WKE

PROJECT ID: 2410-15-70, 71

WITH: N/A

COUNTY: MILWAUKEE

MARCH 2026

ORDER OF SHEETS


| | | |
|---|---|---|
| Section No. | 1 | Title |
| Section No. | 2 | Typical Sections and Details |
| Section No. | 3 | Estimate of Quantities |
| Section No. | 3 | Miscellaneous Quantities |
| Section No. | 4 | Right of Way Plat |
| Section No. | 5 | Plan and Profile |
| Section No. | 6 | Standard Detail Drawings |
| Section No. | 7 | Sign Plates |
| Section No. | 8 | Structure Plans |
| Section No. | 9 | Computer Earthwork Data |
| Section No. | 9 | Cross Sections |


TOTAL SHEETS = 894

PROJECT DESCRIPTIONS:
2410-15-70: ROADWAY, STORM SEWER, AND SIDEWALK ITEMS
2410-15-71: SANITARY SEWER AND WATER MAIN ITEMS

# STATE OF WISCONSIN
# DEPARTMENT OF TRANSPORTATION

**PLAN OF PROPOSED IMPROVEMENT**

| STATE PROJECT | FEDERAL PROJECT | |
|---|---|---|
| | PROJECT | CONTRACT |
| 2410-15-70 | WISC 2026223 | 1 |
| 2410-15-71 | ——— | —— |
| | | |
| | | |

# C WEST ALLIS, W NATIONAL AVENUE
S 95TH ST TO S 108TH ST

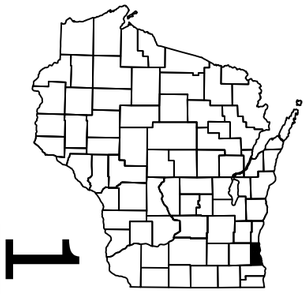
## LOCAL STREET
## MILWAUKEE COUNTY

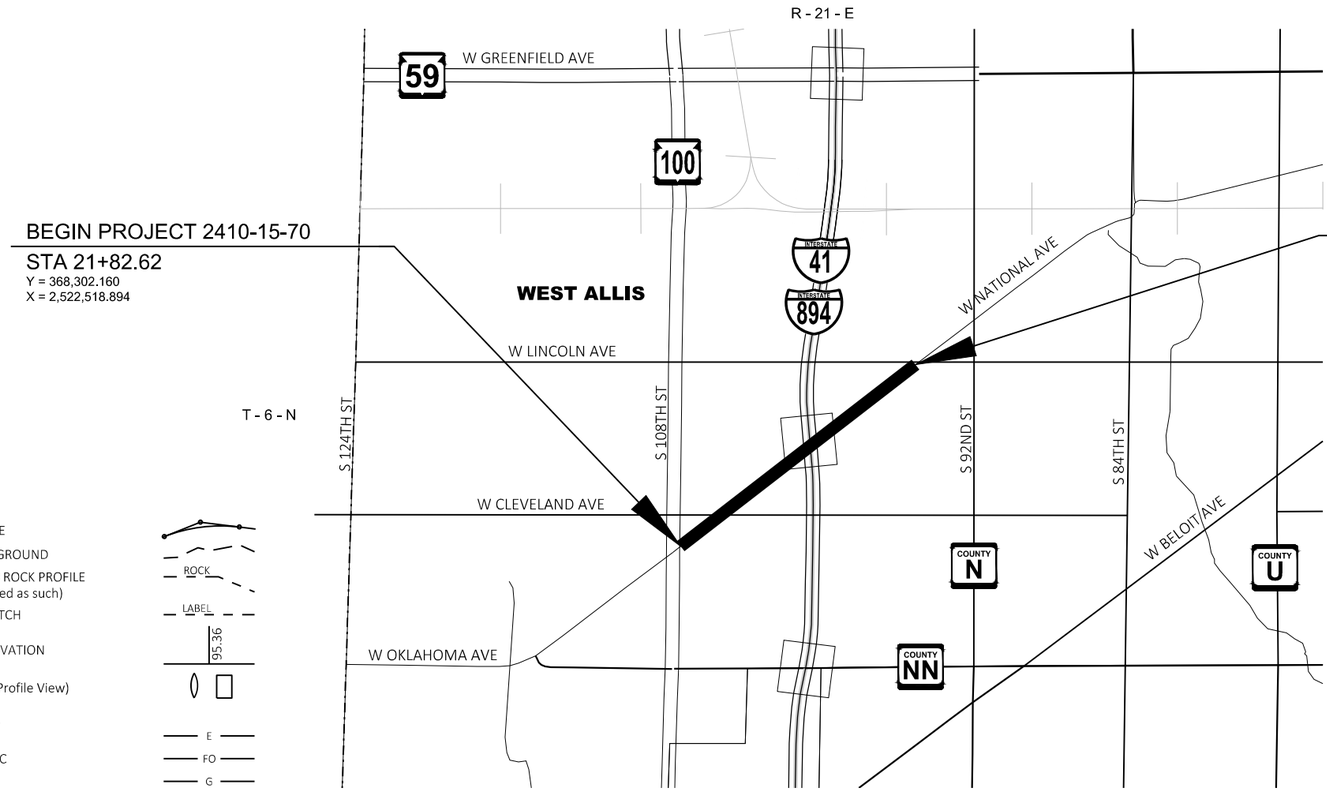
STATE PROJECT NUMBER
**2410-15-70**


# C WEST ALLIS, W NATIONAL AVENUE
S 95TH ST TO S 108TH ST

## LOCAL STREET
## MILWAUKEE COUNTY


STATE PROJECT NUMBER
**2410-15-71**






BEGIN PROJECT 2410-15-70
STA 21+82.62
Y = 368,302.160
X = 2,522,518.894

END PROJECT
STA 72+22.05

LAYOUT
SCALE 0 0.5 MI

TOTAL NET LENGTH OF CENTERLINE = 0.954 MI.

| DESIGN DESIGNATION | | | WEST OF I-41/I-894 | EAST OF I-41/I-894 |
|---|---|---|---|---|
| A.A.D.T. | (2026) | = | 23,100 | 14,200 |
| A.A.D.T. | (2046) | = | 23,100 | 14,200 |
| D.H.V. | | = | 2,705 | 1,665 |
| D.D. | | = | 59/41 | 59/41 |
| T. | | = | 2.6% | 2.6% |
| DESIGN SPEED | | = | 40 MPH | 40 MPH |
| ESALS | | = | 1,400,000 | 920,000 |

## CONVENTIONAL SYMBOLS

PLAN
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES
- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN STATE PLANE COORDINATE SYSTEM (WSPCS), SOUTH ZONE (NAD 27), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO CITY OF WEST ALLIS VERTICAL DATUM.

TO CONVERT ELEVATIONS TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 ADD 580.56 TO ELEVATIONS SHOWN ON THIS PLAN.

ACCEPTED FOR

CITY of WEST ALLIS

Traci Gengler (PRINTED NAME) — Traci Gengler (SIGNATURE)

10/29/25 (DATE) — Sr. Principal Engineer (TITLE OF OFFICIAL)

ORIGINAL PLANS PREPARED BY

raSmith
CREATIVITY BEYOND ENGINEERING
rasmith.com

WISCONSIN
RACHEL A. KETTERHAGEN
E-36868
MILWAUKEE
WI
PROFESSIONAL ENGINEER

10/28/2025 (DATE) — Rachel Ketterhagen (SIGNATURE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

| | |
|---|---|
| Surveyor | raSmith |
| Designer | raSmith |
| Project Manager | MICHAEL BAIRD |
| Regional Examiner | |
| Regional Supervisor | AMY TAETSCH |

APPROVED FOR THE DEPARTMENT

DATE: 11/3/2025 — (Signature)

E

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\010101-TI.DWG PLOT DATE : 1/8/2026 10:39 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

2

### WISCONSIN DNR LIAISON

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SE REGION
1027 W SAINT PAUL AVE
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### SEWRPC CONTACT

ROB MERRY
SEWRPC
W239N1812 ROCKWOOD DR
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### CITY OF WEST ALLIS

TRACI GENGLER, P.E.
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### MILWAUKEE COUNTY TRANSIT

DAN ADAMS
MILWAUKEE COUNTY TRANSIT SYSTEM
1942 N 17TH ST
MILWAUKEE, WI 53205
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### WISDOT SIGNALS

KYLE BRAHM
WISDOT SE REGION
141 NW BARSTOW ST
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### WEST ALLIS-WEST MILWAUKEE SCHOOL DISTRICT

GREG SELISSEN
WEST ALLIS-WEST MILWAUKEE SCHOOL DISTRICT
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GREEN BAY, WI 54307
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EMAIL: GSELISSEN@MCEWI.COM

### WISDOT COMMUNICATIONS

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WISDOT COMMUNICATIONS
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MILWAUKEE, WI 53203
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### DESIGN PROJECT MANAGER

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### DESIGN PROJECT LEADER

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### COUNTY HIGHWAY COMMISSIONER

JOHN RODGERS
MILWAUKEE COUNTY
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WAUWATOSA, WI 53226
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EMAIL:

### WISDOT STREET LIGHTING

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WISDOT SE REGION
935 S 60TH ST
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EMAIL: ERIC.PEREA@DOT.WI.GOV

### WEST ALLIS STREET LIGHTING

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EMAIL: DMOLLESON@WESTALLISWI.GOV

### ORDER OF SECTION 2 DETAIL SHEETS


GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
REMOVAL PLANS
PLAN DETAILS
PAVING GRADES
CURB RAMP DETAILS
EROSION CONTROL
STORM SEWER
SANITARY SEWER PLAN
WATER MAIN PLANS
EXISTING SIGNING
PERMANENT SIGNING
LIGHTING PLANS
TRAFFIC SIGNAL PLANS
PAVEMENT MARKING PLANS
TRAFFIC CONTROL/STAGING
DETOUR PLAN
ALIGNMENT PLAN


### UTILITY CONTACTS

AT&T LEGACY
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110 N MAIN STREET
CULVER, IN 46511
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WE ENERGIES- GAS
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WEST ALLIS
WATER MAIN
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ABBREVIATIONS

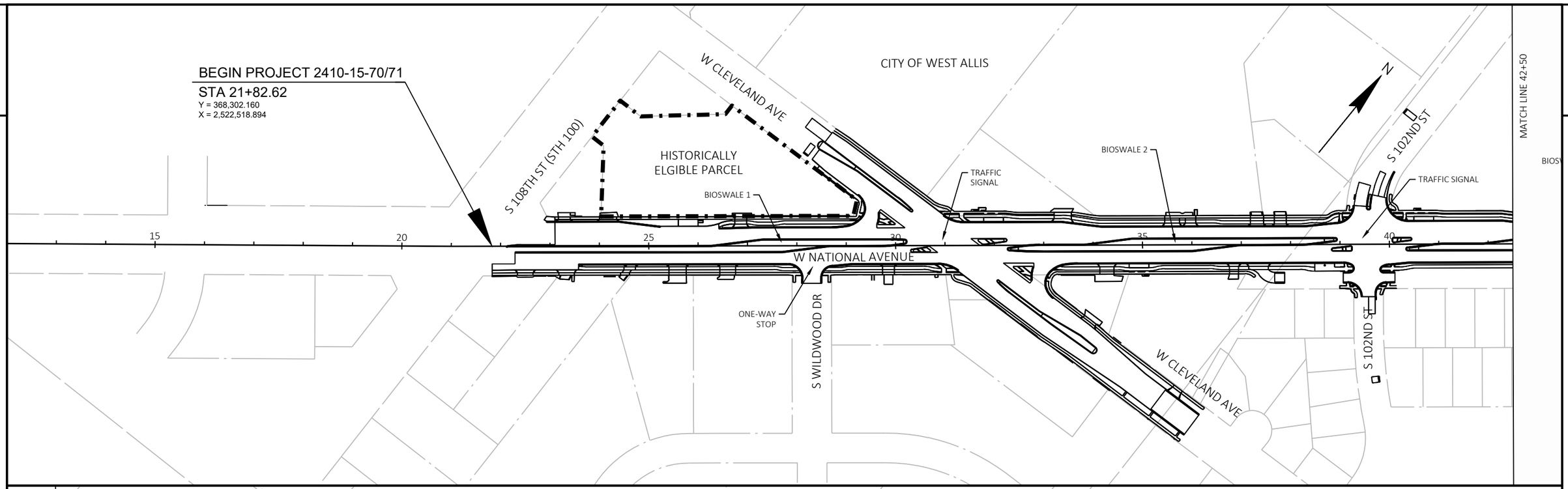
| | |
|---|---|
| ADJ | ADJUST |
| BAD | BASE AGGREGATE DENSE |
| CFS | CUBIC FEET PER SECOND |
| DET | DETECTABLE EDGE TILES |
| FPS | FEET PER SECOND |
| HP | HIGH POINTS |
| LP | LOW POINTS |
| MAX | MAXIMUM |
| OH | OVERHEAD |
| OPT | OPTIONAL |
| PSF | POUNDS PER SQUARE FEET |
| RCT | RAISED CYCLE TRACKS |
| TIF | TECHNICALLY INFEASIBLE |

DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

### GENERAL NOTES

1. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS IN THE AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL COORDINATE THEIR ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA.
2. CURB AND GUTTER GRADES ARE GIVEN TO THE FLANGE OF CURB & GUTTER. INTEGRAL GUTTER GRADES ARE GIVEN TO THE GUTTER FLOWLINE. CURB AND GUTTER RADII ARE MEASURED TO THE FLANGE OF THE CURB & GUTTER UNLESS OTHERWISE NOTED. INTEGRAL GUTTER RADII ARE MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
3. VERIFY EXISTING ELEVATIONS AT ALL TIE-INS TO EXISTING PAVEMENT, EXISTING CURB & GUTTER, AND EXISTING SIDEWALK PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IF A DISCREPANCY IS FOUND BETWEEN PROPOSED PLAN ELEVATIONS AND EXISTING PAVEMENT ELEVATIONS.
4. CONSTRUCT PAVEMENT CONSISTENT WITH THE PLAN TYPICAL SECTIONS. UNLESS DIRECTED OTHERWISE BY THE ENGINEER, PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, BIKE, OR PARKING LANE. THE CONTRACTORS PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, BIKE, OR PARKING LANE.
5. CONSTRUCT THE INSIDE EDGE OF SIDEWALK 1/2-INCH HIGHER THAN THE TOP OF CURB WHEN THEY ARE DIRECTLY ADJACENT TO EACH OTHER.
6. SAWCUT EXISTING ASPHALT AND CONCRETE PAVEMENT AT THE MATCHLINE INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
7. RESHAPE, RESTORE, AND FINISH ALL PREVIOUSLY GRASSED AREAS DISTURBED OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS AT NO EXPENSE TO THE DEPARTMENT.
8. BACKFILL ALL OPENINGS AND HOLES LOCATED WITHIN THE ROADWAY BELOW THE SUBGRADE IMPROVEMENT RESULTING FROM REMOVALS OR ABANDONMENTS WITH BACKFILL GRANULAR.
9. ALL SIGN LOCATIONS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO INSTALLATION.
10. TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. NO WORK SHALL BEGIN UNTIL PROPER TRAFFIC CONTROL DEVICES ARE PLACED AND APPROVED BY THE ENGINEER.
11. EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINER.
12. EROSION CONTROL DEVICES ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED, OR UNTIL THE ENGINEER DETERMINES THAT THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER REQUIRED.
13. ALL DISTURBED/GRADED/SOIL STOCKPILE AREAS SHALL BE PERMANENTLY RESTORED WITHIN FOURTEEN (14) CALENDAR DAYS OF ANY CONTRACTOR DISTURBANCE. IF ANY DISTURBED/GRADED/SOIL STOCKPILE AREAS (INCLUDING PARTIAL/FULL CUTS AND FILLS, ADJUSTED/REPLACEMENT STORM SEWER, CURBS, ETC...) WILL NOT BE PERMANENTLY RESTORED WITHIN FOURTEEN (14) CALENDAR DAYS THEY SHALL BE RESTORED WITH TEMPORARY SEED AND EROSION MAT OR MULCH WITHIN FIVE (5) CALENDAR DAYS OF THE INITIAL AND REPEATED DISTURBANCE.
14. STOCKPILE EXCESS MATERIAL OR SPOILS ON UPLAND AREAS AWAY FROM WETLANDS, FLOODPLAINS, AND WATERWAYS. STOCKPILED SOIL SHALL BE PROTECTED AGAINST EROSION. IF THE STOCKPILE WILL NOT BE PERMANENTLY RESTORED WITHIN FOURTEEN (14) CALENDAR DAYS RESOTRE THE STOCKPILE WITH TEMPORARY SEED AND EROSION MAT OR MULCH WITHIN FIVE (5) CALENDAR DAYS OF THE INITIAL AND REPEATED DISTURBANCE.
15. PLACE TOPSOIL 1-INCH BELOW THE TOP OF ADJACENT CONCRETE CURBS OR SIDEWALKS.
16. CONSTRUCT HMA PAVEMENT WITH THE FOLLOWING LAYERS AND GRADATIONS:

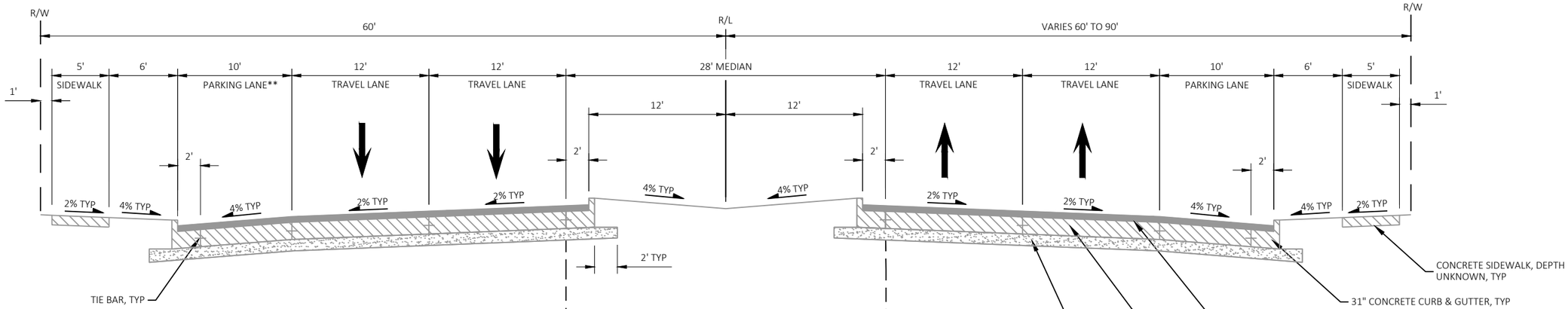
| THICKNESS | LAYERS |
|---|---|
| 3-INCH | 3" SINGLE LAYER 4 MT 58-28 H |
| 4-INCH | 4-INCH LAYER ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES |
| 5-INCH | 2" UPPER LAYER 4 MT 58-28 H<br>3" LOWER LAYER 3 MT 58-28 S |




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PROJECT OVERVIEW | SHEET 3 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\020201-PO.DWG
LAYOUT NAME - 01
PLOT DATE : 1/8/2026 10:48 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

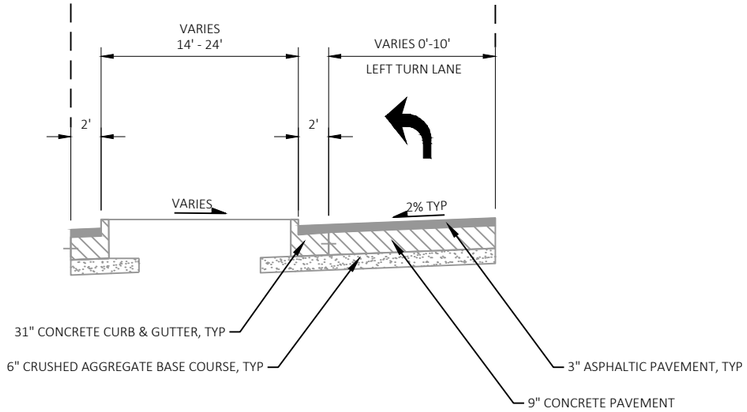
2




** RIGHT TURN LANE STA 22+11 TO STA 25+02 WB AND STA 31+27 TO STA 33+36 WB

## EXISTING TYPICAL SECTION

W NATIONAL AVENUE
STA 22+11 TO STA 37+25 WB
STA 21+82 TO STA 37+25 EB
STA 54+57 TO STA 71+58 WB
STA 55+35 TO STA 72+22 EB



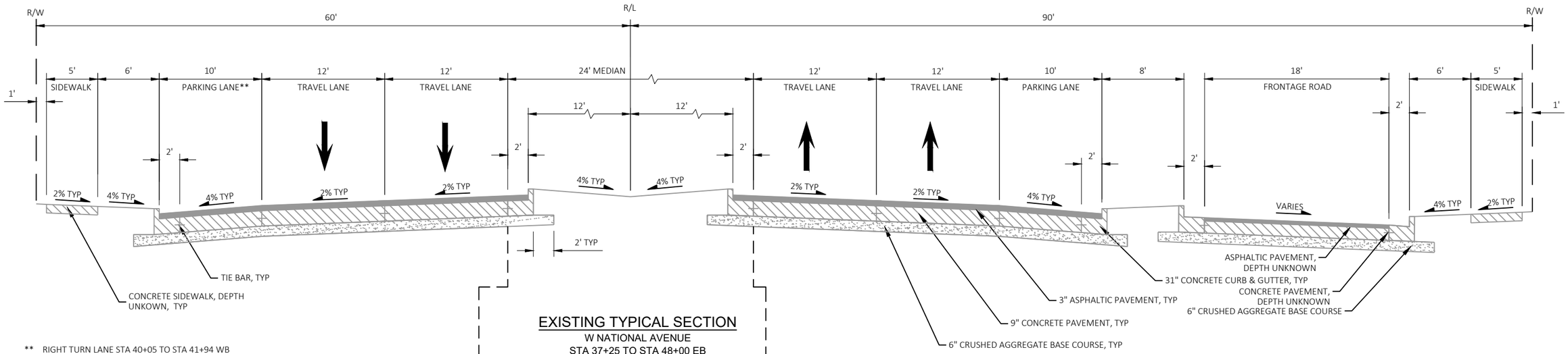

## LEFT TURN LANES

STA 22+29 TO STA 24+86 WB
STA 26+35 TO STA 27+75 EB
STA 32+35 TO STA 35+46 EB
STA 36+59 TO STA 37+25 EB
STA 59+72 TO STA 61+54 WB

WB LEFT TURN LANE IS A MIRROR IMAGE

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TYPICAL SECTIONS | SHEET 4 | E |
|---|---|---|---|---|---|

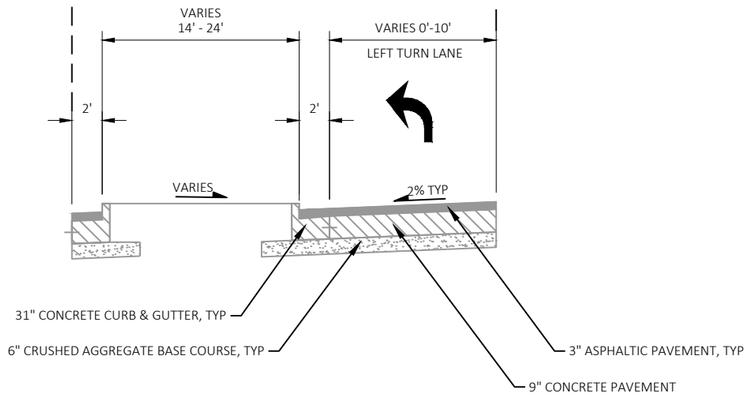
2




** RIGHT TURN LANE STA 40+05 TO STA 41+94 WB

## EXISTING TYPICAL SECTION

W NATIONAL AVENUE
STA 37+25 TO STA 48+00 EB
STA 37+25 TO STA 47+46 WB



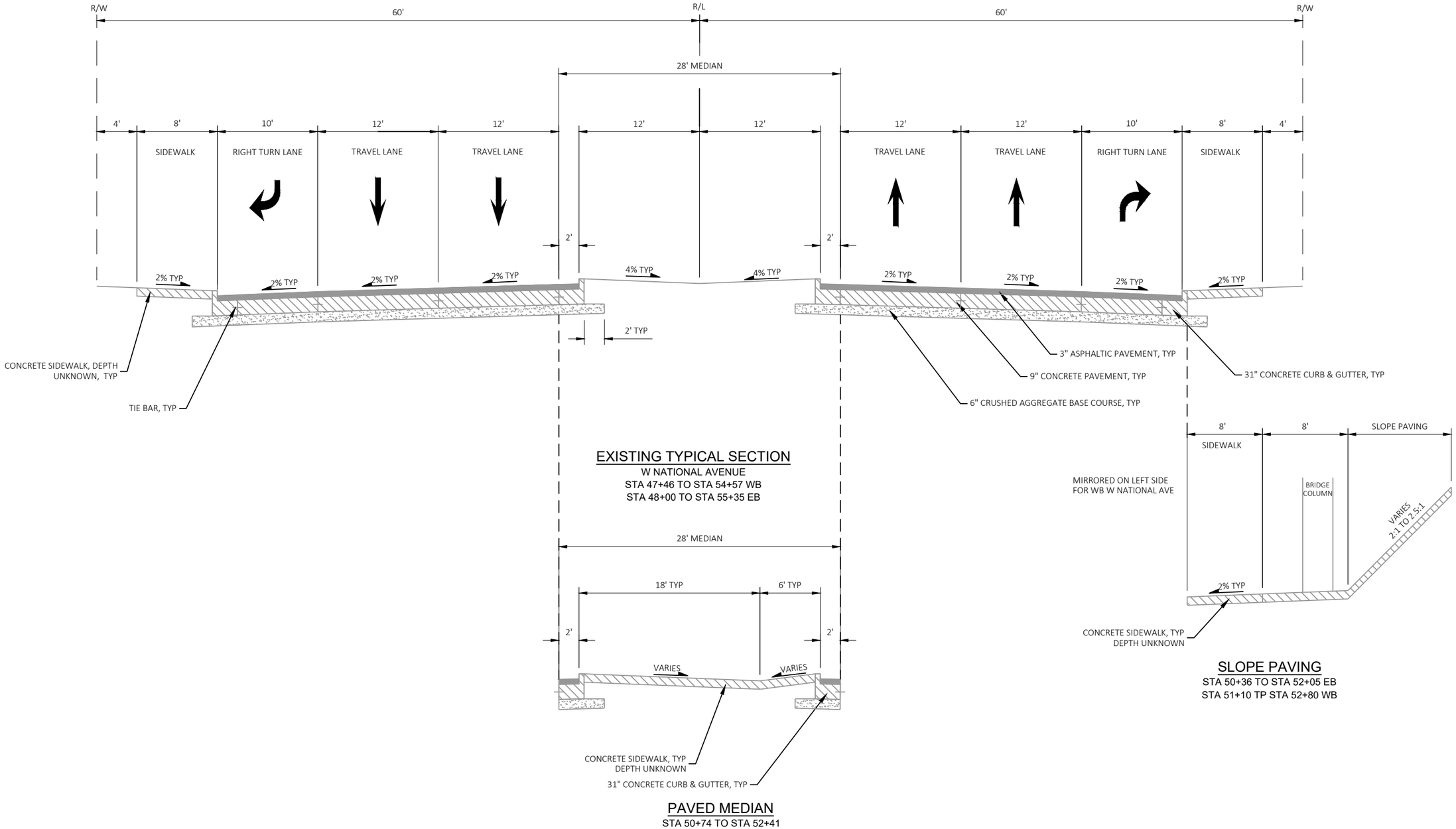

## LEFT TURN LANES

STA 37+25 TO STA 39+19 EB
STA 39+98 TO STA 41+65 WB
STA 45+42 TO STA 48+00 EB

WB LEFT TURN LANE IS A MIRROR IMAGE

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TYPICAL SECTIONS | SHEET 5 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\020301-TS.DWG
LAYOUT NAME - 02-10ft
PLOT DATE : 1/8/2026 10:50 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT




## EXISTING TYPICAL SECTION

W NATIONAL AVENUE
STA 47+46 TO STA 54+57 WB
STA 48+00 TO STA 55+35 EB




## PAVED MEDIAN

STA 50+74 TO STA 52+41

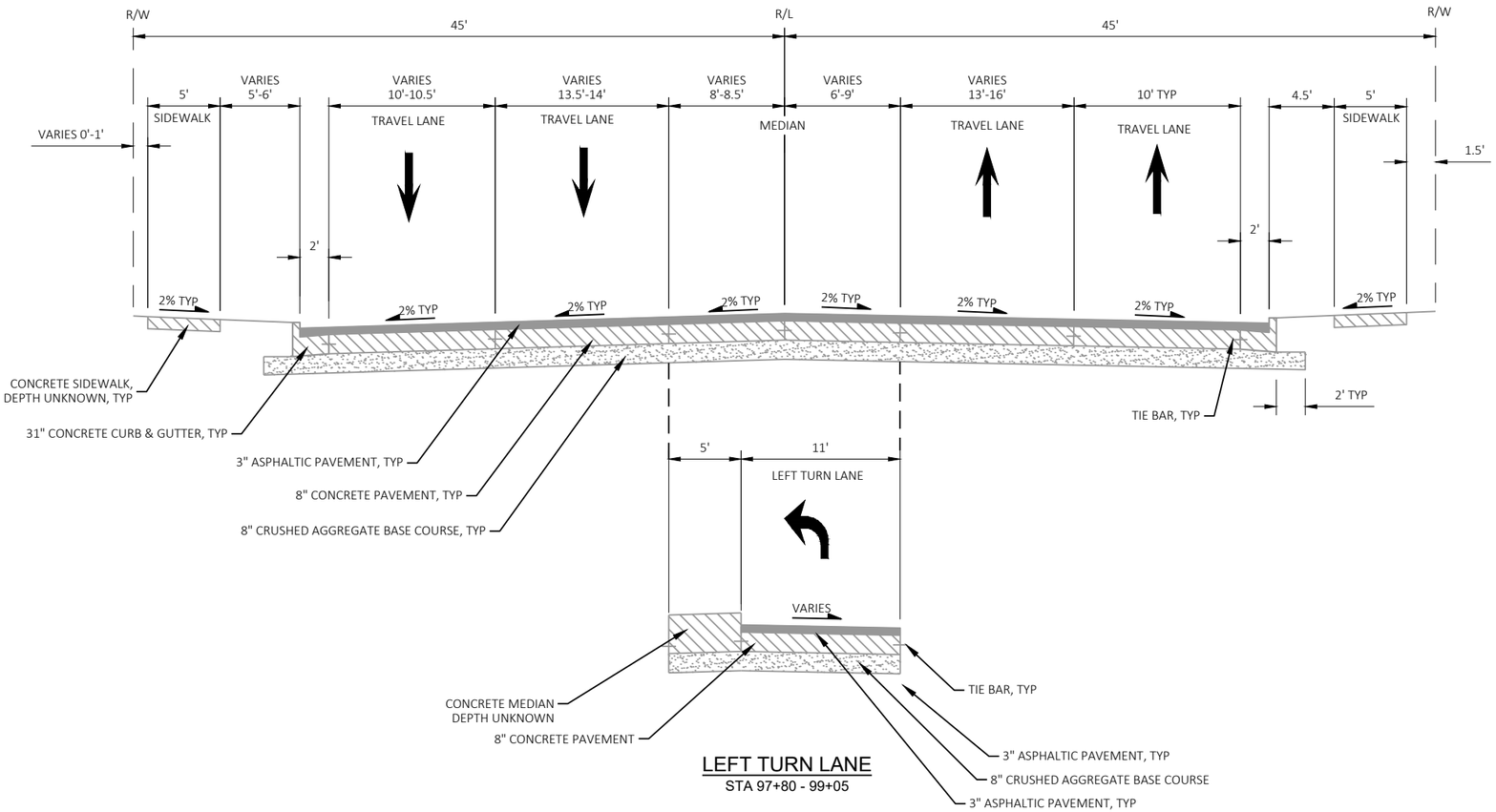



## SLOPE PAVING

STA 50+36 TO STA 52+05 EB
STA 51+10 TP STA 52+80 WB

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TYPICAL SECTIONS | SHEET 6 | E |
|---|---|---|---|---|---|

2

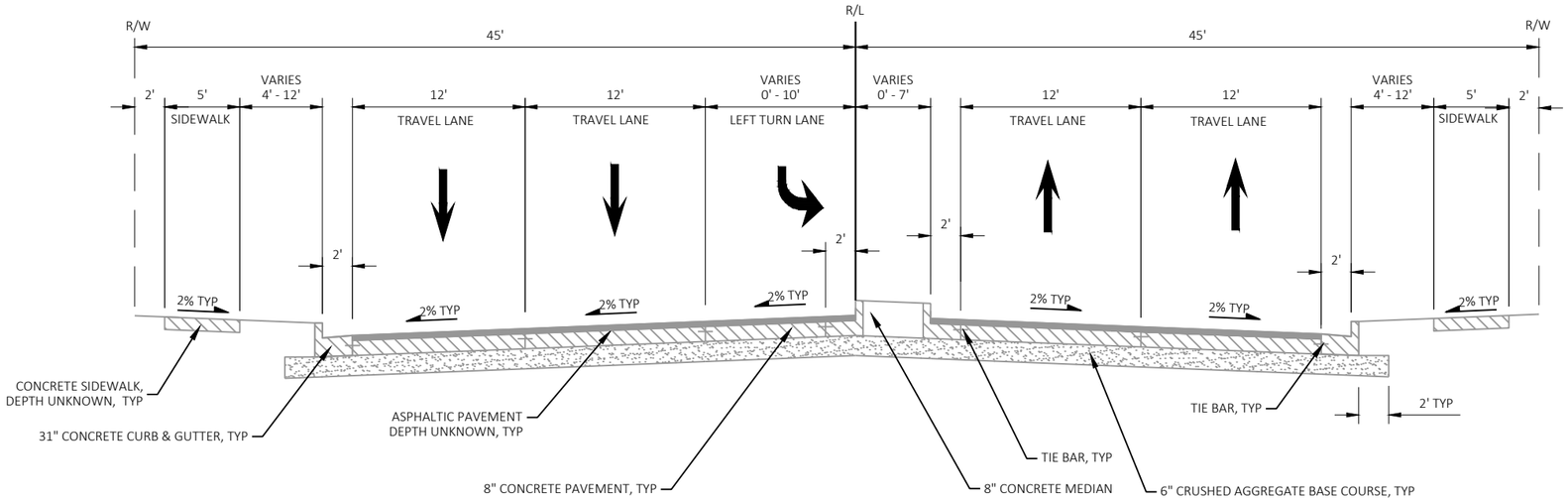



LEFT TURN LANE
STA 97+80 - 99+05

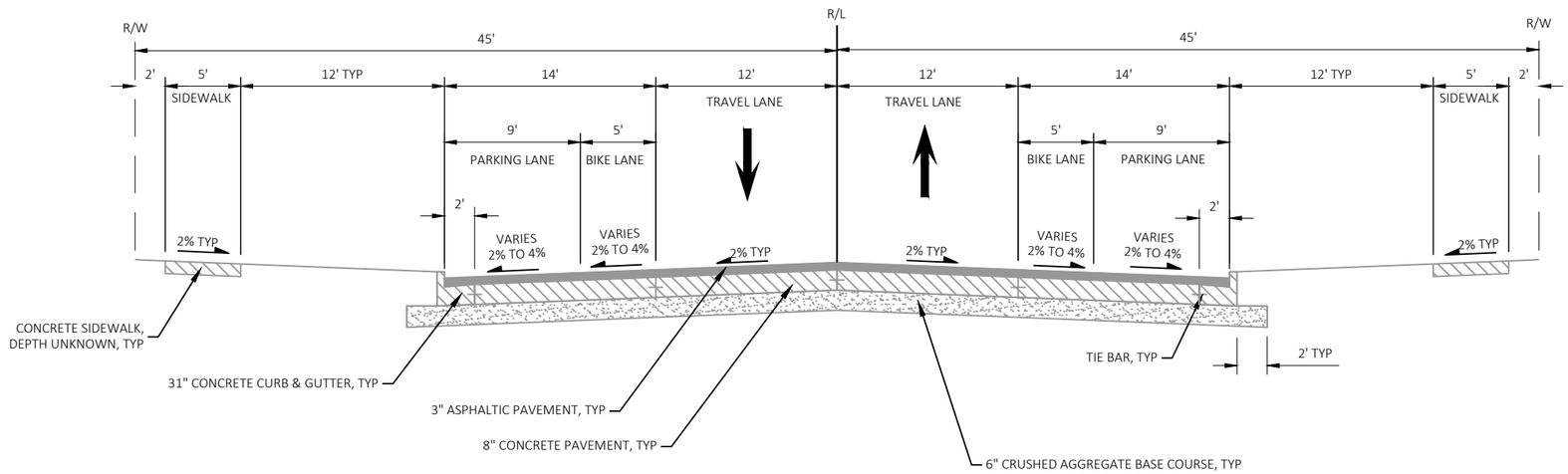
EXISTING TYPICAL SECTION
W CLEVELAND AVENUE
STA 96+65 - TO STA 99+40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TYPICAL SECTIONS | SHEET 7 | E |
|---|---|---|---|---|---|

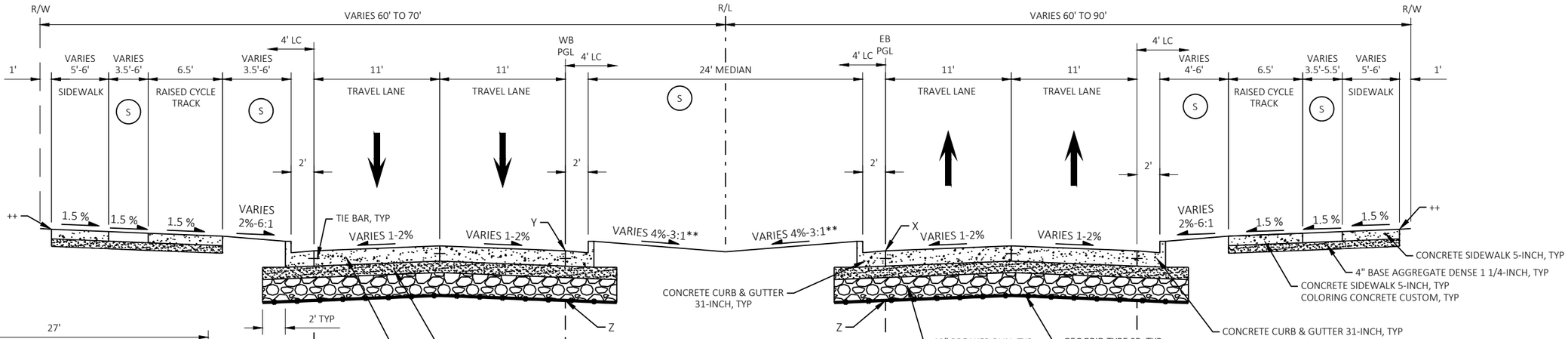
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\020301-TS.DWG
LAYOUT NAME - 04-10ft
PLOT DATE : 1/8/2026 10:50 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT



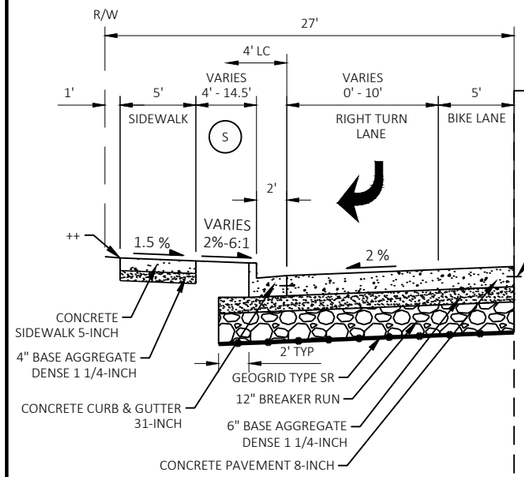

EXISTING TYPICAL SECTION
W CLEVELAND AVENUE
STA 100+60 TO STA 103+55



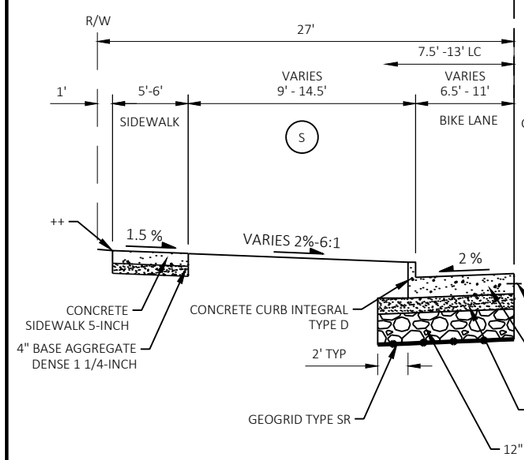

EXISTING TYPICAL SECTION
W CLEVELAND AVENUE
STA 103+82 TO STA 106+03



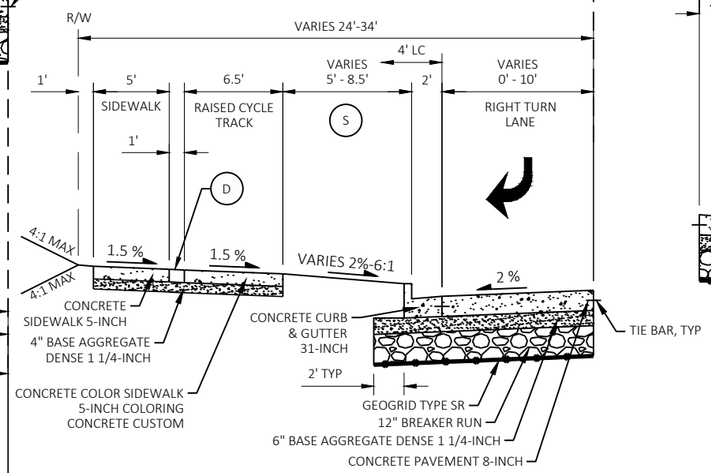

## FINISHED TYPICAL SECTION
### W NATIONAL AVENUE
STA 22+29 TO STA 37+67 EB
STA 23+10 TO STA 37+67 WB



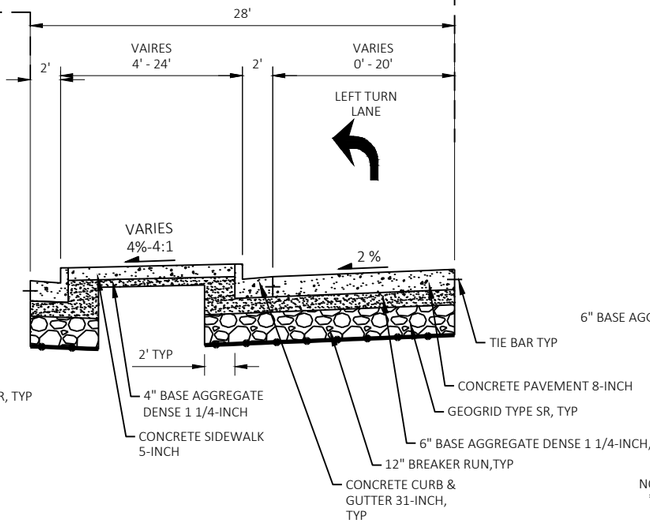

### RIGHT TURN LANE & ON STREET BIKE LANE
STA 23+10 TO STA 25+24 WB




### ON STREET BIKE LANE
STA 25+24 TO STA 26+42 WB

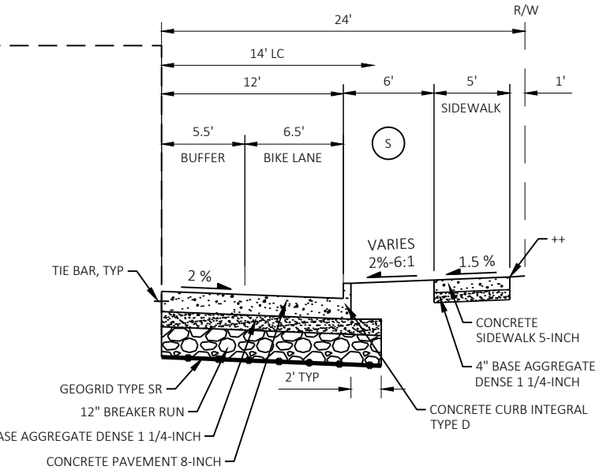



### RIGHT TURN LANE
STA 31+38 TO STA 34+16




### LEFT TURN LANE
STA 23+10 TO STA 27+31 WB
STA 27+71 TO STA 30+16 EB
STA 32+29 TO STA 34+78 WB
STA 36+02 TO STA 37+67 EB

EB LEFT TURN LANE SHOWN
WB LEFT TURN LANE IS A
MIRROR IMAGE




### ON STREET BIKE LANE
STA 22+29 TO STA 23+58 EB

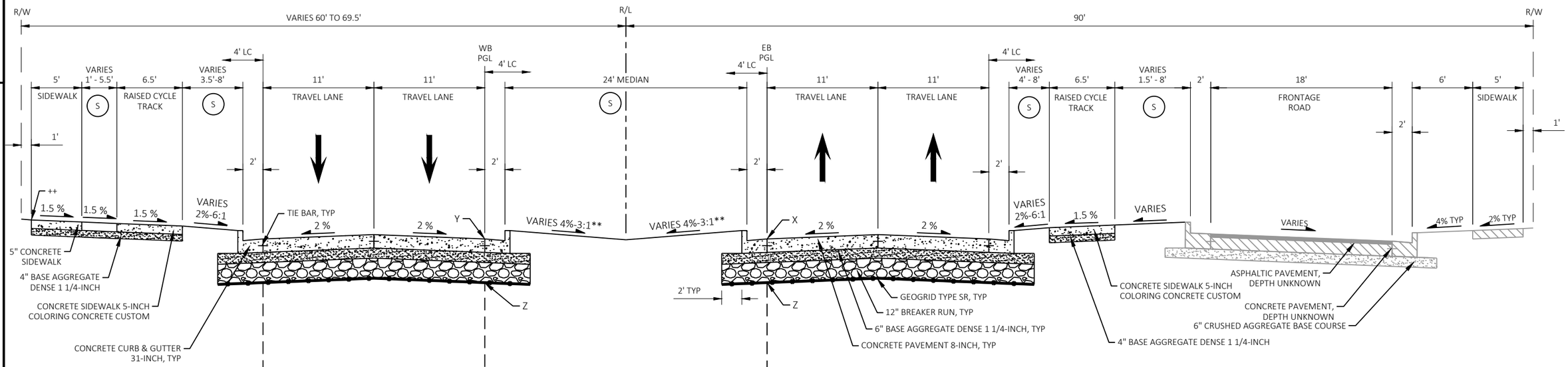
NOTE:
** SEE BIORETENTION CONSTRUCTION DETAIL FOR LOCATIONS AND DETAILS OF BIORETENTION AREAS.
++ OUTSIDE EDGE OF PROPOSED SIDEWALK TO MATCH ELEVATION OF EXISTING SIDEWALK UNLESS OTHERWISE SHOWN IN CROSS SECTIONS.

### LEGEND
(D) DETECTABLE EDGE TILE INSTALLED IN CONCRETE SIDEWALK 5-INCH
(S) TOPSOIL, FERTILIZER TYPE B, AND SOD LAWN

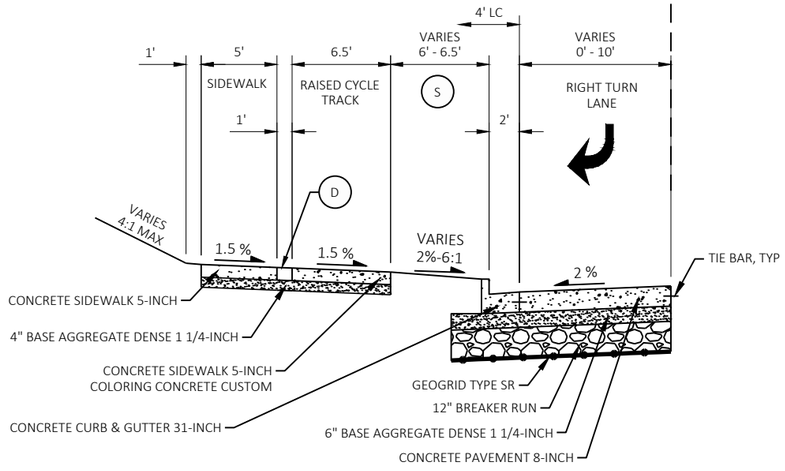
LC = LATERAL CLEARANCE

X = POINT REFERRED TO ON EB PGL
Y = POINT REFERRED TO ON WB PGL
Z = POINT REFERRED TO ON CROSS SECTIONS

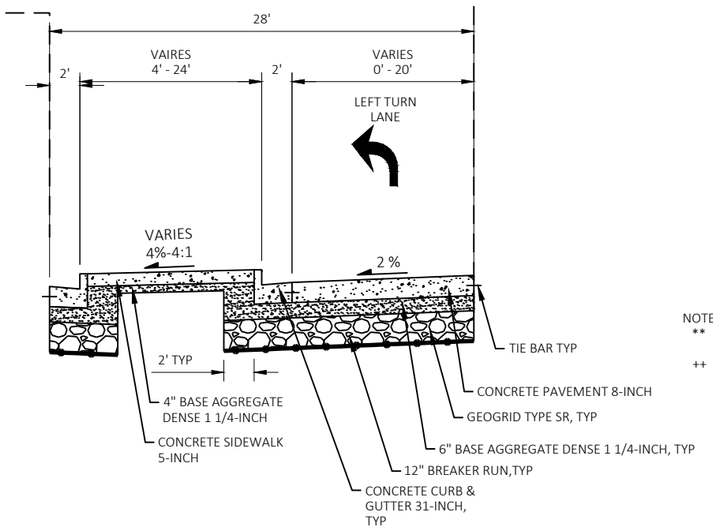
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TYPICAL SECTIONS | SHEET 9 | E |
|---|---|---|---|---|---|




## FINISHED TYPICAL SECTION
W NATIONAL AVENUE
STA 37+67 TO STA 47+46 WB
STA 37+67 TO STA 48+00 EB




## RIGHT TURN LANE
STA 40+37 - 43+10 LT




## LEFT TURN LANE
STA 37+67 TO STA 38+91 EB
STA 40+37 TO STA 42+86 WB
STA 45+10 TO STA 48+00 EB

EB LEFT TURN LANE SHOWN
WB LEFT TURN LANE IS A
MIRROR IMAGE

NOTE:
** SEE BIORETENTION CONSTRUCTION DETAIL FOR LOCATIONS AND DETAILS OF BIORETENTION AREAS.
++ OUTSIDE EDGE OF PROPOSED SIDEWALK TO MATCH ELEVATION OF EXISTING SIDEWALK UNLESS OTHERWISE SHOWN IN CROSS SECTIONS.

## LEGEND
(D) DETECTABLE EDGE TILE INSTALLED IN CONCRETE SIDEWALK 5-INCH
(S) TOPSOIL, FERTILIZER TYPE B, AND SOD LAWN

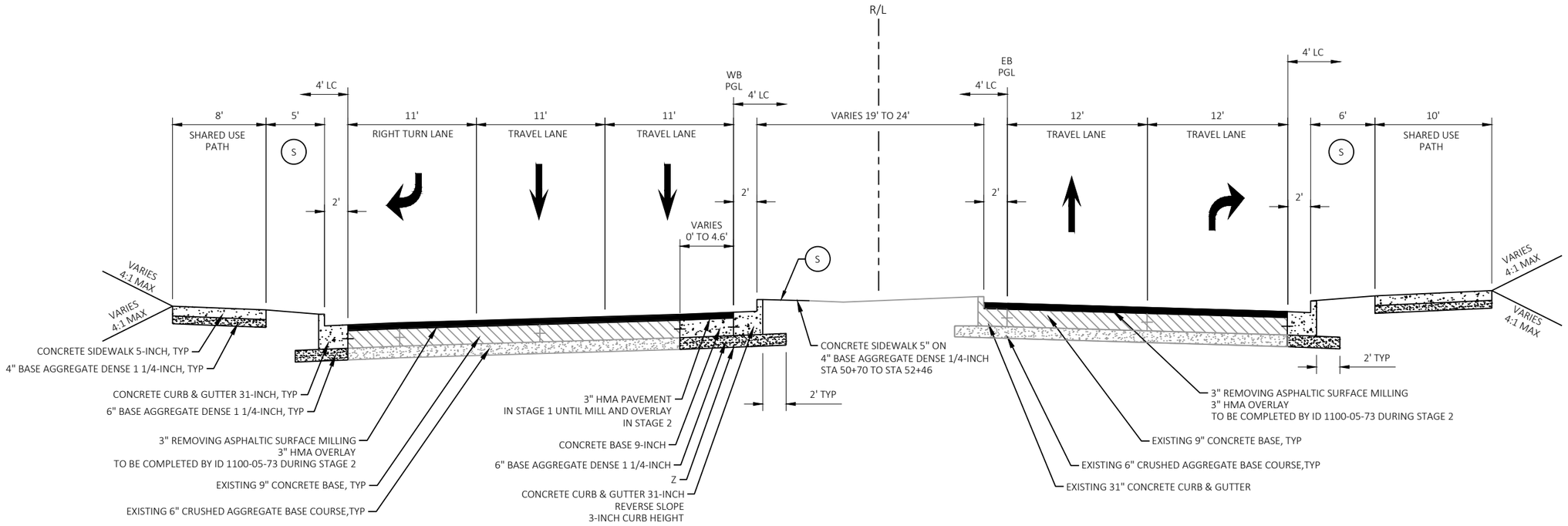
LC = LATERAL CLEARANCE

X = POINT REFERRED TO ON EB PGL
Y = POINT REFERRED TO ON WB PGL
Z = POINT REFERRED TO ON CROSS SECTIONS

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TYPICAL SECTIONS | SHEET 10 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\020302-TS.DWG
LAYOUT NAME - 02-10ft
PLOT DATE : 1/23/2026 5:04 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2




## FINISHED TYPICAL SECTION
## W NATIONAL AVENUE
STA 47+46 TO STA 54+57 WB
STA 48+00 TO STA 55+35 EB

### LEGEND

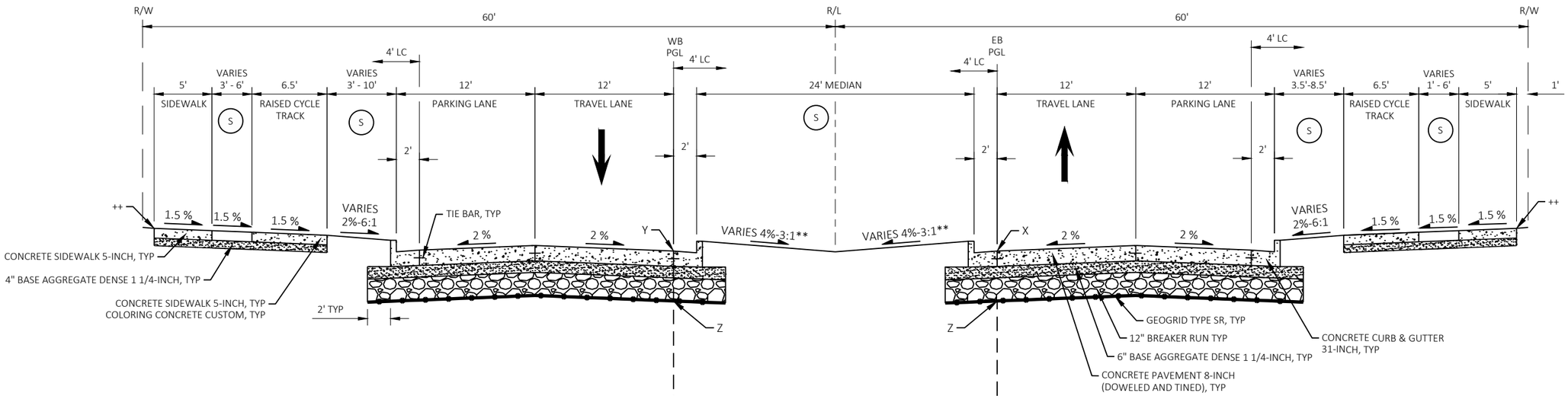
(D) DETECTABLE EDGE TILE INSTALLED IN CONCRETE SIDEWALK 5-INCH

(S) TOPSOIL, FERTILIZER TYPE B, AND SOD LAWN

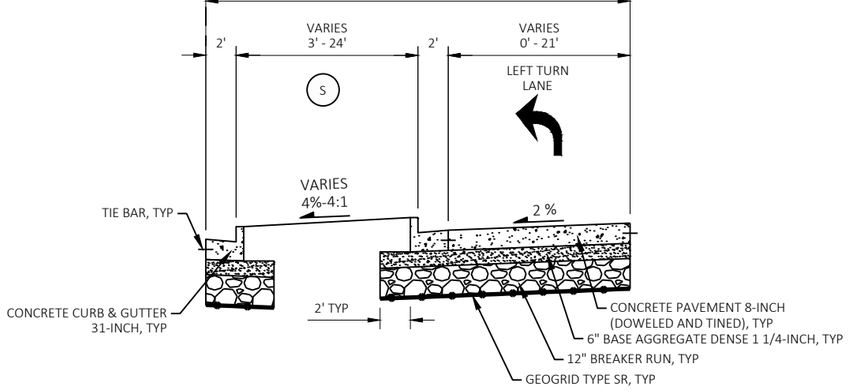
LC = LATERAL CLEARANCE

X = POINT REFERRED TO ON EB PGL
Y = POINT REFERRED TO ON WB PGL
Z = POINT REFERRED TO ON CROSS SECTIONS

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TYPICAL SECTIONS | SHEET 11 | E |
|---|---|---|---|---|---|

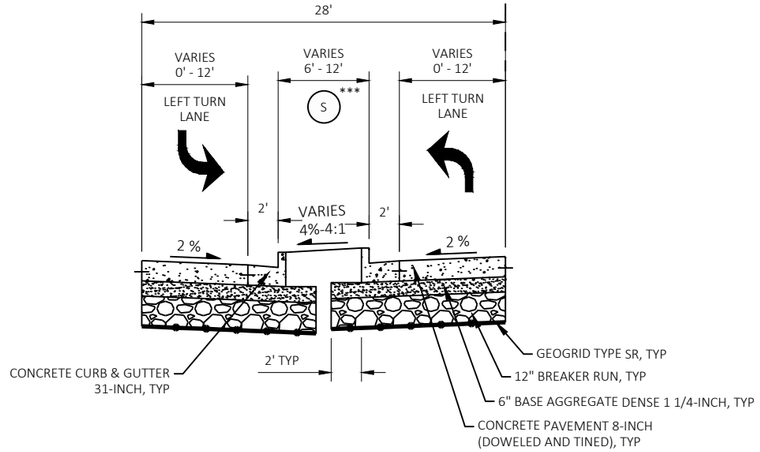



## FINISHED TYPICAL SECTION
W NATIONAL AVENUE
STA 54+57 TO STA 71+58 WB
STA 55+35 TO STA 72+22 EB




## LEFT TURN LANE
STA 56+23 TO STA 58+77 EB
STA 60+10 TO STA 61+12 WB
STA 62+55 TO STA 63+28 EB
STA 64+93 TO STA 67+48 EB

EB LEFT TURN LANE SHOWN
WB LEFT TURN LANE IS A
MIRROR IMAGE




## CONCURRENT LEFT TURN LANES
STA 61+12 TO STA 62+55

NOTE:
** SEE BIORETENTION CONSTRUCTION DETAIL FOR LOCATIONS AND DETAILS OF BIORETENTION AREAS.

*** CONCRETE SIDEWALK 5-INCH ON 4" BASE AGGREGATE DENSE WHEN BACK OF CURB TO BACK OF CURB DISTANCE IS 6 FEET OR LESS (STA 61+51 TO STA 62+16)

++ OUTSIDE EDGE OF PROPOSED SIDEWALK TO MATCH ELEVATION OF EXISTING SIDEWALK UNLESS OTHERWISE SHOWN IN CROSS SECTIONS.

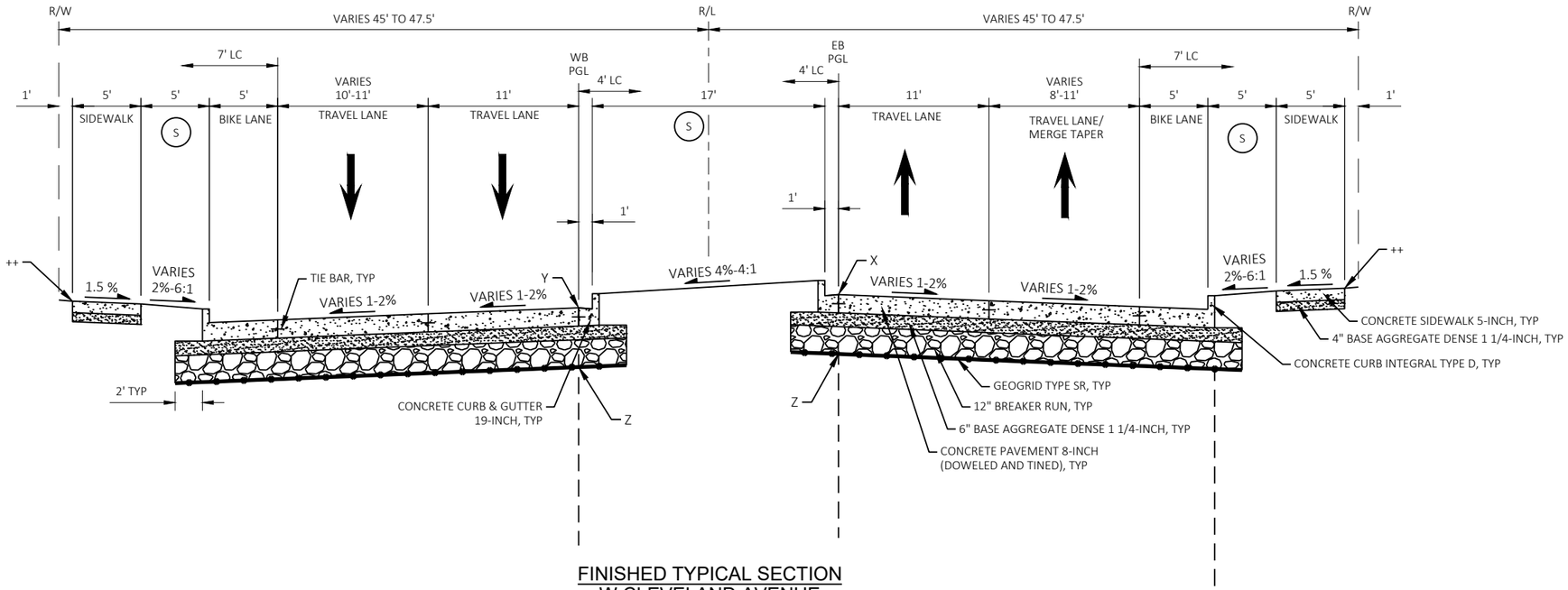
## LEGEND
(D) DETECTABLE EDGE TILE INSTALLED IN CONCRETE SIDEWALK 5-INCH
(S) TOPSOIL, FERTILIZER TYPE B, AND SOD LAWN

LC = LATERAL CLEARANCE

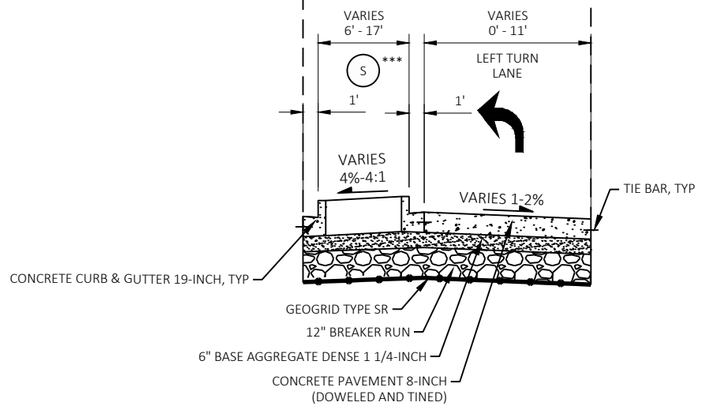
X = POINT REFERRED TO ON EB PGL
Y = POINT REFERRED TO ON WB PGL
Z = POINT REFERRED TO ON CROSS SECTIONS

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TYPICAL SECTIONS | SHEET 12 | E |
|---|---|---|---|---|---|

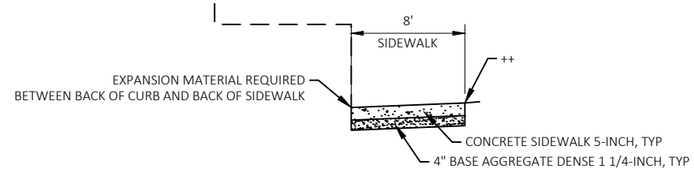
2




## FINISHED TYPICAL SECTION
## W CLEVELAND AVENUE
STA 96+65 TO STA 98+89
STA 101+14 TO STA 103+59




## LEFT TURN LANE
STA 96+65 - 98+89 EB
STA 101+14 - 103+14 WB




## COMMERCIAL SIDEWALK
STA 96+85 - 97+83

NOTE:

** SEE BIORETENTION CONSTRUCTION DETAIL FOR LOCATIONS AND DETAILS OF BIORETENTION AREAS.

*** CONCRETE SIDEWALK 5-INCH ON 4" BASE AGGREGATE DENSE WHEN BACK OF CURB TO BACK OF CURB DISTANCE IS 6 FEET OR LESS (STA 97+44 TO STA 98+89 AND STA 102+27 TO STA 103+14)

++ OUTSIDE EDGE OF PROPOSED SIDEWALK TO MATCH ELEVATION OF EXISTING SIDEWALK UNLESS OTHERWISE SHOWN IN CROSS SECTIONS.

## LEGEND

(D) DETECTABLE EDGE TILE INSTALLED IN CONCRETE SIDEWALK 5-INCH

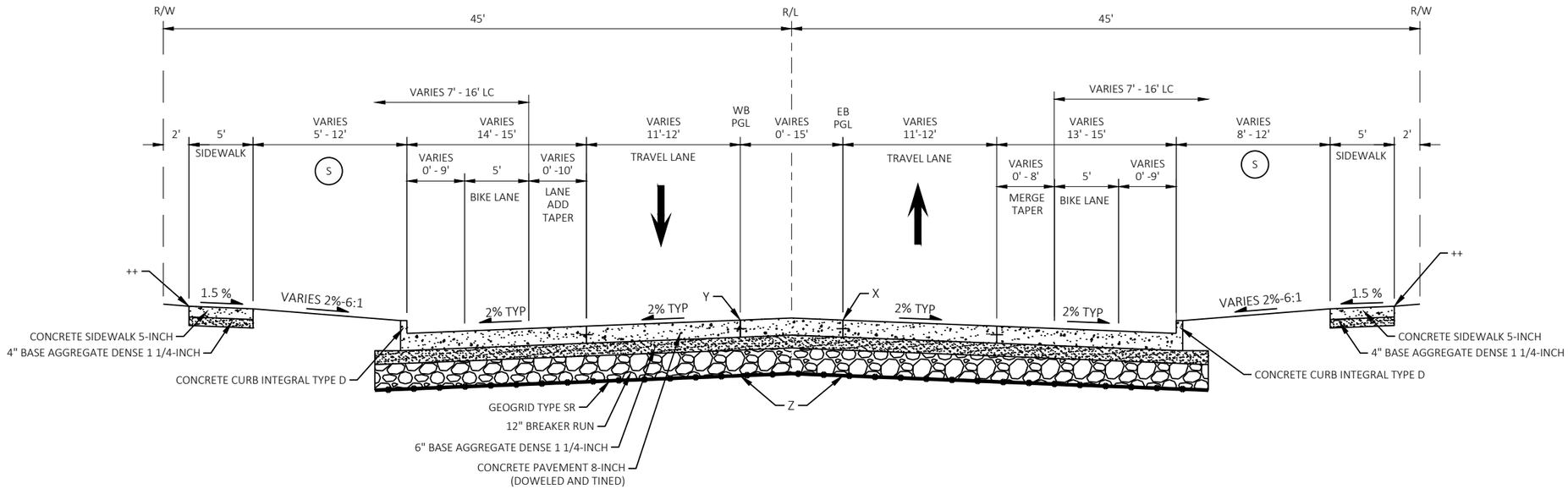
(S) TOPSOIL, FERTILIZER TYPE B, AND SOD LAWN

LC = LATERAL CLEARANCE

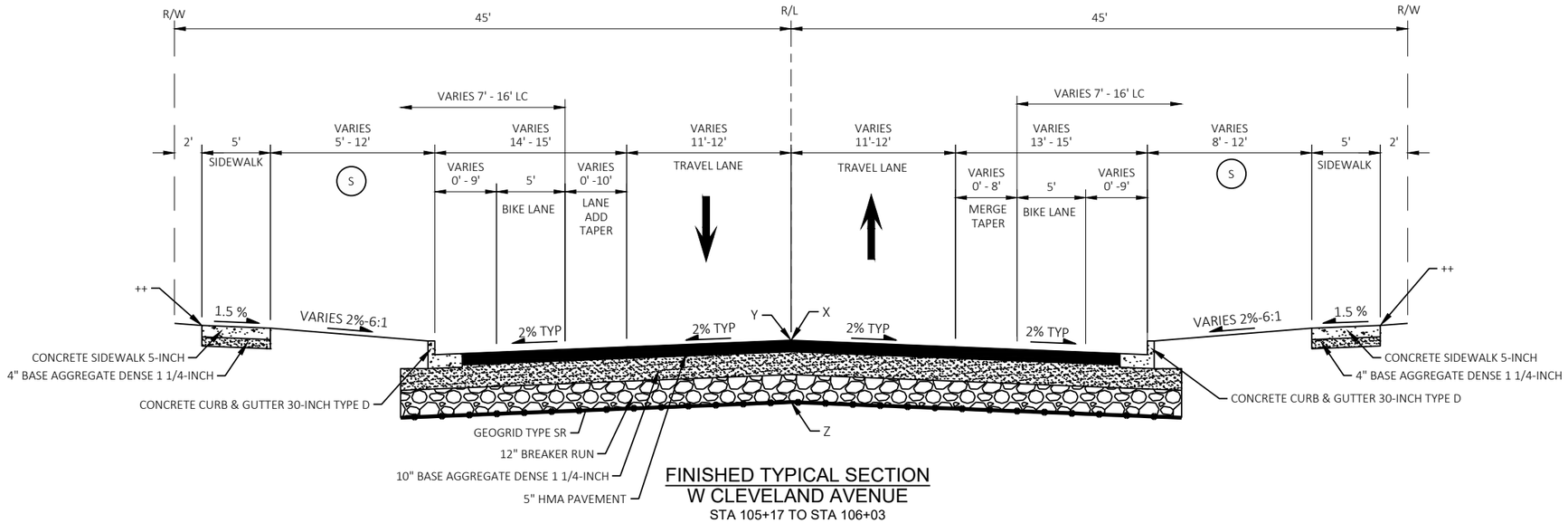
X = POINT REFERRED TO ON EB PGL
Y = POINT REFERRED TO ON WB PGL
Z = POINT REFERRED TO ON CROSS SECTIONS

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TYPICAL SECTIONS | SHEET 13 | E |
|---|---|---|---|---|---|

2




## FINISHED TYPICAL SECTION
## W CLEVELAND AVENUE
STA 103+59 TO STA 105+17




## FINISHED TYPICAL SECTION
## W CLEVELAND AVENUE
STA 105+17 TO STA 106+03

NOTE:
** SEE BIORETENTION CONSTRUCTION DETAIL FOR LOCATIONS AND DETAILS OF BIORETENTION AREAS.
++ OUTSIDE EDGE OF PROPOSED SIDEWALK TO MATCH ELEVATION OF EXISTING SIDEWALK UNLESS OTHERWISE SHOWN IN CROSS SECTIONS.

### LEGEND

(D) DETECTABLE EDGE TILE INSTALLED IN CONCRETE SIDEWALK 5-INCH

(S) TOPSOIL, FERTILIZER TYPE B, AND SOD LAWN

LC = LATERAL CLEARANCE

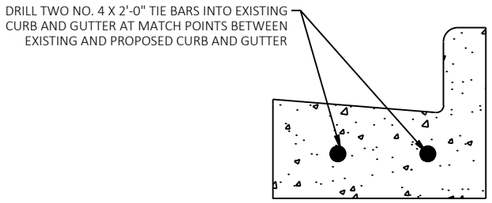
X = POINT REFERRED TO ON EB PGL
Y = POINT REFERRED TO ON WB PGL
Z = POINT REFERRED TO ON CROSS SECTIONS

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TYPICAL SECTIONS | SHEET 14 | E |
|---|---|---|---|---|---|

## RUNOFF COEFFICIENT TABLE

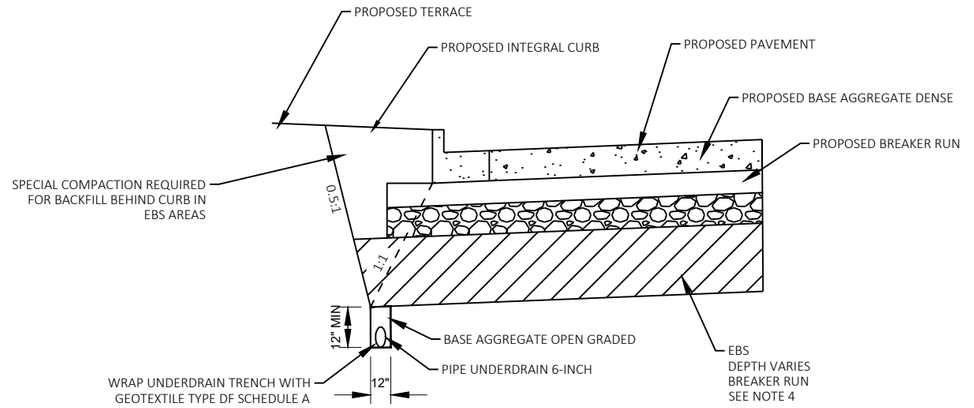
| | HYDROLOGIC SOIL GROUP | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | | | B | | | C | | | D | | |
| | SLOPE RANGE (PERCENT) | | | SLOPE RANGE (PERCENT) | | | SLOPE RANGE (PERCENT) | | | SLOPE RANGE (PERCENT) | | |
| LAND USE: | 0-2 | 2-6 | 6 & OVER | 0-2 | 2-6 | 6 & OVER | 0-2 | 2-6 | 6 & OVER | 0-2 | 2-6 | 6 & OVER |
| ROW CROPS | .08<br>.22 | .16<br>.30 | .22<br>.38 | .12<br>.26 | .20<br>.34 | .27<br>.44 | .15<br>.30 | .24<br>.37 | .33<br>.50 | .19<br>.34 | .28<br>.41 | .38<br>.56 |
| MEDIAN STRIP-TURF | .19<br>.24 | .20<br>.26 | .24<br>.30 | .19<br>.25 | .22<br>.28 | .26<br>.33 | .20<br>.26 | .23<br>.30 | .30<br>.37 | .20<br>.27 | .25<br>.32 | .30<br>.40 |
| SIDE SLOPE:<br>TURF | | | .25<br>.32 | | | .27<br>.34 | | | .28<br>.36 | | | .30<br>.38 |
| PAVEMENT: | | | | | | | | | | | | |
| ASPHALT | .70 - .95 | | | | | | | | | | | |
| CONCRETE | .80 - .95 | | | | | | | | | | | |
| BRICK | .70 - .80 | | | | | | | | | | | |
| DRIVES, WALKS | .75 - .85 | | | | | | | | | | | |
| ROOFS | .75 - .95 | | | | | | | | | | | |
| GRAVEL ROADS, SHOULDERS | .40 - .60 | | | | | | | | | | | |

TOTAL PROJECT AREA = 19.25 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 15.13 ACRES




### DRILLED TIE BARS AND CURB & GUTTER MATCH POINTS

CONSTRUCT AT ALL LOCATIONS WHERE PROPOSED CURB & GUTTER MATCHES EXISTING CURB & GUTTER

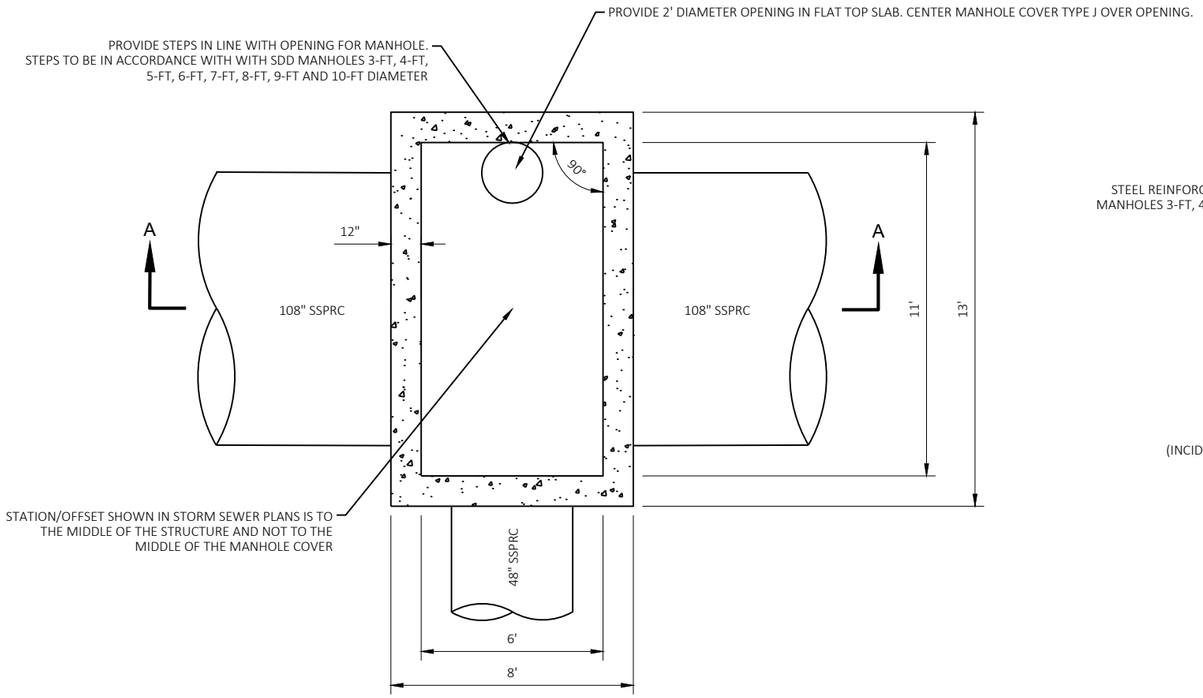



### EXCAVATION BELOW SUBGRADE (EBS) DETAIL (URBAN)

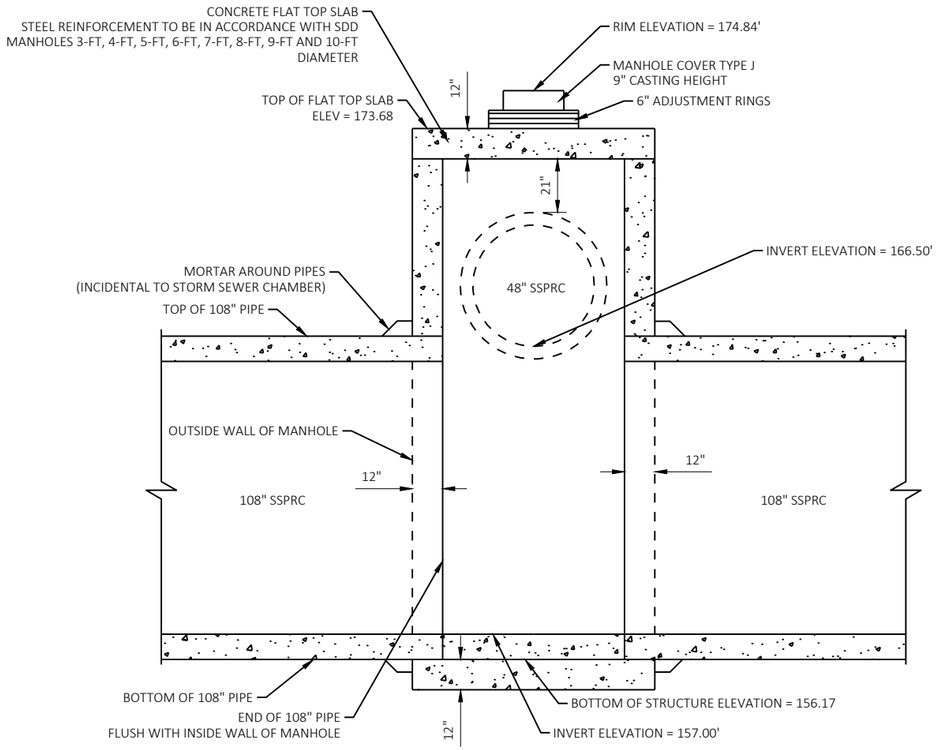
LOCATIONS AS APPROVED BY ENGINEER

NOTES FOR EXCAVATION BELOW SUBGRADE (EBS) AREAS ONLY:

1. USE AS DIRECTED BY THE ENGINEER FOR AREAS OF UNSTABLE SUBGRADE.
2. EBS SHALL BE PAID FOR AS COMMON EXCAVATION.
3. GEOGRID TYPE SR SHALL BE USED AT THE DISCRETION OF THE ENGINEER WHEN THE EBS DEPTH EXCEEDS 18 INCHES TO LIMIT THE DEPTH OF THE REQUIRED EBS. GEOGRID TYPE SR PLACED WITHOUT THE AUTHORIZATION OF THE ENGINEER SHALL NOT BE PAID FOR.
4. WRAP THE UNDERDRAIN TRENCH WITH GEOTEXTILE TYPE DF SCHEDULE A. OVERLAP THE FABRIC BY 12" AT THE TOP OF THE TRENCH. TOTAL FABRIC WIDTH IS 5'-0" FOR PAYMENT.
5. SLOPE THE UNDERDRAIN PIPE AT 0.5% MINIMUM , 1.0% DESIRABLE.
6. CONNECT THE UNDERDRAIN TO THE INLET BY CORING A HOLE IN THE INLET STRUCTURE. MORTAR THE UNDERDRAIN TO THE INLET STRUCTURE. CORING A HOLE IN THE INLET STRUCTURE AND MORTARING THE UNDERDRAIN INTO THE INLET IS INCIDENTAL TO PIPE UNDERDRAIN 6-INCH.
7. THE BOTTOM OF THE PIPE UNDERDRAIN SHALL ENTER THE INLET STRUCTURE HIGHER THAN THE CROWN OF ANY STORM SEWER PIPES IN THE INLET STRUCTURE UNLESS OTHERWISE APPROVED BY THE ENGINEER.




PLAN VIEW

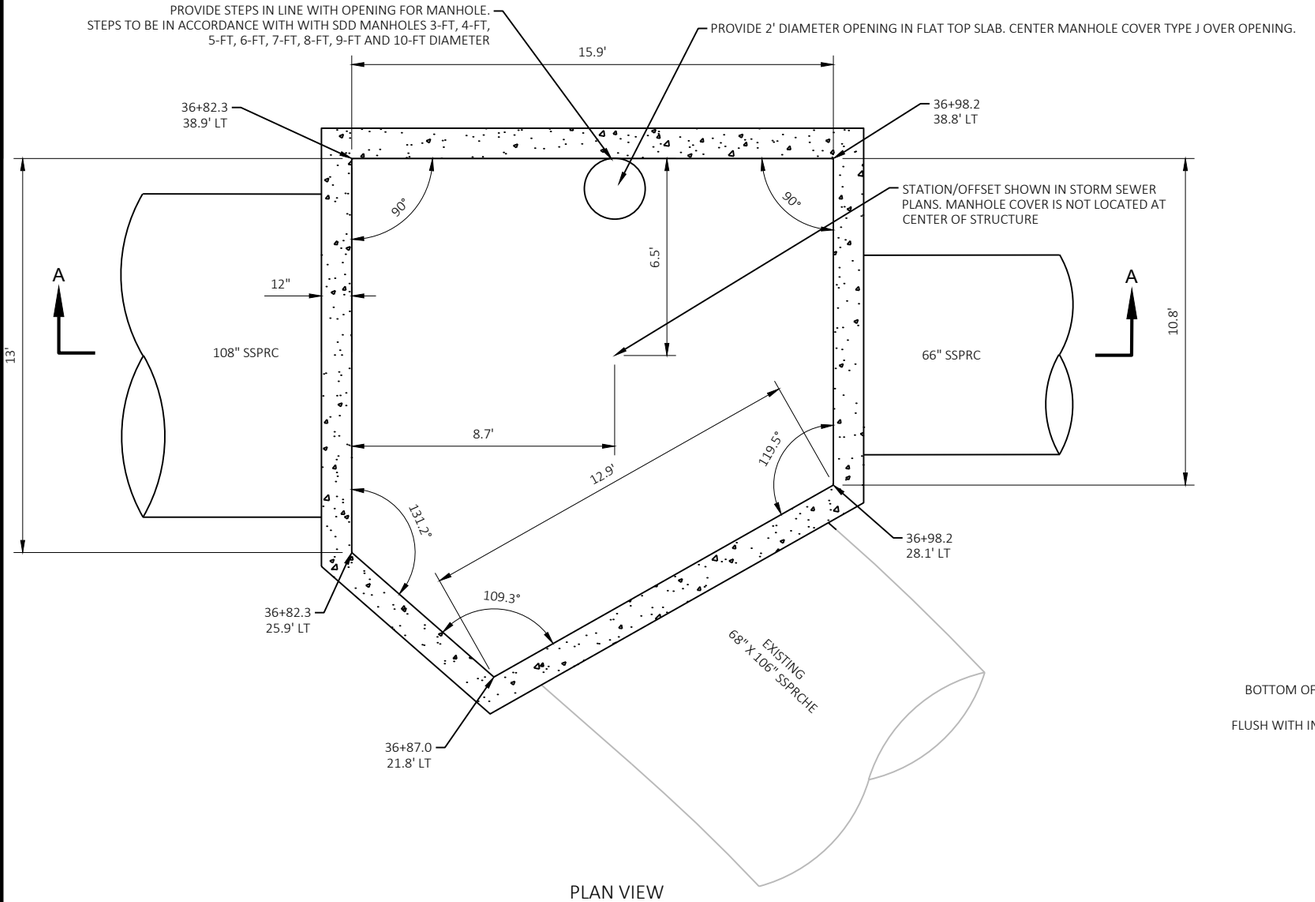



SECTION A-A

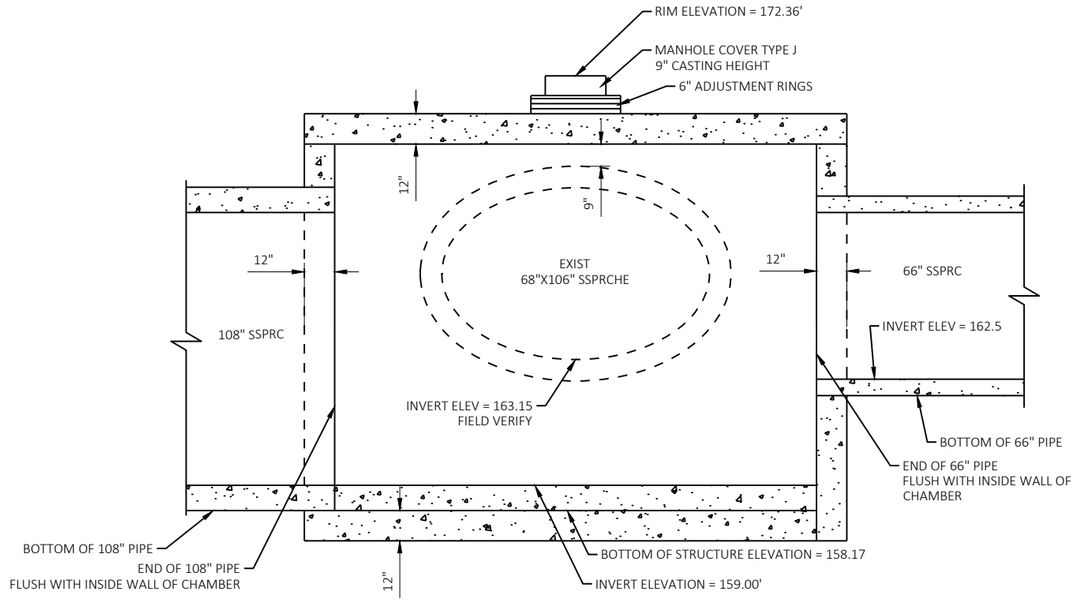
NOTES:
1. MANHOLE SHALL BE CONSTRUCTED IN ACCORDANCE WITH SDD "MANHOLES 3X3-FT, 4X4-FT, 5X5-FT, AND 6X6-FT DIAMETER UNLESS OTHERWISE SPECIFIED IN THIS DETAIL.
2. STRUCTURE MAY BE PRECAST CONCRETE OR CAST IN PLACE.
3. BYPASS PUMPING OR ANOTHER ENGINEER APPROVED METHOD WILL BE REQUIRED TO CONTROL THE FLOW OF WATER WHILE THE MANHOLE IS BEING CONSTRUCTED AND INSTALLED. THE COST OF BYPASS PUMPING OR OTHER ENGINEER APPROVED METHODS SHALL BE INCIDENTAL TO CONSTRUCTION OF THE MANHOLE.
4. COMPRESSIVE STRENGTH OF THE CONCRETE (f'c) SHALL BE 5,000 PSI.
5. YIELD STRENGTH OF REINFORCING BARS (fy) SHALL BE 60 KSI. REBAR SHALL BE EPOXY COATED.
6. DESIGN OF THE STRUCTURE SHALL BE IN ACCORDANCE WITH ASTM C913 WITH DESIGN LOADS PER ASTM C890.
7. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS AND STRUCTURAL CALCULATIONS, PREPARED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF WISCONSIN FOR REVIEW. DO NOT ORDER PRECAST STRUCTURE OR CONSTRUCT STRUCTURE ON SITE UNTIL ENGINEER APPROVES SHOP DRAWINGS AND STRUCTURAL CALCULATIONS.
8. BACKFILL SHALL BE IN ACCORDANCE WITH SECTION 611 OF THE STANDARD SPECS.

## MANHOLE 6X11-FT

STA 98+72'CLEVELAND', 18.7' LT




PLAN VIEW



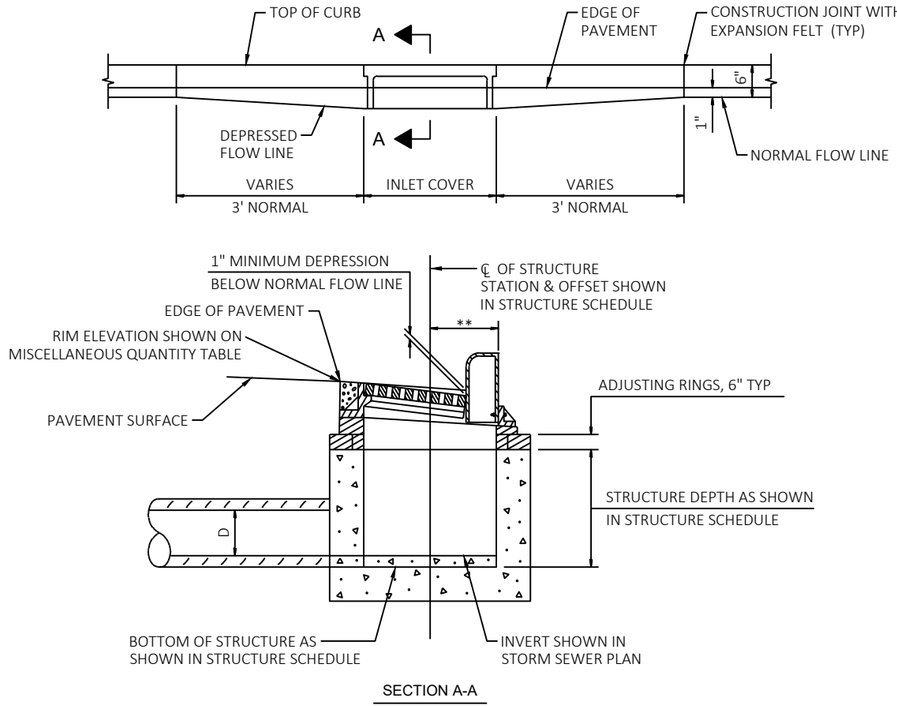

SECTION A-A

NOTES:

1. MANHOLE SHALL BE CONSTRUCTED IN ACCORDANCE WITH SDD "MANHOLES 3X3-FT, 4X4-FT, 5X5-FT, AND 6X6-FT DIAMETER UNLESS OTHERWISE SPECIFIED IN THIS DETAIL.
2. STRUCTURE MAY BE PRECAST CONCRETE OR CAST IN PLACE.
3. BYPASS PUMPING OR ANOTHER ENGINEER APPROVED METHOD WILL BE REQUIRED TO CONTROL THE FLOW OF WATER WHILE THE MANHOLE IS BEING CONSTRUCTED AND INSTALLED. THE COST OF BYPASS PUMPING OR OTHER ENGINEER APPROVED METHODS SHALL BE INCIDENTAL TO CONSTRUCTION OF THE MANHOLE.
4. COMPRESSIVE STRENGTH OF THE CONCRETE (f'c) SHALL BE 5,000 PSI.
5. YIELD STRENGTH OF REINFORCING BARS (fy) SHALL BE 60 KSI. REBAR SHALL BE EPOXY COATED.
6. DESIGN OF THE STRUCTURE SHALL BE IN ACCORDANCE WITH ASTM C913 WITH DESIGN LOADS PER ASTM C890.
7. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS AND STRUCTURAL CALCULATIONS, PREPARED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF WISCONSIN FOR REVIEW. DO NOT ORDER PRECAST STRUCTURE OR CONSTRUCT STRUCTURE ON SITE UNTIL ENGINEER APPROVES SHOP DRAWINGS AND STRUCTURAL CALCULATIONS.
8. BACKFILL SHALL BE IN ACCORDANCE WITH SECTION 611 OF THE STANDARD SPECS.

## STORM SEWER CHAMBER

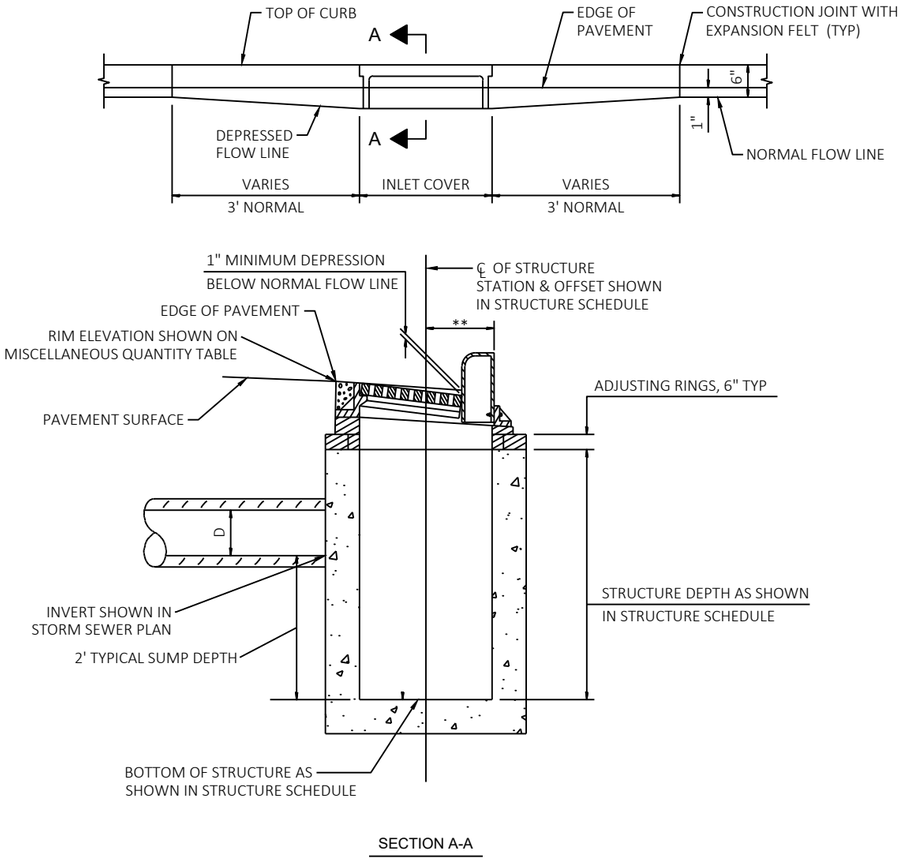
STA 36+91'NATIONAL', 32.3' LT




## DETAIL OF CURB AND GUTTER AT INLETS

** OFFSET TO CENTER OF STRUCTURE TO BACK OF CURB:

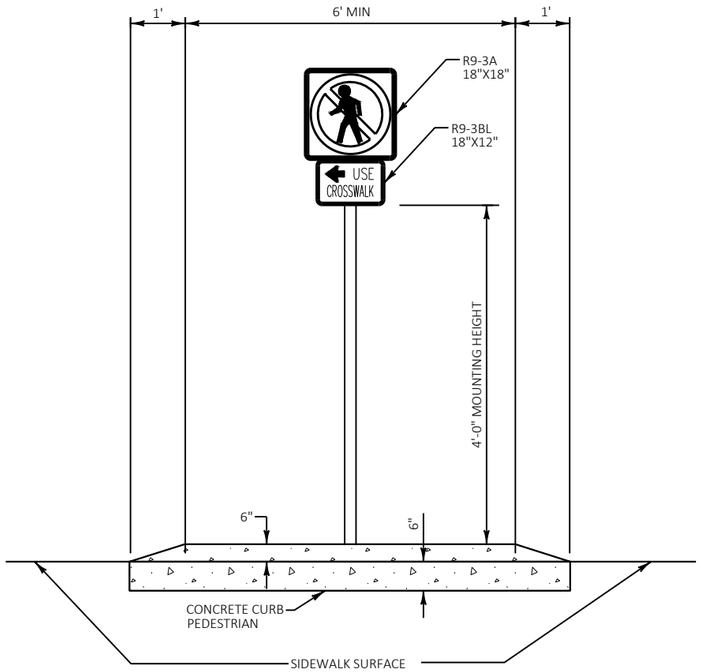
| CASTING TYPE | OFFSET |
|---|---|
| R | 15.5" |
| Z | 9" |




## DETAIL OF CURB AND GUTTER AT CATCH BASINS

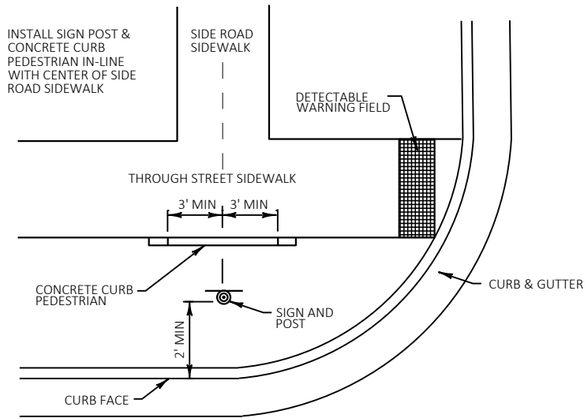
** OFFSET TO CENTER OF STRUCTURE TO BACK OF CURB:

| CASTING TYPE | OFFSET |
|---|---|
| R | 15.5" |
| Z | 9" |




CONCRETE CURB PEDESTRIAN DETAIL

CURB ELEVATION VIEW

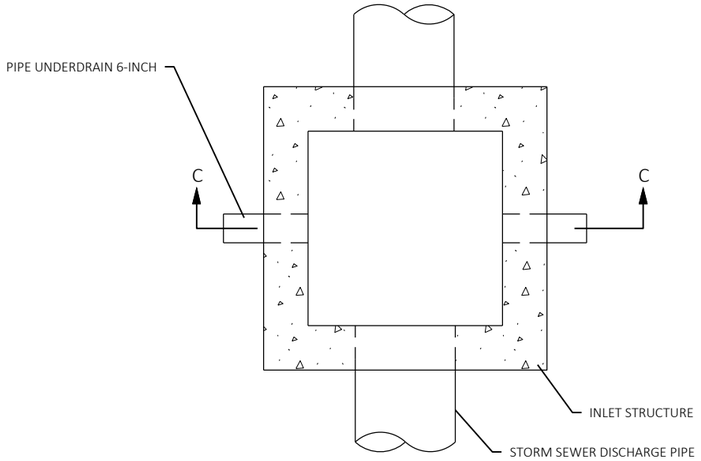



CURB AND SIGN LOCATION DETAIL

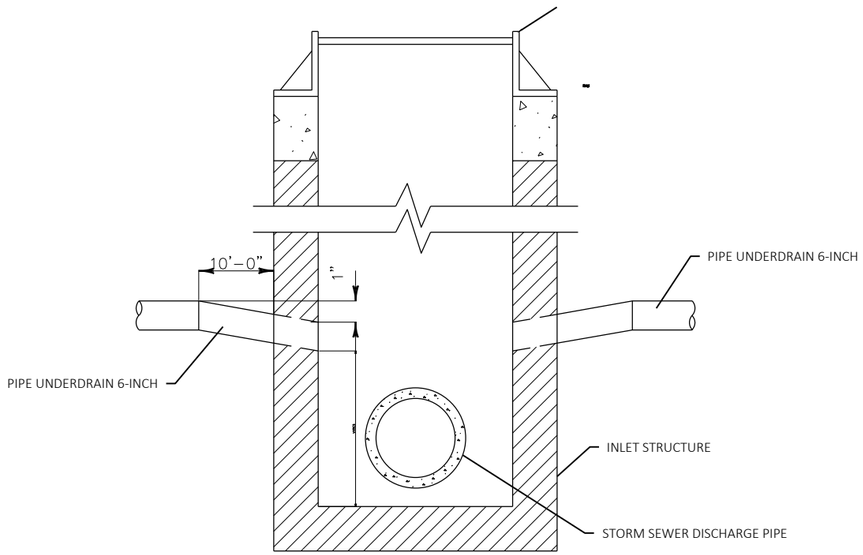
CROSSWALK CLOSURE DETAIL

NOT TO SCALE

SEE CURB RAMP DETAILS FOR LOCATIONS




PLAN VIEW

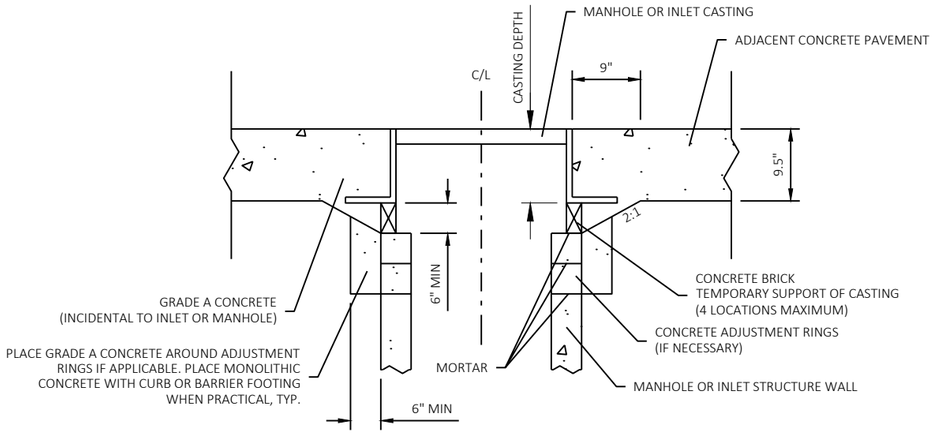



SECTION C-C

NOTE

SEE TYPICAL SECTIONS, STORM SEWER, AND UNDERDRAIN PLANS FOR PIPE UNDERDRAIN LOCATIONS.

## UNDERDRAIN OUTFALL AT DRAINAGE STRUCTURE



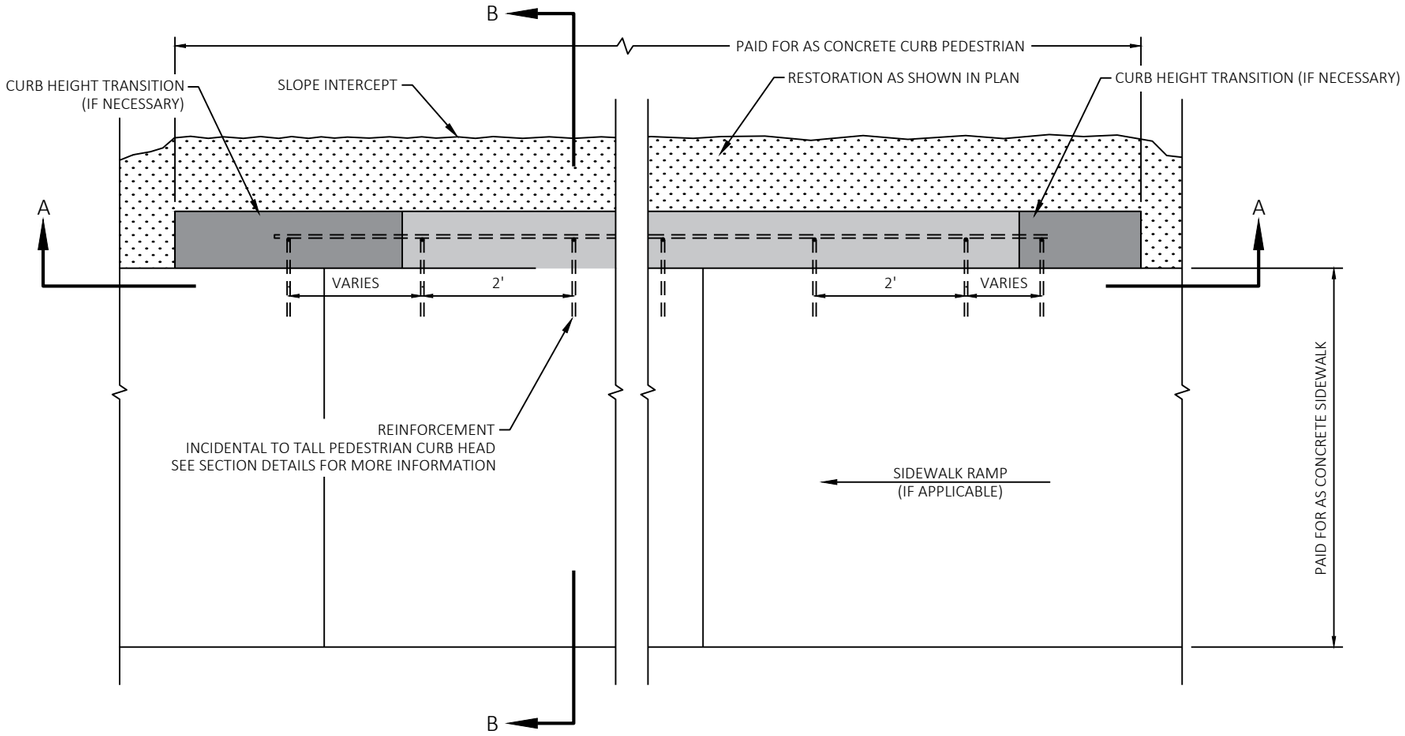

## MONOLITHIC CONCRETE SHIMMING DETAIL

NOTES:
1. MONOLITHIC CONCRETE SHIMMING TO BE PROVIDED FOR ALL PROPOSED COVERS LOCATED IN CONCRETE PAVEMENT, CONCRETE CURB & GUTTER, AND CONCRETE BARRIER.
2. COST OF MONOLITHIC SHIM AND CONCRETE BRICKS TO BE INCIDENTAL TO MANHOLE OR INLET STRUCTURE BID ITEM.

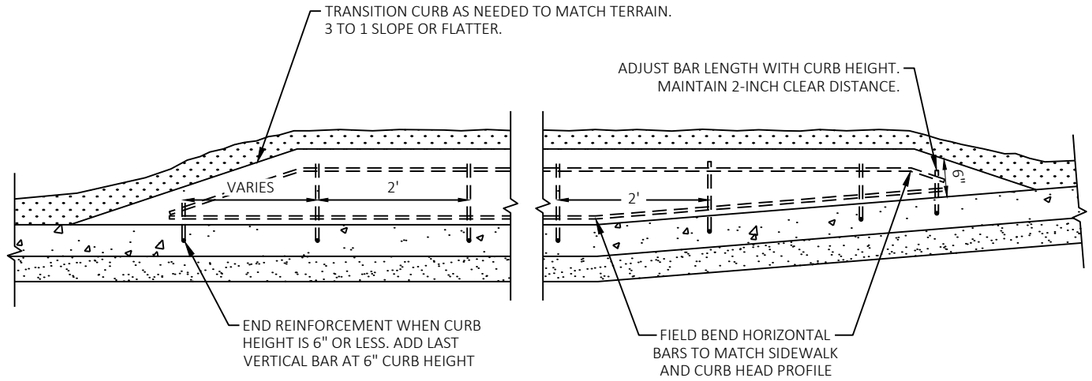
2

CONSTRUCTION NOTES

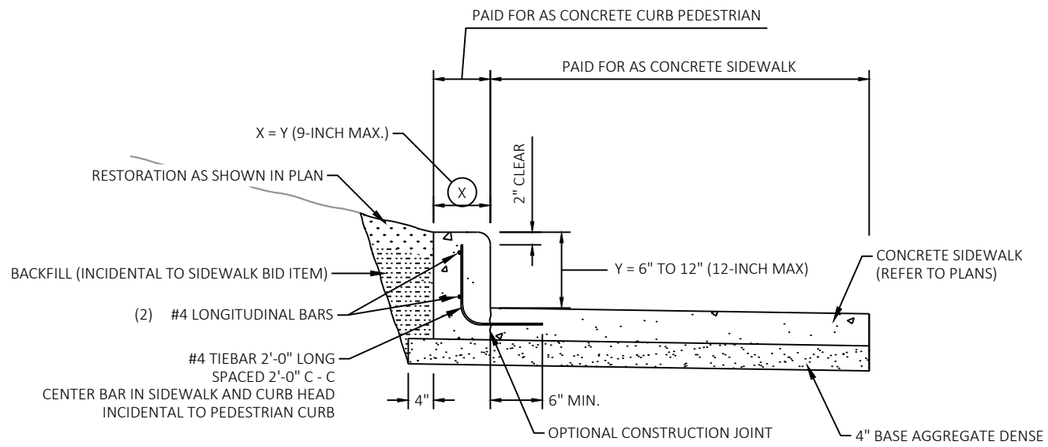
1. CONSTRUCTION FOR TALL PEDESTRIAN CURB SHALL CONFORM TO STANDARD SPEC 601.
2. PEDESTRIAN CURB IS INTENDED TO BE FORMED AND POURED INTEGRAL WITH ADJACENT SIDEWALK. NO ADDITIONAL PAYMENT WILL BE MADE FOR DRILLING TIEBARS IF CONTRACTOR CHOOSES TO POUR CURB AND SIDEWALK SEPARATELY.




PLAN VIEW




SECTION A - A




SECTION B - B

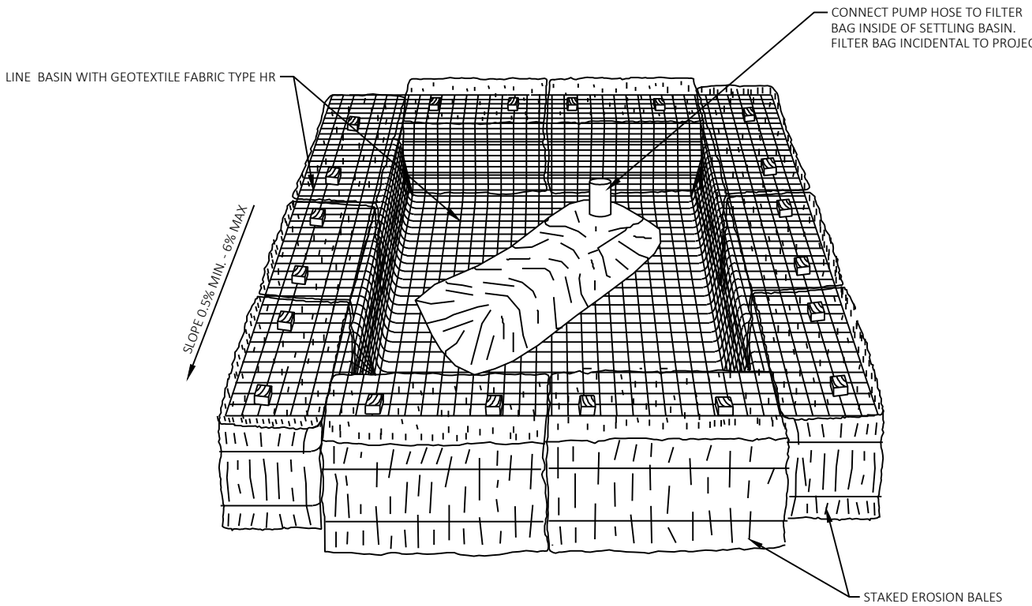
## TALL PEDESTRIAN CURB

FOR PEDESTRIAN CURB GREATER THAN 6-INCHES IN HEIGHT.
REFER TO PLANS FOR LOCATION AND CURB HEIGHT.

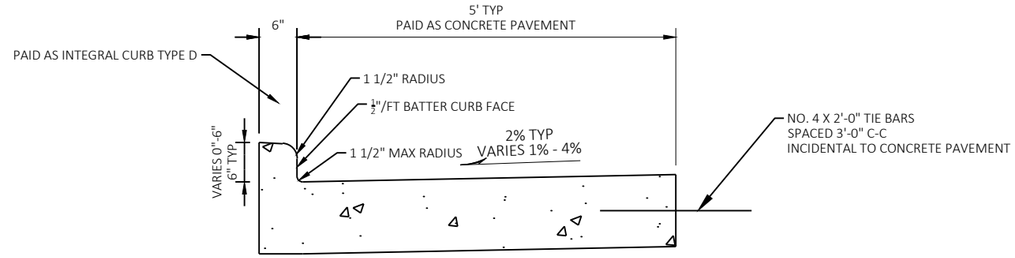
2

NOTES:

1. PUMP FROM DEWATERING OPERATIONS INTO TEMPORARY SETTLING BASINS PRIOR TO DISCHARGING INTO ROADSIDE DITCHES.
2. BASIN SHALL BE KEPT LESS THAN 10% FULL OF SEDIMENT. GEOTEXTILE FABRIC AND SEDIMENTS SHALL BE DISPOSED BY THE CONTRACTOR OFF THE PROJECT SITE.
3. SETTLING BASIN SHALL BE PLACED IN AN UPLAND,FLAT, VEGETATED AREA OR EQUIVALENT LOCATION APPROVED BY THE ENGINEER.
4. SIZE OF SETTLING BASIN AND FILTER BAG SHALL BE DETERMINED BY THE CONTRACTOR AS PART OF THE EROSION CONTROL IMPLEMENTATION PLAN.
5. ONLY ONE HOSE PER BAG ALLOWED AT A TIME. SIZE BASIN APPROPRIATELY FOR ADDITIONAL BAGS IF MORE THAN ONE HOSE IS NEEDED.
6. THE NECK OF THE BAG WHERE THE HOSE ATTACHES SHALL BE PLACED ON THE UPSTREAM CORNER OF THE SETTLING BASIN.
4. REPLACE SEDIMENT BAG, BALES, AND FABRIC AS NECESSARY OR AS DIRECTED BY THE ENGINEER. REMOVE SPENT BAGS PRIOR TO REPLACING. DO NOT STACK NEW BAG ON TOP OF SPENT BAG.
5. ALL ITEMS ARE INCIDENTAL TO THE CONTRACT. INCLUDING DISPOSAL AND REPLACEMENT OF BAGS AND BASIN MATERIALS

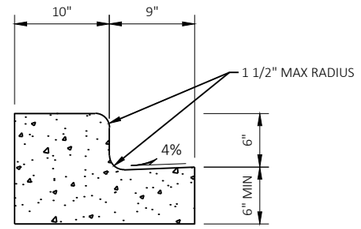



TEMPORARY SETTLING BASIN WITH SEDIMENT BAG




CONCRETE CURB INTEGRAL TYPE D DETAIL

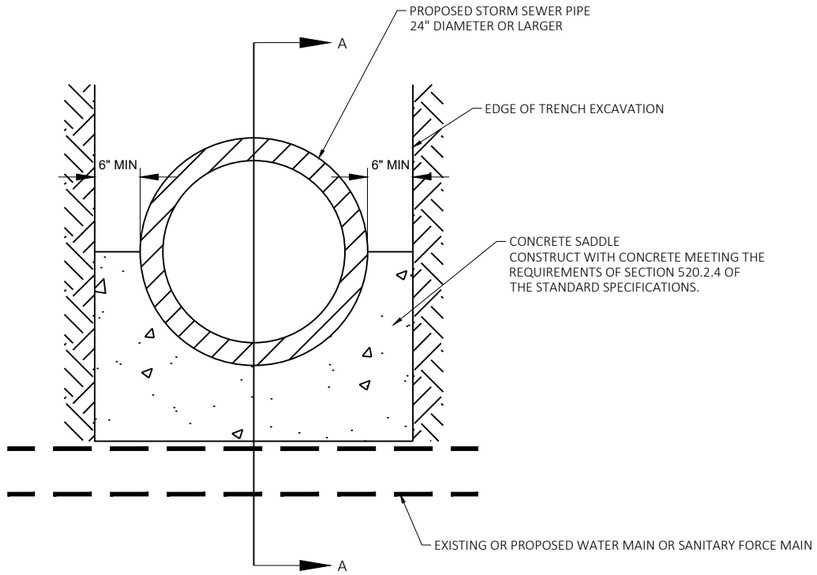
SEE PLAN DETAILS FOR LOCATIONS



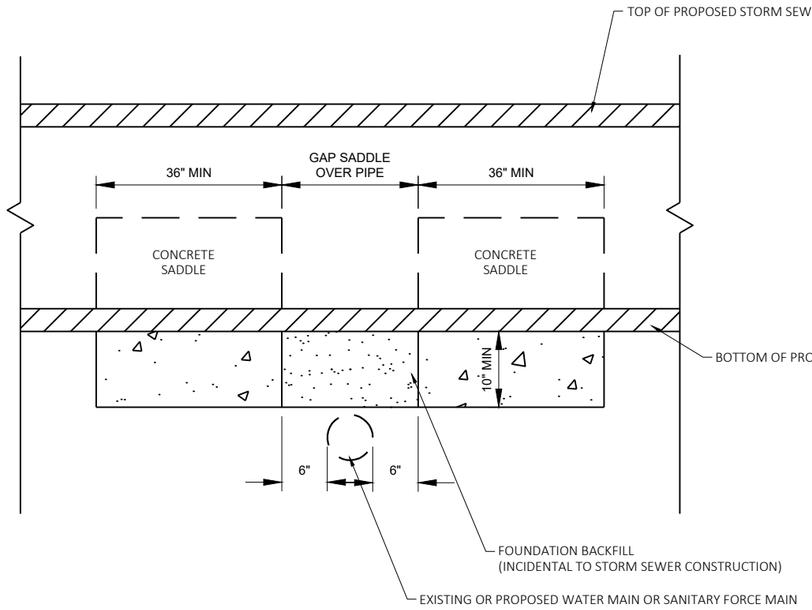

CONCRETE CURB & GUTTER 19-INCH TYPE D 9-INCH GUTTER DETAIL

SEE PLAN DETAILS FOR LOCATIONS

2




SECTION VIEW

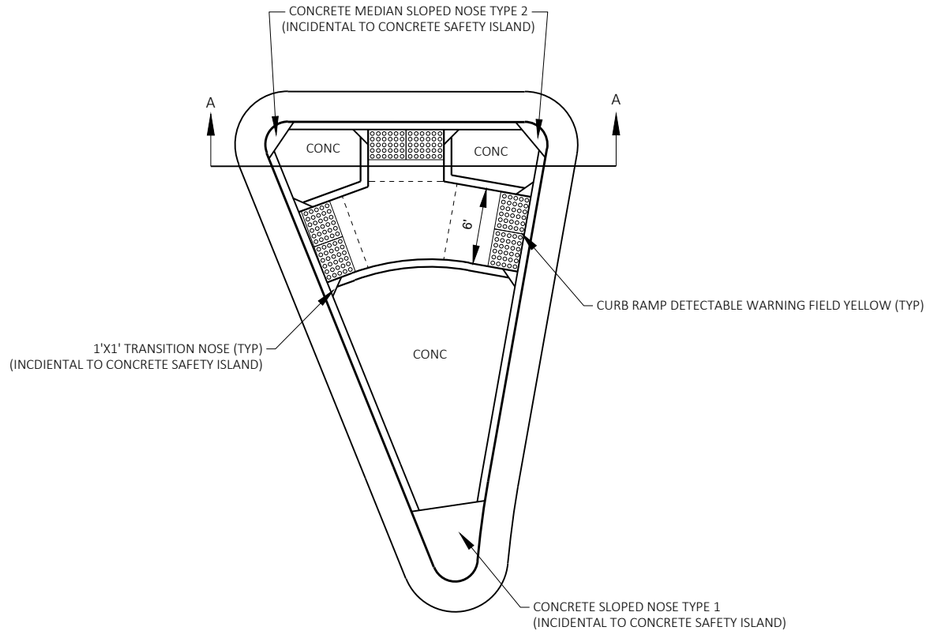


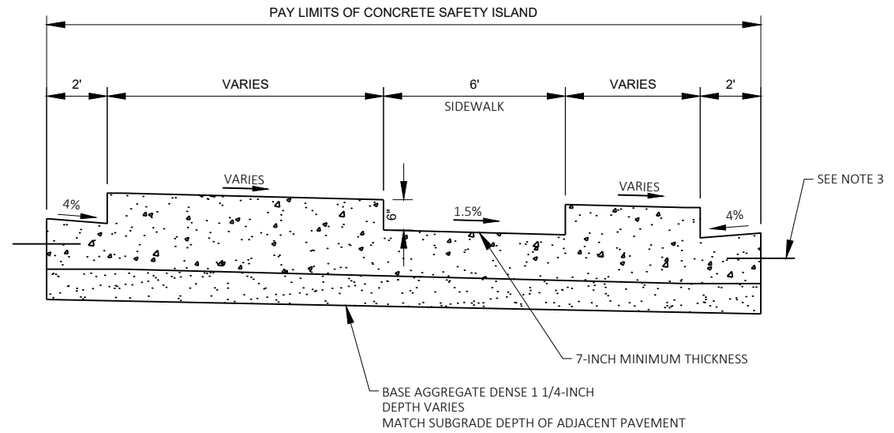

SECTION A-A

## CONCRETE SADDLE

TO BE USED WHENEVER A STORM SEWER PIPE 24-INCHES OR LARGER CROSSES A WATER MAIN OR SANITARY FORCE MAIN WITH LESS THAN 18 INCHES OF CLEARANCE
SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS

2




SECTION A-A

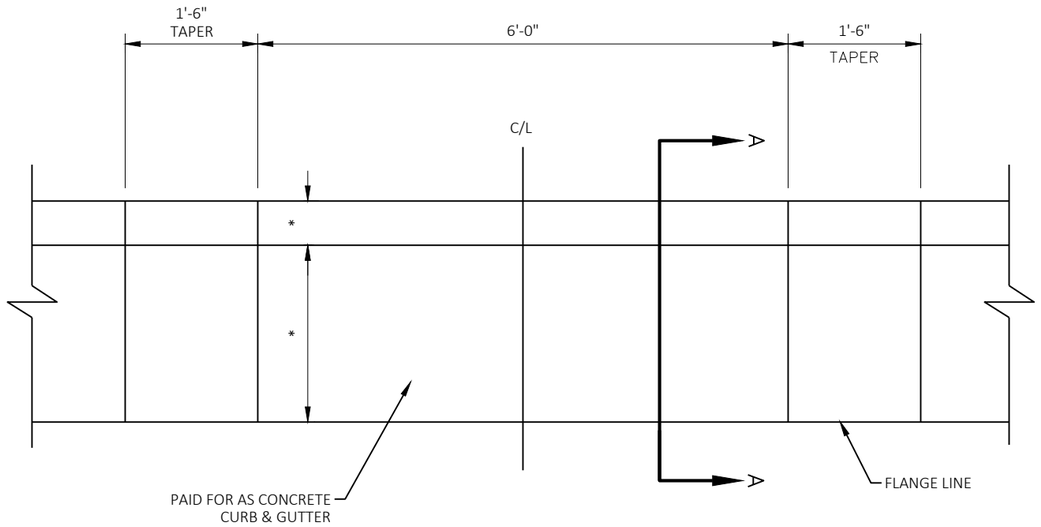
NOTES:

1. ENTIRE ISLAND INCLUDING WALKING PATH IS PAID FOR AS CONCRETE SAFETY ISLAND.
2. SIZE AND SHAPE OF INDIVIDUAL ISLANDS VARIES, SEE PLAN DETAILS AND CURB RAMP DETAILS0 FOR DIMENSIONS, SLOPES, AND ELEVATION OF EACH ISLAND.
3. #4X2' TIE BARS SPACE AT 3' CENTER TO CENTER. TIE BARS INCIDENTAL TO CONCRETE SAFETY ISLAND.
4. CONCRETE SAFETY ISLAND MAY BE CONSTRUCTED AS ONE MONOLITHIC SLAB OR INDIVIDUAL SECTIONS OF CURB & GUTTER, SIDEWALK, AND PEDESTRIAN CURB. PAYMENT SHALL BE THE SAME FOR BOTH METHODS OF CONSTRUCTION.
5. WALKING PATH SHALL MEET PROWAG REQUIREMENTS

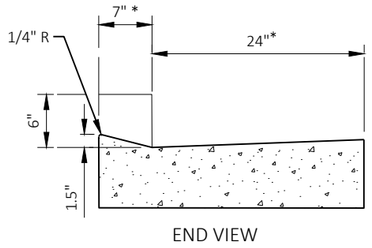
CONCRETE SAFETY ISLAND DETAIL

SEE PLAN FOR LOCATIONS

2



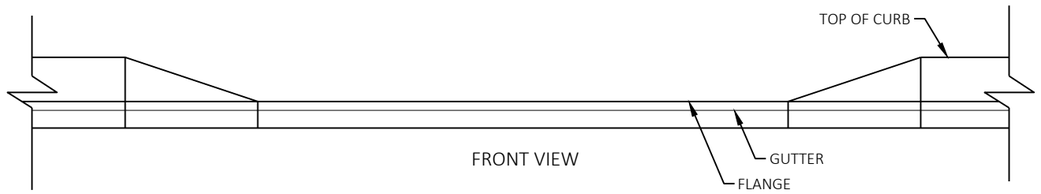

PLAN VIEW




END VIEW

SECTION A-A

* TYPE AND DIMENSIONS TO MATCH ADJACENT CURB AND GUTTER.

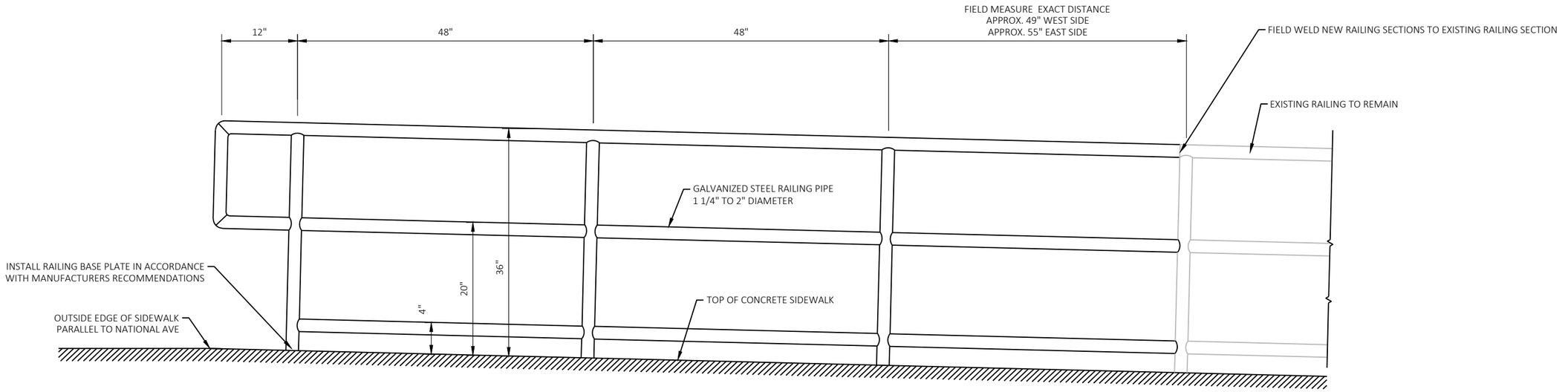



FRONT VIEW

## MAINTENANCE OPENING

LOCATIONS SHOWN ON PAVING DETAILS

2




ELEVATION VIEW - LOOKING WEST

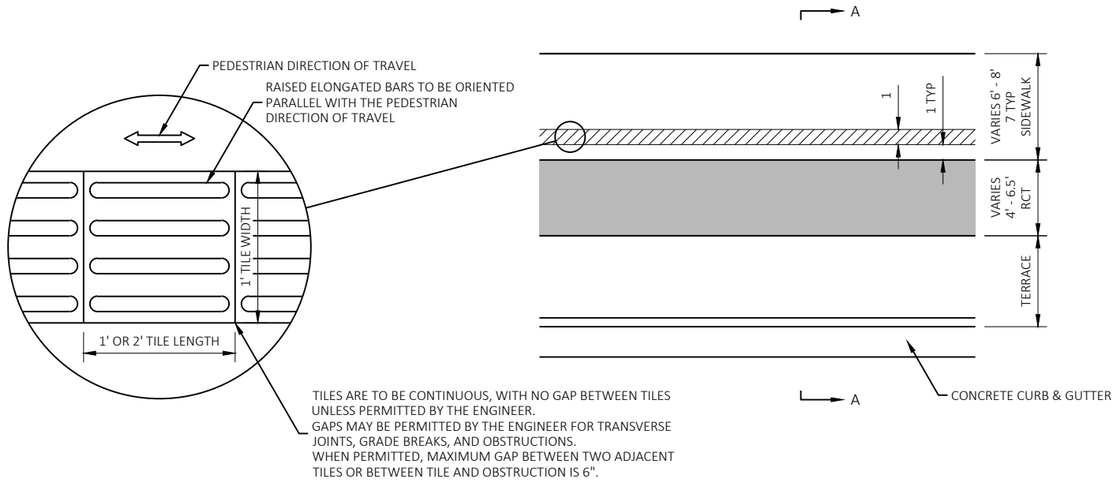
NOTES:

1. SEE CONSTRUCTION DETAILS FOR DIMENSIONS AND AT EACH LOCATION.
2. PROVIDE SHOP DRAWINGS FOR ALL RAILING COMPONENTS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ORDERING OR FABRICATING RAILING COMPONENTS.
3. ALL RAILINGS SHALL BE GALVANIZED STEEL AND PAINTED BLACK TO MATCH ADJACENT RAILING.
4. RAILINGS SHALL BE MOUNTED TO THE CONCRETE SIDEWALK.
5. RAILINGS SHALL BE MOUNTED TO CONCRETE USING ANCHOR BOLTS AND A BASE PLATE. VERTICAL MEMBER OF RAILING SHALL NOT BE EMBEDDED DIRECTLY INTO CONCRETE.
6. PLACE ANCHOR BOLTS FOR RAILING INTO CONCRETE IN ACCORDANCE WITH SECTION 513. PLACE ANCHOR BOLTS DURING CONCRETE PLACEMENT UNLESS OTHERWISE APPROVED BY THE ENGINEER.
7. GRIND AND SMOOTH ALL CONNECTIONS OF SECTIONS OF PIPE.
8. A MINIMUM OF A 1/8" RADIUS IS REQUIRED AT ALL ANGLES OR CORNERS IN THE PIPE. THE ACTUAL RADIUS USED SHALL BE DETERMINED BY THE MANUFACTURER.

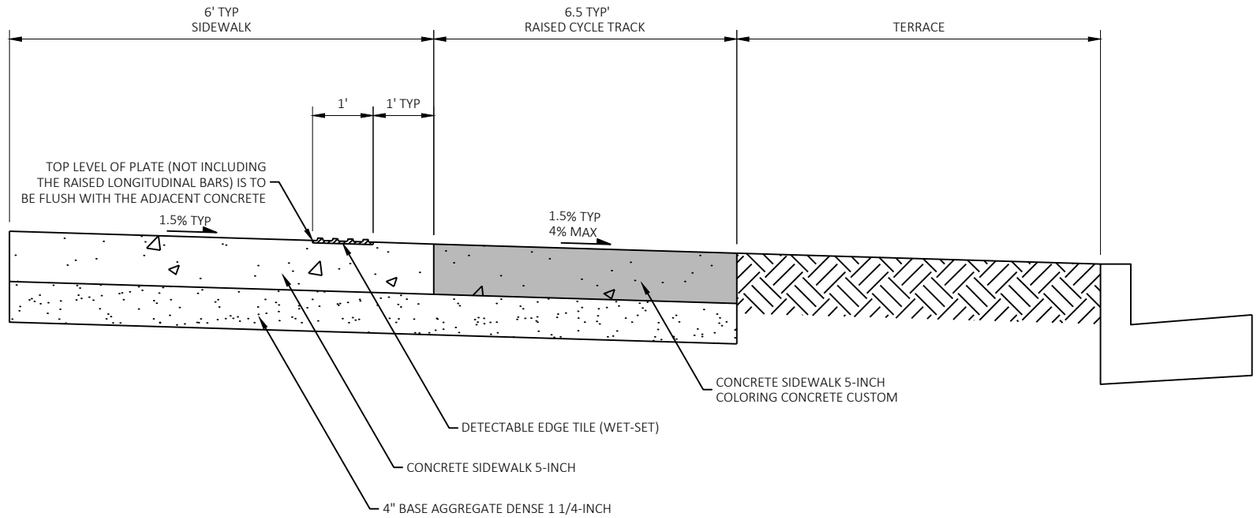
RAILING PIPE DETAIL

SEE PLAN DETAILS FOR LOCATIONS

2



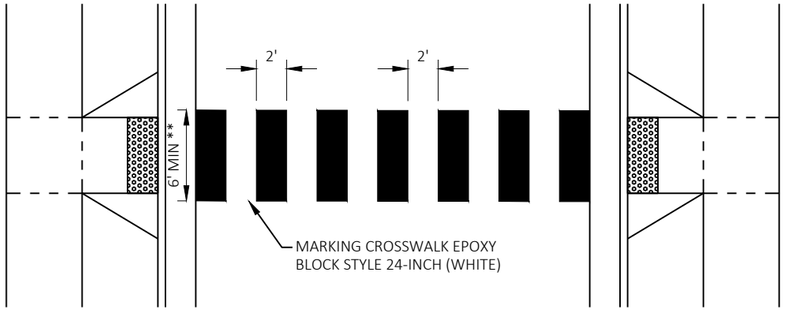

PLAN VIEW




SECTION A-A

## DETECTABLE EDGE TILES

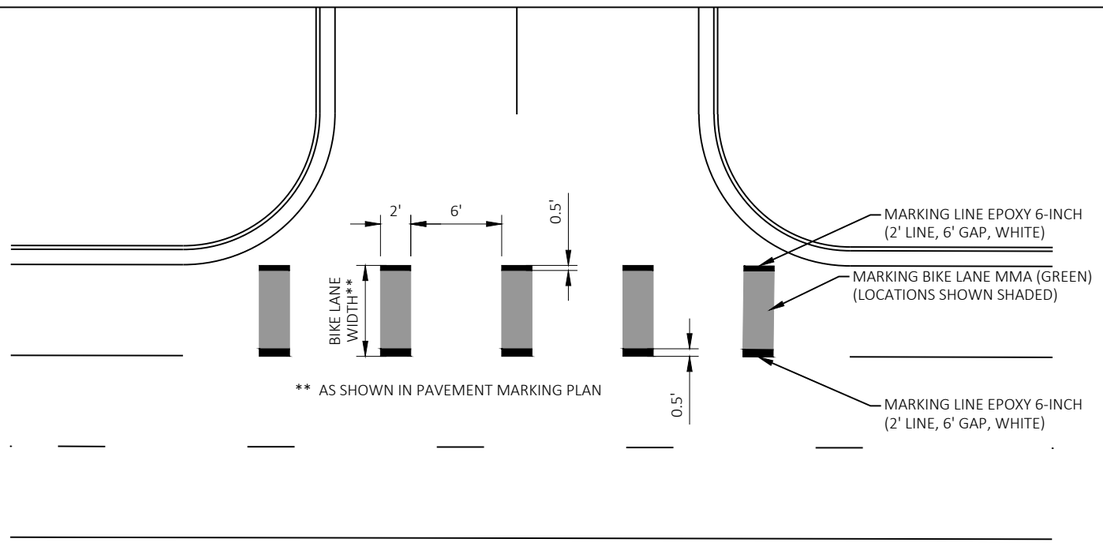
LEFT SIDE SHOWN. RIGHT SIDE IS MIRROR IMAGE.
SEE PLAN DETAILS AND CURB RAMP DETAILS FOR ADDITIONAL INFORMATION.




** OR AS SHOWN IN PAVEMENT MARKING PLAN

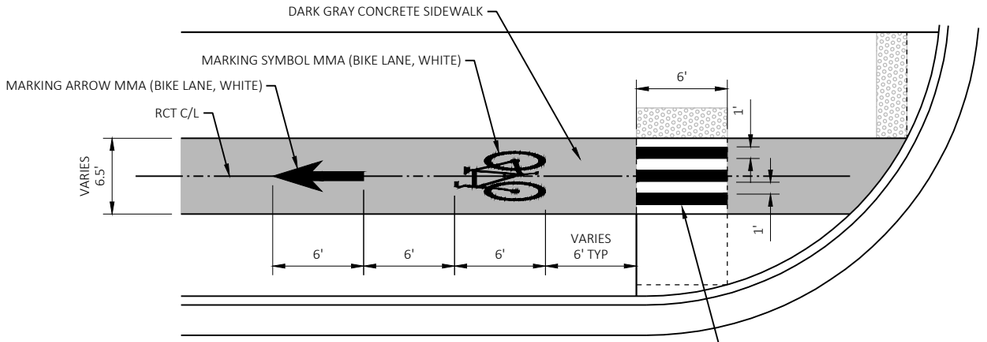
## CONTINENTAL CROSSWALK PAVEMENT MARKING DETAIL

SEE PAVEMENT MARKING PLAN FOR LOCATIONS AND MARKING TYPES



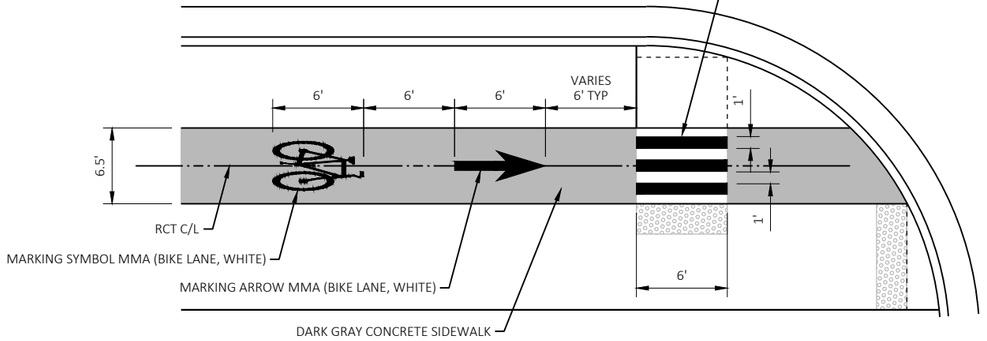

## INTERSECTION BIKE LANE MARKING DETAIL

SEE PAVEMENT MARKING PLAN FOR LOCATIONS AND MARKING TYPES




INTERSECTION DEPARTURE

WESTBOUND RCT DIRECTION SHOWN




INTERSECTION APPROACH

EASTBOUND RCT DIRECTION SHOWN

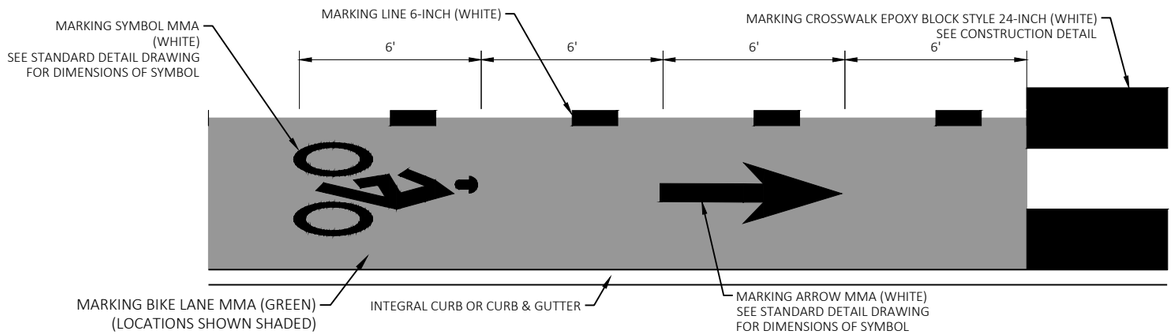
## RAISED CYCLE TRACK MARKINGS NEAR CROSSWALKS

SEE PAVEMENT MARKING PLANS FOR LOCATIONS

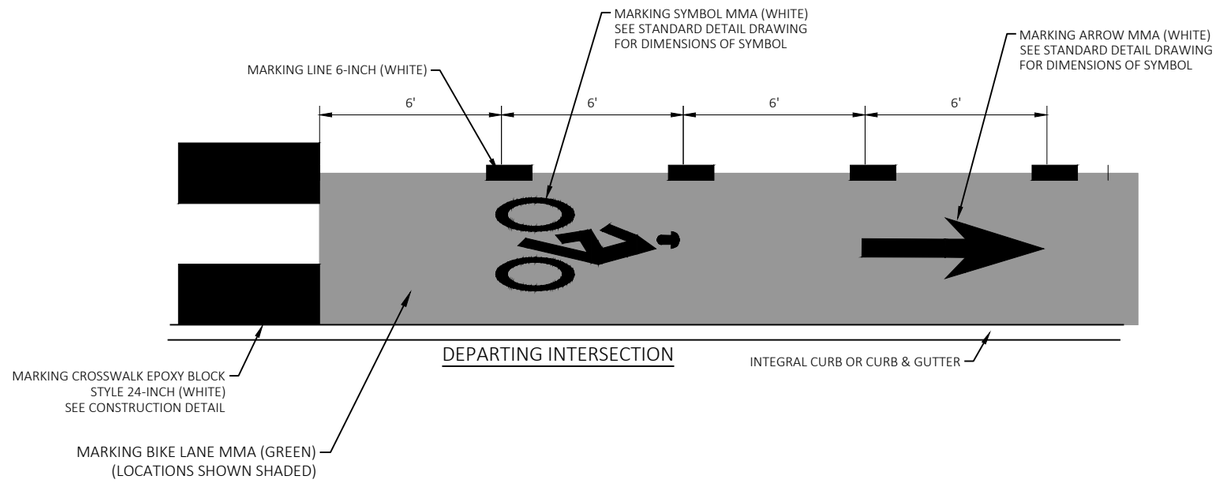
2

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CONSTRUCTION DETAILS | SHEET 28 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021001-CD.DWG
LAYOUT NAME - 16
PLOT DATE : 1/8/2026 10:53 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42




ON APPROACH TO INTERSECTION

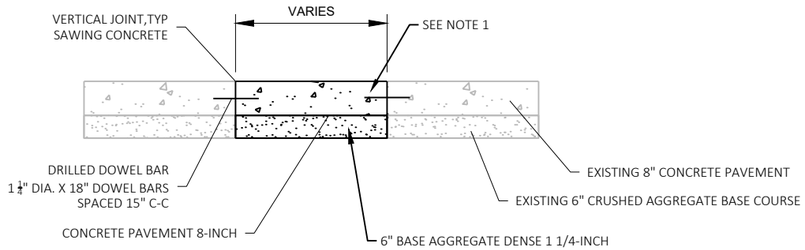



DEPARTING INTERSECTION

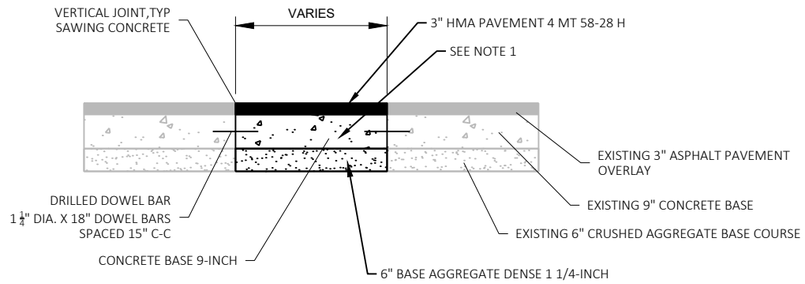
## BIKE LANE ARROW AND SYMBOL AT INTERSECTION DETAILS

SEE PAVEMENT MARKING PLAN FOR LOCATIONS

2




## SECTION VIEW - FULL DEPTH CONCRETE

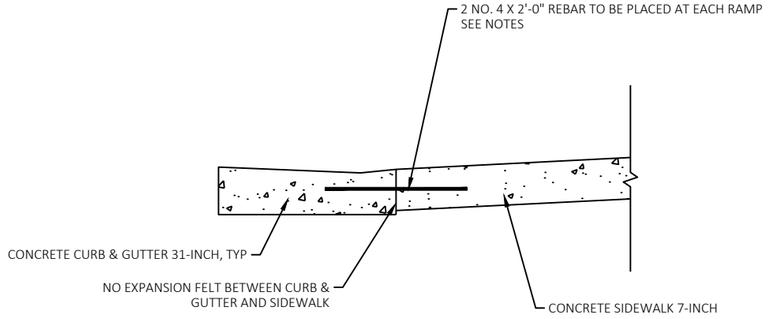



## SECTION VIEW - CONCRETE BASE WITH ASPHALT OVERLAY

NOTE:
1. PROVIDE NO. 6 X 12" TIE BARS SPACED 30" C-C INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT.

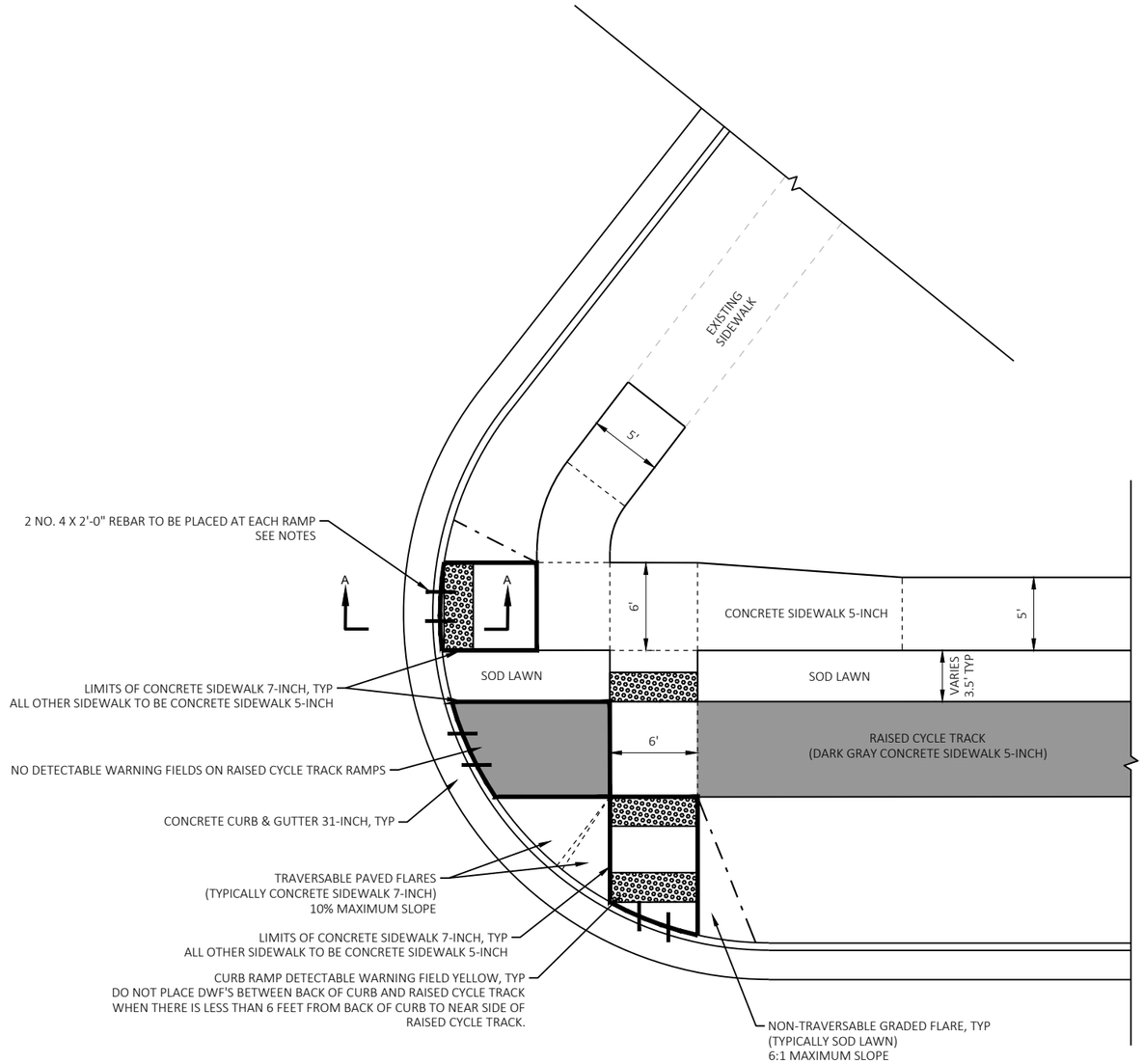
## PAVEMENT REPLACEMENT FOR TRAFFIC SIGNAL LOOPS AND UNDERGROUND UTILITY TRENCHES

SEE PLAN DETAILS FOR LOCATIONS



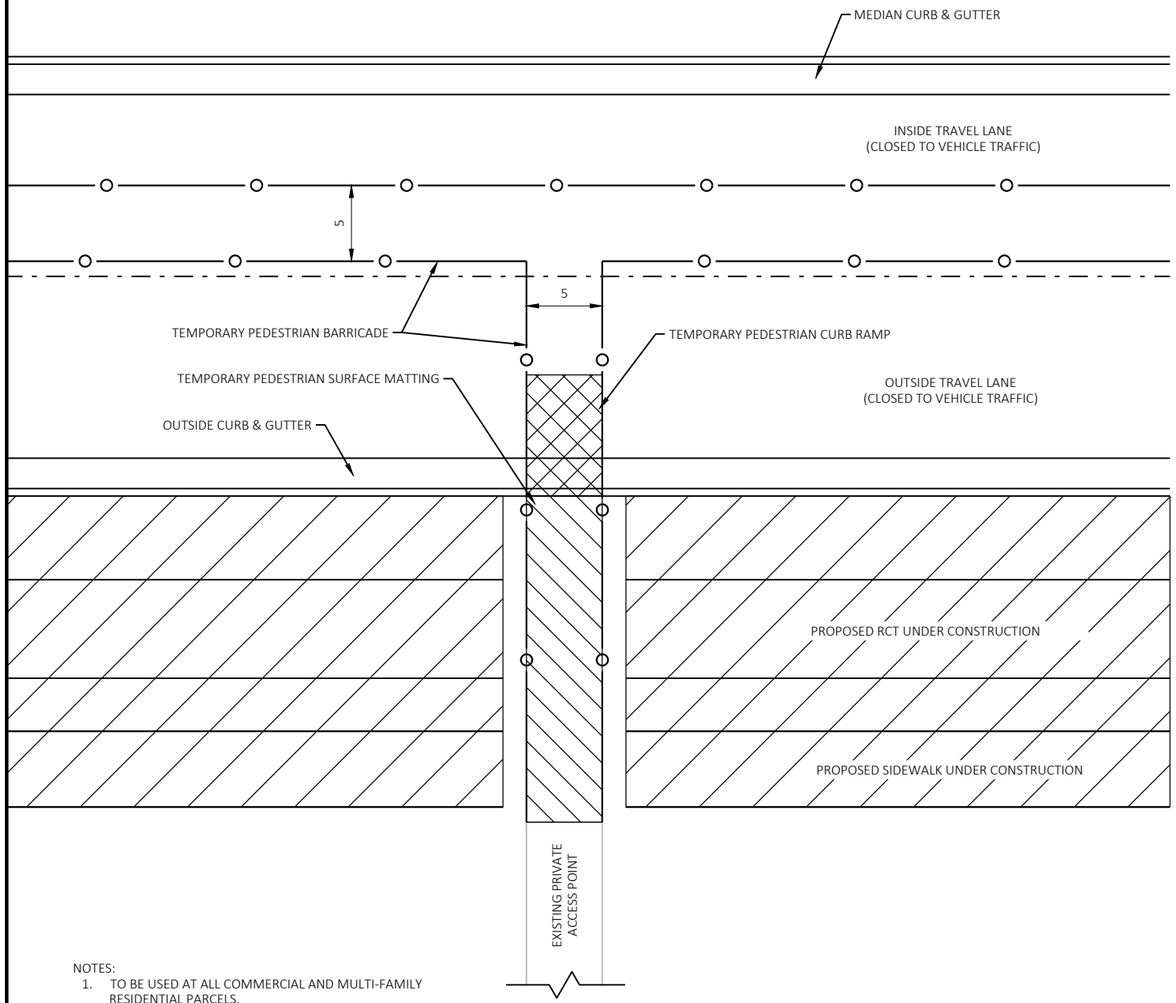

SECTION A-A

NOTES:
1. CONCRETE SIDEWALK BETWEEN BACK OF CURB AND GUTTER AND LANDING TO BE CONCRETE SIDEWALK 7-INCH. ALL OTHER CONCRETE SIDEWALK SHALL BE CONCRETE SIDEWALK 5-INCH.
2. FOR EACH RAMP PLACE 2 NO.4 X 2'-0" REBAR BETWEEN THE CONCRETE SIDEWALK 7-INCH AND CONCRETE CURB & GUTTER. REBAR TO BE PLACED IN WET CONCRETE. REBAR IS INCIDENTAL TO CONCRETE SIDEWALK 7-INCH.
3. REBAR TO HAVE 2" CLEAR COVER.
4. DO NOT PLACE EXPANSION FELT BETWEEN BACK OF CURB AND RAMPS.
5. CURB RAMPS TO BE 6' WIDE. ALL OTHER SIDEWALK TO BE 5 FEET WIDE. SEE PLAN DETAILS AND CURB RAMP DETAILS FOR TRANSITION LOCATIONS AND RAMP WIDTHS AT EACH CURB RAMP.




TYPICAL SIDEWALK AT INTERSECTION RADII DETAIL

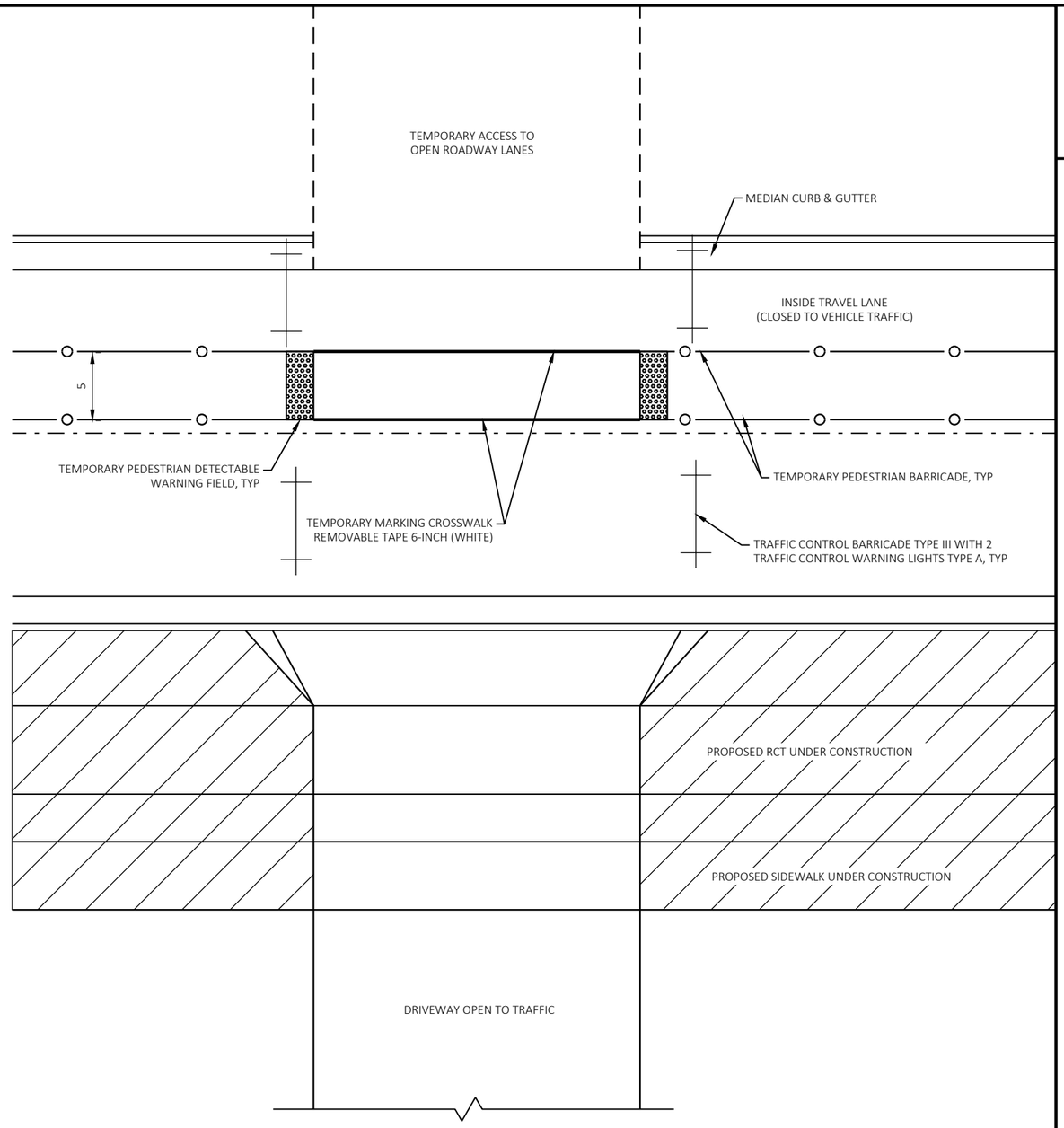
SEE PLAN DETAILS AND CURB RAMP DETAILS FOR DIMENSIONS AND SLOPES AT SPECIFIC LOCATIONS




NOTES:
1. TO BE USED AT ALL COMMERCIAL AND MULTI-FAMILY RESIDENTIAL PARCELS.
2. CONTRACTOR AND FIELD ENGINEER TO WORK DIRECTLY WITH OWNERS AND OCCUPANTS OF SINGLE FAMILY RESIDENTIAL PARCELS ON HOW TO ACCESS PROPERTY WHEN SIDEWALK IS CLOSED.
3. CONNECTION TO PARCEL MAY BE TO EXISTING SIDEWALK OR TO DRIVEWAY.

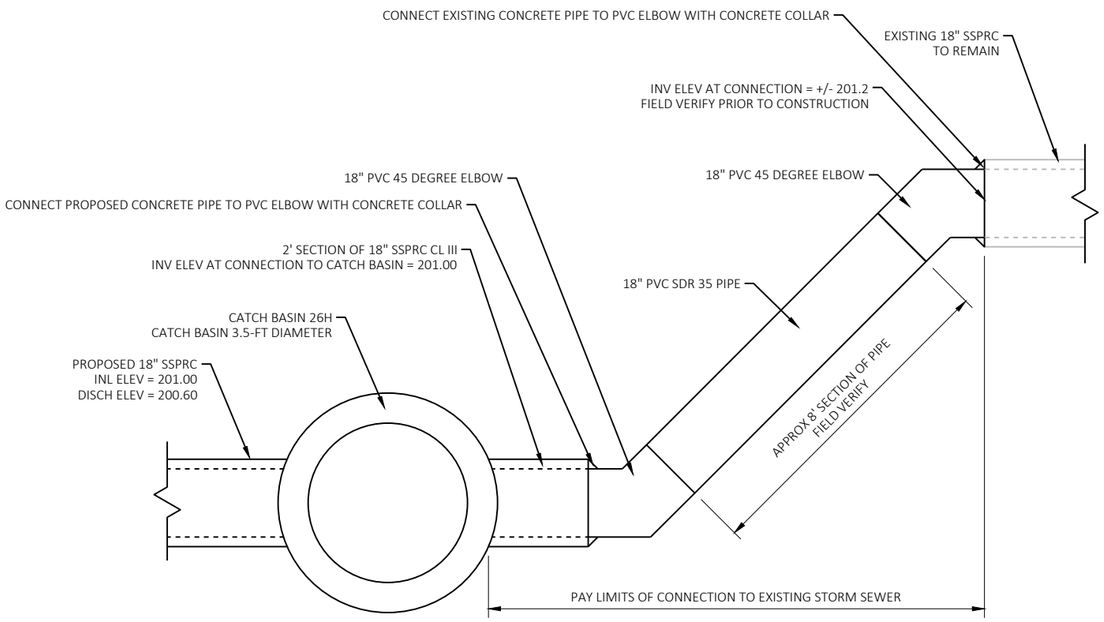
## TEMPORARY PEDESTRIAN ACCESS TO PARCELS

TO BE USED AT ALL LOCATIONS WHERE TEMPORARY PEDESTRIAN ROUTE PARALLEL TO NATIONAL AVENUE IS ROUTED INTO CLOSED LANES OF NATIONAL AVENUE




## TEMPORARY PEDESTRIAN ACCOMMODATIONS AT DRIVEWAYS

TO BE USED AT ALL DRIVEWAYS CONSTRUCTED OPEN TO TRAFFIC

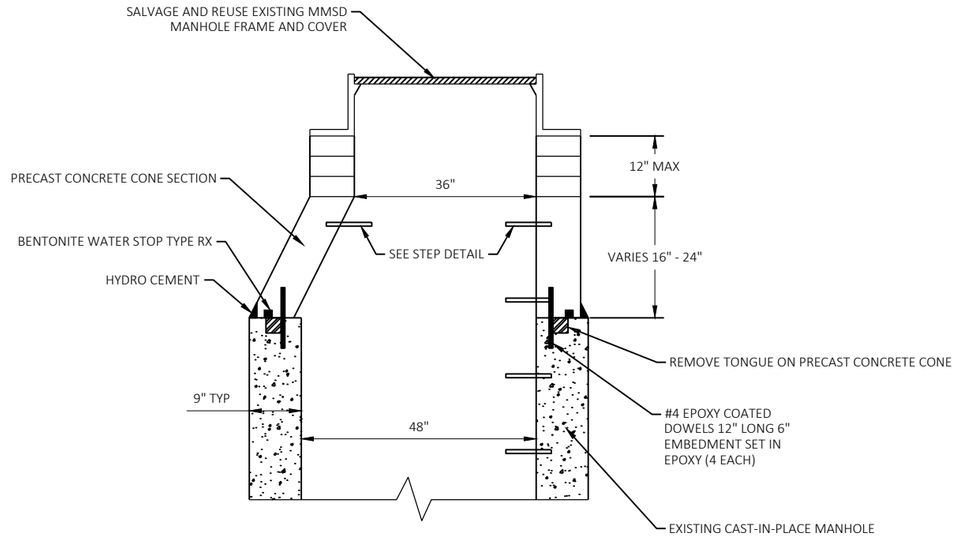



NOTES:

1. FIELD VERIFY INVERT ELEVATION OF CONNECTION POINT TO EXISTING 18" SSPRC PRIOR TO CONSTRUCTION OF CONNECTION.
2. FIELD VERIFY INVERT ELEVATION OF CATCH BASIN AFTER INSTALLATION OF CATCH BASIN AND BEFORE INSTALLATION TO EXISTING STORM SEWER TO CONFIRM POSITIVE DRAINAGE.
3. ALL COMPONENTS REQUIRED TO MAKE THE CONNECTION BETWEEN CATCH BASIN 26H AND THE EXISTING STORM SEWER ARE INCIDENTAL TO THE BID ITEM "CONNECTION TO EXISTING STORM SEWER" INCLUDING BUT NOT LIMITED TO 18" SSPRC CL III, 18" SDR 35 PVC PIPE, PVC PIPE FITTINGS, AND CONCRETE COLLARS.

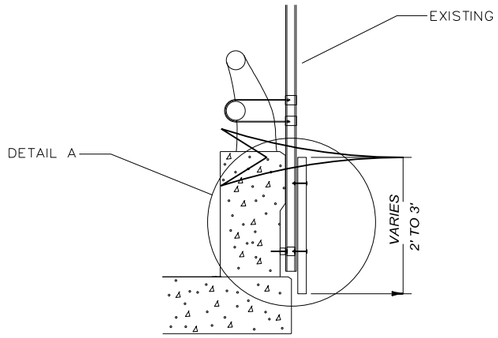
CONNECTION TO EXISTING STORM SEWER

STA 60+00 TO 60+10 LT

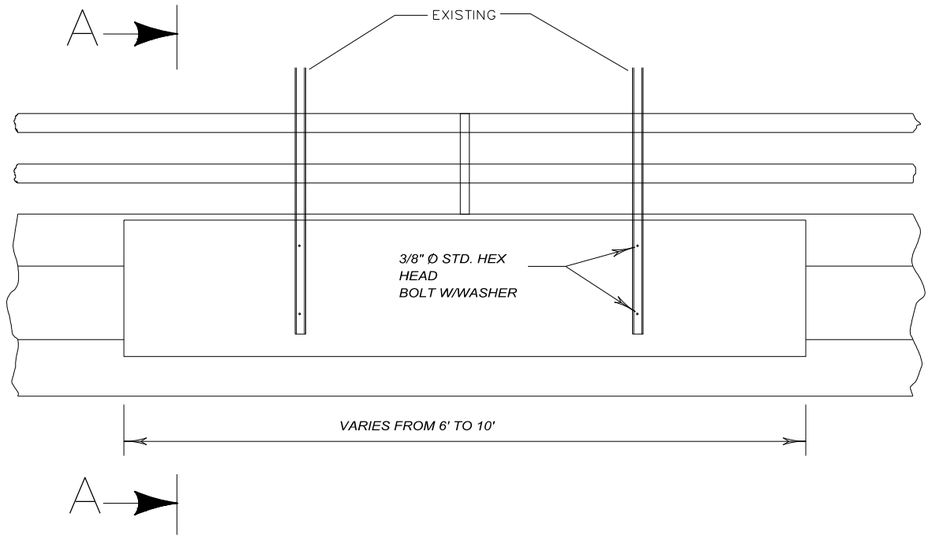



MMSD MANHOLE RECONSTRUCT WITH PRECAST CONCRETE CONE

2




SECTION A–A
SIDE VIEW

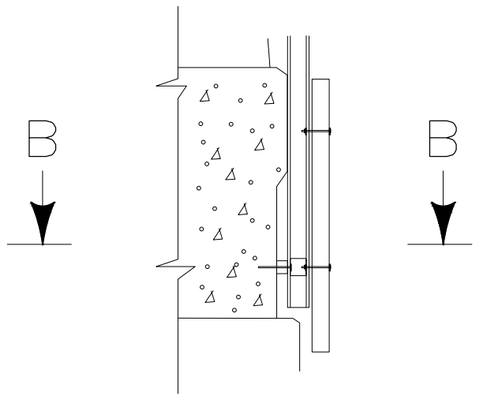



FRONT VIEW

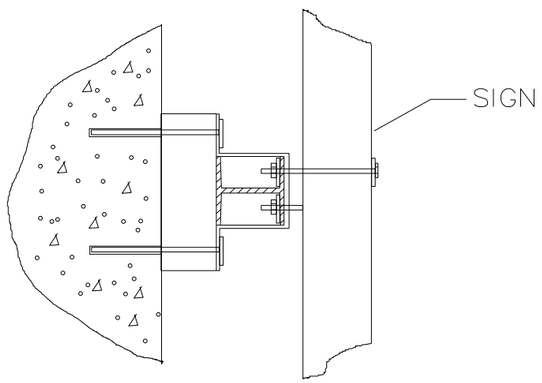
NOTES:

PROVIDE NEW BOLTS.

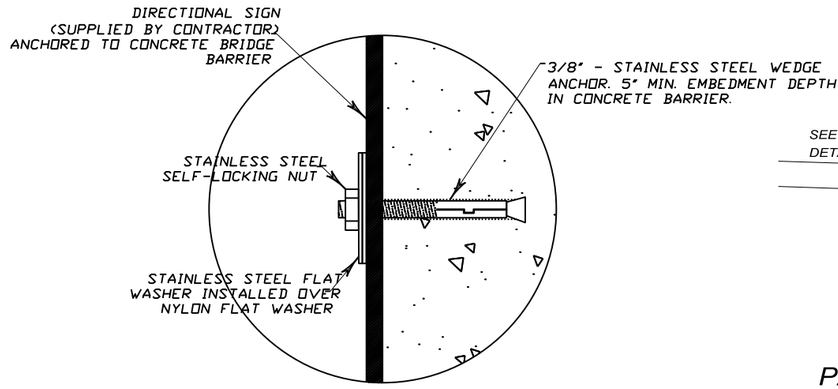
MOUNTING DETAIL COSTS ARE INCIDENTAL TO PAY ITEM "TYPE II SIGNS, REFLECTIVE".



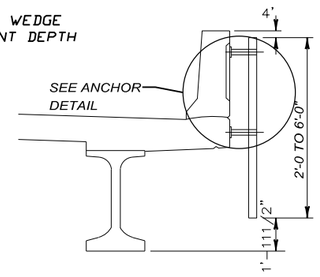

DETAIL A




SECTION B–B
TOP VIEW

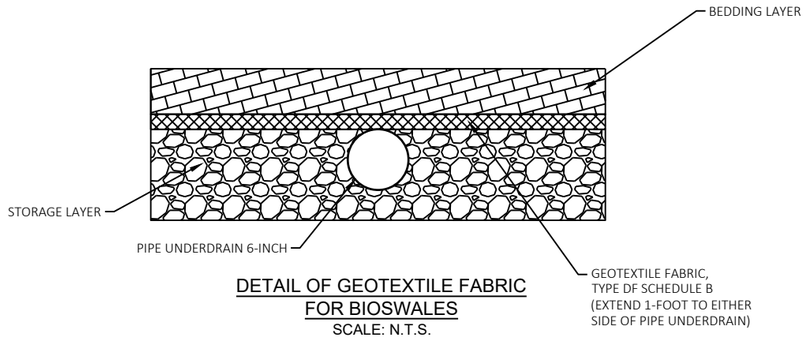



ANCHOR DETAIL
N.T.S.

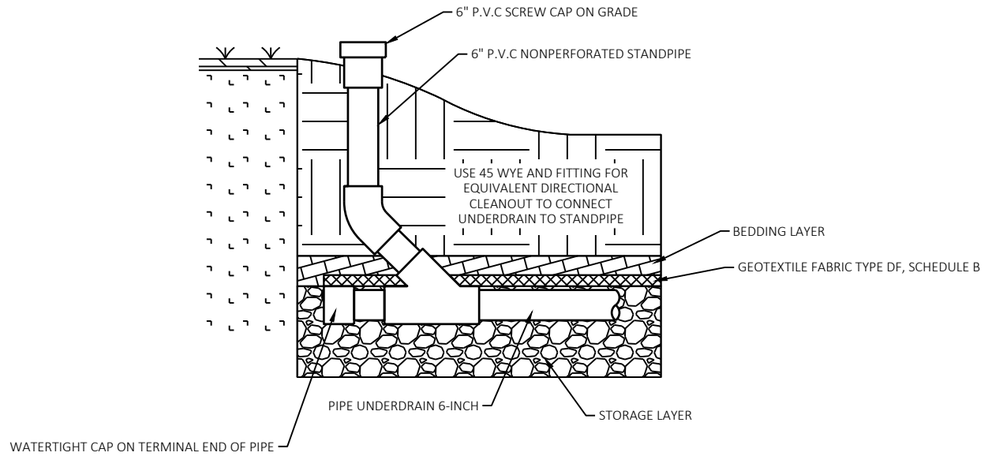



PARAPET OPTION
WITHOUT RAIL

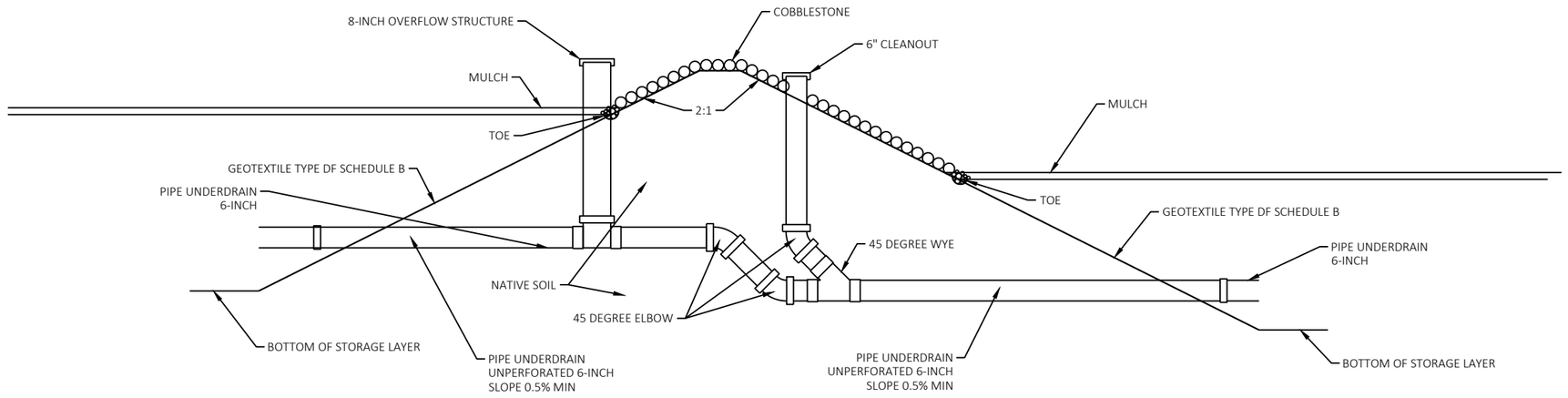
# SIGN MOUNTING DETAIL ON BRIDGE



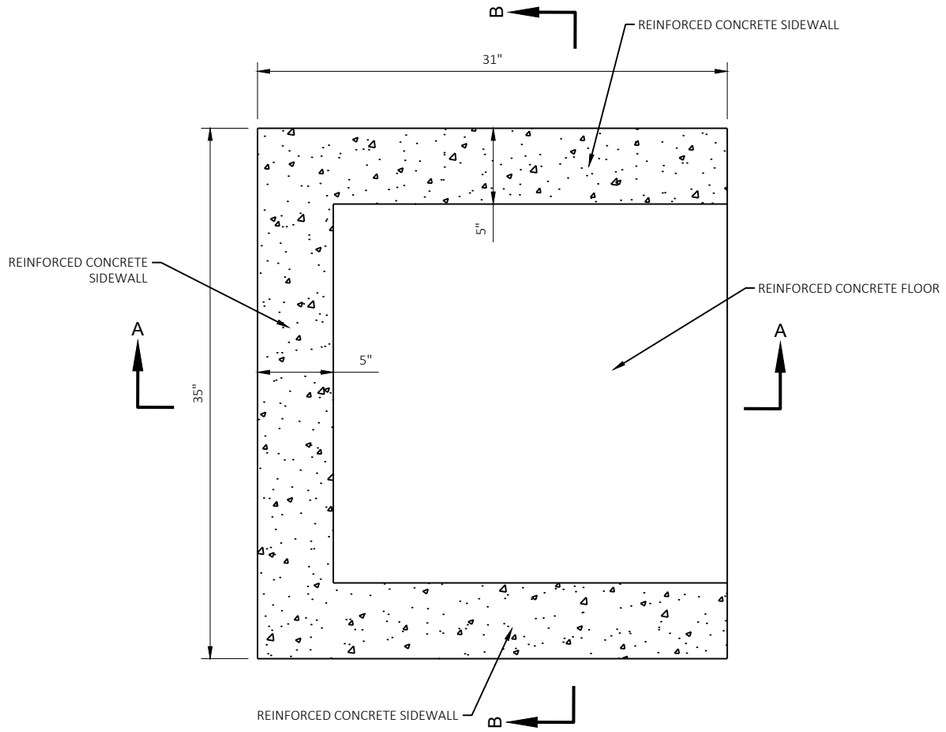

DETAIL OF GEOTEXTILE FABRIC
FOR BIOSWALES
SCALE: N.T.S.



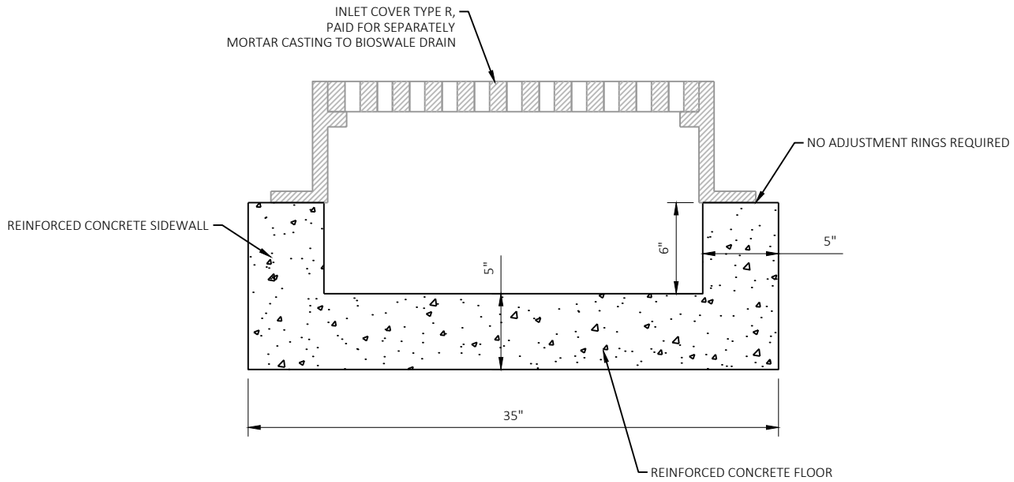

DETAIL OF CLEANOUT
FOR BIOSWALES
SCALE: N.T.S.



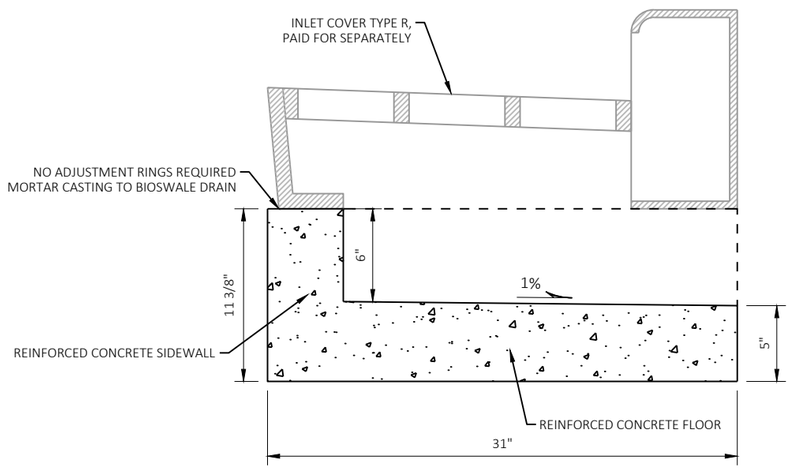

EARTHEN BERM, UNDERDRAIN
AND CLEANOUT DETAIL FOR
BIOSWALES
SCALE: N.T.S.




PLAN VIEW




SECTION B-B

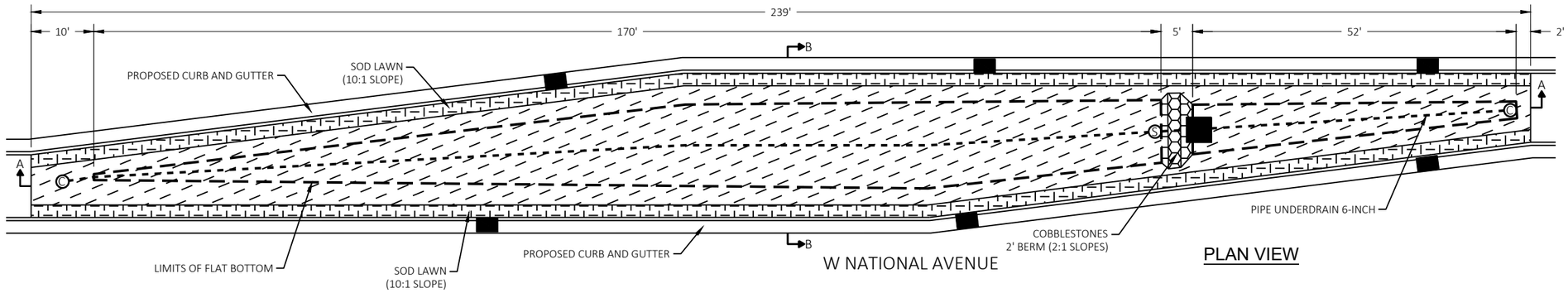



SECTION A-A

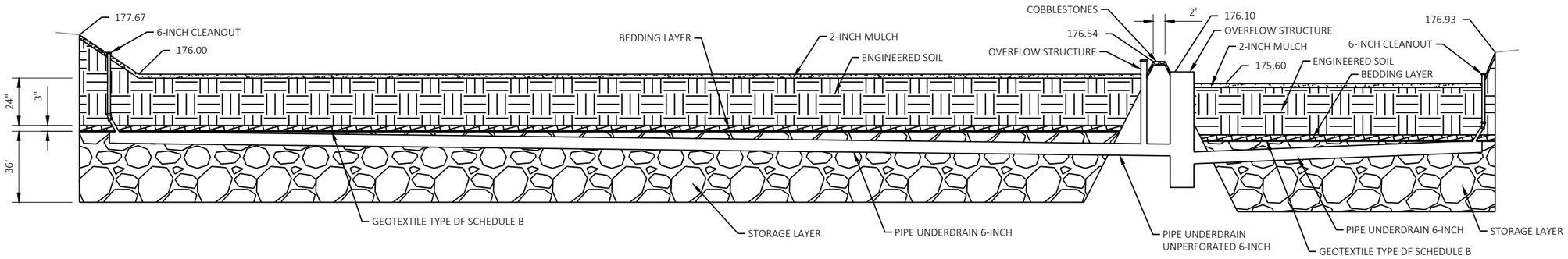
NOTES:
1. DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
2. BIOSWALE DRAINS TO BE PRECAST CONCRETE.
3. CONSTRUCT IN ACCORDANCE WITH SDD "CATCH BASINS 2X3-FT AND 2.5X3-FT" AND ASTM C 913 UNLESS OTHERWISE NOTED IN THIS DETAIL.
4. REINFORCEMENT TO BE IN ACCORDANCE WITH ASTM C 913.
5. CONTRACTOR TO PROVIDE SHOP DRAWINGS STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCEMENT DESIGN.
6. ALL REINFORCING STEEL SHALL HAVE A MINIMUM OF 2-INCHES OF CLEAR COVER.
7. PLACE BIOSWALE DRAIN ON A 6-INCH LAYER OF BEDDING MATERIAL THAT MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BIOSWALE DRAIN.
8. INLET CASTING WITH TYPE R COVER TO BE PAID FOR SEPARATELY. NO ADJUSTMENT RINGS ARE REQUIRED.

BIOSWALE DRAIN DETAIL

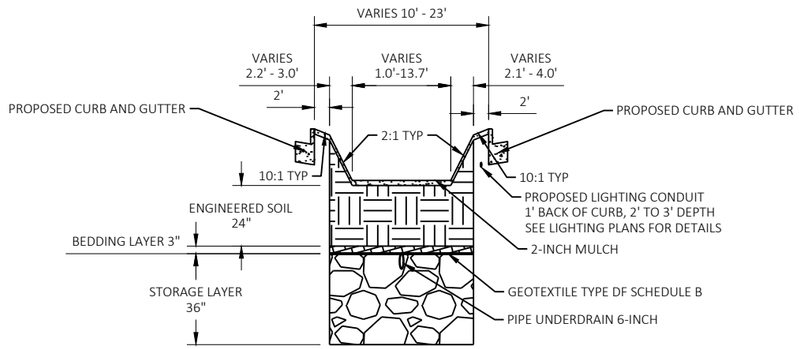
SEE STORM SEWER PLAN FOR LOCATIONS




PLAN VIEW




SECTION A-A
SCALE: N.T.S.

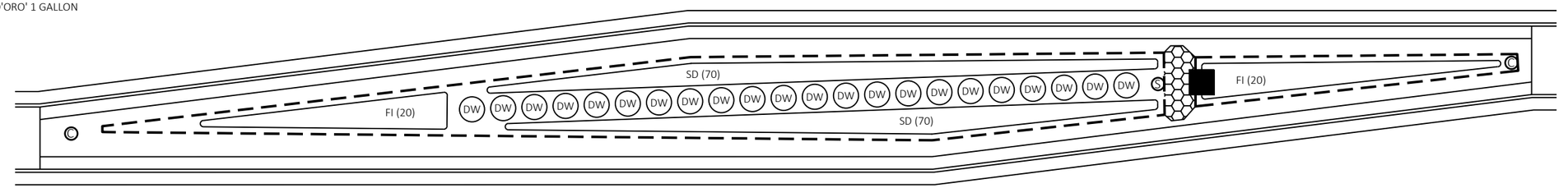



SECTION B-B
SCALE: N.T.S.

- COBBLESTONE BERM
- ENGINEERED SOIL LIMITS
- SOD LAWN
- MULCH
- ENGINEERED SOIL
- BEDDING LAYER
- STORAGE LAYER
- PIPE UNDERDRAIN 6-INCH
- FLAT BOTTOM LIMITS
- GEOTEXTILE TYPE DF SCHEDULE B
- 6-INCH CLEAN OUT
- OVERFLOW STRUCTURE
- INLET MEDIAN 1 GRATE OVERFLOW STRUCTURE
- BIOSWALE INLET STRUCTURE

PLANTING LEGEND

| | | |
|---|---|---|
| (22) | DW | RED TWIGGED DOGWOOD 3 GALLON |
| (40) | FI | FALSE INDIGO 'MIDNIGHT PRAIRIE BLUE EYES' 1 GALLON |
| (140) | SD | DAYLILIES 'STELLA D'ORO' 1 GALLON |




PLANTING PLAN

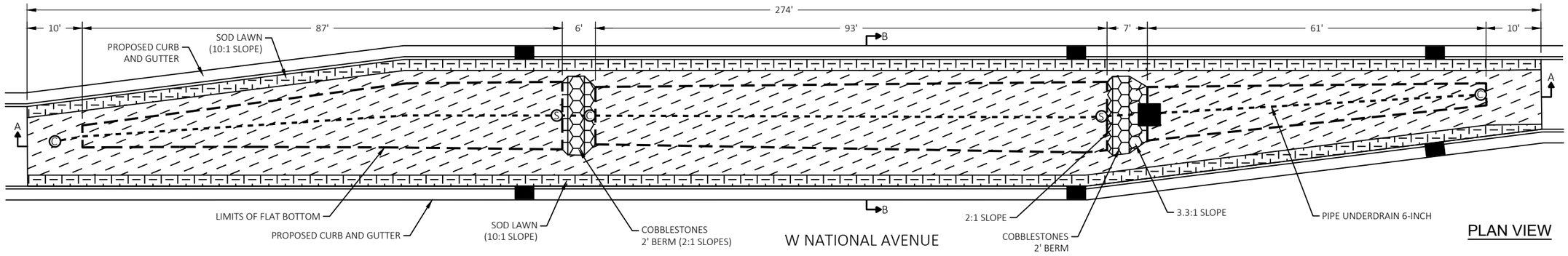
# BIOSWALE 1

| PROJECT NO: 2410-15-71 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CONSTRUCTION DETAILS | SHEET 36 | E |
|---|---|---|---|---|---|

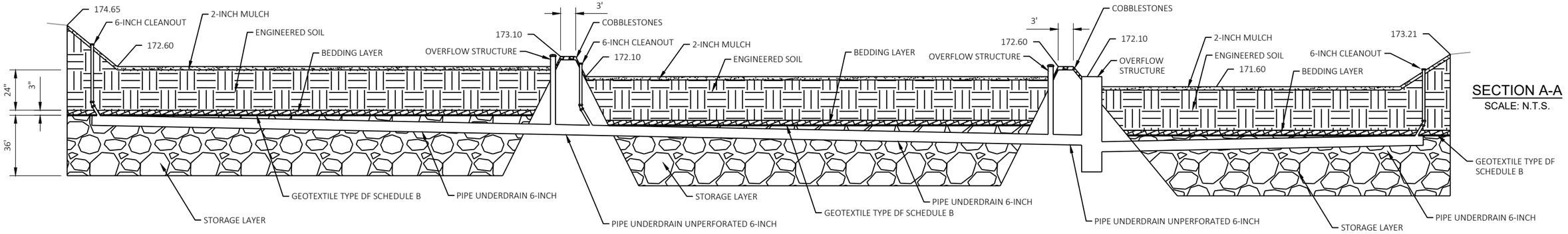
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021002-CD BIOSWALE PLANS.DWG
LAYOUT NAME - 01

PLOT DATE : 1/29/2026 5:28 PM PLOT BY : GEHRING, ALEX PLOT NAME : PLOT SCALE : 1 IN:20 FT

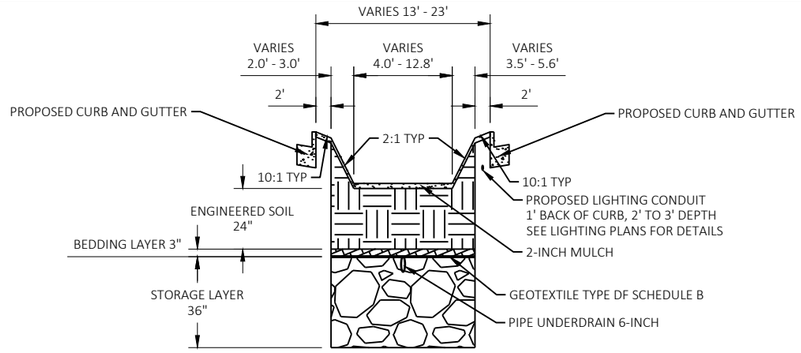
WISDOT/CADDS SHEET 42




PLAN VIEW




SECTION A-A
SCALE: N.T.S.

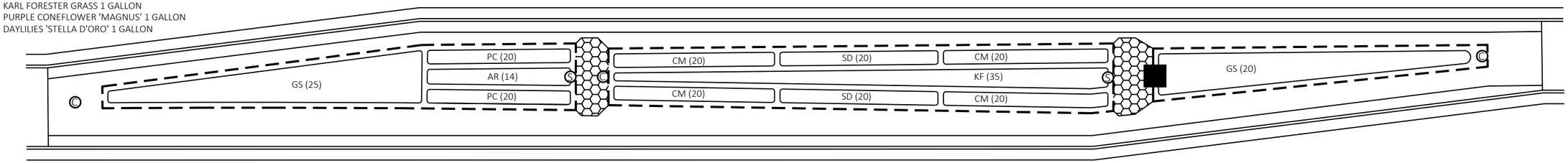



SECTION B-B
SCALE: N.T.S.

COBBLESTONE BERM
ENGINEERED SOIL LIMITS
SOD LAWN
MULCH
ENGINEERED SOIL
BEDDING LAYER
STORAGE LAYER
PIPE UNDERDRAIN 6-INCH
FLAT BOTTOM LIMITS
GEOTEXTILE TYPE DF SCHEDULE B
6-INCH CLEAN OUT
OVERFLOW STRUCTURE
INLET MEDIAN 1 GRATE OVERFLOW STRUCTURE
BIOSWALE INLET STRUCTURE

PLANTING LEGEND

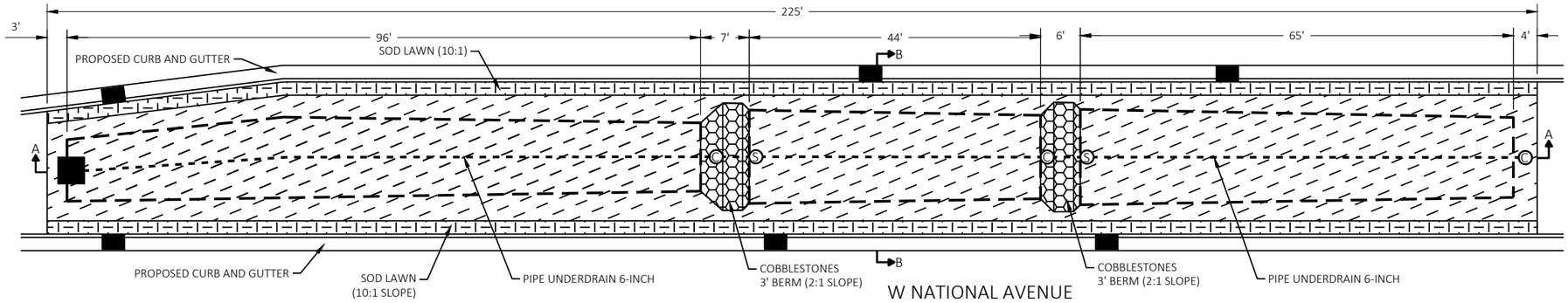
| | | |
|---|---|---|
| (14) | AR | PANICUM GRASS 'APACHE ROSE' 1 GALLON |
| (80) | CM | CATMINT NEPETA 'BLUE WONDER' 1 GALLON |
| (45) | GS | GROW LOW SUMAC 2 GALLON |
| (35) | KF | KARL FORESTER GRASS 1 GALLON |
| (40) | PC | PURPLE CONEFLOWER 'MAGNUS' 1 GALLON |
| (40) | SD | DAYLILIES 'STELLA D'ORO' 1 GALLON |



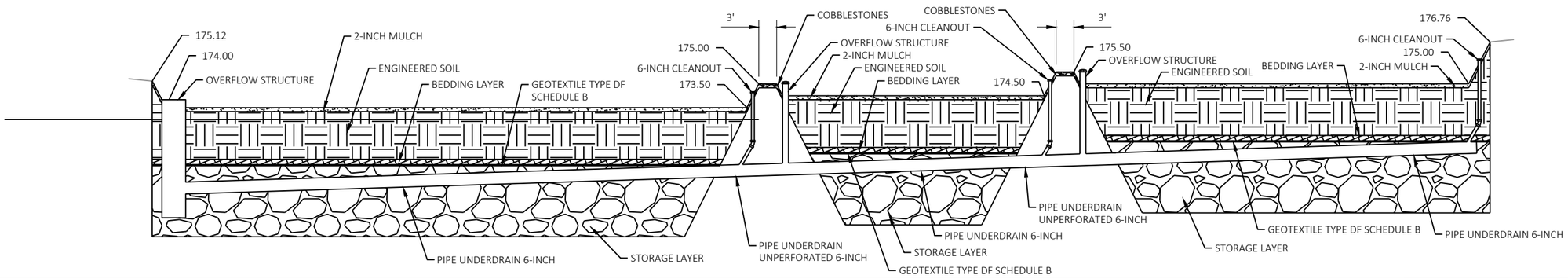

PLANTING PLAN

# BIOSWALE 2

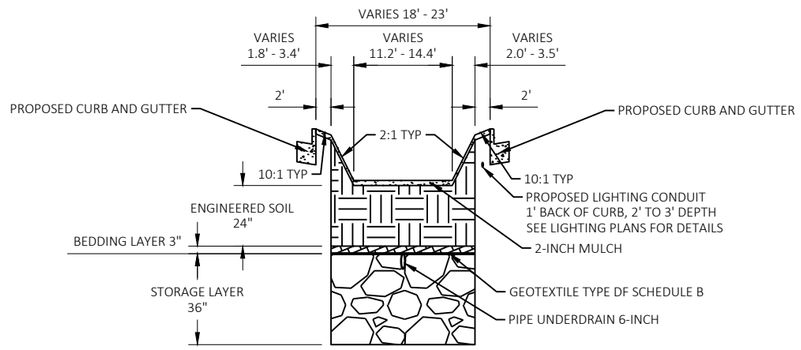
| PROJECT NO: 2410-15-71 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CONSTRUCTION DETAILS | SHEET 37 | E |
|---|---|---|---|---|---|




PLAN VIEW

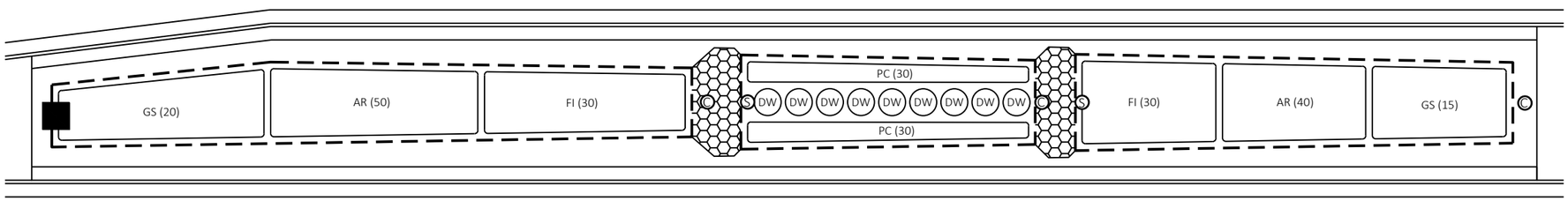



SECTION A-A
SCALE: N.T.S.




SECTION B-B
SCALE: N.T.S.

COBBLESTONE BERM
ENGINEERED SOIL LIMITS
SOD LAWN
MULCH
ENGINEERED SOIL
BEDDING LAYER
STORAGE LAYER
PIPE UNDERDRAIN 6-INCH
FLAT BOTTOM LIMITS
GEOTEXTILE TYPE DF SCHEDULE B
6-INCH CLEAN OUT
OVERFLOW STRUCTURE
INLET MEDIAN 1 GRATE OVERFLOW STRUCTURE
BIOSWALE INLET STRUCTURE




PLANTING PLAN

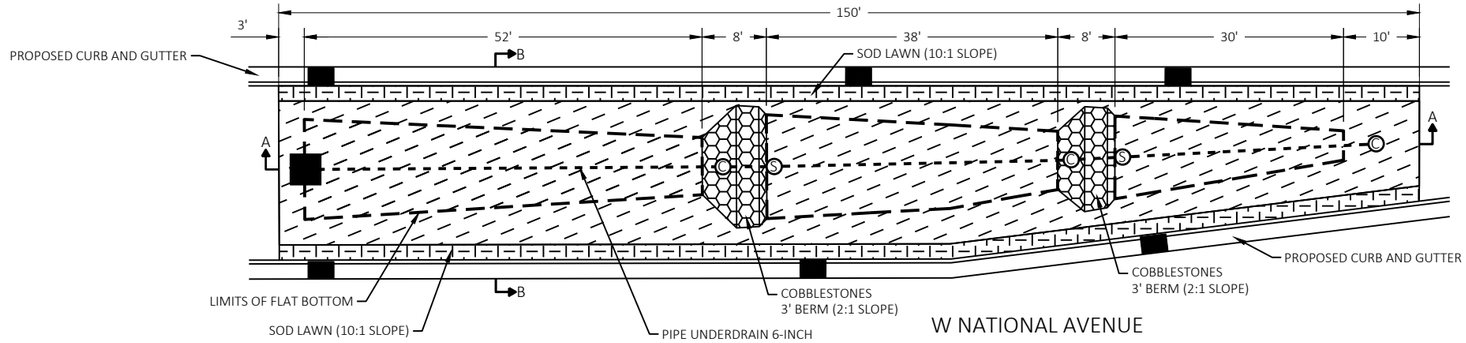
PLANTING LEGEND

| | | |
|---|---|---|
| (90) | AR | PANICUM GRASS 'APACHE ROSE' 1 GALLON |
| (9) | DW | RED TWIGGED DOGWOOD 3 GALLON |
| (60) | FI | FALSE INDIGO 'MIDNIGHT PRAIRIE BLUE EYES' 1 GALLON |
| (35) | GS | GROW LOW SUMAC 2 GALLON |
| (60) | PC | PURPLE CONEFLOWER 'MAGNUS' 1 GALLON |

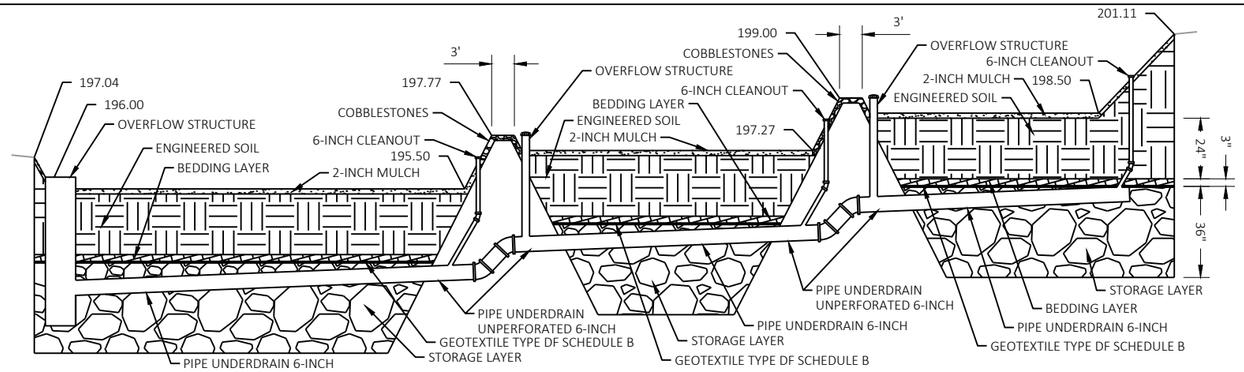
# BIOSWALE 3

| PROJECT NO: 2410-15-71 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CONSTRUCTION DETAILS | SHEET 38 | E |
|---|---|---|---|---|---|

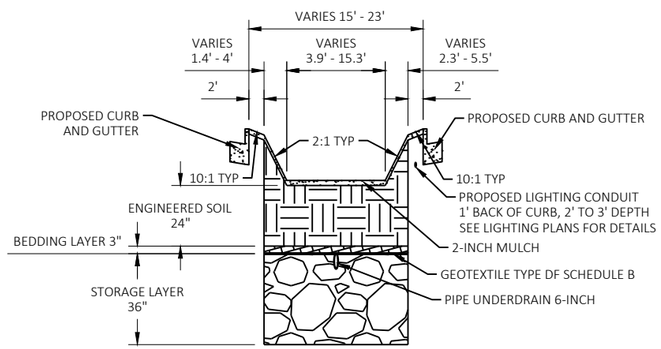
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021002-CD BIOSWALE PLANS.DWG
LAYOUT NAME - 03
PLOT DATE : 1/29/2026 5:28 PM
PLOT BY : GEHRING, ALEX
PLOT NAME :
PLOT SCALE : 1 IN:20 FT




PLAN VIEW




SECTION A-A
SCALE: N.T.S.

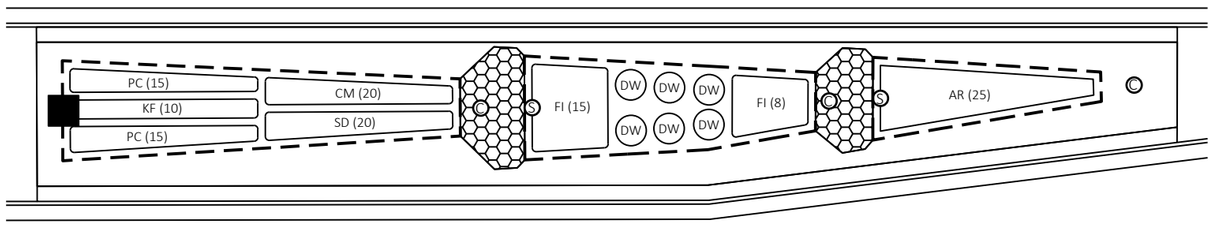



SECTION B-B
SCALE: N.T.S.

- COBBLESTONE BERM
- ENGINEERED SOIL LIMITS
- SOD LAWN
- MULCH
- ENGINEERED SOIL
- BEDDING LAYER
- STORAGE LAYER
- PIPE UNDERDRAIN 6-INCH
- FLAT BOTTOM LIMITS
- GEOTEXTILE TYPE DF SCHEDULE B
- 6-INCH CLEAN OUT
- OVERFLOW STRUCTURE
- INLET MEDIAN 1 GRATE OVERFLOW STRUCTURE
- BIOSWALE INLET STRUCTURE

PLANTING LEGEND

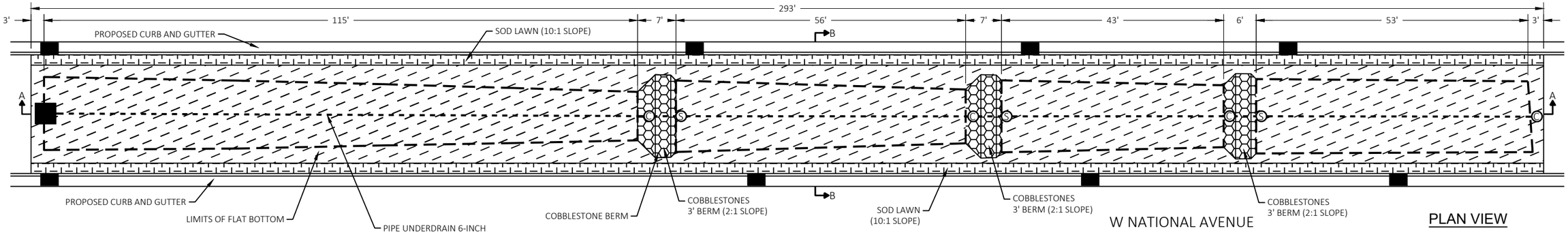
| | | |
|---|---|---|
| (25) | AR | PANICUM GRASS 'APACHE ROSE' 1 GALLON |
| (20) | CM | CATMINT NEPETA 'BLUE WONDER' 1 GALLON |
| (6) | DW | RED TWIGGED DOGWOOD 3 GALLON |
| (23) | FI | FALSE INDIGO 'MIDNIGHT BLUE EYES' 1 GALLON |
| (10) | KF | KARL FORESTER GRASS 1 GALLON |
| (30) | PC | PURPLE CONEFLOWER 'MAGNUS' 1 GALLON |
| (20) | SD | DAYLILIES 'STELLA D'ORO' 1 GALLON |




PLANTING PLAN

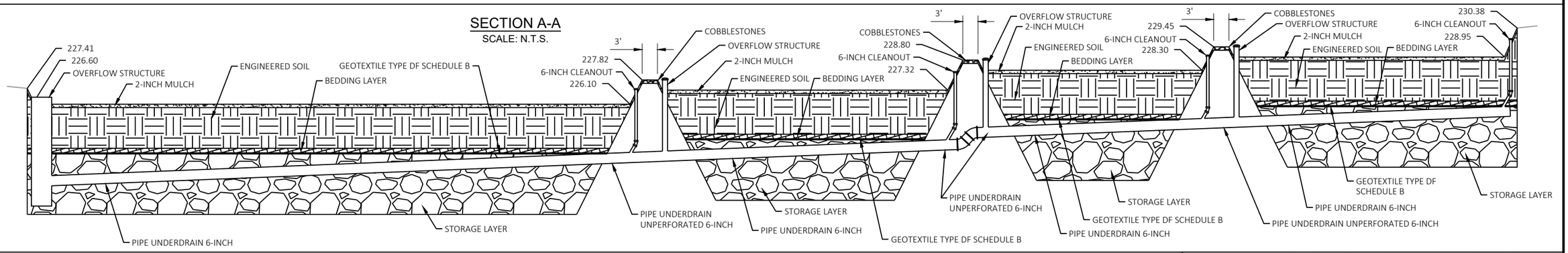
# BIOSWALE 4

| PROJECT NO: 2410-15-71 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CONSTRUCTION DETAILS | SHEET 39 | E |
|---|---|---|---|---|---|

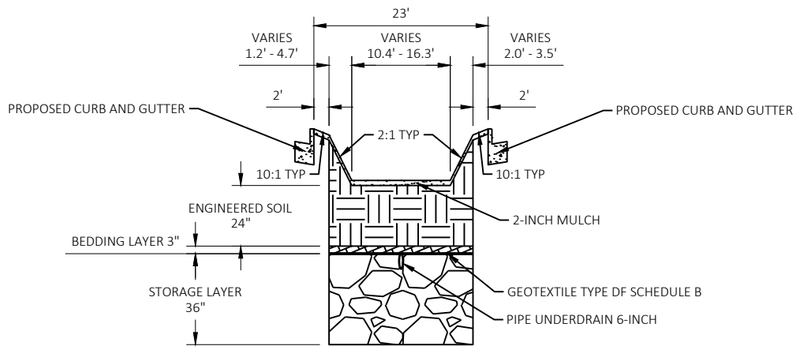



PLAN VIEW

SECTION A-A
SCALE: N.T.S.



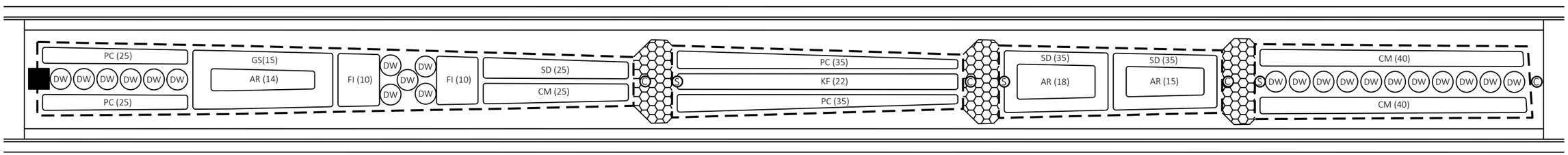

SECTION B-B
SCALE: N.T.S.




PLANTING LEGEND

| | | |
|---|---|---|
| (47) | AR | PANICUM GRASS 'APACHE ROSE' 1 GALLON |
| (105) | CM | CATMINT NEPETA 'BLUE WONDER' 1 GALLON |
| (22) | DW | RED TWIGGED DOGWOOD 3 GALLON |
| (20) | FI | FALSE INDIGO 'MIDNIGHT BLUE EYES' 1 GALLON |
| (15) | GS | GROW LOW SUMAC 2 GALLON |
| (22) | KF | KARL FORESTER GRASS 1 GALLON |
| (120) | PC | PURPLE CONEFLOWER 'MAGNUS' 1 GALLON |
| (95) | SD | DAYLILIES 'STELLA D'ORO' 1 GALLON |

- COBBLESTONE BERM
- ENGINEERED SOIL LIMITS
- SOD LAWN
- MULCH
- ENGINEERED SOIL
- BEDDING LAYER
- STORAGE LAYER
- PIPE UNDERDRAIN 6-INCH
- FLAT BOTTOM LIMITS
- GEOTEXTILE TYPE DF SCHEDULE B
- 6-INCH CLEAN OUT
- OVERFLOW STRUCTURE
- INLET MEDIAN 1 GRATE OVERFLOW STRUCTURE
- BIOSWALE INLET STRUCTURE




PLANTING PLAN

BIOSWALE 5

| PROJECT NO: 2410-15-71 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CONSTRUCTION DETAILS | SHEET 40 | E |
|---|---|---|---|---|---|

2

S 108TH ST/STH 100

W NATIONAL AVE

BOLLARD TO REMAIN
GRADE AROUND BOLLARD

BOLLARD TO REMAIN, GRADE AROUND BOLLARD

SLOPE INTERCEPT

EXISTING R/W

NATIONAL AVE R/L

MATCHLINE STA 27+75

22+00 23+00 24+00 25+00 26+00 27+00

TLE

RC

TR

TC

RM

12" 15" 18"

SEE NOTE 2

SEE NOTE 2.

SLOPE INTERCEPT

BUSINESS SIGN AND BOLLARDS
AROUND SIGN TO REMAIN

PRIVATE LIGHT TO REMAIN
GRADE AROUND POLE

BUSINESS SIGN TO REMAIN

REMOVE CURB
AND GUTTER

DO NOT DISTURB SIGN

BUSINESS SIGN
TO REMAIN

REMOVE CURB AND GUTTER

PRIVATE SIGN TO REMAIN
GRADE AROUND SIGN

REMOVE CURB AND GUTTER

PRIVATE SIGN TO REMAIN
GRADE AROUND SIGN

SEE NOTE 2

DO NOT DISTURB GUARDRAIL

REMOVE CURB AND GUTTER

NOTE:
1. ADDITIONAL REMOVALS FOR SIGNS, LIGHTING, SIGNALS, WATER MAIN AND SANITARY SEWER SHOWN ELSEWHERE IN PLANS.
2. PUSH BACK LANDSCAPING ROCK OR MULCH AND REPLACE AFTER SIDEWALK CONSTRUCTION. DO NOT DISTURB PLANTS. INCIDENTAL TO CONSTRUCTION.

## LEGEND

- X — GRUBBING
- REMOVING CONCRETE PAVEMENT
- REMOVING CURB OR REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- YYYYY — SAWING CONCRETE
- XXXXX — SAWING ASPHALT
- TR — TREE TO REMAIN
- REMOVING FENCE
- REMOVING STORM SEWER
- RC — REMOVING CATCH BASINS
- RM — REMOVING MANHOLES
- REMOVING ASPHALT INCIDENTAL TO EXCAVATION COMMON
- TC — TREE TO BE REMOVED BY CITY PRIOR TO PROJECT

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | REMOVAL PLAN | SHEET 41 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021101-RM.DWG
LAYOUT NAME - 01

PLOT DATE : 1/8/2026 10:57 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

MATCHLINE STA 27+75

MATCHLINE STA 33+75

MATCHLINE STA 97+75

MATCHLINE STA 102+25

W NATIONAL AVE

W CLEVELAND AVE

S WILDWOOD DR

WILDWOOD DR R/L

NATIONAL AVE R/L

CLEVELAND AVE R/L

PL: 214+20.39

28+00 29+00 30+00 31+00 32+00 33+00

95.00'

102.00'

TC

SEE NOTE 2

SEE NOTE 2.

EXISTING R/W

PROPOSED R/W

PRIVATE LIGHT POLE TO BE REMOVED BY OTHERS PRIOR TO CONSTRUCTION.

PRIVATE SIGN TO BE REMOVED BY OTHERS PRIOR TO CONSTRUCTION.

SLOPE INTERCEPT

TLE

RC

RM

TR

PRIVATE SIGN TO REMAIN
GRADE AROUND SIGN

CONCRETE BASE TO REMAIN.

LANDSCAPING TO BE REMOVED. INCIDENTAL TO EXCAVATION COMMON

## LEGEND

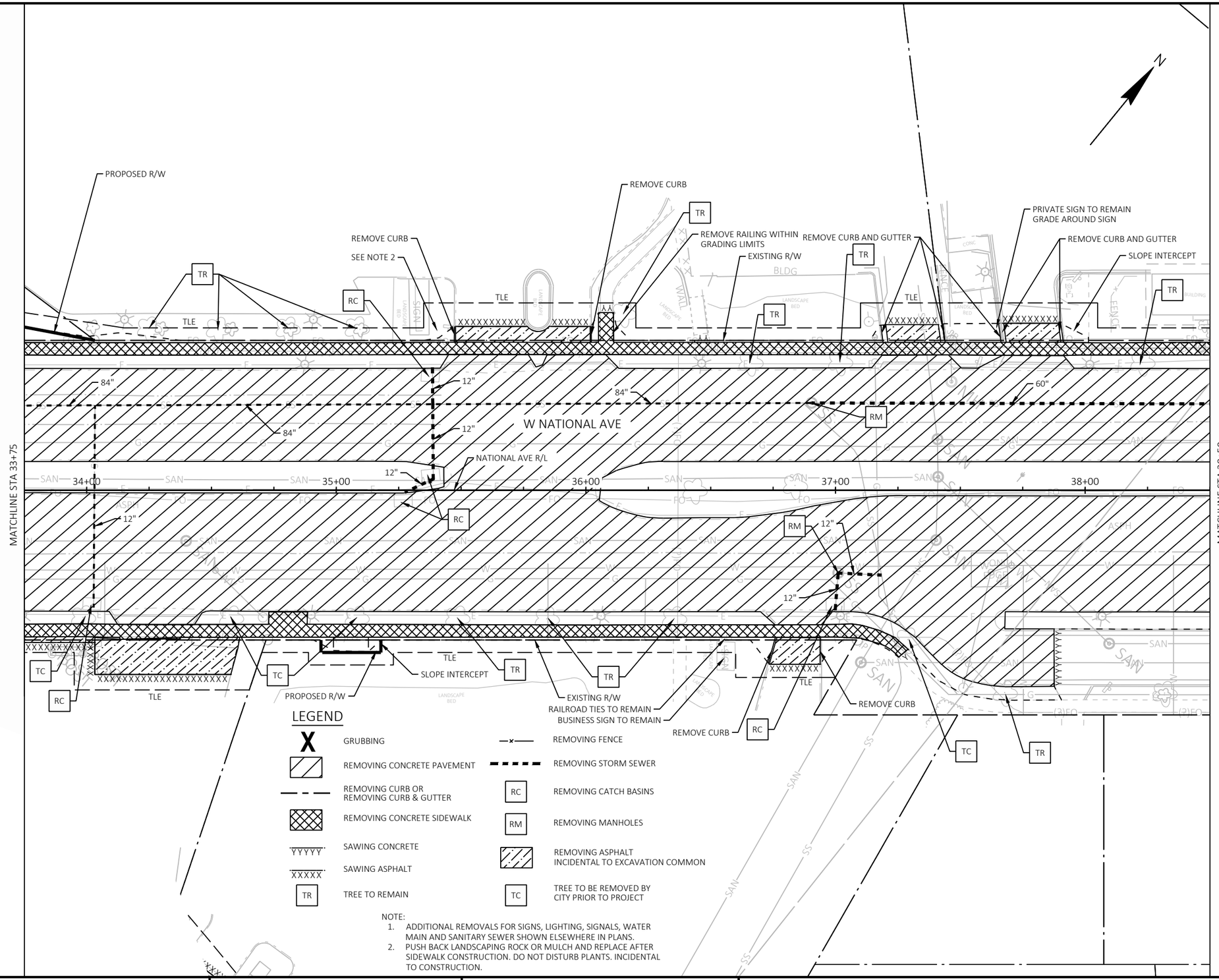
| | |
|---|---|
| X — GRUBBING | —×— REMOVING FENCE |
| REMOVING CONCRETE PAVEMENT | REMOVING STORM SEWER |
| REMOVING CURB OR REMOVING CURB & GUTTER | RC — REMOVING CATCH BASINS |
| REMOVING CONCRETE SIDEWALK | RM — REMOVING MANHOLES |
| YYYYY — SAWING CONCRETE | REMOVING ASPHALT INCIDENTAL TO EXCAVATION COMMON |
| XXXXX — SAWING ASPHALT | |
| TR — TREE TO REMAIN | TC — TREE TO BE REMOVED BY CITY PRIOR TO PROJECT |

NOTE:
1. ADDITIONAL REMOVALS FOR SIGNS, LIGHTING, SIGNALS, WATER MAIN AND SANITARY SEWER SHOWN ELSEWHERE IN PLANS.
2. PUSH BACK LANDSCAPING ROCK OR MULCH AND REPLACE AFTER SIDEWALK CONSTRUCTION. DO NOT DISTURB PLANTS. INCIDENTAL TO CONSTRUCTION.

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | REMOVAL PLAN | SHEET 42 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021101-RM.DWG
LAYOUT NAME - 02
PLOT DATE : 1/8/2026 10:57 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2




NOTE:
1. ADDITIONAL REMOVALS FOR SIGNS, LIGHTING, SIGNALS, WATER MAIN AND SANITARY SEWER SHOWN ELSEWHERE IN PLANS.
2. PUSH BACK LANDSCAPING ROCK OR MULCH AND REPLACE AFTER SIDEWALK CONSTRUCTION. DO NOT DISTURB PLANTS. INCIDENTAL TO CONSTRUCTION.

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | REMOVAL PLAN | SHEET 43 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021101-RM.DWG
LAYOUT NAME - 03
PLOT DATE : 1/8/2026 10:57 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTE:
1. ADDITIONAL REMOVALS FOR SIGNS, LIGHTING, SIGNALS, WATER MAIN AND SANITARY SEWER SHOWN ELSEWHERE IN PLANS

## LEGEND

- X — GRUBBING
- REMOVING CONCRETE PAVEMENT
- REMOVING CURB OR REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- SAWING CONCRETE
- SAWING ASPHALT
- TR — TREE TO REMAIN
- REMOVING FENCE
- REMOVING STORM SEWER
- RC — REMOVING CATCH BASINS
- RM — REMOVING MANHOLES
- REMOVING ASPHALT INCIDENTAL TO EXCAVATION COMMON
- TC — TREE TO BE REMOVED BY CITY PRIOR TO PROJECT

SEE NEXT SHEET FOR ADDITIONAL REMOVALS FOR TRAFFIC SIGNAL LOOP INSTALLATION

S 102ND ST

EXISTING R/W

PROPOSED R/W

PRIVATE SIGN TO REMAIN
GRADE AROUND SIGN

SLOPE INTERCEPT

TLE

W NATIONAL AVE

NATIONAL AVE R/L

102ND ST R/L

MATCHLINE STA 38+50

MATCHLINE STA 44+50

39+00 40+00 41+00 42+00 43+00 44+00

SEE NEXT SHEET FOR ADDITIONAL REMOVALS FOR TRAFFIC SIGNAL LOOP INSTALLATION

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | REMOVAL PLAN | SHEET 44 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021101-RM.DWG
LAYOUT NAME - 04

PLOT DATE : 1/8/2026 10:57 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

## LEGEND

- X — GRUBBING
- REMOVING CONCRETE PAVEMENT
- REMOVING CURB OR REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- SAWING CONCRETE (YYYYY)
- SAWING ASPHALT (XXXXX)
- TR — TREE TO REMAIN
- REMOVING FENCE
- REMOVING STORM SEWER
- RC — REMOVING CATCH BASINS
- RM — REMOVING MANHOLES
- REMOVING ASPHALT INCIDENTAL TO EXCAVATION COMMON
- TC — TREE TO BE REMOVED BY CITY PRIOR TO PROJECT

NOTE:
1. ADDITIONAL REMOVALS FOR SIGNS, LIGHTING, SIGNALS, WATER MAIN AND SANITARY SEWER SHOWN ELSEWHERE IN PLANS

MATCHLINE STA 44+50

MATCHLINE STA 50+50

EXISTING R/W

REMOVE FENCE

PROPOSED R/W

SLOPE INTERCEPT

TLE

10"

12"

48"

NATIONAL AVE R/L

45+00

46+00

47+00

48+00

49+00

50+00

W NATIONAL AVE

I-41/894 SB RAMPS

REMOVING FENCE

15"

S 101ST ST

ELEC SERVICE PANEL

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | REMOVAL PLAN | SHEET 45 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021101-RM.DWG
LAYOUT NAME - 05

PLOT DATE : 1/8/2026 10:57 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

MATCHLINE STA 50+50

MATCHLINE STA 56+50

REMOVING FENCE

REMOVING FENCE

CHAIN LINK FENCE

ELEC SERVICE PANEL

SLOPE INTERCEPT

RC

W NATIONAL AVE

48"

24"

NATIONAL AVE R/L

51+00

52+00

53+00

54+00

55+00

56+00

RM

18"

12"

PK 55+91.34

S 100TH ST

EXISTING R/W

TREE TO REMAIN

TONE FTTP

TRANSMISSION TOWER

21"

21"

12"

TLE

CHAIN LINK FENCE

BUSHES TO REMAIN

DO NOT DISTURB FENCE

SLOPE INTERCEPT

LIGHT POLE TO REMAIN

I-41/894 SB RAMPS

WORK AROUND CONTROL CABINET

REMOVING FENCE

LIGHT POLE TO REMAIN

## LEGEND

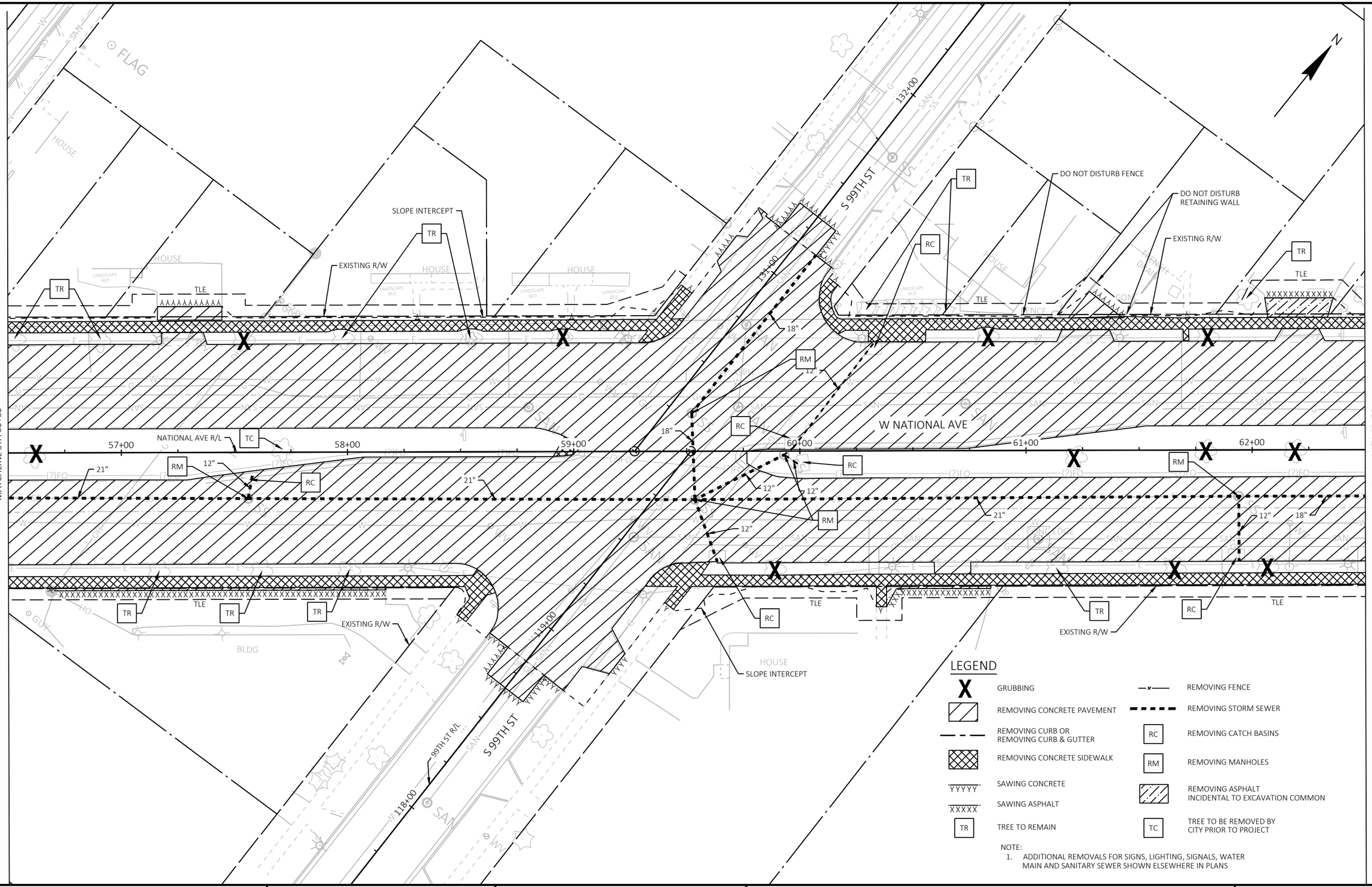
| | | | |
|---|---|---|---|
| X | GRUBBING | —×— | REMOVING FENCE |
| | REMOVING CONCRETE PAVEMENT | - - - - | REMOVING STORM SEWER |
| | REMOVING CURB OR REMOVING CURB & GUTTER | RC | REMOVING CATCH BASINS |
| | REMOVING CONCRETE SIDEWALK | RM | REMOVING MANHOLES |
| YYYYY | SAWING CONCRETE | | REMOVING ASPHALT INCIDENTAL TO EXCAVATION COMMON |
| XXXXX | SAWING ASPHALT | | |
| TR | TREE TO REMAIN | TC | TREE TO BE REMOVED BY CITY PRIOR TO PROJECT |

NOTE:
1. ADDITIONAL REMOVALS FOR SIGNS, LIGHTING, SIGNALS, WATER MAIN AND SANITARY SEWER SHOWN ELSEWHERE IN PLANS

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | REMOVAL PLAN | SHEET 46 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021101-RM.DWG
LAYOUT NAME - 06
PLOT DATE : 1/8/2026 10:57 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

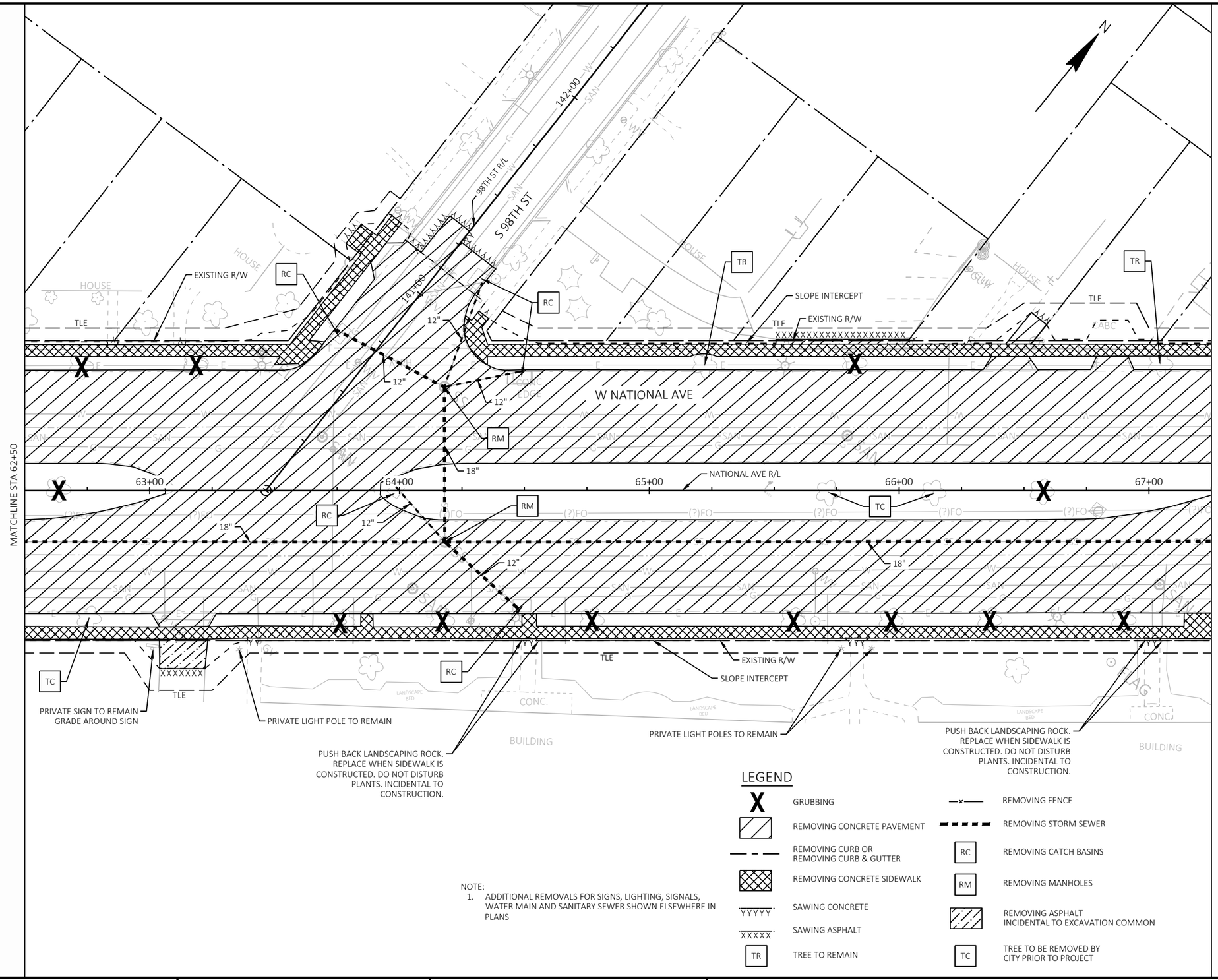
2




NOTE:
1. ADDITIONAL REMOVALS FOR SIGNS, LIGHTING, SIGNALS, WATER MAIN AND SANITARY SEWER SHOWN ELSEWHERE IN PLANS

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | REMOVAL PLAN | SHEET 47 | E |
|---|---|---|---|---|---|

2




LEGEND

| | |
|---|---|
| X GRUBBING | —x— REMOVING FENCE |
| REMOVING CONCRETE PAVEMENT | REMOVING STORM SEWER |
| REMOVING CURB OR REMOVING CURB & GUTTER | RC REMOVING CATCH BASINS |
| REMOVING CONCRETE SIDEWALK | RM REMOVING MANHOLES |
| YYYYY SAWING CONCRETE | REMOVING ASPHALT INCIDENTAL TO EXCAVATION COMMON |
| XXXXX SAWING ASPHALT | |
| TR TREE TO REMAIN | TC TREE TO BE REMOVED BY CITY PRIOR TO PROJECT |

NOTE:
1. ADDITIONAL REMOVALS FOR SIGNS, LIGHTING, SIGNALS, WATER MAIN AND SANITARY SEWER SHOWN ELSEWHERE IN PLANS

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | REMOVAL PLAN | SHEET 48 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021101-RM.DWG
LAYOUT NAME - 08
PLOT DATE : 1/8/2026 10:58 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

MATCHLINE STA 67+25

W LINCOLN AVE

S 97TH ST

97TH ST R/L

W NATIONAL AVE

NATIONAL AVE R/L

152+00

151+00

68+00

69+00

70+00

71+00

72+00

73+00

12"

15"

18"

RC

RM

TR

TC

TLE

SLOPE INTERCEPT

EXISTING R/W

SEE NOTE 2.

DO NOT DISTURB WOODEN PLANTER

SIGN BASES TO REMAIN

PRIVATE SIGN TO REMAIN

DO NOT DISTURB FENCE

PROPOSED R/W

REMOVING LANDSCAPING BED

DO NOT DISTURB PRIVATE LIGHT POLES, RAILINGS OR RETAINING WALLS

## LEGEND

- X — GRUBBING
- REMOVING CONCRETE PAVEMENT
- REMOVING CURB OR REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- YYYYY — SAWING CONCRETE
- XXXXX — SAWING ASPHALT
- TR — TREE TO REMAIN
- REMOVING FENCE
- REMOVING STORM SEWER
- RC — REMOVING CATCH BASINS
- RM — REMOVING MANHOLES
- REMOVING ASPHALT INCIDENTAL TO EXCAVATION COMMON
- TC — TREE TO BE REMOVED BY CITY PRIOR TO PROJECT

NOTE:

1. ADDITIONAL REMOVALS FOR SIGNS, LIGHTING, SIGNALS, WATER MAIN AND SANITARY SEWER SHOWN ELSEWHERE IN PLANS.
2. PUSH BACK LANDSCAPING ROCK OR MULCH AND REPLACE AFTER SIDEWALK CONSTRUCTION. DO NOT DISTURB PLANTS. INCIDENTAL TO CONSTRUCTION.

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | REMOVAL PLAN | SHEET 49 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021101-RM.DWG
LAYOUT NAME - 09

PLOT DATE : 1/8/2026 10:58 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

PUSH BACK LANDSCAPING ROCK. REPLACE WHEN SIDEWALK IS CONSTRUCTED. DO NOT DISTURB PLANTS. INCIDENTAL TO CONSTRUCTION.

PROPOSED R/W

SLOPE INTERCEPT

EXISTING R/W

TLE

W CLEVELAND AVE

CLEVELAND AVE R/L

84"

48"

93+00

94+00

95+00

96+00

97+00

MATCHLINE STA 97+75

ASPH

CONC EDGE

SIGN

LANDSCAPE BED

EXISTING R/W

SLOPE INTERCEPT

TLE

TC

## LEGEND

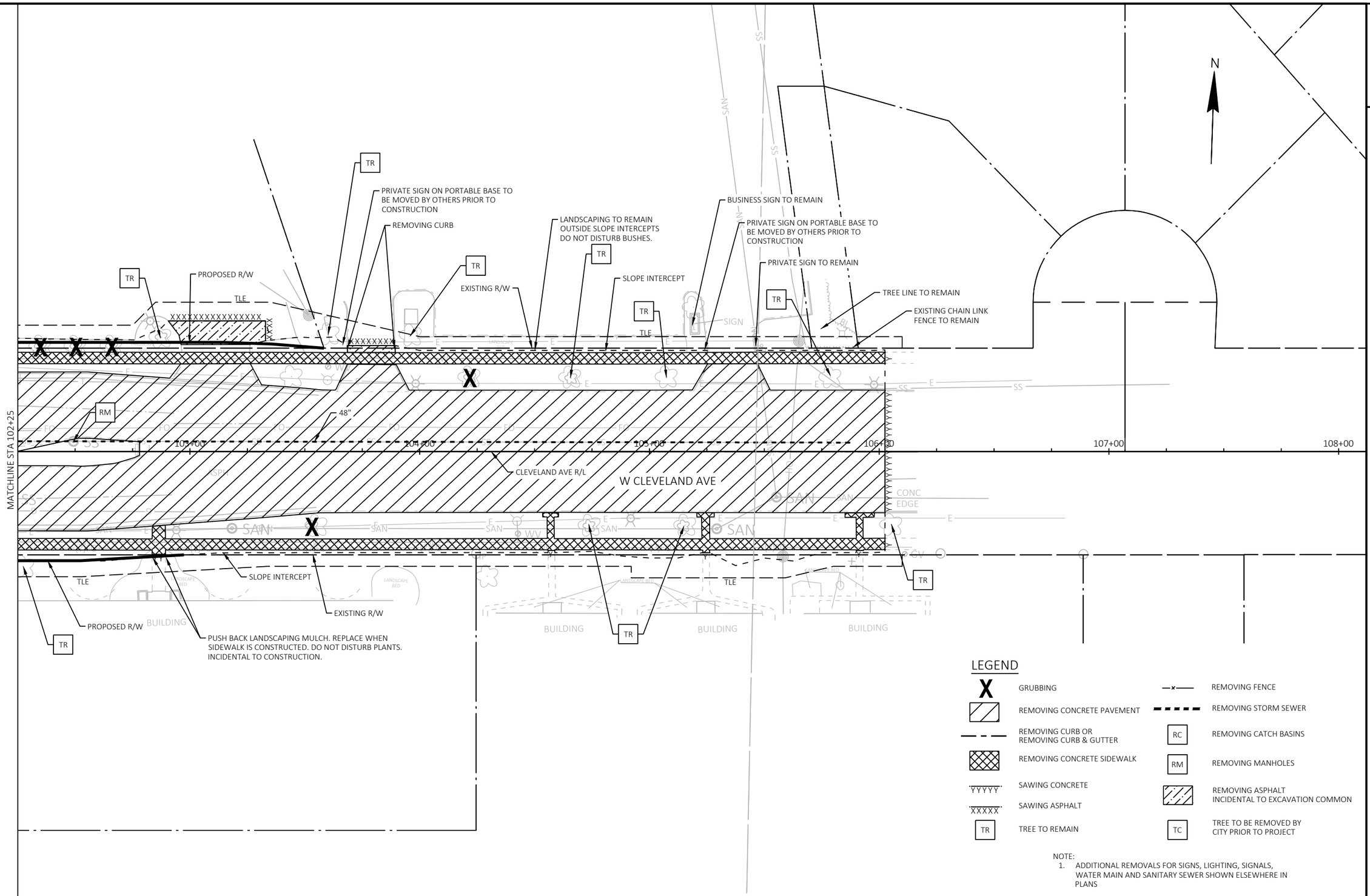
| | | | |
|---|---|---|---|
| X | GRUBBING | | REMOVING FENCE |
| | REMOVING CONCRETE PAVEMENT | | REMOVING STORM SEWER |
| | REMOVING CURB OR REMOVING CURB & GUTTER | RC | REMOVING CATCH BASINS |
| | REMOVING CONCRETE SIDEWALK | RM | REMOVING MANHOLES |
| YYYYY | SAWING CONCRETE | | REMOVING ASPHALT INCIDENTAL TO EXCAVATION COMMON |
| XXXXX | SAWING ASPHALT | | |
| TR | TREE TO REMAIN | TC | TREE TO BE REMOVED BY CITY PRIOR TO PROJECT |

NOTE:
1. ADDITIONAL REMOVALS FOR SIGNS, LIGHTING, SIGNALS, WATER MAIN AND SANITARY SEWER SHOWN ELSEWHERE IN PLANS

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | REMOVAL PLAN | SHEET 50 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021101-RM.DWG
LAYOUT NAME - 10
PLOT DATE : 1/8/2026 10:58 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2




## LEGEND

| | | | |
|---|---|---|---|
| X | GRUBBING | —×— | REMOVING FENCE |
| | REMOVING CONCRETE PAVEMENT | - - - - | REMOVING STORM SEWER |
| | REMOVING CURB OR REMOVING CURB & GUTTER | RC | REMOVING CATCH BASINS |
| | REMOVING CONCRETE SIDEWALK | RM | REMOVING MANHOLES |
| YYYYY | SAWING CONCRETE | | REMOVING ASPHALT INCIDENTAL TO EXCAVATION COMMON |
| XXXXX | SAWING ASPHALT | | |
| TR | TREE TO REMAIN | TC | TREE TO BE REMOVED BY CITY PRIOR TO PROJECT |

NOTE:
1. ADDITIONAL REMOVALS FOR SIGNS, LIGHTING, SIGNALS, WATER MAIN AND SANITARY SEWER SHOWN ELSEWHERE IN PLANS

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | REMOVAL PLAN | SHEET 51 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021101-RM.DWG
LAYOUT NAME - 11
PLOT DATE : 1/8/2026 10:58 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

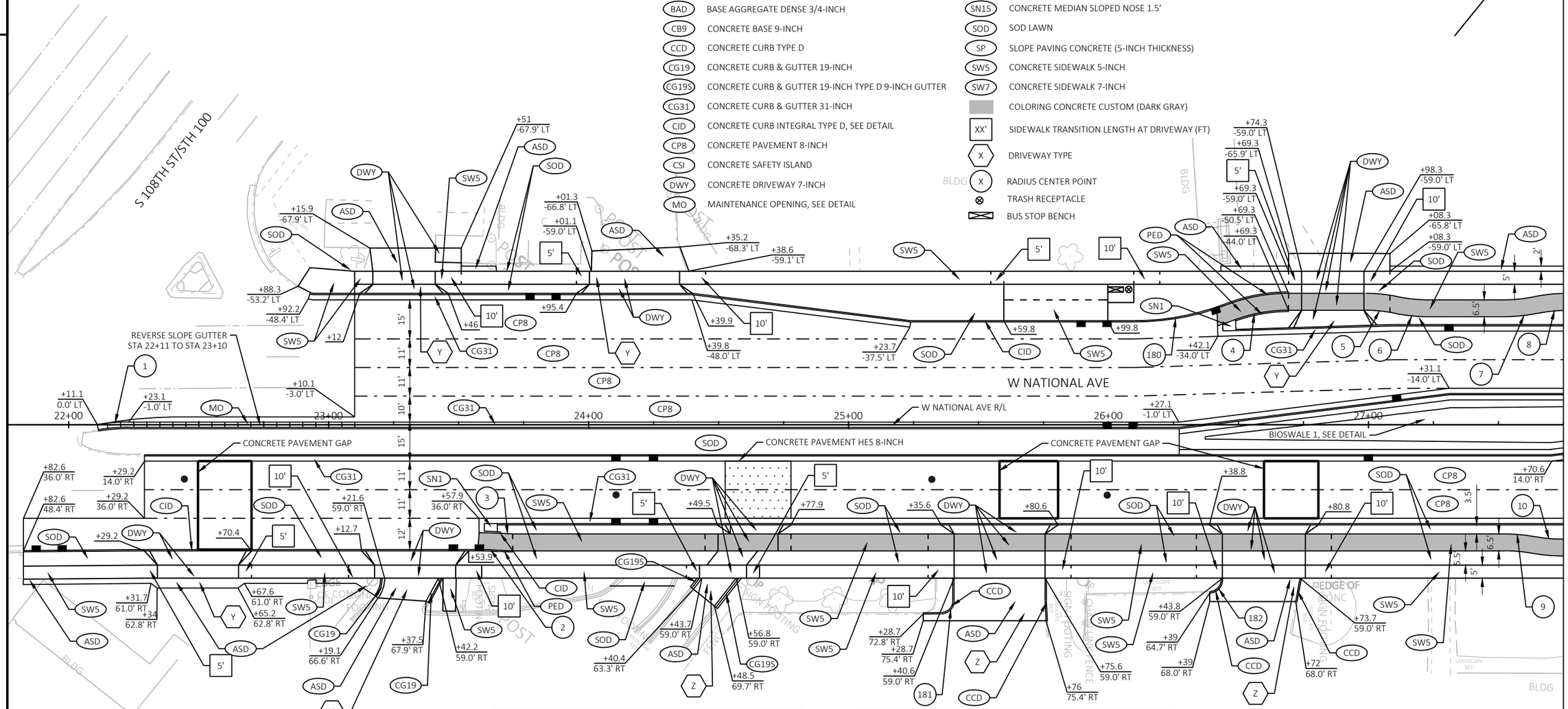
2

2

NOTES:
1. SEE CURB RAMP DETAILS FOR ADDITIONAL INFORMATION

## LEGEND

| | |
|---|---|
| AP3 | 3" HMA PAVEMENT OVERLAY |
| AP5 | 5" HMA PAVEMENT |
| ASD | 4" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES |
| BAD | BASE AGGREGATE DENSE 3/4-INCH |
| CB9 | CONCRETE BASE 9-INCH |
| CCD | CONCRETE CURB TYPE D |
| CG19 | CONCRETE CURB & GUTTER 19-INCH |
| CG19S | CONCRETE CURB & GUTTER 19-INCH TYPE D 9-INCH GUTTER |
| CG31 | CONCRETE CURB & GUTTER 31-INCH |
| CID | CONCRETE CURB INTEGRAL TYPE D, SEE DETAIL |
| CP8 | CONCRETE PAVEMENT 8-INCH |
| CSI | CONCRETE SAFETY ISLAND |
| DWY | CONCRETE DRIVEWAY 7-INCH |
| MO | MAINTENANCE OPENING, SEE DETAIL |
| PED | CONCRETE CURB PEDESTRIAN |
| SN1 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| SN2 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| SN15 | CONCRETE MEDIAN SLOPED NOSE 1.5' |
| SOD | SOD LAWN |
| SP | SLOPE PAVING CONCRETE (5-INCH THICKNESS) |
| SW5 | CONCRETE SIDEWALK 5-INCH |
| SW7 | CONCRETE SIDEWALK 7-INCH |
| | COLORING CONCRETE CUSTOM (DARK GRAY) |
| XX' | SIDEWALK TRANSITION LENGTH AT DRIVEWAY (FT) |
| X | DRIVEWAY TYPE |
| X | RADIUS CENTER POINT |
| | TRASH RECEPTACLE |
| | BUS STOP BENCH |




SHEET 1 OF 13

### RADIUS TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
|---|---|---|---|---|---|
| 1 | 22+23.12 | 74.00' RT | 368,270.25 | 2,522,596.98 | 75' |
| 2 | 23+57.93 | 148.00' RT | 368,297.80 | 2,522,748.28 | 100' |
| 3 | 23+70.80 | -17.50' LT | 368,434.38 | 2,522,653.93 | 60' |
| 4 | 26+69.30 | 16.00' RT | 368,596.57 | 2,522,906.75 | 60' |
| 5 | 26+98.29 | 16.00' RT | 368,614.85 | 2,522,929.26 | 60' |
| 6 | 27+23.31 | -108.00' LT | 368,726.88 | 2,522,870.51 | 66.5' |
| 7 | 27+51.74 | -108.00' LT | 368,744.80 | 2,522,892.57 | 66.5' |

### RADIUS TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
|---|---|---|---|---|---|
| 8 | 27+76.76 | 16.00' RT | 368,664.32 | 2,522,990.17 | 60' |
| 9 | 27+52.38 | 108.50' RT | 368,577.14 | 2,523,029.56 | 66.5' |
| 10 | 27+74.78 | -16.00' LT | 368,687.91 | 2,522,968.46 | 60' |
| 180 | 26+09.78 | -139.50' LT | 368,679.75 | 2,522,762.52 | 100' |
| 181 | 25+35.62 | 67.75' RT | 368,472.12 | 2,522,835.62 | 5' |
| 182 | 26+38.83 | 59.70' RT | 368,543.44 | 2,522,910.66 | 5' |

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN DETAILS - W NATIONAL AVE | SHEET 52 E |

NOTES:
1. SEE CURB RAMP DETAILS FOR ADDITIONAL INFORMATION
2. BANK REDEVELOPMENT WAS CURRENTLY UNDER CONSTRUCTION WHEN FINAL PLANS WERE PREPARED. FIELD VERIFY LOCATION OF DRIVEWAY AND ADJUST PLANS AS NEEDED TO TIE INTO AS-BUILT LOCATION OF DRIVEWAY.
3. LOCATION OF SIDEWALK INTO BANK REDEVELOPMENT WAS CURRENTLY UNDER CONSTRUCTION WHEN FINAL PLANS WERE PREPARED. ADJUST SIDEWALK ELEVATION TO MATCH EXISTING SIDEWALK INTO BANK,

MATCHLINE STA 27+75

MATCHLINE STA 33+75

MATCHLINE STA 102+25

W CLEVELAND AVE

W NATIONAL AVE

W NATIONAL AVE R/L

W CLEVELAND AVE R/L

S WILDWOOD DR

S WILDWOOD DR R/L

REVERSE SLOPE GUTTER

SEE CURB RAMP DETAIL

SEE CURB RAMP DETAILS

BIOSWALE 1, SEE DETAIL

CONCRETE PAVEMENT HES 8-INCH

SEE NOTE 2

SEE NOTE 3

## LEGEND

| | |
|---|---|
| AP3 | 3" HMA PAVEMENT OVERLAY |
| AP5 | 5" HMA PAVEMENT |
| ASD | 4" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES |
| BAD | BASE AGGREGATE DENSE 3/4-INCH |
| CB9 | CONCRETE BASE 9-INCH |
| CCD | CONCRETE CURB TYPE D |
| CG19 | CONCRETE CURB & GUTTER 19-INCH |
| CG19S | CONCRETE CURB & GUTTER 19-INCH TYPE D 9-INCH GUTTER |
| CG31 | CONCRETE CURB & GUTTER 31-INCH |
| CID | CONCRETE CURB INTEGRAL TYPE D, SEE DETAIL |
| CP8 | CONCRETE PAVEMENT 8-INCH |
| CSI | CONCRETE SAFETY ISLAND |
| DWY | CONCRETE DRIVEWAY 7-INCH |
| MO | MAINTENANCE OPENING, SEE DETAIL |
| PED | CONCRETE CURB PEDESTRIAN |
| SN1 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| SN2 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| SN15 | CONCRETE MEDIAN SLOPED NOSE 1.5' |
| SOD | SOD LAWN |
| SP | SLOPE PAVING CONCRETE (5-INCH THICKNESS) |
| SW5 | CONCRETE SIDEWALK 5-INCH |
| SW7 | CONCRETE SIDEWALK 7-INCH |
| | COLORING CONCRETE CUSTOM (DARK GRAY) |
| XX' | SIDEWALK TRANSITION LENGTH AT DRIVEWAY (FT) |
| X | DRIVEWAY TYPE |
| X | RADIUS CENTER POINT |
| | TRASH RECEPTACLE |
| | BUS STOP BENCH |

SHEET 2 OF 13

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN DETAILS - W NATIONAL AVE | SHEET 53 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021201-PD.DWG
LAYOUT NAME - 02

PLOT DATE : 1/23/2026 5:51 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

| RADIUS TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
| 11 | 28+70.96 | -211.00' LT | 368,899.91 | 2,522,920.18 | 175' |
| 12 | 28+92.04 | -89.82' LT | 368,819.13 | 2,523,012.93 | 52' |
| 13 | 29+11.86 | -74.59' LT | 368,819.81 | 2,523,037.93 | 27' |
| 14 | 29+01.86 | -74.49' LT | 368,813.43 | 2,523,030.23 | 37' |
| 15 | 29+14.61 | -60.98' LT | 368,810.98 | 2,523,048.64 | 50' |
| 16 | 29+68.61 | -65.31' LT | 368,848.39 | 2,523,087.83 | 2' |
| 17 | 29+65.35 | -44.00' LT | 368,829.79 | 2,523,098.73 | 1.5' |
| 18 | 29+97.56 | -44.00' LT | 368,850.10 | 2,523,123.74 | 1.5' |
| 19 | 28+53.98 | 101.27' RT | 368,646.81 | 2,523,103.87 | 250' |
| 20 | 30+32.27 | -70.40' LT | 368,892.47 | 2,523,134.03 | 2.5' |
| 22 | 32+18.33 | 43.50' RT | 368,921.50 | 2,523,350.23 | 100' |
| 23 | 32+50.37 | -160.50' LT | 369,099.91 | 2,523,246.24 | 106.5' |
| 24 | 33+36.93 | 46.00' RT | 368,994.46 | 2,523,443.77 | 100' |
| 25 | 29+91.60 | 286.00' RT | 368,590.19 | 2,523,327.16 | 300' |
| 26 | 30+17.87 | -7.83' LT | 368,834.82 | 2,523,162.30 | 5' |
| 27 | 29+71.50 | -198.00' LT | 368,953.21 | 2,523,006.41 | 200' |
| 28 | 30+33.61 | 10.50' RT | 368,830.52 | 2,523,186.08 | 3.5' |
| 29 | 30+62.08 | 6.14' RT | 368,851.85 | 2,523,205.42 | 2.5' |

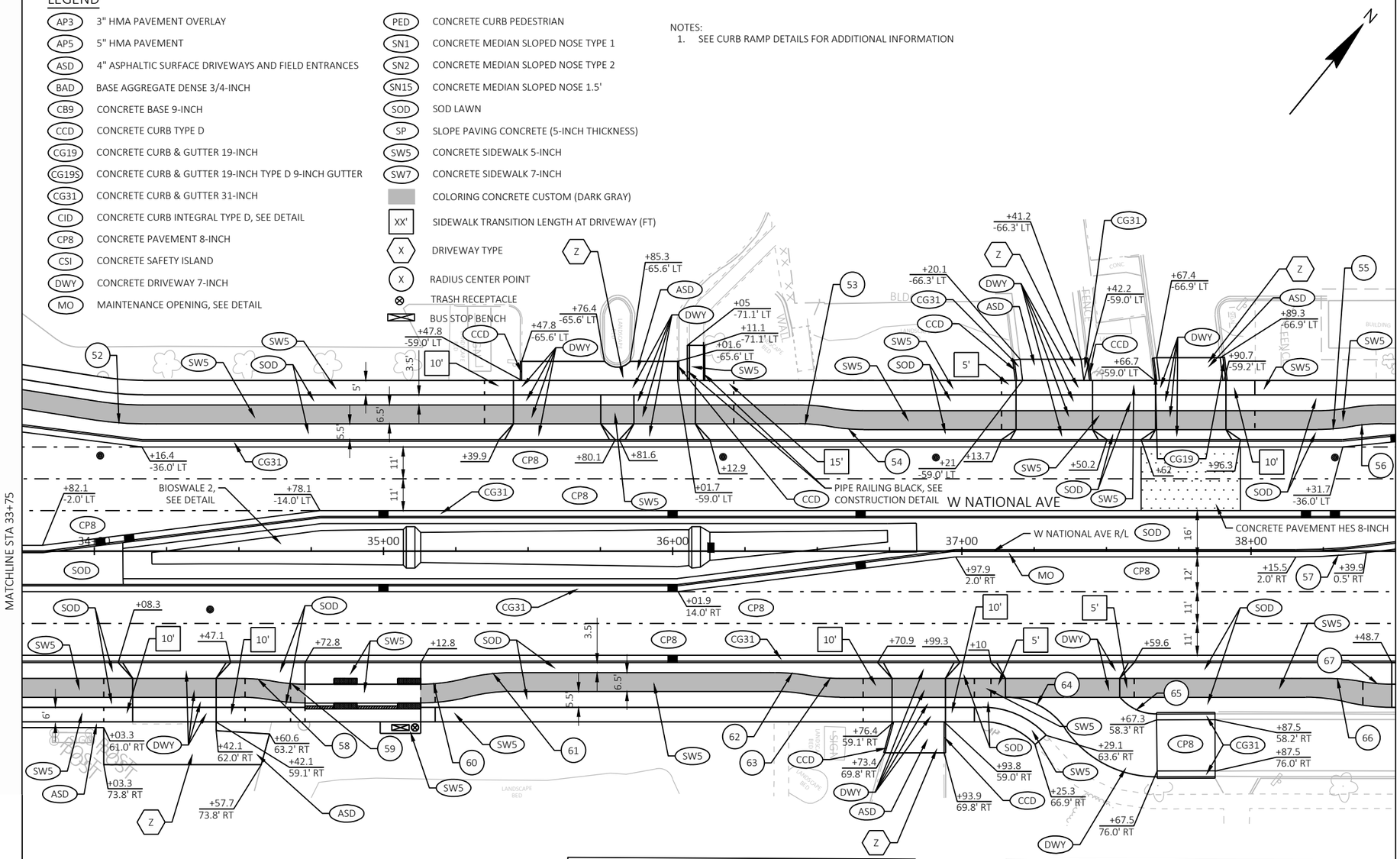
| RADIUS TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
| 30 | 30+67.83 | 10.50' RT | 368,852.10 | 2,523,212.64 | 2.5' |
| 31 | 31+69.20 | -10.50' LT | 368,932.34 | 2,523,278.03 | 2.5' |
| 32 | 31+77.44 | -4.24' LT | 368,932.69 | 2,523,288.37 | 2.5' |
| 33 | 32+22.00 | -10.50' LT | 368,965.69 | 2,523,318.97 | 3.5' |
| 34 | 32+29.26 | 7.67' RT | 368,956.19 | 2,523,336.07 | 3.5' |
| 35 | 32+92.12 | 273.00' RT | 368,790.15 | 2,523,552.37 | 275' |
| 36 | 33+00.48 | -886.00' LT | 369,694.09 | 2,522,826.95 | 900' |
| 37 | 28+86.23 | -15.50' LT | 368,757.78 | 2,523,055.28 | 59.5' |
| 38 | 29+08.59 | 108.50' RT | 368,675.63 | 2,523,150.81 | 66.5' |
| 39 | 30+55.84 | 108.50' RT | 368,768.46 | 2,523,265.11 | 66.5' |
| 40 | 30+94.29 | -53.50' LT | 368,918.45 | 2,523,192.83 | 100' |
| 41 | 32+39.27 | 44.00' RT | 368,934.33 | 2,523,366.78 | 1.5' |
| 42 | 32+76.14 | 44.00' RT | 368,957.62 | 2,523,395.37 | 1.5' |
| 43 | 32+72.80 | 69.48' RT | 368,935.75 | 2,523,408.86 | 1.5' |
| 44 | 33+26.30 | 62.63' RT | 368,974.85 | 2,523,446.02 | 50' |
| 45 | 33+43.37 | 74.75' RT | 368,976.23 | 2,523,466.91 | 42' |
| 46 | 33+33.60 | 76.87' RT | 368,968.41 | 2,523,460.68 | 32' |
| 47 | 33+49.08 | 89.54' RT | 368,968.37 | 2,523,480.68 | 52' |

| RADIUS TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
| 48 | 33+68.46 | 211.00' RT | 368,886.43 | 2,523,572.41 | 175' |
| 49 | 33+41.96 | 19.00' RT | 369,018.57 | 2,523,430.61 | 25' |
| 50 | 32+07.09 | 72.30' RT | 368,892.07 | 2,523,359.70 | 2.5' |
| 51 | 33+52.07 | -61.81' LT | 369,087.62 | 2,523,387.42 | 200' |
| 183 | 29+17.83 | -62.00' LT | 368,813.80 | 2,523,050.49 | 8' |
| 184 | 29+16.04 | -85.07' LT | 368,830.58 | 2,523,034.56 | 15' |
| 185 | 31+06.20 | -130.43' LT | 368,985.68 | 2,523,153.57 | 55' |
| 186 | 30+97.76 | -60.05' LT | 368,925.73 | 2,523,191.39 | 15' |
| 187 | 33+53.31 | 43.50' RT | 369,006.74 | 2,523,454.88 | 105' |
| 188 | 31+27.19 | 59.01' RT | 368,851.92 | 2,523,289.35 | 10' |
| 189 | 31+37.70 | 104.35' RT | 368,823.40 | 2,523,326.13 | 30' |
| 190 | 33+43.86 | 75.12' RT | 368,976.25 | 2,523,467.52 | 35' |
| 191 | 33+29.16 | 78.15' RT | 368,964.63 | 2,523,458.04 | 20' |
| 192 | 33+30.61 | 73.36' RT | 368,969.25 | 2,523,456.14 | 20' |
| 193 | 33+28.16 | 69.00' RT | 368,971.09 | 2,523,451.49 | 15' |

## LEGEND

| | |
|---|---|
| AP3 | 3" HMA PAVEMENT OVERLAY |
| AP5 | 5" HMA PAVEMENT |
| ASD | 4" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES |
| BAD | BASE AGGREGATE DENSE 3/4-INCH |
| CB9 | CONCRETE BASE 9-INCH |
| CCD | CONCRETE CURB TYPE D |
| CG19 | CONCRETE CURB & GUTTER 19-INCH |
| CG19S | CONCRETE CURB & GUTTER 19-INCH TYPE D 9-INCH GUTTER |
| CG31 | CONCRETE CURB & GUTTER 31-INCH |
| CID | CONCRETE CURB INTEGRAL TYPE D, SEE DETAIL |
| CP8 | CONCRETE PAVEMENT 8-INCH |
| CSI | CONCRETE SAFETY ISLAND |
| DWY | CONCRETE DRIVEWAY 7-INCH |
| MO | MAINTENANCE OPENING, SEE DETAIL |
| PED | CONCRETE CURB PEDESTRIAN |
| SN1 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| SN2 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| SN15 | CONCRETE MEDIAN SLOPED NOSE 1.5' |
| SOD | SOD LAWN |
| SP | SLOPE PAVING CONCRETE (5-INCH THICKNESS) |
| SW5 | CONCRETE SIDEWALK 5-INCH |
| SW7 | CONCRETE SIDEWALK 7-INCH |
| | COLORING CONCRETE CUSTOM (DARK GRAY) |
| XX' | SIDEWALK TRANSITION LENGTH AT DRIVEWAY (FT) |
| X | DRIVEWAY TYPE |
| X | RADIUS CENTER POINT |
| | TRASH RECEPTACLE |
| | BUS STOP BENCH |

NOTES:
1. SEE CURB RAMP DETAILS FOR ADDITIONAL INFORMATION




### RADIUS TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
|---|---|---|---|---|---|
| 52 | 34+16.93 | -150.50' LT | 369,197.34 | 2,523,381.71 | 106.5' |
| 53 | 36+43.56 | 16.00' RT | 369,211.35 | 2,523,662.57 | 60' |
| 54 | 36+65.96 | -108.50' LT | 369,322.04 | 2,523,601.33 | 66.5' |
| 55 | 38+22.94 | -108.50' LT | 369,421.17 | 2,523,723.04 | 66.5' |
| 56 | 38+45.35 | 16.00' RT | 369,338.78 | 2,523,819.04 | 60' |
| 57 | 38+15.48 | -198.00' LT | 369,485.86 | 2,523,660.74 | 200' |
| 58 | 34+50.43 | 110.50' RT | 369,016.12 | 2,523,572.51 | 66.5' |
| 59 | 34+72.84 | -14.00' LT | 369,126.81 | 2,523,511.26 | 60' |

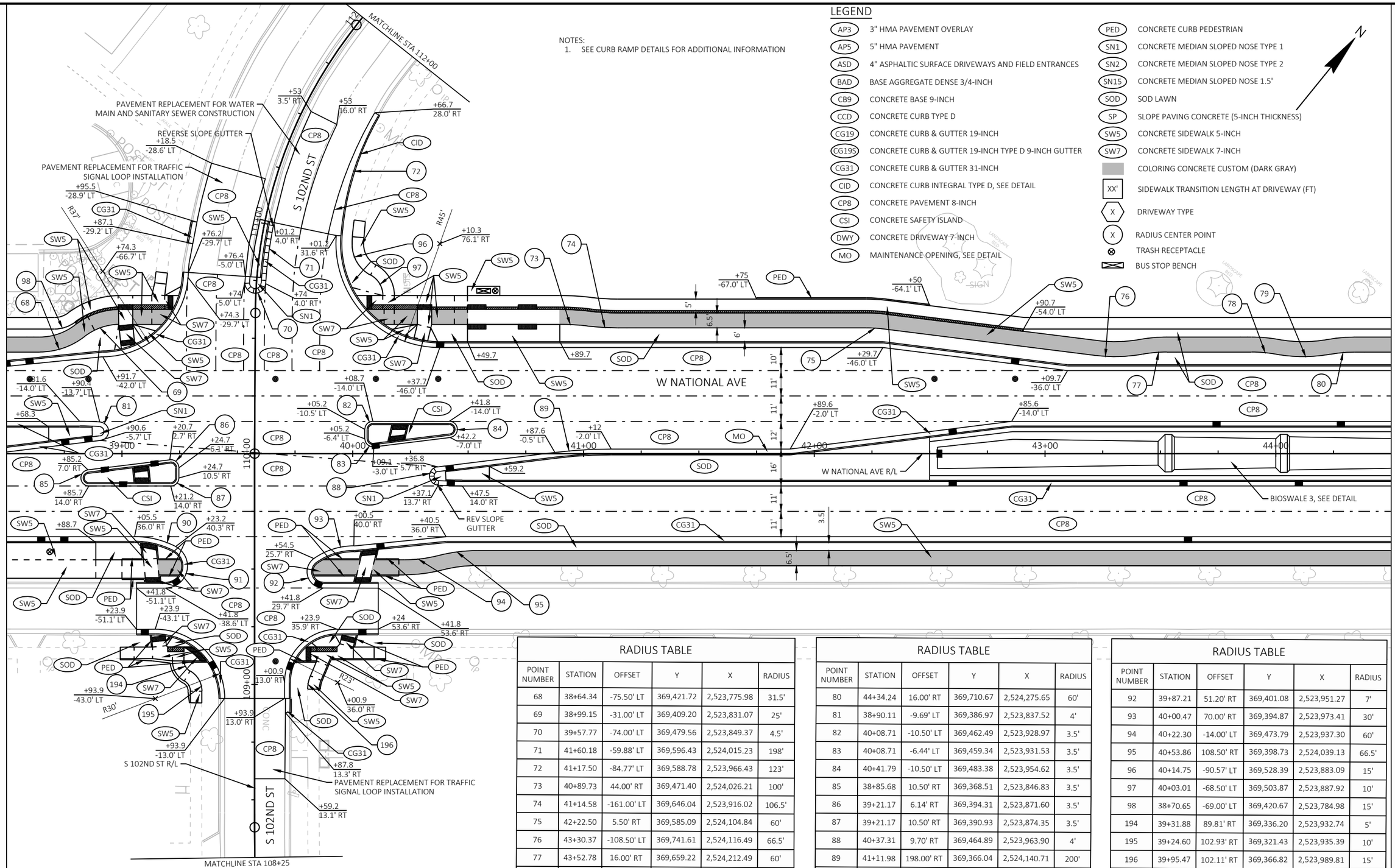
### RADIUS TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
|---|---|---|---|---|---|
| 60 | 35+12.84 | -14.00' LT | 369,152.07 | 2,523,542.27 | 60' |
| 61 | 35+44.40 | 108.50' RT | 369,077.01 | 2,523,644.10 | 66.5' |
| 62 | 36+35.34 | 108.50' RT | 369,134.44 | 2,523,714.61 | 66.5' |
| 63 | 36+57.74 | -16.00' LT | 369,245.12 | 2,523,653.36 | 60' |
| 64 | 37+15.04 | 75.50' RT | 369,210.36 | 2,523,755.57 | 25' |
| 65 | 37+66.98 | 40.19' RT | 369,270.54 | 2,523,773.55 | 16' |
| 66 | 38+18.94 | 110.50' RT | 369,248.83 | 2,523,858.24 | 66.5' |
| 67 | 38+48.67 | -14.00' LT | 369,364.14 | 2,523,802.67 | 60' |



| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN DETAILS - W NATIONAL AVE | SHEET 55 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021201-PD.DWG
LAYOUT NAME - 03
PLOT DATE : 1/23/2026 5:51 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42




NOTES:
1. SEE CURB RAMP DETAILS FOR ADDITIONAL INFORMATION

## LEGEND

| | |
|---|---|
| AP3 | 3" HMA PAVEMENT OVERLAY |
| AP5 | 5" HMA PAVEMENT |
| ASD | 4" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES |
| BAD | BASE AGGREGATE DENSE 3/4-INCH |
| CB9 | CONCRETE BASE 9-INCH |
| CCD | CONCRETE CURB TYPE D |
| CG19 | CONCRETE CURB & GUTTER 19-INCH |
| CG19S | CONCRETE CURB & GUTTER 19-INCH TYPE D 9-INCH GUTTER |
| CG31 | CONCRETE CURB & GUTTER 31-INCH |
| CID | CONCRETE CURB INTEGRAL TYPE D, SEE DETAIL |
| CP8 | CONCRETE PAVEMENT 8-INCH |
| CSI | CONCRETE SAFETY ISLAND |
| DWY | CONCRETE DRIVEWAY 7-INCH |
| MO | MAINTENANCE OPENING, SEE DETAIL |
| PED | CONCRETE CURB PEDESTRIAN |
| SN1 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| SN2 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| SN15 | CONCRETE MEDIAN SLOPED NOSE 1.5' |
| SOD | SOD LAWN |
| SP | SLOPE PAVING CONCRETE (5-INCH THICKNESS) |
| SW5 | CONCRETE SIDEWALK 5-INCH |
| SW7 | CONCRETE SIDEWALK 7-INCH |
| | COLORING CONCRETE CUSTOM (DARK GRAY) |
| XX' | SIDEWALK TRANSITION LENGTH AT DRIVEWAY (FT) |
| X | DRIVEWAY TYPE |
| X | RADIUS CENTER POINT |
| | TRASH RECEPTACLE |
| | BUS STOP BENCH |

### RADIUS TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
|---|---|---|---|---|---|
| 68 | 38+64.34 | -75.50' LT | 369,421.72 | 2,523,775.98 | 31.5' |
| 69 | 38+99.15 | -31.00' LT | 369,409.20 | 2,523,831.07 | 25' |
| 70 | 39+57.77 | -74.00' LT | 369,479.56 | 2,523,849.37 | 4.5' |
| 71 | 41+60.18 | -59.88' LT | 369,596.43 | 2,524,015.23 | 198' |
| 72 | 41+17.50 | -84.77' LT | 369,588.78 | 2,523,966.43 | 123' |
| 73 | 40+89.73 | 44.00' RT | 369,471.40 | 2,524,026.21 | 100' |
| 74 | 41+14.58 | -161.00' LT | 369,646.04 | 2,523,916.02 | 106.5' |
| 75 | 42+22.50 | 5.50' RT | 369,585.09 | 2,524,104.84 | 60' |
| 76 | 43+30.37 | -108.50' LT | 369,741.61 | 2,524,116.49 | 66.5' |
| 77 | 43+52.78 | 16.00' RT | 369,659.22 | 2,524,212.49 | 60' |
| 78 | 43+89.43 | 16.00' RT | 369,682.37 | 2,524,240.91 | 60' |
| 79 | 44+11.84 | -108.50' LT | 369,793.05 | 2,524,179.66 | 66.5' |

### RADIUS TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
|---|---|---|---|---|---|
| 80 | 44+34.24 | 16.00' RT | 369,710.67 | 2,524,275.65 | 60' |
| 81 | 38+90.11 | -9.69' LT | 369,386.97 | 2,523,837.52 | 4' |
| 82 | 40+08.71 | -10.50' LT | 369,462.49 | 2,523,928.97 | 3.5' |
| 83 | 40+08.71 | -6.44' LT | 369,459.34 | 2,523,931.53 | 3.5' |
| 84 | 40+41.79 | -10.50' LT | 369,483.38 | 2,523,954.62 | 3.5' |
| 85 | 38+85.68 | 10.50' RT | 369,368.51 | 2,523,846.83 | 3.5' |
| 86 | 39+21.17 | 6.14' RT | 369,394.31 | 2,523,871.60 | 3.5' |
| 87 | 39+21.17 | 10.50' RT | 369,390.93 | 2,523,874.35 | 3.5' |
| 88 | 40+37.31 | 9.70' RT | 369,464.89 | 2,523,963.90 | 4' |
| 89 | 41+11.98 | 198.00' RT | 369,366.04 | 2,524,140.71 | 200' |
| 90 | 39+05.47 | 75.00' RT | 369,331.00 | 2,523,902.91 | 39' |
| 91 | 39+18.88 | 48.73' RT | 369,359.84 | 2,523,896.72 | 9.5' |

### RADIUS TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
|---|---|---|---|---|---|
| 92 | 39+87.21 | 51.20' RT | 369,401.08 | 2,523,951.27 | 7' |
| 93 | 40+00.47 | 70.00' RT | 369,394.87 | 2,523,973.41 | 30' |
| 94 | 40+22.30 | -14.00' LT | 369,473.79 | 2,523,937.30 | 60' |
| 95 | 40+53.86 | 108.50' RT | 369,398.73 | 2,524,039.13 | 66.5' |
| 96 | 40+14.75 | -90.57' LT | 369,528.39 | 2,523,883.09 | 15' |
| 97 | 40+03.01 | -68.50' LT | 369,503.87 | 2,523,887.92 | 10' |
| 98 | 38+70.65 | -69.00' LT | 369,420.67 | 2,523,784.98 | 15' |
| 194 | 39+31.88 | 89.81' RT | 369,336.20 | 2,523,932.74 | 5' |
| 195 | 39+24.60 | 102.93' RT | 369,321.43 | 2,523,935.39 | 10' |
| 196 | 39+95.47 | 102.11' RT | 369,366.82 | 2,523,989.81 | 15' |



| PROJECT NO: | HWY: | COUNTY: | PLAN DETAILS - W NATIONAL AVE | SHEET | |
|---|---|---|---|---|---|
| 2410-15-70 | NATIONAL AVE | MILWAUKEE | | 56 | E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021201-PD.DWG
LAYOUT NAME - 04
PLOT DATE : 1/23/2026 5:51 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

## LEGEND

| | |
|---|---|
| AP3 | 3" HMA PAVEMENT OVERLAY |
| AP5 | 5" HMA PAVEMENT |
| ASD | 4" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES |
| BAD | BASE AGGREGATE DENSE 3/4-INCH |
| CB9 | CONCRETE BASE 9-INCH |
| CCD | CONCRETE CURB TYPE D |
| CG19 | CONCRETE CURB & GUTTER 19-INCH |
| CG19S | CONCRETE CURB & GUTTER 19-INCH TYPE D 9-INCH GUTTER |
| CG31 | CONCRETE CURB & GUTTER 31-INCH |
| CID | CONCRETE CURB INTEGRAL TYPE D, SEE DETAIL |
| CP8 | CONCRETE PAVEMENT 8-INCH |
| CSI | CONCRETE SAFETY ISLAND |
| DWY | CONCRETE DRIVEWAY 7-INCH |
| MO | MAINTENANCE OPENING, SEE DETAIL |
| PED | CONCRETE CURB PEDESTRIAN |
| SN1 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| SN2 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| SN15 | CONCRETE MEDIAN SLOPED NOSE 1.5' |
| SOD | SOD LAWN |
| SP | SLOPE PAVING CONCRETE (5-INCH THICKNESS) |
| SW5 | CONCRETE SIDEWALK 5-INCH |
| SW7 | CONCRETE SIDEWALK 7-INCH |
| | COLORING CONCRETE CUSTOM (DARK GRAY) |
| XX' | SIDEWALK TRANSITION LENGTH AT DRIVEWAY (FT) |
| X | DRIVEWAY TYPE |
| X | RADIUS CENTER POINT |
| | TRASH RECEPTACLE |
| | BUS STOP BENCH |

NOTES:
1. SEE CURB RAMP DETAILS FOR ADDITIONAL INFORMATION

MATCHLINE STA 44+50

MATCHLINE STA 50+50

W NATIONAL AVE

W NATIONAL AVE R/L

I-41/894 SB RAMPS

S 101ST ST

REVERSE SLOPE GUTTER

3" CURB HEAD HEIGHT

FENCE CHAIN LINK 6-FT

GATE CHAIN LINK 12-FT

S-40-0673

| RADIUS TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
| 99 | 46+32.55 | -786.00' LT | 370,457.75 | 2,523,922.96 | 742' |
| 100 | 46+32.55 | -786.00' LT | 370,457.75 | 2,523,922.96 | 750' |
| 101 | 47+10.45 | -183.19' LT | 370,039.53 | 2,524,364.03 | 60' |
| 102 | 47+45.85 | 48.34' RT | 369,882.37 | 2,524,537.69 | 100' |
| 103 | 47+28.24 | -158.25' LT | 370,031.44 | 2,524,393.58 | 115' |
| 104 | 47+74.18 | -126.96' LT | 370,036.18 | 2,524,448.96 | 83.5' |

| RADIUS TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
| 105 | 51+36.94 | -294.69' LT | 370,395.32 | 2,524,624.31 | 273.5' |
| 106 | 51+36.94 | -294.69' LT | 370,395.32 | 2,524,624.31 | 250' |
| 107 | 50+02.27 | -50.92' LT | 370,121.26 | 2,524,673.83 | 3' |
| 197 | 44+70.07 | 16.00' RT | 369,733.29 | 2,524,303.43 | 60' |
| 198 | 44+92.47 | -108.50' LT | 369,843.97 | 2,524,242.18 | 66.5' |
| 199 | 45+14.88 | 16.00' RT | 369,761.59 | 2,524,338.18 | 60' |

SHEET 6 OF 13

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN DETAILS - W NATIONAL AVE | SHEET 57 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021201-PD.DWG
LAYOUT NAME - 05

PLOT DATE : 1/23/2026 5:52 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

| RADIUS TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
| 108 | 51+52.53 | -342.20' LT | 370,442.00 | 2,524,606.40 | 300' |
| 109 | 56+18.94 | 16.50' RT | 370,458.25 | 2,525,194.59 | 60' |
| 110 | 56+53.01 | -106.50' LT | 370,575.40 | 2,525,143.92 | 66.5' |
| 111 | 51+46.33 | 238.00' RT | 369,988.21 | 2,524,967.98 | 200' |
| 112 | 51+25.41 | 335.79' RT | 369,899.18 | 2,525,013.52 | 300' |
| 113 | 52+68.17 | 39.00' RT | 370,219.45 | 2,524,936.79 | 5' |
| 114 | 51+22.71 | 334.10' RT | 369,898.79 | 2,525,010.36 | 324' |
| 115 | 53+07.56 | -54.00' LT | 370,316.44 | 2,524,908.61 | 100' |
| 116 | 53+36.48 | 154.00' RT | 370,173.42 | 2,525,062.38 | 110' |
| 117 | 54+11.61 | 43.00' RT | 370,306.93 | 2,525,050.53 | 9' |

| RADIUS TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
| 118 | 54+49.64 | 39.00' RT | 370,334.05 | 2,525,077.50 | 5' |
| 119 | 54+66.85 | 39.00' RT | 370,344.92 | 2,525,090.84 | 5' |
| 120 | 54+49.25 | 86.12' RT | 370,297.27 | 2,525,106.95 | 5' |
| 121 | 55+39.60 | 114.00' RT | 370,332.71 | 2,525,194.61 | 60' |
| 122 | 55+75.31 | -11.00' LT | 370,452.18 | 2,525,143.36 | 70' |
| 123 | 53+39.64 | 138.62' RT | 370,187.34 | 2,525,055.11 | 150' |
| 124 | 53+59.66 | 32.49' RT | 370,282.28 | 2,525,003.62 | 42' |
| 125 | 53+43.04 | 61.16' RT | 370,249.56 | 2,525,008.84 | 75' |

NOTES:
1. SEE CURB RAMP DETAILS FOR ADDITIONAL INFORMATION

MATCHLINE STA 50+50

MATCHLINE STA 56+50

FENCE CHAIN LINK 6-FT

+76.4 -71.7' LT

+10 -58.7' LT

+14.5 -64.8' LT

SP

+59 -57.2' LT

SW7

108

SW5

+52.7 -42.2' LT

8"

4.5'

+40 -42.2' LT

AP3

CB9

+78.6 -45.6' LT

+81.4 -50.1' LT

SOD

+79.5 -64.3' LT

+76.4 -58.0' LT

+29.8 -63.1' LT

+41 -65.1' LT

FENCE CHAIN LINK 6-FT

SW5

+11.4 -46.0' LT

CG31

+57.5 -39.1' LT

+50 -11.7' LT

3" CURB HEAD HEIGHT

CG31

SW5

REVERSE SLOPE GUTTER

+40.3 -9.2' LT

MO

+36.4 -11.3' LT

123

125

124

+76.6 -6.0' LT

+57.5 -14.0' LT

CG31

+11.4 -31.0' LT

51+00

52+00

53+00

SOD

54+00

W NATIONAL AVE R/L

ASPH

MO

55+00

SOD

BIOSWALE 4, SEE DETAIL

56+00

AP3

CB9

SW5

+46.3 38.0' RT

111

+88.2 42.4' RT

SW7

+68.2 34.0' RT

SOD

W NATIONAL AVE

CG31

+11.6 34.0' RT

117

+49.6 34.0' RT

118

+66.8 34.0' RT

119

+44.6 39.0' RT

+03.5 45.1' RT

+71.5 40.7' RT

5.5'

CG31

10'

SW7

113

+29.7 54.5' RT

+66 43.5' RT

SN1

10'

+20.6 43.1' RT

+20.4 63.5' RT

CSI

CB9

CG31

SW7

+72.3 78.7' RT

+53.9 87.9' RT

+44.3 86.1' RT

120

+64.3 100.1' RT

I-41/894 NB RAMPS

+01.4 65.2' RT

+06.8 56.0' RT

+35.2 77.2' RT

SP

SW5

112

CG31

114

115

116

PED

SW5

SW7

REVERSE SLOPE GUTTER

+70.2 89.4' RT

FENCE CHAIN LINK 6-FT

+57.8 111.2' RT

+41.4 127.6' RT

+34.5 14.0' RT

+45.2 36.0' RT

CP8

CG31

12'

+23.4 14.0' RT

+34.5 36.6' RT

+59.8 36.0' RT

SOD

10'

CP8

6.5'

5'

3.5'

SW5

SW5

121

122

SW5

CHAIN LINK FENCE

R60'

+28.5 99.6' RT

R100'

+45.2 136.0' RT

ASPH

PAVEMENT REPLACEMENT FOR WATER MAIN AND SANITARY SEWER CONSTRUCTION

TRANSMISSION TOWER

TRANSMISSION TOWER

162+00

S 100TH ST R/L

161+00

S 100TH ST

CP8

+98.8 -69.4' LT

+98.4 -61.4' LT

+28.4 -61.0' LT

PED

R30'

SW5

+73.2 -71.6' LT

+72.7 -59.0' LT

+44.7 -59.0' LT

R28'

SW7

SW5

SOD

SW7

CG31

SW5

CP8

109

110

SW5

+44.7 31.0' RT

CP8

+28.4 -31.0' LT

HOUSE

SIGN

CHAIN LINK FENCE

CHAIN LINK FENCE

SIGN

GRGE

MP

MP

MP

MP

MP

## LEGEND

| | |
|---|---|
| AP3 | 3" HMA PAVEMENT OVERLAY |
| AP5 | 5" HMA PAVEMENT |
| ASD | 4" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES |
| BAD | BASE AGGREGATE DENSE 3/4-INCH |
| CB9 | CONCRETE BASE 9-INCH |
| CCD | CONCRETE CURB TYPE D |
| CG19 | CONCRETE CURB & GUTTER 19-INCH |
| CG19S | CONCRETE CURB & GUTTER 19-INCH TYPE D 9-INCH GUTTER |
| CG31 | CONCRETE CURB & GUTTER 31-INCH |
| CID | CONCRETE CURB INTEGRAL TYPE D, SEE DETAIL |
| CP8 | CONCRETE PAVEMENT 8-INCH |
| CSI | CONCRETE SAFETY ISLAND |
| DWY | CONCRETE DRIVEWAY 7-INCH |
| MO | MAINTENANCE OPENING, SEE DETAIL |
| PED | CONCRETE CURB PEDESTRIAN |
| SN1 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| SN2 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| SN15 | CONCRETE MEDIAN SLOPED NOSE 1.5' |
| SOD | SOD LAWN |
| SP | SLOPE PAVING CONCRETE (5-INCH THICKNESS) |
| SW5 | CONCRETE SIDEWALK 5-INCH |
| SW7 | CONCRETE SIDEWALK 7-INCH |
| | COLORING CONCRETE CUSTOM (DARK GRAY) |
| XX' | SIDEWALK TRANSITION LENGTH AT DRIVEWAY (FT) |
| X | DRIVEWAY TYPE |
| X | RADIUS CENTER POINT |
| | TRASH RECEPTACLE |
| | BUS STOP BENCH |

SHEET 7 OF 13

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN DETAILS - W NATIONAL AVE | SHEET 58 | E |
|---|---|---|---|---|---|

## LEGEND

| | |
|---|---|
| AP3 | 3" HMA PAVEMENT OVERLAY |
| AP5 | 5" HMA PAVEMENT |
| ASD | 4" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES |
| BAD | BASE AGGREGATE DENSE 3/4-INCH |
| CB9 | CONCRETE BASE 9-INCH |
| CCD | CONCRETE CURB TYPE D |
| CG19 | CONCRETE CURB & GUTTER 19-INCH |
| CG19S | CONCRETE CURB & GUTTER 19-INCH TYPE D 9-INCH GUTTER |
| CG31 | CONCRETE CURB & GUTTER 31-INCH |
| CID | CONCRETE CURB INTEGRAL TYPE D, SEE DETAIL |
| CP8 | CONCRETE PAVEMENT 8-INCH |
| CSI | CONCRETE SAFETY ISLAND |
| DWY | CONCRETE DRIVEWAY 7-INCH |
| MO | MAINTENANCE OPENING, SEE DETAIL |
| PED | CONCRETE CURB PEDESTRIAN |
| SN1 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| SN2 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| SN15 | CONCRETE MEDIAN SLOPED NOSE 1.5' |
| SOD | SOD LAWN |
| SP | SLOPE PAVING CONCRETE (5-INCH THICKNESS) |
| SW5 | CONCRETE SIDEWALK 5-INCH |
| SW7 | CONCRETE SIDEWALK 7-INCH |
| | COLORING CONCRETE CUSTOM (DARK GRAY) |
| XX' | SIDEWALK TRANSITION LENGTH AT DRIVEWAY (FT) |
| X | DRIVEWAY TYPE |
| X | RADIUS CENTER POINT |
| | TRASH RECEPTACLE |
| | BUS STOP BENCH |

NOTES:
1. SEE CURB RAMP DETAILS FOR ADDITIONAL INFORMATION

### RADIUS TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
|---|---|---|---|---|---|
| 200 | 56+88.91 | -106.50' LT | 370,597.92 | 2,525,171.86 | 66.5' |
| 201 | 59+72.67 | 41.58' RT | 370,660.72 | 2,525,485.72 | 4' |
| 202 | 58+63.52 | 43.29' RT | 370,590.89 | 2,525,401.81 | 5' |
| 203 | 59+22.91 | -42.36' LT | 370,694.84 | 2,525,394.30 | 3' |
| 204 | 60+11.78 | -44.00' LT | 370,751.89 | 2,525,462.46 | 5' |
| 205 | 60+21.78 | -63.17' LT | 370,773.09 | 2,525,458.21 | 15' |
| 206 | 58+43.52 | 61.89' RT | 370,563.86 | 2,525,397.91 | 15' |

### RADIUS TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
|---|---|---|---|---|---|
| 124 | 57+18.46 | 16.50' RT | 370,520.71 | 2,525,272.06 | 60' |
| 125 | 57+73.19 | 16.50' RT | 370,555.05 | 2,525,314.67 | 60' |
| 126 | 57+98.21 | -107.50' LT | 370,667.30 | 2,525,256.33 | 66.5' |
| 127 | 58+09.38 | 17.00' RT | 370,577.38 | 2,525,343.16 | 58.5' |
| 128 | 58+54.84 | -108.00' LT | 370,703.23 | 2,525,300.11 | 66.5' |
| 129 | 58+77.25 | 16.50' RT | 370,620.36 | 2,525,395.69 | 60' |
| 130 | 59+11.03 | -110.00' LT | 370,740.05 | 2,525,342.60 | 66.5' |
| 131 | 59+26.91 | 15.50' RT | 370,652.31 | 2,525,433.72 | 60' |
| 132 | 60+76.41 | 16.00' RT | 370,745.74 | 2,525,550.43 | 60' |
| 133 | 60+87.65 | -110.00' LT | 370,850.89 | 2,525,480.11 | 66.5' |
| 134 | 57+90.30 | -198.00' LT | 370,732.79 | 2,525,193.38 | 200' |

### RADIUS TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
|---|---|---|---|---|---|
| 135 | 58+76.12 | -10.50' LT | 370,640.68 | 2,525,377.87 | 3.5' |
| 136 | 58+60.85 | 10.50' RT | 370,614.74 | 2,525,379.16 | 3.5' |
| 137 | 59+04.71 | 5.16' RT | 370,646.43 | 2,525,409.95 | 3.5' |
| 138 | 58+99.79 | 9.00' RT | 370,640.35 | 2,525,408.53 | 5' |
| 139 | 59+87.46 | -10.50' LT | 370,710.55 | 2,525,464.55 | 3.5' |
| 140 | 59+82.98 | -4.82' LT | 370,703.32 | 2,525,464.63 | 3.5' |
| 141 | 60+23.40 | -10.50' LT | 370,733.10 | 2,525,492.53 | 3.5' |
| 142 | 60+10.50 | 10.50' RT | 370,708.66 | 2,525,495.66 | 3.5 |
| 143 | 60+88.27 | 198.00' RT | 370,611.49 | 2,525,673.89 | 200' |
| 144 | 56+97.17 | -16.00' LT | 370,532.65 | 2,525,235.10 | 60' |
| 145 | 57+16.60 | 109.00' RT | 370,447.52 | 2,525,328.67 | 66.5' |

### RADIUS TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
|---|---|---|---|---|---|
| 146 | 58+00.59 | 109.00' RT | 370,500.23 | 2,525,394.05 | 66.5' |
| 147 | 58+20.01 | -16.00' LT | 370,609.74 | 2,525,330.73 | 60' |
| 148 | 59+98.49 | 110.50' RT | 370,623.27 | 2,525,549.07 | 66.5' |
| 149 | 60+23.51 | -13.50' LT | 370,735.51 | 2,525,490.73 | 60' |
| 150 | 60+73.82 | -19.50' LT | 370,771.76 | 2,525,526.14 | 66' |
| 152 | 61+13.54 | 108.50' RT | 370,697.03 | 2,525,637.39 | 66.5' |
| 153 | 61+35.95 | -16.00' LT | 370,808.02 | 2,525,576.70 | 60' |
| 154 | 59+24.95 | -46.00' LT | 370,698.96 | 2,525,393.61 | 15' |
| 155 | 60+22.12 | -58.00' LT | 370,769.28 | 2,525,461.72 | 24' |
| 156 | 59+57.56 | 46.00' RT | 370,647.80 | 2,525,476.73 | 15' |
| 157 | 58+63.22 | 51.00' RT | 370,584.70 | 2,525,406.42 | 20' |

PAVEMENT REPLACEMENT FOR WATER MAIN AND SANITARY SEWER CONSTRUCTION

PAVEMENT REPLACEMENT FOR WATER MAIN AND SANITARY SEWER CONSTRUCTION

S 99TH ST R/L

S 99TH ST

W NATIONAL AVE R/L

W NATIONAL AVE

REV SLOPE GUTTER

BIOSWALE 4, SEE DETAIL

MATCHLINE STA 56+50

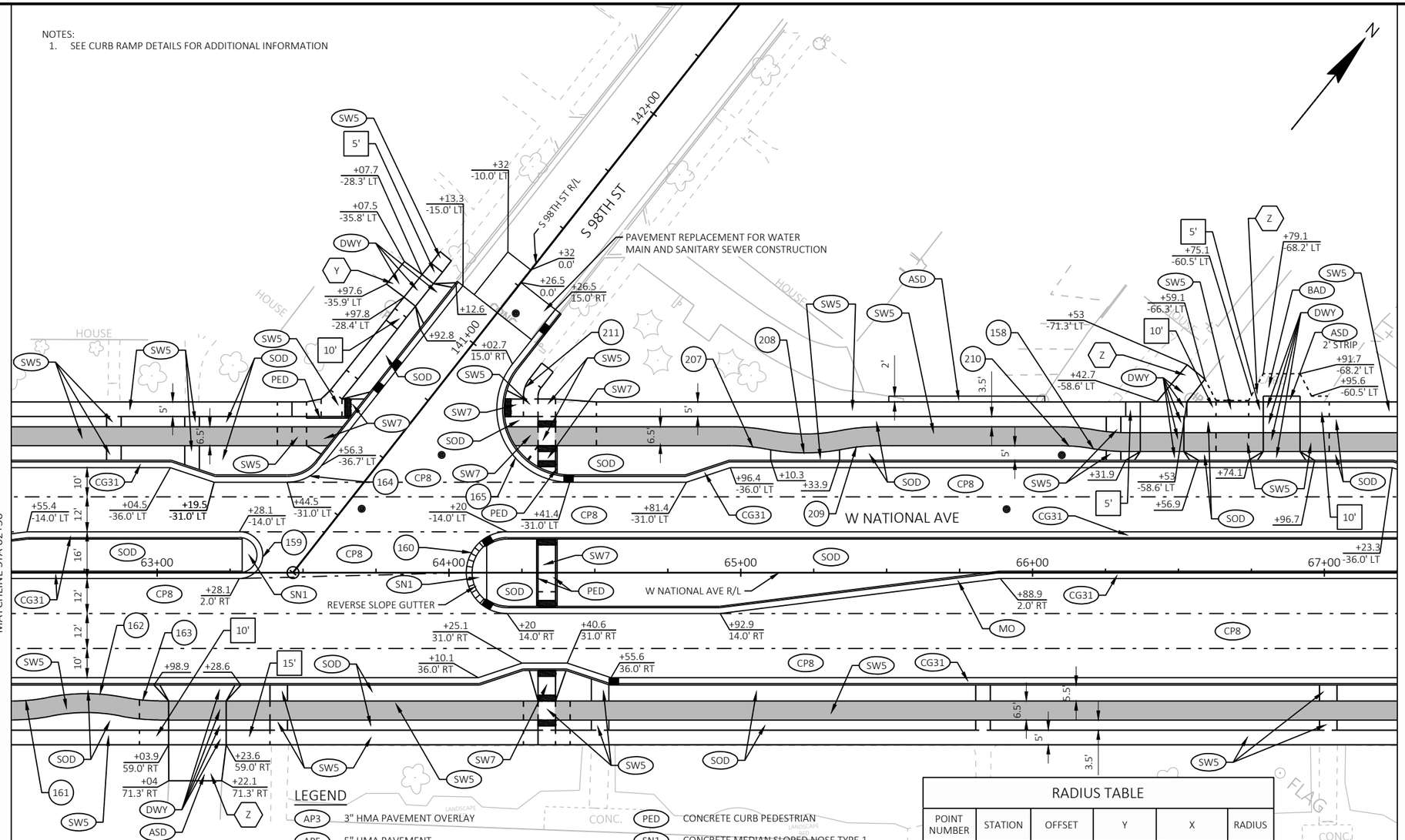
MATCHLINE STA 62+50



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN DETAILS - W NATIONAL AVE | SHEET 59 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021201-PD.DWG
LAYOUT NAME - 07
PLOT DATE : 1/23/2026 5:52 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTES:
1. SEE CURB RAMP DETAILS FOR ADDITIONAL INFORMATION




## LEGEND

| | | | |
|---|---|---|---|
| AP3 | 3" HMA PAVEMENT OVERLAY | PED | CONCRETE CURB PEDESTRIAN |
| AP5 | 5" HMA PAVEMENT | SN1 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| ASD | 4" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES | SN2 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| BAD | BASE AGGREGATE DENSE 3/4-INCH | SN15 | CONCRETE MEDIAN SLOPED NOSE 1.5' |
| CB9 | CONCRETE BASE 9-INCH | SOD | SOD LAWN |
| CCD | CONCRETE CURB TYPE D | SP | SLOPE PAVING CONCRETE (5-INCH THICKNESS) |
| CG19 | CONCRETE CURB & GUTTER 19-INCH | SW5 | CONCRETE SIDEWALK 5-INCH |
| CG19S | CONCRETE CURB & GUTTER 19-INCH TYPE D 9-INCH GUTTER | SW7 | CONCRETE SIDEWALK 7-INCH |
| CG31 | CONCRETE CURB & GUTTER 31-INCH | | COLORING CONCRETE CUSTOM (DARK GRAY) |
| CID | CONCRETE CURB INTEGRAL TYPE D, SEE DETAIL | XX' | SIDEWALK TRANSITION LENGTH AT DRIVEWAY (FT) |
| CP8 | CONCRETE PAVEMENT 8-INCH | X | DRIVEWAY TYPE |
| CSI | CONCRETE SAFETY ISLAND | X | RADIUS CENTER POINT |
| DWY | CONCRETE DRIVEWAY 7-INCH | | TRASH RECEPTACLE |
| MO | MAINTENANCE OPENING, SEE DETAIL | | BUS STOP BENCH |

## RADIUS TABLE

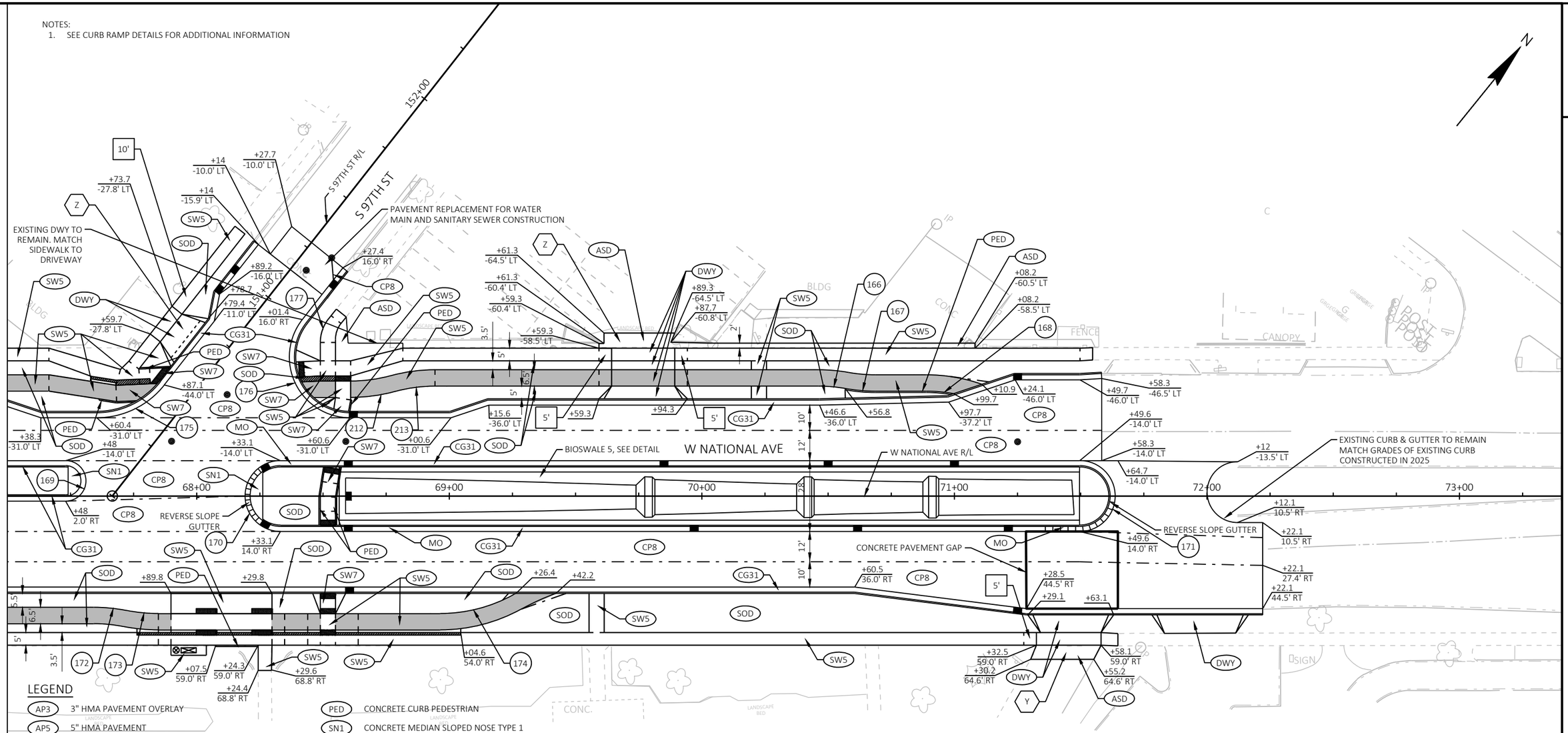
| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
|---|---|---|---|---|---|
| 158 | 66+31.92 | -108.00' LT | 371,190.91 | 2,525,905.10 | 66.5' |
| 159 | 63+28.14 | -6.00' LT | 370,920.86 | 2,525,732.61 | 8' |
| 160 | 64+19.96 | 0.00' | 370,973.81 | 2,525,807.86 | 14' |
| 161 | 62+50.57 | -16.00' LT | 370,879.95 | 2,525,665.94 | 60' |
| 162 | 62+75.59 | 108.00' RT | 370,799.12 | 2,525,763.24 | 66.5' |
| 163 | 63+00.57 | -15.50' LT | 370,910.94 | 2,525,705.18 | 59.5' |
| 164 | 63+44.54 | -46.00' LT | 370,962.29 | 2,525,720.28 | 15' |
| 165 | 64+41.43 | -56.00' LT | 371,030.88 | 2,525,789.43 | 25' |
| 207 | 64+97.04 | 16.50' RT | 371,009.33 | 2,525,878.22 | 60' |
| 208 | 65+22.06 | -107.50' LT | 371,121.58 | 2,525,819.89 | 66.5' |
| 209 | 65+47.09 | 16.50' RT | 371,040.74 | 2,525,917.19 | 60' |
| 210 | 66+09.51 | 16.50' RT | 371,079.92 | 2,525,965.79 | 60' |
| 211 | 64+35.55 | -60.33' LT | 371,030.56 | 2,525,782.14 | 10' |



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN DETAILS - W NATIONAL AVE | SHEET 60 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021201-PD.DWG
LAYOUT NAME - 08
PLOT DATE : 1/23/2026 5:52 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTES:
1. SEE CURB RAMP DETAILS FOR ADDITIONAL INFORMATION




## LEGEND

| | | | |
|---|---|---|---|
| AP3 | 3" HMA PAVEMENT OVERLAY | PED | CONCRETE CURB PEDESTRIAN |
| AP5 | 5" HMA PAVEMENT | SN1 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| ASD | 4" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES | SN2 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| BAD | BASE AGGREGATE DENSE 3/4-INCH | SN15 | CONCRETE MEDIAN SLOPED NOSE 1.5' |
| CB9 | CONCRETE BASE 9-INCH | SOD | SOD LAWN |
| CCD | CONCRETE CURB TYPE D | SP | SLOPE PAVING CONCRETE (5-INCH THICKNESS) |
| CG19 | CONCRETE CURB & GUTTER 19-INCH | SW5 | CONCRETE SIDEWALK 5-INCH |
| CG19S | CONCRETE CURB & GUTTER 19-INCH TYPE D 9-INCH GUTTER | SW7 | CONCRETE SIDEWALK 7-INCH |
| CG31 | CONCRETE CURB & GUTTER 31-INCH | | COLORING CONCRETE CUSTOM (DARK GRAY) |
| CID | CONCRETE CURB INTEGRAL TYPE D, SEE DETAIL | XX' | SIDEWALK TRANSITION LENGTH AT DRIVEWAY (FT) |
| CP8 | CONCRETE PAVEMENT 8-INCH | X | DRIVEWAY TYPE |
| CSI | CONCRETE SAFETY ISLAND | X | RADIUS CENTER POINT |
| DWY | CONCRETE DRIVEWAY 7-INCH | ⊗ | TRASH RECEPTACLE |
| MO | MAINTENANCE OPENING, SEE DETAIL | | BUS STOP BENCH |

### RADIUS TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
|---|---|---|---|---|---|
| 166 | 70+46.18 | 16.50' RT | 371,353.97 | 2,526,305.76 | 60' |
| 167 | 70+68.59 | -108.00' LT | 371,464.96 | 2,526,245.07 | 66.5' |
| 168 | 70+88.83 | 18.50' RT | 371,379.18 | 2,526,340.22 | 60' |
| 169 | 67+48.02 | -6.00' LT | 371,184.37 | 2,526,059.51 | 8' |
| 170 | 68+33.15 | 0.00' | 371,233.12 | 2,526,129.55 | 14' |
| 171 | 71+49.58 | 0.00' | 371,431.71 | 2,526,375.91 | 14' |
| 172 | 67+59.19 | 110.50' RT | 371,100.67 | 2,526,141.31 | 66.5' |
| 173 | 67+84.81 | -19.50' LT | 371,217.96 | 2,526,079.67 | 66' |

### RADIUS TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
|---|---|---|---|---|---|
| 174 | 68+96.41 | -13.50' LT | 371,283.33 | 2,526,170.33 | 60' |
| 175 | 67+60.39 | -65.00' LT | 371,238.06 | 2,526,032.11 | 34' |
| 176 | 68+60.63 | -55.00' LT | 371,293.18 | 2,526,116.42 | 24' |
| 177 | 68+64.92 | -62.04' LT | 371,301.35 | 2,526,115.35 | 15' |
| 212 | 68+60.92 | -105.50' LT | 371,332.68 | 2,526,084.95 | 66.5' |
| 213 | 68+94.36 | 16.50' RT | 371,258.69 | 2,526,187.55 | 60' |



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN DETAILS - W NATIONAL AVE | SHEET 61 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021201-PD.DWG
LAYOUT NAME - 09
PLOT DATE : 1/23/2026 5:52 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

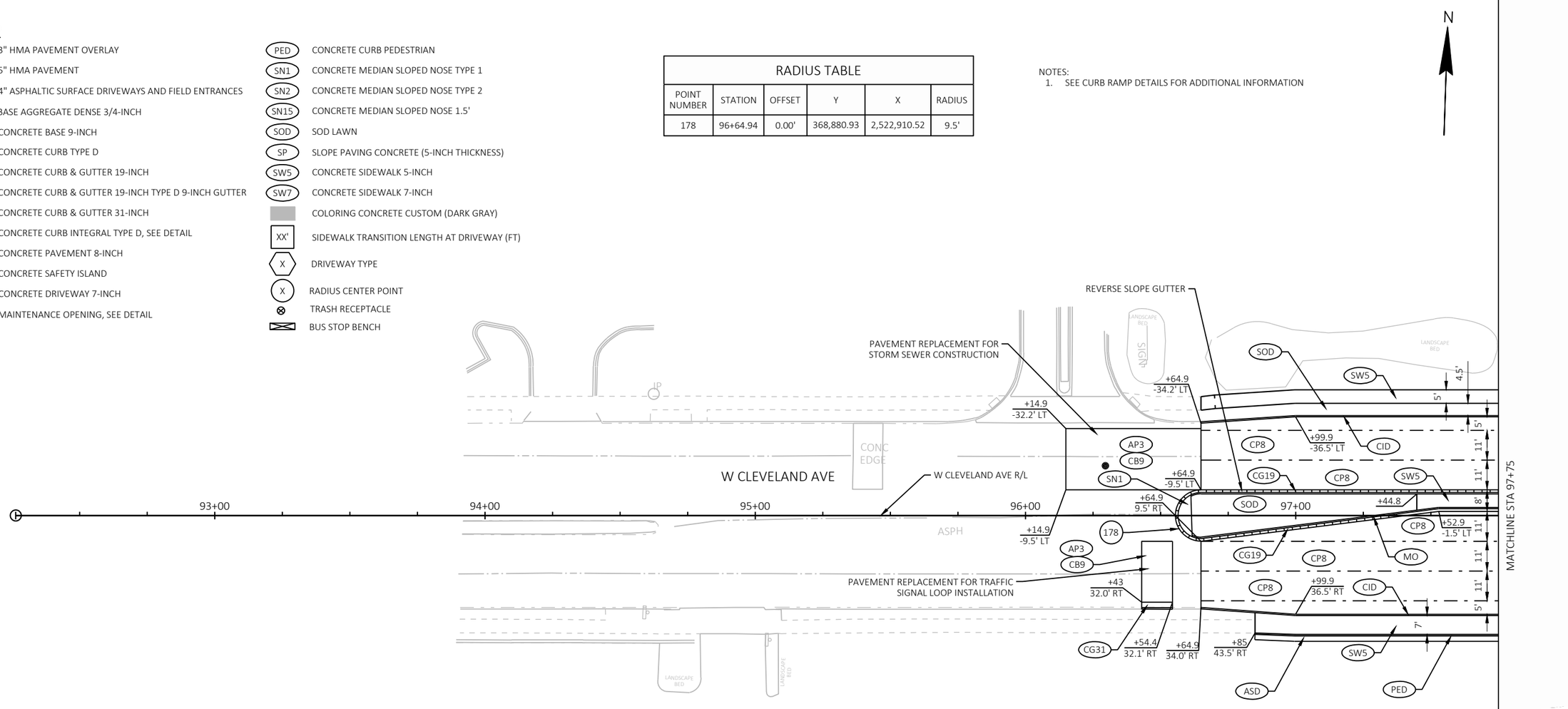
## LEGEND

| | |
|---|---|
| AP3 | 3" HMA PAVEMENT OVERLAY |
| AP5 | 5" HMA PAVEMENT |
| ASD | 4" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES |
| BAD | BASE AGGREGATE DENSE 3/4-INCH |
| CB9 | CONCRETE BASE 9-INCH |
| CCD | CONCRETE CURB TYPE D |
| CG19 | CONCRETE CURB & GUTTER 19-INCH |
| CG19S | CONCRETE CURB & GUTTER 19-INCH TYPE D 9-INCH GUTTER |
| CG31 | CONCRETE CURB & GUTTER 31-INCH |
| CID | CONCRETE CURB INTEGRAL TYPE D, SEE DETAIL |
| CP8 | CONCRETE PAVEMENT 8-INCH |
| CSI | CONCRETE SAFETY ISLAND |
| DWY | CONCRETE DRIVEWAY 7-INCH |
| MO | MAINTENANCE OPENING, SEE DETAIL |
| PED | CONCRETE CURB PEDESTRIAN |
| SN1 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| SN2 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| SN15 | CONCRETE MEDIAN SLOPED NOSE 1.5' |
| SOD | SOD LAWN |
| SP | SLOPE PAVING CONCRETE (5-INCH THICKNESS) |
| SW5 | CONCRETE SIDEWALK 5-INCH |
| SW7 | CONCRETE SIDEWALK 7-INCH |
| | COLORING CONCRETE CUSTOM (DARK GRAY) |
| XX' | SIDEWALK TRANSITION LENGTH AT DRIVEWAY (FT) |
| X | DRIVEWAY TYPE |
| X | RADIUS CENTER POINT |
| ⊗ | TRASH RECEPTACLE |
| | BUS STOP BENCH |

### RADIUS TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
|---|---|---|---|---|---|
| 178 | 96+64.94 | 0.00' | 368,880.93 | 2,522,910.52 | 9.5' |

NOTES:
1. SEE CURB RAMP DETAILS FOR ADDITIONAL INFORMATION




SHEET 11 OF 13

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN DETAILS - W CLEVELAND AVE | SHEET 62 | E |
|---|---|---|---|---|---|

2

N

MATCHLINE STA 102+25

103+00 104+00 105+00 106+00 107+00 108+00

W CLEVELAND AVE R/L

W CLEVELAND AVE

REVERSE SLOPE GUTTER

CONC EDGE

BUILDING BUILDING BUILDING BUILDING

LANDSCAPE BED

## LEGEND

| | |
|---|---|
| AP3 | 3" HMA PAVEMENT OVERLAY |
| AP5 | 5" HMA PAVEMENT |
| ASD | 4" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES |
| BAD | BASE AGGREGATE DENSE 3/4-INCH |
| CB9 | CONCRETE BASE 9-INCH |
| CCD | CONCRETE CURB TYPE D |
| CG19 | CONCRETE CURB & GUTTER 19-INCH |
| CG19S | CONCRETE CURB & GUTTER 19-INCH TYPE D 9-INCH GUTTER |
| CG31 | CONCRETE CURB & GUTTER 31-INCH |
| CID | CONCRETE CURB INTEGRAL TYPE D, SEE DETAIL |
| CP8 | CONCRETE PAVEMENT 8-INCH |
| CSI | CONCRETE SAFETY ISLAND |
| DWY | CONCRETE DRIVEWAY 7-INCH |
| MO | MAINTENANCE OPENING, SEE DETAIL |
| PED | CONCRETE CURB PEDESTRIAN |
| SN1 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| SN2 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| SN15 | CONCRETE MEDIAN SLOPED NOSE 1.5' |
| SOD | SOD LAWN |
| SP | SLOPE PAVING CONCRETE (5-INCH THICKNESS) |
| SW5 | CONCRETE SIDEWALK 5-INCH |
| SW7 | CONCRETE SIDEWALK 7-INCH |
| | COLORING CONCRETE CUSTOM (DARK GRAY) |
| XX' | SIDEWALK TRANSITION LENGTH AT DRIVEWAY (FT) |
| X | DRIVEWAY TYPE |
| X | RADIUS CENTER POINT |
| ⊗ | TRASH RECEPTACLE |
| | BUS STOP BENCH |

### RADIUS TABLE

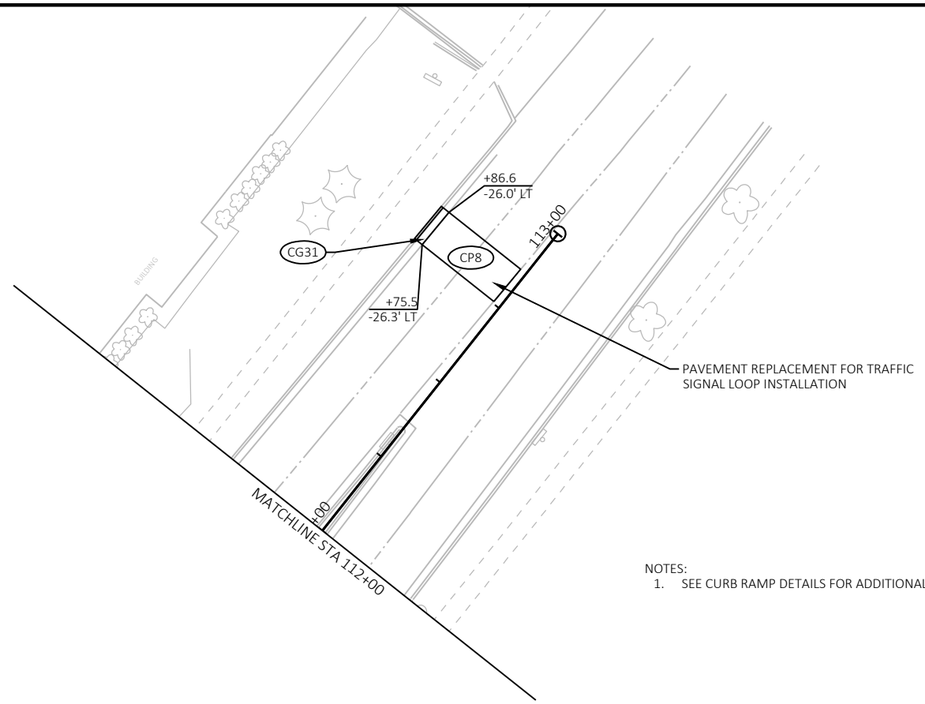
| POINT NUMBER | STATION | OFFSET | Y | X | RADIUS |
|---|---|---|---|---|---|
| 179 | 103+52.48 | -0.73' LT | 368,904.82 | 2,523,597.64 | 7.5' |

NOTES:
1. SEE CURB RAMP DETAILS FOR ADDITIONAL INFORMATION

SHEET 12 OF 13

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN DETAILS - W CLEVELAND AVE | SHEET 63 | E |
|---|---|---|---|---|---|

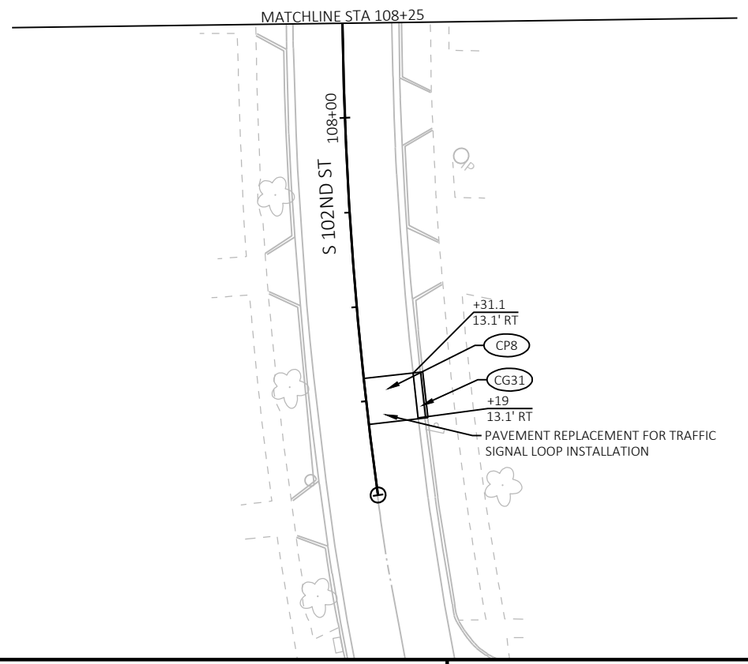
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021201-PD.DWG
LAYOUT NAME - 11
PLOT DATE : 1/23/2026 5:53 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42




NOTES:
1. SEE CURB RAMP DETAILS FOR ADDITIONAL INFORMATION

LEGEND

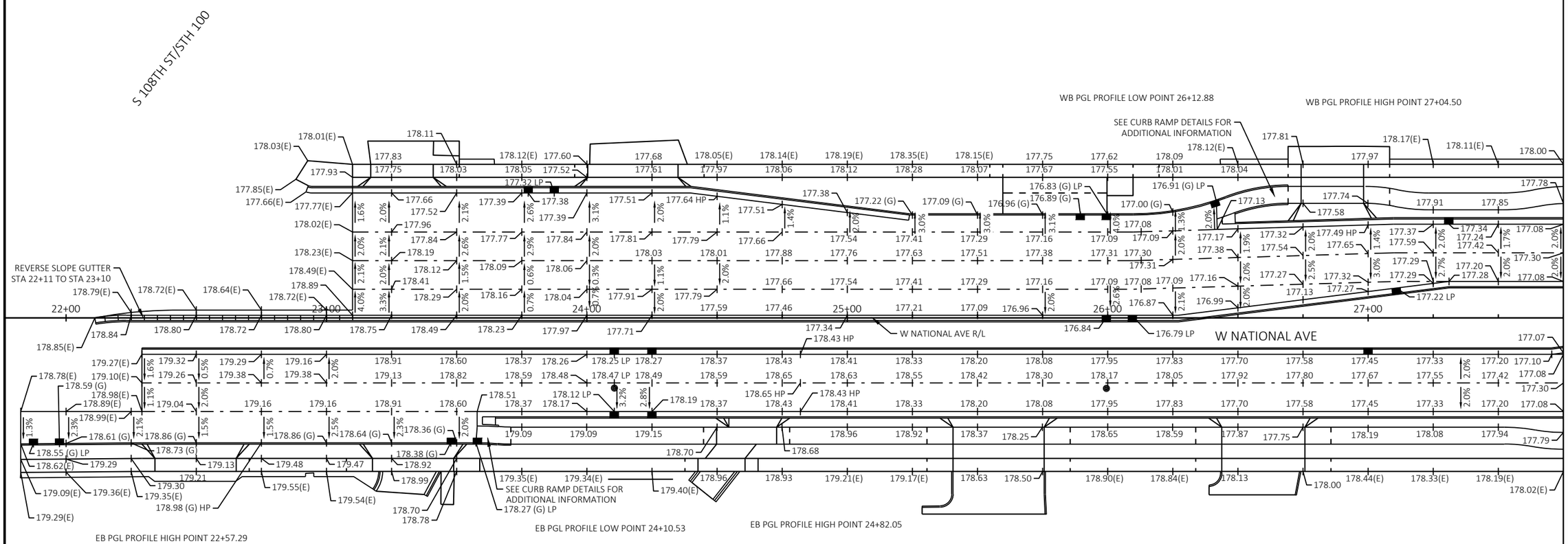
| | |
|---|---|
| AP3 | 3" HMA PAVEMENT OVERLAY |
| AP5 | 5" HMA PAVEMENT |
| ASD | 4" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES |
| BAD | BASE AGGREGATE DENSE 3/4-INCH |
| CB9 | CONCRETE BASE 9-INCH |
| CCD | CONCRETE CURB TYPE D |
| CG19 | CONCRETE CURB & GUTTER 19-INCH |
| CG19S | CONCRETE CURB & GUTTER 19-INCH TYPE D 9-INCH GUTTER |
| CG31 | CONCRETE CURB & GUTTER 31-INCH |
| CID | CONCRETE CURB INTEGRAL TYPE D, SEE DETAIL |
| CP8 | CONCRETE PAVEMENT 8-INCH |
| CSI | CONCRETE SAFETY ISLAND |
| DWY | CONCRETE DRIVEWAY 7-INCH |
| MO | MAINTENANCE OPENING, SEE DETAIL |
| PED | CONCRETE CURB PEDESTRIAN |
| SN1 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| SN2 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| SN15 | CONCRETE MEDIAN SLOPED NOSE 1.5' |
| SOD | SOD LAWN |
| SP | SLOPE PAVING CONCRETE (5-INCH THICKNESS) |
| SW5 | CONCRETE SIDEWALK 5-INCH |
| SW7 | CONCRETE SIDEWALK 7-INCH |
| | COLORING CONCRETE CUSTOM (DARK GRAY) |
| XX' | SIDEWALK TRANSITION LENGTH AT DRIVEWAY (FT) |
| X | DRIVEWAY TYPE |
| X | RADIUS CENTER POINT |
| | TRASH RECEPTACLE |
| | BUS STOP BENCH |



NOTES:
1. ALL CURB AND GUTTER GRADES SHOWN AT THE FLANGE UNLESS OTHERWISE NOTED.
2. GUTTER PAN SLOPE SHALL BE 4% UNLESS OTHERWISE NOTED.
3. SEE CURB RAMP DETAILS FOR PORKCHOP ISLAND GRADES.

LEGEND

| | |
|---|---|
| XXX.XX | ELEVATION GIVEN ALONG JOINT OR FLANGE |
| XXX.XX (E) | EXISTING ELEVATION |
| XXX.XX HP | ELEVATION AT HIGH POINT |
| XXX.XX LP | ELEVATION AT LOW POINT |
| XXX.XX (G) | ELEVATION ALONG GUTTER FLOWLINE |
| | REVERSE SLOPE GUTTER |




| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVING GRADE DETAILS | SHEET 65 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021202-PG.DWG
LAYOUT NAME - 01
PLOT DATE : 1/8/2026 11:04 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

NOTES:

1. ALL CURB AND GUTTER GRADES SHOWN AT THE FLANGE UNLESS OTHERWISE NOTED.
2. GUTTER PAN SLOPE SHALL BE 4% UNLESS OTHERWISE NOTED.
3. SEE CURB RAMP DETAILS FOR PORKCHOP ISLAND GRADES.

LEGEND

| | |
|---|---|
| XXX.XX | ELEVATION GIVEN ALONG JOINT OR FLANGE |
| XXX.XX (E) | EXISTING ELEVATION |
| XXX.XX HP | ELEVATION AT HIGH POINT |
| XXX.XX LP | ELEVATION AT LOW POINT |
| XXX.XX (G) | ELEVATION ALONG GUTTER FLOWLINE |
| | REVERSE SLOPE GUTTER |

N

W NATIONAL AVE

W NATIONAL AVE R/L

MATCHLINE STA 27+75

MATCHLINE STA 97+75

MATCHLINE STA 33+75

MATCHLINE STA 102+25

SEE CURB RAMP DETAIL FOR ADDITIONAL CURB AND GUTTER AND SIDEWALK GRADES.

CONCRETE CURB PEDESTRIAN

REV.SLP. GUTTER

S WILDWOOD DR

S WILDWOOD DR R/L

ASSOCIATED BANK SITE UNDER CONSTRUCTION WHEN ROADWAY DESIGN WAS COMPLETED. FIELD VERIFY AS BUILT ELEVATIONS AND ADJUST SIDEWALK GRADES IF NEEDED TO NOT IMPACT LANDSCAPING ON BANK SITE.

W CLEVELAND AVE

W CLEVELAND AVE R/L

CONCRETE CURB PEDESTRIAN HEIGHT VARIES 0" TO 10"

WARP GUTTER FROM PT TO INLET TO MAINTAIN 0.5% MIN SLOPE

EB PGL PROFILE LOW POINT AT 33+60.92

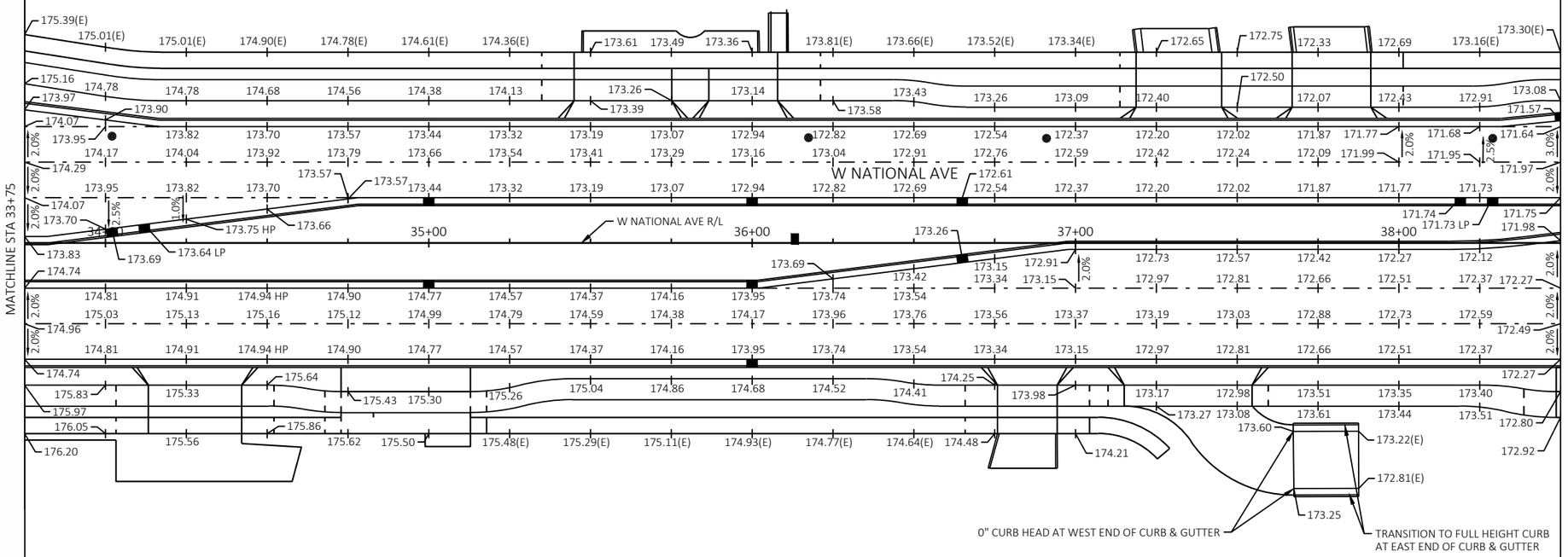
| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVING GRADE DETAILS | SHEET 66 E |

NOTES:
1. ALL CURB AND GUTTER GRADES SHOWN AT THE FLANGE UNLESS OTHERWISE NOTED.
2. GUTTER PAN SLOPE SHALL BE 4% UNLESS OTHERWISE NOTED.
3. SEE CURB RAMP DETAILS FOR PORKCHOP ISLAND GRADES.

LEGEND

| | |
|---|---|
| XXX.XX | ELEVATION GIVEN ALONG JOINT OR FLANGE |
| XXX.XX (E) | EXISTING ELEVATION |
| XXX.XX HP | ELEVATION AT HIGH POINT |
| XXX.XX LP | ELEVATION AT LOW POINT |
| XXX.XX (G) | ELEVATION ALONG GUTTER FLOWLINE |
| | REVERSE SLOPE GUTTER |

WB PGL PROFILE LOW POINT 38+28.93




EB PGL PROFILE HIGH POINT 34+47.69

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVING GRADE DETAILS | SHEET 67 | E |
|---|---|---|---|---|---|

NOTES:
1. ALL CURB AND GUTTER GRADES SHOWN AT THE FLANGE UNLESS OTHERWISE NOTED.
2. GUTTER PAN SLOPE SHALL BE 4% UNLESS OTHERWISE NOTED.
3. SEE CURB RAMP DETAILS FOR PORKCHOP ISLAND GRADES.

LEGEND

| | |
|---|---|
| XXX.XX | ELEVATION GIVEN ALONG JOINT OR FLANGE |
| XXX.XX (E) | EXISTING ELEVATION |
| XXX.XX HP | ELEVATION AT HIGH POINT |
| XXX.XX LP | ELEVATION AT LOW POINT |
| XXX.XX (G) | ELEVATION ALONG GUTTER FLOWLINE |
| | REVERSE SLOPE GUTTER |

N

MATCHLINE STA 38+50

MATCHLINE STA 44+50

S 102ND ST

W NATIONAL AVE

REVERSE SLOPE GUTTER

SEE CURB RAMP DETAIL FOR ADDITIONAL CURB AND GUTTER AND SIDEWALK GRADES.

SEE CURB RAMP DETAIL FOR ADDITIONAL CURB AND GUTTER AND SIDEWALK GRADES.

CONCRETE CURB PEDESTRIAN 6" HEIGHT

SEE CURB RAMP DETAIL FOR ADDITIONAL CURB AND GUTTER AND SIDEWALK GRADES.

SEE CURB RAMP DETAIL FOR ADDITIONAL CURB AND GUTTER AND SIDEWALK GRADES.

SEE CURB RAMP DETAIL FOR ADDITIONAL CURB AND GUTTER AND SIDEWALK GRADES.

SEE CURB RAMP DETAIL FOR ADDITIONAL CURB AND GUTTER AND SIDEWALK GRADES.

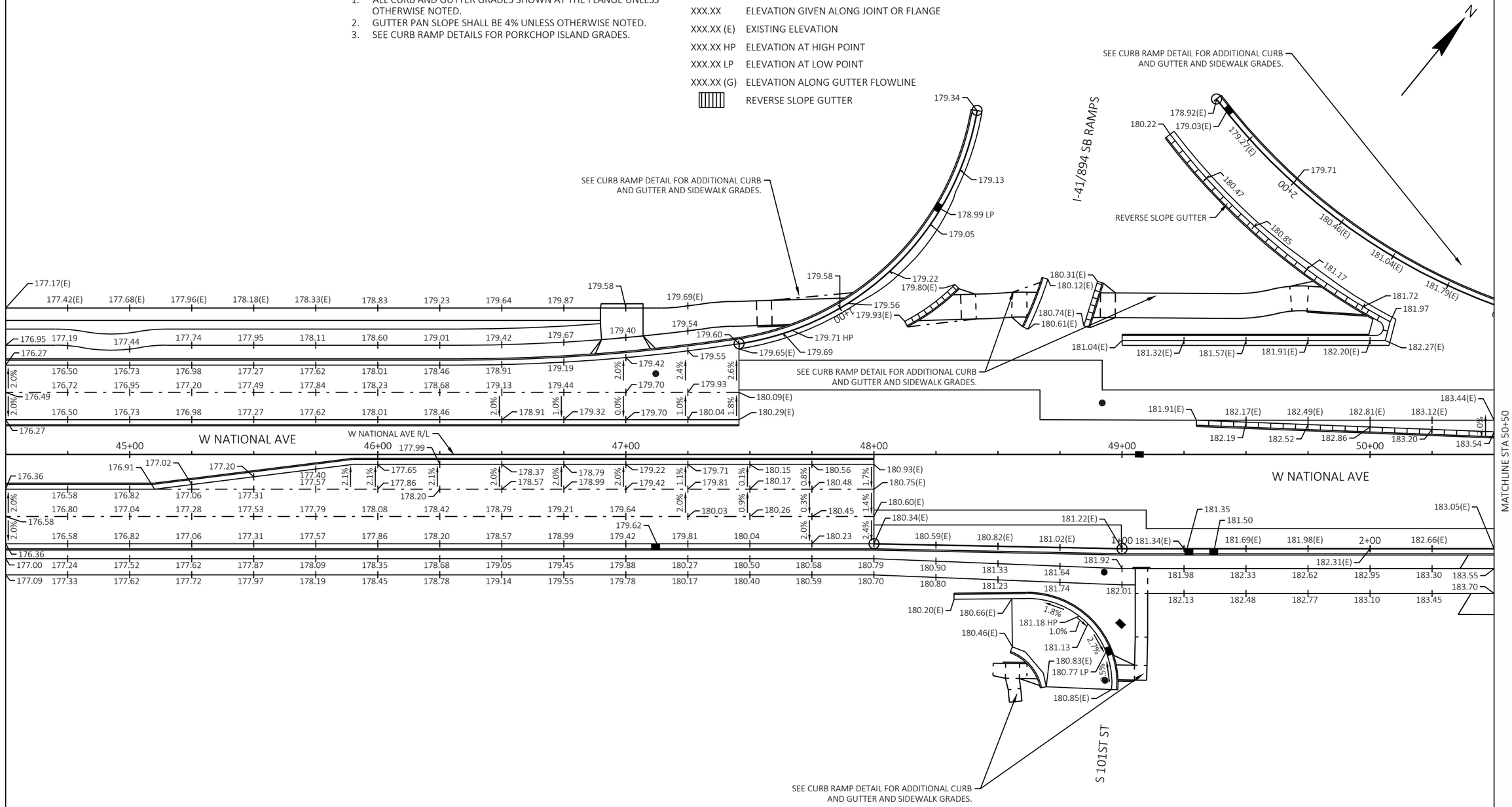
EB PGL PROFILE LOW POINT 38+78.10

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVING GRADE DETAILS | SHEET 68 E |

NOTES:
1. ALL CURB AND GUTTER GRADES SHOWN AT THE FLANGE UNLESS OTHERWISE NOTED.
2. GUTTER PAN SLOPE SHALL BE 4% UNLESS OTHERWISE NOTED.
3. SEE CURB RAMP DETAILS FOR PORKCHOP ISLAND GRADES.

LEGEND

| | |
|---|---|
| XXX.XX | ELEVATION GIVEN ALONG JOINT OR FLANGE |
| XXX.XX (E) | EXISTING ELEVATION |
| XXX.XX HP | ELEVATION AT HIGH POINT |
| XXX.XX LP | ELEVATION AT LOW POINT |
| XXX.XX (G) | ELEVATION ALONG GUTTER FLOWLINE |
| | REVERSE SLOPE GUTTER |



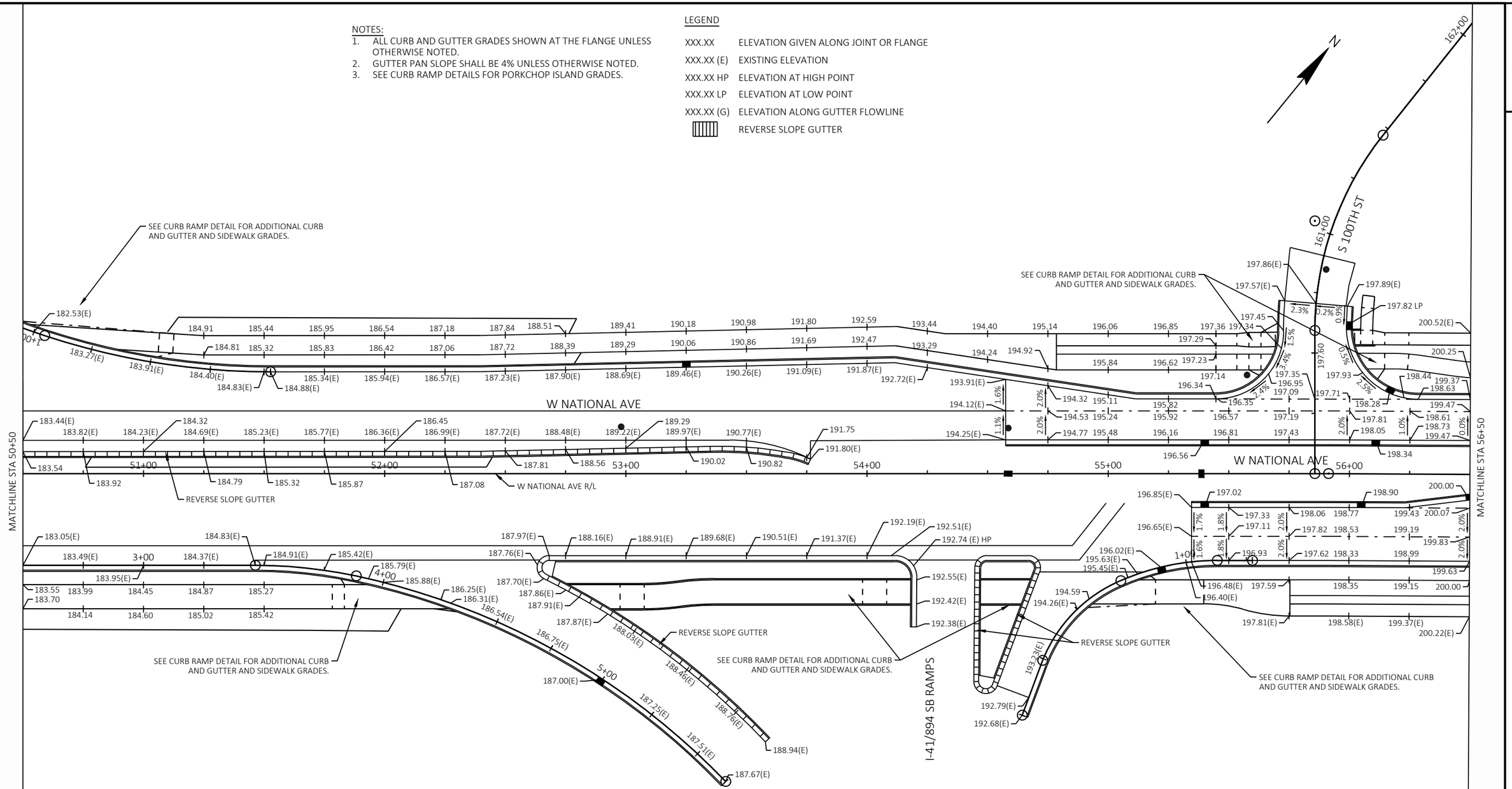

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVING GRADE DETAILS | SHEET 69 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021202-PG.DWG
LAYOUT NAME - 05
PLOT DATE : 1/8/2026 11:05 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

NOTES:
1. ALL CURB AND GUTTER GRADES SHOWN AT THE FLANGE UNLESS OTHERWISE NOTED.
2. GUTTER PAN SLOPE SHALL BE 4% UNLESS OTHERWISE NOTED.
3. SEE CURB RAMP DETAILS FOR PORKCHOP ISLAND GRADES.

LEGEND

| | |
|---|---|
| XXX.XX | ELEVATION GIVEN ALONG JOINT OR FLANGE |
| XXX.XX (E) | EXISTING ELEVATION |
| XXX.XX HP | ELEVATION AT HIGH POINT |
| XXX.XX LP | ELEVATION AT LOW POINT |
| XXX.XX (G) | ELEVATION ALONG GUTTER FLOWLINE |
| | REVERSE SLOPE GUTTER |

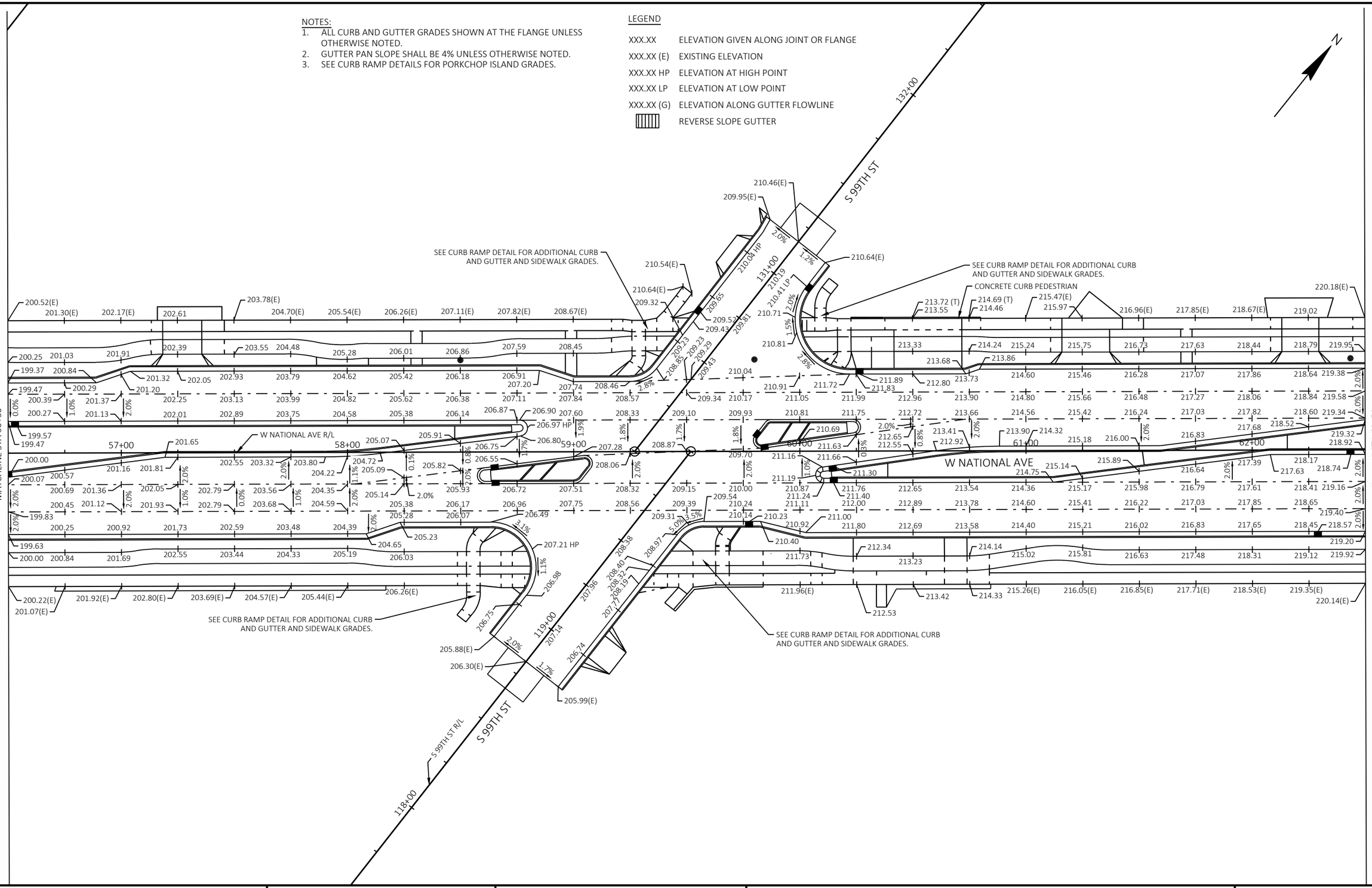



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVING GRADE DETAILS | SHEET 70 | E |
|---|---|---|---|---|---|

NOTES:
1. ALL CURB AND GUTTER GRADES SHOWN AT THE FLANGE UNLESS OTHERWISE NOTED.
2. GUTTER PAN SLOPE SHALL BE 4% UNLESS OTHERWISE NOTED.
3. SEE CURB RAMP DETAILS FOR PORKCHOP ISLAND GRADES.

LEGEND

| | |
|---|---|
| XXX.XX | ELEVATION GIVEN ALONG JOINT OR FLANGE |
| XXX.XX (E) | EXISTING ELEVATION |
| XXX.XX HP | ELEVATION AT HIGH POINT |
| XXX.XX LP | ELEVATION AT LOW POINT |
| XXX.XX (G) | ELEVATION ALONG GUTTER FLOWLINE |
| | REVERSE SLOPE GUTTER |



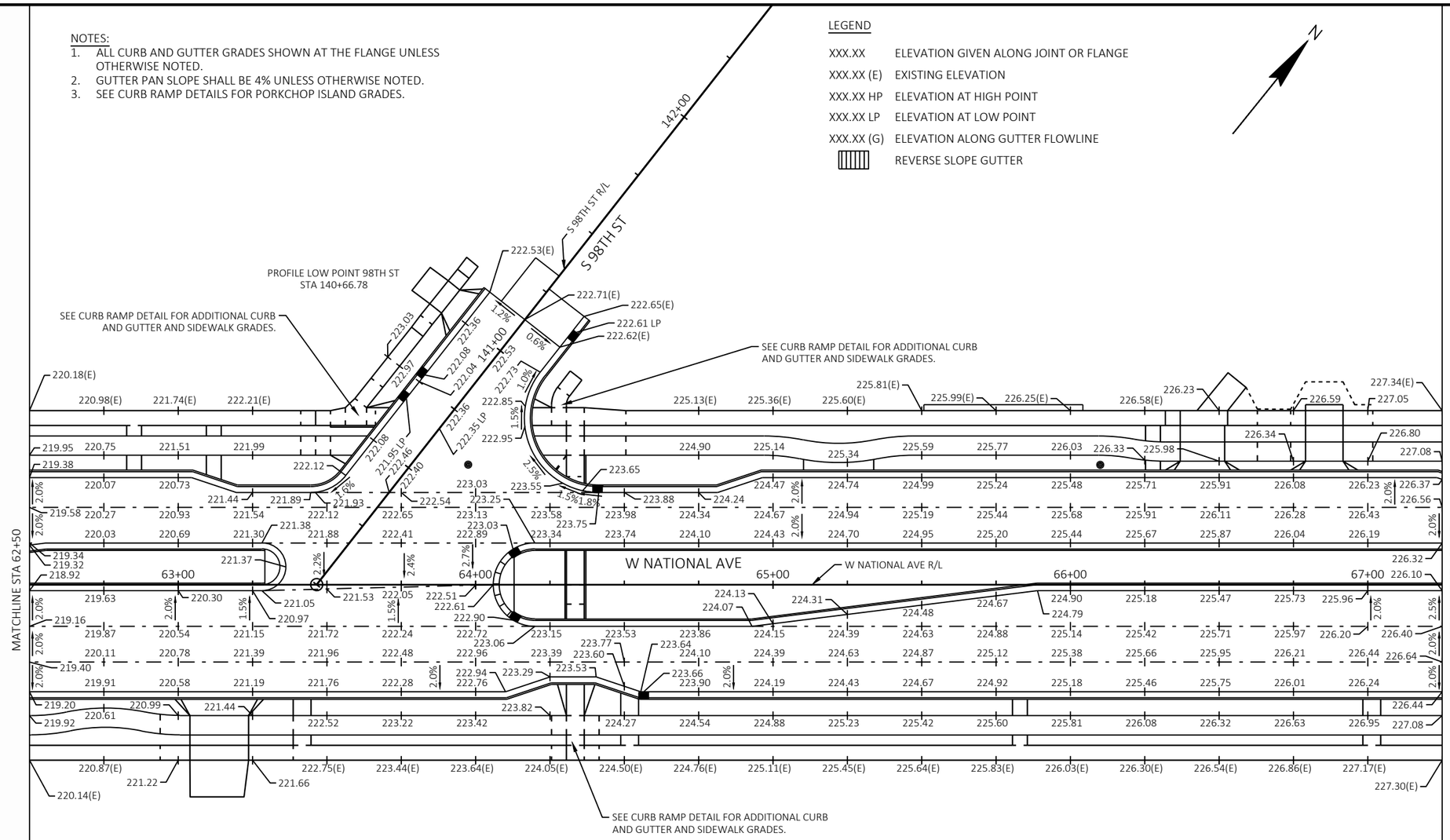

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVING GRADE DETAILS | SHEET 71 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021202-PG.DWG
LAYOUT NAME - 07
PLOT DATE : 1/8/2026 11:05 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTES:
1. ALL CURB AND GUTTER GRADES SHOWN AT THE FLANGE UNLESS OTHERWISE NOTED.
2. GUTTER PAN SLOPE SHALL BE 4% UNLESS OTHERWISE NOTED.
3. SEE CURB RAMP DETAILS FOR PORKCHOP ISLAND GRADES.

LEGEND

| | |
|---|---|
| XXX.XX | ELEVATION GIVEN ALONG JOINT OR FLANGE |
| XXX.XX (E) | EXISTING ELEVATION |
| XXX.XX HP | ELEVATION AT HIGH POINT |
| XXX.XX LP | ELEVATION AT LOW POINT |
| XXX.XX (G) | ELEVATION ALONG GUTTER FLOWLINE |
| | REVERSE SLOPE GUTTER |

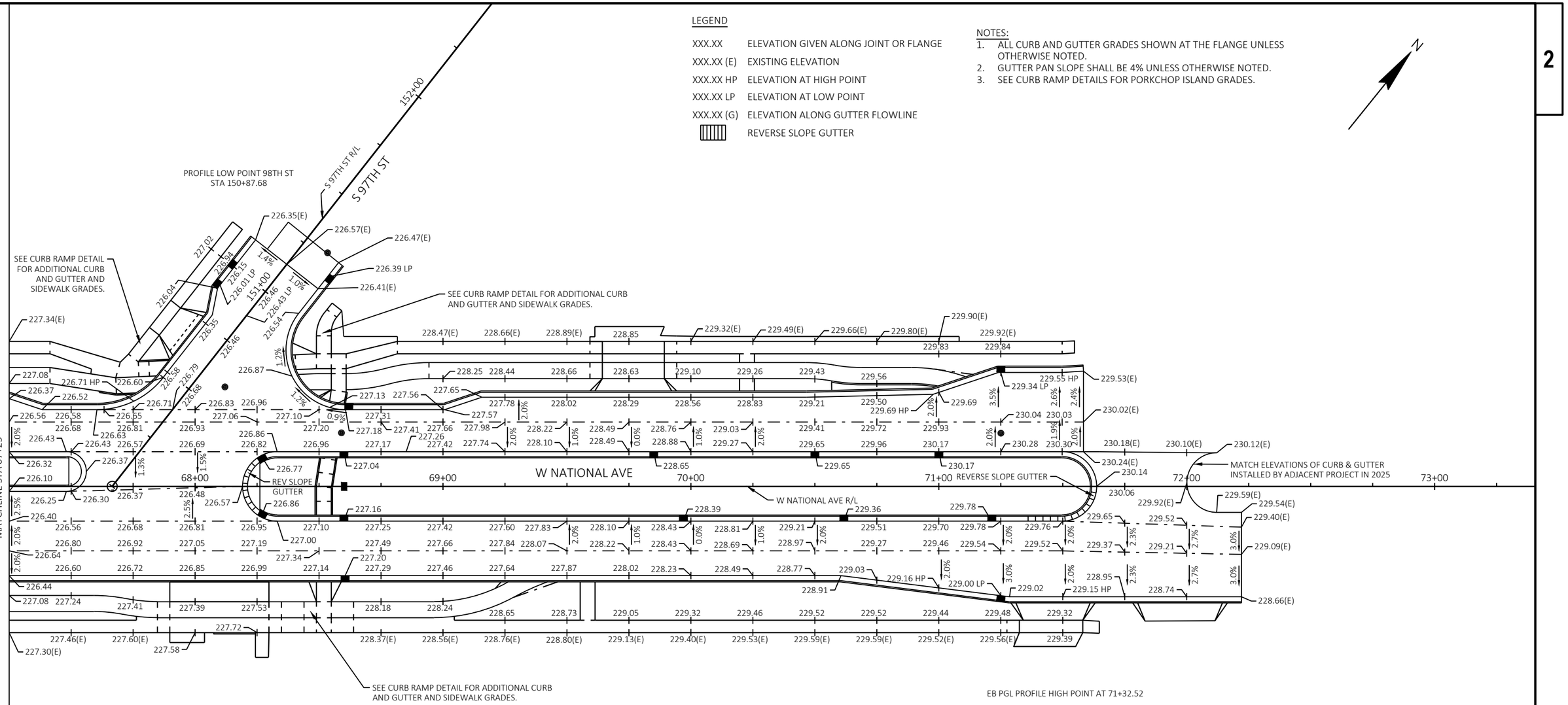



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVING GRADE DETAILS | SHEET 72 | E |
|---|---|---|---|---|---|

LEGEND

| | |
|---|---|
| XXX.XX | ELEVATION GIVEN ALONG JOINT OR FLANGE |
| XXX.XX (E) | EXISTING ELEVATION |
| XXX.XX HP | ELEVATION AT HIGH POINT |
| XXX.XX LP | ELEVATION AT LOW POINT |
| XXX.XX (G) | ELEVATION ALONG GUTTER FLOWLINE |
| | REVERSE SLOPE GUTTER |

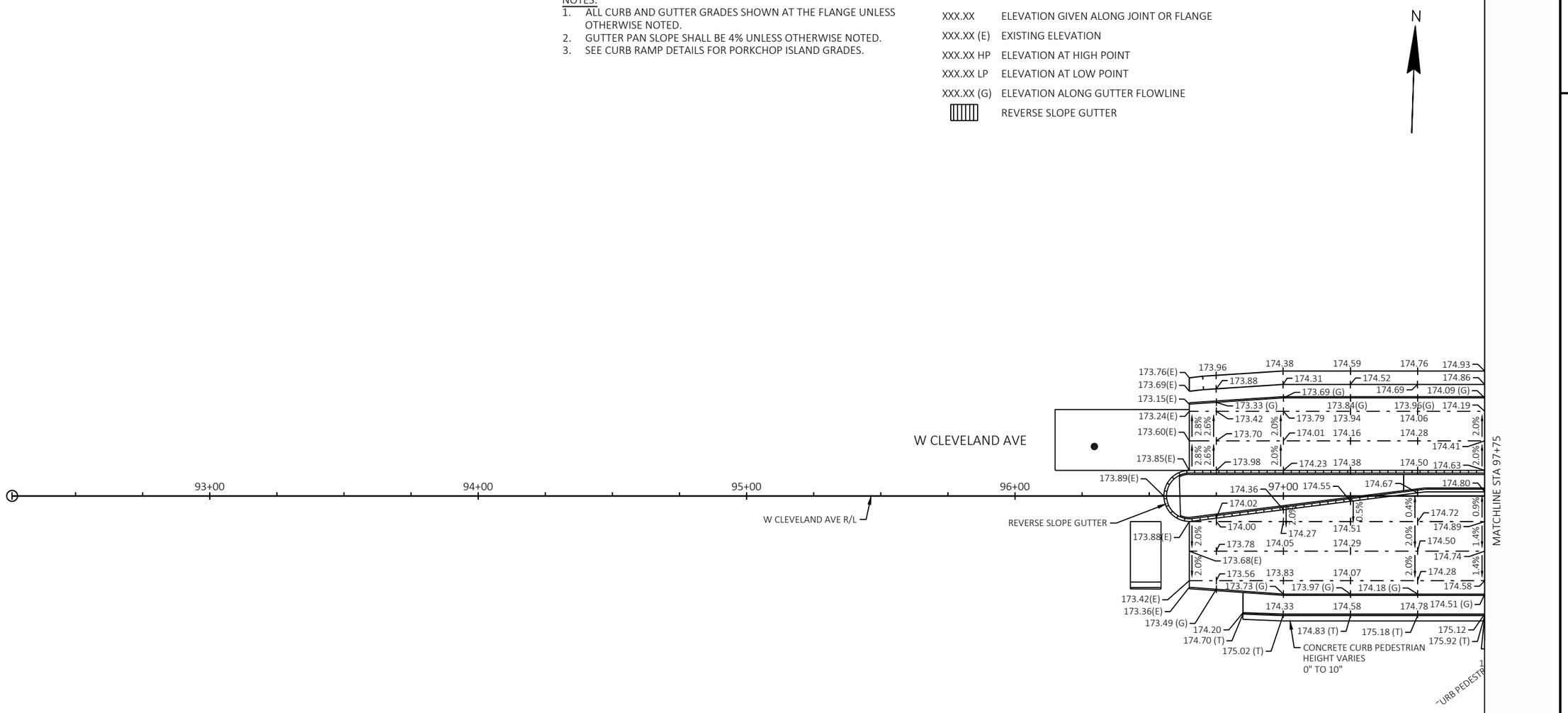
NOTES:
1. ALL CURB AND GUTTER GRADES SHOWN AT THE FLANGE UNLESS OTHERWISE NOTED.
2. GUTTER PAN SLOPE SHALL BE 4% UNLESS OTHERWISE NOTED.
3. SEE CURB RAMP DETAILS FOR PORKCHOP ISLAND GRADES.



NOTES:
1. ALL CURB AND GUTTER GRADES SHOWN AT THE FLANGE UNLESS OTHERWISE NOTED.
2. GUTTER PAN SLOPE SHALL BE 4% UNLESS OTHERWISE NOTED.
3. SEE CURB RAMP DETAILS FOR PORKCHOP ISLAND GRADES.

LEGEND

| | |
|---|---|
| XXX.XX | ELEVATION GIVEN ALONG JOINT OR FLANGE |
| XXX.XX (E) | EXISTING ELEVATION |
| XXX.XX HP | ELEVATION AT HIGH POINT |
| XXX.XX LP | ELEVATION AT LOW POINT |
| XXX.XX (G) | ELEVATION ALONG GUTTER FLOWLINE |
| | REVERSE SLOPE GUTTER |




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVING GRADE DETAILS | SHEET 74 | E |
|---|---|---|---|---|---|

2

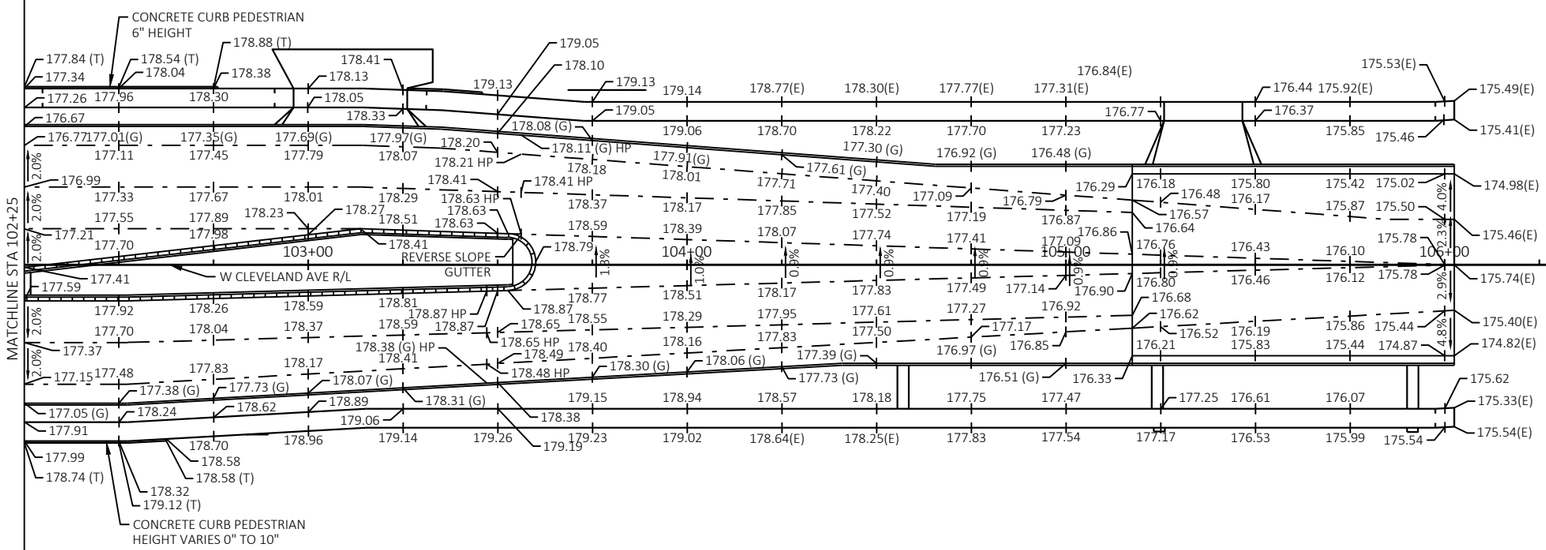
LEGEND

| | |
|---|---|
| XXX.XX | ELEVATION GIVEN ALONG JOINT OR FLANGE |
| XXX.XX (E) | EXISTING ELEVATION |
| XXX.XX HP | ELEVATION AT HIGH POINT |
| XXX.XX LP | ELEVATION AT LOW POINT |
| XXX.XX (G) | ELEVATION ALONG GUTTER FLOWLINE |
| | REVERSE SLOPE GUTTER |

NOTES:
1. ALL CURB AND GUTTER GRADES SHOWN AT THE FLANGE UNLESS OTHERWISE NOTED.
2. GUTTER PAN SLOPE SHALL BE 4% UNLESS OTHERWISE NOTED.
3. SEE CURB RAMP DETAILS FOR PORKCHOP ISLAND GRADES.

N

WB PGL PROFILE HIGH POINT 103+56.15




EB PGL PROFILE HIGH POINT 103+47.09

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVING GRADE DETAILS | SHEET 75 | E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021202-PG.DWG
LAYOUT NAME - 11

PLOT DATE : 1/8/2026 11:05 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

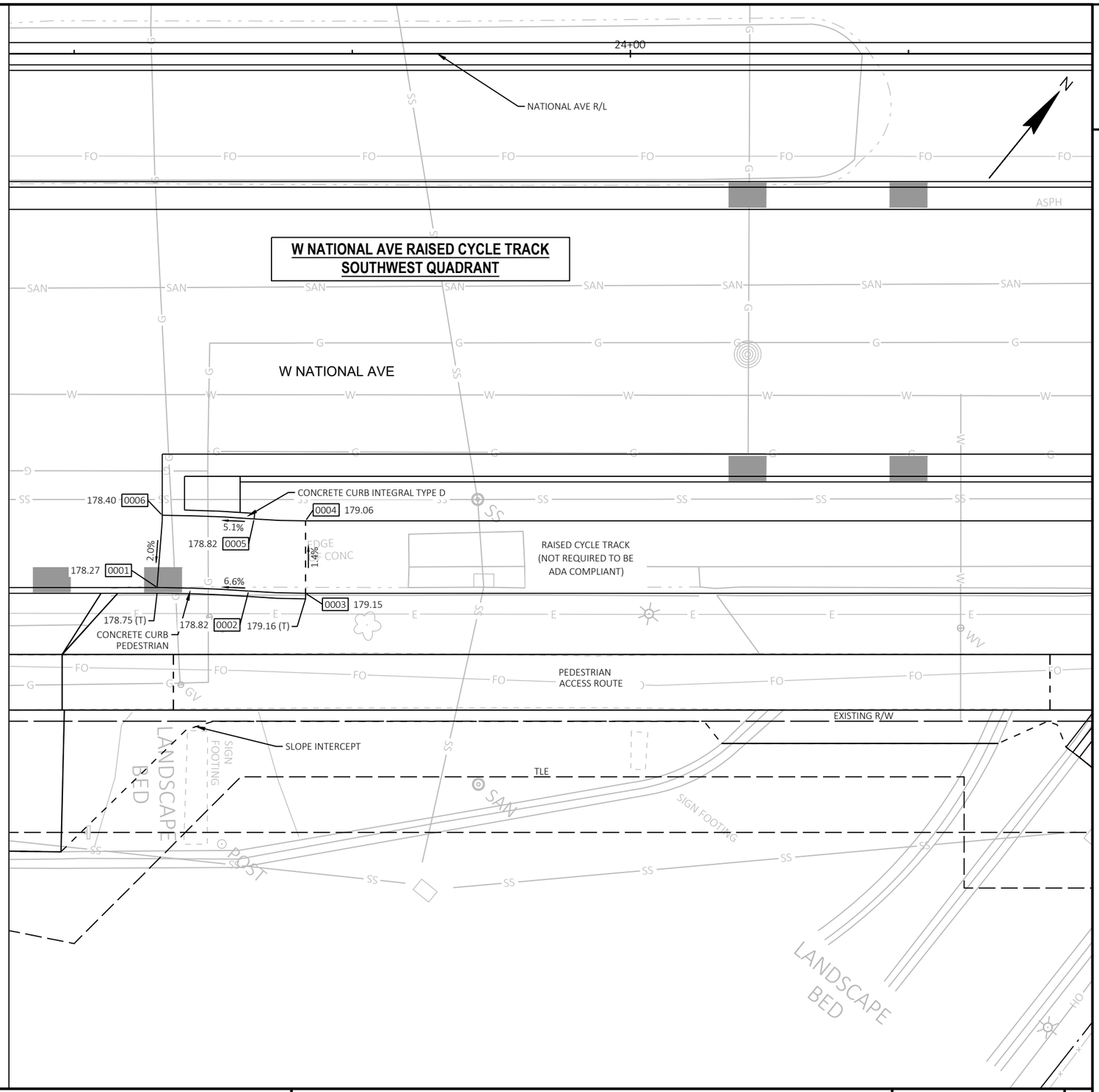
## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

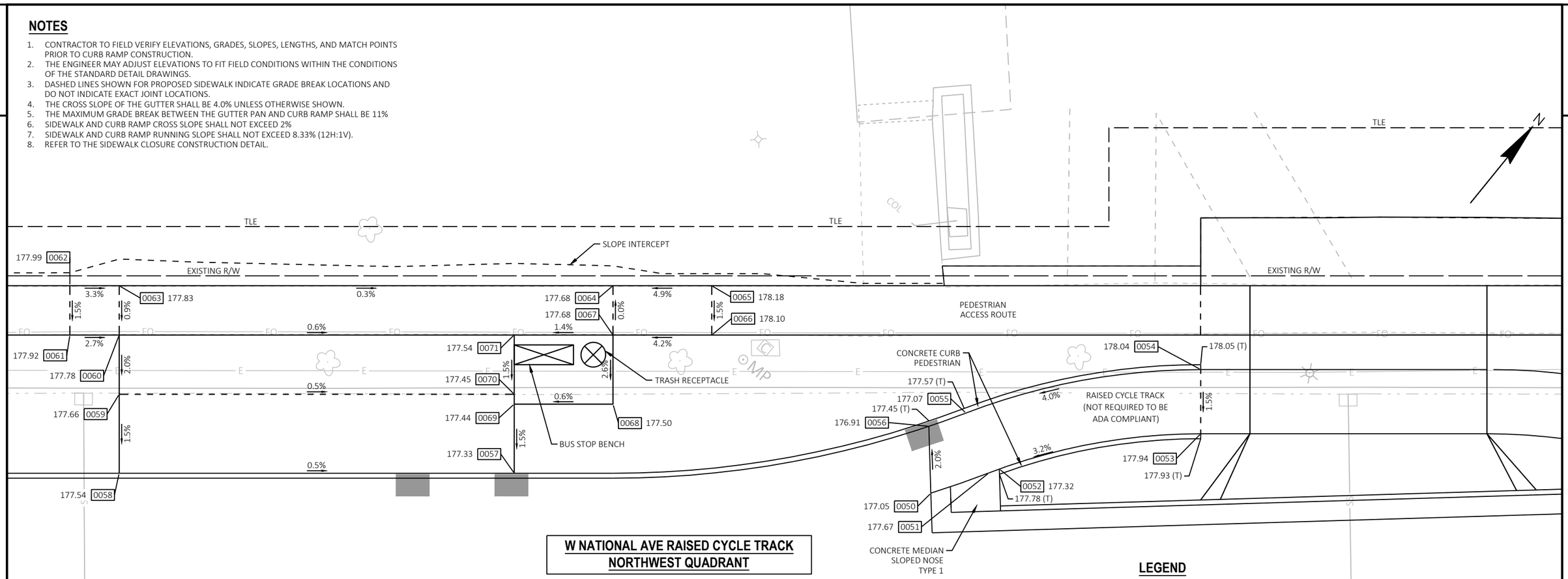
| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0001 | 23+57.46 | 47.98' RT | 368,375.14 | 2,522,684.86 | 178.27 |
| 0002 | 23+65.68 | 48.30' RT | 368,380.08 | 2,522,691.44 | 178.82 |
| 0003 | 23+70.80 | 48.50' RT | 368,383.15 | 2,522,695.54 | 179.15 |
| 0004 | 23+70.80 | 42.00' RT | 368,388.20 | 2,522,691.44 | 179.06 |
| 0005 | 23+66.19 | 41.82' RT | 368,385.43 | 2,522,687.75 | 178.82 |
| 0006 | 23+57.93 | 41.50' RT | 368,380.47 | 2,522,681.14 | 178.40 |




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 76 | E |
|---|---|---|---|---|---|

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.




**W NATIONAL AVE RAISED CYCLE TRACK**
**NORTHWEST QUADRANT**

### LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

POINT TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
|---|---|---|---|---|---|
| 0050 | 26+41.97 | -37.98' LT | 368,621.24 | 2,522,851.51 | 177.05 |
| 0051 | 26+47.85 | -40.04' LT | 368,626.54 | 2,522,854.78 | 177.67 |
| 0052 | 26+48.90 | -40.43' LT | 368,627.51 | 2,522,855.35 | 177.32 |
| 0053 | 26+69.30 | -44.00' LT | 368,643.14 | 2,522,868.93 | 177.94 |
| 0054 | 26+69.30 | -50.50' LT | 368,648.19 | 2,522,864.83 | 178.04 |
| 0055 | 26+45.53 | -46.11' LT | 368,629.79 | 2,522,849.15 | 177.07 |
| 0056 | 26+41.77 | -44.75' LT | 368,626.37 | 2,522,847.08 | 176.91 |
| 0057 | 25+99.78 | -40.00' LT | 368,596.21 | 2,522,817.49 | 177.33 |
| 0058 | 25+59.78 | -40.00' LT | 368,570.99 | 2,522,786.44 | 177.54 |
| 0059 | 25+59.78 | -48.00' LT | 368,577.20 | 2,522,781.40 | 177.66 |
| 0060 | 25+59.78 | -54.00' LT | 368,581.86 | 2,522,777.61 | 177.78 |

POINT TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
|---|---|---|---|---|---|
| 0061 | 25+54.78 | -54.00' LT | 368,578.71 | 2,522,773.73 | 177.92 |
| 0062 | 25+54.78 | -59.00' LT | 368,582.59 | 2,522,770.58 | 177.99 |
| 0063 | 25+59.78 | -59.00' LT | 368,585.74 | 2,522,774.46 | 177.83 |
| 0064 | 26+09.78 | -59.00' LT | 368,617.26 | 2,522,813.27 | 177.68 |
| 0065 | 26+19.78 | -59.00' LT | 368,623.57 | 2,522,821.04 | 178.18 |
| 0066 | 26+19.78 | -54.00' LT | 368,619.69 | 2,522,824.19 | 178.10 |
| 0067 | 26+09.78 | -54.00' LT | 368,613.38 | 2,522,816.43 | 177.68 |
| 0068 | 26+09.78 | -47.00' LT | 368,607.95 | 2,522,820.84 | 177.50 |
| 0069 | 25+99.78 | -47.00' LT | 368,601.65 | 2,522,813.08 | 177.44 |
| 0070 | 25+99.78 | -48.00' LT | 368,602.42 | 2,522,812.45 | 177.45 |
| 0071 | 25+99.78 | -54.00' LT | 368,607.08 | 2,522,808.66 | 177.54 |

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 77 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021301-CR.DWG
LAYOUT NAME - 00N
PLOT DATE : 1/9/2026 12:22 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

28+00

29+00

NATIONAL AVE R/L

W NATIONAL AVE

TYPE 2M

177.04(F) 0100

0104 177.28 HP

0103 176.86(F)

0132 176.72

0105 176.80(F)

0125 176.57

0106 176.65(F)

0124 176.55

176.55 (G)

0107 176.63(F)

0108 176.59(F)

176.51 (G)

0112 176.51

0109 176.58 LP

0110 176.71(F)

0131 176.81

0130 177.12

0129 177.75

0128 177.84

0127 177.22

0126 176.87

0123 177.22

0122 177.30

0121 177.90

0120 177.97

0119 177.24

0114 177.16

0113 176.53

177.19 (T)

177.02 (T)

0115 177.72

0118 177.79

0117 178.12

0116 178.02

RAISED CYCLE TRACK (NOT REQUIRED TO BE ADA COMPLIANT)

PEDESTRIAN ACCESS ROUTE

SEE NOTE 8

EXISTING R/W

CONCRETE CURB PEDESTRIAN

SLOPE INTERCEPT

TLE

0.5% 4.0% 1.6% 6.2% 1.5% 6.9% 0.9% 7.0% 4.0% 6.0% 1.0% 7.3% 0.2% 6.5% 5.4% 3.9% 6.6% 6.1% 1.9%

TYPE 2M

0140 176.55 HP

0141 176.53(F)

176.51 LP 0139

176.52(F) 0138

0144 177.13

176.44 0142

0143 176.66

176.61(F) 0137

0146 176.82

176.42 0148

176.60 0147

0145 177.23

176.64(F) 0136

176.56 (G)

176.56 0149

176.61 0159

176.61 (G)

176.69(F) 0135

176.65 0158

176.85(F) 0134

177.11 102

101 177.18

0150 177.28

177.15 (T)

177.20 0157

177.23 (T)

0152 177.27

0151 177.36

SLOPE INTERCEPT

0153 177.77

177.69 0156

0154 178.09

177.97 0155

RAISED CYCLE TRACK (NOT REQUIRED TO BE ADA COMPLIANT)

CONCRETE CURB PEDESTRIAN

PEDESTRIAN ACCESS ROUTE

EXISTING R/W

TLE

0.5% 4.0% 1.0% 7.0% 4.7% 0.8% 2.5% 4.1% 2.0% 7.1% 5.6% 1.7% 5.5% 2.4% 6.4%

WILDWOOD DR R/L

S WILDWOOD DR

## W NATIONAL AVE & S WILDWOOD DR SOUTHWEST QUADRANT

## W NATIONAL AVE & S WILDWOOD DR SOUTHEAST QUADRANT

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 78 | E |
|---|---|---|---|---|---|

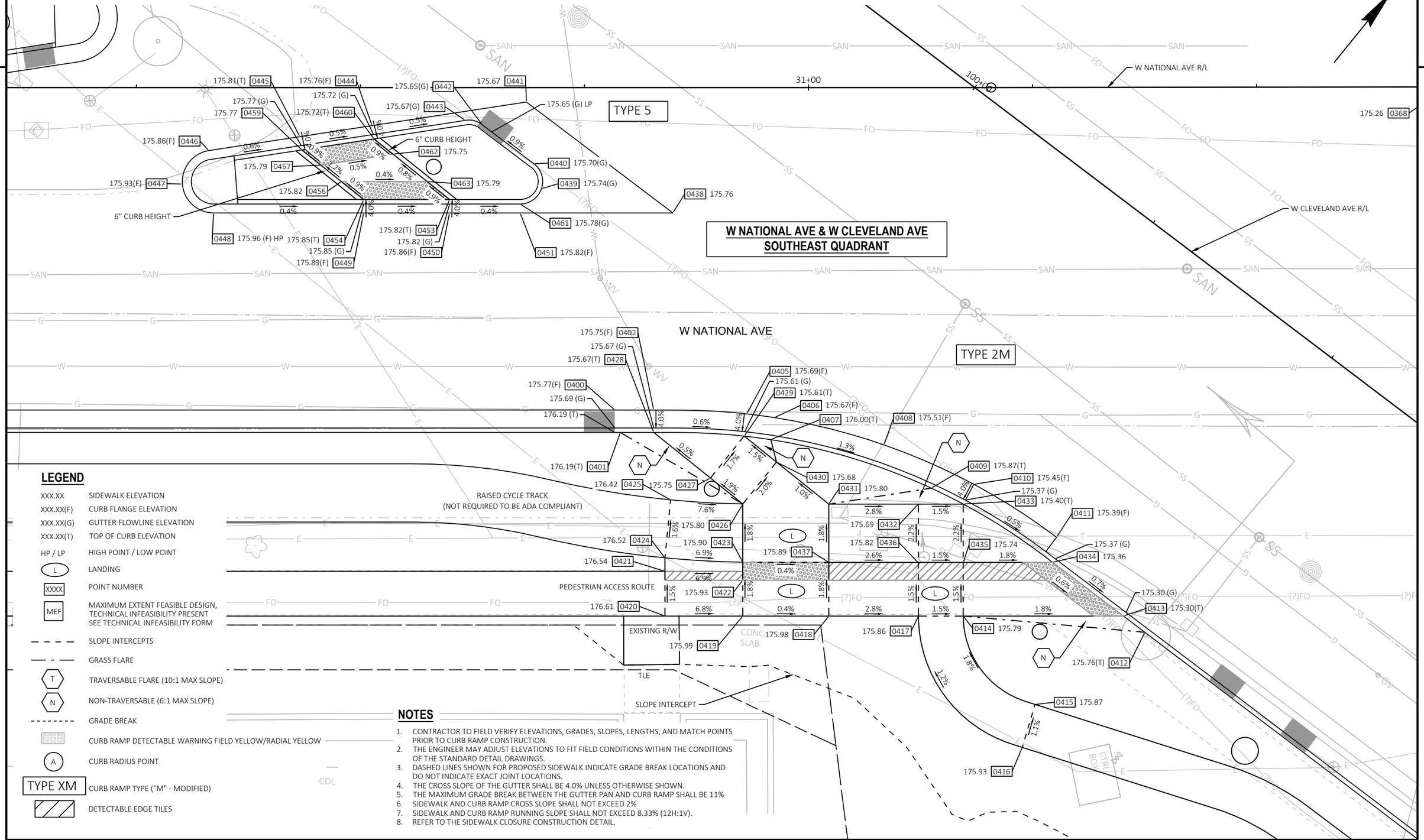
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021301-CR.DWG
LAYOUT NAME - 01
PLOT DATE : 1/9/2026 12:23 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0100 | 27+81.94 | 36.00' RT | 368,652.06 | 2,523,006.80 | 177.04 |
| 101 | 28+68.04 | 54.00' RT | 368,692.37 | 2,523,084.98 | 177.18 |
| 102 | 28+63.04 | 54.00' RT | 368,689.22 | 2,523,081.10 | 177.11 |
| 0103 | 27+96.27 | 39.64' RT | 368,658.27 | 2,523,020.22 | 176.86 |
| 0104 | 27+95.07 | 41.84' RT | 368,655.81 | 2,523,020.68 | 177.28 |
| 0105 | 27+99.94 | 42.00' RT | 368,658.75 | 2,523,024.55 | 176.80 |
| 0106 | 28+06.72 | 49.09' RT | 368,657.52 | 2,523,034.29 | 176.65 |
| 0107 | 28+08.93 | 52.91' RT | 368,655.95 | 2,523,038.41 | 176.63 |
| 0108 | 28+11.22 | 59.45' RT | 368,652.31 | 2,523,044.31 | 176.59 |
| 0109 | 28+11.72 | 62.33' RT | 368,650.39 | 2,523,046.51 | 176.58 |
| 0110 | 28+11.94 | 65.99' RT | 368,647.70 | 2,523,048.99 | 176.71 |
| 0112 | 28+08.78 | 60.00' RT | 368,650.35 | 2,523,042.76 | 176.51 |
| 0113 | 28+06.68 | 60.00' RT | 368,649.03 | 2,523,041.14 | 176.53 |
| 0114 | 27+97.04 | 60.00' RT | 368,642.95 | 2,523,033.65 | 177.16 |
| 0115 | 27+97.04 | 69.00' RT | 368,635.96 | 2,523,039.32 | 177.72 |
| 0116 | 27+97.04 | 74.00' RT | 368,632.08 | 2,523,042.47 | 178.02 |
| 0117 | 27+92.04 | 74.00' RT | 368,628.93 | 2,523,038.59 | 178.12 |
| 0118 | 27+92.04 | 69.00' RT | 368,632.81 | 2,523,035.44 | 177.79 |
| 0119 | 27+92.04 | 60.00' RT | 368,639.80 | 2,523,029.77 | 177.24 |
| 0120 | 27+82.04 | 59.00' RT | 368,634.27 | 2,523,021.37 | 177.97 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0121 | 27+82.04 | 54.00' RT | 368,638.15 | 2,523,018.22 | 177.90 |
| 0122 | 27+92.04 | 54.00' RT | 368,644.45 | 2,523,025.98 | 177.30 |
| 0123 | 27+97.04 | 54.00' RT | 368,647.60 | 2,523,029.86 | 177.22 |
| 0124 | 28+06.68 | 54.00' RT | 368,653.69 | 2,523,037.35 | 176.55 |
| 0125 | 28+04.66 | 50.50' RT | 368,655.13 | 2,523,033.57 | 176.57 |
| 0126 | 27+97.04 | 50.50' RT | 368,650.32 | 2,523,027.66 | 176.87 |
| 0127 | 27+92.04 | 50.50' RT | 368,647.17 | 2,523,023.78 | 177.22 |
| 0128 | 27+82.04 | 50.50' RT | 368,640.86 | 2,523,016.01 | 177.84 |
| 0129 | 27+82.04 | 44.00' RT | 368,645.91 | 2,523,011.92 | 177.75 |
| 0130 | 27+92.04 | 44.00' RT | 368,652.21 | 2,523,019.68 | 177.12 |
| 0131 | 27+97.04 | 44.00' RT | 368,655.37 | 2,523,023.56 | 176.81 |
| 0132 | 27+98.44 | 44.00' RT | 368,656.25 | 2,523,024.65 | 176.72 |
| 0134 | 28+47.94 | 65.01' RT | 368,671.15 | 2,523,076.32 | 176.85 |
| 0135 | 28+48.57 | 59.44' RT | 368,675.87 | 2,523,073.30 | 176.69 |
| 0136 | 28+51.13 | 52.78' RT | 368,682.66 | 2,523,071.08 | 176.64 |
| 0137 | 28+53.82 | 48.89' RT | 368,687.38 | 2,523,070.72 | 176.61 |
| 0138 | 28+63.97 | 41.67' RT | 368,699.37 | 2,523,074.04 | 176.52 |
| 0139 | 28+64.90 | 41.33' RT | 368,700.23 | 2,523,074.56 | 176.51 |
| 0140 | 28+68.93 | 40.32' RT | 368,703.54 | 2,523,077.05 | 176.55 |
| 0141 | 28+72.94 | 40.00' RT | 368,706.33 | 2,523,079.96 | 176.53 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0142 | 28+64.86 | 44.00' RT | 368,698.13 | 2,523,076.21 | 176.44 |
| 0143 | 28+68.04 | 44.00' RT | 368,700.14 | 2,523,078.68 | 176.66 |
| 0144 | 28+78.04 | 44.00' RT | 368,706.44 | 2,523,086.44 | 177.13 |
| 0145 | 28+78.04 | 50.50' RT | 368,701.39 | 2,523,090.54 | 177.23 |
| 0146 | 28+68.04 | 50.50' RT | 368,695.09 | 2,523,082.78 | 176.82 |
| 0147 | 28+64.86 | 50.50' RT | 368,693.08 | 2,523,080.31 | 176.60 |
| 0148 | 28+55.74 | 50.51' RT | 368,687.33 | 2,523,073.23 | 176.42 |
| 0149 | 28+53.31 | 54.00' RT | 368,683.09 | 2,523,073.55 | 176.56 |
| 0150 | 28+78.04 | 54.00' RT | 368,698.68 | 2,523,092.75 | 177.28 |
| 0151 | 28+78.04 | 59.00' RT | 368,694.80 | 2,523,095.90 | 177.36 |
| 0152 | 28+68.04 | 60.00' RT | 368,687.71 | 2,523,088.76 | 177.27 |
| 0153 | 28+68.00 | 69.00' RT | 368,680.70 | 2,523,094.40 | 177.77 |
| 0154 | 28+67.97 | 74.00' RT | 368,676.80 | 2,523,097.54 | 178.09 |
| 0155 | 28+62.98 | 74.00' RT | 368,673.66 | 2,523,093.66 | 177.97 |
| 0156 | 28+63.00 | 69.00' RT | 368,677.55 | 2,523,090.52 | 177.69 |
| 0157 | 28+63.04 | 60.00' RT | 368,684.56 | 2,523,084.88 | 177.20 |
| 0158 | 28+53.31 | 60.00' RT | 368,678.43 | 2,523,077.33 | 176.65 |
| 0159 | 28+51.00 | 60.00' RT | 368,676.97 | 2,523,075.54 | 176.61 |




## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
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5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 80 E |


FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021301-CR.DWG
LAYOUT NAME - 02SE
PLOT DATE : 1/9/2026 12:23 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0200 | 29+24.21 | -103.98' LT | 368,850.41 | 2,523,028.98 | 174.63 |
| 0201 | 29+32.04 | -91.21' LT | 368,845.43 | 2,523,043.11 | 175.17 |
| 0202 | 29+38.86 | -74.86' LT | 368,837.05 | 2,523,058.71 | 174.91 |
| 0203 | 29+35.02 | -66.59' LT | 368,828.20 | 2,523,060.94 | 175.70 |
| 0204 | 29+36.41 | -63.35' LT | 368,826.56 | 2,523,064.07 | 175.38 |
| 0205 | 29+32.80 | -57.53' LT | 368,819.77 | 2,523,064.93 | 175.47 |
| 0206 | 29+28.67 | -56.53' LT | 368,816.39 | 2,523,062.36 | 175.93 |
| 0207 | 29+28.76 | -53.00' LT | 368,813.71 | 2,523,064.65 | 175.55 |
| 0208 | 29+24.06 | -52.08' LT | 368,810.03 | 2,523,061.59 | 176.09 |
| 0209 | 29+23.63 | -48.51' LT | 368,806.99 | 2,523,063.50 | 175.81 |
| 0210 | 29+17.65 | -44.56' LT | 368,800.15 | 2,523,061.35 | 176.08 |
| 0211 | 29+11.71 | -41.69' LT | 368,794.18 | 2,523,058.55 | 176.20 |
| 0212 | 29+07.33 | -42.74' LT | 368,792.23 | 2,523,054.49 | 176.69 |
| 0213 | 29+00.94 | -38.59' LT | 368,784.98 | 2,523,052.15 | 176.39 |
| 0214 | 29+10.77 | -44.00' LT | 368,795.38 | 2,523,056.36 | 176.12 |
| 0215 | 29+06.33 | -44.00' LT | 368,792.58 | 2,523,052.92 | 176.54 |
| 0216 | 29+06.33 | -50.50' LT | 368,797.63 | 2,523,048.82 | 176.78 |
| 0217 | 29+22.11 | -50.50' LT | 368,807.57 | 2,523,061.07 | 175.73 |
| 0218 | 29+30.84 | -59.09' LT | 368,819.74 | 2,523,062.43 | 175.39 |
| 0219 | 29+25.70 | -60.55' LT | 368,817.64 | 2,523,057.52 | 175.66 |
| 0220 | 29+17.83 | -54.00' LT | 368,807.59 | 2,523,055.54 | 175.97 |
| 0221 | 29+06.33 | -54.00' LT | 368,800.34 | 2,523,046.61 | 177.10 |
| 0222 | 29+06.33 | -59.00' LT | 368,804.23 | 2,523,043.46 | 177.17 |
| 0223 | 29+17.83 | -59.00' LT | 368,811.47 | 2,523,052.38 | 176.05 |
| 0224 | 29+20.83 | -61.69' LT | 368,815.45 | 2,523,053.02 | 175.74 |
| 0225 | 29+22.20 | -67.54' LT | 368,820.86 | 2,523,050.40 | 175.70 |
| 0226 | 29+25.78 | -82.79' LT | 368,834.95 | 2,523,043.56 | 174.93 |
| 0227 | 29+25.45 | -88.46' LT | 368,839.15 | 2,523,039.72 | 175.27 |
| 0228 | 29+30.15 | -90.16' LT | 368,843.43 | 2,523,042.31 | 175.20 |
| 0229 | 29+30.65 | -81.65' LT | 368,837.14 | 2,523,048.06 | 174.86 |
| 0230 | 29+27.07 | -66.40' LT | 368,823.04 | 2,523,054.90 | 175.62 |
| 0231 | 29+32.48 | -64.86' LT | 368,825.26 | 2,523,060.07 | 175.33 |
| 0232 | 29+34.14 | -64.39' LT | 368,825.94 | 2,523,061.65 | 175.30 |

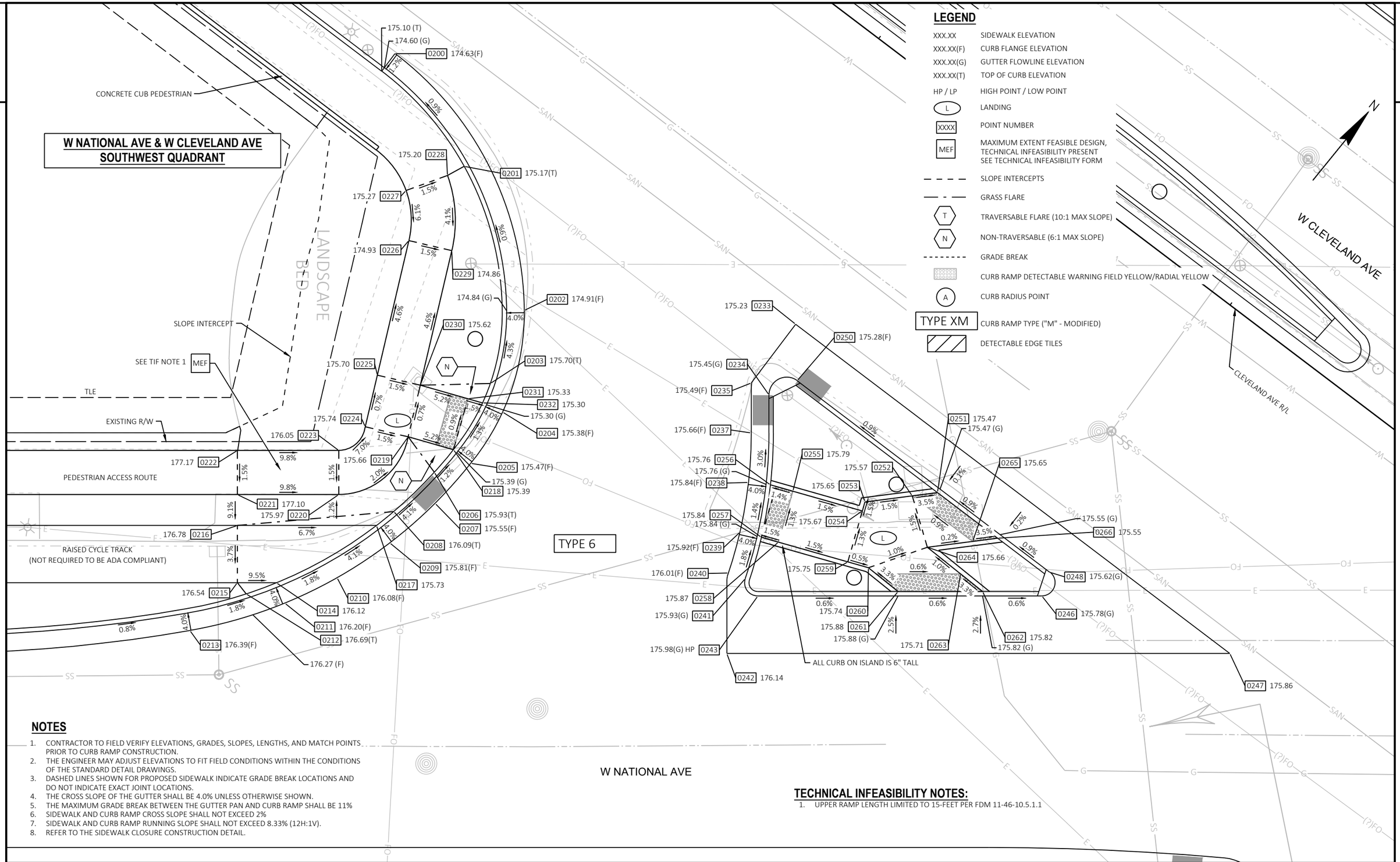
| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0233 | 29+69.65 | -73.31' LT | 368,855.25 | 2,523,083.59 | 175.23 |
| 0234 | 29+66.61 | -65.31' LT | 368,847.13 | 2,523,086.28 | 175.45 |
| 0235 | 29+64.61 | -66.65' LT | 368,846.91 | 2,523,083.88 | 175.49 |
| 0237 | 29+64.61 | -60.98' LT | 368,842.51 | 2,523,087.45 | 175.66 |
| 0238 | 29+64.30 | -55.38' LT | 368,837.96 | 2,523,090.74 | 175.84 |
| 0239 | 29+63.33 | -49.72' LT | 368,832.95 | 2,523,093.56 | 175.92 |
| 0240 | 29+62.03 | -45.11' LT | 368,828.56 | 2,523,095.45 | 176.01 |
| 0241 | 29+63.93 | -44.48' LT | 368,829.26 | 2,523,097.32 | 175.93 |
| 0242 | 29+61.85 | -36.00' LT | 368,821.37 | 2,523,101.06 | 176.14 |
| 0243 | 29+65.35 | -42.50' LT | 368,828.62 | 2,523,099.67 | 175.98 |
| 0246 | 29+97.56 | -42.50' LT | 368,848.94 | 2,523,124.68 | 175.78 |
| 0247 | 30+18.88 | -36.00' LT | 368,857.33 | 2,523,145.33 | 175.86 |
| 0248 | 29+98.47 | -45.20' LT | 368,851.60 | 2,523,123.69 | 175.62 |
| 0250 | 29+69.82 | -66.90' LT | 368,850.39 | 2,523,087.76 | 175.28 |
| 0251 | 29+85.73 | -54.23' LT | 368,850.57 | 2,523,108.10 | 175.47 |
| 0252 | 29+82.87 | -53.86' LT | 368,848.49 | 2,523,106.11 | 175.57 |
| 0253 | 29+77.50 | -53.16' LT | 368,844.56 | 2,523,102.38 | 175.65 |
| 0254 | 29+77.21 | -52.14' LT | 368,843.58 | 2,523,102.80 | 175.67 |
| 0255 | 29+69.33 | -54.38' LT | 368,840.36 | 2,523,095.28 | 175.79 |
| 0256 | 29+66.78 | -55.10' LT | 368,839.31 | 2,523,092.84 | 175.76 |
| 0257 | 29+65.76 | -49.16' LT | 368,834.05 | 2,523,095.80 | 175.84 |
| 0258 | 29+67.69 | -48.61' LT | 368,834.84 | 2,523,097.64 | 175.87 |
| 0259 | 29+75.57 | -46.37' LT | 368,838.07 | 2,523,105.17 | 175.75 |
| 0260 | 29+77.91 | -45.70' LT | 368,839.03 | 2,523,107.40 | 175.74 |
| 0261 | 29+81.27 | -43.00' LT | 368,839.05 | 2,523,111.72 | 175.88 |
| 0262 | 29+90.85 | -43.00' LT | 368,845.09 | 2,523,119.16 | 175.82 |
| 0263 | 29+88.36 | -45.00' LT | 368,845.07 | 2,523,115.96 | 175.71 |
| 0264 | 29+84.59 | -48.03' LT | 368,845.05 | 2,523,111.12 | 175.66 |
| 0265 | 29+89.72 | -48.69' LT | 368,848.80 | 2,523,114.69 | 175.65 |
| 0266 | 29+92.55 | -49.06' LT | 368,850.86 | 2,523,116.65 | 175.55 |

2

## W NATIONAL AVE & W CLEVELAND AVE SOUTHWEST QUADRANT

### LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |




### NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

### TECHNICAL INFEASIBILITY NOTES:

1. UPPER RAMP LENGTH LIMITED TO 15-FEET PER FDM 11-46-10.5.1.1

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 82 | E |
|---|---|---|---|---|---|

2

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0300 | 30+88.02 | -69.56' LT | 368,926.97 | 2,523,177.84 | 175.42 |
| 0301 | 30+96.19 | -60.23' LT | 368,924.88 | 2,523,190.05 | 175.06 |
| 0302 | 31+05.49 | -54.28' LT | 368,926.12 | 2,523,201.03 | 175.11 |
| 0303 | 31+10.25 | -54.70' LT | 368,929.45 | 2,523,204.46 | 175.53 |
| 0304 | 31+16.21 | -49.66' LT | 368,929.29 | 2,523,212.26 | 175.17 |
| 0305 | 31+34.69 | -48.61' LT | 368,940.11 | 2,523,227.20 | 175.49 |
| 0306 | 31+38.62 | -46.00' LT | 368,940.56 | 2,523,231.90 | 175.06 |
| 0307 | 31+48.01 | -46.00' LT | 368,946.49 | 2,523,239.19 | 175.01 |
| 0308 | 31+51.00 | -48.50' LT | 368,950.32 | 2,523,239.92 | 175.41 |
| 0309 | 31+48.01 | -48.50' LT | 368,948.43 | 2,523,237.61 | 174.93 |
| 0310 | 31+42.55 | -53.09' LT | 368,948.54 | 2,523,230.47 | 174.97 |
| 0311 | 31+38.49 | -56.50' LT | 368,948.62 | 2,523,225.17 | 175.34 |
| 0312 | 31+53.33 | -56.50' LT | 368,957.99 | 2,523,236.68 | 176.43 |
| 0313 | 31+73.33 | -56.50' LT | 368,970.62 | 2,523,252.19 | 175.70 |
| 0314 | 31+78.33 | -56.50' LT | 368,973.78 | 2,523,256.07 | 175.40 |
| 0315 | 31+78.33 | -48.50' LT | 368,967.58 | 2,523,261.12 | 175.28 |
| 0316 | 32+18.33 | -48.50' LT | 368,992.84 | 2,523,292.13 | 175.08 |
| 0317 | 32+18.33 | -56.50' LT | 368,999.04 | 2,523,287.08 | 175.20 |
| 0318 | 32+24.26 | -56.32' LT | 369,002.65 | 2,523,291.79 | 175.56 |
| 0319 | 32+24.64 | -62.81' LT | 369,007.92 | 2,523,287.99 | 175.68 |
| 0320 | 32+18.33 | -63.00' LT | 369,004.08 | 2,523,282.98 | 175.29 |
| 0321 | 32+08.33 | -63.00' LT | 368,997.77 | 2,523,275.22 | 175.34 |
| 0322 | 32+00.33 | -63.00' LT | 368,992.71 | 2,523,269.02 | 175.38 |
| 0323 | 31+86.33 | -63.00' LT | 368,983.87 | 2,523,258.16 | 175.45 |
| 0324 | 31+78.33 | -63.00' LT | 368,978.82 | 2,523,251.96 | 175.49 |
| 0325 | 31+73.33 | -63.00' LT | 368,975.66 | 2,523,248.08 | 175.80 |
| 0326 | 31+53.33 | -63.00' LT | 368,963.03 | 2,523,232.58 | 176.53 |
| 0327 | 31+38.49 | -63.00' LT | 368,953.66 | 2,523,221.07 | 175.44 |
| 0328 | 31+38.49 | -69.00' LT | 368,958.31 | 2,523,217.28 | 175.53 |
| 0329 | 31+53.33 | -69.00' LT | 368,967.69 | 2,523,228.79 | 176.62 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0330 | 31+68.33 | -69.00' LT | 368,977.16 | 2,523,240.42 | 175.97 |
| 0331 | 31+73.33 | -68.99' LT | 368,980.31 | 2,523,244.30 | 175.89 |
| 0332 | 31+78.33 | -68.99' LT | 368,983.47 | 2,523,248.18 | 175.58 |
| 0333 | 32+18.33 | -69.00' LT | 369,008.73 | 2,523,279.19 | 175.38 |
| 0334 | 32+25.00 | -68.82' LT | 369,012.80 | 2,523,284.47 | 175.79 |
| 0335 | 31+73.33 | -71.19' LT | 368,982.01 | 2,523,242.91 | 175.92 |
| 0336 | 31+82.73 | -71.19' LT | 368,987.95 | 2,523,250.20 | 176.53 |
| 0337 | 31+83.32 | -76.19' LT | 368,992.20 | 2,523,247.50 | 176.46 |
| 0338 | 31+73.33 | -76.19' LT | 368,985.89 | 2,523,239.76 | 176.00 |
| 0339 | 31+68.33 | -76.19' LT | 368,982.73 | 2,523,235.88 | 176.07 |
| 0340 | 31+68.33 | -73.00' LT | 368,980.26 | 2,523,237.89 | 176.03 |
| 0341 | 31+68.33 | -71.19' LT | 368,978.86 | 2,523,239.04 | 176.00 |
| 0342 | 31+53.33 | -73.00' LT | 368,970.79 | 2,523,226.26 | 176.68 |
| 0343 | 31+29.16 | -69.00' LT | 368,952.42 | 2,523,210.05 | 175.67 |
| 0344 | 31+19.07 | -69.00' LT | 368,946.11 | 2,523,202.29 | 175.49 |
| 0345 | 31+13.83 | -72.97' LT | 368,945.89 | 2,523,195.72 | 175.52 |
| 0346 | 31+09.84 | -75.99' LT | 368,945.72 | 2,523,190.72 | 175.72 |
| 0347 | 31+03.24 | -79.29' LT | 368,944.11 | 2,523,183.52 | 176.03 |
| 0348 | 30+98.43 | -80.66' LT | 368,942.15 | 2,523,178.92 | 176.23 |
| 0349 | 30+97.06 | -75.85' LT | 368,937.55 | 2,523,180.89 | 176.15 |
| 0350 | 31+01.87 | -74.48' LT | 368,939.52 | 2,523,185.49 | 175.95 |
| 0351 | 31+06.82 | -72.01' LT | 368,940.72 | 2,523,190.89 | 175.65 |
| 0352 | 31+10.81 | -68.99' LT | 368,940.89 | 2,523,195.89 | 175.45 |
| 0353 | 30+99.29 | -68.89' LT | 368,933.56 | 2,523,187.01 | 175.09 |
| 0354 | 30+90.41 | -67.74' LT | 368,927.07 | 2,523,180.84 | 174.95 |
| 0355 | 30+97.23 | -62.58' LT | 368,927.36 | 2,523,189.39 | 175.04 |
| 0356 | 31+00.06 | -62.94' LT | 368,929.42 | 2,523,191.36 | 175.08 |
| 0357 | 31+10.82 | -62.99' LT | 368,936.24 | 2,523,199.67 | 175.36 |
| 0358 | 31+19.08 | -63.00' LT | 368,941.46 | 2,523,206.08 | 175.44 |
| 0359 | 31+29.16 | -63.00' LT | 368,947.77 | 2,523,213.84 | 175.58 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0360 | 31+29.16 | -56.50' LT | 368,942.73 | 2,523,217.94 | 175.48 |
| 0361 | 31+19.09 | -56.50' LT | 368,936.42 | 2,523,210.19 | 175.34 |
| 0362 | 31+10.82 | -56.49' LT | 368,931.20 | 2,523,203.78 | 175.26 |
| 0363 | 31+06.66 | -56.49' LT | 368,928.57 | 2,523,200.55 | 175.03 |
| 0364 | 31+34.63 | -51.91' LT | 368,942.62 | 2,523,225.08 | 175.43 |
| 0365 | 31+38.69 | -48.50' LT | 368,942.54 | 2,523,230.38 | 175.06 |
| 0366 | 31+52.19 | -14.00' LT | 368,924.32 | 2,523,262.64 | 175.19 |
| 0367 | 31+64.66 | -4.53' LT | 368,924.85 | 2,523,278.28 | 175.23 |
| 0368 | 31+70.90 | 0.22' RT | 368,925.11 | 2,523,286.12 | 175.26 |
| 0369 | 31+75.93 | -2.25' LT | 368,930.19 | 2,523,288.46 | 175.19 |
| 0370 | 31+77.92 | -0.77' LT | 368,930.31 | 2,523,290.94 | 175.21 |
| 0371 | 31+91.64 | -2.70' LT | 368,940.47 | 2,523,300.36 | 175.12 |
| 0372 | 31+99.63 | -3.82' LT | 368,946.39 | 2,523,305.85 | 175.07 |
| 0373 | 32+22.49 | -7.03' LT | 368,963.31 | 2,523,321.54 | 174.92 |
| 0374 | 32+22.00 | -14.00' LT | 368,968.40 | 2,523,316.76 | 174.84 |
| 0375 | 31+90.86 | -14.00' LT | 368,948.74 | 2,523,292.62 | 174.99 |
| 0376 | 31+81.54 | -14.00' LT | 368,942.85 | 2,523,285.39 | 175.04 |
| 0377 | 31+69.20 | -14.00' LT | 368,935.06 | 2,523,275.82 | 175.10 |
| 0379 | 31+81.54 | -12.50' LT | 368,941.69 | 2,523,286.33 | 175.00 |
| 0380 | 31+83.92 | -10.50' LT | 368,941.64 | 2,523,289.44 | 175.03 |
| 0381 | 31+89.37 | -5.92' LT | 368,941.53 | 2,523,296.57 | 175.11 |
| 0383 | 31+91.43 | -4.18' LT | 368,941.49 | 2,523,299.26 | 175.08 |
| 0384 | 31+99.43 | -5.31' LT | 368,947.41 | 2,523,304.75 | 175.03 |
| 0386 | 31+97.37 | -7.04' LT | 368,947.45 | 2,523,302.06 | 175.06 |
| 0387 | 31+93.25 | -10.50' LT | 368,947.53 | 2,523,296.68 | 174.99 |
| 0388 | 31+90.86 | -12.50' LT | 368,947.58 | 2,523,293.57 | 174.95 |
| 0389 | 31+68.33 | -63.00' LT | 368,972.51 | 2,523,244.21 | 175.88 |
| 0390 | 31+68.33 | -56.50' LT | 368,967.47 | 2,523,248.31 | 175.78 |

# W NATIONAL AVE & W CLEVELAND AVE
# NORTHEAST QUADRANT

TYPE 6

W NATIONAL AVE

W CLEVELAND AVE

W CLEVELAND AVE R/L

0559 175.16(F)
175.06 0558
175.12(F) 0557
174.99 (G)
174.99 0574
175.09(F) 0556
174.90 (G)
174.90 0573
174.77(G) 0555
0553 174.99 (LP)
0554 174.97(G)
0552 175.14(G)
0550 175.31(G)
0551 175.38
0549 175.39(F)
175.19(G) 0560
175.24 0575
175.32 0561
175.46(F) 0562
0572 175.61
0571 175.50
175.70 0576
175.50 0577
175.50 (G)
175.64(F) 0563
0548 175.55(F)
175.47 (G)
0570 175.47
175.60 0567
175.58 0568
0547 175.64(F)
175.56 (G)
0569 175.56
175.76(F) 0564
175.63 (G)
175.63 0565
175.73 0566
0546 175.73(G)
0545 175.84 HP
175.82(G) 0544
0543 176.01(F)

0514 174.67(F)
174.59 (G)
0515 174.70(F)
175.05(T) 0513
174.61(F) 0512
174.56 (G)
174.56(T) 0516
0517 174.95
0518 175.13
174.54(F) 0511
174.48 (G)
174.48 0522
174.94(T) 0510
174.50 (LP) 0509
174.42 (G)
0521 174.62
0520 175.01
0519 175.23
RAISED CYCLE TRACK
(NOT REQUIRED TO BE ADA COMPLIANT)
0527 175.14
0528 175.28
PEDESTRIAN ACCESS ROUTE
0529 175.36
0530 175.22
6" CONCRETE CURB PEDESTRIAN
TLE
SLOPE INTERCEPT
0531 175.39
0532 175.45
174.74(F) 0508
175.34(T) 0506
174.91 0507
175.32 0526
175.38 0525
175.28 0524
174.97(F) 0505
174.89 (G)
174.89 0523
175.06(F) 0504
174.98 (G)
174.98 0542
0533 175.36
175.51 (T)
0534 175.44
0541 175.36
175.38 (T)
CONCRETE CURB
PEDESTRIAN
PROPOSED R/W
175.74(T) 0503
175.68(F) 0502
175.60 (G)
0535 176.51
176.20(F) 0501
176.12 (G)
176.43 0540
0536 177.33
0537 177.47
6" CONCRETE CURB PEDESTRIAN
177.26 0539
177.40 0538
176.70(F) 0500
177.16 (G)
EXISTING R/W

## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 84 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021301-CR.DWG
LAYOUT NAME - 02NE
PLOT DATE : 1/9/2026 12:25 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT

2

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0400 | 30+78.41 | 36.01' RT | 368,838.96 | 2,523,236.93 | 175.77 |
| 0401 | 30+79.00 | 38.50' RT | 368,837.40 | 2,523,238.96 | 176.19 |
| 0402 | 30+82.73 | 36.00' RT | 368,841.70 | 2,523,240.28 | 175.75 |
| 0405 | 30+93.10 | 36.43' RT | 368,847.90 | 2,523,248.60 | 175.69 |
| 0406 | 30+96.22 | 36.84' RT | 368,849.55 | 2,523,251.28 | 175.67 |
| 0407 | 30+95.79 | 39.30' RT | 368,847.37 | 2,523,252.50 | 176.00 |
| 0408 | 31+08.43 | 39.89' RT | 368,854.88 | 2,523,262.69 | 175.51 |
| 0409 | 31+13.70 | 44.72' RT | 368,854.46 | 2,523,269.82 | 175.87 |
| 0410 | 31+18.45 | 44.29' RT | 368,857.78 | 2,523,273.24 | 175.45 |
| 0411 | 31+27.62 | 50.22' RT | 368,859.01 | 2,523,284.13 | 175.39 |
| 0412 | 31+37.46 | 60.83' RT | 368,856.99 | 2,523,298.47 | 175.76 |
| 0413 | 31+35.07 | 59.02' RT | 368,856.89 | 2,523,295.47 | 175.30 |
| 0414 | 31+17.27 | 59.00' RT | 368,845.62 | 2,523,281.59 | 175.79 |
| 0415 | 31+25.20 | 68.87' RT | 368,843.02 | 2,523,294.03 | 175.87 |
| 0416 | 31+23.76 | 73.66' RT | 368,838.40 | 2,523,295.95 | 175.93 |
| 0417 | 31+12.27 | 59.00' RT | 368,842.47 | 2,523,277.71 | 175.86 |
| 0418 | 31+02.27 | 59.00' RT | 368,836.16 | 2,523,269.95 | 175.98 |
| 0419 | 30+92.67 | 58.99' RT | 368,830.12 | 2,523,262.49 | 175.99 |
| 0420 | 30+83.98 | 59.00' RT | 368,824.63 | 2,523,255.75 | 176.61 |
| 0421 | 30+83.98 | 54.00' RT | 368,828.51 | 2,523,252.60 | 176.54 |
| 0422 | 30+92.67 | 55.00' RT | 368,833.22 | 2,523,259.98 | 175.93 |
| 0423 | 30+92.67 | 52.99' RT | 368,834.78 | 2,523,258.71 | 175.90 |
| 0424 | 30+83.98 | 52.50' RT | 368,829.67 | 2,523,251.65 | 176.52 |
| 0425 | 30+84.61 | 46.03' RT | 368,835.09 | 2,523,248.06 | 176.42 |
| 0426 | 30+92.67 | 46.49' RT | 368,839.82 | 2,523,254.61 | 175.80 |
| 0427 | 30+89.06 | 43.59' RT | 368,839.80 | 2,523,249.98 | 175.75 |
| 0428 | 30+82.73 | 38.50' RT | 368,839.75 | 2,523,241.86 | 175.67 |
| 0429 | 30+92.82 | 38.91' RT | 368,845.80 | 2,523,249.95 | 175.61 |
| 0430 | 30+96.43 | 41.81' RT | 368,845.82 | 2,523,254.58 | 175.68 |
| 0431 | 31+02.27 | 46.50' RT | 368,845.86 | 2,523,262.07 | 175.80 |
| 0432 | 31+12.27 | 46.50' RT | 368,852.17 | 2,523,269.83 | 175.69 |
| 0433 | 31+17.28 | 46.50' RT | 368,855.33 | 2,523,273.72 | 175.40 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0434 | 31+27.16 | 53.01' RT | 368,856.55 | 2,523,285.54 | 175.36 |
| 0435 | 31+17.28 | 53.00' RT | 368,850.28 | 2,523,277.82 | 175.74 |
| 0436 | 31+12.27 | 53.06' RT | 368,847.08 | 2,523,273.97 | 175.82 |
| 0437 | 31+02.27 | 53.00' RT | 368,840.82 | 2,523,266.17 | 175.89 |
| 0438 | 30+84.87 | 14.00' RT | 368,860.12 | 2,523,228.07 | 175.76 |
| 0439 | 30+70.20 | 11.30' RT | 368,852.97 | 2,523,214.98 | 175.74 |
| 0440 | 30+69.34 | 8.51' RT | 368,854.59 | 2,523,212.55 | 175.70 |
| 0441 | 30+68.52 | 1.61' RT | 368,859.43 | 2,523,207.57 | 175.67 |
| 0442 | 30+63.59 | 4.15' RT | 368,854.35 | 2,523,205.34 | 175.65 |
| 0443 | 30+61.70 | 3.67' RT | 368,853.53 | 2,523,203.57 | 175.67 |
| 0444 | 30+51.29 | 4.25' RT | 368,846.52 | 2,523,195.86 | 175.76 |
| 0445 | 30+43.25 | 5.48' RT | 368,840.49 | 2,523,190.39 | 175.81 |
| 0446 | 30+33.08 | 7.04' RT | 368,832.87 | 2,523,183.48 | 175.86 |
| 0447 | 30+30.12 | 10.77' RT | 368,828.11 | 2,523,183.53 | 175.93 |
| 0448 | 30+33.61 | 14.00' RT | 368,827.80 | 2,523,188.28 | 175.96 |
| 0449 | 30+50.36 | 14.00' RT | 368,838.37 | 2,523,201.29 | 175.89 |
| 0450 | 30+59.94 | 14.00' RT | 368,844.41 | 2,523,208.72 | 175.86 |
| 0451 | 30+67.83 | 14.00' RT | 368,849.38 | 2,523,214.84 | 175.82 |
| 0453 | 30+59.94 | 12.50' RT | 368,845.57 | 2,523,207.78 | 175.82 |
| 0454 | 30+50.36 | 12.50' RT | 368,839.53 | 2,523,200.34 | 175.85 |
| 0456 | 30+47.87 | 10.50' RT | 368,839.51 | 2,523,197.15 | 175.82 |
| 0457 | 30+45.59 | 8.67' RT | 368,839.50 | 2,523,194.22 | 175.79 |
| 0459 | 30+43.47 | 6.97' RT | 368,839.48 | 2,523,191.50 | 175.77 |
| 0460 | 30+51.52 | 5.73' RT | 368,845.51 | 2,523,196.97 | 175.72 |
| 0461 | 30+67.83 | 13.00' RT | 368,850.16 | 2,523,214.22 | 175.78 |
| 0462 | 30+53.64 | 7.43' RT | 368,845.53 | 2,523,199.69 | 175.75 |
| 0463 | 30+57.45 | 10.50' RT | 368,845.55 | 2,523,204.58 | 175.79 |

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

## W NATIONAL AVE & W CLEVELAND AVE NORTHWEST QUADRANT

## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 86 E |

FILE NAME : T:\1232708\CIVIL3D\241015000\SHEETS\021301-CR.DWG
LAYOUT NAME - 02NW
PLOT DATE : 1/9/2026 12:25 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0500 | 33+17.96 | 108.19' RT | 368,934.26 | 2,523,468.33 | 176.70 |
| 0501 | 33+05.83 | 93.58' RT | 368,937.92 | 2,523,449.70 | 176.20 |
| 0502 | 33+02.33 | 83.67' RT | 368,943.39 | 2,523,440.73 | 175.68 |
| 0503 | 33+04.10 | 76.45' RT | 368,950.11 | 2,523,437.54 | 175.74 |
| 0504 | 33+02.08 | 71.32' RT | 368,952.82 | 2,523,432.73 | 175.06 |
| 0505 | 33+03.86 | 65.06' RT | 368,958.80 | 2,523,430.16 | 174.97 |
| 0506 | 33+07.91 | 62.37' RT | 368,963.43 | 2,523,431.60 | 175.34 |
| 0507 | 33+05.93 | 60.80' RT | 368,963.40 | 2,523,429.07 | 174.91 |
| 0508 | 33+08.83 | 56.61' RT | 368,968.48 | 2,523,428.68 | 174.74 |
| 0509 | 33+13.96 | 51.18' RT | 368,975.93 | 2,523,429.23 | 174.50 |
| 0510 | 33+18.55 | 50.57' RT | 368,979.31 | 2,523,432.40 | 174.94 |
| 0511 | 33+20.42 | 46.15' RT | 368,983.92 | 2,523,431.06 | 174.54 |
| 0512 | 33+31.40 | 40.63' RT | 368,995.13 | 2,523,436.09 | 174.61 |
| 0513 | 33+36.07 | 41.78' RT | 368,997.19 | 2,523,440.43 | 175.05 |
| 0514 | 33+40.88 | 38.19' RT | 369,003.01 | 2,523,441.89 | 174.67 |
| 0515 | 33+46.21 | 37.42' RT | 369,006.97 | 2,523,445.54 | 174.70 |
| 0516 | 33+32.25 | 42.98' RT | 368,993.84 | 2,523,438.23 | 174.56 |
| 0517 | 33+38.87 | 43.81' RT | 368,997.38 | 2,523,443.89 | 174.95 |
| 0518 | 33+41.96 | 44.00' RT | 368,999.18 | 2,523,446.40 | 175.13 |
| 0519 | 33+41.96 | 50.50' RT | 368,994.14 | 2,523,450.51 | 175.23 |
| 0520 | 33+38.07 | 50.26' RT | 368,991.87 | 2,523,447.34 | 175.01 |
| 0521 | 33+31.45 | 49.43' RT | 368,988.33 | 2,523,441.68 | 174.62 |
| 0522 | 33+21.80 | 48.23' RT | 368,983.17 | 2,523,433.44 | 174.48 |
| 0523 | 33+06.18 | 65.98' RT | 368,959.55 | 2,523,432.54 | 174.89 |
| 0524 | 33+11.46 | 67.58' RT | 368,961.65 | 2,523,437.65 | 175.28 |
| 0525 | 33+15.01 | 60.84' RT | 368,969.11 | 2,523,436.14 | 175.38 |

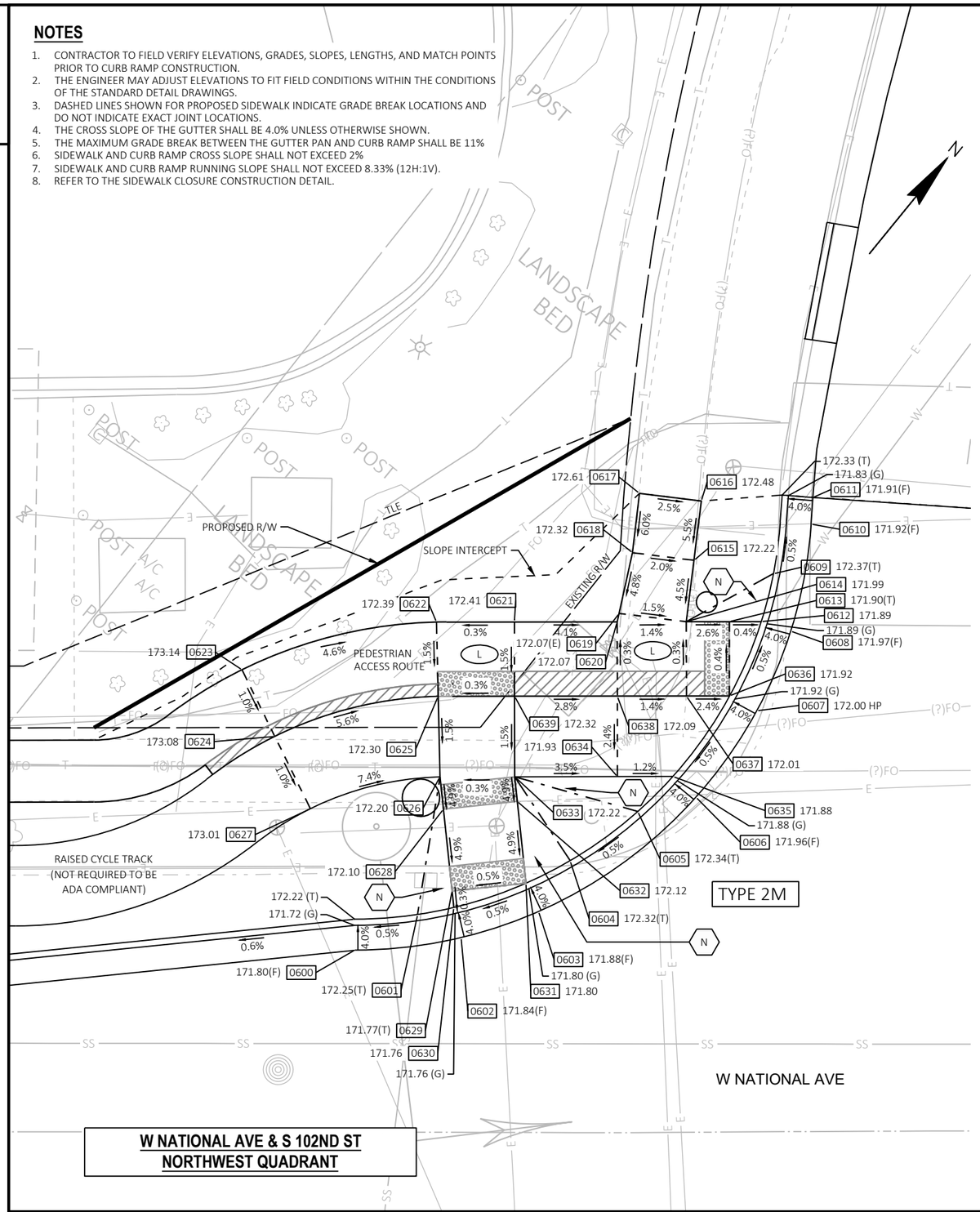
| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0526 | 33+20.82 | 55.92' RT | 368,976.60 | 2,523,437.54 | 175.32 |
| 0527 | 33+28.16 | 54.00' RT | 368,982.72 | 2,523,442.02 | 175.14 |
| 0528 | 33+41.96 | 54.00' RT | 368,991.43 | 2,523,452.72 | 175.28 |
| 0529 | 33+41.96 | 59.00' RT | 368,987.55 | 2,523,455.88 | 175.36 |
| 0530 | 33+28.16 | 59.00' RT | 368,978.84 | 2,523,445.18 | 175.22 |
| 0531 | 33+23.27 | 60.28' RT | 368,974.76 | 2,523,442.19 | 175.39 |
| 0532 | 33+18.91 | 63.97' RT | 368,969.15 | 2,523,441.14 | 175.45 |
| 0533 | 33+16.25 | 69.02' RT | 368,963.55 | 2,523,442.27 | 175.36 |
| 0534 | 33+14.55 | 74.78' RT | 368,958.01 | 2,523,444.58 | 175.44 |
| 0535 | 33+17.75 | 89.90' RT | 368,948.31 | 2,523,456.62 | 176.51 |
| 0536 | 33+25.70 | 99.01' RT | 368,946.27 | 2,523,468.53 | 177.33 |
| 0537 | 33+29.69 | 102.03' RT | 368,946.44 | 2,523,473.53 | 177.47 |
| 0538 | 33+26.66 | 106.01' RT | 368,941.44 | 2,523,473.70 | 177.40 |
| 0539 | 33+22.68 | 102.99' RT | 368,941.27 | 2,523,468.70 | 177.26 |
| 0540 | 33+13.40 | 92.36' RT | 368,943.65 | 2,523,454.80 | 176.43 |
| 0541 | 33+09.75 | 73.33' RT | 368,956.11 | 2,523,439.95 | 175.36 |
| 0542 | 33+04.54 | 71.75' RT | 368,954.04 | 2,523,434.92 | 174.98 |
| 0543 | 32+71.65 | 76.77' RT | 368,929.38 | 2,523,412.58 | 176.01 |
| 0544 | 32+71.74 | 70.56' RT | 368,934.25 | 2,523,408.73 | 175.82 |
| 0545 | 32+73.46 | 70.82' RT | 368,935.13 | 2,523,410.23 | 175.84 |
| 0546 | 32+74.30 | 69.29' RT | 368,936.84 | 2,523,409.91 | 175.73 |
| 0547 | 32+76.30 | 62.48' RT | 368,943.39 | 2,523,407.16 | 175.64 |
| 0548 | 32+76.66 | 56.61' RT | 368,948.17 | 2,523,403.73 | 175.55 |
| 0549 | 32+79.43 | 45.22' RT | 368,958.75 | 2,523,398.68 | 175.39 |
| 0550 | 32+77.55 | 44.52' RT | 368,958.11 | 2,523,396.79 | 175.31 |
| 0551 | 32+79.64 | 44.64' RT | 368,959.34 | 2,523,398.49 | 175.38 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0552 | 32+77.38 | 43.14' RT | 368,959.06 | 2,523,395.78 | 175.14 |
| 0553 | 32+79.64 | 36.00' RT | 368,966.04 | 2,523,393.03 | 174.99 |
| 0554 | 32+76.14 | 42.50' RT | 368,958.79 | 2,523,394.42 | 174.97 |
| 0555 | 32+72.14 | 42.50' RT | 368,956.26 | 2,523,391.32 | 174.77 |
| 0556 | 32+56.93 | 36.00' RT | 368,951.69 | 2,523,375.42 | 175.09 |
| 0557 | 32+47.60 | 36.00' RT | 368,945.80 | 2,523,368.18 | 175.12 |
| 0558 | 32+39.27 | 42.50' RT | 368,935.50 | 2,523,365.83 | 175.06 |
| 0559 | 32+18.00 | 36.00' RT | 368,927.10 | 2,523,345.23 | 175.16 |
| 0560 | 32+37.85 | 43.52' RT | 368,933.81 | 2,523,365.37 | 175.19 |
| 0561 | 32+38.36 | 45.19' RT | 368,932.84 | 2,523,366.83 | 175.32 |
| 0562 | 32+35.33 | 49.17' RT | 368,927.84 | 2,523,366.99 | 175.46 |
| 0563 | 32+46.36 | 57.55' RT | 368,928.31 | 2,523,380.83 | 175.64 |
| 0564 | 32+54.27 | 63.57' RT | 368,928.64 | 2,523,390.77 | 175.76 |
| 0565 | 32+57.60 | 59.18' RT | 368,934.14 | 2,523,390.58 | 175.63 |
| 0566 | 32+62.95 | 59.19' RT | 368,937.51 | 2,523,394.73 | 175.73 |
| 0567 | 32+70.25 | 61.40' RT | 368,940.41 | 2,523,401.79 | 175.60 |
| 0568 | 32+72.44 | 62.06' RT | 368,941.28 | 2,523,403.90 | 175.58 |
| 0569 | 32+73.80 | 62.47' RT | 368,941.82 | 2,523,405.21 | 175.56 |
| 0570 | 32+74.18 | 56.31' RT | 368,946.83 | 2,523,401.62 | 175.47 |
| 0571 | 32+71.99 | 55.65' RT | 368,945.96 | 2,523,399.50 | 175.50 |
| 0572 | 32+63.58 | 48.59' RT | 368,946.13 | 2,523,388.53 | 175.61 |
| 0573 | 32+56.93 | 43.00' RT | 368,946.26 | 2,523,379.84 | 174.90 |
| 0574 | 32+47.60 | 43.00' RT | 368,940.37 | 2,523,372.60 | 174.99 |
| 0575 | 32+49.98 | 45.00' RT | 368,940.32 | 2,523,375.71 | 175.24 |
| 0576 | 32+59.72 | 53.19' RT | 368,940.13 | 2,523,388.44 | 175.70 |
| 0577 | 32+49.69 | 53.17' RT | 368,933.80 | 2,523,380.65 | 175.50 |

2

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.




**W NATIONAL AVE & S 102ND ST**
**NORTHWEST QUADRANT**

## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

POINT TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
|---|---|---|---|---|---|
| 0600 | 38+91.71 | -42.00' LT | 369,413.03 | 2,523,818.36 | 171.80 |
| 0601 | 38+96.78 | -44.88' LT | 369,418.47 | 2,523,820.48 | 172.25 |
| 0602 | 39+00.30 | -43.01' LT | 369,419.24 | 2,523,824.38 | 171.84 |
| 0603 | 39+06.55 | -45.11' LT | 369,424.81 | 2,523,827.90 | 171.88 |
| 0604 | 39+09.11 | -49.21' LT | 369,429.61 | 2,523,827.30 | 172.32 |
| 0605 | 39+14.59 | -53.18' LT | 369,436.15 | 2,523,829.04 | 172.34 |
| 0606 | 39+19.28 | -54.33' LT | 369,440.01 | 2,523,831.95 | 171.96 |
| 0607 | 39+24.20 | -61.30' LT | 369,448.52 | 2,523,831.36 | 172.00 |
| 0608 | 39+26.95 | -67.74' LT | 369,455.24 | 2,523,829.43 | 171.97 |
| 0609 | 39+25.56 | -72.37' LT | 369,457.96 | 2,523,825.43 | 172.37 |
| 0610 | 39+28.61 | -76.37' LT | 369,462.99 | 2,523,825.27 | 171.92 |
| 0611 | 39+28.78 | -78.53' LT | 369,464.76 | 2,523,824.03 | 171.91 |
| 0612 | 39+24.57 | -68.50' LT | 369,454.33 | 2,523,827.10 | 171.89 |
| 0613 | 39+22.01 | -68.50' LT | 369,452.71 | 2,523,825.11 | 171.90 |
| 0614 | 39+18.53 | -68.50' LT | 369,450.52 | 2,523,822.42 | 171.99 |
| 0615 | 39+19.15 | -73.46' LT | 369,454.76 | 2,523,819.77 | 172.22 |
| 0616 | 39+19.75 | -78.25' LT | 369,458.85 | 2,523,817.21 | 172.48 |
| 0617 | 39+14.75 | -78.88' LT | 369,456.18 | 2,523,812.94 | 172.61 |
| 0618 | 39+14.19 | -74.08' LT | 369,452.11 | 2,523,815.53 | 172.32 |
| 0619 | 39+13.10 | -69.18' LT | 369,447.61 | 2,523,817.78 | 172.07 |
| 0620 | 39+12.94 | -68.50' LT | 369,446.99 | 2,523,818.09 | 172.07 |
| 0621 | 39+04.64 | -68.50' LT | 369,441.75 | 2,523,811.65 | 172.41 |
| 0622 | 38+98.34 | -68.49' LT | 369,437.76 | 2,523,806.77 | 172.39 |
| 0623 | 38+82.63 | -64.66' LT | 369,424.87 | 2,523,797.00 | 173.14 |
| 0624 | 38+85.27 | -59.28' LT | 369,422.36 | 2,523,802.45 | 173.08 |
| 0625 | 38+98.47 | -62.50' LT | 369,433.20 | 2,523,810.66 | 172.30 |
| 0626 | 38+98.61 | -55.99' LT | 369,428.24 | 2,523,814.87 | 172.20 |
| 0627 | 38+88.13 | -53.44' LT | 369,419.65 | 2,523,808.36 | 173.01 |
| 0628 | 38+98.89 | -53.38' LT | 369,426.39 | 2,523,816.73 | 172.10 |
| 0629 | 38+99.58 | -46.77' LT | 369,421.70 | 2,523,821.45 | 171.77 |
| 0630 | 38+99.72 | -45.44' LT | 369,420.76 | 2,523,822.39 | 171.76 |
| 0631 | 39+05.55 | -47.40' LT | 369,425.96 | 2,523,825.68 | 171.80 |
| 0632 | 39+04.85 | -54.01' LT | 369,430.64 | 2,523,820.96 | 172.12 |
| 0633 | 39+04.64 | -56.00' LT | 369,432.06 | 2,523,819.55 | 172.22 |
| 0634 | 39+12.94 | -56.00' LT | 369,437.30 | 2,523,825.98 | 171.93 |
| 0635 | 39+17.42 | -56.00' LT | 369,440.12 | 2,523,829.45 | 171.88 |
| 0636 | 39+22.01 | -62.50' LT | 369,448.06 | 2,523,828.90 | 171.92 |
| 0637 | 39+18.53 | -62.50' LT | 369,445.86 | 2,523,826.21 | 172.01 |
| 0638 | 39+12.94 | -62.50' LT | 369,442.34 | 2,523,821.88 | 172.09 |
| 0639 | 39+04.64 | -62.50' LT | 369,437.10 | 2,523,815.44 | 172.32 |

2

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 88 | E |
|---|---|---|---|---|---|

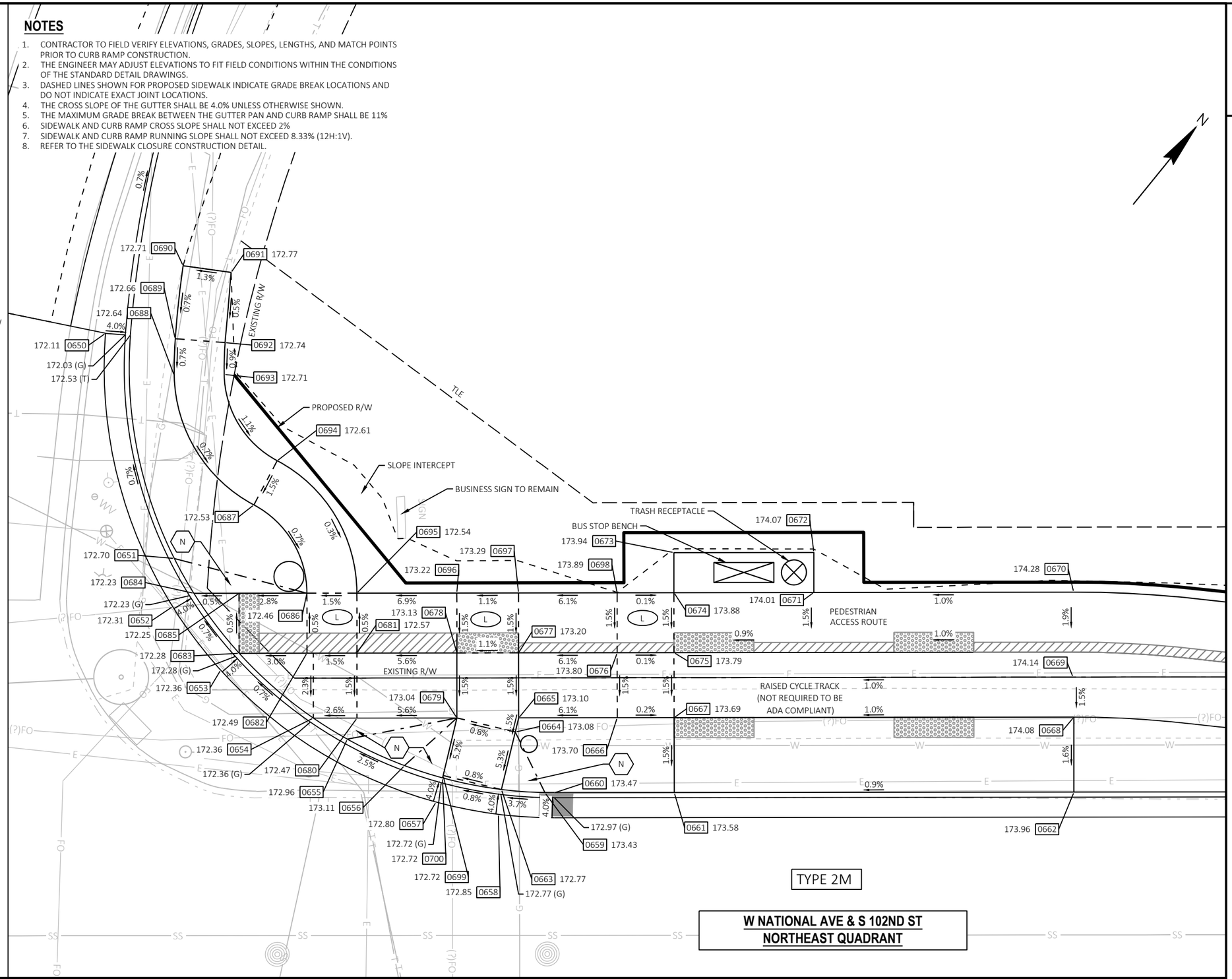
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021301-CR.DWG
LAYOUT NAME - 03NW
PLOT DATE : 1/9/2026 12:26 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT

## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 89 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021301-CR.DWG
LAYOUT NAME - 03NE

PLOT DATE : 1/9/2026 12:26 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0650 | 39+92.88 | -94.51' LT | 369,517.64 | 2,523,863.65 | 172.11 |
| 0651 | 39+99.74 | -71.99' LT | 369,504.50 | 2,523,883.18 | 172.70 |
| 0652 | 39+99.57 | -67.18' LT | 369,500.67 | 2,523,886.09 | 172.31 |
| 0653 | 40+04.36 | -60.82' LT | 369,498.77 | 2,523,893.82 | 172.36 |
| 0654 | 40+13.64 | -56.00' LT | 369,500.88 | 2,523,904.06 | 172.36 |
| 0655 | 40+17.04 | -53.89' LT | 369,501.39 | 2,523,908.03 | 172.96 |
| 0656 | 40+22.75 | -51.23' LT | 369,502.94 | 2,523,914.13 | 173.11 |
| 0657 | 40+25.90 | -47.59' LT | 369,502.10 | 2,523,918.88 | 172.80 |
| 0658 | 40+32.13 | -46.35' LT | 369,505.08 | 2,523,924.49 | 172.85 |
| 0659 | 40+36.80 | -48.51' LT | 369,509.71 | 2,523,926.75 | 173.43 |
| 0660 | 40+37.75 | -48.50' LT | 369,510.29 | 2,523,927.49 | 173.47 |
| 0661 | 40+49.73 | -48.50' LT | 369,517.86 | 2,523,936.78 | 173.58 |
| 0662 | 40+89.73 | -48.50' LT | 369,543.12 | 2,523,967.80 | 173.96 |
| 0663 | 40+32.45 | -48.83' LT | 369,507.20 | 2,523,923.17 | 172.77 |
| 0664 | 40+33.84 | -54.59' LT | 369,512.55 | 2,523,920.62 | 173.08 |
| 0665 | 40+34.18 | -56.00' LT | 369,513.86 | 2,523,919.99 | 173.10 |
| 0666 | 40+44.05 | -56.00' LT | 369,520.09 | 2,523,927.64 | 173.70 |
| 0667 | 40+49.73 | -56.00' LT | 369,523.68 | 2,523,932.05 | 173.69 |
| 0668 | 40+89.73 | -56.00' LT | 369,548.94 | 2,523,963.06 | 174.08 |
| 0669 | 40+89.66 | -60.00' LT | 369,551.99 | 2,523,960.48 | 174.14 |
| 0670 | 40+89.73 | -68.50' LT | 369,558.63 | 2,523,955.17 | 174.28 |
| 0671 | 40+63.73 | -68.50' LT | 369,542.21 | 2,523,935.01 | 174.01 |
| 0672 | 40+63.73 | -72.50' LT | 369,545.31 | 2,523,932.48 | 174.07 |
| 0673 | 40+49.73 | -72.50' LT | 369,536.47 | 2,523,921.63 | 173.94 |
| 0674 | 40+49.73 | -68.50' LT | 369,533.37 | 2,523,924.15 | 173.88 |
| 0675 | 40+49.73 | -62.50' LT | 369,528.72 | 2,523,927.94 | 173.79 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0676 | 40+44.05 | -62.50' LT | 369,525.13 | 2,523,923.53 | 173.80 |
| 0677 | 40+34.18 | -62.50' LT | 369,518.90 | 2,523,915.88 | 173.20 |
| 0678 | 40+28.01 | -62.50' LT | 369,515.00 | 2,523,911.10 | 173.13 |
| 0679 | 40+28.01 | -56.00' LT | 369,509.96 | 2,523,915.20 | 173.04 |
| 0680 | 40+18.01 | -56.00' LT | 369,503.65 | 2,523,907.45 | 172.47 |
| 0681 | 40+18.01 | -62.50' LT | 369,508.69 | 2,523,903.34 | 172.57 |
| 0682 | 40+13.01 | -62.50' LT | 369,505.53 | 2,523,899.47 | 172.49 |
| 0683 | 40+06.22 | -62.50' LT | 369,501.24 | 2,523,894.20 | 172.28 |
| 0684 | 40+01.69 | -68.50' LT | 369,503.03 | 2,523,886.90 | 172.23 |
| 0685 | 40+06.22 | -68.50' LT | 369,505.89 | 2,523,890.41 | 172.25 |
| 0686 | 40+13.01 | -68.50' LT | 369,510.18 | 2,523,895.68 | 172.46 |
| 0687 | 40+07.71 | -77.33' LT | 369,513.68 | 2,523,885.99 | 172.53 |
| 0688 | 39+99.75 | -90.29' LT | 369,518.71 | 2,523,871.64 | 172.64 |
| 0689 | 39+99.86 | -93.96' LT | 369,521.62 | 2,523,869.41 | 172.66 |
| 0690 | 40+00.66 | -101.26' LT | 369,527.79 | 2,523,865.41 | 172.71 |
| 0691 | 40+05.47 | -100.59' LT | 369,530.30 | 2,523,869.57 | 172.77 |
| 0692 | 40+04.85 | -93.57' LT | 369,524.47 | 2,523,873.52 | 172.74 |
| 0693 | 40+04.75 | -90.38' LT | 369,521.93 | 2,523,875.46 | 172.71 |
| 0694 | 40+10.05 | -81.74' LT | 369,518.58 | 2,523,885.02 | 172.61 |
| 0695 | 40+18.01 | -68.50' LT | 369,513.34 | 2,523,899.55 | 172.54 |
| 0696 | 40+28.01 | -68.50' LT | 369,519.65 | 2,523,907.31 | 173.22 |
| 0697 | 40+34.18 | -68.50' LT | 369,523.55 | 2,523,912.10 | 173.29 |
| 0698 | 40+44.05 | -68.50' LT | 369,529.78 | 2,523,919.74 | 173.89 |
| 0699 | 40+26.61 | -50.24' LT | 369,504.62 | 2,523,917.75 | 172.72 |
| 0700 | 40+26.56 | -50.00' LT | 369,504.39 | 2,523,917.86 | 172.72 |

2

## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

## RADIAL WARNING FIELD PANEL LAYOUT TABLE

| QUADRANT | BACK OF CURB RADIUS (FT) | LANDING LENGTH 'XR' (FT) | RADIAL LONG CHORD (FT) |
|---|---|---|---|
| SOUTHWEST | 36.5' | 7.41' | 6.23' |

**W NATIONAL AVE & S 102ND ST ISLANDS**

TYPE 5

TYPE 5M

W NATIONAL AVE

NATIONAL AVE R/L

S 102ND ST

FRONTAGE RD

39+00

BUS STOP

SHARED USE PATH (PEDESTRAIN ACCESS ROUTE)

RAISED CYCLE TRACK (NOT REQUIRED TO BE ADA COMPLIANT)

6" CONCRETE CURB PEDESTRAIN

SLOPE INTERCEPT

## NOTES

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6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

2

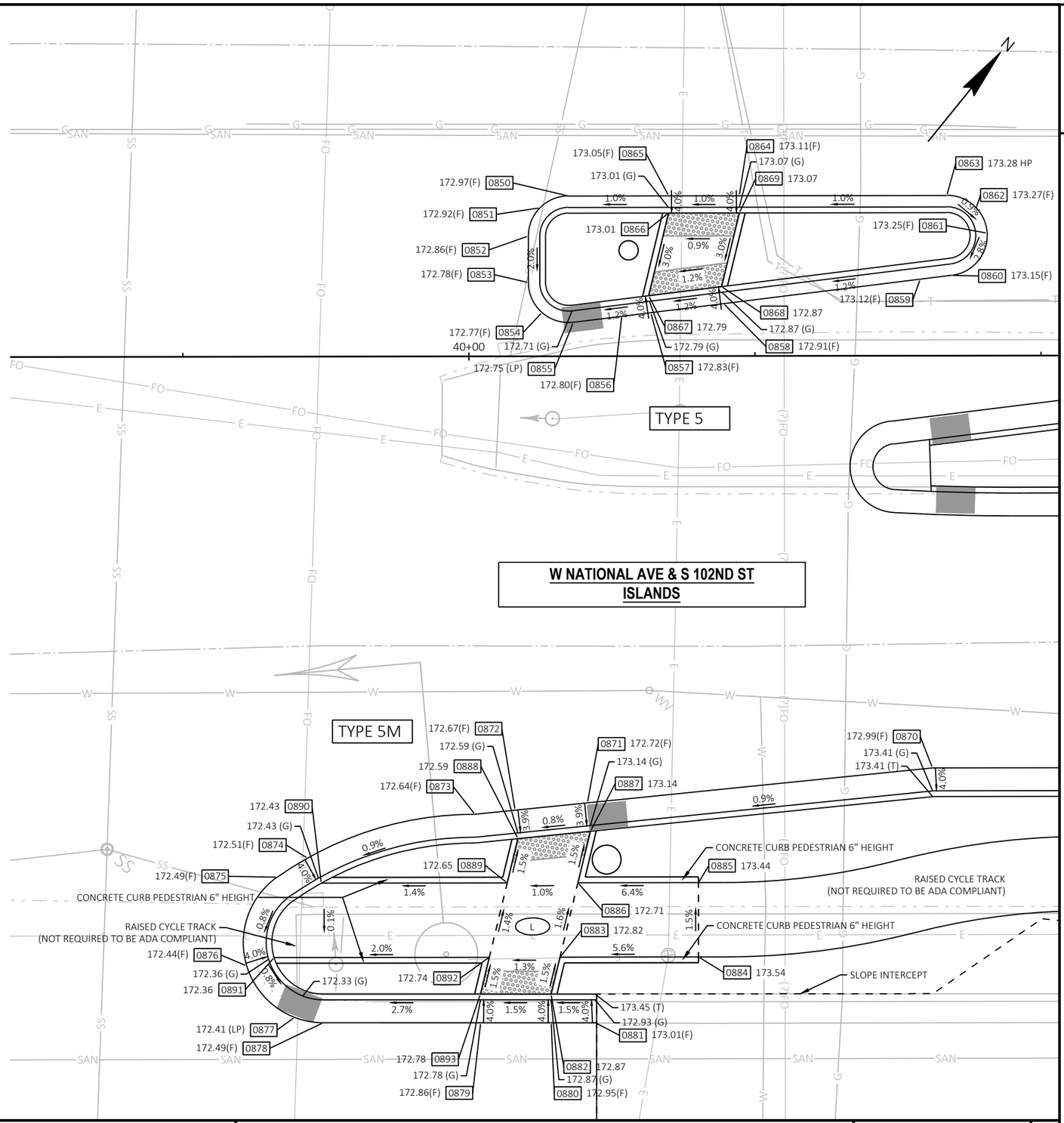
| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0750 | 39+11.83 | 14.00' RT | 369,382.32 | 2,523,869.33 | 172.29 |
| 0751 | 39+21.17 | 14.00' RT | 369,388.21 | 2,523,876.56 | 172.33 |
| 0752 | 39+23.64 | 12.97' RT | 369,390.57 | 2,523,877.83 | 172.31 |
| 0753 | 39+24.67 | 10.50' RT | 369,393.14 | 2,523,877.07 | 172.26 |
| 0754 | 39+24.67 | 6.14' RT | 369,396.52 | 2,523,874.32 | 172.18 |
| 0755 | 39+20.74 | 2.67' RT | 369,396.73 | 2,523,869.08 | 172.08 |
| 0756 | 39+13.88 | 3.51' RT | 369,391.75 | 2,523,864.29 | 172.05 |
| 0757 | 39+10.90 | 3.88' RT | 369,389.58 | 2,523,862.21 | 172.07 |
| 0758 | 39+04.95 | 4.61' RT | 369,385.25 | 2,523,858.05 | 172.10 |
| 0759 | 38+92.34 | 6.16' RT | 369,376.09 | 2,523,849.25 | 172.03 |
| 0760 | 38+85.25 | 7.03' RT | 369,370.94 | 2,523,844.31 | 172.07 |
| 0761 | 38+82.18 | 10.72' RT | 369,366.14 | 2,523,844.26 | 172.16 |
| 0762 | 38+85.68 | 14.00' RT | 369,365.80 | 2,523,849.04 | 172.24 |
| 0763 | 38+92.12 | 14.00' RT | 369,369.87 | 2,523,854.04 | 172.27 |
| 0764 | 39+00.31 | 14.00' RT | 369,375.04 | 2,523,860.39 | 172.23 |
| 0765 | 39+05.80 | 14.00' RT | 369,378.51 | 2,523,864.65 | 172.26 |
| 0766 | 39+05.80 | 12.50' RT | 369,379.67 | 2,523,863.70 | 172.22 |
| 0767 | 39+05.59 | 10.50' RT | 369,381.09 | 2,523,862.28 | 172.16 |
| 0768 | 39+05.34 | 8.09' RT | 369,382.80 | 2,523,860.55 | 172.11 |
| 0769 | 39+05.13 | 6.10' RT | 369,384.21 | 2,523,859.14 | 172.06 |
| 0770 | 39+11.08 | 5.37' RT | 369,388.54 | 2,523,863.29 | 172.03 |
| 0771 | 39+11.29 | 7.35' RT | 369,387.13 | 2,523,864.71 | 172.08 |
| 0772 | 39+11.62 | 10.50' RT | 369,384.90 | 2,523,866.95 | 172.19 |
| 0773 | 39+11.83 | 12.50' RT | 369,383.48 | 2,523,868.38 | 172.25 |
| 0774 | 39+05.47 | 36.00' RT | 369,361.24 | 2,523,878.28 | 172.27 |
| 0775 | 39+06.47 | 36.01' RT | 369,361.86 | 2,523,879.07 | 172.27 |
| 0776 | 39+08.75 | 36.14' RT | 369,363.21 | 2,523,880.92 | 172.28 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0777 | 39+15.32 | 37.27' RT | 369,366.48 | 2,523,886.72 | 172.30 |
| 0778 | 39+23.20 | 40.26' RT | 369,369.13 | 2,523,894.73 | 172.26 |
| 0779 | 39+27.63 | 45.03' RT | 369,368.24 | 2,523,901.17 | 172.22 |
| 0780 | 39+26.88 | 53.85' RT | 369,360.92 | 2,523,906.16 | 172.18 |
| 0781 | 39+24.30 | 56.53' RT | 369,357.22 | 2,523,905.85 | 172.16 |
| 0782 | 39+18.88 | 58.23' RT | 369,352.48 | 2,523,902.72 | 172.32 |
| 0783 | 39+18.24 | 58.23' RT | 369,352.07 | 2,523,902.22 | 172.34 |
| 0784 | 39+16.29 | 58.23' RT | 369,350.84 | 2,523,900.71 | 172.39 |
| 0785 | 39+10.34 | 58.23' RT | 369,347.08 | 2,523,896.10 | 172.47 |
| 0786 | 39+06.34 | 58.23' RT | 369,344.56 | 2,523,893.00 | 172.51 |
| 0787 | 39+10.34 | 55.73' RT | 369,349.02 | 2,523,894.52 | 172.39 |
| 0788 | 39+10.16 | 54.00' RT | 369,350.25 | 2,523,893.29 | 172.51 |
| 0789 | 39+10.13 | 53.73' RT | 369,350.44 | 2,523,893.09 | 172.53 |
| 0790 | 39+00.00 | 54.00' RT | 369,343.83 | 2,523,885.41 | 173.18 |
| 0791 | 38+88.67 | 54.00' RT | 369,336.68 | 2,523,876.63 | 172.89 |
| 0792 | 38+88.67 | 46.00' RT | 369,342.88 | 2,523,871.57 | 172.77 |
| 0793 | 39+00.00 | 46.00' RT | 369,350.03 | 2,523,880.36 | 173.06 |
| 0794 | 39+09.32 | 46.00' RT | 369,355.92 | 2,523,887.58 | 172.41 |
| 0795 | 39+08.54 | 38.63' RT | 369,361.14 | 2,523,882.33 | 172.20 |
| 0796 | 39+14.69 | 39.68' RT | 369,364.21 | 2,523,887.76 | 172.22 |
| 0797 | 39+15.28 | 45.37' RT | 369,360.17 | 2,523,891.81 | 172.38 |
| 0798 | 39+15.35 | 46.00' RT | 369,359.73 | 2,523,892.26 | 172.39 |
| 0799 | 39+25.33 | 46.00' RT | 369,366.03 | 2,523,900.00 | 172.14 |
| 0800 | 39+24.78 | 52.50' RT | 369,360.64 | 2,523,903.67 | 172.10 |
| 0801 | 39+16.03 | 52.50' RT | 369,355.12 | 2,523,896.89 | 172.47 |
| 0802 | 39+16.37 | 55.73' RT | 369,352.83 | 2,523,899.19 | 172.31 |
| 803 | 38+88.67 | 38.50' RT | 369,348.69 | 2,523,866.84 | 172.66 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 804 | 38+48.67 | 38.50' RT | 369,323.43 | 2,523,835.82 | 172.70 |
| 805 | 38+48.67 | 46.00' RT | 369,317.62 | 2,523,840.56 | 172.81 |
| 806 | 38+48.67 | 54.00' RT | 369,311.42 | 2,523,845.61 | 172.93 |
| 807 | 38+38.67 | 45.16' RT | 369,311.96 | 2,523,832.27 | 173.30 |
| 808 | 38+38.67 | 53.26' RT | 369,305.67 | 2,523,837.39 | 173.42 |
| 809 | 38+75.00 | 38.50' RT | 369,340.06 | 2,523,856.24 | 172.66 |
| 810 | 38+75.00 | 46.00' RT | 369,334.25 | 2,523,860.97 | 172.77 |
| 811 | 38+75.00 | 54.00' RT | 369,328.04 | 2,523,866.03 | 172.89 |

## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |




## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 93 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021301-CR.DWG
LAYOUT NAME - 03ISLE
PLOT DATE : 1/9/2026 12:28 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0850 | 40+08.72 | -14.00' LT | 369,465.21 | 2,523,926.77 | 172.97 |
| 0851 | 40+06.23 | -12.97' LT | 369,462.85 | 2,523,925.49 | 172.92 |
| 0852 | 40+05.21 | -10.50' LT | 369,460.28 | 2,523,926.26 | 172.86 |
| 0853 | 40+05.21 | -6.44' LT | 369,457.13 | 2,523,928.82 | 172.78 |
| 0854 | 40+06.39 | -3.82' LT | 369,455.85 | 2,523,931.39 | 172.77 |
| 0855 | 40+09.14 | -2.96' LT | 369,456.92 | 2,523,934.06 | 172.75 |
| 0856 | 40+13.37 | -3.48' LT | 369,460.00 | 2,523,937.02 | 172.80 |
| 0857 | 40+15.90 | -3.80' LT | 369,461.84 | 2,523,938.78 | 172.83 |
| 0858 | 40+22.27 | -4.58' LT | 369,466.46 | 2,523,943.22 | 172.91 |
| 0859 | 40+39.45 | -6.69' LT | 369,478.95 | 2,523,955.21 | 173.12 |
| 0860 | 40+42.22 | -7.03' LT | 369,480.96 | 2,523,957.15 | 173.15 |
| 0861 | 40+45.28 | -10.71' LT | 369,485.75 | 2,523,957.19 | 173.25 |
| 0862 | 40+44.34 | -12.90' LT | 369,486.85 | 2,523,955.09 | 173.27 |
| 0863 | 40+41.79 | -14.00' LT | 369,486.10 | 2,523,952.41 | 173.28 |
| 0864 | 40+23.64 | -14.00' LT | 369,474.64 | 2,523,938.34 | 173.11 |
| 0865 | 40+17.47 | -14.00' LT | 369,470.74 | 2,523,933.55 | 173.05 |
| 0866 | 40+17.47 | -12.50' LT | 369,469.57 | 2,523,934.50 | 173.01 |
| 0867 | 40+15.72 | -5.28' LT | 369,462.87 | 2,523,937.70 | 172.79 |
| 0868 | 40+22.08 | -6.07' LT | 369,467.50 | 2,523,942.14 | 172.87 |
| 0869 | 40+23.64 | -12.50' LT | 369,473.47 | 2,523,939.29 | 173.07 |
| 0870 | 40+40.47 | 36.00' RT | 369,446.49 | 2,523,982.96 | 172.99 |
| 0871 | 40+10.31 | 39.02' RT | 369,425.11 | 2,523,961.48 | 172.72 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0872 | 40+03.98 | 39.65' RT | 369,420.62 | 2,523,956.97 | 172.67 |
| 0873 | 40+00.47 | 40.00' RT | 369,418.13 | 2,523,954.47 | 172.64 |
| 0874 | 39+85.82 | 43.82' RT | 369,405.92 | 2,523,945.52 | 172.51 |
| 0875 | 39+83.18 | 45.48' RT | 369,402.97 | 2,523,944.53 | 172.49 |
| 0876 | 39+80.51 | 53.22' RT | 369,395.28 | 2,523,947.35 | 172.44 |
| 0877 | 39+84.69 | 57.73' RT | 369,394.42 | 2,523,953.43 | 172.41 |
| 0878 | 39+87.21 | 58.20' RT | 369,395.64 | 2,523,955.68 | 172.49 |
| 0879 | 40+00.95 | 58.21' RT | 369,404.31 | 2,523,966.34 | 172.86 |
| 0880 | 40+07.11 | 58.22' RT | 369,408.20 | 2,523,971.12 | 172.95 |
| 0881 | 40+10.96 | 58.22' RT | 369,410.63 | 2,523,974.12 | 173.01 |
| 0882 | 40+07.11 | 55.72' RT | 369,410.14 | 2,523,969.55 | 172.87 |
| 0883 | 40+07.89 | 52.50' RT | 369,413.13 | 2,523,968.12 | 172.82 |
| 0884 | 40+20.00 | 52.50' RT | 369,420.77 | 2,523,977.51 | 173.54 |
| 0885 | 40+20.00 | 46.00' RT | 369,425.81 | 2,523,973.40 | 173.44 |
| 0886 | 40+09.47 | 46.00' RT | 369,419.16 | 2,523,965.24 | 172.71 |
| 0887 | 40+10.56 | 41.49' RT | 369,423.35 | 2,523,963.24 | 173.14 |
| 0888 | 40+04.23 | 42.14' RT | 369,418.85 | 2,523,958.73 | 172.59 |
| 0889 | 40+03.29 | 46.00' RT | 369,415.26 | 2,523,960.45 | 172.65 |
| 0890 | 39+87.04 | 46.00' RT | 369,405.00 | 2,523,947.85 | 172.43 |
| 0891 | 39+82.91 | 52.50' RT | 369,397.35 | 2,523,948.75 | 172.36 |
| 0892 | 40+01.72 | 52.50' RT | 369,409.23 | 2,523,963.33 | 172.74 |
| 0893 | 40+00.94 | 55.71' RT | 369,406.24 | 2,523,964.76 | 172.78 |

2

## LEGEND

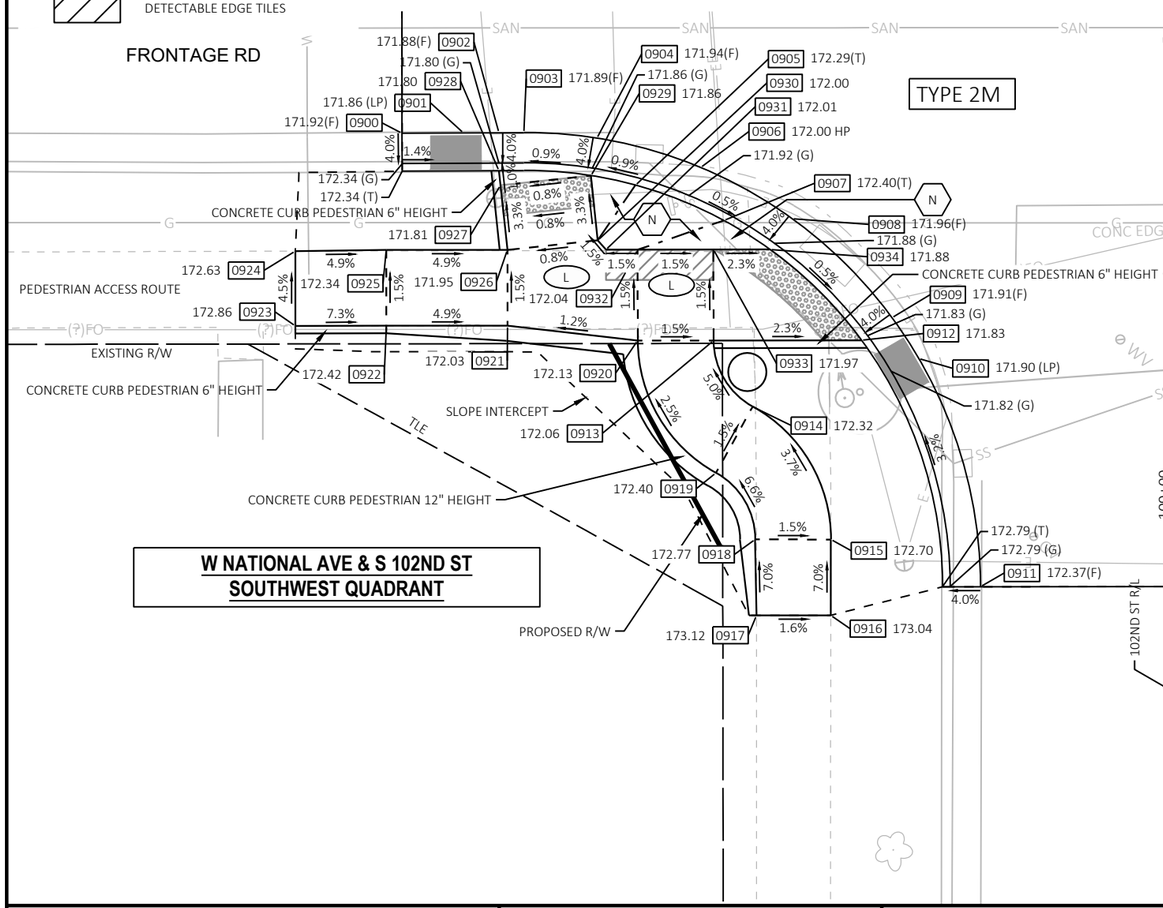
| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

## RADIAL WARNING FIELD PANEL LAYOUT TABLE

| QUADRANT | BACK OF CURB RADIUS (FT) | LANDING LENGTH 'XR' (FT) | RADIAL LONG CHORD (FT) |
|---|---|---|---|
| SOUTHWEST | 27.5' | 9.75' | 8.51' |




## TECHNICAL INFEASIBILITY NOTES:

1. UPPER RAMP LENGTH LIMITED TO 15-FEET PER FDM 11-46-10.5.1.1
2. EXISTING SIDEWALK CROSS SLOPE EXCEEDS 2.1% AT MATCH POINT. TRANSITION SIDEWALK CROSS SLOPE FROM 1.5% TO EXISTING SLOPE AT MATCH POINT.

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 95 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021301-CR.DWG
LAYOUT NAME - 03S

PLOT DATE : 1/9/2026 12:28 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0900 | 39+06.35 | 76.11' RT | 369,330.70 | 2,523,904.29 | 171.92 |
| 0901 | 39+10.39 | 76.09' RT | 369,333.26 | 2,523,907.42 | 171.86 |
| 0902 | 39+12.73 | 76.09' RT | 369,334.74 | 2,523,909.23 | 171.88 |
| 0903 | 39+14.38 | 76.08' RT | 369,335.79 | 2,523,910.51 | 171.89 |
| 0904 | 39+19.20 | 76.46' RT | 369,338.54 | 2,523,914.48 | 171.94 |
| 0905 | 39+21.74 | 79.56' RT | 369,337.74 | 2,523,918.41 | 172.29 |
| 0906 | 39+26.04 | 78.40' RT | 369,341.35 | 2,523,921.01 | 172.00 |
| 0907 | 39+27.56 | 81.90' RT | 369,339.60 | 2,523,924.40 | 172.40 |
| 0908 | 39+32.06 | 81.78' RT | 369,342.53 | 2,523,927.82 | 171.96 |
| 0909 | 39+38.65 | 88.33' RT | 369,341.62 | 2,523,937.06 | 171.91 |
| 0910 | 39+40.41 | 91.02' RT | 369,340.65 | 2,523,940.12 | 171.90 |
| 0911 | 39+44.47 | 106.08' RT | 369,331.53 | 2,523,952.78 | 172.37 |
| 0912 | 39+36.64 | 89.81' RT | 369,339.20 | 2,523,936.43 | 171.83 |
| 0913 | 39+26.88 | 89.81' RT | 369,333.04 | 2,523,928.87 | 172.06 |
| 0914 | 39+29.46 | 94.18' RT | 369,331.28 | 2,523,933.62 | 172.32 |
| 0915 | 39+34.60 | 102.95' RT | 369,327.73 | 2,523,943.15 | 172.70 |
| 0916 | 39+34.59 | 107.95' RT | 369,323.85 | 2,523,946.30 | 173.04 |
| 0917 | 39+29.69 | 107.94' RT | 369,320.75 | 2,523,942.49 | 173.12 |
| 0918 | 39+29.60 | 102.94' RT | 369,324.58 | 2,523,939.27 | 172.77 |
| 0919 | 39+27.03 | 98.55' RT | 369,326.35 | 2,523,934.50 | 172.40 |
| 0920 | 39+21.88 | 89.81' RT | 369,329.88 | 2,523,924.99 | 172.13 |
| 0921 | 39+13.29 | 88.81' RT | 369,325.23 | 2,523,917.69 | 172.03 |
| 0922 | 39+05.29 | 88.81' RT | 369,320.18 | 2,523,911.49 | 172.42 |
| 0923 | 38+99.29 | 88.81' RT | 369,316.39 | 2,523,906.84 | 172.86 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0924 | 38+99.29 | 83.87' RT | 369,320.22 | 2,523,903.73 | 172.63 |
| 0925 | 39+05.29 | 83.81' RT | 369,324.06 | 2,523,908.34 | 172.34 |
| 0926 | 39+13.29 | 83.81' RT | 369,329.11 | 2,523,914.54 | 171.95 |
| 0927 | 39+12.84 | 79.55' RT | 369,332.12 | 2,523,911.50 | 171.81 |
| 0928 | 39+12.74 | 78.59' RT | 369,332.81 | 2,523,910.81 | 171.80 |
| 0929 | 39+18.81 | 78.93' RT | 369,336.38 | 2,523,915.73 | 171.86 |
| 0930 | 39+19.25 | 83.18' RT | 369,333.36 | 2,523,918.77 | 172.00 |
| 0931 | 39+19.79 | 83.81' RT | 369,333.21 | 2,523,919.58 | 172.01 |
| 0932 | 39+21.88 | 83.81' RT | 369,334.54 | 2,523,921.20 | 172.04 |
| 0933 | 39+26.88 | 83.81' RT | 369,337.69 | 2,523,925.08 | 171.97 |
| 0934 | 39+30.60 | 83.81' RT | 369,340.04 | 2,523,927.96 | 171.88 |
| 0935 | 39+70.47 | 106.08' RT | 369,347.95 | 2,523,972.94 | 172.42 |
| 0936 | 39+70.47 | 99.11' RT | 369,353.35 | 2,523,968.54 | 172.35 |
| 0937 | 39+71.71 | 91.66' RT | 369,359.91 | 2,523,964.79 | 172.09 |
| 0938 | 39+72.97 | 88.68' RT | 369,363.02 | 2,523,963.89 | 172.10 |
| 0939 | 39+78.16 | 81.95' RT | 369,371.52 | 2,523,963.66 | 172.14 |
| 0940 | 39+82.20 | 81.98' RT | 369,374.04 | 2,523,966.82 | 172.50 |
| 0941 | 39+92.35 | 78.64' RT | 369,383.04 | 2,523,972.58 | 172.64 |
| 0942 | 39+93.33 | 76.11' RT | 369,385.62 | 2,523,971.74 | 172.23 |
| 0943 | 39+95.38 | 76.10' RT | 369,386.93 | 2,523,973.32 | 172.24 |
| 0944 | 40+00.53 | 76.07' RT | 369,390.20 | 2,523,977.29 | 172.26 |
| 0945 | 40+01.56 | 76.06' RT | 369,390.86 | 2,523,978.09 | 172.25 |
| 0946 | 40+04.15 | 76.04' RT | 369,392.51 | 2,523,980.08 | 172.22 |
| 0947 | 40+11.07 | 76.00' RT | 369,396.91 | 2,523,985.43 | 172.42 |

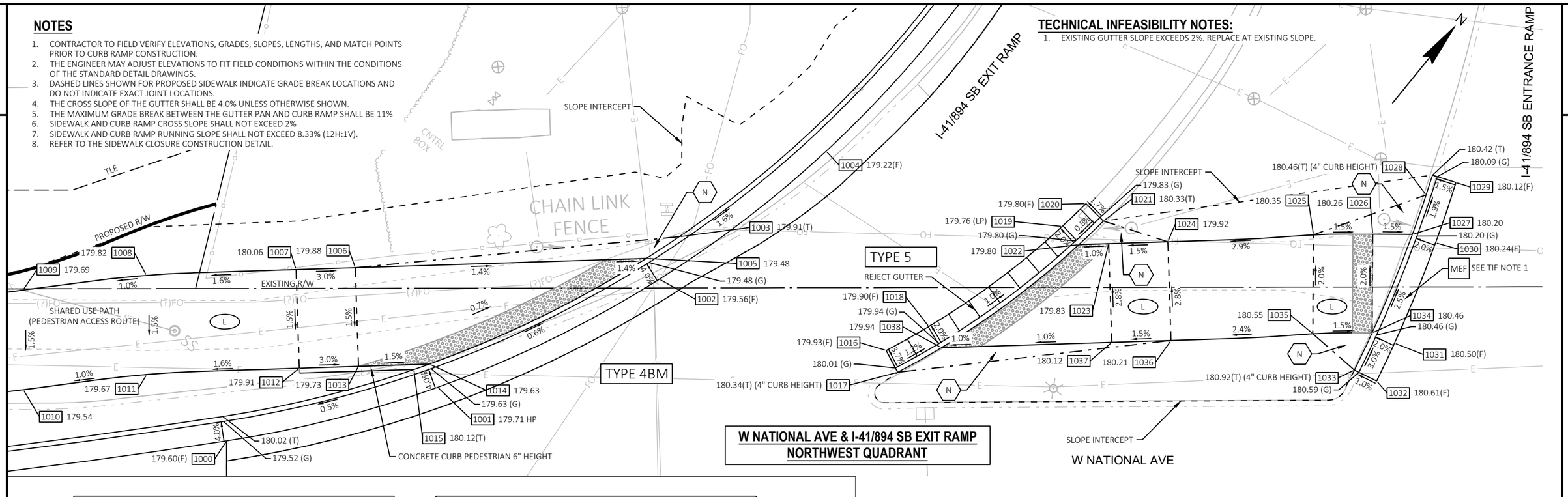
| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 0948 | 40+01.57 | 78.56' RT | 369,388.93 | 2,523,979.68 | 172.17 |
| 0949 | 40+01.22 | 80.01' RT | 369,387.58 | 2,523,980.32 | 172.19 |
| 0950 | 40+00.30 | 83.81' RT | 369,384.06 | 2,523,982.01 | 172.47 |
| 0951 | 40+09.27 | 83.81' RT | 369,389.72 | 2,523,988.97 | 173.02 |
| 0952 | 40+14.27 | 83.85' RT | 369,392.85 | 2,523,992.86 | 173.33 |
| 0953 | 40+14.27 | 88.77' RT | 369,389.03 | 2,523,995.97 | 173.77 |
| 0954 | 40+09.27 | 88.81' RT | 369,385.84 | 2,523,992.12 | 173.33 |
| 0955 | 40+00.30 | 88.81' RT | 369,380.18 | 2,523,985.17 | 172.54 |
| 0956 | 39+91.38 | 88.81' RT | 369,374.54 | 2,523,978.25 | 172.44 |
| 0957 | 39+90.26 | 88.81' RT | 369,373.83 | 2,523,977.38 | 172.43 |
| 0958 | 39+89.00 | 91.77' RT | 369,370.75 | 2,523,978.27 | 172.39 |
| 0959 | 39+86.27 | 98.19' RT | 369,364.04 | 2,523,980.20 | 172.91 |
| 0960 | 39+85.47 | 102.07' RT | 369,360.53 | 2,523,982.03 | 173.17 |
| 0961 | 39+80.47 | 102.04' RT | 369,357.40 | 2,523,978.14 | 173.13 |
| 0962 | 39+81.66 | 96.23' RT | 369,362.66 | 2,523,975.40 | 172.84 |
| 0963 | 39+84.40 | 89.81' RT | 369,369.36 | 2,523,973.46 | 172.32 |
| 0964 | 39+79.82 | 89.81' RT | 369,366.47 | 2,523,969.92 | 172.09 |
| 0965 | 39+75.20 | 89.81' RT | 369,363.55 | 2,523,966.33 | 172.02 |
| 0966 | 39+79.82 | 83.81' RT | 369,371.12 | 2,523,966.13 | 172.06 |
| 0967 | 39+84.40 | 83.81' RT | 369,374.01 | 2,523,969.68 | 172.29 |
| 0968 | 39+91.38 | 83.81' RT | 369,378.42 | 2,523,975.09 | 172.40 |
| 0969 | 39+93.24 | 83.81' RT | 369,379.59 | 2,523,976.53 | 172.42 |
| 0970 | 39+94.47 | 82.40' RT | 369,381.47 | 2,523,976.60 | 172.43 |
| 0971 | 39+95.39 | 78.60' RT | 369,385.00 | 2,523,974.91 | 172.16 |

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

## TECHNICAL INFEASIBILITY NOTES:

1. EXISTING GUTTER SLOPE EXCEEDS 2%. REPLACE AT EXISTING SLOPE.




**W NATIONAL AVE & I-41/894 SB EXIT RAMP**
**NORTHWEST QUADRANT**

### POINT TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
|---|---|---|---|---|---|
| 1000 | 47+45.57 | -44.57' LT | 369,954.23 | 2,524,478.81 | 179.60 |
| 1001 | 47+66.97 | -49.97' LT | 369,971.93 | 2,524,491.98 | 179.71 |
| 1002 | 47+89.43 | -60.88' LT | 369,994.58 | 2,524,502.51 | 179.56 |
| 1003 | 47+91.45 | -65.19' LT | 369,999.19 | 2,524,501.36 | 179.91 |
| 1004 | 48+06.34 | -73.83' LT | 370,015.30 | 2,524,507.44 | 179.22 |
| 1005 | 47+88.10 | -63.00' LT | 369,995.38 | 2,524,500.14 | 179.48 |
| 1006 | 47+58.64 | -62.10' LT | 369,976.08 | 2,524,477.87 | 179.88 |
| 1007 | 47+52.64 | -61.92' LT | 369,972.15 | 2,524,473.33 | 180.06 |
| 1008 | 47+37.50 | -61.34' LT | 369,962.14 | 2,524,461.95 | 179.82 |
| 1009 | 47+25.00 | -59.88' LT | 369,953.11 | 2,524,453.19 | 179.69 |
| 1010 | 47+25.00 | -49.78' LT | 369,945.29 | 2,524,459.56 | 179.54 |
| 1011 | 47+37.50 | -51.31' LT | 369,954.36 | 2,524,468.29 | 179.67 |
| 1012 | 47+52.95 | -51.92' LT | 369,964.59 | 2,524,479.88 | 179.91 |
| 1013 | 47+58.95 | -52.10' LT | 369,968.52 | 2,524,484.42 | 179.73 |
| 1014 | 47+66.13 | -52.32' LT | 369,973.23 | 2,524,489.85 | 179.63 |
| 1015 | 47+64.56 | -51.77' LT | 369,971.81 | 2,524,488.97 | 180.12 |
| 1016 | 48+12.40 | -53.64' LT | 370,003.46 | 2,524,524.89 | 179.93 |
| 1017 | 48+13.55 | -51.42' LT | 370,002.47 | 2,524,527.19 | 180.34 |
| 1018 | 48+16.71 | -56.05' LT | 370,008.06 | 2,524,526.71 | 179.90 |
| 1019 | 48+30.23 | -66.17' LT | 370,024.45 | 2,524,530.81 | 179.76 |

### POINT TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
|---|---|---|---|---|---|
| 1020 | 48+32.64 | -68.48' LT | 370,027.76 | 2,524,531.21 | 179.80 |
| 1021 | 48+34.41 | -66.71' LT | 370,027.50 | 2,524,533.70 | 180.33 |
| 1022 | 48+31.93 | -64.34' LT | 370,024.09 | 2,524,533.28 | 179.80 |
| 1023 | 48+34.93 | -64.43' LT | 370,026.06 | 2,524,535.55 | 179.83 |
| 1024 | 48+40.93 | -64.61' LT | 370,029.99 | 2,524,540.09 | 179.92 |
| 1025 | 48+55.67 | -65.29' LT | 370,039.83 | 2,524,551.09 | 180.35 |
| 1026 | 48+61.67 | -65.35' LT | 370,043.66 | 2,524,555.70 | 180.26 |
| 1027 | 48+65.69 | -65.32' LT | 370,046.18 | 2,524,558.84 | 180.20 |
| 1028 | 48+67.09 | -69.31' LT | 370,050.15 | 2,524,557.40 | 180.46 |
| 1029 | 48+70.12 | -70.57' LT | 370,053.05 | 2,524,558.96 | 180.12 |
| 1030 | 48+68.04 | -64.46' LT | 370,047.00 | 2,524,561.20 | 180.24 |
| 1031 | 48+63.88 | -54.31' LT | 370,036.50 | 2,524,564.38 | 180.50 |
| 1032 | 48+62.06 | -50.47' LT | 370,032.37 | 2,524,565.40 | 180.61 |
| 1033 | 48+59.81 | -51.58' LT | 370,031.81 | 2,524,562.96 | 180.92 |
| 1034 | 48+61.60 | -55.35' LT | 370,035.86 | 2,524,561.97 | 180.46 |
| 1035 | 48+55.60 | -55.28' LT | 370,032.02 | 2,524,557.36 | 180.55 |
| 1036 | 48+41.24 | -54.61' LT | 370,022.43 | 2,524,546.64 | 180.21 |
| 1037 | 48+35.24 | -54.43' LT | 370,018.51 | 2,524,542.10 | 180.12 |
| 1038 | 48+17.99 | -53.91' LT | 370,007.21 | 2,524,529.06 | 179.94 |

### RADIAL WARNING FIELD PANEL LAYOUT TABLE

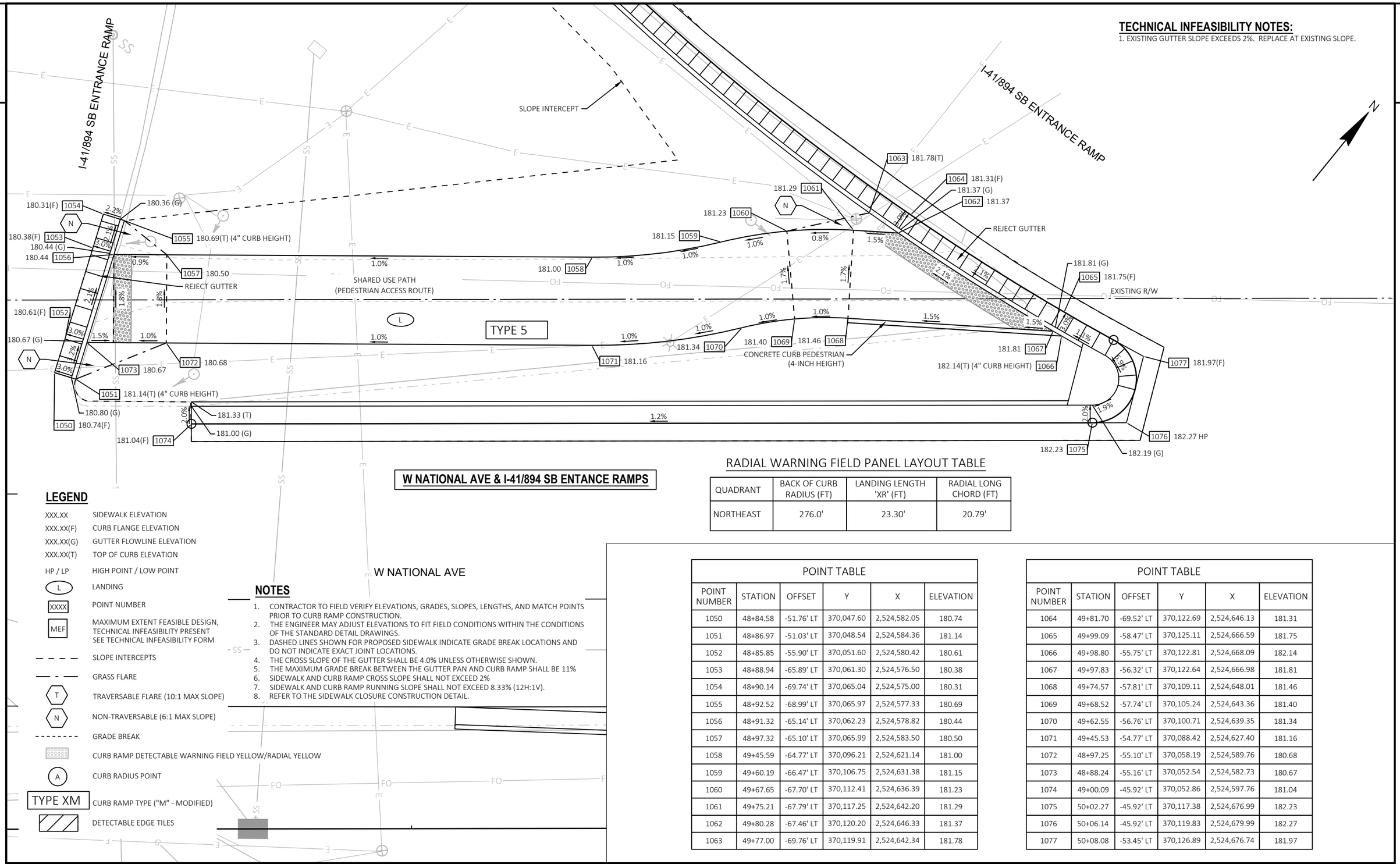
| QUADRANT | BACK OF CURB RADIUS (FT) | LANDING LENGTH 'XR' (FT) | RADIAL LONG CHORD (FT) |
|---|---|---|---|
| NORTHWEST | 112.5' | 29.47' | 24.43' |
| ISLAND | 85.81' | 17.25' | 17.40' |

### LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 97 | E |
|---|---|---|---|---|---|


FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021301-CR.DWG
LAYOUT NAME - 04NW
PLOT DATE : 1/9/2026 12:29 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42




## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| (L) | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| (T) | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| (N) | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| (A) | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

## RADIAL WARNING FIELD PANEL LAYOUT TABLE

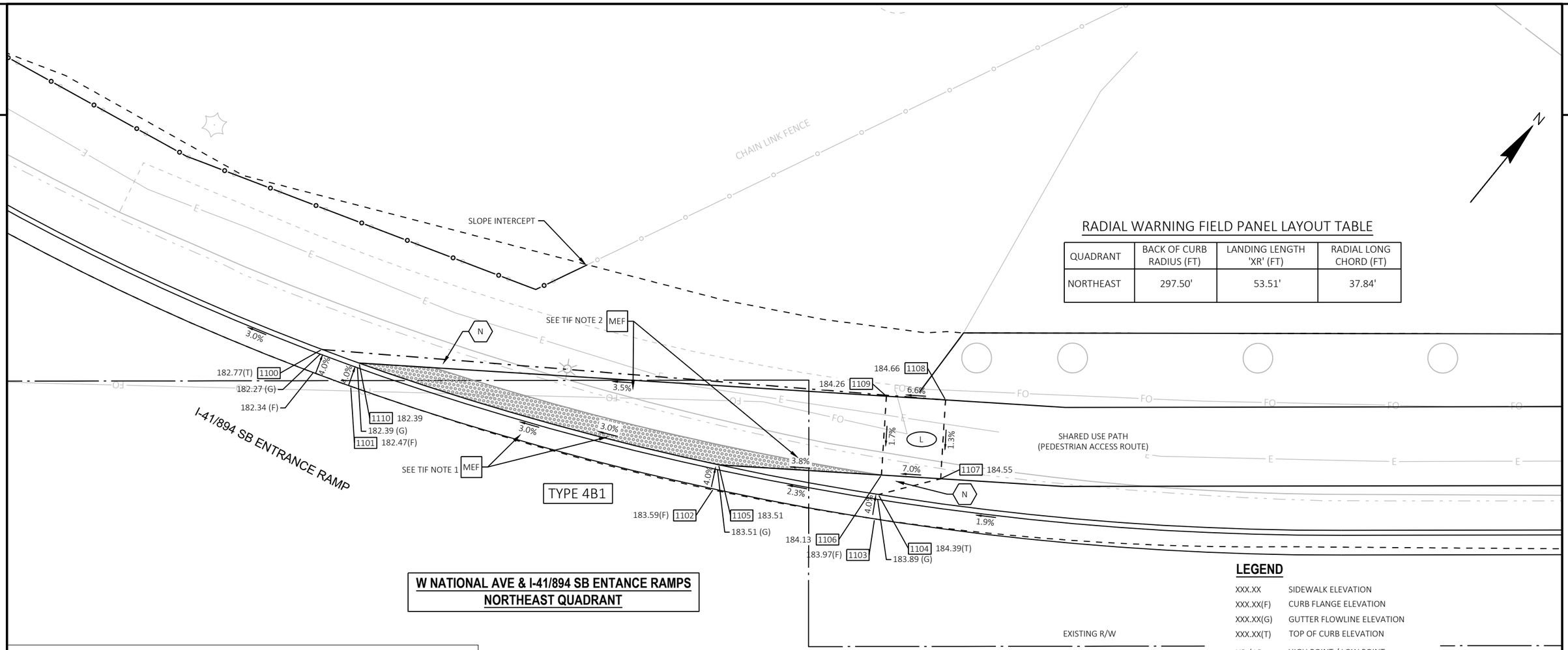
| QUADRANT | BACK OF CURB RADIUS (FT) | LANDING LENGTH 'XR' (FT) | RADIAL LONG CHORD (FT) |
|---|---|---|---|
| NORTHEAST | 276.0' | 23.30' | 20.79' |

### POINT TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
|---|---|---|---|---|---|
| 1050 | 48+84.58 | -51.76' LT | 370,047.60 | 2,524,582.05 | 180.74 |
| 1051 | 48+86.97 | -51.03' LT | 370,048.54 | 2,524,584.36 | 181.14 |
| 1052 | 48+85.85 | -55.90' LT | 370,051.60 | 2,524,580.42 | 180.61 |
| 1053 | 48+88.94 | -65.89' LT | 370,061.30 | 2,524,576.50 | 180.38 |
| 1054 | 48+90.14 | -69.74' LT | 370,065.04 | 2,524,575.00 | 180.31 |
| 1055 | 48+92.52 | -68.99' LT | 370,065.97 | 2,524,577.33 | 180.69 |
| 1056 | 48+91.32 | -65.14' LT | 370,062.23 | 2,524,578.82 | 180.44 |
| 1057 | 48+97.32 | -65.10' LT | 370,065.99 | 2,524,583.50 | 180.50 |
| 1058 | 49+45.59 | -64.77' LT | 370,096.21 | 2,524,621.14 | 181.00 |
| 1059 | 49+60.19 | -66.47' LT | 370,106.75 | 2,524,631.38 | 181.15 |
| 1060 | 49+67.65 | -67.70' LT | 370,112.41 | 2,524,636.39 | 181.23 |
| 1061 | 49+75.21 | -67.79' LT | 370,117.25 | 2,524,642.20 | 181.29 |
| 1062 | 49+80.28 | -67.46' LT | 370,120.20 | 2,524,646.33 | 181.37 |
| 1063 | 49+77.00 | -69.76' LT | 370,119.91 | 2,524,642.34 | 181.78 |

### POINT TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
|---|---|---|---|---|---|
| 1064 | 49+81.70 | -69.52' LT | 370,122.69 | 2,524,646.13 | 181.31 |
| 1065 | 49+99.09 | -58.47' LT | 370,125.11 | 2,524,666.59 | 181.75 |
| 1066 | 49+98.80 | -55.75' LT | 370,122.81 | 2,524,668.09 | 182.14 |
| 1067 | 49+97.83 | -56.32' LT | 370,122.64 | 2,524,666.98 | 181.81 |
| 1068 | 49+74.57 | -57.81' LT | 370,109.11 | 2,524,648.01 | 181.46 |
| 1069 | 49+68.52 | -57.74' LT | 370,105.24 | 2,524,643.36 | 181.40 |
| 1070 | 49+62.55 | -56.76' LT | 370,100.71 | 2,524,639.35 | 181.34 |
| 1071 | 49+45.53 | -54.77' LT | 370,088.42 | 2,524,627.40 | 181.16 |
| 1072 | 48+97.25 | -55.10' LT | 370,058.19 | 2,524,589.76 | 180.68 |
| 1073 | 48+88.24 | -55.16' LT | 370,052.54 | 2,524,582.73 | 180.67 |
| 1074 | 49+00.09 | -45.92' LT | 370,052.86 | 2,524,597.76 | 181.04 |
| 1075 | 50+02.27 | -45.92' LT | 370,117.38 | 2,524,676.99 | 182.23 |
| 1076 | 50+06.14 | -45.92' LT | 370,119.83 | 2,524,679.99 | 182.27 |
| 1077 | 50+08.08 | -53.45' LT | 370,126.89 | 2,524,676.74 | 181.97 |




## RADIAL WARNING FIELD PANEL LAYOUT TABLE

| QUADRANT | BACK OF CURB RADIUS (FT) | LANDING LENGTH 'XR' (FT) | RADIAL LONG CHORD (FT) |
|---|---|---|---|
| NORTHEAST | 297.50' | 53.51' | 37.84' |

## W NATIONAL AVE & I-41/894 SB ENTANCE RAMPS
## NORTHEAST QUADRANT

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1100 | 50+49.48 | -63.16' LT | 370,160.56 | 2,524,702.70 | 182.77 |
| 1101 | 50+52.39 | -59.43' LT | 370,159.51 | 2,524,707.32 | 182.47 |
| 1102 | 50+89.10 | -48.98' LT | 370,174.59 | 2,524,742.38 | 183.59 |
| 1103 | 51+05.41 | -45.92' LT | 370,182.52 | 2,524,756.96 | 183.97 |
| 1104 | 51+05.80 | -48.39' LT | 370,184.68 | 2,524,755.71 | 184.39 |
| 1105 | 50+89.63 | -51.43' LT | 370,176.82 | 2,524,741.25 | 183.51 |
| 1106 | 51+06.12 | -50.37' LT | 370,186.41 | 2,524,754.70 | 184.13 |
| 1107 | 51+12.10 | -49.98' LT | 370,189.90 | 2,524,759.59 | 184.55 |
| 1108 | 51+12.62 | -57.97' LT | 370,196.41 | 2,524,754.94 | 184.66 |
| 1109 | 51+06.63 | -58.35' LT | 370,192.93 | 2,524,750.06 | 184.26 |
| 1110 | 50+53.23 | -61.78' LT | 370,161.86 | 2,524,706.49 | 182.39 |

## TECHNICAL INFEASIBILITY NOTES:

1. EXISTING GUTTER SLOPE EXCEEDS 2%. REPLACE AT EXISTING SLOPE.
2. RUNNING SLOPE OF LOWER LANDING EXCEEDS 2.1%.

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 99 | E |
|---|---|---|---|---|---|

2

2

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

W NATIONAL AVE

RAISED CYCLE TRACK
(NOT REQUIRED TO BE ADA COMPLIANT)

SHARED USE PATH
(PEDESTRIAN ACCESS ROUTE)

EXISTING R/W

**W NATIONAL AVE & S 101ST ST**
**SOUTHWEST QUADRANT**

TYPE 2M

TYPE 7BM

S 101ST ST

SEE NOTE 8.

181.99 1181 — 1182 182.07 — 1.5%

182.09 1180 — 1.5% — 1.5%

182.14 1179 — 1.5% — 1183 182.22

1184 181.68

181.61 1178 — 1.5%

1185 181.27

1186 181.29

1187 181.21

180.77 (LP) 1173 — 2.5%

1174 181.20(T)

180.79(F) 1172

180.73 1176

180.72(T) 1175

180.72 (G)

180.80(F) 1171

181.20 1177

180.83(F) 1170

180.75 (G)

180.75 1188

180.85(F) 1169

181.08 (T)

180.74 (G)

180.46(F) 1150 — 180.43 (G) — 180.73 (T) — 1.5% — 1.3%

1168 180.55 — 180.55 (G)

1151 180.59(F)

1156 180.64

CONCRETE CURB PEDESTRIAN 6" HEIGHT

180.77 1166 — 180.69 1167

180.78 1165

180.82 1164 — 1.2% — 1.4% — 4.8% — 2.0% — 2.1%

1155 180.70 — 180.70 (G)

1152 180.75(F)

180.99 1163 — 3.2% — 1.5% — L — 1.5% — 1.5% — 2.5% — 1.4% — 4.8% — 1.6% — 2.5% — N

180.86 1162 — 3.5% — 4.2% — 1.5% — 1157 180.78 — 1158 180.95 — 2.7%

SLOPE INTERCEPT

181.02 1161 — 3.3% — 4.2% — 0.5% — TILE

1153 180.83(F)

181.15 (G)

181.15 (T)

1154 181.13(T)

1159 181.16

1160 181.19

CONCRETE CURB PEDESTRIAN 4" HEIGHT

SLOPE INTERCEPT

PEDESTRIAN ACCESS ROUTE

## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 100 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021301-CR.DWG
LAYOUT NAME - 04S

PLOT DATE : 1/9/2026 12:31 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1150 | 48+55.77 | 77.55' RT | 369,929.14 | 2,524,641.36 | 180.46 |
| 1151 | 48+63.48 | 82.54' RT | 369,930.13 | 2,524,650.49 | 180.59 |
| 1152 | 48+68.11 | 89.37' RT | 369,927.76 | 2,524,658.40 | 180.75 |
| 1153 | 48+69.45 | 93.56' RT | 369,925.36 | 2,524,662.09 | 180.83 |
| 1154 | 48+66.77 | 93.10' RT | 369,924.03 | 2,524,659.72 | 181.13 |
| 1155 | 48+65.82 | 90.37' RT | 369,925.55 | 2,524,657.26 | 180.70 |
| 1156 | 48+61.63 | 90.31' RT | 369,922.94 | 2,524,653.96 | 180.64 |
| 1157 | 48+58.63 | 90.27' RT | 369,921.08 | 2,524,651.61 | 180.78 |
| 1158 | 48+59.10 | 94.23' RT | 369,918.31 | 2,524,654.48 | 180.95 |
| 1159 | 48+59.63 | 99.29' RT | 369,914.72 | 2,524,658.09 | 181.16 |
| 1160 | 48+54.58 | 99.82' RT | 369,911.12 | 2,524,654.51 | 181.19 |
| 1161 | 48+54.13 | 94.75' RT | 369,914.76 | 2,524,650.96 | 181.02 |
| 1162 | 48+52.99 | 90.19' RT | 369,917.58 | 2,524,647.20 | 180.86 |
| 1163 | 48+48.01 | 89.12' RT | 369,915.26 | 2,524,642.66 | 180.99 |
| 1164 | 48+48.08 | 84.11' RT | 369,919.19 | 2,524,639.54 | 180.82 |
| 1165 | 48+52.08 | 84.18' RT | 369,921.67 | 2,524,642.69 | 180.78 |
| 1166 | 48+53.08 | 84.19' RT | 369,922.29 | 2,524,643.47 | 180.77 |
| 1167 | 48+58.71 | 84.27' RT | 369,925.78 | 2,524,647.89 | 180.69 |
| 1168 | 48+61.71 | 84.31' RT | 369,927.65 | 2,524,650.24 | 180.55 |
| 1169 | 48+95.82 | 94.74' RT | 369,941.10 | 2,524,683.27 | 180.85 |

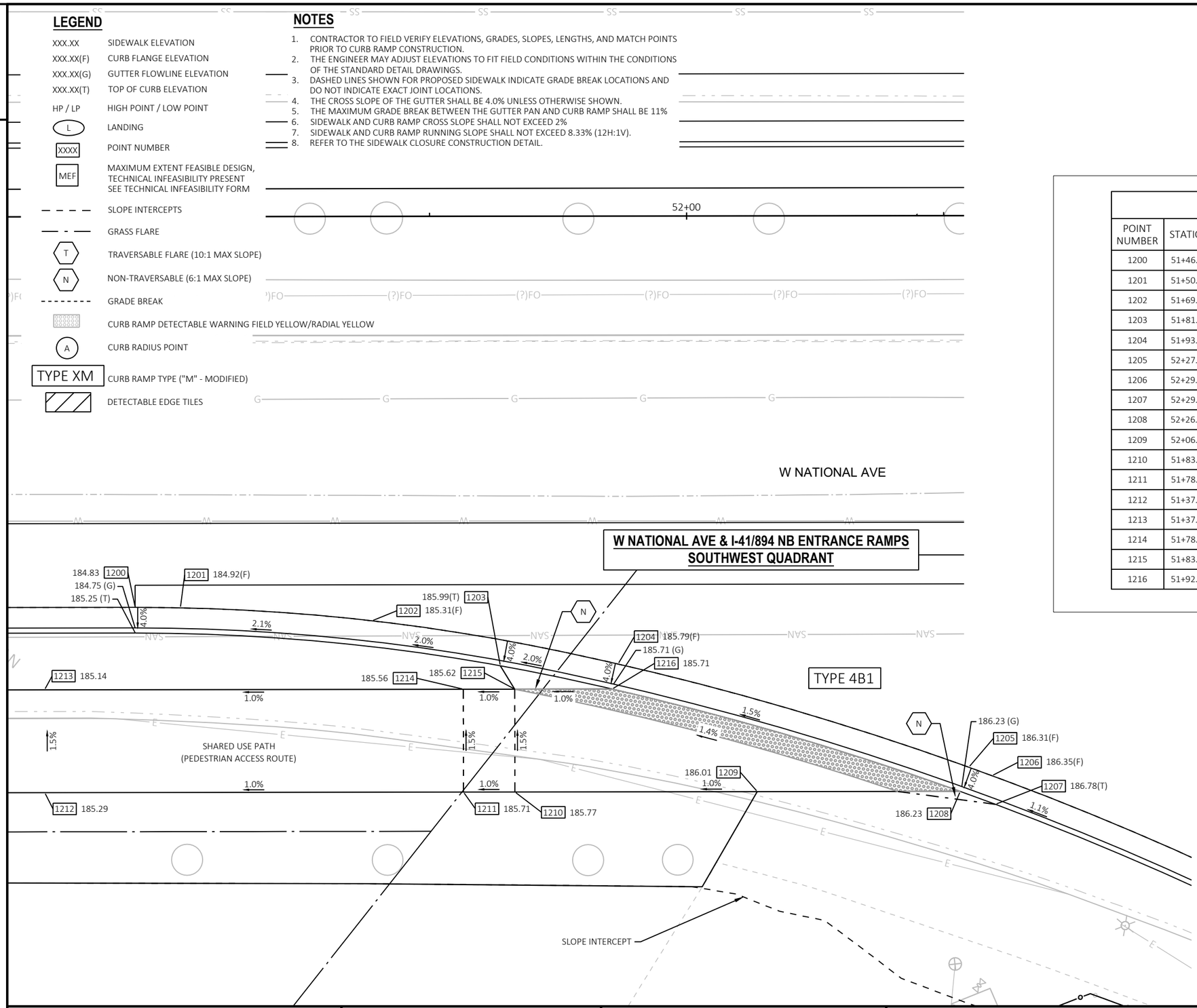
| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1170 | 48+95.85 | 90.91' RT | 369,944.09 | 2,524,680.88 | 180.83 |
| 1171 | 48+95.19 | 85.30' RT | 369,948.02 | 2,524,676.83 | 180.80 |
| 1172 | 48+94.52 | 82.59' RT | 369,949.70 | 2,524,674.60 | 180.79 |
| 1173 | 48+93.52 | 79.65' RT | 369,951.35 | 2,524,671.96 | 180.77 |
| 1174 | 48+96.63 | 80.93' RT | 369,952.31 | 2,524,675.19 | 181.20 |
| 1175 | 48+97.64 | 84.80' RT | 369,949.95 | 2,524,678.41 | 180.72 |
| 1176 | 48+98.37 | 84.81' RT | 369,950.41 | 2,524,678.99 | 180.73 |
| 1177 | 49+05.05 | 84.91' RT | 369,954.55 | 2,524,684.22 | 181.20 |
| 1178 | 49+05.32 | 73.52' RT | 369,963.55 | 2,524,677.24 | 181.61 |
| 1179 | 49+05.32 | 56.00' RT | 369,977.13 | 2,524,666.18 | 182.14 |
| 1180 | 49+05.32 | 52.50' RT | 369,979.85 | 2,524,663.97 | 182.09 |
| 1181 | 49+05.32 | 46.00' RT | 369,984.89 | 2,524,659.86 | 181.99 |
| 1182 | 49+10.32 | 46.00' RT | 369,988.04 | 2,524,663.74 | 182.07 |
| 1183 | 49+10.32 | 56.00' RT | 369,980.29 | 2,524,670.05 | 182.22 |
| 1184 | 49+10.32 | 73.58' RT | 369,966.66 | 2,524,681.15 | 181.68 |
| 1185 | 49+10.05 | 85.02' RT | 369,957.62 | 2,524,688.17 | 181.27 |
| 1186 | 49+09.91 | 90.97' RT | 369,952.92 | 2,524,691.82 | 181.29 |
| 1187 | 49+04.97 | 90.91' RT | 369,949.85 | 2,524,687.95 | 181.21 |
| 1188 | 48+98.34 | 90.81' RT | 369,945.73 | 2,524,682.75 | 180.75 |

## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.




### POINT TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
|---|---|---|---|---|---|
| 1200 | 51+46.33 | 38.00' RT | 370,143.29 | 2,524,841.68 | 184.83 |
| 1201 | 51+50.72 | 38.05' RT | 370,146.03 | 2,524,845.12 | 184.92 |
| 1202 | 51+69.35 | 39.33' RT | 370,156.80 | 2,524,860.38 | 185.31 |
| 1203 | 51+81.83 | 43.73' RT | 370,161.27 | 2,524,872.83 | 185.99 |
| 1204 | 51+93.28 | 43.56' RT | 370,168.62 | 2,524,881.60 | 185.79 |
| 1205 | 52+27.38 | 53.65' RT | 370,182.34 | 2,524,914.41 | 186.31 |
| 1206 | 52+29.64 | 54.48' RT | 370,183.12 | 2,524,916.69 | 186.35 |
| 1207 | 52+29.96 | 57.26' RT | 370,181.16 | 2,524,918.69 | 186.78 |
| 1208 | 52+26.54 | 56.00' RT | 370,179.98 | 2,524,915.25 | 186.23 |
| 1209 | 52+06.80 | 56.00' RT | 370,167.52 | 2,524,899.94 | 186.01 |
| 1210 | 51+83.23 | 56.00' RT | 370,152.64 | 2,524,881.66 | 185.77 |
| 1211 | 51+78.23 | 56.00' RT | 370,149.48 | 2,524,877.79 | 185.71 |
| 1212 | 51+37.50 | 56.00' RT | 370,123.76 | 2,524,846.21 | 185.29 |
| 1213 | 51+37.50 | 46.00' RT | 370,131.51 | 2,524,839.89 | 185.14 |
| 1214 | 51+78.23 | 46.00' RT | 370,157.23 | 2,524,871.47 | 185.56 |
| 1215 | 51+83.23 | 46.00' RT | 370,160.39 | 2,524,875.35 | 185.62 |
| 1216 | 51+92.71 | 46.00' RT | 370,166.37 | 2,524,882.70 | 185.71 |

### RADIAL WARNING FIELD PANEL LAYOUT TABLE

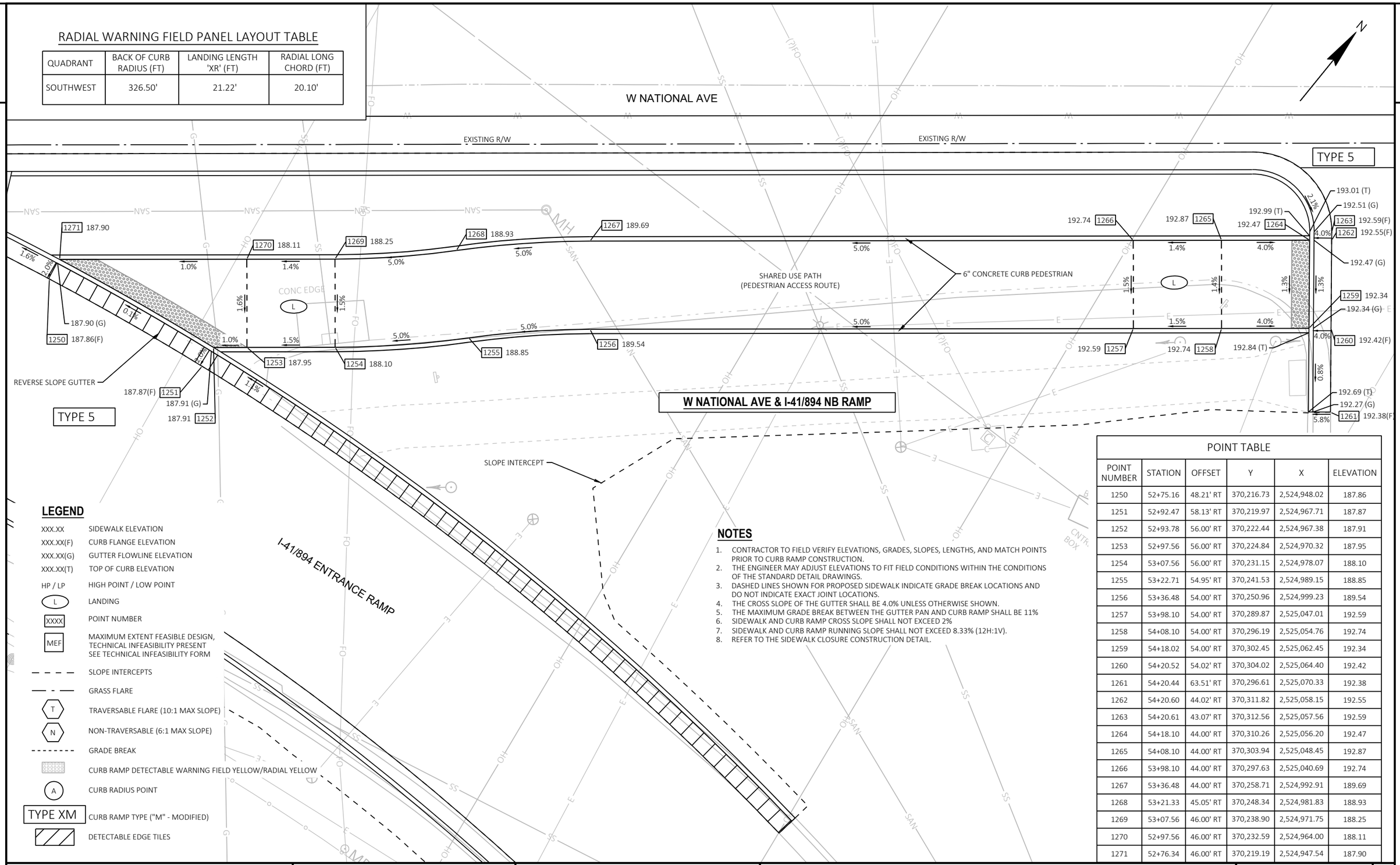
| QUADRANT | BACK OF CURB RADIUS (FT) | LANDING LENGTH 'XR' (FT) | RADIAL LONG CHORD (FT) |
|---|---|---|---|
| SOUTHWEST | 297.50' | 43.30' | 35.27' |

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 102 | E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021301-CR.DWG
LAYOUT NAME - 04SW
PLOT DATE : 1/9/2026 12:32 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:10 FT

## RADIAL WARNING FIELD PANEL LAYOUT TABLE

| QUADRANT | BACK OF CURB RADIUS (FT) | LANDING LENGTH 'XR' (FT) | RADIAL LONG CHORD (FT) |
|---|---|---|---|
| SOUTHWEST | 326.50' | 21.22' | 20.10' |




### LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

### NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

### POINT TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
|---|---|---|---|---|---|
| 1250 | 52+75.16 | 48.21' RT | 370,216.73 | 2,524,948.02 | 187.86 |
| 1251 | 52+92.47 | 58.13' RT | 370,219.97 | 2,524,967.71 | 187.87 |
| 1252 | 52+93.78 | 56.00' RT | 370,222.44 | 2,524,967.38 | 187.91 |
| 1253 | 52+97.56 | 56.00' RT | 370,224.84 | 2,524,970.32 | 187.95 |
| 1254 | 53+07.56 | 56.00' RT | 370,231.15 | 2,524,978.07 | 188.10 |
| 1255 | 53+22.71 | 54.95' RT | 370,241.53 | 2,524,989.15 | 188.85 |
| 1256 | 53+36.48 | 54.00' RT | 370,250.96 | 2,524,999.23 | 189.54 |
| 1257 | 53+98.10 | 54.00' RT | 370,289.87 | 2,525,047.01 | 192.59 |
| 1258 | 54+08.10 | 54.00' RT | 370,296.19 | 2,525,054.76 | 192.74 |
| 1259 | 54+18.02 | 54.00' RT | 370,302.45 | 2,525,062.45 | 192.34 |
| 1260 | 54+20.52 | 54.02' RT | 370,304.02 | 2,525,064.40 | 192.42 |
| 1261 | 54+20.44 | 63.51' RT | 370,296.61 | 2,525,070.33 | 192.38 |
| 1262 | 54+20.60 | 44.02' RT | 370,311.82 | 2,525,058.15 | 192.55 |
| 1263 | 54+20.61 | 43.07' RT | 370,312.56 | 2,525,057.56 | 192.59 |
| 1264 | 54+18.10 | 44.00' RT | 370,310.26 | 2,525,056.20 | 192.47 |
| 1265 | 54+08.10 | 44.00' RT | 370,303.94 | 2,525,048.45 | 192.87 |
| 1266 | 53+98.10 | 44.00' RT | 370,297.63 | 2,525,040.69 | 192.74 |
| 1267 | 53+36.48 | 44.00' RT | 370,258.71 | 2,524,992.91 | 189.69 |
| 1268 | 53+21.33 | 45.05' RT | 370,248.34 | 2,524,981.83 | 188.93 |
| 1269 | 53+07.56 | 46.00' RT | 370,238.90 | 2,524,971.75 | 188.25 |
| 1270 | 52+97.56 | 46.00' RT | 370,232.59 | 2,524,964.00 | 188.11 |
| 1271 | 52+76.34 | 46.00' RT | 370,219.19 | 2,524,947.54 | 187.90 |

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 103 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021301-CR.DWG
LAYOUT NAME - 04MID
PLOT DATE : 1/9/2026 12:32 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

## TECHNICAL INFEASIBILITY NOTES:

1. EXISTING GUTTER SLOPE EXCEEDS 2%. REPLACE AT EXISTING SLOPE.
2. RUNNING SLOPE EXCEEDS 2.1%.

## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

55+00

NATIONAL AVE R/L

W NATIONAL AVE

**W NATIONAL AVE & I-41/894 NB EXIT RAMPS**
**SOUTHEAST QUADRANT**

TYPE 5

193.79(F) 1313 — 193.60(F) 1314 — 193.58 (G) — 193.54(F) 1315 — 193.46 1325 — 193.46 (G) — 193.43(F) 1316 — 193.42(F) 1317 — 193.27(F) 1318 — 193.26(F) 1319 — 193.30 (G) — 193.30 1320 — 193.08(F) 1300 — 193.03(F) 1301 — 192.91(F) 1302 — 192.89 (G) — 192.85 (LP) 1303

1312 194.37(F) — 1311 194.48 HP — 1310 194.38(F) — 194.42 (G) — 194.21 (G) — 1309 194.17(F) — 1308 194.01(F) — 194.05 (G) — 194.05 1321 — 1307 193.45(F) — 193.20(F) 1306 — 1305 192.95(F) — 1304 192.92(F)

1324 193.55 — 194.21 1322 — 194.11 1323

CONCRETE CURB PEDESTRIAN

REVERSE SLOPE GUTTER

I-41/894 NB EXIT RAMP

196.24(T) 1329 — 195.62(F) 1328 — 195.54 (G) — 195.54 1330 — 1331 195.95 — 1332 196.25 — 197.60 1333 — 197.70 1334 — 197.75 1335 — 197.82 1336 — 197.06 1337 — 196.40 1338 — 196.10 1339 — 194.59(F) 1327 — 194.51 (G) — 194.51 1340 — 194.90(T) 1326

SEE TIF NOTE 1 MEF

SEE TIF NOTE 2 MEF

SHARED USE PATH
(PEDESTRIAN ACCESS ROUTE)

SLOPE INTERCEPT

TLE

EXISTING R/W

## RADIAL WARNING FIELD PANEL LAYOUT TABLE

| QUADRANT | BACK OF CURB RADIUS (FT) | LANDING LENGTH 'XR' (FT) | RADIAL LONG CHORD (FT) |
|---|---|---|---|
| SOUTHEAST | 66.48' | 26.04' | 21.80' |

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 104 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021301-CR.DWG
LAYOUT NAME - 04SE

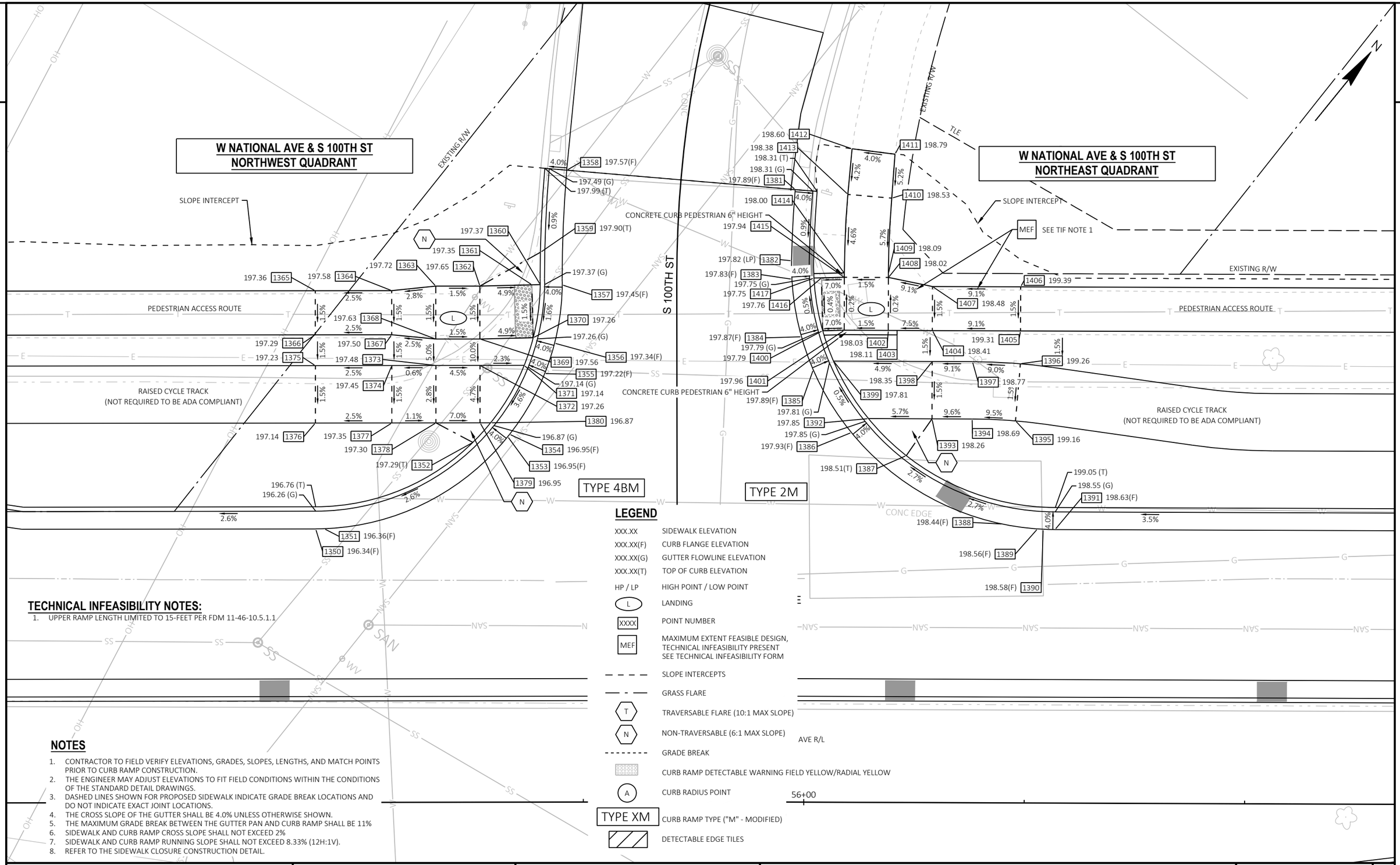
PLOT DATE : 1/9/2026 12:33 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:10 FT

| | | | | | |
|---|---|---|---|---|---|
| 1270 | 52+97.56 | 46.00' RT | 370,232.59 | 2,524,964.00 | |
| 1271 | 52+76.34 | 46.00' RT | 370,219.19 | 2,524,947.54 | |

2

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1300 | 54+44.38 | 71.46' RT | 370,305.56 | 2,525,093.91 | 193.08 |
| 1301 | 54+44.32 | 78.68' RT | 370,299.93 | 2,525,098.42 | 193.03 |
| 1302 | 54+44.25 | 86.08' RT | 370,294.15 | 2,525,103.05 | 192.91 |
| 1303 | 54+48.28 | 91.02' RT | 370,292.86 | 2,525,109.30 | 192.85 |
| 1304 | 54+53.94 | 87.87' RT | 370,298.88 | 2,525,111.69 | 192.92 |
| 1305 | 54+54.42 | 86.58' RT | 370,300.18 | 2,525,111.25 | 192.95 |
| 1306 | 54+58.36 | 76.02' RT | 370,310.85 | 2,525,107.64 | 193.20 |
| 1307 | 54+60.98 | 69.00' RT | 370,317.95 | 2,525,105.24 | 193.45 |
| 1308 | 54+66.26 | 54.87' RT | 370,332.24 | 2,525,100.41 | 194.01 |
| 1309 | 54+69.99 | 44.87' RT | 370,342.35 | 2,525,096.99 | 194.17 |
| 1310 | 54+71.53 | 40.75' RT | 370,346.52 | 2,525,095.57 | 194.38 |
| 1311 | 54+71.02 | 36.25' RT | 370,349.69 | 2,525,092.33 | 194.48 |
| 1312 | 54+66.85 | 34.00' RT | 370,348.79 | 2,525,087.68 | 194.37 |
| 1313 | 54+49.64 | 34.00' RT | 370,337.93 | 2,525,074.34 | 193.79 |
| 1314 | 54+45.23 | 36.65' RT | 370,333.09 | 2,525,072.59 | 193.60 |
| 1315 | 54+44.64 | 38.99' RT | 370,330.90 | 2,525,073.62 | 193.54 |
| 1316 | 54+44.60 | 43.64' RT | 370,327.27 | 2,525,076.52 | 193.43 |
| 1317 | 54+44.60 | 43.98' RT | 370,327.01 | 2,525,076.73 | 193.42 |
| 1318 | 54+44.53 | 52.57' RT | 370,320.31 | 2,525,082.10 | 193.27 |
| 1319 | 54+44.52 | 53.98' RT | 370,319.20 | 2,525,082.99 | 193.26 |
| 1320 | 54+47.02 | 54.00' RT | 370,320.77 | 2,525,084.94 | 193.30 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1321 | 54+63.91 | 54.00' RT | 370,331.44 | 2,525,098.04 | 194.05 |
| 1322 | 54+67.65 | 44.00' RT | 370,341.55 | 2,525,094.62 | 194.21 |
| 1323 | 54+65.51 | 44.00' RT | 370,340.20 | 2,525,092.96 | 194.11 |
| 1324 | 54+49.10 | 44.00' RT | 370,329.84 | 2,525,080.24 | 193.55 |
| 1325 | 54+47.10 | 44.00' RT | 370,328.57 | 2,525,078.69 | 193.46 |
| 1326 | 54+91.69 | 55.49' RT | 370,347.82 | 2,525,120.51 | 194.90 |
| 1327 | 54+92.04 | 52.02' RT | 370,350.74 | 2,525,118.60 | 194.59 |
| 1328 | 55+12.11 | 41.64' RT | 370,371.45 | 2,525,127.60 | 195.62 |
| 1329 | 55+17.64 | 42.48' RT | 370,374.30 | 2,525,132.42 | 196.24 |
| 1330 | 55+12.93 | 44.00' RT | 370,370.14 | 2,525,129.73 | 195.54 |
| 1331 | 55+19.60 | 44.00' RT | 370,374.35 | 2,525,134.90 | 195.95 |
| 1332 | 55+39.60 | 44.00' RT | 370,386.98 | 2,525,150.41 | 196.25 |
| 1333 | 55+75.31 | 44.00' RT | 370,409.53 | 2,525,178.09 | 197.60 |
| 1334 | 55+75.31 | 50.50' RT | 370,404.49 | 2,525,182.20 | 197.70 |
| 1335 | 55+75.31 | 54.00' RT | 370,401.78 | 2,525,184.41 | 197.75 |
| 1336 | 55+75.31 | 59.00' RT | 370,397.90 | 2,525,187.57 | 197.82 |
| 1337 | 55+56.08 | 56.31' RT | 370,387.85 | 2,525,170.96 | 197.06 |
| 1338 | 55+39.60 | 54.00' RT | 370,379.23 | 2,525,156.72 | 196.40 |
| 1339 | 55+19.60 | 54.00' RT | 370,366.60 | 2,525,141.21 | 196.10 |
| 1340 | 54+93.56 | 54.00' RT | 370,350.16 | 2,525,121.03 | 194.51 |




## TECHNICAL INFEASIBILITY NOTES:

1. UPPER RAMP LENGTH LIMITED TO 15-FEET PER FDM 11-46-10.5.1.1

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

AVE R/L

56+00

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 106 | E |
|---|---|---|---|---|---|

2

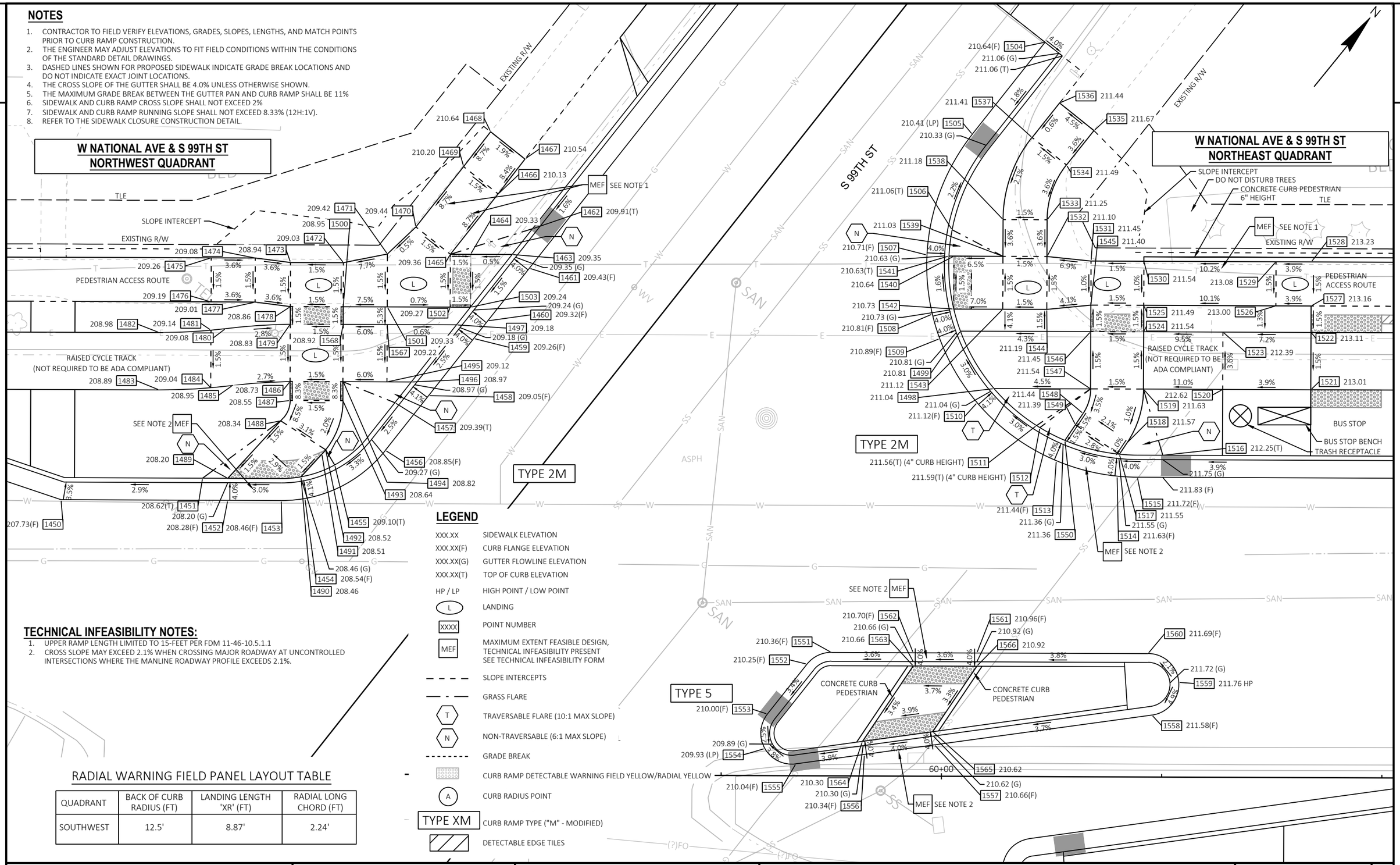
| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1350 | 55+44.68 | -31.00' LT | 370,448.35 | 2,525,106.99 | 196.34 |
| 1351 | 55+45.67 | -31.02' LT | 370,448.98 | 2,525,107.74 | 196.36 |
| 1352 | 55+62.52 | -40.78' LT | 370,467.20 | 2,525,114.65 | 197.29 |
| 1353 | 55+66.49 | -41.43' LT | 370,470.21 | 2,525,117.31 | 196.95 |
| 1354 | 55+66.69 | -41.69' LT | 370,470.54 | 2,525,117.30 | 196.95 |
| 1355 | 55+70.67 | -48.57' LT | 370,478.38 | 2,525,116.04 | 197.22 |
| 1356 | 55+71.80 | -52.01' LT | 370,481.76 | 2,525,114.74 | 197.34 |
| 1357 | 55+72.68 | -58.62' LT | 370,487.45 | 2,525,111.25 | 197.45 |
| 1358 | 55+73.21 | -71.62' LT | 370,497.86 | 2,525,103.46 | 197.57 |
| 1359 | 55+70.22 | -62.32' LT | 370,488.76 | 2,525,107.01 | 197.90 |
| 1360 | 55+70.18 | -58.66' LT | 370,485.89 | 2,525,109.29 | 197.37 |
| 1361 | 55+69.24 | -58.63' LT | 370,485.28 | 2,525,108.58 | 197.35 |
| 1362 | 55+63.34 | -58.50' LT | 370,481.45 | 2,525,104.09 | 197.65 |
| 1363 | 55+58.34 | -58.50' LT | 370,478.30 | 2,525,100.21 | 197.72 |
| 1364 | 55+53.34 | -58.00' LT | 370,474.75 | 2,525,096.65 | 197.58 |
| 1365 | 55+44.67 | -58.00' LT | 370,469.28 | 2,525,089.93 | 197.36 |
| 1366 | 55+44.67 | -53.00' LT | 370,465.40 | 2,525,093.08 | 197.29 |
| 1367 | 55+53.34 | -53.00' LT | 370,470.88 | 2,525,099.81 | 197.50 |
| 1368 | 55+58.34 | -52.50' LT | 370,473.64 | 2,525,104.00 | 197.63 |
| 1369 | 55+63.34 | -52.50' LT | 370,476.80 | 2,525,107.88 | 197.56 |
| 1370 | 55+69.38 | -52.64' LT | 370,480.72 | 2,525,112.47 | 197.26 |
| 1371 | 55+68.35 | -49.50' LT | 370,477.64 | 2,525,113.65 | 197.14 |
| 1372 | 55+63.34 | -49.50' LT | 370,474.48 | 2,525,109.77 | 197.26 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1373 | 55+58.34 | -49.50' LT | 370,471.32 | 2,525,105.90 | 197.48 |
| 1374 | 55+53.34 | -49.50' LT | 370,468.16 | 2,525,102.02 | 197.45 |
| 1375 | 55+44.68 | -49.50' LT | 370,462.69 | 2,525,095.30 | 197.23 |
| 1376 | 55+44.67 | -43.01' LT | 370,457.65 | 2,525,099.39 | 197.14 |
| 1377 | 55+53.34 | -43.00' LT | 370,463.12 | 2,525,106.12 | 197.35 |
| 1378 | 55+58.34 | -43.00' LT | 370,466.28 | 2,525,110.00 | 197.30 |
| 1379 | 55+63.34 | -43.00' LT | 370,469.44 | 2,525,113.88 | 196.95 |
| 1380 | 55+64.54 | -43.00' LT | 370,470.19 | 2,525,114.81 | 196.87 |
| 1381 | 55+98.77 | -69.43' LT | 370,512.49 | 2,525,124.95 | 197.89 |
| 1382 | 55+98.39 | -61.36' LT | 370,505.97 | 2,525,129.72 | 197.82 |
| 1383 | 55+98.44 | -59.26' LT | 370,504.37 | 2,525,131.08 | 197.83 |
| 1384 | 55+99.55 | -52.74' LT | 370,499.99 | 2,525,136.03 | 197.87 |
| 1385 | 56+00.90 | -49.00' LT | 370,497.92 | 2,525,139.43 | 197.89 |
| 1386 | 56+05.25 | -41.91' LT | 370,495.13 | 2,525,147.27 | 197.93 |
| 1387 | 56+11.48 | -39.32' LT | 370,497.02 | 2,525,153.74 | 198.51 |
| 1388 | 56+22.43 | -31.60' LT | 370,497.89 | 2,525,167.12 | 198.44 |
| 1389 | 56+26.39 | -31.07' LT | 370,499.96 | 2,525,170.53 | 198.56 |
| 1390 | 56+27.03 | -31.03' LT | 370,500.33 | 2,525,171.05 | 198.58 |
| 1391 | 56+28.39 | -31.00' LT | 370,501.16 | 2,525,172.13 | 198.63 |
| 1392 | 56+07.18 | -43.50' LT | 370,497.58 | 2,525,147.77 | 197.85 |
| 1393 | 56+14.38 | -43.50' LT | 370,502.10 | 2,525,153.38 | 198.26 |
| 1394 | 56+18.94 | -43.50' LT | 370,504.97 | 2,525,156.93 | 198.69 |
| 1395 | 56+23.86 | -43.30' LT | 370,507.89 | 2,525,160.88 | 199.16 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1396 | 56+24.38 | -49.78' LT | 370,513.27 | 2,525,157.23 | 199.26 |
| 1397 | 56+18.94 | -50.00' LT | 370,510.03 | 2,525,152.85 | 198.77 |
| 1398 | 56+14.38 | -50.00' LT | 370,507.17 | 2,525,149.30 | 198.35 |
| 1399 | 56+03.19 | -50.00' LT | 370,500.14 | 2,525,140.58 | 197.81 |
| 1400 | 56+01.95 | -53.43' LT | 370,502.04 | 2,525,137.47 | 197.79 |
| 1401 | 56+04.38 | -53.50' LT | 370,503.61 | 2,525,139.32 | 197.96 |
| 1402 | 56+09.38 | -53.50' LT | 370,506.75 | 2,525,143.21 | 198.03 |
| 1403 | 56+10.38 | -53.50' LT | 370,507.38 | 2,525,143.99 | 198.11 |
| 1404 | 56+14.38 | -53.50' LT | 370,509.89 | 2,525,147.11 | 198.41 |
| 1405 | 56+24.38 | -53.50' LT | 370,516.17 | 2,525,154.89 | 199.31 |
| 1406 | 56+24.38 | -58.50' LT | 370,520.06 | 2,525,151.75 | 199.39 |
| 1407 | 56+14.38 | -58.50' LT | 370,513.78 | 2,525,143.97 | 198.48 |
| 1408 | 56+09.38 | -59.50' LT | 370,511.42 | 2,525,139.45 | 198.02 |
| 1409 | 56+09.38 | -59.95' LT | 370,511.78 | 2,525,139.16 | 198.09 |
| 1410 | 56+09.73 | -68.49' LT | 370,518.64 | 2,525,134.07 | 198.53 |
| 1411 | 56+10.08 | -73.48' LT | 370,522.74 | 2,525,131.21 | 198.79 |
| 1412 | 56+05.22 | -74.07' LT | 370,520.15 | 2,525,127.06 | 198.60 |
| 1413 | 56+04.75 | -68.90' LT | 370,515.83 | 2,525,129.94 | 198.38 |
| 1414 | 56+04.38 | -59.95' LT | 370,508.64 | 2,525,135.27 | 198.00 |
| 1415 | 56+04.38 | -59.50' LT | 370,508.29 | 2,525,135.55 | 197.94 |
| 1416 | 56+01.79 | -59.43' LT | 370,506.60 | 2,525,133.58 | 197.76 |
| 1417 | 56+00.94 | -59.41' LT | 370,506.05 | 2,525,132.93 | 197.75 |

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.




## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

## TECHNICAL INFEASIBILITY NOTES:

1. UPPER RAMP LENGTH LIMITED TO 15-FEET PER FDM 11-46-10.5.1.1
2. CROSS SLOPE MAY EXCEED 2.1% WHEN CROSSING MAJOR ROADWAY AT UNCONTROLLED INTERSECTIONS WHERE THE MANLINE ROADWAY PROFILE EXCEEDS 2.1%.

## RADIAL WARNING FIELD PANEL LAYOUT TABLE

| QUADRANT | BACK OF CURB RADIUS (FT) | LANDING LENGTH 'XR' (FT) | RADIAL LONG CHORD (FT) |
|---|---|---|---|
| SOUTHWEST | 12.5' | 8.87' | 2.24' |

| | | | |
|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS |

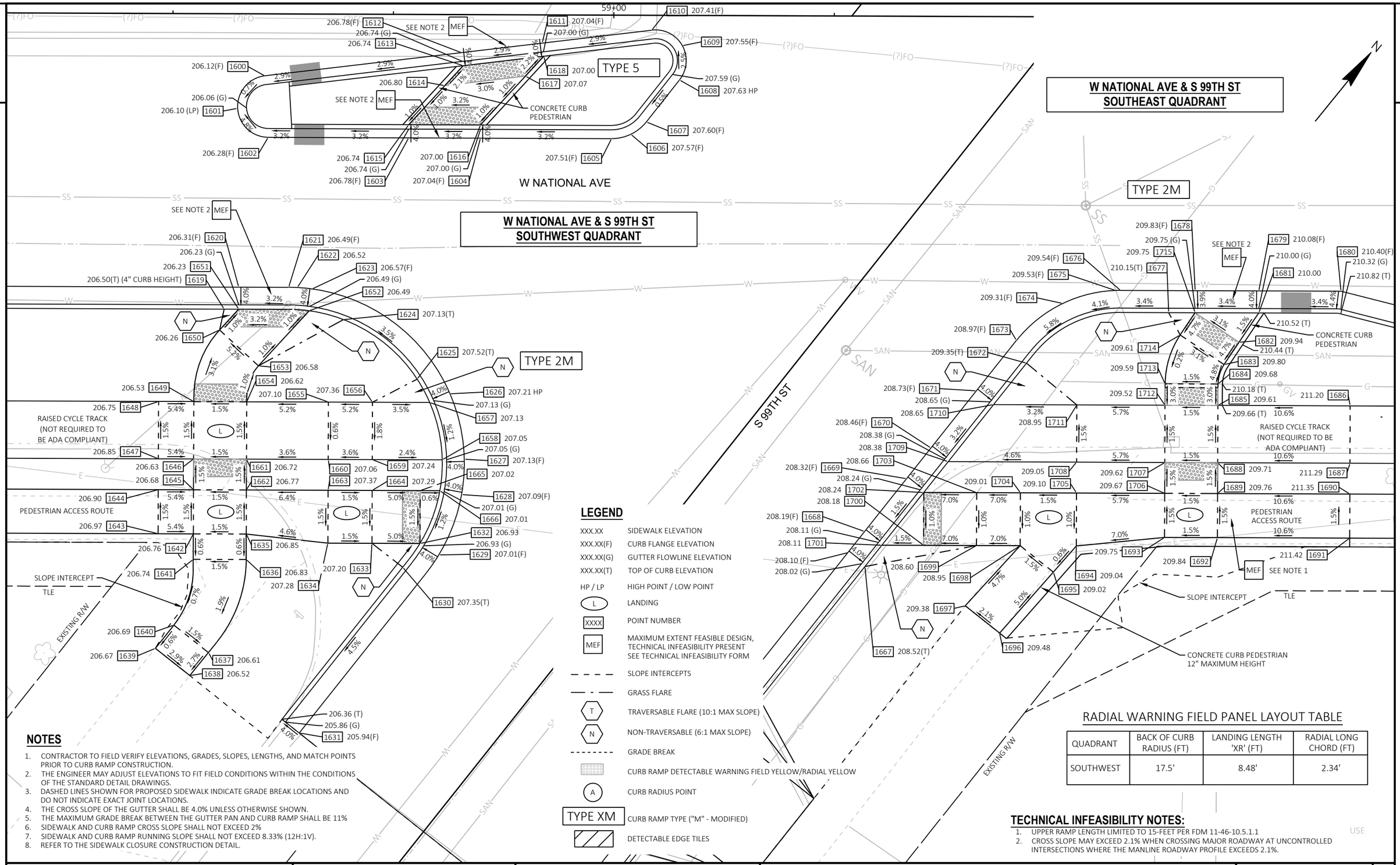
SHEET 108 E

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1450 | 58+99.95 | -31.00' LT | 370,671.59 | 2,525,383.56 | 207.73 |
| 1451 | 59+16.01 | -33.50' LT | 370,683.61 | 2,525,394.49 | 208.62 |
| 1452 | 59+18.87 | -31.00' LT | 370,683.47 | 2,525,398.28 | 208.28 |
| 1453 | 59+24.95 | -31.00' LT | 370,687.28 | 2,525,403.02 | 208.46 |
| 1454 | 59+27.64 | -31.24' LT | 370,689.15 | 2,525,404.96 | 208.54 |
| 1455 | 59+31.00 | -35.06' LT | 370,694.24 | 2,525,405.18 | 209.10 |
| 1456 | 59+36.75 | -36.74' LT | 370,699.15 | 2,525,408.60 | 208.85 |
| 1457 | 59+37.82 | -42.14' LT | 370,704.03 | 2,525,406.04 | 209.39 |
| 1458 | 59+41.64 | -42.96' LT | 370,707.06 | 2,525,408.50 | 209.05 |
| 1459 | 59+46.74 | -49.46' LT | 370,715.32 | 2,525,408.40 | 209.26 |
| 1460 | 59+48.31 | -51.46' LT | 370,717.87 | 2,525,408.37 | 209.32 |
| 1461 | 59+53.03 | -57.46' LT | 370,725.50 | 2,525,408.27 | 209.43 |
| 1462 | 59+53.36 | -61.93' LT | 370,729.19 | 2,525,405.72 | 209.91 |
| 1463 | 59+51.06 | -59.00' LT | 370,725.46 | 2,525,405.77 | 209.35 |
| 1464 | 59+46.35 | -59.00' LT | 370,722.51 | 2,525,402.10 | 209.33 |
| 1465 | 59+44.05 | -59.00' LT | 370,721.07 | 2,525,400.32 | 209.36 |
| 1466 | 59+49.44 | -65.86' LT | 370,729.79 | 2,525,400.20 | 210.13 |
| 1467 | 59+52.48 | -69.83' LT | 370,734.79 | 2,525,400.08 | 210.54 |
| 1468 | 59+48.57 | -72.91' LT | 370,734.73 | 2,525,395.10 | 210.64 |
| 1469 | 59+45.51 | -68.95' LT | 370,729.73 | 2,525,395.21 | 210.20 |
| 1470 | 59+40.12 | -62.09' LT | 370,721.00 | 2,525,395.32 | 209.44 |
| 1471 | 59+36.91 | -59.00' LT | 370,716.58 | 2,525,394.75 | 209.42 |
| 1472 | 59+31.91 | -58.00' LT | 370,712.67 | 2,525,391.49 | 209.03 |
| 1473 | 59+25.91 | -58.00' LT | 370,708.90 | 2,525,386.82 | 208.94 |
| 1474 | 59+21.91 | -58.50' LT | 370,706.78 | 2,525,383.39 | 209.08 |
| 1475 | 59+16.91 | -58.50' LT | 370,703.64 | 2,525,379.50 | 209.26 |
| 1476 | 59+16.91 | -53.50' LT | 370,699.75 | 2,525,382.64 | 209.19 |
| 1477 | 59+21.91 | -53.50' LT | 370,702.89 | 2,525,386.53 | 209.01 |
| 1478 | 59+25.91 | -53.00' LT | 370,705.01 | 2,525,389.96 | 208.86 |
| 1479 | 59+25.91 | -51.00' LT | 370,703.45 | 2,525,391.21 | 208.83 |
| 1480 | 59+18.56 | -50.47' LT | 370,698.43 | 2,525,385.82 | 209.08 |
| 1481 | 59+16.91 | -50.29' LT | 370,697.25 | 2,525,384.65 | 209.14 |
| 1482 | 59+11.03 | -50.00' LT | 370,693.34 | 2,525,380.26 | 208.98 |
| 1483 | 59+11.03 | -43.50' LT | 370,688.28 | 2,525,384.34 | 208.89 |
| 1484 | 59+16.91 | -43.76' LT | 370,692.17 | 2,525,388.75 | 209.04 |
| 1485 | 59+19.38 | -44.03' LT | 370,693.92 | 2,525,390.50 | 208.95 |
| 1486 | 59+25.91 | -44.49' LT | 370,698.39 | 2,525,395.30 | 208.73 |
| 1487 | 59+25.91 | -42.36' LT | 370,696.72 | 2,525,396.64 | 208.55 |
| 1488 | 59+24.86 | -40.04' LT | 370,694.26 | 2,525,397.27 | 208.34 |
| 1489 | 59+18.87 | -33.50' LT | 370,685.41 | 2,525,396.72 | 208.20 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1490 | 59+27.19 | -33.70' LT | 370,690.79 | 2,525,403.06 | 208.46 |
| 1491 | 59+29.55 | -36.28' LT | 370,694.28 | 2,525,403.28 | 208.51 |
| 1492 | 59+29.97 | -36.78' LT | 370,694.93 | 2,525,403.30 | 208.52 |
| 1493 | 59+31.91 | -42.36' LT | 370,700.49 | 2,525,401.31 | 208.64 |
| 1494 | 59+31.91 | -44.50' LT | 370,702.16 | 2,525,399.96 | 208.82 |
| 1495 | 59+36.91 | -44.50' LT | 370,705.30 | 2,525,403.85 | 209.12 |
| 1496 | 59+39.67 | -44.50' LT | 370,707.03 | 2,525,406.00 | 208.97 |
| 1497 | 59+44.78 | -51.00' LT | 370,715.29 | 2,525,405.90 | 209.18 |
| 1498 | 60+05.80 | -44.00' LT | 370,748.14 | 2,525,457.80 | 211.04 |
| 1499 | 60+01.97 | -50.50' LT | 370,750.80 | 2,525,450.74 | 210.81 |
| 1500 | 59+31.91 | -53.00' LT | 370,708.78 | 2,525,394.63 | 208.95 |
| 1501 | 59+36.91 | -53.00' LT | 370,711.91 | 2,525,398.52 | 209.33 |
| 1502 | 59+44.05 | -53.00' LT | 370,716.40 | 2,525,404.08 | 209.27 |
| 1503 | 59+46.35 | -53.00' LT | 370,717.84 | 2,525,405.87 | 209.24 |
| 1504 | 60+11.46 | -83.29' LT | 370,782.29 | 2,525,437.55 | 210.64 |
| 1505 | 60+03.24 | -72.82' LT | 370,768.98 | 2,525,437.72 | 210.41 |
| 1506 | 60+00.99 | -61.98' LT | 370,759.12 | 2,525,442.77 | 211.06 |
| 1507 | 59+98.14 | -59.12' LT | 370,755.10 | 2,525,442.35 | 210.71 |
| 1508 | 59+98.77 | -52.42' LT | 370,750.29 | 2,525,447.05 | 210.81 |
| 1509 | 59+99.62 | -49.63' LT | 370,748.65 | 2,525,449.46 | 210.89 |
| 1510 | 60+03.90 | -42.37' LT | 370,745.68 | 2,525,457.35 | 211.12 |
| 1511 | 60+10.65 | -39.82' LT | 370,747.93 | 2,525,464.21 | 211.56 |
| 1512 | 60+11.03 | -39.58' LT | 370,747.98 | 2,525,464.65 | 211.59 |
| 1513 | 60+12.92 | -35.83' LT | 370,746.25 | 2,525,468.47 | 211.44 |
| 1514 | 60+19.82 | -34.11' LT | 370,749.24 | 2,525,474.93 | 211.63 |
| 1515 | 60+22.12 | -34.00' LT | 370,750.60 | 2,525,476.78 | 211.72 |
| 1516 | 60+25.00 | -36.50' LT | 370,754.35 | 2,525,477.46 | 212.25 |
| 1517 | 60+20.06 | -36.60' LT | 370,751.33 | 2,525,473.55 | 211.55 |
| 1518 | 60+20.92 | -37.89' LT | 370,752.88 | 2,525,473.41 | 211.57 |
| 1519 | 60+22.78 | -44.00' LT | 370,758.79 | 2,525,471.02 | 211.63 |
| 1520 | 60+31.78 | -44.00' LT | 370,764.44 | 2,525,478.03 | 212.62 |
| 1521 | 60+41.78 | -44.00' LT | 370,770.72 | 2,525,485.81 | 213.01 |
| 1522 | 60+41.78 | -50.50' LT | 370,775.78 | 2,525,481.73 | 213.11 |
| 1523 | 60+31.78 | -50.50' LT | 370,769.50 | 2,525,473.95 | 212.39 |
| 1524 | 60+22.78 | -50.50' LT | 370,763.86 | 2,525,466.94 | 211.54 |
| 1525 | 60+22.78 | -53.50' LT | 370,766.19 | 2,525,465.06 | 211.49 |
| 1526 | 60+37.78 | -53.50' LT | 370,775.60 | 2,525,476.74 | 213.00 |
| 1527 | 60+41.78 | -53.50' LT | 370,778.12 | 2,525,479.85 | 213.16 |
| 1528 | 60+41.78 | -58.50' LT | 370,782.01 | 2,525,476.71 | 213.23 |
| 1529 | 60+37.78 | -58.50' LT | 370,779.50 | 2,525,473.60 | 213.08 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1530 | 60+22.78 | -58.50' LT | 370,770.08 | 2,525,461.92 | 211.54 |
| 1531 | 60+16.78 | -58.50' LT | 370,766.32 | 2,525,457.25 | 211.45 |
| 1532 | 60+11.78 | -59.00' LT | 370,763.57 | 2,525,453.04 | 211.10 |
| 1533 | 60+11.78 | -63.17' LT | 370,766.81 | 2,525,450.43 | 211.25 |
| 1534 | 60+13.94 | -69.38' LT | 370,773.01 | 2,525,448.21 | 211.49 |
| 1535 | 60+17.05 | -73.30' LT | 370,778.01 | 2,525,448.18 | 211.67 |
| 1536 | 60+13.14 | -76.41' LT | 370,777.98 | 2,525,443.18 | 211.44 |
| 1537 | 60+10.03 | -72.49' LT | 370,772.98 | 2,525,443.21 | 211.41 |
| 1538 | 60+06.78 | -63.17' LT | 370,763.68 | 2,525,446.53 | 211.18 |
| 1539 | 60+06.78 | -59.00' LT | 370,760.43 | 2,525,449.15 | 211.03 |
| 1540 | 60+01.21 | -59.00' LT | 370,756.94 | 2,525,444.81 | 210.64 |
| 1541 | 60+00.62 | -59.00' LT | 370,756.57 | 2,525,444.35 | 210.63 |
| 1542 | 60+01.21 | -53.00' LT | 370,752.26 | 2,525,448.58 | 210.73 |
| 1543 | 60+06.78 | -53.00' LT | 370,755.76 | 2,525,452.91 | 211.12 |
| 1544 | 60+11.78 | -53.00' LT | 370,758.90 | 2,525,456.81 | 211.19 |
| 1545 | 60+16.78 | -53.50' LT | 370,762.43 | 2,525,460.39 | 211.40 |
| 1546 | 60+16.78 | -50.50' LT | 370,760.09 | 2,525,462.27 | 211.45 |
| 1547 | 60+16.78 | -44.00' LT | 370,755.03 | 2,525,466.35 | 211.54 |
| 1548 | 60+15.93 | -41.22' LT | 370,752.34 | 2,525,467.44 | 211.44 |
| 1549 | 60+15.07 | -39.93' LT | 370,750.79 | 2,525,467.57 | 211.39 |
| 1550 | 60+13.88 | -38.14' LT | 370,748.65 | 2,525,467.77 | 211.36 |
| 1551 | 59+87.46 | -14.00' LT | 370,713.27 | 2,525,462.35 | 210.36 |
| 1552 | 59+84.71 | -12.67' LT | 370,710.51 | 2,525,461.05 | 210.25 |
| 1553 | 59+80.23 | -6.99' LT | 370,703.28 | 2,525,461.13 | 210.00 |
| 1554 | 59+79.95 | -3.08' LT | 370,700.06 | 2,525,463.36 | 209.93 |
| 1555 | 59+83.47 | -1.35' LT | 370,700.92 | 2,525,467.18 | 210.04 |
| 1556 | 59+91.24 | -2.45' LT | 370,706.65 | 2,525,472.55 | 210.34 |
| 1557 | 59+99.20 | -3.57' LT | 370,712.52 | 2,525,478.04 | 210.66 |
| 1558 | 60+23.88 | -7.03' LT | 370,730.71 | 2,525,495.08 | 211.58 |
| 1559 | 60+26.89 | -10.75' LT | 370,735.49 | 2,525,495.09 | 211.76 |
| 1560 | 60+23.40 | -14.00' LT | 370,735.83 | 2,525,490.33 | 211.69 |
| 1561 | 60+03.97 | -14.00' LT | 370,723.64 | 2,525,475.21 | 210.96 |
| 1562 | 59+96.76 | -14.00' LT | 370,719.11 | 2,525,469.59 | 210.70 |
| 1563 | 59+96.76 | -12.50' LT | 370,717.94 | 2,525,470.53 | 210.66 |
| 1564 | 59+91.03 | -3.93' LT | 370,707.68 | 2,525,471.45 | 210.30 |
| 1565 | 59+99.00 | -5.05' LT | 370,713.55 | 2,525,476.95 | 210.62 |
| 1566 | 60+03.97 | -12.50' LT | 370,722.47 | 2,525,476.15 | 210.92 |
| 1567 | 59+36.91 | -51.00' LT | 370,710.36 | 2,525,399.78 | 209.22 |
| 1568 | 59+31.91 | -51.00' LT | 370,707.22 | 2,525,395.88 | 208.92 |

2




## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

## RADIAL WARNING FIELD PANEL LAYOUT TABLE

| QUADRANT | BACK OF CURB RADIUS (FT) | LANDING LENGTH 'XR' (FT) | RADIAL LONG CHORD (FT) |
|---|---|---|---|
| SOUTHWEST | 17.5' | 8.48' | 2.34' |

## TECHNICAL INFEASIBILITY NOTES:

1. UPPER RAMP LENGTH LIMITED TO 15-FEET PER FDM 11-46-10.5.1.1
2. CROSS SLOPE MAY EXCEED 2.1% WHEN CROSSING MAJOR ROADWAY AT UNCONTROLLED INTERSECTIONS WHERE THE MANLINE ROADWAY PROFILE EXCEEDS 2.1%.

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 110 | E |
|---|---|---|---|---|---|

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1600 | 58+60.43 | 7.03' RT | 370,617.18 | 2,525,376.65 | 206.12 |
| 1601 | 58+57.36 | 10.72' RT | 370,612.38 | 2,525,376.58 | 206.10 |
| 1602 | 58+60.85 | 14.00' RT | 370,612.02 | 2,525,381.36 | 206.28 |
| 1603 | 58+76.78 | 14.00' RT | 370,622.02 | 2,525,393.76 | 206.78 |
| 1604 | 58+84.92 | 14.00' RT | 370,627.12 | 2,525,400.09 | 207.04 |
| 1605 | 58+99.79 | 14.00' RT | 370,636.45 | 2,525,411.67 | 207.51 |
| 1606 | 59+01.98 | 13.50' RT | 370,638.22 | 2,525,413.06 | 207.57 |
| 1607 | 59+03.72 | 12.09' RT | 370,640.41 | 2,525,413.53 | 207.60 |
| 1608 | 59+07.47 | 7.32' RT | 370,646.47 | 2,525,413.45 | 207.63 |
| 1609 | 59+07.76 | 3.44' RT | 370,649.68 | 2,525,411.25 | 207.55 |
| 1610 | 59+04.29 | 1.68' RT | 370,648.87 | 2,525,407.44 | 207.41 |
| 1611 | 58+91.89 | 3.20' RT | 370,639.91 | 2,525,398.73 | 207.04 |
| 1612 | 58+82.73 | 4.31' RT | 370,633.29 | 2,525,392.31 | 206.78 |
| 1613 | 58+82.91 | 5.80' RT | 370,632.25 | 2,525,393.38 | 206.74 |
| 1614 | 58+80.84 | 8.07' RT | 370,629.18 | 2,525,393.19 | 206.80 |
| 1615 | 58+76.78 | 12.50' RT | 370,623.18 | 2,525,392.82 | 206.74 |
| 1616 | 58+84.92 | 12.50' RT | 370,628.29 | 2,525,399.15 | 207.00 |
| 1617 | 58+89.99 | 6.95' RT | 370,635.79 | 2,525,399.62 | 207.07 |
| 1618 | 58+92.07 | 4.68' RT | 370,638.86 | 2,525,399.81 | 207.00 |
| 1619 | 58+55.92 | 33.50' RT | 370,593.74 | 2,525,389.75 | 206.50 |
| 1620 | 58+57.57 | 31.00' RT | 370,596.72 | 2,525,389.47 | 206.31 |
| 1621 | 58+63.22 | 31.00' RT | 370,600.27 | 2,525,393.87 | 206.49 |
| 1622 | 58+64.22 | 31.02' RT | 370,600.88 | 2,525,394.66 | 206.52 |
| 1623 | 58+65.89 | 31.18' RT | 370,601.81 | 2,525,396.06 | 206.57 |
| 1624 | 58+69.43 | 34.64' RT | 370,601.33 | 2,525,400.99 | 207.13 |
| 1625 | 58+77.83 | 41.36' RT | 370,601.37 | 2,525,411.74 | 207.52 |
| 1626 | 58+81.55 | 43.00' RT | 370,602.43 | 2,525,415.67 | 207.21 |
| 1627 | 58+83.21 | 50.43' RT | 370,597.69 | 2,525,421.62 | 207.13 |
| 1628 | 58+82.92 | 54.43' RT | 370,594.39 | 2,525,423.91 | 207.09 |
| 1629 | 58+80.37 | 61.29' RT | 370,587.45 | 2,525,426.23 | 207.01 |
| 1630 | 58+76.28 | 62.70' RT | 370,583.78 | 2,525,423.93 | 207.35 |
| 1631 | 58+64.61 | 81.54' RT | 370,561.79 | 2,525,426.67 | 205.94 |
| 1632 | 58+78.23 | 60.00' RT | 370,587.11 | 2,525,423.75 | 206.93 |
| 1633 | 58+72.78 | 60.00' RT | 370,583.69 | 2,525,419.51 | 207.20 |
| 1634 | 58+67.78 | 60.00' RT | 370,580.55 | 2,525,415.62 | 207.28 |
| 1635 | 58+58.52 | 59.00' RT | 370,575.52 | 2,525,407.78 | 206.85 |
| 1636 | 58+58.52 | 61.89' RT | 370,573.27 | 2,525,409.59 | 206.83 |
| 1637 | 58+54.28 | 72.46' RT | 370,562.38 | 2,525,412.93 | 206.61 |
| 1638 | 58+52.17 | 75.08' RT | 370,559.02 | 2,525,412.93 | 206.52 |
| 1639 | 58+48.27 | 72.00' RT | 370,558.97 | 2,525,407.96 | 206.67 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1640 | 58+50.36 | 69.36' RT | 370,562.33 | 2,525,407.93 | 206.69 |
| 1641 | 58+52.52 | 61.89' RT | 370,569.51 | 2,525,404.92 | 206.74 |
| 1642 | 58+52.52 | 59.00' RT | 370,571.75 | 2,525,403.11 | 206.76 |
| 1643 | 58+48.52 | 59.00' RT | 370,569.24 | 2,525,400.00 | 206.97 |
| 1644 | 58+48.52 | 54.00' RT | 370,573.14 | 2,525,396.86 | 206.90 |
| 1645 | 58+52.52 | 54.00' RT | 370,575.65 | 2,525,399.97 | 206.68 |
| 1646 | 58+52.52 | 50.50' RT | 370,578.37 | 2,525,397.78 | 206.63 |
| 1647 | 58+48.52 | 50.50' RT | 370,575.86 | 2,525,394.66 | 206.85 |
| 1648 | 58+48.52 | 44.00' RT | 370,580.92 | 2,525,390.58 | 206.75 |
| 1649 | 58+52.52 | 44.00' RT | 370,583.43 | 2,525,393.70 | 206.53 |
| 1650 | 58+55.41 | 35.86' RT | 370,591.58 | 2,525,390.83 | 206.26 |
| 1651 | 58+57.57 | 33.50' RT | 370,594.78 | 2,525,391.04 | 206.23 |
| 1652 | 58+65.56 | 33.66' RT | 370,599.67 | 2,525,397.35 | 206.49 |
| 1653 | 58+59.83 | 39.91' RT | 370,591.20 | 2,525,396.82 | 206.58 |
| 1654 | 58+58.52 | 44.00' RT | 370,587.20 | 2,525,398.37 | 206.62 |
| 1655 | 58+67.78 | 44.00' RT | 370,593.01 | 2,525,405.58 | 207.10 |
| 1656 | 58+72.78 | 44.00' RT | 370,596.15 | 2,525,409.47 | 207.36 |
| 1657 | 58+79.26 | 44.00' RT | 370,600.21 | 2,525,414.51 | 207.13 |
| 1658 | 58+80.71 | 50.50' RT | 370,596.06 | 2,525,419.72 | 207.05 |
| 1659 | 58+72.78 | 50.50' RT | 370,591.09 | 2,525,413.55 | 207.24 |
| 1660 | 58+67.78 | 50.50' RT | 370,587.95 | 2,525,409.66 | 207.06 |
| 1661 | 58+58.52 | 50.50' RT | 370,582.14 | 2,525,402.45 | 206.72 |
| 1662 | 58+58.52 | 54.00' RT | 370,579.41 | 2,525,404.64 | 206.77 |
| 1663 | 58+67.78 | 54.00' RT | 370,585.23 | 2,525,411.85 | 207.37 |
| 1664 | 58+72.78 | 54.00' RT | 370,588.36 | 2,525,415.75 | 207.29 |
| 1665 | 58+78.23 | 54.00' RT | 370,591.78 | 2,525,419.99 | 207.02 |
| 1666 | 58+80.46 | 54.00' RT | 370,593.18 | 2,525,421.72 | 207.01 |
| 1667 | 59+28.71 | 62.42' RT | 370,616.90 | 2,525,464.57 | 208.52 |
| 1668 | 59+28.65 | 58.45' RT | 370,619.96 | 2,525,462.04 | 208.19 |
| 1669 | 59+33.38 | 52.45' RT | 370,627.60 | 2,525,461.95 | 208.32 |
| 1670 | 59+36.14 | 48.95' RT | 370,632.05 | 2,525,461.90 | 208.46 |
| 1671 | 59+41.26 | 42.45' RT | 370,640.33 | 2,525,461.81 | 208.73 |
| 1672 | 59+46.94 | 39.29' RT | 370,646.36 | 2,525,464.25 | 209.35 |
| 1673 | 59+45.79 | 36.71' RT | 370,647.64 | 2,525,461.73 | 208.97 |
| 1674 | 59+51.02 | 32.51' RT | 370,654.20 | 2,525,463.16 | 209.31 |
| 1675 | 59+57.02 | 31.01' RT | 370,659.13 | 2,525,466.90 | 209.53 |
| 1676 | 59+57.57 | 31.00' RT | 370,659.48 | 2,525,467.32 | 209.54 |
| 1677 | 59+63.04 | 33.50' RT | 370,660.97 | 2,525,473.15 | 210.15 |
| 1678 | 59+66.04 | 31.00' RT | 370,664.80 | 2,525,473.92 | 209.83 |
| 1679 | 59+73.26 | 31.00' RT | 370,669.33 | 2,525,479.53 | 210.08 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1680 | 59+82.57 | 31.00' RT | 370,675.17 | 2,525,486.78 | 210.40 |
| 1681 | 59+73.26 | 33.50' RT | 370,667.38 | 2,525,481.10 | 210.00 |
| 1682 | 59+71.03 | 36.83' RT | 370,663.39 | 2,525,481.46 | 209.94 |
| 1683 | 59+69.34 | 39.36' RT | 370,660.36 | 2,525,481.74 | 209.80 |
| 1684 | 59+68.67 | 41.58' RT | 370,658.21 | 2,525,482.60 | 209.68 |
| 1685 | 59+68.67 | 44.00' RT | 370,656.32 | 2,525,484.12 | 209.61 |
| 1686 | 59+83.67 | 44.00' RT | 370,665.74 | 2,525,495.80 | 211.20 |
| 1687 | 59+83.67 | 50.50' RT | 370,660.68 | 2,525,499.88 | 211.29 |
| 1688 | 59+68.67 | 50.50' RT | 370,651.26 | 2,525,488.20 | 209.71 |
| 1689 | 59+68.67 | 54.00' RT | 370,648.54 | 2,525,490.40 | 209.76 |
| 1690 | 59+83.67 | 54.00' RT | 370,657.95 | 2,525,502.08 | 211.35 |
| 1691 | 59+83.67 | 59.00' RT | 370,654.06 | 2,525,505.21 | 211.42 |
| 1692 | 59+68.67 | 59.00' RT | 370,644.65 | 2,525,493.53 | 209.84 |
| 1693 | 59+62.67 | 59.00' RT | 370,640.88 | 2,525,488.86 | 209.75 |
| 1694 | 59+52.67 | 60.00' RT | 370,633.83 | 2,525,481.71 | 209.04 |
| 1695 | 59+50.07 | 62.97' RT | 370,629.88 | 2,525,481.55 | 209.02 |
| 1696 | 59+44.00 | 69.92' RT | 370,620.66 | 2,525,481.19 | 209.48 |
| 1697 | 59+40.09 | 66.84' RT | 370,620.61 | 2,525,476.21 | 209.38 |
| 1698 | 59+46.30 | 60.00' RT | 370,629.83 | 2,525,476.75 | 208.95 |
| 1699 | 59+41.34 | 60.00' RT | 370,626.72 | 2,525,472.89 | 208.60 |
| 1700 | 59+35.34 | 60.00' RT | 370,622.95 | 2,525,468.22 | 208.18 |
| 1701 | 59+30.61 | 60.00' RT | 370,619.99 | 2,525,464.54 | 208.11 |
| 1702 | 59+35.34 | 54.00' RT | 370,627.63 | 2,525,464.45 | 208.24 |
| 1703 | 59+41.34 | 54.00' RT | 370,631.39 | 2,525,469.12 | 208.66 |
| 1704 | 59+46.30 | 54.00' RT | 370,634.50 | 2,525,472.98 | 209.01 |
| 1705 | 59+52.67 | 54.00' RT | 370,638.50 | 2,525,477.94 | 209.10 |
| 1706 | 59+62.67 | 54.00' RT | 370,644.77 | 2,525,485.73 | 209.67 |
| 1707 | 59+62.67 | 50.50' RT | 370,647.50 | 2,525,483.53 | 209.62 |
| 1708 | 59+52.67 | 50.50' RT | 370,641.22 | 2,525,475.74 | 209.05 |
| 1709 | 59+38.10 | 50.50' RT | 370,632.08 | 2,525,464.40 | 208.38 |
| 1710 | 59+43.23 | 44.00' RT | 370,640.36 | 2,525,464.31 | 208.65 |
| 1711 | 59+52.67 | 44.00' RT | 370,646.28 | 2,525,471.66 | 208.95 |
| 1712 | 59+62.67 | 44.00' RT | 370,652.56 | 2,525,479.45 | 209.52 |
| 1713 | 59+62.67 | 41.58' RT | 370,654.44 | 2,525,477.93 | 209.59 |
| 1714 | 59+64.35 | 36.03' RT | 370,659.82 | 2,525,475.76 | 209.61 |
| 1715 | 59+66.04 | 33.50' RT | 370,662.85 | 2,525,475.49 | 209.75 |

## TECHNICAL INFEASIBILITY NOTES:

1. UPPER RAMP LENGTH LIMITED TO 15-FEET PER FDM 11-46-10.5.1.1

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

**W NATIONAL AVE & S 98TH ST**
**NORTHWEST QUADRANT**

**W NATIONAL AVE & S 98TH ST**
**NORTHEAST QUADRANT**

S 98TH ST

98TH ST R/L

EXISTING R/W

TLE

SLOPE INTERCEPT

CONCRETE CURB PEDESTRIAN 6" HEIGHT

PEDESTRIAN ACCESS ROUTE

RAISED CYCLE TRACK (NOT REQUIRED TO BE ADA COMPLIANT)

TYPE 2M

MEF SEE NOTE 1

CONC EDGE

### LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 112 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021301-CR.DWG
LAYOUT NAME - 07N

PLOT DATE : 1/9/2026 12:35 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1750 | 63+44.54 | -31.00' LT | 370,950.61 | 2,525,729.69 | 221.89 |
| 1751 | 63+56.34 | -36.73' LT | 370,962.48 | 2,525,735.27 | 222.12 |
| 1752 | 63+56.23 | -40.64' LT | 370,965.45 | 2,525,732.74 | 222.57 |
| 1753 | 63+60.44 | -41.96' LT | 370,969.12 | 2,525,735.19 | 222.15 |
| 1754 | 63+65.55 | -48.46' LT | 370,977.38 | 2,525,735.09 | 222.09 |
| 1755 | 63+68.31 | -51.97' LT | 370,981.86 | 2,525,735.03 | 222.05 |
| 1756 | 63+73.03 | -57.97' LT | 370,989.49 | 2,525,734.94 | 222.00 |
| 1757 | 63+72.95 | -61.92' LT | 370,992.51 | 2,525,732.40 | 222.39 |
| 1758 | 63+71.06 | -59.52' LT | 370,989.45 | 2,525,732.44 | 221.92 |
| 1759 | 63+66.35 | -59.52' LT | 370,986.50 | 2,525,728.77 | 222.06 |
| 1760 | 63+63.37 | -59.52' LT | 370,984.63 | 2,525,726.45 | 222.27 |
| 1761 | 63+68.82 | -66.31' LT | 370,993.34 | 2,525,726.42 | 222.63 |
| 1762 | 63+64.85 | -69.44' LT | 370,993.28 | 2,525,721.37 | 222.70 |
| 1763 | 63+59.44 | -62.61' LT | 370,984.57 | 2,525,721.45 | 222.35 |
| 1764 | 63+56.20 | -59.52' LT | 370,980.13 | 2,525,720.87 | 222.38 |
| 1765 | 63+51.20 | -58.52' LT | 370,976.21 | 2,525,717.60 | 222.57 |
| 1766 | 63+46.20 | -58.52' LT | 370,973.07 | 2,525,713.71 | 222.60 |
| 1767 | 63+41.20 | -58.50' LT | 370,969.92 | 2,525,709.83 | 222.51 |
| 1768 | 63+41.20 | -53.50' LT | 370,966.03 | 2,525,712.96 | 222.44 |
| 1769 | 63+46.20 | -53.52' LT | 370,969.18 | 2,525,716.85 | 222.52 |
| 1770 | 63+51.20 | -53.52' LT | 370,972.32 | 2,525,720.74 | 222.50 |
| 1771 | 63+56.20 | -53.52' LT | 370,975.46 | 2,525,724.63 | 222.29 |
| 1772 | 63+63.37 | -53.52' LT | 370,979.96 | 2,525,730.22 | 222.18 |
| 1773 | 63+66.35 | -53.52' LT | 370,981.82 | 2,525,732.53 | 221.97 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1774 | 63+63.59 | -50.00' LT | 370,977.35 | 2,525,732.59 | 222.01 |
| 1775 | 63+51.20 | -50.00' LT | 370,969.58 | 2,525,722.95 | 222.47 |
| 1776 | 63+46.20 | -50.00' LT | 370,966.44 | 2,525,719.05 | 222.48 |
| 1777 | 63+41.20 | -50.00' LT | 370,963.30 | 2,525,715.16 | 222.38 |
| 1778 | 63+41.20 | -43.50' LT | 370,958.24 | 2,525,719.24 | 222.29 |
| 1779 | 63+46.20 | -43.50' LT | 370,961.38 | 2,525,723.13 | 222.38 |
| 1780 | 63+51.20 | -43.50' LT | 370,964.52 | 2,525,727.03 | 222.37 |
| 1781 | 63+58.48 | -43.50' LT | 370,969.09 | 2,525,732.69 | 222.07 |
| 1782 | 64+28.36 | -79.84' LT | 371,041.24 | 2,525,764.30 | 222.62 |
| 1783 | 64+21.77 | -71.45' LT | 371,030.57 | 2,525,764.43 | 222.73 |
| 1784 | 64+19.87 | -62.44' LT | 371,022.36 | 2,525,768.60 | 223.24 |
| 1785 | 64+16.74 | -59.91' LT | 371,018.42 | 2,525,767.75 | 222.85 |
| 1786 | 64+16.58 | -53.24' LT | 371,013.14 | 2,525,771.82 | 222.95 |
| 1787 | 64+17.33 | -49.33' LT | 371,010.57 | 2,525,774.85 | 223.05 |
| 1788 | 64+20.64 | -42.11' LT | 371,007.02 | 2,525,781.96 | 223.25 |
| 1789 | 64+26.94 | -38.79' LT | 371,008.39 | 2,525,788.94 | 223.66 |
| 1790 | 64+27.28 | -38.50' LT | 371,008.38 | 2,525,789.39 | 223.69 |
| 1791 | 64+29.35 | -34.11' LT | 371,006.26 | 2,525,793.76 | 223.55 |
| 1792 | 64+36.01 | -31.59' LT | 371,008.48 | 2,525,800.53 | 223.65 |
| 1793 | 64+41.43 | -31.00' LT | 371,011.41 | 2,525,805.12 | 223.75 |
| 1794 | 64+36.55 | -34.03' LT | 371,010.72 | 2,525,799.42 | 223.57 |
| 1795 | 64+36.55 | -36.30' LT | 371,012.48 | 2,525,798.00 | 223.56 |
| 1796 | 64+36.55 | -43.50' LT | 371,018.09 | 2,525,793.48 | 223.70 |
| 1797 | 64+50.55 | -43.50' LT | 371,026.87 | 2,525,804.38 | 224.31 |

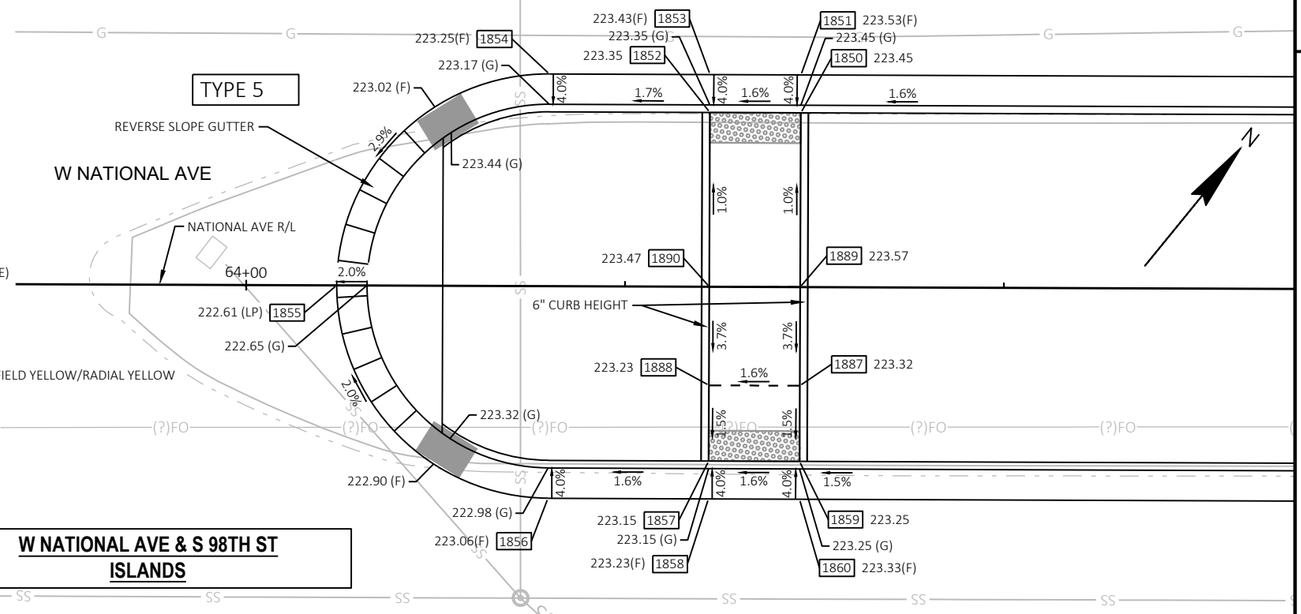
| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1798 | 64+50.55 | -50.00' LT | 371,031.93 | 2,525,800.30 | 224.41 |
| 1799 | 64+36.55 | -50.00' LT | 371,023.15 | 2,525,789.40 | 223.60 |
| 1800 | 64+36.55 | -53.50' LT | 371,025.87 | 2,525,787.20 | 223.49 |
| 1801 | 64+50.55 | -53.50' LT | 371,034.66 | 2,525,798.10 | 224.46 |
| 1802 | 64+50.55 | -58.50' LT | 371,038.55 | 2,525,794.97 | 224.54 |
| 1803 | 64+36.55 | -59.50' LT | 371,030.54 | 2,525,783.44 | 223.38 |
| 1804 | 64+30.55 | -59.52' LT | 371,026.79 | 2,525,778.76 | 223.29 |
| 1805 | 64+31.59 | -63.37' LT | 371,030.44 | 2,525,777.14 | 223.34 |
| 1806 | 64+35.73 | -68.78' LT | 371,037.25 | 2,525,776.97 | 223.54 |
| 1807 | 64+31.80 | -71.87' LT | 371,037.19 | 2,525,771.98 | 223.27 |
| 1808 | 64+27.62 | -66.41' LT | 371,030.31 | 2,525,772.14 | 223.25 |
| 1809 | 64+25.55 | -59.52' LT | 371,023.65 | 2,525,774.86 | 223.22 |
| 1810 | 64+19.20 | -59.52' LT | 371,019.67 | 2,525,769.92 | 222.77 |
| 1811 | 64+19.07 | -53.52' LT | 371,014.91 | 2,525,773.58 | 222.87 |
| 1812 | 64+25.55 | -53.52' LT | 371,018.98 | 2,525,778.63 | 223.33 |
| 1813 | 64+30.55 | -53.52' LT | 371,022.12 | 2,525,782.52 | 223.40 |
| 1814 | 64+30.55 | -50.00' LT | 371,019.38 | 2,525,784.73 | 223.51 |
| 1815 | 64+19.74 | -50.00' LT | 371,012.60 | 2,525,776.31 | 222.97 |
| 1816 | 64+22.72 | -43.50' LT | 371,009.41 | 2,525,782.71 | 223.17 |
| 1817 | 64+30.55 | -43.50' LT | 371,014.32 | 2,525,788.81 | 223.61 |
| 1818 | 64+30.55 | -36.30' LT | 371,008.72 | 2,525,793.33 | 223.47 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1850 | 64+36.55 | -11.50' LT | 370,993.17 | 2,525,813.56 | 223.45 |
| 1851 | 64+36.55 | -14.00' LT | 370,995.12 | 2,525,811.99 | 223.53 |
| 1852 | 64+30.55 | -11.50' LT | 370,989.41 | 2,525,808.89 | 223.35 |
| 1853 | 64+30.55 | -14.00' LT | 370,991.36 | 2,525,807.32 | 223.43 |
| 1854 | 64+19.96 | -14.00' LT | 370,984.71 | 2,525,799.07 | 223.25 |
| 1855 | 64+05.96 | 0.00' | 370,965.02 | 2,525,796.96 | 222.61 |
| 1856 | 64+19.96 | 14.00' RT | 370,962.91 | 2,525,816.65 | 223.06 |
| 1857 | 64+30.55 | 11.50' RT | 370,971.50 | 2,525,823.33 | 223.15 |
| 1858 | 64+30.55 | 14.00' RT | 370,969.56 | 2,525,824.89 | 223.23 |
| 1859 | 64+36.55 | 11.50' RT | 370,975.27 | 2,525,828.00 | 223.25 |
| 1860 | 64+36.55 | 14.00' RT | 370,973.32 | 2,525,829.57 | 223.33 |
| 1861 | 64+55.55 | 36.00' RT | 370,968.12 | 2,525,858.17 | 223.64 |
| 1862 | 64+40.55 | 31.00' RT | 370,962.60 | 2,525,843.35 | 223.53 |
| 1863 | 64+40.15 | 33.50' RT | 370,960.40 | 2,525,844.60 | 223.94 |
| 1864 | 64+36.55 | 31.00' RT | 370,960.09 | 2,525,840.23 | 223.47 |
| 1865 | 64+36.56 | 33.50' RT | 370,958.14 | 2,525,841.81 | 223.39 |
| 1866 | 64+30.55 | 31.00' RT | 370,956.32 | 2,525,835.56 | 223.37 |
| 1867 | 64+30.55 | 33.50' RT | 370,954.37 | 2,525,837.13 | 223.29 |
| 1868 | 64+27.55 | 33.50' RT | 370,952.49 | 2,525,834.80 | 223.75 |
| 1869 | 64+25.05 | 31.00' RT | 370,952.87 | 2,525,831.28 | 223.29 |
| 1870 | 64+10.05 | 36.00' RT | 370,939.56 | 2,525,822.74 | 222.94 |
| 1871 | 64+30.55 | 44.00' RT | 370,946.20 | 2,525,843.72 | 223.92 |
| 1872 | 64+25.55 | 44.00' RT | 370,943.06 | 2,525,839.83 | 223.83 |
| 1873 | 64+25.55 | 50.50' RT | 370,938.00 | 2,525,843.91 | 223.93 |
| 1874 | 64+30.55 | 50.50' RT | 370,941.14 | 2,525,847.80 | 224.02 |
| 1875 | 64+30.55 | 54.00' RT | 370,938.41 | 2,525,850.00 | 224.07 |
| 1876 | 64+25.55 | 54.00' RT | 370,935.28 | 2,525,846.11 | 223.98 |
| 1877 | 64+25.55 | 59.00' RT | 370,931.38 | 2,525,849.24 | 224.05 |
| 1878 | 64+30.55 | 59.00' RT | 370,934.52 | 2,525,853.14 | 224.15 |
| 1879 | 64+36.55 | 59.00' RT | 370,938.29 | 2,525,857.81 | 224.24 |
| 1880 | 64+41.55 | 59.00' RT | 370,941.42 | 2,525,861.70 | 224.35 |
| 1881 | 64+41.55 | 54.00' RT | 370,945.32 | 2,525,858.56 | 224.28 |
| 1882 | 64+36.55 | 54.00' RT | 370,942.18 | 2,525,854.67 | 224.16 |
| 1883 | 64+36.55 | 50.50' RT | 370,944.90 | 2,525,852.47 | 224.11 |
| 1884 | 64+41.55 | 50.50' RT | 370,948.04 | 2,525,856.37 | 224.23 |
| 1885 | 64+41.55 | 44.00' RT | 370,953.10 | 2,525,852.29 | 224.13 |
| 1886 | 64+36.55 | 44.00' RT | 370,949.96 | 2,525,848.39 | 224.01 |
| 1887 | 64+36.55 | 6.51' RT | 370,979.15 | 2,525,824.87 | 223.32 |
| 1888 | 64+30.55 | 6.50' RT | 370,975.39 | 2,525,820.19 | 223.23 |
| 1889 | 64+36.55 | 0.00' | 370,984.22 | 2,525,820.78 | 223.57 |
| 1890 | 64+30.55 | 0.00' | 370,980.46 | 2,525,816.11 | 223.47 |

## LEGEND

- XXX.XX — SIDEWALK ELEVATION
- XXX.XX(F) — CURB FLANGE ELEVATION
- XXX.XX(G) — GUTTER FLOWLINE ELEVATION
- XXX.XX(T) — TOP OF CURB ELEVATION
- HP / LP — HIGH POINT / LOW POINT
- (L) — LANDING
- XXXX — POINT NUMBER
- MEF — MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM
- SLOPE INTERCEPTS
- GRASS FLARE
- (T) — TRAVERSABLE FLARE (10:1 MAX SLOPE)
- (N) — NON-TRAVERSABLE (6:1 MAX SLOPE)
- GRADE BREAK
- CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW
- (A) — CURB RADIUS POINT
- TYPE XM — CURB RAMP TYPE ("M" - MODIFIED)
- DETECTABLE EDGE TILES

**W NATIONAL AVE & S 98TH ST ISLANDS**




## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| (L) | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| (T) | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| (N) | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| (A) | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
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3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
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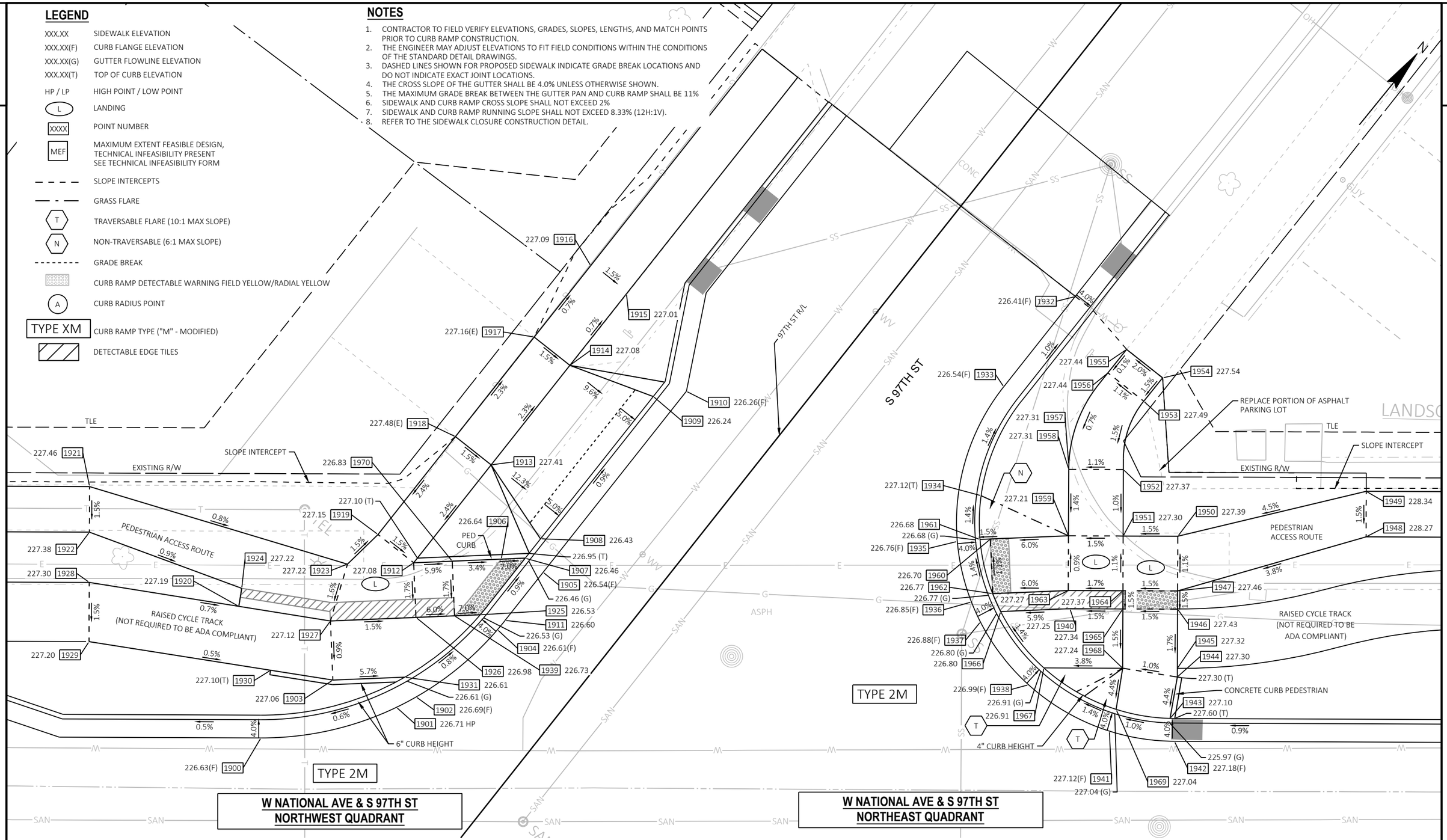
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.




| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 115 E |

2

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1900 | 67+60.39 | -31.00' LT | 371,211.59 | 2,526,053.45 | 226.63 |
| 1901 | 67+75.25 | -34.42' LT | 371,223.58 | 2,526,062.87 | 226.71 |
| 1902 | 67+77.40 | -35.56' LT | 371,225.81 | 2,526,063.82 | 226.69 |
| 1903 | 67+68.26 | -37.37' LT | 371,221.49 | 2,526,055.57 | 227.06 |
| 1904 | 67+86.30 | -42.98' LT | 371,237.18 | 2,526,066.10 | 226.61 |
| 1905 | 67+91.28 | -49.28' LT | 371,245.21 | 2,526,066.02 | 226.54 |
| 1906 | 67+86.68 | -50.71' LT | 371,243.43 | 2,526,061.54 | 226.64 |
| 1907 | 67+89.31 | -50.83' LT | 371,245.18 | 2,526,063.52 | 226.46 |
| 1908 | 67+90.99 | -52.95' LT | 371,247.88 | 2,526,063.49 | 226.43 |
| 1909 | 68+03.30 | -68.63' LT | 371,267.81 | 2,526,063.24 | 226.24 |
| 1910 | 68+06.93 | -69.21' LT | 371,270.55 | 2,526,065.70 | 226.26 |
| 1911 | 67+87.13 | -44.00' LT | 371,238.49 | 2,526,066.10 | 226.60 |
| 1912 | 67+77.08 | -50.28' LT | 371,237.07 | 2,526,054.34 | 227.08 |
| 1913 | 67+85.54 | -61.05' LT | 371,250.77 | 2,526,054.17 | 227.41 |
| 1914 | 67+94.14 | -72.00' LT | 371,264.70 | 2,526,053.99 | 227.08 |
| 1915 | 68+00.32 | -79.87' LT | 371,274.69 | 2,526,053.86 | 227.01 |
| 1916 | 67+96.39 | -82.96' LT | 371,274.63 | 2,526,048.86 | 227.09 |
| 1917 | 67+90.21 | -75.09' LT | 371,264.63 | 2,526,048.99 | 227.16 |
| 1918 | 67+81.61 | -64.14' LT | 371,250.70 | 2,526,049.17 | 227.48 |
| 1919 | 67+73.15 | -53.37' LT | 371,237.01 | 2,526,049.34 | 227.15 |
| 1920 | 67+57.91 | -45.43' LT | 371,221.27 | 2,526,042.46 | 227.19 |
| 1921 | 67+41.48 | -58.50' LT | 371,221.14 | 2,526,021.47 | 227.46 |
| 1922 | 67+41.48 | -53.50' LT | 371,217.24 | 2,526,024.61 | 227.38 |
| 1923 | 67+69.81 | -50.10' LT | 371,232.38 | 2,526,048.79 | 227.22 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1924 | 67+58.22 | -47.41' LT | 371,223.00 | 2,526,041.46 | 227.22 |
| 1925 | 67+84.39 | -44.60' LT | 371,237.24 | 2,526,063.60 | 226.53 |
| 1926 | 67+77.35 | -44.28' LT | 371,232.58 | 2,526,058.31 | 226.98 |
| 1927 | 67+67.96 | -43.86' LT | 371,226.36 | 2,526,051.27 | 227.12 |
| 1928 | 67+41.48 | -48.00' LT | 371,212.96 | 2,526,028.06 | 227.30 |
| 1929 | 67+41.48 | -41.50' LT | 371,207.90 | 2,526,032.14 | 227.20 |
| 1930 | 67+61.42 | -38.42' LT | 371,218.01 | 2,526,049.58 | 227.10 |
| 1931 | 67+76.15 | -37.72' LT | 371,226.71 | 2,526,061.49 | 226.61 |
| 1932 | 68+49.55 | -79.74' LT | 371,305.49 | 2,526,092.27 | 226.41 |
| 1933 | 68+41.76 | -69.83' LT | 371,292.88 | 2,526,092.43 | 226.54 |
| 1934 | 68+39.32 | -57.87' LT | 371,282.05 | 2,526,098.03 | 227.12 |
| 1935 | 68+36.73 | -52.84' LT | 371,276.50 | 2,526,099.17 | 226.76 |
| 1936 | 68+38.30 | -46.21' LT | 371,272.32 | 2,526,104.56 | 226.85 |
| 1937 | 68+39.29 | -44.02' LT | 371,271.24 | 2,526,106.70 | 226.88 |
| 1938 | 68+44.60 | -37.14' LT | 371,269.22 | 2,526,115.15 | 226.99 |
| 1939 | 67+81.58 | -44.47' LT | 371,235.38 | 2,526,061.48 | 226.73 |
| 1940 | 68+49.10 | -45.50' LT | 371,278.55 | 2,526,113.41 | 227.25 |
| 1941 | 68+53.48 | -32.09' LT | 371,270.86 | 2,526,125.24 | 227.12 |
| 1942 | 68+60.63 | -31.00' LT | 371,274.50 | 2,526,131.49 | 227.18 |
| 1943 | 68+60.15 | -33.51' LT | 371,276.15 | 2,526,129.54 | 227.10 |
| 1944 | 68+60.92 | -38.05' LT | 371,280.17 | 2,526,127.29 | 227.30 |
| 1945 | 68+60.92 | -39.00' LT | 371,280.91 | 2,526,126.69 | 227.32 |
| 1946 | 68+60.92 | -45.50' LT | 371,285.97 | 2,526,122.61 | 227.43 |
| 1947 | 68+60.92 | -47.50' LT | 371,287.53 | 2,526,121.35 | 227.46 |

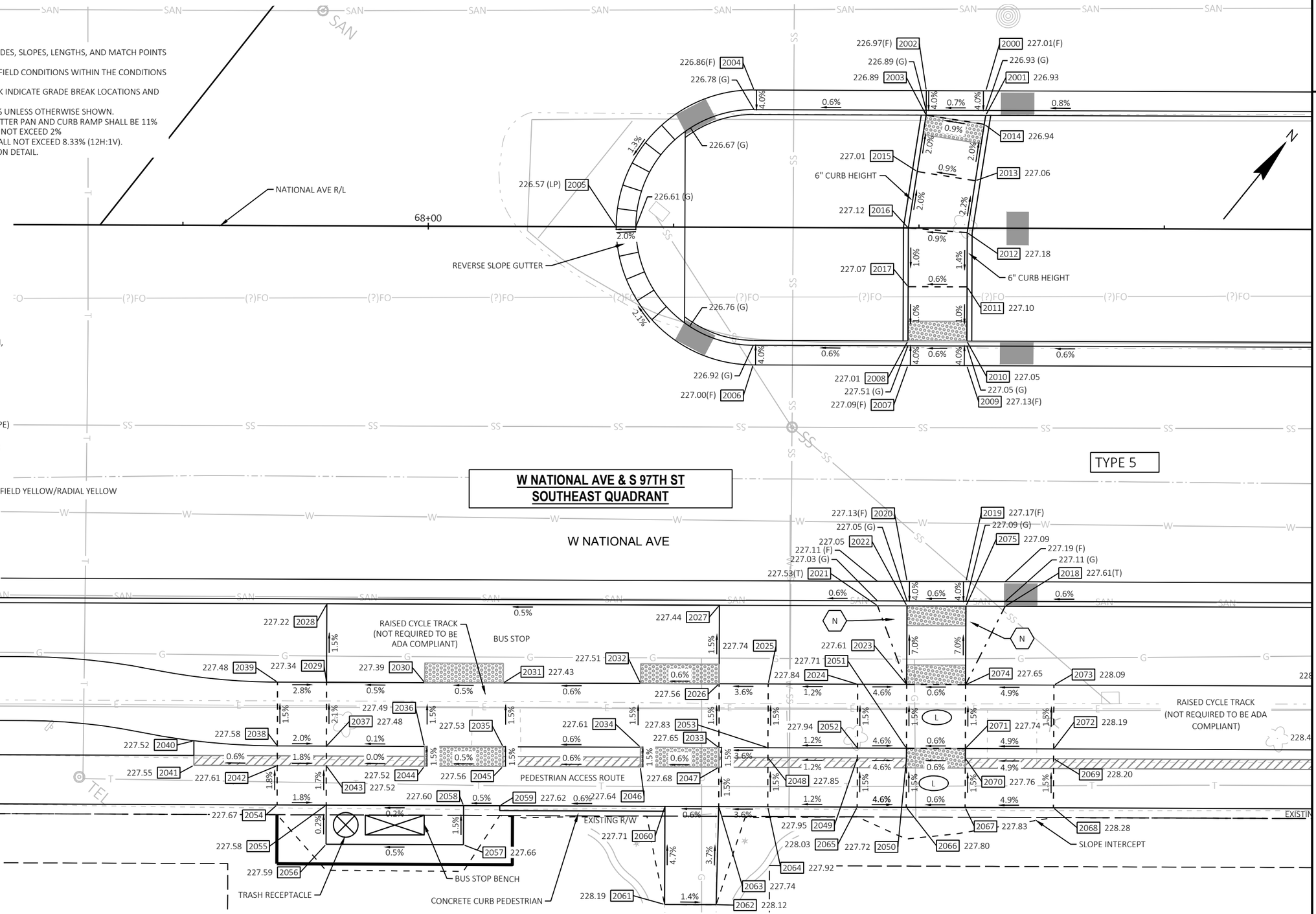
| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 1948 | 68+81.57 | -53.50' LT | 371,305.16 | 2,526,133.67 | 228.27 |
| 1949 | 68+81.57 | -58.50' LT | 371,309.05 | 2,526,130.53 | 228.34 |
| 1950 | 68+60.92 | -53.50' LT | 371,292.20 | 2,526,117.59 | 227.39 |
| 1951 | 68+54.92 | -53.50' LT | 371,288.43 | 2,526,112.92 | 227.30 |
| 1952 | 68+54.92 | -60.79' LT | 371,294.11 | 2,526,108.34 | 227.37 |
| 1953 | 68+57.12 | -68.30' LT | 371,301.34 | 2,526,105.35 | 227.49 |
| 1954 | 68+59.19 | -70.87' LT | 371,304.63 | 2,526,105.34 | 227.54 |
| 1955 | 68+55.23 | -73.98' LT | 371,304.57 | 2,526,100.31 | 227.44 |
| 1956 | 68+53.19 | -71.39' LT | 371,301.28 | 2,526,100.35 | 227.44 |
| 1957 | 68+48.91 | -61.35' LT | 371,290.78 | 2,526,103.32 | 227.31 |
| 1958 | 68+48.92 | -60.79' LT | 371,290.34 | 2,526,103.67 | 227.31 |
| 1959 | 68+48.92 | -53.50' LT | 371,284.67 | 2,526,108.25 | 227.21 |
| 1960 | 68+40.36 | -53.12' LT | 371,278.99 | 2,526,101.82 | 226.70 |
| 1961 | 68+39.22 | -53.06' LT | 371,278.24 | 2,526,100.97 | 226.68 |
| 1962 | 68+40.62 | -47.12' LT | 371,274.50 | 2,526,105.79 | 226.77 |
| 1963 | 68+48.92 | -47.50' LT | 371,279.99 | 2,526,112.01 | 227.27 |
| 1964 | 68+54.92 | -47.50' LT | 371,283.76 | 2,526,116.68 | 227.37 |
| 1965 | 68+54.92 | -45.50' LT | 371,282.20 | 2,526,117.94 | 227.34 |
| 1966 | 68+41.51 | -45.16' LT | 371,273.53 | 2,526,107.72 | 226.80 |
| 1967 | 68+46.27 | -39.00' LT | 371,271.71 | 2,526,115.28 | 226.91 |
| 1968 | 68+54.92 | -39.00' LT | 371,277.14 | 2,526,122.02 | 227.24 |
| 1969 | 68+54.22 | -34.48' LT | 371,273.19 | 2,526,124.32 | 227.04 |
| 1970 | 67+81.31 | -50.47' LT | 371,239.88 | 2,526,057.51 | 226.83 |

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 117 | E |
|---|---|---|---|---|---|

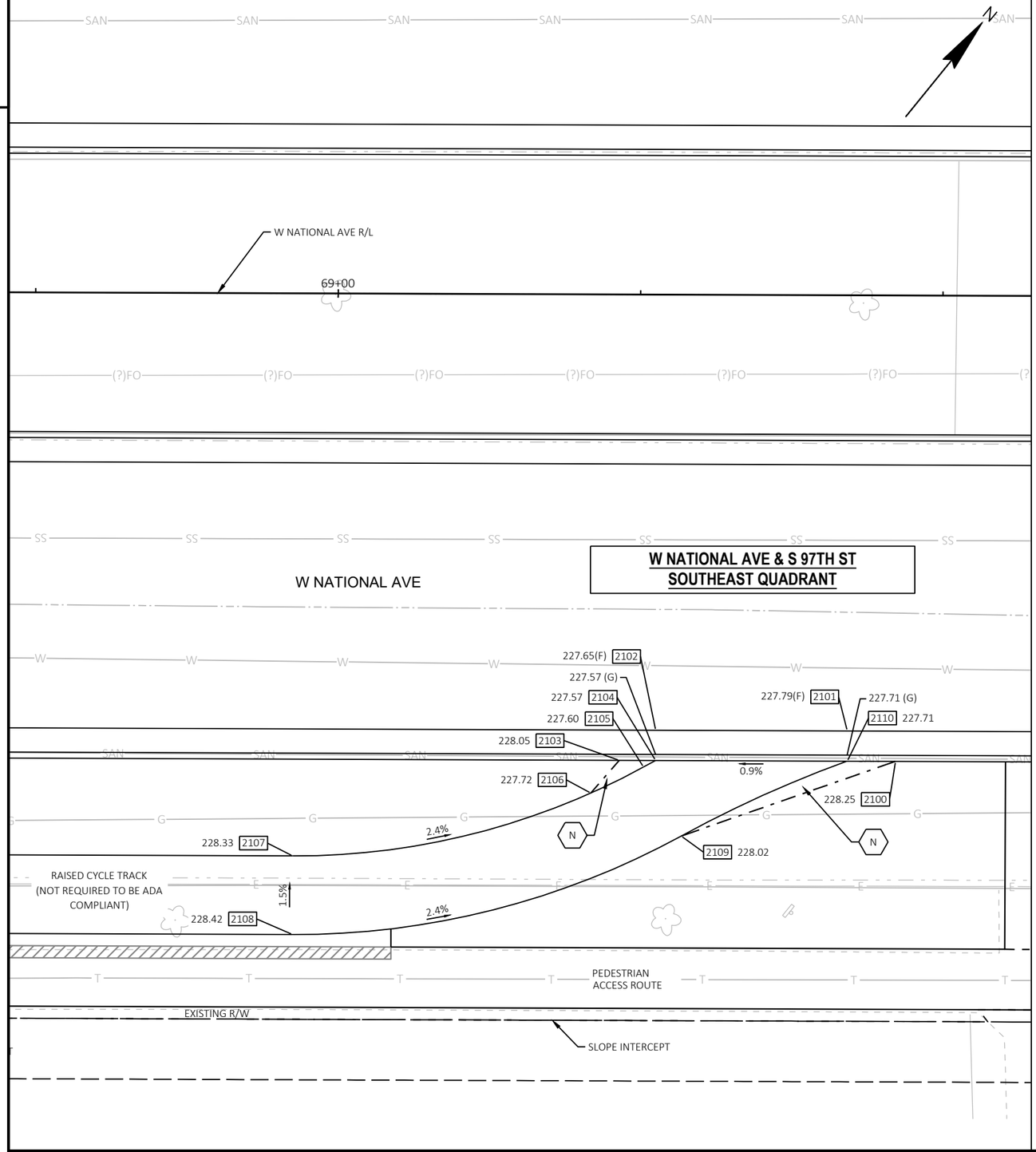

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\021301-CR.DWG
LAYOUT NAME - 08ISL
PLOT DATE : 1/9/2026 12:37 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 2000 | 68+56.76 | -14.00' LT | 371,258.83 | 2,526,139.14 | 227.01 |
| 2001 | 68+56.76 | -11.50' LT | 371,256.89 | 2,526,140.71 | 226.93 |
| 2002 | 68+50.69 | -14.00' LT | 371,255.02 | 2,526,134.41 | 226.97 |
| 2003 | 68+50.69 | -11.50' LT | 371,253.08 | 2,526,135.98 | 226.89 |
| 2004 | 68+33.15 | -14.00' LT | 371,244.02 | 2,526,120.76 | 226.86 |
| 2005 | 68+19.15 | 0.00' | 371,224.33 | 2,526,118.65 | 226.57 |
| 2006 | 68+33.15 | 14.00' RT | 371,222.22 | 2,526,138.33 | 227.00 |
| 2007 | 68+48.92 | 14.00' RT | 371,232.11 | 2,526,150.61 | 227.09 |
| 2008 | 68+48.92 | 11.50' RT | 371,234.06 | 2,526,149.04 | 227.01 |
| 2009 | 68+54.92 | 14.00' RT | 371,235.88 | 2,526,155.28 | 227.13 |
| 2010 | 68+54.92 | 11.50' RT | 371,237.83 | 2,526,153.71 | 227.05 |
| 2011 | 68+54.92 | 5.98' RT | 371,242.12 | 2,526,150.25 | 227.10 |
| 2012 | 68+54.92 | 0.46' RT | 371,246.42 | 2,526,146.78 | 227.18 |
| 2013 | 68+55.73 | -4.84' LT | 371,251.06 | 2,526,144.09 | 227.06 |
| 2014 | 68+56.62 | -10.59' LT | 371,256.09 | 2,526,141.17 | 226.94 |
| 2015 | 68+49.80 | -5.75' LT | 371,248.05 | 2,526,138.90 | 227.01 |
| 2016 | 68+48.92 | 0.00' | 371,243.01 | 2,526,141.82 | 227.12 |
| 2017 | 68+48.92 | 5.98' RT | 371,238.36 | 2,526,145.57 | 227.07 |
| 2018 | 68+58.92 | 38.50' RT | 371,219.32 | 2,526,173.77 | 227.61 |
| 2019 | 68+54.92 | 36.00' RT | 371,218.75 | 2,526,169.09 | 227.17 |
| 2020 | 68+48.92 | 36.00' RT | 371,214.99 | 2,526,164.42 | 227.13 |
| 2021 | 68+45.92 | 38.50' RT | 371,211.16 | 2,526,163.65 | 227.53 |
| 2022 | 68+48.92 | 38.50' RT | 371,213.04 | 2,526,165.98 | 227.05 |
| 2023 | 68+48.92 | 46.50' RT | 371,206.81 | 2,526,171.00 | 227.61 |
| 2024 | 68+43.92 | 46.50' RT | 371,203.67 | 2,526,167.11 | 227.84 |
| 2025 | 68+34.81 | 46.50' RT | 371,197.96 | 2,526,160.02 | 227.74 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 2026 | 68+29.81 | 46.50' RT | 371,194.82 | 2,526,156.13 | 227.56 |
| 2027 | 68+29.81 | 38.50' RT | 371,201.05 | 2,526,151.11 | 227.44 |
| 2028 | 67+89.81 | 38.50' RT | 371,175.94 | 2,526,119.96 | 227.22 |
| 2029 | 67+89.81 | 46.50' RT | 371,169.71 | 2,526,124.99 | 227.34 |
| 2030 | 67+99.81 | 46.50' RT | 371,175.99 | 2,526,132.77 | 227.39 |
| 2031 | 68+07.81 | 46.50' RT | 371,181.01 | 2,526,139.00 | 227.43 |
| 2032 | 68+21.81 | 46.50' RT | 371,189.80 | 2,526,149.90 | 227.51 |
| 2033 | 68+29.81 | 53.00' RT | 371,189.76 | 2,526,160.21 | 227.65 |
| 2034 | 68+21.81 | 53.00' RT | 371,184.74 | 2,526,153.98 | 227.61 |
| 2035 | 68+07.81 | 53.00' RT | 371,175.95 | 2,526,143.08 | 227.53 |
| 2036 | 67+99.81 | 53.00' RT | 371,170.93 | 2,526,136.85 | 227.49 |
| 2037 | 67+89.81 | 53.00' RT | 371,164.65 | 2,526,129.06 | 227.48 |
| 2038 | 67+84.81 | 53.00' RT | 371,161.52 | 2,526,125.17 | 227.58 |
| 2039 | 67+84.81 | 46.50' RT | 371,166.58 | 2,526,121.09 | 227.48 |
| 2040 | 67+76.31 | 52.50' RT | 371,156.57 | 2,526,118.24 | 227.52 |
| 2041 | 67+76.31 | 55.00' RT | 371,154.62 | 2,526,119.81 | 227.55 |
| 2042 | 67+84.81 | 55.00' RT | 371,159.96 | 2,526,126.43 | 227.61 |
| 2043 | 67+89.81 | 55.00' RT | 371,163.10 | 2,526,130.32 | 227.52 |
| 2044 | 67+99.81 | 55.00' RT | 371,169.37 | 2,526,138.11 | 227.52 |
| 2045 | 68+07.81 | 55.00' RT | 371,174.39 | 2,526,144.33 | 227.56 |
| 2046 | 68+21.81 | 55.00' RT | 371,183.18 | 2,526,155.23 | 227.64 |
| 2047 | 68+29.81 | 55.00' RT | 371,188.20 | 2,526,161.46 | 227.68 |
| 2048 | 68+34.81 | 54.00' RT | 371,192.12 | 2,526,164.73 | 227.85 |
| 2049 | 68+43.92 | 54.00' RT | 371,197.83 | 2,526,171.82 | 227.95 |
| 2050 | 68+48.92 | 54.00' RT | 371,200.97 | 2,526,175.71 | 227.72 |
| 2051 | 68+48.92 | 53.00' RT | 371,201.75 | 2,526,175.08 | 227.71 |

| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 2052 | 68+43.92 | 53.00' RT | 371,198.61 | 2,526,171.19 | 227.94 |
| 2053 | 68+34.81 | 53.00' RT | 371,192.90 | 2,526,164.10 | 227.83 |
| 2054 | 67+84.81 | 59.00' RT | 371,156.84 | 2,526,128.94 | 227.67 |
| 2055 | 67+89.81 | 59.00' RT | 371,159.98 | 2,526,132.83 | 227.58 |
| 2056 | 67+89.81 | 63.00' RT | 371,156.87 | 2,526,135.34 | 227.59 |
| 2057 | 68+03.81 | 63.00' RT | 371,165.65 | 2,526,146.24 | 227.66 |
| 2058 | 68+03.81 | 59.00' RT | 371,168.77 | 2,526,143.73 | 227.60 |
| 2059 | 68+07.50 | 59.00' RT | 371,171.09 | 2,526,146.61 | 227.62 |
| 2060 | 68+24.33 | 59.00' RT | 371,181.65 | 2,526,159.71 | 227.71 |
| 2061 | 68+24.33 | 69.00' RT | 371,173.87 | 2,526,165.99 | 228.19 |
| 2062 | 68+29.51 | 69.00' RT | 371,177.11 | 2,526,170.02 | 228.12 |
| 2063 | 68+29.81 | 59.00' RT | 371,185.09 | 2,526,163.97 | 227.74 |
| 2064 | 68+34.81 | 59.00' RT | 371,188.22 | 2,526,167.86 | 227.92 |
| 2065 | 68+43.92 | 59.00' RT | 371,193.94 | 2,526,174.96 | 228.03 |
| 2066 | 68+48.92 | 59.00' RT | 371,197.08 | 2,526,178.85 | 227.80 |
| 2067 | 68+54.92 | 59.00' RT | 371,200.84 | 2,526,183.52 | 227.83 |
| 2068 | 68+63.92 | 59.00' RT | 371,206.49 | 2,526,190.53 | 228.28 |
| 2069 | 68+63.92 | 54.00' RT | 371,210.39 | 2,526,187.39 | 228.20 |
| 2070 | 68+54.92 | 54.00' RT | 371,204.74 | 2,526,180.38 | 227.76 |
| 2071 | 68+54.92 | 53.00' RT | 371,205.52 | 2,526,179.76 | 227.74 |
| 2072 | 68+63.92 | 53.00' RT | 371,211.16 | 2,526,186.76 | 228.19 |
| 2073 | 68+63.92 | 46.50' RT | 371,216.22 | 2,526,182.68 | 228.09 |
| 2074 | 68+54.92 | 46.50' RT | 371,210.58 | 2,526,175.68 | 227.65 |
| 2075 | 68+54.92 | 38.50' RT | 371,216.80 | 2,526,170.66 | 227.09 |




## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| (L) | LANDING |
| [XXXX] | POINT NUMBER |
| [MEF] | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| - - - - | SLOPE INTERCEPTS |
| — - — | GRASS FLARE |
| (T) | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| (N) | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| ------- | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| (A) | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |

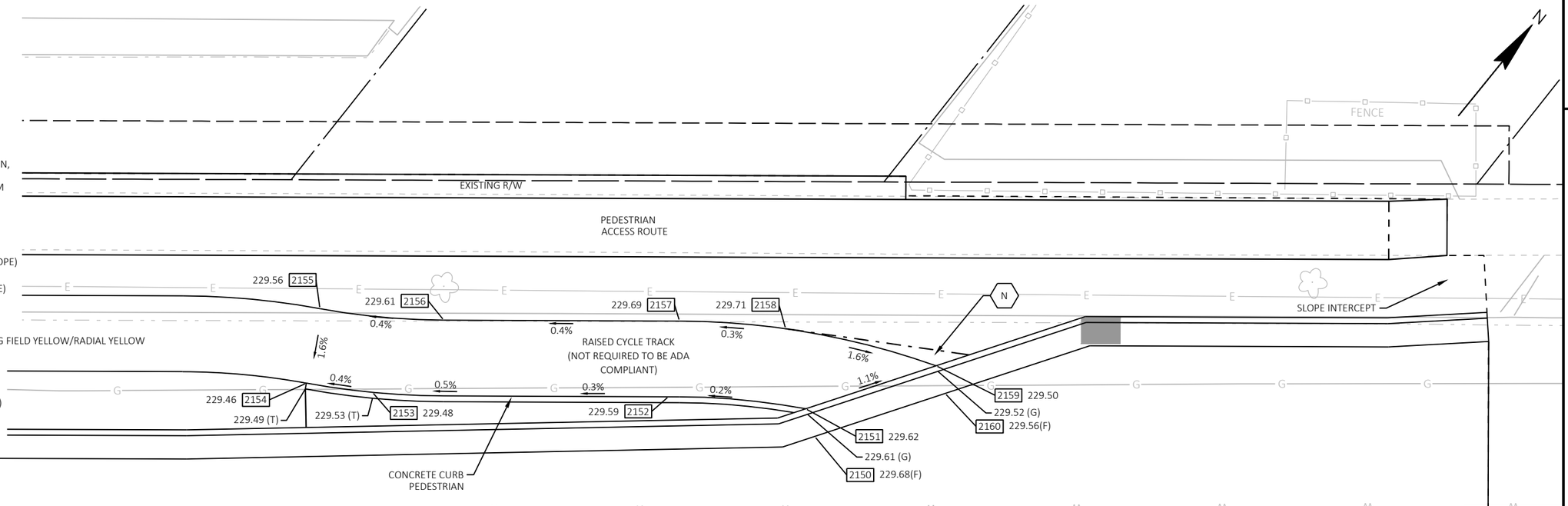
POINT TABLE

| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
|---|---|---|---|---|---|
| 2100 | 69+46.21 | 38.50' RT | 371,274.10 | 2,526,241.74 | 228.25 |
| 2101 | 69+42.21 | 36.00' RT | 371,273.54 | 2,526,237.05 | 227.79 |
| 2102 | 69+26.38 | 36.00' RT | 371,263.60 | 2,526,224.72 | 227.65 |
| 2103 | 69+23.38 | 38.50' RT | 371,259.77 | 2,526,223.96 | 228.05 |
| 2104 | 69+26.38 | 38.50' RT | 371,261.65 | 2,526,226.29 | 227.57 |
| 2105 | 69+25.38 | 39.05' RT | 371,260.60 | 2,526,225.86 | 227.60 |
| 2106 | 69+21.03 | 41.22' RT | 371,256.18 | 2,526,223.83 | 227.72 |
| 2107 | 68+96.41 | 46.50' RT | 371,236.62 | 2,526,207.98 | 228.33 |
| 2108 | 68+96.41 | 53.00' RT | 371,231.56 | 2,526,212.06 | 228.42 |
| 2109 | 69+28.52 | 44.74' RT | 371,258.14 | 2,526,231.87 | 228.02 |
| 2110 | 69+42.21 | 38.50' RT | 371,271.59 | 2,526,238.62 | 227.71 |

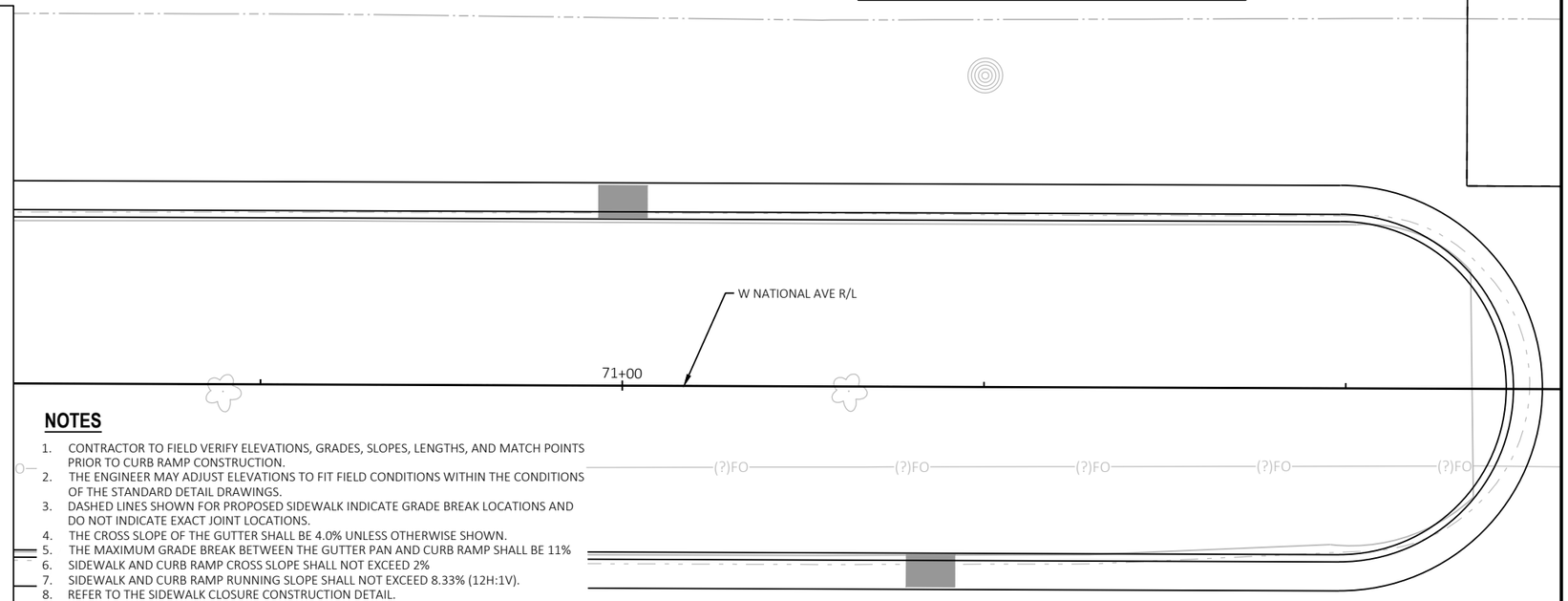
2

## LEGEND

| | |
|---|---|
| XXX.XX | SIDEWALK ELEVATION |
| XXX.XX(F) | CURB FLANGE ELEVATION |
| XXX.XX(G) | GUTTER FLOWLINE ELEVATION |
| XXX.XX(T) | TOP OF CURB ELEVATION |
| HP / LP | HIGH POINT / LOW POINT |
| L | LANDING |
| XXXX | POINT NUMBER |
| MEF | MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT SEE TECHNICAL INFEASIBILITY FORM |
| | SLOPE INTERCEPTS |
| | GRASS FLARE |
| T | TRAVERSABLE FLARE (10:1 MAX SLOPE) |
| N | NON-TRAVERSABLE (6:1 MAX SLOPE) |
| | GRADE BREAK |
| | CURB RAMP DETECTABLE WARNING FIELD YELLOW/RADIAL YELLOW |
| A | CURB RADIUS POINT |
| TYPE XM | CURB RAMP TYPE ("M" - MODIFIED) |
| | DETECTABLE EDGE TILES |




## W NATIONAL AVE RAISED CYCLE TRACK NORTHEAST QUADRANT




| POINT TABLE | | | | | |
|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | Y | X | ELEVATION |
| 2150 | 71+00.47 | -38.14' LT | 371,430.58 | 2,526,313.74 | 229.68 |
| 2151 | 70+99.68 | -40.51' LT | 371,431.93 | 2,526,311.63 | 229.62 |
| 2152 | 70+87.90 | -41.50' LT | 371,425.31 | 2,526,301.84 | 229.59 |
| 2153 | 70+62.50 | -41.77' LT | 371,409.57 | 2,526,281.89 | 229.48 |
| 2154 | 70+56.81 | -42.55' LT | 371,406.61 | 2,526,276.97 | 229.46 |
| 2155 | 70+57.96 | -48.95' LT | 371,412.31 | 2,526,273.85 | 229.56 |
| 2156 | 70+68.59 | -48.00' LT | 371,418.25 | 2,526,282.72 | 229.61 |
| 2157 | 70+88.83 | -48.00' LT | 371,430.95 | 2,526,298.48 | 229.69 |
| 2158 | 70+97.95 | -47.37' LT | 371,436.18 | 2,526,305.97 | 229.71 |
| 2159 | 71+10.87 | -44.24' LT | 371,441.86 | 2,526,318.00 | 229.50 |
| 2160 | 71+11.66 | -41.87' LT | 371,440.51 | 2,526,320.11 | 229.56 |

## NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK INDICATE GRADE BREAK LOCATIONS AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4.0% UNLESS OTHERWISE SHOWN.
5. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
8. REFER TO THE SIDEWALK CLOSURE CONSTRUCTION DETAIL.

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CURB RAMP DETAILS | SHEET 120 E |

2

LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

MATCHLINE STA 44+50

MATCHLINE STA 50+50

IH 41/894 SB EXIT RAMP

IH 41/894 SB ENTRANCE RAMP

PROPOSED R/W

TLE

EXISTING R/W

SLOPE INTERCEPT

W NATIONAL AVE R/L

45+00 46+00 47+00 48+00 49+00 50+00

W NATIONAL AVE

FRONTAGE ROAD

S 101ST ST

ELEC SERVICE PANEL

NOTES:

1. EROSION CONTROL DEVICES SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER NEEDED.
2. EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.
3. ALL RESTORATION SHALL BE TOPSOIL, SOD LAWN, AND FERTILIZER TYPE B UNLESS OTHERWISE SHOWN.
4. PLACE INLET PROTECTION TYPE A DURING GRADING AND INLET PROTECTION TYPE B OR D AFTER PAVEMENT ADJACENT TO INLET IS PLACED.
5. DO NOT STORE MATERIAL OR OPERATE EQUIPMENT IN WETLANDS OUTSIDE THE SLOPE INTERCEPT.

SHEET 01 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 1 | SHEET 121 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022001-EC1.DWG
LAYOUT NAME - 05

PLOT DATE : 1/8/2026 11:11 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTES:

1. EROSION CONTROL DEVICES SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER NEEDED.
2. EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.
3. ALL RESTORATION SHALL BE TOPSOIL, SOD LAWN, AND FERTILIZER TYPE B UNLESS OTHERWISE SHOWN.
4. PLACE INLET PROTECTION TYPE A DURING GRADING AND INLET PROTECTION TYPE B OR D AFTER PAVEMENT ADJACENT TO INLET IS PLACED.
5. DO NOT STORE MATERIAL OR OPERATE EQUIPMENT IN WETLANDS OUTSIDE THE SLOPE INTERCEPT.

MATCHLINE STA 50+50

MATCHLINE STA 56+50

W NATIONAL AVE

W NATIONAL AVE R/L

SLOPE INTERCEPT

S 100TH ST

S 100TH ST R/L

EXISTING R/W

IH 41/894 NB ENTRANCE RAMP

IH 41/894 NB EXIT RAMP

TRANSMISSION TOWER

CHAIN LINK FENCE

ELEC SERVICE PANEL

CONC EDGE

ASPH

HOUSE

TLE

51+00 52+00 53+00 54+00 55+00 56+00 161+00 162+00

LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

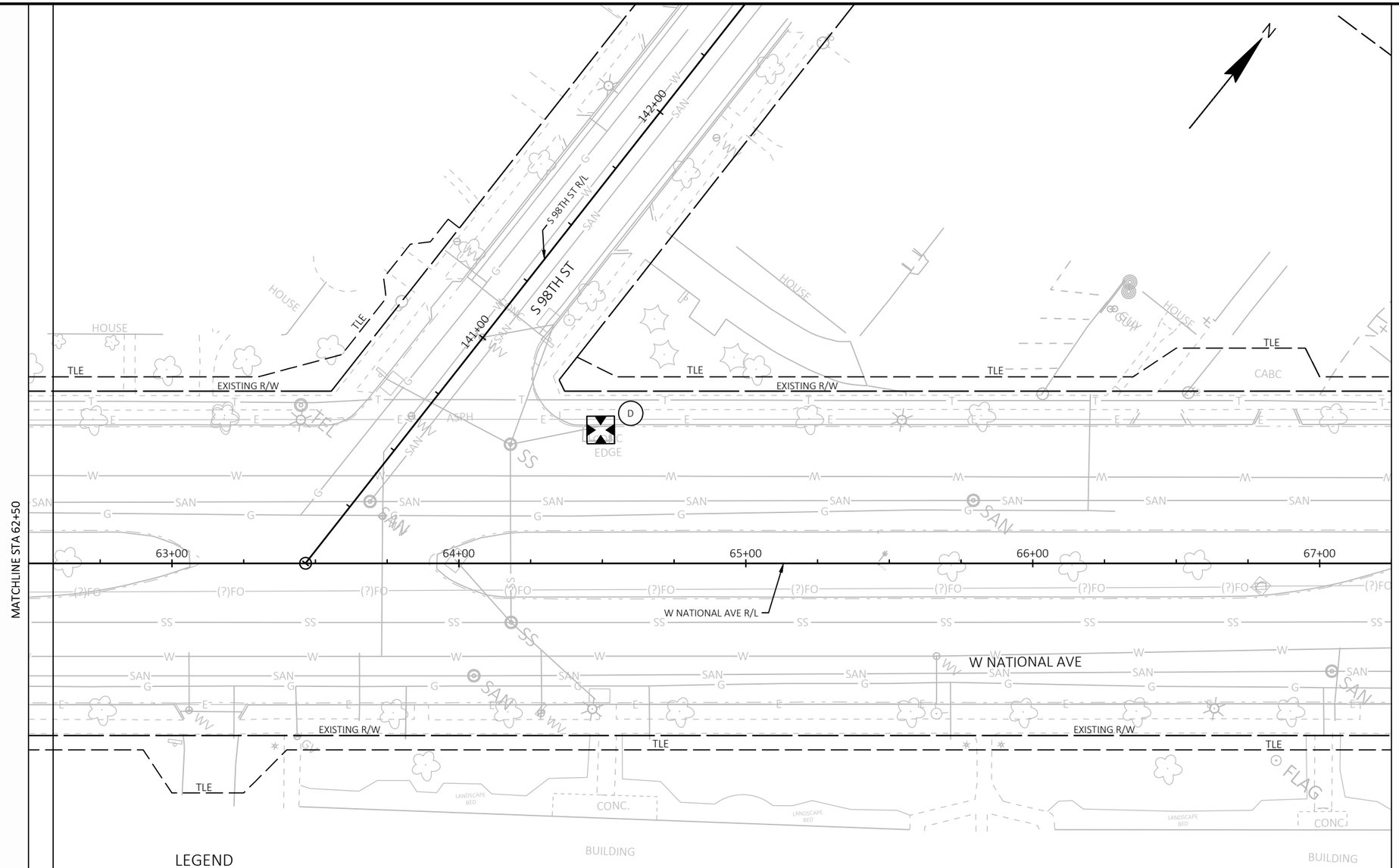
SHEET 02 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 1 | SHEET 122 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022001-EC1.DWG
LAYOUT NAME - 06

PLOT DATE : 1/8/2026 11:11 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2




## LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

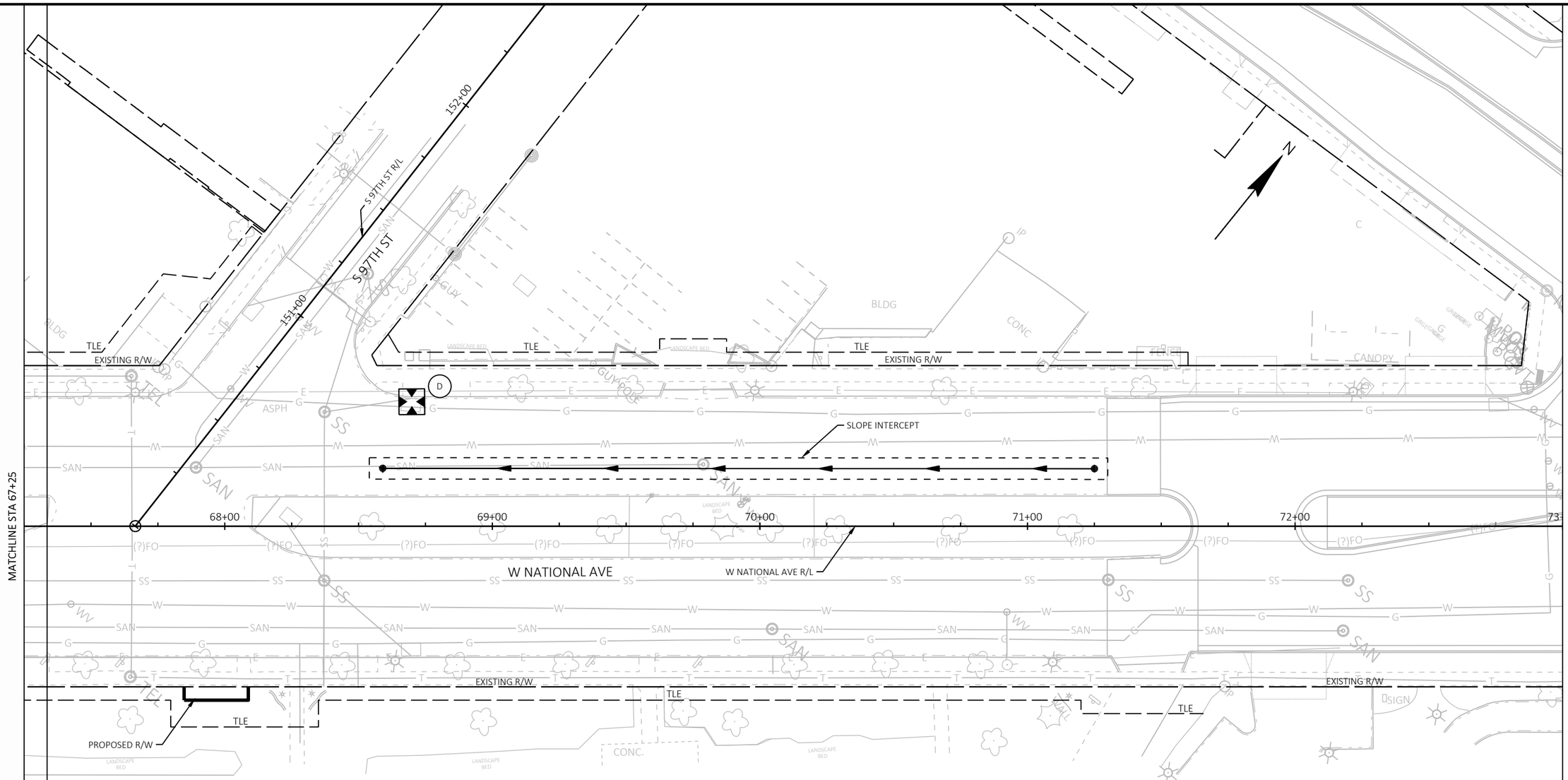
NOTES:

1. EROSION CONTROL DEVICES SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER NEEDED.
2. EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.
3. ALL RESTORATION SHALL BE TOPSOIL, SOD LAWN, AND FERTILIZER TYPE B UNLESS OTHERWISE SHOWN.
4. PLACE INLET PROTECTION TYPE A DURING GRADING AND INLET PROTECTION TYPE B OR D AFTER PAVEMENT ADJACENT TO INLET IS PLACED.
5. DO NOT STORE MATERIAL OR OPERATE EQUIPMENT IN WETLANDS OUTSIDE THE SLOPE INTERCEPT.



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 1 | SHEET 123 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022001-EC1.DWG
LAYOUT NAME - 08
PLOT DATE : 1/8/2026 11:12 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42




## LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

NOTES:

1. EROSION CONTROL DEVICES SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER NEEDED.
2. EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.
3. ALL RESTORATION SHALL BE TOPSOIL, SOD LAWN, AND FERTILIZER TYPE B UNLESS OTHERWISE SHOWN.
4. PLACE INLET PROTECTION TYPE A DURING GRADING AND INLET PROTECTION TYPE B OR D AFTER PAVEMENT ADJACENT TO INLET IS PLACED.
5. DO NOT STORE MATERIAL OR OPERATE EQUIPMENT IN WETLANDS OUTSIDE THE SLOPE INTERCEPT.

SHEET 04 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 1 | SHEET 124 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022001-EC1.DWG
LAYOUT NAME - 08A
PLOT DATE : 1/8/2026 11:12 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

MATCHLINE STA 44+50

PROPOSED R/W

TLE

EXISTING R/W

W NATIONAL AVE R/L

W NATIONAL AVE

FRONTAGE ROAD

EXISTING R/W

45+00 46+00 47+00 48+00 49+00 50+00

IH 41/894 SB EXIT RAMP

IH 41/894 SB ENTRANCE RAMP

SLOPE INTERCEPT

SILT FENCE

SLOPE INTERCEPT

SILT FENCE

S 101ST ST

ELEC SERVICE PANEL

NOTES:

1. EROSION CONTROL DEVICES SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER NEEDED.
2. EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.
3. ALL RESTORATION SHALL BE TOPSOIL, SOD LAWN, AND FERTILIZER TYPE B UNLESS OTHERWISE SHOWN.
4. PLACE INLET PROTECTION TYPE A DURING GRADING AND INLET PROTECTION TYPE B OR D AFTER PAVEMENT ADJACENT TO INLET IS PLACED.
5. DO NOT STORE MATERIAL OR OPERATE EQUIPMENT IN WETLANDS OUTSIDE THE SLOPE INTERCEPT.

SHEET 05 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 2 | SHEET 125 | E |
|---|---|---|---|---|---|

NOTES:

1. EROSION CONTROL DEVICES SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER NEEDED.
2. EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.
3. ALL RESTORATION SHALL BE TOPSOIL, SOD LAWN, AND FERTILIZER TYPE B UNLESS OTHERWISE SHOWN.
4. PLACE INLET PROTECTION TYPE A DURING GRADING AND INLET PROTECTION TYPE B OR D AFTER PAVEMENT ADJACENT TO INLET IS PLACED.
5. DO NOT STORE MATERIAL OR OPERATE EQUIPMENT IN WETLANDS OUTSIDE THE SLOPE INTERCEPT.

MATCHLINE STA 50+50

W NATIONAL AVE

W NATIONAL AVE R/L

S 100TH ST

S 100TH ST R/L

EXISTING R/W

IH 41/894 NB ENTRANCE RAMP

IH 41/894 NB EXIT RAMP

SILT FENCE

SLOPE INTERCEPT

TLE

CHAIN LINK FENCE

CONC EDGE

ASPH

TRANSMISSION TOWER

ELEC SERVICE PANEL

CONTRL BOX

PLACE INLET PROTECTION TYPE D AT NEXT DOWNSTREAM INLET.

PLACE INLET PROTECTION TYPE D AT NEXT DOWNSTREAM INLET.

LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

SHEET 06 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 2 | SHEET 126 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022002-EC2.DWG
LAYOUT NAME - 06

PLOT DATE : 1/8/2026 11:12 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTES:

1. EROSION CONTROL DEVICES SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER NEEDED.
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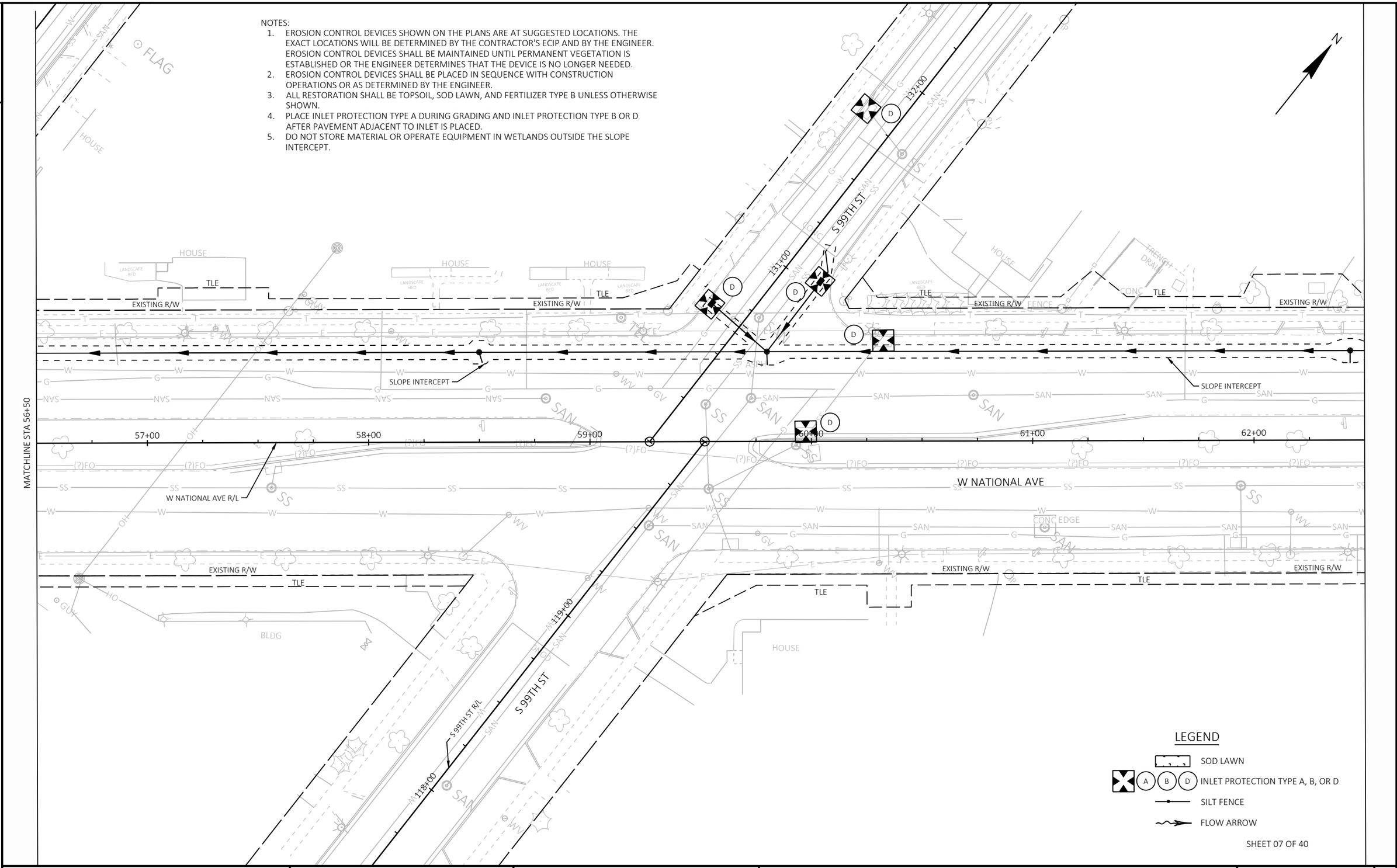
3. ALL RESTORATION SHALL BE TOPSOIL, SOD LAWN, AND FERTILIZER TYPE B UNLESS OTHERWISE SHOWN.
4. PLACE INLET PROTECTION TYPE A DURING GRADING AND INLET PROTECTION TYPE B OR D AFTER PAVEMENT ADJACENT TO INLET IS PLACED.
5. DO NOT STORE MATERIAL OR OPERATE EQUIPMENT IN WETLANDS OUTSIDE THE SLOPE INTERCEPT.



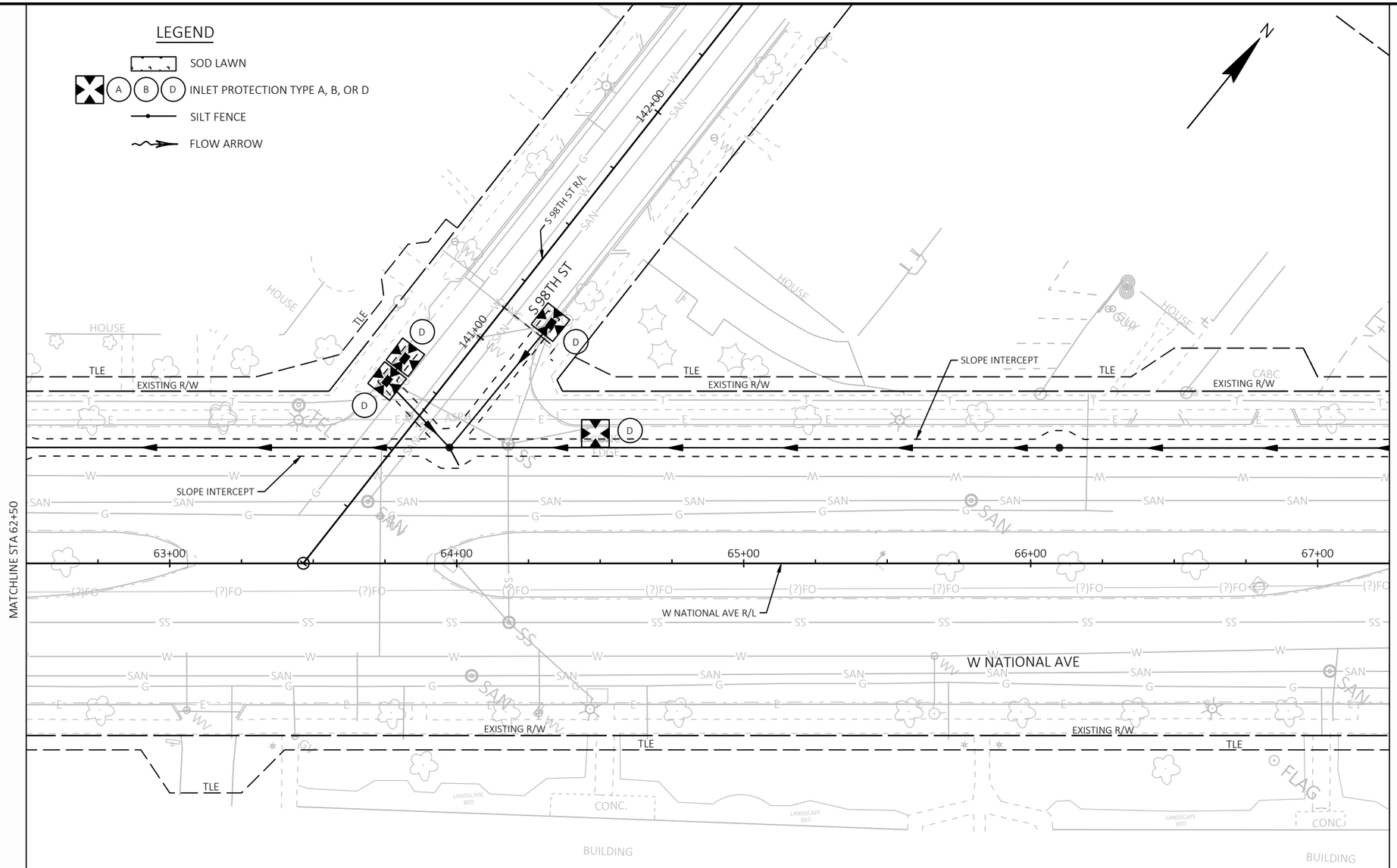

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 2 | SHEET 127 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022002-EC2.DWG
LAYOUT NAME - 07
PLOT DATE : 1/8/2026 11:12 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

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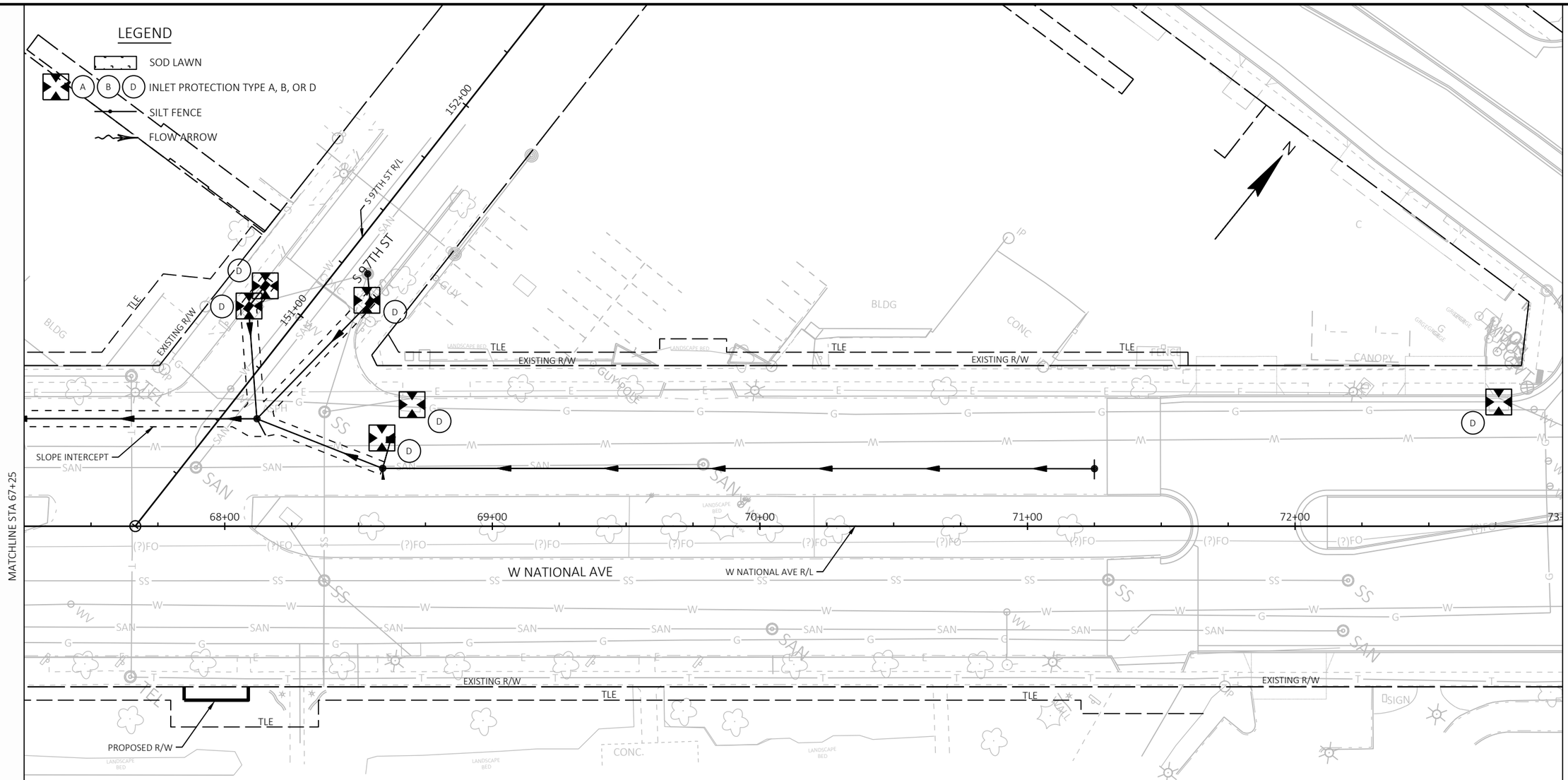
5. DO NOT STORE MATERIAL OR OPERATE EQUIPMENT IN WETLANDS OUTSIDE THE SLOPE INTERCEPT.



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 2 | SHEET 128 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022002-EC2.DWG
LAYOUT NAME - 08
PLOT DATE : 1/8/2026 11:12 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

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SHEET 09 OF 40

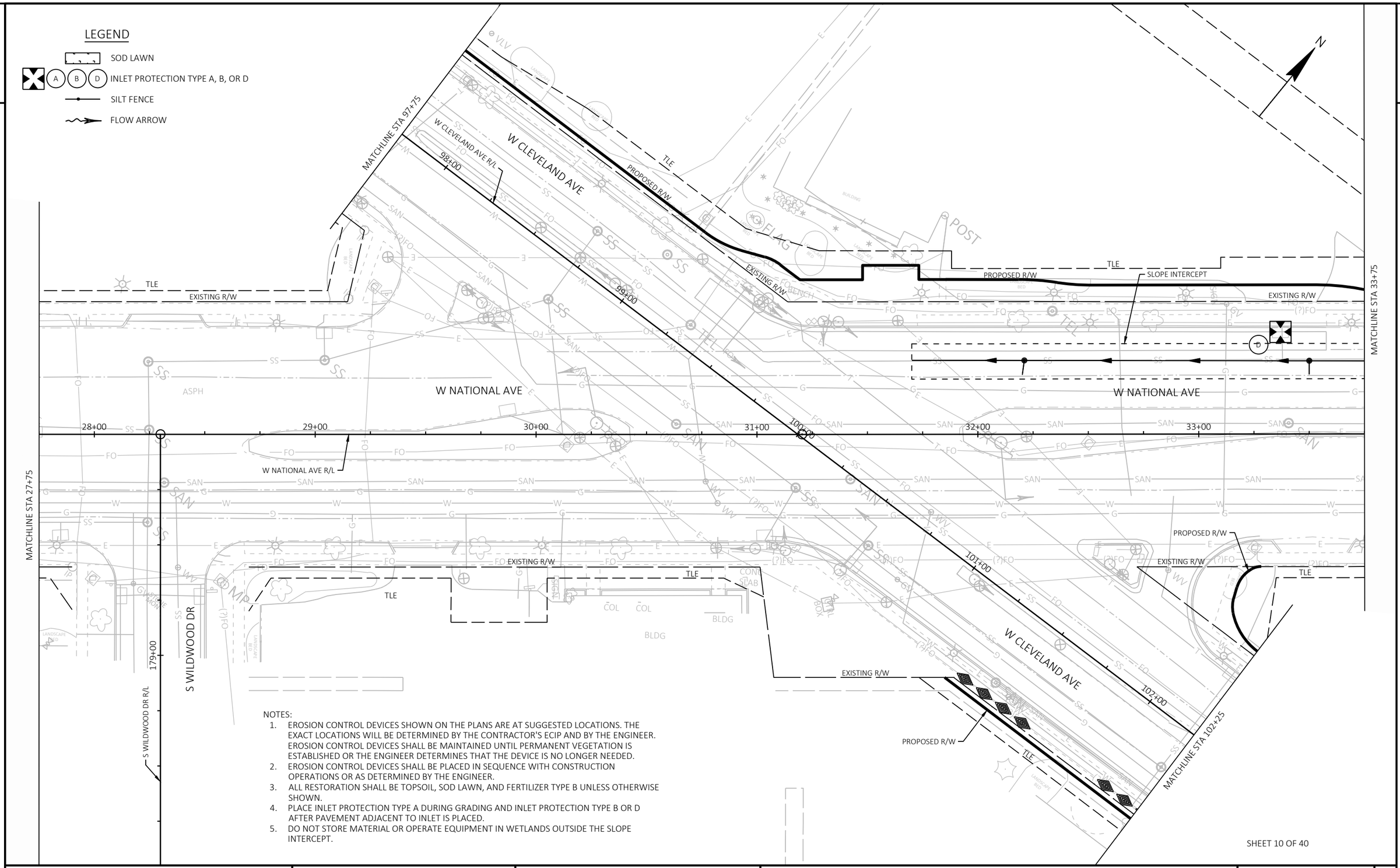
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 2 | SHEET 129 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022002-EC2.DWG
LAYOUT NAME - 08A
PLOT DATE : 1/8/2026 11:12 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW




NOTES:

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SHEET 10 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 3 | SHEET 130 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022003-EC3.DWG
LAYOUT NAME - 02

PLOT DATE : 1/8/2026 11:12 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

## LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

MATCHLINE STA 33+75

MATCHLINE STA 38+50

PROPOSED R/W

TLE

EXISTING R/W

SLOPE INTERCEPT

W NATIONAL AVE R/L

34+00 35+00 36+00 37+00 38+00

W NATIONAL AVE

FRONTAGE ROAD

BLDG

SIGN

WALL

FENCE

ASPH

CONC

NOTES:

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 3 | SHEET 131 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022003-EC3.DWG
LAYOUT NAME - 03
PLOT DATE : 1/8/2026 11:12 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

PLACE INLET PROTECTION TYPE D AT NEXT DOWNSTREAM INLET.

PLACE INLET PROTECTION TYPE D AT NEXT DOWNSTREAM INLET.

S 102ND ST

PROPOSED R/W

TLE

EXISTING R/W

SLOPE INTERCEPT

W NATIONAL AVE R/L

W NATIONAL AVE

FRONTAGE ROAD

S 102ND ST R/L

MATCHLINE STA 38+50

MATCHLINE STA 44+50

NOTES:

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LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

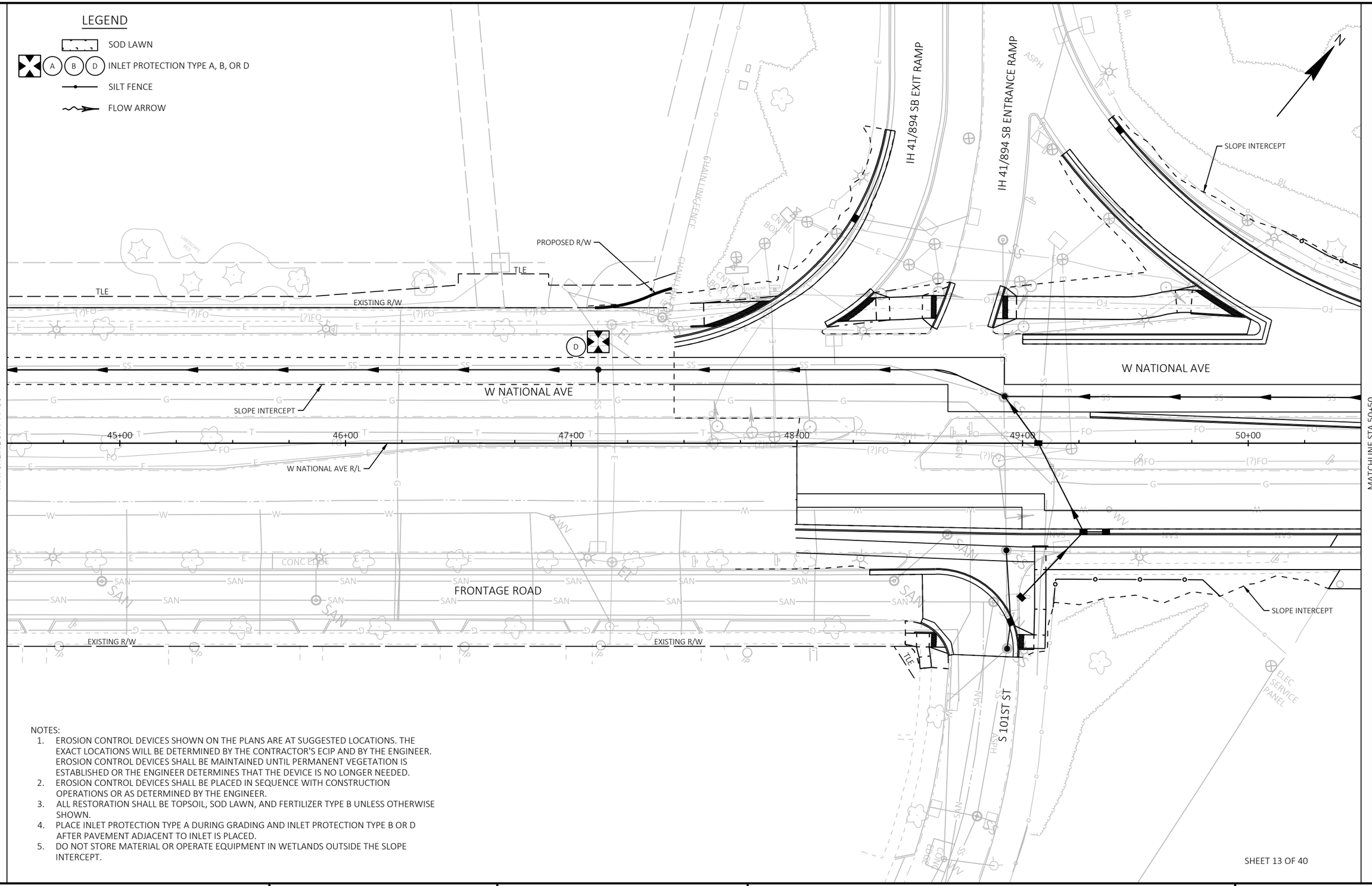
SHEET 12 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 3 | SHEET 132 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022003-EC3.DWG
LAYOUT NAME - 04
PLOT DATE : 1/8/2026 11:12 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

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SHEET 13 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 3 | SHEET 133 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022003-EC3.DWG
LAYOUT NAME - 05
PLOT DATE : 1/8/2026 11:13 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTES:

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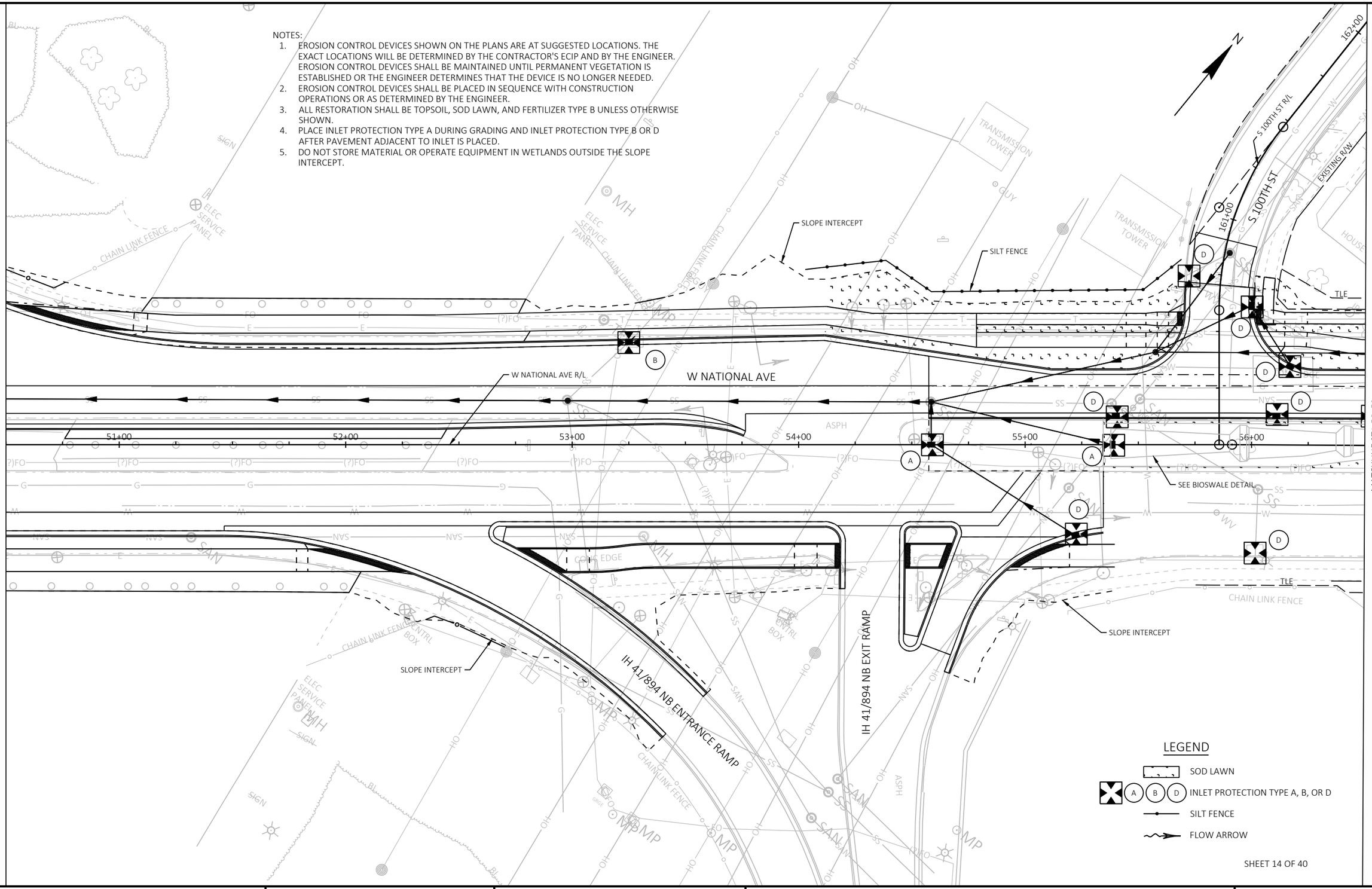


LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

SHEET 14 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 3 | SHEET 134 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022003-EC3.DWG
LAYOUT NAME - 06

PLOT DATE : 1/8/2026 11:13 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

MATCHLINE STA 56+50

MATCHLINE STA 62+50

FLAG

HOUSE

SLOPE INTERCEPT

TLE

EXISTING R/W

S 99TH ST

132+00

131+00

57+00

58+00

59+00

60+00

61+00

62+00

SEE BIOSWALE DETAIL.

W NATIONAL AVE R/L

W NATIONAL AVE

BLDG

FENCE

TRENCH DRAIN

CONC EDGE

CONC

119+00

118+00

S 99TH ST R/L

LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

NOTES:

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SHEET 15 OF 40

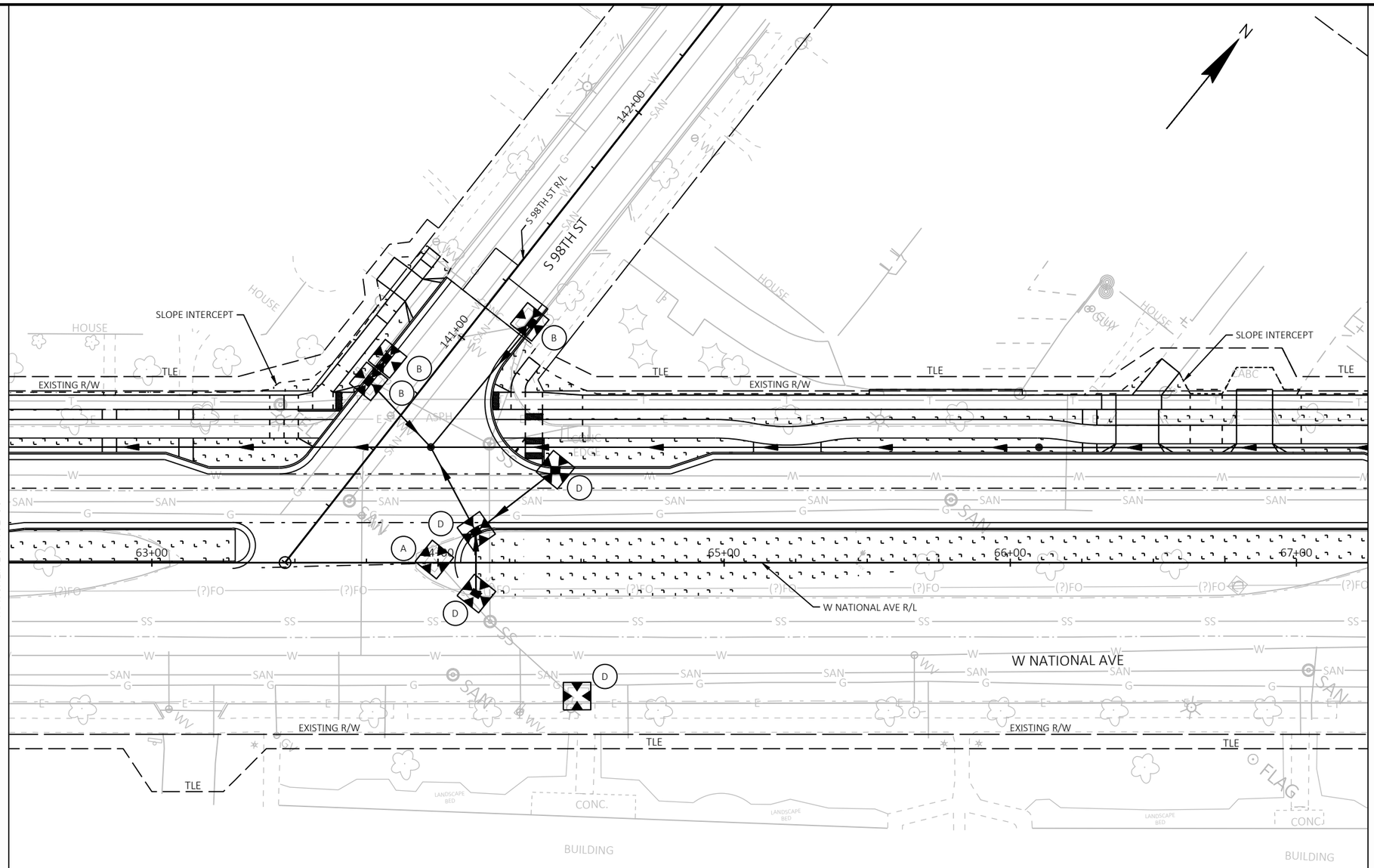
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 3 | SHEET 135 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022003-EC3.DWG
LAYOUT NAME - 07

PLOT DATE : 1/8/2026 11:13 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2




LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

NOTES:

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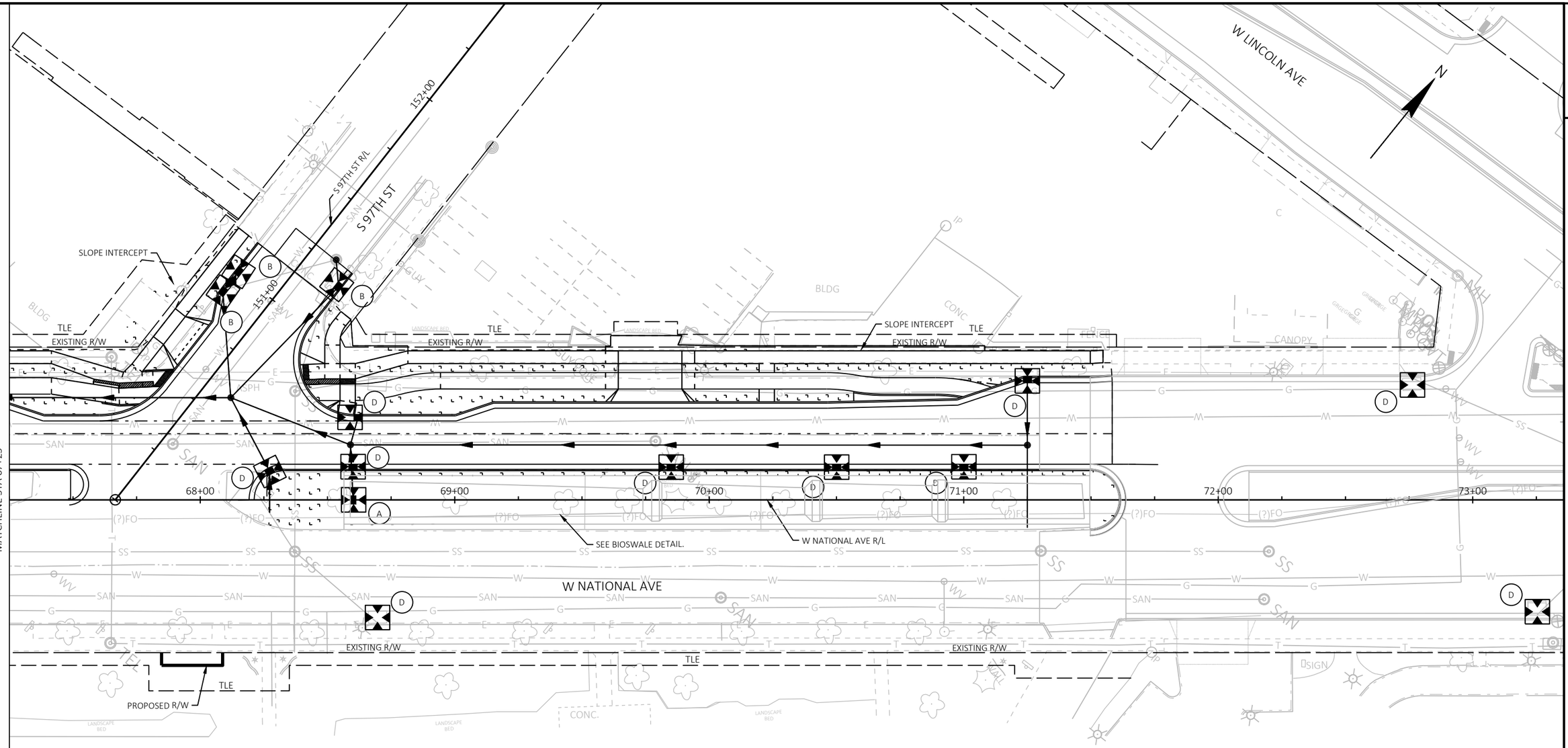
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 3 | SHEET 136 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022003-EC3.DWG
LAYOUT NAME - 08
PLOT DATE : 1/8/2026 11:13 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2




LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

NOTES:

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2

LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

PLACE INLET PROTECTION TYPE D AT NEXT DOWNSTREAM INLET.

MATCHLINE STA 97+75

W CLEVELAND AVE R/L

98+00

W CLEVELAND AVE

PROPOSED R/W

99+00

100+00

101+00

102+00

W CLEVELAND AVE

TLE

EXISTING R/W

PROPOSED R/W

SLOPE INTERCEPT

D

W NATIONAL AVE

W NATIONAL AVE R/L

28+00

29+00

30+00

31+00

32+00

33+00

MATCHLINE STA 33+75

MATCHLINE STA 27+75

S WILDWOOD DR

S WILDWOOD DR R/L

179+00

MATCHLINE STA 102+25

ASPH

BLDG

NOTES:

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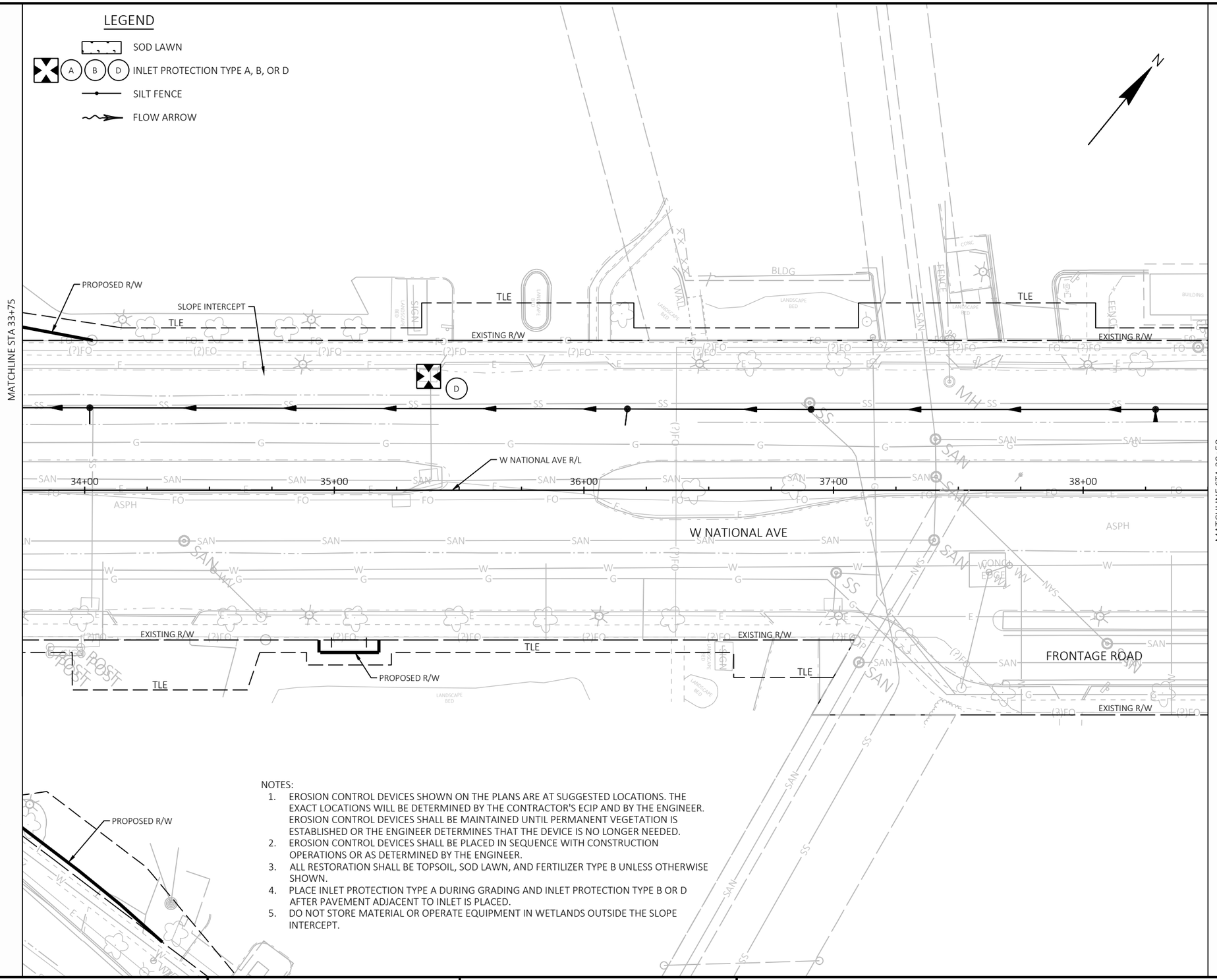
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 4 | SHEET 138 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022004-EC4.DWG
LAYOUT NAME - 02
PLOT DATE : 1/8/2026 11:13 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

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SHEET 19 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 4 | SHEET 139 | E |
|---|---|---|---|---|---|

2

PLACE INLET PROTECTION TYPE D AT NEXT DOWNSTREAM INLET.

PLACE INLET PROTECTION TYPE D AT NEXT DOWNSTREAM INLET.

S 102ND ST

PROPOSED R/W

TLE

EXISTING R/W

SLOPE INTERCEPT

W NATIONAL AVE R/L

W NATIONAL AVE

FRONTAGE ROAD

S 102ND ST R/L

MATCHLINE STA 38+50

MATCHLINE STA 44+50

NOTES:

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LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

SHEET 20 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 4 | SHEET 140 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022004-EC4.DWG
LAYOUT NAME - 04
PLOT DATE : 1/8/2026 11:13 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTES:

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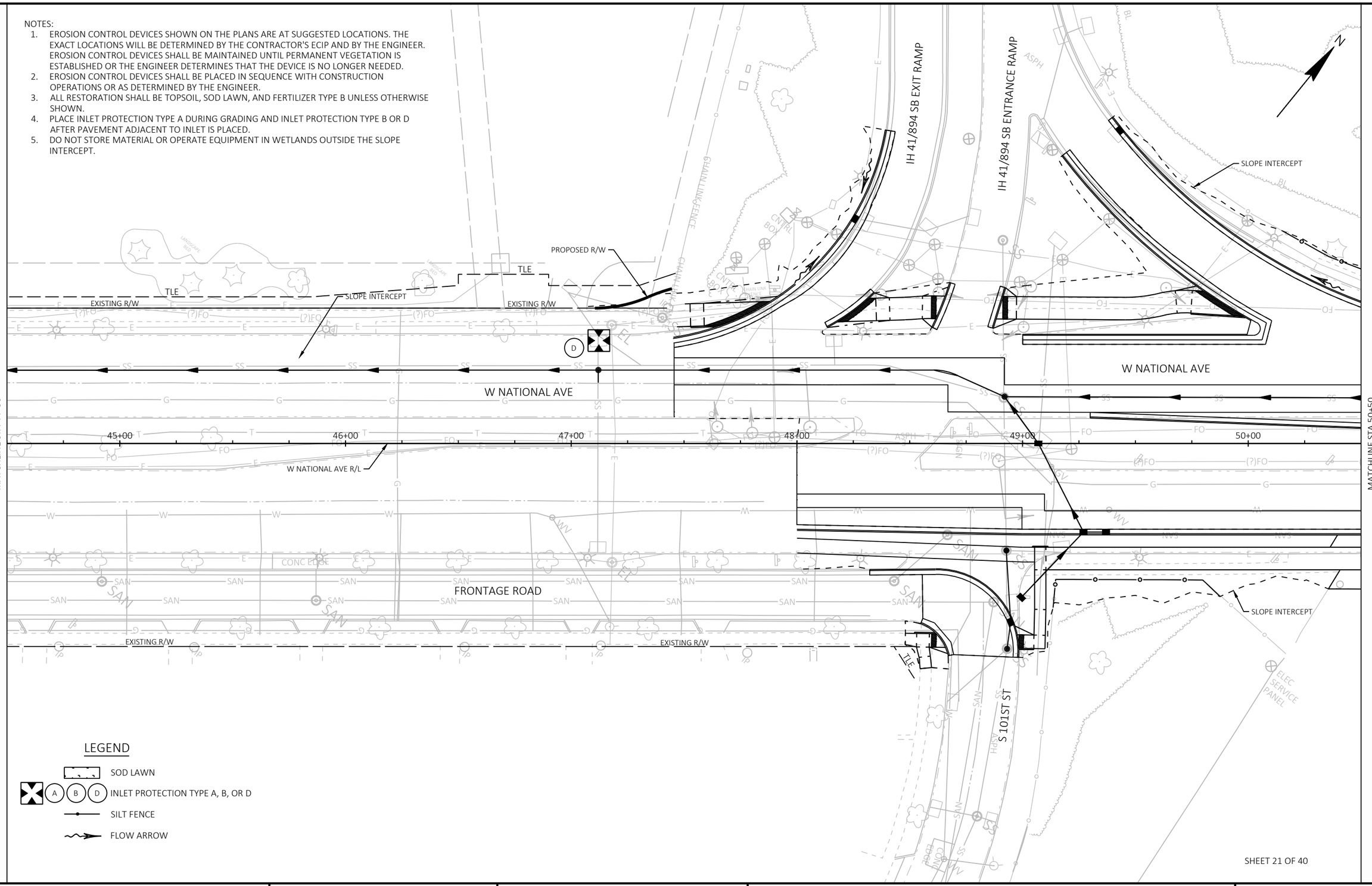
4. PLACE INLET PROTECTION TYPE A DURING GRADING AND INLET PROTECTION TYPE B OR D AFTER PAVEMENT ADJACENT TO INLET IS PLACED.
5. DO NOT STORE MATERIAL OR OPERATE EQUIPMENT IN WETLANDS OUTSIDE THE SLOPE INTERCEPT.




SHEET 21 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 4 | SHEET 141 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022004-EC4.DWG
LAYOUT NAME - 05

PLOT DATE : 1/8/2026 11:13 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTES:

1. EROSION CONTROL DEVICES SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER NEEDED.
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5. DO NOT STORE MATERIAL OR OPERATE EQUIPMENT IN WETLANDS OUTSIDE THE SLOPE INTERCEPT.

MATCHLINE STA 50+50

MATCHLINE STA 56+50

W NATIONAL AVE

W NATIONAL AVE R/L

S 100TH ST

S 100TH ST R/L

EXISTING R/W

TLE

SLOPE INTERCEPT

SEE BIOSWALE DETAIL.

SILT FENCE

IH 41/894 NB ENTRANCE RAMP

IH 41/894 NB EXIT RAMP

CHAIN LINK FENCE

TRANSMISSION TOWER

ELEC SERVICE PANEL

CONC EDGE

ASPH

51+00 52+00 53+00 54+00 55+00 56+00 161+00 162+00

## LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

SHEET 22 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 4 | SHEET 142 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022004-EC4.DWG
LAYOUT NAME - 06

PLOT DATE : 1/8/2026 11:14 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTES:

1. EROSION CONTROL DEVICES SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER NEEDED.
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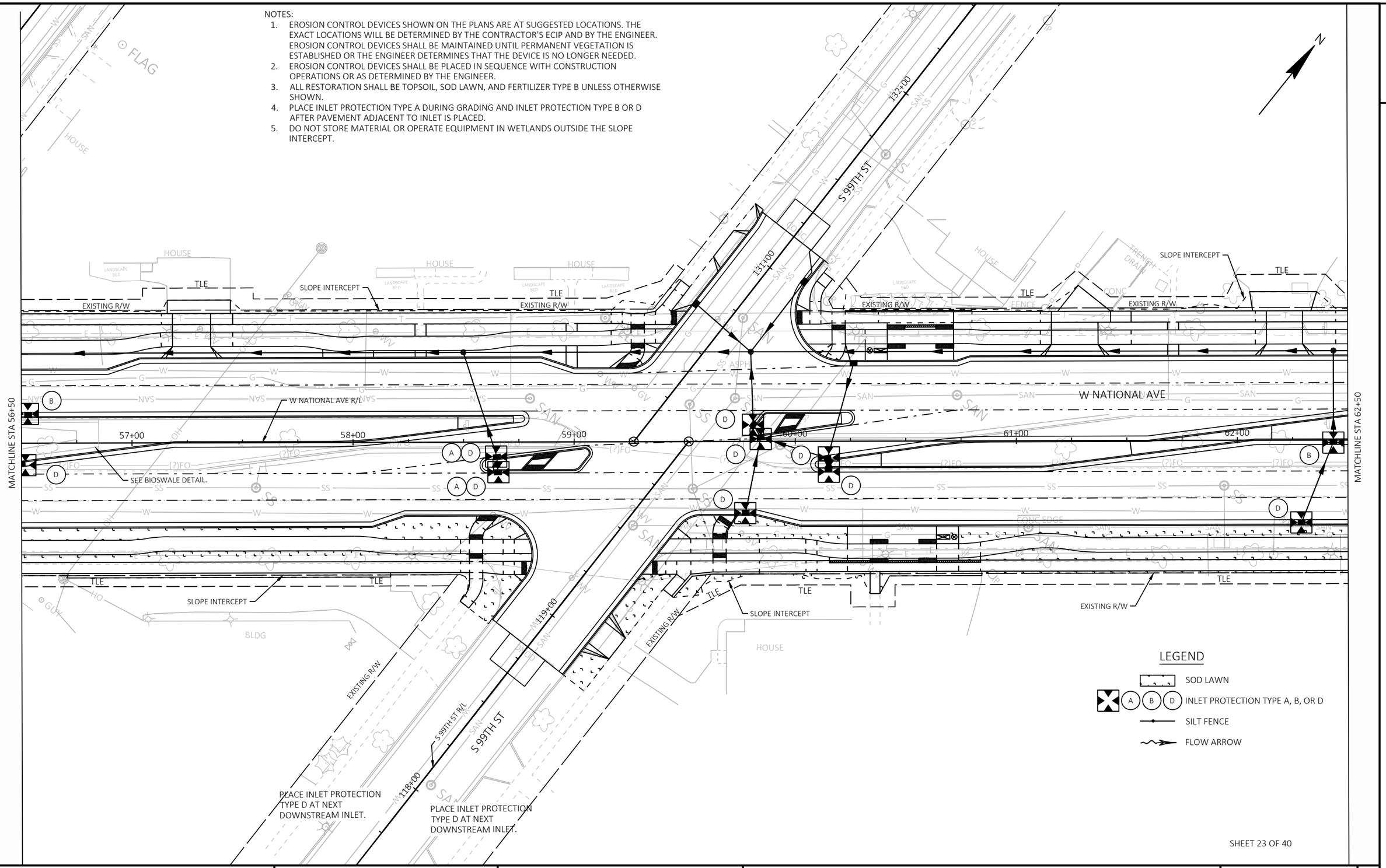



SHEET 23 OF 40

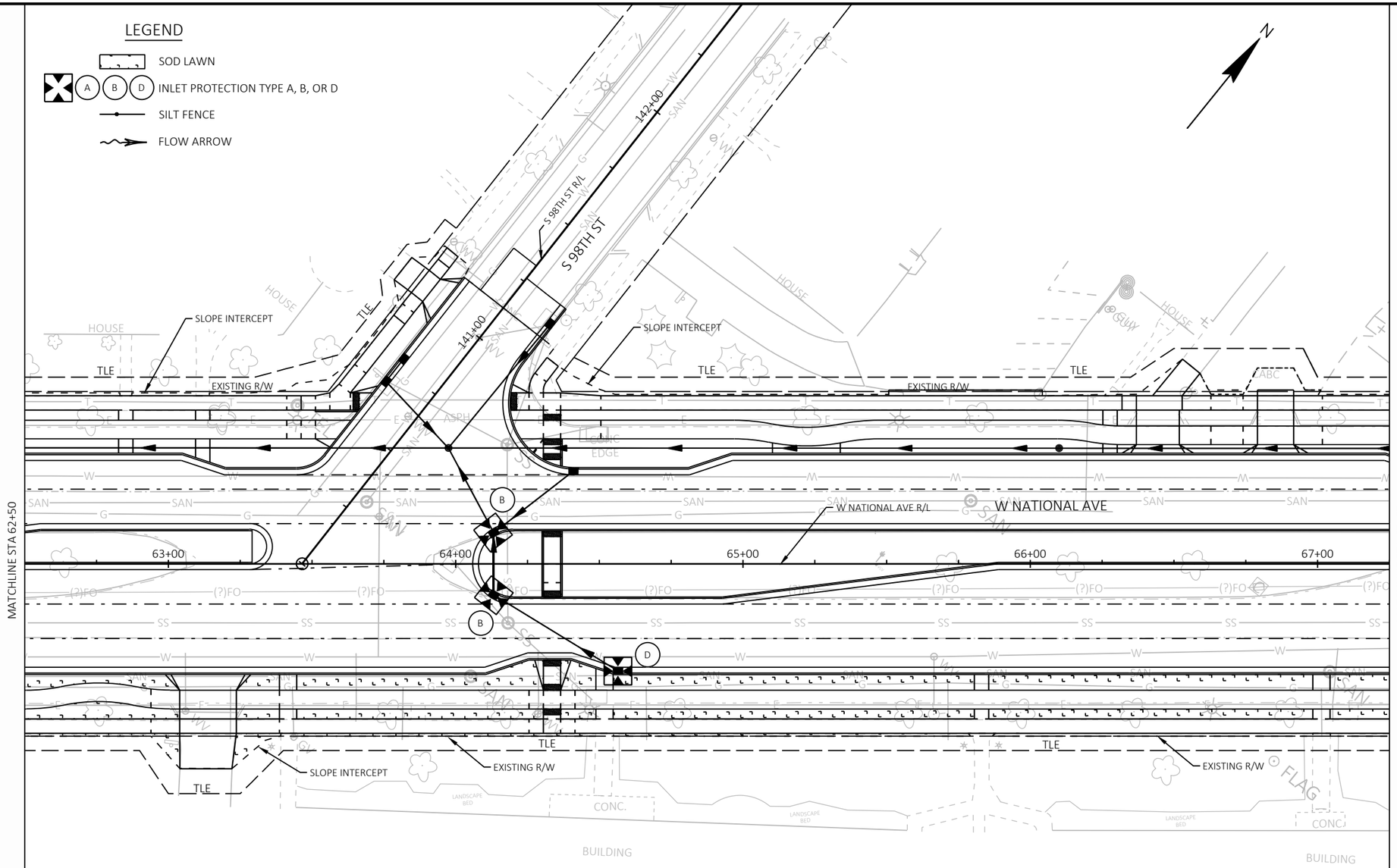
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 4 | SHEET 143 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022004-EC4.DWG
LAYOUT NAME - 07

PLOT DATE : 1/8/2026 11:14 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2




NOTES:

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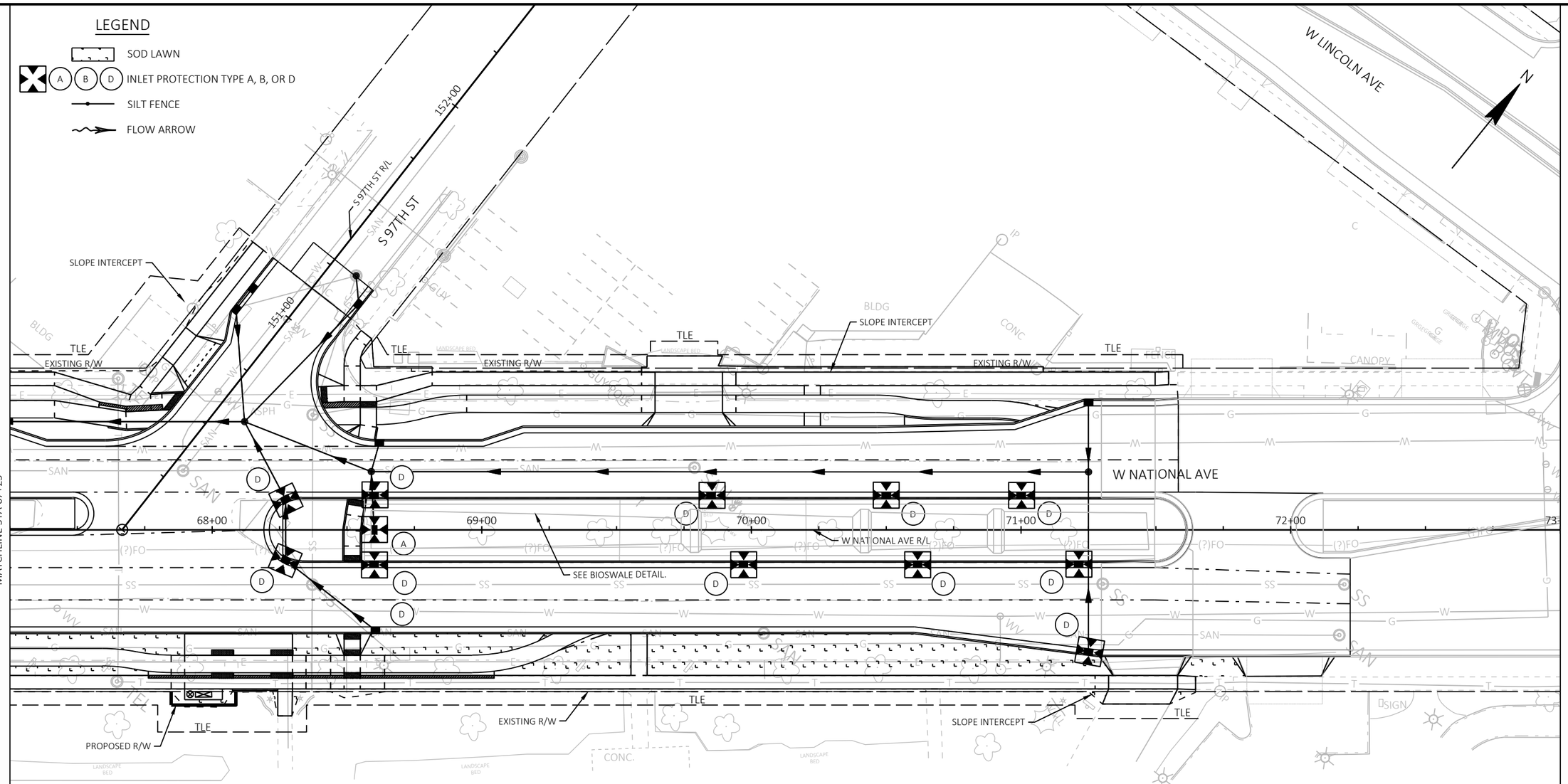
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 4 | SHEET 144 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022004-EC4.DWG
LAYOUT NAME - 08
PLOT DATE : 1/8/2026 11:14 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 4 | SHEET 145 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022004-EC4.DWG
LAYOUT NAME - 08A
PLOT DATE : 1/8/2026 11:14 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTES:

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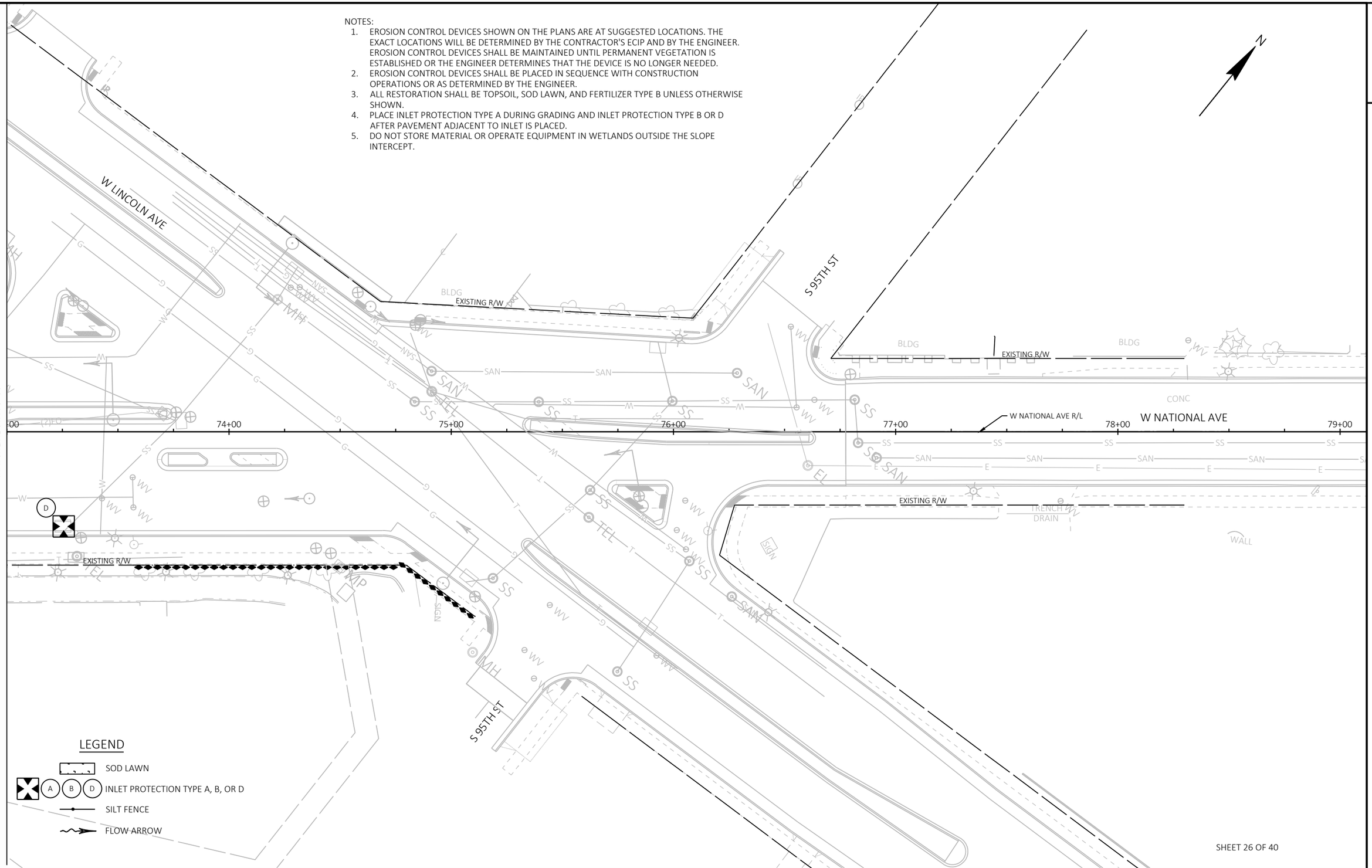


SHEET 26 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 4 | SHEET 146 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022004-EC4.DWG
LAYOUT NAME - 09

PLOT DATE : 1/8/2026 11:14 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

MATCHLINE STA 16+25

MATCHLINE STA 22+00

EXISTING R/W

W NATIONAL AVE

17+00 18+00 19+00 20+00 21+00 22

W NATIONAL AVE R/L

EXISTING R/W

SLOPE INTERCEPT

S 108TH ST/STH 100

NOTES:

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5. DO NOT STORE MATERIAL OR OPERATE EQUIPMENT IN WETLANDS OUTSIDE THE SLOPE INTERCEPT.

SHEET 27 OF 40

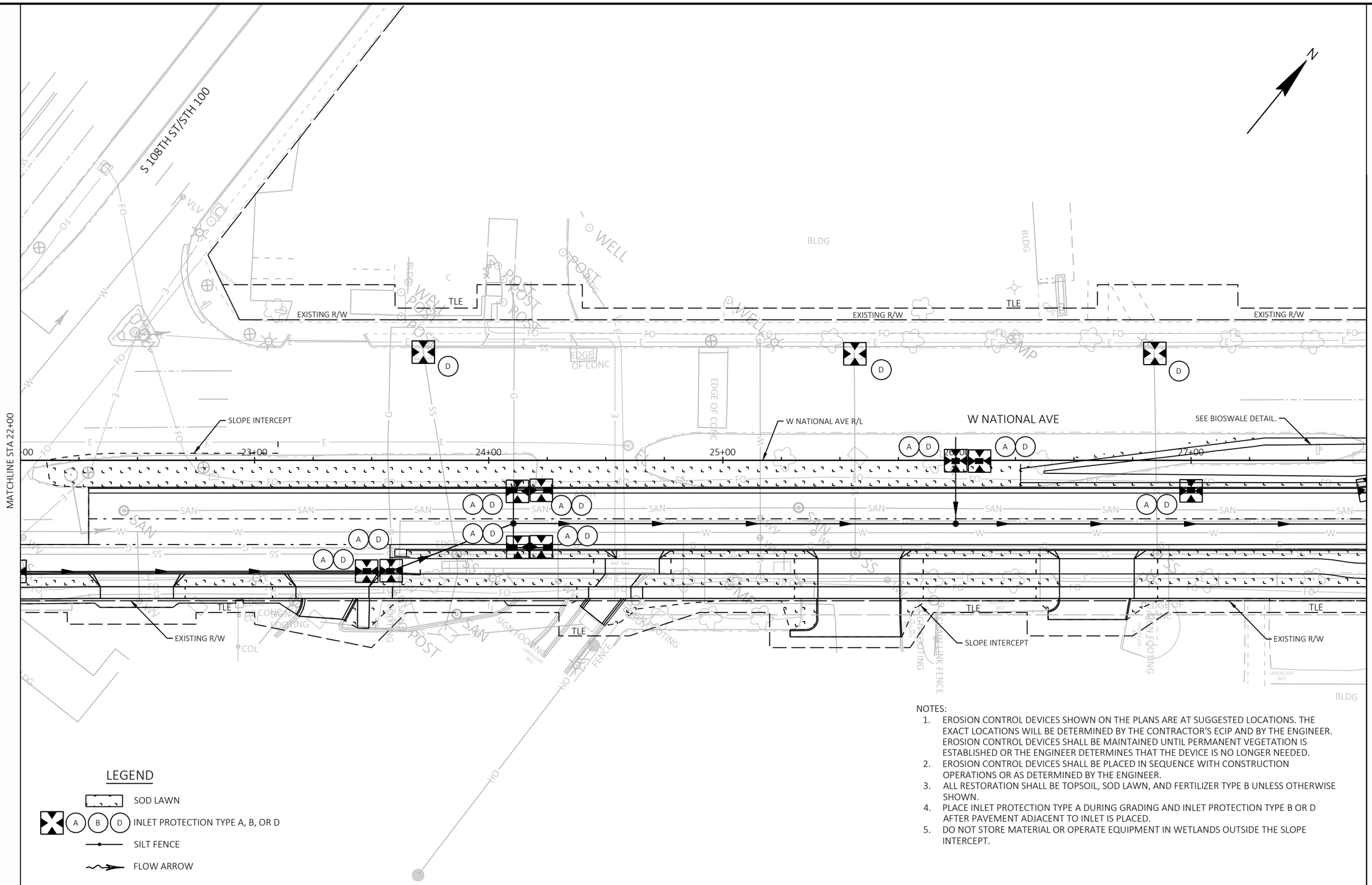
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 6 | SHEET 147 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022006-EC6.DWG
LAYOUT NAME - 01B

PLOT DATE : 1/8/2026 11:14 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2




NOTES:

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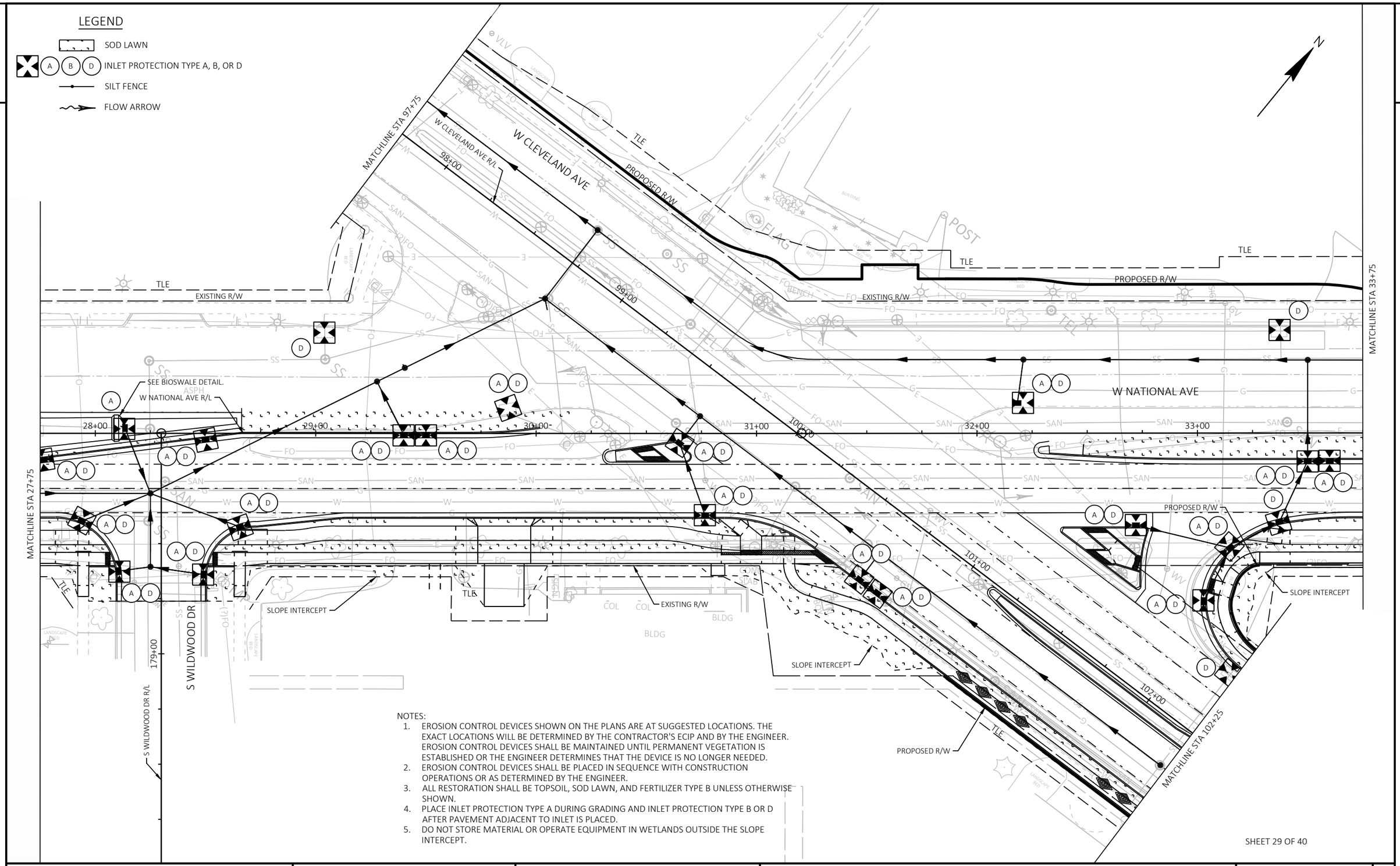
SHEET 28 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 6 | SHEET 148 | E |
|---|---|---|---|---|---|

LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW




NOTES:

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SHEET 29 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 6 | SHEET 149 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022006-EC6.DWG
LAYOUT NAME - 02

PLOT DATE : 1/8/2026 11:14 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

## LEGEND

- SOD LAWN
- A B D — INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

NOTES:

1. EROSION CONTROL DEVICES SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER NEEDED.
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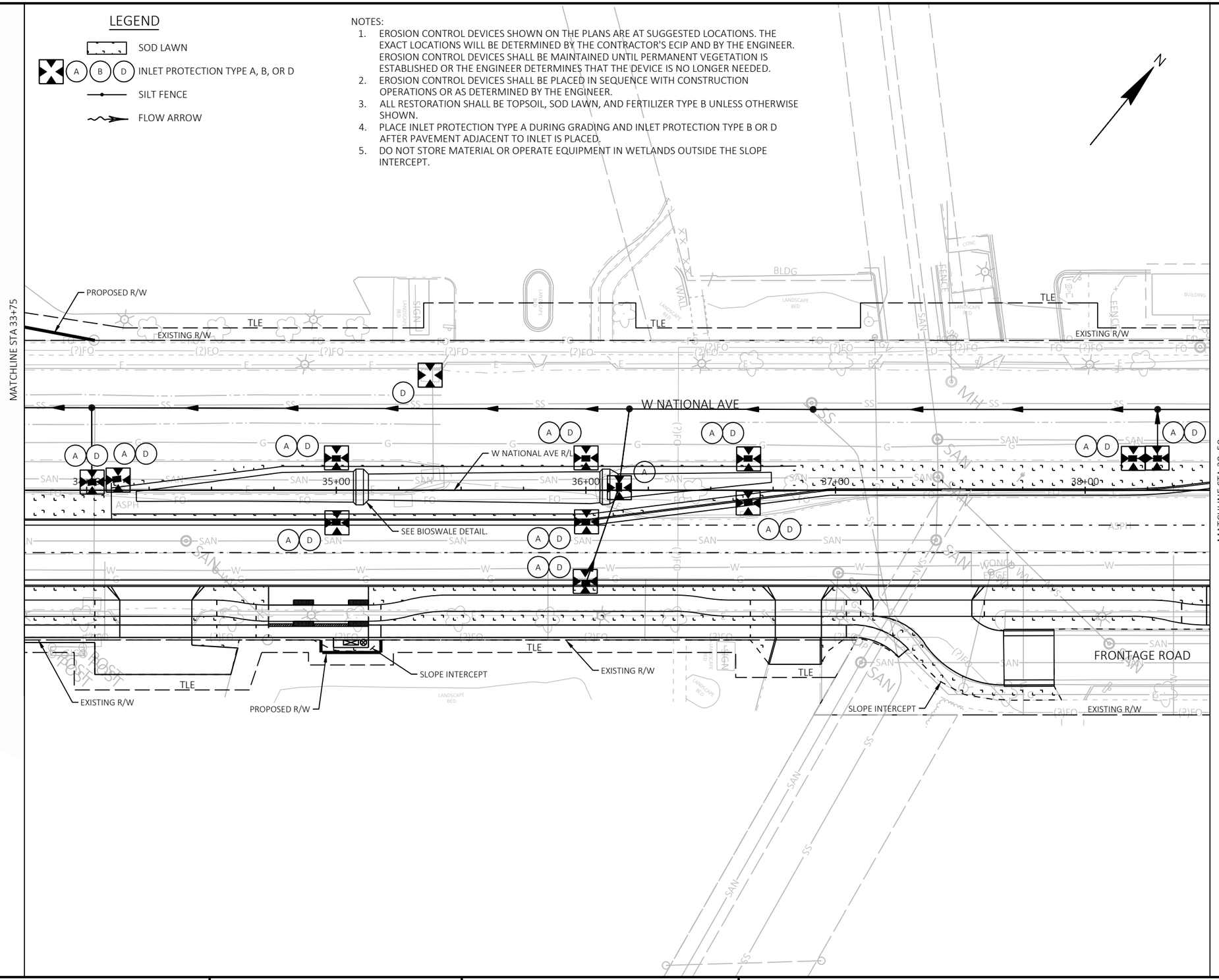



SHEET 30 OF 40

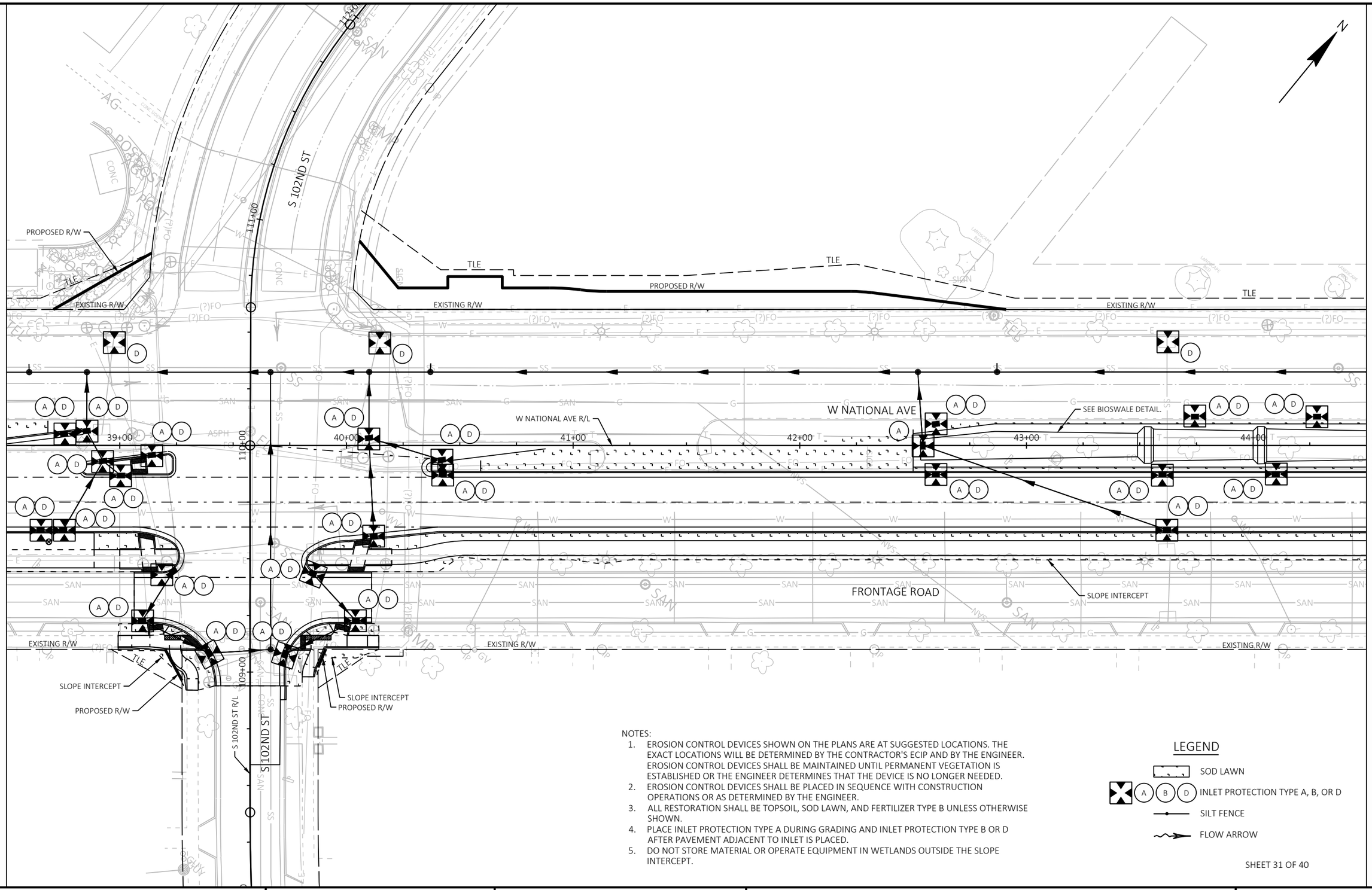
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 6 | SHEET 150 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022006-EC6.DWG
LAYOUT NAME - 03

PLOT DATE : 1/8/2026 11:14 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

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LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

SHEET 31 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 6 | SHEET 151 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022006-EC6.DWG
LAYOUT NAME - 04
PLOT DATE : 1/8/2026 11:15 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

IH 41/894 SB EXIT RAMP

IH 41/894 SB ENTRANCE RAMP

SLOPE INTERCEPT

SLOPE INTERCEPT

PROPOSED R/W

TLE

TLE

EXISTING R/W

W NATIONAL AVE R/L

W NATIONAL AVE

MATCHLINE STA 44+50

45+00

46+00

47+00

48+00

49+00

50+00

MATCHLINE STA 50+50

SEE BIOSWALE DETAIL.

SLOPE INTERCEPT

FRONTAGE ROAD

EXISTING R/W

EXISTING R/W

SLOPE INTERCEPT

TLE

S 101ST ST

ELEC SERVICE PANEL

NOTES:

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SHEET 32 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 6 | SHEET 152 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022006-EC6.DWG
LAYOUT NAME - 05

PLOT DATE : 1/8/2026 11:15 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

MATCHLINE STA 102+25

TLE

PROPOSED R/W

SLOPE INTERCEPT

TLE

EXISTING R/W

PLACE INLET PROTECTION TYPE D AT NEXT DOWNSTREAM INLET.

103+00

104+00

105+00

106+00

107+00

108+00

W CLEVELAND AVE R/L

W CLEVELAND AVE

ASPH

CONC EDGE

PLACE INLET PROTECTION TYPE D AT NEXT DOWNSTREAM INLET.

EXISTING R/W

TLE

TLE

TLE

SLOPE INTERCEPT

PROPOSED R/W

BUILDING

BUILDING

BUILDING

NOTES:

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LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

SHEET 33 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 6 | SHEET 153 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022006-EC6.DWG
LAYOUT NAME - 11

PLOT DATE : 1/8/2026 11:15 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

SOD LAWN

A B D INLET PROTECTION TYPE A, B, OR D

SILT FENCE

FLOW ARROW

MATCHLINE STA 16+25

MATCHLINE STA 22+00

W NATIONAL AVE

17+00 18+00 19+00 20+00 21+00 22+

W NATIONAL AVE R/L

EXISTING R/W

EXISTING R/W

EXISTING R/W

EXISTING R/W

S 108TH ST/STH 100

SLOPE INTERCEPT

TLE

BLDG

POST

CONC

SIGN-FOOTING

CONC EDGE

ASPH

NOTES:

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SHEET 34 OF 40

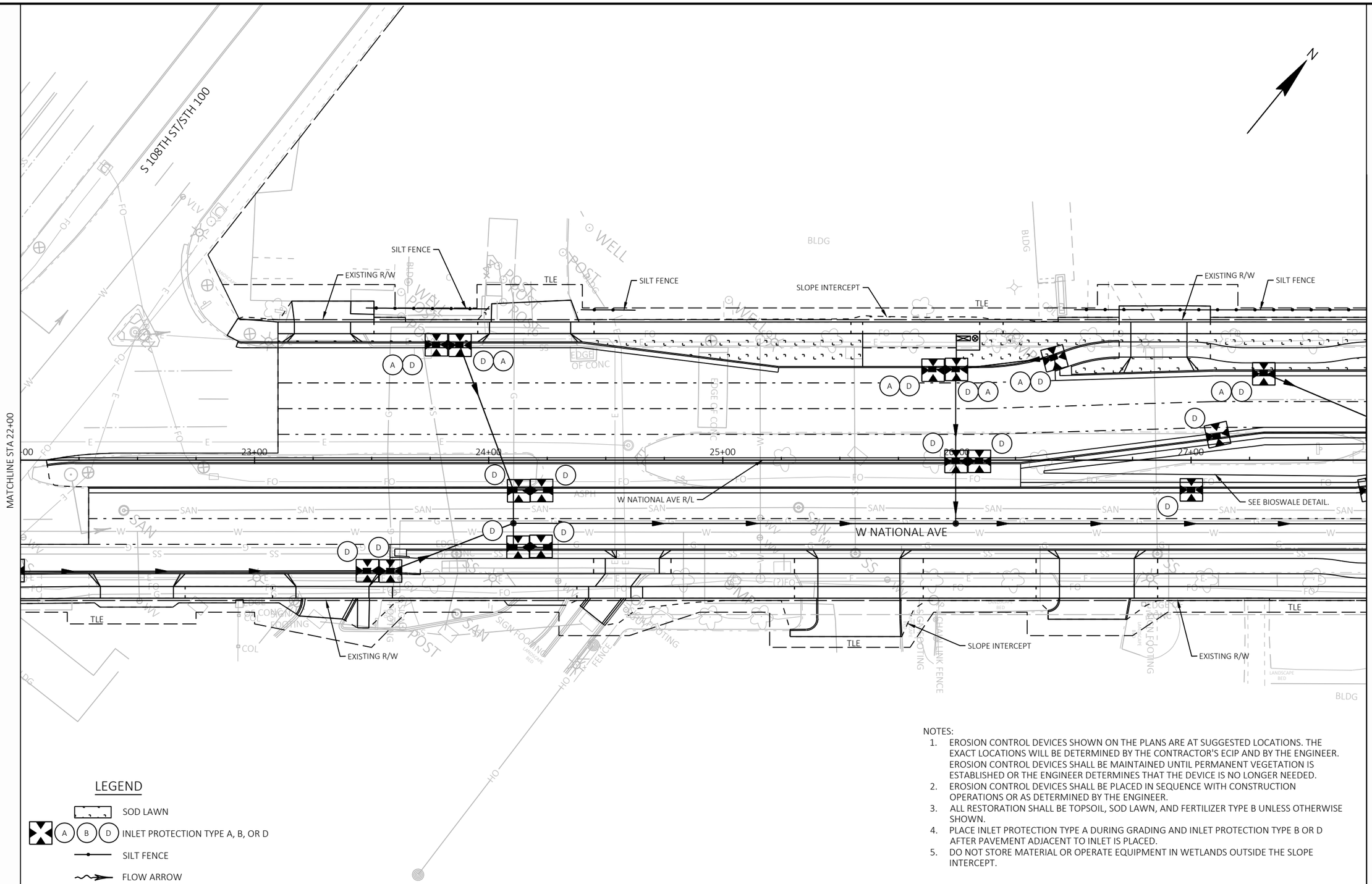
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 7 | SHEET 154 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022007-EC7.DWG
LAYOUT NAME - 01B

PLOT DATE : 1/8/2026 11:15 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2


S 108TH ST/STH 100
MATCHLINE STA 22+00
MATCHLINE STA 27+75
SILT FENCE
EXISTING R/W
TLE
SILT FENCE
SLOPE INTERCEPT
TLE
EXISTING R/W
SILT FENCE
23+00
24+00
25+00
26+00
27+00
W NATIONAL AVE R/L
SEE BIOSWALE DETAIL.
W NATIONAL AVE
TLE
EXISTING R/W
TLE
SLOPE INTERCEPT
EXISTING R/W
BLDG
BLDG
WELL
POST
SAN
SAN
SAN

2

## LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

MATCHLINE STA 97+75

EXISTING R/W

SLOPE INTERCEPT

PROPOSED R/W

TLE

98+00

99+00

SLOPE INTERCEPT

TLE

EXISTING R/W

SEE BIOSWALE DETAIL.

28+00

29+00

30+00

31+00

100+00

32+00

33+00

TLE

EXISTING R/W

PROPOSED R/W

TLE

MATCHLINE STA 33+75

W NATIONAL AVE R/L

W NATIONAL AVE

MATCHLINE STA 27+75

SLOPE INTERCEPT

101+00

W CLEVELAND AVE R/L

PROPOSED R/W

TLE

TLE

EXISTING R/W

SLOPE INTERCEPT

EXISTING R/W

W CLEVELAND AVE

102+00

PROPOSED R/W

TLE

MATCHLINE STA 102+25

179+00

S WILDWOOD DR

S WILDWOOD DR R/L

NOTES:

1. EROSION CONTROL DEVICES SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER NEEDED.
2. EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.
3. ALL RESTORATION SHALL BE TOPSOIL, SOD LAWN, AND FERTILIZER TYPE B UNLESS OTHERWISE SHOWN.
4. PLACE INLET PROTECTION TYPE A DURING GRADING AND INLET PROTECTION TYPE B OR D AFTER PAVEMENT ADJACENT TO INLET IS PLACED.
5. DO NOT STORE MATERIAL OR OPERATE EQUIPMENT IN WETLANDS OUTSIDE THE SLOPE INTERCEPT.



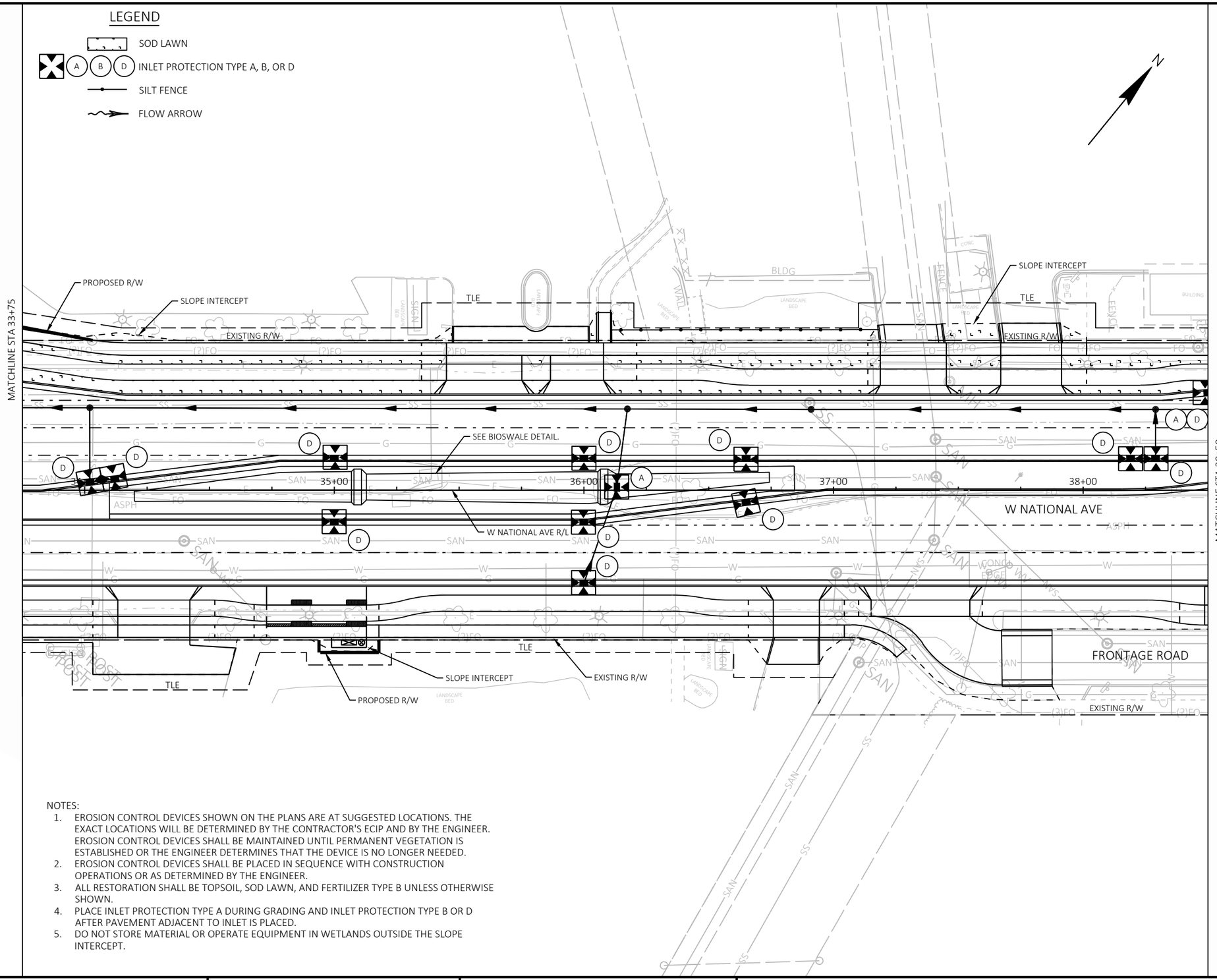
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 7 | SHEET 156 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022007-EC7.DWG
LAYOUT NAME - 02
PLOT DATE : 1/8/2026 11:15 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW




NOTES:

1. EROSION CONTROL DEVICES SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER NEEDED.
2. EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.
3. ALL RESTORATION SHALL BE TOPSOIL, SOD LAWN, AND FERTILIZER TYPE B UNLESS OTHERWISE SHOWN.
4. PLACE INLET PROTECTION TYPE A DURING GRADING AND INLET PROTECTION TYPE B OR D AFTER PAVEMENT ADJACENT TO INLET IS PLACED.
5. DO NOT STORE MATERIAL OR OPERATE EQUIPMENT IN WETLANDS OUTSIDE THE SLOPE INTERCEPT.

SHEET 37 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 7 | SHEET 157 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022007-EC7.DWG
LAYOUT NAME - 03
PLOT DATE : 1/8/2026 11:15 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

PLACE INLET PROTECTION TYPE D AT NEXT DOWNSTREAM INLET.

PLACE INLET PROTECTION TYPE D AT NEXT DOWNSTREAM INLET.

EXISTING R/W

PROPOSED R/W

SLOPE INTERCEPT

SLOPE INTERCEPT

PROPOSED R/W

TLE

TLE

PROPOSED R/W

TLE

SEE BIOSWALE DETAIL.

MATCHLINE STA 38+50

MATCHLINE STA 44+50

S 102ND ST

39+00

40+00

41+00

42+00

43+00

44+00

110+00

W NATIONAL AVE R/L

W NATIONAL AVE

SLOPE INTERCEPT

FRONTAGE ROAD

EXISTING R/W

EXISTING R/W

EXISTING R/W

TLE

TLE

SLOPE INTERCEPT

PROPOSED R/W

SLOPE INTERCEPT

PROPOSED R/W

109+00

S 102ND ST R/L

S 102ND ST

NOTES:

1. EROSION CONTROL DEVICES SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER NEEDED.
2. EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.
3. ALL RESTORATION SHALL BE TOPSOIL, SOD LAWN, AND FERTILIZER TYPE B UNLESS OTHERWISE SHOWN.
4. PLACE INLET PROTECTION TYPE A DURING GRADING AND INLET PROTECTION TYPE B OR D AFTER PAVEMENT ADJACENT TO INLET IS PLACED.
5. DO NOT STORE MATERIAL OR OPERATE EQUIPMENT IN WETLANDS OUTSIDE THE SLOPE INTERCEPT.

LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

SHEET 38 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 7 | SHEET 158 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022007-EC7.DWG
LAYOUT NAME - 04

PLOT DATE : 1/8/2026 11:15 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW

MATCHLINE STA 44+50

MATCHLINE STA 50+50

IH 41/894 SB EXIT RAMP

IH 41/894 SB ENTRANCE RAMP

PROPOSED R/W

SLOPE INTERCEPT

TLE

EXISTING R/W

SEE BIOSWALE DETAIL.

45+00 46+00 47+00 48+00 49+00 50+00

W NATIONAL AVE R/L

W NATIONAL AVE

D

FRONTAGE ROAD

CONC EDGE

EXISTING R/W

EXISTING R/W

S 101ST ST

ELEC SERVICE PANEL

NOTES:

1. EROSION CONTROL DEVICES SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER NEEDED.
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3. ALL RESTORATION SHALL BE TOPSOIL, SOD LAWN, AND FERTILIZER TYPE B UNLESS OTHERWISE SHOWN.
4. PLACE INLET PROTECTION TYPE A DURING GRADING AND INLET PROTECTION TYPE B OR D AFTER PAVEMENT ADJACENT TO INLET IS PLACED.
5. DO NOT STORE MATERIAL OR OPERATE EQUIPMENT IN WETLANDS OUTSIDE THE SLOPE INTERCEPT.

SHEET 39 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 7 | SHEET 159 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022007-EC7.DWG
LAYOUT NAME - 05

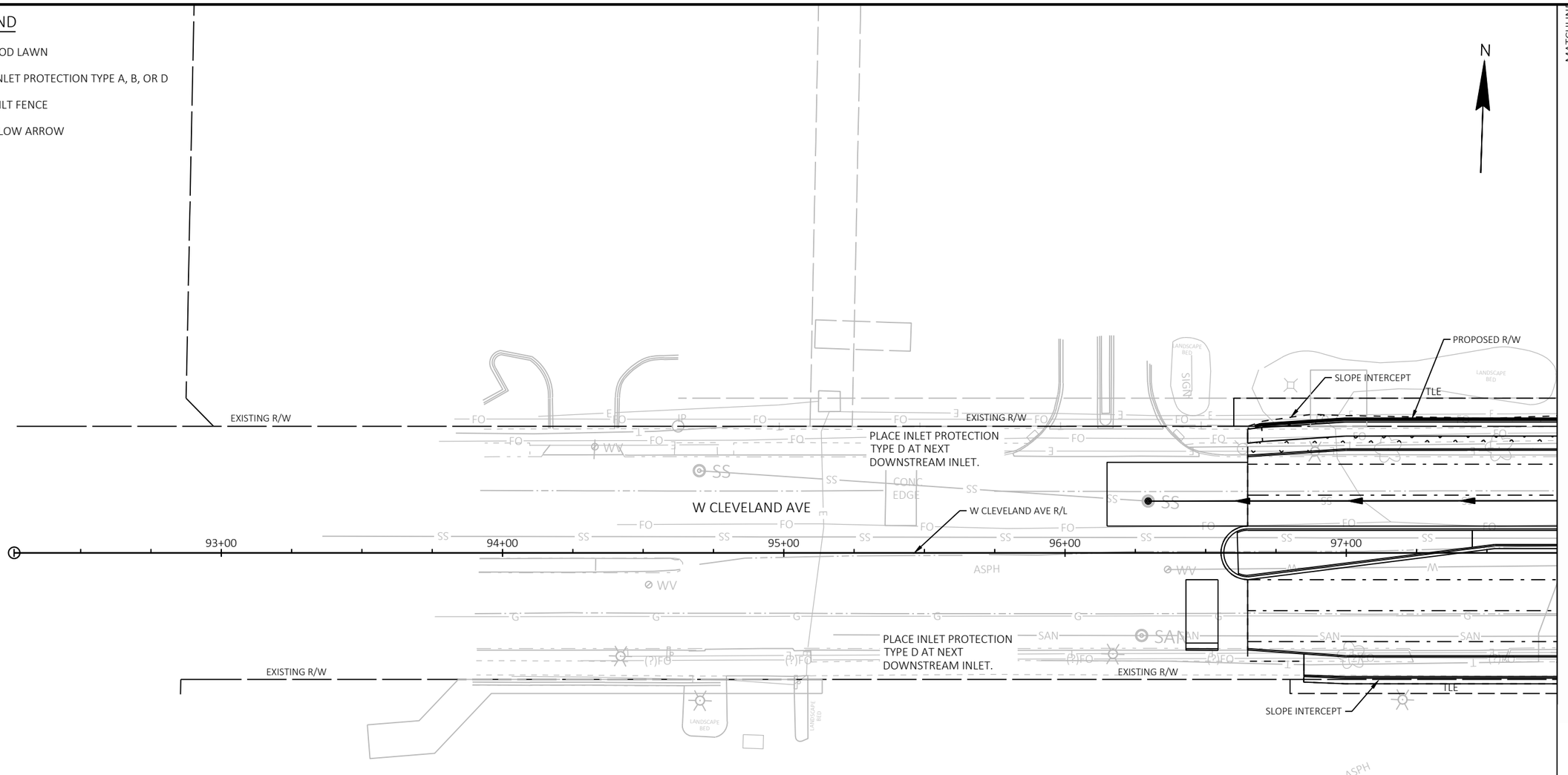
PLOT DATE : 1/8/2026 11:15 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

## LEGEND

- SOD LAWN
- A B D INLET PROTECTION TYPE A, B, OR D
- SILT FENCE
- FLOW ARROW




NOTES:

1. EROSION CONTROL DEVICES SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER NEEDED.
2. EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.
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5. DO NOT STORE MATERIAL OR OPERATE EQUIPMENT IN WETLANDS OUTSIDE THE SLOPE INTERCEPT.

SHEET 40 OF 40

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EROSION CONTROL - STAGE 7 | SHEET 160 | E |
|---|---|---|---|---|---|

2

CITY OF WEST ALLIS

(STORM SEWER, SANITARY SEWER, AND WATER MAIN PLANS)

WISCONSIN
ALEXANDER J WEISLAK
E-101812
WAUWATOSA
WI
PROFESSIONAL ENGINEER

10/29/2025 (DATE)

Digitally signed by Alexander Weislak
Date: 2025.10.29 11:07:11 -05'00'
(SIGNATURE)

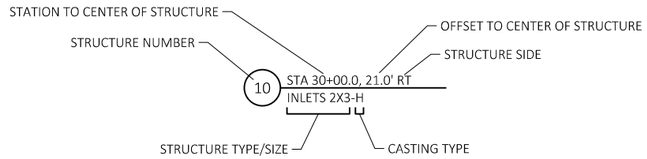
## GENERAL DRAINAGE NOTES

1. STATION AND OFFSET OF MANHOLES, INLETS, AND FIELD INLETS ARE GIVEN TO THE CENTER OF STRUCTURE.
2. STATION AND OFFSET OF ENDWALLS ARE GIVEN TO THE END OF THE LAST PIPE SEGMENT.
3. PIPE LENGTHS ARE DIMENSIONED CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
4. RIM ELEVATIONS ARE GIVEN AT FLANGE LINE OF CURB AND GUTTER FOR CURB INLETS, TO THE CENTER OF COVER FOR MANHOLES, AND TO CENTER OF THE COVER FOR FIELD INLETS.
5. STRUCTURE DEPTH CALCULATIONS FOR MANHOLES AND CATCH BASINS USE A 6-INCH ADJUSTMENT. NO ADJUSTMENT IS USED IN CALCULATING STRUCTURE DEPTH OF INLETS MEDIAN 1 GRATE.
6. STORM SEWER PIPE REINFORCED CONCRETE PIPE COVER DEPTH FOR DETERMINING PIPE CLASS IS MEASURED FROM THE BOTTOM OF THE BASE AGGREGATE DENSE 1 1/4-INCH LAYER.
7. VERIFY THE LOCATION, SIZE, AND ELEVATION OF ALL CONNECTIONS TO EXISTING DRAINAGE FACILITIES PRIOR TO ORDERING DRAINAGE STRUCTURES AND PIPES. NOTIFY THE ENGINEER OF ANY DEVIATIONS FROM THE INFORMATION SHOWN ON THE PLANS PRIOR TO INSTALLING ANY DRAINAGE PIPES OR STRUCTURES.
8. PROVIDE TEMPORARY POSITIVE DRAINAGE THROUGHOUT THE PROJECT DURING ALL STAGES. PROVIDING TEMPORARY DRAINAGE IS INCIDENTAL TO CONSTRUCTION UNLESS OTHERWISE SHOWN IN THE TRAFFIC CONTROL/STAGING PLANS.
9. SUPPORTING UTILITIES DURING STORM SEWER CONSTRUCTION IS INCIDENTAL TO STORM SEWER PIPE AND/OR STORM SEWER STRUCTURE CONSTRUCTION.
10. PLAN VIEW HIGHLIGHTING ALONG STORM SEWER PIPES REPRESENTS THE STORM SEWER PROFILE SHOWN IN THE PROFILE VIEW BELOW ON THE SAME STORM SEWER SHEET.
11. CONCRETE COLLARS FOR PIPE SHALL ONLY BE PAID FOR WHEN SHOWN IN THE PLANS. ALL OTHER CONNECTIONS BETWEEN PIPES AND STORM SEWER STRUCTURES SHALL BE INCIDENTAL TO THE STORM SEWER PIPE OR STORM SEWER STRUCTURE.

## STORM SEWER LEGEND

| | |
|---|---|
| XX / XXX.XX | STORM SEWER STRUCTURE NUMBER IN PROFILE VIEW WITH RIM ELEVATION |
| PXX | STORM SEWER PIPE NUMBER |
| CC | CONCRETE COLLARS FOR PIPE |
| | PIPE RUN SHOWN IN PROFILE VIEW ON CURRENT SHEET |

## STORM SEWER STRUCTURE ANNOTATION LEGEND




### STRUCTURE TYPES

| | |
|---|---|
| BIO DRAIN | BIOSWALE DRAIN |
| CATCH BASIN 3-FT | CATCH BASINS 3-FT DIAMETER |
| CATCH BASINS 3.5-FT | CATCH BASINS 3.5-FT DIAMETER |
| CATCH BASINS 4-FT | CATCH BASINS 4-FT DIAMETER |
| CATCH BASINS 6 | CATCH BASINS 6-FT DIAMETER |
| INLETS 3-FT | INLETS 3-FT DIAMETER |
| INLETS 3.5-FT | INLETS 3.5-FT DIAMETER |
| INLETS 2X3 | INLETS 2X3-FT |
| INLETS MEDIAN 1G | INLETS MEDIAN 1 GRATE |
| MANHOLES 4 | MANHOLE 4-FT DIAMETER |
| MANHOLES 4T | MANHOLE VARIABLE TEE 4-FT DIAMETER |
| MANHOLES 5 | MANHOLE 5-FT DIAMETER |
| MANHOLES 6 | MANHOLE 6-FT DIAMETER |
| MANHOLES 6X11-FT | MANHOLES 6X11-FT |
| MANHOLES 7 | MANHOLE 7-FT DIAMETER |
| MANHOLES 8 | MANHOLE 8-FT DIAMETER |
| MANHOLES 9 | MANHOLE 9-FT DIAMETER |
| MANHOLES 10 | MANHOLES 10-FT DIAMETER |

### CASTING TYPES

| | |
|---|---|
| C | MANHOLE COVERS TYPE C |
| J | MANHOLE COVERS TYPE J |
| H | INLET COVERS TYPE H |
| MS | INLET COVERS TYPE MS |
| R | INLET COVERS TYPE R |
| R-1 | INLET COVERS TYPE R SPECIAL GRATE NO. 1 |
| Z | INLET COVERS TYPE Z |

NOTES:
1. CONNECT EXISTING YARD BASIN TO PROPOSED 21" SSPRC USING BLIND CONNECTION AND PIPE UNDERDRAIN UNPERFORATED 8".

STH 100 (S 108TH ST)

W NATIONAL AVE

W NATIONAL AVE R/L

TLE

SLOPE INTERCEPT

EXISTING R/W

MATCH LINE 27+75

STA 21+87.5, 47.6' RT
CATCH BASINS 3.5-FT-R (1)

RECONNECT EXISTING 12" PVC PIPE INTO PROPOSED CATCH BASIN WITH A CONCRETE COLLAR

STA 21+97.5, 47.6' RT
CATCH BASINS 3.5-FT-R (2)

STA 23+48.0, 47.3' RT
CATCH BASINS 3.5-FT-R (3)

STA 23+58.0, 47.3' RT
CATCH BASINS 3.5-FT-R (4)

STA 23+77.5, 49.3' LT
CATCH BASINS 3.5-FT-R (5A)

STA 23+87.5, 49.3' LT
CATCH BASINS 3.5-FT-R (5B)

STA 24+10.5, 27.0' RT
MANHOLES 5-J (5)

STA 24+10.5, 12.7' RT
INLETS 3.5-FT-R (5D)

STA 24+25.0, 12.7' RT
INLETS 3.5-FT-R (5C)

CONNECT PRIVATE STORM SEWER TO CATCH BASIN 5F USING PIPE UNDERDRAIN UNPERFORATED 10-INCH AND CONCRETE COLLAR

STA 24+10.5, 37.3' RT
CATCH BASINS 3.5-FT-R (5F)

STA 24+25.0, 37.3' RT
CATCH BASINS 3.5-FT-R (5E)

SEE NOTE 1

SLOPE INTERCEPT

SEE NOTE 1

STA 25+89.5, 38.8' LT
CATCH BASINS 3.5-FT-R (6A)

STA 25+99.5, 38.8' LT
CATCH BASINS 3.5-FT-R (6C)

STA 25+99.5, 0.3' RT
CATCH BASINS 3.5-FT-R (6E)

STA 25+99.5, 27.1' RT
MANHOLES 5-J (6)

STA 26+41.3, 43.9' LT
INLETS 3.5-FT-R (6B)

STA 26+09.5, 0.3' RT
CATCH BASINS 3.5-FT-R (6D)

CAUTION

TLE

EXISTING R/W

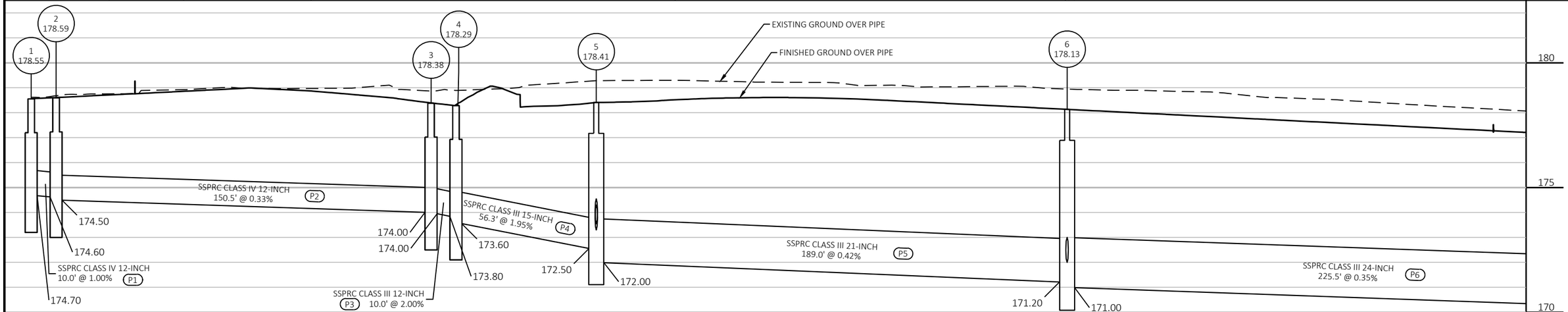
STA 27+31.0, 37.3' LT
CATCH BASINS 3.5-FT-R-1 (8A)

STA 27+10.9, 10.2' LT
BIO DRAIN-R (100)

STA 27+00.0, 12.7' RT
BIO DRAIN-R-1 (101)

P1 P2 P3 P4 P5 P5A P5B P5C P5D P5E P5F P6 P6A P6B P6C P6D P6E P8A

22+00 23+00 24+00 25+00 26+00 27+00




SHEET 2 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 162 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 01A

PLOT DATE : 1/24/2026 8:15 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41

NOTES:
1. CONNECT EXISTING YARD BASIN TO PROPOSED 21" SSPRC USING BLIND CONNECTION AND PIPE UNDERDRAIN UNPERFORATED 8".

STH 100 (S 108TH ST)

W NATIONAL AVE

W NATIONAL AVE R/L

TLE

SLOPE INTERCEPT

EXISTING R/W

STA 23+77.5, 49.3' LT
CATCH BASINS 3.5-FT-R 5A

5B STA 23+87.5, 49.3' LT
CATCH BASINS 3.5-FT-R

6B STA 26+41.3, 43.9' LT
INLETS 3.5-FT-R

STA 25+89.5, 38.8' LT
CATCH BASINS 3.5-FT-R 6A

STA 25+99.5, 38.8' LT
CATCH BASINS 3.5-FT-R 6C

6D STA 26+09.5, 0.3' RT
CATCH BASINS 3.5-FT-R

STA 25+99.5, 0.3' RT
CATCH BASINS 3.5-FT-R 6E

STA 27+31.0, 37.3' LT
CATCH BASINS 3.5-FT-R-1 8A

STA 27+10.9, 10.2' LT
BIO DRAIN-R 100

STA 27+00.0, 12.7' RT
BIO DRAIN-R-1 101

STA 24+10.5, 12.7' RT
INLETS 3.5-FT-R 5D

STA 24+10.5, 27.0' RT
MANHOLES 5-J 5

5C STA 24+25.0, 12.7' RT
INLETS 3.5-FT-R

STA 25+99.5, 27.1' RT
MANHOLES 6-J 6

STA 23+58.0, 47.3' RT
CATCH BASINS 3.5-FT-R 4

STA 23+48.0, 47.3' RT
CATCH BASINS 3.5-FT-R 3

STA 21+97.5, 47.6' RT
CATCH BASINS 3.5-FT-R 2

1 STA 21+87.5, 47.6' RT
CATCH BASINS 3.5-FT-R

RECONNECT EXISTING 12" PVC PIPE INTO PROPOSED CATCH BASIN WITH A CONCRETE COLLAR

CONNECT PRIVATE STORM SEWER TO CATCH BASIN 5F USING PIPE UNDERDRAIN UNPERFORATED 10-INCH AND CONCRETE COLLAR

STA 24+10.5, 37.3' RT
CATCH BASINS 3.5-FT-R 5F

5E STA 24+25.0, 37.3' RT
CATCH BASINS 3.5-FT-R

SEE NOTE 1

SLOPE INTERCEPT

SEE NOTE 1

CAUTION

TLE

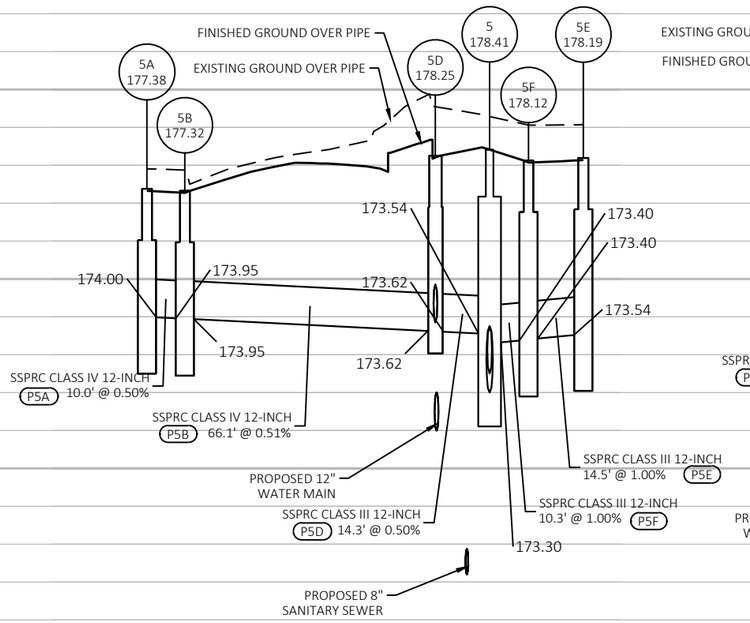
EXISTING R/W

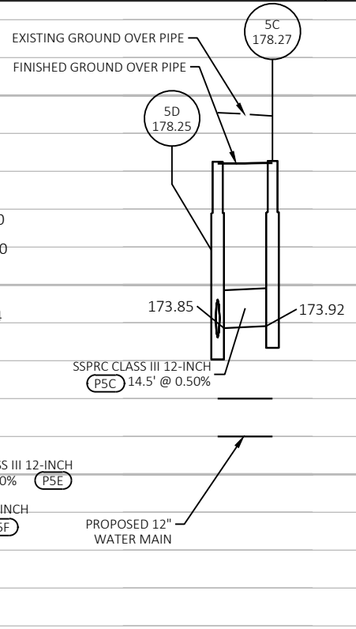
MATCH LINE 27+75

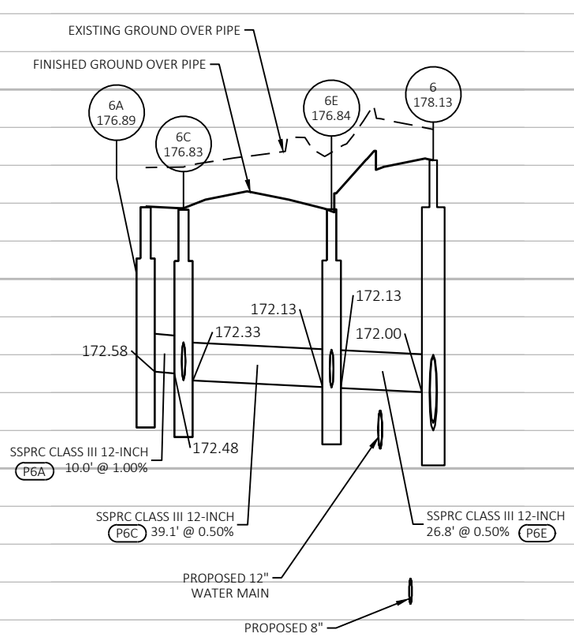
P1 P2 P3 P4 P5 P6 P5A P5B P5C P5D P5E P5F P6A P6B P6C P6D P6E P8A

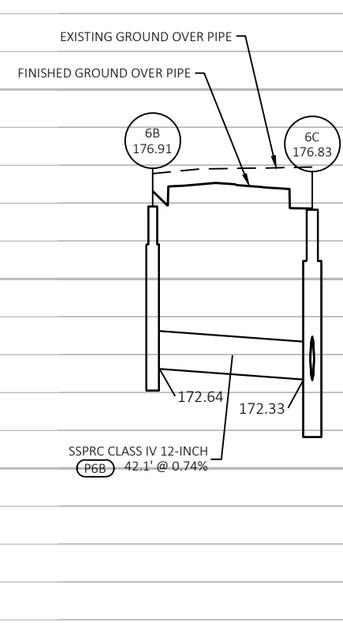
12" 15" 21" 24"

22+00 23+00 24+00 25+00 26+00 27+00




180 175 170 165

SHEET 3 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 163 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 01B

PLOT DATE : 1/24/2026 8:15 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41

NOTES:
1. CONNECT EXISTING YARD BASIN TO PROPOSED 21" SSPRC USING BLIND CONNECTION AND PIPE UNDERDRAIN UNPERFORATED 8".

STH 100 (S 108TH ST)

W NATIONAL AVE

W NATIONAL AVE R/L

TLE

SLOPE INTERCEPT

EXISTING R/W

STA 23+77.5, 49.3' LT
CATCH BASINS 3.5-FT-R 5A

5B STA 23+87.5, 49.3' LT
CATCH BASINS 3.5-FT-R

STA 24+10.5, 12.7' RT
INLETS 3.5-FT-R 5D

STA 24+10.5, 27.0' RT
MANHOLES 5-J 5

STA 24+25.0, 12.7' RT
INLETS 3.5-FT-R 5C

STA 23+58.0, 47.3' RT
CATCH BASINS 3.5-FT-R 4

STA 23+48.0, 47.3' RT
CATCH BASINS 3.5-FT-R 3

STA 21+97.5, 47.6' RT
CATCH BASINS 3.5-FT-R 2

1 STA 21+87.5, 47.6' RT
CATCH BASINS 3.5-FT-R

RECONNECT EXISTING 12" PVC PIPE INTO PROPOSED CATCH BASIN WITH A CONCRETE COLLAR

CONNECT PRIVATE STORM SEWER TO CATCH BASIN 5F USING PIPE UNDERDRAIN UNPERFORATED 10-INCH AND CONCRETE COLLAR

STA 24+10.5, 37.3' RT
CATCH BASINS 3.5-FT-R 5F

5E STA 24+25.0, 37.3' RT
CATCH BASINS 3.5-FT-R

SEE NOTE 1

SLOPE INTERCEPT

SEE NOTE 1

CAUTION

TLE

EXISTING R/W

STA 25+89.5, 38.8' LT
CATCH BASINS 3.5-FT-R 6A

STA 25+99.5, 38.8' LT
CATCH BASINS 3.5-FT-R 6C

STA 25+99.5, 0.3' RT
CATCH BASINS 3.5-FT-R 6E

STA 25+99.5, 27.1' RT
MANHOLES 5-J 6

6B STA 26+41.3, 43.9' LT
INLETS 3.5-FT-R

6D STA 26+09.5, 0.3' RT
CATCH BASINS 3.5-FT-R

STA 27+31.0, 37.3' LT
CATCH BASINS 3.5-FT-R-1 8A

STA 27+10.9, 10.2' LT
BIO DRAIN-R 100

101 STA 27+00.0, 12.7' RT
BIO DRAIN-R-1

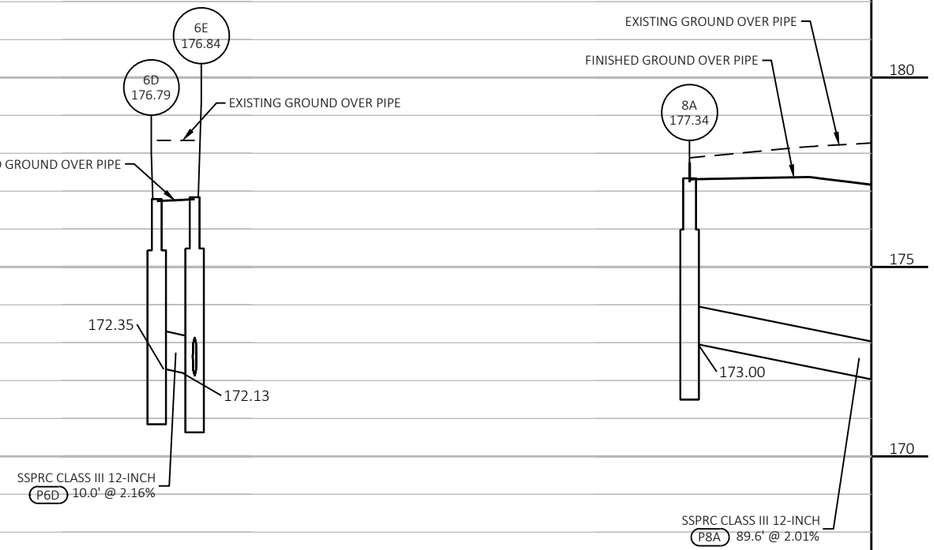
MATCH LINE 27+75

22+00 23+00 24+00 25+00 26+00 27+00

P1 P2 P3 P4 P5 P6 P5A P5B P5C P5D P5E P5F P6A P6B P6C P6D P6E P8A

12" 15" 21" 24"

CC



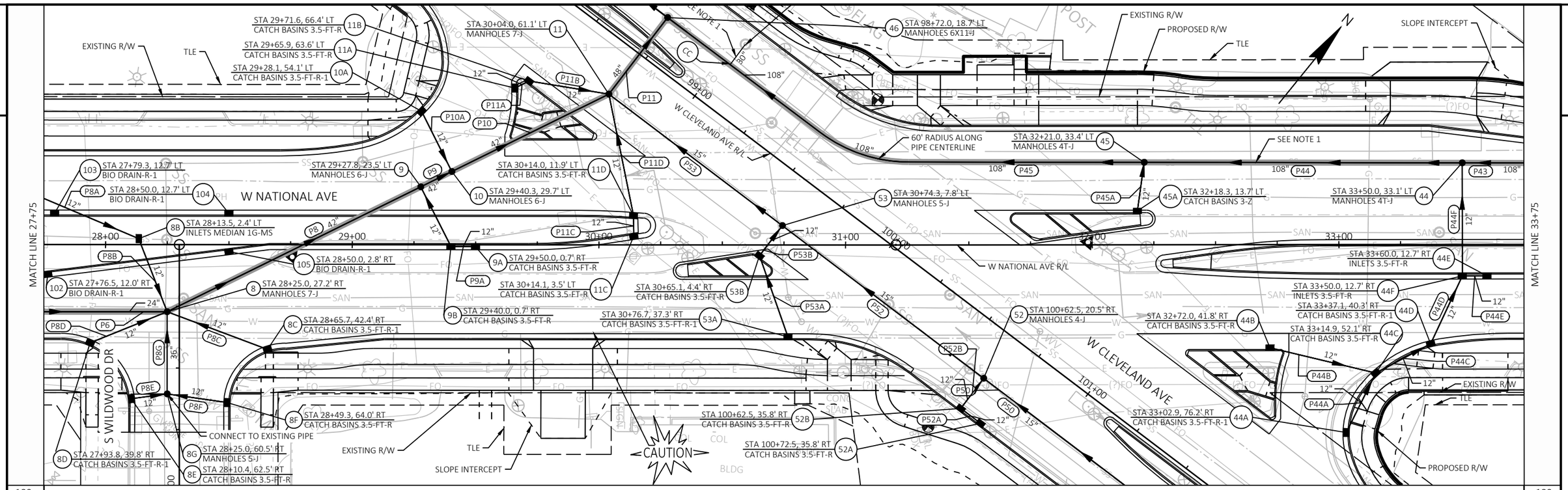

SHEET 4 OF 30

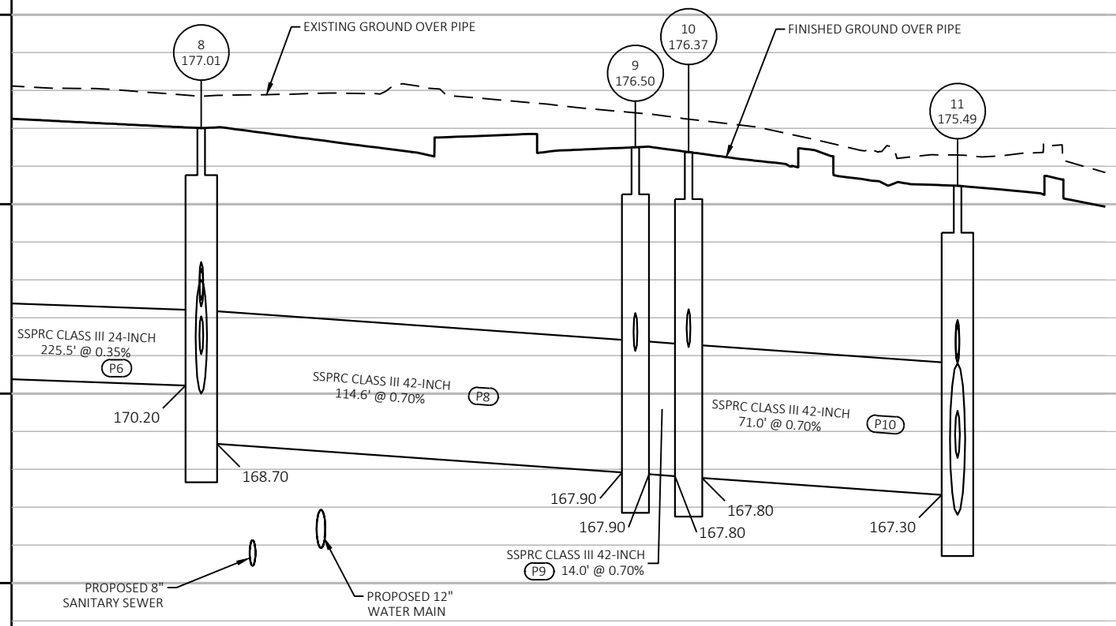
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 164 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 01C

PLOT DATE : 1/24/2026 8:15 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41



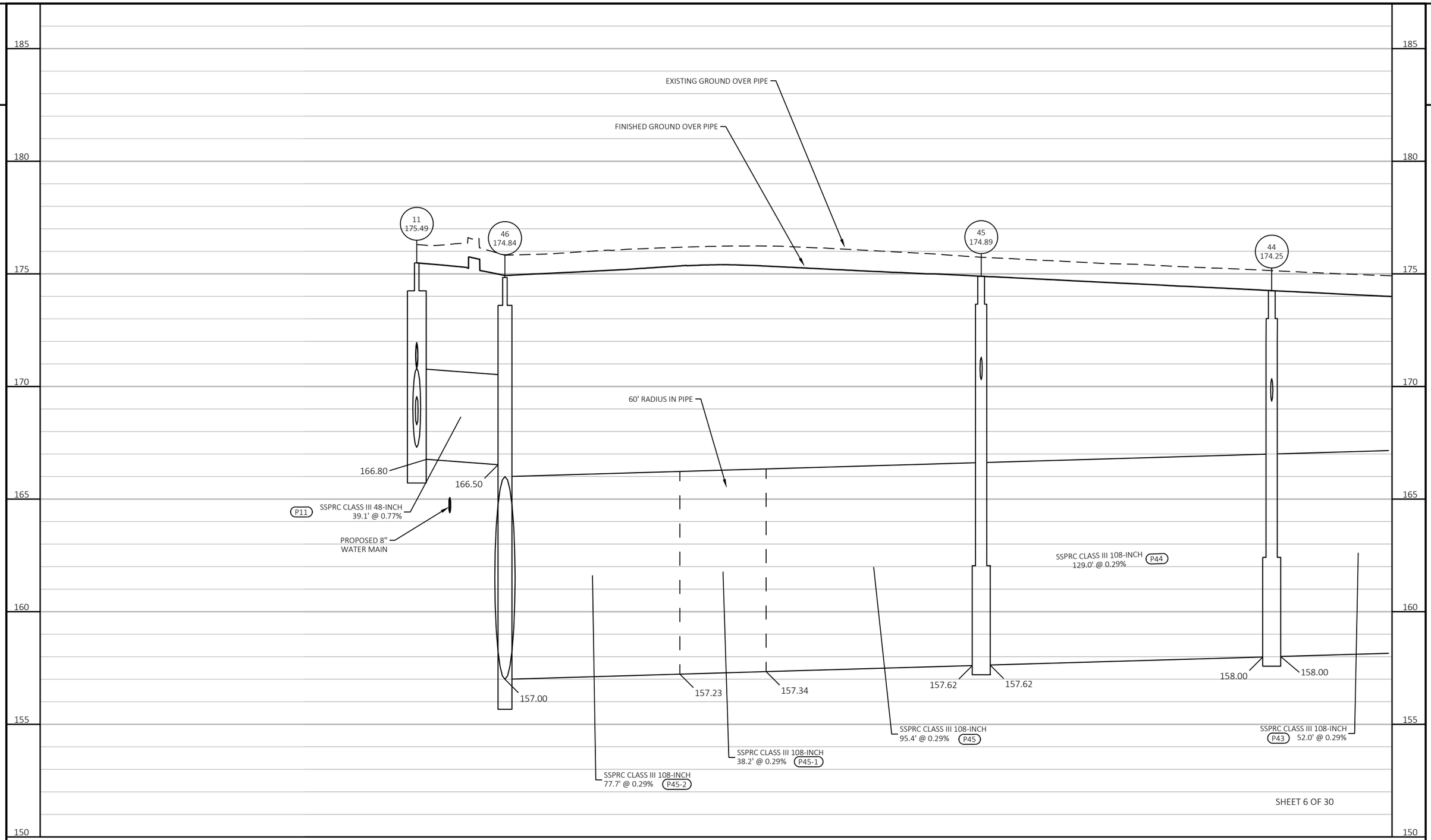

PROFILE FOR STORM SEWER TRUNK LINE EAST OF MANHOLE 11 ON NEXT SHEET

NOTES:
1. RECONNECT EXISTING 12" YARD BASIN TO PROPOSED 108" SSPRC USING BLIND CONNECTION.

SHEET 5 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 165 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 02A
PLOT DATE : 1/24/2026 8:15 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 166 | E |
|---|---|---|---|---|---|

2

MATCH LINE 27+75

MATCH LINE 33+75

EXISTING R/W

TLE

STA 29+71.6, 66.4' LT
CATCH BASINS 3.5-FT-R
11B

STA 29+65.9, 63.6' LT
CATCH BASINS 3.5-FT-R
11A

STA 29+28.1, 54.1' LT
CATCH BASINS 3.5-FT-R-1
10A

STA 30+04.0, 61.1' LT
MANHOLES 7-J
11

SEE NOTE 1

CC

99+00

W CLEVELAND AVE R/L

STA 98+72.0, 18.7' LT
MANHOLES 6X11-J
46

EXISTING R/W

PROPOSED R/W

TLE

SLOPE INTERCEPT

60' RADIUS ALONG
PIPE CENTERLINE

STA 32+21.0, 33.4' LT
MANHOLES 4T-J
45

SEE NOTE 1

STA 33+50.0, 33.1' LT
MANHOLES 4T-J
44

STA 27+79.3, 12.7' LT
BIO DRAIN-R-1
103

P8A

STA 28+50.0, 12.7' LT
BIO DRAIN-R-1
104

W NATIONAL AVE

STA 29+27.8, 23.5' LT
MANHOLES 6-J
9

STA 29+40.3, 29.7' LT
MANHOLES 6-J
10

STA 30+14.0, 11.9' LT
CATCH BASINS 3.5-FT-R
11D

STA 30+74.3, 7.8' LT
MANHOLES 5-J
53

STA 32+18.3, 13.7' LT
CATCH BASINS 3-Z
45A

W NATIONAL AVE R/L

28+00

29+00

30+00

31+00

32+00

33+00

STA 28+13.5, 2.4' LT
INLETS MEDIAN 1G-MS
8B

STA 29+50.0, 0.7' RT
CATCH BASINS 3.5-FT-R
9A

STA 30+14.1, 3.5' LT
CATCH BASINS 3.5-FT-R
11C

STA 30+65.1, 4.4' RT
CATCH BASINS 3.5-FT-R
53B

STA 33+60.0, 12.7' RT
INLETS 3.5-FT-R
44E

STA 27+76.5, 12.0' RT
BIO DRAIN-R-1
102

STA 28+50.0, 2.8' RT
BIO DRAIN-R-1
105

STA 28+25.0, 27.2' RT
MANHOLES 7-J
8

STA 29+40.0, 0.7' RT
CATCH BASINS 3.5-FT-R
9B

STA 30+76.7, 37.3' RT
CATCH BASINS 3.5-FT-R-1
53A

STA 33+50.0, 12.7' RT
INLETS 3.5-FT-R
44F

STA 33+37.1, 40.3' RT
CATCH BASINS 3.5-FT-R-1
44D

STA 100+62.5, 20.5' RT
MANHOLES 4-J
52

STA 32+72.0, 41.8' RT
CATCH BASINS 3.5-FT-R
44B

STA 33+14.9, 52.1' RT
CATCH BASINS 3.5-FT-R
44C

S WILDWOOD DR

W CLEVELAND AVE

101+00

STA 28+65.7, 42.4' RT
CATCH BASINS 3.5-FT-R-1
8C

STA 28+49.3, 64.0' RT
CATCH BASINS 3.5-FT-R
8F

CONNECT TO EXISTING PIPE

STA 27+93.8, 39.8' RT
CATCH BASINS 3.5-FT-R-1
8D

STA 28+25.0, 60.5' RT
MANHOLES 5-J
8G

STA 28+10.4, 62.5' RT
CATCH BASINS 3.5-FT-R
8E

EXISTING R/W

TLE

SLOPE INTERCEPT

CAUTION

STA 100+62.5, 35.8' RT
CATCH BASINS 3.5-FT-R
52B

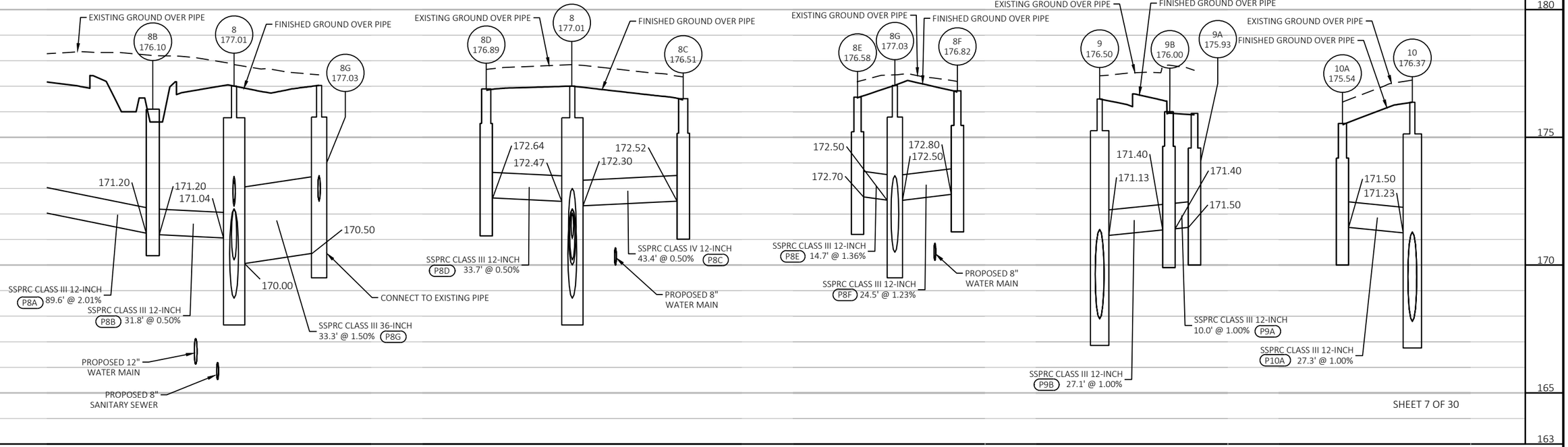
STA 100+72.5, 35.8' RT
CATCH BASINS 3.5-FT-R
52A

STA 33+02.9, 76.2' RT
CATCH BASINS 3.5-FT-R-1
44A

EXISTING R/W

TLE

PROPOSED R/W




SHEET 7 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 167 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 02C

PLOT DATE : 1/24/2026 8:15 AM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41

2

MATCH LINE 27+75

MATCH LINE 33+75

EXISTING R/W

TLE

STA 29+71.6, 66.4' LT
CATCH BASINS 3.5-FT-R
11B

STA 29+65.9, 63.6' LT
CATCH BASINS 3.5-FT-R
11A

STA 29+28.1, 54.1' LT
CATCH BASINS 3.5-FT-R-1
10A

STA 30+04.0, 61.1' LT
MANHOLES 7-J
11

SEE NOTE 1

CC

30"

108"

99+00

W CLEVELAND AVE R/L

48"

P11B

12"

P11

P11A

P10A

P10

42"

15"

P53

108"

STA 98+72.0, 18.7' LT
MANHOLES 6X11-J
46

EXISTING R/W

PROPOSED R/W

TLE

SLOPE INTERCEPT

60' RADIUS ALONG
PIPE CENTERLINE

STA 32+21.0, 33.4' LT
MANHOLES 4T-J
45

SEE NOTE 1

108"
P45

108"
P44

P43
108"

103
STA 27+79.3, 12.7' LT
BIO DRAIN-R-1

P8A
STA 28+50.0, 12.7' LT
BIO DRAIN-R-1
104

W NATIONAL AVE

STA 29+27.8, 23.5' LT
MANHOLES 6-J
9

P9

42"

10
STA 29+40.3, 29.7' LT
MANHOLES 6-J

STA 30+14.0, 11.9' LT
CATCH BASINS 3.5-FT-R
11D

12"

P11D

53
STA 30+74.3, 7.8' LT
MANHOLES 5-J

P45A

12"

45A
STA 32+18.3, 13.7' LT
CATCH BASINS 3-Z

STA 33+50.0, 33.1' LT
MANHOLES 4T-J
44

P44F

12"

PROPOSED 12"
WATER MAIN

28+00

29+00

30+00

31+00

32+00

33+00

8B
STA 28+13.5, 2.4' LT
INLETS MEDIAN 1G-MS

P8

42"

12"

P11C

12"

P53B

12"

PROPOSED 12"
WATER MAIN

100+00

W NATIONAL AVE R/L

PROPOSED 10"
SANITARY SEWER

STA 33+60.0, 12.7' RT
INLETS 3.5-FT-R
44E

P8B

105
STA 28+50.0, 2.8' RT
BIO DRAIN-R-1

9A
STA 29+50.0, 0.7' RT
CATCH BASINS 3.5-FT-R

P9A

102
STA 27+76.5, 12.0' RT
BIO DRAIN-R-1

8
STA 28+25.0, 27.2' RT
MANHOLES 7-J

STA 30+14.1, 3.5' LT
CATCH BASINS 3.5-FT-R
11C

STA 30+65.1, 4.4' RT
CATCH BASINS 3.5-FT-R
53B

P53A

15"

P52

STA 33+50.0, 12.7' RT
INLETS 3.5-FT-R
44F

STA 33+37.1, 40.3' RT
CATCH BASINS 3.5-FT-R-1
44D

P44D

12"

P44E

24"

P8D

P6

12"

P8C

8C
STA 28+65.7, 42.4' RT
CATCH BASINS 3.5-FT-R-1

9B
STA 29+40.0, 0.7' RT
CATCH BASINS 3.5-FT-R

STA 30+76.7, 37.3' RT
CATCH BASINS 3.5-FT-R-1
53A

52
STA 100+62.5, 20.5' RT
MANHOLES 4-J

STA 32+72.0, 41.8' RT
CATCH BASINS 3.5-FT-R
44B

STA 33+14.9, 52.1' RT
CATCH BASINS 3.5-FT-R
44C

P52B

12"

P50

P50

15"

12"

P44C

P44B

12"

P44A

12"

EXISTING R/W

TLE

S WILDWOOD DR

P8G

36"

P8E

12"

P8F

8F
STA 28+49.3, 64.0' RT
CATCH BASINS 3.5-FT-R

W CLEVELAND AVE

101+00

STA 100+62.5, 35.8' RT
CATCH BASINS 3.5-FT-R
52B

STA 33+02.9, 76.2' RT
CATCH BASINS 3.5-FT-R-1
44A

P52A

CONNECT TO EXISTING PIPE

8D
STA 27+93.8, 39.8' RT
CATCH BASINS 3.5-FT-R-1

8G
STA 28+25.0, 60.5' RT
MANHOLES 5-J

8E
STA 28+10.4, 62.5' RT
CATCH BASINS 3.5-FT-R

EXISTING R/W

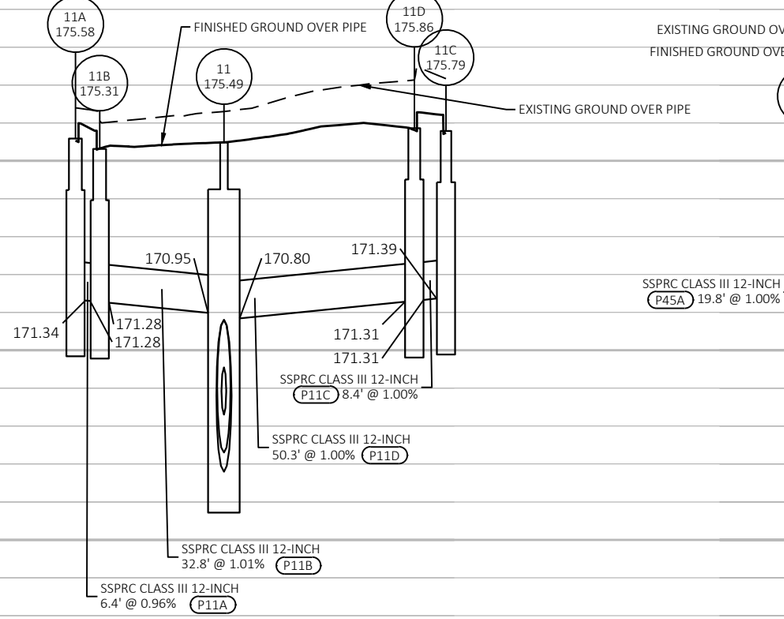
TLE

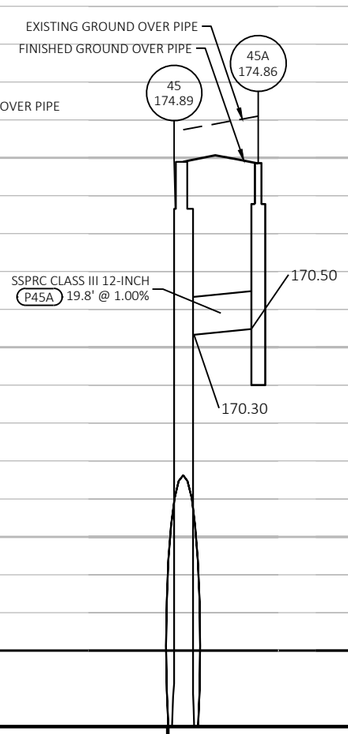
SLOPE INTERCEPT

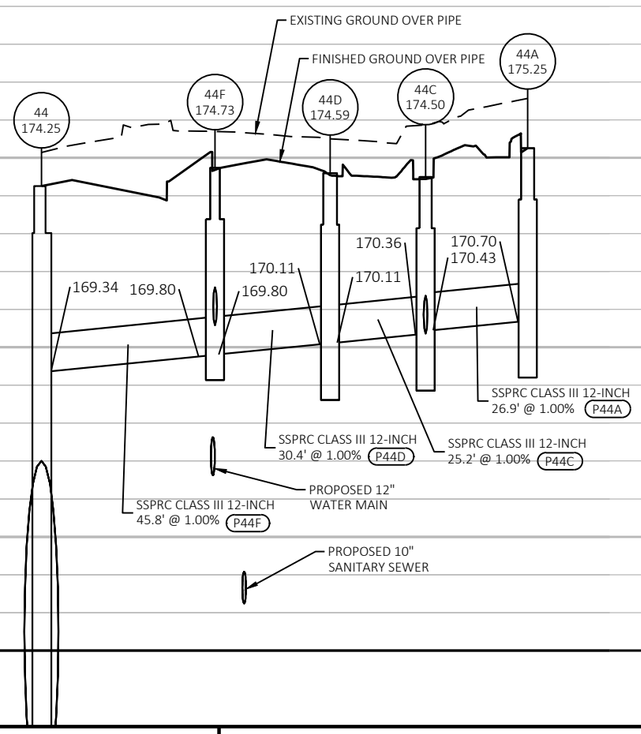
CAUTION

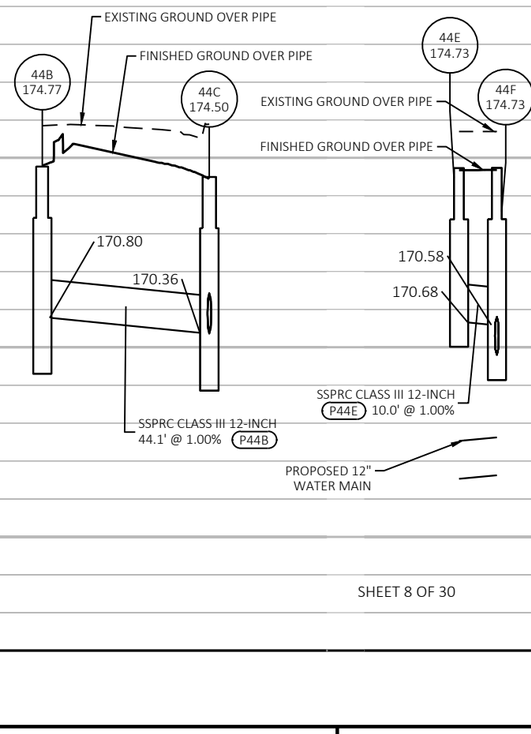
STA 100+72.5, 35.8' RT
CATCH BASINS 3.5-FT-R
52A

PROPOSED R/W




SHEET 8 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 168 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 02D

PLOT DATE : 1/24/2026 8:15 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

MATCH LINE 33+75

MATCH LINE 38+50

PROPOSED R/W

43 STA 34+02.0, 33.0' LT MANHOLES 4T-J

TLE

CAUTION

EXISTING R/W

SLOPE INTERCEPT

42 STA 36+17.4, 32.5' LT MANHOLES 4T-J

RECONNECT 15" YARD DRAIN INTO 108" SSPRC WITH BLIND CONNECTION

RECONNECT 12" YARD DRAIN INTO 108" SSPRC WITH BLIND CONNECTION

STA 38+29.0, 32.4' LT MANHOLES 4T-J 40

P39

P43 108" P42 108" P41 108" P40 66" 66"

P43B 12"

43A STA 34+12.1, 4.4' LT CATCH BASINS 3.5-FT-R

106 STA 35+00.0, 12.7' LT BIO DRAIN-R-1

STA 36+00.0, 12.7' LT BIO DRAIN-R-1 108

P42B 12"

42B STA 36+13.2, 1.2' LT INLETS MEDIAN 1G-MS

41 STA 36+91.0, 32.4' LT STORM CHAMBER 1-J

CONNECT EXISTING PIPE

STA 38+29.0, 12.7' LT CATCH BASINS 3.5-FT-R 40B 12" P40B

STA 36+65.0, 12.7' LT BIO DRAIN-R-1 110

34+00 35+00 36+00 37+00 38+00

CC

P43A 12"

W NATIONAL AVE R/L

STA 38+19.0, 12.7' LT CATCH BASINS 3.5-FT-R 40A 12" P40A

ASPH

W NATIONAL AVE

P42A 12"

SEE NOTE 1

43B STA 34+02.1, 3.2' LT CATCH BASINS 3.5-FT-R

107 STA 35+00.0, 12.7' RT BIO DRAIN-R-1

STA 36+00.0, 12.7' RT BIO DRAIN-R-1 109

42A STA 36+00.0, 37.3' RT CATCH BASINS 3.5-FT-R-1

111 STA 36+65.0, 4.8' RT BIO DRAIN-R-1

EXISTING R/W

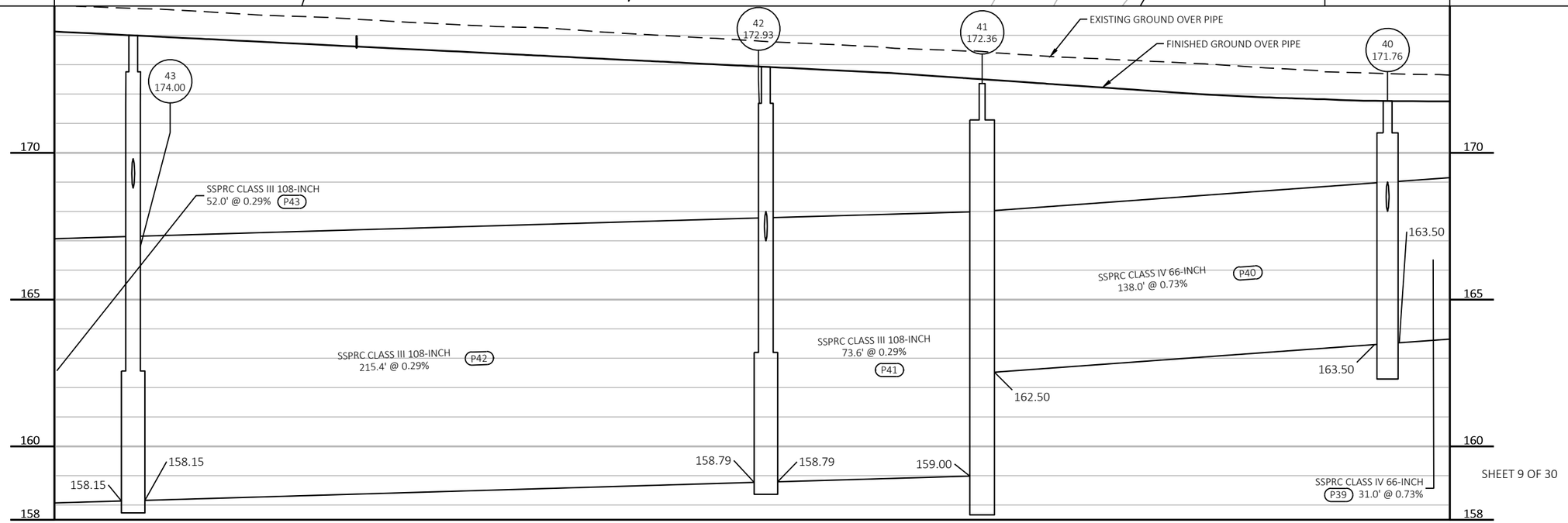
PROPOSED R/W

TLE

CAUTION

SLOPE INTERCEPT

NOTES:
1. CONNECT EXISTING 6" PVC PIPE FROM BANK PARKING LOT TO PROPOSED CATCH BASIN WITH CONCRETE COLLAR.




SHEET 9 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 169 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 03A
PLOT DATE : 1/24/2026 8:16 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

2

MATCH LINE 33+75

MATCH LINE 38+50

PROPOSED R/W

43 STA 34+02.0, 33.0' LT MANHOLES 4T-J

TLE

CAUTION

EXISTING R/W

SLOPE INTERCEPT

42 STA 36+17.4, 32.5' LT MANHOLES 4T-J

RECONNECT 15" YARD DRAIN INTO 108" SSPRC WITH BLIND CONNECTION

RECONNECT 12" YARD DRAIN INTO 108" SSPRC WITH BLIND CONNECTION

STA 38+29.0, 32.4' LT MANHOLES 4T-J 40

P43 108" P42 108" P41 108" P40 66" P39 66"

P43B 12" 43A STA 34+12.1, 4.4' LT CATCH BASINS 3.5-FT-R

106 STA 35+00.0, 12.7' LT BIO DRAIN-R-1

STA 36+00.0, 12.7' LT BIO DRAIN-R-1 108

P42B 12" 42B STA 36+13.2, 1.2' LT INLETS MEDIAN 1G-MS

41 STA 36+91.0, 32.4' LT STORM CHAMBER 1-J

CONNECT EXISTING PIPE

STA 38+29.0, 12.7' LT CATCH BASINS 3.5-FT-R 40B 12" P40B

34+00 35+00 36+00 37+00 38+00

STA 36+65.0, 12.7' LT BIO DRAIN-R-1 110

P43A 12"

W NATIONAL AVE R/L

STA 38+19.0, 12.7' LT CATCH BASINS 3.5-FT-R 40A 12" P40A

ASPH

W NATIONAL AVE

43B STA 34+02.1, 3.2' LT CATCH BASINS 3.5-FT-R

107 STA 35+00.0, 12.7' RT BIO DRAIN-R-1

STA 36+00.0, 12.7' RT BIO DRAIN-R-1 109

P42A 12"

42A STA 36+00.0, 37.3' RT CATCH BASINS 3.5-FT-R-1

111 STA 36+65.0, 4.8' RT BIO DRAIN-R-1

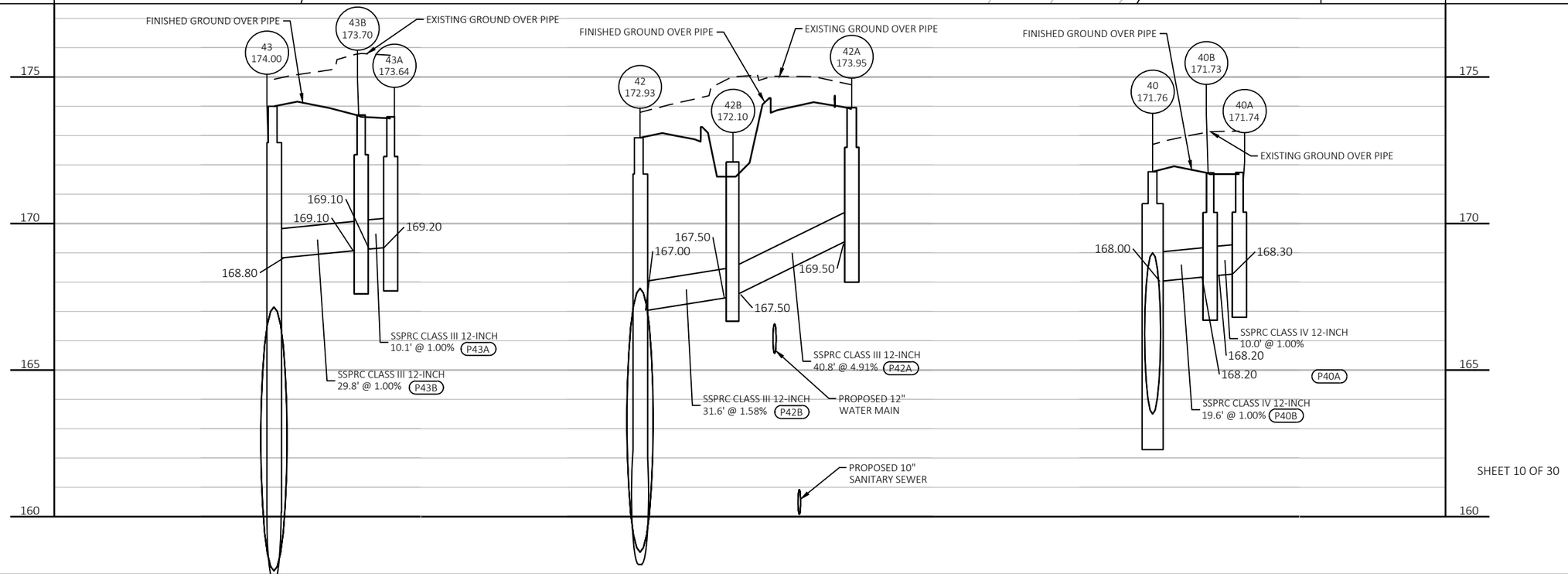
EXISTING R/W

PROPOSED R/W

TLE

SLOPE INTERCEPT

NOTES:
1. CONNECT EXISTING 6" PVC PIPE FROM BANK PARKING LOT TO PROPOSED CATCH BASIN WITH CONCRETE COLLAR.




SHEET 10 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 170 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 03B

PLOT DATE : 1/24/2026 8:16 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

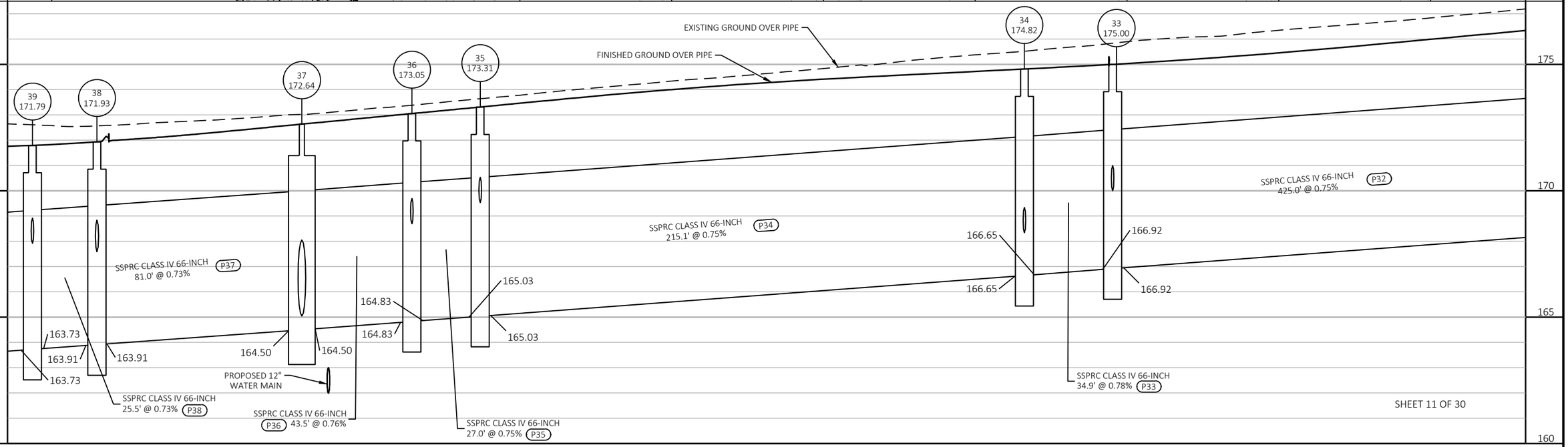
WISDOT/CADDS SHEET 41

2

MATCH LINE 38+50

MATCH LINE 44+50

39A STA 38+49.9, 39.1' LT CATCH BASINS 3.5-FT-R
P39A 12"
39B STA 38+59.9, 40.1' LT CATCH BASINS 3.5-FT-R
S 102ND ST
35A STA 40+37.9, 47.3' LT CATCH BASINS 3.5-FT-R-1
EXISTING R/W
SLOPE INTERCEPT
PROPOSED R/W
TLE
33A STA 42+87.1, 40.1' LT CATCH BASINS 3.5-FT-R-1
33 STA 42+87.0, 32.4' LT MANHOLES 4T-J
CAUTION
P35A
P39B 12"
39 STA 38+60.0, 32.4' LT MANHOLES 4T-J
37 STA 39+66.5, 32.4' LT MANHOLES 9-J
38 STA 38+85.5, 32.4' LT MANHOLES 4T-J
P37
P36
P35
35 STA 40+37.0, 32.4' LT MANHOLES 4T-J
P33A
12"
66"
15"
P38
38F STA 38+75.4, 5.2' LT CATCH BASINS 3.5-FT-R
P39 66"
38G STA 38+85.4, 6.4' LT CATCH BASINS 3.5-FT-R
P38G
P38D
38D STA 39+14.1, 4.2' RT INLETS 3-Z
39+00
110+00
40+00
41+00
42+00
43+00
44+00
P36D
12"
36 STA 40+10.0, 32.4' LT MANHOLES 4T-J
P34
STA 42+52.1, 32.4' LT MANHOLES 4T-J
34
P33
P32
112 STA 42+60.0, 9.5' LT BIO DRAIN-R-1
STA 43+74.3, 12.7' LT BIO DRAIN-R-1
114
STA 44+28.2, 12.7' LT BIO DRAIN-R-1
116
W NATIONAL AVE R/L
P34B
36D STA 40+09.9, 3.4' LT CATCH BASINS 3-Z
P36C
P36B
36C STA 40+42.1, 6.4' RT CATCH BASINS 3.5-FT-R
STA 42+54.3, 0.0' INLETS MEDIAN 1G-MS
34B
STA 43+60.0, 12.7' RT BIO DRAIN-R-1
115
12" P38F
P38E 15"
38C STA 39+00.5, 13.3' RT CATCH BASINS 3-Z
P38B
36B STA 40+42.5, 12.6' RT CATCH BASINS 3.5-FT-R
W NATIONAL AVE
STA 42+60.0, 12.7' RT BIO DRAIN-R-1
113
STA 44+10.0, 12.7' RT BIO DRAIN-R-1
117
P36A
P38A 12"
38E STA 38+92.6, 6.9' RT CATCH BASINS 6-Z
37G STA 39+66.6, 90.0' RT MANHOLES 5-J
36A STA 40+12.1, 40.1' RT CATCH BASINS 3.5-FT-R-1
P34A
38B STA 38+75.0, 37.3' RT CATCH BASINS 3.5-FT-R
P37A
S 102ND ST R/L
P37G
37D STA 39+85.1, 56.5' RT CATCH BASINS 3.5-FT-R
SLOPE INTERCEPT
38A STA 38+65.0, 37.3' RT CATCH BASINS 3.5-FT-R
STA 39+23.6, 55.5' RT CATCH BASINS 3.5-FT-R
37A
P37D
37E STA 40+04.2, 77.3' RT CATCH BASINS 3.5-FT-R-1
EXISTING R/W
34A STA 43+62.0, 37.3' RT CATCH BASINS 3.5-FT-R-1
P37B
P37E
37F STA 39+72.9, 92.1' RT CATCH BASINS 3.5-FT-R
STA 39+09.9, 77.4' RT CATCH BASINS 3.5-FT-R
37B
P37C
STA 39+39.3, 91.7' RT CATCH BASINS 3.5-FT-R
37C
CONNECT EXISTING PIPE
P37F

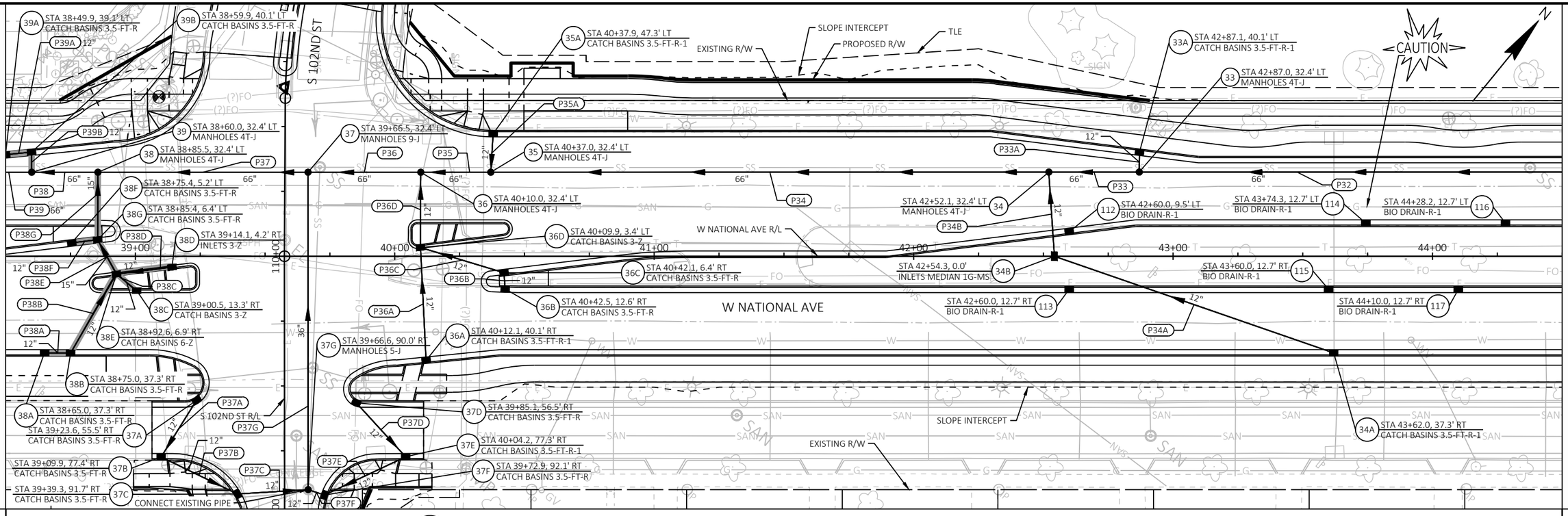


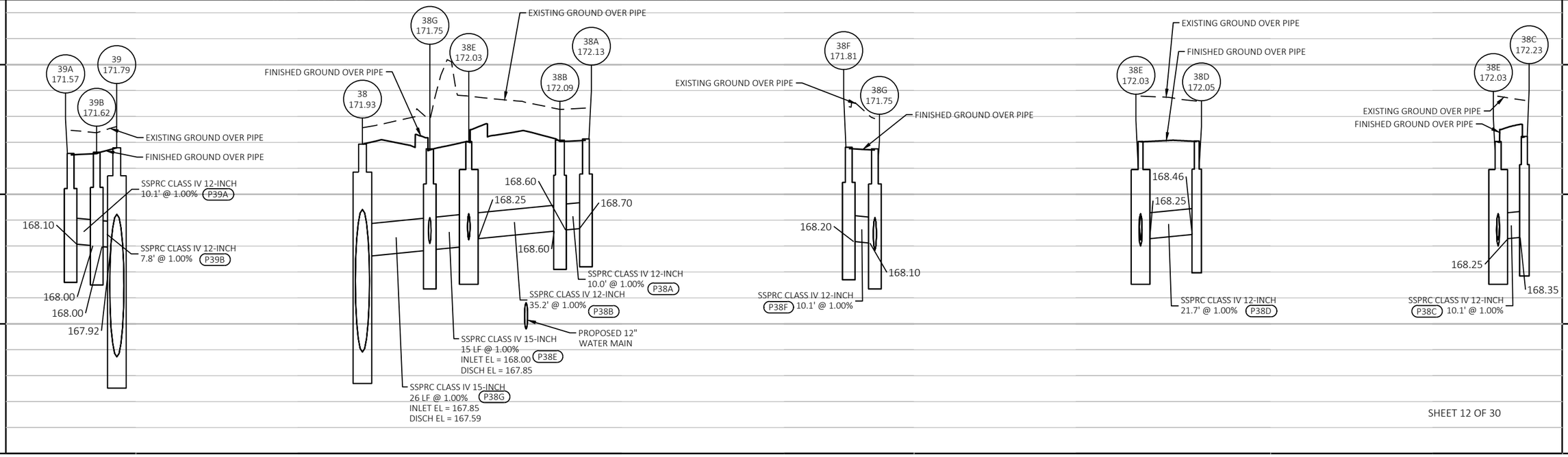

SHEET 11 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 171 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 04A

PLOT DATE : 1/24/2026 8:16 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT




SHEET 12 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 172 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 04B

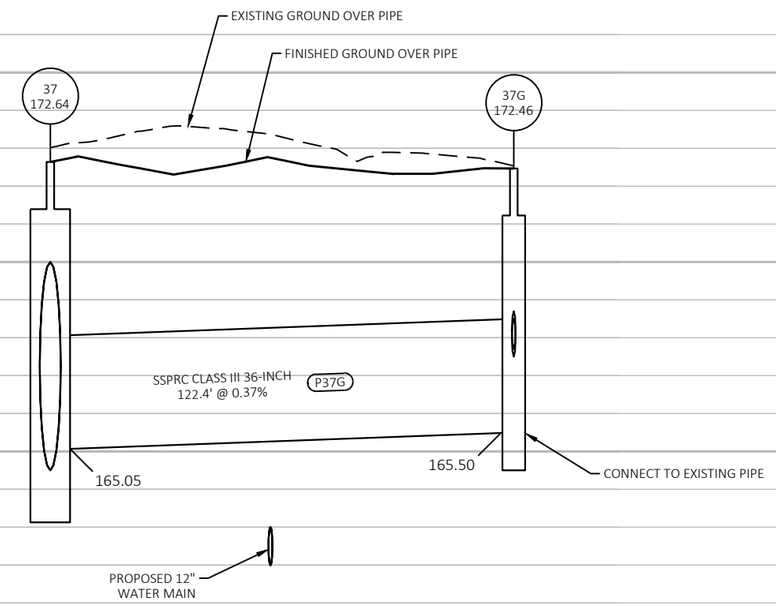
PLOT DATE : 1/24/2026 8:16 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

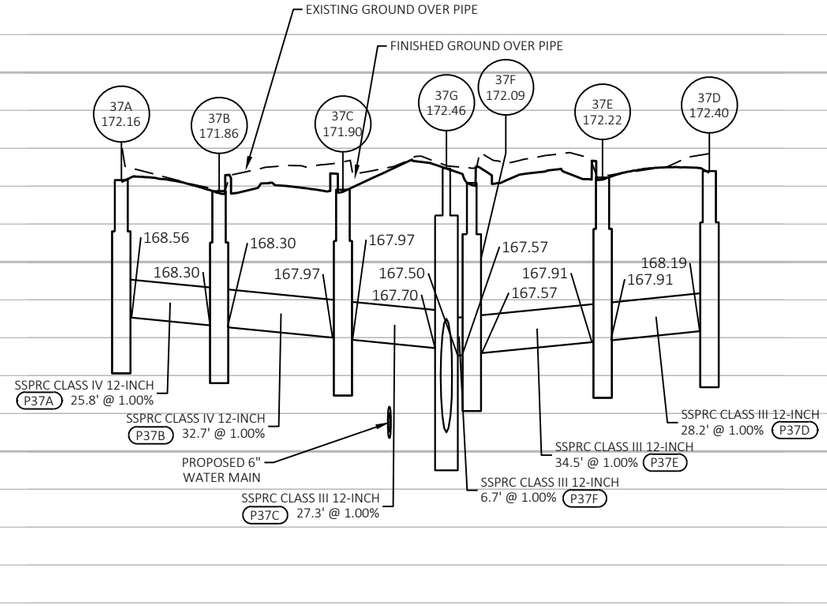
2

MATCH LINE 38+50

MATCH LINE 44+50

39A STA 38+49.9, 39.1' LT CATCH BASINS 3.5-FT-R
P39A 12"
39B STA 38+59.9, 40.1' LT CATCH BASINS 3.5-FT-R
S 102ND ST
39 STA 38+60.0, 32.4' LT MANHOLES 4T-J
P39B 12"
38 STA 38+85.5, 32.4' LT MANHOLES 4T-J
P37
37 STA 39+66.5, 32.4' LT MANHOLES 9-J
P36
P35
35A STA 40+37.9, 47.3' LT CATCH BASINS 3.5-FT-R-1
EXISTING R/W
SLOPE INTERCEPT
PROPOSED R/W
TLE
P35A
35 STA 40+37.0, 32.4' LT MANHOLES 4T-J
12"
33A STA 42+87.1, 40.1' LT CATCH BASINS 3.5-FT-R-1
33 STA 42+87.0, 32.4' LT MANHOLES 4T-J
CAUTION
P33A
12"
66" 15" 66" 66" 66" 66" 66" 66"
P38 P39 66"
38F STA 38+75.4, 5.2' LT CATCH BASINS 3.5-FT-R
38G STA 38+85.4, 6.4' LT CATCH BASINS 3.5-FT-R
P38G P38D
38D STA 39+14.1, 4.2' RT INLETS 3-Z
39+00 40+00 41+00 42+00 43+00 44+00
1100
P36D 12"
36 STA 40+10.0, 32.4' LT MANHOLES 4T-J
P34
STA 42+52.1, 32.4' LT MANHOLES 4T-J
34
P33 P32
112 STA 42+60.0, 9.5' LT BIO DRAIN-R-1
STA 43+74.3, 12.7' LT BIO DRAIN-R-1
114
STA 44+28.2, 12.7' LT BIO DRAIN-R-1
116
P34B
W NATIONAL AVE R/L
12" P38F
P38E 15"
12"
P38C
38C STA 39+00.5, 13.3' RT CATCH BASINS 3-Z
P36C 12"
P36B 12"
36C STA 40+42.1, 6.4' RT CATCH BASINS 3.5-FT-R
STA 42+54.3, 0.0' INLETS MEDIAN 1G-MS
34B
STA 43+60.0, 12.7' RT BIO DRAIN-R-1
115
P38B
P36A 12"
36B STA 40+42.5, 12.6' RT CATCH BASINS 3.5-FT-R
W NATIONAL AVE
STA 42+60.0, 12.7' RT BIO DRAIN-R-1
113
12"
STA 44+10.0, 12.7' RT BIO DRAIN-R-1
117
P38A 12"
38E STA 38+92.6, 6.9' RT CATCH BASINS 6-Z
37G STA 39+66.6, 90.0' RT MANHOLES 5-J
36A STA 40+12.1, 40.1' RT CATCH BASINS 3.5-FT-R-1
P34A
38B STA 38+75.0, 37.3' RT CATCH BASINS 3.5-FT-R
P37A
S 102ND ST R/L
P37G
37D STA 39+85.1, 56.5' RT CATCH BASINS 3.5-FT-R
SLOPE INTERCEPT
34A STA 43+62.0, 37.3' RT CATCH BASINS 3.5-FT-R-1
38A STA 38+65.0, 37.3' RT CATCH BASINS 3.5-FT-R
STA 39+23.6, 55.5' RT CATCH BASINS 3.5-FT-R
37A
12"
P37B
P37D
37E STA 40+04.2, 77.3' RT CATCH BASINS 3.5-FT-R-1
EXISTING R/W
STA 39+09.9, 77.4' RT CATCH BASINS 3.5-FT-R
37B
P37C
P37E
37F STA 39+72.9, 92.1' RT CATCH BASINS 3.5-FT-R
STA 39+39.3, 91.7' RT CATCH BASINS 3.5-FT-R
37C CONNECT EXISTING PIPE
12" P37F

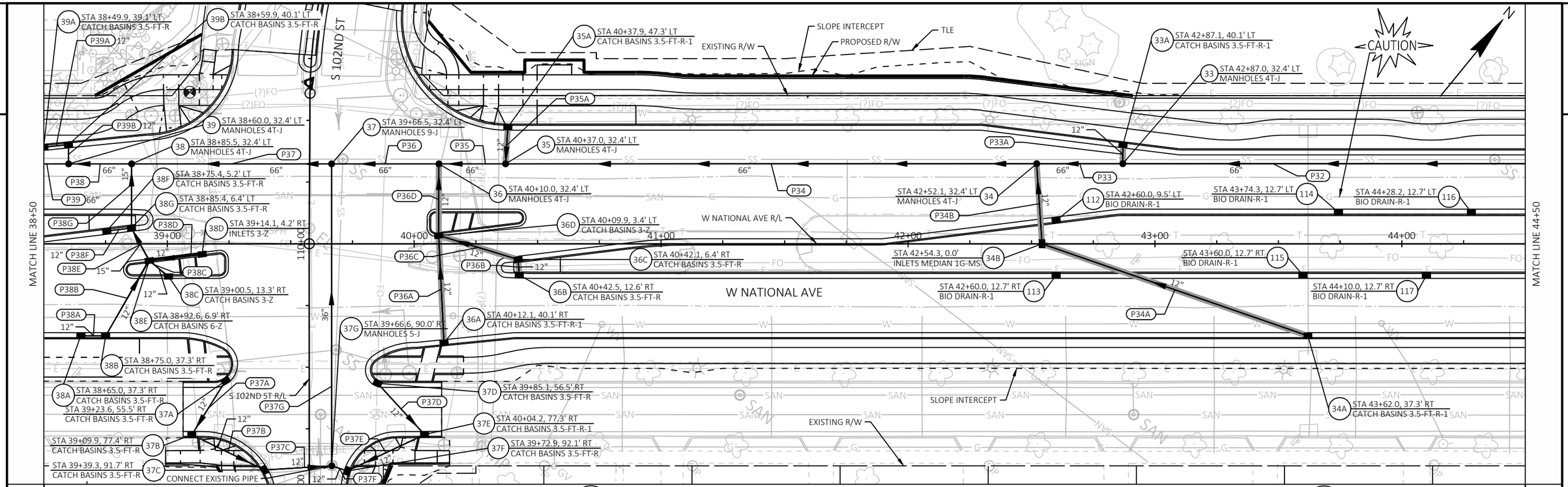


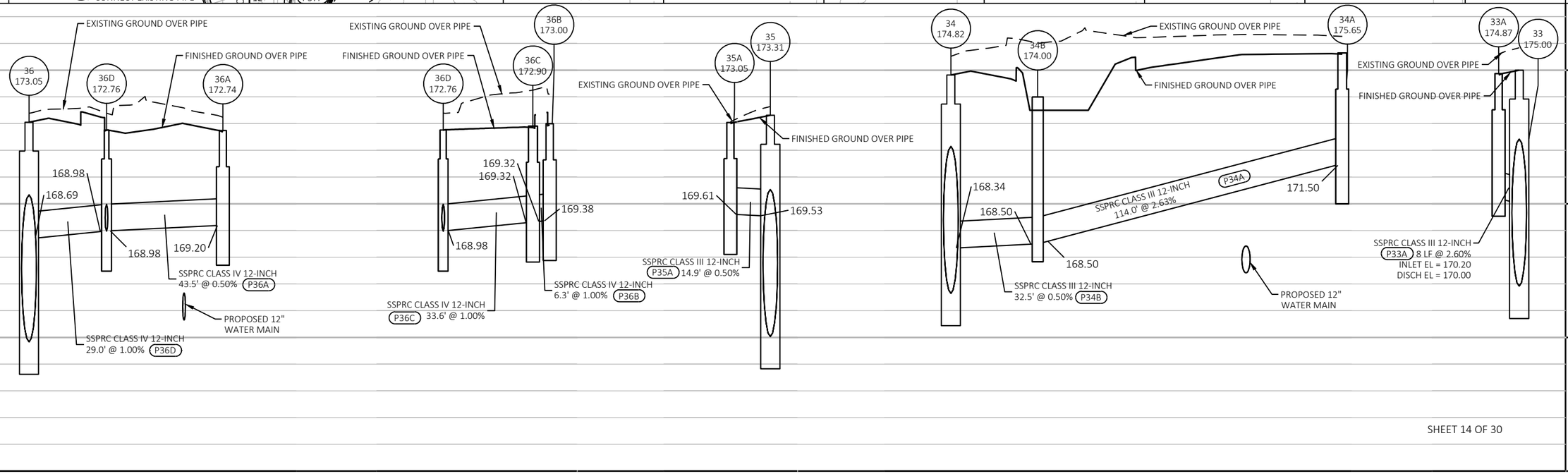




SHEET 13 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 173 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 04C
PLOT DATE : 1/24/2026 8:16 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 174 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 04D
PLOT DATE : 1/24/2026 8:16 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

MATCH LINE 44+50

MATCH LINE 50+50

CAUTION

SLOPE INTERCEPT

EXISTING R/W

SEE NOTE 1

10"

66"

P32

STA 47+12.0, 32.5' LT
MANHOLES 4T-J
32

W NATIONAL AVE R/L

45+00 46+00 47+00 48+00 49+00 50+00

P32A

12"

W NATIONAL AVE

25' RADIUS ALONG PIPE CENTERLINE

31 STA 48+92.0, 20.8' LT
MANHOLES 10-J

P30

60"

P31

66"

P31D

15"

31D STA 49+07.0, 0.0'
MANHOLES 4-C

STA 48+92.8, 47.5' RT
RECONSTRUCTING MANHOLE
62

P31C

12"

31C STA 49+27.0, 39.3' RT
CATCH BASINS 3.5-FT-R-1

31B STA 49+37.0, 39.3' RT
CATCH BASINS 3.5-FT-R-1

P61

P31B

NOTES:
1. BULKHEAD EXISTING 10" PIPE JUST SOUTHEAST OF EXISTING CATCH BASIN. CORE NEW PIPE UNDERDRAIN UNPERFORATED 10-INCH INTO SOUTH SIDE OF EXISTING CATCH BASIN AND CONNECT TO PROPOSED 66" SSPRC USING A BLIND CONNECTION.

SLOPE INTERCEPT

EXISTING R/W

32A STA 47+12.0, 37.3' RT
CATCH BASINS 3.5-FT-R-1
CONNECT 8" ROOF DRAIN TO PROPOSED INLET USING PIPE UNDERDRAIN UNPERFORATED 8-INCH AND CONCRETE COLLAR

STA 48+94.7, 79.2' RT
CATCH BASINS 3.5-FT-R
61

15"

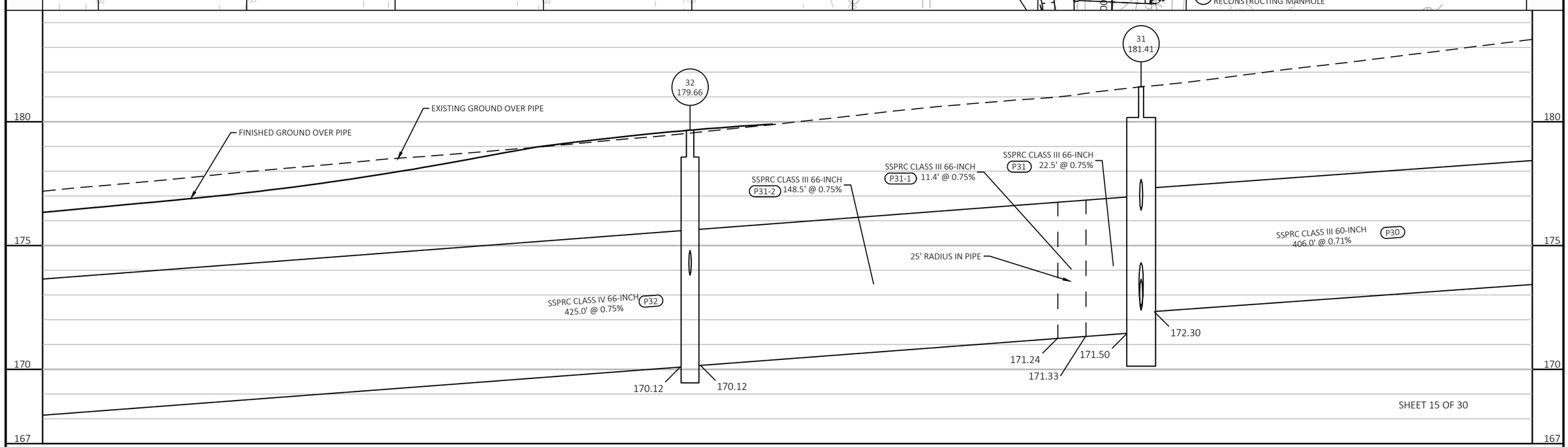
P31A

P60

15"

31A STA 48+99.4, 68.2' RT
INLETS MEDIAN 1G-MS

60 STA 48+93.1, 91.0' RT
RECONSTRUCTING MANHOLE




SHEET 15 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 175 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 05A

PLOT DATE : 1/24/2026 8:17 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

MATCH LINE 44+50

MATCH LINE 50+50

INSET A

STA 49+43.1, 138.8' LT
ADJUSTING INLET COVERS 202

CAUTION

TLE

SLOPE INTERCEPT

EXISTING R/W

SEE NOTE 1

STA 48+25.7, 99.6' LT
INLETS 2X3-H 201

SEE INSET A

25' RADIUS ALONG PIPE CENTERLINE

STA 48+92.0, 20.8' LT
MANHOLES 10-J 31

P30

60"

P31

P31D

15"

STA 49+07.0, 0.0'
MANHOLES 4-C 31D

STA 49+27.0, 39.3' RT
CATCH BASINS 3.5-FT-R-1 31C

STA 49+37.0, 39.3' RT
CATCH BASINS 3.5-FT-R-1 31B

12"

P31C

P31B

P61

P31A

STA 48+99.4, 68.2' RT
INLETS MEDIAN 1G-MS 31A

STA 48+93.1, 91.0' RT
RECONSTRUCTING MANHOLE 60

P60

15"

66"

P32

STA 47+12.0, 32.5' LT
MANHOLES 4T-J 32

W NATIONAL AVE R/L

P32A

W NATIONAL AVE

STA 48+92.8, 47.5' RT
RECONSTRUCTING MANHOLE 62

STA 48+94.7, 79.2' RT
CATCH BASINS 3.5-FT-R 61

STA 47+12.0, 37.3' RT
CATCH BASINS 3.5-FT-R-1 32A

CONNECT 8" ROOF DRAIN TO PROPOSED INLET USING PIPE UNDERDRAIN UNPERFORATED 8-INCH AND CONCRETE COLLAR

SLOPE INTERCEPT

EXISTING R/W

NOTES:
1. BULKHEAD EXISTING 10" PIPE JUST SOUTHEAST OF EXISTING CATCH BASIN. CORE NEW PIPE UNDERDRAIN UNPERFORATED 10-INCH INTO SOUTH SIDE OF EXISTING CATCH BASIN AND CONNECT TO PROPOSED 66" SSPRC USING A BLIND CONNECTION.

45+00 46+00 47+00 48+00 49+00 50+00

185 180 175 170 168

32 179.66
32A 179.62
FINISHED GROUND OVER PIPE
EXISTING GROUND OVER PIPE
SSPRC CLASS III 12-INCH 69.8' @ 1.00% P32A
173.80
174.50
PROPOSED 12" WATER MAIN

31 181.41
31D 181.53
31C 181.35
31A 181.00
FINISHED GROUND OVER PIPE
EXISTING GROUND OVER PIPE
176.68
176.42
176.93
177.37
177.50
177.70
SSPRC CLASS III 12-INCH 40.0' @ 0.50% P31A
PROPOSED 12" WATER MAIN
SSPRC CLASS III 12-INCH 44.1' @ 1.00% P31C
SSPRC CLASS III 15-INCH 25.6' @ 1.00% P31D

62 181.85
61 180.77
60 180.94
FINISHED GROUND OVER PIPE
EXISTING GROUND OVER PIPE
173.17
173.50
173.38
173.38
SSPRC CLASS III 15-INCH 31.8' @ 0.66% P61
SSPRC CLASS III 15-INCH 12.0' @ 1.00% P60

31C 181.35
31B 181.50
EXISTING GROUND OVER PIPE
FINISHED GROUND OVER PIPE
177.37
177.53
SSPRC CLASS III 12-INCH 10.0' @ 1.60% P31B

SHEET 16 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 176 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 05B
PLOT DATE : 1/24/2026 8:17 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

2

MATCH LINE 50+50

MATCH LINE 56+50

CAUTION

SLOPE INTERCEPT

CONNECT TO EXISTING PIPE

CC

P70

12"

STA 52+98.0, 19.4' LT
MANHOLES 8-J
30

70
STA 53+25.1, 45.4' LT
CATCH BASINS 3.5 FT-R-1

STA 54+58.5, 18.8' LT
MANHOLES 5-J
29

STA 55+57.5, 40.9' LT
MANHOLES 6-J
28

STA 55+90.3, 84.6' LT
MANHOLES 5-J
28C

28B
STA 55+99.7, 61.3' LT
CATCH BASINS 3.5-FT-R-1

TLE
EXISTING R/W

P28A

P28B

P28C

P27

30"

24"

12"

28A
STA 56+16.9, 34.7' LT
CATCH BASINS 3.5-FT-R-1

S 100TH ST

S 100TH ST R/L

P30

60"

P29

36"

P28

36"

P29A

P29C

12"

12"

51+00

52+00

53+00

54+00

55+00

56+00

W NATIONAL AVE R/L

W NATIONAL AVE

STA 54+58.5, 0.0'
MANHOLES 4-C
29C

118
STA 55+40.0, 12.7' LT
BIO DRAIN-R-1

29A
STA 55+38.6, 0.0'
INLETS MEDIAN 1G-MS

STA 55+22.2, 40.0' RT
CATCH BASINS 3.5-FT-R-1
29B

P29B

12"

119
STA 55+40.0, 12.7' RT
BIO DRAIN-R-1

STA 56+10.9, 12.7' LT
BIO DRAIN-R-1
120

121
STA 56+05.0, 12.7' RT
BIO DRAIN-R-1

STA 52+89.4, 86.1' RT
ADJUSTING INLET COVERS
203

CC

TLE

SLOPE INTERCEPT

CONNECT 6" YARD DRAIN TO PROPOSED INLET
USING PIPE UNDERDRAIN UNPERFORATED
6-INCH AND CONCRETE COLLAR

190 200 190 200

30
189.13

28
197.24

29
194.22

EXISTING GROUND OVER PIPE

FINISHED GROUND OVER PIPE

185 195 185 195

P29 SSPRC CLASS III 36-INCH
160.5' @ 1.99%

SSPRC CLASS IV 30-INCH
292.7' @ 2.39%
P27

PROPOSED 8"
WATER MAIN

180.50

191.50

180 190 180 190

PROPOSED 12"
STORM SEWER

SSPRC CLASS III 60-INCH
406.0' @ 0.71%
P30

P28 SSPRC CLASS III 36-INCH
101.5' @ 2.27%

186.80

175.20

184.50

175 185 175 185

183.70

SSPRC CLASS III 36-INCH
160.5' @ 1.99%
P29

173 183 173 183

SHEET 17 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 177 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 06A

PLOT DATE : 1/24/2026 8:17 AM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41

MATCH LINE 50+50

MATCH LINE 56+50

CAUTION

SLOPE INTERCEPT

CONNECT TO EXISTING PIPE

CC

P70

12"

STA 52+98.0, 19.4' LT
MANHOLES 8-J
30

STA 53+25.1, 45.4' LT
CATCH BASINS 3.5 FT-R-1
70

STA 54+58.5, 18.8' LT
MANHOLES 5-J
29

STA 55+57.5, 40.9' LT
MANHOLES 6-J
28

STA 55+90.3, 84.6' LT
MANHOLES 5-J
28C

STA 55+99.7, 61.3' LT
CATCH BASINS 3.5-FT-R-1
28B

TLE

EXISTING R/W

S 100TH ST

P30

60"

P29

36"

P28

36"

P28C

24"

12"

P28B

P28A

P27

30"

28A
STA 56+16.9, 34.7' LT
CATCH BASINS 3.5-FT-R-1

S 100TH ST R/L

P29A

P29C

12"

12"

118
STA 55+40.0, 12.7' LT
BIO DRAIN-R-1

29A
STA 55+38.6, 0.0'
INLETS MEDIAN 1G-MS

STA 54+58.5, 0.0'
MANHOLES 4-C
29C

W NATIONAL AVE R/L

W NATIONAL AVE

P29B

12"

STA 55+22.2, 40.0' RT
CATCH BASINS 3.5-FT-R-1
29B

119
STA 55+40.0, 12.7' RT
BIO DRAIN-R-1

STA 56+10.9, 12.7' LT
BIO DRAIN-R-1
120

121
STA 56+05.0, 12.7' RT
BIO DRAIN-R-1

STA 52+89.4, 86.1' RT
ADJUSTING INLET COVERS
203

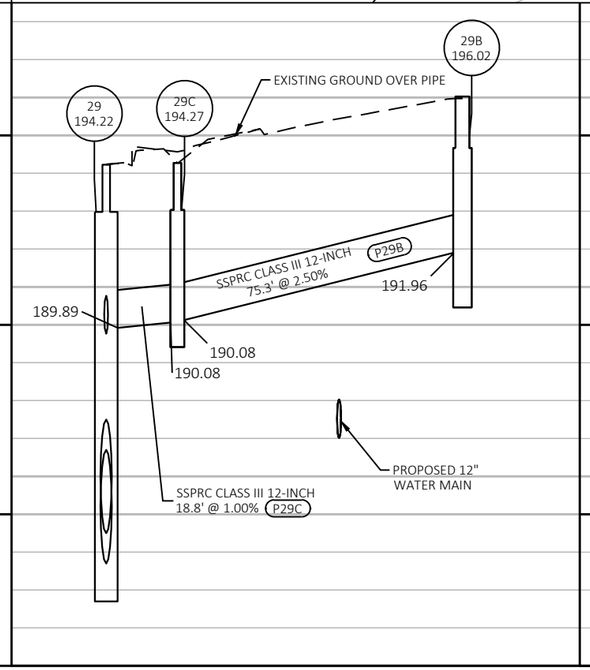
CC

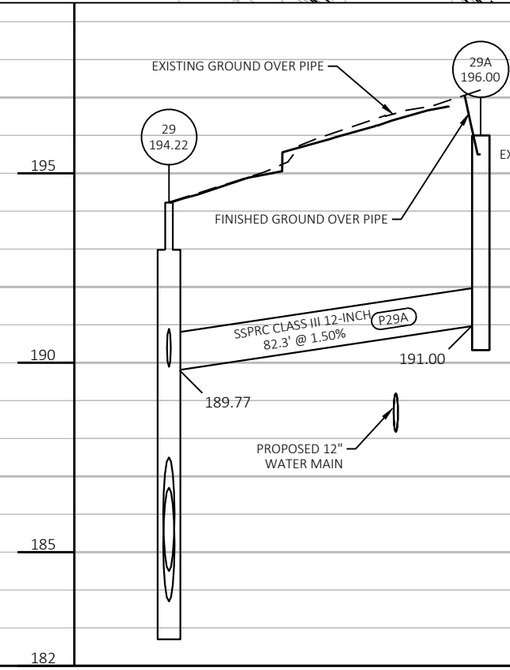
TLE

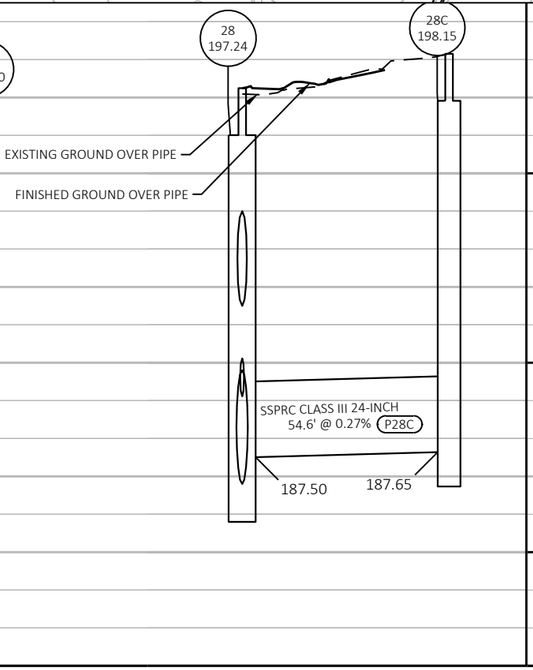
SLOPE INTERCEPT

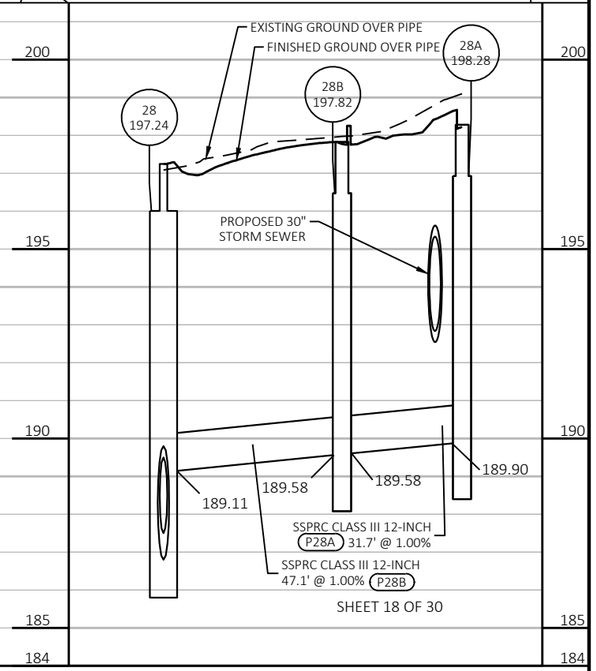
CONNECT 6" YARD DRAIN TO PROPOSED INLET USING PIPE UNDERDRAIN UNPERFORATED 6-INCH AND CONCRETE COLLAR

51+00 52+00 53+00 54+00 55+00 56+00




SHEET 18 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 178 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 06B
PLOT DATE : 1/24/2026 8:17 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

2

MATCH LINE 56+50

MATCH LINE 62+50

EXISTING R/W

SLOPE INTERCEPT

CONNECT 8" ROOF DRAIN TO 30" SSPRC USING BLIND CONNECTION

TLE

STA 59+55.2, 62.4' LT
CATCH BASINS 3.5-FT-R-1
26A

131+00

12"

18"

CONNECTION TO EXISTING STORM SEWER, SEE CONSTRUCTION DETAIL

CONNECT EXISTING 8" ROOF DRAIN TO 24" SSPRC USING A BLIND CONNECTION

26H STA 60+04.3, 72.1' LT
CATCH BASINS 3.5-FT-R

26 STA 59+80.0, 40.5' LT
MANHOLES 5-J

30"

P27

122 STA 56+53.0, 12.7' LT
BIO DRAIN-R-1

STA 58+50.0, 40.6' LT
MANHOLES 5-J
27

P26

P26A

P26H

26C STA 60+26.5, 35.3' LT
INLETS 3.5-FT-R-1

P25

STA 62+43.5, 40.4' LT
MANHOLES 4-J
25

P27B

12"

STA 59+81.1, 7.6' LT
CATCH BASINS 3-Z
26G

S 99TH ST R/L

P26G

P26C

12"

15"

P25B

12"

W NATIONAL AVE R/L

57+00

58+00

59+00

60+00

61+00

62+00

P26F

26E STA 60+14.6, 7.7' RT
CATCH BASINS 3.5-FT-R-1

STA 58+65.1, 6.8' RT
CATCH BASINS 3-Z
27B

12"

P26D 12"

STA 62+43.5, 0.7' RT
CATCH BASINS 3.5-FT-R-1
25B

P27A

STA 59+84.4, 1.8' LT
CATCH BASINS 4-Z
26F

123 STA 56+50.0, 9.4' RT
BIO DRAIN-R-1

CAUTION

STA 58+65.5, 13.7' RT
CATCH BASINS 3-Z
27A

P26B

12"

P26E

SEE NOTE 1

W NATIONAL AVE

26D STA 60+15.0, 12.7' RT
CATCH BASINS 3.5-FT-R-1

P25A

STA 62+29.0, 37.3' RT
CATCH BASINS 3.5-FT-R-1
25A

CC

S 99TH ST R/L

S 99TH ST

119+00

TLE

SLOPE INTERCEPT

TLE

NOTES:
1. CONNECT EXISTING 6" ROOF DRAIN TO PROPOSED CATCH BASIN USING PIPE UNDERDRAIN UNPERFORATED 6-INCH AND CONCRETE COLLAR

PROPOSED 12" WATER MAIN

26B STA 59+77.5, 32.3' RT
CATCH BASINS 3.5-FT-R-1

EXISTING R/W

210

205

200

195

193

27
206.78

EXISTING GROUND OVER PIPE

FINISHED GROUND OVER PIPE

SSPRC CLASS IV 30-INCH
292.7' @ 2.39%
P27

198.50

198.50

SSPRC CLASS III 30-INCH
P26 130.0' @ 1.15%

210

205

200

195

193

26
210.16

EXISTING GROUND OVER PIPE

FINISHED GROUND OVER PIPE

SSPRC CLASS III 24-INCH
263.6' @ 2.66%
P25

PROPOSED 6" WATER MAIN

204.00

SSPRC CLASS III 30-INCH
130.0' @ 1.15%
P26

200.00

PROPOSED 8" SANITARY SEWER

220

215

210

205

200

195

193

25
219.67

EXISTING GROUND OVER PIPE

FINISHED GROUND OVER PIPE

SSPRC CLASS III 24-INCH
263.6' @ 2.66%
P25

211.00

211.00

220

215

210

205

200

195

205

SHEET 19 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 179 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 07A

PLOT DATE : 1/24/2026 8:17 AM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41

2

MATCH LINE 56+50

MATCH LINE 62+50

EXISTING R/W

SLOPE INTERCEPT

CONNECT 8" ROOF DRAIN TO 30" SSPRC USING BLIND CONNECTION

TLE

STA 59+55.2, 62.4' LT
CATCH BASINS 3.5-FT-R-1
26A

CONNECTION TO EXISTING STORM SEWER, SEE CONSTRUCTION DETAIL

CONNECT EXISTING 8" ROOF DRAIN TO 24" SSPRC USING A BLIND CONNECTION

26H STA 60+04.3, 72.1' LT
CATCH BASINS 3.5-FT-R-1

26 STA 59+80.0, 40.5' LT
MANHOLES 5-J

131+00

18"

30"

P27

122 STA 56+53.0, 12.7' LT
BIO DRAIN-R-1

STA 58+50.0, 40.6' LT
MANHOLES 5-J
27

P26

P26A

P26H

S 99TH ST R/L

P26G

26C STA 60+26.5, 35.3' LT
INLETS 3.5-FT-R-1

P25

STA 62+43.5, 40.4' LT
MANHOLES 4-J
25

P27B

12"

STA 59+81.1, 7.6' LT
CATCH BASINS 3-Z
26G

15"

P26C

12"

P25B

W NATIONAL AVE R/L

57+00

58+00

59+00

60+00

61+00

62+00

P26F

26E STA 60+14.6, 7.7' RT
CATCH BASINS 3.5-FT-R-1

STA 58+65.1, 6.8' RT
CATCH BASINS 3-Z
27B

12"

P27A

STA 59+84.4, 1.8' LT
CATCH BASINS 4-Z
26F

P26D 12"

W NATIONAL AVE

STA 62+43.5, 0.7' RT
CATCH BASINS 3.5-FT-R-1
25B

123 STA 56+50.0, 9.4' RT
BIO DRAIN-R-1

CAUTION

STA 58+65.5, 13.7' RT
CATCH BASINS 3-Z
27A

P26B

P26E

SEE NOTE 1

12"

26D STA 60+15.0, 12.7' RT
CATCH BASINS 3.5-FT-R-1

P25A

STA 62+29.0, 37.3' RT
CATCH BASINS 3.5-FT-R-1
25A

CC

S 99TH ST R/L

S 99TH ST

119+00

TLE

SLOPE INTERCEPT

PROPOSED 12" WATER MAIN

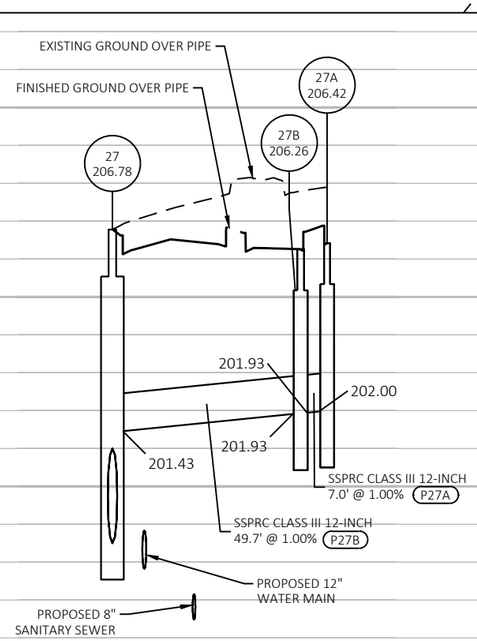
26B STA 59+77.5, 32.3' RT
CATCH BASINS 3.5-FT-R-1

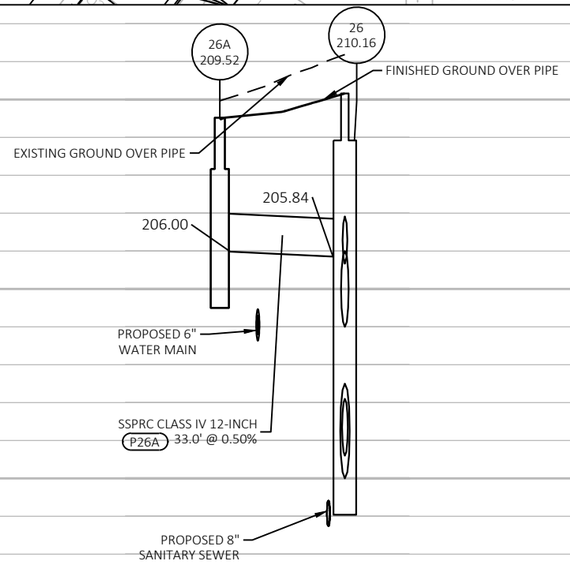
EXISTING R/W

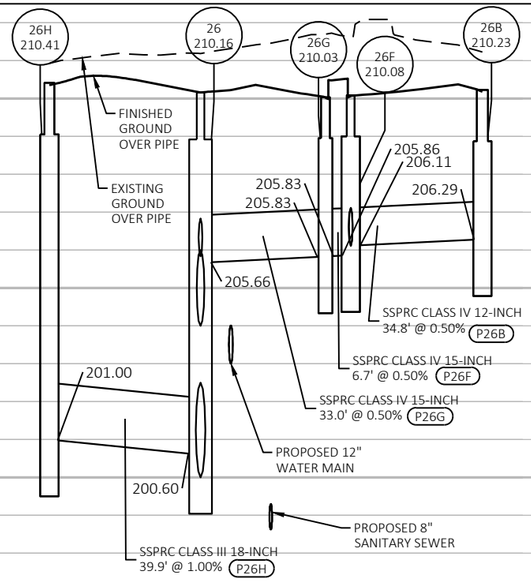
SLOPE INTERCEPT

TLE

NOTES:
1. CONNECT EXISTING 6" ROOF DRAIN TO PROPOSED CATCH BASIN USING PIPE UNDERDRAIN UNPERFORATED 6-INCH AND CONCRETE COLLAR




210

205

200

195

SHEET 20 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 180 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 07B
PLOT DATE : 1/24/2026 8:17 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

2

MATCH LINE 56+50

MATCH LINE 62+50

EXISTING R/W

SLOPE INTERCEPT

CONNECT 8" ROOF DRAIN TO 30" SSPRC USING BLIND CONNECTION

TLE

STA 59+55.2, 62.4' LT
CATCH BASINS 3.5-FT-R-1
26A

131+00

CONNECTION TO EXISTING STORM SEWER, SEE CONSTRUCTION DETAIL

CONNECT EXISTING 8" ROOF DRAIN TO 24" SSPRC USING A BLIND CONNECTION

26H STA 60+04.3, 72.1' LT
CATCH BASINS 3.5-FT-R

26 STA 59+80.0, 40.5' LT
MANHOLES 5-J

TLE

18"

30"

P27

122 STA 56+53.0, 12.7' LT
BIO DRAIN-R-1

STA 58+50.0, 40.6' LT
MANHOLES 5-J
27

P26

P26A

P26H

24"

26C STA 60+26.5, 35.3' LT
INLETS 3.5-FT-R-1

P25

STA 62+43.5, 40.4' LT
MANHOLES 4-J
25

S 99TH ST R/L

P26G

P27B

12"

STA 59+81.1, 7.6' LT
CATCH BASINS 3-Z
26G

15"

P26C

12"

P25B

12"

W NATIONAL AVE R/L

57+00

58+00

59+00

60+00

61+00

62+00

P26F

26E STA 60+14.6, 7.7' RT
CATCH BASINS 3.5-FT-R-1

15"

12"

P26D 12"

STA 58+65.1, 6.8' RT
CATCH BASINS 3-Z
27B

P27A

STA 59+84.4, 1.8' LT
CATCH BASINS 4-Z
26F

P26B

12"

P26E

SEE NOTE 1

W NATIONAL AVE

STA 62+43.5, 0.7' RT
CATCH BASINS 3.5-FT-R-1
25B

P25A

123 STA 56+50.0, 9.4' RT
BIO DRAIN-R-1

CAUTION

STA 58+65.5, 13.7' RT
CATCH BASINS 3-Z
27A

26D STA 60+15.0, 12.7' RT
CATCH BASINS 3.5-FT-R-1

CC

STA 62+29.0, 37.3' RT
CATCH BASINS 3.5-FT-R-1
25A

S 99TH ST R/L

S 99TH ST

119+00

TLE

SLOPE INTERCEPT

PROPOSED 12"
WATER MAIN

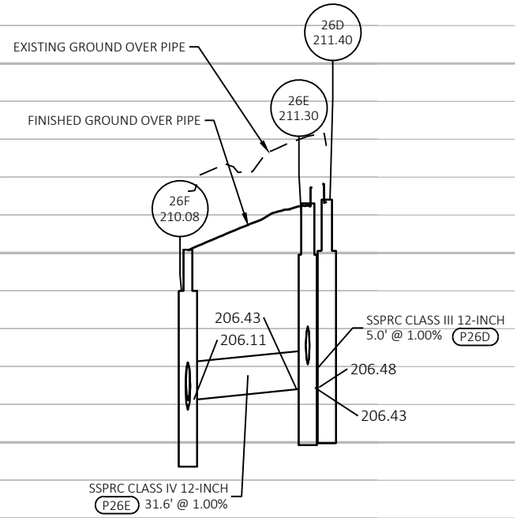
26B STA 59+77.5, 32.3' RT
CATCH BASINS 3.5-FT-R-1

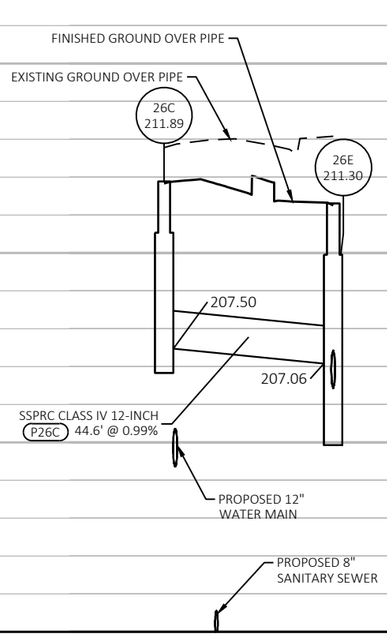
EXISTING R/W

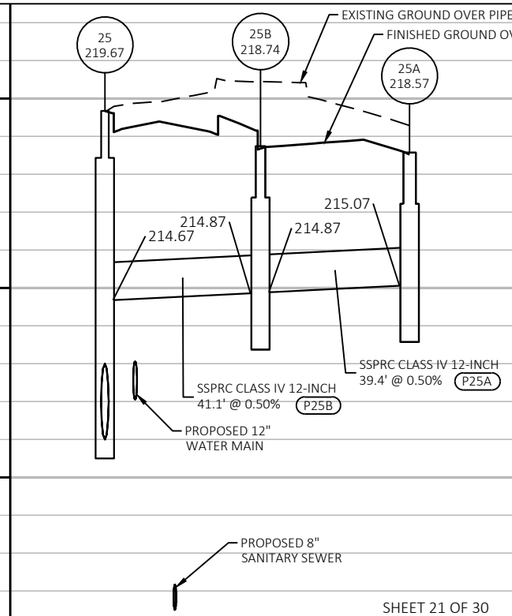
SLOPE INTERCEPT

TLE

NOTES:
1. CONNECT EXISTING 6" ROOF DRAIN TO PROPOSED CATCH BASIN USING PIPE UNDERDRAIN UNPERFORATED 6-INCH AND CONCRETE COLLAR




SHEET 21 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 181 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 07C
PLOT DATE : 1/24/2026 8:18 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

2

MATCH LINE 62+50

MATCH LINE 67+25

EXISTING R/W

HOUSE

TLE

STA 63+81.9, 71.4' LT
CATCH BASINS 3.5-FT-R
24A

P24A

12"

STA 63+75.8, 63.5' LT
CATCH BASINS 3.5-FT-R
24B

S 98TH ST
141+00

15"

12"

P24B

24G
STA 64+32.9, 83.5' LT
CATCH BASINS 3.5-FT-R

P24G

CAUTION

SLOPE INTERCEPT

TLE

EXISTING R/W

24"

P24

STA 63+97.5, 40.3' LT
MANHOLES 7-J
24

P24F

15"

P24E

12"

24E
STA 64+41.0, 32.3' LT
INLETS 3.5-FT-R-1

P23

23
STA 66+10.0, 40.2' LT
MANHOLES 5-J

24"

P22

63+00

64+00

65+00

66+00

67+00

W NATIONAL AVE R/L

STA 64+13.3, 10.8' LT
CATCH BASINS 3.5-FT-R-1
24F

P24D

12"

S 98TH ST R/L

CONNECT EXISTING 8" ROOF DRAIN TO 24" SSPRC
USING BLIND CONNECTION

STA 64+13.3, 10.8' RT
CATCH BASINS 3.5-FT-R-1
24D

P24C

12"

24C
STA 64+56.5, 37.3' RT
CATCH BASINS 3.5-FT-R-1

W NATIONAL AVE

CC

TLE

SLOPE INTERCEPT

EXISTING R/W

CONNECT EXISTING 8" ROOF DRAIN TO PROPOSED STORM LATERAL USING PIPE
UNDERDRAIN UNPERFORATED 8-INCH AND BLIND CONNECTION

CONNECT EXISTING 8" ROOF DRAIN TO CATCH BASIN
USING PIPE UNDERDRAIN UNPERFORATED 8-INCH AND
CONCRETE COLLAR

FLAG

CONC

FINISHED GROUND OVER PIPE

EXISTING GROUND OVER PIPE

24
222.80

23
226.04

225

220

215

210

PROPOSED 6"
WATER MAIN

SSPRC CLASS III 24-INCH
154.0' @ 2.27%
P24

SSPRC CLASS III 24-INCH
212.5' @ 0.80%
P23

SSPRC CLASS III 24-INCH
202.0' @ 0.94%
P22

214.50

215.50

217.20

217.20

PROPOSED 8"
SANITARY SEWER

SHEET 22 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 182 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 08A

PLOT DATE : 1/24/2026 8:18 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

MATCH LINE 62+50

MATCH LINE 67+25

EXISTING R/W

HOUSE

TLE

STA 63+81.9, 71.4' LT
CATCH BASINS 3.5-FT-R
24A

P24A
12"

STA 63+75.8, 63.5' LT
CATCH BASINS 3.5-FT-R
24B

S 98TH ST
141+00

15"

12"

24G
STA 64+32.9, 83.5' LT
CATCH BASINS 3.5-FT-R

P24G

CAUTION

SLOPE INTERCEPT

TLE

EXISTING R/W

P24B

24"

P24

P24E

P24F

STA 64+41.0, 32.3' LT
INLETS 3.5-FT-R-1
24E

P23

STA 66+10.0, 40.2' LT
MANHOLES 5-J
23

P22

STA 63+97.5, 40.3' LT
MANHOLES 7-J
24

STA 64+13.3, 10.8' LT
CATCH BASINS 3.5-FT-R-1
24F

63+00

64+00

65+00

66+00

67+00

W NATIONAL AVE R/L

P24D

S 98TH ST R/L

CONNECT EXISTING 8" ROOF DRAIN TO 24" SSPRC
USING BLIND CONNECTION

STA 64+13.3, 10.8' RT
CATCH BASINS 3.5-FT-R-1
24D

P24C

W NATIONAL AVE

CC

STA 64+56.5, 37.3' RT
CATCH BASINS 3.5-FT-R-1
24C

SLOPE INTERCEPT

EXISTING R/W

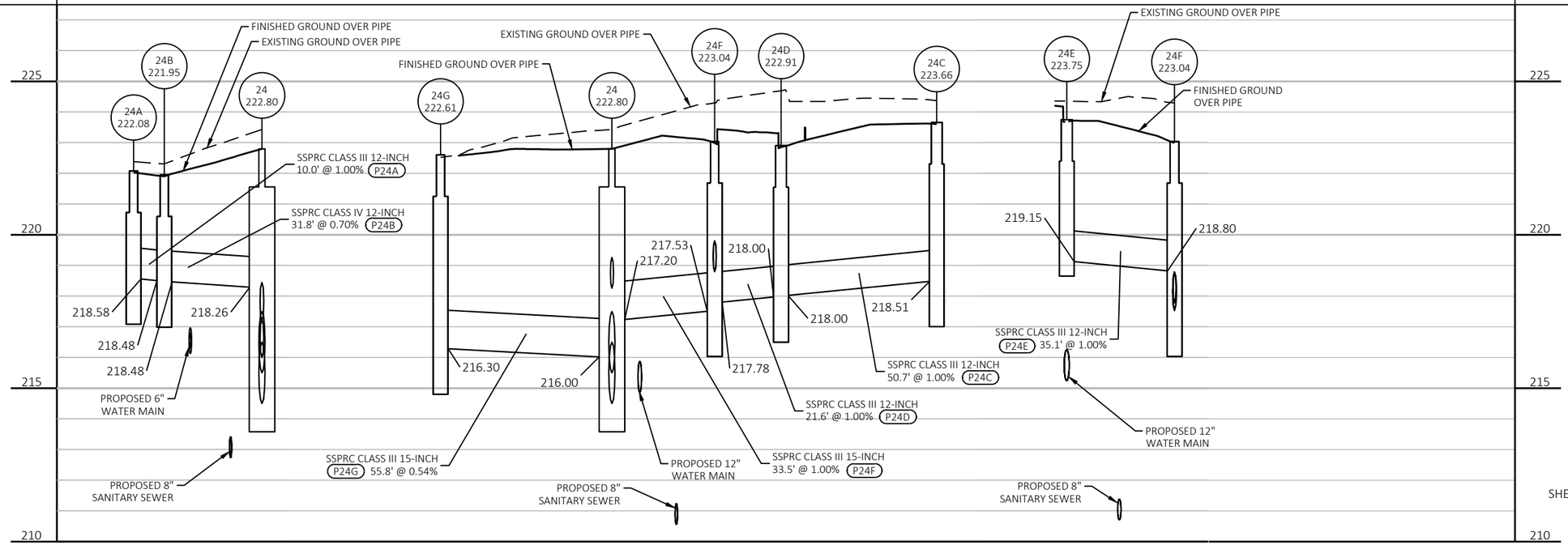
CONNECT EXISTING 8" ROOF DRAIN TO PROPOSED STORM LATERAL USING PIPE
UNDERDRAIN UNPERFORATED 8-INCH AND BLIND CONNECTION

TLE

CONNECT EXISTING 8" ROOF DRAIN TO CATCH BASIN
USING PIPE UNDERDRAIN UNPERFORATED 8-INCH AND
CONCRETE COLLAR

FLAG

CONC

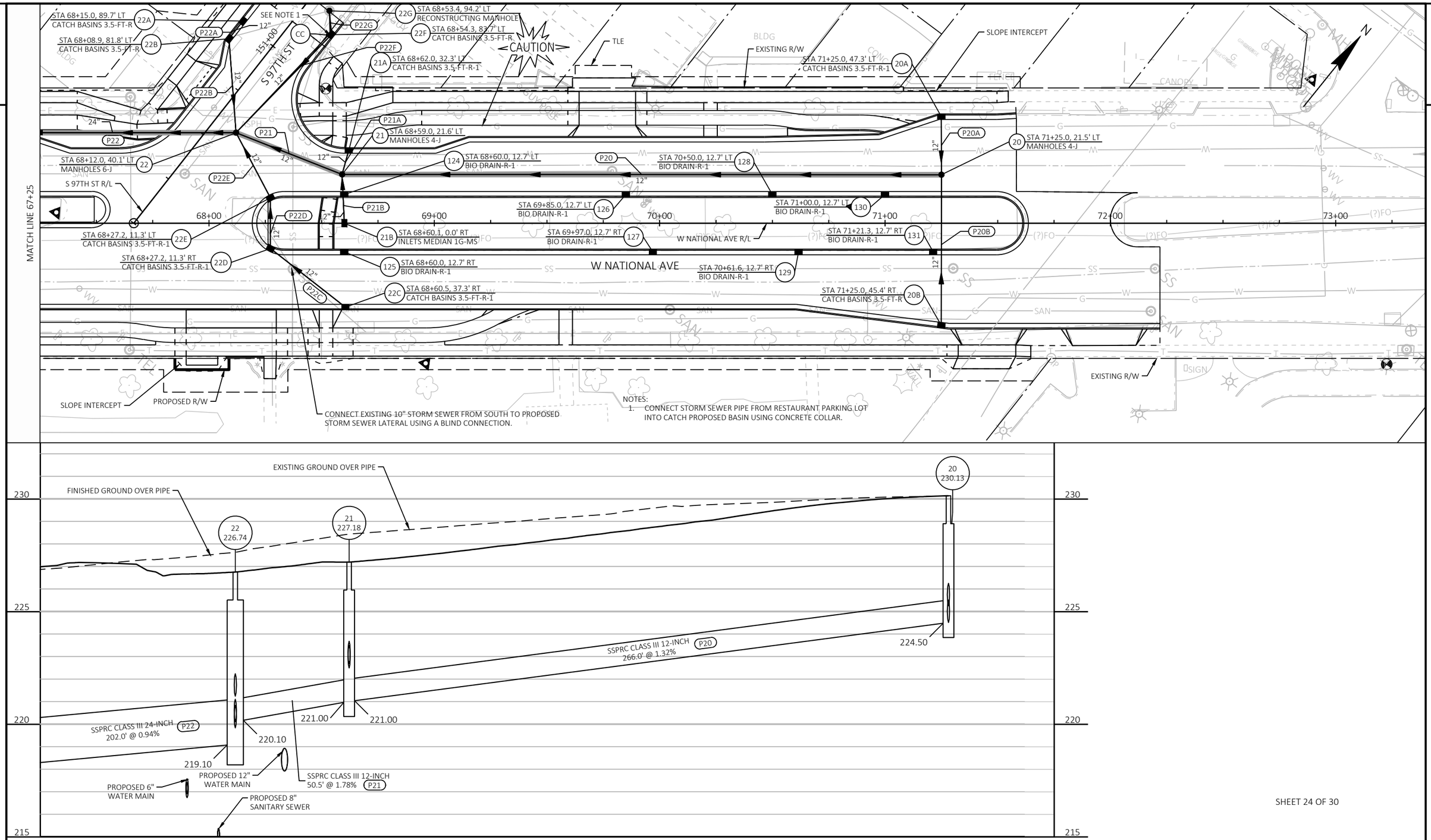



SHEET 23 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 183 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 08B

PLOT DATE : 1/24/2026 8:18 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

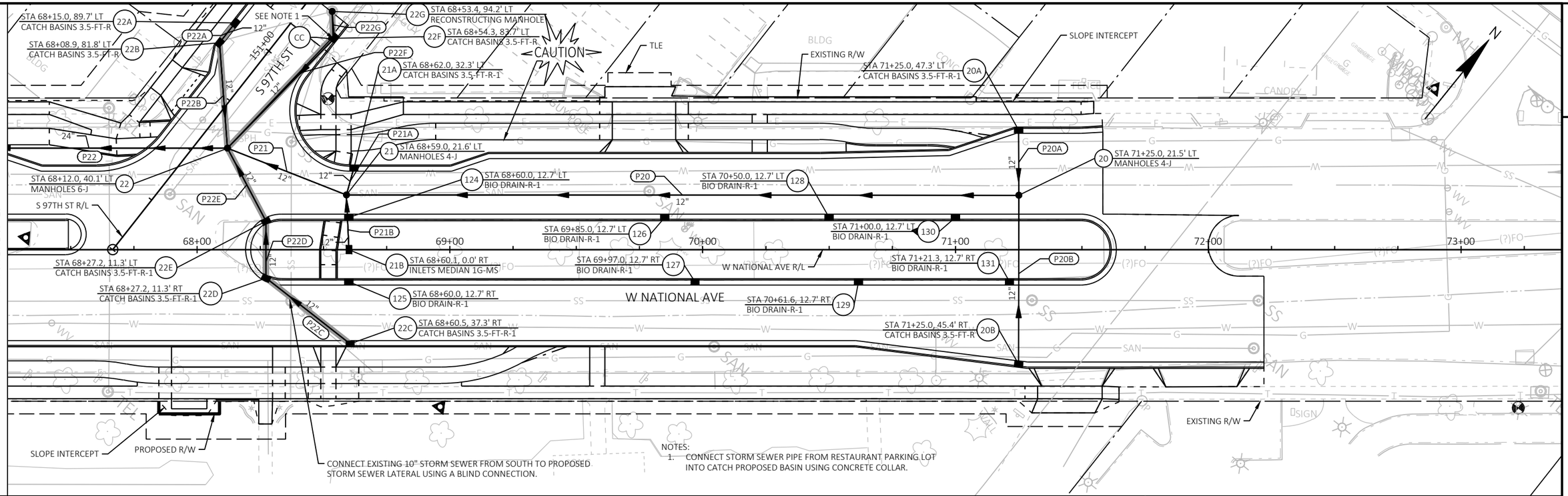


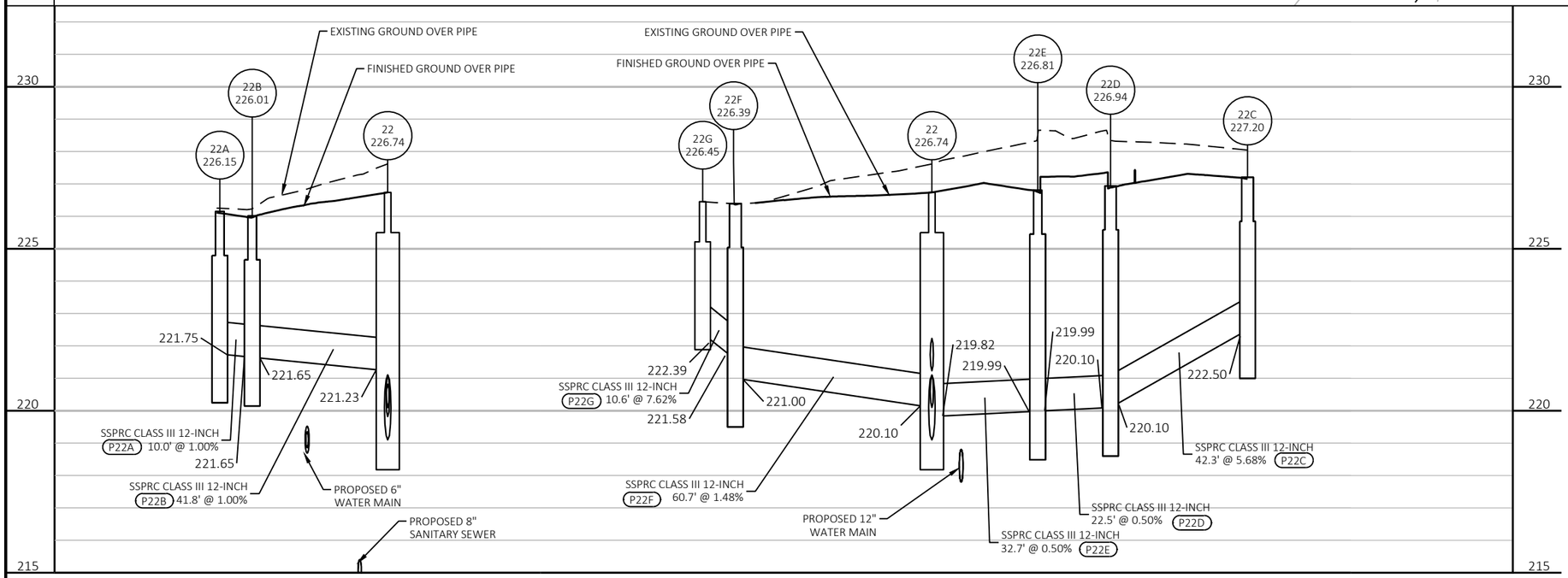

SHEET 24 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 184 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 09A

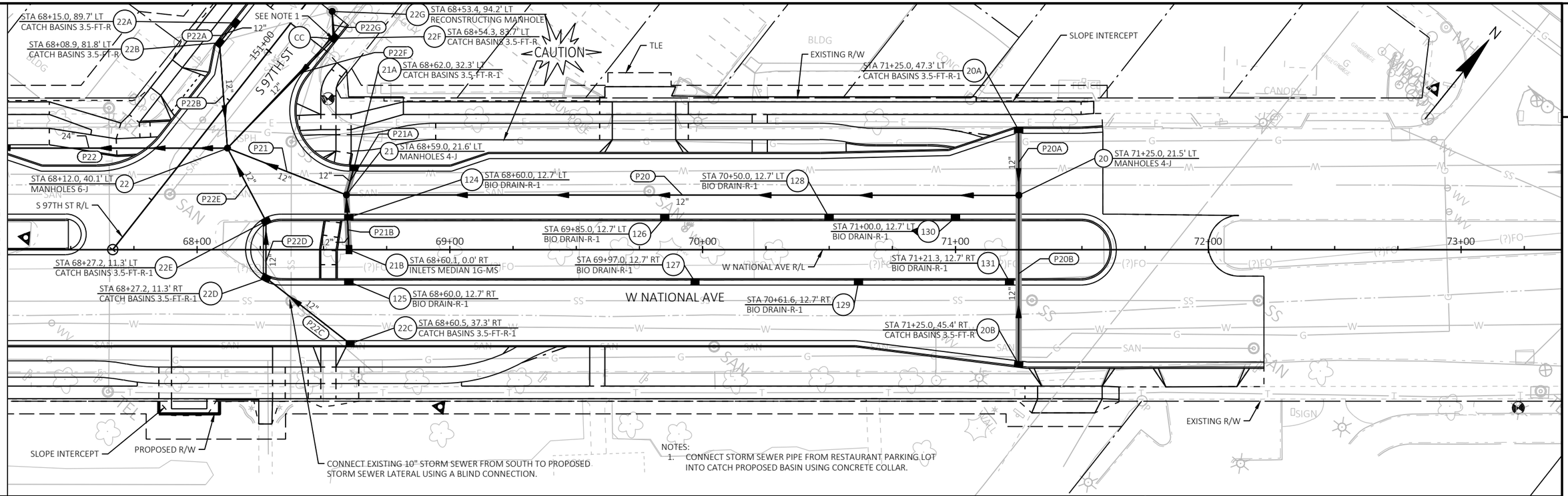
PLOT DATE : 1/24/2026 8:18 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

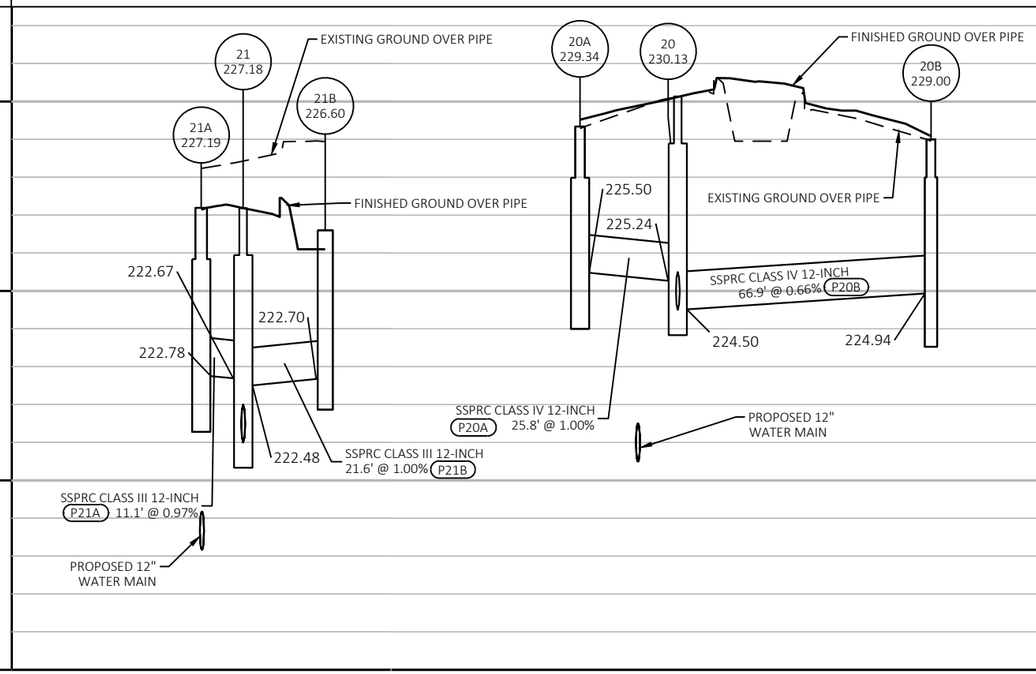



SHEET 25 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 185 | E |
|---|---|---|---|---|---|







230
225
220
215

SHEET 26 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 186 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 09C
PLOT DATE : 1/24/2026 8:18 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

2

N

TLE

PROPOSED R/W

EXISTING R/W

SLOPE INTERCEPT

STA 32+21.0, 33.4' LT
MANHOLES 4T-J
45

P45A

12"

P45

108"

60' RADIUS ALONG PIPE CENTERLINE

STA 96+29.6, 18.4' LT
MANHOLES 4T-J
47

CONNECT TO EXISTING PIPE

P46
108"

STA 98+72.0, 18.7' LT
MANHOLES 6X11-J
46

SEE NOTE 1

30"

108"

CC

STA 30+74.3, 7.8' LT
MANHOLES 5-J
53

STA 32+18.3, 13.7' LT
CATCH BASINS 3-Z
45A

W CLEVELAND AVE R/L

W NATIONAL AVE R/L

96+00

97+00

98+00

99+00

100+00

101

MATCH LINE 101+00

W CLEVELAND AVE

STA 30+14.1, 3.5' LT
CATCH BASINS 3.5-FT-R
11C

STA 30+04.0, 61.1' LT
MANHOLES 7-J
11

48"

P11

STA 30+65.1, 4.4' RT
CATCH BASINS 3.5-FT-R
53B

15"

12"

31+00

52

STA 100+62.5, 20.5' RT
MANHOLES 4-J

P52B

15"

P50

15"

STA 29+71.6, 66.4' LT
CATCH BASINS 3.5-FT-R
11B

P11B

12"

P53

11D

STA 30+14.0, 11.9' LT
CATCH BASINS 3.5-FT-R

P53B

STA 100+62.5, 35.8' RT
CATCH BASINS 3.5-FT-R
52B

12"

12"

P11A

P53A

P52

P52A

P11C

12"

12"

P10

42"

30"

W NATIONAL AVE

STA 29+65.9, 63.6' LT
CATCH BASINS 3.5-FT-R
11A

STA 29+28.1, 54.1' LT
CATCH BASINS 3.5-FT-R-1
10A

P10A

12"

STA 100+72.5, 35.8' RT
CATCH BASINS 3.5-FT-R
52A

STA 29+40.3, 29.7' LT
MANHOLES 6-J
10

P9

42"

53A

STA 30+76.7, 37.3' RT
CATCH BASINS 3.5-FT-R-1

STA 29+27.8, 23.5' LT
MANHOLES 6-J
9

SLOPE INTERCEPT

EXISTING R/W

TLE

CAUTION

NOTES:
1. REMOVE SAMPLING MANHOLE. CONNECT EXISTING 30" SSPRC TO PROPOSED 108" SSPRC WITH 30" SSPRC AND A BLIND CONNECTION INTO 108" PIPE.

PROFILE FOR P46 ON NEXT SHEET

FINISHED GROUND OVER PIPE

EXISTING GROUND OVER PIPE

11
175.49

53
175.54

52
175.33

175

170

165

162

SSPRC CLASS III 15-INCH
88.3' @ 1.26%
P53

SSPRC CLASS III 15-INCH
102.5' @ 1.26%
P52

SSPRC CLASS IV 15-INCH
159.5' @ 1.18%
P50

168.30

169.42

169.42

170.71

PROPOSED 12"
WATER MAIN

PROPOSED 8"
SANITARY SEWER

SHEET 27 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 187 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 10A

PLOT DATE : 1/24/2026 8:19 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

N

185
180
175
170
165
160
155
150

FINISHED GROUND OVER PIPE
EXISTING GROUND OVER PIPE

47
173.39

46
174.84

SSPRC CLASS III 108-INCH
242.4' @ 0.39% P46

156.06

157.00

CONNECT TO EXISTING PIPE

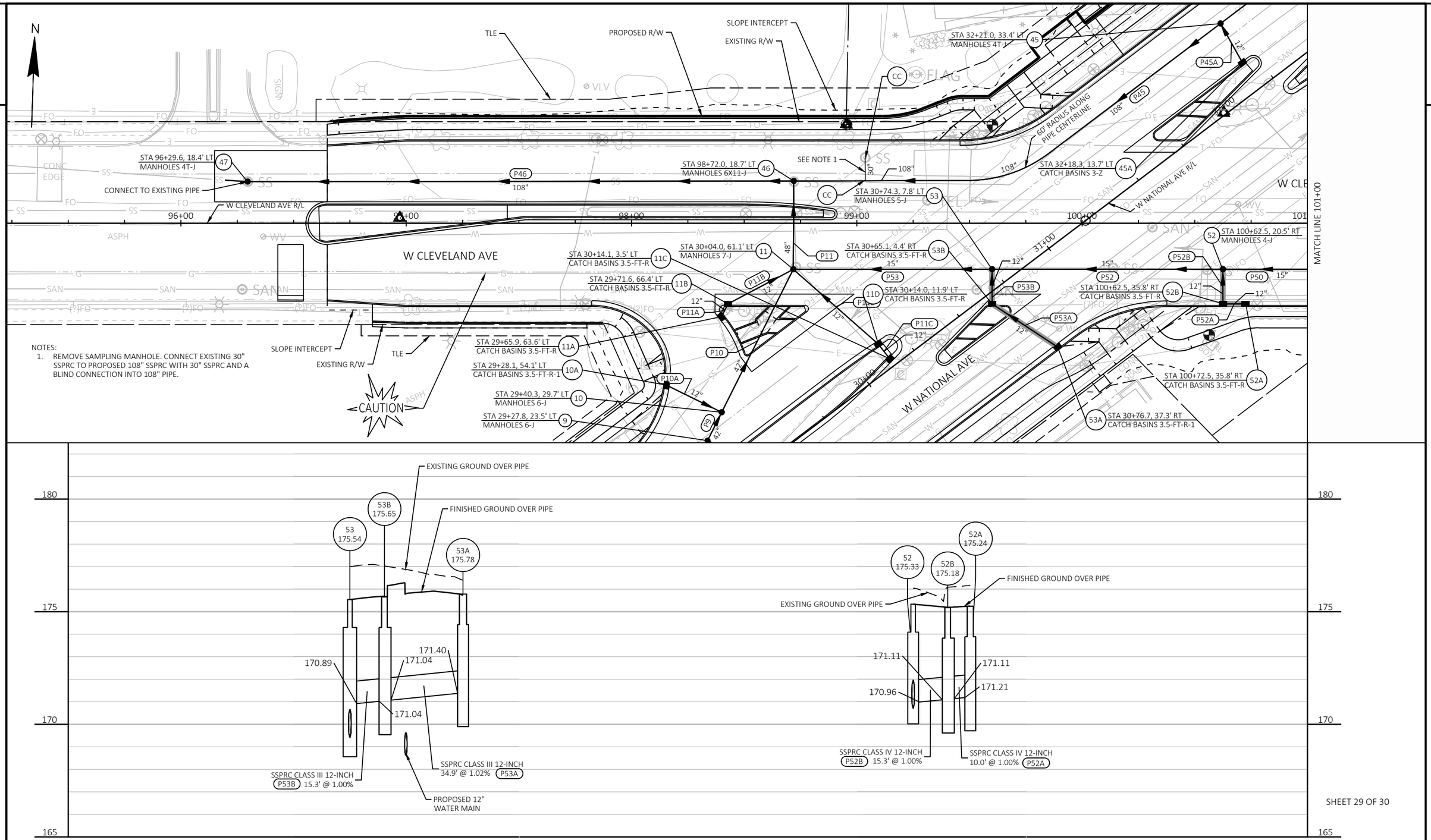
185
180
175
170
165
160
155
150

2

SHEET 28 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 188 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 10B
PLOT DATE : 1/24/2026 8:19 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 41



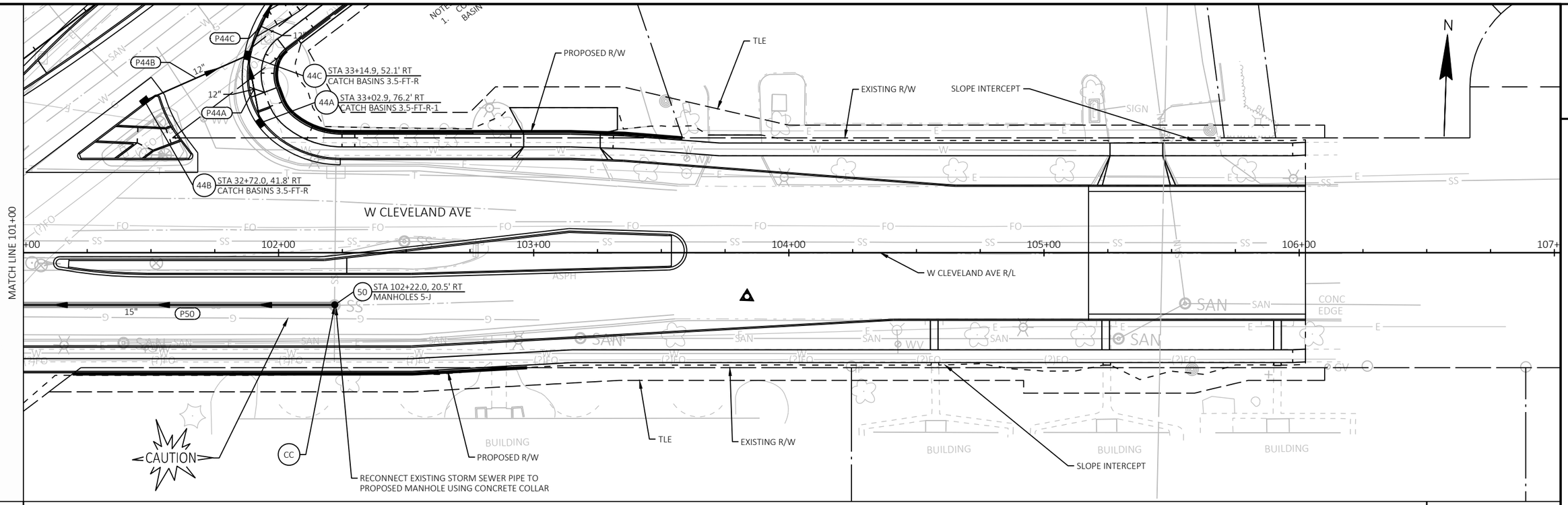




SHEET 29 OF 30

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 189 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 10C
PLOT DATE : 1/24/2026 8:19 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

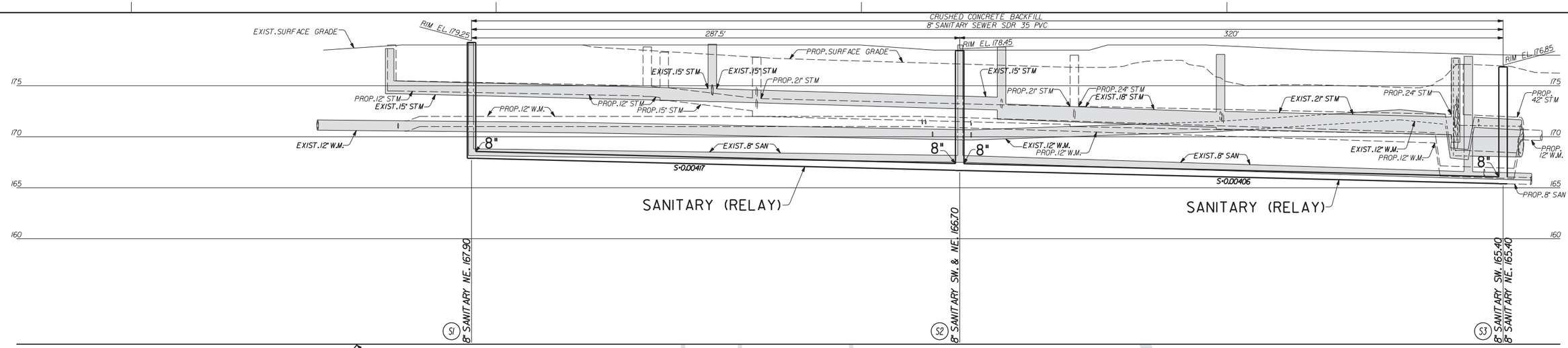


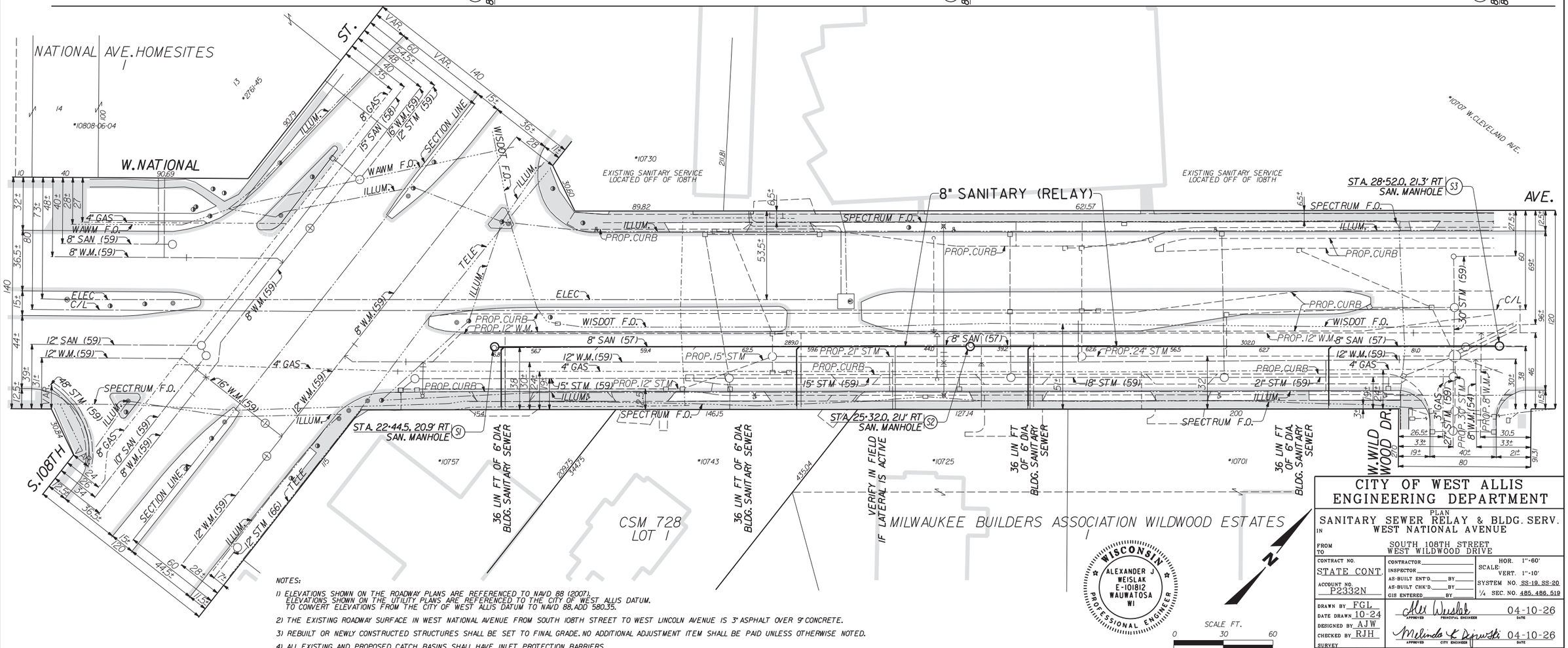

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | STORM SEWER | SHEET 190 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\022501-SS.DWG
LAYOUT NAME - 11A

PLOT DATE : 1/24/2026 8:19 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41




NOTES:

1) ELEVATIONS SHOWN ON THE ROADWAY PLANS ARE REFERENCED TO NAVD 88 (2007). ELEVATIONS SHOWN ON THE UTILITY PLANS ARE REFERENCED TO THE CITY OF WEST ALLIS DATUM. TO CONVERT ELEVATIONS FROM THE CITY OF WEST ALLIS DATUM TO NAVD 88, ADD 580.35.

2) THE EXISTING ROADWAY SURFACE IN WEST NATIONAL AVENUE FROM SOUTH 108TH STREET TO WEST LINCOLN AVENUE IS 3" ASPHALT OVER 9" CONCRETE.

3) REBUILT OR NEWLY CONSTRUCTED STRUCTURES SHALL BE SET TO FINAL GRADE. NO ADDITIONAL ADJUSTMENT ITEM SHALL BE PAID UNLESS OTHERWISE NOTED.

4) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

WISCONSIN
ALEXANDER J WEISLAK
E-101812
WAUWATOSA WI
PROFESSIONAL ENGINEER

SCALE FT. 0 30 60

# CITY OF WEST ALLIS
# ENGINEERING DEPARTMENT

PLAN
SANITARY SEWER RELAY & BLDG. SERV.
IN
WEST NATIONAL AVENUE
FROM SOUTH 108TH STREET
TO WEST WILDWOOD DRIVE

| | | |
|---|---|---|
| CONTRACT NO. STATE CONT. | CONTRACTOR | HOR. 1"=60' |
| ACCOUNT NO. P2332N | INSPECTOR | SCALE: VERT. 1"=10' |
| | AS-BUILT ENT'D BY | SYSTEM NO. SS-19, SS-20 |
| | AS-BUILT CHK'D BY | ¼ SEC. NO. 485, 486, 519 |
| | GIS ENTERED BY | |
| DRAWN BY FGL | Alex Weislak APPROVED PRINCIPAL ENGINEER | 04-10-26 DATE |
| DATE DRAWN 10-24 | | |
| DESIGNED BY AJW | | |
| CHECKED BY RJH | Melinda K Dejewski APPROVED CITY ENGINEER | 04-10-26 DATE |
| SURVEY FINAL PLAN DATE | PLAN FILE NO. S-1692 | |

| PROJECT NO: 2410-15-71 | HWY: WEST NATIONAL AVENUE | COUNTY: MILWAUKEE | SANITARY SEWER PLAN | SHEET 191 |
|---|---|---|---|---|

CRUSHED CONCRETE BACKFILL

8" SANITARY SEWER SDR 35 PVC 289' | 299' | 10" SANITARY SEWER SDR 35 PVC 300.3'

EXIST. SURFACE GRADE
PROP. SURFACE GRADE
RIM EL. 176.85
RIM EL. 175.60
RIM EL. 175.05
RIM EL. 173.06
PROP. 42" STM
PROP. 48" STM
EXIST. 12" W.M.
PROP. 12" W.M.
EXIST. 36" STM
EXIST. 8" SAN
PROP. 8" SAN
S=0.00415
SANITARY (RELAY)
PROP. 108" STM
EXIST. 84" STM
EXIST. 10" SAN
S=0.00368
SANITARY (RELAY)
PROP. 66" STM
EXIST. 54" STM
EXIST. 84" STM
PROP. 108" STM
EXIST. 12" W.M.
PROP. 12" W.M.
S=0.01156
SANITARY (RELAY)
EXIST. 24" M.J.S. EL. 149.37
EXIST. 24" M.J.S. EL. 150.69
EXIST. 24" M.J.S. EL. 152.15

S3 8" SANITARY SW. 165.40 / 8" SANITARY NE. 165.40
S4 8" SANITARY SW. 164.20 / 10" SANITARY NE. 164.00
S5 10" SANITARY SW. 162.90 / 10" SANITARY NE. 162.00
S6 10" SANITARY SW. 158.53 / EXIST. 24" SANITARY NW. & S. 158.33

W. CLEVELAND AVE. — SPECTRUM F.O. — ILLUM — PROP. CURB — 84" STM (58) — TELE. (8 MTD) — 48" STM (60) — 36" STM (59) — 24" M.J.S.(84) — 8" W.M.(67) — TRAF. LOOP — MCI F.O. — 24" M.J.S.(84) — 8" W.M.(54) — 3" GAS — 8" SAN (59) — 15" STM (59) — PROP. 12" W.M. — 30" H.P.GAS — 4" ELEC — C/L — WISDOT F.O. — 8" SAN (57) — 12" W.M.(54) — 4" GAS — 10" SAN (57) — 12" W.M.(54) — 15" M.J.S.(39) — 24" M.J.S.(84) — 8" W.M.(54) — 10" W.M.(59) — 8" STM (59) — 10" W.M.(54)

*10707 W.CLEVELAND AVE.
*10296 W.NATIONAL AVE.
*10288-30
*10247-43
*10269
*10539
*10533

CSM 2013 PARCEL 2
CSM 2013 PARCEL 1

3.75 VERT FT OF 6" DIA. SANITARY RISER
77 LIN FT OF 6" DIA. BLDG. SANITARY SEWER

EXISTING SANITARY SERVICE LOCATED OFF MAIN ON PROPERTY

S3 STA. 28+52.0, 21.3' RT SAN. MANHOLE
S4 STA. 31+41.0, 20.7' RT SAN. MANHOLE
S5 STA. 34+40.0, 20.2' RT SAN. MANHOLE
STA. 37+40.3, 20.0' RT ADJUSTMENT S6

W. NATIONAL AVE.
W. WILDWOOD DR.

8" SANITARY (RELAY)
10" SANITARY (RELAY)

36 LIN FT OF 6" DIA. BLDG. SANITARY SEWER

MILWAUKEE BUILDERS ASSOCIATION
WILDWOOD ESTATES
2

VERIFY IN FIELD IF LATERAL IS ACTIVE

WISCONSIN
ALEXANDER J WEISLAK
E-101812
WAUWATOSA WI
PROFESSIONAL ENGINEER

SCALE FT. 0 30 60

NOTES:

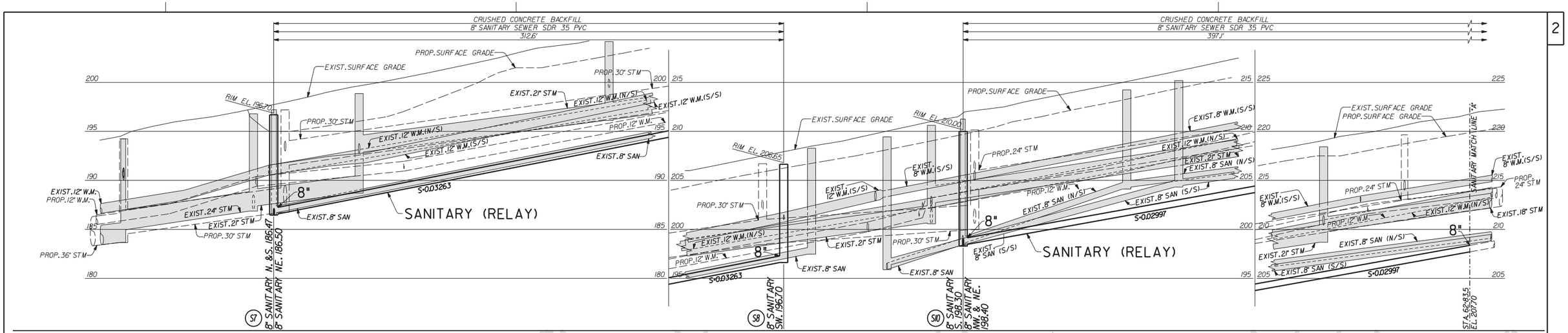
1) ELEVATIONS SHOWN ON THE ROADWAY PLANS ARE REFERENCED TO NAVD 88 (2007). ELEVATIONS SHOWN ON THE UTILITY PLANS ARE REFERENCED TO THE CITY OF WEST ALLIS DATUM. TO CONVERT ELEVATIONS FROM THE CITY OF WEST ALLIS DATUM TO NAVD 88, ADD 580.35.
2) THE EXISTING ROADWAY SURFACE IN WEST NATIONAL AVENUE FROM SOUTH 108TH STREET TO WEST LINCOLN AVENUE IS 3" ASPHALT OVER 9" CONCRETE.
3) REBUILT OR NEWLY CONSTRUCTED STRUCTURES SHALL BE SET TO FINAL GRADE. NO ADDITIONAL ADJUSTMENT ITEM SHALL BE PAID UNLESS OTHERWISE NOTED.
4) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

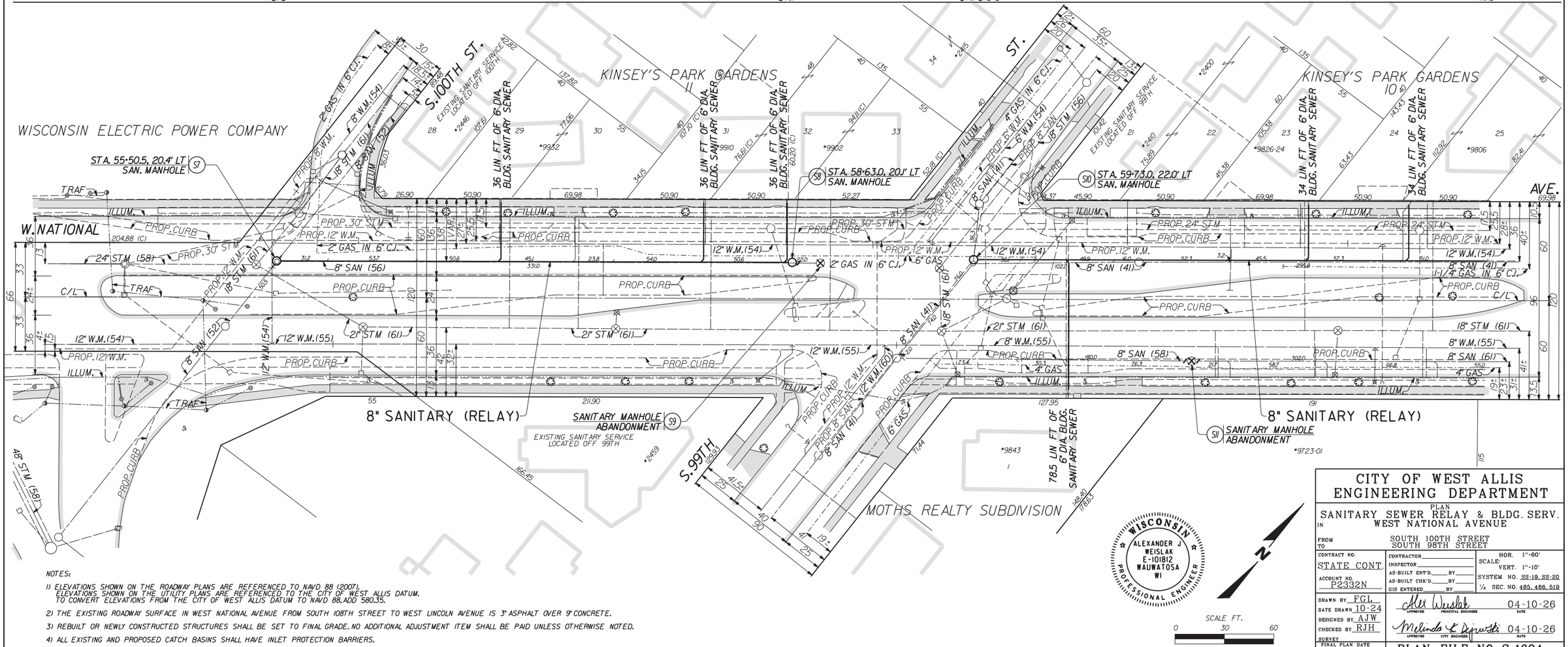
# CITY OF WEST ALLIS ENGINEERING DEPARTMENT

PLAN
SANITARY SEWER RELAY & BLDG. SERV.
IN WEST NATIONAL AVENUE
FROM WEST WILDWOOD DRIVE
TO SOUTH 102ND STREET

| | | |
|---|---|---|
| CONTRACT NO. STATE CONT. | CONTRACTOR | HOR. 1"=60' |
| ACCOUNT NO. P2332N | INSPECTOR | SCALE: VERT. 1"=10' |
| | AS-BUILT ENT'D BY | SYSTEM NO. SS-19, SS-20 |
| | AS-BUILT CHK'D BY | ¼ SEC. NO. 485, 486, 519 |
| | GIS ENTERED BY | |
| DRAWN BY FGL | Alex Weislak APPROVED PRINCIPAL ENGINEER | 04-10-26 DATE |
| DATE DRAWN 10-24 | | |
| DESIGNED BY AJW | | |
| CHECKED BY RJH | Melinda K Bajewski APPROVED CITY ENGINEER | 04-10-26 DATE |
| SURVEY FINAL PLAN DATE | PLAN FILE NO. S-1693 | |

PROJECT NO: 2410-15-71 | HWY: WEST NATIONAL AVENUE | COUNTY: MILWAUKEE | SANITARY SEWER PLAN | SHEET 192




NOTES:

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2) THE EXISTING ROADWAY SURFACE IN WEST NATIONAL AVENUE FROM SOUTH 108TH STREET TO WEST LINCOLN AVENUE IS 3" ASPHALT OVER 9" CONCRETE.

3) REBUILT OR NEWLY CONSTRUCTED STRUCTURES SHALL BE SET TO FINAL GRADE. NO ADDITIONAL ADJUSTMENT ITEM SHALL BE PAID UNLESS OTHERWISE NOTED.

4) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

WISCONSIN
ALEXANDER J WEISLAK
E-101812
WAUWATOSA
WI
PROFESSIONAL ENGINEER

SCALE FT.
0 30 60

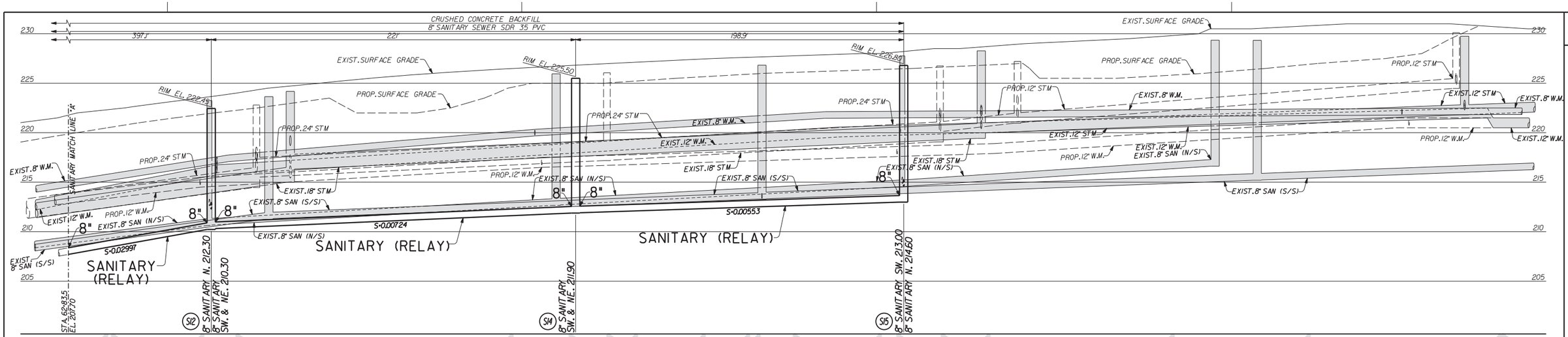
# CITY OF WEST ALLIS
# ENGINEERING DEPARTMENT

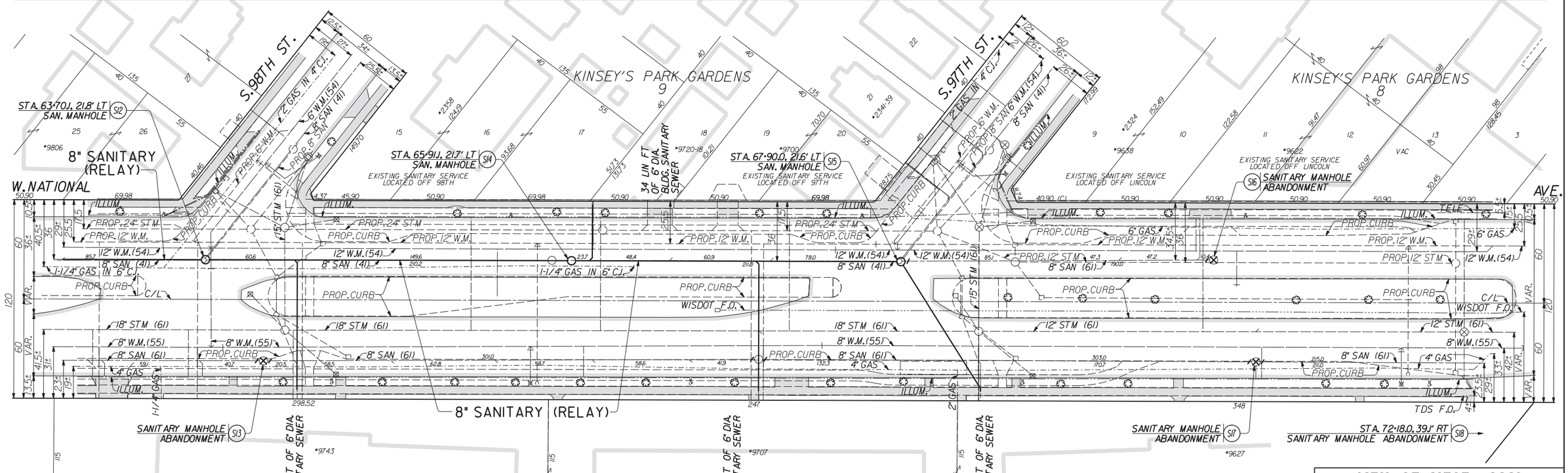
PLAN
SANITARY SEWER RELAY & BLDG. SERV.
IN
WEST NATIONAL AVENUE
FROM SOUTH 100TH STREET
TO SOUTH 98TH STREET

| | | |
|---|---|---|
| CONTRACT NO. STATE CONT. | CONTRACTOR | HOR. 1"=60' |
| ACCOUNT NO. P2332N | INSPECTOR | SCALE: VERT. 1"=10' |
| | AS-BUILT ENT'D BY | SYSTEM NO. SS-19, SS-20 |
| | AS-BUILT CHK'D BY | ¼ SEC. NO. 485, 486, 519 |
| | GIS ENTERED BY | |
| DRAWN BY FGL | Alex Weislak APPROVED PRINCIPAL ENGINEER | 04-10-26 DATE |
| DATE DRAWN 10-24 | | |
| DESIGNED BY AJW | | |
| CHECKED BY RJH | Melinda K Pejwski APPROVED CITY ENGINEER | 04-10-26 DATE |
| SURVEY FINAL PLAN DATE | | |

PLAN FILE NO. S-1694

| PROJECT NO: 2410-15-71 | HWY: WEST NATIONAL AVENUE | COUNTY: MILWAUKEE | SANITARY SEWER PLAN | SHEET 193 |
|---|---|---|---|---|




NOTES:

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2) THE EXISTING ROADWAY SURFACE IN WEST NATIONAL AVENUE FROM SOUTH 108TH STREET TO WEST LINCOLN AVENUE IS 3" ASPHALT OVER 9" CONCRETE.

3) REBUILT OR NEWLY CONSTRUCTED STRUCTURES SHALL BE SET TO FINAL GRADE. NO ADDITIONAL ADJUSTMENT ITEM SHALL BE PAID UNLESS OTHERWISE NOTED.

4) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

WISCONSIN
ALEXANDER J WEISLAK
E-101812
WAUWATOSA WI
PROFESSIONAL ENGINEER

SCALE FT. 0 30 60

# CITY OF WEST ALLIS ENGINEERING DEPARTMENT

PLAN
SANITARY SEWER RELAY & BLDG. SERV.
IN WEST NATIONAL AVENUE

FROM SOUTH 98TH STREET
TO SOUTH 97TH STREET

CONTRACT NO. STATE CONT.
ACCOUNT NO. P2332N

CONTRACTOR
INSPECTOR
AS-BUILT ENT'D BY
AS-BUILT CHK'D BY
GIS ENTERED BY

SCALE: HOR. 1"=60'
VERT. 1"=10'
SYSTEM NO. SS-19, SS-20
¼ SEC. NO. 485, 486, 519

DRAWN BY FGL
DATE DRAWN 10-24
DESIGNED BY AJW
CHECKED BY RJH
SURVEY
FINAL PLAN DATE

Alex Weislak 04-10-26
APPROVED PRINCIPAL ENGINEER DATE

Melinda L Dejewski 04-10-26
APPROVED CITY ENGINEER DATE

PLAN FILE NO. S-1695

| PROJECT NO: 2410-15-71 | HWY: WEST NATIONAL AVENUE | COUNTY: MILWAUKEE | SANITARY SEWER PLAN | SHEET 194 |
|---|---|---|---|---|

CRUSHED CONCRETE BACKFILL
8" SANITARY SEWER SDR 35 PVC
157'
150.3'
EXIST. SURFACE GRADE
PROP. SURFACE GRADE
RIM EL. 177.70
RIM EL. 178.15
RIM EL. 175.90
EXIST. 8" W.M.(S/S)
EXIST. 12" W.M.(N/S)
PROP. 18" ST.M.
EXIST. 12" W.M.
PROP. 12" ST.M.
EXIST. 15" ST.M.
EXIST. 18" ST.M.
PROP. 8" W.M.
EXIST. 8" W.M.
EXIST. 8" W.M.(S/S)
EXIST. 12" W.M.(S/S)
PROP. 12" W.M.
EXIST. 12" W.M.(N/S)
PROP. 12" W.M.
EXIST. 8" W.M.(S/S)
EXIST. 12" W.M.(N/S)
EXIST. SAN
8"
8"
8"
8"
EXIST. 8" SAN
S=0.00764
S=0.00998
EXIST. 8" SAN
SANITARY (RELAY)
SANITARY (RELAY)
EXIST. 68"x106" ST.M.
EXIST. 24" SAN
PROP. 108" ST.M.
EXIST. 84" ST.M.
EXIST. 48" ST.M.
EXIST. 48" ST.M.
EXIST. 48" ST.M.
EXIST. 24" M.J.S. EL.149.37
175
170
165
160
155

(S20) 8" SANITARY W. 164.90
(S22) 8" SANITARY E. & W. 163.70
(S24) 8" SANITARY W. 162.20
EXIST. 24" SANITARY N. 159.25
EXIST. 24" SANITARY E. 159.35

CSM 2013
PARCEL 2
*10296 W.NATIONAL AVE.
*2600 S.108TH ST.
*10269 W.NATIONAL AVE.
*10243-47 W.NATIONAL AVE.
*10206
WILDWOOD ADDN.
W.CLEVELAND AVE.
W.NATIONAL AVE.
SPECTRUM F.O.
ELEC.
ILLUM.
TRAF.
PROP. CURB
PROP. 108" ST.M.
84" ST.M. (58)
36" ST.M. (59)
TRAF. LOOP
TELE (8 MTD)
48" ST.M. (60)
S/L
PROP. 8" W.M.
8" W.M.(67)
30" H.P. GAS
18" ST.M. (59)
PROP. 18" ST.M.
24" M.J.S.(84)
WAWM F.O.
PROP. 42" ST.M.
36" ST.M. (59)
C/L
VAR.
WISDOT F.O.
PROP. 12" W.M.
8" S.SAN (57)
12" W.M.(54)
MCI F.O.
PROP. 8" SAN
PROP. 10" SAN
12" W.M.(59)
10" SAN (57)
12" W.M.(54)
4" GAS
3" GAS
15" ST.M. (59)
PROP. 12" ST.M.
8" SAN (59)
8" W.M.(54)
PROP. 12" W.M.
TELE (6 MCD)
8" SAN (59)
24" SAN (82)
8" SAN (59)
48" ST.M. (60)
68"x106" ST.M. (58)
PROP. 8" W.M.
WAWM F.O.
8" W.M.(54)
24" SAN (182)
ST.A. 105+55.3, 19.9' RT ADJUSTMENT
8" SANITARY (RELAY)
ELEC.
182.34
30.26
20.16
76.15
ILLUM.
PROP. CURB
PROP. 12" W.M.
TELE (6 MCD)
S/L
PROP. 8" W.M.
WAWM F.O.
8" W.M.(54)
(S18) SANITARY MANHOLE ABANDONMENT
ST.A. 102+48.0, 19.5' RT SAN. MANHOLE (S20)
(S21) SANITARY MANHOLE ABANDONMENT
ST.A. 104+05.0, 19.6' RT SAN. MANHOLE (S22)
(S23) SANITARY MANHOLE ABANDONMENT
19 LIN FT OF 6' DIA. BLDG. SANITARY SEWER
21 LIN FT OF 6' DIA. BLDG. SANITARY SEWER
21 LIN FT OF 6' DIA. BLDG. SANITARY SEWER
*10253
*10231
*10221
301.80 (P)
302.01 (D)
67.50
67
62.76
66.8
55.1
63.6
91.64
99.75
91.03
N
SCALE FT.
0
30
60

NOTES:

1) ELEVATIONS SHOWN ON THE ROADWAY PLANS ARE REFERENCED TO NAVD 88 (2007). ELEVATIONS SHOWN ON THE UTILITY PLANS ARE REFERENCED TO THE CITY OF WEST ALLIS DATUM. TO CONVERT ELEVATIONS FROM THE CITY OF WEST ALLIS DATUM TO NAVD 88, ADD 580.35.

2) THE EXISTING ROADWAY SURFACE IN WEST NATIONAL AVENUE FROM SOUTH 108TH STREET TO WEST LINCOLN AVENUE IS 3" ASPHALT OVER 9" CONCRETE. THE EXISTING ROADWAY SURFACE IN WEST CLEVELAND AVENUE IS 3" ASPHALT OVER 8" CONCRETE.

3) REBUILT OR NEWLY CONSTRUCTED STRUCTURES SHALL BE SET TO FINAL GRADE. NO ADDITIONAL ADJUSTMENT ITEM SHALL BE PAID UNLESS OTHERWISE NOTED.

4) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

WISCONSIN
ALEXANDER J WEISLAK
E-101812
WAUWATOSA WI
PROFESSIONAL ENGINEER

# CITY OF WEST ALLIS
# ENGINEERING DEPARTMENT

PLAN
SANITARY SEWER RELAY & BLDG. SERV.
IN WEST CLEVELAND AVENUE

FROM WEST NATIONAL AVENUE
TO PT. EAST OF WEST NATIONAL AVENUE

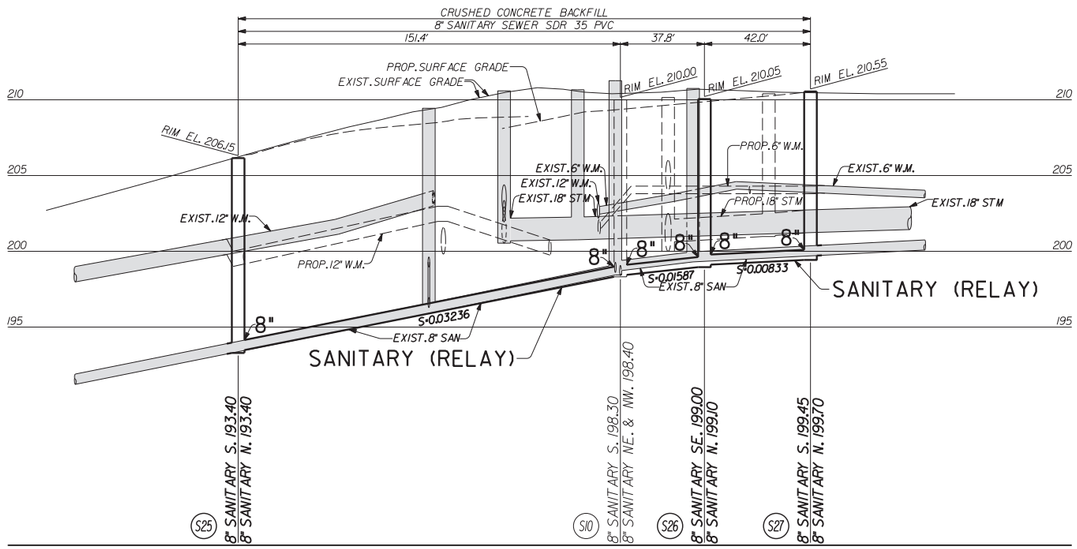
CONTRACT NO. STATE CONT.
ACCOUNT NO. P2332N
CONTRACTOR
INSPECTOR
AS-BUILT ENT'D BY
AS-BUILT CHK'D BY
GIS ENTERED BY
SCALE: HOR. 1"=60'
VERT. 1"=10'
SYSTEM NO. SS-19, SS-20
¼ SEC. NO. 485, 486, 519

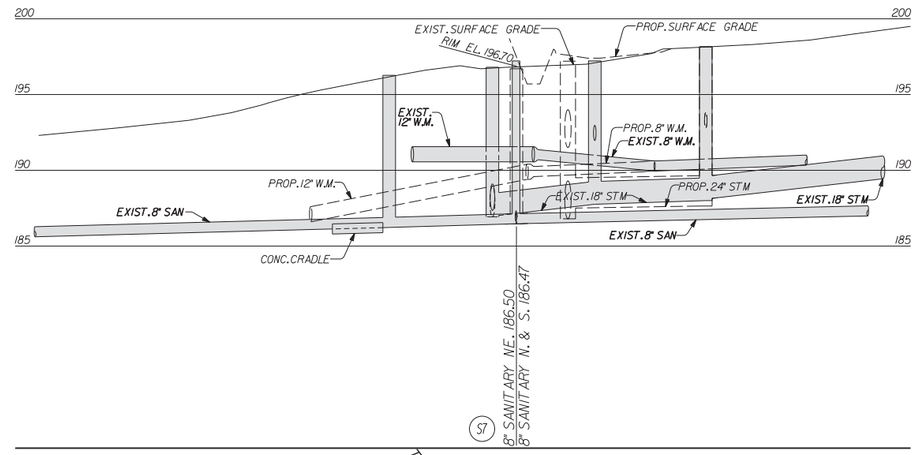
DRAWN BY FGL
DATE DRAWN 10-24
DESIGNED BY AJW
CHECKED BY RJH
SURVEY
FINAL PLAN DATE

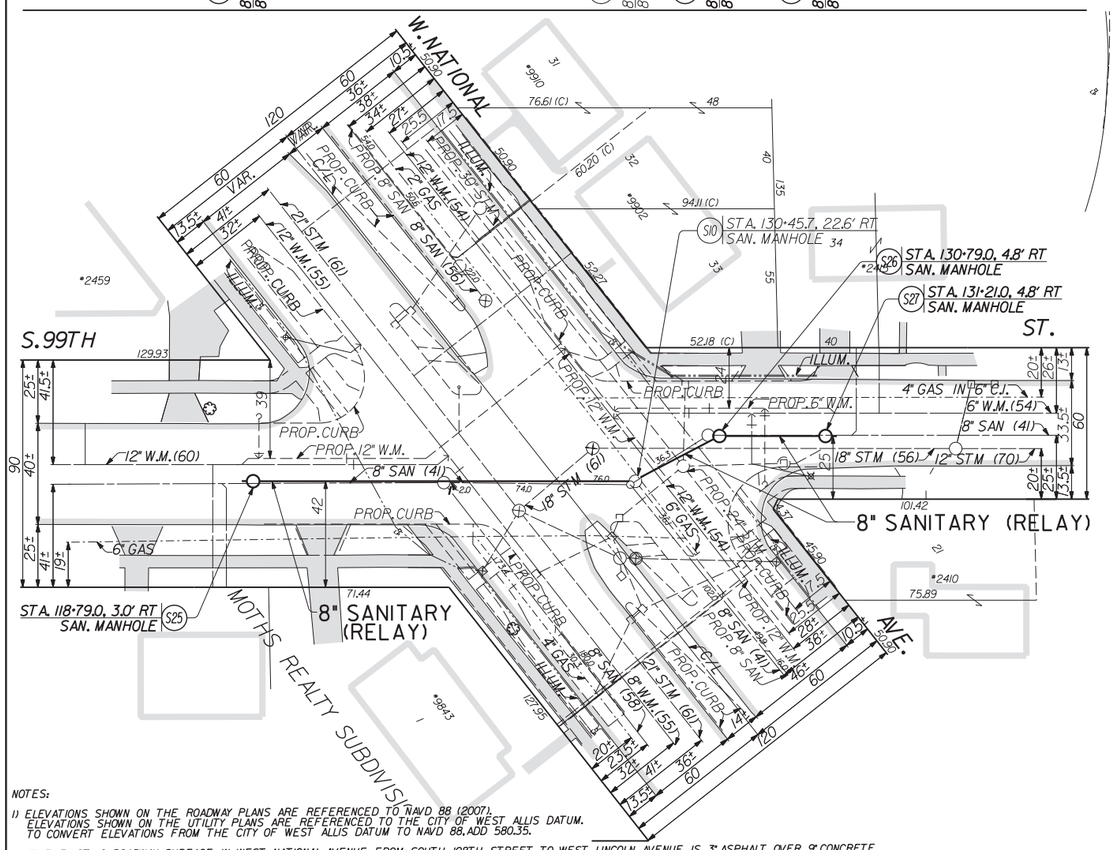
Alex Weislak 04-10-26
APPROVED PRINCIPAL ENGINEER DATE
Melinda K Dejwski 04-10-26
APPROVED CITY ENGINEER DATE

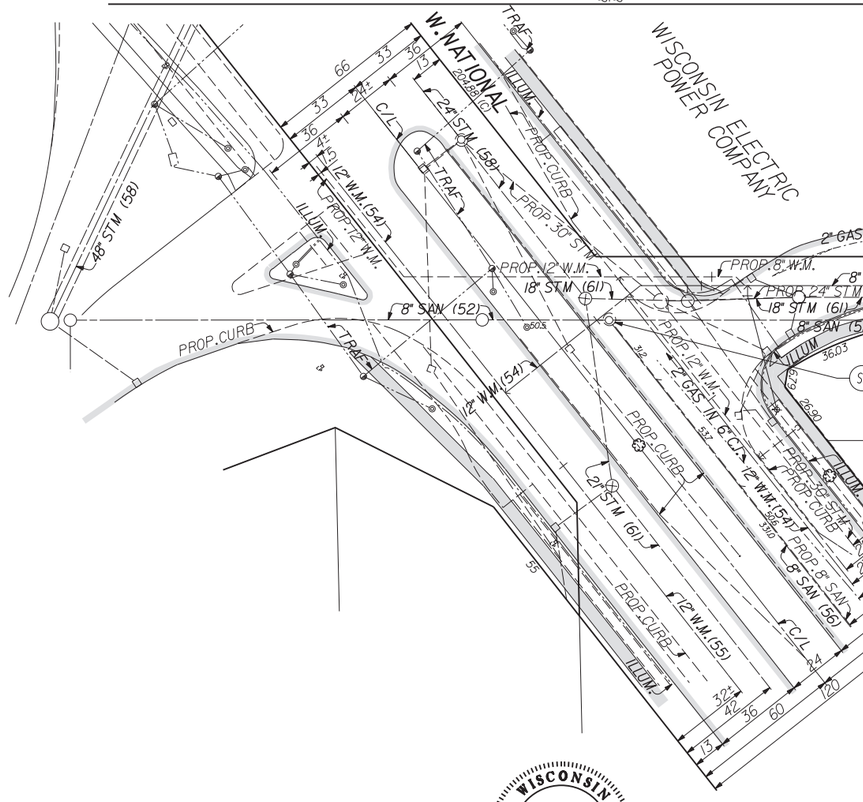
PLAN FILE NO. S-1696

PROJECT NO: 2410-15-71 | HWY: WEST NATIONAL AVENUE | COUNTY: MILWAUKEE | SANITARY SEWER PLAN | SHEET 195




NOTES:

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2) THE EXISTING ROADWAY SURFACE IN WEST NATIONAL AVENUE FROM SOUTH 108TH STREET TO WEST LINCOLN AVENUE IS 3" ASPHALT OVER 9" CONCRETE. THE EXISTING ROADWAY SURFACE IN NORTHBOUND SOUTH 99TH STREET AT WEST NATIONAL AVE IS 7" CONCRETE. SOUTHBOUND SOUTH 99TH STREET IS 8" CONCRETE. THE EXISTING ROADWAY SURFACE IN SOUTH 100TH STREET AT WEST NATIONAL AVE IS 7" CONCRETE.

3) REBUILT OR NEWLY CONSTRUCTED STRUCTURES SHALL BE SET TO FINAL GRADE. NO ADDITIONAL ADJUSTMENT ITEM SHALL BE PAID UNLESS OTHERWISE NOTED.

4) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

WISCONSIN
ALEXANDER J WEISLAK
E-101812
WAUWATOSA WI
PROFESSIONAL ENGINEER

SCALE FT.
0 30 60

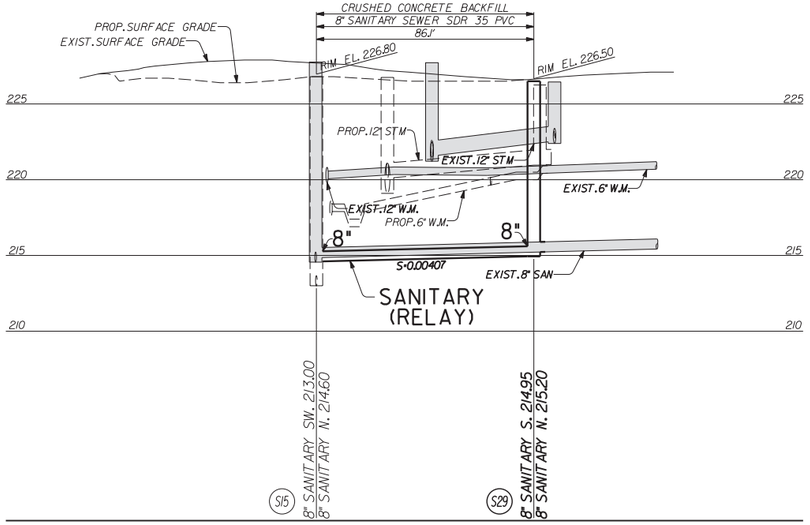
# CITY OF WEST ALLIS
# ENGINEERING DEPARTMENT

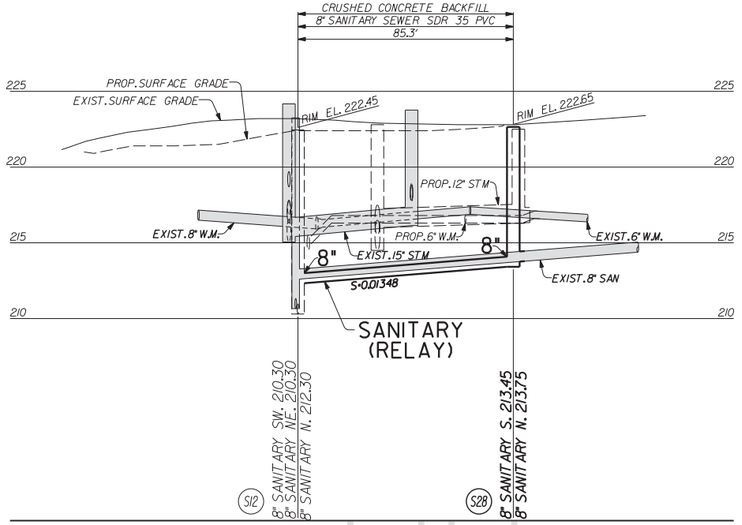
PLAN
SANITARY SEWER RELAY & BLDG. SERV.
IN SOUTH 99TH & 100TH STREET

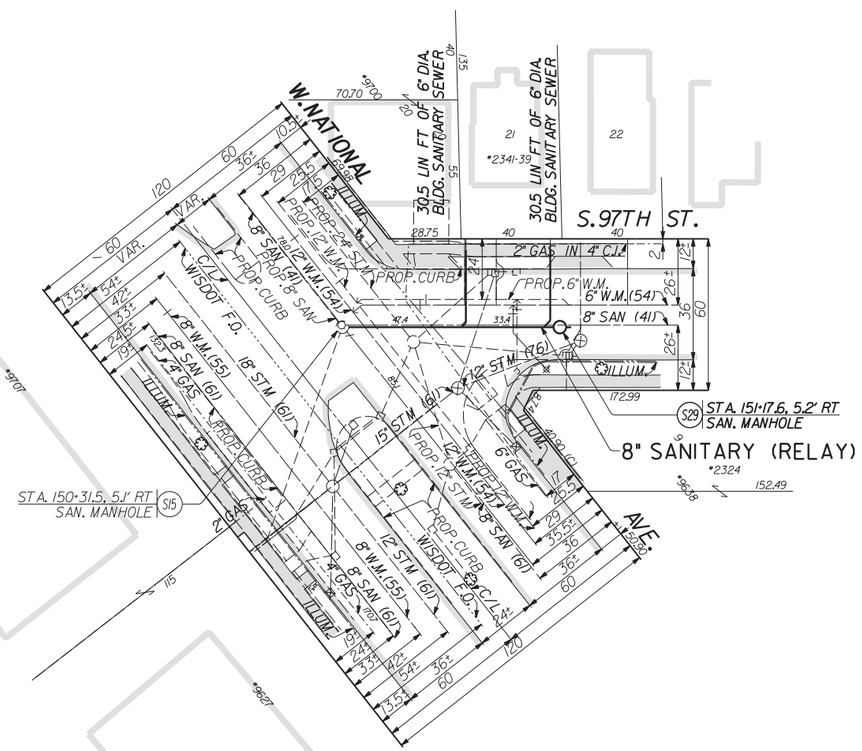
AT WEST NATIONAL AVENUE

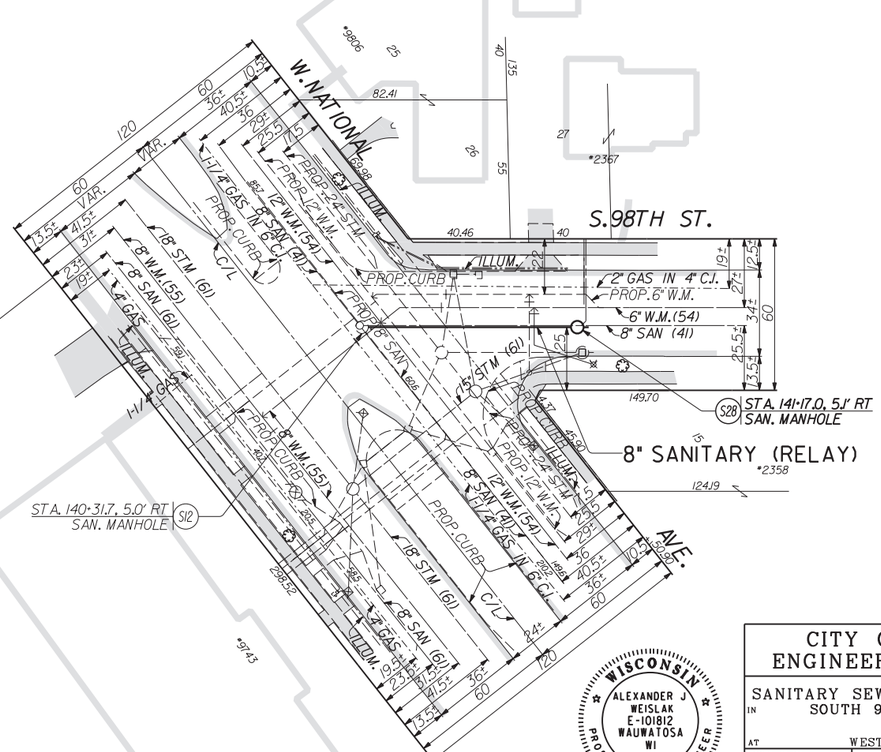
| | | |
|---|---|---|
| CONTRACT NO. STATE CONT. | CONTRACTOR | HOR. 1"=60' |
| ACCOUNT NO. P2332N | INSPECTOR | SCALE: VERT. 1"=10' |
| | AS-BUILT ENT'D BY | SYSTEM NO. SS-19, SS-20 |
| | AS-BUILT CHK'D BY | ¼ SEC. NO. 485, 486, 519 |
| | GIS ENTERED BY | |
| DRAWN BY FGL | Alex Weislak APPROVED PRINCIPAL ENGINEER | 04-10-26 DATE |
| DATE DRAWN 10-24 | | |
| DESIGNED BY AJW | | |
| CHECKED BY RJH | Melinda K Dejewski APPROVED CITY ENGINEER | 04-10-26 DATE |
| SURVEY FINAL PLAN DATE | PLAN FILE NO. S-1697 | |

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-71 | HWY: WEST NATIONAL AVENUE | COUNTY: MILWAUKEE | SANITARY SEWER PLAN | SHEET 196 |




NOTES:

1) ELEVATIONS SHOWN ON THE ROADWAY PLANS ARE REFERENCED TO NAVD 88 (2007). ELEVATIONS SHOWN ON THE UTILITY PLANS ARE REFERENCED TO THE CITY OF WEST ALLIS DATUM. TO CONVERT ELEVATIONS FROM THE CITY OF WEST ALLIS DATUM TO NAVD 88, ADD 580.35.

2) THE EXISTING ROADWAY SURFACE IN WEST NATIONAL AVENUE FROM SOUTH 108TH STREET TO WEST LINCOLN AVENUE IS 3" ASPHALT OVER 9" CONCRETE. THE EXISTING ROADWAY SURFACE IN SOUTH 97TH STREET AT WEST NATIONAL AVENUE IS 8" CONCRETE. THE EXISTING ROADWAY SURFACE IN SOUTH 98TH STREET AT WEST NATIONAL AVENUE IS 7" CONCRETE.

3) REBUILT OR NEWLY CONSTRUCTED STRUCTURES SHALL BE SET TO FINAL GRADE. NO ADDITIONAL ADJUSTMENT ITEM SHALL BE PAID UNLESS OTHERWISE NOTED.

4) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

WISCONSIN
ALEXANDER J WEISLAK
E-101812
WAUWATOSA
WI
PROFESSIONAL ENGINEER

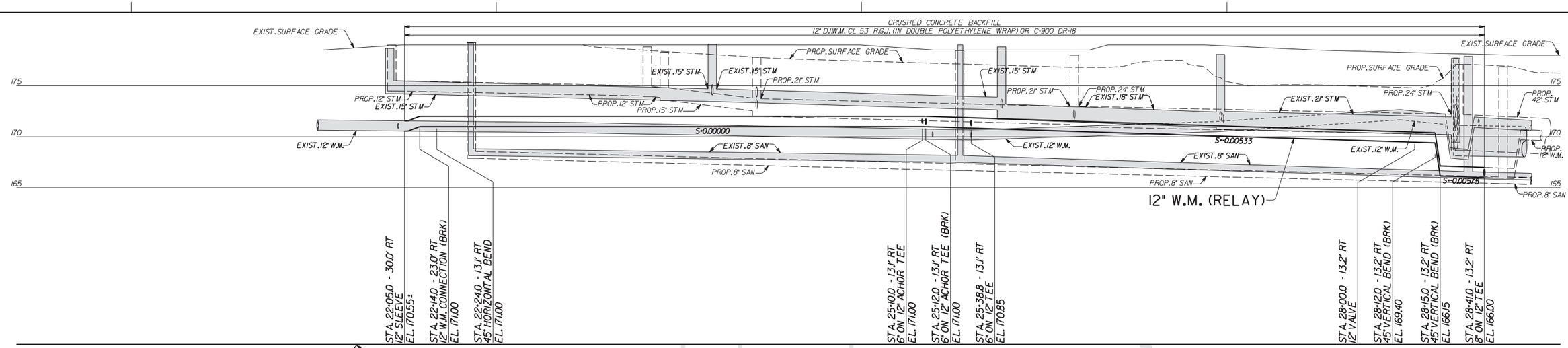
SCALE FT.
0 30 60

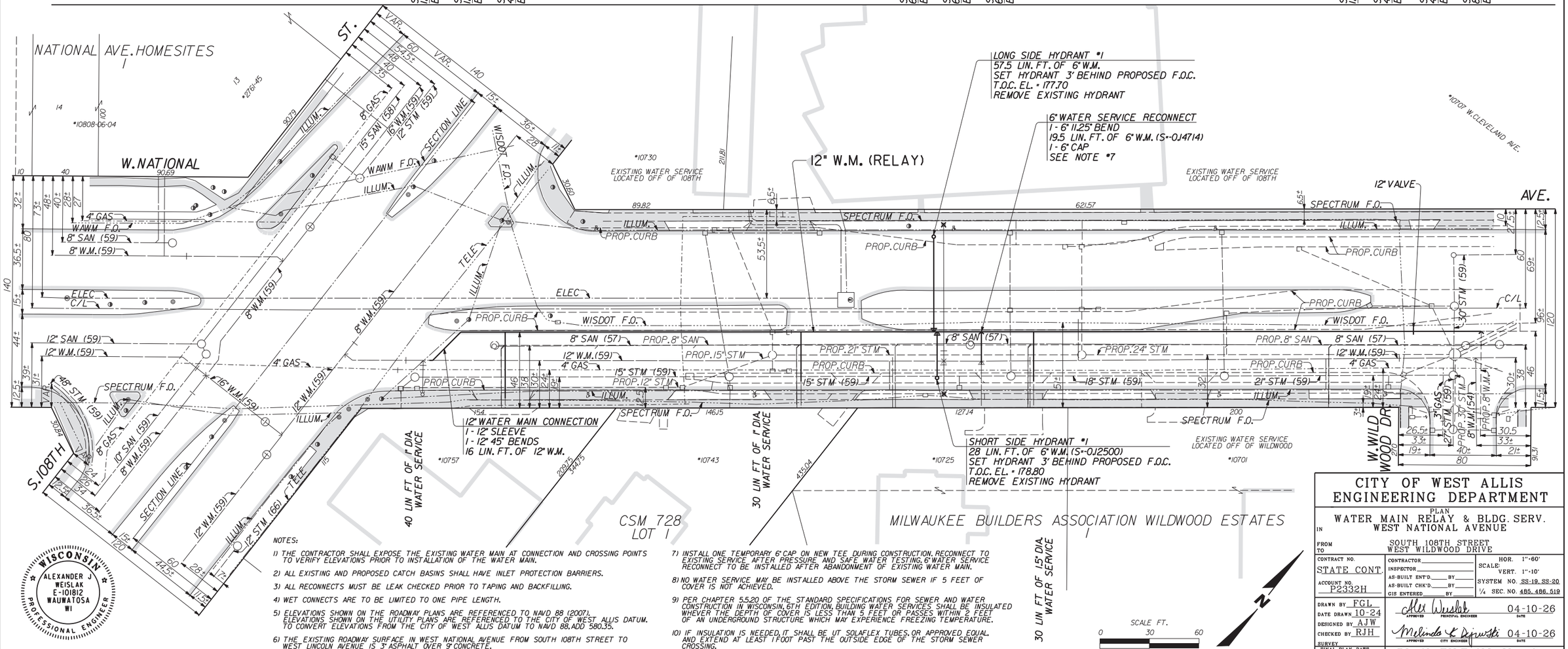
# CITY OF WEST ALLIS
# ENGINEERING DEPARTMENT

PLAN SANITARY SEWER RELAY & BLDG. SERV.
IN SOUTH 97TH & 98TH STREET
AT WEST NATIONAL AVENUE

| | | |
|---|---|---|
| CONTRACT NO. STATE CONT. | CONTRACTOR | HOR. 1"=60' |
| ACCOUNT NO. P2332N | INSPECTOR | VERT. 1"=10' |
| | AS-BUILT ENT'D BY | SYSTEM NO. SS-19, SS-20 |
| | AS-BUILT CHK'D BY | ¼ SEC. NO. 485, 486, 519 |
| | GIS ENTERED BY | |
| DRAWN BY FGL | Alex Weislak APPROVED PRINCIPAL ENGINEER | 04-10-26 DATE |
| DATE DRAWN 10-24 | | |
| DESIGNED BY AJW | | |
| CHECKED BY RJH | Melinda K Bajewski APPROVED CITY ENGINEER | 04-10-26 DATE |
| SURVEY | | |
| FINAL PLAN DATE | PLAN FILE NO. S-1698 | |

PROJECT NO: 2410-15-71 | HWY: WEST NATIONAL AVENUE | COUNTY: MILWAUKEE | SANITARY SEWER PLAN | SHEET 197




NOTES:

1) THE CONTRACTOR SHALL EXPOSE THE EXISTING WATER MAIN AT CONNECTION AND CROSSING POINTS TO VERIFY ELEVATIONS PRIOR TO INSTALLATION OF THE WATER MAIN.

2) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

3) ALL RECONNECTS MUST BE LEAK CHECKED PRIOR TO TAPING AND BACKFILLING.

4) WET CONNECTS ARE TO BE LIMITED TO ONE PIPE LENGTH.

5) ELEVATIONS SHOWN ON THE ROADWAY PLANS ARE REFERENCED TO NAVD 88 (2007). ELEVATIONS SHOWN ON THE UTILITY PLANS ARE REFERENCED TO THE CITY OF WEST ALLIS DATUM. TO CONVERT ELEVATIONS FROM THE CITY OF WEST ALLIS DATUM TO NAVD 88, ADD 580.35.

6) THE EXISTING ROADWAY SURFACE IN WEST NATIONAL AVENUE FROM SOUTH 108TH STREET TO WEST LINCOLN AVENUE IS 3" ASPHALT OVER 9" CONCRETE.

7) INSTALL ONE TEMPORARY 6" CAP ON NEW TEE DURING CONSTRUCTION. RECONNECT TO EXISTING SERVICE AFTER PRESSURE AND SAFE WATER TESTING. 6" WATER SERVICE RECONNECT TO BE INSTALLED AFTER ABANDONMENT OF EXISTING WATER MAIN.

8) NO WATER SERVICE MAY BE INSTALLED ABOVE THE STORM SEWER IF 5 FEET OF COVER IS NOT ACHIEVED.

9) PER CHAPTER 5.5.20 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, 6TH EDITION, BUILDING WATER SERVICES SHALL BE INSULATED WHEVER THE DEPTH OF COVER IS LESS THAN 5 FEET OR PASSES WITHIN 2 FEET OF AN UNDERGROUND STRUCTURE WHICH MAY EXPERIENCE FREEZING TEMPERATURE.

10) IF INSULATION IS NEEDED, IT SHALL BE UT SOLAFLEX TUBES, OR APPROVED EQUAL, AND EXTEND AT LEAST 1 FOOT PAST THE OUTSIDE EDGE OF THE STORM SEWER CROSSING.

WISCONSIN
ALEXANDER J
WEISLAK
E-101812
WAUWATOSA
WI
PROFESSIONAL ENGINEER

**CITY OF WEST ALLIS**
**ENGINEERING DEPARTMENT**

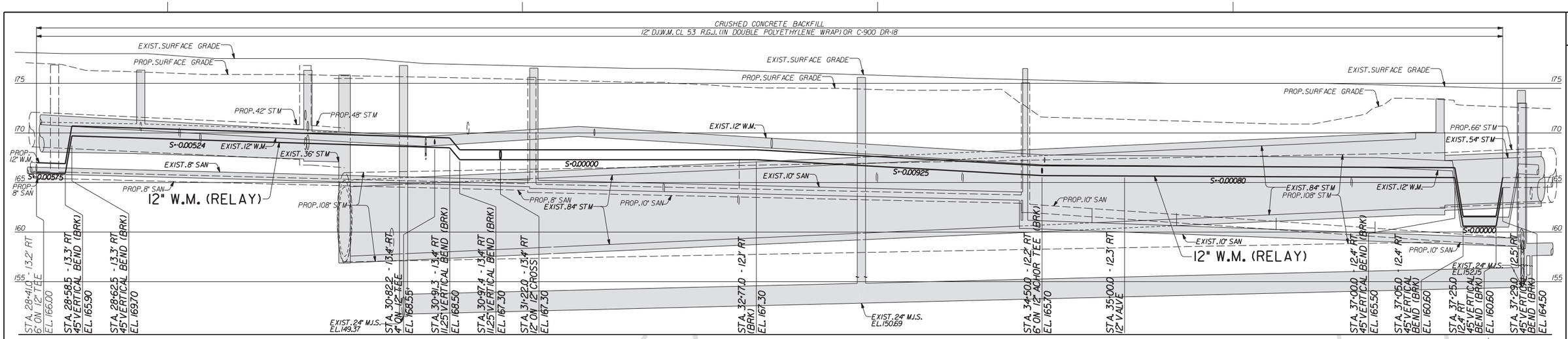
PLAN
WATER MAIN RELAY & BLDG. SERV.
IN
WEST NATIONAL AVENUE

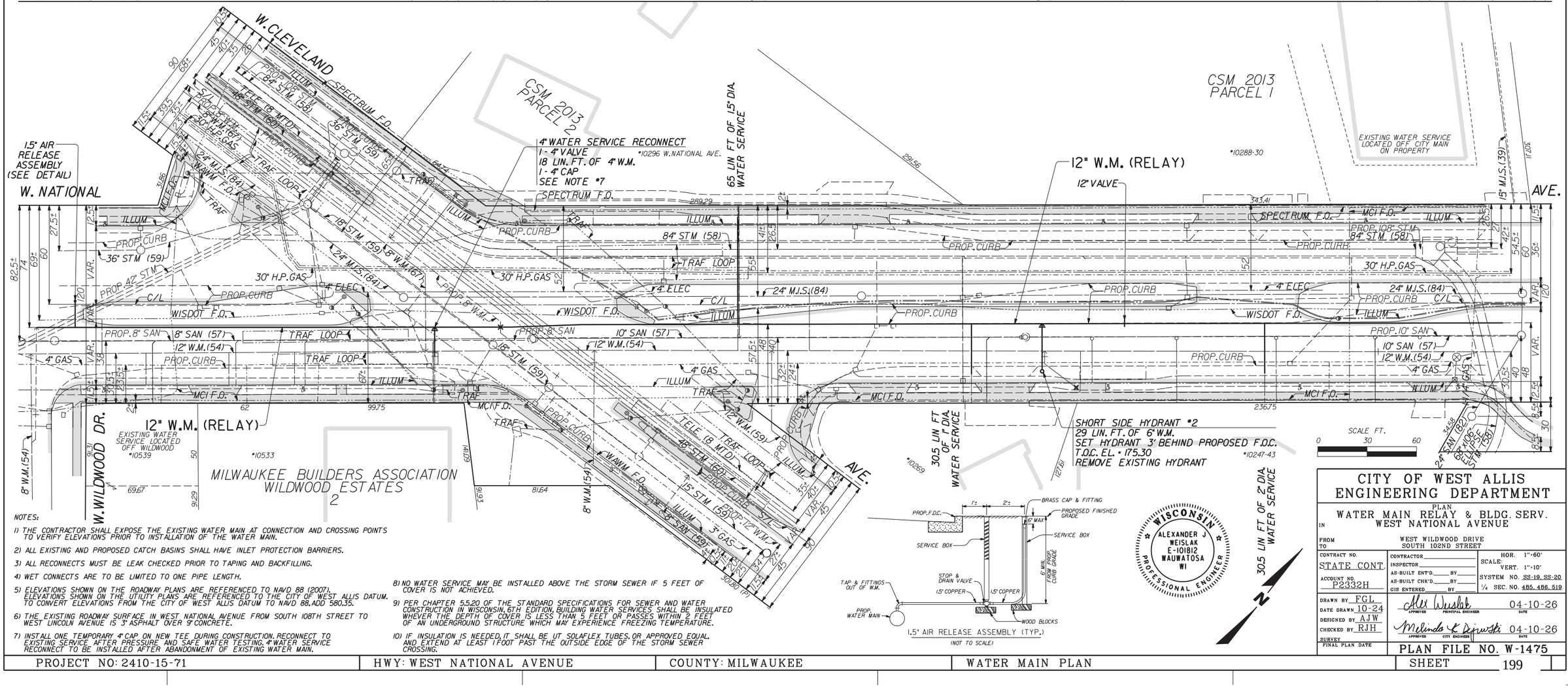
FROM SOUTH 108TH STREET
TO WEST WILDWOOD DRIVE

| | | |
|---|---|---|
| CONTRACT NO. STATE CONT. | CONTRACTOR | HOR. 1"=60' |
| ACCOUNT NO. P2332H | INSPECTOR | SCALE: VERT. 1"=10' |
| | AS-BUILT ENT'D BY | SYSTEM NO. SS-19, SS-20 |
| | AS-BUILT CHK'D BY | ¼ SEC. NO. 485, 486, 519 |
| | GIS ENTERED BY | |
| DRAWN BY FGL | Alex Weislak APPROVED PRINCIPAL ENGINEER | 04-10-26 DATE |
| DATE DRAWN 10-24 | | |
| DESIGNED BY AJW | | |
| CHECKED BY RJH | Melinda K Dejewski APPROVED CITY ENGINEER | 04-10-26 DATE |
| SURVEY FINAL PLAN DATE | | |

PLAN FILE NO. W-1474

| PROJECT NO: 2410-15-71 | HWY: WEST NATIONAL AVENUE | COUNTY: MILWAUKEE | WATER MAIN PLAN | SHEET 198 |
|---|---|---|---|---|







NOTES:

1) THE CONTRACTOR SHALL EXPOSE THE EXISTING WATER MAIN AT CONNECTION AND CROSSING POINTS TO VERIFY ELEVATIONS PRIOR TO INSTALLATION OF THE WATER MAIN.

2) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

3) ALL RECONNECTS MUST BE LEAK CHECKED PRIOR TO TAPING AND BACKFILLING.

4) WET CONNECTS ARE TO BE LIMITED TO ONE PIPE LENGTH.

5) ELEVATIONS SHOWN ON THE ROADWAY PLANS ARE REFERENCED TO NAVD 88 (2007). ELEVATIONS SHOWN ON THE UTILITY PLANS ARE REFERENCED TO THE CITY OF WEST ALLIS DATUM. TO CONVERT ELEVATIONS FROM THE CITY OF WEST ALLIS DATUM TO NAVD 88,ADD 580.35.

6) THE EXISTING ROADWAY SURFACE IN WEST NATIONAL AVENUE FROM SOUTH 108TH STREET TO WEST LINCOLN AVENUE IS 3" ASPHALT OVER 9" CONCRETE.

7) INSTALL ONE TEMPORARY 4" CAP ON NEW TEE DURING CONSTRUCTION. RECONNECT TO EXISTING SERVICE AFTER PRESSURE AND SAFE WATER TESTING. 4" WATER SERVICE RECONNECT TO BE INSTALLED AFTER ABANDONMENT OF EXISTING WATER MAIN.

8) NO WATER SERVICE MAY BE INSTALLED ABOVE THE STORM SEWER IF 5 FEET OF COVER IS NOT ACHIEVED.

9) PER CHAPTER 5.5.20 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, 6TH EDITION, BUILDING WATER SERVICES SHALL BE INSULATED WHEVER THE DEPTH OF COVER IS LESS THAN 5 FEET OR PASSES WITHIN 2 FEET OF AN UNDERGROUND STRUCTURE WHICH MAY EXPERIENCE FREEZING TEMPERATURE.

10) IF INSULATION IS NEEDED, IT SHALL BE UT SOLAFLEX TUBES, OR APPROVED EQUAL, AND EXTEND AT LEAST 1 FOOT PAST THE OUTSIDE EDGE OF THE STORM SEWER CROSSING.

WISCONSIN
ALEXANDER J WEISLAK
E-101812
WAUWATOSA WI
PROFESSIONAL ENGINEER

**CITY OF WEST ALLIS**
**ENGINEERING DEPARTMENT**

PLAN
WATER MAIN RELAY & BLDG. SERV.
IN WEST NATIONAL AVENUE
FROM WEST WILDWOOD DRIVE
TO SOUTH 102ND STREET

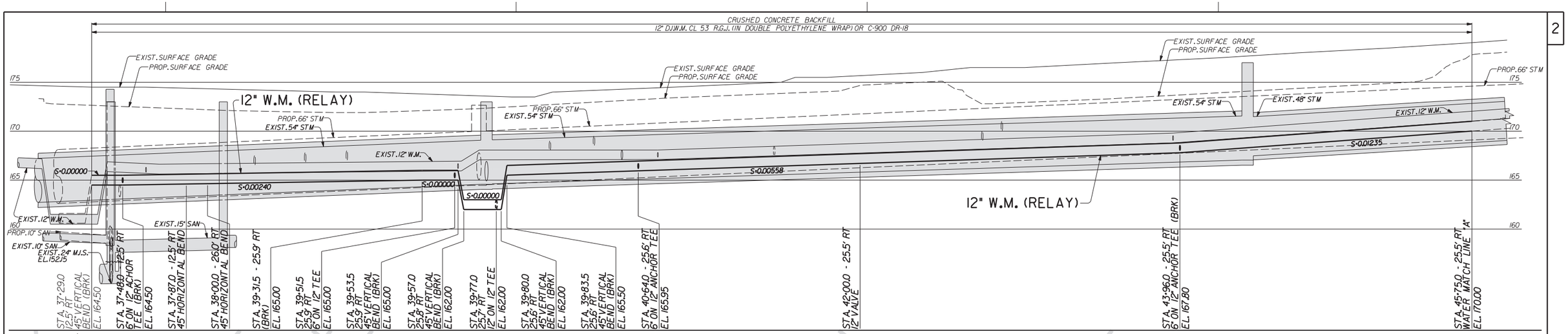
| | |
|---|---|
| CONTRACT NO. STATE CONT. | CONTRACTOR |
| ACCOUNT NO. P2332H | INSPECTOR |
| | AS-BUILT ENT'D BY |
| | AS-BUILT CHK'D BY |
| | GIS ENTERED BY |
| SCALE: | HOR. 1"=60' |
| | VERT. 1"=10' |
| SYSTEM NO. | SS-19, SS-20 |
| ¼ SEC. NO. | 485, 486, 519 |
| DRAWN BY FGL | |
| DATE DRAWN 10-24 | |
| DESIGNED BY AJW | |
| CHECKED BY RJH | |
| SURVEY FINAL PLAN DATE | |

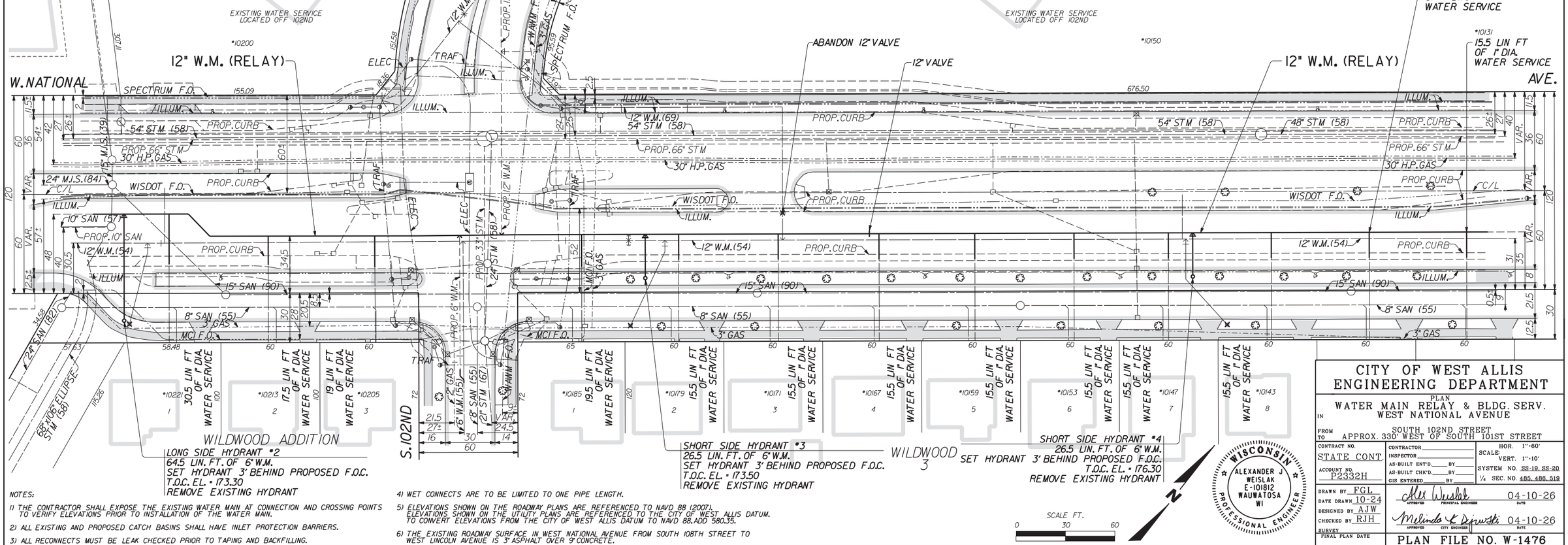
Alex Weislak 04-10-26
APPROVED MUNICIPAL ENGINEER DATE

Melinda L Dejewski 04-10-26
APPROVED CITY ENGINEER DATE

PLAN FILE NO. W-1475

PROJECT NO: 2410-15-71 | HWY: WEST NATIONAL AVENUE | COUNTY: MILWAUKEE | WATER MAIN PLAN | SHEET 199




NOTES:

1) THE CONTRACTOR SHALL EXPOSE THE EXISTING WATER MAIN AT CONNECTION AND CROSSING POINTS TO VERIFY ELEVATIONS PRIOR TO INSTALLATION OF THE WATER MAIN.

2) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

3) ALL RECONNECTS MUST BE LEAK CHECKED PRIOR TO TAPING AND BACKFILLING.

4) WET CONNECTS ARE TO BE LIMITED TO ONE PIPE LENGTH.

5) ELEVATIONS SHOWN ON THE ROADWAY PLANS ARE REFERENCED TO NAVD 88 (2007). ELEVATIONS SHOWN ON THE UTILITY PLANS ARE REFERENCED TO THE CITY OF WEST ALLIS DATUM. TO CONVERT ELEVATIONS FROM THE CITY OF WEST ALLIS DATUM TO NAVD 88, ADD 580.35.

6) THE EXISTING ROADWAY SURFACE IN WEST NATIONAL AVENUE FROM SOUTH 108TH STREET TO WEST LINCOLN AVENUE IS 3" ASPHALT OVER 9" CONCRETE.

WISCONSIN
ALEXANDER J WEISLAK E-101812 WAUWATOSA WI
PROFESSIONAL ENGINEER

**CITY OF WEST ALLIS**
**ENGINEERING DEPARTMENT**

PLAN
WATER MAIN RELAY & BLDG. SERV.
IN
WEST NATIONAL AVENUE
FROM SOUTH 102ND STREET
TO APPROX. 330' WEST OF SOUTH 101ST STREET

| | | |
|---|---|---|
| CONTRACT NO. STATE CONT. | CONTRACTOR | HOR. 1"=60' |
| ACCOUNT NO. P2332H | INSPECTOR | SCALE: VERT. 1"=10' |
| | AS-BUILT ENT'D BY | SYSTEM NO. SS-19, SS-20 |
| | AS-BUILT CHK'D BY | ¼ SEC. NO. 485, 486, 519 |
| | GIS ENTERED BY | |

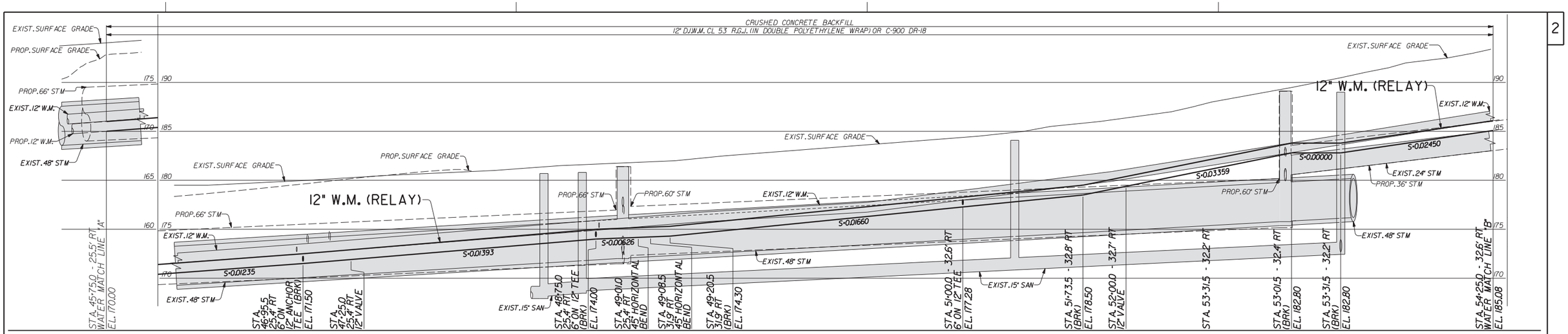
DRAWN BY FGL
DATE DRAWN 10-24
DESIGNED BY AJW
CHECKED BY RJH
SURVEY
FINAL PLAN DATE

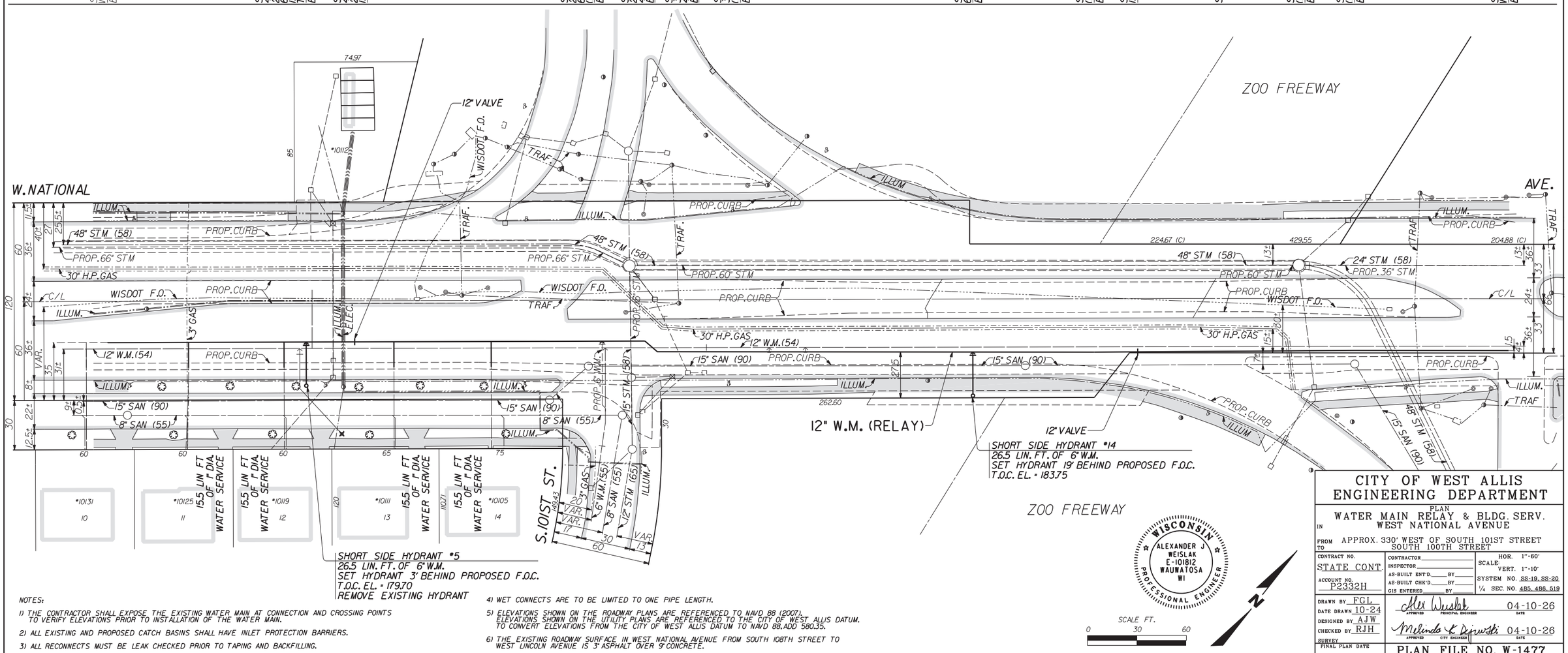
Alex Weislak 04-10-26
APPROVED PRINCIPAL ENGINEER DATE

Melinda K Dejewski 04-10-26
APPROVED CITY ENGINEER DATE

PLAN FILE NO. W-1476

| PROJECT NO: 2410-15-71 | HWY: WEST NATIONAL AVENUE | COUNTY: MILWAUKEE | WATER MAIN PLAN | SHEET 200 |
|---|---|---|---|---|




NOTES:

1) THE CONTRACTOR SHALL EXPOSE THE EXISTING WATER MAIN AT CONNECTION AND CROSSING POINTS TO VERIFY ELEVATIONS PRIOR TO INSTALLATION OF THE WATER MAIN.

2) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

3) ALL RECONNECTS MUST BE LEAK CHECKED PRIOR TO TAPING AND BACKFILLING.

4) WET CONNECTS ARE TO BE LIMITED TO ONE PIPE LENGTH.

5) ELEVATIONS SHOWN ON THE ROADWAY PLANS ARE REFERENCED TO NAVD 88 (2007). ELEVATIONS SHOWN ON THE UTILITY PLANS ARE REFERENCED TO THE CITY OF WEST ALLIS DATUM. TO CONVERT ELEVATIONS FROM THE CITY OF WEST ALLIS DATUM TO NAVD 88, ADD 580.35.

6) THE EXISTING ROADWAY SURFACE IN WEST NATIONAL AVENUE FROM SOUTH 108TH STREET TO WEST LINCOLN AVENUE IS 3" ASPHALT OVER 9" CONCRETE.

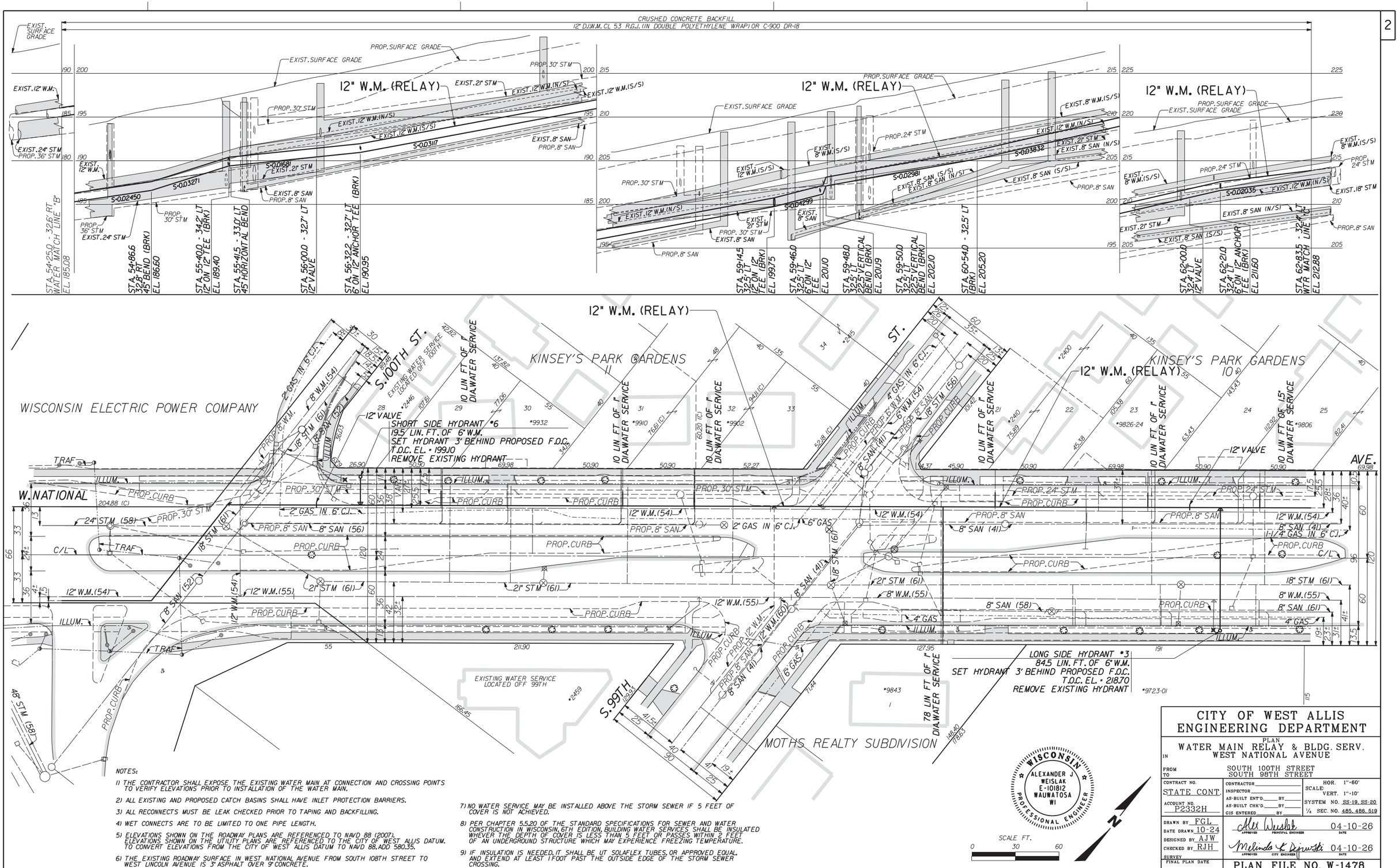
WISCONSIN
ALEXANDER J WEISLAK
E-101812
WAUWATOSA
WI
PROFESSIONAL ENGINEER

# CITY OF WEST ALLIS
# ENGINEERING DEPARTMENT

PLAN
WATER MAIN RELAY & BLDG. SERV.
IN WEST NATIONAL AVENUE
FROM APPROX. 330' WEST OF SOUTH 101ST STREET
TO SOUTH 100TH STREET

| | | |
|---|---|---|
| CONTRACT NO. STATE CONT. | CONTRACTOR | HOR. 1"=60' |
| ACCOUNT NO. P2332H | INSPECTOR | SCALE: VERT. 1"=10' |
| | AS-BUILT ENT'D BY | SYSTEM NO. SS-19, SS-20 |
| | AS-BUILT CHK'D BY | ¼ SEC. NO. 485, 486, 519 |
| | GIS ENTERED BY | |
| DRAWN BY FGL | Alex Weislak APPROVED PRINCIPAL ENGINEER | 04-10-26 DATE |
| DATE DRAWN 10-24 | | |
| DESIGNED BY AJW | | |
| CHECKED BY RJH | Melinda K Dejewski APPROVED CITY ENGINEER | 04-10-26 DATE |
| SURVEY FINAL PLAN DATE | PLAN FILE NO. W-1477 | |

| PROJECT NO: 2410-15-71 | HWY: WEST NATIONAL AVENUE | COUNTY: MILWAUKEE | WATER MAIN PLAN | SHEET 201 |
|---|---|---|---|---|




NOTES:

1) THE CONTRACTOR SHALL EXPOSE THE EXISTING WATER MAIN AT CONNECTION AND CROSSING POINTS TO VERIFY ELEVATIONS PRIOR TO INSTALLATION OF THE WATER MAIN.

2) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

3) ALL RECONNECTS MUST BE LEAK CHECKED PRIOR TO TAPING AND BACKFILLING.

4) WET CONNECTS ARE TO BE LIMITED TO ONE PIPE LENGTH.

5) ELEVATIONS SHOWN ON THE ROADWAY PLANS ARE REFERENCED TO NAVD 88 (2007). ELEVATIONS SHOWN ON THE UTILITY PLANS ARE REFERENCED TO THE CITY OF WEST ALLIS DATUM. TO CONVERT ELEVATIONS FROM THE CITY OF WEST ALLIS DATUM TO NAVD 88, ADD 580.35.

6) THE EXISTING ROADWAY SURFACE IN WEST NATIONAL AVENUE FROM SOUTH 108TH STREET TO WEST LINCOLN AVENUE IS 3" ASPHALT OVER 9" CONCRETE.

7) NO WATER SERVICE MAY BE INSTALLED ABOVE THE STORM SEWER IF 5 FEET OF COVER IS NOT ACHIEVED.

8) PER CHAPTER 5.5.20 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, 6TH EDITION, BUILDING WATER SERVICES SHALL BE INSULATED WHEVER THE DEPTH OF COVER IS LESS THAN 5 FEET OR PASSES WITHIN 2 FEET OF AN UNDERGROUND STRUCTURE WHICH MAY EXPERIENCE FREEZING TEMPERATURE.

9) IF INSULATION IS NEEDED, IT SHALL BE UT SOLAFLEX TUBES, OR APPROVED EQUAL, AND EXTEND AT LEAST 1 FOOT PAST THE OUTSIDE EDGE OF THE STORM SEWER CROSSING.

WISCONSIN
ALEXANDER J WEISLAK
E-101812
WAUWATOSA WI
PROFESSIONAL ENGINEER

# CITY OF WEST ALLIS
# ENGINEERING DEPARTMENT

PLAN IN: WATER MAIN RELAY & BLDG. SERV. WEST NATIONAL AVENUE

FROM: SOUTH 100TH STREET
TO: SOUTH 98TH STREET

CONTRACT NO. STATE CONT.
ACCOUNT NO. P2332H

CONTRACTOR
INSPECTOR
AS-BUILT ENT'D BY
AS-BUILT CHK'D BY
GIS ENTERED BY

SCALE: HOR. 1"=60' VERT. 1"=10'
SYSTEM NO. SS-19, SS-20
¼ SEC. NO. 485, 486, 519

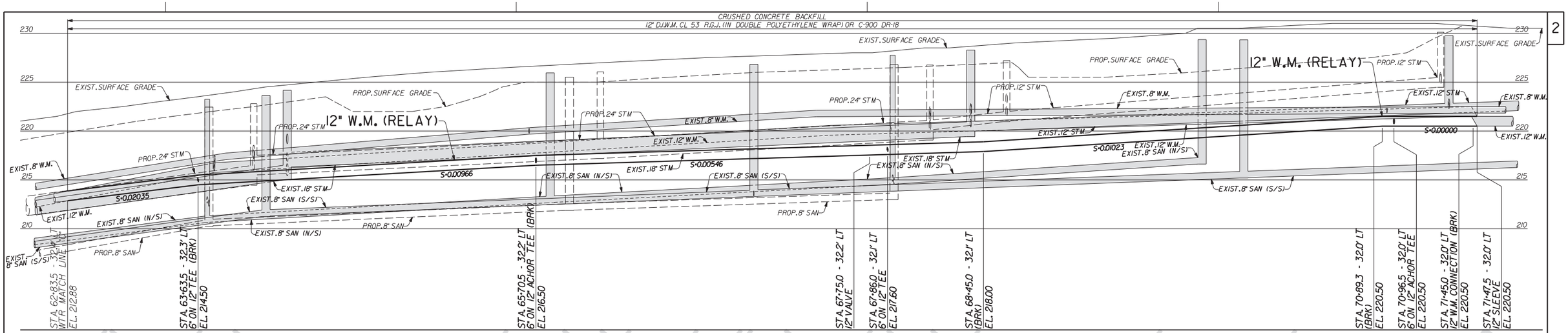
DRAWN BY FGL
DATE DRAWN 10-24
DESIGNED BY AJW
CHECKED BY RJH
SURVEY
FINAL PLAN DATE

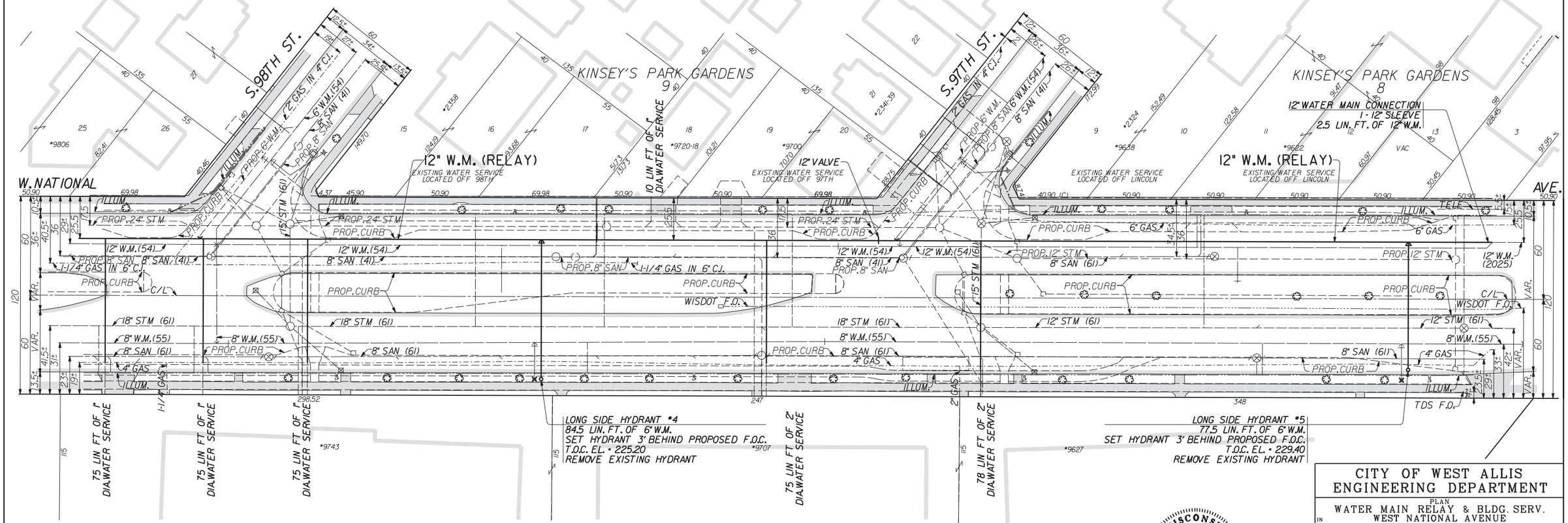
Alex Weislak 04-10-26
APPROVED PRINCIPAL ENGINEER DATE

Melinda K Dejewski 04-10-26
APPROVED CITY ENGINEER DATE

PLAN FILE NO. W-1478

| PROJECT NO: 2410-15-71 | HWY: WEST NATIONAL AVENUE | COUNTY: MILWAUKEE | WATER MAIN PLAN | SHEET 202 |
|---|---|---|---|---|




NOTES:

1) THE CONTRACTOR SHALL EXPOSE THE EXISTING WATER MAIN AT CONNECTION AND CROSSING POINTS TO VERIFY ELEVATIONS PRIOR TO INSTALLATION OF THE WATER MAIN.

2) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

3) ALL RECONNECTS MUST BE LEAK CHECKED PRIOR TO TAPING AND BACKFILLING.

4) WET CONNECTS ARE TO BE LIMITED TO ONE PIPE LENGTH.

5) ELEVATIONS SHOWN ON THE ROADWAY PLANS ARE REFERENCED TO NAVD 88 (2007). ELEVATIONS SHOWN ON THE UTILITY PLANS ARE REFERENCED TO THE CITY OF WEST ALLIS DATUM. TO CONVERT ELEVATIONS FROM THE CITY OF WEST ALLIS DATUM TO NAVD 88, ADD 580.35.

6) THE EXISTING ROADWAY SURFACE IN WEST NATIONAL AVENUE FROM SOUTH 108TH STREET TO WEST LINCOLN AVENUE IS 3" ASPHALT OVER 9" CONCRETE.

7) INSTALL ONE TEMPORARY 6" CAP ON NEW TEE DURING CONSTRUCTION. RECONNECT TO EXISTING SERVICE AFTER PRESSURE AND SAFE WATER TESTING. 6" WATER SERVICE RECONNECT TO BE INSTALLED AFTER ABANDONMENT OF EXISTING WATER MAIN.

8) NO WATER SERVICE MAY BE INSTALLED ABOVE THE STORM SEWER IF 5 FEET OF COVER IS NOT ACHIEVED.

9) PER CHAPTER 5.5.20 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, 6TH EDITION, BUILDING WATER SERVICES SHALL BE INSULATED WHEVER THE DEPTH OF COVER IS LESS THAN 5 FEET OR PASSES WITHIN 2 FEET OF AN UNDERGROUND STRUCTURE WHICH MAY EXPERIENCE FREEZING TEMPERATURE.

10) IF INSULATION IS NEEDED, IT SHALL BE UT SOLAFLEX TUBES, OR APPROVED EQUAL, AND EXTEND AT LEAST 1 FOOT PAST THE OUTSIDE EDGE OF THE STORM SEWER CROSSING.

WISCONSIN
ALEXANDER J WEISLAK
E-101812
WAUWATOSA WI
PROFESSIONAL ENGINEER

SCALE FT.
0 30 60

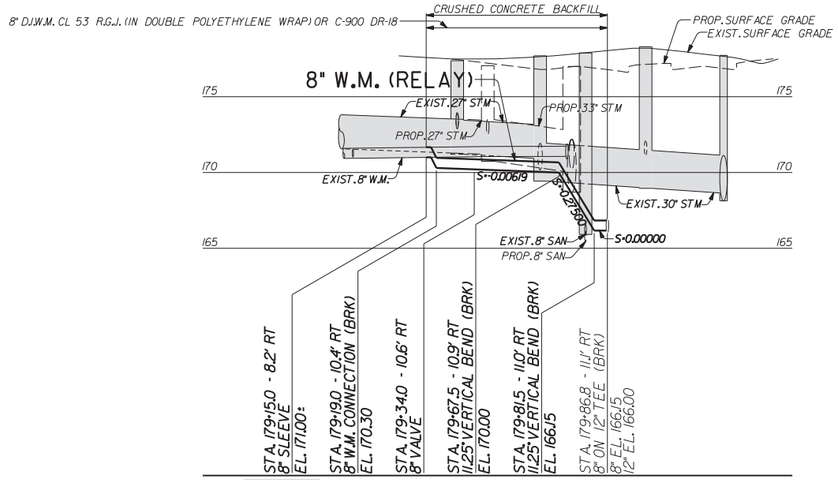
N

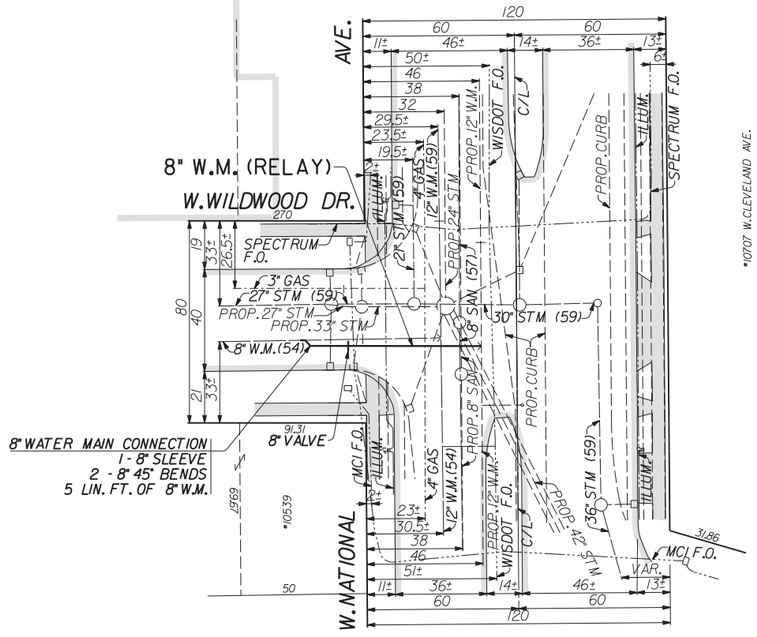
# CITY OF WEST ALLIS
# ENGINEERING DEPARTMENT

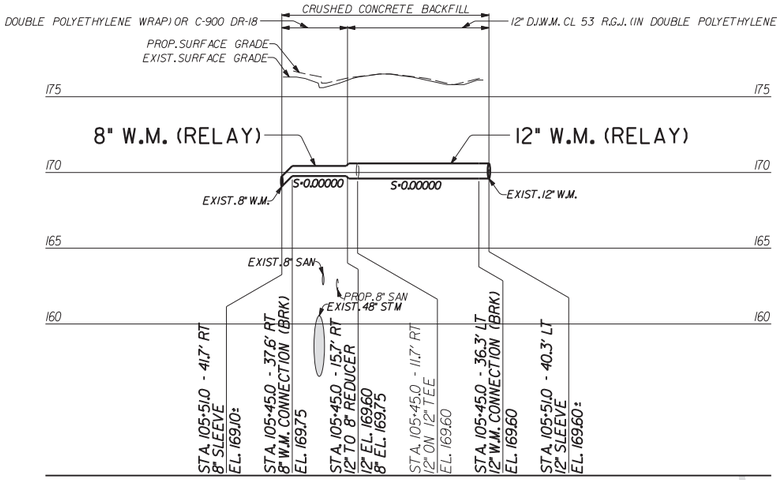
PLAN
WATER MAIN RELAY & BLDG. SERV.
IN WEST NATIONAL AVENUE
FROM SOUTH 98TH STREET
TO WEST LINCOLN AVENUE

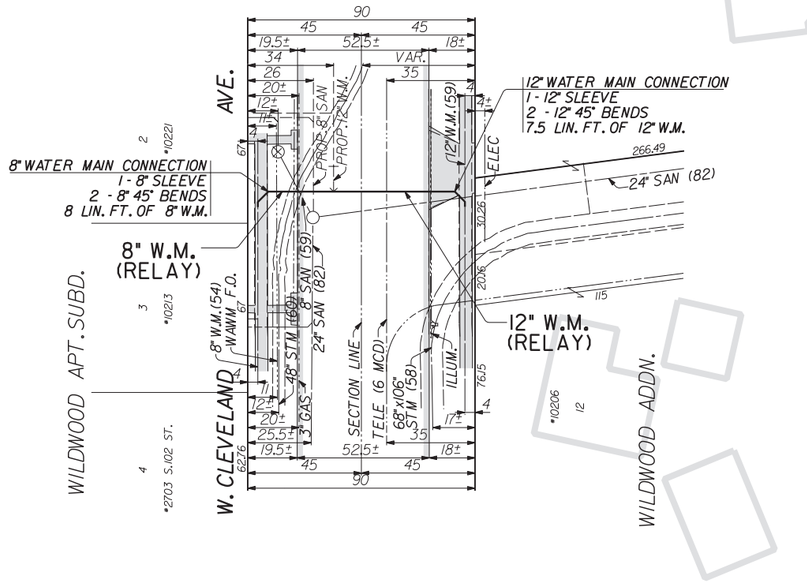
| | | |
|---|---|---|
| CONTRACT NO. STATE CONT. | CONTRACTOR | HOR. 1"=60' |
| ACCOUNT NO. P2332H | INSPECTOR | VERT. 1"=10' |
| | AS-BUILT ENT'D BY | SCALE: SYSTEM NO. SS-19, SS-20 |
| | AS-BUILT CHK'D BY | 1/4 SEC. NO. 485, 486, 519 |
| | GIS ENTERED BY | |
| DRAWN BY FGL | Alex Weislak APPROVED PRINCIPAL ENGINEER | 04-10-26 DATE |
| DATE DRAWN 10-24 | | |
| DESIGNED BY AJW | | |
| CHECKED BY RJH | Melinda K Dejwski APPROVED CITY ENGINEER | 04-10-26 DATE |
| SURVEY FINAL PLAN DATE | PLAN FILE NO. W-1479 | |

PROJECT NO: 2410-15-71 | HWY: WEST NATIONAL AVENUE | COUNTY: MILWAUKEE | WATER MAIN PLAN | SHEET 203




NOTES:

1) THE CONTRACTOR SHALL EXPOSE THE EXISTING WATER MAIN AT CONNECTION AND CROSSING POINTS TO VERIFY ELEVATIONS PRIOR TO INSTALLATION OF THE WATER MAIN.

2) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

3) ALL RECONNECTS MUST BE LEAK CHECKED PRIOR TO TAPING AND BACKFILLING.

4) WET CONNECTS ARE TO BE LIMITED TO ONE PIPE LENGTH.

5) ELEVATIONS SHOWN ON THE ROADWAY PLANS ARE REFERENCED TO NAVD 88 (2007). ELEVATIONS SHOWN ON THE UTILITY PLANS ARE REFERENCED TO THE CITY OF WEST ALLIS DATUM. TO CONVERT ELEVATIONS FROM THE CITY OF WEST ALLIS DATUM TO NAVD 88, ADD 580.35.

6) THE EXISTING ROADWAY SURFACE IN WEST NATIONAL AVENUE FROM SOUTH 108TH STREET TO WEST LINCOLN AVENUE IS 3" ASPHALT OVER 9" CONCRETE. THE EXISTING ROADWAY SURFACE IN WEST WILDWOOD DRIVE IS 8" CONCRETE. THE EXISTING ROADWAY SURFACE IN WEST CLEVELAND AVENUE IS 3" ASPHALT OVER 8" CONCRETE.




SCALE FT.
0 30 60

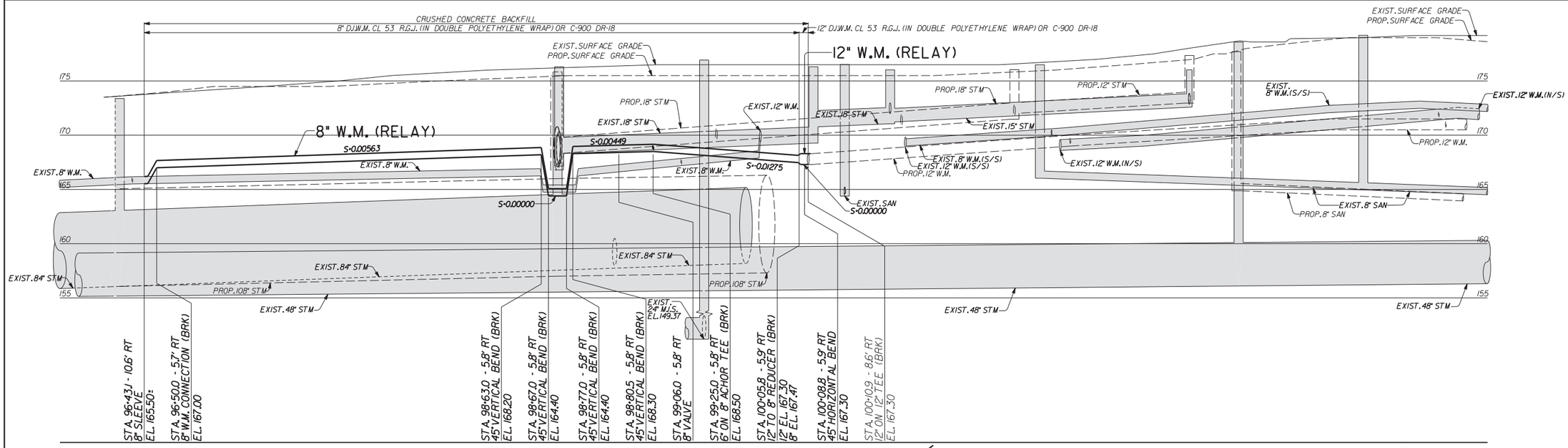
CITY OF WEST ALLIS
ENGINEERING DEPARTMENT

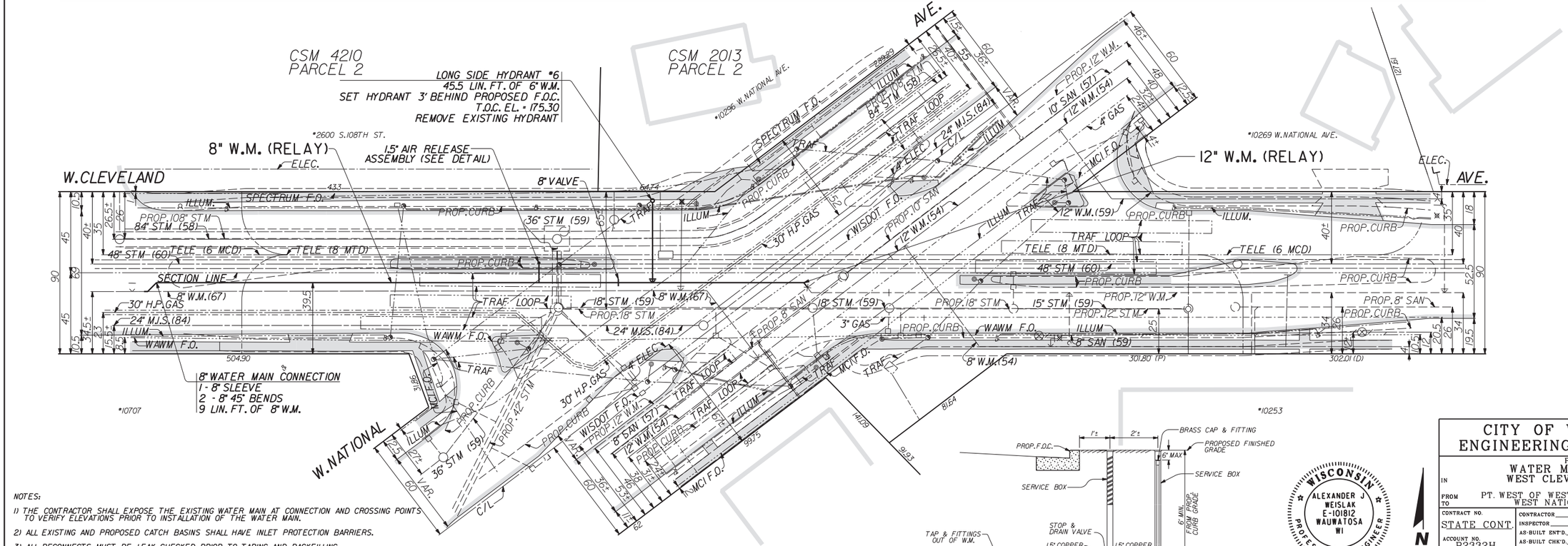
PLAN
IN WATER MAIN RELAY
WEST WILDWOOD DRIVE &
WEST CLEVELAND AVENUE

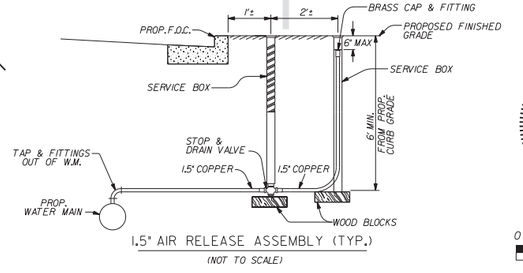
AT WEST NATIONAL AVENUE

| | | |
|---|---|---|
| CONTRACT NO. STATE CONT. | CONTRACTOR | HOR. 1"=60' |
| ACCOUNT NO. P2332H | INSPECTOR | SCALE: VERT. 1"=10' |
| | AS-BUILT ENT'D BY | SYSTEM NO. SS-19, SS-20 |
| | AS-BUILT CHK'D BY | 1/4 SEC. NO. 485, 486, 519 |
| | GIS ENTERED BY | |
| DRAWN BY FGL | Alex Weislak APPROVED PRINCIPAL ENGINEER | 04-10-26 DATE |
| DATE DRAWN 10-24 | | |
| DESIGNED BY AJW | | |
| CHECKED BY RJH | Melinda K Dejewski APPROVED CITY ENGINEER | 04-10-26 DATE |
| SURVEY FINAL PLAN DATE | PLAN FILE NO. W-1480 | |

PROJECT NO: 2410-15-71 | HWY: WEST NATIONAL AVENUE | COUNTY: MILWAUKEE | WATER MAIN PLAN | SHEET 204




1.5" AIR RELEASE ASSEMBLY (TYP.)
(NOT TO SCALE)

WISCONSIN
ALEXANDER J WEISLAK
E-101812
WAUWATOSA
WI
PROFESSIONAL ENGINEER

SCALE FT.
0 30 60

N

NOTES:

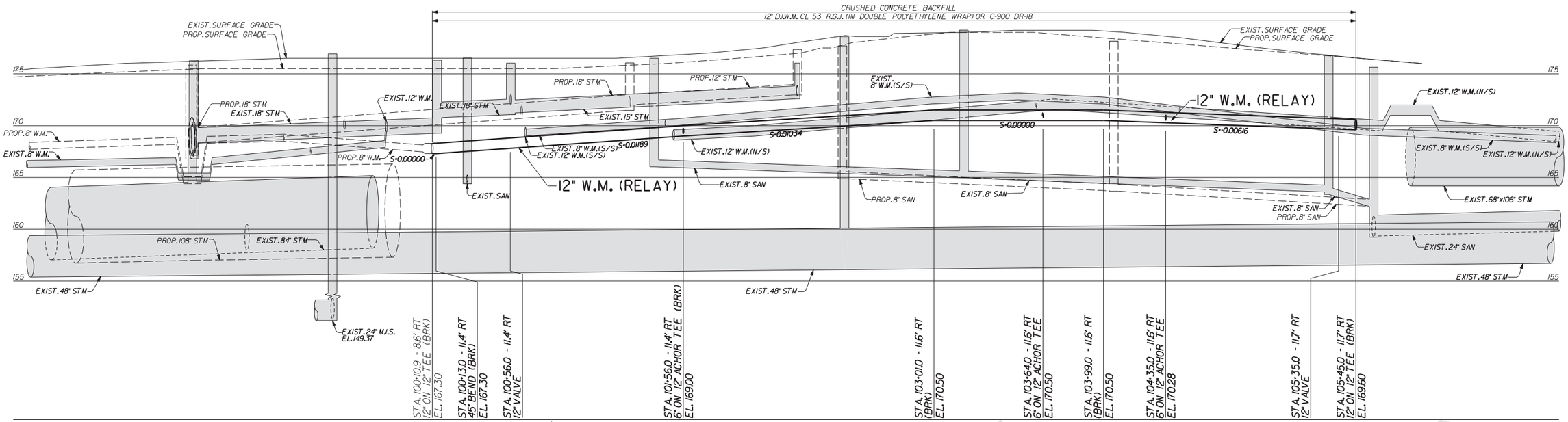
1) THE CONTRACTOR SHALL EXPOSE THE EXISTING WATER MAIN AT CONNECTION AND CROSSING POINTS TO VERIFY ELEVATIONS PRIOR TO INSTALLATION OF THE WATER MAIN.
2) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.
3) ALL RECONNECTS MUST BE LEAK CHECKED PRIOR TO TAPING AND BACKFILLING.
4) WET CONNECTS ARE TO BE LIMITED TO ONE PIPE LENGTH.
5) ELEVATIONS SHOWN ON THE ROADWAY PLANS ARE REFERENCED TO NAVD 88 (2007). ELEVATIONS SHOWN ON THE UTILITY PLANS ARE REFERENCED TO THE CITY OF WEST ALLIS DATUM. TO CONVERT ELEVATIONS FROM THE CITY OF WEST ALLIS DATUM TO NAVD 88, ADD 580.35.
6) THE EXISTING ROADWAY SURFACE IN WEST NATIONAL AVENUE FROM SOUTH 108TH STREET TO WEST LINCOLN AVENUE IS 3" ASPHALT OVER 9" CONCRETE. THE EXISTING ROADWAY SURFACE IN WEST CLEVELAND AVENUE IS 3" ASPHALT OVER 8" CONCRETE.

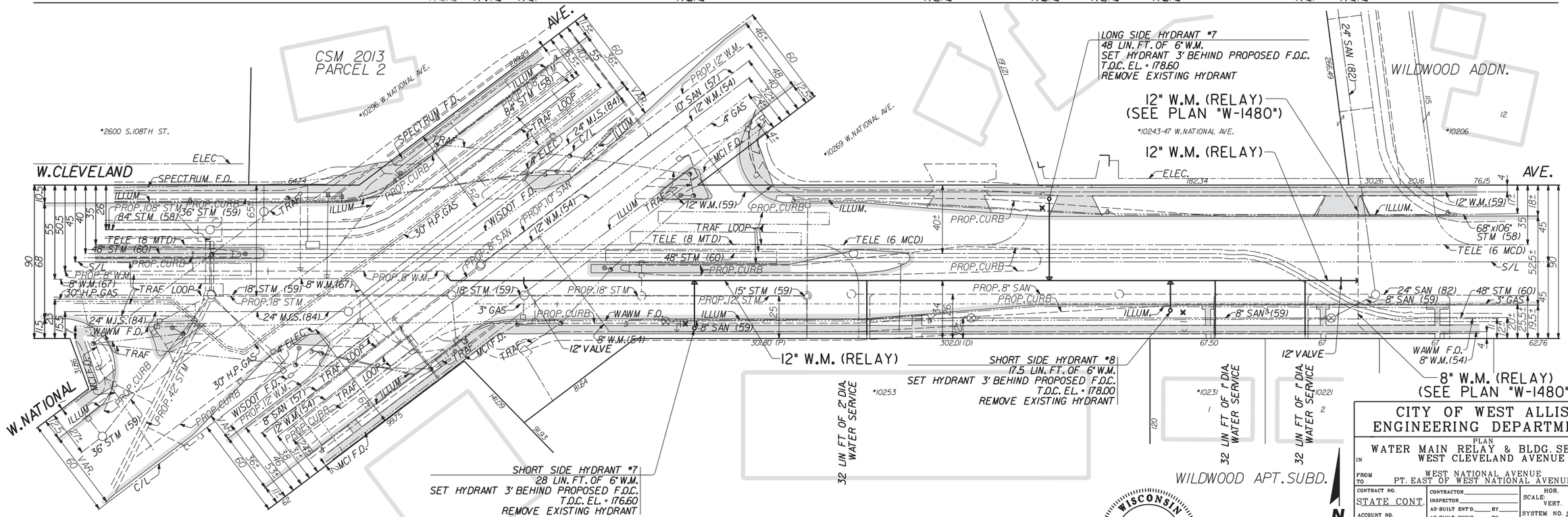
# CITY OF WEST ALLIS
# ENGINEERING DEPARTMENT

PLAN: WATER MAIN RELAY
IN: WEST CLEVELAND AVENUE
FROM: PT. WEST OF WEST NATIONAL AVENUE
TO: WEST NATIONAL AVENUE

| | | |
|---|---|---|
| CONTRACT NO. STATE CONT. | CONTRACTOR | HOR. 1"=60' |
| ACCOUNT NO. P2332H | INSPECTOR | SCALE VERT. 1"=10' |
| | AS-BUILT ENT'D BY | SYSTEM NO. SS-19, SS-20 |
| | AS-BUILT CHK'D BY | ¼ SEC. NO. 485, 486, 519 |
| | GIS ENTERED BY | |
| DRAWN BY FGL | Alex Weislak APPROVED PRINCIPAL ENGINEER | 04-10-26 DATE |
| DATE DRAWN 10-24 | | |
| DESIGNED BY AJW | | |
| CHECKED BY RJH | Melinda K. Dejewski APPROVED CITY ENGINEER | 04-10-26 DATE |
| SURVEY FINAL PLAN DATE | PLAN FILE NO. W-1481 | |

PROJECT NO: 2410-15-71 | HWY: WEST NATIONAL AVENUE | COUNTY: MILWAUKEE | WATER MAIN PLAN | SHEET 205




NOTES:

1) THE CONTRACTOR SHALL EXPOSE THE EXISTING WATER MAIN AT CONNECTION AND CROSSING POINTS TO VERIFY ELEVATIONS PRIOR TO INSTALLATION OF THE WATER MAIN.

2) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

3) ALL RECONNECTS MUST BE LEAK CHECKED PRIOR TO TAPING AND BACKFILLING.

4) WET CONNECTS ARE TO BE LIMITED TO ONE PIPE LENGTH.

5) ELEVATIONS SHOWN ON THE ROADWAY PLANS ARE REFERENCED TO NAVD 88 (2007). ELEVATIONS SHOWN ON THE UTILITY PLANS ARE REFERENCED TO THE CITY OF WEST ALLIS DATUM. TO CONVERT ELEVATIONS FROM THE CITY OF WEST ALLIS DATUM TO NAVD 88, ADD 580.35.

6) THE EXISTING ROADWAY SURFACE IN WEST NATIONAL AVENUE FROM SOUTH 108TH STREET TO WEST LINCOLN AVENUE IS 3" ASPHALT OVER 9" CONCRETE. THE EXISTING ROADWAY SURFACE IN WEST CLEVELAND AVENUE IS 3" ASPHALT OVER 8" CONCRETE.

WISCONSIN
ALEXANDER J WEISLAK
E-101812
WAUWATOSA WI
PROFESSIONAL ENGINEER

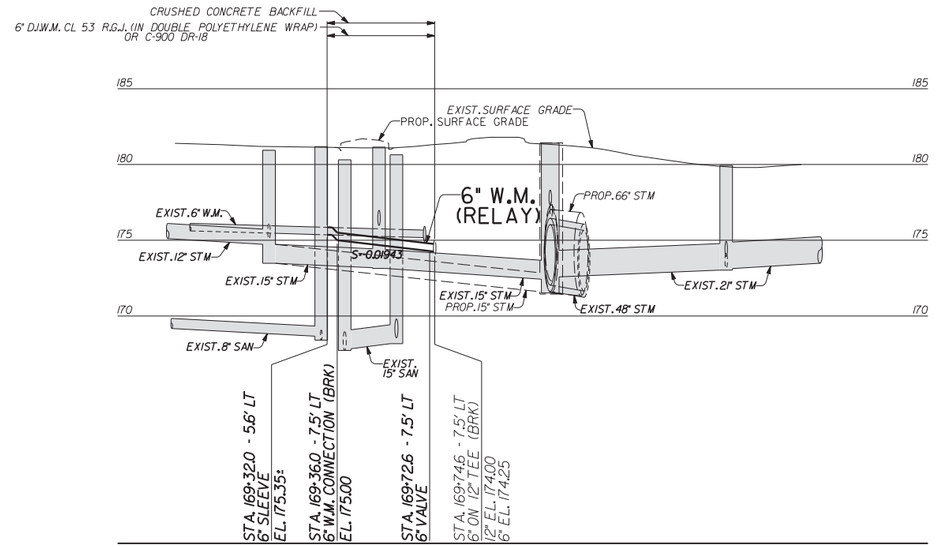
# CITY OF WEST ALLIS
# ENGINEERING DEPARTMENT

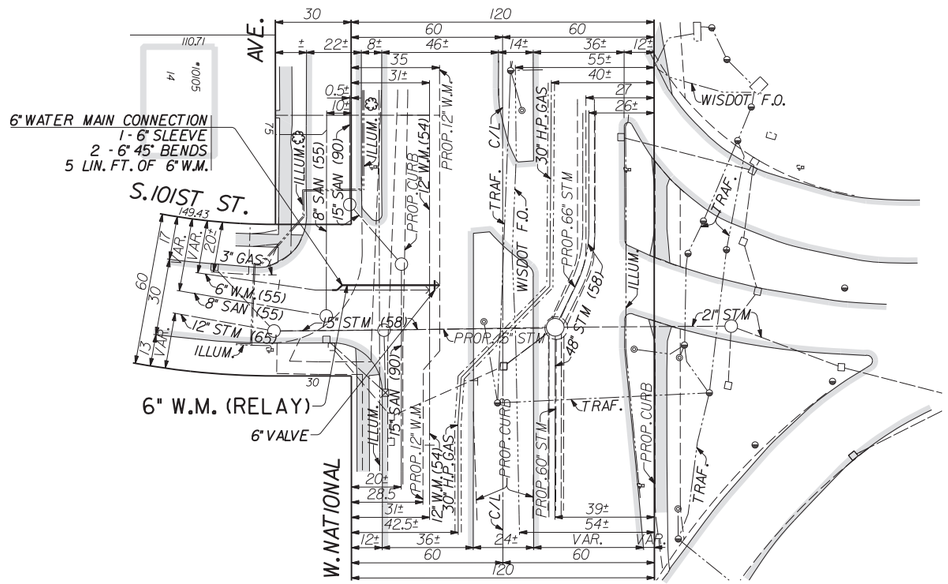
PLAN
WATER MAIN RELAY & BLDG. SERV.
IN WEST CLEVELAND AVENUE
FROM WEST NATIONAL AVENUE
TO PT. EAST OF WEST NATIONAL AVENUE

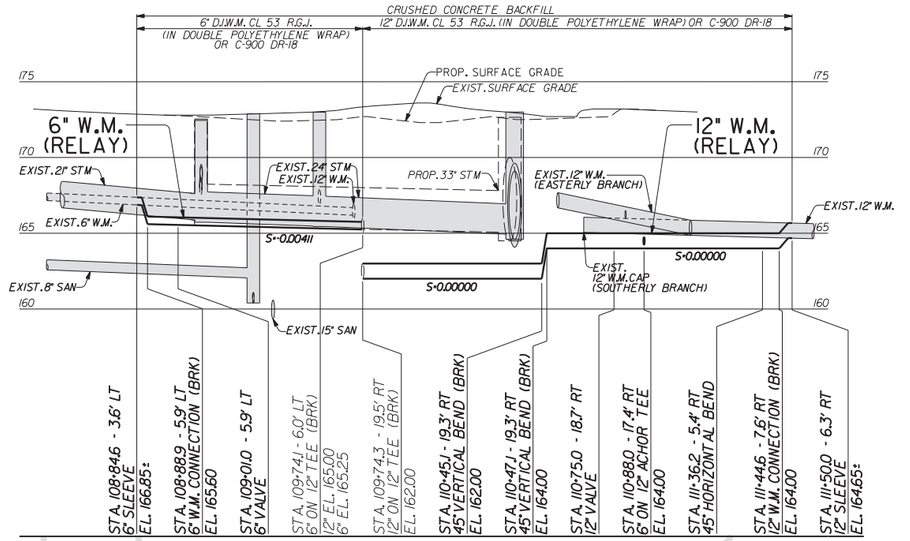
| | | |
|---|---|---|
| CONTRACT NO. STATE CONT. | CONTRACTOR | HOR. 1"=60' |
| ACCOUNT NO. P2332H | INSPECTOR | SCALE: VERT. 1"=10' |
| | AS-BUILT ENT'D BY | SYSTEM NO. SS-19, SS-20 |
| | AS-BUILT CHK'D BY | ¼ SEC. NO. 485, 486, 519 |
| | GIS ENTERED BY | |
| DRAWN BY FGL | Alex Weislak APPROVED PRINCIPAL ENGINEER | 04-10-26 DATE |
| DATE DRAWN 10-24 | | |
| DESIGNED BY AJW | | |
| CHECKED BY RJH | Melinda K Dejewski APPROVED CITY ENGINEER | 04-10-26 DATE |
| SURVEY FINAL PLAN DATE | | |

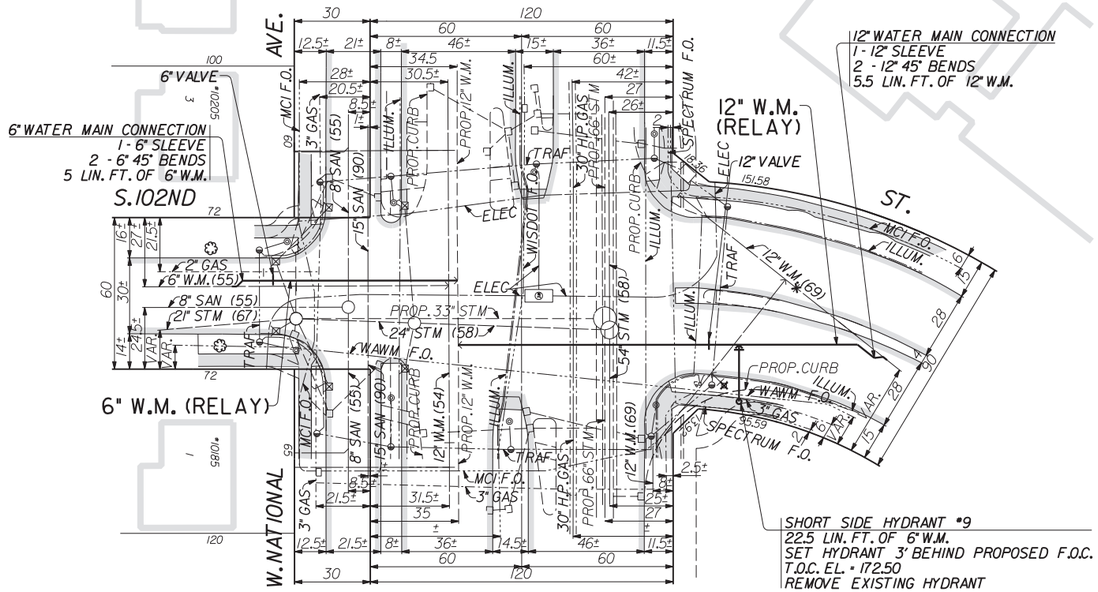
PLAN FILE NO. W-1482

PROJECT NO: 2410-15-71 | HWY: WEST NATIONAL AVENUE | COUNTY: MILWAUKEE | WATER MAIN PLAN | SHEET 206




NOTES:

1) THE CONTRACTOR SHALL EXPOSE THE EXISTING WATER MAIN AT CONNECTION AND CROSSING POINTS TO VERIFY ELEVATIONS PRIOR TO INSTALLATION OF THE WATER MAIN.

2) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

3) ALL RECONNECTS MUST BE LEAK CHECKED PRIOR TO TAPING AND BACKFILLING.

4) WET CONNECTS ARE TO BE LIMITED TO ONE PIPE LENGTH.

5) ELEVATIONS SHOWN ON THE ROADWAY PLANS ARE REFERENCED TO NAVD 88 (2007). ELEVATIONS SHOWN ON THE UTILITY PLANS ARE REFERENCED TO THE CITY OF WEST ALLIS DATUM. TO CONVERT ELEVATIONS FROM THE CITY OF WEST ALLIS DATUM TO NAVD 88, ADD 580.35.

6) THE EXISTING ROADWAY SURFACE IN SOUTH 101ST STREET AT WEST NATIONAL AVENUE IS 4" ASPHALT OVER 8" CONCRETE. THE EXISTING ROADWAY SURFACE IN NORTHBOUND SOUTH 102ND STREET AT WEST NATIONAL AVENUE IS 8" CONCRETE PAVEMENT. SOUTHBOUND SOUTH 102ND STREET IS 7" CONCRETE PAVEMENT.

WISCONSIN
ALEXANDER J WEISLAK
E-101812
WAUWATOSA
WI
PROFESSIONAL ENGINEER

SCALE FT.
0 30 60

# CITY OF WEST ALLIS
# ENGINEERING DEPARTMENT

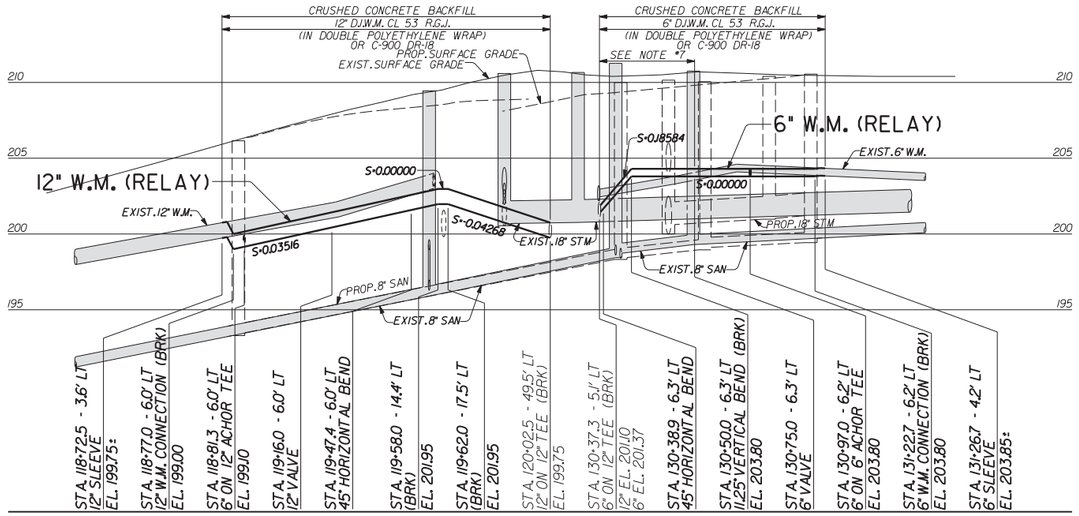
PLAN
IN WATER MAIN RELAY
SOUTH 101ST & 102ND STREET

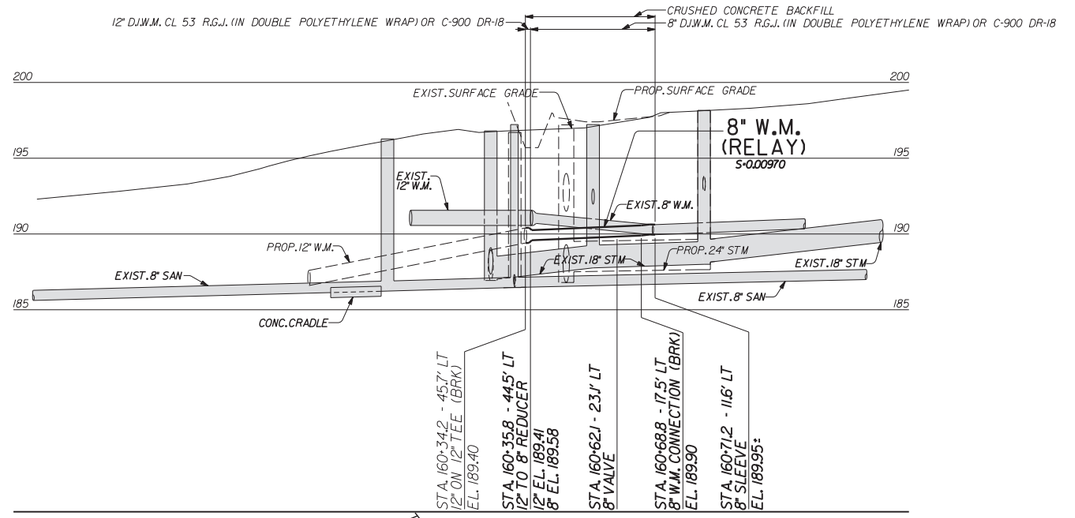
AT WEST NATIONAL AVENUE

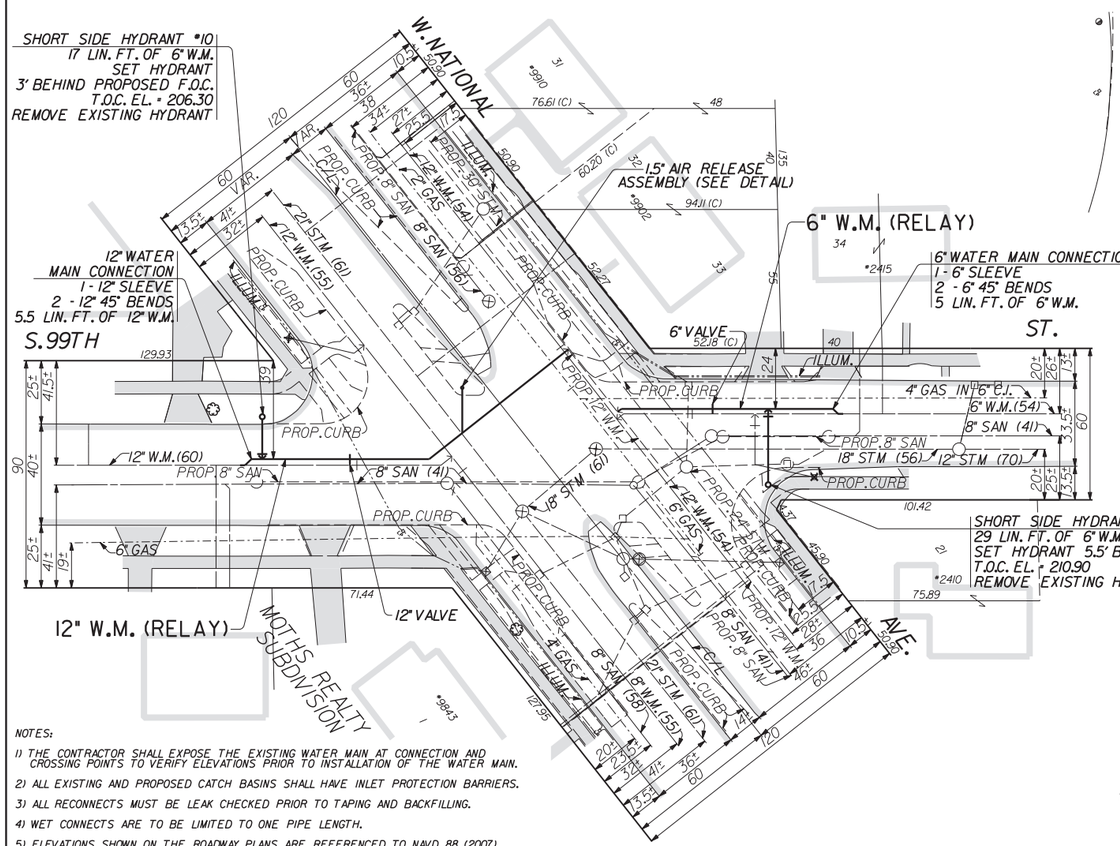
| | | |
|---|---|---|
| CONTRACT NO. STATE CONT. | CONTRACTOR | SCALE: HOR. 1"=60' |
| ACCOUNT NO. P2332H | INSPECTOR | VERT. 1"=10' |
| | AS-BUILT ENT'D BY | SYSTEM NO. SS-19, SS-20 |
| | AS-BUILT CHK'D BY | ¼ SEC. NO. 485, 486, 519 |
| | GIS ENTERED BY | |
| DRAWN BY FGL | Alex Weislak APPROVED PRINCIPAL ENGINEER | 04-10-26 DATE |
| DATE DRAWN 10-24 | | |
| DESIGNED BY AJW | | |
| CHECKED BY RJH | Melinda K Dejewski APPROVED CITY ENGINEER | 04-10-26 DATE |
| SURVEY FINAL PLAN DATE | | |

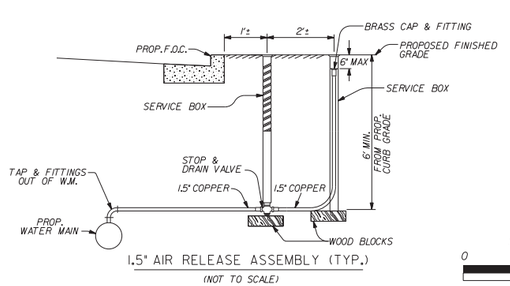
PLAN FILE NO. W-1483

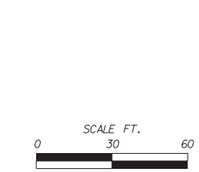
| PROJECT NO: 2410-15-71 | HWY: WEST NATIONAL AVENUE | COUNTY: MILWAUKEE | WATER MAIN PLAN | SHEET 207 |
|---|---|---|---|---|




NOTES:

1) THE CONTRACTOR SHALL EXPOSE THE EXISTING WATER MAIN AT CONNECTION AND CROSSING POINTS TO VERIFY ELEVATIONS PRIOR TO INSTALLATION OF THE WATER MAIN.

2) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

3) ALL RECONNECTS MUST BE LEAK CHECKED PRIOR TO TAPING AND BACKFILLING.

4) WET CONNECTS ARE TO BE LIMITED TO ONE PIPE LENGTH.

5) ELEVATIONS SHOWN ON THE ROADWAY PLANS ARE REFERENCED TO NAVD 88 (2007). ELEVATIONS SHOWN ON THE UTILITY PLANS ARE REFERENCED TO THE CITY OF WEST ALLIS DATUM. TO CONVERT ELEVATIONS FROM THE CITY OF WEST ALLIS DATUM TO NAVD 88, ADD 580.35.

6) THE EXISTING ROADWAY SURFACE IN NORTHBOUND SOUTH 99TH STREET AT WEST NATIONAL AVENUE IS 7" CONCRETE PAVEMENT. SOUTHBOUND SOUTH 99TH STREET IS 8" CONCRETE PAVEMENT. THE EXISTING ROADWAY SURFACE IN SOUTH 100TH STREET AT WEST NATIONAL AVENUE IS 7" CONCRETE PAVEMENT.

7) INSULATION ABOVE THE WATER MAIN IS REQUIRED. SEE SPECIALS FOR DETAILS.

ALEXANDER J WEISLAK
E-101812
WAUWATOSA
WI
WISCONSIN
PROFESSIONAL ENGINEER

# CITY OF WEST ALLIS
# ENGINEERING DEPARTMENT

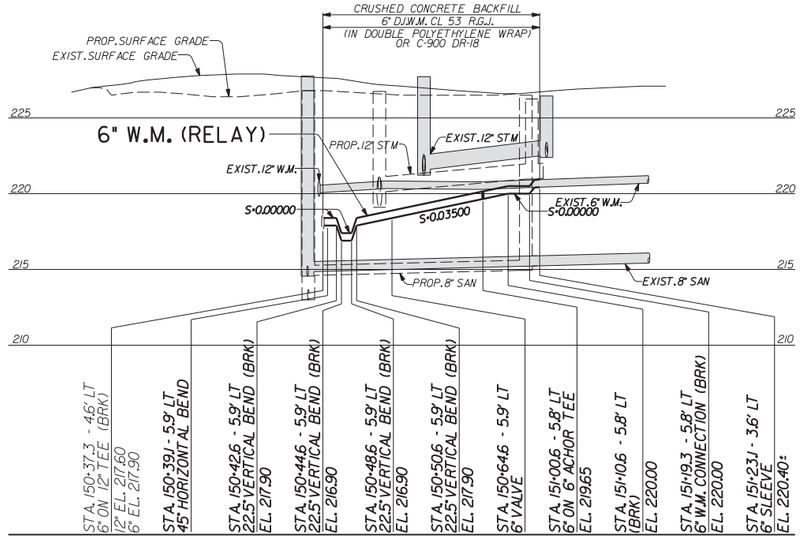
PLAN
IN WATER MAIN RELAY
SOUTH 99TH & 100TH STREET

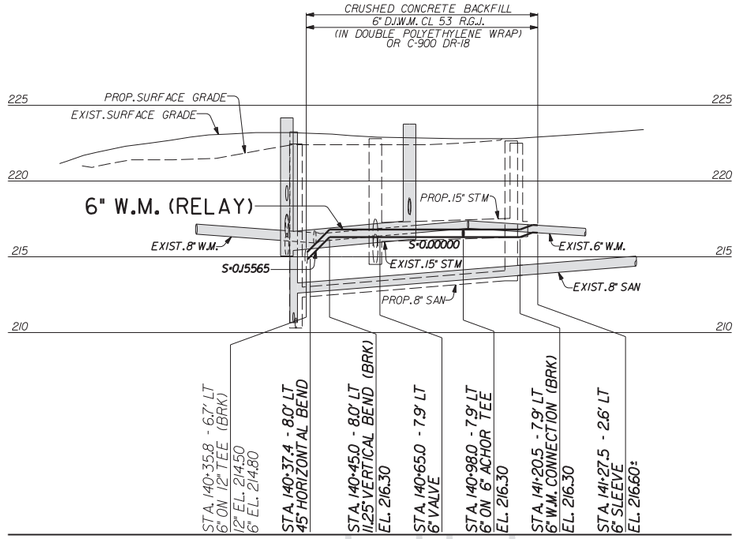
AT WEST NATIONAL AVENUE

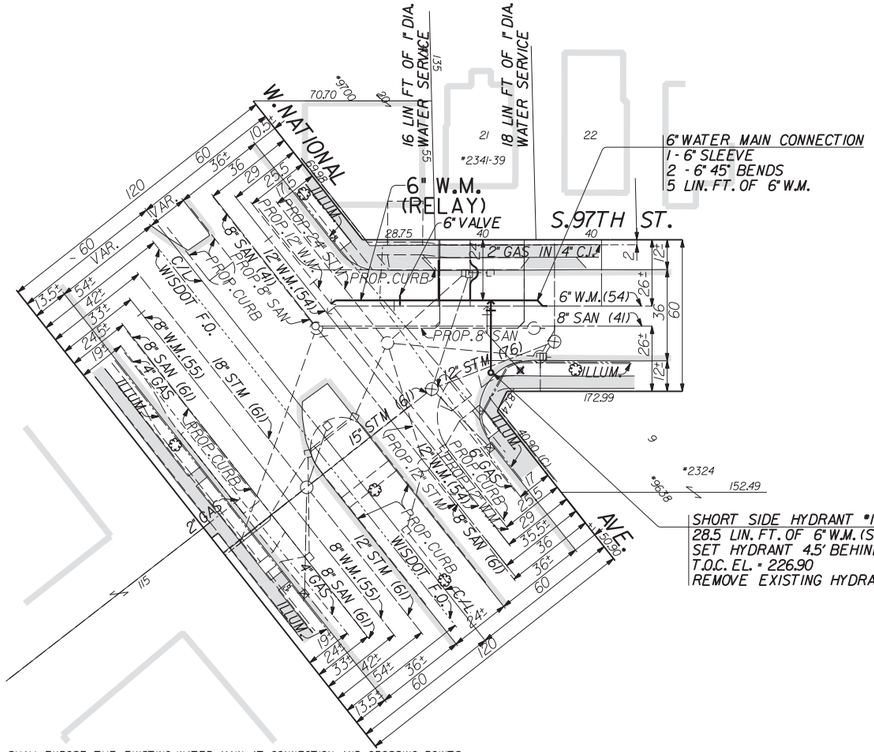
| | | | |
|---|---|---|---|
| CONTRACT NO. STATE CONT. | CONTRACTOR | SCALE HOR. | 1"=60' |
| ACCOUNT NO. P2332H | INSPECTOR | | VERT. 1"=10' |
| | AS-BUILT ENT'D BY | SYSTEM NO. | SS-19, SS-20 |
| | AS-BUILT CHK'D BY | ¼ SEC. NO. | 485, 486, 519 |
| | GIS ENTERED BY | | |
| DRAWN BY FGL | Alex Weislak APPROVED PRINCIPAL ENGINEER 04-10-26 DATE | | |
| DATE DRAWN 10-24 | | | |
| DESIGNED BY AJW | | | |
| CHECKED BY RJH | Melinda L Dejewski APPROVED CITY ENGINEER 04-10-26 DATE | | |
| SURVEY | | | |
| FINAL PLAN DATE | | PLAN FILE NO. W-1484 | |

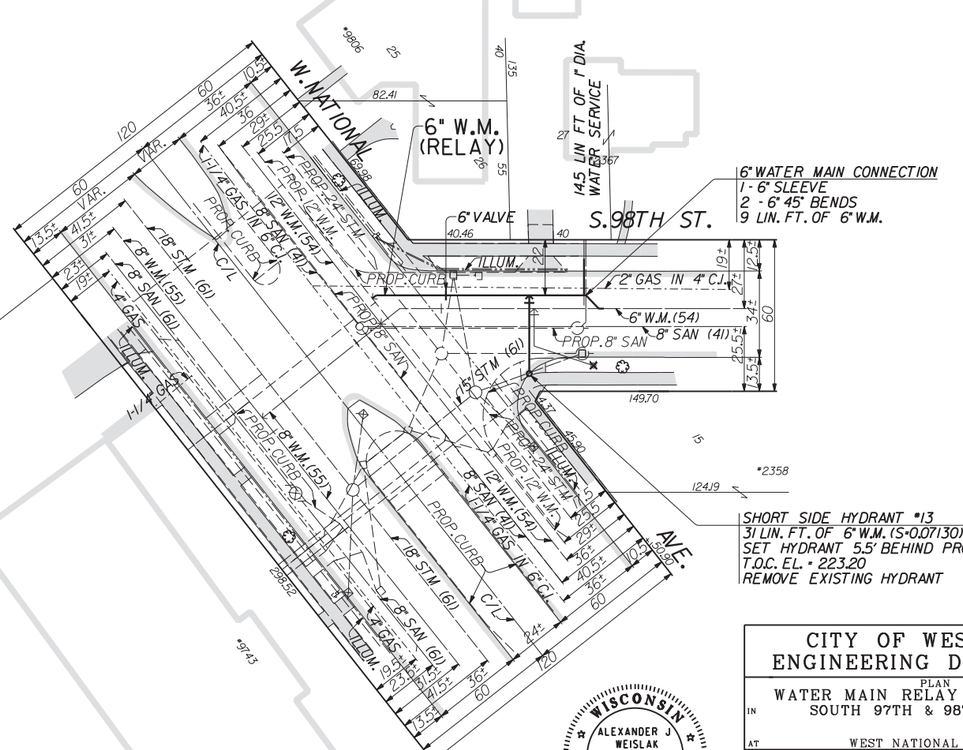
| | | | |
|---|---|---|---|
| PROJECT NO: 2410-15-71 | HWY: WEST NATIONAL AVENUE | COUNTY: MILWAUKEE | WATER MAIN PLAN |

SHEET 208




NOTES:

1) THE CONTRACTOR SHALL EXPOSE THE EXISTING WATER MAIN AT CONNECTION AND CROSSING POINTS TO VERIFY ELEVATIONS PRIOR TO INSTALLATION OF THE WATER MAIN.

2) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

3) ALL RECONNECTS MUST BE LEAK CHECKED PRIOR TO TAPING AND BACKFILLING.

4) WET CONNECTS ARE TO BE LIMITED TO ONE PIPE LENGTH.

5) ELEVATIONS SHOWN ON THE ROADWAY PLANS ARE REFERENCED TO NAVD 88 (2007). ELEVATIONS SHOWN ON THE UTILITY PLANS ARE REFERENCED TO THE CITY OF WEST ALLIS DATUM. TO CONVERT ELEVATIONS FROM THE CITY OF WEST ALLIS DATUM TO NAVD 88, ADD 580.35.

6) THE EXISTING ROADWAY SURFACE IN SOUTH 97TH STREET AT WEST NATIONAL AVENUE IS 8" CONCRETE PAVEMENT. THE EXISTING ROADWAY SURFACE IN SOUTH 98TH STREET AT WEST NATIONAL AVENUE IS 7" CONCRETE PAVEMENT.

7) NO WATER SERVICE MAY BE INSTALLED ABOVE THE STORM SEWER IF 5 FEET OF COVER IS NOT ACHIEVED.

8) PER CHAPTER 5.5.20 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, 6TH EDITION, BUILDING WATER SERVICES SHALL BE INSULATED WHEVER THE DEPTH OF COVER IS LESS THAN 5 FEET OR PASSES WITHIN 2 FEET OF AN UNDERGROUND STRUCTURE WHICH MAY EXPERIENCE FREEZING TEMPERATURE.

9) IF INSULATION IS NEEDED, IT SHALL BE UT SOLAFLEX TUBES, OR APPROVED EQUAL, AND EXTEND AT LEAST 1 FOOT PAST THE OUTSIDE EDGE OF THE STORM SEWER CROSSING.

SCALE FT.
0 30 60

WISCONSIN
ALEXANDER J WEISLAK
E-101812
WAUWATOSA WI
PROFESSIONAL ENGINEER

CITY OF WEST ALLIS
ENGINEERING DEPARTMENT

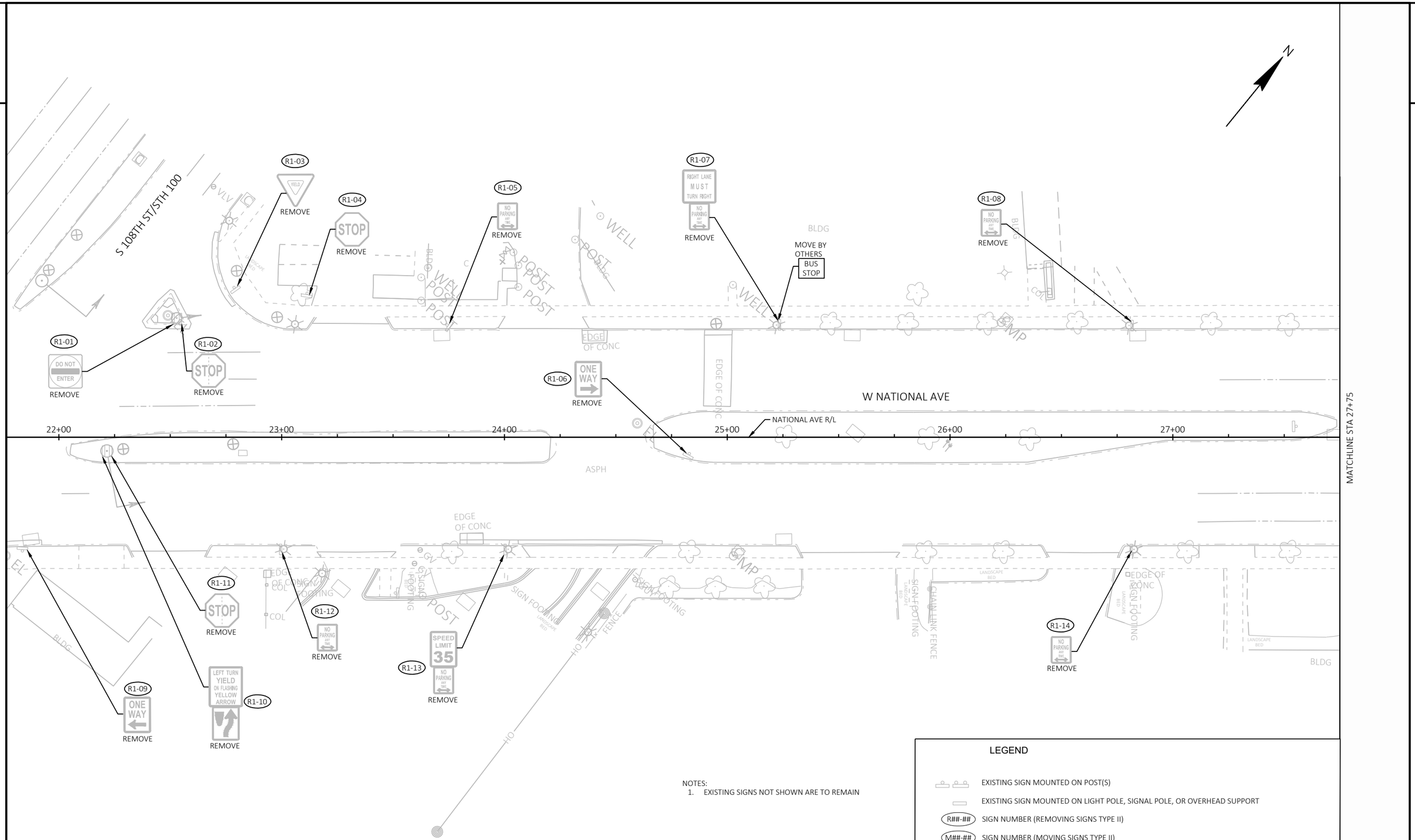
PLAN
WATER MAIN RELAY & BLDG. SERV.
IN SOUTH 97TH & 98TH STREET

AT WEST NATIONAL AVENUE

| | | |
|---|---|---|
| CONTRACT NO. STATE CONT. | CONTRACTOR | HOR. 1"=60' |
| ACCOUNT NO. P2332H | INSPECTOR | SCALE VERT. 1"=10' |
| | AS-BUILT ENT'D BY | SYSTEM NO. SS-19, SS-20 |
| | AS-BUILT CHK'D BY | ¼ SEC. NO. 485, 486, 519 |
| | GIS ENTERED BY | |
| DRAWN BY FGL | Alex Weislak APPROVED PRINCIPAL ENGINEER | 04-10-26 DATE |
| DATE DRAWN 10-24 | | |
| DESIGNED BY AJW | | |
| CHECKED BY RJH | Melinda K Dejewski APPROVED CITY ENGINEER | 04-10-26 DATE |
| SURVEY FINAL PLAN DATE | PLAN FILE NO. W-1485 | |

PROJECT NO: 2410-15-71 | HWY: WEST NATIONAL AVENUE | COUNTY: MILWAUKEE | WATER MAIN PLAN | SHEET 209

2




NOTES:
1. EXISTING SIGNS NOT SHOWN ARE TO REMAIN

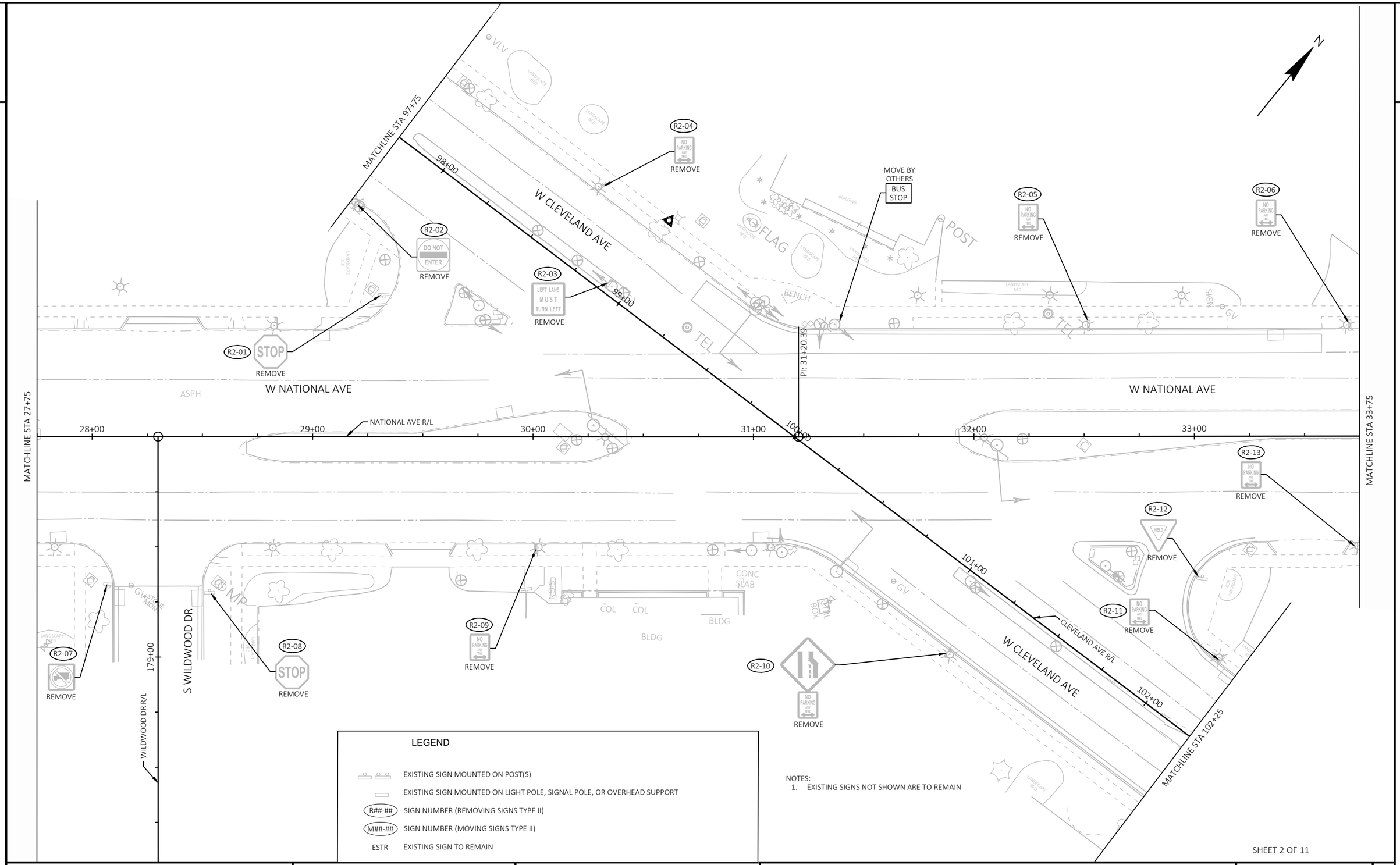
**LEGEND**

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLE, SIGNAL POLE, OR OVERHEAD SUPPORT
- R##-## SIGN NUMBER (REMOVING SIGNS TYPE II)
- M##-## SIGN NUMBER (MOVING SIGNS TYPE II)
- ESTR EXISTING SIGN TO REMAIN

SHEET 1 OF 11

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | SIGN REMOVALS | SHEET 210 | E |
|---|---|---|---|---|---|

2




LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLE, SIGNAL POLE, OR OVERHEAD SUPPORT
- R##-## SIGN NUMBER (REMOVING SIGNS TYPE II)
- M##-## SIGN NUMBER (MOVING SIGNS TYPE II)
- ESTR EXISTING SIGN TO REMAIN

NOTES:
1. EXISTING SIGNS NOT SHOWN ARE TO REMAIN

SHEET 2 OF 11

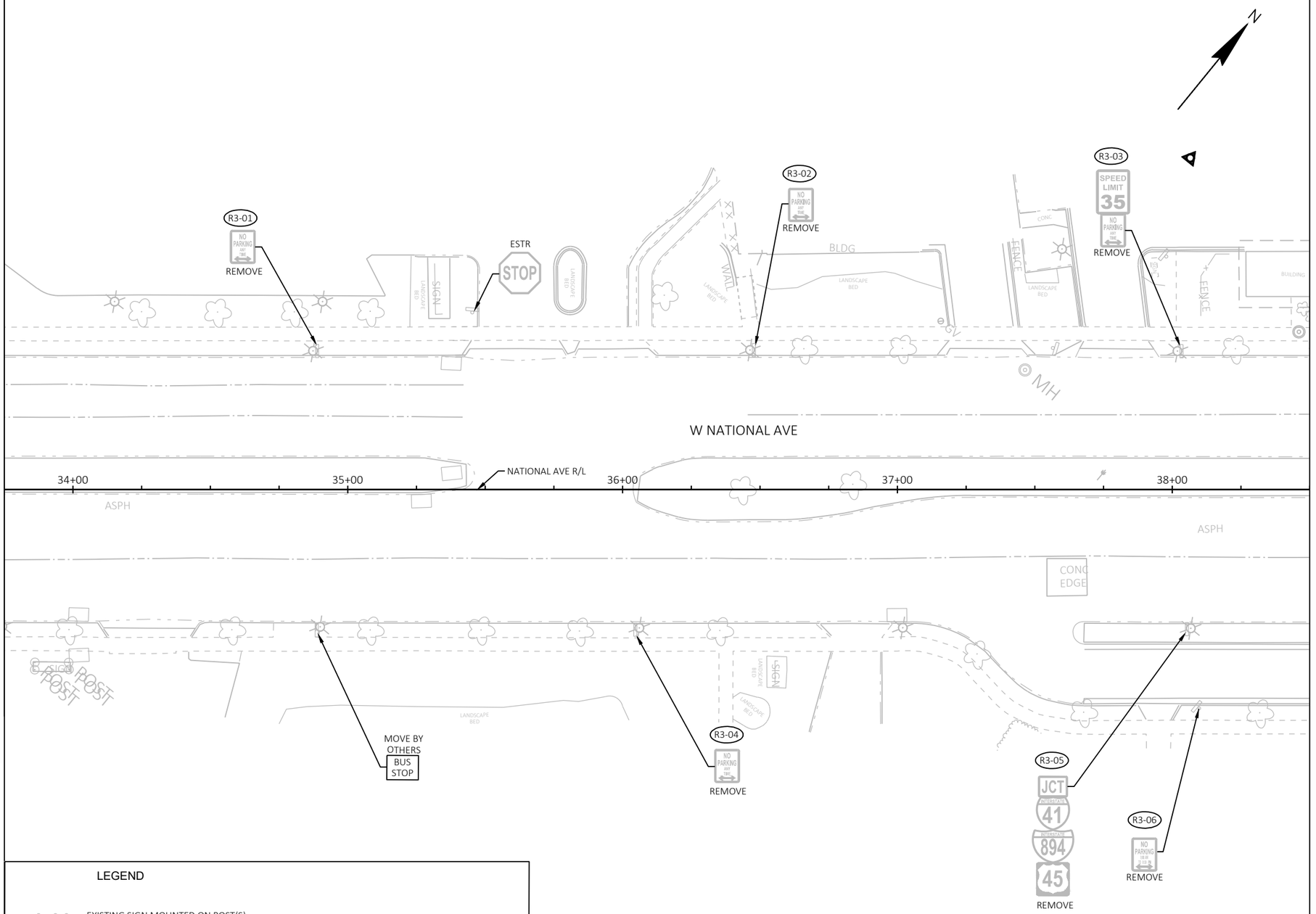
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | SIGN REMOVALS | SHEET 211 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\241015OO\SHEETS\023201-ES.DWG
LAYOUT NAME - 02

PLOT DATE : 1/8/2026 11:30 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2




MATCHLINE STA 33+75

MATCHLINE STA 38+50

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLE, SIGNAL POLE, OR OVERHEAD SUPPORT
- R##-## SIGN NUMBER (REMOVING SIGNS TYPE II)
- M##-## SIGN NUMBER (MOVING SIGNS TYPE II)
- ESTR EXISTING SIGN TO REMAIN

NOTES:
1. EXISTING SIGNS NOT SHOWN ARE TO REMAIN

SHEET 3 OF 11

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | SIGN REMOVALS | SHEET 212 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\023201-ES.DWG
LAYOUT NAME - 03
PLOT DATE : 1/8/2026 11:31 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

NOTES:
1. EXISTING SIGNS NOW SHOWN ARE TO REMAIN

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLE, SIGNAL POLE, OR OVERHEAD SUPPORT
- R##-## SIGN NUMBER (REMOVING SIGNS TYPE II)
- M##-## SIGN NUMBER (MOVING SIGNS TYPE II)
- ESTR EXISTING SIGN TO REMAIN

MATCHLINE STA 38+50

MATCHLINE STA 44+50

W NATIONAL AVE

S 102ND ST

102ND ST R/L

NATIONAL AVE R/L

R4-01 STOP REMOVE

R4-02 ONE WAY REMOVE

R4-03 STOP REMOVE

R4-04 LEFT TURN YIELD ON FLASHING YELLOW ARROW REMOVE

R4-05 RIGHT LANE MUST TURN RIGHT REMOVE

R4-06 REMOVE

R4-07 NO PARKING ANY TIME REMOVE

R4-08 STOP REMOVE

R4-09 DO NOT ENTER REMOVE

R4-10 NO PARKING REMOVE

R4-11 STOP REMOVE

R4-12 DO NOT ENTER REMOVE

R4-13 STOP REMOVE

R4-14 ONE WAY REMOVE

R4-15 STOP REMOVE

R4-16 NO PARKING REMOVE

R4-17 REMOVE

R4-18 SOUTH 41 45 / EAST 894 / NORTH 41 45 / WEST 894 REMOVE

R4-19 NO PARKING REMOVE

R4-20 W National Ave REMOVE

R4-21 S 102 nd St REMOVE

R4-22 S 102 nd St REMOVE

R4-23 W National Ave REMOVE

MOVE BY OTHERS BUS STOP

MOVE BY OTHERS BUS STOP

SHEET 4 OF 11

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | SIGN REMOVALS | SHEET 213 | E |
|---|---|---|---|---|---|

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLE, SIGNAL POLE, OR OVERHEAD SUPPORT
- R##-## SIGN NUMBER (REMOVING SIGNS TYPE II)
- M##-## SIGN NUMBER (MOVING SIGNS TYPE II)
- ESTR EXISTING SIGN TO REMAIN

NOTES:
1. EXISTING SIGNS NOW SHOWN ARE TO REMAIN

MATCHLINE STA 44+50

MATCHLINE STA 50+50

W NATIONAL AVE

45+00 46+00 NATIONAL AVE R/L 47+00 48+00 49+00 50+00

I-41/894 SB RAMPS

S 101ST ST

R5-01 NO PARKING ANY TIME — REMOVE

MOVE BY OTHERS — CUSTOM NO PARKING

R5-02 SOUTH INTERSTATE 41 / EAST INTERSTATE 894 / SOUTH 45 — REMOVE

R5-03 DO NOT ENTER — REMOVE

R5-04 STOP — REMOVE

R5-05 RAMP METERED WHEN FLASHING — REMOVE

R5-06 — REMOVE

R5-07 SOUTH INTERSTATE 41 / 45 / EAST INTERSTATE 894 — REMOVE

R5-08 / R5-09 YIELD — REMOVE

R5-10 RAMP METERED WHEN FLASHING — REMOVE

R5-11 — REMOVE

R5-12 STOP — REMOVE

R5-13 STOP — REMOVE

R5-14 — REMOVE

R5-15 LEFT TURN YIELD ON FLASHING YELLOW ARROW — REMOVE

R5-16 STOP — REMOVE

R5-17 — REMOVE

R5-18 14'-2" — REMOVE

R5-19 STOP — REMOVE

R5-20 — REMOVE

R5-21 DO NOT ENTER — REMOVE

R5-22 LEFT TURN YIELD ON FLASHING YELLOW ARROW — REMOVE

R5-23 ONE WAY — REMOVE

R5-24 NO PARKING ANY TIME — REMOVE

R5-25 H — REMOVE

R5-26 WEST INTERSTATE 894 / NORTH 45 — USE RIGHT LANE — REMOVE

R5-27 NORTH INTERSTATE 41 / WEST INTERSTATE 894 / 45 — NO PARKING ANY TIME — REMOVE

R5-28 AHEAD — REMOVE

R5-29 STOP ONLY — REMOVE

R5-30 500 FT — REMOVE

CHAIN LINK FENCE

CONC EDGE

ASPH

CONC PAD

CNTRL BOX

ELEC SERVICE PANEL

SHEET 5 OF 11

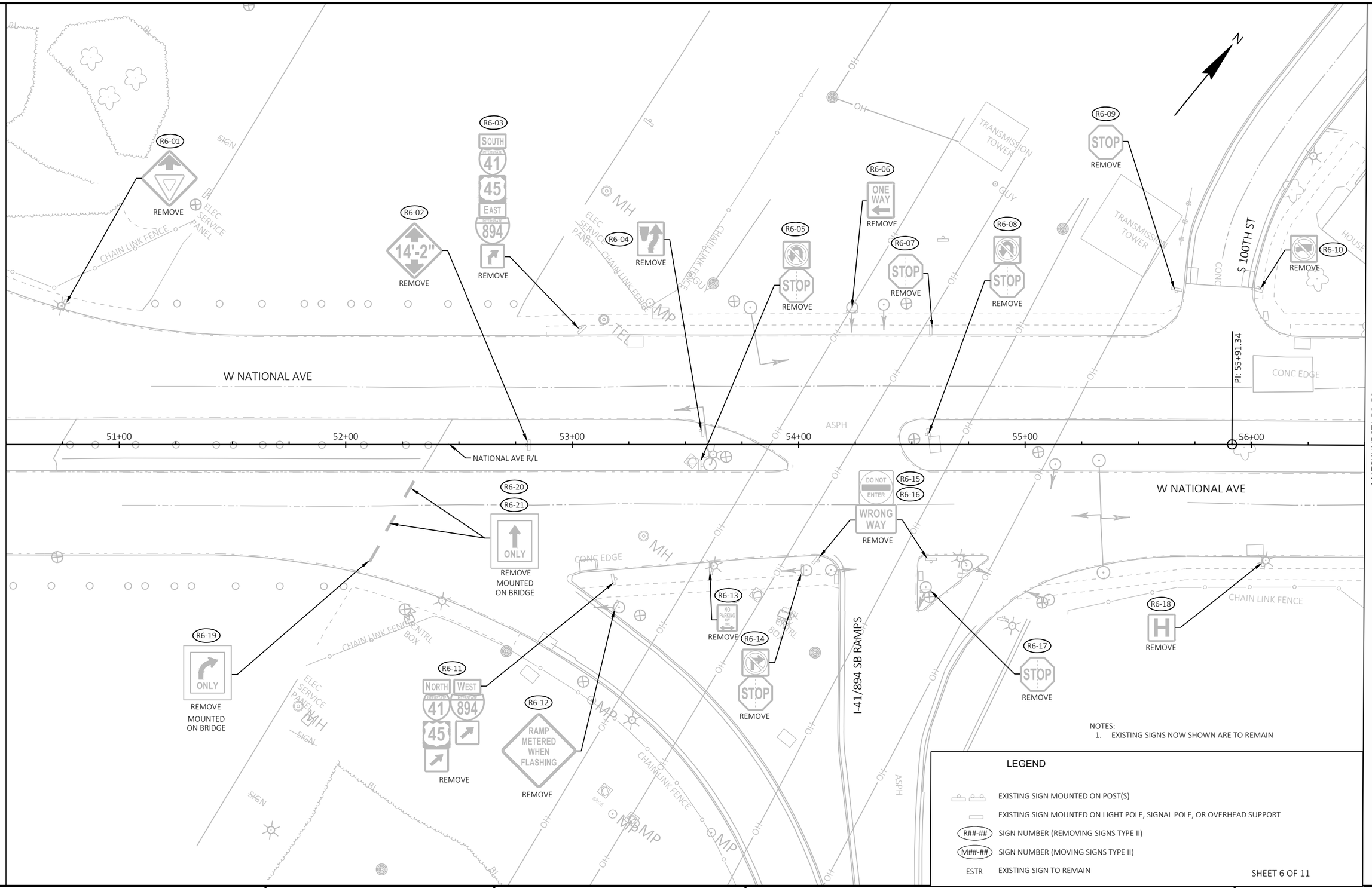
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | SIGN REMOVALS | SHEET 214 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\023201-ES.DWG
LAYOUT NAME - 05

PLOT DATE : 1/8/2026 11:31 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2




NOTES:
1. EXISTING SIGNS NOW SHOWN ARE TO REMAIN

## LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLE, SIGNAL POLE, OR OVERHEAD SUPPORT
- (R##-##) SIGN NUMBER (REMOVING SIGNS TYPE II)
- (M##-##) SIGN NUMBER (MOVING SIGNS TYPE II)
- ESTR EXISTING SIGN TO REMAIN

SHEET 6 OF 11

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | SIGN REMOVALS | SHEET 215 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\023201-ES.DWG
LAYOUT NAME - 06

PLOT DATE : 1/8/2026 11:31 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

MATCHLINE STA 56+50

MATCHLINE STA 62+50

R7-01 SPEED LIMIT 35 REMOVE

R7-02 REMOVE

R7-03 JCT INTERSTATE 41 INTERSTATE 894 45 REMOVE

R7-04 STOP REMOVE

R7-05 REMOVE

R7-06 REMOVE

R7-07 NO PARKING BUS STOP REMOVE

R7-08 R7-09 REMOVE

BUS STOP MOVE BY OTHERS

R7-10 REMOVE

R7-11 REMOVE

R7-12 STOP REMOVE

R7-13 SPEED LIMIT 35 REMOVE

R7-14 NO PARKING LOADING ZONE REMOVE

BUS STOP MOVE BY OTHERS

W NATIONAL AVE

NATIONAL AVE R/L

99TH ST R/L

S 99TH ST

57+00 58+00 59+00 60+00 61+00 62+00

118+00 119+00 131+00 132+00

FLAG HOUSE BLDG CONC ASPH CONC EDGE FENCE TRENCH DRAIN LANDSCAPE BED OH GW GV

NOTES:
1. EXISTING SIGNS NOT SHOWN ARE TO REMAIN

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLE, SIGNAL POLE, OR OVERHEAD SUPPORT
- R##-## SIGN NUMBER (REMOVING SIGNS TYPE II)
- M##-## SIGN NUMBER (MOVING SIGNS TYPE II)
- ESTR EXISTING SIGN TO REMAIN

SHEET 7 OF 11

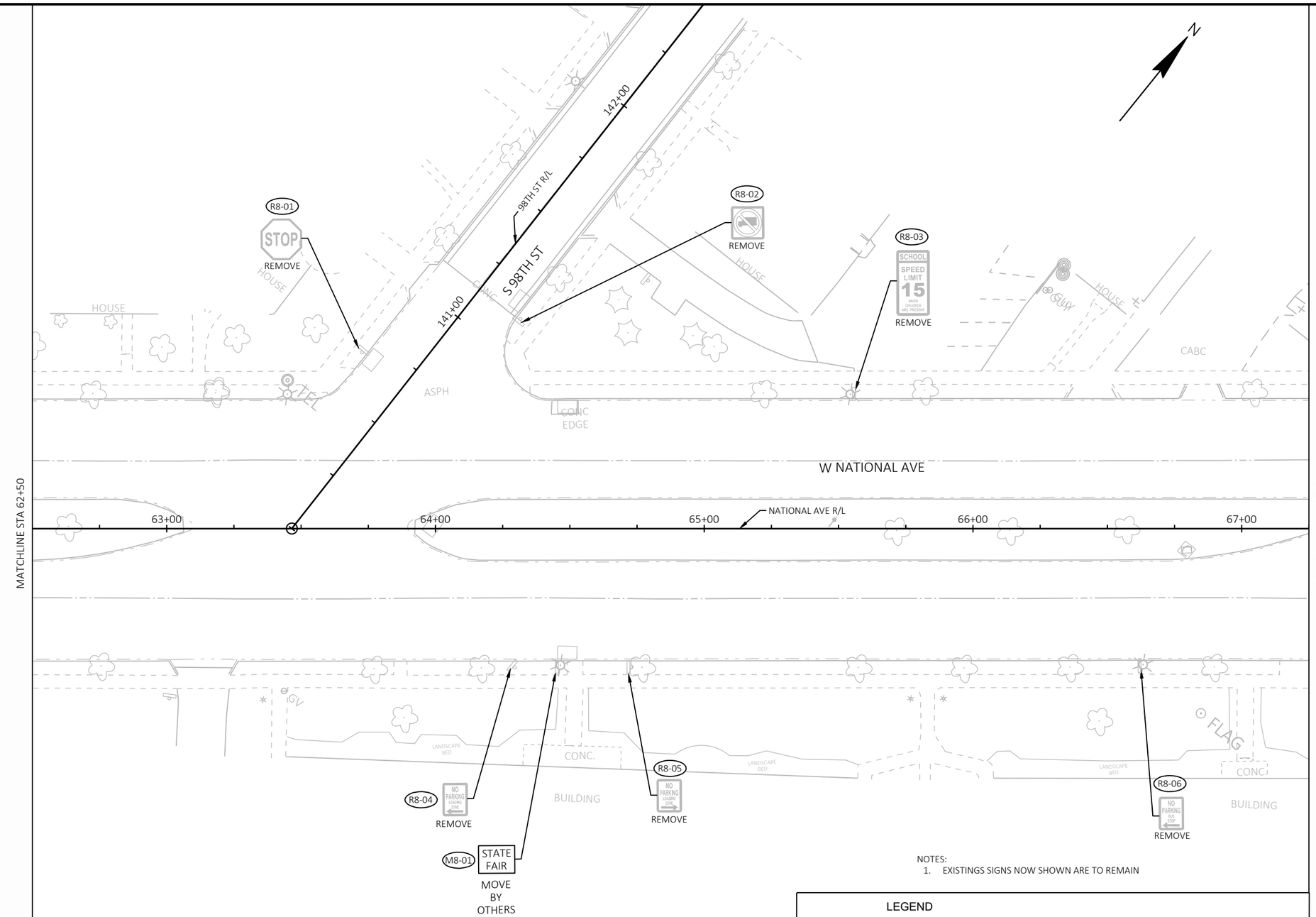
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | SIGN REMOVALS | SHEET 216 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\023201-ES.DWG
LAYOUT NAME - 07

PLOT DATE : 1/8/2026 11:31 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2




NOTES:
1. EXISTINGS SIGNS NOW SHOWN ARE TO REMAIN

LEGEND

| | |
|---|---|
| | EXISTING SIGN MOUNTED ON POST(S) |
| | EXISTING SIGN MOUNTED ON LIGHT POLE, SIGNAL POLE, OR OVERHEAD SUPPORT |
| R##-## | SIGN NUMBER (REMOVING SIGNS TYPE II) |
| M##-## | SIGN NUMBER (MOVING SIGNS TYPE II) |
| ESTR | EXISTING SIGN TO REMAIN |



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | SIGN REMOVALS | SHEET 217 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\023201-ES.DWG
LAYOUT NAME - 08
PLOT DATE : 1/8/2026 11:31 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

MATCHLINE STA 67+25

N

W LINCOLN AVE

S 97TH ST

97TH ST R/L

152+00

151+00

R9-01

STOP

REMOVE

MOVE BY OTHERS

NEIGHBORHOOD WATCH

R9-02

REMOVE

SPEED WAVE

MOVE BY OTHERS

R9-03

XX HOUR PARKING 8AM-6PM

REMOVE

BLDG

CONC

FENCE

CANOPY

MH

ASPH

W NATIONAL AVE

68+00

69+00

70+00

71+00

72+00

73+00

NATIONAL AVE R/L

TEL

SIGN

BUS STOP

MOVE BY OTHERS

R9-04

NO PARKING BUS STOP

REMOVE

R9-05

NO PARKING LOADING ZONE

REMOVE

R9-06

NO PARKING LOADING ZONE

REMOVE

NOTES:
1. EXISTING SIGNS NOW SHOWN ARE TO REMAIN

LEGEND

| | |
|---|---|
| | EXISTING SIGN MOUNTED ON POST(S) |
| | EXISTING SIGN MOUNTED ON LIGHT POLE, SIGNAL POLE, OR OVERHEAD SUPPORT |
| R##-## | SIGN NUMBER (REMOVING SIGNS TYPE II) |
| M##-## | SIGN NUMBER (MOVING SIGNS TYPE II) |
| ESTR | EXISTING SIGN TO REMAIN |

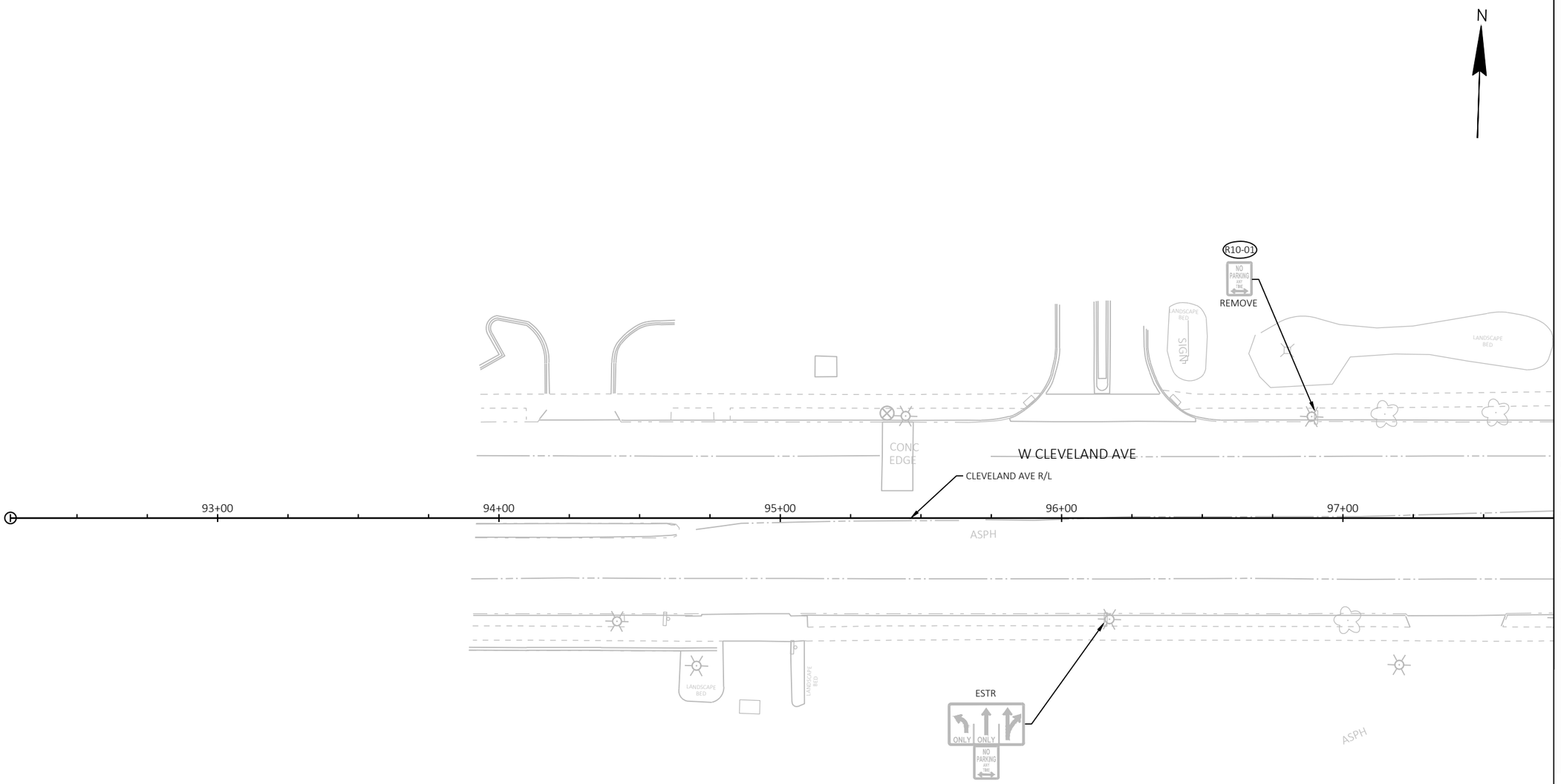
SHEET 9 OF 11

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | SIGN REMOVALS | SHEET 218 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\023201-ES.DWG
LAYOUT NAME - 09

PLOT DATE : 1/8/2026 11:31 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2




NOTES:
1. EXISTING SIGNS NOT SHOWN ARE TO REMAIN

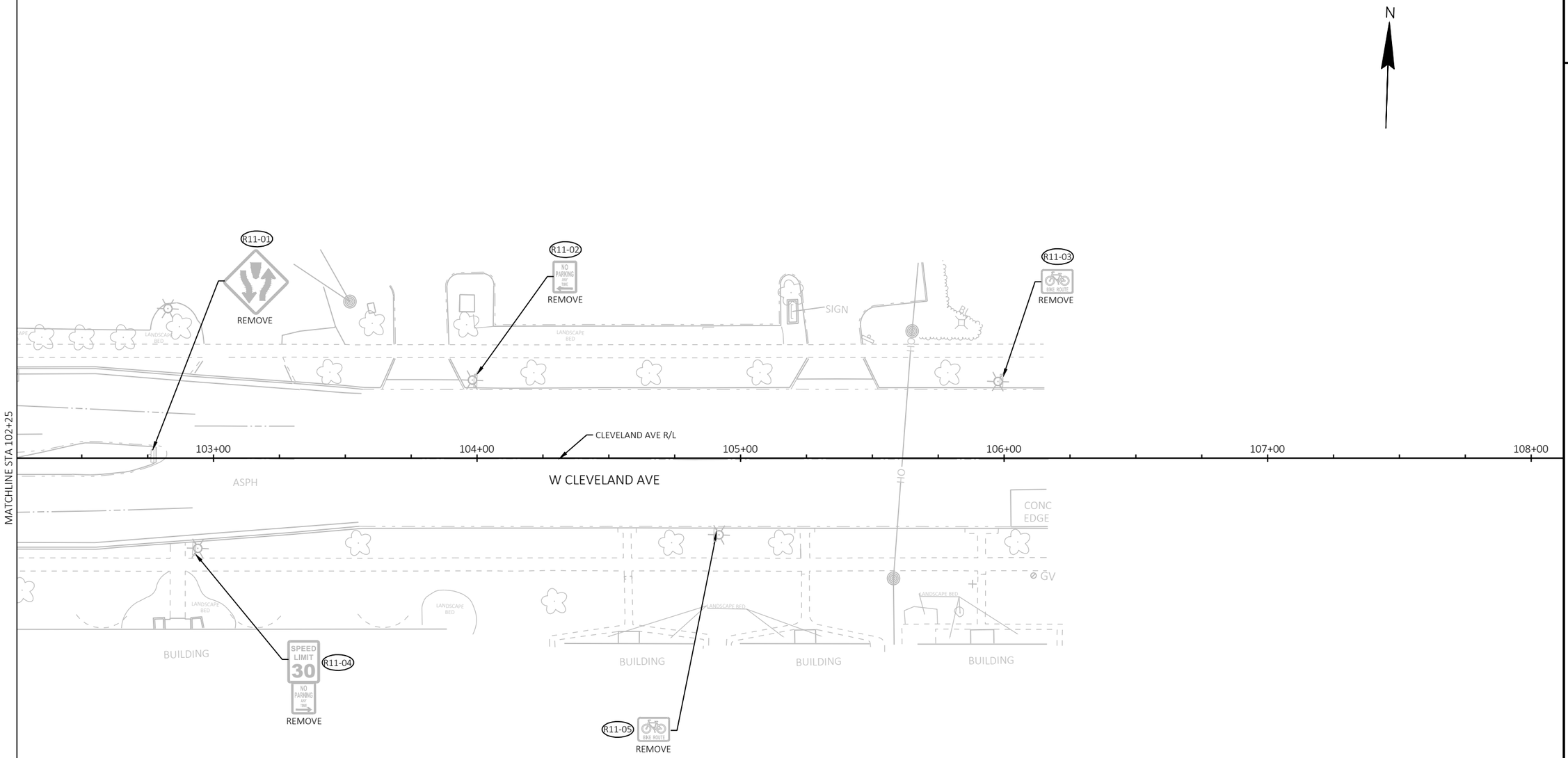
LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLE, SIGNAL POLE, OR OVERHEAD SUPPORT
- R##-## SIGN NUMBER (REMOVING SIGNS TYPE II)
- M##-## SIGN NUMBER (MOVING SIGNS TYPE II)
- ESTR EXISTING SIGN TO REMAIN

SHEET 10 OF 11

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | SIGN REMOVALS | SHEET 219 | E |
|---|---|---|---|---|---|

2




NOTES:
1. EXISTING SIGNS NOT SHOWN ARE TO REMAIN

LEGEND

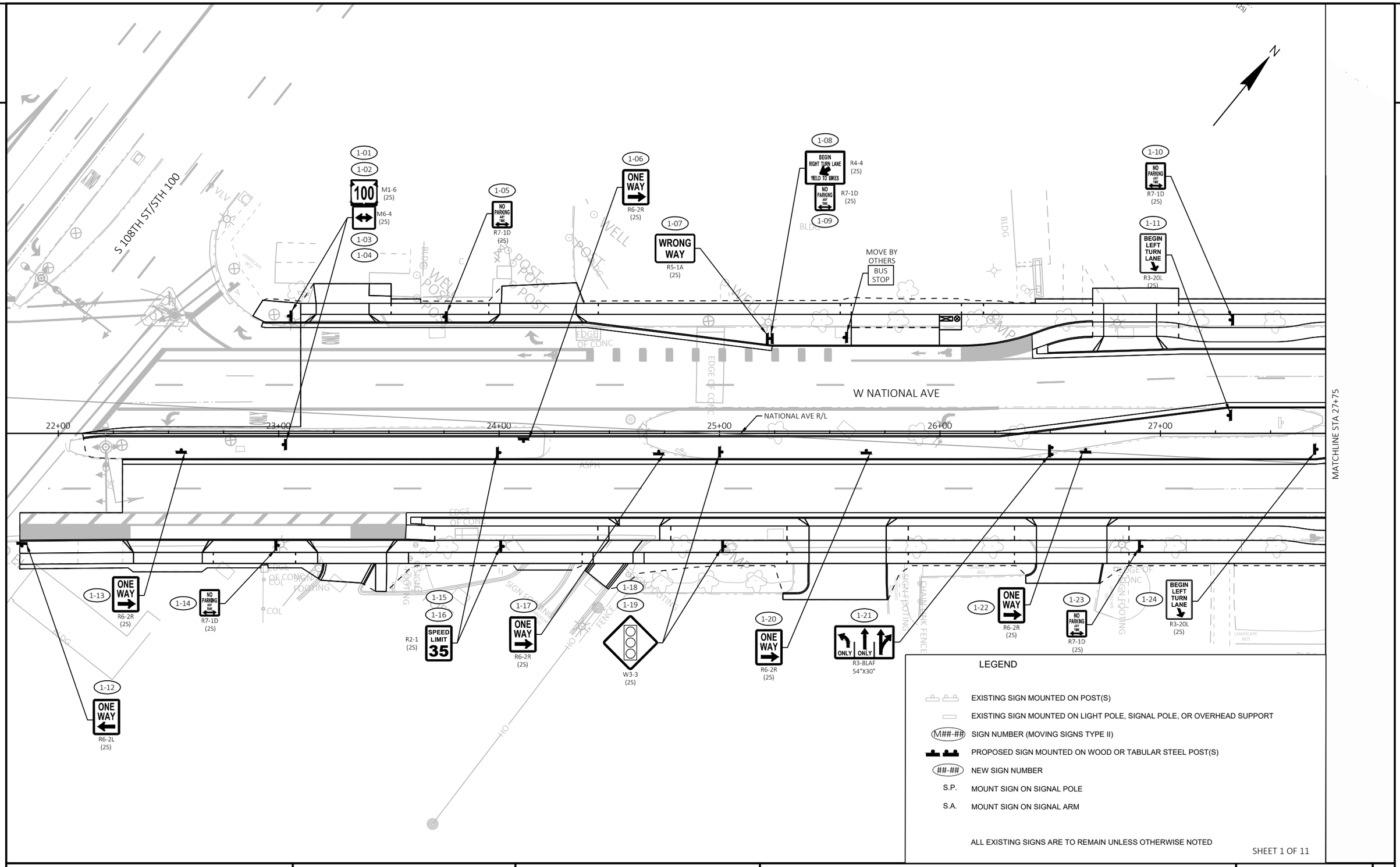
| | |
|---|---|
| | EXISTING SIGN MOUNTED ON POST(S) |
| | EXISTING SIGN MOUNTED ON LIGHT POLE, SIGNAL POLE, OR OVERHEAD SUPPORT |
| R##-## | SIGN NUMBER (REMOVING SIGNS TYPE II) |
| M##-## | SIGN NUMBER (MOVING SIGNS TYPE II) |
| ESTR | EXISTING SIGN TO REMAIN |

SHEET 11 OF 11

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | SIGN REMOVALS | SHEET 220 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\023201-ES.DWG
LAYOUT NAME - 11

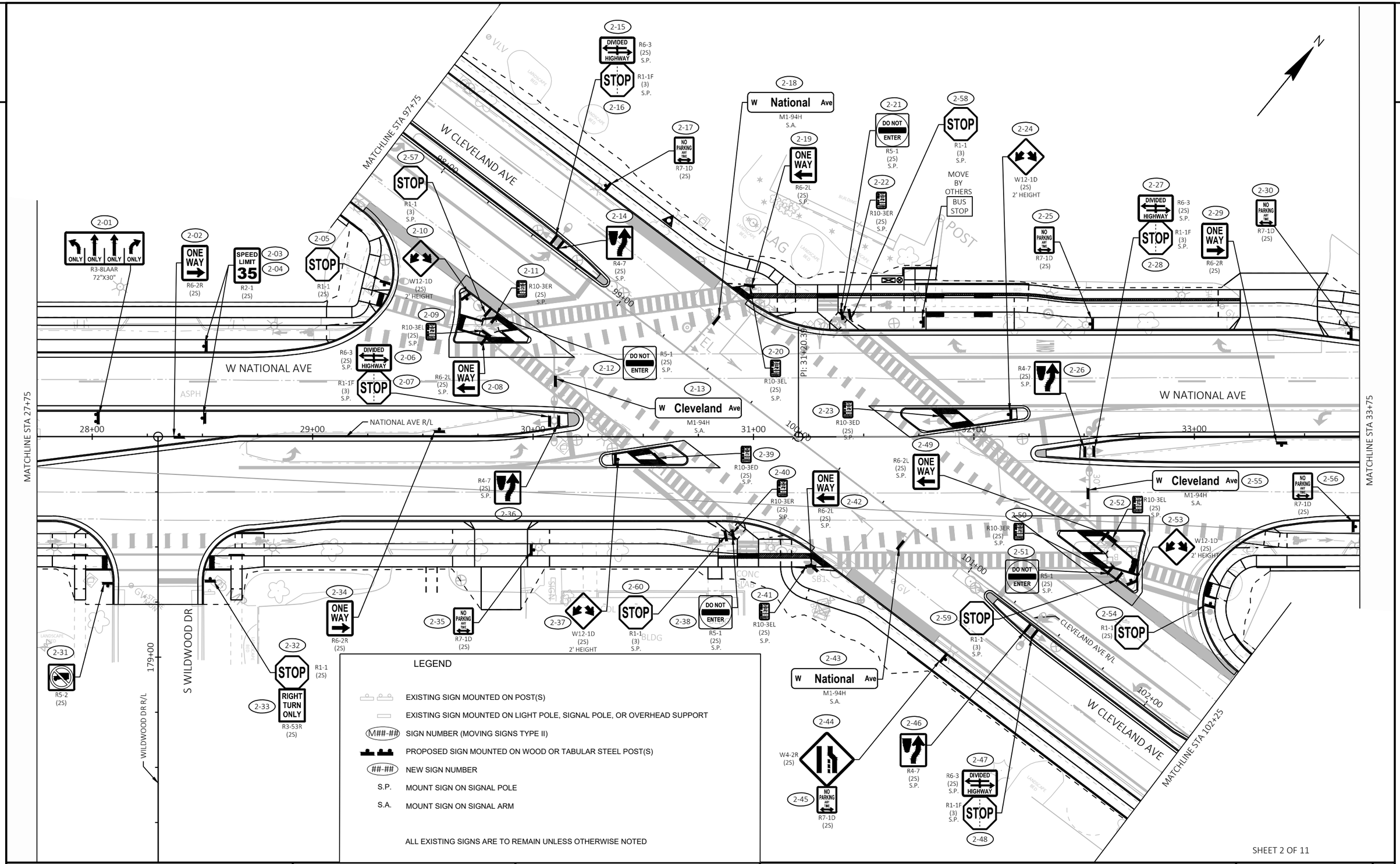
PLOT DATE : 1/8/2026 11:31 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PERMANENT SIGNING | SHEET 221 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\023202-PS.DWG
LAYOUT NAME - 01

PLOT DATE : 1/8/2026 11:32 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT




LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLE, SIGNAL POLE, OR OVERHEAD SUPPORT
- M##-## SIGN NUMBER (MOVING SIGNS TYPE II)
- PROPOSED SIGN MOUNTED ON WOOD OR TABULAR STEEL POST(S)
- ##-## NEW SIGN NUMBER
- S.P. MOUNT SIGN ON SIGNAL POLE
- S.A. MOUNT SIGN ON SIGNAL ARM

ALL EXISTING SIGNS ARE TO REMAIN UNLESS OTHERWISE NOTED

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PERMANENT SIGNING | SHEET 222 | E |
|---|---|---|---|---|---|

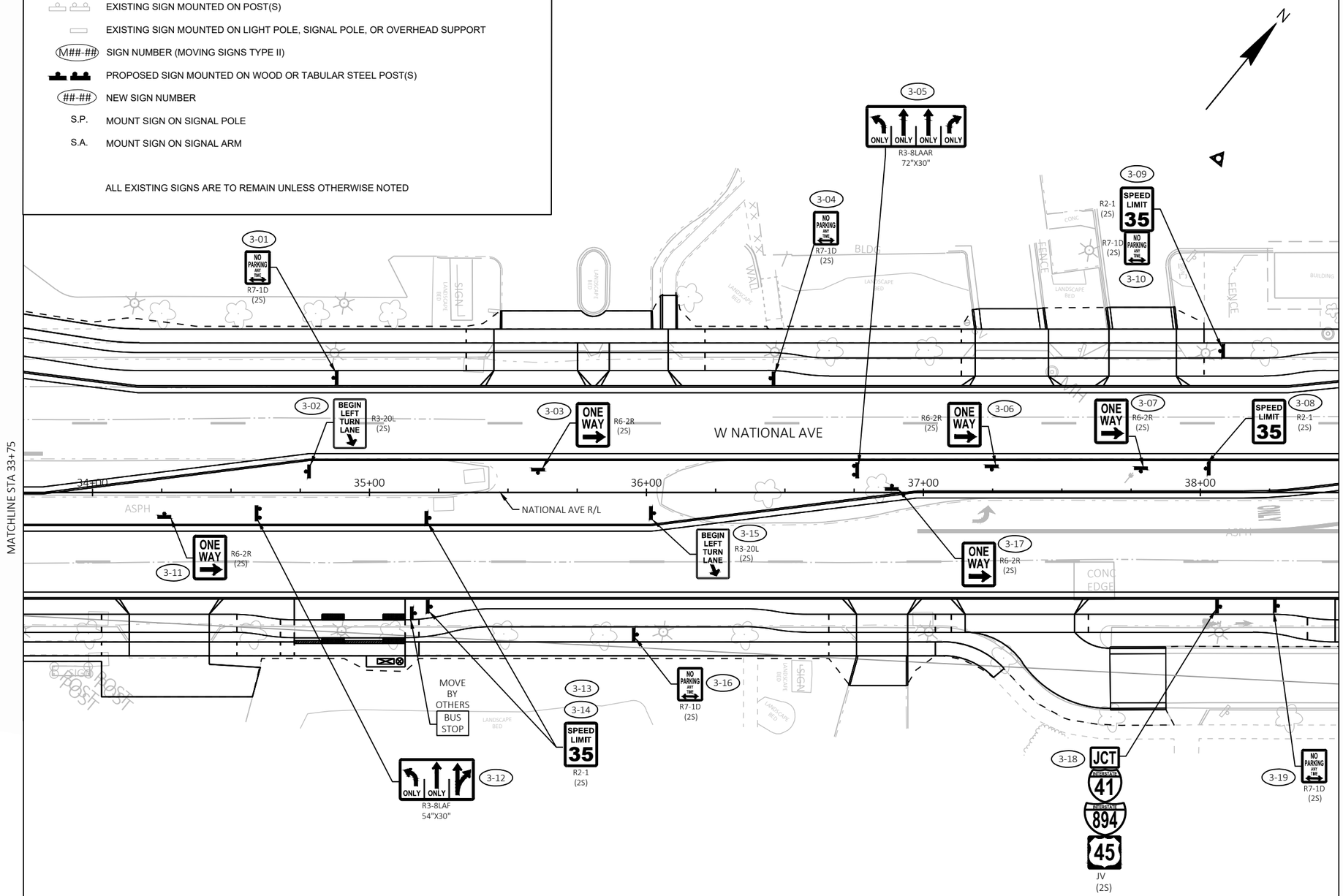
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\023202-PS.DWG
LAYOUT NAME - 02

PLOT DATE : 1/8/2026 11:32 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLE, SIGNAL POLE, OR OVERHEAD SUPPORT
- M##-## SIGN NUMBER (MOVING SIGNS TYPE II)
- PROPOSED SIGN MOUNTED ON WOOD OR TABULAR STEEL POST(S)
- ##-## NEW SIGN NUMBER
- S.P. MOUNT SIGN ON SIGNAL POLE
- S.A. MOUNT SIGN ON SIGNAL ARM

ALL EXISTING SIGNS ARE TO REMAIN UNLESS OTHERWISE NOTED



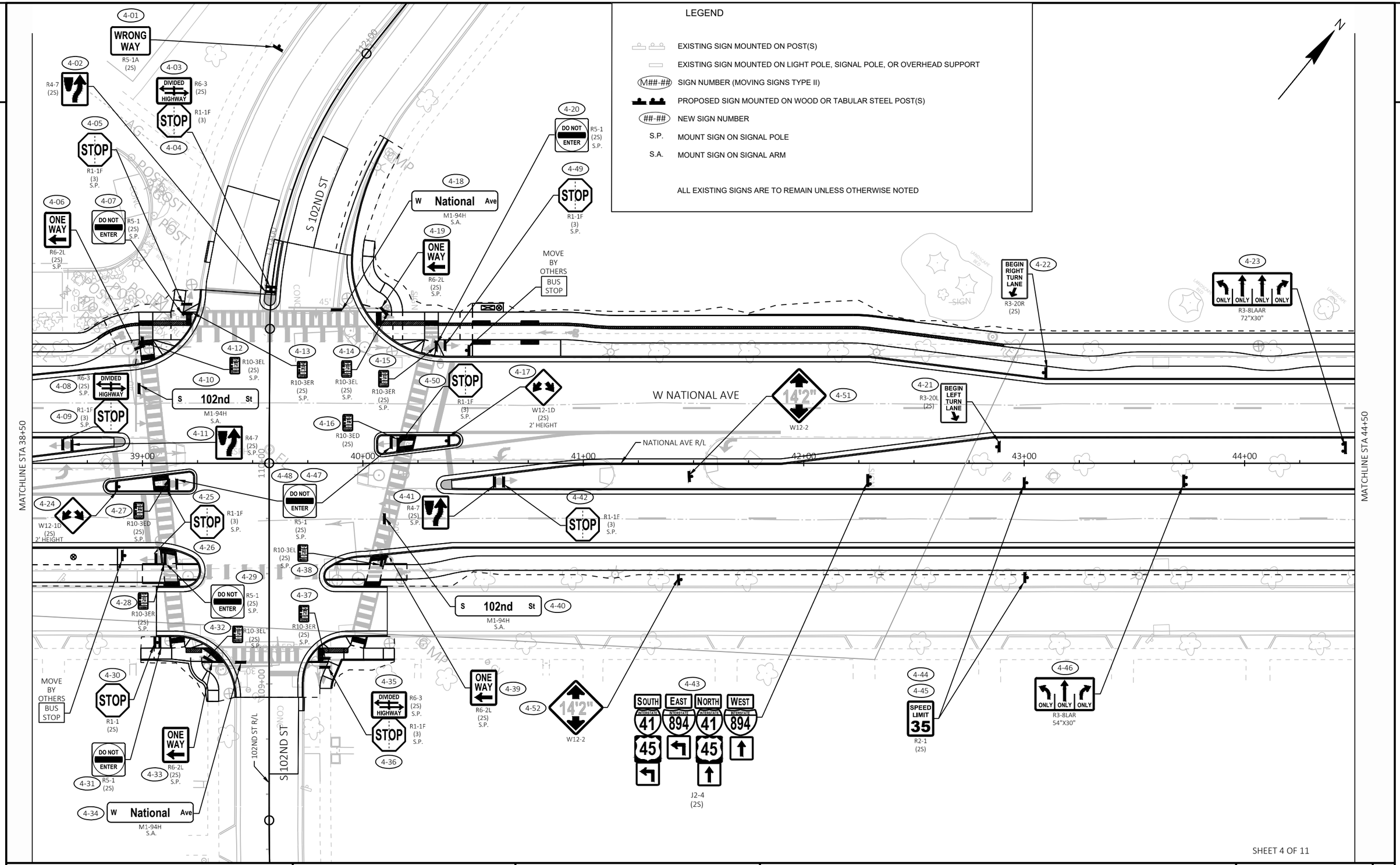

SHEET 3 OF 11

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PERMANENT SIGNING | SHEET 223 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\023202-PS.DWG
LAYOUT NAME - 03

PLOT DATE : 1/8/2026 11:33 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42


LEGEND
EXISTING SIGN MOUNTED ON POST(S)
EXISTING SIGN MOUNTED ON LIGHT POLE, SIGNAL POLE, OR OVERHEAD SUPPORT
M##-## SIGN NUMBER (MOVING SIGNS TYPE II)
PROPOSED SIGN MOUNTED ON WOOD OR TABULAR STEEL POST(S)
##-## NEW SIGN NUMBER
S.P. MOUNT SIGN ON SIGNAL POLE
S.A. MOUNT SIGN ON SIGNAL ARM
ALL EXISTING SIGNS ARE TO REMAIN UNLESS OTHERWISE NOTED
N
MATCHLINE STA 38+50
MATCHLINE STA 44+50
W NATIONAL AVE
NATIONAL AVE R/L
S 102ND ST
102ND ST R/L
39+00
40+00
41+00
42+00
43+00
44+00
4-01 WRONG WAY R5-1A (2S)
4-02 R4-7 (2S)
4-03 DIVIDED HIGHWAY R6-3 (2S)
4-04 STOP R1-1F (3)
4-05 STOP R1-1F (3) S.P.
4-06 ONE WAY R6-2L (2S) S.P.
4-07 DO NOT ENTER R5-1 (2S) S.P.
4-08 DIVIDED HIGHWAY R6-3 (2S) S.P.
4-09 STOP R1-1F (3) S.P.
4-10 S 102nd St M1-94H S.A.
4-11 R4-7 (2S) S.P.
4-12 R10-3EL (2S) S.P.
4-13 R10-3ER (2S) S.P.
4-14 R10-3EL (2S) S.P.
4-15 R10-3ER (2S) S.P.
4-16 R10-3ED (2S)
4-17 W12-1D (2S) 2' HEIGHT
4-18 W National Ave M1-94H S.A.
4-19 ONE WAY R6-2L (2S) S.P.
4-20 DO NOT ENTER R5-1 (2S) S.P.
4-21 BEGIN LEFT TURN LANE R3-20L (2S)
4-22 BEGIN RIGHT TURN LANE R3-20R (2S)
4-23 ONLY ONLY ONLY ONLY R3-8LAAR 72"X30"
4-24 W12-1D (2S) 2' HEIGHT
4-25 STOP R1-1F (3) S.P.
4-26
4-27 R10-3ED (2S) S.P.
4-28 R10-3ER (2S) S.P.
4-29 DO NOT ENTER R5-1 (2S) S.P.
4-30 STOP R1-1 (2S)
4-31 DO NOT ENTER R5-1 (2S)
4-32 R10-3EL (2S) S.P.
4-33 ONE WAY R6-2L (2S) S.P.
4-34 W National Ave M1-94H S.A.
4-35 DIVIDED HIGHWAY R6-3 (2S) S.P.
4-36 STOP R1-1F (3) S.P.
4-37 R10-3ER (2S) S.P.
4-38
4-39 ONE WAY R6-2L (2S) S.P.
4-40 S 102nd St M1-94H S.A.
4-41 R4-7 (2S) S.P.
4-42 STOP R1-1F (3) S.P.
4-43 SOUTH EAST NORTH WEST OVERSTAR 41 894 41 894 45 45 J2-4 (2S)
4-44
4-45 SPEED LIMIT 35 R2-1 (2S)
4-46 ONLY ONLY ONLY R3-8LAR 54"X30"
4-47 DO NOT ENTER R5-1 (2S) S.P.
4-48
4-49 STOP R1-1F (3) S.P.
4-50 STOP R1-1F (3) S.P.
4-51 14'2" W12-2
4-52 14'2" W12-2
MOVE BY OTHERS BUS STOP
MOVE BY OTHERS BUS STOP
SIGN
LANDSCAPE RCK
LANDSCAPE
POST
POST
POST

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLE, SIGNAL POLE, OR OVERHEAD SUPPORT
- M##-## SIGN NUMBER (MOVING SIGNS TYPE II)
- PROPOSED SIGN MOUNTED ON WOOD OR TABULAR STEEL POST(S)
- ##-## NEW SIGN NUMBER
- S.P. MOUNT SIGN ON SIGNAL POLE
- S.A. MOUNT SIGN ON SIGNAL ARM

ALL EXISTING SIGNS ARE TO REMAIN UNLESS OTHERWISE NOTED

2

MATCHLINE STA 44+50

MATCHLINE STA 50+50

5-01 NO PARKING ANY TIME R7-1D (2S)

5-02 / 5-03 SPEED LIMIT 35 R2-1 (2S)

MOVE BY OTHERS — CUSTOM NO PARKING

5-04 / 5-35 DO NOT ENTER R5-1 (2S)

5-05 STOP R1-1F (3)

5-06 RAMP METERED WHEN FLASHING W3-8 (2S) S.P.

5-33 RAMP CLOSED USE ALT ROUTE R11-54F (2S)

5-34 FREEWAY ENTRANCE D13-3 (2S)

I-41/894 SB RAMPS

SOUTH INTERSTATE 41 / 45 EAST / INTERSTATE 894 JV (2S)

5-10

5-11 RAMP METERED WHEN FLASHING W3-8 (2S) S.P.

5-12 W12-1D (2S) 2' HEIGHT

W NATIONAL AVE

5-07 R4-7 (2S) S.P.

5-08 STOP R1-1F (3)

R1-1F (3) S.P. STOP 5-09

45+00 46+00 47+00 48+00 49+00 50+00

S-40-0673

NATIONAL AVE R/L

5-15 BEGIN LEFT TURN LANE R3-20L (2S)

W NATIONAL AVE

5-13 H D9-2 (2S) MB6-1 (2S) 5-14

5-16 WEST INTERSTATE 894 USE RIGHT LANE / NORTH INTERSTATE 45 USE RIGHT LANE J2-2 (2S)

5-17 TYPE I SIGN — SOUTH INTERSTATE 41 EAST INTERSTATE 894 SOUTH 45 ONLY D16-1L

5-18 TYPE I SIGN — W NATIONAL AVE D16-1A

5-19 TYPE I SIGN — NORTH INTERSTATE 41 WEST INTERSTATE 894 NORTH 45 ONLY USE RIGHT LANE D16-1R

5-20 NO PARKING ANY TIME R7-1D (2S)

5-21 NORTH INTERSTATE 41 WEST INTERSTATE 894 45 J2-2 (2S)

5-22 W11-2 (2S) W16-9P (2S) AHEAD 5-23

5-24 W12-1D (2S) 2' HEIGHT

5-25 SOUTH INTERSTATE 41 EAST INTERSTATE 894 SOUTH 45 J3-3 (2S)

S 101ST ST

5-30 W11-2 (2S) 250 FT W16-2A (2S) 5-31

5-32 / 5-36 14'-2" W12-2 (2S)

5-28 / 5-29 W3-3 (2S)

5-26 / 5-27 DO NOT ENTER R5-1 (2S)

ELEC SERVICE PANEL

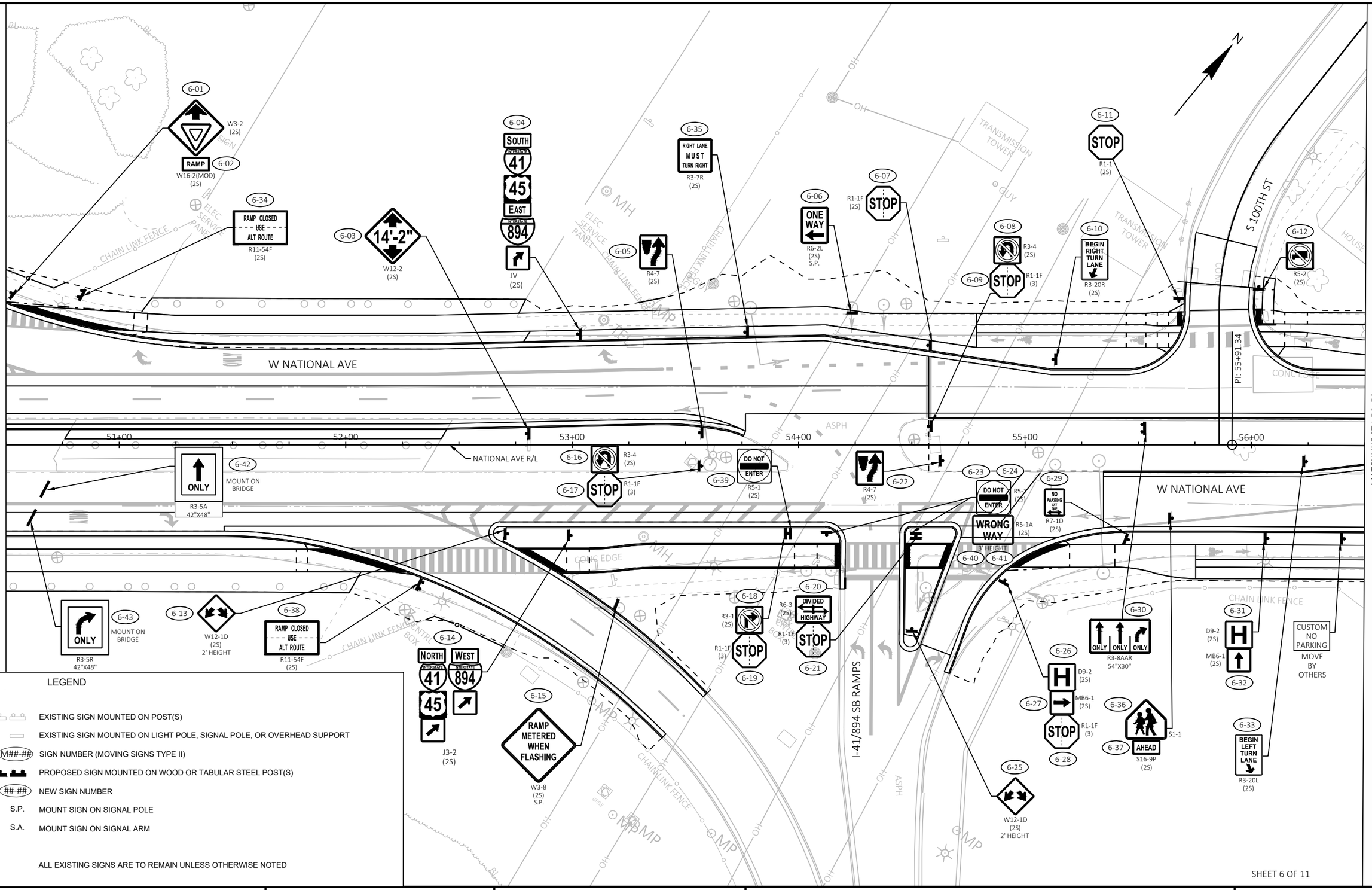
SHEET 5 OF 11

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PERMANENT SIGNING | SHEET 225 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\023202-PS.DWG
LAYOUT NAME - 05

PLOT DATE : 1/8/2026 11:33 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2




LEGEND

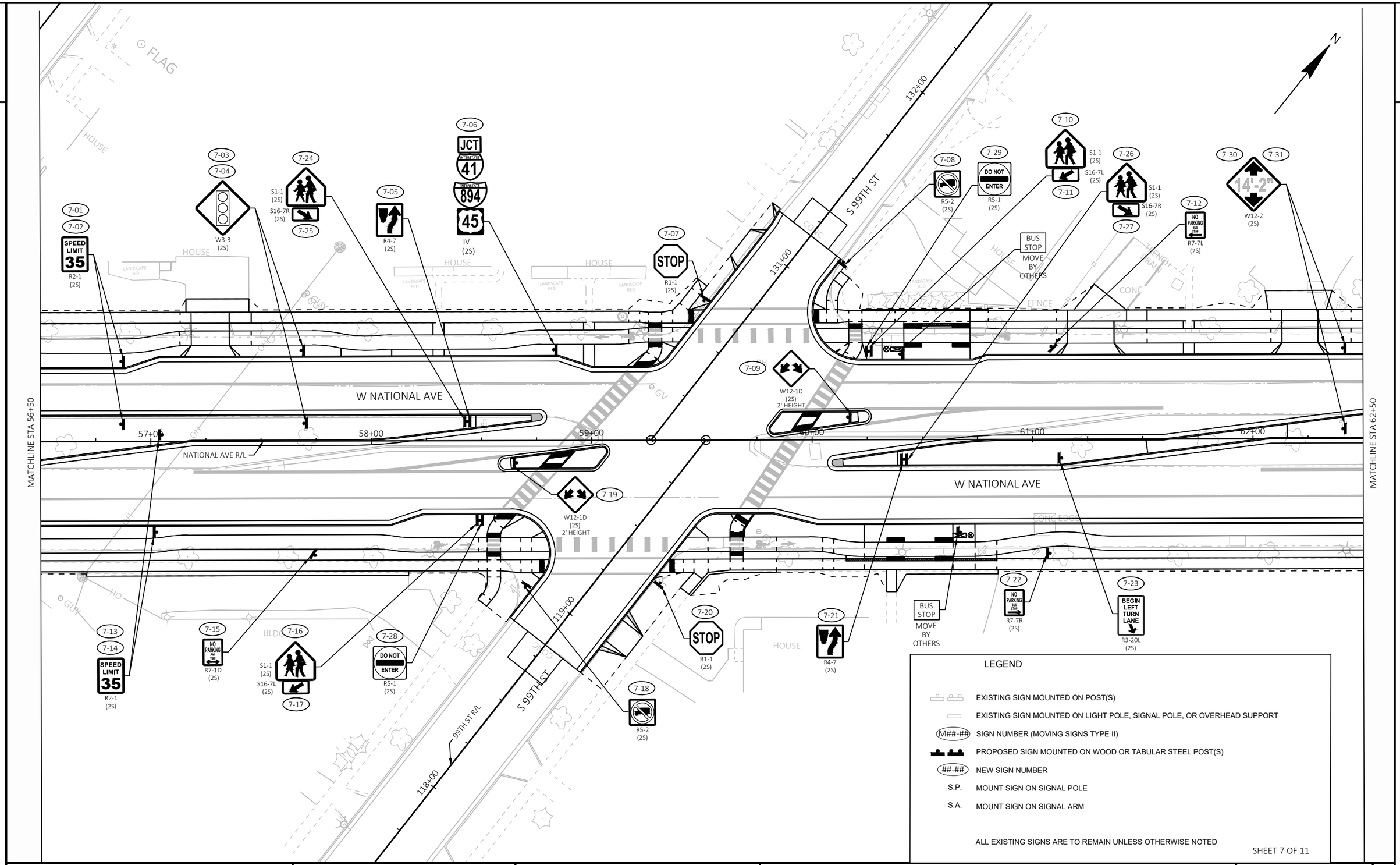
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLE, SIGNAL POLE, OR OVERHEAD SUPPORT
- M##-## SIGN NUMBER (MOVING SIGNS TYPE II)
- PROPOSED SIGN MOUNTED ON WOOD OR TABULAR STEEL POST(S)
- ##-## NEW SIGN NUMBER
- S.P. MOUNT SIGN ON SIGNAL POLE
- S.A. MOUNT SIGN ON SIGNAL ARM

ALL EXISTING SIGNS ARE TO REMAIN UNLESS OTHERWISE NOTED

SHEET 6 OF 11

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PERMANENT SIGNING | SHEET 226 | E |
|---|---|---|---|---|---|

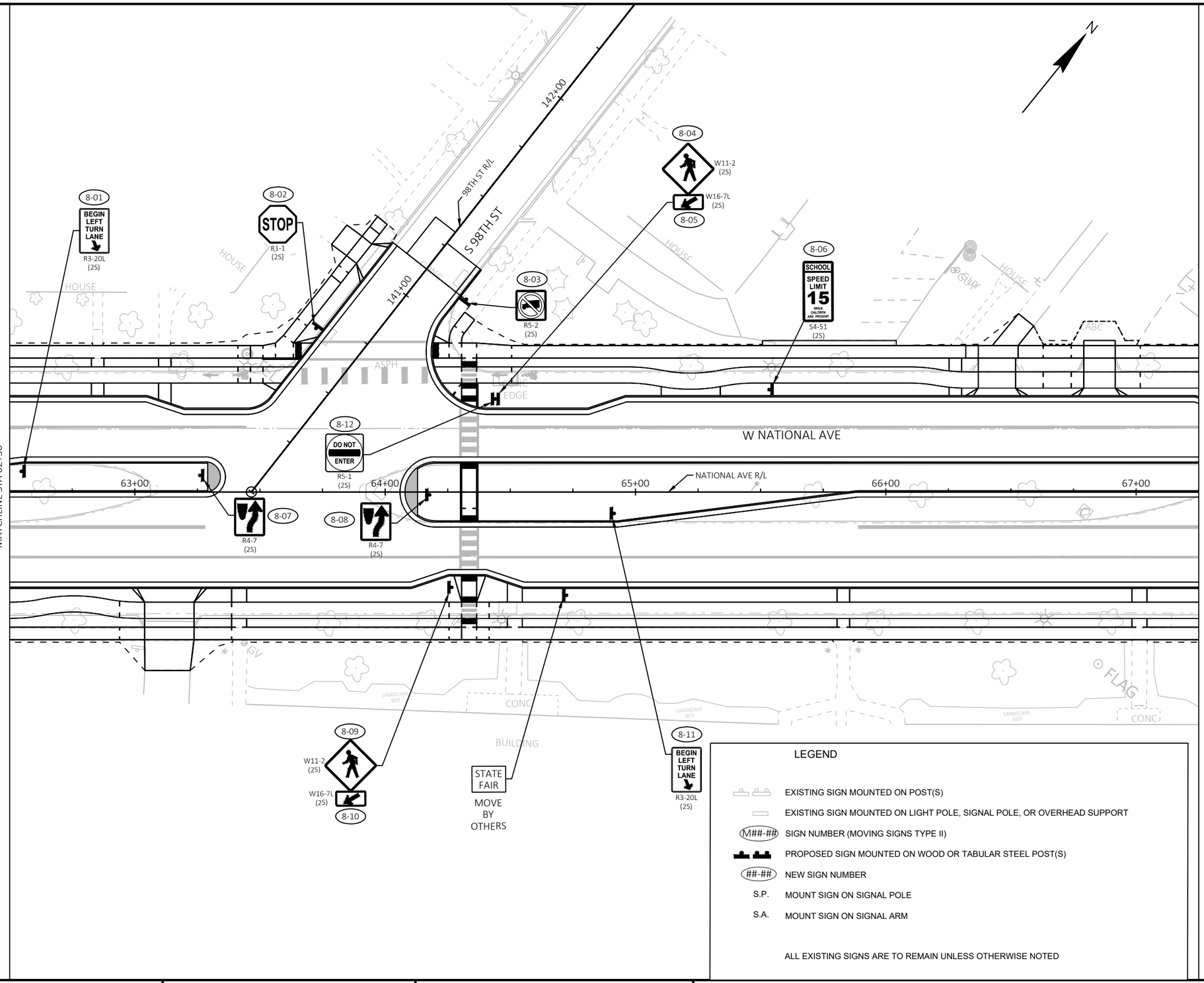
2




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PERMANENT SIGNING | SHEET 227 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\023202-PS.DWG
LAYOUT NAME - 07
PLOT DATE : 1/8/2026 11:33 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2




## LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLE, SIGNAL POLE, OR OVERHEAD SUPPORT
- M##-## — SIGN NUMBER (MOVING SIGNS TYPE II)
- PROPOSED SIGN MOUNTED ON WOOD OR TABULAR STEEL POST(S)
- ##-## — NEW SIGN NUMBER
- S.P. — MOUNT SIGN ON SIGNAL POLE
- S.A. — MOUNT SIGN ON SIGNAL ARM

ALL EXISTING SIGNS ARE TO REMAIN UNLESS OTHERWISE NOTED



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PERMANENT SIGNING | SHEET 228 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\023202-PS.DWG
LAYOUT NAME - 08
PLOT DATE : 1/8/2026 11:33 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

MATCHLINE STA 67+25

N

W LINCOLN AVE

W NATIONAL AVE

S 97TH ST

97TH ST R/L

NATIONAL AVE R/L

152+00

151+00

68+00

69+00

70+00

71+00

72+00

73+00

9-01 STOP R1-1 (2S)

MOVE BY OTHERS

NEIGHBORHOOD WATCH

9-02 R5-2 (2S)

9-03 W11-2 (2S) W16-7L (2S) 9-04

9-05 SPEED LIMIT 35 R2-1 (2S)

9-06 SPEED LIMIT 35 R2-1 (2S) NO PARKING ANY TIME R7-1D (2S) 9-28

SPEED WAVE

MOVE BY OTHERS

9-22 9-23 S1-1 (2S) AHEAD S16-9P (2S) 9-24 9-25

9-26 W4-2R (2S) NO PARKING ANY TIME R7-1D (2S) 9-27

9-07 R4-7 (2S)

9-08 9-09 R4-7 (2S)

9-10 NO PARKING BUS STOP R7-7L (2S)

9-11 ONLY ONLY ONLY R3-8LAR 54"X30"

BUS STOP MOVE BY MCTS

9-12 W11-2 (2S) W16-7L (2S) 9-13

9-14 NO PARKING ANY TIME R7-1D (2S)

9-15 ONE WAY R6-2R (2S)

9-16 BEGIN RIGHT TURN LANE YIELD TO BIKES R4-4 (2S)

9-17 NO PARKING ANY TIME R7-1D (2S)

9-18 9-19 W11-2 (2S) 9-21 9-20 W16-7R (2S) BACK TO BACK

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLE, SIGNAL POLE, OR OVERHEAD SUPPORT
- M##-## SIGN NUMBER (MOVING SIGNS TYPE II)
- PROPOSED SIGN MOUNTED ON WOOD OR TABULAR STEEL POST(S)
- ##-## NEW SIGN NUMBER
- S.P. MOUNT SIGN ON SIGNAL POLE
- S.A. MOUNT SIGN ON SIGNAL ARM

ALL EXISTING SIGNS ARE TO REMAIN UNLESS OTHERWISE NOTED

SHEET 9 OF 11

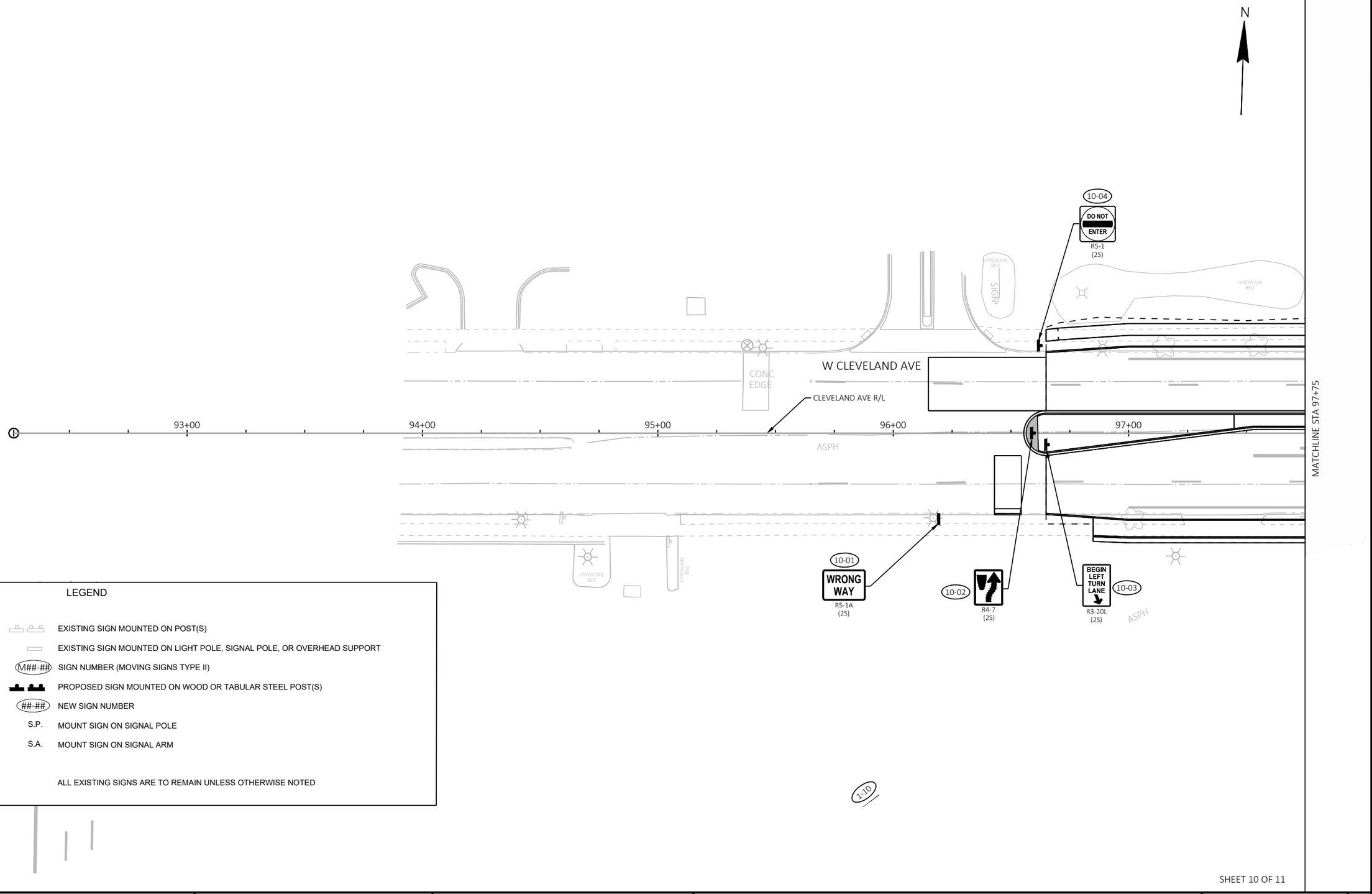
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PERMANENT SIGNING | SHEET 229 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\023202-PS.DWG
LAYOUT NAME - 09

PLOT DATE : 1/8/2026 11:33 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2




LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLE, SIGNAL POLE, OR OVERHEAD SUPPORT
- (M##-##) SIGN NUMBER (MOVING SIGNS TYPE II)
- PROPOSED SIGN MOUNTED ON WOOD OR TABULAR STEEL POST(S)
- (##-##) NEW SIGN NUMBER
- S.P. MOUNT SIGN ON SIGNAL POLE
- S.A. MOUNT SIGN ON SIGNAL ARM

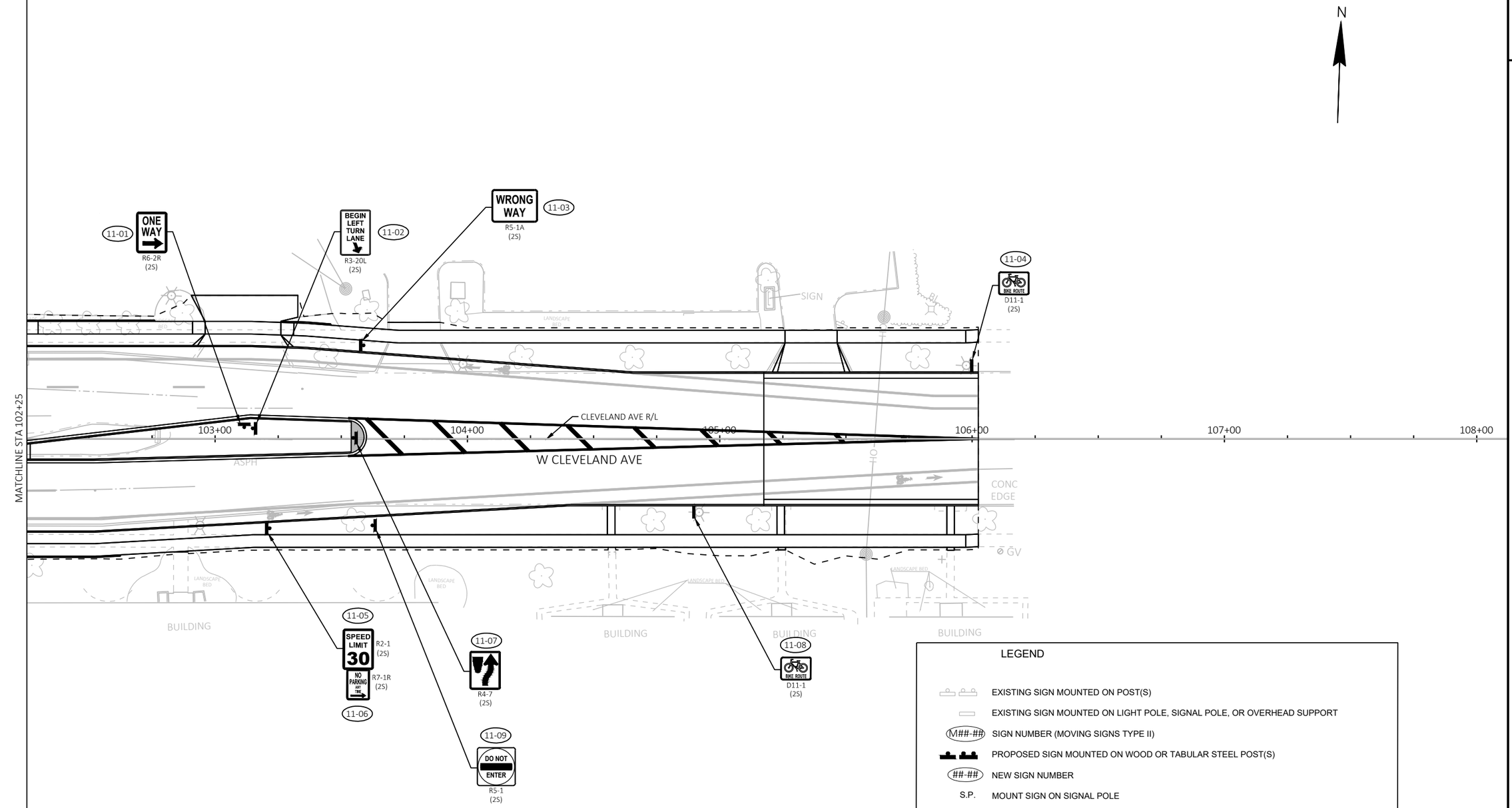
ALL EXISTING SIGNS ARE TO REMAIN UNLESS OTHERWISE NOTED

SHEET 10 OF 11

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PERMANENT SIGNING | SHEET 230 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\023202-PS.DWG
LAYOUT NAME - 10
PLOT DATE : 1/8/2026 11:33 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2




## LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLE, SIGNAL POLE, OR OVERHEAD SUPPORT
- M##-## — SIGN NUMBER (MOVING SIGNS TYPE II)
- PROPOSED SIGN MOUNTED ON WOOD OR TABULAR STEEL POST(S)
- ##-## — NEW SIGN NUMBER
- S.P. — MOUNT SIGN ON SIGNAL POLE
- S.A. — MOUNT SIGN ON SIGNAL ARM

ALL EXISTING SIGNS ARE TO REMAIN UNLESS OTHERWISE NOTED

SHEET 11 OF 11

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PERMANENT SIGNING | SHEET 231 | E |
|---|---|---|---|---|---|

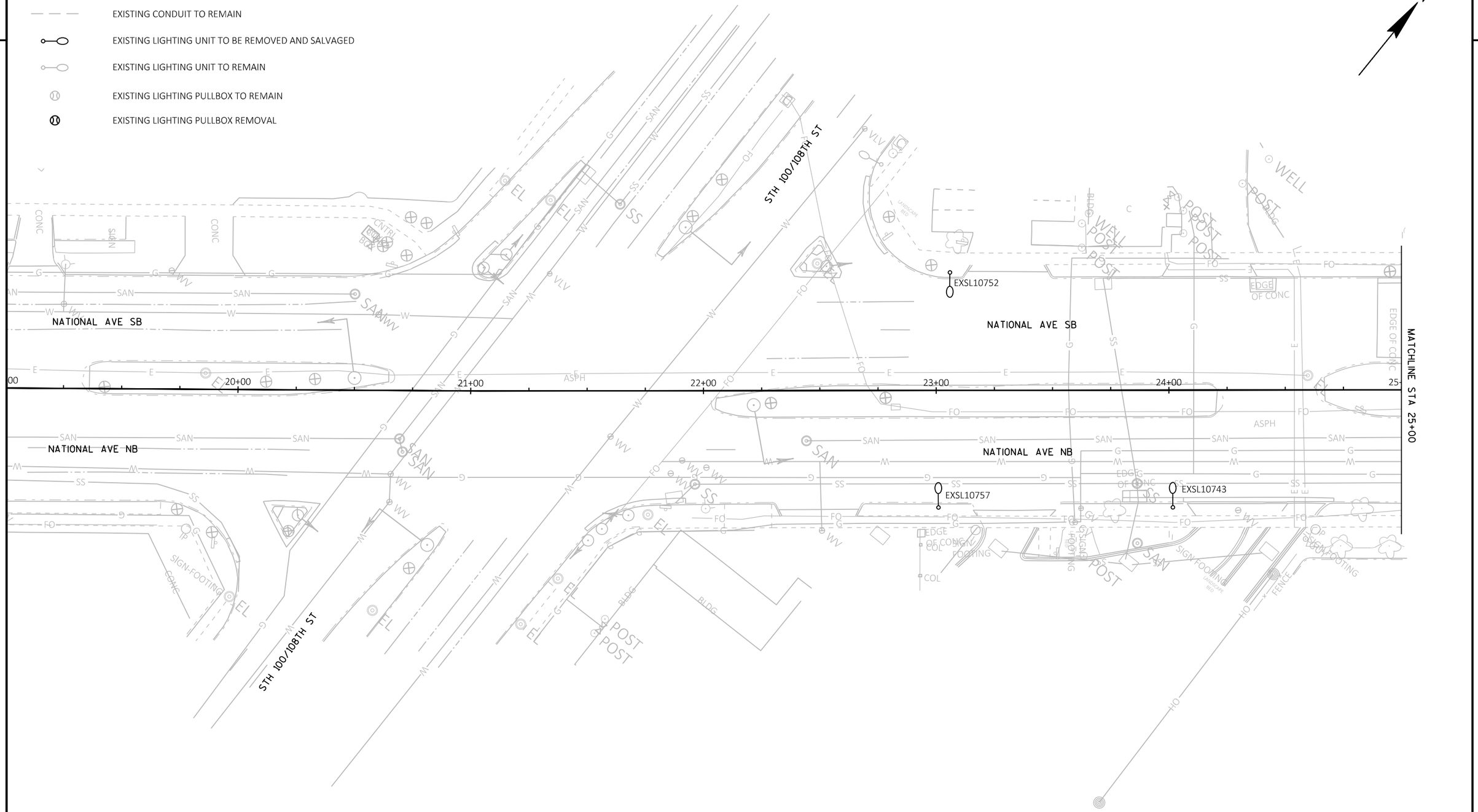
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\023202-PS.DWG
LAYOUT NAME - 11
PLOT DATE : 1/8/2026 11:34 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

## LEGEND

- REMOVE EXISTING LIGHTING CONDUCTORS AND REMOVE OR ABANDON CONDUIT
- EXISTING CONDUIT TO REMAIN
- EXISTING LIGHTING UNIT TO BE REMOVED AND SALVAGED
- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING LIGHTING PULLBOX TO REMAIN
- EXISTING LIGHTING PULLBOX REMOVAL

CONSTRUCTION NOTES:

1) FIELD VERIFY ALL ELECTRICAL INFRASTRUCTURE PRIOR TO REMOVAL TO ENSURE ALL REMOVALS ARE NECESSARY




SHEET 1 OF 13

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | LIGHTING REMOVAL PLANS | SHEET 232 | E |
|---|---|---|---|---|---|

FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023401-LR.DWG
LAYOUT NAME - 01

PLOT DATE : 10/30/2025 2:59 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

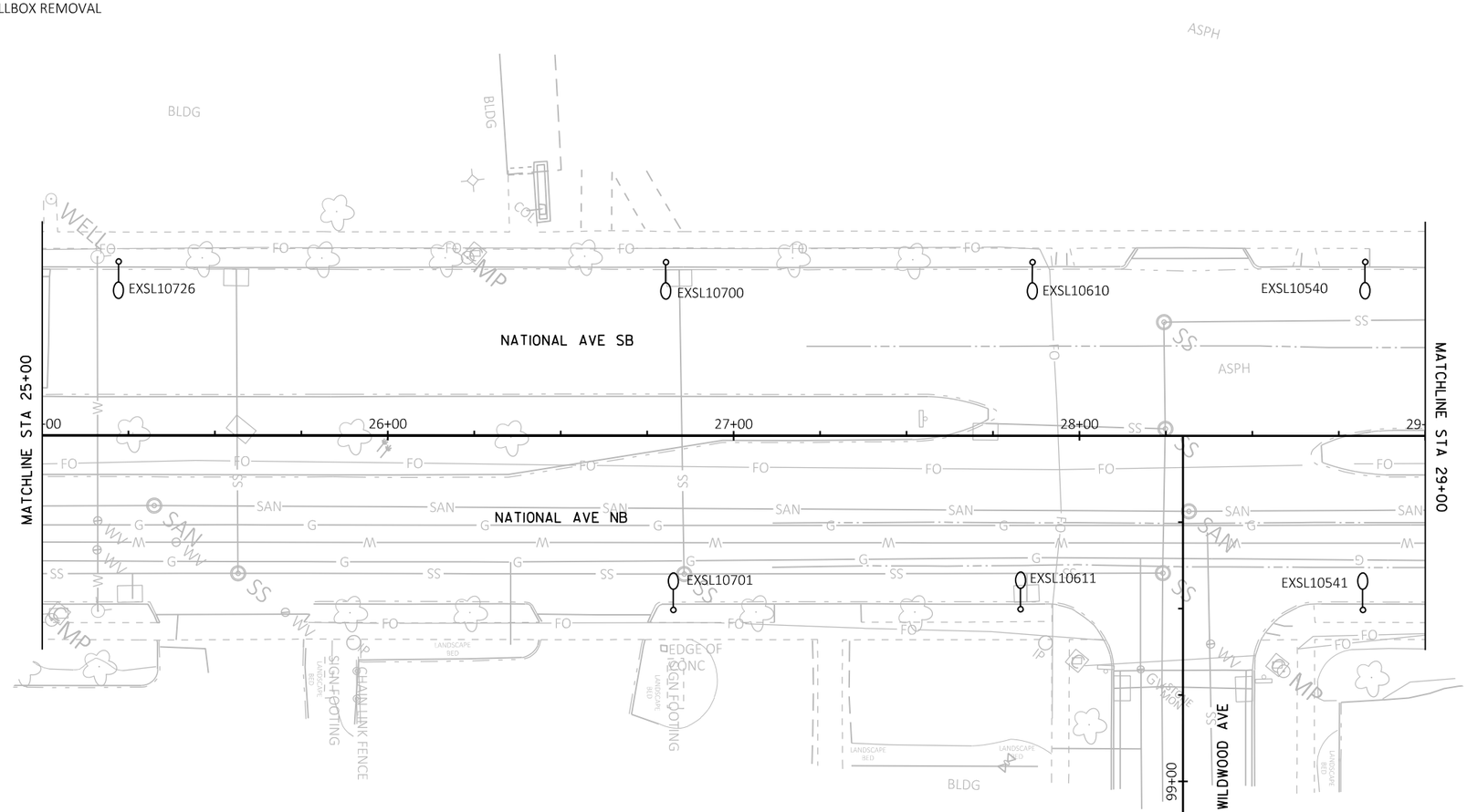
2

## LEGEND

- REMOVE EXISTING LIGHTING CONDUCTORS AND REMOVE OR ABANDON CONDUIT
- EXISTING CONDUIT TO REMAIN
- EXISTING LIGHTING UNIT TO BE REMOVED AND SALVAGED
- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING LIGHTING PULLBOX TO REMAIN
- EXISTING LIGHTING PULLBOX REMOVAL

CONSTRUCTION NOTES:

1) FIELD VERIFY ALL ELECTRICAL INFRASTRUCTURE PRIOR TO REMOVAL TO ENSURE ALL REMOVALS ARE NECESSARY




SHEET 2 OF 13

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | LIGHTING REMOVAL PLANS | SHEET 233 | E |
|---|---|---|---|---|---|

FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023401-LR.DWG
LAYOUT NAME - 02

PLOT DATE : 10/30/2025 2:59 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

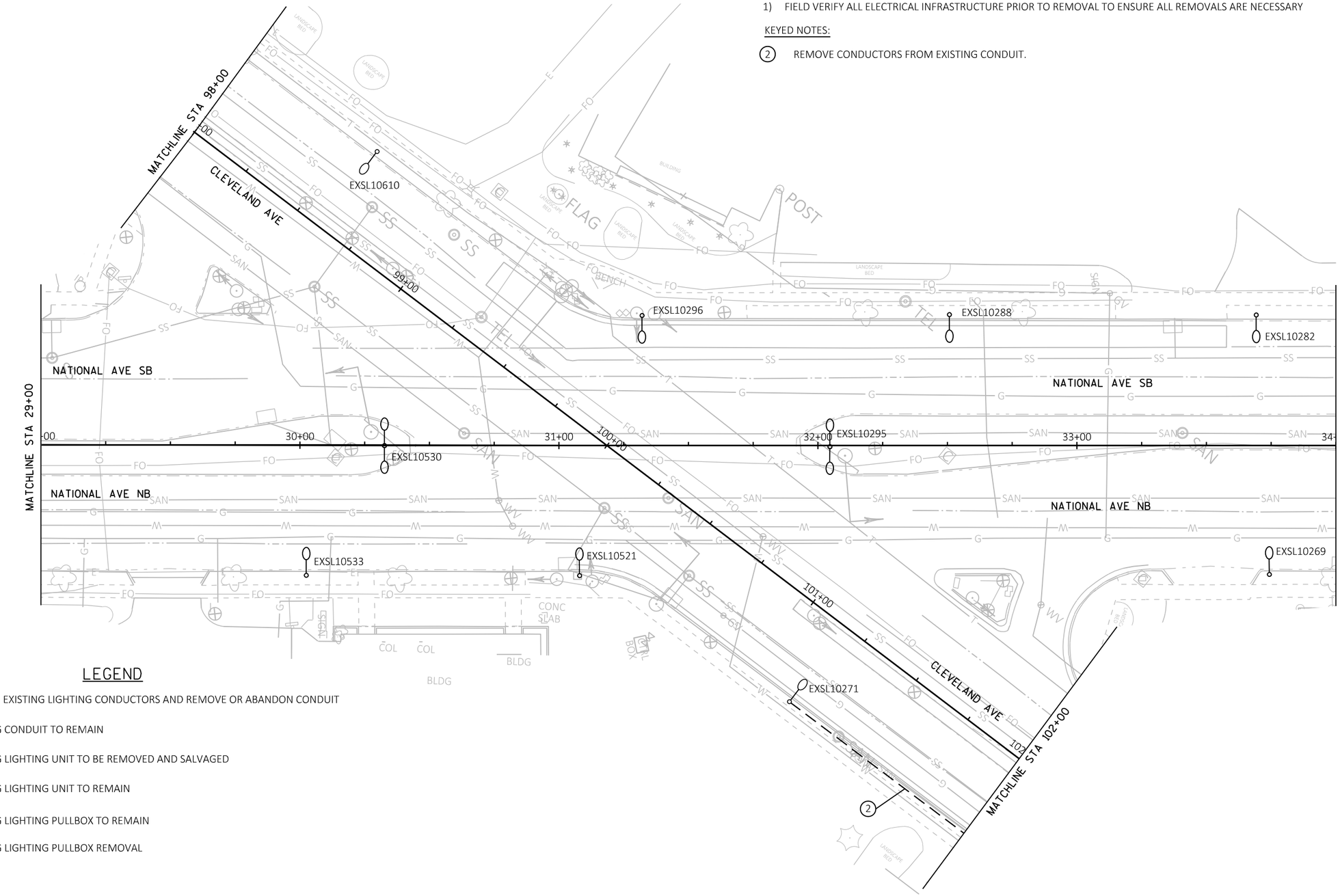
2

CONSTRUCTION NOTES:

1) FIELD VERIFY ALL ELECTRICAL INFRASTRUCTURE PRIOR TO REMOVAL TO ENSURE ALL REMOVALS ARE NECESSARY

KEYED NOTES:

(2) REMOVE CONDUCTORS FROM EXISTING CONDUIT.




## LEGEND

- REMOVE EXISTING LIGHTING CONDUCTORS AND REMOVE OR ABANDON CONDUIT
- EXISTING CONDUIT TO REMAIN
- EXISTING LIGHTING UNIT TO BE REMOVED AND SALVAGED
- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING LIGHTING PULLBOX TO REMAIN
- EXISTING LIGHTING PULLBOX REMOVAL

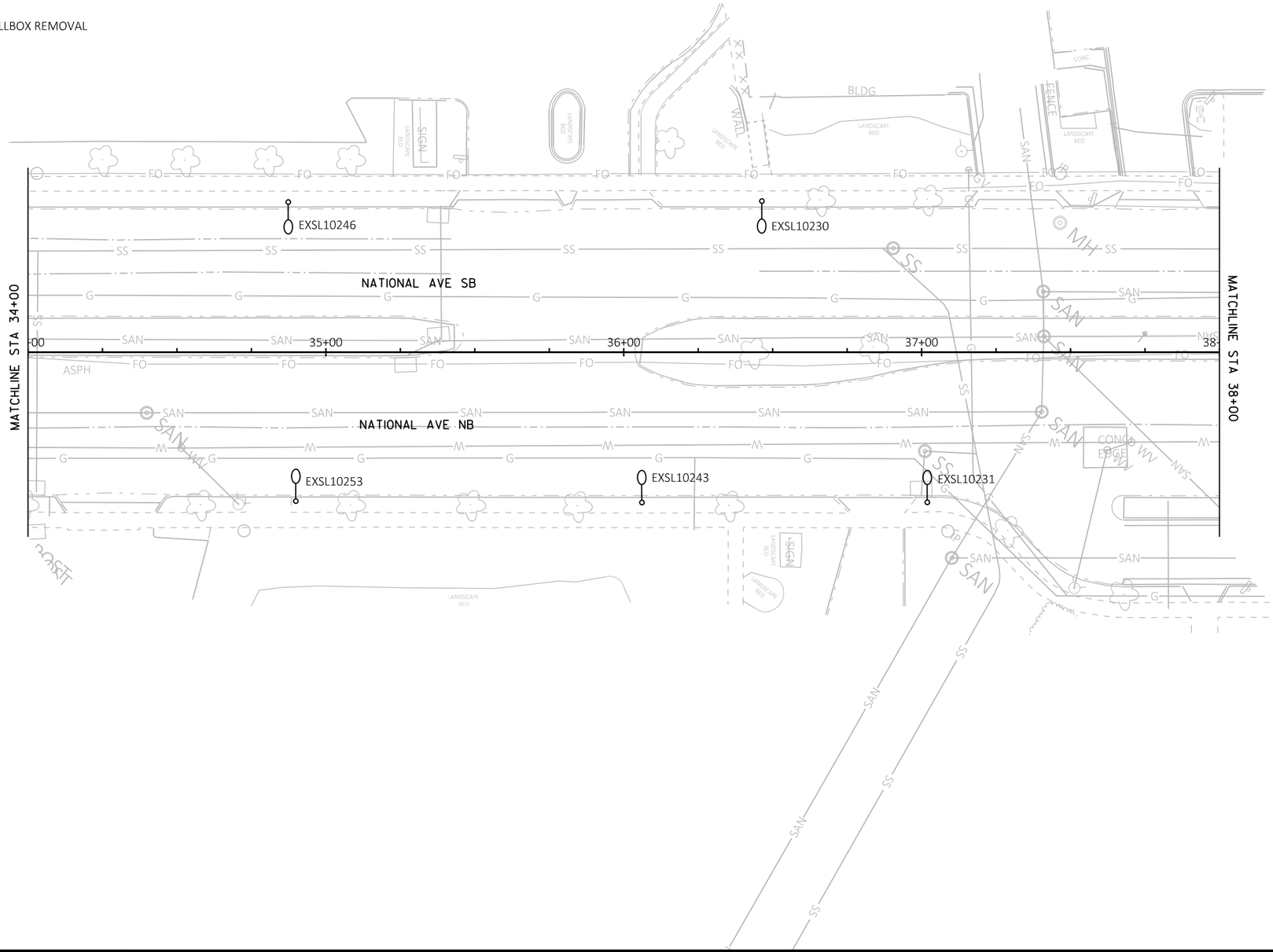
2

## LEGEND

- REMOVE EXISTING LIGHTING CONDUCTORS AND REMOVE OR ABANDON CONDUIT
- EXISTING CONDUIT TO REMAIN
- EXISTING LIGHTING UNIT TO BE REMOVED AND SALVAGED
- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING LIGHTING PULLBOX TO REMAIN
- EXISTING LIGHTING PULLBOX REMOVAL

CONSTRUCTION NOTES:

1) FIELD VERIFY ALL ELECTRICAL INFRASTRUCTURE PRIOR TO REMOVAL TO ENSURE ALL REMOVALS ARE NECESSARY




2

SHEET 4 OF 13

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | LIGHTING REMOVAL PLANS | SHEET 235 | E |
|---|---|---|---|---|---|

FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023401-LR.DWG
LAYOUT NAME - 04

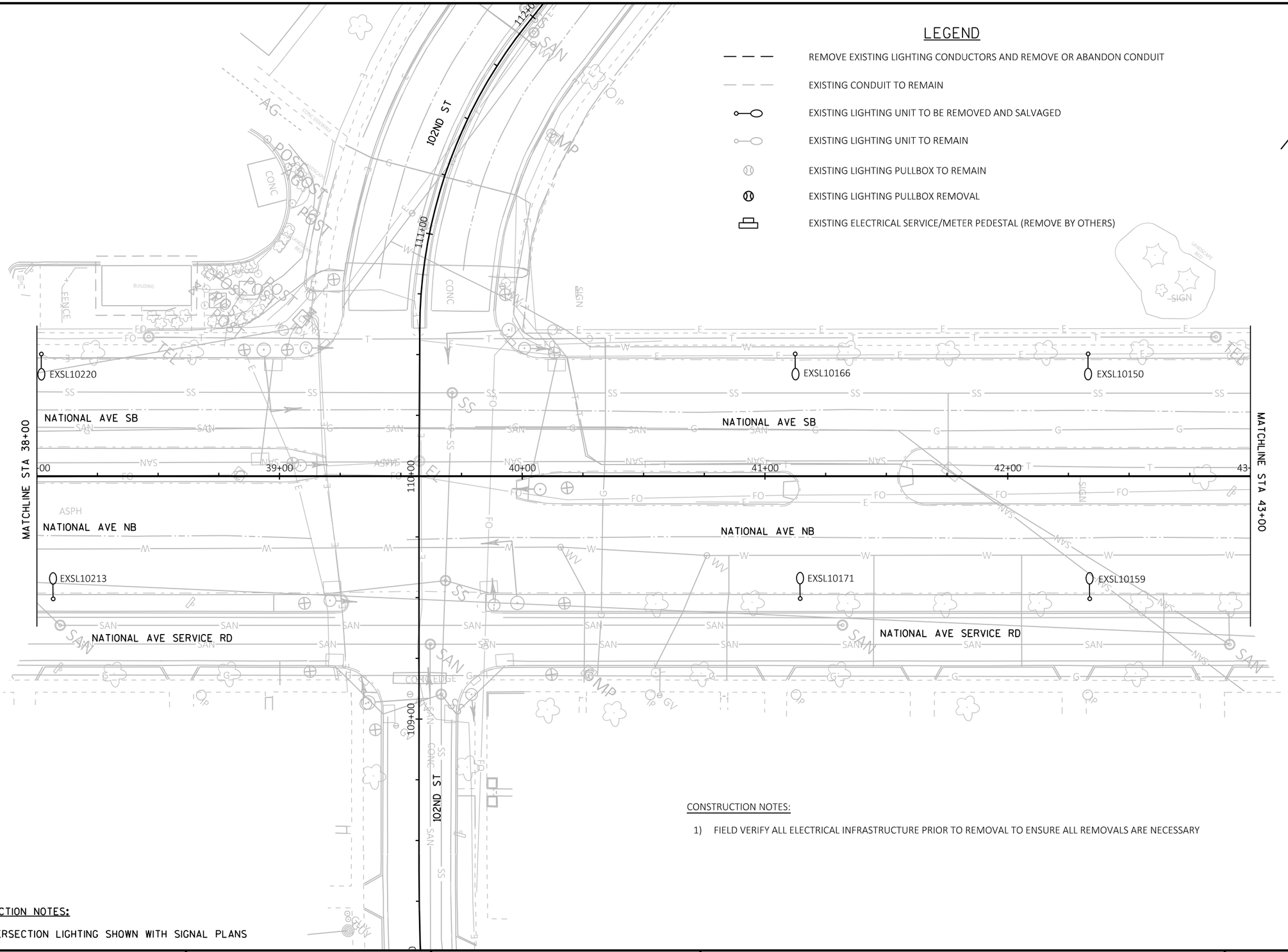
PLOT DATE : 10/30/2025 2:59 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

## LEGEND

- REMOVE EXISTING LIGHTING CONDUCTORS AND REMOVE OR ABANDON CONDUIT
- EXISTING CONDUIT TO REMAIN
- EXISTING LIGHTING UNIT TO BE REMOVED AND SALVAGED
- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING LIGHTING PULLBOX TO REMAIN
- EXISTING LIGHTING PULLBOX REMOVAL
- EXISTING ELECTRICAL SERVICE/METER PEDESTAL (REMOVE BY OTHERS)




CONSTRUCTION NOTES:

1) FIELD VERIFY ALL ELECTRICAL INFRASTRUCTURE PRIOR TO REMOVAL TO ENSURE ALL REMOVALS ARE NECESSARY

CONSTRUCTION NOTES:

1) INTERSECTION LIGHTING SHOWN WITH SIGNAL PLANS



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | LIGHTING REMOVAL PLANS | SHEET 236 | E |
|---|---|---|---|---|---|

FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023401-LR.DWG
LAYOUT NAME - 05
PLOT DATE : 10/30/2025 3:00 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

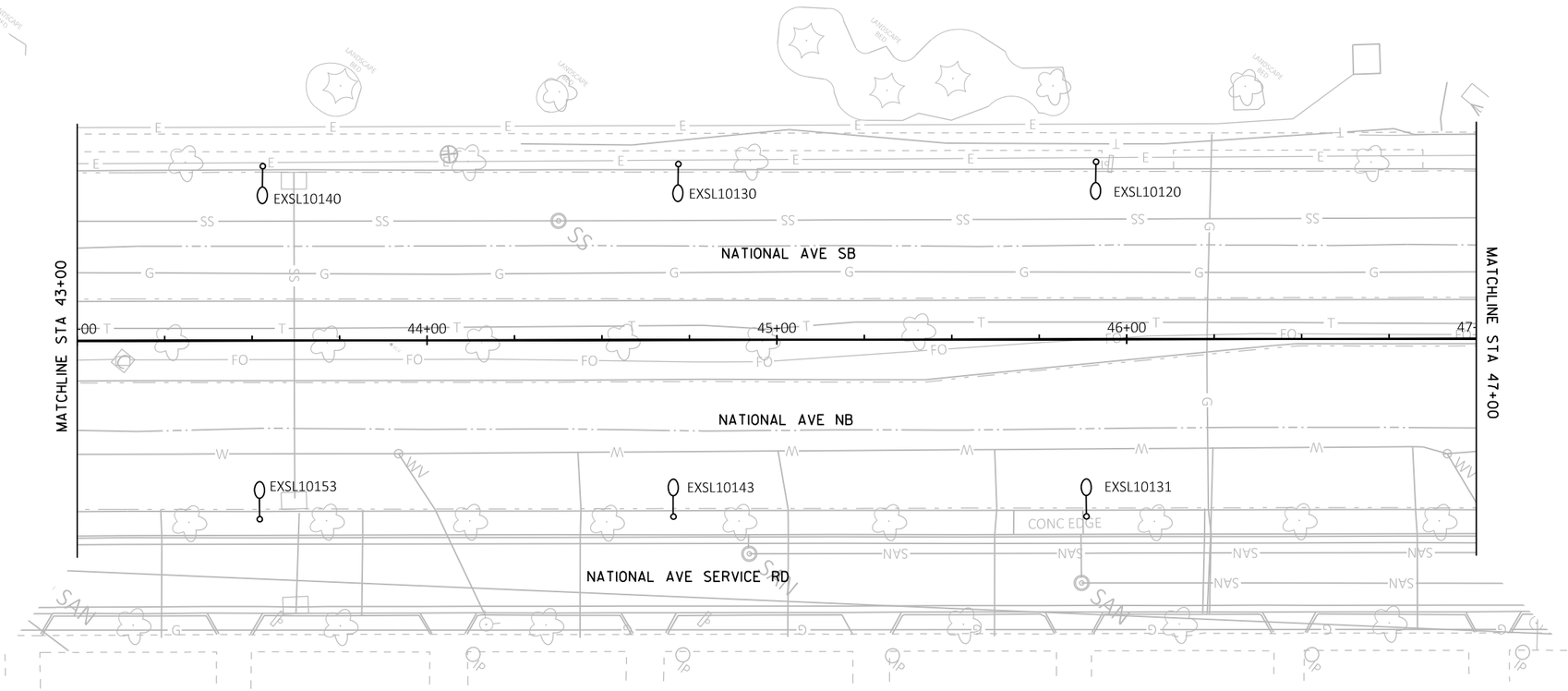
2

## LEGEND

- REMOVE EXISTING LIGHTING CONDUCTORS AND REMOVE OR ABANDON CONDUIT
- EXISTING CONDUIT TO REMAIN
- EXISTING LIGHTING UNIT TO BE REMOVED AND SALVAGED
- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING LIGHTING PULLBOX TO REMAIN
- EXISTING LIGHTING PULLBOX REMOVAL
- EXISTING ELECTRICAL SERVICE/METER PEDESTAL (REMOVE BY OTHERS)

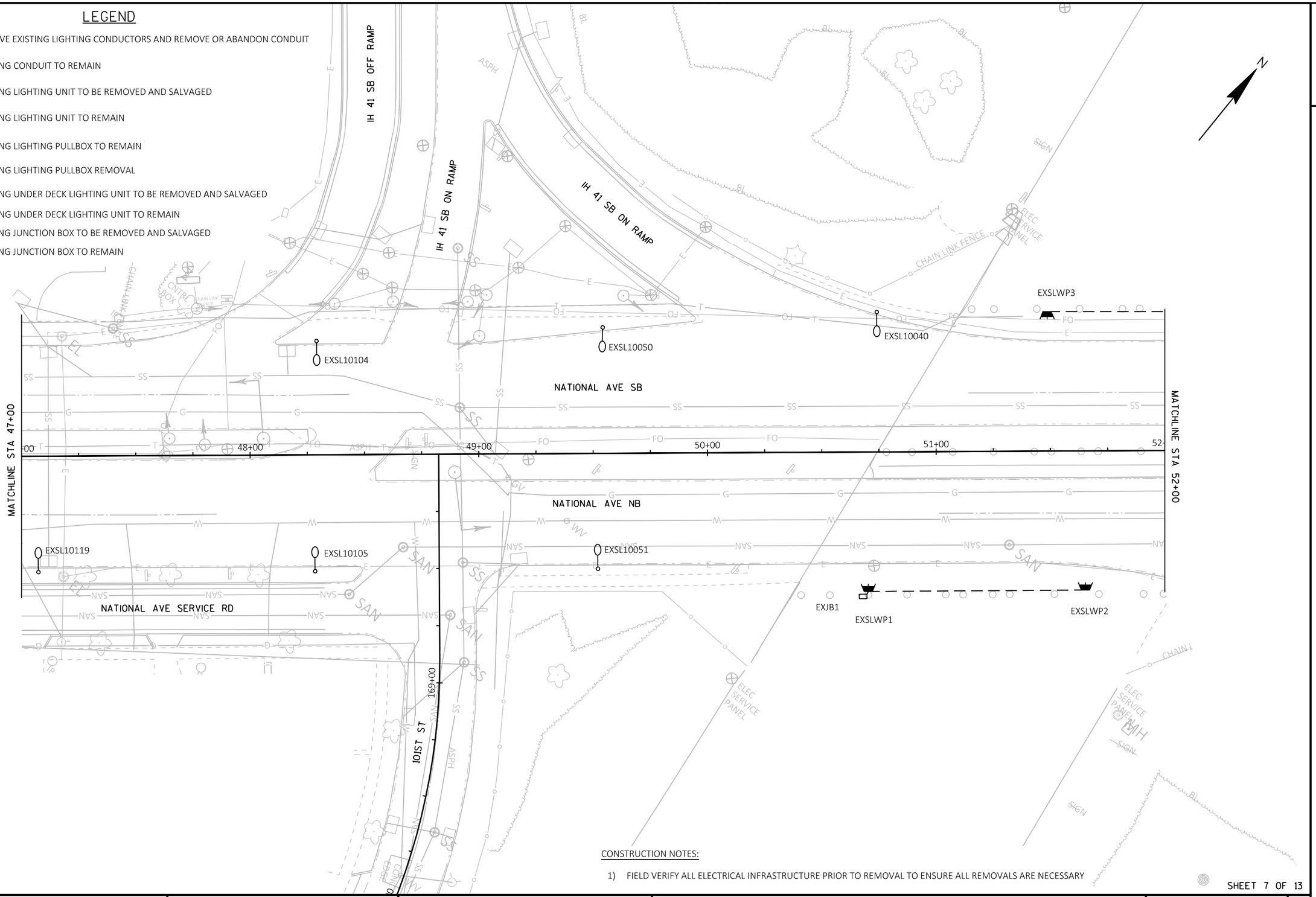
CONSTRUCTION NOTES:

1) FIELD VERIFY ALL ELECTRICAL INFRASTRUCTURE PRIOR TO REMOVAL TO ENSURE ALL REMOVALS ARE NECESSARY



## LEGEND

- REMOVE EXISTING LIGHTING CONDUCTORS AND REMOVE OR ABANDON CONDUIT
- EXISTING CONDUIT TO REMAIN
- EXISTING LIGHTING UNIT TO BE REMOVED AND SALVAGED
- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING LIGHTING PULLBOX TO REMAIN
- EXISTING LIGHTING PULLBOX REMOVAL
- EXISTING UNDER DECK LIGHTING UNIT TO BE REMOVED AND SALVAGED
- EXISTING UNDER DECK LIGHTING UNIT TO REMAIN
- EXISTING JUNCTION BOX TO BE REMOVED AND SALVAGED
- EXISTING JUNCTION BOX TO REMAIN




CONSTRUCTION NOTES:

1) FIELD VERIFY ALL ELECTRICAL INFRASTRUCTURE PRIOR TO REMOVAL TO ENSURE ALL REMOVALS ARE NECESSARY

SHEET 7 OF 13

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | LIGHTING REMOVAL PLANS | SHEET 238 | E |
|---|---|---|---|---|---|

FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023401-LR.DWG
LAYOUT NAME - 07

PLOT DATE : 10/30/2025 3:00 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

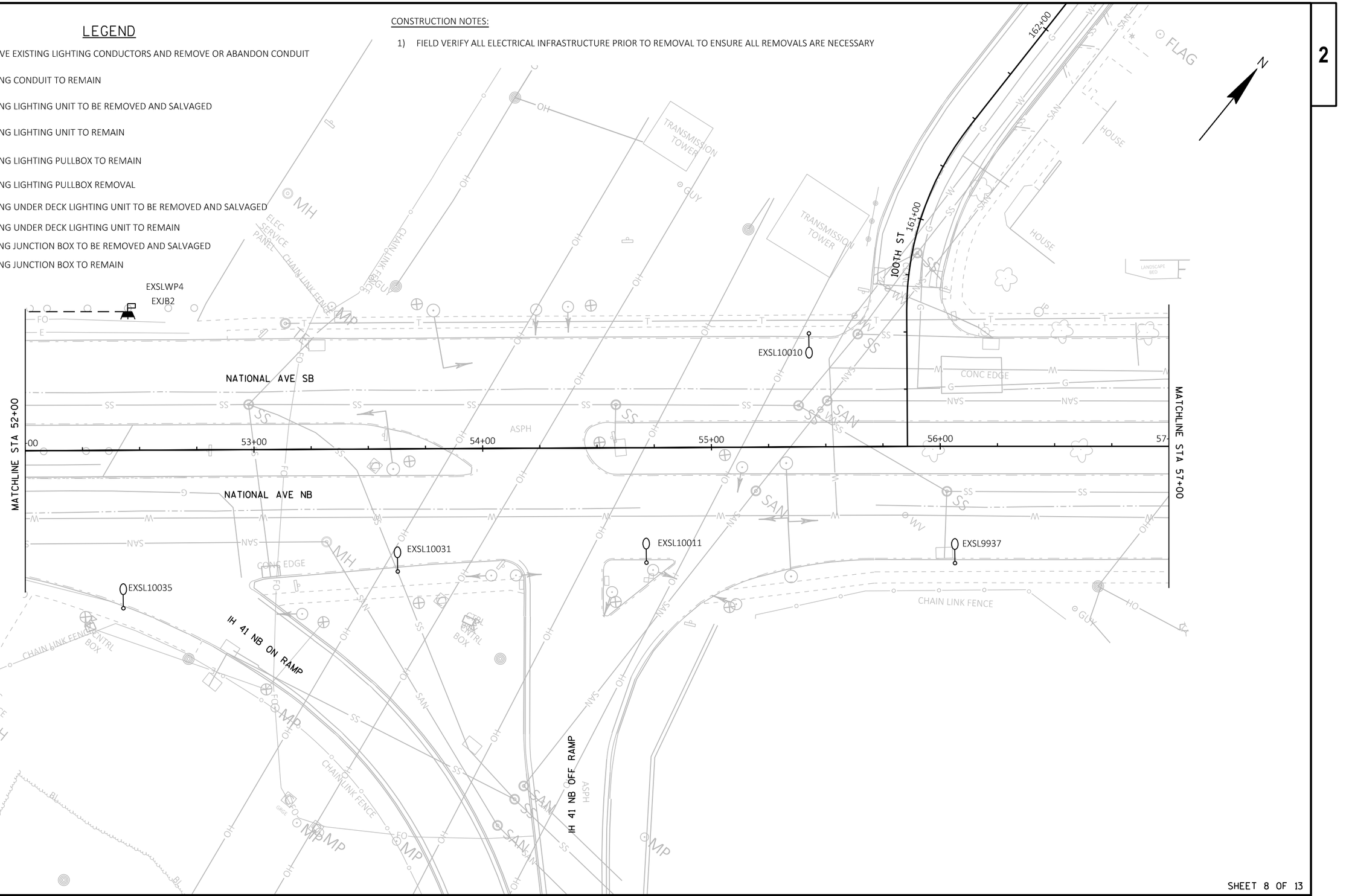
WISDOT/CADDS SHEET 42

## LEGEND

- REMOVE EXISTING LIGHTING CONDUCTORS AND REMOVE OR ABANDON CONDUIT
- EXISTING CONDUIT TO REMAIN
- EXISTING LIGHTING UNIT TO BE REMOVED AND SALVAGED
- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING LIGHTING PULLBOX TO REMAIN
- EXISTING LIGHTING PULLBOX REMOVAL
- EXISTING UNDER DECK LIGHTING UNIT TO BE REMOVED AND SALVAGED
- EXISTING UNDER DECK LIGHTING UNIT TO REMAIN
- EXISTING JUNCTION BOX TO BE REMOVED AND SALVAGED
- EXISTING JUNCTION BOX TO REMAIN

CONSTRUCTION NOTES:

1) FIELD VERIFY ALL ELECTRICAL INFRASTRUCTURE PRIOR TO REMOVAL TO ENSURE ALL REMOVALS ARE NECESSARY




SHEET 8 OF 13

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | LIGHTING REMOVAL PLANS | SHEET 239 | E |
|---|---|---|---|---|---|

FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023401-LR.DWG
LAYOUT NAME - 08

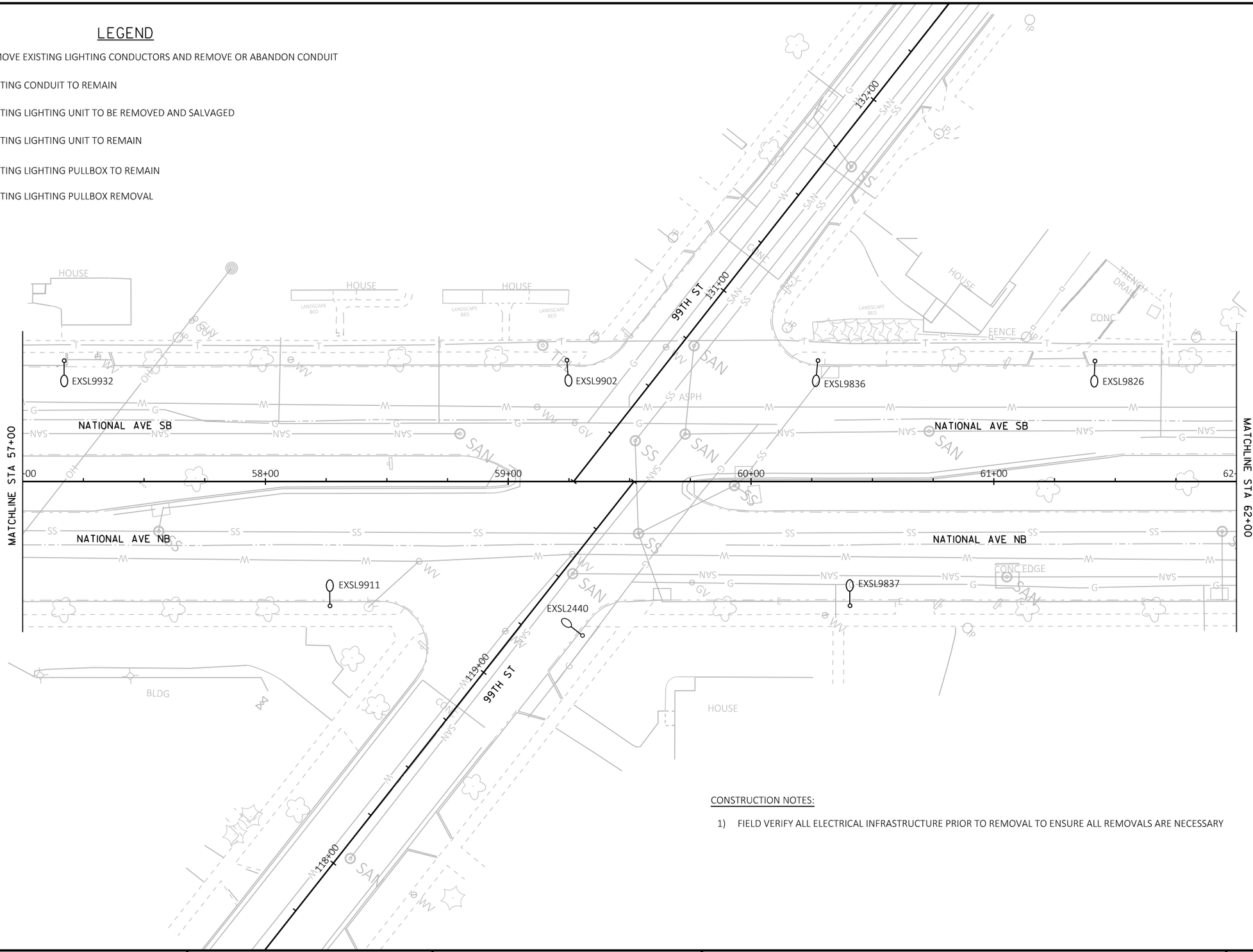
PLOT DATE : 10/30/2025 3:00 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

## LEGEND

- REMOVE EXISTING LIGHTING CONDUCTORS AND REMOVE OR ABANDON CONDUIT
- EXISTING CONDUIT TO REMAIN
- EXISTING LIGHTING UNIT TO BE REMOVED AND SALVAGED
- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING LIGHTING PULLBOX TO REMAIN
- EXISTING LIGHTING PULLBOX REMOVAL




CONSTRUCTION NOTES:

1) FIELD VERIFY ALL ELECTRICAL INFRASTRUCTURE PRIOR TO REMOVAL TO ENSURE ALL REMOVALS ARE NECESSARY

SHEET 9 OF 13

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | LIGHTING REMOVAL PLANS | SHEET 240 | E |
|---|---|---|---|---|---|

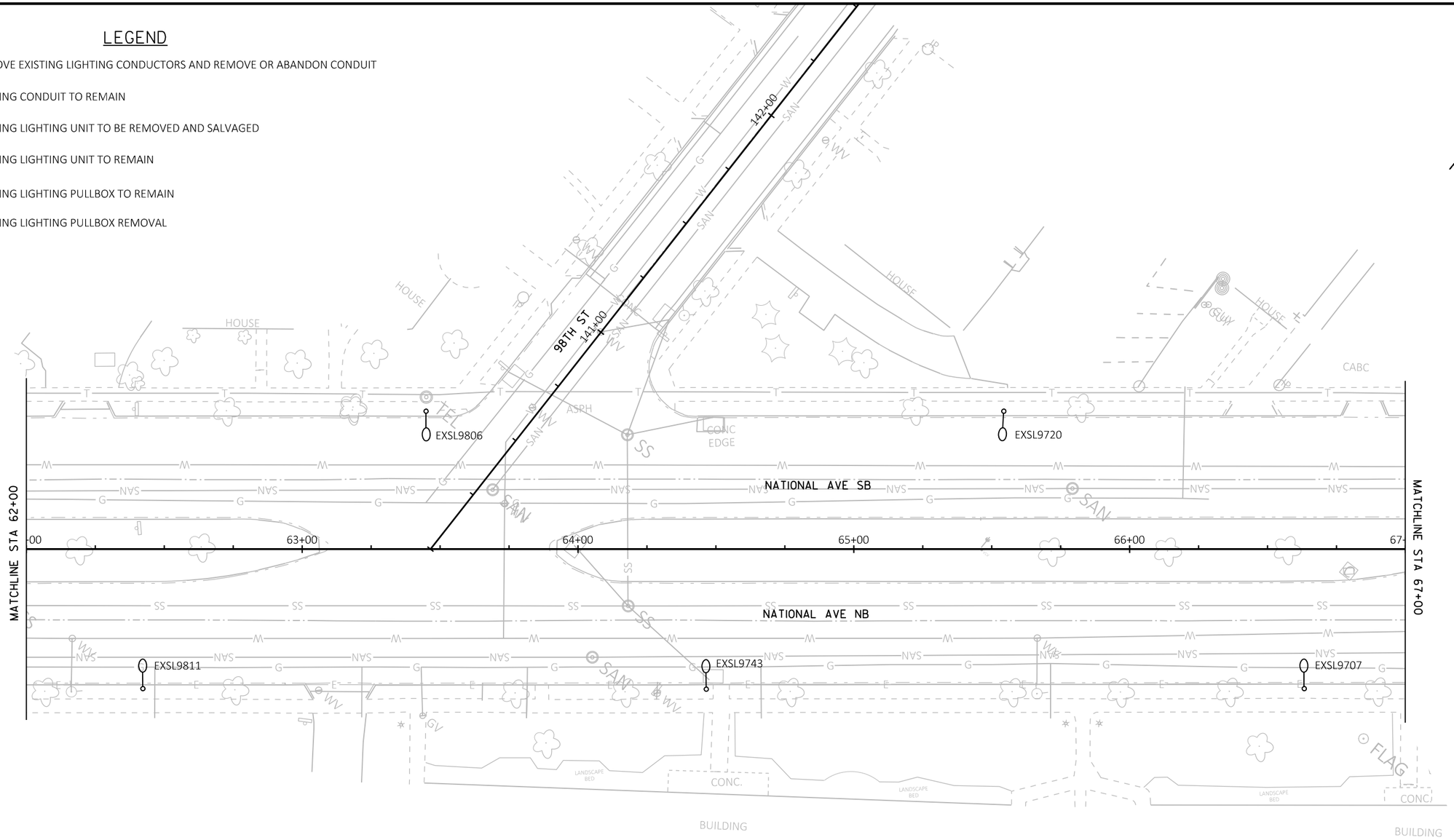
FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023401-LR.DWG
LAYOUT NAME - 09

PLOT DATE : 10/30/2025 3:00 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

## LEGEND

- REMOVE EXISTING LIGHTING CONDUCTORS AND REMOVE OR ABANDON CONDUIT
- EXISTING CONDUIT TO REMAIN
- EXISTING LIGHTING UNIT TO BE REMOVED AND SALVAGED
- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING LIGHTING PULLBOX TO REMAIN
- EXISTING LIGHTING PULLBOX REMOVAL




CONSTRUCTION NOTES:

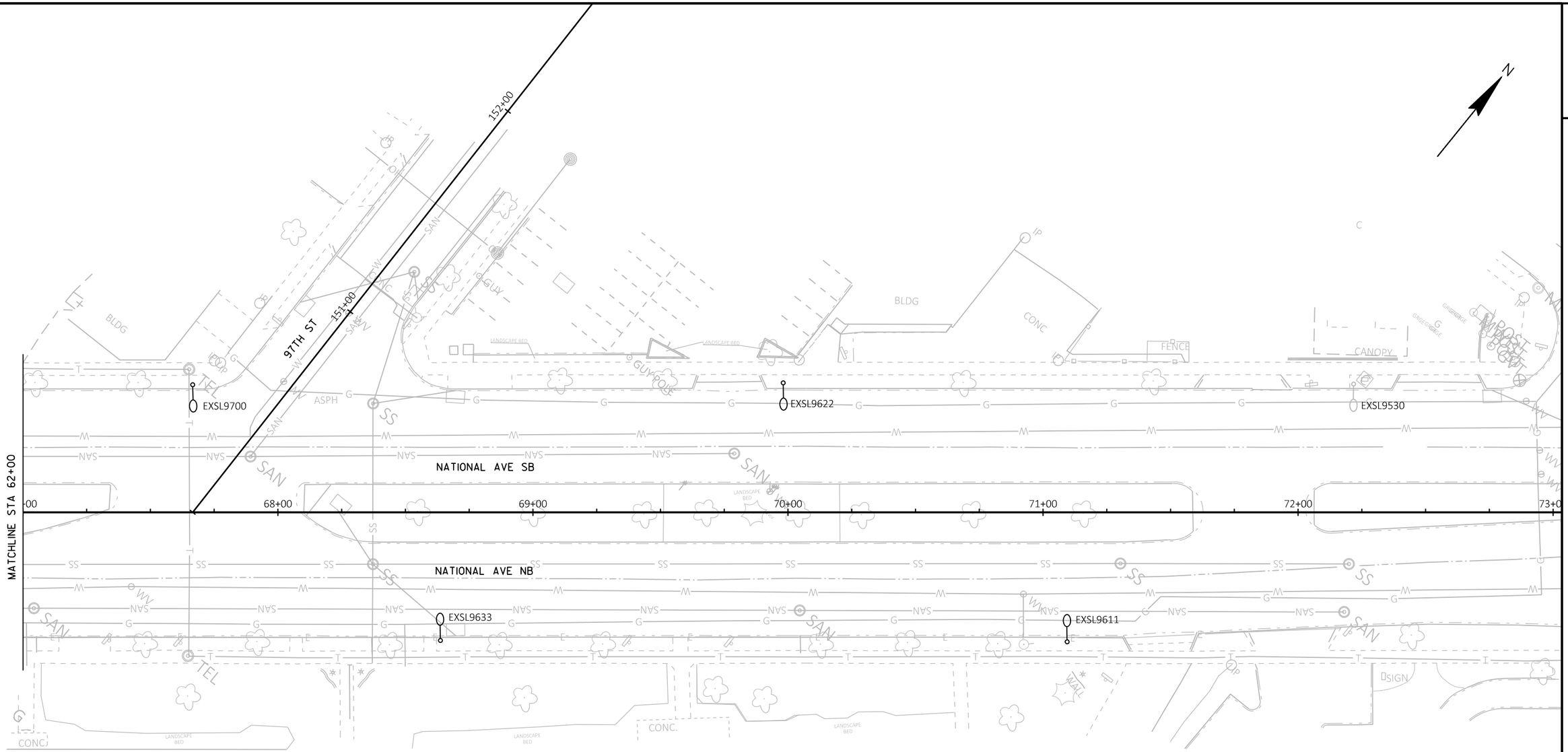
1) FIELD VERIFY ALL ELECTRICAL INFRASTRUCTURE PRIOR TO REMOVAL TO ENSURE ALL REMOVALS ARE NECESSARY



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | LIGHTING REMOVAL PLANS | SHEET 241 | E |
|---|---|---|---|---|---|

FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023401-LR.DWG
LAYOUT NAME - 10
PLOT DATE : 10/30/2025 3:00 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2




## LEGEND

- REMOVE EXISTING LIGHTING CONDUCTORS AND REMOVE OR ABANDON CONDUIT
- EXISTING CONDUIT TO REMAIN
- EXISTING LIGHTING UNIT TO BE REMOVED AND SALVAGED
- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING LIGHTING PULLBOX TO REMAIN
- EXISTING LIGHTING PULLBOX REMOVAL

CONSTRUCTION NOTES:

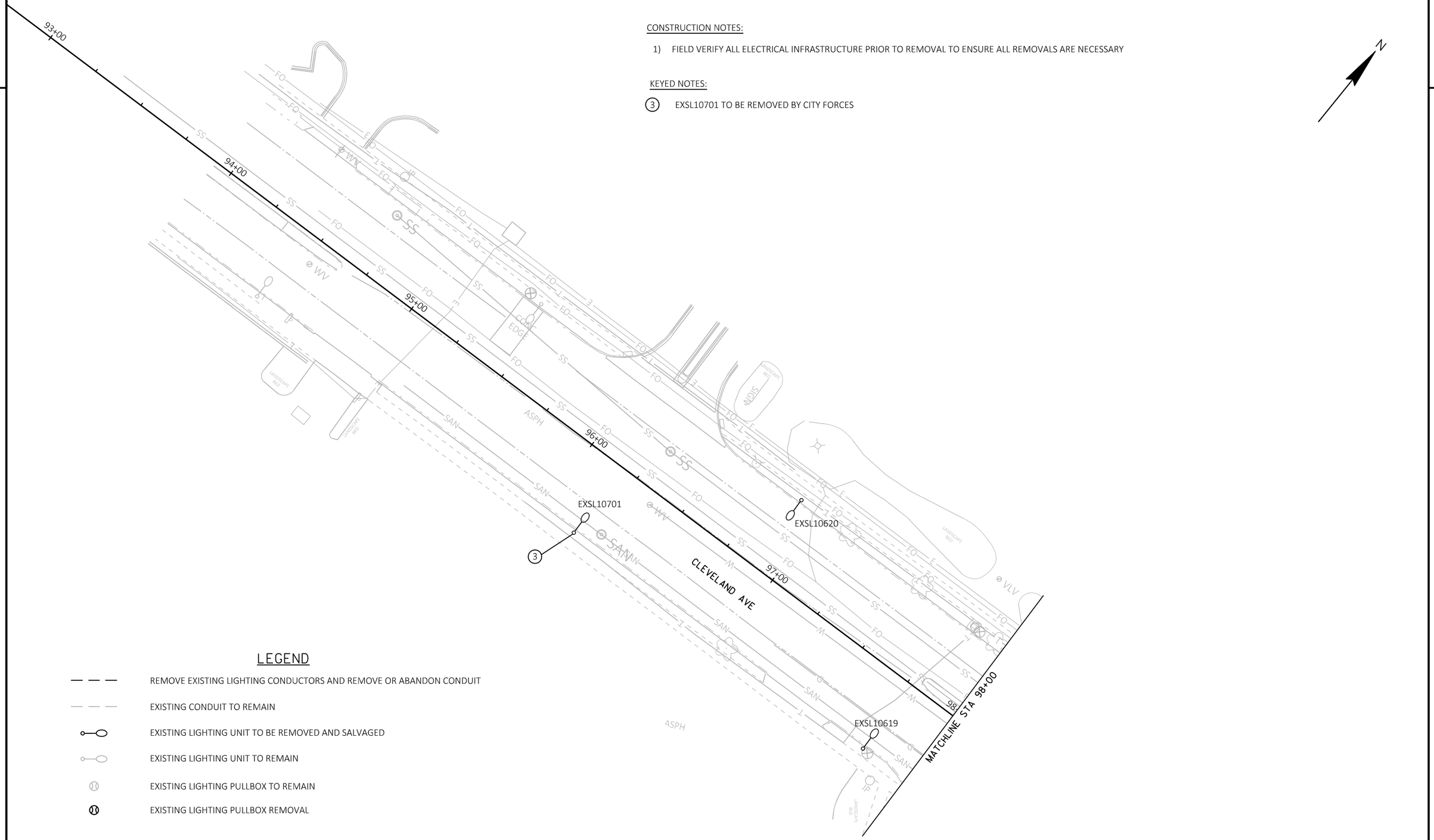
1) FIELD VERIFY ALL ELECTRICAL INFRASTRUCTURE PRIOR TO REMOVAL TO ENSURE ALL REMOVALS ARE NECESSARY

CONSTRUCTION NOTES:

1) FIELD VERIFY ALL ELECTRICAL INFRASTRUCTURE PRIOR TO REMOVAL TO ENSURE ALL REMOVALS ARE NECESSARY

KEYED NOTES:

(3) EXSL10701 TO BE REMOVED BY CITY FORCES




## LEGEND

- REMOVE EXISTING LIGHTING CONDUCTORS AND REMOVE OR ABANDON CONDUIT
- EXISTING CONDUIT TO REMAIN
- EXISTING LIGHTING UNIT TO BE REMOVED AND SALVAGED
- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING LIGHTING PULLBOX TO REMAIN
- EXISTING LIGHTING PULLBOX REMOVAL

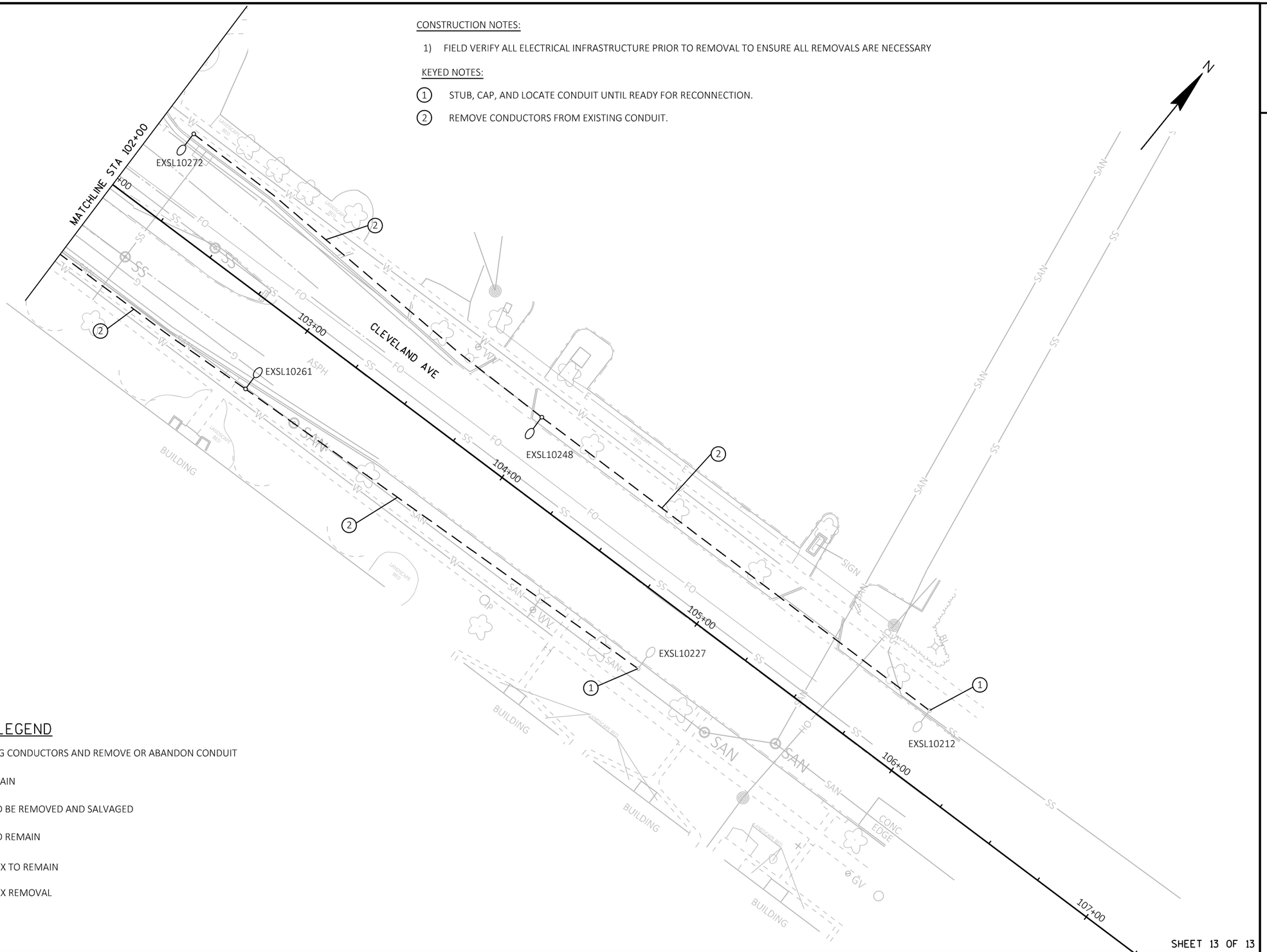
CONSTRUCTION NOTES:

1) FIELD VERIFY ALL ELECTRICAL INFRASTRUCTURE PRIOR TO REMOVAL TO ENSURE ALL REMOVALS ARE NECESSARY

KEYED NOTES:

(1) STUB, CAP, AND LOCATE CONDUIT UNTIL READY FOR RECONNECTION.

(2) REMOVE CONDUCTORS FROM EXISTING CONDUIT.




## LEGEND

- REMOVE EXISTING LIGHTING CONDUCTORS AND REMOVE OR ABANDON CONDUIT
- EXISTING CONDUIT TO REMAIN
- EXISTING LIGHTING UNIT TO BE REMOVED AND SALVAGED
- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING LIGHTING PULLBOX TO REMAIN
- EXISTING LIGHTING PULLBOX REMOVAL

SHEET 13 OF 13

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | LIGHTING REMOVAL PLANS | SHEET 244 | E |
|---|---|---|---|---|---|

FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023401-LR.DWG
LAYOUT NAME - 13

PLOT DATE : 10/30/2025 3:01 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

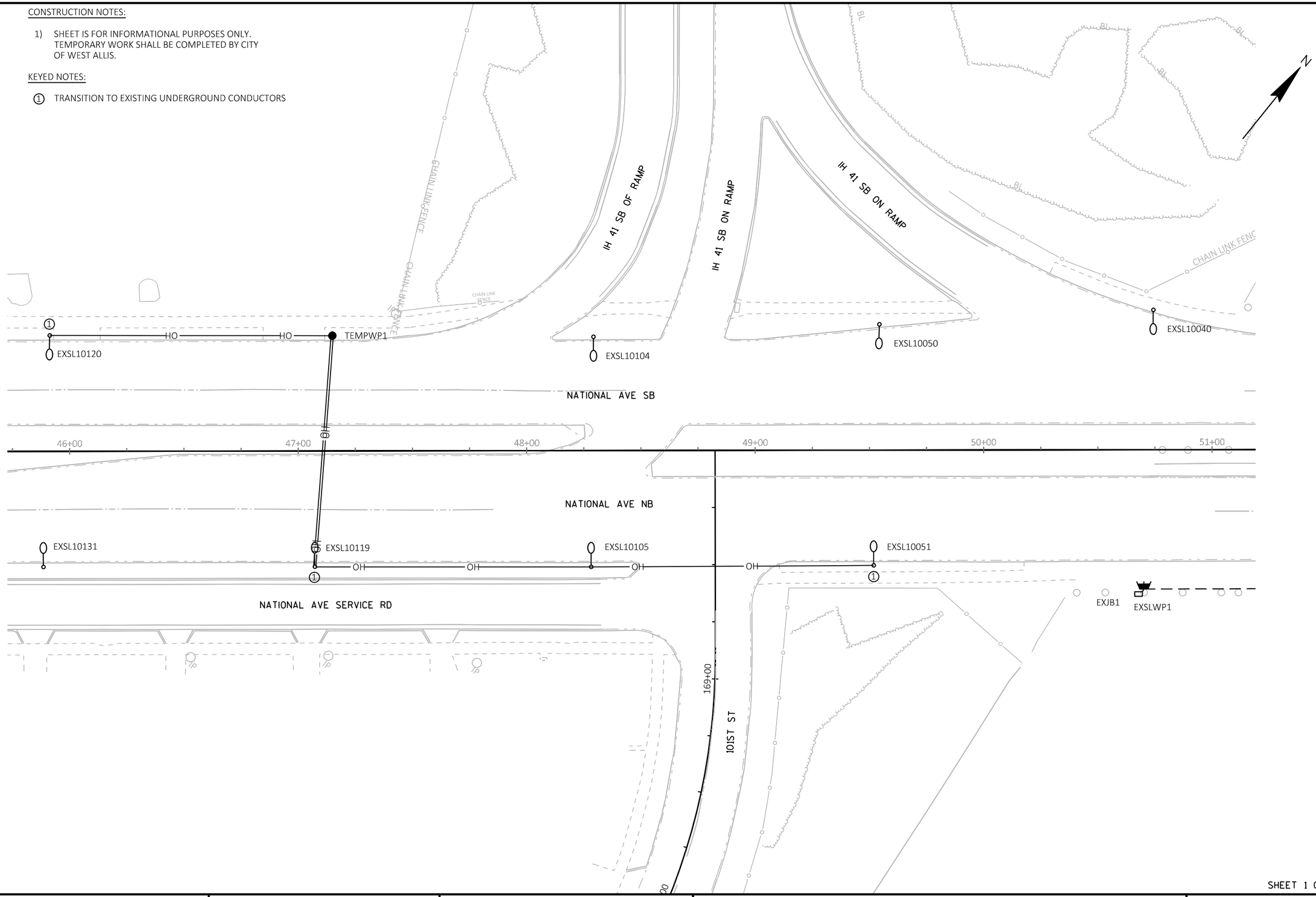
WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES:

1) SHEET IS FOR INFORMATIONAL PURPOSES ONLY. TEMPORARY WORK SHALL BE COMPLETED BY CITY OF WEST ALLIS.

KEYED NOTES:

① TRANSITION TO EXISTING UNDERGROUND CONDUCTORS




SHEET 1 OF 1

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY LIGHTING PLANS | SHEET 245 | E |
|---|---|---|---|---|---|

FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023401-LR-TEMP.DWG
LAYOUT NAME - 06

PLOT DATE : 1/9/2026 12:36 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

STREET LIGHTING PLANS PREPARED BY:

KL Engineering

WISCONSIN
JACOB A. JOYAL
46965-6
OREGON, WI
PROFESSIONAL ENGINEER

10/30/2025
(DATE)

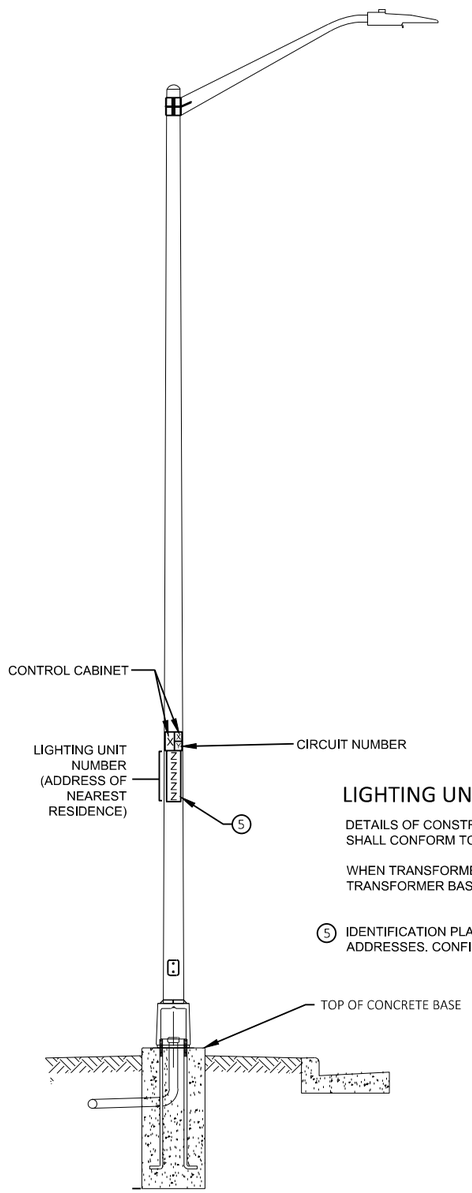
(SIGNATURE)

## LIGHTING PLAN LEGEND:

- SINGLE ARM LIGHTING UNIT
- TWIN ARM LIGHTING UNIT
- CONCRETE CONTROL CABINET BASE/ELECTRICAL SERVICE
- PULL BOX NON-CONDUCTIVE, 24"X42"
- —— —— LIGHTING CONDUIT SCHEDULE 40
- —— - —— LIGHTING CONDUIT SCHEDULE 80
- ------- FIBER CONDUIT SCHEDULE 40

STA XXX+XX'XX' - XX.X' XT
LED - X - X - X - X - SLXXX

- STATION
- OFFSET
- LIGHTING UNIT NUMBER
- LUMINAIRE CIRCUIT LETTER
- MAST ARM LENGTH IN FEET
- POLE SHAFT LENGTH IN FEET
- CONCRETE BASE TYPE
- LUMINAIRE TYPE




### LIGHTING UNIT GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(5) IDENTIFICATION PLAQUE - INSTALLED BY CONTRACTOR. SEE QUANTITY TABLES FOR ADDRESSES. CONFIRM ADDRESS WITH CITY OF WEST ALLIS PRIOR TO INSTALLATION.

LIGHTING UNIT DETAIL
NO SCALE

## CONDUIT/CONDUCTOR LEGEND

| CB100 | 1 | 2" |
|---|---|---|
| A | 1 | #6 | 1 | #6 |

- SERVICE CABINET
- NO. OF CONDUITS
- CONDUIT SIZE
- SIZE (AWG) OF GROUND CONDUCTOR
- QTY. OF GROUND CONDUCTOR
- SIZE (AWG) OF CONDUCTORS
- QTY. OF CONDUCTORS
- CIRCUIT

T.W.O. = TRACER WIRE ONLY

NEU = NEUTRAL

## CONDUCTOR COLOR LEGEND UA CABINET

| LIGHTING CONDUCTORS |
|---|
| 2 - MATCH EXISTING<br>4 - MATCH EXISTING |
| 240V PHASE TO PHASE |

## CONDUCTOR COLOR LEGEND UC CABINET

| LIGHTING CONDUCTORS |
|---|
| 5 - MATCH EXISTING<br>6 - MATCH EXISTING<br>10 - MATCH EXISTING<br>11 - MATCH EXISTING |
| 240V PHASE TO PHASE |

GENERAL STREET LIGHTING NOTES:

1) THE ENGINEER SHALL APPROVE THE FINAL LOCATION FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION.

2) PITCH ALL CONDUITS TOWARD PULLBOXES. INSTALL A 2" DRAIN DUCT TO DITCH OR STORM SEWER AS REQUIRED FOR DRAINAGE. THIS 2" DRAIN DUCT IS INCIDENTAL TO THE PULL BOX BID ITEM. DRAIN DUCT IS NOT SHOWN. DO NOT SPLICE IN PULLBOXES.

3) THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

4) REFER TO STAKING DATA FOR EXACT OFFSET LOCATIONS, WITH ALL LOCATIONS APPROVED BY THE ENGINEER PRIOR TO INSTALL.

| A = | UC | 1 | | 2" | |
|---|---|---|---|---|---|
| | 11 | 2 | #6 | 1 | #6 |

STA. 23+0'NAT' - 53.9' LT
PB300

STA. 23+96'NAT' - 6.4' RT
PB100

STA. 24+02'NAT' - 6.5' RT
LED B - 5 - 30 - 6 - 11/11 - SL100

1-2" T.W.O.

1-2" T.W.O.

STH 100/108TH ST

NATIONAL AVE SB

NATIONAL AVE NB

NATIONAL AVE SB

NATIONAL AVE NB

STH 100/108TH ST

20+00 21+00 22+00 23+00 24+00 25+00

MATCHLINE STA 25+00

SHEET 2 OF 16

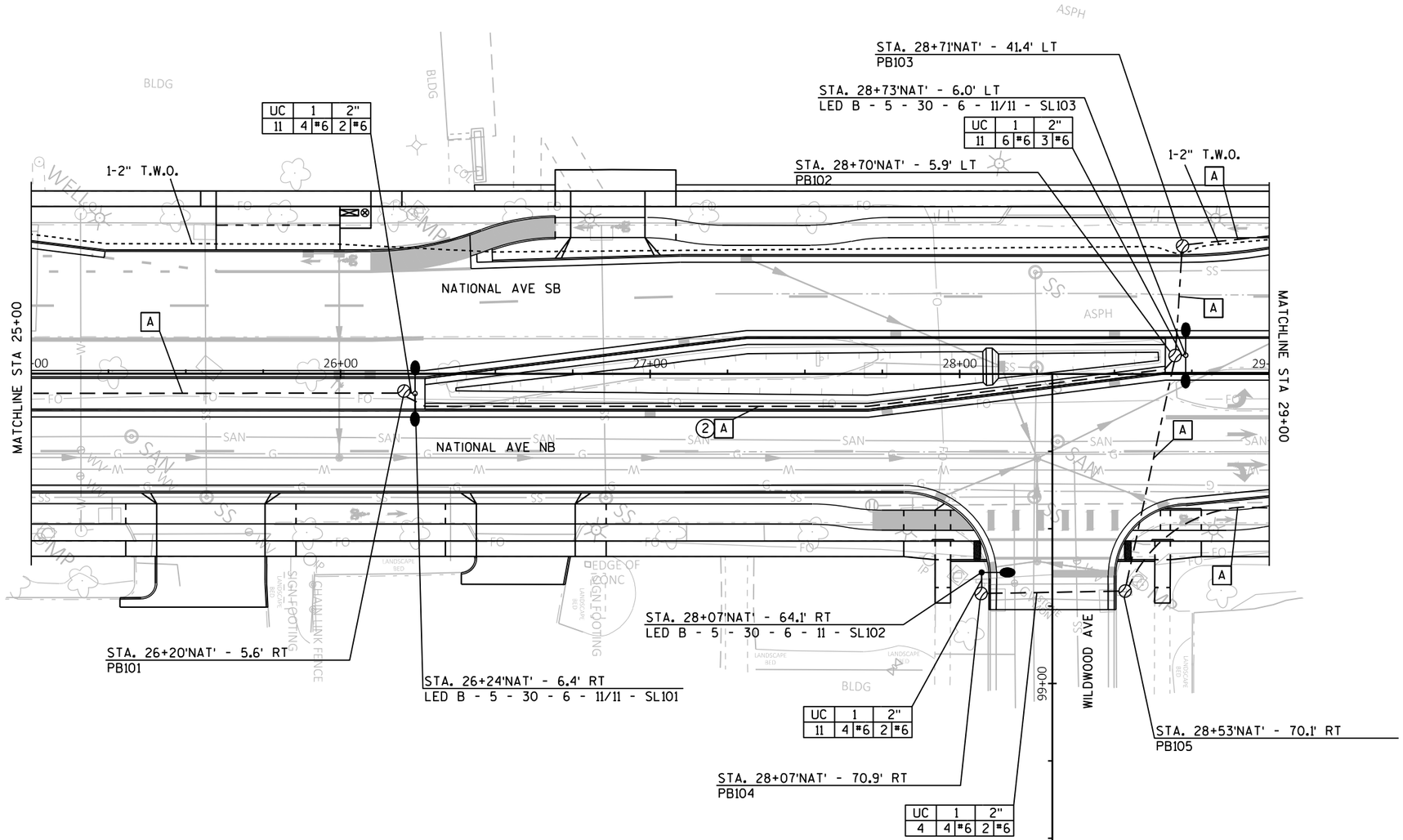
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | LIGHTING PLANS | SHEET 247 | E |
|---|---|---|---|---|---|

FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023601-LP.DWG
LAYOUT NAME - 01

PLOT DATE : 1/9/2026 9:59 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

| A = | UC | 1 | 2" |
|---|---|---|---|
| | 11 | 2 #6 | 1 #6 |




KEYED NOTES:

(2) ROUTE CONDUIT AROUND BIOSWALE

SHEET 3 OF 16

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | LIGHTING PLANS | SHEET 248 | E |
|---|---|---|---|---|---|

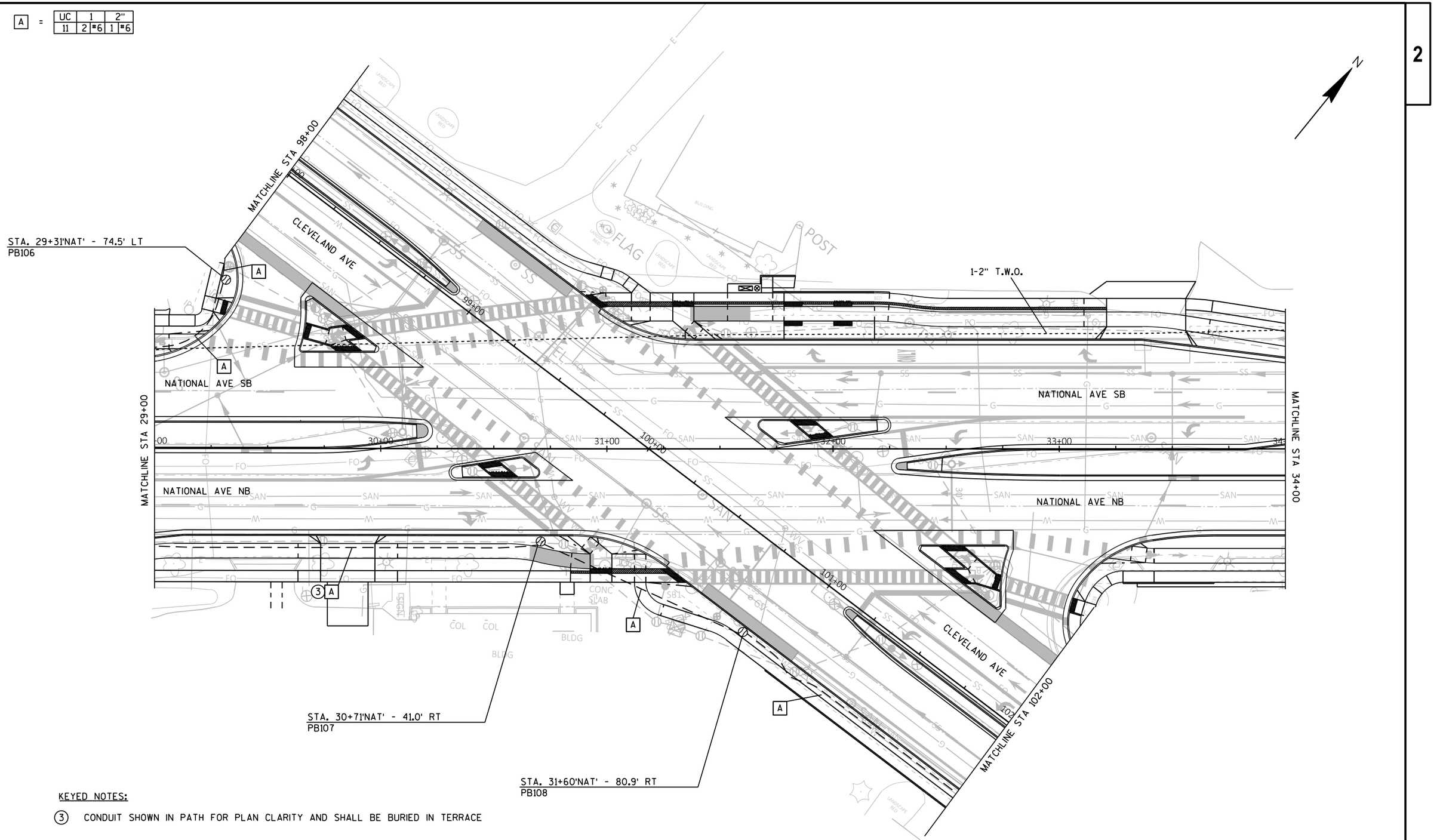
FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023601-LP.DWG
LAYOUT NAME - 02

PLOT DATE : 1/9/2026 9:59 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

| A = | UC | 1 | | 2" | |
|---|---|---|---|---|---|
| | 11 | 2 | #6 | 1 | #6 |




KEYED NOTES:

③ CONDUIT SHOWN IN PATH FOR PLAN CLARITY AND SHALL BE BURIED IN TERRACE

CONSTRUCTION NOTES:

1) INTERSECTION LIGHTING SHOWN WITH SIGNAL PLANS

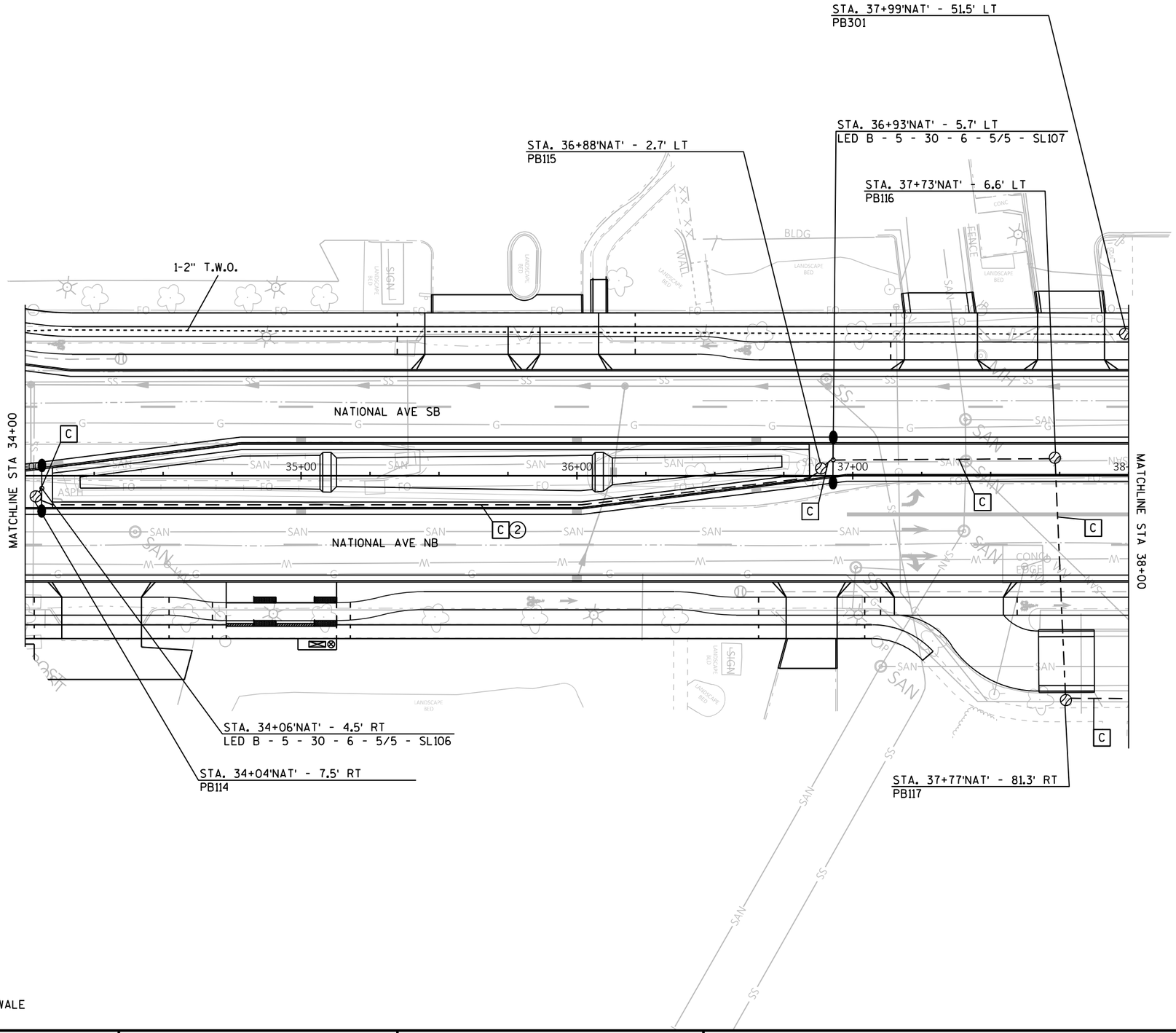


| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | LIGHTING PLANS | SHEET 249 | E |
|---|---|---|---|---|---|

FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023601-LP.DWG
LAYOUT NAME - 03
PLOT DATE : 1/9/2026 9:59 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

C = 

| UC | | 1 | | 2" | |
|---|---|---|---|---|---|
| 5 | 2 | #6 | 1 | #6 | |




KEYED NOTES:

(2) ROUTE CONDUIT AROUND BIOSWALE

SHEET 5 OF 16

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | LIGHTING PLANS | SHEET 250 | E |
|---|---|---|---|---|---|

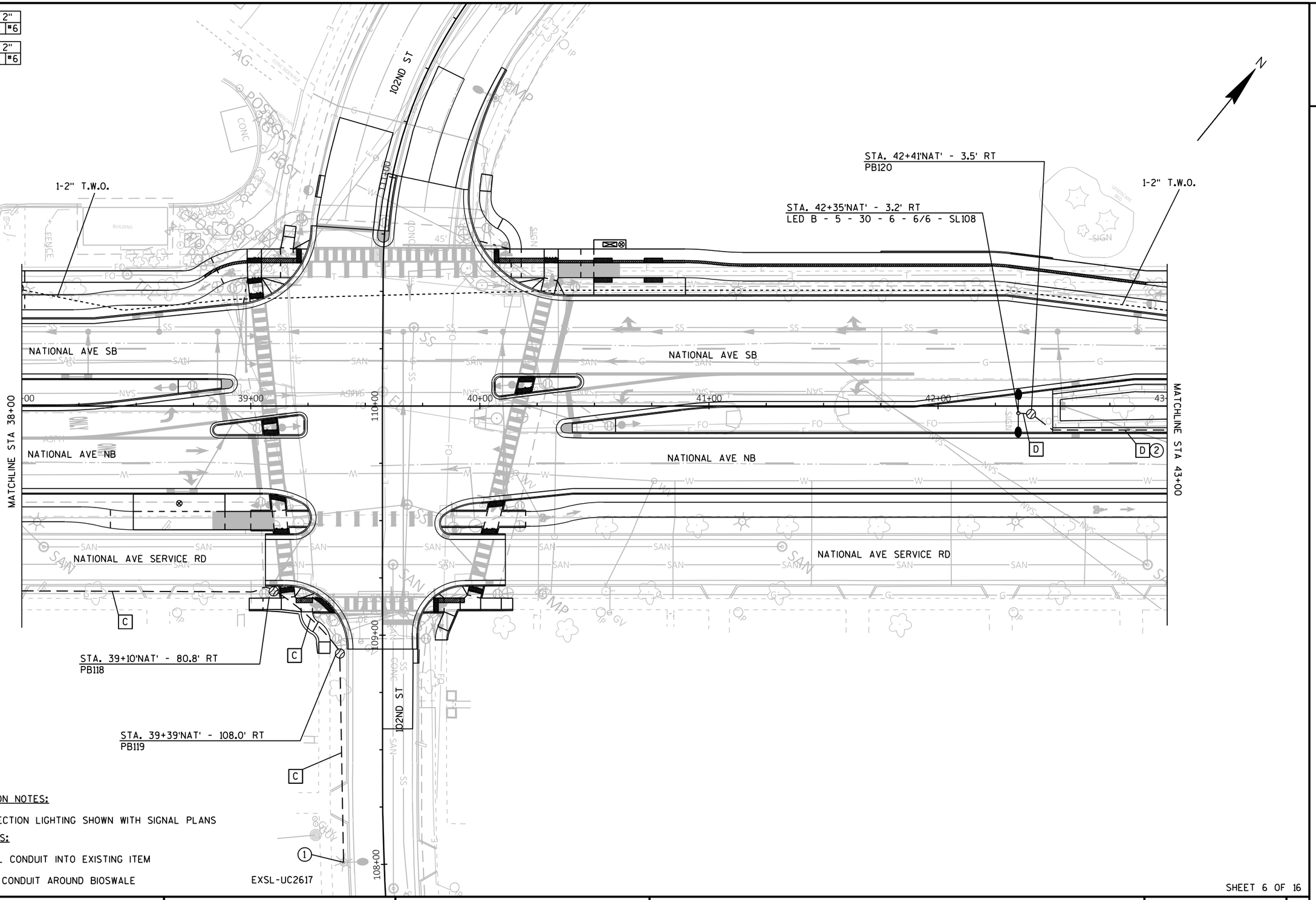
FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023601-LP.DWG
LAYOUT NAME - 04

PLOT DATE : 1/9/2026 10:00 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

C = | UC | 1 | 2" |
|---|---|---|
| 5 | 2 #6 | 1 #6 |

D = | UC | 1 | 2" |
|---|---|---|
| 6 | 2 #6 | 1 #6 |

2




CONSTRUCTION NOTES:

1) INTERSECTION LIGHTING SHOWN WITH SIGNAL PLANS

KEYED NOTES:

(1) INSTALL CONDUIT INTO EXISTING ITEM

(2) ROUTE CONDUIT AROUND BIOSWALE



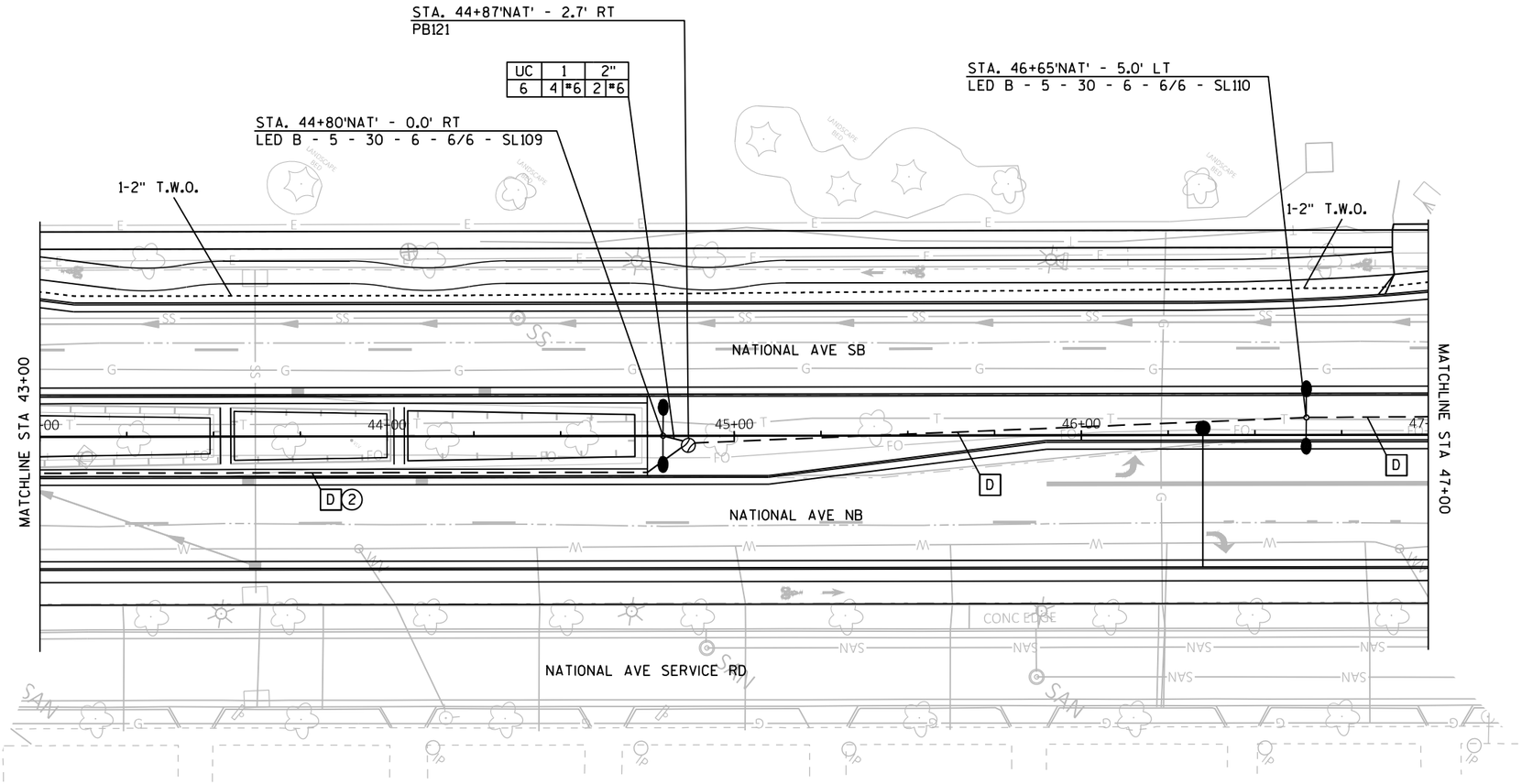
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | LIGHTING PLANS | SHEET 251 | E |
|---|---|---|---|---|---|

FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023601-LP.DWG
LAYOUT NAME - 05
PLOT DATE : 1/9/2026 10:00 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

D = 

| UC | 1 | 2" |
|---|---|---|
| 6 | 2 #6 | 1 #6 |




KEYED NOTES:

(2) ROUTE CONDUIT AROUND BIOSWALE

| D = | UC | 1 | 2" |
|---|---|---|---|
| | 6 | 2 #6 | 1 #6 |

| E = | UA | 1 | 2" |
|---|---|---|---|
| | 2 | 2 #6 | 1 #6 |

STA. 49+03'NAT' - 0.0' RT
LED B - 5 - 30 - 6 - 6/6 - SL112

STA. 47+98'NAT' - 2.3' LT
PB122

STA. 47+92'NAT' - 5.6' LT
LED B - 5 - 30 - 6 - 6/6 - SL111

STA. 50+41'NAT' - 0.0' RT
LED B - 5 - 30 - 6 - 6/6 - SL113

STA. 51+44'NAT' - 60.7' LT
WALLPACK - 2 - SL220

1-2" T.W.O.

IH 41 SB OFF RAMP

IH 41 SB ON RAMP

IH 41 SB ON RAMP

NATIONAL AVE SB

NATIONAL AVE NB

NATIONAL AVE SERVICE RD

MATCHLINE STA 47+00

MATCHLINE STA 52+00

| UC | 1 | 2" |
|---|---|---|
| 6 | 4 #6 | 2 #6 |

STA. 48+97'NAT' - 3.9' RT
PB123

STA. 48+97'NAT' - 55.7' RT
PB124

(1) EXSL-UC2502

STA. 50+72'NAT' - 43.4' RT
PB226

STA. 50+70'NAT' - 61.0' RT
WALLPACK - 2 - SL221

STA. 51+71'NAT' - 61.1' RT
WALLPACK - 2 - SL222

STA. 50+66'NAT' - 64.1' RT
JUNCTION BOX 227

101ST ST

CONSTRUCTION NOTES:

1) SEE UNDERDECK DETAILS FOR UNDERDECK LIGHTING

KEYED NOTES:

(1) INSTALL CONDUIT INTO EXISTING ITEM



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | LIGHTING PLANS | SHEET 253 E |
|---|---|---|---|---|

FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023601-LP.DWG
LAYOUT NAME - 07
PLOT DATE : 1/9/2026 10:00 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

E = 

| UA | 1 | 2" |
|---|---|---|
| 2 | 2 #6 | 1 #6 |

STA. 52+48'NAT' - 64.9' LT
JUNCTION BOX 225

STA. 52+53'NAT' - 47.4' LT
PB222

STA. 52+45'NAT' - 60.6' LT
WALLPACK - 2 - SL219

STA. 53+78'NAT' - 4.4' RT
PB221

STA. 53+71'NAT' - 0.0' RT
LED B - 5 - 30 - 6 - 2/2 - SL217

STA. 52+95'NAT' - 48.2' LT
PB302

1-2" T.W.O.

STA. 54+61'NAT' - 6.6' RT
PB220

STA. 55+09'NAT' - 0.0' LT
LED B - 5 - 30 - 6 - 2/2 - SL216

STA. 56+03'NAT' - 66.0' LT
LED B - 5 - 30 - 6 - 2 - SL215

STA. 56+24'NAT' - 36.7' LT
PB218

1-2" T.W.O.

STA. 56+90'NAT' - 36.6' LT
PB217

EXSL-UA2446

NATIONAL AVE SB

NATIONAL AVE NB

MATCHLINE STA 52+00

MATCHLINE STA 57+00

IH 41 NB ON RAMP

IH 41 NB OFF RAMP

STA. 52+59'NAT' - 1.7' RT
PB223

| UA | 1 | 2" |
|---|---|---|
| 2 | 4 #6 | 2 #6 |

STA. 52+66'NAT' - 0.9' RT
LED B - 5 - 30 - 6 - 2/2 - SL218

STA. 52+77'NAT' - 40.6' RT
PB224

STA. 55+23'NAT' - 2.9' RT
PB219

STA. 56+89'NAT' - 4.1' LT
LED B - 5 - 30 - 6 - 2/2 - SL214

| UA | 1 | 2" |
|---|---|---|
| 2 | 4 #6 | 2 #6 |

STA. 56+93'NAT' - 4.3' LT
PB216

1-2" T.W.O.

CONSTRUCTION NOTES:

1) SEE UNDERDECK DETAILS FOR UNDERDECK LIGHTING

KEYED NOTES:

(1) INSTALL CONDUIT INTO EXISTING ITEM

(2) ROUTE CONDUIT AROUND BIOSWALE

SHEET 9 OF 16

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | LIGHTING PLANS | SHEET 254 | E |
|---|---|---|---|---|---|

FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023601-LP.DWG
LAYOUT NAME - 08
PLOT DATE : 1/9/2026 10:00 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

F = 

| UA | 1 | 2" |
|---|---|---|
| 4 | 2 #6 | 1 #6 |

EXSL-UA2401
1

STA. 59+53'NAT' - 65.9' LT
LED B - 5 - 30 - 6 - 4 - SL212

| UA | 1 | 2" |
|---|---|---|
| 4 | 4 #6 | 2 #6 |

STA. 58+69'NAT' - 10.1' LT
LED B - 5 - 30 - 6 - 4/4 - SL213

| UA | 1 | 2" |
|---|---|---|
| 4 | 4 #6 | 2 #6 |

STA. 59+51'NAT' - 63.3' LT
PB212

STA. 60+05'NAT' - 65.4' LT
PB210

STA. 58+48'NAT' - 51.0' LT
PB215

1-2" T.W.O.

NATIONAL AVE SB

NATIONAL AVE NB

99TH ST

MATCHLINE STA 57+00

MATCHLINE STA 62+00

STA. 58+51'NAT' - 8.8' LT
PB214

STA. 58+50'NAT' - 37.7' RT
PB213

STA. 59+57'NAT' - 38.9' RT
PB211

STA. 59+28'NAT' - 67.2' RT
LED B - 5 - 30 - 6 - 4 - SL211

STA. 61+72'NAT' - 1.4' RT
LED B - 5 - 30 - 6 - 4/4 - SL209

STA. 60+23'NAT' - 9.6' RT
PB209

| UA | 1 | 2" |
|---|---|---|
| 4 | 4 #6 | 2 #6 |

STA. 60+17'NAT' - 10.0' RT
LED B - 5 - 30 - 6 - 4/4 - SL210

STA. 60+20'NAT' - 43.8' RT
PB208

KEYED NOTES:

(1) INSTALL CONDUIT INTO EXISTING ITEM

2

C = | UA | 1 | 2" |
|---|---|---|
| 4 | 2 #6 | 1 #6 |

EXSL-UA2361

1

142+00

C

STA. 63+74'NAT' - 68.0' LT
LED B - 5 - 30 - 6 - 4 - SL207

STA. 63+71'NAT' - 64.3' LT
PB206

C

98TH ST

141+00

1-2" T.W.O.

C

STA. 64+25'NAT' - 4.3' LT
PB205

1-2" T.W.O.

HOUSE

HOUSE

HOUSE

CABC

EDGE

NATIONAL AVE SB

C

1-2" T.W.O.

MATCHLINE STA 62+00

63+00

64+00

65+00

66+00

67+00

MATCHLINE STA 67+00

1-2" T.W.O.

NATIONAL AVE NB

| UA | 1 | 2" |
|---|---|---|
| 4 | 4 #6 | 2 #6 |

STA. 63+20'NAT' - 6.0' LT
LED B - 5 - 30 - 6 - 4/4 - SL208

| UA | 1 | 2" |
|---|---|---|
| 4 | 4 #6 | 2 #6 |

LANDSCAPE BED

CONC.

LANDSCAPE BED

FLAG

CONC.

STA. 65+86'NAT' - 5.9' LT
LED B - 5 - 30 - 6 - 4/4 - SL205

BUILDING

BUILDING

STA. 64+21'NAT' - 0.0' RT
LED B - 5 - 30 - 6 - 4/4 - SL206

STA. 63+25'NAT' - 6.0' LT
PB207

KEYED NOTES:

(1) INSTALL CONDUIT INTO EXISTING ITEM



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | LIGHTING PLANS | SHEET 256 | E |
|---|---|---|---|---|---|

FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023601-LP.DWG
LAYOUT NAME - 10

PLOT DATE : 1/9/2026 10:00 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

F = | UA | 1 | 2" |
|---|---|---|
| 4 | 2 #6 | 1 #6 |

EXSL-UA2335

STA. 68+07'NAT' - 86.7' LT
LED B - 5 - 30 - 6 - 4 - SL203

| UA | 1 | 2" |
|---|---|---|
| 4 | 4 #6 | 2 #6 |

STA. 68+02'NAT' - 79.1' LT
PB203

STA. 67+36'NAT' - 51.4' LT
PB303

1-2" T.W.O.

97TH ST

152+00

151+00

STA. 68+47'NAT' - 65.2' LT
PB202

STA. 68+43'NAT' - 3.0' LT
PB201

| UA | 1 | 2" |
|---|---|---|
| 4 | 4 #6 | 2 #6 |

STA. 70+07'NAT' - 40.8' LT
LED B - 5 - 30 - 6 - 4 - SL201

1-2" T.W.O.

STA. 71+48'NAT' - 51.0' LT
PB304

NATIONAL AVE SB

NATIONAL AVE NB

MATCHLINE STA 62+00

68+00 69+00 70+00 71+00 72+00 73+0

1-2" T.W.O.

1-2" T.W.O.

| UA | 1 | 2" |
|---|---|---|
| 4 | 4 #6 | 2 #6 |

STA. 67+43'NAT' - 6.0' LT
PB204

STA. 67+37'NAT' - 6.0' LT
LED B - 5 - 30 - 6 - 4/4 - SL204

STA. 68+37'NAT' - 0.0' RT
LED B - 5 - 30 - 6 - 4/4 - SL202

STA. 68+41'NAT' - 41.3' RT
PB200

STA. 71+06'NAT' - 46.7' RT
LED B - 5 - 30 - 6 - 4 - SL200

KEYED NOTES:

(1) INSTALL CONDUIT INTO EXISTING ITEM



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | LIGHTING PLANS | SHEET 257 | E |
|---|---|---|---|---|---|

FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023601-LP.DWG
LAYOUT NAME - 11
PLOT DATE : 1/9/2026 10:01 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

93+00

94+00

95+00

96+00

97+00

98+00

CLEVELAND AVE

MATCHLINE STA 98+00

STA. 96+69'CLE' - 0.3' LT
LED B - 5 - 30 - 6 - 11/11 - SL104

STA. 96+89'CLE' - 38.6' RT
PB109

STA. 96+89'CLE' - 1.5' LT
PB110

A

| A = | UC | 1 | 2" | |
|---|---|---|---|---|
| | 11 | 2 | #6 | 1 #6 |

SHEET 13 OF 16

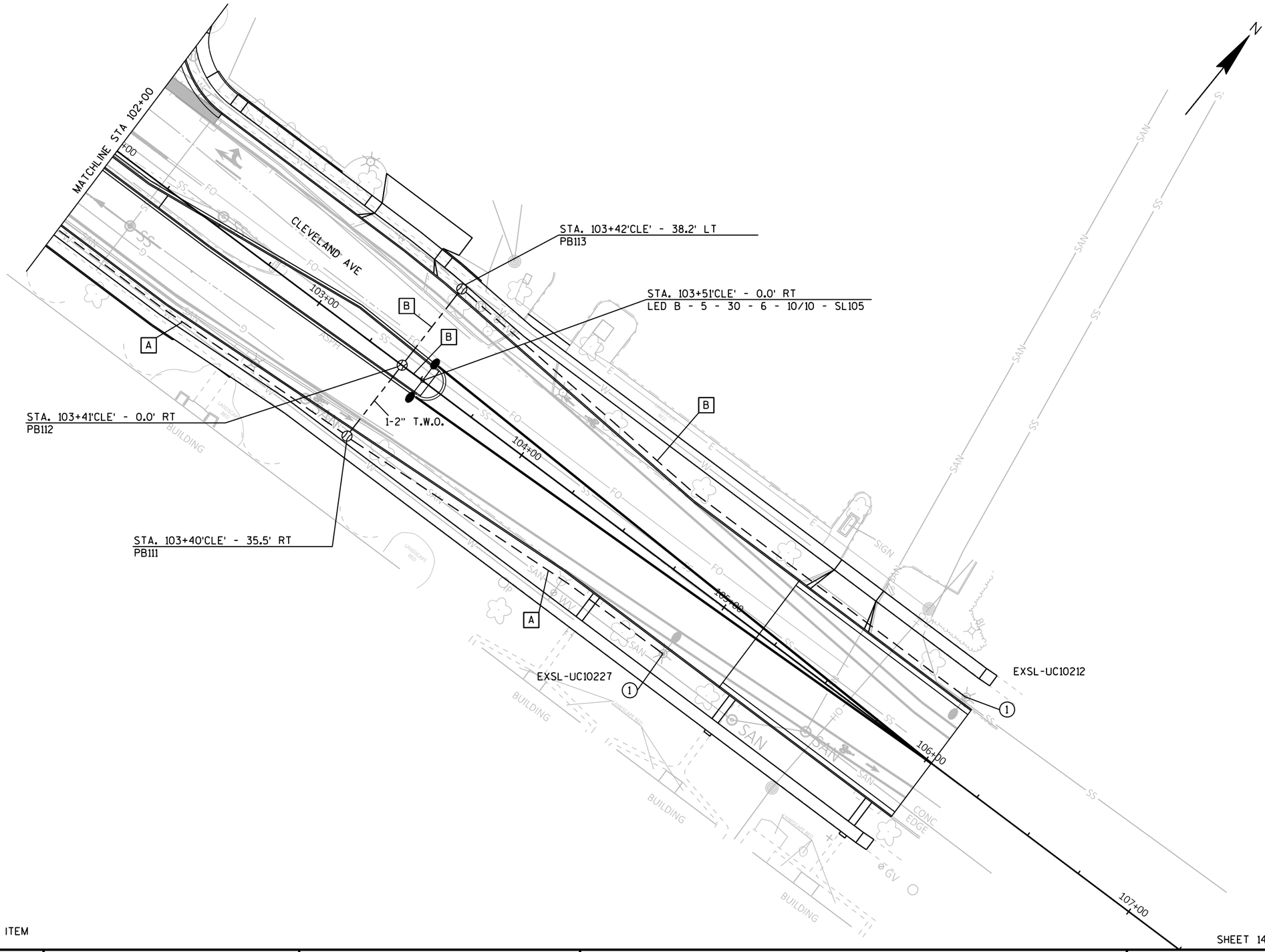
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | LIGHTING PLANS | SHEET 258 | E |
|---|---|---|---|---|---|

FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023601-LP.DWG
LAYOUT NAME - 12

PLOT DATE : 1/9/2026 10:01 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

A = | UC | 1 | 2" |
|---|---|---|
| 11 | 2 #6 | 1 #6 |

B = | UC | 1 | 2" |
|---|---|---|
| 10 | 2 #6 | 1 #6 |




KEYED NOTES:

(1) INSTALL CONDUIT INTO EXISTING ITEM



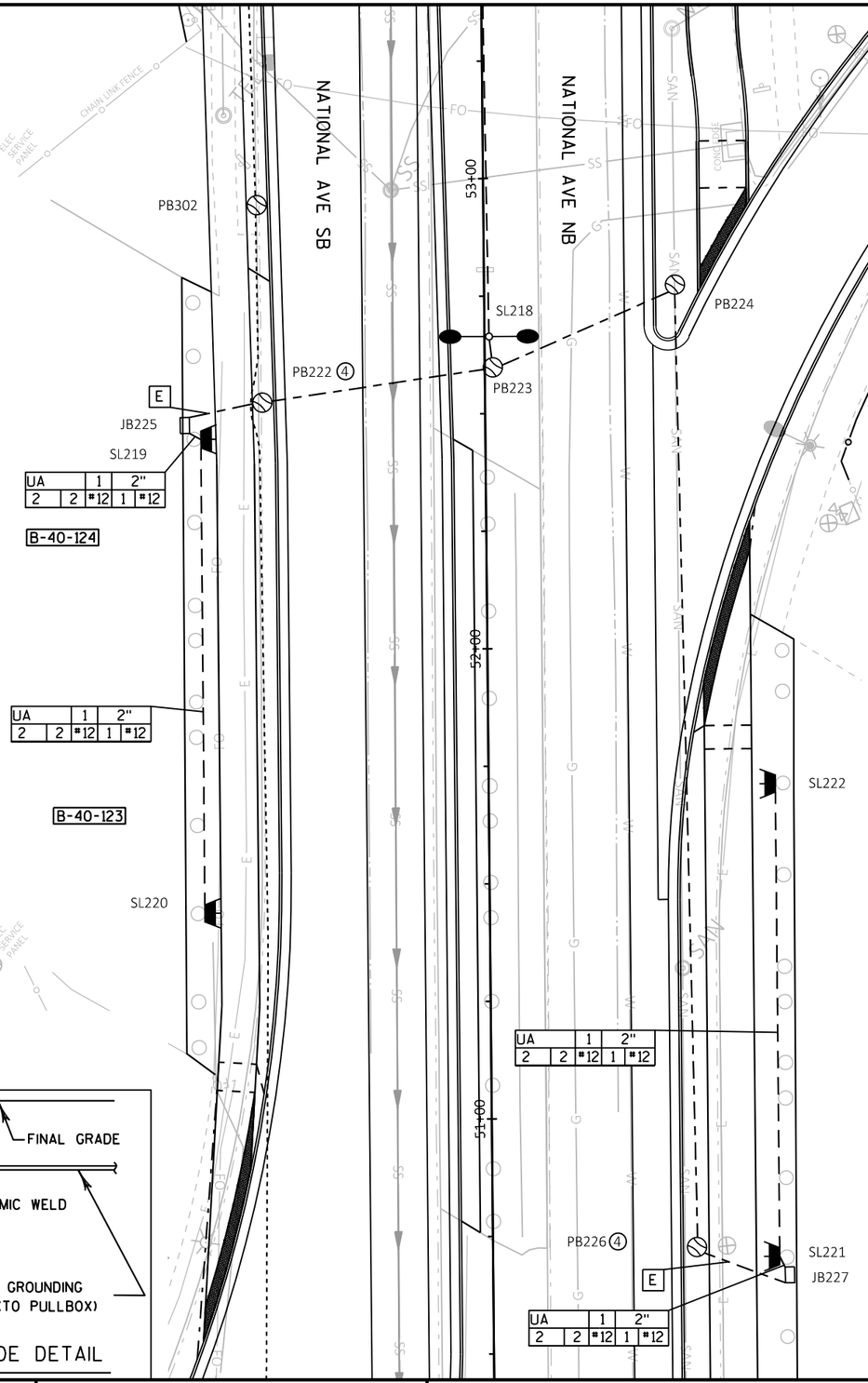
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | LIGHTING PLANS | SHEET 259 E |
|---|---|---|---|---|

FILE NAME : G:\RA SMITH\25046_NATIONAL AVE\CIVIL 3D\SHEETS\023601-LP.DWG
LAYOUT NAME - 13
PLOT DATE : 1/9/2026 10:01 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

E = UA | 1 | 2" | 2 | 2 | #6 | 1 | #6

KEYED NOTES:

④ ALL ITEMS BEYOND PULLBOX ARE INCIDENTAL TO THE RESPECTIVE UNDERDECK LIGHTING BID ITEMS.




| MAJOR QUANTITIES - UNDERDECK LIGHTING | | |
|---|---|---|
| | B-40-123 | B-40-124 |
| BIRD SPIKES | 1 LS | 1 LS |
| ELECTRICAL WIRE LIGHTING 6 AWG. | 220 LF | 220 LF |
| ELECTRICAL WIRE LIGHTING 12 AWG. | 310 LF | 310 LF |
| EQUIPMENT GROUNDING ELECTRODE | 1 EA | 1 EA |
| 2" SCHEDULE 80 PVC CONDUIT | 70 LF | 70 LF |
| 1" RIGID STEEL CONDUIT | 100 LF | 100 LF |
| 18"X12"X6" JUNCTION BOX STAINLESS STEEL 4X WITH HINGED COVER | 1 EA | 1 EA |
| 2" PVC EXPANSION FITTING | 1 EA | 1 EA |
| ½" LIQUID TIGHT NONMETALLIC FLEXIBLE CONDUIT | 10 LF | 10 LF |
| 6"X6"X4" JUNCTION BOX STAINLESS STEEL 4X WITH HINGED COVER | 2 EA | 2 EA |
| 1" RIGID STEEL EXPANSION FITTING | 1 EA | 1 EA |

NOTE: ALL ITEMS LISTED ABOVE ARE TO BE PAID FOR UNDER "UNDERDECK LIGHTING (B-40-123)" BID ITEM 659.0601.0001 "UNDERDECK LIGHTING (B-40-124)" BID ITEM 659.0601.0002

NOTES:

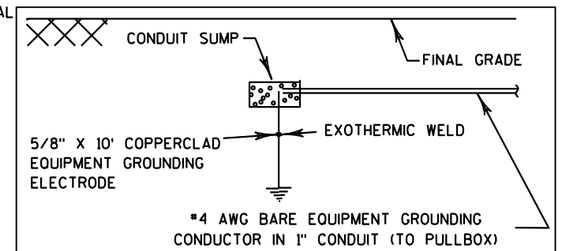
1) ALL WORK MUST CONFORM TO THE NATIONAL ELECTRIC CODE.

2) REFER TO STANDARD DETAIL DRAWING "ELECTRICAL DETAILS UNDERDECK LIGHTING" FOR ADDITIONAL INFORMATION NOT SHOWN ON THIS DETAIL.

3) ALL CONDUIT, BOXES AND FITTINGS SHALL BE RATED WATERTIGHT.

4) UNDERDECK LIGHT CIRCUITS SHALL BE 240 VAC.

5) INSTALL BIRD SPIKES ON ALL JUNCTION BOXES AND LUMINAIRES

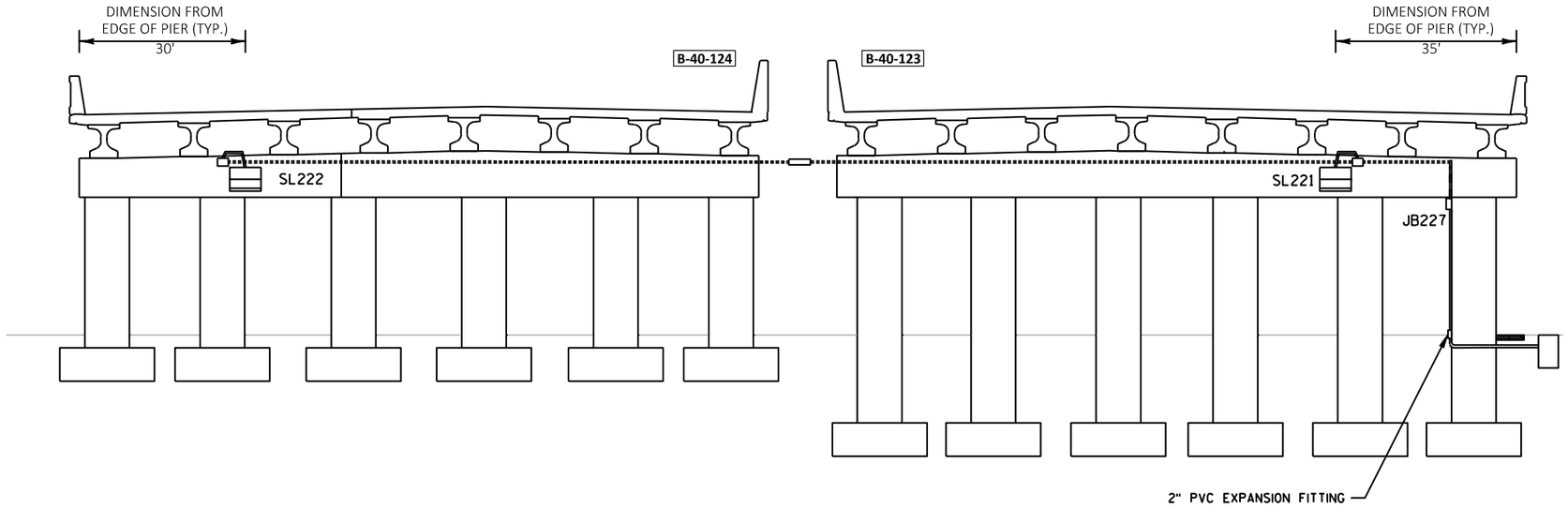



EQUIPMENT GROUNDING ELECTRODE DETAIL

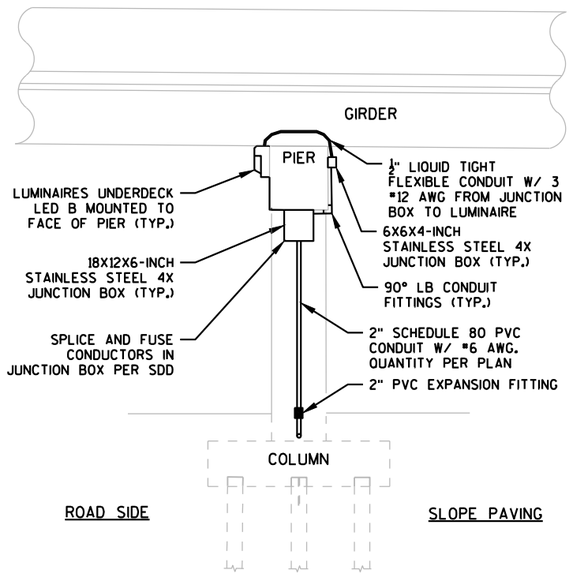
SHEET 15 OF 16

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | B-40-123/124 UNDERDECK LIGHTING DETAIL | SHEET 260 | E |
|---|---|---|---|---|---|

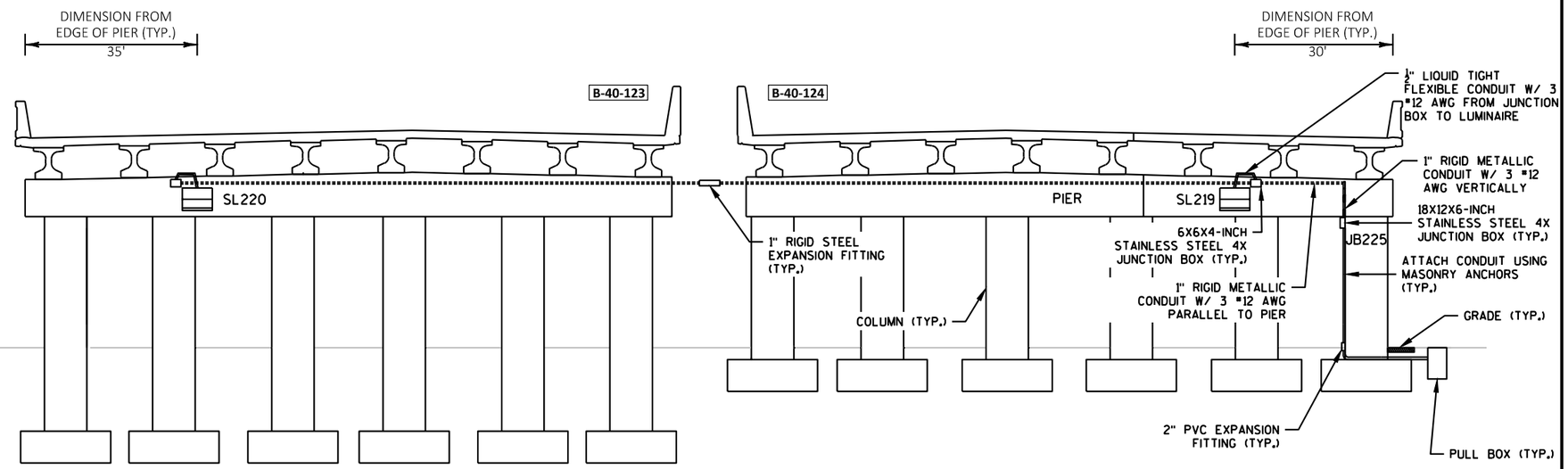
2




ELEVATION FACING SOUTH
NO SCALE




SECTION VIEW




ELEVATION FACING NORTH
NO SCALE

CONSTRUCTION NOTES:

1) ALL STAINLESS STEEL 4X JUNCTION BOXES TO INCLUDE A HINGED COVER.
2) ONLY NEED TO FUSE CONDUCTORS IN JUNCTION BOX IF UNDERDECK LIGHTING CIRCUITS ARE SHARED WITH OTHER ROADWAY LIGHTING CIRCUITS.
3) FUSE UNDERDECK LIGHT CIRCUITS IN JUNCTION BOX.

* DISTANCES ARE APPROXIMATE

SHEET 16 OF 16

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | B-40-123/124 UNDERDECK LIGHTING DETAIL | SHEET 261 | E |
|---|---|---|---|---|---|

2

2

LEGEND

- TRAFFIC CONTROL CABINET
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- PUSH BUTTON
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER

CONSTRUCTION NOTES:

1. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.
4. SEE SPECIAL PROVISIONS FOR MATERIALS TO BE SALVAGED BY THE CITY.
5. SEE LIGHTING REMOVAL PLANS FOR STREET LIGHTING REMOVALS.

N

W CLEVELAND AVE

W NATIONAL AVE

PB1 PB2 PB3 PB4 PB5 PB6 PB7 PB8 PB9 PB10 PB11 PB12 PB13

SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB8 SB9 SB10 SB11 SB12 SB13 SB14

CB1

V1 V2 V3 V4

28+00 29+00 30+00 31+00 32+00 33+00 34+00

- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- VEHICLE DETECTION CAMERA
- PEDESTRIAN SIGNAL HEAD (COUNTDOWN TIMER)

# TRAFFIC CONTROL SIGNAL
## W NATIONAL AVE & W CLEVELAND AVE
## CITY OF WEST ALLIS
## MILWAUKEE COUNTY

CITY CONTACT: TRACI GENGLER
DESIGNED BY: raSmith
REVISED BY:

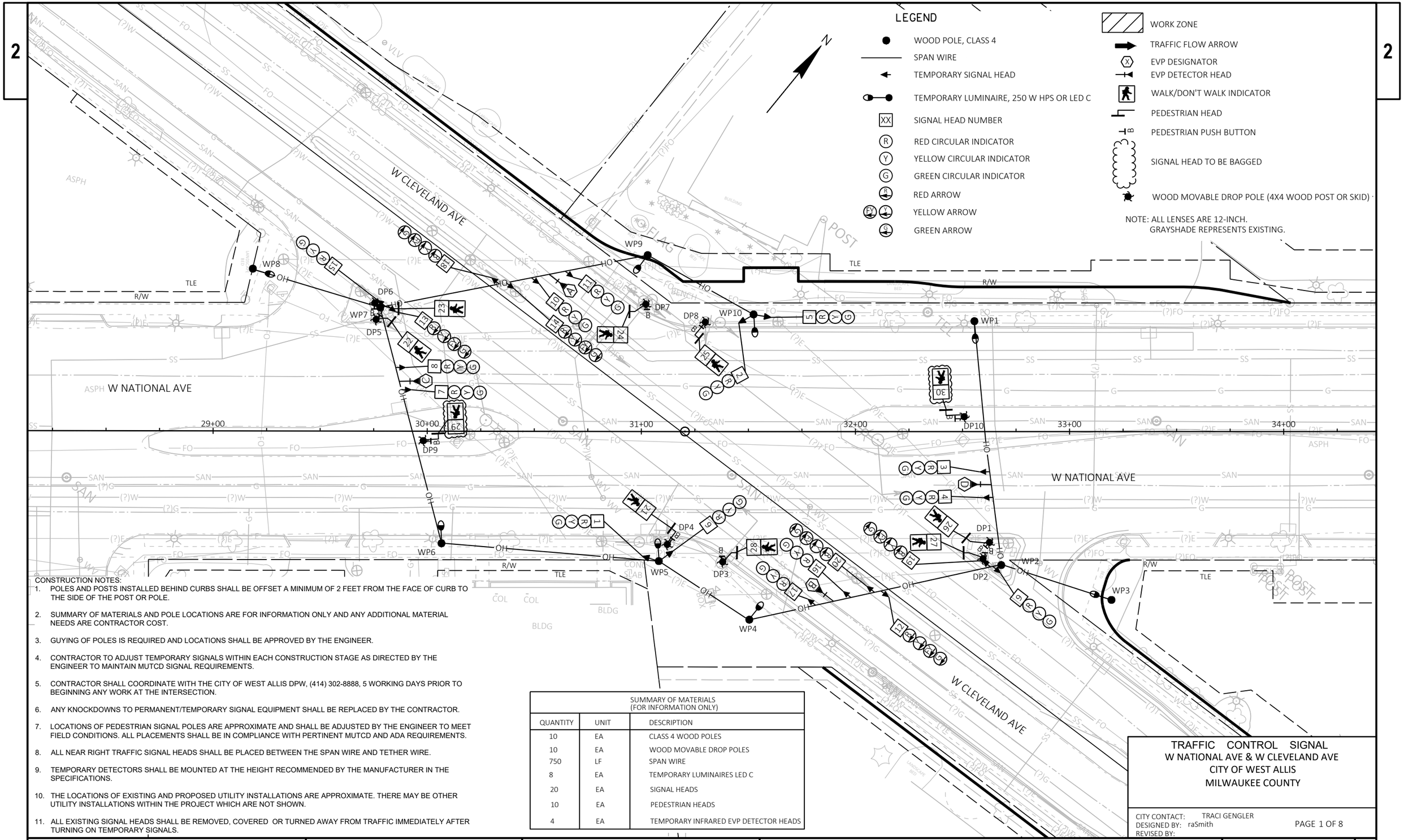
PAGE 1 OF 1

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC SIGNAL REMOVAL PLAN | SHEET 262 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024001-SR.DWG
LAYOUT NAME - Plan 1 IN 40 FT

PLOT DATE : 10/28/2025 3:30 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42




CONSTRUCTION NOTES:

1. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POST OR POLE.
2. SUMMARY OF MATERIALS AND POLE LOCATIONS ARE FOR INFORMATION ONLY AND ANY ADDITIONAL MATERIAL NEEDS ARE CONTRACTOR COST.
3. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
4. CONTRACTOR TO ADJUST TEMPORARY SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
5. CONTRACTOR SHALL COORDINATE WITH THE CITY OF WEST ALLIS DPW, (414) 302-8888, 5 WORKING DAYS PRIOR TO BEGINNING ANY WORK AT THE INTERSECTION.
6. ANY KNOCKDOWNS TO PERMANENT/TEMPORARY SIGNAL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR.
7. LOCATIONS OF PEDESTRIAN SIGNAL POLES ARE APPROXIMATE AND SHALL BE ADJUSTED BY THE ENGINEER TO MEET FIELD CONDITIONS. ALL PLACEMENTS SHALL BE IN COMPLIANCE WITH PERTINENT MUTCD AND ADA REQUIREMENTS.
8. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
9. TEMPORARY DETECTORS SHALL BE MOUNTED AT THE HEIGHT RECOMMENDED BY THE MANUFACTURER IN THE SPECIFICATIONS.
10. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
11. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.

SUMMARY OF MATERIALS
(FOR INFORMATION ONLY)

| QUANTITY | UNIT | DESCRIPTION |
|---|---|---|
| 10 | EA | CLASS 4 WOOD POLES |
| 10 | EA | WOOD MOVABLE DROP POLES |
| 750 | LF | SPAN WIRE |
| 8 | EA | TEMPORARY LUMINAIRES LED C |
| 20 | EA | SIGNAL HEADS |
| 10 | EA | PEDESTRIAN HEADS |
| 4 | EA | TEMPORARY INFRARED EVP DETECTOR HEADS |

TRAFFIC CONTROL SIGNAL
W NATIONAL AVE & W CLEVELAND AVE
CITY OF WEST ALLIS
MILWAUKEE COUNTY

CITY CONTACT: TRACI GENGLER
DESIGNED BY: raSmith
REVISED BY:

PAGE 1 OF 8

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY TRAFFIC SIGNAL PLANS - PRE- AND POST-CONSTRUCTION | SHEET 263 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024101-ST.DWG
LAYOUT NAME - Cleveland

PLOT DATE : 10/30/2025 12:38 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WOOD POLE, CLASS 4
- SPAN WIRE
- TEMPORARY SIGNAL HEAD
- TEMPORARY LUMINAIRE, 250 W HPS OR LED C
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- WORK ZONE
- TRAFFIC FLOW ARROW
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- WALK/DON'T WALK INDICATOR
- PEDESTRIAN HEAD
- PEDESTRIAN PUSH BUTTON
- SIGNAL HEAD TO BE BAGGED
- WOOD MOVABLE DROP POLE (4X4 WOOD POST OR SKID)

NOTE: ALL LENSES ARE 12-INCH.
GRAYSHADE REPRESENTS EXISTING.

W CLEVELAND AVE

W NATIONAL AVE

WP1 WP2 WP3 WP4 WP5 WP6 WP7 WP8 WP9 WP10

DP1 DP2 DP3 DP4 DP5 DP6 DP7 DP8 DP9 DP10

29+00 30+00 31+00 32+00 33+00 34+00

TRAFFIC CONTROL SIGNAL
W NATIONAL AVE & W CLEVELAND AVE
CITY OF WEST ALLIS
MILWAUKEE COUNTY

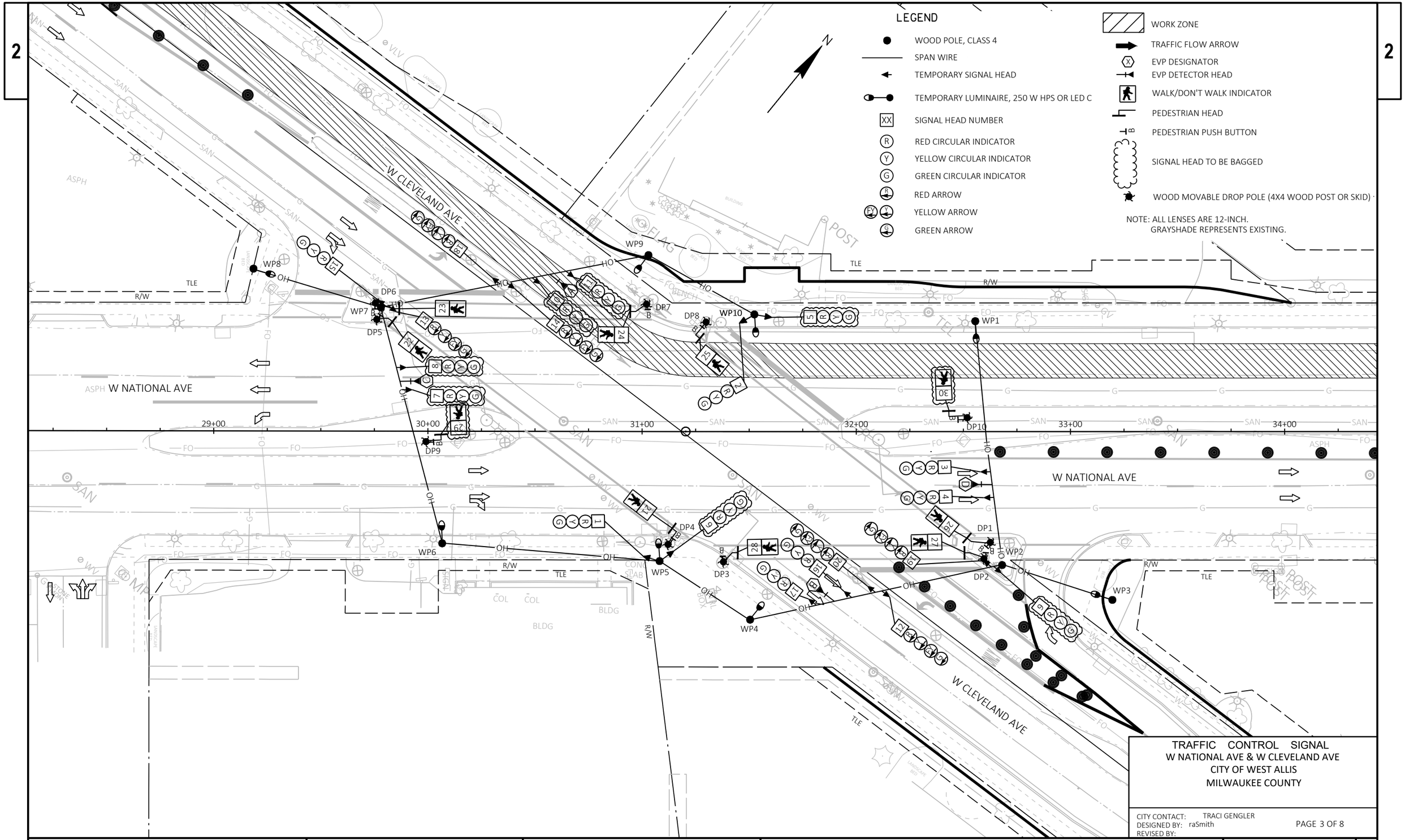
CITY CONTACT: TRACI GENGLER
DESIGNED BY: raSmith
REVISED BY:

PAGE 2 OF 8

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY TRAFFIC SIGNAL PLANS - STAGE 3 | SHEET 264 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024102-ST-3.DWG
LAYOUT NAME - Cleveland

PLOT DATE : 10/30/2025 12:39 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

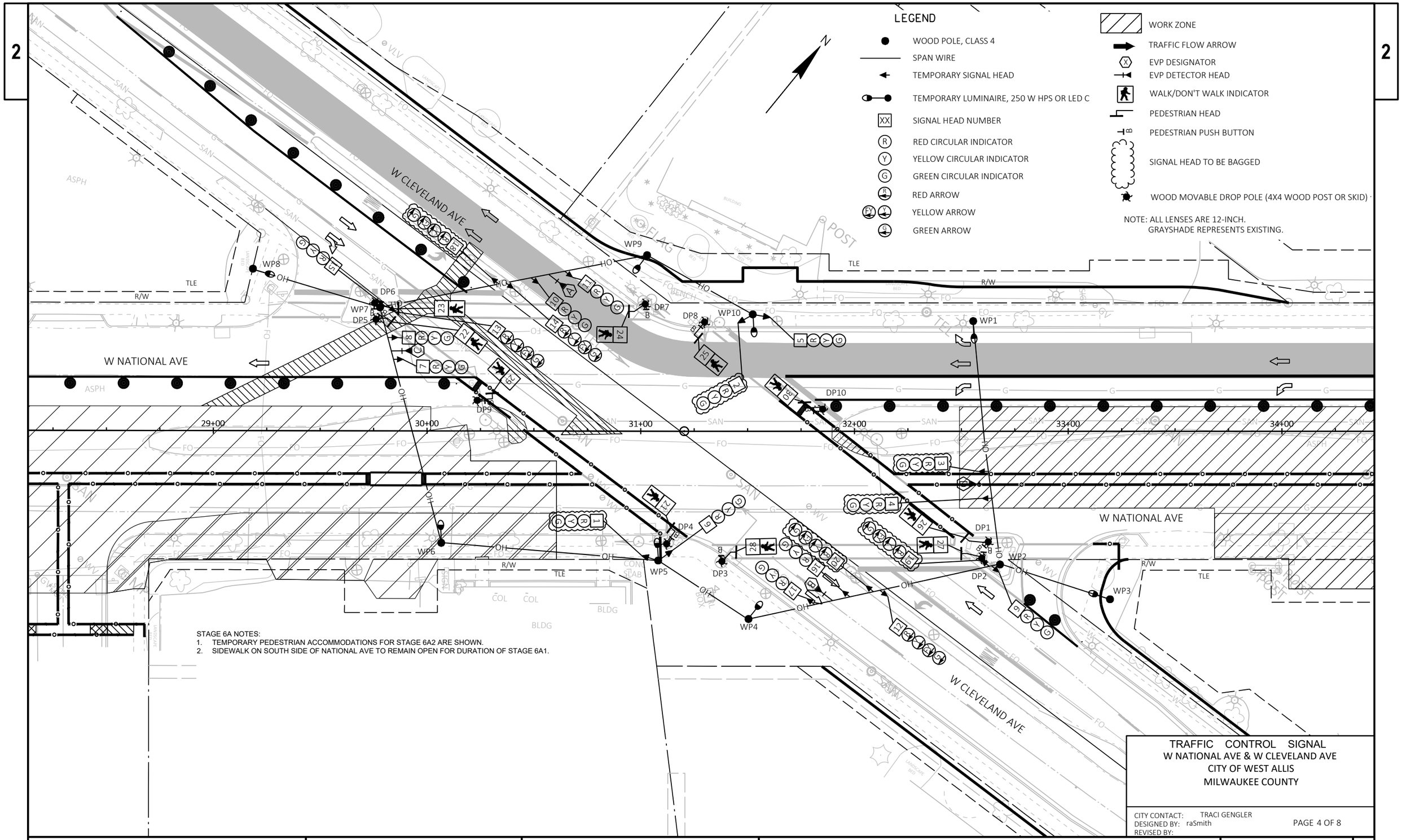



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY TRAFFIC SIGNAL PLANS - STAGE 4 | SHEET 265 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024102-ST-4.DWG
LAYOUT NAME - Cleveland

PLOT DATE : 10/30/2025 12:39 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

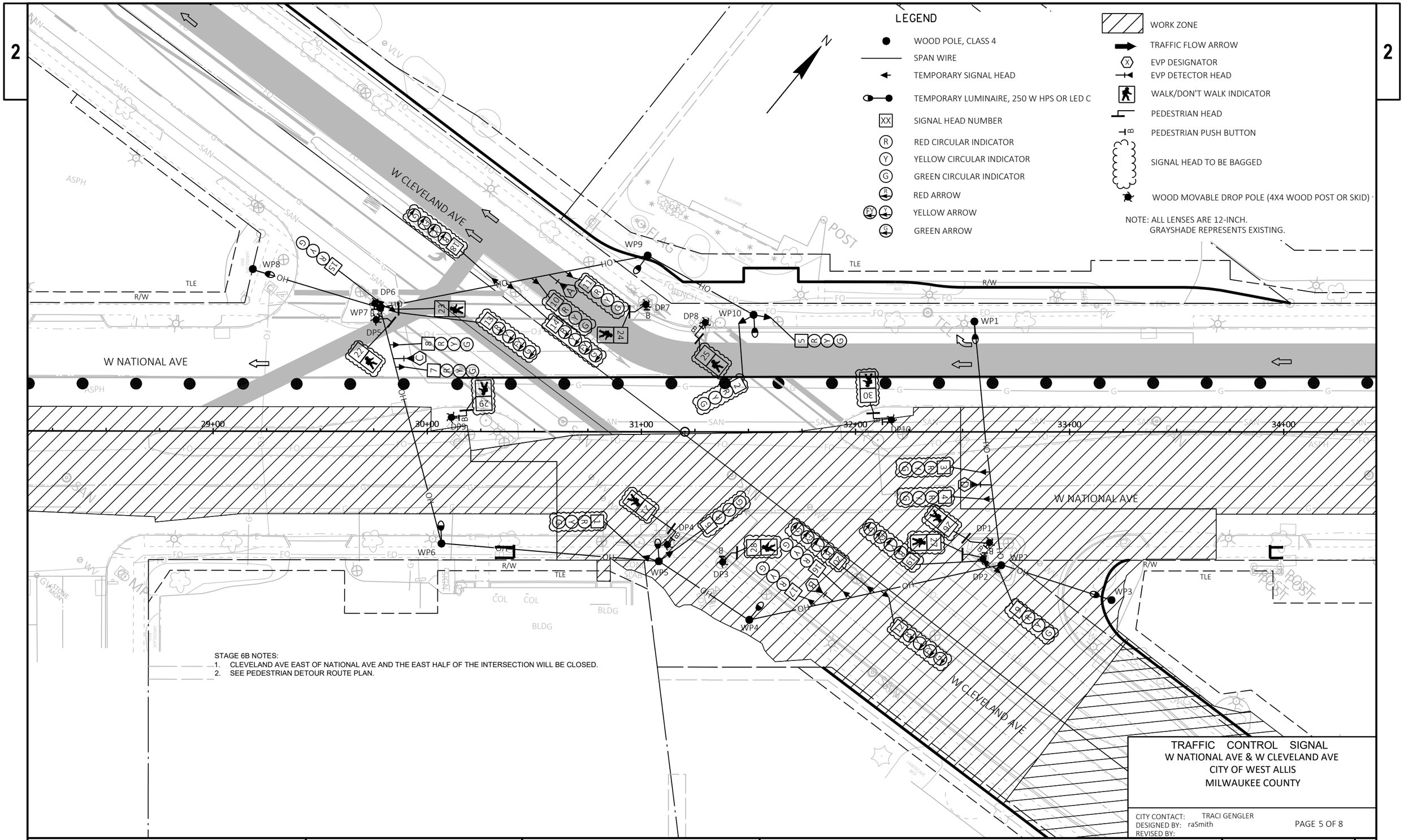



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY TRAFFIC SIGNAL PLANS - STAGE 6A | SHEET 266 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024103-ST-6A2.DWG
LAYOUT NAME - Cleveland

PLOT DATE : 10/30/2025 12:40 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42




FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024103-ST-6B.DWG
LAYOUT NAME - Cleveland

PLOT DATE : 10/30/2025 12:41 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

## LEGEND

- WOOD POLE, CLASS 4
- SPAN WIRE
- TEMPORARY SIGNAL HEAD
- TEMPORARY LUMINAIRE, 250 W HPS OR LED C
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- WORK ZONE
- TRAFFIC FLOW ARROW
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- WALK/DON'T WALK INDICATOR
- PEDESTRIAN HEAD
- PEDESTRIAN PUSH BUTTON
- SIGNAL HEAD TO BE BAGGED
- WOOD MOVABLE DROP POLE (4X4 WOOD POST OR SKID)

NOTE: ALL LENSES ARE 12-INCH.
GRAYSHADE REPRESENTS EXISTING.

W CLEVELAND AVE

W NATIONAL AVE

WP1 WP2 WP3 WP4 WP5 WP6 WP7 WP8 WP9 WP10

DP1 DP2 DP3 DP4 DP5 DP6 DP7 DP8 DP9 DP10

29+00 30+00 31+00 32+00 33+00 34+00

STAGE 7A NOTES:
1. CLEVELAND AVE WEST OF NATIONAL AVE AND THE WEST HALF OF THE INTERSECTION WILL BE CLOSED.
2. SIDEWALK ON CLEVELAND AVE WEST OF NATIONAL AVE WILL BE CLOSED DURING STAGE 7A.
3. SEE PEDESTRIAN DETOUR ROUTE PLAN.

# TRAFFIC CONTROL SIGNAL
## W NATIONAL AVE & W CLEVELAND AVE
## CITY OF WEST ALLIS
## MILWAUKEE COUNTY

CITY CONTACT: TRACI GENGLER
DESIGNED BY: raSmith
REVISED BY:



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY TRAFFIC SIGNAL PLANS - STAGE 7A | SHEET 268 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024103-ST-7A.DWG
LAYOUT NAME - Cleveland
PLOT DATE : 10/30/2025 12:41 PM
PLOT BY : UTIC, ANDY
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

## LEGEND

- WOOD POLE, CLASS 4
- SPAN WIRE
- TEMPORARY SIGNAL HEAD
- TEMPORARY LUMINAIRE, 250 W HPS OR LED C
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- WORK ZONE
- TRAFFIC FLOW ARROW
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- WALK/DON'T WALK INDICATOR
- PEDESTRIAN HEAD
- PEDESTRIAN PUSH BUTTON
- SIGNAL HEAD TO BE BAGGED
- WOOD MOVABLE DROP POLE (4X4 WOOD POST OR SKID)

NOTE: ALL LENSES ARE 12-INCH.
GRAYSHADE REPRESENTS EXISTING.

W CLEVELAND AVE

W NATIONAL AVE

W NATIONAL AVE

W CLEVELAND AVE

WP1 WP2 WP3 WP4 WP5 WP6 WP7 WP8 WP9 WP10

DP1 DP2 DP3 DP4 DP5 DP6 DP7 DP8 DP9 DP10

29+00 30+00 31+00 32+00 33+00 34+00

STAGE 7B NOTES:
1. TEMPORARY PEDESTRIAN ACCOMMODATIONS FOR STAGE 7B2 ARE SHOWN.
2. SIDEWALK ON NORTH SIDE OF NATIONAL AVE TO REMAIN OPEN FOR DURATION OF STAGE 7A1.

TRAFFIC CONTROL SIGNAL
W NATIONAL AVE & W CLEVELAND AVE
CITY OF WEST ALLIS
MILWAUKEE COUNTY

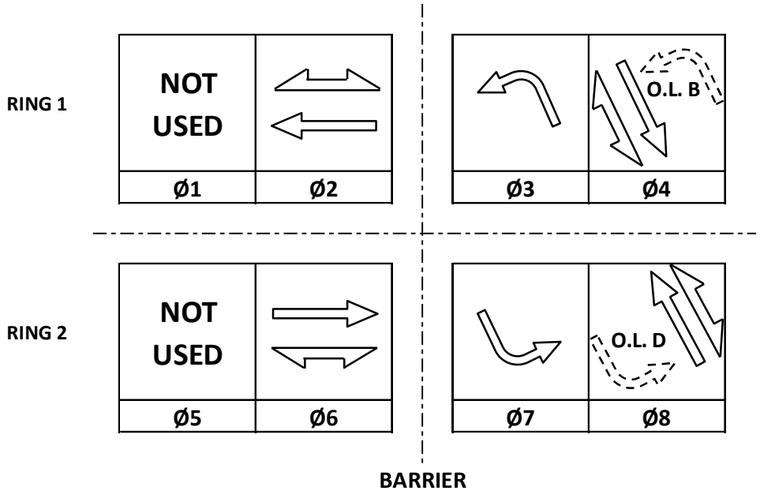
CITY CONTACT: TRACI GENGLER
DESIGNED BY: raSmith
REVISED BY:



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY TRAFFIC SIGNAL PLANS - STAGE 7B | SHEET 269 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024103-ST-7B.DWG
LAYOUT NAME - Cleveland
PLOT DATE : 10/30/2025 12:42 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

| | HEAD NUMBERS | FLASH |
|---|---|---|
| Ø1 | | |
| Ø2 | 5,6,7,8 | R |
| Ø3 | 12,13,14 | R ← |
| Ø4 | 15,16,17 | R |
| Ø5 | | |
| Ø6 | 1,2,3,4 | R |
| Ø7 | 18,19,20 | R ← |
| Ø8 | 9,10,11 | R |
| Ø2P | 23,24 | |
| Ø4P | 21,22,29 | |
| Ø6P | 27,28 | |
| Ø8P | 25,26,30 | |
| OLA | | |
| OLB | 18,19,20 | - |
| OLC | | |
| OLD | 25,26,27 | - |




## CONTROLLER LOGIC

| PHASE NUMBER | PHASE LOCKING | DUAL ENTRY W / Ø | PHASE RECALL | PHASE ACTIVE |
|---|---|---|---|---|
| | | | | |
| 1 | | | | |
| 2 | X | 6 | MAX | X |
| 3 | X | 8 | MAX | X |
| 4 | X | 8 | MAX | X |
| 5 | | | | |
| 6 | X | 2 | MAX | X |
| 7 | X | 4 | MAX | X |
| 8 | X | 4 | MAX | X |

EMERGENCY VEHICLE PREEMPTION SEQUENCE

| EMERGENCY VEHICLE PREEMPTOR | A | B | C | D |
|---|---|---|---|---|
| MOVEMENT | ← | → | ↓ | ↑ |
| PHASE | 2+6 | 6+2 | 4+7 | 8+3 |

AFTER PREEMPTION SEQUENCE 2+6 OR 6+2, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8.

| TYPE OF INTERCONNECT/COMMUNICATION | |
|---|---|
| NONE | X |
| CLOSED LOOP | |
| TWISTED PAIR | |
| FIBER OPTIC* | |
| FIBER OPTIC (ETHERNET) | |
| RADIO | |
| CELL MODEM | |

| TYPE OF COORDINATION | |
|---|---|
| NONE | |
| TBC | X |
| TRAFFIC RESPONSIVE | |
| ADAPTIVE | |
| *LOCATION OF MASTER CONTROLLER NO: S- | |
| SIGNAL SYSTEM NO: SS- | |

| TYPE OF LIGHTING | |
|---|---|
| BY OTHER AGENCY | |
| IN TRAFFIC CABINET | X |
| IN SEPARATE LIGHTING CABINET | |

| TYPE OF PRE-EMPT | |
|---|---|
| NONE | |
| RAILROAD | |
| EMERGENCY VEHICLE | X |
| GTT | |
| TOMAR | |
| HARDWIRE | |
| OTHER | |
| CONFIRMATION LIGHTS | |
| LIFT BRIDGE | |
| QUEUE DETECTION | |

## GENERAL NOTES:

1. OMIT PHASE 7 DURING STAGE 6A-6B AND STAGE 7A.
2. OMIT PHASE 3 DURING STAGE 6B AND STAGE 7A-7B.

W NATIONAL AVE & W CLEVELAND AVE
CITY OF WEST ALLIS
MILWAUKEE COUNTY

| | |
|---|---|
| SIGNAL NO: LOCAL | CABINET TYPE: TEMP |
| | CONTROLLER TYPE: TEMP |
| DATE: 11/2025 | PAGE NUMBER: 8 OF 8 |

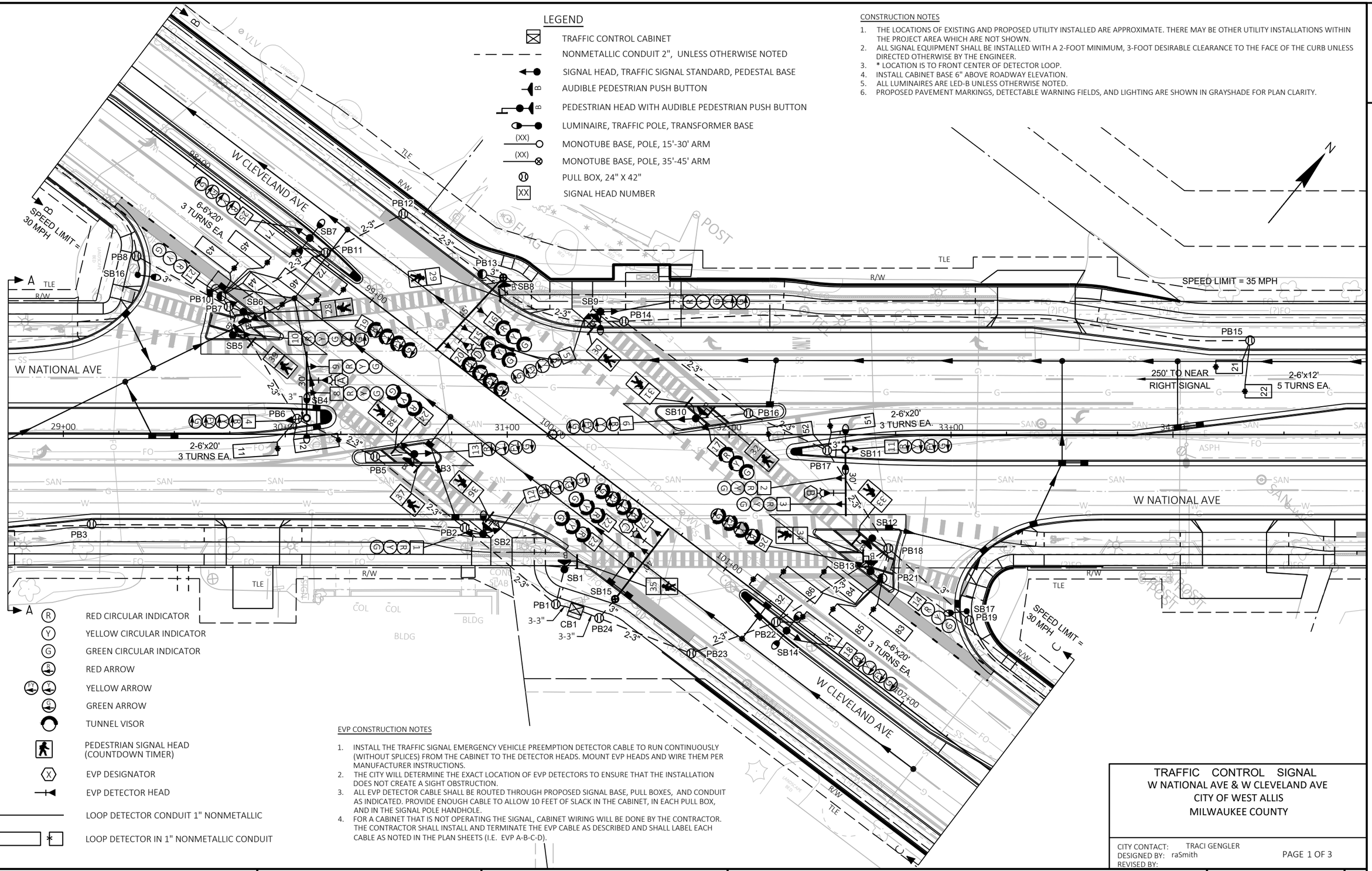
2

## LEGEND

- TRAFFIC CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- AUDIBLE PEDESTRIAN PUSH BUTTON
- PEDESTRIAN HEAD WITH AUDIBLE PEDESTRIAN PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-45' ARM
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER

CONSTRUCTION NOTES

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLED ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
2. ALL SIGNAL EQUIPMENT SHALL BE INSTALLED WITH A 2-FOOT MINIMUM, 3-FOOT DESIRABLE CLEARANCE TO THE FACE OF THE CURB UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
3. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
4. INSTALL CABINET BASE 6" ABOVE ROADWAY ELEVATION.
5. ALL LUMINAIRES ARE LED-B UNLESS OTHERWISE NOTED.
6. PROPOSED PAVEMENT MARKINGS, DETECTABLE WARNING FIELDS, AND LIGHTING ARE SHOWN IN GRAYSHADE FOR PLAN CLARITY.




- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- TUNNEL VISOR
- PEDESTRIAN SIGNAL HEAD (COUNTDOWN TIMER)
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT

EVP CONSTRUCTION NOTES

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PREEMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT EVP HEADS AND WIRE THEM PER MANUFACTURER INSTRUCTIONS.
2. THE CITY WILL DETERMINE THE EXACT LOCATION OF EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ALL EVP DETECTOR CABLE SHALL BE ROUTED THROUGH PROPOSED SIGNAL BASE, PULL BOXES, AND CONDUIT AS INDICATED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. FOR A CABINET THAT IS NOT OPERATING THE SIGNAL, CABINET WIRING WILL BE DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL INSTALL AND TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED IN THE PLAN SHEETS (I.E. EVP A-B-C-D).

# TRAFFIC CONTROL SIGNAL
## W NATIONAL AVE & W CLEVELAND AVE
## CITY OF WEST ALLIS
## MILWAUKEE COUNTY

CITY CONTACT: TRACI GENGLER
DESIGNED BY: raSmith
REVISED BY:

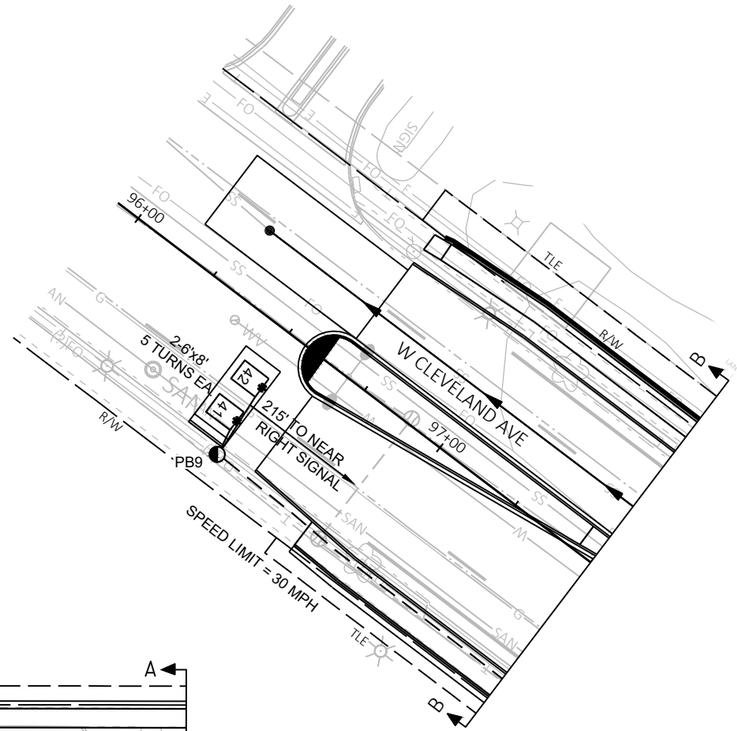


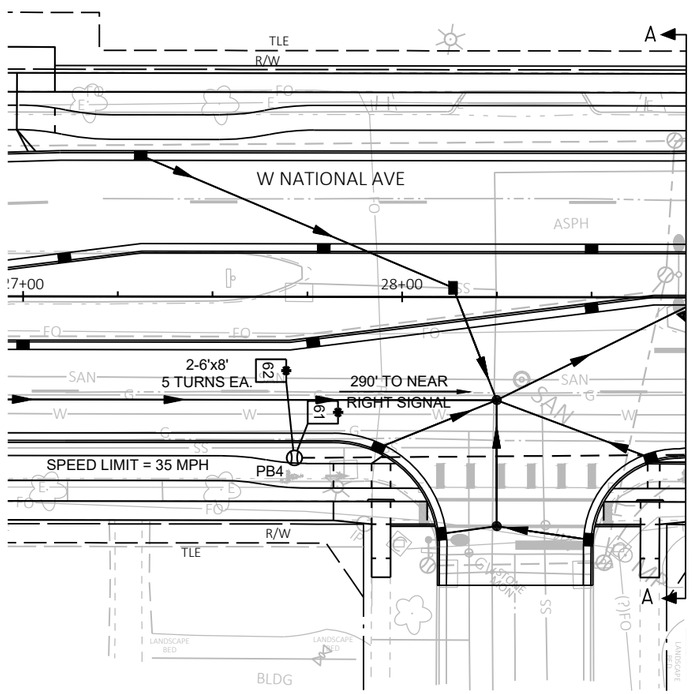
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC SIGNAL PLAN | SHEET 271 | E |
|---|---|---|---|---|---|

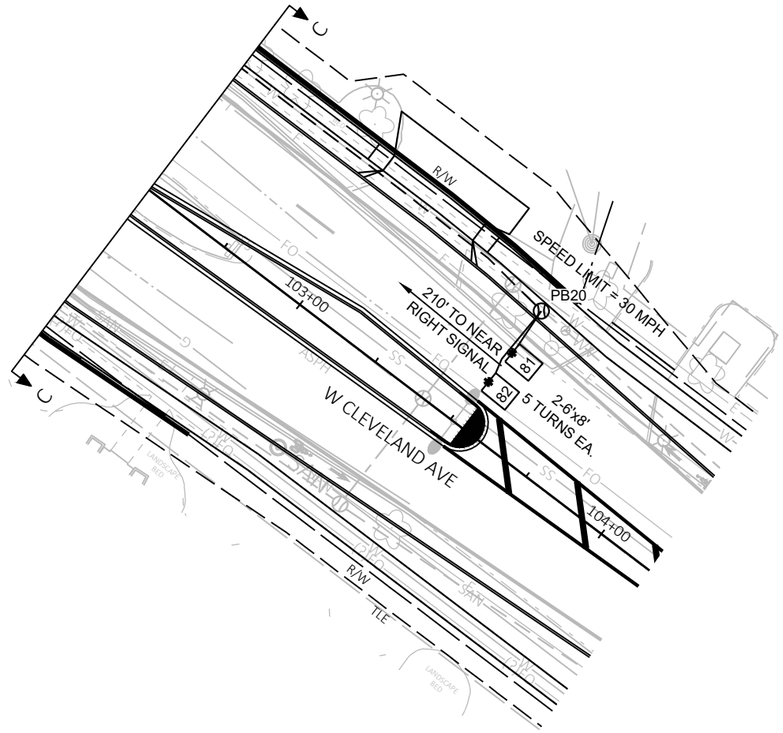
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024201-SP.DWG
LAYOUT NAME - NationalCleveland_pg1

PLOT DATE : 10/30/2025 10:59 AM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

2




TRAFFIC CONTROL SIGNAL
W NATIONAL AVE & W CLEVELAND AVE
CITY OF WEST ALLIS
MILWAUKEE COUNTY

CITY CONTACT: TRACI GENGLER
DESIGNED BY: raSmith
REVISED BY:

PAGE 2 OF 3

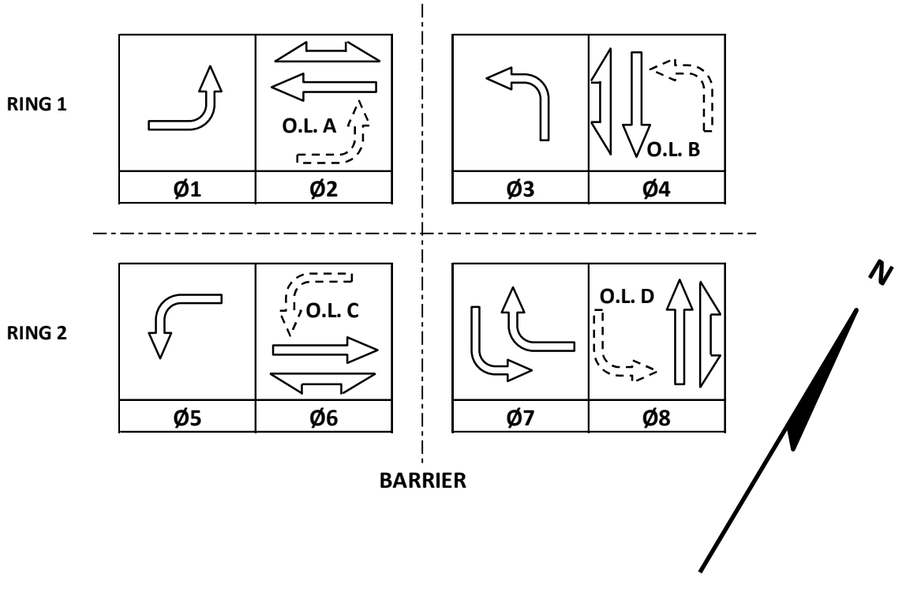
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC SIGNAL PLAN | SHEET 272 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024201-SP.DWG
LAYOUT NAME - NationalCleveland_pg2

PLOT DATE : 10/30/2025 11:01 AM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

| | HEAD NUMBERS | FLASH |
|---|---|---|
| Ø1 | 4,5,6 | R ← |
| Ø2 | 7,8,9,10 | R |
| Ø3 | 18,19,20 | R ← |
| Ø4 | 21,22,23,24 | R |
| Ø5 | 11,12,13 | R ← |
| Ø6 | 1,2,3 | R |
| Ø7 | 7,10,25,26,27 | R ← |
| Ø8 | 14,15,16,17 | R |
| Ø2P | 28,29 | |
| Ø4P | 36,37,38,39 | |
| Ø6P | 34,35 | |
| Ø8P | 30,31,32,33 | |
| OLA | 4,5,6 | - |
| OLB | 18,19,20 | - |
| OLC | 11,12,13 | - |
| OLD | 25,26,27 | - |




## CONTROLLER LOGIC

| PHASE NUMBER | PHASE LOCKING | DUAL ENTRY W / Ø | PHASE RECALL | PHASE ACTIVE |
|---|---|---|---|---|
| 1 | | 6 | | X |
| 2 | X | 6 | MIN | X |
| 3 | | 8 | | X |
| 4 | | 8 | | X |
| 5 | | 2 | | X |
| 6 | X | 2 | MIN | X |
| 7 | | 4 | | X |
| 8 | | 4 | | X |

EMERGENCY VEHICLE PREEMPTION SEQUENCE

| EMERGENCY VEHICLE PREEMPTOR | A | B | C | D |
|---|---|---|---|---|
| MOVEMENT | | | | |
| PHASE | 2+5 | 6+1 | 4+7 | 8+3 |

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+5.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8.

| TYPE OF INTERCONNECT/COMMUNICATION | |
|---|---|
| NONE | X |
| CLOSED LOOP | |
| TWISTED PAIR | |
| FIBER OPTIC* | |
| FIBER OPTIC (ETHERNET) | |
| RADIO | |
| CELL MODEM | |

| TYPE OF COORDINATION | |
|---|---|
| NONE | |
| TBC | X |
| TRAFFIC RESPONSIVE | |
| ADAPTIVE | |
| *LOCATION OF MASTER CONTROLLER NO: S- | |
| SIGNAL SYSTEM NO: SS- | |

| TYPE OF LIGHTING | |
|---|---|
| BY OTHER AGENCY | |
| IN TRAFFIC CABINET | |
| IN SEPARATE LIGHTING CABINET | X |

| TYPE OF PRE-EMPT | |
|---|---|
| NONE | |
| RAILROAD | |
| EMERGENCY VEHICLE | X |
| GTT | |
| TOMAR | X |
| HARDWIRE | |
| OTHER | |
| CONFIRMATION LIGHTS | X |
| LIFT BRIDGE | |
| QUEUE DETECTION | |

## DETECTOR LOGIC

| DETECTOR INPUT | 3 | 1 | 7 | 5 | 11 | 9 | 15 | 13 |
|---|---|---|---|---|---|---|---|---|
| PLAN LOOP DETECTOR(S) | 11 | 21 | 31 | 41 | 43 | 45 | 51 | 61 |
| PHASE CALLED | 1 | 2 | 3 | | 4 | 4 | 5 | 6 |
| PHASE EXTENDED | 1 | 2 | 3 | 4 | 4 | 4 | 5 | 6 |
| CALLING DELAY | | | | | | | | |
| EXTENSION STRETCH | | | | X | | | | |
| ADDED INIT | | X | | | | | | X |

| 19 | 17 | 23 | 21 | 27 | 25 | 31 | 29 | DETECTOR INPUT |
|---|---|---|---|---|---|---|---|---|
| 71 | 81 | 83 | 85 | | | | | PLAN LOOP DETECTOR(S) |
| 7 | | 8 | 8 | | | | | PHASE CALLED |
| 7 | 8 | 8 | 8 | | | | | PHASE EXTENDED |
| | | | | | | | | CALLING DELAY |
| | X | | | | | | | EXTENSION STRETCH |
| | | | | | | | | ADDED INIT |

| DETECTOR INPUT | 4 | 2 | 8 | 6 | 12 | 10 | 16 | 14 |
|---|---|---|---|---|---|---|---|---|
| PLAN LOOP DETECTOR(S) | 12 | 22 | 32 | 42 | 44 | 46 | 52 | 62 |
| PHASE CALLED | 1 | 2 | 3 | | 4 | 4 | 5 | 6 |
| PHASE EXTENDED | 1 | 2 | 3 | 4 | 4 | 4 | 5 | 6 |
| CALLING DELAY | | | | | | | | |
| EXTENSION STRETCH | | | | X | | | | |
| ADDED INIT | | X | | | | | | X |

| 20 | 18 | 24 | 22 | 28 | 26 | 32 | 30 | DETECTOR INPUT |
|---|---|---|---|---|---|---|---|---|
| 72 | 82 | 84 | 86 | | | | | PLAN LOOP DETECTOR(S) |
| 7 | | 8 | 8 | | | | | PHASE CALLED |
| 7 | 8 | 8 | 8 | | | | | PHASE EXTENDED |
| | | | | | | | | CALLING DELAY |
| | X | | | | | | | EXTENSION STRETCH |
| | | | | | | | | ADDED INIT |

W NATIONAL AVE & W CLEVELAND AVE
CITY OF WEST ALLIS
MILWAUKEE COUNTY

| SIGNAL NO: LOCAL | CABINET TYPE: TS2 |
|---|---|
| | CONTROLLER TYPE: MCCAIN |
| DATE: 11/2025 | PAGE NUMBER: 3 OF 3 |

| PROJECT ID: | 2410-15-70 |
|---|---|
| INTERSECTION: | W NATIONAL AVE & W CLEVELAND AVE |

| Signal Wire Color Coding | BLK - black | RED - red | GRN - green |
|---|---|---|---|
| | WHT - white | BLU - blue | ORG - orange |

| CB1 TO | AWG14 # OF CONDUCTORS | HEAD NO. | SIGNAL INDICATION WIRE COLOR | | | | | | | | | PED NEUTRAL | PED INPUT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | RED | YELLOW | GREEN | <RED> | <YELLOW> | <GREEN> | <FLASHING YELLOW> | D/WALK | WALK | | |
| SB1 | 7 | 35 | | | | | | | | BLK | BLU | | |
| | | PUSH BUTTON | | | | | | | | | | RED | WHT/BLK |
| SB2 | 15 | 1 | RED | ORG | GRN | | | | | | | | |
| | | 12 | | | | RED/BLK | ORG/BLK | GRN/BLK | BLK/WHT | | | | |
| | | 36 | | | | | | | | BLK | BLU | | |
| | | PUSH BUTTON | | | | | | | | | | BLU/BLK | WHT/BLK |
| SB3 | 15 | 13 | | | | RED/BLK | ORG/BLK | GRN/BLK | BLK/WHT | | | | |
| | | 24 | RED | ORG | GRN | | | | | | | | |
| | | 37 | | | | | | | | BLK | BLU | | |
| | | 38 | | | | | | | | BLK | BLU | | |
| | | PUSH BUTTON | | | | | | | | | | BLU/BLK | WHT/BLK |
| SB4 | 12 | 4 | | | | RED | ORG | GRN | BLK/WHT | | | | |
| | | 8 | RED/BLK | ORG/BLK | GRN/BLK | | | | | | | | |
| | | 9 | RED/BLK | ORG/BLK | GRN/BLK | | | | | | | | |
| SB5 | 12 | 10 | RED | ORG | GRN | | ORG/BLK | GRN/BLK | | | | | |
| | | 39 | | | | | | | | BLK | BLU | | |
| | | PUSH BUTTON | | | | | | | | | | BLU/BLK | WHT/BLK |
| SB6 | 12 | 19 | | | | RED | ORG | GRN | BLK/WHT | | | | |
| | | 21 | RED/BLK | ORG/BLK | GRN/BLK | | | | | | | | |
| | | 28 | | | | | | | | BLK | BLU | | |
| | | PUSH BUTTON | | | | | | | | | | BLU/BLK | WHT/BLK |
| SB7 | 7 | 25 | | | | RED | ORG | GRN | BLK | | | | |
| SB8 | 15 | 15 | RED | ORG | GRN | | | | | | | | |
| | | 16 | RED | ORG | GRN | | | | | | | | |
| | | 20 | | | | RED/BLK | ORG/BLK | GRN/BLK | BLK/WHT | | | | |
| | | 29 | | | | | | | | BLK | BLU | | |
| | | PUSH BUTTON | | | | | | | | | | BLU/BLK | WHT/BLK |
| SB9 | 15 | 5 | | | | RED | ORG | GRN | BLK/WHT | | | | |
| | | 7 | RED/BLK | ORG/BLK | GRN/BLK | | BLU/WHT | GRN/WHT | | | | | |
| | | 30 | | | | | | | | BLK | BLU | | |
| | | PUSH BUTTON | | | | | | | | | | BLU/BLK | WHT/BLK |
| SB10 | 15 | 6 | | | | RED/BLK | ORG/BLK | GRN/BLK | BLK/WHT | | | | |
| | | 17 | RED | ORG | GRN | | | | | | | | |
| | | 31 | | | | | | | | BLK | BLU | | |
| | | 32 | | | | | | | | BLK | BLU | | |
| | | PUSH BUTTON | | | | | | | | | | BLU/BLK | WHT/BLK |
| SB11 | 12 | 2 | RED | ORG | GRN | | | | | | | | |
| | | 3 | RED | ORG | GRN | | | | | | | | |
| | | 11 | | | | RED/BLK | ORG/BLK | GRN/BLK | BLK/WHT | | | | |
| SB12 | 7 | 33 | | | | | | | | BLK | BLU | | |
| | | PUSH BUTTON | | | | | | | | | | RED | WHT/BLK |
| SB13 | 15 | 14 | RED | ORG | GRN | | | | | | | | |
| | | 26 | | | | RED/BLK | ORG/BLK | GRN/BLK | BLK/WHT | | | | |
| | | 34 | | | | | | | | BLK | BLU | | |
| | | PUSH BUTTON | | | | | | | | | | BLU/BLK | WHT/BLK |
| SB14 | 7 | 18 | | | | RED | ORG | GRN | BLK | | | | |
| SB15 | 12 | 22 | RED | ORG | GRN | | | | | | | | |
| | | 23 | RED | ORG | GRN | | | | | | | | |
| | | 27 | | | | RED/BLK | ORG/BLK | GRN/BLK | BLK/WHT | | | | |

| Equipment Grounding Conductor 10 AWG Green XLP | |
|---|---|
| From | To |
| | |
| CB1 | SB1 |
| SB1 | SB2 |
| SB2 | SB3 |
| SB3 | SB4 |
| SB4 | SB5 |
| SB5 | SB6 |
| SB6 | SB7 |
| SB7 | SB8 |
| SB8 | SB9 |
| SB9 | SB10 |
| SB10 | SB11 |
| SB11 | SB12 |
| SB12 | SB13 |
| SB13 | SB14 |
| SB14 | SB15 |
| SB15 | CB1 |
| | |

| Pull Box Bonding Jumper 10 AWG Green XLP | |
|---|---|
| From | To |
| | |
| PB1 | SB1 |
| PB2 | SB2 |
| PB5 | SB3 |
| PB6 | SB4 |
| PB7 | SB6 |
| PB11 | SB7 |
| PB12 | SB8 |
| PB13 | SB8 |
| PB14 | SB9 |
| PB16 | SB10 |
| PB17 | SB11 |
| PB18 | SB12 |
| PB22 | SB14 |
| PB23 | SB15 |
| PB24 | SB15 |

| Lighting UF 2-12 AWG Grounded | |
|---|---|
| From | To |
| CB1 | SB2 |
| SB2 | SB4 |
| SB4 | SB16 |
| SB16 | SB7 |
| | |
| CB1 | SB14 |
| SB14 | SB17 |
| SB17 | SB11 |
| SB11 | SB9 |

| Emergency Vehicle Preemption | |
|---|---|
| From | To |
| | |
| CB1 | HEAD A (SB4) |
| CB1 | HEAD B (SB11) |
| CB1 | HEAD C (SB15) |
| CB1 | HEAD D(SB8) |
| | |

*Use the white conductor in the cable assembly as the grounded conductor for all traffic signal indications
*Ensure the grounded conductor in the feeder cable and the pole cables are both 18" longer than the ungrounded conductors.
*At the signal bases, connect one terminal from the pedestrian push buttons to the color indicated in the chart. Connect the other terminal to the grounded
*Reconnect the grounding conductors wherever the circuit has been interrupted to ensure the grounding circuit is complete.

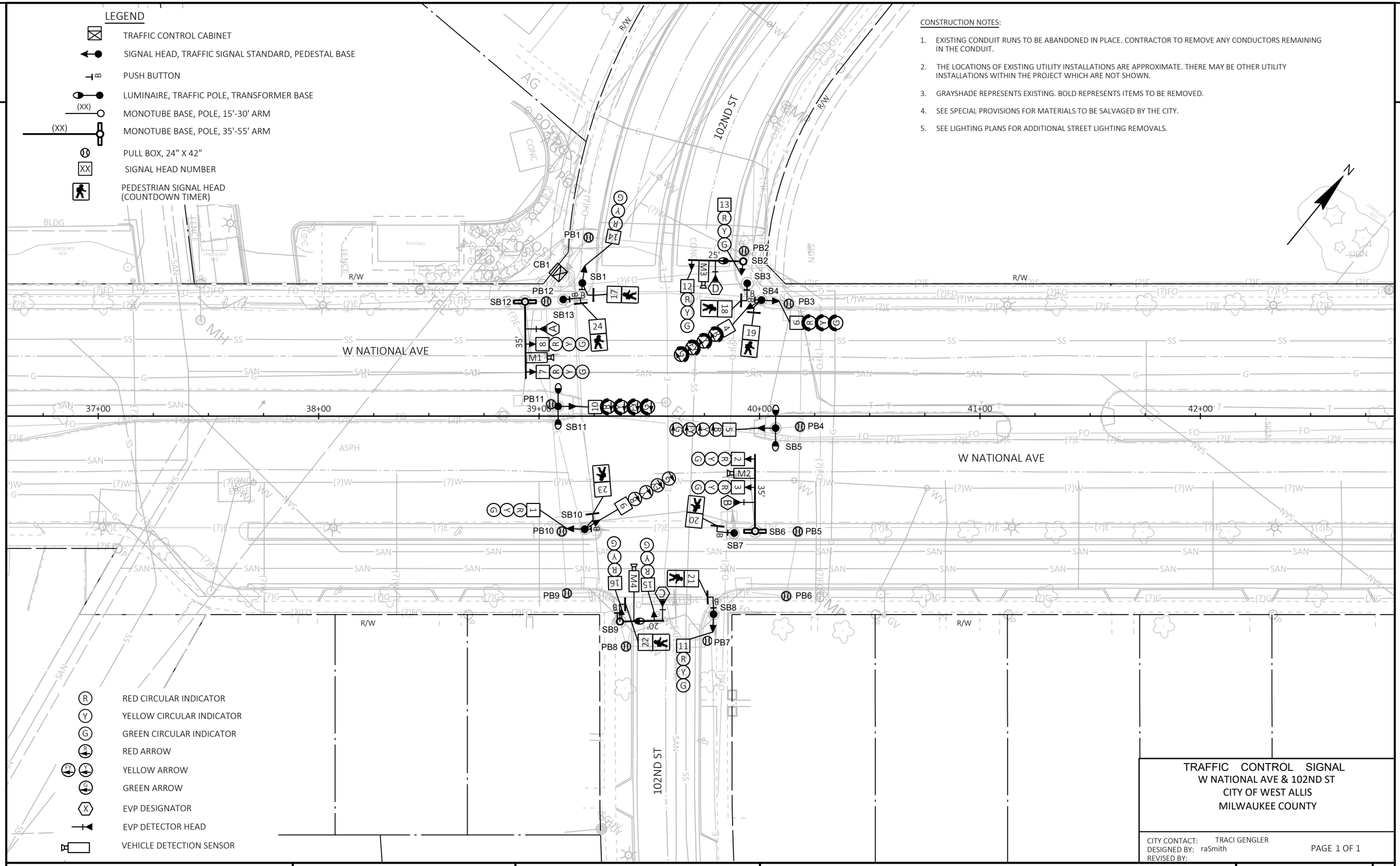
2

## LEGEND

- TRAFFIC CONTROL CABINET
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- PEDESTRIAN SIGNAL HEAD (COUNTDOWN TIMER)

CONSTRUCTION NOTES:

1. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.
4. SEE SPECIAL PROVISIONS FOR MATERIALS TO BE SALVAGED BY THE CITY.
5. SEE LIGHTING PLANS FOR ADDITIONAL STREET LIGHTING REMOVALS.




TRAFFIC CONTROL SIGNAL
W NATIONAL AVE & 102ND ST
CITY OF WEST ALLIS
MILWAUKEE COUNTY

CITY CONTACT: TRACI GENGLER
DESIGNED BY: raSmith
REVISED BY:

PAGE 1 OF 1

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC SIGNAL REMOVAL PLAN | SHEET 275 | E |
|---|---|---|---|---|---|

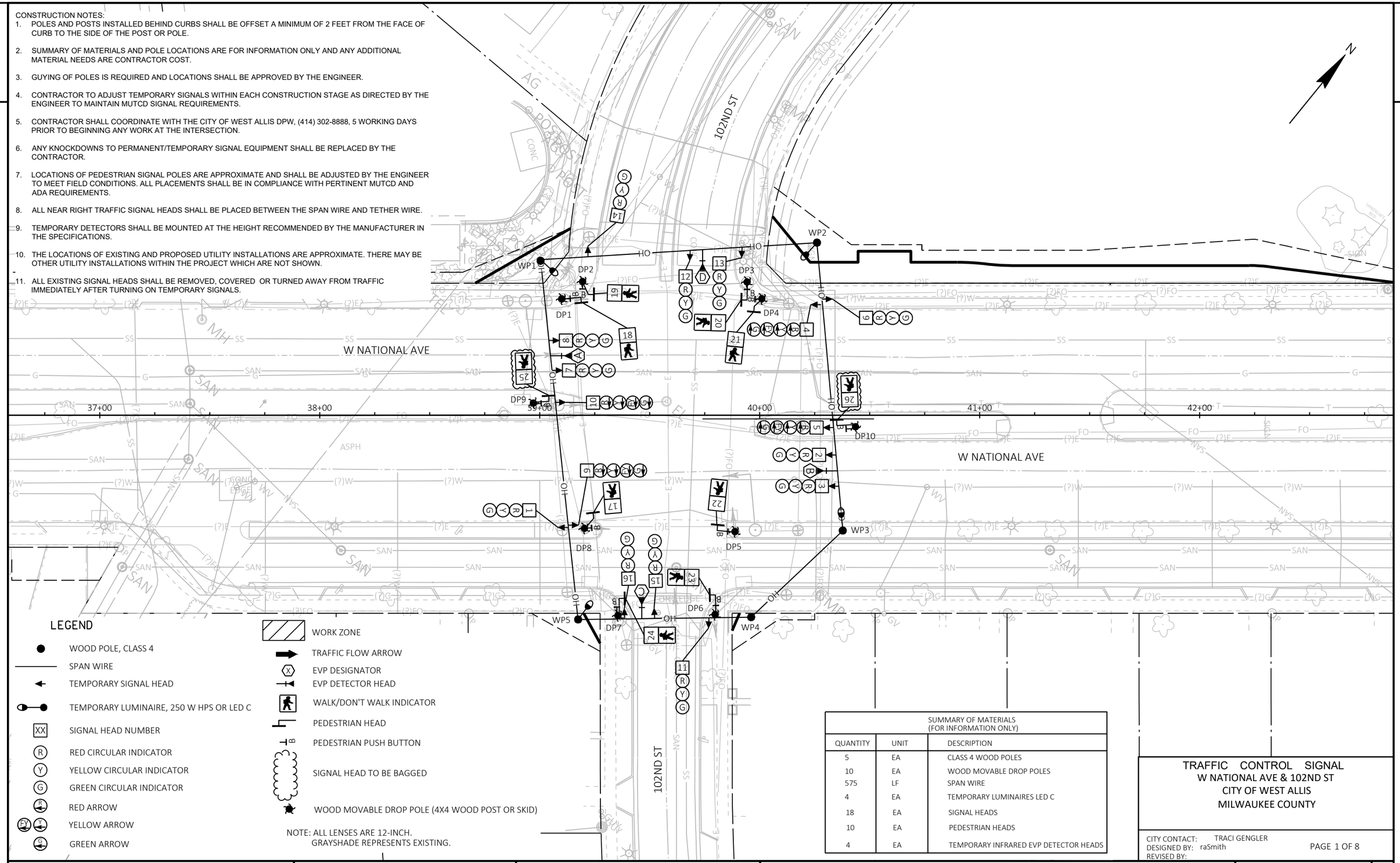
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024002-SR.DWG
LAYOUT NAME - Plan 1 IN 40 FT

PLOT DATE : 10/28/2025 3:37 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES:

1. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POST OR POLE.
2. SUMMARY OF MATERIALS AND POLE LOCATIONS ARE FOR INFORMATION ONLY AND ANY ADDITIONAL MATERIAL NEEDS ARE CONTRACTOR COST.
3. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
4. CONTRACTOR TO ADJUST TEMPORARY SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
5. CONTRACTOR SHALL COORDINATE WITH THE CITY OF WEST ALLIS DPW, (414) 302-8888, 5 WORKING DAYS PRIOR TO BEGINNING ANY WORK AT THE INTERSECTION.
6. ANY KNOCKDOWNS TO PERMANENT/TEMPORARY SIGNAL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR.
7. LOCATIONS OF PEDESTRIAN SIGNAL POLES ARE APPROXIMATE AND SHALL BE ADJUSTED BY THE ENGINEER TO MEET FIELD CONDITIONS. ALL PLACEMENTS SHALL BE IN COMPLIANCE WITH PERTINENT MUTCD AND ADA REQUIREMENTS.
8. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
9. TEMPORARY DETECTORS SHALL BE MOUNTED AT THE HEIGHT RECOMMENDED BY THE MANUFACTURER IN THE SPECIFICATIONS.
10. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
11. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.




LEGEND

- WOOD POLE, CLASS 4
- SPAN WIRE
- TEMPORARY SIGNAL HEAD
- TEMPORARY LUMINAIRE, 250 W HPS OR LED C
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RA RED ARROW
- YA YELLOW ARROW
- GA GREEN ARROW
- WORK ZONE
- TRAFFIC FLOW ARROW
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- WALK/DON'T WALK INDICATOR
- PEDESTRIAN HEAD
- B PEDESTRIAN PUSH BUTTON
- SIGNAL HEAD TO BE BAGGED
- WOOD MOVABLE DROP POLE (4X4 WOOD POST OR SKID)

NOTE: ALL LENSES ARE 12-INCH.
GRAYSHADE REPRESENTS EXISTING.

SUMMARY OF MATERIALS
(FOR INFORMATION ONLY)

| QUANTITY | UNIT | DESCRIPTION |
|---|---|---|
| 5 | EA | CLASS 4 WOOD POLES |
| 10 | EA | WOOD MOVABLE DROP POLES |
| 575 | LF | SPAN WIRE |
| 4 | EA | TEMPORARY LUMINAIRES LED C |
| 18 | EA | SIGNAL HEADS |
| 10 | EA | PEDESTRIAN HEADS |
| 4 | EA | TEMPORARY INFRARED EVP DETECTOR HEADS |

# TRAFFIC CONTROL SIGNAL
W NATIONAL AVE & 102ND ST
CITY OF WEST ALLIS
MILWAUKEE COUNTY

CITY CONTACT: TRACI GENGLER
DESIGNED BY: raSmith
REVISED BY:

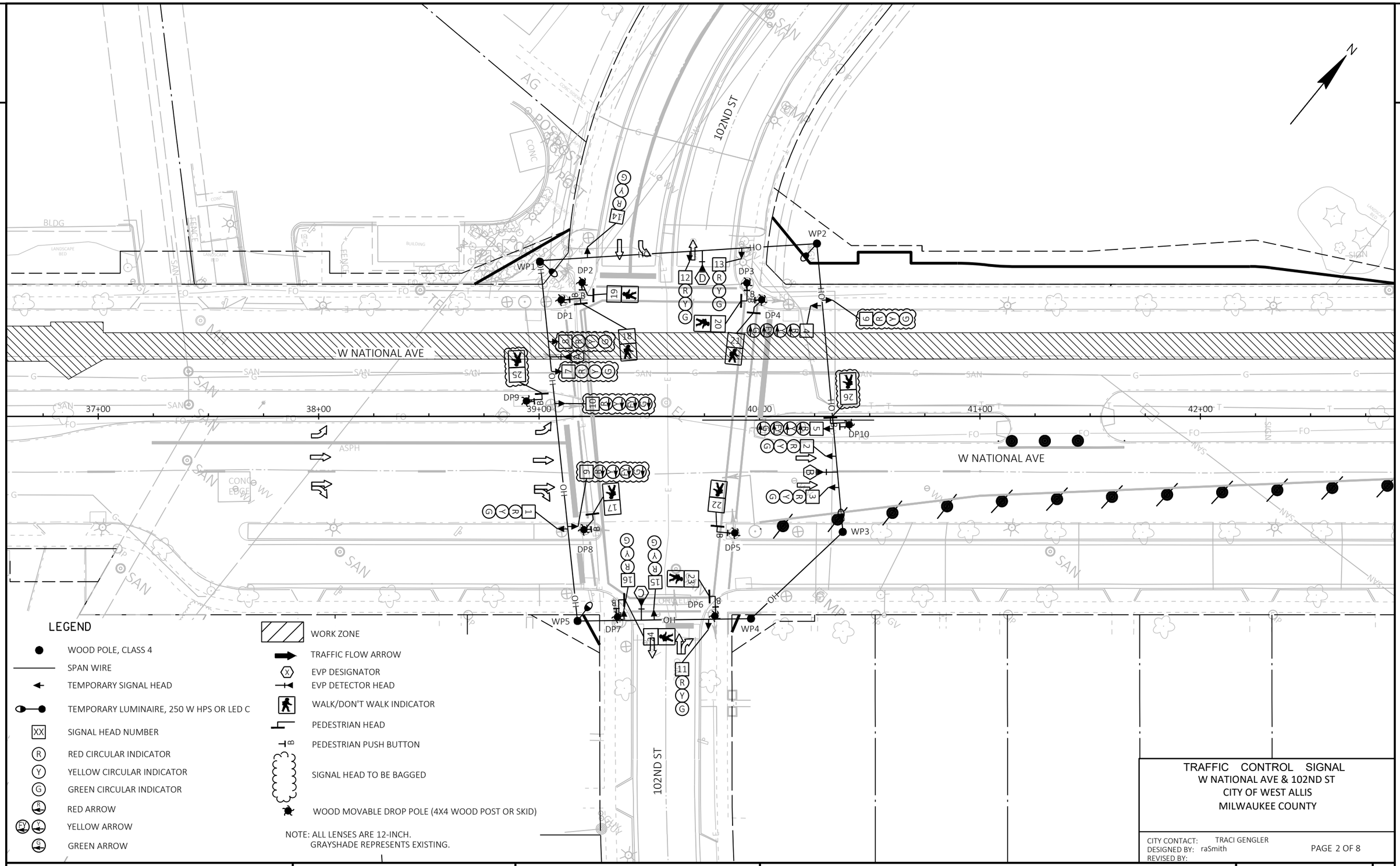
PAGE 1 OF 8

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY TRAFFIC SIGNAL PLANS - PRE- AND POST-CONSTRUCTION | SHEET 276 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024101-ST.DWG
LAYOUT NAME - 102nd
PLOT DATE : 10/30/2025 1:18 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2




TRAFFIC CONTROL SIGNAL
W NATIONAL AVE & 102ND ST
CITY OF WEST ALLIS
MILWAUKEE COUNTY

CITY CONTACT: TRACI GENGLER
DESIGNED BY: raSmith
REVISED BY:



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY TRAFFIC SIGNAL PLANS - STAGES 3 & 4 | SHEET 277 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024102-ST-3-4.DWG
LAYOUT NAME - 102nd
PLOT DATE : 10/30/2025 12:43 PM
PLOT BY : UTIC, ANDY
PLOT NAME :
PLOT SCALE : ##########

2

2

W NATIONAL AVE

102ND ST

37+00 38+00 39+00 40+00 41+00 42+00

WP1 WP2 WP3 WP4 WP5

DP1 DP2 DP3 DP4 DP5 DP6 DP7 DP8 DP9 DP10

## LEGEND

- WOOD POLE, CLASS 4
- SPAN WIRE
- TEMPORARY SIGNAL HEAD
- TEMPORARY LUMINAIRE, 250 W HPS OR LED C
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- WORK ZONE
- TRAFFIC FLOW ARROW
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- WALK/DON'T WALK INDICATOR
- PEDESTRIAN HEAD
- PEDESTRIAN PUSH BUTTON
- SIGNAL HEAD TO BE BAGGED
- WOOD MOVABLE DROP POLE (4X4 WOOD POST OR SKID)

NOTE: ALL LENSES ARE 12-INCH.
GRAYSHADE REPRESENTS EXISTING.

# TRAFFIC CONTROL SIGNAL
W NATIONAL AVE & 102ND ST
CITY OF WEST ALLIS
MILWAUKEE COUNTY

CITY CONTACT: TRACI GENGLER
DESIGNED BY: raSmith
REVISED BY:



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY TRAFFIC SIGNAL PLANS - STAGE 6A1 | SHEET 278 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024103-ST-6A1.DWG
LAYOUT NAME - 102nd
PLOT DATE : 10/30/2025 12:44 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

2

N

W NATIONAL AVE

102ND ST

37+00 38+00 39+00 40+00 41+00 42+00

WP1 WP2 WP3 WP4 WP5

DP1 DP2 DP3 DP4 DP5 DP6 DP7 DP8 DP9 DP10

## LEGEND

- WOOD POLE, CLASS 4
- SPAN WIRE
- TEMPORARY SIGNAL HEAD
- TEMPORARY LUMINAIRE, 250 W HPS OR LED C
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RA RED ARROW
- FY YELLOW ARROW
- GA GREEN ARROW
- WORK ZONE
- TRAFFIC FLOW ARROW
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- WALK/DON'T WALK INDICATOR
- PEDESTRIAN HEAD
- PB PEDESTRIAN PUSH BUTTON
- SIGNAL HEAD TO BE BAGGED
- WOOD MOVABLE DROP POLE (4X4 WOOD POST OR SKID)

NOTE: ALL LENSES ARE 12-INCH.
GRAYSHADE REPRESENTS EXISTING.

# TRAFFIC CONTROL SIGNAL
W NATIONAL AVE & 102ND ST
CITY OF WEST ALLIS
MILWAUKEE COUNTY

CITY CONTACT: TRACI GENGLER
DESIGNED BY: raSmith
REVISED BY:

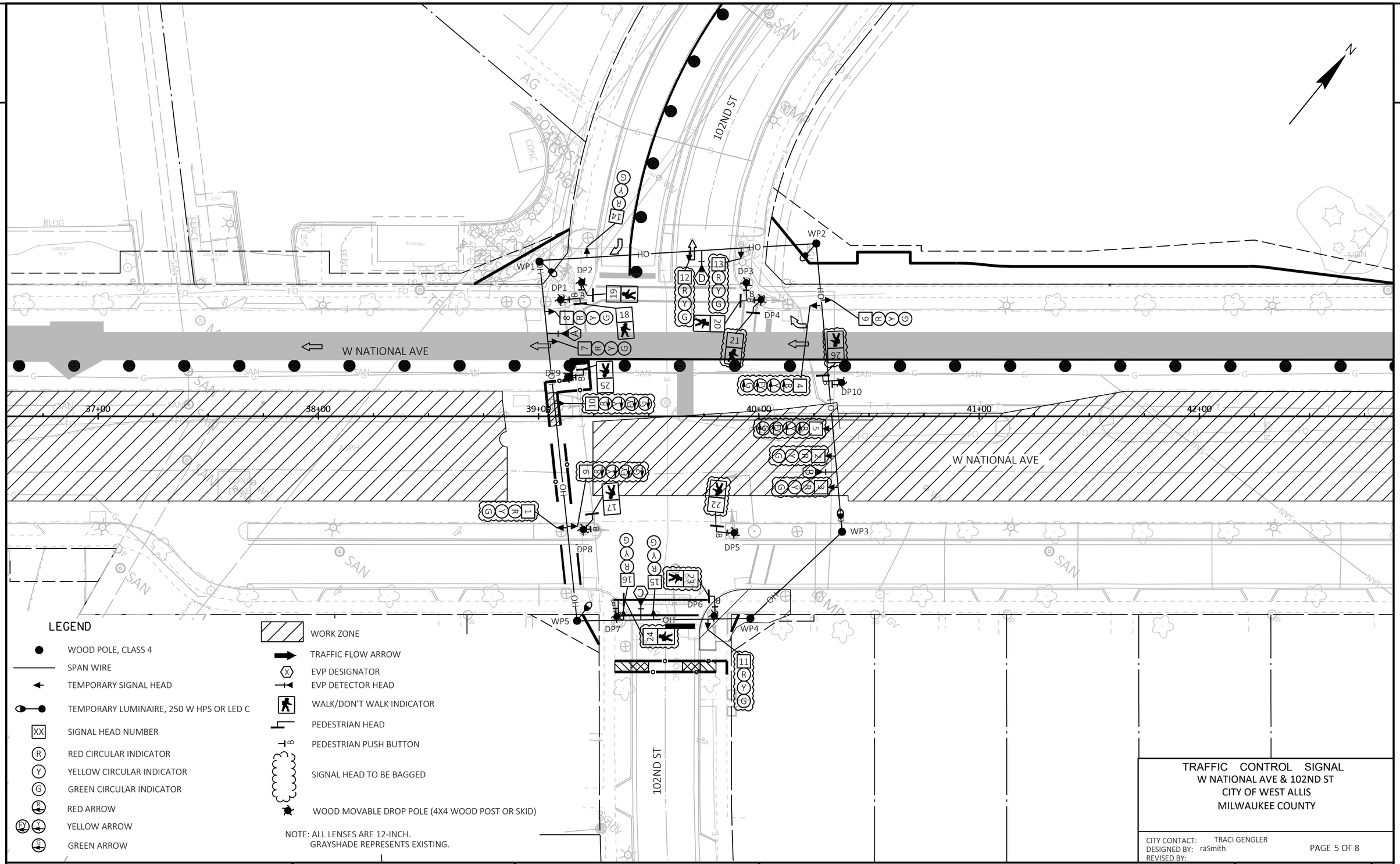


| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY TRAFFIC SIGNAL PLANS - STAGE 6A2 | SHEET 279 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024103-ST-6A2.DWG
LAYOUT NAME - 102nd
PLOT DATE : 10/30/2025 12:44 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

2




# TRAFFIC CONTROL SIGNAL
W NATIONAL AVE & 102ND ST
CITY OF WEST ALLIS
MILWAUKEE COUNTY

CITY CONTACT: TRACI GENGLER
DESIGNED BY: raSmith
REVISED BY:



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY TRAFFIC SIGNAL PLANS - STAGE 6B | SHEET 280 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024103-ST-6B.DWG
LAYOUT NAME - 102nd

PLOT DATE : 10/30/2025 12:45 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

W NATIONAL AVE

102ND ST

37+00 38+00 39+00 40+00 41+00 42+00

WP1 WP2 WP3 WP4 WP5

DP1 DP2 DP3 DP4 DP5 DP6 DP7 DP8 DP9 DP10

HIO OH

LEGEND

- WOOD POLE, CLASS 4
- SPAN WIRE
- TEMPORARY SIGNAL HEAD
- TEMPORARY LUMINAIRE, 250 W HPS OR LED C
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY Y YELLOW ARROW
- G GREEN ARROW
- WORK ZONE
- TRAFFIC FLOW ARROW
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- WALK/DON'T WALK INDICATOR
- PEDESTRIAN HEAD
- B PEDESTRIAN PUSH BUTTON
- SIGNAL HEAD TO BE BAGGED
- WOOD MOVABLE DROP POLE (4X4 WOOD POST OR SKID)

NOTE: ALL LENSES ARE 12-INCH.
GRAYSHADE REPRESENTS EXISTING.

# TRAFFIC CONTROL SIGNAL
W NATIONAL AVE & 102ND ST
CITY OF WEST ALLIS
MILWAUKEE COUNTY

CITY CONTACT: TRACI GENGLER
DESIGNED BY: raSmith
REVISED BY:

PAGE 6 OF 8

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY TRAFFIC SIGNAL PLANS - STAGE 7A | SHEET 281 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024103-ST-7A.DWG
LAYOUT NAME - 102nd
PLOT DATE : 10/30/2025 12:45 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : ##########

2

STAGE 7B NOTES:
1. TEMPORARY PEDESTRIAN ACCOMMODATIONS FOR STAGE 7B2 ARE SHOWN.
2. SIDEWALK ON NORTH SIDE OF NATIONAL AVE TO REMAIN OPEN FOR DURATION OF STAGE 7B1.

W NATIONAL AVE

102ND ST

37+00 38+00 39+00 40+00 41+00 42+00

WP1 WP2 WP3 WP4 WP5

DP1 DP2 DP3 DP4 DP5 DP6 DP7 DP8 DP10

## LEGEND

- WOOD POLE, CLASS 4
- SPAN WIRE
- TEMPORARY SIGNAL HEAD
- TEMPORARY LUMINAIRE, 250 W HPS OR LED C
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RA RED ARROW
- FY YELLOW ARROW
- GA GREEN ARROW
- WORK ZONE
- TRAFFIC FLOW ARROW
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- WALK/DON'T WALK INDICATOR
- PEDESTRIAN HEAD
- PB PEDESTRIAN PUSH BUTTON
- SIGNAL HEAD TO BE BAGGED
- WOOD MOVABLE DROP POLE (4X4 WOOD POST OR SKID)

NOTE: ALL LENSES ARE 12-INCH.
GRAYSHADE REPRESENTS EXISTING.

TRAFFIC CONTROL SIGNAL
W NATIONAL AVE & 102ND ST
CITY OF WEST ALLIS
MILWAUKEE COUNTY

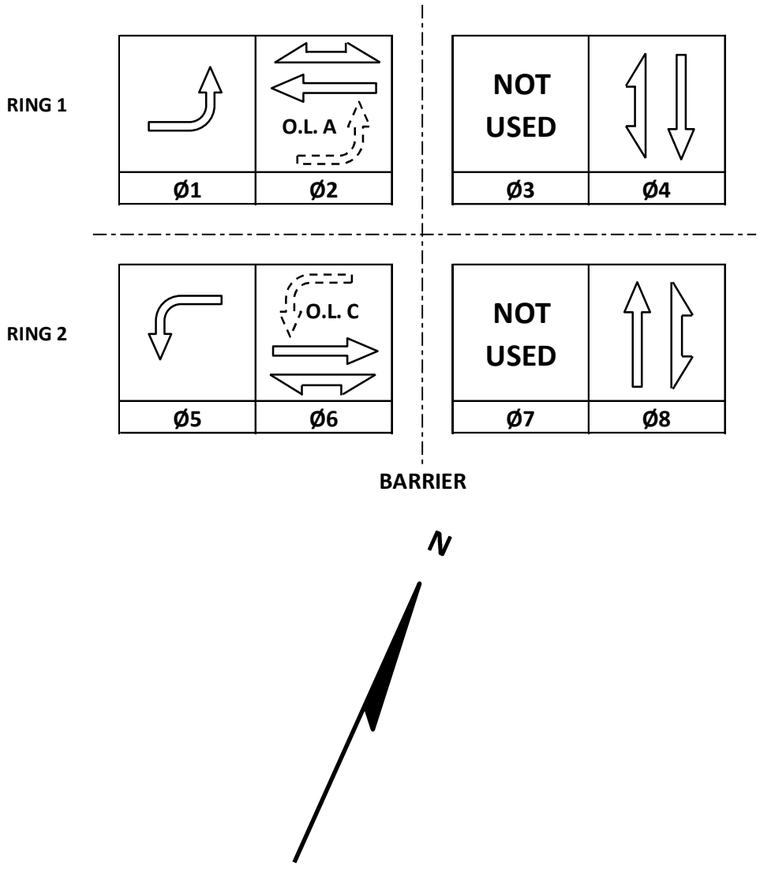
CITY CONTACT: TRACI GENGLER
DESIGNED BY: raSmith
REVISED BY:

PAGE 7 OF 8

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY TRAFFIC SIGNAL PLANS - STAGE 7B | SHEET 282 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024103-ST-7B.DWG
LAYOUT NAME - 102nd
PLOT DATE : 10/30/2025 12:46 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : ##########

| | HEAD NUMBERS | FLASH |
|---|---|---|
| Ø1 | 4,5 | R ← |
| Ø2 | 6,7,8 | R |
| Ø3 | | |
| Ø4 | 14,15,16 | R |
| Ø5 | 9,10 | R ← |
| Ø6 | 1,2,3 | R |
| Ø7 | | |
| Ø8 | 11,12,13 | R |
| Ø2P | 19,20 | |
| Ø4P | 17,18,25 | |
| Ø6P | 23,24 | |
| Ø8P | 21,22,26 | |
| OLA | 4,5 | - |
| OLB | | |
| OLC | 9,10 | - |
| OLD | | |




## CONTROLLER LOGIC

| PHASE NUMBER | PHASE LOCKING | DUAL ENTRY W / Ø | PHASE RECALL | PHASE ACTIVE |
|---|---|---|---|---|
| 1 | X | 6 | MAX | X |
| 2 | X | 6 | MAX | X |
| 3 | | | | |
| 4 | X | 8 | MAX | X |
| 5 | X | 2 | MAX | X |
| 6 | X | 2 | MIN | X |
| 7 | | | | |
| 8 | X | 4 | MAX | X |

EMERGENCY VEHICLE PREEMPTION SEQUENCE

| EMERGENCY VEHICLE PREEMPTOR | A | B | C | D |
|---|---|---|---|---|
| MOVEMENT | | | | |
| PHASE | 2+5 | 6+1 | 4+8 | 8+4 |

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+8 OR 8+4, CONTROLLER SHALL RETURN TO PHASES 4+8.

| TYPE OF INTERCONNECT/COMMUNICATION | |
|---|---|
| NONE | X |
| CLOSED LOOP | |
| TWISTED PAIR | |
| FIBER OPTIC* | |
| FIBER OPTIC (ETHERNET) | |
| RADIO | |
| CELL MODEM | |

| TYPE OF COORDINATION | |
|---|---|
| NONE | |
| TBC | X |
| TRAFFIC RESPONSIVE | |
| ADAPTIVE | |
| *LOCATION OF MASTER CONTROLLER NO: S- | |
| SIGNAL SYSTEM NO: SS- | |

| TYPE OF LIGHTING | |
|---|---|
| BY OTHER AGENCY | |
| IN TRAFFIC CABINET | X |
| IN SEPARATE LIGHTING CABINET | |

| TYPE OF PRE-EMPT | |
|---|---|
| NONE | |
| RAILROAD | |
| EMERGENCY VEHICLE | X |
| GTT | |
| TOMAR | |
| HARDWIRE | |
| OTHER | |
| CONFIRMATION LIGHTS | |
| LIFT BRIDGE | |
| QUEUE DETECTION | |

## GENERAL NOTES:

1. PHASE 5 IS FOR EVP ONLY AND WILL BE OMITTED DURING NORMAL OPERATION.
2. OMIT PHASE 1 DURING STAGE 6A-6B AND STAGE 7A-7B.

W NATIONAL AVE & 102ND ST
CITY OF WEST ALLIS
MILWAUKEE COUNTY

| | | |
|---|---|---|
| SIGNAL NO: | LOCAL | CABINET TYPE: TEMP |
| | | CONTROLLER TYPE: TEMP |
| DATE: | 11/2025 | PAGE NUMBER: 8 OF 8 |



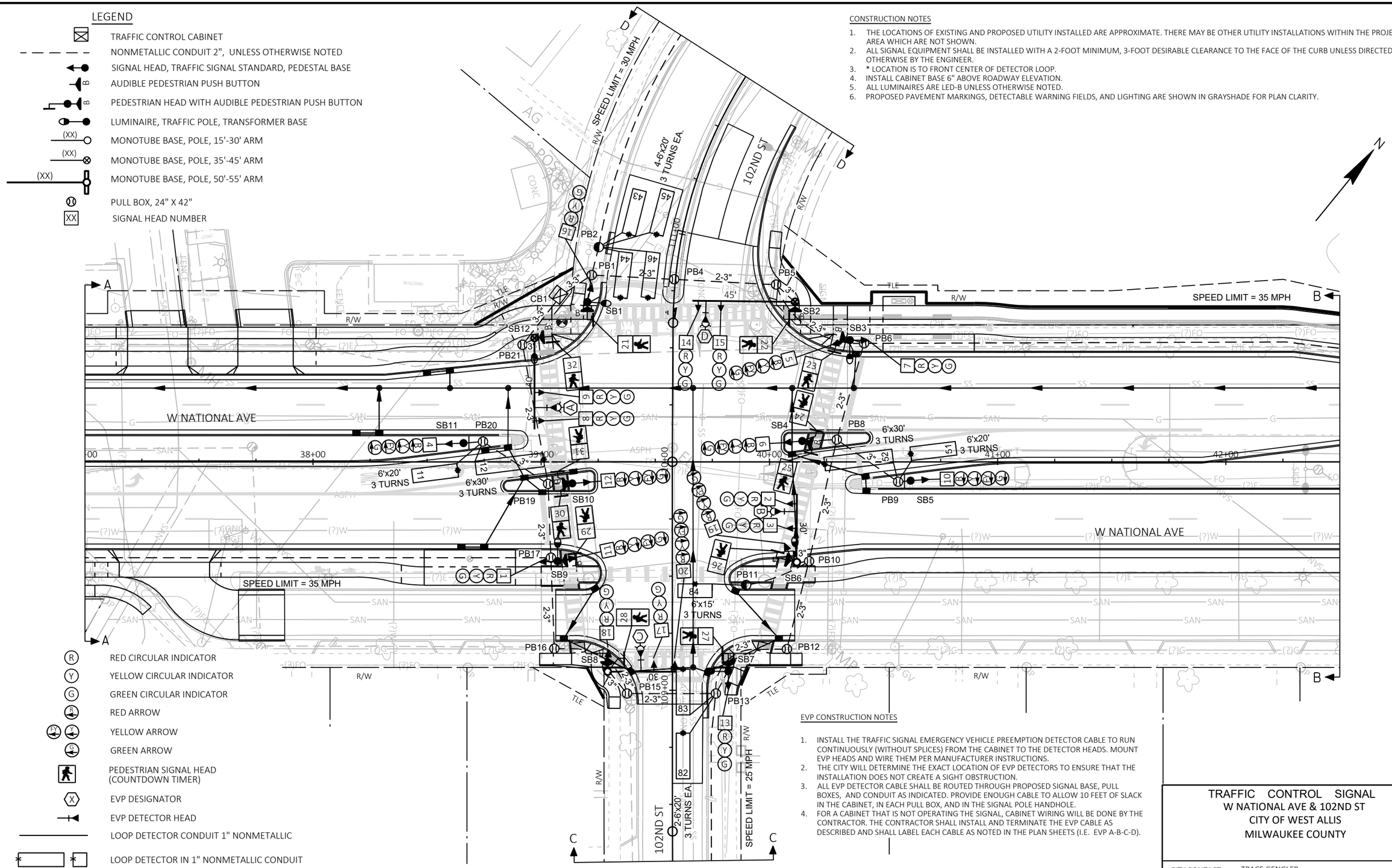
FILE NAME: \\rasmith.com\Brookfield\Transportation\1232708\Traffic\Signal Design\Sequence of Operations\102nd St\Temp\TS2-S_FYA_ABCD_EPAC_SEQ.xlsx PLOT DATE: ######### PLOT NAME: TS2-S_FYA_ABCD_EPAC_SEQ.xlsx PLOT BY: _____ PLOT SCALE: 1:1

LEGEND

- TRAFFIC CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- AUDIBLE PEDESTRIAN PUSH BUTTON
- PEDESTRIAN HEAD WITH AUDIBLE PEDESTRIAN PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-45' ARM
- (XX) MONOTUBE BASE, POLE, 50'-55' ARM
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER

CONSTRUCTION NOTES

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLED ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
2. ALL SIGNAL EQUIPMENT SHALL BE INSTALLED WITH A 2-FOOT MINIMUM, 3-FOOT DESIRABLE CLEARANCE TO THE FACE OF THE CURB UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
3. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
4. INSTALL CABINET BASE 6" ABOVE ROADWAY ELEVATION.
5. ALL LUMINAIRES ARE LED-B UNLESS OTHERWISE NOTED.
6. PROPOSED PAVEMENT MARKINGS, DETECTABLE WARNING FIELDS, AND LIGHTING ARE SHOWN IN GRAYSHADE FOR PLAN CLARITY.




- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW
- PEDESTRIAN SIGNAL HEAD (COUNTDOWN TIMER)
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- * * LOOP DETECTOR IN 1" NONMETALLIC CONDUIT

EVP CONSTRUCTION NOTES

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PREEMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT EVP HEADS AND WIRE THEM PER MANUFACTURER INSTRUCTIONS.
2. THE CITY WILL DETERMINE THE EXACT LOCATION OF EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ALL EVP DETECTOR CABLE SHALL BE ROUTED THROUGH PROPOSED SIGNAL BASE, PULL BOXES, AND CONDUIT AS INDICATED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. FOR A CABINET THAT IS NOT OPERATING THE SIGNAL, CABINET WIRING WILL BE DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL INSTALL AND TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED IN THE PLAN SHEETS (I.E. EVP A-B-C-D).

# TRAFFIC CONTROL SIGNAL
## W NATIONAL AVE & 102ND ST
## CITY OF WEST ALLIS
## MILWAUKEE COUNTY

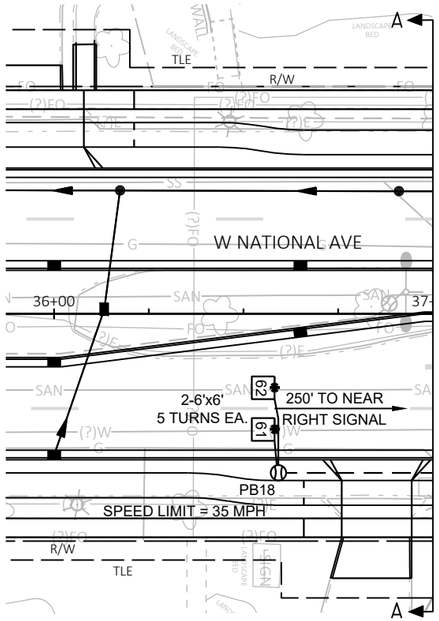
CITY CONTACT: TRACE GENGLER
DESIGNED BY: raSmith
REVISED BY:

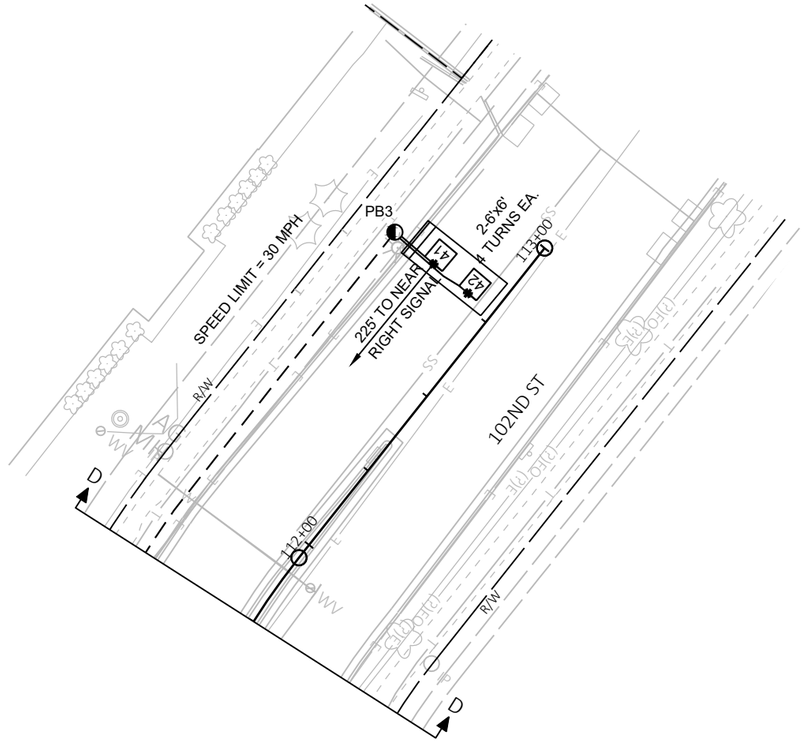


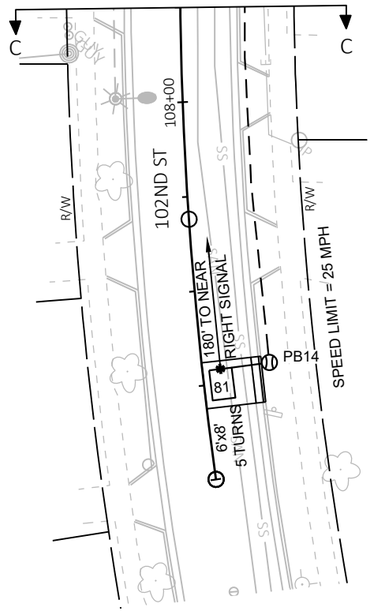
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC SIGNAL PLAN | SHEET 284 | E |
|---|---|---|---|---|---|

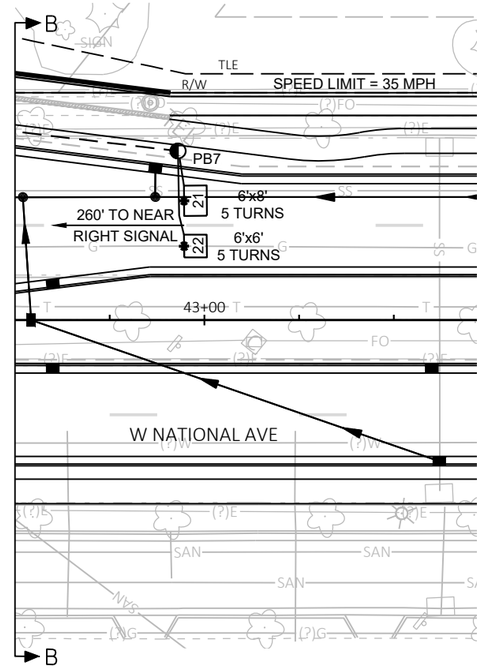
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024202-SP.DWG
LAYOUT NAME - National102ndSt_pg1
PLOT DATE : 10/30/2025 2:14 PM
PLOT BY : UTIC, ANDY
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2




TRAFFIC CONTROL SIGNAL
W NATIONAL AVE & 102ND ST
CITY OF WEST ALLIS
MILWAUKEE COUNTY

CITY CONTACT: TRACE GENGLER
DESIGNED BY: raSmith
REVISED BY:

PAGE 2 OF 3

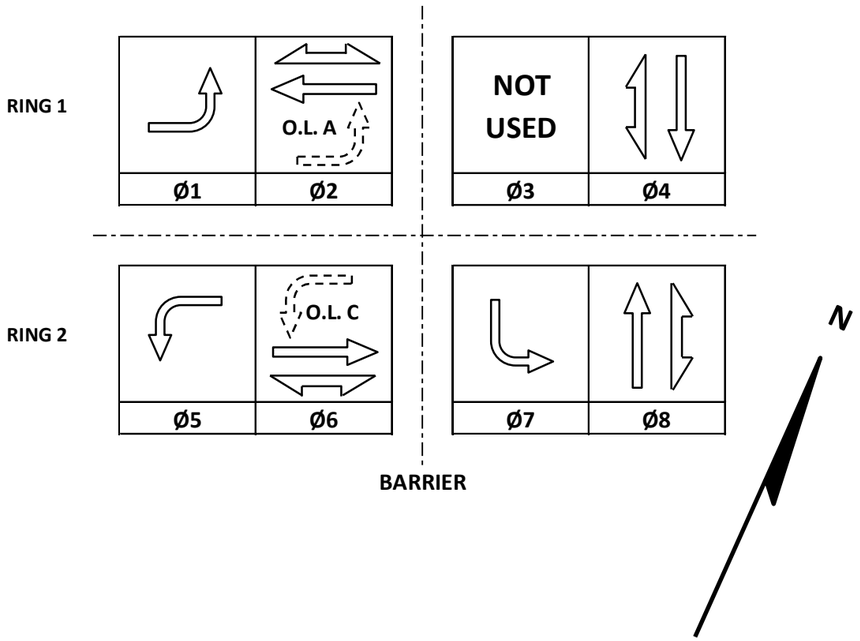
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC SIGNAL PLAN | SHEET 285 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024202-SP.DWG
LAYOUT NAME - National102ndSt_pg2

PLOT DATE : 10/30/2025 11:05 AM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

| | HEAD NUMBERS | FLASH |
|---|---|---|
| Ø1 | 4,5,6 | R ← |
| Ø2 | 7,8,9 | R |
| Ø3 | | |
| Ø4 | 16,17,18 | R |
| Ø5 | 10,11,12 | R ← |
| Ø6 | 1,2,3 | R |
| Ø7 | 19,20 | R ← |
| Ø8 | 13,14,15 | R |
| Ø2P | 21,22 | |
| Ø4P | 29,30,31,32 | |
| Ø6P | 27,28 | |
| Ø8P | 23,24,25,26 | |
| OLA | 4,5,6 | R ← |
| OLB | | |
| OLC | 10,11,12 | R ← |
| OLD | | |




## CONTROLLER LOGIC

| PHASE NUMBER | PHASE LOCKING | DUAL ENTRY W / Ø | PHASE RECALL | PHASE ACTIVE |
|---|---|---|---|---|
| 1 | | 6 | | X |
| 2 | X | 6 | MIN | X |
| 3 | | | | |
| 4 | | 8 | | X |
| 5 | | 2 | | X |
| 6 | X | 2 | MIN | X |
| 7 | | 4 | | X |
| 8 | | 4 | | X |

EMERGENCY VEHICLE PREEMPTION SEQUENCE

| EMERGENCY VEHICLE PREEMPTOR | A | B | C | D |
|---|---|---|---|---|
| MOVEMENT | | | | |
| PHASE | 2+5 | 6+1 | 4+7 | 8+4 |

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+4, CONTROLLER SHALL RETURN TO PHASES 4+8.

| TYPE OF INTERCONNECT/COMMUNICATION | |
|---|---|
| NONE | X |
| CLOSED LOOP | |
| TWISTED PAIR | |
| FIBER OPTIC* | |
| FIBER OPTIC (ETHERNET) | |
| RADIO | |
| CELL MODEM | |

| TYPE OF COORDINATION | |
|---|---|
| NONE | |
| TBC | X |
| TRAFFIC RESPONSIVE | |
| ADAPTIVE | |
| *LOCATION OF MASTER CONTROLLER NO: S- | |
| SIGNAL SYSTEM NO: SS- | |

| TYPE OF LIGHTING | |
|---|---|
| BY OTHER AGENCY | |
| IN TRAFFIC CABINET | |
| IN SEPARATE LIGHTING CABINET | X |

| TYPE OF PRE-EMPT | |
|---|---|
| NONE | |
| RAILROAD | |
| EMERGENCY VEHICLE | X |
| GTT | |
| TOMAR | X |
| HARDWIRE | |
| OTHER | |
| CONFIRMATION LIGHTS | X |
| LIFT BRIDGE | |
| QUEUE DETECTION | |

## DETECTOR LOGIC

| DETECTOR INPUT | 3 | 1 | 7 | 5 | 11 | 9 | 15 | 13 |
|---|---|---|---|---|---|---|---|---|
| PLAN LOOP DETECTOR(S) | 11 | 21 | 41 | 43 | 45 | 51 | 61 | 81 |
| PHASE CALLED | 1 | 2 | | 4 | 4 | 5 | 6 | |
| PHASE EXTENDED | 1 | 2 | 4 | 4 | 4 | 5 | 6 | 8 |
| CALLING DELAY | | | | | | | | |
| EXTENSION STRETCH | | | X | | | | | X |
| ADDED INIT | | X | | | | | X | |

| 19 | 17 | 23 | 21 | 27 | 25 | 31 | 29 | DETECTOR INPUT |
|---|---|---|---|---|---|---|---|---|
| 83 | | | | | | | | PLAN LOOP DETECTOR(S) |
| 8 | | | | | | | | PHASE CALLED |
| 8 | | | | | | | | PHASE EXTENDED |
| X | | | | | | | | CALLING DELAY |
| | | | | | | | | EXTENSION STRETCH |
| | | | | | | | | ADDED INIT |

| DETECTOR INPUT | 4 | 2 | 8 | 6 | 12 | 10 | 16 | 14 |
|---|---|---|---|---|---|---|---|---|
| PLAN LOOP DETECTOR(S) | 12 | 22 | 42 | 44 | 46 | 52 | 62 | 82 |
| PHASE CALLED | 1 | 2 | | 4 | 4 | 5 | 6 | 8 |
| PHASE EXTENDED | 1 | 2 | 4 | 4 | 4 | 5 | 6 | 8 |
| CALLING DELAY | | | | | | | | |
| EXTENSION STRETCH | | | X | | | | | |
| ADDED INIT | | X | | | | | X | |

| 20 | 18 | 24 | 22 | 28 | 26 | 32 | 30 | DETECTOR INPUT |
|---|---|---|---|---|---|---|---|---|
| 84 | | | | | | | | PLAN LOOP DETECTOR(S) |
| 8 | | | | | | | | PHASE CALLED |
| 8 | | | | | | | | PHASE EXTENDED |
| X | | | | | | | | CALLING DELAY |
| | | | | | | | | EXTENSION STRETCH |
| | | | | | | | | ADDED INIT |

## GENERAL NOTES:

1. PHASE 7 IS FOR EVP ONLY AND WILL BE OMITTED DURING NORMAL OPERATION.

W NATIONAL AVE & 102ND ST
CITY OF WEST ALLIS
MILWAUKEE COUNTY

| | |
|---|---|
| SIGNAL NO: LOCAL | CABINET TYPE: TS2 |
| | CONTROLLER TYPE: MCCAIN |
| DATE: 11/2025 | PAGE NUMBER: 3 OF 3 |

| PROJECT ID: | 2410-15-70 |
|---|---|
| INTERSECTION: | W NATIONAL AVE & S 102ND ST |

| Signal Wire Color Coding | BLK - black | RED - red | GRN - green |
|---|---|---|---|
| | WHT - white | BLU - blue | ORG - orange |

| CB1 TO | AWG14 # OF CONDUCTORS | HEAD NO. | SIGNAL INDICATION WIRE COLOR | | | | | | | | | PED NEUTRAL | PED INPUT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | RED | YELLOW | GREEN | <RED> | <YELLOW> | <GREEN> | <FLASHING YELLOW> | D/WALK | WALK | | |
| | | | | | | | | | | | | | |
| SB1 | 12 | 16 | RED | ORG | GRN | | | | | | | | |
| | | 21 | | | | | | | | BLK | BLU | | |
| | | PUSH BUTTON | | | | | | | | | | BLU/BLK | WHT/BLK |
| | | | | | | | | | | | | | |
| SB2 | 12 | 14 | RED | ORG | GRN | | | | | | | | |
| | | 15 | RED | ORG | GRN | | | | | | | | |
| | | 22 | | | | | | | | BLK | BLU | | |
| | | PUSH BUTTON | | | | | | | | | | BLU/BLK | WHT/BLK |
| | | | | | | | | | | | | | |
| SB3 | 15 | 5 | | | | RED | ORG | GRN | BLK/WHT | | | | |
| | | 7 | RED/BLK | ORG/BLK | GRN/BLK | | | | | | | | |
| | | 23 | | | | | | | | BLK | BLU | | |
| | | PUSH BUTTON | | | | | | | | | | BLU/BLK | WHT/BLK |
| | | | | | | | | | | | | | |
| SB4 | 12 | 6 | | | | RED | ORG | GRN | BLK/WHT | | | | |
| | | 24 | | | | | | | | BLK | BLU | | |
| | | 25 | | | | | | | | BLK | BLU | | |
| | | PUSH BUTTON | | | | | | | | | | BLU/BLK | WHT/BLK |
| | | | | | | | | | | | | | |
| SB5 | 7 | 10 | | | | RED | ORG | GRN | BLK | | | | |
| | | | | | | | | | | | | | |
| SB6 | 15 | 2 | RED | ORG | GRN | | | | | | | | |
| | | 3 | RED | ORG | GRN | | | | | | | | |
| | | 19 | | | | RED/BLK | ORG/BLK | GRN/BLK | BLK/WHT | | | | |
| | | 26 | | | | | | | | BLK | BLU | | |
| | | PUSH BUTTON | | | | | | | | | | BLU/BLK | WHT/BLK |
| | | | | | | | | | | | | | |
| SB7 | 12 | 13 | RED | ORG | GRN | | | | | | | | |
| | | 27 | | | | | | | | BLK | BLU | | |
| | | PUSH BUTTON | | | | | | | | | | BLU/BLK | WHT/BLK |
| | | | | | | | | | | | | | |
| SB8 | 15 | 17 | RED | ORG | GRN | | | | | | | | |
| | | 18 | RED | ORG | GRN | | | | | | | | |
| | | 20 | | | | RED/BLK | ORG/BLK | GRN/BLK | BLK/WHT | | | | |
| | | 28 | | | | | | | | BLK | BLU | | |
| | | PUSH BUTTON | | | | | | | | | | BLU/BLK | WHT/BLK |
| | | | | | | | | | | | | | |
| SB9 | 15 | 1 | RED | ORG | GRN | | | | | | | | |
| | | 11 | | | | RED/BLK | ORG/BLK | GRN/BLK | BLK/WHT | | | | |
| | | 29 | | | | | | | | BLK | BLU | | |
| | | PUSH BUTTON | | | | | | | | | | BLU/BLK | WHT/BLK |
| | | | | | | | | | | | | | |
| SB10 | 12 | 12 | | | | RED | ORG | GRN | BLK/WHT | | | | |
| | | 30 | | | | | | | | BLK | BLU | | |
| | | 31 | | | | | | | | BLK | BLU | | |
| | | PUSH BUTTON | | | | | | | | | | BLU/BLK | WHT/BLK |
| | | | | | | | | | | | | | |
| SB11 | 7 | 4 | | | | RED | ORG | GRN | BLK | | | | |
| | | | | | | | | | | | | | |
| SB12 | 12 | 8 | RED | ORG | GRN | | | | | | | | |
| | | 9 | RED | ORG | GRN | | | | | | | | |
| | | 32 | | | | | | | | BLK | BLU | | |
| | | PUSH BUTTON | | | | | | | | | | BLU/BLK | WHT/BLK |
| | | | | | | | | | | | | | |

| Equipment Grounding Conductor 10 AWG Green XLP | |
|---|---|
| From | To |
| | |
| CB1 | SB1 |
| SB1 | SB2 |
| SB2 | SB3 |
| SB3 | SB4 |
| SB4 | SB5 |
| SB5 | SB6 |
| SB6 | SB7 |
| SB7 | SB8 |
| SB8 | SB9 |
| SB9 | SB10 |
| SB10 | SB11 |
| SB11 | SB12 |
| SB12 | CB1 |
| | |

| Pull Box Bonding Jumper 10 AWG Green XLP | |
|---|---|
| From | To |
| | |
| | |
| PB1 | CB1 |
| PB4 | SB2 |
| PB5 | SB2 |
| PB6 | SB3 |
| PB8 | SB4 |
| PB9 | SB5 |
| PB10 | SB6 |
| PB12 | SB6 |
| PB13 | SB7 |
| PB15 | SB8 |
| PB16 | SB8 |
| PB17 | SB9 |
| PB19 | SB10 |
| PB20 | SB11 |
| PB21 | SB12 |
| | |

| Lighting UF 2-12 AWG Grounded | |
|---|---|
| From | To |
| CB1 | SB1 |
| SB1 | SB3 |
| SB3 | SB6 |
| | |
| CB1 | SB12 |
| SB12 | SB9 |
| SB9 | SB7 |

| Emergency Vehicle Preemption | |
|---|---|
| From | To |
| | |
| CB1 | HEAD A (SB12) |
| CB1 | HEAD B (SB6) |
| CB1 | HEAD C (SB8) |
| CB1 | HEAD D (SB2) |
| | |

*Use the white conductor in the cable assembly as the grounded conductor for all traffic signal indications

*Ensure the grounded conductor in the feeder cable and the pole cables are both 18" longer than the ungrounded conductors.

*At the signal bases, connect one terminal from the pedestrian push buttons to the color indicated in the chart. Connect the other terminal to the grounded conductor.

*Reconnect the grounding conductors wherever the circuit has been interrupted to ensure the grounding circuit is complete.

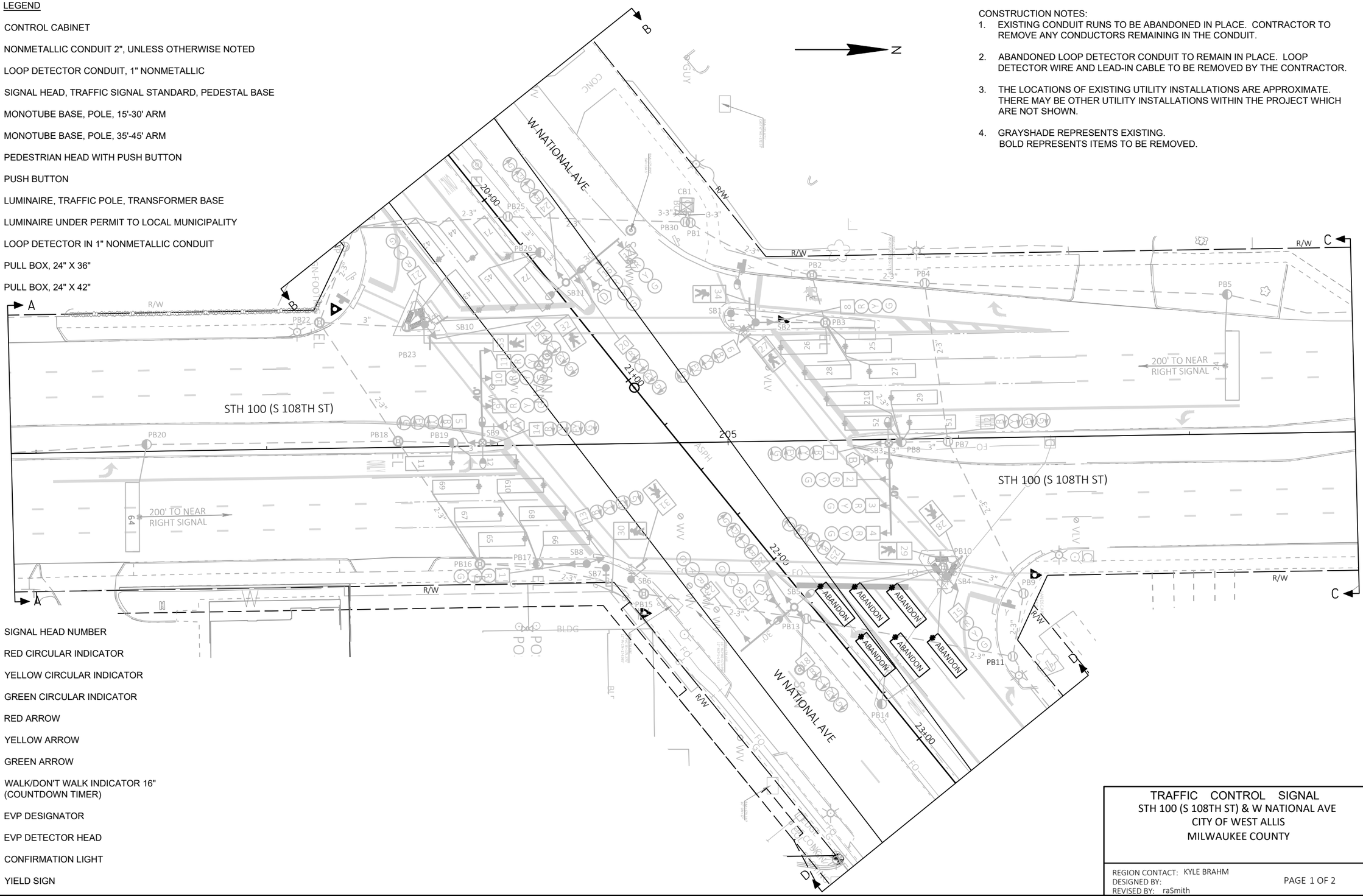
2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT, 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX') MONOTUBE BASE, POLE, 15'-30' ARM
- (XX') MONOTUBE BASE, POLE, 35'-45' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"

CONSTRUCTION NOTES:

1. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRE AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.
3. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.




- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY Y YELLOW ARROW
- G GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- CONFIRMATION LIGHT
- Y YIELD SIGN

TRAFFIC CONTROL SIGNAL
STH 100 (S 108TH ST) & W NATIONAL AVE
CITY OF WEST ALLIS
MILWAUKEE COUNTY

REGION CONTACT: KYLE BRAHM
DESIGNED BY:
REVISED BY: raSmith

PAGE 1 OF 2

| PROJECT NO: 2410-15-70 | HWY: STH 100 | COUNTY: MILWAUKEE | TRAFFIC SIGNAL REMOVAL PLAN | SHEET 288 | E |
|---|---|---|---|---|---|

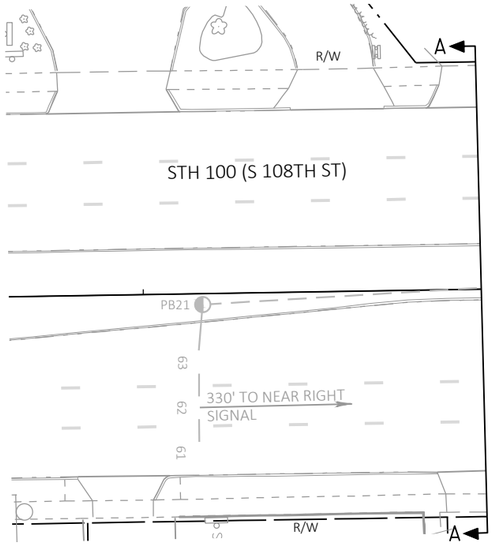
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024003-SR.DWG
LAYOUT NAME - S40-1072_Rem_pg1

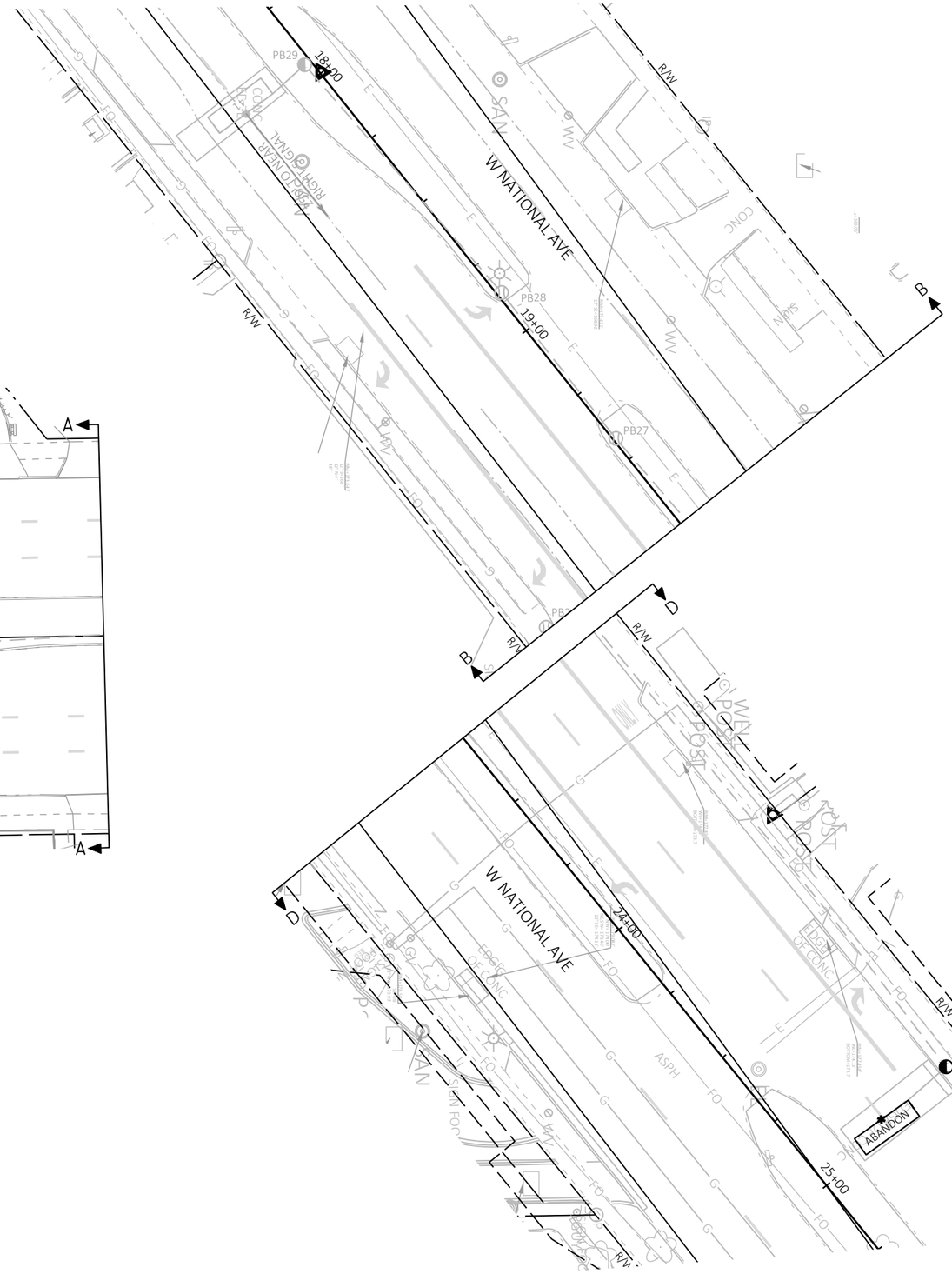
PLOT DATE : 10/20/2025 11:06 AM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : ##########

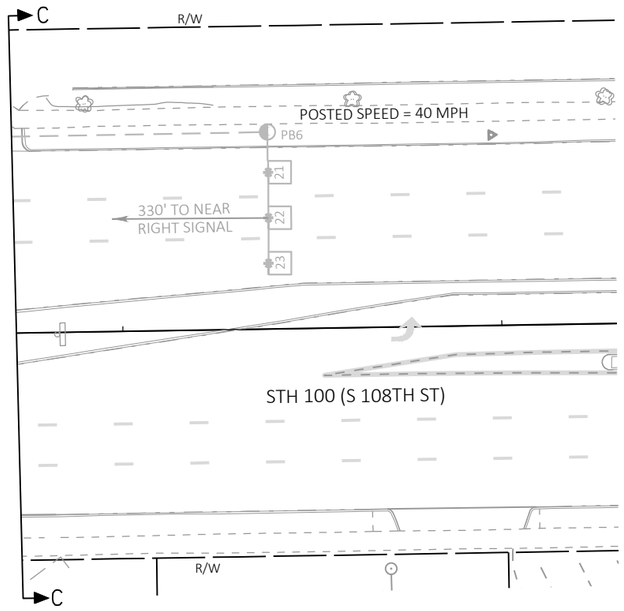
WISDOT/CADDS SHEET 42

2

N




3"

3"

TRAFFIC CONTROL SIGNAL
STH 100 (S 108TH ST) & W NATIONAL AVE
CITY OF WEST ALLIS
MILWAUKEE COUNTY

REGION CONTACT: KYLE BRAHM
DESIGNED BY:
REVISED BY: raSmith

PAGE 2 OF 2

| PROJECT NO: 2410-15-70 | HWY: STH 100 | COUNTY: MILWAUKEE | TRAFFIC SIGNAL REMOVAL PLAN | SHEET 289 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024003-SR.DWG
LAYOUT NAME - S40-1072_Rem_pg2

PLOT DATE : 10/20/2025 11:07 AM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : ##########

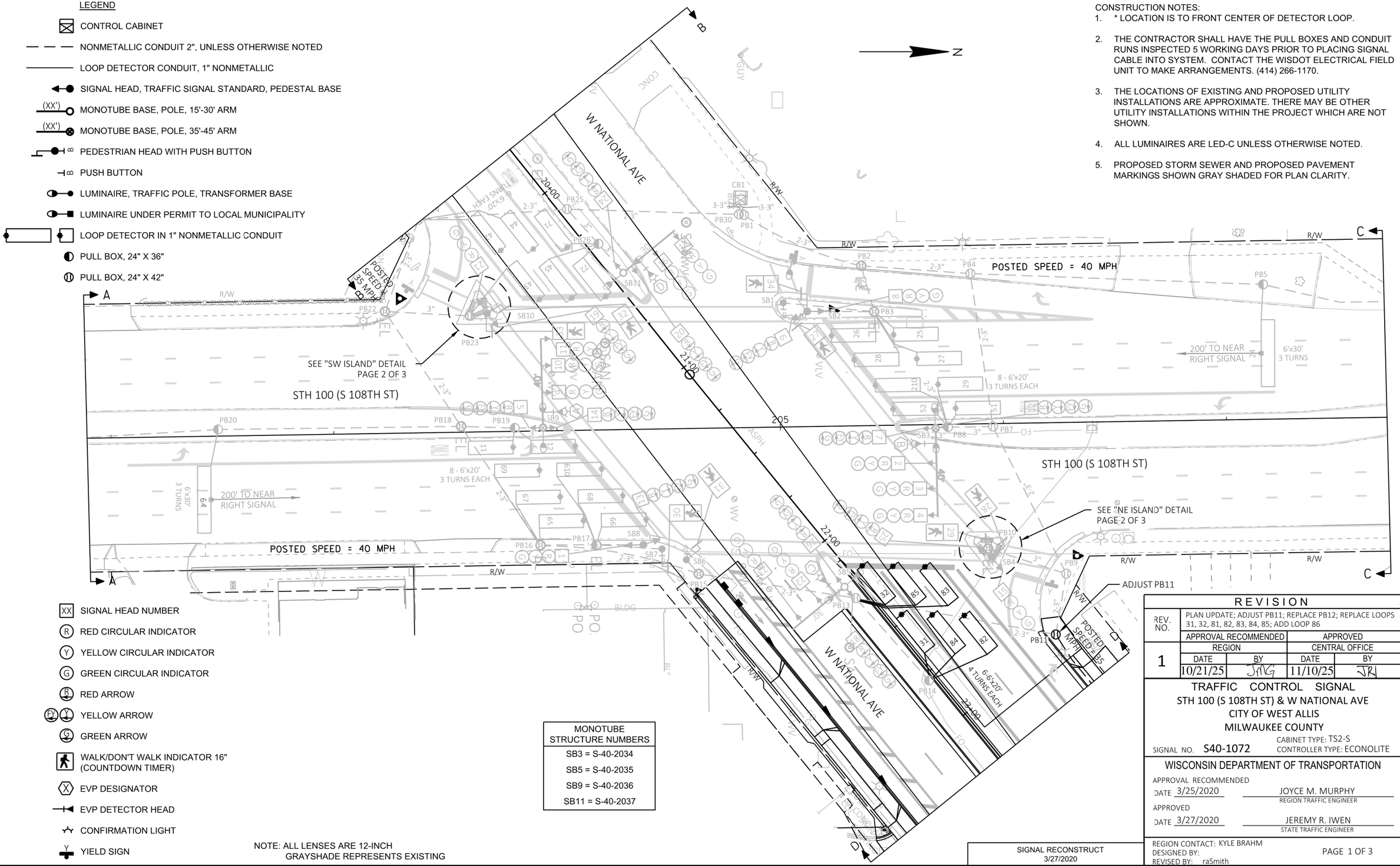
WISDOT/CADDS SHEET 42

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT, 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX') MONOTUBE BASE, POLE, 15'-30' ARM
- (XX') MONOTUBE BASE, POLE, 35'-45' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"

CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (414) 266-1170.
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. ALL LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.
5. PROPOSED STORM SEWER AND PROPOSED PAVEMENT MARKINGS SHOWN GRAY SHADED FOR PLAN CLARITY.




- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY Y YELLOW ARROW
- G GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- CONFIRMATION LIGHT
- Y YIELD SIGN

| MONOTUBE STRUCTURE NUMBERS |
|---|
| SB3 = S-40-2034 |
| SB5 = S-40-2035 |
| SB9 = S-40-2036 |
| SB11 = S-40-2037 |

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

SIGNAL RECONSTRUCT
3/27/2020

REVISION

| REV. NO. | PLAN UPDATE; ADJUST PB11; REPLACE PB12; REPLACE LOOPS 31, 32, 81, 82, 83, 84, 85; ADD LOOP 86 | | | |
|---|---|---|---|---|
| | APPROVAL RECOMMENDED | | APPROVED | |
| | REGION | | CENTRAL OFFICE | |
| 1 | DATE | BY | DATE | BY |
| | 10/21/25 | JMG | 11/10/25 | JR |

10/21/25 JMG JR

TRAFFIC CONTROL SIGNAL
STH 100 (S 108TH ST) & W NATIONAL AVE
CITY OF WEST ALLIS
MILWAUKEE COUNTY

SIGNAL NO. S40-1072
CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 3/25/2020 JOYCE M. MURPHY, REGION TRAFFIC ENGINEER

APPROVED
DATE 3/27/2020 JEREMY R. IWEN, STATE TRAFFIC ENGINEER

REGION CONTACT: KYLE BRAHM
DESIGNED BY:
REVISED BY: raSmith

PAGE 1 OF 3

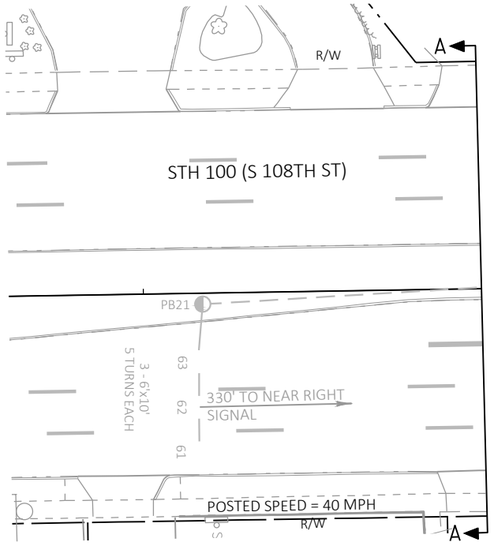
| PROJECT NO: 2410-15-70 | HWY: STH 100 | COUNTY: MILWAUKEE | TRAFFIC SIGNAL PLAN | SHEET 290 | E |
|---|---|---|---|---|---|

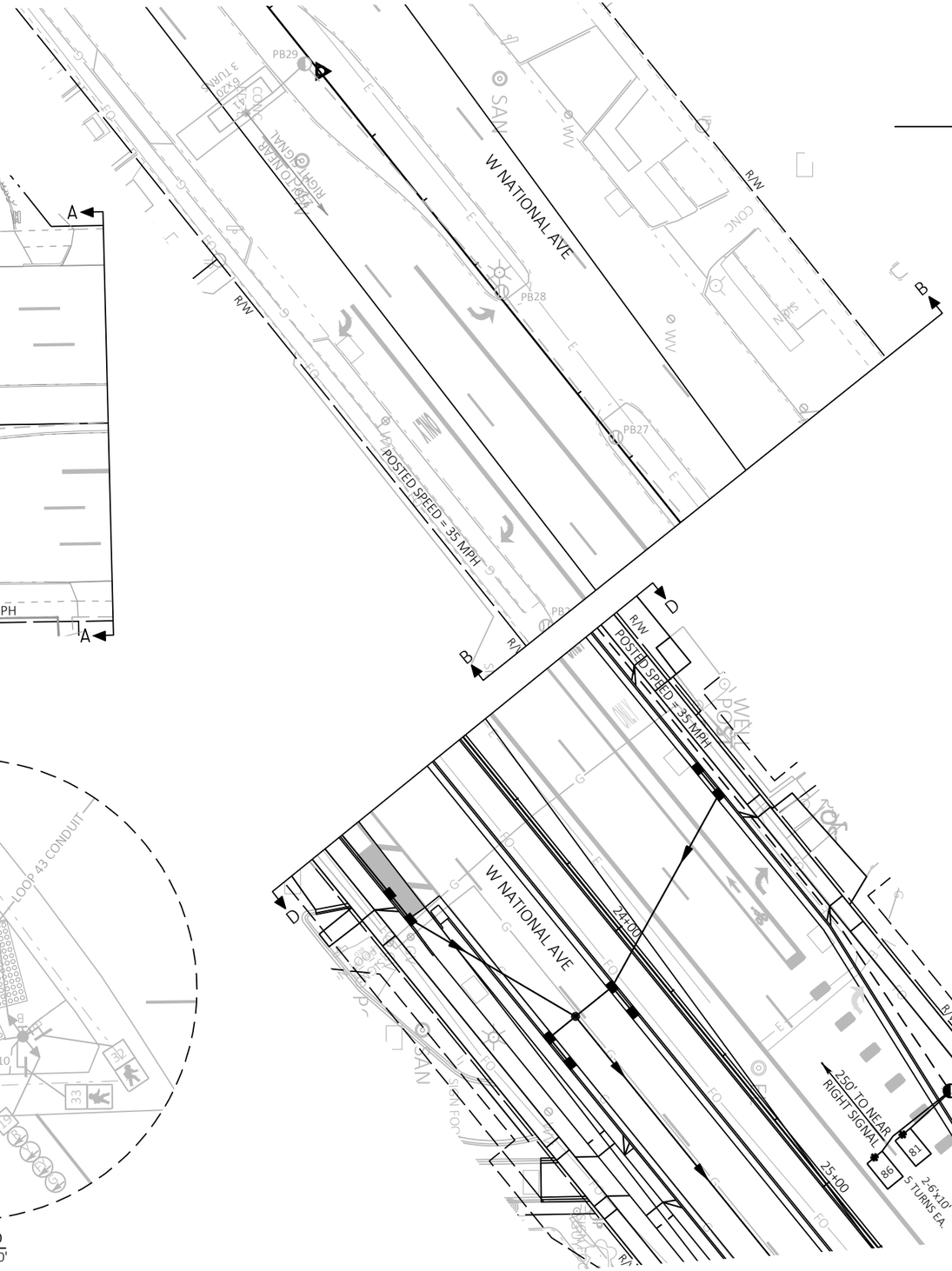
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024203-SP.DWG
LAYOUT NAME - S40-1072_R1_pg1

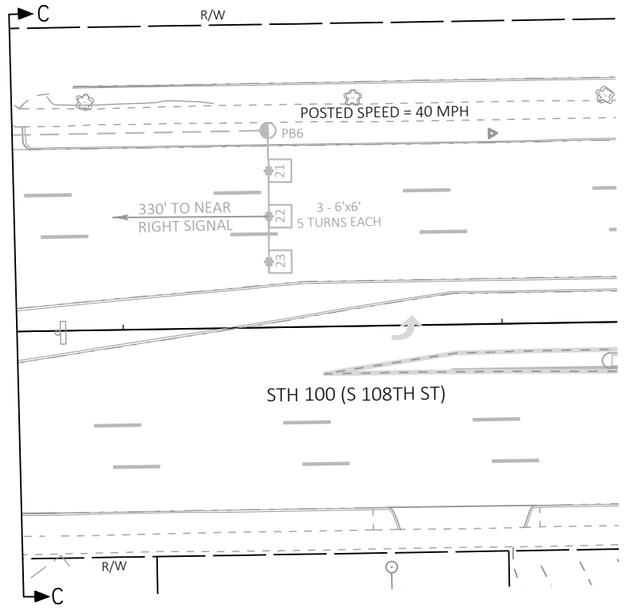
PLOT DATE : 10/20/2025 11:00 AM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : ##########

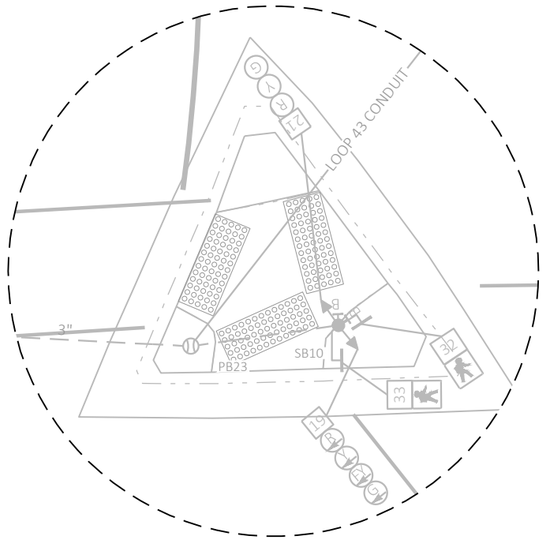
WISDOT/CADDS SHEET 42

2

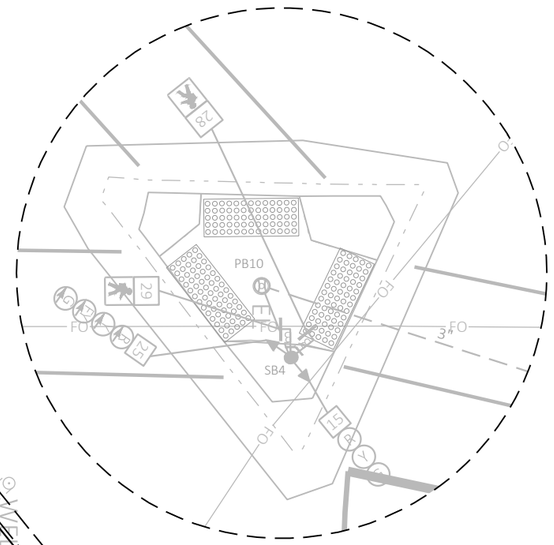



SW ISLAND
SCALE: 1.0"=8.0'




NE ISLAND
SCALE: 1.0"=8.0'

# TRAFFIC CONTROL SIGNAL
STH 100 (S 108TH ST) & W NATIONAL AVE
CITY OF WEST ALLIS
MILWAUKEE COUNTY

REGION CONTACT: KYLE BRAHM
DESIGNED BY:
REVISED BY: raSmith

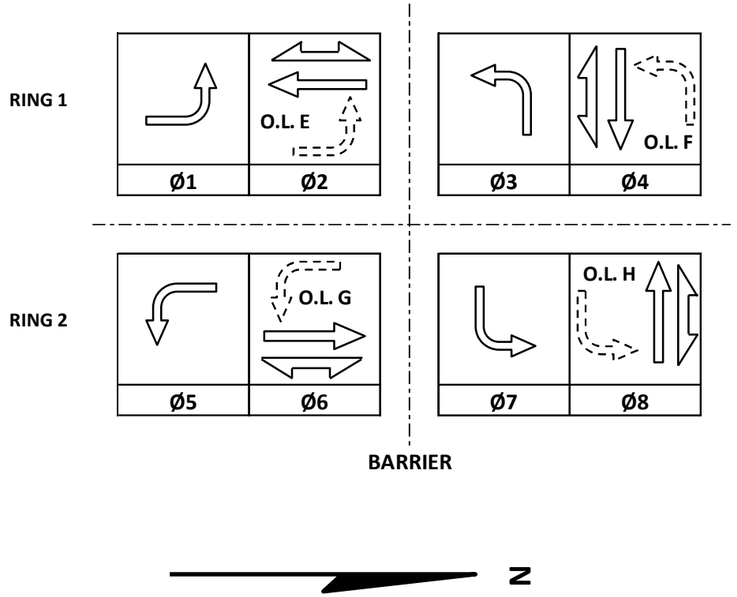
PAGE 2 OF 3

| PROJECT NO: 2410-15-70 | HWY: STH 100 | COUNTY: MILWAUKEE | TRAFFIC SIGNAL PLAN | SHEET 291 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024203-SP.DWG
LAYOUT NAME - S40-1072_R1_pg2

PLOT DATE : 10/30/2025 11:56 AM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : ##########

| | HEAD NUMBERS | FLASH |
|---|---|---|
| Ø1 | 5,6,7 | R |
| Ø2 | 8,9,10,11 | R |
| Ø3 | 18,19,20 | R |
| Ø4 | 21,22,23 | R |
| Ø5 | 12,13,14 | R |
| Ø6 | 1,2,3,4 | R |
| Ø7 | 24,25,26 | R |
| Ø8 | 15,16,17 | R |
| Ø2P | 33,34 | |
| Ø4P | 31,32 | |
| Ø6P | 29,30 | |
| Ø8P | 27,28 | |
| OLE | 5,6,7 | - |
| OLF | 18,19,20 | - |
| OLG | 12,13,14 | - |
| OLH | 24,25,26 | - |




## CONTROLLER LOGIC

| PHASE NUMBER | PHASE LOCKING | DUAL ENTRY W / Ø | PHASE RECALL | PHASE ACTIVE |
|---|---|---|---|---|
| 1 | | 6 | | X |
| 2 | X | 6 | MIN | X |
| 3 | | 8 | | X |
| 4 | | 8 | | X |
| 5 | | 2 | | X |
| 6 | X | 2 | MIN | X |
| 7 | | 4 | | X |
| 8 | | 4 | | X |

EMERGENCY VEHICLE PREEMPTION SEQUENCE

| EMERGENCY VEHICLE PREEMPTOR | A | B | C | D |
|---|---|---|---|---|
| MOVEMENT | | | | |
| PHASE | 2+5 | 6+1 | 4+7 | 8+3 |

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8.

| TYPE OF INTERCONNECT/COMMUNICATION | |
|---|---|
| NONE | |
| CLOSED LOOP | |
| TWISTED PAIR | |
| FIBER OPTIC* | |
| FIBER OPTIC (ETHERNET) | X |
| RADIO | |
| CELL MODEM | |

| TYPE OF COORDINATION | |
|---|---|
| NONE | |
| TBC | X |
| TRAFFIC RESPONSIVE | |
| ADAPTIVE | |
| *LOCATION OF MASTER CONTROLLER NO: | S- |
| SIGNAL SYSTEM NO: | SS- 00-14 |

| TYPE OF LIGHTING | |
|---|---|
| BY OTHER AGENCY | |
| IN TRAFFIC CABINET | X |
| IN SEPARATE DOT LIGHTING CABINET | |

| TYPE OF PRE-EMPT | |
|---|---|
| NONE | |
| RAILROAD | |
| EMERGENCY VEHICLE | X |
| GTT | X |
| TOMAR | |
| HARDWIRE | |
| OTHER | |
| CONFIRMATION LIGHTS | X |
| LIFT BRIDGE | |
| QUEUE DETECTION | |

## DETECTOR LOGIC

| DETECTOR INPUT | 3 | 1 | 7 | 5 | 11 | 9 | 15 | 13 |
|---|---|---|---|---|---|---|---|---|
| PLAN LOOP DETECTOR*(S) | 11 | 21 | 23 | 25 | 27 | 29 | 31 | 41 |
| CALLED PHASE | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 4 |
| CALL OPTION | X | X | X | X | X | X | X | |
| DELAY TIME | | | | | | | | |
| EXTENTION OPTION | X | X | X | X | X | X | X | X |
| EXTEND TIME | | | | | | | | X |
| USE ADDED INITIAL | | X | X | | | | | |
| CROSS SWITCH PHASE | 2 | | | | | | 4 | |

| DETECTOR INPUT | 19 | 17 | 23 | 21 | 27 | 25 | 31 | 29 |
|---|---|---|---|---|---|---|---|---|
| PLAN LOOP DETECTOR*(S) | 43 | 45 | 52 | 62 | 64 | 66 | 68 | 610 |
| CALLED PHASE | 4 | 4 | 5 | 6 | 6 | 6 | 6 | 6 |
| CALL OPTION | X | X | X | X | X | X | X | X |
| DELAY TIME | | | | | | | | |
| EXTENTION OPTION | X | X | X | X | X | X | X | X |
| EXTEND TIME | | | | | | | | |
| USE ADDED INITIAL | | | | X | X | | | |
| CROSS SWITCH PHASE | | | 6 | | | | | |

| DETECTOR INPUT | 35 | 33 | 39 | 37 | 43 | 41 | 47 | 45 |
|---|---|---|---|---|---|---|---|---|
| PLAN LOOP DETECTOR*(S) | 72 | 82 | 84 | 86 | | | | |
| CALLED PHASE | 7 | 8 | 8 | 8 | | | | |
| CALL OPTION | X | X | X | | | | | |
| DELAY TIME | | | | | | | | |
| EXTENTION OPTION | X | X | X | X | | | | |
| EXTEND TIME | | | | X | | | | |
| USE ADDED INITIAL | | | | | | | | |
| CROSS SWITCH PHASE | 8 | | | | | | | |

| DETECTOR INPUT | 4 | 2 | 8 | 6 | 12 | 10 | 16 | 14 |
|---|---|---|---|---|---|---|---|---|
| PLAN LOOP DETECTOR*(S) | 12 | 22 | 24 | 26 | 28 | 210 | 32 | 42 |
| CALLED PHASE | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 4 |
| CALL OPTION | X | X | X | X | X | X | X | X |
| DELAY TIME | | | | | | | | |
| EXTENTION OPTION | X | X | X | X | X | X | X | X |
| EXTEND TIME | | | | | | | | |
| USE ADDED INITIAL | | X | X | | | | | |
| CROSS SWITCH PHASE | 2 | | | | | | 4 | |

| DETECTOR INPUT | 20 | 18 | 24 | 22 | 28 | 26 | 32 | 30 |
|---|---|---|---|---|---|---|---|---|
| PLAN LOOP DETECTOR*(S) | 44 | 51 | 61 | 63 | 65 | 67 | 69 | 71 |
| CALLED PHASE | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 7 |
| CALL OPTION | X | X | X | X | X | X | X | X |
| DELAY TIME | | | | | | | | |
| EXTENTION OPTION | X | X | X | X | X | X | X | X |
| EXTEND TIME | | | | | | | | |
| USE ADDED INITIAL | | | X | X | | | | |
| CROSS SWITCH PHASE | | 6 | | | | | | 8 |

| DETECTOR INPUT | 36 | 34 | 40 | 38 | 44 | 42 | 48 | 46 |
|---|---|---|---|---|---|---|---|---|
| PLAN LOOP DETECTOR*(S) | 81 | 83 | 85 | | | | | |
| CALLED PHASE | 8 | 8 | 8 | | | | | |
| CALL OPTION | | X | X | | | | | |
| DELAY TIME | | | | | | | | |
| EXTENTION OPTION | X | X | X | | | | | |
| EXTEND TIME | X | | | | | | | |
| USE ADDED INITIAL | | | | | | | | |
| CROSS SWITCH PHASE | | | | | | | | |

STH 100 (S. 108TH STREET) & W. NATIONAL AVENUE
CITY OF WEST ALLIS
MILWAUKEE COUNTY
SIGNAL NO: S40-1072 CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE
DATE: 08/2025 PAGE NO. 3 OF 3

2

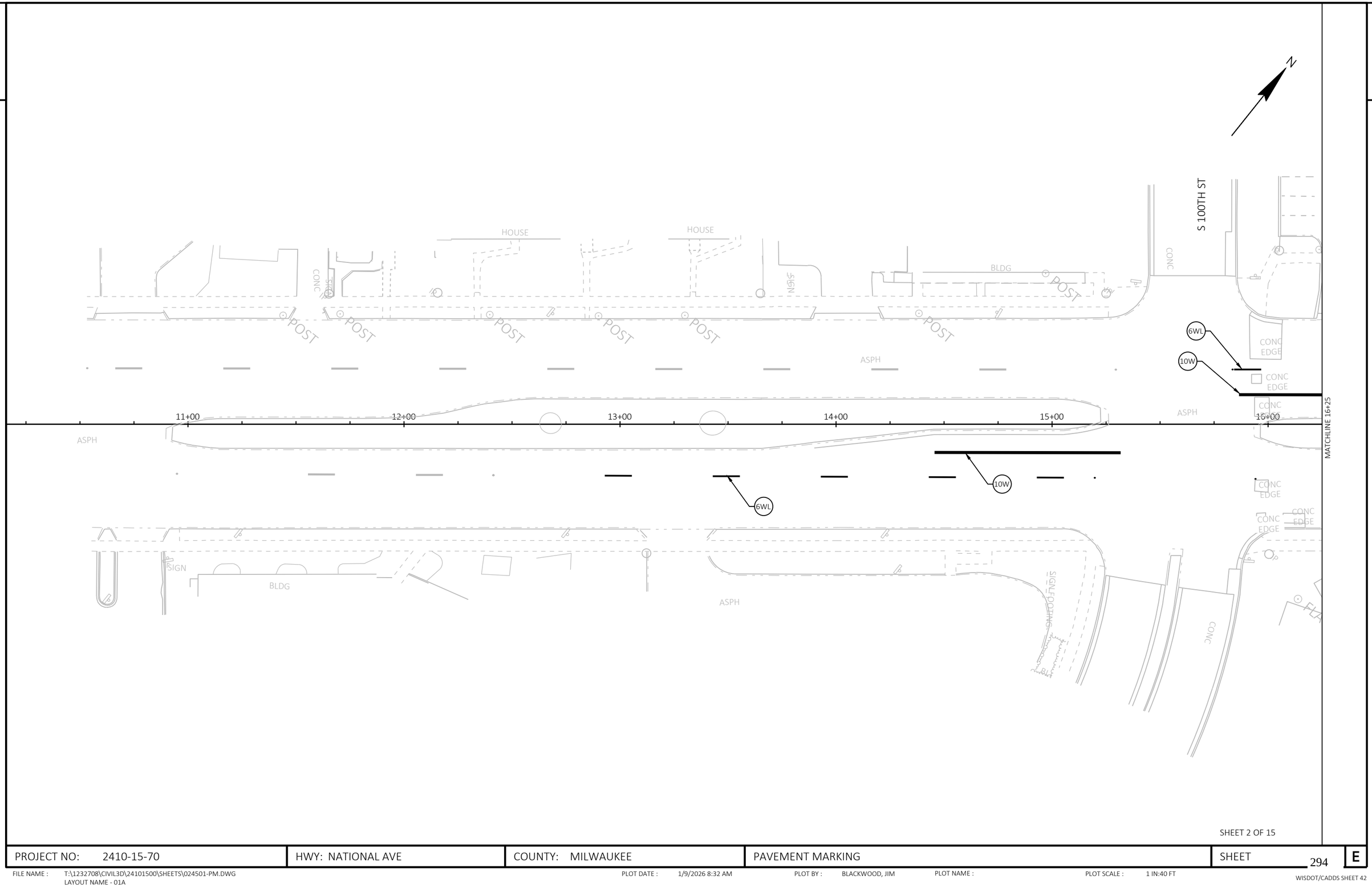
2

## PAVEMENT MARKING LEGEND

- 6W — MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
- 6WL — MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)
- 6Y — MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
- 6YL — MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, YELLOW)
- 10W — MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
- 6X — MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- 12B — MARKING CROSSWALK EPOXY BLOCK STYLE 12-INCH (WHITE), SEE CONSTRUCTION DETAIL
- 24B — MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE), SEE CONSTRUCTION DETAIL
- 18 — MARKING STOP LINE EPOXY 18-INCH (WHITE)
- 12W — MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- 12Y — MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- 6-26 — MARKING LINE GROOVED WET REF EPOXY 6-INCH (2' LINE, 6' GAP, WHITE)
- 10-26 — MARKING LINE GROOVED WET REF EPOXY 10-INCH (2' LINE, 6' GAP, WHITE)
- 6-39 — MARKING LINE GROOVED WET REF EPOXY 6-INCH (3' LINE, 9' GAP, WHITE)
- 10-39 — MARKING LINE GROOVED WET REF EPOXY 10-INCH (3' LINE, 9' GAP, WHITE)
- AR-2 — MARKING ARROW EPOXY (TYPE 2, WHITE)
- AR-3 — MARKING ARROW EPOXY (TYPE 3, WHITE)
- BK-A — MARKING ARROW MMA (BIKE LANE ARROW, WHITE)
- BK-P — MARKING BIKE LANE MMA (GREEN) (LOCATIONS SHOWN AS SHADED)
- BK-S — MARKING SYMBOL MMA (BIKE LANE SYMBOL, WHITE)
- BA — MARKING ARROW EPOXY (BIKE LANE ARROW, WHITE)
- BS — MARKING SYMBOL EPOXY (BIKE LANE SYMBOL, WHITE)
- C — MARKING CURB EPOXY (YELLOW)
- N — MARKING ISLAND NOSE EPOXY (YELLOW)
- W — MARKING WORD EPOXY (WHITE)

2

2




SHEET 2 OF 15

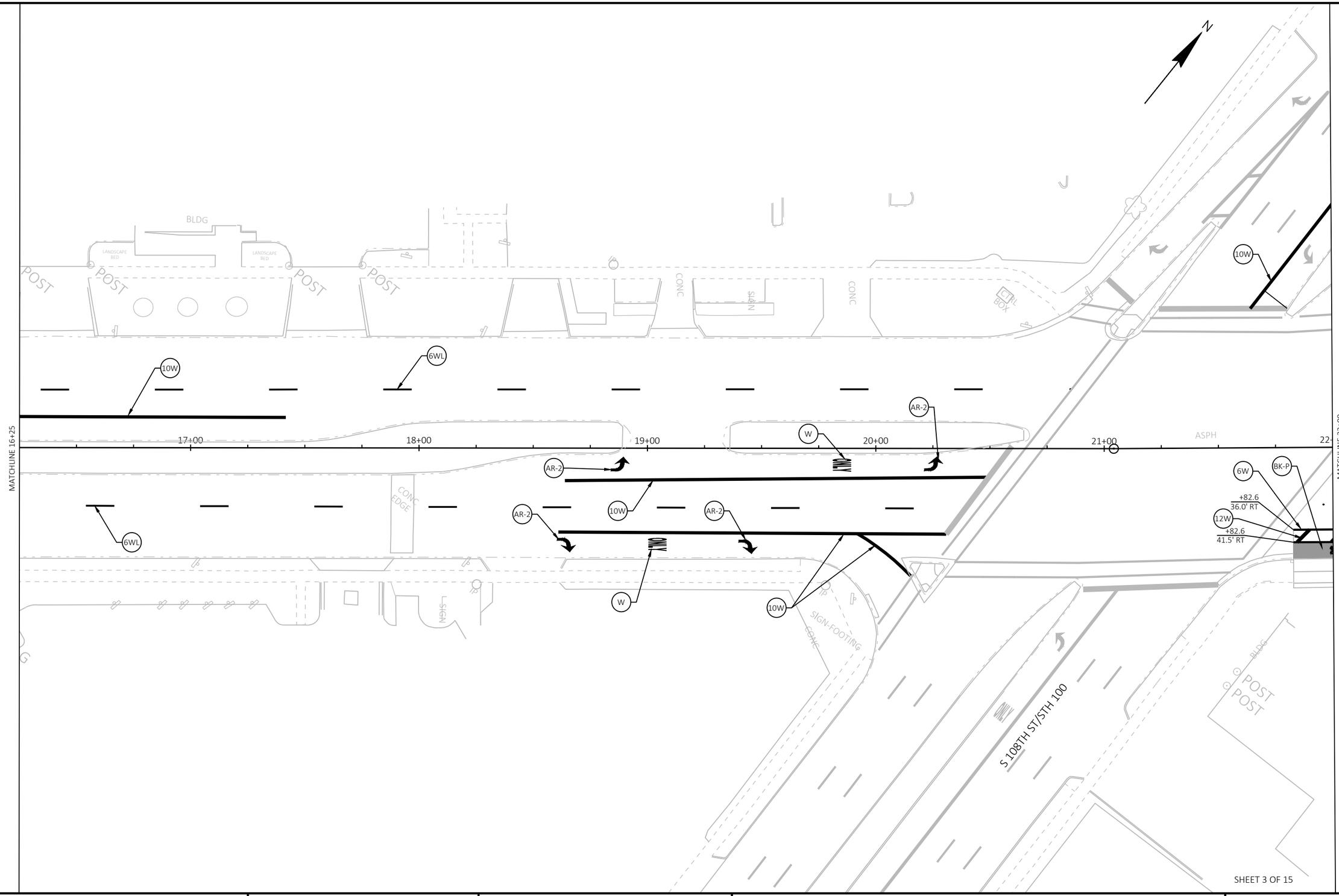
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVEMENT MARKING | SHEET 294 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024501-PM.DWG
LAYOUT NAME - 01A

PLOT DATE : 1/9/2026 8:32 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

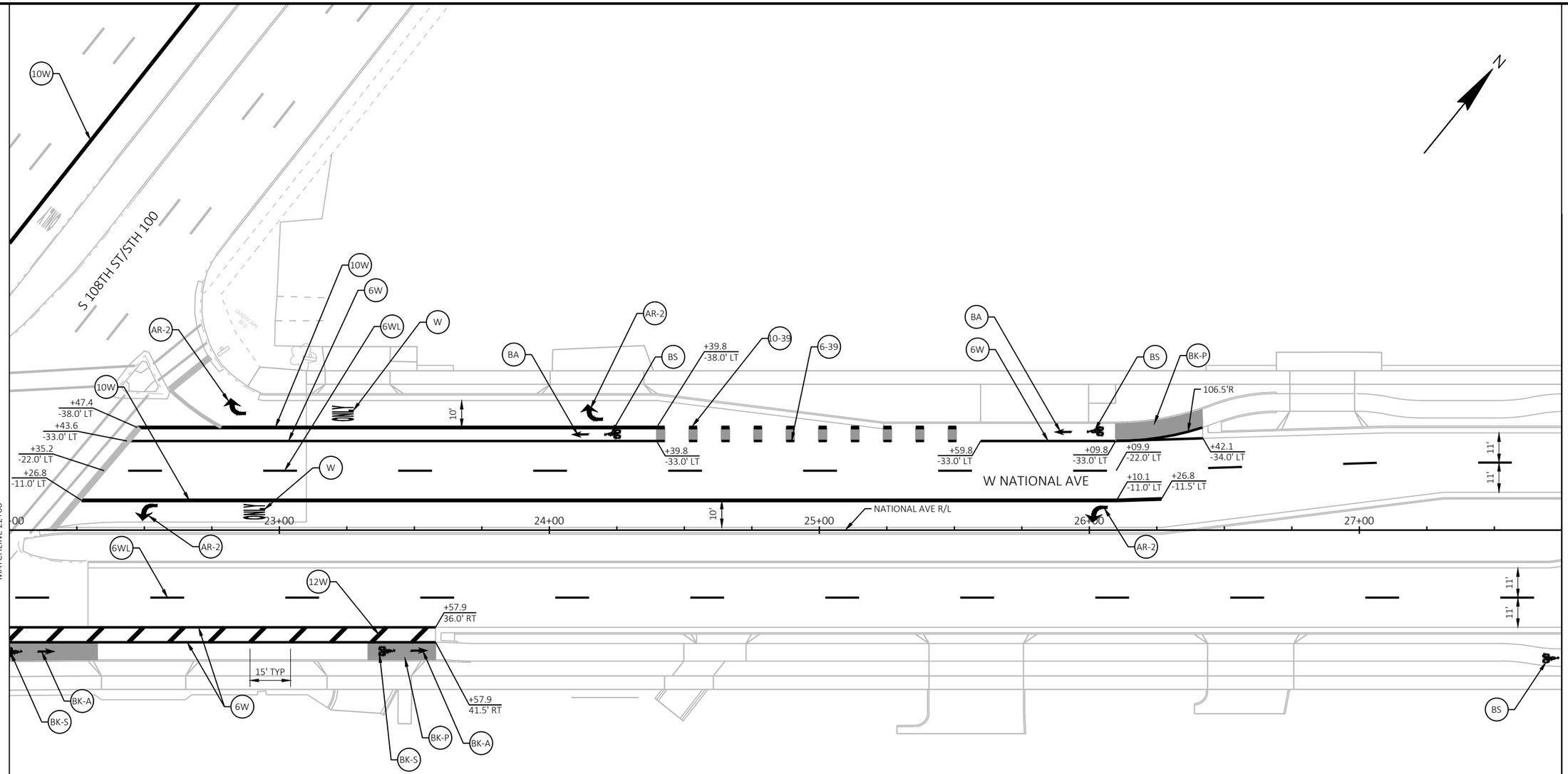



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVEMENT MARKING | SHEET 295 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024501-PM.DWG
LAYOUT NAME - 01B

PLOT DATE : 1/9/2026 8:32 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2




SHEET 4 OF 15

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVEMENT MARKING | SHEET 296 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024501-PM.DWG
LAYOUT NAME - 01
PLOT DATE : 1/9/2026 8:32 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

MATCHLINE STA 27+75

MATCHLINE STA 33+75

W NATIONAL AVE

W CLEVELAND AVE

S WILDWOOD DR

NATIONAL AVE R/L

WILDWOOD DR R/L

CLEVELAND AVE R/L

MATCHLINE STA 97+75

MATCHLINE STA 102+25

28+00 29+00 30+00 31+00 32+00 33+00

98+00 99+00 100+00 101+00 102+00 179+00

SHEET 5 OF 15

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVEMENT MARKING | SHEET 297 | E |
|---|---|---|---|---|---|

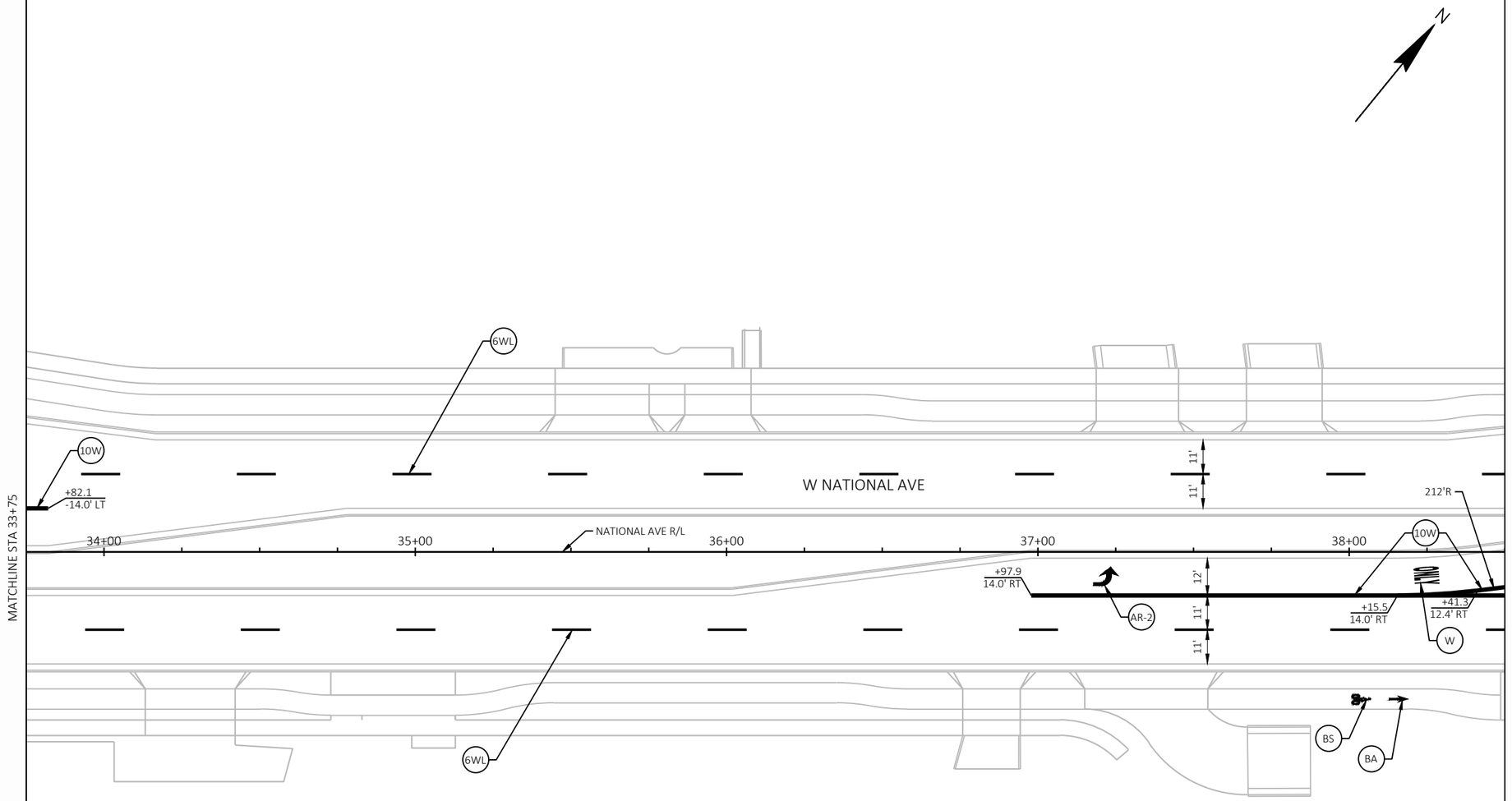
FILE NAME : T:\1232708\CIVIL3D\241015OO\SHEETS\024501-PM.DWG
LAYOUT NAME - 02

PLOT DATE : 1/9/2026 8:32 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2




SHEET 6 OF 15

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVEMENT MARKING | SHEET 298 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024501-PM.DWG
LAYOUT NAME - 03

PLOT DATE : 1/9/2026 8:32 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

MATCHLINE STA 38+50

MATCHLINE STA 44+50

W NATIONAL AVE

S 102ND ST

NATIONAL AVE R/L

212'R

102ND ST R/L

39+00

40+00

41+00

42+00

43+00

44+00

110+00

111+00

112+00

109+00

+76.2
-29.7' LT

+76.4
-5.0' LT

+39.7
-46.0' LT

+87.5
-5.3' LT

+88.9
6.6' RT

+01.4
14.0' RT

+03.7
36.0' RT

+32
-14.0' LT

+38.5
-6.6' LT

+86.1
-12.4' LT

+12
-14.0' LT

+89.6
-14.0' LT

+40
5.3' RT

+05.7
13.5' RT

+05.7
0.0'

6WL 12B 18 C N 24B 6X BS BA 6-26 BK-P AR-2 10W

SHEET 7 OF 15

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVEMENT MARKING | SHEET 299 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024501-PM.DWG
LAYOUT NAME - 04

PLOT DATE : 1/9/2026 8:32 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

MATCHLINE STA 44+50

MATCHLINE STA 50+50

W NATIONAL AVE

I-41/894 SB RAMPS

S 101ST ST

NATIONAL AVE R/L

45+00 46+00 47+00 48+00 49+00 50+00

6WL BS BA 18 +05.5 -68.5' LT +33.9 -69.4' LT 24B 6X 11' 11' +08 -53.5' LT +04.7 -46.0' LT +04.7 -35.9' LT +30.9 -35.8' LT 15' +04.7 -13.9' LT +30.4 -24.8' LT 273'R 10W 12W

AR-2 +90 14.0' RT +35 25.0' RT 10' 11' 11' 6WL AR-2 10W W 6-39 124' R +66.2 -11.4' LT +41.5 14.0' RT +59.8 14.0' RT 10W AR-2 BS +23 26.0' RT 10W W 6X BA

ASPH CONC PAD

SHEET 8 OF 15

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVEMENT MARKING | SHEET 300 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024501-PM.DWG
LAYOUT NAME - 05

PLOT DATE : 1/9/2026 8:32 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

MATCHLINE STA 50+50

MATCHLINE STA 56+50

W NATIONAL AVE

NATIONAL AVE R/L

51+00 52+00 53+00 54+00 55+00 56+00

24B AR-2 W 6WL 10W AR-2 6X

+63.8 -31.2' LT

+40.2 -20.2' LT

+39.7 -33.4' LT

+61 -22.9' LT

+75.4 -36.4' LT

+57.2 -25.0' LT

70'R

11' 11' 11'

ONLY

BS BA 6W BA BS

6X 6-26 6' 6' BK-P BA BS

S 100TH ST

+28.4 -26.0' LT

6W

+23 26.0' RT

15'

10W 12W

12'

11'

W AR-2 10W 6X 24B 12W

+11.6 26.0' RT

+32.9 43.5' RT

+44.6 26.0' RT

+77 26.0' RT

10W 12W 6X 24B 6X

11' 11'

+20.5 58.5' RT

+44.5 58.5' RT

+64.9 58.5' RT

+84.9 58.5' RT

18 AR-2 18

I-41/894 SB RAMPS

10W

+31.9 127.6' RT

+44 114.4' RT

BS BA

W NATIONAL AVE

CTRL BOX

CHAIN LINK FENCE

ASPH

MP MP MP MP

SHEET 9 OF 15

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVEMENT MARKING | SHEET 301 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024501-PM.DWG
LAYOUT NAME - 06

PLOT DATE : 1/9/2026 8:32 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

MATCHLINE STA 56+50

MATCHLINE STA 62+50

W NATIONAL AVE

NATIONAL AVE R/L

S 99TH ST

99TH ST R/L

57+00 58+00 59+00 60+00 61+00 62+00

131+00 132+00 119+00 118+00

+90.3 14.0' RT 212'R +15.9 12.4' RT

+19.4 14.0' RT

+58.8 -11.9' LT 212'R +88.3 -14.0' LT +59.4 -14.0' LT

+03.5 14.0' RT

6W 10W 24B 6X 6-26 BK-P N C BA BS 12B

6' 9' 7' 10' 12'

SHEET 10 OF 15

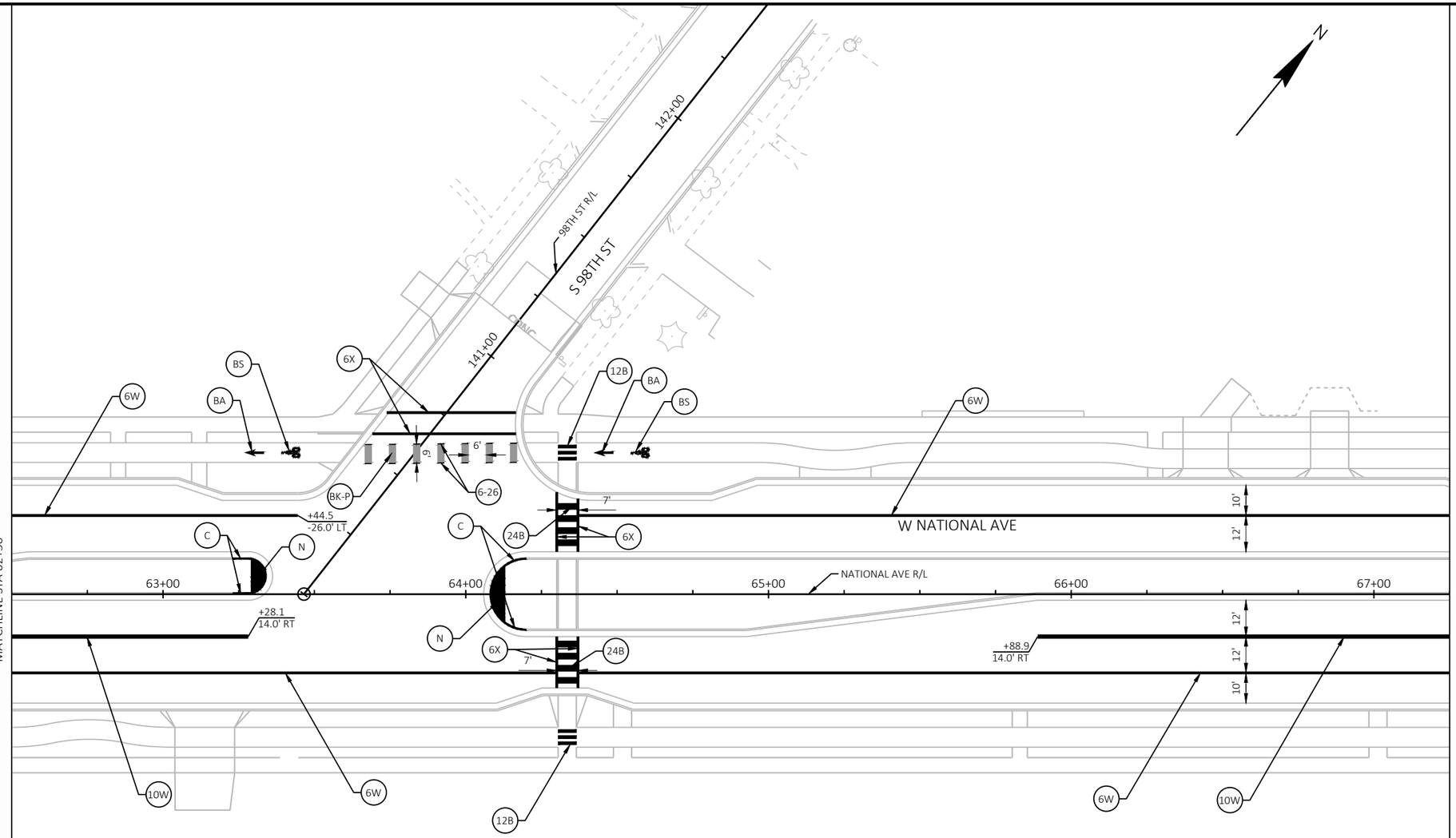
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVEMENT MARKING | SHEET 302 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024501-PM.DWG
LAYOUT NAME - 07

PLOT DATE : 1/9/2026 8:32 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



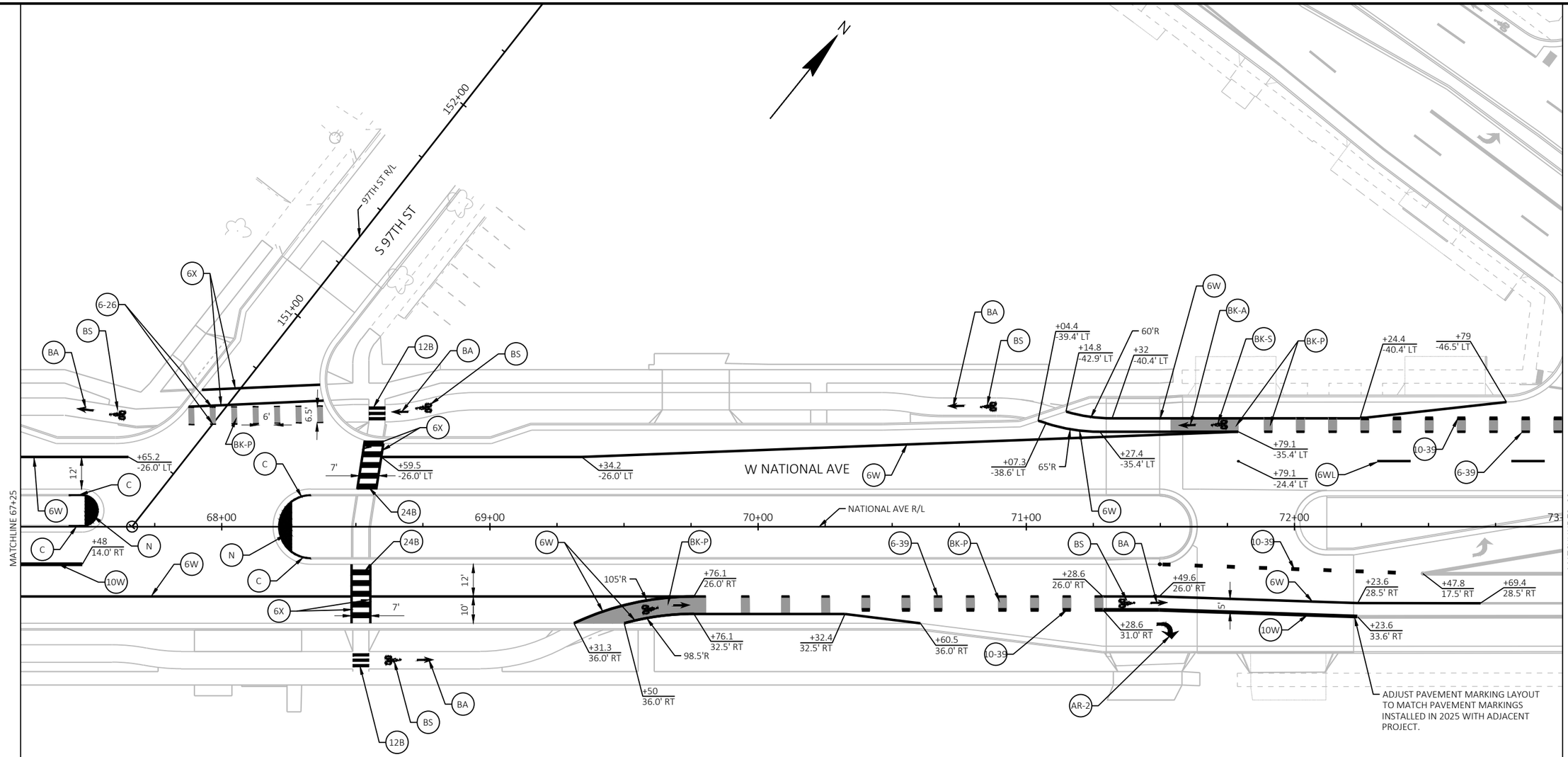

SHEET 11 OF 15

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVEMENT MARKING | SHEET 303 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024501-PM.DWG
LAYOUT NAME - 08

PLOT DATE : 1/9/2026 8:32 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



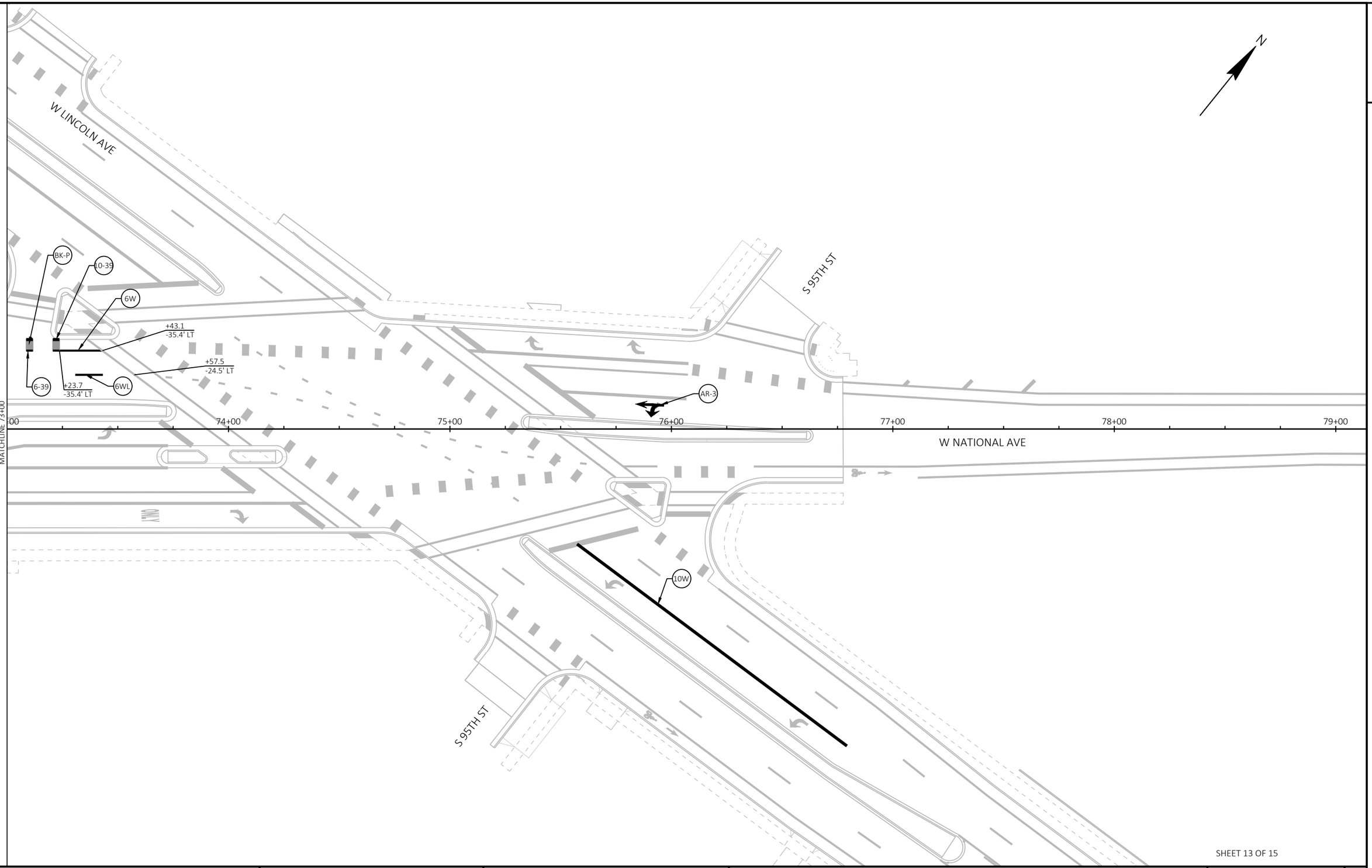

SHEET 12 OF 15

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVEMENT MARKING | SHEET 304 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024501-PM.DWG
LAYOUT NAME - 08A

PLOT DATE : 1/9/2026 8:33 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



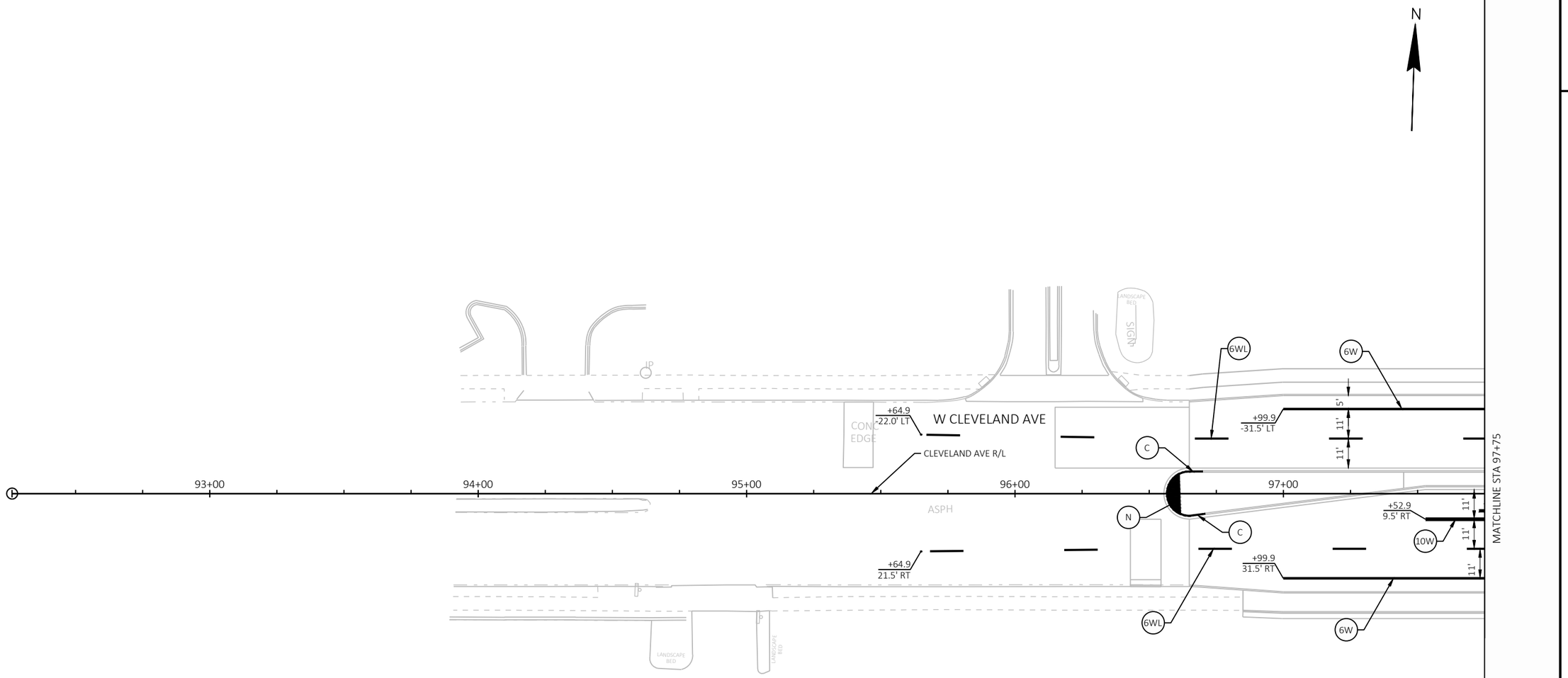

SHEET 13 OF 15

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVEMENT MARKING | SHEET 305 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024501-PM.DWG
LAYOUT NAME - 09

PLOT DATE : 1/9/2026 8:33 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2




SHEET 14 OF 15

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVEMENT MARKING | SHEET 306 | E |
|---|---|---|---|---|---|

2

N

MATCHLINE STA 102+25

6W
BA
BS
6W
11'
11'
+14.3
-31.5' LT
+34.8
-30.8' LT
+52.7
-8.2' LT
25'
DOUBLE
6Y
C
+34.5
-19.8' LT
6WL
CLEVELAND AVE R/L
+84.8
-12.0' LT
103+00
104+00
105+00
106+00
107+00
108+00
W CLEVELAND AVE
11'
11'
5'
6WL
+52.3
20.5' RT
C
+52.7
6.8' RT
N
DOUBLE
6Y
CONC
EDGE
+52
31.5' RT
BS
BA
6W
12Y
BS
BA
6W

SHEET 15 OF 15

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PAVEMENT MARKING | SHEET 307 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\024501-PM.DWG
LAYOUT NAME - 11

PLOT DATE : 1/9/2026 8:33 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

## LEGEND

- WORK ZONE
- TRAFFIC CONTROL COVERING SIGNS
- TRAFFIC FLOW
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- CONNECTED ARROW BOARD
- POST MOUNTED TRAFFIC CONTROL SIGNS
- TRAFFIC CONTROL SIGN MOUNTED ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TYPE A WARNING LIGHTS WITH/WITHOUT SIGN
- ESTR — EXISTING SIGN TO REMAIN
- PSIP — PROPOSED SIGN IN PLACE
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- PAVEMENT MARKING INSTALLED THIS STAGE
- PAVEMENT MARKING INSTALLED IN PREVIOUS STAGE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY 16"X16" FLAGS (INCIDENTAL TO TRAFFIC CONTROL SIGNS)
- TEMPORARY AUDIBLE MESSAGE DEVICE

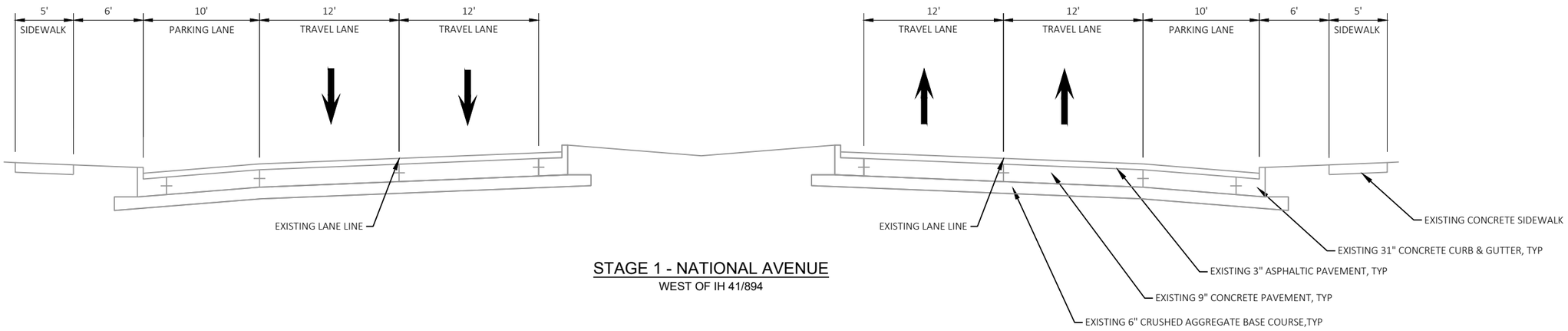
## GENERAL NOTES FOR CONSTRUCTION STAGING AND TRAFFIC CONTROL:

1. TRAFFIC CONTROL DRUMS IN TAPERS SHALL BE EQUIPPED WITH WARNING LIGHTS, TYPE "C", ONE WAY LIGHTS, UNLESS OTHERWISE SHOWN.
2. SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
3. SIGNS IN CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE COVERED. THE COVERING OF TYPE II SIGNS IS INCLUDED UNDER THE BID ITEM TRAFFIC CONTROL COVERING SIGNS TYPE II.
4. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
5. ALL TRAFFIC CONTROL SIGNS SHALL BE 48"X48" UNLESS OTHERWISE NOTED IN THE PLANS.
6. A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE "WORK/CLOSED" AREAS IF WARRANTED BY CONDITIONS AND/OR AS DIRECTED BY THE ENGINEER.
7. CONTRACTOR SHALL INSTALL PERMANENT SIGNS AND PERMANENT PAVEMENT MARKING WHEN APPROPRIATE DURING CONSTRUCTION STAGING AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.
8. ADEQUATE TURNING PROVISIONS SHALL BE MAINTAINED FOR ALL VEHICLES, INCLUDING TRUCKS.
9. EXISTING PAVEMENT MARKINGS TO BE REMOVED THAT WILL NOT BE REPLACED IN THE SAME LOCATION AFTER CONSTRUCTION SHALL BE REMOVED USING THE MARKING REMOVAL LINE WATER BLASTING BID ITEMS . DO NOT GRIND EXISTING PAVEMENT MARKINGS THAT WILL NOT BE REPLACED AFTER CONSTRUCTION.
10. BARRICADE STRIPES SHALL POINT DOWNWARD IN THE DIRECTION OF TRAFFIC FLOW.
11. THE CONTRACTOR SHALL ENSURE ADEQUATE DRAINAGE AND AVOID ANY PONDING OR STANDING WATER DURING THE STAGED CONSTRUCTION.
12. TEMPORARY MARKINGS SHALL BE TEMPORARY TAPE WHEN PLACED ON NEW OR EXISTING PAVEMENT SURFACES THAT ARE TO REMAIN IN PLACE FOLLOWING CONSTRUCTION. PAINT MAY BE USED ON EXISTING PAVEMENT OR BINDER HMA LAYERS THAT ARE TO BE REMOVED OR OVERLAID IN SUBSEQUENT STAGES. TEMPORARY PAVEMENT MARKINGS ON NEW PAVEMENT OR EXISTING PAVEMENT THAT WILL REMAIN IN PLACE AFTER CONSTRUCTION SHALL BE REMOVED USING WATER BLASTING. REMOVAL OF TEMPORARY MARKINGS IS INCIDENTAL TO THE TEMPORARY PAVEMENT MARKING BID ITEMS. DO NOT GRIND TEMPORARY PAVEMENT MARKINGS OFF NEW PAVEMENT OR EXISTING PAVEMENT THAT WILL REMAIN AFTER CONSTRUCTION.
13. COORDINATE STAGE CHANGES WITH WISDOT SE REGION SIGNALS UNIT SO THAT TEMPORARY SIGNALS AT THE IH 41/894 INTERCHANGE CAN BE MODIFIED TO THE NEW STAGE.
14. TEMPORARY STORM SEWER ELEVATIONS AND CONNECTIONS MAY BE ADJUSTED TO MEET FIELD CONDITIONS AS APPROVED BY THE FIELD ENGINEER.

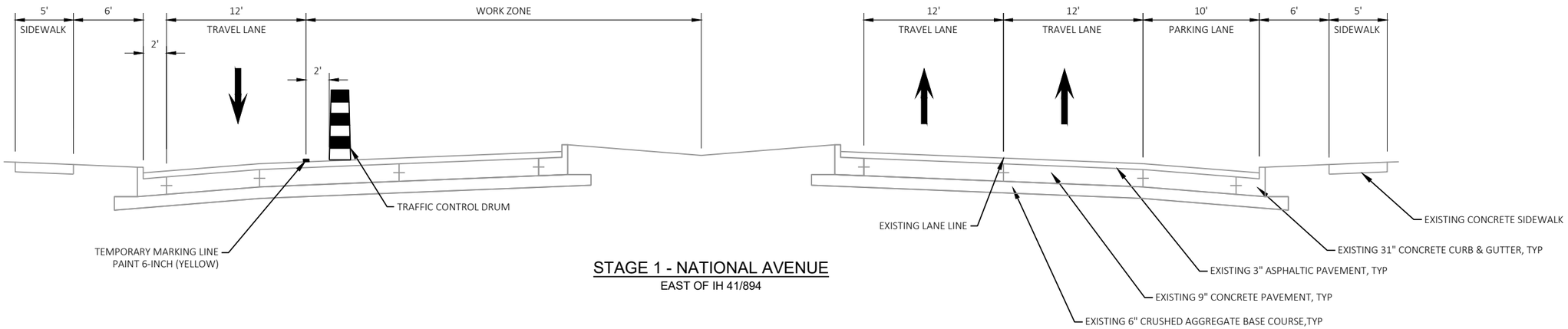
## TEMPORARY PAVEMENT MARKING LEGEND

| | |
|---|---|
| A | TEMPORARY MARKING ARROW PAINT (WHITE) |
| EWA | TEMPORARY MARKING ARROW EPOXY (WHITE) |
| EW | TEMPORARY MARKING WORDS EPOXY (WHITE) |
| EW10 | TEMPORARY MARKING LINE EPOXY 10-INCH (WHITE) |
| EWL | TEMPORARY MARKING LINE EPOXY 6-INCH (WHITE) (12.5' SEGMENT, 37.5' GAP) |
| EWS | TEMPORARY MARKING LINE EPOXY 6-INCH (WHITE) (12.5' SEGMENT, 37.5 FT GAP) |
| EWT | TEMPORARY MARKING LINE EPOXY 6-INCH (WHITE) (2' SEGMENT, 6' GAP) |
| P | PERMANENT PAVEMENT MARKINGS (SEE PAVEMENT MARKING PLAN) |
| SB | TEMPORARY MARKING STOP LINE PAINT 18-INCH (WHITE) |
| TA | TEMPORARY MARKING ARROW REMOVABLE TAPE (WHITE) |
| TM8 | TEMPORARY MARKING REMOVABLE MASK OUT TAPE 8-INCH (BLACK) |
| TM12 | TEMPORARY MARKING REMOVABLE MASK OUT TAPE 12-INCH (BLACK) |
| TSB | TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE) |
| TW | TEMPORARY MARKING WORDS REMOVABLE TAPE (WHITE) |
| TW6 | TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) |
| TW10 | TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (WHITE) |
| TWL | TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (12.5' SEGMENT, 37.5' GAP) |
| TWS | TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (3' SEGMENT, 9' GAP) |
| TWT | TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (2' SEGMENT, 6' GAP) |
| TXW | TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH (WHITE) |
| TY6 | TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW) |
| TYS | TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW) (2' SEGMENT, 6' GAP) |
| W | TEMPORARY MARKING WORDS PAINT (WHITE) |
| W6 | TEMPORARY MARKING LINE PAINT 6-INCH (WHITE) |
| W10 | TEMPORARY MARKING LINE PAINT 10-INCH (WHITE) |
| WL | TEMPORARY MARKING LINE PAINT 6-INCH (WHITE) (12.5' SEGMENT, 37.5' GAP) |
| WS | TEMPORARY MARKING LINE PAINT 6-INCH (WHITE) (3' SEGMENT, 9' GAP) |
| XW | TEMPORARY MARKING CROSSWALK PAINT 6-INCH (WHITE) |
| Y6 | TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW) |
| Y10 | TEMPORARY MARKING LINE PAINT 10-INCH (YELLOW) |

2




STAGE 1 - NATIONAL AVENUE
WEST OF IH 41/894

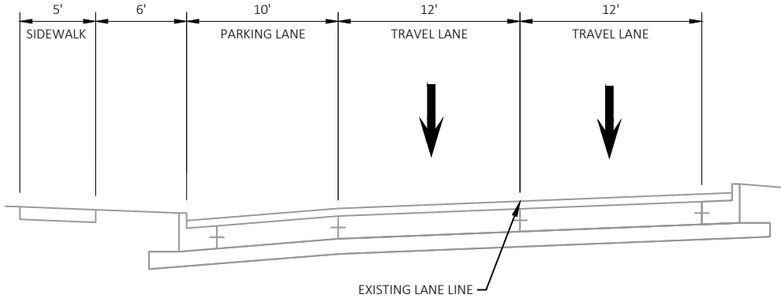


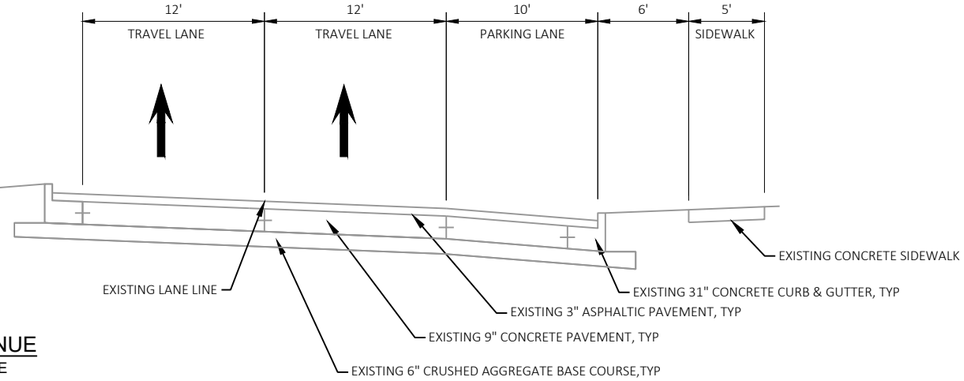

STAGE 1 - NATIONAL AVENUE
EAST OF IH 41/894



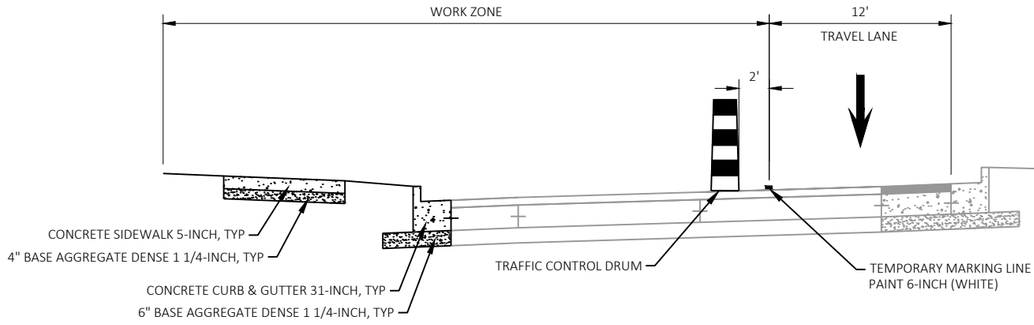
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL TYPICAL SECTIONS | SHEET 309 | E |
|---|---|---|---|---|---|

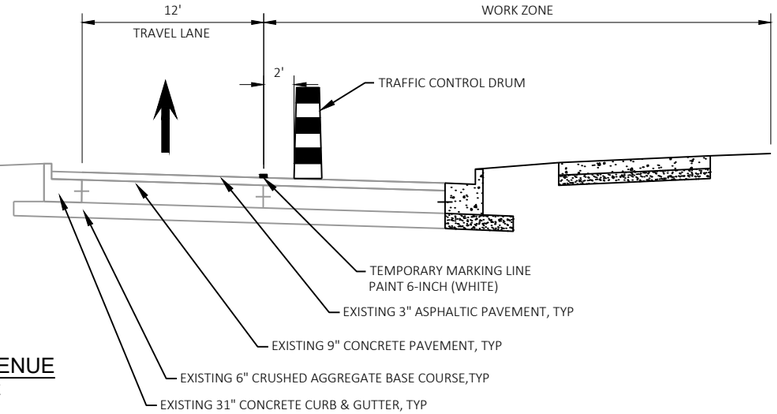
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\025001-TC TYPS.DWG
LAYOUT NAME - 01
PLOT DATE : 1/9/2026 9:33 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



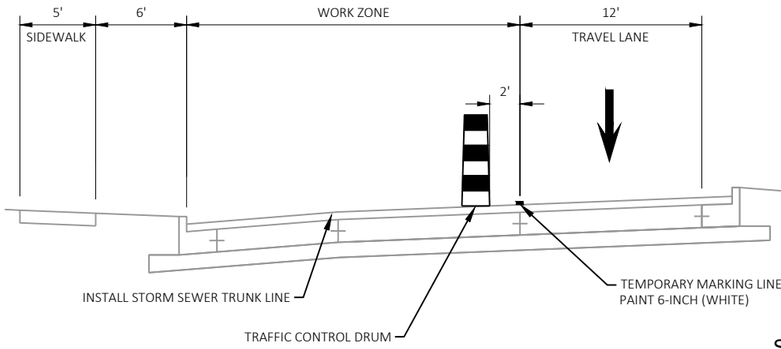



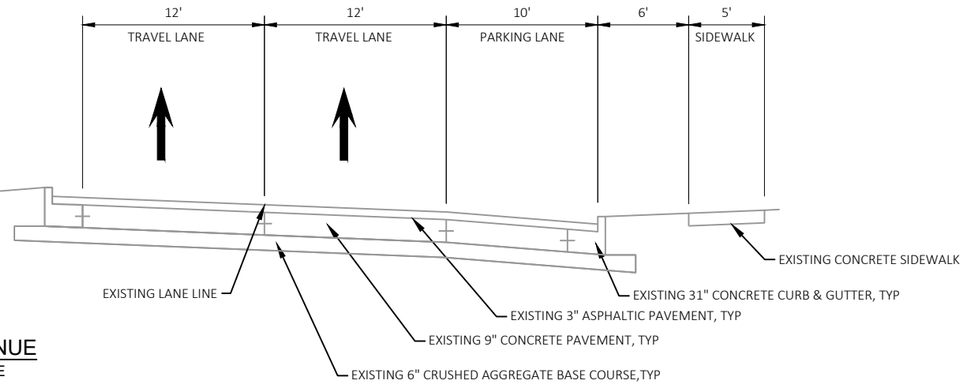

## STAGE 2 - NATIONAL AVENUE
WEST OF IH 41/894 INTERCHANGE




## STAGE 2 - NATIONAL AVENUE
AT IH 41/894 INTERCHANGE



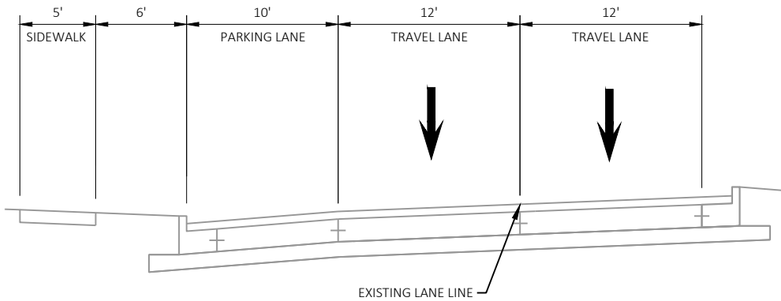



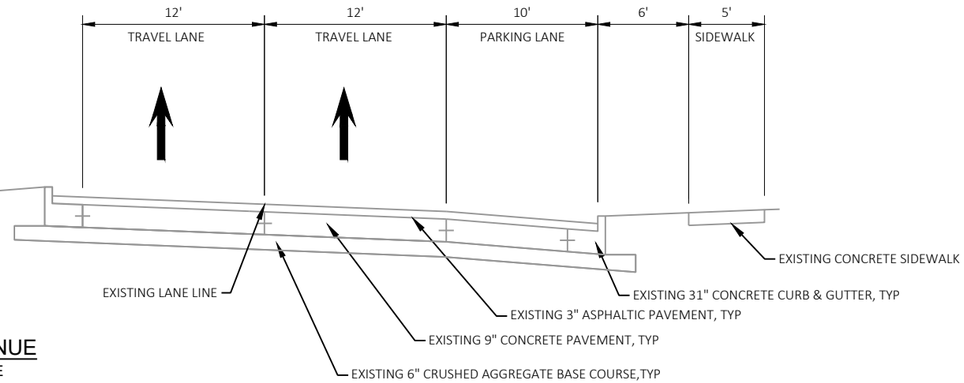

## STAGE 2 - NATIONAL AVENUE
EAST OF IH 41/894 INTERCHANGE



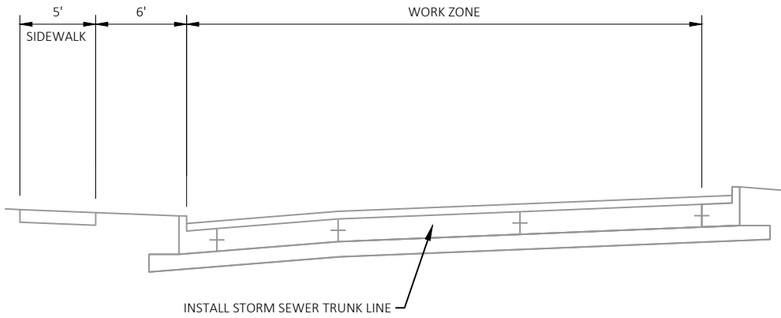
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL TYPICAL SECTIONS | SHEET 310 | E |
|---|---|---|---|---|---|

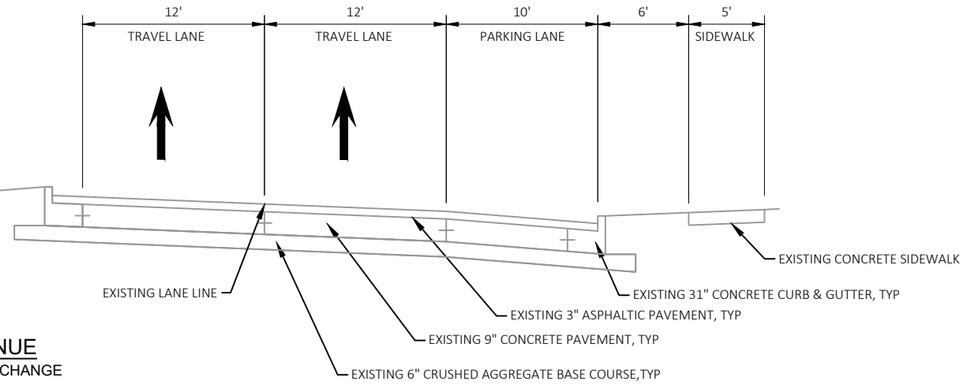
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\025001-TC TYPS.DWG
LAYOUT NAME - 02
PLOT DATE : 1/9/2026 9:33 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



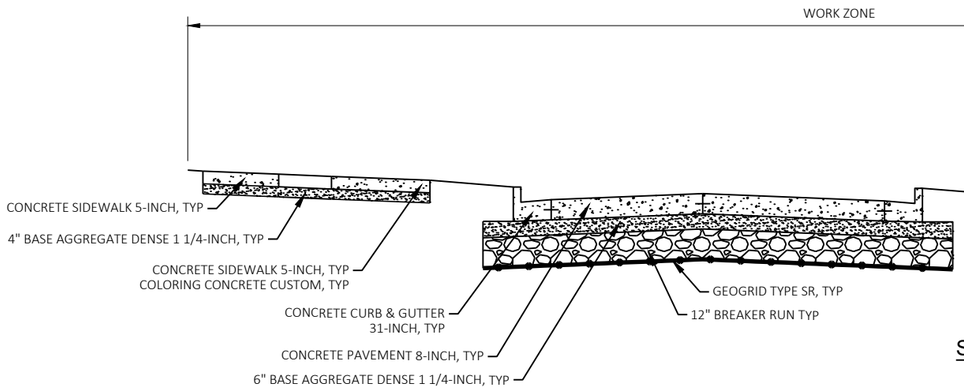



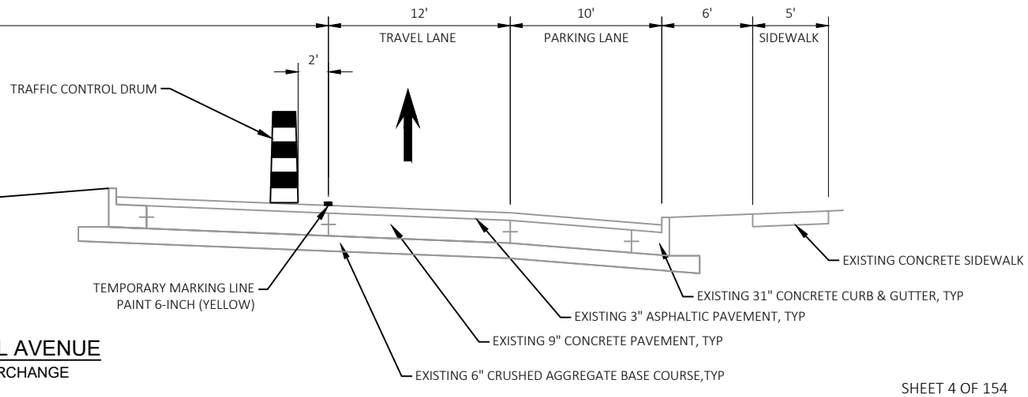

## STAGE 3 - NATIONAL AVENUE
STH 100 TO CLEVELAND AVENUE




## STAGE 3 - NATIONAL AVENUE
CLEVELAND AVENUE TO IH 41/894 INTERCHANGE



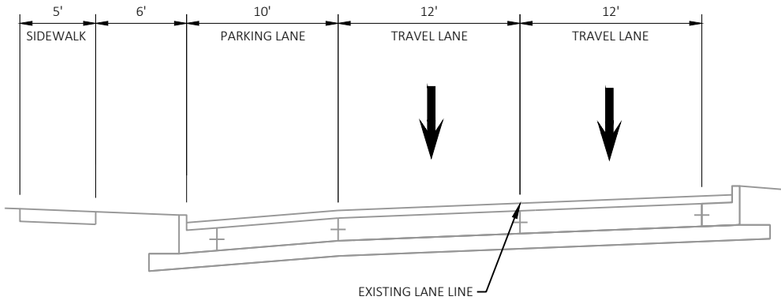



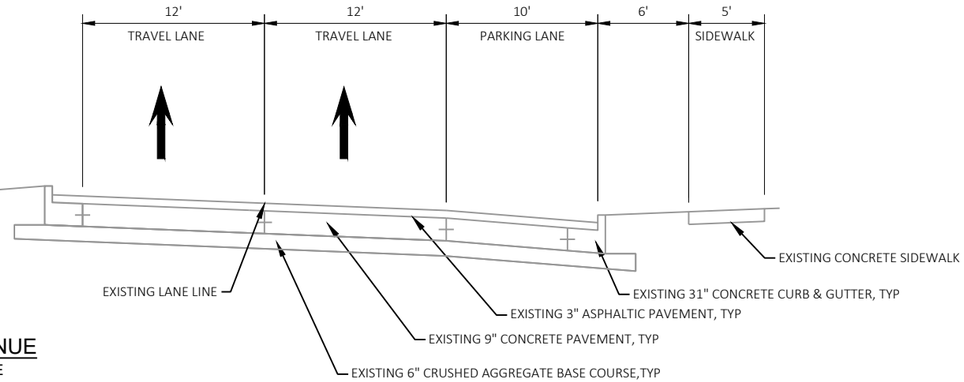

## STAGE 3 - NATIONAL AVENUE
EAST OF IH 41/894 INTERCHANGE



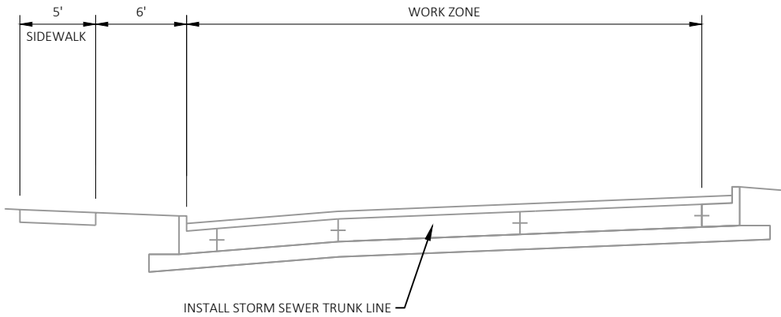
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL TYPICAL SECTIONS | SHEET 311 | E |
|---|---|---|---|---|---|

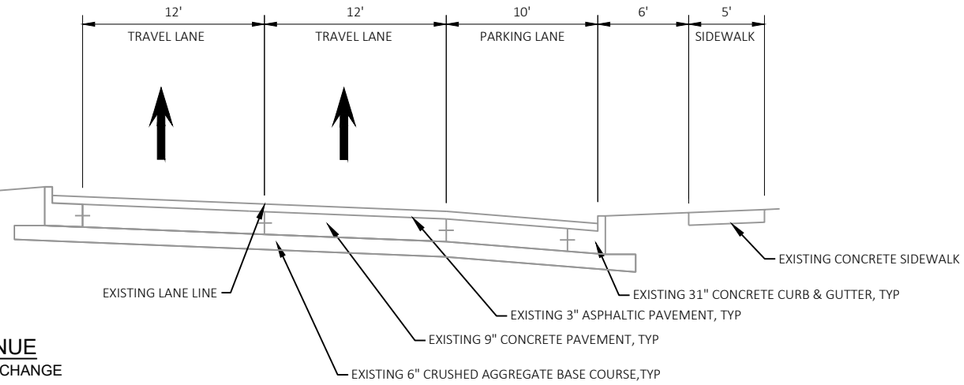
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\025001-TC TYPS.DWG
LAYOUT NAME - 03
PLOT DATE : 1/9/2026 9:33 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



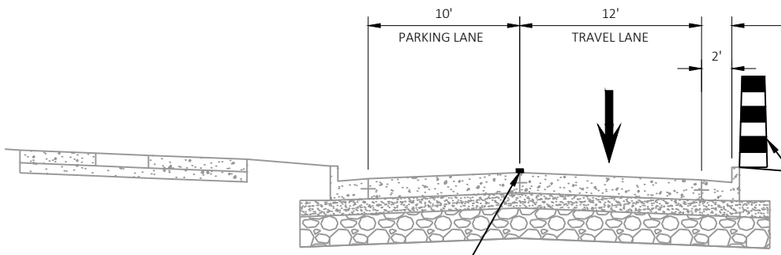



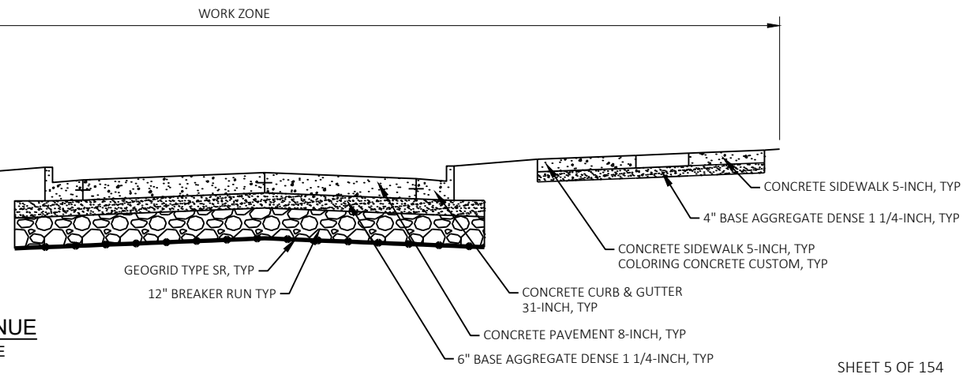

STAGE 4 - NATIONAL AVENUE
STH 100 TO CLEVELAND AVENUE




STAGE 4 - NATIONAL AVENUE
CLEVELAND AVENUE TO IH 41/894 INTERCHANGE



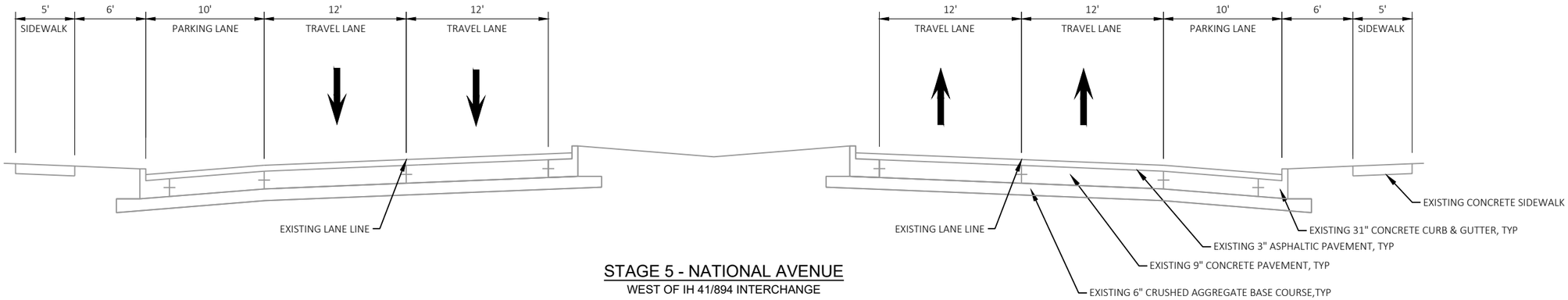

STAGE 4 - NATIONAL AVENUE
EAST OF IH 41/894 INTERCHANGE

SHEET 5 OF 154

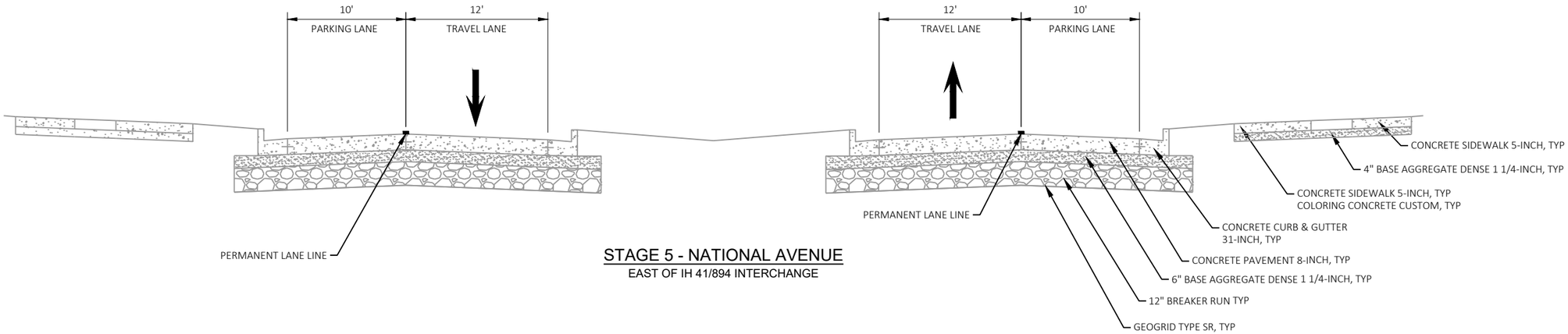
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL TYPICAL SECTIONS | SHEET 312 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\025001-TC TYPS.DWG
LAYOUT NAME - 04
PLOT DATE : 1/9/2026 9:33 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT

2




STAGE 5 - NATIONAL AVENUE
WEST OF IH 41/894 INTERCHANGE



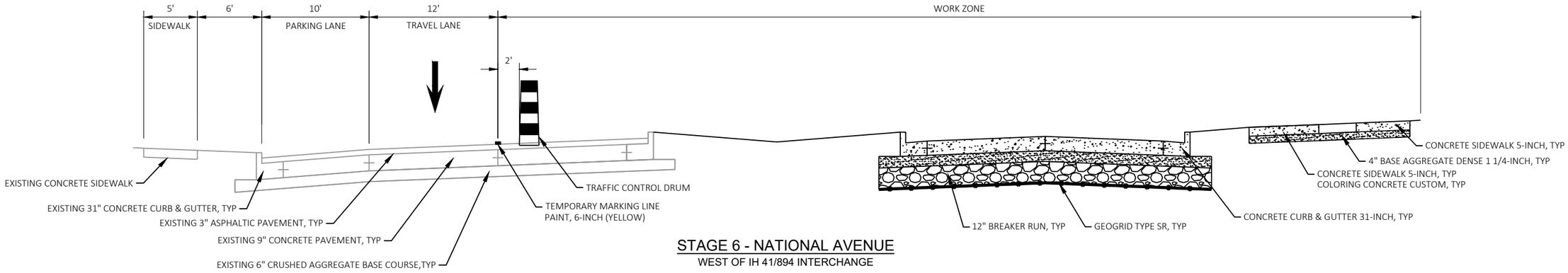

STAGE 5 - NATIONAL AVENUE
EAST OF IH 41/894 INTERCHANGE

SHEET 6 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL TYPICAL SECTIONS | SHEET 313 | E |
|---|---|---|---|---|---|

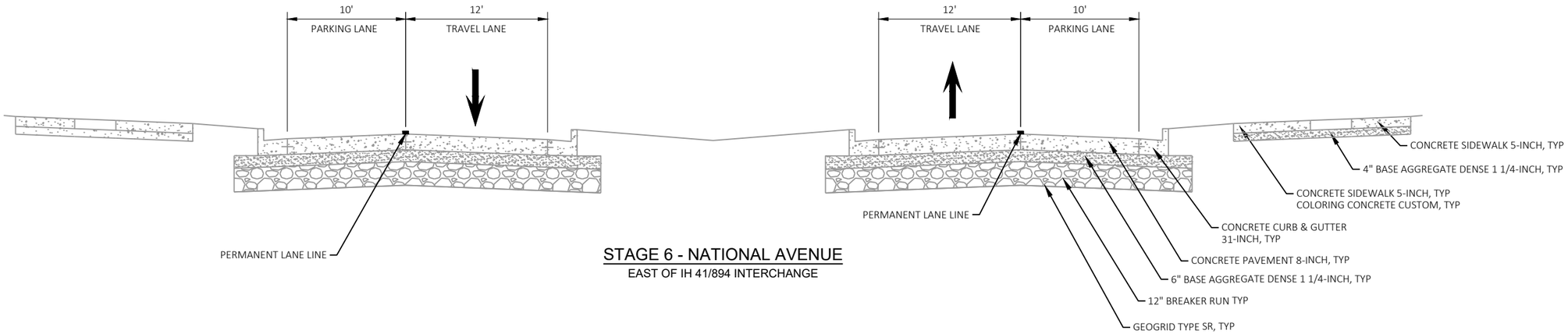
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\025001-TC TYPS.DWG
LAYOUT NAME - 05
PLOT DATE : 1/9/2026 9:33 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT

2




## STAGE 6 - NATIONAL AVENUE

WEST OF IH 41/894 INTERCHANGE




## STAGE 6 - NATIONAL AVENUE

EAST OF IH 41/894 INTERCHANGE

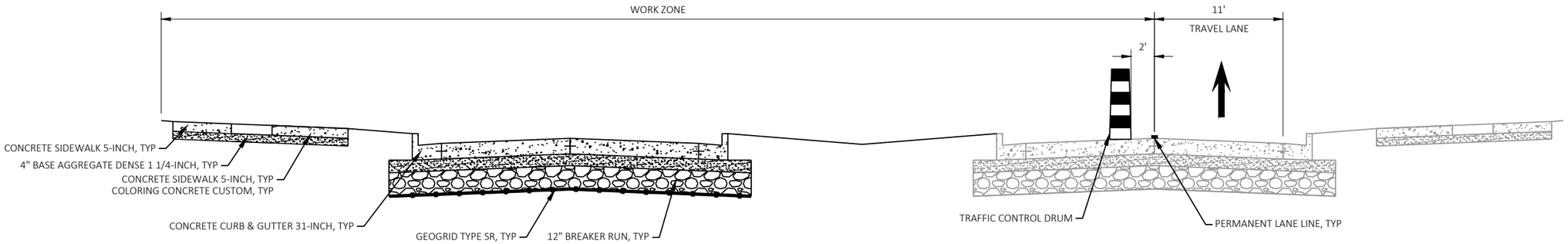
SHEET 7 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL TYPICAL SECTIONS | SHEET 314 | E |
|---|---|---|---|---|---|

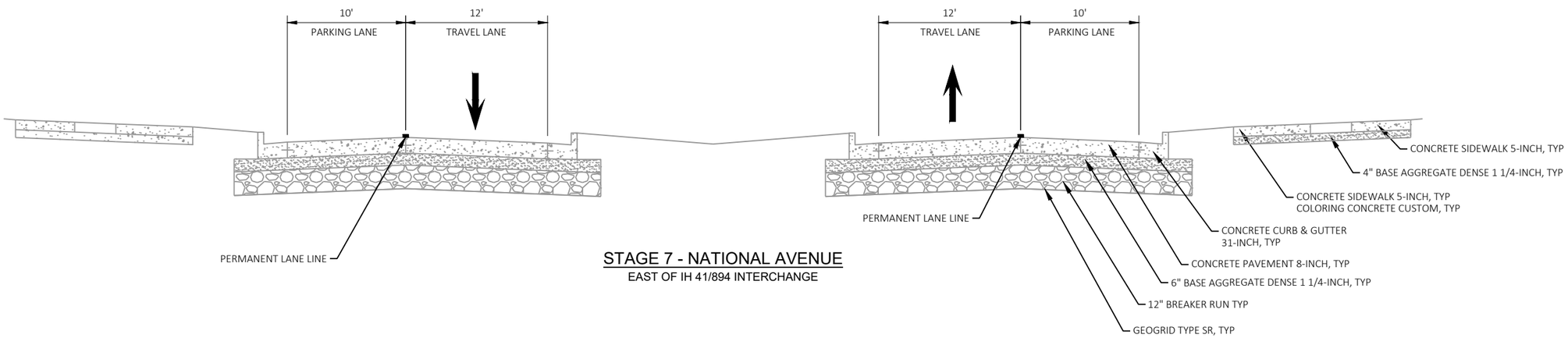
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\025001-TC TYPS.DWG
LAYOUT NAME - 06

PLOT DATE : 1/9/2026 9:33 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:10 FT

2




STAGE 7 - NATIONAL AVENUE
WEST OF IH 41/894 INTERCHANGE




STAGE 7 - NATIONAL AVENUE
EAST OF IH 41/894 INTERCHANGE

SHEET 8 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL TYPICAL SECTIONS | SHEET 315 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\025001-TC TYPS.DWG
LAYOUT NAME - 07
PLOT DATE : 1/9/2026 9:33 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT

2

LEGEND

WORK ZONE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES

WORK CONSTRUCTED UNDER TRAFFIC

ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

TRAFFIC CONTROL NOTES - STAGE 1

CONSTRUCTION:

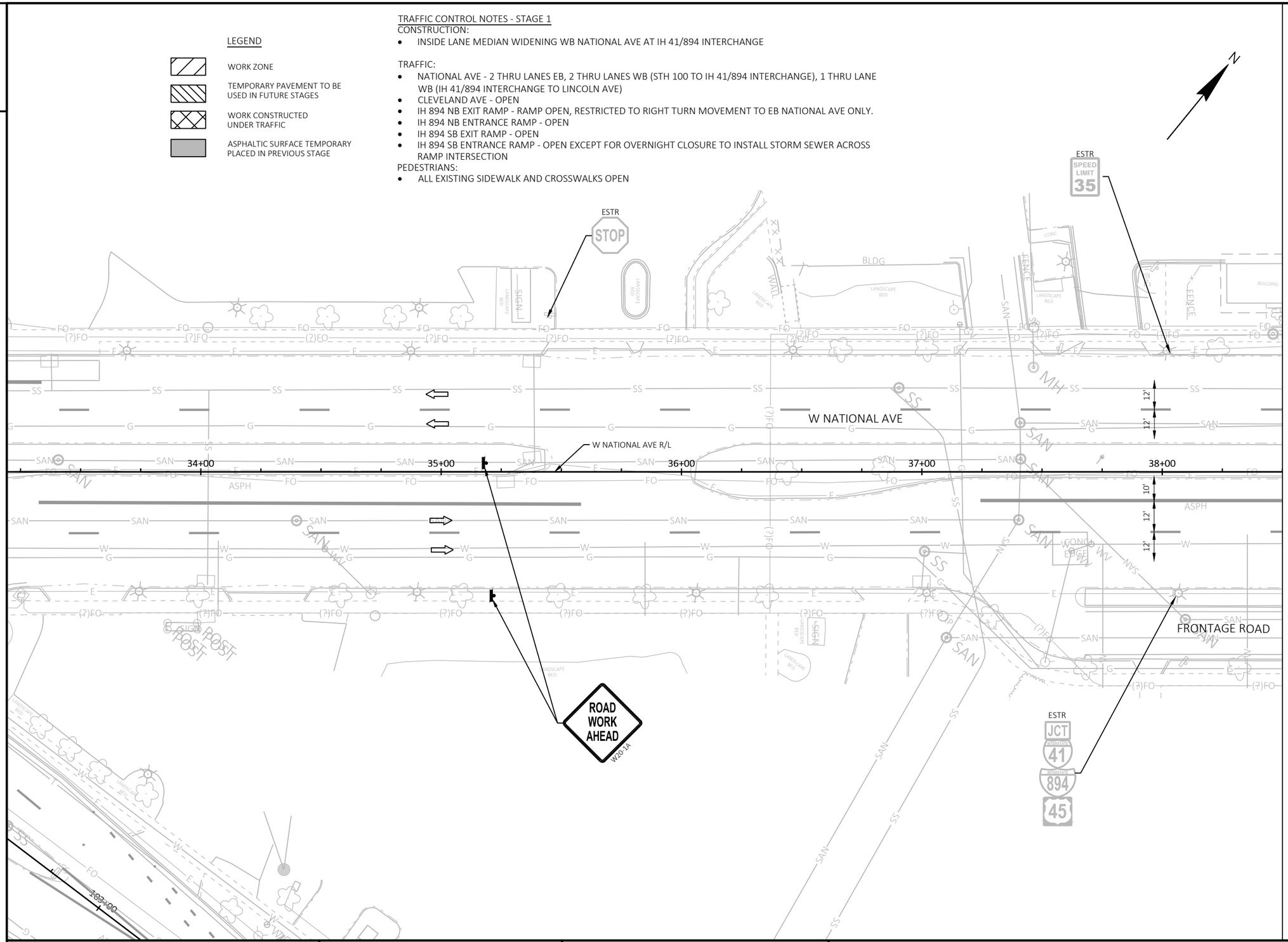
- INSIDE LANE MEDIAN WIDENING WB NATIONAL AVE AT IH 41/894 INTERCHANGE

TRAFFIC:

- NATIONAL AVE - 2 THRU LANES EB, 2 THRU LANES WB (STH 100 TO IH 41/894 INTERCHANGE), 1 THRU LANE WB (IH 41/894 INTERCHANGE TO LINCOLN AVE)
- CLEVELAND AVE - OPEN
- IH 894 NB EXIT RAMP - RAMP OPEN, RESTRICTED TO RIGHT TURN MOVEMENT TO EB NATIONAL AVE ONLY.
- IH 894 NB ENTRANCE RAMP - OPEN
- IH 894 SB EXIT RAMP - OPEN
- IH 894 SB ENTRANCE RAMP - OPEN EXCEPT FOR OVERNIGHT CLOSURE TO INSTALL STORM SEWER ACROSS RAMP INTERSECTION

PEDESTRIANS:

- ALL EXISTING SIDEWALK AND CROSSWALKS OPEN




SHEET 9 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 1 | SHEET 316 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026001-TC1.DWG
LAYOUT NAME - 03

PLOT DATE : 1/9/2026 9:33 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

WORK ZONE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES

WORK CONSTRUCTED UNDER TRAFFIC

ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

N

MATCHLINE STA 38+50

MATCHLINE STA 44+50

S 102ND ST

S 102ND ST R/L

W NATIONAL AVE R/L

W NATIONAL AVE

FRONTAGE ROAD

111+00

110+00

109+00

39+00

40+00

41+00

42+00

43+00

44+00

10'

12'

12'

10'

12'

12'

ESTR
LEFT TURN YIELD ON FLASHING YELLOW ARROW

ESTR
RIGHT LANE MUST TURN RIGHT

END ROAD WORK
G20-2A
48"X24"

ESTR

ESTR
ONE WAY

ROAD WORK 500 FT
W20-1D

ESTR

ESTR
COVERING SIGNS TYPE II
SOUTH I-41 I-894 45
EAST
NORTH I-41 45
WEST I-894

SHEET 10 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 1 | SHEET 317 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026001-TC1.DWG
LAYOUT NAME - 04

PLOT DATE : 1/9/2026 9:33 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

MATCHLINE B-B

MATCHLINE STA 44+50

MATCHLINE STA 50+50

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

ESTR
COVERING SIGNS TYPE II
SOUTH EAST SOUTH
INTERSTATE INTERSTATE
41 894 45

ESTR
DO NOT ENTER

ESTR
RAMP METERED WHEN FLASHING

IH 41/894 SB EXIT RAMP

IH 41/894 SB ENTRANCE RAMP

ESTR
SOUTH INTERSTATE 41 45 EAST INTERSTATE 894

ESTR
RAMP METERED WHEN FLASHING

ESTR

ESTR
LEFT TURN YIELD ON FLASHING YELLOW ARROW

100' TAPER

+13
35' LT

+13
14' LT

+89
46' LT

25'

11'

+22
46' LT

W10

Y6

W NATIONAL AVE R/L

45+00 46+00 47+00 48+00 49+00 50+00

PCMS

+42
12' RT

W NATIONAL AVE

25'

12'

12'

+55
11' RT

PROVIDE TEMPORARY CONNECTION TO EXISTING STORM SEWER

FRONTAGE ROAD

CONC EDGE

CLOSE EB LEFT TURN LANE TO IH 894 SB ENTRANCE RAMP
SEE DETOUR PLAN

R3-18
30"X30"

ESTR
WEST INTERSTATE 894 USE RIGHT LANE
NORTH 45 USE RIGHT LANE

ESTR
NORTH INTERSTATE 41
WEST INTERSTATE 894
45

ESTR
AHEAD

ESTR
DO NOT ENTER

ESTR
LEFT TURN YIELD ON FLASHING YELLOW ARROW

ESTR
ONE WAY

S 101ST ST

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

ESTR
H

TRAFFIC CONTROL SIGNS PCMS MESSAGE

| FRAME 1 | FRAME 2 |
|---|---|
| ROAD WORK BEGINS | XXXDAY XX/XX |

ESTR
STOP
ONLY

ESTR
ONE WAY
R6-1R
36"X12"
R3-2
24"X24"

ESTR
500 FT

ESTR
14'-2"

ELEC SERVICE PANEL

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1A

PLACE SIGN 500 FT FROM INTERSECTION

SHEET 11 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 1 | SHEET 318 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026001-TC1.DWG
LAYOUT NAME - 05

PLOT DATE : 1/9/2026 9:33 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

MATCHLINE STA 50+50

ESTR SOUTH INTERSTATE 41 45 EAST INTERSTATE 894

ESTR

ESTR 14'-2"

ESTR

PROVIDE TEMPORARY CONNECTION OF EXISTING STORM SEWER TO PROPOSED MANHOLE

ESTR ONE WAY

ESTR STOP

R6-1R 36"X12" ONE WAY

R3-2 24"X24"

PLACE SIGN 500 FT FROM INTERSECTION

ROAD WORK AHEAD W20-1A

S 100TH ST R/L

162+00

END ROAD WORK G20-2A 48"X24"

161+00

S 100TH ST

ESTR

ESTR

Y6

25'

W NATIONAL AVE

11'

51+00

52+00

53+00

54+00

55+00

56+00

ONE WAY R6-2R 24"X30"

25'

12'

12'

W NATIONAL AVE R/L

Y6

W NATIONAL AVE

ESTR

ESTR NORTH INTERSTATE 41 WEST INTERSTATE 894 45

ESTR RAMP METERED WHEN FLASHING

IH 41/894 NB ENTRANCE RAMP

IH 41/894 NB EXIT RAMP

TY6

ESTR WRONG WAY DO NOT ENTER

ESTR

ONE WAY R6-2R 24"X30"

R11-2 48" X 30" ROAD CLOSED

TYPE III BARRICADE

R11-2L 48" X 30" LANE CLOSED

TYPE III BARRICADE

ESTR H

CLOSE NB LEFT TURN LANES
RAMP RESTRICTED TO RIGHT TURN ONLY

MATCHLINE A-A

MATCHLINE STA 56+50

SHEET 12 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 1 | SHEET 319 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026001-TC1.DWG
LAYOUT NAME - 06

PLOT DATE : 1/9/2026 9:33 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

WORK ZONE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES

WORK CONSTRUCTED UNDER TRAFFIC

ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

WO1-6
48" X 24"
TYPE III BARRICADE

PLACE SIGN 500 FT FROM INTERSECTION
ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48"X24"

ESTR JCT 41 894 45

ESTR SPEED LIMIT 35

ESTR STOP

BEGIN LEFT TURN LANE
R3-20L
24"X36"

MATCHLINE STA 56+50

MATCHLINE STA 62+50

W NATIONAL AVE R/L

S 99TH ST R/L

S 99TH ST

W NATIONAL AVE

57+00 58+00 59+00 60+00 61+00 62+00

131+00 132+00 118+00 119+00

Y6 +59 35' LT 50' R +05 4' LT

W10 +04 35' LT +98 25' LT +22 35' LT +23 25' LT +03 35' LT

25' 11' 10' 12' 12' 80' TURN BAY TAPER

HOUSE BLDG FENCE CONC CONC EDGE FREE FLT DRAIN LANDSCAPE BED

SHEET 13 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 1 | SHEET 320 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026001-TC1.DWG
LAYOUT NAME - 07

PLOT DATE : 1/9/2026 9:34 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

ROAD WORK AHEAD
W20-1A
PLACE SIGN 500 FT FROM INTERSECTION

END ROAD WORK
G20-2A
48"X24"

WO1-6
48" X 24"
TYPE III BARRICADE

ESTR
STOP

ESTR
SCHOOL SPEED LIMIT 15 WHEN CHILDREN ARE PRESENT

S 98TH ST R/L
S 98TH ST
141+00
142+00

MATCHLINE STA 62+50

63+00
64+00
65+00
66+00
67+00

MATCHLINE STA 67+25

Y6
+66
35' LT
45' R
+10
2' LT
+90
2' LT
+29
34' LT
12'
25'
+99
34' LT
40' R

W NATIONAL AVE R/L
W NATIONAL AVE

WO1-6
48" X 24"
TYPE III BARRICADE

HOUSE
BUILDING
CONC.
LANDSCAPE BED
FLAG
GUY

SHEET 14 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 1 | SHEET 321 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026001-TC1.DWG
LAYOUT NAME - 08
PLOT DATE : 1/9/2026 9:34 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

PLACE SIGN AT 250 FT FROM INTERSECTION

ROAD WORK AHEAD W20-1A

END ROAD WORK G20-2A 48"X24"

ESTR

ESTR STOP

S 97TH ST R/L

S 97TH ST

152+00

151+00

INSTALL STORM SEWER TRUNK LINE. BULKHEAD AT BOTH ENDS. CONNECT TO OTHER PORTIONS OF STORM SEWER SYSTEM IN A LATER STAGE

ESTR H

ROAD WORK AHEAD W20-1A

NATIONAL AVE

PLACE SIGN 500 FT FROM INTERSECTION

W LINCOLN AVE

ESTR ONE WAY

R11-2L 48" X 30"

LANE CLOSED

TYPE III BARRICADE

ESTR SPEED LIMIT 35

ESTR STOP

MATCHLINE STA 67+25

MATCHLINE STA 73+00

Y6

40' R

+37 9' LT

+08 10' LT

+45 34' LT

+36 34' LT

TY6

12'

25'

68+00

69+00

70+00

71+00

72+00

73+

W NATIONAL AVE

W NATIONAL AVE R/L

R3-18 30"X30"

WO1-6 48" X 24"

TYPE III BARRICADE

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

SHEET 15 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 1 | SHEET 322 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026001-TC1.DWG
LAYOUT NAME - 08A

PLOT DATE : 1/9/2026 9:34 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

ESTR
STOP
END
ROAD WORK
G20-2A
48"X24"
WO1-6
48" X 24"
TYPE III BARRICADE
ESTR
W LINCOLN AVE
ESTR
ESTR
STOP
ESTR
S 95TH ST
WO12-1D
48"X48"
PLACE SIGN 500 FT
FROM INTERSECTION
ROAD
WORK
500 FT
W20-1D
PLACE SIGN 1000 FT
FROM INTERSECTION
ROAD
WORK
AHEAD
W20-1A
PCMS
TY6
+60
23' LT
25'
MATCHLINE STA 73+00
74+00
75+00
76+00
77+00
W NATIONAL AVE
78+00
79+00
W NATIONAL AVE R/L
BLDG
CONC
TRENCH
DRAIN
WALL
SIGN
TEL
MH
MP
ESTR
STOP
ESTR
ESTR
H
ESTR
ESTR
ESTR
ESTR
S 95TH ST
ESTR
STOP
ESTR
ONE
WAY
ESTR
END
ROAD WORK
G20-2A
48"X24"
TRAFFIC CONTROL SIGNS PCMS
MESSAGE
FRAME 1
FRAME 2
ROAD
WORK
BEGINS
XXXDAY
XX/XX
ROAD
WORK
AHEAD
W20-1A
NATIONAL
AVE
PLACE SIGN 500 FT
FROM INTERSECTION

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

SHEET 16 OF 154

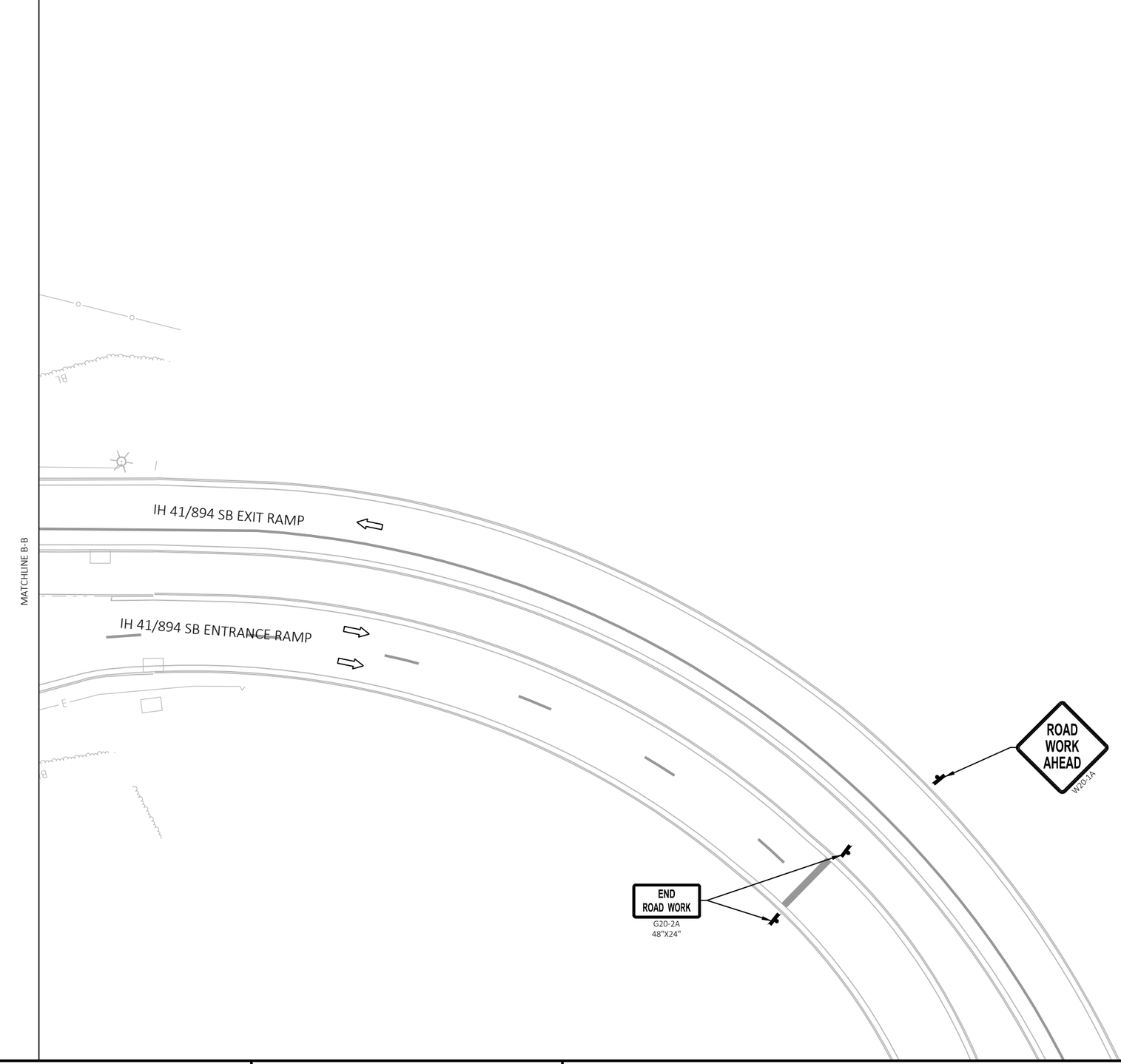
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 1 | SHEET 323 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026001-TC1.DWG
LAYOUT NAME - 09
PLOT DATE : 1/9/2026 9:34 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE




2

SHEET 17 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 1 | SHEET 324 | E |
|---|---|---|---|---|---|

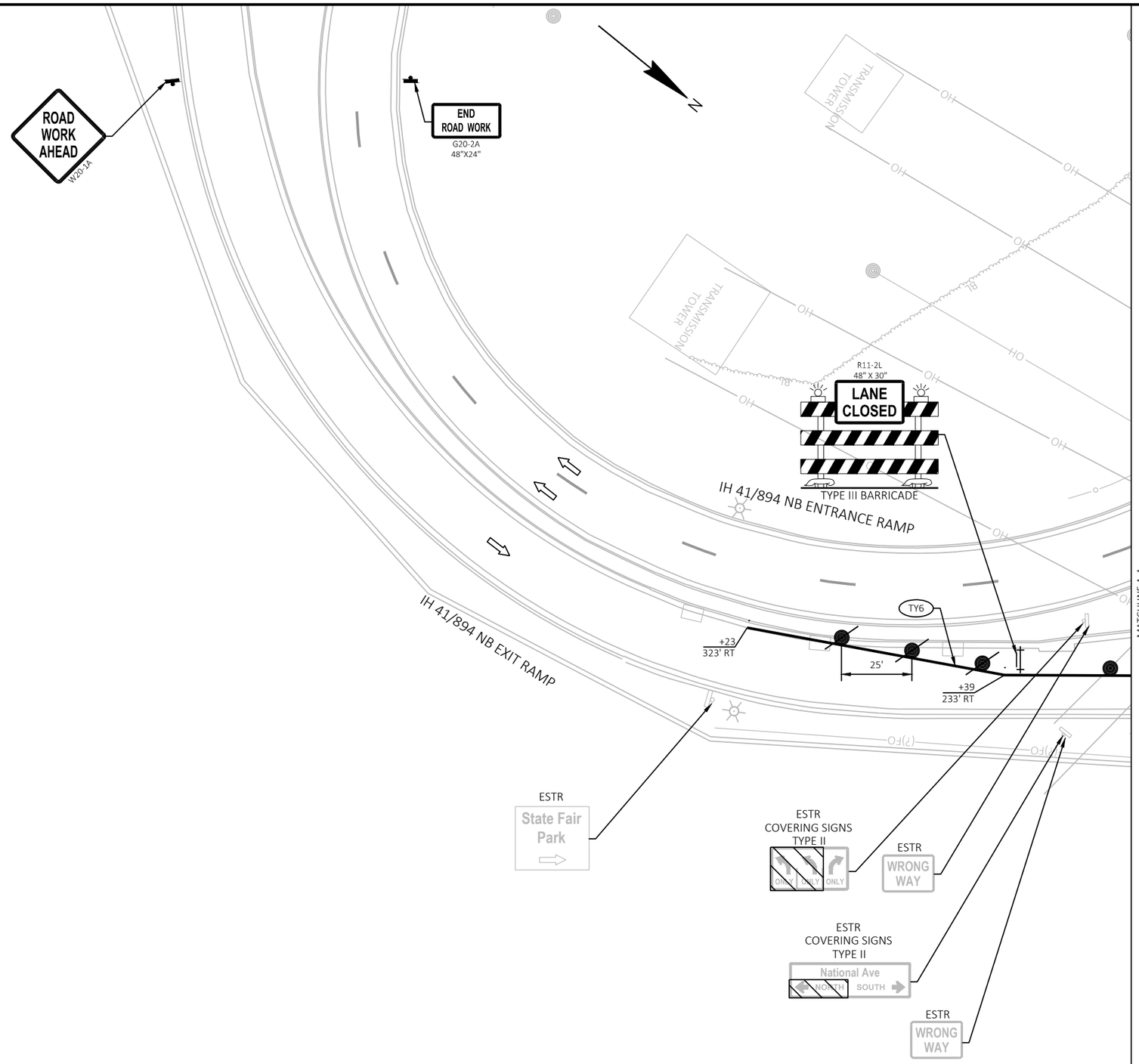
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026001-TC1.DWG
LAYOUT NAME - 12

PLOT DATE : 1/9/2026 9:34 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE




SHEET 18 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 1 | SHEET 325 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026001-TC1.DWG
LAYOUT NAME - 13

PLOT DATE : 1/9/2026 9:34 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

TRAFFIC CONTROL NOTES - STAGE 2

CONSTRUCTION:

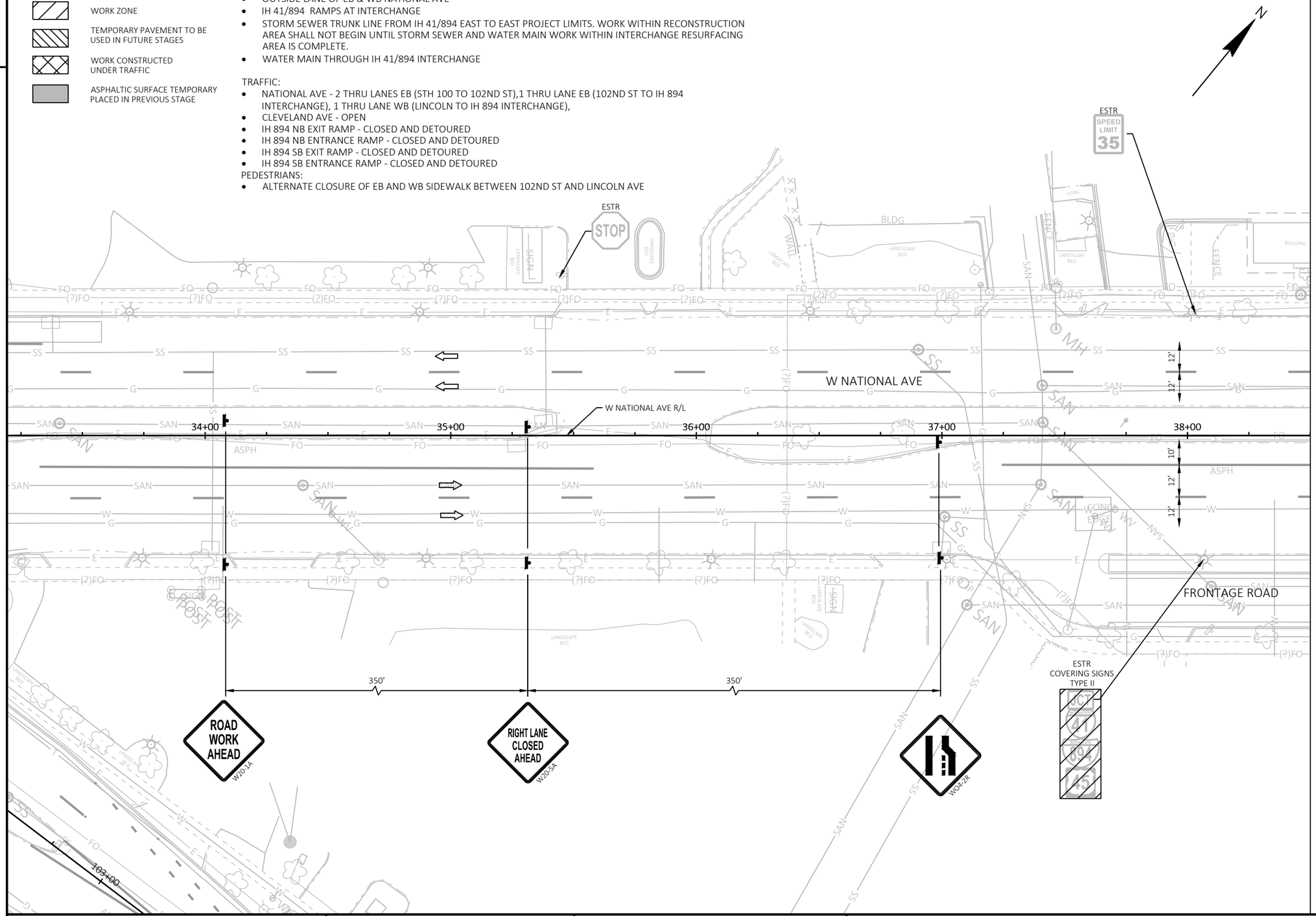
- OUTSIDE LANE OF EB & WB NATIONAL AVE
- IH 41/894 RAMPS AT INTERCHANGE
- STORM SEWER TRUNK LINE FROM IH 41/894 EAST TO EAST PROJECT LIMITS. WORK WITHIN RECONSTRUCTION AREA SHALL NOT BEGIN UNTIL STORM SEWER AND WATER MAIN WORK WITHIN INTERCHANGE RESURFACING AREA IS COMPLETE.
- WATER MAIN THROUGH IH 41/894 INTERCHANGE

TRAFFIC:

- NATIONAL AVE - 2 THRU LANES EB (STH 100 TO 102ND ST),1 THRU LANE EB (102ND ST TO IH 894 INTERCHANGE), 1 THRU LANE WB (LINCOLN TO IH 894 INTERCHANGE),
- CLEVELAND AVE - OPEN
- IH 894 NB EXIT RAMP - CLOSED AND DETOURED
- IH 894 NB ENTRANCE RAMP - CLOSED AND DETOURED
- IH 894 SB EXIT RAMP - CLOSED AND DETOURED
- IH 894 SB ENTRANCE RAMP - CLOSED AND DETOURED

PEDESTRIANS:

- ALTERNATE CLOSURE OF EB AND WB SIDEWALK BETWEEN 102ND ST AND LINCOLN AVE




2

SHEET 19 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 2 | SHEET 326 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2.DWG
LAYOUT NAME - 03

PLOT DATE : 1/9/2026 9:34 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

PLACE AT ARTHUR AVE

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48"X24"

S 102ND ST

111+00

110+00

109+00

S 102ND ST R/L

ESTR
LEFT TURN YIELD ON FLASHING YELLOW ARROW

END ROAD WORK
G20-2A
48"X24"

ESTR
RIGHT LANE MUST TURN RIGHT

ESTR

ESTR

39+00 40+00 41+00 42+00 43+00 44+00

10' 12' 12' 10'

12' 12'

W NATIONAL AVE R/L

W6

W NATIONAL AVE

+00 48' RT

+00 36' RT

+45 26' RT

25'

FRONTAGE ROAD

100' TAPER

245' MERGE TAPER

ESTR
ONE WAY

R11-3
60" X 30"
ROAD CLOSED TO THRU TRAFFIC 1/4 MILES AHEAD
TYPE III BARRICADE

ESTR

ESTR
COVERING SIGNS TYPE II
SOUTH EAST NORTH WEST
41 894 41 894
45 45

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1A

PLACE SIGN AT HARRISON AVE

MATCHLINE STA 38+50

MATCHLINE STA 44+50

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

N

SHEET 20 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 2 | SHEET 327 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2.DWG
LAYOUT NAME - 04
PLOT DATE : 1/9/2026 9:34 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

MATCHLINE STA 44+50

MATCHLINE STA 50+50

IH 41/894 SB EXIT RAMP

IH 41/894 SB ENTRANCE RAMP

ESTR
SIGNS COVERED IN STAGE 1
SOUTH EAST SOUTH
41 894 45

WO1-6
48" X 24"
TYPE III BARRICADE

TEMPORARY ASPHALTIC CURB TRANSITION

PROVIDE TEMPORARY CONNECTION BETWEEN EXISTING AND PROPOSED STORM SEWER. INCIDENTAL TO STORM SEWER INSTALLATION.

ESTR

100' TAPER

+50
46' LT

+50
26' LT

W6

12'

25'

W NATIONAL AVE R/L

+33
26' LT

45+00 46+00 47+00 48+00 49+00 50+00

SEE NOTE 3

SEE NOTE 2

SEE NOTE 1

W NATIONAL AVE

W6

25'

12'

FRONTAGE ROAD

ESTR
H

ESTR
COVERING SIGNS TYPE II
WEST NORTH
894 45
USE RIGHT LANE
USE RIGHT LANE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

ESTR
COVERING SIGNS TYPE II
NORTH WEST
41 894
45

R3-1
24"X24"

ESTR
AHEAD

TEMPORARY ASPHALTIC CURB TRANSITION

R3-2
24"X24"

ESTR
LEFT TURN YIELD ON FLASHING YELLOW ARROW

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

END ROAD WORK
G20-2A
48"X24"

S 101ST ST

ROAD CLOSED 500 FT
W20-3D
PLACE SIGN 500 FT FROM WORK ZONE

ESTR

ESTR
14'-2"

ROAD CLOSED AHEAD
W20-3A
PLACE SIGN AT HARRISON AVE

ELEC SERVICE PANEL

NOTES:
1. CONSTRUCT PROPOSED WATER MAIN AT NIGHT USING OVERNIGHT CLOSURE OF EB NATIONAL AVE. PLACE TEMPORARY ASPHALTIC SURFACE BEFORE OPENING LANES.
2. INSTALL STORM SEWER CROSSING OVERNIGHT USING FULL CLOSURE OF EB NATIONAL AVE. PLACE ASPHALTIC SURFACE TEMPORARY BEFORE REOPENING LANES.
3. CLOSE EB LEFT TURN LANE TO IH 894 SB ENTRANCE RAMP. SEE DETOUR PLAN



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 2 | SHEET 328 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2.DWG
LAYOUT NAME - 05
PLOT DATE : 1/9/2026 9:34 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

INSTALL STORM SEWER CROSSING OVERNIGHT USING CLOSURE OF WB NATIONAL AVE
PLACE TEMPORARY ASPHALTIC SURFACE BEFORE REOPENING LANES

CLOSE 100TH ST TO INSTALL STORM SEWER
NO POSTED DETOUR PROVIDED
SEE SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURE DETAIL 1

PLACE SIGN 500 FT FROM INTERSECTION

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48"X24"

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

W04-1L

R11-2R
48" X 30"
RAMP CLOSED
TYPE III BARRICADE

R3-1
24"X24"

ESTR

STOP

W NATIONAL AVE

W6

+40
21' LT

+15
25' LT

+28
25' LT

+73
72' LT

+98
69' LT

+43
26' LT

+00
26' RT

45' R

S 100TH ST R/L

161+00

162+00

51+00

52+00

53+00

54+00

55+00

56+00

25'

12'

W NATIONAL AVE R/L

IH 41/894 NB ENTRANCE RAMP

IH 41/894 NB EXIT RAMP

INSTALL STORM SEWER AND WATER MAIN CROSSING OVERNIGHT USING CLOSURE OF EB NATIONAL AVE
PLACE TEMPORARY ASPHALTIC SURFACE BEFORE REOPENING LANES

100' TAPER

MATCHLINE STA 50+50

MATCHLINE STA 56+50

SHEET 22 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 2 | SHEET 329 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2.DWG
LAYOUT NAME - 06

PLOT DATE : 1/9/2026 9:35 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

PLACE SIGN 500 FT FROM INTERSECTION

ROAD WORK AHEAD W20-1A

END ROAD WORK G20-2A 48"X24"

CLOSE 99TH ST TO INSTALL STORM SEWER
NO POSTED DETOUR PROVIDED
SEE SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES DETAIL 1

R11-2L 48" X 30" LANE CLOSED

TYPE III BARRICADE

ESTR SPEED LIMIT 35

ESTR STOP

SEE NOTE 1

MATCHLINE STA 56+50

MATCHLINE STA 62+50

57+00 58+00 59+00 60+00 61+00 62+00

131+00 132+00

S 99TH ST

W NATIONAL AVE

W NATIONAL AVE R/L

S 99TH ST R/L

118+00 119+00

+47 52' LT

+05 26' LT

+32 26' LT

+11 83' LT

+00 49' RT

45' R 32' R

25' 12'

W6

100' TAPER

HOUSE BLDG FENCE CONC CONC EDGE TRENCH DRAIN LANDSCAPE BED

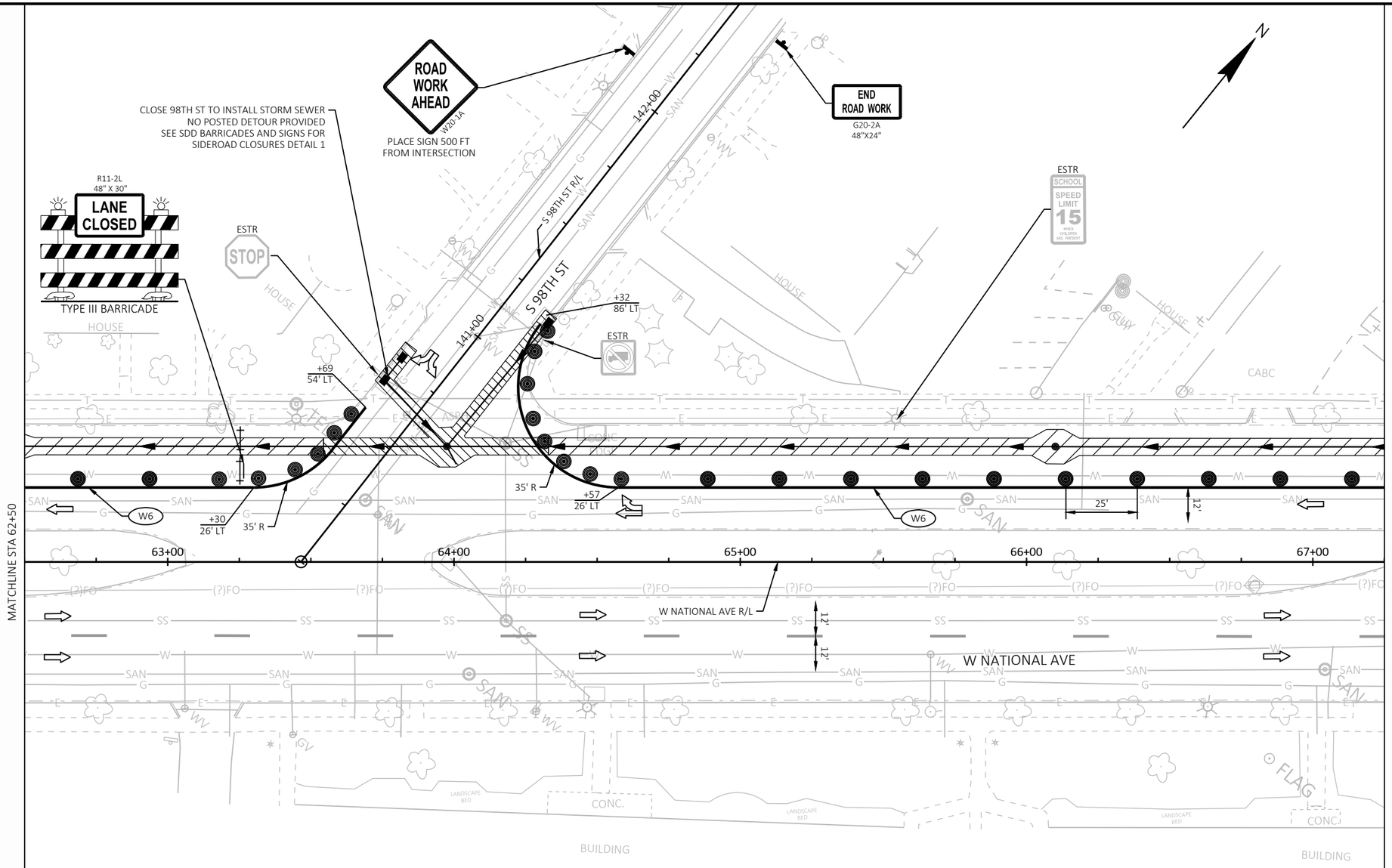
NOTES:
1. PROVIDE TEMPORARY BUS STOP IN ACCORDANCE WITH SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION". MOVE TEMPORARY BUS STOP WHEN INSTALLING STORM SEWER IN FRONT OF BUS STOP. CONTACT MCTS AT LEAST 5 BUSINESS DAYS BEFORE MOVING BUS STOP.

SHEET 23 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 2 | SHEET 330 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2.DWG
LAYOUT NAME - 07
PLOT DATE : 1/9/2026 9:35 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2




SHEET 24 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 2 | SHEET 331 | E |
|---|---|---|---|---|---|

2

2

PLACE SIGN AT 250 FT FROM INTERSECTION

ROAD WORK AHEAD W20-1A

CLOSE 97TH ST TO INSTALL STORM SEWER
NO POSTED DETOUR PROVIDED
SEE SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES DETAIL 1

ESTR STOP

R11-2L 48" X 30" LANE CLOSED

TYPE III BARRICADE

S 97TH ST R/L

S 97TH ST

END ROAD WORK G20-2A 48"X24"

ESTR

INSTALL STORM SEWER UNDER WB LANES USING OVERNIGHT CLOSURE OF WB NATIONAL AVE
PLACE ASPHALTIC SURFACE TEMPORARY BEFORE REOPENING LANE

151+00

152+00

+48 78' LT

+88 53' LT

32' R

45' R

+45 26' LT

+73 26' LT

W6

25'

12'

CLOSE DRIVEWAY

R11-2 48" X 30" ROAD CLOSED

TYPE III BARRICADE

PLACE SIGN 500 FT FROM INTERSECTION

ROAD WORK AHEAD W20-1A

NATIONAL AVE

ESTR H

W LINCOLN AVE

R11-2 48" X 30" ROAD CLOSED

TYPE III BARRICADE

ESTR ONE WAY

ESTR SPEED LIMIT 35

CLOSE DRIVEWAY

CLOSE DRIVEWAY

ESTR STOP

+79 46' LT

TW6

W6

+95 26' LT

68+00 69+00 70+00 71+00 72+00 73+00

MATCHLINE STA 67+25

MATCHLINE STA 73+00

W NATIONAL AVE

W NATIONAL AVE R/L

12'

12'

R11-2L 48" X 30" LANE CLOSED

TYPE III BARRICADE

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

SHEET 25 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 2 | SHEET 332 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2.DWG
LAYOUT NAME - 08A

PLOT DATE : 1/9/2026 9:35 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

ESTR STOP

END ROAD WORK
G20-2A
48"X24"

ESTR

W LINCOLN AVE

ESTR

ESTR

ESTR STOP

ESTR

S 95TH ST

PLACE SIGN 500 FT FROM INTERSECTION

ROAD WORK 500 FT
W20-1D

PLACE SIGN 1000 FT FROM INTERSECTION

ROAD WORK AHEAD
W20-1A

WO12-1D
48"X48"

BLDG

TW6

MATCHLINE STA 73+00

74+00 75+00 76+00 77+00 78+00 79+00

W NATIONAL AVE

TRENCH DRAIN

WALL

ESTR STOP

ESTR

W NATIONAL AVE R/L

ESTR H

ESTR

ESTR

ESTR

ESTR

S 95TH ST

ESTR STOP

ESTR ONE WAY

ESTR

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1A

NATIONAL AVE

PLACE SIGN 500 FT FROM INTERSECTION

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

SHEET 26 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 2 | SHEET 333 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2.DWG
LAYOUT NAME - 09

PLOT DATE : 1/9/2026 9:35 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

N

1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

MATCHLINE STA 38+50

MATCHLINE STA 44+50

S 102ND ST

W NATIONAL AVE

FRONTAGE ROAD

39+00 40+00 41+00 42+00 43+00 44+00

110+00 111+00 112+00 109+00

DETOUR
M4-9BR
30"X24"

SIDEWALK CLOSED AHEAD
R9-9A
30"X18"

DETOUR
M4-9BL
30"X24"

SHEET 27 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 2A | SHEET 334 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2A-PED.DWG
LAYOUT NAME - 04

PLOT DATE : 1/9/2026 9:35 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

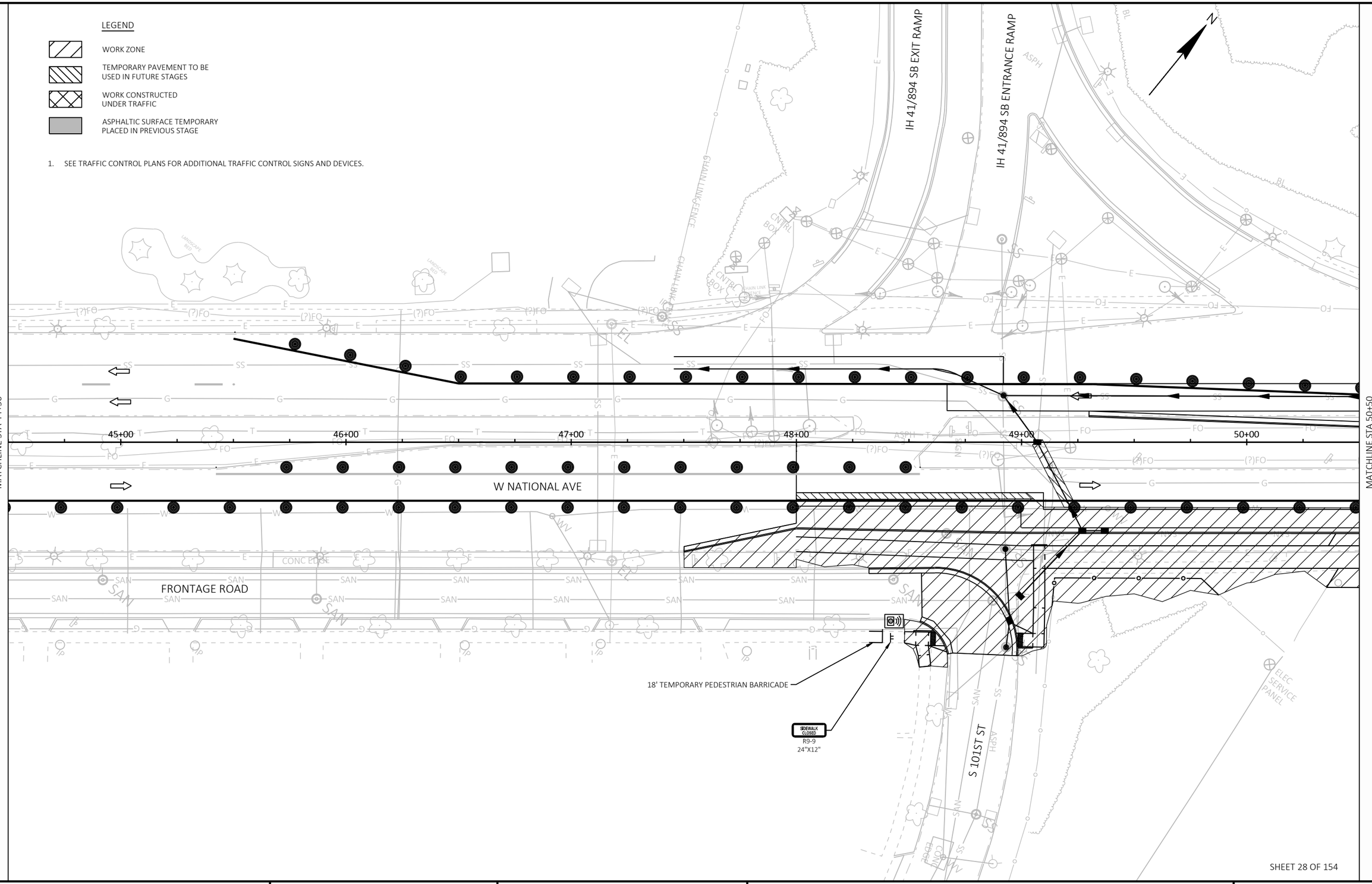
WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.




SHEET 28 OF 154

2

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 2A | SHEET 335 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2A-PED.DWG
LAYOUT NAME - 05

PLOT DATE : 1/9/2026 9:35 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

W NATIONAL AVE

MATCHLINE STA 50+50

51+00 52+00 53+00 54+00 55+00 56+00

S 100TH ST

161+00 162+00

IH 41/894 NB ENTRANCE RAMP

IH 41/894 NB EXIT RAMP

18' TEMPORARY PEDESTRIAN BARRICADE

SIDEWALK CLOSED
R9-9
24"X12"

MATCHLINE STA 56+50

SHEET 29 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 2A | SHEET 336 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2A-PED.DWG
LAYOUT NAME - 06

PLOT DATE : 1/9/2026 9:35 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

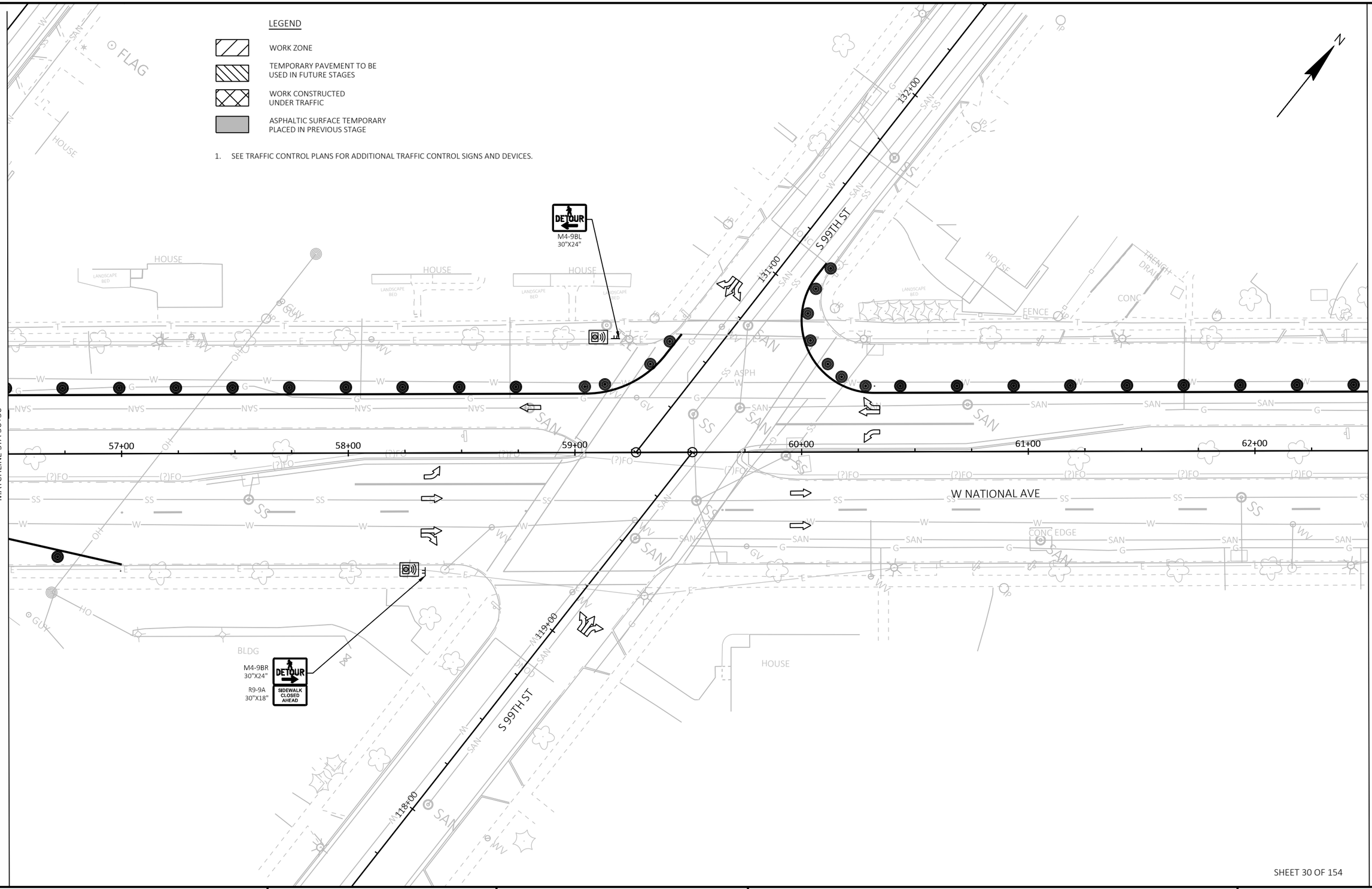
WORK ZONE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES

WORK CONSTRUCTED UNDER TRAFFIC

ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.




SHEET 30 OF 154

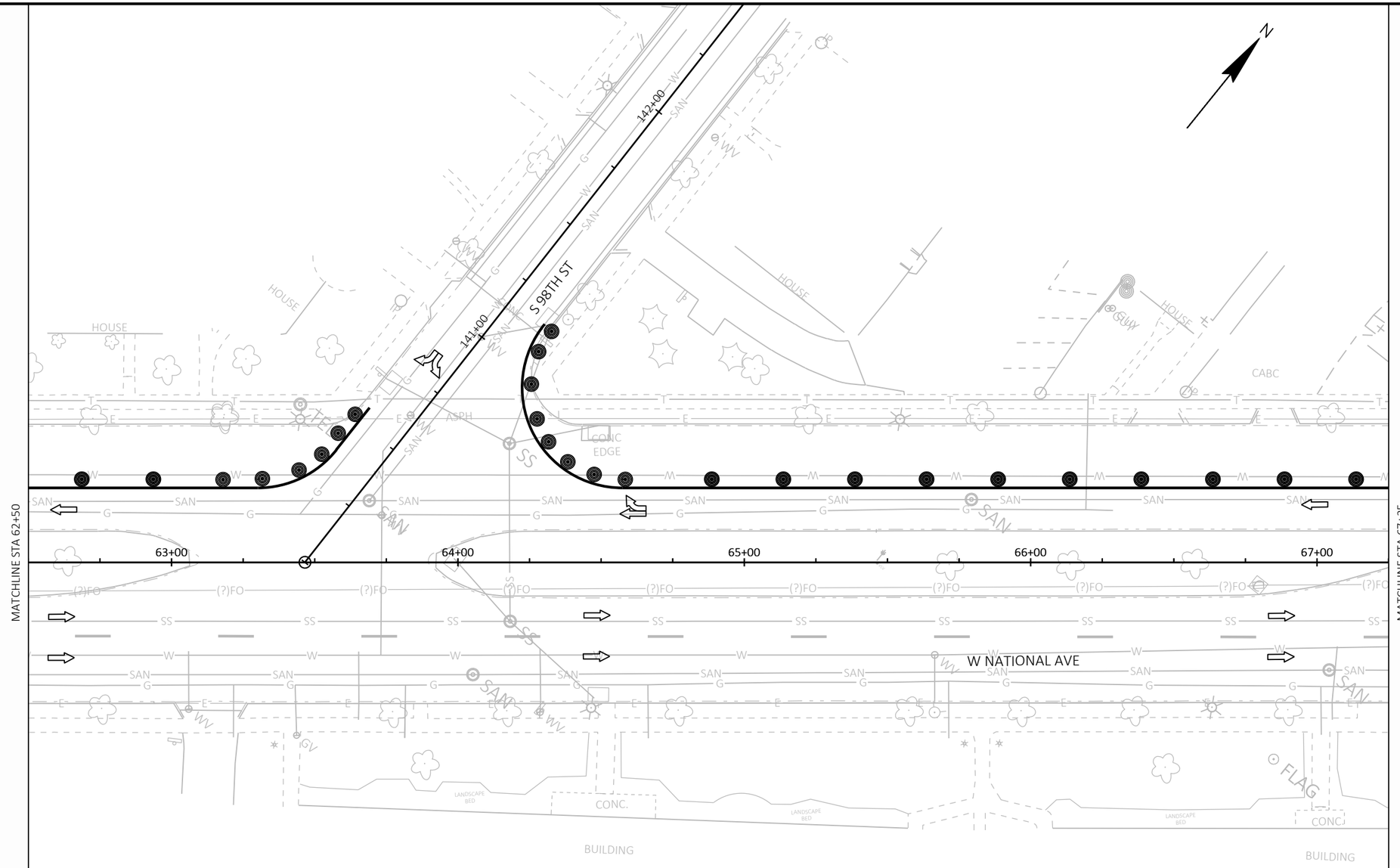
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 2A | SHEET 337 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2A-PED.DWG
LAYOUT NAME - 07

PLOT DATE : 1/9/2026 9:36 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2




1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

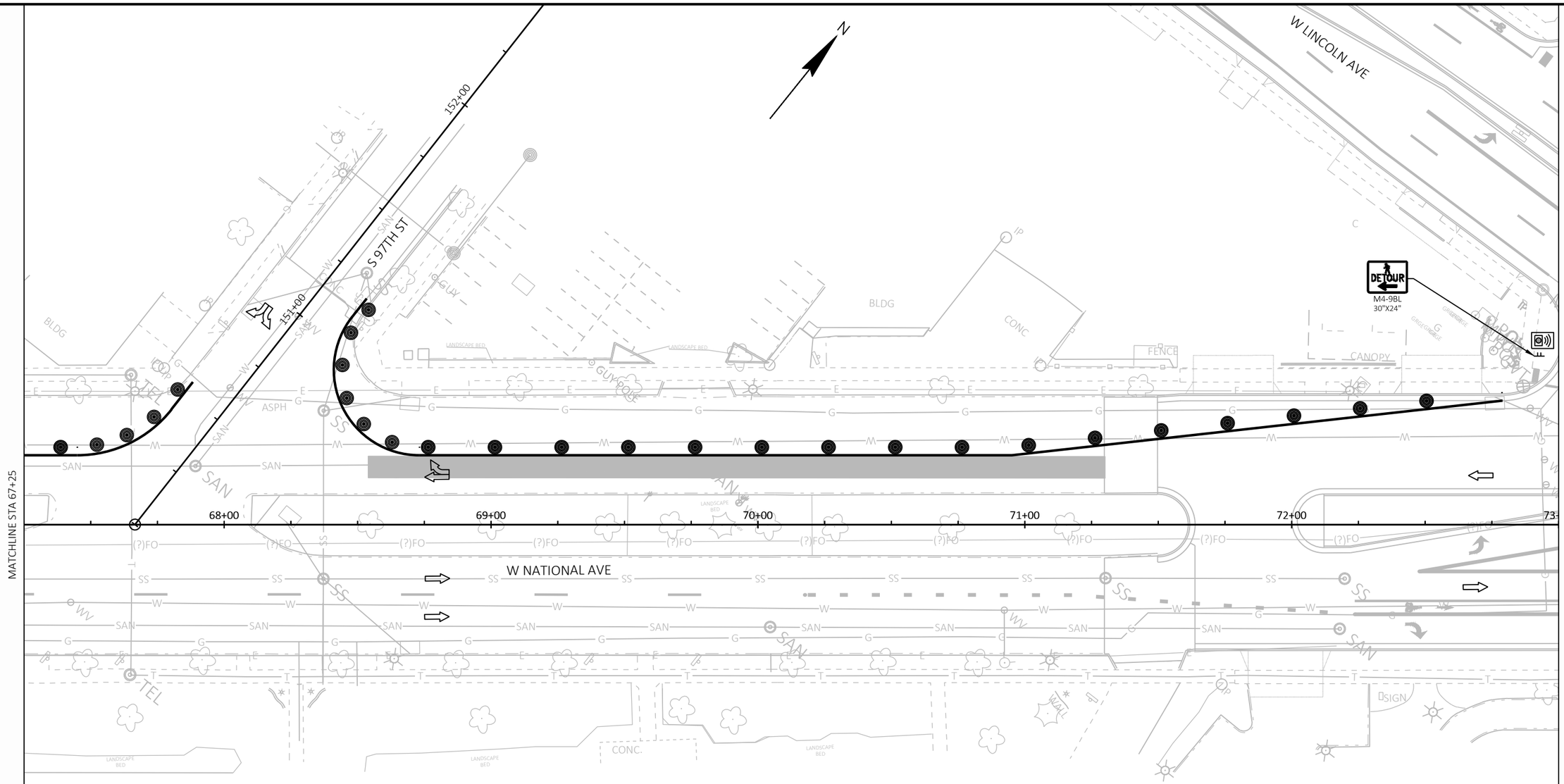
LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

SHEET 31 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 2A | SHEET 338 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2A-PED.DWG
LAYOUT NAME - 08
PLOT DATE : 1/9/2026 9:36 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42




1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

LEGEND

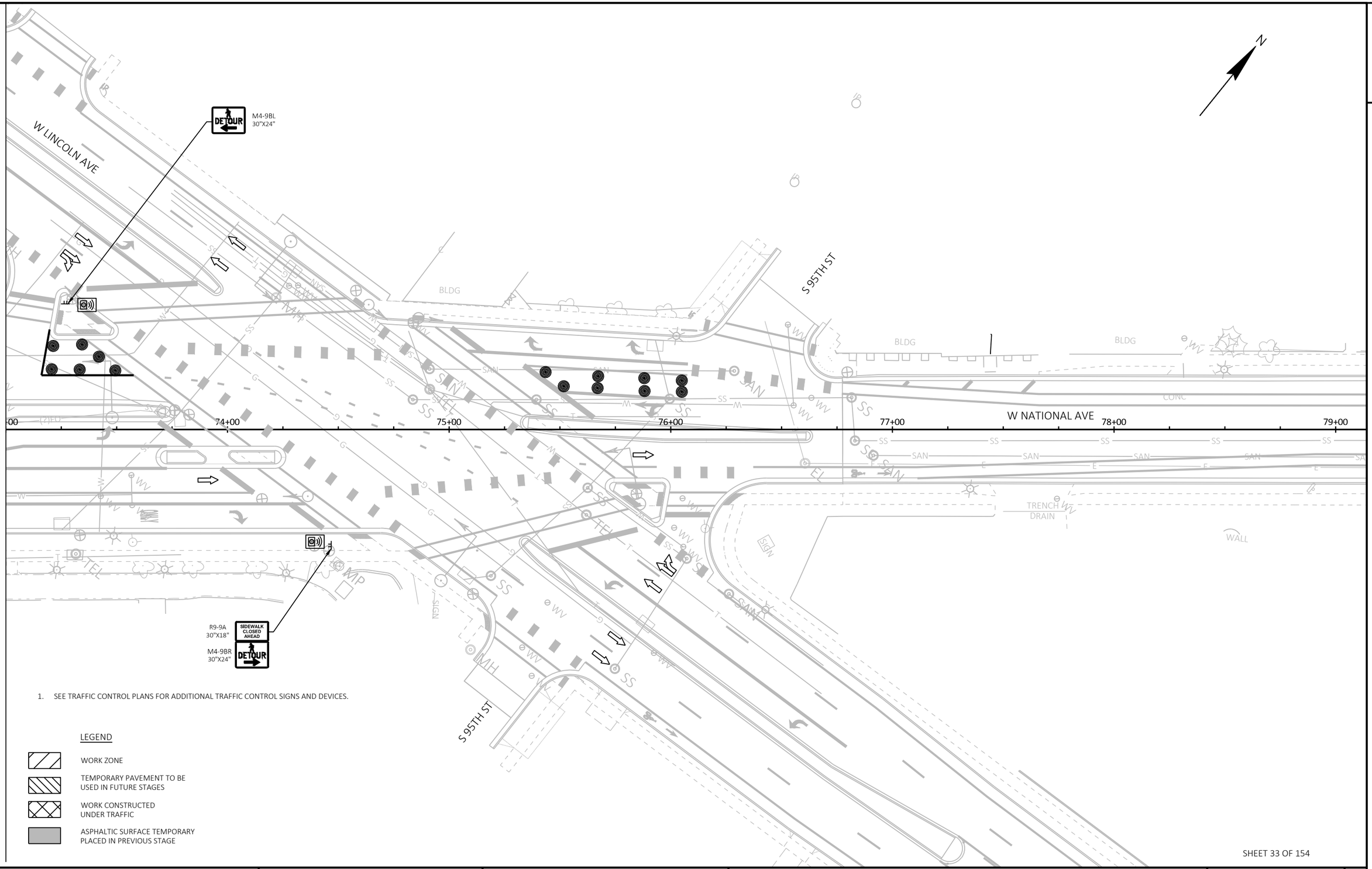
- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

SHEET 32 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 2A | SHEET 339 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2A-PED.DWG
LAYOUT NAME - 08A
PLOT DATE : 1/9/2026 9:36 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2




1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

SHEET 33 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 2A | SHEET 340 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2A-PED.DWG
LAYOUT NAME - 09
PLOT DATE : 1/9/2026 9:36 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

MATCHLINE STA 38+50

MATCHLINE STA 44+50

S 102ND ST

W NATIONAL AVE

FRONTAGE ROAD

M4-9BR
30"X24"

R9-9A
30"X18"

M4-9BL
30"X24"

SHEET 34 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 2B | SHEET 341 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2B-PED.DWG
LAYOUT NAME - 04

PLOT DATE : 1/9/2026 9:36 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

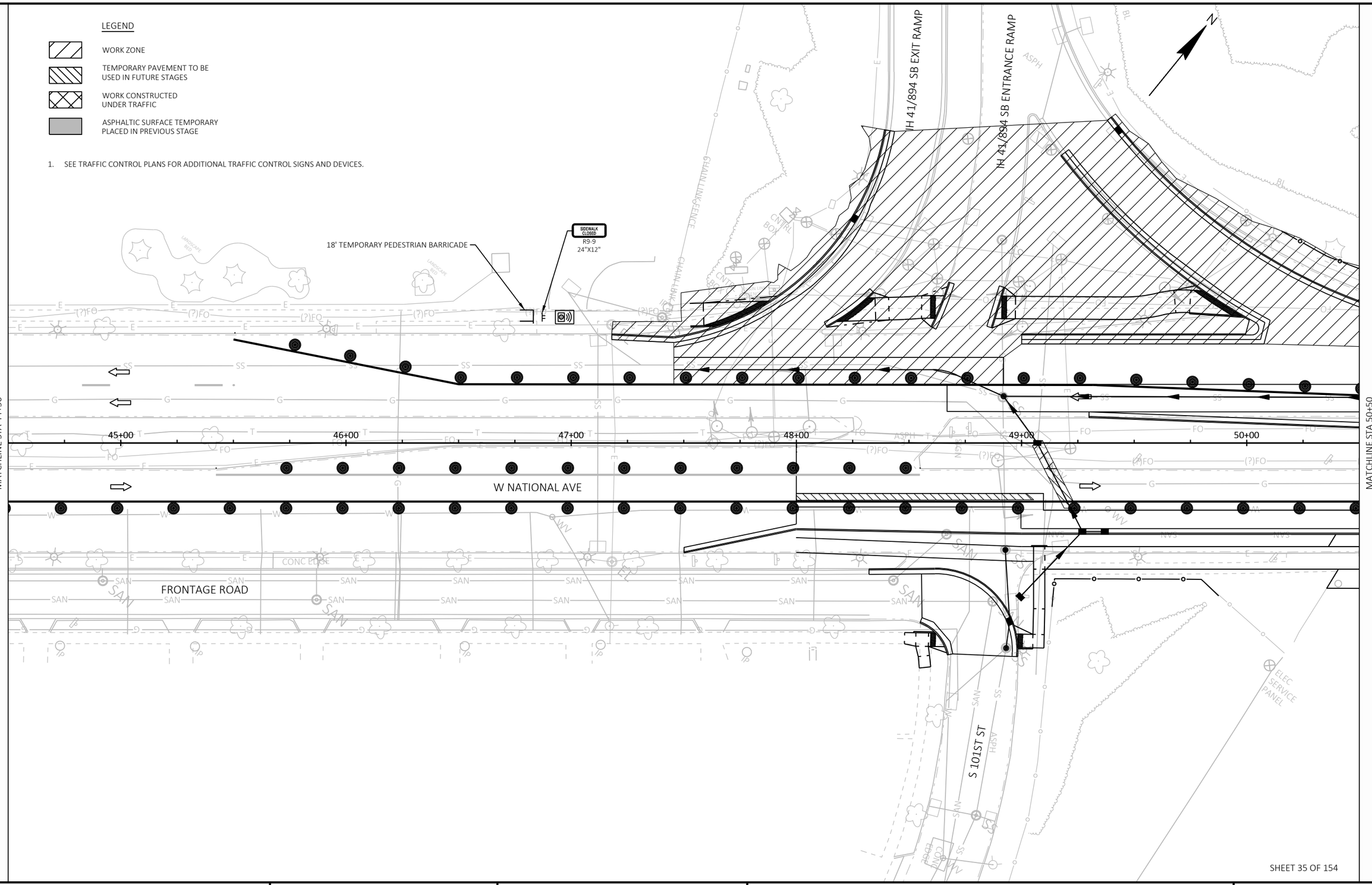
WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.




SHEET 35 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 2B | SHEET 342 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2B-PED.DWG
LAYOUT NAME - 05

PLOT DATE : 1/9/2026 9:36 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

MATCHLINE STA 50+50

W NATIONAL AVE

51+00 52+00 53+00 54+00 55+00 56+00

18' TEMPORARY PEDESTRIAN BARRICADE

SIDEWALK CLOSED R9-9 24"X12"

S 100TH ST

161+00 162+00

IH 41/894 NB ENTRANCE RAMP

IH 41/894 NB EXIT RAMP

MATCHLINE STA 56+50

SHEET 36 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 2B | SHEET 343 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2B-PED.DWG
LAYOUT NAME - 06

PLOT DATE : 1/9/2026 9:36 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

R9-9A 30"X18" SIDEWALK CLOSED AHEAD
M4-9BL 30"X24" DETOUR
M4-9BR 30"X24" DETOUR

MATCHLINE STA 56+50

MATCHLINE STA 62+50

57+00 58+00 59+00 60+00 61+00 62+00

131+00 132+00 119+00 118+00

S 99TH ST

W NATIONAL AVE

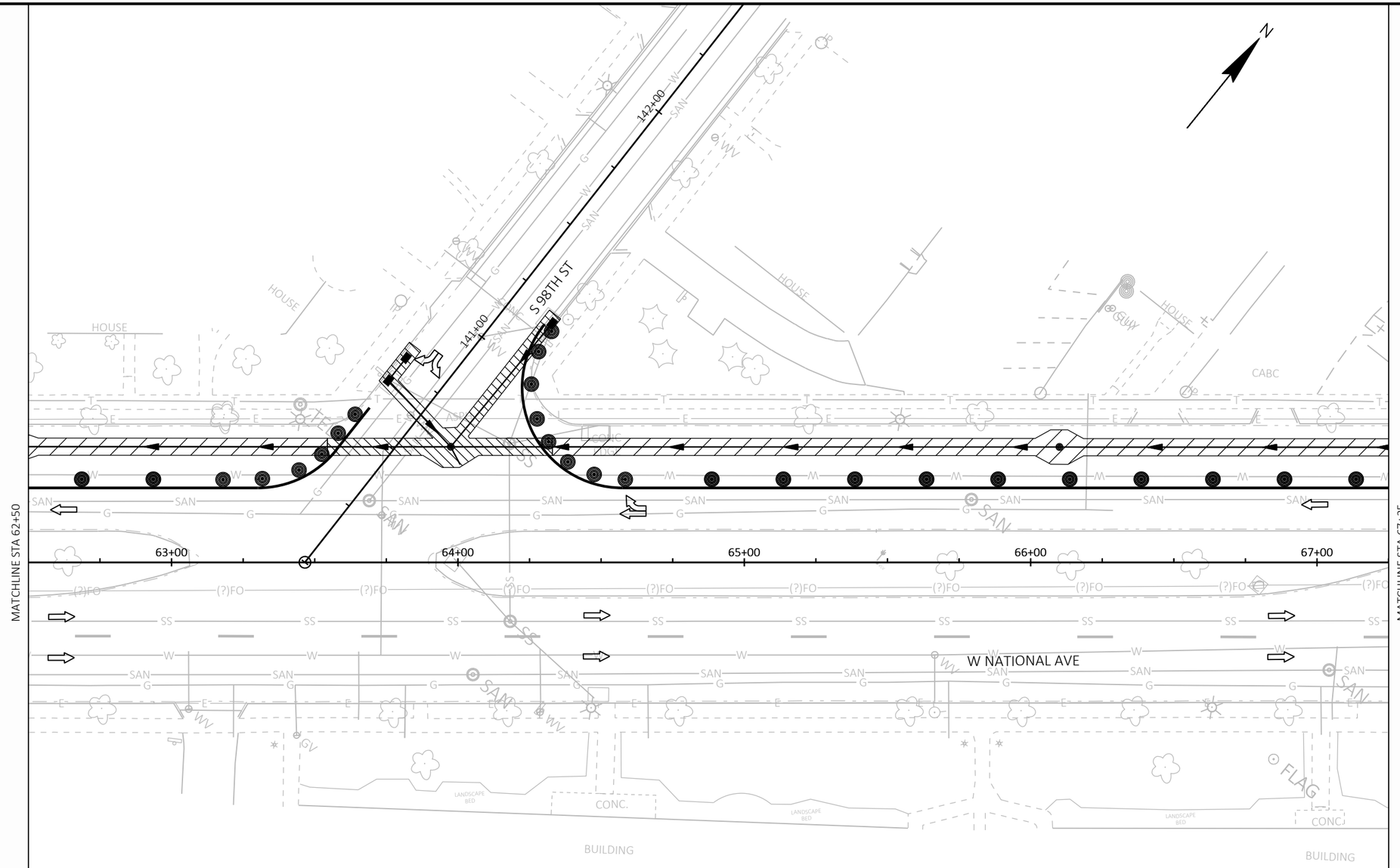
HOUSE BLDG FENCE CONC CONC EDGE TRENCH DRAIN LANDSCAPE BED FLAG



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 2B | SHEET 344 E |
|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2B-PED.DWG
LAYOUT NAME - 07
PLOT DATE : 1/9/2026 9:36 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2




1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

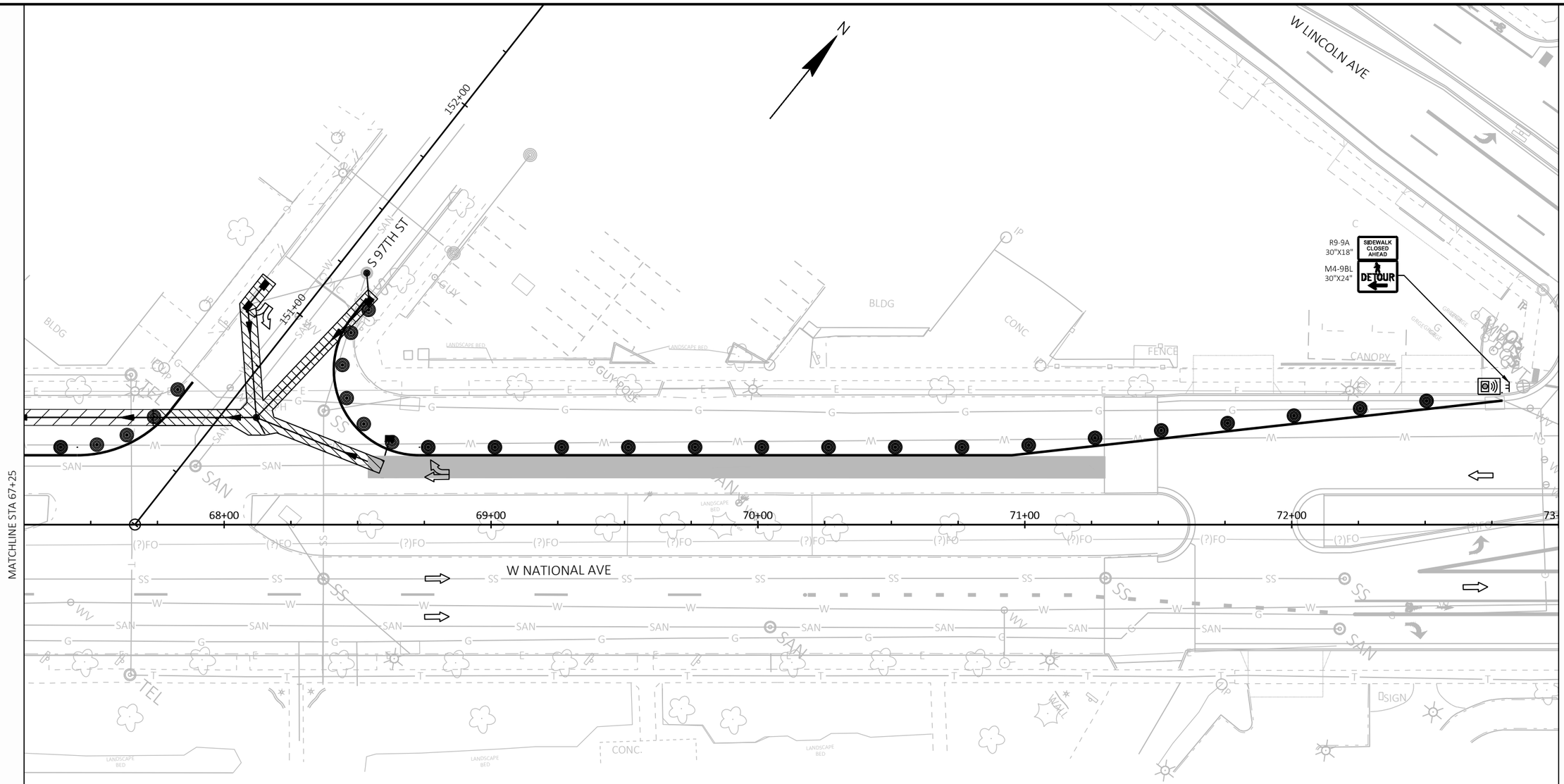
LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

SHEET 38 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 2B | SHEET 345 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2B-PED.DWG
LAYOUT NAME - 08
PLOT DATE : 1/9/2026 9:36 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42




1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

LEGEND

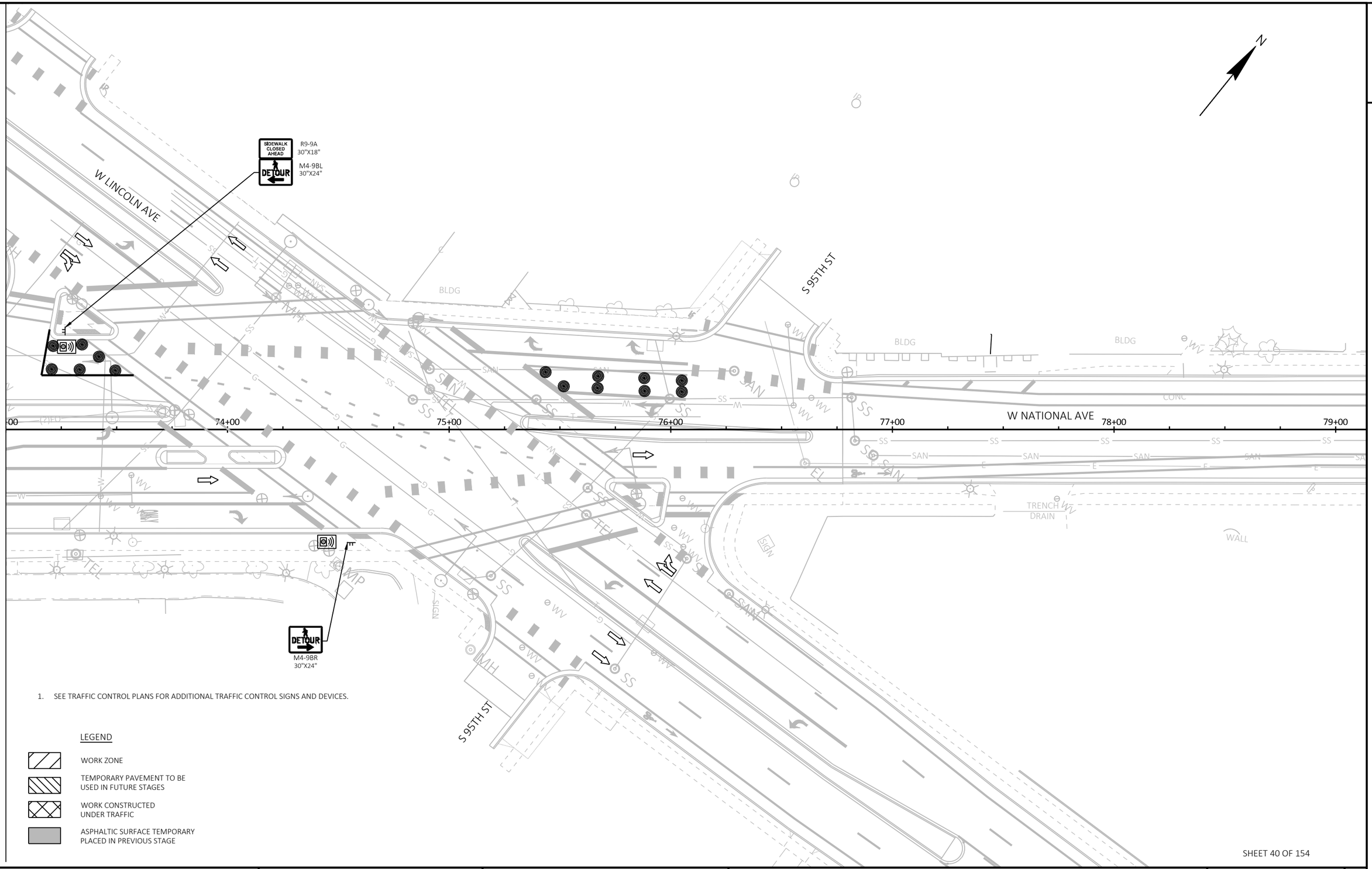
- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

SHEET 39 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 2B | SHEET 346 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2B-PED.DWG
LAYOUT NAME - 08A
PLOT DATE : 1/9/2026 9:36 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2




1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 2B | SHEET 347 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026002-TC2B-PED.DWG
LAYOUT NAME - 09
PLOT DATE : 1/9/2026 9:37 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

TRAFFIC CONTROL NOTES - STAGE 3

CONSTRUCTION:

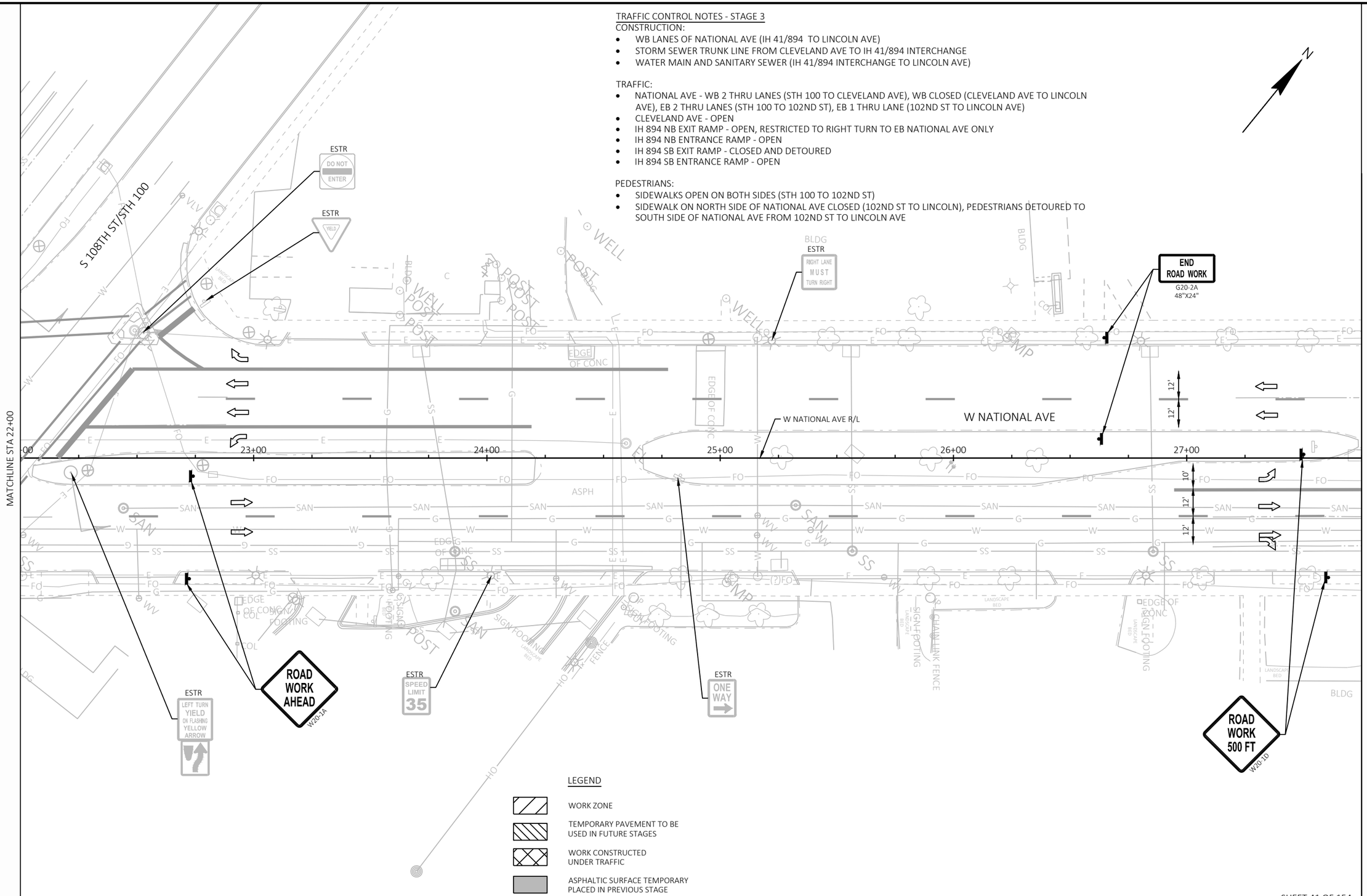
- WB LANES OF NATIONAL AVE (IH 41/894 TO LINCOLN AVE)
- STORM SEWER TRUNK LINE FROM CLEVELAND AVE TO IH 41/894 INTERCHANGE
- WATER MAIN AND SANITARY SEWER (IH 41/894 INTERCHANGE TO LINCOLN AVE)

TRAFFIC:

- NATIONAL AVE - WB 2 THRU LANES (STH 100 TO CLEVELAND AVE), WB CLOSED (CLEVELAND AVE TO LINCOLN AVE), EB 2 THRU LANES (STH 100 TO 102ND ST), EB 1 THRU LANE (102ND ST TO LINCOLN AVE)
- CLEVELAND AVE - OPEN
- IH 894 NB EXIT RAMP - OPEN, RESTRICTED TO RIGHT TURN TO EB NATIONAL AVE ONLY
- IH 894 NB ENTRANCE RAMP - OPEN
- IH 894 SB EXIT RAMP - CLOSED AND DETOURED
- IH 894 SB ENTRANCE RAMP - OPEN

PEDESTRIANS:

- SIDEWALKS OPEN ON BOTH SIDES (STH 100 TO 102ND ST)
- SIDEWALK ON NORTH SIDE OF NATIONAL AVE CLOSED (102ND ST TO LINCOLN), PEDESTRIANS DETOURED TO SOUTH SIDE OF NATIONAL AVE FROM 102ND ST TO LINCOLN AVE




LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

SHEET 41 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 3 | SHEET 348 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026003-TC3.DWG
LAYOUT NAME - 01

PLOT DATE : 1/9/2026 9:37 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. CLOSE DRIVEWAY FOR DURATION OF STAGE
2. INSTALL PROPOSED 108" STORM SEWER. INSTALL ASPHALTIC SURFACE TEMPORARY AFTER STORM SEWER IS INSTALLED.

N

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

SEE NOTE 1

SEE NOTE 2

ESTR
LEFT LANE MUST TURN LEFT

ESTR
DO NOT ENTER

ESTR
STOP

ESTR
STOP

ESTR

ESTR
YIELD

W CLEVELAND AVE

W CLEVELAND AVE R/L

W NATIONAL AVE

W NATIONAL AVE R/L

S WILDWOOD DR

S WILDWOOD DR R/L

97+00
98+00
99+00
100+00
101+00
102+00
103+00
179+00

28+00
29+00
30+00
31+00
32+00
33+00

MATCHLINE STA 27+75

MATCHLINE STA 33+75

12'
12'
10'
12'
12'
12'
12'
25'

Y6

ASPH
CONC SLAB
BLDG
COL
FLAG
POST
BENCH
TEL
BUILDING
LANDSCAPE BED

SHEET 42 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 3 | SHEET 349 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026003-TC3.DWG
LAYOUT NAME - 02

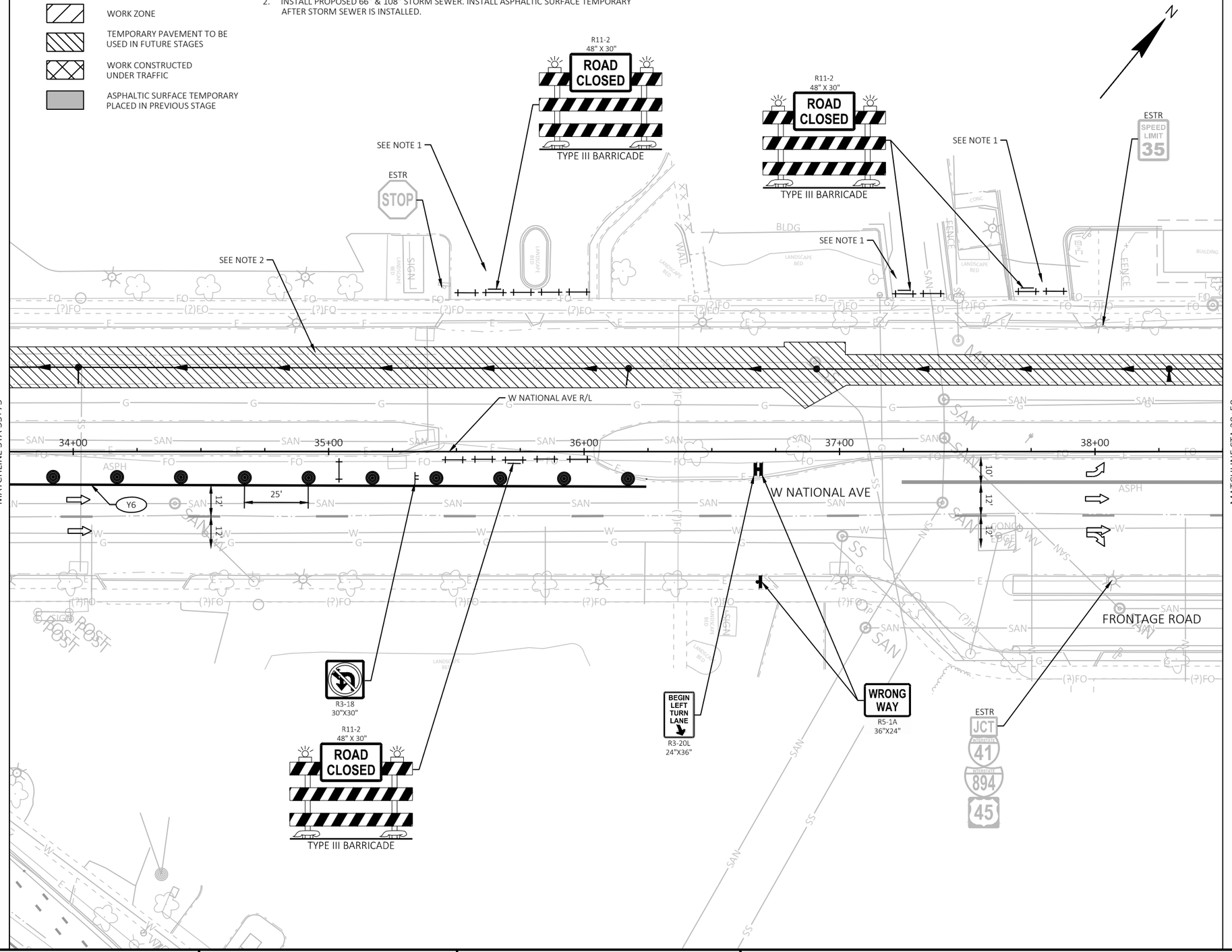
PLOT DATE : 1/9/2026 9:37 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. CLOSE DRIVEWAY FOR DURATION OF STAGE
2. INSTALL PROPOSED 66" & 108" STORM SEWER. INSTALL ASPHALTIC SURFACE TEMPORARY AFTER STORM SEWER IS INSTALLED.




SHEET 43 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 3 | SHEET 350 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\241015OO\SHEETS\026003-TC3.DWG
LAYOUT NAME - 03
PLOT DATE : 1/9/2026 9:37 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

NOTES:
1. INTERSECTION TO REMAIN OPEN EXCEPT WHEN STORM SEWER IS BEING INSTALLED ACROSS INTERSECTION. NO POSTED DETOUR. CLOSE SIDEROAD IN ACCORADANCE WITH SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES DETAIL 1.
2. INSTALL PROPOSED 66" STORM SEWER. INSTALL ASPHALTIC SURFACE TEMPORARY AFTER STORM SEWER IS INSTALLED.

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

ROAD WORK AHEAD W20-1A
PLACE SIGN AT ARTHUR AVE

END ROAD WORK G20-2A 48"X24"

R3-1 24"X24"

WO1-6 48" X 24"
TYPE III BARRICADE

R11-2 48" X 30"
ROAD CLOSED
TYPE III BARRICADE

SEE NOTE 1

SIDEWALK CLOSED AHEAD R9-9A 30"X18"
DETOUR M4-9BR 30"X24"

ESTR
LEFT TURN YIELD ON FLASHING YELLOW ARROW

R3-18 30"X30"

ESTR
RIGHT LANE MUST TURN RIGHT

SEE NOTE 2

ESTR

MATCHLINE STA 38+50

MATCHLINE STA 44+50

S 102ND ST

W NATIONAL AVE R/L

W NATIONAL AVE

39+00 40+00 41+00 42+00 43+00 44+00

110+00 111+00 112+00

R3-1 24"X24"

R3-2 24"X24"

Y6

12' 12'

25'

FRONTAGE ROAD

DO NOT ENTER R5-1 30"X30"

100' TAPER

245' MERGE TAPER

R11-2 48" X 30"
ROAD CLOSED
TYPE III BARRICADE

S 102ND ST R/L 109+00

S 102ND ST

DETOUR M4-9BL 30"X24"

R3-2 24"X24"

ESTR
ONE WAY

ESTR

ESTR
SOUTH EAST NORTH WEST
INTERSTATE 41 894 41 894
45 45

R11-2L 48" X 30"
LANE CLOSED
TYPE III BARRICADE

END ROAD WORK G20-2A 48"X24"

ROAD WORK AHEAD W20-1A
PLACE SIGN AT HARRISON AVE

SHEET 44 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 3 | SHEET 351 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026003-TC3.DWG
LAYOUT NAME - 04

PLOT DATE : 1/9/2026 9:37 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. RAMP CLOSED SEE DETOUR PLAN.
2. INSTALL PROPOSED 66" STORM SEWER. INSTALL ASPHALTIC SURFACE TEMPORARY AFTER STORM SEWER IS INSTALLED.
3. MAINTAIN ACCESS TO PARCEL FOR CITY OWNED VEHICLES.

MATCHLINE STA 44+50

MATCHLINE STA 50+50

RAMP CLOSED
R11-2R
48"X30"

SEE NOTE 1

IH 41/894 SB EXIT RAMP

IH 41/894 SB ENTRANCE RAMP

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

ESTR
SOUTH INTERSTATE 41 | EAST INTERSTATE 894 | SOUTH 45

DO NOT ENTER
R5-1
30"X30"

ESTR

SEE NOTE 3

SEE NOTE 2

W NATIONAL AVE

+87
50' LT

+59
49' LT

TW10

150' R

TY6

+68
10' LT

+27
6' LT

45+00 46+00 47+00 48+00 49+00 50+00

W NATIONAL AVE R/L

+49
14' RT

10'

25'

12'

W10

TW10

98' R

+04
26' RT

+39
13' RT

+55
13' RT

TW6

+00
26' RT

+05
34' RT

12'

FRONTAGE ROAD

DETOUR
M4-9BR
30"X24"

ESTR
WEST INTERSTATE 894 | NORTH 45
USE RIGHT LANE | USE RIGHT LANE

ESTR
NORTH INTERSTATE 41 | WEST INTERSTATE 894
45

ESTR
H

BEGIN LEFT TURN LANE
R3-20L
24"X36"

BEGIN RIGHT TURN LANE
R3-20R
24"X36"

ESTR
AHEAD

WO12-1D
48"X48"

ESTR
LEFT TURN YIELD ON FLASHING YELLOW ARROW

DETOUR
M4-9BL
30"X24"

S 101ST ST

P

12' TEMPORARY PEDESTRIAN BARRICADE

ESTR

ELEC SERVICE PANEL

ESTR
14'-2"

SHEET 45 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 3 | SHEET 352 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026003-TC3.DWG
LAYOUT NAME - 05

PLOT DATE : 1/9/2026 9:37 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

PLACE BARRICADE AND TEMPORARY AUDIBLE MESSAGE DEVICE AT LINCOLN AVE IN ACCORDANCE WITH SDD TEMPORARY PEDESTRIAN ACCOMMODATIONS SHEET F

ROAD CLOSED AHEAD W20-3A

PLACE SIGN 500 FT FROM INTERSECTION

R9-9A 30"X18"

SIDEWALK CLOSED AHEAD

M4-9BL 30"X24"

DETOUR

R11-2 48" X 30"

ROAD CLOSED

TYPE III BARRICADE

DO NOT ENTER R5-1 30"X30"

WO1-6 48" X 24"

TYPE III BARRICADE

18' TEMPORARY PEDESTRIAN BARRICADE

SIDEWALK CLOSED R9-9 24"X12"

CLOSE 100TH ST FOR DURATION OF STAGE IN ACCORDANCE WITH SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES DETAIL 1 NO POSTED DETOUR PROVIDED

ESTR

PULL DRUMS BACK TO PROVIDED TURNING ROOM FOR WB-67 TRUCK

S 100TH ST R/L

S 100TH ST

161+00

162+00

END ROAD WORK G20-2A 48"X24"

SIDEWALK CLOSED R9-9 24"X12"

W NATIONAL AVE R/L

W NATIONAL AVE

51+00 52+00 53+00 54+00 55+00 56+00

MATCHLINE STA 50+50

MATCHLINE STA 56+50

12'

12'

+23 26' RT

+26 26' RT

+26 14' RT

+74 33' RT

TW10

TW10

25'

TY6

24' TEMPORARY PEDESTRIAN BARRICADE

DETOUR M4-9BR 30"X24"

+71 26' RT

TEMPORARY PEDESTRIAN SURFACE ASPHALT

ESTR

WRONG WAY R5-1A 36"X24"

DO NOT ENTER R5-1 30"X30"

24' TEMPORARY PEDESTRIAN BARRICADE

DETOUR M4-9BL 30"X24"

WO1-6 48" X 24"

R11-2L 48" X 30"

LANE CLOSED

TYPE III BARRICADE

TYPE III BARRICADE

WO1-4R

WO12-1D 48"X48"

M3-4 24"X12"

M3-1 24"X12" NORTH INTERSTATE 41

M1-1 24"X24"

M1-4 24"X24" 45

M6-2 21"X21"

WEST INTERSTATE 894 M1-1A 30"X24"

M6-2 21"X21"

IH 41/894 NB ENTRANCE RAMP

RAMP METERED WHEN FLASHING W3-8 48"X48"

ESTR

R3-1 24"X24"

IH 41/894 NB EXIT RAMP

127' R

+44 113' RT

RAMP RESTRICTED TO RIGHT TURN ONLY FOR DURATION OF STAGE

MATCHLINE A-A

SHEET 46 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 3 | SHEET 353 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026003-TC3.DWG
LAYOUT NAME - 06

PLOT DATE : 1/9/2026 9:37 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

WORK ZONE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES

WORK CONSTRUCTED UNDER TRAFFIC

ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

PLACE SIGN 500 FT FROM INTERSECTION

ROAD CLOSED AHEAD W20-3A

R11-2 48" X 30"

ROAD CLOSED

TYPE III BARRICADE

END ROAD WORK G20-2A 48"X24"

MAINTAIN PEDESTRIAN ACCESS FROM DRIVEWAY TO 100TH ST OR 99TH ST

CLOSE 99TH ST FOR DURATION OF STAGE IN ACCORDANCE WITH SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES DETAIL 1. NO POSTED DETOUR PROVIDED

MAINTAIN ONE PEDESTRIAN CROSSING ACROSS NATIONAL AVE AT ALL TIMES. SEE TEMPORARY PEDESTRIAN DETAILS FOR ADDITIONAL TEMPORARY PEDESTRIAN SIGNING AND TRAFFIC CONTROL DEVICES.

MAINTAIN PEDESTRIAN ACCESS FROM PARCEL TO 99TH ST OR 98TH ST

MATCHLINE STA 56+50

MATCHLINE STA 62+50

W NATIONAL AVE

W NATIONAL AVE R/L

S 99TH ST

S 99TH ST R/L

57+00 58+00 59+00 60+00 61+00 62+00

131+00 132+00 119+00 118+00

R3-18 30"X30"

DO NOT ENTER R5-1 30"X30"

WRONG WAY R5-1A 36"X24"

R11-2L 48" X 30" LANE CLOSED TYPE III BARRICADE

ESTR

STOP

ONE WAY R6-1R 36"X12"

R3-2 24"X24"

ONE WAY R6-2R 24"X30"

R11-2 48" X 30" ROAD CLOSED TYPE III BARRICADE

WO1-6 48" X 24" TYPE III BARRICADE

ESTR SPEED LIMIT 35

INSTALL SANITARY SEWER AND WATER MAIN SERVICE LINES OVERNIGHT USING CLOSURE OF EB NATIONAL AVE. BACKFILL AND PAVE WITH ASPHALTIC SURFACE TEMPORARY BEFORE OPENING ROADWAY.

END ROAD WORK G20-2A 48"X24"

ROAD WORK AHEAD W20-1A

PLACE SIGN 300 FT FROM INTERSECTION

SHEET 47 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 3 | SHEET 354 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026003-TC3.DWG
LAYOUT NAME - 07

PLOT DATE : 1/9/2026 9:37 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

PLACE BARRICADE AND TEMPORARY AUDIBLE MESSAGE DEVICE AT LINCOLN AVE IN ACCORDANCE WITH SDD TEMPORARY PEDESTRIAN ACCOMMODATIONS SHEET F

R9-9A 30"X18"
M4-9BL 30"X24"
SIDEWALK CLOSED AHEAD
DETOUR

PLACE SIGN 500 FT FROM INTERSECTION

ROAD CLOSED AHEAD
W20-3A

18' TEMPORARY PEDESTRIAN BARRICADE

SIDEWALK CLOSED
R9-9
24"X12"

CLOSE 98TH ST FOR DURATION OF STAGE IN ACCORDANCE WITH SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES DETAIL 1
NO POSTED DETOUR PROVIDED

MAINTAIN PEDESTRIAN ACCESS TO PARCEL FROM 99TH ST OR 98TH ST

S 98TH ST R/L
S 98TH ST
142+00
141+00

R9-9A 30"X18"
M4-9BL 30"X24"
SIDEWALK CLOSED AHEAD
DETOUR

PLACE BARRICADE AND TEMPORARY AUDIBLE MESSAGE DEVICE AT LINCOLN AVE IN ACCORDANCE WITH SDD TEMPORARY PEDESTRIAN ACCOMMODATIONS SHEET F

END ROAD WORK
G20-2A
48"X24"

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

18' TEMPORARY PEDESTRIAN BARRICADE

SIDEWALK CLOSED
R9-9
24"X12"

63+00 64+00 65+00 66+00 67+00

W NATIONAL AVE R/L

25'
Y6
12'
W NATIONAL AVE

MATCHLINE STA 62+50

MATCHLINE STA 67+25

ONE WAY
R6-2R
24"X30"

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

WO1-6
48" X 24"
TYPE III BARRICADE

INSTALL SANITARY SEWER AND WATER MAIN SERVICE LINES OVERNIGHT USING CLOSURE OF EB NATIONAL AVE. BACKFILL AND PAVE WITH ASPHALTIC SURFACE TEMPORARY BEFORE OPENING ROADWAY.

HOUSE
BUILDING
CONC.
LANDSCAPE BED
FLAG

SHEET 48 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 3 | SHEET 355 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026003-TC3.DWG
LAYOUT NAME - 08

PLOT DATE : 1/9/2026 9:38 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

PLACE BARRICADE AND TEMPORARY AUDIBLE MESSAGE DEVICE AT LINCOLN AVE IN ACCORDANCE WITH SDD TEMPORARY PEDESTRIAN ACCOMMODATIONS SHEET F

R9-9A 30"X18"
SIDEWALK CLOSED AHEAD
M4-9BL 30"X24"
DETOUR

PLACE SIGN 250 FT FROM INTERSECTION
ROAD CLOSED AHEAD
W20-3A

18' TEMPORARY PEDESTRIAN BARRICADE
R9-9 24"X12"
SIDEWALK CLOSED

CLOSE 97TH ST FOR DURATION OF STAGE IN ACCORDANCE WITH SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES DETAIL 1
NO POSTED DETOUR PROVIDED

S 97TH ST R/L
S 97TH ST
152+00
151+00

END ROAD WORK
G20-2A
48"X24"

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

18' TEMPORARY PEDESTRIAN BARRICADE
R9-9 24"X12"
SIDEWALK CLOSED

SEE NOTE 1

PLACE SIGN 500 FT FROM INTERSECTION
ROAD WORK AHEAD
W20-1A
NATIONAL AVE

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

ESTR
W LINCOLN AVE
ESTR
ONE WAY
R3-1
24"X24"
ESTR
STOP
ESTR
SPEED LIMIT 35

SEE NOTE 1
R9-9 24"X12"
SIDEWALK CLOSED
18' TEMPORARY PEDESTRIAN BARRICADE
DETOUR
M4-9BL
30"X24"

68+00
69+00
70+00
71+00
72+00
73+

W NATIONAL AVE R/L
W NATIONAL AVE
25'
12'
+63
26' RT
+53
22' RT
+69
29' RT
+54
34' RT
+24
34' RT
TWS
TY6
TW6
Y6
TW10

BEGIN LEFT TURN LANE
R3-20L
24"X36"

INSTALL SANITARY SEWER AND WATER MAIN SERVICE LINES OVERNIGHT USING CLOSURE OF EB NATIONAL AVE. BACKFILL AND PAVE WITH ASPHALTIC SURFACE TEMPORARY BEFORE OPENING ROADWAY.

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

WO1-6
48" X 24"
TYPE III BARRICADE

MATCHLINE STA 67+25

MATCHLINE STA 73+00

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. CLOSE DRIVEWAY FOR DURATION OF STAGE

SHEET 49 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 3 | SHEET 356 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026003-TC3.DWG
LAYOUT NAME - 08A
PLOT DATE : 1/9/2026 9:38 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

WORK ZONE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES

WORK CONSTRUCTED UNDER TRAFFIC

ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

N

ESTR STOP

END ROAD WORK
G20-2A
48"X24"

WB NATIONAL AVE CLOSED TO ALL TRAFFIC FOR DURATION OF STAGE

DETOUR
M4-9BL
30"X24"

SIDEWALK CLOSED
R9-9
24"X12"

DETOUR
M4-9BL
30"X24"

W LINCOLN AVE

ESTR

TW6

ESTR

ESTR STOP

ESTR USE CROSSWALK

WO12-1D
48"X48"

S 95TH ST

PLACE SIGN 500 FT FROM INTERSECTION

ROAD CLOSED 500 FT
W20-3D

PLACE SIGN 1000 FT FROM INTERSECTION

ROAD CLOSED AHEAD
W20-3A

BLDG

TA

W NATIONAL AVE R/L

W NATIONAL AVE

74+00 75+00 76+00 77+00 78+00 79+00

MATCHLINE STA 73+00

ESTR H

ESTR

ESTR DETOUR
M4-9BR
30"X24"

DETOUR
M4-9BL
30"X24"

ESTR

ESTR USE CROSSWALK

ESTR

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

S 95TH ST

ESTR STOP

ESTR ONE WAY

ESTR USE CROSSWALK

END ROAD WORK
G20-2A
48"X24"

TRENCH DRAIN

WALL

ESTR STOP

ESTR

R3-18
30"X30"

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

TY6

ROAD WORK AHEAD
W20-3A

NATIONAL AVE

PLACE SIGN 500 FT FROM INTERSECTION

SHEET 50 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 3 | SHEET 357 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026003-TC3.DWG
LAYOUT NAME - 09

PLOT DATE : 1/9/2026 9:38 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48"X24"

N

I-41/894 NB ENTRANCE RAMP

I-41/894 NB EXIT RAMP

TRANSMISSION TOWER

TRANSMISSION TOWER

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

TY6

+23
323' RT

25'

+39
233' RT

MATCHLINE A-A

ESTR
State Fair Park

ESTR
SIGN COVERED IN STAGE 1

ESTR
WRONG WAY

ESTR
SIGN COVERED IN STAGE 1
National Ave
NORTH
SOUTH

ESTR
WRONG WAY

2

SHEET 51 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 3 | SHEET 358 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026003-TC3.DWG
LAYOUT NAME - 13

PLOT DATE : 1/9/2026 9:38 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

MATCHLINE STA 56+50

MAINTAIN PEDESTRIAN ACCESS FROM DRIVEWAY TO 100TH ST OR 99TH STREET

TEMPORARY PEDESTRIAN CURB RAMP
TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD

R9-9 24"X12"
SIDEWALK CLOSED
M4-9BL 30"X24"
DETOUR

TEMPORARY PEDESTRIAN BARRICADE

TEMPORARY PEDESTRIAN SURFACE MATTING

M4-9BR 30"X24"
DETOUR

TWX

S 99TH ST

132+00

131+00

TEMPORARY PEDESTRIAN BARRICADE

TEMPORARY PEDESTRIAN CURB RAMP
TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD

TEMPORARY PEDESTRIAN SURFACE MATTING

M4-9BR 30"X24"
DETOUR

M4-9BL 30"X24"
DETOUR

MAINTAIN PEDESTRIAN ACCESS FROM PARCEL TO 99TH ST OR 98TH ST

57+00 58+00 59+00 60+00 61+00 62+00

R9-9 24"X12"
SIDEWALK CLOSED

TEMPORARY PEDESTRIAN BARRICADE

W NATIONAL AVE

TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD

119+00

S 99TH ST

118+00

R9-9A 30"X18"
SIDEWALK CLOSED AHEAD
M4-9BR 30"X24"
DETOUR

M4-9BL 30"X24"
DETOUR

MATCHLINE STA 62+50

SHEET 52 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 3A | SHEET 359 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026003A-TC3A.DWG
LAYOUT NAME - 07

PLOT DATE : 1/9/2026 9:38 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES
2. TEMPORARY PEDESTRIAN SURFACE MATTING. REMOVE EXISTING PAVEMENT AND GRADE SURFACE TO A MAXIMUM OF 7% RUNNING SLOPE BEFORE PLACING MATTING.
3. TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD
4. TEMPORARY PEDESTRIAN BARRICADE

MATCHLINE STA 56+50

MATCHLINE STA 62+50

TEMPORARY PEDESTRIAN CURB RAMP WITH TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD PLACED IN PREVIOUS STAGE

TEMPORARY PEDESTRIAN SURFACE MATTING PLACED IN PREVIOUS STAGE

TEMPORARY PEDESTRIAN BARRICADE

TEMPORARY PEDESTRIAN BARRICADE PLACED IN PREVIOUS STAGE

MAINTAIN PEDESTRIAN ACCESS FROM DRIVEWAY TO 100TH ST OR 99TH STREET

TEMPORARY PEDESTRIAN BARRICADE PLACED IN PREVIOUS STAGE

TEMPORARY PEDESTRIAN CURB RAMP WITH TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD PLACED IN PREVIOUS STAGE

TEMPORARY PEDESTRIAN SURFACE MATTING

TEMPORARY PEDESTRIAN BARRICADE

MAINTAIN PEDESTRIAN ACCESS FROM PARCEL TO 99TH ST OR 98TH ST

R9-9A 30"X18" — SIDEWALK CLOSED AHEAD / DETOUR — M4-9BR 30"X24"

M4-9BL 30"X24"

R9-9 24"X12" — SIDEWALK CLOSED / DETOUR — M4-9BL 30"X24"

M4-9BL 30"X24"

R9-9 24"X12" — SIDEWALK CLOSED / DETOUR — M4-9BR 30"X24"

M4-9BR 30"X24"

R9-9A 30"X18" — SIDEWALK CLOSED AHEAD / DETOUR — M4-9BL 30"X24"

R9-9 24"X12" — SIDEWALK CLOSED

SEE NOTE 2

SEE NOTE 3

SEE NOTE 4

57+00 58+00 59+00 60+00 61+00 62+00

131+00 132+00 119+00 118+00

S 99TH ST

W NATIONAL AVE

SHEET 53 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 3B | SHEET 360 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026003B-TC3B.DWG
LAYOUT NAME - 07

PLOT DATE : 1/9/2026 9:38 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

TRAFFIC CONTROL NOTES - STAGE 4

CONSTRUCTION:

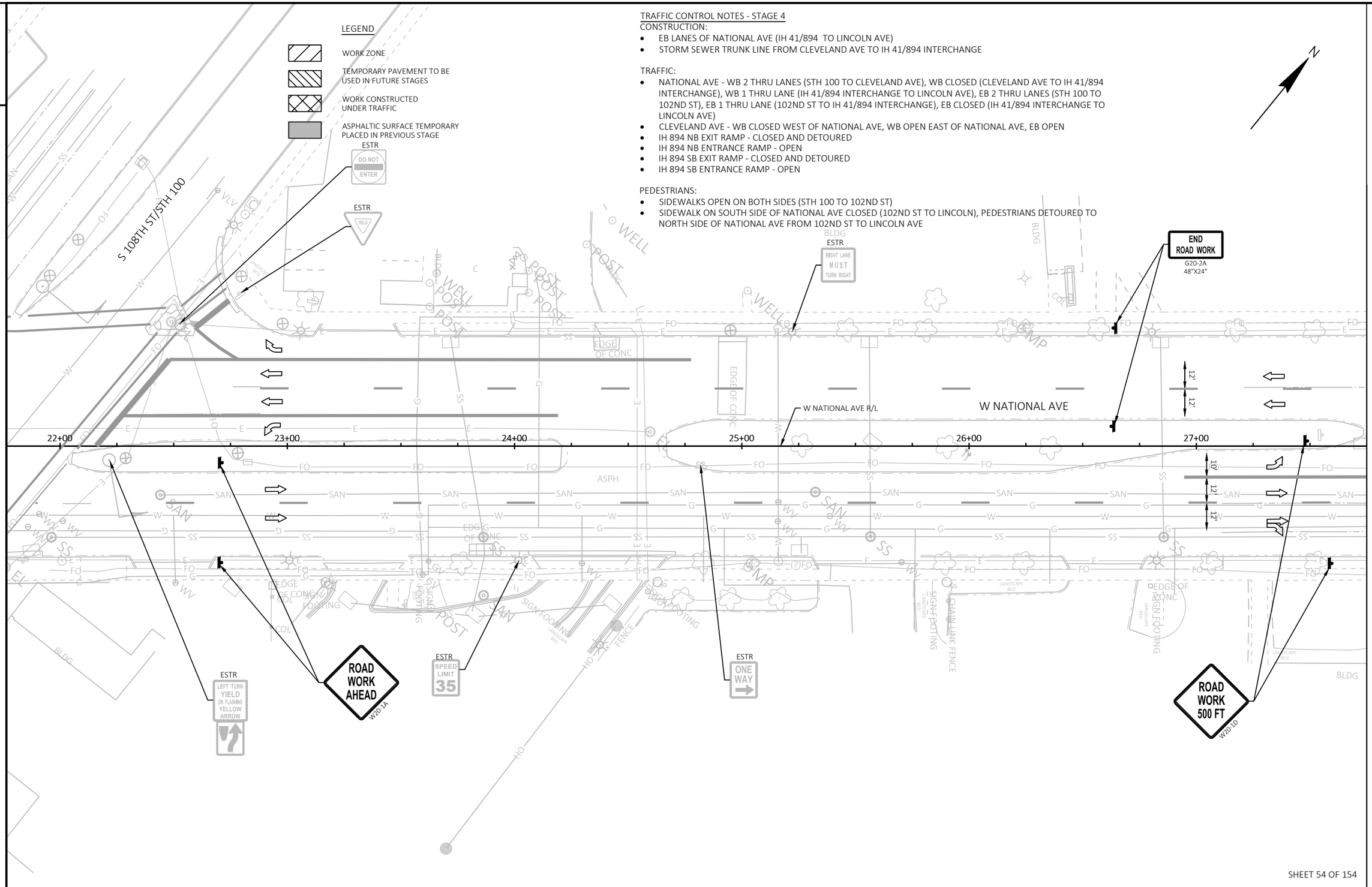
- EB LANES OF NATIONAL AVE (IH 41/894 TO LINCOLN AVE)
- STORM SEWER TRUNK LINE FROM CLEVELAND AVE TO IH 41/894 INTERCHANGE

TRAFFIC:

- NATIONAL AVE - WB 2 THRU LANES (STH 100 TO CLEVELAND AVE), WB CLOSED (CLEVELAND AVE TO IH 41/894 INTERCHANGE), WB 1 THRU LANE (IH 41/894 INTERCHANGE TO LINCOLN AVE), EB 2 THRU LANES (STH 100 TO 102ND ST), EB 1 THRU LANE (102ND ST TO IH 41/894 INTERCHANGE), EB CLOSED (IH 41/894 INTERCHANGE TO LINCOLN AVE)
- CLEVELAND AVE - WB CLOSED WEST OF NATIONAL AVE, WB OPEN EAST OF NATIONAL AVE, EB OPEN
- IH 894 NB EXIT RAMP - CLOSED AND DETOURED
- IH 894 NB ENTRANCE RAMP - OPEN
- IH 894 SB EXIT RAMP - CLOSED AND DETOURED
- IH 894 SB ENTRANCE RAMP - OPEN

PEDESTRIANS:

- SIDEWALKS OPEN ON BOTH SIDES (STH 100 TO 102ND ST)
- SIDEWALK ON SOUTH SIDE OF NATIONAL AVE CLOSED (102ND ST TO LINCOLN), PEDESTRIANS DETOURED TO NORTH SIDE OF NATIONAL AVE FROM 102ND ST TO LINCOLN AVE




SHEET 54 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 4 | SHEET 361 | E |
|---|---|---|---|---|---|

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. CLOSE DRIVEWAY FOR DURATION OF STAGE.
2. REOPEN WB CLEVELAND AVE IN STAGE 5 CONFIGURATION AFTER STORM SEWER INSTALLATION IS COMPLETE.
3. REOPEN WB NATIONAL AVE BETWEEN CLEVELAND AVE AND IH 41/894 INTERCHANGE IN STAGE 5 CONFIGURATION ONCE STORM SEWER INSTALLATION IS COMPLETE.
4. INSTALL PROPOSED 108" STORM SEWER. INSTALL ASPHALTIC SURFACE TEMPORARY AFTER STORM SEWER IS INSTALLED.

MATCHLINE STA 27+75

MATCHLINE STA 33+75

MATCHLINE STA 97+75

W CLEVELAND AVE

W CLEVELAND AVE R/L

98+00

99+00

100+00

101+00

102+00

SEE NOTE 1

SEE NOTE 2

SEE NOTE 3

SEE NOTE 4

ESTR
LEFT LANE MUST TURN LEFT

ESTR
DO NOT ENTER

ESTR
STOP

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

W NATIONAL AVE

W NATIONAL AVE R/L

28+00

29+00

30+00

31+00

32+00

33+00

12'

12'

10'

12'

12'

25'

12'

12'

S WILDWOOD DR

S WILDWOOD DR R/L

179+00

ESTR
STOP

R3-2
24"X24"

ESTR

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

ESTR
YIELD

100' R
+94
20' LT
+06
8' LT

W CLEVELAND AVE

TW10

MATCHLINE STA 102+25

SHEET 55 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 4 | SHEET 362 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004-TC4.DWG
LAYOUT NAME - 02

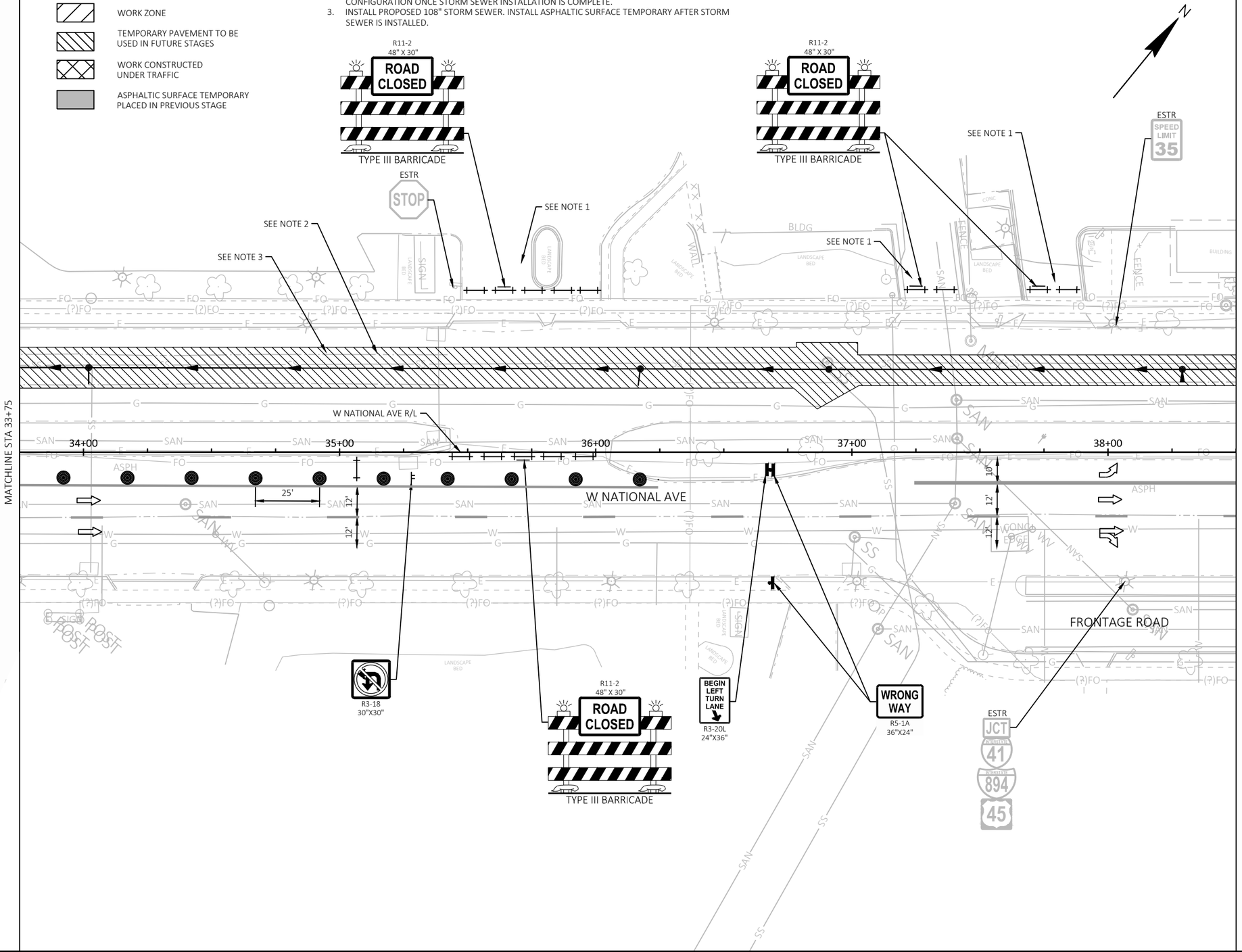
PLOT DATE : 1/9/2026 9:38 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. CLOSE DRIVEWAY FOR DURATION OF STAGE.
2. REOPEN WB NATIONAL AVE BETWEEN CLEVELAND AVE AND IH 41/894 INTERCHANGE IN STAGE 5 CONFIGURATION ONCE STORM SEWER INSTALLATION IS COMPLETE.
3. INSTALL PROPOSED 108" STORM SEWER. INSTALL ASPHALTIC SURFACE TEMPORARY AFTER STORM SEWER IS INSTALLED.






| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 4 | SHEET 363 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004-TC4.DWG
LAYOUT NAME - 03
PLOT DATE : 1/9/2026 9:38 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTES:
1. INTERSECTION TO REMAIN OPEN EXCEPT WHEN SEWER IS BEING INSTALLED ACROSS INTERSECTON. NO POSTED DETOUR PROVIDED. CLOSE SIDEROAD IN ACCORDANCE WITH SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES DETAIL 1.
2. INSTALL PROPOSED 66" STORM SEWER. INSTALL ASPHALTIC SURFACE TEMPORARY AFTER STORM SEWER IS INSTALLED.
3. REOPEN WB NATIONAL AVE BETWEEN CLEVELAND AVE AND IH 41/894 INTERCHANGE IN STAGE 5 CONFIGURATION ONCE STORM SEWER INSTALLATION IS COMPLETE.

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

ROAD WORK AHEAD W20-1A
PLACE SIGN AT ARTHUR AVE
END ROAD WORK G20-2A 48"X24"
WO1-6 48" X 24"
TYPE III BARRICADE
R11-2 48" X 30" ROAD CLOSED
TYPE III BARRICADE
R3-1 24"X24"
ESTR LEFT TURN YIELD ON FLASHING YELLOW ARROW
SEE NOTE 1
M4-9BR 30"X24" DETOUR
R3-18 30"X30"
ESTR RIGHT LANE MUST TURN RIGHT
SEE NOTE 2
ESTR
SEE NOTE 3
MATCHLINE STA 38+50
MATCHLINE STA 44+50
S 102ND ST
W NATIONAL AVE
W NATIONAL AVE R/L
111+00
110+00
109+00
39+00
40+00
41+00
42+00
43+00
44+00
12'
12'
25'
Y6
R3-1 24"X24"
R3-2 24"X24"
DO NOT ENTER R5-1 30"X30"
FRONTAGE ROAD
R11-2 48" X 30" ROAD CLOSED
TYPE III BARRICADE
S 102ND ST R/L
SIDEWALK CLOSED AHEAD R9-9A 30"X18"
DETOUR M4-9BL 30"X24"
ESTR ONE WAY
R3-2 24"X24"
100' TAPER
245' MERGE TAPER
ESTR
ESTR SOUTH EAST NORTH WEST INTERSTATE 41 894 41 894 45 45
R11-2L 48" X 30" LANE CLOSED
TYPE III BARRICADE
END ROAD WORK G20-2A 48"X24"
ROAD WORK AHEAD W20-1A
PLACE SIGN AT HARRISON AVE

SHEET 57 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 4 | SHEET 364 | E |
|---|---|---|---|---|---|

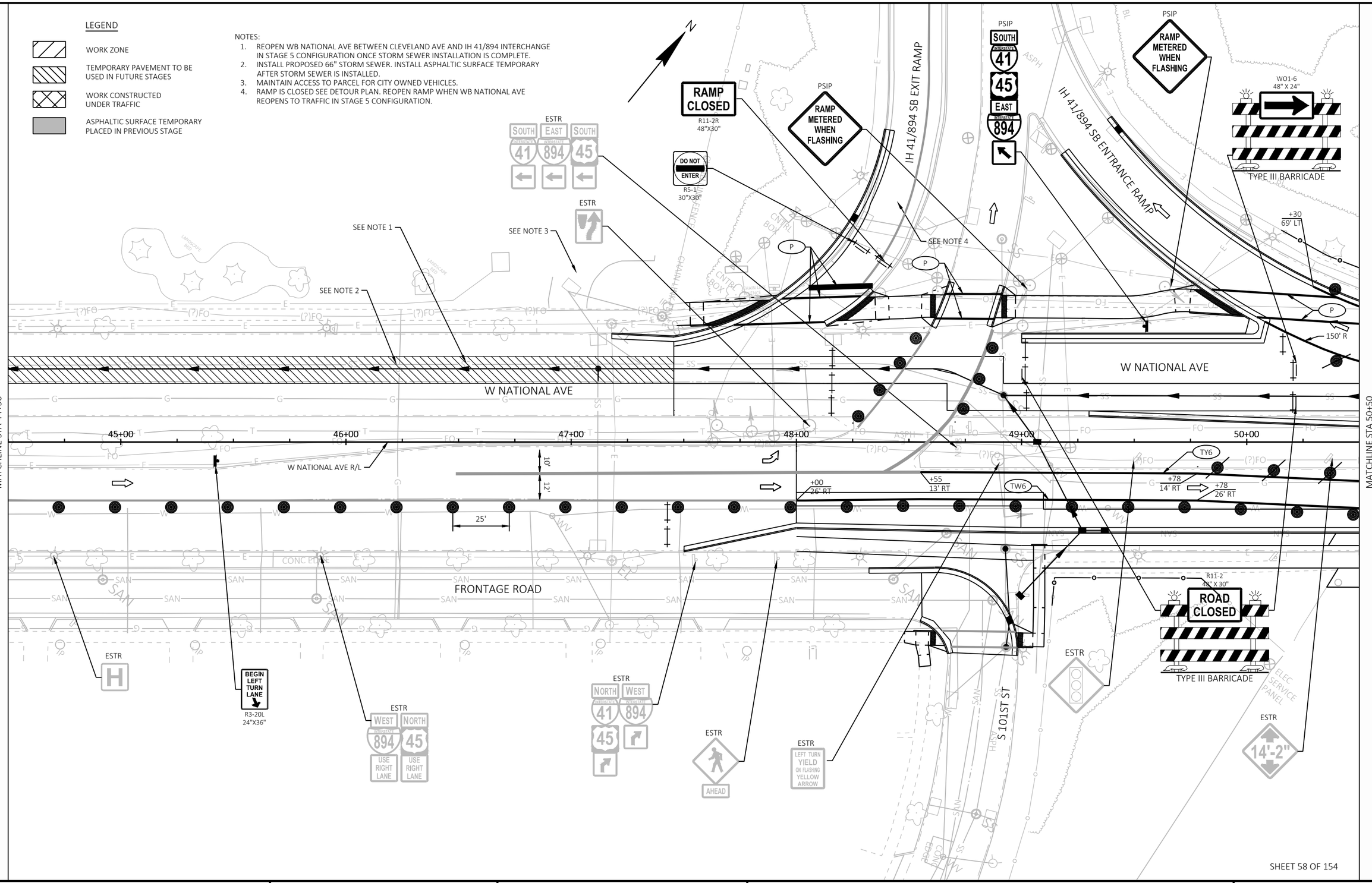
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004-TC4.DWG
LAYOUT NAME - 04
PLOT DATE : 1/9/2026 9:39 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:

1. REOPEN WB NATIONAL AVE BETWEEN CLEVELAND AVE AND IH 41/894 INTERCHANGE IN STAGE 5 CONFIGURATION ONCE STORM SEWER INSTALLATION IS COMPLETE.
2. INSTALL PROPOSED 66" STORM SEWER. INSTALL ASPHALTIC SURFACE TEMPORARY AFTER STORM SEWER IS INSTALLED.
3. MAINTAIN ACCESS TO PARCEL FOR CITY OWNED VEHICLES.
4. RAMP IS CLOSED SEE DETOUR PLAN. REOPEN RAMP WHEN WB NATIONAL AVE REOPENS TO TRAFFIC IN STAGE 5 CONFIGURATION.




SHEET 58 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 4 | SHEET 365 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004-TC4.DWG
LAYOUT NAME - 05

PLOT DATE : 1/9/2026 9:39 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

PSIP RAMP

WO1-6 48" X 24" TYPE III BARRICADE

W12-2 36"X36" 14'-2"

PSIP SOUTH INTERSTATE 41 45 EAST INTERSTATE 894

R3-18 30"X30"

PLACE SIGN 500 FT FROM INTERSECTION

ROAD WORK AHEAD W20-1A

PSIP STOP

R3-2 24"X24" ONE WAY R6-1R 36"X12"

ONE WAY R6-2R 24"X30"

PSIP END ROAD WORK G20-2A 48"X24"

S 100TH ST R/L

S 100TH ST

161+00

162+00

150' R

+85 30' LT

300' R

+47 40' LT

25'

12'

TW6

TY6

51+00

52+00

53+00

54+00

55+00

56+00

+25 26' LT

+25 14' LT

W NATIONAL AVE R/L

W NATIONAL AVE

100' R

+37 31' RT

+07 25' RT

324' R

325' R

+28.6 33.1' RT

+66 43' RT

+69 73' RT

CURB EDGE

WO1-6 48" X 24" TYPE III BARRICADE

R11-2 48" X 30" ROAD CLOSED TYPE III BARRICADE

PSIP NORTH INTERSTATE 41 WEST INTERSTATE 894 45

PSIP RAMP METERED WHEN FLASHING

IH 41/894 NB ENTRANCE RAMP

IH 41/894 NB EXIT RAMP

DO NOT ENTER R5-1 30"X30"

RAMP CLOSED R11-2R 48"X30"

DO NOT ENTER R5-1 30"X30"

RAMP CLOSED FOR DURATION OF STAGE. SEE DETOUR PLAN

MATCHLINE STA 50+50

MATCHLINE STA 56+50

CHAIN LINK FENCE

ELEC SERVICE PANEL

CONTRL BOX

TRANSMISSION TOWER

MH

SIGN

SAN

ASPH

SHEET 59 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 4 | SHEET 366 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004-TC4.DWG
LAYOUT NAME - 06

PLOT DATE : 1/9/2026 9:39 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

WORK ZONE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES

WORK CONSTRUCTED UNDER TRAFFIC

ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

PLACE SIGN 500 FT FROM INTERSECTION

ROAD WORK AHEAD W20-1A

END ROAD WORK G20-2A 48"X24"

R11-2 48" X 30" ROAD CLOSED TYPE III BARRICADE

PSIP

PSIP JCT INTERSTATE 41 INTERSTATE 894 45

R1-1 30"X30" STOP

R3-2 24"X24" ONE WAY

R6-1R 36"X12"

ONE WAY R6-2R 24"X30"

SPEED LIMIT 35 R2-1 24"X30"

WRONG WAY R5-1A 36"X24"

WO3-3

S 99TH ST

132+00

131+00

DO NOT ENTER R5-1 30"X30"

WO11-2 48"X48"

WO16-7L 24"X12"

WO16-7R 24"X12"

R3-18 30"X30"

WRONG WAY R5-1A 36"X24"

W NATIONAL AVE

W NATIONAL AVE R/L

TY6

26'

12'

57+00 58+00 59+00 60+00 61+00 62+00

MATCHLINE STA 56+50

MATCHLINE STA 62+50

BLDG

HOUSE

S 99TH ST R/L

S 99TH ST

118+00

115+00

CLOSE 99TH ST FOR DURATION OF STAGE IN ACCORDANCE WITH SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES DETAIL 1. NO POSTED DETOUR PROVIDED

MAINTAIN ONE PEDESTRIAN CROSSING ACROSS NATIONAL AVE AT ALL TIMES. SEE TEMPORARY PEDESTRIAN ACCOMMODATION PLANS FOR ADDITIONAL TEMPORARY PEDESTRIAN SIGNING AND TRAFFIC CONTROL DEVICES.

R11-2 48" X 30" ROAD CLOSED TYPE III BARRICADE

END ROAD WORK G20-2A 48"X24"

ROAD CLOSED AHEAD W20-3A

PLACE SIGN AT ARTHUR AVE

SHEET 60 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 4 | SHEET 367 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004-TC4.DWG
LAYOUT NAME - 07

PLOT DATE : 1/9/2026 9:39 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

PLACE SIGN 500 FT FROM INTERSECTION

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48"X24"

R1-1
30"X30"
STOP

R3-2
24"X24"

ONE WAY
R6-1R
36"X12"

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

ONE WAY
R6-2R
24"X30"

PSIP

SEE TEMPORARY PEDESTRIAN ACCOMMODATION PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES

WRONG WAY
R5-1A
36"X24"

R3-18
30"X30"

DO NOT ENTER
R5-1
30"X30"

PSIP
SCHOOL
SPEED LIMIT
15
WHEN CHILDREN ARE PRESENT

S 98TH ST R/L

S 98TH ST

W NATIONAL AVE R/L

W NATIONAL AVE

141+00

142+00

63+00

64+00

65+00

66+00

67+00

TY6

12'

25'

MATCHLINE STA 62+50

MATCHLINE STA 67+25

LANDSCAPE BED

CONC.

BUILDING

FLAG

ALTERNATE CLOSURE OF THIS ACCESS WITH OTHER APARTMENT ACCESS AT STA 71+50 SO THAT APARTMENT TRAFFIC HAS ACCESS TO PARKING LOT AT ALL TIMES

SHEET 61 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 4 | SHEET 368 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004-TC4.DWG
LAYOUT NAME - 08

PLOT DATE : 1/9/2026 9:39 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

MATCHLINE STA 67+25

MATCHLINE STA 73+00

ROAD WORK AHEAD W20-1A

PLACE SIGN 250 FT FROM INTERSECTION

R11-2 48" X 30" ROAD CLOSED

TYPE III BARRICADE

R1-1 30"X30" STOP

R3-2 24"X24"

ONE WAY R6-1R 36"X12"

ONE WAY R6-2R 24"X30"

S 97TH ST R/L

S 97TH ST

152+00

151+00

END ROAD WORK G20-2A 48"X24"

PSIP

R3-18 30"X30"

DO NOT ENTER R5-1 30"X30"

R11-2L 48" X 30" LANE CLOSED

TYPE III BARRICADE

SPEED LIMIT 35 R2-1 24"X30"

245' MERGE TAPER

CLOSE DRIVEWAY

WRONG WAY R5-1A 36"X24"

+34 26' LT

W NATIONAL AVE R/L

68+00 69+00 70+00 71+00 72+00 73+

ESTR H

ROAD WORK AHEAD W20-1A

PLACE SIGN 500 FT FROM INTERSECTION

NATIONAL AVE

W LINCOLN AVE

R11-2 48" X 30" ROAD CLOSED

TYPE III BARRICADE

ESTR ONE WAY

ESTR SPEED LIMIT 35

ESTR STOP

100' TAPER

CLOSE DRIVEWAY

CLOSE DRIVEWAY

+79 35' LT

25'

TWS

+79 46' LT

TWL

TY6

W NATIONAL AVE

ALTERNATE CLOSURE OF THIS ACCESS WITH OTHER APARTMENT ACCESS AT STA 63+15 SO THAT APRTMENT TRAFFIC HAS ACCESS TO PARKING LOT AT ALL TIMES.

R11-4 60" X 30" ROAD CLOSED TO THRU TRAFFIC

TYPE III BARRICADE

ROAD OPEN TO
I-41 SOUTH
I-894 EAST
HWY 45 SOUTH

FIXED MESSAGE SIGN NUMBER 12

FIXED MESSAGE SIGN

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

SHEET 62 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 4 | SHEET 369 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004-TC4.DWG
LAYOUT NAME - 08A

PLOT DATE : 1/9/2026 9:39 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

WORK ZONE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES

WORK CONSTRUCTED UNDER TRAFFIC

ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

ESTR STOP

END ROAD WORK
G20-2A
48"X24"

ESTR

W LINCOLN AVE

ESTR

ESTR

ESTR STOP

ESTR

S 95TH ST

WO4-2R

350'

RIGHT LANE CLOSED AHEAD
W20-5A

350'

ROAD WORK AHEAD
W20-1A

BLDG

BLDG

TW6

TWS

TWL

MATCHLINE STA 73+00

74+00

75+00

76+00

77+00

W NATIONAL AVE R/L

78+00

W NATIONAL AVE

79+00

P

CONC

TRENCH DRAIN

WALL

ESTR STOP

ESTR

ESTR H

ESTR

ESTR

EB NATIONAL AVE
CLOSED TO ALL TRAFFIC
FOR DURATION OF STAGE

WO1-6
48" X 24"

TYPE III BARRICADE

ESTR

ESTR

S 95TH ST

ESTR STOP

ESTR ONE WAY

ESTR

P

ROAD WORK AHEAD
W20-1A

NATIONAL AVE

PLACE SIGN 500 FT FROM INTERSECTION

END ROAD WORK
G20-2A
48"X24"

SHEET 63 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 4 | SHEET 370 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004-TC4.DWG
LAYOUT NAME - 09

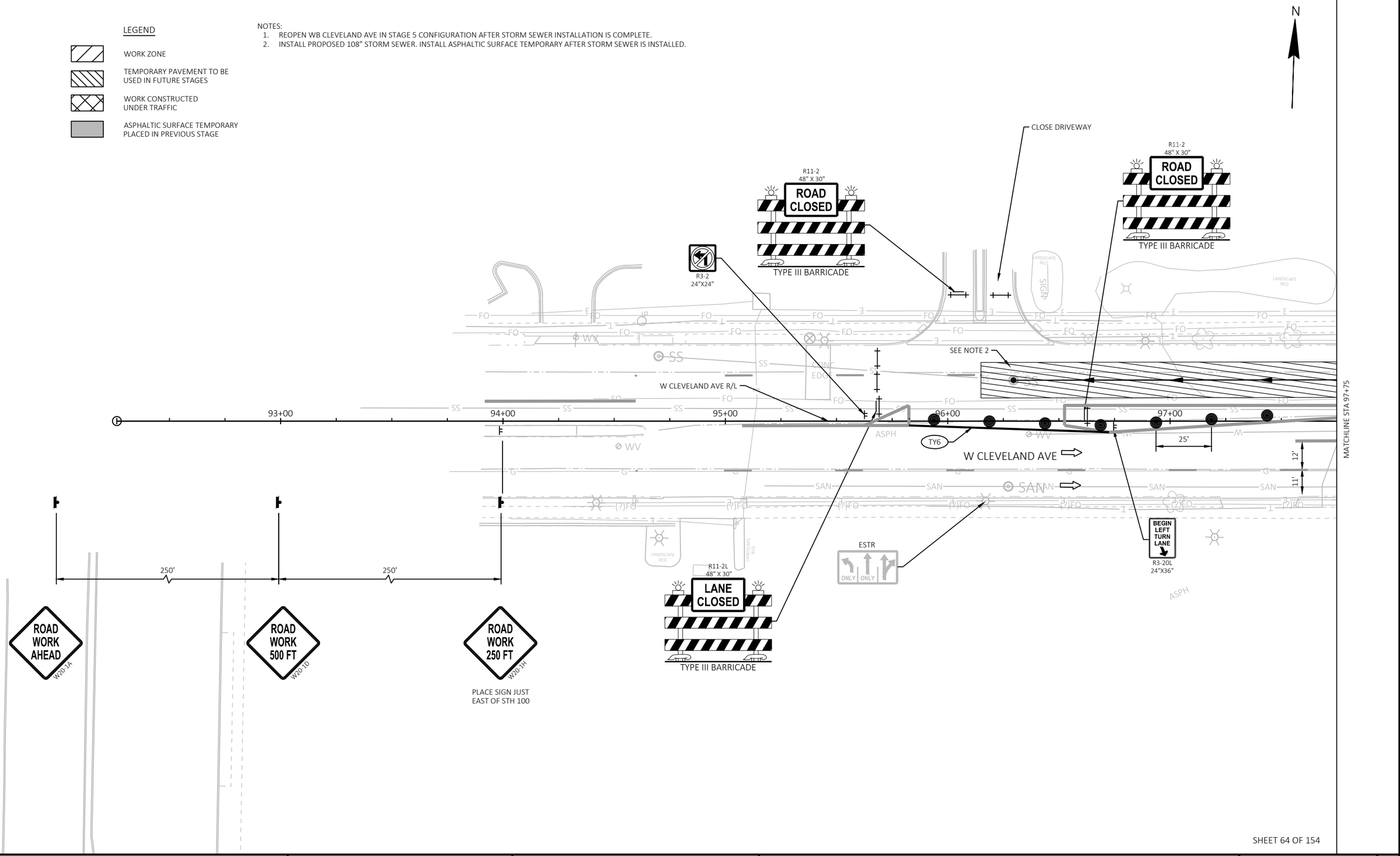
PLOT DATE : 1/9/2026 9:39 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. REOPEN WB CLEVELAND AVE IN STAGE 5 CONFIGURATION AFTER STORM SEWER INSTALLATION IS COMPLETE.
2. INSTALL PROPOSED 108" STORM SEWER. INSTALL ASPHALTIC SURFACE TEMPORARY AFTER STORM SEWER IS INSTALLED.




SHEET 64 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 4 | SHEET 371 | E |
|---|---|---|---|---|---|

NOTES:
1. WB CLEVELAND AVE CLOSED WEST OF NATIONAL AVE. SEE DETOUR PLAN
2. REOPEN WB CLEVELAND AVE IN STAGE 5 CONFIGURATION AFTER STORM SEWER INSTALLATION IS COMPLETE.

N

ROAD WORK AHEAD
W20-1A
PLACE SIGN JUST WEST OF 92ND ST

PLACE SIGN JUST WEST OF 92ND ST
R11-4
60" X 30"
ROAD CLOSED TO THRU TRAFFIC
TYPE III BARRICADE

ROAD WORK 500 FT
W20-1D

WO12-1D
48"X48"

ESTR

+57
18' LT

MATCHLINE STA 102+25

103+00 104+00 105+00 106+00 107+00 108+00

12'
12'

W CLEVELAND AVE R/L
W CLEVELAND AVE

ASPH

SIGN

BUILDING

ESTR
SPEED LIMIT 30

ESTR
BIKE ROUTE

END ROAD WORK
G20-2A
48"X24"

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

SHEET 65 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 4 | SHEET 372 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004-TC4.DWG
LAYOUT NAME - 11
PLOT DATE : 1/9/2026 9:40 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES

MATCHLINE STA 50+50

MATCHLINE STA 56+50

51+00 52+00 53+00 54+00 55+00 56+00

161+00 162+00

S 100TH ST

W NATIONAL AVE

IH 41/894 NB ENTRANCE RAMP

IH 41/894 NB EXIT RAMP

TRANSMISSION TOWER

TRANSMISSION TOWER

HOUSE

CHAIN LINK FENCE

ELEC SERVICE PANEL

CONTROL BOX

GUY

MH

MP

SIGN

ASPH

CURB & GUTTER

DETOUR M4-9BR 30"X24"

DETOUR M4-9BL 30"X24"

DETOUR M4-9BR 30"X24"

DETOUR M4-9BL 30"X24"

TEMPORARY PEDESTRIAN BARRICADE PLACED IN PREVIOUS STAGE

TEMPORARY PEDESTRIAN SURFACE MATTING PLACED IN PREVIOUS STAGE

TEMPORARY PEDESTRIAN BARRICADE PLACED IN PREVIOUS STAGE

SHEET 66 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATION - STAGE 4A | SHEET 373 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004A-TC4A-PED.DWG
LAYOUT NAME - 06

PLOT DATE : 1/9/2026 9:40 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.
2. TEMPORARY PEDESTRIAN SURFACE MATTING INSTALLED IN PREVIOUS STAGE.
3. TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD.
4. TEMPORARY PEDESTRIAN BARRICADE.

MATCHLINE STA 56+50

MATCHLINE STA 62+50

S 99TH ST

W NATIONAL AVE

57+00 58+00 59+00 60+00 61+00 62+00

131+00 132+00 119+00 118+00

DETOUR M4-9BL 30"X24"

SEE NOTE 3

SEE NOTE 2

TEMPORARY PEDESTRIAN BARRICADE

SIDEWALK CLOSED AHEAD R9-9A 30"X18"

DETOUR M4-9BR 30"X24"

SEE NOTE 4

SIDEWALK TO REMAIN OPEN FOR DURATION OF STAGE 3B

SIDEWALK TO REMAIN OPEN FOR DURATION OF STAGE 3

TEMPORARY PEDESTRIAN CURB RAMP TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD

TEMPORARY PEDESTRIAN SURFACE MATTING

TEMPORARY PEDESTRIAN CURB RAMP WITH TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD

TWX

HOUSE BLDG FENCE CONC TRENCH DRAIN LANDSCAPE BED FLAG

SHEET 67 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATION - STAGE 4A | SHEET 374 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004A-TC4A-PED.DWG
LAYOUT NAME - 07

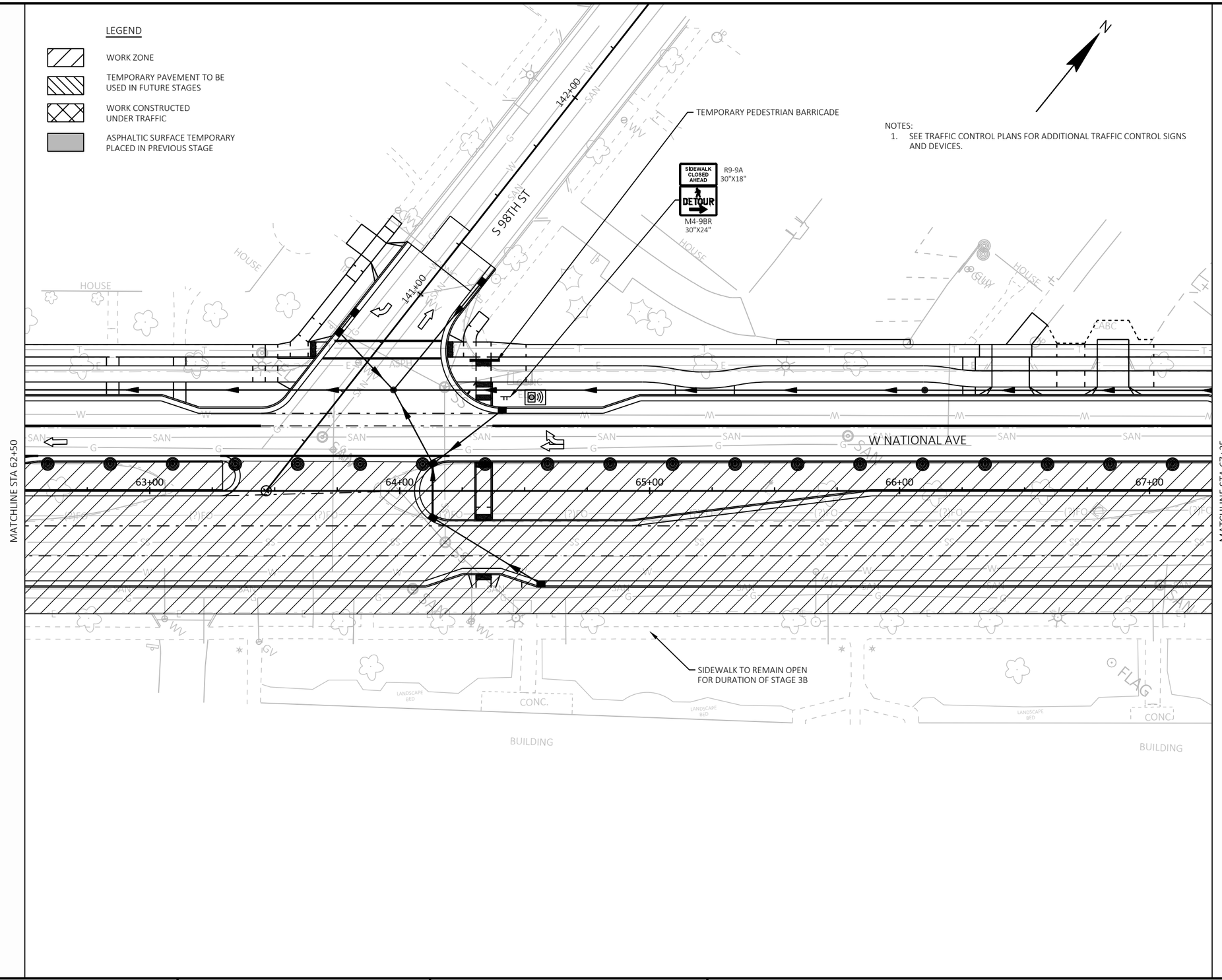
PLOT DATE : 1/9/2026 9:40 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE



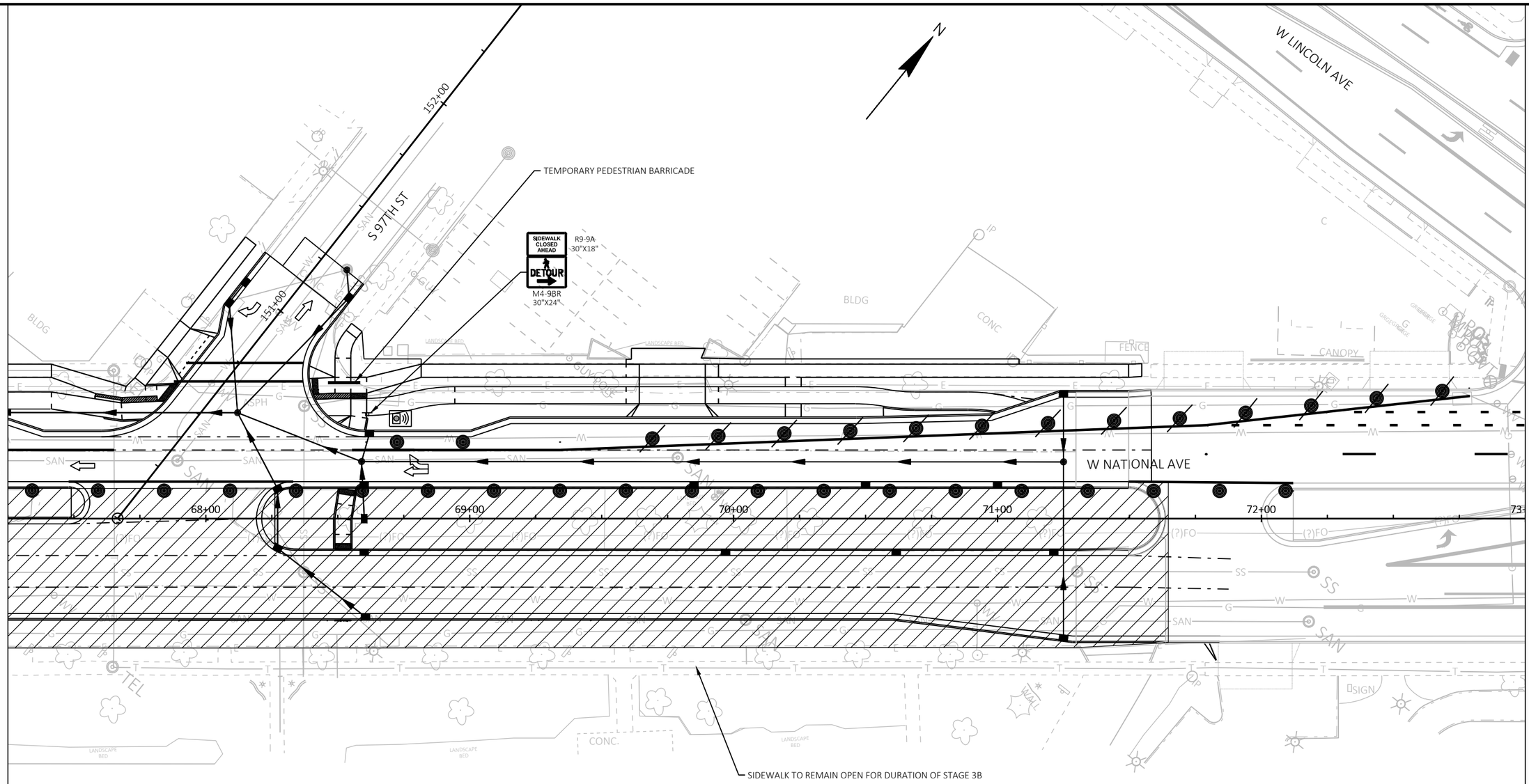

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

SHEET 68 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATION - STAGE 4A | SHEET 375 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004A-TC4A-PED.DWG
LAYOUT NAME - 08
PLOT DATE : 1/9/2026 9:40 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2




LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

SHEET 69 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATION - STAGE 4A | SHEET 376 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004A-TC4A-PED.DWG
LAYOUT NAME - 08A

PLOT DATE : 1/9/2026 9:40 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

MATCHLINE STA 50+50

MATCHLINE STA 56+50

51+00 52+00 53+00 54+00 55+00 56+00

161+00 162+00

S 100TH ST

W NATIONAL AVE

IH 41/894 NB ENTRANCE RAMP

IH 41/894 NB EXIT RAMP

TRANSMISSION TOWER

TRANSMISSION TOWER

CHAIN LINK FENCE

ELEC SERVICE PANEL

CONTRL BOX

CURB & GUTTER

ASPH

HOUSE

DETOUR M4-9BR 30"X24"

DETOUR M4-9BL 30"X24"

DETOUR M4-9BR 30"X24"

DETOUR M4-9BL 30"X24"

TEMPORARY PEDESTRIAN BARRICADE PLACED IN PREVIOUS STAGE

TEMPORARY PEDESTRIAN SURFACE MATTING PLACED IN PREVIOUS STAGE

TEMPORARY PEDESTRIAN BARRICADE PLACED IN PREVIOUS STAGE

SHEET 70 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATION - STAGE 4B1 | SHEET 377 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004B-TC4B1-PED.DWG
LAYOUT NAME - 06

PLOT DATE : 1/9/2026 9:40 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

WORK ZONE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES

WORK CONSTRUCTED UNDER TRAFFIC

ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

TEMPORARY PEDESTRIAN BARRICADE

R9-9 24"X12" SIDEWALK CLOSED DETOUR
M4-9BR 30"X24"

DETOUR M4-9BR 30"X24"

S 99TH ST

W NATIONAL AVE

MATCHLINE STA 56+50

MATCHLINE STA 62+50

57+00 58+00 59+00 60+00 61+00 62+00

131+00 132+00 119+00 118+00

R9-9 24"X12" SIDEWALK CLOSED DETOUR M4-9BL 30"X24"

TEMPORARY PEDESTRIAN BARRICADE

R9-9 24"X12" SIDEWALK CLOSED DETOUR M4-9BR 30"X24"

DETOUR M4-9BR 30"X24"

DETOUR M4-9BL 30"X24"

TEMPORARY PEDESTRIAN BARRICADE

TEMPORARY PEDESTRIAN CURB RAMP

R9-9 24"X12" SIDEWALK CLOSED DETOUR M4-9BL 30"X24"

TEMPORARY PEDESTRIAN SURFACE MATTING PLACED IN PREVIOUS STAGE

TEMPORARY PEDESTRIAN BARRICADE PLACED IN PREVIOUS STAGE

R9-9A 30"X18" SIDEWALK CLOSED AHEAD DETOUR M4-9BR 30"X24"

TWX

TEMPORARY PEDESTRIAN CURB RAMP WITH TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD PLACED IN PREVIOUS STAGE

TEMPORARY PEDESTRIAN CURB RAMP TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD PLACED IN PREVIOUS STAGE

TEMPORARY PEDESTRIAN BARRICADE PLACED IN PREVIOUS STAGE

TEMPORARY PEDESTRIAN SURFACE MATTING PLACED IN PREVIOUS STAGE

DETOUR M4-9BL 30"X24"

SHEET 71 OF 154

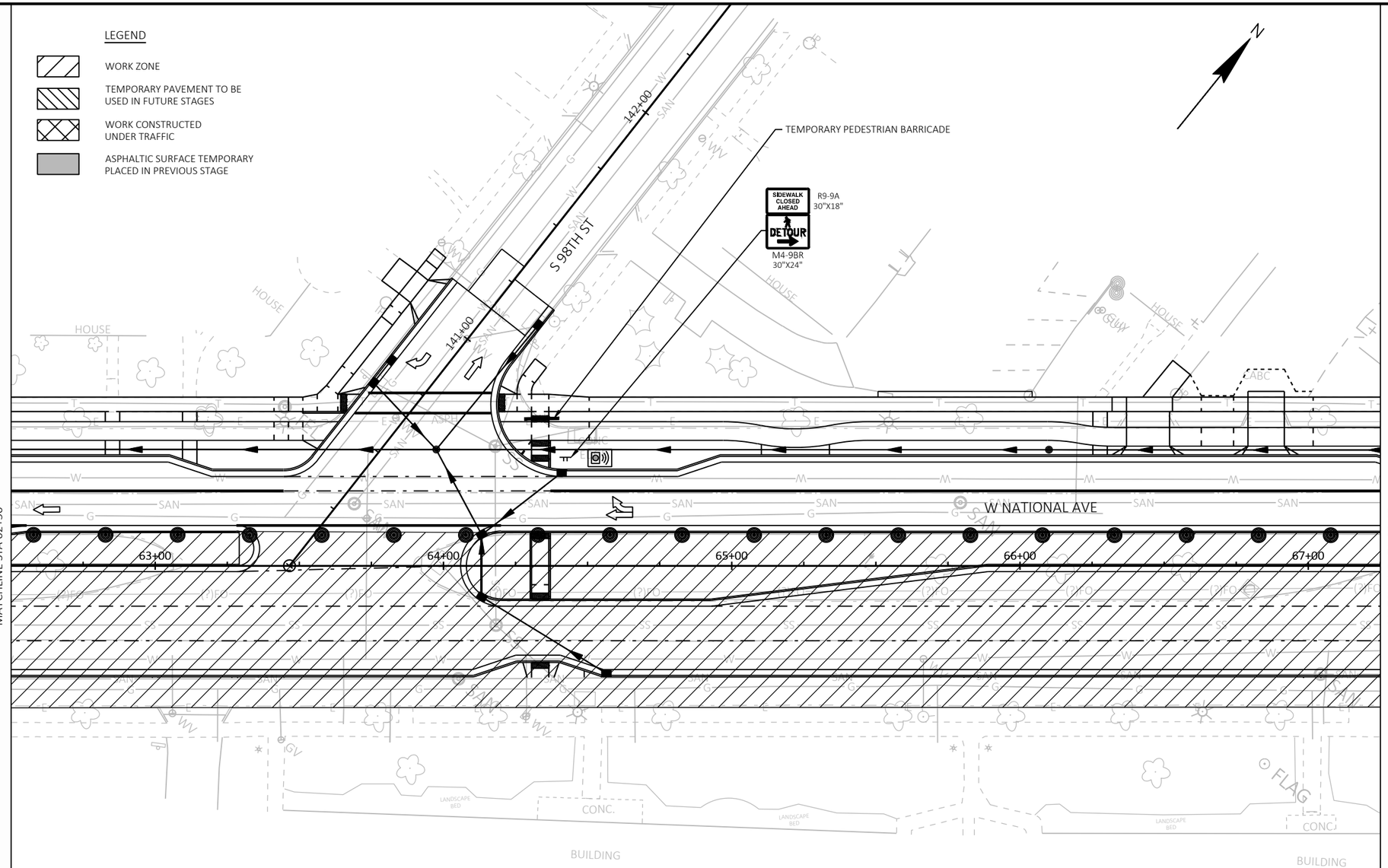
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATION - STAGE 4B1 | SHEET 378 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004B-TC4B1-PED.DWG
LAYOUT NAME - 07

PLOT DATE : 1/9/2026 9:40 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



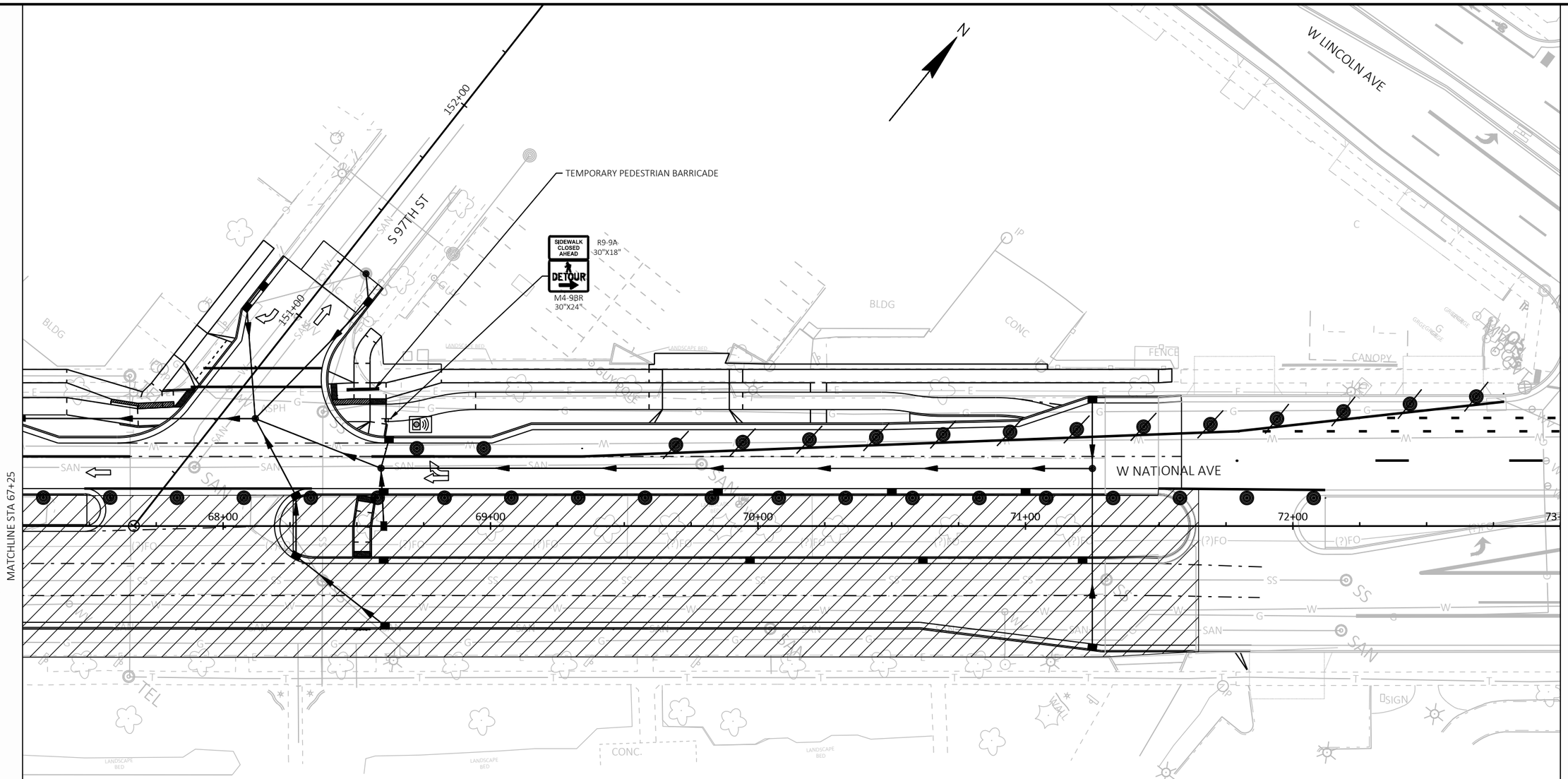

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

SHEET 72 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATION - STAGE 4B1 | SHEET 379 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004B-TC4B1-PED.DWG
LAYOUT NAME - 08
PLOT DATE : 1/9/2026 9:40 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2




LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL AND DEVICES.

SHEET 73 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATION - STAGE 4B1 | SHEET 380 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004B-TC4B1-PED.DWG
LAYOUT NAME - 08A
PLOT DATE : 1/9/2026 9:40 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

N

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

MATCHLINE STA 50+50

MATCHLINE STA 56+50

51+00 52+00 53+00 54+00 55+00 56+00

161+00

162+00

S 100TH ST

W NATIONAL AVE

IH 41/894 NB ENTRANCE RAMP

IH 41/894 NB EXIT RAMP

TRANSMISSION TOWER

TRANSMISSION TOWER

CHAIN LINK FENCE

ELEC SERVICE PANEL

CONTROL BOX

CURB EDGE

ASPH

HOUSE

TEMPORARY PEDESTRIAN BARRICADE

TEMPORARY PEDESTRIAN CURB RAMP

DETOUR
M4-9BL
30"X24"

TEMPORARY PEDESTRIAN SURFACE MATTING

DETOUR
M4-9BR
30"X24"

SHEET 74 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 4B2 | SHEET 381 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004C-TC4B2-PED.DWG
LAYOUT NAME - 06

PLOT DATE : 1/9/2026 9:41 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD

S 99TH ST

W NATIONAL AVE

MATCHLINE STA 56+50

MATCHLINE STA 62+50

57+00 58+00 59+00 60+00 61+00 62+00

131+00 132+00 118+00 119+00

TEMPORARY PEDESTRIAN BARRICADE

M4-9BR 30"X24"

M4-9BL 30"X24"

TEMPORARY PEDESTRIAN SURFACE MATTING

TEMPORARY PEDESTRIAN CURB RAMP

ALTERNATE CLOSURE OF ACCESS TO PARCEL BETWEEN SIDEWALK ON NATIONAL AVE AND 99TH ST. MAINTAIN ONE PEDESTRIAN ACCESS AT ALL TIMES. SEE CONSTRUCTION DETAIL FOR TEMPORARY PEDESTRIAN ACCESS TO PARCELS.

SHEET 75 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 4B2 | SHEET 382 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004C-TC4B2-PED.DWG
LAYOUT NAME - 07

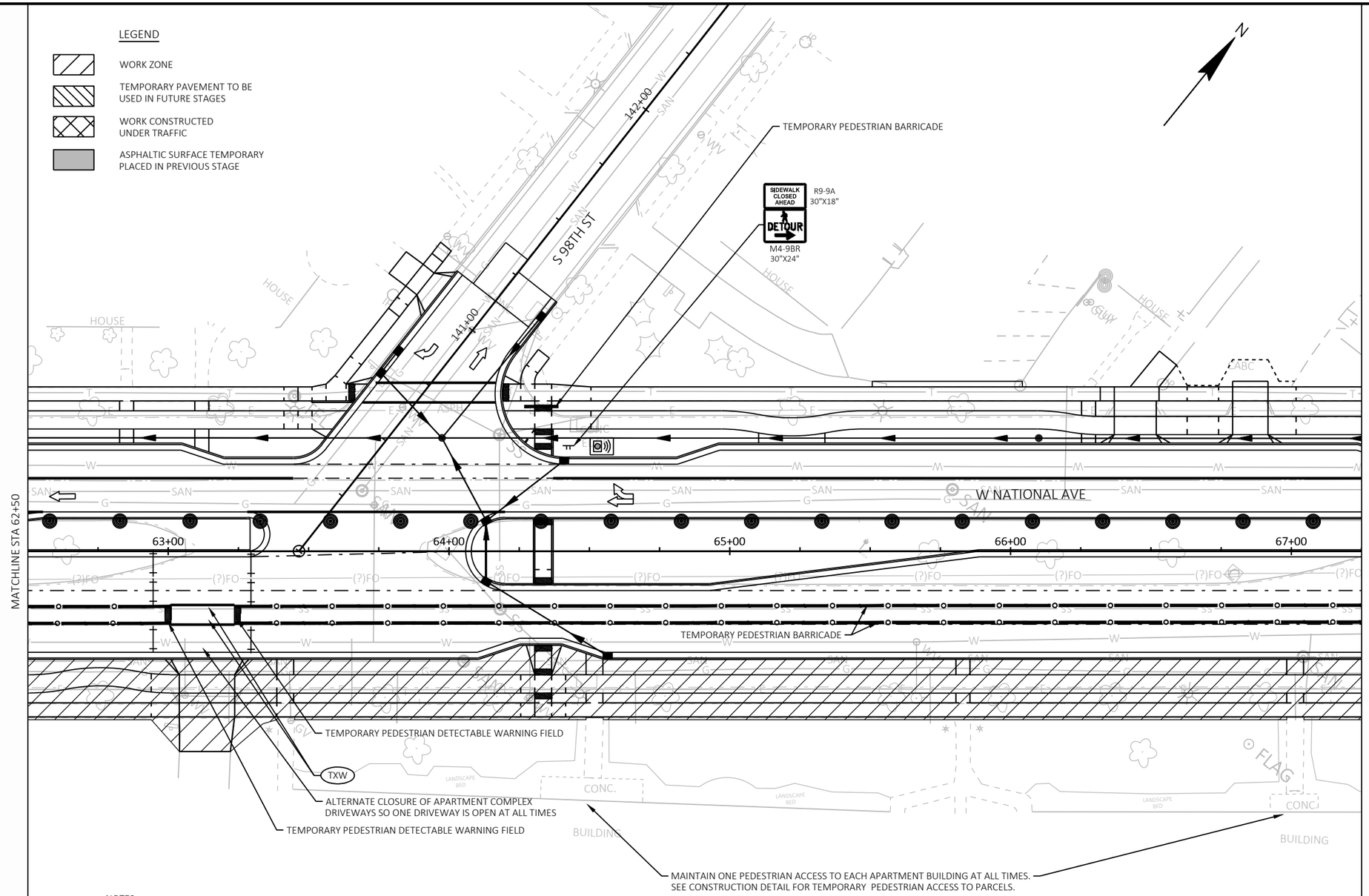
PLOT DATE : 1/9/2026 9:41 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE



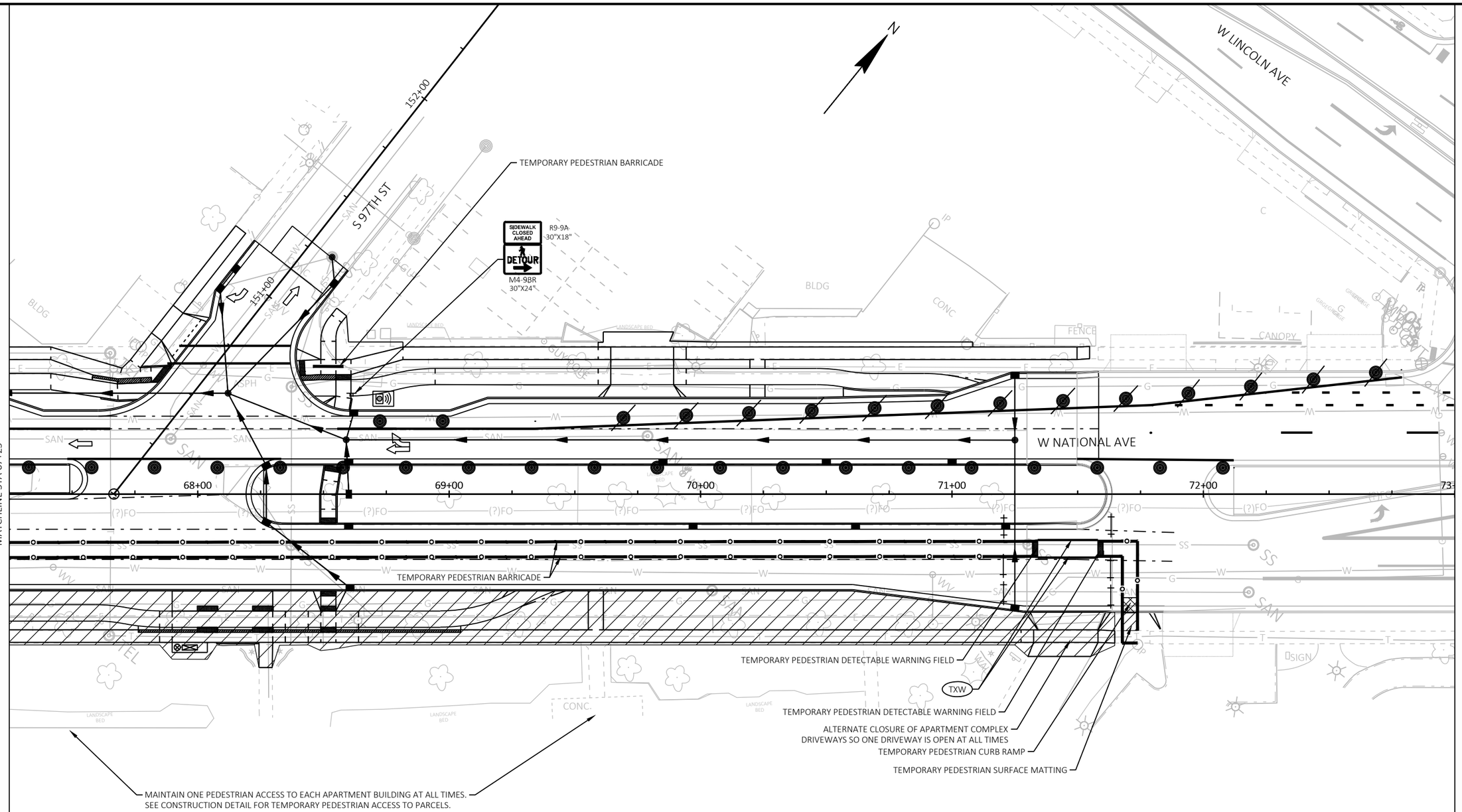

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 4B2 | SHEET 383 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004C-TC4B2-PED.DWG
LAYOUT NAME - 08
PLOT DATE : 1/9/2026 9:41 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2




LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

SHEET 77 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 4B2 | SHEET 384 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026004C-TC4B2-PED.DWG
LAYOUT NAME - 08A
PLOT DATE : 1/9/2026 9:41 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

WORK ZONE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES

WORK CONSTRUCTED UNDER TRAFFIC

ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

TRAFFIC CONTROL NOTES - STAGE 5

CONSTRUCTION:

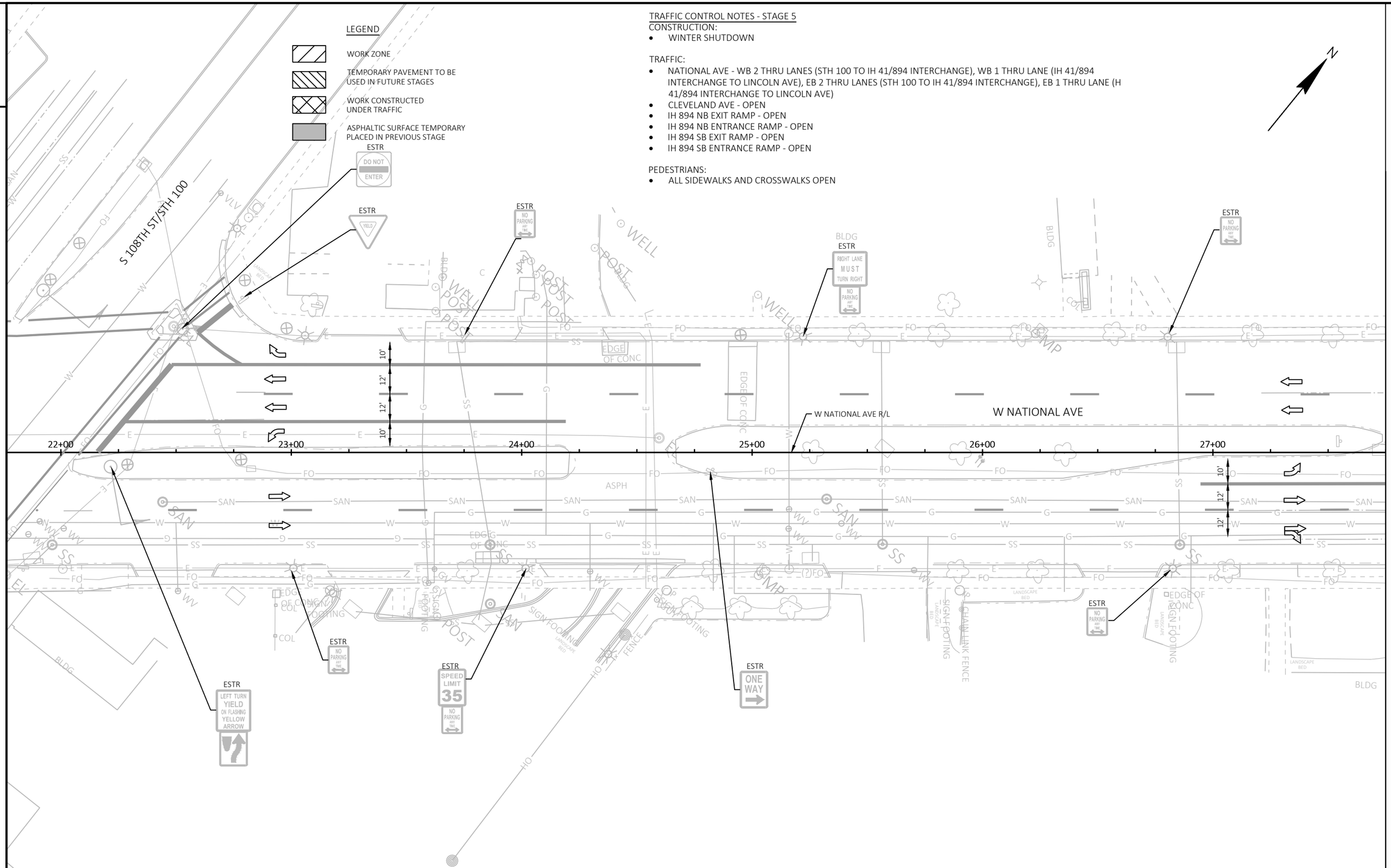
- WINTER SHUTDOWN

TRAFFIC:

- NATIONAL AVE - WB 2 THRU LANES (STH 100 TO IH 41/894 INTERCHANGE), WB 1 THRU LANE (IH 41/894 INTERCHANGE TO LINCOLN AVE), EB 2 THRU LANES (STH 100 TO IH 41/894 INTERCHANGE), EB 1 THRU LANE (H 41/894 INTERCHANGE TO LINCOLN AVE)
- CLEVELAND AVE - OPEN
- IH 894 NB EXIT RAMP - OPEN
- IH 894 NB ENTRANCE RAMP - OPEN
- IH 894 SB EXIT RAMP - OPEN
- IH 894 SB ENTRANCE RAMP - OPEN

PEDESTRIANS:

- ALL SIDEWALKS AND CROSSWALKS OPEN




SHEET 78 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 5 | SHEET 385 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026005-TC5.DWG
LAYOUT NAME - 01

PLOT DATE : 1/9/2026 10:15 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

MATCHLINE STA 97+75

W CLEVELAND AVE

W CLEVELAND AVE R/L

98+00

99+00

100+00

101+00

102+00

W NATIONAL AVE

W NATIONAL AVE R/L

S WILDWOOD DR

S WILDWOOD DR R/L

MATCHLINE STA 27+75

MATCHLINE STA 33+75

MATCHLINE STA 102+25

28+00 29+00 30+00 31+00 32+00 33+00

179+00

ESTR

STOP

DO NOT ENTER

NO PARKING ANY TIME

LEFT LANE MUST TURN LEFT

YIELD

EWL

EW10

+31 21' LT

+52 38' LT

+68 26' LT

+34 37' LT

+32 13' RT

+33 20' LT

12' 12' 10'

ASPH

CONC SLAB

BLDG

COL

BENCH

POST

SHED

SHEET 79 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 5 | SHEET 386 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026005-TC5.DWG
LAYOUT NAME - 02

PLOT DATE : 1/9/2026 10:15 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

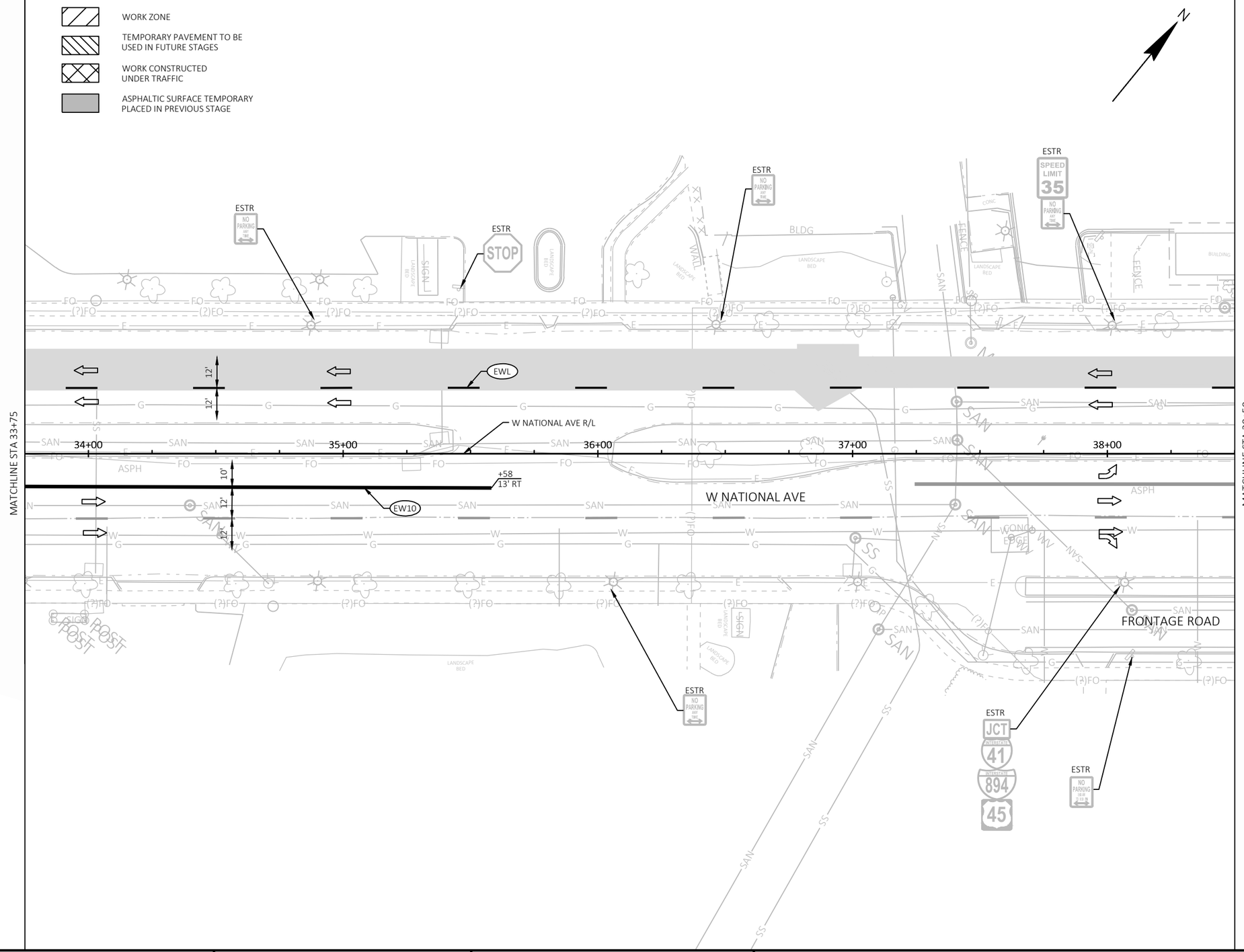
LEGEND

WORK ZONE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES

WORK CONSTRUCTED UNDER TRAFFIC

ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE




SHEET 80 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 5 | SHEET 387 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026005-TC5.DWG
LAYOUT NAME - 03
PLOT DATE : 1/9/2026 10:15 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

N

MATCHLINE STA 38+50

MATCHLINE STA 44+50

S 102ND ST

W NATIONAL AVE

W NATIONAL AVE R/L

FRONTAGE ROAD

S 102ND ST R/L

ESTR ONE WAY

ESTR LEFT TURN YIELD ON FLASHING YELLOW ARROW

ESTR RIGHT LANE MUST TURN RIGHT

ESTR NO PARKING

ESTR DO NOT ENTER

ESTR STOP

ESTR SOUTH EAST NORTH WEST INTERSTATE 41 894 41 894 45 45

ESTR R3-8LAR 54"X30" ONLY ONLY ONLY

+04 37' LT

+14 26' LT

+03 26' LT

+95 37' LT

+00 25' RT

EW10

EWL

SIGN

PCMS

TRAFFIC CONTROL SIGN PCMS MESSAGE

| FRAME 1 | FRAME 2 |
|---|---|
| NEW TRAFFIC PATTERN | AHEAD |

TRAFFIC CONTROL SIGN PCMS TO BE IN PLACE FOR FIRST 5 CALENDAR DAYS OF STAGE

SHEET 81 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 5 | SHEET 388 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026005-TC5.DWG
LAYOUT NAME - 04

PLOT DATE : 1/9/2026 10:15 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

MATCHLINE STA 44+50

MATCHLINE STA 50+50

W NATIONAL AVE

W NATIONAL AVE R/L

FRONTAGE ROAD

S 101ST ST

IH 41/894 SB EXIT RAMP

IH 41/894 SB ENTRANCE RAMP

45+00 46+00 47+00 48+00 49+00 50+00

+05 25' LT

+50 20' LT

12' 12' 12' 12' 11' 11'

EWL EWS

PSIP
RAMP METERED WHEN FLASHING

PSIP
DO NOT ENTER

PSIP
SOUTH INTERSTATE 41 45 EAST INTERSTATE 894

PSIP
14'-2"

PSIP
250 FT

SPEED LIMIT 35
R2-1
24"X30"

BEGIN LEFT TURN LANE
R3-20L
24"X36"

RIGHT LANE MUST EXIT
R3-33R
78"X36"

ESTR
NO PARKING ANY TIME

ESTR
H

ESTR
WEST INTERSTATE 894 USE RIGHT LANE
NORTH 45 USE RIGHT LANE

ESTR
NORTH WEST INTERSTATE 41 894 45

ESTR
AHEAD

PSIP
SOUTH INTERSTATE 41
EAST INTERSTATE 894
SOUTH 45

SHEET 82 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 5 | SHEET 389 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026005-TC5.DWG
LAYOUT NAME - 05

PLOT DATE : 1/9/2026 10:16 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

PSIP RAMP

PSIP 14'-2"

PSIP SOUTH INTERSTATE 41 45 EAST INTERSTATE 894

PSIP

PSIP ONE WAY

PSIP

PSIP STOP

PSIP BEGIN RIGHT TURN LANE

PSIP

PSIP

P +64 31' LT

EA

EW

EW10

EWL

+40 31' LT

+40 20' LT

11'

11'

11'

EA

+40 33' LT

+68 23' LT

EWS

+57 25' LT

+75 36' LT

EWT

ASPH 70' R

P

12'

51+00

52+00

53+00

54+00

55+00

56+00

W NATIONAL AVE R/L

W NATIONAL AVE

MATCHLINE STA 50+50

MATCHLINE STA 56+50

162+00

161+00

S 100TH ST R/L

S 100TH ST

TRANSMISSION TOWER

GUY

MH

ELEC SERVICE PANEL

CHAIN LINK FENCE

HOUSE

SIGN

PSIP DO NOT ENTER

PSIP

PSIP NO PARKING ANY TIME

P

+32 43' RT

12'

12'

12'

12'

PSIP

PSIP

PSIP DIVIDED HIGHWAY

EA

EW10

PSIP

PSIP ONLY ONLY ONLY

PSIP H

CUSTOM NO PARKING

MOVE BY OTHERS

PSIP BEGIN LEFT TURN LANE

PSIP NORTH INTERSTATE 41 45 WEST INTERSTATE 894

PSIP RAMP METERED WHEN FLASHING

IH 41/894 NB ENTRANCE RAMP

IH 41/894 NB EXIT RAMP

CONTROL BOX

GORE

SHEET 83 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 5 | SHEET 390 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\241015OO\SHEETS\026005-TC5.DWG
LAYOUT NAME - 06

PLOT DATE : 1/9/2026 10:16 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
ALL PAVEMENT MARKINGS THIS SHEET ARE PERMANENT PAVEMENT MARKINGS

MATCHLINE STA 56+50

MATCHLINE STA 62+50

W NATIONAL AVE R/L

W NATIONAL AVE

S 99TH ST

S 99TH ST R/L

57+00 58+00 59+00 60+00 61+00 62+00

131+00 132+00 118+00 119+00

PSIP SPEED LIMIT 35

PSIP

PSIP JCT INTERSTATE 41 INTERSTATE 894 45

PSIP STOP

PSIP NO PARKING BUS STOP

PSIP BUS STOP MOVE BY MCTS

PSIP BEGIN LEFT TURN LANE

W12-1D (2S)

SHEET 84 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 5 | SHEET 391 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026005-TC5.DWG
LAYOUT NAME - 07

PLOT DATE : 1/9/2026 10:16 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

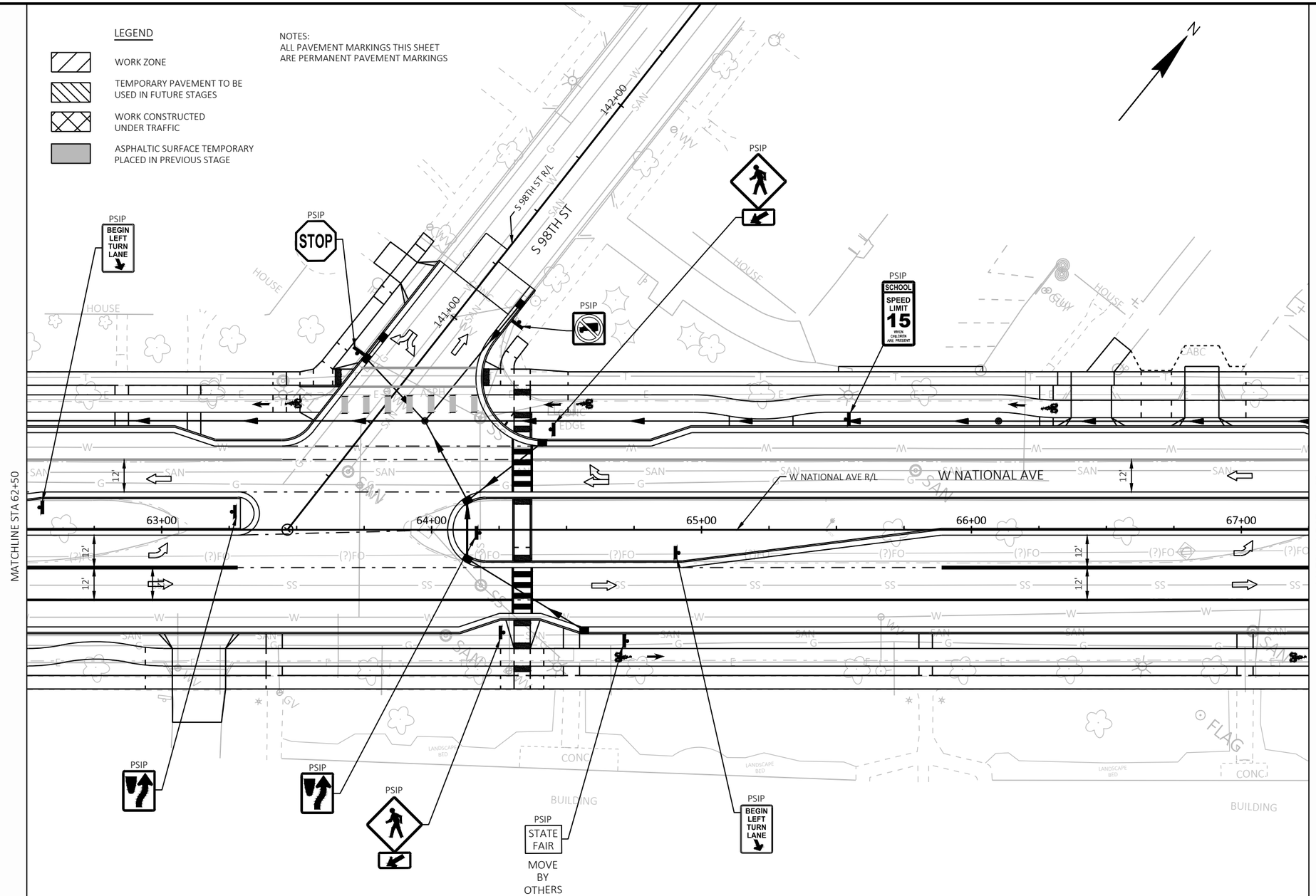
WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
ALL PAVEMENT MARKINGS THIS SHEET ARE PERMANENT PAVEMENT MARKINGS




SHEET 85 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 5 | SHEET 392 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026005-TC5.DWG
LAYOUT NAME - 08

PLOT DATE : 1/9/2026 10:16 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTES
ALL PAVEMENT MARKINGS ON THIS SHEET ARE PERMANENT PAVEMENT MARKINGS

N

W LINCOLN AVE

ESTR H

ESTR ONE WAY

ESTR SPEED LIMIT 35

ESTR STOP

PSIP STOP

MOVE BY OTHERS NEIGHBORHOOD WATCH

PSIP

PSIP SPEED LIMIT 35

SPEED WAVE

MOVE BY OTHERS

S 97TH ST R/L

S 97TH ST

152+00

151+00

BLDG

CONC

FENCE

CANOPY

GREENHOUSE

LANDSCAPE BED

W NATIONAL AVE R/L

W NATIONAL AVE

68+00

69+00

70+00

71+00

72+00

12'

MATCHLINE STA 67+25

MATCHLINE STA 73+00

PSIP NO PARKING BUS STOP

PSIP NO PARKING ANY TIME

PSIP ONLY ONLY ONLY

PSIP BUS STOP MOVE BY MCTS

PSIP ONE WAY

PSIP BEGIN RIGHT TURN LANE YIELD TO BIKES

PSIP NO PARKING ANY TIME

PSIP

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

SHEET 86 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 5 | SHEET 393 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026005-TC5.DWG
LAYOUT NAME - 08A

PLOT DATE : 1/9/2026 10:16 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTES:
ALL PAVEMENT MARKINGS THIS SHEET ARE PERMANENT PAVEMENT MARKINGS

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

N

W LINCOLN AVE

S 95TH ST

W NATIONAL AVE

W NATIONAL AVE R/L

MATCHLINE STA 73+00

74+00 75+00 76+00 77+00 78+00 79+00

ESTR STOP

ESTR

ESTR

ESTR

ESTR

ESTR

ESTR

ESTR

ESTR

ESTR STOP

ESTR

ESTR STOP

ESTR ONE WAY

ESTR

ESTR

BLDG

TRENCH DRAIN

WALL

SHEET 87 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 5 | SHEET 394 | E |
|---|---|---|---|---|---|

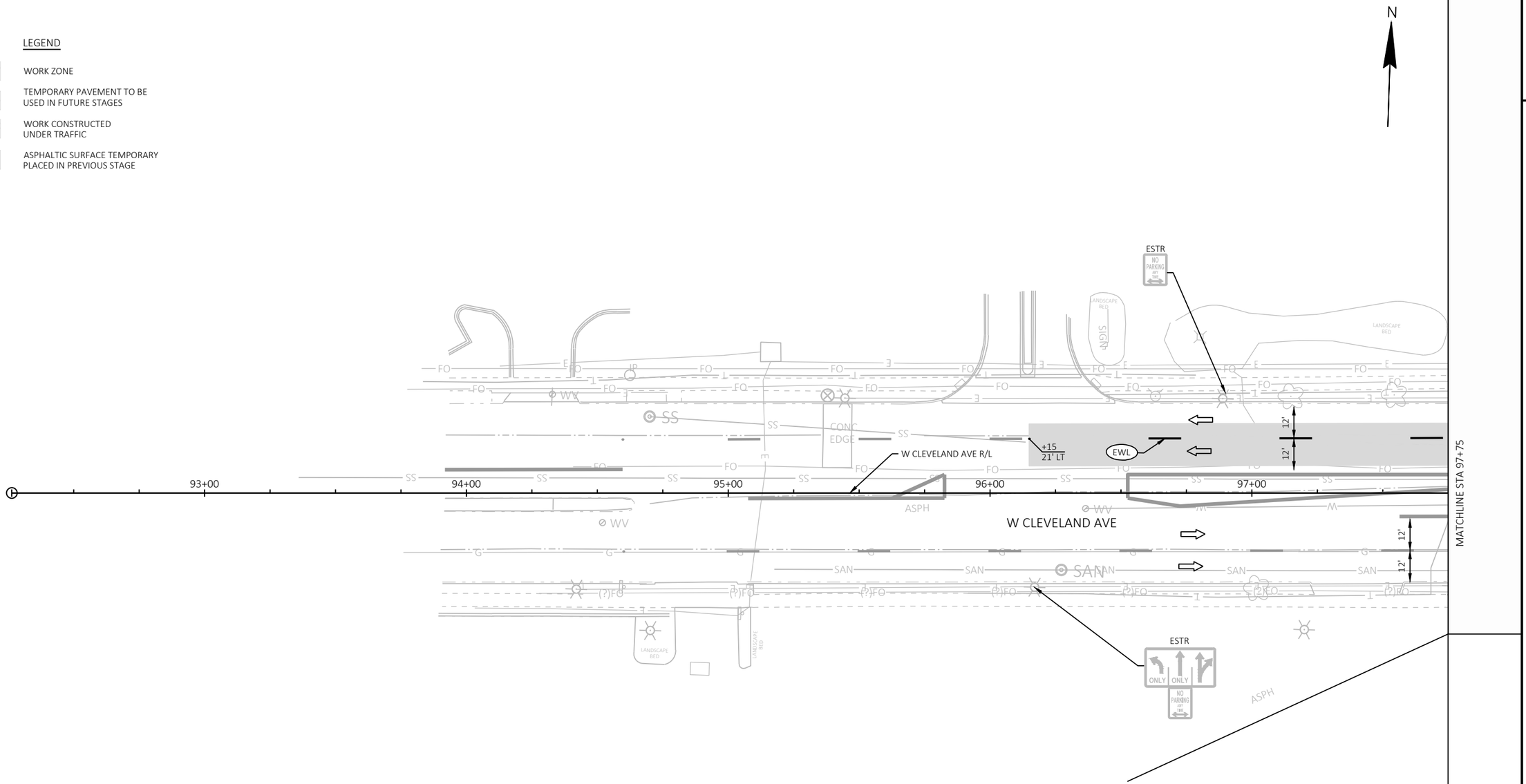
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026005-TC5.DWG
LAYOUT NAME - 09

PLOT DATE : 1/9/2026 10:16 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE






| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 5 | SHEET 395 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026005-TC5.DWG
LAYOUT NAME - 10
PLOT DATE : 1/9/2026 10:16 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

N

MATCHLINE STA 102+25

ESTR

ESTR

ESTR

SIGN

EWL

+79
17' LT

103+00

104+00

105+00

106+00

107+00

108+00

12'

12'

W CLEVELAND AVE R/L

W CLEVELAND AVE

ASPH

BUILDING

BUILDING

BUILDING

BUILDING

ESTR

SPEED LIMIT 30

NO PARKING ANY TIME

ESTR

BIKE ROUTE

LEGEND

WORK ZONE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES

WORK CONSTRUCTED UNDER TRAFFIC

ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

SHEET 89 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 5 | SHEET 396 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026005-TC5.DWG
LAYOUT NAME - 11

PLOT DATE : 1/9/2026 10:16 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

TRAFFIC CONTROL NOTES - STAGE 6

CONSTRUCTION:

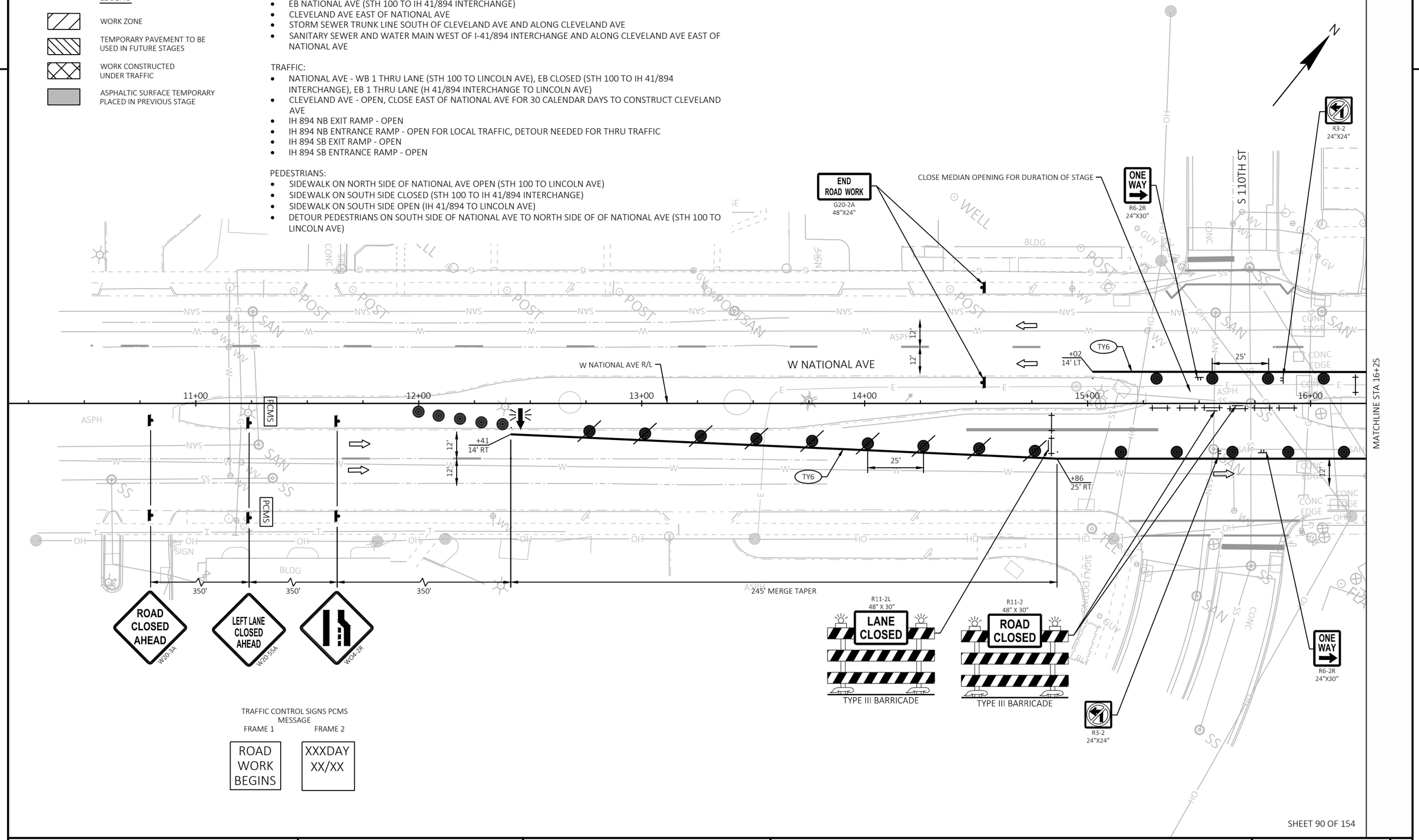
- EB NATIONAL AVE (STH 100 TO IH 41/894 INTERCHANGE)
- CLEVELAND AVE EAST OF NATIONAL AVE
- STORM SEWER TRUNK LINE SOUTH OF CLEVELAND AVE AND ALONG CLEVELAND AVE
- SANITARY SEWER AND WATER MAIN WEST OF I-41/894 INTERCHANGE AND ALONG CLEVELAND AVE EAST OF NATIONAL AVE

TRAFFIC:

- NATIONAL AVE - WB 1 THRU LANE (STH 100 TO LINCOLN AVE), EB CLOSED (STH 100 TO IH 41/894 INTERCHANGE), EB 1 THRU LANE (H 41/894 INTERCHANGE TO LINCOLN AVE)
- CLEVELAND AVE - OPEN, CLOSE EAST OF NATIONAL AVE FOR 30 CALENDAR DAYS TO CONSTRUCT CLEVELAND AVE
- IH 894 NB EXIT RAMP - OPEN
- IH 894 NB ENTRANCE RAMP - OPEN FOR LOCAL TRAFFIC, DETOUR NEEDED FOR THRU TRAFFIC
- IH 894 SB EXIT RAMP - OPEN
- IH 894 SB ENTRANCE RAMP - OPEN

PEDESTRIANS:

- SIDEWALK ON NORTH SIDE OF NATIONAL AVE OPEN (STH 100 TO LINCOLN AVE)
- SIDEWALK ON SOUTH SIDE CLOSED (STH 100 TO IH 41/894 INTERCHANGE)
- SIDEWALK ON SOUTH SIDE OPEN (IH 41/894 TO LINCOLN AVE)
- DETOUR PEDESTRIANS ON SOUTH SIDE OF NATIONAL AVE TO NORTH SIDE OF OF NATIONAL AVE (STH 100 TO LINCOLN AVE)




TRAFFIC CONTROL SIGNS PCMS MESSAGE

| FRAME 1 | FRAME 2 |
|---|---|
| ROAD WORK BEGINS | XXXDAY XX/XX |

SHEET 90 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 6A-6B | SHEET 397 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006-TC6.DWG
LAYOUT NAME - 01A

PLOT DATE : 1/9/2026 10:16 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

R11-2L 48" X 30" LANE CLOSED — TYPE III BARRICADE

R11-2 48" X 30" ROAD CLOSED — TYPE III BARRICADE

R6-2R 24"X30" ONE WAY

R3-18 30"X30"

R3-18 30"X30"

R3-18 30"X30"

PLACE SIGN 500FT FROM INTERSECTION — ROAD WORK AHEAD W20-1A — NATIONAL AVE

MATCHLINE STA 16+25

MATCHLINE STA 22+00

W NATIONAL AVE

W NATIONAL AVE R/L

17+00 18+00 19+00 20+00 21+00 22

TY6 25' 12' 12' +10 14' LT

TY6 +86 13' LT +44 13' LT

TY6 +83 4' RT +43 4' RT

TWS +67 4' RT

TY6 +41 25' RT

+03 26' RT

+04 37' RT

+61 37' RT

TW10 +69 15' RT

TW10 +70 26' RT

+19 15' RT +49 14' RT

275' R

+39 26' RT

TY6 +61 57' LT

TWT 275' R

6:1 TAPER

11' 11' 10'

BEGIN LEFT TURN LANE — R3-20L 24"X36"

WO12-1D 48"X48"

R11-2L 48" X 30" LANE CLOSED — TYPE III BARRICADE

PLACE SIGN 500FT FROM INTERSECTION — ROAD WORK AHEAD W20-1A — NATIONAL AVE

S 108TH ST/STH 100

R3-1 24"X24"

R11-2 48" X 30" ROAD CLOSED — TYPE III BARRICADE

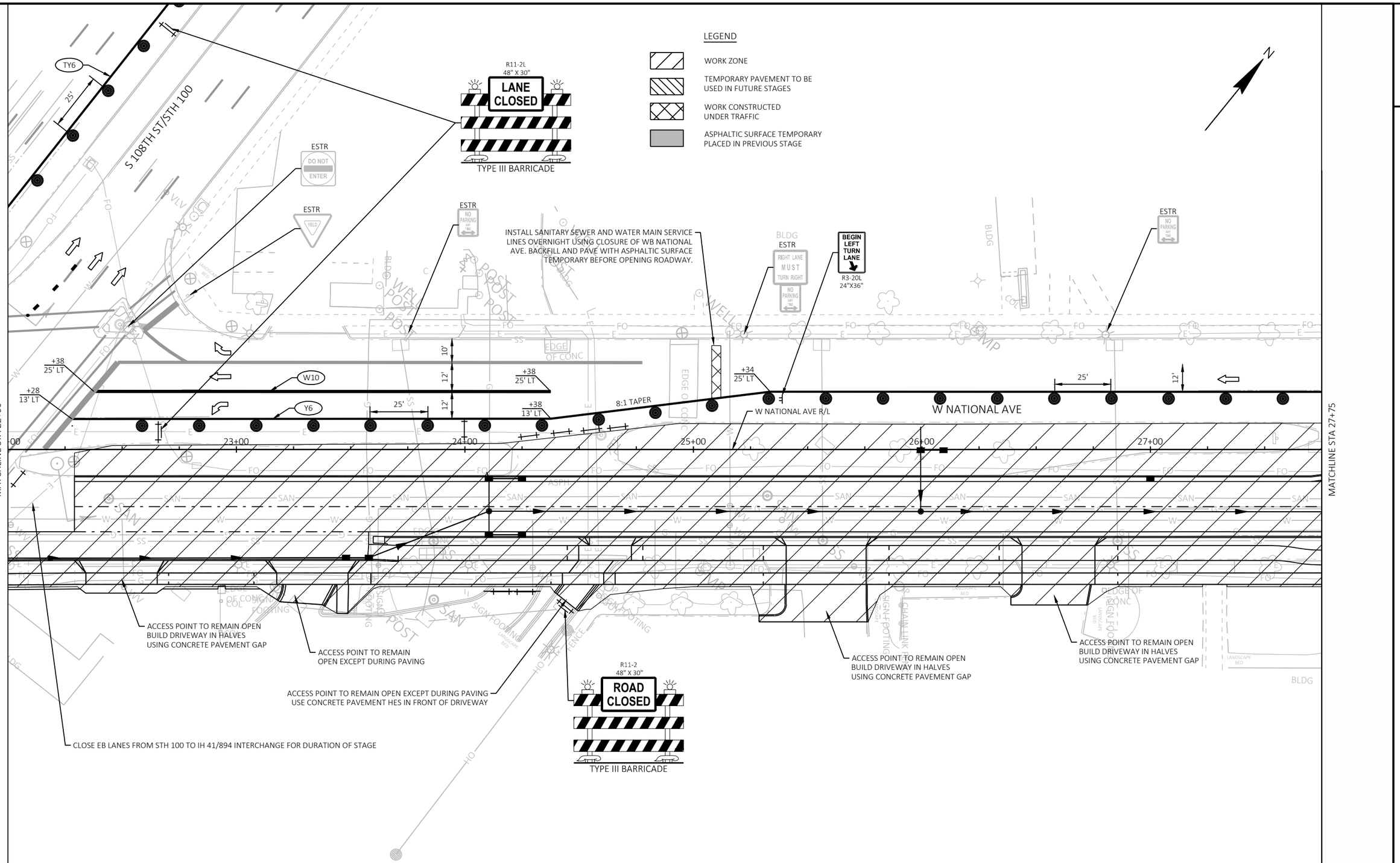
SHEET 91 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 6A-6B | SHEET 398 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006-TC6.DWG
LAYOUT NAME - 01B

PLOT DATE : 1/9/2026 10:17 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 6A-6B | SHEET 399 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006-TC6.DWG
LAYOUT NAME - 01

PLOT DATE : 1/9/2026 10:17 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTE:
1. INSTALL STORM SEWER ACROSS OPEN LANES OF NATIONAL AVE AND CLEVELAND AVE DURING OVERNIGHT HOURS USING A FULL CLOSURE OF NATIONAL AVE AND CLEVELAND AVE.
2. CLOSE LEFT TURN LANE WHEN CLEVELAND AVE IS CLOSED.

INSTALL SANITARY SEWER AND WATER MAIN SERVICE LINES OVERNIGHT USING CLOSURE OF WB NATIONAL AVE. BACKFILL AND PAVE WITH ASPHALTIC SURFACE TEMPORARY BEFORE OPENING ROADWAY.

MATCHLINE STA 27+75

MATCHLINE STA 33+75

MATCHLINE STA 97+75

MATCHLINE STA 102+25

W CLEVELAND AVE R/L

W CLEVELAND AVE

W NATIONAL AVE R/L

W NATIONAL AVE

S WILDWOOD DR R/L

S WILDWOOD DR

98+00

99+00

100+00

101+00

102+00

179+00

28+00

29+00

30+00

31+00

32+00

33+00

+81
9' RT

+14
25' LT

+58
26' LT

+82
15' LT

SEE NOTE 1

SEE NOTE 2

ONE WAY
R6-2R
24"X30"

R3-18
30"X30"

STOP

ESTR

DO NOT ENTER
R5-1
30"X30"

ESTR
NO PARKING ANY TIME

ESTR
LEFT LANE MUST TURN LEFT

WO1-6
48" X 24"
TYPE III BARRICADE

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

ACCESS POINT TO REMAIN OPEN EXCEPT DURING CONCRETE PAVEMENT PLACEMENT AND CURE TIME

ACCESS POINT TO BE CLOSED FOR DURATION OF STAGE

CLOSE WILDWOOD DR FOR DURATION OF STAGE
NO POSTED DETOUR PROVIDED

CLEVELAND AVE TO REMAIN OPEN TO THRU TRAFFIC EXCEPT LAST 30 CALENDAR DAYS OF STAGE. DURING STAGE 6B CLOSE AND DETOUR CLEVELAND AVE EAST OF NATIONAL AVE. SEE STAGE 6B TRAFFIC CONTROL SHEETS FOR ADDITIONAL DETAILS.

END ROAD WORK
G20-2A
48"X24"

ROAD CLOSED AHEAD
W20-3A

PLACE SIGN AT MONTANA AVE

R3-1
24"X24"

Y6

W10

12'

11'

25'

SHEET 93 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 6A | SHEET 400 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006-TC6.DWG
LAYOUT NAME - 02
PLOT DATE : 1/9/2026 10:17 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

WORK ZONE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES

WORK CONSTRUCTED UNDER TRAFFIC

ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

MATCHLINE STA 33+75

MATCHLINE STA 38+50

WRONG WAY
R5-1A
36"X24"

ESTR

BEGIN LEFT TURN LANE
R3-20L
24"X36"

ONE WAY
R6-2R
24"X30"

ESTR
STOP

ESTR

ONE WAY
R6-2R
24"X30"

ONE WAY
R6-2R
24"X30"

ESTR
SPEED LIMIT 35

W10

W NATIONAL AVE

11'

12'

+57
15' LT

+57
26' LT

8:1 TAPER

+45
26' LT

W NATIONAL AVE R/L

25'

Y6

34+00

35+00

36+00

37+00

38+00

CLOSE DRIVEWAY
REOPEN DRIVEWAY BEFORE CLOSING
DRIVEWAY ON CLEVELAND AVE

CLOSE DRIVEWAY
REOPEN DRIVEWAY BEFORE CLOSING
DRIVEWAY ON CLEVELAND AVE

FRONTAGE ROAD

SHEET 94 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 6A | SHEET 401 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006-TC6.DWG
LAYOUT NAME - 03

PLOT DATE : 1/9/2026 10:17 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

MATCHLINE STA 38+50

MATCHLINE STA 44+50

MATCHLINE 111+50

S 102ND ST

R3-18
30"X30"

TY6

ESTR
ONE WAY

ONE WAY
R6-2R
24"X30"

25'

12'

111+00

+64
17' LT

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

DO NOT ENTER
R5-1
30"X30"

INSTALL STORM SEWER ACROSS OPEN LANES OF NATONAL AVE USING FULL CLOSURE OF NATIONAL AVE DURING OVERNIGHT HOURS

DO NOT ENTER
R5-1
30"X30"

WRONG WAY
R5-1A
36"X24"

ESTR
RIGHT LANE MUST TURN RIGHT

10'

12'

25'

Y6

W NATIONAL AVE

R3-18
30"X30"

W NATIONAL AVE R/L

39+00

40+00

41+00

42+00

43+00

44+00

110+00

109+00

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

CLOSE 102ND ST FOR DURATION OF STAGE
NO POSTED DETOUR PROVIDED

PROVIDE LOCAL ACCESS TO RESIDENTS

PROVIDE LOCAL ACCESS
TO RESIDENTS

S 102ND ST R/L

S 102ND ST

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

END
ROAD WORK
G20-2A
48"X24"

ROAD CLOSED AHEAD
W20-3A

PLACE SIGN AT
W HARRISON AVE

FRONTAGE ROAD

SHEET 95 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 6A-6B | SHEET 402 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\241015000\SHEETS\026006-TC6.DWG
LAYOUT NAME - 04

PLOT DATE : 1/9/2026 10:17 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

PLACE SIGN 1000 FT FROM STOP BAR

ROAD WORK AHEAD W20-1A

ROAD WORK 500 FT W20-1D

PLACE SIGN 500 FT FROM STOP BAR

PSIP RAMP METERED WHEN FLASHING

IH 41/894 SB EXIT RAMP

IH 41/894 SB ENTRANCE RAMP

PSIP SOUTH INTERSTATE 41 / 45 EAST INTERSTATE 894

END ROAD WORK G20-2A 48"X24"

PSIP RAMP METERED WHEN FLASHING

PSIP

PSIP DO NOT ENTER

PSIP

NO PARKING ANY TIME

SPEED LIMIT 35 R2-1 24"X30"

MATCHLINE STA 44+50

MATCHLINE STA 50+50

12'

25'

W NATIONAL AVE R/L

W NATIONAL AVE

45+00 46+00 47+00 48+00 49+00 50+00

Y6 TY6

+26 24' LT

+30 25' LT

+05 25' LT

11'

25'

TY6

FRONTAGE ROAD

CONC EDGE

CHAIN LINK FENCE

CENTRAL BOX

ELEC SERVICE PANEL

S 101ST ST

R11-2L 48" X 30" LANE CLOSED

TYPE III BARRICADE

PSIP

PSIP SOUTH INTERSTATE 41 / EAST INTERSTATE 894 / SOUTH 45

PSIP 14'-2"

PSIP 250 FT

PSIP

12' TEMPORARY PEDESTRIAN BARRICADE

SIDEWALK CLOSED R9-9 24"X12"

PSIP DO NOT ENTER

SHEET 96 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 6A-6B | SHEET 403 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006-TC6.DWG
LAYOUT NAME - 05

PLOT DATE : 1/9/2026 10:17 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

WORK ZONE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES

WORK CONSTRUCTED UNDER TRAFFIC

ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

PSIP RAMP

R11-2L 48" X 30" LANE CLOSED TYPE III BARRICADE

PSIP 14'-2"

PSIP SOUTH INTERSTATE 41 45 EAST INTERSTATE 894

WO1-6 48" X 24" TYPE III BARRICADE

150' SHIFTING TAPER

PSIP ONE WAY

PSIP STOP

PSIP BEGIN RIGHT TURN LANE

S 100TH ST

S 100TH ST R/L

161+00

162+00

N

MATCHLINE STA 50+50

MATCHLINE STA 56+50

TY6

25'

11'

11'

+33 20' LT

+83 16' LT

51+00

52+00

53+00

54+00

55+00

56+00

40' R

ASPH

W NATIONAL AVE R/L

W NATIONAL AVE

+88 12' RT

+23 12' RT

12'

PSIP NO PARKING ANY TIME

PSIP DO NOT ENTER

PSIP DIVIDED HIGHWAY

+32 58' RT

PSIP NORTH INTERSTATE 41 45 WEST INTERSTATE 894

PSIP RAMP METERED WHEN FLASHING

IH 41/894 NB ENTRANCE RAMP

IH 41/894 NB EXIT RAMP

25'

PSIP ONLY ONLY ONLY

COVERING SIGN TYPE II

PSIP H

PSIP CUSTOM NO PARKING

MOVE BY OTHERS

RESTRICT NB LEFT TURN TO ONE LEFT TURN LANE

PSIP BEGIN LEFT TURN LANE

R11-2L 48" X 30" LANE CLOSED TYPE III BARRICADE

MATCHLINE A-A

TRANSMISSION TOWER

CHAIN LINK FENCE

ELEC SERVICE PANEL

CONC EDGE

SHEET 97 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 6A-6B | SHEET 404 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006-TC6.DWG
LAYOUT NAME - 06

PLOT DATE : 1/9/2026 10:17 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

WORK ZONE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES

WORK CONSTRUCTED UNDER TRAFFIC

ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

PSIP ROAD WORK 250 FT W20-1H

PSIP SPEED LIMIT 35

PSIP

PSIP

PSIP JCT INTERSTATE 41 INTERSTATE 894 45

PSIP STOP

PSIP

PSIP ROAD WORK 500 FT W20-1D

PSIP

PSIP NO PARKING BUS STOP

PSIP BUS STOP MOVE BY MCTS

PSIP

PSIP BEGIN LEFT TURN LANE

PSIP NO PARKING ANY TIME

PSIP

PSIP SPEED LIMIT 35

PSIP STOP

PSIP

PSIP BUS STOP MOVE BY MCTS

PSIP NO PARKING BUS STOP

END ROAD WORK G20-2A 48"X24"

MATCHLINE STA 56+50

MATCHLINE STA 62+50

W NATIONAL AVE R/L

W NATIONAL AVE

S 99TH ST

S 99TH ST R/L

57+00 58+00 59+00 60+00 61+00 62+00

118+00 119+00 131+00 132+00

12'

HOUSE BLDG CONC FLAG GUY TRENCH DRAIN FENCE FONT EDGE

SHEET 98 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 6A-6B | SHEET 405 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006-TC6.DWG
LAYOUT NAME - 07

PLOT DATE : 1/9/2026 10:17 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

TRAFFIC CONTROL SIGNS PCMS MESSAGE

| FRAME 1 | FRAME 2 |
|---|---|
| ROAD WORK BEGINS | XXXDAY XX/XX |

MATCHLINE STA 62+50

PSIP BEGIN LEFT TURN LANE

PSIP STOP

PSIP

PSIP SCHOOL SPEED LIMIT 15 WHEN CHILDREN ARE PRESENT

PSIP ROAD WORK AHEAD W20-1A

S 98TH ST

S 98TH ST R/L

141+00

142+00

W NATIONAL AVE

W NATIONAL AVE R/L

63+00

64+00

65+00

66+00

67+00

68+00

PCMS

12'

12'

PSIP

PSIP

PSIP

PSIP STATE FAIR

MOVE BY OTHERS

PSIP BEGIN LEFT TURN LANE

SHEET 99 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 6A-6B | SHEET 406 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006-TC6.DWG
LAYOUT NAME - 08

PLOT DATE : 1/9/2026 10:18 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

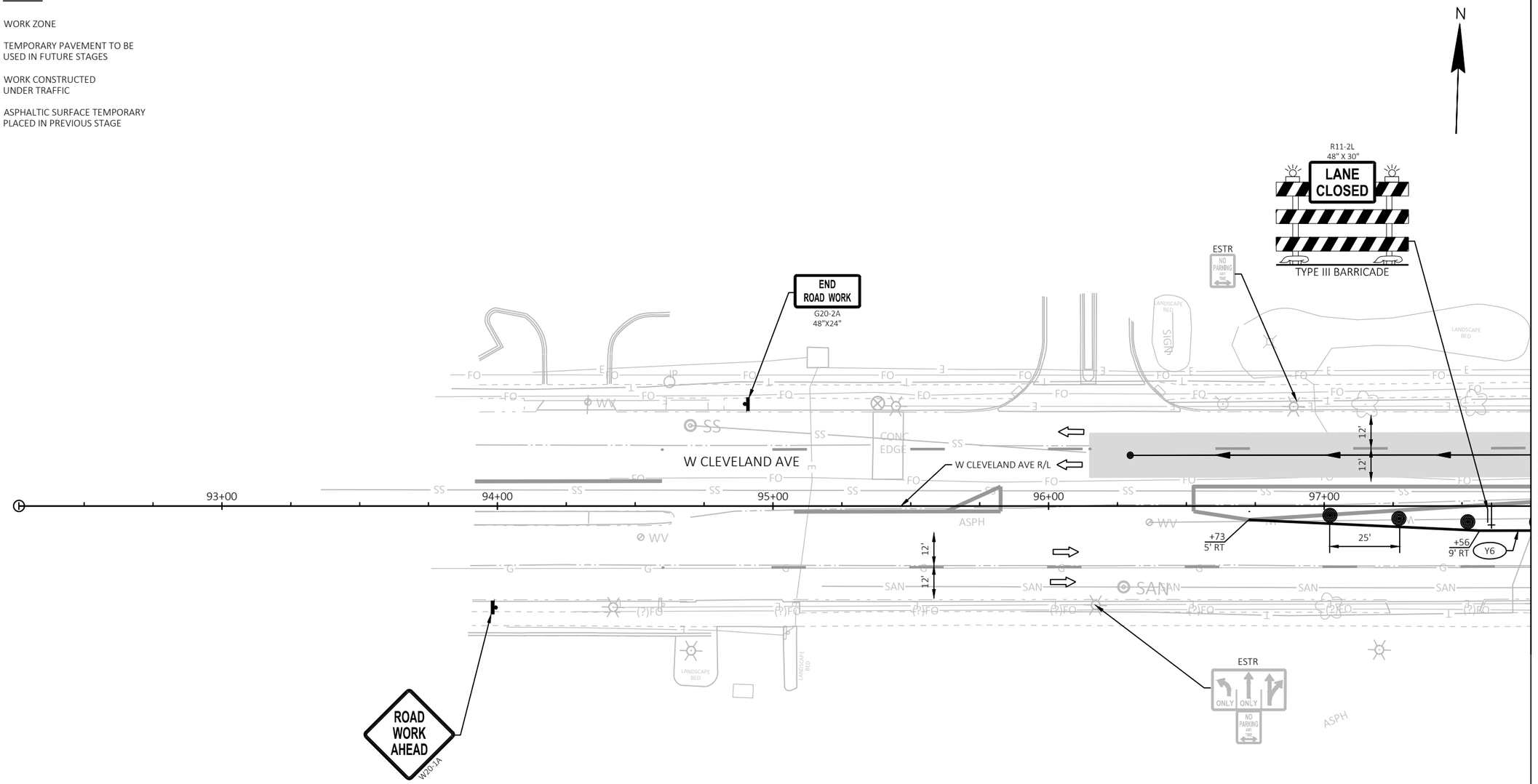
LEGEND

WORK ZONE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES

WORK CONSTRUCTED UNDER TRAFFIC

ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE




SHEET 100 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 6A | SHEET 407 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006-TC6.DWG
LAYOUT NAME - 10

PLOT DATE : 1/9/2026 10:18 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

WORK ZONE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES

WORK CONSTRUCTED UNDER TRAFFIC

ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

CLOSE DRIVEWAY BEFORE CLOSING
REOPEN DRIVEWAY BEFORE CLOSING
DRIVEWAY ON CLEVELAND AVE

N

ESTR

ESTR
NO PARKING
FOR THE NEXT

ESTR
BIKE ROUTE

ROAD WORK AHEAD
W20-1A

ESTR
SPEED LIMIT
30
NO PARKING
FOR THE NEXT

ESTR
BIKE ROUTE

END ROAD WORK
G20-2A
48"X24"

MATCHLINE STA 102+25

103+00 104+00 105+00 106+00 107+00 108+00

W CLEVELAND AVE R/L

W CLEVELAND AVE

12'
12'

ASPH

CONC EDGE

SIGN

BUILDING BUILDING BUILDING BUILDING

SHEET 101 OF 154

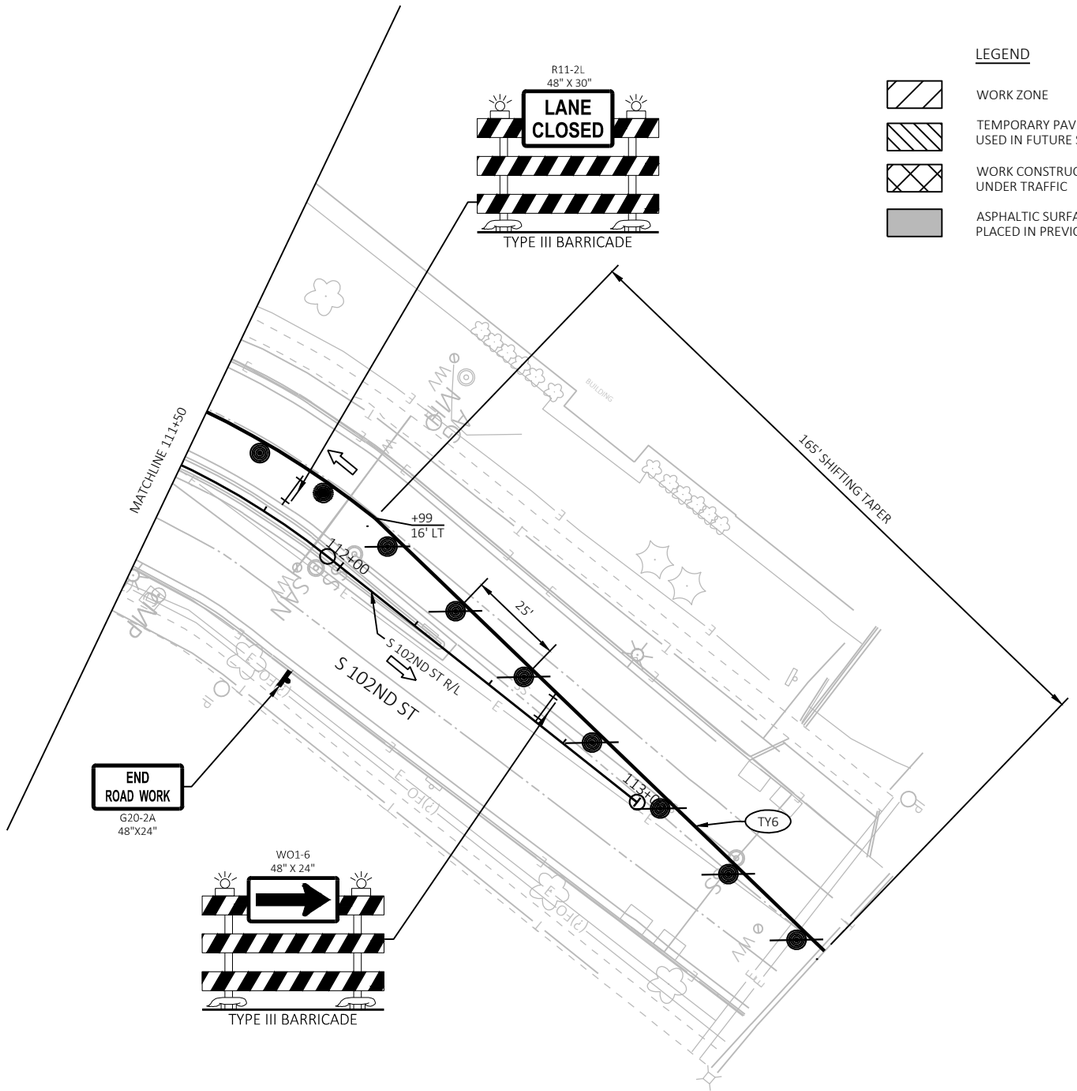
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 6A | SHEET 408 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006-TC6.DWG
LAYOUT NAME - 11

PLOT DATE : 1/9/2026 10:18 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

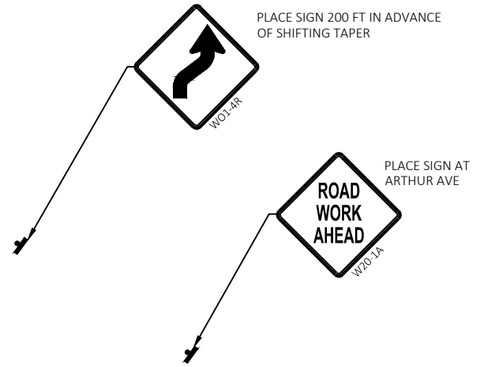
2




LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

N




PLACE SIGN 200 FT IN ADVANCE OF SHIFTING TAPER

PLACE SIGN AT ARTHUR AVE

SHEET 102 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 6A-6B | SHEET 409 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006-TC6.DWG
LAYOUT NAME - 14

PLOT DATE : 1/9/2026 10:18 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48"X24"

N

I-41/894 NB ENTRANCE RAMP

I-41/894 NB EXIT RAMP

TRANSMISSION TOWER

TRANSMISSION TOWER

TY6

MATCHLINE A-A

ESTR
State Fair Park

ESTR
COVERING SIGNS
TYPE II
ONLY ONLY ONLY

ESTR
WRONG WAY

ESTR
National Ave
NORTH SOUTH

ESTR
WRONG WAY

2

SHEET 103 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 6A-6B | SHEET 410 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006-TC6.DWG
LAYOUT NAME - 13

PLOT DATE : 1/9/2026 10:18 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

MATCHLINE STA 97+75

W CLEVELAND AVE R/L

W CLEVELAND AVE

EB CLEVELAND AVE CLOSED TO ALL TRAFFIC AT STA 96+50.
SEE DETOUR PLAN FOR POSED DETOUR

ESTR
NO PARKING ANY TIME

ESTR
LEFT LANE MUST TURN LEFT

WO1-6
48" X 24"
TYPE III BARRICADE

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

DO NOT ENTER
R5-1
30"X30"

R3-18
30"X30"

ESTR
NO PARKING ANY TIME

ESTR
NO PARKING ANY TIME

ESTR
DO NOT ENTER

ESTR
STOP

ONE WAY
R6-2R
24"X30"

R3-18
30"X30"

98+00

99+00

12'

12'

+14
25' LT

11'

12'

Y6

25'

W NATIONAL AVE R/L

W NATIONAL AVE

28+00

29+00

30+00

31+00

32+00

33+00

100+00

101+00

102+00

MATCHLINE STA 27+75

MATCHLINE STA 33+75

S WILDWOOD DR

S WILDWOOD DR R/L

179+00

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

ACCESS POINT TO REMAIN OPEN

ACCESS POINT TO BE CLOSED FOR DURATION OF STAGE

SIDEWALK ALONG CLEVELAND AVE CLOSED TO ALL TRAFFIC. SEE PEDESTRIAN DETOUR PLAN AND TEMPORARY PEDESTRIAN ACCOMMODATION PLANS FOR ADDITIONAL SIGNS AND TRAFFIC CONTROL DEVICES.

CLOSE CLEVELAND AVE EAST OF NATIONAL AVE AND EAST HALF OF INTERSECTION FOR UP TO 30 CALENDAR DAYS TO CONSTRUCT CLEVELAND AVE AND AND INTERSECTION.

CLOSE WILDWOOD DR FOR DURATION OF STAGE
NO POSTED DETOUR PROVIDED

END ROAD WORK
G20-2A
48"X24"

ROAD CLOSED AHEAD
W20-3A

PLACE SIGN AT MONTANA AVE

MATCHLINE STA 102+25

SHEET 104 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 6B | SHEET 411 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006B-TC6B.DWG
LAYOUT NAME - 02

PLOT DATE : 1/9/2026 10:18 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

WRONG WAY
R5-1A
36"X24"

ESTR
NO PARKING ANY TIME

BEGIN LEFT TURN LANE
R3-20L
24"X36"

ONE WAY
R6-2R
24"X30"

ESTR
STOP

ESTR
NO PARKING ANY TIME

ONE WAY
R6-2R
24"X30"

ONE WAY
R6-2R
24"X30"

ESTR
SPEED LIMIT 35
NO PARKING ANY TIME

W NATIONAL AVE

12'

25'

Y6

+45
26' LT
W NATIONAL AVE R/L

34+00
35+00
36+00
37+00
38+00

MATCHLINE STA 33+75

MATCHLINE STA 38+50

FRONTAGE ROAD

SHEET 105 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 6B | SHEET 412 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006B-TC6B.DWG
LAYOUT NAME - 03

PLOT DATE : 1/9/2026 10:18 AM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

PLOT SCALE : 1 IN:40 FT

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

N

R11-4
60" X 30"
ROAD CLOSED TO THRU TRAFFIC
TYPE III BARRICADE

PLACE ROAD CLOSURE SIGNS IN ACCORDANCE WITH SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL B

50'

W CLEVELAND AVE

W CLEVELAND AVE R/L

93+00 94+00 95+00 96+00 97+00

12' 12'

ESTR

COVERING SIGN TYPE II

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

MATCHLINE STA 97+75

SHEET 106 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 6B | SHEET 413 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006B-TC6B.DWG
LAYOUT NAME - 10

PLOT DATE : 1/9/2026 10:18 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTE: CONSTRUCT CLEVELAND AVE CLOSED TO TRAFFIC, FULLY CLOSED AND DETOUR CLEVELAND AVE FOR A MAXIMUM OF 30 CALENDAR DAYS

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

PLACE ROAD CLOSURE SIGNS IN ACCORDANCE WITH SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL B

N

MATCHLINE STA 102+25

103+00 104+00 105+00 106+00 107+00 108+00

W CLEVELAND AVE R/L

W CLEVELAND AVE

BUILDING BUILDING BUILDING BUILDING

SHEET 107 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 6B | SHEET 414 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006B-TC6B.DWG
LAYOUT NAME - 11

PLOT DATE : 1/9/2026 10:18 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

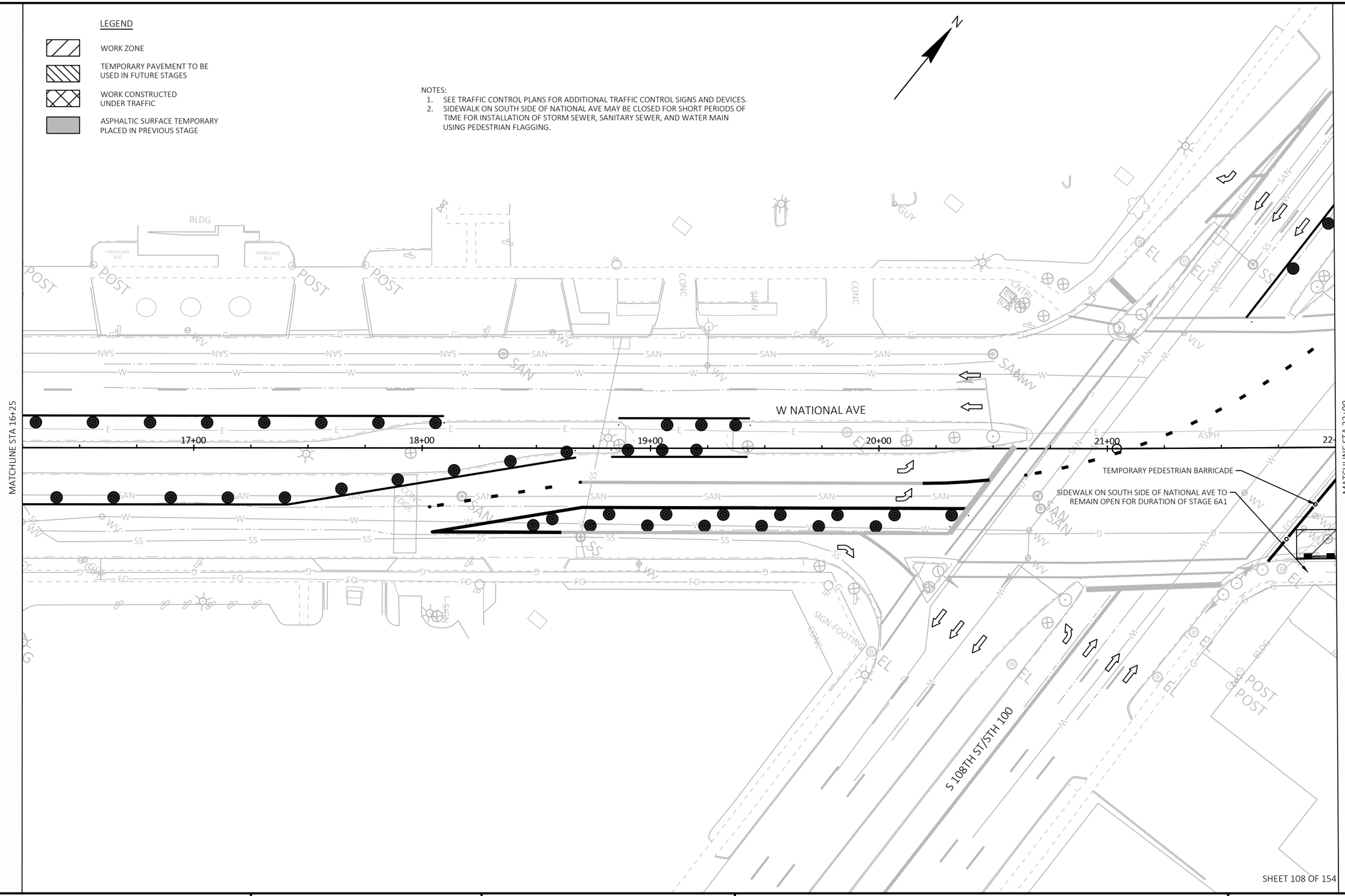
WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.
2. SIDEWALK ON SOUTH SIDE OF NATIONAL AVE MAY BE CLOSED FOR SHORT PERIODS OF TIME FOR INSTALLATION OF STORM SEWER, SANITARY SEWER, AND WATER MAIN USING PEDESTRIAN FLAGGING.




SHEET 108 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 6A1 | SHEET 415 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006C-TC6A1-PED.DWG
LAYOUT NAME - 01B

PLOT DATE : 1/9/2026 10:19 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

WORK ZONE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES

WORK CONSTRUCTED UNDER TRAFFIC

ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.
2. SIDEWALK ON SOUTH SIDE OF NATIONAL AVE MAY BE CLOSED FOR SHORT PERIODS OF TIME FOR INSTALLATION OF STORM SEWER, SANITARY SEWER, AND WATER MAIN USING PEDESTRIAN FLAGGING.

N

S 108TH ST/STH 100

W NATIONAL AVE

MATCHLINE STA 22+00

MATCHLINE STA 27+75

23+00 24+00 25+00 26+00 27+00

SIDEWALK ON SOUTH SIDE OF NATIONAL AVE TO REMAIN OPEN FOR DURATION OF STAGE 6A1

SHEET 109 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 6A1 | SHEET 416 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006C-TC6A1-PED.DWG
LAYOUT NAME - 01

PLOT DATE : 1/9/2026 10:19 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.
2. SIDEWALK ON SOUTH SIDE OF NATIONAL AVE MAY BE CLOSED FOR SHORT PERIODS OF TIME FOR INSTALLATION OF STORM SEWER, SANITARY SEWER, AND WATER MAIN USING PEDESTRIAN FLAGGING.

N

MATCHLINE STA 27+75

MATCHLINE STA 97+75

98+00

99+00

100+00

101+00

102+00

MATCHLINE STA 102+25

MATCHLINE STA 33+75

W NATIONAL AVE

S WILDWOOD DR

179+00

28+00

29+00

30+00

31+00

32+00

33+00

DETOUR M4-9BR 30"X24"

12' PEDESTRIAN BARRICADE

DETOUR M4-9BL 30"X24"

DETOUR M4-9BR 30"X24"

TEMPORARY PEDESTRIAN CURB RAMP

DETOUR M4-9BL 30"X24"

DETOUR M4-9BR 30"X24"

TEMPORARY PEDESTRIAN SURFACE MATTING

TEMPORARY PEDESTRIAN SURFACE RAMP

DETOUR M4-9BL 30"X24"

DETOUR M4-9BR 30"X24"

TEMPORARY PEDESTRIAN BARRICADE

12' PEDESTRIAN BARRICADE

SIDEWALK ON SOUTH SIDE OF NATIONAL AVE TO REMAIN OPEN FOR DURATION OF STAGE 6A1

TEMPORARY PEDESTRIAN BARRICADE

TEMPORARY PEDESTRIAN BARRICADE

SHEET 110 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 6A1 | SHEET 417 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006C-TC6A1-PED.DWG
LAYOUT NAME - 02

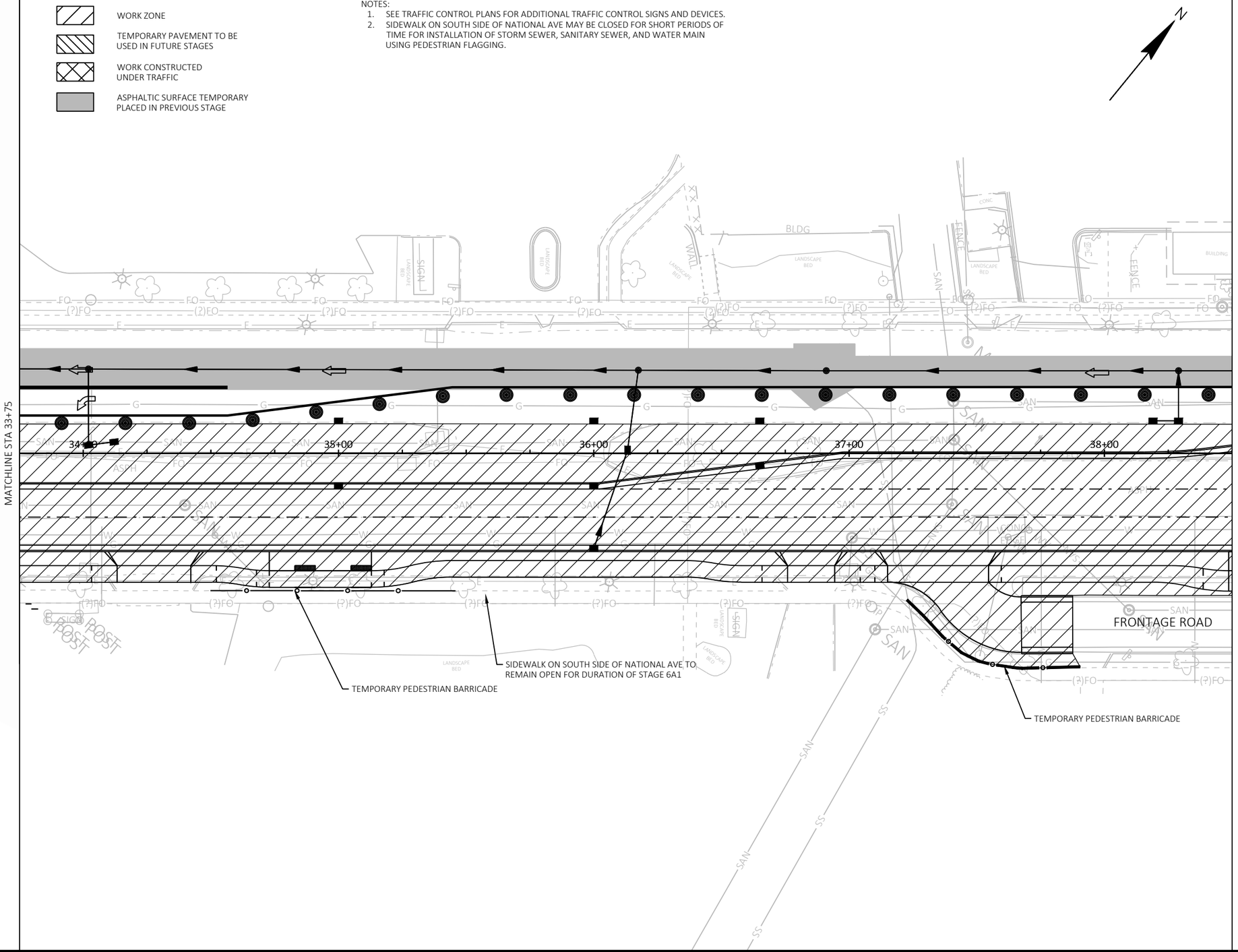
PLOT DATE : 1/9/2026 10:19 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.
2. SIDEWALK ON SOUTH SIDE OF NATIONAL AVE MAY BE CLOSED FOR SHORT PERIODS OF TIME FOR INSTALLATION OF STORM SEWER, SANITARY SEWER, AND WATER MAIN USING PEDESTRIAN FLAGGING.




SHEET 111 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 6A1 | SHEET 418 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006C-TC6A1-PED.DWG
LAYOUT NAME - 03
PLOT DATE : 1/9/2026 10:19 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.
2. SIDEWALK ON SOUTH SIDE OF NATIONAL AVE MAY BE CLOSED FOR SHORT PERIODS OF TIME FOR INSTALLATION OF STORM SEWER, SANITARY SEWER, AND WATER MAIN USING PEDESTRIAN FLAGGING.

MATCHLINE STA 38+50

MATCHLINE 111+50

S 102ND ST

W NATIONAL AVE

FRONTAGE ROAD

39+00 40+00 41+00 42+00 43+00 44+00

110+00 111+00 109+00

M4-9BL 30"X24"

M4-9BR 30"X24"

TEMPORARY PEDESTRIAN SURFACE MATTING AFTER SIDEWALK REMOVED FOR STORM SEWER INSTALLATION

TEMPORARY PEDESTRIAN BARRICADE

TEMPORARY PEDESTRIAN MATTING

TEMPORARY PEDESTRIAN CURB RAMP

SIDEWALK ON SOUTH SIDE OF NATIONAL AVE TO REMAIN OPEN FOR DURATION OF STAGE 6A1

SHEET 112 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 6A1 | SHEET 419 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006C-TC6A1-PED.DWG
LAYOUT NAME - 04

PLOT DATE : 1/9/2026 10:19 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

MATCHLINE STA 16+25

MATCHLINE STA 22+00

W NATIONAL AVE

17+00 18+00 19+00 20+00 21+00 22+

S 108TH ST/STH 100

TEMPORARY PEDESTRIAN BARRICADE

SIDEWALK CLOSED
DETOUR
M4-9BL
30"X24"

R9-9
24"X12"

SHEET 113 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 6A2 | SHEET 420 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006C-TC6A2-PED.DWG
LAYOUT NAME - 01B

PLOT DATE : 1/9/2026 10:19 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

WORK ZONE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES

WORK CONSTRUCTED UNDER TRAFFIC

ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

N

MATCHLINE STA 22+00

MATCHLINE STA 27+75

S 108TH ST/STH 100

W NATIONAL AVE

23+00

24+00

25+00

26+00

27+00

TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD

TXW

CONSTRUCT DRIVEWAY IN HALVES
DRIVEWAY TO REMAIN OPEN AT ALL TIMES

CLOSE DRIVEWAY FOR A MAXIMUM OF 7 CALENDAR DAYS TO CONSTRUCT DRIVEWAY.
TRAFFIC TO USE STH 100 ACCESS POINT TO EXIT SITE WHEN DRIVEWAY IS CLOSED.
DO NOT CLOSE AS SAME TIME AS ARBY'S EXIT DRIVEWAY.

TEMPORARY PEDESTRIAN BARRICADES

CLOSE DRIVEWAY FOR A MAXIMUM OF 7 CALENDAR DAYS TO CONSTRUCT DRIVEWAY TRAFFIC TO USE STH 100 ACCESS POINT TO EXIT SITE WHEN DRIVEWAY IS CLOSED.
DO NOT CLOSE AT SAME TIME AS ARBY'S ENTRANCE DRIVEWAY.

CONSTRUCT DRIVEWAY IN HALVES
DRIVEWAY TO REMAIN OPEN AT ALL TIMES

TEMPORARY PEDESTRIAN ACCOMMODATIONS

CONSTRUCT DRIVEWAY IN HALVES
DRIVEWAY TO REMAIN OPEN AT ALL TIMES

SHEET 114 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 6A2 | SHEET 421 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006C-TC6A2-PED.DWG
LAYOUT NAME - 01

PLOT DATE : 1/9/2026 10:19 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

MATCHLINE STA 97+75

MATCHLINE STA 27+75

MATCHLINE STA 33+75

MATCHLINE STA 102+25

98+00

99+00

100+00

101+00

102+00

28+00

29+00

30+00

31+00

32+00

33+00

W NATIONAL AVE

S WILDWOOD DR

179 (S)

TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD

TEMPORARY PEDESTRIAN BARRICADE

TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD

TEMPORARY PEDESTRIAN SURFACE MATTING PARTIAL REMOVAL OF MEDIAN TO PROVIDE 5 FT WIDTH FOR PEDESTRIANS

TEMPORARY PEDESTRIAN BARRICADE

TEMPORARY PEDESTRIAN BARRICADE

TEMPORARY PEDESTRIAN BARRICADE

DRIVEWAY TO REMAIN OPEN EXCEPT DURING PAVING.
7 CALENDAR DAY MAXIMUM CLOSURE

TEMPORARY PEDESTRIAN BARRICADE

TEMPORARY PEDESTRIAN SURFACE MATTING

TEMPORARY PEDESTRIAN CURB RAMP

TEMPORARY PEDESTRIAN BARRICADE

TEMPORARY PEDESTRIAN SURFACE MATTING

TEMPORARY PEDESTRIAN CURB RAMP

TEMPORARY PEDESTRIAN BARRICADE

TEMPORARY PEDESTRIAN BARRICADE

DETOUR M4-9BR 30"X24"

DETOUR M4-9BL 30"X24"

DETOUR M4-9BR 30"X24"

DETOUR M4-9BL 30"X24"

DETOUR M4-9BR 30"X24"

DETOUR M4-9BL 30"X24"

DETOUR M4-9BR 30"X24"

DETOUR M4-9BR 30"X24"

DETOUR M4-9BL 30"X24"

DETOUR M4-9BR 30"X24"

DETOUR M4-9BL 30"X24"

SHEET 115 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 6A2 | SHEET 422 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006C-TC6A2-PED.DWG
LAYOUT NAME - 02

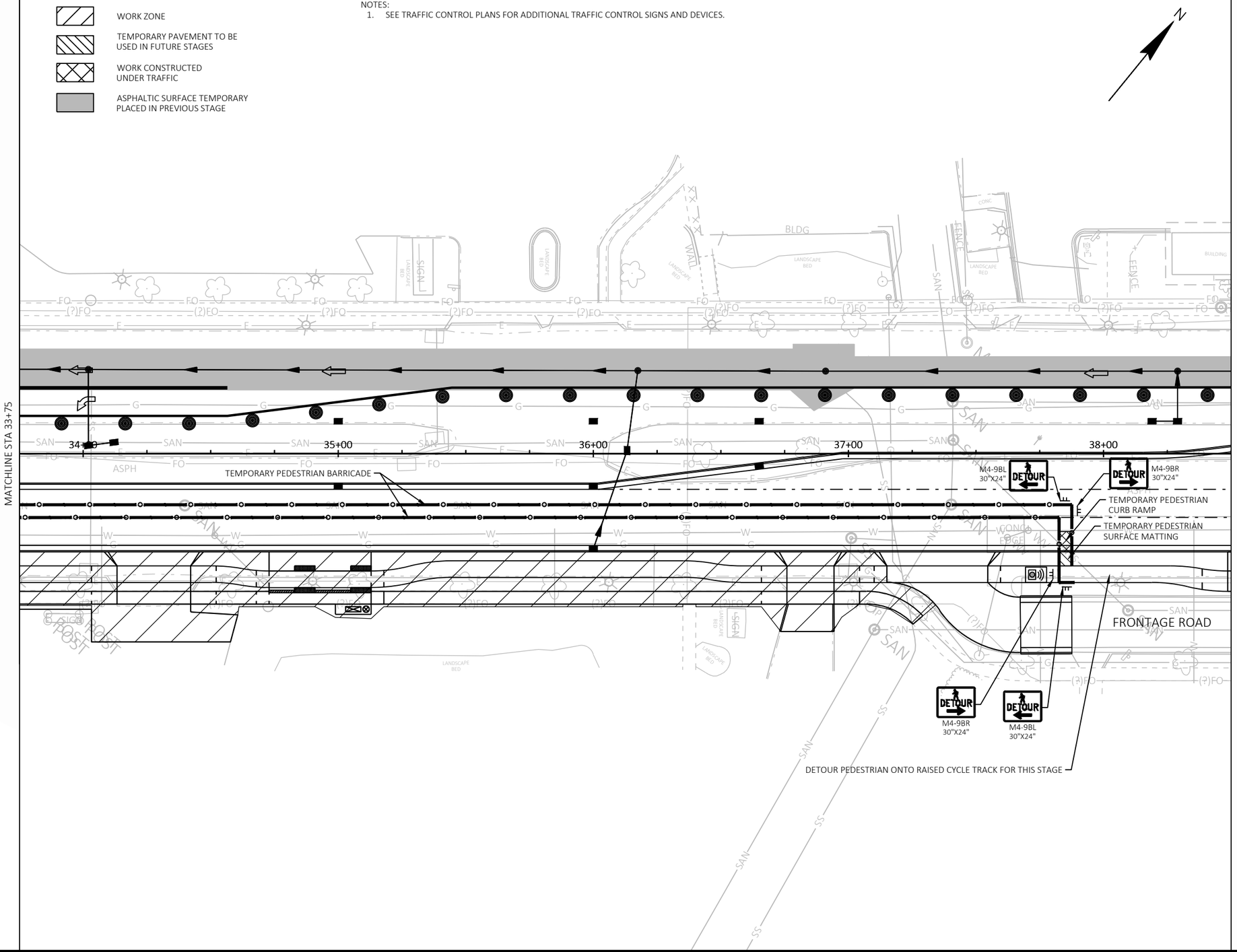
PLOT DATE : 1/9/2026 10:19 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.






| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 6A2 | SHEET 423 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006C-TC6A2-PED.DWG
LAYOUT NAME - 03
PLOT DATE : 1/9/2026 10:19 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

MATCHLINE STA 38+50

MATCHLINE STA 44+50

MATCHLINE 111+50

S 102ND ST

W NATIONAL AVE

FRONTAGE ROAD

39+00 40+00 41+00 42+00 43+00 44+00

110+00 111+00 109+00

DETOUR M4-9BL 30"X24"

DETOUR M4-9BR 30"X24"

SIDEWALK CLOSED R9-9 24"X12"

TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD

TEMPORARY PEDESTRIAN SURFACE MATTING REMOVE EXISTING PAVEMENT AND GRADE SURFACE TO A 7% MAXIMUM RUNNING SLOPE BEFORE PLACING MATTING

TEMPORARY PEDESTRIAN BARRICADE

TEMPORARY PEDESTRIAN SURFACE MATTING

TEMPORARY PEDESTRIAN CURB RAMP

SHEET 117 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 6A2 | SHEET 424 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006C-TC6A2-PED.DWG
LAYOUT NAME - 04

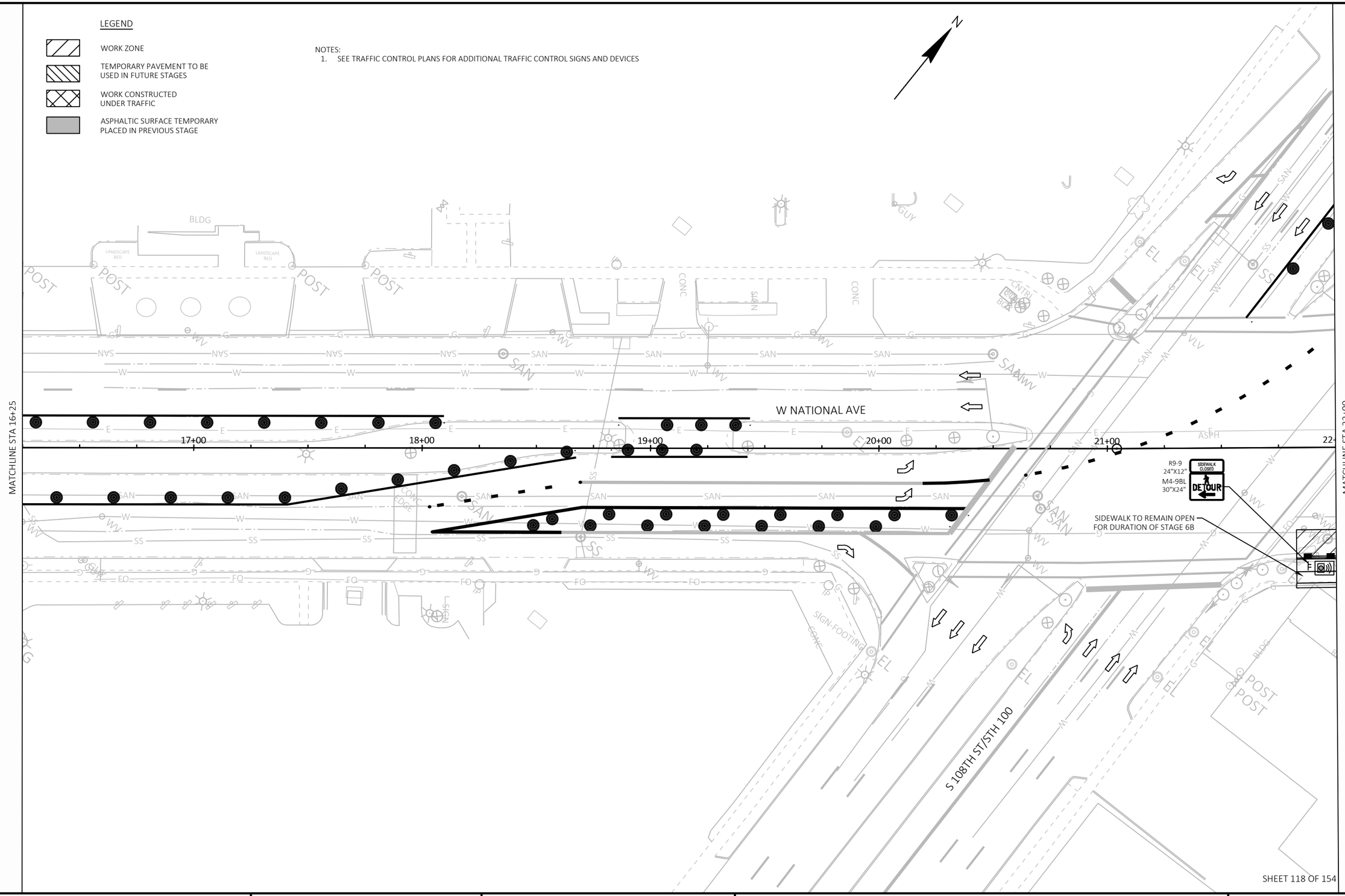
PLOT DATE : 1/9/2026 10:20 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES






| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 6B | SHEET 425 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006D-TC6B-PED.DWG
LAYOUT NAME - 01B
PLOT DATE : 1/9/2026 10:20 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

SEE PEDESTRIAN DETOUR PLAN FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES ON CLEVELAND AVENUE

MATCHLINE STA 97+75

EB CLEVELAND AVE CLOSED TO ALL TRAFFIC AT STA 96+50. SEE DETOUR PLAN FOR POSED DETOUR

98+00

99+00

W NATIONAL AVE

MATCHLINE STA 27+75

28+00

29+00

30+00

31+00

100+00

32+00

33+00

MATCHLINE STA 33+75

101+00

102+00

MATCHLINE STA 102+25

SIDEWALK CLOSED AHEAD
R9-9A
30"X18"

18' TEMPORARY PEDESTRIAN BARRICADE

SIDEWALK CLOSED
R9-9
24"X12"

SIDEWALK TO REMAIN OPEN

S WILDWOOD DR

179+00

SEE PEDESTRIAN DETOUR ROUTE PLAN FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES ON CLEVELAND AVENUE

SHEET 119 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 6B | SHEET 426 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006D-TC6B-PED.DWG
LAYOUT NAME - 02

PLOT DATE : 1/9/2026 10:20 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

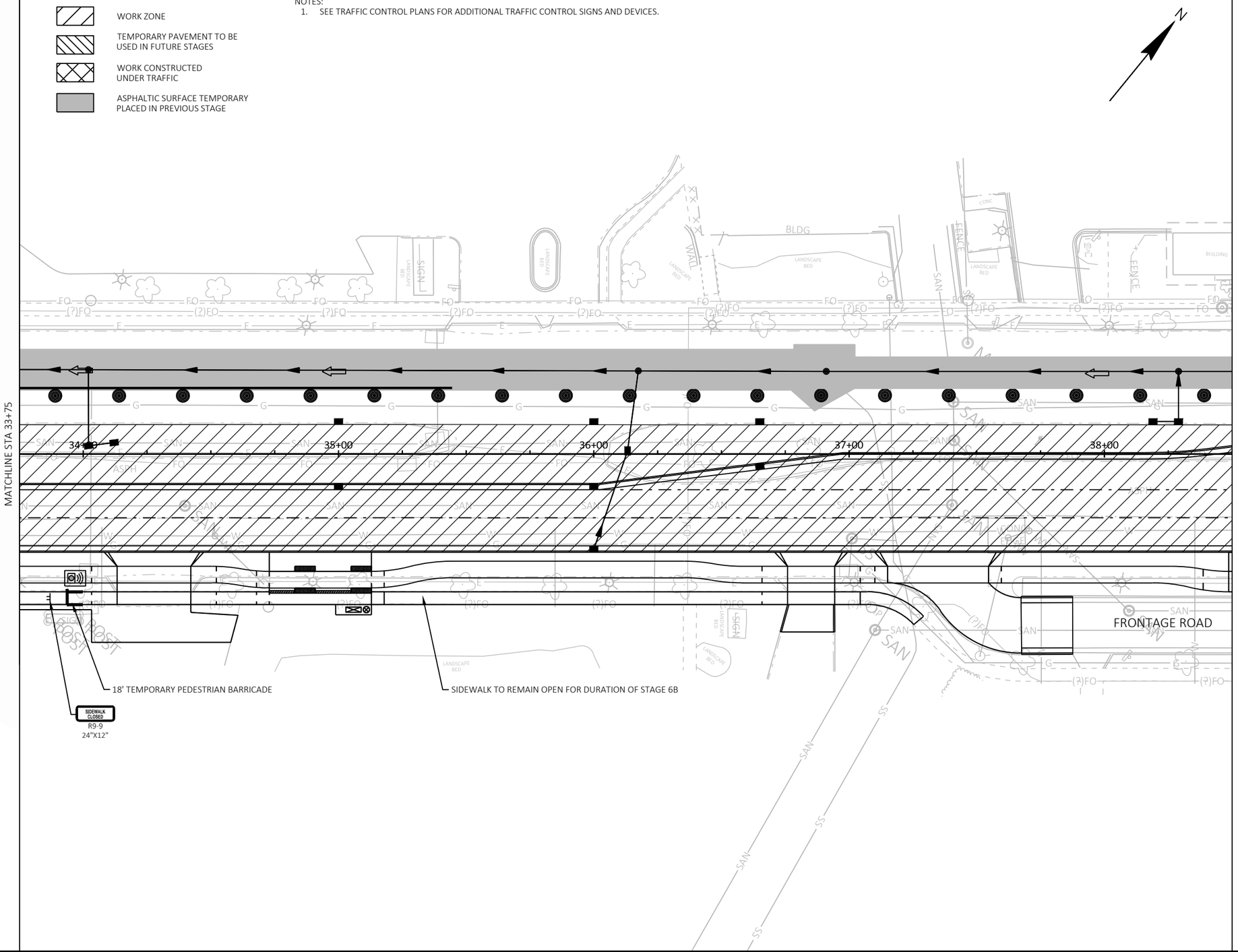
WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.




SHEET 120 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 6B | SHEET 427 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006D-TC6B-PED.DWG
LAYOUT NAME - 03
PLOT DATE : 1/9/2026 10:20 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

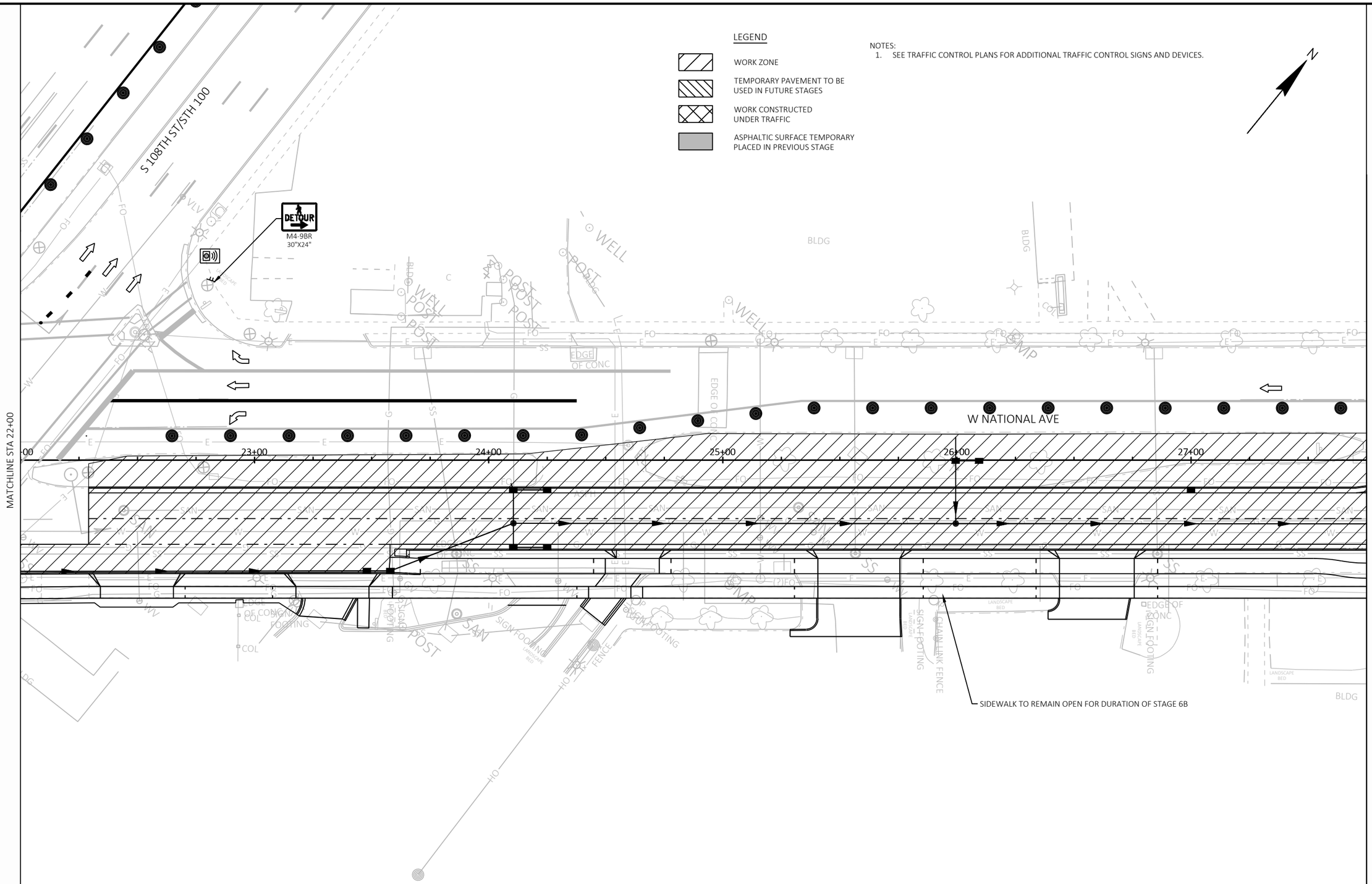
WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.




SHEET 121 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 6B | SHEET 428 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006D-TC6B-PED.DWG
LAYOUT NAME - 01

PLOT DATE : 1/9/2026 10:20 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.
2. TEMPORARY PEDESTRIAN SURFACE MATTING. REMOVE EXISTING PAVEMENT AND GRADE SURFACE TO A MAXIMUM OF 7% RUNNING SLOPE BEFORE PLACING MATTING.
3. TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD
4. TEMPORARY PEDESTRIAN BARRICADE

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

MATCHLINE 111+50

S 102ND ST

W NATIONAL AVE

FRONTAGE ROAD

MATCHLINE STA 38+50

MATCHLINE STA 44+50

DETOUR
M4-9BL
30"X24"

SEE NOTE 2

DETOUR
M4-9BR
30"X24"

SEE NOTE 3

SEE NOTE 4

SIDEWALK CLOSED
R9-9
24"X12"

39+00

110+00

40+00

41+00

42+00

43+00

44+00

R9-9A
30"X18"
SIDEWALK CLOSED AHEAD

DETOUR
M4-9BR
30"X24"

DETOUR
M4-9BR
30"X24"

TEMPORARY PEDESTRIAN SURFACE MATTING

TEMPORARY PEDESTRIAN CURB RAMP

SEE NOTE 4

109+00

S 102ND ST

DETOUR
M4-9BR
30"X24"

DETOUR
M4-9BL
30"X24"

TEMPORARY PEDESTRIAN SURFACE MATTING

TEMPORARY PEDESTRIAN CURB RAMP

SIGN

SHEET 122 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 6B | SHEET 429 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026006D-TC6B-PED.DWG
LAYOUT NAME - 04

PLOT DATE : 1/9/2026 10:20 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

TRAFFIC CONTROL NOTES - STAGE 7

CONSTRUCTION:

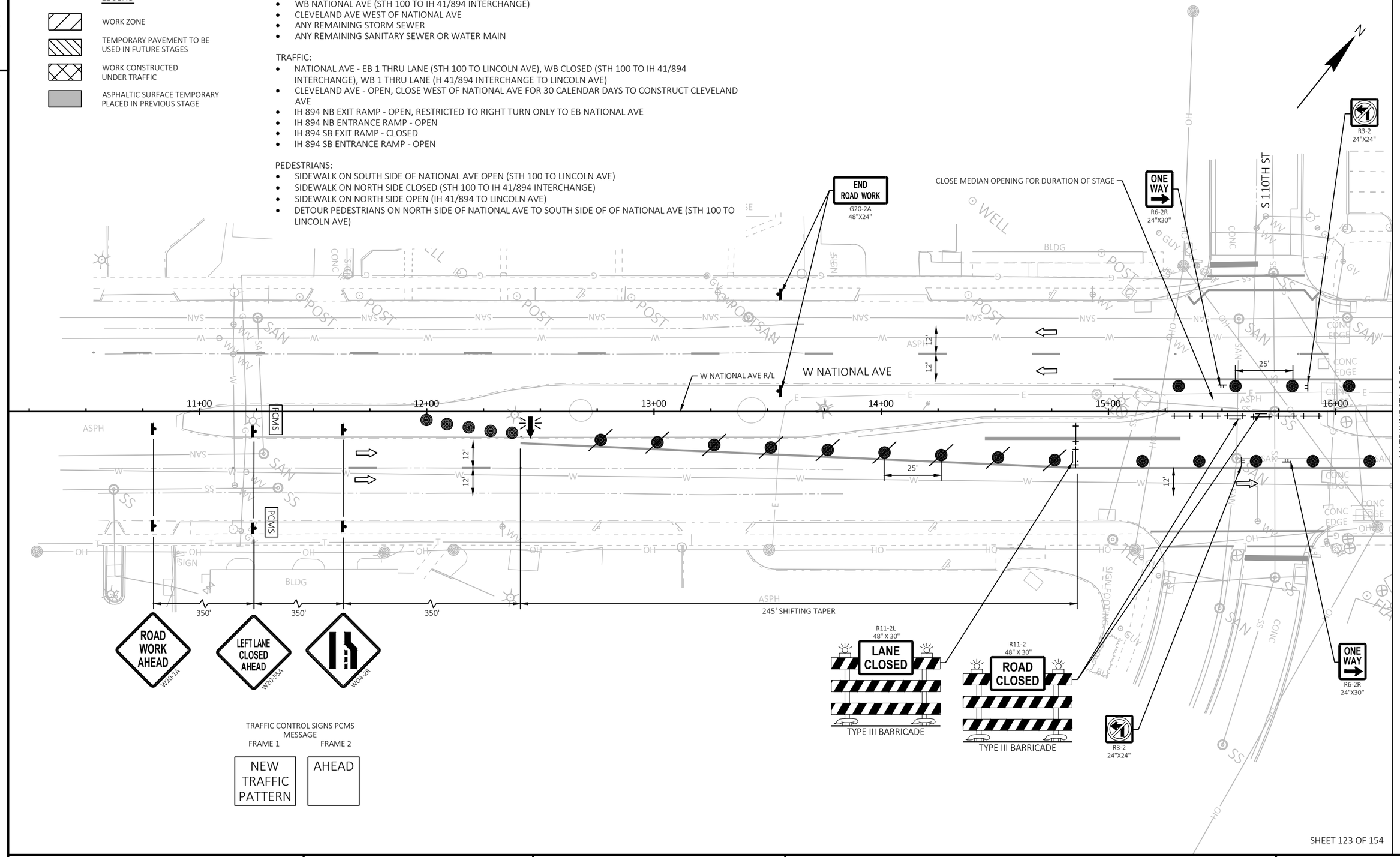
- WB NATIONAL AVE (STH 100 TO IH 41/894 INTERCHANGE)
- CLEVELAND AVE WEST OF NATIONAL AVE
- ANY REMAINING STORM SEWER
- ANY REMAINING SANITARY SEWER OR WATER MAIN

TRAFFIC:

- NATIONAL AVE - EB 1 THRU LANE (STH 100 TO LINCOLN AVE), WB CLOSED (STH 100 TO IH 41/894 INTERCHANGE), WB 1 THRU LANE (H 41/894 INTERCHANGE TO LINCOLN AVE)
- CLEVELAND AVE - OPEN, CLOSE WEST OF NATIONAL AVE FOR 30 CALENDAR DAYS TO CONSTRUCT CLEVELAND AVE
- IH 894 NB EXIT RAMP - OPEN, RESTRICTED TO RIGHT TURN ONLY TO EB NATIONAL AVE
- IH 894 NB ENTRANCE RAMP - OPEN
- IH 894 SB EXIT RAMP - CLOSED
- IH 894 SB ENTRANCE RAMP - OPEN

PEDESTRIANS:

- SIDEWALK ON SOUTH SIDE OF NATIONAL AVE OPEN (STH 100 TO LINCOLN AVE)
- SIDEWALK ON NORTH SIDE CLOSED (STH 100 TO IH 41/894 INTERCHANGE)
- SIDEWALK ON NORTH SIDE OPEN (IH 41/894 TO LINCOLN AVE)
- DETOUR PEDESTRIANS ON NORTH SIDE OF NATIONAL AVE TO SOUTH SIDE OF OF NATIONAL AVE (STH 100 TO LINCOLN AVE)




TRAFFIC CONTROL SIGNS PCMS MESSAGE

| FRAME 1 | FRAME 2 |
|---|---|
| NEW TRAFFIC PATTERN | AHEAD |

SHEET 123 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 7A-7B | SHEET 430 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007-TC7.DWG
LAYOUT NAME - 01A

PLOT DATE : 1/9/2026 10:20 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

R11-2L 48" X 30" LANE CLOSED
TYPE III BARRICADE

R11-2 48" X 30" ROAD CLOSED
TYPE III BARRICADE

ONE WAY R6-2R 24"X30"

R3-18 30"X30"

PLACE SIGN 500FT FROM INTERSECTION
ROAD WORK AHEAD W20-1A
NATIONAL AVE

MATCHLINE STA 16+25

MATCHLINE STA 22+00

W NATIONAL AVE

12'
12'
25'
25'
11'
11'
10'

17+00 18+00 19+00 20+00 21+00 22+

W NATIONAL AVE R/L

+69 15' RT
+03 26' RT
+70 26' RT
+19 15' RT
+47 15' RT
+88 25' RT

6:1 TAPER
TW10

P
PSIP
ONE WAY
TY6

BEGIN LEFT TURN LANE
R3-20L 24"X36"

WO12-1D 48"X48"

R11-2L 48" X 30" LANE CLOSED
TYPE III BARRICADE

R3-18 30"X30"

PLACE SIGN 500FT FROM INTERSECTION
ROAD WORK AHEAD W20-1A
NATIONAL AVE

S 108TH ST/STH 100

SHEET 124 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 7A-7B | SHEET 431 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007-TC7.DWG
LAYOUT NAME - 01B

PLOT DATE : 1/9/2026 10:20 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTES:
1. SEE TEMPORARY PEDESTRIAN ACCOMMODATION PLANS FOR ADDITIONAL SIGNS AND TRAFFIC CONTROL DEVICES.

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

CLOSE WB LANES FROM STH 100 TO IH 41/894 INTERCHANGE FOR DURATION OF STAGE

CLOSE ACCESS POINT FOR DURATION OF STAGE

S 108TH ST/STH 100

MATCHLINE STA 22+00

MATCHLINE STA 27+75

22+00 23+00 24+00 25+00 26+00 27+00

W NATIONAL AVE R/L

W NATIONAL AVE

26'

11'

TY6

PSIP
NO PARKING ANY TIME
R7-1D (2S)

ONE WAY
R6-2R
24"X30"

PSIP
SPEED LIMIT 35

ONE WAY
R6-2R
24"X30"

PSIP

ONE WAY
R6-2R
24"X30"

WRONG WAY
R5-1A
36"X24"

ONE WAY
R6-2R
24"X30"

PSIP
NO PARKING ANY TIME
R7-1D (2S)

R4-7
24"X30"

WO1-6
48" X 24"
TYPE III BARRICADE

SHEET 125 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 7A-7B | SHEET 432 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007-TC7.DWG
LAYOUT NAME - 01

PLOT DATE : 1/9/2026 10:20 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

CLOSE CLEVELAND AVE WEST OF NATIONAL AVE AND WEST HALF OF INTERSECTION FOR FIRST 30 CALENDAR DAYS OF STAGE 7 TO CONSTRUCT CLEVELAND AVE AND AND INTERSECTION.

NOTES:
1. SEE TEMPORARY PEDESTRIAN ACCOMMODATION PLANS FOR ADDITIONAL SIGNS AND TRAFFIC CONTROL DEVICES.
2. SIDEWALK ON CLEVELAND AVE CLOSED DURING STAGE 7A. SEE PEDESTRIAN DETOUR PLAN.

N

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

MATCHLINE STA 97+75

PERMANENTLY CLOSE ACCESS POINT AT BEGINNING OF STAGE

CLOSE ACCESS POINT FOR DURATION OF STAGE

MATCHLINE STA 27+75

MATCHLINE STA 33+75

28+00 29+00 30+00 31+00 32+00 33+00

99+00 100+00 101+00 102+00

W NATIONAL AVE

W NATIONAL AVE R/L

TY6

25'

11'

S WILDWOOD DR

S WILDWOOD DR R/L

179+00

W CLEVELAND AVE

W CLEVELAND AVE R/L 102+00

+01 21' LT

MATCHLINE STA 102+25

DO NOT ENTER
R5-1
30"X30"

PSIP

ONE WAY
R6-2R
24"X30"

STOP
RIGHT TURN ONLY

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

NO PARKING ANY TIME
R3-2
24"X24"

DO NOT ENTER
R5-1
30"X30"

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

NO PARKING ANY TIME

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

WO1-6
48" X 24"
TYPE III BARRICADE

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1A

PLACE SIGN AT MONTANA AVE

P

CONC SLAB

BLDG

COL

SHEET 126 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 7A | SHEET 433 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007-TC7.DWG
LAYOUT NAME - 02

PLOT DATE : 1/9/2026 10:21 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TEMPORARY PEDESTRIAN ACCOMMODATION PLANS FOR ADDITIONAL SIGNS AND TRAFFIC CONTROL DEVICES.

CLOSE ACCESS PONIT FOR DURATION OF STAGE

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

MAINTAIN ACCESS EXCEPT DURING PAVING
PARCEL HAS ALTERNATE ACCESS FROM 102ND ST

CLOSE ACCESS POINT FOR DURATION OF STAGE

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

MATCHLINE STA 33+75

MATCHLINE STA 38+50

34+00
35+00
36+00
37+00
38+00

W NATIONAL AVE

W NATIONAL AVE R/L

TY6

25'
11'

PSIP
NO PARKING ANY TIME

PSIP
SPEED LIMIT 35

ONE WAY
R6-2R
24"X30"

ONE WAY
R6-2R
24"X30"

WRONG WAY
R5-1A
36"X24"

FRONTAGE ROAD

PSIP
JCT
INTERSTATE 41
INTERSTATE 894
45

PSIP
NO PARKING ANY TIME

SHEET 127 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 7A-7B | SHEET 434 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007-TC7.DWG
LAYOUT NAME - 03

PLOT DATE : 1/9/2026 10:21 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

PLACE SIGN AT ARTHUR AVE

ROAD CLOSED AHEAD
W20-3A

END ROAD WORK
G20-2A
48"X24"

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

CLOSE 102ND ST FOR DURATION OF STAGE
NO POSTED DETOUR PROVIDED

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TEMPORARY PEDESTRIAN ACCOMMODATION PLANS FOR ADDITIONAL SIGNS AND TRAFFIC CONTROL DEVICES.

MATCHLINE STA 38+50

MATCHLINE STA 44+50

S 102ND ST

W NATIONAL AVE

FRONTAGE ROAD

39+00 40+00 41+00 42+00 43+00 44+00

W NATIONAL AVE R/L

TY6

25'

21'

+22
25' RT

DO NOT ENTER
R5-1
(2S)

R3-2
24"X24"

PSIP
DO NOT ENTER

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

PSIP
STOP

S 102ND ST R/L
109+00

ONE WAY
R6-2R
24"X30"

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

PSIP
SPEED LIMIT
35

BEGIN LEFT TURN LANE
R3-20L
24"X36"

END ROAD WORK
G20-2A
48"X24"

PLACE SIGN AT HARRISON AVE

ROAD WORK AHEAD
W20-1A

SHEET 128 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 7A-7B | SHEET 435 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007-TC7.DWG
LAYOUT NAME - 04

PLOT DATE : 1/9/2026 10:21 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TEMPORARY PEDESTRIAN ACCOMMODATION PLANS FOR ADDITIONAL SIGNS AND TRAFFIC CONTROL DEVICES.

RAMP CLOSED FOR DURATION OF STAGE

R11-2R 48" X 30" RAMP CLOSED
TYPE III BARRICADE

DO NOT ENTER R5-1 (2S)

PSIP RAMP METERED WHEN FLASHING

IH 41/894 SB EXIT RAMP

IH 41/894 SB ENTRANCE RAMP

PSIP SOUTH INTERSTATE 41 45 EAST INTERSTATE 894

END ROAD WORK G20-2A 48"X24"

PSIP RAMP METERED WHEN FLASHING

PSIP

WO1-6 48" X 24"
TYPE III BARRICADE

MAINTAIN ACCESS FOR CITY VEHICLES TO PARCEL

PSIP

PSIP DO NOT ENTER

MATCHLINE STA 44+50

45+00 46+00 47+00 48+00 49+00 50+00

W NATIONAL AVE

W NATIONAL AVE R/L

+91 14' RT
+10 14' RT
8:1 TAPER
TW10
TY6
+03 25' RT
+03 36' RT
10'
+28 14' RT
+28 25' RT
P
TWS
+00 14' RT
+00 25' RT
+30 69' LT
+08 53' LT
12'
12'

FRONTAGE ROAD

225' SHIFTING TAPER

PSIP H

PSIP WEST INTERSTATE 894 USE RIGHT LANE NORTH 45 USE RIGHT LANE

PSIP SOUTH INTERSTATE 41 EAST INTERSTATE 894 SOUTH 45 ONLY

PSIP W NATIONAL AVE

PSIP NO PARKING ANY TIME

PSIP NORTH INTERSTATE 41 WEST INTERSTATE 894 NORTH 45 ONLY USE RIGHT LANE

PSIP NORTH INTERSTATE 41 WEST INTERSTATE 894 45

PSIP AHEAD

PSIP

PSIP SOUTH INTERSTATE 41 EAST INTERSTATE 894 SOUTH 45

S 101ST ST

PSIP DO NOT ENTER

PSIP 250 FT

PSIP

PSIP 14'-2"

R11-2 48" X 30" ROAD CLOSED
TYPE III BARRICADE

MATCHLINE STA 50+50

SHEET 129 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 7A-7B | SHEET 436 | E |
|---|---|---|---|---|---|

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

PSIP RAMP

PSIP 14'-2"

PSIP SOUTH INTERSTATE 41 45 EAST INTERSTATE 894

WO1-6 48" X 24" TYPE III BARRICADE

PSIP ONE WAY

PSIP

PSIP STOP

PSIP BEGIN RIGHT TURN LANE

PSIP SIDEWALK CLOSED R9-9 24"X12"

18' TEMPORARY PEDESTRIAN BARRICADE

PSIP

PSIP

PSIP

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

PSIP SPEED LIMIT 35

PSIP

PSIP JCT INTERSTATE 41 INTERSTATE 894 45

PSIP R9-9A 30"X18" SIDEWALK CLOSED AHEAD DETOUR M4-9BL 30"X24"

PSIP STOP

PSIP

PSIP ROAD CLOSED 500 FT W20-3D

PSIP BUS STOP MOVE BY MCTS

PSIP NO PARKING BUS STOP

PSIP BEGIN LEFT TURN LANE

PSIP NO PARKING ANY TIME

PSIP DETOUR M4-9BR 30"X24"

PSIP

PSIP STOP

PSIP

PSIP BUS STOP MOVE BY MCTS

PSIP NO PARKING BUS STOP

PSIP BEGIN LEFT TURN LANE

END ROAD WORK G20-2A 48"X24"

W NATIONAL AVE

W NATIONAL AVE R/L

S 99TH ST

S 99TH ST R/L

57+00 58+00 59+00 60+00 61+00 62+00

131+00 132+00 118+00 119+00

12'

MATCHLINE STA 56+50

MATCHLINE STA 62+50

SHEET 131 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 7A-7B | SHEET 438 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007-TC7.DWG
LAYOUT NAME - 07

PLOT DATE : 1/9/2026 10:21 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

TRAFFIC CONTROL SIGNS PCMS MESSAGE

| FRAME 1 | FRAME 2 |
|---|---|
| ROAD TO CLOSE | XXXDAY XX/XX |

PSIP BEGIN LEFT TURN LANE

PSIP STOP

PSIP

PSIP

PSIP SCHOOL SPEED LIMIT 15 WHEN CHILDREN ARE PRESENT

PSIP ROAD CLOSED AHEAD W20-3A

PSIP

PSIP

PSIP

PSIP STATE FAIR

MOVE BY OTHERS

PSIP BEGIN LEFT TURN LANE

PCMS

S 98TH ST R/L

S 98TH ST

W NATIONAL AVE R/L

W NATIONAL AVE

141+00

142+00

63+00

64+00

65+00

66+00

67+00

12'

12'

MATCHLINE STA 62+50

MATCHLINE STA 67+25

HOUSE

BUILDING

CONC

FLAG

SHEET 132 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 7A-7B | SHEET 439 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007-TC7.DWG
LAYOUT NAME - 08

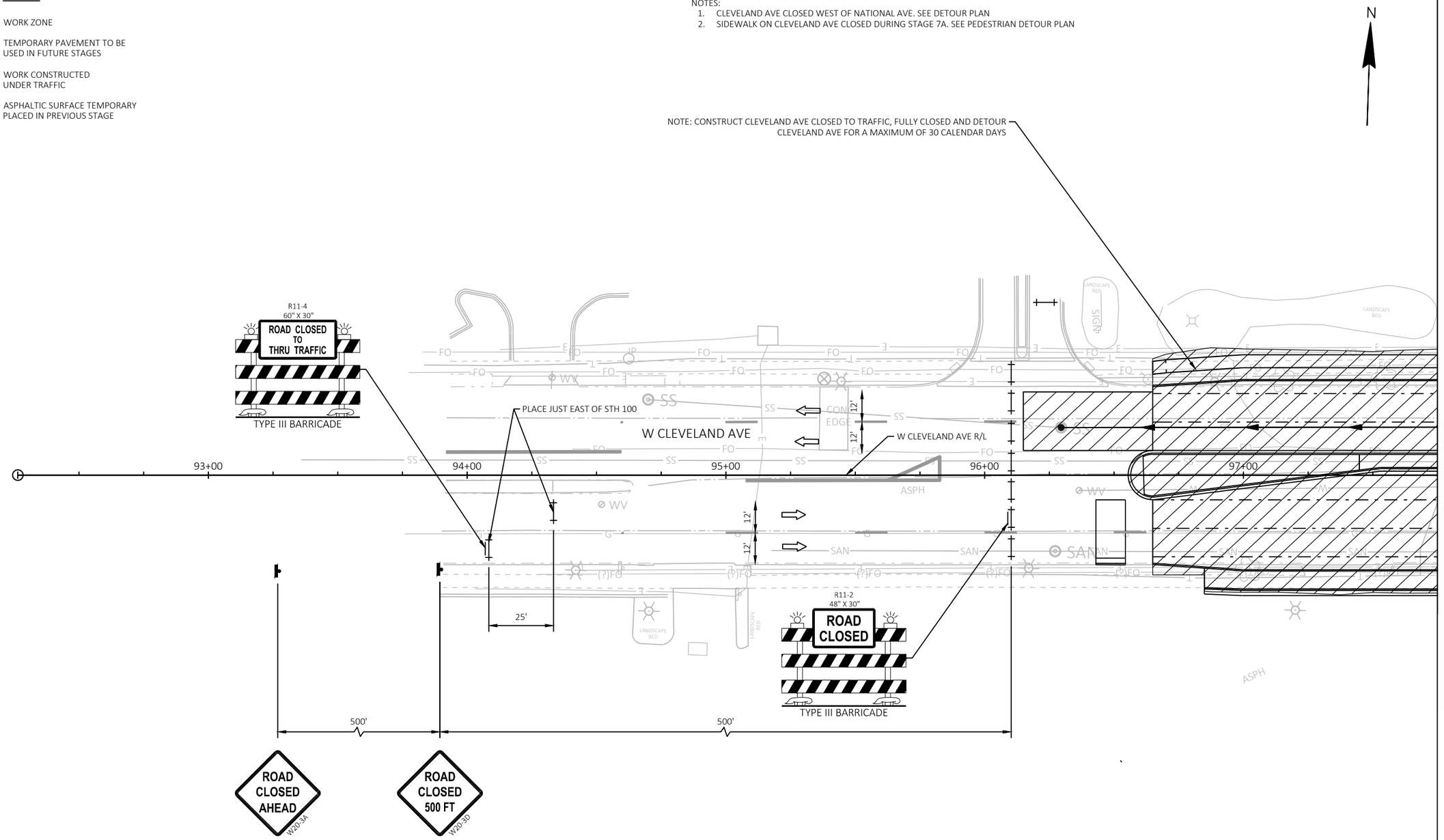
PLOT DATE : 1/9/2026 10:21 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. CLEVELAND AVE CLOSED WEST OF NATIONAL AVE. SEE DETOUR PLAN
2. SIDEWALK ON CLEVELAND AVE CLOSED DURING STAGE 7A. SEE PEDESTRIAN DETOUR PLAN




SHEET 133 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 7A | SHEET 440 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\241015OO\SHEETS\026007-TC7.DWG
LAYOUT NAME - 10
PLOT DATE : 1/9/2026 10:21 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

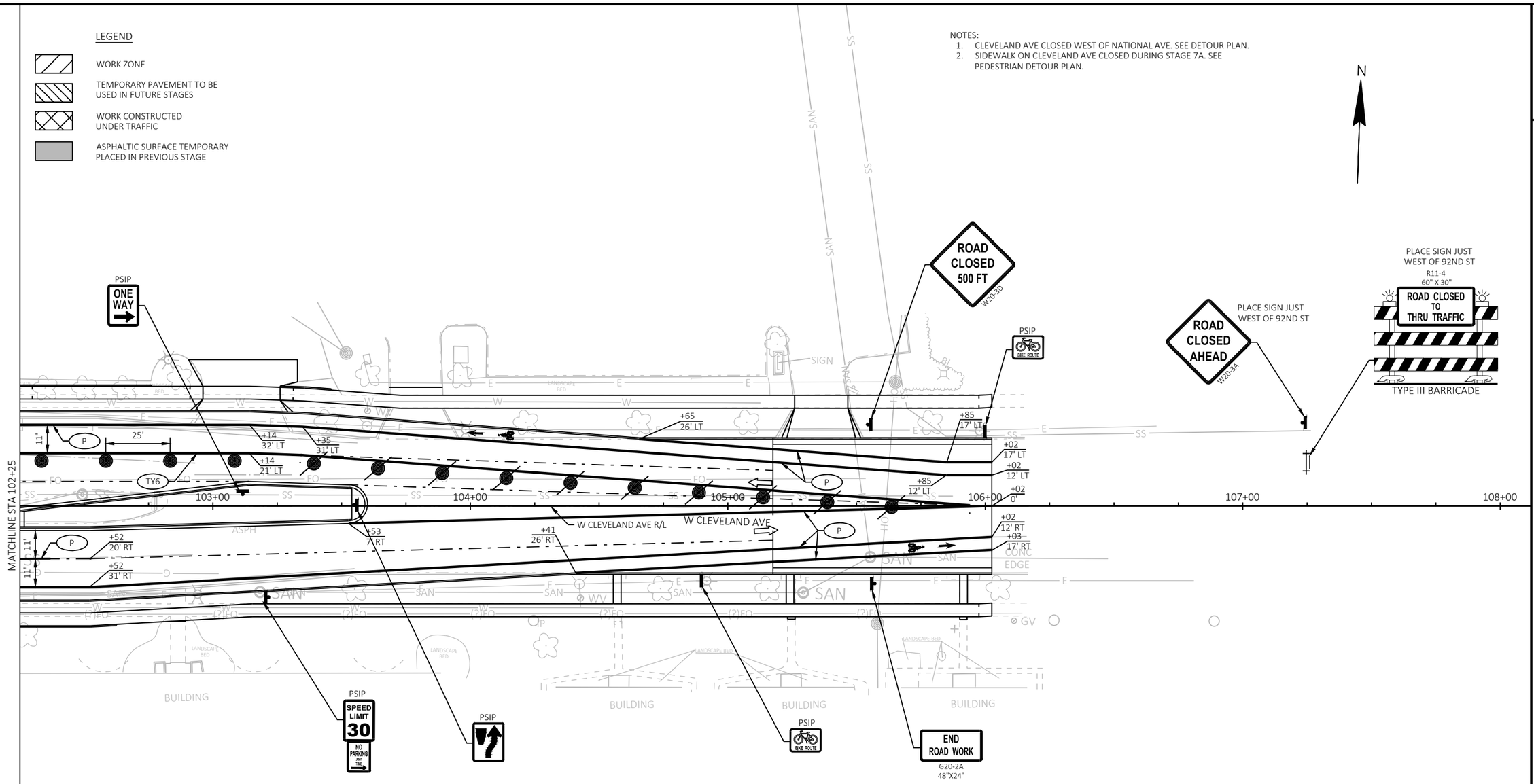
WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. CLEVELAND AVE CLOSED WEST OF NATIONAL AVE. SEE DETOUR PLAN.
2. SIDEWALK ON CLEVELAND AVE CLOSED DURING STAGE 7A. SEE PEDESTRIAN DETOUR PLAN.




SHEET 134 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 7A | SHEET 441 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007-TC7.DWG
LAYOUT NAME - 11

PLOT DATE : 1/9/2026 10:22 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48"X24"

N

TRANSMISSION TOWER

TRANSMISSION TOWER

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

IH 41/894 NB EXIT RAMP

IH 41/894 NB ENTRANCE RAMP

TY6

25'

+39
233' RT

MATCHLINE A-A

ESTR
State Fair Park

ESTR
SIGN COVERED IN STAGE 1

ESTR
WRONG WAY

ESTR
SIGN COVERED IN STAGE 1
National Ave
NORTH SOUTH

ESTR
WRONG WAY

2

SHEET 135 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 7A-7B | SHEET 442 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007-TC7.DWG
LAYOUT NAME - 13

PLOT DATE : 1/9/2026 10:22 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

CLOSE CLEVELAND AVE WEST OF NATIONAL AVE AND WEST HALF OF INTERSECTION FOR UP TO 30 CALENDAR DAYS TO CONSTRUCT CLEVELAND AVE AND AND INTERSECTION. CLEVELAND AVE TO REMAIN OPEN IN EXISTING CONFIGURATION WHEN ROADWAY IS OPEN TO TRAFFIC.

NOTES:
1. SEE TEMPORARY PEDESTRIAN ACCOMMODATION PLANS FOR ADDITIONAL SIGNS AND TRAFFIC CONTROL DEVICES

MATCHLINE STA 97+75

PERMANENTLY CLOSE ACCESS POINT AT BEGINNING OF STAGE

STOP R1-1 30"X30"

PSIP NO PARKING ANY TIME

DO NOT ENTER R5-1 30"X30"

R4-7 24"X30"

WO1-6 48" X 24"

TYPE III BARRICADE

CLOSE ACCESS POINT FOR DURATION OF STAGE

W NATIONAL AVE R/L

W NATIONAL AVE

W CLEVELAND AVE R/L

W CLEVELAND AVE

S WILDWOOD DR

S WILDWOOD DR R/L

MATCHLINE STA 27+75

MATCHLINE STA 33+75

MATCHLINE STA 102+25

ONE WAY R6-2R 24"X30"

RIGHT TURN ONLY

ROAD CLOSED R11-2 48" X 30"

END ROAD WORK G20-2A 48"X24"

ROAD WORK AHEAD W20-1A

PLACE SIGN AT MONTANA AVE

TW6

TY6

SHEET 136 OF 154

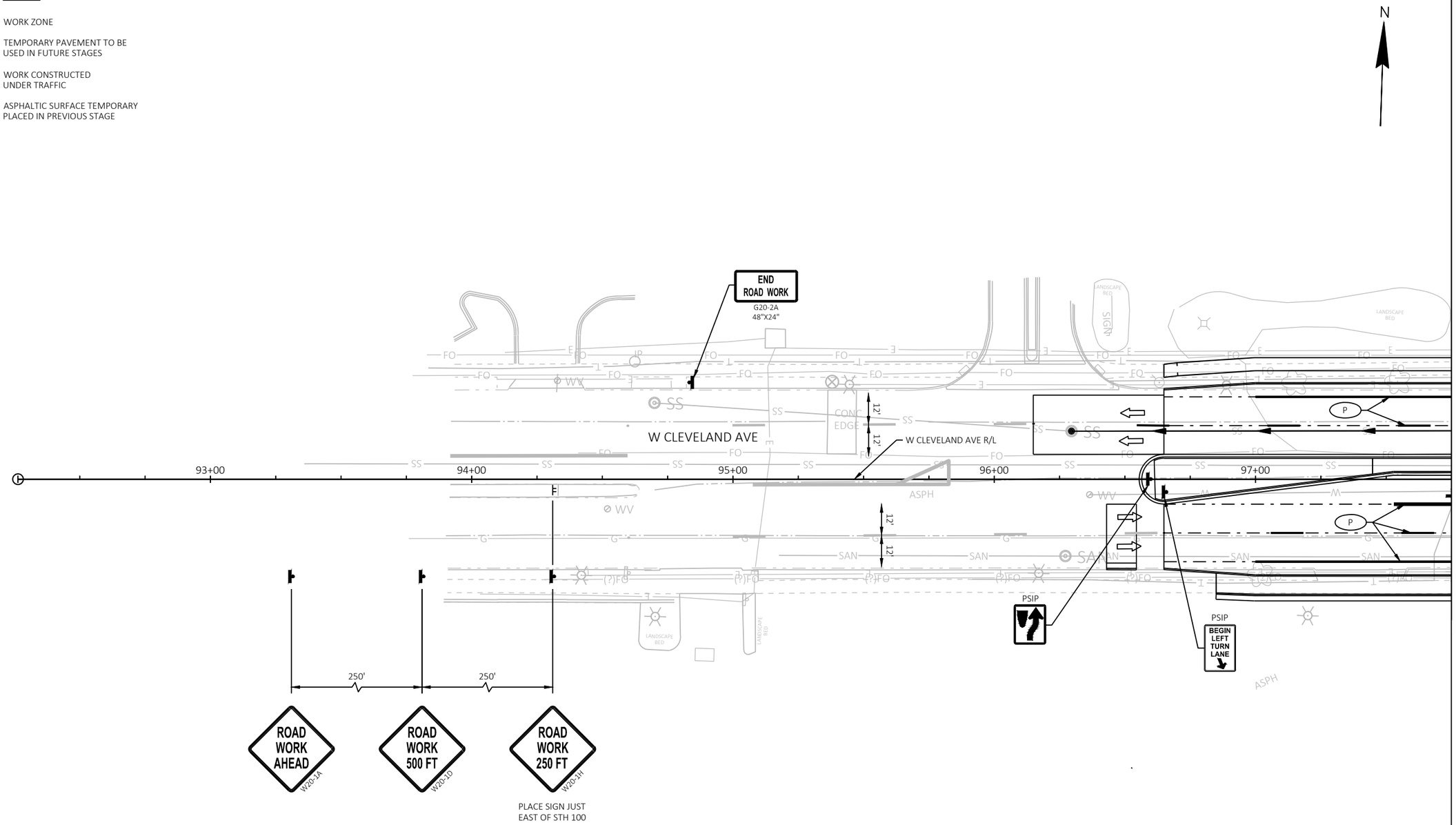
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 7B | SHEET 443 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007B-TC7B.DWG
LAYOUT NAME - 02
PLOT DATE : 1/9/2026 10:22 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE




SHEET 137 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 7B | SHEET 444 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007B-TC7B.DWG
LAYOUT NAME - 10

PLOT DATE : 1/9/2026 10:22 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

WORK ZONE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES

WORK CONSTRUCTED UNDER TRAFFIC

ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

N

MATCHLINE STA 102+25

DO NOT ENTER
R5-1
30"X30"

PSIP
ONE WAY

ROAD WORK AHEAD
W20-1A

PSIP
BIKE ROUTE

11'
11'
P
25'
TY6
+14
21' LT
+14
10' LT
+34
20' LT

103+00
104+00
105+00
106+00
107+00
108+00

W CLEVELAND AVE
W CLEVELAND AVE R/L

PSIP
SPEED LIMIT 30
NO PARKING ANY TIME

PSIP

PSIP
BIKE ROUTE

END ROAD WORK
G20-2A
48"X24"

BUILDING

SHEET 138 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TRAFFIC CONTROL-STAGING - STAGE 7B | SHEET 445 | E |
|---|---|---|---|---|---|

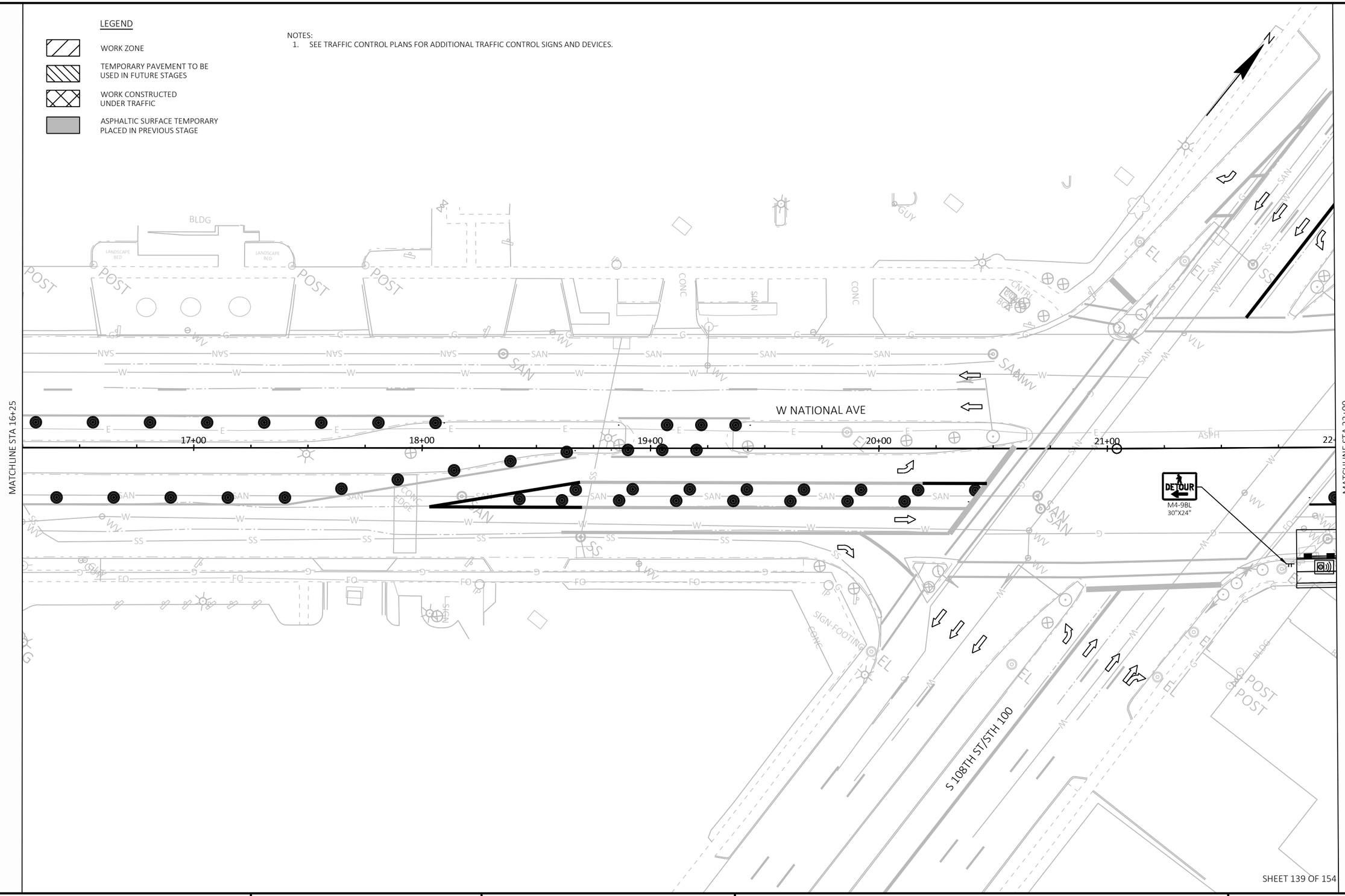
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007B-TC7B.DWG
LAYOUT NAME - 11

PLOT DATE : 1/9/2026 10:22 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.






| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 7A | SHEET 446 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007C-TC7A-PED.DWG
LAYOUT NAME - 01B

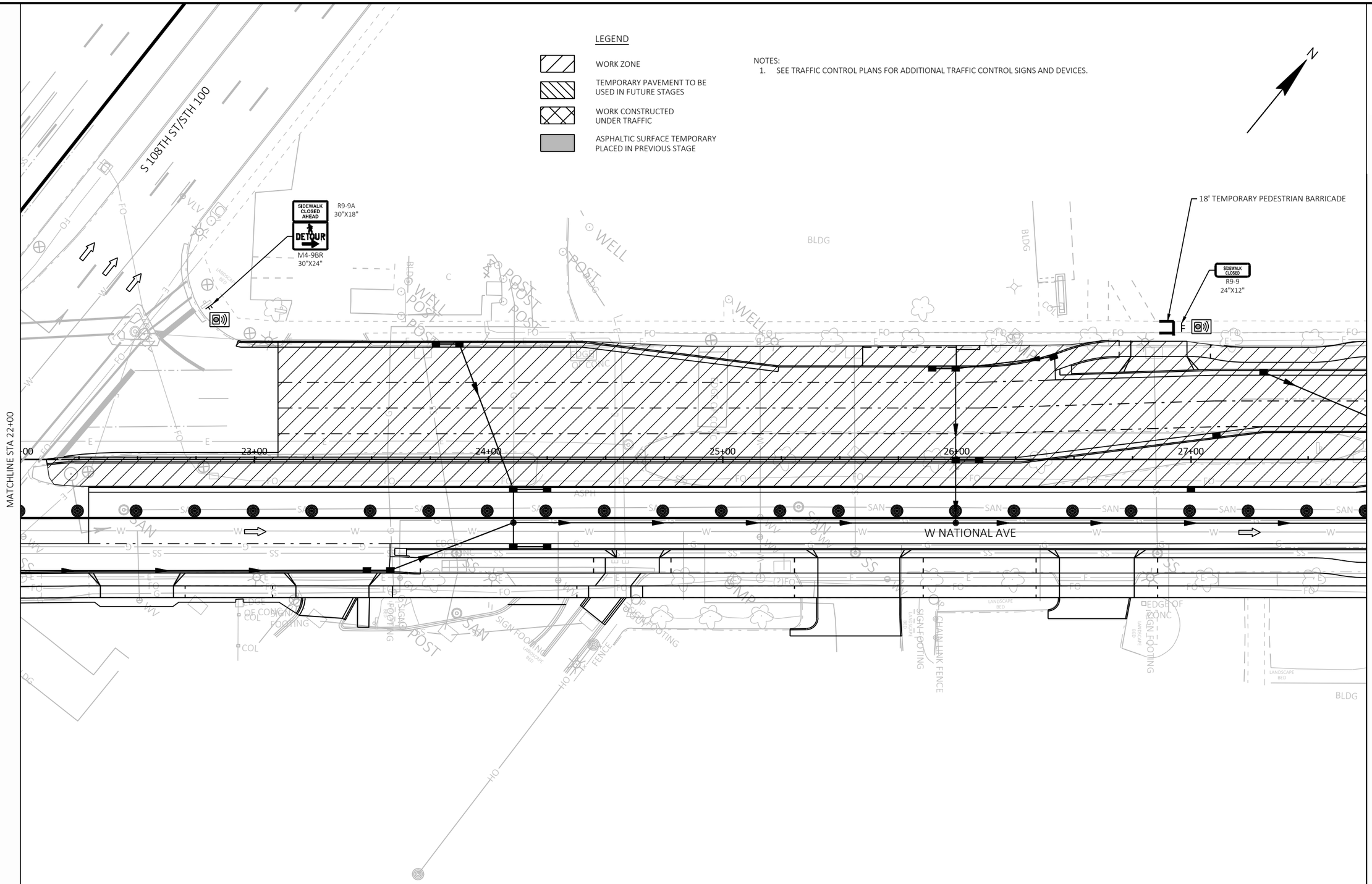
PLOT DATE : 1/9/2026 10:22 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.




SHEET 140 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 7A | SHEET 447 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007C-TC7A-PED.DWG
LAYOUT NAME - 01
PLOT DATE : 1/9/2026 10:22 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

SEE PEDESTRIAN DETOUR FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES ON CLEVELAND AVENUE

18' TEMPORARY PEDESTRIAN BARRICADE

SIDEWALK CLOSED R9-9 24"X12"

MATCHLINE STA 97+75

MATCHLINE STA 27+75

MATCHLINE STA 33+75

MATCHLINE STA 102+25

W NATIONAL AVE

S WILDWOOD DR

28+00 29+00 30+00 31+00 32+00 33+00

97+00 98+00 99+00 100+00 101+00 102+00 179+00

SEE PEDESTRIAN DETOUR FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES ON CLEVELAND AVENUE

SHEET 141 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 7A | SHEET 448 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007C-TC7A-PED.DWG
LAYOUT NAME - 02

PLOT DATE : 1/9/2026 10:22 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITONAL TRAFFIC CONTROL SIGNS AND DEVICES.

SIDEWALK TO REMAIN OPEN FOR DURATION OF STAGE 7A

MATCHLINE STA 33+75

34+00 35+00 36+00 37+00 38+00

W NATIONAL AVE

FRONTAGE ROAD

MATCHLINE STA 38+50

SHEET 142 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 7A | SHEET 449 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007C-TC7A-PED.DWG
LAYOUT NAME - 03

PLOT DATE : 1/9/2026 10:22 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.
2. TEMPORARY PEDESTRIAN SURFACE MATTING INSTALLED IN PREVIOUS STAGE.
3. TEMPORARY PEDESTRIAN BARRICADE.

MATCHLINE STA 38+50

MATCHLINE 111+50

R9-9 24"X12" SIDEWALK CLOSED
M4-9BR 30"X24" DETOUR

R9-9A 30"X18" SIDEWALK CLOSED AHEAD
M4-9BL 30"X24" DETOUR

SEE NOTE 3

SEE NOTE 2

S 102ND ST

39+00

40+00

41+00

42+00

43+00

44+00

W NATIONAL AVE

FRONTAGE ROAD

109+00

M4-9BL 30"X24" DETOUR

M4-9BR 30"X24" DETOUR

R9-9 24"X12" SIDEWALK CLOSED

M4-9BL 30"X24" DETOUR

R9-9 24"X12" SIDEWALK CLOSED

6' TEMPORARY PEDESTRIAN BARRICADE

6' TEMPORARY PEDESTRIAN BARRICADE

MATCHLINE STA 44+50

SHEET 143 OF 154

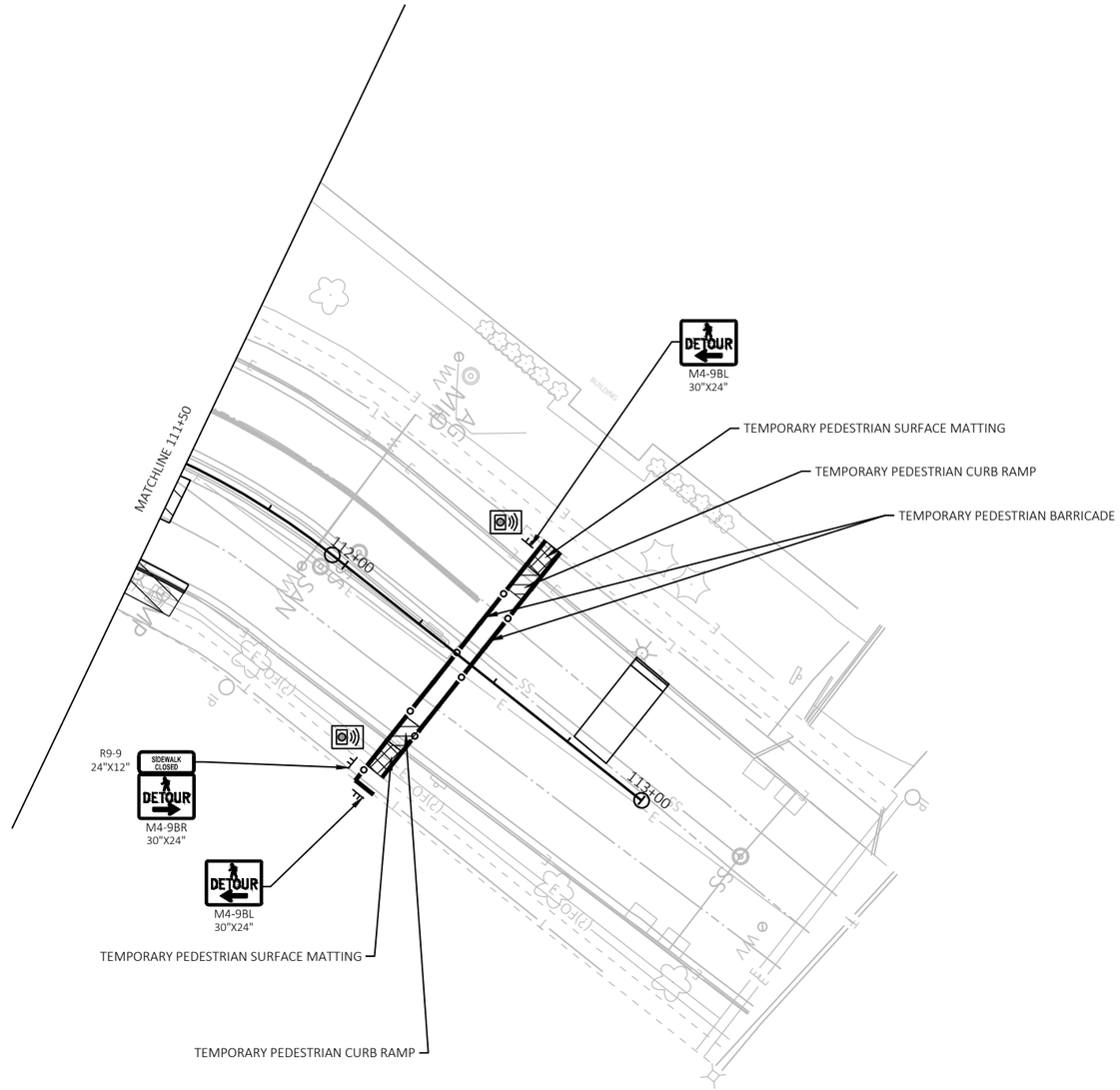
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 7A | SHEET 450 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007C-TC7A-PED.DWG
LAYOUT NAME - 04
PLOT DATE : 1/9/2026 10:23 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.






| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 7A | SHEET 451 | E |
|---|---|---|---|---|---|

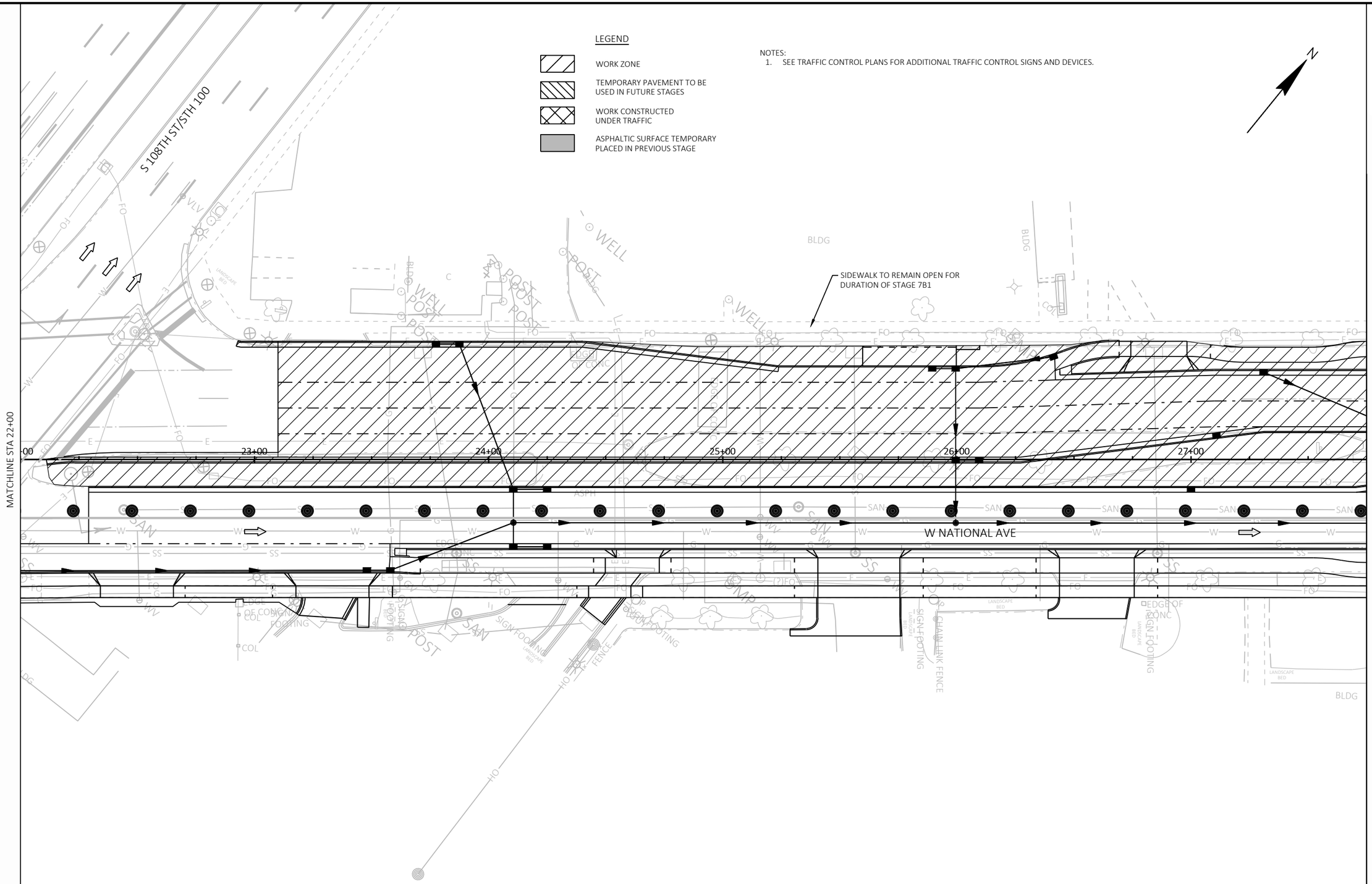
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007C-TC7A-PED.DWG
LAYOUT NAME - 14
PLOT DATE : 1/9/2026 10:23 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.




SHEET 145 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 7B1 | SHEET 452 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007D-TC7B1-PED.DWG
LAYOUT NAME - 01
PLOT DATE : 1/9/2026 10:23 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

N

MATCHLINE STA 97+75

98+00

99+00

SIDEWALK TO REMAIN OPEN FOR DURATION OF STAGE 7B1

DETOUR M4-9BL 30"X24"

DETOUR M4-9BR 30"X24"

TEMPORARY PEDESTRIAN BARRICADE

DETOUR M4-9BR 30"X24"

TEMPORARY PEDESTRIAN SURFACE MATTING

DETOUR M4-9BL 30"X24"

SIDEWALK TO REMAIN OPEN FOR DURATION OF STAGE 7B1

MATCHLINE STA 27+75

28+00

29+00

30+00

31+00

100+00

32+00

33+00

MATCHLINE STA 33+75

W NATIONAL AVE

S WILDWOOD DR

179+00

101+00

102+00

MATCHLINE STA 102+25

SHEET 146 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 7B1 | SHEET 453 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007D-TC7B1-PED.DWG
LAYOUT NAME - 02

PLOT DATE : 1/9/2026 10:23 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

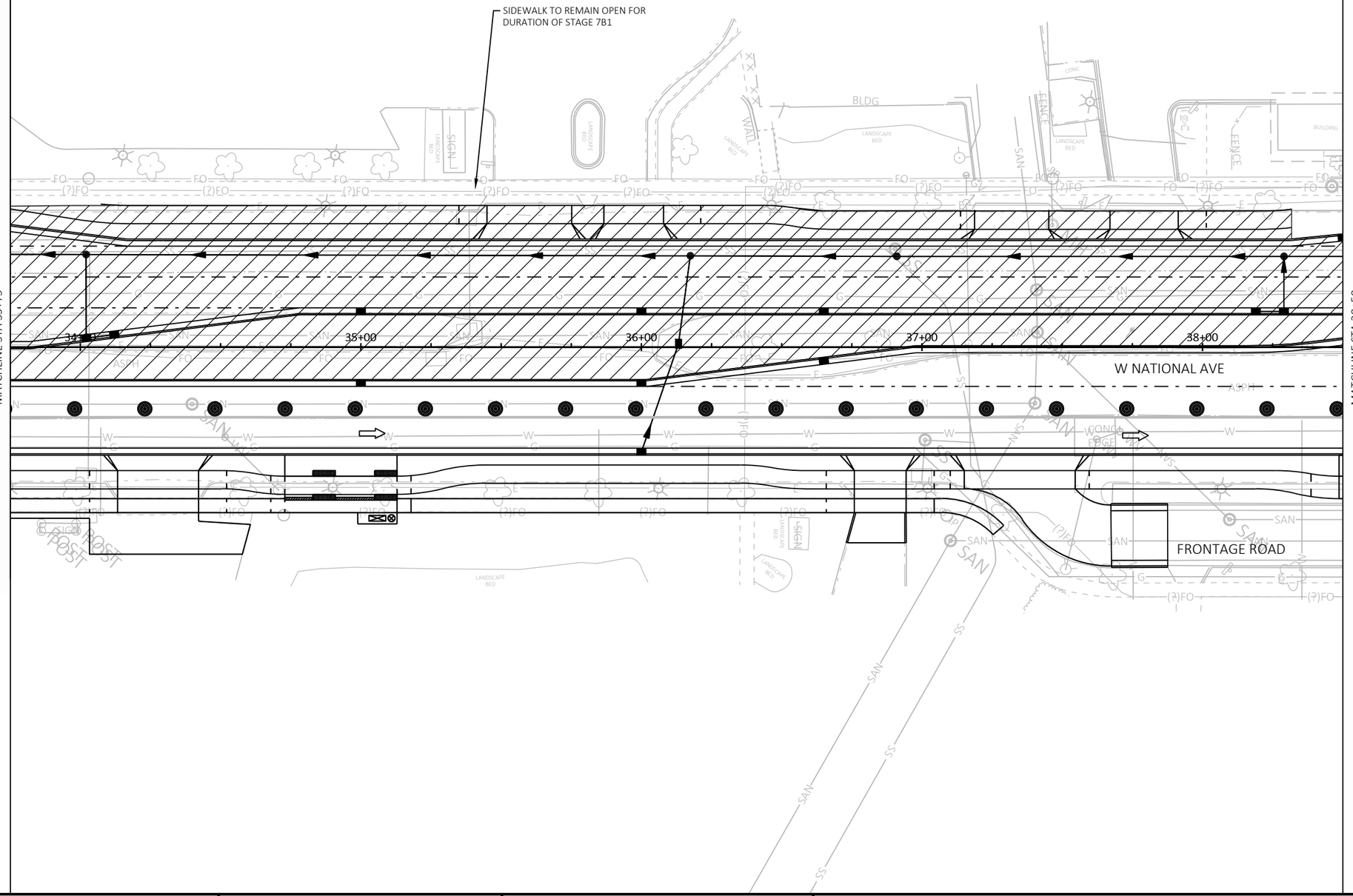
2

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.




SHEET 147 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 7B1 | SHEET 454 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007D-TC7B1-PED.DWG
LAYOUT NAME - 03

PLOT DATE : 1/9/2026 10:23 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

MATCHLINE 111+50

MATCHLINE STA 38+50

MATCHLINE STA 44+50

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

R9-9A 30"X18" SIDEWALK CLOSED AHEAD
M4-9BR 30"X24" DETOUR

TEMPORARY PEDESTRIAN BARRICADE

R9-9A 30"X18" SIDEWALK CLOSED AHEAD
M4-9BL 30"X24" DETOUR

S 102ND ST

R9-9A 30"X18" SIDEWALK CLOSED AHEAD
M4-9BR 30"X24" DETOUR

M4-9BL 30"X24" DETOUR

R9-9A 30"X18" SIDEWALK CLOSED AHEAD
M4-9BR 30"X24" DETOUR

39+00 40+00 41+00 42+00 43+00 44+00

110+00

TEMPORARY PEDESTRIAN BARRICADE

W NATIONAL AVE

FRONTAGE ROAD

6' TEMPORARY PEDESTRIAN BARRICADE

109+00

S 102ND ST

TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD

M4-9BL 30"X24" DETOUR

M4-9BR 30"X24" DETOUR

R9-9 24"X12" SIDEWALK CLOSED
M4-9BR 30"X24" DETOUR

12' TEMPORARY PEDESTRIAN BARRICADE

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

SHEET 148 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 7B1 | SHEET 455 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007D-TC7B1-PED.DWG
LAYOUT NAME - 04

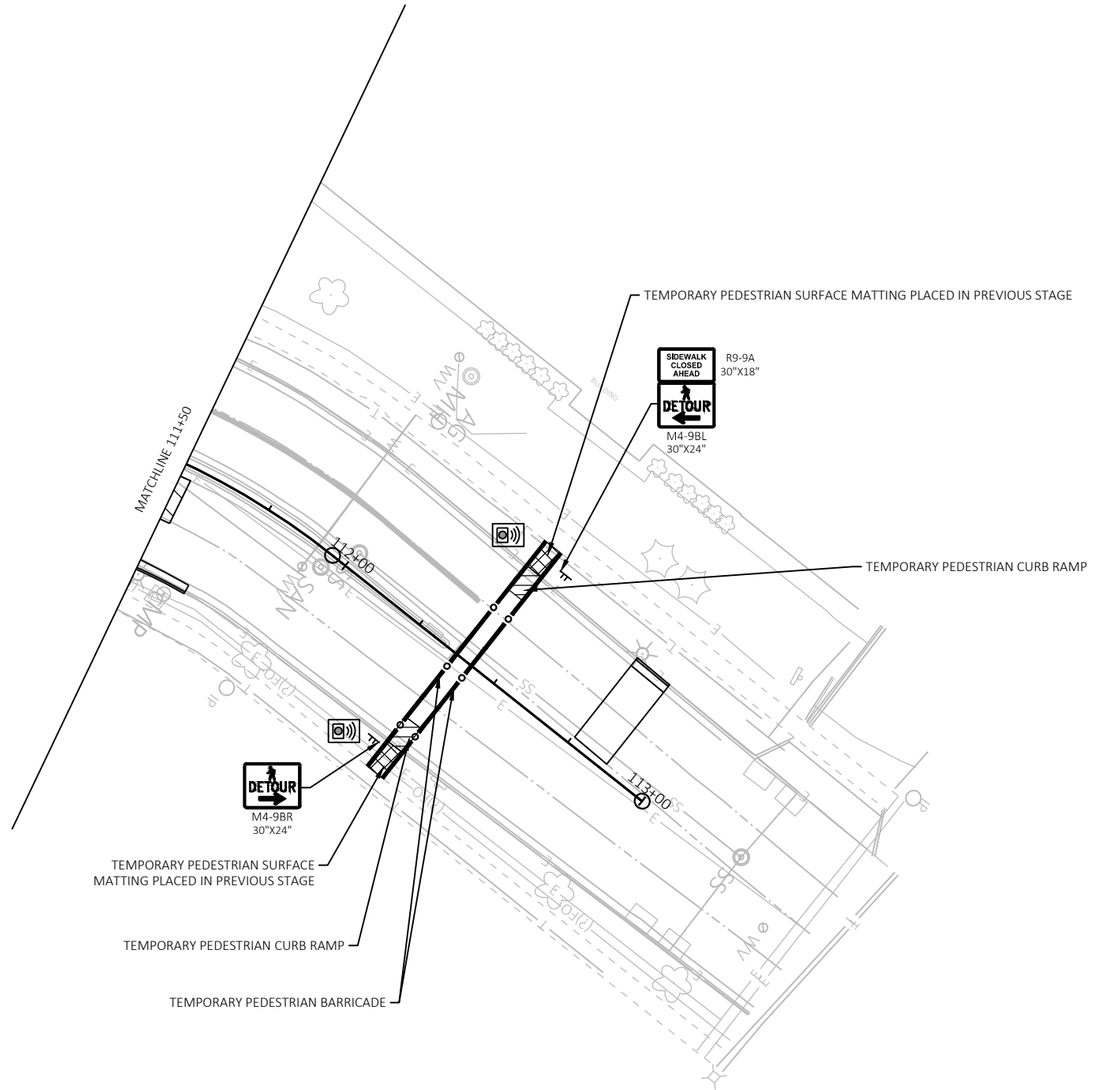
PLOT DATE : 1/9/2026 10:23 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.




2

SHEET 149 OF 154

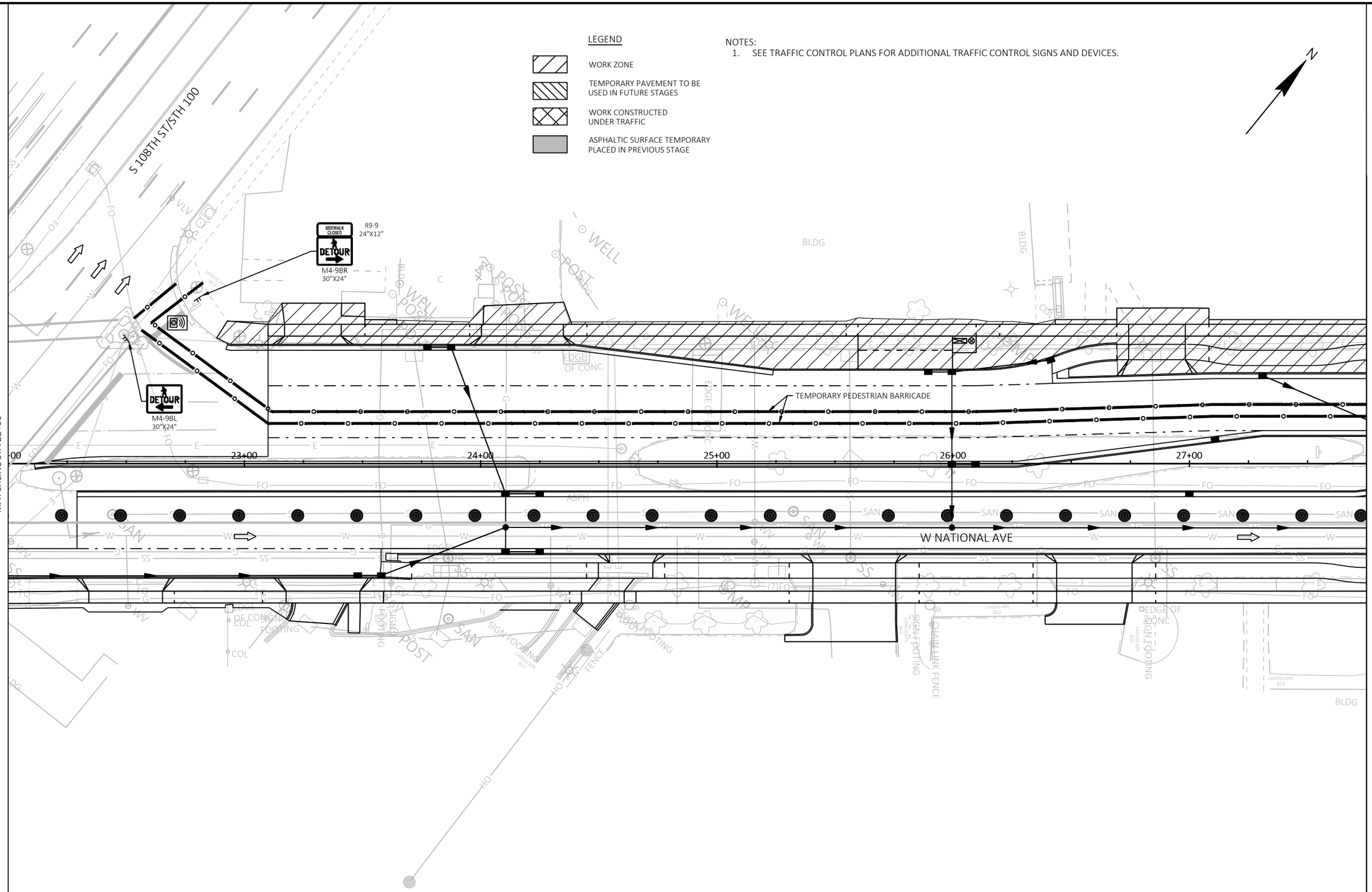
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 7B1 | SHEET 456 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007D-TC7B1-PED.DWG
LAYOUT NAME - 14
PLOT DATE : 1/9/2026 10:23 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.




SHEET 150 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 7B2 | SHEET 457 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007E-TC7B2-PED.DWG
LAYOUT NAME - 01
PLOT DATE : 1/9/2026 10:23 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIVE TRAFFIC CONTROL SIGNS AND DEVICES.

MATCHLINE STA 27+75

MATCHLINE STA 33+75

MATCHLINE STA 97+75

MATCHLINE STA 102+25

R9-9 24"X12" SIDEWALK CLOSED
M4-9BL 30"X24" DETOUR

M4-9BR 30"X24" DETOUR

M4-9BL 30"X24" DETOUR

R9-9 24"X12" SIDEWALK CLOSED
M4-9BR 30"X24" DETOUR

M4-9BL 30"X24" DETOUR

M4-9BR 30"X24" DETOUR

TEMPORARY PEDESTRIAN CURB RAMP

TEMPORARY PEDESTRIAN SURFACE MATTING

TEMPORARY PEDESTRIAN BARRICADE

TEMPORARY PEDESTRIAN BARRICADE

28+00 29+00 30+00 31+00 32+00 33+00

97+00 98+00 99+00 100+00 101+00 102+00

W NATIONAL AVE

S WILDWOOD DR

179+00

FLAG POST

BLDG COL COL BLDG CONC SLAB

SHEET 151 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 7B2 | SHEET 458 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007E-TC7B2-PED.DWG
LAYOUT NAME - 02

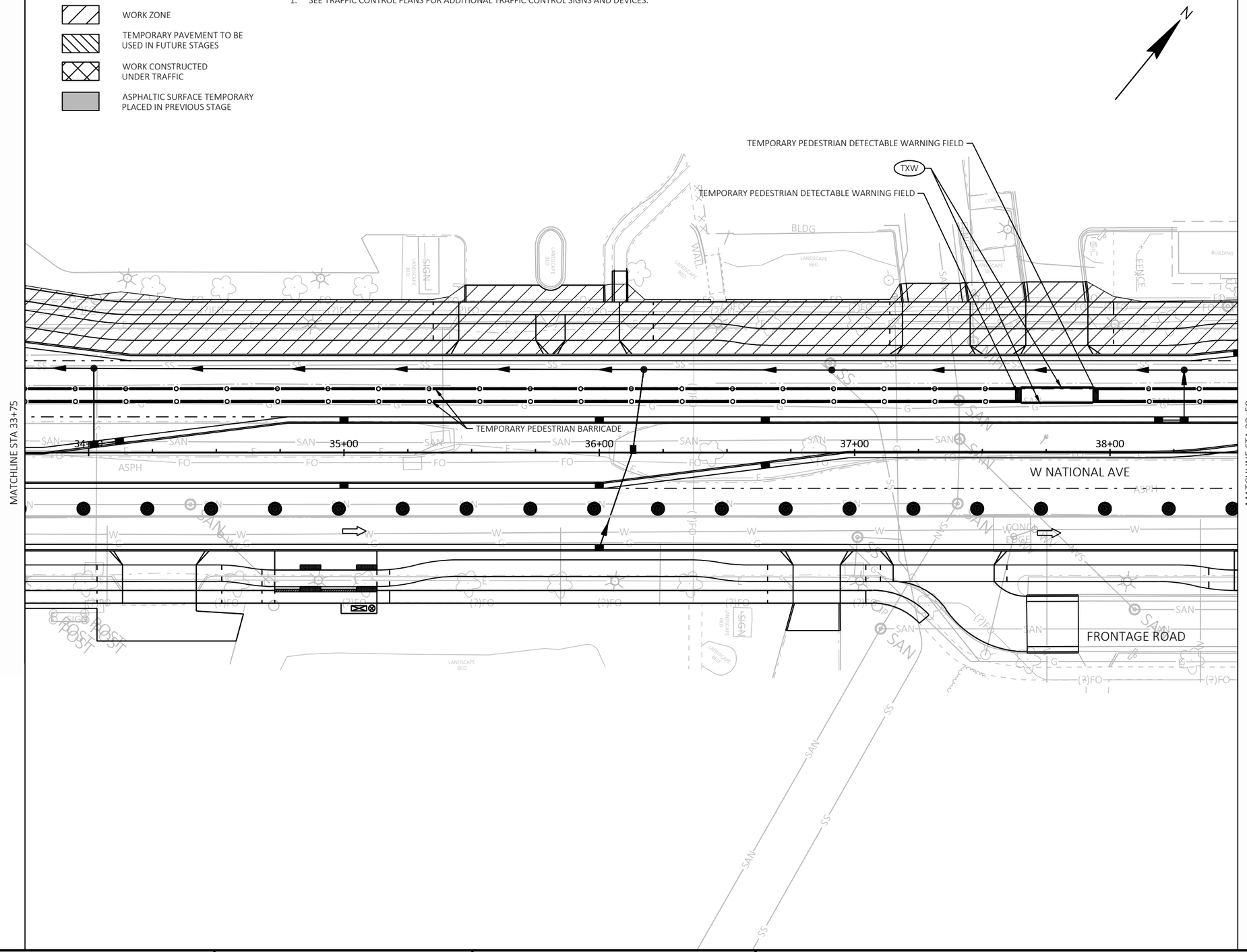
PLOT DATE : 1/9/2026 10:23 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.




SHEET 152 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 7B2 | SHEET 459 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007E-TC7B2-PED.DWG
LAYOUT NAME - 03
PLOT DATE : 1/9/2026 10:23 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.

MATCHLINE 111+50

MATCHLINE STA 38+50

MATCHLINE STA 44+50

S 102ND ST

W NATIONAL AVE

FRONTAGE ROAD

39+00

40+00

41+00

42+00

43+00

44+00

110+00

109+00

R9-9
24"X12"
M4-9BR
30"X24"

M4-9BL
30"X24"

R9-9
24"X12"
M4-9BR
30"X24"

TEMPORARY PEDESTRIAN BARRICADE

6' TEMPORARY PEDESTRIAN BARRICADE

R9-9
24"X12"
M4-9BR
30"X24"

12' TEMPORARY PEDESTRIAN BARRICADE

M4-9BL
30"X24"

M4-9BR
30"X24"

TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

SHEET 153 OF 154

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 7B2 | SHEET 460 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007E-TC7B2-PED.DWG
LAYOUT NAME - 04

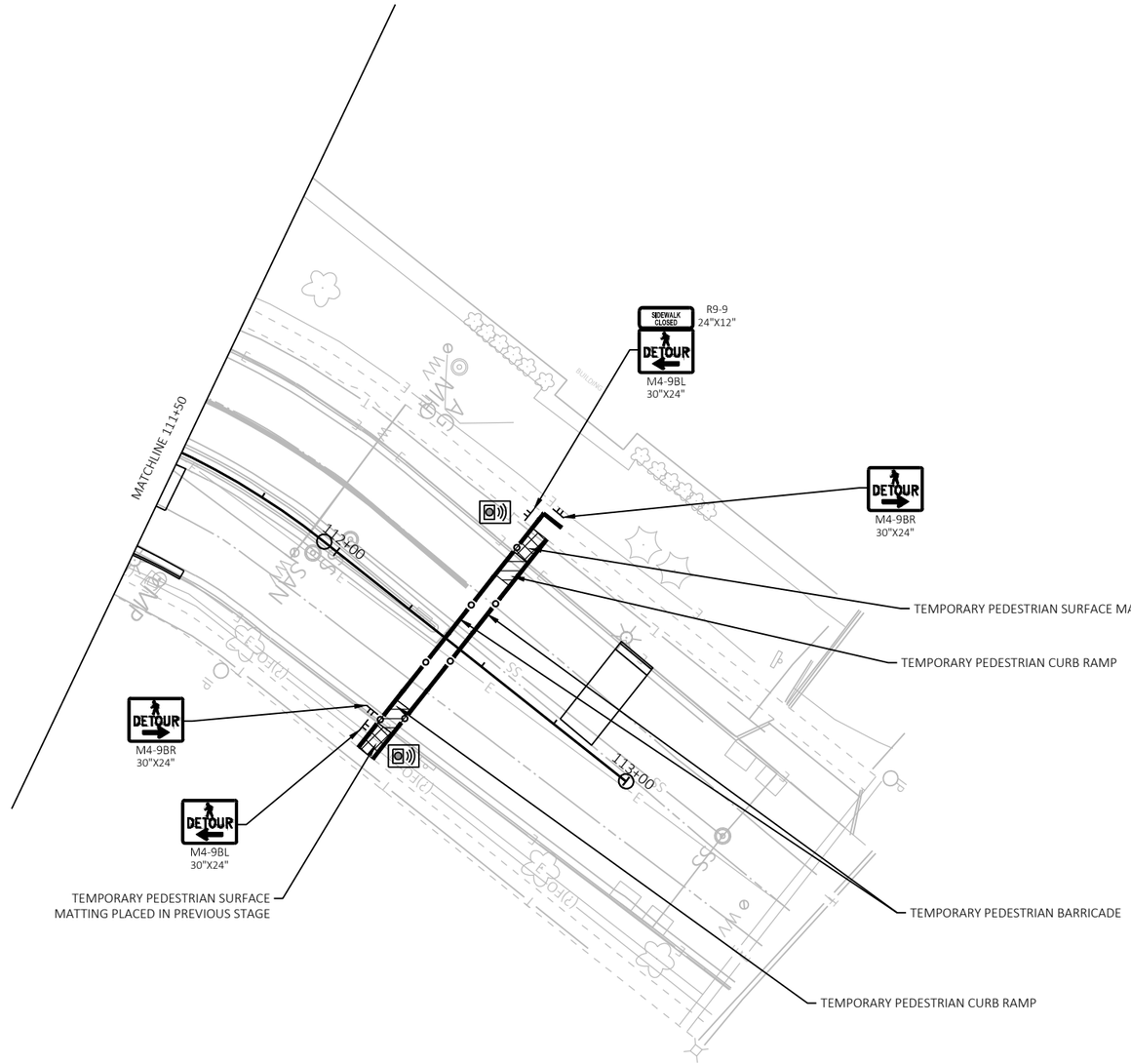
PLOT DATE : 1/9/2026 10:24 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES
- WORK CONSTRUCTED UNDER TRAFFIC
- ASPHALTIC SURFACE TEMPORARY PLACED IN PREVIOUS STAGE

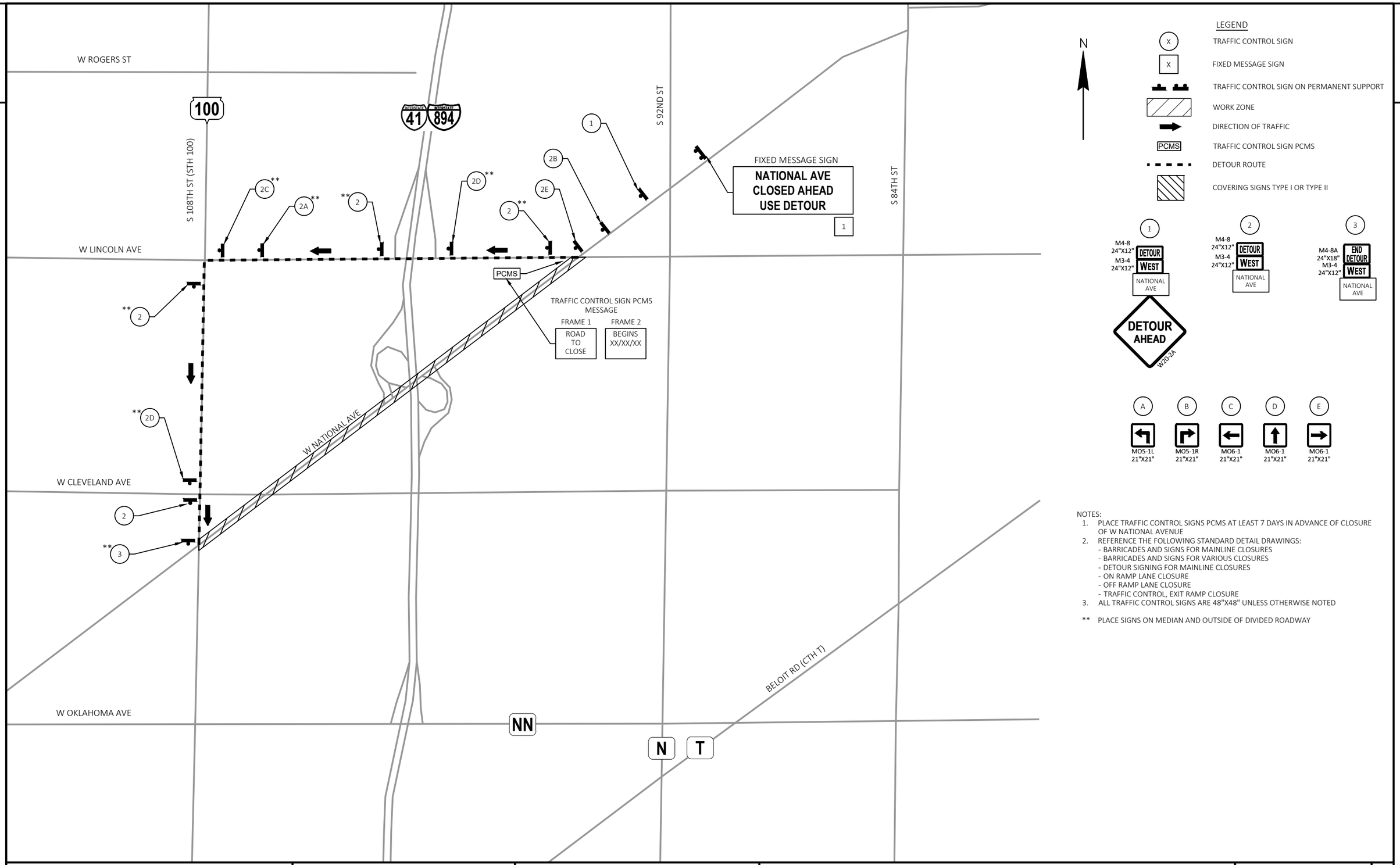
NOTES:
1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL TRAFFIC CONTROL SIGNS AND DEVICES.






| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 7B2 | SHEET 461 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\026007E-TC7B2-PED.DWG
LAYOUT NAME - 14
PLOT DATE : 1/9/2026 10:24 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42




NOTES:

1. PLACE TRAFFIC CONTROL SIGNS PCMS AT LEAST 7 DAYS IN ADVANCE OF CLOSURE OF W NATIONAL AVENUE
2. REFERENCE THE FOLLOWING STANDARD DETAIL DRAWINGS:
   - BARRICADES AND SIGNS FOR MAINLINE CLOSURES
   - BARRICADES AND SIGNS FOR VARIOUS CLOSURES
   - DETOUR SIGNING FOR MAINLINE CLOSURES
   - ON RAMP LANE CLOSURE
   - OFF RAMP LANE CLOSURE
   - TRAFFIC CONTROL, EXIT RAMP CLOSURE
3. ALL TRAFFIC CONTROL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

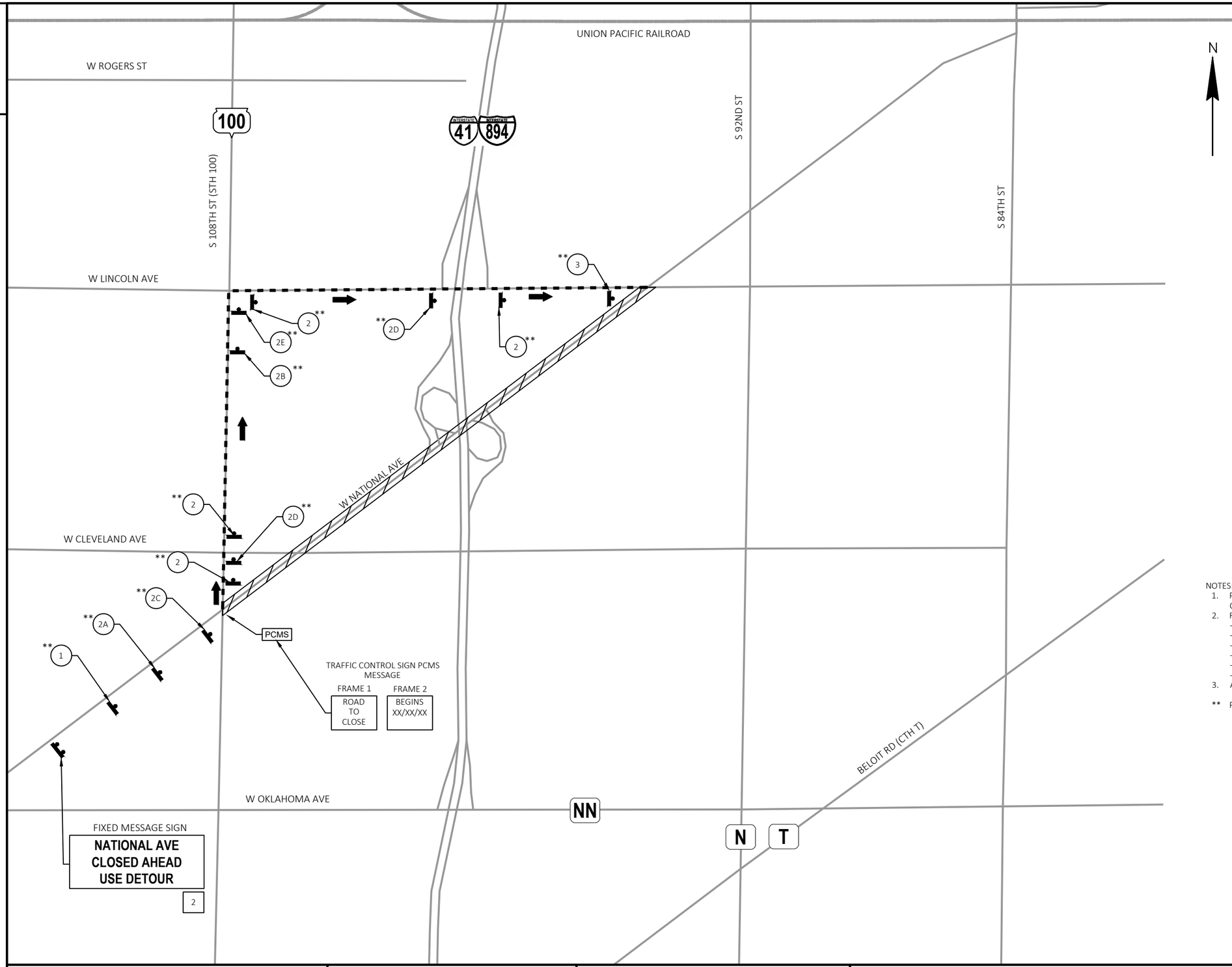
** PLACE SIGNS ON MEDIAN AND OUTSIDE OF DIVIDED ROADWAY

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | DETOUR PLAN - WB NATIONAL AVE - STAGES 3 - 4 & 7 | SHEET 462 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\027001-DT.DWG
LAYOUT NAME - 01

PLOT DATE : 1/9/2026 10:36 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:1000 FT

WISDOT/CADDS SHEET 42




NOTES:

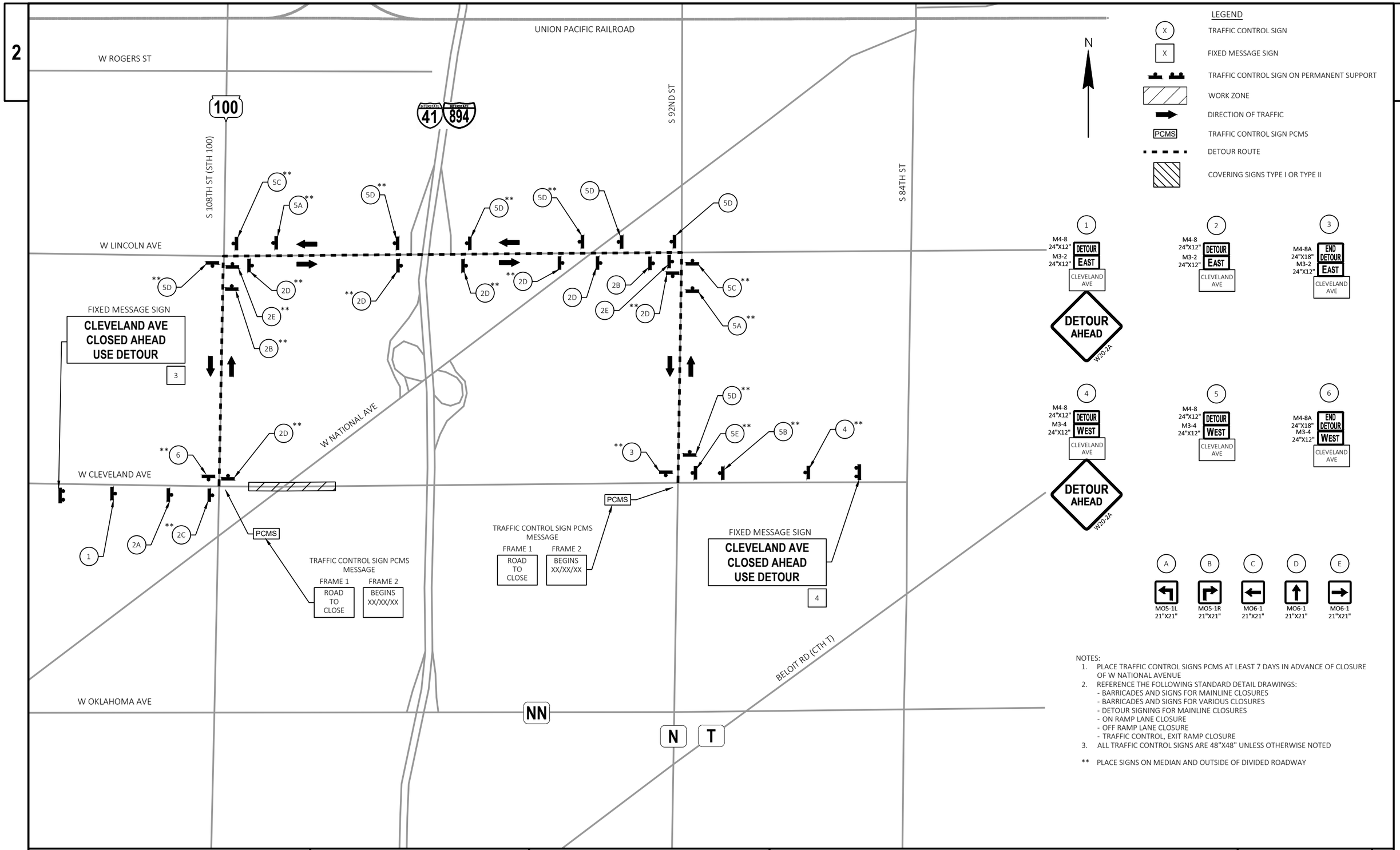
1. PLACE TRAFFIC CONTROL SIGNS PCMS AT LEAST 7 DAYS IN ADVANCE OF CLOSURE OF W NATIONAL AVENUE
2. REFERENCE THE FOLLOWING STANDARD DETAIL DRAWINGS:
   - BARRICADES AND SIGNS FOR MAINLINE CLOSURES
   - BARRICADES AND SIGNS FOR VARIOUS CLOSURES
   - DETOUR SIGNING FOR MAINLINE CLOSURES
   - ON RAMP LANE CLOSURE
   - OFF RAMP LANE CLOSURE
   - TRAFFIC CONTROL, EXIT RAMP CLOSURE
3. ALL TRAFFIC CONTROL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

** PLACE SIGNS ON MEDIAN AND OUTSIDE OF DIVIDED ROADWAY

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | DETOUR PLAN - EB NATIONAL AVE - STAGE 4 & STAGE 6 | SHEET 463 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\027002-DT.DWG
LAYOUT NAME - 01

PLOT DATE : 1/9/2026 10:36 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:1000 FT



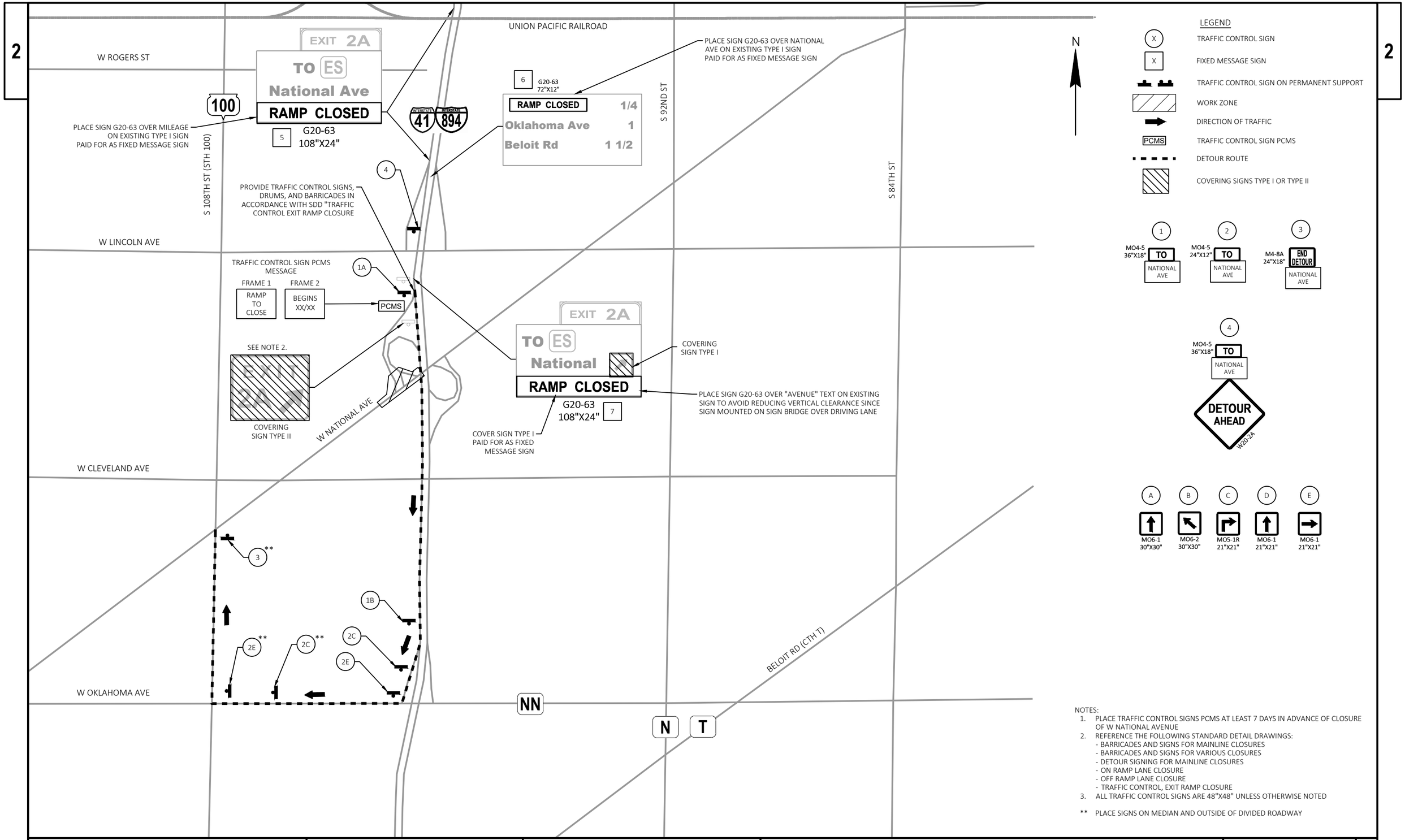

NOTES:

1. PLACE TRAFFIC CONTROL SIGNS PCMS AT LEAST 7 DAYS IN ADVANCE OF CLOSURE OF W NATIONAL AVENUE
2. REFERENCE THE FOLLOWING STANDARD DETAIL DRAWINGS:
   - BARRICADES AND SIGNS FOR MAINLINE CLOSURES
   - BARRICADES AND SIGNS FOR VARIOUS CLOSURES
   - DETOUR SIGNING FOR MAINLINE CLOSURES
   - ON RAMP LANE CLOSURE
   - OFF RAMP LANE CLOSURE
   - TRAFFIC CONTROL, EXIT RAMP CLOSURE
3. ALL TRAFFIC CONTROL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

** PLACE SIGNS ON MEDIAN AND OUTSIDE OF DIVIDED ROADWAY

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | DETOUR PLAN - CLEVELAND AVE - STAGE 6 & STAGE 7 | SHEET 464 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\027003-DT.DWG
LAYOUT NAME - 01
PLOT DATE : 1/9/2026 10:36 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42



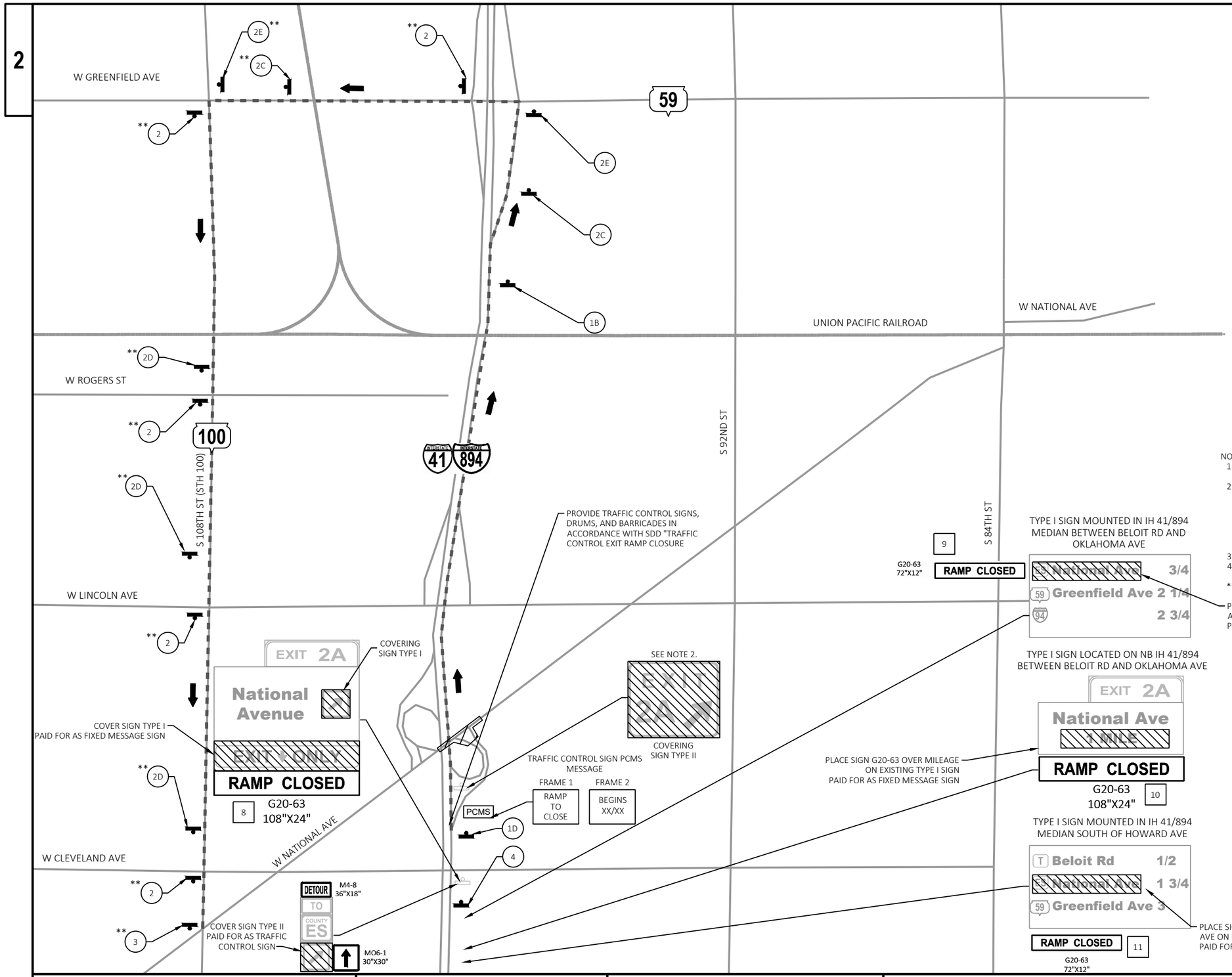

NOTES:

1. PLACE TRAFFIC CONTROL SIGNS PCMS AT LEAST 7 DAYS IN ADVANCE OF CLOSURE OF W NATIONAL AVENUE
2. REFERENCE THE FOLLOWING STANDARD DETAIL DRAWINGS:
   - BARRICADES AND SIGNS FOR MAINLINE CLOSURES
   - BARRICADES AND SIGNS FOR VARIOUS CLOSURES
   - DETOUR SIGNING FOR MAINLINE CLOSURES
   - ON RAMP LANE CLOSURE
   - OFF RAMP LANE CLOSURE
   - TRAFFIC CONTROL, EXIT RAMP CLOSURE
3. ALL TRAFFIC CONTROL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

** PLACE SIGNS ON MEDIAN AND OUTSIDE OF DIVIDED ROADWAY

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | DETOUR PLAN - SB I-41-894 EXIT RAMP - STAGES 2 - 3 - 4 & 7 | SHEET 465 | E |
|---|---|---|---|---|---|


FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\027004-DT.DWG
LAYOUT NAME - 01
PLOT DATE : 1/9/2026 10:36 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42



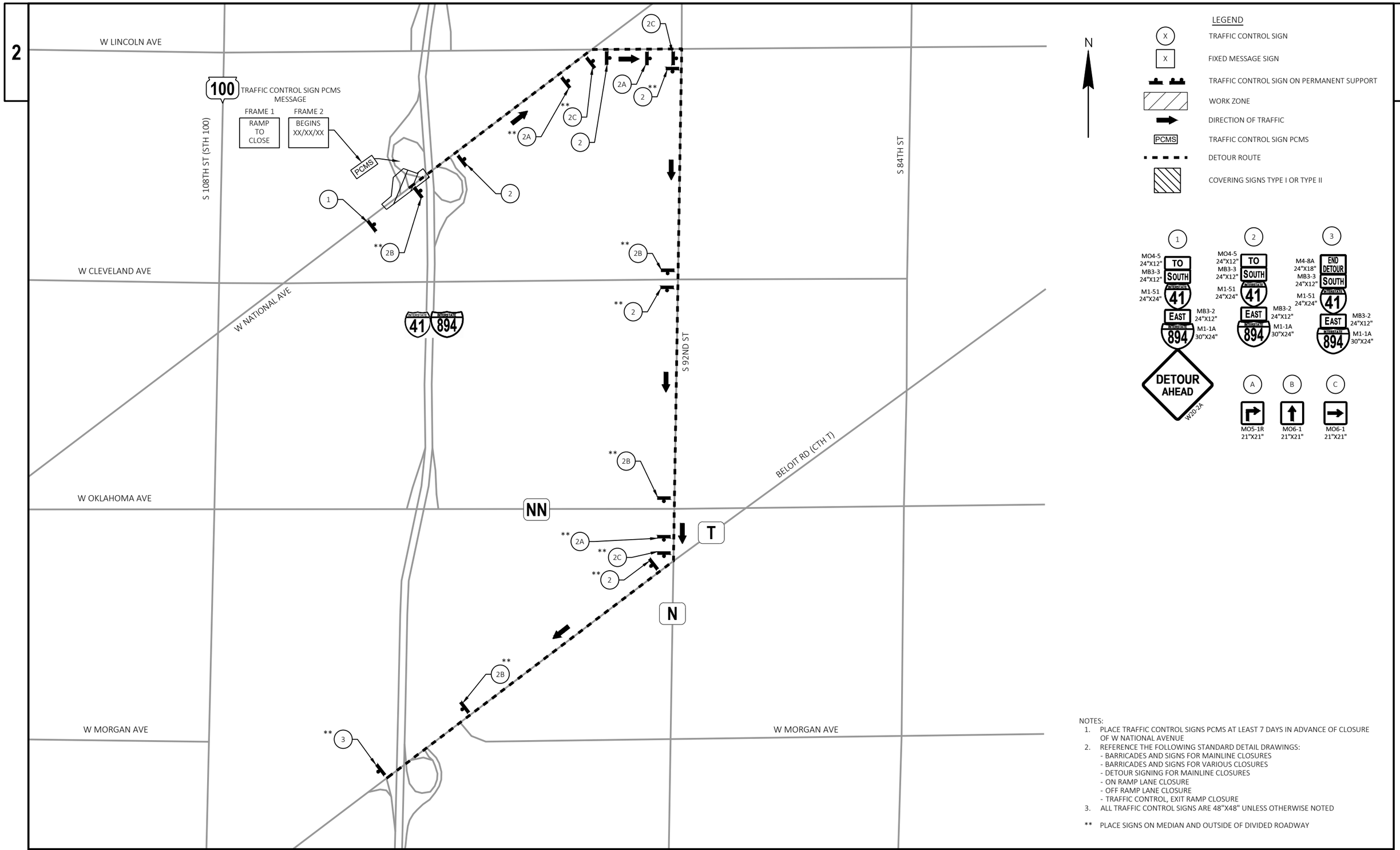

NOTES:

1. PLACE TRAFFIC CONTROL SIGNS PCMS AT LEAST 7 DAYS IN ADVANCE OF CLOSURE OF W NATIONAL AVENUE
2. REFERENCE THE FOLLOWING STANDARD DETAIL DRAWINGS:
   - BARRICADES AND SIGNS FOR MAINLINE CLOSURES
   - BARRICADES AND SIGNS FOR VARIOUS CLOSURES
   - DETOUR SIGNING FOR MAINLINE CLOSURES
   - ON RAMP LANE CLOSURE
   - OFF RAMP LANE CLOSURE
   - TRAFFIC CONTROL, EXIT RAMP CLOSURE
3. ALL TRAFFIC CONTROL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED
4. DO NOT PLACE ANY ITEMS WITHIN 50-FEET OF THE RAILROAD RIGHT-OF-WAY

** PLACE SIGNS ON MEDIAN AND OUTSIDE OF DIVIDED ROADWAY

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | DETOUR PLAN - NB I-41-894 EXIT RAMP - STAGE 2 & STAGE 4 | SHEET 466 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\027005-DT.DWG
LAYOUT NAME - 01
PLOT DATE : 1/9/2026 10:36 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | DETOUR PLAN - SB I-41-894 EB ENTRANCE RAMP - STAGES 1 - 2 & 6 | SHEET 467 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\027006-DT.DWG
LAYOUT NAME - 01

PLOT DATE : 1/9/2026 10:36 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:1000 FT

WISDOT/CADDS SHEET 42

TRAFFIC CONTROL SIGN PCMS MESSAGE

| FRAME 1 | FRAME 2 |
|---|---|
| RAMP TO CLOSE | BEGINS XX/XX/XX |

PCMS

S 108TH ST (STH 100)

W NATIONAL AVE

W CLEVELAND AVE

W OKLAHOMA AVE

W MORGAN AVE

S 92ND ST

S 84TH ST

BELOIT RD (CTH T)

41 894

NN

N T

100

1 2 2A 2B 2C 3

LEGEND

- X — TRAFFIC CONTROL SIGN
- X — FIXED MESSAGE SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT
- WORK ZONE
- DIRECTION OF TRAFFIC
- PCMS — TRAFFIC CONTROL SIGN PCMS
- DETOUR ROUTE
- COVERING SIGNS TYPE I OR TYPE II

1

MO4-5 24"X12"
MB3-3 24"X12"
M1-51 24"X24"
TO SOUTH INTERSTATE 41
EAST INTERSTATE 894
MB3-2 24"X12"
M1-1A 30"X24"
DETOUR AHEAD W20-2A

2

MO4-5 24"X12"
MB3-3 24"X12"
M1-51 24"X24"
TO SOUTH INTERSTATE 41
EAST INTERSTATE 894
MB3-2 24"X12"
M1-1A 30"X24"

3

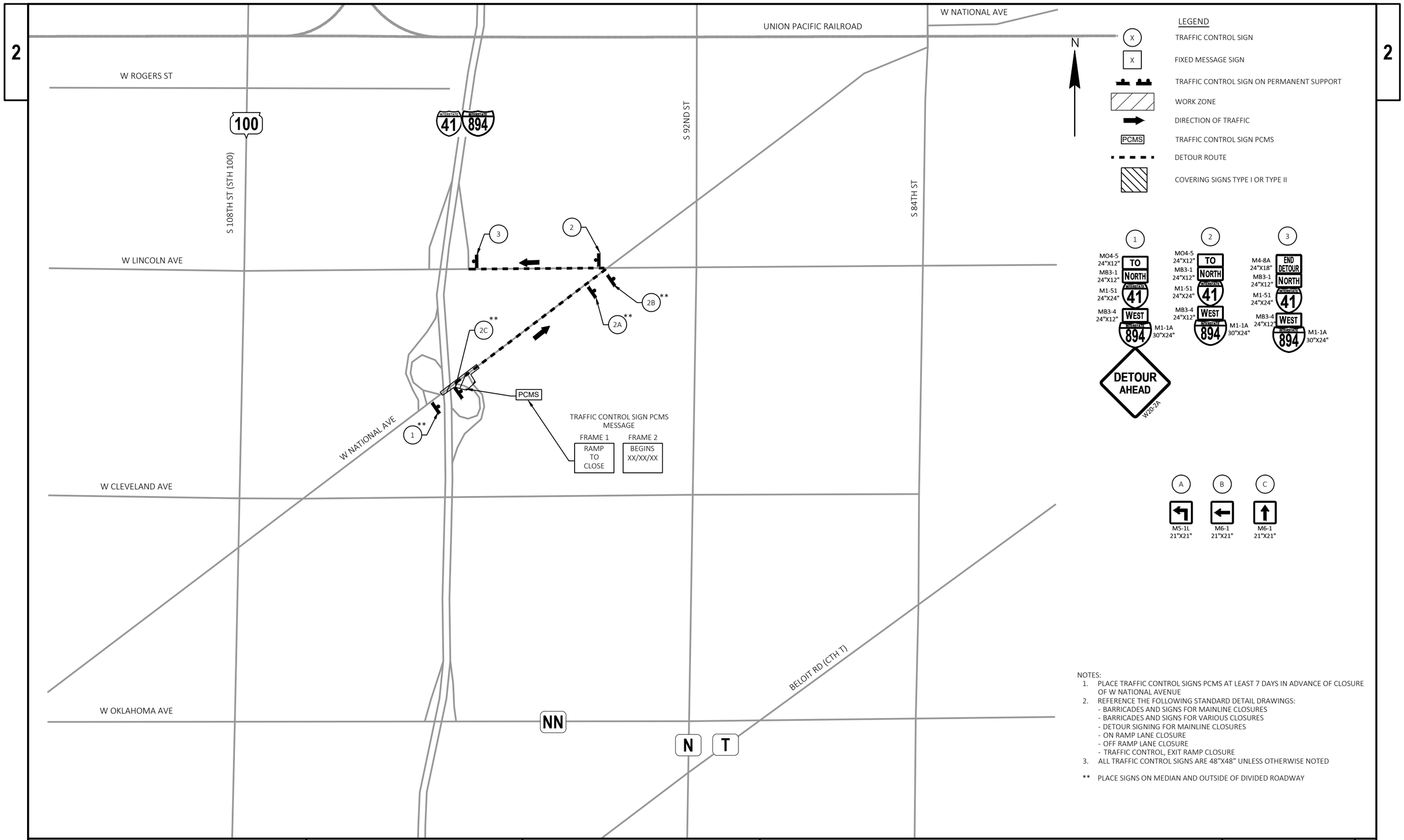
M4-8A 24"X18"
MB3-3 24"X12"
M1-51 24"X24"
END DETOUR SOUTH INTERSTATE 41
EAST INTERSTATE 894
MB3-2 24"X12"
M1-1A 30"X24"

A — MO5-1L 21"X21"
B — MO6-1 21"X21"
C — MO6-1 21"X21"

NOTES:
1. PLACE TRAFFIC CONTROL SIGNS PCMS AT LEAST 7 DAYS IN ADVANCE OF CLOSURE OF W NATIONAL AVENUE
2. REFERENCE THE FOLLOWING STANDARD DETAIL DRAWINGS:
   - BARRICADES AND SIGNS FOR MAINLINE CLOSURES
   - BARRICADES AND SIGNS FOR VARIOUS CLOSURES
   - DETOUR SIGNING FOR MAINLINE CLOSURES
   - ON RAMP LANE CLOSURE
   - OFF RAMP LANE CLOSURE
   - TRAFFIC CONTROL, EXIT RAMP CLOSURE
3. ALL TRAFFIC CONTROL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

** PLACE SIGNS ON MEDIAN AND OUTSIDE OF DIVIDED ROADWAY

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | DETOUR PLAN - SB I-41-894 WB ENTRANCE RAMP - STAGE 2 | SHEET 468 | E |
|---|---|---|---|---|---|

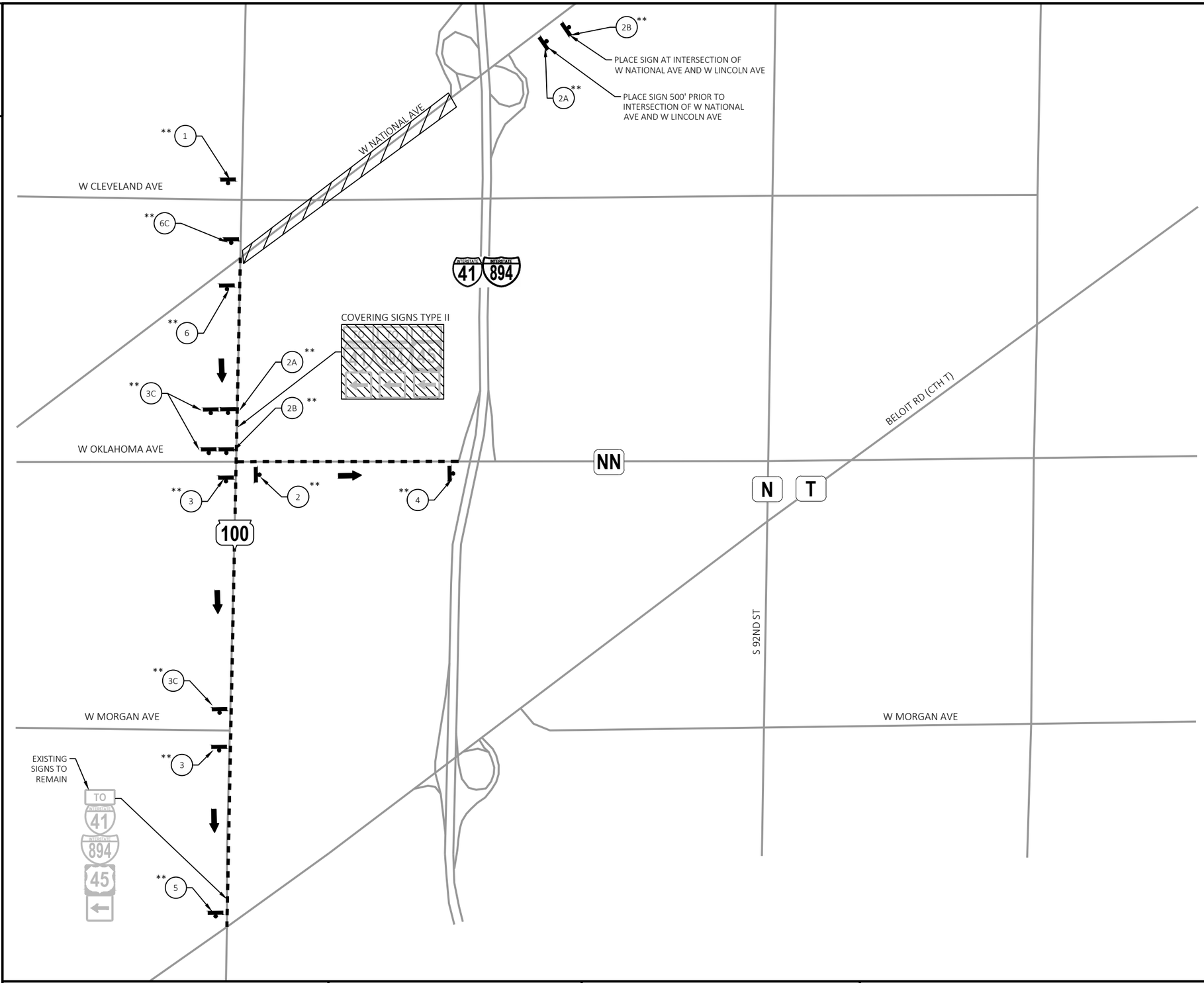



NOTES:

1. PLACE TRAFFIC CONTROL SIGNS PCMS AT LEAST 7 DAYS IN ADVANCE OF CLOSURE OF W NATIONAL AVENUE
2. REFERENCE THE FOLLOWING STANDARD DETAIL DRAWINGS:
   - BARRICADES AND SIGNS FOR MAINLINE CLOSURES
   - BARRICADES AND SIGNS FOR VARIOUS CLOSURES
   - DETOUR SIGNING FOR MAINLINE CLOSURES
   - ON RAMP LANE CLOSURE
   - OFF RAMP LANE CLOSURE
   - TRAFFIC CONTROL, EXIT RAMP CLOSURE
3. ALL TRAFFIC CONTROL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

** PLACE SIGNS ON MEDIAN AND OUTSIDE OF DIVIDED ROADWAY

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | DETOUR PLAN - NB I-41-894 ENTRANCE RAMP - STAGE 2 | SHEET 469 | E |
|---|---|---|---|---|---|




N

LEGEND

- X — TRAFFIC CONTROL SIGN
- X — FIXED MESSAGE SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT
- WORK ZONE
- DIRECTION OF TRAFFIC
- PCMS — TRAFFIC CONTROL SIGN PCMS
- DETOUR ROUTE
- COVERING SIGNS TYPE I OR TYPE II

1
- MO4-5 24"X12": TO INTERSTATE 41 / INTERSTATE 894
- M1-51 24"X24"
- M1-1A 30"X24"
- DETOUR AHEAD W20-2A

2
- MO4-5 24"X12": TO NORTH INTERSTATE 41 / WEST INTERSTATE 894
- MB3-1 24"X12"
- M1-51 24"X24"
- MB3-4 24"X12"
- M1-1A 30"X24"

3
- MO4-5 24"X12": TO SOUTH INTERSTATE 41 / EAST INTERSTATE 894
- MB3-3 24"X12"
- M1-51 24"X24"
- MB3-2 24"X12"
- M1-1A 30"X24"

4
- M4-8A 24"X18": END DETOUR
- MB3-1 24"X12": NORTH INTERSTATE 41
- M1-51 24"X24"
- MB3-4 24"X12": WEST INTERSTATE 894
- M1-1A 30"X24"

5
- M4-8A 24"X18": END DETOUR
- MB3-3 24"X12": SOUTH INTERSTATE 41
- M1-51 24"X24"
- MB3-2 24"X12": EAST INTERSTATE 894
- M1-1A 30"X24"

6
- MO4-5 24"X12": TO INTERSTATE 41 / INTERSTATE 894
- M1-51 24"X24"
- M1-1A 30"X24"

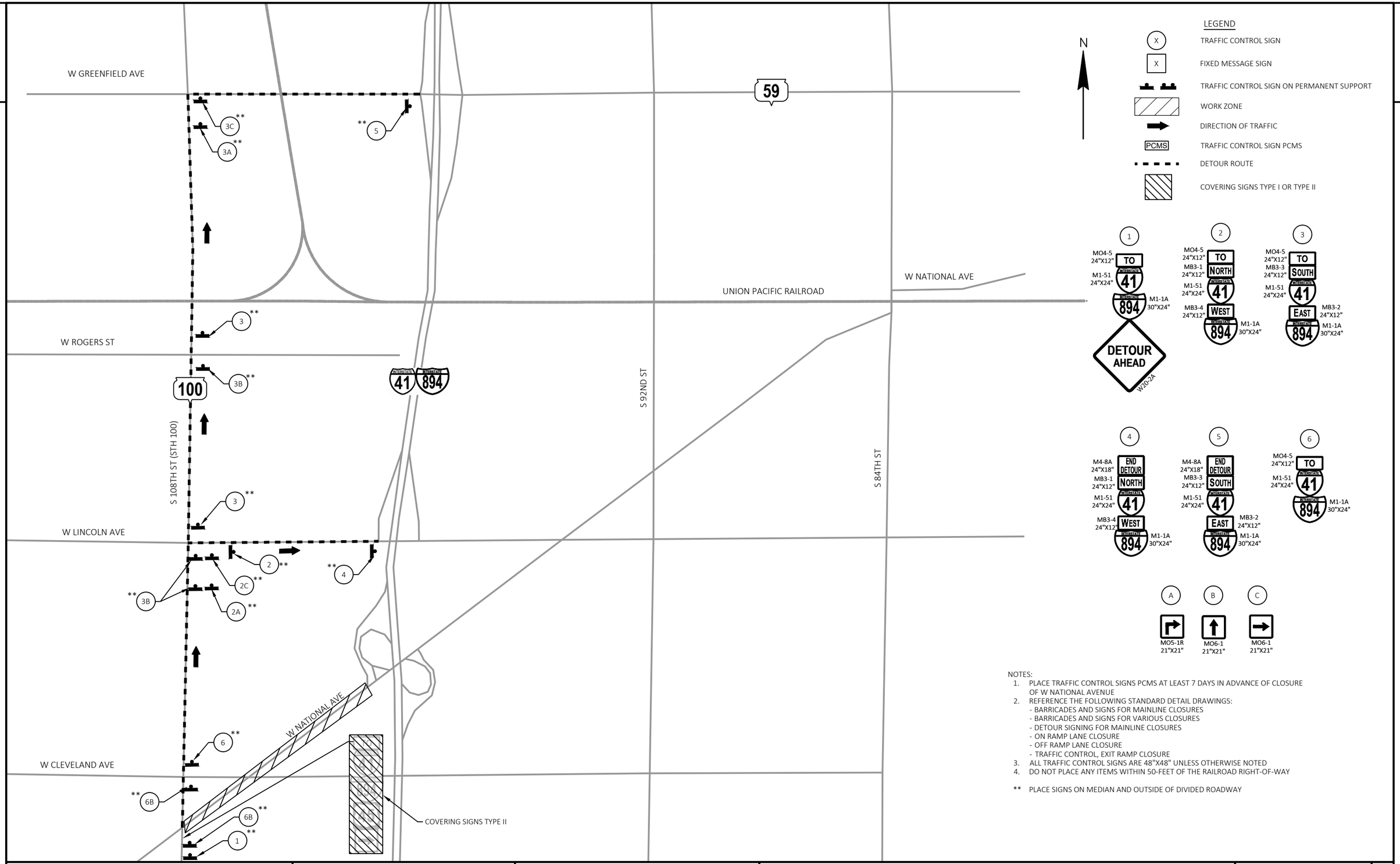
A — M5-1L 21"X21"
B — M6-1 21"X21"
C — M6-1 21"X21"

NOTES:
1. PLACE TRAFFIC CONTROL SIGNS PCMS AT LEAST 7 DAYS IN ADVANCE OF CLOSURE OF W NATIONAL AVENUE
2. REFERENCE THE FOLLOWING STANDARD DETAIL DRAWINGS:
   - BARRICADES AND SIGNS FOR MAINLINE CLOSURES
   - BARRICADES AND SIGNS FOR VARIOUS CLOSURES
   - DETOUR SIGNING FOR MAINLINE CLOSURES
   - ON RAMP LANE CLOSURE
   - OFF RAMP LANE CLOSURE
   - TRAFFIC CONTROL, EXIT RAMP CLOSURE
3. ALL TRAFFIC CONTROL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

** PLACE SIGNS ON MEDIAN AND OUTSIDE OF DIVIDED ROADWAY

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | DETOUR PLAN - SB STH 100 TO IH 41-894 - STAGE 6 | SHEET 470 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\027009-DT.DWG
LAYOUT NAME - 01
PLOT DATE : 1/9/2026 10:36 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42




NOTES:

1. PLACE TRAFFIC CONTROL SIGNS PCMS AT LEAST 7 DAYS IN ADVANCE OF CLOSURE OF W NATIONAL AVENUE
2. REFERENCE THE FOLLOWING STANDARD DETAIL DRAWINGS:
   - BARRICADES AND SIGNS FOR MAINLINE CLOSURES
   - BARRICADES AND SIGNS FOR VARIOUS CLOSURES
   - DETOUR SIGNING FOR MAINLINE CLOSURES
   - ON RAMP LANE CLOSURE
   - OFF RAMP LANE CLOSURE
   - TRAFFIC CONTROL, EXIT RAMP CLOSURE
3. ALL TRAFFIC CONTROL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED
4. DO NOT PLACE ANY ITEMS WITHIN 50-FEET OF THE RAILROAD RIGHT-OF-WAY

** PLACE SIGNS ON MEDIAN AND OUTSIDE OF DIVIDED ROADWAY

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | DETOUR PLAN - NB STH 100 TO IH 41-894 - STAGE 6 | SHEET 471 | E |
|---|---|---|---|---|---|


FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\027010-DT.DWG
LAYOUT NAME - 01
PLOT DATE : 1/9/2026 10:36 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

WORK AREA

DETOUR ROUTE

TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT

TEMPORARY AUDIBLE MESSAGE DEVICE

N

100

S 108TH ST

W CLEVELAND AVE

W NATIONAL AVE

S 102ND ST

S WILDWOOD DR

S 104TH ST

S 103RD ST

S 102ND ST

S 106TH ST

S AURENE CIR

PEDESTRIAN DETOUR LOCATED ON NORTH SIDE OF NATIONAL AVE

12' TEMPORARY PEDESTRIAN BARRICADE

R9-9 24"X12"

SIDEWALK CLOSED

DETOUR

M4-9BL 30"X24"

M4-9BL 30"X24"

M4-9BR 30"X24"

24' TEMPORARY PEDESTRIAN BARRICADE

R9-9 24"X12"

SIDEWALK CLOSED

SEE DETAIL A

R9-9 24"X12"

SIDEWALK CLOSED

DETOUR

M4-9BL 30"X24"

6' TEMPORARY PEDESTRIAN BARRICADE

R9-9 24"X12"

SIDEWALK CLOSED

24' TEMPORARY PEDESTRIAN BARRICADE

R9-9A 30"X18"

SIDEWALK CLOSED AHEAD

DETOUR

M4-9BR 30"X24"

TEMPORARY PEDESTRIAN CURB RAMP

24' TEMPORARY PEDESTRIAN BARRICADE

R9-9A 30"X18"

SIDEWALK CLOSED AHEAD

DETOUR

M4-9BR 30"X24"

DETAIL A

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN DETOUR - STAGE 6B | SHEET 472 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\027011-DT.DWG
LAYOUT NAME - 01

PLOT DATE : 1/9/2026 10:36 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

2

LEGEND

WORK AREA

DETOUR ROUTE

TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT

TEMPORARY AUDIBLE MESSAGE DEVICES

N

100

S 108TH ST

W NATIONAL AVE

W CLEVELAND AVE

S 102ND ST

S WILDWOOD DR

S 104TH ST

S 103RD ST

S 102ND ST

S 106TH ST

S AURENE CIR

18' TEMPORARY PEDESTRIAN BARRICADE

SIDEWALK CLOSED
R9-9
24"X12"

18' TEMPORARY PEDESTRIAN BARRICADE

SIDEWALK CLOSED
R9-9
24"X12"

SIDEWALK CLOSED
R9-9
24"X12"

DETOUR
M4-9BL
30"X24"

6' TEMPORARY PEDESTRIAN BARRICADE

R9-9A
30"X18"

SIDEWALK CLOSED AHEAD

DETOUR
M4-9BR
30"X24"

R9-9A
30"X18"

SIDEWALK CLOSED AHEAD

DETOUR
M4-9BR
30"X24"

DETOUR
M4-9BL
30"X24"

SIDEWALK CLOSED
R9-9
24"X12"

6' TEMPORARY PEDESTRIAN BARRICADE

PEDESTRIAN DETOUR LOCATED ON SOUTH SIDE OF NATIONAL AVE

DETOUR
M4-9BR
30"X24"

DETOUR
M4-9BL
30"X24"

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | TEMPORARY PEDESTRIAN DETOUR - STAGE 7A | SHEET 473 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\027012-DT.DWG
LAYOUT NAME - 01

PLOT DATE : 1/9/2026 10:36 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

MATCH LINE 36+00

N

BEGIN CLEVELAND R/L
92+26.38
Y = 368,866.160
X = 2,522,472.210

BP: 92+26.38

CONCRETE MONUMENT WITH BRASS CAP
Y = 368,866.16
X = 2,522,472.21

T 6 N
7 8
7 8
R 21 E

95

W CLEVELAND AVE R/L

W CLEVELAND AVE

END WILDWOOD R/L
180+00.00
Y = 368,710.248
X = 2,523,021.339

CP 9

W NATIONAL AVE R/L

PI: 21+04.16

CP 111

CP 112

CP 102

BP: 10+00.00

CP 104

REFERENCE LINE
N51° 21' 05.0"E
1104.16'

15

20

N50°54'59.0"E
1016.23'

25

30

100

N50°50'22.0"E
2470.95'

35

W NATIONAL AVE

EP: 180+00.00

S WILDWOOD DR R/L

N39°06'33.4"W
200.00'

S WILDWOOD DR

PI: 31+20.39

N88°04'10.0"E
1846.97'

CP 110

CP 103

BEGIN PROJECT
STA 21+82.62

BP: 178+00.00

BEGIN WILDWOOD R/L
178+00.00
Y = 368,555.059
X = 2,523,147.499

BEGIN NATIONAL R/L
10+00.00
Y = 367,563.100
X = 2,521,595.653

105

W CLEVELAND AVE

W CLEVELAND AVE R/L

110

END CLEVELAND R/L
110+73.35
Y = 368,928.381
X = 2,524,318.127

EP: 110+73.35

CONCRETE MONUMENT WITH BRASS CAP
Y = 366,228.82
X = 2,522,514.92

T 6 N
7 8
18 17
R 21 E

| CONTROL POINTS | | | |
|---|---|---|---|
| POINT NUMBER | Y | X | DESCRIPTION |
| 9 | 367,976.86 | 2,522,028.79 | CHISELED T IN CONCRETE |
| 102 | 368,943.29 | 2,523,306.53 | CHISELED T SET IN CONCRETE |
| 103 | 368,257.01 | 2,522,555.72 | CHISELED T IN CONCRETE |
| 104 | 367,583.39 | 2,521,616.66 | CHISELED T IN CONCRETE |
| 110 | 368,122.83 | 2,522,423.94 | CHISELED T IN CONCRETE |
| 111 | 368,316.73 | 2,522,429.41 | CHISELED T IN CONCRETE |
| 112 | 368,426.11 | 2,522,539.21 | CHISELED T IN CONCRETE |

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | ALIGNMENT PLAN | SHEET 474 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\027201-AD.DWG
LAYOUT NAME - 01

PLOT DATE : 1/9/2026 10:39 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

| CONTROL POINTS | | | |
|---|---|---|---|
| POINT NUMBER | Y | X | DESCRIPTION |
| 100 | 370,645.83 | 2,525,397.03 | CHISELED T SET IN CONCRETE |
| 101 | 369,472.50 | 2,523,854.63 | CHISELED X SET IN CONCRETE |
| 105 | 370,029.92 | 2,524,726.86 | CHISELED T SET IN CONCRETE |

CONCRETE MONUMENT WITH BRASS CAP
Y = 371,589.60
X = 2,525,079.96

MATCH LINE 66+00

CURVE 1
PI STA = 111+30.90
Y = 369523.913
X = 2523813.735
DELTA = 38°08'07" RT
D = 28°18'29"
T = 69.96'
L = 134.71'
R = 202.40'
PC STA = 110+60.94
PT STA = 111+95.65

CURVE 2
PI STA = 107+69.16
Y = 369242.839
X = 2524041.789
DELTA = 7°53'27" RT
D = 5°42'50"
T = 69.16'
L = 138.10'
R = 1002.76'
PC STA = 107+00.00
PT STA = 108+38.10

CURVE 3
PI STA = 161+04.72
Y = 370531.403
X = 2525092.224
DELTA = 38°29'48" RT
D = 44°04'25"
T = 45.39'
L = 87.35'
R = 130.00'
PC STA = 160+59.33
PT STA = 161+46.67

CURVE 4
PI STA = 0+82.74
Y = 370015.557
X = 2524534.357
DELTA = 71°28'12" RT
D = 49°49'21"
T = 82.74'
L = 143.45'
R = 115.00'
PC STA = 0+00.00
PT STA = 1+43.45

CURVE 5
PI STA = 1+72.96
Y = 370134.080
X = 2524641.325
DELTA = 34°31'40" RT
D = 22°55'06"
T = 77.69'
L = 150.66'
R = 250.00'
PC STA = 0+95.27
PT STA = 2+45.92

CURVE 6
PI STA = 0+48.04
Y = 370179.119
X = 2524758.713
DELTA = 18°11'42" RT
D = 19°05'55"
T = 48.04'
L = 95.27'
R = 300.00'
PC STA = 0+00.00
PT STA = 0+95.27

CURVE 7
PI STA = 3+67.50
Y = 370156.644
X = 2524858.084
DELTA = 12°04'25" RT
D = 28°38'52"
T = 21.15'
L = 42.14'
R = 200.00'
PC STA = 3+46.35
PT STA = 3+88.49

CURVE 8
PI STA = 4+80.17
Y = 370208.019
X = 2524958.535
DELTA = 33°59'06" RT
D = 19°05'55"
T = 91.68'
L = 177.94'
R = 300.00'
PC STA = 3+88.49
PT STA = 5+66.44

CURVE 9
PC: 0+24.27
BP: 0+00.00
PC: 0+71.76
PT: 1+12.94
EP: 1+27.54
PI: 55+91.34

CURVE 10
PI STA = 0+92.64
Y = 370383.545
X = 2525133.516
DELTA = 23°35'50" RT
D = 57°18'00"
T = 20.89'
L = 41.18'
R = 99.99'
PC STA = 0+71.76
PT STA = 1+12.94

END 102ND R/L
113+00.00
Y = 369,698.206
X = 2,523,811.528

EP: 113+00.00
PT: 111+95.65
N0°43'32.0"W
104.35'
CURVE 1
CP 101
PC: 110+60.94
N38°51'38.8"W
60.94'
PI: 110+00.00

S 102ND ST R/L
N39°09'52.8"W
161.90'
W NATIONAL AVE R/L
PT: 108+38.10
BP: 107+00.00
CURVE 2
BEGIN 102ND R/L
107+00.00
Y = 369,195.722
X = 2,524,092.415

W NATIONAL AVE

BEGIN IH 41/894 SB EXIT R/L
0+00.00
Y = 370,087.715
X = 2,524,493.867
BP: 0+00.00
EP: 1+43.45
END IH 41/894 SB EXIT R/L
1+43.45
Y = 369,954.234
X = 2,524,478.808
N50°50'22.0"E
2470.95'
CURVE 4

END IH 41/894
SB ENTRANCE R/L
STA 2+45.92
Y = 370,152.266
X = 2,524,565.790
EP: 2+45.92
PCC: 0+95.27
BP: 0+00.00
CURVE 5
CURVE 6

BEGIN IH 41/894
SB ENTRANCE R/L
STA 0+00.00
Y = 370,209.472
X = 2,524,795.948
N50°50'22.0"E
246.33'
CP 105
CURVE 7

BEGIN IH 41/894
NB ENTRANCE R/L
0+00.00
Y = 369,926.134
X = 2,524,571.885
BP: 0+00.00
PI: 1+00.02
N51°59'06.8"E
100.02'

PC: 3+46.35
PCC: 3+88.49
CURVE 8
END IH 41/894
NB ENTRANCE R/L
5+66.44
Y = 370,197.009
X = 2,525,049.547
EP: 5+66.44

END 100TH R/L
162+46.06
Y = 370,676.178
X = 2,525,090.547
EP: 162+46.06
PT: 161+46.67
CURVE 3
PC: 160+59.33
BP: 160+00.00
N39°09'38.0"W
59.33'
S 100TH ST R/L
CP 100

BEGIN 99TH NORTH R/L
130+00.00
Y = 370,664.414
X = 2,525,424.046
N0°39'50.3"W
99.39'
BEGIN 100TH R/L
160+00.00
Y = 370,450.204
X = 2,525,158.355
N0°37'30.3"W
300.00'
S 99TH ST
BP: 130+00.00
EP: 120+00.00
BP: 117+00.00
S 99TH ST R/L
BEGIN 99TH SOUTH R/L
117+00.00
Y = 370,380.017
X = 2,525,446.653

BEGIN IH 41/894
SB EXIT R/L
STA 0+00.00
Y = 370,295.916
X = 2,525,127.471
N18°40'34.3"W
24.27'

END IH 41/894
SB EXIT R/L
STA 1+27.54
Y = 370,405.957
X = 2,525,161.034
N50°50'18.9"E
14.60'

END 99TH NORTH R/L
133+00.00
Y = 370,964.390
X = 2,525,420.242
EP: 133+00.00
N0°43'35.8"W
300.00'
S 99TH ST R/L
END 99TH SOUTH R/L
120+00.00
Y = 370,679.999
X = 2,525,443.380

END 98TH R/L
143+00.00
Y = 371,227.713
X = 2,525,746.980
EP: 143+00.00
S 98TH ST R/L
N0°42'43.1"W
300.00'
S 98TH ST
BP: 140+00.00
N51°07'39.7"E
2456.11'
BEGIN 98TH R/L
140+00.00
Y = 370,927.736
X = 2,525,750.708

W CLEVELAND AVE
W CLEVELAND AVE R/L
END CLEVELAND R/L
110+73.35
Y = 368,928.381
X = 2,524,318.127
EP: 110+73.35

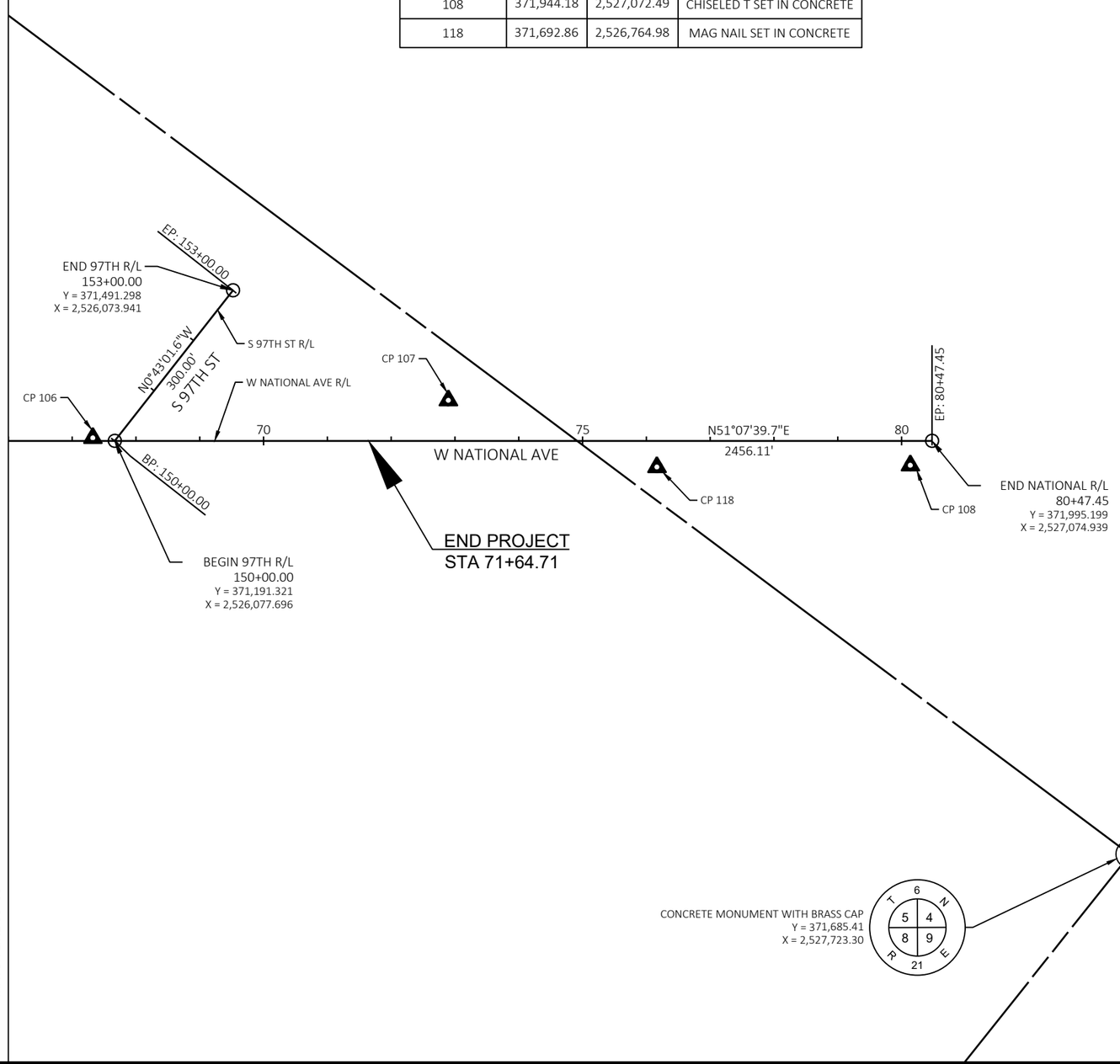
CONCRETE MONUMENT WITH BRASS CAP
Y = 366,228.82
X = 2,522,514.92

MATCH LINE 36+00

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | ALIGNMENT PLAN | SHEET 475 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\027201-AD.DWG
LAYOUT NAME - 02
PLOT DATE : 1/9/2026 10:39 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:200 FT

| CONTROL POINTS | | | |
|---|---|---|---|
| POINT NUMBER | Y | X | DESCRIPTION |
| 106 | 371,173.45 | 2,526,047.94 | CHISELED T SET IN CONCRETE |
| 107 | 371,569.04 | 2,526,444.82 | CHISELED T SET IN CONCRETE |
| 108 | 371,944.18 | 2,527,072.49 | CHISELED T SET IN CONCRETE |
| 118 | 371,692.86 | 2,526,764.98 | MAG NAIL SET IN CONCRETE |




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | ALIGNMENT PLAN | SHEET 476 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\027201-AD.DWG
LAYOUT NAME - 03

PLOT DATE : 1/9/2026 10:39 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

## Estimate Of Quantities

| Line | Item | Item Description | Unit | Total | 2410-15-70 Qty | 2410-15-71 Qty |
|---|---|---|---|---|---|---|
| 0002 | 201.0205 | Grubbing | STA | 19.000 | 19.000 | |
| 0004 | 201.0220 | Grubbing | ID | 126.000 | 126.000 | |
| 0006 | 204.0100 | Removing Concrete Pavement | SY | 51,495.000 | 51,495.000 | |
| 0008 | 204.0130 | Removing Curb | LF | 95.000 | 95.000 | |
| 0010 | 204.0150 | Removing Curb & Gutter | LF | 495.000 | 495.000 | |
| 0012 | 204.0155 | Removing Concrete Sidewalk | SY | 6,255.000 | 6,255.000 | |
| 0014 | 204.0170 | Removing Fence | LF | 260.000 | 260.000 | |
| 0016 | 204.0175 | Removing Concrete Slope Paving | SY | 280.000 | 280.000 | |
| 0018 | 204.0195 | Removing Concrete Bases | EACH | 90.000 | 90.000 | |
| 0020 | 204.0210 | Removing Manholes | EACH | 38.000 | 38.000 | |
| 0022 | 204.0215 | Removing Catch Basins | EACH | 60.000 | 60.000 | |
| 0024 | 204.0245 | Removing Storm Sewer (size) 001. 10-Inch | LF | 85.000 | 85.000 | |
| 0026 | 204.0245 | Removing Storm Sewer (size) 002. 12-Inch | LF | 2,540.000 | 2,540.000 | |
| 0028 | 204.0245 | Removing Storm Sewer (size) 003. 15-Inch | LF | 735.000 | 735.000 | |
| 0030 | 204.0245 | Removing Storm Sewer (size) 004. 18-Inch | LF | 1,330.000 | 1,330.000 | |
| 0032 | 204.0245 | Removing Storm Sewer (size) 005. 21-Inch | LF | 675.000 | 675.000 | |
| 0034 | 204.0245 | Removing Storm Sewer (size) 006. 24-Inch | LF | 375.000 | 375.000 | |
| 0036 | 204.0245 | Removing Storm Sewer (size) 007. 27-Inch | LF | 35.000 | 35.000 | |
| 0038 | 204.0245 | Removing Storm Sewer (size) 008. 36-Inch | LF | 305.000 | 305.000 | |
| 0040 | 204.0245 | Removing Storm Sewer (size) 009. 48-Inch | LF | 1,795.000 | 1,795.000 | |
| 0042 | 204.0245 | Removing Storm Sewer (size) 010. 60-Inch | LF | 595.000 | 595.000 | |
| 0044 | 204.0245 | Removing Storm Sewer (size) 011. 84-Inch | LF | 945.000 | 945.000 | |
| 0046 | 204.9060.S | Removing (item description) 001. Landscaping Bed | EACH | 1.000 | 1.000 | |
| 0048 | 204.9060.S | Removing (item description) 101. Traffic Signals National Ave & Cleveland Ave | EACH | 1.000 | 1.000 | |
| 0050 | 204.9060.S | Removing (item description) 102. Traffic Signals National Ave & 102nd St | EACH | 1.000 | 1.000 | |
| 0052 | 204.9060.S | Removing (item description) 103. Loop Detector Wire & Lead-In Cable STH 100 & National Ave | EACH | 1.000 | 1.000 | |
| 0054 | 204.9090.S | Removing (item description) 001. Pipe Railing Partial | LF | 15.000 | 15.000 | |
| 0056 | 204.9090.S | Removing (item description) 201. Removing Electrical Conductors From Existing Conduit | LF | 990.000 | 990.000 | |
| 0058 | 204.9090.S | Removing (item description) 202. Removing or Abandoning Conduit | LF | 990.000 | 990.000 | |
| 0060 | 205.0100 | Excavation Common | CY | 53,955.000 | 53,955.000 | |
| 0062 | 213.0100 | Finishing Roadway (project) 001. 2410-15-70 | EACH | 1.000 | 1.000 | |
| 0064 | 305.0110 | Base Aggregate Dense 3/4-Inch | TON | 10.000 | 10.000 | |
| 0066 | 305.0120 | Base Aggregate Dense 1 1/4-Inch | TON | 24,410.000 | 24,410.000 | |
| 0068 | 310.0110 | Base Aggregate Open-Graded | TON | 325.000 | 325.000 | |
| 0070 | 311.0110 | Breaker Run | TON | 38,589.000 | 38,589.000 | |
| 0072 | 320.0155 | Concrete Base 9-Inch | SY | 2,030.000 | 2,030.000 | |
| 0074 | 405.0200 | Coloring Concrete Custom | CY | 655.000 | 655.000 | |
| 0076 | 415.0080 | Concrete Pavement 8-Inch | SY | 34,695.000 | 34,695.000 | |
| 0078 | 415.0210 | Concrete Pavement Gaps | EACH | 4.000 | 4.000 | |
| 0080 | 415.1080 | Concrete Pavement HES 8-Inch | SY | 285.000 | 285.000 | |
| 0082 | 415.4100 | Concrete Pavement Joint Filling | SY | 38,905.000 | 38,905.000 | |
| 0084 | 416.0610 | Drilled Tie Bars | EACH | 2,095.000 | 2,095.000 | |
| 0086 | 416.0620 | Drilled Dowel Bars | EACH | 705.000 | 705.000 | |
| 0088 | 455.0605 | Tack Coat | GAL | 255.000 | 255.000 | |
| 0090 | 460.6223 | HMA Pavement 3 MT 58-28 S | TON | 85.000 | 85.000 | |
| 0092 | 460.6424 | HMA Pavement 4 MT 58-28 H | TON | 420.000 | 420.000 | |
| 0094 | 465.0120 | Asphaltic Surface Driveways and Field Entrances | TON | 215.000 | 215.000 | |

| Line | Item | Item Description | Unit | Total | 2410-15-70 Qty | 2410-15-71 Qty |
|---|---|---|---|---|---|---|
| 0096 | 465.0125 | Asphaltic Surface Temporary | TON | 1,280.000 | 1,280.000 | |
| 0098 | 495.1000.S | Cold Patch | TON | 50.000 | 50.000 | |
| 0100 | 520.8000 | Concrete Collars for Pipe | EACH | 11.000 | 11.000 | |
| 0102 | 531.2048 | Drilling Shaft 48-Inch | LF | 28.000 | 28.000 | |
| 0104 | 531.5340 | Foundation Single-Shaft Type TC-IV (structure) 01. S-40-673 | EACH | 1.000 | 1.000 | |
| 0106 | 532.5340 | Truss Cantilever 2-Chord Type IV (structure) 01. S-40-673 | EACH | 1.000 | 1.000 | |
| 0108 | 601.0110 | Concrete Curb Type D | LF | 100.000 | 100.000 | |
| 0110 | 601.0150 | Concrete Curb Integral Type D | LF | 1,525.000 | 1,525.000 | |
| 0112 | 601.0319 | Concrete Curb & Gutter 19-Inch | LF | 1,030.000 | 1,030.000 | |
| 0114 | 601.0331 | Concrete Curb & Gutter 31-Inch | LF | 18,315.000 | 18,315.000 | |
| 0116 | 601.0600 | Concrete Curb Pedestrian | LF | 1,730.000 | 1,730.000 | |
| 0118 | 602.0410 | Concrete Sidewalk 5-Inch | SF | 95,845.000 | 95,845.000 | |
| 0120 | 602.0420 | Concrete Sidewalk 7-Inch | SF | 5,440.000 | 5,440.000 | |
| 0122 | 602.0505 | Curb Ramp Detectable Warning Field Yellow | SF | 1,475.000 | 1,475.000 | |
| 0124 | 602.0605 | Curb Ramp Detectable Warning Field Radial Yellow | SF | 445.000 | 445.000 | |
| 0126 | 602.0815 | Concrete Driveway 7-Inch | SY | 1,685.000 | 1,685.000 | |
| 0128 | 602.2400 | Concrete Safety Islands | SF | 6,300.000 | 6,300.000 | |
| 0130 | 604.0400 | Slope Paving Concrete | SY | 300.000 | 300.000 | |
| 0132 | 608.0312 | Storm Sewer Pipe Reinforced Concrete Class III 12-Inch | LF | 2,310.000 | 2,310.000 | |
| 0134 | 608.0315 | Storm Sewer Pipe Reinforced Concrete Class III 15-Inch | LF | 407.000 | 407.000 | |
| 0136 | 608.0318 | Storm Sewer Pipe Reinforced Concrete Class III 18-Inch | LF | 40.000 | 40.000 | |
| 0138 | 608.0321 | Storm Sewer Pipe Reinforced Concrete Class III 21-Inch | LF | 189.000 | 189.000 | |
| 0140 | 608.0324 | Storm Sewer Pipe Reinforced Concrete Class III 24-Inch | LF | 1,114.000 | 1,114.000 | |
| 0142 | 608.0330 | Storm Sewer Pipe Reinforced Concrete Class III 30-Inch | LF | 140.000 | 140.000 | |
| 0144 | 608.0336 | Storm Sewer Pipe Reinforced Concrete Class III 36-Inch | LF | 418.000 | 418.000 | |
| 0146 | 608.0342 | Storm Sewer Pipe Reinforced Concrete Class III 42-Inch | LF | 200.000 | 200.000 | |
| 0148 | 608.0348 | Storm Sewer Pipe Reinforced Concrete Class III 48-Inch | LF | 39.000 | 39.000 | |
| 0150 | 608.0360 | Storm Sewer Pipe Reinforced Concrete Class III 60-Inch | LF | 406.000 | 406.000 | |
| 0152 | 608.0366 | Storm Sewer Pipe Reinforced Concrete Class III 66-Inch | LF | 183.000 | 183.000 | |
| 0154 | 608.0398 | Storm Sewer Pipe Reinforced Concrete Class III 108-Inch | LF | 923.000 | 923.000 | |
| 0156 | 608.0412 | Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch | LF | 1,011.000 | 1,011.000 | |
| 0158 | 608.0415 | Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch | LF | 241.000 | 241.000 | |
| 0160 | 608.0430 | Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch | LF | 293.000 | 293.000 | |
| 0162 | 608.0466 | Storm Sewer Pipe Reinforced Concrete Class IV 66-Inch | LF | 1,022.000 | 1,022.000 | |
| 0164 | 611.0420 | Reconstructing Manholes | EACH | 3.000 | 3.000 | |
| 0166 | 611.0530 | Manhole Covers Type J | EACH | 40.000 | 40.000 | |
| 0168 | 611.0612 | Inlet Covers Type C | EACH | 2.000 | 2.000 | |
| 0170 | 611.0624 | Inlet Covers Type H | EACH | 1.000 | 1.000 | |
| 0172 | 611.0642 | Inlet Covers Type MS | EACH | 6.000 | 6.000 | |
| 0174 | 611.0648 | Inlet Covers Type R | EACH | 124.000 | 92.000 | 32.000 |
| 0176 | 611.0666 | Inlet Covers Type Z | EACH | 9.000 | 9.000 | |
| 0178 | 611.1003 | Catch Basins 3-FT Diameter | EACH | 6.000 | 6.000 | |
| 0180 | 611.1004 | Catch Basins 4-FT Diameter | EACH | 1.000 | 1.000 | |
| 0182 | 611.1006 | Catch Basins 6-FT Diameter | EACH | 1.000 | 1.000 | |
| 0184 | 611.2004 | Manholes 4-FT Diameter | EACH | 6.000 | 6.000 | |
| 0186 | 611.2005 | Manholes 5-FT Diameter | EACH | 11.000 | 11.000 | |
| 0188 | 611.2006 | Manholes 6-FT Diameter | EACH | 4.000 | 4.000 | |
| 0190 | 611.2007 | Manholes 7-FT Diameter | EACH | 3.000 | 3.000 | |
| 0192 | 611.2008 | Manholes 8-FT Diameter | EACH | 1.000 | 1.000 | |

## Estimate Of Quantities

| Line | Item | Item Description | Unit | Total | 2410-15-70 Qty | 2410-15-71 Qty |
|---|---|---|---|---|---|---|
| 0194 | 611.2009 | Manholes 9-FT Diameter | EACH | 1.000 | 1.000 | |
| 0196 | 611.2010 | Manholes 10-FT Diameter | EACH | 1.000 | 1.000 | |
| 0198 | 611.2504 | Manholes Variable Tee 4-FT Diameter | EACH | 13.000 | 13.000 | |
| 0200 | 611.3003 | Inlets 3-FT Diameter | EACH | 1.000 | 1.000 | |
| 0202 | 611.3230 | Inlets 2x3-FT | EACH | 1.000 | 1.000 | |
| 0204 | 611.3901 | Inlets Median 1 Grate | EACH | 6.000 | 6.000 | |
| 0206 | 611.8115 | Adjusting Inlet Covers | EACH | 2.000 | 2.000 | |
| 0208 | 611.8120.S | Cover Plates Temporary | EACH | 10.000 | 10.000 | |
| 0210 | 612.0106 | Pipe Underdrain 6-Inch | LF | 2,845.000 | 1,855.000 | 990.000 |
| 0212 | 612.0206 | Pipe Underdrain Unperforated 6-Inch | LF | 295.000 | 100.000 | 195.000 |
| 0214 | 612.0208 | Pipe Underdrain Unperforated 8-Inch | LF | 305.000 | 305.000 | |
| 0216 | 612.0210 | Pipe Underdrain Unperforated 10-Inch | LF | 65.000 | 65.000 | |
| 0218 | 612.0902.S | Insulation Board Polystyrene (inch) 001. 2-Inch | SY | 15.000 | 15.000 | |
| 0220 | 616.0206 | Fence Chain Link 6-FT | LF | 175.000 | 175.000 | |
| 0222 | 616.0329 | Gates Chain Link (width) 001. 12-FT | EACH | 1.000 | 1.000 | |
| 0224 | 619.1000 | Mobilization | EACH | 1.000 | 0.820 | 0.180 |
| 0226 | 620.0300 | Concrete Median Sloped Nose | SF | 605.000 | 605.000 | |
| 0228 | 623.0200 | Dust Control Surface Treatment | SY | 22,500.000 | 22,500.000 | |
| 0230 | 624.0100 | Water | MGAL | 600.000 | 600.000 | |
| 0232 | 625.0100 | Topsoil | SY | 27,225.000 | 27,225.000 | |
| 0234 | 627.0200 | Mulching | SY | 10,380.000 | 10,380.000 | |
| 0236 | 628.1104 | Erosion Bales | EACH | 100.000 | 100.000 | |
| 0238 | 628.1504 | Silt Fence | LF | 3,030.000 | 3,030.000 | |
| 0240 | 628.1520 | Silt Fence Maintenance | LF | 1,517.000 | 1,517.000 | |
| 0242 | 628.1905 | Mobilizations Erosion Control | EACH | 21.000 | 21.000 | |
| 0244 | 628.1910 | Mobilizations Emergency Erosion Control | EACH | 15.000 | 15.000 | |
| 0246 | 628.2004 | Erosion Mat Class I Type B | SY | 2,000.000 | 2,000.000 | |
| 0248 | 628.6510 | Soil Stabilizer Type B | ACRE | 1.700 | 1.700 | |
| 0250 | 628.7005 | Inlet Protection Type A | EACH | 137.000 | 137.000 | |
| 0252 | 628.7010 | Inlet Protection Type B | EACH | 17.000 | 17.000 | |
| 0254 | 628.7020 | Inlet Protection Type D | EACH | 375.000 | 375.000 | |
| 0256 | 628.7504 | Temporary Ditch Checks | LF | 171.000 | 171.000 | |
| 0258 | 628.7560 | Tracking Pads | EACH | 24.000 | 24.000 | |
| 0260 | 628.7570 | Rock Bags | EACH | 250.000 | 250.000 | |
| 0262 | 629.0210 | Fertilizer Type B | CWT | 17.300 | 17.300 | |
| 0264 | 630.0140 | Seeding Mixture No. 40 | LB | 360.000 | 360.000 | |
| 0266 | 630.0200 | Seeding Temporary | LB | 215.000 | 215.000 | |
| 0268 | 630.0300 | Seeding Borrow Pit | LB | 200.000 | 200.000 | |
| 0270 | 630.0500 | Seed Water | MGAL | 190.000 | 190.000 | |
| 0272 | 631.0300 | Sod Water | MGAL | 519.000 | 519.000 | |
| 0274 | 631.1000 | Sod Lawn | SY | 19,823.000 | 19,823.000 | |
| 0276 | 632.9101 | Landscape Planting Surveillance and Care Cycles | EACH | 15.000 | 15.000 | |
| 0278 | 634.0618 | Posts Wood 4x6-Inch X 18-FT | EACH | 63.000 | 63.000 | |
| 0280 | 634.0620 | Posts Wood 4x6-Inch X 20-FT | EACH | 3.000 | 3.000 | |
| 0282 | 634.0622 | Posts Wood 4x6-Inch X 22-FT | EACH | 4.000 | 4.000 | |
| 0284 | 634.0814 | Posts Tubular Steel 2x2-Inch X 14-FT | EACH | 14.000 | 14.000 | |
| 0286 | 637.1220 | Signs Type I Reflective SH | SF | 148.500 | 148.500 | |
| 0288 | 637.2210 | Signs Type II Reflective H | SF | 1,363.780 | 1,363.780 | |
| 0290 | 637.2215 | Signs Type II Reflective H Folding | SF | 223.960 | 223.960 | |

| Line | Item | Item Description | Unit | Total | 2410-15-70 Qty | 2410-15-71 Qty |
|---|---|---|---|---|---|---|
| 0292 | 637.2230 | Signs Type II Reflective F | SF | 387.500 | 387.500 | |
| 0294 | 638.2602 | Removing Signs Type II | EACH | 157.000 | 157.000 | |
| 0296 | 638.3000 | Removing Small Sign Supports | EACH | 63.000 | 63.000 | |
| 0298 | 642.5401 | Field Office Type D | EACH | 1.000 | 0.820 | 0.180 |
| 0300 | 643.0300 | Traffic Control Drums | DAY | 91,675.000 | 91,675.000 | |
| 0302 | 643.0420 | Traffic Control Barricades Type III | DAY | 39,300.000 | 39,300.000 | |
| 0304 | 643.0705 | Traffic Control Warning Lights Type A | DAY | 78,600.000 | 78,600.000 | |
| 0306 | 643.0715 | Traffic Control Warning Lights Type C | DAY | 13,000.000 | 13,000.000 | |
| 0308 | 643.0810 | Traffic Control Connected Arrow Boards | DAY | 535.000 | 535.000 | |
| 0310 | 643.0900 | Traffic Control Signs | DAY | 198,440.000 | 198,440.000 | |
| 0312 | 643.0910 | Traffic Control Covering Signs Type I | EACH | 6.000 | 6.000 | |
| 0314 | 643.0920 | Traffic Control Covering Signs Type II | EACH | 22.000 | 22.000 | |
| 0316 | 643.1000 | Traffic Control Signs Fixed Message | SF | 196.000 | 196.000 | |
| 0318 | 643.1050 | Traffic Control Signs PCMS | DAY | 220.000 | 220.000 | |
| 0320 | 643.1220 | Traffic Control Connected Work Zone Start and End Location Markers | DAY | 870.000 | 870.000 | |
| 0322 | 643.3165 | Temporary Marking Line Paint 6-Inch | LF | 12,200.000 | 12,200.000 | |
| 0324 | 643.3170 | Temporary Marking Line Epoxy 6-Inch | LF | 935.000 | 935.000 | |
| 0326 | 643.3180 | Temporary Marking Line Removable Tape 6-Inch | LF | 11,355.000 | 11,355.000 | |
| 0328 | 643.3265 | Temporary Marking Line Paint 10-Inch | LF | 800.000 | 800.000 | |
| 0330 | 643.3270 | Temporary Marking Line Epoxy 10-Inch | LF | 945.000 | 945.000 | |
| 0332 | 643.3280 | Temporary Marking Line Removable Tape 10-Inch | LF | 1,755.000 | 1,755.000 | |
| 0334 | 643.3350 | Temporary Marking Crosswalk Removable Tape 6-Inch | LF | 605.000 | 605.000 | |
| 0336 | 643.3520 | Temporary Marking Arrow Epoxy | EACH | 2.000 | 2.000 | |
| 0338 | 643.3620 | Temporary Marking Word Epoxy | EACH | 1.000 | 1.000 | |
| 0340 | 643.5000 | Traffic Control | EACH | 1.000 | 0.820 | 0.180 |
| 0342 | 644.1440 | Temporary Pedestrian Surface Matting | SF | 2,565.000 | 2,565.000 | |
| 0344 | 644.1601 | Temporary Pedestrian Curb Ramp | DAY | 1,374.000 | 1,374.000 | |
| 0346 | 644.1605 | Temporary Pedestrian Detectable Warning Field | SF | 530.000 | 530.000 | |
| 0348 | 644.1810 | Temporary Pedestrian Barricade | LF | 20,425.000 | 20,425.000 | |
| 0350 | 644.1900.S | Temporary Audible Message Devices | DAY | 4,666.000 | 4,666.000 | |
| 0352 | 645.0111 | Geotextile Type DF Schedule A | SY | 1,560.000 | 1,560.000 | |
| 0354 | 645.0112 | Geotextile Type DF Schedule B | SY | 2,260.000 | | 2,260.000 |
| 0356 | 645.0220 | Geogrid Type SR | SY | 46,855.000 | 46,855.000 | |
| 0358 | 646.2040 | Marking Line Grooved Wet Ref Epoxy 6-Inch | LF | 8,445.000 | 8,445.000 | |
| 0360 | 646.4040 | Marking Line Grooved Wet Ref Epoxy 10-Inch | LF | 4,625.000 | 4,625.000 | |
| 0362 | 646.5020 | Marking Arrow Epoxy | EACH | 34.000 | 34.000 | |
| 0364 | 646.5060.S | Marking Arrow MMA | EACH | 8.000 | 8.000 | |
| 0366 | 646.5120 | Marking Word Epoxy | EACH | 9.000 | 9.000 | |
| 0368 | 646.5220 | Marking Symbol Epoxy | EACH | 32.000 | 32.000 | |
| 0370 | 646.5260.S | Marking Symbol MMA | EACH | 8.000 | 8.000 | |
| 0372 | 646.6120 | Marking Stop Line Epoxy 18-Inch | LF | 550.000 | 550.000 | |
| 0374 | 646.6466 | Cold Weather Marking Epoxy 6-Inch | LF | 4,240.000 | 4,240.000 | |
| 0376 | 646.6470 | Cold Weather Marking Epoxy 10-Inch | LF | 2,325.000 | 2,325.000 | |
| 0378 | 646.7120 | Marking Diagonal Epoxy 12-Inch | LF | 530.000 | 530.000 | |
| 0380 | 646.7420 | Marking Crosswalk Epoxy Transverse Line 6-Inch | LF | 3,125.000 | 3,125.000 | |
| 0382 | 646.7520 | Marking Crosswalk Epoxy Block Style 24-Inch | LF | 2,305.000 | 2,305.000 | |
| 0384 | 646.7760.S | Marking Bike Lane MMA | SF | 4,345.000 | 4,345.000 | |
| 0386 | 646.8120 | Marking Curb Epoxy | LF | 285.000 | 285.000 | |
| 0388 | 646.8220 | Marking Island Nose Epoxy | EACH | 17.000 | 17.000 | |

| | | | | | 2410-15-70 | 2410-15-71 |
|---|---|---|---|---|---|---|
| **Line** | **Item** | **Item Description** | **Unit** | **Total** | **Qty** | **Qty** |
| 0390 | 646.9002 | Marking Removal Line 6-Inch | LF | 6,835.000 | 6,835.000 | |
| 0392 | 646.9012 | Marking Removal Line Water Blasting 6-Inch | LF | 275.000 | 275.000 | |
| 0394 | 646.9102 | Marking Removal Line 10-Inch | LF | 2,675.000 | 2,675.000 | |
| 0396 | 646.9112 | Marking Removal Line Water Blasting 10-Inch | LF | 510.000 | 510.000 | |
| 0398 | 646.9200 | Marking Removal Line Wide | LF | 335.000 | 335.000 | |
| 0400 | 646.9300 | Marking Removal Special Marking | EACH | 16.000 | 16.000 | |
| 0402 | 646.9310 | Marking Removal Special Marking Water Blasting | EACH | 2.000 | 2.000 | |
| 0404 | 650.4000 | Construction Staking Storm Sewer | EACH | 182.000 | 182.000 | |
| 0406 | 650.4500 | Construction Staking Subgrade | LF | 9,250.000 | 9,250.000 | |
| 0408 | 650.5000 | Construction Staking Base | LF | 85.000 | 85.000 | |
| 0410 | 650.5500 | Construction Staking Curb Gutter and Curb & Gutter | LF | 170.000 | 170.000 | |
| 0412 | 650.6501 | Construction Staking Structure Layout (structure) 001. S-40-673 | EACH | 1.000 | 1.000 | |
| 0414 | 650.7000 | Construction Staking Concrete Pavement | LF | 9,170.000 | 9,170.000 | |
| 0416 | 650.8501 | Construction Staking Electrical Installations (project) 001. 2410-15-70 | EACH | 1.000 | 1.000 | |
| 0418 | 650.9000 | Construction Staking Curb Ramps | EACH | 74.000 | 74.000 | |
| 0420 | 650.9500 | Construction Staking Sidewalk (project) 001. 2410-15-70 | EACH | 1.000 | 1.000 | |
| 0422 | 650.9911 | Construction Staking Supplemental Control (project) 001. 2410-15-70 | EACH | 1.000 | 1.000 | |
| 0424 | 650.9920 | Construction Staking Slope Stakes | LF | 10,700.000 | 10,700.000 | |
| 0426 | 652.0225 | Conduit Rigid Nonmetallic Schedule 40 2-Inch | LF | 12,149.000 | 12,149.000 | |
| 0428 | 652.0235 | Conduit Rigid Nonmetallic Schedule 40 3-Inch | LF | 958.000 | 958.000 | |
| 0430 | 652.0325 | Conduit Rigid Nonmetallic Schedule 80 2-Inch | LF | 1,485.000 | 1,485.000 | |
| 0432 | 652.0605 | Conduit Special 2-Inch | LF | 1,315.000 | 1,315.000 | |
| 0434 | 652.0615 | Conduit Special 3-Inch | LF | 1,953.000 | 1,953.000 | |
| 0436 | 652.0700.S | Install Conduit into Existing Item | EACH | 8.000 | 8.000 | |
| 0438 | 652.0800 | Conduit Loop Detector | LF | 3,686.000 | 3,686.000 | |
| 0440 | 653.0135 | Pull Boxes Steel 24x36-Inch | EACH | 9.000 | 9.000 | |
| 0442 | 653.0140 | Pull Boxes Steel 24x42-Inch | EACH | 37.000 | 37.000 | |
| 0444 | 653.0164 | Pull Boxes Non-Conductive 24x42-Inch | EACH | 56.000 | 56.000 | |
| 0446 | 653.0900 | Adjusting Pull Boxes | EACH | 1.000 | 1.000 | |
| 0448 | 653.0905 | Removing Pull Boxes | EACH | 26.000 | 26.000 | |
| 0450 | 654.0101 | Concrete Bases Type 1 | EACH | 11.000 | 11.000 | |
| 0452 | 654.0102 | Concrete Bases Type 2 | EACH | 8.000 | 8.000 | |
| 0454 | 654.0105 | Concrete Bases Type 5 | EACH | 35.000 | 35.000 | |
| 0456 | 654.0110 | Concrete Bases Type 10 | EACH | 4.000 | 4.000 | |
| 0458 | 654.0120 | Concrete Bases Type 10-Special | EACH | 4.000 | 4.000 | |
| 0460 | 654.0217 | Concrete Control Cabinet Bases Type 9 Special | EACH | 2.000 | 2.000 | |
| 0462 | 655.0230 | Cable Traffic Signal 5-14 AWG | LF | 1,490.000 | 1,490.000 | |
| 0464 | 655.0240 | Cable Traffic Signal 7-14 AWG | LF | 2,021.000 | 2,021.000 | |
| 0466 | 655.0260 | Cable Traffic Signal 12-14 AWG | LF | 2,395.000 | 2,395.000 | |
| 0468 | 655.0270 | Cable Traffic Signal 15-14 AWG | LF | 3,033.000 | 3,033.000 | |
| 0470 | 655.0305 | Cable Type UF 2-12 AWG Grounded | LF | 2,281.000 | 2,281.000 | |
| 0472 | 655.0515 | Electrical Wire Traffic Signals 10 AWG | LF | 4,694.000 | 4,694.000 | |
| 0474 | 655.0610 | Electrical Wire Lighting 12 AWG | LF | 15,136.000 | 15,136.000 | |
| 0476 | 655.0625 | Electrical Wire Lighting 6 AWG | LF | 25,215.000 | 25,215.000 | |
| 0478 | 655.0700 | Loop Detector Lead In Cable | LF | 14,091.000 | 14,091.000 | |
| 0480 | 655.0800 | Loop Detector Wire | LF | 14,364.000 | 14,364.000 | |
| 0482 | 655.0900 | Traffic Signal EVP Detector Cable | LF | 1,968.000 | 1,968.000 | |
| 0484 | 656.0201 | Electrical Service Meter Breaker Pedestal (location) 101. National Ave & Cleveland Ave | EACH | 1.000 | 1.000 | |
| 0486 | 656.0201 | Electrical Service Meter Breaker Pedestal (location) 102. National Ave & 102nd St | EACH | 1.000 | 1.000 | |

| | | | | | 2410-15-70 | 2410-15-71 |
|---|---|---|---|---|---|---|
| **Line** | **Item** | **Item Description** | **Unit** | **Total** | **Qty** | **Qty** |
| 0488 | 657.0100 | Pedestal Bases | EACH | 11.000 | 11.000 | |
| 0490 | 657.0255 | Transformer Bases Breakaway 11 1/2-Inch Bolt Circle | EACH | 8.000 | 8.000 | |
| 0492 | 657.0310 | Poles Type 3 | EACH | 8.000 | 8.000 | |
| 0494 | 657.0345 | Poles Type 9 | EACH | 1.000 | 1.000 | |
| 0496 | 657.0347 | Poles Type 9-Special | EACH | 3.000 | 3.000 | |
| 0498 | 657.0350 | Poles Type 10 | EACH | 3.000 | 3.000 | |
| 0500 | 657.0352 | Poles Type 10-Special | EACH | 1.000 | 1.000 | |
| 0502 | 657.0425 | Traffic Signal Standards Aluminum 15-FT | EACH | 9.000 | 9.000 | |
| 0504 | 657.0430 | Traffic Signal Standards Aluminum 10-FT | EACH | 2.000 | 2.000 | |
| 0506 | 657.0530 | Monotube Arms 30-FT | EACH | 4.000 | 4.000 | |
| 0508 | 657.0541 | Monotube Arms 40-FT-Special | EACH | 2.000 | 2.000 | |
| 0510 | 657.0546 | Monotube Arms 45-FT-Special | EACH | 2.000 | 2.000 | |
| 0512 | 657.0609 | Luminaire Arms Single Member 4-Inch Clamp 6-FT | EACH | 10.000 | 10.000 | |
| 0514 | 657.0806 | Luminaire Arms Steel 6-FT | EACH | 6.000 | 6.000 | |
| 0516 | 658.0173 | Traffic Signal Face 3S 12-Inch | EACH | 25.000 | 25.000 | |
| 0518 | 658.0174 | Traffic Signal Face 4S 12-Inch | EACH | 20.000 | 20.000 | |
| 0520 | 658.0175 | Traffic Signal Face 5S 12-Inch | EACH | 2.000 | 2.000 | |
| 0522 | 658.0416 | Pedestrian Signal Face 16-Inch | EACH | 24.000 | 24.000 | |
| 0524 | 658.5070 | Signal Mounting Hardware (location) 101. National Ave & Cleveland Ave | EACH | 1.000 | 1.000 | |
| 0526 | 658.5070 | Signal Mounting Hardware (location) 102. National Ave & 102nd St | EACH | 1.000 | 1.000 | |
| 0528 | 659.0601 | Underdeck Lighting (structure) 001. B-40-123 | EACH | 1.000 | 1.000 | |
| 0530 | 659.0601 | Underdeck Lighting (structure) 002. B-40-124 | EACH | 1.000 | 1.000 | |
| 0532 | 659.1120 | Luminaires Utility LED B | EACH | 16.000 | 16.000 | |
| 0534 | 659.1210 | Luminaires Underdeck LED B | EACH | 4.000 | 4.000 | |
| 0536 | 661.0201 | Temporary Traffic Signals for Intersections (location) 101. National Ave & Cleveland Ave | EACH | 1.000 | 1.000 | |
| 0538 | 661.0201 | Temporary Traffic Signals for Intersections (location) 102. National Ave & 102nd St | EACH | 1.000 | 1.000 | |
| 0540 | 661.0300 | Generators | DAY | 2.000 | 2.000 | |
| 0542 | 690.0150 | Sawing Asphalt | LF | 1,905.000 | 1,905.000 | |
| 0544 | 690.0250 | Sawing Concrete | LF | 5,705.000 | 5,705.000 | |
| 0546 | 715.0720 | Incentive Compressive Strength Concrete Pavement | DOL | 10,410.000 | 10,410.000 | |
| 0548 | 740.0440 | Incentive IRI Ride | DOL | 1,565.000 | 1,565.000 | |
| 0550 | ASP.1T0A | On-the-Job Training Apprentice at $5.00/HR | HRS | 10,500.000 | 10,500.000 | |
| 0552 | ASP.1T0G | On-the-Job Training Graduate at $5.00/HR | HRS | 36,000.000 | 36,000.000 | |
| 0554 | SPV.0035 | Special 001. Backfill Slurry | CY | 150.000 | 150.000 | |
| 0556 | SPV.0035 | Special 002. Engineered Soil Bioswales | CY | 1,515.000 | | 1,515.000 |
| 0558 | SPV.0035 | Special 003. Bedding Layer Bioswales | CY | 200.000 | | 200.000 |
| 0560 | SPV.0035 | Special 004. Storage Layer Bioswales | CY | 2,260.000 | | 2,260.000 |
| 0562 | SPV.0035 | Special 005. Cobblestones | CY | 1,540.000 | | 1,540.000 |
| 0564 | SPV.0060 | Special 001. Manholes 6x11-FT | EACH | 1.000 | 1.000 | |
| 0566 | SPV.0060 | Special 002. Storm Sewer Chamber | EACH | 1.000 | 1.000 | |
| 0568 | SPV.0060 | Special 003. Bioswale Drains | EACH | 32.000 | | 32.000 |
| 0570 | SPV.0060 | Special 004. Bus Stop Bench | EACH | 7.000 | 7.000 | |
| 0572 | SPV.0060 | Special 005. Trash  Receptacle | EACH | 7.000 | 7.000 | |
| 0574 | SPV.0060 | Special 006. Tree Root Sawing | EACH | 74.000 | 74.000 | |
| 0576 | SPV.0060 | Special 007. Utility Line Opening (ULO) | EACH | 25.000 | 25.000 | |
| 0578 | SPV.0060 | Special 008. Catmint Nepeta 'Blue Wonder' 1 Gallon | EACH | 205.000 | | 205.000 |
| 0580 | SPV.0060 | Special 009. Daylilies 'Stella D'Oro' 1 Gallon | EACH | 295.000 | | 295.000 |
| 0582 | SPV.0060 | Special 010. False Indigo 'Midnight Prairie Blue Eyes' 1 Gallon | EACH | 143.000 | | 143.000 |
| 0584 | SPV.0060 | Special 011. Gro Low Sumac 2 Gallon | EACH | 95.000 | | 95.000 |

| Line | Item | Item Description | Unit | Total | 2410-15-70 Qty | 2410-15-71 Qty |
|---|---|---|---|---|---|---|
| 0586 | SPV.0060 | Special 012. Karl Foerster Grass 1 Gallon | EACH | 67.000 | | 67.000 |
| 0588 | SPV.0060 | Special 013. Panicum Grass 'Apache Rose' 1 Gallon | EACH | 176.000 | | 176.000 |
| 0590 | SPV.0060 | Special 014. Purple Coneflower 'Magnus' 1 Gallon | EACH | 250.000 | | 250.000 |
| 0592 | SPV.0060 | Special 015. Red Twigged Dogwood 3 Gallon | EACH | 59.000 | | 59.000 |
| 0594 | SPV.0060 | Special 016. Connection to Existing Storm Sewer | EACH | 1.000 | 1.000 | |
| 0596 | SPV.0060 | Special 017. Inlets 3.5-FT Diameter | EACH | 6.000 | 6.000 | |
| 0598 | SPV.0060 | Special 018. Dewatering for Storm Sewer Construction | EACH | 1.000 | 1.000 | |
| 0600 | SPV.0060 | Special 029. Concrete Saddle | EACH | 8.000 | 8.000 | |
| 0602 | SPV.0060 | Special 030. Catch Basins 3.5-FT Diameter | EACH | 86.000 | 86.000 | |
| 0604 | SPV.0060 | Special 031. Round Steel Sign Post System | EACH | 150.000 | 150.000 | |
| 0606 | SPV.0060 | Special 100. Furnish & Install Signal Cabinet & Controller National Ave & Cleveland Ave | EACH | 1.000 | 1.000 | |
| 0608 | SPV.0060 | Special 101. Furnish & Install Signal Cabinet & Controller National Ave & 102nd St | EACH | 1.000 | 1.000 | |
| 0610 | SPV.0060 | Special 102. Furnish & Install EVP System National Ave & Cleveland Ave | EACH | 1.000 | 1.000 | |
| 0612 | SPV.0060 | Special 103. Furnish & Install EVP System National Ave & 102nd St | EACH | 1.000 | 1.000 | |
| 0614 | SPV.0060 | Special 104. Furnish & Install Accessible Ped Signals National Ave & Cleveland Ave | EACH | 1.000 | 1.000 | |
| 0616 | SPV.0060 | Special 105. Furnish & Install Accessible Ped Signals National Ave & 102nd St | EACH | 1.000 | 1.000 | |
| 0618 | SPV.0060 | Special 106. Removing Concrete Monotube Traffic Signals | EACH | 8.000 | 8.000 | |
| 0620 | SPV.0060 | Special 107. Temporary Infrared EVP System National Ave & Cleveland Ave | EACH | 1.000 | 1.000 | |
| 0622 | SPV.0060 | Special 108. Temporary Infrared EVP System National Ave & 102nd St | EACH | 1.000 | 1.000 | |
| 0624 | SPV.0060 | Special 200. Transformer Bases Breakaway 11 1/2-Inch Bolt Circle Bronze | EACH | 35.000 | 35.000 | |
| 0626 | SPV.0060 | Special 201. Poles Type 5-Aluminum Bronze | EACH | 35.000 | 35.000 | |
| 0628 | SPV.0060 | Special 202. Luminaire Arms Single Member 4 1/2-Inch Clamp 6-Ft Bronze | EACH | 60.000 | 60.000 | |
| 0630 | SPV.0060 | Special 203. Luminaires Utility LED B Bronze | EACH | 60.000 | 60.000 | |
| 0632 | SPV.0060 | Special 204. Remove and Salvage Lighting Unit | EACH | 73.000 | 73.000 | |
| 0634 | SPV.0060 | Special 300. Internal Sanitary Manhole Seal | EACH | 20.000 | | 20.000 |
| 0636 | SPV.0060 | Special 301. Adjust Sanitary Manhole Frame | EACH | 20.000 | | 20.000 |
| 0638 | SPV.0060 | Special 302. Sanitary Manhole Frame with Solid Gasketed Lid | EACH | 20.000 | | 20.000 |
| 0640 | SPV.0060 | Special 303. Sanitary Manhole Abandonment | EACH | 9.000 | | 9.000 |
| 0642 | SPV.0060 | Special 304. Construction Staking Sanitary Sewer | EACH | 19.000 | | 19.000 |
| 0644 | SPV.0060 | Special 305. Reconstructing MMSD Manhole | EACH | 4.000 | | 4.000 |
| 0646 | SPV.0060 | Special 400. Water Main Connection 6-Inch | EACH | 5.000 | | 5.000 |
| 0648 | SPV.0060 | Special 401. Water Main Connection 8-Inch | EACH | 4.000 | | 4.000 |
| 0650 | SPV.0060 | Special 402. Water Main Connection 12-Inch | EACH | 5.000 | | 5.000 |
| 0652 | SPV.0060 | Special 403. Water Main Valve 6-Inch | EACH | 5.000 | | 5.000 |
| 0654 | SPV.0060 | Special 404. Water Main Valve 8-Inch | EACH | 3.000 | | 3.000 |
| 0656 | SPV.0060 | Special 405. Water Main Valve 12-inch | EACH | 12.000 | | 12.000 |
| 0658 | SPV.0060 | Special 406. Short Side Hydrant | EACH | 14.000 | | 14.000 |
| 0660 | SPV.0060 | Special 407. Long Side Hydrant | EACH | 7.000 | | 7.000 |
| 0662 | SPV.0060 | Special 408. Air Release Assembly 1.5-Inch | EACH | 3.000 | | 3.000 |
| 0664 | SPV.0060 | Special 409. Adjust Water Valve Box | EACH | 41.000 | | 41.000 |
| 0666 | SPV.0060 | Special 410. Water Service Reconnect 4-Inch | EACH | 1.000 | | 1.000 |
| 0668 | SPV.0060 | Special 411. Water Service Reconnect 6-Inch | EACH | 1.000 | | 1.000 |
| 0670 | SPV.0060 | Special 412. Temporary Water Main Connection | EACH | 4.000 | | 4.000 |
| 0672 | SPV.0090 | Special 001. Pipe Railing Black | LF | 30.000 | 30.000 | |
| 0674 | SPV.0090 | Special 002. Concrete Curb & Gutter 19-Inch Type D 9-Inch Gutter | LF | 20.000 | 20.000 | |
| 0676 | SPV.0090 | Special 003. Construction Staking Fence | LF | 100.000 | 100.000 | |
| 0678 | SPV.0090 | Special 004. Marking Crosswalk Epoxy Block Style 12-Inch | LF | 295.000 | 295.000 | |
| 0680 | SPV.0090 | Special 300. Sanitary Sewer Relay SDR 35 PVC SP 8-Inch | LF | 2,836.000 | | 2,836.000 |
| 0682 | SPV.0090 | Special 301. Sanitary Sewer Relay SDR 35 PVC SP 10-Inch | LF | 700.000 | | 700.000 |

| | | | | | 2410-15-70 | 2410-15-71 |
|---|---|---|---|---|---|---|
| **Line** | **Item** | **Item Description** | **Unit** | **Total** | **Qty** | **Qty** |
| 0684 | SPV.0090 | Special 302. Building Sanitary Sewer 6-inch | LF | 1,025.000 | | 1,025.000 |
| 0686 | SPV.0090 | Special 400. Water Main Relay 6-Inch | LF | 377.000 | | 377.000 |
| 0688 | SPV.0090 | Special 401. Water Main Relay 8-Inch | LF | 490.000 | | 490.000 |
| 0690 | SPV.0090 | Special 402. Water Main Relay 12-Inch | LF | 5,880.000 | | 5,880.000 |
| 0692 | SPV.0090 | Special 403. Water Service 1-Inch | LF | 864.000 | | 864.000 |
| 0694 | SPV.0090 | Special 404. Water Service 1.5-Inch | LF | 105.000 | | 105.000 |
| 0696 | SPV.0090 | Special 405. Water Service 2-Inch | LF | 216.000 | | 216.000 |
| 0698 | SPV.0090 | Special 406. Construction Staking Water Main | LF | 6,750.000 | | 6,750.000 |
| 0700 | SPV.0165 | Special 001. Detectable Edge Tiles | SF | 840.000 | 840.000 | |
| 0702 | SPV.0180 | Special 001. Mulch Bioswales | SY | 2,260.000 | | 2,260.000 |
| 0704 | SPV.0200 | Special 300. Sanitary Sewer 48-Inch Diameter | VF | 214.000 | | 214.000 |
| 0706 | SPV.0200 | Special 301. Sanitary Riser 6-Inch | VF | 4.000 | | 4.000 |

3

## GRUBBING

| CATEGORY | ROADWAY | LOCATION | 201.0205 GRUBBING STA | 201.0220 GRUBBING ID |
|---|---|---|---|---|
| 0010 | NATIONAL AVENUE | 25+26, 1'LT | --- | 4 |
| | NATIONAL AVENUE | 25+90, 1'RT | --- | 10 |
| | NATIONAL AVENUE | 26+36, 1'RT | --- | 3 |
| | NATIONAL AVENUE | 43+27, 1'RT | --- | 3 |
| | NATIONAL AVENUE | 43+71, 1'RT | --- | 4 |
| | NATIONAL AVENUE | 44+16, 1'RT | --- | 5 |
| | NATIONAL AVENUE | 44+56, 1'RT | --- | 4 |
| | NATIONAL AVENUE | 45+40, 3'LT | --- | 4 |
| | NATIONAL AVENUE | 47+65, 52'RT | --- | 11 |
| | NATIONAL AVENUE | 47+00 - 48+00 LT | 1 | --- |
| | NATIONAL AVENUE | 48+03, 52'RT | --- | 7 |
| | NATIONAL AVENUE | 50+39, 86'LT | --- | 6 |
| | NATIONAL AVENUE | 55+00 - 56+00 RT | 1 | --- |
| | NATIONAL AVENUE | 56+61. 2'RT | --- | 3 |
| | NATIONAL AVENUE | 57+00 - 59+00 LT | 2 | --- |
| | NATIONAL AVENUE | 59+00 - 60+00 RT | 1 | --- |
| | NATIONAL AVENUE | 60+00 - 61+00 LT | 1 | --- |
| | NATIONAL AVENUE | 61+00 - 71+00 RT | 10 | --- |
| | NATIONAL AVENUE | 61+81, 50'LT | --- | 9 |
| | NATIONAL AVENUE | 62+00 - 63+00 LT | 1 | --- |
| | NATIONAL AVENUE | 63+18, 50'LT | --- | 11 |
| | NATIONAL AVENUE | 65+82, 51'LT | --- | 11 |
| | NATIONAL AVENUE | 68+55, 1'LT | --- | 7 |
| | NATIONAL AVENUE | 69+00 - 70+00 LT | 1 | --- |
| | NATIONAL AVENUE | 71+16, 1'RT | --- | 6 |
| | CLEVELAND AVENUE | 97+15, 37'LT | --- | 3 |
| | CLEVELAND AVENUE | 97+54, 37'LT | --- | 3 |
| | CLEVELAND AVENUE | 102+35, 46'LT | --- | 3 |
| | CLEVELAND AVENUE | 102+50, 46'LT | --- | 3 |
| | CLEVELAND AVENUE | 102+66, 46'LT | --- | 3 |
| | CLEVELAND AVENUE | 103+00 - 104+00 RT | 1 | --- |
| | CLEVELAND AVENUE | 104+22, 32'LT | --- | 3 |
| | PROJECT TOTALS | | 19 | 126 |

## MISCELLANEOUS REMOVALS

| CATEGORY | STATION | TO | STATION | 204.0100 REMOVING CONCRETE PAVEMENT SY | 204.0130 REMOVING CURB LF | 204.0150 REMOVING CURB & GUTTER LF | 204.0155 REMOVING CONCRETE SIDEWALK SY | 204.0170 REMOVING FENCE LF | 204.0175 REMOVING CONCRETE SLOPE PAVING SY | 204.9060.S.001 REMOVING LANDSCAPING BED EACH | 204.9090.S.001 REMOVING PIPE RAILING PARTIAL LF |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | NATIONAL AVENUE | | | | | | | | | | |
| 0010 | 21+75 | - | 27+75 | 4,785 | 55 | 215 | 660 | --- | --- | --- | --- |
| | 27+75 | - | 33+75 | 8,575 | 0 | --- | 950 | --- | --- | --- | --- |
| | 33+75 | - | 38+50 | 4,735 | 40 | 35 | 480 | --- | --- | --- | 15 |
| | 38+50 | - | 44+50 | 6,560 | 0 | --- | 465 | --- | --- | --- | --- |
| | 44+50 | - | 50+50 | 4,515 | 0 | 160 | 420 | 185 | 15 | --- | --- |
| | 50+50 | - | 56+50 | 3,505 | 0 | 75 | 940 | 75 | 265 | --- | --- |
| | 56+50 | - | 62+50 | 6,225 | 0 | --- | 675 | --- | --- | --- | --- |
| | 62+50 | - | 67+25 | 4,580 | 0 | --- | 570 | --- | --- | --- | --- |
| | 67+25 | - | 72+22 | 4,550 | 0 | --- | 545 | --- | --- | 1 | --- |
| | CLEVELAND AVENUE | | | | | | | | | | |
| | 96+55 | - | 97+75 | 1,040 | 0 | --- | 110 | --- | --- | --- | --- |
| | 102+25 | - | 106+05 | 2,425 | 0 | 10 | 440 | --- | --- | --- | --- |
| | PROJECT TOTALS | | | 51,495 | 95 | 495 | 6,255 | 260 | 280 | 1 | 15 |

3

## REMOVING STORM STRUCTURES

| CATEGORY | STATION | SIDE | 204.0210 REMOVING MANHOLES EACH | 204.0215 REMOVING CATCH BASINS EACH |
|---|---|---|---|---|
| | NATIONAL AVENUE | | | |
| 0010 | 21+88 | 47' RT | --- | 1 |
| | 21+96 | 40' RT | 1 | --- |
| | 23+72 | 47' LT | --- | 1 |
| | 23+86 | 40' RT | 1 | --- |
| | 23+87 | 47' RT | --- | 1 |
| | 24+41 | 47' LT | --- | 1 |
| | 25+25 | 47' RT | --- | 1 |
| | 25+56 | 47' LT | --- | 1 |
| | 25+57 | 1' LT | --- | 1 |
| | 25+57 | 40' RT | 1 | --- |
| | 26+85 | 47' LT | --- | 1 |
| | 26+86 | 40' RT | 1 | --- |
| | 27+73 | 3' RT | --- | 1 |
| | 27+85 | 47' RT | --- | 1 |
| | 28+11 | 73' RT | --- | 1 |
| | 28+25 | 33' LT | 1 | --- |
| | 28+25 | 2' LT | 1 | --- |
| | 28+25 | 40' RT | 1 | --- |
| | 28+49 | 73' RT | --- | 1 |
| | 29+04 | 47' LT | --- | 1 |
| | 29+04 | 34' LT | 1 | --- |
| | 29+87 | 10' LT | --- | 1 |
| | 30+19 | 1' LT | --- | 1 |
| | 31+04 | 47' RT | --- | 1 |
| | 31+18 | 24' RT | 1 | --- |
| | 33+37 | 47' LT | --- | 1 |
| | 98+72 | 18' LT | 1 | --- |
| | 98+73 | 20' RT | 1 | --- |
| | 99+04 | 29' LT | 1 | --- |
| | 100+56 | 21' RT | 1 | --- |
| | 100+56 | 34' RT | --- | 1 |
| | 102+22 | 34' LT | --- | 1 |
| | 102+22 | 20' RT | 1 | --- |
| | 34+02 | 47' RT | --- | 1 |
| | 35+27 | 1' RT | --- | 1 |
| | 35+38 | 47' LT | --- | 1 |
| | 35+38 | 5' LT | --- | 1 |
| | 36+90 | 35' LT | 1 | --- |
| | 37+00 | 33' RT | 1 | --- |
| | 37+00 | 48' RT | --- | 1 |
| | 38+92 | 6' LT | --- | 1 |
| | 38+97 | 48' LT | --- | 1 |
| | 39+22 | 48' RT | --- | 1 |
| | 39+23 | 78' RT | --- | 1 |
| | 39+43 | 98' RT | --- | 1 |

## REMOVING STORM STRUCTURES

| CATEGORY | STATION | SIDE | 204.0210 REMOVING MANHOLES EACH | 204.0215 REMOVING CATCH BASINS EACH |
|---|---|---|---|---|
| | NATIONAL AVENUE | | | |
| 0010 | 39+66 | 90' RT | 1 | --- |
| | 39+68 | 43' RT | 1 | --- |
| | 39+71 | 34' LT | 1 | --- |
| | 39+73 | 98' RT | --- | 1 |
| | 39+87 | 48' RT | --- | 1 |
| | 39+93 | 78' RT | --- | 1 |
| | 40+15 | 47' LT | --- | 1 |
| | 41+76 | 1' LT | --- | 1 |
| | 43+62 | 48' LT | --- | 1 |
| | 43+62 | 48' RT | --- | 1 |
| | 44+38 | 34' LT | 1 | --- |
| | 47+12 | 48'LT | --- | 1 |
| | 47+12 | 48' RT | --- | 1 |
| | 47+40 | 56' LT | 1 | --- |
| | 48+28 | 100' LT | --- | 1 |
| | 48+93 | 48' RT | 1 | --- |
| | 48+98 | 70' RT | --- | 1 |
| | 49+17 | 48' RT | --- | 1 |
| | 53+28 | 48' LT | --- | 1 |
| | 54+58 | 19' LT | 1 | --- |
| | 55+38 | 18' LT | 1 | --- |
| | 55+64 | 49' LT | 1 | --- |
| | 56+02 | 48' RT | --- | 1 |
| | 56+03 | 20' RT | 1 | --- |
| | 56+22 | 4' LT | --- | 1 |

## REMOVING STORM STRUCTURES

| CATEGORY | STATION | SIDE | 204.0210 REMOVING MANHOLES EACH | 204.0215 REMOVING CATCH BASINS EACH |
|---|---|---|---|---|
| | NATIONAL AVENUE | | | |
| 0010 | 57+56 | 9' RT | --- | 1 |
| | 57+56 | 20' RT | 1 | --- |
| | 59+52 | 17' LT | 1 | --- |
| | 59+54 | 21' RT | 1 | --- |
| | 59+63 | 48' RT | --- | 1 |
| | 59+93 | 2' RT | 1 | --- |
| | 59+97 | 2' LT | --- | 1 |
| | 60+00 | 6' RT | --- | 1 |
| | 60+33 | 47' RT | --- | 1 |
| | 61+94 | 21' RT | 1 | --- |
| | 61+94 | 49' RT | --- | 1 |
| | 63+75 | 64' LT | --- | 1 |
| | 63+99 | 1' LT | --- | 1 |
| | 64+18 | 41' LT | 1 | --- |
| | 64+18 | 21' RT | 1 | --- |
| | 64+33 | 84' LT | --- | 1 |
| | 64+49 | 48' LT | --- | 1 |
| | 64+49 | 48' RT | --- | 1 |
| | 68+09 | 82' LT | --- | 1 |
| | 68+23 | 1' LT | --- | 1 |
| | 68+37 | 43' LT | 1 | --- |
| | 68+37 | 20' RT | 1 | --- |
| | 68+55 | 84' LT | --- | 1 |
| | 68+70 | 48' LT | --- | 1 |
| | 68+70 | 48' RT | --- | 1 |
| | 71+30 | 20' RT | 1 | --- |
| | 72+20 | 20' RT | 1 | --- |
| | CLEVELAND AVENUE | | | |
| | 102+49 | 4' LT | 1 | --- |
| | PROJECT TOTAL | | 38 | 60 |

## REMOVING STORM SEWER

| CATEGORY | STATION | TO | STATION | LOCATION | 204.0245.001 REMOVING STORM SEWER 10-INCH LF | 204.0245.002 REMOVING STORM SEWER 12-INCH LF | 204.0245.003 REMOVING STORM SEWER 15-INCH LF | 204.0245.004 REMOVING STORM SEWER 18-INCH LF | 204.0245.005 REMOVING STORM SEWER 21-INCH LF | 204.0245.006 REMOVING STORM SEWER 24-INCH LF | 204.0245.007 REMOVING STORM SEWER 27-INCH LF | 204.0245.008 REMOVING STORM SEWER 36-INCH LF | 204.0245.009 REMOVING STORM SEWER 48-INCH LF | 204.0245.010 REMOVING STORM SEWER 60-INCH LF | 204.0245.011 REMOVING STORM SEWER 84-INCH LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NATIONAL AVENUE | | | | | | | | | | | | | | |
| 0010 | 21+88 | - | 21+96 | RT | --- | 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 21+96 | - | 23+86 | RT | --- | --- | 190 | --- | --- | --- | --- | --- | --- | --- | --- |
| | 23+72 | - | 23+86 | LT/RT | --- | 90 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 23+72 | - | 24+41 | LT | --- | 70 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 23+84 | - | 23+87 | RT | --- | 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 23+86 | - | 25+57 | RT | --- | --- | 170 | --- | --- | --- | --- | --- | --- | --- | --- |
| | 25+26 | - | 25+26 | RT | --- | 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 25+57 | - | 25+57 | LT | --- | 50 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 25+57 | - | 25+57 | RT | --- | 40 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 25+57 | - | 26+86 | RT | --- | --- | --- | 130 | --- | --- | --- | --- | --- | --- | --- |
| | 26+86 | - | 26+86 | LT/RT | --- | 90 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 26+86 | - | 28+24 | RT | --- | --- | --- | 140 | --- | --- | --- | --- | --- | --- | --- |
| | 27+73 | - | 28+25 | LT | --- | 55 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 27+85 | - | 27+85 | RT | --- | 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 28+10 | - | 28+24 | RT | --- | 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 28+24 | - | 28+50 | RT | --- | 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 28+24 | - | 28+25 | LT | --- | --- | --- | --- | --- | --- | --- | 35 | --- | --- | --- |
| | 28+25 | - | 28+25 | LT/RT | --- | --- | --- | --- | --- | --- | --- | 45 | --- | --- | --- |
| | 28+25 | - | 28+25 | RT | --- | --- | --- | --- | --- | --- | 35 | --- | --- | --- | --- |
| | 28+25 | - | 29+04 | LT | --- | --- | --- | --- | --- | --- | --- | 80 | --- | --- | --- |
| | 29+04 | - | 29+04 | LT | --- | 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 29+04 | - | 30+06 | LT | --- | --- | --- | --- | --- | --- | --- | 105 | --- | --- | --- |
| | 29+88 | - | 30+12 | LT | --- | 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 30+06 | - | 30+12 | LT | --- | 65 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 30+12 | - | 30+28 | LT | --- | --- | --- | --- | --- | --- | --- | 40 | --- | --- | --- |
| | 30+28 | - | 36+90 | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 685 |
| | 33+38 | - | 33+38 | LT | --- | --- | 20 | --- | --- | --- | --- | --- | --- | --- | --- |
| | 34+02 | - | 34+06 | LT/RT | --- | 85 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 35+39 | - | 35+39 | LT | --- | 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 35+39 | - | 35+39 | LT | --- | 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 35+38 | - | 35+39 | LT/RT | --- | 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 37+00 | - | 37+01 | RT | --- | 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 37+01 | - | 37+18 | RT | --- | 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 36+90 | - | 39+71 | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | 285 | --- |
| | 38+92 | - | 38+96 | LT | --- | 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 38+96 | - | 38+98 | LT | --- | --- | 30 | --- | --- | --- | --- | --- | --- | --- | --- |
| | 39+71 | - | 44+38 | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | 310 | --- |
| | 40+04 | - | 40+11 | LT | --- | 35 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 40+11 | - | 40+14 | LT | --- | 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 41+76 | - | 41+76 | LT | --- | 35 | --- | --- | --- | --- | --- | --- | --- | --- | --- |

## REMOVING STORM SEWER (CONTINUED)

| CATEGORY | STATION | TO | STATION | LOCATION | 204.0245.001 REMOVING STORM SEWER 10-INCH LF | 204.0245.002 REMOVING STORM SEWER 12-INCH LF | 204.0245.003 REMOVING STORM SEWER 15-INCH LF | 204.0245.004 REMOVING STORM SEWER 18-INCH LF | 204.0245.005 REMOVING STORM SEWER 21-INCH LF | 204.0245.006 REMOVING STORM SEWER 24-INCH LF | 204.0245.007 REMOVING STORM SEWER 27-INCH LF | 204.0245.008 REMOVING STORM SEWER 36-INCH LF | 204.0245.009 REMOVING STORM SEWER 48-INCH LF | 204.0245.010 REMOVING STORM SEWER 60-INCH LF | 204.0245.011 REMOVING STORM SEWER 84-INCH LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NATIONAL AVENUE | | | | | | | | | | | | | | |
| 0010 | 43+62 | - | 43+62 | LT | --- | 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 43+62 | - | 43+62 | LT/RT | --- | 80 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 44+38 | - | 48+92 | LT | --- | --- | --- | --- | --- | --- | --- | --- | 460 | --- | --- |
| | 47+03 | - | 47+12 | LT | 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 47+12 | - | 47+12 | LT | --- | 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 47+12 | - | 47+12 | LT/RT | --- | 85 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 47+19 | - | 47+40 | LT | 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 48+92 | - | 52+98 | LT | --- | --- | --- | --- | --- | --- | --- | --- | 410 | --- | --- |
| | 48+93 | - | 48+93 | RT | --- | --- | 45 | --- | --- | --- | --- | --- | --- | --- | --- |
| | 48+93 | - | 49+18 | RT | --- | 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 48+98 | - | 49+18 | RT | --- | 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 52+98 | - | 54+58 | LT | --- | --- | --- | --- | --- | 165 | --- | --- | --- | --- | --- |
| | 54+58 | - | 54+58 | LT | --- | 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 54+58 | - | 55+38 | LT | --- | --- | --- | --- | --- | 80 | --- | --- | --- | --- | --- |
| | 55+38 | - | 55+64 | LT | --- | --- | --- | 45 | --- | --- | --- | --- | --- | --- | --- |
| | 55+64 | - | 55+80 | LT | --- | --- | --- | 30 | --- | --- | --- | --- | --- | --- | --- |
| | 55+64 | - | 56+23 | LT | --- | 60 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 55+38 | - | 56+03 | LT/RT | --- | --- | --- | --- | 75 | --- | --- | --- | --- | --- | --- |
| | 56+02 | - | 56+03 | RT | --- | 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 56+03 | - | 57+56 | RT | --- | --- | --- | --- | 155 | --- | --- | --- | --- | --- | --- |
| | 57+56 | - | 57+58 | RT | --- | 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 57+56 | - | 59+54 | RT | --- | --- | --- | --- | 200 | --- | --- | --- | --- | --- | --- |
| | 59+52 | - | 59+54 | LT/RT | --- | --- | --- | 40 | --- | --- | --- | --- | --- | --- | --- |
| | 59+52 | - | 60+07 | LT | --- | --- | --- | 90 | --- | --- | --- | --- | --- | --- | --- |
| | 59+54 | - | 59+64 | RT | --- | 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 59+54 | - | 59+93 | RT | --- | 45 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 59+93 | - | 59+99 | RT | --- | 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 59+93 | - | 60+33 | LT/RT | --- | 65 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 59+54 | - | 61+94 | RT | --- | --- | --- | --- | 245 | --- | --- | --- | --- | --- | --- |
| | 61+94 | - | 61+94 | RT | --- | 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 61+94 | - | 64+18 | RT | --- | --- | --- | 225 | --- | --- | --- | --- | --- | --- | --- |
| | 63+99 | - | 64+18 | LT/RT | --- | 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 64+18 | - | 64+18 | LT/RT | --- | --- | --- | 65 | --- | --- | --- | --- | --- | --- | --- |
| | 63+74 | - | 64+18 | LT | --- | 50 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 64+18 | - | 64+33 | LT | --- | 45 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 64+18 | - | 64+50 | LT | --- | 35 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 64+18 | - | 64+48 | RT | --- | 40 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 64+18 | - | 68+37 | RT | --- | --- | --- | 420 | --- | --- | --- | --- | --- | --- | --- |
| | 68+23 | - | 68+37 | RT | --- | 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 68+37 | - | 68+37 | RT | 40 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

3

## REMOVING STORM SEWER (CONTINUED)

| CATEGORY | STATION | TO | STATION | LOCATION | 204.0245.001 REMOVING STORM SEWER 10-INCH LF | 204.0245.002 REMOVING STORM SEWER 12-INCH LF | 204.0245.003 REMOVING STORM SEWER 15-INCH LF | 204.0245.004 REMOVING STORM SEWER 18-INCH LF | 204.0245.005 REMOVING STORM SEWER 21-INCH LF | 204.0245.006 REMOVING STORM SEWER 24-INCH LF | 204.0245.007 REMOVING STORM SEWER 27-INCH LF | 204.0245.008 REMOVING STORM SEWER 36-INCH LF | 204.0245.009 REMOVING STORM SEWER 48-INCH LF | 204.0245.010 REMOVING STORM SEWER 60-INCH LF | 204.0245.011 REMOVING STORM SEWER 84-INCH LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NATIONAL AVENUE | | | | | | | | | | | | | | |
| 0010 | 68+37 | - | 68+37 | LT/RT | --- | --- | 65 | --- | --- | --- | --- | --- | --- | --- | --- |
| | 68+37 | - | 68+53 | LT | --- | 55 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 68+37 | - | 68+70 | LT | --- | 35 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 68+09 | - | 68+53 | LT | --- | 50 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 68+53 | - | 68+55 | LT | --- | 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 68+37 | - | 68+70 | RT | --- | 45 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 68+37 | - | 71+30 | RT | --- | 295 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 71+30 | - | 72+20 | RT | --- | 90 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | CLEVELAND AVENUE | | | | | | | | | | | | | | |
| | 96+15 | - | 96+30 | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 15 |
| | 96+30 | - | 98+72 | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 245 |
| | 96+65 | - | 105+87 | LT | --- | --- | --- | --- | --- | --- | --- | --- | 925 | --- | --- |
| | 98+73 | - | 100+14 | RT | --- | --- | --- | 145 | --- | --- | --- | --- | --- | --- | --- |
| | 100+14 | - | 100+17 | RT | --- | 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 100+14 | - | 100+56 | RT | --- | --- | 45 | --- | --- | --- | --- | --- | --- | --- | --- |
| | 100+56 | - | 100+56 | RT | --- | 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 100+56 | - | 102+22 | RT | --- | --- | 170 | --- | --- | --- | --- | --- | --- | --- | --- |
| | 102+22 | - | 102+22 | LT/RT | --- | 55 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 102+22 | - | 102+22 | RT | --- | 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 102ND STREET | | | | | | | | | | | | | | |
| | 109+02 | - | 109+22 | LT | --- | 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 109+02 | - | 109+10 | LT/RT | --- | 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 109+02 | - | 109+10 | RT | --- | 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 109+02 | - | 109+22 | RT | --- | 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 109+10 | - | 109+57 | RT | --- | --- | --- | --- | --- | 50 | --- | --- | --- | --- | --- |
| | 109+52 | - | 109+57 | LT/RT | --- | 50 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 109+52 | - | 109+57 | RT | --- | 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 109+57 | - | 110+34 | RT | --- | --- | --- | --- | --- | 80 | --- | --- | --- | --- | --- |
| | PROJECT TOTALS | | | | 85 | 2,540 | 735 | 1,330 | 675 | 375 | 35 | 305 | 1,795 | 595 | 945 |

| DIVISION | FROM/TO STATION | LOCATION | 205.0100 EXCAVATION COMMON (1) CUT (2) | 205.0100 EXCAVATION COMMON (1) EBS EXCAVATION (3) | SALVAGED/UNUSABLE PAVEMENT MATERIAL (4) | AVAILABLE MATERIAL (5) | ** 311.0110 BREAKER RUN EXPANDED EBS BACKFILL FACTOR (TONS/CY) 2.10 | UNEXPANDED FILL | EXPANDED FILL (13) FACTOR 1.25 | MASS ORDINATE +/- (14) | WASTE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DIVISION 1 | | | | | | | | | | | |
| | 49+00.00/54+00.00 | NATIONAL AVE STAGE 1 | 217 | 20 | 44 | 173 | 42 | 0 | 0 | 173 | 173 |
| DIVISION 1 SUBTOTAL | | | 217 | 20 | 44 | 173 | 42 | 0 | 0 | 173 | 173 |
| DIVISION 2 | | | | | | | | | | | |
| | 48+00.00/55+00.00 | NATIONAL AVE STAGE 2 | 563 | 30 | 246 | 317 | 63 | 48 | 60 | 257 | 257 |
| | 0+00.00/1+00.00 | WEST 894 EXIT RAMP | 62 | 0 | 18 | 44 | 0 | 1 | 1 | 43 | 43 |
| | 0+75.00/2+45.92 | WEST 894 ENTRY RAMP | 107 | 0 | 77 | 30 | 0 | 9 | 11 | 19 | 19 |
| | 4+25.00/5+66.39 | EAST 894 ENTRY RAMP | 64 | 0 | 36 | 28 | 0 | 11 | 14 | 14 | 14 |
| | 0+65.73/1+67.91 | EAST 894 EXIT RAMP | 55 | 0 | 24 | 31 | 0 | 7 | 9 | 22 | 22 |
| DIVISION 2 SUBTOTAL | | | 851 | 30 | 401 | 450 | 63 | 76 | 95 | 355 | 355 |
| DIVISION 3 | | | | | | | | | | | |
| | 54+57.50/71+64.71 | NATIONAL AVE STAGE 3 | 9,444 | 480 | 2,716 | 6,728 | 1,008 | 25 | 31 | 6,697 | 6,697 |
| | 130+90.00/131+17.69 | S. 99TH ST STAGE 3 | 103 | 0 | 45 | 58 | 0 | 0 | 0 | 58 | 58 |
| | 140+85.00/141+13.32 | S. 98TH ST STAGE 3 | 114 | 0 | 46 | 68 | 0 | 0 | 0 | 68 | 68 |
| | 150+76.67/151+13.98 | S. 97TH ST STAGE 3 | 190 | 0 | 69 | 121 | 0 | 0 | 0 | 121 | 121 |
| DIVISION 3 SUBTOTAL | | | 9,851 | 480 | 2,876 | 6,975 | 1,008 | 25 | 31 | 6,944 | 6,944 |
| DIVISION 4 | | | | | | | | | | | |
| | 55+34.50/71+64.71 | NATIONAL AVE STAGE 4 | 7,764 | 390 | 2,512 | 5,252 | 819 | 26 | 33 | 5,220 | 5,220 |
| | 118+81.98/119+20.00 | S. 99TH ST STAGE 4 | 158 | 0 | 71 | 87 | 0 | 4 | 5 | 82 | 82 |
| DIVISON 4 SUBTOTAL | | | 7,922 | 390 | 2,583 | 5,339 | 819 | 30 | 38 | 5,302 | 5,302 |
| DIVISION 6 | | | | | | | | | | | |
| | 21+82.62/48+00.00 | NATIONAL AVE STAGE 6 | 12,948 | 650 | 4,773 | 8,175 | 1,365 | 34 | 43 | 8,133 | 8,133 |
| | 100+60.00/106+00.00 | W. CLEVELAND AVE STAGE 6 | 3,752 | 190 | 1,201 | 2,551 | 399 | 21 | 26 | 2,525 | 2,525 |
| | 108+93.92/109+50.00 | S. 102ND ST STAGE 6 | 360 | 0 | 187 | 173 | 0 | 0 | 0 | 173 | 173 |
| DIVISION 6 SUBTOTAL | | | 17,060 | 840 | 6,161 | 10,899 | 1,764 | 55 | 69 | 10,830 | 10,830 |
| DIVISION 7 | | | | | | | | | | | |
| | 22+50.00/47+45.57 | NATIONAL AVE STAGE 7 | 12,414 | 630 | 3,767 | 8,647 | 1,323 | 26 | 33 | 8,615 | 8,615 |
| | 96+64.94/99+00.00 | W. CLEVELAND AVE STAGE 7 | 1,887 | 950 | 611 | 1,276 | 1,995 | 11 | 14 | 1,262 | 1,262 |
| | 110+50.00/111+66.74 | S. 102ND ST STAGE 7 | 413 | 0 | 132 | 281 | 0 | 0 | 0 | 281 | 281 |
| DIVISION 7 SUBTOTAL | | | 14,714 | 1,580 | 4,510 | 10,204 | 3,318 | 37 | 46 | 10,158 | 10,158 |
| GRAND TOTAL | | | 50,615 | 3,340 | 16,575 | 34,040 | 7,014 | 223 | 279 | 33,761 | 33,761 |
| | TOTAL COMMON EXC | | 53,955 | | | | | | | | |

**ADDITIONAL QUANTITY FOUND ELSEWHERE - BASE AGGREGATE DENSE

NOTES:

(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100

(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.

(3) EBS EXCAVATION TO BE BACKFILLED WITH BREAKER RUN.

(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL

5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL

(6) EXPANDED FILL FACTOR = 1.25

(7) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

(8) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

ALL ITEMS CATEGORY 0010 UNLESS NOTED

## BASE AGGREGATE ITEMS

| CATEGORY | STATION | TO | STATION | 305.0110 BASE AGGREGATE DENSE 3/4-INCH TON | 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON | 310.0110 BASE AGGREGATE OPEN-GRADED TON | ** 311.0110 BREAKER RUN TON |
|---|---|---|---|---|---|---|---|
| | NATIONAL AVENUE | | | | | | |
| 0010 | 21+75 | - | 27+75 | --- | 2,215 | 60 | 3,145 |
| | 27+75 | - | 33+75 | --- | 4,495 | 35 | 6,170 |
| | 33+75 | - | 38+50 | --- | 2,430 | 30 | 2,585 |
| | 38+50 | - | 44+50 | --- | 3,345 | 45 | 4,570 |
| | 44+50 | - | 50+50 | --- | 1,875 | 15 | 1,890 |
| | 50+50 | - | 56+50 | --- | 1,225 | 30 | 850 |
| | 56+50 | - | 62+50 | --- | 2,820 | 20 | 4,095 |
| | 62+50 | - | 67+25 | 10 | 2,045 | 55 | 2,855 |
| | 67+25 | - | 72+22 | --- | 2,095 | 35 | 2,795 |
| | CLEVELAND AVENUE | | | | | | |
| | 96+55 | - | 97+75 | --- | 700 | --- | 775 |
| | 102+25 | - | 106+05 | --- | 1,165 | --- | 1,845 |
| | PROJECT TOTAL | | | 10 | 24,410 | 325 | 31,575 |

**ADDITIONAL QUANTITY FOUND ELSEWHERE - EARTHWORK SUMMARY

## CONCRETE ITEMS

| CATEGORY | STATION | TO | STATION | 320.0155 CONCRETE BASE 9-INCH SY | 405.0200 COLORING CONCRETE CUSTOM (DARK GRAY) CY | 415.0080 CONCRETE PAVEMENT 8-INCH SY | 415.0210 CONCRETE PAVEMENT GAPS EACH | 415.1080 CONCRETE PAVEMENT HES 8-INCH SY | 415.4100 CONCRETE PAVEMENT JOINT FILLING SY | 602.0815 CONCRETE DRIVEWAY 7-INCH SY | 604.0400 SLOPE PAVING CONCRETE SY | 620.0300 CONCRETE MEDIAN SLOPED NOSE SF | 715.0720 INCENTIVE COMPRESSIVE STRENGTH CONCRETE PAVEMENT DOL | 740.0440 INCENTIVE IRI RIDE DOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NATIONAL AVENUE | | | | | | | | | | | | | |
| 0010 | 21+75 | - | 27+75 | --- | 60 | 3,460 | 3 | 65 | 3,885 | 410 | --- | 35 | --- | --- |
| | 27+75 | - | 33+75 | --- | 70 | 7,095 | --- | 135 | 7,540 | 135 | --- | 75 | --- | --- |
| | 33+75 | - | 38+50 | --- | 95 | 2,640 | --- | 85 | 3,075 | 510 | --- | --- | --- | --- |
| | 38+50 | - | 44+50 | --- | 95 | 5,265 | --- | --- | 5,775 | --- | --- | 65 | --- | --- |
| | 44+50 | - | 50+50 | 780 | 70 | 2,010 | --- | --- | 2,530 | 40 | 15 | 30 | --- | --- |
| | 50+50 | - | 56+50 | 1,095 | 25 | 890 | --- | --- | 1,355 | --- | 285 | 30 | --- | --- |
| | 56+50 | - | 62+50 | --- | 100 | 4,535 | --- | --- | 5,040 | 205 | --- | 30 | --- | --- |
| | 62+50 | - | 67+25 | --- | 90 | 3,155 | --- | --- | 3,565 | 150 | --- | 115 | --- | --- |
| | 67+25 | - | 72+22 | --- | 50 | 3,085 | 1 | --- | 3,480 | 155 | --- | 115 | --- | --- |
| | CLEVELAND AVENUE | | | | | | | | | | | | | |
| | 96+55 | - | 97+75 | 155 | --- | 735 | --- | --- | 765 | --- | --- | 60 | --- | --- |
| | 102+25 | - | 106+05 | --- | --- | 1,825 | --- | --- | 1,895 | 80 | --- | 50 | --- | --- |
| | UNDISTRIBUTED | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10,410 | 1,565 |
| | PROJECT TOTAL | | | 2,030 | 655 | 34,695 | 4 | 285 | 38,905 | 1,685 | 300 | 605 | 10,410 | 1,565 |

## ASPHALT ITEMS

| CATEGORY | STATION | TO | STATION | 455.0605 TACK COAT GAL | 460.6223 HMA PAVEMENT 3 MT 58-28S TON | 460.6424 HMA PAVEMENT 4 MT 58-28H TON | 465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON | 465.0125 ASPHALTIC SURFACE TEMPORARY TON | 495.1000.S COLD PATCH TON |
|---|---|---|---|---|---|---|---|---|---|
| | NATIONAL AVENUE | | | | | | | | |
| 0010 | 21+75 | - | 27+75 | 25 | --- | --- | 70 | 5 | --- |
| | 27+75 | - | 33+75 | 10 | --- | --- | 30 | 315 | --- |
| | 33+75 | - | 38+50 | 15 | --- | --- | 45 | 235 | --- |
| | 38+50 | - | 44+50 | --- | --- | --- | --- | 245 | --- |
| | 44+50 | - | 50+50 | 55 | --- | 140 | 5 | 130 | --- |
| | 50+50 | - | 56+50 | 80 | --- | 195 | --- | 45 | --- |
| | 56+50 | - | 62+50 | 10 | --- | --- | 20 | 45 | --- |
| | 62+50 | - | 67+25 | 5 | --- | --- | 10 | 55 | --- |
| | 67+25 | - | 72+22 | 5 | --- | --- | 15 | 120 | --- |
| | CLEVELAND AVENUE | | | | | | | | |
| | 96+55 | - | 97+75 | 15 | --- | 30 | 5 | 85 | --- |
| | 102+25 | - | 106+05 | 35 | 85 | 55 | 15 | --- | --- |
| | UNDISTRIBUTED | | | | | | | --- | 50 |
| | PROJECT TOTAL | | | 255 | 85 | 420 | 215 | 1,280 | 50 |

## CURB & GUTTER ITEMS

| CATEGORY | STATION | TO | STATION | 416.0610 DRILLED TIE BARS EACH | 416.0620 DRILLED DOWEL BARS EACH | 601.0110 CONCRETE CURB TYPE D LF | 601.0150 CONCRETE CURB INTEGRAL TYPE D LF | 601.0319 CONCRETE CURB & GUTTER 19-INCH LF | 601.0331 CONCRETE CURB & GUTTER 31-INCH LF | 601.0600 CONCRETE CURB PEDESTRIAN LF | SPV.0090.002 CONCRETE CURB & GUTTER 19-INCH TYPE D 9-INCH GUTTER LF |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | NATIONAL AVENUE | | | | | | | | | | |
| 0010 | 21+75 | - | 27+75 | 65 | 65 | 60 | 340 | 20 | 1,905 | --- | 20 |
| | 27+75 | - | 33+75 | 5 | 30 | --- | 370 | 460 | 1,780 | 460 | --- |
| | 33+75 | - | 38+50 | 5 | 15 | 40 | --- | 20 | 1,960 | 15 | --- |
| | 38+50 | - | 44+50 | 130 | 145 | --- | --- | --- | 2,295 | 340 | --- |
| | 44+50 | - | 50+50 | 710 | 95 | --- | --- | --- | 2,350 | 65 | --- |
| | 50+50 | - | 56+50 | 1,050 | 150 | --- | --- | --- | 2,090 | 320 | --- |
| | 56+50 | - | 62+50 | 30 | 50 | --- | --- | --- | 2,115 | 165 | --- |
| | 62+50 | - | 67+25 | 15 | 25 | --- | --- | --- | 1,850 | 70 | --- |
| | 67+25 | - | 72+22 | 20 | 95 | --- | --- | --- | 1,785 | 95 | --- |
| | CLEVELAND AVENUE | | | | | | | | | | |
| | 96+55 | - | 97+75 | 60 | 35 | --- | 225 | 250 | 15 | 90 | --- |
| | 102+25 | - | 106+05 | 5 | --- | --- | 590 | 280 | 170 | 110 | --- |
| | PROJECT TOTAL | | | 2,095 | 705 | 100 | 1,525 | 1,030 | 18,315 | 1,730 | 20 |

## CONCRETE ITEMS CONTINUED

| CATEGORY | STATION | TO | STATION | 602.0410 CONCRETE SIDEWALK 5-INCH SF | 602.0420 CONCRETE SIDEWALK 7-INCH SF | 602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF | 602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW SF | 602.2400 CONCRETE SAFETY ISLAND SF | SPV.0060.004 BUS STOP BENCH EACH | SPV.0060.005 TRASH RECEPTACLE EACH | SPV.0090.001 PIPE RAILING BLACK LF | SPV.0165.001 DETECTABLE EDGE TILES SF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NATIONAL AVENUE | | | | | | | | | | | |
| 0010 | 21+75 | - | 27+75 | 7,870 | --- | --- | --- | --- | 1 | 1 | --- | --- |
| | 27+75 | - | 33+75 | 12,110 | 865 | 365 | --- | 3,605 | 1 | 1 | --- | 285 |
| | 33+75 | - | 38+50 | 8,525 | --- | 65 | --- | --- | 1 | 1 | 30 | --- |
| | 38+50 | - | 44+50 | 11,270 | 745 | 265 | 35 | 735 | 1 | 1 | --- | 375 |
| | 44+50 | - | 50+50 | 8,990 | 720 | 65 | 130 | --- | --- | --- | --- | --- |
| | 50+50 | - | 56+50 | 10,395 | 1,475 | 90 | 245 | 1,060 | --- | --- | --- | --- |
| | 56+50 | - | 62+50 | 13,205 | 970 | 340 | 35 | 900 | 2 | 2 | --- | 70 |
| | 62+50 | - | 67+25 | 10,410 | 315 | 120 | --- | --- | --- | --- | --- | --- |
| | 67+25 | - | 72+22 | 8,085 | 350 | 165 | --- | --- | 1 | 1 | --- | 110 |
| | CLEVELAND AVENUE | | | | | | | | | | | |
| | 96+55 | - | 97+75 | 1,340 | --- | --- | --- | --- | --- | --- | --- | --- |
| | 102+25 | - | 106+05 | 3,645 | --- | --- | --- | --- | --- | --- | --- | --- |
| | PROJECT TOTAL | | | 95,845 | 5,440 | 1,475 | 445 | 6,300 | 7 | 7 | 30 | 840 |

## PIPE UNDERDRAIN

** ADDITIONAL ITEMS ELSEWHERE - BIOSWALE ITEMS **

| CATEGORY | STATION | TO | STATION | 612.0106 PIPE UNDERDRAIN 6-INCH LF | 612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF | 612.0208 PIPE UNDERDRAIN UNPERFORATED 8-INCH LF | 612.0210 PIPE UNDERDRAIN UNPERFORATED 10-INCH LF |
|---|---|---|---|---|---|---|---|
| | NATIONAL AVENUE | | | | | | |
| 0010 | 21+75 | - | 27+75 | 430 | --- | 30 | 30 |
| | 27+75 | - | 33+75 | 275 | --- | --- | --- |
| | 33+75 | - | 38+50 | 90 | --- | --- | --- |
| | 38+50 | - | 44+50 | 380 | --- | --- | --- |
| | 44+50 | - | 50+50 | 80 | --- | 15 | 35 |
| | 50+50 | - | 56+50 | 175 | 80 | --- | --- |
| | 56+50 | - | 62+50 | 135 | 20 | --- | --- |
| | 62+50 | - | 67+25 | 135 | --- | 260 | --- |
| | 67+25 | - | 72+22 | 155 | --- | --- | --- |
| | CLEVELAND AVENUE | | | | | | |
| | 96+55 | - | 97+75 | --- | --- | --- | --- |
| | 102+25 | - | 106+05 | --- | --- | --- | --- |
| | UNDISTRIBUTED | | | --- | --- | --- | --- |
| | PROJECT TOTAL | | | 1,855 | 100 | 305 | 65 |

## WATER & DUST CONTROL

| CATEGORY | LOCATION | 623.0200 DUST CONTROL SURFACE TREATMENT SY | 624.0100 WATER MGAL |
|---|---|---|---|
| 0010 | DUST CONTROL | 22,500 | --- |
| | EXCAVATION | --- | 110 |
| | BASE AGGREGATE COMPACTION | --- | 490 |
| | PROJECT TOTALS | 22,500 | 600 |

## MISCELLANEOUS STORM SEWER ITEMS

| CATEGORY | STATION | TO | STATION | 612.0902.S INSULATION BOARD POLYSTYRENE 2-INCH SY | SPV.0035.001 BACKFILL SLURRY CY | SPV.0060.029 CONCRETE SADDLE EA |
|---|---|---|---|---|---|---|
| | NATIONAL AVENUE | | | | | |
| 0010 | 21+75 | - | 27+75 | 1 | --- | --- |
| | 27+75 | - | 33+75 | 2 | --- | 2 |
| | 33+75 | - | 38+50 | --- | --- | --- |
| | 38+50 | - | 44+50 | 2 | --- | 2 |
| | 44+50 | - | 50+50 | --- | --- | --- |
| | 50+50 | - | 56+50 | 2 | --- | 1 |
| | 56+50 | - | 62+50 | 2 | --- | 1 |
| | 62+50 | - | 67+25 | 2 | --- | 1 |
| | 67+25 | - | 72+22 | 2 | --- | 1 |
| | CLEVELAND AVENUE | | | | | |
| | 96+55 | - | 97+75 | --- | --- | --- |
| | 102+25 | - | 106+05 | 2 | --- | --- |
| | UNDISTRIBUTED | | | --- | 150 | --- |
| | PROJECT TOTAL | | | 15 | 150 | 8 |

## FENCE ITEMS

| CATEGORY | STATION | TO | STATION | 616.0206 FENCE CHAIN LINK 6-FT LF | 616.0329.001 GATES CHAIN LINK 12-FT EA |
|---|---|---|---|---|---|
| | NATIONAL AVENUE | | | | |
| 0010 | 21+75 | - | 27+75 | --- | --- |
| | 27+75 | - | 33+75 | --- | --- |
| | 33+75 | - | 38+50 | --- | --- |
| | 38+50 | - | 44+50 | --- | --- |
| | 44+50 | - | 50+50 | 120 | 1 |
| | 50+50 | - | 56+50 | 55 | --- |
| | 56+50 | - | 62+50 | --- | --- |
| | 62+50 | - | 67+25 | --- | --- |
| | 67+25 | - | 72+22 | --- | --- |
| | CLEVELAND AVENUE | | | | |
| | 96+55 | - | 97+75 | --- | --- |
| | 102+25 | - | 106+05 | --- | --- |
| | PROJECT TOTAL | | | 175 | 1 |

## FIELD OFFICE TYPE D

| CATEGORY | LOCATION | 642.5401 EACH |
|---|---|---|
| 0010 | ID 2410-15-70 | 0.82 |
| | ID 2410-15-71 | 0.18 |
| | PROJECT TOTALS | 1 |

3

## STORM SEWER STRUCTURES

| STRUCTURE NUMBER | STATION | OFFSET | RIM ELEV | LOWEST PIPE INVERT ELEV | TOP OF STRUCTURE ELEV | BOTTOM OF STRUCTURE ELEV | STR DEPTH FT | 611.0420 RECONSTRUCTING MANHOLE EACH | CATCH BASINS 611.1003 CATCH BASINS 3-FT DIAMETER EACH | CATCH BASINS 611.1004 CATCH BASINS 4-FT DIAMETER EACH | CATCH BASINS 611.1006 CATCH BASINS 6-FT DIAMETER EACH | MANHOLES 611.2004 4-FT DIAMETER EACH | MANHOLES 611.2005 5-FT DIAMETER EACH | MANHOLES 611.2006 6-FT DIAMETER EACH | MANHOLES 611.2007 7-FT DIAMETER EACH | MANHOLES 611.2008 8-FT DIAMETER EACH | MANHOLES 611.2009 9-FT DIAMETER EACH | MANHOLES 611.2010 10-FT DIAMETER EACH | MANHOLES 611.2504 VARIABLE TEE 4-FT DIAMETER EACH | INLETS 611.3003 3-FT DIAMETER EACH | INLETS 611.3230 2X3-FT EACH | INLETS 611.3901 MEDIAN 1 GRATE EACH | PROJECT ID 2410-15-71 *** CAT 0010 611.8115 ADJUSTING INLET COVERS EACH | 650.4000 CONSTRUCTION STAKING STORM SEWER EACH | SPV.0060.001 MANHOLES 6X11-FT EACH | SPV.0060.002 STORM SEWER CHAMBER EACH | SPV.0060.003 BIOSWALE DRAINS EACH | SPV.0060.016 CONNECTION TO EXISTING STORM SEWER EACH | SPV.0060.017 INLETS 3.5-FT DIAMETER EACH | SPV.0060.030 CATCH BASINS 3.5-FT DIAMETER EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 21+87.5 | 47.64' RT | 178.55 | 174.70 | 177.38 | 173.70 | 3.68 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 |
| 2 | 21+97.5 | 47.6' RT | 178.59 | 174.50 | 177.42 | 173.50 | 3.92 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 3 | 23+48.0 | 47.3' RT | 178.38 | 174.00 | 177.21 | 173.00 | 4.21 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 4 | 23+58.0 | 47.3' RT | 178.27 | 173.60 | 177.10 | 172.60 | 4.50 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 5 | 24+10.5 | 27.0' RT | 178.41 | 172.00 | 177.16 | 171.77 | 5.39 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 5A | 23+77.5 | 49.3' LT | 177.38 | 174.00 | 176.21 | 173.00 | 3.21 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 5B | 23+87.5 | 49.3' LT | 177.32 | 173.95 | 176.15 | 172.95 | 3.20 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 5C | 24+25.0 | 12.7' RT | 178.27 | 173.92 | 177.10 | 173.75 | 3.35 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- |
| 5D | 24+10.5 | 12.7' RT | 178.25 | 173.62 | 177.08 | 173.45 | 3.63 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- |
| 5E | 24+25.0 | 37.3' RT | 178.19 | 173.54 | 177.02 | 172.54 | 4.48 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 5F | 24+10.5 | 37.3' RT | 178.12 | 173.40 | 176.95 | 172.40 | 4.55 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 6 | 25+99.5 | 27.1' RT | 178.13 | 171.00 | 176.88 | 170.75 | 6.13 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 6A | 25+89.5 | 38.8' LT | 176.89 | 172.58 | 175.72 | 171.58 | 4.14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 6B | 26+41.3 | 43.9' LT | 176.91 | 172.64 | 175.74 | 172.47 | 3.27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- |
| 6C | 25+99.5 | 38.8' LT | 176.83 | 172.33 | 175.66 | 171.33 | 4.33 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 6D | 26+09.5 | 0.3' RT | 176.79 | 172.35 | 175.62 | 171.35 | 4.27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 6E | 25+99.5 | 0.3' RT | 176.84 | 172.13 | 175.67 | 171.13 | 4.54 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 8 | 28+25.0 | 27.2' RT | 177.01 | 168.70 | 175.76 | 168.33 | 7.44 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 8A | 27+31.0 | 37.3' LT | 177.30 | 173.00 | 176.13 | 172.00 | 4.13 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 8B | 28+13.5 | 2.4' LT | 176.10 | 171.20 | 176.10 | 171.03 | 5.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | 1 | --- | --- | --- | --- |
| 8C | 28+65.7 | 42.4' RT | 176.51 | 172.52 | 175.34 | 171.52 | 3.82 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 8D | 27+93.8 | 39.8' RT | 176.89 | 172.64 | 175.72 | 171.64 | 4.08 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 8E | 28+10.4 | 62.5' RT | 176.58 | 172.70 | 175.41 | 171.70 | 3.71 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 8F | 28+49.3 | 64.0' RT | 176.82 | 172.80 | 175.65 | 171.80 | 3.85 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 8G | 28+25.0 | 60.5' RT | 177.03 | 170.50 | 175.78 | 170.17 | 5.61 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 9 | 29+27.8 | 23.5' LT | 176.50 | 167.90 | 175.25 | 167.53 | 7.72 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 9A | 29+50.0 | 0.7' RT | 175.93 | 171.50 | 174.76 | 170.50 | 4.26 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 9B | 29+40.0 | 0.7' RT | 176.00 | 171.40 | 174.83 | 170.40 | 4.43 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 10 | 29+40.3 | 29.7' LT | 176.37 | 167.80 | 175.12 | 167.43 | 7.69 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 10A | 29+28.1 | 54.1' LT | 175.54 | 171.50 | 174.37 | 170.50 | 3.87 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 11 | 30+04.0 | 61.1' LT | 175.49 | 166.80 | 174.24 | 166.38 | 7.86 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 11A | 29+65.9 | 63.6' LT | 175.58 | 171.34 | 174.41 | 170.34 | 4.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 11B | 29+71.65 | 66.41' LT | 175.31 | 171.28 | 174.14 | 170.28 | 3.86 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 11C | 30+14.1 | 3.5' LT | 175.79 | 171.39 | 174.62 | 170.39 | 4.23 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 11D | 30+14.0 | 11.89' LT | 175.86 | 171.31 | 174.69 | 170.31 | 4.38 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 20 | 71+25.0 | 21.5' LT | 230.11 | 224.50 | 228.86 | 224.17 | 4.69 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 20A | 71+25.0 | 47.3' LT | 229.32 | 225.50 | 228.15 | 224.50 | 3.65 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 20B | 71+25.0 | 45.4' RT | 228.90 | 224.94 | 227.73 | 223.94 | 3.79 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 21 | 68+59.0 | 21.6' LT | 227.18 | 221.00 | 225.93 | 220.67 | 5.26 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 21A | 68+62.0 | 32.3' LT | 227.19 | 222.78 | 226.02 | 221.78 | 4.24 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 21B | 68+60.01 | 0.0' RT | 226.60 | 222.70 | 226.60 | 222.53 | 4.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 22 | 68+12.0 | 40.1' LT | 226.74 | 219.10 | 225.49 | 218.85 | 6.64 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 22A | 68+15.0 | 89.7' LT | 226.15 | 221.75 | 224.98 | 220.75 | 4.23 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 22B | 68+08.9 | 81.8' LT | 226.01 | 221.65 | 224.84 | 220.65 | 4.19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 22C | 68+60.5 | 37.3' RT | 227.20 | 222.50 | 226.03 | 221.50 | 4.53 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 22D | 68+27.2 | 11.3' RT | 226.86 | 220.10 | 225.69 | 219.10 | 6.59 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 22E | 68+27.2 | 11.3' LT | 226.77 | 219.99 | 225.60 | 218.99 | 6.61 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 22F | 68+53.7 | 83.7' LT | 226.39 | 221.00 | 225.22 | 220.00 | 5.22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 22G | 68+53.4 | 94.22' LT | 226.45 | 222.39 | 225.95 | 222.39 | 3.56 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23 | 66+10.0 | 40.2' LT | 226.04 | 217.20 | 224.79 | 216.95 | 7.84 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 24 | 63+97.5 | 40.3' LT | 222.80 | 214.50 | 221.55 | 214.25 | 7.30 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 24A | 63+81.9 | 71.4' LT | 222.08 | 218.58 | 220.91 | 217.58 | 3.33 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 24B | 63+75.8 | 63.5' LT | 221.95 | 218.48 | 220.78 | 217.48 | 3.30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 24C | 64+56.5 | 37.3' RT | 223.66 | 218.51 | 222.49 | 217.51 | 4.98 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 24D | 64+13.2 | 10.8' RT | 222.90 | 218.00 | 221.73 | 217.00 | 4.73 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 24E | 64+41.0 | 32.3' LT | 223.75 | 219.15 | 222.58 | 218.98 | 3.60 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- |

## STORM SEWER STRUCTURES CONTINUED

| | | | | | | | | | CATCH BASINS | | | MANHOLES | | | | | | | | | INLETS | | | | PROJECT ID 2410-15-71 *** CAT 0010 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 611.0420 | 611.1003 | 611.1004 | 611.1006 | 611.2004 | 611.2005 | 611.2006 | 611.2007 | 611.2008 | 611.2009 | 611.2010 | 611.2504 | 611.3003 | 611.3230 | 611.3901 | 611.8115 | 650.4000 | SPV.0060.001 | SPV.0060.002 | SPV.0060.003 | SPV.0060.016 | SPV.0060.017 | SPV.0060.030 | |
| STRUCTURE | | | RIM | LOWEST PIPE INVERT | TOP OF STRUCTURE | BOTTOM OF STRUCTURE | STR DEPTH | RECONSTRUCTING MANHOLE | CATCH BASINS 3-FT DIAMETER | CATCH BASINS 4-FT DIAMETER | CATCH BASINS 6-FT DIAMETER | 4-FT DIAMETER | 5-FT DIAMETER | 6-FT DIAMETER | 7-FT DIAMETER | 8-FT DIAMETER | 9-FT DIAMETER | 10-FT DIAMETER | VARIABLE TEE 4-FT DIAMETER | 3-FT DIAMETER | 2X3-FT | MEDIAN 1 GRATE | ADJUSTING INLET COVERS | CONSTRUCTION STAKING STORM SEWER | MANHOLES 6X11-FT | STORM SEWER CHAMBER | BIOSWALE DRAINS | CONNECTION TO EXISTING STORM SEWER | INLETS 3.5-FT DIAMETER | CATCH BASINS 3.5-FT DIAMETER | |
| 24F | 64+13.3 | 10.8' LT | 223.03 | 217.53 | 221.86 | 216.53 | 5.33 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 24G | 64+32.9 | 83.5' LT | 222.61 | 216.30 | 221.44 | 215.30 | 6.14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 25 | 62+43.5 | 40.4' LT | 219.67 | 211.00 | 218.42 | 210.50 | 7.92 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 25A | 62+29.0 | 37.3' RT | 218.57 | 215.07 | 217.40 | 214.07 | 3.33 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 25B | 62+43.5 | 0.7' RT | 218.74 | 214.87 | 217.57 | 213.87 | 3.70 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 26 | 59+80.0 | 40.5' LT | 210.16 | 200.00 | 208.91 | 199.71 | 9.20 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 26A | 59+55.2 | 62.4' LT | 209.52 | 206.00 | 208.35 | 205.00 | 3.35 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 26B | 59+77.5 | 32.23' RT | 210.23 | 206.29 | 209.06 | 205.29 | 3.77 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 26C | 60+26.5 | 35.3' LT | 211.89 | 207.50 | 210.72 | 207.33 | 3.39 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | |
| 26D | 60+15.0 | 12.7' RT | 211.40 | 206.48 | 210.23 | 205.48 | 4.75 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 26E | 60+14.6 | 7.7' RT | 211.30 | 206.43 | 210.13 | 205.43 | 4.70 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 26F | 59+84.4 | 1.8' LT | 210.08 | 205.86 | 209.00 | 204.86 | 4.14 | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 26G | 59+81.1 | 7.6' LT | 210.03 | 205.83 | 208.95 | 204.83 | 4.12 | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 26H | 60+04.3 | 72.1' LT | 210.41 | 201.00 | 209.24 | 200.00 | 9.24 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | 1 | --- | 1 | |
| 27 | 58+50.0 | 40.6' LT | 206.78 | 198.50 | 205.53 | 198.21 | 7.32 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 27A | 58+65.5 | 13.7' RT | 206.42 | 202.00 | 205.34 | 201.00 | 4.34 | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 27B | 58+65.1 | 6.8' RT | 206.26 | 201.93 | 205.18 | 200.93 | 4.25 | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 28 | 55+57.5 | 40.9' LT | 197.24 | 186.80 | 195.99 | 186.47 | 9.52 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 28A | 56+16.9 | 34.7' LT | 198.28 | 189.90 | 197.11 | 188.90 | 8.21 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 28B | 55+99.7 | 61.3' LT | 197.82 | 189.58 | 196.65 | 188.58 | 8.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 28C | 55+90.3 | 84.6' LT | 198.15 | 187.65 | 196.90 | 187.40 | 9.50 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 29 | 54+58.5 | 18.8' LT | 194.22 | 183.70 | 192.97 | 183.37 | 9.60 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 29A | 55+38.6 | 0.0' RT | 196.00 | 191.00 | 196.00 | 190.83 | 5.17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 29B | 55+22.2 | 40.0' RT | 196.02 | 191.96 | 194.85 | 190.96 | 3.89 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 29C | 54+58.5 | 0.0' RT | 194.27 | 190.08 | 193.03 | 189.75 | 3.28 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 30 | 52+98.0 | 19.4' LT | 189.13 | 175.20 | 187.88 | 174.70 | 13.18 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 31 | 48+92.0 | 20.8' LT | 181.41 | 171.50 | 180.16 | 170.96 | 9.20 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 31A | 48+99.4 | 68.2' RT | 181.00 | 177.70 | 181.00 | 177.53 | 3.47 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 31B | 49+37.0 | 39.3' RT | 181.50 | 177.53 | 180.33 | 176.53 | 3.80 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 31C | 49+27.0 | 39.3' RT | 181.35 | 177.37 | 180.18 | 176.37 | 3.81 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 31D | 49+07.0 | 0.0' RT | 181.53 | 176.68 | 180.29 | 176.31 | 3.98 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 32 | 47+12.0 | 32.5' LT | 179.66 | 170.12 | 178.41 | 170.12 | 8.29 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 32A | 47+12.0 | 37.3' RT | 179.62 | 174.50 | 178.45 | 173.50 | 4.95 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 33 | 42+87.0 | 32.4' LT | 175.00 | 166.92 | 173.75 | 166.92 | 6.83 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 33A | 42+87.1 | 40.1' LT | 174.87 | 170.20 | 173.70 | 169.20 | 4.50 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 34 | 42+52.1 | 32.4' LT | 174.82 | 166.65 | 173.57 | 166.65 | 6.92 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 34A | 43+62.0 | 37.3' RT | 175.65 | 171.50 | 174.48 | 170.50 | 3.98 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 34B | 42+54.3 | 0.0' RT | 174.00 | 168.50 | 174.00 | 168.33 | 5.67 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 35 | 40+37.0 | 32.4' LT | 173.31 | 165.03 | 172.06 | 165.03 | 7.03 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 35A | 40+37.9 | 47.3' LT | 173.05 | 169.61 | 171.88 | 168.61 | 3.27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 36 | 40+10.0 | 32.4' LT | 173.05 | 164.83 | 171.80 | 164.83 | 6.97 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 36A | 40+12.1 | 40.1' RT | 172.74 | 169.20 | 171.57 | 168.20 | 3.37 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 36B | 40+42.5 | 12.6' RT | 173.00 | 169.38 | 171.83 | 168.38 | 3.45 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 36C | 40+42.1 | 6.4' RT | 172.90 | 169.32 | 171.73 | 168.32 | 3.41 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 36D | 40+09.9 | 3.4' LT | 172.76 | 168.98 | 171.68 | 167.98 | 3.70 | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 37 | 39+66.5 | 32.4' LT | 172.64 | 164.50 | 171.39 | 163.96 | 7.43 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | |
| 37A | 39+23.6 | 55.5' RT | 172.16 | 168.56 | 170.99 | 167.56 | 3.43 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 37B | 39+09.9 | 77.4' RT | 171.86 | 168.30 | 170.69 | 167.30 | 3.39 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 37C | 39+39.3 | 91.7' RT | 171.90 | 167.97 | 170.73 | 166.97 | 3.76 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |
| 37D | 39+85.1 | 56.5' RT | 172.40 | 168.19 | 171.23 | 167.19 | 4.04 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | |

## STORM SEWER STRUCTURES CONTINUED

| | | | | | | | | | CATCH BASINS | | | MANHOLES | | | | | | | | INLETS | | | PROJECT ID 2410-15-71 *** CAT 0010 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 611.0420 | 611.1003 | 611.1004 | 611.1006 | 611.2004 | 611.2005 | 611.2006 | 611.2007 | 611.2008 | 611.2009 | 611.2010 | 611.2504 | 611.3003 | 611.3230 | 611.3901 | 611.8115 | 650.4000 | SPV.0060.001 | SPV.0060.002 | SPV.0060.003 | SPV.0060.016 | SPV.0060.017 | SPV.0060.030 |
| STRUCTURE | | | RIM | LOWEST PIPE INVERT | TOP OF STRUCTURE | BOTTOM OF STRUCTURE | STR DEPTH | RECONSTRUCTING MANHOLE | CATCH BASINS 3-FT DIAMETER | CATCH BASINS 4-FT DIAMETER | CATCH BASINS 6-FT DIAMETER | 4-FT DIAMETER | 5-FT DIAMETER | 6-FT DIAMETER | 7-FT DIAMETER | 8-FT DIAMETER | 9-FT DIAMETER | 10-FT DIAMETER | VARIABLE TEE 4-FT DIAMETER | 3-FT DIAMETER | 2X3-FT | MEDIAN 1 GRATE | ADJUSTING INLET COVERS | CONSTRUCTION STAKING STORM SEWER | MANHOLES 6X11-FT | STORM SEWER CHAMBER | BIOSWALE DRAINS | CONNECTION TO EXISTING STORM SEWER | INLETS 3.5-FT DIAMETER | CATCH BASINS 3.5-FT DIAMETER |
| 37E | 40+04.2 | 77.3' RT | 172.22 | 167.91 | 171.05 | 166.91 | 4.14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 37F | 39+72.9 | 92.1' RT | 172.09 | 167.57 | 170.92 | 166.57 | 4.35 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 37G | 39+66.6 | 90.0' RT | 172.46 | 165.50 | 171.21 | 165.17 | 6.04 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 38 | 38+85.5 | 32.4' LT | 171.93 | 163.91 | 170.68 | 163.91 | 6.77 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 38A | 38+65.0 | 37.3' RT | 172.13 | 168.70 | 170.96 | 167.70 | 3.26 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 38B | 38+75.0 | 37.3' RT | 172.16 | 168.60 | 170.99 | 167.60 | 3.39 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 38C | 39+00.5 | 13.3' RT | 172.23 | 168.35 | 171.15 | 167.35 | 3.80 | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 38D | 39+14.1 | 4.2' RT | 172.05 | 168.46 | 170.97 | 168.29 | 2.67 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 38E | 38+92.6 | 6.9' RT | 172.03 | 168.00 | 170.95 | 167.00 | 3.95 | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 38F | 38+75.4 | 5.2' LT | 171.81 | 168.20 | 170.64 | 167.20 | 3.44 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 38G | 38+85.4 | 6.4' LT | 171.75 | 167.85 | 170.58 | 166.85 | 3.73 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 39 | 38+60.0 | 32.4' LT | 171.79 | 163.73 | 170.54 | 163.73 | 6.81 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 39A | 38+49.9 | 39.1' LT | 171.57 | 168.10 | 170.40 | 167.10 | 3.30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 39B | 38+59.9 | 40.1' LT | 171.62 | 168.00 | 170.45 | 167.00 | 3.45 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 40 | 38+29.0 | 32.4' LT | 171.76 | 163.50 | 170.51 | 163.50 | 7.01 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 40A | 38+19.0 | 12.7' LT | 171.74 | 168.30 | 170.57 | 167.30 | 3.27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 40B | 38+29.0 | 12.7' LT | 171.73 | 168.20 | 170.56 | 167.20 | 3.36 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 41 | 36+91.0 | 32.4' LT | 172.36 | 159.00 | 171.11 | 158.17 | 12.94 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 42 | 36+17.4 | 32.5' LT | 172.93 | 158.79 | 171.68 | 158.79 | 12.89 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 42A | 36+00.0 | 37.3' RT | 173.95 | 169.50 | 172.78 | 168.50 | 4.28 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 42B | 36+13.2 | 1.2' LT | 172.10 | 167.50 | 172.10 | 167.33 | 4.77 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | 1 | --- | --- | --- | --- | --- | --- |
| 43 | 34+02.0 | 33.0' LT | 174.00 | 158.15 | 172.75 | 158.15 | 14.60 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 43A | 34+12.1 | 4.4' LT | 173.64 | 169.20 | 172.47 | 168.20 | 4.27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 43B | 34+02.1 | 3.2' LT | 173.70 | 169.10 | 172.53 | 168.10 | 4.43 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 44 | 33+50.0 | 33.1' LT | 174.25 | 158.00 | 173.00 | 158.00 | 15.00 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 44A | 33+02.9 | 76.2' RT | 175.25 | 170.70 | 174.08 | 169.70 | 4.38 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 44B | 32+72.0 | 41.8' RT | 174.77 | 170.80 | 173.60 | 169.80 | 3.80 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 44C | 33+14.9 | 52.1' RT | 174.50 | 170.36 | 173.33 | 169.36 | 3.97 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 44D | 33+37.1 | 40.3' RT | 174.64 | 170.11 | 173.47 | 169.11 | 4.36 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 44E | 33+60.0 | 12.7' RT | 174.73 | 170.68 | 173.56 | 169.68 | 3.88 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 44F | 33+50.0 | 12.7' RT | 174.73 | 169.80 | 173.56 | 169.63 | 3.93 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- |
| 45 | 32+21.0 | 33.4' LT | 174.89 | 157.62 | 173.64 | 157.62 | 16.02 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 45A | 32+18.3 | 13.7' LT | 174.86 | 170.50 | 173.78 | 169.50 | 4.28 | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 46 | 98+72.0 | 18.7' LT | 174.84 | 157.00 | 173.59 | 156.17 | 17.42 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 1 | --- | --- | --- | --- | --- |
| 47 | 96+29.6 | 18.4' LT | 173.39 | 156.06 | 172.14 | 156.06 | 16.08 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 50 | 102+22.0 | 20.5' RT | 177.33 | 172.59 | 176.08 | 172.42 | 3.66 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 52 | 100+62.5 | 20.5' RT | 175.33 | 170.71 | 174.08 | 170.34 | 3.75 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 52A | 100+72.5 | 35.8' RT | 175.24 | 171.21 | 174.07 | 170.21 | 3.86 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 52B | 100+62.5 | 35.8' RT | 175.18 | 171.11 | 174.01 | 170.11 | 3.90 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 53 | 30+74.3 | 7.8' LT | 175.54 | 169.42 | 174.29 | 169.23 | 5.06 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 53A | 30+76.7 | 37.3' RT | 175.78 | 171.40 | 174.61 | 170.40 | 4.21 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 53B | 30+65.1 | 4.4' RT | 175.65 | 171.04 | 174.48 | 170.04 | 4.44 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 60 | 48+93.1 | 91.0' RT | 180.94 | 173.50 | 180.44 | 173.50 | 6.94 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 61 | 48+94.7 | 79.2' RT | 180.77 | 173.38 | 179.60 | 172.38 | 7.22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 62 | 48+92.8 | 47.5' RT | 181.85 | 173.17 | 181.35 | 173.17 | 8.18 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 70 | 53+25.1 | 45.4' LT | 189.41 | 184.18 | 188.24 | 183.18 | 5.06 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 |
| 100 | 27+10.9 | 10.2' LT | 177.22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 101 | 27+00.0 | 12.7' RT | 177.45 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 102 | 27+76.5 | 12.0' RT | 177.05 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 103 | 27+79.3 | 12.7' LT | 177.06 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |

## STORM SEWER STRUCTURES CONTINUED

| STRUCTURE | | | RIM | LOWEST PIPE INVERT | TOP OF STRUCTURE | BOTTOM OF STRUCTURE | STR DEPTH | 611.0420 RECONSTRUCTING MANHOLE | CATCH BASINS 611.1003 CATCH BASINS 3-FT DIAMETER | CATCH BASINS 611.1004 CATCH BASINS 4-FT DIAMETER | CATCH BASINS 611.1006 CATCH BASINS 6-FT DIAMETER | MANHOLES 611.2004 4-FT DIAMETER | 611.2005 5-FT DIAMETER | 611.2006 6-FT DIAMETER | 611.2007 7-FT DIAMETER | 611.2008 8-FT DIAMETER | 611.2009 9-FT DIAMETER | 611.2010 10-FT DIAMETER | 611.2504 VARIABLE TEE 4-FT DIAMETER | INLETS 611.3003 3-FT DIAMETER | 611.3230 2X3-FT | 611.3901 MEDIAN 1 GRATE | 611.8115 ADJUSTING INLET COVERS | 650.4000 CONSTRUCTION STAKING STORM SEWER | SPV.0060.001 MANHOLES 6X11-FT | SPV.0060.002 STORM SEWER CHAMBER | PROJECT ID 2410-15-71 *** CAT 0010 SPV.0060.003 BIOSWALE DRAINS | SPV.0060.016 CONNECTION TO EXISTING STORM SEWER | SPV.0060.017 INLETS 3.5-FT DIAMETER | SPV.0060.030 CATCH BASINS 3.5-FT DIAMETER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 104 | 28+50.0 | 12.7' LT | 176.70 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 105 | 28+50.0 | 2.7' RT | 176.51 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 106 | 35+00.0 | 12.7' LT | 173.44 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 107 | 35+00.0 | 12.7' RT | 174.77 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 108 | 36+00.0 | 12.7' LT | 172.94 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 109 | 36+00.0 | 12.7' RT | 173.95 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 110 | 36+65.0 | 12.7' LT | 172.61 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 111 | 36+65.0 | 4.8' RT | 173.26 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 112 | 42+60.0 | 9.5' LT | 174.72 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 113 | 42+60.0 | 12.7' RT | 174.83 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 114 | 43+74.3 | 12.7' LT | 175.57 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 115 | 43+60.0 | 12.7' RT | 175.63 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 116 | 44+28.2 | 12.7' LT | 176.06 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 117 | 44+10.0 | 12.7' RT | 176.03 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 118 | 55+40.0 | 12.7' LT | 196.56 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 119 | 55+40.0 | 12.7' RT | 197.02 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 120 | 56+10.9 | 12.7' LT | 198.34 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 121 | 56+05.0 | 12.7' RT | 198.90 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 122 | 56+53.0 | 12.7' LT | 199.57 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 123 | 56+50.0 | 9.4' RT | 200.00 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 124 | 68+60.0 | 12.7' LT | 227.04 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 125 | 68+60.0 | 12.7' RT | 227.16 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 126 | 69+85.0 | 12.7' LT | 228.65 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 127 | 69+97.0 | 12.7' RT | 228.39 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 128 | 70+50.0 | 12.7' LT | 229.64 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 129 | 70+61.6 | 12.7' RT | 229.36 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 130 | 71+00.0 | 12.7' LT | 230.13 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 131 | 71+21.3 | 12.7' RT | 229.80 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | --- | --- |
| 201 | 48+25.7 | 99.6' LT | 178.99 | **** | 177.99 | **** | **** | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | 1 | --- | --- | --- | --- | --- | --- |
| 202 | 49+43.1 | 138.8' LT | 179.03 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 203 | 52+89.4 | 86.1' RT | 187.00 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| | | | | | | | TOTALS | 3 | 6 | 1 | 1 | 6 | 11 | 4 | 3 | 1 | 1 | 1 | 13 | 1 | 1 | 6 | 2 | 182 | 1 | 1 | 32 | 1 | 6 | 86 |

*** BIOSWALE DRAINS ARE PROJECT ID 2410-15-71 CATEGORY 0010

**** INVERT OF EXISTING STRUCTURE UNABLE TO BE DETERIMINED. FIELD VERIFY INVERT ELEVATION OF EXISTING STRUCTURE PRIOR TO ORDERING PROPOSED STRUCTURE.

## STORM SEWER STRUCTURE COVERS

| STRUCTURE NUMBER | STATION | OFFSET | 611.0530 MANHOLE COVERS TYPE J EACH | 611.0612 INLET COVERS TYPE C EACH | 611.0624 INLET COVERS TYPE H EACH | 611.0642 INLET COVERS TYPE MS EACH | PROJECT ID 2410-15-71 611.0648 CAT 0010 INLET COVERS TYPE R EACH | 611.0648 CAT 0010 INLET COVERS TYPE R-1 EACH | 611.0648 CAT 0010 INLET COVERS TYPE R-1 EACH | 611.0666 INLET COVERS TYPE Z EACH | 611.8120.S COVER PLATES TEMPORARY EA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 21+87.5 | 47.64' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 2 | 21+97.5 | 47.6' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 3 | 23+48.0 | 47.3' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 4 | 23+58.0 | 47.3' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 5 | 24+10.5 | 27.0' RT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 5A | 23+77.5 | 49.3' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 5B | 23+87.5 | 49.3' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 5C | 24+25.0 | 12.7' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 5D | 24+10.5 | 12.7' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 5E | 24+25.0 | 37.3' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 5F | 24+10.5 | 37.3' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 6 | 25+99.5 | 27.1' RT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 6A | 25+89.5 | 38.8' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 6B | 26+41.3 | 43.9' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 6C | 25+99.5 | 38.8' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 6D | 26+09.5 | 0.3' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 6E | 25+99.5 | 0.3' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 8 | 28+25.0 | 27.2' RT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 8A | 27+31.0 | 37.3' LT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 8B | 28+13.5 | 2.4' LT | --- | --- | --- | 1 | --- | --- | --- | --- | --- |
| 8C | 28+65.7 | 42.4' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 8D | 27+93.8 | 39.8' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 8E | 28+10.4 | 62.5' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 8F | 28+49.3 | 64.0' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 8G | 28+25.0 | 60.5' RT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 9 | 29+27.8 | 23.5' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 9A | 29+50.0 | 0.7' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 9B | 29+40.0 | 0.7' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 10 | 29+40.3 | 29.7' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 10A | 29+28.1 | 54.1' LT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 11 | 30+04.0 | 61.1' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 11A | 29+65.9 | 63.6' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 11B | 29+71.65 | 66.41' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 11C | 30+14.1 | 3.5' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 11D | 30+14.0 | 11.89' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 20 | 71+25.0 | 21.5' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 20A | 71+25.0 | 47.3' LT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 20B | 71+25.0 | 45.4' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 21 | 68+59.0 | 21.6' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 21A | 68+62.0 | 32.3' LT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 21B | 68+60.01 | 0.0' RT | --- | --- | --- | 1 | --- | --- | --- | --- | --- |
| 22 | 68+12.0 | 40.1' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 22A | 68+15.0 | 89.7' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 22B | 68+08.9 | 81.8' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 22C | 68+60.5 | 37.3' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 22D | 68+27.2 | 11.3' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 22E | 68+27.2 | 11.3' LT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 22F | 68+53.7 | 83.7' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 22G | 68+53.4 | 94.22' LT | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23 | 66+10.0 | 40.2' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 24 | 63+97.5 | 40.3' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 24A | 63+81.9 | 71.4' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 24B | 63+75.8 | 63.5' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 24C | 64+56.5 | 37.3' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 24D | 64+13.2 | 10.8' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 24E | 64+41.0 | 32.3' LT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |

## STORM SEWER STRUCTURE COVERS CONTINUED

| STRUCTURE NUMBER | STATION | OFFSET | 611.0530 MANHOLE COVERS TYPE J EACH | 611.0612 INLET COVERS TYPE C EACH | 611.0624 INLET COVERS TYPE H EACH | 611.0642 INLET COVERS TYPE MS EACH | PROJECT ID 2410-15-71 611.0648 CAT 0010 INLET COVERS TYPE R EACH | 611.0648 CAT 0010 INLET COVERS TYPE R-1 EACH | 611.0648 CAT 0010 INLET COVERS TYPE R-1 EACH | 611.0666 INLET COVERS TYPE Z EACH | 611.8120.S COVER PLATES TEMPORARY EA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 24F | 64+13.3 | 10.8' LT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 24G | 64+32.9 | 83.5' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 25 | 62+43.5 | 40.4' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 25A | 62+29.0 | 37.3' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 25B | 62+43.5 | 0.7' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 26 | 59+80.0 | 40.5' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 26A | 59+55.2 | 62.4' LT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 26B | 59+77.5 | 32.23' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 26C | 60+26.5 | 35.3' LT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 26D | 60+15.0 | 12.7' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 26E | 60+14.6 | 7.7' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 26F | 59+84.4 | 1.8' LT | --- | --- | --- | --- | --- | --- | --- | 1 | --- |
| 26G | 59+81.1 | 7.6' LT | --- | --- | --- | --- | --- | --- | --- | 1 | --- |
| 26H | 60+04.3 | 72.1' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 27 | 58+50.0 | 40.6' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 27A | 58+65.5 | 13.7' RT | --- | --- | --- | --- | --- | --- | --- | 1 | --- |
| 27B | 58+65.1 | 6.8' RT | --- | --- | --- | --- | --- | --- | --- | 1 | --- |
| 28 | 55+57.5 | 40.9' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 28A | 56+16.9 | 34.7' LT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 28B | 55+99.7 | 61.3' LT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 28C | 55+90.3 | 84.6' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 29 | 54+58.5 | 18.8' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 29A | 55+38.6 | 0.0' RT | --- | --- | --- | 1 | --- | --- | --- | --- | --- |
| 29B | 55+22.2 | 40.0' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 29C | 54+58.5 | 0.0' RT | --- | 1 | --- | --- | --- | --- | --- | --- | --- |
| 30 | 52+98.0 | 19.4' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | 48+92.0 | 20.8' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 31A | 48+99.4 | 68.2' RT | --- | --- | --- | 1 | --- | --- | --- | --- | --- |
| 31B | 49+37.0 | 39.3' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 31C | 49+27.0 | 39.3' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 31D | 49+07.0 | 0.0' RT | --- | 1 | --- | --- | --- | --- | --- | --- | --- |
| 32 | 47+12.0 | 32.5' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 32A | 47+12.0 | 37.3' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 33 | 42+87.0 | 32.4' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 33A | 42+87.1 | 40.1' LT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 34 | 42+52.1 | 32.4' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 34A | 43+62.0 | 37.3' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 34B | 42+54.3 | 0.0' RT | --- | --- | --- | 1 | --- | --- | --- | --- | --- |
| 35 | 40+37.0 | 32.4' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 35A | 40+37.9 | 47.3' LT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 36 | 40+10.0 | 32.4' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 36A | 40+12.1 | 40.1' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 36B | 40+42.5 | 12.6' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 36C | 40+42.1 | 6.4' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 36D | 40+09.9 | 3.4' LT | --- | --- | --- | --- | --- | --- | --- | 1 | --- |
| 37 | 39+66.5 | 32.4' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 37A | 39+23.6 | 55.5' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 37B | 39+09.9 | 77.4' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 37C | 39+39.3 | 91.7' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 37D | 39+85.1 | 56.5' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |

## STORM SEWER STRUCTURE COVERS CONTINUED

PROJECT ID 2410-15-71

| STRUCTURE NUMBER | STATION | OFFSET | 611.0530 MANHOLE COVERS TYPE J EACH | 611.0612 INLET COVERS TYPE C EACH | 611.0624 INLET COVERS TYPE H EACH | 611.0642 INLET COVERS TYPE MS EACH | 611.0648 CAT 0010 INLET COVERS TYPE R EACH | 611.0648 CAT 0010 INLET COVERS TYPE R-1 EACH | 611.0648 CAT 0010 INLET COVERS TYPE R-1 EACH | 611.0666 INLET COVERS TYPE Z EACH | 611.8120.S COVER PLATES TEMPORARY EA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 37E | 40+04.2 | 77.3' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 37F | 39+72.9 | 92.1' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 37G | 39+66.6 | 90.0' RT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 38 | 38+85.5 | 32.4' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 38A | 38+65.0 | 37.3' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 38B | 38+75.0 | 37.3' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 38C | 39+00.5 | 13.3' RT | --- | --- | --- | --- | --- | --- | --- | 1 | --- |
| 38D | 39+14.1 | 4.2' RT | --- | --- | --- | --- | --- | --- | --- | 1 | --- |
| 38E | 38+92.6 | 6.9' RT | --- | --- | --- | --- | --- | --- | --- | 1 | --- |
| 38F | 38+75.4 | 5.2' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 38G | 38+85.4 | 6.4' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 39 | 38+60.0 | 32.4' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 39A | 38+49.9 | 39.1' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 39B | 38+59.9 | 40.1' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 40 | 38+29.0 | 32.4' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 40A | 38+19.0 | 12.7' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 40B | 38+29.0 | 12.7' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 41 | 36+91.0 | 32.4' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 42 | 36+17.4 | 32.5' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 42A | 36+00.0 | 37.3' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 42B | 36+13.2 | 1.2' LT | --- | --- | --- | 1 | --- | --- | --- | --- | --- |
| 43 | 34+02.0 | 33.0' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 43A | 34+12.1 | 4.4' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 43B | 34+02.1 | 3.2' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 44 | 33+50.0 | 33.1' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 44A | 33+02.9 | 76.2' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 44B | 32+72.0 | 41.8' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 44C | 33+14.9 | 52.1' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 44D | 33+37.1 | 40.3' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 44E | 33+60.0 | 12.7' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 44F | 33+50.0 | 12.7' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 45 | 32+21.0 | 33.4' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 45A | 32+18.3 | 13.7' LT | --- | --- | --- | --- | --- | --- | --- | 1 | --- |
| 46 | 98+72.0 | 18.7' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 47 | 96+29.6 | 18.4' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 50 | 102+22.0 | 20.5' RT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 52 | 100+62.5 | 20.5' RT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 52A | 100+72.5 | 35.8' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 52B | 100+62.5 | 35.8' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 53 | 30+74.3 | 7.8' LT | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| 53A | 30+76.7 | 37.3' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 53B | 30+65.1 | 4.4' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 60 | 48+93.1 | 91.0' RT | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 61 | 48+94.7 | 79.2' RT | --- | --- | --- | --- | 1 | --- | --- | --- | --- |
| 62 | 48+92.8 | 47.5' RT | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 70 | 53+25.1 | 45.4' LT | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 100 | 27+10.9 | 10.2' LT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 101 | 27+00.0 | 12.7' RT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 102 | 27+76.5 | 12.0' RT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 103 | 27+79.3 | 12.7' LT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |

## STORM SEWER STRUCTURE COVERS CONTINUED

PROJECT ID 2410-15-71

| STRUCTURE NUMBER | STATION | OFFSET | 611.0530 MANHOLE COVERS TYPE J EACH | 611.0612 INLET COVERS TYPE C EACH | 611.0624 INLET COVERS TYPE H EACH | 611.0642 INLET COVERS TYPE MS EACH | 611.0648 CAT 0010 INLET COVERS TYPE R EACH | 611.0648 CAT 0010 INLET COVERS TYPE R-1 EACH | 611.0648 CAT 0010 INLET COVERS TYPE R-1 EACH | 611.0666 INLET COVERS TYPE Z EACH | 611.8120.S COVER PLATES TEMPORARY EA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 104 | 28+50.0 | 12.7' LT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 105 | 28+50.0 | 2.7' RT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 106 | 35+00.0 | 12.7' LT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 107 | 35+00.0 | 12.7' RT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 108 | 36+00.0 | 12.7' LT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 109 | 36+00.0 | 12.7' RT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 110 | 36+65.0 | 12.7' LT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 111 | 36+65.0 | 4.8' RT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 112 | 42+60.0 | 9.5' LT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 113 | 42+60.0 | 12.7' RT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 114 | 43+74.3 | 12.7' LT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 115 | 43+60.0 | 12.7' RT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 116 | 44+28.2 | 12.7' LT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 117 | 44+10.0 | 12.7' RT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 118 | 55+40.0 | 12.7' LT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 119 | 55+40.0 | 12.7' RT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 120 | 56+10.9 | 12.7' LT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 121 | 56+05.0 | 12.7' RT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 122 | 56+53.0 | 12.7' LT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 123 | 56+50.0 | 9.4' RT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 124 | 68+60.0 | 12.7' LT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 125 | 68+60.0 | 12.7' RT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 126 | 69+85.0 | 12.7' LT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 127 | 69+97.0 | 12.7' RT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 128 | 70+50.0 | 12.7' LT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 129 | 70+61.6 | 12.7' RT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 130 | 71+00.0 | 12.7' LT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 131 | 71+21.3 | 12.7' RT | --- | --- | --- | --- | --- | --- | 1 | --- | --- |
| 201 | 48+25.7 | 99.6' LT | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 202 | 49+43.1 | 138.8' LT | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 203 | 52+89.4 | 86.1' RT | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | | TOTALS | 40 | 2 | 1 | 6 | 56 | 36 | 32 | 9 | 10 |
| | | | | | | | 92 | | | | |

3

## STORM SEWER PIPES

| PIPE NUMBER | FROM | - | TO | INLET ELEVATION | DISCHARGE ELEVATION | SLOPE % | 520.8000 CONCRETE COLLARS FOR PIPE EACH | STORM SEWER PIPE REINFORCED CONCRETE CLASS III | | | | | | | | | | | STORM SEWER PIPE REINFORCED CONCRETE CLASS IV | | | | JOINT TIES* EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 608.0312 12-INCH LF | 608.0315 15-INCH LF | 608.0318 18-INCH LF | 608.0321 21-INCH LF | 608.0324 24-INCH LF | 608.0330 30-INCH LF | 608.0336 36-INCH LF | 608.0342 42-INCH LF | 608.0348 48-INCH LF | 608.0360 60-INCH LF | 608.0366 66-INCH LF | 608.0398 108-INCH LF | 608.0412 12-INCH LF | 608.0415 15-INCH LF | 608.0430 30-INCH LF | 608.0466 66-INCH LF | |
| P1 | 1 | - | 2 | 174.70 | 174.60 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10 | --- | --- | --- | --- |
| --- | EXIST SS | - | 1 | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P2 | 2 | - | 3 | 174.50 | 174.00 | 0.33% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 151 | --- | --- | --- | --- |
| P3 | 3 | - | 4 | 174.00 | 173.80 | 2.00% | --- | 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P4 | 4 | - | 5 | 173.60 | 172.50 | 1.95% | --- | --- | 56 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P5 | 5 | - | 6 | 172.00 | 171.20 | 0.42% | --- | --- | --- | --- | 189 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P5A | 5A | - | 5B | 174.00 | 173.95 | 0.50% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10 | --- | --- | --- | --- |
| P5B | 5B | - | 5D | 173.95 | 173.62 | 0.51% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 66 | --- | --- | --- | --- |
| P5C | 5C | - | 5D | 173.92 | 173.85 | 0.50% | --- | 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P5D | 5D | - | 5 | 173.62 | 173.54 | 0.50% | --- | 14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P5E | 5E | - | 5F | 173.54 | 173.40 | 1.00% | --- | 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P5F | 5F | - | 5 | 173.40 | 173.30 | 1.00% | --- | 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| --- | EXIST SS | - | 5F | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P6 | 6 | - | 8 | 171.00 | 170.20 | 0.35% | --- | --- | --- | --- | --- | 226 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P6A | 6A | - | 6C | 172.58 | 172.48 | 1.00% | --- | 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P6B | 6B | - | 6C | 172.64 | 172.33 | 0.74% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 42 | --- | --- | --- | --- |
| P6C | 6C | - | 6E | 172.33 | 172.13 | 0.50% | --- | 39 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P6D | 6D | - | 6E | 172.35 | 172.13 | 2.16% | --- | 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P6E | 6E | - | 6 | 172.13 | 172.00 | 0.50% | --- | 27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P8 | 8 | - | 9 | 168.70 | 167.90 | 0.70% | --- | --- | --- | --- | --- | --- | --- | --- | 115 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P8A | 8A | - | 8B | 173.00 | 171.20 | 2.01% | --- | 90 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P8B | 8B | - | 8 | 171.20 | 171.04 | 0.50% | --- | 32 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P8C | 8C | - | 8 | 172.52 | 172.30 | 0.50% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 43 | --- | --- | --- | --- |
| P8D | 8D | - | 8 | 172.64 | 172.47 | 0.50% | --- | 34 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P8E | 8E | - | 8G | 172.70 | 172.50 | 1.36% | --- | 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P8F | 8F | - | 8G | 172.80 | 172.50 | 1.23% | --- | 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P8G | 8G | - | 8 | 170.50 | 170.00 | 1.50% | --- | --- | --- | --- | --- | --- | --- | 33 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P9 | 9 | - | 10 | 167.90 | 167.80 | 0.70% | --- | --- | --- | --- | --- | --- | --- | --- | 14 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P9A | 9A | - | 9B | 171.50 | 171.40 | 1.00% | --- | 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P9B | 9B | - | 9 | 171.40 | 171.13 | 1.00% | --- | 27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P10 | 10 | - | 11 | 167.80 | 167.30 | 0.70% | --- | --- | --- | --- | --- | --- | --- | --- | 71 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P10A | 10A | - | 10 | 171.50 | 171.23 | 1.00% | --- | 27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P11 | 11 | - | 46 | 166.80 | 166.50 | 0.77% | --- | --- | --- | --- | --- | --- | --- | --- | --- | 39 | --- | --- | --- | --- | --- | --- | --- | --- |
| P11A | 11A | - | 11B | 171.34 | 171.28 | 0.96% | --- | 6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P11B | 11B | - | 11 | 171.28 | 170.95 | 1.01% | --- | 33 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P11C | 11C | - | 11D | 171.39 | 171.31 | 1.00% | --- | 8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P11D | 11D | - | 11 | 171.31 | 170.80 | 1.00% | --- | 50 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P20 | 20 | - | 21 | 224.50 | 221.00 | 1.32% | --- | 266 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P20A | 20A | - | 20 | 225.50 | 225.24 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 26 | --- | --- | --- | --- |
| P20B | 20B | - | 20 | 224.94 | 224.50 | 0.66% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 67 | --- | --- | --- | --- |
| P21 | 21 | - | 22 | 221.00 | 220.10 | 1.78% | --- | 51 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P21A | 21A | - | 21 | 222.78 | 222.67 | 0.97% | --- | 11 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P21B | 21B | - | 21 | 222.70 | 222.48 | 1.00% | --- | 22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P22 | 22 | - | 23 | 219.10 | 217.20 | 0.94% | --- | --- | --- | --- | --- | 202 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P22A | 22A | - | 22B | 221.75 | 221.65 | 1.00% | --- | 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P22B | 22B | - | 22 | 221.65 | 221.23 | 1.00% | --- | 42 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P22C | 22C | - | 22D | 222.50 | 220.10 | 5.68% | --- | 42 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P22D | 22D | - | 22E | 220.10 | 219.99 | 0.50% | --- | 23 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P22E | 22E | - | 22 | 219.99 | 219.82 | 0.50% | --- | 33 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P22F | 22F | - | 22 | 221.00 | 220.10 | 1.48% | 1 | 61 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P22G | 22G | - | 22F | 222.39 | 221.58 | 7.62% | --- | 11 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P23 | 23 | - | 24 | 217.20 | 215.50 | 0.80% | --- | --- | --- | --- | --- | 213 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P24 | 24 | - | 25 | 214.50 | 211.00 | 2.27% | --- | --- | --- | --- | --- | 154 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P24A | 24A | - | 24B | 218.58 | 218.48 | 1.00% | --- | 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P24B | 24B | - | 24 | 218.48 | 218.26 | 0.70% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 32 | --- | --- | --- | --- |
| P24C | 24C | - | 24D | 218.51 | 218.00 | 1.00% | 1 | 51 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

## STORM SEWER PIPES CONTINUED

| PIPE NUMBER | FROM | - | TO | INLET ELEVATION | DISCHARGE ELEVATION | SLOPE FT/FT | 520.8000 CONCRETE COLLARS FOR PIPE EACH | STORM SEWER PIPE REINFORCED CONCRETE CLASS III 608.0312 12-INCH LF | 608.0315 15-INCH LF | 608.0318 18-INCH LF | 608.0321 21-INCH LF | 608.0324 24-INCH LF | 608.0330 30-INCH LF | 608.0336 36-INCH LF | 608.0342 42-INCH LF | 608.0348 48-INCH LF | 608.0360 60-INCH LF | 608.0366 66-INCH LF | 608.0398 108-INCH LF | STORM SEWER PIPE REINFORCED CONCRETE 608.0412 12-INCH LF | 608.0415 15-INCH LF | 608.0430 30-INCH LF | 608.0466 66-INCH LF | JOINT TIES* EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P24D | 24D | - | 24F | 218.00 | 217.78 | 1.00% | --- | 22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P24E | 24E | - | 24F | 219.15 | 218.80 | 1.00% | --- | 35 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P24F | 24F | - | 24 | 217.53 | 217.20 | 1.00% | --- | --- | 34 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P24G | 24G | - | 24 | 216.30 | 216.00 | 0.54% | --- | --- | 56 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P25 | 25 | - | 26 | 211.00 | 204.00 | 2.66% | --- | --- | --- | --- | --- | 264 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P25A | 25A | - | 25B | 215.07 | 214.87 | 0.50% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 39 | --- | --- | --- | --- |
| P25B | 25B | - | 25 | 214.87 | 214.67 | 0.50% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 41 | --- | --- | --- | --- |
| P26 | 26 | - | 27 | 200.00 | 198.50 | 1.15% | --- | --- | --- | --- | --- | --- | 130 | --- | --- | --- | --- | --- | --- | | --- | --- | --- | --- |
| P26A | 26A | - | 26 | 206.00 | 205.84 | 0.50% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 33 | --- | --- | --- | --- |
| P26B | 26B | - | 26F | 206.29 | 206.11 | 0.50% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 35 | --- | --- | --- | --- |
| P26C | 26C | - | 26E | 207.50 | 207.06 | 0.99% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 45 | --- | --- | --- | --- |
| P26D | 26D | - | 26E | 206.48 | 206.43 | 1.00% | 1 | 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P26E | 26E | - | 26F | 206.43 | 206.11 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 32 | --- | --- | --- | --- |
| P26F | 26F | - | 26G | 205.86 | 205.83 | 0.50% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 7 | --- | --- | --- |
| P26G | 26G | - | 26 | 205.83 | 205.66 | 0.50% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 33 | --- | --- | --- |
| P26H | 26H | - | 26 | 201.00 | 200.60 | 1.00% | --- | --- | --- | 40 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P27 | 27 | - | 28 | 198.50 | 191.50 | 2.39% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 293 | --- | --- |
| P27A | 27A | - | 27B | 202.00 | 201.93 | 1.00% | --- | 7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P27B | 27B | - | 27 | 201.93 | 201.43 | 1.00% | --- | 50 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P28 | 28 | - | 29 | 186.80 | 184.50 | 2.27% | --- | --- | --- | --- | --- | --- | --- | 102 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P28A | 28A | - | 28B | 189.90 | 189.58 | 1.00% | --- | 32 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P28B | 28B | - | 28 | 189.58 | 189.11 | 1.00% | --- | 47 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P28C | 28C | - | 28 | 187.65 | 187.50 | 0.27% | --- | --- | --- | --- | --- | 55 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P29 | 29 | - | 30 | 183.70 | 180.50 | 1.99% | --- | --- | --- | --- | --- | --- | --- | 161 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P29A | 29A | - | 29 | 191.00 | 189.77 | 1.50% | --- | 82 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P29B | 29B | - | 29C | 191.96 | 190.08 | 2.50% | 1 | 75 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P29C | 29C | - | 29 | 190.08 | 189.89 | 1.00% | --- | 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P30 | 30 | - | 31 | 175.20 | 172.30 | 0.71% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 406 | --- | --- | --- | --- | --- | --- | --- |
| P31 | 31 | - | P31B-1 | 171.50 | 171.33 | 0.75% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23 | --- | --- | --- | --- | --- | --- |
| P31-1 | P31B-1 | - | P31B-2 | 171.33 | 171.24 | 0.75% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11 | --- | --- | --- | --- | --- | --- |
| P31-2 | P31B-2 | - | 32 | 171.24 | 170.12 | 0.75% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 149 | --- | --- | --- | --- | --- | --- |
| P31A | 31A | - | 31C | 177.70 | 177.50 | 0.50% | --- | 40 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P31B | 31B | - | 31C | 177.53 | 177.37 | 1.60% | --- | 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P31C | 31C | - | 31D | 177.37 | 176.93 | 1.00% | --- | 44 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P31D | 31D | - | 31 | 176.68 | 176.42 | 1.00% | --- | --- | 26 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P32A | 32A | - | 32 | 174.50 | 173.80 | 1.00% | --- | 70 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P32 | 32 | - | 33 | 170.12 | 166.92 | 0.75% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 425 | --- |
| P33 | 33 | - | 34 | 166.92 | 166.65 | 0.78% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 35 | --- |
| P33A | 33A | - | 33 | 170.20 | 170.00 | 2.60% | --- | 8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P34 | 34 | - | 35 | 166.65 | 165.03 | 0.75% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 215 | --- |
| P34A | 34A | - | 34B | 171.50 | 168.50 | 2.63% | --- | 114 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P34B | 34B | - | 34 | 168.50 | 168.34 | 0.50% | --- | 33 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P35 | 35 | - | 36 | 165.03 | 164.83 | 0.75% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 27 | --- |
| P35A | 35A | - | 35 | 169.61 | 169.53 | 0.50% | --- | 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P36 | 36 | - | 37 | 164.83 | 164.50 | 0.76% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 44 | --- |
| P36A | 36A | - | 36D | 169.20 | 168.98 | 0.50% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 44 | --- | --- | --- | --- |
| P36B | 36B | - | 36C | 169.38 | 169.32 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6 | --- | --- | --- | --- |
| P36C | 36C | - | 36D | 169.32 | 168.98 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 34 | --- | --- | --- | --- |
| P36D | 36D | - | 36 | 168.98 | 168.69 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 29 | --- | --- | --- | --- |
| P37 | 37 | - | 38 | 164.50 | 163.91 | 0.73% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | --- | --- | 81 | --- |

## STORM SEWER PIPES CONTINUED

| PIPE NUMBER | FROM | | TO | INLET ELEVATION | DISCHARGE ELEVATION | SLOPE FT/FT | 520.8000 CONCRETE COLLARS FOR PIPE EACH | STORM SEWER PIPE REINFORCED CONCRETE CLASS III | | | | | | | | | | | STORM SEWER PIPE REINFORCED CONCRETE | | | | JOINT TIES* EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 608.0312 12-INCH LF | 608.0315 15-INCH LF | 608.0318 18-INCH LF | 608.0321 21-INCH LF | 608.0324 24-INCH LF | 608.0330 30-INCH LF | 608.0336 36-INCH LF | 608.0342 42-INCH LF | 608.0348 48-INCH LF | 608.0360 60-INCH LF | 608.0366 66-INCH LF | 608.0398 108-INCH LF | 608.0412 12-INCH LF | 608.0415 15-INCH LF | 608.0430 30-INCH LF | 608.0466 66-INCH LF | |
| P37A | 37A | - | 37B | 168.56 | 168.30 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 26 | --- | --- | --- | --- |
| P37B | 37B | - | 37C | 168.30 | 167.97 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 33 | --- | --- | --- | --- |
| P37C | 37C | - | 37G | 167.97 | 167.70 | 1.00% | --- | 27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P37D | 37D | - | 37E | 168.19 | 167.91 | 1.00% | --- | 28 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P37E | 37E | - | 37F | 167.91 | 167.57 | 1.00% | --- | 35 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P37F | 37F | - | 37G | 167.57 | 167.50 | 1.00% | --- | 7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P37G | 37G | - | 37 | 165.50 | 165.05 | 0.37% | --- | --- | --- | --- | --- | --- | --- | 122 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P38 | 38 | - | 39 | 163.91 | 163.73 | 0.73% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 26 | --- |
| P38A | 38A | - | 38B | 168.70 | 168.60 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10 | --- | --- | --- | --- |
| P38B | 38B | - | 38E | 168.60 | 168.25 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 35 | --- | --- | --- | --- |
| P38C | 38C | - | 38E | 168.35 | 168.25 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10 | --- | --- | --- | --- |
| P38D | 38D | - | 38E | 168.46 | 168.25 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 22 | --- | --- | --- | --- |
| P38E | 38E | - | 38G | 168.00 | 167.85 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 15 | --- | --- | --- |
| P38F | 38F | - | 38G | 168.20 | 168.10 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10 | --- | --- | --- | --- |
| P38G | 38G | - | 38 | 167.85 | 167.59 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 26 | --- | --- | --- |
| P39 | 39 | - | 40 | 163.73 | 163.50 | 0.73% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 31 | --- |
| P39A | 39A | - | 39B | 168.10 | 168.00 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10 | --- | --- | --- | --- |
| P39B | 39B | - | 39 | 168.00 | 167.92 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8 | --- | --- | --- | --- |
| P40 | 40 | - | 41 | 163.50 | 162.50 | 0.73% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 138 | --- |
| P40A | 40A | - | 40B | 168.30 | 168.20 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10 | --- | --- | --- | --- |
| P40B | 40B | - | 40 | 168.20 | 168.00 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 20 | --- | --- | --- | --- |
| P41 | 41 | - | 42 | 159.00 | 158.79 | 0.29% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 74 | --- | --- | --- | --- | --- |
| P42 | 42 | - | 43 | 158.79 | 158.15 | 0.29% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 215 | --- | --- | --- | --- | --- |
| P42A | 42A | - | 42B | 169.50 | 167.50 | 4.91% | --- | 41 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P42B | 42B | - | 42 | 167.50 | 167.00 | 1.58% | --- | 32 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P43 | 43 | - | 44 | 158.15 | 158.00 | 0.29% | --- | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 52 | --- | --- | --- | --- | --- |
| P43A | 43A | - | 43B | 169.20 | 169.10 | 1.00% | --- | 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| --- | EXIST SS | - | 43B | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P43B | 43B | - | 43 | 169.10 | 168.80 | 1.00% | --- | 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P44 | 44 | - | 45 | 158.00 | 157.62 | 0.29% | --- | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 129 | --- | --- | --- | --- | --- |
| P44A | 44A | - | 44C | 170.70 | 170.43 | 1.00% | --- | 27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P44B | 44B | - | 44C | 170.80 | 170.36 | 1.00% | --- | 44 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P44C | 44C | - | 44D | 170.36 | 170.11 | 1.00% | --- | 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P44D | 44D | - | 44F | 170.11 | 169.80 | 1.00% | --- | 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P44E | 44E | - | 44F | 170.68 | 170.58 | 1.00% | --- | 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P44F | 44F | - | 44 | 169.80 | 169.34 | 1.00% | --- | 46 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P45 | 45 | - | P45B-1 | 157.62 | 157.34 | 0.29% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 95 | --- | --- | --- | --- | --- |
| P45-1 | P45B-1 | - | P45B-2 | 157.34 | 157.23 | 0.29% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 38 | --- | --- | --- | --- | --- |
| P45-2 | P45B-2 | - | 46 | 157.23 | 157.00 | 0.29% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 78 | --- | --- | --- | --- | --- |
| P45A | 45A | - | 45 | 170.50 | 170.30 | 1.00% | --- | 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| --- | EXIST SS | - | P45 | 157.99 | 157.89 | 1.00% | 2 | --- | --- | --- | --- | --- | 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P46 | 46 | - | 47 | 157.00 | 156.06 | 0.39% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 242 | --- | --- | --- | --- | --- |
| P50 | 50 | - | 52 | 172.59 | 170.71 | 1.18% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 160 | --- | --- | --- |
| --- | EXIST SS | - | 50 | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P52 | 52 | - | 53 | 170.71 | 169.42 | 1.26% | --- | --- | 103 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P52A | 52A | - | 52B | 171.21 | 171.11 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10 | --- | --- | --- | --- |
| P52B | 52B | - | 52 | 171.11 | 170.96 | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 15 | --- | --- | --- | --- |
| P53 | 53 | - | 11 | 169.42 | 168.30 | 1.26% | --- | --- | 88 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P53A | 53A | - | 53B | 171.40 | 171.04 | 1.02% | --- | 35 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P53B | 53B | - | 53 | 171.04 | 170.89 | 1.00% | --- | 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P60 | 60 | - | 61 | 173.50 | 173.38 | 1.00% | --- | --- | 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P61 | 61 | - | 62 | 173.38 | 173.17 | 0.66% | --- | --- | 32 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P70 | EXIST SS | - | 70 | 184.35 | 184.18 | 4.69% | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 4 | --- | --- | --- | --- |
| P201 | EXIST SS | - | 201 | **** | **** | 1.00% | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 3 | --- | --- | --- | --- |
| | | | | | | TOTALS | 11 | 2,310 | 407 | 40 | 189 | 1,114 | 140 | 418 | 200 | 39 | 406 | 183 | 923 | 1,011 | 241 | 293 | 1,022 | 0 |

*NON-BID ITEM: FOR INFORMATION ONLY

**** INNVERT OF EXISTING STRUCTURE UNABLE TO BE DETERMINED. FIELD VERIFY EXISTING PIPE SIZE AND ELEVATION PRIOR TO ORDERING PIPES

3

3

## RESTORATION ITEMS

| CATEGORY | STATION | TO | STATION | 625.0100 TOPSOIL SY | 627.0200 MULCHING SY | 628.2004 EROSION MAT CLASS I TYPE B SY | 628.6510 SOIL STABILIZER TYPE B ACRE | 629.0210 FERTILIZER TYPE B CWT | 630.0200 SEEDING TEMPORARY LB | 630.0300 SEEDING BORROW PIT LB | 630.0500 SEED WATER MGAL | 630.0140 SEEDING MIXTURE NO. 40 LB | 631.0300 SOD WATER MGAL | 631.1000 SOD LAWN SY | 632.9101 LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES EA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NATIONAL AVENUE | | | | | | | | | | | | | | |
| 0010 | 16+25 | - | 21+75 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 21+75 | - | 27+75 | 1,410 | 355 | --- | --- | 0.8 | --- | --- | --- | --- | 40 | 1,410 | --- |
| | 27+75 | - | 33+75 | 1,570 | 395 | --- | --- | 0.9 | --- | --- | --- | --- | 40 | 1,570 | --- |
| | 33+75 | - | 38+50 | 1,245 | 315 | --- | --- | 0.7 | --- | --- | --- | --- | 35 | 1,245 | --- |
| | 38+50 | - | 44+50 | 1,255 | 315 | --- | --- | 0.8 | --- | --- | --- | --- | 35 | 1,255 | --- |
| | 44+50 | - | 50+50 | 2,540 | 635 | --- | --- | 1.5 | --- | --- | --- | --- | 65 | 2,540 | --- |
| | 50+50 | - | 56+50 | 2,365 | 595 | --- | --- | 1.4 | --- | --- | --- | --- | 60 | 2,365 | --- |
| | 56+50 | - | 62+50 | 1,565 | 395 | --- | --- | 0.9 | --- | --- | --- | --- | 40 | 1,565 | --- |
| | 62+50 | - | 67+25 | 1,610 | 405 | --- | --- | 1.0 | --- | --- | --- | --- | 45 | 1,610 | --- |
| | 67+25 | - | 72+22 | 1,160 | 290 | --- | --- | 0.7 | --- | --- | --- | --- | 30 | 1,160 | --- |
| | CLEVELAND AVENUE | | | | | | | | | | | | | | |
| | 96+55 | - | 97+75 | 200 | 50 | --- | --- | 0.2 | --- | --- | --- | --- | 5 | 200 | --- |
| | 102+25 | - | 106+05 | 945 | 240 | --- | --- | 0.6 | --- | --- | --- | --- | 25 | 945 | --- |
| | WASTE SITE | | | 5,920 | 5,920 | --- | --- | --- | --- | 160 | 150 | --- | --- | --- | --- |
| | UNDISTRIBUTED | | | 5,440 | 470 | 2,000 | 1.7 | 7.8 | 215 | 40 | 40 | 360 | 99 | 3,958 | 15 |
| | PROJECT TOTALS | | | 27,225 | 10,380 | 2,000 | 1.7 | 17.3 | 215 | 200 | 190 | 360 | 519 | 19,823 | 15 |

## EROSION CONTROL ITEMS

| CATEGORY | STATION | TO | STATION | 628.1104 EROSION BALES EACH | 628.1504 SILT FENCE LF | 628.1520 SILT FENCE MAINTENANCE LF | 628.1905 MOBILIZATIONS EROSION CONTROL EACH | 628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH | 628.7005 INLET PROTECTION TYPE A EACH | 628.7010 INLET PROTECTION TYPE B EACH | 628.7020 INLET PROTECTION TYPE D EACH | 628.7504 TEMPORARY DITCH CHECKS LF | 628.7560 TRACKING PADS EACH | 628.7570 ROCK BAGS EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NATIONAL AVENUE | | | | | | | | | | | | | |
| 0010 | 16+25 | - | 21+75 | --- | --- | --- | --- | --- | 2 | --- | 5 | --- | --- | --- |
| | 21+75 | - | 27+75 | --- | 205 | 103 | --- | --- | 15 | --- | 28 | --- | --- | --- |
| | 27+75 | - | 33+75 | --- | 145 | 73 | --- | --- | 27 | --- | 57 | --- | --- | --- |
| | 33+75 | - | 38+50 | --- | 110 | 55 | --- | --- | 14 | --- | 26 | --- | --- | --- |
| | 38+50 | - | 44+50 | --- | --- | --- | --- | --- | 29 | --- | 67 | --- | --- | --- |
| | 44+50 | - | 50+50 | --- | 195 | 98 | --- | --- | 6 | --- | 24 | --- | --- | --- |
| | 50+50 | - | 56+50 | --- | 570 | 285 | --- | --- | 7 | 3 | 21 | --- | --- | --- |
| | 56+50 | - | 62+50 | --- | --- | --- | --- | --- | 6 | 2 | 27 | --- | --- | --- |
| | 62+50 | - | 67+25 | --- | --- | --- | --- | --- | 1 | 5 | 10 | --- | --- | --- |
| | 67+25 | - | 72+22 | --- | --- | --- | --- | --- | 2 | 3 | 27 | --- | --- | --- |
| | 72+22 | - | 74+00 | --- | --- | --- | --- | --- | --- | --- | 4 | --- | --- | --- |
| | CLEVELAND AVENUE | | | | | | | | | | | | | |
| | 96+55 | - | 97+75 | --- | --- | --- | --- | --- | --- | --- | 2 | --- | --- | --- |
| | 102+25 | - | 106+05 | --- | --- | --- | --- | --- | --- | --- | 2 | --- | --- | --- |
| | WASTE SITE | | | --- | 1,200 | 600 | --- | --- | --- | --- | --- | --- | --- | --- |
| | UNDISTRIBUTED | | | 100 | 605 | 303 | 36 | 25 | 28 | 4 | 75 | 171 | 24 | 250 |
| | PROJECT TOTALS | | | 100 | 3,030 | 1,517 | 21 | 15 | 137 | 17 | 375 | 171 | 24 | 250 |

3

## REMOVING SIGNS

| SIGN # | SHEET # | SIGN CODE | SIGN MOUNTED ON SAME POST AS # | 638.2602 REMOVING SIGNS TYPE II EACH | 638.3000 REMOVING SMALL SIGN SUPPORTS EACH | DESCRIPTION |
|---|---|---|---|---|---|---|
| R1-01 | 1 OF 11 | R5-1 | - | 1 | - | DO NOT ENTER |
| R1-02 | 1 OF 11 | R1-1F | - | 1 | - | STOP (FOLDING) |
| R1-03 | 1 OF 11 | R1-2 | - | 1 | 1 | YIELD |
| R1-04 | 1 OF 11 | R1-1 | - | 1 | 1 | STOP |
| R1-05 | 1 OF 11 | R7-1D | - | 1 | 1 | NO PARKING ANY TIME - DOUBLE ARROW |
| R1-06 | 1 OF 11 | R6-2R | - | 1 | 1 | ONE WAY RIGHT ARROW |
| R1-07 | 1 OF 11 | R3-7R | - | 1 | - | RIGHT LANE MUST TURN RIGHT |
| R1-07 | 1 OF 11 | R7-1D | R1-07 | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW |
| R1-08 | 1 OF 11 | R7-1D | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW |
| R1-09 | 1 OF 11 | R6-1L | - | 1 | 1 | ONE WAY LEFT ARROW |
| R1-10 | 1 OF 11 | R10-50L | R1-10 | 1 | - | LEFT TURN YIELD ON FLASHING YELLOW ARROW |
| R1-10 | 1 OF 11 | R4-7 | - | 1 | - | KEEP RIGHT |
| R1-11 | 1 OF 11 | R1-1F | - | 1 | - | STOP (FOLDING) |
| R1-12 | 1 OF 11 | R7-1D | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW |
| R1-13 | 1 OF 11 | R2-1 | - | 1 | - | SPEED LIMIT 35 MPH |
| R1-13 | 1 OF 11 | R7-1D | R1-13 | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW |
| R1-14 | 1 OF 11 | R7-1D | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW |
| R2-01 | 2 OF 11 | R1-1 | - | 1 | 1 | STOP |
| R2-02 | 2 OF 11 | R5-1 | - | 1 | - | DO NOT ENTER |
| R2-03 | 2 OF 11 | R3-7L | - | 1 | - | LEFT LANE MUST TURN LEFT |
| R2-04 | 2 OF 11 | R7-1D | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW |
| R2-05 | 2 OF 11 | R7-1D | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW |
| R2-06 | 2 OF 11 | R7-1D | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW |
| R2-07 | 2 OF 11 | R5-2 | - | 1 | 1 | NO TRUCKS SYMBOL |
| R2-08 | 2 OF 11 | R1-1 | - | 1 | 1 | STOP |
| R2-09 | 2 OF 11 | R7-1D | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW |
| R2-10 | 2 OF 11 | W4-2R | - | 1 | - | LANE REDUCTION TRANSITION SYMBOL - [RIGHT LANE] |
| R2-10 | 2 OF 11 | R7-1D | R2-10 | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW |
| R2-11 | 2 OF 11 | R7-1D | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW |
| R2-12 | 2 OF 11 | R1-2 | - | 1 | 1 | YIELD |
| R2-13 | 2 OF 11 | R7-1D | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW |
| R3-01 | 3 OF 11 | R7-1D | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW |
| R3-02 | 3 OF 11 | R7-1D | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW |
| R3-03 | 3 OF 11 | R2-1 | - | 1 | - | SPEED LIMIT 35 MPH |
| R3-03 | 3 OF 11 | R7-1D | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW |
| R3-04 | 3 OF 11 | R7-1D | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW |
| R3-05 | 3 OF 11 | JV | - | 1 | - | ANY VERTICALLY CONFIGURED J-PANEL |
| R3-06 | 3 OF 11 | R7-1D | - | 1 | 1 | NO PARKING ANY TIME - DOUBLE ARROW |
| R4-01 | 4 OF 11 | R1-1F | - | 1 | - | STOP (FOLDING) |
| R4-02 | 4 OF 11 | R6-2L | - | 1 | - | ONE WAY LEFT ARROW |
| R4-03 | 4 OF 11 | R1-1F | - | 1 | - | STOP (FOLDING) |
| R4-04 | 4 OF 11 | R10-50L | - | 1 | - | LEFT TURN YIELD ON FLASHING YELLOW ARROW |
| R4-04 | 4 OF 11 | R4-7 | R4-04 | 1 | - | KEEP RIGHT |
| R4-05 | 4 OF 11 | R3-7R | - | 1 | - | RIGHT LANE MUST TURN RIGHT |
| R4-06 | 4 OF 11 | W3-3 | - | 1 | 1 | SIGNAL AHEAD |
| R4-07 | 4 OF 11 | R7-1D | - | 1 | 1 | NO PARKING ANY TIME - DOUBLE ARROW |
| R4-08 | 4 OF 11 | R1-1F | - | 1 | - | STOP (FOLDING) |
| R4-09 | 4 OF 11 | R5-1 | - | 1 | - | DO NOT ENTER |
| **SUBTOTAL** | | | | **48** | **12** | |





FILE NAME: "T:\1232708\Civil3D\24101500\sheets\030200_mq.pptx" PLOT DATE 1/23/2026 12:57:30 PM PLOT BY : ARG PLOT SCALE : 1:1

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## REMOVING SIGNS (CONT.)

| SIGN # | SHEET # | SIGN CODE | SIGN MOUNTED ON SAME POST AS # | 638.2602 REMOVING SIGNS TYPE II EACH | 638.3000 REMOVING SMALL SIGN SUPPORTS EACH | DESCRIPTION |
|---|---|---|---|---|---|---|
| R4-10 | 4 OF 11 | R7-1D | - | 1 | 1 | NO PARKING ANY TIME - DOUBLE ARROW |
| R4-11 | 4 OF 11 | R1-1 | - | 1 | 1 | STOP |
| R4-12 | 4 OF 11 | R5-1 | R4-11 | 1 | - | DO NOT ENTER |
| R4-13 | 4 OF 11 | R1-1F | - | 1 | - | STOP (FOLDING) |
| R4-14 | 4 OF 11 | R6-2L | - | 1 | - | ONE WAY LEFT ARROW |
| R4-15 | 4 OF 11 | R1-1F | - | 1 | - | STOP (FOLDING) |
| R4-16 | 4 OF 11 | R7-1D | - | 1 | 1 | NO PARKING ANY TIME - DOUBLE ARROW |
| R4-17 | 4 OF 11 | W3-3 | - | 1 | - | SIGNAL AHEAD |
| R4-18 | 4 OF 11 | JV | - | 1 | 2 | ANY VERTICALLY CONFIGURED J-PANEL |
| R4-19 | 4 OF 11 | R7-2D | - | 1 | 1 | NO PARKING (TIME) TO (TIME) - DOUBLE ARROW |
| R4-20 | 4 OF 11 | M1-94H | - | 1 | - | OVERHEAD STREET NAME SIGN |
| R4-21 | 4 OF 11 | M1-94H | - | 1 | - | OVERHEAD STREET NAME SIGN |
| R4-22 | 4 OF 11 | M1-94H | - | 1 | - | OVERHEAD STREET NAME SIGN |
| R4-23 | 4 OF 11 | M1-94H | - | 1 | - | OVERHEAD STREET NAME SIGN |
| R5-01 | 5 OF 11 | R7-1D | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW |
| R5-02 | 5 OF 11 | J2-3 | - | 1 | - | ROUTE TURN ASSEMBLY (3 HEADED ROUTE PANEL) |
| R5-03 | 5 OF 11 | R5-1 | - | 1 | 1 | DO NOT ENTER |
| R5-04 | 5 OF 11 | R1-1F | - | 1 | 1 | STOP (FOLDING) |
| R5-05 | 5 OF 11 | W3-8 | - | 1 | - | RAMP METERED WHEN FLASHING |
| R5-06 | 5 OF 11 | W4-3R | - | 1 | 1 | MERGE - ADDED LANE FROM RIGHT |
| R5-07 | 5 OF 11 | JV | - | 1 | - | ANY VERTICALLY CONFIGURED J-PANEL |
| R5-08 | 5 OF 11 | R1-2 | - | 1 | 1 | YIELD |
| R5-09 | 5 OF 11 | R1-2 | - | 1 | 1 | YIELD |
| R5-10 | 5 OF 11 | W3-8 | - | 1 | - | RAMP METERED WHEN FLASHING |
| R5-11 | 5 OF 11 | W12-1D | - | 1 | 1 | DOUBLE DOWN ARROWS |
| R5-12 | 5 OF 11 | R1-1F | - | 1 | - | STOP (FOLDING) |
| R5-13 | 5 OF 11 | R1-1F | - | 1 | 1 | STOP (FOLDING) |
| R5-14 | 5 OF 11 | R3-2 | - | 1 | 1 | NO LEFT TURN SYMBOL |
| R5-15 | 5 OF 11 | R10-50L | - | 1 | - | LEFT TURN YIELD ON FLASHING YELLOW ARROW |
| R5-16 | 5 OF 11 | R1-1F | - | 1 | - | STOP (FOLDING) |
| R5-17 | 5 OF 11 | W3-3 | - | 1 | 1 | SIGNAL AHEAD |
| R5-18 | 5 OF 11 | W12-2 | - | 1 | 1 | LOW CLEARANCE SYMBOL |
| R5-19 | 5 OF 11 | R1-1F | - | 1 | - | STOP (FOLDING) |
| R5-20 | 5 OF 11 | R4-7 | - | 1 | - | KEEP RIGHT |
| R5-21 | 5 OF 11 | R5-1 | - | 1 | - | DO NOT ENTER |
| R5-22 | 5 OF 11 | R10-50L | - | 1 | - | LEFT TURN YIELD ON FLASHING YELLOW ARROW |
| R5-23 | 5 OF 11 | R6-2R | - | 1 | - | ONE WAY RIGHT ARROW |
| R5-24 | 5 OF 11 | R7-2D | - | 1 | 1 | NO PARKING (TIME) TO (TIME) - DOUBLE ARROW |
| R5-25 | 5 OF 11 | D9-2 | - | 1 | - | HOSPITAL |
| R5-26 | 5 OF 11 | J3-2 | - | 1 | - | DIRECTIONAL ASSEMBLY (2 HEADED ROUTE PANEL) |
| R5-27 | 5 OF 11 | JV | - | 1 | 2 | ANY VERTICALLY CONFIGURED J-PANEL |
| R5-27 | 5 OF 11 | R7-1D | R5-27 | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW |
| R5-28 | 5 OF 11 | W11-2 | - | 1 | 1 | PEDESTRIAN CROSSING SYMBOL |
| R5-28 | 5 OF 11 | W16-9P | R5-28 | 1 | - | AHEAD PLAQUE (YELLOW) |
| R5-29 | 5 OF 11 | R1-1 | - | 1 | 1 | STOP |
| R5-29 | 5 OF 11 | R3-5R | R5-29 | 1 | - | ARROW UP RIGHT / ONLY |
| R5-30 | 5 OF 11 | W11-2 | - | 1 | 1 | PEDESTRIAN CROSSING SYMBOL |
| R5-30 | 5 OF 11 | W16-2A | R5-30 | 1 | - | 500 FEET |
| R6-01 | 6 OF 11 | W3-2 | - | 1 | - | YIELD AHEAD |
| R6-02 | 6 OF 11 | W12-2 | - | 1 | 1 | LOW CLEARANCE SYMBOL |
| **SUBTOTAL** | | | | **50** | **23** | |

3

## REMOVING SIGNS (CONT.)

| SIGN # | SHEET # | SIGN CODE | SIGN MOUNTED ON SAME POST AS # | 638.2602 REMOVING SIGNS TYPE II EACH | 638.3000 REMOVING SMALL SIGN SUPPORTS EACH | DESCRIPTION |
|---|---|---|---|---|---|---|
| R6-03 | 6 OF 11 | JV | - | 1 | 1 | ANY VERTICALLY CONFIGURED J-PANEL |
| R6-04 | 6 OF 11 | R4-7 | - | 1 | 1 | KEEP RIGHT |
| R6-05 | 6 OF 11 | R3-4 | - | 1 | 1 | NO U-TURN SYMBOL |
| R6-05 | 6 OF 11 | R1-1F | R6-05 | 1 | - | STOP (FOLDING) |
| R6-06 | 6 OF 11 | R6-2L | - | 1 | - | ONE WAY LEFT ARROW |
| R6-07 | 6 OF 11 | R1-1F | - | 1 | - | STOP (FOLDING) |
| R6-08 | 6 OF 11 | R3-4 | - | 1 | 1 | NO U-TURN SYMBOL |
| R6-08 | 6 OF 11 | R1-1F | R6-08 | 1 | - | STOP (FOLDING) |
| R6-09 | 6 OF 11 | R1-1 | - | 1 | 1 | STOP |
| R6-10 | 6 OF 11 | R5-2 | - | 1 | 1 | NO TRUCKS SYMBOL |
| R6-11 | 6 OF 11 | JV | - | 1 | 2 | ANY VERTICALLY CONFIGURED J-PANEL |
| R6-12 | 6 OF 11 | W3-8 | - | 1 | - | RAMP METERED WHEN FLASHING |
| R6-13 | 6 OF 11 | R7-1D | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW |
| R6-14 | 6 OF 11 | R3-1 | - | 1 | - | NO RIGHT TURN SYMBOL |
| R6-14 | 6 OF 11 | R1-1F | R6-14 | 1 | - | STOP (FOLDING) |
| R6-15 | 6 OF 11 | R5-1 | - | 1 | 1 | DO NOT ENTER |
| R6-15 | 6 OF 11 | R5-1A | R6-15 | 1 | - | WRONG WAY |
| R6-16 | 6 OF 11 | R5-1 | - | 1 | 1 | DO NOT ENTER |
| R6-16 | 6 OF 11 | R5-1A | R6-16 | 1 | - | WRONG WAY |
| R6-17 | 6 OF 11 | R1-1F | - | 1 | - | STOP (FOLDING) |
| R6-18 | 6 OF 11 | R9-2 | - | 1 | - | CROSS ONLY AT CROSS WALKS |
| R6-19 | 6 OF 11 | R3-5R | - | 1 | - | ARROW UP RIGHT / ONLY |
| R6-20 | 6 OF 11 | R3-5A | - | 1 | - | ARROW UP / ONLY |
| R6-21 | 6 OF 11 | R3-5A | - | 1 | - | ARROW UP / ONLY |
| R7-01 | 7 OF 11 | R2-1 | - | 1 | - | SPEED LIMIT 35 MPH |
| R7-02 | 7 OF 11 | W3-3 | - | 1 | 1 | SIGNAL AHEAD |
| R7-03 | 7 OF 11 | JV | - | 1 | - | ANY VERTICALLY CONFIGURED J-PANEL |
| R7-04 | 7 OF 11 | R1-1 | - | 1 | 1 | STOP |
| R7-05 | 7 OF 11 | R5-2 | - | 1 | 1 | NO TRUCKS SYMBOL |
| R7-06 | 7 OF 11 | S1-1 | - | 1 | - | SCHOOL ADVANCE |
| R7-06 | 7 OF 11 | S16-7L | R7-06 | 1 | - | LEFT DIAGONAL DOWNWARD POINTING ARROW (FLUORESCENT) |
| R7-07 | 7 OF 11 | R7-7L | - | 1 | 1 | NO PARKING BUS STOP - LEFT ARROW |
| R7-08 | 7 OF 11 | W3-3 | - | 1 | 1 | SIGNAL AHEAD |
| R7-09 | 7 OF 11 | W3-3 | - | 1 | 1 | SIGNAL AHEAD |
| R7-10 | 7 OF 11 | S1-1 | - | 1 | - | SCHOOL ADVANCE |
| R7-10 | 7 OF 11 | S16-7L | R7-10 | 1 | - | LEFT DIAGONAL DOWNWARD POINTING ARROW (FLUORESCENT) |
| R7-11 | 7 OF 11 | R5-2 | - | 1 | 1 | NO TRUCKS SYMBOL |
| R7-12 | 7 OF 11 | R1-1 | - | 1 | - | STOP |
| R7-13 | 7 OF 11 | R2-1 | - | 1 | - | SPEED LIMIT 35 MPH |
| R7-14 | 7 OF 11 | R7-6R | - | 1 | 1 | NO PARKING LOADING ZONE - RIGHT ARROW |
| R8-01 | 8 OF 11 | R1-1 | - | 1 | 1 | STOP |
| R8-02 | 8 OF 11 | R5-2 | - | 1 | 1 | NO TRUCKS SYMBOL |
| R8-03 | 8 OF 11 | S4-51 | - | 1 | - | SCHOOL SPEED LIMIT |
| R8-04 | 8 OF 11 | R7-6L | - | 1 | 1 | NO PARKING LOADING ZONE - LEFT ARROW |
| R8-05 | 8 OF 11 | R7-6R | - | 1 | 1 | NO PARKING LOADING ZONE - RIGHT ARROW |
| R8-06 | 8 OF 11 | R7-7L | - | 1 | - | NO PARKING BUS STOP - LEFT ARROW |
| R9-01 | 9 OF 11 | R1-1 | - | 1 | 1 | STOP |
| R9-02 | 9 OF 11 | R5-2 | - | 1 | 1 | NO TRUCKS SYMBOL |
| R9-03 | 9 OF 11 | R7-5D | - | 1 | - | __ HOUR PARKING (TIME) TO (TIME) - DOUBLE ARROW |
| R9-04 | 9 OF 11 | R7-7R | - | 1 | 1 | NO PARKING BUS STOP - RIGHT ARROW |
| **SUBTOTAL** | | | | **50** | **25** | |

3

## REMOVING SIGNS (CONT.)

| SIGN # | SHEET # | SIGN CODE | SIGN MOUNTED ON SAME POST AS # | 638.2602 REMOVING SIGNS TYPE II EACH | 638.3000 REMOVING SMALL SIGN SUPPORTS EACH | DESCRIPTION |
|---|---|---|---|---|---|---|
| R9-05 | 9 OF 11 | R7-6L | - | 1 | 1 | NO PARKING LOADING ZONE - LEFT ARROW |
| R9-06 | 9 OF 11 | R7-6R | - | 1 | 1 | NO PARKING LOADING ZONE - RIGHT ARROW |
| R10-01 | 10 OF 11 | R7-1D | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW |
| R11-01 | 11 OF 11 | W6-1 | - | 1 | 1 | DIVIDED HIGHWAY AHEAD SYMBOL |
| R11-02 | 11 OF 11 | R7-1L | - | 1 | - | NO PARKING ANY TIME - LEFT ARROW |
| R11-03 | 11 OF 11 | D11-1 | - | 1 | - | BIKE ROUTE (SYMBOL & WORDS) |
| R11-04 | 11 OF 11 | R2-1 | - | 1 | - | SPEED LIMIT 30 MPH |
| R11-04 | 11 OF 11 | R7-1R | R11-04 | 1 | - | NO PARKING ANY TIME - RIGHT ARROW |
| R11-05 | 11 OF 11 | D11-1 | - | 1 | - | BIKE ROUTE (SYMBOL & WORDS) |
| **SUBTOTAL** | | | | **9** | **3** | |
| **PROJECT TOTAL** | | | | **157** | **63** | |

## PERMANENT SIGNING

| SIGN # | SIGN CODE | SHEET # | SIGN SIZE | SIGN SIZE W IN. | X | SIGN SIZE H IN. | 637.1220 SIGNS TYPE I REFLECTIVE SH SF | 637.2210 SIGNS TYPE II REFLECTIVE H SF | 637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF | 637.2230 SIGNS TYPE II REFLECTIVE F SF | 634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH | 634.0620 POSTS WOOD 4X6-INCH X 20-FT EACH | 634.0622 POSTS WOOD 4X6-INCH X 22-FT EACH | 634.0624 POSTS WOOD 4X6-INCH X 24-FT EACH | SPV.0060.031 ROUND STEEL SIGN POST SYSTEM EACH | SIGN MOUNTED ON SAME POST AS # | DESCRIPTION | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-01 | M1-6 | 1 OF 11 | 2S | 24 | X | 24 | - | 4 | - | - | - | - | - | - | 1 | - | STATE ROUTE MARKER | STH 100 |
| 1-02 | M1-6 | 1 OF 11 | 2S | 24 | X | 24 | - | 4 | - | - | - | - | - | - | 1 | - | STATE ROUTE MARKER | STH 100 |
| 1-03 | M6-4 | 1 OF 11 | 2S | 21 | X | 21 | - | 3.06 | - | - | - | - | - | - | - | 1-01 | DIRECTIONAL ARROWS LEFT - RIGHT | - |
| 1-04 | M6-4 | 1 OF 11 | 2S | 21 | X | 21 | - | 3.06 | - | - | - | - | - | - | - | 1-02 | DIRECTIONAL ARROWS LEFT - RIGHT | - |
| 1-05 | R7-1D | 1 OF 11 | 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 1-06 | R6-2R | 1 OF 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | ONE WAY RIGHT ARROW | - |
| 1-07 | R5-1A | 1 OF 11 | 2S | 36 | X | 24 | - | 6 | - | - | - | - | - | - | 1 | - | WRONG WAY | - |
| 1-08 | R4-4 | 1 OF 11 | 2S | 36 | X | 30 | - | 7.5 | - | - | - | - | - | - | - | 1-07 | BEGIN RIGHT TURN LANE - YIELD TO BIKES | - |
| 1-09 | R7-1D | 1 OF 11 | 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | - | 1-07 | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 1-10 | R7-1D | 1 OF 11 | 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 1-11 | R3-20L | 1 OF 11 | 2S | 24 | X | 36 | - | 6 | - | - | - | - | - | - | 1 | - | BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW | - |
| 1-12 | R6-2L | 1 OF 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | ONE WAY LEFT ARROW | - |
| 1-13 | R6-2R | 1 OF 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | ONE WAY RIGHT ARROW | - |
| 1-14 | R7-1D | 1 OF 11 | 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 1-15 | R2-1 | 1 OF 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | SPEED LIMIT ___ MPH | 35 MPH |
| 1-16 | R2-1 | 1 OF 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | SPEED LIMIT ___ MPH | 35 MPH |
| 1-17 | R6-2R | 1 OF 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | ONE WAY RIGHT ARROW | - |
| 1-18 | W3-3 | 1 OF 11 | 2S | 36 | X | 36 | - | - | - | 9 | - | - | - | - | 1 | - | SIGNAL AHEAD | - |
| 1-19 | W3-3 | 1 OF 11 | 2S | 36 | X | 36 | - | - | - | 9 | - | - | - | - | 1 | - | SIGNAL AHEAD | - |
| 1-20 | R6-2R | 1 OF 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | ONE WAY RIGHT ARROW | - |
| 1-21 | R3-8LAF | 1 OF 11 | 2S | 54 | X | 30 | - | 11.25 | - | - | - | - | - | - | 2 | - | LEFT ONLY, AHEAD ONLY, AHEAD-RIGHT | - |
| 1-22 | R6-2R | 1 OF 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | ONE WAY RIGHT ARROW | - |
| 1-23 | R7-1D | 1 OF 11 | 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 1-24 | R3-20L | 1 OF 11 | 2S | 24 | X | 36 | - | 6 | - | - | - | - | - | - | 1 | - | BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW | - |
| 2-01 | R3-8LAAR | 2 OF 11 | 2S | 72 | X | 30 | - | 15 | - | - | - | - | - | - | 2 | - | LEFT ONLY, AHEAD ONLY, AHEAD ONLY, RIGHT ONLY | - |
| 2-02 | R6-2R | 2 OF 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | 0 | 1 | - | ONE WAY RIGHT ARROW | - |
| 2-03 | R2-1 | 2 OF 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | SPEED LIMIT ___ MPH | 35 MPH |
| 2-04 | R2-1 | 2 OF 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | SPEED LIMIT ___ MPH | 35 MPH |
| 2-05 | R1-1 | 2 OF 11 | 2S | 30 | X | 30 | - | 5.18 | - | - | - | - | - | - | 1 | - | STOP | - |
| 2-06 | R6-3 | 2 OF 11 | 2S | 30 | X | 24 | - | 5 | - | - | - | - | - | - | - | - | DIVIDED HIGHWAY CROSSING SIGN AND INTERSECTION | ON SIGNAL POLE |
| 2-07 | R1-1F | 2 OF 11 | 3 | 36 | X | 36 | - | - | 7.46 | - | - | - | - | - | - | - | STOP (FOLDING) | ON SIGNAL POLE |
| 2-08 | R6-2L | 2 OF 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | - | - | ONE WAY LEFT ARROW | ON SIGNAL POLE |
| 2-09 | R10-3EL | 2 OF 11 | 2S | 9 | X | 15 | - | 0.94 | - | - | - | - | - | - | - | - | TO CROSS PUSH BUTTON [LEFT ARROW] | ON SIGNAL POLE |
| 2-10 | W12-1D | 2 OF 11 | 2S | 24 | X | 24 | - | - | - | 4 | - | - | - | - | 1 | - | DOUBLE DOWN ARROWS | 2' MOUNTING HEIGHT |
| 2-11 | R10-3ER | 2 OF 11 | 2S | 9 | X | 15 | - | 0.94 | - | - | - | - | - | - | - | - | TO CROSS PUSH BUTTON [RIGHT ARROW] | ON SIGNAL POLE |
| 2-12 | R5-1 | 2 OF 11 | 2S | 30 | X | 30 | - | 6.25 | - | - | - | - | - | - | - | - | DO NOT ENTER | ON SIGNAL POLE |
| 2-13 | M1-94H | 2 OF 11 | 2S | 102 | X | 18 | - | 12.75 | - | - | - | - | - | - | - | - | OVERHEAD STREET NAME SIGN | ON SIGNAL ARM |
| 2-14 | R4-7 | 2 OF 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | - | - | KEEP RIGHT | ON SIGNAL POLE |
| 2-15 | R6-3 | 2 OF 11 | 2S | 30 | X | 24 | - | 5 | - | - | - | - | - | - | - | - | DIVIDED HIGHWAY CROSSING SIGN AND INTERSECTION | ON SIGNAL POLE |
| 2-16 | R1-1F | 2 OF 11 | 3 | 36 | X | 36 | - | - | 7.46 | - | - | - | - | - | - | - | STOP (FOLDING) | ON SIGNAL POLE |
| 2-17 | R7-1D | 2 OF 11 | 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 2-18 | M1-94H | 2 OF 11 | 2S | 102 | X | 18 | - | 12.75 | - | - | - | - | - | - | - | - | OVERHEAD STREET NAME SIGN | ON SIGNAL ARM |
| 2-19 | R6-2L | 2 OF 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | - | - | ONE WAY LEFT ARROW | ON SIGNAL POLE |
| 2-20 | R10-3EL | 2 OF 11 | 2S | 9 | X | 15 | - | 0.94 | - | - | - | - | - | - | - | - | TO CROSS PUSH BUTTON [LEFT ARROW] | ON SIGNAL POLE |
| 2-21 | R5-1 | 2 OF 11 | 2S | 30 | X | 30 | - | 6.25 | - | - | - | - | - | - | - | - | DO NOT ENTER | ON SIGNAL POLE |
| 2-22 | R10-3ER | 2 OF 11 | 2S | 9 | X | 15 | - | 0.94 | - | - | - | - | - | - | - | - | TO CROSS PUSH BUTTON [RIGHT ARROW] | ON SIGNAL POLE |
| 2-23 | R10-3ED | 2 OF 11 | 2S | 9 | X | 15 | - | 0.94 | - | - | - | - | - | - | - | - | TO CROSS PUSH BUTTON [DOUBLE ARROW] | ON SIGNAL POLE |
| 2-24 | W12-1D | 2 OF 11 | 2S | 24 | X | 24 | - | - | - | 4 | - | - | - | - | 1 | - | DOUBLE DOWN ARROWS | 2' MOUNTING HEIGHT |
| 2-25 | R7-1D | 2 OF 11 | 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 2-26 | R4-7 | 2 OF 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | - | - | KEEP RIGHT | ON SIGNAL POLE |
| **SUBTOTAL** | | | | | | | **0** | **219.75** | **14.92** | **26** | **0** | **0** | **0** | **0** | **31** | | | |

SHEET 1 OF 8

## PERMANENT SIGNING (CONT.)

| SIGN # | SIGN CODE | SIGN SIZE | W IN. | X | H IN. | 637.1220 SIGNS TYPE I REFLECTIVE SH SF | 637.2210 SIGNS TYPE II REFLECTIVE H SF | 637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF | 637.2230 SIGNS TYPE II REFLECTIVE F SF | 634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH | 634.0620 POSTS WOOD 4X6-INCH X 20-FT EACH | 634.0622 POSTS WOOD 4X6-INCH X 22-FT EACH | 634.0624 POSTS WOOD 4X6-INCH X 24-FT EACH | SPV.0060.031 ROUND STEEL SIGN POST SYSTEM EACH | SIGN MOUNTED ON SAME POST AS # | DESCRIPTION | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2-27 | R6-3 | 2 OF 11 2S | 30 | X | 24 | - | 5 | - | - | - | - | - | - | - | - | DIVIDED HIGHWAY CROSSING SIGN AND INTERSECTION | ON SIGNAL POLE |
| 2-28 | R1-1F | 2 OF 11 3 | 36 | X | 36 | - | - | 7.46 | - | - | - | - | - | - | 2-27 | STOP (FOLDING) | ON SIGNAL POLE |
| 2-29 | R6-2R | 2 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | ONE WAY RIGHT ARROW | - |
| 2-30 | R7-1D | 2 OF 11 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 2-31 | R5-2 | 2 OF 11 2S | 24 | X | 24 | - | 4 | - | - | - | - | - | - | 1 | - | NO TRUCKS SYMBOL | - |
| 2-32 | R1-1 | 2 OF 11 2S | 30 | X | 30 | - | 5.18 | - | - | - | - | - | - | 1 | - | STOP | - |
| 2-33 | R3-53R | 2 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | - | 2-32 | RIGHT TURN ONLY | - |
| 2-34 | R6-2R | 2 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | ONE WAY RIGHT ARROW | - |
| 2-35 | R7-1D | 2 OF 11 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 2-36 | R4-7 | 2 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | - | - | KEEP RIGHT | ON SIGNAL POLE |
| 2-37 | W12-1D | 2 OF 11 2S | 24 | X | 24 | - | - | - | 4 | - | - | - | - | 1 | - | DOUBLE DOWN ARROWS | 2' MOUNTING HEIGHT |
| 2-38 | R5-1 | 2 OF 11 2S | 30 | X | 30 | - | 6.25 | - | - | - | - | - | - | - | - | DO NOT ENTER | ON SIGNAL POLE |
| 2-39 | R10-3ED | 2 OF 11 2S | 9 | X | 15 | - | 0.94 | - | - | - | - | - | - | - | - | TO CROSS PUSH BUTTON [DOUBLE ARROW] | ON SIGNAL POLE |
| 2-40 | R10-3ER | 2 OF 11 2S | 9 | X | 15 | - | 0.94 | - | - | - | - | - | - | - | - | TO CROSS PUSH BUTTON [RIGHT ARROW] | ON SIGNAL POLE |
| 2-41 | R10-3EL | 2 OF 11 2S | 9 | X | 15 | - | 0.94 | - | - | - | - | - | - | - | - | TO CROSS PUSH BUTTON [LEFT ARROW] | ON SIGNAL POLE |
| 2-42 | R6-2L | 2 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | - | - | ONE WAY LEFT ARROW | ON SIGNAL POLE |
| 2-43 | M1-94H | 2 OF 11 2S | 102 | X | 18 | - | 12.75 | - | - | - | - | - | - | - | - | OVERHEAD STREET NAME SIGN | ON SIGNAL ARM |
| 2-44 | W4-2R | 2 OF 11 2S | 36 | X | 36 | - | - | - | 9 | - | - | - | - | 1 | - | LANE REDUCTION TRANSITION SYMBOL - [RIGHT LANE] | - |
| 2-45 | R7-1D | 2 OF 11 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | - | 2-44 | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 2-46 | R4-7 | 2 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | - | - | KEEP RIGHT | ON SIGNAL POLE |
| 2-47 | R6-3 | 2 OF 11 2S | 30 | X | 24 | - | 5 | - | - | - | - | - | - | - | - | DIVIDED HIGHWAY CROSSING SIGN AND INTERSECTION | ON SIGNAL POLE |
| 2-48 | R1-1F | 2 OF 11 3 | 36 | X | 36 | - | - | 7.46 | - | - | - | - | - | - | 2-47 | STOP (FOLDING) | ON SIGNAL POLE |
| 2-49 | R6-2L | 2 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | - | - | ONE WAY LEFT ARROW | ON SIGNAL POLE |
| 2-50 | R10-3EL | 2 OF 11 2S | 9 | X | 15 | - | 0.94 | - | - | - | - | - | - | - | - | TO CROSS PUSH BUTTON [LEFT ARROW] | ON SIGNAL POLE |
| 2-51 | R5-1 | 2 OF 11 2S | 30 | X | 30 | - | 6.25 | - | - | - | - | - | - | - | - | DO NOT ENTER | ON SIGNAL POLE |
| 2-52 | R10-3EL | 2 OF 11 2S | 9 | X | 15 | - | 0.94 | - | - | - | - | - | - | - | - | TO CROSS PUSH BUTTON [LEFT ARROW] | ON SIGNAL POLE |
| 2-53 | W12-1D | 2 OF 11 2S | 24 | X | 24 | - | - | - | 4 | - | - | - | - | 1 | - | DOUBLE DOWN ARROWS | 2' MOUNTING HEIGHT |
| 2-54 | R1-1 | 2 OF 11 2S | 30 | X | 30 | - | 5.18 | - | - | - | - | - | - | 1 | - | STOP | - |
| 2-55 | M1-94H | 2 OF 11 2S | 102 | X | 18 | - | 12.75 | - | - | - | - | - | - | - | - | OVERHEAD STREET NAME SIGN | ON SIGNAL ARM |
| 2-56 | R1-1 | 2 OF 11 2S | 30 | X | 30 | - | 5.18 | - | - | - | - | - | - | 1 | - | STOP | - |
| 2-57 | R1-1F | 2 OF 11 3 | 36 | X | 36 | - | - | 7.46 | - | - | - | - | - | - | 2-11 | STOP (FOLDING) | ON SIGNAL POLE |
| 2-58 | R1-1F | 2 OF 11 3 | 36 | X | 36 | - | - | 7.46 | - | - | - | - | - | - | 2-21 | STOP (FOLDING) | ON SIGNAL POLE |
| 2-59 | R1-1F | 2 OF 11 3 | 36 | X | 36 | - | - | 7.46 | - | - | - | - | - | - | 2-50 | STOP (FOLDING) | ON SIGNAL POLE |
| 2-60 | R1-1F | 2 OF 11 3 | 36 | X | 36 | - | - | 7.46 | - | - | - | - | - | - | 2-38 | STOP (FOLDING) | ON SIGNAL POLE |
| 3-01 | R7-1D | 3 OF 11 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 3-02 | R3-20L | 3 OF 11 2S | 24 | X | 36 | - | 6 | - | - | - | - | - | - | 1 | - | BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW | - |
| 3-03 | R6-2R | 3 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | ONE WAY RIGHT ARROW | - |
| 3-04 | R7-1D | 3 OF 11 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 3-05 | R3-8LAAR | 3 OF 11 2S | 72 | X | 30 | - | 15 | - | - | - | - | - | - | 2 | - | LEFT ONLY, AHEAD ONLY, AHEAD ONLY, RIGHT ONLY | - |
| 3-06 | R6-2R | 3 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | ONE WAY RIGHT ARROW | - |
| 3-07 | R6-2R | 3 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | ONE WAY RIGHT ARROW | - |
| 3-08 | R2-1 | 3 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | SPEED LIMIT ___ MPH | 35 MPH |
| 3-09 | R2-1 | 3 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | SPEED LIMIT ___ MPH | 35 MPH |
| 3-10 | R7-1D | 3 OF 11 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | 1 | 3-09 | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 3-11 | R6-2R | 3 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | ONE WAY RIGHT ARROW | - |
| 3-12 | R3-8LAF | 3 OF 11 2S | 54 | X | 30 | - | 11.25 | - | - | - | - | - | - | 2 | - | LEFT ONLY, AHEAD ONLY, AHEAD-RIGHT | - |
| 3-13 | R2-1 | 3 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | SPEED LIMIT ___ MPH | 35 MPH |
| 3-14 | R2-1 | 3 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | SPEED LIMIT ___ MPH | 35 MPH |
| 3-15 | R3-20L | 3 OF 11 2S | 24 | X | 36 | - | 6 | - | - | - | - | - | - | 1 | - | BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW | - |
| 3-16 | R7-1D | 3 OF 11 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW | - |
| **SUBTOTAL** | | | | | | **0** | **206.49** | **44.76** | **17** | **0** | **0** | **0** | **0** | **29** | | | |

## PERMANENT SIGNING (CONT.)

| SIGN # | SIGN CODE | SIGN SIZE | SIGN SIZE W IN. | SIGN SIZE X | SIGN SIZE H IN. | 637.1220 SIGNS TYPE I REFLECTIVE SH SF | 637.2210 SIGNS TYPE II REFLECTIVE H SF | 637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF | 637.2230 SIGNS TYPE II REFLECTIVE F SF | 634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH | 634.0620 POSTS WOOD 4X6-INCH X 20-FT EACH | 634.0622 POSTS WOOD 4X6-INCH X 22-FT EACH | 634.0624 POSTS WOOD 4X6-INCH X 24-FT EACH | SPV.0060.031 ROUND STEEL SIGN POST SYSTEM EACH | SIGN MOUNTED ON SAME POST AS # | DESCRIPTION | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3-17 | R6-2R | 3 OF 11 | 2S | 24 | X 30 | - | 5 | - | - | - | - | - | - | 1 | - | ONE WAY RIGHT ARROW | - |
| 3-18 | JV | 3 OF 11 | 2S | 30 | X 87 | - | 18.125 | - | - | 1 | - | - | - | - | - | ANY VERTICALLY CONFIGURED J-PANEL | - |
| | MB2-1 | 3 OF 11 | 2S | 21 | X 15 | - | - | - | - | - | - | - | - | - | - | JCT - BLUE | - |
| | M1-1 | 3 OF 11 | 2S | 24 | X 24 | - | - | - | - | - | - | - | - | - | - | INTERSTATE SHIELD | IH 41 |
| | M1-1A | 3 OF 11 | 2S | 30 | X 24 | - | - | - | - | - | - | - | - | - | - | INTERSTATE ROUTE MARKER (3 DIGIT) | IH 894 |
| | M1-4 | 3 OF 11 | 2S | 24 | X 24 | - | - | - | - | - | - | - | - | - | - | US ROUTE MARKER | USH 45 |
| 3-19 | R7-1D | 3 OF 11 | 2S | 18 | X 24 | - | 3 | - | - | - | - | - | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 4-01 | R5-1A | 4 OF 11 | 2S | 36 | X 24 | - | 6 | - | - | - | - | - | - | 1 | - | WRONG WAY | - |
| 4-02 | R4-7 | 4 OF 11 | 2S | 24 | X 30 | - | 5 | - | - | - | - | - | - | 1 | - | KEEP RIGHT | - |
| 4-03 | R6-3 | 4 OF 11 | 2S | 30 | X 24 | - | 5 | - | - | - | - | - | - | - | 4-02 | DIVIDED HIGHWAY CROSSING SIGN AND INTERSECTION | - |
| 4-04 | R1-1F | 4 OF 11 | 3 | 36 | X 36 | - | - | 7.46 | - | - | - | - | - | - | 4-02 | STOP (FOLDING) | - |
| 4-05 | R1-1F | 4 OF 11 | 3 | 36 | X 36 | - | - | 7.46 | - | - | - | - | - | - | - | STOP (FOLDING) | ON SIGNAL POLE |
| 4-06 | R6-2L | 4 OF 11 | 2S | 24 | X 30 | - | 5 | - | - | - | - | - | - | - | - | ONE WAY LEFT ARROW | ON SIGNAL POLE |
| 4-07 | R5-1 | 4 OF 11 | 2S | 30 | X 30 | - | 6.25 | - | - | - | - | - | - | - | - | DO NOT ENTER | ON SIGNAL POLE |
| 4-08 | R6-3 | 4 OF 11 | 2S | 30 | X 24 | - | 5 | - | - | - | - | - | - | - | - | DIVIDED HIGHWAY CROSSING SIGN AND INTERSECTION | ON SIGNAL POLE |
| 4-09 | R1-1F | 4 OF 11 | 3 | 36 | X 36 | - | - | 7.46 | - | - | - | - | - | - | 4-08 | STOP (FOLDING) | ON SIGNAL POLE |
| 4-10 | M1-94H | 4 OF 11 | 2S | 72 | X 18 | - | 9 | - | - | - | - | - | - | - | - | OVERHEAD STREET NAME SIGN | ON SIGNAL ARM |
| 4-11 | R4-7 | 4 OF 11 | 2S | 24 | X 30 | - | 5 | - | - | - | - | - | - | - | - | KEEP RIGHT | ON SIGNAL POLE |
| 4-12 | R10-3EL | 4 OF 11 | 2S | 9 | X 15 | - | 0.94 | - | - | - | - | - | - | - | - | TO CROSS PUSH BUTTON [LEFT ARROW] | ON SIGNAL POLE |
| 4-13 | R10-3ER | 4 OF 11 | 2S | 9 | X 15 | - | 0.94 | - | - | - | - | - | - | - | - | TO CROSS PUSH BUTTON [RIGHT ARROW] | ON SIGNAL POLE |
| 4-14 | R10-3EL | 4 OF 11 | 2S | 9 | X 15 | - | 0.94 | - | - | - | - | - | - | - | - | TO CROSS PUSH BUTTON [LEFT ARROW] | ON SIGNAL POLE |
| 4-15 | R10-3ER | 4 OF 11 | 2S | 9 | X 15 | - | 0.94 | - | - | - | - | - | - | - | - | TO CROSS PUSH BUTTON [RIGHT ARROW] | ON SIGNAL POLE |
| 4-16 | R10-3ED | 4 OF 11 | 2S | 9 | X 15 | - | 0.94 | - | - | - | - | - | - | - | - | TO CROSS PUSH BUTTON [DOUBLE ARROW] | ON SIGNAL POLE |
| 4-17 | W12-1D | 4 OF 11 | 2S | 24 | X 24 | - | - | - | 4 | - | - | - | - | 1 | - | DOUBLE DOWN ARROWS | 2' MOUNTING HEIGHT |
| 4-18 | M1-94H | 4 OF 11 | 2S | 102 | X 18 | - | 12.75 | - | - | - | - | - | - | - | - | OVERHEAD STREET NAME SIGN | ON SIGNAL ARM |
| 4-19 | R6-2L | 4 OF 11 | 2S | 24 | X 30 | - | 5 | - | - | - | - | - | - | - | - | ONE WAY LEFT ARROW | ON SIGNAL POLE |
| 4-20 | R5-1 | 4 OF 11 | 2S | 30 | X 30 | - | 6.25 | - | - | - | - | - | - | - | - | DO NOT ENTER | ON SIGNAL POLE |
| 4-21 | R3-20L | 4 OF 11 | 2S | 24 | X 36 | - | 6 | - | - | - | - | - | - | 1 | - | BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW | - |
| 4-22 | R3-20R | 4 OF 11 | 2S | 24 | X 36 | - | 6 | - | - | - | - | - | - | 1 | - | BEGIN RIGHT TURN LANE WITH DOWN LEFT ARROW | - |
| 4-23 | R3-8LAAR | 4 OF 11 | 2S | 72 | X 30 | - | 15 | - | - | - | - | - | - | 2 | - | LEFT ONLY, AHEAD ONLY, AHEAD ONLY, RIGHT ONLY | - |
| 4-24 | W12-1D | 4 OF 11 | 2S | 24 | X 24 | - | - | - | 4 | - | - | - | - | 1 | - | DOUBLE DOWN ARROWS | 2' MOUNTING HEIGHT |
| 4-25 | R1-1F | 4 OF 11 | 3 | 36 | X 36 | - | - | 7.46 | - | - | - | - | - | - | - | STOP (FOLDING) | ON SIGNAL POLE |
| 4-26 | R1-1F | 4 OF 11 | 3 | 36 | X 36 | - | - | 7.46 | - | - | - | - | - | - | - | STOP (FOLDING) | ON SIGNAL POLE |
| 4-27 | R10-3ED | 4 OF 11 | 2S | 9 | X 15 | - | 0.94 | - | - | - | - | - | - | - | - | TO CROSS PUSH BUTTON [DOUBLE ARROW] | ON SIGNAL POLE |
| 4-28 | R10-3ER | 4 OF 11 | 2S | 9 | X 15 | - | 0.94 | - | - | - | - | - | - | - | - | TO CROSS PUSH BUTTON [RIGHT ARROW] | ON SIGNAL POLE |
| 4-29 | R5-1 | 4 OF 11 | 2S | 30 | X 30 | - | 6.25 | - | - | - | - | - | - | - | - | DO NOT ENTER | ON SIGNAL POLE |
| 4-30 | R1-1 | 4 OF 11 | 2S | 30 | X 30 | - | 5.18 | - | - | - | - | - | - | 1 | - | STOP | - |
| 4-31 | R5-1 | 4 OF 11 | 2S | 30 | X 30 | - | 6.25 | - | - | - | - | - | - | - | 4-30 | DO NOT ENTER | - |
| 4-32 | R10-3EL | 4 OF 11 | 2S | 9 | X 15 | - | 0.94 | - | - | - | - | - | - | - | - | TO CROSS PUSH BUTTON [LEFT ARROW] | ON SIGNAL POLE |
| 4-33 | R6-2L | 4 OF 11 | 2S | 24 | X 30 | - | 5 | - | - | - | - | - | - | - | - | ONE WAY LEFT ARROW | ON SIGNAL POLE |
| 4-34 | M1-94H | 4 OF 11 | 2S | 102 | X 18 | - | 12.75 | - | - | - | - | - | - | - | - | OVERHEAD STREET NAME SIGN | ON SIGNAL ARM |
| 4-35 | R6-3 | 4 OF 11 | 2S | 30 | X 24 | - | 5 | - | - | - | - | - | - | - | - | DIVIDED HIGHWAY CROSSING SIGN AND INTERSECTION | ON SIGNAL POLE |
| 4-36 | R1-1F | 4 OF 11 | 3 | 36 | X 36 | - | - | 7.46 | - | - | - | - | - | - | 4-35 | STOP (FOLDING) | ON SIGNAL POLE |
| 4-37 | R10-3ER | 4 OF 11 | 2S | 9 | X 15 | - | 0.94 | - | - | - | - | - | - | - | - | TO CROSS PUSH BUTTON [RIGHT ARROW] | ON SIGNAL POLE |
| 4-38 | R10-3EL | 4 OF 11 | 2S | 9 | X 15 | - | 0.94 | - | - | - | - | - | - | - | - | TO CROSS PUSH BUTTON [LEFT ARROW] | ON SIGNAL POLE |
| 4-39 | R6-2L | 4 OF 11 | 2S | 24 | X 30 | - | 5 | - | - | - | - | - | - | - | - | ONE WAY LEFT ARROW | ON SIGNAL POLE |
| 4-40 | M1-94H | 4 OF 11 | 2S | 72 | X 18 | - | 9 | - | - | - | - | - | - | - | - | OVERHEAD STREET NAME SIGN | ON SIGNAL POLE |
| 4-41 | R4-7 | 4 OF 11 | 2S | 24 | X 30 | - | 5 | - | - | - | - | - | - | - | - | KEEP RIGHT | ON SIGNAL POLE |
| 4-42 | R1-1F | 4 OF 11 | 3 | 36 | X 36 | - | - | 7.46 | - | - | - | - | - | - | - | STOP (FOLDING) | ON SIGNAL POLE |
| 4-43 | J2-4 | 4 OF 11 | 2S | 108 | X 81 | - | 60.75 | - | - | - | 2 | - | - | - | - | ROUTE TURN ASSEMBLY (4 HEADED ROUTE PANEL) | - |
| **SUBTOTAL** | | | | | | **0** | **252.955** | **52.22** | **8** | **1** | **2** | **0** | **0** | **11** | | | |

## PERMANENT SIGNING (CONT.)

| SIGN # | SIGN CODE | SIGN SIZE | W IN. | SIGN SIZE X | H IN. | 637.1220 SIGNS TYPE I REFLECTIVE SH SF | 637.2210 SIGNS TYPE II REFLECTIVE H SF | 637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF | 637.2230 SIGNS TYPE II REFLECTIVE F SF | 634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH | 634.0620 POSTS WOOD 4X6-INCH X 20-FT EACH | 634.0622 POSTS WOOD 4X6-INCH X 22-FT EACH | 634.0624 POSTS WOOD 4X6-INCH X 24-FT EACH | SPV.0060.031 ROUND STEEL SIGN POST SYSTEM EACH | SIGN MOUNTED ON SAME POST AS # | DESCRIPTION | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MB3-3 | 4 OF 11 2S | 24 | X | 12 | - | - | - | - | - | - | - | - | - | - | SOUTH CARDINAL ROUTE MARKER | - |
| | M1-1 | 4 OF 11 2S | 24 | X | 24 | - | - | - | - | - | - | - | - | - | - | INTERSTATE SHIELD | IH 41 |
| | M1-4 | 4 OF 11 2S | 24 | X | 24 | - | - | - | - | - | - | - | - | - | - | US ROUTE MARKER | USH 45 |
| | MB5-1L | 4 OF 11 2S | 21 | X | 21 | - | - | - | - | - | - | - | - | - | - | ADVANCED LEFT TURN ARROW - BLUE | - |
| | MB3-2 | 4 OF 11 2S | 24 | X | 12 | - | - | - | - | - | - | - | - | - | - | EAST CARDINAL ROUTE MARKER | - |
| | M1-1A | 4 OF 11 2S | 30 | X | 24 | - | - | - | - | - | - | - | - | - | - | INTERSTATE ROUTE MARKER (3 DIGIT) | IH 894 |
| | MB5-1L | 4 OF 11 2S | 21 | X | 21 | - | - | - | - | - | - | - | - | - | - | ADVANCED LEFT TURN ARROW - BLUE | - |
| | MB3-1 | 4 OF 11 2S | 24 | X | 12 | - | - | - | - | - | - | - | - | - | - | NORTH CARDINAL ROUTE MARKER | - |
| | M1-1 | 4 OF 11 2S | 24 | X | 24 | - | - | - | - | - | - | - | - | - | - | INTERSTATE SHIELD | IH 41 |
| | M1-4 | 4 OF 11 2S | 24 | X | 24 | - | - | - | - | - | - | - | - | - | - | US ROUTE MARKER | IH 894 |
| | MB6-1 | 4 OF 11 2S | 21 | X | 21 | - | - | - | - | - | - | - | - | - | - | ARROW - RIGHT, LEFT, OR AHEAD | - |
| | MB3-4 | 4 OF 11 2S | 24 | X | 12 | - | - | - | - | - | - | - | - | - | - | WEST CARDINAL ROUTE MARKER | - |
| | M1-1A | 4 OF 11 2S | 30 | X | 24 | - | - | - | - | - | - | - | - | - | - | INTERSTATE ROUTE MARKER (3 DIGIT) | IH 894 |
| | MB6-1 | 4 OF 11 2S | 21 | X | 21 | - | - | - | - | - | - | - | - | - | - | ARROW - RIGHT, LEFT, OR AHEAD | - |
| 4-44 | R2-1 | 4 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | SPEED LIMIT ___ MPH | 35 MPH |
| 4-45 | R2-1 | 4 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | SPEED LIMIT ___ MPH | 35 MPH |
| 4-46 | R3-8LAR | 4 OF 11 2S | 54 | X | 30 | - | 11.25 | - | - | 2 | - | - | - | - | - | LEFT ONLY, AHEAD ONLY, RIGHT ONLY | - |
| 4-47 | R5-1 | 4 OF 11 2S | 30 | X | 30 | - | 6.25 | - | - | - | - | - | - | - | 4-16 | DO NOT ENTER | - |
| 4-48 | R5-1 | 4 OF 11 2S | 30 | X | 30 | - | 6.25 | - | - | - | - | - | - | - | 4-25 | DO NOT ENTER | - |
| 4-49 | R1-1F | 4 OF 11 3 | 36 | X | 36 | - | - | 7.46 | - | - | - | - | - | - | 4-15 | STOP (FOLDING) | - |
| 4-50 | R1-1F | 4 OF 11 3 | 36 | X | 36 | - | - | 7.46 | - | - | - | - | - | - | 4-16 | STOP (FOLDING) | - |
| 4-51 | W12-2 | 4 OF 11 2S | 36 | X | 36 | - | - | - | 9 | - | - | - | - | 1 | - | LOW CLEARANCE SYMBOL | 14'-2" |
| 4-52 | W12-2 | 4 OF 11 2S | 36 | X | 36 | - | - | - | 9 | - | - | - | - | 1 | - | LOW CLEARANCE SYMBOL | 14'-2" |
| 5-01 | R7-1D | 5 OF 11 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 5-02 | R2-1 | 5 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | SPEED LIMIT ___ MPH | 35 MPH |
| 5-03 | R2-1 | 5 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | SPEED LIMIT ___ MPH | 35 MPH |
| 5-04 | R5-1 | 5 OF 11 2S | 30 | X | 30 | - | 6.25 | - | - | 1 | - | - | - | - | - | DO NOT ENTER | ON SIGNAL POLE |
| 5-05 | R1-1F | 5 OF 11 3 | 36 | X | 36 | - | - | 7.46 | - | 1 | - | - | - | - | - | STOP (FOLDING) | ON SIGNAL POLE |
| 5-06 | W3-8 | 5 OF 11 2S | 48 | X | 48 | - | - | - | 16 | - | - | - | - | - | - | RAMP METERED WHEN FLASHING | ON SIGNAL POLE |
| 5-07 | R4-7 | 5 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | - | - | KEEP RIGHT | ON SIGNAL POLE |
| 5-08 | R1-1F | 5 OF 11 3 | 36 | X | 36 | - | - | 7.46 | - | 1 | - | - | - | - | - | STOP (FOLDING) | - |
| 5-09 | R1-1F | 5 OF 11 3 | 36 | X | 36 | - | - | 7.46 | - | - | - | - | - | - | - | STOP (FOLDING) | ON SIGNAL POLE |
| 5-10 | JV | 5 OF 11 2S | 30 | X | 117 | - | 24.375 | - | - | - | - | 2 | - | - | - | ANY VERTICALLY CONFIGURED J-PANEL | - |
| | MB3-3 | 5 OF 11 2S | 24 | X | 12 | - | - | - | - | - | - | - | - | - | - | SOUTH CARDINAL ROUTE MARKER | - |
| | M1-1 | 5 OF 11 2S | 24 | X | 24 | - | - | - | - | - | - | - | - | - | - | INTERSTATE SHIELD | IH 41 |
| | M1-4 | 5 OF 11 2S | 24 | X | 24 | - | - | - | - | - | - | - | - | - | - | US ROUTE MARKER | USH 45 |
| | MB3-2 | 5 OF 11 2S | 24 | X | 12 | - | - | - | - | - | - | - | - | - | - | EAST CARDINAL ROUTE MARKER | - |
| | M1-1A | 5 OF 11 2S | 30 | X | 24 | - | - | - | - | - | - | - | - | - | - | INTERSTATE ROUTE MARKER (3 DIGIT) | IH 894 |
| | MB6-2 | 5 OF 11 2S | 21 | X | 21 | - | - | - | - | - | - | - | - | - | - | ARROW TILT RIGHT OR LEFT | - |
| 5-11 | W3-8 | 5 OF 11 2S | 48 | X | 48 | - | - | - | 16 | - | - | - | - | - | - | RAMP METERED WHEN FLASHING | ON SIGNAL POLE |
| 5-12 | W12-1D | 5 OF 11 2S | 24 | X | 24 | - | - | - | 4 | 1 | - | - | - | - | - | DOUBLE DOWN ARROWS | 2' MOUNTING HEIGHT |
| 5-13 | D9-2 | 5 OF 11 2S | 24 | X | 24 | - | 4 | - | - | - | - | - | - | 1 | - | HOSPITAL | - |
| 5-14 | MB6-1 | 5 OF 11 2S | 21 | X | 21 | - | 3.06 | - | - | - | - | - | - | - | 5-13 | ARROW - RIGHT, LEFT, OR AHEAD | - |
| 5-15 | R3-20L | 5 OF 11 2S | 24 | X | 36 | - | 6 | - | - | - | - | - | - | 1 | - | BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW | - |
| 5-16 | J2-2 | 5 OF 11 2S | 54 | X | 60 | - | 22.5 | - | - | 2 | - | - | - | - | - | ROUTE TURN ASSEMBLY (2 HEADED ROUTE PANEL) | - |
| | MB3-4 | 5 OF 11 2S | 24 | X | 12 | - | - | - | - | - | - | - | - | - | - | WEST CARDINAL ROUTE MARKER | - |
| | M1-1A | 5 OF 11 2S | 30 | X | 24 | - | - | - | - | - | - | - | - | - | - | INTERSTATE ROUTE MARKER (3 DIGIT) | IH 894 |
| | MB4-20R | 5 OF 11 2S | 24 | X | 24 | - | - | - | - | - | - | - | - | - | - | USE RIGHT LANE | - |
| | M3-1 | 5 OF 11 2S | 24 | X | 12 | - | - | - | - | - | - | - | - | - | - | NORTH CARDINAL ROUTE MARKER | - |
| | M1-4 | 5 OF 11 2S | 24 | X | 24 | - | - | - | - | - | - | - | - | - | - | US ROUTE MARKER | USH 45 |
| **SUBTOTAL** | | | | | | **0** | **117.935** | **37.3** | **54** | **8** | **0** | **2** | **0** | **9** | | | |

## PERMANENT SIGNING (CONT.)

| SIGN # | SIGN CODE | SIGN SIZE | W IN. | X | H IN. | 637.1220 SIGNS TYPE I REFLECTIVE SH SF | 637.2210 SIGNS TYPE II REFLECTIVE H SF | 637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF | 637.2230 SIGNS TYPE II REFLECTIVE F SF | 634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH | 634.0620 POSTS WOOD 4X6-INCH X 20-FT EACH | 634.0622 POSTS WOOD 4X6-INCH X 22-FT EACH | 634.0624 POSTS WOOD 4X6-INCH X 24-FT EACH | SPV.0060.031 ROUND STEEL SIGN POST SYSTEM EACH | SIGN MOUNTED ON SAME POST AS # | DESCRIPTION | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M4-20R | 5 OF 11 2S | 24 | X | 24 | - | - | - | - | - | - | - | - | - | - | USE RIGHT LANE | - |
| 5-17 | D16-1L | 5 OF 11 2S | 108 | X | 72 | 54 | - | - | - | - | - | - | - | - | - | DESTINATION GUIDE SIGN (LEFT ARROW) | ON S-40-673 |
| 5-18 | D16-1A | 5 OF 11 2S | 84 | X | 54 | 31.5 | - | - | - | - | - | - | - | - | - | DESTINATION GUIDE SIGN (AHEAD ARROW) | ON S-40-673 |
| 5-19 | D16-1R | 5 OF 11 2S | 108 | X | 84 | 63 | - | - | - | - | - | - | - | - | - | DESTINATION GUIDE SIGN (RIGHT ARROW) | ON S-40-673 |
| 5-20 | R7-1D | 5 OF 11 2S | 18 | X | 24 | - | 3 | - | - | 1 | - | - | - | - | - | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 5-21 | J2-2 | 5 OF 11 2S | 54 | X | 81 | - | 30.375 | - | - | 2 | - | - | - | - | 5-20 | ROUTE TURN ASSEMBLY (2 HEADED ROUTE PANEL) | - |
| | MB3-1 | 5 OF 11 2S | 24 | X | 12 | - | - | - | - | - | - | - | - | - | - | NORTH CARDINAL ROUTE MARKER | - |
| | M1-1 | 5 OF 11 2S | 24 | X | 24 | - | - | - | - | - | - | - | - | - | - | INTERSTATE SHIELD | IH 41 |
| | M1-4 | 5 OF 11 2S | 24 | X | 24 | - | - | - | - | - | - | - | - | - | - | US ROUTE MARKER | USH 45 |
| | MB5-2R | 5 OF 11 2S | 21 | X | 21 | - | - | - | - | - | - | - | - | - | - | ADVANCE ARROW RIGHT BENT - BLUE | - |
| | MB3-4 | 5 OF 11 2S | 24 | X | 12 | - | - | - | - | - | - | - | - | - | - | WEST CARDINAL ROUTE MARKER | - |
| | M1-1A | 5 OF 11 2S | 30 | X | 24 | - | - | - | - | - | - | - | - | - | - | INTERSTATE ROUTE MARKER (3 DIGIT) | IH 894 |
| | MB5-2R | 5 OF 11 2S | 21 | X | 21 | - | - | - | - | - | - | - | - | - | - | ADVANCE ARROW RIGHT BENT - BLUE | - |
| 5-22 | W11-2 | 5 OF 11 2S | 30 | X | 30 | - | - | - | 6.25 | 1 | - | - | - | - | - | PEDESTRIAN CROSSING SYMBOL | - |
| 5-23 | W16-9P | 5 OF 11 2S | 24 | X | 12 | - | - | - | 2 | - | - | - | - | - | 5-22 | AHEAD PLAQUE (YELLOW) | - |
| 5-24 | W12-1D | 5 OF 11 2S | 24 | X | 24 | - | - | - | 4 | 1 | - | - | - | - | - | DOUBLE DOWN ARROWS | 2' MOUNTING HEIGHT |
| 5-25 | J2-3 | 5 OF 11 2S | 78 | X | 57 | - | 30.875 | - | - | 2 | - | - | - | - | - | ROUTE TURN ASSEMBLY (3 HEADED ROUTE PANEL) | - |
| | MB3-3 | 5 OF 11 2S | 24 | X | 12 | - | - | - | - | - | - | - | - | - | - | SOUTH CARDINAL ROUTE MARKER | - |
| | M1-1 | 5 OF 11 2S | 24 | X | 24 | - | - | - | - | - | - | - | - | - | - | INTERSTATE SHIELD | IH 41 |
| | MB6-1 | 5 OF 11 2S | 21 | X | 21 | - | - | - | - | - | - | - | - | - | - | ARROW - RIGHT, LEFT, OR AHEAD | - |
| | MB3-2 | 5 OF 11 2S | 24 | X | 12 | - | - | - | - | - | - | - | - | - | - | EAST CARDINAL ROUTE MARKER | - |
| | M1-1A | 5 OF 11 2S | 30 | X | 24 | - | - | - | - | - | - | - | - | - | - | INTERSTATE ROUTE MARKER (3 DIGIT) | IH 894 |
| | MB6-1 | 5 OF 11 2S | 21 | X | 21 | - | - | - | - | - | - | - | - | - | - | ARROW - RIGHT, LEFT, OR AHEAD | - |
| | M3-3 | 5 OF 11 2S | 24 | X | 12 | - | - | - | - | - | - | - | - | - | - | SOUTH CARDINAL ROUTE MARKER | - |
| | M1-4 | 5 OF 11 2S | 24 | X | 24 | - | - | - | - | - | - | - | - | - | - | US ROUTE MARKER | USH 45 |
| | M6-1 | 5 OF 11 2S | 21 | X | 21 | - | - | - | - | - | - | - | - | - | - | ARROW - RIGHT, LEFT, OR AHEAD | - |
| 5-26 | R5-1 | 5 OF 11 2S | 30 | X | 30 | - | 6.25 | - | - | - | - | - | - | 1 | - | DO NOT ENTER | - |
| 5-27 | R5-1 | 5 OF 11 2S | 30 | X | 30 | - | 6.25 | - | - | - | - | - | - | 1 | - | DO NOT ENTER | - |
| 5-28 | W3-3 | 5 OF 11 2S | 36 | X | 36 | - | - | - | 9 | 1 | - | - | - | - | - | SIGNAL AHEAD | - |
| 5-29 | W3-3 | 5 OF 11 2S | 36 | X | 36 | - | - | - | 9 | 1 | - | - | - | - | - | SIGNAL AHEAD | - |
| 5-30 | W11-2 | 5 OF 11 2S | 30 | X | 30 | - | - | - | 6.25 | 1 | - | - | - | - | - | PEDESTRIAN CROSSING SYMBOL | - |
| 5-31 | W16-2A | 5 OF 11 2S | 24 | X | 12 | - | - | - | 2 | - | - | - | - | - | 5-30 | 250 FEET | - |
| 5-32 | W12-2 | 5 OF 11 2S | 36 | X | 36 | - | - | - | 9 | 1 | - | - | - | - | - | LOW CLEARANCE SYMBOL | 14'-2" |
| 5-33 | R11-54F | 5 OF 11 2S | 48 | X | 30 | - | - | 10 | - | 2 | - | - | - | - | - | RAMP CLOSED USE ALT ROUTE (FOLDING) | - |
| 5-34 | D13-3 | 5 OF 11 2S | 60 | X | 30 | - | 12.5 | - | - | 2 | - | - | - | - | - | FREEWAY ENTRANCE | - |
| 5-35 | R5-1 | 5 OF 11 2S | 30 | X | 30 | - | 6.25 | - | - | 1 | - | - | - | - | - | DO NOT ENTER | - |
| 5-36 | W12-2 | 5 OF 11 2S | 36 | X | 36 | - | - | - | 9 | 1 | - | - | - | - | - | LOW CLEARANCE SYMBOL | 14'-2" |
| 6-01 | W3-2 | 6 OF 11 2S | 36 | X | 36 | - | - | - | 9 | 1 | - | - | - | - | - | YIELD AHEAD | - |
| 6-02 | W16-2 | 6 OF 11 2S | 24 | X | 12 | - | - | - | --- | - | - | - | - | - | 6-01 | (MOD) RAMP | - |
| 6-03 | W12-2 | 6 OF 11 2S | 36 | X | 36 | - | - | - | 9 | 1 | - | - | - | - | - | LOW CLEARANCE SYMBOL | - |
| 6-04 | JV | 6 OF 11 2S | 30 | X | 117 | - | 24.375 | - | - | - | - | 2 | - | - | - | ANY VERTICALLY CONFIGURED J-PANEL | - |
| | MB3-3 | 6 OF 11 2S | 24 | X | 12 | - | - | - | - | - | - | - | - | - | - | SOUTH CARDINAL ROUTE MARKER | - |
| | M1-1 | 6 OF 11 2S | 24 | X | 24 | - | - | - | - | - | - | - | - | - | - | INTERSTATE SHIELD | IH 41 |
| | M1-4 | 6 OF 11 2S | 24 | X | 24 | - | - | - | - | - | - | - | - | - | - | US ROUTE MARKER | USH 45 |
| | MB3-2 | 6 OF 11 2S | 24 | X | 12 | - | - | - | - | - | - | - | - | - | - | EAST CARDINAL ROUTE MARKER | - |
| | M1-1A | 6 OF 11 2S | 30 | X | 24 | - | - | - | - | - | - | - | - | - | - | INTERSTATE ROUTE MARKER (3 DIGIT) | IH 894 |
| | MB5-2R | 6 OF 11 2S | 21 | X | 21 | - | - | - | - | - | - | - | - | - | - | ADVANCE ARROW RIGHT BENT - BLUE | - |
| 6-05 | R4-7 | 6 OF 11 2S | 24 | X | 30 | - | 5 | - | - | 1 | - | - | - | - | - | KEEP RIGHT | - |
| 6-06 | R6-2L | 6 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | - | - | ONE WAY LEFT ARROW | ON SIGNAL POLE |
| 6-07 | R1-1F | 6 OF 11 3 | 36 | X | 36 | - | - | 7.46 | - | 1 | - | - | - | - | - | STOP (FOLDING) | - |
| **SUBTOTAL** | | | | | | **148.5** | **129.875** | **17.46** | **74.5** | **21** | **0** | **2** | **0** | **2** | | | |

## PERMANENT SIGNING (CONT.)

| SIGN # | SIGN CODE | | SIGN SIZE | SIGN SIZE W IN. | | SIGN SIZE H IN. | 637.1220 SIGNS TYPE I REFLECTIVE SH SF | 637.2210 SIGNS TYPE II REFLECTIVE H SF | 637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF | 637.2230 SIGNS TYPE II REFLECTIVE F SF | 634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH | 634.0620 POSTS WOOD 4X6-INCH X 20-FT EACH | 634.0622 POSTS WOOD 4X6-INCH X 22-FT EACH | 634.0624 POSTS WOOD 4X6-INCH X 24-FT EACH | SPV.0060.031 ROUND STEEL SIGN POST SYSTEM EACH | SIGN MOUNTED ON SAME POST AS # | DESCRIPTION | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6-08 | R3-4 | 6 OF 11 | 2S | 24 | X | 24 | - | 4 | - | - | 1 | - | - | - | - | - | NO U-TURN SYMBOL | - |
| 6-09 | R1-1F | 6 OF 11 | 3 | 36 | X | 36 | - | - | 7.46 | - | - | - | - | - | - | 6-08 | STOP (FOLDING) | - |
| 6-10 | R3-20R | 6 OF 11 | 2S | 24 | X | 36 | - | 6 | - | - | - | - | - | - | 1 | - | BEGIN RIGHT TURN LANE WITH DOWN LEFT ARROW | - |
| 6-11 | R1-1 | 6 OF 11 | 2S | 30 | X | 30 | - | 5.18 | - | - | - | - | - | - | 1 | - | STOP | - |
| 6-12 | R5-2 | 6 OF 11 | 2S | 24 | X | 24 | - | 4 | - | - | - | - | - | - | 1 | - | NO TRUCKS SYMBOL | - |
| 6-13 | W12-1D | 6 OF 11 | 2S | 24 | X | 24 | - | - | - | 4 | 1 | - | - | - | - | - | DOUBLE DOWN ARROWS | 2' MOUNTING HEIGHT |
| 6-14 | J3-2 | 6 OF 11 | 2S | 54 | X | 81 | - | 30.375 | - | - | 2 | - | - | - | - | - | DIRECTIONAL ASSEMBLY (2 HEADED ROUTE PANEL) | - |
| | MB3-1 | 6 OF 11 | 2S | 24 | X | 12 | - | - | - | - | - | - | - | - | - | - | NORTH CARDINAL ROUTE MARKER | - |
| | M1-1 | 6 OF 11 | 2S | 24 | X | 24 | - | - | - | - | - | - | - | - | - | - | INTERSTATE SHIELD | IH 41 |
| | M1-4 | 6 OF 11 | 2S | 24 | X | 24 | - | - | - | - | - | - | - | - | - | - | US ROUTE MARKER | USH 45 |
| | MB6-2 | 6 OF 11 | 2S | 21 | X | 21 | - | - | - | - | - | - | - | - | - | - | ARROW TILT RIGHT OR LEFT | - |
| | MB3-4 | 6 OF 11 | 2S | 24 | X | 12 | - | - | - | - | - | - | - | - | - | - | WEST CARDINAL ROUTE MARKER | - |
| | M1-1A | 6 OF 11 | 2S | 30 | X | 24 | - | - | - | - | - | - | - | - | - | - | INTERSTATE ROUTE MARKER (3 DIGIT) | IH 894 |
| | MB6-2 | 6 OF 11 | 2S | 21 | X | 21 | - | - | - | - | - | - | - | - | - | - | ARROW TILT RIGHT OR LEFT | - |
| 6-15 | W3-8 | 6 OF 11 | 2S | 48 | X | 48 | - | - | - | 16 | - | - | - | - | - | - | RAMP METERED WHEN FLASHING | ON SIGNAL POLE |
| 6-16 | R3-4 | 6 OF 11 | 2S | 24 | X | 24 | - | 4 | - | - | 1 | - | - | - | - | - | NO U-TURN SYMBOL | - |
| 6-17 | R1-1F | 6 OF 11 | 3 | 36 | X | 36 | - | - | 7.46 | - | - | - | - | - | - | 6-16 | STOP (FOLDING) | - |
| 6-18 | R3-1 | 6 OF 11 | 2S | 24 | X | 24 | - | 4 | - | - | 1 | - | - | - | - | - | NO RIGHT TURN SYMBOL | - |
| 6-19 | R1-1F | 6 OF 11 | 3 | 36 | X | 36 | - | - | 7.46 | - | - | - | - | - | - | 6-18 | STOP (FOLDING) | - |
| 6-20 | R6-3 | 6 OF 11 | 2S | 30 | X | 24 | - | 5 | - | - | 1 | - | - | - | - | - | DIVIDED HIGHWAY CROSSING SIGN AND INTERSECTION | - |
| 6-21 | R1-1F | 6 OF 11 | 3 | 36 | X | 36 | - | - | 7.46 | - | - | - | - | - | - | 6-20 | STOP (FOLDING) | - |
| 6-22 | R4-7 | 6 OF 11 | 2S | 24 | X | 30 | - | 5 | - | - | 1 | - | - | - | - | - | KEEP RIGHT | - |
| 6-23 | R5-1 | 6 OF 11 | 2S | 30 | X | 30 | - | 6.25 | - | - | 1 | - | - | - | - | - | DO NOT ENTER | - |
| 6-24 | R5-1 | 6 OF 11 | 2S | 30 | X | 30 | - | 6.25 | - | - | - | - | - | - | - | 6-20 | DO NOT ENTER | - |
| 6-25 | W12-1D | 6 OF 11 | 2S | 24 | X | 24 | - | - | - | 4 | 1 | - | - | - | - | - | DOUBLE DOWN ARROWS | 2' MOUNTING HEIGHT |
| 6-26 | D9-2 | 6 OF 11 | 2S | 24 | X | 24 | - | 4 | - | - | 1 | - | - | - | - | - | HOSPITAL | - |
| 6-27 | MB6-1 | 6 OF 11 | 2S | 21 | X | 21 | - | 3.06 | - | - | - | - | - | - | - | 6-26 | ARROW - RIGHT, LEFT, OR AHEAD | - |
| 6-28 | R1-1F | 6 OF 11 | 3 | 36 | X | 36 | - | - | 7.46 | - | - | - | - | - | - | 6-26 | STOP (FOLDING) | - |
| 6-29 | R7-1D | 6 OF 11 | 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 6-30 | R3-8AAR | 6 OF 11 | 2S | 54 | X | 30 | - | 11.25 | - | - | - | - | - | - | 2 | - | AHEAD ONLY, AHEAD ONLY, RIGHT ONLY | - |
| 6-31 | D9-2 | 6 OF 11 | 2S | 24 | X | 24 | - | 4 | - | - | - | - | - | - | 1 | - | HOSPITAL | - |
| 6-32 | MB6-1 | 6 OF 11 | 2S | 21 | X | 21 | - | 3.06 | - | - | - | - | - | - | - | 6-31 | ARROW - RIGHT, LEFT, OR AHEAD | - |
| 6-33 | R3-20L | 6 OF 11 | 2S | 24 | X | 36 | - | 6 | - | - | - | - | - | - | 1 | - | BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW | - |
| 6-34 | R11-54F | 6 OF 11 | 2S | 48 | X | 30 | - | - | 10 | - | 2 | - | - | - | - | - | RAMP CLOSED USE ALT ROUTE (FOLDING) | - |
| 6-35 | R3-7R | 6 OF 11 | 2S | 30 | X | 30 | - | 6.25 | - | - | 1 | - | - | - | - | - | RIGHT LANE MUST TURN RIGHT | - |
| 6-36 | S1-1 | 6 OF 11 | 2S | 36 | X | 36 | - | - | - | 6.75 | - | - | - | - | 1 | - | SCHOOL ADVANCE | - |
| 6-37 | S16-9P | 6 OF 11 | 2S | 30 | X | 18 | - | - | - | 3.75 | - | - | - | - | - | 6-36 | AHEAD PLAQUE (FLUORESCENT YELLOW GREEN) | - |
| 6-38 | R11-54F | 6 OF 11 | 2S | 48 | X | 30 | - | - | 10 | - | 2 | - | - | - | - | - | RAMP CLOSED USE ALT ROUTE (FOLDING) | - |
| 6-39 | R5-1 | 6 OF 11 | 2S | 30 | X | 30 | - | 6.25 | - | - | - | - | - | - | - | 6-18 | DO NOT ENTER | - |
| 6-40 | R5-1A | 6 OF 11 | 2S | 36 | X | 24 | - | 6 | - | - | - | - | - | - | - | 6-23 | WRONG WAY | 3' MOUNTING HEIGHT |
| 6-41 | R5-1A | 6 OF 11 | 2S | 36 | X | 24 | - | 6 | - | - | - | - | - | - | - | 6-24 | WRONG WAY | 3' MOUNTING HEIGHT |
| 6-42 | R3-5A | 6 OF 11 | 2S | 42 | X | 48 | - | 14 | - | - | - | - | - | - | 1 | - | ARROW UP / ONLY | MOUNT ON BRIDGE |
| 6-43 | R3-5R | 6 OF 11 | 2S | 42 | X | 48 | - | 14 | - | - | - | - | - | - | 1 | - | ARROW UP RIGHT / ONLY | MOUNT ON BRIDGE |
| 7-01 | R2-1 | 7 OF 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | SPEED LIMIT ___ MPH | 35 MPH |
| 7-02 | R2-1 | 7 OF 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | SPEED LIMIT ___ MPH | 35 MPH |
| 7-03 | W3-3 | 7 OF 11 | 2S | 36 | X | 36 | - | - | - | 9 | - | - | - | - | 1 | - | SIGNAL AHEAD | - |
| 7-04 | W3-3 | 7 OF 11 | 2S | 36 | X | 36 | - | - | - | 9 | 1 | - | - | - | - | - | SIGNAL AHEAD | - |
| 7-05 | R4-7 | 7 OF 11 | 2S | 24 | X | 30 | - | 5 | - | - | 1 | - | - | - | - | - | KEEP RIGHT | - |
| 7-06 | JV | 7 OF 11 | 2S | 30 | X | 87 | - | 18.125 | - | - | 1 | - | - | - | - | - | ANY VERTICALLY CONFIGURED J-PANEL | - |
| | M2-1 | 7 OF 11 | 2S | 21 | X | 15 | - | - | - | - | - | - | - | - | - | - | JCT | - |
| **SUBTOTAL** | | | | | | | **0** | **200.05** | **57.3** | **52.5** | **19** | **0** | **0** | **0** | **14** | | | |

## PERMANENT SIGNING (CONT.)

| SIGN # | SIGN CODE | | | | SIGN SIZE | W IN. | | H IN. | 637.1220 SIGNS TYPE I REFLECTIVE SH SF | 637.2210 SIGNS TYPE II REFLECTIVE H SF | 637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF | 637.2230 SIGNS TYPE II REFLECTIVE F SF | 634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH | 634.0620 POSTS WOOD 4X6-INCH X 20-FT EACH | 634.0622 POSTS WOOD 4X6-INCH X 22-FT EACH | 634.0624 POSTS WOOD 4X6-INCH X 24-FT EACH | SPV.0060.031 ROUND STEEL SIGN POST SYSTEM EACH | SIGN MOUNTED ON SAME POST AS # | DESCRIPTION | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M1-1 | 7 | OF | 11 | 2S | 24 | X | 24 | - | - | - | - | - | - | - | - | - | - | INTERSTATE SHIELD | IH 41 |
| | M1-1A | 7 | OF | 11 | 2S | 30 | X | 24 | - | - | - | - | - | - | - | - | 1 | - | INTERSTATE ROUTE MARKER (3 DIGIT) | IH 894 |
| | M1-4 | 7 | OF | 11 | 2S | 24 | X | 24 | - | - | - | - | - | - | - | - | 1 | - | US ROUTE MARKER | USH 45 |
| 7-07 | R1-1 | 7 | OF | 11 | 2S | 30 | X | 30 | - | 5.18 | - | - | - | - | - | - | 1 | - | STOP | - |
| 7-08 | R5-2 | 7 | OF | 11 | 2S | 24 | X | 24 | - | 4 | - | - | - | - | - | - | 1 | - | NO TRUCKS SYMBOL | - |
| 7-09 | W12-1D | 7 | OF | 11 | 2S | 24 | X | 24 | - | - | - | 4 | 1 | - | - | - | - | - | DOUBLE DOWN ARROWS | 2' MOUNTING HEIGHT |
| 7-10 | S1-1 | 7 | OF | 11 | 2S | 36 | X | 36 | - | - | - | 6.75 | - | - | - | - | 1 | - | SCHOOL ADVANCE | - |
| 7-11 | S16-7L | 7 | OF | 11 | 2S | 30 | X | 18 | - | - | - | 3.75 | - | - | - | - | 1 | 7-10 | LEFT DIAGONAL DOWNWARD POINTING ARROW (FLUORESCENT) | - |
| 7-12 | R7-7L | 7 | OF | 11 | 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | 1 | - | NO PARKING BUS STOP - LEFT ARROW | - |
| 7-13 | R2-1 | 7 | OF | 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | SPEED LIMIT ___ MPH | 35 MPH |
| 7-14 | R2-1 | 7 | OF | 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | SPEED LIMIT ___ MPH | 35 MPH |
| 7-15 | R7-1D | 7 | OF | 11 | 2S | 18 | X | 24 | - | 3 | - | - | 1 | - | - | - | - | - | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 7-16 | S1-1 | 7 | OF | 11 | 2S | 36 | X | 36 | - | - | - | 6.75 | - | - | - | - | 1 | - | SCHOOL ADVANCE | - |
| 7-17 | S16-7L | 7 | OF | 11 | 2S | 30 | X | 18 | - | - | - | 3.75 | - | - | - | - | 1 | 7-16 | LEFT DIAGONAL DOWNWARD POINTING ARROW (FLUORESCENT) | - |
| 7-18 | R5-2 | 7 | OF | 11 | 2S | 24 | X | 24 | - | 4 | - | - | - | - | - | - | 1 | - | NO TRUCKS SYMBOL | - |
| 7-19 | W12-1D | 7 | OF | 11 | 2S | 24 | X | 24 | - | - | - | 4 | - | - | - | - | 1 | - | DOUBLE DOWN ARROWS | 2' MOUNTING HEIGHT |
| 7-20 | R1-1 | 7 | OF | 11 | 2S | 30 | X | 30 | - | 5.18 | - | - | - | - | - | - | 1 | - | STOP | - |
| 7-21 | R4-7 | 7 | OF | 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | KEEP RIGHT | - |
| 7-22 | R7-7R | 7 | OF | 11 | 2S | 18 | X | 24 | - | 3 | - | - | 1 | - | - | - | - | - | NO PARKING BUS STOP - RIGHT ARROW | - |
| 7-23 | R3-20L | 7 | OF | 11 | 2S | 24 | X | 36 | - | 6 | - | - | 1 | - | - | - | - | - | BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW | - |
| 7-24 | S1-1 | 7 | OF | 11 | 2S | 36 | X | 36 | - | - | - | 6.75 | - | - | - | - | - | 7-05 | SCHOOL ADVANCE | - |
| 7-25 | S16-7R | 7 | OF | 11 | 2S | 30 | X | 18 | - | - | - | 3.75 | - | - | - | - | - | 7-05 | RIGHT DIAGONAL DOWNWARD POINTING ARROW (FLUORESCENT) | - |
| 7-26 | S1-1 | 7 | OF | 11 | 2S | 36 | X | 36 | - | - | - | 6.75 | - | - | - | - | - | 7-21 | SCHOOL ADVANCE | - |
| 7-27 | S16-7R | 7 | OF | 11 | 2S | 30 | X | 18 | - | - | - | 3.75 | - | - | - | - | - | 7-21 | RIGHT DIAGONAL DOWNWARD POINTING ARROW (FLUORESCENT) | - |
| 7-28 | R5-1 | 7 | OF | 11 | 2S | 30 | X | 30 | - | 6.25 | - | - | - | - | - | - | 1 | 7-16 | DO NOT ENTER | - |
| 7-29 | R5-1 | 7 | OF | 11 | 2S | 30 | X | 30 | - | 6.25 | - | - | - | - | - | - | 1 | 7-10 | DO NOT ENTER | - |
| 7-30 | W12-2 | 7 | OF | 11 | 2S | 36 | X | 36 | - | - | - | 9 | - | - | - | - | 1 | - | LOW CLEARANCE SYMBOL | 14'-2" |
| 7-31 | W12-2 | 7 | OF | 11 | 2S | 36 | X | 36 | - | - | - | 9 | - | - | - | - | 1 | - | LOW CLEARANCE SYMBOL | 14'-2" |
| 8-01 | R3-20L | 8 | OF | 11 | 2S | 24 | X | 36 | - | 6 | - | - | - | - | - | - | 1 | - | BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW | - |
| 8-02 | R1-1 | 8 | OF | 11 | 2S | 30 | X | 30 | - | 5.18 | - | - | - | - | - | - | 1 | - | STOP | - |
| 8-03 | R5-2 | 8 | OF | 11 | 2S | 24 | X | 24 | - | 4 | - | - | 1 | - | - | - | - | - | NO TRUCKS SYMBOL | - |
| 8-04 | W11-2 | 8 | OF | 11 | 2S | 30 | X | 30 | - | - | - | 6.25 | - | - | - | - | 1 | - | PEDESTRIAN CROSSING SYMBOL | - |
| 8-05 | W16-7L | 8 | OF | 11 | 2S | 24 | X | 12 | - | - | - | 2 | - | - | - | - | 1 | 8-04 | LEFT DIAGONAL DOWNWARD POINTING ARROW (YELLOW) | - |
| 8-06 | S4-51 | 8 | OF | 11 | 2S | 24 | X | 48 | - | - | - | 8 | - | - | - | - | 1 | - | SCHOOL SPEED LIMIT | 15 MPH |
| 8-07 | R4-7 | 8 | OF | 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | KEEP RIGHT | - |
| 8-08 | R4-7 | 8 | OF | 11 | 2S | 24 | X | 30 | - | 5 | - | - | 1 | - | - | - | - | - | KEEP RIGHT | - |
| 8-09 | W11-2 | 8 | OF | 11 | 2S | 30 | X | 30 | - | - | - | 6.25 | - | - | - | - | 1 | - | PEDESTRIAN CROSSING SYMBOL | - |
| 8-10 | W16-7L | 8 | OF | 11 | 2S | 24 | X | 12 | - | - | - | 2 | - | - | - | - | - | 8-09 | LEFT DIAGONAL DOWNWARD POINTING ARROW (YELLOW) | - |
| 8-11 | R3-20L | 8 | OF | 11 | 2S | 24 | X | 36 | - | 6 | - | - | - | - | - | - | 1 | - | BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW | - |
| 8-12 | R5-1 | 8 | OF | 11 | 2S | 30 | X | 30 | - | 6.25 | - | - | - | - | - | - | 1 | 8-04 | DO NOT ENTER | - |
| 9-01 | R1-1 | 9 | OF | 11 | 2S | 30 | X | 30 | - | 5.18 | - | - | - | - | - | - | 1 | - | STOP | - |
| 9-02 | R5-2 | 9 | OF | 11 | 2S | 24 | X | 24 | - | 4 | - | - | 1 | - | - | - | - | - | NO TRUCKS SYMBOL | - |
| 9-03 | W11-2 | 9 | OF | 11 | 2S | 30 | X | 30 | - | - | - | 6.25 | - | - | - | - | 1 | - | PEDESTRIAN CROSSING SYMBOL | - |
| 9-04 | W16-7L | 9 | OF | 11 | 2S | 24 | X | 12 | - | - | - | 2 | - | - | - | - | 1 | 9-03 | LEFT DIAGONAL DOWNWARD POINTING ARROW (YELLOW) | - |
| 9-05 | R2-1 | 9 | OF | 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | SPEED LIMIT ___ MPH | 35 MPH |
| 9-06 | R2-1 | 9 | OF | 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | SPEED LIMIT ___ MPH | 35 MPH |
| 9-07 | R4-7 | 9 | OF | 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | 1 | - | - | 1 | - | KEEP RIGHT | - |
| 9-08 | R4-7 | 9 | OF | 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | KEEP RIGHT | - |
| 9-09 | R4-7 | 9 | OF | 11 | 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 2 | - | KEEP RIGHT | - |
| 9-10 | R7-7L | 9 | OF | 11 | 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | 1 | - | NO PARKING BUS STOP - LEFT ARROW | - |
| **SUBTOTAL** | | | | | | | | | **0** | **135.47** | **0** | **100.75** | **7** | **1** | **0** | **0** | **38** | | | |

3

## PERMANENT SIGNING (CONT.)

| SIGN # | SIGN CODE | SIGN SIZE | SIGN SIZE W IN. | SIGN SIZE X | SIGN SIZE H IN. | 637.1220 SIGNS TYPE I REFLECTIVE SH SF | 637.2210 SIGNS TYPE II REFLECTIVE H SF | 637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF | 637.2230 SIGNS TYPE II REFLECTIVE F SF | 634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH | 634.0620 POSTS WOOD 4X6-INCH X 20-FT EACH | 634.0622 POSTS WOOD 4X6-INCH X 22-FT EACH | 634.0624 POSTS WOOD 4X6-INCH X 24-FT EACH | SPV.0060.031 ROUND STEEL SIGN POST SYSTEM EACH | SIGN MOUNTED ON SAME POST AS # | DESCRIPTION | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9-11 | R3-8LAR | 9 OF 11 2S | 54 | X | 30 | - | 11.25 | - | - | 2 | - | - | - | - | - | LEFT ONLY, AHEAD ONLY, RIGHT ONLY | - |
| 9-12 | W11-2 | 9 OF 11 2S | 30 | X | 30 | - | - | - | 6.25 | - | - | - | - | 1 | - | PEDESTRIAN CROSSING SYMBOL | - |
| 9-13 | W16-7L | 9 OF 11 2S | 24 | X | 12 | - | - | - | 2 | - | - | - | - | 1 | 9-12 | LEFT DIAGONAL DOWNWARD POINTING ARROW (YELLOW) | - |
| 9-14 | R7-1D | 9 OF 11 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | 1 | - | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 9-15 | R6-2R | 9 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | ONE WAY RIGHT ARROW | - |
| 9-16 | R4-4 | 9 OF 11 2S | 36 | X | 30 | - | 7.5 | - | - | - | - | - | - | 1 | - | BEGIN RIGHT TURN LANE - YIELD TO BIKES | - |
| 9-17 | R7-1D | 9 OF 11 2S | 18 | X | 24 | - | 3 | - | - | 1 | - | - | - | - | - | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 9-18 | W11-2 | 9 OF 11 2S | 30 | X | 30 | - | - | - | 6.25 | 1 | - | - | - | - | - | PEDESTRIAN CROSSING SYMBOL | - |
| 9-19 | W11-2 | 9 OF 11 2S | 30 | X | 30 | - | - | - | 6.25 | - | - | - | - | - | 9-18 | PEDESTRIAN CROSSING SYMBOL | - |
| 9-20 | W16-7R | 9 OF 11 2S | 24 | X | 12 | - | - | - | 2 | - | - | - | - | 1 | 9-18 | RIGHT DIAGONAL DOWNWARD POINTING ARROW (YELLOW) | - |
| 9-21 | W16-7R | 9 OF 11 2S | 24 | X | 12 | - | - | - | 2 | - | - | - | - | - | 9-18 | RIGHT DIAGONAL DOWNWARD POINTING ARROW (YELLOW) | - |
| 9-22 | S1-1 | 9 OF 11 2S | 36 | X | 36 | - | - | - | 6.75 | 1 | - | - | - | - | - | SCHOOL ADVANCE | - |
| 9-23 | S1-1 | 9 OF 11 2S | 36 | X | 36 | - | - | - | 6.75 | - | - | - | - | - | 9-22 | SCHOOL ADVANCE | - |
| 9-24 | S16-9P | 9 OF 11 2S | 30 | X | 18 | - | - | - | 3.75 | - | - | - | - | 1 | 9-22 | AHEAD PLAQUE (FLUORESCENT YELLOW GREEN) | - |
| 9-25 | S16-9P | 9 OF 11 2S | 30 | X | 18 | - | - | - | 3.75 | - | - | - | - | - | 9-22 | AHEAD PLAQUE (FLUORESCENT YELLOW GREEN) | - |
| 9-26 | W4-2R | 9 OF 11 2S | 36 | X | 36 | - | - | - | 9 | - | - | - | - | - | - | LANE REDUCTION TRANSITION SYMBOL - [RIGHT LANE] | - |
| 9-27 | R7-1D | 9 OF 11 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | - | 9-26 | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 9-28 | R7-1D | 9 OF 11 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | 1 | 9-06 | NO PARKING ANY TIME - DOUBLE ARROW | - |
| 10-01 | R5-1A | 10 OF 11 2S | 36 | X | 24 | - | 6 | - | - | - | - | - | - | 1 | - | WRONG WAY | ON LIGHT POLE |
| 10-02 | R4-7 | 10 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | KEEP RIGHT | - |
| 10-03 | R3-20L | 10 OF 11 2S | 24 | X | 36 | - | 6 | - | - | - | - | - | - | 1 | - | BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW | - |
| 10-04 | R5-1 | 10 OF 11 2S | 30 | X | 30 | - | 6.25 | - | - | - | - | - | - | 1 | - | DO NOT ENTER | - |
| 11-01 | R6-2R | 11 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | ONE WAY RIGHT ARROW | - |
| 11-02 | R3-20L | 11 OF 11 2S | 24 | X | 36 | - | 6 | - | - | 1 | - | - | - | - | - | BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW | - |
| 11-03 | R5-1A | 11 OF 11 2S | 36 | X | 24 | - | 6 | - | - | - | - | - | - | 1 | - | WRONG WAY | - |
| 11-04 | D11-1 | 11 OF 11 2S | 24 | X | 18 | - | 3 | - | - | - | - | - | - | - | - | BIKE ROUTE (SYMBOL & WORDS) | ON LIGHT POLE |
| 11-05 | R2-1 | 11 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | SPEED LIMIT ___ MPH | 30 MPH |
| 11-06 | R7-1R | 11 OF 11 2S | 18 | X | 24 | - | 3 | - | - | - | - | - | - | - | 11-05 | NO PARKING ANY TIME - RIGHT ARROW | - |
| 11-07 | R4-7 | 11 OF 11 2S | 24 | X | 30 | - | 5 | - | - | - | - | - | - | 1 | - | KEEP RIGHT | ON LIGHT POLE |
| 11-08 | D11-1 | 11 OF 11 2S | 24 | X | 18 | - | 3 | - | - | - | - | - | - | - | - | BIKE ROUTE (SYMBOL & WORDS) | - |
| 11-09 | R5-1 | 11 OF 11 2S | 30 | X | 30 | - | 6.25 | - | - | 1 | - | - | - | - | - | DO NOT ENTER | - |
| **SUBTOTAL** | | | | | | **0** | **101.25** | **0** | **54.75** | **7** | **0** | **0** | **0** | **16** | | | |
| **UNDISTRIBUTED** | | | | | | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **14** | **0** | | | |
| **PROJECT TOTAL** | | | | | | **148.5** | **1363.78** | **223.96** | **387.5** | **63** | **3** | **4** | **14** | **150** | | | |

SHEET 8 OF 8

## TRAFFIC CONTROL ITEMS

| CATEGORY | LOCATION | * DURATION | 643.0300 TRAFFIC CONTROL DRUMS * | | 643.0420 TRAFFIC CONTROL BARRICADES TYPE III * | | 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A * | | 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C * | | 643.0810 CONNECTED ARROW BOARD * | | 643.1220 TRAFFIC CONTROL CONNECTED WORK ZONE START AND END MARKERS * | | 643.0900 ** TRAFFIC CONTROL SIGNS * | | 643.0920 ** TRAFFIC CONTROL COVERING SIGNS TYPE II * | | | 643.1050 ** TRAFFIC CONTROL SIGNS PCMS * | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DAYS | DRUMS | DAYS | BARRICADES | DAYS | LIGHTS | DAYS | LIGHTS | DAYS | BOARDS | DAYS | MARKERS | DAYS | SIGNS | DAYS | SIGNS | CYCLES | EACH | SIGNS | DAYS |
| 0010 | STAGE 1 | 15 | 185 | 2,775 | 40 | 600 | 80 | 1,200 | 10 | 150 | --- | --- | 2 | 30 | 55 | 825 | 4 | 1 | 4 | 3 | 15 |
| | STAGE 2 | 30 | 210 | 6,300 | 50 | 1,500 | 100 | 3,000 | 25 | 750 | 2 | 60 | 2 | 60 | 85 | 2,190 | 5 | 1 | 5 | --- | --- |
| | STAGE 3 | 65 | 165 | 10,725 | 110 | 7,150 | 220 | 14,300 | 20 | 1,300 | 1 | 65 | 2 | 130 | 140 | 9,100 | --- | --- | --- | --- | --- |
| | STAGE 3A PED | 45 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10 | 450 | --- | --- | --- | --- | --- |
| | STAGE 3B PED | 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 15 | 300 | --- | --- | --- | --- | --- |
| | STAGE 4 | 85 | 235 | 19,975 | 110 | 9,350 | 220 | 18,700 | 60 | 5,100 | 2 | 170 | 2 | 170 | 140 | 11,900 | --- | --- | --- | --- | --- |
| | STAGE 4A PED | 65 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 20 | 1,300 | --- | --- | --- | --- | --- |
| | STAGE 4B PED | 20 | --- | --- | 15 | 300 | 30 | 600 | --- | --- | --- | --- | --- | --- | 40 | 800 | --- | --- | --- | --- | --- |
| | STAGE 5 | 150 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10 | 1,500 | --- | --- | --- | 1 | 5 |
| | STAGE 6A | 90 | 220 | 19,800 | 85 | 7,650 | 170 | 15,300 | 15 | 1,350 | 1 | 90 | 2 | 180 | 95 | 8,550 | 2 | 1 | 2 | 3 | 15 |
| | STAGE 6A1 PED | 65 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 20 | 1,300 | --- | --- | --- | --- | --- |
| | STAGE 6A2 PED | 25 | --- | --- | 30 | 750 | 60 | 1,500 | --- | --- | --- | --- | --- | --- | 30 | 750 | --- | --- | --- | --- | --- |
| | STAGE 6B | 30 | 215 | 6,450 | 100 | 3,000 | 200 | 6,000 | 15 | 450 | 1 | 30 | 2 | 60 | 95 | 2,850 | 1 | 1 | 1 | 3 | 15 |
| | STAGE 6B PED | 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 15 | 450 | --- | --- | --- | --- | --- |
| | STAGE 7A | 30 | 225 | 6,750 | 90 | 2,700 | 180 | 5,400 | 40 | 1,200 | 1 | 30 | 2 | 60 | 100 | 3,000 | 1 | 1 | 1 | 3 | 15 |
| | STAGE 7A PED | 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 20 | 600 | --- | --- | --- | --- | --- |
| | STAGE 7B | 90 | 210 | 18,900 | 70 | 6,300 | 140 | 12,600 | 30 | 2,700 | 1 | 90 | 2 | 180 | 100 | 9,000 | 1 | 1 | 1 | 3 | 15 |
| | STAGE 7B1 PED | 65 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 20 | 1,300 | --- | 1 | --- | --- | --- |
| | STAGE 7B2 PED | 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 30 | 750 | --- | --- | --- | --- | --- |
| | PROJECT TOTALS | | | 91,675 | | 39,300 | | 78,600 | | 13,000 | | 535 | | 870 | | 56,915 | | | 14 | --- | 80 |

NOTES:

* FOR INFORMATION ONLY

** ADDITONAL QUANTITIES ELSEWHERE

## TRAFFIC CONTROL

| CATEGORY | LOCATION | 643.5000 EACH |
|---|---|---|
| 0010 | ID 2410-15-70 | 0.82 |
| | ID 2410-15-71 | 0.18 |
| | PROJECT TOTALS | 1 |

3

3

## TEMPORARY PAVEMENT MARKING ITEMS

| CATEGORY | STAGE | LOCATION | STATION | TO | STATION | OFFSET | 643.3165 TEMPORARY MARKING LINE PAINT 6-INCH (WHITE) LF | 643.3165 TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW) LF | 643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) LF | 643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW) LF | 643.3170 TEMPORARY MARKING LINE EPOXY 6-INCH (WHITE) LF | 643.3270 TEMPORARY MARKING LINE EPOXY 10-INCH (WHITE) LF | 643.3265 TEMPORARY MARKING LINE PAINT 10-INCH (WHITE) LF | 643.3280 TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (WHITE) LF | 643.3350 TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH (WHITE) LF | 643.3520 TEMPORARY MARKING ARROW EPOXY EACH | 643.3620 TEMPORARY MARKING WORD EPOXY EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 1 | NATIONAL AVE - STH 100 TO LINCOLN AVE | 21+75 | - | 72+22 | RT&LT | -- | 2,650 | -- | 495 | -- | -- | 120 | -- | -- | -- | -- |
| | 2 | NATIONAL AVE - STH 100 TO LINCOLN AVE | 21+75 | - | 72+22 | RT&LT | 4,380 | -- | 225 | -- | -- | -- | -- | -- | -- | -- | -- |
| | 3 | NATIONAL AVE - STH 100 TO LINCOLN AVE | 21+75 | - | 72+22 | RT&LT | -- | 2,070 | 240 | 790 | -- | -- | 155 | 840 | 40 | -- | -- |
| | 4 | NATIONAL AVE - STH 100 TO LINCOLN AVE | 21+75 | - | 72+22 | RT&LT | -- | -- | 1,125 | 1,650 | -- | -- | -- | 140 | 145 | -- | -- |
| | 5 | NATIONAL AVE - STH 100 TO LINCOLN AVE | 21+75 | - | 72+22 | RT&LT | -- | -- | -- | -- | 935 | 945 | -- | -- | -- | 2 | 1 |
| | 6A | NATIONAL AVE - STH 100 TO LINCOLN AVE | 21+75 | - | 72+22 | RT&LT | -- | 2,565 | 55 | 2,470 | -- | -- | 525 | 325 | 360 | -- | -- |
| | 6B | NATIONAL AVE - STH 100 TO LINCOLN AVE | 21+75 | - | 72+22 | RT&LT | -- | 535 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 7A | NATIONAL AVE - STH 100 TO LINCOLN AVE | 21+75 | - | 72+22 | RT&LT | -- | -- | 595 | 3,420 | -- | -- | -- | 450 | -- | -- | -- |
| | 7B | NATIONAL AVE - STH 100 TO LINCOLN AVE | 21+75 | - | 72+22 | RT&LT | -- | -- | 55 | 235 | -- | -- | -- | -- | 60 | -- | -- |
| | | | | | | PROJECT TOTALS: | 4,380 | 7,820 | 2,295 | 9,060 | 935 | 945 | 800 | 1,755 | 605 | 2 | 1 |
| | | | | | | | 12,200 | | 11,355 | | | | | | | | |

## TRAFFIC CONTROL SIGNS FIXED MESSAGE

| STAGE | SIGN NUMBER | * SIGN SIZE | 643.1000 SF |
|---|---|---|---|
| DETOUR ROUTE PLAN | 1 | 78"X36" | 20 |
| DETOUR ROUTE PLAN | 2 | 78"X36" | 20 |
| DETOUR ROUTE PLAN | 3 | 78"X36" | 20 |
| DETOUR ROUTE PLAN | 4 | 78"X36" | 20 |
| DETOUR ROUTE PLAN | 5 | 108"X24" | 18 |
| DETOUR ROUTE PLAN | 6 | 72"X12" | 6 |
| DETOUR ROUTE PLAN | 7 | 108"X24" | 18 |
| DETOUR ROUTE PLAN | 8 | 108"X24" | 18 |
| DETOUR ROUTE PLAN | 9 | 72"X12" | 6 |
| DETOUR ROUTE PLAN | 10 | 108"X24" | 18 |
| DETOUR ROUTE PLAN | 11 | 72"X12" | 6 |
| STAGE 4 | 12 | 78"X48" | 26 |
| | | TOTAL | 196 |

*FOR INFORMATION ONLY

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## PEDESTRIAN ACCOMMODATION TRAFFIC CONTROL ITEMS

| | | | 644.1440 | 644.1601 | | 644.1605 | 644.1810 | 644.1900.S | |
|---|---|---|---|---|---|---|---|---|---|
| | | * | TEMPORARY PEDESTRIAN SURFACE MATTING | TEMPORARY PEDESTRIAN CURB RAMP | | TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD | TEMPORARY PEDESTRIAN BARRICADE | TEMPORARY AUDIBLE MESSAGE DEVICES | |
| CATEGORY | LOCATION | DURATION | | * | | | | * | |
| | | DAYS | SF | RAMPS | DAYS | SF | LF | DEVICES | DAYS |
| 0010 | STAGE 1 | 15 | --- | --- | --- | --- | --- | --- | --- |
| | STAGE 2 | 30 | 220 | --- | --- | 40 | 195 | 11 | 330 |
| | STAGE 3 | 65 | 25 | --- | --- | --- | 225 | 12 | 780 |
| | STAGE 3A PED | 45 | 45 | 2 | 90 | 35 | 290 | 5 | 225 |
| | STAGE 3B PED | 20 | 165 | --- | --- | 20 | 210 | 5 | 100 |
| | STAGE 4 | 85 | --- | --- | --- | --- | --- | 2 | 170 |
| | STAGE 4A PED | 65 | 70 | 2 | 130 | 25 | 210 | 8 | 520 |
| | STAGE 4B PED | 20 | 575 | 12 | 240 | 70 | 4,620 | 14 | 280 |
| | STAGE 5 | 150 | --- | --- | --- | --- | --- | --- | --- |
| | STAGE 6A | 90 | --- | --- | --- | --- | 15 | --- | --- |
| | STAGE 6A1 PED | 65 | 330 | 4 | 260 | --- | 5,550 | 8 | 520 |
| | STAGE 6A2 PED | 25 | 855 | 15 | 375 | 265 | 4,800 | 15 | 375 |
| | STAGE 6B | 30 | --- | --- | --- | --- | 15 | --- | --- |
| | STAGE 6B PED | 30 | 75 | 2 | 60 | 20 | 295 | 9 | 270 |
| | STAGE 7A | 30 | --- | --- | --- | --- | 20 | 3 | 90 |
| | STAGE 7A PED | 7 | 85 | 2 | 14 | 15 | 390 | 8 | 56 |
| | STAGE 7B | 90 | --- | --- | --- | --- | --- | 3 | 270 |
| | STAGE 7B1 PED | 65 | 75 | 2 | 130 | 15 | 330 | 7 | 455 |
| | STAGE 7B2 PED | 25 | 45 | 3 | 75 | 25 | 3,260 | 9 | 225 |
| | | PROJECT TOTALS | 2,565 | | 1,374 | 530 | 20,425 | | 4,666 |

NOTES:

* FOR INFORMATION ONLY

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## DETOUR ITEMS

| | | | 643.0900 | | 643.0910 | | | 643.0920 | | | 643.1050 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | * DURATION | ** TRAFFIC CONTROL SIGNS | | TRAFFIC CONTROL COVERING SIGNS TYPE I | | | TRAFFIC CONTROL COVERING SIGNS TYPE II | | | ** TRAFFIC CONTROL SIGNS PCMS | |
| CATEGORY | LOCATION | DAYS | * SIGNS | DAYS | * SIGNS | * CYCLES | EACH | * SIGNS | * CYCLES | EACH | * SIGNS | DAYS |
| 0010 | STAGE 1 - EB NATIONAL TO IH 41/894 SB ENTRANCE RAMP | 15 | 175 | 2,625 | --- | --- | --- | --- | --- | --- | 1 | 7 |
| | STAGE 2 - IH 41/894 SB EXIT RAMP | 30 | 35 | 1,050 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 |
| | STAGE 2 - IH 41/894 NB EXIT RAMP | 30 | 70 | 2,100 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 |
| | STAGE 2 - EB NATIONAL TO IH 41/894 SB ENTRANCE RAMP | 30 | 175 | 5,250 | --- | --- | --- | --- | --- | --- | 1 | 7 |
| | STAGE 2 - WB NATIONAL TO IH 41/894 SB ENTRANCE RAMP | 30 | 140 | 4,200 | --- | --- | --- | --- | --- | --- | 1 | 7 |
| | STAGE 2 - IH 41/894 NB ENTRANCE RAMP | 30 | 60 | 1,800 | --- | --- | --- | --- | --- | --- | 1 | 7 |
| | STAGE 3 - WB NATIONAL AVE | 65 | 80 | 5,200 | --- | --- | --- | --- | --- | --- | 1 | 7 |
| | STAGE 3 - IH 41/894 SB EXIT RAMP | 65 | 35 | 2,275 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 |
| | STAGE 4 - WB NATIONAL AVE | 85 | 80 | 6,800 | --- | --- | --- | --- | --- | --- | 1 | 7 |
| | STAGE 4 - EB NATIONAL AVE | 85 | 90 | 7,650 | --- | --- | --- | --- | --- | --- | 1 | 7 |
| | STAGE 4 - IH 41/894 SB EXIT RAMP | 85 | 35 | 2,975 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 |
| | STAGE 4 - IH 41/894 NB EXIT RAMP | 85 | 70 | 5,950 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 |
| | STAGE 6 - EB NATIONAL AVE | 120 | 90 | 10,800 | --- | --- | --- | --- | --- | --- | 1 | 7 |
| | STAGE 6 - CLEVELAND AVE | 30 | 220 | 6,600 | --- | --- | --- | --- | --- | --- | 2 | 14 |
| | STAGE 6 - EB NATIONAL TO IH 41/894 SB ENTRANCE RAMP | 120 | 175 | 21,000 | --- | --- | --- | --- | --- | --- | 1 | 7 |
| | STAGE 6 - SB STH 100 LT TURN TO EB NATIONAL AVE | 120 | 135 | 16,200 | --- | --- | --- | 1 | 1 | 1 | --- | --- |
| | STAGE 6 - NB STH 100 RT TURN TO EB NATIONAL AVE | 120 | 165 | 19,800 | --- | --- | --- | 1 | 1 | 1 | --- | --- |
| | STAGE 7 - WB NATIONAL AVE | 110 | 80 | 8,800 | --- | --- | --- | --- | --- | --- | 1 | 7 |
| | STAGE 7 - CLEVELAND AVE | 30 | 220 | 6,600 | --- | --- | --- | --- | --- | --- | 2 | 14 |
| | STAGE 7 - IH 41/894 SB EXIT RAMP | 110 | 35 | 3,850 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 |
| | PROJECT TOTALS | | | 141,525 | | | 6 | | | 8 | | 140 |

NOTES:

* FOR INFORMATION ONLY

** ADDITONAL QUANTITIES ELSEWHERE

## PAVEMENT MARKING ITEMS

| CATEGORY | STATION | TO | STATION | 646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE) LF | 646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW) LF | 646.4040 MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE) LF | 646.5020 MARKING ARROW EPOXY (TYPE 2, WHITE) EACH | 646.5020 MARKING ARROW EPOXY (TYPE 3, WHITE) EACH | 646.5120 MARKING WORD EPOXY (WHITE) EACH | 646.5220 MARKING SYMBOL EPOXY (BIKE LANE) (WHITE) EACH | 646.6120 MARKING STOP LINE EPOXY 18-INCH (WHITE) LF | 646.6466 COLD WEATHER MARKING EPOXY 6-INCH (WHITE) LF | 646.6466 COLD WEATHER MARKING EPOXY 6-INCH (YELLOW) LF | 646.6470 COLD WEATHER MARKING EPOXY 10-INCH (WHITE) LF | 646.7120 MARKING DIAGONAL EPOXY 12-INCH (WHITE) LF | 646.7120 MARKING DIAGONAL EPOXY 12-INCH (YELLOW) LF | 646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE) LF | 646.7520 MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE) LF | 646.8120 MARKING CURB EPOXY (YELLOW) LF | 646.8220 MARKING ISLAND NOSE EPOXY (YELLOW) EACH | 646.5060.S MARKING ARROW MMA (WHITE) EACH | 646.5260.S MARKING SYMBOL MMA (WHITE) EACH | SPV.0090.004 MARKING CROSSWALK EPOXY BLOCK STYLE 12-INCH (WHITE) LF | 646.7760.S MARKING BIKE LANE MMA (GREEN) SF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NATIONAL AVENUE | | | | | | | | | | | | | | | | | | | | | | | |
| 0010 | 12+00 | - | 21+75 | 310 | --- | --- | 4 | --- | 2 | --- | --- | 155 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 21+75 | - | 27+75 | 975 | --- | 620 | 4 | --- | 2 | 3 | --- | 490 | --- | 310 | 95 | --- | --- | --- | --- | --- | --- | 2 | 2 | --- | 860 |
| | 27+75 | - | 33+75 | 1,035 | --- | 830 | 10 | --- | --- | 5 | 290 | 520 | --- | 415 | --- | --- | 1,105 | 830 | 120 | 4 | 4 | 4 | 60 | 2,175 |
| | 33+75 | - | 38+50 | 240 | --- | 195 | 1 | --- | 1 | 1 | --- | 120 | --- | 100 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 38+50 | - | 44+50 | 305 | --- | 290 | 3 | --- | --- | 3 | 120 | 155 | --- | 145 | --- | --- | 600 | 490 | 50 | 3 | --- | --- | 80 | 195 |
| | 44+50 | - | 50+50 | 270 | --- | 625 | 4 | --- | 2 | 2 | 65 | 135 | --- | 315 | 160 | --- | 295 | 310 | --- | 1 | --- | --- | --- | --- |
| | 50+50 | - | 56+50 | 270 | --- | 1,020 | 6 | --- | 2 | 4 | 75 | 135 | --- | 510 | 170 | --- | 320 | 340 | --- | 1 | --- | --- | --- | 45 |
| | 56+50 | - | 62+50 | 1,035 | --- | 460 | --- | --- | --- | 4 | --- | 520 | --- | 230 | --- | --- | 465 | 210 | 20 | 2 | --- | --- | 75 | 155 |
| | 62+50 | - | 67+25 | 880 | --- | 215 | --- | --- | --- | 2 | --- | 440 | --- | 110 | --- | --- | 165 | 60 | 30 | 2 | --- | --- | 40 | 80 |
| | 67+25 | - | 71+75 | 985 | --- | 100 | 1 | --- | --- | 5 | --- | 495 | --- | 50 | --- | --- | 175 | 65 | 30 | 2 | 2 | 2 | 40 | 630 |
| | 71+75 | - | 77+00 | 290 | --- | 245 | --- | 1 | --- | --- | --- | 145 | --- | 125 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 205 |
| | CLEVELAND AVENUE | | | | | | | | | | | | | | | | | | | | | | | |
| | 96+55 | - | 97+75 | 255 | --- | 25 | --- | --- | --- | --- | --- | 130 | --- | 15 | --- | --- | --- | --- | 20 | 1 | --- | --- | --- | --- |
| | 102+25 | - | 106+05 | 1,095 | 500 | --- | --- | --- | --- | 3 | --- | 550 | 250 | --- | --- | 105 | --- | --- | 15 | 1 | --- | --- | --- | --- |
| | SUBTOTALS | | | 7,945 | 500 | 4,625 | 33 | 1 | 9 | 32 | 550 | 3,990 | 250 | 2,325 | 425 | 105 | 3,125 | 2,305 | 285 | 17 | 8 | 8 | 295 | 4,345 |
| | PROJECT TOTAL | | | 8,445 | | | 34 | | | | | 4,240 | | | 530 | | | | | | | | | |

## DEWATERING FOR STORM SEWER CONSTRUCTION

| CATEGORY | LOCATION | SPV.0060.018 EACH |
|---|---|---|
| 0010 | ID 2410-15-70 | 1 |
| | PROJECT TOTALS | 1 |

3

## PAVEMENT MARKING REMOVAL ITEMS

| CATEGORY | STAGE | 646.9002 MARKING REMOVAL LINE 6-INCH LF | 646.9012 MARKING REMOVAL LINE WATER BLASTING 6-INCH LF | 646.9102 MARKING REMOVAL LINE 10-INCH LF | 646.9112 MARKING REMOVAL LINE WATER BLASTING 10-INCH LF | 646.9200 MARKING REMOVAL LINE WIDE LF | 646.9300 MARKING REMOVAL SPECIAL MARKING EACH | 646.9310 MARKING REMOVAL SPECIAL MARKING WATER BLASTING EACH |
|---|---|---|---|---|---|---|---|---|
| 0010 | STAGE 1 | 560 | 75 | 660 | --- | 35 | --- | --- |
| | STAGE 2 | 885 | --- | 425 | --- | 35 | --- | --- |
| | STAGE 3 | 1,100 | --- | 590 | 155 | 25 | --- | --- |
| | STAGE 4 | 500 | --- | --- | --- | --- | --- | --- |
| | STAGE 5 | --- | --- | --- | --- | --- | --- | --- |
| | STAGE 6 | 2,970 | 200 | 805 | 355 | 90 | 16 | 2 |
| | STAGE 7 | 820 | --- | 195 | --- | 150 | --- | --- |
| PROJECT TOTALS | | 6,835 | 275 | 2,675 | 510 | 335 | 16 | 2 |

3

## BIOSWALE PLANTING ITEMS

| PROJECT ID | CATEGORY | LOCATION | SPV.0060.008 CATMINT NEPETA 'BLUE WONDER' 1 GALLON EA | SPV.0060.009 DAYLILIES 'STELLA D'ORO' 1 GALLON EA | SPV.0060.010 FALSE INDIGO 'MIDNIGHT PRAIRIE BLUE EYES' 1 GALLON EA | SPV.0060.011 GRO LOW SUMAC 2 GALLON EA | SPV.0060.012 KARL FOERSTER GRASS 1 GALLON EA | SPV.0060.013 PANICUM GRASS 'APACHE ROSE' 1 GALLON EA | SPV.0060.014 PURPLE CONEFLOWER 'MAGNUS' 1 GALLON EA | SPV.0060.015 RED TWIGGED DOGWOOD 3 GALLON EA |
|---|---|---|---|---|---|---|---|---|---|---|
| ID 2410-15-71 | 0010 | BIOSWALE 1 | --- | 140 | 40 | --- | --- | --- | --- | 22 |
| | | BIOSWALE 2 | 80 | 40 | --- | 45 | 35 | 14 | 40 | --- |
| | | BIOSWALE 3 | --- | --- | 60 | 35 | --- | 90 | 60 | 9 |
| | | BIOSWALE 4 | 20 | 20 | 23 | --- | 10 | 25 | 30 | 6 |
| | | BIOSWALE 5 | 105 | 95 | 20 | 15 | 22 | 47 | 120 | 22 |
| | | PROJECT TOTALS | 205 | 295 | 143 | 95 | 67 | 176 | 250 | 59 |

## GEOTEXTILE/GEOGRID ITEMS

| PROJECT ID | CATEGORY | STATION | TO | STATION | 645.0111 GEOTEXTILE TYPE DF SCHEDULE A SY | 645.0220 GEOGRID TYPE SR SY |
|---|---|---|---|---|---|---|
| | | NATIONAL AVENUE | | | | |
| ID 2410-15-70 | 0010 | 21+75 | - | 27+75 | 315 | 4,490 |
| | | 27+75 | - | 33+75 | 195 | 8,900 |
| | | 33+75 | - | 38+50 | 175 | 4,350 |
| | | 38+50 | - | 44+50 | 295 | 6,280 |
| | | 44+50 | - | 50+50 | 60 | 2,700 |
| | | 50+50 | - | 56+50 | 140 | 1,215 |
| | | 56+50 | - | 62+50 | 90 | 5,845 |
| | | 62+50 | - | 67+25 | 75 | 4,550 |
| | | 67+25 | - | 72+22 | 215 | 4,715 |
| | | CLEVELAND AVENUE | | | | |
| | | 96+55 | - | 97+75 | --- | 1,075 |
| | | 102+25 | - | 106+05 | --- | 2,735 |
| | | PROJECT TOTAL | | | 1,560 | 46,855 |

3

## BIOSWALE ITEMS

| PROJECT ID | CATEGORY | STATION | TO | STATION | 612.0106 PIPE UNDERDRAIN 6-INCH LF | 612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF | 645.0112 GEOTEXTILE TYPE DF SCHEDULE B SY | SPV.0035.002 ENGINEERED SOIL BIOSWALES CY | SPV.0035.003 BEDDING LAYER BIOSWALES CY | SPV.0035.004 STORAGE LAYER BIOSWALES CY | SPV.0180.001 MULCH BIOSWALES SY | SPV.0035.005 COBBLESTONES CY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NATIONAL AVENUE | | | | | | | | | | |
| ID 2410-15-71 | 0010 | 21+75 | - | 27+75 | 145 | --- | 240 | 160 | 20 | 240 | 240 | --- |
| | | 27+75 | - | 33+75 | 75 | 20 | 130 | 90 | 15 | 130 | 130 | 90 |
| | | 33+75 | - | 38+50 | 235 | 35 | 505 | 335 | 45 | 505 | 505 | 285 |
| | | 38+50 | - | 44+50 | 165 | 40 | 415 | 280 | 35 | 415 | 415 | 325 |
| | | 44+50 | - | 50+50 | 30 | --- | 55 | 40 | 5 | 55 | 55 | --- |
| | | 50+50 | - | 56+50 | 75 | 40 | 240 | 160 | 20 | 240 | 240 | 345 |
| | | 56+50 | - | 62+50 | 30 | --- | 55 | 35 | 5 | 55 | 55 | --- |
| | | 62+50 | - | 67+25 | --- | --- | --- | --- | --- | --- | --- | --- |
| | | 67+25 | - | 72+22 | 235 | 60 | 620 | 415 | 55 | 620 | 620 | 495 |
| | | CLEVELAND AVENUE | | | | | --- | | | | | |
| | | 96+55 | - | 97+75 | --- | --- | --- | --- | --- | --- | --- | --- |
| | | 102+25 | - | 106+05 | --- | --- | --- | --- | --- | --- | --- | --- |
| | | WASTE SITE | | | --- | --- | --- | --- | --- | --- | --- | --- |
| | | UNDISTRIBUTED | | | --- | --- | --- | --- | --- | --- | --- | --- |
| | | PROJECT TOTALS | | | 990 | 195 | 2,260 | 1,515 | 200 | 2,260 | 2,260 | 1,540 |



FILE NAME: "T:\1232708\Civil3D\24101500\sheets\030200_mq.pptx" PLOT DATE 1/29/2026 4:34:11 PM PLOT BY : ARG PLOT SCALE : 1:1

## CONSTRUCTION STAKING ITEMS

| CATEGORY | STATION | TO | STATION | 650.4500 CONSTRUCTION STAKING SUBGRADE LF | 650.5000 CONSTRUCTION STAKING BASE LF | 650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF | 650.6501 CONSTRUCTION STAKING STRUCTURE LAYOUT EA | 650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF | 650.9000 CONSTRUCTION STAKING CURB RAMPS EA | 650.9500 CONSTRUCTION STAKING SIDEWALK EA | 650.9911 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL EA | 650.9920 CONSTRUCTION STAKING SLOPE STAKES LF | ** SPV.0060.304 CONSTRUCTION STAKING SANITARY SEWER EA | *** SPV.0090.406 CONSTRUCTION STAKING WATER MAIN LF | SPV.0090.003 CONSTRUCTION STAKING FENCE LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NATIONAL AVENUE | | | | | | | | | | | | | | |
| 0010 | 16+25 | - | 21+75 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 21+75 | - | 27+75 | 1,060 | --- | --- | --- | 1,060 | --- | --- | --- | 1,060 | 2 | --- | --- |
| | 27+75 | - | 33+75 | 1,200 | --- | --- | --- | 1,200 | 18 | --- | --- | 1,200 | 2 | --- | --- |
| | 33+75 | - | 38+50 | 950 | --- | --- | --- | 950 | --- | --- | --- | 950 | 2 | --- | --- |
| | 38+50 | - | 44+50 | 1,200 | --- | --- | --- | 1,200 | 16 | --- | --- | 1,200 | --- | --- | --- |
| | 44+50 | - | 50+50 | 650 | --- | --- | --- | 650 | 7 | --- | --- | 1,200 | --- | --- | 80 |
| | 50+50 | - | 56+50 | 310 | --- | --- | --- | 310 | 9 | --- | --- | 1,200 | 1 | --- | 20 |
| | 56+50 | - | 62+50 | 1,200 | --- | --- | --- | 1,200 | 12 | --- | --- | 1,200 | 2 | --- | --- |
| | 62+50 | - | 67+25 | 950 | --- | --- | --- | 950 | 6 | --- | --- | 950 | 2 | --- | --- |
| | 67+25 | - | 72+25 | 930 | --- | --- | --- | 930 | 6 | --- | --- | 930 | 1 | --- | --- |
| | CLEVELAND AVENUE | | | | | | | | | | | | | | |
| | 96+55 | - | 97+75 | 285 | --- | --- | --- | 290 | --- | --- | --- | 290 | --- | --- | --- |
| | 102+25 | - | 106+05 | 515 | 85 | 170 | --- | 430 | --- | --- | --- | 520 | 2 | --- | --- |
| | 106+05 | - | 131+00 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 2 | --- | --- |
| | 131+00 | - | 151+18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 3 | --- | --- |
| | WASTE SITE | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | UNDISTRIBUTED | | | --- | --- | --- | --- | --- | --- | 1 | 1 | --- | --- | 6,750 | --- |
| | CATEGORY 0010 SUBTOTAL | | | 9,250 | 85 | 170 | 0 | 9,170 | 74 | 1 | 1 | 10,700 | 19 | 6,750 | 100 |
| | NATIONAL AVENUE | | | | | | | | | | | | | | |
| 0040 | 44+50 | - | 50+50 | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- |
| | CATEGORY 0040 SUBTOTAL | | | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | PROJECT TOTALS | | | 9,250 | 85 | 170 | 1 | 9,170 | 74 | 1 | 1 | 10,700 | 19 | 6,750 | 100 |

** CATEGORY 0050

*** CATEGORY 0060

## SAWING ITEMS

| CATEGORY | STATION | TO | STATION | 690.0150 SAWING ASPHALT LF | 690.0250 SAWING CONCRETE LF | SPV.0060.006 TREE ROOT SAWING EA |
|---|---|---|---|---|---|---|
| | NATIONAL AVENUE | | | | | |
| 0010 | 21+75 | - | 27+75 | 515 | 315 | 11 |
| | 27+75 | - | 33+75 | 270 | 65 | 6 |
| | 33+75 | - | 38+50 | 210 | 35 | 9 |
| | 38+50 | - | 44+50 | --- | 510 | 16 |
| | 44+50 | - | 50+50 | --- | 1,530 | 9 |
| | 50+50 | - | 56+50 | --- | 2,495 | --- |
| | 56+50 | - | 62+50 | 230 | 240 | 8 |
| | 62+50 | - | 67+25 | 80 | 120 | 3 |
| | 67+25 | - | 72+22 | 190 | 305 | 7 |
| | CLEVELAND AVENUE | | | | | |
| | 96+55 | - | 97+75 | 335 | 10 | --- |
| | 102+25 | - | 106+05 | 75 | 80 | 5 |
| | PROJECT TOTALS | | | 1,905 | 5,705 | 74 |

## UTILITY LINE OPENING

| CATEGORY | STATION | TO | STATION | SPV.0060.007 UTILITY LINE OPENING EA |
|---|---|---|---|---|
| | NATIONAL AVENUE | | | |
| 0010 | 21+75 | - | 27+75 | --- |
| | 27+75 | - | 33+75 | --- |
| | 33+75 | - | 38+50 | --- |
| | 38+50 | - | 44+50 | --- |
| | 44+50 | - | 50+50 | --- |
| | 50+50 | - | 56+50 | --- |
| | 56+50 | - | 62+50 | --- |
| | 62+50 | - | 67+25 | --- |
| | 67+25 | - | 72+22 | --- |
| | CLEVELAND AVENUE | | | |
| | 96+55 | - | 97+75 | --- |
| | 102+25 | - | 106+05 | --- |
| | UNDISTRIBUTED | | | 25 |
| | PROJECT TOTAL | | | 25 |

## SANITARY SEWER PIPES

| CATEGORY | FROM | - | TO | SPV.0090.300 SANITARY SEWER RELAY SDR 35 PVC SP 8-INCH LF | SPV.0090.301 SANITARY SEWER RELAY SDR 35 PVC SP 10-INCH LF |
|---|---|---|---|---|---|
| 0050 | S1 | - | S2 | 287.5 | --- |
| | S2 | - | S3 | 320.0 | --- |
| | S3 | - | S4 | 389.0 | --- |
| | S4 | - | S5 | --- | 399.0 |
| | S5 | - | S6 | --- | 300.3 |
| | S8 | - | S7 | 312.6 | --- |
| | S12 | - | S10 | 397.1 | --- |
| | S14 | - | S12 | 221.0 | --- |
| | S15 | - | S14 | 198.9 | --- |
| | S20 | - | S22 | 157.0 | --- |
| | S22 | - | S24 | 150.3 | --- |
| | S27 | - | S26 | 42.0 | --- |
| | S26 | - | S10 | 37.8 | --- |
| | S10 | - | S25 | 151.4 | --- |
| | S28 | - | S12 | 85.3 | --- |
| | S29 | - | S15 | 86.1 | --- |
| | | | PROJECT TOTAL | 2,836 | 700 |

## BUILDING SANITARY SEWER

| CATEGORY | STATION | OFFSET | ADDRESS | SPV.0200.301 SANITARY RISER 6-INCH VERT. FT | SPV.0090.302 BUILDING SANITARY SEWER 6-INCH LF |
|---|---|---|---|---|---|
| 0050 | 22+50.2 | RT | #10757 National | --- | 36 |
| | 24+28.8 | RT | #10743 National | --- | 36 |
| | 25+68.8 | RT | #10725 National | --- | 36 |
| | 27+50.6 | RT | #10701 National | --- | 36 |
| | 29+13.1 | RT | #10539 National | --- | 36 |
| | 30+83.0 | RT | #10533 National | --- | 36 |
| | 32+66.6 | LT | #10296 National | 3.75 | 77 |
| | 34+18.2 | RT | #10269 National | --- | 36 |
| | 36+53.4 | RT | #10247-43 National | --- | 36 |
| | 56+84.6 | LT | #9932 National | --- | 36 |
| | 58+07.5 | LT | #9910 National | --- | 36 |
| | 58+58.1 | LT | #9902 National | --- | 36 |
| | 60+29.0 | RT | #9843 National | --- | 78.5 |
| | 61+74.3 | LT | #9826-24 National | --- | 34 |
| | 62+35.1 | LT | #9806 National | --- | 34 |
| | 64+23.8 | RT | #9743 National | --- | 78.5 |
| | 66+01.9 | LT | #9720-18 National | --- | 34 |
| | 67+02.5 | RT | #9707 National | --- | 78.5 |
| | 67+90.0 | RT | #9627 National | --- | 92.5 |
| | 102+60.6 | RT | #10253 Cleveland | --- | 19 |
| | 104+62.3 | RT | #10231 Cleveland | --- | 21 |
| | 105+17.4 | RT | #10221 Cleveland | --- | 21 |
| | 150+78.6 | LT | #9700 National | --- | 30.5 |
| | 151+11.3 | LT | #2341-39 97th | --- | 30.5 |
| | | | PROJECT TOTALS | 4 | 1,025 |

3

## SANITARY SEWER STRUCTURES

| CATEGORY | NUMBER | STATION | OFFSET | ADDRESS | RIM ELEVATION | LOWEST INVERT | SPV.0200.300 SANITARY MANHOLE 48" DIA. VERT. FT | SPV.0060.300 INTERNAL SANITARY MANHOLE SEAL EA | SPV.0060.301 ADJUST SANITARY MANHOLE FRAME EA | SPV.0060.302 SANITARY MANHOLE FRAME W/ SOLID GASKETED LID EA | SPV.0060.303 SANITARY MANHOLE ABANDONMENT EA | SPV.0060.305 RECONSTRUCTING MMSD MANHOLE EA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0050 | S1 | 22+44.5 | 20.9 RT | 10757 National | 179.25 | 167.90 | 11.35 | 1 | 1 | 1 | --- | --- |
| | S2 | 25+32.0 | 21.1 RT | 10725 National | 178.45 | 166.70 | 11.75 | 1 | 1 | 1 | --- | --- |
| | S3 | 28+52.0 | 21.3 RT | Wildwood / National | 176.85 | 165.40 | 11.45 | 1 | 1 | 1 | --- | --- |
| | S4 | 31+41.0 | 20.7 RT | Cleveland / National | 175.60 | 164.00 | 11.60 | 1 | 1 | 1 | --- | --- |
| | S5 | 34+40.0 | 20.2 RT | 10269 National | 175.05 | 162.00 | 13.05 | 1 | 1 | 1 | --- | --- |
| | S6 | 37+40.3 | 20 RT | 10247-43 National | 173.00 | 158.33 | --- | 1 | 1 | 1 | --- | --- |
| | S7 | 55+50.5 | 20.4 LT | 100th / National | 196.70 | 186.47 | 10.23 | 1 | 1 | 1 | --- | --- |
| | S8 | 58+63.0 | 20.1 LT | 9902 National | 206.65 | 196.70 | 9.95 | 1 | 1 | 1 | --- | --- |
| | S9 | 58+80.1 | 19.7 LT | 9902 National | 208.28 | 197.56 | --- | --- | --- | --- | 1 | --- |
| | S10 | 59+73.0 | 22.0 LT | 99th / National | 210.00 | 198.30 | 11.70 | 1 | 1 | 1 | | --- |
| | S11 | 61+05.3 | 39.2 RT | 9723-01 National | 215.19 | 204.43 | --- | --- | --- | --- | 1 | --- |
| | S12 | 63+70.1 | 21.8 LT | 98th / National | 222.45 | 210.30 | 12.15 | 1 | 1 | 1 | --- | --- |
| | S13 | 64+05.2 | 39.2 RT | 9743 National | 223.64 | 211.31 | --- | --- | --- | --- | 1 | --- |
| | S14 | 65+91.1 | 21.7 LT | 9720-18 National | 225.50 | 211.90 | 13.60 | 1 | 1 | 1 | --- | --- |
| | S15 | 67+90.0 | 21.6 LT | 97th / National | 226.80 | 213.00 | 13.80 | 1 | 1 | 1 | --- | --- |
| | S16 | 69+78.8 | 23.1 LT | 9622 National | 229.35 | 216.65 | --- | --- | --- | --- | 1 | --- |
| | S17 | 70+04.5 | 38.4 RT | 9627 National | 229.24 | 215.19 | --- | --- | --- | --- | 1 | --- |
| | S18 | 72+18.0 | 39.1 RT | 9515 National | 228.74 | 216.56 | --- | --- | --- | --- | 1 | --- |
| | S19 | 101+39.2 | 35.4 RT | 10253 Cleveland | 176.50 | 166.03 | --- | --- | --- | --- | 1 | --- |
| | S20 | 102+48.0 | 19.5 RT | 10253 Cleveland | 177.70 | 164.90 | 12.80 | 1 | 1 | 1 | | --- |
| | S21 | 103+18.3 | 33.5 RT | 10253 Cleveland | 179.21 | 164.96 | --- | --- | --- | --- | 1 | --- |
| | S22 | 104+05.0 | 19.6 RT | 10253 Cleveland | 178.15 | 163.70 | 14.45 | 1 | 1 | 1 | --- | --- |
| | S23 | 105+29.2 | 33.7 RT | 10221 Cleveland | 176.75 | 163.37 | --- | --- | --- | --- | 1 | --- |
| | S24 | 105+55.3 | 19.9 RT | 10221 Cleveland | 175.90 | 159.25 | --- | 1 | 1 | 1 | --- | --- |
| | S25 | 118+79.0 | 3.0 RT | 2459 99th | 206.15 | 193.40 | 12.75 | 1 | 1 | 1 | --- | --- |
| | S26 | 130+79.0 | 4.8 RT | 2410 99th | 210.05 | 199.00 | 11.05 | 1 | 1 | 1 | --- | --- |
| | S27 | 131+21.0 | 4.8 RT | 2415 99th | 210.55 | 199.45 | 11.10 | 1 | 1 | 1 | --- | --- |
| | S28 | 141+17.0 | 5.1 RT | 2367 98th | 222.65 | 213.45 | 9.20 | 1 | 1 | 1 | --- | --- |
| | S29 | 151+17.6 | 5.2 RT | 2341-39 97th | 226.50 | 214.95 | 11.55 | 1 | 1 | 1 | --- | --- |
| | MMSD1 | 30+64 | 5 LT | --- | --- | --- | --- | --- | --- | --- | --- | 1 |
| | MMSD2 | 33+41 | 5 LT | --- | --- | --- | --- | --- | --- | --- | --- | 1 |
| | MMSD3 | 37+41 | 5 LT | --- | --- | --- | --- | --- | --- | --- | --- | 1 |
| | MMSD4 | 37+41 | 20 LT | --- | --- | --- | --- | --- | --- | --- | --- | 1 |
| | | | | PROJECT TOTALS | | | 214 | 20 | 20 | 20 | 9 | 4 |

## WATER MAIN RELAY

| CATEGORY | FROM STATION | FROM OFFSET | TO STATION | TO OFFSET | LOCATION | SPV.0060.400 WATER MAIN CONNECTION 6-INCH EA | SPV.0060.401 WATER MAIN CONNECTION 8-INCH EA | SPV.0060.402 WATER MAIN CONNECTION 12-INCH EA | SPV.0060.403 WATER MAIN VALVE 6-INCH EA | SPV.0060.404 WATER MAIN VALVE 8-INCH EA | SPV.0060.405 WATER MAIN VALVE 12-INCH EA | SPV.0060.406 SHORT SIDE HYDRANT EA | SPV.0060.407 LONG SIDE HYDRANT EA | SPV.0060.408 AIR RELEASE ASSEMBLY, 1.5-INCH EA | SPV.0060.409 ADJUST WATER VALVE BOX EA | SPV.0090.400 WATER MAIN RELAY 6-INCH LF | SPV.0090.401 WATER MAIN RELAY 8-INCH LF | SPV.0090.402 WATER MAIN RELAY 12-INCH LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0060 | 22+14.0 | 23.0 RT | 71+45.0 | 32.0 LT | NATIONAL | --- | --- | 2 | --- | --- | 8 | 7 | 5 | 1 | 20 | --- | --- | 4,976.2 |
| | 179+19.0 | 10.4 RT | 179+86.8 | 11.1 RT | WILDWOOD | --- | 1 | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | 67.8 | --- |
| | 96+50.0 | 5.7 RT | 100+05.8 | 5.9 RT | CLEVELAND | --- | 1 | --- | --- | 1 | --- | --- | 1 | 1 | 2 | --- | 355.8 | --- |
| | 100+05.8 | 5.9 RT | 105+45.0 | 11.7 RT | CLEVELAND | --- | --- | --- | --- | --- | 2 | 2 | 1 | --- | 5 | --- | --- | 541.9 |
| | 105+45.0 | 15.7 RT | 105+45.0 | 37.6 RT | CLEVELAND | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 21.9 | --- |
| | 105+45.0 | 15.7 RT | 105+45.0 | 36.3 LT | CLEVELAND | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 52 |
| | 108+88.9 | 5.9 LT | 109+74.3 | 6.0 LT | 102ND | 1 | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | 85.2 | --- | |
| | 109+74.3 | 19.5 RT | 111+44.6 | 7.6 RT | 102ND | --- | --- | 1 | --- | --- | 1 | 1 | --- | --- | 2 | --- | --- | 166.6 |
| | 169+32.0 | 5.6 LT | 169+74.6 | 7.5 LT | 101ST | 1 | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | 38.6 | --- | --- |
| | 160+34.2 | 45.7 LT | 160+68.8 | 17.5 LT | 100TH | --- | 1 | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | 43.9 | 2 |
| | 118+77.0 | 6.0 LT | 120+02.5 | 49.5 LT | 99TH | --- | --- | 1 | --- | --- | 1 | 1 | --- | 1 | 2 | --- | --- | 140.5 |
| | 130+37.3 | 5.1 LT | 131+22.7 | 6.2 LT | 99TH | 1 | --- | --- | 1 | --- | --- | 1 | --- | --- | 2 | 85.8 | --- | --- |
| | 140+35.8 | 6.7 LT | 141+20.5 | 7.9 LT | 98TH | 1 | --- | --- | 1 | --- | --- | 1 | --- | --- | 2 | 85.1 | --- | --- |
| | 150+37.3 | 4.6 LT | 151+19.3 | 5.8 LT | 97TH | 1 | --- | --- | 1 | --- | --- | 1 | --- | --- | 2 | 82.3 | --- | --- |
| | PROJECT TOTALS | | | | | 5 | 4 | 5 | 5 | 3 | 12 | 14 | 7 | 3 | 41 | 377 | 490 | 5,880 |

## TEMPORARY WATER MAIN CONNECTION

| CATEGORY | FROM STATION | FROM OFFSET | TO STATION | TO OFFSET | LOCATION | SPV.0060.412 EACH |
|---|---|---|---|---|---|---|
| 0060 | UNDISTRIBUTED | | | | | 4 |
| | PROJECT TOTALS | | | | | 4 |

3

**WATER SERVICES**

| CATEGORY | STATION | LOCATION | ADDRESS | SPV.0060.410 WATER SERVICE RECONNECT 4-INCH EA | SPV.0060.411 WATER SERVICE RECONNECT 6-INCH EA | SPV.0090.403 WATER SERVICE 1-INCH LF | SPV.0090.404 WATER SERVICE 1.5-INCH LF | SPV.0090.405 WATER SERVICE 2-INCH LF |
|---|---|---|---|---|---|---|---|---|
| 0060 | 22+50.8 | RT | #10757 National | --- | --- | 40 | --- | --- |
| | 24+29.7 | RT | #10743 National | --- | --- | 30 | --- | --- |
| | 25+38.8 | RT | #10725 National | --- | 1 | --- | --- | --- |
| | 25+70.3 | RT | #10725 National | --- | --- | --- | 30 | --- |
| | 30+82.2 | RT | #10533 National | 1 | --- | --- | --- | --- |
| | 32+65.8 | LT | #10296 National | --- | --- | --- | 65 | --- |
| | 34+07.2 | RT | #10269 National | --- | --- | 30.5 | --- | --- |
| | 35+84.8 | RT | #10243-47 National | --- | --- | --- | --- | 30.5 |
| | 37+75.3 | RT | #10221 National | --- | --- | 30.5 | --- | --- |
| | 38+35.4 | RT | #10213 National | --- | --- | 17.5 | --- | --- |
| | 39+00.0 | RT | #10205 National | --- | --- | 19 | --- | --- |
| | 40+25.4 | RT | #10185 National | --- | --- | 19.5 | --- | --- |
| | 40+84.2 | RT | #10179 National | --- | --- | 15.5 | --- | --- |
| | 41+44.6 | RT | #10171 National | --- | --- | 15.5 | --- | --- |
| | 42+05.8 | RT | #10167 National | --- | --- | 15.5 | --- | --- |
| | 42+63.9 | RT | #10159 National | --- | --- | 15.5 | --- | --- |
| | 43+24.0 | RT | #10153 National | --- | --- | 15.5 | --- | --- |
| | 43+81.2 | RT | #10147 National | --- | --- | 15.5 | --- | --- |
| | 44+43.6 | RT | #10143 National | --- | --- | 15.5 | --- | --- |
| | 45+03.0 | RT | #10137 National | --- | --- | 15.5 | --- | --- |

3

**WATER SERVICES CONTINUED**

| CATEGORY | STATION | LOCATION | ADDRESS | SPV.0060.410 WATER SERVICE RECONNECT 4-INCH EA | SPV.0060.411 WATER SERVICE RECONNECT 6-INCH EA | SPV.0090.403 WATER SERVICE 1-INCH LF | SPV.0090.404 WATER SERVICE 1.5-INCH LF | SPV.0090.405 WATER SERVICE 2-INCH LF |
|---|---|---|---|---|---|---|---|---|
| 0060 | 45+62.1 | RT | #10131 National | --- | --- | 15.5 | --- | --- |
| | 46+24.1 | RT | #10125 National | --- | --- | 15.5 | --- | --- |
| | 46+82.1 | RT | #10119 National | --- | --- | 15.5 | --- | --- |
| | 47+48.7 | RT | #10111 National | --- | --- | 15.5 | --- | --- |
| | 48+07.7 | RT | #10105 National | --- | --- | 15.5 | --- | --- |
| | 56+85.6 | LT | #9932 National | --- | --- | 10 | --- | --- |
| | 58+10.4 | LT | #9910 National | --- | --- | 10 | --- | --- |
| | 58+59.4 | LT | #9902 National | --- | --- | 10 | --- | --- |
| | 60+30.5 | RT | #9843 National | --- | --- | 78 | --- | --- |
| | 60+66.2 | LT | #2410 99th | --- | --- | 10 | --- | --- |
| | 61+71.1 | LT | #9824-26 National | --- | --- | 10 | --- | --- |
| | 62+48.0 | LT | #9806 National | --- | --- | --- | 10 | --- |
| | 63+06.0 | RT | #9743 National | --- | --- | 75 | --- | --- |
| | 63+65.4 | RT | #9743 National | --- | --- | 75 | --- | --- |
| | 64+28.7 | RT | #9743 National | --- | --- | 75 | --- | --- |
| | 66+04.1 | LT | #9718-20 National | --- | --- | 10 | --- | --- |
| | 67+07.1 | RT | #9707 National | --- | --- | --- | --- | 75 |
| | 68+37.0 | RT | #9627 National | --- | --- | --- | --- | 78 |
| | 102+57.0 | RT | #10253 Cleveland | --- | --- | --- | --- | 32 |
| | 104+61.2 | RT | #10231 Cleveland | --- | --- | 32 | --- | --- |
| | 105+13.9 | RT | #10221 Cleveland | --- | --- | 32 | --- | --- |
| | 141+19.7 | LT | #2367 98th | --- | --- | 14.5 | --- | --- |
| | 150+80.0 | LT | #9700 National | --- | --- | 16.0 | --- | --- |
| | 150+92.5 | LT | #2339-41 97th | --- | --- | 18.0 | --- | --- |
| | PROJECT TOTALS | | | 1 | 1 | 864 | 105 | 216 |

STREET LIGHTING REMOVALS

| LIGHT NUMBER | 204.0195* REMOVING CONCRETE BASES EACH | SPV.0060.204 REMOVE & SALVAGE LIGHTING UNIT EACH |
|---|---|---|
| ALL ITEMS CATEGORY 0030 | | |
| EXSL 10752 | 1 | 1 |
| EXSL 10757 | 1 | 1 |
| EXSL 10743 | 1 | 1 |
| EXSL 10726 | 1 | 1 |
| EXSL 10701 | 1 | 1 |
| EXSL 10700 | 1 | 1 |
| EXSL 10611 | 1 | 1 |
| EXSL 10610 | 1 | 1 |
| EXSL 10541 | 1 | 1 |
| EXSL 10540 | 1 | 1 |
| EXSL 10533 | 1 | 1 |
| EXSL 10530 | 1 | 1 |
| EXSL 10610 | 1 | 1 |
| EXSL 10521 | 1 | 1 |
| EXSL 10296 | 1 | 1 |
| EXSL 10295 | 1 | 1 |
| EXSL 10261 | 1 | 1 |
| EXSL 10288 | 1 | 1 |
| EXSL 10269 | 1 | 1 |
| EXSL 10246 | 1 | 1 |
| EXSL 10253 | 1 | 1 |
| EXSL 10243 | 1 | 1 |
| EXSL 10230 | 1 | 1 |
| EXSL 10231 | 1 | 1 |
| EXSL 10220 | 1 | 1 |
| EXSL 10213 | 1 | 1 |
| EXSL 10166 | 1 | 1 |
| EXSL 10171 | 1 | 1 |
| EXSL 10150 | 1 | 1 |
| EXSL 10159 | 1 | 1 |
| EXSL 10140 | 1 | 1 |
| EXSL 10153 | 1 | 1 |
| EXSL 10130 | 1 | 1 |
| EXSL 10143 | 1 | 1 |
| EXSL 10120 | 1 | 1 |
| EXSL 10131 | 1 | 1 |
| EXSL 10119 | 1 | 1 |
| EXSL 10105 | 1 | 1 |
| EXSL 10104 | 1 | 1 |
| EXSL 10051 | 1 | 1 |
| EXSL 10050 | 1 | 1 |
| EXSL 10040 | 1 | 1 |
| SUBTOTALS | 42 | 42 |

STREET LIGHTING REMOVALS (CONT.)

| LIGHT NUMBER | 204.0195* REMOVING CONCRETE BASES EACH | SPV.0060.204 REMOVE & SALVAGE LIGHTING UNIT EACH |
|---|---|---|
| ALL ITEMS CATEGORY 0030 | | |
| EXSL 10035 | 1 | 1 |
| EXSL 10031 | 1 | 1 |
| EXSL 10011 | 1 | 1 |
| EXSL 10010 | 1 | 1 |
| EXSL 9937 | 1 | 1 |
| EXSL 9932 | 1 | 1 |
| EXSL 9911 | 1 | 1 |
| EXSL 2440 | 1 | 1 |
| EXSL 9902 | 1 | 1 |
| EXSL 9836 | 1 | 1 |
| EXSL 9837 | 1 | 1 |
| EXSL 9826 | 1 | 1 |
| EXSL 9811 | 1 | 1 |
| EXSL 9806 | 1 | 1 |
| EXSL 9743 | 1 | 1 |
| EXSL 9720 | 1 | 1 |
| EXSL 9707 | 1 | 1 |
| EXSL 9700 | 1 | 1 |
| EXSL 9633 | 1 | 1 |
| EXSL 9622 | 1 | 1 |
| EXSL 9611 | 1 | 1 |
| EXSL 9530 | 1 | 1 |
| EXSL 10620 | 1 | 1 |
| EXSL 10619 | 1 | 1 |
| EXSL 10272 | 1 | 1 |
| EXSL 10261 | 1 | 1 |
| EXSL 10248 | 1 | 1 |
| EXSL WP1 | -- | 1 |
| EXSL WP2 | -- | 1 |
| EXSL WP3 | -- | 1 |
| EXSL WP4 | -- | 1 |
| SUBTOTALS | 27 | 31 |
| PROJECT TOTALS | 69 | 73 |

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

STREET LIGHTING REMOVALS

| FROM | - | TO | 204.9090.S.201 REMOVING ELECTRICAL CONDUCTORS FROM EXISTING CONDUIT LF | 204.9090.S.202 REMOVING OR ABANDONING CONDUIT LF |
|---|---|---|---|---|
| ALL ITEMS CATEGORY 0030 | | | | |
| EXSL10212 | - | EXSL10248 | 200 | 200 |
| EXSL10248 | - | EXSL10272 | 190 | 190 |
| EXSL10227 | - | EXSL10261 | 200 | 200 |
| EXSL10261 | - | EXSL10271 | 180 | 180 |
| EXJB1 | - | EXSLWP1 | 10 | 10 |
| EXSLWP1 | - | EXSLWP2 | 100 | 100 |
| EXJB2 | - | EXSLWP4 | 10 | 10 |
| EXSLWP4 | - | EXSLWP3 | 100 | 100 |
| PROJECT TOTALS | | | 990 | 990 |

UNDERDECK LIGHTING

| LIGHT NUMBER | STATION | OFFSET | R/L | 659.0601.001 UNDERDECK LIGHTING (B-40-123) EACH | 659.0601.002 UNDERDECK LIGHTING (B-40-124) EACH | 659.1210 LUMINAIRES UNDERDECK LED B EACH | ADDRESS LABELS (FOR INFO ONLY) |
|---|---|---|---|---|---|---|---|
| ALL ITEMS ARE CATEGORY 0030 | | | | | | | |
| SL 219 | 52+45 'NAT' | 60.6' | LT | -- | -- | 1 | UA10032 |
| SL 220 | 51+44 'NAT' | 60.7' | LT | -- | -- | 1 | UA10041 |
| SL 221 | 50+70 'NAT' | 61.0' | RT | -- | -- | 1 | UA10040 |
| SL 222 | 51+71 'NAT' | 61.1' | RT | -- | -- | 1 | UA10045 |
| | 2410-15-70 | | | 1 | 1 | -- | |
| PROJECT TOTALS | | | | 1 | 1 | 4 | |

3

LIGHTING CONDUIT AND WIRE

| FROM | - | TO | 652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF | 652.0325 SCHEDULE 80 2-INCH LF | 652.0605* CONDUIT SPECIAL 2-INCH LF | 652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EACH | 655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF | 655.0625 ELECTRICAL WIRE LIGHTING 6 AWG LF | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| ALL ITEMS ARE CATEGORY 0030 | | | | | | | | | |
| SL UC10212 | - | PB 113 | 260 | -- | -- | 1 | -- | 813 | |
| PB 113 | - | PB 112 | -- | 40 | -- | -- | -- | 156 | |
| PB 112 | - | SL 105 | 10 | -- | -- | -- | -- | 63 | |
| SL UC10227 | - | PB 111 | 155 | -- | -- | 1 | -- | 498 | |
| PB 111 | - | PB 112 | -- | 35 | -- | -- | 47 | -- | TRACER WIRE ONLY |
| PB 111 | - | PB 108 | 270 | -- | -- | -- | -- | 846 | |
| PB 108 | - | PB 107 | 100 | -- | -- | -- | -- | 336 | |
| PB 107 | - | PB 105 | 235 | -- | -- | -- | -- | 741 | |
| PB 105 | - | PB 104 | -- | 50 | -- | -- | -- | 372 | |
| PB 104 | - | SL 102 | 10 | -- | -- | -- | -- | 126 | |
| PB 105 | - | PB 102 | -- | 80 | -- | -- | -- | 276 | |
| PB 102 | - | SL 103 | 5 | -- | -- | -- | -- | 144 | |
| PB 102 | - | PB 103 | -- | 35 | -- | -- | -- | 141 | |
| PB 103 | - | PB 106 | 80 | -- | -- | -- | -- | 276 | |
| PB 106 | - | PB 109 | 125 | -- | -- | -- | -- | 411 | |
| PB 109 | - | PB 110 | -- | 40 | -- | -- | -- | 156 | |
| PB 110 | - | SL 104 | 40 | -- | -- | -- | -- | 153 | |
| PB 102 | - | PB 101 | 260 | -- | -- | -- | -- | 816 | |
| PB 101 | - | SL 101 | 5 | -- | -- | -- | -- | 96 | |
| PB 101 | - | SL 100 | 220 | -- | -- | -- | -- | 693 | |
| SL 100 | - | PB 100 | 10 | -- | -- | -- | 21 | -- | TRACER WIRE ONLY |
| SL UC2617 | - | PB 119 | -- | -- | 90 | 1 | -- | 303 | |
| PB 119 | - | PB 118 | 40 | -- | -- | -- | -- | 156 | |
| PB 118 | - | PB 117 | -- | -- | 135 | -- | -- | 441 | |
| PB 117 | - | PB 116 | -- | 90 | -- | -- | -- | 306 | |
| PB 116 | - | SL 107 | 80 | -- | -- | -- | -- | 273 | |
| SL 107 | - | PB 115 | 10 | -- | -- | -- | -- | 63 | |
| PB 115 | - | PB 114 | 290 | -- | -- | -- | -- | 906 | |
| PB 114 | - | SL 106 | 5 | -- | -- | -- | -- | 48 | |
| SL UC2502 | - | PB 124 | 40 | -- | -- | 1 | -- | 153 | |
| PB 124 | - | PB 123 | -- | -- | 55 | -- | -- | 201 | |
| PB 123 | - | SL 112 | 10 | -- | -- | -- | -- | 126 | |
| SL 112 | - | SL 113 | 140 | -- | -- | -- | -- | 450 | |
| PB 123 | - | PB 122 | -- | -- | 100 | -- | -- | 336 | |
| PB 122 | - | SL 111 | 10 | -- | -- | -- | -- | 63 | |
| SL 111 | - | SL 110 | 220 | -- | -- | -- | -- | 690 | |
| SL 110 | - | PB 121 | 250 | -- | -- | -- | -- | 783 | |
| PB 121 | - | SL 109 | 10 | -- | -- | -- | -- | 126 | |
| PB 121 | - | PB 120 | 250 | -- | -- | -- | -- | 786 | |
| PB 120 | - | SL 108 | 5 | -- | -- | -- | -- | 48 | |
| SUBTOTALS | | | 3,145 | 370 | 380 | 4 | 68 | 13,371 | |

3

LIGHTING CONDUIT AND WIRE (CONT.)

| FROM | - | TO | 652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF | 652.0325 SCHEDULE 80 2-INCH LF | 652.0605* CONDUIT SPECIAL 2-INCH LF | 652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EACH | 655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF | 655.0625 ELECTRICAL WIRE LIGHTING 6 AWG LF | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| ALL ITEMS ARE CATEGORY 0030 | | | | | | | | | |
| SL UA2335 | - | SL 203 | -- | -- | 60 | 1 | -- | 210 | |
| SL 203 | - | PB 203 | 10 | -- | -- | -- | -- | 126 | |
| PB 203 | - | PB 202 | -- | 50 | -- | -- | -- | 186 | |
| PB 202 | - | SL 201 | 180 | -- | -- | -- | -- | 1,146 | |
| PB 202 | - | PB 201 | -- | 65 | -- | -- | -- | 231 | |
| PB 201 | - | SL 202 | 10 | -- | -- | -- | -- | 126 | |
| PB 201 | - | PB 200 | -- | 45 | -- | -- | -- | 171 | |
| PB 200 | - | SL 200 | 265 | -- | -- | -- | -- | 828 | |
| PB 203 | - | PB 204 | -- | 95 | -- | -- | -- | 321 | |
| PB 204 | - | SL 204 | 5 | -- | -- | -- | -- | 48 | |
| PB 204 | - | PB 201 | -- | 100 | -- | -- | 112 | -- | TRACER WIRE ONLY |
| SL 204 | - | SL 205 | 150 | -- | -- | -- | 160 | -- | TRACER WIRE ONLY |
| SL UA2361 | - | SL 207 | -- | -- | 125 | 1 | -- | 405 | |
| SL 207 | - | PB 206 | 5 | -- | -- | -- | -- | 48 | |
| PB 206 | - | PB 207 | -- | 75 | -- | -- | -- | 261 | |
| PB 207 | - | SL 208 | 5 | -- | -- | -- | -- | 96 | |
| PB 207 | - | PB 205 | -- | 100 | -- | -- | -- | 336 | |
| PB 205 | - | SL 206 | 5 | -- | -- | -- | -- | 96 | |
| PB 205 | - | SL 205 | 160 | -- | -- | -- | -- | 513 | |
| SL 208 | - | SL 209 | 155 | -- | -- | -- | 165 | -- | TRACER WIRE ONLY |
| SL UA2401 | - | SL 212 | -- | -- | 165 | 1 | -- | 525 | |
| SL 212 | - | PB 212 | 5 | -- | -- | -- | -- | 96 | |
| PB 212 | - | PB 210 | -- | 55 | -- | -- | -- | 201 | |
| PB 212 | - | PB 209 | -- | 80 | -- | -- | -- | 276 | |
| PB 209 | - | SL 210 | 5 | -- | -- | -- | -- | 96 | |
| PB 209 | - | SL 209 | 155 | -- | -- | -- | -- | 498 | |
| PB 209 | - | PB 208 | -- | 35 | -- | -- | 47 | -- | TRACER WIRE ONLY |
| PB 208 | - | PB 211 | 65 | -- | -- | -- | 77 | -- | TRACER WIRE ONLY |
| PB 212 | - | PB 215 | 110 | -- | -- | -- | -- | 366 | |
| PB 215 | - | PB 214 | -- | 45 | -- | -- | -- | 171 | |
| PB 214 | - | SL 213 | 20 | -- | -- | -- | -- | 186 | |
| PB 214 | - | PB 209 | -- | 175 | -- | -- | 187 | -- | TRACER WIRE ONLY |
| PB 214 | - | PB 213 | -- | 50 | -- | -- | -- | 186 | |
| PB 213 | - | PB 211 | -- | 110 | -- | -- | -- | 366 | |
| PB 211 | - | SL 211 | 45 | -- | -- | -- | -- | 168 | |
| PB 214 | - | PB 216 | 160 | -- | -- | -- | 172 | -- | TRACER WIRE ONLY |
| SL UA2446 | - | SL 215 | -- | -- | 70 | 1 | -- | 240 | |
| SL 215 | - | PB 218 | 40 | -- | -- | -- | -- | 153 | |
| PB 218 | - | PB 217 | 70 | -- | -- | -- | -- | 246 | |
| PB 217 | - | PB 216 | -- | 35 | -- | -- | -- | 141 | |
| PB 216 | - | SL 214 | 5 | -- | -- | -- | -- | 96 | |
| PB 216 | - | PB 219 | 180 | -- | -- | -- | -- | 576 | |
| PB 219 | - | SL 216 | 15 | -- | -- | -- | -- | 78 | |
| SL 216 | - | PB 220 | 50 | -- | -- | -- | -- | 183 | |
| PB 220 | - | PB 221 | -- | -- | 85 | -- | -- | 291 | |
| PB 221 | - | SL 217 | 10 | -- | -- | -- | -- | 63 | |
| SL 217 | - | SL 218 | 105 | -- | -- | -- | -- | 345 | |
| SL 218 | - | PB 223 | 10 | -- | -- | -- | -- | 126 | |
| PB 223 | - | PB 224 | -- | -- | 45 | -- | -- | 171 | |
| PB 223 | - | PB 222 | -- | -- | 55 | -- | -- | 201 | |
| PB 224 | - | PB 226 | -- | -- | 205 | -- | -- | 651 | |
| SUBTOTALS | | | 2,000 | 1,115 | 810 | 4 | 920 | 11,844 | |
| PROJECT TOTALS | | | 5,145 | 1,485 | 1,190 | 8 | 988 | 25,215 | |

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

## LIGHTING PULLBOXES

| PULLBOX NUMBER | STATION | OFFSET | R/L | 653.0164* PULL BOXES NON-CONDUCTIVE 24X42-INCH EACH |
|---|---|---|---|---|
| ALL ITEMS ARE CATEGORY 0030 | | | | |
| PB 100 | 23+96 'NAT' | 6.4' | RT | 1 |
| PB 101 | 26+20 'NAT' | 5.6' | RT | 1 |
| PB 102 | 28+70 'NAT' | 5.9' | LT | 1 |
| PB 103 | 28+71 'NAT' | 41.4' | LT | 1 |
| PB 104 | 28+07 'NAT' | 70.9' | RT | 1 |
| PB 105 | 28+53 'NAT' | 70.1' | RT | 1 |
| PB 106 | 29+31 'NAT' | 74.5' | LT | 1 |
| PB 107 | 30+71 'NAT' | 41.0' | RT | 1 |
| PB 108 | 31+60 'NAT' | 80.9' | RT | 1 |
| PB 109 | 96+89 'CLE' | 38.6' | RT | 1 |
| PB 110 | 96+89 'CLE' | 1.5' | LT | 1 |
| PB 111 | 103+40 'CLE' | 35.5' | RT | 1 |
| PB 112 | 103+41 'CLE' | 0.0' | RT | 1 |
| PB 113 | 103+42 'CLE' | 38.2' | LT | 1 |
| PB 114 | 34+04 'NAT' | 7.5' | RT | 1 |
| PB 115 | 36+88 'NAT' | 2.7' | LT | 1 |
| PB 116 | 37+73 'NAT' | 6.6' | LT | 1 |
| PB 117 | 37+77 'NAT' | 81.3' | RT | 1 |
| PB 118 | 39+10 'NAT' | 80.8' | RT | 1 |
| PB 119 | 39+39 'NAT' | 108.0' | RT | 1 |
| PB 120 | 42+41 'NAT' | 3.5' | RT | 1 |
| PB 121 | 44+87 'NAT' | 2.7' | RT | 1 |
| PB 122 | 47+98 'NAT' | 2.3' | LT | 1 |
| PB 123 | 48+97 'NAT' | 3.9' | RT | 1 |
| PB 124 | 48+97 'NAT' | 55.7' | RT | 1 |
| PB 200 | 68+41 'NAT' | 41.3' | RT | 1 |
| PB 201 | 68+43 'NAT' | 3.0' | LT | 1 |
| PB 202 | 68+47 'NAT' | 65.2' | LT | 1 |
| PB 203 | 68+02 'NAT' | 79.1' | LT | 1 |
| PB 204 | 67+43 'NAT' | 6.0' | LT | 1 |
| PB 205 | 64+25 'NAT' | 4.3' | LT | 1 |
| PB 206 | 63+71 'NAT' | 64.3' | LT | 1 |
| PB 207 | 63+25 'NAT' | 6.0' | LT | 1 |
| PB 208 | 60+20 'NAT' | 43.8' | RT | 1 |
| PB 209 | 60+23 'NAT' | 9.6' | RT | 1 |
| PB 210 | 60+05 'NAT' | 65.4' | LT | 1 |
| PB 211 | 59+57 'NAT' | 38.9' | RT | 1 |
| PB 212 | 59+51 'NAT' | 63.3' | LT | 1 |
| PB 213 | 58+50 'NAT' | 37.7' | RT | 1 |
| PB 214 | 58+51 'NAT' | 8.8' | LT | 1 |
| PB 215 | 58+48 'NAT' | 51.0' | LT | 1 |
| PB 216 | 56+93 'NAT' | 4.3' | LT | 1 |
| PB 217 | 56+90 'NAT' | 36.6' | LT | 1 |
| PB 218 | 56+24 'NAT' | 36.7' | LT | 1 |
| PB 219 | 55+32 'NAT' | 2.9' | RT | 1 |
| PB 220 | 54+61 'NAT' | 6.6' | RT | 1 |
| PB 221 | 53+78 'NAT' | 4.4' | RT | 1 |
| PB 222 | 52+53 'NAT' | 47.4' | LT | 1 |
| PB 223 | 52+59 'NAT' | 1.7' | RT | 1 |
| PB 224 | 52+77 'NAT' | 40.6' | RT | 1 |
| PB 226 | 50+72 'NAT' | 43.4' | RT | 1 |
| PROJECT TOTALS | | | | 51 |

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

## FUTURE USE CONDUIT AND WIRE

| FROM | - | TO | 652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF | 655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF | REMARKS |
|---|---|---|---|---|---|
| ALL ITEMS ARE CATEGORY 0030 | | | | | |
| PB 300 | - | PB 301 | 1500 | 1,512 | TRACER WIRE ONLY |
| PB 301 | - | PB 302 | 1500 | 1,512 | TRACER WIRE ONLY |
| PB 302 | - | PB 303 | 1450 | 1,462 | TRACER WIRE ONLY |
| PB 303 | - | PB 304 | 410 | 422 | TRACER WIRE ONLY |
| PRJOECT TOTALS | | | 4,860 | 4,908 | |

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

## FUTURE USE PULLBOXES

| PULLBOX NUMBER | STATION | OFFSET | R/L | 653.0164* PULL BOXES NON-CONDUCTIVE 24X42-INCH EACH |
|---|---|---|---|---|
| ALL ITEMS ARE CATEGORY 0030 | | | | |
| PB 300 | 23+0 'NAT' | 53.9 | LT | 1 |
| PB 301 | 37+99 'NAT' | 51.5' | LT | 1 |
| PB 302 | 52+95 'NAT' | 48.2' | LT | 1 |
| PB 303 | 67+36 'NAT' | 51.4' | LT | 1 |
| PB 304 | 71+48 'NAT' | 51.0' | LT | 1 |
| PROJECT TOTALS | | | | 5 |

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

STREET LIGHTING

| LIGHT NUMBER | STATION | OFFSET | R/L | 654.0105* CONCRETE BASES TYPE 5 EACH | SPV.0060.200* TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE - BRONZE EACH | SPV.0060.201* POLES TYPE 5 ALUMINUM - BRONZE EACH | SPV.0060.202* LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT - BRONZE EACH | SPV.0060.203* LUMINAIRES UTILITY LED B - BRONZE EACH | 655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF | ADDRESS LABELS (FOR INFO ONLY) |
|---|---|---|---|---|---|---|---|---|---|---|
| ALL ITEMS ARE CATEGORY 0030 | | | | | | | | | | |
| SL 100 | 24+02 'NAT' | 6.5' | RT | 1 | 1 | 1 | 2 | 2 | 246 | UC10744 |
| SL 101 | 26+24 'NAT' | 6.4' | RT | 1 | 1 | 1 | 2 | 2 | 246 | UC10716 |
| SL 102 | 28+07 'NAT' | 64.1' | RT | 1 | 1 | 1 | 1 | 1 | 123 | UC2767 |
| SL 103 | 28+73 'NAT' | 6.0' | LT | 1 | 1 | 1 | 2 | 2 | 246 | UC10542 |
| SL 104 | 96+69 'CLE' | 0.3' | LT | 1 | 1 | 1 | 2 | 2 | 246 | UC10660 |
| SL 105 | 103+51 'CLE' | 0.0' | RT | 1 | 1 | 1 | 2 | 2 | 246 | UC10258 |
| SL 106 | 34+06 'NAT' | 4.5' | RT | 1 | 1 | 1 | 2 | 2 | 246 | UC10264 |
| SL 107 | 36+93 'NAT' | 5.7' | LT | 1 | 1 | 1 | 2 | 2 | 246 | UC10228 |
| SL 108 | 42+35 'NAT' | 3.2' | RT | 1 | 1 | 1 | 2 | 2 | 246 | UC10150 |
| SL 109 | 44+80 'NAT' | 0.0' | RT | 1 | 1 | 1 | 2 | 2 | 246 | UC10130 |
| SL 110 | 46+65 'NAT' | 5.0' | LT | 1 | 1 | 1 | 2 | 2 | 246 | UC10112 |
| SL 111 | 47+92 'NAT' | 5.6' | LT | 1 | 1 | 1 | 2 | 2 | 246 | UC10108 |
| SL 112 | 49+03 'NAT' | 0.0' | RT | 1 | 1 | 1 | 2 | 2 | 246 | UC10078 |
| SL 113 | 50+41 'NAT' | 0.0' | RT | 1 | 1 | 1 | 2 | 2 | 246 | UC10066 |
| SL 200 | 71+06 'NAT' | 46.7' | RT | 1 | 1 | 1 | 1 | 1 | 123 | UA9611 |
| SL 201 | 70+07 'NAT' | 40.8' | LT | 1 | 1 | 1 | 1 | 1 | 123 | UA9622 |
| SL 202 | 68+37 'NAT' | 0.0' | RT | 1 | 1 | 1 | 2 | 2 | 246 | UA9662 |
| SL 203 | 68+07 'NAT' | 86.7' | LT | 1 | 1 | 1 | 1 | 1 | 123 | UA2337 |
| SL 204 | 67+37 'NAT' | 6.0' | LT | 1 | 1 | 1 | 2 | 2 | 246 | UA9704 |
| SL 205 | 65+86 'NAT' | 5.9' | LT | 1 | 1 | 1 | 2 | 2 | 246 | UA9718 |
| SL 206 | 64+21 'NAT' | 0.0' | RT | 1 | 1 | 1 | 2 | 2 | 246 | UA9784 |
| SL 207 | 63+74 'NAT' | 68.0' | LT | 1 | 1 | 1 | 1 | 1 | 123 | UA2373 |
| SL 208 | 63+20 'NAT' | 6.0' | LT | 1 | 1 | 1 | 2 | 2 | 246 | UA9806 |
| SL 209 | 61+72 'NAT' | 1.4' | RT | 1 | 1 | 1 | 2 | 2 | 246 | UA9822 |
| SL 210 | 60+17 'NAT' | 10.0' | RT | 1 | 1 | 1 | 2 | 2 | 246 | UA9836 |
| SL 211 | 59+28 'NAT' | 67.2' | RT | 1 | 1 | 1 | 1 | 1 | 123 | UA2440 |
| SL 212 | 59+53 'NAT' | 65.9' | LT | 1 | 1 | 1 | 1 | 1 | 123 | UA2422 |
| SL 213 | 58+69 'NAT' | 10.1' | LT | 1 | 1 | 1 | 2 | 2 | 246 | UA9912 |
| SL 214 | 56+89 'NAT' | 4.1' | LT | 1 | 1 | 1 | 2 | 2 | 246 | UA9982 |
| SL 215 | 56+03 'NAT' | 66.0' | LT | 1 | 1 | 1 | 1 | 1 | 123 | UA2448 |
| SL 216 | 55+09 'NAT' | 0.0' | RT | 1 | 1 | 1 | 2 | 2 | 246 | UA10010 |
| SL 217 | 53+71 'NAT' | 0.0' | RT | 1 | 1 | 1 | 2 | 2 | 246 | UA10020 |
| SL 218 | 52+66 'NAT' | 0.9' | RT | 1 | 1 | 1 | 2 | 2 | 246 | UA10030 |
| PROJECT TOTALS | | | | 33 | 33 | 33 | 58 | 58 | 7,134 | |

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

## REMOVING CONCRETE BASES

| CATEGORY | SIGNAL BASE NO. | * 204.0195 REMOVING CONCRETE BASES EACH | * SPV.0060.106 REMOVING CONCRETE MONOTUBE TRAFFIC SIGNAL BASES EACH |
|---|---|---|---|
| 0020 | SB1 | 1 | - |
| | SB2 | 1 | - |
| | SB3 | 1 | - |
| | SB4 | - | 1 |
| | SB5 | 1 | - |
| | SB6 | 1 | - |
| | SB7 | - | 1 |
| | SB8 | 1 | - |
| | SB9 | 1 | - |
| | SB10 | 1 | - |
| | SB11 | - | 1 |
| | SB12 | 1 | - |
| | SB13 | 1 | - |
| | SB14 | - | 1 |
| | CB1 | 1 | - |
| **TOTAL 0020** | | **11** | **4** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## TRAFFIC SIGNAL REMOVALS

| CATEGORY | LOCATION | 204.9060.S.101 REMOVING TRAFFIC SIGNALS EACH |
|---|---|---|
| 0020 | W NATIONAL AVE & W CLEVELAND AVE | 1 |
| **TOTAL 0020** | | **1** |

## REMOVING PULL BOXES

| CATEGORY | PULL BOX NO. | * 653.0905 REMOVING PULL BOXES EACH |
|---|---|---|
| 0020 | PB1 | 1 |
| | PB2 | 1 |
| | PB3 | 1 |
| | PB4 | 1 |
| | PB5 | 1 |
| | PB6 | 1 |
| | PB7 | 1 |
| | PB8 | 1 |
| | PB9 | 1 |
| | PB10 | 1 |
| | PB11 | 1 |
| | PB12 | 1 |
| | PB13 | 1 |
| **TOTAL 0020** | | **13** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

3

3

## CONDUIT

| CATEGORY | FROM | TO | * 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF | * 652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF | * 652.0615 CONDUIT SPECIAL 3-INCH LF |
|---|---|---|---|---|---|
| 0020 | CB1 | PB1 | - | 27 | - |
| | CB1 | PB24 | - | 33 | - |
| | PB1 | SB1 | 16 | - | - |
| | PB1 | PB2 | - | 108 | - |
| | PB2 | SB2 | 11 | - | - |
| | PB2 | PB3 | 169 | - | - |
| | PB2 | PB5 | - | - | 104 |
| | PB3 | PB4 | 141 | - | - |
| | PB5 | SB3 | 18 | - | - |
| | PB5 | PB6 | - | - | 78 |
| | PB6 | SB4 | - | 4 | - |
| | PB6 | PB7 | - | - | 118 |
| | PB7 | SB5 | 13 | - | - |
| | PB7 | SB6 | 7 | - | - |
| | PB7 | PB8 | - | - | 47 |
| | PB7 | PB10 | 6 | - | - |
| | PB7 | PB11 | - | - | 100 |
| | PB8 | PB9 | 152 | - | - |
| | PB8 | SB16 | 9 | - | - |
| | PB11 | SB7 | 10 | - | - |
| | PB11 | PB12 | - | - | 78 |
| | PB12 | PB13 | - | 90 | - |
| | PB13 | SB8 | - | 10 | - |
| | PB13 | PB14 | - | 138 | - |
| | PB14 | SB9 | 14 | - | - |
| | PB14 | PB15 | 283 | - | - |
| | PB14 | PB16 | - | - | 140 |
| | PB16 | SB10 | 24 | - | - |
| | PB16 | PB17 | - | - | 78 |
| | PB17 | SB11 | - | 8 | - |
| | PB17 | PB18 | - | - | 104 |
| | PB18 | SB12 | 12 | - | - |
| | PB18 | SB13 | 12 | - | - |
| | PB18 | PB19 | - | - | 49 |
| | PB18 | PB21 | 14 | - | - |
| | PB18 | PB22 | - | - | 122 |
| | PB19 | SB17 | 5 | - | - |
| | PB19 | PB20 | 152 | - | - |
| | PB22 | SB14 | 6 | - | - |
| | PB22 | PB23 | - | - | 82 |
| | PB23 | PB24 | - | 88 | - |
| | PB24 | SB15 | - | 11 | - |
| **TOTAL 0020** | | | **1074** | **517** | **1100** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## PULL BOXES

| CATEGORY | PULL BOX NO. | LOCATION ## | * 653.0135 PULL BOXES STEEL 24x36-INCH EACH | * 653.0140 PULL BOXES STEEL 24x42-INCH EACH |
|---|---|---|---|---|
| 0020 | PB1 | STA 31+22; 76.4' RT | - | 1 |
| | PB2 | STA 30+81; 42.1' RT | - | 1 |
| | PB3 | STA 29+13; 40.6' RT | - | 1 |
| | PB4 | STA 27+72; 42.5' RT | - | 1 |
| | PB5 | STA 30+40; 10.0' RT | - | 1 |
| | PB6 | STA 30+05; 6.9' LT | - | 1 |
| | PB7 | STA 29+74; 57.4' LT | - | 1 |
| | PB8 | STA 29+33; 80.1' LT | - | 1 |
| | PB9 | STA 28+21; 179.4' LT | 1 | - |
| | PB10 | STA 29+71; 62.0' LT | 1 | - |
| | PB11 | STA 30+18; 81.8' LT | - | 1 |
| | PB12 | STA 30+53; 99.3' LT | - | 1 |
| | PB13 | STA 30+89; 72.2' LT | 1 | - |
| | PB14 | STA 31+53; 51.0' LT | - | 1 |
| | PB15 | STA 34+35; 42.4' LT | - | 1 |
| | PB16 | STA 32+09; 9.6' LT | - | 1 |
| | PB17 | STA 32+44; 7.1' RT | - | 1 |
| | PB18 | STA 32+72; 51.2' RT | - | 1 |
| | PB19 | STA 33+08; 83.7' RT | - | 1 |
| | PB20 | STA 34+21; 183.2' RT | - | 1 |
| | PB21 | STA 32+69; 64.7' RT | 1 | - |
| | PB22 | STA 32+21; 84.4' RT | - | 1 |
| | PB23 | STA 31+83; 98.5' RT | - | 1 |
| | PB24 | STA 31+41; 82.6' RT | - | 1 |
| **TOTAL 0020** | | | **4** | **20** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.
## FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

## ELECTRICAL SERVICE METER BREAKER PEDESTAL

| CATEGORY | LOCATION # | 656.0201.101 ELECTRICAL SERVICE METER BREAKER PEDESTAL EACH |
|---|---|---|
| 0020 | W NATIONAL AVE & W CLEVELAND AVE | 1 |
| | **TOTAL 0020** | **1** |

## SIGNAL MOUNTING HARDWARE

| CATEGORY | LOCATION | 658.5070.101 SIGNAL MOUNTING HARDWARE EACH |
|---|---|---|
| 0020 | W NATIONAL AVE & W CLEVELAND AVE | 1 |
| | **TOTAL 0020** | **1** |

3

## CONCRETE BASES

| CATEGORY | SIGNAL BASE NO. | LOCATION ## | * 654.0101 CONCRETE BASES TYPE 1 EACH | * 654.0102 CONCRETE BASES TYPE 2 EACH | * 654.0105 CONCRETE BASES TYPE 5 EACH | * 654.0110 CONCRETE BASES TYPE 10 EACH | * 654.0120 CONCRETE BASES TYPE 10-SPECIAL EACH | * 654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH |
|---|---|---|---|---|---|---|---|---|
| 0020 | SB1 | STA 31+26; 59.9' RT | 1 | - | - | - | - | - |
| | SB2 | STA 30+89; 44.8' RT | - | 1 | - | - | - | - |
| | SB3 | STA 30+58; 8.7' RT | 1 | - | - | - | - | - |
| | SB4 | STA 30+10; 7.3' LT | - | - | - | 1 | - | - |
| | SB5 | STA 29+76; 45.2' LT | 1 | - | - | - | - | - |
| | SB6 | STA 29+81; 55.2' LT | 1 | - | - | - | - | - |
| | SB7 | STA 30+11; 88.3' LT | - | 1 | - | - | - | - |
| | SB8 | STA 30+98; 70.7' LT | - | - | - | - | 1 | - |
| | SB9 | STA 31+41; 55.7' LT | - | 1 | - | - | - | - |
| | SB10 | STA 31+86; 7.3' LT | 1 | - | - | - | - | - |
| | SB11 | STA 32+52; 6.8' RT | - | - | - | 1 | - | - |
| | SB12 | STA 32+65; 47.4' RT | 1 | - | - | - | - | - |
| | SB13 | STA 32+64; 60.8' RT | 1 | - | - | - | - | - |
| | SB14 | STA 32+26; 88.3' RT | - | 1 | - | - | - | - |
| | SB15 | STA 31+49; 74.1' RT | - | - | - | - | 1 | - |
| | SB16 | STA 29+33; 71.6' LT | - | - | 1 | - | - | - |
| | SB17 | STA 33+07; 79.5' RT | - | - | 1 | - | - | - |
| | CB1 | STA 31+31; 78.5' RT | - | - | - | - | - | 1 |
| | | **TOTAL 0020** | **7** | **4** | **2** | **2** | **2** | **1** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.
## FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

## TRAFFIC DETECTOR LOOPS

| CATEGORY | LOOP NO. | HOME RUN PB | LOCATION ## | SIZE (FT)x(FT) | NO. OF TURNS | PAVEMENT TYPE | * 652.0800 CONDUIT LOOP DETECTOR LF | * 655.0700 LOOP DETECTOR LEAD IN CABLE LF | * 655.0800 LOOP DETECTOR WIRE LF |
|---|---|---|---|---|---|---|---|---|---|
| 0020 | 11 | PB6 | STA 29+96; 6' RT | 6X20 | 3 | CONCRETE | 80 | 182 | 248 |
| | 12 | PB6 | STA 30+24; 3' RT | 6X20 | 3 | CONCRETE | 70 | 182 | 218 |
| | 21 | PB15 | STA 34+19; 30' LT | 6X12 | 5 | CONCRETE | 56 | 642 | 288 |
| | 22 | PB15 | STA 34+32; 19' LT | 6X12 | 5 | CONCRETE | 76 | 642 | 388 |
| | 31 | PB22 | STA 32+33; 82' RT | 6X20 | 3 | CONCRETE | 72 | 122 | 224 |
| | 32 | PB22 | STA 32+11; 65' RT | 6X20 | 3 | CONCRETE | 64 | 122 | 200 |
| | 41 | PB9 | STA 28+26; 188' LT | 6X8 | 5 | CONCRETE | 42 | 448 | 218 |
| | 42 | PB9 | STA 28+32; 197' LT | 6X8 | 5 | CONCRETE | 64 | 448 | 328 |
| | 43 | PB10 | STA 29+76; 75' LT | 6X20 | 3 | CONCRETE | 74 | 249 | 230 |
| | 44 | PB10 | STA 29+98; 58' LT | 6X20 | 3 | CONCRETE | 74 | 249 | 230 |
| | 45 | PB10 | STA 29+92; 77' LT | 6X20 | 3 | CONCRETE | 100 | 249 | 308 |
| | 46 | PB10 | STA 30+14; 60' LT | 6X20 | 3 | CONCRETE | 112 | 249 | 344 |
| | 51 | PB17 | STA 32+46; 4' LT | 6X20 | 3 | CONCRETE | 68 | 238 | 212 |
| | 52 | PB17 | STA 32+18; 0' LT | 6X20 | 3 | CONCRETE | 72 | 238 | 224 |
| | 61 | PB4 | STA 27+83; 30' RT | 6X8 | 5 | CONCRETE | 48 | 406 | 248 |
| | 62 | PB4 | STA 27+70; 20' RT | 6X8 | 5 | CONCRETE | 68 | 406 | 348 |
| | 71 | PB11 | STA 30+04; 82' LT | 6X20 | 3 | CONCRETE | 78 | 294 | 242 |
| | 72 | PB11 | STA 30+26; 65' LT | 6X20 | 3 | CONCRETE | 66 | 294 | 206 |
| | 81 | PB20 | STA 34+13; 194' RT | 6X8 | 5 | CONCRETE | 48 | 392 | 248 |
| | 82 | PB20 | STA 34+07; 202' RT | 6X8 | 5 | CONCRETE | 68 | 392 | 348 |
| | 83 | PB21 | STA 32+65; 79' RT | 6X20 | 3 | CONCRETE | 76 | 199 | 236 |
| | 84 | PB21 | STA 32+43; 62' RT | 6X20 | 3 | CONCRETE | 74 | 199 | 230 |
| | 85 | PB21 | STA 32+47; 79' RT | 6X20 | 3 | CONCRETE | 104 | 199 | 320 |
| | 86 | PB21 | STA 32+24; 62' RT | 6X20 | 3 | CONCRETE | 118 | 199 | 362 |
| | | | | | | **TOTAL 0020** | **1772** | **7240** | **6448** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.
## LOCATION IS TO FRONT CENTER OF DETECTOR LOOP. FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
SDD INSTALLATION REFERENCE: LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)

3

## TRAFFIC SIGNAL CABLE AND WIRE (UNDERGROUND)

| CATEGORY | FROM | TO | * 655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG LF | * 655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG LF | * 655.0270 CABLE TRAFFIC SIGNAL 15-14 AWG L.F. | * 655.0305 CABLE TYPE UF 2-12 AWG GROUNDED L.F. |
|---|---|---|---|---|---|---|
| 0020 | CB1 | SB1 | 64 | - | - | - |
| | CB1 | SB2 | - | - | 127 | 127 |
| | CB1 | SB3 | - | - | 200 | - |
| | CB1 | SB4 | - | 241 | - | - |
| | CB1 | SB5 | - | 324 | - | - |
| | CB1 | SB6 | - | 318 | - | - |
| | CB1 | SB7 | 386 | - | - | - |
| | CB1 | SB8 | - | - | 499 | - |
| | CB1 | SB9 | - | - | 459 | - |
| | CB1 | SB10 | - | - | 385 | - |
| | CB1 | SB11 | - | 315 | - | - |
| | CB1 | SB12 | 251 | - | - | - |
| | CB1 | SB13 | - | - | 252 | - |
| | CB1 | SB14 | 170 | - | - | 170 |
| | CB1 | SB15 | - | 60 | - | - |
| | SB2 | SB4 | - | - | - | 154 |
| | SB4 | SB16 | - | - | - | 182 |
| | SB16 | SB7 | - | - | - | 178 |
| | SB14 | SB17 | - | - | - | 183 |
| | SB17 | SB11 | - | - | - | 176 |
| | SB11 | SB9 | - | - | - | 192 |
| | | TOTAL 0020 | 871 | 1,258 | 1,922 | 1,362 |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## TRAFFIC SIGNAL CABLE AND WIRE

| CATEGORY | FROM | TO | * 655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF |
|---|---|---|---|
| 0020 | SB2 | LUM. | 117 |
| | SB4 | LUM. | 234 |
| | SB7 | LUM. | 234 |
| | SB9 | LUM. | 117 |
| | SB11 | LUM. | 234 |
| | SB14 | LUM. | 234 |
| | SB16 | LUM. | 117 |
| | SB17 | LUM. | 117 |
| | | TOTAL 0020 | 1404 |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## TRAFFIC SIGNAL EVP DETECTOR CABLE

| CATEGORY | FROM | TO | * 655.0900 TRAFFIC SIGNAL EVP DETECTOR CABLE LF |
|---|---|---|---|
| 0020 | CB1 | HEAD A (SB4) | 230 |
| | CB1 | HEAD B (SB11) | 289 |
| | CB1 | HEAD C (SB15) | 99 |
| | CB1 | HEAD D (SB8) | 436 |
| | | TOTAL 0020 | 1054 |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## TRAFFIC SIGNAL CABLE AND WIRE (GROUNDING)

| CATEGORY | FROM | TO | * 655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF |
|---|---|---|---|
| 0020 | CB1 | SB1 | 64 |
| | SB1 | SB2 | 127 |
| | SB2 | SB3 | 127 |
| | SB3 | SB4 | 107 |
| | SB4 | SB5 | 122 |
| | SB5 | SB6 | 51 |
| | SB6 | SB7 | 113 |
| | SB7 | SB8 | 164 |
| | SB8 | SB9 | 139 |
| | SB9 | SB10 | 153 |
| | SB10 | SB11 | 117 |
| | SB11 | SB12 | 118 |
| | SB12 | SB13 | 55 |
| | SB13 | SB14 | 125 |
| | SB14 | SB15 | 163 |
| | SB15 | CB1 | 60 |
| | PB1 | SB1 | 32 |
| | PB2 | SB2 | 34 |
| | PB5 | SB3 | 41 |
| | PB6 | SB4 | 27 |
| | PB7 | SB6 | 30 |
| | PB11 | SB7 | 33 |
| | PB12 | SB8 | 92 |
| | PB13 | SB8 | 33 |
| | PB14 | SB9 | 37 |
| | PB16 | SB10 | 47 |
| | PB17 | SB11 | 31 |
| | PB18 | SB12 | 35 |
| | PB22 | SB14 | 29 |
| | PB23 | SB15 | 94 |
| | PB24 | SB15 | 34 |
| | | TOTAL 0020 | 2,434 |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## TRAFFIC SIGNAL CABLE AND WIRE (ABOVE GROUND)

| CATEGORY | FROM | TO | * 655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF | * 655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG LF |
|---|---|---|---|---|
| 0020 | SB1 | HEAD 35 | 15 | - |
| | SB2 | HEAD 1 | 21 | - |
| | SB2 | HEAD 12 | - | 22 |
| | SB2 | HEAD 36 | 15 | - |
| | SB3 | HEAD 13 | - | 22 |
| | SB3 | HEAD 24 | 21 | - |
| | SB3 | HEAD 37 | 15 | - |
| | SB3 | HEAD 38 | 15 | - |
| | SB4 | HEAD 4 | - | 20 |
| | SB4 | HEAD 8 | 55 | - |
| | SB4 | HEAD 9 | 55 | - |
| | SB5 | HEAD 10 | - | 23 |
| | SB5 | HEAD 39 | 15 | - |
| | SB6 | HEAD 19 | - | 22 |
| | SB6 | HEAD 21 | 21 | - |
| | SB6 | HEAD 28 | 15 | - |
| | SB7 | HEAD 25 | - | 22 |
| | SB8 | HEAD 15 | 70 | - |
| | SB8 | HEAD 16 | 70 | - |
| | SB8 | HEAD 20 | - | 71 |
| | SB8 | HEAD 29 | 15 | - |
| | SB9 | HEAD 5 | - | 22 |
| | SB9 | HEAD 7 | - | 23 |
| | SB9 | HEAD 30 | 15 | - |
| | SB10 | HEAD 6 | - | 22 |
| | SB10 | HEAD 17 | 21 | - |
| | SB10 | HEAD 31 | 15 | - |
| | SB10 | HEAD 32 | 15 | - |
| | SB11 | HEAD 2 | 55 | - |
| | SB11 | HEAD 3 | 55 | - |
| | SB11 | HEAD 11 | - | 20 |
| | SB12 | HEAD 33 | 15 | - |
| | SB13 | HEAD 14 | 21 | - |
| | SB13 | HEAD 26 | - | 22 |
| | SB13 | HEAD 34 | 15 | - |
| | SB14 | HEAD 18 | - | 22 |
| | SB15 | HEAD 22 | 65 | - |
| | SB15 | HEAD 23 | 65 | - |
| | SB15 | HEAD 27 | - | 66 |
| | | TOTAL 0020 | 775 | 399 |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

W NATIONAL AVE & W CLEVELAND AVE
CITY OF WEST ALLIS

## POLES AND ARMS

| CATEGORY | SIGNAL BASE NO. | * 657.0100 PEDESTAL BASES EACH | * 657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH | * SPV.0060.200 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE BRONZE EACH | * 657.0310 POLES TYPE 3 EACH | * SPV.0060.201 POLES TYPE 5-ALUMINUM BRONZE EACH | * 657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH | 657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT EACH | * 657.0609 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FT EACH | * SPV.0060.202 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT BRONZE EACH | * 659.1120 LUMINAIRES UTILITY LED B EACH | * SPV.0060.203 LUMINAIRES UTILITY LED B BRONZE EACH | (INCIDENTAL) ACCESSIBLE PEDESTRIAN PUSH BUTTON EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0020 | SB1 | 1 | - | - | - | - | - | 1 | - | - | - | - | 1 |
| | SB2 | - | 1 | - | 1 | - | - | - | 1 | - | 1 | - | 1 |
| | SB3 | 1 | - | - | - | - | 1 | - | - | - | - | - | 1 |
| | SB5 | 1 | - | - | - | - | 1 | - | - | - | - | - | 1 |
| | SB6 | 1 | - | - | - | - | 1 | - | - | - | - | - | 1 |
| | SB7 | - | 1 | - | 1 | - | - | - | 2 | - | 2 | - | - |
| | SB9 | - | 1 | - | 1 | - | - | - | 1 | - | 1 | - | 1 |
| | SB10 | 1 | - | - | - | - | 1 | - | - | - | - | - | 1 |
| | SB12 | 1 | - | - | - | - | - | 1 | - | - | - | - | 1 |
| | SB13 | 1 | - | - | - | - | 1 | - | - | - | - | - | 1 |
| | SB14 | - | 1 | - | 1 | - | - | - | 2 | - | 2 | - | - |
| 0030 | SB16 | - | - | 1 | - | 1 | - | - | - | 1 | - | 1 | - |
| | SB17 | - | - | 1 | - | 1 | - | - | - | 1 | - | 1 | - |
| | **TOTAL 0020** | **7** | **4** | **0** | **4** | **0** | **5** | **2** | **6** | **0** | **6** | **0** | **9** |
| | **TOTAL 0030** | **0** | **0** | **2** | **0** | **2** | **0** | **0** | **0** | **2** | **0** | **2** | **0** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## POLES (MONOTUBES)

| CATEGORY | SIGNAL BASE NO. | * 657.0350 POLES TYPE 10 EACH | * 657.0347 POLES TYPE 9 SPECIAL EACH | * 657.0530 MONOTUBE ARMS 30-FT EACH | * 657.0541 MONOTUBE ARMS 40-FT SPECIAL EACH | * 657.0546 MONOTUBE ARMS 45-FT SPECIAL EACH | * 657.0806 LUMINAIRE ARMS STEEL 6-FT EACH | * 659.1120 LUMINAIRES UTILITY LED B EACH | (INCIDENTAL) ACCESSIBLE PEDESTRIAN PUSH BUTTON EACH |
|---|---|---|---|---|---|---|---|---|---|
| 0020 | SB4 | 1 | - | 1 | - | - | 2 | 2 | - |
| | SB8 | - | 1 | - | - | 1 | - | - | 1 |
| | SB11 | 1 | - | 1 | - | - | 2 | 2 | - |
| | SB15 | - | 1 | - | 1 | - | - | - | - |
| | **TOTAL 0020** | 2 | 2 | 2 | 1 | 1 | 4 | 4 | 1 |

* ADDITIONAL QUANTITY SHOWN ELSEWHERE ON PLAN



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | MISCELLANEOUS QUANTITIES | SHEET 539 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\Civil 3D\24101570\Design\Quantities\030201-mq.ppt PLOT DATE : 10/31/2025 9:14 AM PLOT BY : ANDY UTIC PLOT NAME : PLOT SCALE : 1:1

3

## FACES

| CATEGORY | SIGNAL HEAD NO. | SIGNAL BASE NO. | * 658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH | * 658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH | 658.0175 TRAFFIC SIGNAL FACE 5S 12-INCH EACH | * 658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH |
|---|---|---|---|---|---|---|
| 0020 | HEAD 35 | SB1 | - | - | - | 1 |
| | HEAD 1 | SB2 | 1 | - | - | - |
| | HEAD 12 | SB2 | - | 1 | - | - |
| | HEAD 36 | SB2 | - | - | - | 1 |
| | HEAD 13 | SB3 | - | 1 | - | - |
| | HEAD 24 ^ | SB3 | 1 | - | - | - |
| | HEAD 37 | SB3 | - | - | - | 1 |
| | HEAD 38 | SB3 | - | - | - | 1 |
| | HEAD 4 | SB4 | - | 1 | - | - |
| | HEAD 8 | SB4 | 1 | - | - | - |
| | HEAD 9 | SB4 | 1 | - | - | - |
| | HEAD 10 | SB5 | - | - | 1 | - |
| | HEAD 39 | SB5 | - | - | - | 1 |
| | HEAD 19 ^ | SB6 | - | 1 | - | - |
| | HEAD 21 | SB6 | 1 | - | - | - |
| | HEAD 28 | SB6 | - | - | - | 1 |
| | HEAD 25 | SB7 | - | 1 | - | - |
| | HEAD 15 ^ | SB8 | 1 | - | - | - |
| | HEAD 16 ^ | SB8 | 1 | - | - | - |
| | HEAD 20 ^ | SB8 | - | 1 | - | - |
| | HEAD 29 | SB8 | - | - | - | 1 |
| | HEAD 5 | SB9 | - | 1 | - | - |
| | HEAD 7 | SB9 | - | - | 1 | - |
| | HEAD 30 | SB9 | - | - | - | 1 |
| | HEAD 6 | SB10 | - | 1 | - | - |
| | HEAD 17 ^ | SB10 | 1 | - | - | - |
| | HEAD 31 | SB10 | - | - | - | 1 |
| | HEAD 32 | SB10 | - | - | - | 1 |
| | HEAD 2 | SB11 | 1 | - | - | - |
| | HEAD 3 | SB11 | 1 | - | - | - |
| | HEAD 11 | SB11 | - | 1 | - | - |
| | HEAD 33 | SB12 | - | - | - | 1 |
| | HEAD 14 | SB13 | 1 | - | - | - |
| | HEAD 26 ^ | SB13 | - | 1 | - | - |
| | HEAD 34 | SB13 | - | - | - | 1 |
| | HEAD 18 | SB14 | - | 1 | - | - |
| | HEAD 22 ^ | SB15 | 1 | - | - | - |
| | HEAD 23 ^ | SB15 | 1 | - | - | - |
| | HEAD 27 ^ | SB15 | - | 1 | - | - |
| | **TOTAL 0020** | | **13** | **12** | **2** | **12** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.
^ CIRCULAR INDICATORS INCLUDE TUNNEL VISORS

## LED MODULES SUMMARY (FOR INFORMATION ONLY)

| SIGNAL HEAD NO. | SIGNAL BASE NO. | PEDESTRIAN SIGNAL FACE 16-INCH EACH | LED MODULES 12-INCH RED BALL EACH | LED MODULES 12-INCH YELLOW BALL EACH | LED MODULES 12-INCH GREEN BALL EACH | LED MODULES 12-INCH RED ARROW EACH | LED MODULES 12-INCH YELLOW ARROW EACH | LED MODULES 12-INCH GREEN ARROW EACH |
|---|---|---|---|---|---|---|---|---|
| HEAD 35 | SB1 | 1 | - | - | - | - | - | - |
| HEAD 1 | SB2 | - | 1 | 1 | 1 | - | - | - |
| HEAD 12 | SB2 | - | - | - | - | 1 | 2 | 1 |
| HEAD 36 | SB2 | 1 | - | - | - | - | - | - |
| HEAD 13 | SB3 | - | - | - | - | 1 | 2 | 1 |
| HEAD 24 ^ | SB3 | - | 1^ | 1^ | 1^ | - | - | - |
| HEAD 37 | SB3 | 1 | - | - | - | - | - | - |
| HEAD 38 | SB3 | 1 | - | - | - | - | - | - |
| HEAD 4 | SB4 | - | - | - | - | 1 | 2 | 1 |
| HEAD 8 | SB4 | - | 1 | 1 | 1 | - | - | - |
| HEAD 9 | SB4 | - | 1 | 1 | 1 | - | - | - |
| HEAD 10 | SB5 | - | 1 | 1 | 1 | - | 1 | 1 |
| HEAD 39 | SB5 | 1 | - | - | - | - | - | - |
| HEAD 19 ^ | SB6 | - | - | - | - | 1^ | 2^ | 1^ |
| HEAD 21 | SB6 | - | 1 | 1 | 1 | - | - | - |
| HEAD 28 | SB6 | 1 | - | - | - | - | - | - |
| HEAD 25 | SB7 | - | - | - | - | 1 | 2 | 1 |
| HEAD 15 ^ | SB8 | - | 1^ | 1^ | 1^ | - | - | - |
| HEAD 16 ^ | SB8 | - | 1^ | 1^ | 1^ | - | - | - |
| HEAD 20 ^ | SB8 | - | - | - | - | 1^ | 2^ | 1^ |
| HEAD 29 | SB8 | 1 | - | - | - | - | - | - |
| HEAD 5 | SB9 | - | - | - | - | 1 | 2 | 1 |
| HEAD 7 | SB9 | - | 1 | 1 | 1 | - | 1 | 1 |
| HEAD 30 | SB9 | 1 | - | - | - | - | - | - |
| HEAD 6 | SB10 | - | - | - | - | 1 | 2 | 1 |
| HEAD 17 ^ | SB10 | - | 1^ | 1^ | 1^ | - | - | - |
| HEAD 31 | SB10 | 1 | - | - | - | - | - | - |
| HEAD 32 | SB10 | 1 | - | - | - | - | - | - |
| HEAD 2 | SB11 | - | 1 | 1 | 1 | - | - | - |
| HEAD 3 | SB11 | - | 1 | 1 | 1 | - | - | - |
| HEAD 11 | SB11 | - | - | - | - | 1 | 2 | 1 |
| HEAD 33 | SB12 | 1 | - | - | - | - | - | - |
| HEAD 14 | SB13 | - | 1 | 1 | 1 | - | - | - |
| HEAD 26 ^ | SB13 | - | - | - | - | 1^ | 2^ | 1^ |
| HEAD 34 | SB13 | 1 | - | - | - | - | - | - |
| HEAD 18 | SB14 | - | - | - | - | 1 | 2 | 1 |
| HEAD 22 ^ | SB15 | - | 1^ | 1^ | 1^ | - | - | - |
| HEAD 23 ^ | SB15 | - | 1^ | 1^ | 1^ | - | - | - |
| HEAD 27 ^ | SB15 | - | - | - | - | 1^ | 2^ | 1^ |
| | **TOTAL** | **12** | **15** | **15** | **15** | **12** | **26** | **14** |

^ CIRCULAR INDICATORS INCLUDE TUNNEL VISORS

3

## TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS

| CATEGORY | LOCATION | 661.0201.101 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS EACH | * 661.0300 GENERATORS DAY |
|---|---|---|---|
| 0020 | NATIONAL AVE & CLEVELAND AVE | 1 | 1 |
| | TOTAL | 1 | 1 |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## FURNISH & INSTALL TRAFFIC SIGNAL CABINET & CONTROLLER

| CATEGORY | LOCATION | SPV.0060.100 FURNISH & INSTALL SIGNAL CABINET & CONTROLLER EACH |
|---|---|---|
| 0020 | NATIONAL AVE & CLEVELAND AVE | 1 |
| | **TOTAL 0020** | **1** |

## FURNISH & INSTALL EVP SYSTEM

| CATEGORY | LOCATION | SPV.0060.102 FURNISH & INSTALL EVP SYSTEM EACH |
|---|---|---|
| 0020 | NATIONAL AVE & CLEVELAND AVE | 1 |
| | **TOTAL 0020** | **1** |

## FURNISH & INSTALL ACCESSIBLE PEDESTRIAN PUSH BUTTON SYSTEM

| CATEGORY | LOCATION | SPV.0060.104 FURNISH & INSTALL ACCESSIBLE PED SIGNALS EACH |
|---|---|---|
| 0020 | NATIONAL AVE & CLEVELAND AVE | 1 |
| | **TOTAL 0020** | **1** |

## TEMPORARY INFRARED EVP SYSTEM

| CATEGORY | LOCATION | SPV.0060.107 TEMPORARY INFRARED EVP SYSTEM EACH |
|---|---|---|
| 0020 | NATIONAL AVE & CLEVELAND AVE | 1 |
| | **TOTAL 0020** | **1** |

3

## REMOVING CONCRETE BASES

| CATEGORY | SIGNAL BASE NO. | * 204.0195 REMOVING CONCRETE BASES EACH | * SPV.0060.106 REMOVING CONCRETE MONOTUBE TRAFFIC SIGNAL BASES EACH |
|---|---|---|---|
| 0020 | SB1 | 1 | - |
| | SB2 | - | 1 |
| | SB3 | 1 | - |
| | SB4 | 1 | - |
| | SB5 | 1 | - |
| | SB6 | - | 1 |
| | SB7 | 1 | - |
| | SB8 | 1 | - |
| | SB9 | - | 1 |
| | SB10 | 1 | - |
| | SB11 | 1 | - |
| | SB12 | - | 1 |
| | SB13 | 1 | - |
| | CB1 | 1 | - |
| | **TOTAL 0020** | **10** | **4** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## TRAFFIC SIGNAL REMOVALS

| CATEGORY | LOCATION | 204.9060.S.102 REMOVING TRAFFIC SIGNALS EACH |
|---|---|---|
| 0020 | W NATIONAL AVE & 102ND ST | 1 |
| | **TOTAL 0020** | **1** |

## REMOVING PULL BOXES

| CATEGORY | PULL BOX NO. | * 653.0905 REMOVING PULL BOXES EACH |
|---|---|---|
| 0020 | PB1 | 1 |
| | PB2 | 1 |
| | PB3 | 1 |
| | PB4 | 1 |
| | PB5 | 1 |
| | PB6 | 1 |
| | PB7 | 1 |
| | PB8 | 1 |
| | PB9 | 1 |
| | PB10 | 1 |
| | PB11 | 1 |
| | PB12 | 1 |
| | **TOTAL 0020** | **12** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

3

## CONDUIT

| CATEGORY | FROM | TO | * 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF | * 652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF | 652.0605 CONDUIT SPECIAL 2-INCH LF | * 652.0615 CONDUIT SPECIAL 3-INCH LF |
|---|---|---|---|---|---|---|
| 0020 | CB1 | PB1 | - | 51 | - | - |
| | CB1 | PB21 | - | 81 | - | - |
| | PB1 | SB1 | 12 | - | - | - |
| | PB1 | PB2 | 13 | - | - | - |
| | PB1 | PB4 | - | - | - | 72 |
| | PB2 | PB3 | 205 | - | - | - |
| | PB4 | PB5 | - | - | - | 90 |
| | PB5 | SB2 | - | 11 | - | - |
| | PB5 | PB6 | - | 100 | - | - |
| | PB6 | SB3 | 7 | - | - | - |
| | PB6 | PB7 | 252 | - | - | - |
| | PB6 | PB8 | - | - | - | 88 |
| | PB8 | SB4 | 16 | - | - | - |
| | PB8 | PB9 | - | - | - | 33 |
| | PB8 | PB10 | - | - | - | 110 |
| | PB9 | SB5 | 5 | - | - | - |
| | PB10 | SB6 | - | 7 | - | - |
| | PB10 | PB11 | 30 | - | - | - |
| | PB10 | PB12 | - | - | - | 80 |
| | PB12 | PB13 | - | 86 | - | - |
| | PB13 | SB7 | 13 | - | - | - |
| | PB13 | PB14 | 43 | - | 125 | - |
| | PB13 | PB15 | - | - | - | 78 |
| | PB15 | SB8 | - | 14 | - | - |
| | PB15 | PB16 | - | 84 | - | - |
| | PB16 | PB17 | - | - | - | 80 |
| | PB17 | SB9 | 4 | - | - | - |
| | PB17 | PB18 | 245 | - | - | - |
| | PB17 | PB19 | - | - | - | 64 |
| | PB19 | SB10 | 11 | - | - | - |
| | PB19 | PB20 | - | - | - | 34 |
| | PB20 | SB11 | 9 | - | - | - |
| | PB19 | PB21 | - | - | - | 124 |
| | PB21 | SB12 | - | 7 | - | - |
| **TOTAL 0020** | | | **865** | **441** | **125** | **853** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## PULL BOXES

| CATEGORY | PULL BOX NO. | LOCATION ## | * 653.0135 PULL BOXES STEEL 24x36-INCH EACH | * 653.0140 PULL BOXES STEEL 24x42-INCH EACH |
|---|---|---|---|---|
| 0020 | PB1 | STA 39+22; 81.9' LT | - | 1 |
| | PB2 | STA 39+25; 94.1' LT | 1 | - |
| | PB3 | STA 40+27; 271.6' LT | 1 | - |
| | PB4 | STA 39+58; 80.0' LT | - | 1 |
| | PB5 | STA 40+03; 77.7' LT | - | 1 |
| | PB6 | STA 40+41; 52.0' LT | - | 1 |
| | PB7 | STA 42+93; 44.6' LT | 1 | - |
| | PB8 | STA 40+30; 9.8' LT | - | 1 |
| | PB9 | STA 40+56; 8.7' RT | - | 1 |
| | PB10 | STA 40+17; 43.5' RT | - | 1 |
| | PB11 | STA 39+90; 54.0' RT | 1 | - |
| | PB12 | STA 40+08; 82.0' RT | - | 1 |
| | PB13 | STA 39+76; 101.5' RT | - | 1 |
| | PB14 | STA 39+81; 268.7' RT | - | 1 |
| | PB15 | STA 39+38; 101.5' RT | - | 1 |
| | PB16 | STA 39+06; 81.8' RT | - | 1 |
| | PB17 | STA 39+04; 42.0' RT | - | 1 |
| | PB18 | STA 36+59; 42.0' RT | - | 1 |
| | PB19 | STA 39+03; 9.7' RT | - | 1 |
| | PB20 | STA 38+74; 8.9'LT | - | 1 |
| | PB21 | STA 38+92; 51.3' LT | - | 1 |
| **TOTAL 0020** | | | **4** | **17** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.
## FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

## ELECTRICAL SERVICE METER BREAKER PEDESTAL

| CATEGORY | LOCATION # | 656.0201.102 ELECTRICAL SERVICE METER BREAKER PEDESTAL EACH |
|---|---|---|
| 0020 | W NATIONAL AVE & 102ND ST | 1 |
| **TOTAL 0020** | | **1** |

## SIGNAL MOUNTING HARDWARE

| CATEGORY | LOCATION | 658.5070.102 SIGNAL MOUNTING HARDWARE EACH |
|---|---|---|
| 0020 | W NATIONAL AVE & 102ND ST | 1 |
| **TOTAL 0020** | | **1** |

3

3

## CONCRETE BASES

| CATEGORY | SIGNAL BASE NO. | LOCATION ## | * 654.0101 CONCRETE BASES TYPE 1 EACH | * 654.0102 CONCRETE BASES TYPE 2 EACH | * 654.0110 CONCRETE BASES TYPE 10 EACH | * 654.0120 CONCRETE BASES TYPE 10-SPECIAL EACH | * 654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH |
|---|---|---|---|---|---|---|---|
| 0020 | SB1 | STA 39+19; 69.4' LT | - | 1 | - | - | - |
| | SB2 | STA 40+11; 70.2' LT | - | - | - | 1 | - |
| | SB3 | STA 40+35; 54.2' LT | - | 1 | - | - | - |
| | SB4 | STA 40+15; 9.0' LT | 1 | - | - | - | - |
| | SB5 | STA 40+62; 8.3' RT | 1 | - | - | - | - |
| | SB6 | STA 40+12; 44.2' RT | - | - | 1 | - | - |
| | SB7 | STA 39+83; 91.2' RT | - | 1 | - | - | - |
| | SB8 | STA 39+29; 91.9' RT | - | - | 1 | - | - |
| | SB9 | STA 39+08; 44.6' RT | - | 1 | - | - | - |
| | SB10 | STA 39+13; 9.4' RT | 1 | - | - | - | - |
| | SB11 | STA 38+66; 8.3' LT | 1 | - | - | - | - |
| | SB12 | STA 38+97; 54.3' LT | - | - | - | 1 | - |
| | CB1 | STA 39+08; 72.6' LT | - | - | - | - | 1 |
| | | **TOTAL 0020** | **4** | **4** | **2** | **2** | **1** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.
## FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

## TRAFFIC DETECTOR LOOPS

| CATEGORY | LOOP NO. | HOME RUN PB | LOCATION ## | SIZE (FT)x(FT) | NO. OF TURNS | PAVEMENT TYPE | * 652.0800 CONDUIT LOOP DETECTOR LF | * 655.0700 LOOP DETECTOR LEAD IN CABLE LF | * 655.0800 LOOP DETECTOR WIRE LF |
|---|---|---|---|---|---|---|---|---|---|
| 0020 | 11 | PB20 | STA 38+63; 4' RT | 6x20 | 3 | CONCRETE | 82 | 150 | 254 |
| | 12 | PB20 | STA 39+01; 1' LT | 6x30 | 3 | CONCRETE | 90 | 150 | 278 |
| | 21 | PB7 | STA 42+95; 31' LT | 6x8 | 5 | CONCRETE | 46 | 434 | 238 |
| | 22 | PB7 | STA 42+95; 20' LT | 6x6 | 5 | CONCRETE | 68 | 434 | 348 |
| | 41 | PB3 | STA 40+37; 263' LT | 6x6 | 4 | CONCRETE | 44 | 267 | 184 |
| | 42 | PB3 | STA 40+46; 256' LT | 6x6 | 4 | CONCRETE | 68 | 267 | 280 |
| | 43 | PB2 | STA 39+38; 100' LT | 6x20 | 3 | CONCRETE | 76 | 53 | 236 |
| | 44 | PB2 | STA 39+35; 72' LT | 6x20 | 3 | CONCRETE | 70 | 53 | 218 |
| | 45 | PB2 | STA 39+50; 100' LT | 6x20 | 3 | CONCRETE | 98 | 53 | 302 |
| | 46 | PB2 | STA 39+47; 72' LT | 6x20 | 3 | CONCRETE | 94 | 53 | 290 |
| | 51 | PB9 | STA 40+62; 4' LT | 6x20 | 3 | CONCRETE | 74 | 254 | 230 |
| | 52 | PB9 | STA 40+24; 1' RT | 6x30 | 3 | CONCRETE | 90 | 254 | 278 |
| | 61 | PB18 | STA 36+58; 30' RT | 6x6 | 5 | CONCRETE | 42 | 400 | 218 |
| | 62 | PB18 | STA 36+58; 19' RT | 6x6 | 5 | CONCRETE | 64 | 400 | 328 |
| | 81 | PB14 | STA 39+68; 270' RT | 6x8 | 5 | CONCRETE | 48 | 444 | 248 |
| | 82 | PB13 | STA 39+62; 119' RT | 6x20 | 3 | CONCRETE | 94 | 272 | 290 |
| | 83 | PB13 | STA 39+62; 91' RT | 6x20 | 3 | CONCRETE | 82 | 272 | 254 |
| | 84 | PB11 | STA 39+67; 53' RT | 6x15 | 3 | CONCRETE | 72 | 306 | 224 |
| | | | | | | **TOTAL 0020** | **1302** | **4516** | **4698** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.
## LOCATION IS TO FRONT CENTER OF DETECTOR LOOP. FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
SDD INSTALLATION REFERENCE: LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)

3

## TRAFFIC SIGNAL CABLE AND WIRE (UNDERGROUND)

| CATEGORY | FROM | TO | * 655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG LF | * 655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG LF | * 655.0270 CABLE TRAFFIC SIGNAL 15-14 AWG L.F. | * 655.0305 CABLE TYPE UF 2-12 AWG GROUNDED L.F. |
|---|---|---|---|---|---|---|
| 0020 | CB1 | SB1 | - | 67 | - | 67 |
| | CB1 | SB2 | - | 176 | - | - |
| | CB1 | SB3 | - | - | 237 | - |
| | CB1 | SB4 | - | 303 | - | - |
| | CB1 | SB5 | 343 | - | - | - |
| | CB1 | SB6 | - | - | 365 | - |
| | CB1 | SB7 | - | 367 | - | - |
| | CB1 | SB8 | - | - | 315 | - |
| | CB1 | SB9 | - | - | 194 | - |
| | CB1 | SB10 | - | 152 | - | - |
| | CB1 | SB11 | 199 | - | - | - |
| | CB1 | SB12 | - | 72 | - | 72 |
| | SB1 | SB3 | - | - | - | 225 |
| | SB3 | SB6 | - | - | - | 174 |
| | SB12 | SB9 | - | - | - | 166 |
| | SB9 | SB7 | - | - | - | 215 |
| | | **TOTAL 0020** | **542** | **1,137** | **1,111** | **919** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## TRAFFIC SIGNAL CABLE AND WIRE

| CATEGORY | FROM | TO | * 655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF |
|---|---|---|---|
| 0020 | SB1 | LUM. | 117 |
| | SB3 | LUM. | 117 |
| | SB6 | LUM. | 117 |
| | SB7 | LUM. | 117 |
| | SB9 | LUM. | 117 |
| | SB12 | LUM. | 117 |
| | | **TOTAL 0020** | **702** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## TRAFFIC SIGNAL EVP DETECTOR CABLE

| CATEGORY | FROM | TO | * 655.0900 TRAFFIC SIGNAL EVP DETECTOR CABLE LF |
|---|---|---|---|
| 0020 | CB1 | HEAD A (SB12) | 111 |
| | CB1 | HEAD B (SB6) | 325 |
| | CB1 | HEAD C (SB8) | 289 |
| | CB1 | HEAD D (SB2) | 189 |
| | | **TOTAL 0020** | **914** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## TRAFFIC SIGNAL CABLE AND WIRE (GROUNDING)

| CATEGORY | FROM | TO | * 655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF |
|---|---|---|---|
| 0020 | CB1 | SB1 | 67 |
| | SB1 | SB2 | 166 |
| | SB2 | SB3 | 114 |
| | SB3 | SB4 | 113 |
| | SB4 | SB5 | 100 |
| | SB5 | SB6 | 161 |
| | SB6 | SB7 | 164 |
| | SB7 | SB8 | 111 |
| | SB8 | SB9 | 161 |
| | SB9 | SB10 | 93 |
| | SB10 | SB11 | 99 |
| | SB11 | SB12 | 164 |
| | SB12 | CB1 | 72 |
| | PB1 | CB1 | 46 |
| | PB4 | SB2 | 94 |
| | PB5 | SB2 | 34 |
| | PB6 | SB3 | 30 |
| | PB8 | SB4 | 39 |
| | PB9 | SB5 | 28 |
| | PB10 | SB6 | 30 |
| | PB12 | SB6 | 85 |
| | PB13 | SB7 | 36 |
| | PB15 | SB8 | 37 |
| | PB16 | SB8 | 93 |
| | PB17 | SB9 | 27 |
| | PB19 | SB10 | 34 |
| | PB20 | SB11 | 32 |
| | PB21 | SB12 | 30 |
| | | **TOTAL 0020** | **2,260** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## TRAFFIC SIGNAL CABLE AND WIRE (ABOVE GROUND)

| CATEGORY | FROM | TO | * 655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF | * 655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG LF |
|---|---|---|---|---|
| 0020 | SB1 | HEAD 16 | 19 | - |
| | SB1 | HEAD 21 | 15 | - |
| | SB2 | HEAD 14 | 70 | - |
| | SB2 | HEAD 15 | 70 | - |
| | SB2 | HEAD 22 | 15 | - |
| | SB3 | HEAD 5 | - | 22 |
| | SB3 | HEAD 7 | 21 | - |
| | SB3 | HEAD 23 | 15 | - |
| | SB4 | HEAD 6 | - | 22 |
| | SB4 | HEAD 24 | 15 | - |
| | SB4 | HEAD 25 | 15 | - |
| | SB5 | HEAD 10 | - | 22 |
| | SB6 | HEAD 2 | 55 | - |
| | SB6 | HEAD 3 | 55 | - |
| | SB6 | HEAD 19 | - | 21 |
| | SB6 | HEAD 26 | 15 | - |
| | SB7 | HEAD 13 | 19 | - |
| | SB7 | HEAD 27 | 15 | - |
| | SB8 | HEAD 17 | 55 | - |
| | SB8 | HEAD 18 | 20 | - |
| | SB8 | HEAD 20 | - | 56 |
| | SB8 | HEAD 28 | 15 | - |
| | SB9 | HEAD 1 | 21 | - |
| | SB9 | HEAD 11 | - | 22 |
| | SB9 | HEAD 29 | 15 | - |
| | SB10 | HEAD 12 | - | 22 |
| | SB10 | HEAD 30 | 15 | - |
| | SB10 | HEAD 31 | 15 | - |
| | SB11 | HEAD 4 | - | 22 |
| | SB12 | HEAD 8 | 65 | - |
| | SB12 | HEAD 9 | 65 | - |
| | SB12 | HEAD 32 | 15 | - |
| | | **TOTAL 0020** | **715** | **209** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

3

W NATIONAL AVE & S 102ND ST
CITY OF WEST ALLIS

## POLES AND ARMS

| CATEGORY | SIGNAL BASE NO. | * 657.0100 PEDESTAL BASES EACH | * 657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH | * 657.0310 POLES TYPE 3 EACH | * 657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH | * 657.0609 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FT EACH | * 659.1120 LUMINAIRES UTILITY LED B EACH | (INCIDENTAL) ACCESSIBLE PEDESTRIAN PUSH BUTTON EACH |
|---|---|---|---|---|---|---|---|---|
| 0020 | SB1 | - | 1 | 1 | - | 1 | 1 | 1 |
| | SB3 | - | 1 | 1 | - | 1 | 1 | 1 |
| | SB4 | 1 | - | - | 1 | - | - | 1 |
| | SB5 | 1 | - | - | 1 | - | - | - |
| | SB7 | - | 1 | 1 | - | 1 | 1 | 1 |
| | SB9 | - | 1 | 1 | - | 1 | 1 | 1 |
| | SB10 | 1 | - | - | 1 | - | - | 1 |
| | SB11 | 1 | - | - | 1 | - | - | - |
| | **TOTAL 0020** | **4** | **4** | **4** | **4** | **4** | **4** | **6** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## POLES (MONOTUBES)

| CATEGORY | SIGNAL BASE NO. | * 657.0345 POLES TYPE 9 EACH | * 657.0350 POLES TYPE 10 EACH | * 657.0347 POLES TYPE 9 SPECIAL EACH | * 657.0352 POLES TYPE 10 SPECIAL EACH | * 657.0530 MONOTUBE ARMS 30-FT EACH | * 657.0541 MONOTUBE ARMS 40-FT SPECIAL EACH | * 657.0546 MONOTUBE ARMS 45-FT SPECIAL EACH | * 657.0806 LUMINAIRE ARMS STEEL 6-FT EACH | * 659.1120 LUMINAIRES UTILITY LED B EACH | (INCIDENTAL) ACCESSIBLE PEDESTRIAN PUSH BUTTON EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0020 | SB2 | - | - | 1 | - | - | - | 1 | - | - | 1 |
| | SB6 | - | 1 | - | - | 1 | - | - | 1 | 1 | 1 |
| | SB8 | 1 | - | - | - | 1 | - | - | - | - | 1 |
| | SB12 | - | - | - | 1 | - | 1 | - | 1 | 1 | 1 |
| | **TOTAL 0020** | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 4 |

* ADDITIONAL QUANTITY SHOWN ELSEWHERE ON PLAN



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | MISCELLANEOUS QUANTITIES | SHEET 546 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\Civil 3D\24101570\Design\Quantities\030201-mq.ppt PLOT DATE : 10/31/2025 9:14 AM PLOT BY : ANDY UTIC PLOT NAME : PLOT SCALE : 1:1

3

## FACES

| CATEGORY | SIGNAL HEAD NO. | SIGNAL BASE NO. | * 658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH | * 658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH | * 658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH |
|---|---|---|---|---|---|
| 0020 | HEAD 16 | SB1 | 1 | - | - |
| | HEAD 21 | SB1 | - | - | 1 |
| | HEAD 14 | SB2 | 1 | - | - |
| | HEAD 15 | SB2 | 1 | - | - |
| | HEAD 22 | SB2 | - | - | 1 |
| | HEAD 5 | SB3 | - | 1 | - |
| | HEAD 7 | SB3 | 1 | - | - |
| | HEAD 23 | SB3 | - | - | 1 |
| | HEAD 6 | SB4 | - | 1 | - |
| | HEAD 24 | SB4 | - | - | 1 |
| | HEAD 25 | SB4 | - | - | 1 |
| | HEAD 10 | SB5 | - | 1 | - |
| | HEAD 2 | SB6 | 1 | - | - |
| | HEAD 3 | SB6 | 1 | - | - |
| | HEAD 19 | SB6 | - | 1 | - |
| | HEAD 26 | SB6 | - | - | 1 |
| | HEAD 13 | SB7 | 1 | - | - |
| | HEAD 27 | SB7 | - | - | 1 |
| | HEAD 17 | SB8 | 1 | - | - |
| | HEAD 18 | SB8 | 1 | - | - |
| | HEAD 20 | SB8 | - | 1 | - |
| | HEAD 28 | SB8 | - | - | 1 |
| | HEAD 1 | SB9 | 1 | - | - |
| | HEAD 11 | SB9 | - | 1 | - |
| | HEAD 29 | SB9 | - | - | 1 |
| | HEAD 12 | SB10 | - | 1 | - |
| | HEAD 30 | SB10 | - | - | 1 |
| | HEAD 31 | SB10 | - | - | 1 |
| | HEAD 4 | SB11 | - | 1 | - |
| | HEAD 8 | SB12 | 1 | - | - |
| | HEAD 9 | SB12 | 1 | - | - |
| | HEAD 32 | SB12 | - | - | 1 |
| | **TOTAL 0020** | | **12** | **8** | **12** |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## LED MODULES SUMMARY (FOR INFORMATION ONLY)

| SIGNAL HEAD NO. | SIGNAL BASE NO. | PEDESTRIAN SIGNAL FACE 16-INCH EACH | LED MODULES 12-INCH RED BALL EACH | LED MODULES 12-INCH YELLOW BALL EACH | LED MODULES 12-INCH GREEN BALL EACH | LED MODULES 12-INCH RED ARROW EACH | LED MODULES 12-INCH YELLOW ARROW EACH | LED MODULES 12-INCH GREEN ARROW EACH |
|---|---|---|---|---|---|---|---|---|
| HEAD 16 | SB1 | - | 1 | 1 | 1 | - | - | - |
| HEAD 21 | SB1 | 1 | - | - | - | - | - | - |
| HEAD 14 | SB2 | - | 1 | 1 | 1 | - | - | - |
| HEAD 15 | SB2 | - | 1 | 1 | 1 | - | - | - |
| HEAD 22 | SB2 | 1 | - | - | - | - | - | - |
| HEAD 5 | SB3 | - | - | - | - | 1 | 2 | 1 |
| HEAD 7 | SB3 | - | 1 | 1 | 1 | - | - | - |
| HEAD 23 | SB3 | 1 | - | - | - | - | - | - |
| HEAD 6 | SB4 | - | - | - | - | 1 | 2 | 1 |
| HEAD 24 | SB4 | 1 | - | - | - | - | - | - |
| HEAD 25 | SB4 | 1 | - | - | - | - | - | - |
| HEAD 10 | SB5 | - | - | - | - | 1 | 2 | 1 |
| HEAD 2 | SB6 | - | 1 | 1 | 1 | - | - | - |
| HEAD 3 | SB6 | - | 1 | 1 | 1 | - | - | - |
| HEAD 19 | SB6 | - | - | - | - | 1 | 2 | 1 |
| HEAD 26 | SB6 | 1 | - | - | - | - | - | - |
| HEAD 13 | SB7 | - | 1 | 1 | 1 | - | - | - |
| HEAD 27 | SB7 | 1 | - | - | - | - | - | - |
| HEAD 17 | SB8 | - | 1 | 1 | 1 | - | - | - |
| HEAD 18 | SB8 | - | 1 | 1 | 1 | - | - | - |
| HEAD 20 | SB8 | - | - | - | - | 1 | 2 | 1 |
| HEAD 28 | SB8 | 1 | - | - | - | - | - | - |
| HEAD 1 | SB9 | - | 1 | 1 | 1 | - | - | - |
| HEAD 11 | SB9 | - | - | - | - | 1 | 2 | 1 |
| HEAD 29 | SB9 | 1 | - | - | - | - | - | - |
| HEAD 12 | SB10 | - | - | - | - | 1 | 2 | 1 |
| HEAD 30 | SB10 | 1 | - | - | - | - | - | - |
| HEAD 31 | SB10 | 1 | - | - | - | - | - | - |
| HEAD 4 | SB11 | - | - | - | - | 1 | 2 | 1 |
| HEAD 8 | SB12 | - | 1 | 1 | 1 | - | - | - |
| HEAD 9 | SB12 | - | 1 | 1 | 1 | - | - | - |
| HEAD 32 | SB12 | 1 | - | - | - | - | - | - |
| **TOTAL** | | **12** | **12** | **12** | **12** | **8** | **16** | **8** |

3

## TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS

| CATEGORY | LOCATION | 661.0201.102 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS EACH | * 661.0300 GENERATORS DAY |
|---|---|---|---|
| 0020 | NATIONAL AVE & 102ND ST | 1 | 1 |
| | TOTAL | 1 | 1 |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## FURNISH & INSTALL TRAFFIC SIGNAL CABINET & CONTROLLER

| CATEGORY | LOCATION | SPV.0060.101 FURNISH & INSTALL SIGNAL CABINET & CONTROLLER EACH |
|---|---|---|
| 0020 | NATIONAL AVE & 102ND ST | 1 |
| | **TOTAL 0020** | **1** |

3

## FURNISH & INSTALL EVP SYSTEM

| CATEGORY | LOCATION | SPV.0060.103 FURNISH & INSTALL EVP SYSTEM EACH |
|---|---|---|
| 0020 | NATIONAL AVE & 102ND ST | 1 |
| | **TOTAL 0020** | **1** |

## FURNISH & INSTALL ACCESSIBLE PEDESTRIAN PUSH BUTTON SYSTEM

| CATEGORY | LOCATION | SPV.0060.105 FURNISH & INSTALL ACCESSIBLE PED SIGNALS EACH |
|---|---|---|
| 0020 | NATIONAL AVE & 102ND ST | 1 |
| | **TOTAL 0020** | **1** |

## TEMPORARY INFRARED EVP SYSTEM

| CATEGORY | LOCATION | SPV.0060.108 TEMPORARY INFRARED EVP SYSTEM EACH |
|---|---|---|
| 0020 | NATIONAL AVE & 102ND ST | 1 |
| | **TOTAL 0020** | **1** |

3

## LOOP DETECTOR REMOVALS

| CATEGORY | LOCATION | 204.9060.S.103 REMOVING LOOP DETECTOR WIRE & LEAD-IN CABLE EACH |
|---|---|---|
| 0020 | STH 100 & NATIONAL AVE | 1 |
| | TOTAL | 1 |

## REMOVING PULL BOXES

| CATEGORY | PULL BOX NO. | * 653.0905 REMOVING PULL BOXES EACH |
|---|---|---|
| 0020 | PB12 | 1 |
| | TOTAL 0010 | 1 |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## CONDUIT

| CATEGORY | FROM | TO | * 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF |
|---|---|---|---|
| 0020 | PB11 | PB12 | 205 |
| | | TOTAL | 205 |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## TRAFFIC DETECTOR LOOPS

| CATEGORY | LOOP NO. | HOME RUN PB | LOCATION ## | SIZE (FT)x(FT) | NO. OF TURNS | PAVEMENT TYPE | * 652.0800 CONDUIT LOOP DETECTOR LF | * 655.0700 LOOP DETECTOR LEAD IN CABLE LF | * 655.0800 LOOP DETECTOR WIRE LF |
|---|---|---|---|---|---|---|---|---|---|
| 0020 | 31 | PB14 | STA 22+47.5; 6' LT | 6X20 | 4 | ASPHALT | 78 | - | 320 |
| | 32 | PB13 | STA 22+19.5; 6' LT | 6X20 | 4 | ASPHALT | 80 | - | 328 |
| | 81 | PB12 | STA 25+03; 27.5' LT | 6X10 | 5 | CONCRETE | 66 | 528 | 338 |
| | 82 | PB14 | STA 22+65.5; 27.5' LT | 6X20 | 4 | ASPHALT | 110 | 461 | 448 |
| | 83 | PB13 | STA 22+37.5; 27.5' LT | 6X20 | 4 | ASPHALT | 136 | 409 | 552 |
| | 84 | PB14 | STA 22+56; 16.5' LT | 6X20 | 4 | ASPHALT | 86 | - | 352 |
| | 85 | PB13 | STA 22+28; 16.5' LT | 6X20 | 4 | ASPHALT | 106 | 409 | 432 |
| | 86 | PB12 | STA 25+03; 16.5' LT | 6X10 | 5 | CONCRETE | | 528 | 448 |
| | | | | | | TOTAL | 662 | 2335 | 3218 |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.
## LOCATION IS TO FRONT CENTER OF DETECTOR LOOP. FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
SDD INSTALLATION REFERENCE: LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)

## PULL BOXES

| CATEGORY | PULL BOX NO. | LOCATION ## | * 653.0135 PULL BOXES STEEL 24x36-INCH EACH | 653.0900 ADJUSTING PULL BOXES EACH |
|---|---|---|---|---|
| 0020 | PB11 | - | - | 1 |
| | PB12 | STA 25+02; 47' LT | 1 | - |
| | | TOTAL | 1 | 1 |

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.
## FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

## CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
TO BE REMOVED
BRIDGE
CULVERT

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN
PROPOSED R/W POINT
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED)

| | COMPENSABLE | NON-COMPENSABLE |
|---|---|---|
| ELECTRIC POLE | | |
| TELEPHONE POLE | | |
| PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.) | | |

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER 25
UTILITY NUMBER 40
PARALLEL OFFSETS

## CONVENTIONAL UTILITY SYMBOLS

| | |
|---|---|
| WATER | W |
| GAS | G |
| TELEPHONE | T |
| OVERHEAD TRANSMISSION LINES | OH |
| ELECTRIC | E |
| CABLE TELEVISION | TV |
| FIBER OPTIC | FO |
| SANITARY SEWER | SAN |
| STORM SEWER | SS |
| ELECTRIC TOWER | |

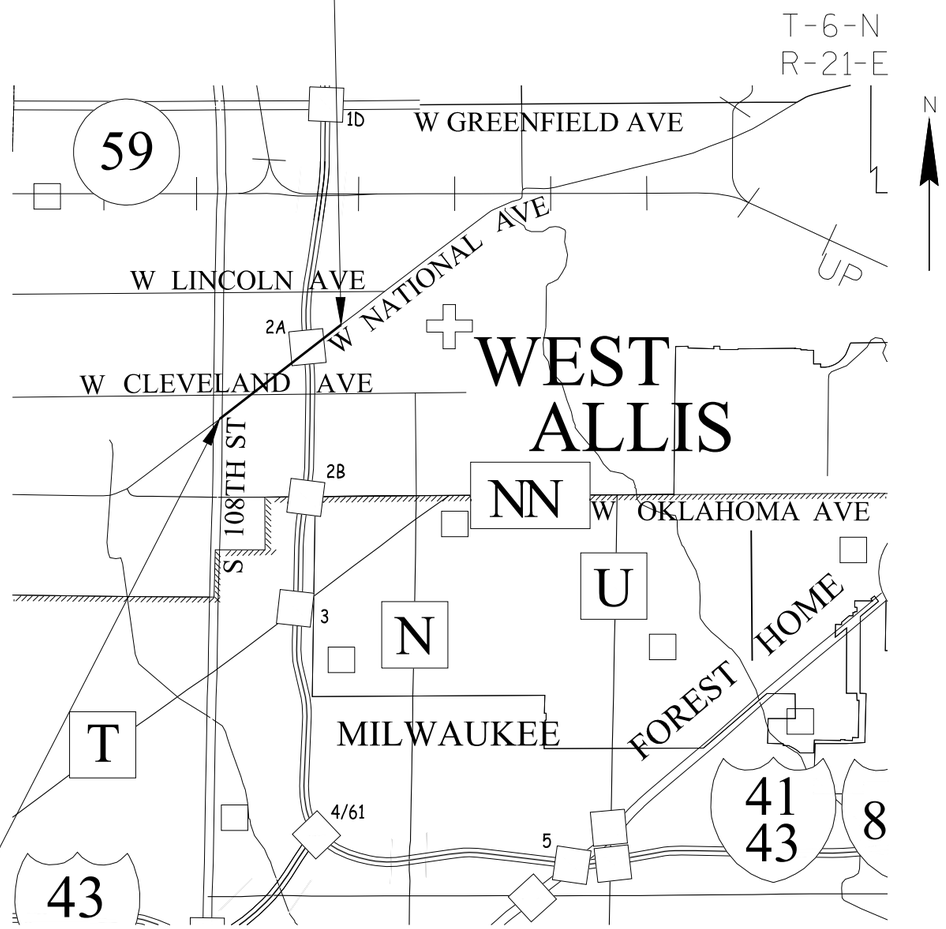
## CONVENTIONAL ABBREVIATIONS

| | | | |
|---|---|---|---|
| ACCESS RIGHTS | AR | POINT OF COMPOUND CURVE | PCC |
| ACRES | AC | POINT OF INTERSECTION | PI |
| AHEAD | AH | PROPERTY LINE | PL |
| ALUMINUM | ALUM | RECORDED AS | (100') |
| AND OTHERS | ET AL | REEL / IMAGE | R/I |
| BACK | BK | REFERENCE LINE | R/L |
| BLOCK | BLK | REMAINING | REM |
| CENTERLINE | C/L | RESTRICTIVE DEVELOPMENT EASEMENT | RDE |
| CERTIFIED SURVEY MAP | CSM | RIGHT | RT |
| CONCRETE | CONC | RIGHT OF WAY | R/W |
| COUNTY | CO | SECTION | SEC |
| COUNTY TRUNK HIGHWAY | CTH | SEPTIC VENT | SEPV |
| DISTANCE | DIST | SQUARE FEET | SF |
| CORNER | COR | STATE TRUNK HIGHWAY | STH |
| DOCUMENT NUMBER | DOC | STATION | STA |
| EASEMENT | EASE | TELEPHONE PEDESTAL | TP |
| EXISTING | EX | TEMPORARY LIMITED EASEMENT | TLE |
| GAS VALVE | GV | TRANSPORTATION PROJECT PLAT | TPP |
| GRID NORTH | GN | UNITED STATES HIGHWAY | USH |
| HIGHWAY EASEMENT | HE | VOLUME | V |
| IDENTIFICATION | ID | | |
| LAND CONTRACT | LC | | |
| LEFT | LT | | |
| MONUMENT | MON | | |
| NATIONAL GEODETIC SURVEY | NGS | | |
| NUMBER | NO | | |
| OUTLOT | OL | | |
| PAGE | P | | |
| POINT OF TANGENCY | PT | | |
| PERMANENT LIMITED EASEMENT | PLE | | |
| POINT OF BEGINNING | POB | | |
| POINT OF CURVATURE | PC | | |

## CURVE DATA ABBREVIATIONS

| | |
|---|---|
| LONG CHORD | LCH |
| LONG CHORD BEARING | LCB |
| RADIUS | R |
| DEGREE OF CURVE | D |
| CENTRAL ANGLE | Δ /DELTA |
| LENGTH OF CURVE | L |
| TANGENT | T |
| DIRECTION AHEAD | DA |
| DIRECTION BACK | DB |

END RELOCATION ORDER
STA 74+00.00
114.64 FEET SOUTH AND
1234.62 FEET WEST OF THE NORTHEAST
CORNER OF SECTION 8,
T 6 N, T 20 E




BEGIN RELOCATION ORDER
STA 10+00.00
613.38 FEET SOUTH AND
17.6 FEET WEST OF THE
WEST 1/4 CORNER OF
SEC 8, T 6 N, R 21 E

LAYOUT
SCALE 0 1MI

TOTAL NET LENGTH OF CENTERLINE = 1.21MI

| R/W PROJECT NUMBER | SHEET NUMBER | TOTAL SHEETS |
|---|---|---|
| 2410-15-00 | | |
| CONSTRUCTION PROJECT NUMBER 2410-15-70 | 1 | 10 |

PLAT OF RIGHT OF WAY REQUIRED FOR

# W. NATIONAL AVENUE
# S. 95TH STREET TO S. 108TH STREET

| WEST NATIONAL AVENUE | MILWAUKEE COUNTY |
|---|---|

### NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN STATE PLANE COORDINATES, SOUTH ZONE, NAD 27 US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GROUND DISTANCES. GROUND DISTANCES MAY BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE GRID FACTOR SHOWN ON EACH RESPECTIVE DETAIL SHEET.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL TLEs ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE CITY OF WEST ALLIS

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE DETAIL PAGES.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE DETAIL PAGES.

WISCONSIN
MICHAEL J. RATZBURG
S-2236
WAUKESHA
WI
LAND SURVEYOR

**CAUTION:**
THIS PLAT IS FOR ILLUSTRATIVE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES.

REVISION DATE
10/16/25
1/09/26

CITY OF WEST ALLIS

APPROVED FOR THE CITY OF WEST ALLIS
DATE: 9/5/25 (Signatur



FILE NAME : S:\5169172\PLAT\PLAT TITLE SHEET DRAFT-NATIONAL.DWG
PLOT DATE : 1/9/2026 7:44 AM
PLOT BY : RATZBURG, MICHAEL
PLOT NAME :

# SCHEDULE OF LANDS & INTERESTS REQUIRED

AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO THE CITY OF WEST ALLIS.

| PARCEL NUMBER | SHEET NUMBER | OWNER(S) | INTEREST REQUIRED | TOTAL ACRES | R/W REQUIRED ACRES | | | TOTAL REMAINING ACRES | T.L.E. TEMP. ACRES | P.L.E. PERM. ACRES | PARCEL NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NEW | EXISTING | TOTAL | | | | |
| 1 | 4.04 | THE BAL-LER GROUP, LLC | TLE | 0.451 | - | - | - | - | 0.024 | | 1 |
| 2 | 4.04 | 12947 WOODRIDGE STREET, LLC (AKA ARBY'S) | TLE | 1.031 | - | - | - | - | 0.035 | | 2 |
| 3 | 4.04 | PEOPLES STATE BANK | TLE | 0.911 | - | - | - | - | 0.042 | | 3 |
| 4 | 4.04 | CENTRAL BANK | TLE | 1.330 | - | - | - | - | 0.037 | | 4 |
| - | - | - | - | - | - | - | - | - | - | | - |
| 6(2) | 4.05 | MARQUETTE SAVINGS AND LOAN ASSOCIATION | TLE | 0.779 | - | - | - | - | 0.050 | | 6 |
| 7(2) | 4.04 | RUST REALTY INC. | TLE | 0.297 | - | - | - | - | 0.031 | | 7 |
| 8(2) | 4.04, 4.05 | RUST REALTY INC. | TLE | 1.970 | - | - | - | - | 0.099 | | 8 |
| 9 | 4.05 | H-10253 CLEVELAND, LLC, & S-10253 CLEVELAND, LLC | FEE, TLE | 0.918 | 0.009 | - | 0.009 | 0.909 | 0.045 | | 9 |
| 10 | 4.05 | RICHARD R. NEUMAN | TLE | 0.186 | - | - | - | - | 0.007 | | 10 |
| 11 | 4.06 | GREAT MIDWEST SAVINGS & LOAN ASSOCIATION | FEE, TLE | 0.277 | 0.026 | - | 0.026 | 0.251 | 0.093 | | 11 |
| 12 | 4.06 | CENTER FOR COMMUNICATION, HEARING AND DEAFNESS, INC | FEE, TLE | 1.112 | 0.003 | - | 0.003 | 1.109 | 0.068 | | 12 |
| 13 | 4.07 | JALAL RAMMAHA | FEE, TLE | 0.137 | 0.001 | - | 0.001 | 0.136 | 0.005 | | 13 |
| 14 | 4.07 | TERRY S. & BEVERLY G. MANTHEY | FEE, TLE | 0.178 | 0.0003 | - | 0.0003 | 0.178 | 0.006 | | 14 |
| 15 | 4.05 | HARRY & BARBARA J HARSCH LIVING TRUST | TLE | 0.184 | - | - | - | - | 0.015 | | 15 |
| 16 | 4.06 | TARGET CORPORATION | FEE, TLE | 9.486 | 0.012 | - | 0.012 | 9.474 | 0.051 | | 16 |
| 17 | 4.06 | WATERSTONE BANK SSB | FEE, TLE | 0.715 | 0.066 | - | 0.066 | 0.649 | 0.073 | | 17 |
| 18 | 4.06 | BADGER CENTURY MANAGEMENT, LLC | TLE | 5.687 | - | - | - | 5.687 | 0.067 | | 18 |
| 19 | 4.07 | CC WEST ALLIS 1772, LLC (AKA CARIBOU COFFEE) | FEE, TLE | 2.293 | 0.010 | - | 0.010 | 2.283 | 0.033 | | 19 |
| 20 | 4.07, 4.08 | DKS REALTY WISCONSIN V, LLC. ET LA | FEE, TLE | 3.787 | 0.057 | - | 0.057 | 3.730 | 0.115 | | 20 |
| 21 | 4.08 | CITY OF WEST ALLIS | FEE, TLE | 0.125 | 0.002 | - | 0.002 | 0.123 | 0.011 | | 21 |
| 22 | 4.09 | CHOCTAW AMERICAN INSURANCE, INC | TLE | 0.186 | - | - | - | - | 0.002 | | 22 |
| 23 | 4.09 | THE EDITH M. TIARKS REVOCABLE TRUST | TLE | 0.460 | - | - | - | - | 0.007 | | 23 |
| 24 | 4.09 | RICHARD R. NEUMANN | TLE | 0.240 | - | - | - | - | 0.024 | | 24 |
| 25 | 4.05 | PEAPOD REAL ESTATE, LLC | TLE | 0.184 | - | - | - | - | 0.007 | | 25 |
| 26(3) | 4.09 | LUTZ LAND MANAGEMENT, LLC | TLE | 0.253 | - | - | - | - | 0.022 | | 26 |
| 27 | 4.09, 4.10 | FRENCH QUARTER APARTMENTS PARTNERSHIP | FEE, TLE | 5.939 | 0.003 | - | 0.003 | 5.936 | 0.153 | | 27 |
| 28 | 4.09 | ROBIN S. & BETH A. MEDVED | TLE | 0.112 | - | - | - | - | 0.007 | | 28 |
| 29 | 4.09 | JANET L. QUINN | TLE | 0.155 | - | - | - | - | 0.020 | | 29 |
| - | - | - | - | - | - | - | - | - | - | | - |
| 31 | 4.09 | HEULER REAL ESTATE INVESTORS, LLC | TLE | 0.117 | - | - | - | - | 0.017 | | 31 |
| 32 | 4.09 | HEULER XXI, LLC | TLE | 0.204 | - | - | - | - | 0.012 | | 32 |
| 33 | 4.09 | HEATHER & JEFFREY A. SCHWASINGER | TLE | 0.139 | - | - | - | - | 0.014 | | 33 |
| 34 | 4.09 | ROBERT H. & MARTINA BREMER | TLE | 0.106 | - | - | - | - | 0.014 | | 34 |
| - | - | - | - | - | - | - | - | - | - | | - |
| 36 | 4.09 | PAUL R. & VIRGINIA A. RADLER | TLE | 0.284 | - | - | - | - | 0.037 | | 36 |
| 37 | 4.10 | EMW PROPERTIES, LLC | TLE | 0.319 | - | - | - | - | 0.021 | | 37 |
| 38 | 4.10 | ORITZ HERRERA REALITY, LLC | TLE | 0.106 | - | - | - | - | 0.010 | | 38 |
| 39 | 4.10 | BEST IN CLASS REMODELING, LLC | TLE | 0.141 | - | - | - | - | 0.036 | | 39 |
| 40 | 4.10 | KIMBERLEY A. ZAJAC | TLE | 0.124 | - | - | - | - | 0.005 | | 40 |
| 41 | 4.10 | RONALD MELLANTINE | TLE | 0.556 | - | - | - | - | 0.021 | | 41 |
| 42(2) | 4.10 | JAMES S. & KAREN M. MORATECK REV. TRUST | TLE | 0.389 | - | - | - | - | 0.012 | | 42 |
| 43(2) | - | DELETED | - | - | - | - | - | - | - | | 43 |
| 44 | 4.10 | NATIONAL AVENUE 9530, LLC | TLE | 0.238 | - | - | - | - | 0.006 | | 44 |
| - | - | - | - | - | - | - | - | - | - | | - |
| 500 | 4.04,4.05,4.06,4.07,&4.09 | AT&T CORP | RELEASE OF RIGHTS | | | | | | | | |
| 501 | 4.04,4.06,4.09,&4.10 | WE ENERGIES - GAS | RELEASE OF RIGHTS | | | | | | | | |
| 502 | 4.04,4.05,4.06,4.07,4.08,4.09 | WE ENERGIES - ELECTRIC | RELEASE OF RIGHTS | | | | | | | | |
| 504 | 4.06 | CITY OF WEST ALLIS | RELEASE OF RIGHTS | | | | | | | | |
| 505 | 4.07,4.09,&4.10 | AMERICAN TRANSMISSION COMPANY | RELEASE OF RIGHTS | | | | | | | | |
| 506 | 4.06,4.07 | METRO MILWAUKEE SEWAGE DISTRICT | RELEASE OF RIGHTS | | | | | | | | |

4

4

REVISION DATE
10/16/25
1/09/26

DATE 9/5/25

GRID FACTOR

SCALE, FEET
0 N/A N/A

HWY: W. NATIONAL AVENUE

COUNTY: MILWAUKEE

STATE R/W PROJECT NUMBER: 2410-15-00

CONSTRUCTION PROJECT NUMBER: 2410-15-70

PLAT SHEET 4.02

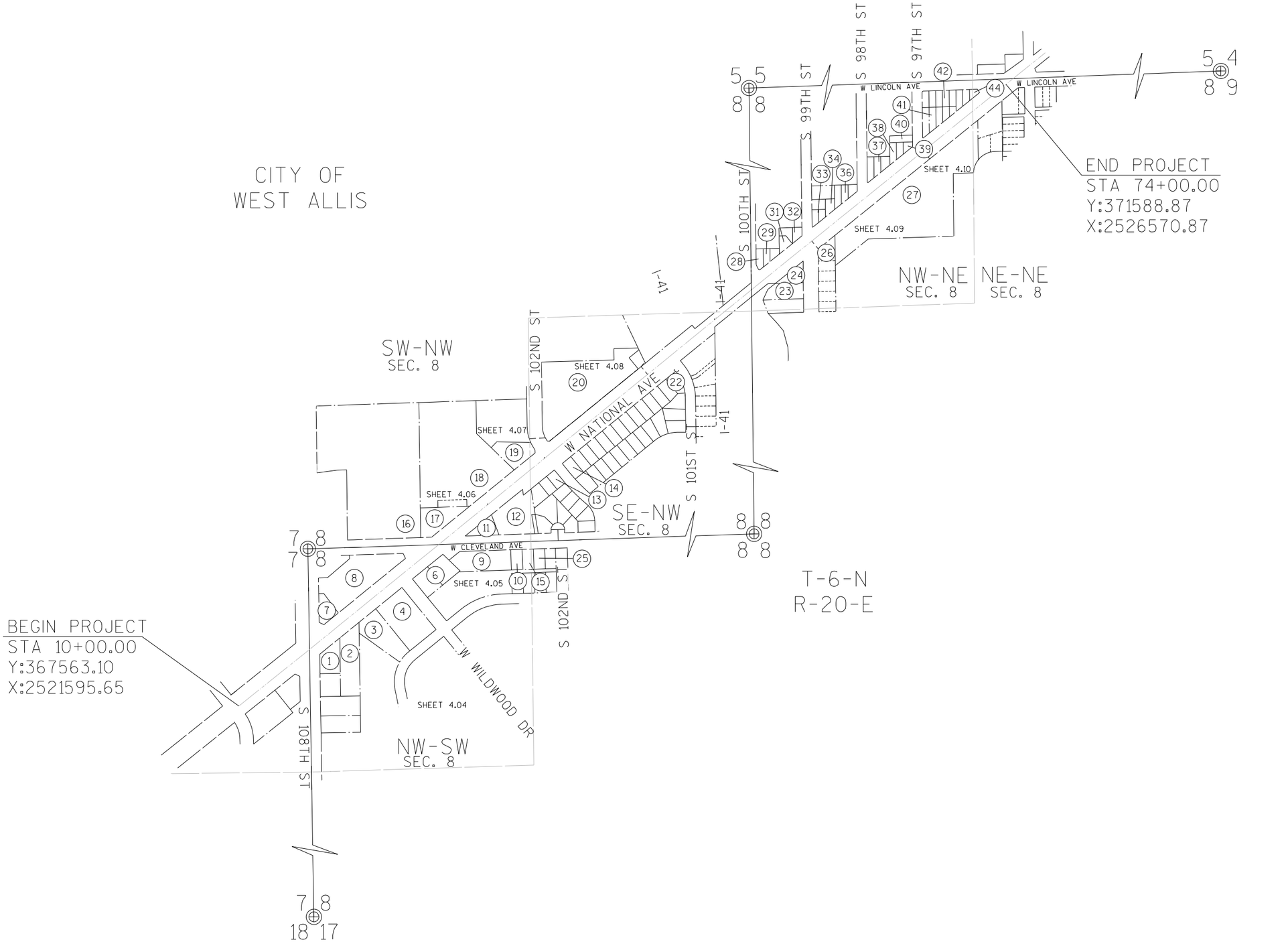
PS&E SHEET 551

E

FILE NAME : TPP-NATIONAL(USE)(NEW).DWG
LAYOUT NAME - 4.02

PLOT DATE : 1/9/2026 7:30 AM PLOT BY : RATZBURG, MICHAEL PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 75




| | | | | | |
|---|---|---|---|---|---|
| REVISION DATE<br>10/16/25<br>1/09/26 | DATE 9/5/25<br>GRID FACTOR | SCALE, FEET<br>0 150 300 | HWY: W. NATIONAL AVENUE<br>COUNTY: MILWAUKEE | STATE R/W PROJECT NUMBER: 2410-15-00<br>CONSTRUCTION PROJECT NUMBER: 2410-15-70 | PLAT SHEET 4.03<br>PS&E SHEET 552 E |

FILE NAME : TPP-NATIONAL(USE)(NEW).DWG
LAYOUT NAME - 4.03

PLOT DATE : 1/9/2026 7:31 AM PLOT BY : RATZBURG, MICHAEL PLOT NAME : PLOT SCALE :

CONCRETE MONUMENT
WITH BRASS CAP
Y:368866.16
X:2522472.21

T 6 N
7 8
7 8
R 21 E

(500) AT&T CORP

| | |
|---|---|
| NON DESCRIPT EASEMENT DOC.3746002 D.3943 P.210 PARCELS 1, 2 | 4' EASEMENT DOC.3775324 D.3986 P.44 PARCEL 2 |
| NON DESCRIPT EASEMENT DOC.4292149 D.338 P.2172 PARCELS 1 | NON DESCRIPT EASEMENT DOC.3780894 D.3994 P.400 PARCELS 7, 8 |

(501) WE ENERGIES - GAS

| | |
|---|---|
| 4' EASEMENT DOC.10897427 PARCEL 1 | 12' EASEMENT DOC.10812848 PARCELS 8 |

(502) WE ENERGIES - ELECTRIC

| | |
|---|---|
| NON DESCRIPT EASEMENT DOC.2816227 D.2539 P.304 PARCELS 1, 2, 3 | 6' EASEMENT DOC.3307944 D.3308 P.599 PARCEL 3, 4 |
| NON DESCRIPT EASEMENT DOC.3746002 D.3943 P.210 PARCELS 1, 2 | 4' EASEMENT DOC.3775324 D.3986 P.44 PARCEL 2 |
| NON DESCRIPT EASEMENT DOC.4292149 D.338 P.2172 PARCELS 1 | NON DESCRIPT EASEMENT DOC.1312983 PARCELS 3, 4 |
| NON DESCRIPT EASEMENT DOC.1511163 PARCELS 7, 8 | NON DESCRIPT EASEMENT DOC.1312984 PARCELS 3, 4 |
| PAD EASEMENT DOC.4504422 R.512 I.1019 PARCEL 7 | NON DESCRIPT EASEMENT DOC.2821457 PARCELS 3, 4 |
| NON DESCRIPT EASEMENT DOC.3813092 V. 4042, P. 30 PARCELS 4 | NON DESCRIPT EASEMENT DOC.3907510 V. 4179, P. 626 PARCELS 3, 4 |
| NON DESCRIPT EASEMENT DOC.4511947 D.519 P.883 PARCEL 3 | NON DESCRIPT EASEMENT DOC.2816227 V. 2539, P. 304 PARCELS 4, 3 |
| | NO RECORD OF EASEMENT PARCEL8 |

INT. SEC LN & ALI. (NATIONAL)
STA 21+34.87
Y:368272.06
X:2522481.83

BEGIN RELOCATION ORDER:
STA 10+00.00
Y:367563.10
X:2521595.65

CONCRETE MONUMENT
WITH BRASS CAP
Y:366228.82
X:2522514.92

T 6 N
7 8
17 18
R 21 E

SEC LN=N00°55'40"W 2637.69

2043.51'

S 108TH ST

60'

PL

TLE, SLOPES & DRIVEWAY (8) RUST REALTY INC.

SLOPE INTERCEPT

MATCH LINE SEE SHEET 4.05

CITY OF WEST ALLIS
NW-SW

W NATIONAL AVENUE
R/L=N50°54'49"E

W. WILD WOOD DR

LOT 1
CSM 9296
DOC.
11084386

BLDG

12' WE ENERGIES - GAS EASEMENT PER DOC. 10812848

WE ENERGIES DOC. 4504422 R-512, I-1019

TLE, SLOPES (7) RUST REALTY INC

6' WE ENERGIES - ELECTRIC EASEMENT DOC. 3307944 D.3308 P.599

4' WE ENERGIES - ELECTRIC AND AT&T WISCONSIN EASEMENT DOC. 3775324 D.3986 P.46

4' WE ENERGIES - GAS EASEMENT DOC. 10897427

12' WEPCO EASEMENT DOC. 4292150

TLE, SLOPES & DRIVEWAY (4) CENTRAL BANK

TLE, SLOPES & DRIVEWAY (3) PEOPLES STATE BANK

TLE, SLOPES & DRIVEWAY (2) 12947 WOODBRIDGE STREET (AKA ARBY'S)

TLE, SLOPES & DRIVEWAY (1) THE BAL-LER GROUP, LLC

LOT 1
CSM 728
R.379, I.1147
DOC. 4343622

| TLE STATION/OFFSET TABLE | | |
|---|---|---|
| T450 | 22+86.31 | 75.00' LT |
| T451 | 23+95.00 | 65.00' LT |
| T452 | 23+95.00 | 75.00' LT |
| T453 | 24+40.00 | 75.00' LT |
| T454 | 24+40.00 | 65.00' LT |
| T455 | 27+89.94 | 79.34' RT |
| T456 | 27+80.00 | 65.00' RT |
| T457 | 26+90.00 | 65.00' RT |
| T458 | 26+75.00 | 75.00' RT |
| T459 | 26+30.00 | 75.00' RT |
| T460 | 26+30.00 | 65.00' RT |
| T461 | 25+90.08 | 65.00' RT |
| T462 | 25+80.00 | 80.00' RT |
| T463 | 25+20.00 | 80.00' RT |
| T464 | 25+20.00 | 65.00' RT |
| T465 | 24+90.00 | 65.00' RT |
| T466 | 24+60.00 | 75.00' RT |
| T467 | 24+30.00 | 75.00' RT |
| T468 | 24+30.00 | 65.00' RT |
| T469 | 23+65.00 | 65.00' RT |

| TLE STATION/OFFSET TABLE | | |
|---|---|---|
| T470 | 23+50.00 | 80.00' RT |
| T471 | 23+00.00 | 70.00' RT |
| T472 | 23+00.00 | 65.00' RT |
| T473 | 22+75.00 | 65.00' RT |
| T474 | 22+75.00 | 70.00' RT |
| T475 | 22+20.00 | 70.00' RT |
| T476 | 22+20.00 | 65.00' RT |
| T477 | 21+75.00 | 65.00' RT |
| T478 | 21+75.00 | 60.00' RT |
| T479 | 23+07.59 | 71.52' RT |
| T480 | 24+03.99 | 75.00' LT |
| T481 | 23+60.00 | 75.00' LT |
| T482 | 23+60.00 | 65.00' LT |
| T483 | 26+60.00 | 65.00' LT |
| T484 | 26+60.00 | 75.00' LT |
| T485 | 27+20.00 | 75.00' LT |
| T486 | 27+20.00 | 65.00' LT |

| STATION & OFFSET TABLE | | |
|---|---|---|
| 490 | 22+93.62 | 60.00' LT |

| HWY | BASIS OF EXISTING R/W | R/W WIDTH | YEAR |
|---|---|---|---|
| W NATIONAL AVE | CSM 9296 | 60' | 2021 |
| S 108TH ST | CSM 9296 | 60' | 1967 |
| W WILDWOOD DR | WILDWOOD ESTATES SUB. | 80' | 1954 |

GN

4

4

| | | | |
|---|---|---|---|
| REVISION DATE 10/16/25 1/09/26 | DATE 9/5/25 | SCALE, FEET 0 40 80 | HWY: W. NATIONAL AVENUE |
| | GRID FACTOR 0.99992592 | | COUNTY: MILWAUKEE |

| | | |
|---|---|---|
| STATE R/W PROJECT NUMBER: | 2410-15-00 | PLAT SHEET 4.04 |
| CONSTRUCTION PROJECT NUMBER: | 2410-15-70 | PS&E SHEET 553 E |

FILE NAME : TPP-NATIONAL(USE)(NEW).DWG
LAYOUT NAME - 4.04

PLOT DATE : 1/9/2026 7:31 AM PLOT BY : RATZBURG, MICHAEL PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 75

(502) WE ENERGIES - ELE.
NON DESCRIPT EASEMENT DOC.1312982 PARCEL 6
NON DESCRIPT EASEMENT DOC.1312983 PARCEL 6
NON DESCRIPT EASEMENT DOC.3263989 V.3243 P.294 PARCEL 6
NON DESCRIPT EASEMENT DOC.3263989 V.3243 P.294 PARCEL 9
NON DESCRIPT EASEMENT DOC.1312982 PARCEL 9
6' EASEMENT DOC.3307944 PARCEL 9

(500) AT&T CORP.
NO RECORD OF EASEMENT PARCEL 6

| TLE STATION/OFFSET TABLE | | |
|---|---|---|
| T549 | 104+24.52 | 45.00' RT |
| T550 | 104+24.52 | 50.00' RT |
| T551 | 103+33.54 | 50.00' RT |
| T552 | 102+52.66 | 54.50' RT |
| T553 | 101+10.03 | 54.50' RT |
| T554 | 31+03.06 | 73.47' RT |
| T555 | 30+85.00 | 65.00' RT |
| T556 | 28+80.00 | 65.00' RT |
| T557 | 28+69.94 | 79.94' RT |
| T558 | 29+05.57 | 65.00' RT |
| T559 | 97+79.07 | 50.00' RT |
| T560 | 96+80.00 | 50.00' RT |
| T561 | 96+80.00 | 45.00' RT |
| T563 | 104+92.02 | 50.00' RT |
| T564 | 104+92.02 | 55.00' RT |
| T565 | 105+59.02 | 55.00' RT |
| T566 | 105+80.00 | 50.00' RT |
| T567 | 106+10.00 | 50.00' RT |
| T568 | 106+10.00 | 45.00' RT |
| T569 | 105+59.02 | 45.00' RT |
| T570 | 104+92.02 | 45.00' RT |

| TLE STATION/OFFSET TABLE | | |
|---|---|---|
| T571 | 30+05.00 | 65.00' RT |
| T572 | 30+05.00 | 85.00' RT |
| T573 | 29+61.50 | 85.00' RT |
| T574 | 29+61.50 | 65.00' RT |

| STATION & OFFSET TABLE | | |
|---|---|---|
| 500 | 102+97.40 | 45.00' RT |
| 501 | 102+52.47 | 47.50' RT |
| 502 | 101+19.27 | 47.50' RT |
| 503 | 97+87.79 | 45.00' RT |
| 504 | 29+14.67 | 60.00' LT |
| 505 | 28+69.94 | 60.00' RT |
| 506 | 31+01.37 | 60.00' RT |
| 507 | 101+22.57 | 45.00' RT |

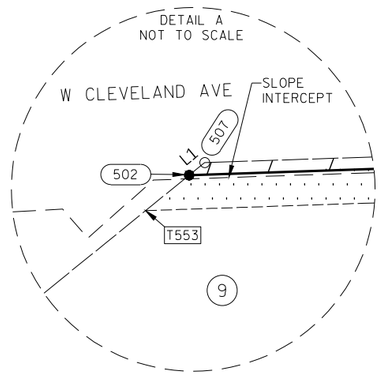
| R/W COURSE TABLE | | |
|---|---|---|
| 500-501 | S84°53'06"W | 45.00' |
| 501-502 | S88°04'10"W | 133.20' |

| R/W COURSE TABLE | | |
|---|---|---|
| L1 | N50°54'49"E | 4.14' |
| L2 | N88°04'10"E | 174.83' |

| HWY | BASIS OF EXISTING R/W | R/W WIDTH | YEAR |
|---|---|---|---|
| W WILDWOOD DR | WILDWOOD ESTATES SUB. | 80' | 1954 |

| PI | Y | X | DELTA ANGLE |
|---|---|---|---|
| 31+20.39 | 368893.38 | 2523246.82 | 00° 04' 37" LT |

DETAIL A
NOT TO SCALE

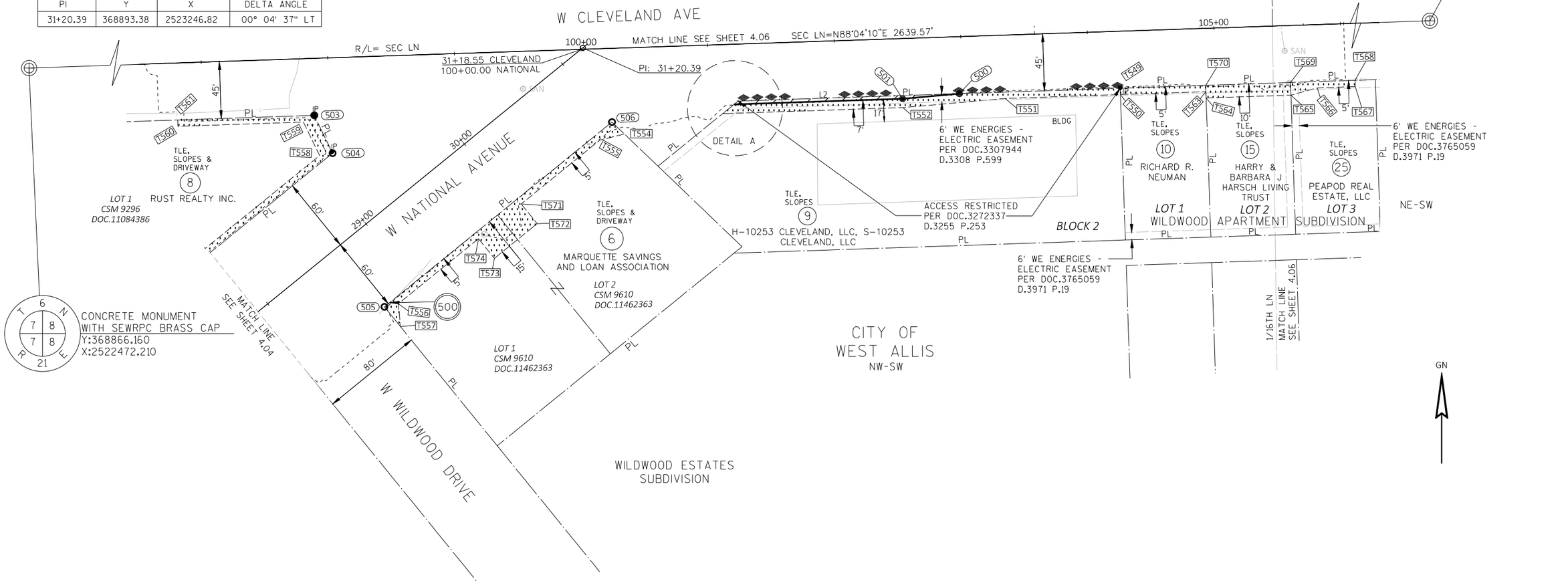



CONCRETE MONUMENT
WITH SEWRPC BRASS CAP
Y:368955.089
X:2525110.492

T 6 N
8 8
8 8
R 21 E

SW-NW

SE-NW




| | | | |
|---|---|---|---|
| REVISION DATE 10/16/25, 1/09/26 | DATE 9/5/25 | SCALE, FEET 0 40 80 | HWY: W. NATIONAL AVENUE |
| | GRID FACTOR 0.99992592 | | COUNTY: MILWAUKEE |

| | | |
|---|---|---|
| STATE R/W PROJECT NUMBER: 2410-15-00 | PLAT SHEET 4.05 | |
| CONSTRUCTION PROJECT NUMBER: 2410-15-70 | PS&E SHEET 554 | E |

FILE NAME : TPP-NATIONAL(USE)(NEW).DWG
LAYOUT NAME - 4.05
PLOT DATE : 1/9/2026 7:32 AM PLOT BY : RATZBURG, MICHAEL PLOT NAME : PLOT SCALE :



4

(500) AT&T CORP
20' X 20' EASEMENT DOC.7734728 R.4551 I.1742 PARCEL 16
NO RECORD OF EASEMENT PARCEL 12, 16, 17, 18
NON DESCRIPT EASEMENT DOC.3738554 D.3932 P.352 PARCEL 12

(502) WE ENERGIES - ELECTRIC
NON DESCRIPT EASEMENT DOC.3897343 D.4165 P.239 PARCEL 16, 17, 18
12' EASEMENT DOC.4729407 R.695 I.1226 PARCEL 17
10' EASEMENT DOC.4729408 R.695 I.1228 PARCEL 16
NON DESCRIPT EASEMENT DOC.3738554 D.3932 P.352 PARCEL 12
NON DESCRIPT EASEMENT DOC.3333569 R.3346 P.446 PARCEL 12
WE ENERGIES EASEMENT PER DOC.6024869 R.2047 I.1143 PARCEL 12

(504) CITY OF WEST ALLIS - SANITARY SEWER
10' EASEMENT PER DOC.3309978 D.3311 P.533 PARCEL 12
15' STORM WATER EASEMENT PER CSM 2013 DOC. 4738879 PARCEL 17
CITY OF WEST ALLIS- WATER EASEMENT PER DOC.6145412 R.2184 P.219 PARCEL 18

(506) METRO. MILW. SEW. DIST.
20' EASEMENT AS SHOWN ON CSM 1749 DOC.4646696, PARCEL 18
NO RECORD OF EASEMENT PARCEL 11

| STATION & OFFSET TABLE | | |
|---|---|---|
| 600 | 96+67.48 | 45.00' LT |
| 601 | 96+69.87 | 45.57' LT |
| 602 | 96+99.58 | 47.50' LT |
| 603 | 99+11.39 | 47.50' LT |
| 604 | 99+29.15 | 50.83' LT |
| 605 | 99+39.55 | 54.88' LT |
| 606 | 99+47.16 | 56.31' LT |
| 608 | 99+58.41 | 56.31' LT |
| 609 | 32+18.33 | 70.00' LT |
| 610 | 32+35.94 | 68.63' LT |
| 611 | 32+50.37 | 67.50' LT |
| 612 | 33+53.31 | 67.50' LT |
| 613 | 33+70.45 | 66.17' LT |
| 614 | 34+03.26 | 60.00' LT |
| 615 | 37+43.56 | 60.00' LT |
| 616 | 37+48.93 | 90.00' RT |
| 617 | 36+91.28 | 90.00' RT |
| 618 | 37+08.47 | 60.00' RT |
| 619 | 33+28.16 | 60.00' RT |
| 620 | 33+23.76 | 61.15' RT |
| 621 | 33+17.21 | 69.31' RT |
| 622 | 102+01.85 | 60.32' LT |
| 623 | 102+05.77 | 54.66' LT |
| 624 | 102+24.84 | 47.50' LT |
| 625 | 103+14.51 | 47.50' LT |
| 626 | 103+35.71 | 46.80' LT |
| 627 | 103+58.33 | 45.00' LT |
| 628 | 35+17.84 | 60.00' RT |
| 629 | 35+17.84 | 65.00' RT |
| 630 | 34+93.84 | 65.00' RT |
| 631 | 34+93.84 | 60.00' RT |
| 632 | 31+47.83 | 70.00' LT |
| 633 | 31+47.83 | 76.50' LT |

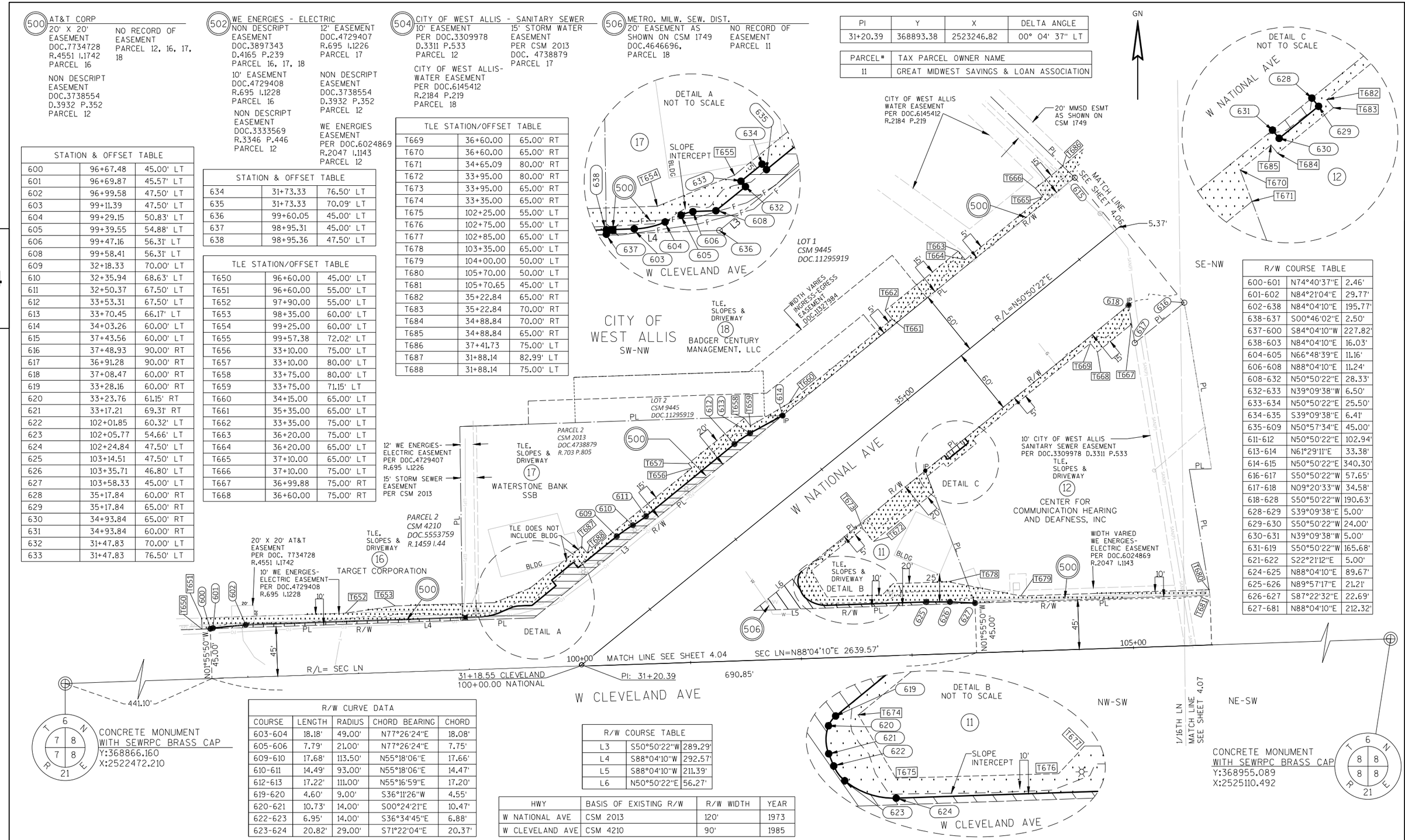
| STATION & OFFSET TABLE | | |
|---|---|---|
| 634 | 31+73.33 | 76.50' LT |
| 635 | 31+73.33 | 70.09' LT |
| 636 | 99+60.05 | 45.00' LT |
| 637 | 98+95.31 | 45.00' LT |
| 638 | 98+95.36 | 47.50' LT |

| TLE STATION/OFFSET TABLE | | |
|---|---|---|
| T650 | 96+60.00 | 45.00' LT |
| T651 | 96+60.00 | 55.00' LT |
| T652 | 97+90.00 | 55.00' LT |
| T653 | 98+35.00 | 60.00' LT |
| T654 | 99+25.00 | 60.00' LT |
| T655 | 99+57.38 | 72.02' LT |
| T656 | 33+10.00 | 75.00' LT |
| T657 | 33+10.00 | 80.00' LT |
| T658 | 33+75.00 | 80.00' LT |
| T659 | 33+75.00 | 71.15' LT |
| T660 | 34+15.00 | 65.00' LT |
| T661 | 35+35.00 | 65.00' LT |
| T662 | 33+35.00 | 75.00' LT |
| T663 | 36+20.00 | 75.00' LT |
| T664 | 36+20.00 | 65.00' LT |
| T665 | 37+10.00 | 65.00' LT |
| T666 | 37+10.00 | 75.00' LT |
| T667 | 36+99.88 | 75.00' RT |
| T668 | 36+60.00 | 75.00' RT |

| TLE STATION/OFFSET TABLE | | |
|---|---|---|
| T669 | 36+60.00 | 65.00' RT |
| T670 | 36+60.00 | 65.00' RT |
| T671 | 34+65.09 | 80.00' RT |
| T672 | 33+95.00 | 80.00' RT |
| T673 | 33+95.00 | 65.00' RT |
| T674 | 33+35.00 | 65.00' RT |
| T675 | 102+25.00 | 55.00' LT |
| T676 | 102+75.00 | 55.00' LT |
| T677 | 102+85.00 | 65.00' LT |
| T678 | 103+35.00 | 65.00' LT |
| T679 | 104+00.00 | 50.00' LT |
| T680 | 105+70.00 | 50.00' LT |
| T681 | 105+70.65 | 45.00' LT |
| T682 | 35+22.84 | 65.00' RT |
| T683 | 35+22.84 | 70.00' RT |
| T684 | 34+88.84 | 70.00' RT |
| T685 | 34+88.84 | 65.00' RT |
| T686 | 37+41.73 | 75.00' LT |
| T687 | 31+88.14 | 82.99' LT |
| T688 | 31+88.14 | 75.00' LT |

| PI | Y | X | DELTA ANGLE |
|---|---|---|---|
| 31+20.39 | 368893.38 | 2523246.82 | 00° 04' 37" LT |

| PARCEL # | TAX PARCEL OWNER NAME |
|---|---|
| 11 | GREAT MIDWEST SAVINGS & LOAN ASSOCIATION |




| R/W CURVE DATA | | | | |
|---|---|---|---|---|
| COURSE | LENGTH | RADIUS | CHORD BEARING | CHORD |
| 603-604 | 18.18' | 49.00' | N77°26'24"E | 18.08' |
| 605-606 | 7.79' | 21.00' | N77°26'24"E | 7.75' |
| 609-610 | 17.68' | 113.50' | N55°18'06"E | 17.66' |
| 610-611 | 14.49' | 93.00' | N55°18'06"E | 14.47' |
| 612-613 | 17.22' | 111.00' | N55°16'59"E | 17.20' |
| 619-620 | 4.60' | 9.00' | S36°11'26"W | 4.55' |
| 620-621 | 10.73' | 14.00' | S00°24'21"E | 10.47' |
| 622-623 | 6.95' | 14.00' | S36°34'45"E | 6.88' |
| 623-624 | 20.82' | 29.00' | S71°22'04"E | 20.37' |

| R/W COURSE TABLE | | |
|---|---|---|
| L3 | S50°50'22"W | 289.29' |
| L4 | S88°04'10"W | 292.57' |
| L5 | S88°04'10"W | 211.39' |
| L6 | N50°50'22"E | 56.27' |

| HWY | BASIS OF EXISTING R/W | R/W WIDTH | YEAR |
|---|---|---|---|
| W NATIONAL AVE | CSM 2013 | 120' | 1973 |
| W CLEVELAND AVE | CSM 4210 | 90' | 1985 |

| R/W COURSE TABLE | | |
|---|---|---|
| 600-601 | N74°40'37"E | 2.46' |
| 601-602 | N84°21'04"E | 29.77' |
| 602-638 | N84°04'10"E | 195.77' |
| 638-637 | S00°46'02"E | 2.50' |
| 637-600 | S84°04'10"W | 227.82' |
| 638-603 | N84°04'10"E | 16.03' |
| 604-605 | N66°48'39"E | 11.16' |
| 606-608 | N88°04'10"E | 11.24' |
| 608-632 | N50°50'22"E | 28.33' |
| 632-633 | N39°09'38"W | 6.50' |
| 633-634 | N50°50'22"E | 25.50' |
| 634-635 | S39°09'38"E | 6.41' |
| 635-609 | N50°57'34"E | 45.00' |
| 611-612 | N50°50'22"E | 102.94' |
| 613-614 | N61°29'11"E | 33.38' |
| 614-615 | N50°50'22"E | 340.30' |
| 616-617 | S50°50'22"W | 57.65' |
| 617-618 | N09°20'33"W | 34.58' |
| 618-628 | S50°50'22"W | 190.63' |
| 628-629 | S39°09'38"E | 5.00' |
| 629-630 | S50°50'22"W | 24.00' |
| 630-631 | N39°09'38"W | 5.00' |
| 631-619 | S50°50'22"W | 165.68' |
| 621-622 | S22°21'12"E | 5.00' |
| 624-625 | N88°04'10"E | 89.67' |
| 625-626 | N89°57'17"E | 21.21' |
| 626-627 | S87°22'32"E | 22.69' |
| 627-681 | N88°04'10"E | 212.32' |

CONCRETE MONUMENT WITH SEWRPC BRASS CAP
Y:368866.160
X:2522472.210

CONCRETE MONUMENT WITH SEWRPC BRASS CAP
Y:368955.089
X:2525110.492

| | | | | | |
|---|---|---|---|---|---|
| REVISION DATE 10/16/25 1/09/26 | DATE 9/5/25 | SCALE, FEET 0 40 80 | HWY: W. NATIONAL AVENUE | STATE R/W PROJECT NUMBER: 2410-15-00 | PLAT SHEET 4.06 |
| | GRID FACTOR 0.99992592 | | COUNTY: MILWAUKEE | CONSTRUCTION PROJECT NUMBER: 2410-15-70 | PS&E SHEET 555 E |

FILE NAME : TPP-NATIONAL(USE)(NEW).DWG
LAYOUT NAME - 4.06
PLOT DATE : 1/9/2026 7:32 AM
PLOT BY : RATZBURG, MICHAEL
PLOT NAME :
PLOT SCALE :



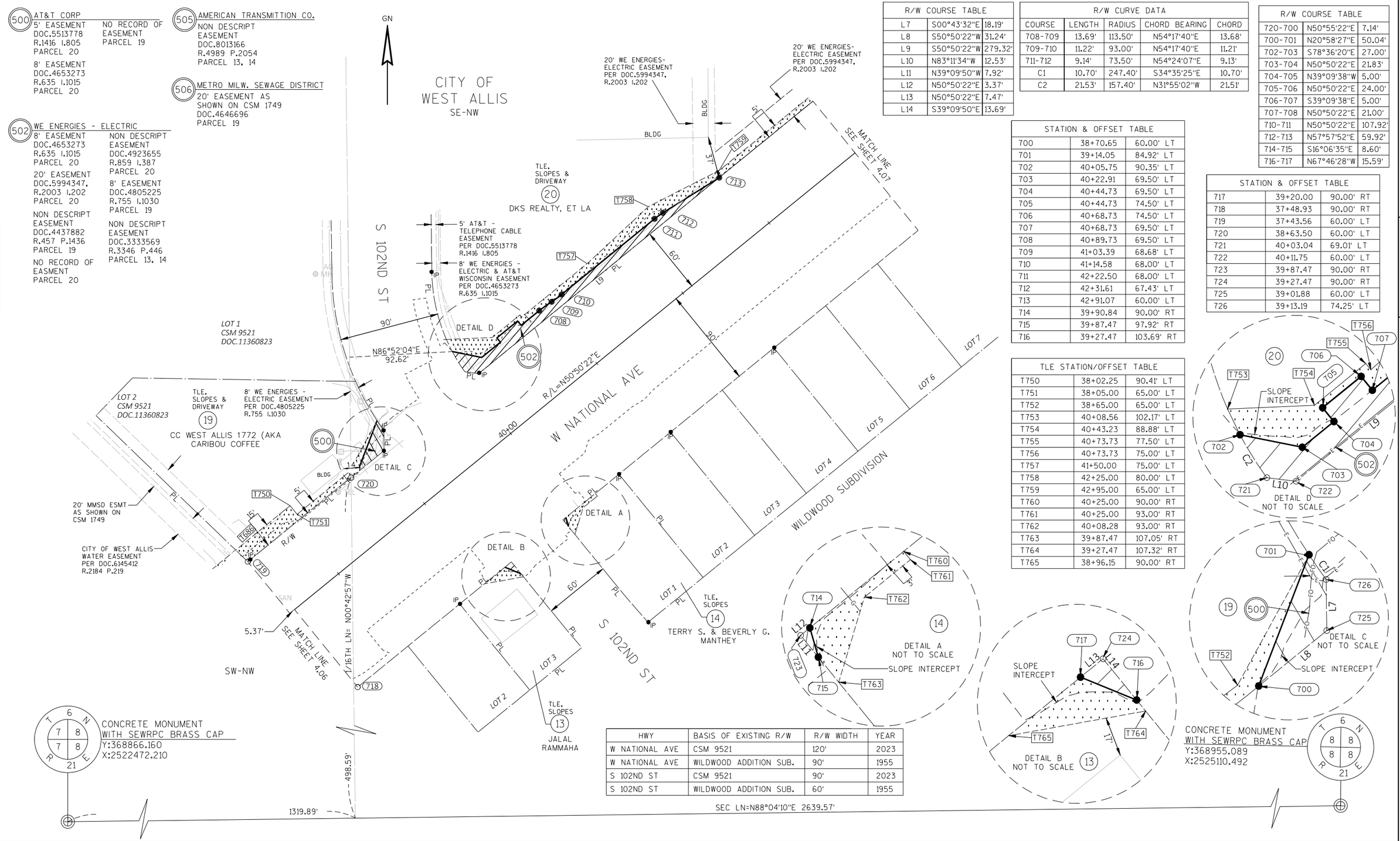
4

(500) AT&T CORP
5' EASEMENT DOC.5513778 R.1416 I.805 PARCEL 20
8' EASEMENT DOC.4653273 R.635 I.1015 PARCEL 20
NO RECORD OF EASEMENT PARCEL 19

(502) WE ENERGIES - ELECTRIC
8' EASEMENT DOC.4653273 R.635 I.1015 PARCEL 20
20' EASEMENT DOC.5994347, R.2003 I.202 PARCEL 20
NON DESCRIPT EASEMENT DOC.4437882 R.457 P.1436 PARCEL 19
NO RECORD OF EASMENT PARCEL 20
NON DESCRIPT EASEMENT DOC.4923655 R.859 I.387 PARCEL 20
8' EASEMENT DOC.4805225 R.755 I.1030 PARCEL 19
NON DESCRIPT EASEMENT DOC.3333569 R.3346 P.446 PARCEL 13, 14

(505) AMERICAN TRANSMITTION CO.
NON DESCRIPT EASEMENT DOC.8013166 R.4989 P.2054 PARCEL 13, 14

(506) METRO MILW. SEWAGE DISTRICT
20' EASEMENT AS SHOWN ON CSM 1749 DOC.4646696 PARCEL 19




| R/W COURSE TABLE | | |
|---|---|---|
| L7 | S00°43'32"E | 18.19' |
| L8 | S50°50'22"W | 31.24' |
| L9 | S50°50'22"W | 279.32' |
| L10 | N83°11'34"W | 12.53' |
| L11 | N39°09'50"W | 7.92' |
| L12 | N50°50'22"E | 3.37' |
| L13 | N50°50'22"E | 7.47' |
| L14 | S39°09'50"E | 13.69' |

| R/W CURVE DATA | | | | |
|---|---|---|---|---|
| COURSE | LENGTH | RADIUS | CHORD BEARING | CHORD |
| 708-709 | 13.69' | 113.50' | N54°17'40"E | 13.68' |
| 709-710 | 11.22' | 93.00' | N54°17'40"E | 11.21' |
| 711-712 | 9.14' | 73.50' | N54°24'07"E | 9.13' |
| C1 | 10.70' | 247.40' | S34°35'25"E | 10.70' |
| C2 | 21.53' | 157.40' | N31°55'02"W | 21.51' |

| STATION & OFFSET TABLE | | |
|---|---|---|
| 700 | 38+70.65 | 60.00' LT |
| 701 | 39+14.05 | 84.92' LT |
| 702 | 40+05.75 | 90.35' LT |
| 703 | 40+22.91 | 69.50' LT |
| 704 | 40+44.73 | 69.50' LT |
| 705 | 40+44.73 | 74.50' LT |
| 706 | 40+68.73 | 74.50' LT |
| 707 | 40+68.73 | 69.50' LT |
| 708 | 40+89.73 | 69.50' LT |
| 709 | 41+03.39 | 68.68' LT |
| 710 | 41+14.58 | 68.00' LT |
| 711 | 42+22.50 | 68.00' LT |
| 712 | 42+31.61 | 67.43' LT |
| 713 | 42+91.07 | 60.00' LT |
| 714 | 39+90.84 | 90.00' RT |
| 715 | 39+87.47 | 97.92' RT |
| 716 | 39+27.47 | 103.69' RT |

| TLE STATION/OFFSET TABLE | | |
|---|---|---|
| T750 | 38+02.25 | 90.41' LT |
| T751 | 38+05.00 | 65.00' LT |
| T752 | 38+65.00 | 65.00' LT |
| T753 | 40+08.56 | 102.17' LT |
| T754 | 40+43.23 | 88.88' LT |
| T755 | 40+73.73 | 77.50' LT |
| T756 | 40+73.73 | 75.00' LT |
| T757 | 41+50.00 | 75.00' LT |
| T758 | 42+25.00 | 80.00' LT |
| T759 | 42+95.00 | 65.00' LT |
| T760 | 40+25.00 | 90.00' RT |
| T761 | 40+25.00 | 93.00' RT |
| T762 | 40+08.28 | 93.00' RT |
| T763 | 39+87.47 | 107.05' RT |
| T764 | 39+27.47 | 107.32' RT |
| T765 | 38+96.15 | 90.00' RT |

| R/W COURSE TABLE | | |
|---|---|---|
| 720-700 | N50°55'22"E | 7.14' |
| 700-701 | N20°58'27"E | 50.04' |
| 702-703 | S78°36'20"E | 27.00' |
| 703-704 | N50°50'22"E | 21.83' |
| 704-705 | N39°09'38"W | 5.00' |
| 705-706 | N50°50'22"E | 24.00' |
| 706-707 | S39°09'38"E | 5.00' |
| 707-708 | N50°50'22"E | 21.00' |
| 710-711 | N50°50'22"E | 107.92' |
| 712-713 | N57°57'52"E | 59.92' |
| 714-715 | S16°06'35"E | 8.60' |
| 716-717 | N67°46'28"W | 15.59' |

| STATION & OFFSET TABLE | | |
|---|---|---|
| 717 | 39+20.00 | 90.00' RT |
| 718 | 37+48.93 | 90.00' RT |
| 719 | 37+43.56 | 60.00' LT |
| 720 | 38+63.50 | 60.00' LT |
| 721 | 40+03.04 | 69.01' LT |
| 722 | 40+11.75 | 60.00' LT |
| 723 | 39+87.47 | 90.00' RT |
| 724 | 39+27.47 | 90.00' RT |
| 725 | 39+01.88 | 60.00' LT |
| 726 | 39+13.19 | 74.25' LT |













| HWY | BASIS OF EXISTING R/W | R/W WIDTH | YEAR |
|---|---|---|---|
| W NATIONAL AVE | CSM 9521 | 120' | 2023 |
| W NATIONAL AVE | WILDWOOD ADDITION SUB. | 90' | 1955 |
| S 102ND ST | CSM 9521 | 90' | 2023 |
| S 102ND ST | WILDWOOD ADDITION SUB. | 60' | 1955 |




CONCRETE MONUMENT
WITH SEWRPC BRASS CAP
Y:368866.160
X:2522472.210




CONCRETE MONUMENT
WITH SEWRPC BRASS CAP
Y:368955.089
X:2525110.492

| REVISION DATE | | | |
|---|---|---|---|
| 10/16/25 | | | |
| 1/09/26 | | | |

DATE 9/5/25
GRID FACTOR 0.99992592
SCALE, FEET 0 40 80
HWY: W. NATIONAL AVENUE
COUNTY: MILWAUKEE
STATE R/W PROJECT NUMBER: 2410-15-00
CONSTRUCTION PROJECT NUMBER: 2410-15-70
PLAT SHEET 4.07
PS&E SHEET 556
E

FILE NAME : TPP-NATIONAL(USE)(NEW).DWG
LAYOUT NAME - 4.07
PLOT DATE : 1/9/2026 7:33 AM
PLOT BY : RATZBURG, MICHAEL
PLOT NAME :
PLOT SCALE :
WISDOT/CADDS SHEET 75

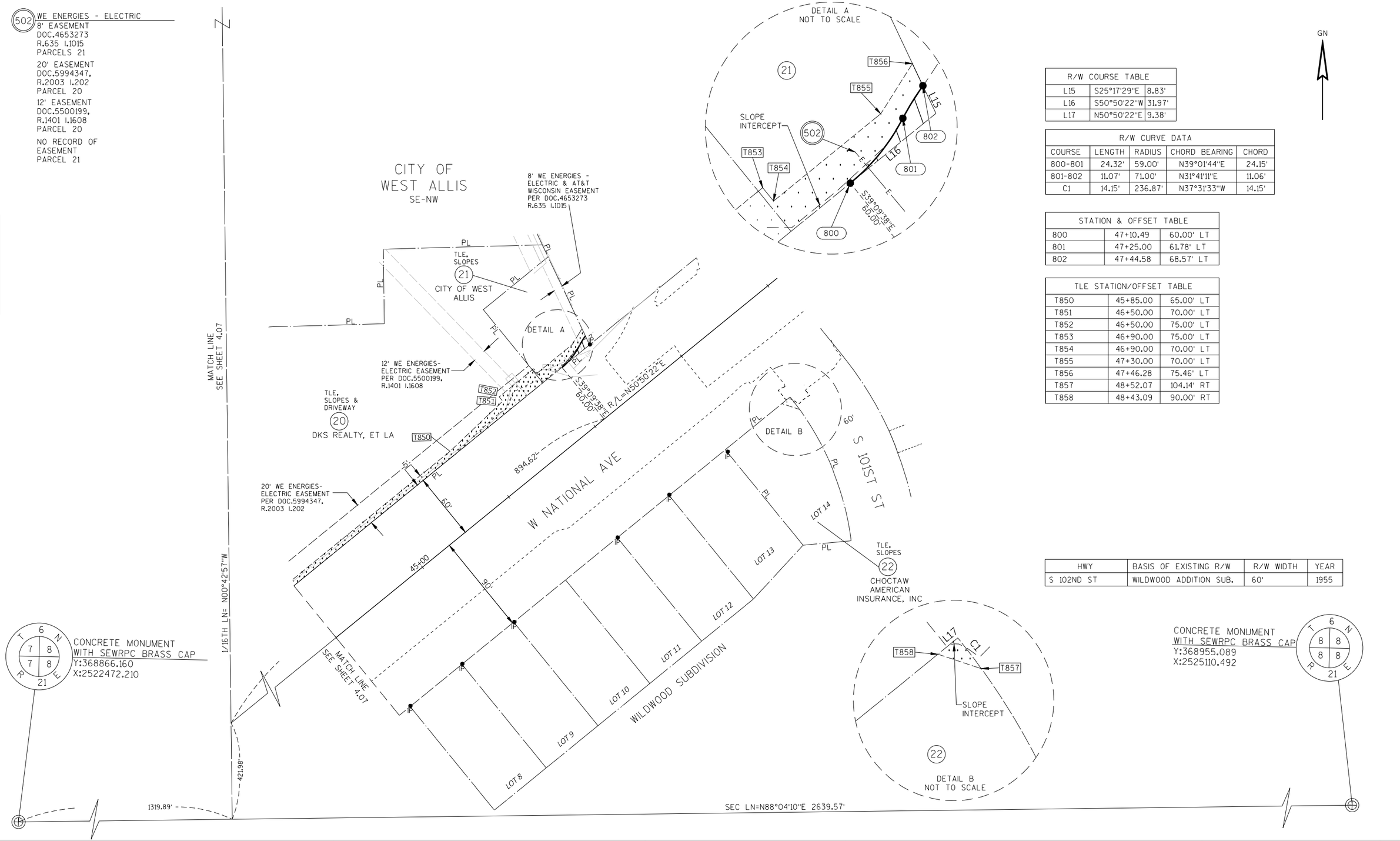
4

(502) WE ENERGIES - ELECTRIC
8' EASEMENT
DOC.4653273
R.635 I.1015
PARCELS 21

20' EASEMENT
DOC.5994347,
R.2003 I.202
PARCEL 20

12' EASEMENT
DOC.5500199,
R.1401 I.1608
PARCEL 20

NO RECORD OF
EASEMENT
PARCEL 21




| R/W COURSE TABLE | | |
|---|---|---|
| L15 | S25°17'29"E | 8.83' |
| L16 | S50°50'22"W | 31.97' |
| L17 | N50°50'22"E | 9.38' |

| R/W CURVE DATA | | | | |
|---|---|---|---|---|
| COURSE | LENGTH | RADIUS | CHORD BEARING | CHORD |
| 800-801 | 24.32' | 59.00' | N39°01'44"E | 24.15' |
| 801-802 | 11.07' | 71.00' | N31°41'11"E | 11.06' |
| C1 | 14.15' | 236.87' | N37°31'33"W | 14.15' |

| STATION & OFFSET TABLE | | |
|---|---|---|
| 800 | 47+10.49 | 60.00' LT |
| 801 | 47+25.00 | 61.78' LT |
| 802 | 47+44.58 | 68.57' LT |

| TLE STATION/OFFSET TABLE | | |
|---|---|---|
| T850 | 45+85.00 | 65.00' LT |
| T851 | 46+50.00 | 70.00' LT |
| T852 | 46+50.00 | 75.00' LT |
| T853 | 46+90.00 | 75.00' LT |
| T854 | 46+90.00 | 70.00' LT |
| T855 | 47+30.00 | 70.00' LT |
| T856 | 47+46.28 | 75.46' LT |
| T857 | 48+52.07 | 104.14' RT |
| T858 | 48+43.09 | 90.00' RT |

| HWY | BASIS OF EXISTING R/W | R/W WIDTH | YEAR |
|---|---|---|---|
| S 102ND ST | WILDWOOD ADDITION SUB. | 60' | 1955 |

4

4

REVISION DATE
10/16/25
1/09/26

DATE 9/5/25

GRID FACTOR 0.99992592

SCALE, FEET
0 40 80

HWY: W. NATIONAL AVENUE

COUNTY: MILWAUKEE

STATE R/W PROJECT NUMBER: 2410-15-00

CONSTRUCTION PROJECT NUMBER: 2410-15-70

PLAT SHEET 4.08

PS&E SHEET 557

E

FILE NAME : TPP-NATIONAL(USE)(NEW).DWG
LAYOUT NAME - 4.08

PLOT DATE : 1/9/2026 7:33 AM PLOT BY : RATZBURG, MICHAEL PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 75

(500) AT&T WISCONSIN
POLE
EASEMENT
DOC.4159949
R.233 I.878
PARCEL 24

(502) WE ENERGIES - ELECTRIC

| NON DESCRIPT | POLE |
|---|---|
| EASEMENT | EASEMENT |
| DOC.3098167 | DOC.4159949 |
| V.2996 P.458 | R.233 I.878 |
| PARCEL 27 | PARCEL 24 |

(505) AMERICAN TRANSMITTION CO.
NON DESCRIPT
EASEMENT
DOC.3607340
V.3741 P.113
REF. IN
DOC.8013166
R.4989 P.2054
PARCEL 24, 26, 27, 28, 29, 31, 32, 33, 34, 36,

T 6 N 5 5 8 8 R 21 E
CONCRETE MONUMENT WITH BRASS CAP
Y:371589.603
X:2525079.961

SEC LN=N00°39'50"W 2634.69'

PAUL R. & VIRGINIA A. RADLER (36) TLE, SLOPES & DRIVEWAY
ROBERT H. & MARTINA BREMER (34) TLE, SLOPES & DRIVEWAY
KINSEY'S PARK GARDENS SUBDIVISION
HEATHER & JEFFREY A. SCHWASINGER (33) TLE, SLOPES & DRIVEWAY
HEULER XXI, LLC (32) TLE, SLOPES & DRIVEWAY
HEULER REAL ESTATE INVESTORS, LLC (31) TLE, SLOPES & DRIVEWAY
ROBIN S. & BETH A. MEDVED (28) TLE, SLOPES & DRIVEWAY
JANET L. QUINN (29) TLE, SLOPES & DRIVEWAY
FRENCH QUARTER APARTMENTS PARTNERSHIP (27) TLE, SLOPES & DRIVEWAY
LUTZ LAND MANAGEMENT LLC (26) TLE, SLOPES
RICHARD R. NEUMANN (24) TLE, SLOPES
THE EDITH M. TIARKS REVOCABLE LIVING TRUST (23) TLE, SLOPES

S 100TH ST — 30'
S 99TH ST — 60'
S 98TH ST — 90'
W NATIONAL AVENUE
BLOCK 10
BLOCK 11
LOT 21 LOT 22 LOT 23 LOT 24 LOT 25 LOT 26
LOT 28 LOT 29 LOT 30 LOT 31 LOT 32 LOT 33
LOT 1 LOT 2 LOT 3 LOT 4
MOTHS REALTY SUBDIVISION
CITY OF WEST ALLIS NW-NE
MATCH LINE SEE SHEET 4.10
SLOPE INTERCEPT
R/L=N5°07'40"E
R/L=N0°43'36"W
R/L=N5°07'40"E
R/L=N50°50'22"E 88.95
S39°52'20"E 370.41'
60.00'
1210.81'
60+00
Pt: 130+00.00
Pt: 55+91.34
STA: 55+02.40
ONLY 2 ACCESS POINTS ALLOWED PER DOC. 4298711
WE ENERGIES ELECTRIC & AT&T WISCONSIN POLE EASEMENT DOC. 4159949 R.233 I.878
NO ACCESS PER PLAT 1100-1-21 DATED 1969

DETAIL A NOT TO SCALE — L18 C1 900 901 902 903 904 905 910 911 912
DETAIL B NOT TO SCALE — 906 907 908 909
DETAIL C NOT TO SCALE — L19 L20 903 904

T 6 N 8 8 8 8 R 21 E
CONCRETE MONUMENT WITH BRASS CAP
Y:368955.089
X:2525110.492

| PI | Y | X | DELTA ANGLE |
|---|---|---|---|
| 55+91.34 | 370453.78 | 2525162.74 | 00° 17' 18" RT |

| HWY | BASIS OF EXISTING R/W | R/W WIDTH | YEAR |
|---|---|---|---|
| W NATIONAL AVE | MOTHS REALTY SUB. | 120' | 1959 |
| S 99TH ST | MOTHS REALTY SUB. | 90' | 1959 |
| S 99TH ST | KINSEY'S PARK GARDENS SUB. | 60' | 1924 |
| S 98TH ST | KINSEY'S PARK GARDENS SUB. | 60' | 1924 |
| S 100TH ST | KINSEY'S PARK GARDENS SUB. | 30' | 1924 |
| W NATIONAL AVE | FRENCH QUARTER ATLA SURVEY | 120' | 2023 |

| R/W COURSE TABLE | | |
|---|---|---|
| L18 | N81°43'26"W | 6.75' |
| L19 | N64°46'50"W | 4.37' |
| L20 | N00°43'36"W | 12.88' |

| R/W CURVE DATA | | | | |
|---|---|---|---|---|
| COURSE | LENGTH | RADIUS | CHORD BEARING | CHORD |
| C1 | 12.85' | 125.00' | S30°29'15"E | 12.84' |

| STATION & OFFSET TABLE | | |
|---|---|---|
| 900 | 56+11.01 | 64.95' LT |
| 901 | 56+15.60 | 60.00' LT |
| 902 | 59+35.95 | 60.00' LT |
| 903 | 60+15.33 | 63.93' LT |
| 904 | 60+17.24 | 60.00' LT |
| 905 | 63+55.55 | 60.00' RT |
| 910 | 59+61.81 | 60.00' RT |
| 911 | 58+47.21 | 60.00' RT |
| 912 | 55+79.38 | 59.94' RT |

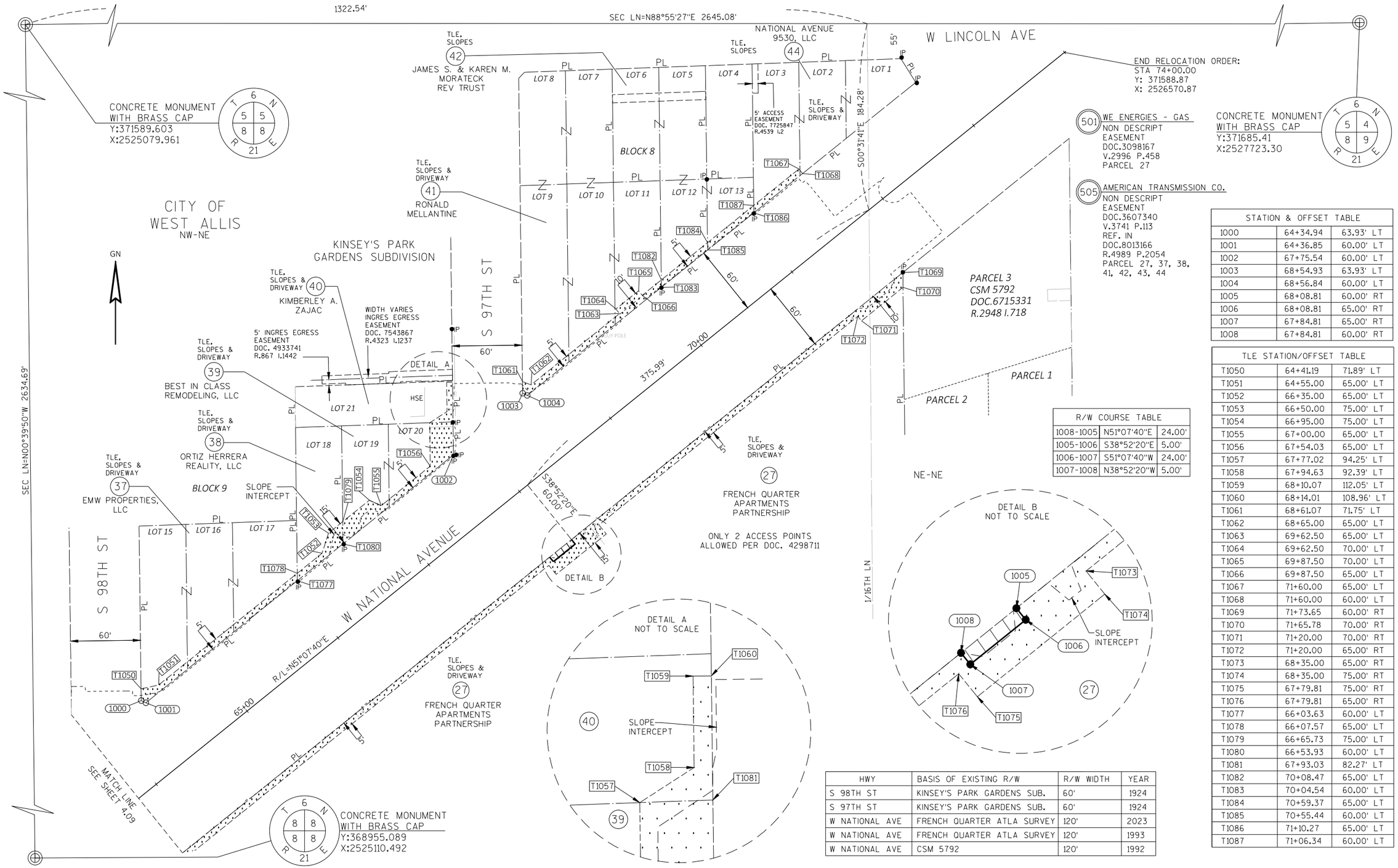
| TLE STATION/OFFSET TABLE | | |
|---|---|---|
| T950 | 56+12.88 | 77.65' LT |
| T951 | 56+35.00 | 65.00' LT |
| T952 | 57+05.00 | 65.00' LT |
| T953 | 57+05.00 | 70.00' LT |
| T954 | 57+55.00 | 70.00' LT |
| T955 | 57+55.00 | 65.00' LT |
| T956 | 59+15.00 | 65.00' LT |
| T957 | 59+39.60 | 72.74' LT |
| T958 | 59+45.77 | 80.60' LT |
| T959 | 59+49.70 | 77.51' LT |
| T960 | 60+23.29 | 74.07' LT |
| T961 | 60+30.00 | 65.00' LT |
| T962 | 61+12.77 | 65.00' LT |
| T963 | 61+27.53 | 77.15' LT |
| T964 | 61+42.72 | 65.00' LT |
| T965 | 61+95.00 | 65.001' LT |
| T966 | 62+00.00 | 75.00' LT |
| T967 | 62+40.00 | 75.00' LT |
| T968 | 62+50.00 | 65.00' LT |
| T969 | 63+30.00 | 65.00' LT |
| T970 | 63+59.19 | 72.73' LT |
| T971 | 63+74.64 | 92.39' LT |
| T972 | 63+74.11 | 96.78' LT |
| T973 | 63+80.62 | 91.90' LT |
| T974 | 63+40.00 | 65.00' RT |
| T975 | 63+25.00 | 80.00 RT |
| T976 | 63+00.00 | 80.00' RT |
| T977 | 62+90.00 | 65.00' RT |
| T978 | 60+45.00 | 65.00' RT |
| T979 | 60+45.00 | 75.00' RT |
| T980 | 60+25.00 | 75.00' RT |
| T981 | 60+25.00 | 65.00' RT |
| T984 | 59+75.00 | 65.00' RT |
| T985 | 59+46.91 | 78.91' RT |
| T986 | 58+43.27 | 65.00' RT |
| T987 | 56+42.08 | 65.00' RT |
| T988 | 56+38.09 | 62.00' RT |
| T989 | 55+75.28 | 61.92' RT |
| T990 | 56+46.40 | 65.00' LT |
| T991 | 56+97.30 | 65.00' LT |
| T992 | 56+42.47 | 60.00' LT |
| T993 | 56+93.37 | 60.00' LT |
| T994 | 57+63.45 | 60.00' LT |
| T995 | 58+65.15 | 60.00' LT |
| T996 | 61+14.04 | 60.00' LT |
| T997 | 61+84.02 | 60.00' LT |
| T998 | 60+89.65 | 60.00' RT |
| T999 | 60+85.72 | 65.00' RT |

| REVISION DATE | | | |
|---|---|---|---|
| 10/16/25 | | | |
| 1/09/26 | | | |

DATE 9/5/25
GRID FACTOR 0.99992592
SCALE, FEET 0 40 80
HWY: W. NATIONAL AVENUE
COUNTY: MILWAUKEE
STATE R/W PROJECT NUMBER: 2410-15-00
CONSTRUCTION PROJECT NUMBER: 2410-15-70
PLAT SHEET 4.09
PS&E SHEET 558
E

FILE NAME : TPP-NATIONAL(USE)(NEW).DWG
LAYOUT NAME - 4.09
PLOT DATE : 1/9/2026 7:34 AM
PLOT BY : RATZBURG, MICHAEL
PLOT NAME :
PLOT SCALE :
WISDOT/CADDS SHEET 75

4
4




| R/W COURSE TABLE | | |
|---|---|---|
| 1008-1005 | N51°07'40"E | 24.00' |
| 1005-1006 | S38°52'20"E | 5.00' |
| 1006-1007 | S51°07'40"W | 24.00' |
| 1007-1008 | N38°52'20"W | 5.00' |

| HWY | BASIS OF EXISTING R/W | R/W WIDTH | YEAR |
|---|---|---|---|
| S 98TH ST | KINSEY'S PARK GARDENS SUB. | 60' | 1924 |
| S 97TH ST | KINSEY'S PARK GARDENS SUB. | 60' | 1924 |
| W NATIONAL AVE | FRENCH QUARTER ATLA SURVEY | 120' | 2023 |
| W NATIONAL AVE | FRENCH QUARTER ATLA SURVEY | 120' | 1993 |
| W NATIONAL AVE | CSM 5792 | 120' | 1992 |

| STATION & OFFSET TABLE | | |
|---|---|---|
| 1000 | 64+34.94 | 63.93' LT |
| 1001 | 64+36.85 | 60.00' LT |
| 1002 | 67+75.54 | 60.00' LT |
| 1003 | 68+54.93 | 63.93' LT |
| 1004 | 68+56.84 | 60.00' LT |
| 1005 | 68+08.81 | 60.00' RT |
| 1006 | 68+08.81 | 65.00' RT |
| 1007 | 67+84.81 | 65.00' RT |
| 1008 | 67+84.81 | 60.00' RT |

| TLE STATION/OFFSET TABLE | | |
|---|---|---|
| T1050 | 64+41.19 | 71.89' LT |
| T1051 | 64+55.00 | 65.00' LT |
| T1052 | 66+35.00 | 65.00' LT |
| T1053 | 66+50.00 | 75.00' LT |
| T1054 | 66+95.00 | 75.00' LT |
| T1055 | 67+00.00 | 65.00' LT |
| T1056 | 67+54.03 | 65.00' LT |
| T1057 | 67+77.02 | 94.25' LT |
| T1058 | 67+94.63 | 92.39' LT |
| T1059 | 68+10.07 | 112.05' LT |
| T1060 | 68+14.01 | 108.96' LT |
| T1061 | 68+61.07 | 71.75' LT |
| T1062 | 68+65.00 | 65.00' LT |
| T1063 | 69+62.50 | 65.00' LT |
| T1064 | 69+62.50 | 70.00' LT |
| T1065 | 69+87.50 | 70.00' LT |
| T1066 | 69+87.50 | 65.00' LT |
| T1067 | 71+60.00 | 65.00' LT |
| T1068 | 71+60.00 | 60.00' LT |
| T1069 | 71+73.65 | 60.00' RT |
| T1070 | 71+65.78 | 70.00' RT |
| T1071 | 71+20.00 | 70.00' RT |
| T1072 | 71+20.00 | 65.00' RT |
| T1073 | 68+35.00 | 65.00' RT |
| T1074 | 68+35.00 | 75.00' RT |
| T1075 | 67+79.81 | 75.00' RT |
| T1076 | 67+79.81 | 65.00' RT |
| T1077 | 66+03.63 | 60.00' LT |
| T1078 | 66+07.57 | 65.00' LT |
| T1079 | 66+65.73 | 75.00' LT |
| T1080 | 66+53.93 | 60.00' LT |
| T1081 | 67+93.03 | 82.27' LT |
| T1082 | 70+08.47 | 65.00' LT |
| T1083 | 70+04.54 | 60.00' LT |
| T1084 | 70+59.37 | 65.00' LT |
| T1085 | 70+55.44 | 60.00' LT |
| T1086 | 71+10.27 | 65.00' LT |
| T1087 | 71+06.34 | 60.00' LT |

| | | | | | |
|---|---|---|---|---|---|
| REVISION DATE 10/16/25 1/09/26 | DATE 9/5/25 | SCALE, FEET 0 40 80 | HWY: W. NATIONAL AVENUE | R/W PROJECT NUMBER: 2410-15-00 | PLAT SHEET 4.10 |
| | GRID FACTOR 0.99992592 | | COUNTY: MIILWAUKEE | RA SMITH SURVEY NUMBER: 2410-15-70 | PS&E SHEET 559 E |

FILE NAME : TPP-NATIONAL(USE)(NEW).DWG
LAYOUT NAME - 4.10
PLOT DATE : 1/9/2026 7:34 AM PLOT BY : RATZBURG, MICHAEL PLOT NAME : PLOT SCALE :
WISDOT/CADDS SHEET 75

| BENCHMARKS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| BM 1003 | 23+18, 60' RT | 182.31 | CHISELED BOX NW SIDE OF LIGHT POLE BASE |

RUST REALITY INC
(SPECTRUM)
10730 W NATIONAL AVE

RUST REALITY INC
(OFFICE MAX)
10707 W CLEVELAND AVE

POTENTIALLY
HISTORIC PARCEL

S 108TH ST (STH 100)

PI: 21+04.16

BEGIN PROJECT
STA 21+82.62
Y = 368,302.160
X = 2,522,518.894

BOLLARD TO REMAIN

BOLLARD TO REMAIN, GRADE AROUND BOLLARD

EXISTING R/W

TREE TO REMAIN

SLOPE INTERCEPT

BUILDING COLUMN TO REMAIN

175' RIGHT TURN LANE

BUS STOP

BIKE LANE

BIOSWALE 1, SEE DETAIL

400' LEFT TURN LANE

NATIONAL AVENUE R/L

CLOSE MEDIAN OPENING

W NATIONAL AVENUE

BUSINESS SIGN TO REMAIN

BUSINESS SIGN TO REMAIN GRADE AROUND SIGN

BIKE LANE

ENCROACHING BUSINESS SIGN TO REMAIN

PRIVATE LIGHT POLE TO REMAIN

BUSINESS SIGN TO REMAIN

BM 1003

EXISTING R/W

REMOVE ACCESS POINT RESTORE WITH SOD

BUSINESS SIGN TO REMAIN

TREE TO REMAIN

SLOPE INTERCEPT

CONCRETE CURB PEDESTRIAN

REDUCE ACCESS POINT WIDTH TO 35 FEET

SEE NOTE 1

EXISTING FENCE TO REMAIN

PEOPLES STATE BANK
10725 W NATIONAL AVE

BUSINESS SIGN TO REMAIN

SEE NOTE 1

CAUTION

SLOPE INTERCEPT

BUSINESS SIGN TO REMAIN

SEE NOTE 1

CENTRAL BANK
(ASSOCIATED BANK)
10701 W NATIONAL AVE

THE BAL-LER GROUP LLC
(GOODYEAR)
10757 W NATIONAL AVE

FOCUS REALTY GROUP LLC
(ARBY'S)
10743 W NATIONAL AVE

NOTES:
1. PUSH BACK LANDSCAPING ROCK AND REPLACE AFTER SIDEWALK CONSTRUCTION. DO NOT DISTURB PLANTS. INCIDENTAL TO CONSTRUCTION.

MATCHLINE STA 27+50

BEGIN RECONSTRUCTION EB
STA 22+29.20

EB PGL

VPC STA 22+44.30 'EB'
VPC EL 179.31

VPI STA 22+89.30 'EB'
VPI EL 179.41

VPT STA 23+34.30 'EB'
VPT EL 178.79

VPI STA 23+87.07 'EB'
VPI EL 178.07

LP STA 24+10.53 'EB'
LP EL 178.25

VPC STA 24+37.32 'EB'
VPC EL 178.32

VPI STA 24+82.32 'EB'
VPI EL 178.54

VPT STA 25+27.32 'EB'
VPT EL 178.32

VCL = 100.00
K = 53.60

STA 22+29.20 'EB'
EL 179.27

0.23%

-1.37%

0.50%

-0.50%

EXISTING PROFILE ALONG EB PGL

PROPOSED PROFILE ALONG EB PGL

VPT STA 24+37.07 'EB'
VPT EL 178.32

HP STA 22+57.29 'EB'
HP EL 179.32

VPC STA 23+37.07 'EB'
VPC EL 178.76

HP STA 24+82.05 'EB'
HP EL 178.43

EB PGL EXISTING ELEVATION

EB PGL PROPOSED ELEVATION

VCL = 90.00
K = 56.19

VCL = 90.00
K = 90.36

| | | |

| BENCHMARKS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| BM 1003 | 23+18, 60' RT | 182.31 | CHISELED BOX NW SIDE OF LIGHT POLE BASE |

RUST REALITY INC (SPECTRUM) 10730 W NATIONAL AVE

RUST REALTY INC (OFFICE MAX) 10707 W CLEVELAND AVE

POTENTIALLY HISTORIC PARCEL

S 108TH ST (STH 100)

PI: 21+04.16

BEGIN PROJECT
STA 22+11.10
Y = 368,302.160
X = 2,522,518.894

BOLLARD TO REMAIN

BOLLARD TO REMAIN, GRADE AROUND BOLLARD

EXISTING R/W

TREE TO REMAIN

SLOPE INTERCEPT

BUILDING COLUMN TO REMAIN

TLE

HMA

SIDEWALK

RCT

BUS STOP

BIKE LANE

175' RIGHT TURN LANE

400' LEFT TURN LANE

BIOSWALE 1, SEE DETAIL

NATIONAL AVENUE R/L

CLOSE MEDIAN OPENING

W NATIONAL AVENUE

BUSINESS SIGN TO REMAIN

BUSINESS SIGN TO REMAIN GRADE AROUND SIGN

ENCROACHING BUSINESS SIGN TO REMAIN

PRIVATE LIGHT POLE TO REMAIN

BM 1003

BUSINESS SIGN TO REMAIN

EXISTING R/W

REMOVE ACCESS POINT RESTORE WITH SOD

BUSINESS SIGN TO REMAIN

CONCRETE CURB PEDESTRIAN

REDUCE ACCESS POINT WIDTH TO 35 FEET

SEE NOTE 1

EXISTING FENCE TO REMAIN

SLOPE INTERCEPT

CAUTION

SEE NOTE 1

BUSINESS SIGN TO REMAIN

SEE NOTE 1

THE BAL-LER GROUP LLC (GOODYEAR) 10757 W NATIONAL AVE

FOCUS REALTY GROUP LLC (ARBY'S) 10743 W NATIONAL AVE

PEOPLES STATE BANK 10725 W NATIONAL AVE

CENTRAL BANK (ASSOCIATED BANK) 10701 W NATIONAL AVE

MATCHLINE STA 27+50

NOTES:
1. PUSH BACK LANDSCAPING ROCK AND REPLACE AFTER SIDEWALK CONSTRUCTION. DO NOT DISTURB PLANTS. INCIDENTAL TO CONSTRUCTION.

BEGIN RECONSTRUCTION WB
STA 23+10.06

WB PGL

STA 23+10.06 'WB'
EL 178.49

VCL = 90.00
K = 90.00

LP STA 26+12.88'WB'
LP EL 177.08

VPC STA 26+59.54 'WB'
VPC EL 177.20

VPI STA 27+04.54 'WB'
VPI EL 177.43

VPT STA 27+49.54 'WB'
VPT EL 177.20

-0.50%

0.50%

EXISTING PROFILE ALONG WB PGL

PROPOSED PROFILE ALONG WB PGL

VPC STA 25+67.88 'WB'
VPC EL 177.20

VPI STA 26+12.88 'WB'
VPI EL 176.97

VPT STA 26+57.88 'WB'
VPT EL 177.20

HP STA 27+04.50'WB'
HP EL 177.32

VCL = 90.00
K = 89.91

WB PGL EXISTING ELEVATION

WB PGL PROPOSED ELEVATION

| | | |

RUST REALTY INC
(OFFICE MAX)
10707 W CLEVELAND AVE

POTENTIALLY
HISTORIC PARCEL

SLOPE INTERCEPT

REMOVE ACCESS POINT

EXISTING R/W

TLE

SIDEWALK

RCT

BIOSWALE 1, SEE DETAIL

W NATIONAL AVENUE

WB PGL

EP, 180+00.00

28+00

29+00

30+00

31+00

150' LEFT TURN LANE

CLOSE MEDIAN OPENING

EB PGL

CLEVELAND AVE R/L

W CLEVELAND AVE

99+00

100+00

WATERSTONE BANK SSB
10296 W NATIONAL AVE

SLOPE INTERCEPT

BUSINESS SIGN
TO REMAIN

PRIVATE LIGHT POLE
TO BE REMOVED
BY OTHERS

EXISTING R/W

PROPOSED
R/W

PRIVATE LIGHT POLE
TO BE REMOVED
BY OTHERS

CAUTION

PRIVATE LIGHT POLE TO
BE REMOVED BY OTHERS

BUSINESS SIGN TO BE
REMOVED BY OTHERS

BADGER CENTURY
MANAGEMENT LLC
10236 W NATIONAL AVE

TLE

TREES TO REMAIN

HMA

SIDEWALK

RCT

BUS STOP

175' RIGHT TURN LANE

BIOSWALE 2, SEE DETAIL

150' LEFT TURN LANE

32+00

33+00

34+00

35

NATIONAL AVENUE R/L

W NATIONAL AVENUE

REMOVE ACCESS POINT

BUS STOP

RCT

SIDEWALK

ATM TO REMAIN

HMA

TLE

PROPOSED R/W

SLOPE INTERCEPT

GREAT MIDWEST
SAVINGS & LOAN
10269 W NATIONAL AVE

EXISTING R/W

101+00

CLEVELAND AVE R/L

W CLEVELAND AVE

102+00

TLE

EXISTING
R/W

BLDG

SLOPE INTERCEPT

CONC

WILDWOOD DR R/L

179+00

S WILDWOOD DR

SLOPE INTERCEPT

STA 28+29.91 W NATIONAL AVE =
STA 180+00.00 S WILDWOOD DR

BANK PARCEL UNDER CONSTRUCTION WHEN
FINAL PLAN PREPARED. FIELD VERIFY FINAL
SITE CONFIGURATION

TLE

EXISTING R/W
BUSINESS SIGN TO REMAIN

STA 31+18.55 W NATIONAL AVE =
STA 100+00.00 W CLEVELAND AVE

MARQUETTE SAVINGS BANK
(NORTH SHORE BANK)
10533 W NATIONAL AVE

BM 1002

EXISTING R/W

H-10253 CLEVELAND LLC
10253 W CLEVELAND AVE

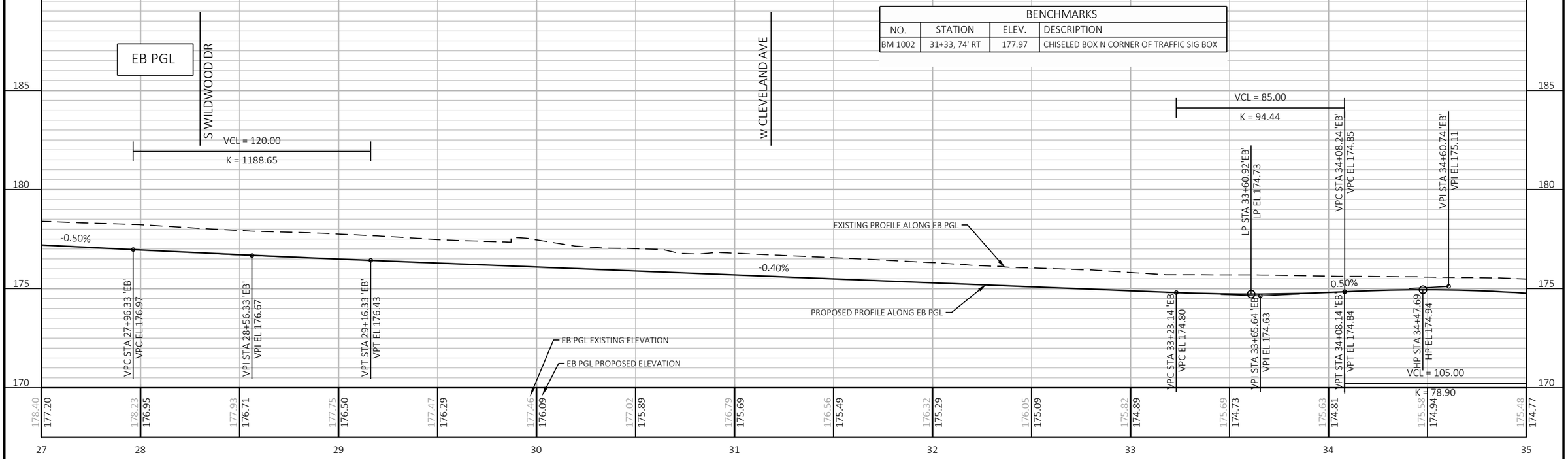
MATCHLINE STA 27+50

MATCHLINE STA 35+00

5

5

| BENCHMARKS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| BM 1002 | 31+33, 74' RT | 177.97 | CHISELED BOX N CORNER OF TRAFFIC SIG BOX |

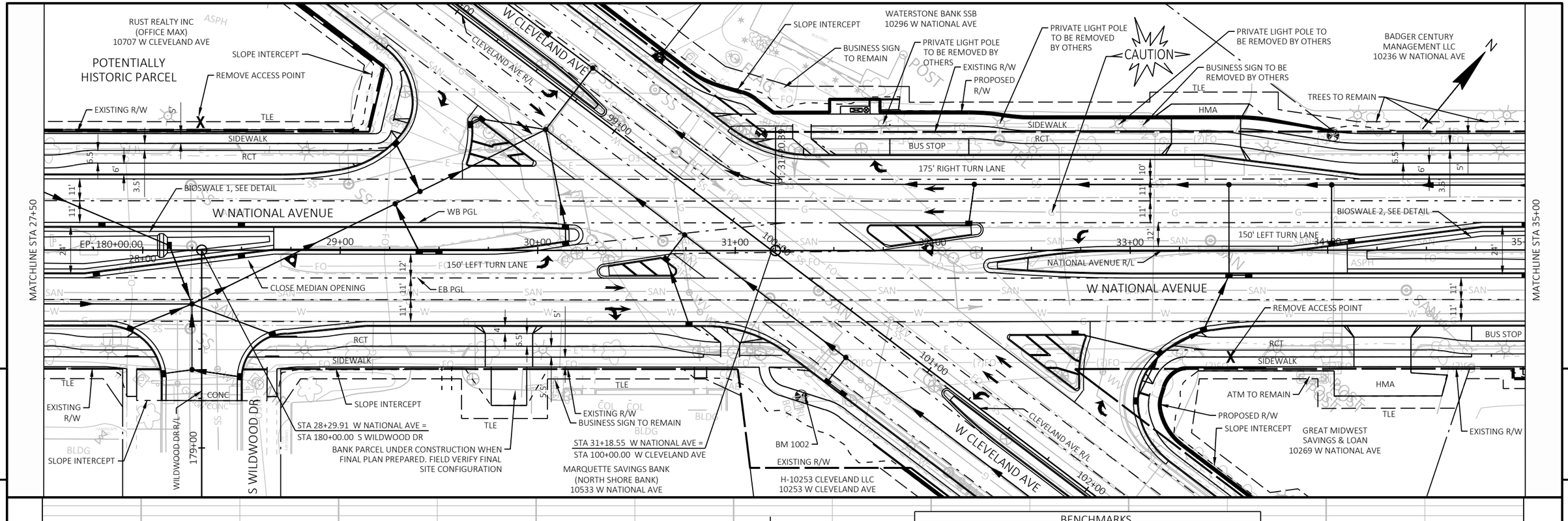


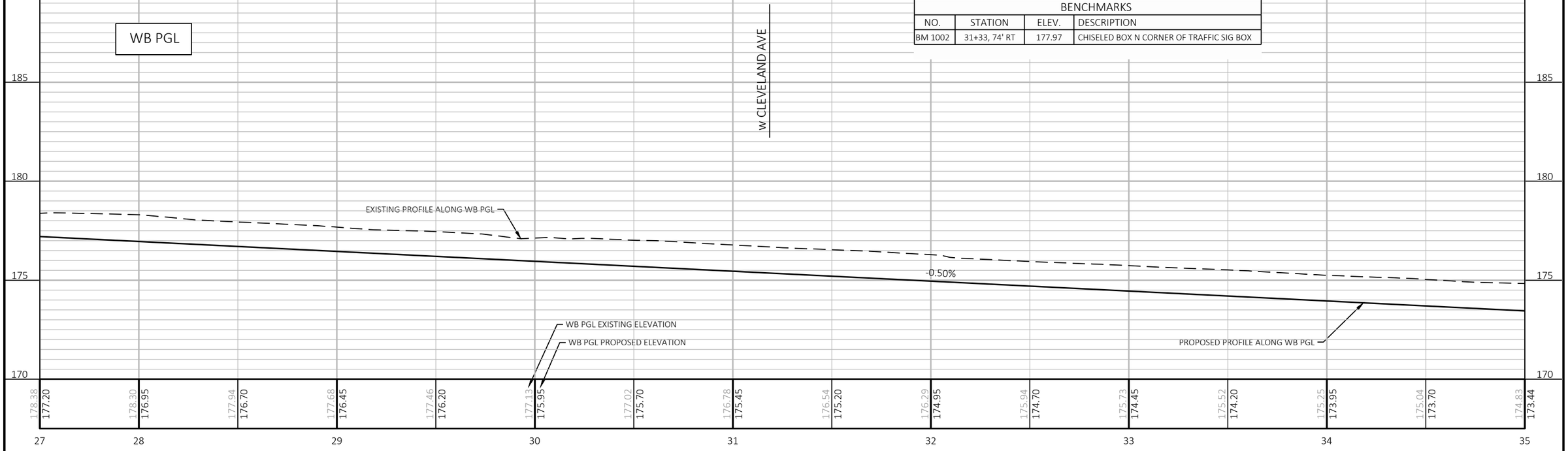

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: W NATIONAL AVE | SHEET 562 | E |
|---|---|---|---|---|---|


FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\050101-PP.DWG
LAYOUT NAME - 02EB

PLOT DATE : 1/9/2026 10:46 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:50 FT

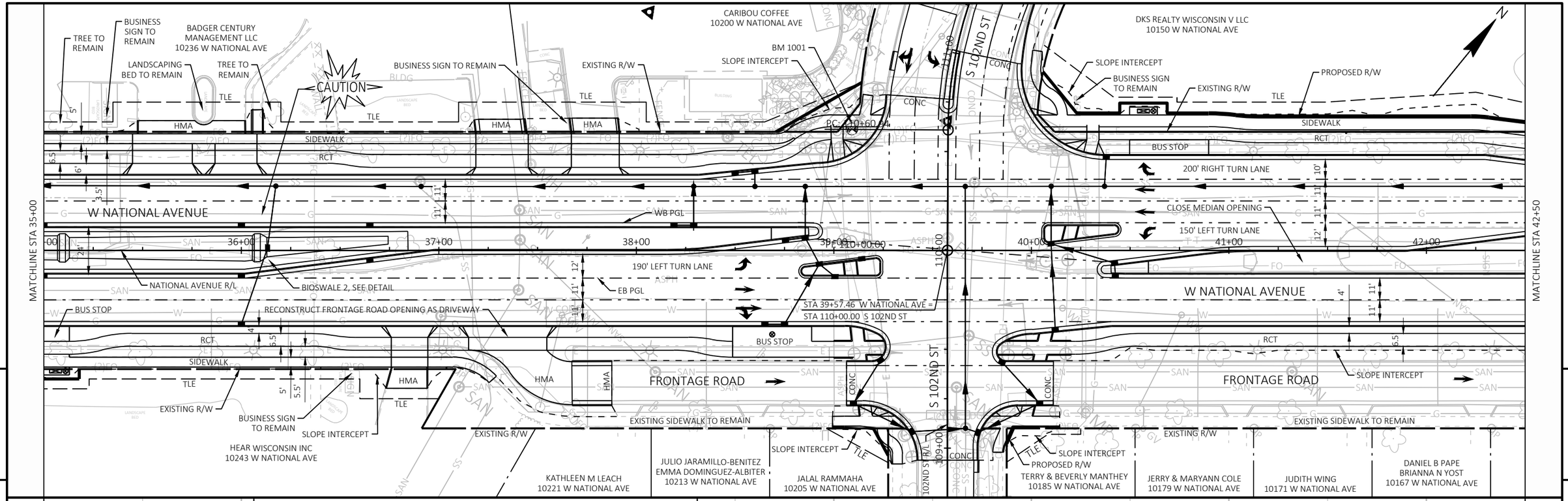
WISDOT/CADDS SHEET 44



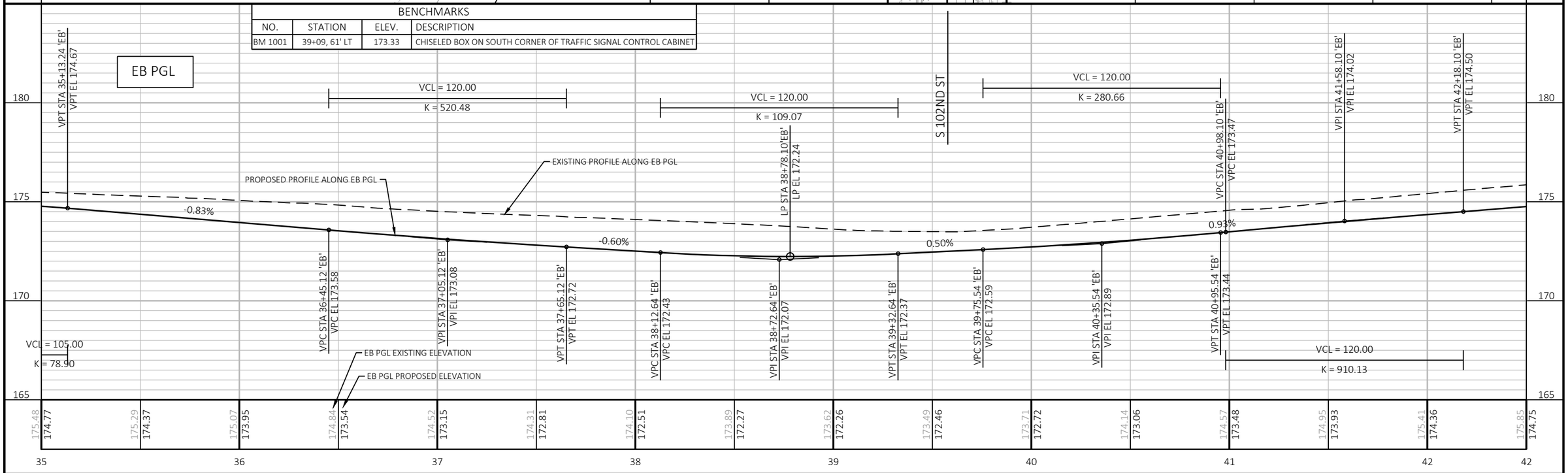




| BENCHMARKS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| BM 1002 | 31+33, 74' RT | 177.97 | CHISELED BOX N CORNER OF TRAFFIC SIG BOX |

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: W NATIONAL AVE | SHEET 563 E |

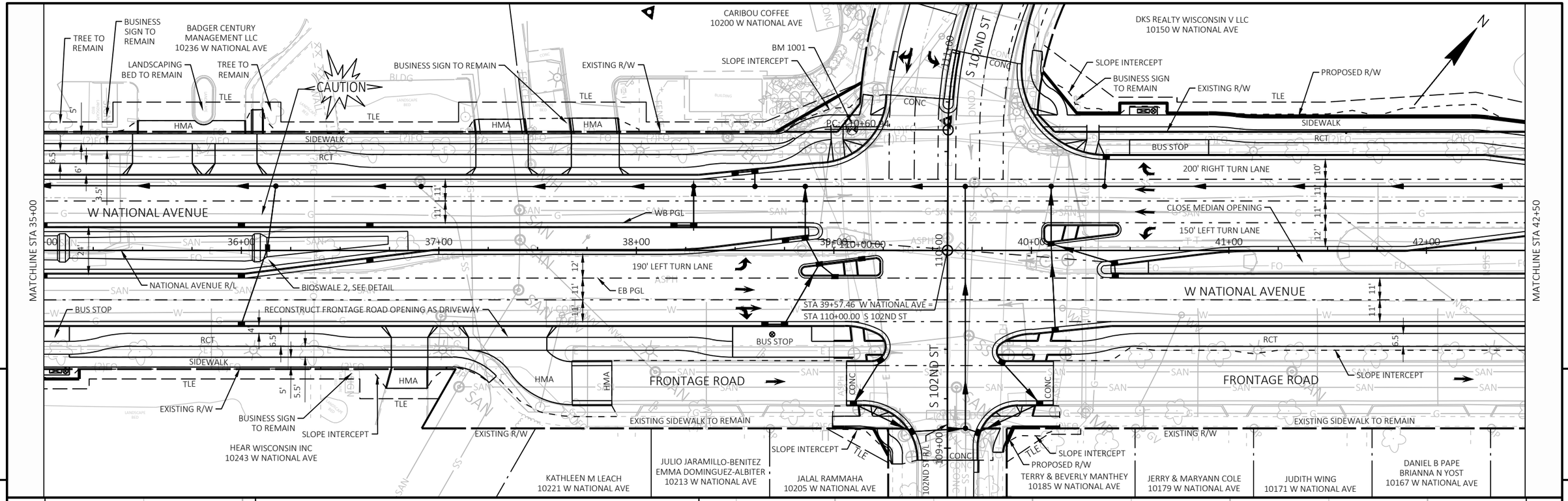



| BENCHMARKS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| BM 1001 | 39+09, 61' LT | 173.33 | CHISELED BOX ON SOUTH CORNER OF TRAFFIC SIGNAL CONTROL CABINET |

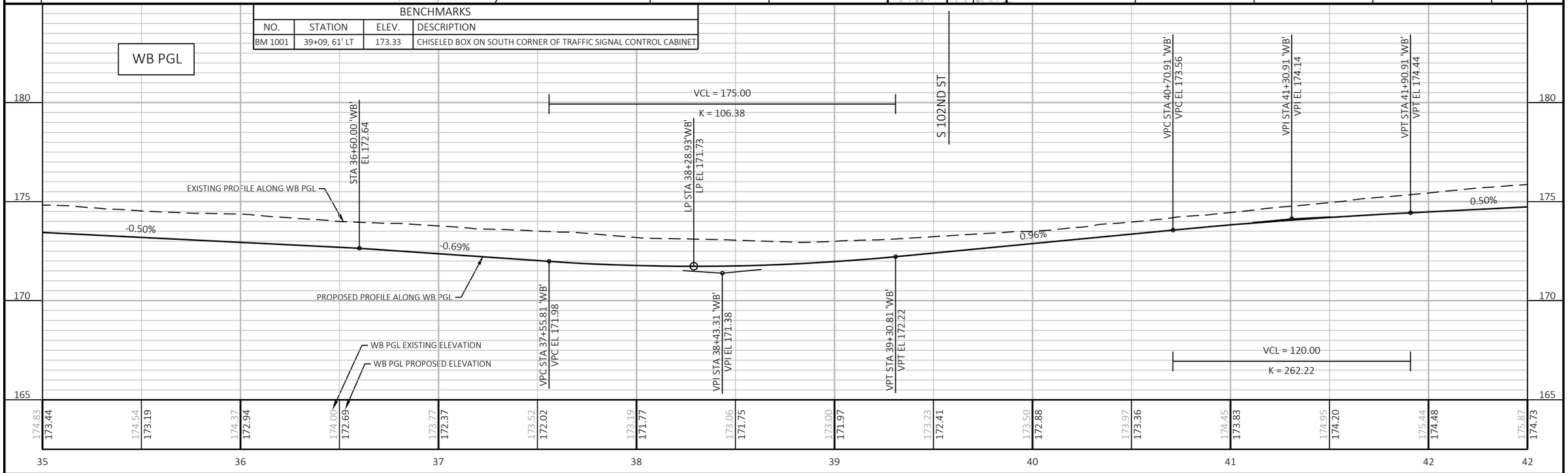



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: W NATIONAL AVE | SHEET 564 | E |
|---|---|---|---|---|---|


FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\050101-PP.DWG
LAYOUT NAME - 03EB
PLOT DATE : 1/9/2026 10:46 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

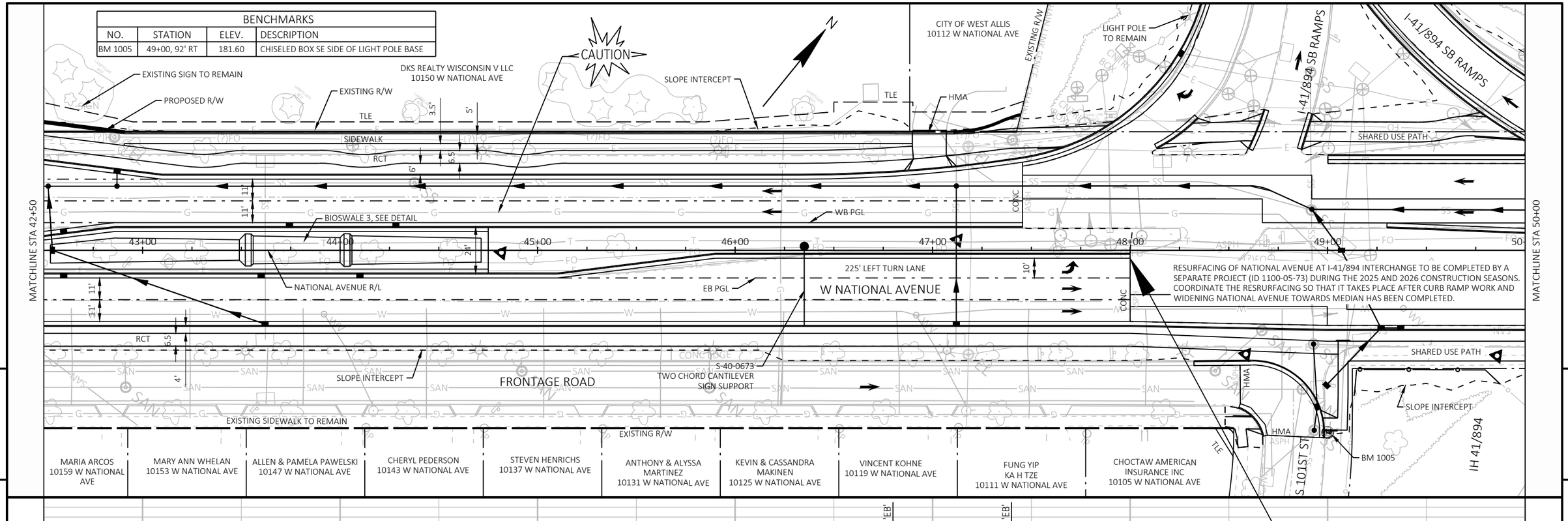


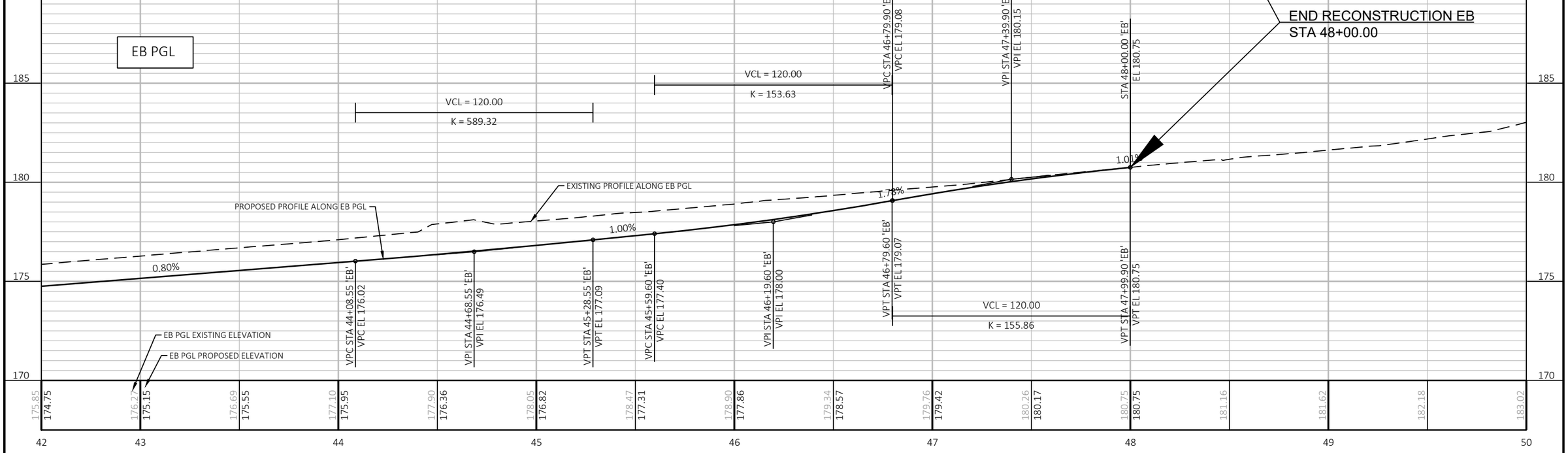

| BENCHMARKS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| BM 1001 | 39+09, 61' LT | 173.33 | CHISELED BOX ON SOUTH CORNER OF TRAFFIC SIGNAL CONTROL CABINET |




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: W NATIONAL AVE | SHEET 565 | E |
|---|---|---|---|---|---|

| BENCHMARKS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| BM 1005 | 49+00, 92' RT | 181.60 | CHISELED BOX SE SIDE OF LIGHT POLE BASE |

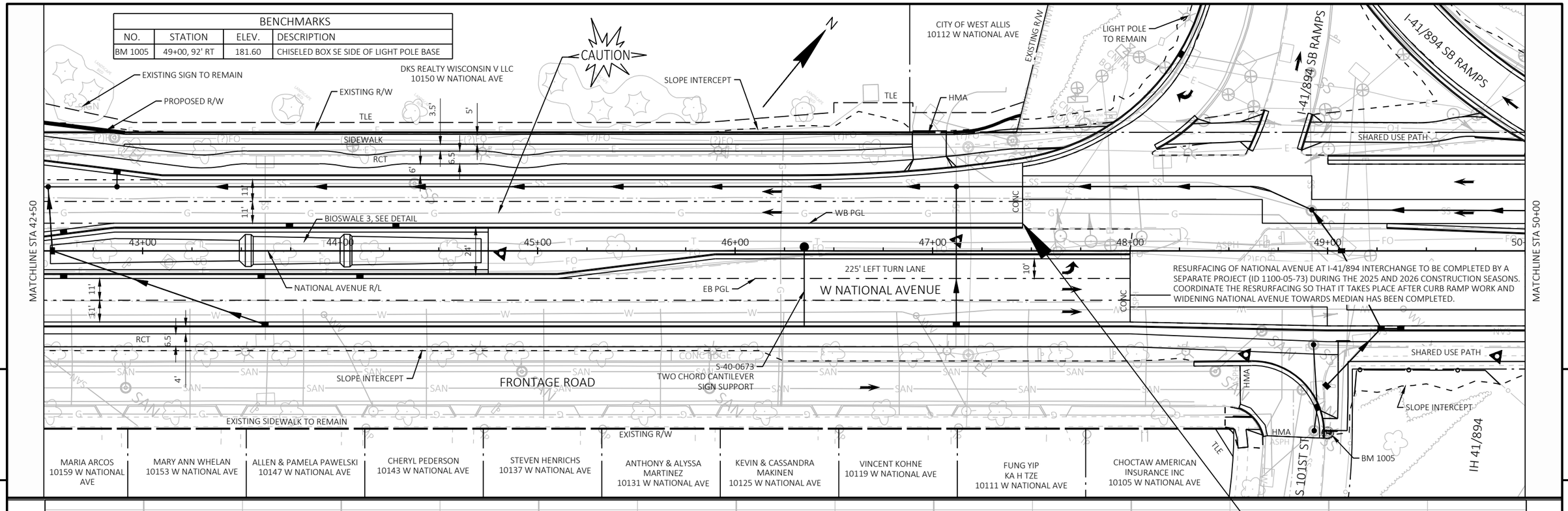


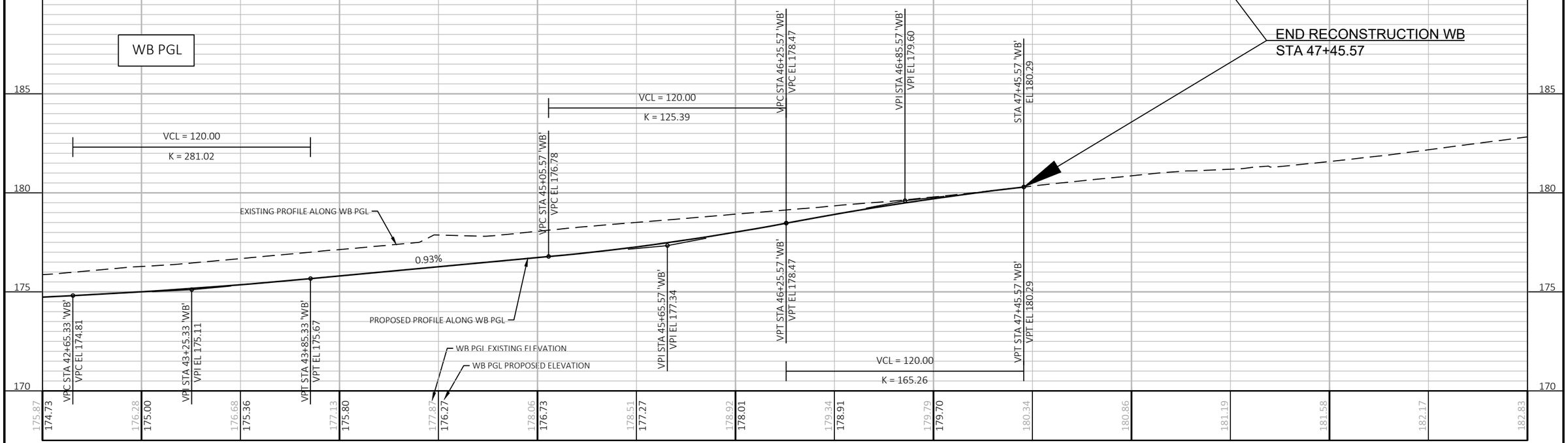




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: W NATIONAL AVE | SHEET 566 | E |
|---|---|---|---|---|---|


FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\050101-PP.DWG
LAYOUT NAME - 04EB
PLOT DATE : 1/9/2026 10:46 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

| BENCHMARKS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| BM 1005 | 49+00, 92' RT | 181.60 | CHISELED BOX SE SIDE OF LIGHT POLE BASE |




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: W NATIONAL AVE | SHEET 567 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\241015OO\SHEETS\050101-PP.DWG
LAYOUT NAME - 04WB

PLOT DATE : 1/9/2026 10:46 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

RESURFACING OF NATIONAL AVENUE AT I-41/894 INTERCHANGE TO BE COMPLETED BY A SEPARATE PROJECT (ID 1100-05-73) DURING THE 2025 AND 2026 CONSTRUCTION SEASONS. COORDINATE THE RESRURFACING SO THAT IT TAKES PLACE AFTER CURB RAMP WORK AND WIDENING NATIONAL AVENUE TOWARDS MEDIAN HAS BEEN COMPLETED.

WISCONSIN DEPARTMENT OF TRANSPORTATION

I-41/894

SLOPE PAVING

I-41/894 NB RAMPS

SHARED USE PATH

EXISTING R/W

MATCHLINE STA 50+00

51+00

52+00

53+00

54+00

55+00

56+00

57+00

MATCHLINE STA 57+50

STA 55+85.68 W NATIONAL AVE =
STA 160+00.00 S 100TH ST

SLOPE INTERCEPT

PC: 160+59.23

PI: 55+91.34

S 100TH ST

161+00

S 100TH ST R/L

SLOPE INTERCEPT

ROBIN & BETH MEDVED
2446 S 100TH STREET

JANET QUINN
9932 W NATIONAL AVE

TREE TO REMAIN

EXISTING R/W

TLE

CONC

SIDEWALK

RCT

12'

10'

WB PGL

BP: 160+00.00

NATIONAL AVENUE R/L

W NATIONAL AVENUE

EB PGL

BIOSWALE 4, SEE DETAIL

24'

12'

12'

10'

6'

3.5'

5'

TLE

SIDEWALK

RCT

EXISTING R/W

SHARED USE PATH

EXISTING R/W

SLOPE PAVING

CAUTION

I-41/894

SLOPE INTERCEPT

GRADE AROUND WISDOT CONTROL CABINET

I-41/894 NB RAMPS

I-41/894 SB RAMPS

LIGHT POLE TO REMAIN

BUSHES TO REMAIN

DO NOT DISTURB FENCE

SLOPE INTERCEPT

LIGHT POLE TO REMAIN

EDITH TIARKS
2477 S 99TH STREET

RICHARD NEUMANN
2459 S 99TH STREET

N

5

5

EB PGL

EXISTING PROFILE ALONG EB PGL

BEGIN RECONSTRUCTION EB
STA 55+34.50

STA 55+34.50 'EB' VPC EL 196.85

VPC STA 55+34.60 'EB'
VPC EL 196.86

100TH ST

VPI STA 55+94.60 'EB'
VPI EL 198.71

VPT STA 56+54.60 'EB'
VPT EL 200.18

VPC STA 56+54.75 'EB'
VPC EL 200.19

VPI STA 57+14.75 'EB'
VPI EL 201.66

VCL = 120.00
K = 168.00

VCL = 120.00
K = 185.60

3.09%

2.45%

PROPOSED PROFILE ALONG EB PGL

EB PGL EXISTING ELEVATION

EB PGL PROPOSED ELEVATION

195
190
185
180

205
200
195
190

183.02
183.69
184.53
185.51
186.67
187.86
189.45
190.85
192.43
194.05
195.73
197.35
197.33
198.90
198.77
200.60
200.07
202.35
201.36
204.02
202.79

50
51
52
53
54
55
56
57
57

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: W NATIONAL AVE | SHEET 568 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\050101-PP.DWG
LAYOUT NAME - 05EB

PLOT DATE : 1/9/2026 10:46 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

WISCONSIN DEPARTMENT OF TRANSPORTATION

RESURFACING OF NATIONAL AVENUE AT I-41/894 INTERCHANGE TO BE COMPLETED BY A SEPARATE PROJECT (ID 1100-05-73) DURING THE 2025 AND 2026 CONSTRUCTION SEASONS. COORDINATE THE RESRURFACING SO THAT IT TAKES PLACE AFTER CURB RAMP WORK AND WIDENING NATIONAL AVENUE TOWARDS MEDIAN HAS BEEN COMPLETED.

STA 55+85.68 W NATIONAL AVE =
STA 160+00.00 S 100TH ST

MATCHLINE STA 50+00

MATCHLINE STA 57+50

I-41/894

I-41/894 NB RAMPS

I-41/894 SB RAMPS

W NATIONAL AVENUE

S 100TH ST

SLOPE PAVING

SHARED USE PATH

EXISTING R/W

SLOPE INTERCEPT

GRADE AROUND WISDOT CONTROL CABINET

LIGHT POLE TO REMAIN

CAUTION

PC: 160+59.23

PI: 55+91.34

BP: 160+00.00

WB PGL

NATIONAL AVENUE R/L

EB PGL

BIOSWALE 4, SEE DETAIL

TREE TO REMAIN

CONC

TLE

SIDEWALK

RCT

CHAIN LINK FENCE

BUSHES TO REMAIN

DO NOT DISTURB FENCE

SLOPE INTERCEPT

LIGHT POLE TO REMAIN

ROBIN & BETH MEDVED
2446 S 100TH STREET

JANET QUINN
9932 W NATIONAL AVE

EDITH TIARKS
2477 S 99TH STREET

RICHARD NEUMANN
2459 S 99TH STREET

50+00 51+00 52+00 53+00 54+00 55+00 56+00 57+00

12' 10' 24' 12' 12' 10' 6' 6.5 5' 3.5'

N

5

5

WB PGL

BEGIN RECONSTRUCTION WB
STA 54+57.45

VPC STA 54+57.45 'WB'
VPC EL 194.25

VPI STA 55+17.50 'WB'
VPI EL 196.05

VPT STA 55+77.50 'WB'
VPT EL 197.49

VPC STA 55+77.50 'WB'
VPC EL 197.49

VPI STA 56+37.50 'WB'
VPI EL 198.93

VPT STA 56+97.50 'WB'
VPT EL 201.04

VPC STA 57+46.98 'WB'
VPC EL 202.79

VCL = 120.00
K = 105.94

VCL = 120.00
K = 197.18

VCL = 120.00
K = 189.80

3.00%

3.53%

EXISTING PROFILE ALONG WB PGL

PROPOSED PROFILE ALONG WB PGL

WB PGL EXISTING ELEVATION

WB PGL PROPOSED ELEVATION

| STA | 54+57.45 'WB' | 55+00 | 55+17.50 'WB' | 55+77.50 'WB' | 56+00 | 56+37.50 'WB' | 56+97.50 'WB' | 57+00 | 57+46.98 'WB' |
|---|---|---|---|---|---|---|---|---|---|
| EL | 194.25 | 195.57 | 196.05 | 197.49 | 197.25 | 198.93 | 201.04 | 198.90 | 202.79 |
| WB PGL EXISTING ELEVATION | | 195.48 | | | 196.81 | | | 198.05 | |
| WB PGL PROPOSED ELEVATION | | 195.57 | | | 197.25 | | | 198.90 | |

| 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 57 |
|---|---|---|---|---|---|---|---|---|
| 182.83 | 183.52 | 184.34 | 185.33 | 186.39 | 187.75 | 189.23 | 190.77 | 192.31 |

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: W NATIONAL AVE | SHEET 569 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\050101-PP.DWG
LAYOUT NAME - 05WB

PLOT DATE : 1/9/2026 10:46 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

MATCHLINE STA 57+50

MATCHLINE STA 65+00

HEULER REAL ESTATE INVESTORS LLC
9910 W NATIONAL AVE

HEULER XXI LLC
9902 W NATIONAL AVE

COLLIN BURKE
2410 S 99TH STREET

ROBERT & MARTINA BREMER
9824 W NATIONAL AVE

PAUL & VIRGINIA RADLER
9806 W NATIONAL AVE

EMW ROPERTIES LLC
2358 S 98TH STREET

RICHARD NEUMANN
2459 S 99TH STREET

WASA PROPERTIES LLC
9843 W NATIONAL AVE

FRENCH QUARTER APARTMENTS
9627-9701 W NATIONAL AVE

S 99TH ST

S 98TH ST

W NATIONAL AVENUE

NATIONAL AVENUE R/L

99TH ST NORTH R/L

99TH ST SOUTH R/L

98TH ST R/L

EXISTING R/W

SLOPE INTERCEPT

TLE

SIDEWALK

RCT

BUS STOP

TREE LINE TO REMAIN

ENCROACHING FENCE TO REMAIN

DO NOT DISTURB RETAINING WALL

TREE TO REMAIN

CAUTION

BUSH TO BE REMOVED

HMA

CONC

EDGE

WB PGL

EB PGL

150' LEFT TURN LANE

160' LEFT TURN LANE

120' LEFT TURN LANE

BP: 130+00.00

PP: 120+00.00

BP: 140+00.00

131+00

119+00

141+00

58+00

59+00

60+00

61+00

62+00

63+00

64+00

65

STA 59+26.97 W NATIONAL AVE =
STA 130+00.00 S 99TH ST NORTH

STA 59+51.81 W NATIONAL AVE =
STA 120+00.00 S 99TH ST SOUTH

STA 63+46.55 W NATIONAL AVE =
STA 140+00.00 S 98TH ST

SLOPE INTERCEPT MATCH PARKING LOT

CONCRETE CURB PEDESTRIAN

EXISTING PRIVATE SIGN TO REMAIN

PRIVATE LIGHT POLE TO REMAIN

PUSH BACK LANDSCAPING ROCK
REPLACE WHEN SIDEWALK IS CONSTRUCTED
DO NOT IMPACT PLANTS
INCIDENTAL TO CONSTRUCTION

EB PGL

S 99TH ST

VCL = 120.00

K = 292.12

STA 60+73.42 'EB'
EL 213.49

VCL = 120.00

K = 168.00

3.16%

3.57%

VPT STA 57+74.75 'EB'
VPT EL 203.55

VPC STA 58+93.32 'EB'
VPC EL 207.30

VPI STA 59+53.32 'EB'
VPI EL 209.20

VPT STA 60+13.32 'EB'
VPT EL 211.34

EB PGL EXISTING ELEVATION

EB PGL PROPOSED ELEVATION

S 98TH ST

VPC STA 62+07.84 'EB'
VPC EL 217.86

VPI STA 63+62.84 'EB'
VPI EL 222.90

EXISTING PROFILE ALONG EB PGL

PROPOSED PROFILE ALONG EB PGL

VCL = 310.00

K = 132.99

3.25%

| 204.02 | 205.77 | 207.41 | 208.99 | 210.65 | 212.31 | 213.94 | 215.53 | 217.16 | 218.75 | 220.36 | 221.80 | 222.98 | 224.01 | 224.84 | 225.47 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 202.79 | 204.35 | 205.93 | 207.51 | 209.15 | 210.87 | 212.65 | 214.36 | 215.98 | 217.61 | 219.16 | 220.54 | 221.72 | 222.72 | 223.53 | 224.15 |

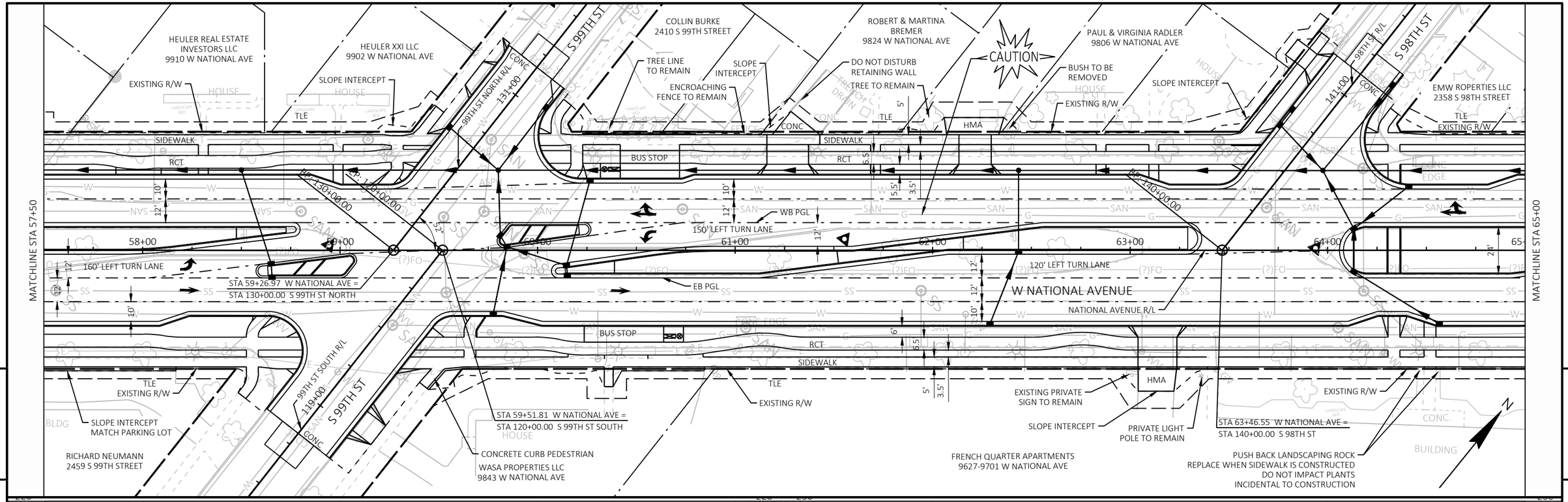
57 58 59 60 61 62 63 64 65

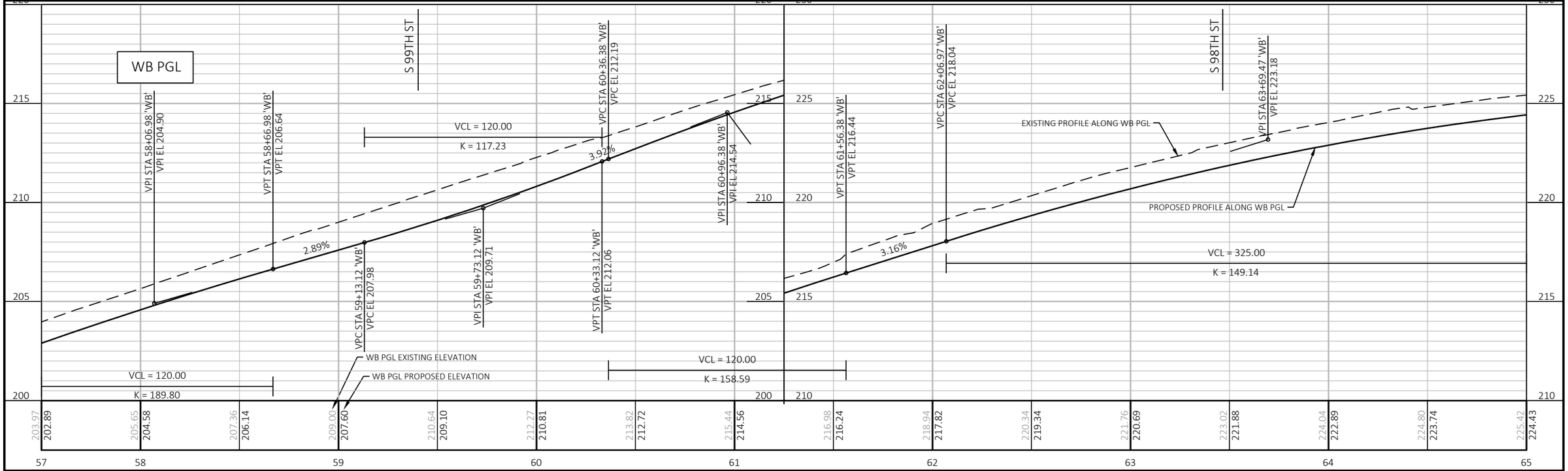
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: W NATIONAL AVE | SHEET 570 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\050101-PP.DWG
LAYOUT NAME - 06EB

PLOT DATE : 1/9/2026 10:47 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: W NATIONAL AVE | SHEET 571 | E |
|---|---|---|---|---|---|

MATCHLINE STA 65+00

EMW PROPERTIES LLC
2358 S 98TH STREET

CAROLINE BEAUMONT
9718 W NATIONAL AVE

MICHAEL A WEBER
9700 W NATIONAL AVE

S 97TH ST R/L

S 97TH ST

DO NOT DISTURB SIGN BASES

RONALD MELLANTINE
(NICO'S PIZZA)
9638 W NATIONAL AVE

TREE TO REMAIN

EXISTING R/W

MORATECK REVOCABLE TRUST
(ALLIS BIKE & FITNESS)
9622 W NATIONAL AVE

ENCROACHING FENCE TO REMAIN

NATIONAL AVE 9530 LLC
9530 W NATIONAL AVE

SLOPE INTERCEPT

SLOPE INTERCEPT
MATCH PARKING LOT

CONC

TLE

BAD

151+00

DO NOT DISTURB
WOOD PLANTER

DO NOT DISTURB
WOOD PLANTER

SLOPE
INTERCEPT

TLE

HMA

BUSINESS SIGN
TO REMAIN

EXISTING R/W

SIDEWALK

RCT

6.5'

6'

3.5'

5'

12'

10'

BP=150+00.00

WB PGL

BIOSWALE 5, SEE DETAIL

MATCH LINCOLN & NATIONAL AVE
INTERSECTION PROJECT
2025 CONSTRUCTION

66+00

67+00

68+00

69+00

70+00

71+00

72+00

160' LEFT TURN LANE

W NATIONAL AVENUE

EB PGL

NATIONAL AVENUE R/L

BUS STOP

RIGHT TURN LANE

PRIVATE LIGHT
POLES TO REMAIN

TLE

EXISTING R/W

SLOPE INTERCEPT

TLE

PRIVATE LIGHT POLE TO REMAIN

EXISTING WALL AND FENCE TO REMAIN

HMA

PRIVATE SIGN TO REMAIN

CAUTION

PUSH BACK LANDSCAPING ROCK
REPLACE WHEN SIDEWALK IS CONSTRUCTED
DO NOT IMPACT PLANTS
INCIDENTAL TO CONSTRUCTION

BM 1006

BUILDING
FRENCH QUARTER APARTMENTS
9627-9701 W NATIONAL AVE

STA 67+66.55 W NATIONAL AVE =
STA 150+00.00 S 97TH ST

RETAINING WALLS, RAILINGS, AND
DECORATIVE LIGHT POLES TO REMAIN

PUSH BACK LANDSCAPING ROCK
REPLACE WHEN SIDEWALK IS CONSTRUCTED
DO NOT IMPACT PLANTS
INCIDENTAL TO CONSTRUCTION

LANDMARK CREDIT UNION
9515 W NATIONAL AVE

| BENCHMARKS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| BM 1006 | 67+04, 85' RT | 228.74 | NE CORNER OF STEP 9707 W NATIONAL AVE |

EB PGL

S 97TH ST

VCL = 120.00
K = 471.60

VCL = 120.00
K = 635.33

VCL = 120.00
K = 120.83

VCL = 310.00
K = 132.99

VCL = 120.00
K = 178.12

VCL = 130.00
K = 58.80

VPT STA 65+17.84 'EB'
VPT EL 224.32

VPC STA 65+21.39'EB'
VPC EL 224.36

VPI STA 65+81.39 'EB'
VPI EL 224.91

VPC STA 66+41.49 'EB'
VPC EL 225.61

VPT STA 66+41.39 'EB'
VPT EL 225.61

VPI STA 67+01.49 'EB'
VPI EL 226.32

VPT STA 67+61.49 'EB'
VPT EL 226.62

VPC STA 67+81.17 'EB'
VPC EL 226.72

VPI STA 68+41.17 'EB'
VPI EL 227.02

VPT STA 69+01.17 'EB'
VPT EL 227.43

VPC STA 69+11.52 'EB'
VPC EL 227.50

VPI STA 69+71.52 'EB'
VPI EL 227.91

VPC STA 70+33.62 'EB'
VPC EL 228.96

VPT STA 70+31.52 'EB'
VPT EL 228.92

VPI STA 70+98.62 'EB'
VPI EL 230.05

VPT STA 71+63.62 'EB'
VPT EL 229.71

HP STA 71+32.52
HP EL 229.79

STA 72+22.05 'EB'
EL 229.40

0.92%

1.17%

0.50%

0.69%

1.68%

-0.53%

PROPOSED PROFILE ALONG EB PGL

EXISTING PROFILE ALONG EB PGL

EB PGL EXISTING ELEVATION

EB PGL PROPOSED ELEVATION

END PROJECT
STA 72+22.05

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 225.47 | 224.15 | 225.94 | 224.63 | 226.61 | 225.14 | 226.77 | 225.71 | 227.28 | 226.20 | 227.65 | 226.56 | 228.08 | 226.81 | 228.43 | 227.10 | 228.84 | 227.42 | 229.28 | 227.83 | 229.71 | 228.43 | 229.94 | 229.21 | 229.95 | 229.70 | 229.88 | 229.76 | 229.54 | 229.52 | 229.33 |

65 66 67 68 69 70 71 72 72

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: W NATIONAL AVE | SHEET 572 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\050101-PP.DWG
LAYOUT NAME - 07EB

PLOT DATE : 1/9/2026 10:47 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

MATCHLINE STA 65+00

EMW PROPERTIES LLC
2358 S 98TH STREET

CAROLINE BEAUMONT
9718 W NATIONAL AVE

MICHAEL A WEBER
9700 W NATIONAL AVE

S 97TH ST R/L

S 97TH ST

DO NOT DISTURB SIGN BASES

RONALD MELLANTINE
(NICO'S PIZZA)
9638 W NATIONAL AVE

TREE TO REMAIN

EXISTING R/W

MORATECK REVOCABLE TRUST
(ALLIS BIKE & FITNESS)
9622 W NATIONAL AVE

ENCROACHING FENCE TO REMAIN

NATIONAL AVE 9530 LLC
9530 W NATIONAL AVE

SLOPE INTERCEPT

SLOPE INTERCEPT
MATCH PARKING LOT

CONC

TLE

BAD

DO NOT DISTURB
WOOD PLANTER

DO NOT DISTURB
WOOD PLANTER

HMA

BUSINESS SIGN
TO REMAIN

EXISTING R/W

SIDEWALK

RCT

6'

6.5'

3.5'

5'

12'

10'

151+00

BP=150+00.00

WB PGL

BIOSWALE 5, SEE DETAIL

MATCH LINCOLN & NATIONAL AVE
INTERSECTION PROJECT
2025 CONSTRUCTION

66+00

67+00

68+00

69+00

70+00

71+00

72+00

160' LEFT TURN LANE

W NATIONAL AVENUE

EB PGL

NATIONAL AVENUE R/L

BUS STOP

RIGHT TURN LANE

PRIVATE LIGHT
POLES TO REMAIN

TLE

EXISTING R/W

SLOPE INTERCEPT

PRIVATE LIGHT POLE TO REMAIN

EXISTING WALL AND FENCE TO REMAIN

PRIVATE SIGN TO REMAIN

HMA

CAUTION

BM 1006

PUSH BACK LANDSCAPING ROCK
REPLACE WHEN SIDEWALK IS CONSTRUCTED
DO NOT IMPACT PLANTS
INCIDENTAL TO CONSTRUCTION

BUILDING
FRENCH QUARTER APARTMENTS
9627-9701 W NATIONAL AVE

STA 67+66.55 W NATIONAL AVE =
STA 150+00.00 S 97TH ST

RETAINING WALLS, RAILINGS, AND
DECORATIVE LIGHT POLES TO REMAIN

LANDMARK CREDIT UNION
9515 W NATIONAL AVE

| BENCHMARKS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| BM 1006 | 67+04, 85' RT | 228.74 | NE CORNER OF STEP 9707 W NATIONAL AVE |

WB PGL

S 97TH ST

VPT STA 65+31.97 'WB'
VPT EL 224.77

VPC STA 65+91.80 'WB'
VPC EL 225.36

VPI STA 66+51.80 'WB'
VPI EL 225.95

VPT STA 67+11.80 'WB'
VPT EL 226.25

VCL = 120.00
K = 113.25

VPC STA 70+39.61 'WB'
VPC EL 229.50

VPI STA 70+89.61 'WB'
VPI EL 230.28

STA 71+39.62 'WB'
EL 230.30

STA 71+58.31 'WB'
EL 230.24

END
RECONSTRUCTION WB
STA 71+49.71

0.04%

-0.31%

1.56%

0.50%

0.98%

EXISTING PROFILE ALONG WB PGL

PROPOSED PROFILE ALONG WB PGL

VCL = 120.00
K = 248.68

VPC STA 68+27.57 'WB'
VPC EL 226.83

VPI STA 68+87.57 'WB'
VPI EL 227.13

VPT STA 69+47.57 'WB'
VPT EL 228.07

VCL = 100.00
K = 65.84

VPT STA 71+39.61 'WB'
VPT EL 230.30

VCL = 325.00
K = 149.14

WB PGL EXISTING ELEVATION

WB PGL PROPOSED ELEVATION

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 225.42 | 224.43 | 226.13 | 224.95 | 226.37 | 225.44 | 226.82 | 225.87 | 227.23 | 226.19 | 227.66 | 226.44 | 228.03 | 226.69 | 228.51 | 226.96 | 228.89 | 227.42 | 229.26 | 228.10 | 229.84 | 228.88 | 230.05 | 229.65 | 230.22 | 230.17 | 230.30 | 230.27 | 230.09 | |

235 230 225 220

65 66 67 68 69 70 71 72 72

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: W NATIONAL AVE | SHEET 573 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\050101-PP.DWG
LAYOUT NAME - 07WB

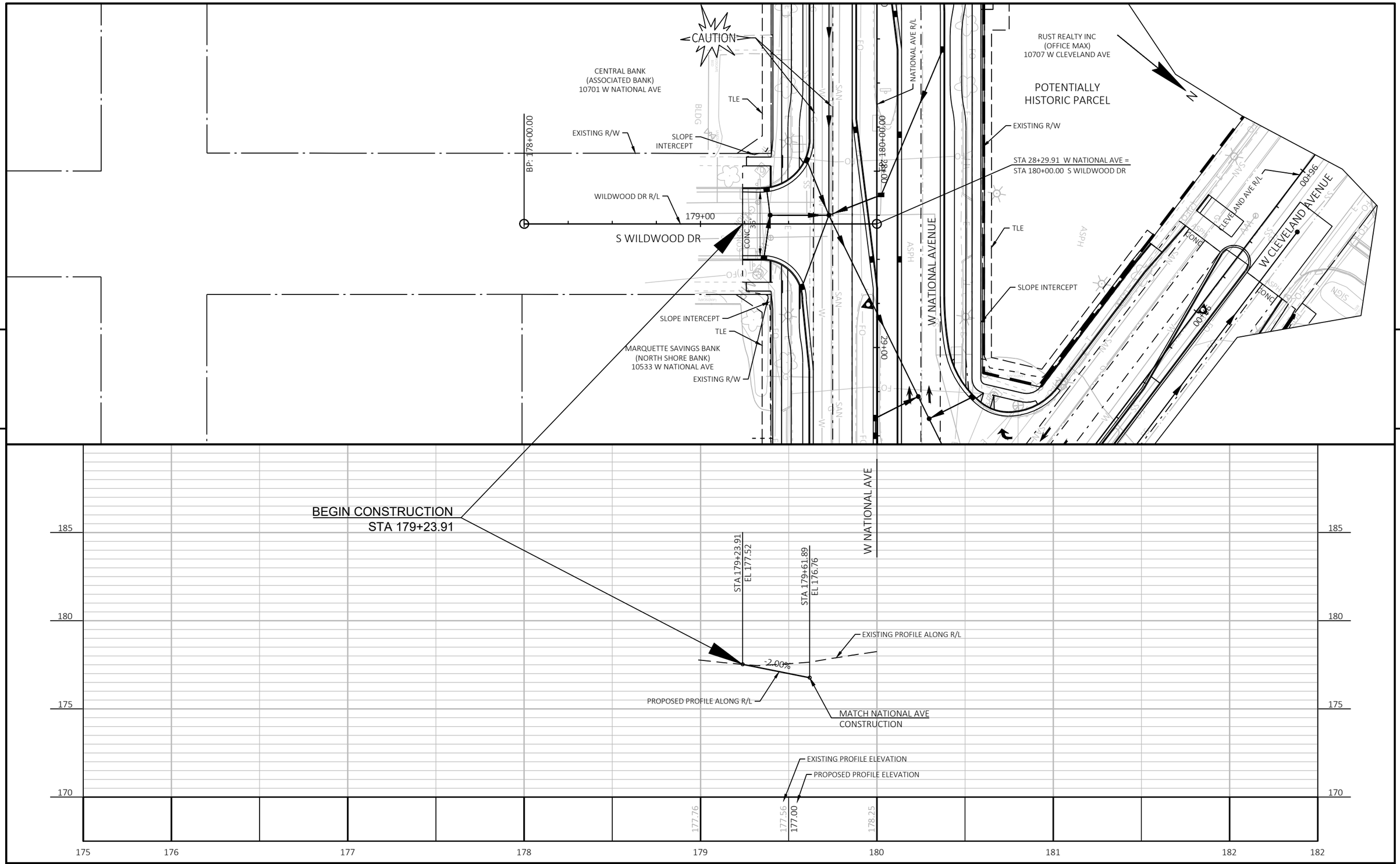
PLOT DATE : 1/9/2026 10:47 AM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44




5

5

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: S WILDWOOD DR | SHEET 574 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\050102-PP-SIDEROADS.DWG
LAYOUT NAME - Wildwood

PLOT DATE : 1/9/2026 10:47 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

| BENCHMARKS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| BM 1002 | 31+33, 74' RT | 177.97 | CHISELED BOX N CORNER OF TRAFFIC SIG BOX |

N

DAYTON-HUDSON CORP
2600 S 108TH ST

WATERSTONE BANK SSB
10296 W NATIONAL AVE

PUSH BACK LANDSCAPING MULCH
REPLACE WHEN SIDEWALK IS CONSTRUCTED
DO NOT IMPACT PLANTS
INCIDENTAL TO CONSTRUCTION

PROPOSED R/W

EXISTING R/W

SLOPE INTERCEPT

REMOVE LANDSCAPING BED
TO SLOPE INTERCEPTS

TLE

SIDEWALK

BIKE LANE

W CLEVELAND AVE

CLEVELAND AVE R/L

NATIONAL AVE R/L

130' LEFT TURN LANE

BIKE LANE

SIDEWALK

EXISTING R/W

TLE

CONCRETE CURB PEDESTRIAN

REMOVE
ACCESS POINT

CAUTION

MATCH EDGE OF EXISTING PARKING LOT

SLOPE INTERCEPT

RUST REALTY INC
(OFFICE MAX)
10707 W CLEVELAND AVE

POTENTIALLY
HISTORIC PARCEL

W NATIONAL AVE

BM 1002

TLE

SLOPE
INTERCEPT

EXISTING R/W

CONCRETE
CURB
PEDESTRIAN

H-10253 CLEVELAND LLC
10253 W CLEVELAND AVE

STA 31+18.55 W NATIONAL AVE =
STA 100+00.00 W CLEVELAND AVE

MARQUETTE SAVINGS BANK
(NORTH SHORE BANK)
10253 W CLEVELAND AVE

MATCH LINE 101+50

EB PGL

BEGIN CONSTRUCTION
STA 96+64.94

STA 96+64.94 'EB'
EL 173.88

VPC STA 96+79.94 'EB'
VPC EL 174.05

VPI STA 97+39.94 'EB'
VPI EL 174.74

VPT STA 97+99.94 'EB'
VPT EL 175.04

STA 99+27.85 'EB'
EL 175.67

W NATIONAL AVE

STA 100+46.95 'EB'
EL 175.45

STA 100+61.52 'EB'
EL 175.42

EXISTING PROFILE ALONG EB PGL

1.14%

0.50%

0.22%

PROPOSED PROFILE ALONG EB PGL

MATCH NATIONAL AVE
CONSTRUCTION

VCL = 120.00

K = 187.10

EXISTING EB PGL PROFILE ELEVATION

PROPOSED EB PGL PROFILE ELEVATION

| | | |

| BENCHMARKS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| BM 1002 | 31+33, 74' RT | 177.97 | CHISELED BOX N CORNER OF TRAFFIC SIG BOX |

N

DAYTON-HUDSON CORP
2600 S 108TH ST

WATERSTONE BANK SSB
10296 W NATIONAL AVE

PUSH BACK LANDSCAPING MULCH
REPLACE WHEN SIDEWALK IS CONSTRUCTED
DO NOT IMPACT PLANTS
INCIDENTAL TO CONSTRUCTION

PROPOSED R/W

EXISTING R/W

SLOPE INTERCEPT

REMOVE LANDSCAPING BED
TO SLOPE INTERCEPTS

TLE

5'

SIDEWALK

BIKE LANE

5'

11'

11'

5'

W CLEVELAND AVE

94+00 95+00 96+00 97+00 98+00 99+00 100+00 101+00

CLEVELAND AVE R/L

130' LEFT TURN LANE

11'

11'

5'

11'

11'

5'

BIKE LANE

SIDEWALK

EXISTING R/W

TLE

REMOVE
ACCESS POINT

CONCRETE CURB PEDESTRIAN

CAUTION

MATCH EDGE OF EXISTING PARKING LOT

SLOPE INTERCEPT

RUST REALTY INC
(OFFICE MAX)
10707 W CLEVELAND AVE

POTENTIALLY
HISTORIC PARCEL

W NATIONAL AVE

30+00

31+00

33+00

NATIONAL AVE R/L

BM 1002

TLE

SLOPE
INTERCEPT

EXISTING R/W

CONCRETE
CURB
PEDESTRIAN

H-10253 CLEVELAND LLC
10253 W CLEVELAND AVE

STA 31+18.55 W NATIONAL AVE =
STA 100+00.00 W CLEVELAND AVE

MARQUETTE SAVINGS BANK
(NORTH SHORE BANK)
10253 W CLEVELAND AVE

MATCH LINE 101+50

5

5

WB PGL

BEGIN CONSTRUCTION
STA 96+64.94

VPC STA 96+73.38 'WB'
VPC EL 173.96

VPI STA 96+93.38 'WB'
VPI EL 174.22

VPT STA 97+13.38 'WB'
VPT EL 174.32

STA 99+52.93 'WB'
EL 175.52

W NATIONAL AVE

STA 100+71.98 'WB'
EL 175.32

STA 101+39.31 'WB'
EL 176.04

EXISTING PROFILE ALONG WB PGL

1.28%

0.50%

1.52%

0.50%

PROPOSED PROFILE ALONG WB PGL

MATCH NATIONAL AVE
CONSTRUCTION

STA 96+64.94 'WB'
EL 173.85

VCL = 40.00

K = 51.08

STA 101+01.18 'WB'
EL 175.46

EXISTING WB PGL PROFILE ELEVATION

PROPOSED WB PGL PROFILE ELEVATION

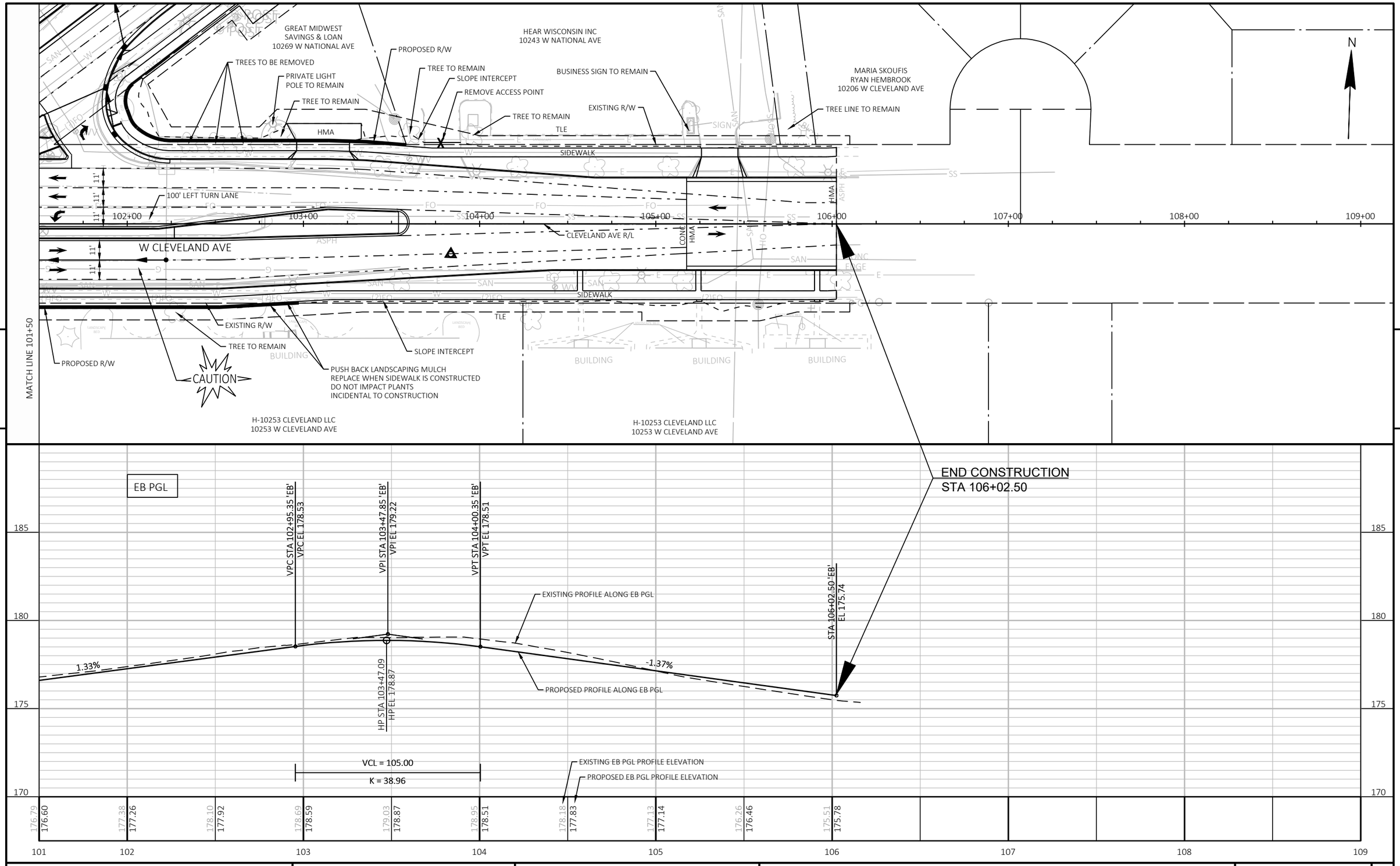
180
175
170
165

| 170.94 | 171.57 | 172.08 | 172.60 | 173.14 | 173.70 | 174.30 | 174.94 | 175.51 | 175.97 | 176.27 | 176.40 | 176.74 | 176.41 | 176.34 | 176.67 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 174.23 | 174.50 | 174.75 | 175.00 | 175.25 | 175.50 | | | | |

94 95 96 97 98 99 100 101 101

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: W CLEVELAND AVE | SHEET 576 E |
|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\050102-PP-SIDEROADS.DWG
LAYOUT NAME - ClevelandWest-WB
PLOT DATE : 1/9/2026 10:47 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

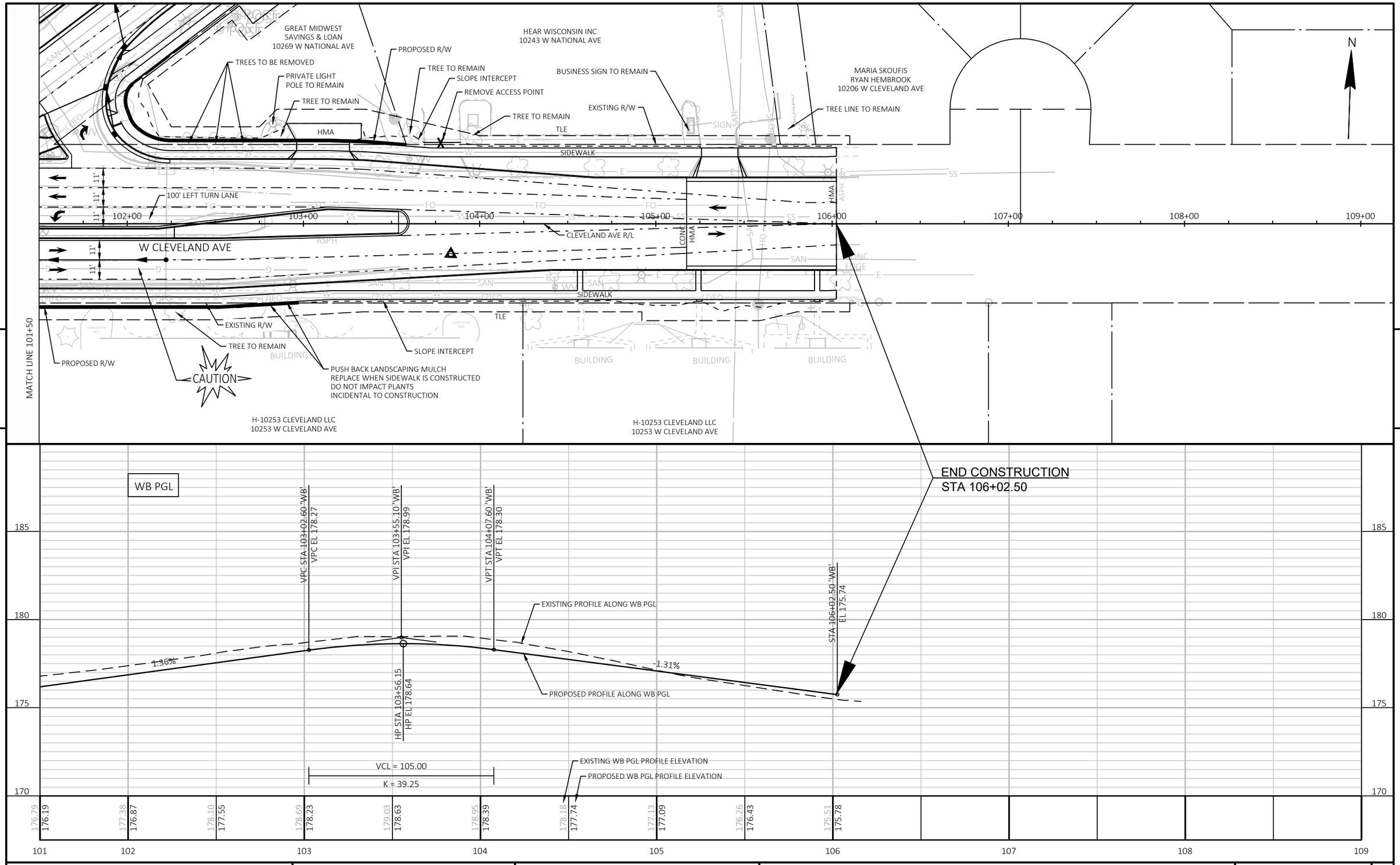



| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: W CLEVELAND AVE | SHEET 577 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\050102-PP-SIDEROADS.DWG
LAYOUT NAME - ClevelandEast-EB

PLOT DATE : 1/9/2026 10:47 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: W CLEVELAND AVE | SHEET 578 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\050102-PP-SIDEROADS.DWG
LAYOUT NAME - ClevelandEast-WB

PLOT DATE : 1/9/2026 10:47 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

| BENCHMARKS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| BM 1001 | 110+61, 49' LT | 173.33 | CHISELED BOX ON SOUTH CORNER OF TRAFFIC SIGNAL CONTROL CABINET |

102ND ST CURVE 1
RADIUS = 1,002.76
SE = NC

JULIO JARAMILLO-BENITEZ
EMMA DOMINGUEZ-ALBITER
10213 W NATIONAL AVE

STA 39+57.47 W NATIONAL AVE =
STA 110+00.00 S 102ND ST

JALAL RAMMAHA
10205 W NATIONAL AVE

LAURIE A VOGT
2617 S 102ND ST

SLOPE INTERCEPT

CARIBOU COFFEE
10200 W NATIONAL AVE

102ND ST CURVE 2
RADIUS = 202.4
SE = NC

BM 1001

PI PARTNERS LLC
2601 S 102ND ST

BP: 107+00.00

PT: 108+38.10

EXISTING R/W

NATIONAL AVE R/L

PC: 110+00.00

PT: 110+95.65

END CONSTRUCTION
STA 111+66.76

102ND ST R/L

108+00

109+00

110+00

111+00

S 102ND ST

25'

CONC

102ND ST CURVE 2

28'

PT: 111+95.65

112+00

102ND ST R/L

102ND ST CURVE 1

EXISTING R/W

PROPOSED R/W

TLE

TERRY & BEVERLY MANTHEY
10185 W NATIONAL AVE

SLOPE INTERCEPT

40+00

FRONTAGE ROAD

W NATIONAL AVENUE

SLOPE INTERCEPT

EP: 111+00.00

113+00

CAUTION

DKS REALTY WISCONSIN V LLC
10150 W NATIONAL AVE

BEGIN CONSTRUCTION
108+93.92

END PROJECT
STA 111+01.21

W NATIONAL AVE

STA 108+93.92 EL 172.81
STA 109+07.58 EL 172.72
STA 109+41.94 EL 172.38
STA 109+64.00 EL 172.50
STA 110+36.00 'NB' EL 172.52
STA 110+68.25 'NB' EL 172.70
STA 111+01.21 'NB' EL 172.54
STA 110+35.84 'SB' EL 172.43
STA 110+76.42 'SB' EL 172.67

0.69%
0.97%
0.51%
0.57%
0.59%
0.50%

EXISTING PROFILE ALONG R/L
PROPOSED PROFILE ALONG R/L
MATCH NATIONAL AVE CONSTRUCTION
PROPOSED PROFILE ALONG SB PGL
PROPOSED PROFILE ALONG NB PGL

PROPOSED PROFILE ELEVATION
EXISTING PROFILE ELEVATION

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 174.72 | 174.00 | 173.49 | 173.15 | 172.76 | 172.77 | 172.70 | 172.42 | 173.63 | 172.67 | 172.51<br>172.60 | 173.06<br>172.54 | 172.80 | 172.20 | 171.31 | 170.88 | |

180 175 170 165

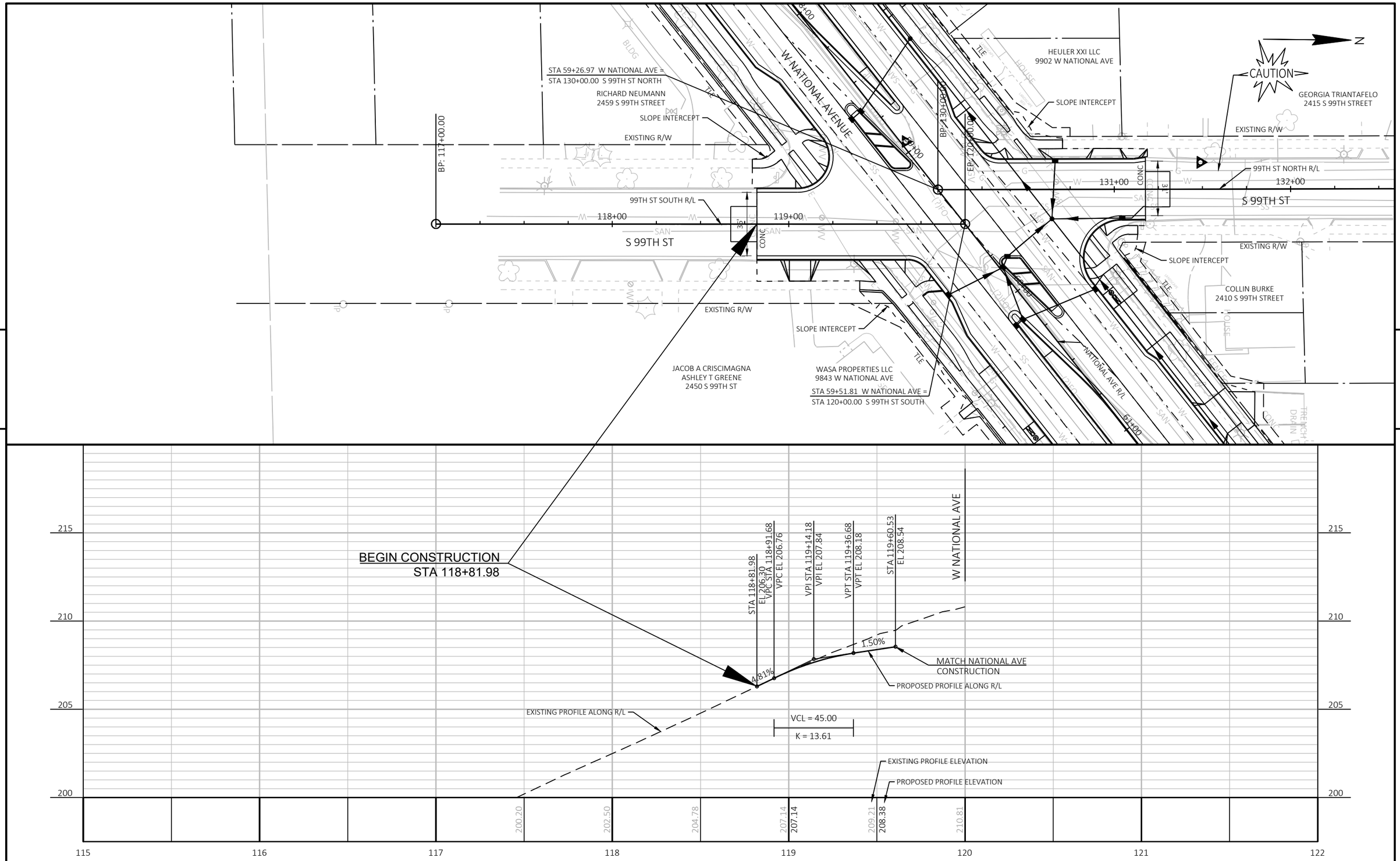
106 107 108 109 110 111 112 113 113

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: S 102ND ST | SHEET 579 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\050102-PP-SIDEROADS.DWG
LAYOUT NAME - 102nd St

PLOT DATE : 1/9/2026 10:48 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

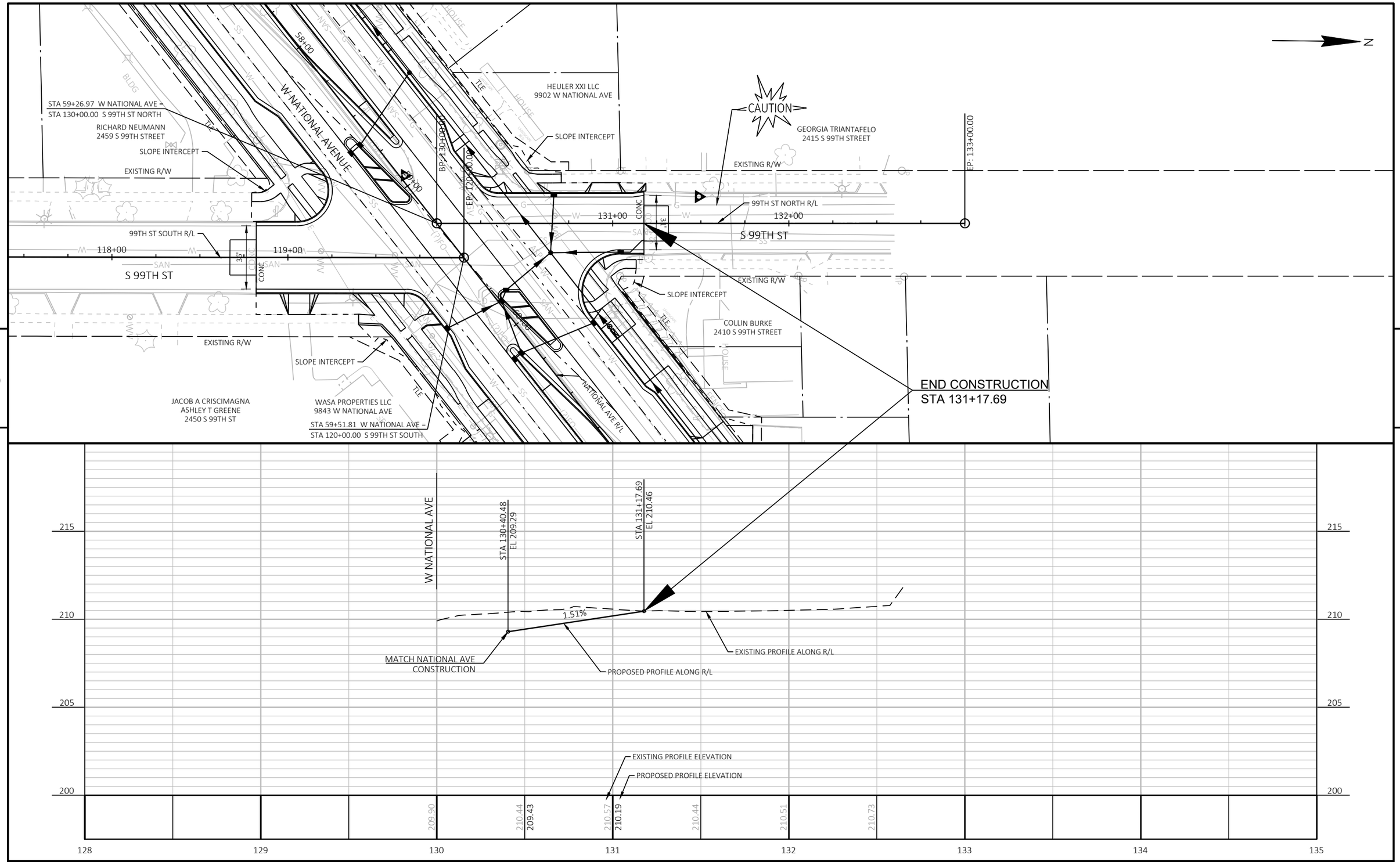



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: S 99TH ST SOUTH | SHEET 580 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\050102-PP-SIDEROADS.DWG
LAYOUT NAME - 99th South

PLOT DATE : 1/9/2026 10:48 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

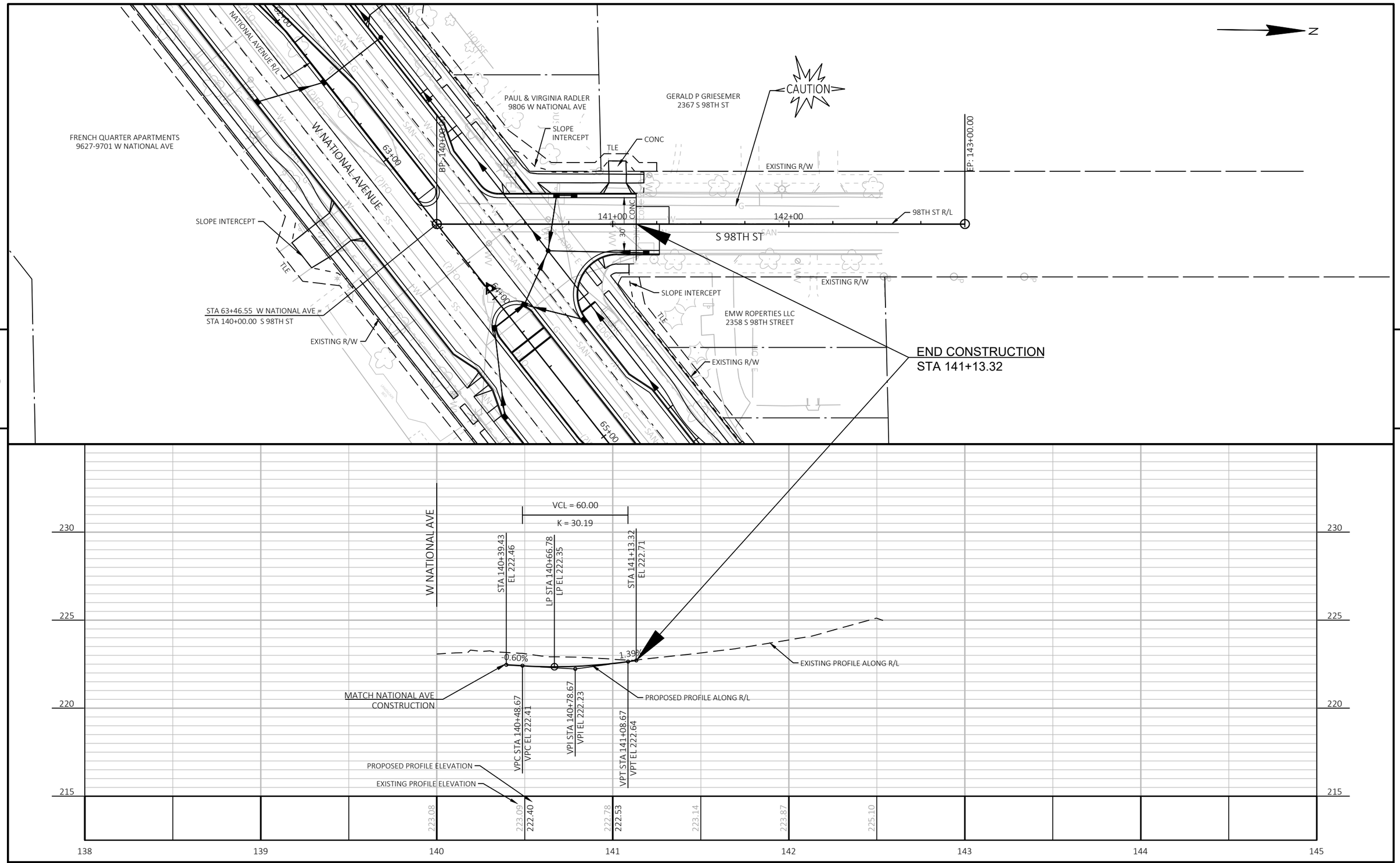



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: S 99TH ST NORTH | SHEET 581 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\050102-PP-SIDEROADS.DWG
LAYOUT NAME - 99th North

PLOT DATE : 1/9/2026 10:48 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: S 98TH ST | SHEET 582 | E |
|---|---|---|---|---|---|


FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\050102-PP-SIDEROADS.DWG
LAYOUT NAME - 98th St
PLOT DATE : 1/9/2026 10:48 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

| BENCHMARKS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| BM 1006 | 67+04, 85' RT | 228.74 | NE CORNER OF STEP 9707 W NATIONAL AVE |

N

W NATIONAL AVENUE

MICHAEL A WEBER
9700 W NATIONAL AVE

KIMBERLEY A ZAJAC
2339 S 97TH ST

BP: 150+00.00

EP: 153+00.00

67+00

NATIONAL AVE R/L

EXISTING R/W

SLOPE INTERCEPT

97TH ST R/L

151+00

152+00

S 97TH ST

32'

68+00

BM 1006

FRENCH QUARTER APARTMENTS
9627-9701 W NATIONAL AVE

SLOPE INTERCEPT

STA 67+66.55 W NATIONAL AVE =
STA 150+00.00 S 97TH ST

CAUTION

RONALD MELLANTINE
(NICO'S PIZZA)
9638 W NATIONAL AVE

69+00

END CONSTRUCTION
STA 151+13.98

VCL = 50.00
K = 25.00

STA 150+39.42
EL 226.79

LP STA 150+87.68
LP EL 226.43

STA 151+13.98
EL 226.57

-1.00%

1.00%

MATCH NATIONAL AVE
CONSTRUCTION

PROPOSED PROFILE ALONG R/L

EXISTING PROFILE ALONG R/L

VPC STA 150+62.67
VPC EL 226.55

VPI STA 150+87.67
VPI EL 226.30

VPT STA 151+12.67
VPT EL 226.55

PROPOSED PROFILE ELEVATION

EXISTING PROFILE ELEVATION

227.89
227.51
226.68
226.73
226.46
226.99

230
225
220
215

148 149 150 151 152 153 154 155

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PLAN AND PROFILE: S 97TH ST | SHEET 583 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\050102-PP-SIDEROADS.DWG
LAYOUT NAME - 97th

PLOT DATE : 1/9/2026 10:48 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

# Standard Detail Drawing List

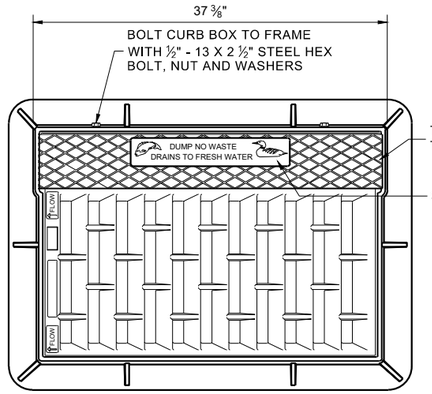
| | |
|---|---|
| 08A05-22A | INLET COVERS TYPE A, H, A-S, H-S & Z |
| 08A05-22B | INLET COVERS TYPE B, B-A, C, MS, MS-A, DW & WM |
| 08A05-22E | INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M |
| 08A08-03 | CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER |
| 08B09-04 | MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER |
| 08B10-03 | MANHOLES 3X3-FT, 4X4-FT, 5X5-FT AND 6X6-FT |
| 08B11-03 | MANHOLES VARIABLE TEE AND SPECIAL 4-FT DIAMETER |
| 08C06-03 | INLETS 3-FT AND 4-FT DIAMETER |
| 08C07-03 | INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT & 2X3.5-FT |
| 08C08-03 | INLETS MEDIAN 1 AND 2 GRATE |
| 08D01-24A | CONCRETE CURB & GUTTER |
| 08D01-24B | CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS |
| 08D05-22A | CURB RAMPS TYPES 1 AND 1-A |
| 08D05-22B | CURB RAMPS TYPES 2 AND 3 |
| 08D05-22C | CURB RAMPS TYPES 4A AND 4A1 |
| 08D05-22D | CURB RAMPS TYPES 4B AND 4B1 |
| 08D05-22E | CURB RAMPS TYPES 5, 6, 7A, 7B & 8 |
| 08D05-22F | CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS |
| 08D05-22G | CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES |
| 08D16-11 | CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES |
| 08D17-06 | MANHOLES, MANHOLE & INLET COVERS |
| 08D18-05 | DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y |
| 08D19-05 | DRIVEWAY AND SIDEWALK RAMPS TYPE Z |
| 08E09-06 | SILT FENCE |
| 08E10-02 | INLET PROTECTION TYPE A, B, C AND D |
| 08E14-01 | TRACKING PAD |
| 08F04-08 | JOINT TIES FOR CONCRETE PIPE  AND CONCRETE COLLAR DETAIL |
| 09B02-10 | CONDUIT |
| 09B04-13 | PULL BOX |
| 09B16-03 | PULL BOX  NON-CONDUCTIVE |
| 09C02-09 | CONCRETE BASES, TYPES 1, 2,  5, & 6 |
| 09C03-04 | TRANSFORMER/PEDESTAL BASES |
| 09C06-07 | CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL |
| 09C11-10 | CONCRETE BASE TYPE 10 |
| 09C15-02 | CONCRETE BASE TYPE 10 SPECIAL |
| 09D01-05 | CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL) |
| 09D02-03 | SIGNAL CONTROL CABINET |
| 09E01-15B | POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY) |
| 09E01-15D | POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET) |
| 09E01-15G | HARDWARE DETAILS FOR POLE MOUNTINGS |
| 09E03-06 | NON-FREEWAY LIGHTING UNIT POLE WIRING |
| 09E06-05 | TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT. |
| 09E07-06 | TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS |
| 09E08-09A | TYPE 9 POLE 15'-30' MONOTUBE ARM |
| 09E08-09C | TYPE 9 SPECIAL POLE 40' MONOTUBE ARM |
| 09E08-09D | TYPE 9 SPECIAL POLE 45' MONOTUBE ARM |
| 09E08-09E | TYPE 10 POLE 15'-30' MONOTUBE ARM |
| 09E08-09G | TYPE 10 SPECIAL POLE 40' MONOTUBE ARM |
| 09E08-09K | GENERAL NOTES, HARDWARE DETAILS FOR TYPE 9, 10, 9/10 SPECIAL,12 & 13 POLES W/ MONOTUBE ARMS |
| 09F15-04B | LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2) |
| 09G01-04B | SPAN WIRE TEMPORARY TRAFFIC SIGNAL |
| 09G01-04D | SPAN WIRE TEMPORARY TRAFFIC SIGNAL |
| 09G01-04E | SPAN WIRE TEMPORARY TRAFFIC SIGNAL |
| 09G01-04F | SPAN WIRE TEMPORARY TRAFFIC SIGNAL |
| 09G01-04G | SPAN WIRE TEMPORARY TRAFFIC SIGNAL |
| 11B02-02 | CONCRETE MEDIAN NOSE |
| 12A04-03 | STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD  SIGN SUPPORTS & TRAFFIC SIGNALS |
| 13C01-19 | CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES |
| 13C13-11 | URBAN DOWELED CONCRETE PAVEMENT |
| 13C15-08A | CONCRETE BASE |
| 13C15-08B | CONCRETE BASE |
| 13C18-08A | CONCRETE PAVEMENT JOINTING |
| 13C18-08B | CONCRETE PAVEMENT STEEL REINFORCEMENT |
| 13C18-08C | CONCRETE PAVEMENT JOINT TYPES |
| 13C18-08D | CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES |
| 13C18-08F | CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER |

6

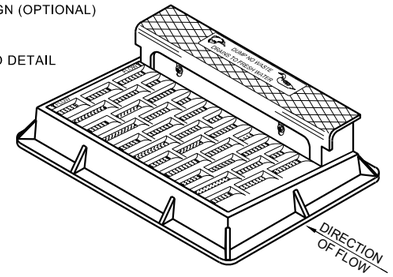
# Standard Detail Drawing List

| | |
|---|---|
| 13C18-08G | CONCRETE PAVEMENT JOINTING ACCELERATION/DECELERATION LANE |
| 13C19-03 | HMA LONGITUDINAL JOINTS |
| 15B03-15A | FENCE CHAIN LINK |
| 15B03-15B | FENCE CHAIN LINK |
| 15C02-09A | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C02-09B | BARRICADES AND SIGNS FOR VARIOUS CLOSURES |
| 15C02-09C | DETOUR SIGNING FOR MAINLINE CLOSURES |
| 15C02-09D | ON RAMP LANE CLOSURE |
| 15C02-09E | OFF RAMP LANE CLOSURE |
| 15C02-09G | TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE |
| 15C02-09H | MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING |
| 15C03-05 | BARRICADES AND SIGNS FOR SIDEROAD CLOSURES |
| 15C05-05 | TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC |
| 15C07-16A | PAVEMENT MARKING SYMBOLS |
| 15C07-16B | PAVEMENT MARKING WORDS |
| 15C07-16C | PAVEMENT MARKING ARROWS |
| 15C07-16E | PAVEMENT MARKING FOR BIKE LANES |
| 15C08-24A | PERMANENT LONGITUDINAL PAVEMENT MARKINGS |
| 15C08-24B | TEMPORARY LONGITUDINAL PAVEMENT MARKING |
| 15C08-24C | PAVEMENT MARKING (TURN LANES) |
| 15C08-24D | PAVEMENT MARKING (TURN LANES) |
| 15C11-10A | CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST |
| 15C11-10B | CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS |
| 15C12-09A | TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION |
| 15C18-09A | MEDIAN ISLAND PAVEMENT MARKINGS |
| 15C18-09B | PAVEMENT MARKINGS, MEDIAN ISLAND NOSE |
| 15C18-09C | MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT |
| 15C19-10A | MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY |
| 15C20-02 | YIELD MARKING |
| 15C29-08A | BICYCLE LANE MARKING |
| 15D16-06 | TRAFFIC CONTROL, EXIT RAMP CLOSURE |
| 15D20-10A | TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY |
| 15D20-10B | TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY |
| 15D20-10C | TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY |
| 15D21-07A | TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE |
| 15D21-07B | TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE |
| 15D28-04 | TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY |
| 15D30-11A | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-11B | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-11C | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-11D | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-11E | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-11F | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-11G | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-11H | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-11I | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-11J | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-11K | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-11L | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D46-01 | TRAFFIC CONTROL, ONE - WAY SIGNING |

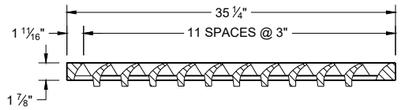

6

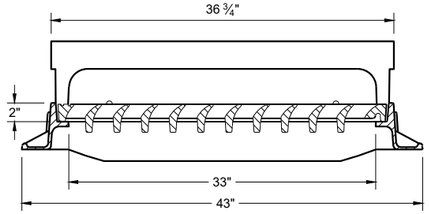


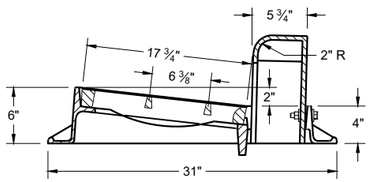

NOTE: EITHER CASTING IS ACCEPTABLE

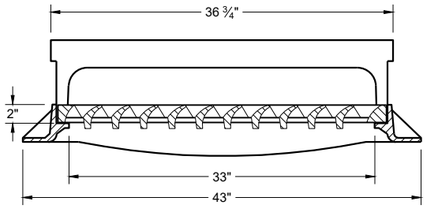


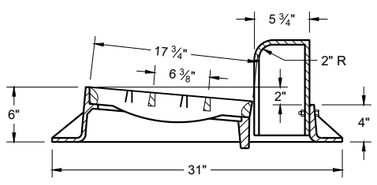

NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"



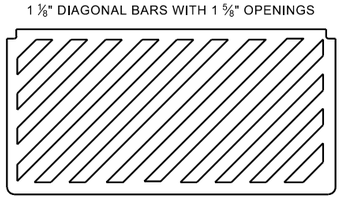




**TYPE "H"**

NOTE: EITHER CASTING IS ACCEPTABLE

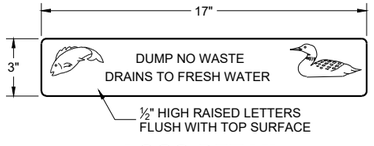
1 ⅛" DIAGONAL BARS WITH 1 ⅝" OPENINGS



**SPECIAL GRATE FOR TYPE "H" COVER**

(MEASURES 35" X 17 ¾" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



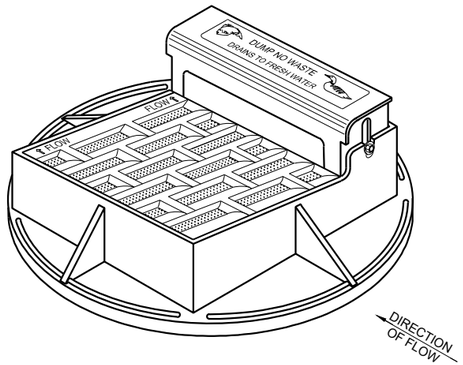

**LOGO DETAIL**

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

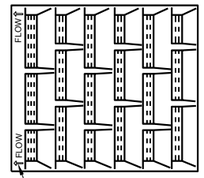
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

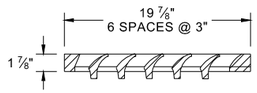


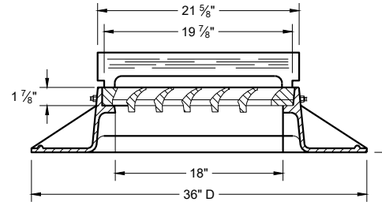

NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

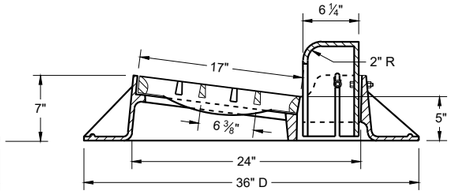
NOTE: EITHER CASTING IS ACCEPTABLE




DIRECTION OF FLOW ARROWS

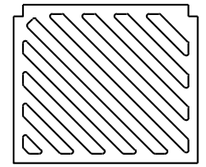



**TYPE "A"**

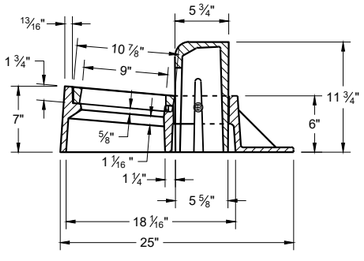
1" DIAGONAL BARS
WITH 1 ½" OPENINGS

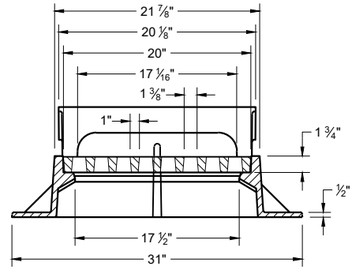


**SPECIAL GRATE FOR TYPE "A" COVER**

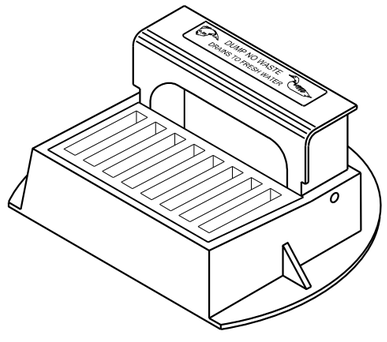
(MEASURES 19 ¾" X 17" X 1 ⅞")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)




**TYPE "Z"**




**INLET COVERS**
**TYPES A, H, A-S, H-S AND Z**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

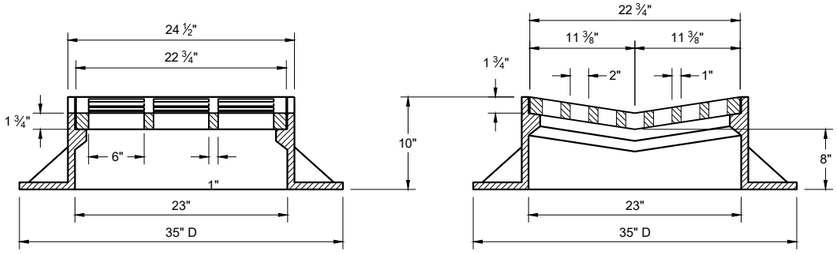
FHWA

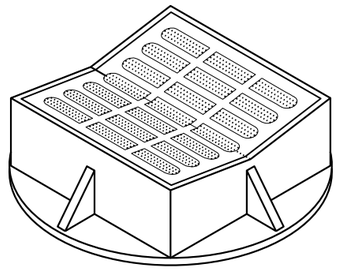


6

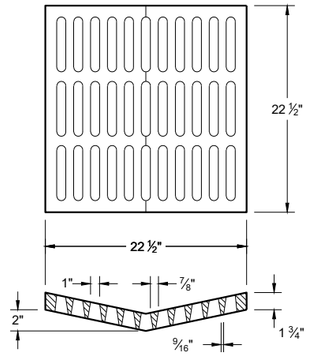
SDD 08A05-22a

SDD 08A05-22a



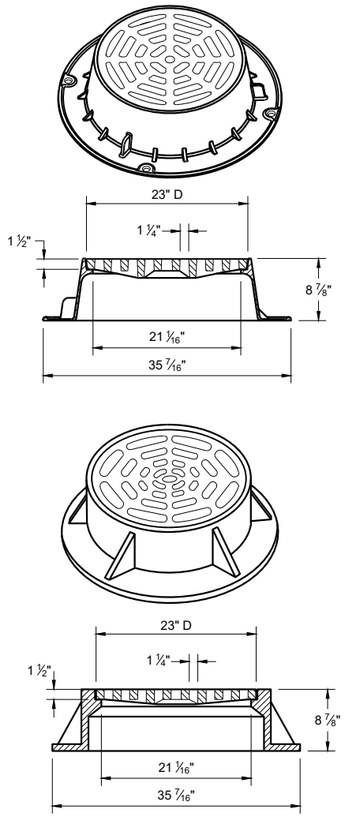
**TYPE "B"**




**ALTERNATIVE GRATE FOR TYPE "B" COVER**

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS POSSIBLE

**NOTED AS TYPE B - A ON THE DRAINAGE TABLE**




**TYPE "C"**

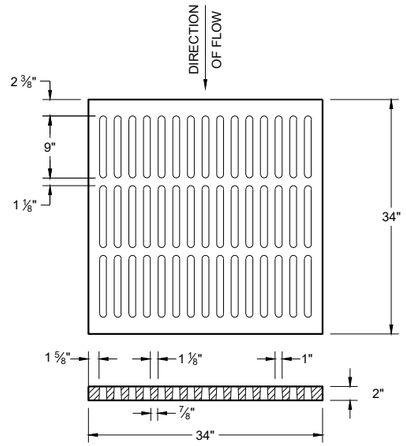
NOTE: EITHER CASTING IS ACCEPTABLE

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

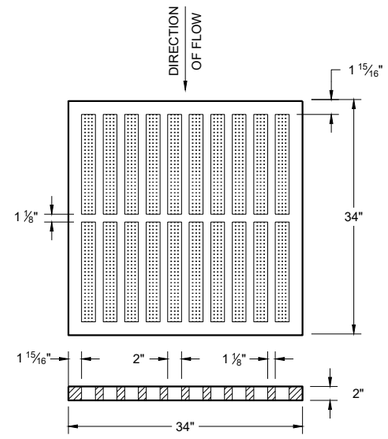
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.




**ALTERNATIVE TYPE "MS"**

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS PERMITTED

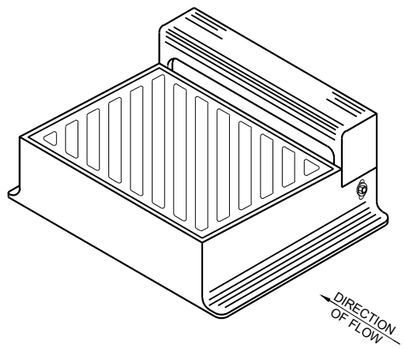
**NOTED AS TYPE MS-A ON THE DRAINAGE TABLE**



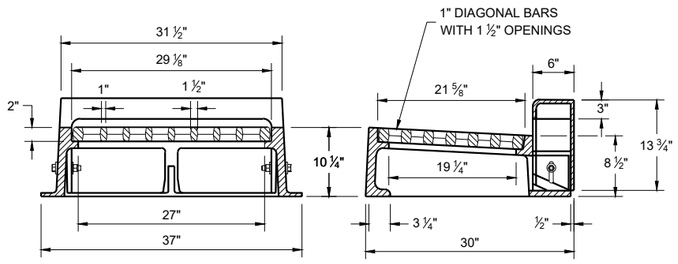

**TYPE "MS"**

USE ON FREEWAYS AND EXPRESSWAYS

**NOTED AS TYPE MS ON THE DRAINAGE TABLE**

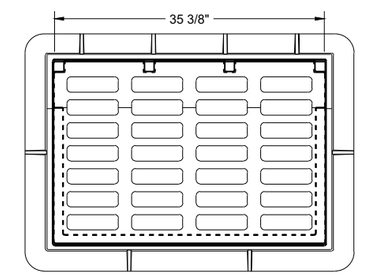


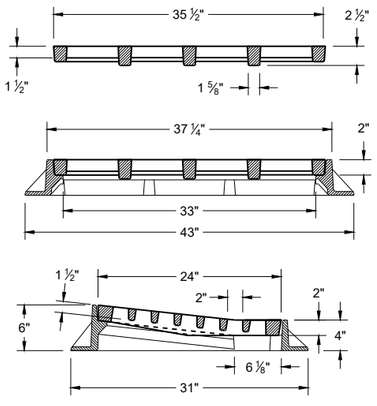

DIAGONAL SLOTS SHALL BE ORIENTEDTO THE DIRECTION OF FLOW AS ILLUSTRATED.
GRATES ARE MANUFACTURED TO BE REVERSIBLE.

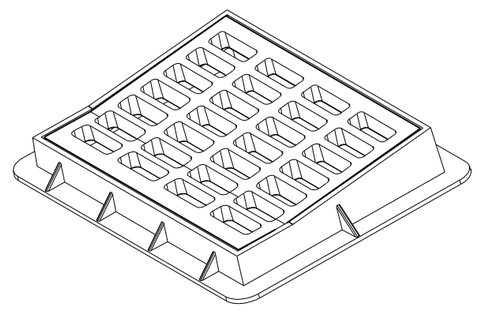


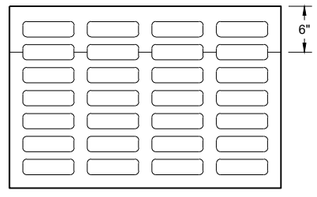

**TYPE "WM"**

NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"






**TYPE "DW"**

NOTES: FOR USE IN A SUMP CONDITION. THIS OPTION IS ONLY TO BE USED IF NO OTHER INLETS ARE APPLICABLE.

**INLET COVERS**
**TYPES B, B-A, C,**
**MS, MS-A ,DW AND WM**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA



6

SDD 08A05-22b

SDD 08A05-22b

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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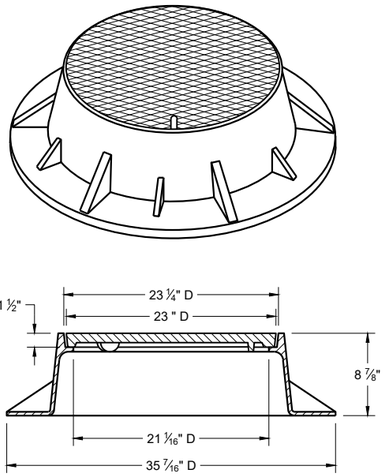
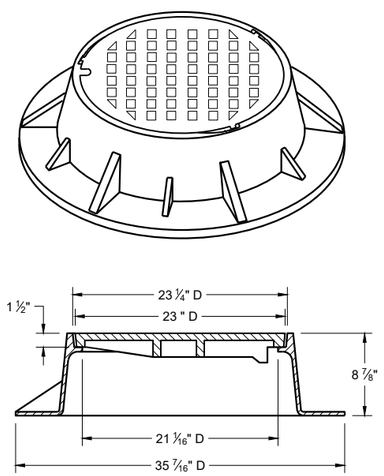
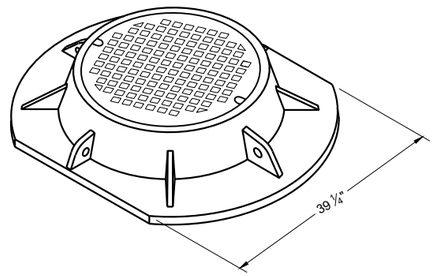
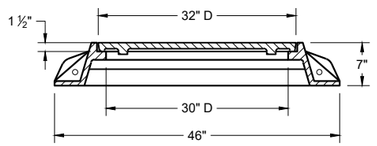
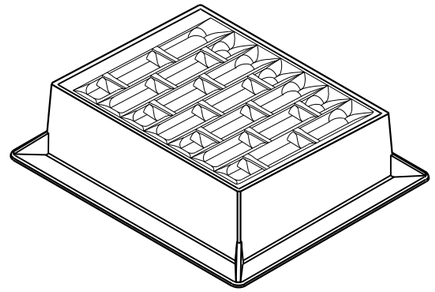


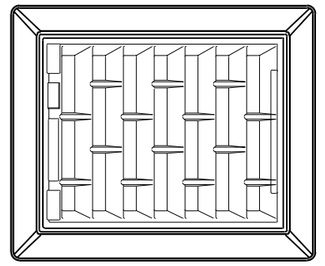



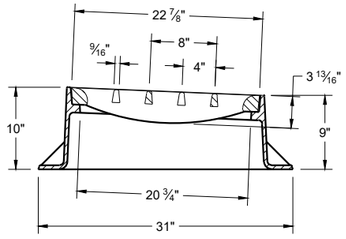



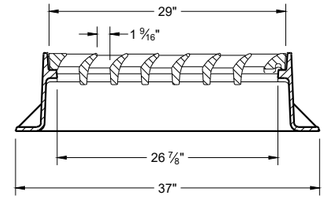




**TYPE "K"**

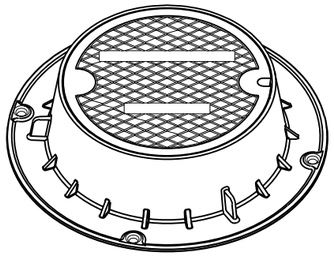


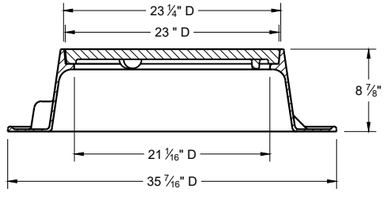




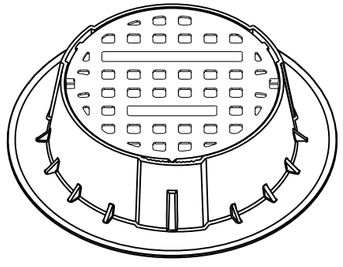

**INLET COVER TYPE "BW"**

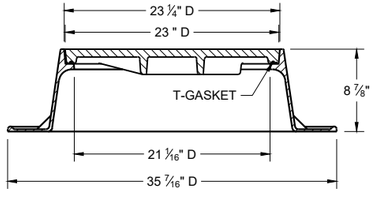





**TYPE "J"**

NOTE: EITHER CASTING IS ACCEPTABLE

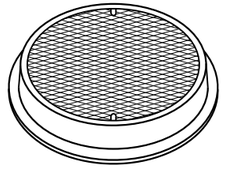


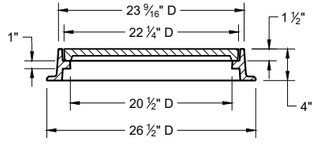



**TYPE "J" SPECIAL**

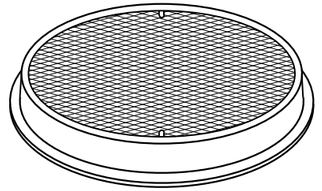
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

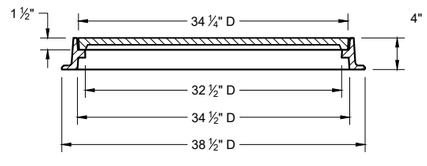
NOTE: EITHER CASTING IS ACCEPTABLE






**TYPE "L"**






**TYPE "M"**

**INLET COVERS TYPES BW**
**MANHOLE COVERS TYPES K, J, J-S, L, AND M**

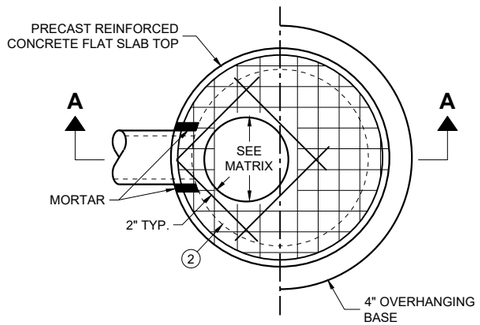
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

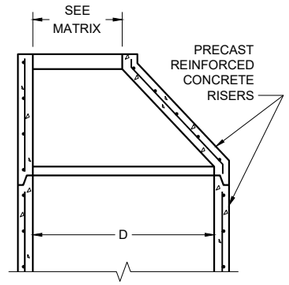
FHWA



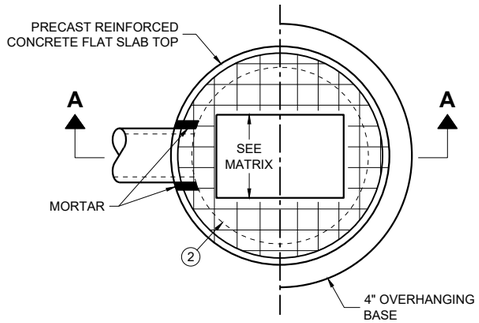
6
SDD 08A05-22e



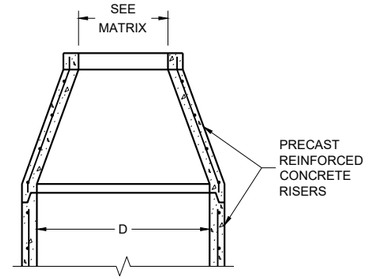

**PLAN VIEW CIRCULAR OPENING**




**OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP**




**PLAN VIEW RECTANGULAR OPENING**




**OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP**

## COVER MATRIX

| CATCH BASIN SIZE | INLET COVER TYPE | ALL A'S | ALL B'S | BW | C | F | ALL H'S | S | T | V V-B | VV-B | WM | Z |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OPENING SIZE (FT.) | | | | | | | | | | | | |
| 3-FT | 2 X 2 | X | X | | | | | X | | X | | | |
| | 2 DIA. | | | | X | | | | | | | | X |
| 4-FT TO 6-FT | 2 X 2 | X | X | | | | | X | | X | | | |
| | 2 X 2.5 | | | X | | | | X | X | X | | X | |
| | 2 DIA. | | | | X | | | | | | | | X |
| | 2 X 3 | | | | | | X | | | | | | |
| | 2.5 X 3 | | | | | X | | | | | | | |
| | 2 X 3.5* | | | | | | | | | | X* | | |

* REQUIRES 5-FT DIAMETER OR LARGER STRUCTURE

## PIPE MATRIX

| CATCH BASIN SIZE | MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES | |
|---|---|---|
| | 180° SEPARATION (IN) | 90° SEPARATION (IN) |
| 3-FT | 15 | 12 |
| 4-FT | 24 | 18 |
| 5-FT | 36 | 24 |
| 6-FT | 42 | 30 |

## CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES. CONCENTRIC CONE TOPS SHALL BE USE ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "D".

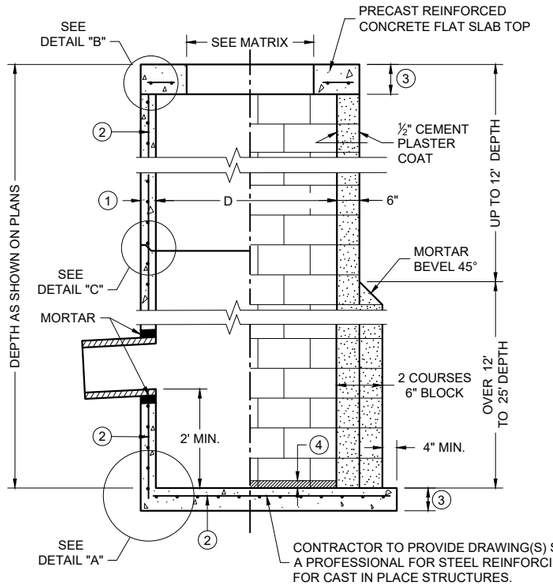
(1) MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.

(2) FOR PRECAST CATCH BASINS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(3) PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

(4) 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

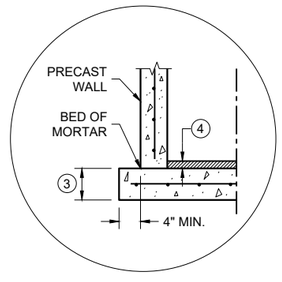
(5) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFROMING TO ASTM C443.



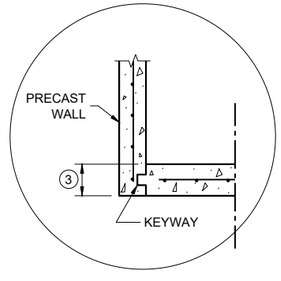

**SECTION A - A**

**PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE**

**CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (2)**

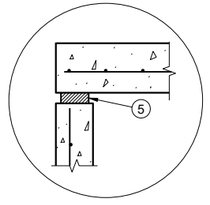



**SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION**

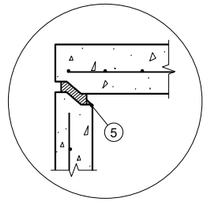



**PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION**

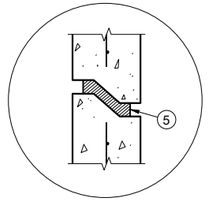
**DETAIL "A"**



**TOP WITH PLAIN END JOINT**

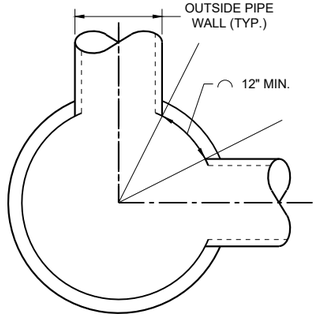


**TOP WITH TONGUE AND GROOVE JOINT**



**RISER WITH TONGUE AND GROOVE JOINT**

**DETAIL "B"** **DETAIL "C"**




**MINIMUM HORIZONTAL PIPE SEPARATION**

**DETAIL "D"**

**CATCH BASINS, 3-FT. 4-FT., 5 FT., AND 6-FT. DIAMETER**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

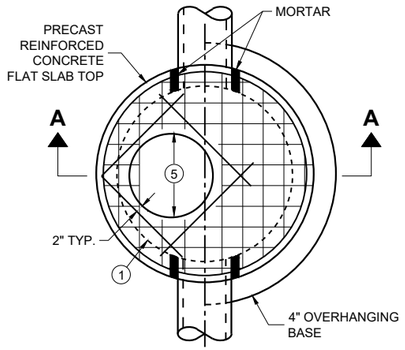
APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA



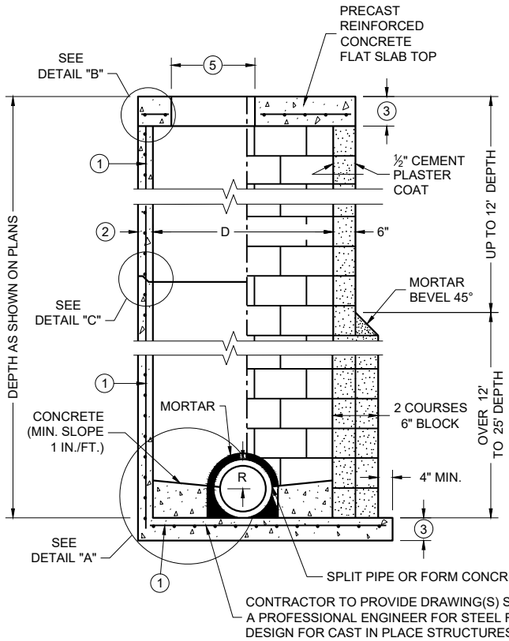
SDD 08A08-03

SDD 08A08-03




**PLAN VIEW**

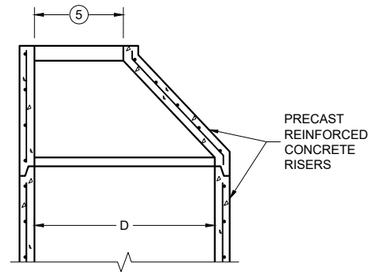
## CIRCULAR OPENING



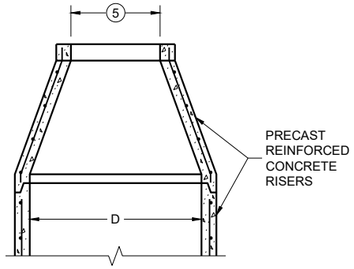

**SECTION A - A**

**PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE**

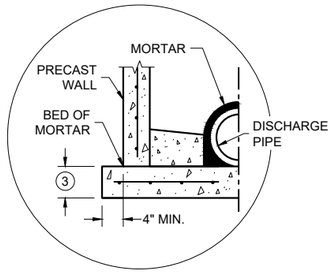
**CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE** (1)



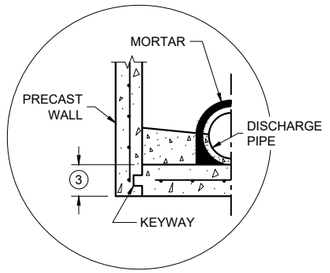

**OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP**




**OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP**

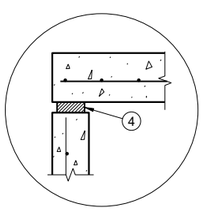



**SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION**

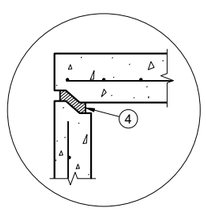



**PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION**

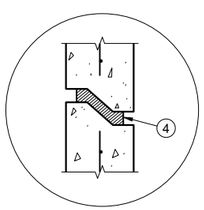
## DETAIL "A"




**TOP WITH PLAIN END JOINT**




**TOP WITH TONGUE AND GROOVE JOINT**




**RISER WITH TONGUE AND GROOVE JOINT**

## DETAIL "B"

## DETAIL "C"

### MANHOLE COVER OPENING MATRIX

| OPENING SIZE (FT.) (5) \ MANHOLE COVER TYPE | C | ALL J'S | K | L | M |
|---|---|---|---|---|---|
| 2 DIA. | X | X | | X | |
| 3 DIA. | | | X | | X |

### PIPE MATRIX

| MANHOLE SIZE (DIA.) | MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES | | MINIMUM WALL THICKNESS (IN) | MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS |
|---|---|---|---|---|
| | 180° SEPARATION (IN) | 90° SEPARATION (IN) | | |
| 3-FT | 15 | 12 | 4 | 6 |
| 4-FT | 24 | 18 | 4 | 6 |
| 5-FT | 36 | 24 | 5 | 8 |
| 6-FT | 42 | 36 | 6 | 8 |
| 7-FT | 48 | 36/42 * | 7 | 8 |
| 8-FT | 60 | 42 | 8 | 8 |
| 9-FT | 66 | 54 | 9 | 10 |
| 10-FT | 72 | 60 | 10 | 10 |

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES. SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES. CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL IMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "D".

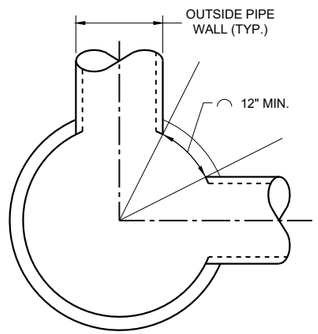
(1) FOR PRECAST MANHOLES AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(2) SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES

(3) SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.

(4) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.

(5) SEE MANHOLE COVER OPENING MATRIX.




**MINIMUM HORIZONTAL PIPE SEPARATION**

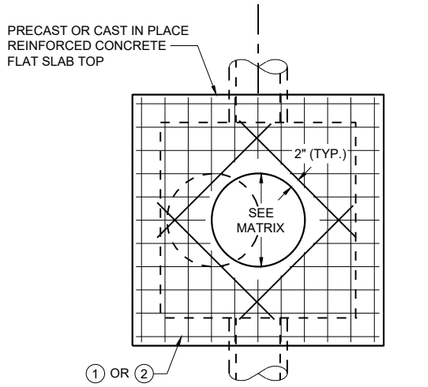
## DETAIL "D"

**MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER**

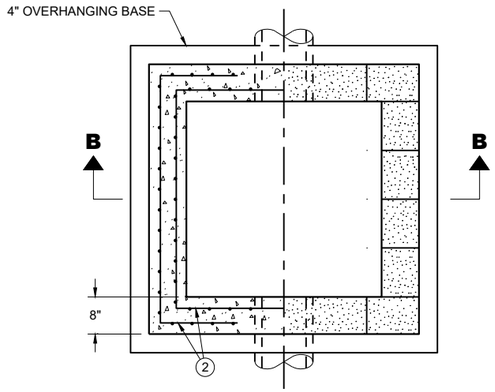
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

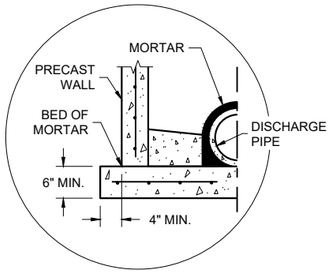
FHWA




**PLAN VIEW**
**CIRCULAR OPENING**

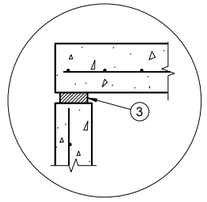



**SECTION A - A**
**PLAN VIEW**

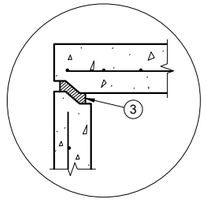



**SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION**

**DETAIL "A"**

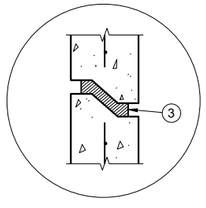



**TOP WITH PLAIN END JOINT**



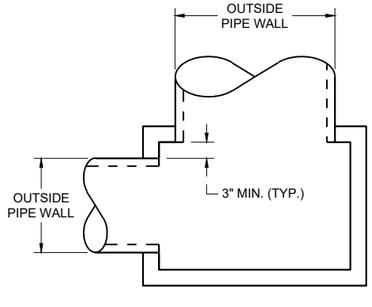

**TOP WITH TONGUE AND GROOVE JOINT**

**DETAIL "B"**

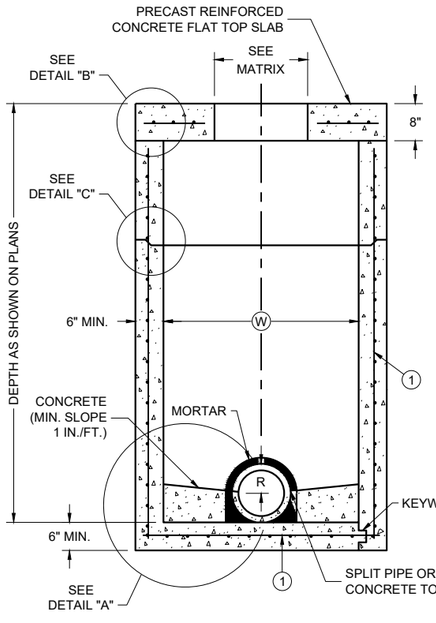



**RISER WITH TONGUE AND GROOVE JOINT**

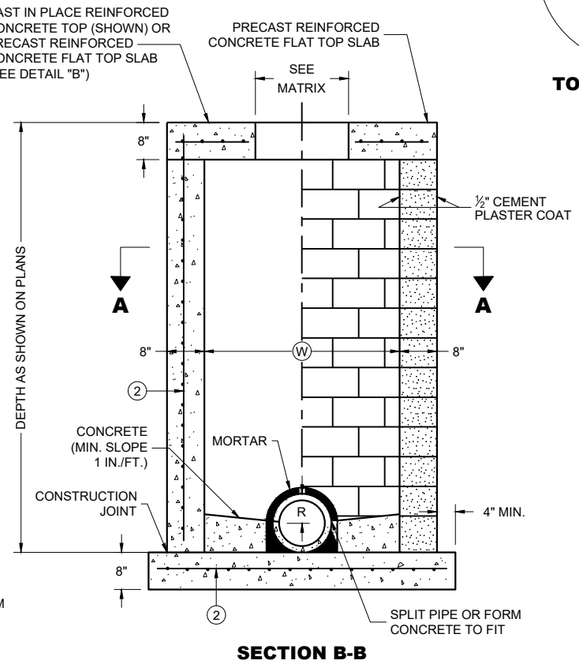
**DETAIL "C"**




**DETAIL "D"**




**PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE**




**PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE**

**CAST IN PLACE REINFORCED CONCRETE**

**SECTION B-B**

**CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE** (1)

**SQUARE MANHOLES WITH FLAT TOP**

**MANHOLES 3 X 3-FT, 4 X 4 -FT, 5 X 5-FT AND 6 X 6-FT**

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C913.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN WIDTH.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "D". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

(1) FOR PRECAST MANHOLES AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

(2) CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGNFOR CAST-IN-PLACE STRUCTURES.

(3) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP.)

**MANHOLE COVER OPENING MATRIX**

| MANHOLE COVER TYPE | C | ALL J'S | K | L | M |
|---|---|---|---|---|---|
| OPENING SIZE (FT.) | | | | | |
| 2 DIA. | X | X | | X | |
| 3 DIA. | | | X | | X |

**PIPE MATRIX**

| MANHOLE SIZE WxW-FT | MAXIMUM INSIDE PIPE DIAMETER (IN) |
|---|---|
| 3 X 3 FT | 24 |
| 4 X 4 FT | 30 |
| 5 X 5 FT | 42 |
| 6 X 6 FT | 54 |

**MANHOLES**
**3 X 3 -FT, 4 X 4-FT**
**5 X 5-FT AND 6 X 6-FT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

FHWA



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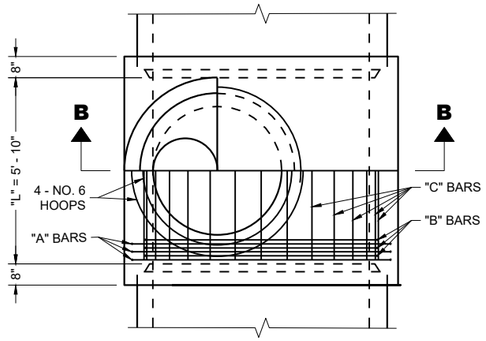
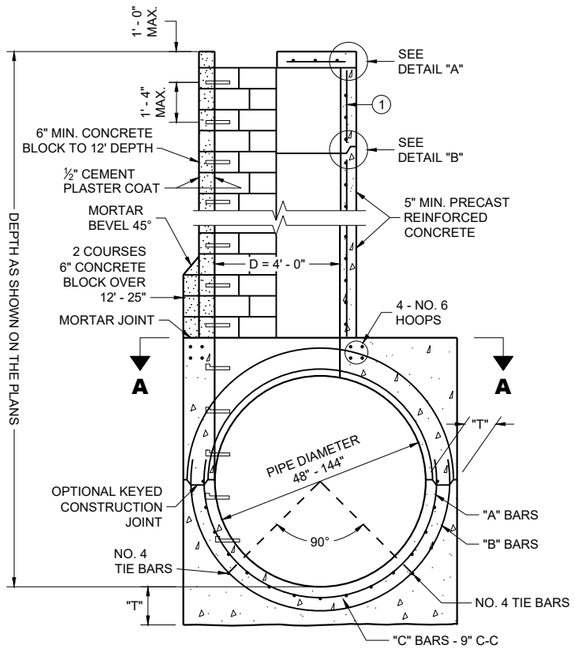



**HALF SECTION A - A**




**SECTION B - B**

## MANHOLE VARIABLE SPECIAL 4-FT DIAMETER

### NOTES FOR MANHOLE VARIABLE SPECIAL 4-FT DIAMETER

NOTE: ALL "A", "B", AND "C" BAR STEEL REINFORCING IS THE SAME DIAMETER WHICH VARIES WITH DEPTH.

NO. 5 BARS TO 20' DEPTH
NO. 6 BARS OVER 20' TO 30' DEPTH
NO. 7 BARS OVER 30' TO 40' DEPTH

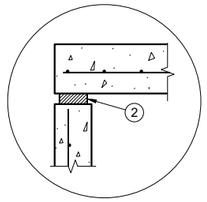
THE "A" AND "B" BARS MAY BE PLACED IN ONE OR TWO SEGMENTS, AND SHALL LAP 24 BAR DIAMETERS.

"C" BARS SHALL HAVE STANDARD HOOKED ENDS.

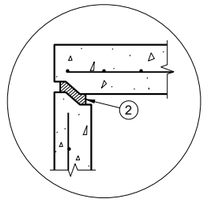
NOTE: "T" THROUGHOUT LENGTH "L" SHALL BE 13" FOR PIPE DIAMETER 48" TO 84" AND 15" FOR PIPE DIAMETER GREATER THAN 84".

## MANHOLE COVER OPENING MATRIX

| MANHOLE COVER TYPE | C | ALL J'S | K | L | M |
|---|---|---|---|---|---|
| OPENING SIZE (FT.) | | | | | |
| 2 DIA. | X | X | | X | |
| 3 DIA. | | | X | | X |

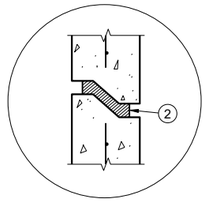



**TOP WITH PLAIN END JOINT**



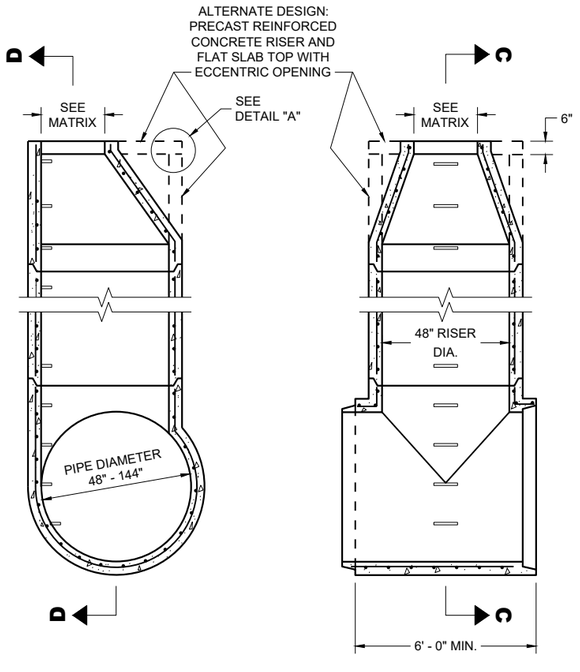

**TOP WITH TONGUE AND GROOVE JOINT**

**DETAIL "A"**




**RISER WITH TONGUE AND GROOVE JOINT**

**DETAIL "B"**




**SECTION C - C** **SECTION D - D**

## MANHOLE VARIABLE TEE 4-FT DIAMETER

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 4T-L", "MANHOLES 4S-M", ETC. THE VARIABLE TEE IS DENOTED BY 4T AND THE VARIABLE SPECIAL IS DENOTED BY 4S. THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES VER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES ROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE OR CONCRETE BLOCK STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

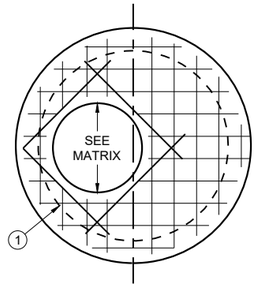
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST MANHOLES SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

(1) FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO DESIGNATION M199.

(2) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.




**PLAN VIEW**

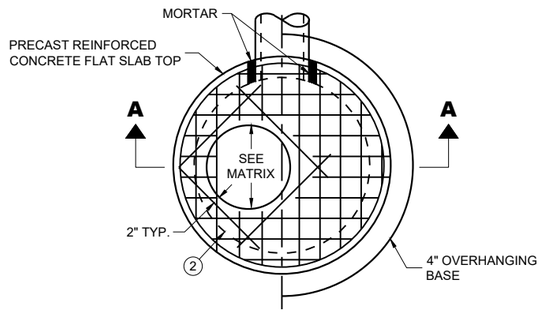
## PRECAST REINFORCED CONCRETE FLAT SLAB TOP WITH ECCENTRIC OPENING

## MANHOLE VARIABLE TEE AND SPECIAL 4-FT DIAMETER

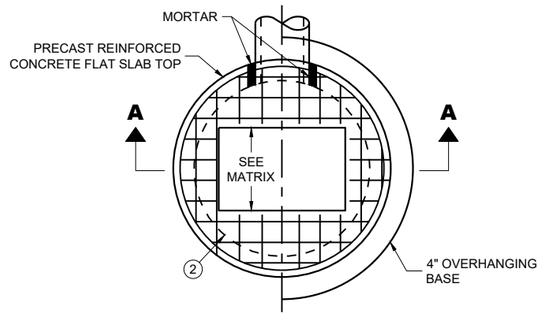
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA

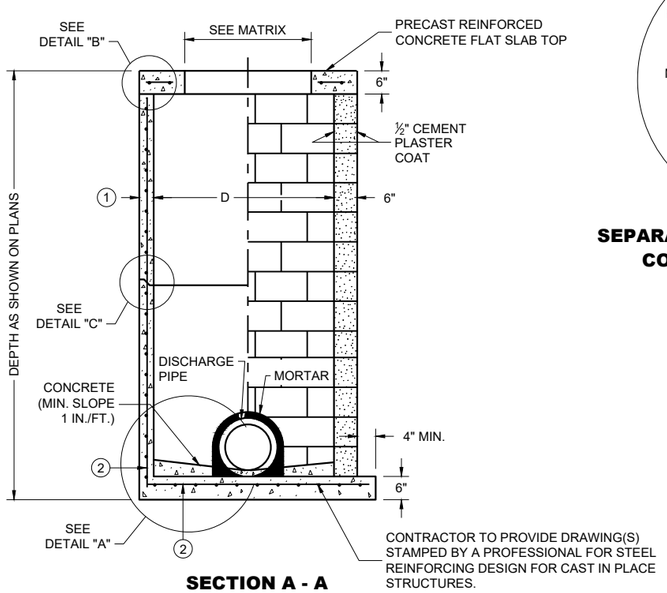
SDD 08B11-03




**PLAN VIEW CIRCULAR OPENING**




**PLAN VIEW RECTANGULAR OPENING**




**SECTION A - A**

**PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE**

**CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE** (2)

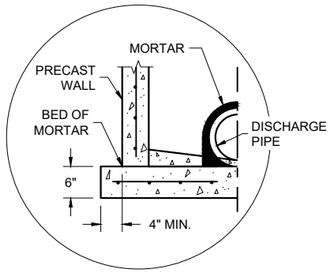
**CIRCULAR INLETS WITH FLAT TOP**

## CATCH BASIN COVER OPENING MATRIX

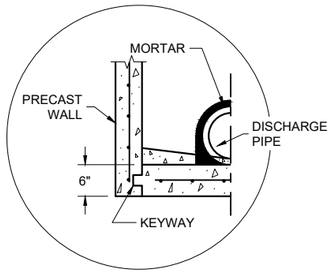
| INLET SIZE | INLET COVER TYPE | ALL A'S | ALL B'S | BW | C | F | ALL H'S | S | T | V V-B | WM | Z |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OPENING SIZE (FT.) | | | | | | | | | | | |
| 3-FT | 2 DIA. | | | | X | | | | | | | X |
| | 2 X 2 | X | X | | | | | X | | X | | |
| 4-FT | 2 DIA. | | | | X | | | | | | | X |
| | 2 X 2 | X | X | | | | | X | | X | | |
| | 2 X 2.5 | | | X | | | | X | X | X | X | |
| | 2 X 3 | | | | | | X | | | | | |
| | 2.5 X 3 | | | | | X | | | | | | |

## PIPE MATRIX

| INLET SIZE | MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES | |
|---|---|---|
| | 180° SEPARATION (IN) | 90° SEPARATION (IN) |
| 3-FT | 15 | 12 |
| 4-FT | 24 | 18 |

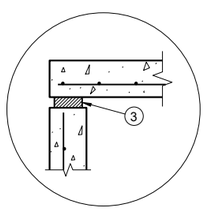



**SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION**

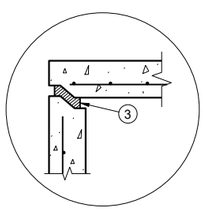



**PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION**

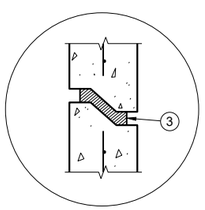
**DETAIL "A"**




**TOP WITH PLAIN END JOINT**




**TOP WITH TONGUE AND GROOVE JOINT**




**RISER WITH TONGUE AND GROOVE JOINT**

**DETAIL "B"** **DETAIL "C"**

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

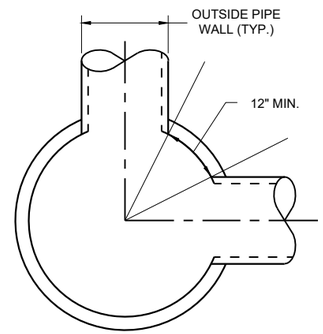
4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "D".

(1) MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT DIAMETER AND 5 INCHES FOR 4-FT DIAMTER PRECAST INLETS.

(2) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(3) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.




**MINIMUM HORIZONTAL PIPE SEPARATION**

**DETAIL "D"**

**INLETS 3-FT AND 4-FT DIAMETER**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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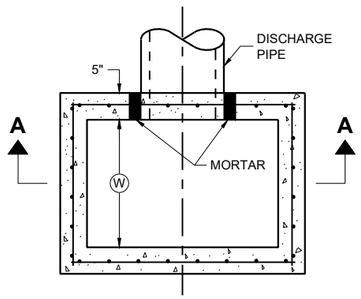
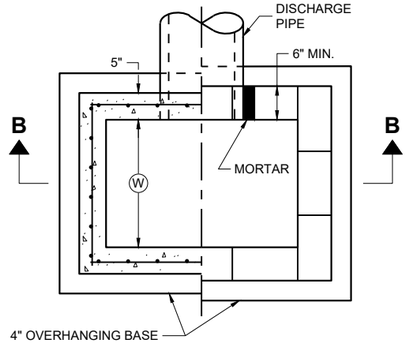
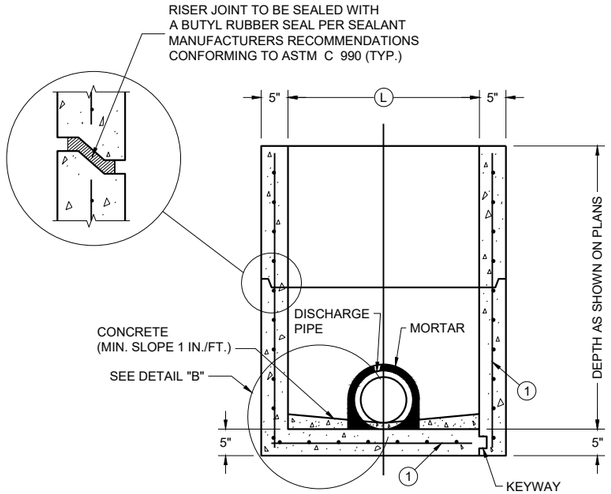



**PLAN VIEW**



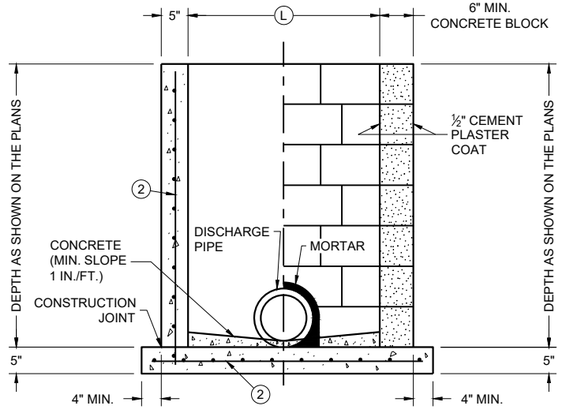

**PLAN VIEW**




**PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE**

**PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE**

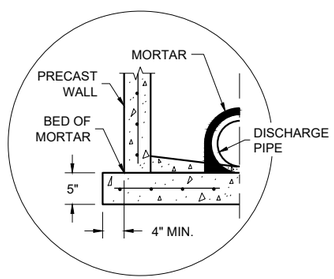
**SECTION A - A**




**CAST IN PLACE REINFORCED CONCRETE**

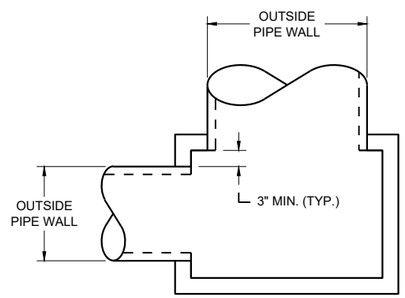
**CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE** (1)

**SECTION B - B**




**SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION**

**DETAIL "B"**




**DETAIL "A"**

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP N0T SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

(1) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913
(2) CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

## CATCH BASIN COVER MATRIX

| INLET SIZE | WIDTH (W) (FT.) | LENGTH (L) (FT.) | INLET COVER TYPE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ALL A'S | ALL B'S | BW | F | ALL H'S | S | T | V | WM | V V-B |
| 2 X 2-FT | 2 | 2 | X | X | | | | X | | | | |
| 2 X 2.5-FT | 2 | 2.5 | | | X | | | X | X | X | X | |
| 2 X 3-FT | 2 | 3 | | | | | X | | | | | |
| 2.5 X 3-FT | 2.5 | 3 | | | | X | | | | | | |
| 2 X 3.5-FT | 2 | 3.5 | | | | | | | | | | X |

## PIPE MATRIX

| CATCH BASIN SIZE | MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES | |
|---|---|---|
| | WIDTH (IN) | LENGTH (IN) |
| 2 X 2-FT | 12 | 12 |
| 2 X 2.5-FT | 12 | 18 |
| 2 X 3-FT | 12 | 24 |
| 2.5 X 3-FT | 18 | 24 |
| 2 X 3.5-FT | 12 | 30 |

**INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2X3.5-FT**

**INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2 X 3.5-FT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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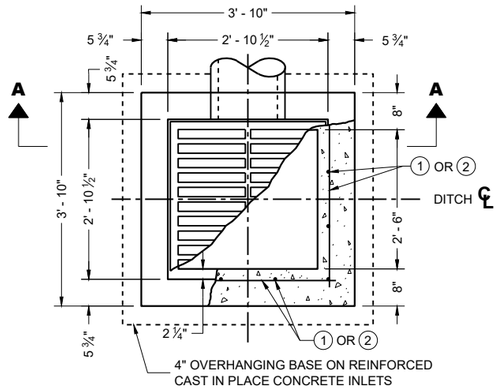
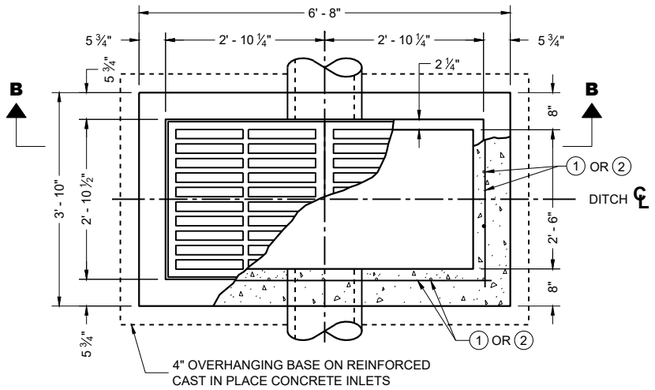
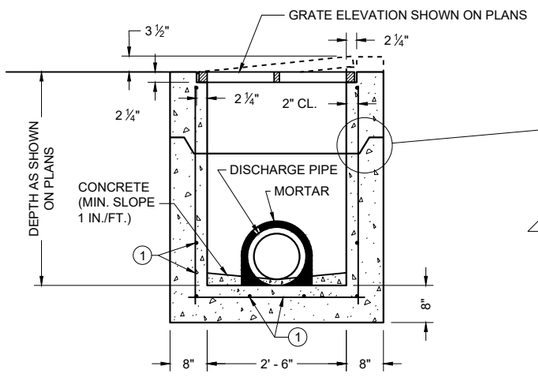


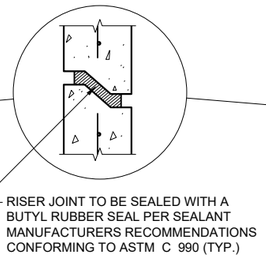

**PLAN VIEW**

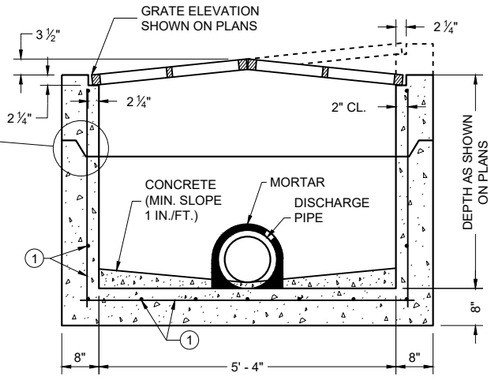



**PLAN VIEW**

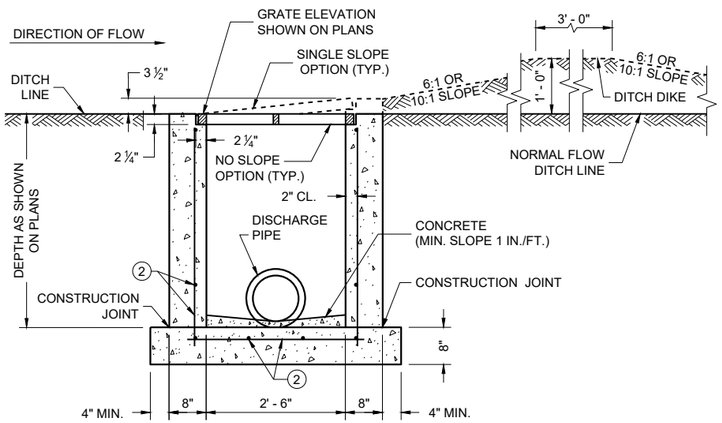



**PRECAST REINFORCED CONCRETE SECTION A - A**



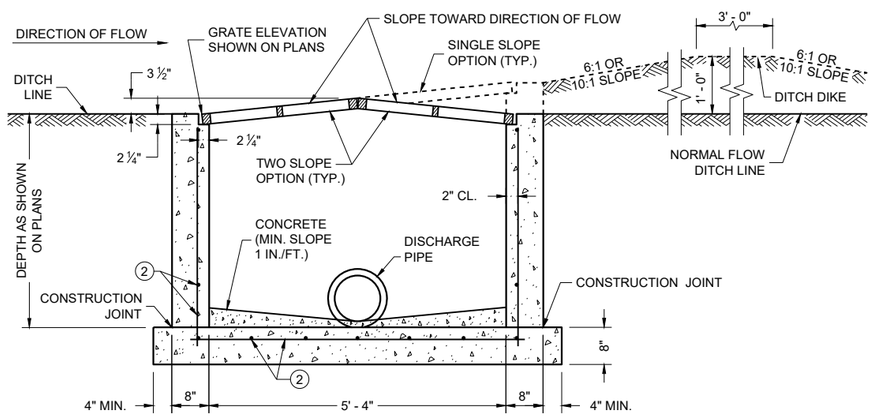




**PRECAST REINFORCED CONCRETE SECTION B - B**




**REINFORCED CAST IN PLACE CONCRETE SECTION A - A**

**INLETS MEDIAN 1 GRATE**




**REINFORCED CAST IN PLACE CONCRETE SECTION B - B**

**INLETS MEDIAN 2 GRATE**

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP N0T SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

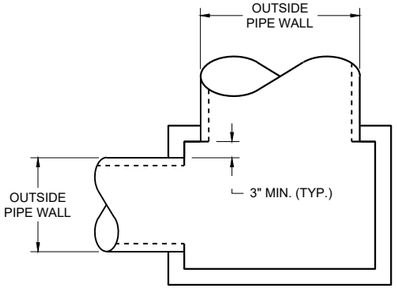
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

(1) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

(2) CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.




**DETAIL "A"**

**PIPE MATRIX**

| INLET SIZE | MAXIMUM INSIDE PIPE DIAMETER | |
|---|---|---|
| | WIDTH (IN) | LENGTH (IN) |
| 1 GRATE | 18 | 18 |
| 2 GRATE | 18 | 42 |

**INLETS**
**MEDIAN 1 AND 2 GRATE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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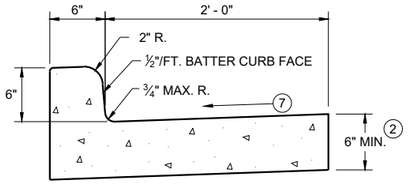
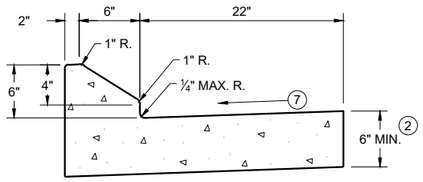
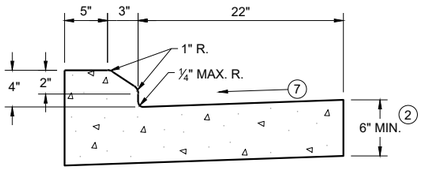


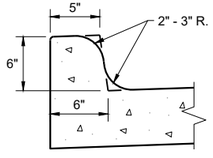

**TYPES A (1) & D**



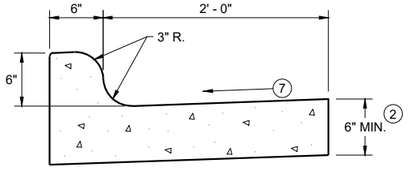

**6" SLOPED CURB TYPES G (1) & J**




**4" SLOPED CURB TYPES G (1) & J**

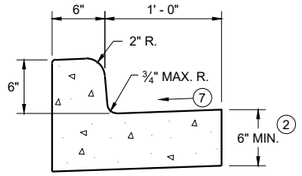



**TYPES K (1) & L**
(OPTIONAL CURB SHAPE)



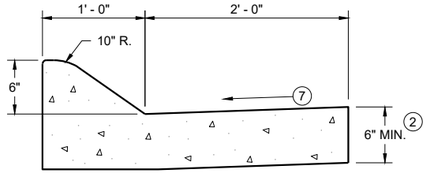

**TYPES K (1) & L**

**CONCRETE CURB AND GUTTER 30"**

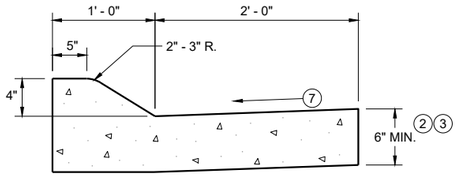



**TYPES A (1) & D**

**CONCRETE CURB AND GUTTER 18"**

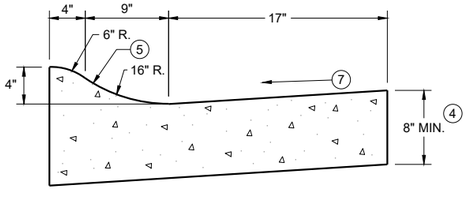



**6" SLOPED CURB TYPES A (1) & D**



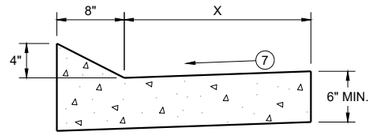

**4" SLOPED CURB TYPES A (1) & D**

**CONCRETE CURB AND GUTTER 36"**




**4" SLOPED CURB TYPES R (1) & T**
**CONCRETE CURB AND GUTTER 30"**

| TBT & TBTT | X |
|---|---|
| 30" | 22" |
| 36" | 28" |

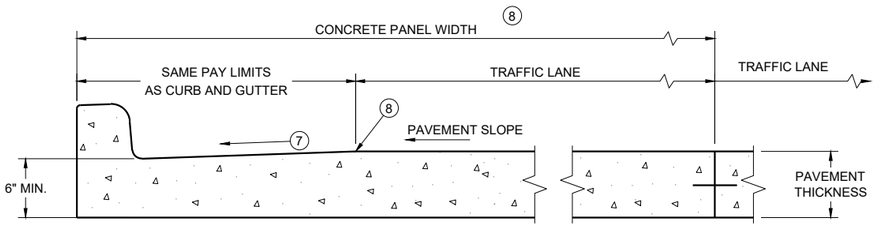



**TYPES TBT & TBTT (1)**

**CONCRETE CURB AND GUTTER**

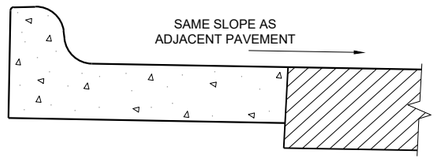
**PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE**

| PAVEMENT THICKNESS | MAXIMUM PANEL WIDTH |
|---|---|
| LESS THAN 10" | 12' |
| 10" & ABOVE | 15' |




**PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER ***

* BIKE LANE IS NOT SHOWN




**REVERSE SLOPE GUTTER (6)**
(TYPICAL FOR ALL CURB & GUTTER TYPES)

## GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

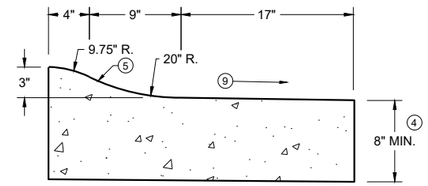
(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

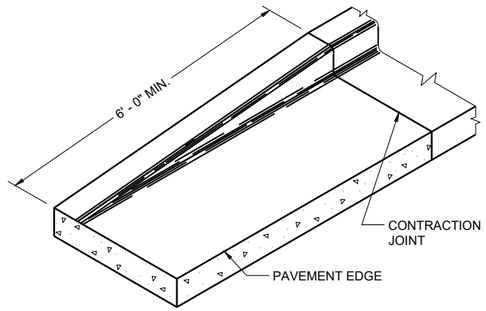
(9) SLOPE TO BE REVERSE SLOPE MATCHING THE SLOPE OF THE PAVEMENT AND THE CIRCULATORY ROADWAY



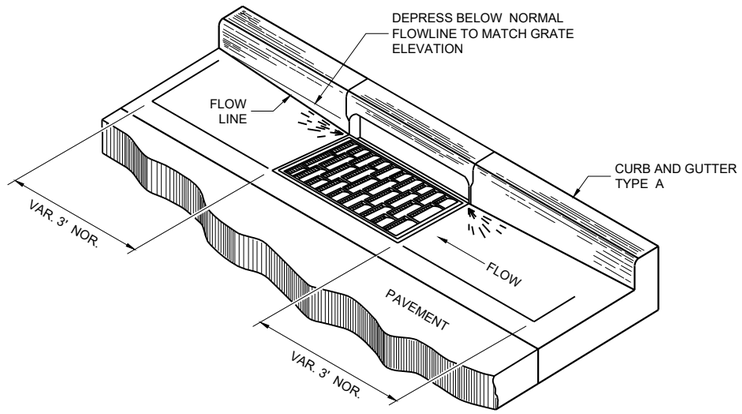

**3" SLOPED CURB TYPES R (1) & T**

**CONCRETE CURB AND GUTTER**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION




**END SECTION CURB AND GUTTER**




**DETAIL OF CURB AND GUTTER AT INLETS**

(TYPICAL H INLET COVER SHOWN)

## GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

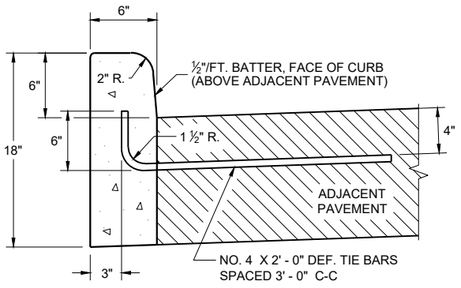
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

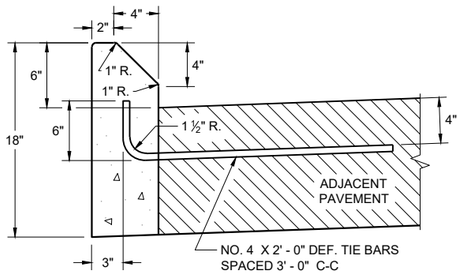
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(10) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

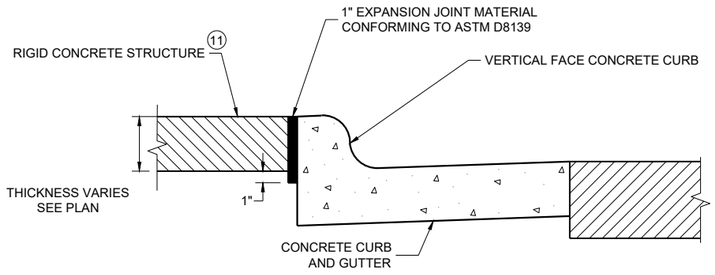



**TYPES A (1) & D**

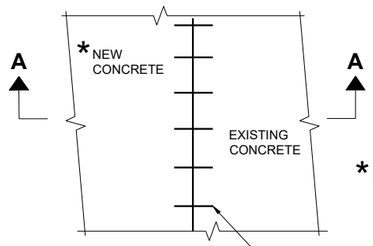



**TYPES G (1) & J**

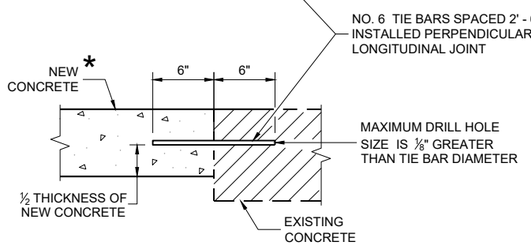
**CONCRETE CURB**




**EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)**

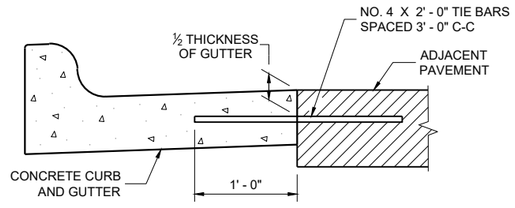



**PLAN VIEW**

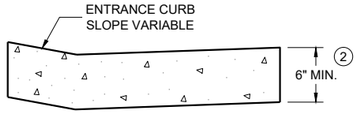



**SECTION A - A**

**TIE BARS DRILLED INTO EXISTING PAVEMENT**




**TYPICAL TIE BAR LOCATION (1)**




**DRIVEWAY ENTRANCE CURB (10)**

(WHEN DIRECTED BY THE ENGINEER)

**CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

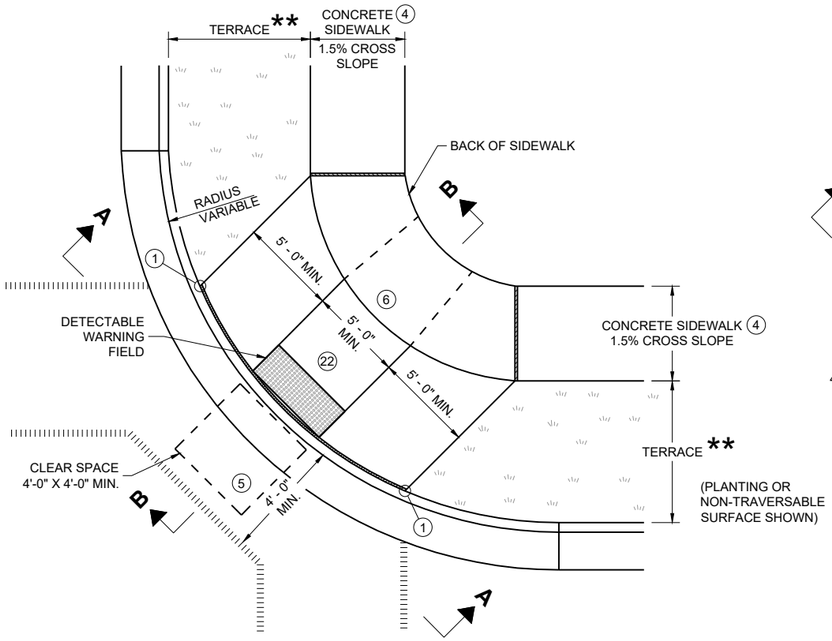


6

SDD 08D01-24b

6

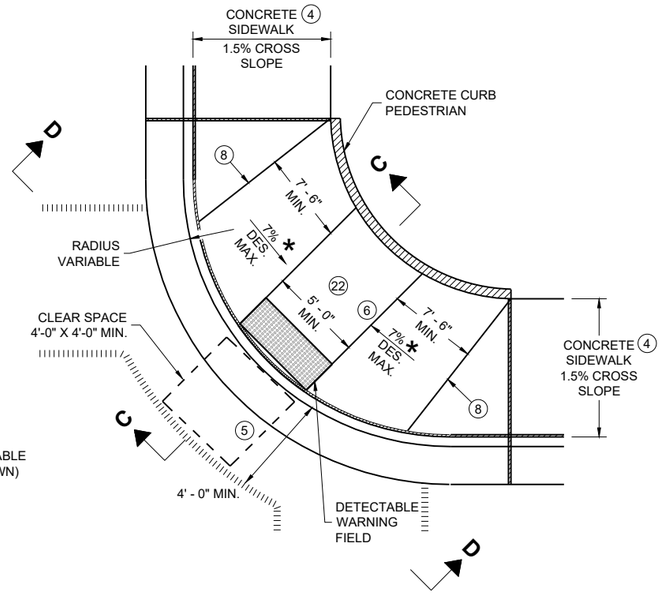
SDD 08D01-24b




**PLAN VIEW**

## CURB RAMP TYPE 1

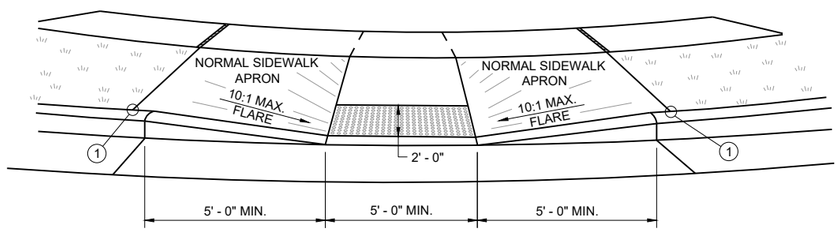
**(CENTER OF CORNER RADIUS)**



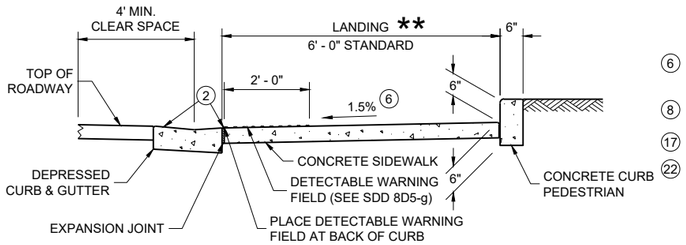

**PLAN VIEW**

## CURB RAMP TYPE 1 - A

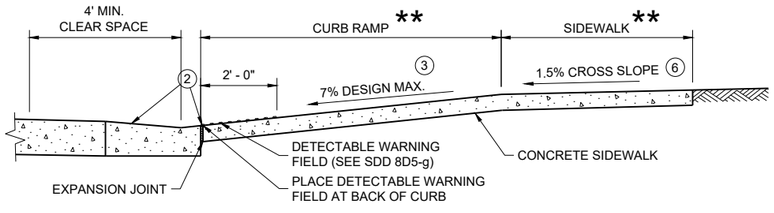
**(NO TERRACE)**



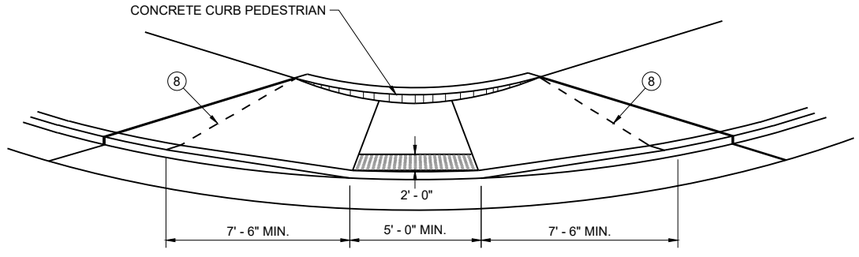

**VIEW A - A FOR TYPE 1**




**SECTION C - C FOR TYPE 1 - A**




**SECTION B - B FOR TYPE 1**




**VIEW D - D FOR TYPE 1 - A**

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB RAMP ACCESS AREAS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE CURB RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF CURB RAMP.

DETECTABLE WARNING FILED SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE CURB RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A CLEAR SPACE IN THE STREET AND GUTTER AREA. WHEN THE GUTTER CROSS SLOPE EXCEEDS 2.1%, CONSTRUCT THE CLEAR SPACE IN THE STREET AREA AND THE 4 FOOT WIDTH IS MEASURED FROM THE FLANGE LINE. FOR RECONSTRUCTION AND MODERNIZATION PROJECTS THE CLEAR SPACE SLOPE PARALLEL TO THE CURBLINE SHOULD BE 2.1% MAX FOR CROSSINGS THAT ARE STOP AND YIELD CONTROLLED, AND 5% MAX FOR THOSE THAT ARE SIGNAL CONTROLLED. FOR PERPETUATION AND REHABILITATION PROJECTS THE SLOPE OF THE CLEAR SPACE PARALLEL TO THE CURBLINE WILL MATCH THE ROADWAY LONGITUDINAL SLOPE. THE SLOPE OF THE CLEAR SPACE PERPENDICULAR TO THE CURBLINE WILL MATCH THE ROADWAY CROSS SLOPE BUT SHOULD NOT EXCEED 5% UNLESS THE ROADWAY IS SUPERELEVATED (WHEN SUPERELEVATED THE ROADWAY CROSS SLOPE SHOULD MATCH THE SUPERELEVATION).

(6) PROVIDE A 5 FOOT BY 5 FOOT LANDING. SLOPE PERPENDICULAR TO CURB SHALL BE 2.1% MAXIMUM. SLOPE PARALLEL TO CURB SHALL MATCH THE CURB AND GUTTER LONGITUDINAL SLOPE.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

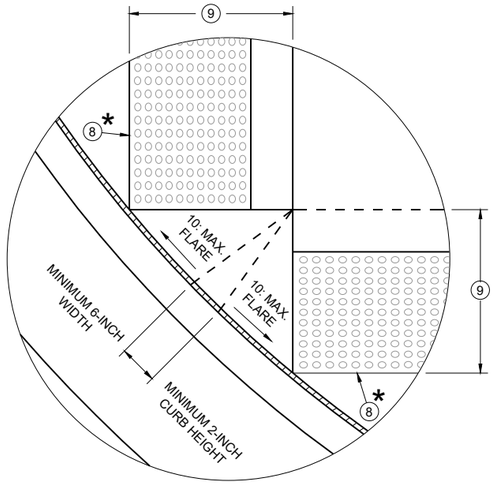
(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

## LEGEND

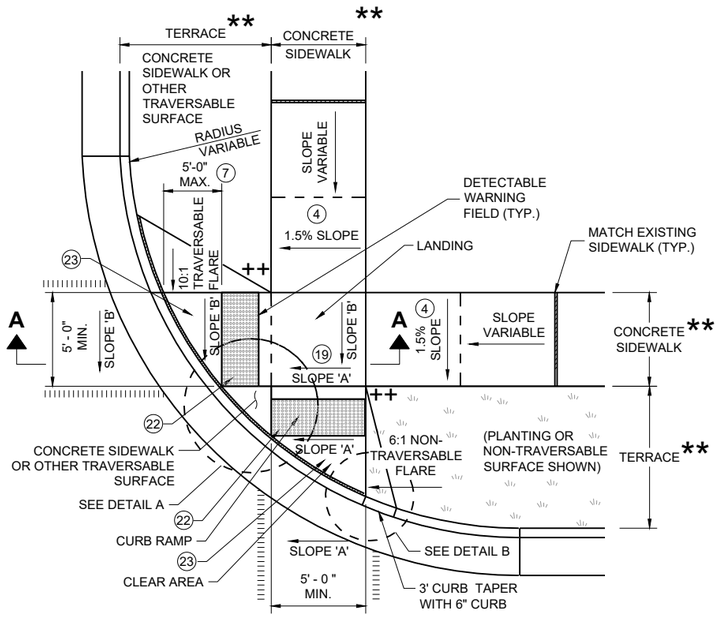
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- * MAXIMUM 8.3%
- ** WIDTH SHOWN ELSEWHERE IN THE PLANS

**CURB RAMPS TYPE 1 AND 1-A**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



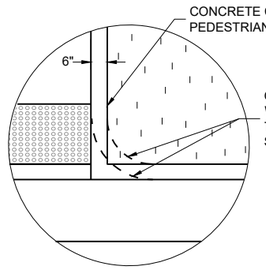

**DETAIL A**



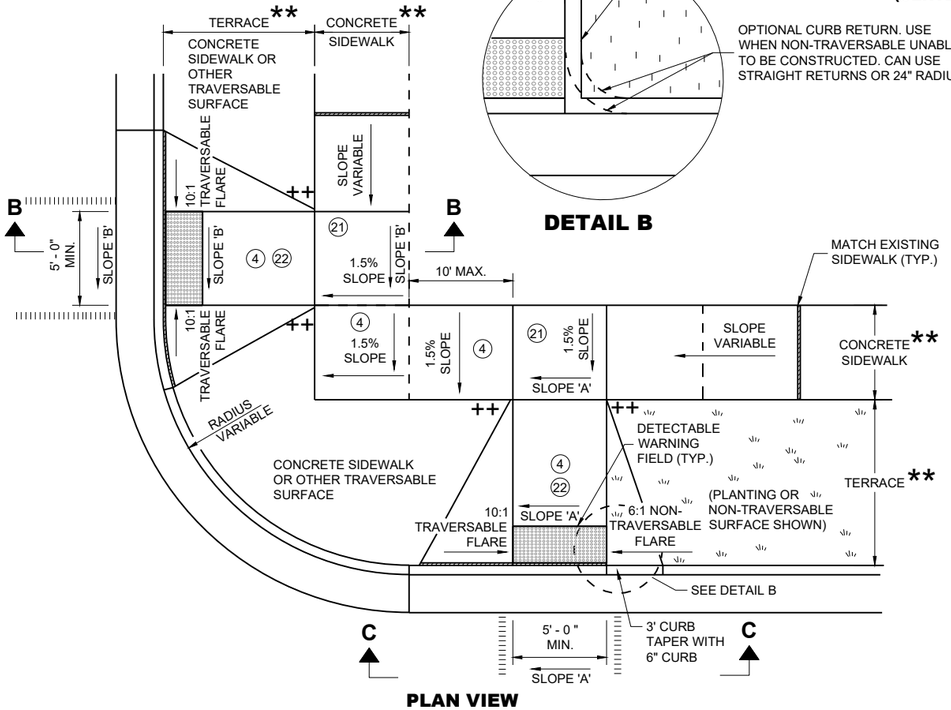

**PLAN VIEW**

## CURB RAMP TYPE 2

**(CENTER OF CORNER RADIUS)**



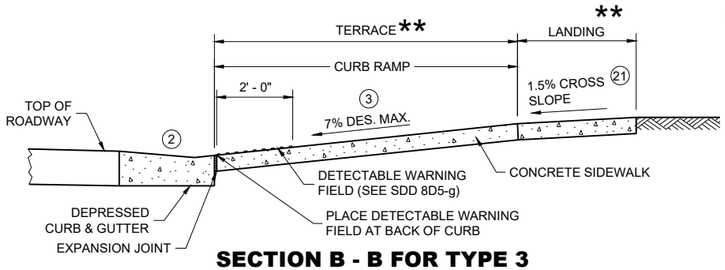

**DETAIL B**



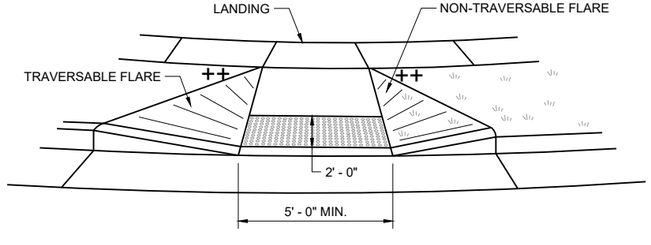

**PLAN VIEW**

## CURB RAMP TYPE 3

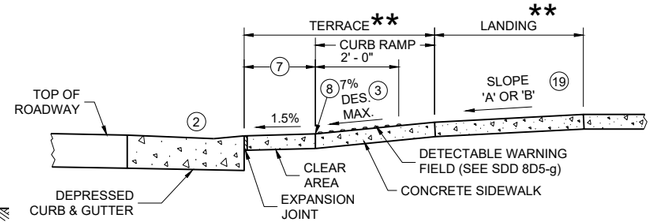
**(OUTSIDE OF CROSSWALK AREA)**




**SECTION B - B FOR TYPE 3**




**VIEW C - C FOR TYPE 3**




**SECTION A - A FOR TYPE 2**

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB RAMP ACCESS AREAS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% DESIGN MAXIMUM SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% DESIGN MAXIMUM SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

(19) WHERE A LANDING SERVES TWO CURB RAMPS, THE LANDING SLOPE SHALL NOT EXCEED THE CROSS SLOPE AT THE BOTTOM OF THE RAMP OR WITHIN THE CROSSWALK PARALLEL TO THE DIRECTION OF TRAVEL.

(21) PROVIDE A LANDING WITH A SLOPE PARALLEL TO ROADWAY THAT MATCHES SLOPE AT THE BOTTOM OF THE ADJACENT RAMP. SLOPE PERPENDICULAR TO ROADWAY SHALL BE 2.1% MAXIMUM. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

(23) THE CLEAR AREA BETWEEN THE BOTTOM OF RAMP AND BACK OF CURB SHALL BE SLOPED SO THAT WATER DRAINS OUT OF ONE SIDE OR BOTH SIDES OF THE CURB OPENING.

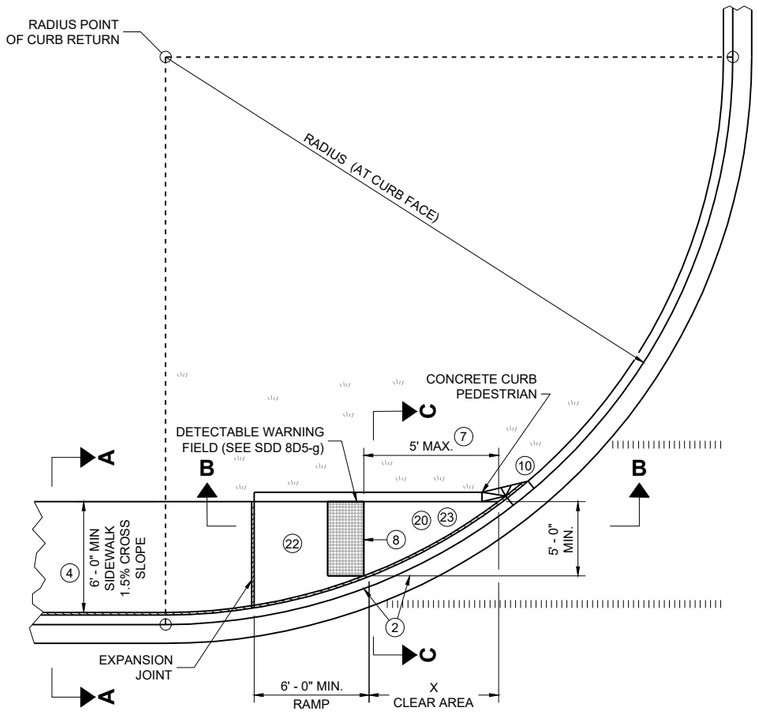
## LEGEND

- ½" EXPANSION JOINT SIDEWALK
- – – – CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)
- * MAXIMUM 2.1% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK
- ** WIDTH SHOWN ELSEWHERE IN THE PLANS
- ++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

**CURB RAMPS TYPE 2 AND 3**

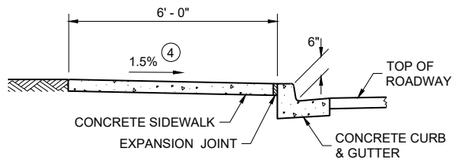
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION


6
SDD 08D05-22b

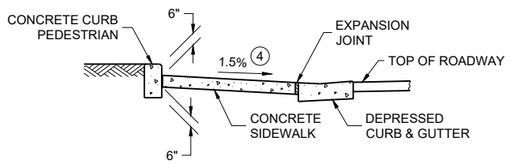



**PLAN VIEW**

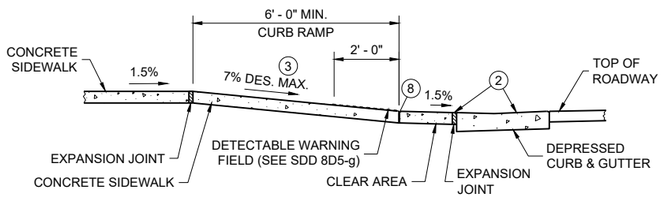
**CURB RAMP TYPE 4A**



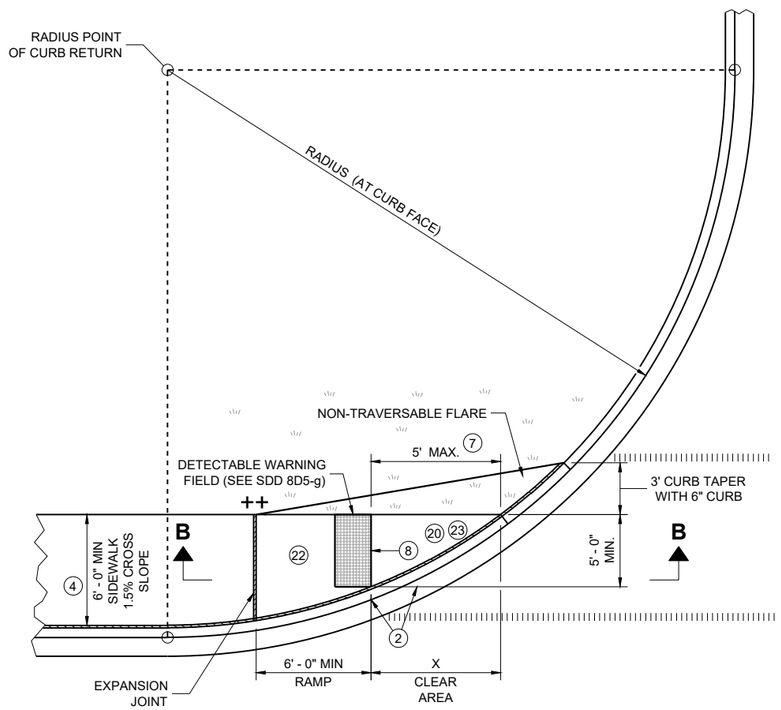

**SECTION A - A FOR TYPE 4A**




**SECTION C - C FOR TYPE 4A**




**SECTION B - B FOR TYPE 4A AND TYPE 4A1**




**PLAN VIEW**

**CURB RAMP TYPE 4A1**

## LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)
- ++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

| RADIUS (AT CURB FACE) | X |
|---|---|
| 10 FEET | 4' - 7" |

INTERMEDIATE RADII CAN BE INTERPOLATED

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB RAMP ACCESS AREAS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

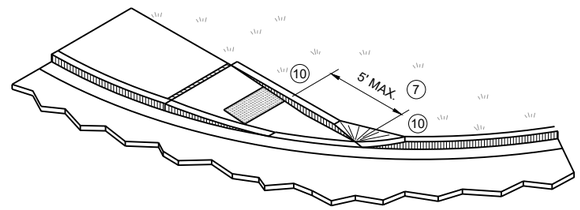
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

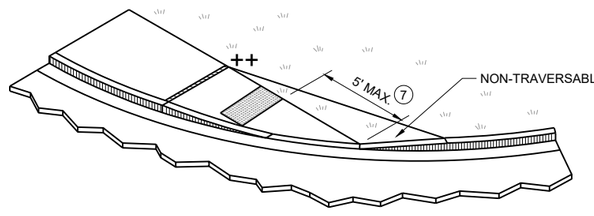
(20) MAXIMUM 1.5% DESIGN MAXIMUM AND 2.1% PROWAG MAXIMUM RUNNING SLOPE ON CLEAR AREA. CROSS SLOPE OF CLEAR AREA SHALL MATCH THE CROSS SLOPE OF THE ADJACENT CROSSWALK.

(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

(23) THE CLEAR AREA BETWEEN THE BOTTOM OF RAMP AND BACK OF CURB SHALL BE SLOPED SO THAT WATER DRAINS OUT OF ONE SIDE OR BOTH SIDES OF THE CURB OPENING.



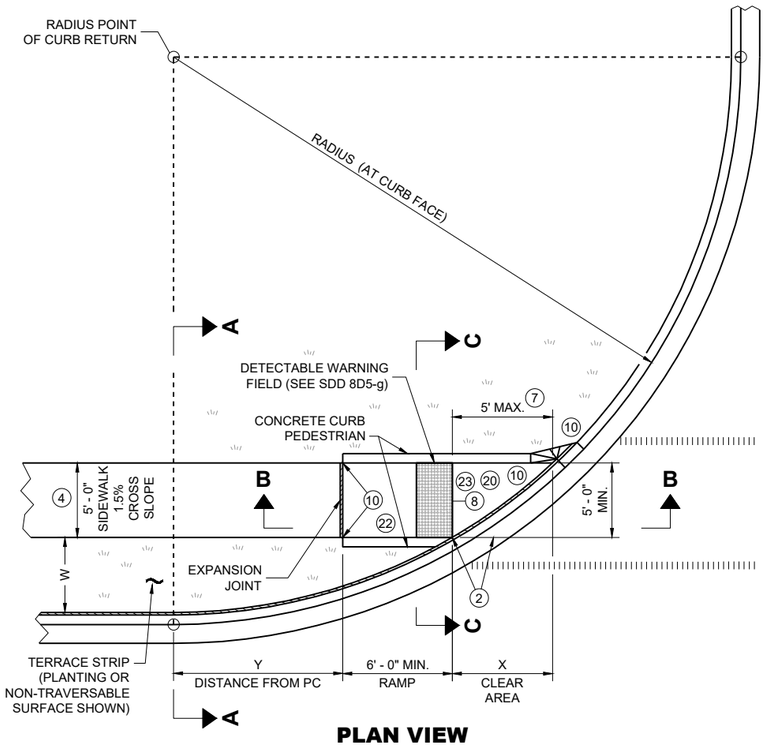

**ISOMETRIC VIEW FOR TYPE 4A**




**ISOMETRIC VIEW FOR TYPE 4A1**

**CURB RAMPS**
**TYPE 4A AND 4A1**

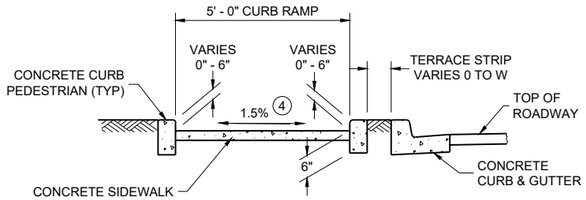
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION




**PLAN VIEW**
**CURB RAMP TYPE 4B**

| RADIUS (AT CURB FACE) | W = 3' - 0" | | W = 4' - 0" | | W = 5' - 0" | | W = 6' - 0" | | W = 7' - 0" | | W = 8' - 0" | | W = 9' - 0" | | W = 10' - 0" | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | X | Y | X | Y | X | Y | X | Y | X | Y | X | Y | X | Y | X | Y |
| 10 FEET | 2' - 10 ¼" | 0' - 5" | 2' - 1" | 1' - 4 ½" | 1' - 5" | 2' - 1" | 0' - 10" | 2' - 7 ½" | 0' - 3 ¼" | 3' - 0 ¼" | | | | | | |
| 15 FEET | 4' - 6 ¾" | 2' - 1 ¾" | 3' - 9" | 3' - 5 ¾" | 3' - 1 ¼" | 4' - 6" | 2' - 6 ¾" | 5' - 4 ½" | 2' - 1" | 6' - 1" | 1' - 8" | 6' - 8 ½" | 1' - 3 ¼" | 7' - 2 ½" | 0' - 10 ¾" | 7' - 7 ¼" |
| 20 FEET | | | 4' - 11 ½" | 5' - 1 ¾" | 4' - 3 ¼" | 6' - 5 ½" | 3' - 8 ¾" | 7' - 7" | 3' - 3" | 8' - 6 ½" | 2' - 10" | 9' - 4 ½" | 2' - 5 ½" | 10' - 1 ¼" | 2' - 1 ¼" | 10' - 9" |
| 30 FEET | | | | | | | | | 4' - 10 ¾" | 12' - 5 ¾" | 4' - 5 ½" | 13' - 7 ¾" | 4' - 0 ¾" | 14' - 8 ½" | 3' - 8 ½" | 15' - 8 ¼" |
| 40 FEET | | | | | | | | | | | | | | | 4' - 10 ¾" | 19' - 8 ¼" |

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH




**SECTION C - C FOR TYPE 4B**

## LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)
- * MAXIMUM 2.1% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK
- ++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB RAMP ACCESS AREAS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

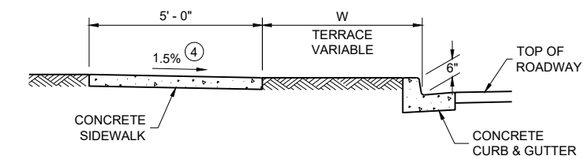
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

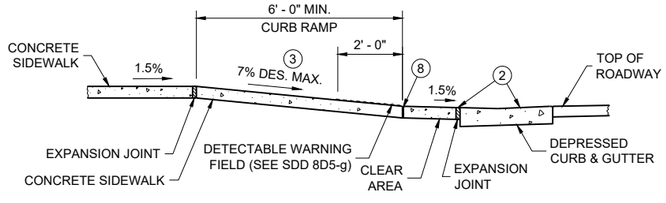
(20) MAXIMUM 1.5% DESIGN MAXIMUM AND 2.1% PROWAG MAXIMUM RUNNING SLOPE ON CLEAR AREA. CROSS SLOPE OF CLEAR AREA SHALL MATCH THE CROSS SLOPE OF THE ADJACENT CROSSWALK.

(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

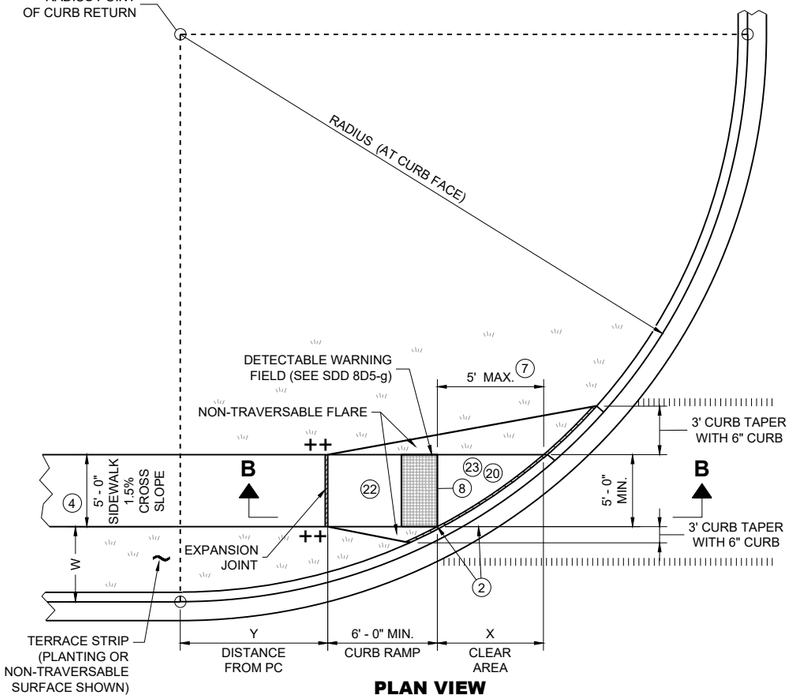
(23) THE CLEAR AREA BETWEEN THE BOTTOM OF RAMP AND BACK OF CURB SHALL BE SLOPED SO THAT WATER DRAINS OUT OF ONE SIDE OR BOTH SIDES OF THE CURB OPENING.



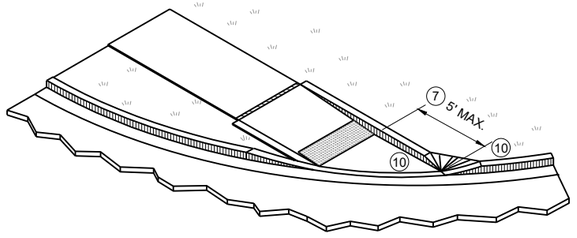

**SECTION A - A FOR TYPE 4B**



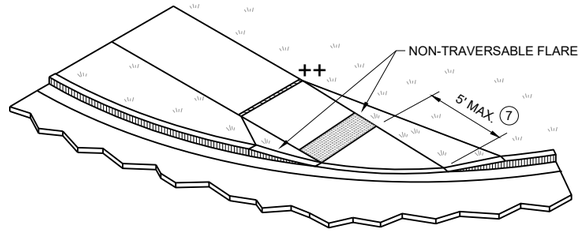

**SECTION B - B FOR TYPE 4B AND TYPE 4B1**




**PLAN VIEW**
**CURB RAMP TYPE 4B1**




**ISOMETRIC VIEW FOR TYPE 4B**



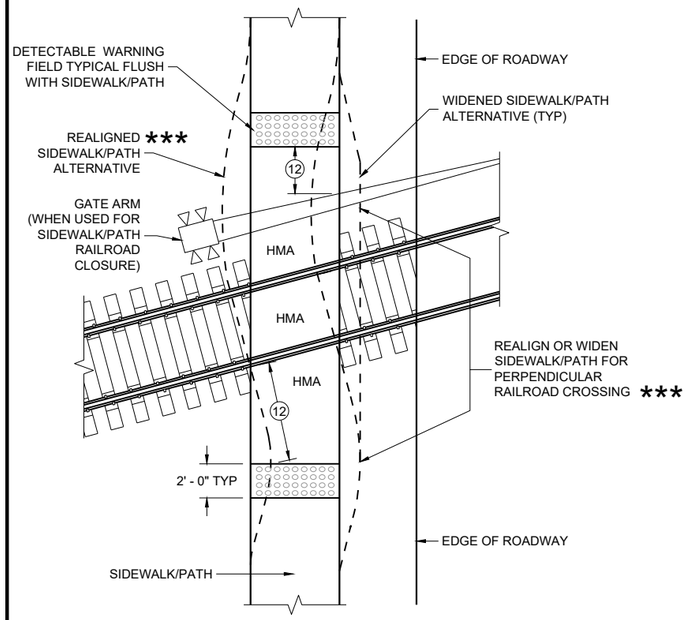

**ISOMETRIC VIEW FOR TYPE 4B1**

**CURB RAMPS**
**TYPE 4B AND 4B1**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

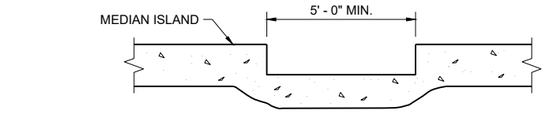
6

SDD 08D05-22d

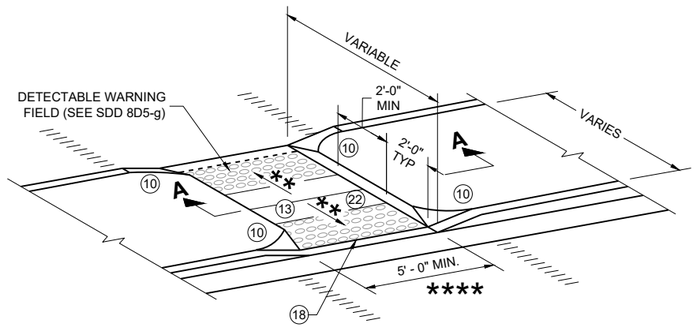



## CURB RAMP TYPE 8

### DETECTABLE WARNINGS FOR SIDEWALKS OR SHARED USE PATHS AT RAILROAD CROSSINGS




### SECTION A - A FOR TYPE 5




## CURB RAMP TYPE 5

### MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB RAMP ACCESS AREAS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A 5 FOOT BY 5 FOOT LANDING. SLOPE PERPENDICULAR TO CURB SHALL BE 2.1% MAXIMUM. SLOPE PARALLEL TO CURB SHALL MATCH THE CURB AND GUTTER LONGITUDINAL SLOPE.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

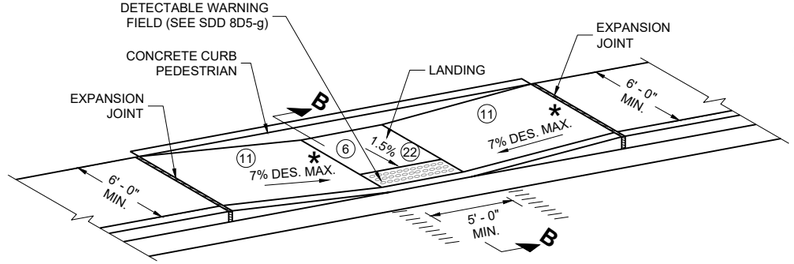
(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK/PATH, WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD TRACK IS 15 FEET MAXIMUM AND 12 FEET MINIMUM, 15 FEET TYPICAL FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

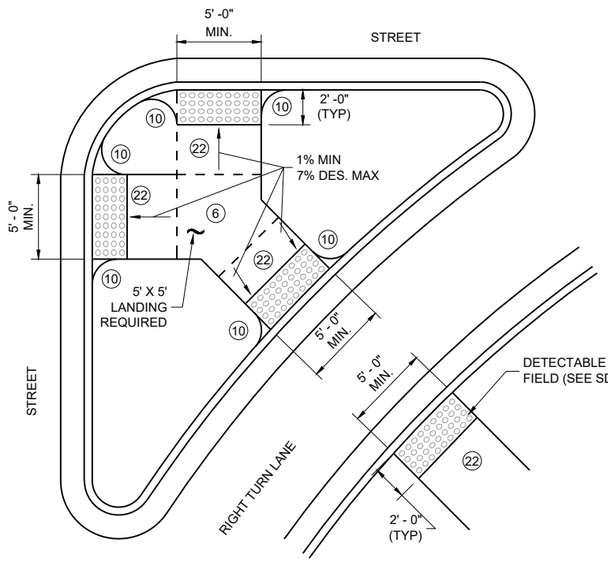
(18) WHEN THE DISTANCE BETWEEN THE BACK OF CURBS IS LESS THAN 6 FEET BUT THE FACE OF CURB TO FACE OF CURB DISTANCE IS 6 FEET OR GREATER THEN THE DETECTABLE WARNING FIELDS MAY BE MOVED SO THAT THE EDGE OF THE WARNING FIELD IS PLACED AT THE GUTTER FLOWLINE. MAINTAIN A MINIMUM OF TWO FEET BETWEEN DETECTABLE WARNING FIELD PANELS.

(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.




## CURB RAMP TYPE 7A

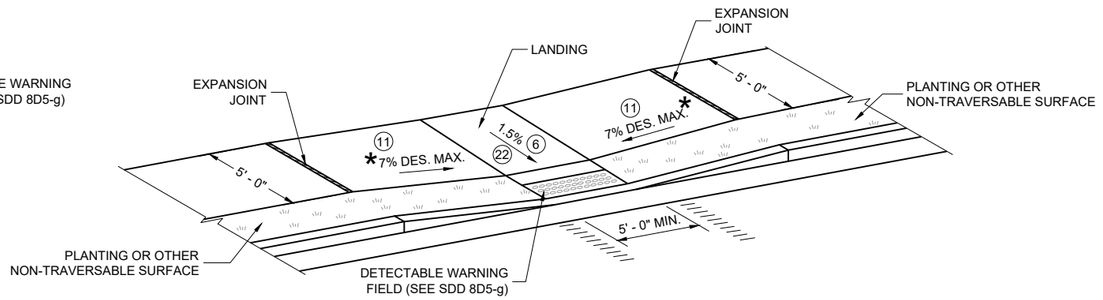
### FOR INTERSECTIONS AND MID BLOCK CROSSINGS




## CURB RAMP TYPE 6

### DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS

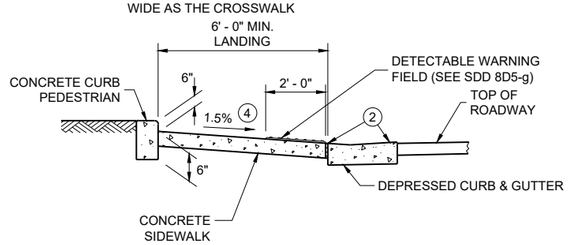



## CURB RAMP TYPE 7B

### FOR INTERSECTIONS AND MID BLOCK CROSSINGS

## LEGEND

| | |
|---|---|
| ═══ | ½" EXPANSION JOINT SIDEWALK |
| – – – – | CONTRACTION JOINT FIELD LOCATED |
| ıı ıı ıı ıı | PAVEMENT MARKING CROSSWALK (WHITE) |
| * | MAXIMUM 8.3% |
| ** | 1% MINIMUM (PROVIDE DRAINAGE) |
| *** | DETAILS TO BE DETERMINED BY ENGINEER |
| **** | FOR SHARED USE PATHS, WIDTH MUST BE AS WIDE AS THE CROSSWALK |




### SECTION B - B FOR TYPE 7A

**CURB RAMPS**
**TYPE 5, 6, 7A, 7B & 8**

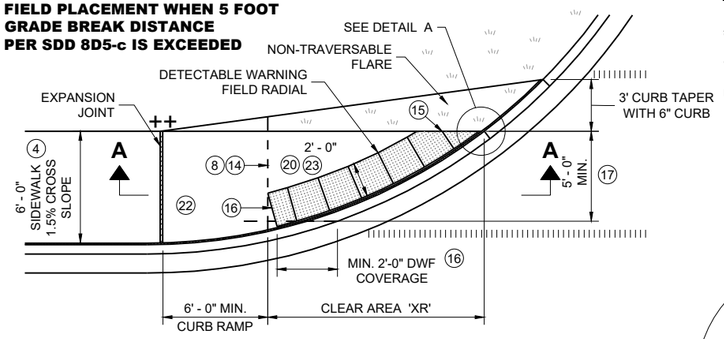
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION




6

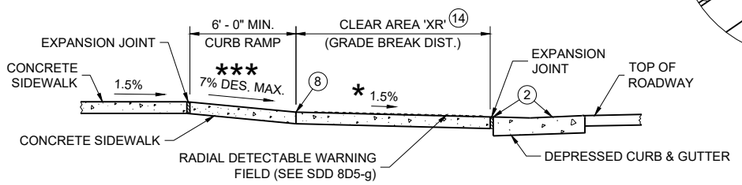
SDD 08D05-22e

**RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED**




**PLAN VIEW**

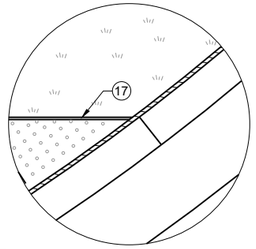
## CURB RAMP TYPE 4A1
## (GRADE BREAK DISTANCE GREATER THAN 5 FEET)




**SECTION A - A FOR TYPE 4A1**

## LEGEND

| | |
|---|---|
| ═══ | ½" EXPANSION JOINT SIDEWALK |
| – – – – | CONTRACTION JOINT SIDEWALK |
| ıı ıı ıı ıı | PAVEMENT MARKING CROSSWALK (WHITE) |
| ** | WIDTH SHOWN ELSEWHERE IN THE PLANS |
| *** | MAXIMUM 8.3% |
| ++ | CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE |




**DETAIL A**

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB RAMP ACCESS AREAS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A 5 FOOT BY 5 FOOT LANDING. SLOPE PERPENDICULAR TO CURB SHALL BE 2.1% MAXIMUM. SLOPE PARALLEL TO CURB SHALL MATCH THE CURB AND GUTTER LONGITUDINAL SLOPE.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

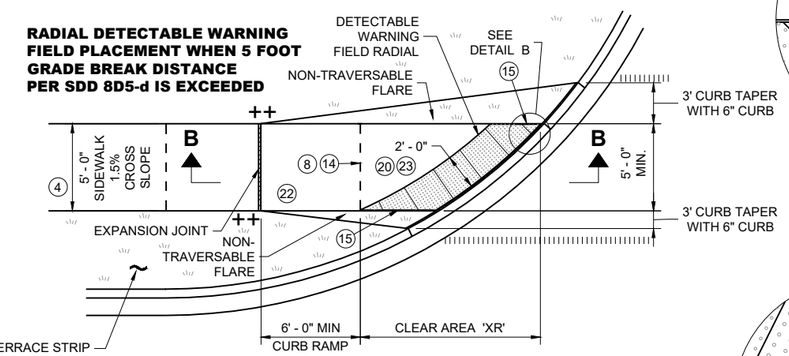
(19) WHERE A LANDING SERVES TWO CURB RAMPS, THE LANDING SLOPE SHALL NOT EXCEED THE CROSS SLOPE AT THE BOTTOM OF THE RAMP OR WITHIN THE CROSSWALK PARALLEL TO THE DIRECTION OF TRAVEL.

(20) MAXIMUM 1.5% DESIGN MAXIMUM AND 2.1% PROWAG MAXIMUM RUNNING SLOPE ON CLEAR AREA. CROSS SLOPE OF CLEAR AREA SHALL MATCH THE CROSS SLOPE OF THE ADJACENT CROSSWALK.

(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

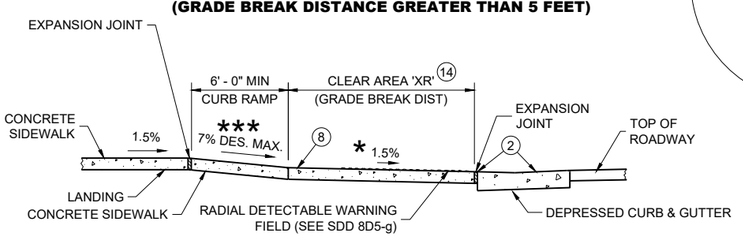
(23) THE CLEAR AREA BETWEEN THE BOTTOM OF RAMP AND BACK OF CURB SHALL BE SLOPED SO THAT WATER DRAINS OUT OF ONE SIDE OR BOTH SIDES OF THE CURB OPENING.

**RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED**

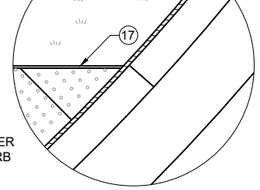



**PLAN VIEW**

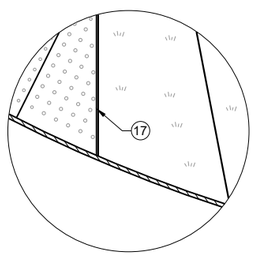
## CURB RAMP TYPE 4B1
**(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**




**SECTION B - B FOR TYPE 4B1**

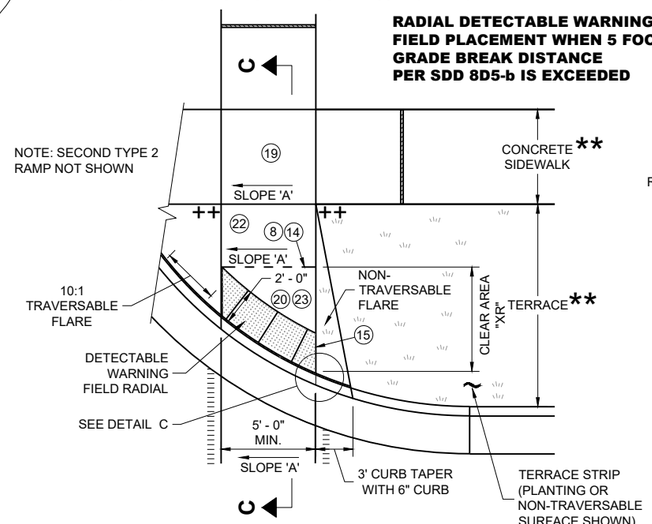



**DETAIL B**



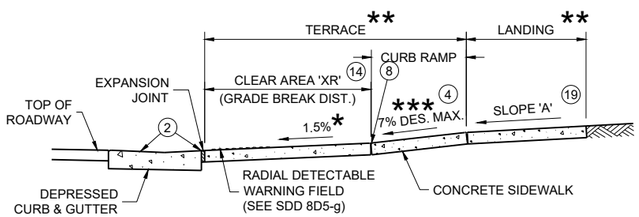

**DETAIL C**

**RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED**




**PLAN VIEW**

## CURB RAMP TYPE 2
**(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**
**(ON LINE WITH SIDEWALK)**




**SECTION C - C FOR TYPE 2**

**CURB RAMPS**
**RADIAL DETECTABLE WARNING**

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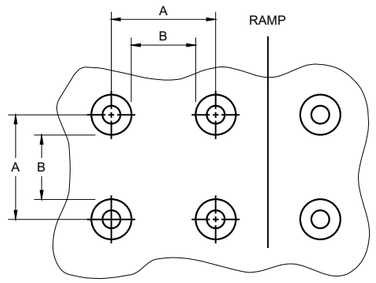
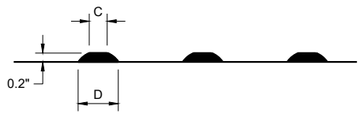
| | MIN. | MAX. |
|---|---|---|
| **A** | 1.6" | 2.4" |
| **B** | 0.65" | 1.5" |
| **C** | * | * |
| **D** | 0.9" | 1.4" |

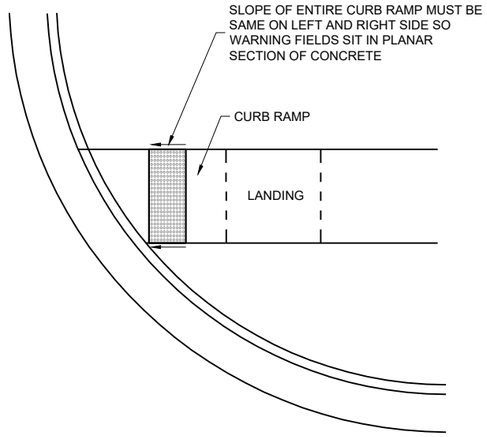
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.




**PLAN VIEW**




**ELEVATION VIEW**




**DETECTABLE WARNING FIELD**
**PLANAR INSTALLATION**

## GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

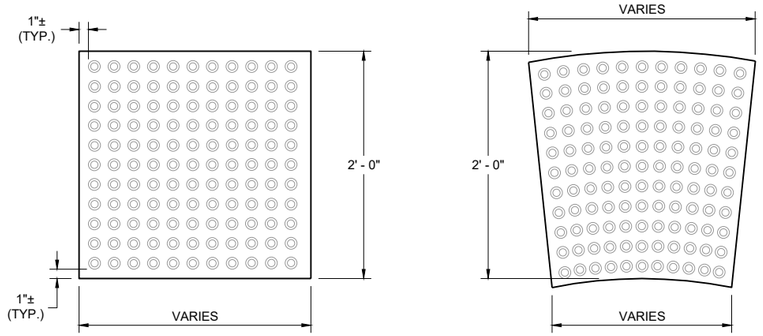
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

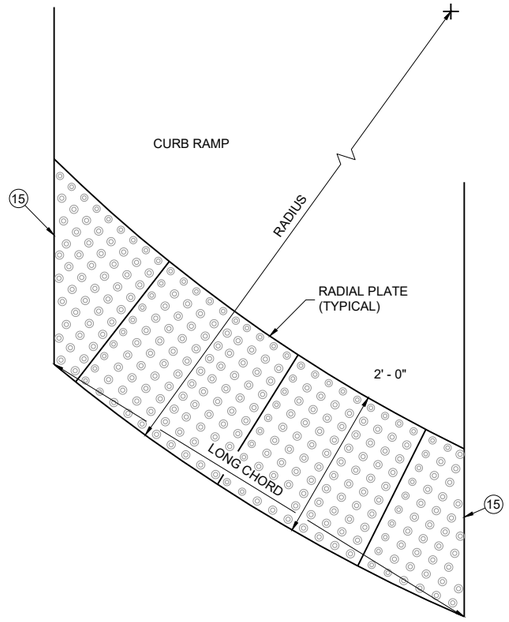
## TRUNCATED DOMES
### DETECTABLE WARNING PATTERN DETAIL



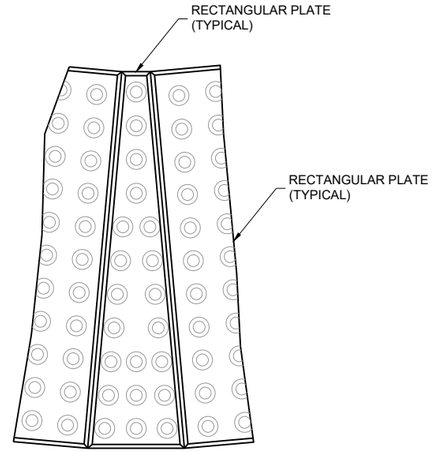

**RECTANGULAR PLATES**

**RADIAL PLATES**

**PLAN VIEW**
**DETECTABLE WARNING FIELDS (TYPICAL)**




**PLAN VIEW**
**RADIAL DETECTABLE WARNING FIELD ATTRIBUTES**




**PLAN VIEW**
**RADIAL WEDGE PLATE CONNECTION DETAIL**

**CURB RAMPS**
**RECTANGULAR AND RADIAL**
**DETECTABLE WARNING PLATES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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February 2025 — DATE
/S/ Rodney Taylor — <position>

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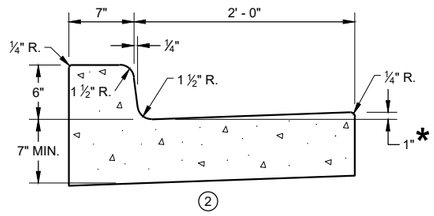
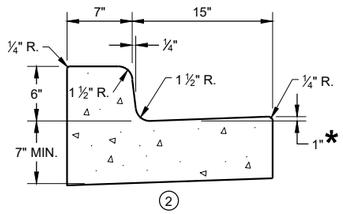
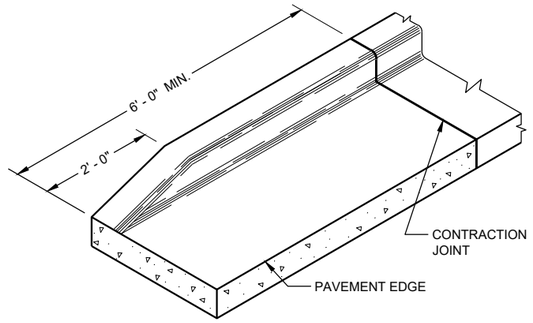



## CONCRETE CURB AND GUTTER 31" ①

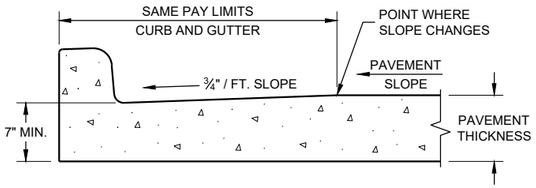
*TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



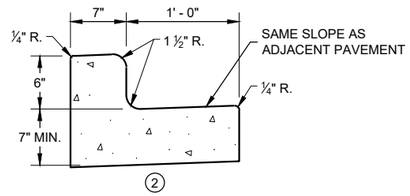

## CONCRETE CURB AND GUTTER 22" ①



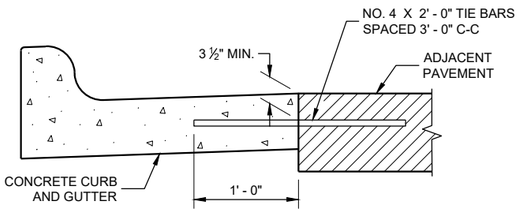

## END SECTIONCURB AND GUTTER



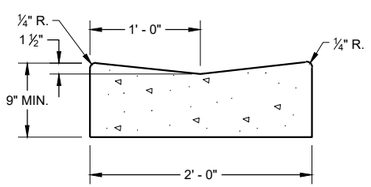

## PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER



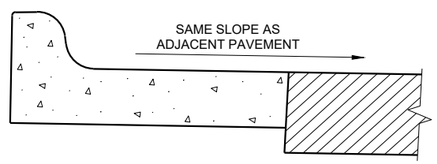

## CONCRETE CURB AND GUTTER 19" ①




## TYPICAL TIE BAR LOCATION ①




## CONCRETE GUTTER 24" ①




## HIGH SIDE SECTION ③

(TYPICAL FOR ALL CURB & GUTTER TYPES)

## GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

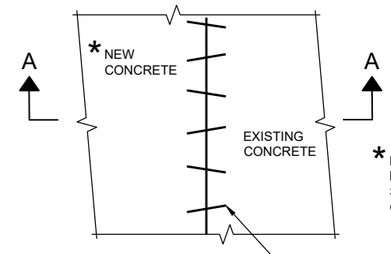
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUITED FOR CURB AND GUTTER 31", 22", 19" AND CONCRETE GUTTER 24".

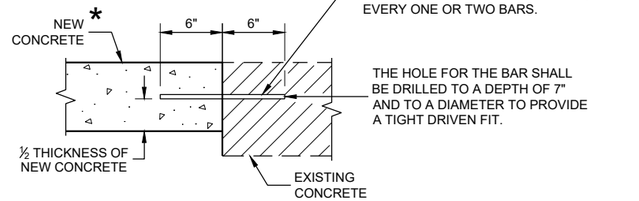
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MINIMUM GUTTER THICKNESS IS MAINTAINED.

③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLANS




## PLAN VIEW

* EXISTING AND NEW CONCRETE MAY BE CURB AND GUTTER, SURFACE DRAINS, PAVEMENT OR OTHER CONCRETE STRUCTURE.




## SECTION A - A

## PAVEMENT TIES

**CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES**

**(For Optional use in Milwaukee Co. Only)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
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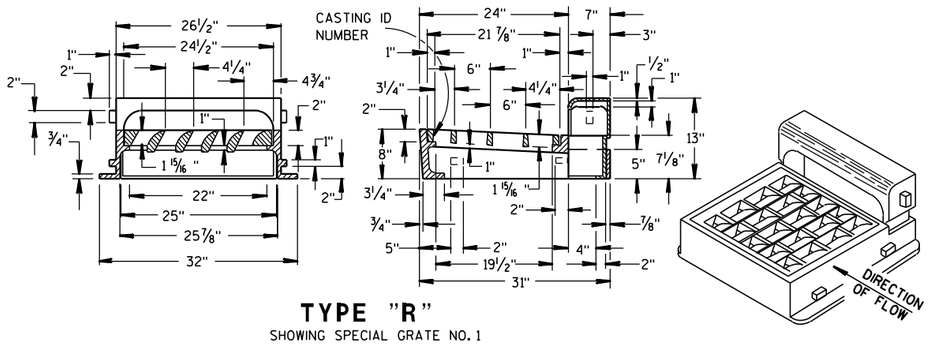
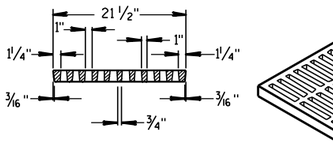
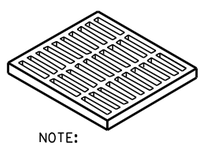
## INLET COVERS



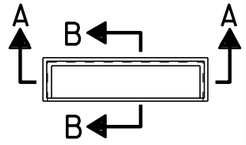

### TYPE "R"

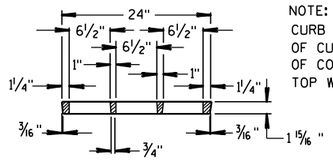
SHOWING SPECIAL GRATE NO. 1
(TO BE NOTED AS R-1 IN DRAINAGE TABLE)



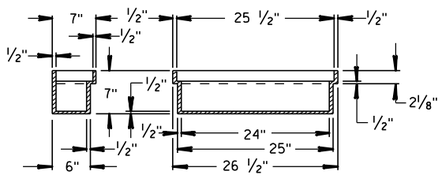


(APPROX. WEIGHT - 510 LBS.)
FRAME..... 245 LBS.
CURB..... 120 LBS.
GRATE..... 145 LBS.





NOTE:
CURB PLUG USED IN PLACE OF CURB BOX IN ABSENCE OF CONC. CURB. FILL TO TOP WITH CONCRETE.



### GRATE FOR TYPE "R" INLET COVER

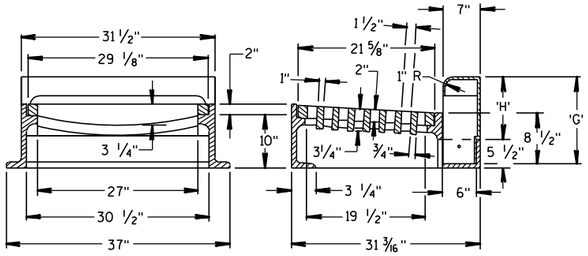
(GRATE..... 150 LBS.)
(TO BE USED UNLESS OTHERWISE NOTED IN DRAINAGE TABLE)

SECTION B-B SECTION A-A

### SPECIAL CURB PLUG "P"

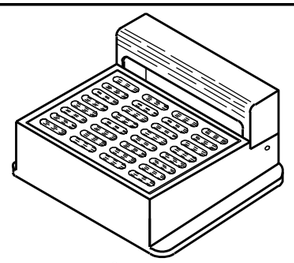
(CURB PLUG..... 85 LBS.)
(TO BE NOTED AS R-P IN DRAINAGE TABLE)

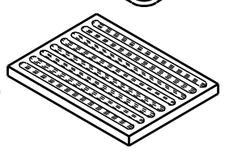
'H' = 9" FOR 6" CURB
'H' = 11" FOR 8" CURB
'G' = 13 3/4" FOR 6" CURB
'G' = 15 3/4" FOR 8" CURB



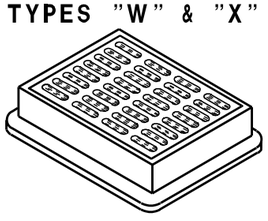
### TYPE "W"

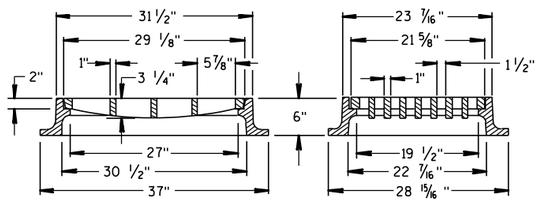
(APPROX. WEIGHT - 670 LBS.)
FRAME..... 350 LBS.
CURB BOX..... 135 LBS.
GRATE..... 185 LBS.





ALTERNATE GRATE
(FOR EXPRESSWAY RAMPS)
TYPES "W" & "X"

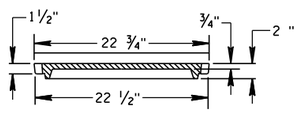




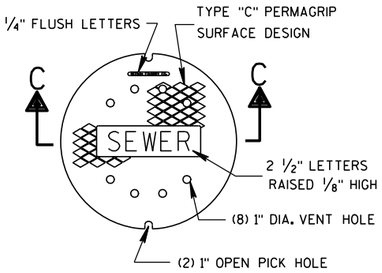
### TYPE "X"

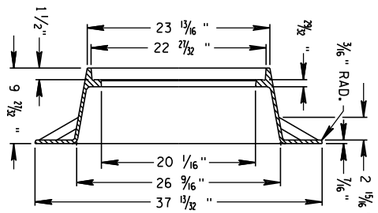
(APPROX. WEIGHT - 470 LBS.)

## MANHOLE COVER



SECTION C-C



### TYPE "Q"

(APPROX. WEIGHT - 290 LBS.)

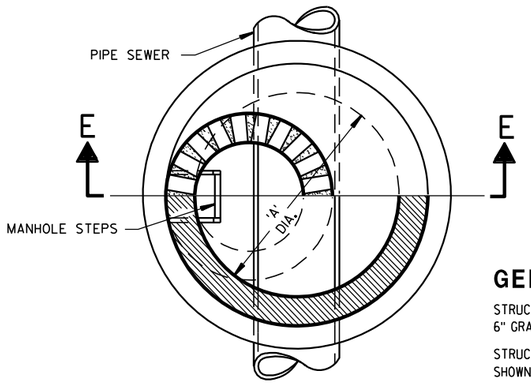
### TABLE OF DIMENSIONS

| TYPE | 'A' | 'B' | 'C' |
|---|---|---|---|
| 11 | 3'-6" | 2'-8" | 12" - 36"* |
| 12 | 4'-0" | 3'-8" | 12" - 42"** |
| 13 | 5'-0" | 5'-8" | 42" - 48" |
| 14 | 6'-0" | 7'-8" | 54" - 60" |

* 12" - 21" FOR PRECAST MANHOLES
** 12" - 24" FOR PRECAST MANHOLES

THE FIRST STEP SHALL BE PLACED 16" ABOVE THE BENCH.

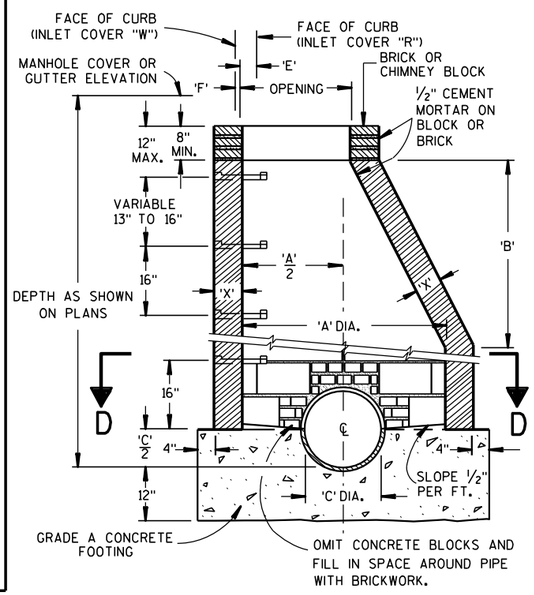
## MANHOLE



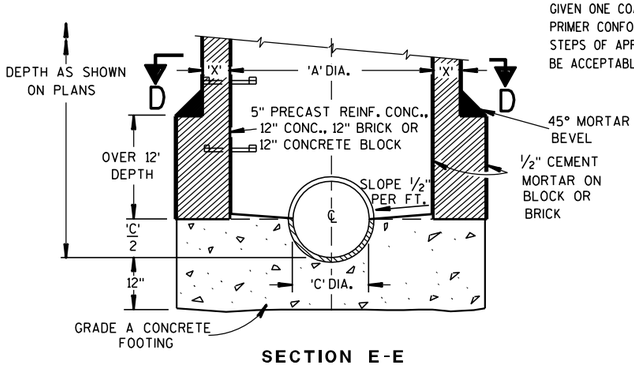

HALF SECTION D-D

### TABLE OF OPENING DIMENSIONS

| TYPE | COVER DESCRIPTION | OPENING | 'E' | 'F' |
|---|---|---|---|---|
| "O" | ROUND | 2'-2" DIA. | — | — |
| "W" | CURB BOX | 1'-8" X 2'-6" | — | 1" |
| "X" | INLET | 1'-10" X 2'-6" | — | — |
| "R" | CURB BOX | 2'-0" X 2'-1" | 4" | — |




SECTION E-E




SECTION E-E

TYPES 11, 12, 13 & 14

### GENERAL NOTES

STRUCTURE WALL THICKNESS 'X' TO BE 8" BRICK, 6" CONCRETE BLOCK, 6" GRADE A CONCRETE OR 5" PRECAST REINFORCED CONCRETE.

STRUCTURE FOOTINGS ARE TO BE GRADE A CONCRETE OF THE THICKNESS SHOWN IN THE DETAIL OR 5" PRECAST REINFORCED CONCRETE.

REINFORCEMENT FOR 5" PRECAST REINFORCED CONCRETE SHALL BE 6" X 6" W16 X W16 WELDED SREEL WIRE FABRIC AND SHALL BE EMBEDDED 2" CLEAR.

PRECAST INLET UNITS AND BASES SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

PRECAST CONCRETE FLAT SLAB TOPS MAY BE USED ON THE STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6" IN DEPTH, WHICH MEETS THE REQUIREMENTS FOR GRANULAR BACK-FILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

SET FRAME ELEVATION 0.03 FT. LOWER THAN ELEVATION INDICATED ON THE PLANS.

THE CONTRACTOR MAY FORM AND POUR MONOLITHIC CONCRETE INVERT PROVIDED THE PIPE ENDS ARE EXTENDED INTO THE M.H. AND NOT TERMINATED WITHIN THE M.H. WALLS.

MANHOLE STEPS

STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH; 16 INCH C-C MAX. SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM WALL EMBEDMENT OF 3 INCHES IN PRECAST MANHOLE AND 6 INCHES IN 8 INCH BRICK OR 6 INCH BLOCK MANHOLE; TREAD OF STEP SHALL HAVE A NON-SKID SURFACE AND BE FLANKED BY CLEATS, WITH A MINIMUM OF 10 INCHES CLEAR BETWEEN CLEATS, TO PREVENT FOOT SLIPPING OFF THE EDGE CLEATS SHALL BE A MINIMUM OF 3/4 INCH HIGH BY 3/4 INCH WIDE HAVING A MINIMUM THICKNESS OF 3/8 INCH. STEPS SHALL BE CAPABLE OF SUPPORTING A CONCENTRATED LOAD OF 300 LBS. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 0.75 INCH. ALUMINUM SURFACES TO BE EMBEDDED IN CONCRETE SHALL BE GIVEN ONE COAT OF SUITABLE QUALITY PAINT, SUCH AS ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645 OR EQUIVALENT. STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCING BAR WILL BE ACCEPTABLE.

## MANHOLES, MANHOLE & INLET COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

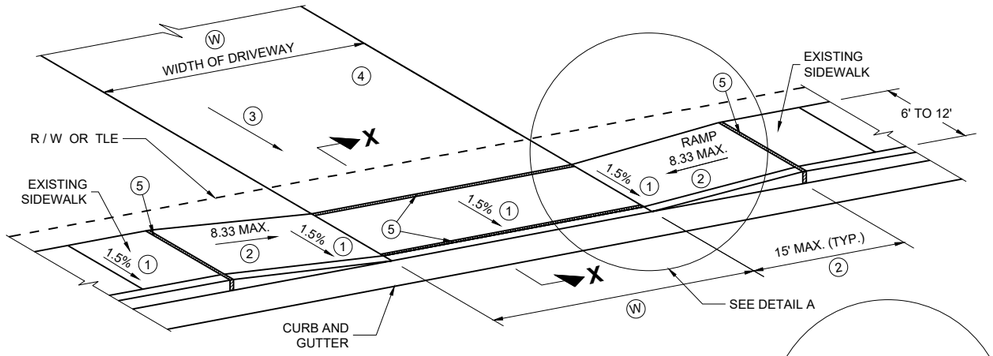
APPROVED
4/12/2011 — DATE
/S/ Jerry H. Zogg — ROADSIDE STANDARDS ENGINEER
606
FHWA

S.D.D. 8 D 17-6

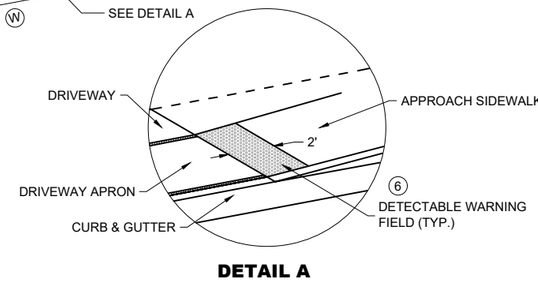
S.D.D. 8 D 17-6

6

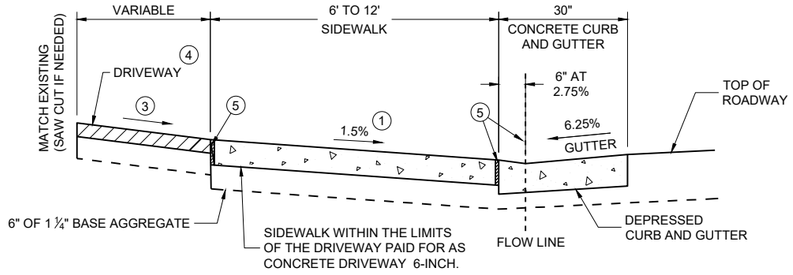
6



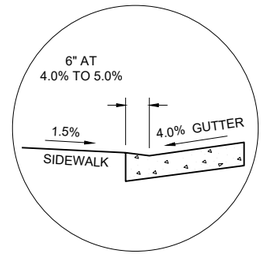

**TYPE X**
**SIDEWALK ABUTS CURB AND GUTTER**
**TERRACE VARIES 0 TO 3 FEET**




**DETAIL A**




**SECTION X - X**



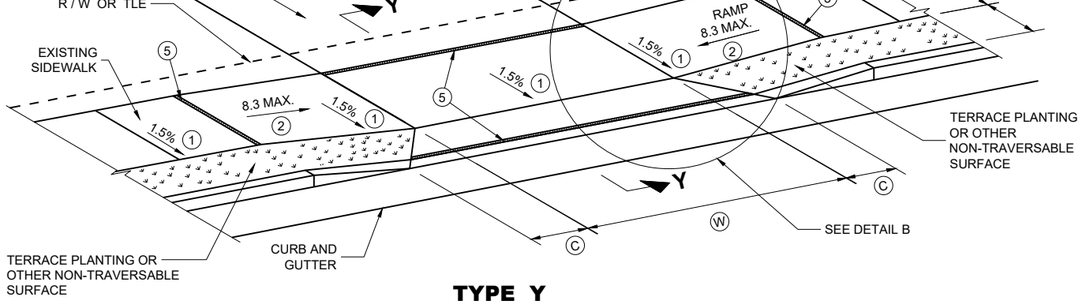

**SECTION X - X**
**4% GUTTER SLOPE**

Ⓦ: 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

16' MIN. - 35' MAX. COMMERCIAL (CE)

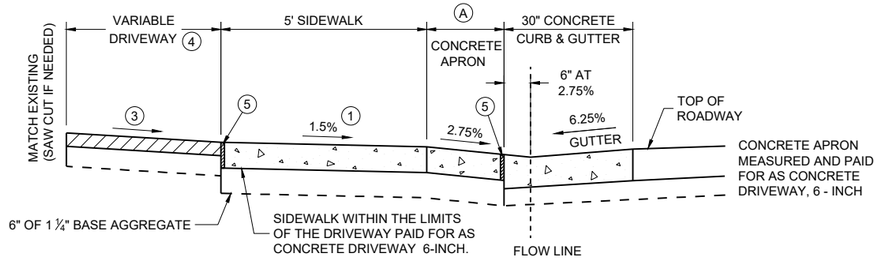
**TABLE Y**

| Ⓐ FEET | Ⓒ FEET |
|---|---|
| 3.5' | 2.0' |
| 4.5' | 3.0' |
| 5.5' | 3.5' |

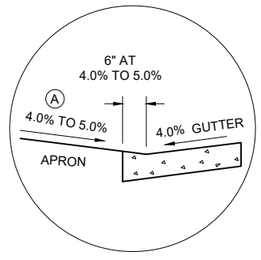



**TYPE Y**
**SIDEWALK WITH NARROWER TERRACE**
**TERRACE VARIES 4 TO 6 FEET**

Ⓐ:MEASURE FROM BACK OF CURB




NOTE: SIDEWALK MY BE DEPRESSED IN DRIVEWAY AREAS




**SECTION Y - Y**
**4% GUTTER SLOPE**

**SECTION Y - Y**

## DRIVEWAY DETAIL WITH CONCRETE CURB AND GUTTER

**(URBAN AND SUBURBAN)**

## GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

Ⓦ IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

(1) CONSTRUCTION TOLERANCE OF 0.5%± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1%.

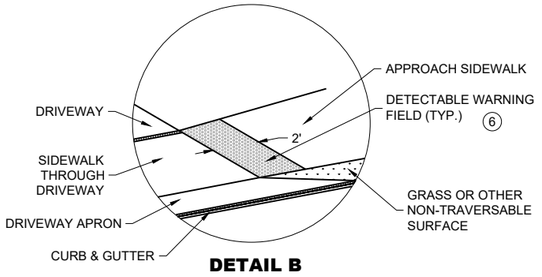
(2) THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(3) DRIVEWAY SLOPES: DESIRABLE MAXIMUM
10.5% UP AWAY FROM SIDEWALK (SAG)
8.5% DOWN AWAY FROM SIDEWALK (CREST)
ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

(4) DRIVEWAY TYPES
* 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
* 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
* 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES.)

(5) 1/2" EXPANSION JOINT FILLER

(6) DETECABLE WARNING FIELDS ARE REQUIRED WHEN A PEDESTRIAN CIRCULATION ROUTE CROSSES A DRIVEWAY THAT IS TRAFFIC SIGNAL, STOP, OR YIELD SIGN CONTROLLED. DETECTABLE WARNING FIELDS TO BE 2 FT DEEP AND EXTEND THE WIDTH OF THE PEDESTRIAN CIRCULATION ROUTE.




**DETAIL B**

**DRIVEWAY AND SIDEWALK RAMPS TYPES X AND Y**

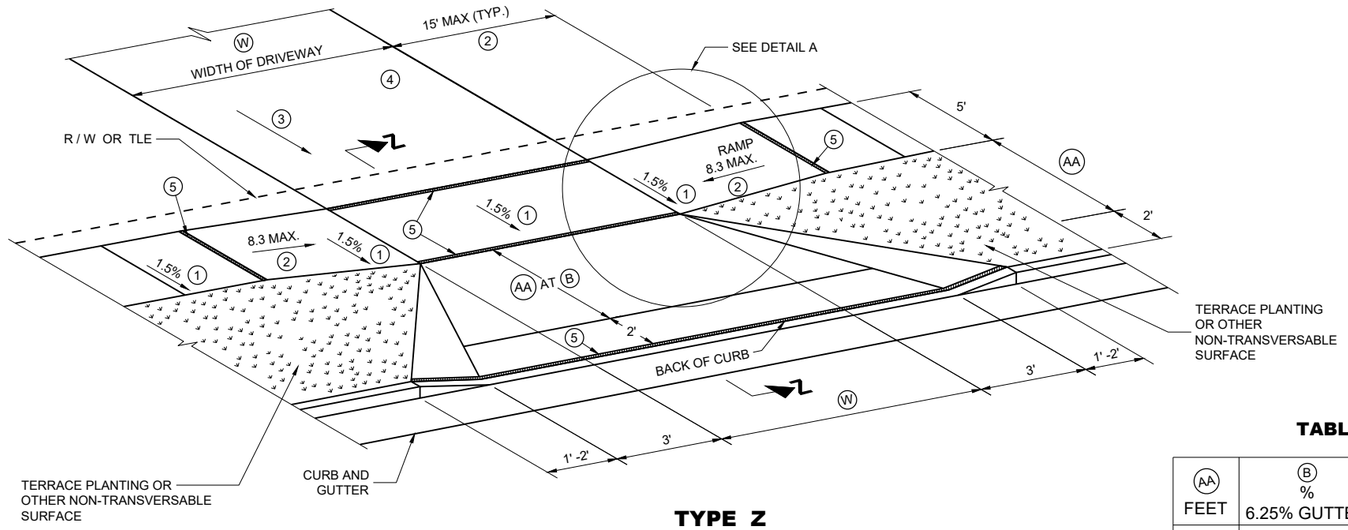
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025 (DATE)
/S/ Rodney Taylor

FHWA




6
SDD 08D18-05




## TYPE Z

### SIDEWALK WITH WIDER TERRACE
### TERRACE VARIES 7 TO 12 FEET

## GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

(W) IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

(1) CONSTRUCTION TOLERANCE OF 0.5%± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1%.

(2) THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY.

(3) DRIVEWAY SLOPES: DESIRABLE MAXIMUM
- 10.5% UP AWAY FROM SIDEWALK (SAG)
- 8.5% DOWN AWAY FROM SIDEWALK (CREST)
- ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

(4) DRIVEWAY TYPES
- * 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE 2-INCH
- * TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE 6-INCH BASE
- * AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES.)

(5) 1/2" EXPANSION JOINT FILLER.

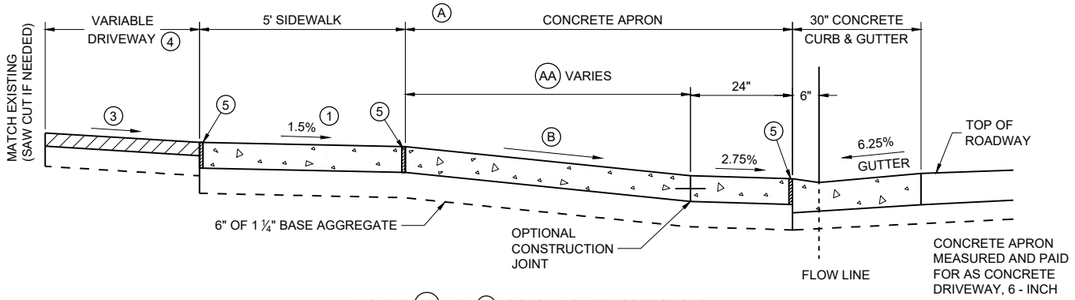
(6) DETECABLE WARNING FIELDS ARE REQUIRED WHEN A PEDESTRIAN CIRCULATION ROUTE CROSSES A DRIVEWAY THAT IS TRAFFIC SIGNAL, STOP, OR YIELD CONTROLLED. DETECTABLE WARNING FIELDS TO BE 2 FT DEEP AND EXTEND THE WIDTH OF THE PEDESTRIAN CIRCULATION ROUTE.

(W): 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

16' MIN. - 35' MAX. COMMERCIAL (CE)

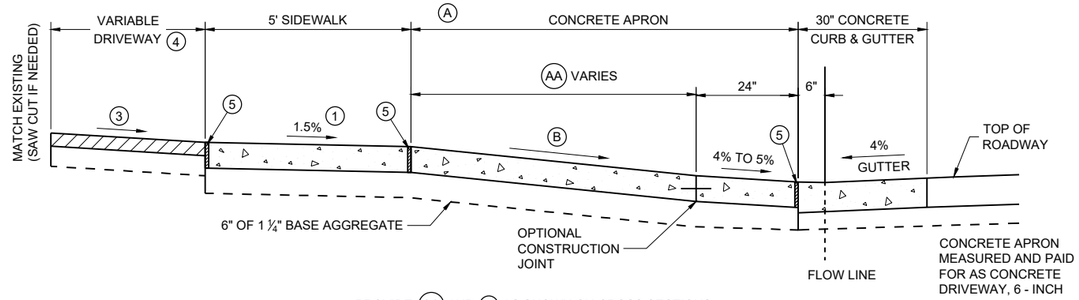
### TABLE Z

| (AA) FEET | (B) % 6.25% GUTTER | (B) % 4% GUTTER |
|---|---|---|
| 4.5' | 11.5% | 9% TO 11.5% |
| 5.5' | 9% TO 11.5% | 8% TO 11.5% |
| 6.5' | 8% TO 11.5% | 6% TO 11.5% |
| 7.5' | 7% TO 11.5% | 6% TO 11.5% |
| 8.5' | 6% TO 11.5% | 5% TO 11.5% |
| 9.5' | 5% TO 11.5% | 4% TO 11.5% |



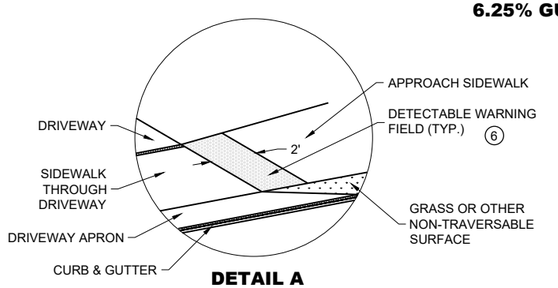

PROVIDE (AA) AND (B) AS SHOWN ON CROSS SECTIONS.

**6.25% GUTTER SLOPE**




PROVIDE (AA) AND (B) AS SHOWN ON CROSS SECTIONS.

**4% GUTTER SLOPE**




**DETAIL A**

NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS FOR (B) VALUES NOT SHOWN IN TABLE Z.

SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY PAID FOR AS CONCRETE DRIVEWAY 6-INCH.

**SECTION Z - Z**

## DRIVEWAY DETAIL WITH CONCRETE CURB AND GUTTER

**(URBAN AND SUBURBAN)**

**DRIVEWAY AND SIDEWALK RAMPS TYPE Z**

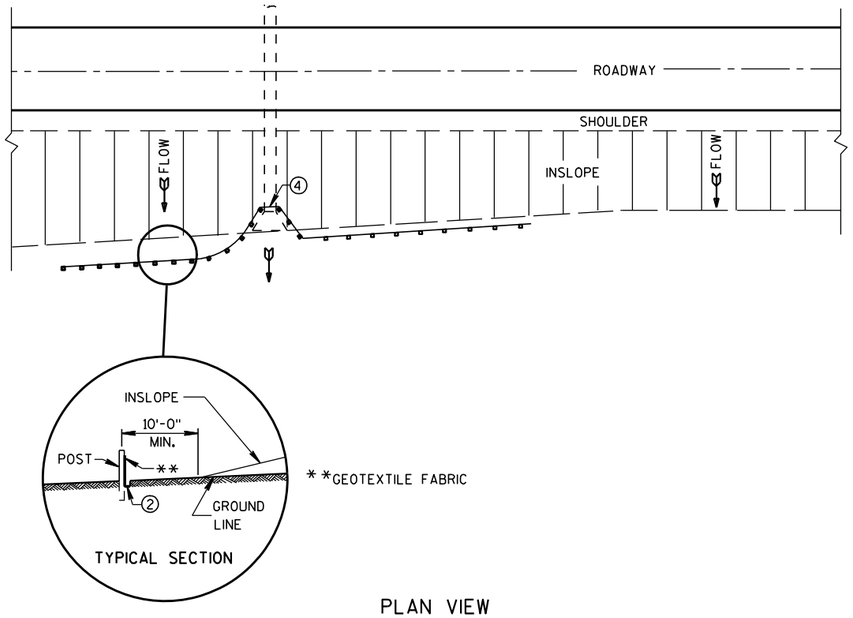
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

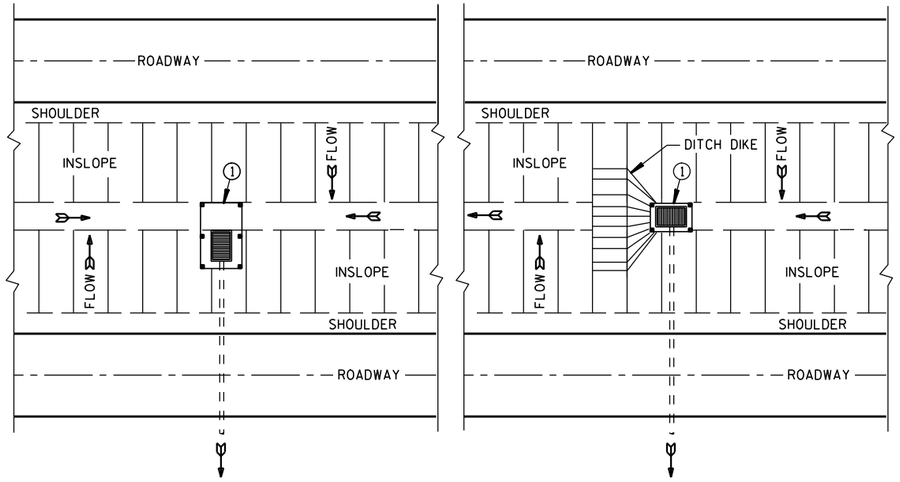



6
SDD 08D19-05




PLAN VIEW

## TYPICAL APPLICATION OF SILT FENCE



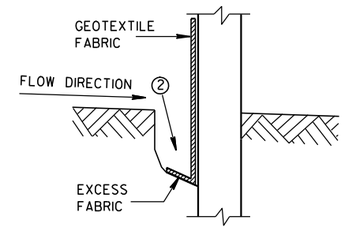

PLAN VIEW

## SILT FENCE AT MEDIAN SURFACE DRAINS

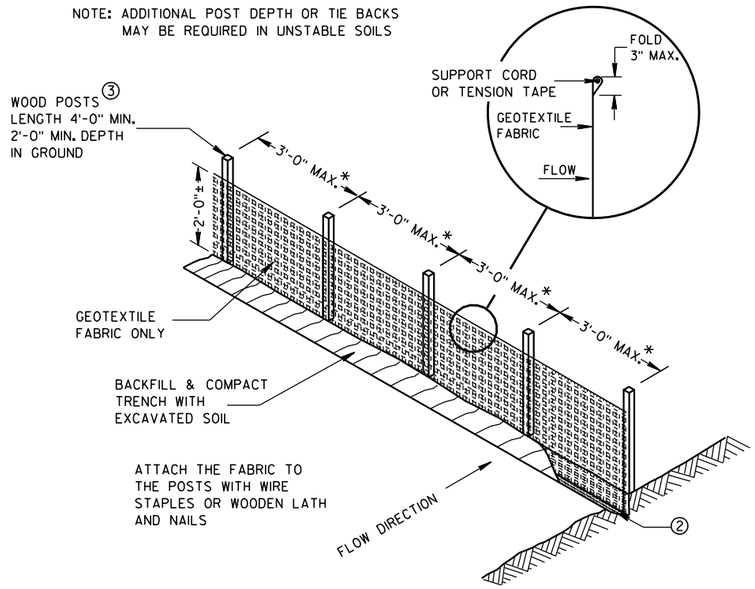
## GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

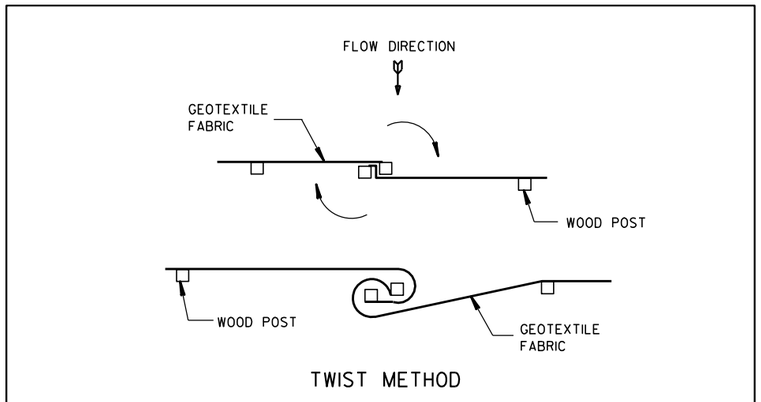
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



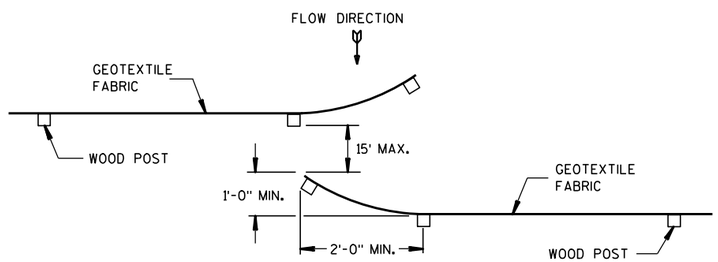

## TRENCH DETAIL




## SILT FENCE

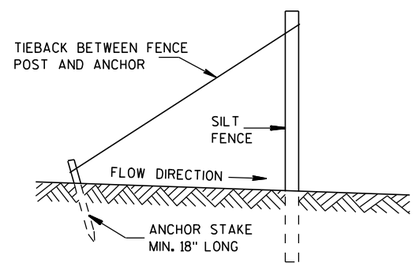



TWIST METHOD




HOOK METHOD

## JOINING TWO LENGTHS OF SILT FENCE 5




## SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

**SILT FENCE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

609

6

S.D.D. 8 E 9-6

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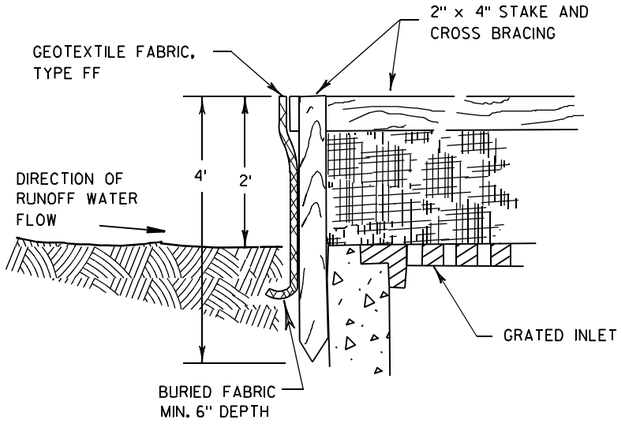
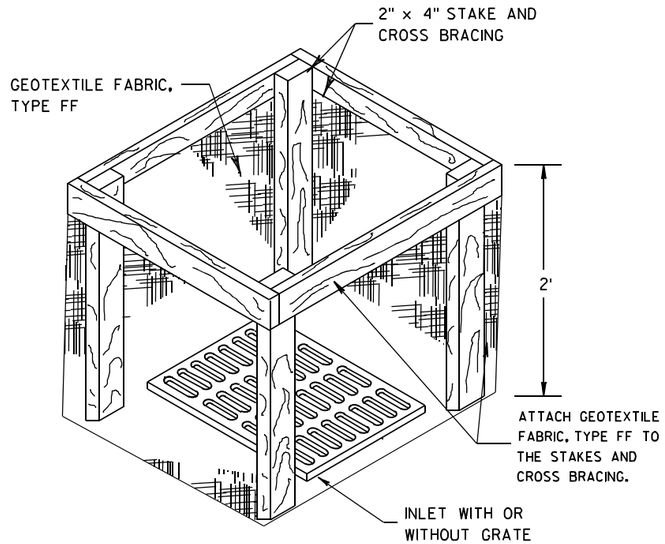
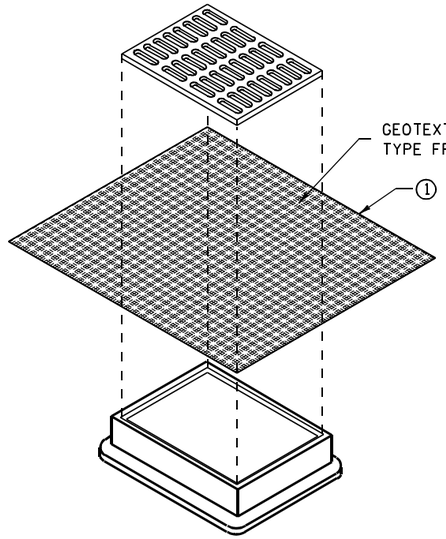
S.D.D. 8 E 9-6



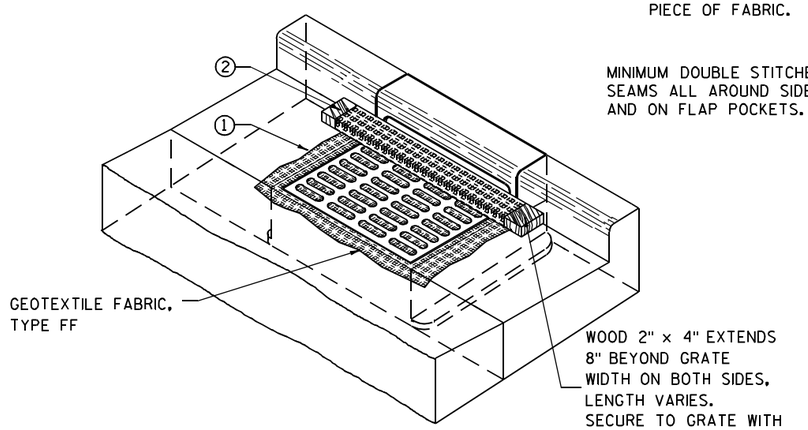




## INLET PROTECTION, TYPE A

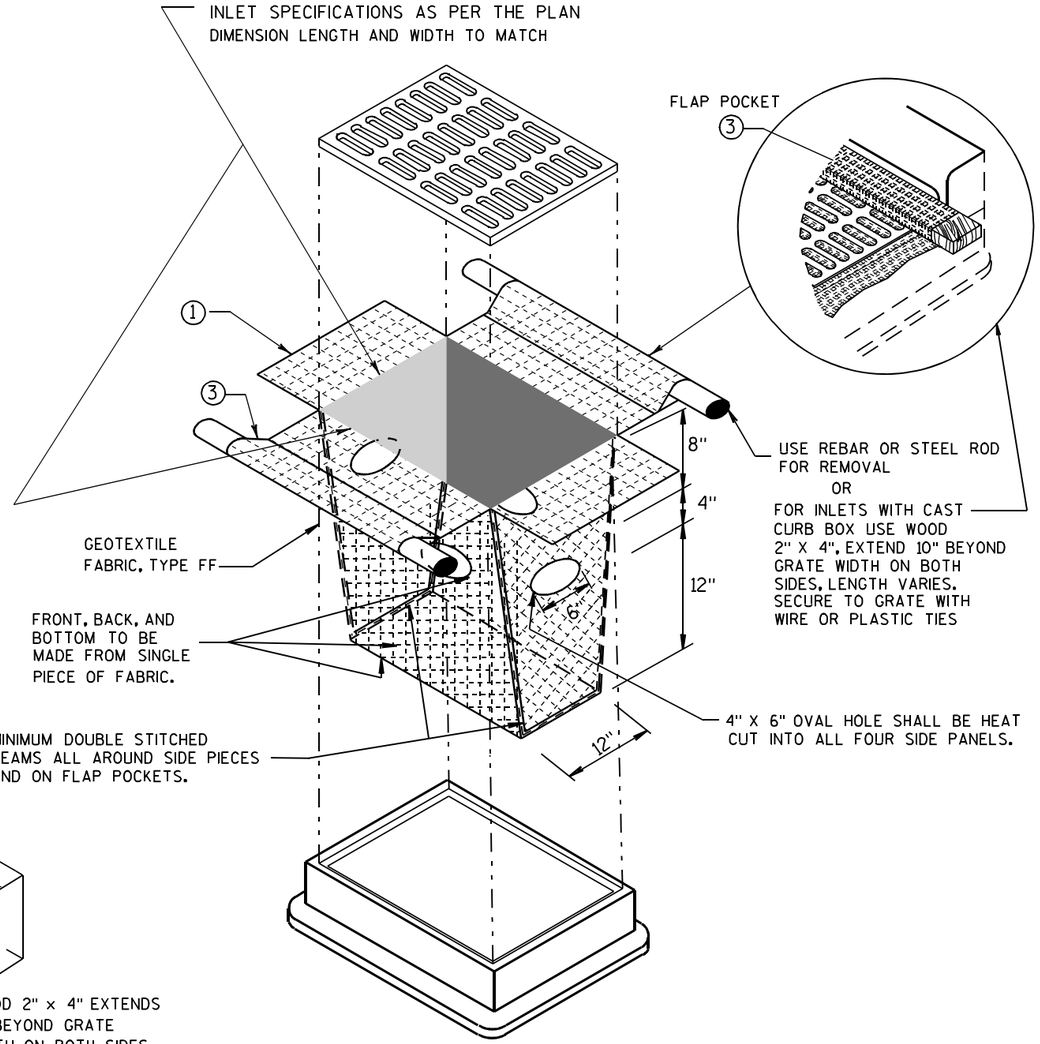



## INLET PROTECTION, TYPE B
## (WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)




## INLET PROTECTION, TYPE C (WITH CURB BOX)




## INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ② )

## GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

## INSTALLATION NOTES

### TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

### TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

**INLET PROTECTION**
**TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

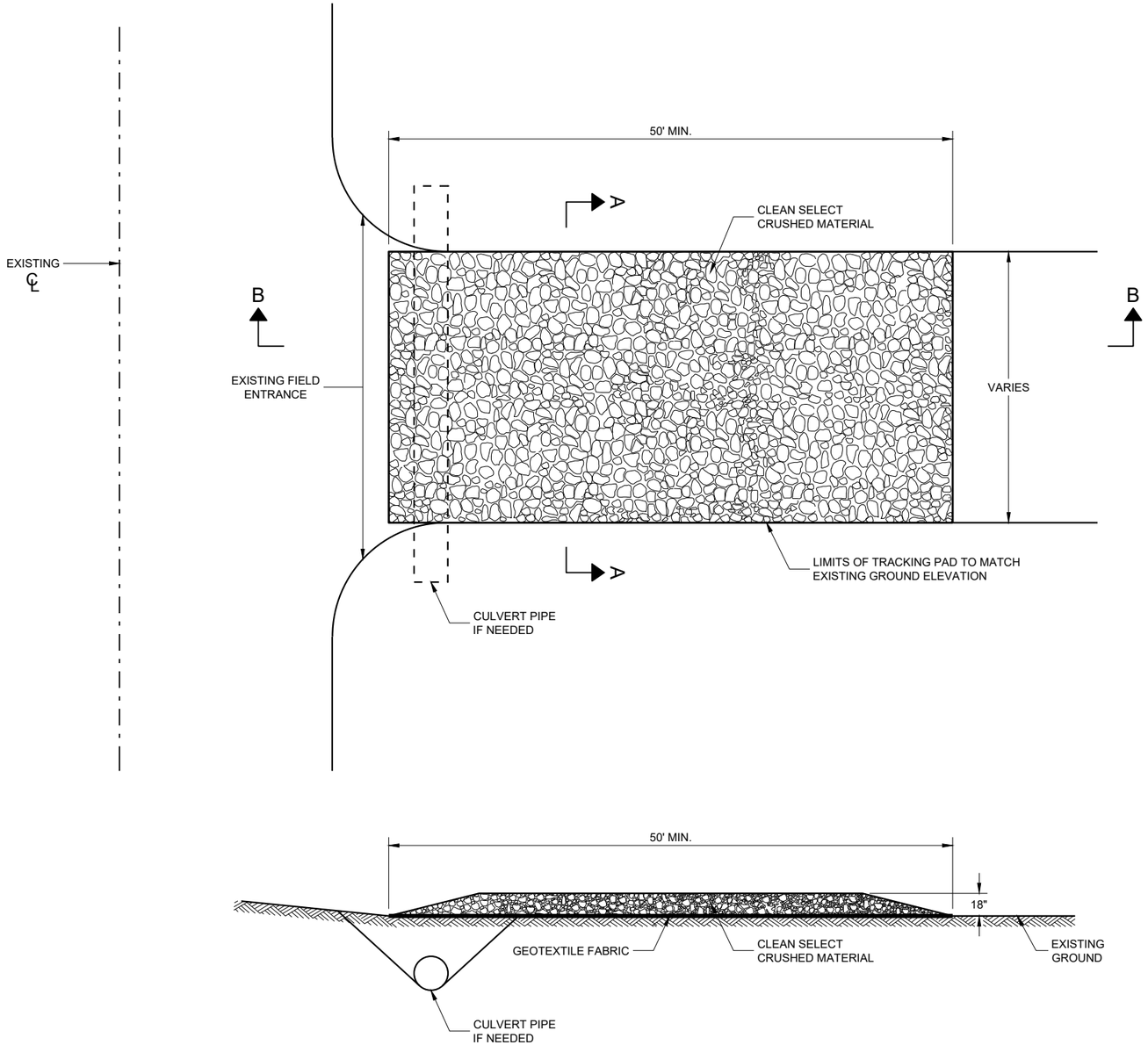


6

S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2







**SECTION B - B**

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

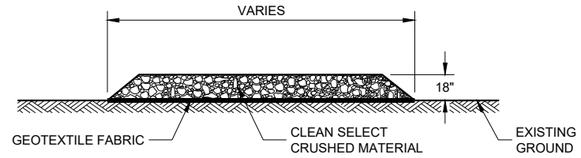
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.




**SECTION A - A**

# TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/24/2011
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVE ENGINEER

FHWA



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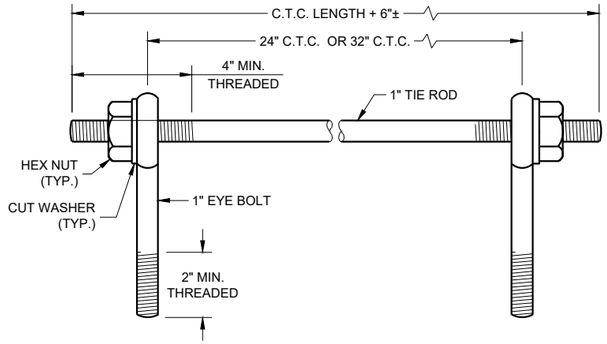
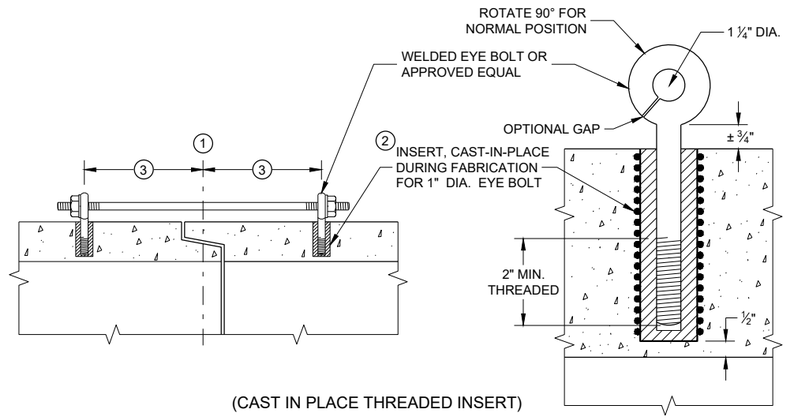
SDD 08E14 - 01




**EYE BOLTS AND TIE ROD**




(CAST IN PLACE THREADED INSERT)

**LONGITUDINAL SECTIONS**

## EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

(1) CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

(2) THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

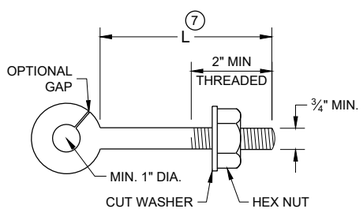
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

(4) BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

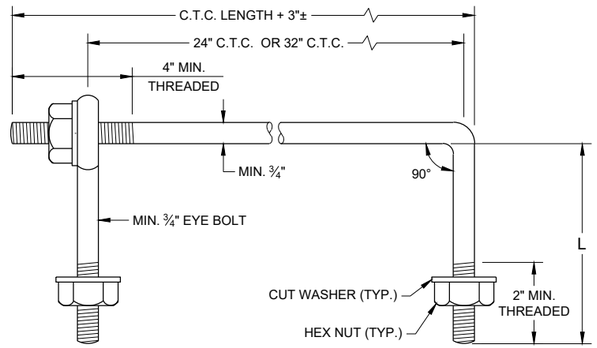
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

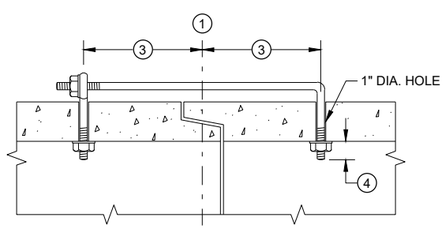



**EYE BOLT** (7)

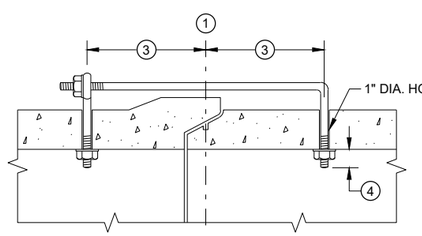
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.




**EYE BOLT AND TIE ROD**




(TONGUE AND GROOVE PIPE)




(MODIFIED BELL PIPE)

**LONGITUDINAL SECTION**

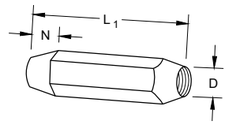
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

## EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

| PIPE DIAMETER | TIE ROD DIAMETER | D | $L_1$ | N |
|---|---|---|---|---|
| 12 - 60 | ⅝ | ⅝ | 5 | ½ |
| 66 - 84 | ¾ | ¾ | 5 | ½ |
| 90 - 144 | 1 | 1 | 7 | 1 7/16 |

DIMENSIONS SHOWN ARE IN INCHES

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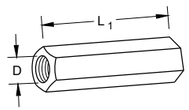
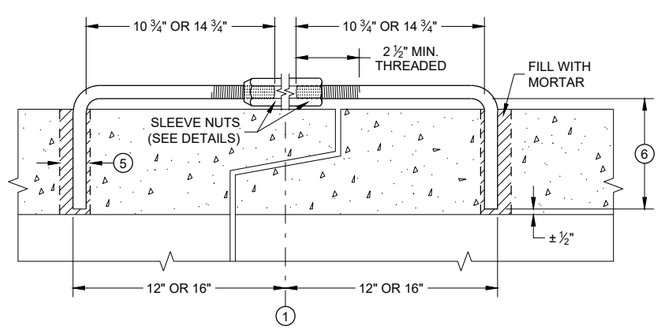



PLAIN

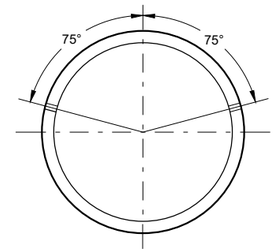
RIGHT AND LEFT THREADS

**SLEEVE NUTS**



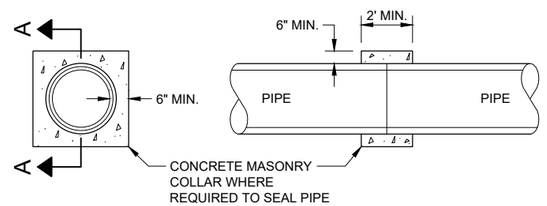

**LONGITUDINAL SECTION**

## ADJUSTABLE TIE ROD (ALTERNATE NO. 3)




PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

**TRANSVERSE SECTION**




**SECTION A - A**

## CONCRETE COLLAR DETAIL

**JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

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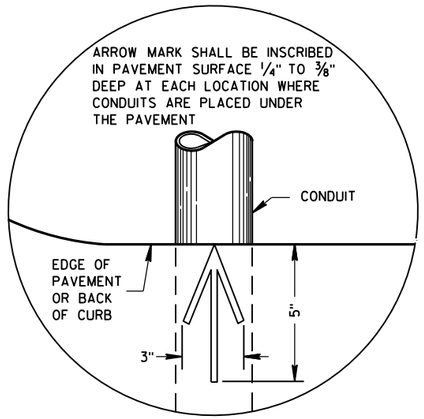
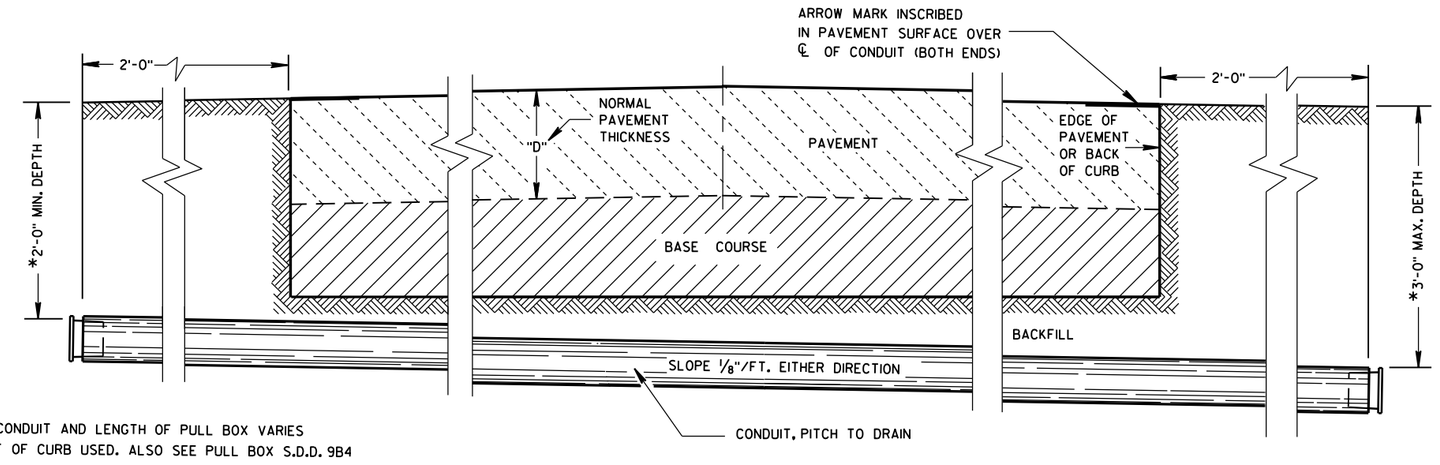
SDD 08F04 - 08




**PLAN VIEW**

## ARROW MARK




*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

**SIDE ELEVATION**

## DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

# CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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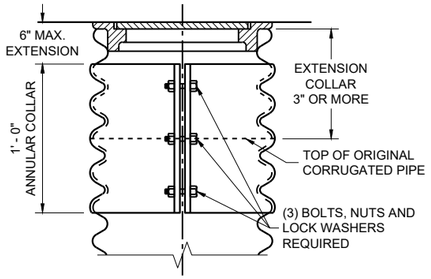
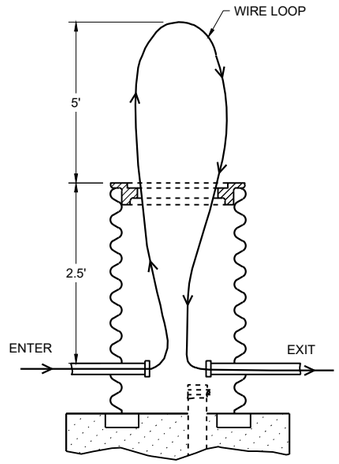
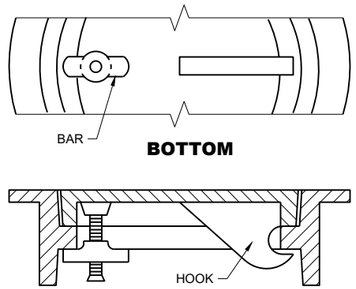
S.D.D. 9 B 2-10




## CORRUGATED PIPE EXTENDER




## MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX




## BOTTOM




## SECTION

## ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

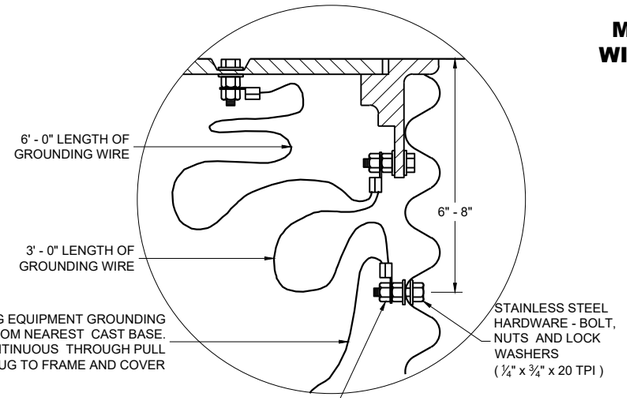
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

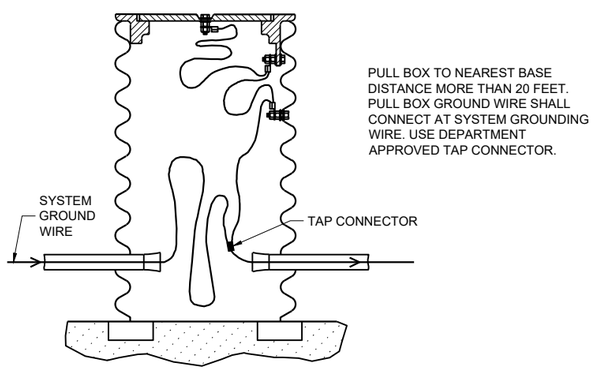
GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

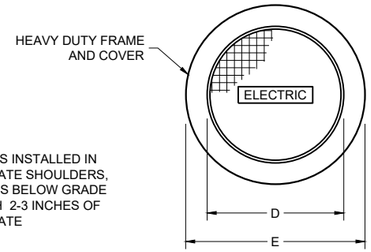
WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



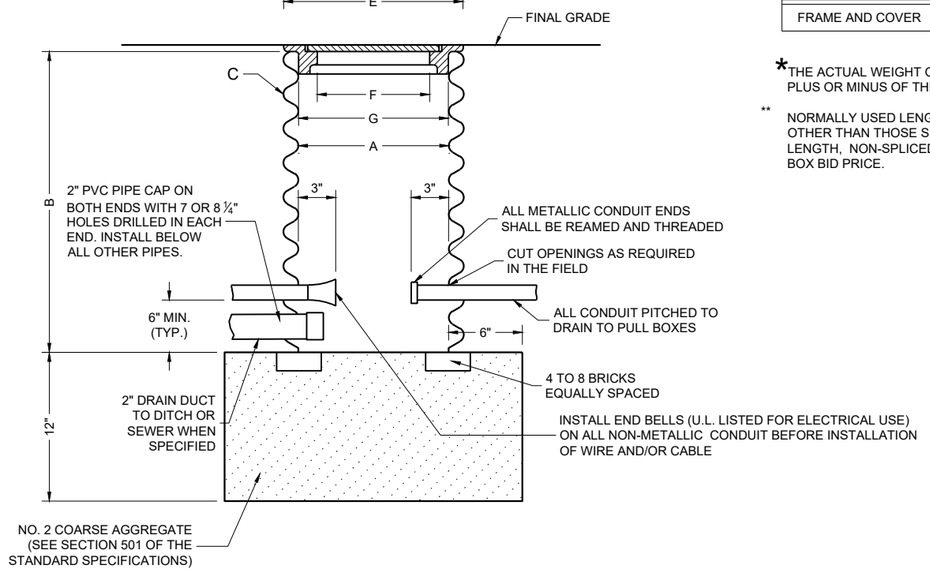

## EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES




## EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES




WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE




## PULL BOX

### TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

| DIMENSION IN INCHES | | CORRUGATED STEEL PIPE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| PIPE DIAMETER (INSIDE) | A | 12 | 12 | 12 | 18 | 18 | 18 | 24 | 24 | 24 |
| PIPE LENGTH ** | B | 24 | 30 | 36 | 24 | 30 | 36 | 36 | 42 | 48 |
| WALL THICKNESS | C | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 |
| COVER | D | 10 ¼ | 10 ¼ | 10 ¼ | 16 ¼ | 16 ¼ | 16 ¼ | 22 ¼ | 22 ¼ | 22 ¼ |
| FRAME | E | 14 ½ | 14 ½ | 14 ½ | 20 ½ | 20 ½ | 20 ½ | 26 ½ | 26 ½ | 26 ½ |
| FRAME | F | 8 ½ | 8 ½ | 8 ½ | 14 ½ | 14 ½ | 14 ½ | 20 ½ | 20 ½ | 20 ½ |
| FRAME | G | 11 ½ | 11 ½ | 11 ½ | 17 ½ | 17 ½ | 17 ½ | 23 ½ | 23 ½ | 23 ½ |
| **WEIGHT IN POUNDS*** | | | | | | | | | | |
| FRAME AND COVER | | 60 | 60 | 60 | 110 | 110 | 110 | 155 | 155 | 155 |

*THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

**PULL BOX**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER

FHWA



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SDD 09B04-13

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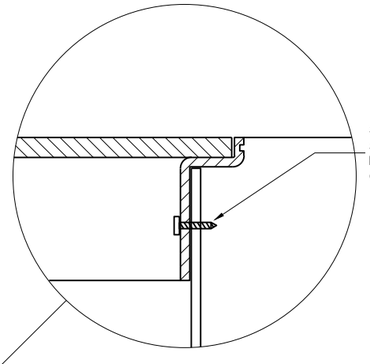
SDD 09B04-13

TABLE OF NOMINAL DIMENSIONS
AND WEIGHTS

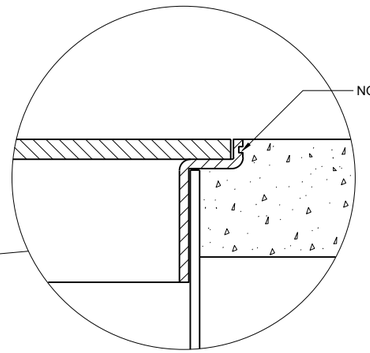
| DIMENSION IN INCHES | | NON- CONDUCTIVE PULL BOX | |
|---|---|---|---|
| BOX DIAMETER ** (INSIDE) | A | 24 | 24 |
| BOX OVERALL OUTSIDE DIAMETER | B | 27 | 27 |
| BOX LENGTH | C | 36 | 42 |
| FRAME OPENING | D | 22 ½ | 22 ½ |
| WEIGHT IN POUNDS * | | | |
| COVER | | 50 | 50 |
| BOX ONLY | | 75 | 85 |

*THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

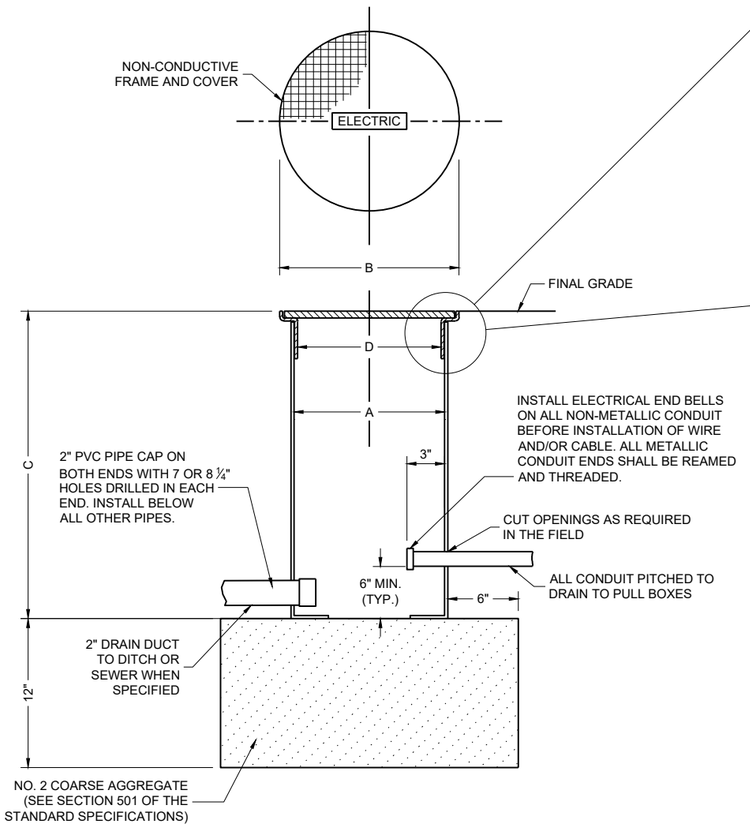
** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE.



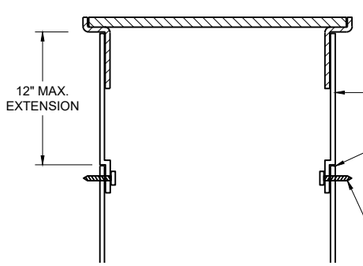

**INSTALLED IN SOD OR CRUSHED AGGREGATE**




**INSTALLED IN SIDEWALK**




**NON-CONDUCTIVE PULL BOX**




**BOX EXTENSION**

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN ½" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN ¼".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

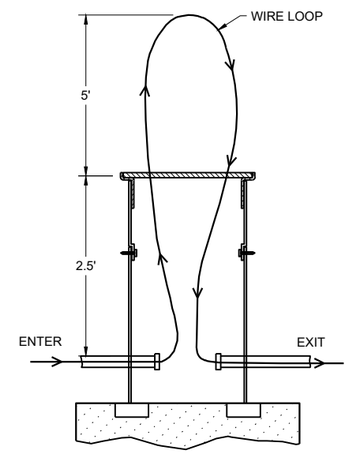
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE.

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.




**MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX**

**PULL BOXES NON-CONDUCTIVE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER

FHWA

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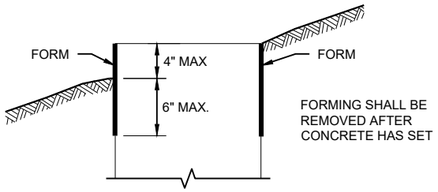
SDD 09B16-03

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE




**FORMING DETAIL**

| QUANTITY REQUIREMENTS | CONCRETE BASE TYPE | | |
|---|---|---|---|
| | 1 | 2 | 5 & 6 |
| APPROX. CUBIC YARDS OF CONCRETE | 0.40 | 0.57 | 0.40 |
| LBS. OF HOOP BAR STEEL | NONE | 23 | 16 |
| LBS. OF VERTICAL BAR STEEL | NONE | 60 | 18 |

# GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWINGSHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

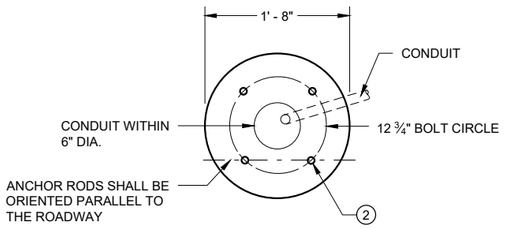
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

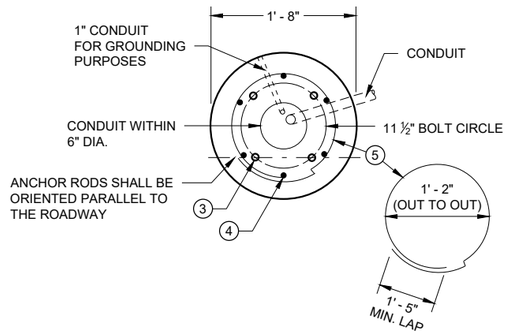
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

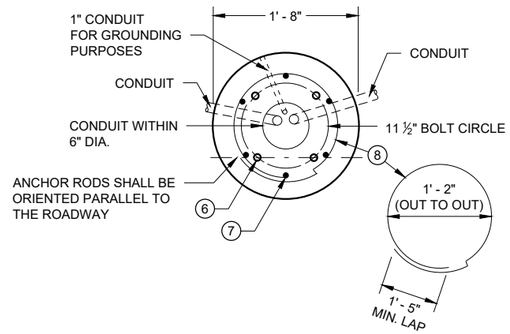
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).




1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.

4 (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.

5 (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.

6 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

7 (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.

8 (5) NO. 4 X 5' - 1" BAR STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

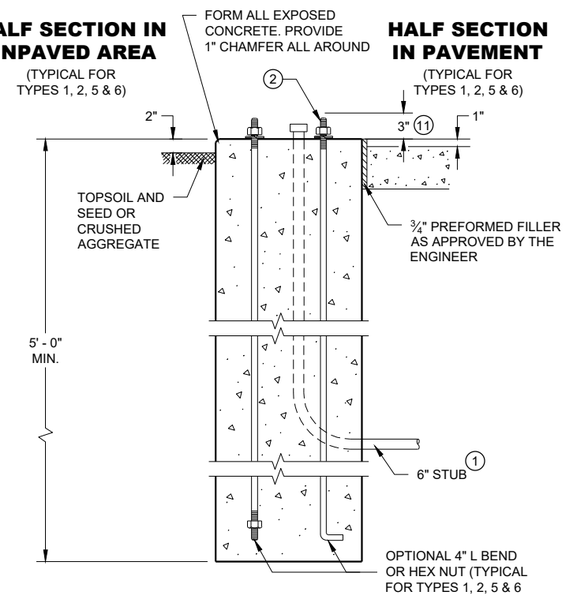
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

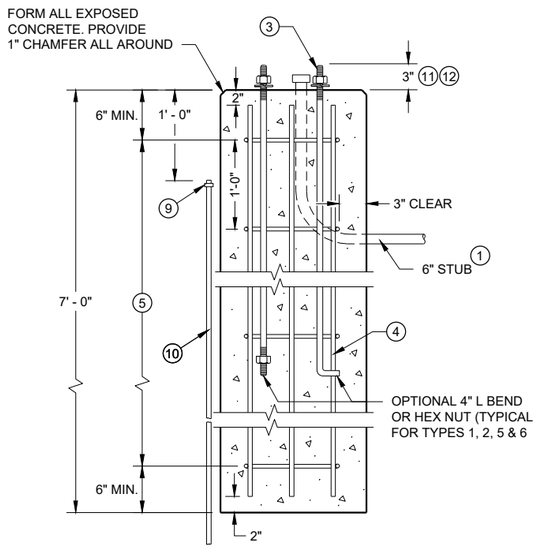
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

**HALF SECTION IN UNPAVED AREA**
(TYPICAL FOR TYPES 1, 2, 5 & 6)

**HALF SECTION IN PAVEMENT**
(TYPICAL FOR TYPES 1, 2, 5 & 6)




**TYPE 1**

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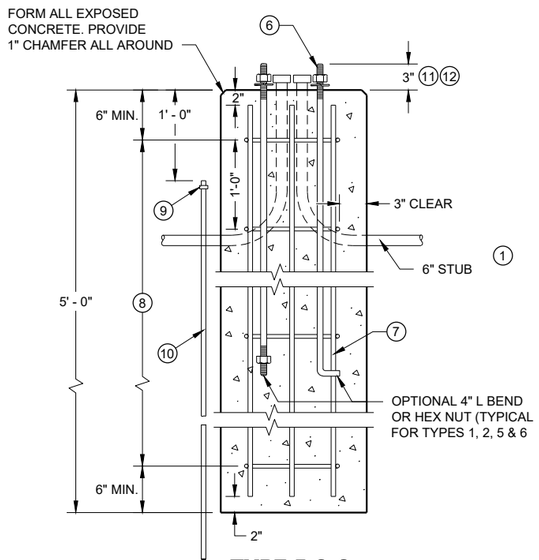


**TYPE 5 & 6**

**CONCRETE BASES**

**CONCRETE BASES TYPES 1, 2, 5, & 6**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA





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SDD 09C02 - 09

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

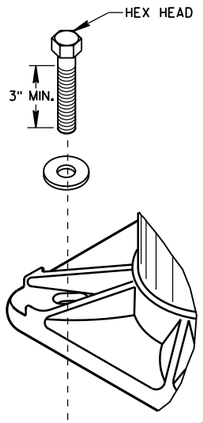
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

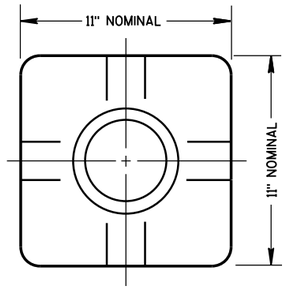
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

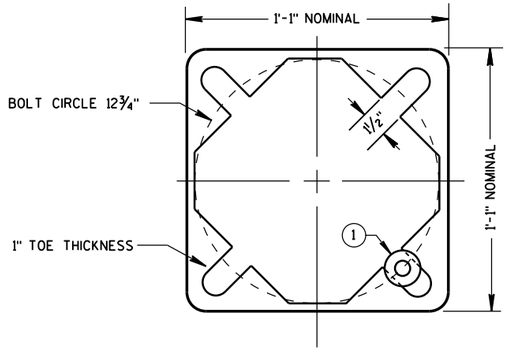
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

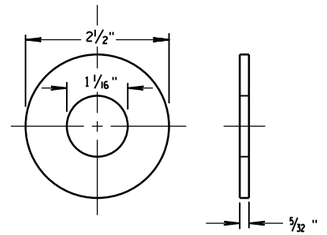



TOP VIEW
(PEDESTAL BASE)

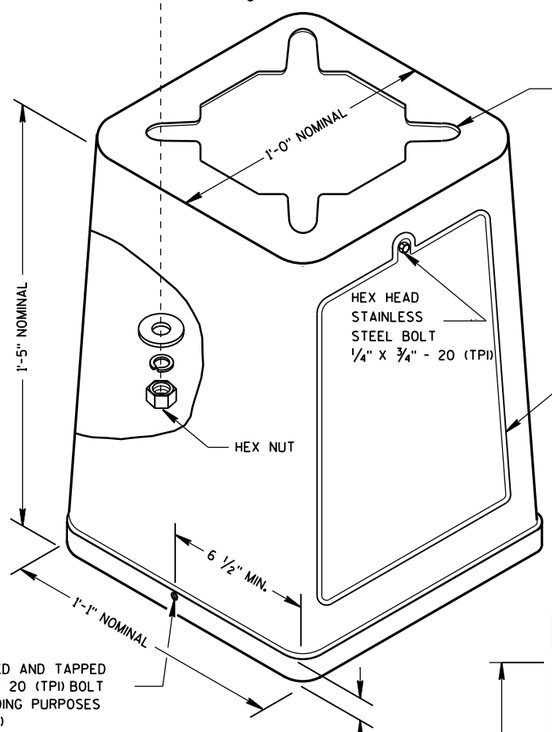



BOTTOM VIEW
(PEDESTAL BASE)

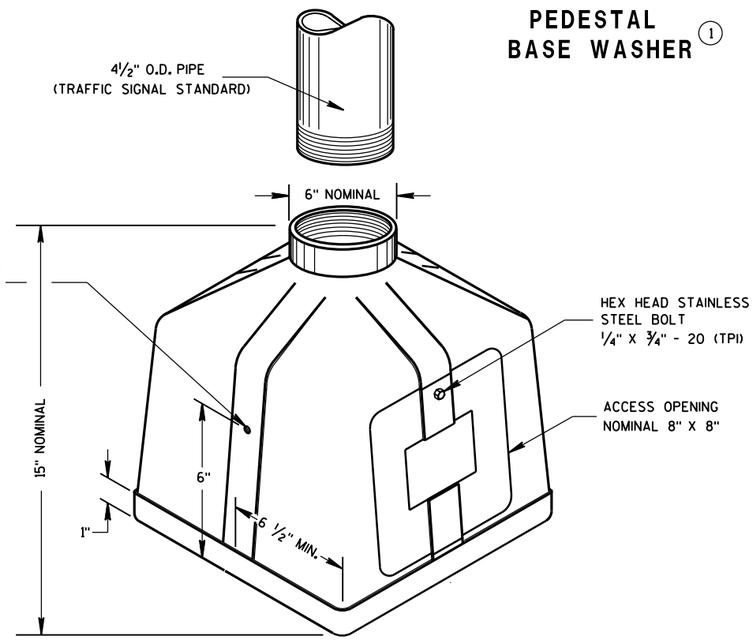



ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

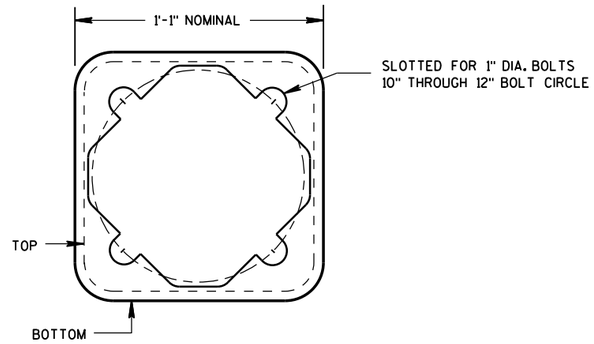
**PEDESTAL BASE WASHER** (1)



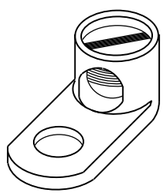

ISOMETRIC VIEW




ISOMETRIC VIEW
**PEDESTAL BASE**

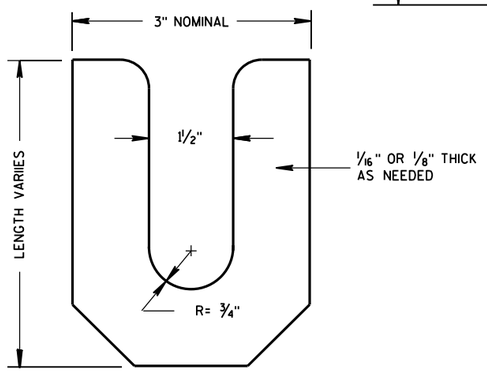



BOTTOM VIEW
(TRANSFORMER BASE)



**TYPICAL MECHANICAL CONNECTOR LUG**
TO BE FURNISHED WITH EACH BASE

**TRANSFORMER BASE**
INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES




**LEVELING SHIM**

**TRANSFORMER/PEDESTAL BASES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA



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S.D.D. 9 C 3-4

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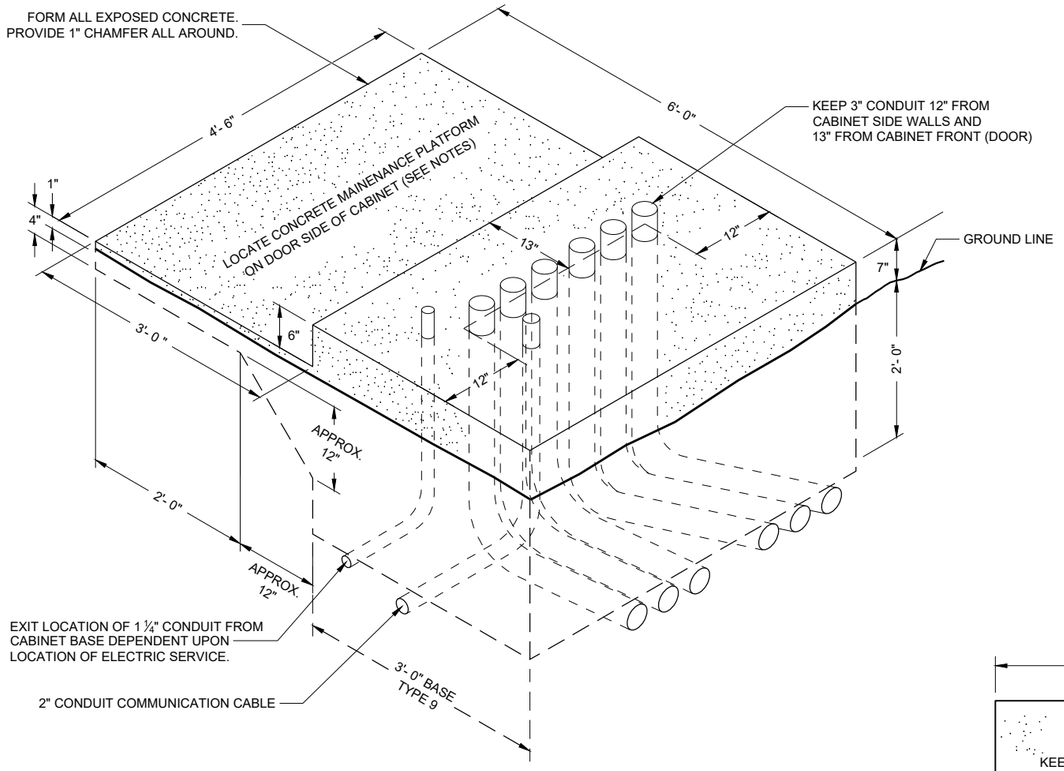
S.D.D. 9 C 3-4

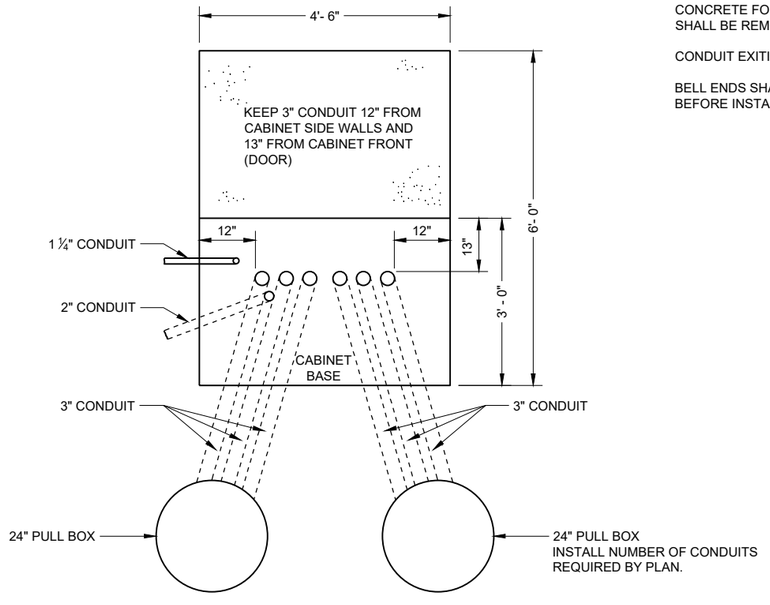
# SDD 09C06 Concrete Control Cabinet Base, Type 9, Special




**ISOMETRIC VIEW**

**TYPE 9 SPECIAL**

( C.Y. CONCRETE = APPROX. 1.56 )




**PLAN VIEW**

**CONCRETE CONTROL CABINET BASE, TYPE 9 SPECIAL**

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NON - METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U. L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NON - METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON - METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCHES MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

CONDUIT EXITING THE CONCRETE BASE (SIX 3") SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

**CONCRETE CONTROL CABINET BASE TYPE 9, SPECIAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE

/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI 618

FHWA

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SDD 09C06 - 07

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SDD 09C06 - 07

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 TIMES THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER RUN) EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

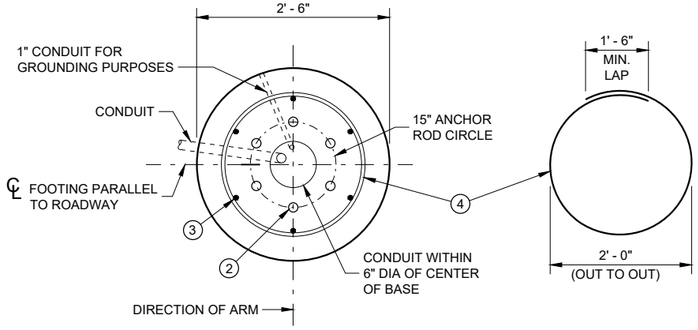
(2) (6) 1 ½ DIA. X 4' - 4" ANCHOR RODS

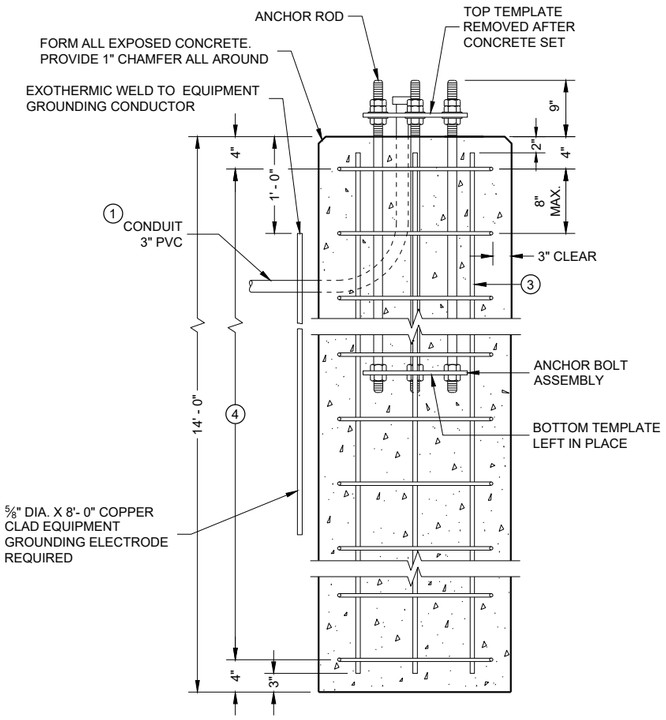
(3) (6) NO. 6 X 13' - 7" BAR STEEL REINFORCEMENT.

(4) (21) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 ( IN ACCORDANCE .....fy = 55,000 p.s.i.
WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.

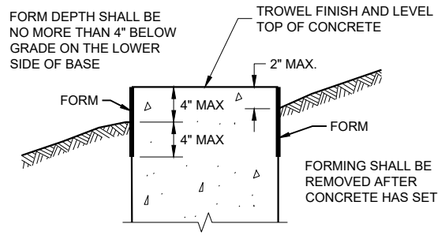
| QUANTITY REQUIREMENTS | |
|---|---|
| APPROX. CUBIC YARDS OF CONCRETE | 2.5 |
| LBS. OF HOOP BAR STEEL | 172 |
| LBS. OF VERTICAL BAR STEEL | 122 |



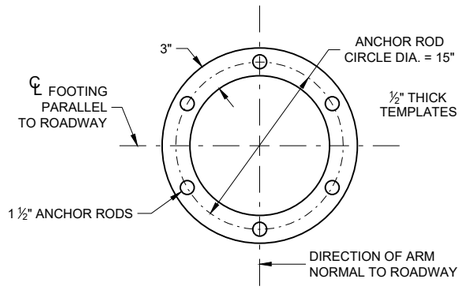




## CONCRETE BASE, TYPE 10
### (FOR TYPE 9, TYPE 10 AND OVER HEIGHT (OH) POLES)

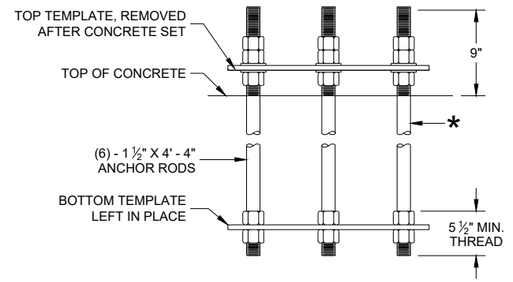
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE SDD 9C13 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.




## FORMING DETAIL




## TOP AND BOTTOM TEMPLATE




## ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 10" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

**CONCRETE BASE TYPE 10**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demerbilek — WIND LOADED STRUCTU PROGRAM LEADER
FHWA



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SDD 09C11 - 10

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SDD 09C11 - 10

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

ANY DAMAGE TO THE CONCRETE BASE AND ANCHOR RODS DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

THE REINFORCEMENT AND ANCHOR RODS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR RODS STICK OUT ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

FORM ALL EXPOSED CONCRETE CORNERS WITH 1" CHAMFER ALL AROUND. TOP OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 TIMES THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 ½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

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CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55.....fy = 55,000 p.s.i.
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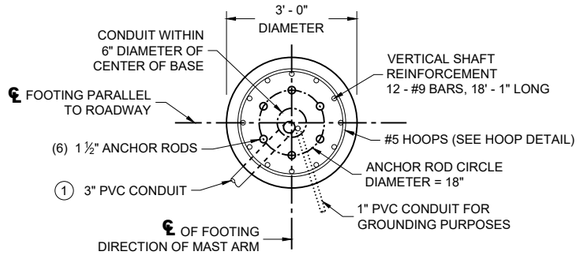
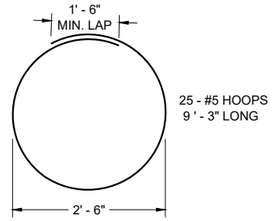
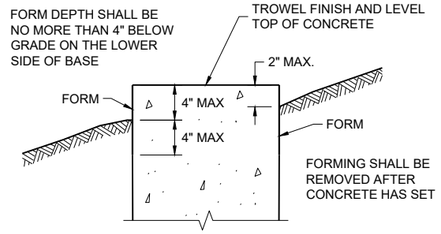
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.



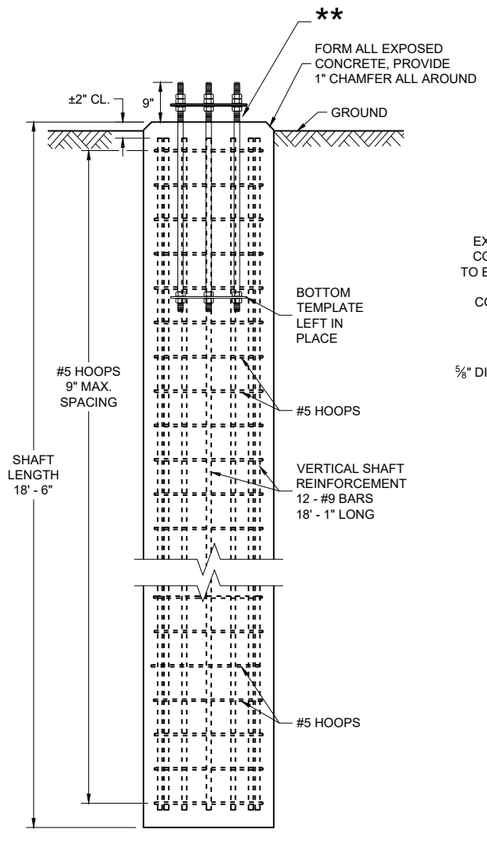

**PLAN VIEW**



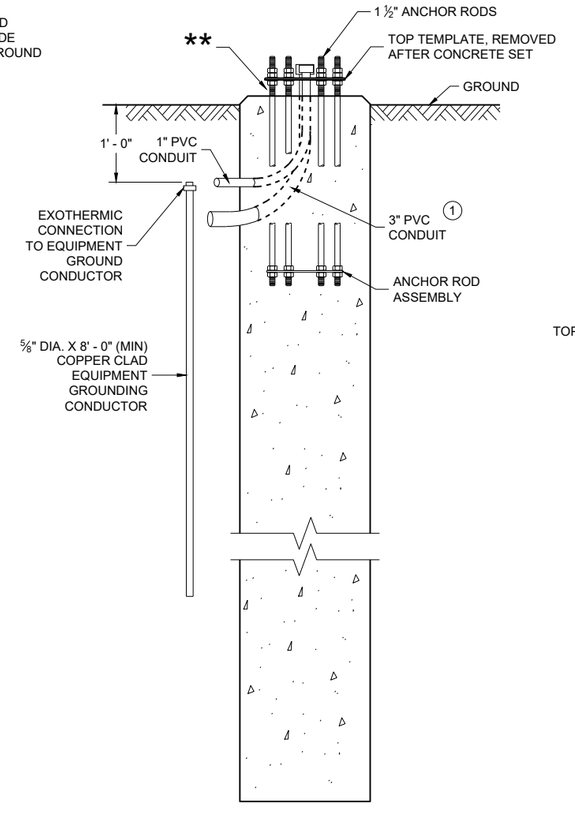

**HOOP DETAIL**



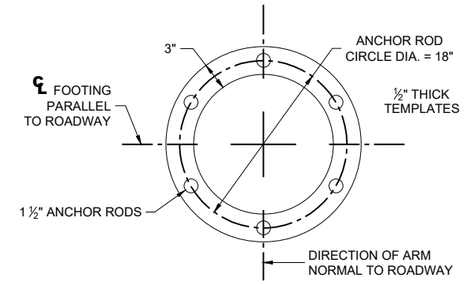

**FORMING DETAIL**



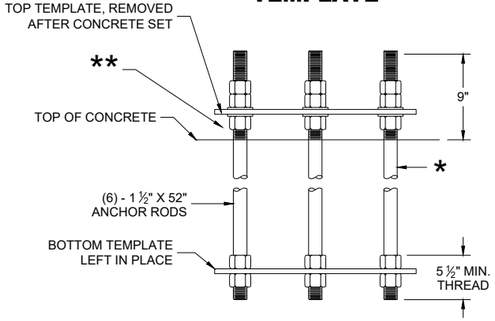

**ELEVATION VIEW**
(CONDUITS NOT SHOWN ON THIS VIEW FOR CLARITY)




**SIDE VIEW**
(HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY)




**TOP AND BOTTOM TEMPLATE**




**ANCHOR ROD ASSEMBLY DETAILS**

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** RODENT PROTECTION REQUIRED

## CONCRETE BASE, TYPE 10 SPECIAL
## (FOR TYPE 9 SPECIAL AND TYPE 10 SPECIAL POLES AND OVER HEIGHT (OH) POLES)

CONCRETE = 4.8 CUBIC YARD
H.S. REINFORCEMENT = 979 LBS.

FOR USE WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.

**CONCRETE BASE TYPE 10 SPECIAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Alex Crabtree — WIND LOADED STRUCTURES PROGRAM LEADER

FHWA




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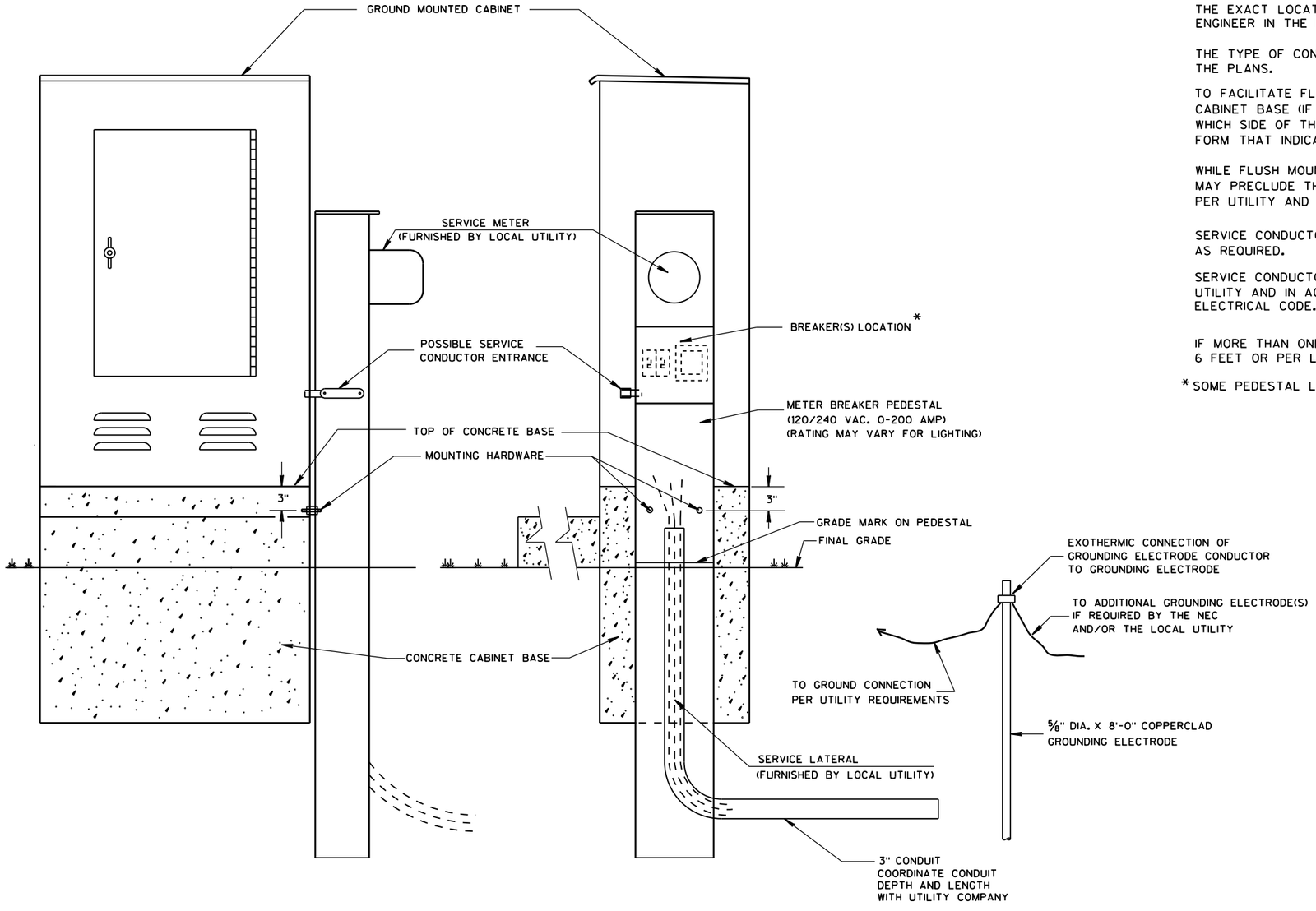
SDD 09C15-03




## TYPICAL CABINET SERVICE INSTALLATION

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

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S.D.D. 9 D 1-5

6

S.D.D. 9 D 1-5

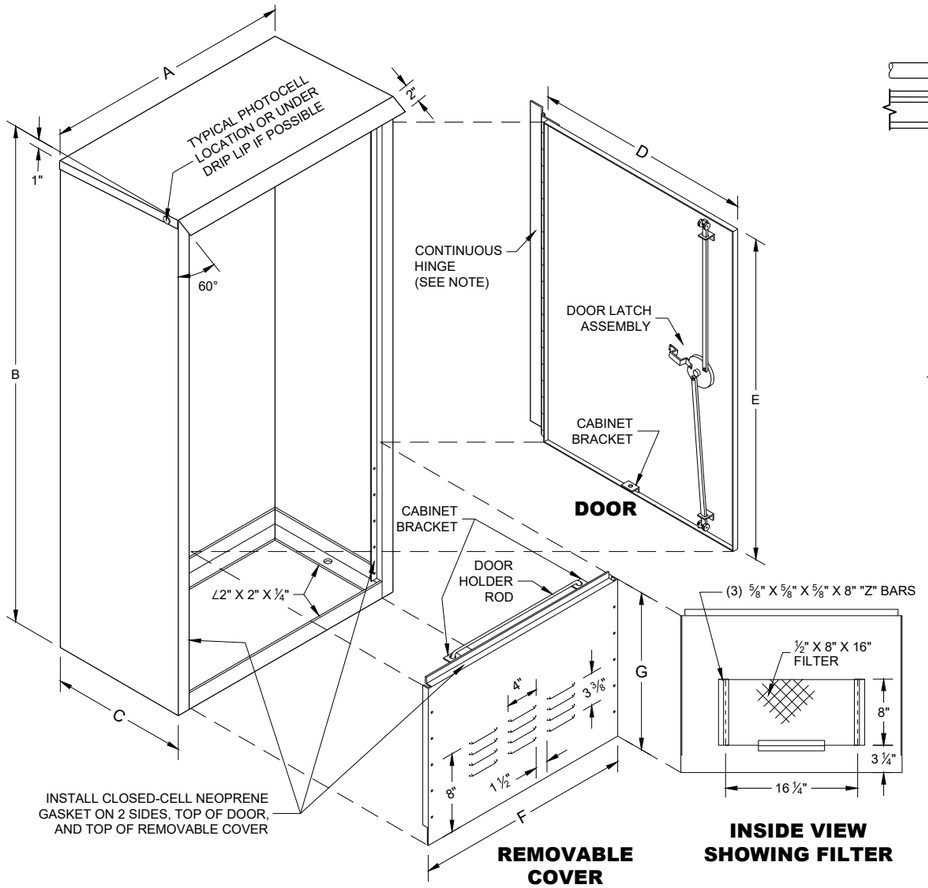
**CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)**

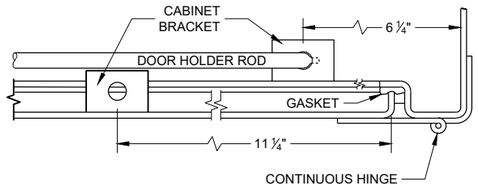
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

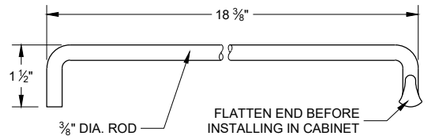
/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA

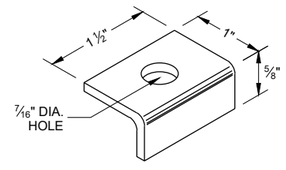


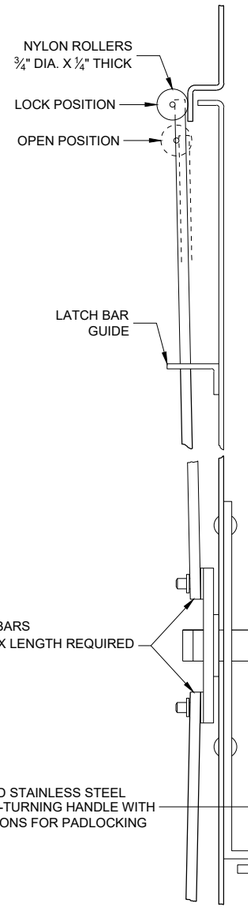

**HINGE AND DOOR HOLDER**

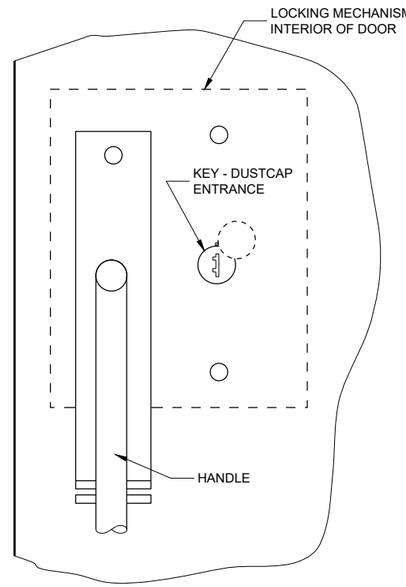



**HOLDER ROD**




**CABINET BRACKET**




**SIDE VIEW** **FRONT VIEW**

**LATCH ASSEMBLY**

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

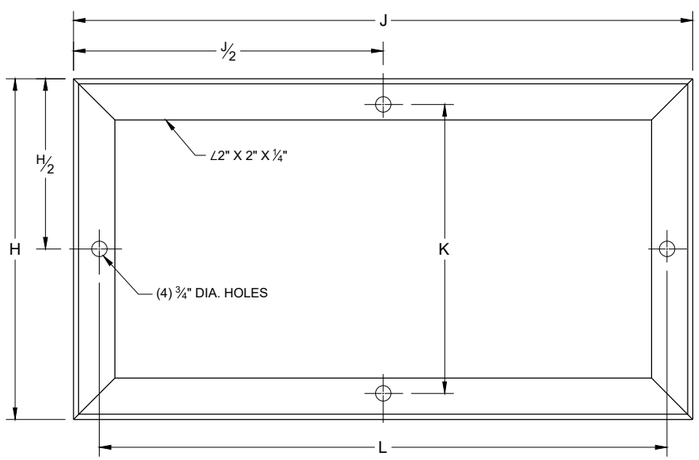
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH ¼" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH ¼" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH - NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

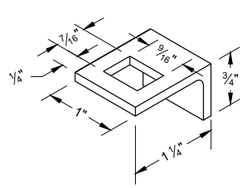
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.




**MOUNTING BASE**

TABLE OF DIMENSIONS (INCHES)

| MARK | CABINET TYPE | | |
|---|---|---|---|
| | 3060 | 3860 | 3866 |
| A | 30 | 38 | 38 |
| B | 60 | 60 | 66 |
| C | 16 ½ | 16 ½ | 24 |
| D | 26 ½ | 34 ¾ | 33 ¾ |
| E | 38 ¾ | 38 ¾ | 38 ¾ |
| F | 26 ½ | 34 ¾ | 33 ¾ |
| G | 19 | 19 | 25 |
| H | 16 ½ | 16 ½ | 24 |
| H/2 | 8 ¼ | 8 ¼ | 12 |
| J | 30 | 38 | 38 |
| J/2 | 15 | 19 | 19 |
| K | 13 ¾ | 13 ¾ | 21 ¼ |
| L | 27 ½ | 35 ½ | 35 ½ |




**LATCH BAR GUIDE**

**SIGNAL CONTROL CABINET**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE

/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI 622

FHWA

SDD 09D02 - 03

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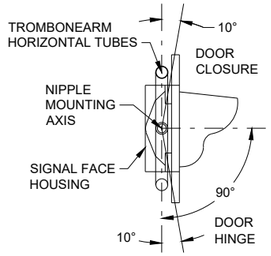
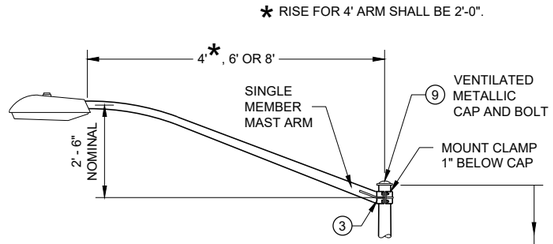
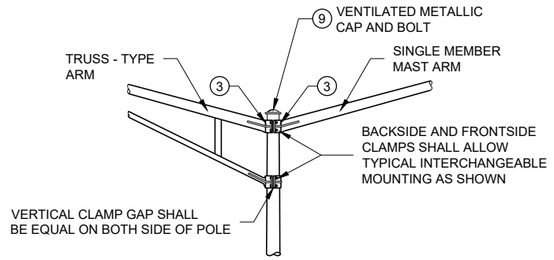
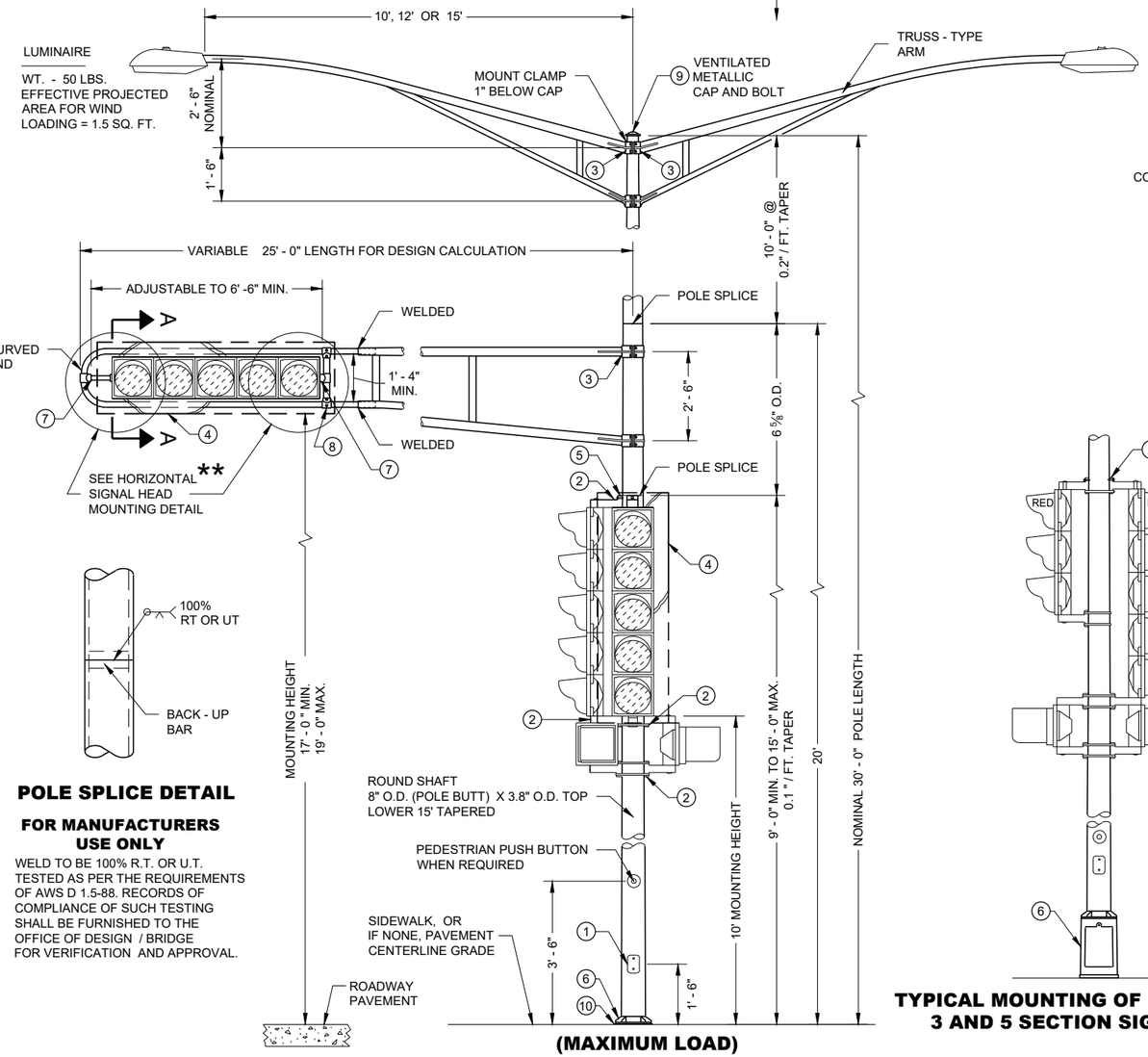



**SECTION A-A**



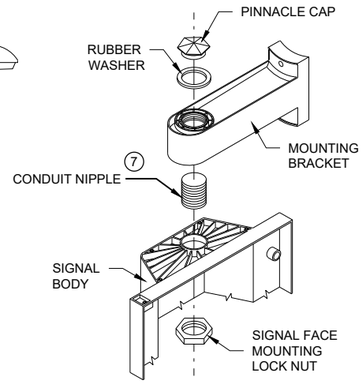




**INTERCHANGEABLE MOUNTING DETAIL**

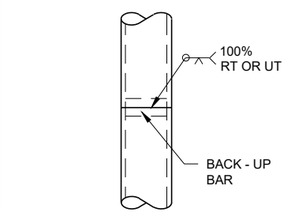



**(MAXIMUM LOAD)**

**TYPE 3 POLE MOUNTING CONFIGURATION**



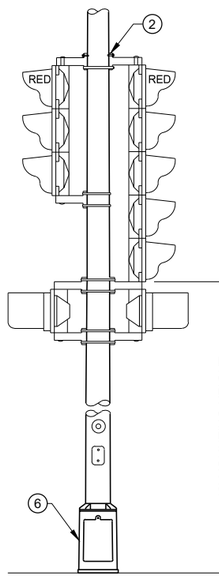

**SIGNAL FACE MOUNTING DETAIL**
**(BANDED)**



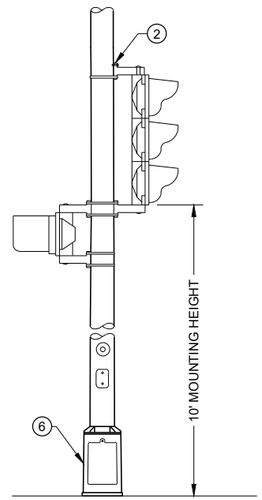

**POLE SPLICE DETAIL**

**FOR MANUFACTURERS USE ONLY**

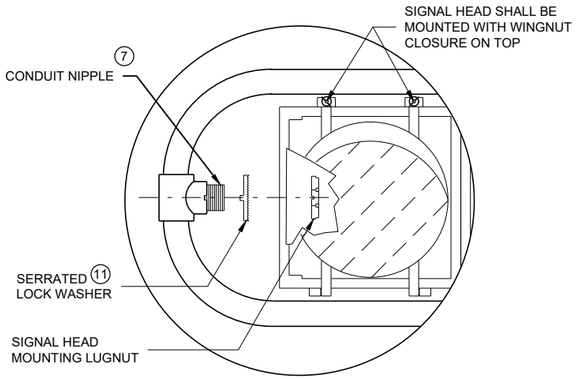
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN / BRIDGE FOR VERIFICATION AND APPROVAL.




**TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES**




**TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE**




**HORIZONTAL SIGNAL HEAD ** MOUNTING DETAIL**

** SIGNAL HEAD ATTACHMENT ALSO APPLIES TO MOUNTING AT CROSS BAR

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 3/8 INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 3/8" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED. UNDER MAX LOADING, TYPE 3 POLE SHALL BE MOUNTED DIRECTLY TO ITS CONCRETE BASE.

(7) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW ( ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.

(9) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

**POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS TYPE 3 (HEAVY DUTY)**

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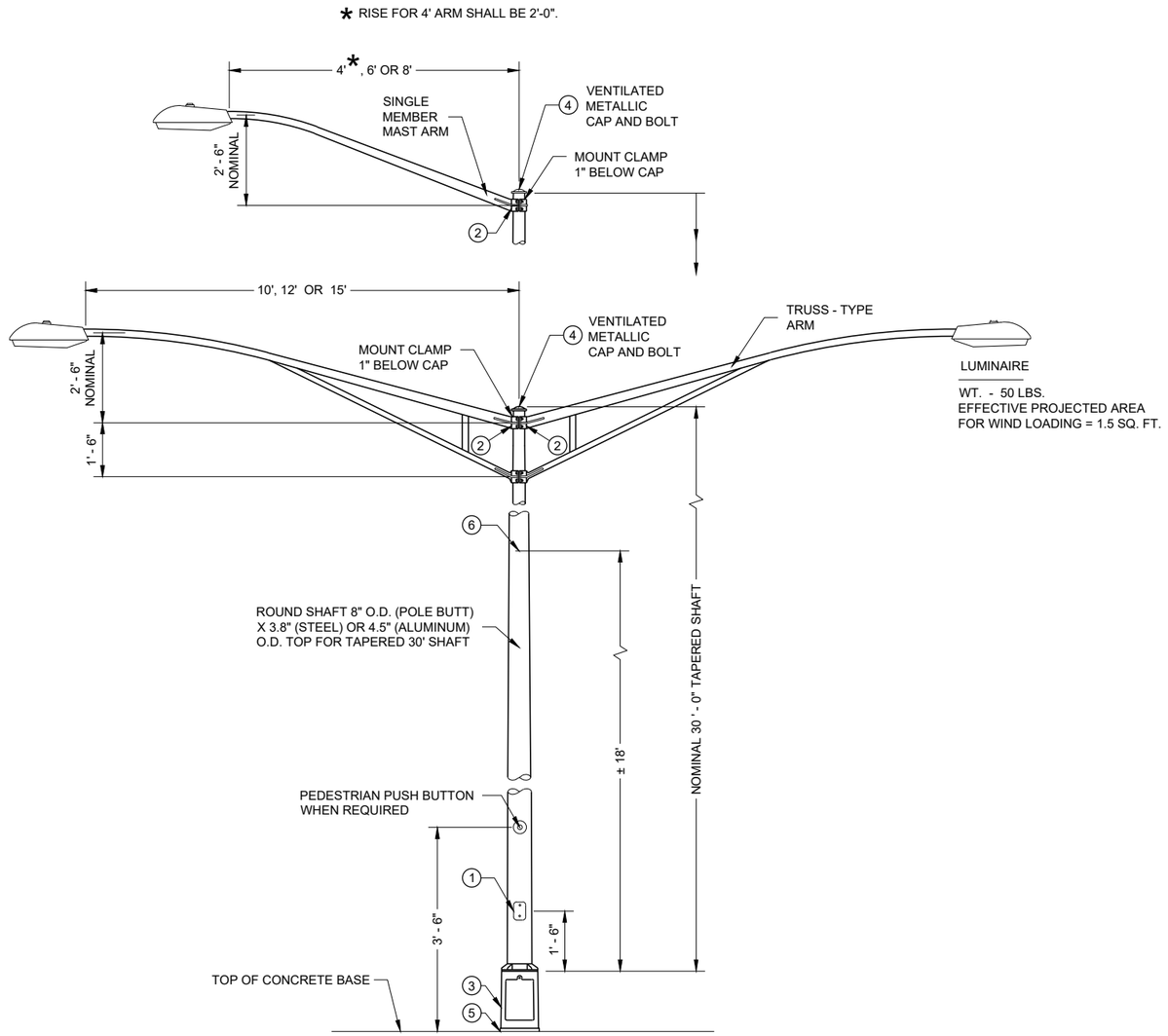



**TYPE 5 POLE MOUNTING CONFIGURATION**
**(MAXIMUM LOAD)**
**LIGHTING ONLY**

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

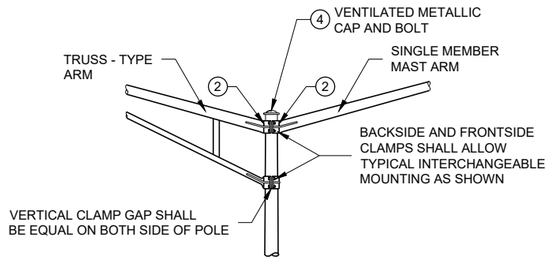
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.




**INTERCHANGEABLE MOUNTING DETAIL**

**POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 ( 30 FEET )**

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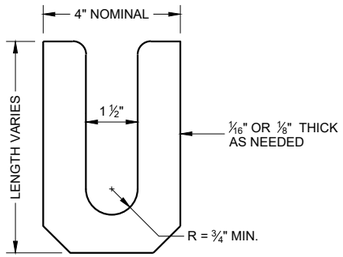
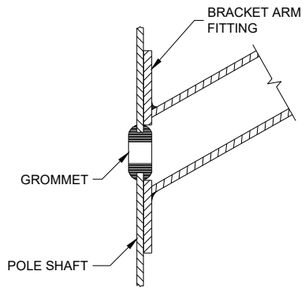
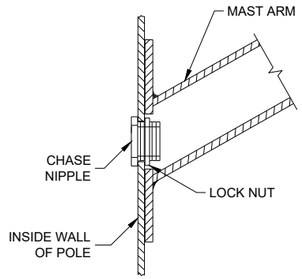



**LEVELING SHIM** (1)
SHALL BE ALUMINUM




**TYPICAL APPLICATION OF GROMMET IN POLE SHAFT**




**TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT**

## GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

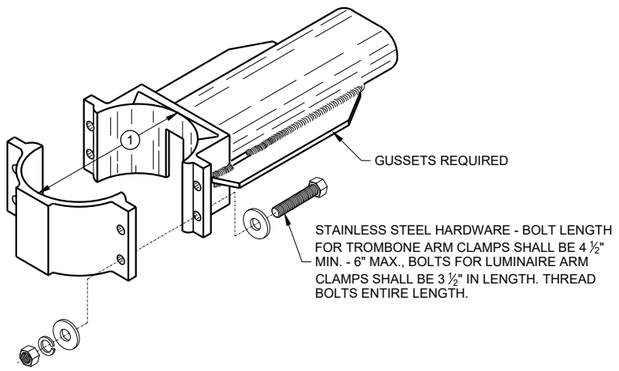
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(2) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

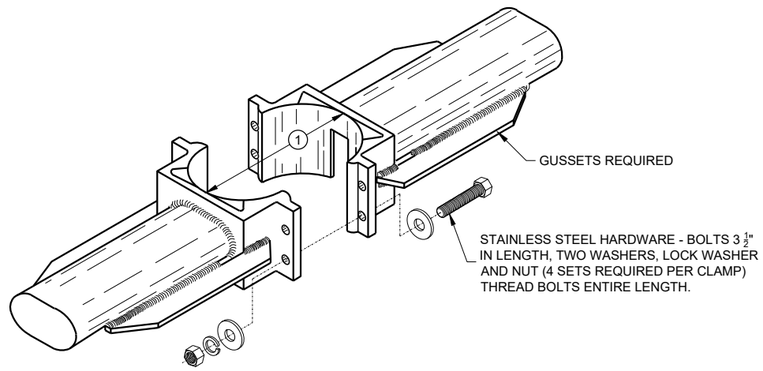
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(4) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

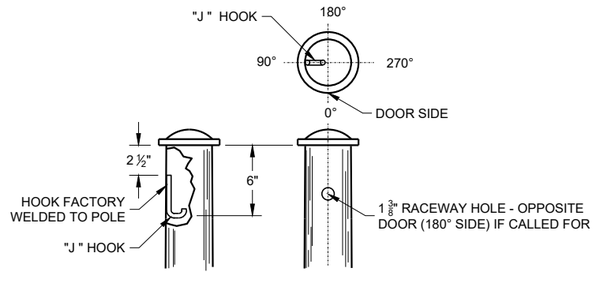
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



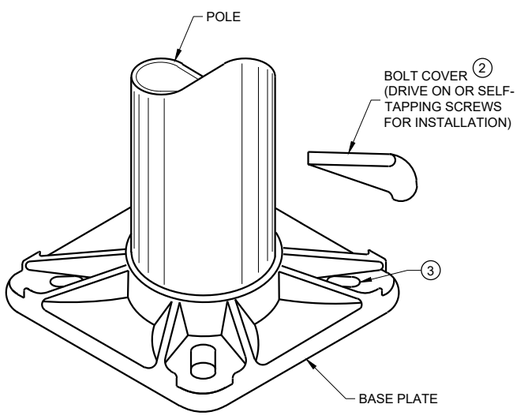

**TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP**



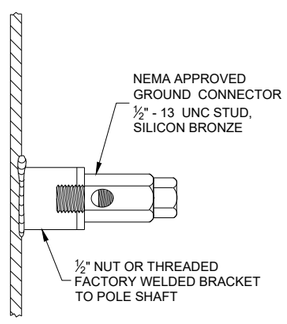

**TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS**

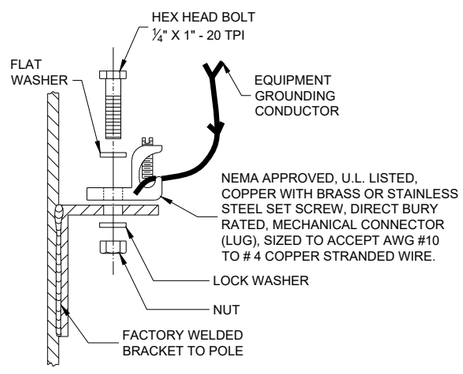


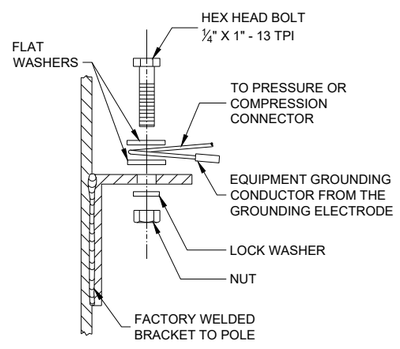

**TYPICAL "J" HOOK LOCATION**




**BASE PLATE**




**TYPICAL GROUNDING CONNECTIONS**
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

**HARDWARE DETAILS FOR POLE MOUNTING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 625

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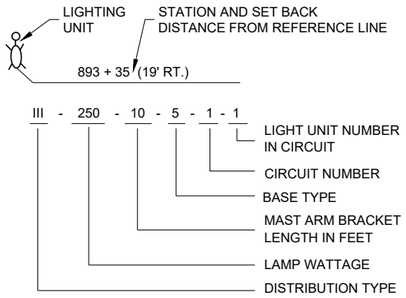
## GENERAL NOTES

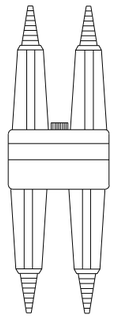
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

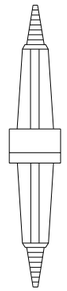
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.



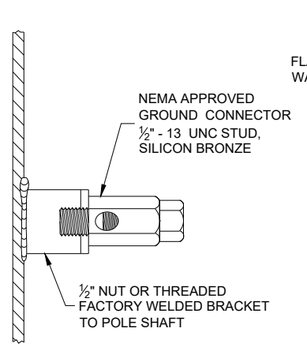

**LIGHTING UNIT CODE**
**(TYPICAL)**



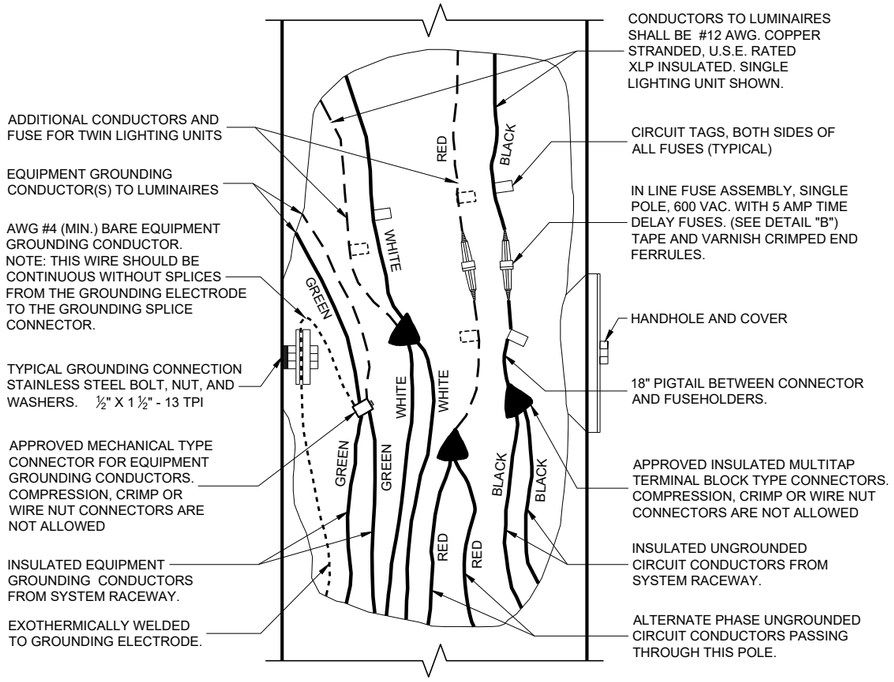
**DETAIL "A"**
**BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT**



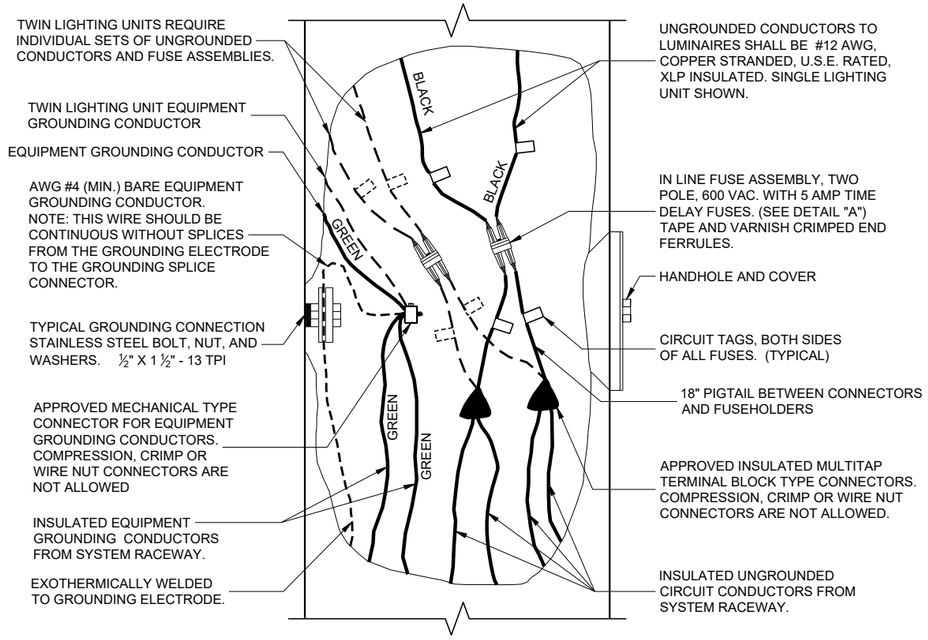
**DETAIL "B"**
**BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT**




**TYPICAL GROUNDING CONNECTIONS**
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL




**3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH GROUNDING CONDUCTOR AND EQUIPMENT GROUNDING CONDUCTOR**




**2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR**

**NON - FREEWAY LIGHTING UNIT POLE WIRING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 626

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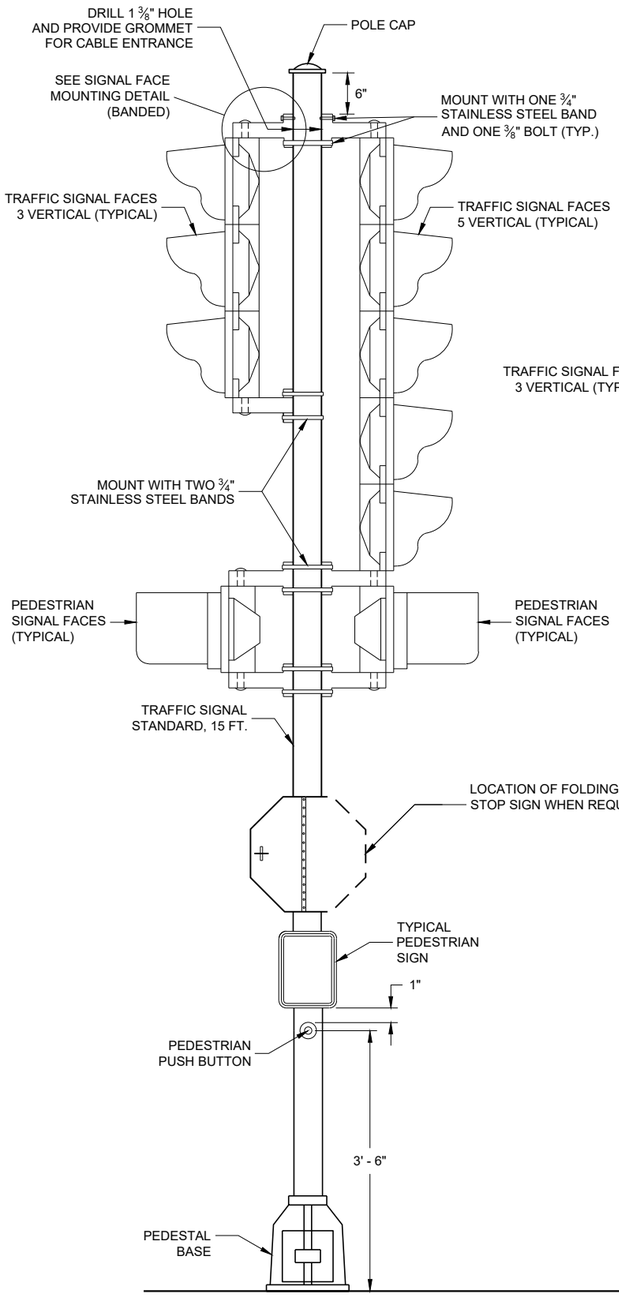
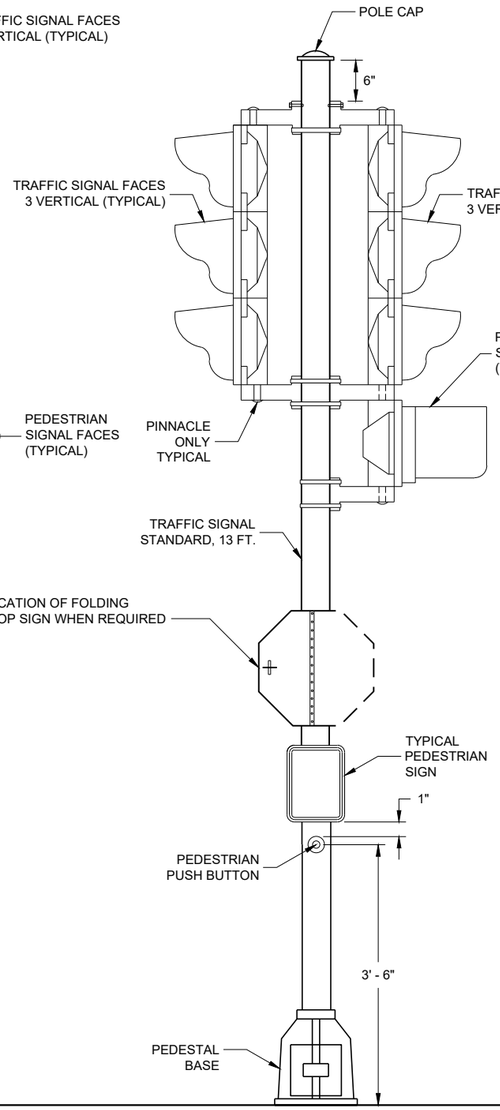
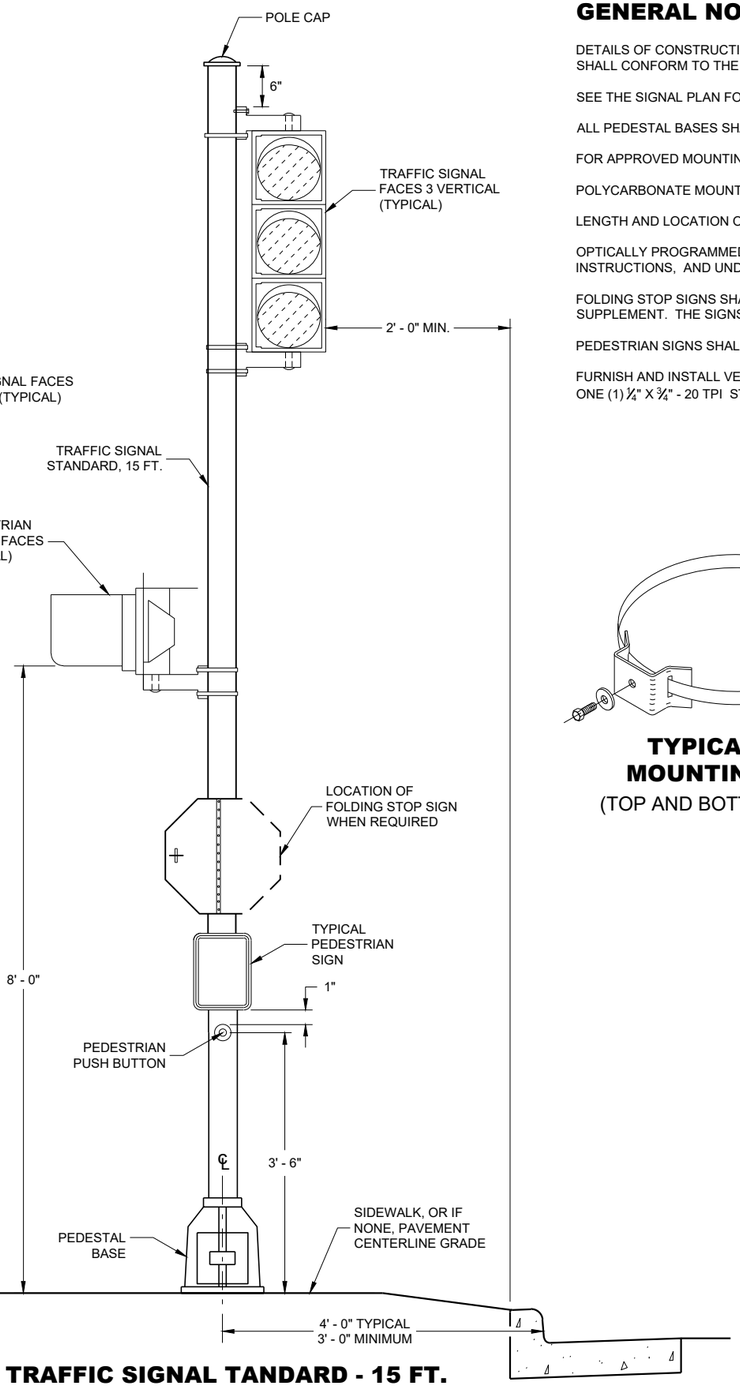



**TRAFFIC SIGNAL STANDARD - 15 FT.**




**TRAFFIC SIGNAL STANDARD - 13 FT.**




**TRAFFIC SIGNAL TANDARD - 15 FT.**
**3M MOUNTING (TYPICAL)**

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

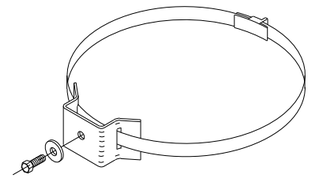
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

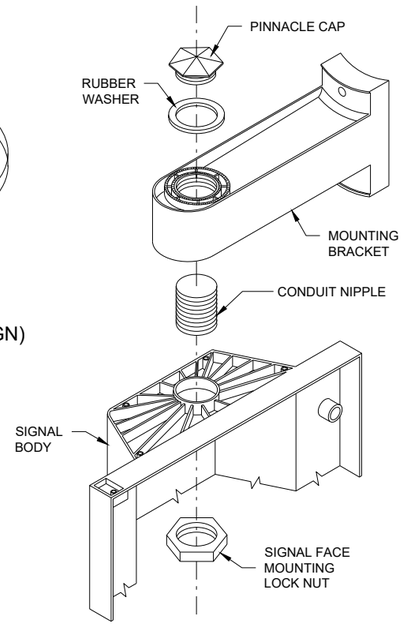
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



**TYPICAL SIGN MOUNTING BAND**
(TOP AND BOTTOM OF SIGN)




**SIGNAL FACE MOUNTING DETAIL (BANDED)**

**TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/28/2013
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 627

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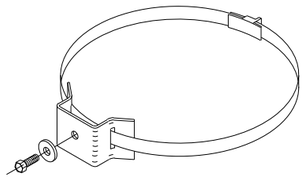
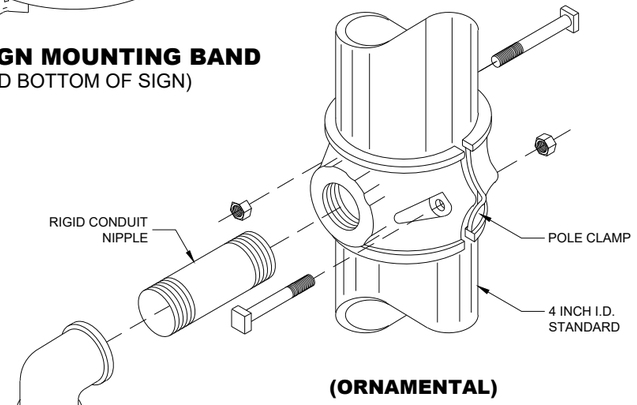
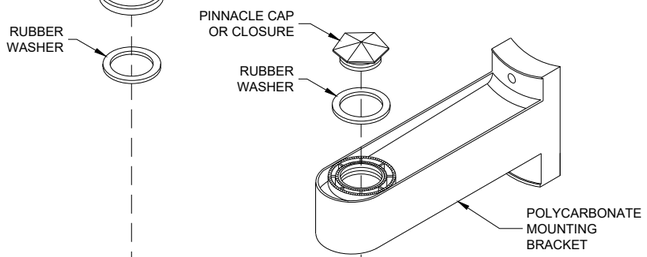


**TYPICAL SIGN MOUNTING BAND**
(TOP AND BOTTOM OF SIGN)




**(ORNAMENTAL)**

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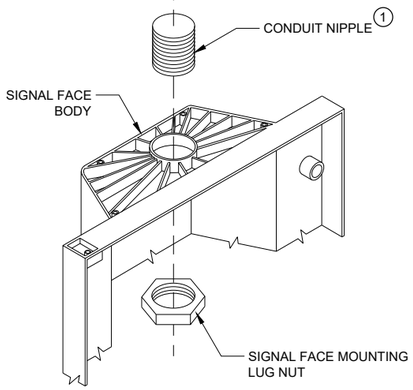
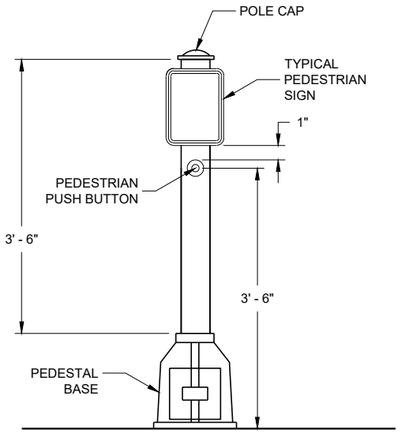
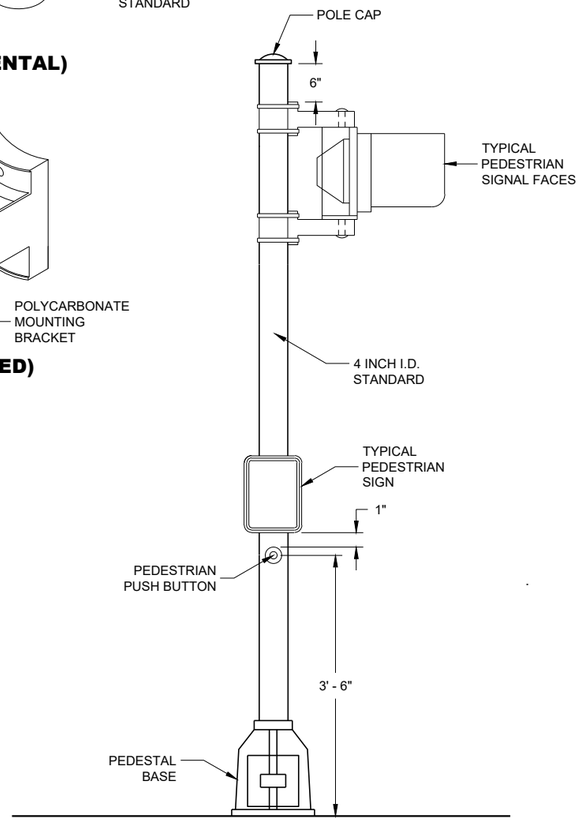


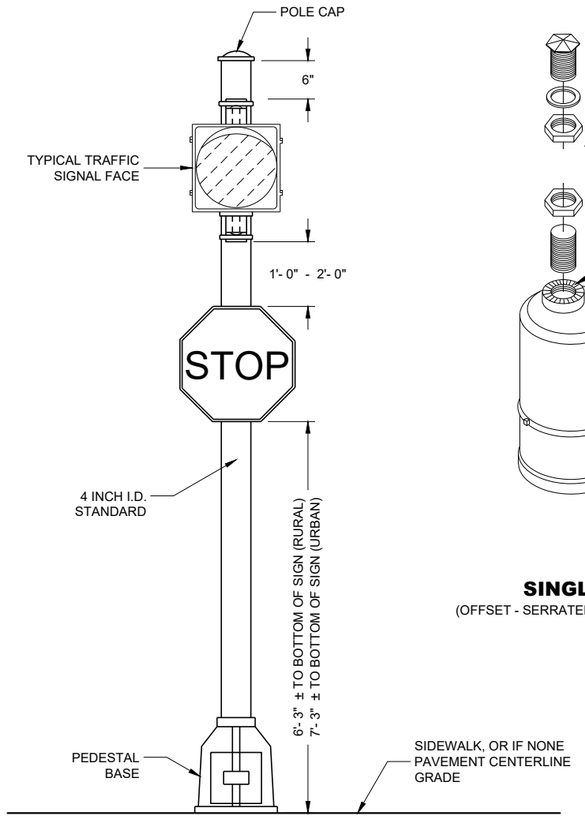

**SIGNAL FACE MOUNTING DETAILS**




**PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING**




**PEDESTRIAN FACE STANDARD - 10 FT.**
(WALK - DON'T WALK)




**STANDARD FLASHER**
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS, UNLESS APPROVED BY THE ENGINEER IN THE FIELD.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

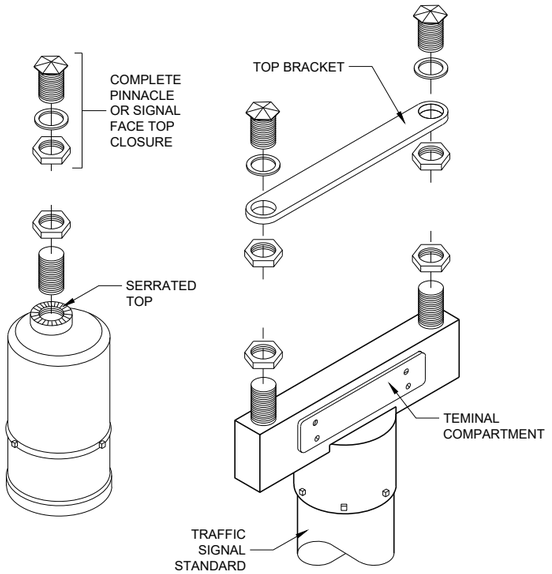
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE REGION TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(1) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACESAND BRACKET ENDS.




**SINGLE**
(OFFSET - SERRATED MOUNTING)

**DOUBLE**
(SERRATED MOUNTING)

**SLIPFITTERS**

**TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
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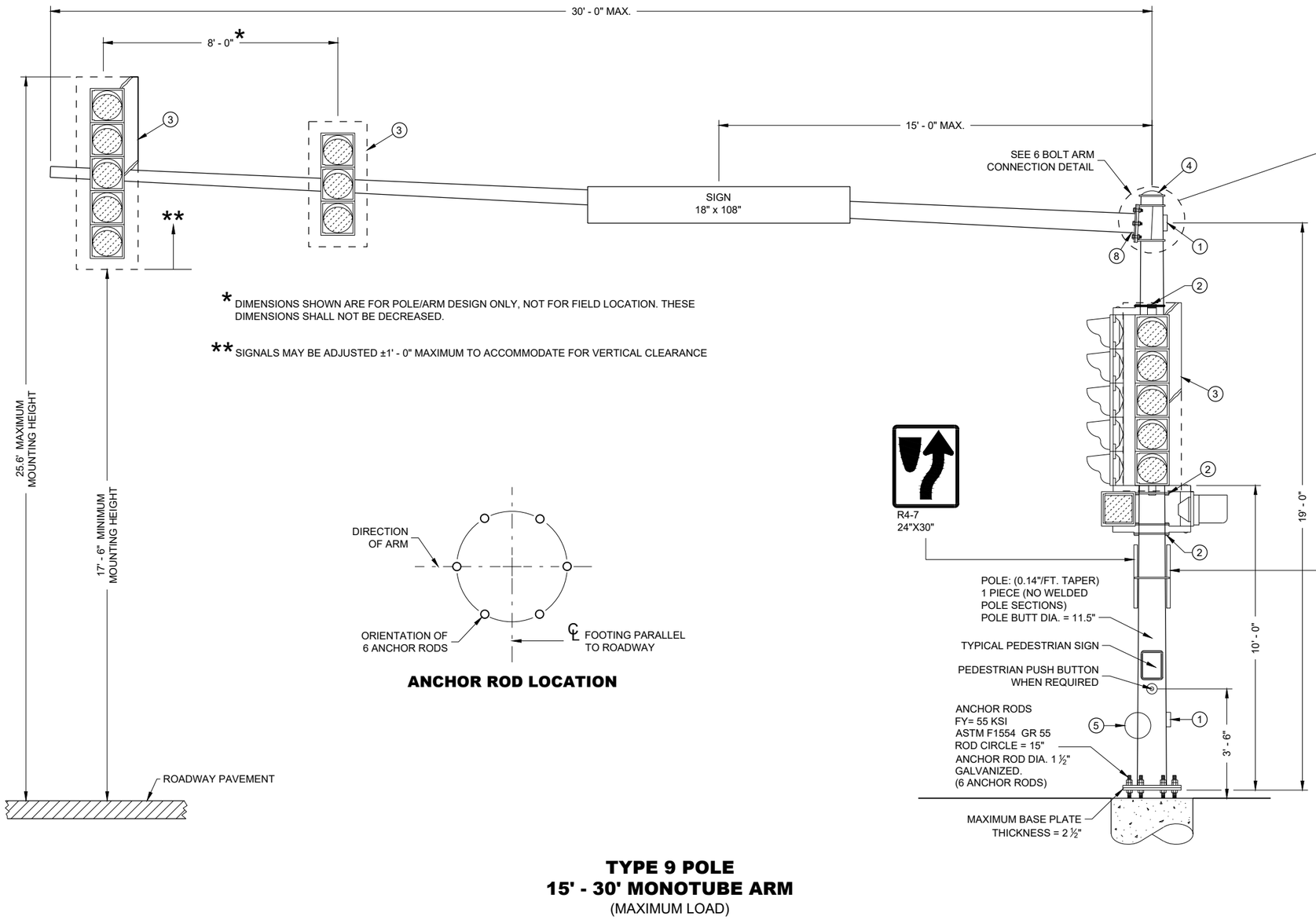
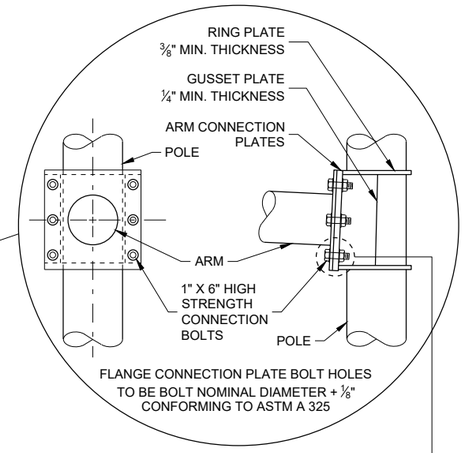



* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

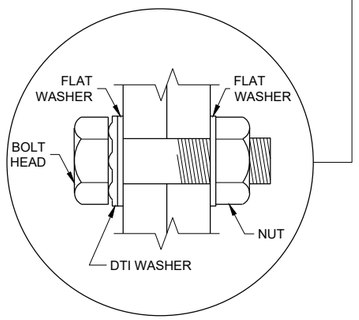
** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE




**ANCHOR ROD LOCATION**




**6 BOLT ARM CONNECTION DETAIL**




**RECOMMENDED BOLT ASSEMBLY DETAIL**

**TYPE 9 POLE**
**15' - 30' MONOTUBE ARM**
(MAXIMUM LOAD)

| **TYPE 9 POLE**<br>**15' - 30' MONOTUBE ARM** | |
|---|---|
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION | |
| APPROVED<br>August 2020<br>DATE | /S/ Ahmet Demirbilek<br>STATE ELECTRICAL ENGI 629 |
| FHWA | |

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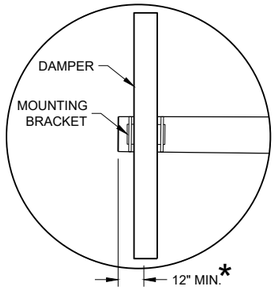
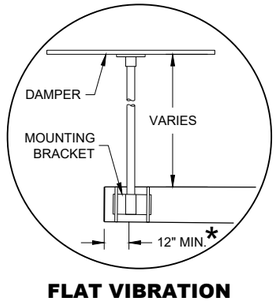
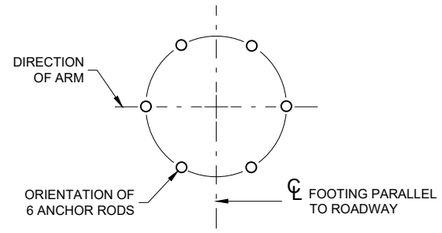



**DUMBBELL VIBRATION DAMPER**

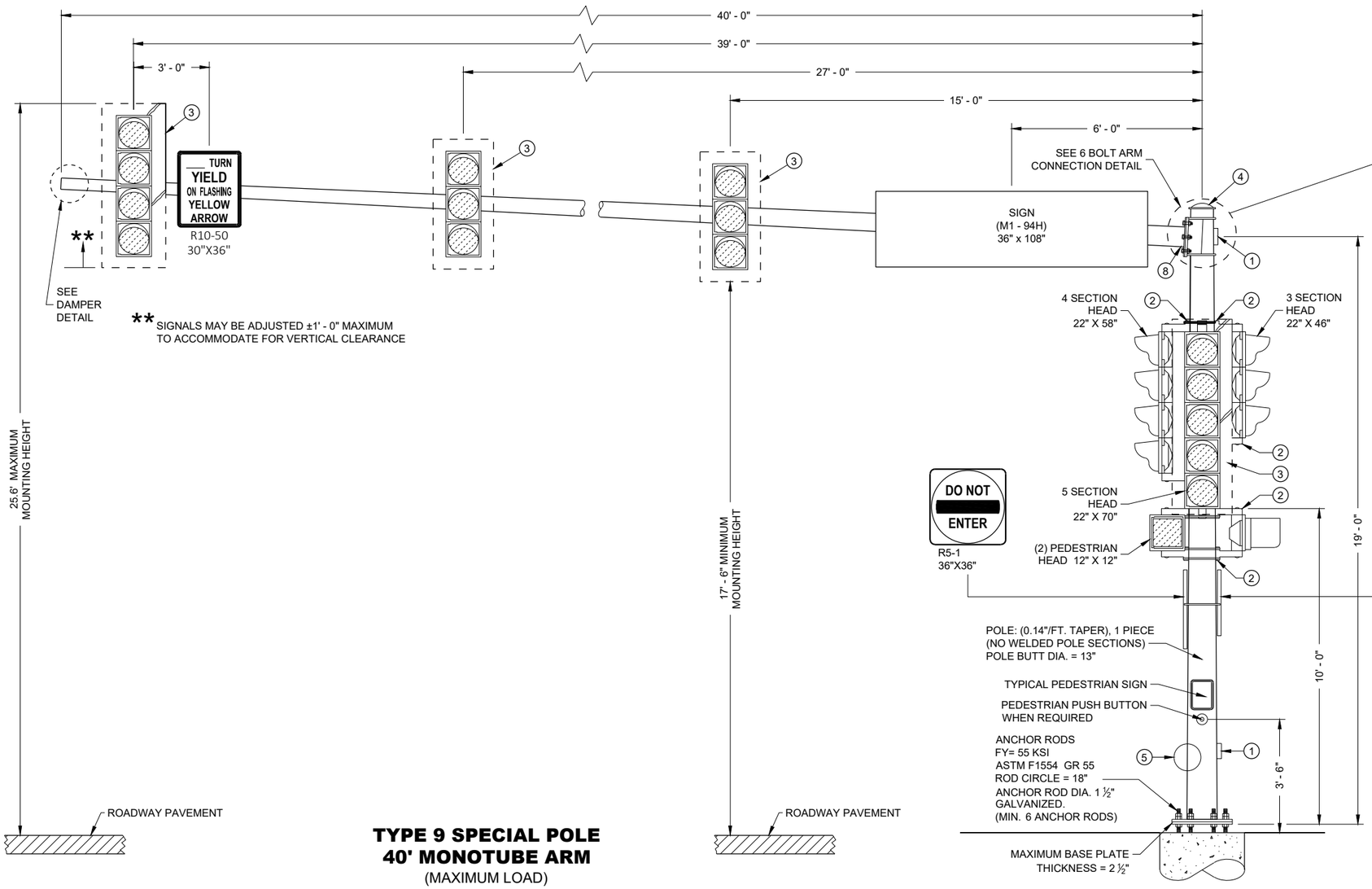



**FLAT VIBRATION DAMPER**

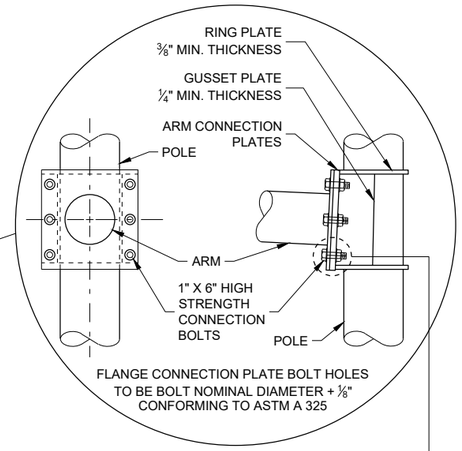
* MOUNT AS CLOSE TO END OF MAST ARM FOR MAXIMUM DAMPING PER MANUFACTURER'S RECOMMENDATIONS.



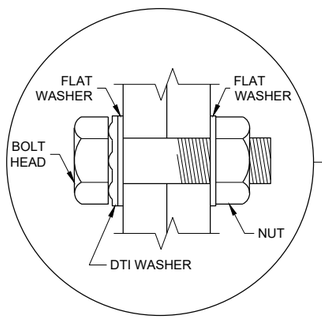

**ANCHOR ROD LOCATION**




**TYPE 9 SPECIAL POLE 40' MONOTUBE ARM**
(MAXIMUM LOAD)




**6 BOLT ARM CONNECTION DETAIL**




**RECOMMENDED BOLT ASSEMBLY DETAIL**

**TYPE 9 SPECIAL POLE 40' MONOTUBE ARM**

STATE OF WISCONSIN
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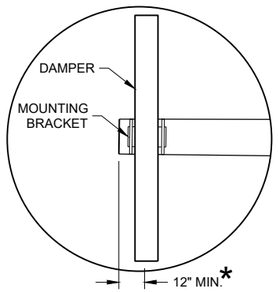
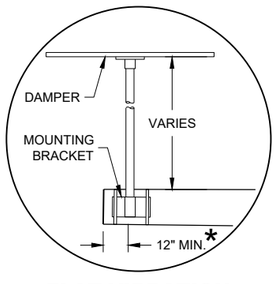
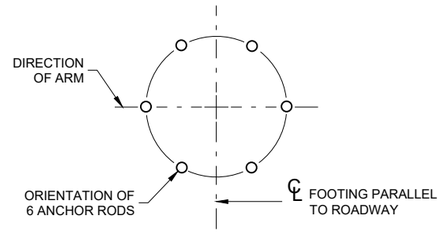



**DUMBBELL VIBRATION DAMPER**

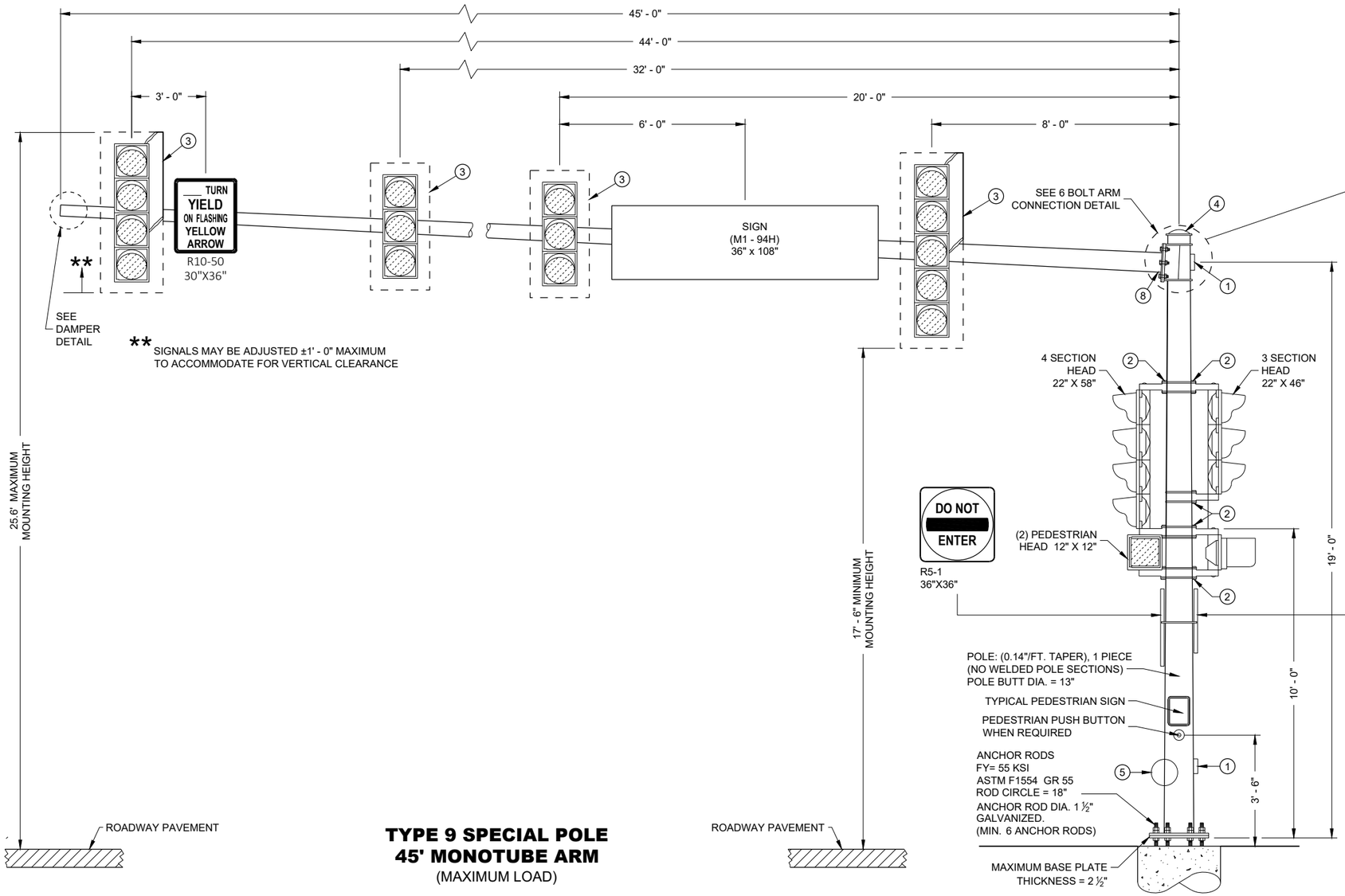



**FLAT VIBRATION DAMPER**

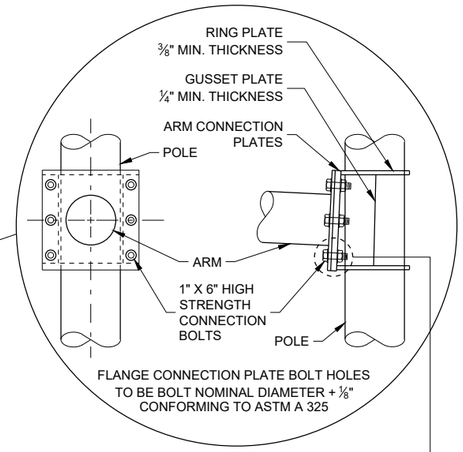
* MOUNT AS CLOSE TO END OF MAST ARM FOR MAXIMUM DAMPING PER MANUFACTURER'S RECOMMENDATIONS.



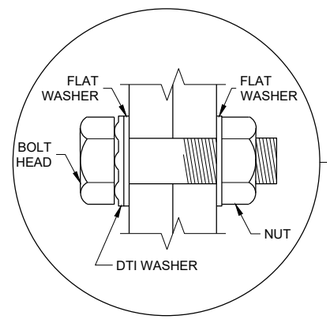

**ANCHOR ROD LOCATION**




**TYPE 9 SPECIAL POLE 45' MONOTUBE ARM**
(MAXIMUM LOAD)




**6 BOLT ARM CONNECTION DETAIL**




**RECOMMENDED BOLT ASSEMBLY DETAIL**

**TYPE 9 SPECIAL POLE 45' MONOTUBE ARM**

STATE OF WISCONSIN
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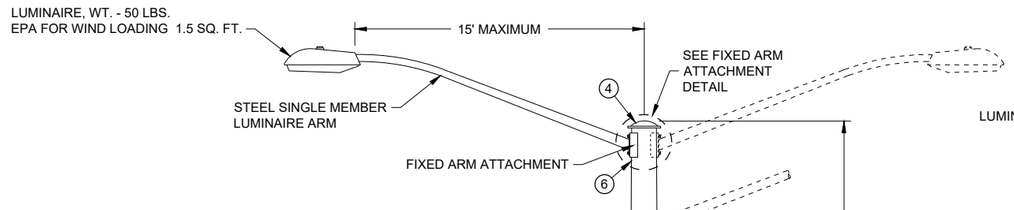
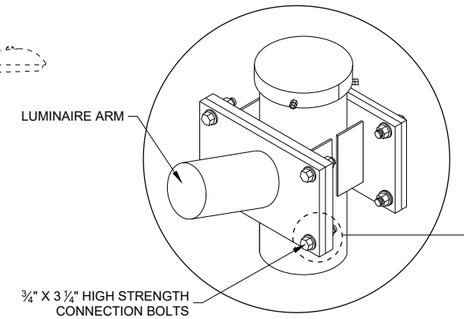
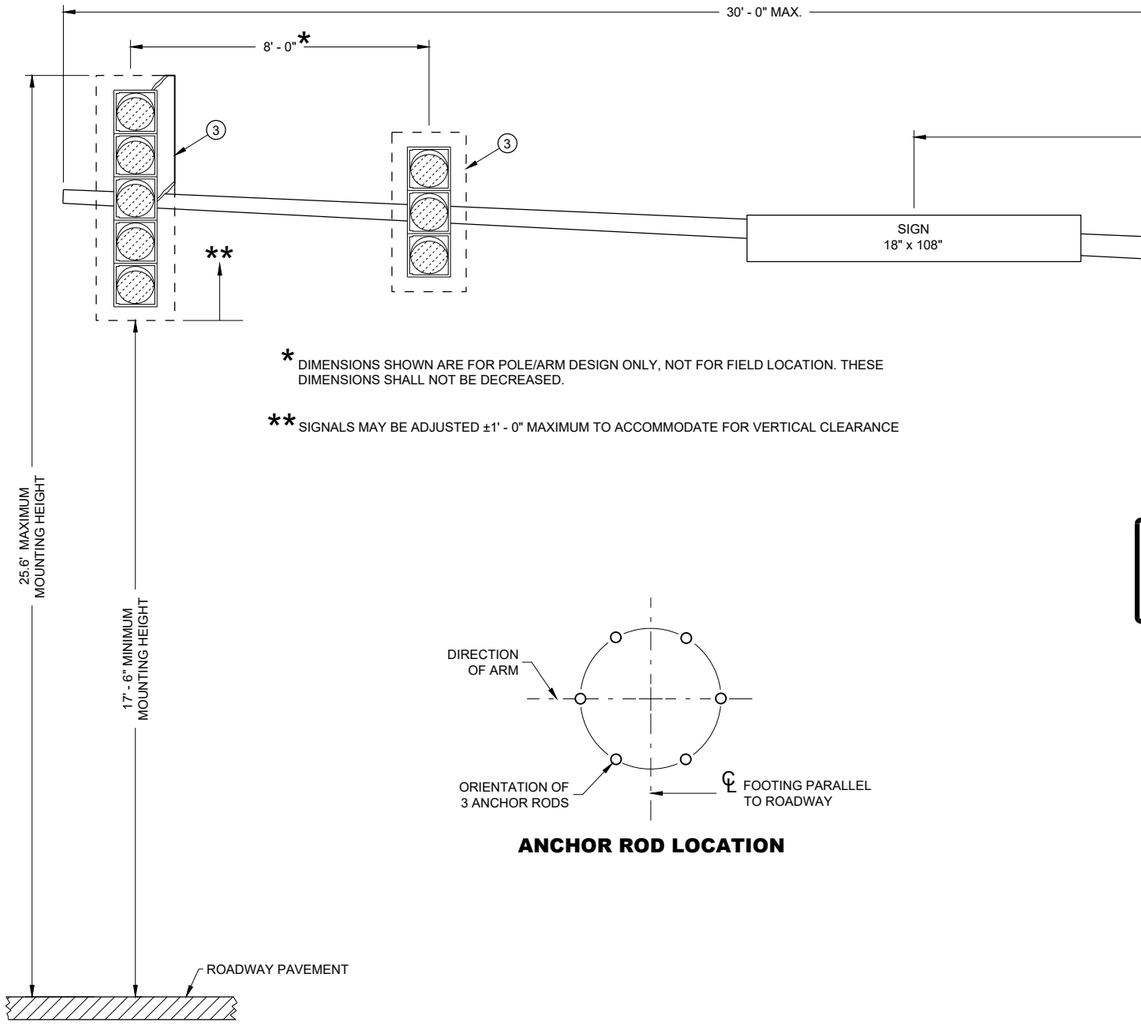



**FIXED ARM ATTACHMENT DETAIL**

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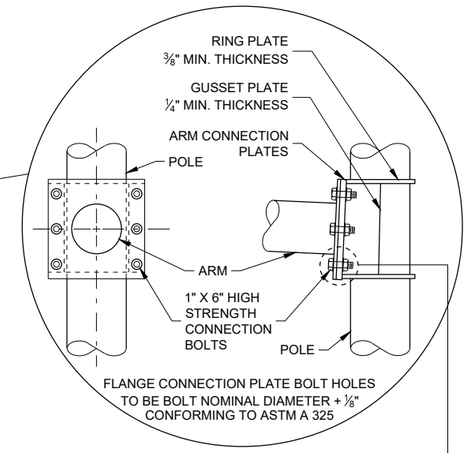
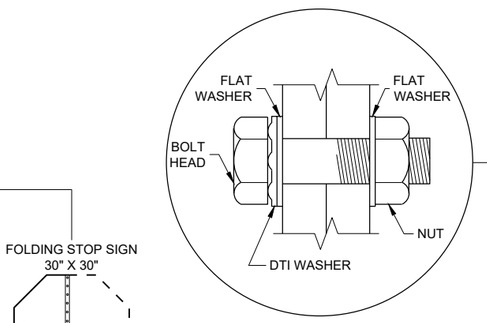
** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE



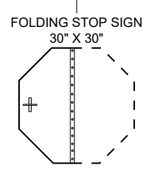

**ANCHOR ROD LOCATION**




**6 BOLT ARM CONNECTION DETAIL**




**RECOMMENDED BOLT ASSEMBLY DETAIL**




**TYPE 10 POLE**
**15' - 30' MONOTUBE ARM**
(MAXIMUM LOAD)

**TYPE 10 POLE**
**15' - 30 MONOTUBE ARM**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
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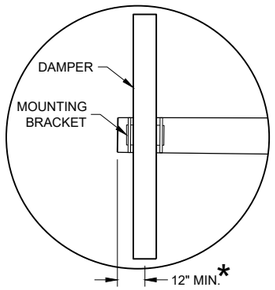
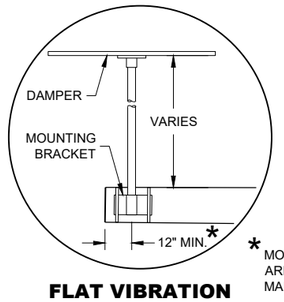
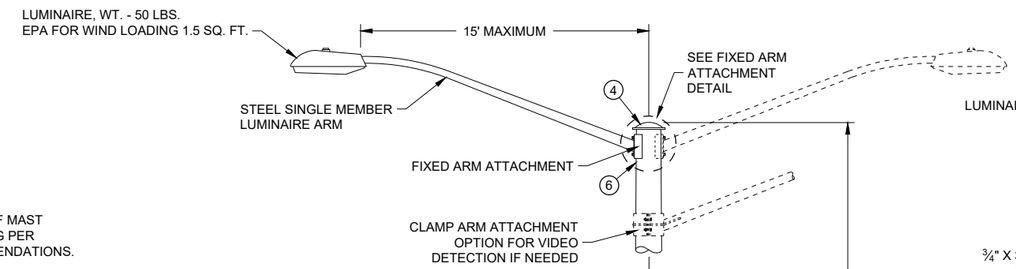


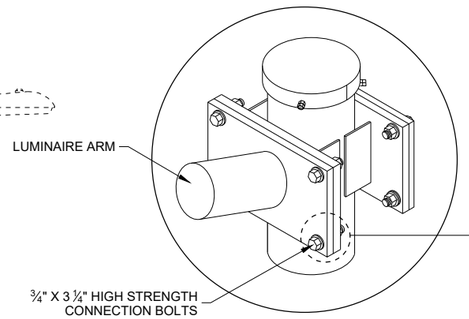

**DUMBBELL VIBRATION DAMPER**



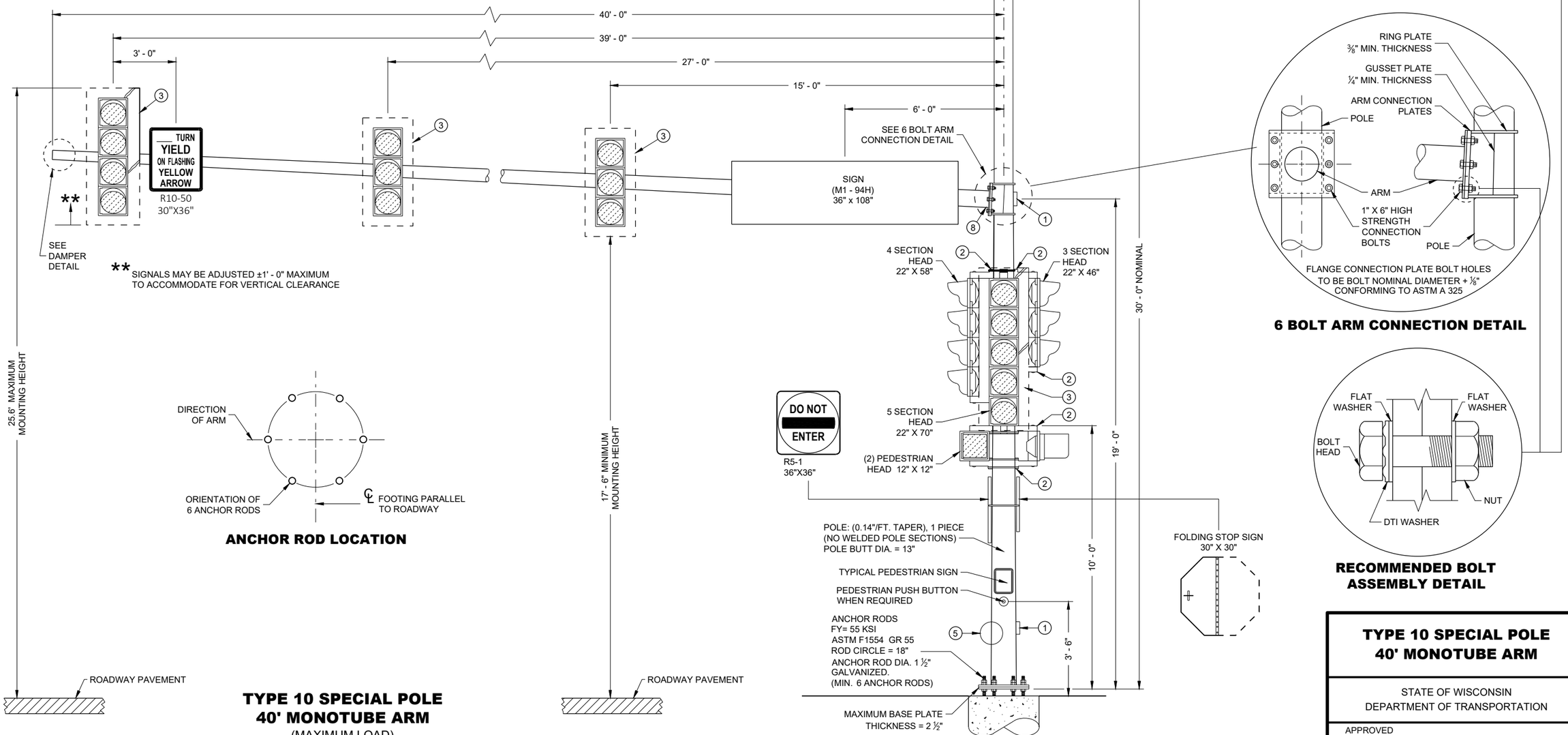

**FLAT VIBRATION DAMPER**

* MOUNT AS CLOSE TO END OF MAST ARM FOR MAXIMUM DAMPING PER MANUFACTURER'S RECOMMENDATIONS.




**FIXED ARM ATTACHMENT DETAIL**




** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE




**ANCHOR ROD LOCATION**




**6 BOLT ARM CONNECTION DETAIL**




**RECOMMENDED BOLT ASSEMBLY DETAIL**

**TYPE 10 SPECIAL POLE**
**40' MONOTUBE ARM**
(MAXIMUM LOAD)

**TYPE 10 SPECIAL POLE**
**40' MONOTUBE ARM**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
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/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 633

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## GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15 FOOT TO 30 FOOT.

POLE TYPES 9 SPECIAL AND 10 SPECIAL ARE FOR ARM LENGTHS 35 FOOT, 40 FOOT, AND 45 FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35 FOOT TO 55 FOOT.

MONOTUBE POLES AND ARMS SHALL BE GALVANIZED STEEL.

RING STIFFENED BUILT UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3% ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATION SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNAL 2015 1ST EDITION (INCLUDING INTERIM REVISIONS)" AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR THE LIGHTING STRUCTURES AS FOLLOWS:

CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.

CATEGORY II FATIGUE LOADS OF TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 SPECIAL AND TYPE 10 SPECIAL STRUCTURES. IN LIEU OF DESIGNING FOR GALLOPING, A VIBRATION DAMPER MITIGATION DEVICE IS REQUIRED TO BE SUPPLIED AND INSTALLED AT THE END OF THE MAST ARM.

CATEGORY II FATIGUE FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE12 AND TYPE 13 STRUCTURES.

115 MPH (700 YEAR MRI BASIC WIND SPEED).

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" STAINLESS STEEL BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR A S DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEAD AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HAND HOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING (SEE SPECIFICATION SECTION 658).

(3) SECURELY MOUNT BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HAND HOLD, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

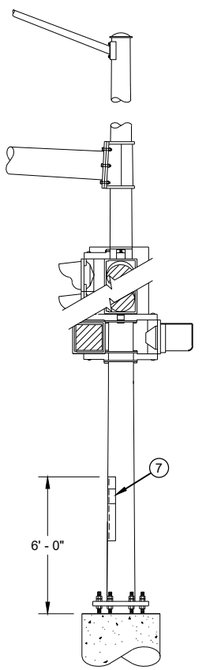
(6) FACTORY WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

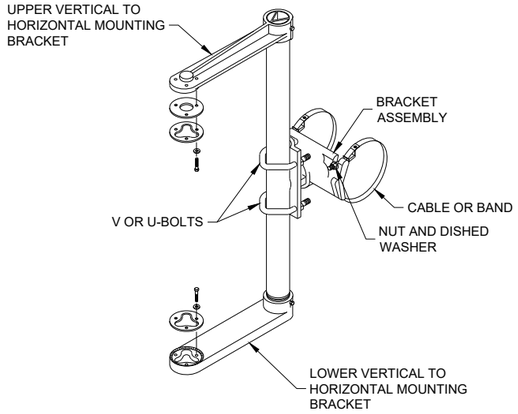
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 6' - 0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

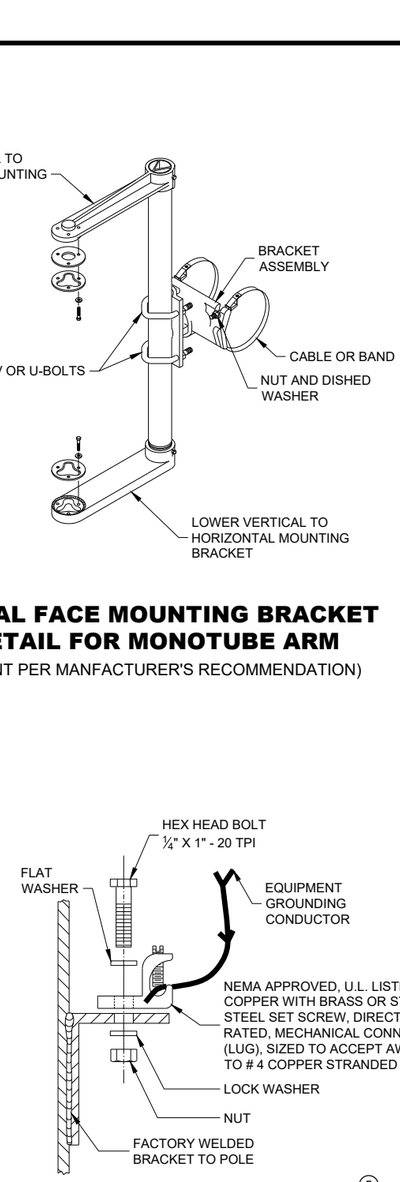



**STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT**



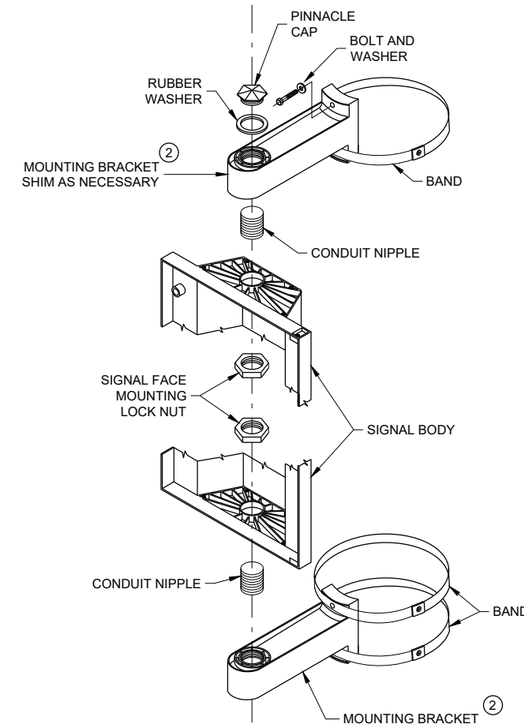

**SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM**

(MOUNT PER MANFACTURER'S RECOMMENDATION)

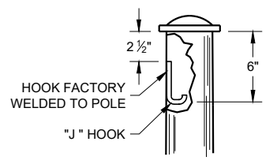



**TYPICAL GROUNDING (5) CONNECTIONS**

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL




**SIGNAL FACE VERTICAL MOUNTING DETAIL**




**TYPICAL "J" HOOK (6) WIRE SUPPORT**

**GENERAL NOTES AND HARDWARE FOR TYPES 9,10, 9/10 SPECIAL, 12 AND 13 POLES WITH MONOTUBE ARMS**

STATE OF WISCONSIN
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/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

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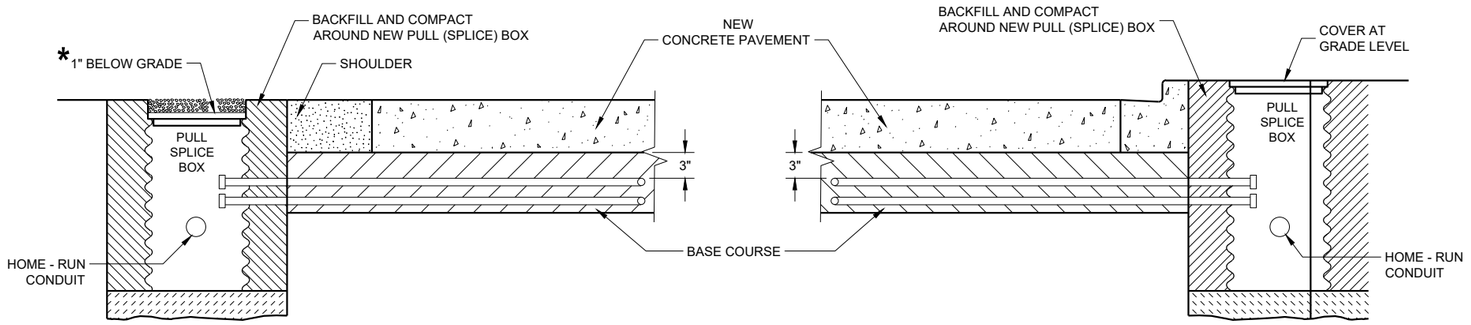



**SECTION A - A**
**NO CURB AND GUTTER**

**SECTION B - B**
**CURB AND GUTTER**

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

## LOOP DETECTOR INSTALLATION DETAIL

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READING TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

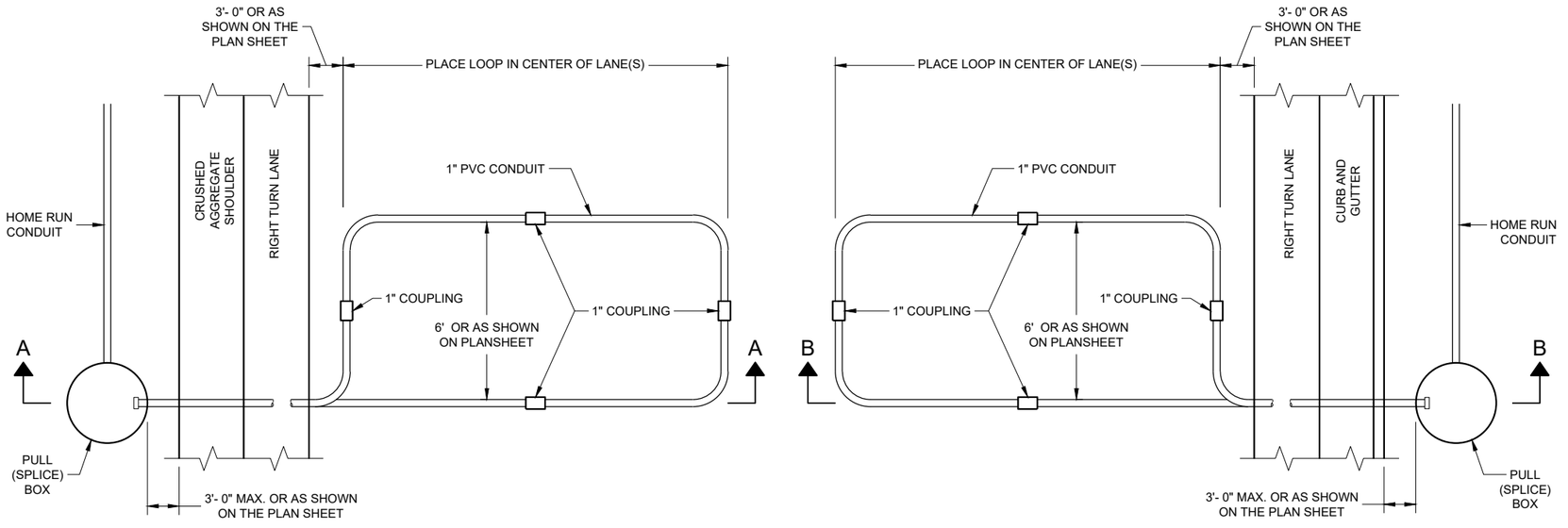
THE #12 AWG LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

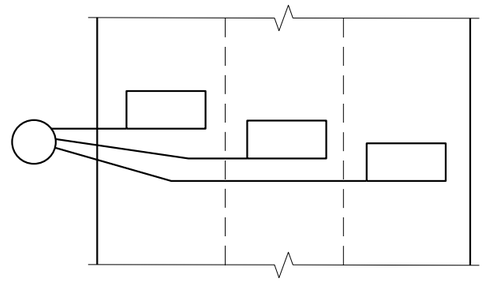
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.




**TYPICAL PLAN LOOP DETECTOR**
**WITH 24" PULL (SPLICE) BOX**



**MULTI-LANE**
**INSTALLATION**

**LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 635

FHWA

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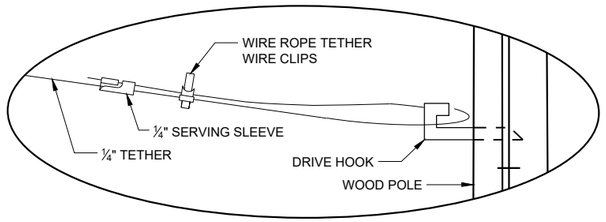
SDD 09F15 - 04b

SDD 09F15 - 04b

| MINIMUM POLE LENGTHS | CLASS | POLE BURIAL DEPTHS |
|---|---|---|
| 25' | V | 5' |
| 30' | V | 6' |
| 35' | IV | 7' |
| 40' | IV | 8' |
| 45' | IV | 9' |

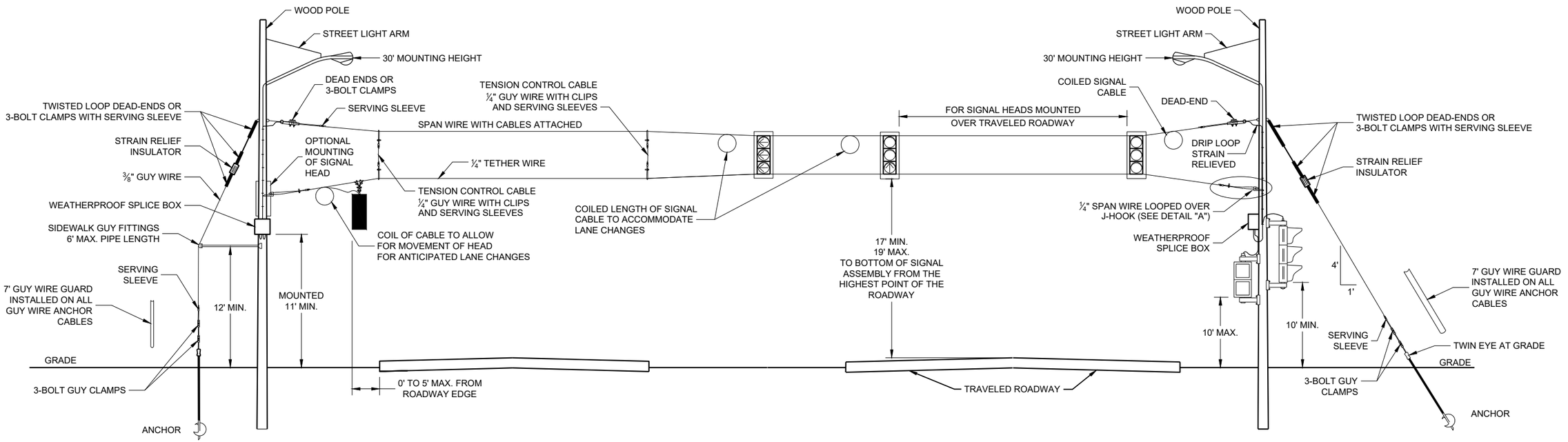



**DETAIL "A"**

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.
2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBLY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.




**SPAN WIRE**
**TEMPORARY SIGNALS**
**4 LANE ROADWAYS**

**SPAN WIRE TEMPORARY TRAFFIC SIGNAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE
/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI 636
FHWA

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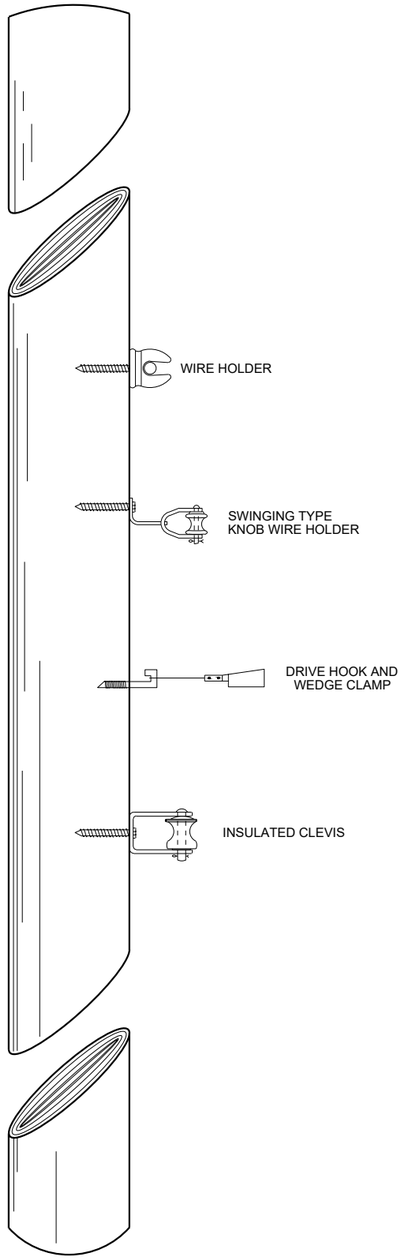
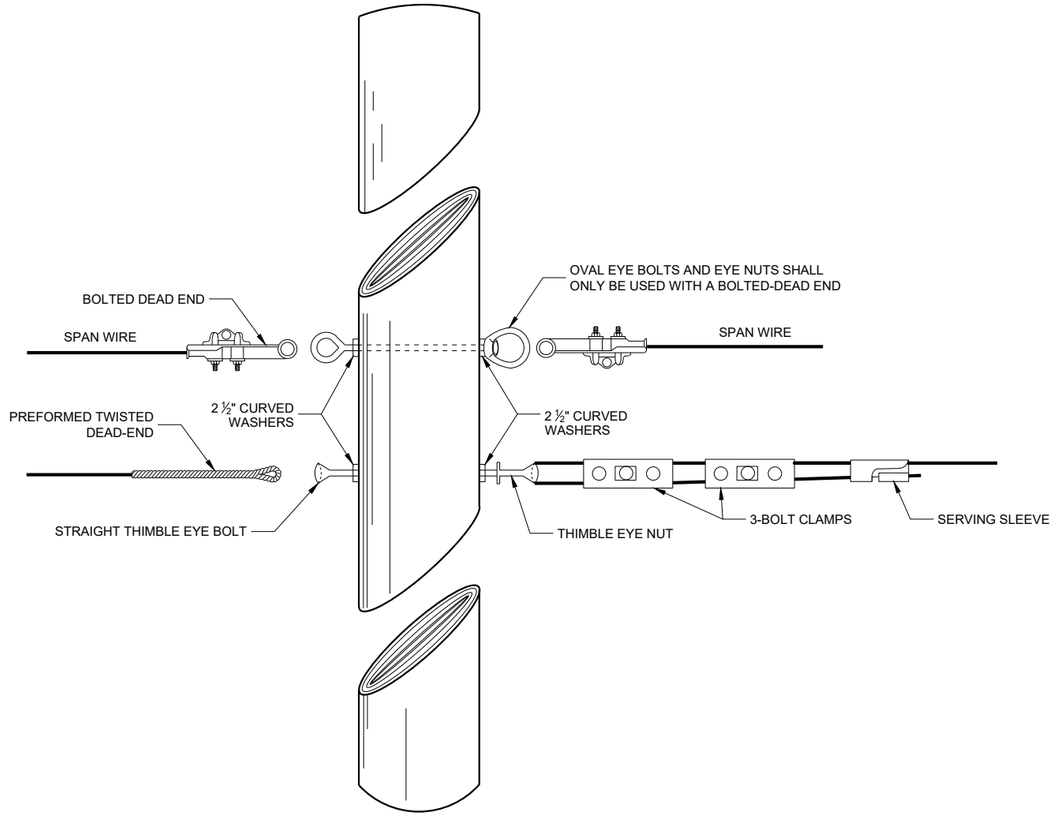
SDD09G01 - 04b

6

SDD09G01 - 04b

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SDD 09G01 - 4d

SDD 09G01 - 4d

**SPAN WIRE TEMPORARY TRAFFIC SIGNAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2015
DATE

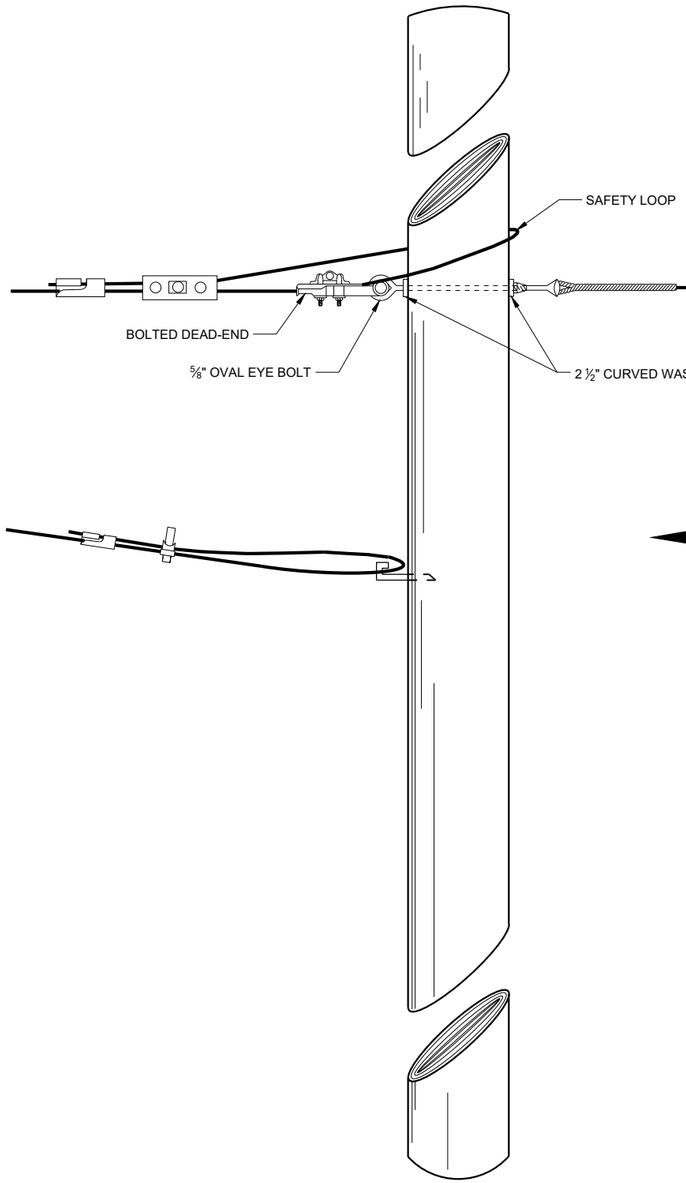
/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

637

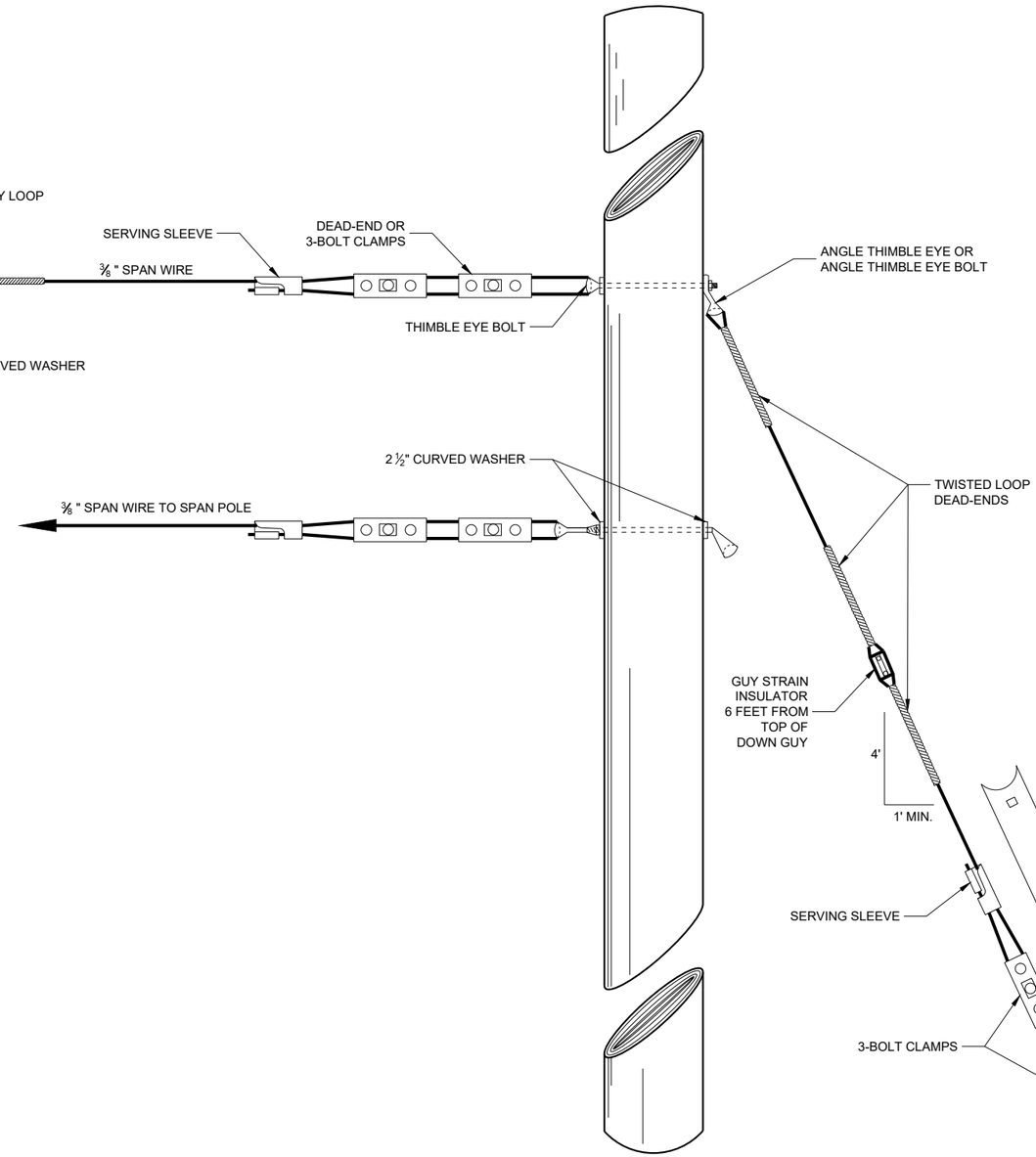
FHWA

## GENERAL NOTES

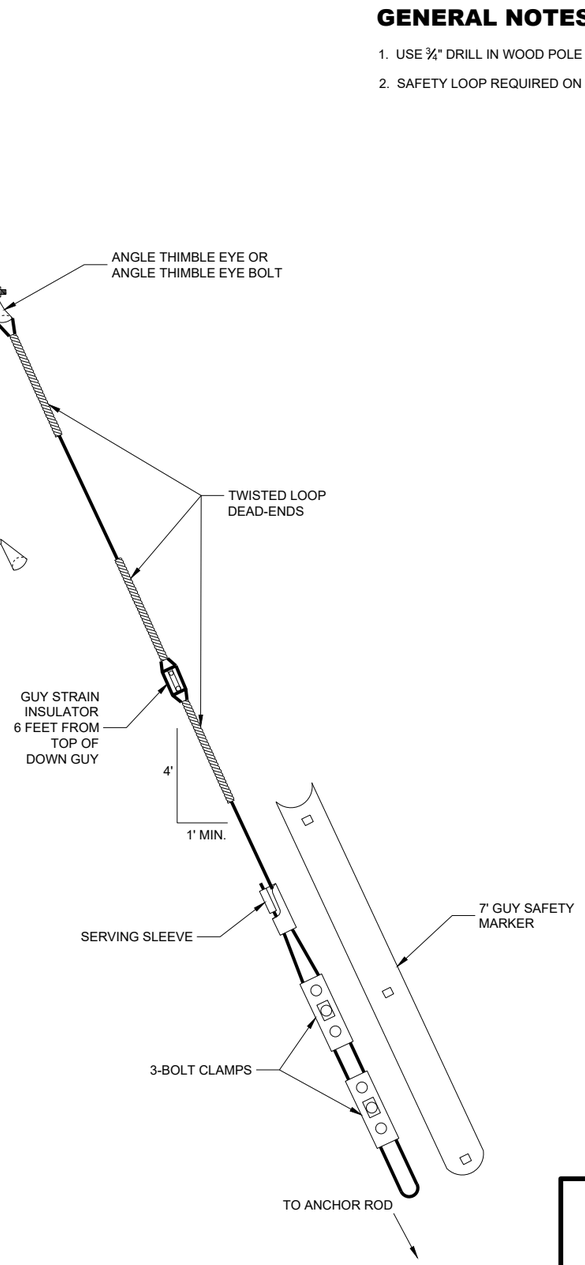
1. USE ¾" DRILL IN WOOD POLE TO PROVIDE FOR ⅝" BOLTS.
2. SAFETY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.




SPAN WIRE POLE




GUY POLE




**TYPICAL DEAD-ENDINGS OR GUYING**

**SPAN WIRE TEMPORARY TRAFFIC SIGNAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

638

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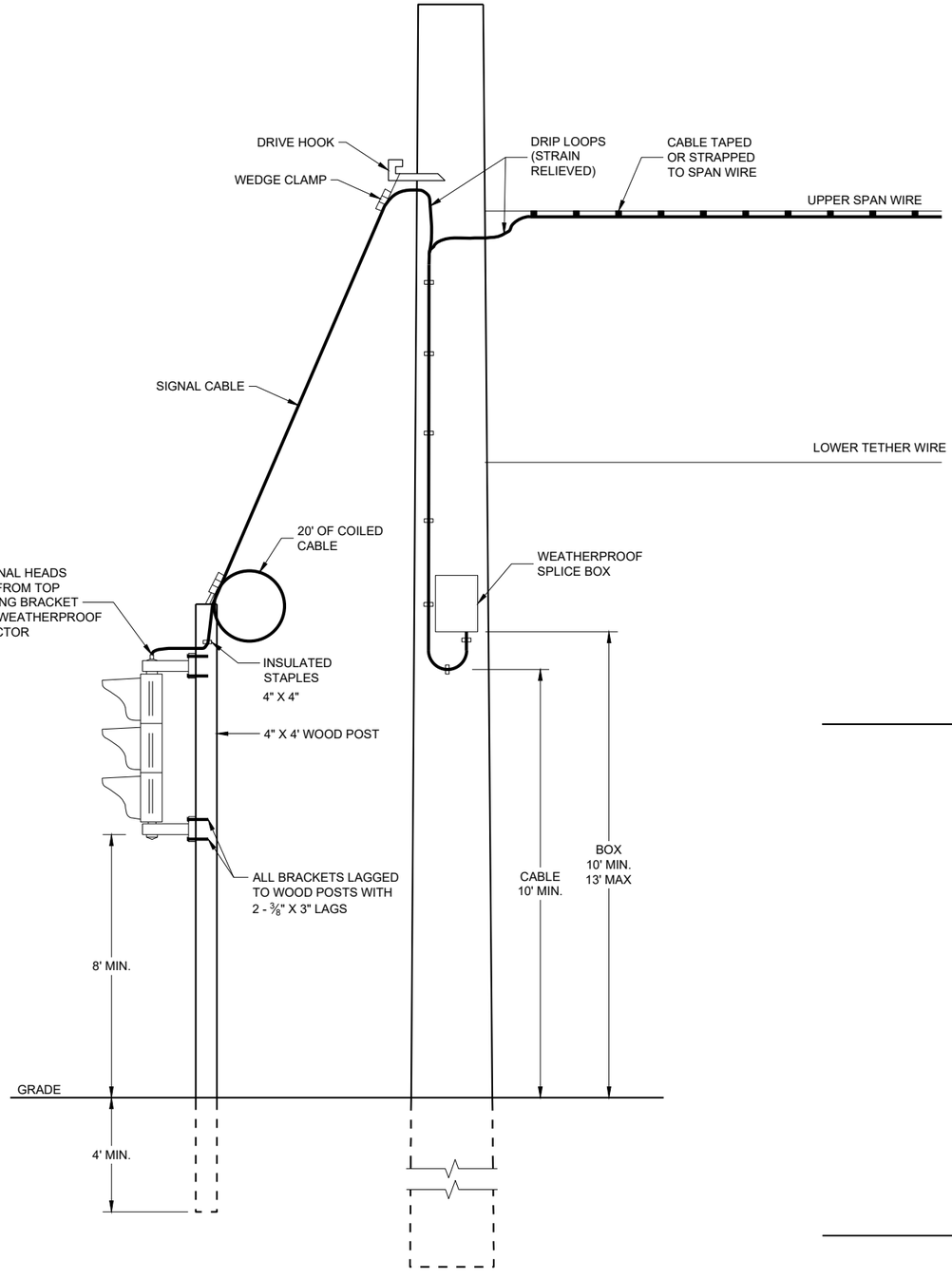
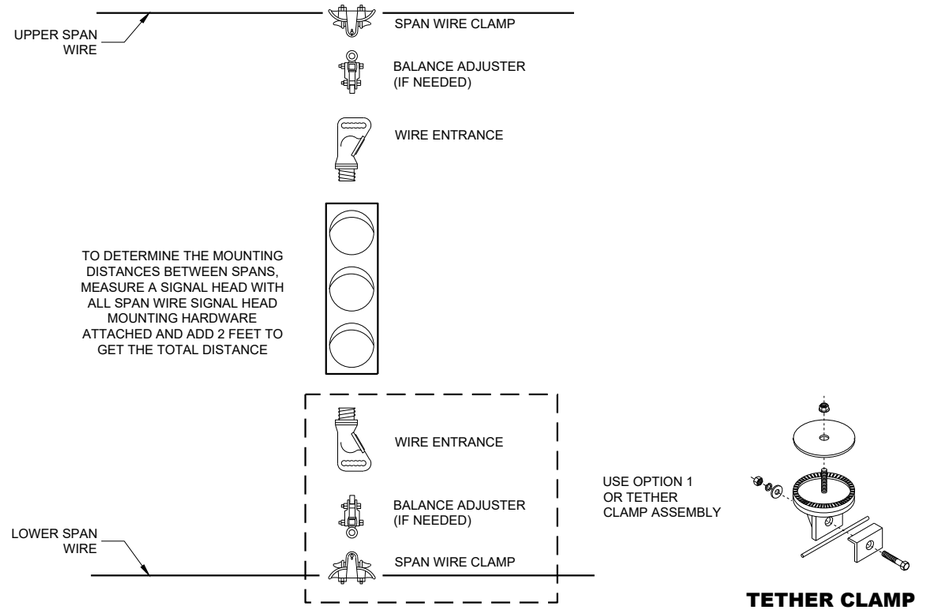
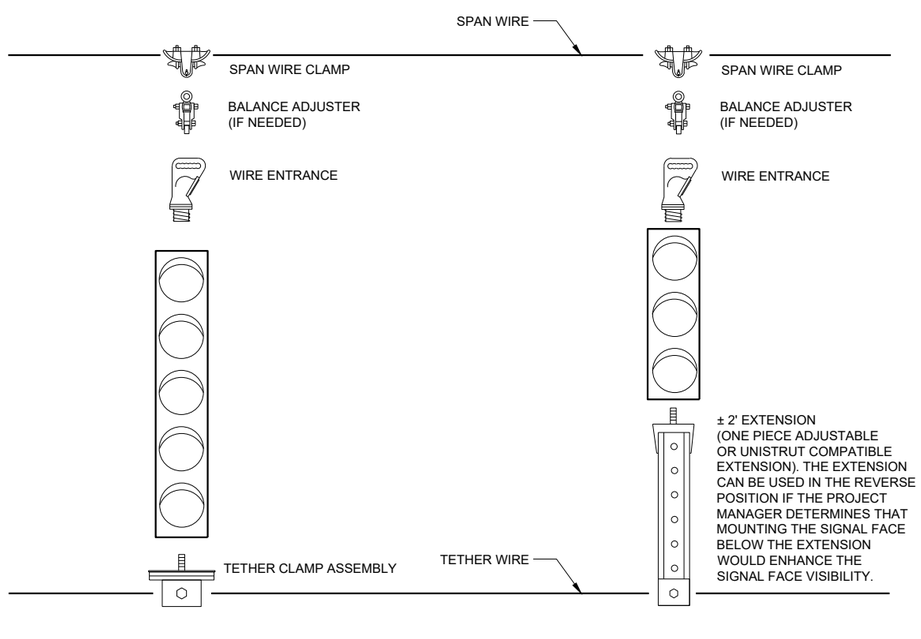



**TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL**




**TYPICAL SPAN WIRE MOUNTING HARDWARE**




**5 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN WIRE**

**SPAN WIRE TEMPORARY TRAFFIC SIGNAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015 — DATE
/S/ Ahmet Demerbilek — ROADWAY STANDARDS DEVE ENGINEER

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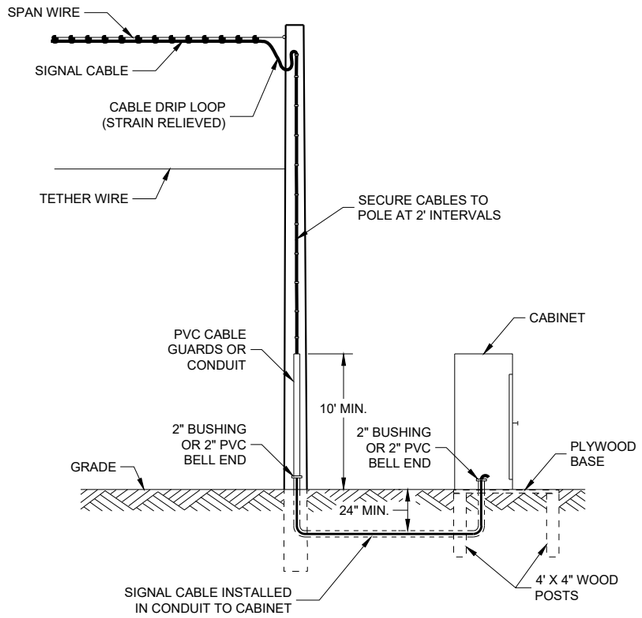
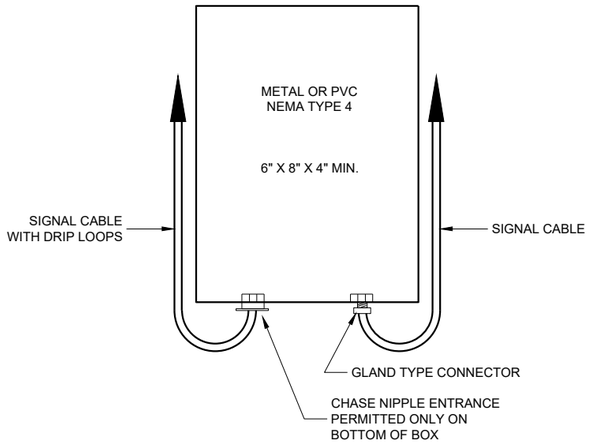
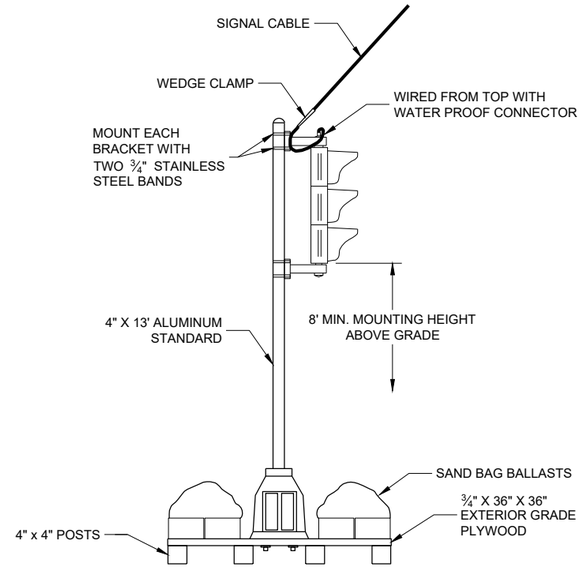
SDD 09G01 - 4f

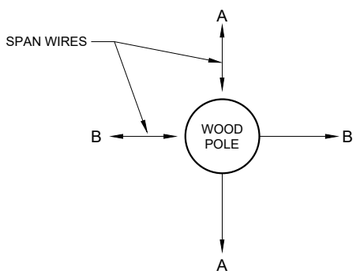



**SPLICE BOX**

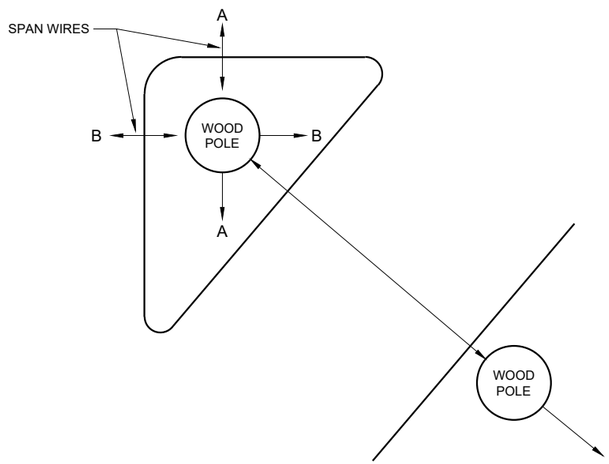



**TYPICAL SKID TYPE TEMPORARY**

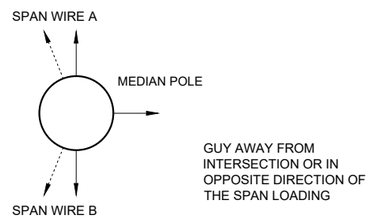



ALL DOWN OR SIDEWALK GUYS
SHALL BE INSTALLED IN THE
OPOSITE DIRECTION OF THE
STRAIN OF THE SPAN WIRE

**CORNER POLES**




**ISLAND POLES**




GUY AWAY FROM
INTERSECTION OR IN
OPPOSITE DIRECTION OF
THE SPAN LOADING

**MEDIAN POLES**

**SPAN WIRE TEMPORARY TRAFFIC SIGNAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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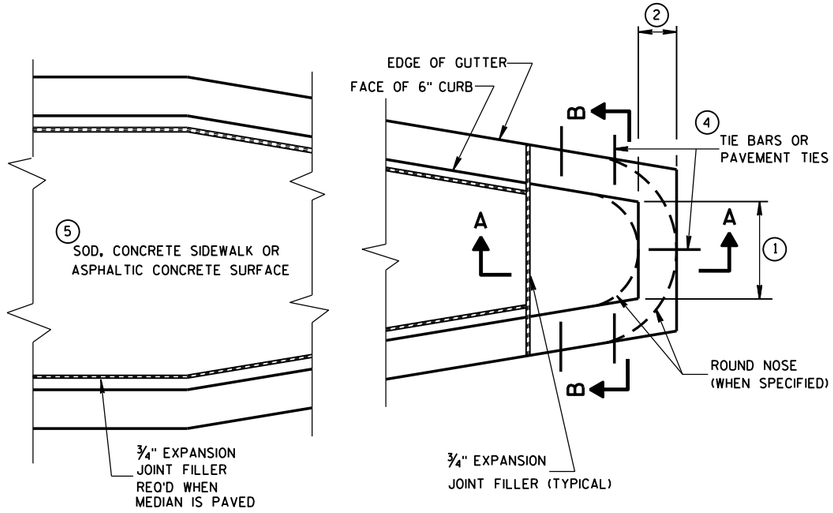
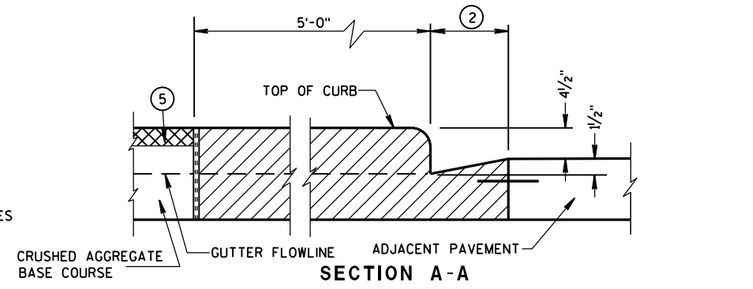
SDD 09G01 - 4g




## CONCRETE MEDIAN BLUNT NOSE DETAIL

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

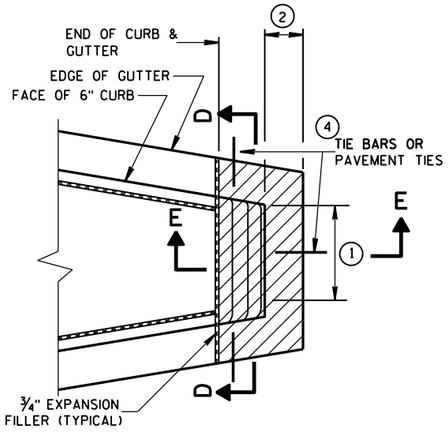
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

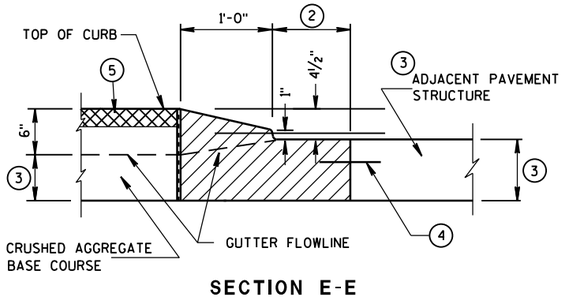
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

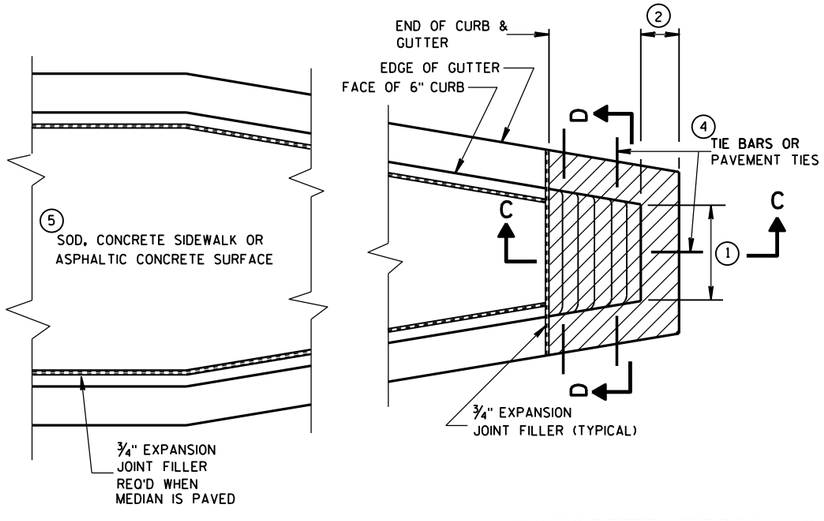
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

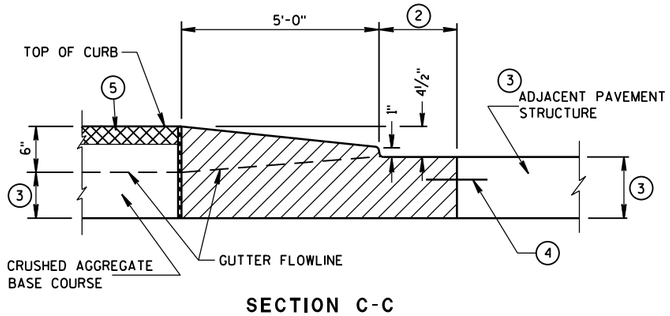



SECTION E-E

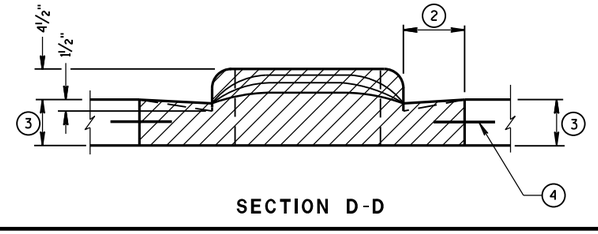
## CONCRETE MEDIAN SLOPED NOSE TYPE 2




SECTION C-C

## CONCRETE MEDIAN SLOPED NOSE TYPE 1




SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER

FHWA



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S.D.D. 11 B 2-2

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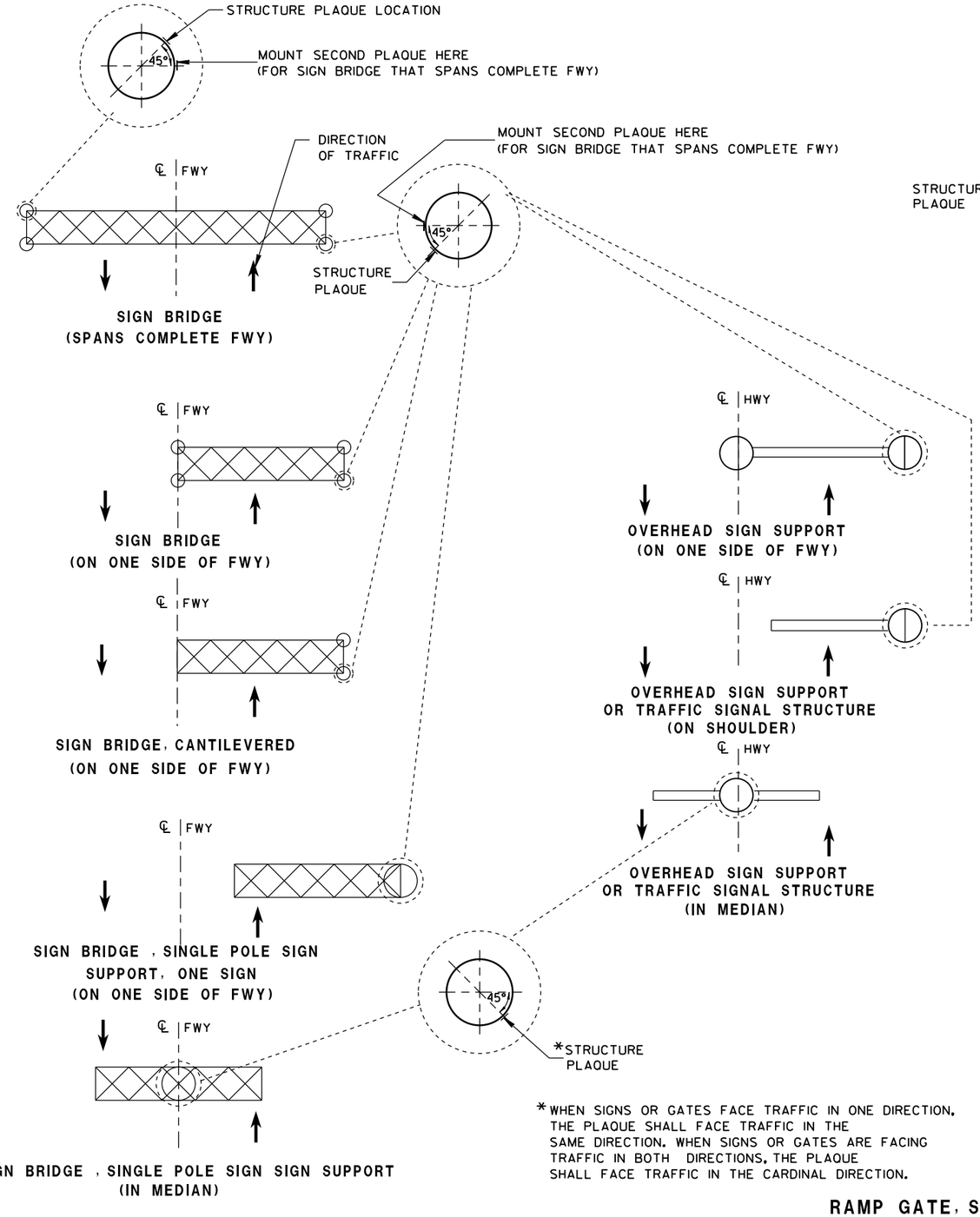
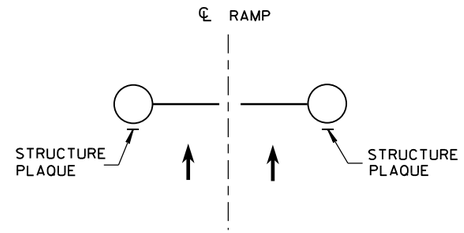
S.D.D. 11 B 2-2

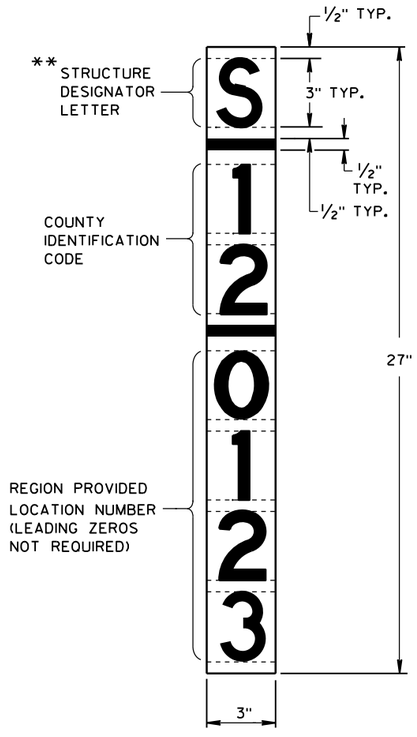



LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES

* WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.




RAMP GATE
(ACROSS FWY ON-RAMP)




** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

## GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

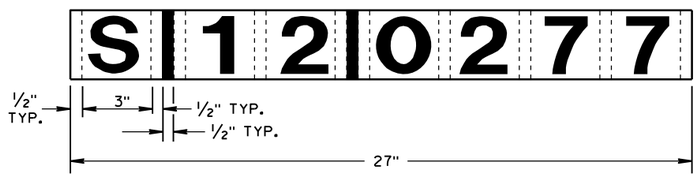
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.




IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA



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S.D.D. 12 A 4-3

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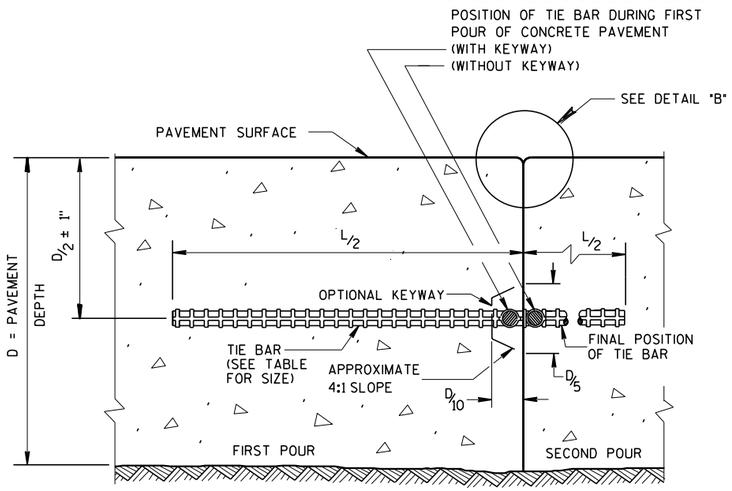
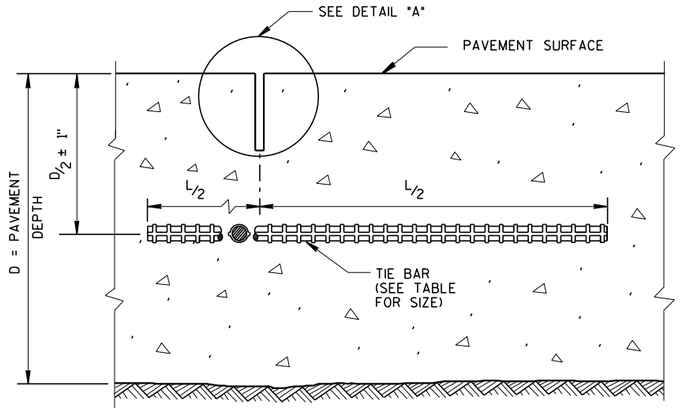
S.D.D. 12 A 4-3




## CONSTRUCTION JOINT




## SAWED JOINT

## GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.




PLAN VIEW




SECTION A-A

## LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT




DETAIL "A"




DETAIL "B"




DETAIL "C"

## TIE BAR TABLE

| PAVEMENT DEPTH (D) | TIE BAR SIZE | TIE BAR LENGTH (L) | MAX. TIE BAR SPACING |
|---|---|---|---|
| < 10 1/2" | NO. 4 | 30" | 36" |
| ≥ 10 1/2" | NO. 5 | 36" | 36" |
| | NO. 4 * | 30" | 24" ** |

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.




PLAN VIEW
SHOWING LOCATION OF TIE BARS

## CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE
/S/ Peter Kemp, P.E.
PAVEMENT SUPE

FHWA



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S.D.D. 13 C 1-19

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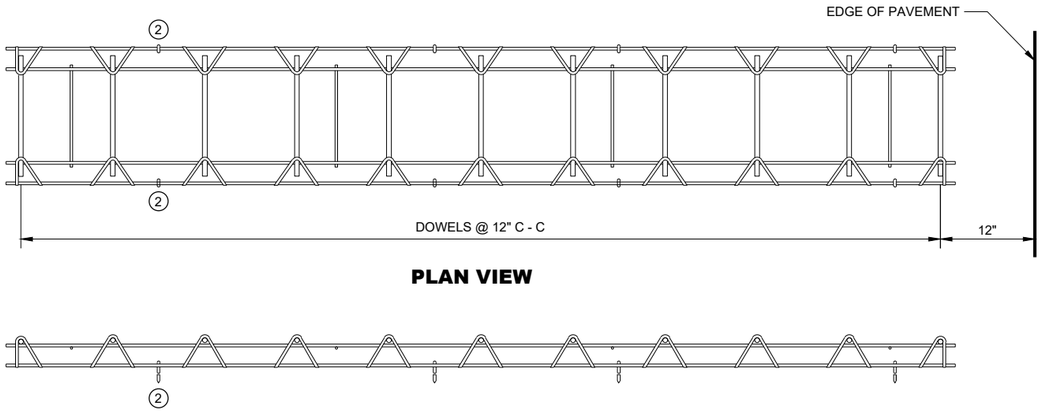
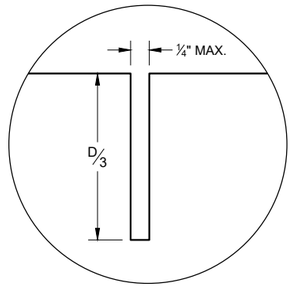
S.D.D. 13 C 1-19




## CONTRACTION JOINT DOWEL ASSEMBLY (1)




JOINT DETAIL

## GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

(1) OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.

(2) SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

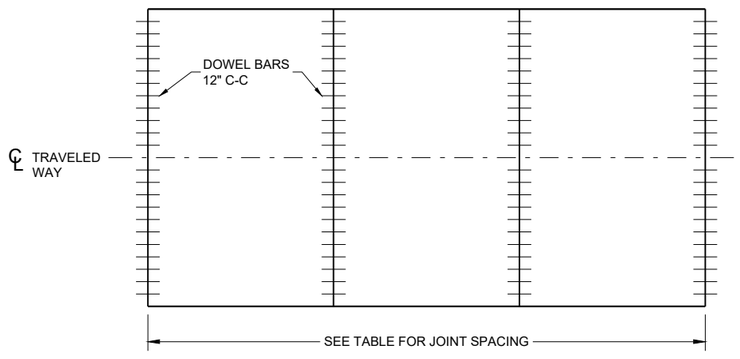
(3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.

(4) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

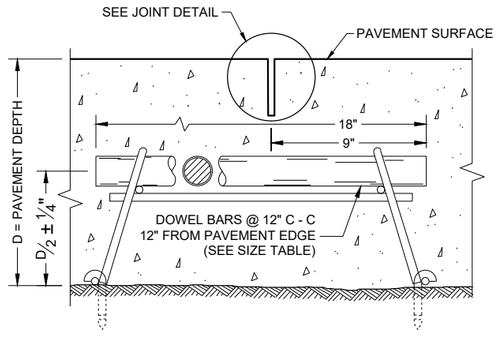
(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED DOWEL BAR CONSTRUCTION JOINT" DETAIL.

(6) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

(7) ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



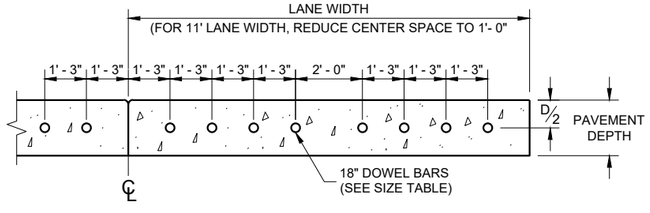

CONTRACTION JOINT LOCATIONS



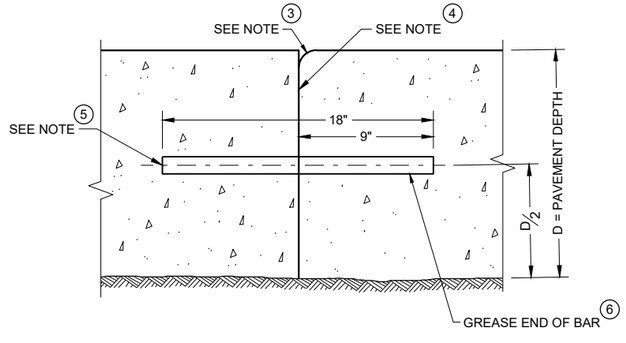

DOWELED CONTRACTION JOINT

### PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

| PAVEMENT DEPTH (D) | DOWEL BAR DIAMETER | CONTRACTION JOINT SPACING |
|---|---|---|
| 6", 6 ½" | NONE | 12' |
| 7", 7 ½" | 1" | 14' |
| 8" & ABOVE | 1 ¼" | 15' |




DRILLED DOWEL BAR CONSTRUCTION JOINT (7)




TRANSVERSE CONSTRUCTION JOINT

**URBAN DOWELED CONCRETE PAVEMENT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

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FHWA

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SDD 13C13 - 11

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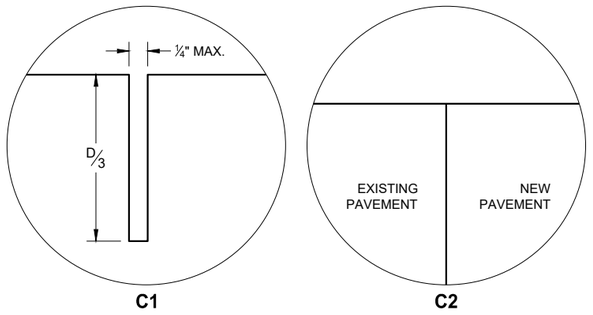
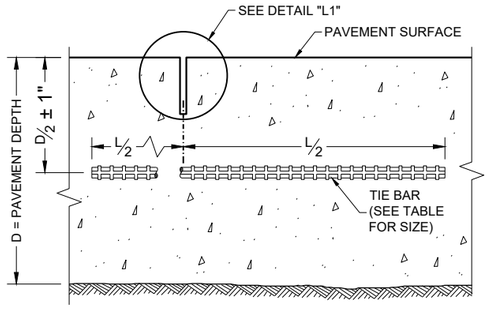
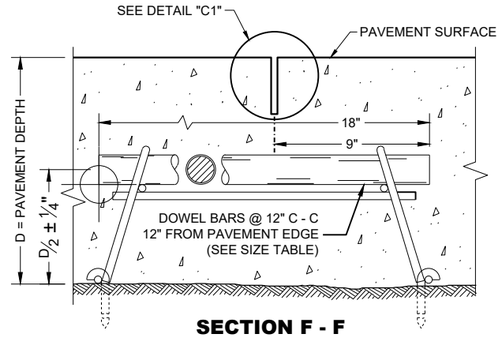
SDD 13C13 - 11




**TRANSVERSE JOINTS**




**SECTION C - C**
**SAWED JOINT**




**SECTION F - F**
**CONTRACTION JOINT**

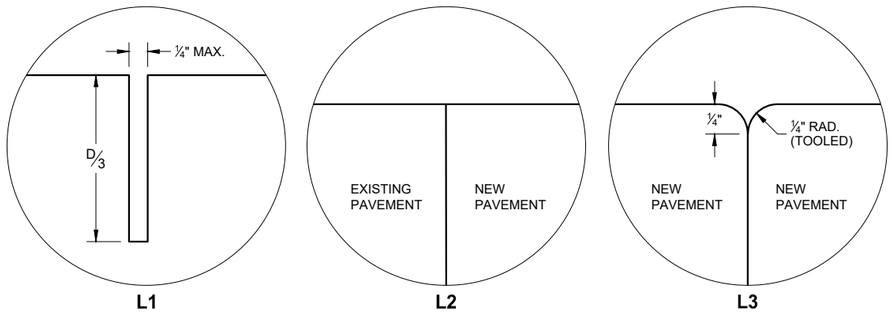
## GENERAL NOTES

ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

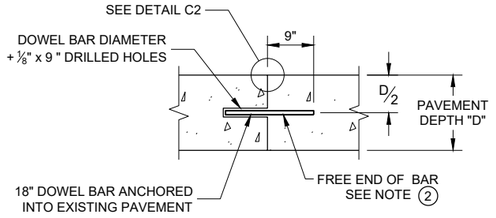
PROVIDE A MIMIMUM DISTANCE OF 15 INCHES FROM AN EXISTING TRANSVERSE JOINT OR EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

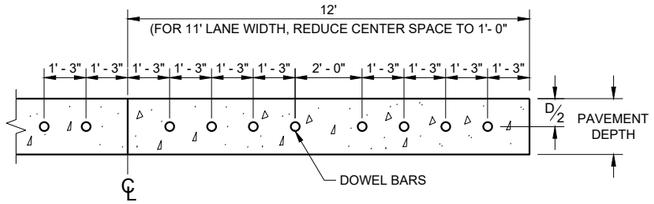
(2) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.



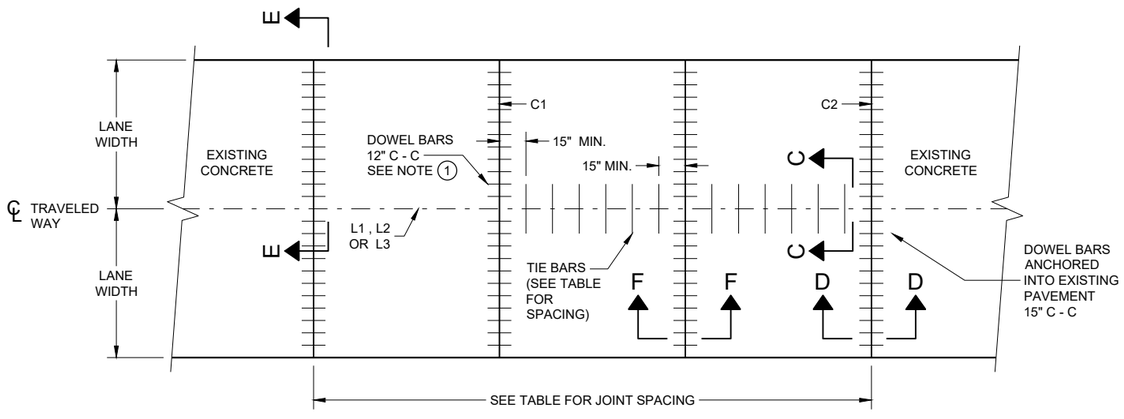

**LONGITUDINAL JOINTS**




**SECTION D - D**




**SECTION E - E**
**SPACING OF DOWEL BARS**
**ANCHORED INTO EXISTING PAVEMENT**




**PLAN VIEW**
**CONCRETE BASE**
**CONTRACTION JOINT LOCATIONS**

### TIE BAR TABLE

| PAVEMENT DEPTH (D) | TIE BAR SIZE | TIE BAR LENGTH (L) | MAX. TIE BAR SPACING |
|---|---|---|---|
| < 10 ½" | NO. 4 | 30" | 36" |
| ≥ 10 ½" | NO. 5 | 36" | 36" |
| | NO. 4* | 30" | 24"** |

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

### PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

| PAVEMENT DEPTH (D) | DOWEL BAR DIAMETER | CONTRACTION JOINT SPACING |
|---|---|---|
| 6", 6 ½" | NONE | 12' |
| 7", 7 ½" | 1" | 14' |
| 8" & ABOVE | 1 ¼" | 15' |

**CONCRETE BASE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

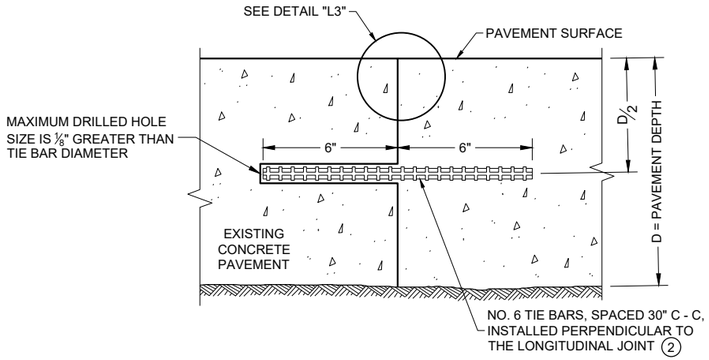



6


SDD 13C15 - 08a

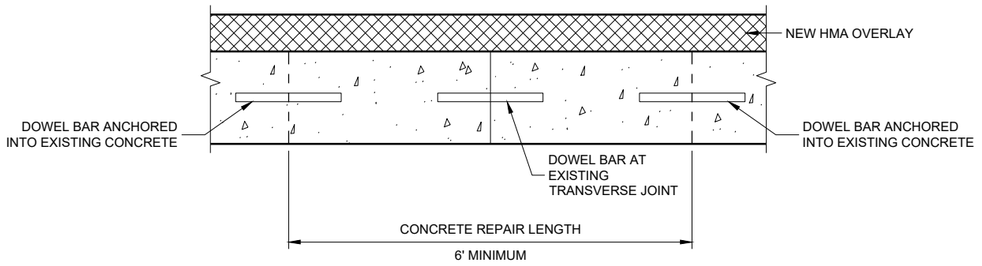
## GENERAL NOTES

1. USE AN ENGINEER APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) AT THE LONGITUDINAL JOINT IN LIEU OF TIE BARS FOR SINGLE LANE CONCRETE BASE REPAIRS UP TO 15 FEET IN LENGTH.
2. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.
3. PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

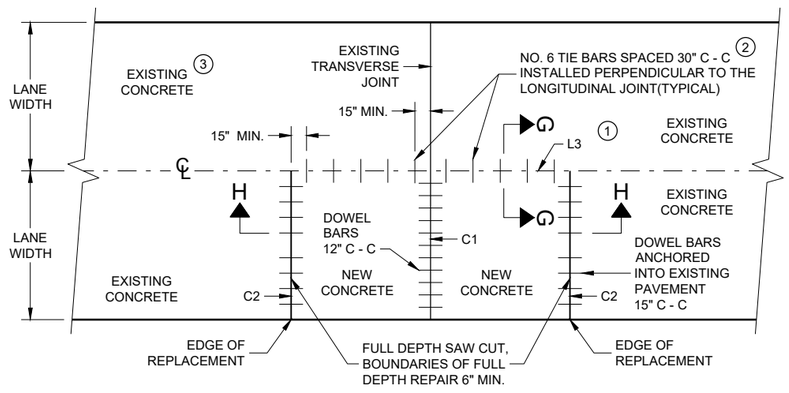



**SECTION G - G**

**TIE BARS ANCHORED INTO EXISTING PAVEMENT**




**SECTION H - H**




**PLAN VIEW**

**SINGLE LANE CONCRETE BASE REPAIR**

**CONCRETE BASE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS 646

FHWA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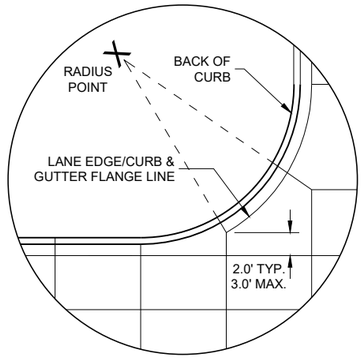
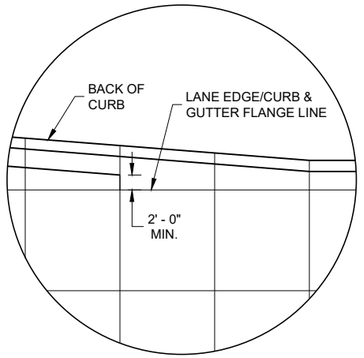
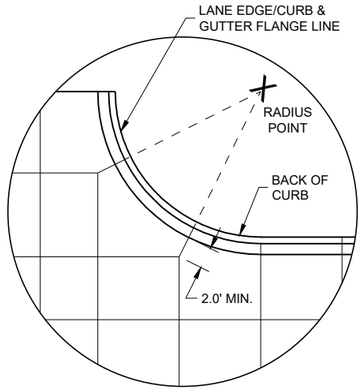
SDD 13C15 - 08b




**DETAIL "A"**




**DETAIL "B"**

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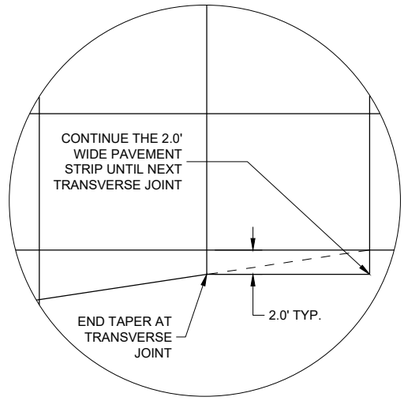



**DETAIL "D"**

## GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

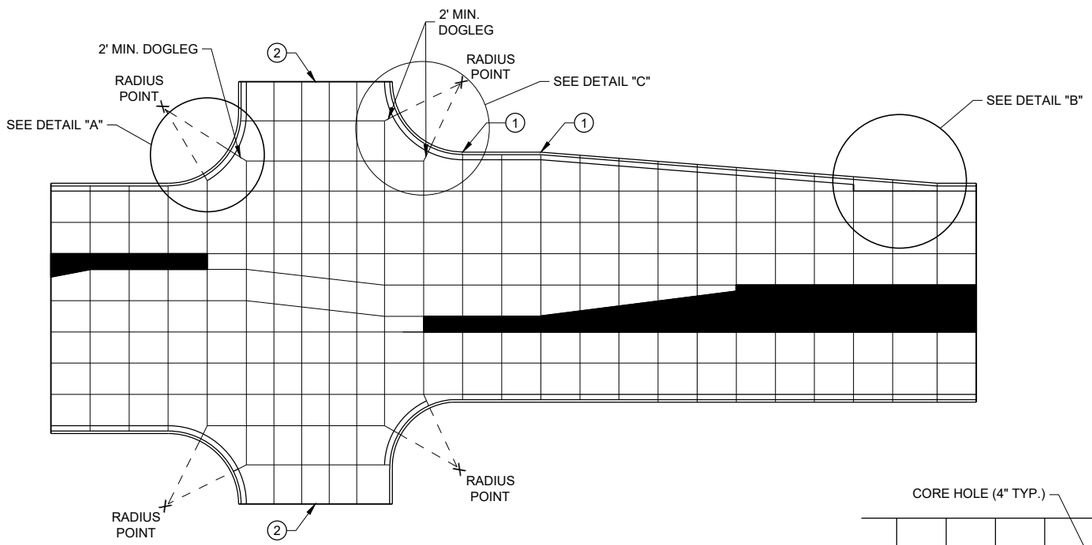
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

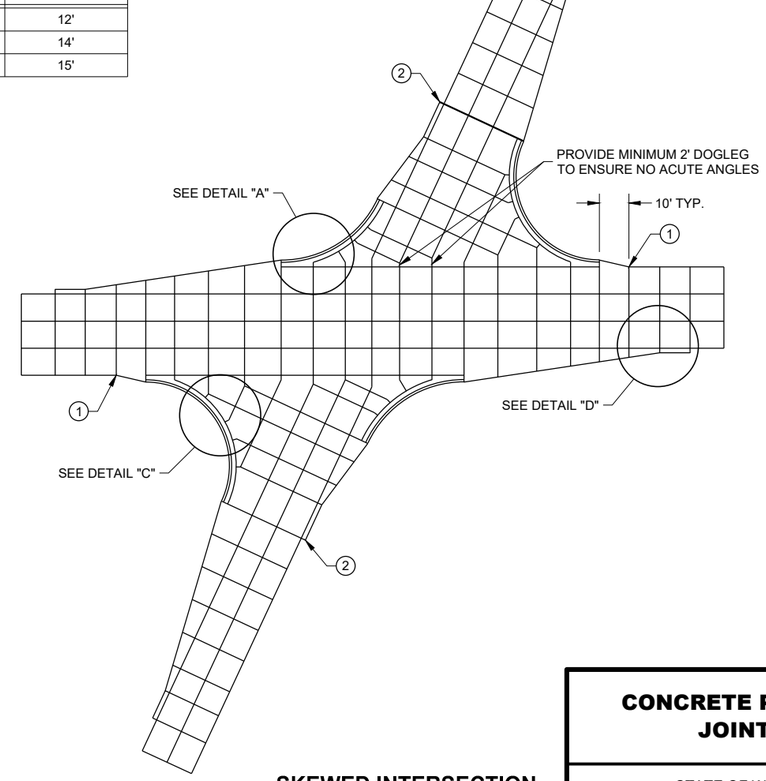
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



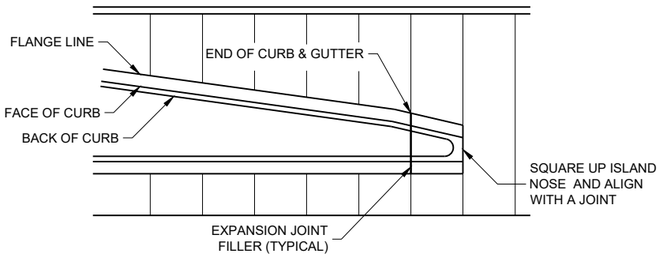

**STANDARD INTERSECTION**

PAVEMENT DEPTH AND JOINT SPACING TABLE

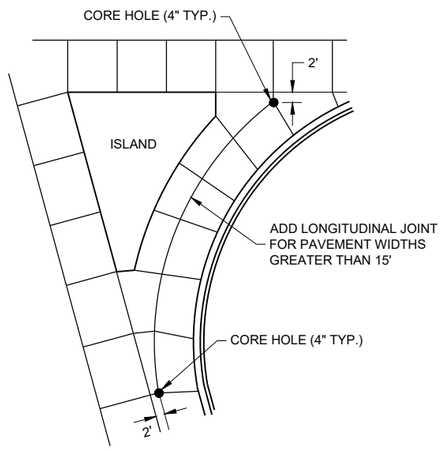
| PAVEMENT DEPTH (D) | CONTRACTION JOINT SPACING |
|---|---|
| 6", 6 ½" | 12' |
| 7", 7 ½" | 14' |
| 8" & ABOVE | 15' |




**SKEWED INTERSECTION**




**APPROACH TO MEDIAN**




**LARGE RIGHT TURN**

**CONCRETE PAVEMENT JOINTING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



6

SDD 13C18 - 08a

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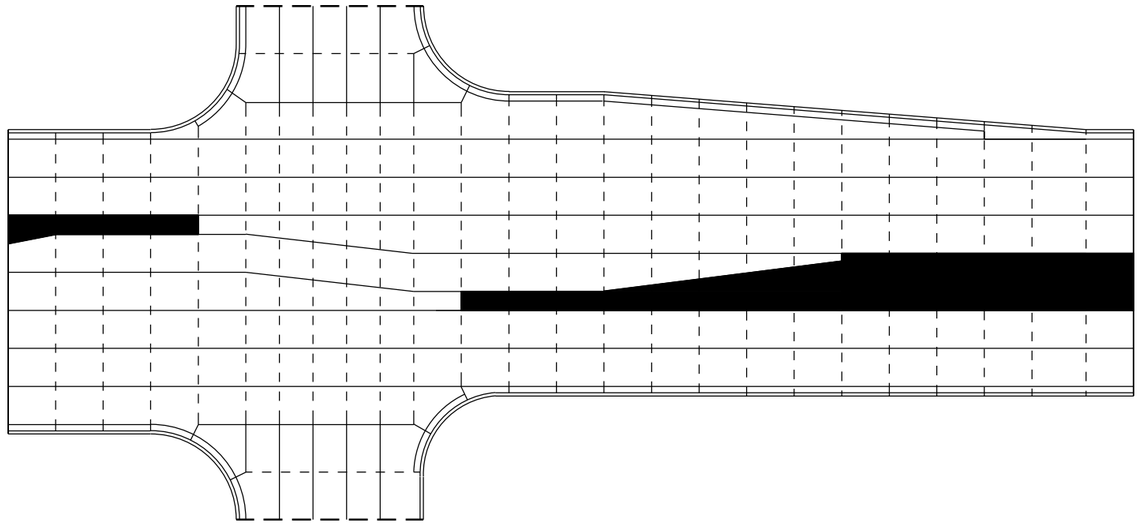
SDD 13C18 - 08a

## LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

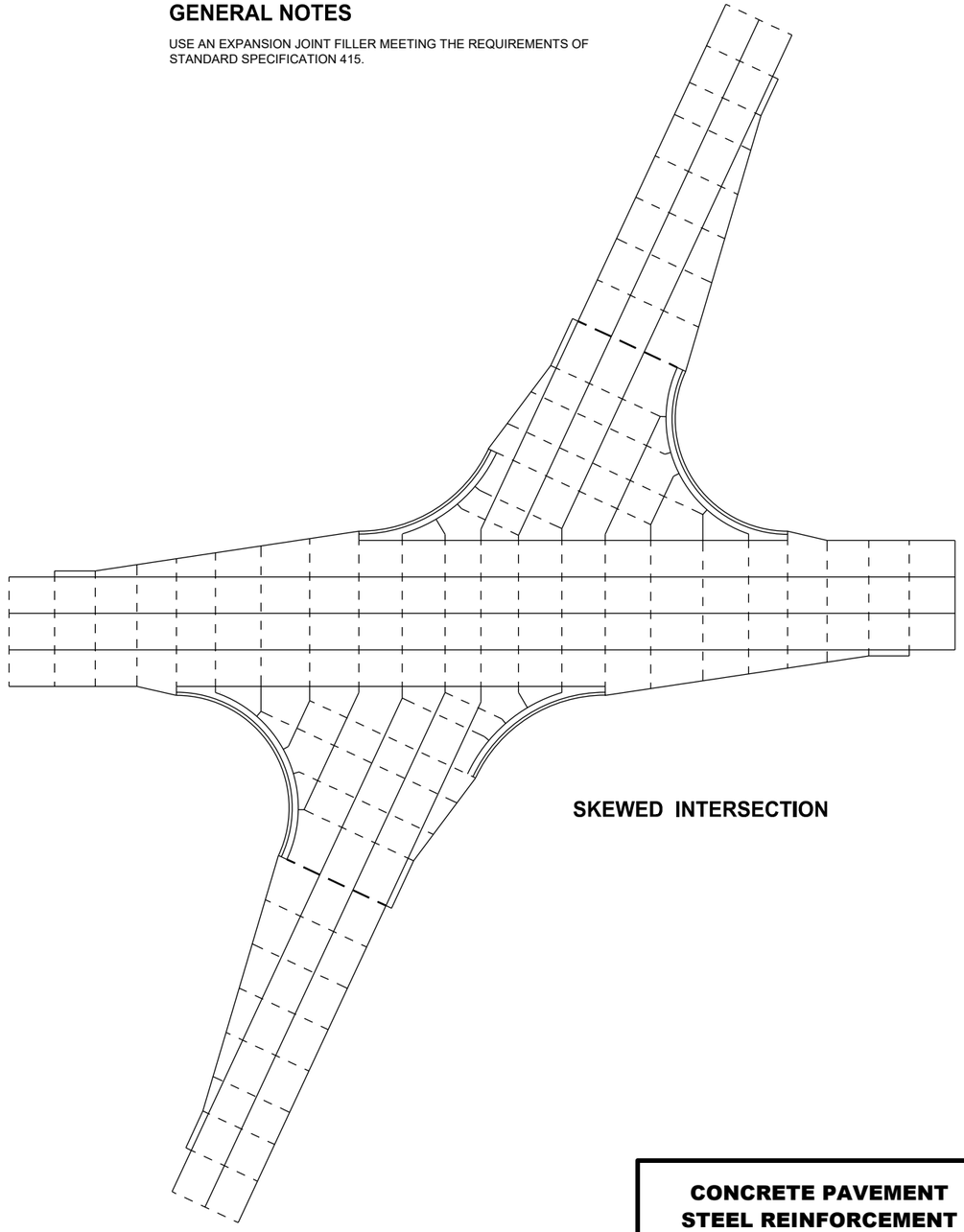
TIED JOINT



STANDARD INTERSECTION

## GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

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SDD 13C18 - 08b

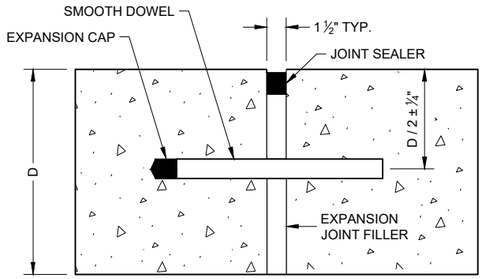
**CONCRETE PAVEMENT STEEL REINFORCEMENT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

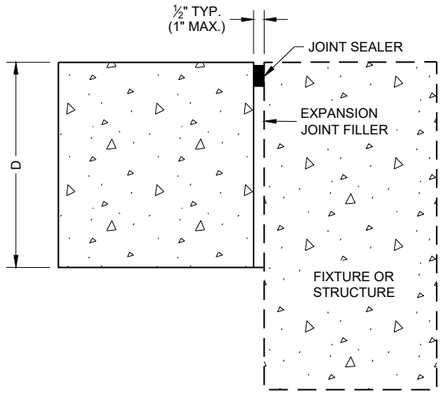


6

SDD 13C18 - 08b




**DOWELED TRANSVERSE** (1)




**UNTIED - LONGITUDINAL**

## EXPANSION JOINTS

### TIE BAR TABLE

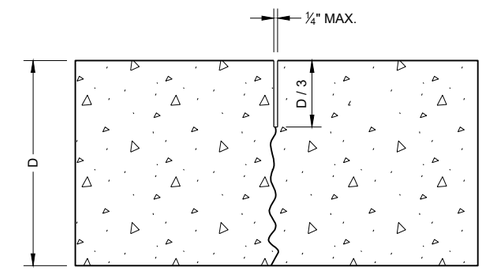
| PAVEMENT DEPTH (D) | TIE BAR SIZE | TIE BAR LENGTH (L) | MAX. TIE BAR SPACING |
|---|---|---|---|
| < 10 ½" | NO. 4 | 30" | 36" |
| ≥ 10 ½" | NO. 5 | 36" | 36" |
| | NO. 4 * | 30" | 24" ** |

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

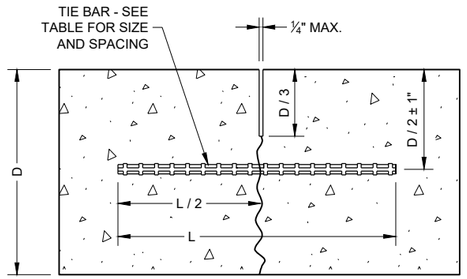
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

### GENERAL NOTES

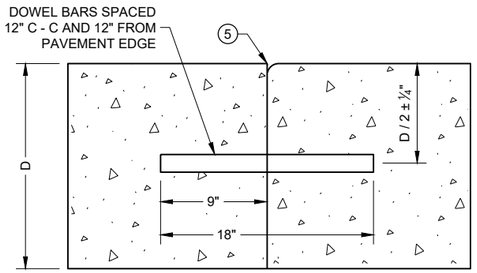
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



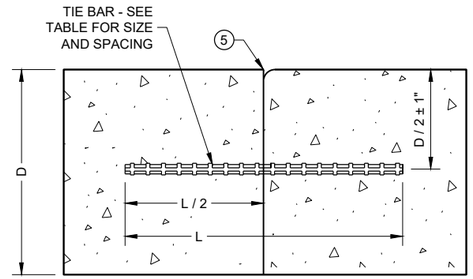

**UNDOWELED TRANSVERSE**



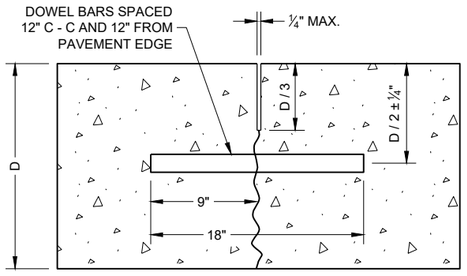

**TIED LONGITUDINAL**



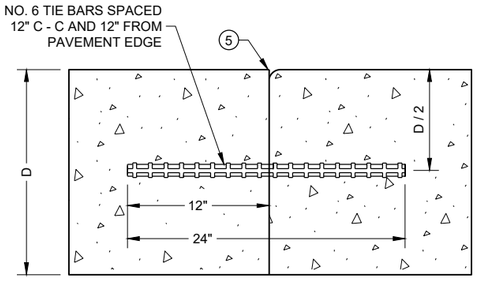

**DOWELED TRANSVERSE** (3)



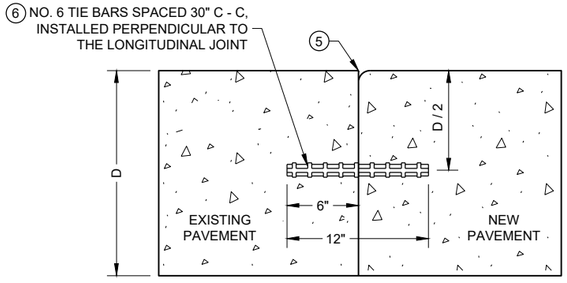

**TIED LONGITUDINAL**




**DOWELED TRANSVERSE**




**TIED TRANSVERSE** (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)

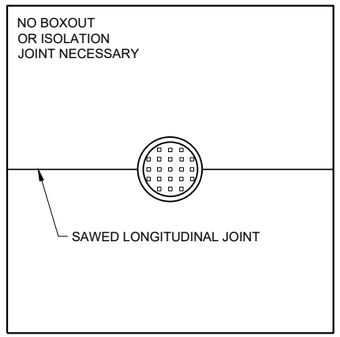



**TIED LONGITUDINAL TO EXISTING**

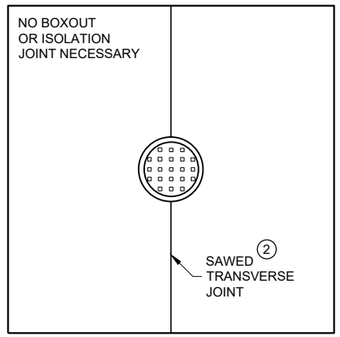
## CONTRACTION JOINTS (2)

## CONSTRUCTION JOINTS (4)

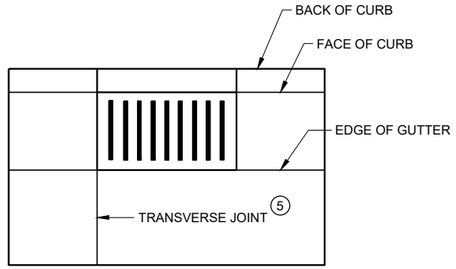
**CONCRETE PAVEMENT JOINT TYPES**




**MANHOLE WITH LONGITUDINAL JOINT**



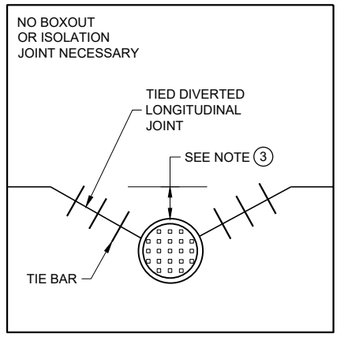

**MANHOLE WITH TRANSVERSE JOINT**



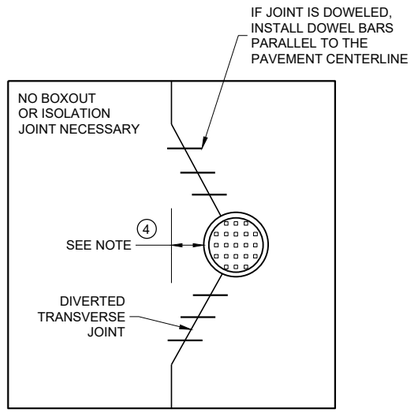

**INLET WITH TRANSVERSE JOINT**

## GENERAL NOTES

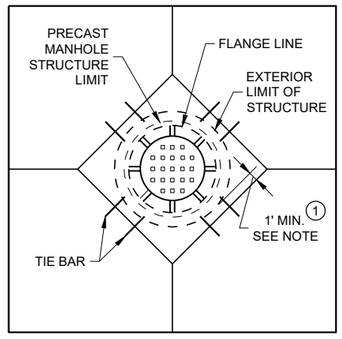
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.




**MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT**




**MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT**




**DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS**

**CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVISO

650

FHWA

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SDD13C18 - 08d

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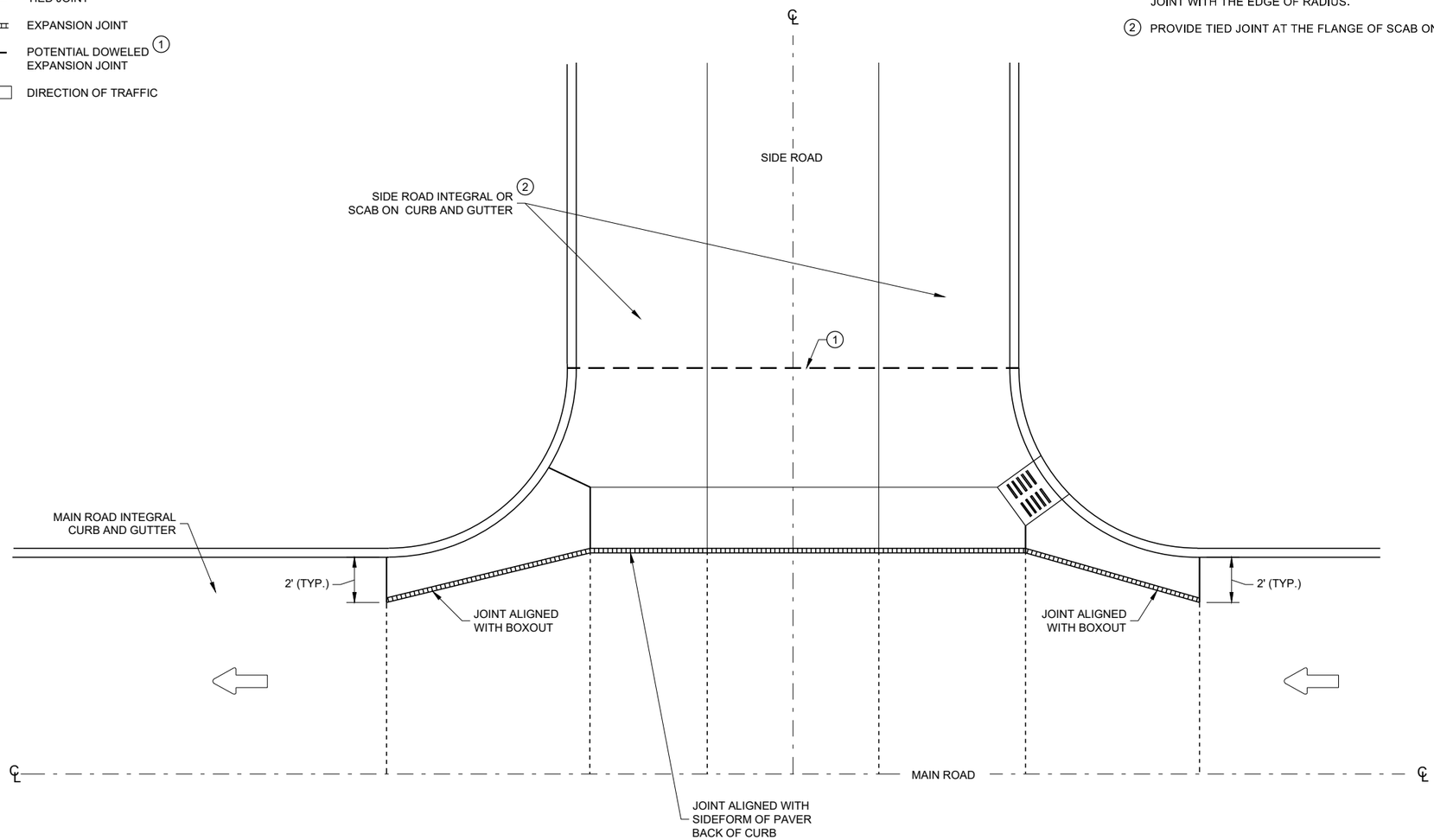
SDD13C18 - 08d

## LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT (1)
- DIRECTION OF TRAFFIC




## GENERAL NOTES

(1) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH THE EDGE OF RADIUS.

(2) PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USE.

**INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER**

**CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS 651

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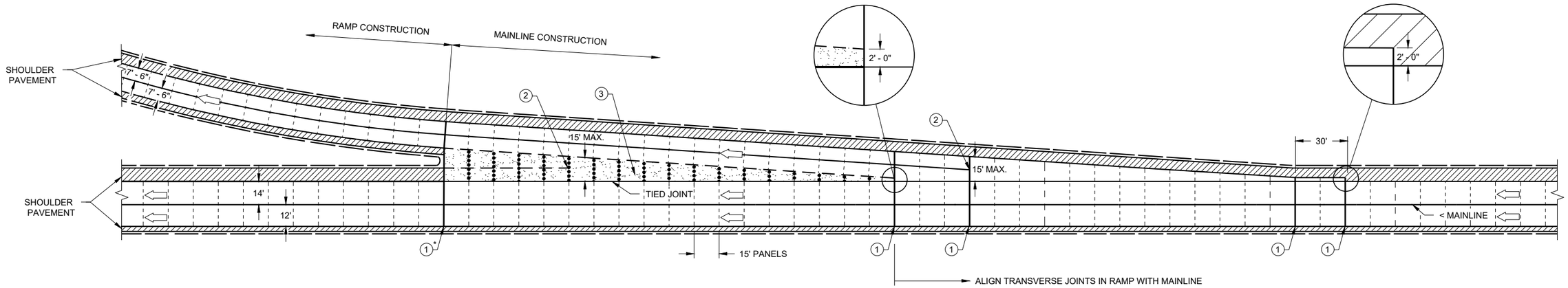
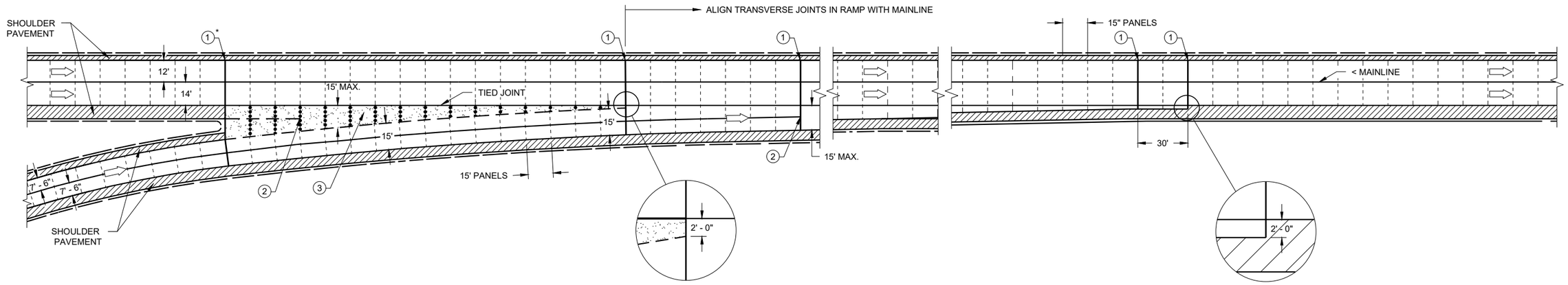



## DECELERATION LANE




## ACCELERATION LANE

## GENERAL NOTES

PAVEMENT AND BASE THICKNESS, PANEL LENGTHS, JOINTS AND REINFORCEMENT FOR THE DECELERATION AND ACCELERATION LANES, INCLUDING TAPERS, SHALL BE THE SAME AS THE MAINLINE, EXCEPT WHERE OTHERWISE NOTED.

ALL REINFORCEMENT BARS SHALL BE EPOXY COATED CONFORMING TO SUBSECTION 505.2.6 OF THE STANDARD SPECIFICATIONS.

LANE AND SHOULDER WIDTHS MAY VARY FROM SHOWN. SEE CONSTRUCTION PLANS FOR ACTUAL PROPOSED WIDTHS.

(1) CRITICAL TRANSVERSE JOINT LOCATIONS AT PAVEMENT WIDTH CHANGES.
((1)* IS NOT A CRITICAL TRANSVERSE JOINT WHEN ASPHALTIC GORE IS INSTALLED).

(2) STOP LONGITUDINAL JOINT WITH CORE HOLE (2" TYP.) WHEN IT MEETS THE FIRST TRANSVERSE JOINT LESS THAN 15' WIDE OR STOP LONGITUDINAL JOINT WHEN IT MEETS 2' AWAY FROM THE TIED JOINT OF THE MAINLINE.

(3) DISREGARD THE JOINT DETAILS IN AND AROUND THE GORE WHEN ASPHALTIC GORE IS INSTALLED.

## LEGEND

- DOWELED JOINT
- UNDOWELED JOINT
- TIED JOINT
- UNTIED JOINT
- GORE
- DIRECTION OF TRAVEL

**CONCRETE PAVEMENT JOINTING ACCELERATION/ DECELERATION LANE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS 652

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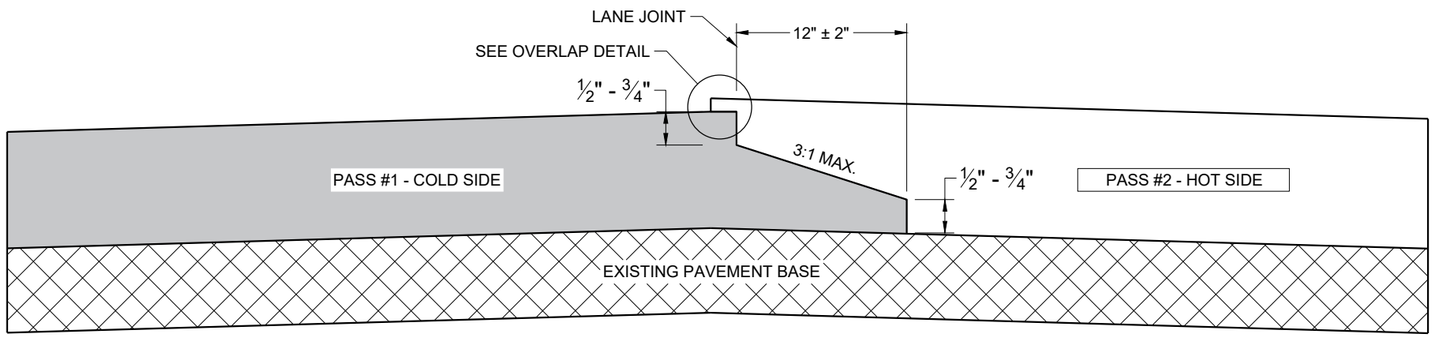
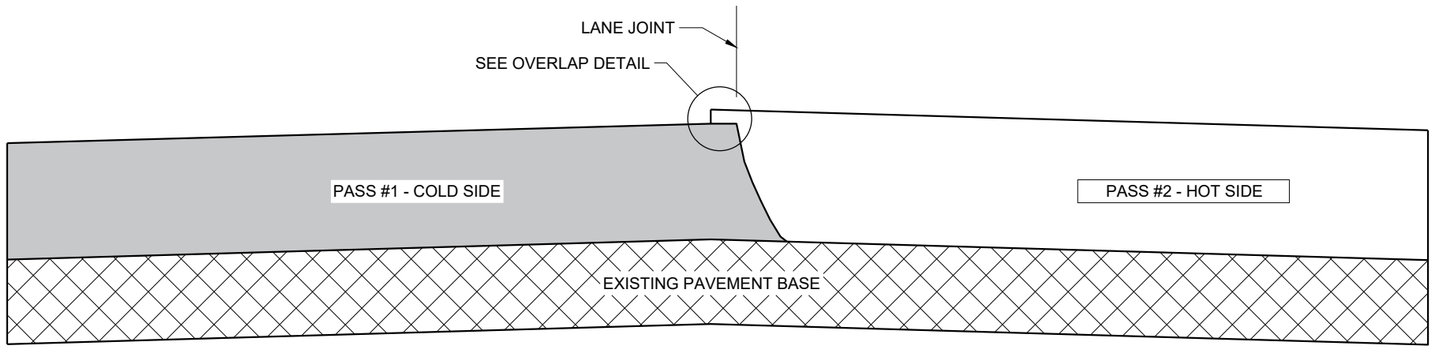
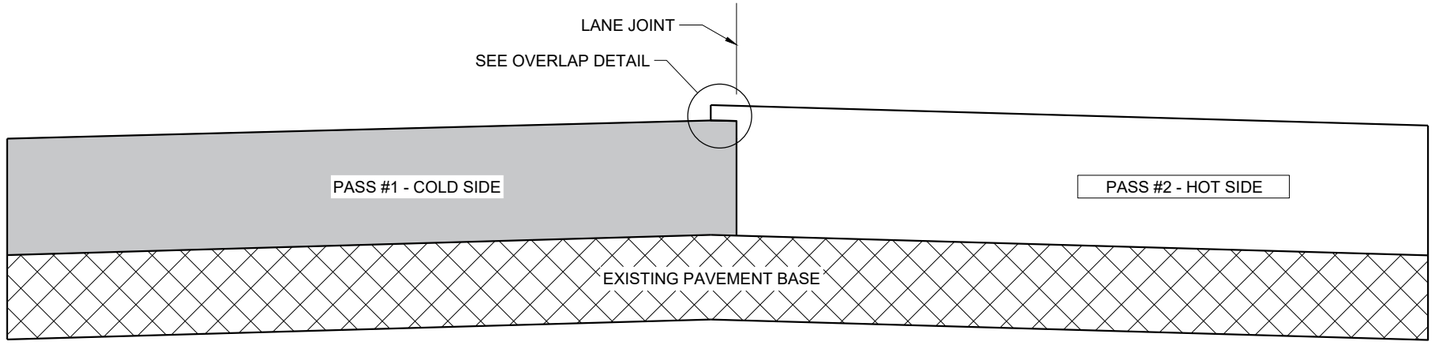



**TYPICAL PAVEMENT CROSS SECTION**
**NOTCHED WEDGE JOINT**




**TYPICAL PAVEMENT CROSS SECTION**
**VERTICAL JOINT**




**TYPICAL PAVEMENT CROSS SECTION**
**VERTICAL JOINT (MILLED)**

## GENERAL NOTES

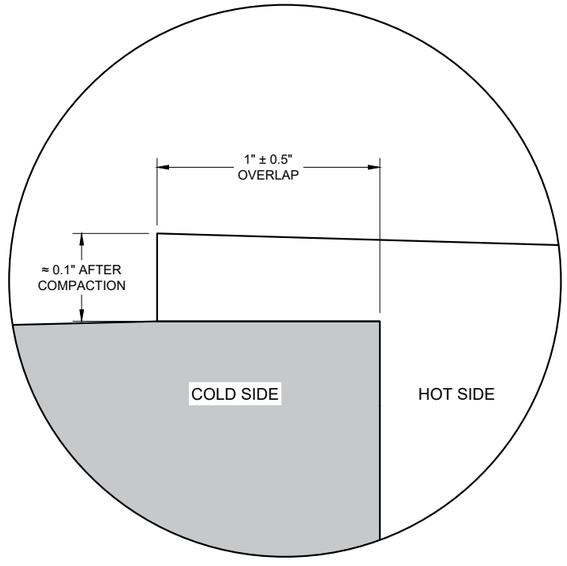
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.




**OVERLAP DETAIL (TYPICAL)**

6

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SDD 13C19 - 03

SDD 13C19 - 03

**HMA LONGITUDINAL JOINTS**

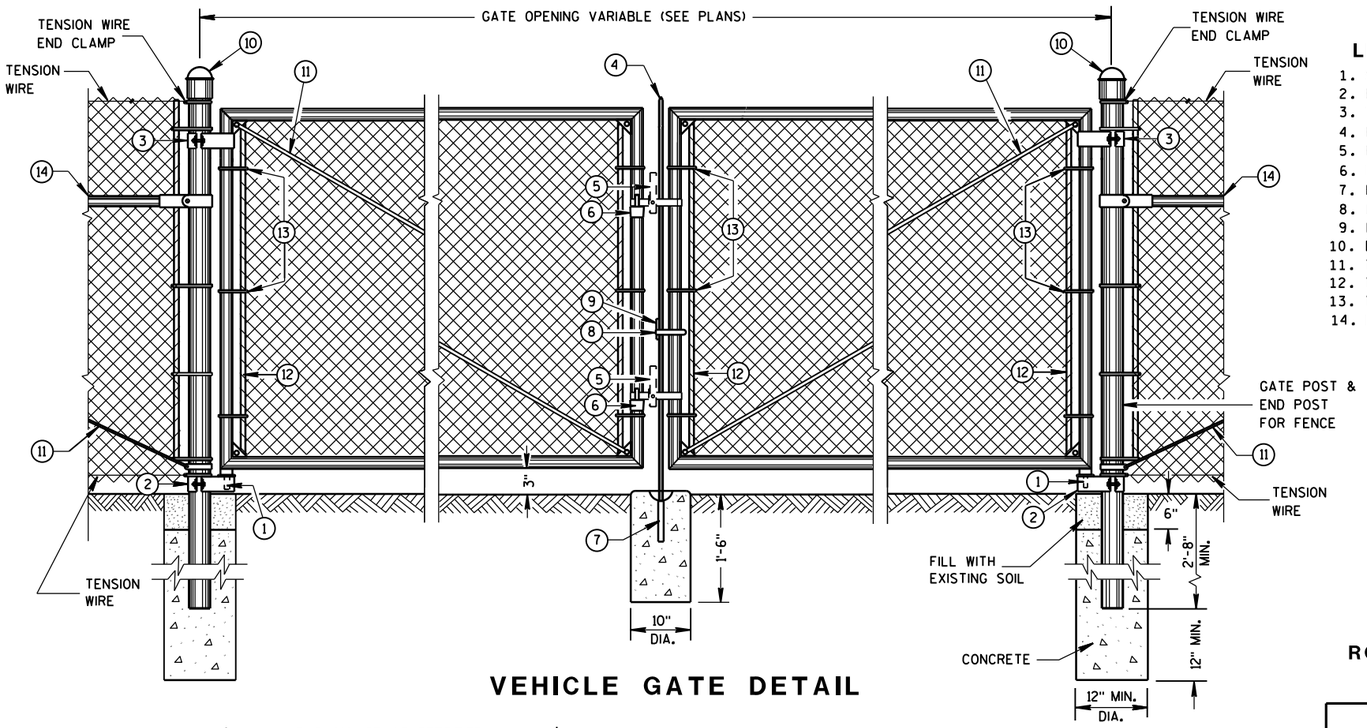
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

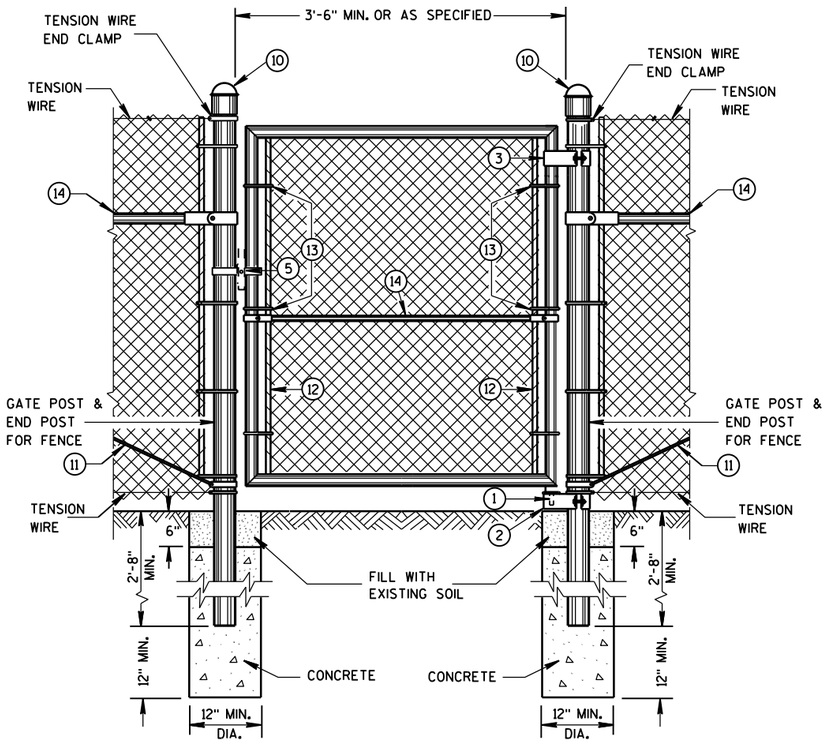
/S/ Steven Hefel
HMA PAVEMENT ENGIN

653

FHWA




## VEHICLE GATE DETAIL




## PEDESTRIAN GATE DETAIL

### LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH *
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

## GENERAL NOTES

FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

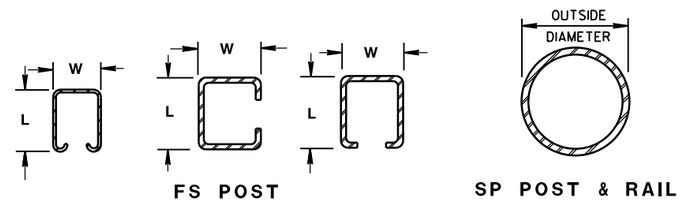
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.

USE TYPE 2, CLASS 3, MARCELLED/CRIMPED, TENSION WIRE PER ASTM A 817.




## CROSS SECTIONS OF POSTS AND RAILS

### ROLLED-FORMED STEEL FENCE POST (2.0 OZ./SQ. FT. COATING)

| POST TYPE | LENGTH (L) INCH | WIDTH (W) INCH | WEIGHT LBS/FT |
|---|---|---|---|
| FS1 | 1.625 | 1.25 | 1.35 |
| FS2† | 1.875 | 1.625 | 1.850 |
| FS2 | 1.875 | 1.625 | 2.400 |
| FS3 | 2.250 | 1.700 | 2.780 |

### ROUND STEEL FENCE POST (1.8 OZ./SQ. FT. COATING)

| POST TYPE | OUTSIDE DIMENSION INCH | WALL THICKNESS INCH | WEIGHT LBS/FT |
|---|---|---|---|
| SP1 | 1.660 | 0.140 | 2.270 |
| SP2 | 1.900 | 0.145 | 2.720 |
| SP3 | 2.375 | 0.154 | 3.650 |
| SP4 | 2.875 | 0.203 | 5.800 |
| SP5 | 4.000 | 0.226 | 9.120 |
| SP6 | 6.625 | 0.280 | 18.990 |
| SP7 | 8.625 | 0.322 | 28.580 |

### REQUIRED FENCE POST SIZES

| USE | FABRIC HEIGHTS FEET | POST TYPE |
|---|---|---|
| TERMINAL POSTS ** | LESS THAN OR EQUAL TO 6 FT. | SP3 |
| | GREATER THAN OR EQUAL TO 6 FT. | SP4 |
| LINE POSTS | LESS THAN OR EQUAL TO 6 FT. | SP2 |
| | LESS THAN OR EQUAL TO 8 FT. | SP3 |
| | GREATER THAN OR EQUAL TO 8 FT. | SP4 |
| | LESS THAN OR EQUAL TO 8 FT. | FS2 OR FS2† |
| | GREATER THAN OR EQUAL TO 8 FT. | FS3 |

### REQUIRED POST SIZE FOR GATES

| USE | LEAF WIDTHS FEET | POST TYPE |
|---|---|---|
| GATES | LESS THAN OR EQUAL TO 6 FT. | SP4 |
| | LESS THAN OR EQUAL TO 13 FT. | SP5 |
| | LESS THAN OR EQUAL TO 18 FT. | SP6 |
| | LESS THAN OR EQUAL TO 23 FT. | SP7 |

### BRACE RAIL TYPES

| USE | | TYPE |
|---|---|---|
| BRACE RAIL | | SP1 OR FS1 |

** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

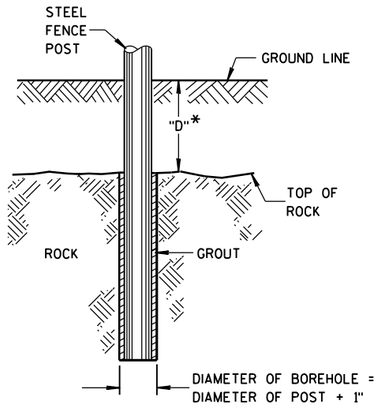
FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR



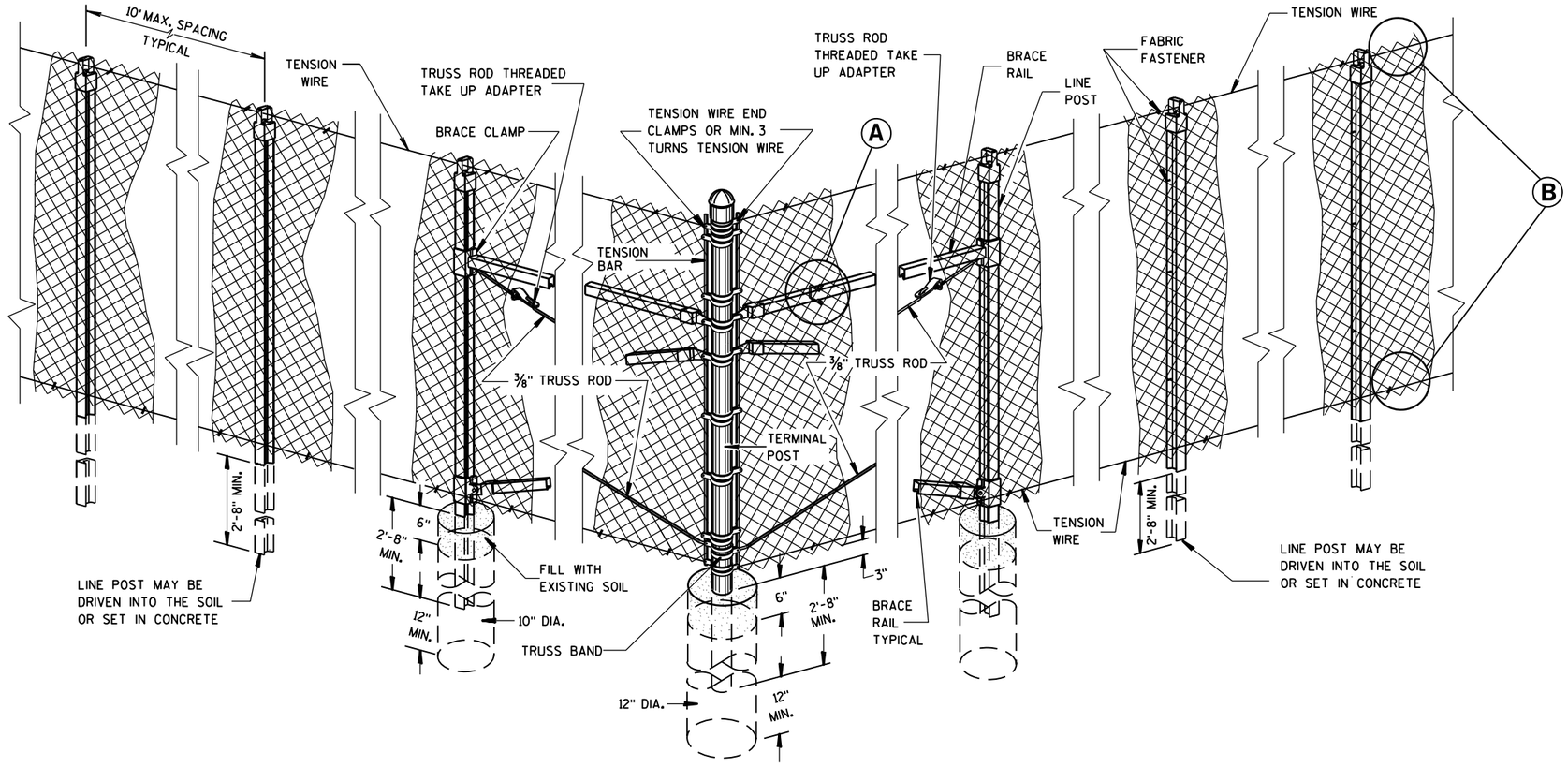

6


S.D.D. 15 B 3-15a

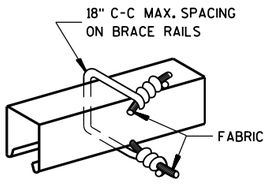



*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

## ROCK INSTALLATION OF LINE POST



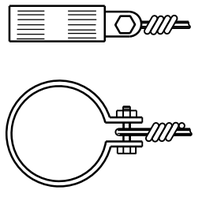

## END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



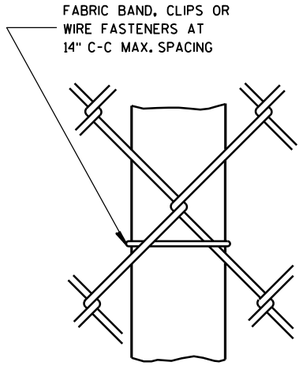

BRACE RAIL

## FABRIC FASTENER

Ⓐ



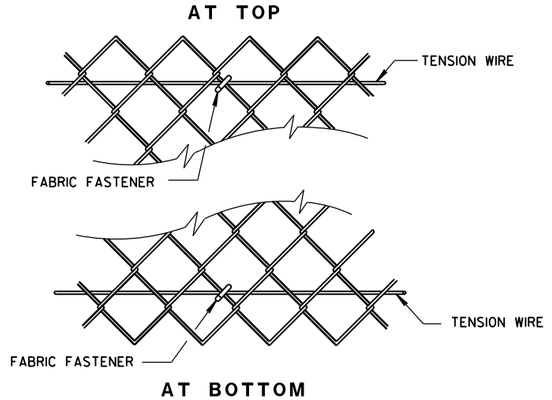
## TENSION WIRE END CLAMP




LINE POST

## FABRIC FASTENER

AT TOP




AT BOTTOM

## SELVAGES

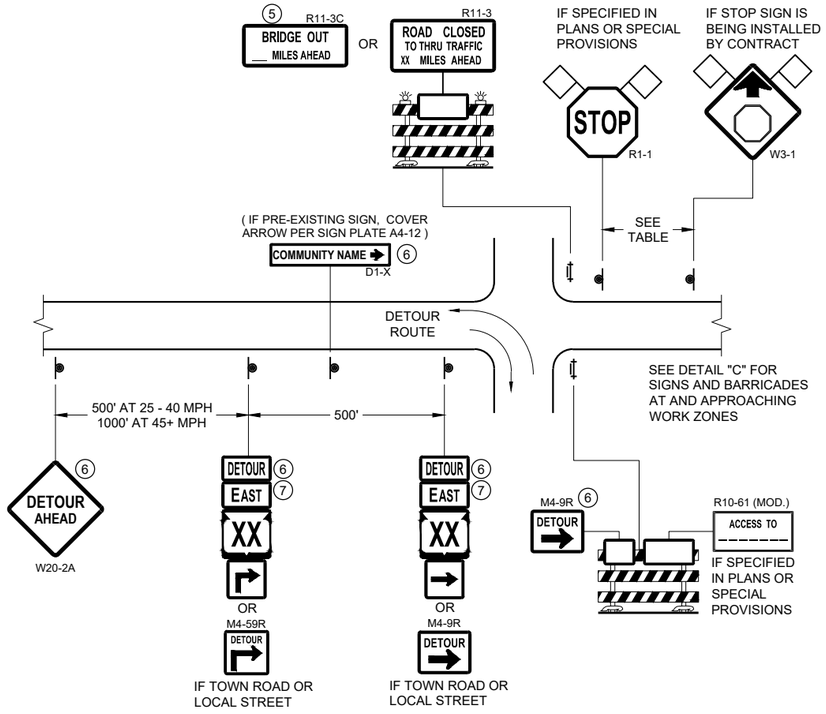
Ⓑ

## FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

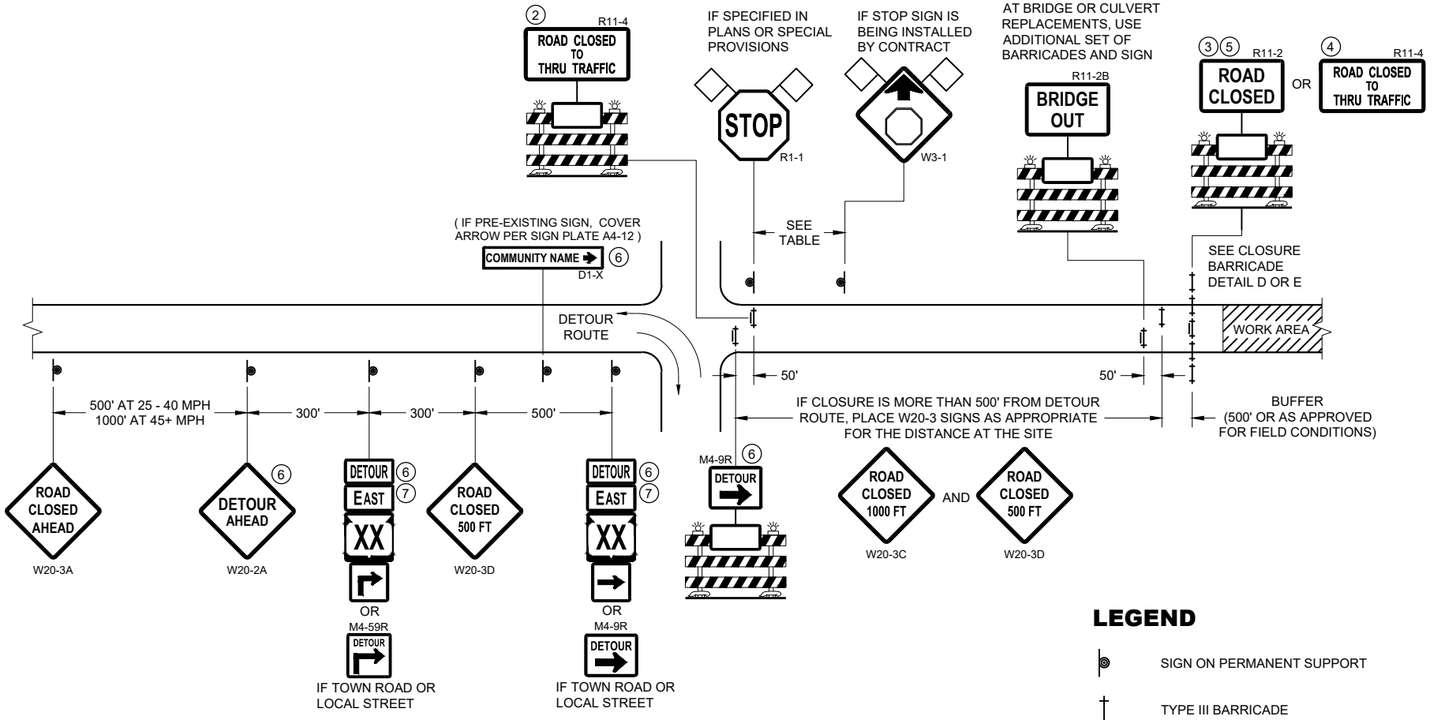
APPROVED
FEB. 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA


6
S.D.D. 15 B 3-15b



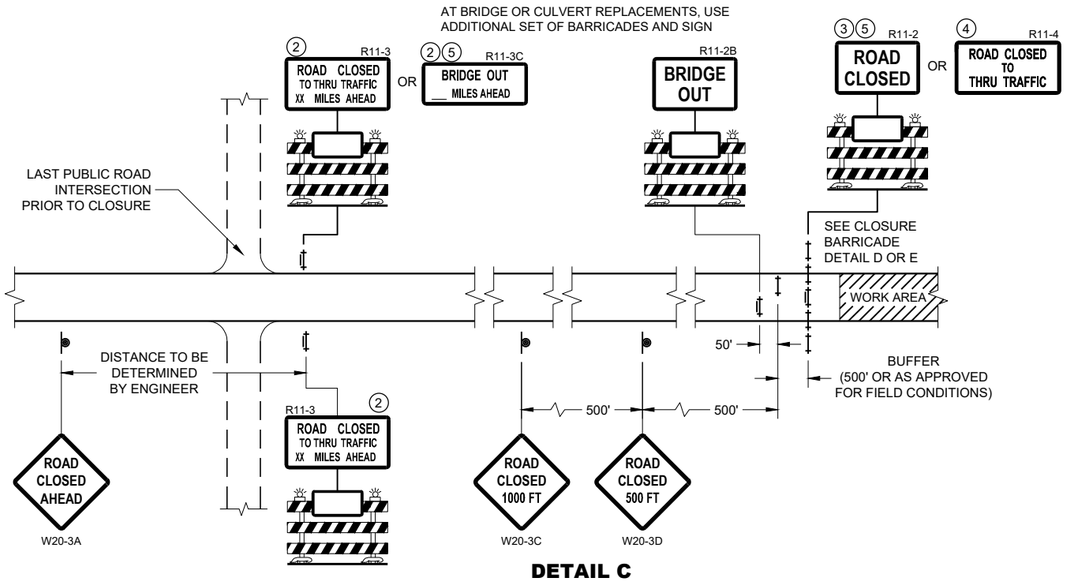

## DETAIL A
## MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE ( 1000 FEET IF URBAN )




## DETAIL B
## MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE ( 1000 FEET IF URBAN )




## DETAIL C
## MAINLINE CLOSURE, NO POSTED DETOUR

| SPEED LIMIT (MPH) | "STOP AHEAD" ADVANCE WARNING DISTANCE (FT) |
|---|---|
| 25 | 200 |
| 30 | 200 |
| 35 | 350 |
| 40 | 350 |
| 45 | 500 |
| 50 | 550 |
| 55 | 750 |

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

## LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1

## BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

656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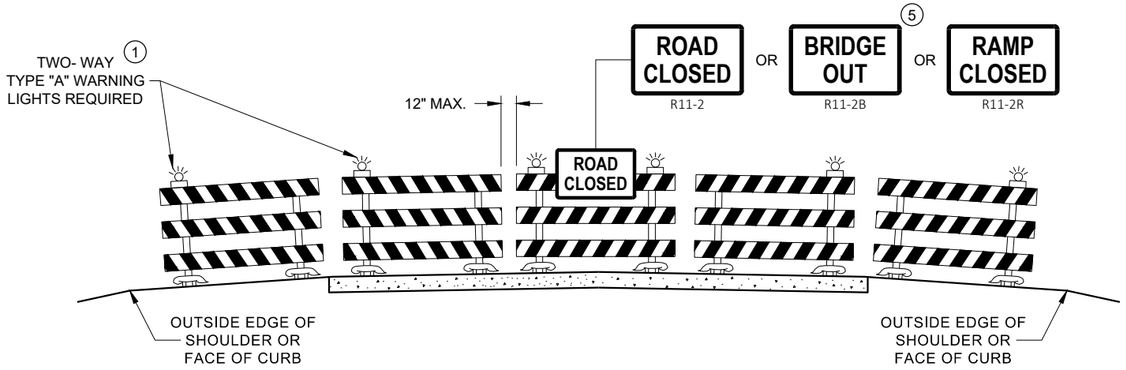
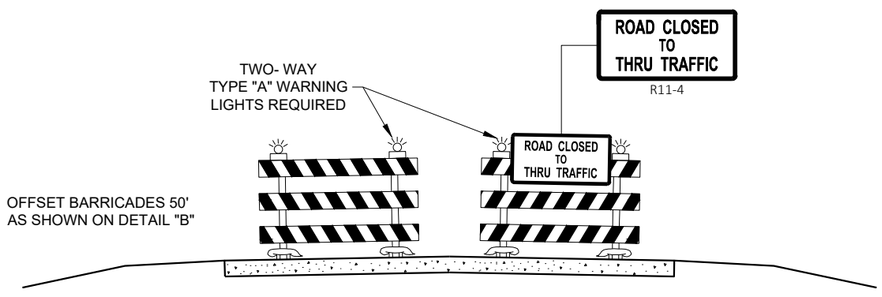
SDD 15C02 - 09a




**DETAIL D**
**ROAD CLOSURE BARRICADE DETAIL**
**APPROACH VIEW**




**DETAIL E**
**LANE CLOSURE BARRICADE DETAIL**
**APPROACH VIEW**

SEE SDD 15C2 - SHEET "a" FOR LEGEND

## GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

**BARRICADES AND SIGNS FOR VARIOUS CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE 657
FHWA


6
SDD 15C02 - 09b

**THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.**

## LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR / EAST — M4 - 8, M3 - X
- XX — M1 - 4; XX — M1 - 6; COUNTY X — M1 - 5A
- M05 - 1; M06 - 1; M06 - 1

## GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

500' AT 25-40 MPH
1000' AT 45+ MPH

500'

DETOUR EAST XX *

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

M4-8a END DETOUR WEST XX *

DETOUR EAST XX / WEST XX

DETOUR ROUTE

WORK AREA

DETOUR EAST XX

WEST XX OR M4-9L DETOUR ** IF TOWN ROAD OR LOCAL STREET

500'

DETOUR NEXT X MILES * G20-51

DETOUR WEST XX * OR M4-59L DETOUR ** IF TOWN ROAD OR LOCAL STREET

MATCH POINT

* M4-59L DETOUR ** OR DETOUR EAST XX * IF TOWN ROAD OR LOCAL STREET

D1-X COMMUNITY NAME * (IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

500'

M4-9L DETOUR ** OR DETOUR EAST XX IF TOWN ROAD OR LOCAL STREET

DETOUR WEST XX

DETOUR WEST XX OR M4-9R DETOUR ** IF TOWN ROAD OR LOCAL STREET

DETOUR WEST XX * OR M4-59R * DETOUR ** IF TOWN ROAD OR LOCAL STREET

500'

DETOUR ROUTE

500' AT 25 - 40 MPH
1000' AT 45+ MPH

500'

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

DETOUR EAST XX *

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

DETOUR EAST XX

500'

DETOUR EAST XX

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

DETOUR EAST XX *

PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA)

500' AT 25 - 40 MPH
1000' AT 45+ MPH

DETOUR EAST XX *

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

**DETAIL F**
**DETOUR SIGNING**

**DETOUR SIGNING FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

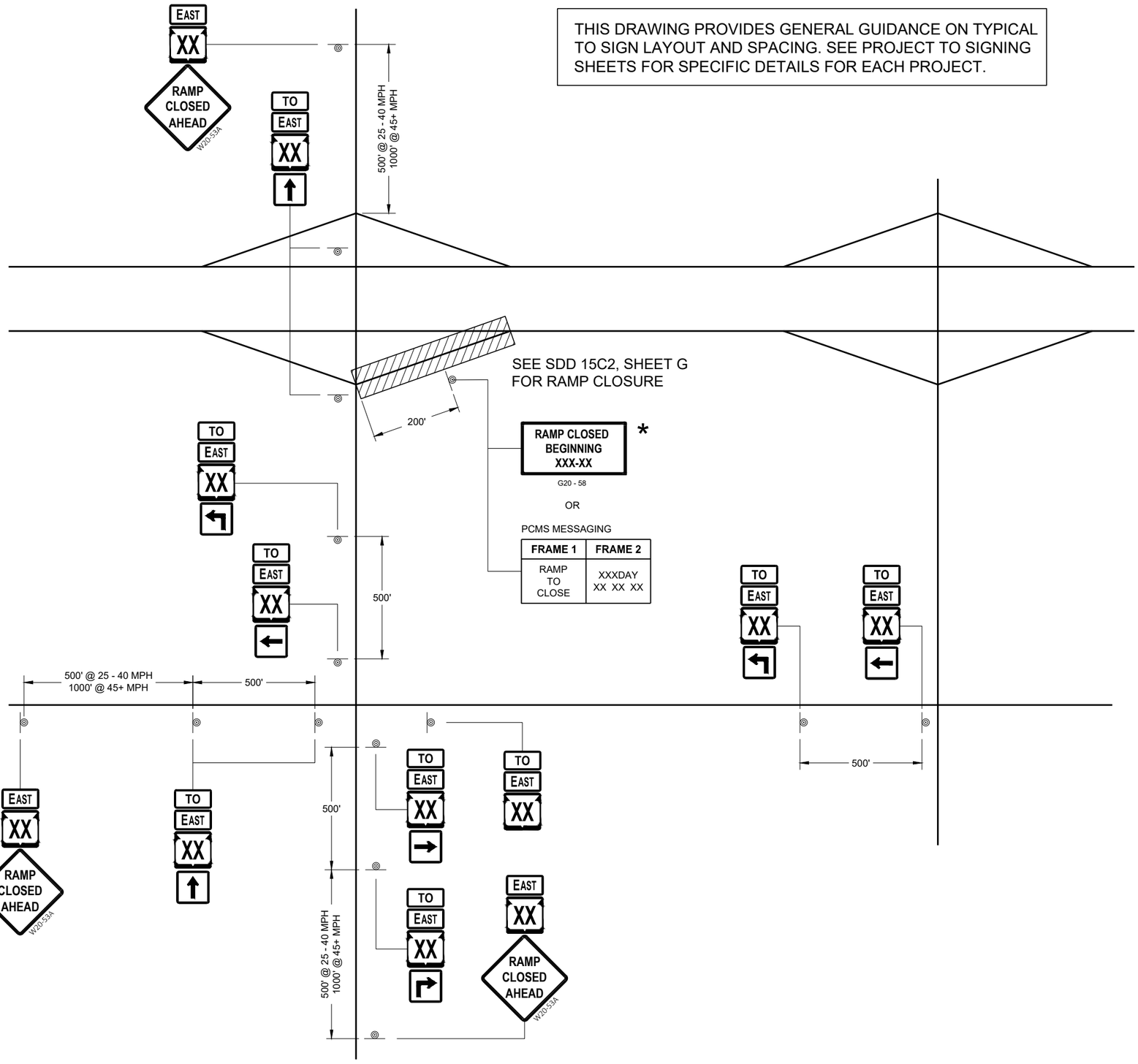
FHWA





6

SDD 15C02 - 09c




THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL TO SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

## LEGEND

SIGN ON PERMANENT SUPPORT

TO EAST — MO4 - 5, M3 - X

XX M1 - 6 OR XX M1 - 4 OR INTERSTATE XX M1 - 1

M05 - 1 OR M06 - 1 OR M06 - 1

## GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE TO ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND TO SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL " IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS THAT SHALL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOW:
- M3 - X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 1, M1 - 4, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).
- W20 - 53A SHALL BE 48" X 48"

* PLACE "RAMP CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

# ON RAMP LANE CLOSURE

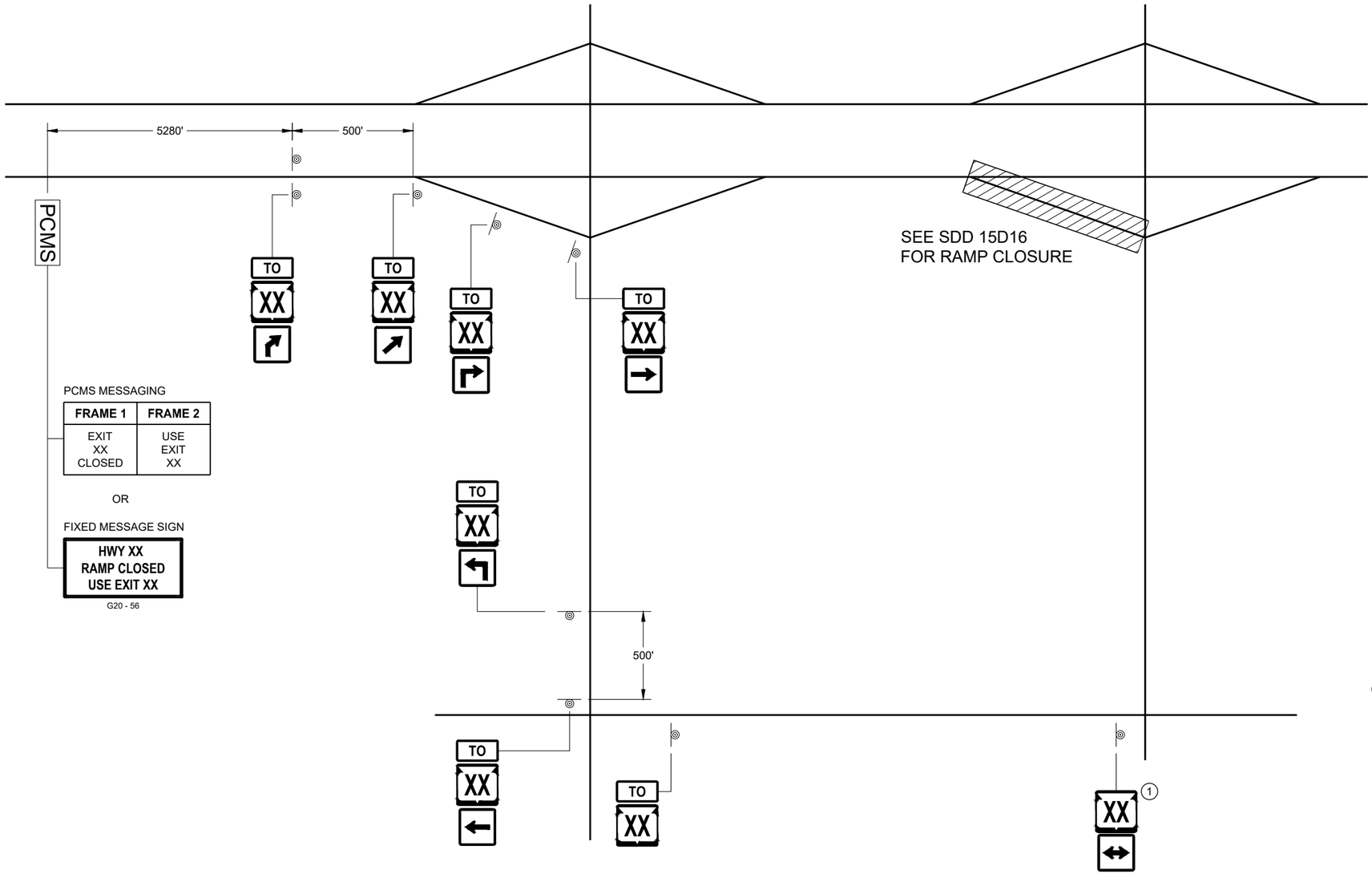
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
659
FHWA


6

SDD 15C02 - 09d

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL "TO" MO-4 SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.




PCMS MESSAGING

| FRAME 1 | FRAME 2 |
|---|---|
| EXIT XX CLOSED | USE EXIT XX |

OR

FIXED MESSAGE SIGN

HWY XX
RAMP CLOSED
USE EXIT XX

G20 - 56

## LEGEND

SIGN ON PERMANENT SUPPORT

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

TO MO4 - 5

XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A

M05 - 1 OR M05 - 2 OR M06 - 1 OR M06 - 2 OR M06 - 4

## GENERAL NOTES

SEE SDD 15D16 "TRAFFIC CONTROL, EXIT RAMP CLOSURE" DETAIL FOR TRAFFIC CONTROL AT EXIT RAMP CLOSURE.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE "TO" MO-4 ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND "TO" MO-4 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL " IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS THAT SHALL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOW:
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 4, M1 - 5A, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).

(1) ONLY ADD IF THERE ARE NO EXISTING ROUTE MARKERS FOR THE INTERSECTING ROADWAY.

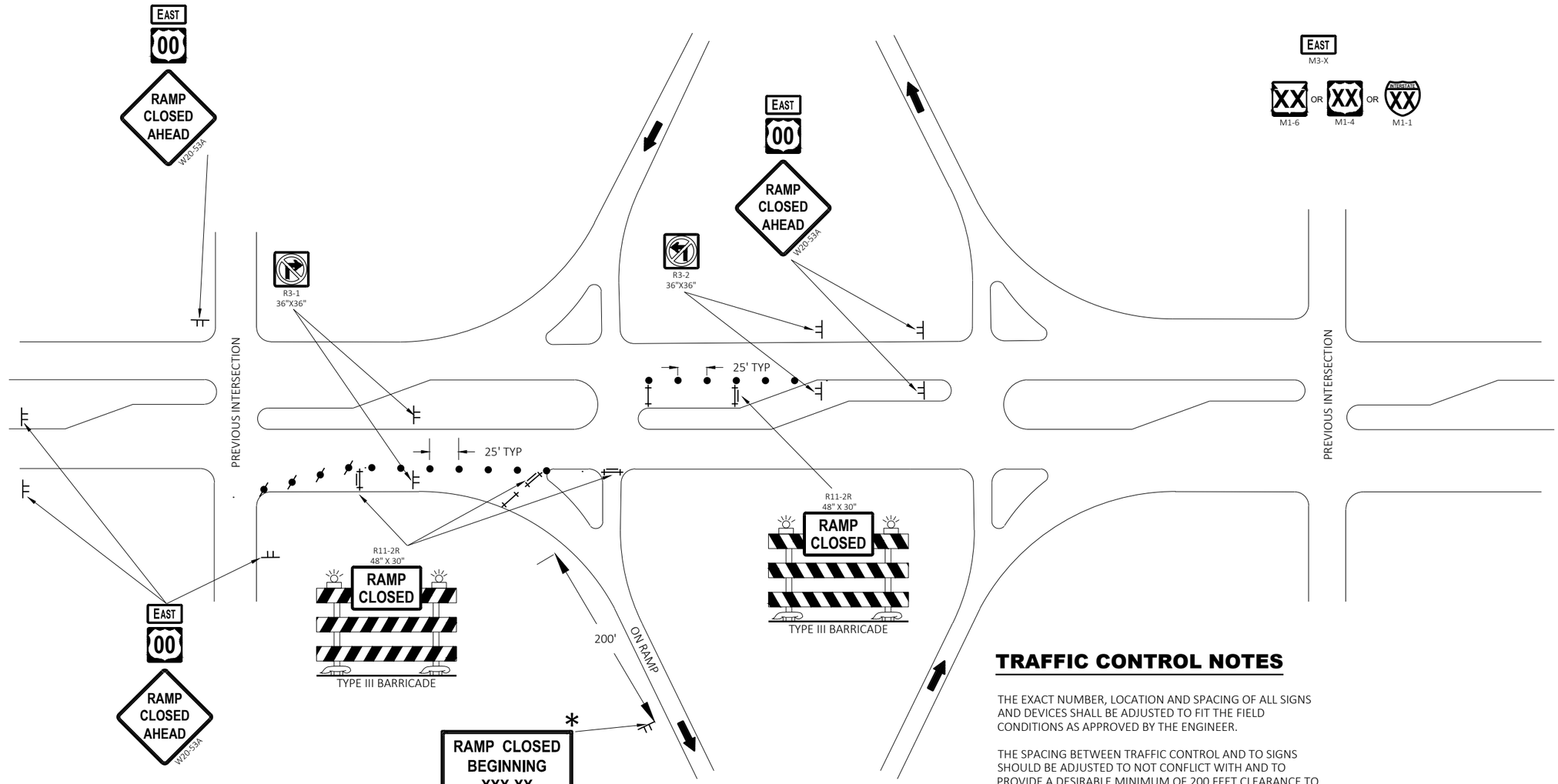
**OFF RAMP LANE CLOSURE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 DATE
/S/ Andrew Heidtke WORK ZONE ENGINEER
660
FHWA


6

SDD 15C02 - 09e




## LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC

## TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT THE FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL AND TO SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS THAT SHALL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24"x24" (36" x18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-1, M1-4, AND M1-6 SHALL BE 24"x24" (36"x36" IF NEEDED TO MATCH EXISTING SIGNS)
- W20-53A SHALL BE 48"X48"

* PLACE "RAMP CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

## TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEE
FHWA



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SDD 15C02-09g

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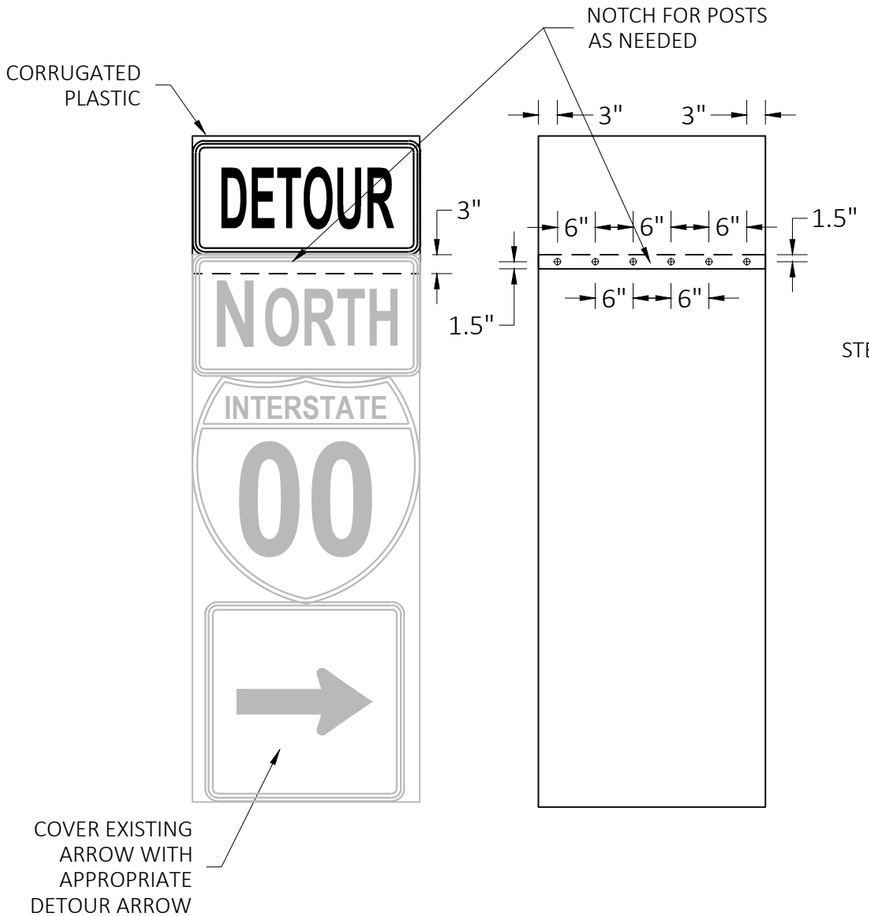
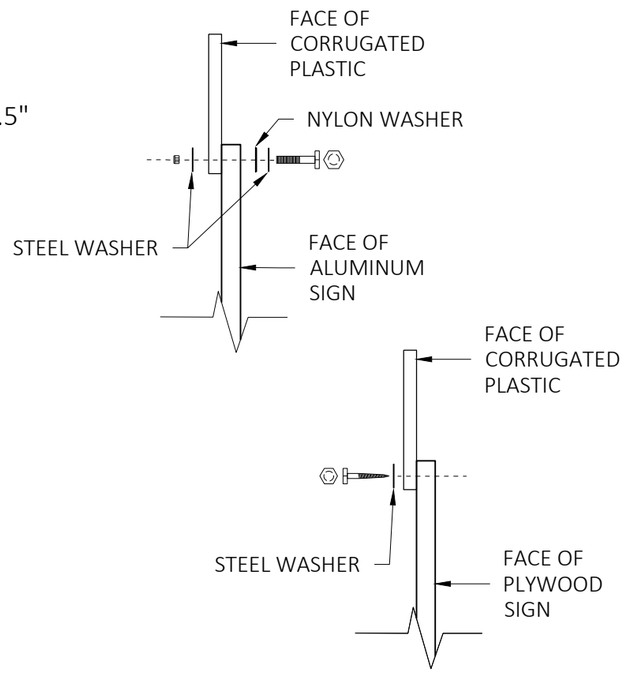
SDD 15C02-09g

FRONT SIDE

BACK SIDE

SIDE VIEW




## GENERAL NOTES

CELLS OF CORRUGATED PLASTIC SHALL BE VERTICALLY ORIENTED.

PROVIDE A 0.4-INCH THICK BASE CORRUGATED PLASTIC WITH A 0.035-INCH WALL THICKNESS AND 0.4-INCH CELL SIZE.

FOR 36" WIDE SIGNS: USE 6 FASTENERS AS SHOWN.

FOR 24" WIDE SIGNS: USE 4 FASTENERS WITH EDGE SPACING AS SHOWN AND 6" SPACING BETWEEN FASTENERS.

METAL WASHERS, NUTS, BOLTS AND LAGS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3.

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

PLYWOOD SIGNS:
LAG SCREWS - 5/16" x 1"
ALUMINUM SIGNS:
MACHINE BOLTS - 5/16" x 1-1/4" LENGTH W/NUTS
WASHERS:
1-1/4" O.D. x 3/8" I.D. x 1/16" STEEL
1-1/4" O.D. x 3/8" I.D. x .080 NYLON

# MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

**MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVEL ENGINEER
FHWA

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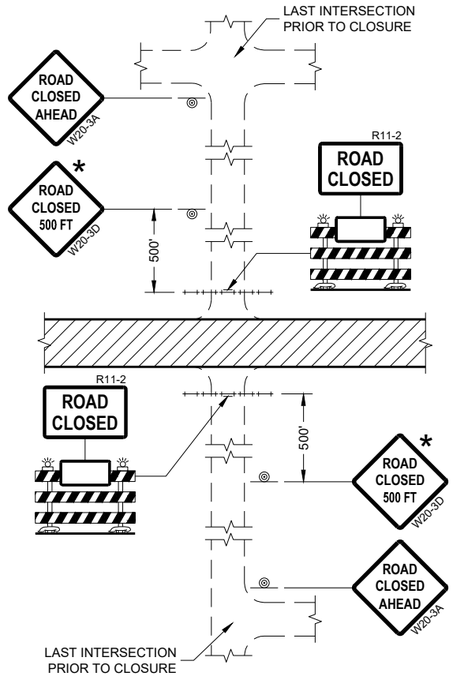
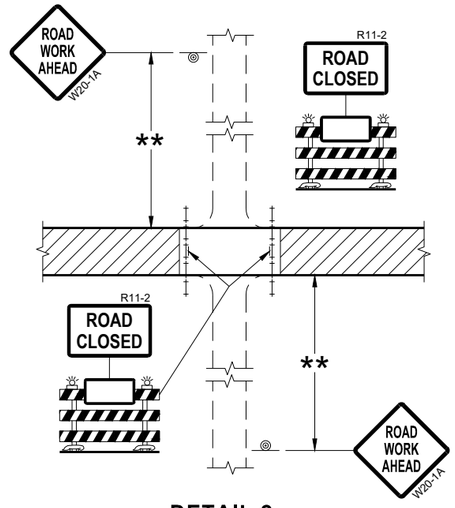
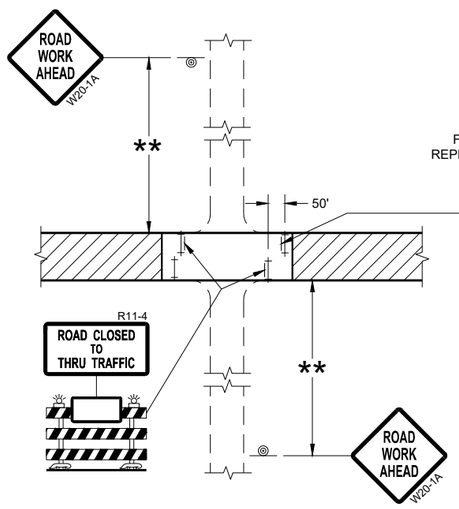
SDD 15C02-09h



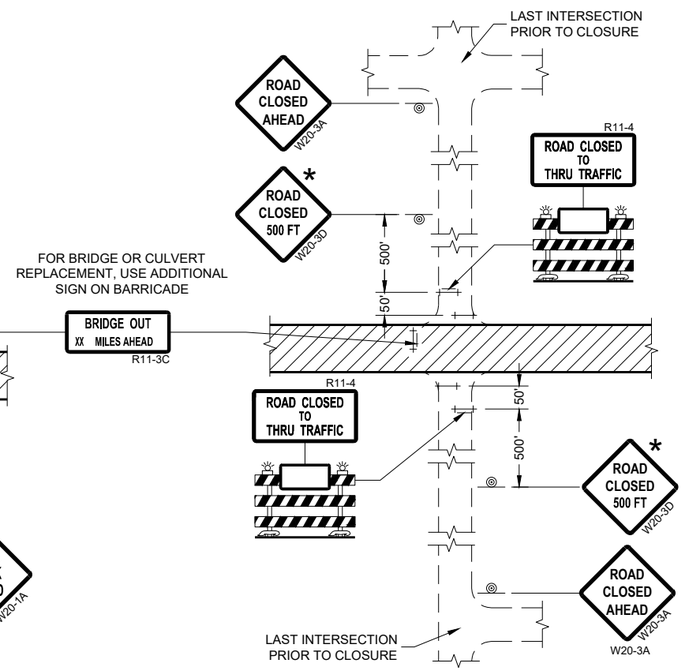

**DETAIL 1**
(NO ACCESS TO PROJECT)




**DETAIL 2**
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)




**DETAIL 3**
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)




**DETAIL 4**
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

## GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

## LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

**BARRICADES AND SIGNS FOR SIDEROAD CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA



6

SDD 15C03 - 05

6

SDD 15C03 - 05

## GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

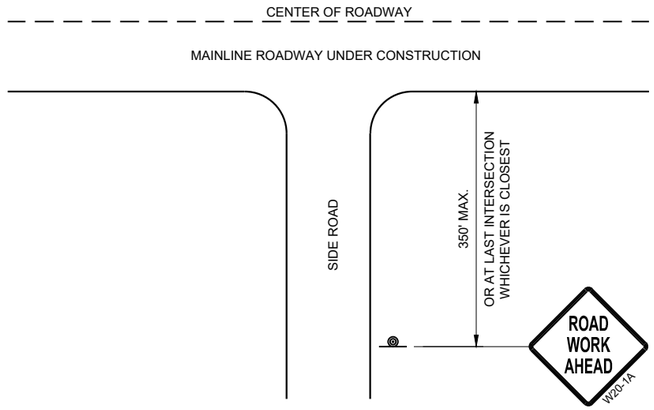
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



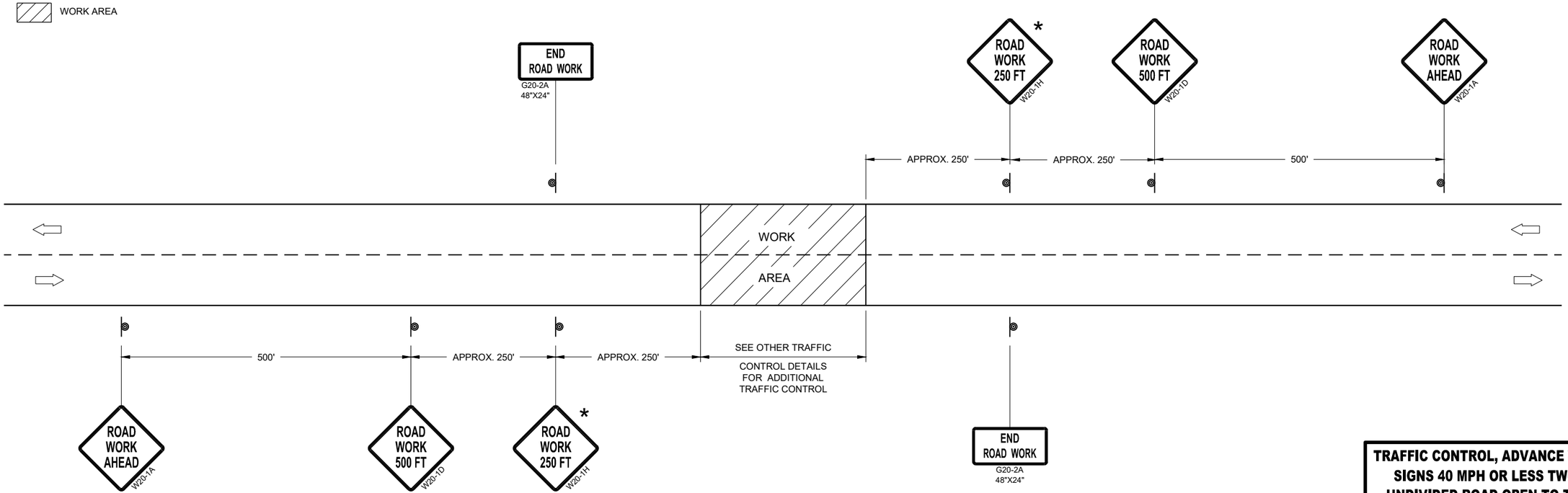

**TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL**

## LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA




**TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS**

**TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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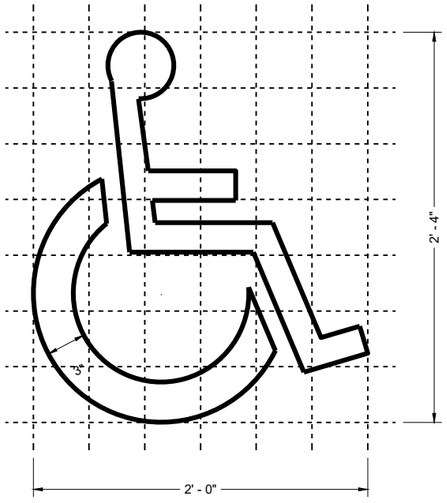
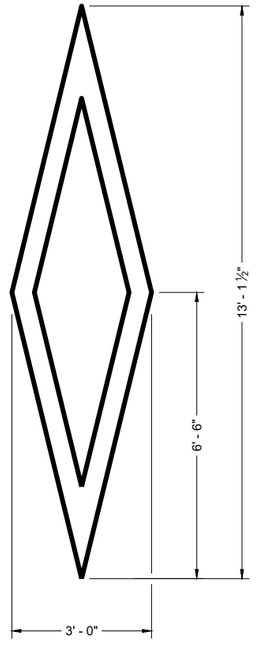
SDD 15C05 - 05

## GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.




**HANDICAP SYMBOL**




**PREFERENTIAL LANE SYMBOL**

6

SDD 15C07-16a

**PAVEMENT MARKING SYMBOLS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024
DATE

/S/ Jeannie Silver
STATE SIGNING AND MARKING ENGINEER

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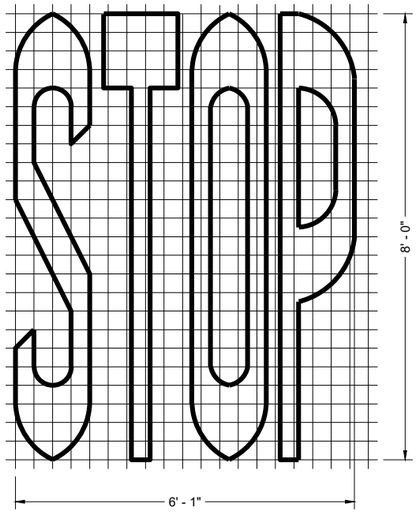
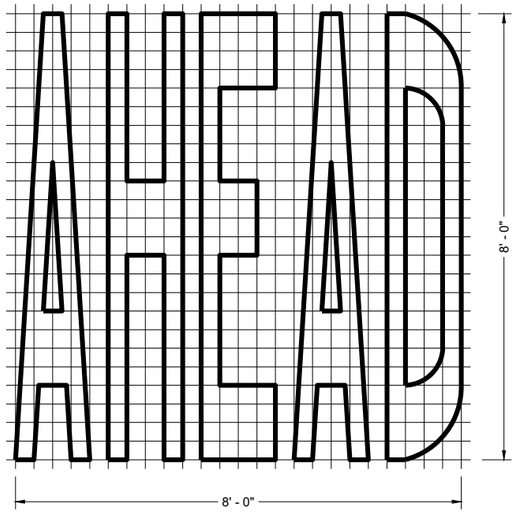
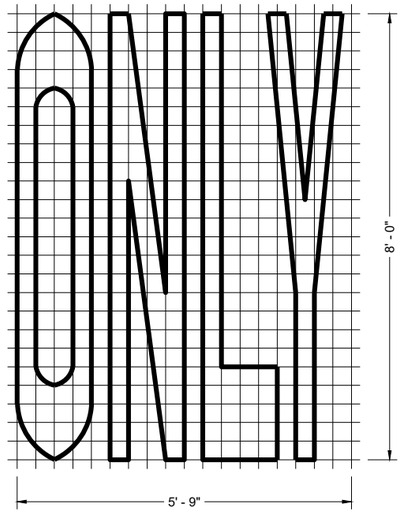
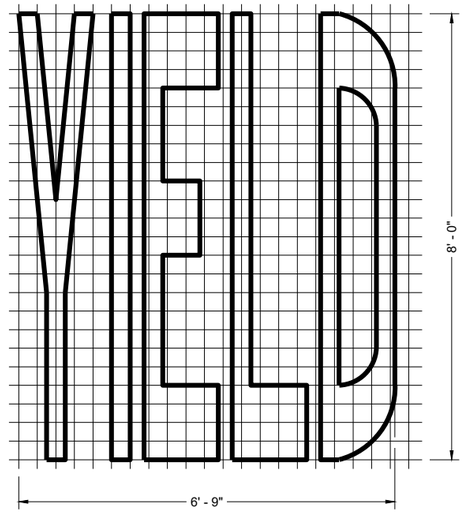
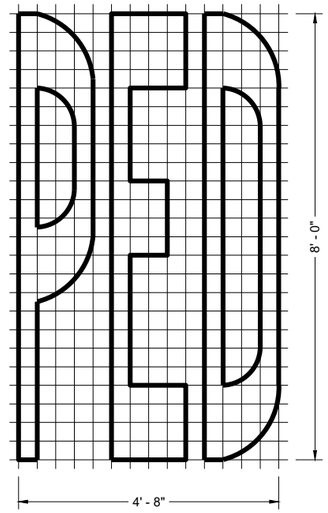
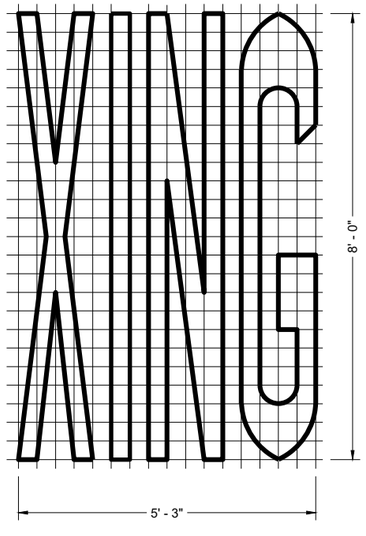


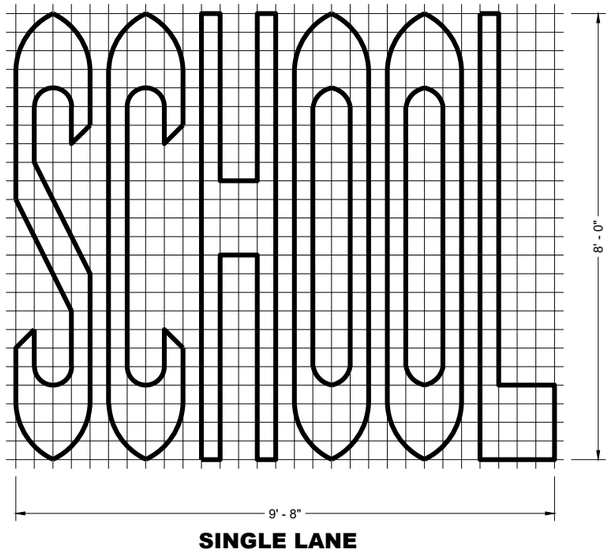



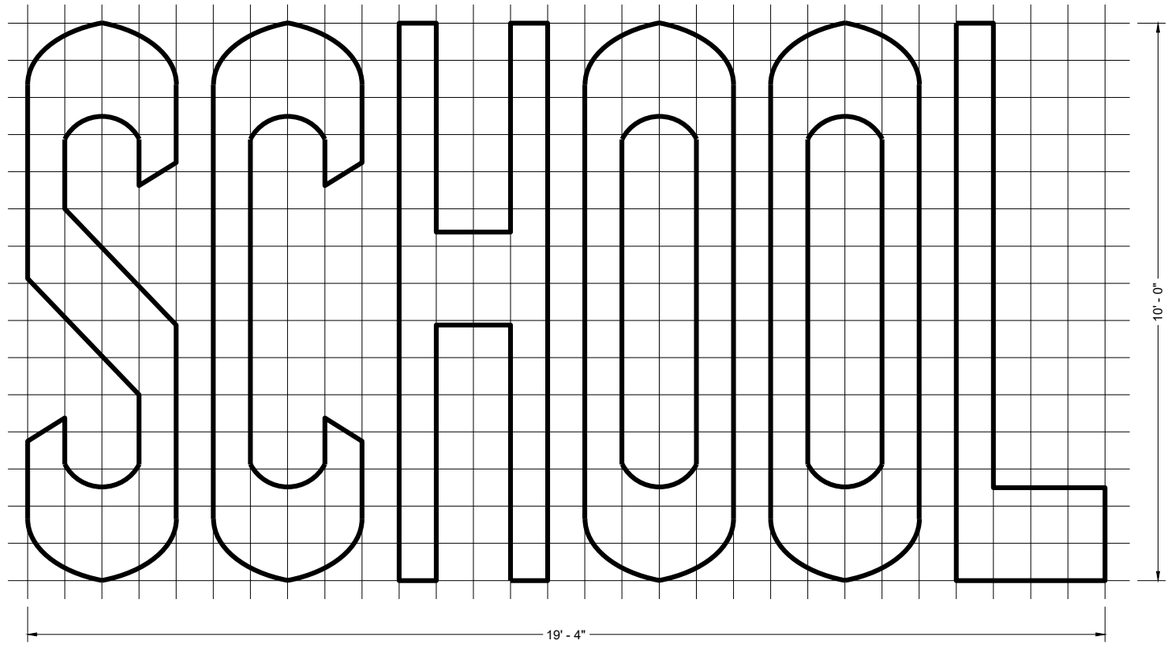




**SINGLE LANE**




**TWO - LANE**

## GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

**PAVEMENT MARKING WORDS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MARKING ENGINEER

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SDD 15C07-16b

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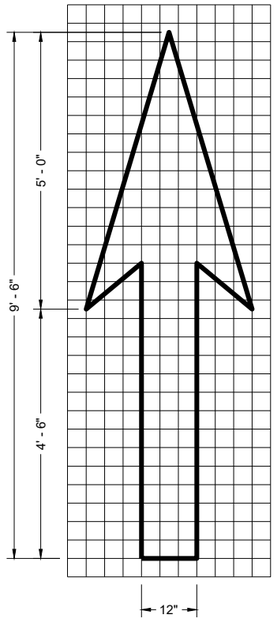
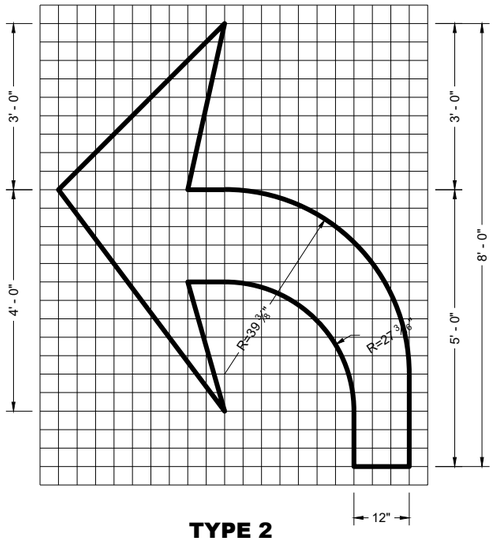
## GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.




TYPE 1

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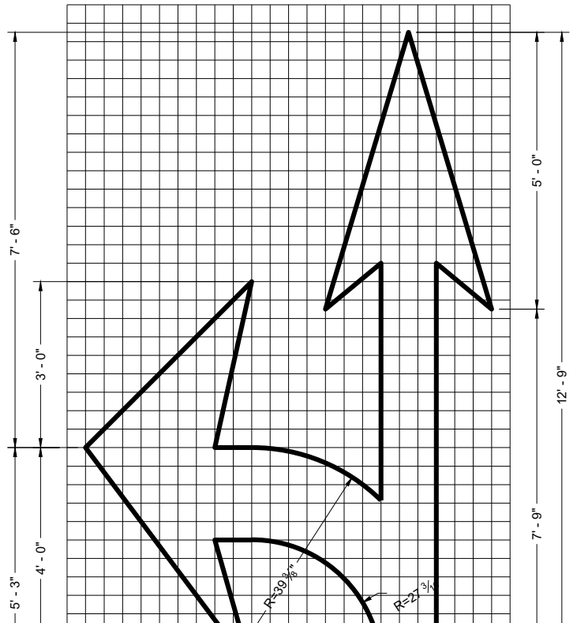


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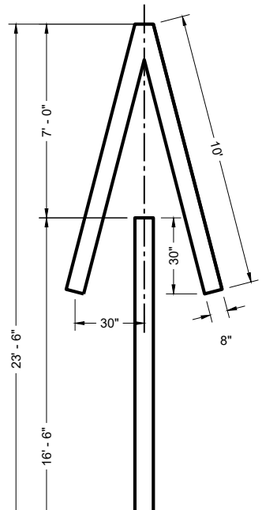
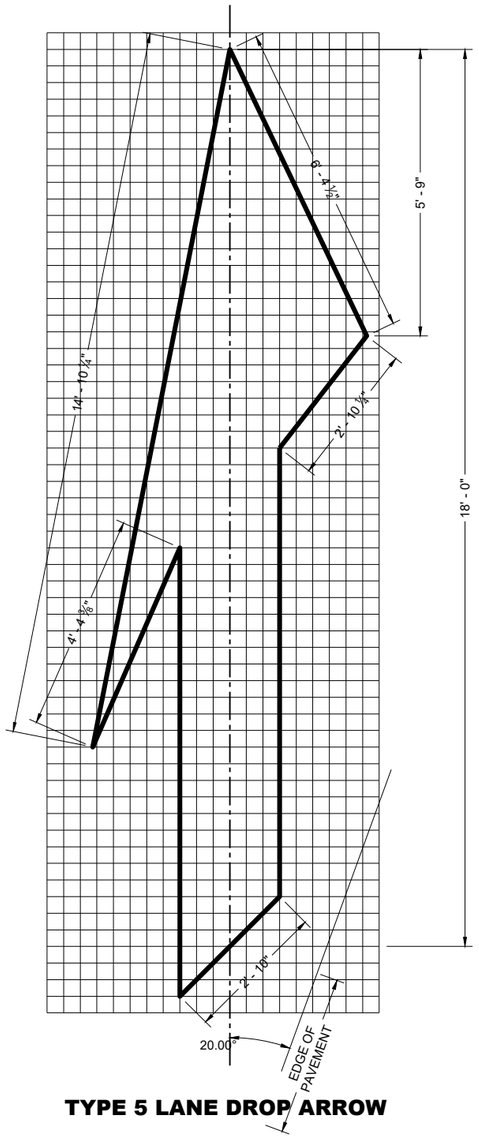
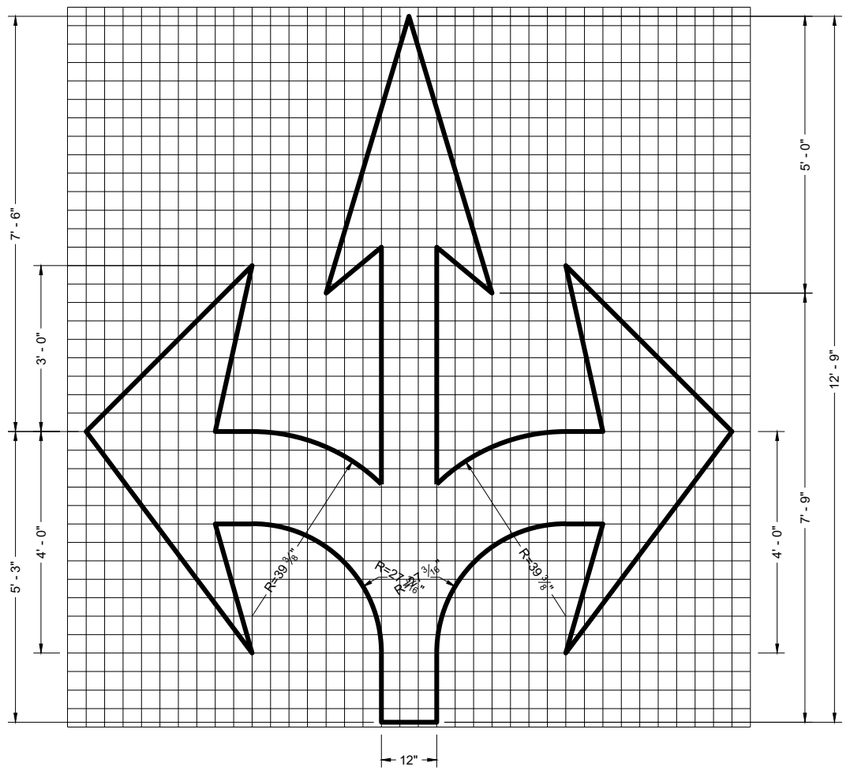


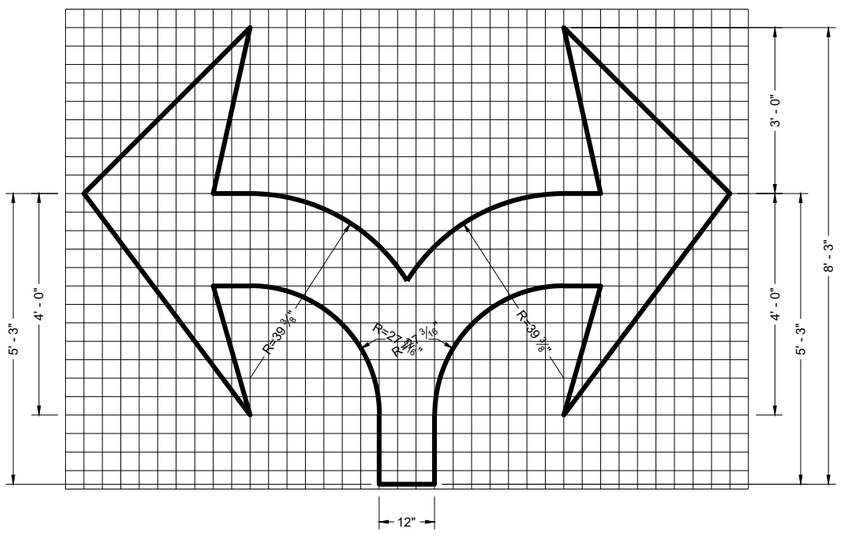

TYPE 4




TYPE 5 LANE DROP ARROW




TYPE 6




TYPE 7

# PAVEMENT MARKING ARROWS

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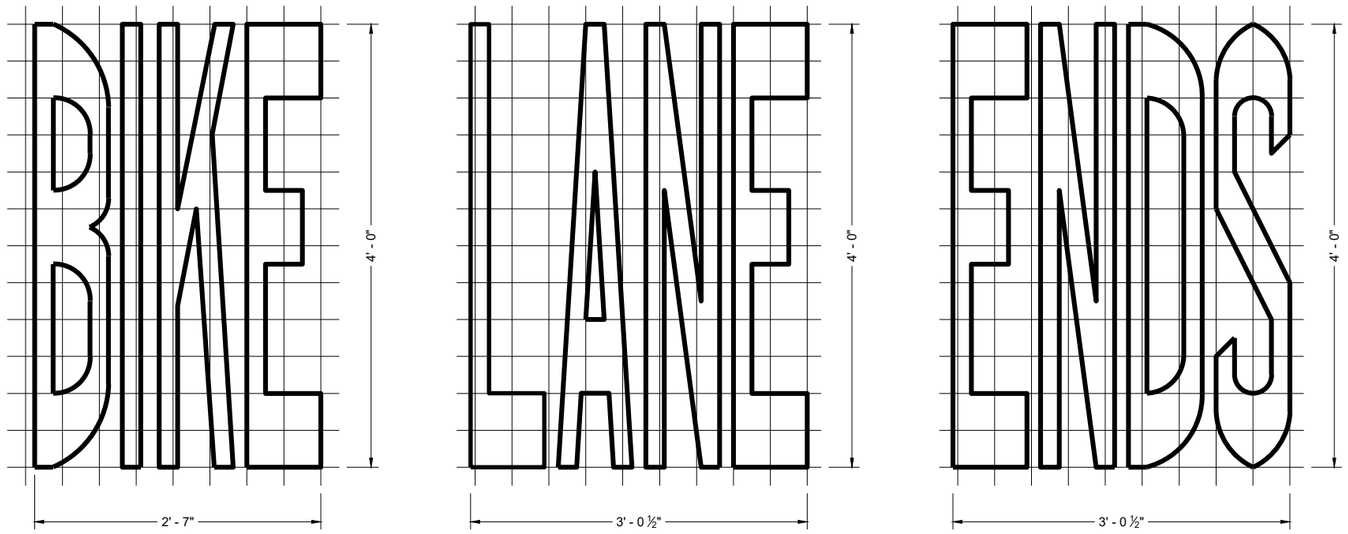
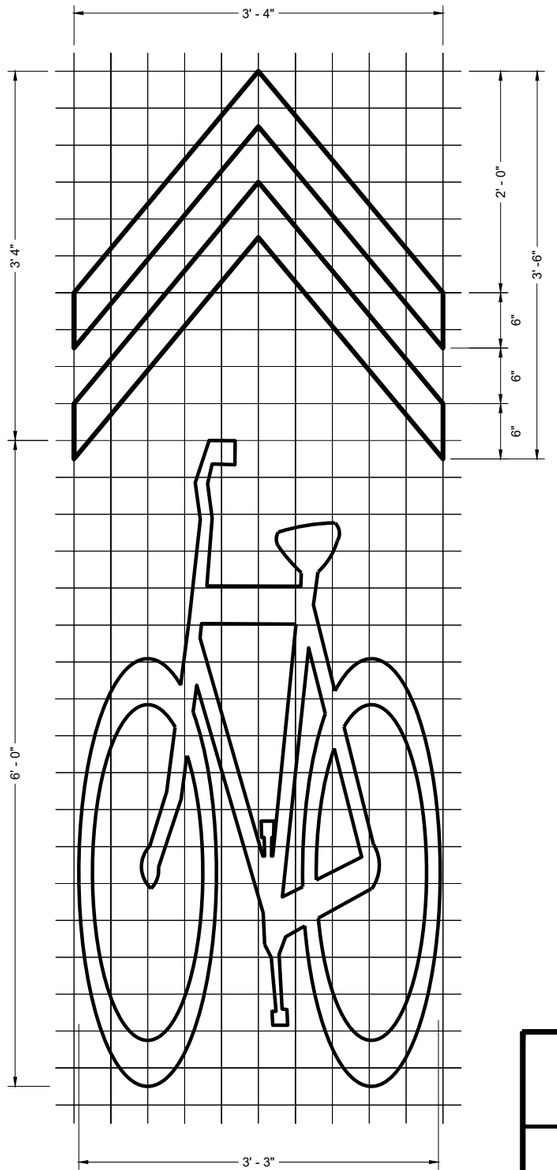



**BIKE LANE WORDS**

## GENERAL NOTES

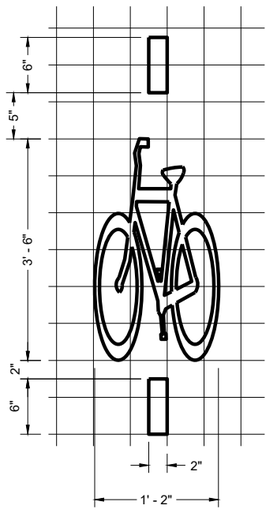
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.







**BIKE LANE ARROW**




**BICYCLE DETECTOR PAVEMENT MARKING**




**BIKE LANE SYMBOL**




**BIKE LANE SYMBOL FOR SHARED LANE**

**PAVEMENT MARKING FOR BIKE LANES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MARKING ENGINEER

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SDD 15C07-16e

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SDD 15C07-16e

## GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING

(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

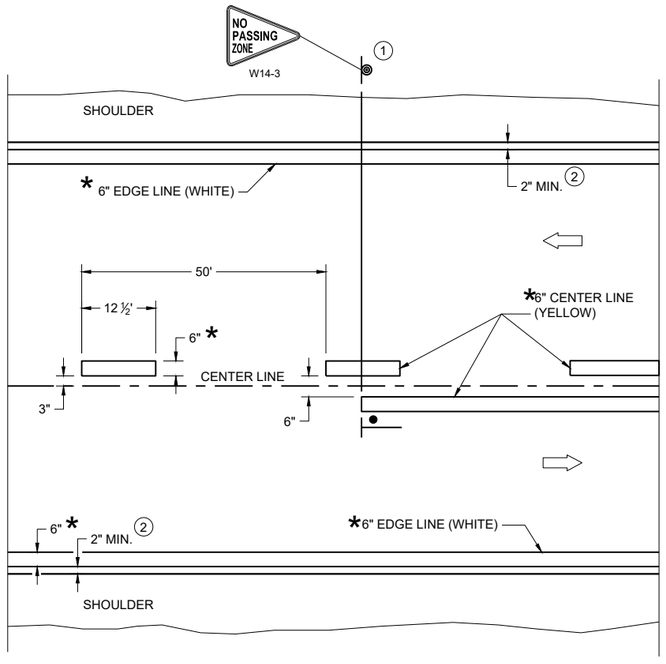
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

## LEGEND

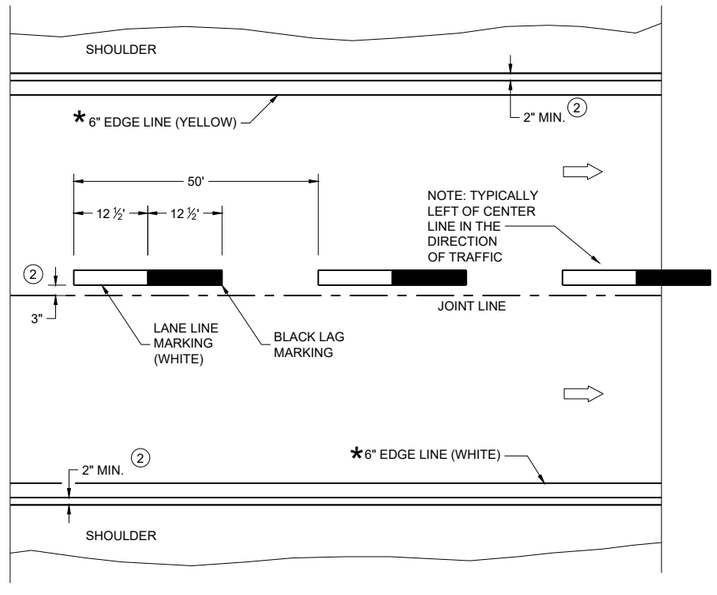
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC




TWO WAY TRAFFIC




ONE WAY TRAFFIC

**PERMANENT PAVEMENT MARKING**

6

**PERMANENT LONGITUDINAL PAVEMENT MARKINGS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024
DATE

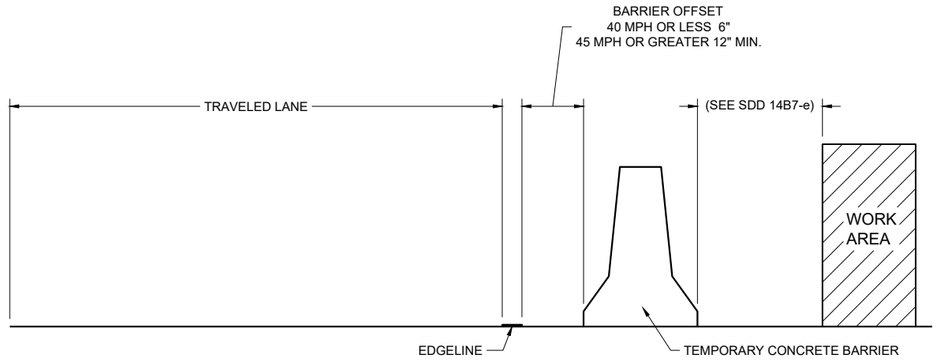
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA





SDD 15C08-24a




**TEMPORARY BARRIER OFFSET FROM EDGELINE**

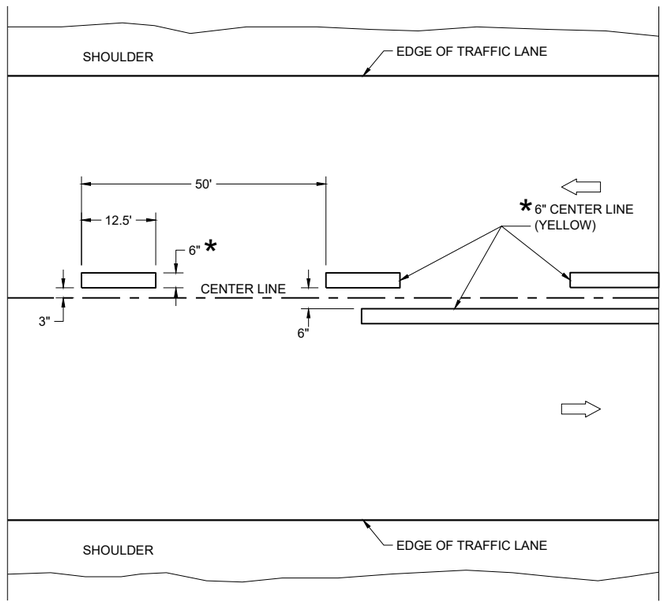
## GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

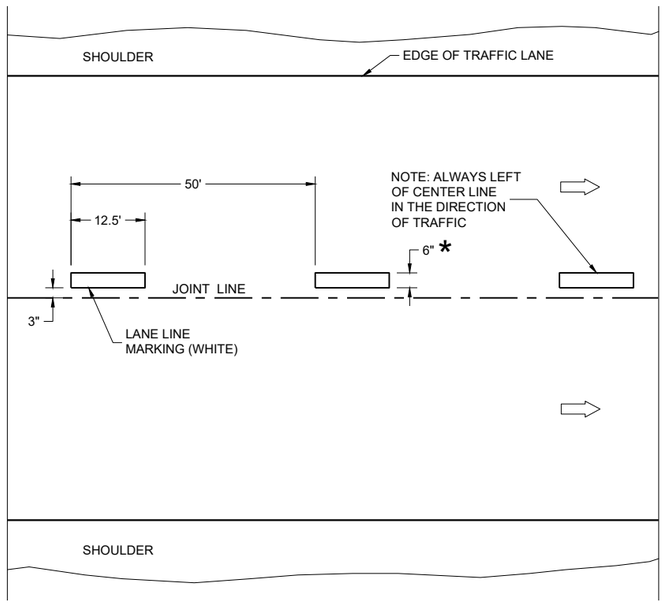
## LEGEND

DIRECTION OF TRAFFIC

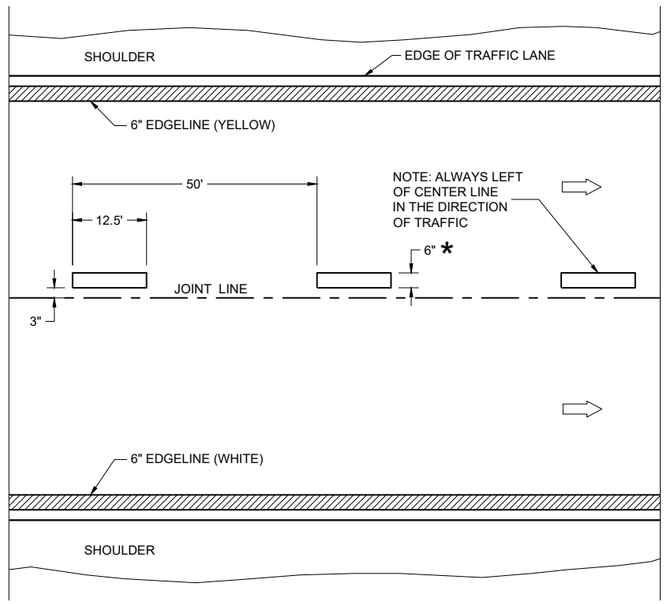
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES




**TWO WAY TRAFFIC**




**ONE WAY TRAFFIC**




**FREEWAYS AND EXPRESSWAYS**

**TEMPORARY PAVEMENT MARKING**

**TEMPORARY LONGITUDINAL PAVEMENT MARKING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer
FHWA



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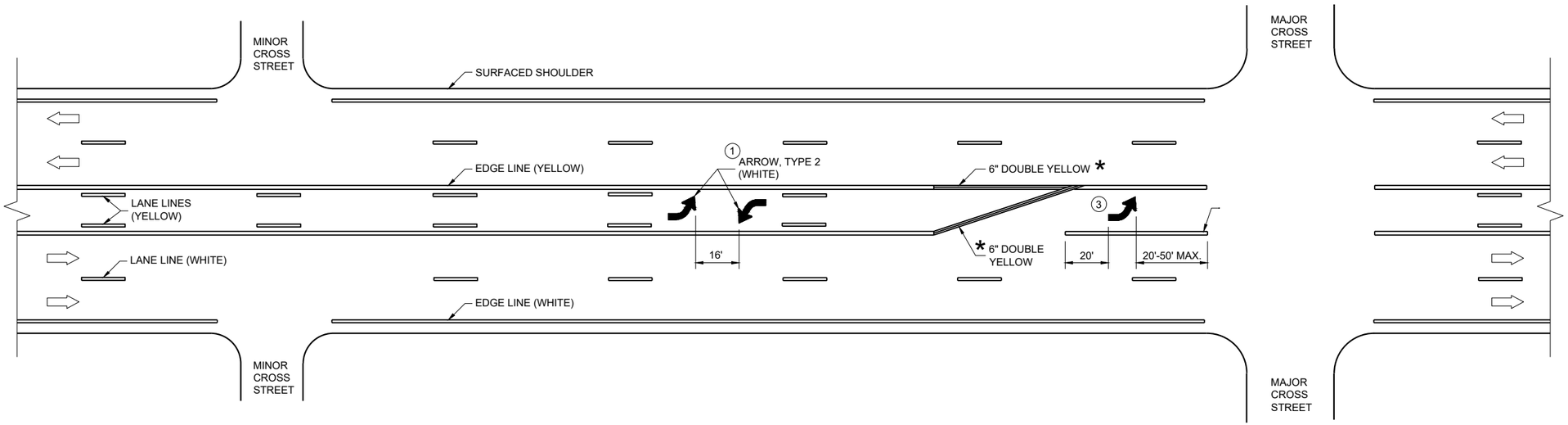
SDD 15C08-24b

## GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 10" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

⇨ DIRECTION OF TRAFFIC

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES




**TWO WAY LEFT TURN LANE**



6

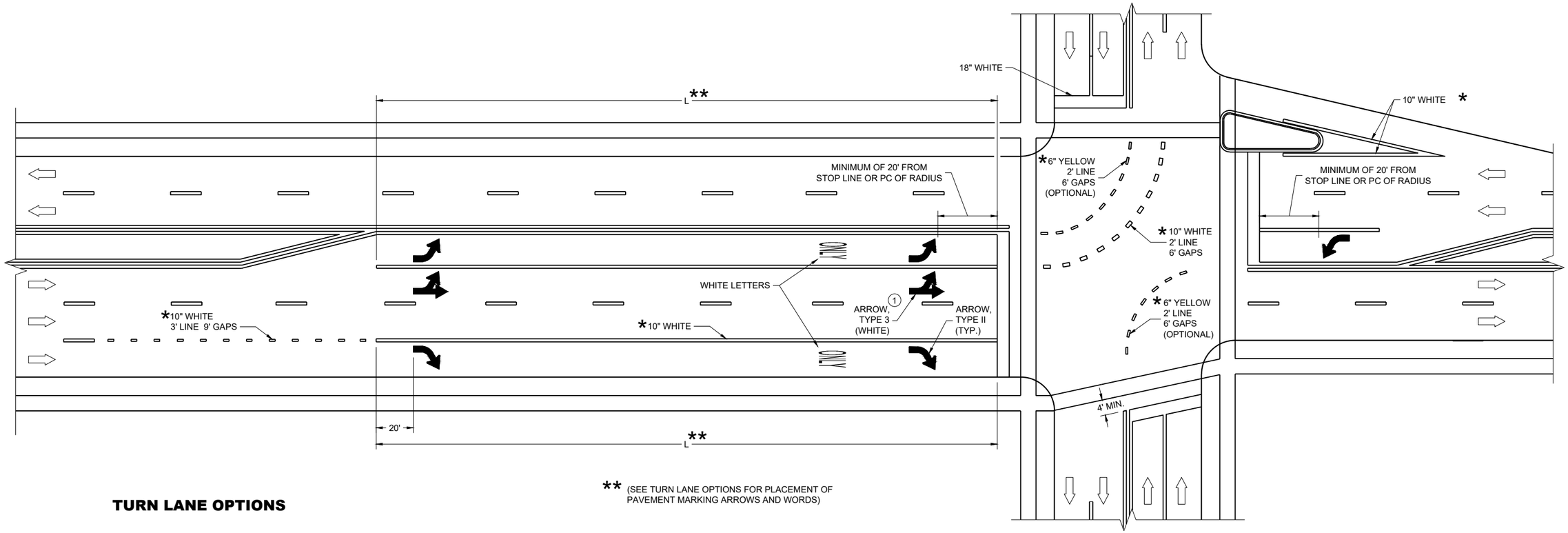


**PAVEMENT MARKING (TURN LANES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



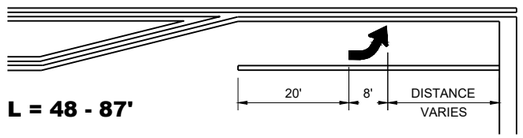
SDD 15C08-24c



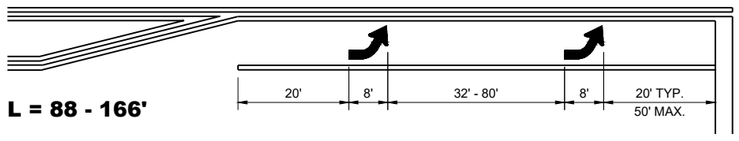

** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

## TURN LANE OPTIONS

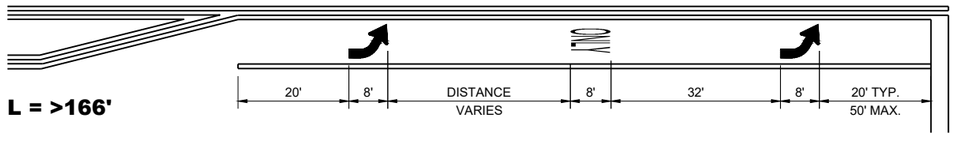
LENGTH OF TURN BAY ( **L** ) OF 0 - 47' DOES NOT
REQUIRE PAVEMENT MARKING ARROWS OR WORDS




**L = 48 - 87'**




**L = 88 - 166'**




**L = >166'**

## GENERAL NOTES

1. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

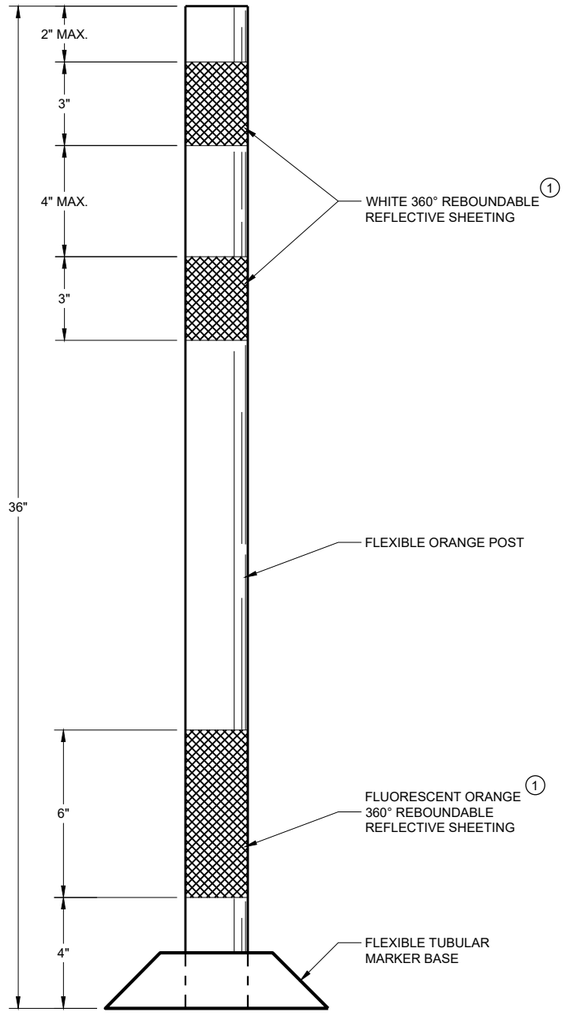
DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

**PAVEMENT MARKING (TURN LANES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION




**FLEXIBLE TUBULAR MARKER POST WORK ZONE**

## GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

6

**CHANNELIZING DEVICES**
**FLEXIBLE TUBULAR MARKER POST**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

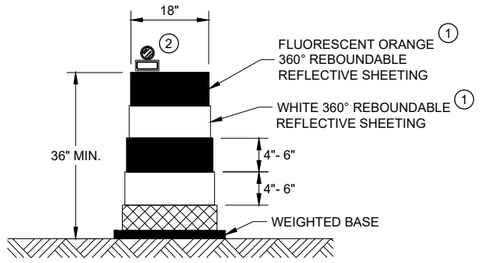
APPROVED
November 2022
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE 673
FHWA



SDD 15C11 - 10a

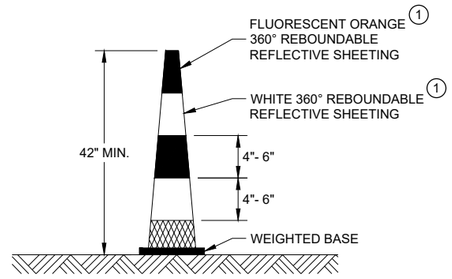
## GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.




### DRUM

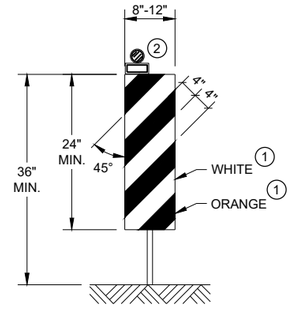
BALLAST WIDTHS
RANGE FROM 24"-36"




### 42" CONE

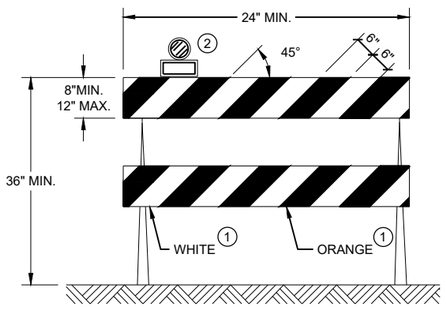
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



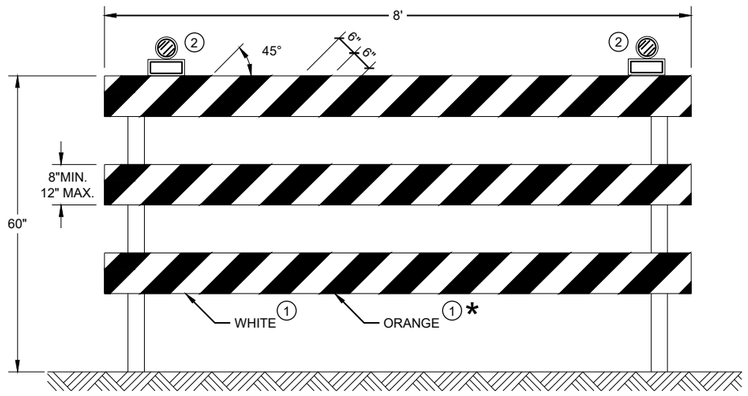

### VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.




### TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.




### TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

## CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

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## LEGEND

- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TEMPORARY PORTABLE RUMBLE STRIP ARRAY
- DIRECTION OF TRAFFIC
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

## GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND LOCATION OF ALL FLAGGERS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

## FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

## TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

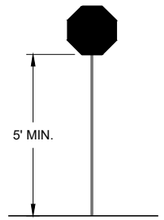
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



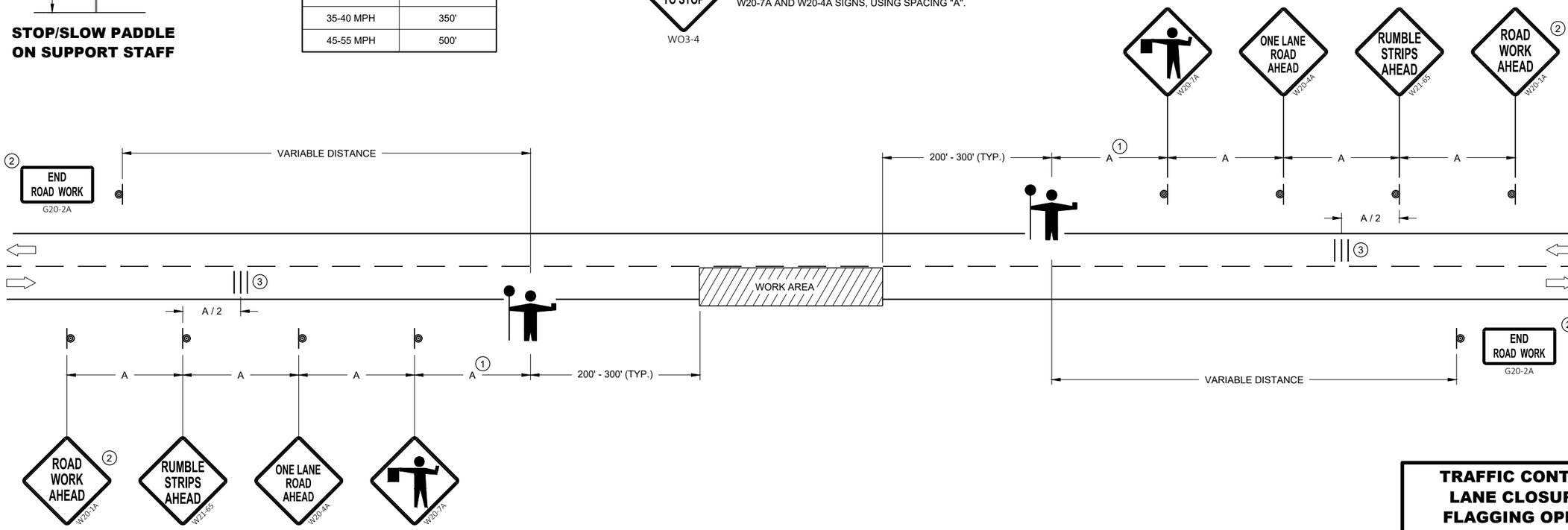

**STOP/SLOW PADDLE ON SUPPORT STAFF**

### SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

| SPEED LIMIT | SPACING "A" |
|---|---|
| 25-30 MPH | 200' |
| 35-40 MPH | 350' |
| 45-55 MPH | 500' |

WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".




**TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

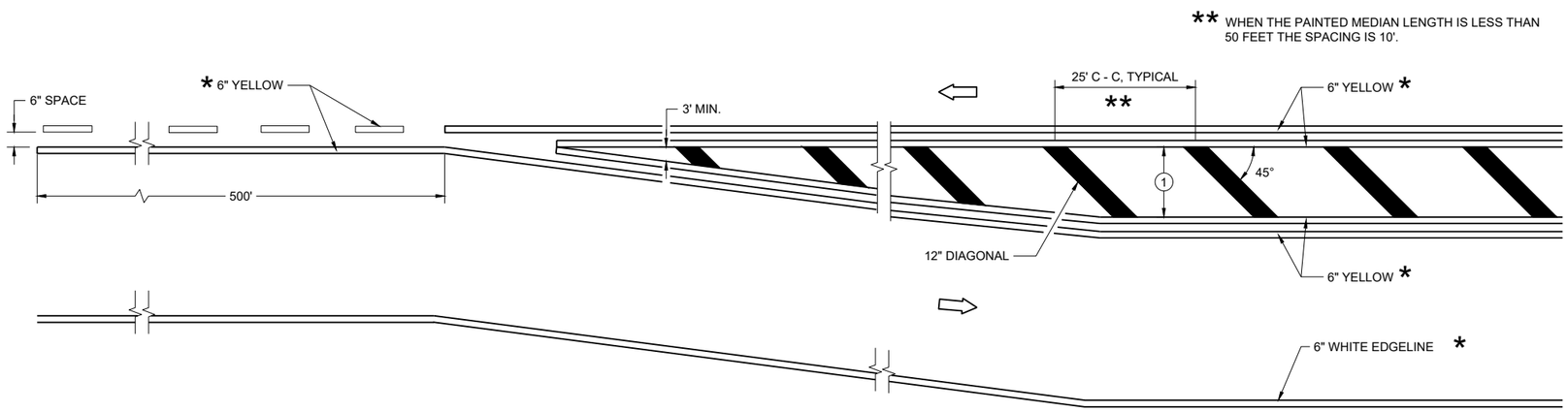
675

FHWA



6

SDD 15C12 - 09a



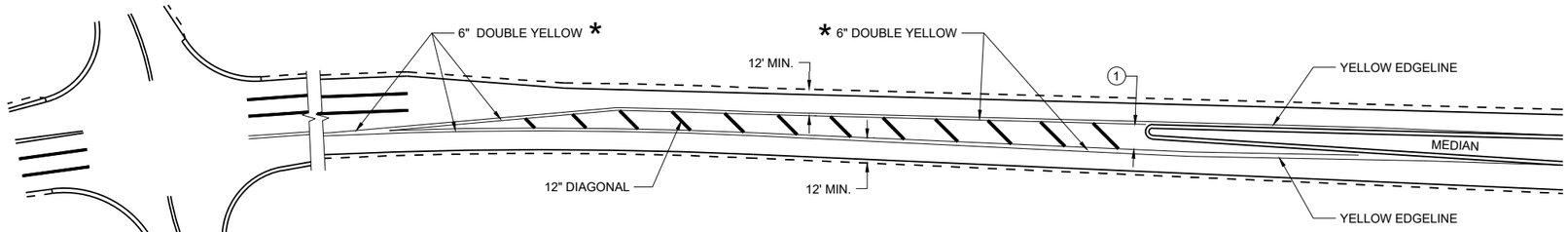

**MEDIAN ISLAND DETAIL**

## GENERAL NOTES

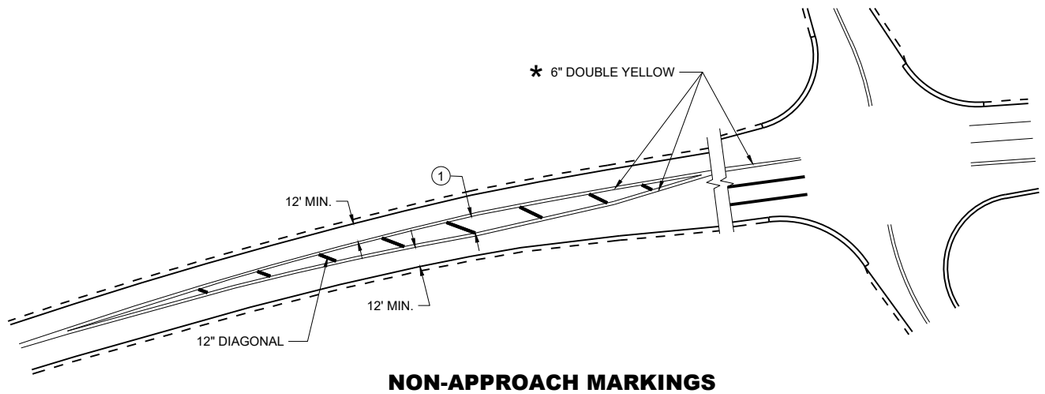
(1) DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

DIRECTION OF TRAVEL

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES




**APPROACH MARKINGS FOR OTHER MEDIAN TYPES**




**NON-APPROACH MARKINGS**

**MEDIAN ISLAND PAVEMENT MARKINGS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA



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SDD 15C18-09a

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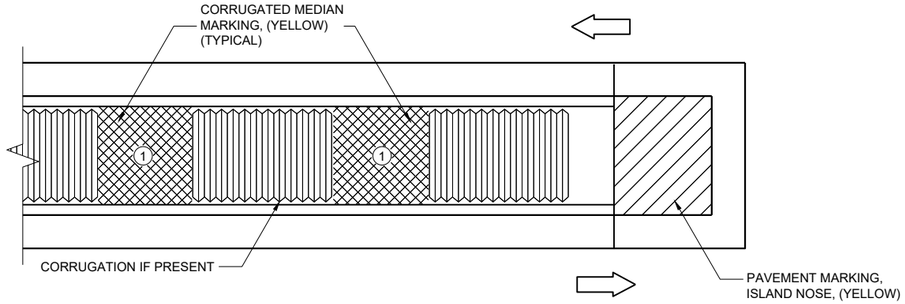
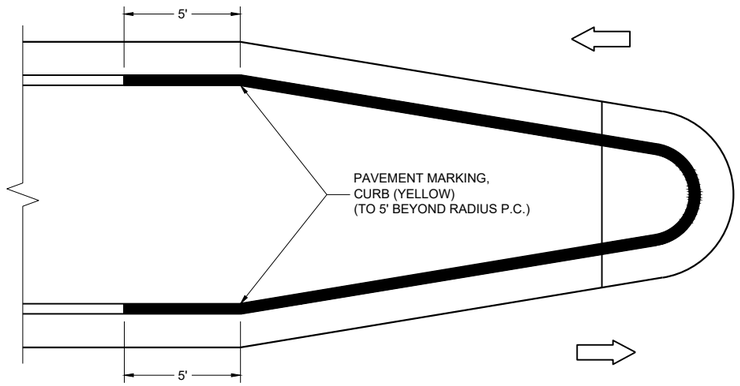
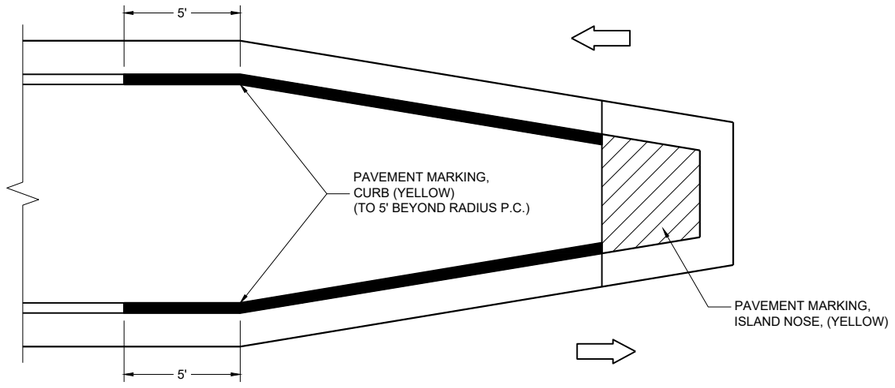



**MEDIAN ISLAND WITH SQUARE BLUNT NOSE**




**MEDIAN ISLAND WITH ROUND BLUNT NOSE**




**MEDIAN ISLAND WITH SLOPED NOSE**

**TYPICAL PLACEMENT OF
PAVEMENT MARKING ON MEDIAN ISLANDS**

## GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

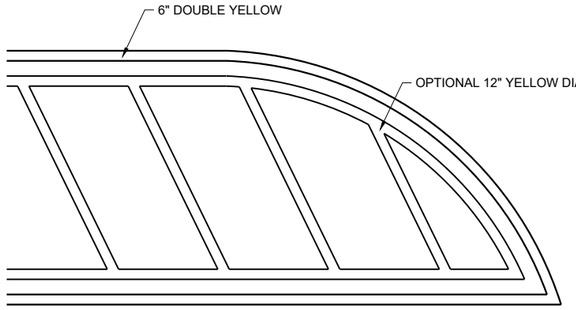
(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL




**FLUSH MEDIAN ISLAND NOSE**

**PAVEMENT MARKINGS,
MEDIAN ISLAND NOSE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA







SDD 15C18-09b

| REQUIREMENTS FOR EDGE LINES | | |
|---|---|---|
| POSTED SPEED | IS THERE CONTINUOUS LIGHTING? | |
| | YES | NO |
| ≤ 30 MPH | NO | OPTIONAL |
| 35 OR 40 MPH | OPTIONAL | RECOMMENDED |
| ≥ 45 MPH | RECOMMENDED | REQUIRED |

## GENERAL NOTES

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

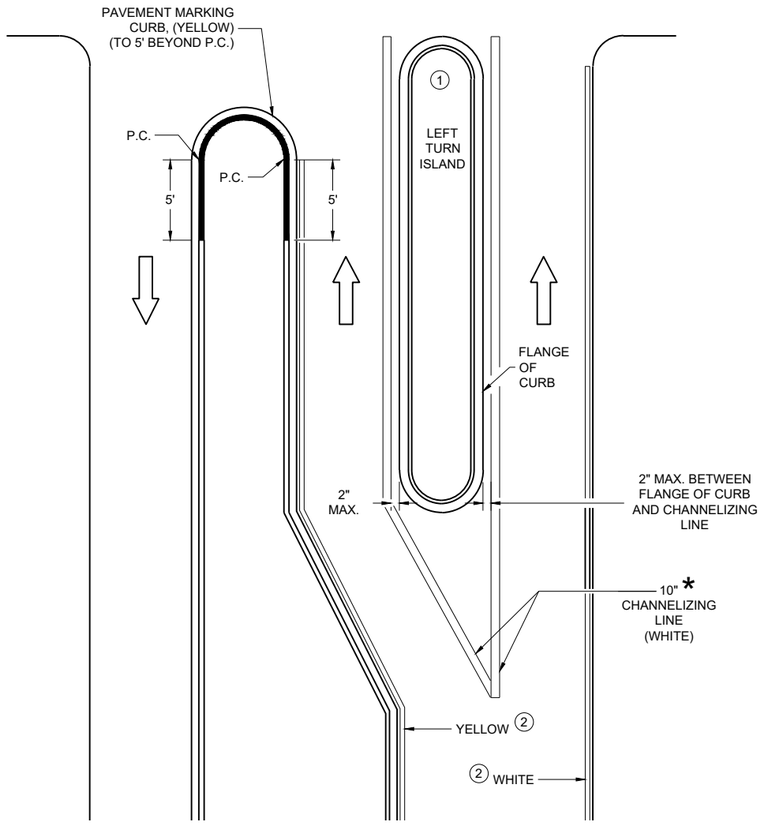
(1) MARK CURB NOSES YELLOW.

(2) MARK ACCORDING TO TABLE.

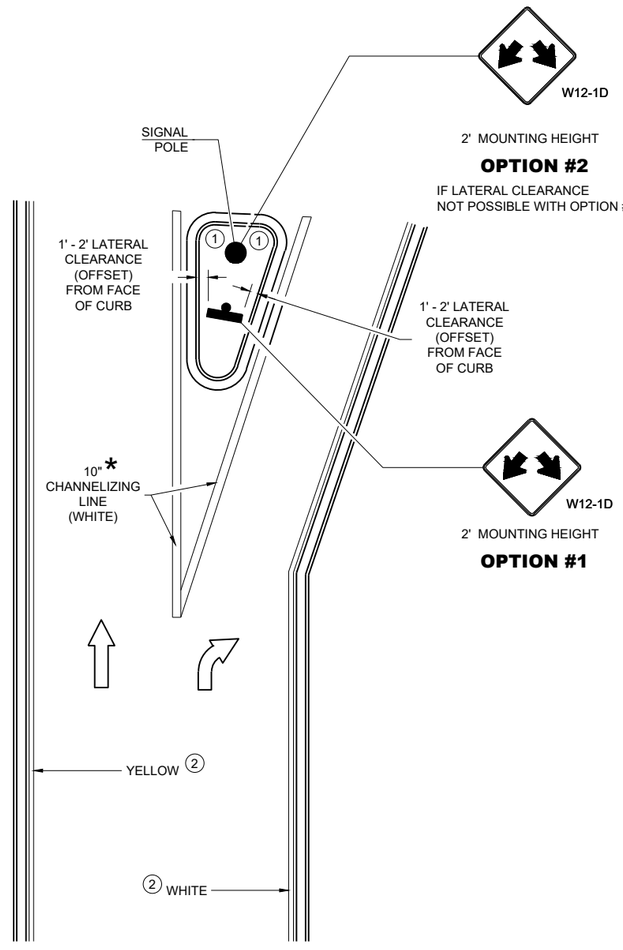
(3) CHEVRON MAY BE OMITTED IF LESS THAN 4" WIDE

DIRECTION OF TRAVEL

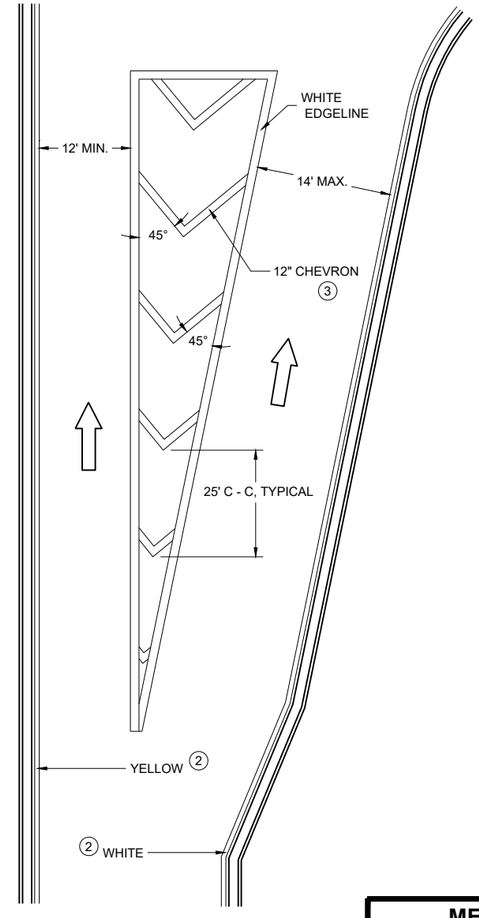
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES




**LEFT TURN & MEDIAN ISLAND**




**RIGHT TURN ISLAND**




**TURN LANE DETAIL**

**MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

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SDD 15C18-09c

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SDD 15C18-09c

## LEGEND

**V1** LEAD VEHICLE

**V2** MARKING VEHICLE

**V3** SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

## GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH

WORKERS SHALL NOT PERFORM WORK FROM ANY SHADOW OR PROTECTION VEHICLES.

UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

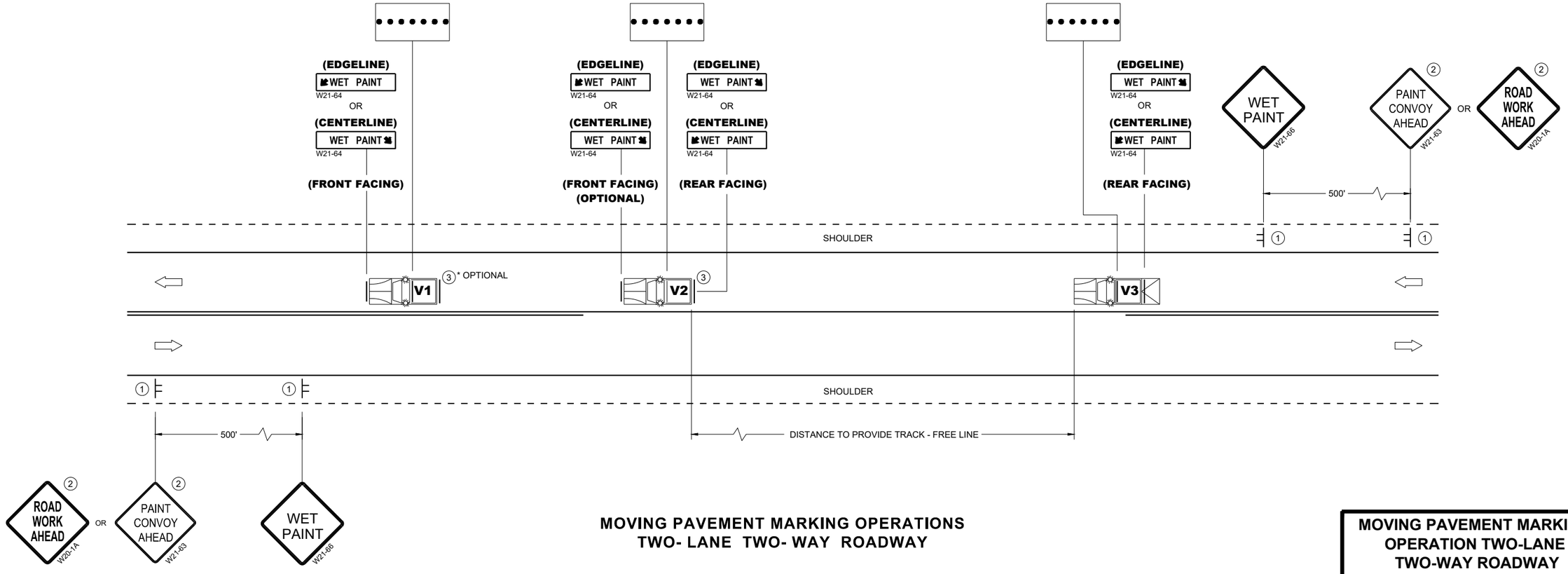
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY MAJOR INTERSECTION.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.

(3) V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.




## MOVING PAVEMENT MARKING OPERATIONS TWO- LANE TWO- WAY ROADWAY

**MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — STATE ELECTRICAL ENGINEER

FHWA





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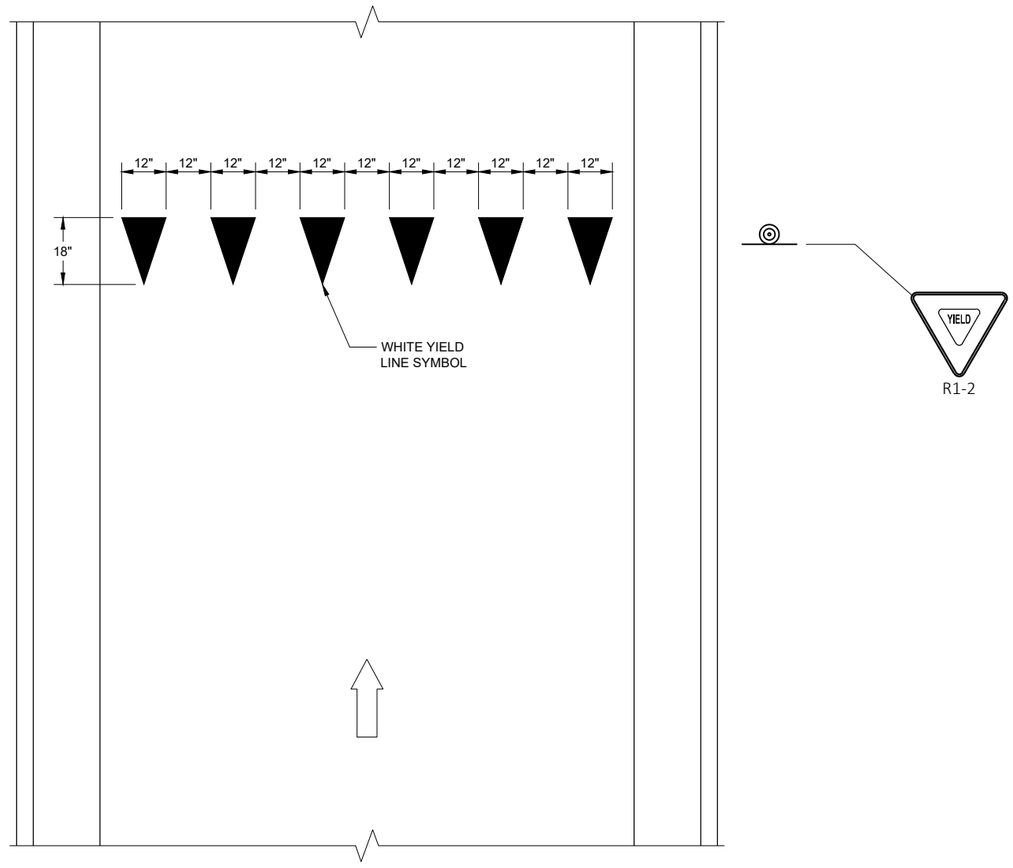
SDD 15C19-11a

## LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL







R1-2

**YIELD LINE**

## YIELD MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-81-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR ENGINEER

680

FHWA

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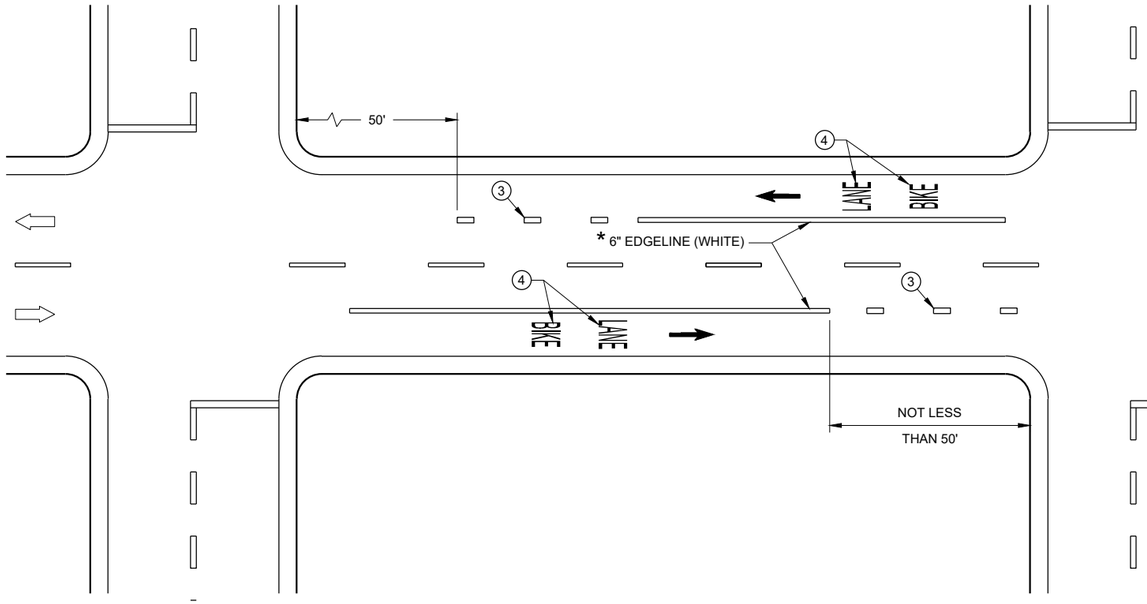
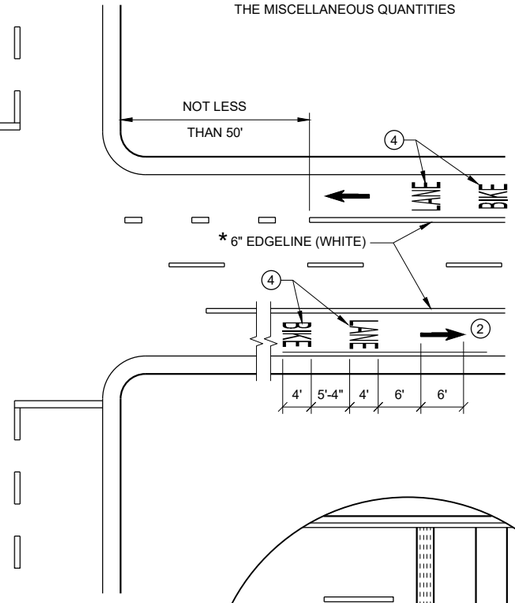
SDD 15C20 - 02




**DESIGNATED BIKE LANE - NO PARKING**

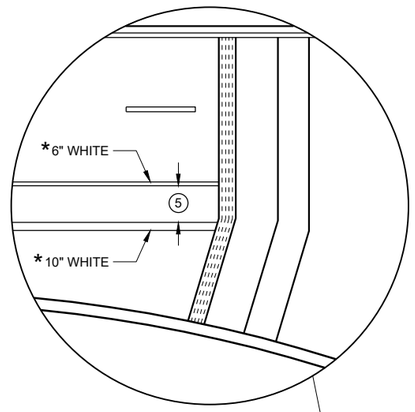
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



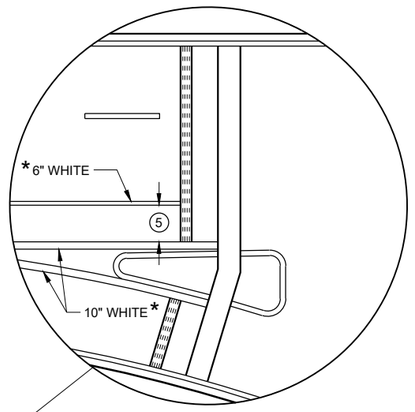

## GENERAL NOTES

1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. MINIMUM OF ONE PER BLOCK. MAXIMUM OF 250 FEET.
3. DOTTED LINES (3' LINE, 9' GAP) SHOULD BE USED 50 FEET TO 200 FEET IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. BIKE SYMBOLS OR WORDS MAY BE USED.
5. BIKE ACCOMMODATION IS TYPICAL 5 FEET WIDE AND MINIMUM OF 4 FEET FROM A LONGITUDINAL JOINT. USE 5 FEET AT ≥ 45 MPH.
6. OMIT THESE MARKINGS FOR WIDER TURN LANE APPLICATIONS (MINIMUM OF 15 FOOT WIDE TURN LANE).
7. REFER TO CONTRACT PLANS FOR LANE WIDTH.

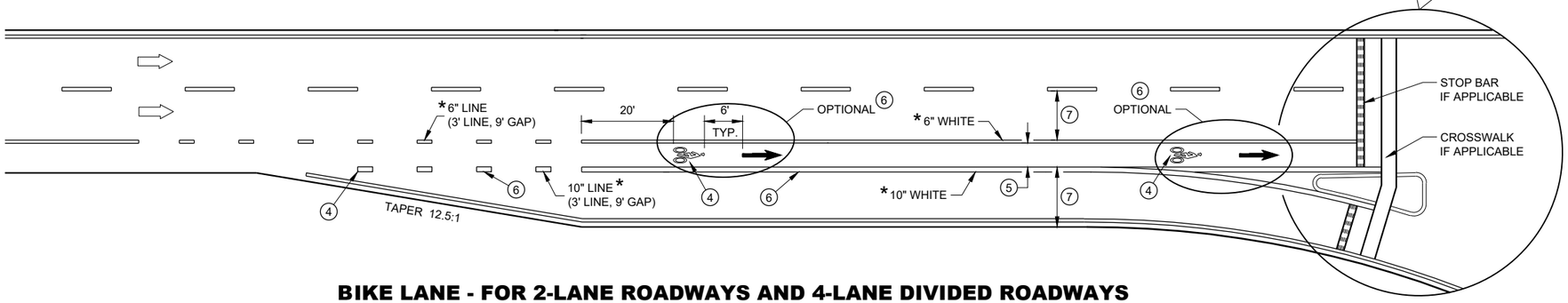
DIRECTION OF TRAVEL




**4 LANE DIVIDED WITHOUT ISLAND**




**4 LANE DIVIDED WITH ISLAND**




**BIKE LANE - FOR 2-LANE ROADWAYS AND 4-LANE DIVIDED ROADWAYS**
**(4-LANE DIVIDED WITH RIGHT TURN LANE SHOWN)**

## BIKE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023 — DATE

/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

FHWA



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SDD 15C29-08a

## LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

## GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

PLACE TEMPORARY PAVEMENT MARKING LINE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

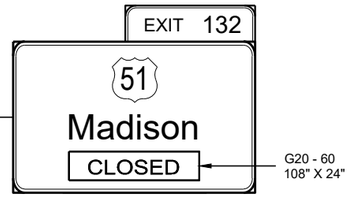
WORK AREAS WITH A DROP OFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN WORK IS NOT IN PROGRESS.

WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

(1) W20 - 1A AND G20 - 2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

(2) PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.

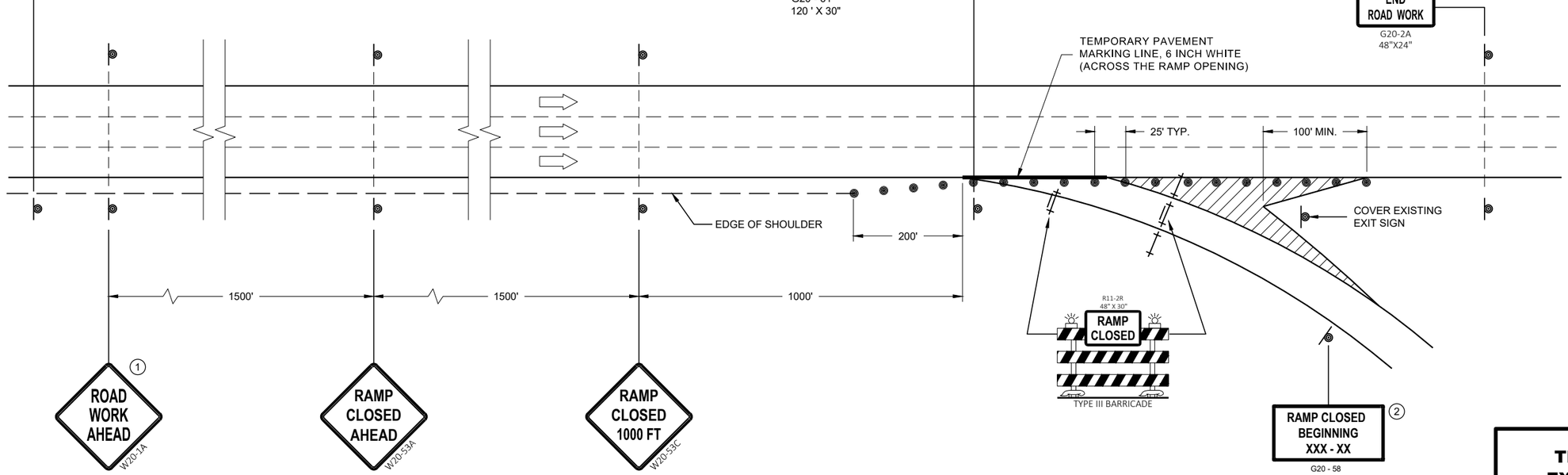
OR




PLACE SIGN G20 - 60 OVER MILEAGE ON EXISTING E1 - 1A SIGN

G20 - 61
120 ' X 30"

COVER ARROW ON EXISTING E4 - 1 SIGN (COVERING SIGNS TYPE I)




OR

PCMS MESSAGING

| FRAME 1 | FRAME 2 |
|---|---|
| RAMP TO CLOSE | XXXDAY XX XX XX |

# TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVE ENGINEER

FHWA





6

SDD 15D16-06

## LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER

## GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

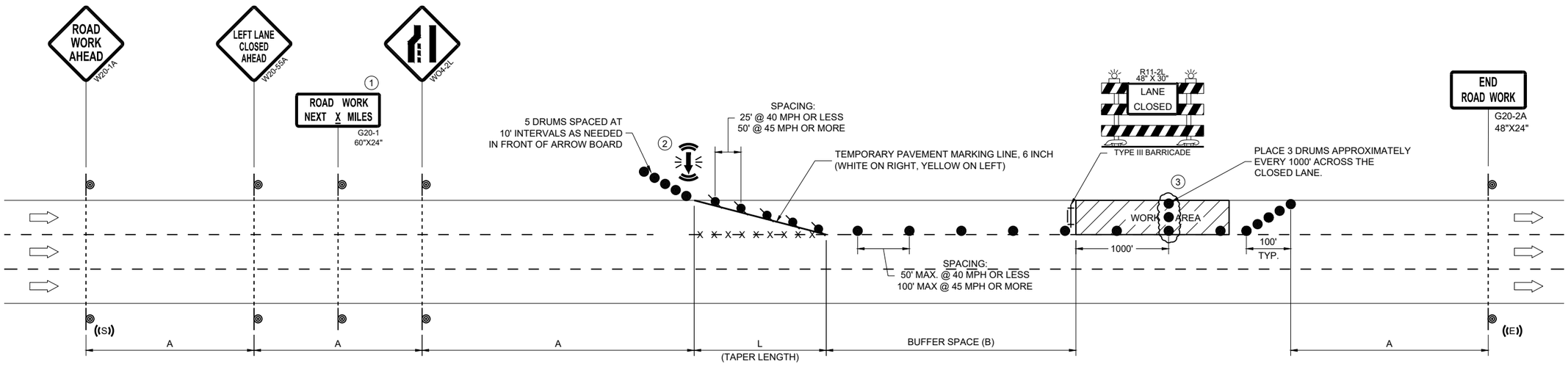
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.

(3) DRUMS IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.




| POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH) | ADVANCE WARNING SIGN SPACING (A) FEET | TAPER LENGTH (12 FT. LANE) (L) FEET | BUFFER SPACE (B) FEET |
|---|---|---|---|
| 25 | 200' | 125' | 155' |
| 30 | 200' | 180' | 200' |
| 35 | 350' | 245' | 250' |
| 40 | 350' | 320' | 305' |
| 45 | 500' | 540' | 360' |

# TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA




6

SDD 15D20-11a
SDD 15D20-11a

## LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER

## GENERAL NOTES

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

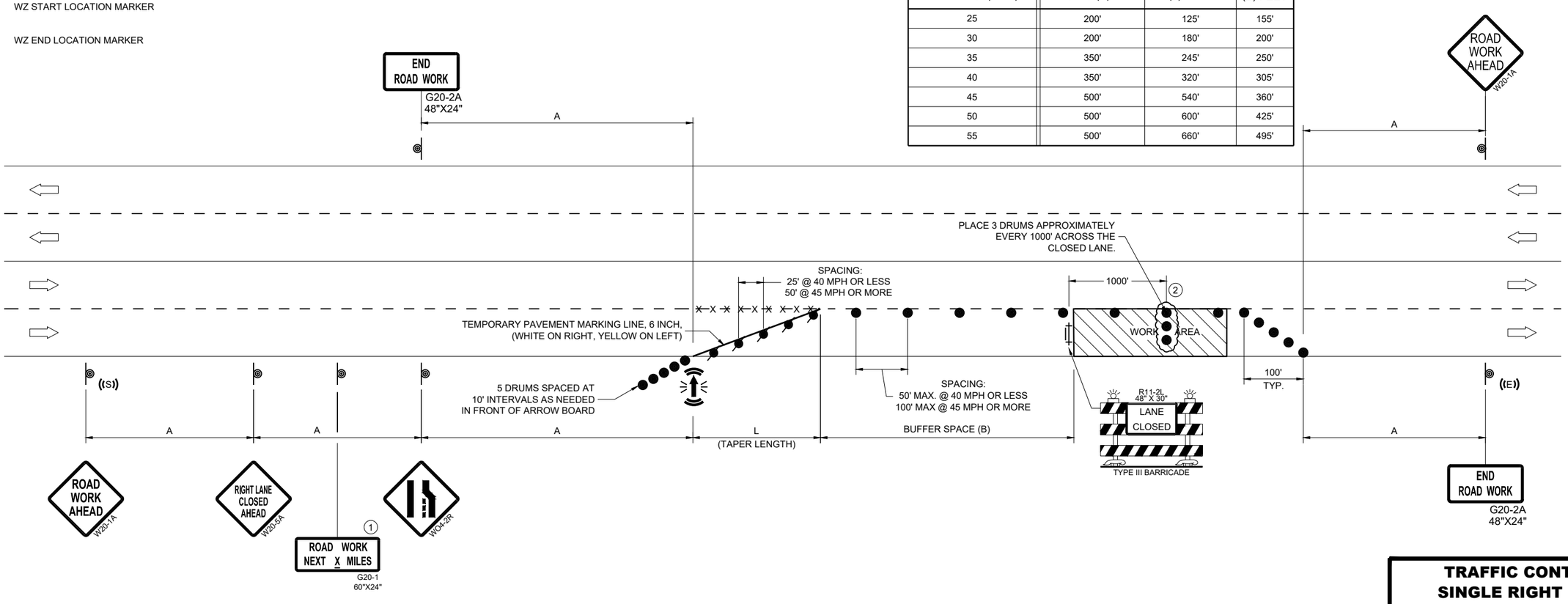
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) DRUMS IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

| POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH) | ADVANCE WARNING SIGN SPACING (A) FEET | TAPER LENGTH (12 FT. LANE) (L) FEET | BUFFER SPACE (B) FEET |
|---|---|---|---|
| 25 | 200' | 125' | 155' |
| 30 | 200' | 180' | 200' |
| 35 | 350' | 245' | 250' |
| 40 | 350' | 320' | 305' |
| 45 | 500' | 540' | 360' |
| 50 | 500' | 600' | 425' |
| 55 | 500' | 660' | 495' |




# TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA



6

SDD 15D20-11b

6

SDD 15D20-11b

## LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER

## GENERAL NOTES

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

DUE TO LACK OF SHOULDER/MEDIAN, ARROW BOARD IS PLACED AT THE THE END OF THE TAPER.

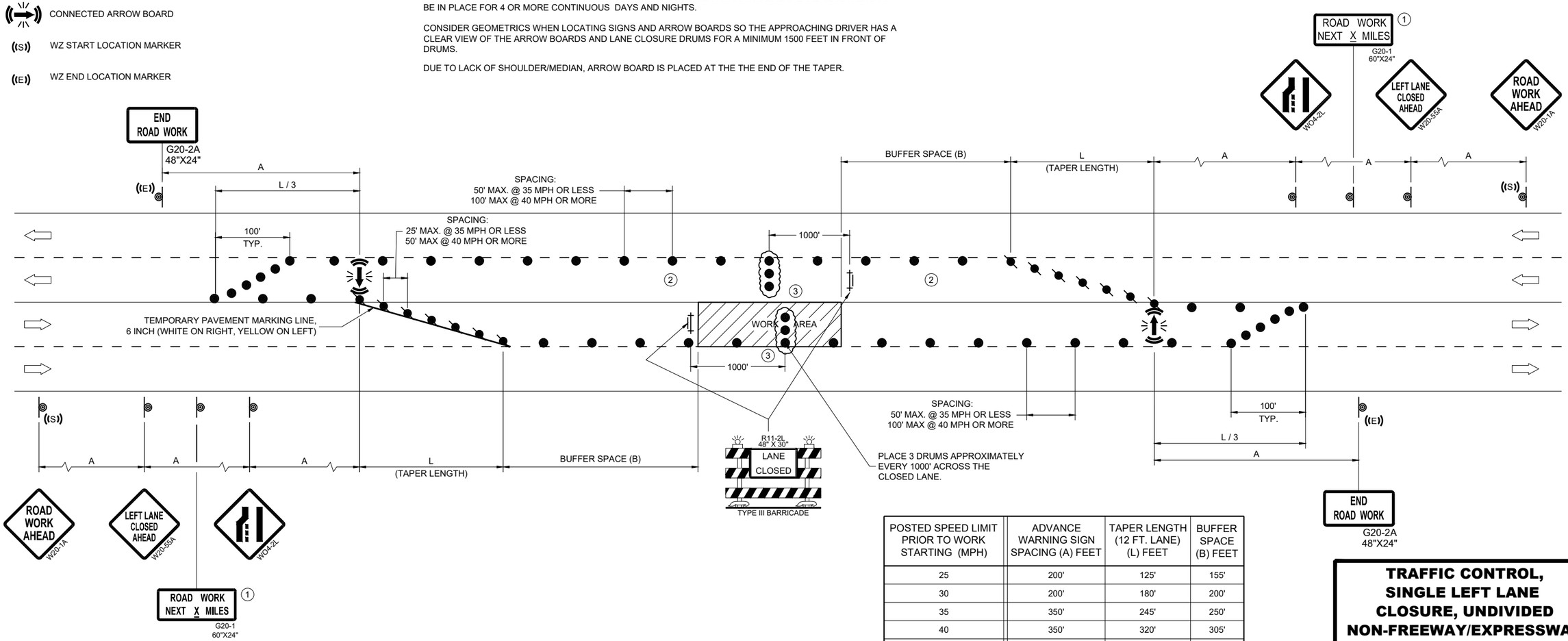
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) LANE MAY BE OPENED WHEN WORKERS ARE NOT PRESENT IN THE WORK AREA.

DRUMS IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.




| POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH) | ADVANCE WARNING SIGN SPACING (A) FEET | TAPER LENGTH (12 FT. LANE) (L) FEET | BUFFER SPACE (B) FEET |
|---|---|---|---|
| 25 | 200' | 125' | 155' |
| 30 | 200' | 180' | 200' |
| 35 | 350' | 245' | 250' |
| 40 | 350' | 320' | 305' |
| 45 | 500' | 540' | 360' |
| 50 | 500' | 600' | 425' |
| 55 | 500' | 660' | 495' |

# TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

November 2025
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA



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SDD 15D20-11c

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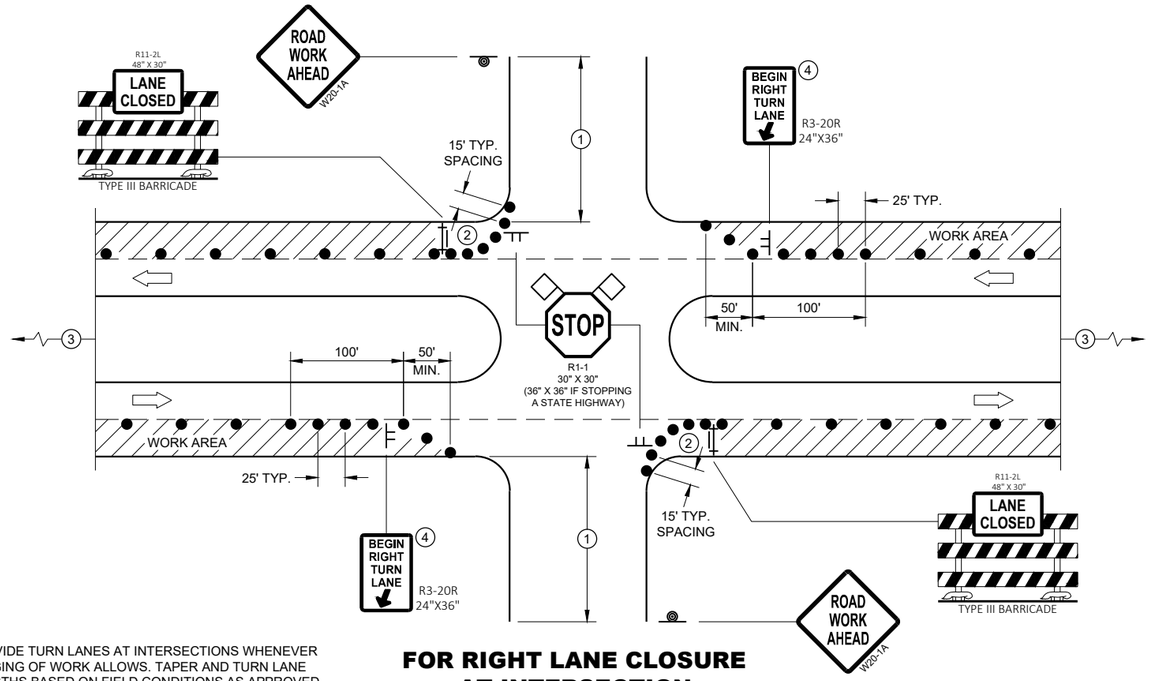
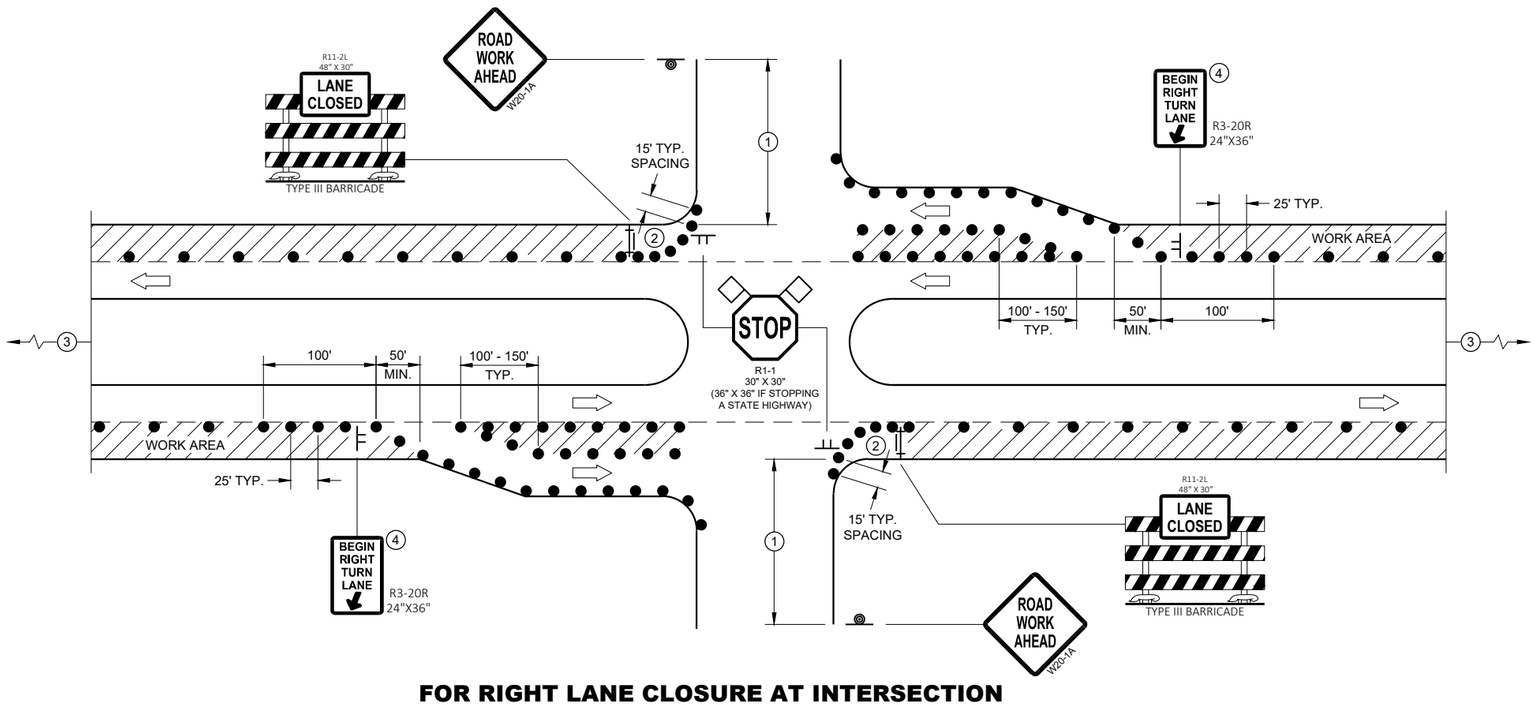
SDD 15D20-11c




PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

**FOR RIGHT LANE CLOSURE AT INTERSECTION**




**FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)**

## GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.

## LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

**TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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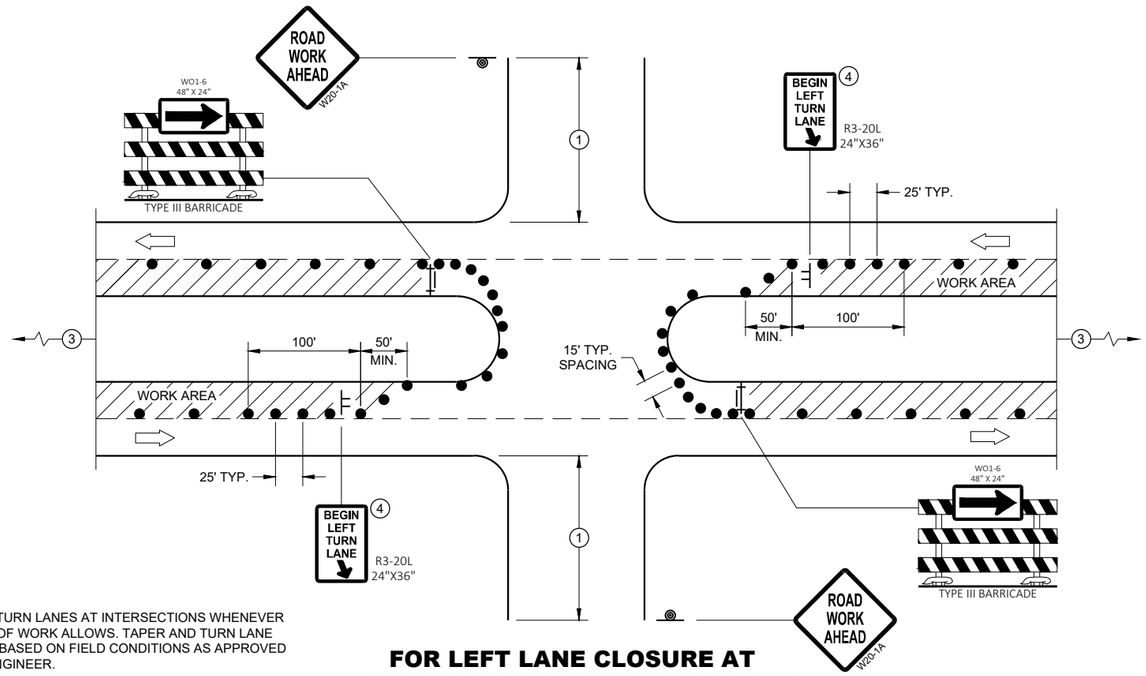
SDD15D21 - 07a




PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

## FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

## GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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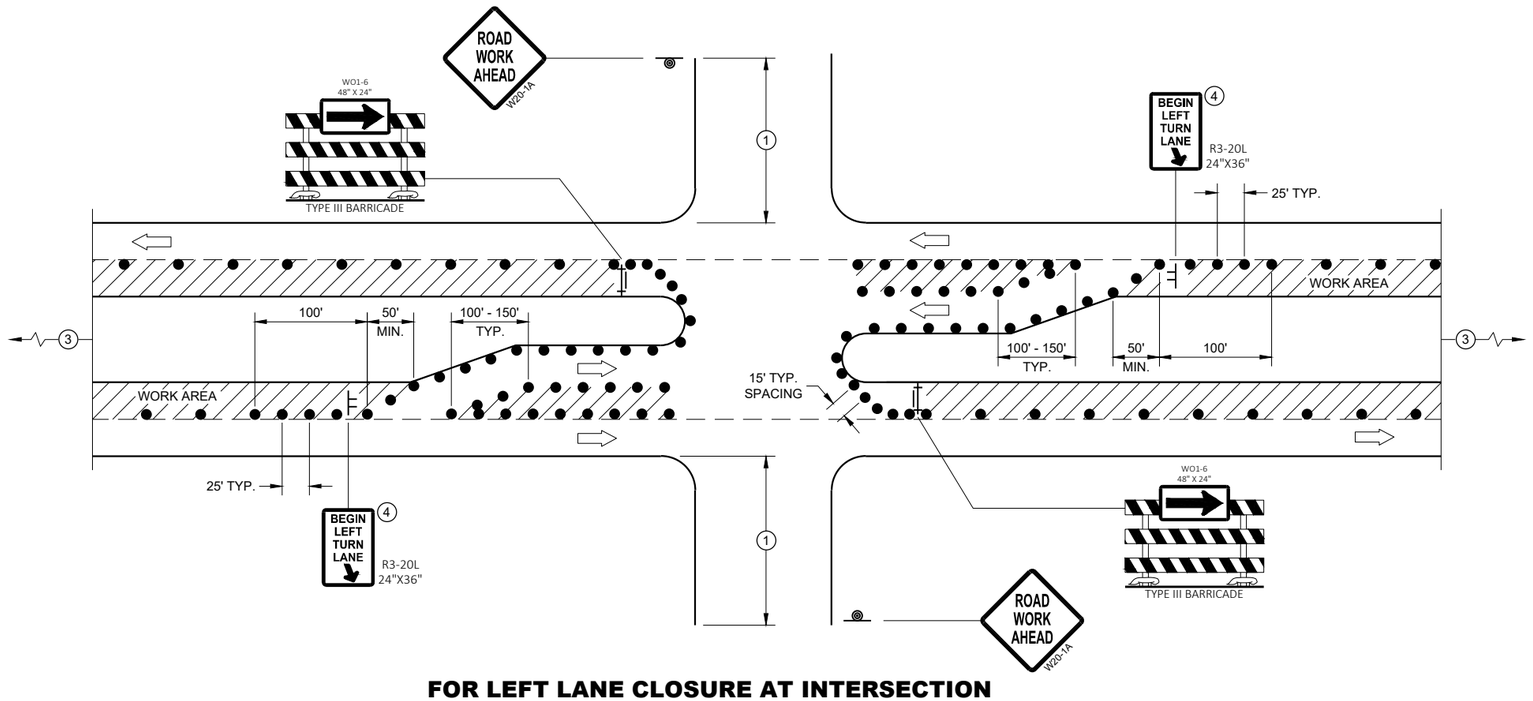
(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.




## FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

## LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

**TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA



6

SDD 15D21 - 07b

6

SDD 15D21 - 07b

## LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

## GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

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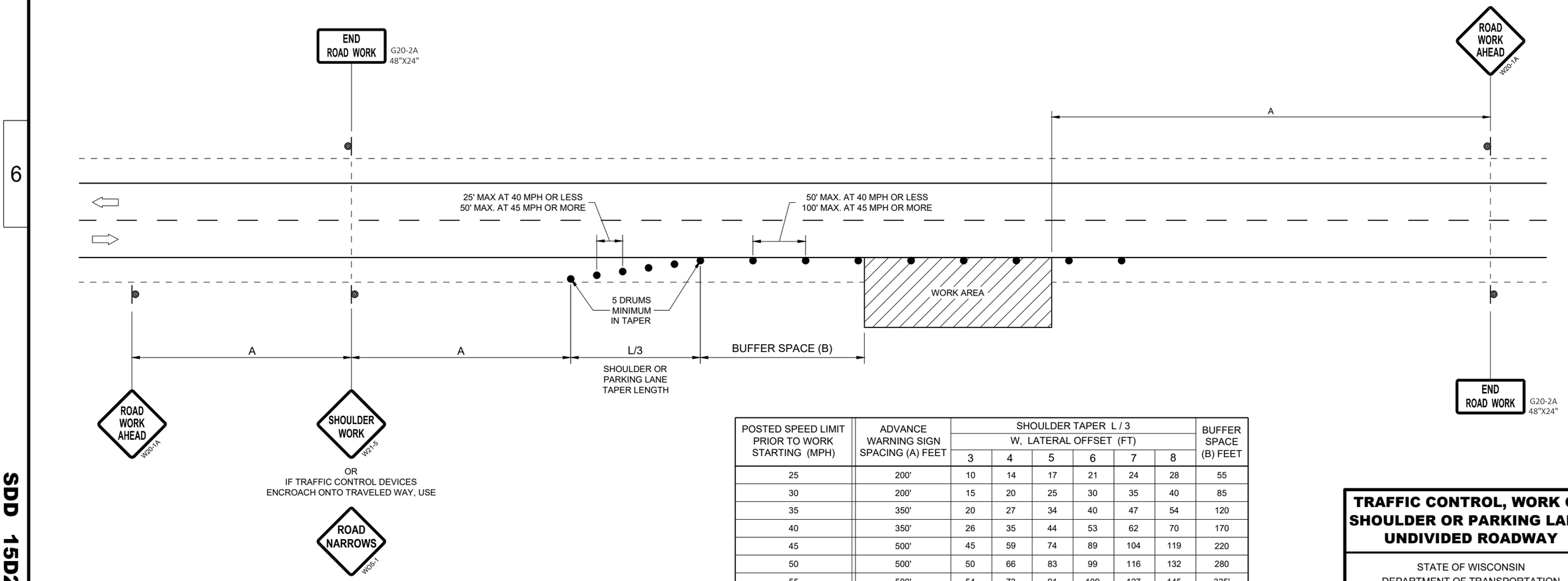
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.




| POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH) | ADVANCE WARNING SIGN SPACING (A) FEET | SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT) | | | | | | BUFFER SPACE (B) FEET |
|---|---|---|---|---|---|---|---|---|
| | | 3 | 4 | 5 | 6 | 7 | 8 | |
| 25 | 200' | 10 | 14 | 17 | 21 | 24 | 28 | 55 |
| 30 | 200' | 15 | 20 | 25 | 30 | 35 | 40 | 85 |
| 35 | 350' | 20 | 27 | 34 | 40 | 47 | 54 | 120 |
| 40 | 350' | 26 | 35 | 44 | 53 | 62 | 70 | 170 |
| 45 | 500' | 45 | 59 | 74 | 89 | 104 | 119 | 220 |
| 50 | 500' | 50 | 66 | 83 | 99 | 116 | 132 | 280 |
| 55 | 500' | 54 | 73 | 91 | 109 | 127 | 145 | 335' |

# TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

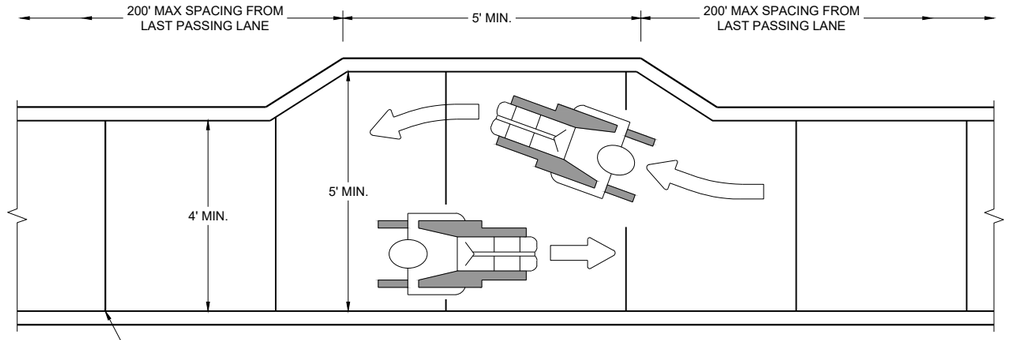
APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER 688

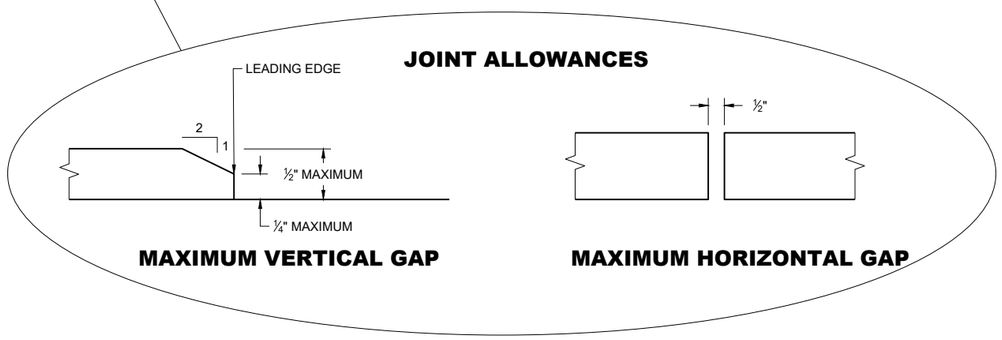
FHWA

SDD 15D28 - 04

SDD 15D28 - 04




**NARROW SIDEWALK PASSING DETAIL**



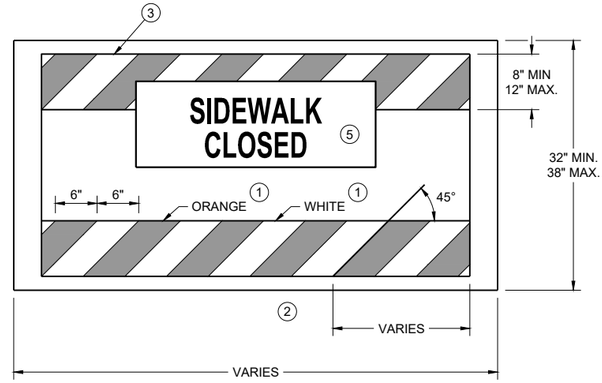

**MAXIMUM VERTICAL GAP**

**MAXIMUM HORIZONTAL GAP**

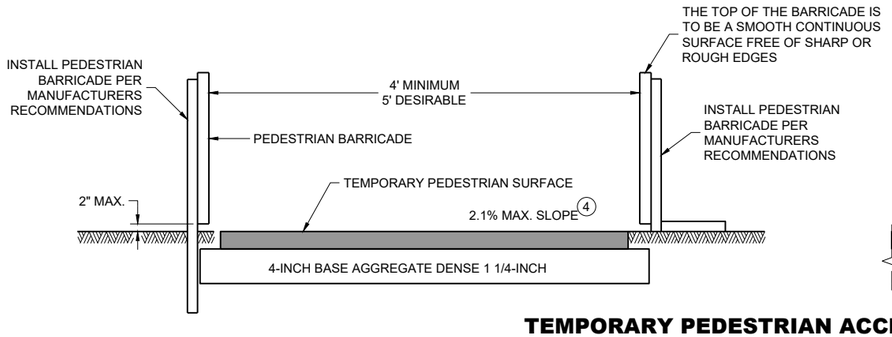
## GENERAL NOTES

BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

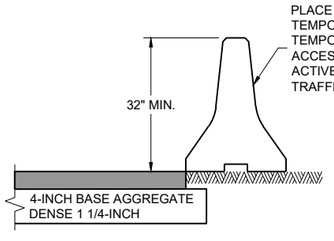
1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
3. PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.
4. WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.
5. WHERE SIGNS FOR TEMPORARY PEDESTRIAN ACCOMMODATIONS ARE SHOWN BEING PLACED BEHIND TEMPORARY PEDESTRIAN BARRICADE, THE SIGNS MAY BE MOUNTED ON THE TEMPORARY PEDESTRIAN BARRICADE INSTEAD. A CORRUGATED POLYPROPYLENE OR POLYETHYLENE PLASTIC SIGN BASE SHALL BE USED IF MOUNTED ON THE BARRICADE. THE TOP OF THE SIGN SHALL BE MOUNTED BELOW THE TOP OF THE BARRICADE TO ALLOW A CONTINUOUS HAND-TRAILING EDGE.

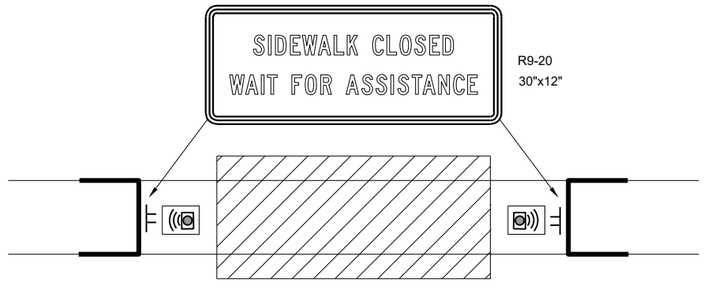



**TEMPORARY PEDESTRIAN BARRICADE ***




**TEMPORARY PEDESTRIAN ACCESS**



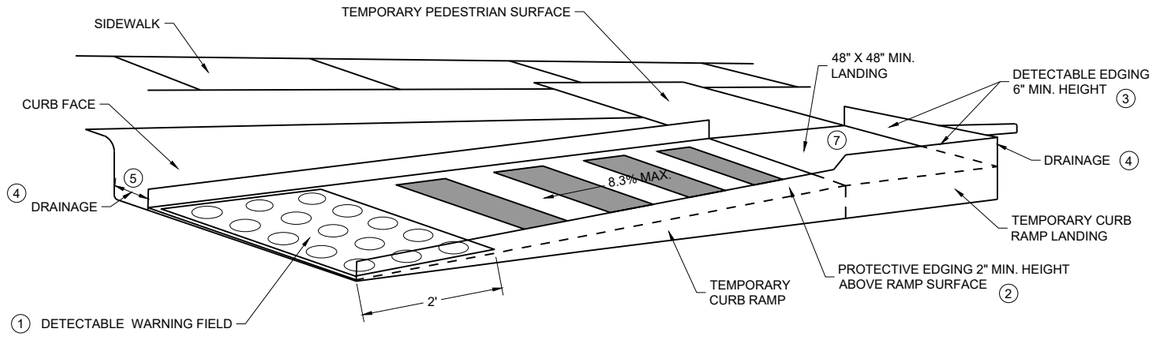

**TEMPORARY PEDESTRIAN FLAGGING**

**LEGEND**

- TEMPORARY PEDESTRIAN BARRICADE
- AUDIBLE MESSAGE DEVICE
- TEMPORARY SIGN SUPPORT
- WORK AREA

**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION




**PERSPECTIVE VIEW**

## GENERAL NOTES

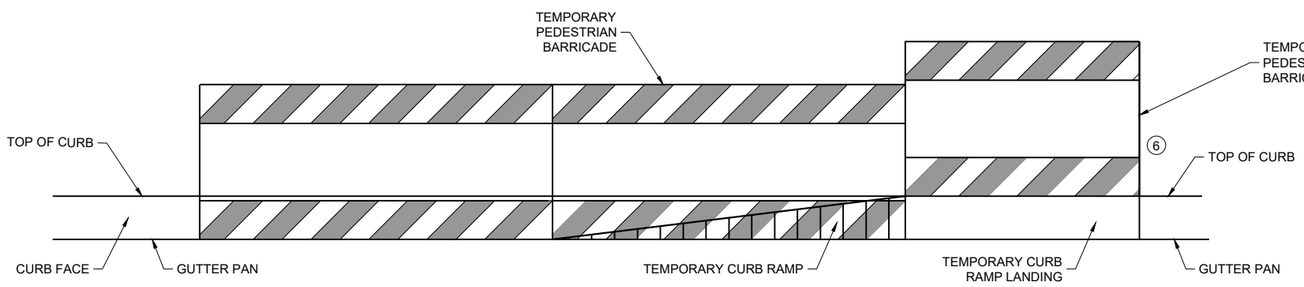
CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:48 (2.1%) MAX. CROSS-SLOPE.

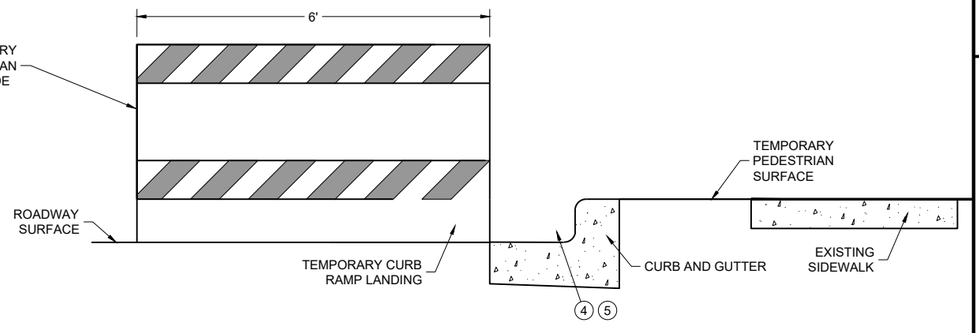
CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

1. INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.
2. PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
3. DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
5. ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.
6. IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.
7. LANDING TO BE SLOPED A MAXIMUM OF 2.1% IN ALL DIRECTIONS OF PEDESTRIAN TRAVEL.




**FRONT VIEW**




**SIDE VIEW**

**TEMPORARY CURB RAMP PARALLEL TO CURB**

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**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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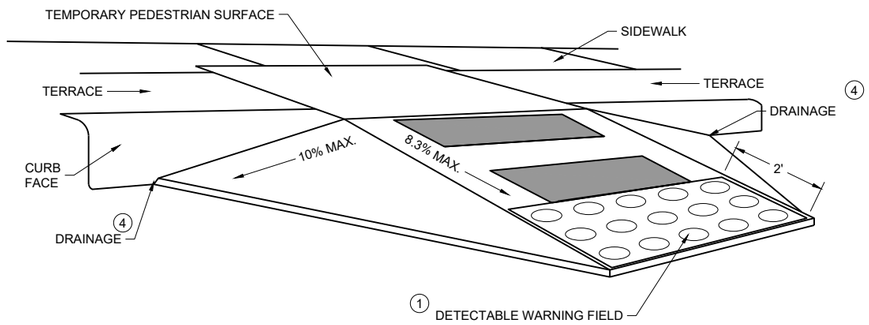
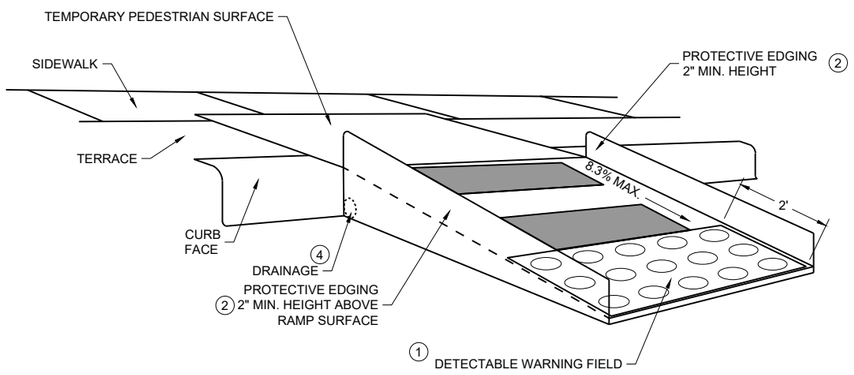
SDD 15D30-12b




**WITH SIDE APRON** (5)




**WITH PROTECTIVE EDGE**

**TEMPORARY CURB RAMP PERPENDICULAR TO CURB**

## GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:48 (2.1%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

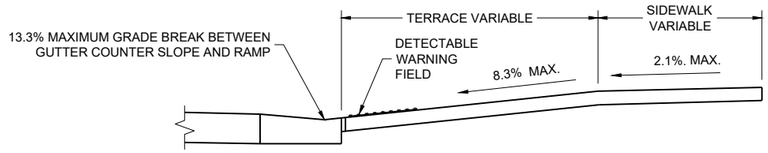
(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

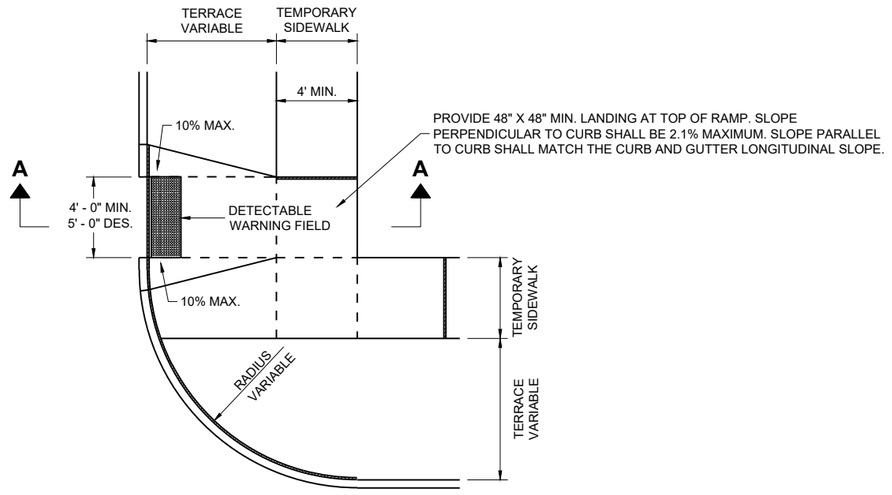
(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

## GENERAL NOTES




**SECTION A - A**




**PLAN VIEW**
**TEMPORARY TYPE 3 RAMP**
(OUTSIDE OF CROSSWALK AREA)

6

SDD 15D30-12d

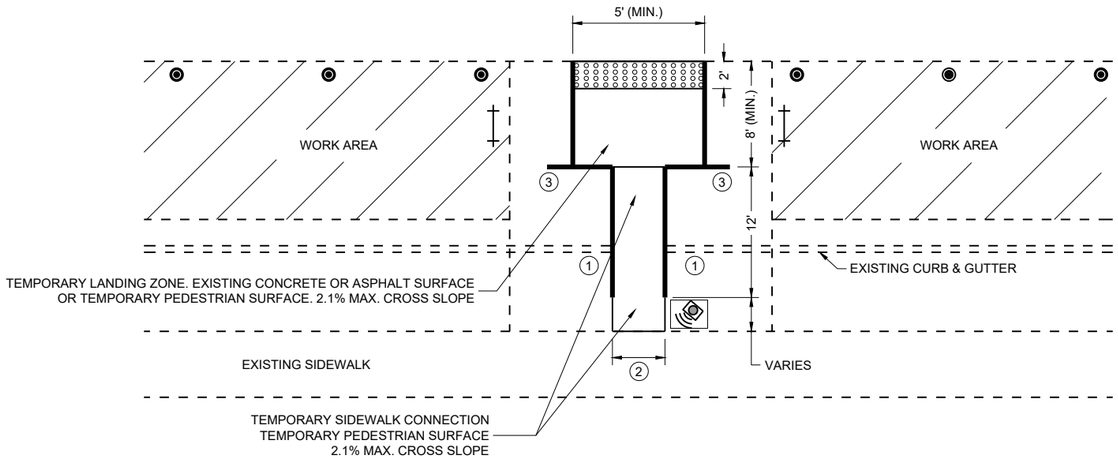
**TRAFFIC CONTROL,**
**PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

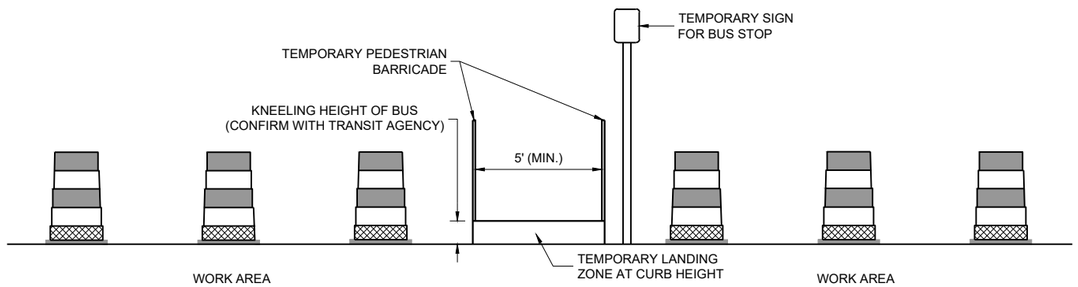


6

SDD 15D30-12d




**PLAN VIEW**




**PROFILE VIEW TEMPORARY BUS STOP PAD**

## GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

CURB RAMPS AND LANDINGS SHALL HAVE A 1:48 (2.1%) MAX. CROSS-SLOPE.

(1) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(2) 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.

(3) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

## LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- WORK AREA
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)



6



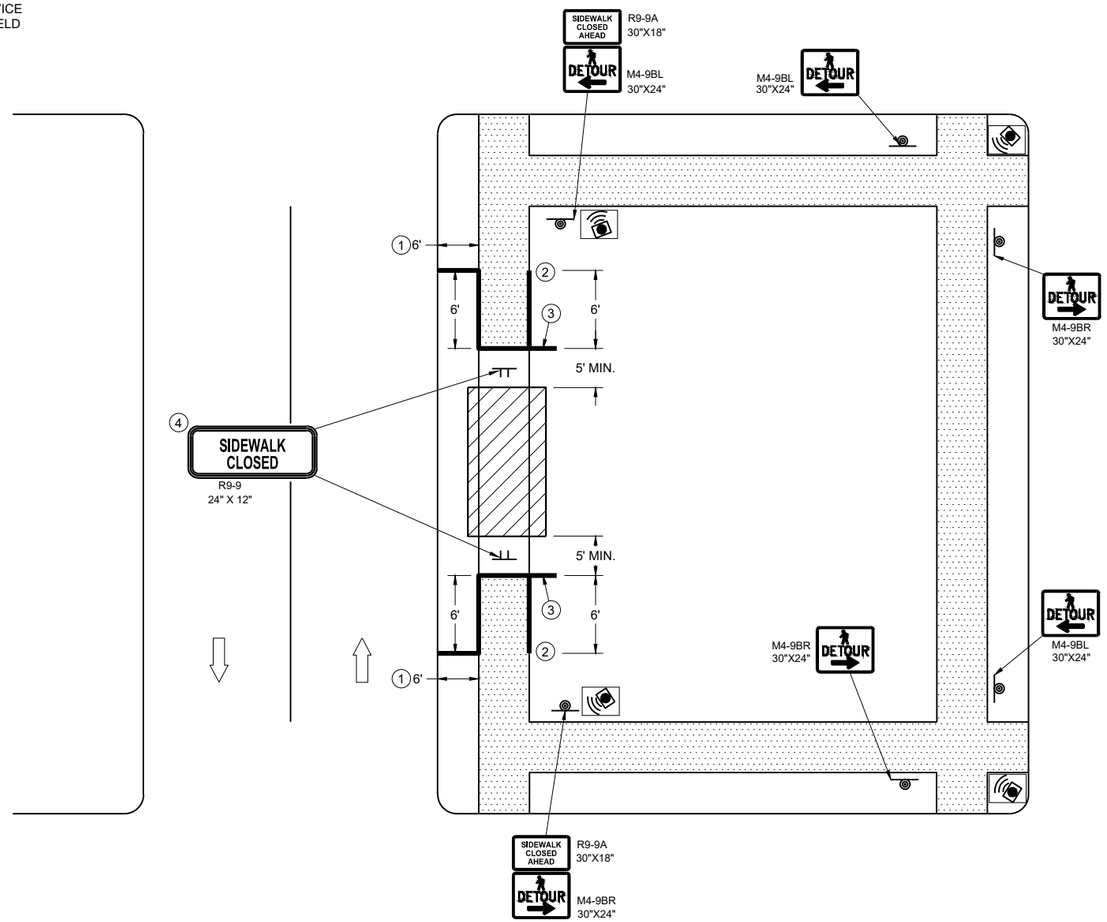
SDD 15D30-12e

**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

## LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)




**SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE**

## GENERAL NOTES

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.





**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



6

SDD 15D30-12f

## LEGEND

- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

## GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

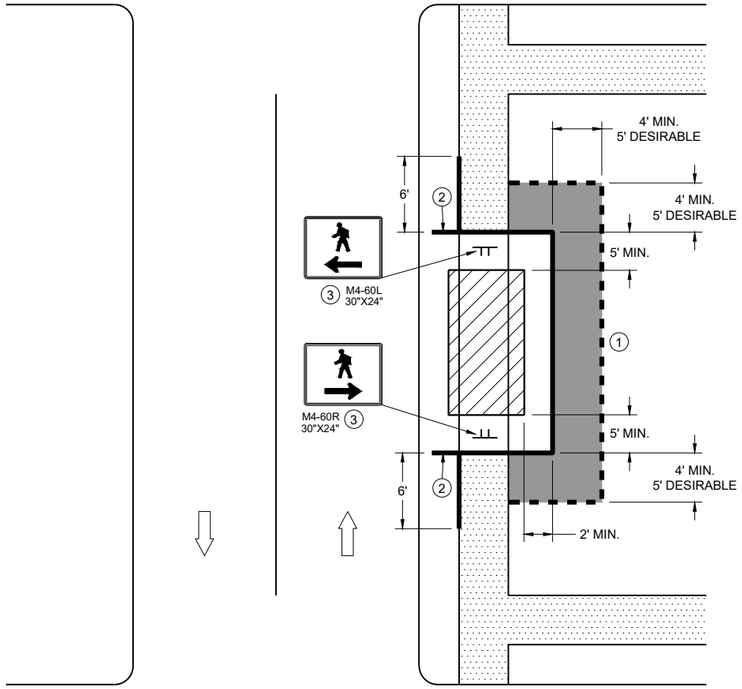
WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

(1) USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.

(2) IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.

(3) MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.




**SIDEWALK BYPASS**
**SINGLE SIDE**

6

SDD 15D30-12g

**TRAFFIC CONTROL,**
**PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

## LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

## GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

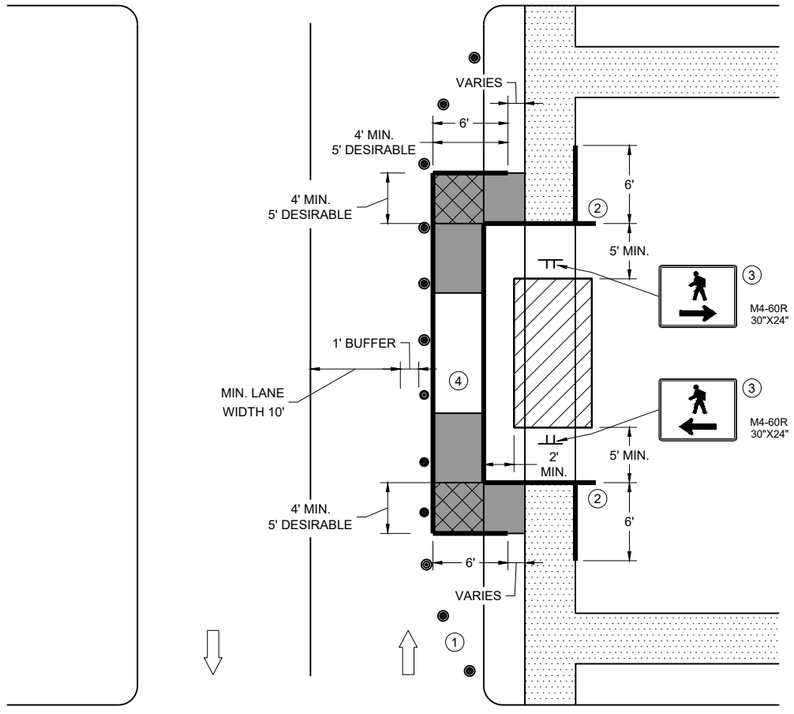
WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

(1) SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.

(2) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.

(3) MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

(4) USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURFACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE. WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.




**SIDEWALK BYPASS, SINGLE SIDE**

6

SDD 15D30-12h

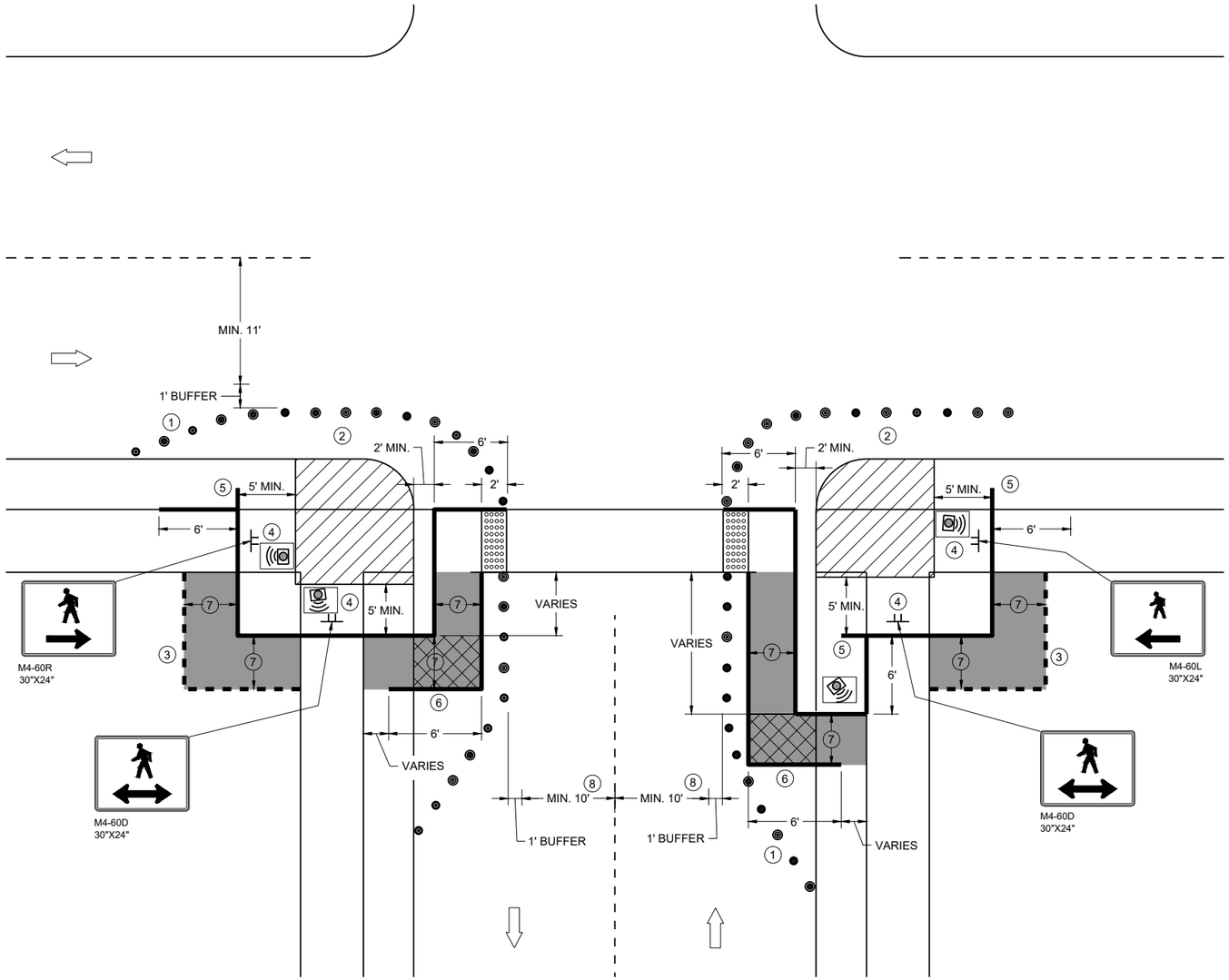
**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



6

SDD 15D30-12h




**CURB RAMP PEDESTRIAN TRAFFIC CONTROL**
**SIDEWALK ON SINGLE SIDE**

## GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
7. 4 FEET MINIMUM, 5 FEET DESIRABLE
8. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

## LEGEND

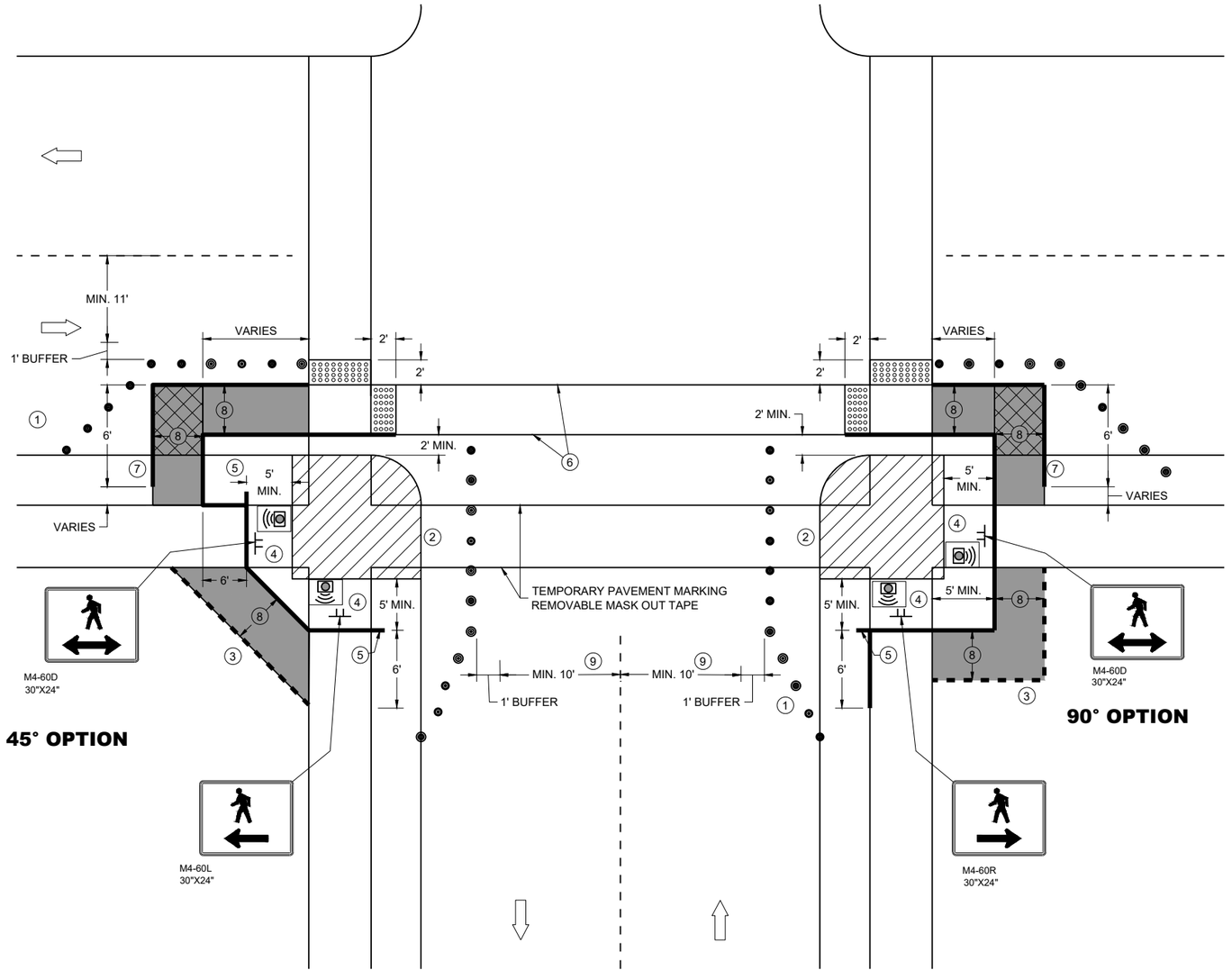
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION




6
SDD 15D30-12i




**CURB RAMP PEDESTRIAN TRAFFIC CONTROL**

## GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

(1) SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.

(2) PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS

(3) USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.

(4) MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.

(5) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.

(6) WHITE 6" TEMPORARY PAVEMENT MARKING

(7) IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.

(8) 4 FEET MINIMUM, 5 FEET DESIRABLE

(9) IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

## LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



6

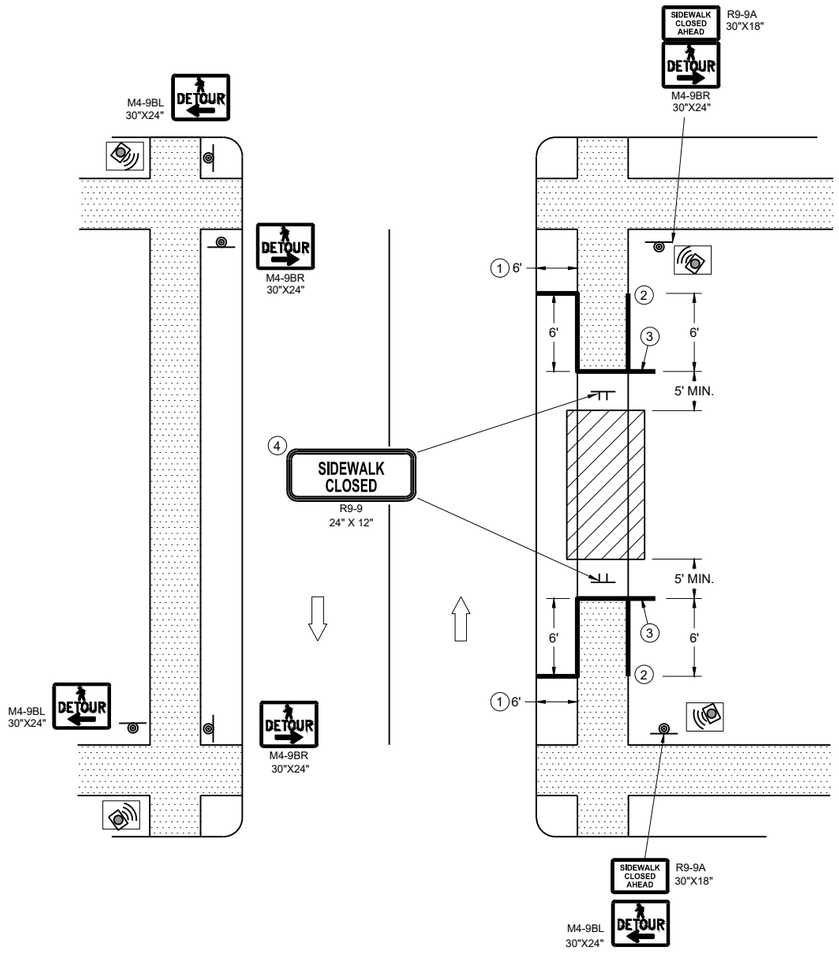


6

SDD 15D30-12j

## LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)




**SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES**

## GENERAL NOTES

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.





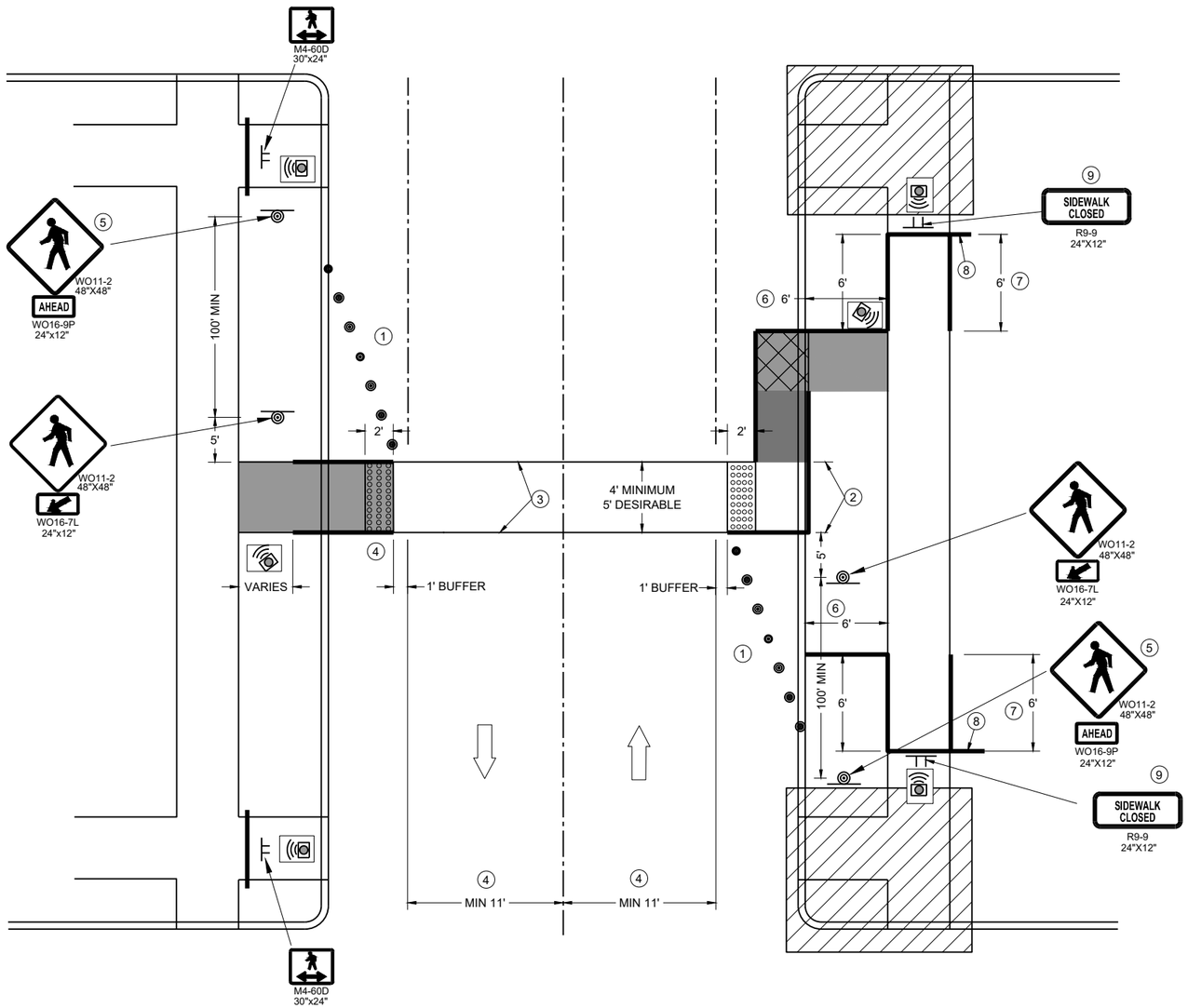
**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



6

SDD 15D30-12k




**TEMPORARY PEDESTRIAN CROSSING**

## GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SEE OTHER PEDESTRIAN ACCOMMODATION DETAILS FOR SIGNING AND DEVICES FOR DIFFERENT PEDESTRIAN FACILITIES CLOSURES.

WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

1. SHOULDER OR LANE CLOSURE ADVANCED WARNING AND PROPER BUFFER SPACE REQUIRED.
2. 4 FEET MINIMUM, 5 FEET DESIRABLE.
3. WHITE 6" TEMPORARY PAVEMENT MARKING.
4. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, PERPENDICULAR CURB RAMPS MAY NEED TO BE UTILIZED.
5. IF MINIMUM 100' SPACING FROM THE MID-BLOCK CROSSING CANNOT BE ATTAINED BEFORE THE INTERSECTION, REMOVE THIS SIGN ASSEMBLY.
6. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
7. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
8. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF THE EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
9. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF THE SIGN.

## LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA




6
SDD 15D30-12I

## LEGEND

- EXISTING SIGN ON PERMANENT SUPPORT
- NEW SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK ZONE

## GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

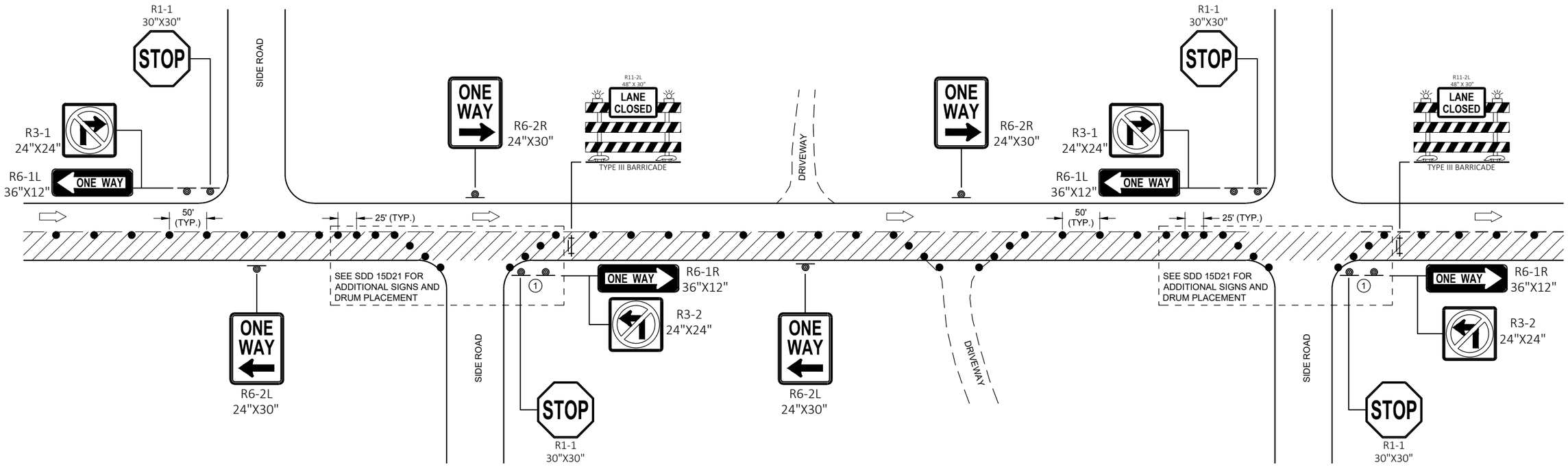
ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) IF WORK OPERATIONS ALLOWS, MOVE R1-1, R6-1R, AND R3-2 CLOSER TO INTERSECTION.




**TRAFFIC CONTROL**
**ONE - WAY SIGNING**

| TRAFFIC CONTROL<br>ONE-WAY SIGNING | |
|---|---|
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION | |
| APPROVED<br>May 2020<br>DATE | /S/ Andrew Heidtke<br>WORK ZONE ENGINEE 701 |
| FHWA | |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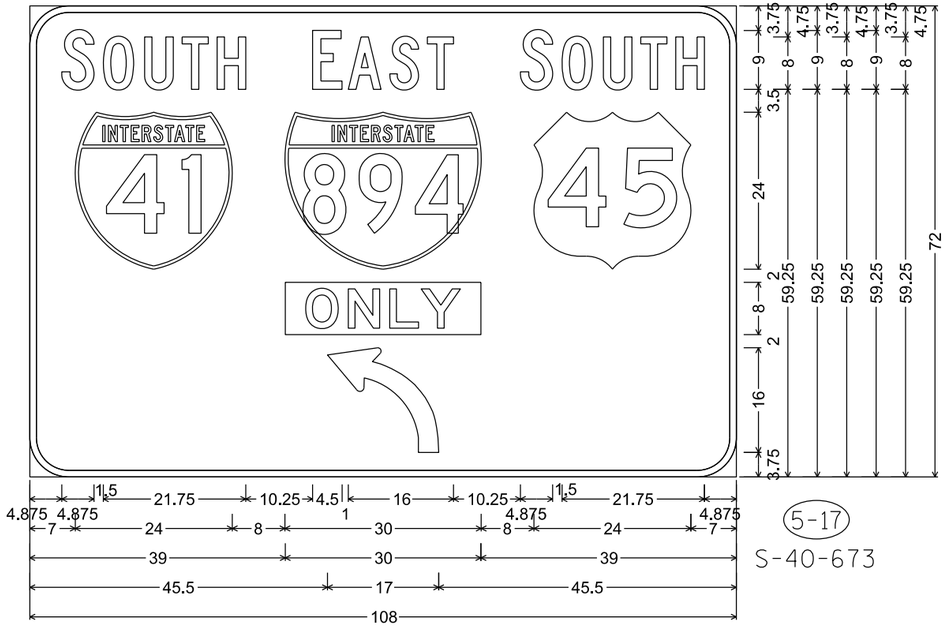
SDD 15D46 - 01

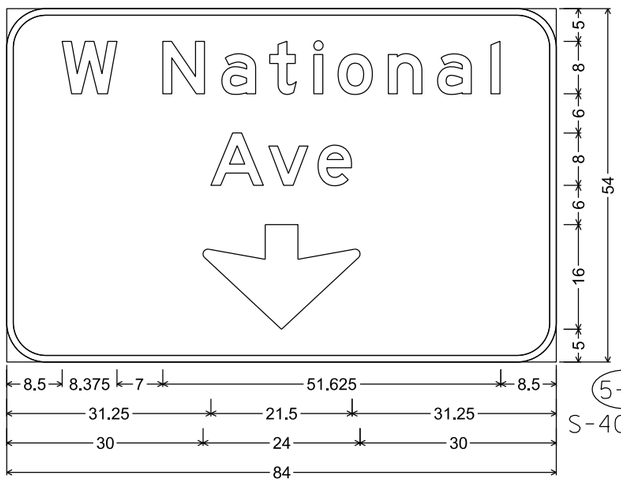



5-17
S-40-673

D16-1L; 6.000" Radius, 1.000" Border
"SOUTH", C; "EAST", C; "SOUTH", C

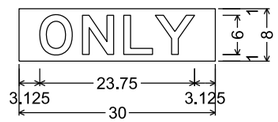
## NOTES

1. All Signs Type I- Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E or as noted
4. ONLY Plaque background on Yellow Type F Reflective Sheeting with Black Non-Reflective Message

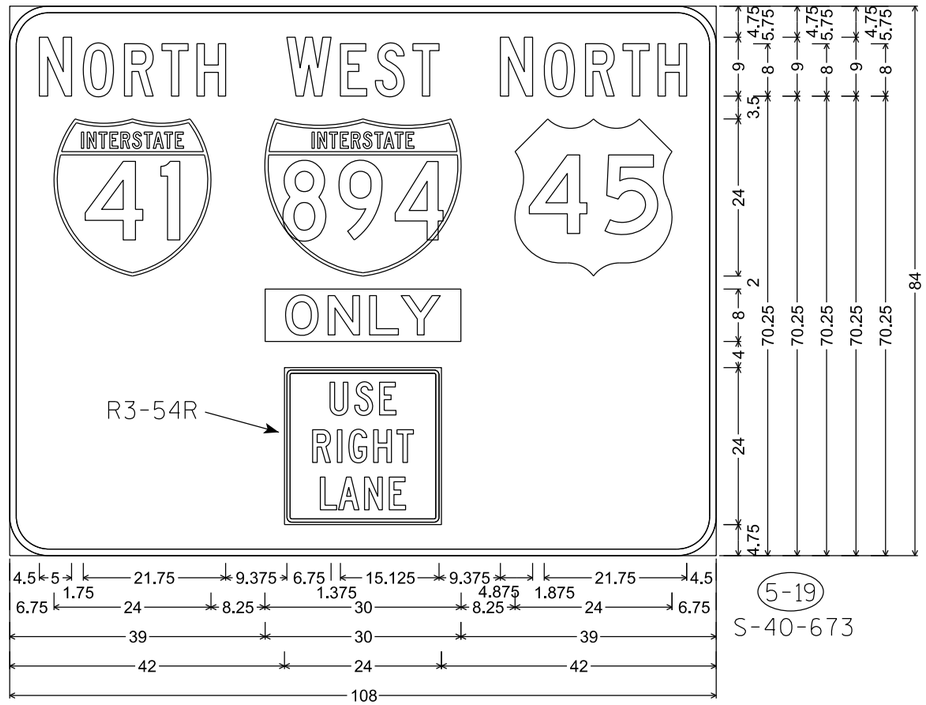



5-18
S-40-673

D16-1A; 6.000" Radius, 1.000" Border




No border, Black on Fluorescent yellow;
"ONLY", E;




5-19
S-40-673

D16-1R; 6.000" Radius, 1.000" Border
"NORTH", C; "WEST", C; "NORTH", C

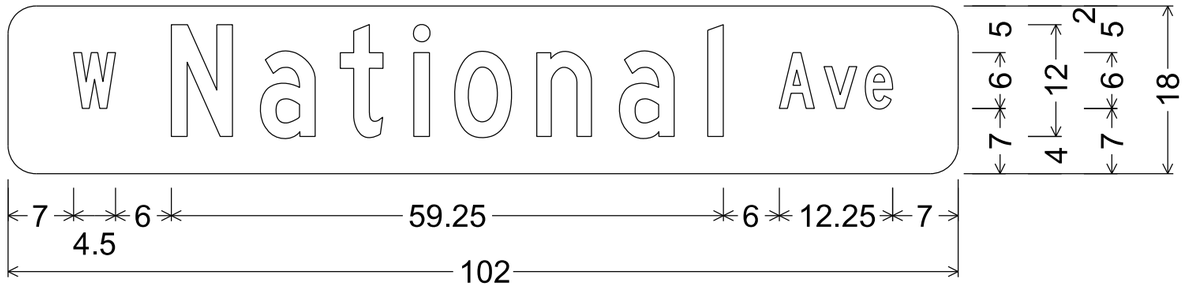
7

7

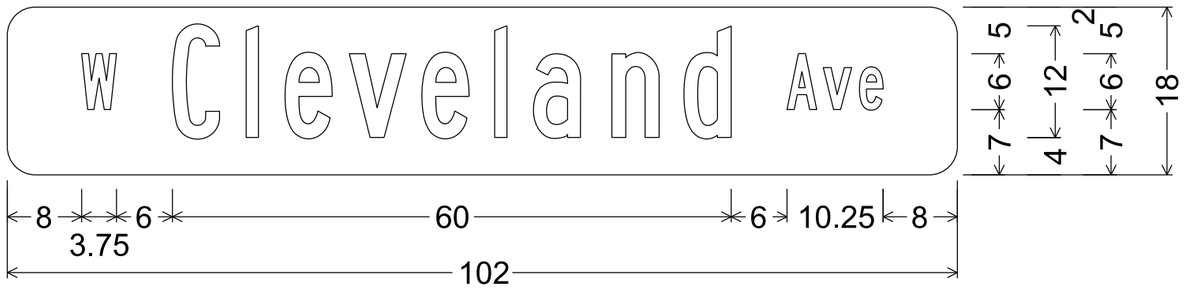
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | PERMANENT SIGNING | SHEET NO: 702 | E |
|---|---|---|---|---|---|

NOTES

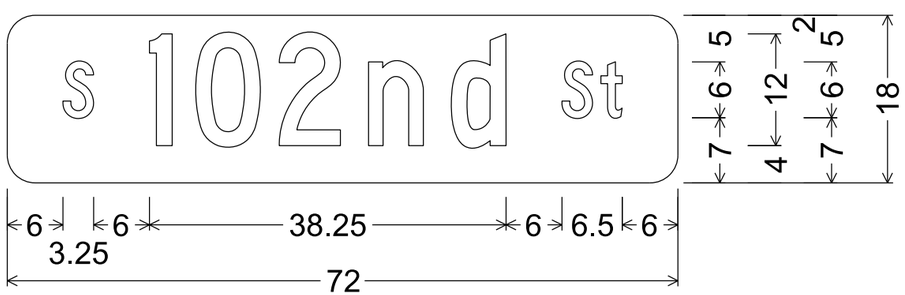
1. Signs are Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - C or as noted




M1-94H; 3.000" Radius, No border



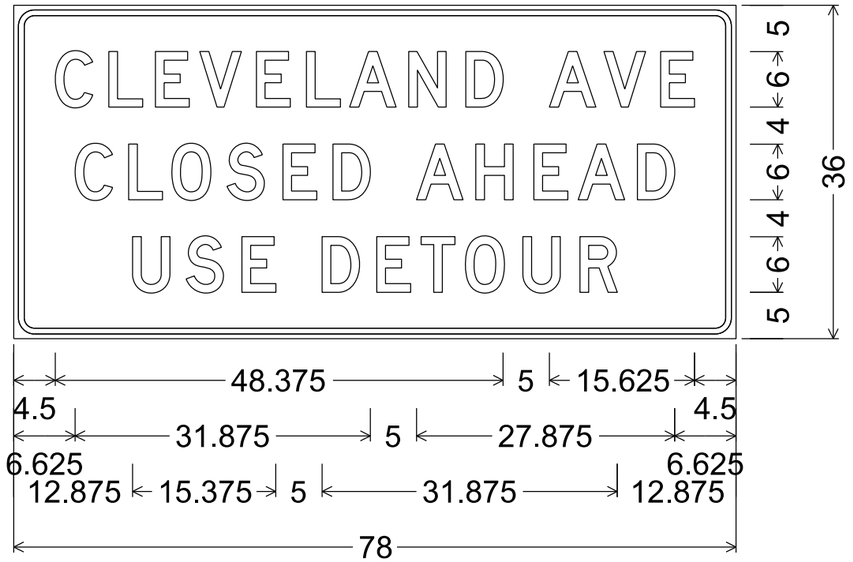

M1-94H; 3.000" Radius, No border
"W", B; "Cleveland", B; "Ave", B;



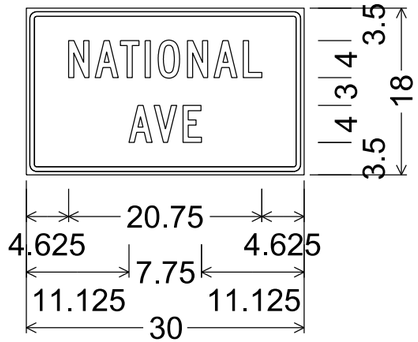

M1-94H; 3.000" Radius, No border

7

7



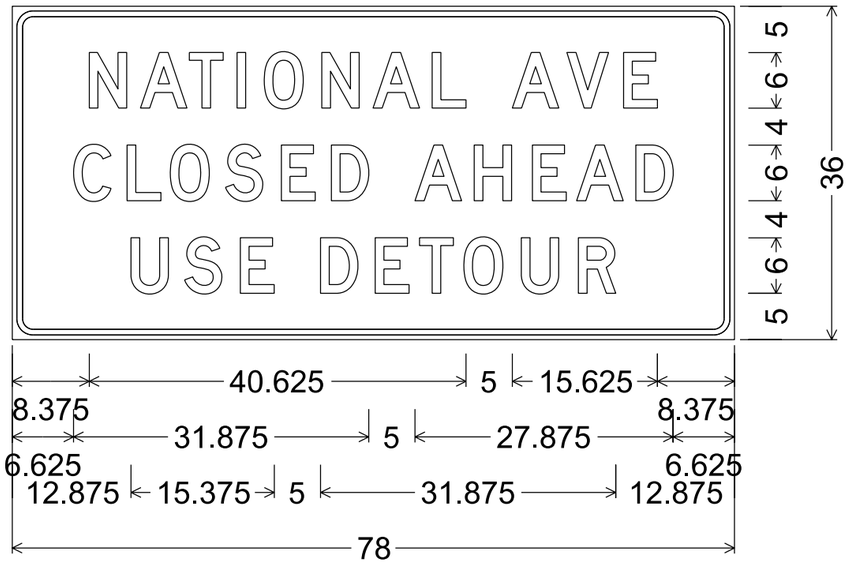

2.250" Radius, 0.625" Border, 0.500" Indent



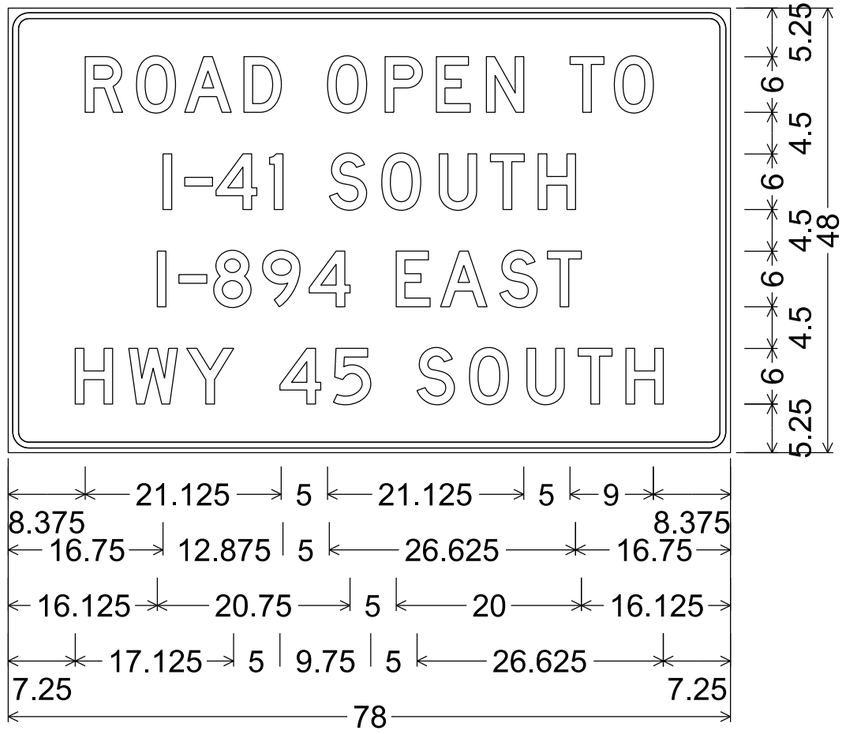

1.125" Radius, 0.500" Border, 0.375" Indent
"NATIONAL", C;
"AVE", C;

NOTES

1. Signs are Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D or as noted



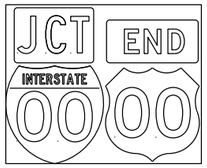

2.250" Radius, 0.625" Border, 0.500" Indent



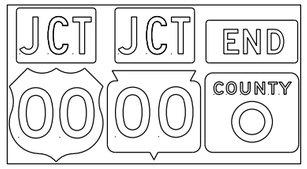

2.250" Radius, 0.625" Border, 0.500" Indent

# TYPICAL ASSEMBLIES

J1-1



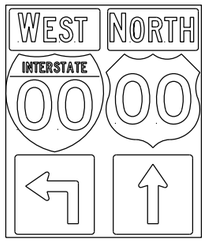
J1-2



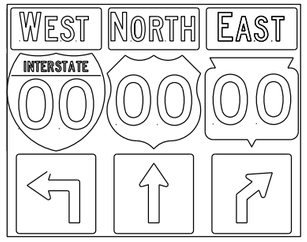
J1-3

JR1-1

J2-1

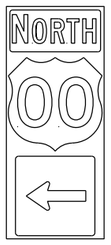


J2-2

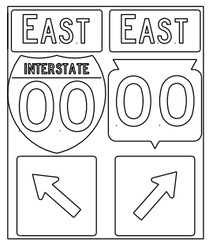


J2-3

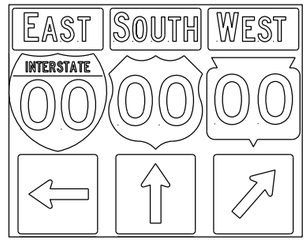
JV
( Typical Vertical J-Assembly
See Note 10 and 11 )



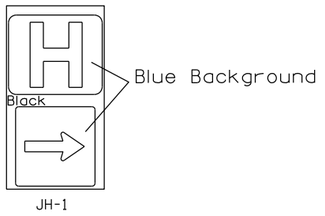
J3-1



J3-2

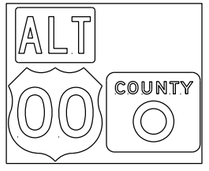


J3-3

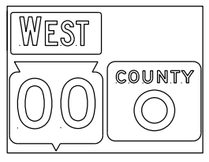


JH-1

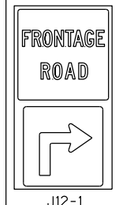
J4-1



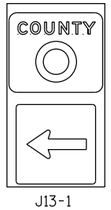
J4-2



J4-2



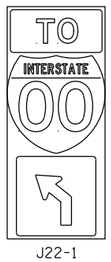
J12-1



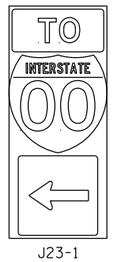
J13-1

J32-1

J33-1



J22-1



J23-1

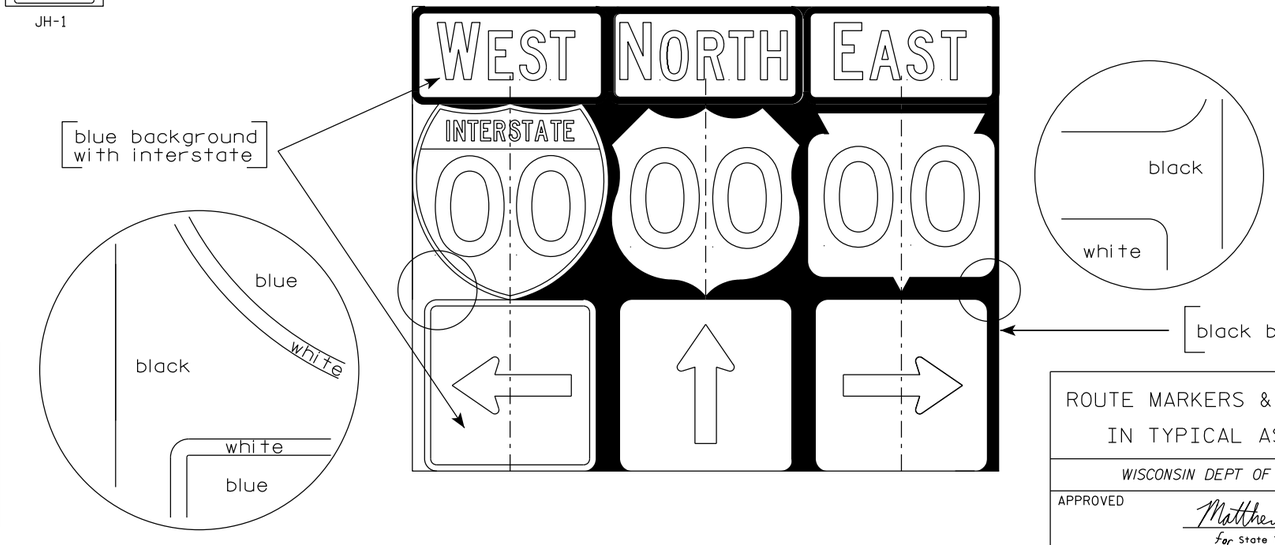
JR13-1

JR23-1

JR99-1

NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - Black Non-reflective
   Message - see Note 4
3. Message Series - See Note 4
4. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
5. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
6. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
7. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
8. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. All Vertical J Assemblies are given a Sign Code of JV
10. For JV Assemblies that have a mixture of Interstate and Non-Interstate shields, arrows and cardinals shall be white on blue.
11. For JV Assemblies that have a mixture of Non-Interstate and Auto-Tour shields, arrows and cardinals shall be black on white.




ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

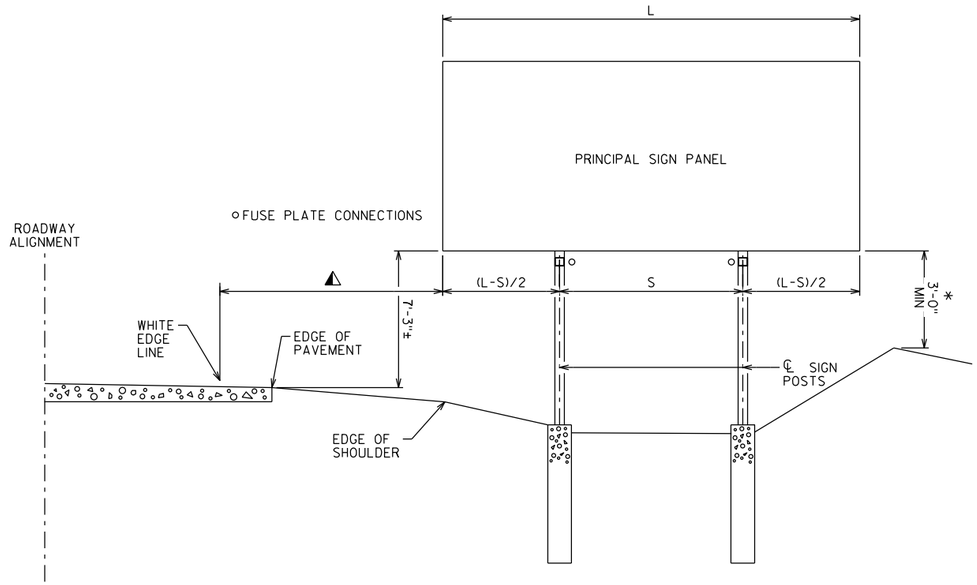
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

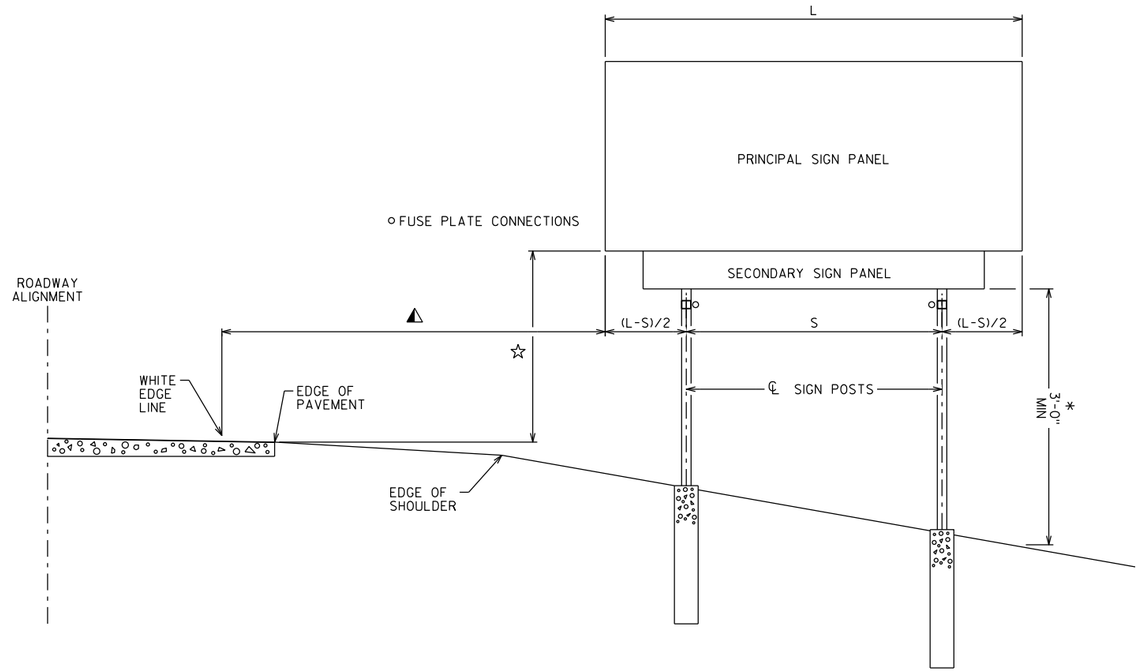
DATE 6/7/23 PLATE NO. A2-1S.10

PROJECT NO:

SHEET NO: 705 E




INSTALLATION WITHOUT SECONDARY SIGN




INSTALLATION WITH SECONDARY SIGN

## TYPE 1 SIGN INSTALLATION NOTES:

FOR A 2-POST INSTALLATION, "S" EQUALS 3L/5, BUT SHALL NOT BE LESS THAN 6'-0".

FOR A 3-POST INSTALLATION, "S" EQUALS 5L/7, BUT SHALL NOT BE LESS THAN 12'-0". THE SPACING BETWEEN ANY TWO POSTS SHALL NOT BE LESS THAN 6'-0".

◭ UNLESS NOTED IN THE PLANS, THE SIGN OFFSET DISTANCE SHALL BE A MINIMUM OF 17'-6" FROM THE WHITE EDGE LINE, DESIRABLE 30'-0".

WHERE SIGNS ARE MOUNTED BEHIND CRASH WORTHY PROTECTION SUCH AS GUARDRAIL OR BARRIER WALL, THE LATERAL OFFSET MAY BE 4'-6" BEHIND THE GUARDRAIL OR BARRIER WALL.

THE ± TOLERANCE SHOWN ON THIS SHEETS IS 3".

THE VERTICAL SIGN HEIGHT CLEARANCES SHOWN ON THIS SHEET ARE MEASURED FROM THE BOTTOM OF THE SIGN PANEL TO THE NEAR EDGE OF PAVEMENT.

☆ THE VERTICAL CLEARANCE SHALL BE 8'-3"± WHEN THE SECONDARY SIGN HEIGHT IS 3'-0" OR LESS. FOR SECONDARY SIGN HEIGHTS LARGER THAN 3'-0", THE VERTICAL CLEARANCE TO THE BOTTOM OF THE SECONDARY SIGN PANEL SHALL BE 5'-3"±.

* THE VERTICAL SIGN GROUND CLEARANCE ON RIGHT END OF SIGN SHALL BE A MINIMUM OF 3'-0"±.

○ FOR 2-POST SIGNS, IF THERE IS A SECONDARY SIGN THAT IS NOT AS WIDE AS THE POSTS, INSTALL FUSE PLATES BENEATH PRINCIPAL SIGN.

FOR SECONDARY SIGNS THAT ARE NOT AS WIDE AS THE EXTERIOR POSTS, SECURE SIGN WITH CHANNEL STEEL AS DESCRIBED IN A4-6.

POST LENGTHS SHOWN IN THE MISCELLANEOUS QUANTITIES ARE ESTIMATED LENGTHS. THE CONTRACTOR SHALL VERIFY POST LENGTHS AT THE TIME OF FINAL GRADING.

REFER TO THE TRAFFIC ENGINEERING OPERATIONS AND SAFETY MANUAL FOR FURTHER GUIDANCE ON MINIMUM VERTICAL CLEARANCE REQUIREMENTS.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | 2/29/24 | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

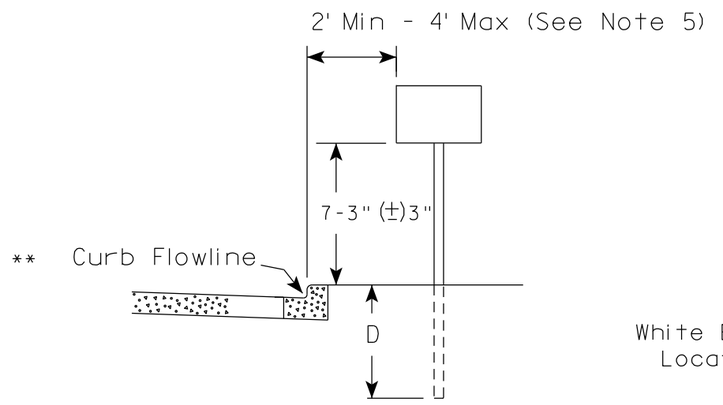
| DRAWN BY | PLANS CK'D. |
|---|---|
| | |

TYPICAL TYPE I SIGN INSTALLATION

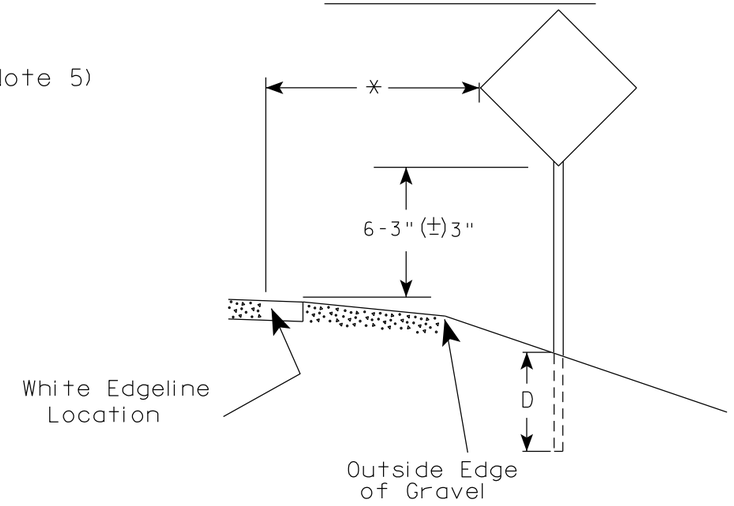
SHEET A4-1.11

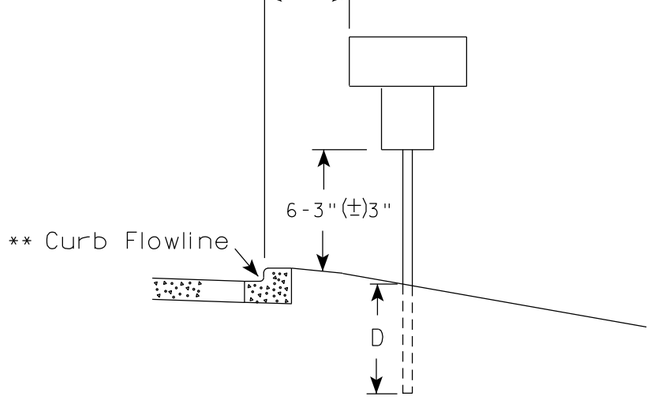
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 706 | E |
|---|---|---|---|---|---|

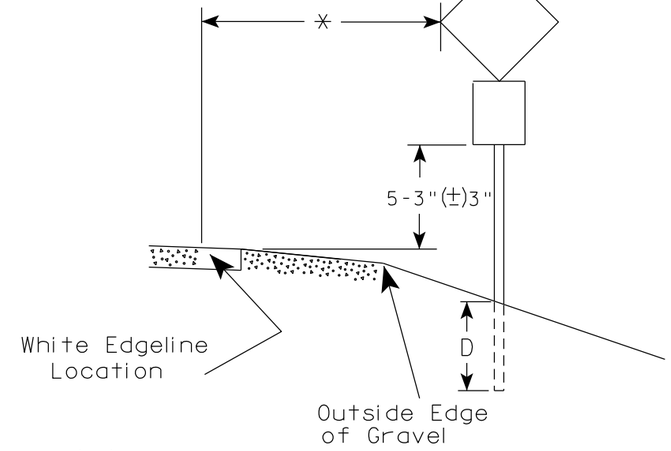
## URBAN AREA




## RURAL AREA (See Note 2)




** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

### POST EMBEDMENT DEPTH

| Area of Sign Installation ( Sq. Ft. ) | D ( Min ) |
|---|---|
| 20 or Less | 4' |
| Greater than 20 | 5' |

### GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

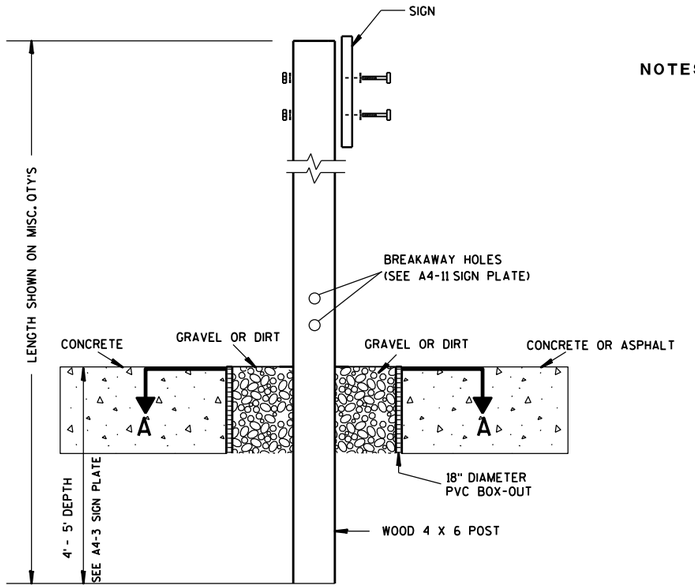
# TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

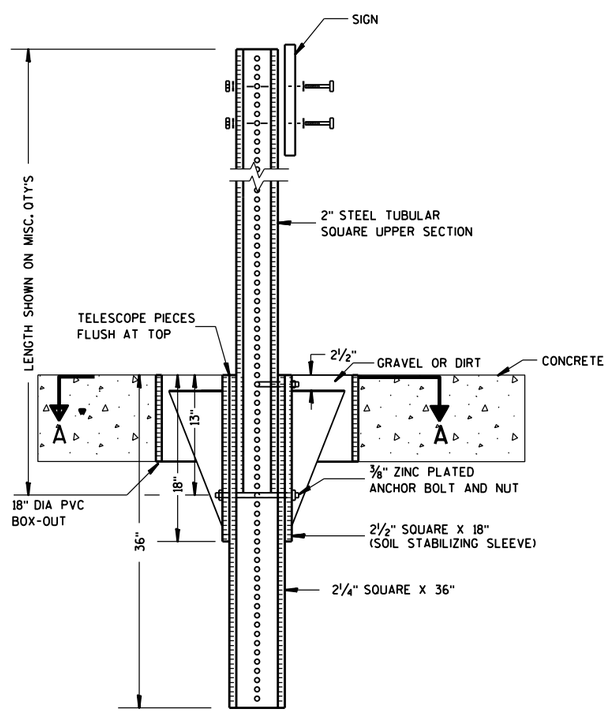
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 707 | E |
|---|---|---|---|---|---|




**ELEVATION VIEW**

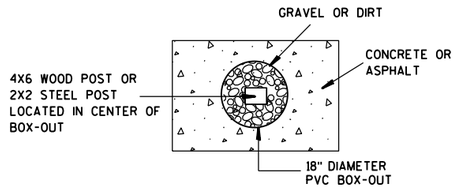
**DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT**

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.




**ELEVATION VIEW**

**DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT**




**PLAN VIEW**

**FOR NEW CONCRETE/ASPHALT INSTALLATIONS**

# SIGN POST BOX-OUTS A4-3B

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

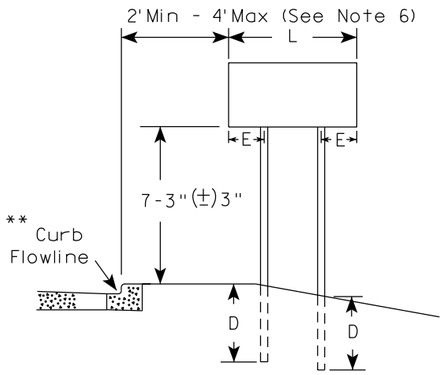
DATE 1/27/14 PLATE NO. A4-3B.1



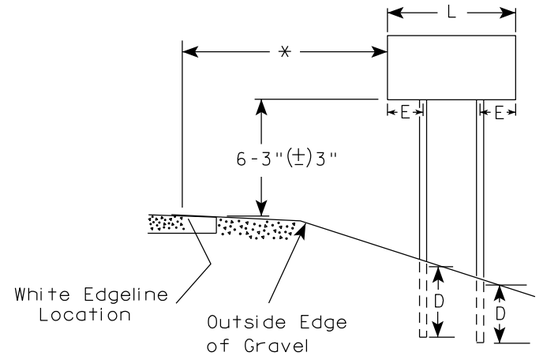
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

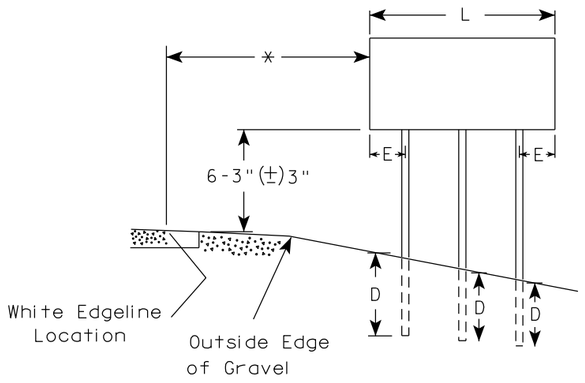
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

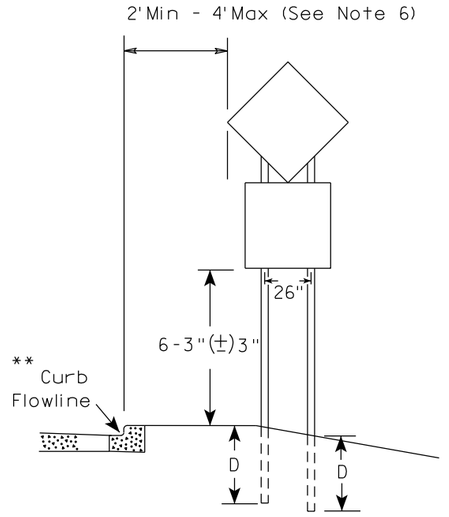
## URBAN AREA



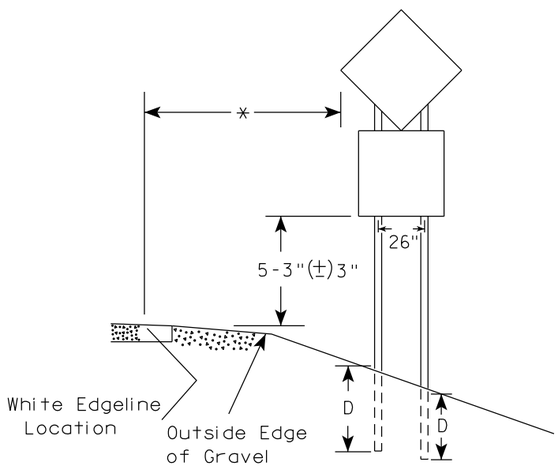

## RURAL AREA (See Note 3)




48" DIAMOND WARNING SIGN




48" DIAMOND WARNING SIGN

| SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED) | | |
|---|---|---|
| | L | E |
| *** | Greater than 48" Less than 60" | 12" |
| | 60" to 108" | L/5 |

| SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED) | |
|---|---|
| L | E |
| Greater than 108" to 144" | 12" |

## GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±) 3".

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

## POST EMBEDMENT DEPTH

| Area of Sign Installation ( Sq. Ft. ) | D ( Min ) |
|---|---|
| 20 or Less | 4' |
| Greater than 20 | 5' |

## TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

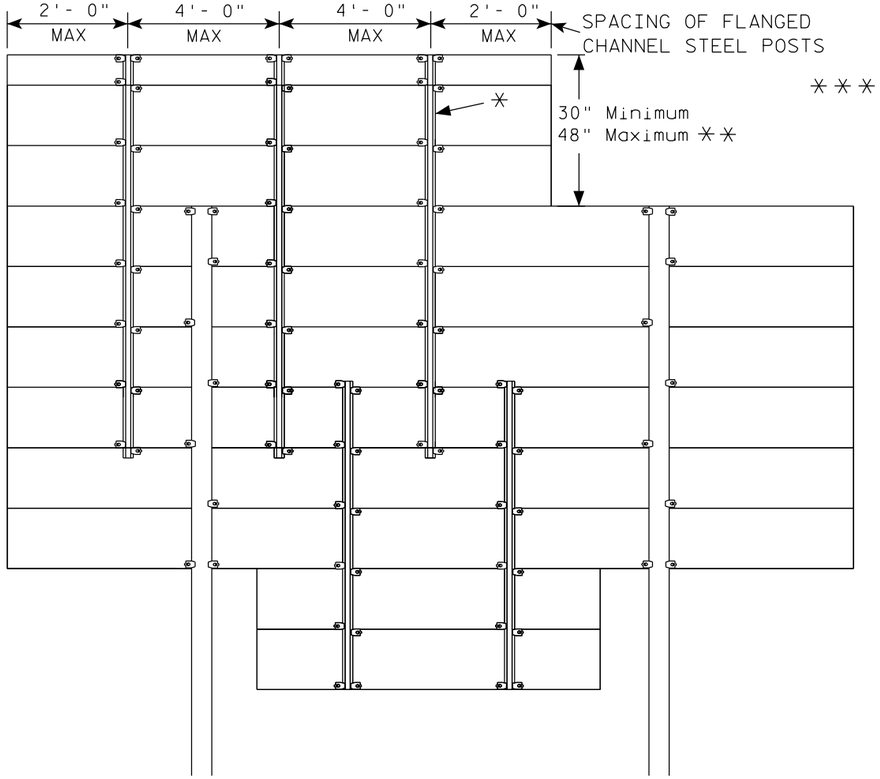
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 709 | E |
|---|---|---|---|---|---|

## GROUND MOUNTED SIGN



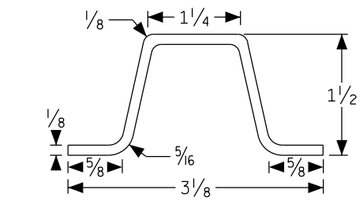

✳=2.00 lb/ft AND 4.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

✳✳=FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

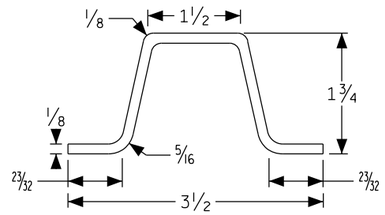
✳✳✳ THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 15 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 15 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

## FLANGE CHANNEL DETAILS

NOT TO SCALE

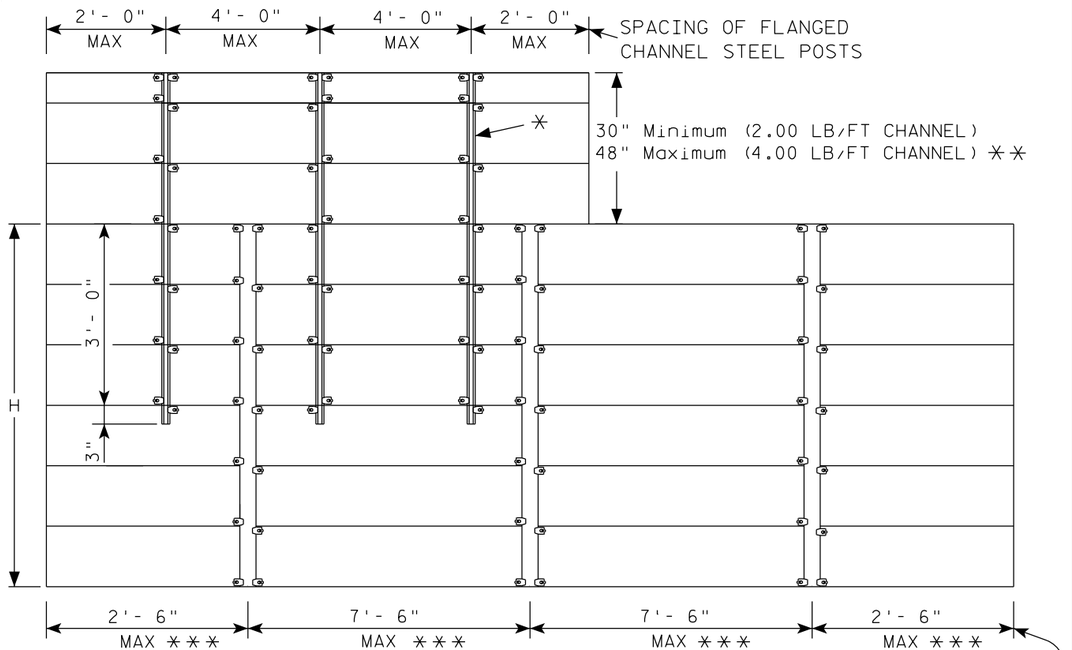



2.00 LB/FT CHANNEL




4.00 LB/FT CHANNEL

## SIGN BRIDGE MOUNTED SIGN




SPACING OF ALUMINUM SIGN SUPPORTS
5" X 3.5" X 3.7 LBS./ft.

## GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:

   PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
   PANEL LENGTH 9'- 0" - 12'- 0" = 3 CHANNELS
   PANEL LENGTH 13'- 0" OR MORE = 4 CHANNELS

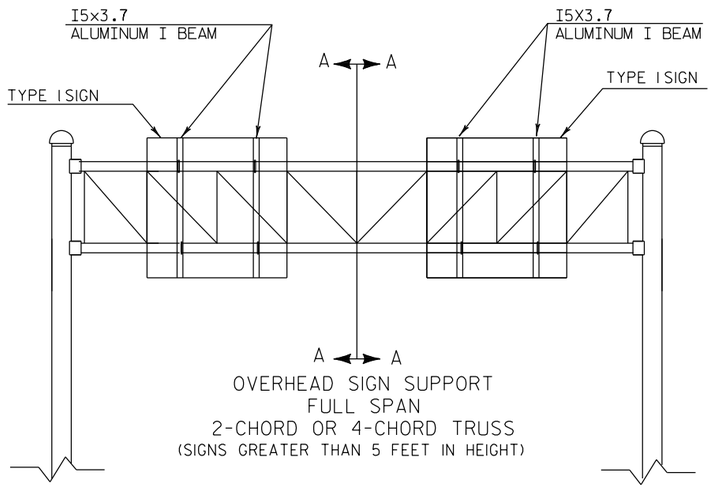
   If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)
6. Structural steel sign supports shall extend to the top of the main signs, as shown on the above details.

# ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

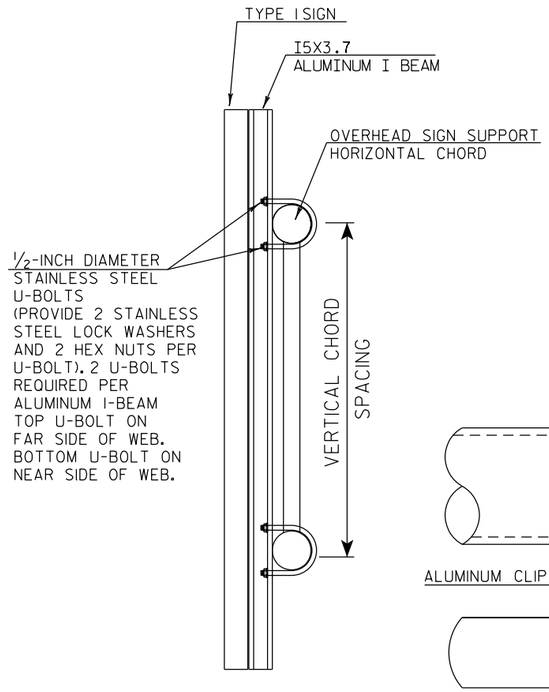
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*for* State Traffic Engineer

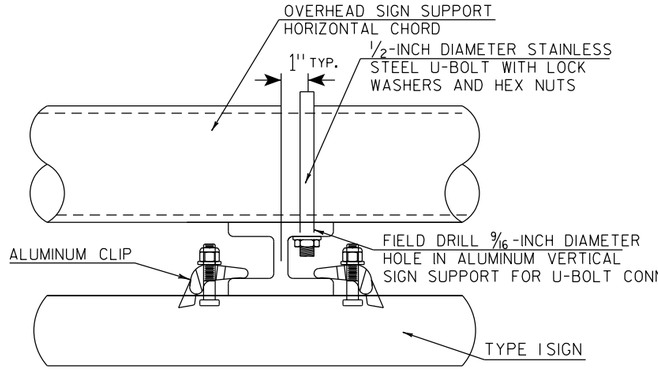
DATE 1/07/20 PLATE NO. A4-6.12




OVERHEAD SIGN SUPPORT
FULL SPAN
2-CHORD OR 4-CHORD TRUSS
(SIGNS GREATER THAN 5 FEET IN HEIGHT)



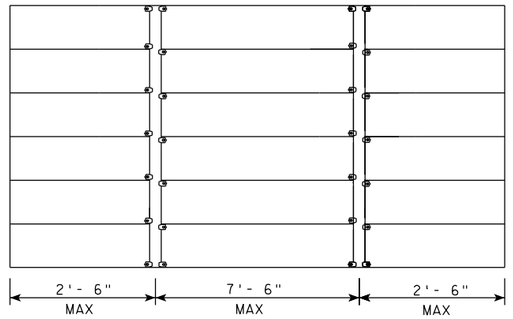

CUT SECTION A-A



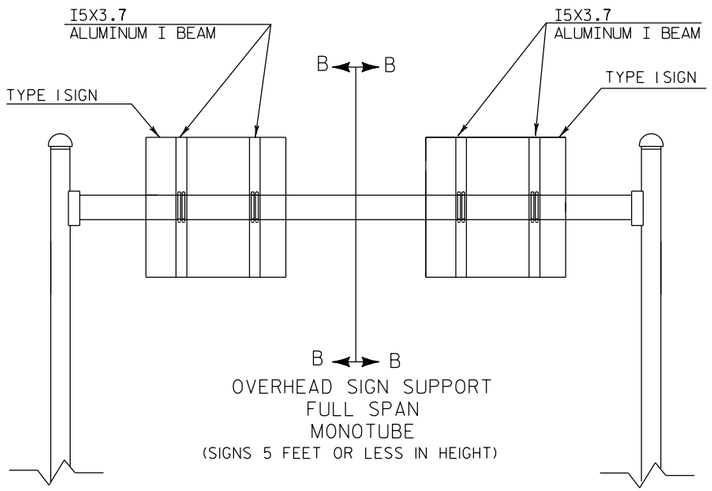

TYPICAL SIGN CONNECTION FOR
2-CHORD OR 4-CHORD TRUSS
PLAN VIEW

GENERAL NOTES

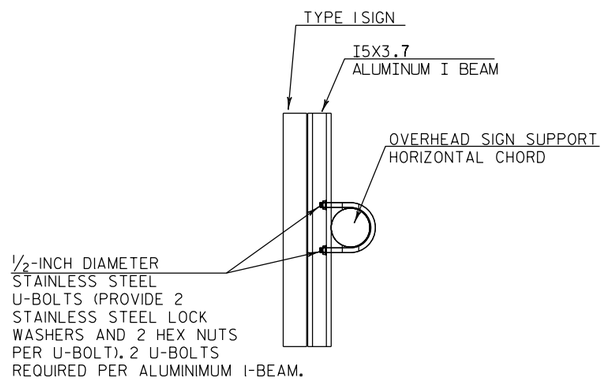
1. USE STAINLESS STEEL U-BOLTS, WASHERS, AND NUTS.
2. USE CLIPS ON EVERY EXTRUDED PANEL JOINT PER SIGN PLATE A4-6.
3. USE ALUMINUM VERTICAL SIGN SUPPORT BEAMS HAVING A 5 INCH BEAM DEPTH AND WEIGHT OF 3.7 LBS PER FOOT.
4. U-BOLTS SHALL BE STAINLESS STEEL AND MANUFACTURED TO THE PROPER SIZE TO FIT THE CHORDS OF THE OVERHEAD SIGN STRUCTURE.
5. DIAMETER OF U-BOLTS SHALL BE AS SHOWN.
6. THE LENGTH OF THE ALUMINUM VERTICAL SIGN SUPPORT BEAMS SHALL BE THE SAME AS THE HEIGHT OF THE SIGN THEY ARE SUPPORTING. BEAM LENGTHS MAY BE LONGER FOR PROPER ATTACHMENT TO CHORDS.
7. MINIMUM NUMBER OF BRACKETS PER SIGN IS TWO. SEE DETAIL BELOW FOR SPACING OF ALUMINUM VERTICAL SIGN SUPPORTS
8. MATERIAL NOTES:
   STAINLESS STEEL U-BOLTS AND LOCKWASHERS ASTM 304.
   STAINLESS STEEL HEX NUTS ASTM A276.
   ALUMINUM I-BEAMS ARE 6061-T6.
9. SLOTTED HOLES IN I-BEAMS ARE NOT ALLOWED



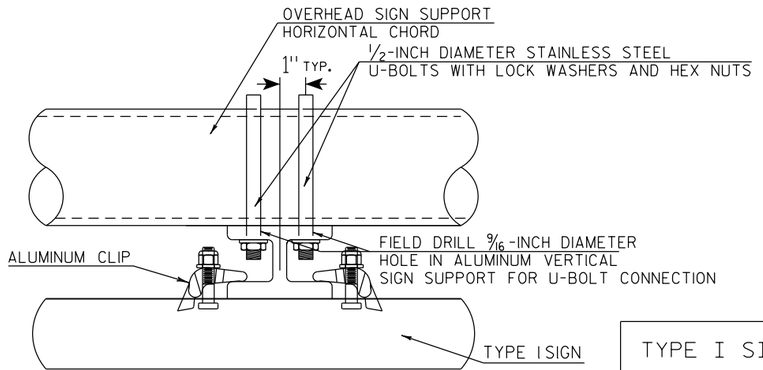

SPACING OF I5X3.7 ALUMINUM
VERTICAL SIGN SUPPORT




OVERHEAD SIGN SUPPORT
FULL SPAN
MONOTUBE
(SIGNS 5 FEET OR LESS IN HEIGHT)




CUT SECTION B-B




TYPICAL SIGN CONNECTION FOR
MONOTUBE
PLAN VIEW

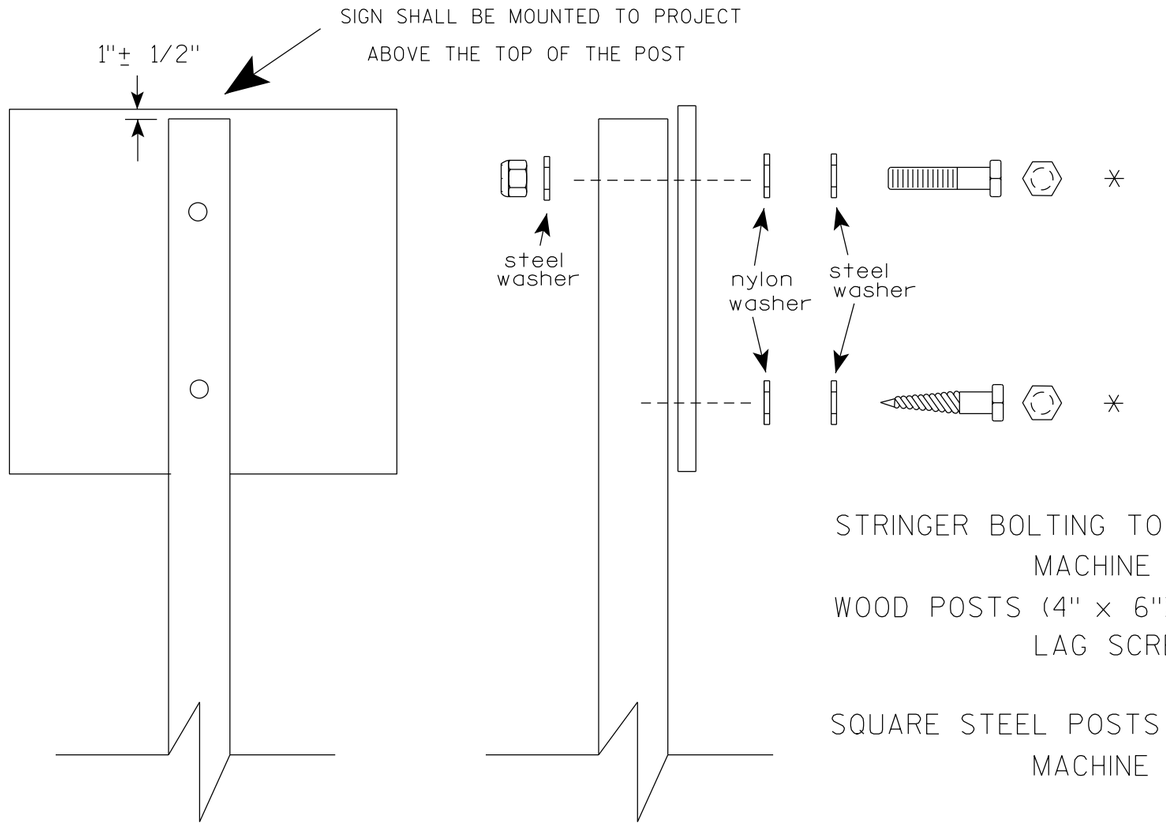
TYPE I SIGN CONNECTION
TO OVERHEAD SIGN SUPPORT

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
State Traffic Engineer

DATE 1/07/20 PLATE NO. A4-7A.1

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 711 | E |
|---|---|---|---|---|---|




Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

# ATTACHMENT OF SIGNS TO POSTS

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

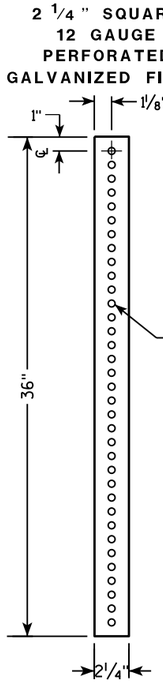
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

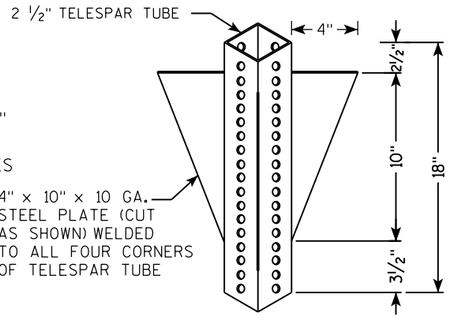
SHEET NO: 712 E

## TELESCOPIC TUBING ANCHORS
## TWO PIECE SYSTEM

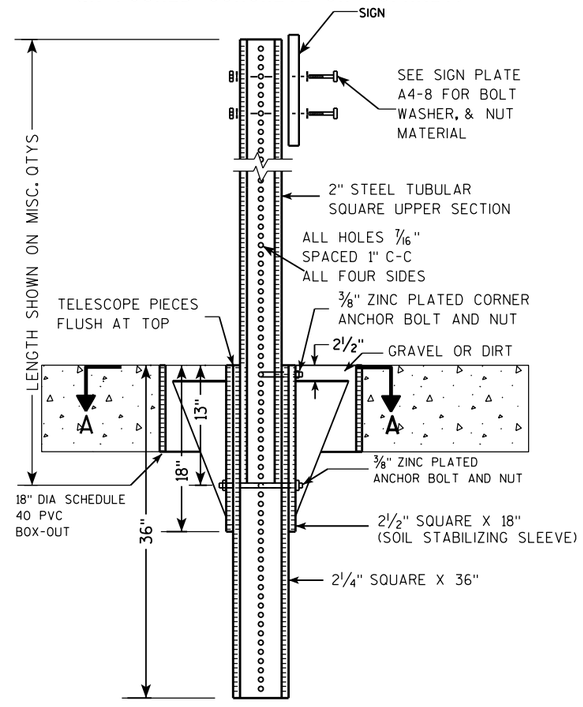
**2 1/4 " SQUARE**
**12 GAUGE**
**PERFORATED**
**GALVANIZED FINISH**



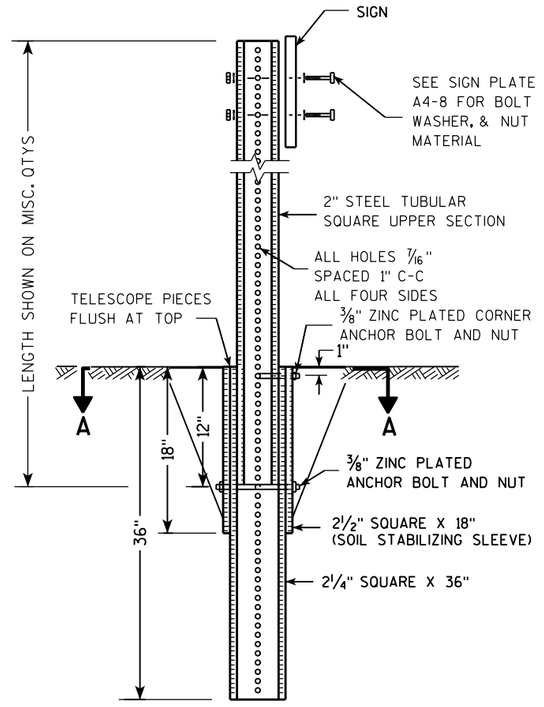

**2 1/2 " SQUARE**
**12 GAUGE**
**OMNI-DIRECTIONAL**
**PERFORATED**
**SOIL STABILIZING SLEEVE**
**GALVANIZED FINISH**

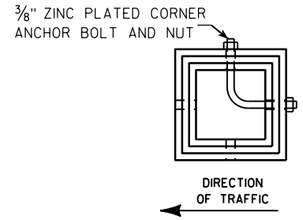



## DETAIL OF TUBULAR STEEL SIGN POST
**(IN POURED CONCRETE OR ASPHALT)**




## DETAIL OF TUBULAR STEEL SIGN POST
**(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)**




**SECTION A-A**

| Area of Sign Installation (Sq. Ft.) | Number of Required Posts |
|---|---|
| 9 or less | 1 |
| Greater than 9 less than or equal to 18 | 2 |
| Greater than 18 less than or equal to 27 | 3 |

**Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).**

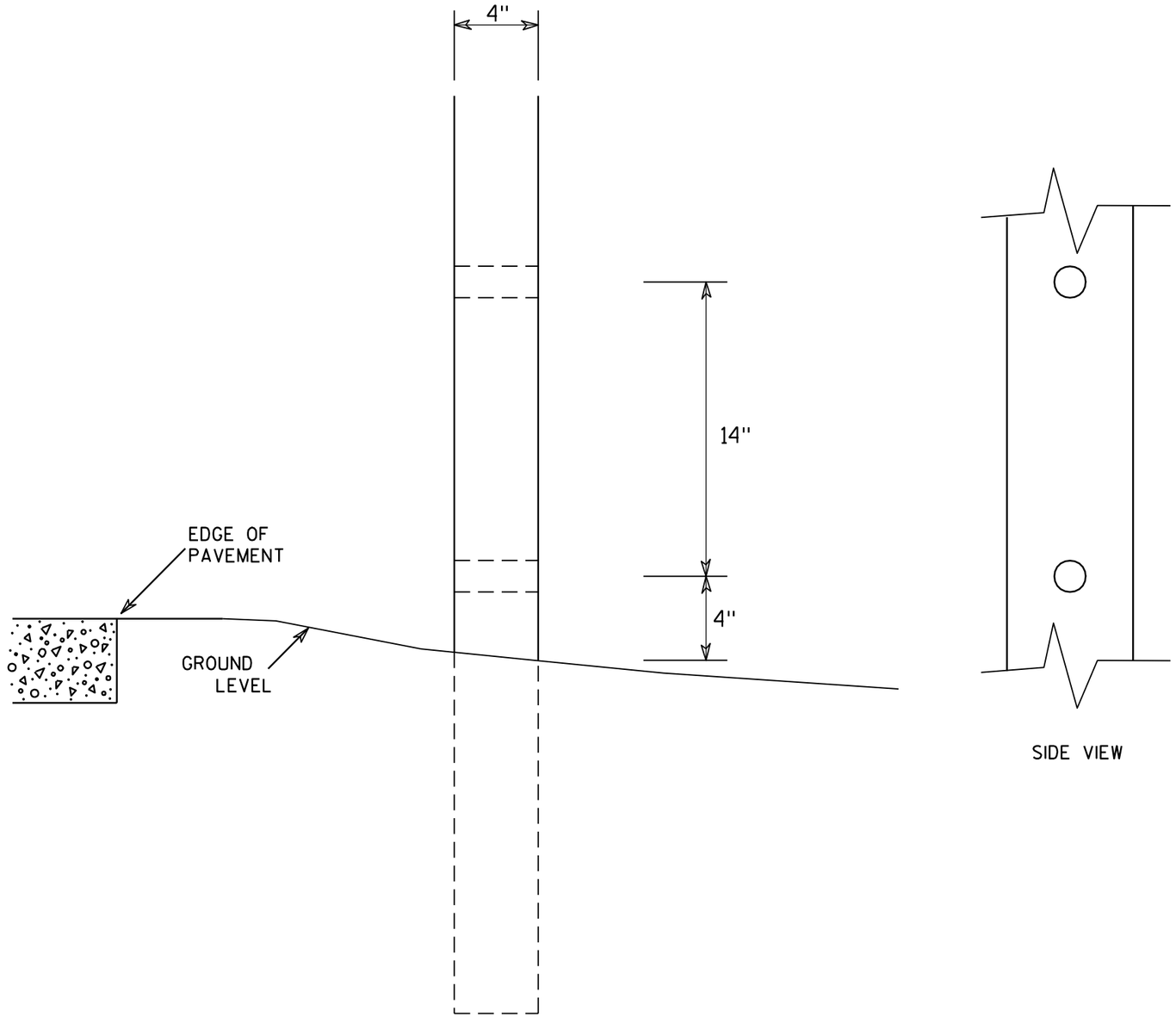
TUBULAR STEEL
SIGN POST
A4-9

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 2/05/15 PLATE 713 A4-9.9

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|






SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

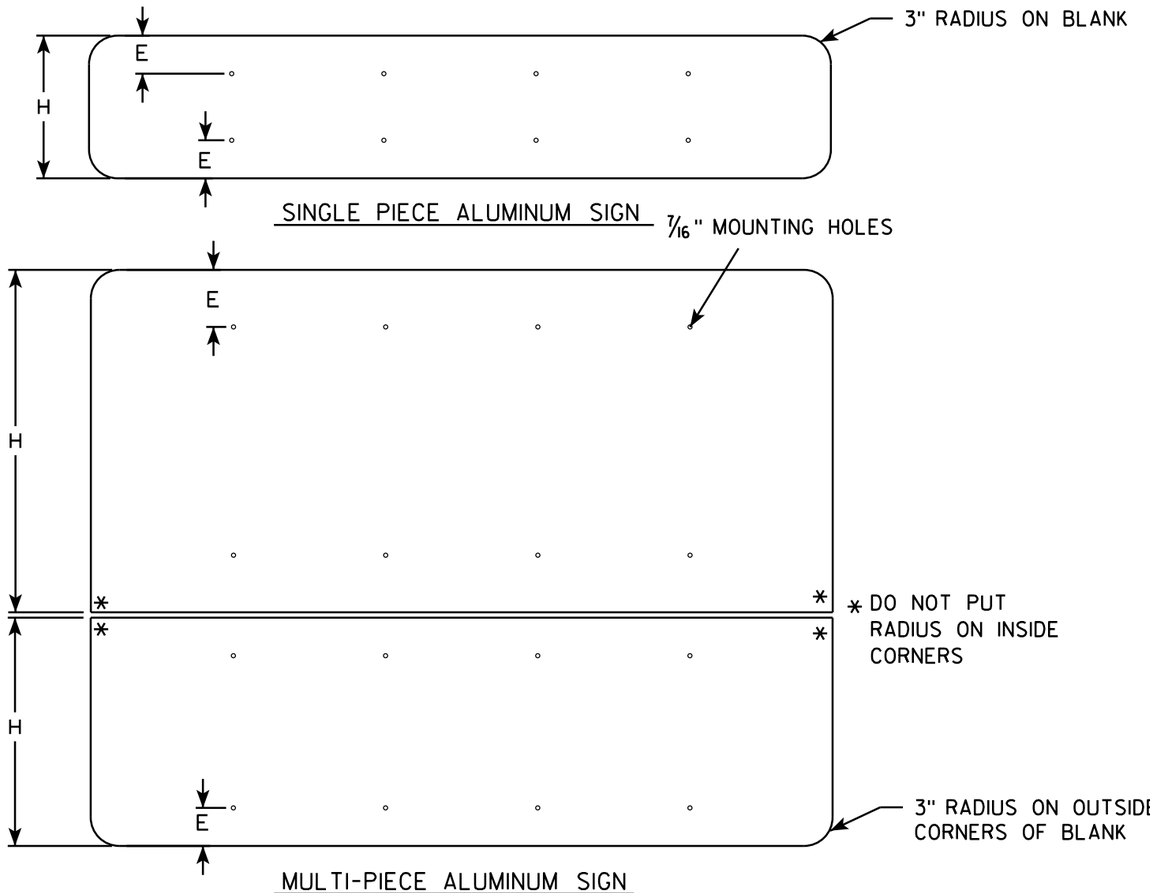
# 4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

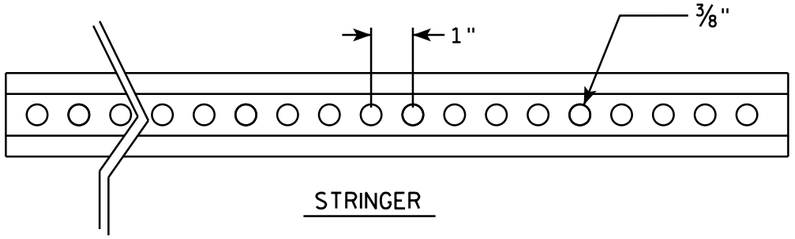
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 714 | E |
|---|---|---|---|---|---|




# GENERAL NOTES

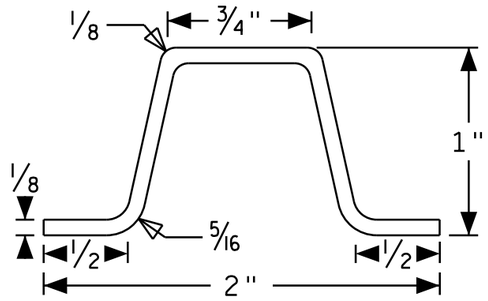
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

| SIGN WIDTH | STRINGER WIDTH | POSTS | HOLE SPACING | MOUNTING HOLES |
|---|---|---|---|---|
| 78" | 72" | 2 | 16" | 15" 31" 47" 63" |
| 84" | 72" | 2 | 17" | 16½" 33½" 50½" 67½" |
| 90" | 72" | 2 | 18" | 18" 36" 54" 72" |
| 96" | 90" | 2 | 19" | 19½" 38½" 57½" 76½" |
| 102" | 90" | 2 | 20" | 21" 41" 61" 81" |
| 108" | 90" | 2 | 21" | 22½" 43½" 64½" 85½" |
| 114" | 108" | 3 | 15" | 12" 27" 42" 57" 72" 87" 102" |
| 120" | 108" | 3 | 16" | 12" 28" 44" 60" 76" 92" 108" |
| 126" | 108" | 3 | 17" | 12" 29" 46" 63" 80" 97" 114" |
| 132" | 126" | 3 | 18" | 12" 30" 48" 66" 84" 102" 120" |
| 138" | 126" | 3 | 19" | 12" 31" 50" 69" 88" 107" 126" |
| 144" | 126" | 3 | 20" | 12" 32" 52" 72" 92" 112" 132" |

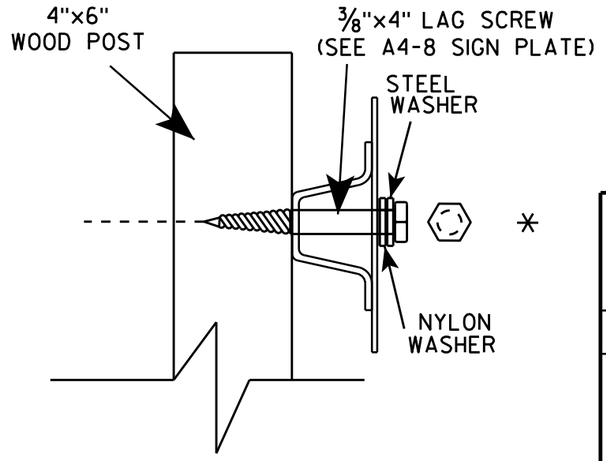



STRINGER

CROSS SECTION VIEW OF CHANNEL




POST MOUNTING




## SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

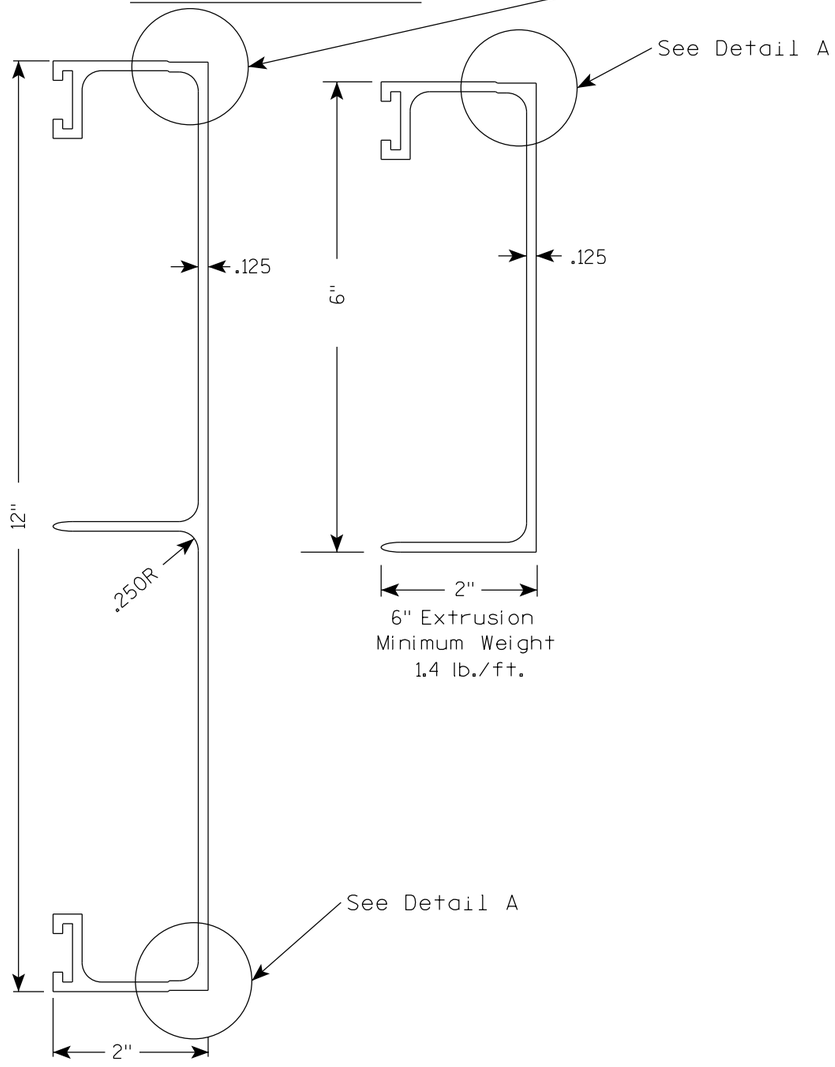
DATE 4/26/16 PLATE NO A4-18.1

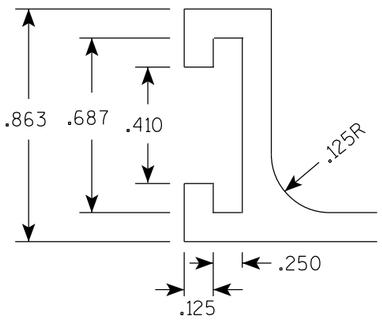
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

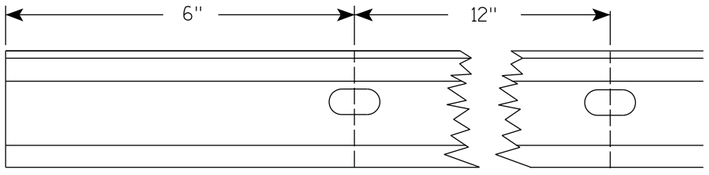


FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

## Extruded Shape



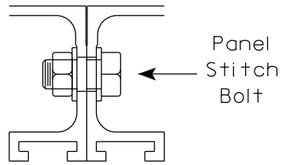

Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.

## Hardware

### STITCH BOLT, WASHER & NUT

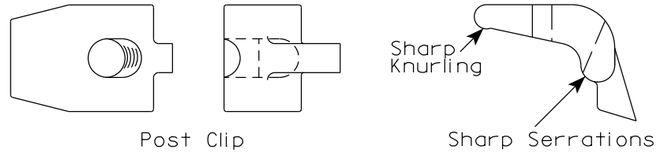
The hardware includes:

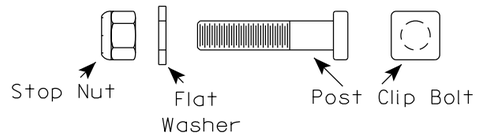
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy




### POST CLIP, POST CLIP BOLT, WASHER & NUT

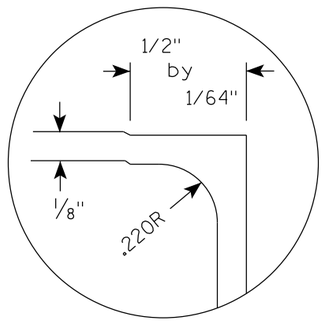
Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.




### NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.
4. Edge wrapping of sign sheeting required on all extrusions joints shown in Detail A.




DETAIL A (EDGE WRAP JOINT)

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

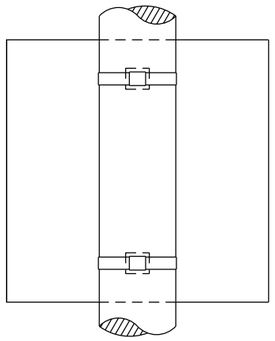
DATE 1/07/20 PLATE NO. A5-2.10

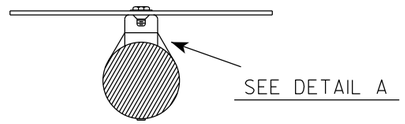
PROJECT NO:

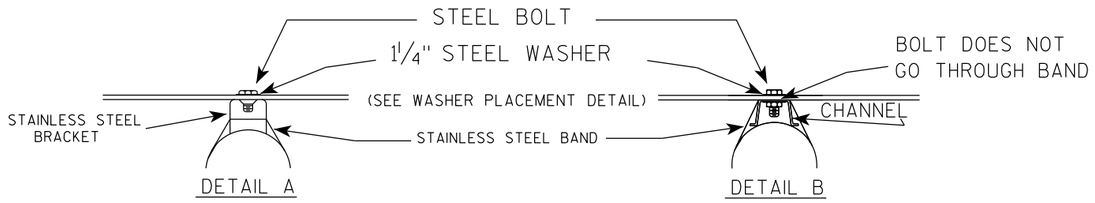
SHEET NO: 716 E

# BANDING

SINGLE SIGN



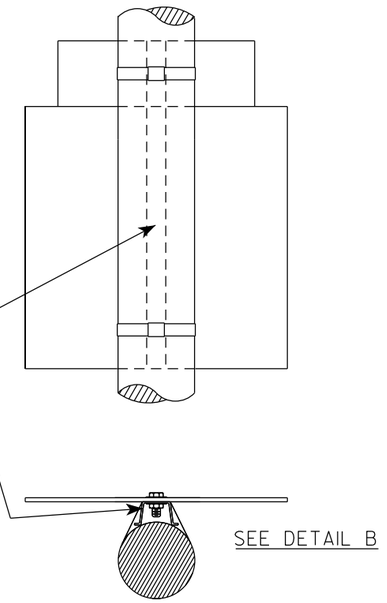


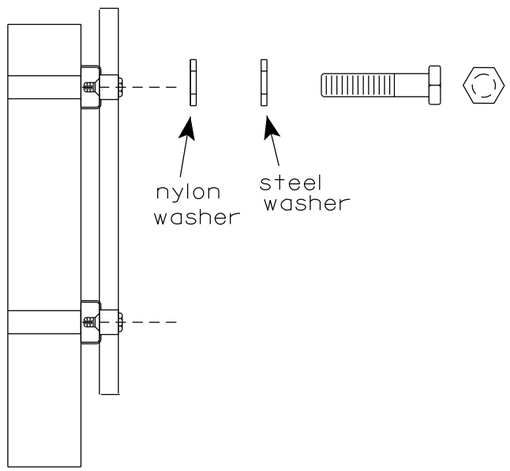

## GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY




WASHER PLACEMENT




WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

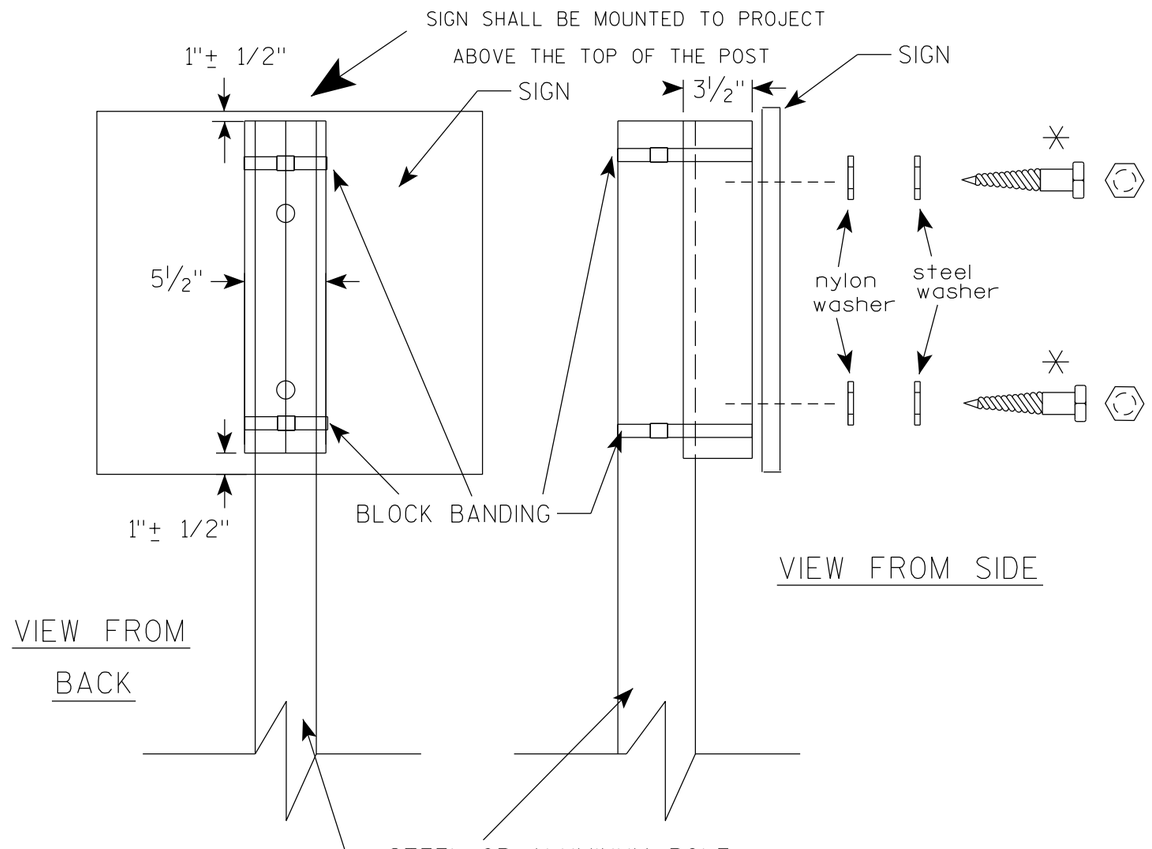
DATE 6/10/19 PLATE NO. A5-9.4

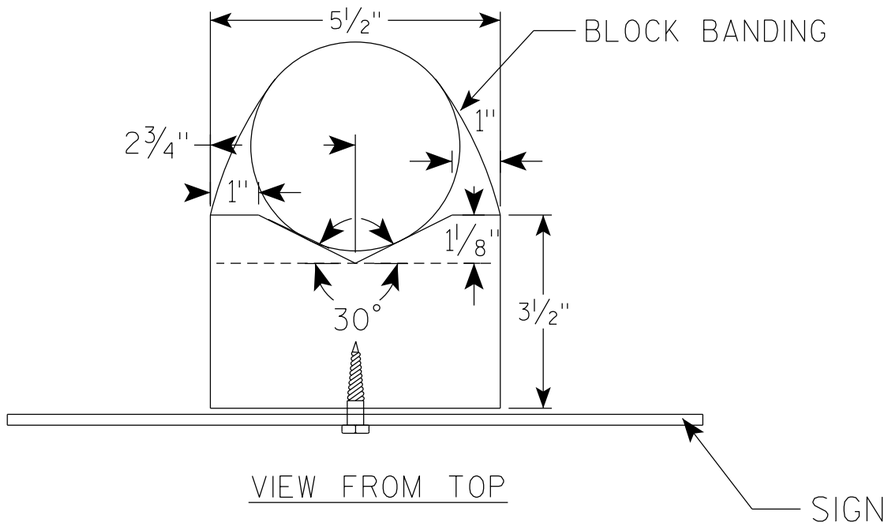
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 717 | E |
|---|---|---|---|---|---|

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7




## GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

# BLOCK BANDING DETAIL ( V-BLOCK OPTION )

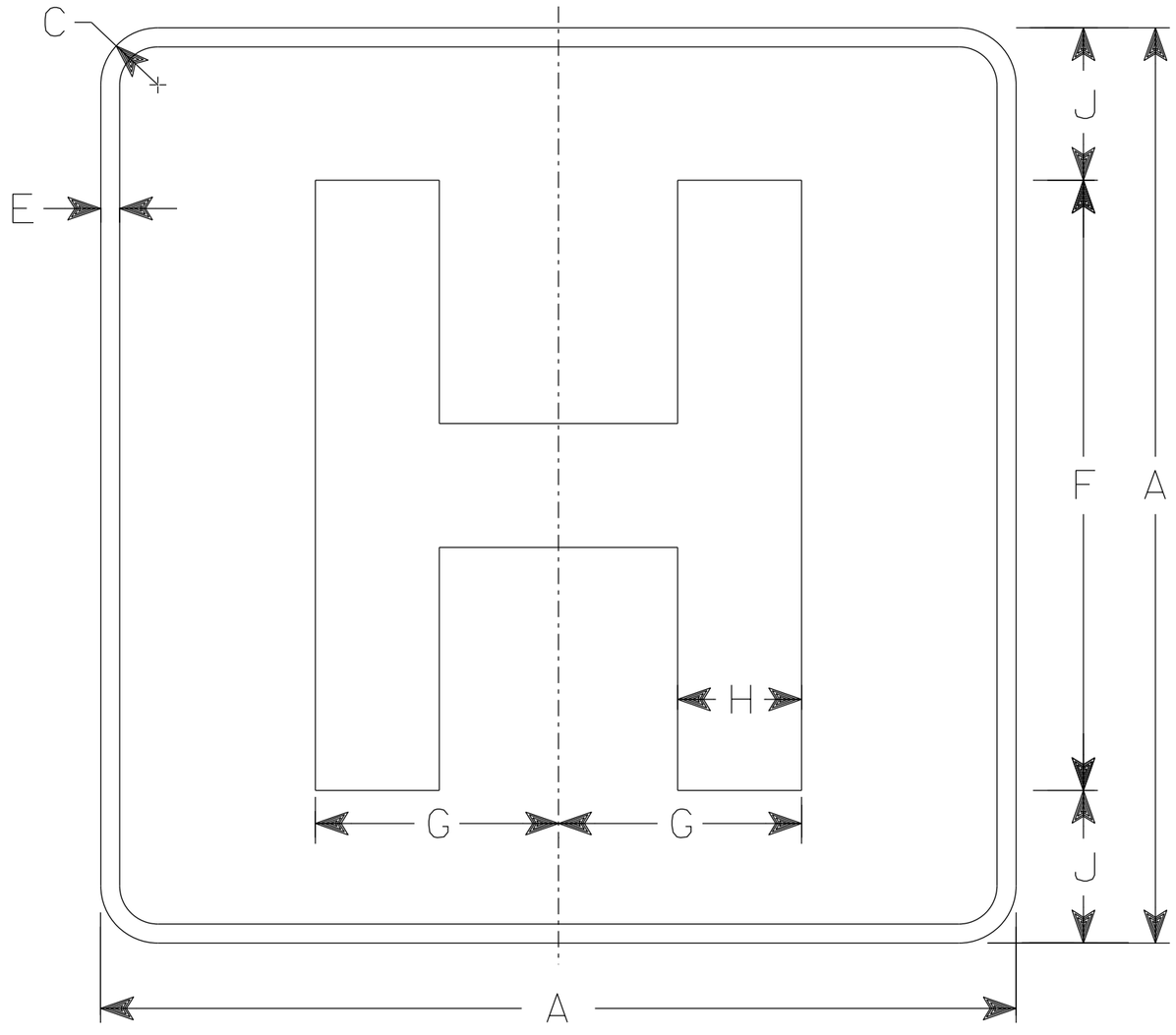
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 718 E




D9-2

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Blue
   Message - White
3. Message Series - E Modified
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18 | | 1 1/2 | | 1/2 | 12 | 4 3/4 | 2 3/8 | | 3 | | | | | | | | | | | | | | | | | 2.25 |
| 2S | 24 | | 1 1/2 | | 1/2 | 16 | 6 3/8 | 3 1/4 | | 4 | | | | | | | | | | | | | | | | | 4.0 |
| 2M | 24 | | 1 1/2 | | 1/2 | 16 | 6 3/8 | 3 1/4 | | 4 | | | | | | | | | | | | | | | | | 4.0 |
| 3 | 36 | | 2 1/4 | | 3/4 | 24 | 9 1/2 | 4 7/8 | | 6 | | | | | | | | | | | | | | | | | 9.0 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
D9-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/25/2023 PLATE NO. D9-2.6

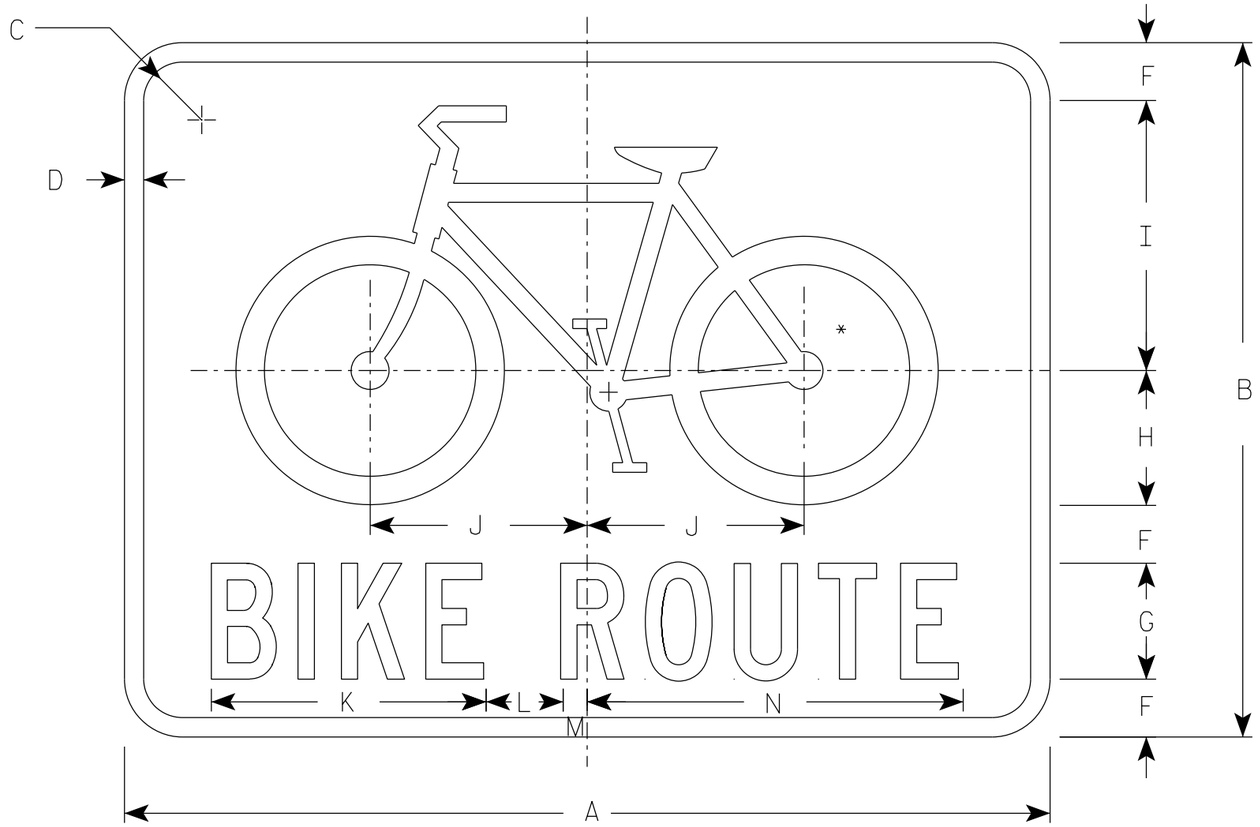
PROJECT NO:

SHEET NO: 719 E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\D92.dgn PLOT DATE : 25-JAN 2023 1:20 PLOT BY : dotc4c

WISDOT/CADDS SHEET 42


7




D11-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - C

* See W11-1 for symbol design

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 18 | 1 1/2 | 1/2 | | 1 1/2 | 3 | 3 1/2 | 7 | 5 5/8 | 7 1/8 | 2 | 5/8 | 9 3/4 | | | | | | | | | | | | | 3.0 |
| 2M | 24 | 18 | 1 1/2 | 1/2 | | 1 1/2 | 3 | 3 1/2 | 7 | 5 5/8 | 7 1/8 | 2 | 5/8 | 9 3/4 | | | | | | | | | | | | | 3.0 |
| 3 | 30 | 24 | 1 1/2 | 5/8 | | 2 | 4 | 4 3/4 | 9 1/4 | 7 1/2 | 9 1/2 | 2 5/8 | 7/8 | 13 | | | | | | | | | | | | | 5.0 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
D11-1

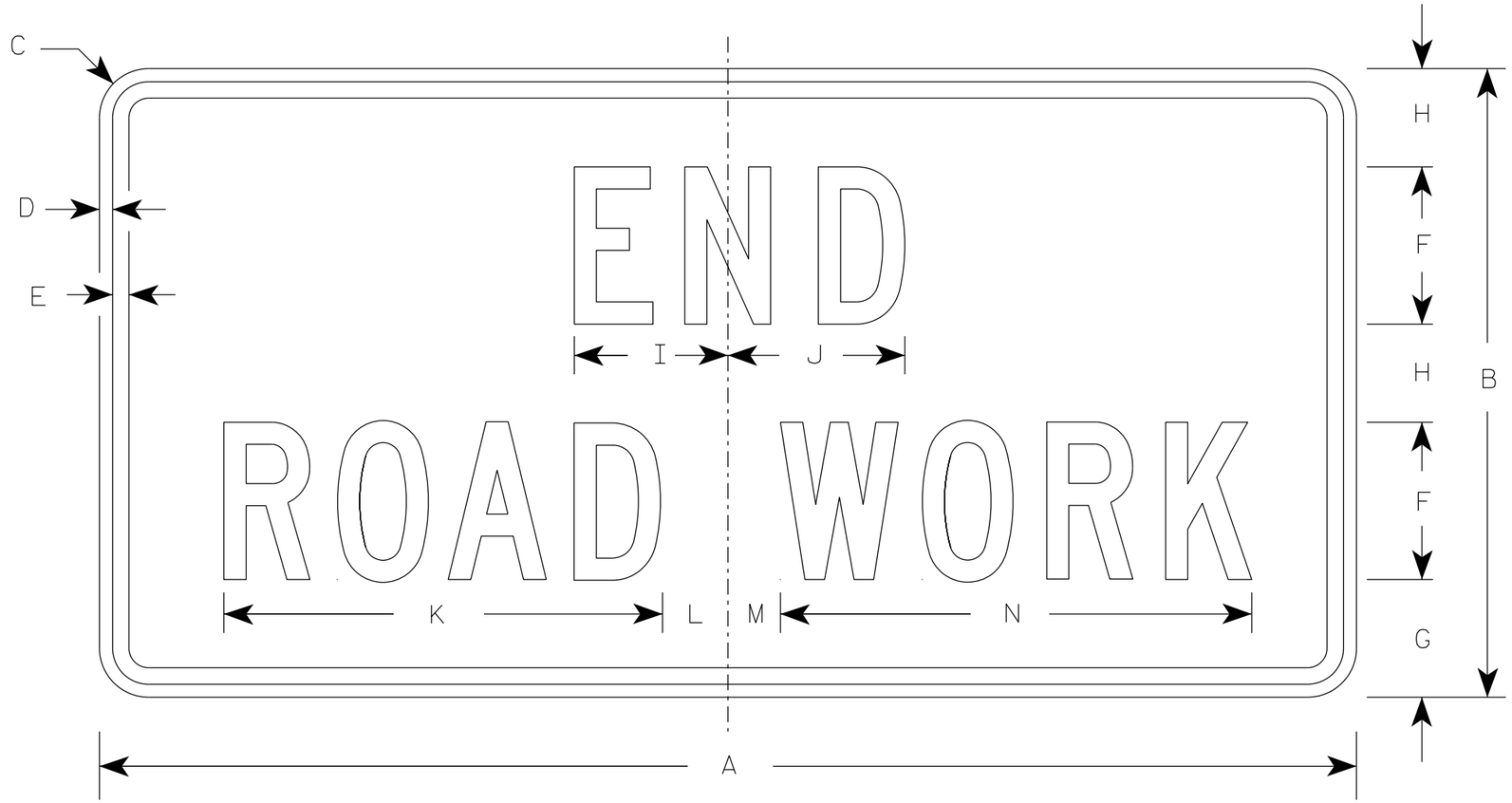
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2023 PLATE NO. D11-1.3

PROJECT NO:

SHEET NO: 720 E




G20-2A

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | 18 | 1 1/2 | 3/8 | 1/2 | 4 | 3 3/4 | 2 1/2 | 4 1/8 | 4 1/8 | 11 1/8 | 2 | 1 | 12 1/8 | | | | | | | | | | | | | 4.5 |
| 2 | 48 | 24 | 1 7/8 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 |
| 2M | 48 | 24 | 1 7/8 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 |
| 3 | 48 | 24 | 1 7/8 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 |
| 4 | 48 | 24 | 1 7/8 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 |
| 5 | 48 | 24 | 1 7/8 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 |

STANDARD SIGN

G20-2A

WISCONSIN DEPT OF TRANSPORTATION

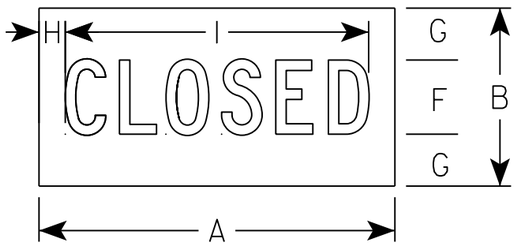
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. G20-2A.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 721 E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Material shall be .040 aluminmum




G20-62

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 48 | 24 | | | | 10 | 7 | 3 ½ | 40 ⅞ | | | | | | | | | | | | | | | | | | 8.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
G20-62

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/24/15 PLATE NO G20-62.1

722

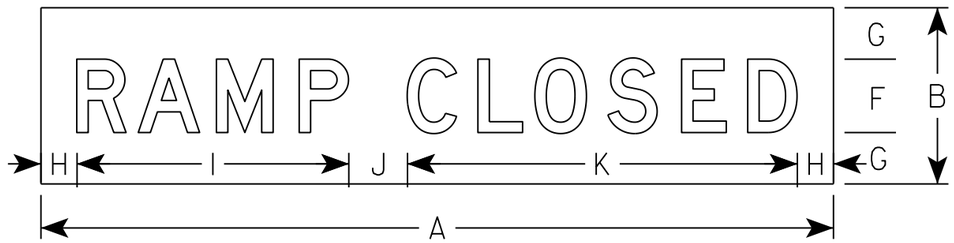
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\G2062.DGN PLOT DATE : 01-DEC-2015 17:53 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 20.431338:1.000000

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Material shall be .040 aluminmum




G20-63

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 72 | 12 | | | | 6 | 3 | 6 | 22 1/8 | 6 | 31 7/8 | | | | | | | | | | | | | | | | 6.0 |
| 4 | 108 | 24 | | | | 10 | 7 | 4 7/8 | 37 | 8 | 53 1/8 | | | | | | | | | | | | | | | | 18.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN

G20-63

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

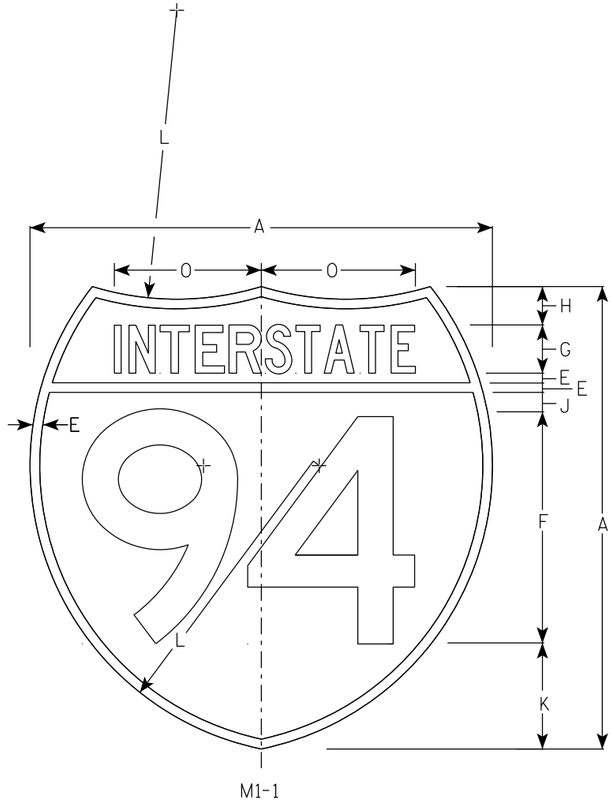
DATE 11/8/17 PLATE NO. G20-63.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 723 | E

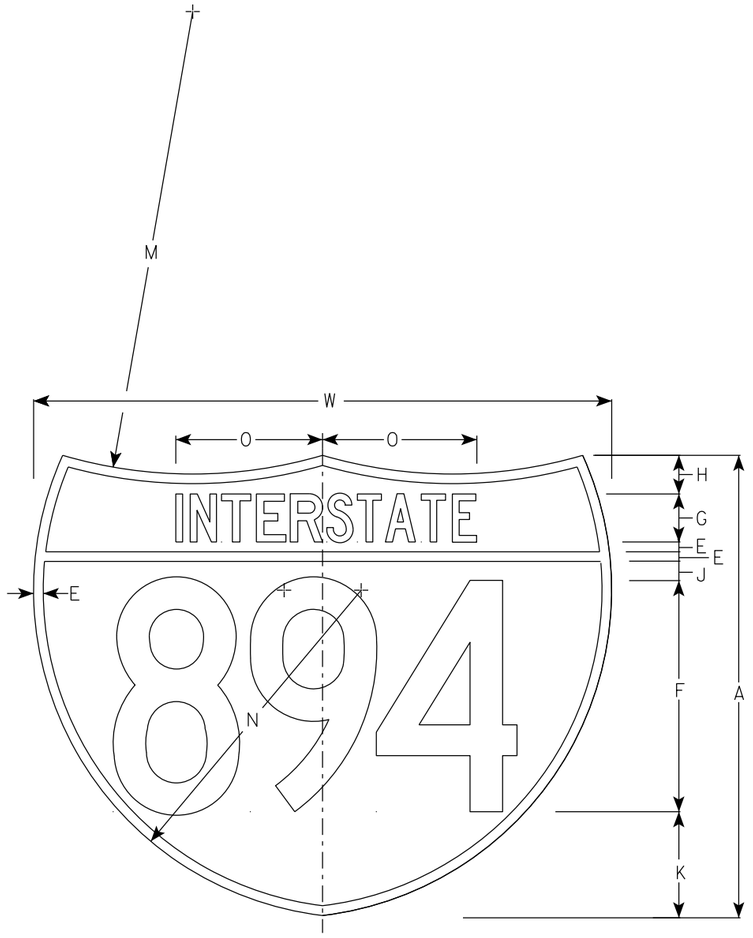


7

7




M1-1




M1-1A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Top Red - Bottom Blue
   Message - White
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | M1-1 Area sq. ft. | M1-1A Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | | | | 1/2 | 12 | 2 1/2 | 2 | | 1 | 5 1/2 | 15 | 24 | 17 | 7 7/8 | | | | | | | | 30 | | | 3.13 | 3.91 |
| 2M | 24 | | | | 1/2 | 12 | 2 1/2 | 2 | | 1 | 5 1/2 | 15 | 24 | 17 | 7 7/8 | | | | | | | | 30 | | | 3.13 | 3.91 |
| 3 | 36 | | | | 3/4 | 18 | 3 3/4 | 3 | | 1 1/2 | 8 1/4 | 22 1/2 | 36 | 25 1/2 | 11 3/4 | | | | | | | | 45 | | | 7.03 | 8.79 |
| 4 | 36 | | | | 3/4 | 18 | 3 3/4 | 3 | | 1 1/2 | 8 1/4 | 22 1/2 | 36 | 25 1/2 | 11 3/4 | | | | | | | | 45 | | | 7.03 | 8.79 |
| 5 | 36 | | | | 3/4 | 18 | 3 3/4 | 3 | | 1 1/2 | 8 1/4 | 22 1/2 | 36 | 25 1/2 | 11 3/4 | | | | | | | | 45 | | | 7.03 | 8.79 |

# INTERSTATE ROUTE MARKER M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

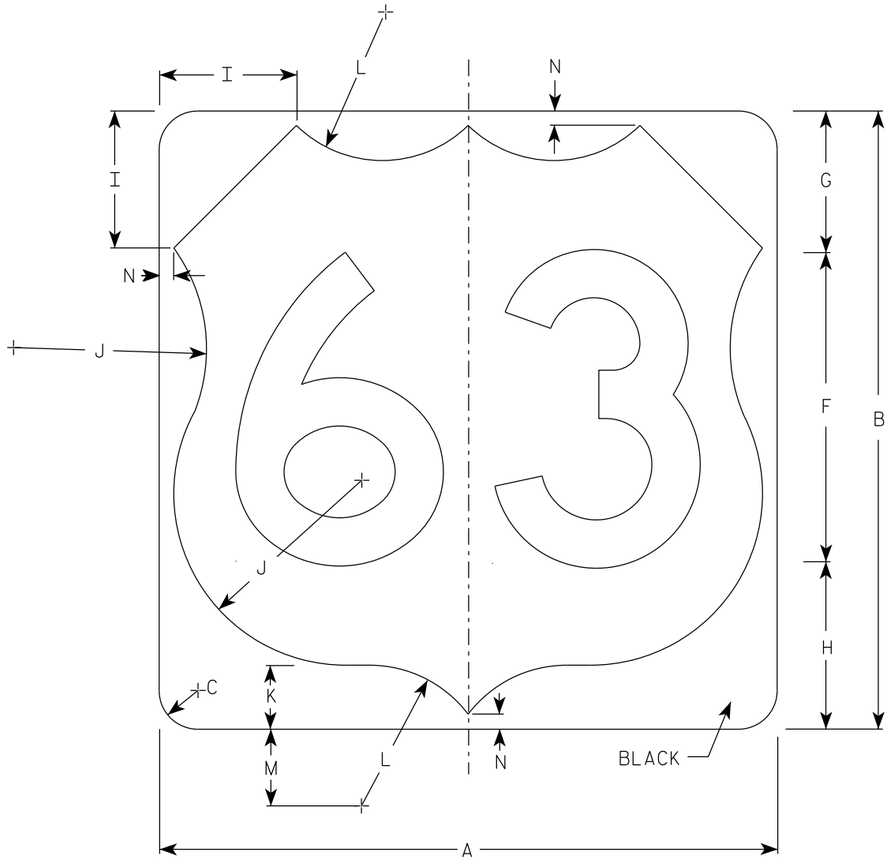
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 11/7/2022 PLATE NO. M1-1.9

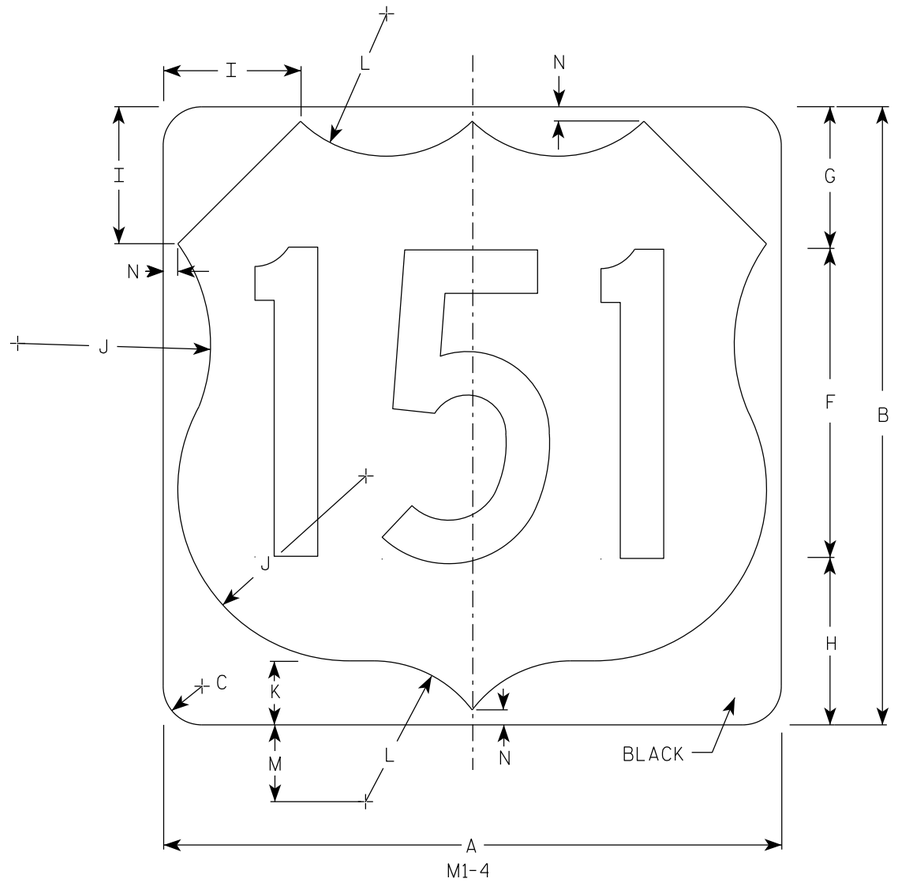
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 724 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C




M1-4




M1-4

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 24 | 1 ½ | | | 12 | 5 ½ | 6 ½ | 5 | 7 ½ | 2 ½ | 5 ½ | 3 | ½ | | | | | | | | | | | | | 4.0 |
| 2M | 24 | 24 | 1 ½ | | | 12 | 5 ½ | 6 ½ | 5 | 7 ½ | 2 ½ | 5 ½ | 3 | ½ | | | | | | | | | | | | | 4.0 |
| 3 | 36 | 36 | 2 ¼ | | | 18 | 8 ¼ | 9 ¼ | 7 ¼ | 11 ¼ | 3 ¾ | 8 ¼ | 4 ½ | ¾ | | | | | | | | | | | | | 9.0 |
| 4 | 36 | 36 | 2 ¼ | | | 18 | 8 ¼ | 9 ¼ | 7 ¼ | 11 ¼ | 3 ¾ | 8 ¼ | 4 ½ | ¾ | | | | | | | | | | | | | 9.0 |
| 5 | 36 | 36 | 2 ¼ | | | 18 | 8 ¼ | 9 ¼ | 7 ¼ | 11 ¼ | 3 ¾ | 8 ¼ | 4 ½ | ¾ | | | | | | | | | | | | | 9.0 |

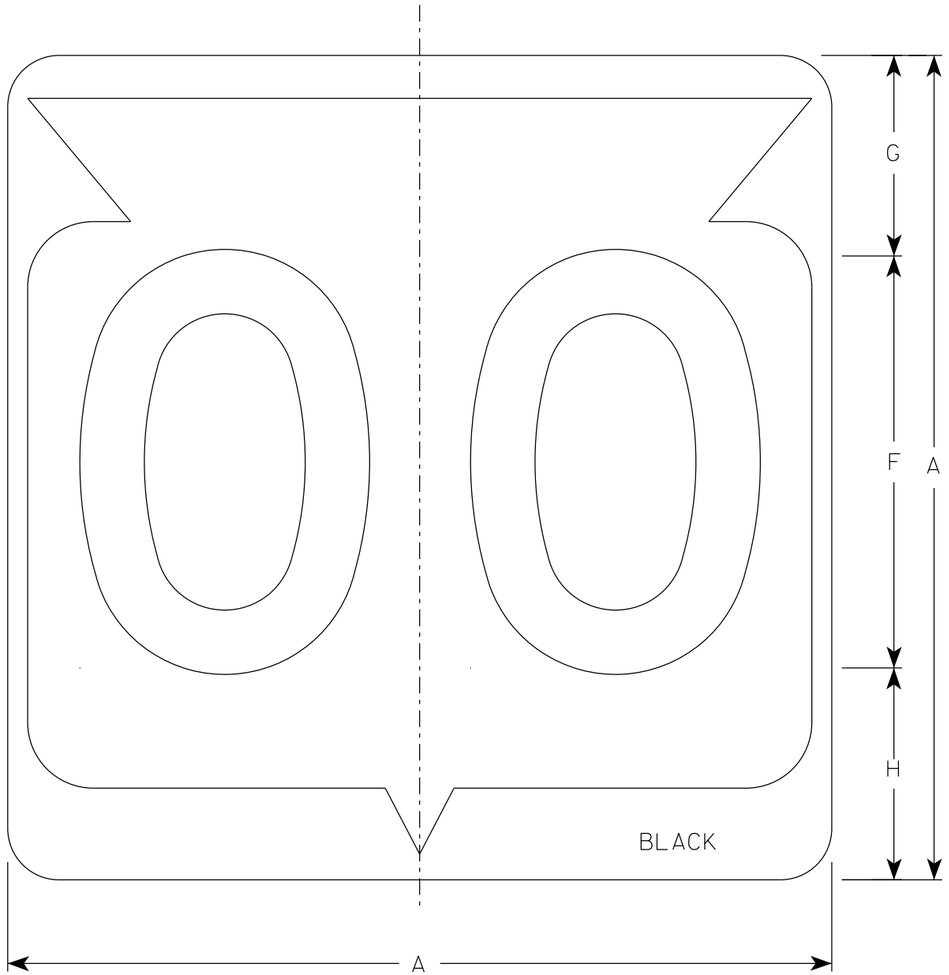
# USH MARKER
# M1-4 FOR ASSEMBLIES

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 12/20/22 PLATE NO. M1-4.11

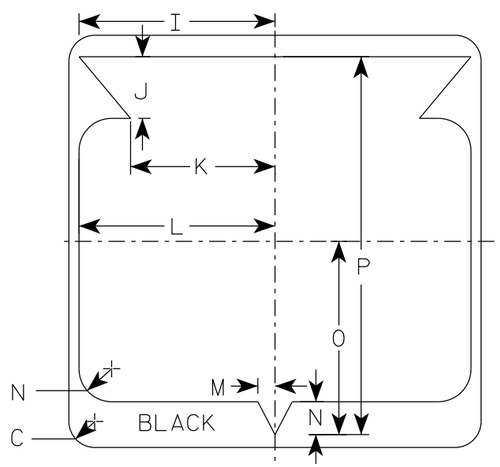
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 725 | E




M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C




| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | | 1 1/2 | | | 12 | 5 1/2 | 6 1/2 | 10 1/4 | 2 1/2 | 8 7/8 | 11 1/2 | 1 | 1 7/8 | 11 1/4 | 21 7/8 | | | | | | | | | | | 4.0 |
| 2M | 24 | | 1 1/2 | | | 12 | 5 1/2 | 6 1/2 | 10 1/4 | 2 1/2 | 8 7/8 | 11 1/2 | 1 | 1 7/8 | 11 1/4 | 21 7/8 | | | | | | | | | | | 4.0 |
| 3 | 36 | | 2 1/4 | | | 18 | 8 3/4 | 9 1/4 | 15 3/8 | 5 3/8 | 12 5/8 | 17 1/8 | 1 1/2 | 2 7/8 | 16 7/8 | 33 | | | | | | | | | | | 9.0 |
| 4 | 36 | | 2 1/4 | | | 18 | 8 3/4 | 9 1/4 | 15 3/8 | 5 3/8 | 12 5/8 | 17 1/8 | 1 1/2 | 2 7/8 | 16 7/8 | 33 | | | | | | | | | | | 9.0 |
| 5 | 36 | | 2 1/4 | | | 18 | 8 3/4 | 9 1/4 | 15 3/8 | 5 3/8 | 12 5/8 | 17 1/8 | 1 1/2 | 2 7/8 | 16 7/8 | 33 | | | | | | | | | | | 9.0 |

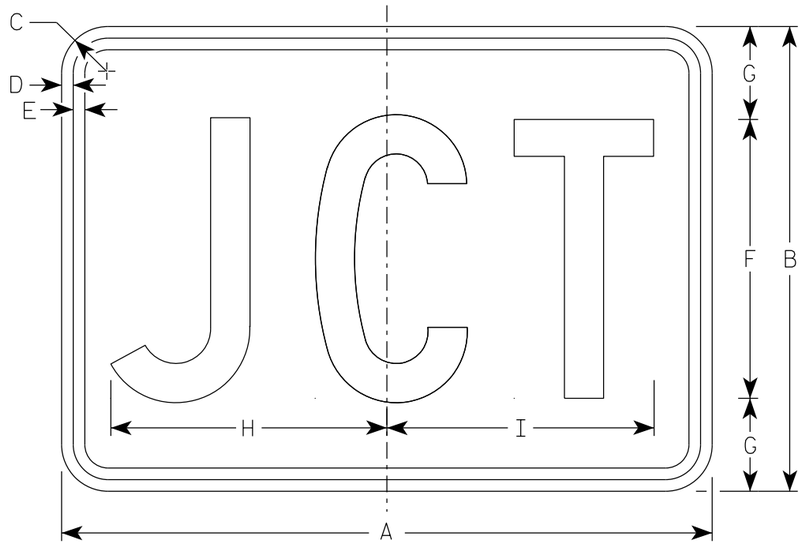
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

*WISCONSIN DEPT OF TRANSPORTATION*

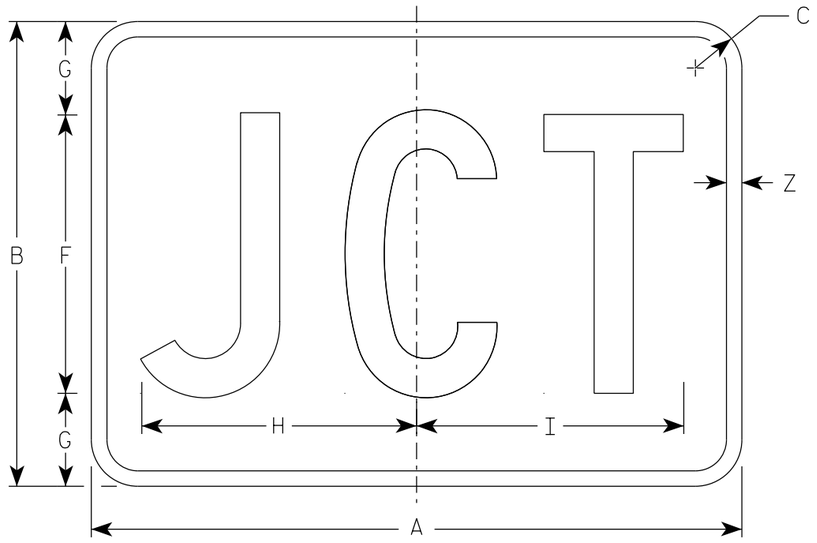
APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-6.11

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 726 | E |
|---|---|---|---|---|---|




M2-1
MM2-1
MP2-1




MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 21 | 15 | 1 1/2 | 3/8 | 3/8 | 9 | 3 | 8 7/8 | 8 5/8 | | | | | | | | | | | | | | | | | 1/2 | 2.20 |
| 2M | 21 | 15 | 1 1/2 | 3/8 | 3/8 | 9 | 3 | 8 7/8 | 8 5/8 | | | | | | | | | | | | | | | | | 1/2 | 2.20 |
| 3 | 30 | 21 | 1 1/2 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | | 1/2 | 4.40 |
| 4 | 30 | 21 | 1 1/2 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | | 1/2 | 4.40 |
| 5 | 30 | 21 | 1 1/2 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | | 1/2 | 4.40 |

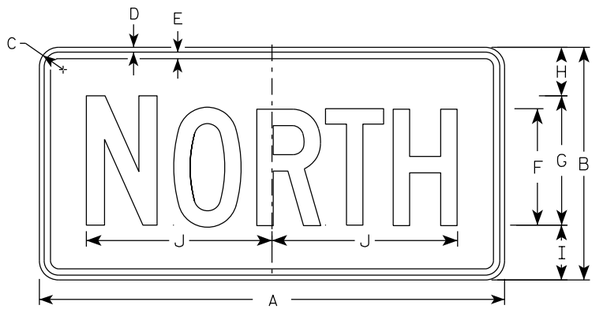
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

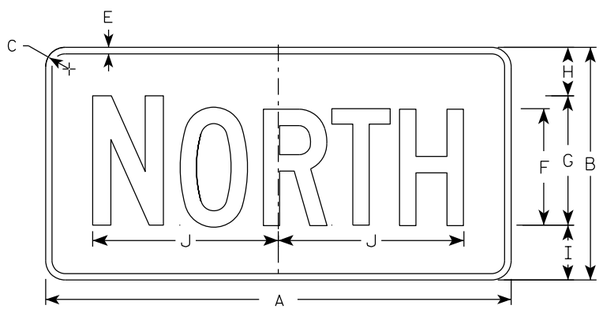
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/8/2023 PLATE NO. M2-1.14

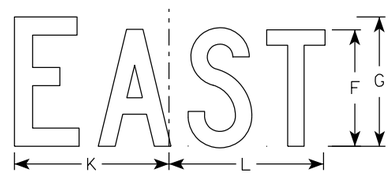
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 727 | E




M3-1
MM3-1
MP3-1

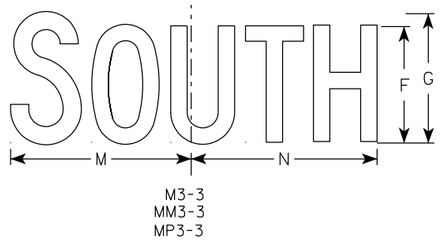



MB3-1
MK3-1
MN3-1

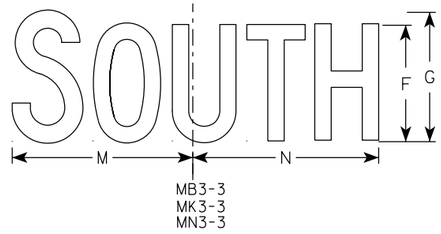



M3-2
MM3-2
MP3-2

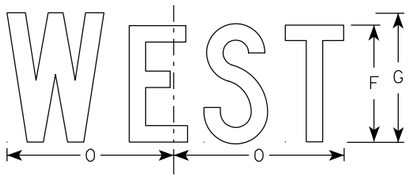
MB3-2
MK3-2
MN3-2



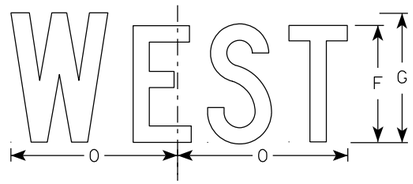

M3-3
MM3-3
MP3-3




MB3-3
MK3-3
MN3-3




M3-4
MM3-4
MP3-4




MB3-4
MK3-4
MN3-4

## NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 12 | 1 1/2 | 3/8 | 3/8 | 6 | 7 | 2 1/4 | 2 3/4 | 10 1/4 | 7 7/8 | 8 3/8 | 10 1/4 | 9 3/4 | 8 3/4 | | | | | | | | | | | | 2.00 |
| 2M | 24 | 12 | 1 1/2 | 3/8 | 3/8 | 6 | 7 | 2 1/4 | 2 3/4 | 10 1/4 | 7 7/8 | 8 3/8 | 10 1/4 | 9 3/4 | 8 3/4 | | | | | | | | | | | | 2.00 |
| 3 | 36 | 18 | 1 1/2 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | | | | | | | | | | 4.5 |
| 4 | 36 | 18 | 1 1/2 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | | | | | | | | | | 4.5 |
| 5 | 36 | 18 | 1 1/2 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | | | | | | | | | | 4.5 |

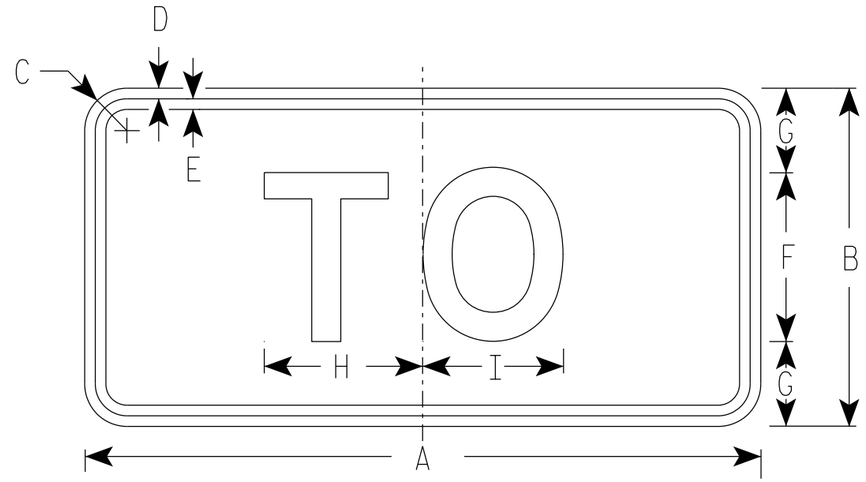
STANDARD SIGNS
M3-1 THRU M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

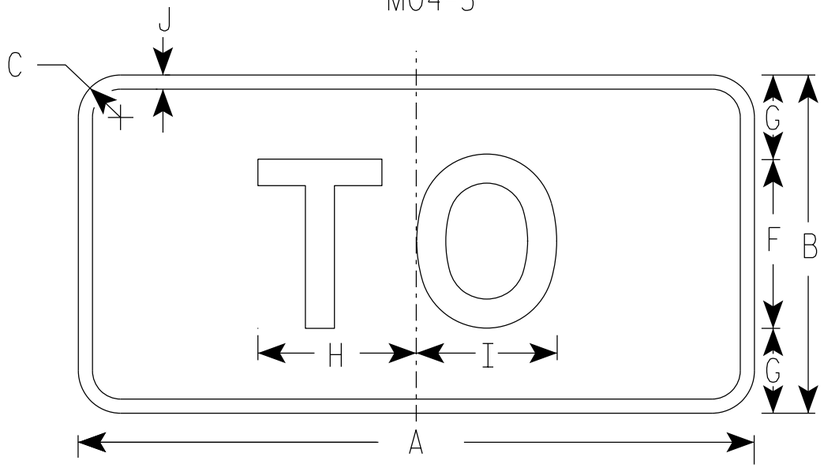
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/8/2023 PLATE NO. M3-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 728 | E




M4-5
MM4-5
MP4-5
M04-5




MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

   M04-5 Background - Orange Type F Reflective
   Message - Black

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 12 | 1 ½ | ⅜ | ⅜ | 6 | 3 | 5 ⅜ | 5 ¼ | ½ | | | | | | | | | | | | | | | | | 2.00 |
| 2M | 24 | 12 | 1 ½ | ⅜ | ⅜ | 6 | 3 | 5 ⅜ | 5 ¼ | ½ | | | | | | | | | | | | | | | | | 2.00 |
| 3 | 36 | 18 | 1 ½ | ⅜ | ½ | 9 | 4 ½ | 8 ¼ | 8 ⅜ | ½ | | | | | | | | | | | | | | | | | 4.5 |
| 4 | 36 | 18 | 1 ½ | ⅜ | ½ | 9 | 4 ½ | 8 ¼ | 8 ⅜ | ½ | | | | | | | | | | | | | | | | | 4.5 |
| 5 | 36 | 18 | 1 ½ | ⅜ | ½ | 9 | 4 ½ | 8 ¼ | 8 ⅜ | ½ | | | | | | | | | | | | | | | | | 4.5 |

STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/8/2023 PLATE NO. M4-5.11

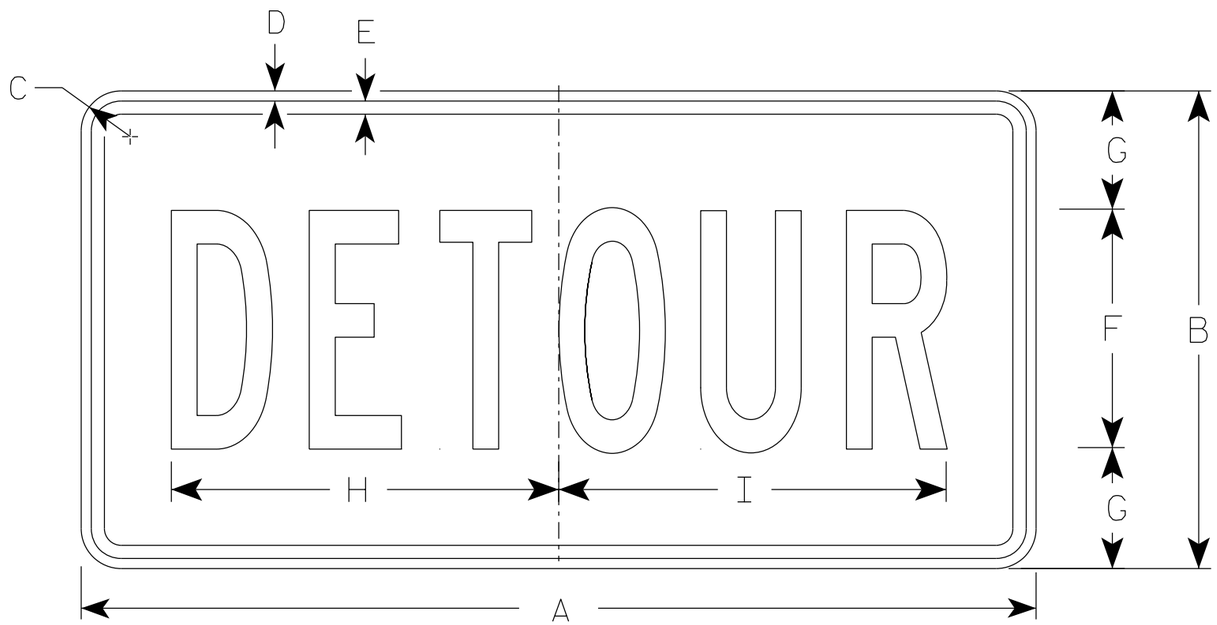
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 729 E




7

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.




M4-8

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 12 | 1 1/2 | 3/8 | 3/8 | 6 | 3 | 10 | 10 1/4 | | | | | | | | | | | | | | | | | | 2.0 |
| 2M | 24 | 12 | 1 1/2 | 3/8 | 3/8 | 6 | 3 | 10 | 10 1/4 | | | | | | | | | | | | | | | | | | 2.0 |
| 3 | 36 | 18 | 1 1/2 | 3/8 | 1/2 | 9 | 4 1/2 | 14 5/8 | 14 1/2 | | | | | | | | | | | | | | | | | | 4.5 |
| 4 | 36 | 18 | 1 1/2 | 3/8 | 1/2 | 9 | 4 1/2 | 14 5/8 | 14 1/2 | | | | | | | | | | | | | | | | | | 4.5 |
| 5 | 36 | 18 | 1 1/2 | 3/8 | 1/2 | 9 | 4 1/2 | 14 5/8 | 14 1/2 | | | | | | | | | | | | | | | | | | 4.5 |

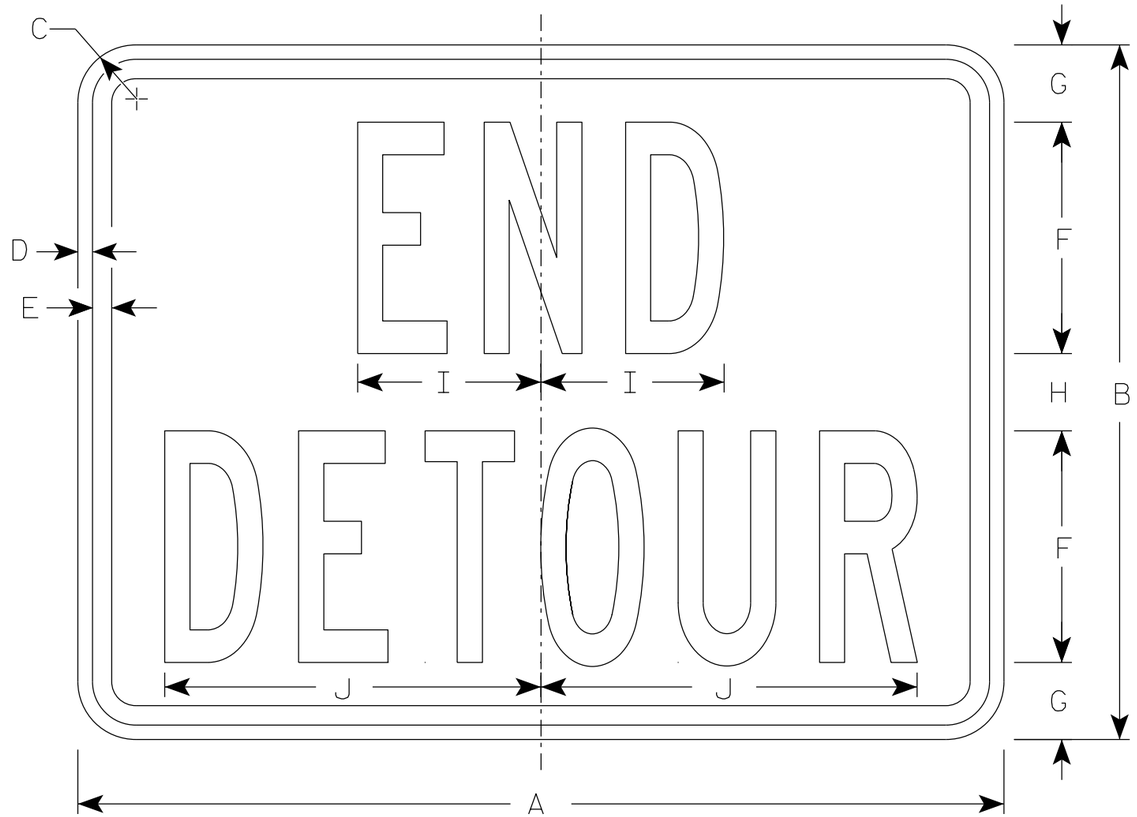
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8.4

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 730 | E |
|---|---|---|---|---|---|




M4-8A

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 18 | 1 ½ | ⅜ | ½ | 6 | 2 | 2 | 4 ¾ | 9 ¾ | | | | | | | | | | | | | | | | | 3.0 |
| 2M | 24 | 18 | 1 ½ | ⅜ | ½ | 6 | 2 | 2 | 4 ¾ | 9 ¾ | | | | | | | | | | | | | | | | | 3.0 |
| 3 | 30 | 24 | 1 ½ | ⅜ | ½ | 8 | 2 ½ | 3 | 6 ¾ | 13 | | | | | | | | | | | | | | | | | 5.0 |
| 4 | 30 | 24 | 1 ½ | ⅜ | ½ | 8 | 2 ½ | 3 | 6 ¾ | 13 | | | | | | | | | | | | | | | | | 5.0 |
| 5 | 30 | 24 | 1 ½ | ⅜ | ½ | 8 | 2 ½ | 3 | 6 ¾ | 13 | | | | | | | | | | | | | | | | | 5.0 |

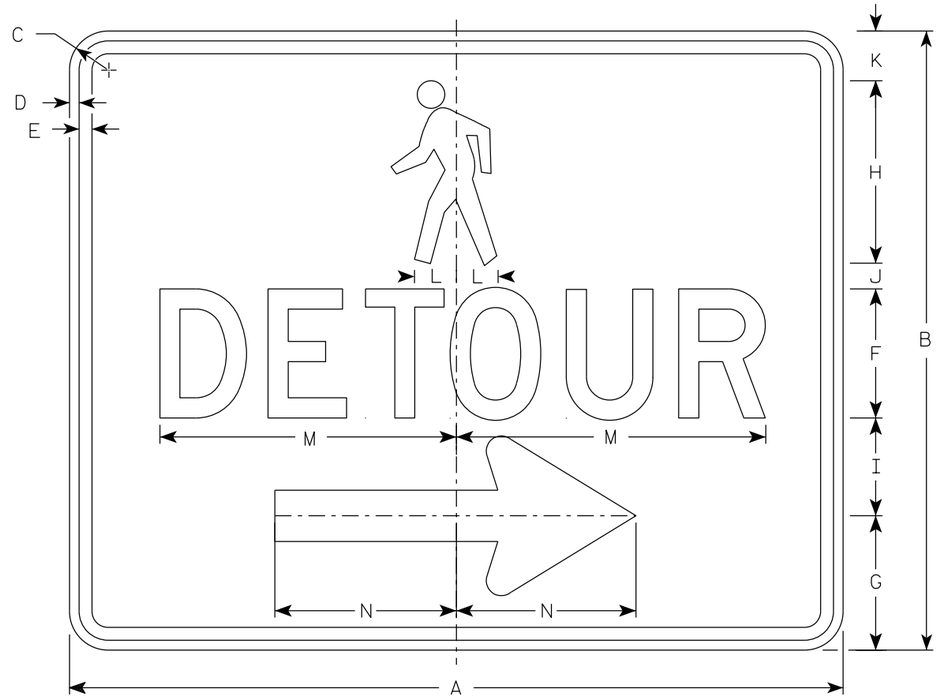
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8A.4

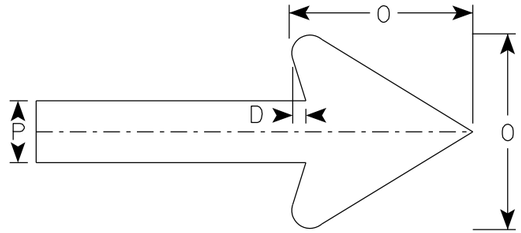
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 731 | E




M4-9BR

NOTES

1. Sign is Type II-Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9BL is the same as M4-9BR except the arrow is reversed.




Arrow Detail

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 24 | 1 1/2 | 3/8 | 1/2 | 5 | 5 1/4 | 7 1/8 | 3 3/4 | 1 | 1 1/8 | 1 5/8 | 11 3/4 | 7 | 6 | 2 | | | | | | | | | | | 5.0 |
| 2M | 30 | 24 | 1 1/2 | 3/8 | 1/2 | 5 | 5 1/4 | 7 1/8 | 3 3/4 | 1 | 1 1/8 | 1 5/8 | 11 3/4 | 7 | 6 | 2 | | | | | | | | | | | 5.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

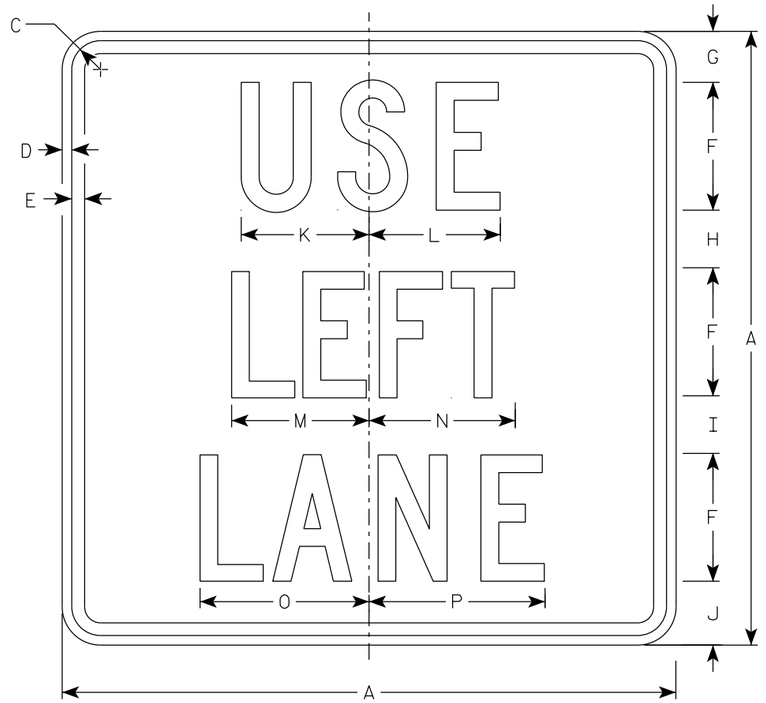
STANDARD SIGN
M4-9B L&R

WISCONSIN DEPT OF TRANSPORTATION

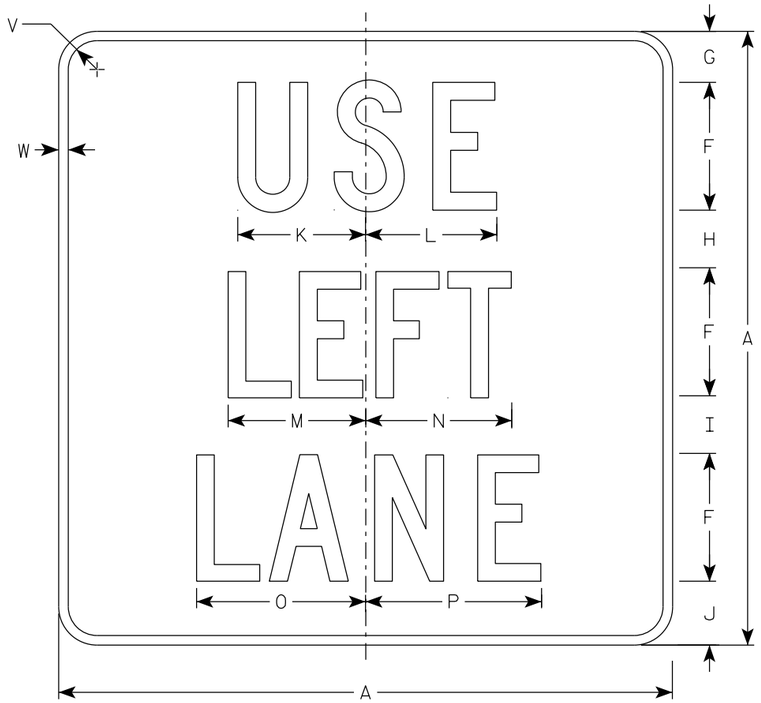
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-9B.4

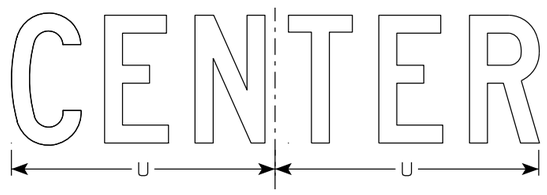
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 732 | E



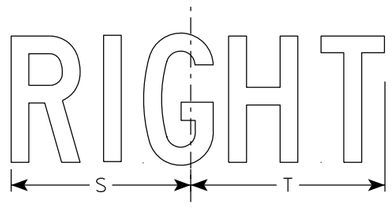

M4-20L
MM4-20L
MO4-20L
MP4-20L




MB4-20L
MK4-20L
MN4-20L
MR4-20L




M4-20C
MB4-20C
MK4-20C
MM4-20C
MN4-20C
MO4-20C
MP4-20C
MR4-20C




M4-20R
MB4-20R
MK4-20R
MM4-20R
MN4-20R
MO4-20R
MP4-20R
MR4-20R

NOTES

1. Sign is Type II - Type H except as Shown
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-20 Background - White
   Message - Black
   MB4-20 Background - Blue
   Message - White
   MK4-20 Background - Green
   Message - White
   MM4-20 Background - White
   Message - Green
   MN4-20 Background - Brown
   Message - White
   MO4-20 Background - Orange - Type F Reflective
   Message - Black
   MP4-20 Background - White
   Message - Blue
   MR4-20 Background - Brown
   Message - Yellow

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | | 1 1/2 | 3/8 | 1/2 | 5 | 2 | 2 1/4 | 2 1/4 | 2 1/2 | 5 | 5 1/8 | 5 3/8 | 5 3/4 | 6 5/8 | 6 7/8 | | | 7 | 7 5/8 | 10 1/4 | 1 1/2 | 1/2 | | | | 4.0 |
| 2M | 24 | | 1 1/2 | 3/8 | 1/2 | 5 | 2 | 2 1/4 | 2 1/4 | 2 1/2 | 5 | 5 1/8 | 5 3/8 | 5 3/4 | 6 5/8 | 6 7/8 | | | 7 | 7 5/8 | 10 1/4 | 1 1/2 | 1/2 | | | | 4.0 |
| 3 | 36 | | 2 1/4 | 5/8 | 3/4 | 7 | 4 | 3 | 3 1/2 | 4 1/2 | 7 1/2 | 7 3/4 | 8 | 8 5/8 | 9 7/8 | 10 1/4 | | | 10 3/8 | 11 3/8 | 14 3/8 | 1 7/8 | 1/2 | | | | 9.0 |
| 4 | 36 | | 2 1/4 | 5/8 | 3/4 | 7 | 4 | 3 | 3 1/2 | 4 1/2 | 7 1/2 | 7 3/4 | 8 | 8 5/8 | 9 7/8 | 10 1/4 | | | 10 3/8 | 11 3/8 | 14 3/8 | 1 7/8 | 1/2 | | | | 9.0 |
| 5 | 36 | | 2 1/4 | 5/8 | 3/4 | 7 | 4 | 3 | 3 1/2 | 4 1/2 | 7 1/2 | 7 3/4 | 8 | 8 5/8 | 9 7/8 | 10 1/4 | | | 10 3/8 | 11 3/8 | 14 3/8 | 1 7/8 | 1/2 | | | | 9.0 |

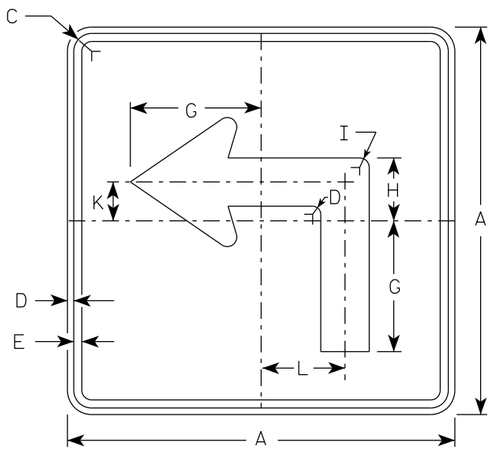
STANDARD SIGN
M4-20

WISCONSIN DEPT OF TRANSPORTATION

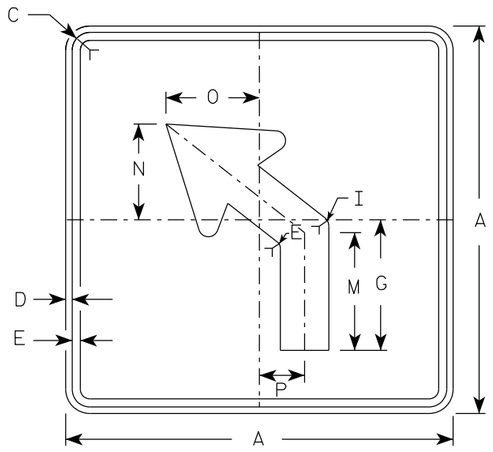
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M4-20.6

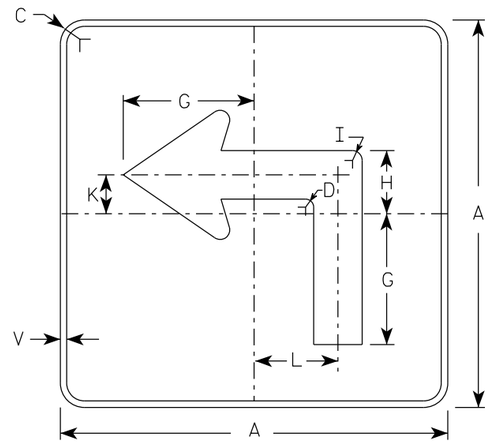
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 733 | E |
|---|---|---|---|---|---|



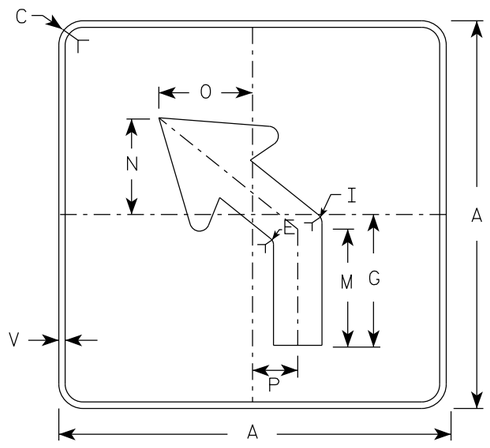

M5-1L
MM5-1L
MO5-1L
MP5-1L




M5-2L
MM5-2L
MO5-2L
MP5-2L




MB5-1L
MK5-1L
MN5-1L
MR5-1L

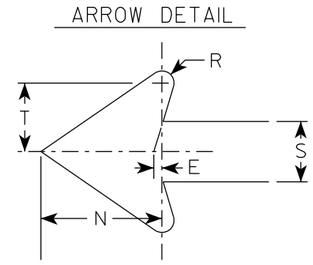



MB5-2L
MK5-2L
MN5-2L
MR5-2L

## NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

ARROW DETAIL




| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 21 | | 1 1/2 | 3/8 | 3/8 | | 7 | 3 3/8 | 5/8 | | 2 1/8 | 4 1/2 | 6 3/8 | 5 1/4 | 5 | 2 1/2 | | 1/2 | 2 5/8 | 3 | | 1/2 | | | | | 3.06 |
| 2M | 21 | | 1 1/2 | 3/8 | 3/8 | | 7 | 3 3/8 | 5/8 | | 2 1/8 | 4 1/2 | 6 3/8 | 5 1/4 | 5 | 2 1/2 | | 1/2 | 2 5/8 | 3 | | 1/2 | | | | | 3.06 |
| 3 | 30 | | 1 7/8 | 1/2 | 5/8 | | 10 1/8 | 4 7/8 | 7/8 | | 3 | 6 1/2 | 9 1/8 | 7 1/2 | 7 1/4 | 3 1/2 | | 3/4 | 3 3/4 | 4 1/4 | | 1/2 | | | | | 6.25 |
| 4 | 30 | | 1 7/8 | 1/2 | 5/8 | | 10 1/8 | 4 7/8 | 7/8 | | 3 | 6 1/2 | 9 1/8 | 7 1/2 | 7 1/4 | 3 1/2 | | 3/4 | 3 3/4 | 4 1/4 | | 1/2 | | | | | 6.25 |
| 5 | 30 | | 1 7/8 | 1/2 | 5/8 | | 10 1/8 | 4 7/8 | 7/8 | | 3 | 6 1/2 | 9 1/8 | 7 1/2 | 7 1/4 | 3 1/2 | | 3/4 | 3 3/4 | 4 1/4 | | 1/2 | | | | | 6.25 |

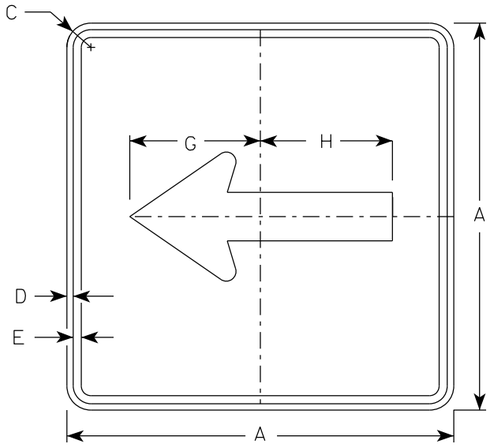
# STANDARD SIGN
# M5-1 & M5-2

*WISCONSIN DEPT OF TRANSPORTATION*

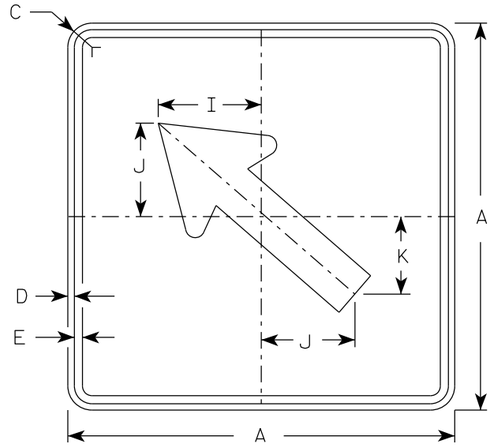
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15

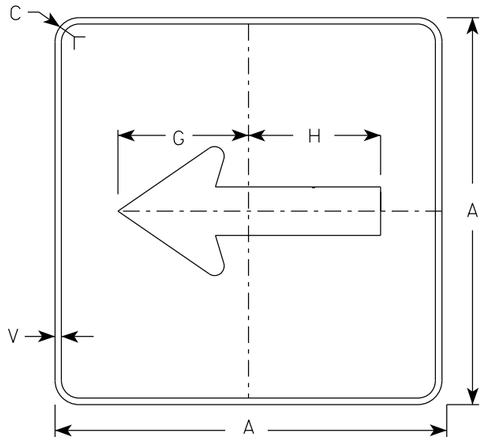
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 734 | E



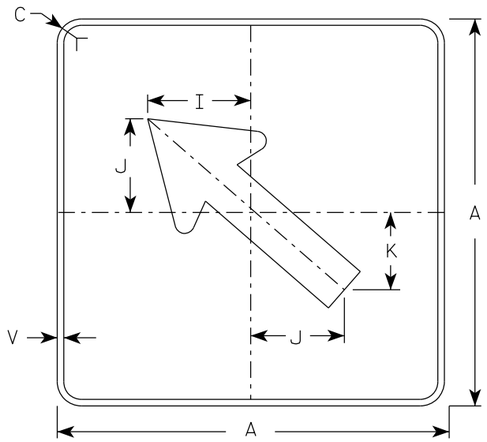

M6-1
MM6-1
MO6-1
MP6-1




M6-2
MM6-2
MO6-2
MP6-2




MB6-1
MK6-1
MN6-1
MR6-1

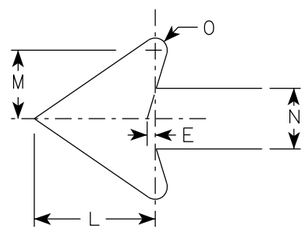



MB6-2
MK6-2
MN6-2
MR6-2

NOTES

1. Signs are Type II - Type H Reflective except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow

ARROW DETAIL




| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 21 | | 1 1/2 | 3/8 | 3/8 | | 7 1/2 | 7 1/8 | 5 5/8 | 5 | 4 1/4 | 5 1/4 | 3 | 2 5/8 | 1/2 | | | | | | | 1/2 | | | | | 3.06 |
| 2M | 21 | | 1 1/2 | 3/8 | 3/8 | | 7 1/2 | 7 1/8 | 5 5/8 | 5 | 4 1/4 | 5 1/4 | 3 | 2 5/8 | 1/2 | | | | | | | 1/2 | | | | | 3.06 |
| 3 | 30 | | 1 7/8 | 1/2 | 5/8 | | 10 3/4 | 10 1/4 | 8 | 7 1/4 | 6 | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | | 1/2 | | | | | 6.25 |
| 4 | 30 | | 1 7/8 | 1/2 | 5/8 | | 10 3/4 | 10 1/4 | 8 | 7 1/4 | 6 | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | | 1/2 | | | | | 6.25 |
| 5 | 30 | | 1 7/8 | 1/2 | 5/8 | | 10 3/4 | 10 1/4 | 8 | 7 1/4 | 6 | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | | 1/2 | | | | | 6.25 |

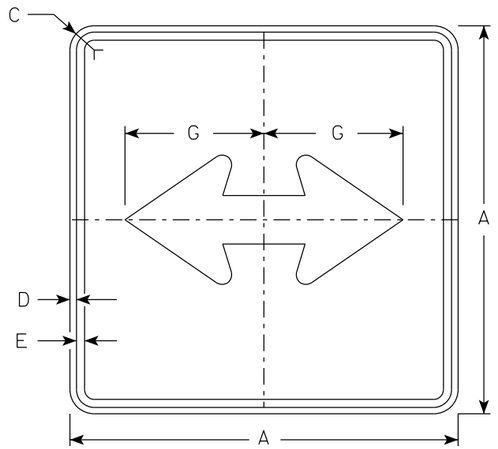
STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

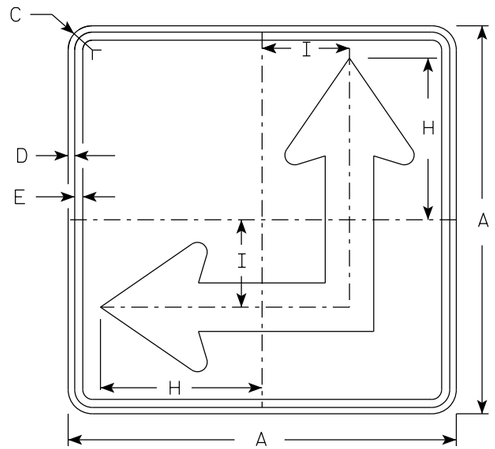
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

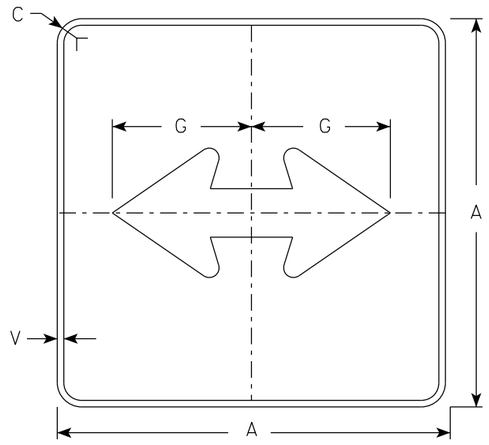
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 735 | E



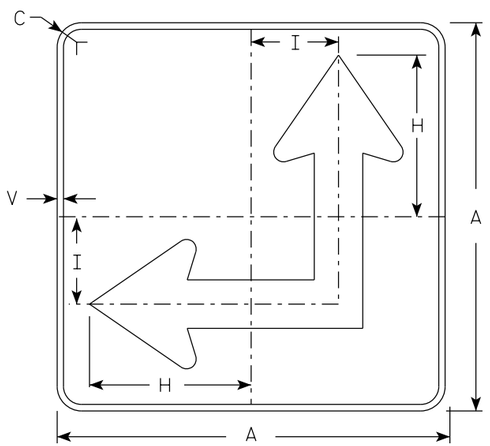

M6-4
MM6-4
MO6-4
MP6-4




M6-6
MM6-6
MO6-6
MP6-6




MB6-4
MK6-4
MN6-4
MR6-4

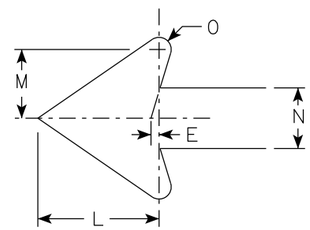



MB6-6
MK6-6
MN6-6
MR6-6

## NOTES

1. Signs are Type II - Type H Reflective except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.

ARROW DETAIL




| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 21 | | 1 1/2 | 3/8 | 3/8 | | 7 1/2 | 8 3/4 | 4 1/4 | | | 5 1/4 | 3 | 2 5/8 | 1/2 | | | | | | | 1/2 | | | | | 3.06 |
| 2M | 21 | | 1 1/2 | 3/8 | 3/8 | | 7 1/2 | 8 3/4 | 4 1/4 | | | 5 1/4 | 3 | 2 5/8 | 1/2 | | | | | | | 1/2 | | | | | 3.06 |
| 3 | 30 | | 1 7/8 | 1/2 | 5/8 | | 10 3/4 | 12 1/2 | 6 3/4 | | | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | | 1/2 | | | | | 6.25 |
| 4 | 30 | | 1 7/8 | 1/2 | 5/8 | | 10 3/4 | 12 1/2 | 6 3/4 | | | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | | 1/2 | | | | | 6.25 |
| 5 | 30 | | 1 7/8 | 1/2 | 5/8 | | 10 3/4 | 12 1/2 | 6 3/4 | | | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | | 1/2 | | | | | 6.25 |

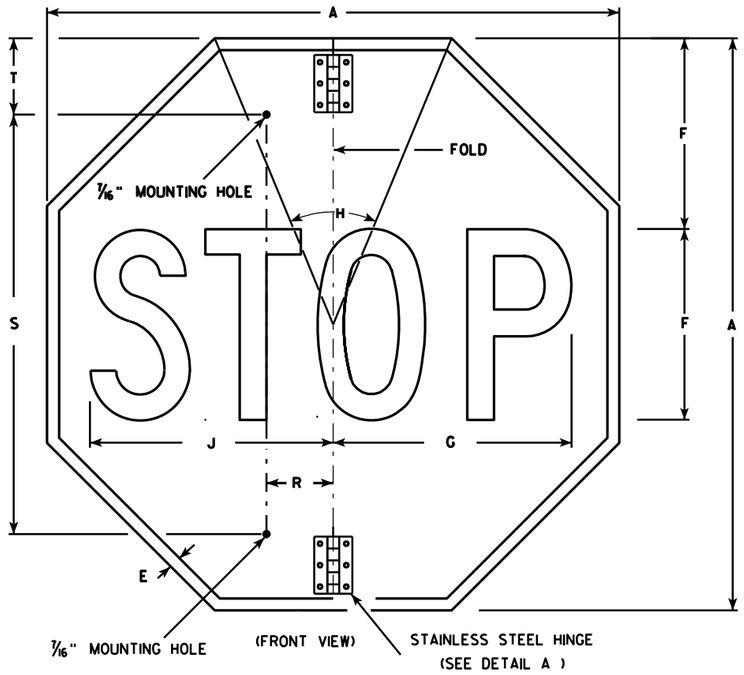
# STANDARD SIGN M6-4 & M6-6 SERIES

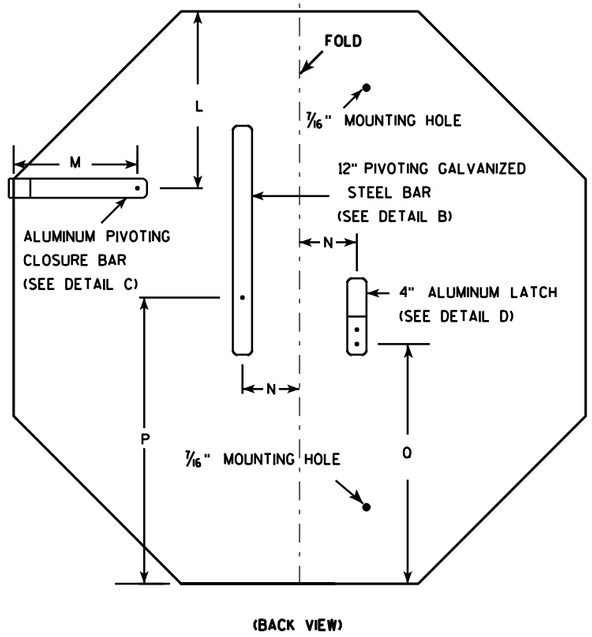
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-4.11

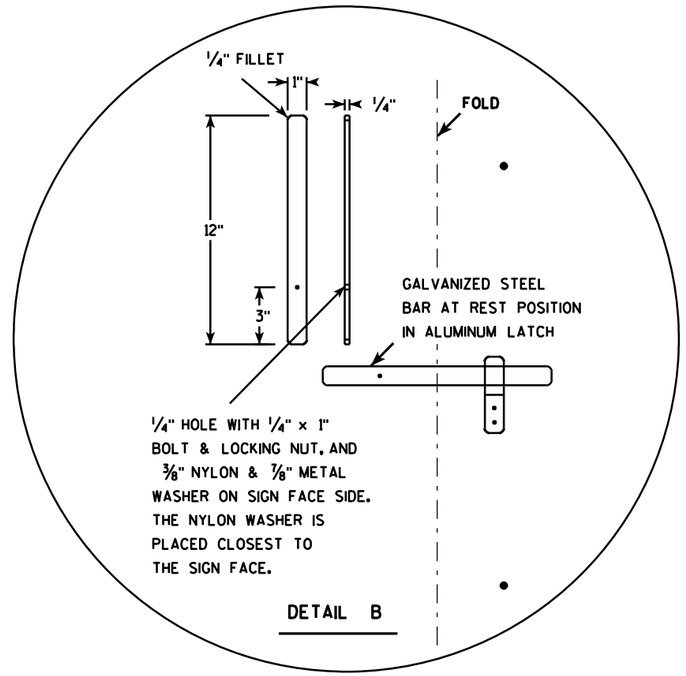
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 736 | E

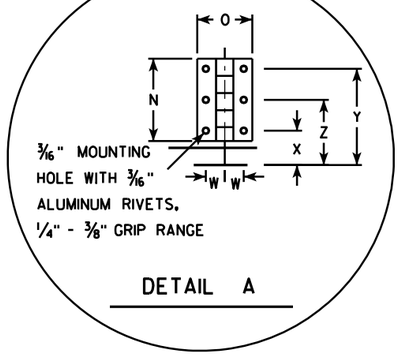


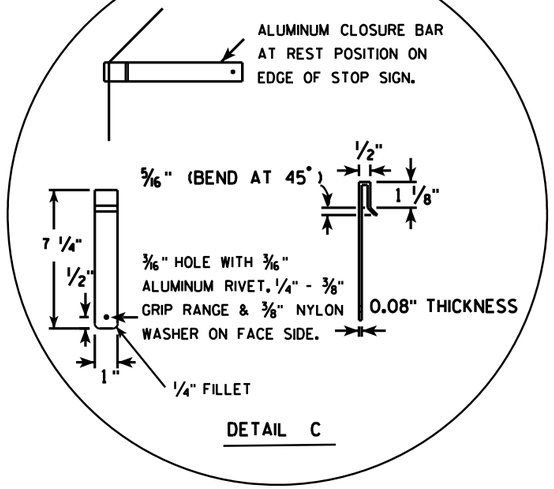



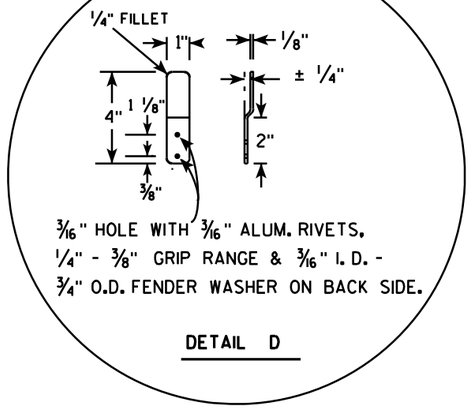

## NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.




| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | O | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | | | | 5/8 | 10 | 12 1/2 | 45 | | 12 3/4 | | 9 1/4 | 6 1/2 | 3 | 2 | 15 | 12 3/8 | 2 1/2 | 22 | 5 | | | 11/16 | 1 1/4 | 3 1/2 | 2 3/8 | 5.18 |
| 2M | 36 | | | | 3/4 | 12 | 15 | 45 | | 15 3/8 | | 11 | 6 1/2 | 3 | 2 | 18 | 15 3/8 | 2 1/2 | 26 | 5 | | | 11/16 | 1 1/4 | 3 1/2 | 2 3/8 | 7.46 |
| 3 | 36 | | | | 3/4 | 12 | 15 | 45 | | 15 3/8 | | 11 | 6 1/2 | 3 | 2 | 18 | 15 3/8 | 2 1/2 | 26 | 5 | | | 11/16 | 1 1/4 | 3 1/2 | 2 3/8 | 7.46 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

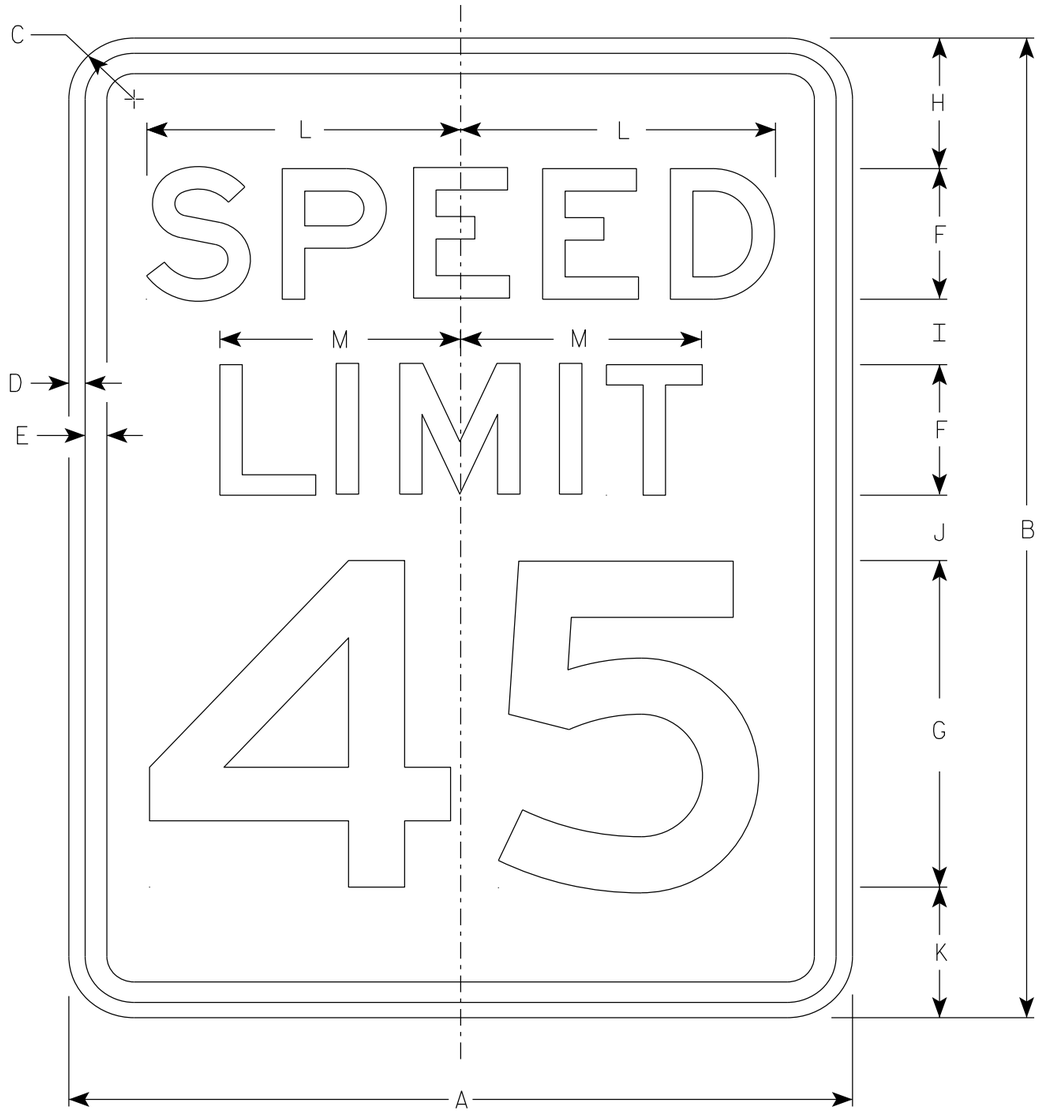
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 737 | E




R2-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18 | 24 | 1 1/2 | 3/8 | 1/2 | 3 | 8 | 3 | 2 | 2 | 3 | 7 1/4 | 5 1/2 | | | | | | | | | | | | | | 3.0 |
| 2S | 24 | 30 | 1 1/2 | 3/8 | 1/2 | 4 | 10 | 3 | 2 1/4 | 3 3/8 | 3 3/8 | 9 5/8 | 7 3/8 | | | | | | | | | | | | | | 5.0 |
| 2M | 30 | 36 | 1 7/8 | 1/2 | 5/8 | 5 | 12 | 5 | 2 1/2 | 2 1/2 | 4 | 12 | 9 1/4 | | | | | | | | | | | | | | 7.5 |
| 3 | 36 | 48 | 1 7/8 | 1/2 | 5/8 | 6 | 14 | 6 | 5 | 5 | 6 | 14 3/8 | 11 | | | | | | | | | | | | | | 12.0 |
| 4 | 36 | 48 | 1 7/8 | 1/2 | 5/8 | 6 | 14 | 6 | 5 | 5 | 6 | 14 3/8 | 11 | | | | | | | | | | | | | | 12.0 |
| 5 | 48 | 60 | 3 | 3/4 | 1 | 8 | 20 | 6 | 4 1/2 | 6 3/4 | 6 3/4 | 19 1/4 | 14 5/8 | | | | | | | | | | | | | | 20.0 |

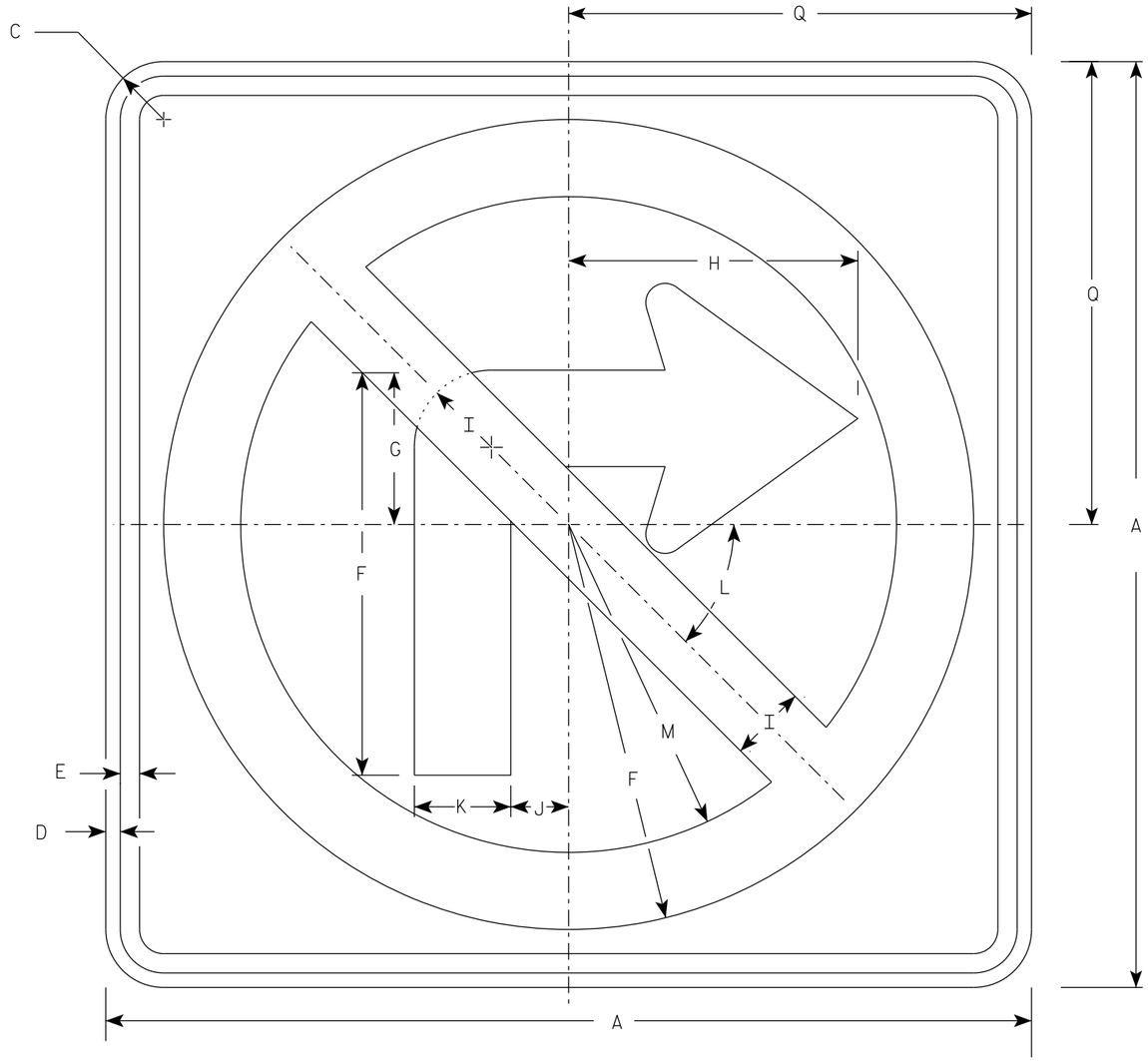
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/23 PLATE NO. R2-1.14

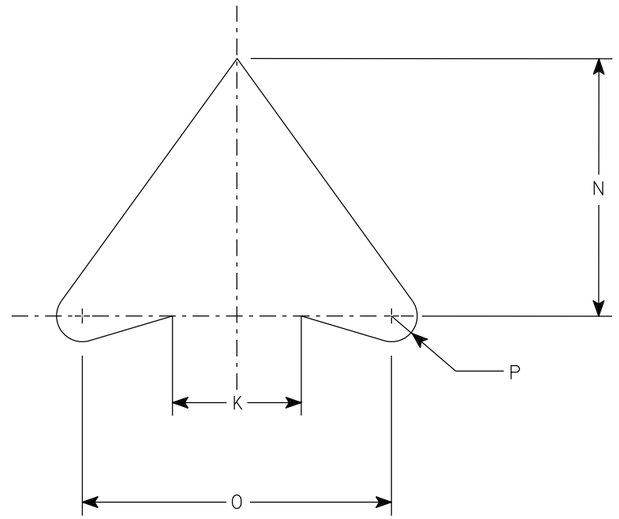
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 738 | E




R3-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See note 3
3. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24 | | 1 ½ | ⅜ | ½ | 10 ½ | 4 | 7 ½ | 2 | 1 ½ | 2 ½ | 45 | 8 ½ | 5 | 6 | ½ | 12 | | | | | | | | | | 4.0 |
| 2S | 24 | | 1 ½ | ⅜ | ½ | 10 ½ | 4 | 7 ½ | 2 | 1 ½ | 2 ½ | 45° | 8 ½ | 5 | 6 | ½ | 12 | | | | | | | | | | 4.0 |
| 2M | 36 | | 2 ¼ | ⅝ | ¾ | 15 ¾ | 6 | 11 ¼ | 3 | 2 ¼ | 3 ¾ | 45 | 12 ¾ | 7 ½ | 9 | ¾ | 18 | | | | | | | | | | 9.0 |
| 3 | 36 | | 2 ¼ | ⅝ | ¾ | 15 ¾ | 6 | 11 ¼ | 3 | 2 ¼ | 3 ¾ | 45 | 12 ¾ | 7 ½ | 9 | ¾ | 18 | | | | | | | | | | 9.0 |
| 4 | 36 | | 2 ¼ | ⅝ | ¾ | 15 ¾ | 6 | 11 ¼ | 3 | 2 ¼ | 3 ¾ | 45° | 12 ¾ | 7 ½ | 9 | ¾ | 18 | | | | | | | | | | 9.0 |
| 5 | 48 | | 2 ¼ | ¾ | 1 | 21 | 8 | 15 | 4 | 3 | 5 | 45° | 17 | 10 | 12 | 1 | 24 | | | | | | | | | | 16.0 |

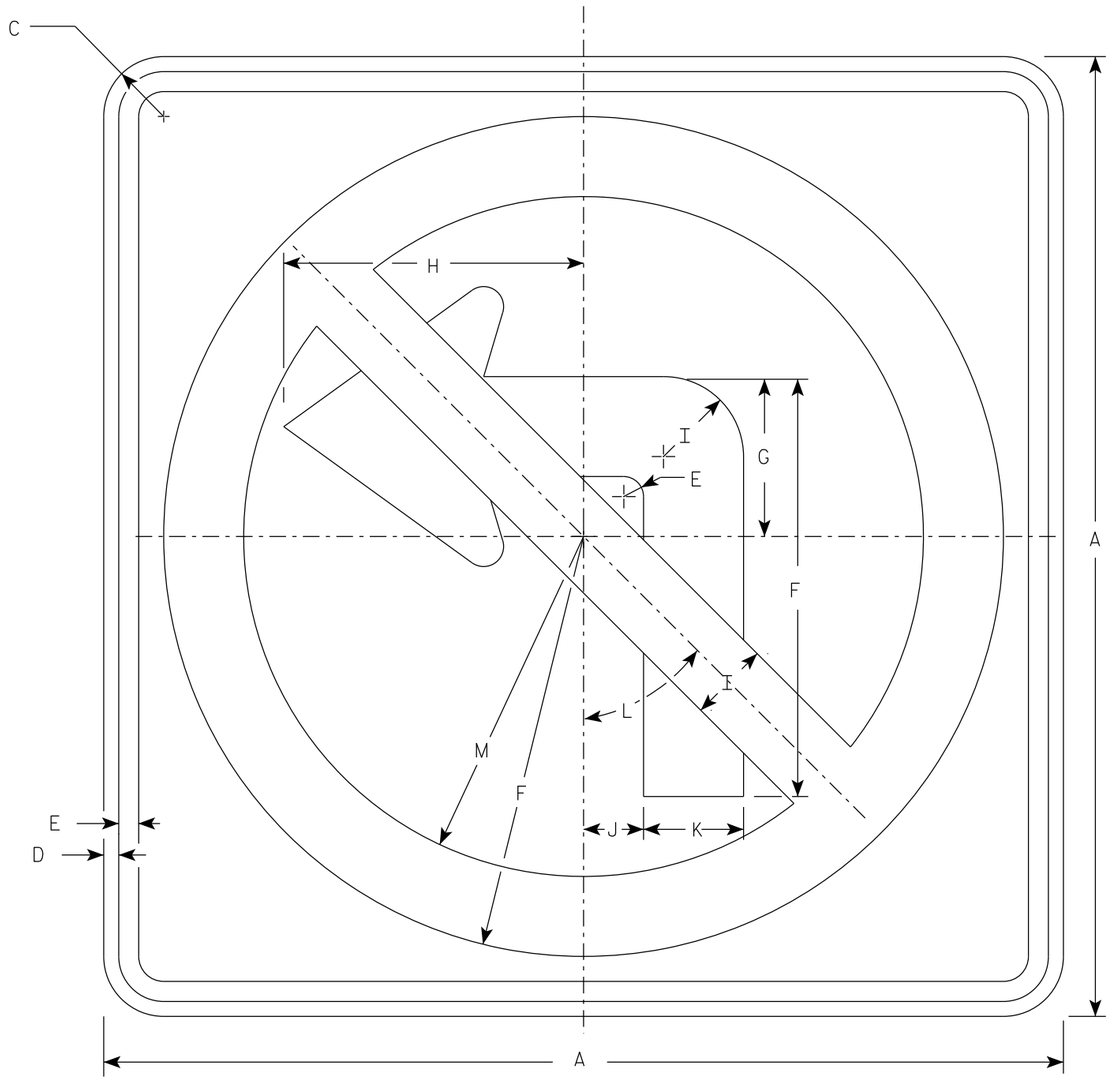
STANDARD SIGN
R3-1

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 2/2/23 PLATE NO. R3-1.6

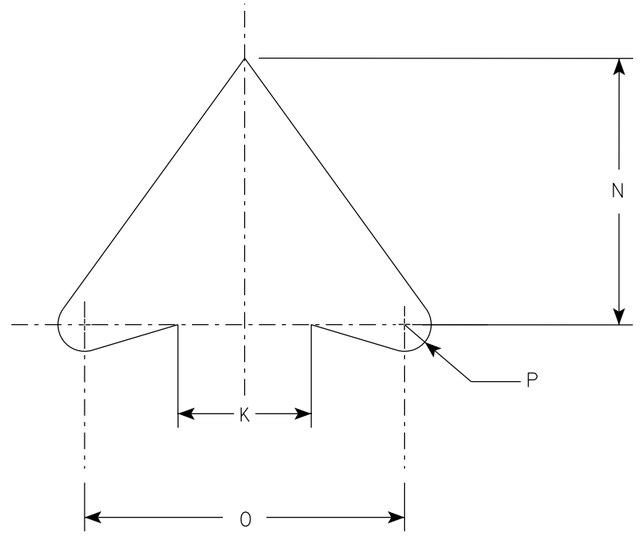
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 739 | E




R3-2

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See note 3
3. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24 | | 1 ½ | ⅜ | ½ | 10 ½ | 4 | 7 ½ | 2 | 1 ½ | 2 ½ | 45° | 8 ½ | 5 | 6 | ½ | | | | | | | | | | | 4.0 |
| 2S | 24 | | 1 ½ | ⅜ | ½ | 10 ½ | 4 | 7 ½ | 2 | 1 ½ | 2 ½ | 45° | 8 ½ | 5 | 6 | ½ | | | | | | | | | | | 4.0 |
| 2M | 36 | | 2 ¼ | ⅝ | ¾ | 15 ¾ | 6 | 11 ¼ | 3 | 2 ¼ | 3 ¾ | 45° | 12 ¾ | 7 ½ | 9 | ¾ | | | | | | | | | | | 9.0 |
| 3 | 36 | | 2 ¼ | ⅝ | ¾ | 15 ¾ | 6 | 11 ¼ | 3 | 2 ¼ | 3 ¾ | 45° | 12 ¾ | 7 ½ | 9 | ¾ | | | | | | | | | | | 9.0 |
| 4 | 36 | | 2 ¼ | ⅝ | ¾ | 15 ¾ | 6 | 11 ¼ | 3 | 2 ¼ | 3 ¾ | 45° | 12 ¾ | 7 ½ | 9 | ¾ | | | | | | | | | | | 9.0 |
| 5 | 48 | | 2 ¼ | ¾ | 1 | 21 | 8 | 15 | 4 | 3 | 5 | 45° | 17 | 10 | 12 | 1 | | | | | | | | | | | 16.0 |

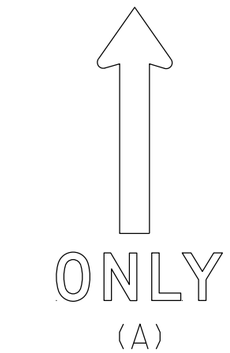
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

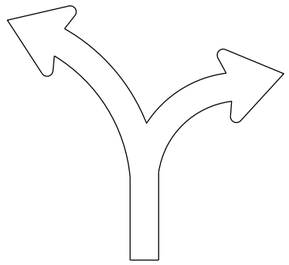
DATE 2/2/23 PLATE NO. R3-2.11

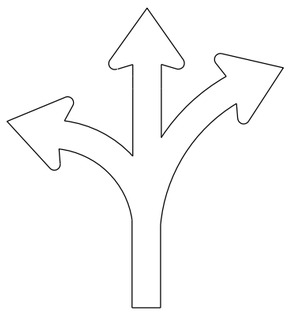
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 740 | E

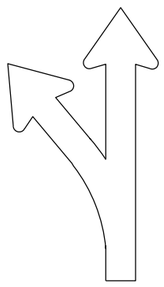


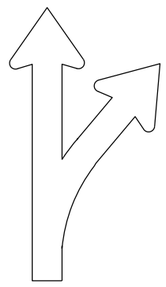
(A)

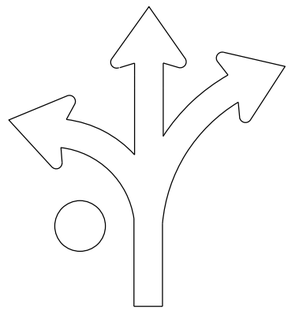
(B)

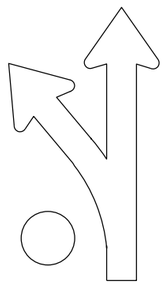

(C)

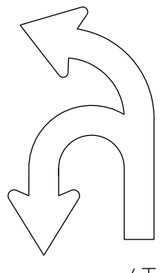

(D)

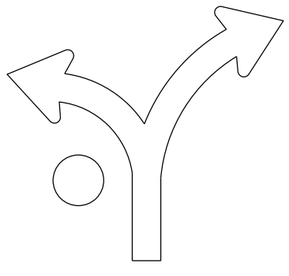

(E)

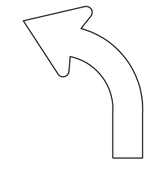

(F)


(G)

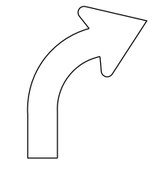

(H)


(I)


(J)



(L)



(R)

NOTES

1. Sigs are Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Use appropriate Letter for Sign Code
   Each letter added makes sign wider. Example R3-8EAR
5. Square footage of sign varies by letters

| | | |
|---|---|---|
| 1 | Letter = | 3.75 sq ft for Size 2 |
| | | 6.0 sq ft for Size 3 |
| | | 10.0 sq ft for Size 4 or 5 |
| 2 | Letters = | 7.5 sq ft for Size 2 |
| | | 12.0 sq ft for Size 3 |
| | | 20.0 sq ft for Size 4 or 5 |
| 3 | Letters = | 11.25 sq ft for Size 2 |
| | | 18.0 sq ft for Size 3 |
| | | 30.0 sq ft for Size 4 or 5 |
| 4 | Letters = | 15.0 sq ft for Size 2 |
| | | 24.0 sq ft for Size 3 |
| | | 40.0 sq ft for Size 4 or 5 |
| 5 | Letters = | 18.75 sq ft for Size 2 |
| | | 30.0 sq ft for Size 3 |
| | | 50.0 sq ft for Size 4 or 5 |
| 6 | Letters = | 22.5 sq ft for Size 2 |
| | | 36.0 sq ft for Size 3 |
| | | 60.0 sq ft for Size 4 or 5 |

6. When letters C,D,G,J are used on the Left or Right end of the sign the Sq. Ft. changes.
   Add the amounts when these letters are used:
   1.25 sq ft for Size 2
   1.5 sq ft for Size 3
   2.0 sq ft for Size 4 or 5

STANDARD SIGN
R3-8 Series

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

7

7

PROJECT NO:

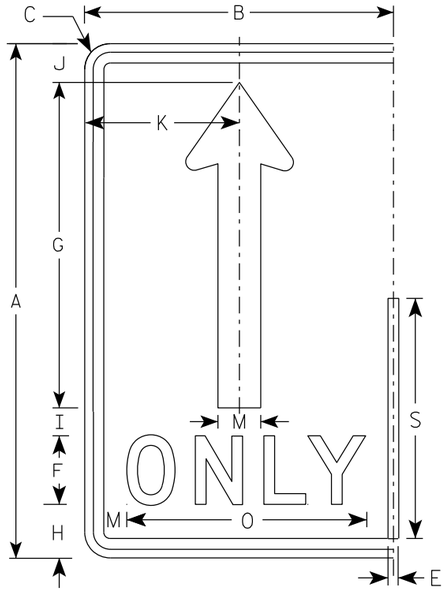
SHEET NO: 741 E

FILE NAME : C:\CAEfiles\Projects\stdplate_R38.dgn PLOT DATE : 14-FEB 2023 3:01 PLOT BY : mscj9h PLOT NAME :

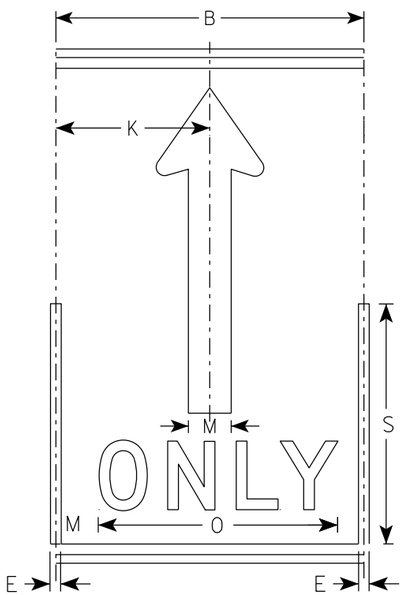
WISDOT/CADDS SHEET 42

NOTES

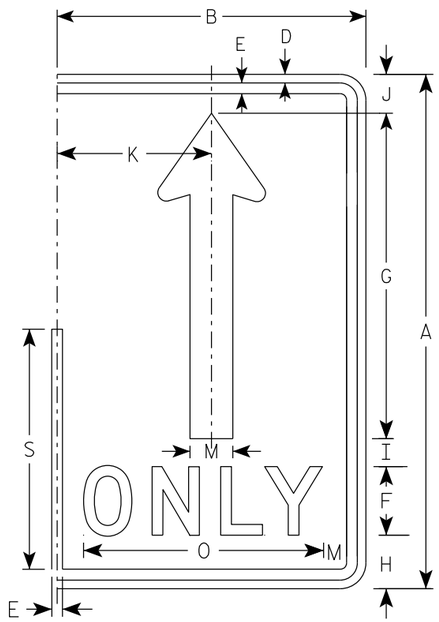
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



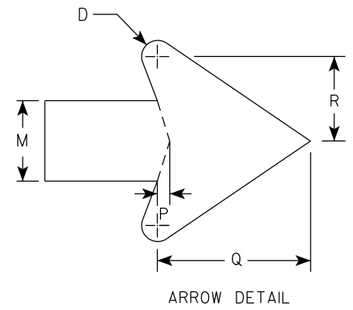

(A)




(A)




(A)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 18 | 1 1/2 | 1/2 | 5/8 | 4 | 19 | 3 1/8 | 1 5/8 | 2 1/4 | 9 | | 2 1/2 | | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 1/2 | 1/2 | 5/8 | 4 | 19 | 3 1/8 | 1 5/8 | 2 1/4 | 9 | | 2 1/2 | | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | | | | | | | | 3.75 |
| 3 | 36 | 24 | 1 1/2 | 1/2 | 5/8 | 5 | 22 3/4 | 3 3/4 | 1 3/4 | 2 3/4 | 12 | | 3 | | 17 5/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | | | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 30 3/8 | 5 1/8 | 2 7/8 | 3 5/8 | 15 | | 4 | | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 30 3/8 | 5 1/8 | 2 7/8 | 3 5/8 | 15 | | 4 | | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | | | | | | | 10.0 |

# STANDARD SIGN
## R3-8 (A) Arrow

WISCONSIN DEPT OF TRANSPORTATION

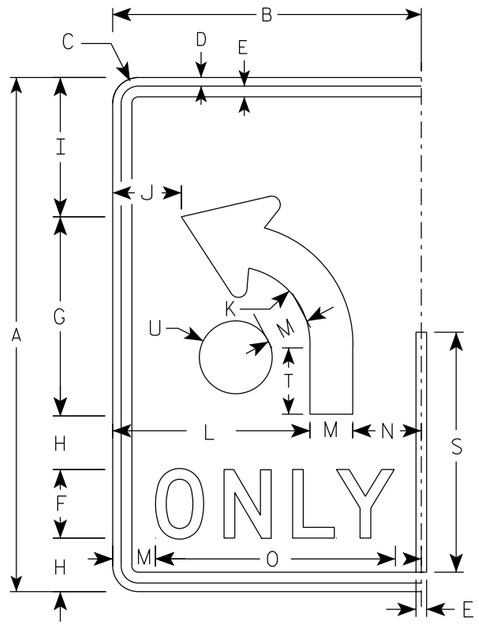
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

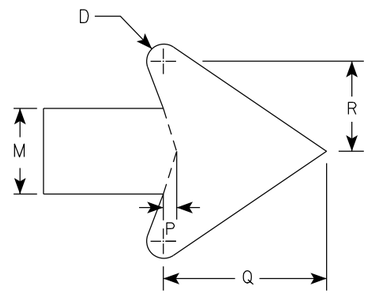
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 742 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
   Message Series - D




(B)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 18 | 1 1/2 | 1/2 | 5/8 | 4 | 11 5/8 | 3 1/8 | 8 1/8 | 4 | 4 1/2 | 11 1/2 | 2 1/2 | 4 | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | 3 7/8 | 2 1/8 | | | | | | 3.75 |
| 2M | 30 | 18 | 1 1/2 | 1/2 | 5/8 | 4 | 11 5/8 | 3 1/8 | 8 1/8 | 4 | 4 1/2 | 11 1/2 | 2 1/2 | 4 | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | 3 7/8 | 2 1/8 | | | | | | 3.75 |
| 3 | 36 | 24 | 1 1/2 | 1/2 | 5/8 | 5 | 14 | 3 1/2 | 9 3/4 | 6 | 5 3/8 | 15 | 3 | 6 | 17 5/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | 4 5/8 | 2 1/2 | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 18 5/8 | 5 1/8 | 13 1/8 | 6 1/8 | 7 1/4 | 18 | 4 | 8 | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 6 1/4 | 3 3/8 | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 18 5/8 | 5 1/8 | 13 1/8 | 6 1/8 | 7 1/4 | 18 | 4 | 8 | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 6 1/4 | 3 3/8 | | | | | | 10.0 |

STANDARD SIGN

R3-8 (B) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

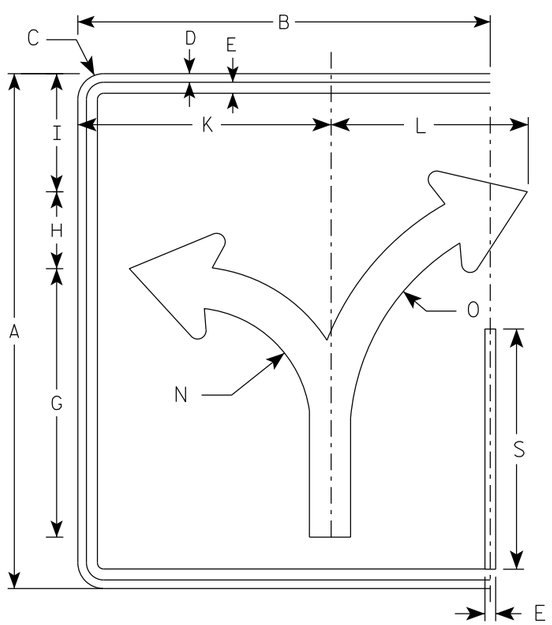
DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

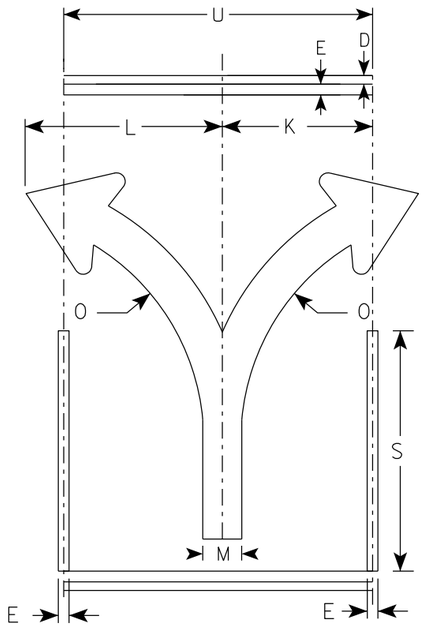
SHEET NO: 743 E

NOTES

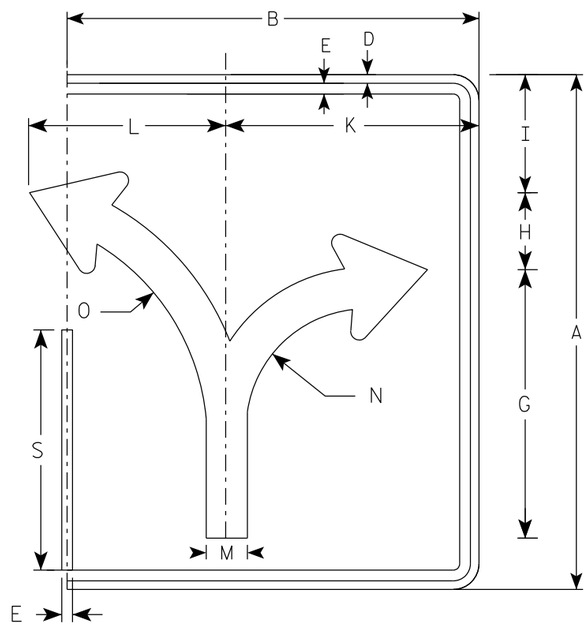
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



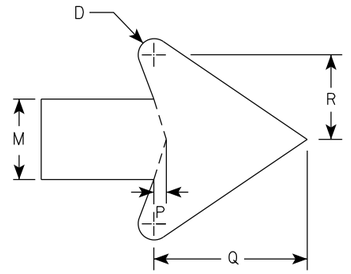

(C)




(C)




(C)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | ENDS Area sq. ft. | MIDDLE Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 24 | 1 1/2 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 6 7/8 | | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 18 | | | | | | 5.0 | 3.75 |
| 2M | 30 | 24 | 1 1/2 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 6 7/8 | | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 18 | | | | | | 5.0 | 3.75 |
| 3 | 36 | 30 | 1 1/2 | 1/2 | 5/8 | | 18 3/4 | 5 1/2 | 8 1/4 | | 17 1/4 | 17 1/4 | 2 7/8 | 8 3/8 | 16 | 1/2 | 5 1/2 | 3 | 16 3/4 | | 24 | | | | | | 7.5 | 6.0 |
| 4 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 11 | | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 30 | | | | | | 12.0 | 10.0 |
| 5 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 11 | | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 30 | | | | | | 12.0 | 10.0 |

STANDARD SIGN
R3-8 (C) Arrow

WISCONSIN DEPT OF TRANSPORTATION

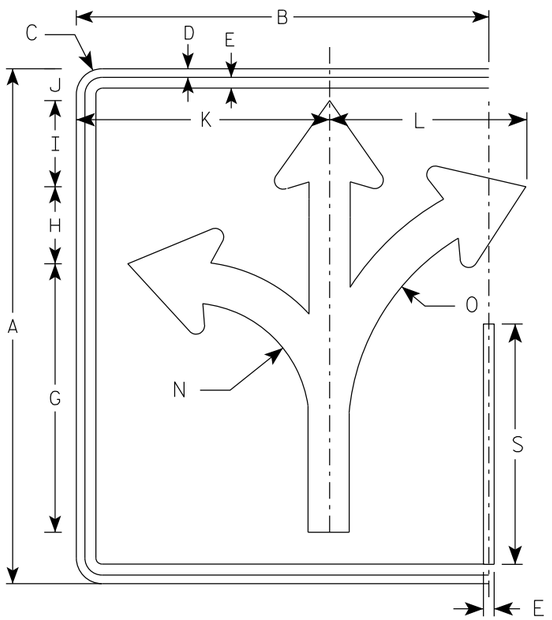
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

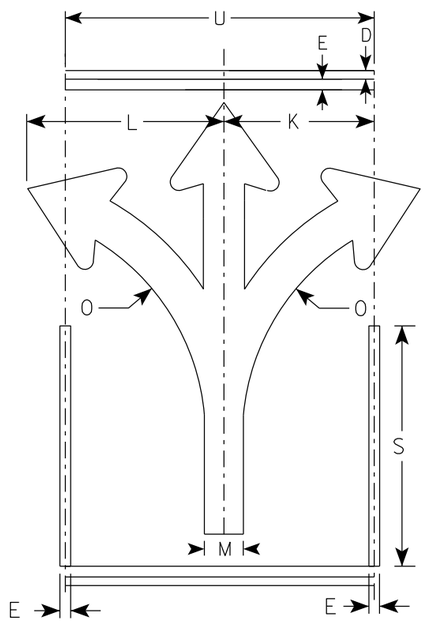
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 744 | E

NOTES

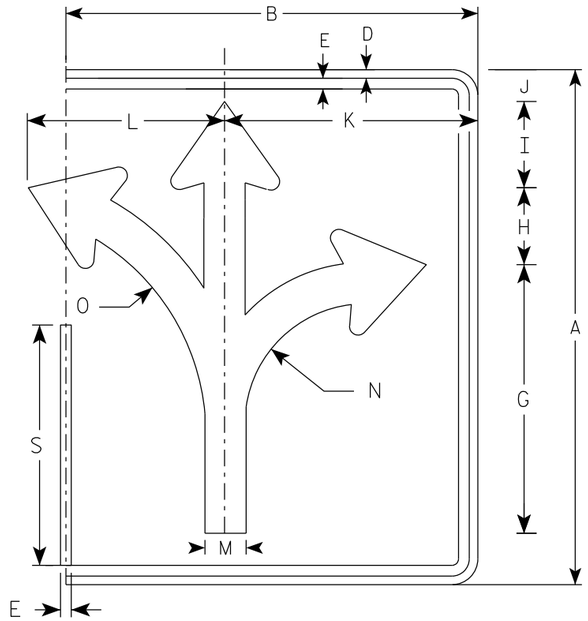
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



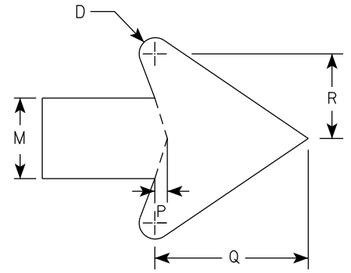

(D)




(D)




(D)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | ENDS Area sq. ft. | MIDDLE Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 24 | 1 1/2 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 5 | 1 7/8 | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 18 | | | | | | 5.0 | 3.75 |
| 2M | 30 | 24 | 1 1/2 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 5 | 1 7/8 | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 18 | | | | | | 5.0 | 3.75 |
| 3 | 36 | 30 | 1 1/2 | 1/2 | 5/8 | | 18 3/4 | 5 1/2 | 6 | 2 1/4 | 17 1/4 | 17 1/4 | 2 7/8 | 8 3/8 | 16 | 1/2 | 5 1/2 | 3 | 16 3/4 | | 24 | | | | | | 7.5 | 6.0 |
| 4 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 7 7/8 | 3 1/8 | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 30 | | | | | | 12.0 | 10.0 |
| 5 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 7 7/8 | 3 1/8 | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 30 | | | | | | 12.0 | 10.0 |

STANDARD SIGN
R3-8 (D) Arrow

WISCONSIN DEPT OF TRANSPORTATION

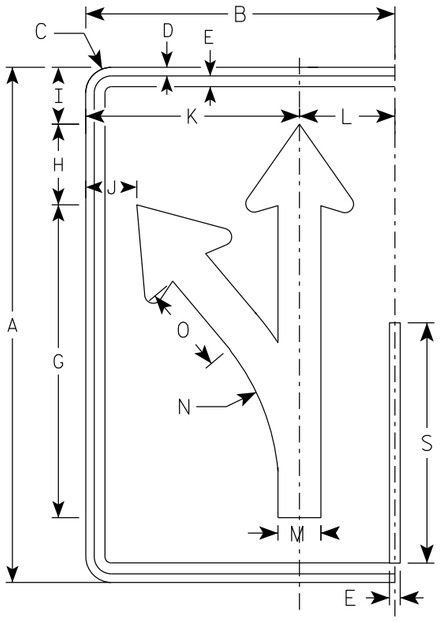
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

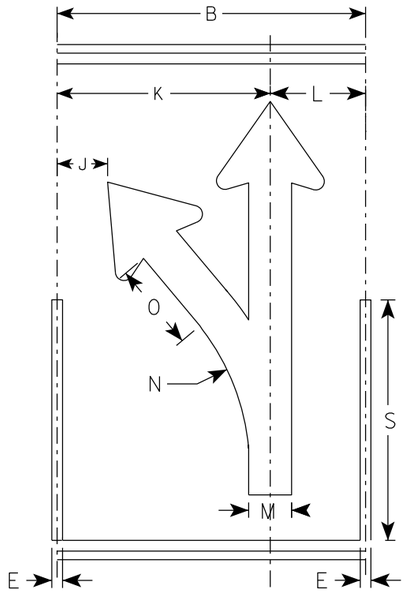
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 745 | E

## NOTES

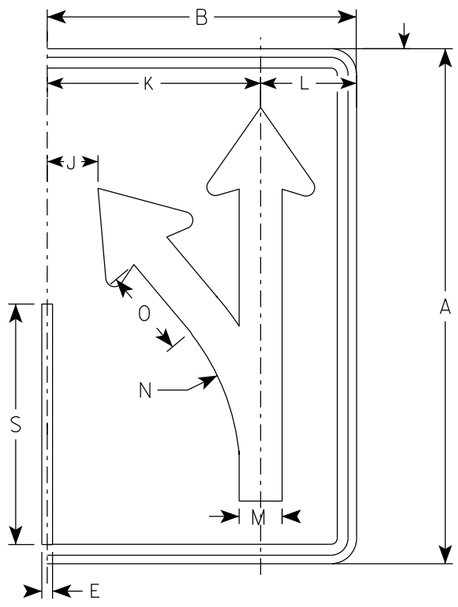
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



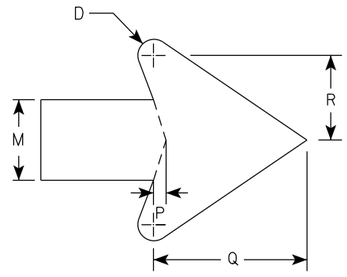

(E)




(E)




(E)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 18 | 1 1/2 | 1/2 | 5/8 | | 18 1/4 | 4 3/4 | 3 1/4 | 3 | 12 1/2 | 5 1/2 | 2 1/2 | 13 1/4 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 1/2 | 1/2 | 5/8 | | 18 1/4 | 4 3/4 | 3 1/4 | 3 | 12 1/2 | 5 1/2 | 2 1/2 | 13 1/4 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | | | | | | | | 3.75 |
| 3 | 36 | 24 | 1 1/2 | 1/2 | 5/8 | | 21 7/8 | 5 5/8 | 4 | 4 7/8 | 16 1/8 | 7 3/4 | 3 | 15 7/8 | 6 1/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | | | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 7 1/2 | 5 1/4 | 5 3/8 | 20 1/2 | 9 1/2 | 4 | 21 1/4 | 8 1/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 7 1/2 | 5 1/4 | 5 3/8 | 20 1/2 | 9 1/2 | 4 | 21 1/4 | 8 1/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | | | | | | | 10.0 |

# STANDARD SIGN
# R3-8 (E) Arrow

WISCONSIN DEPT OF TRANSPORTATION

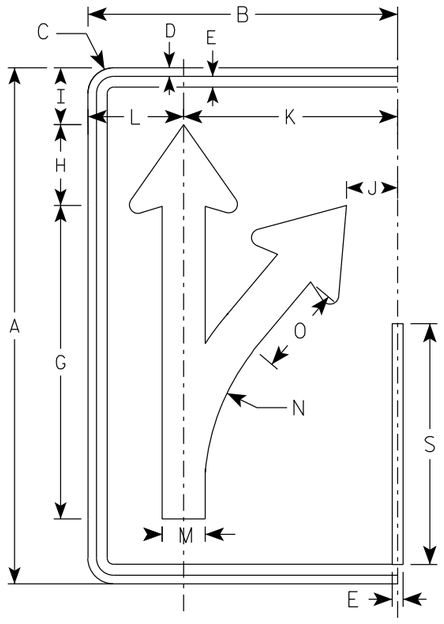
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

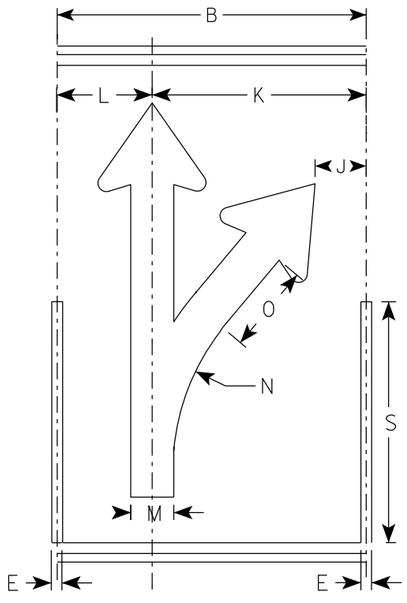
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 746 | E

NOTES

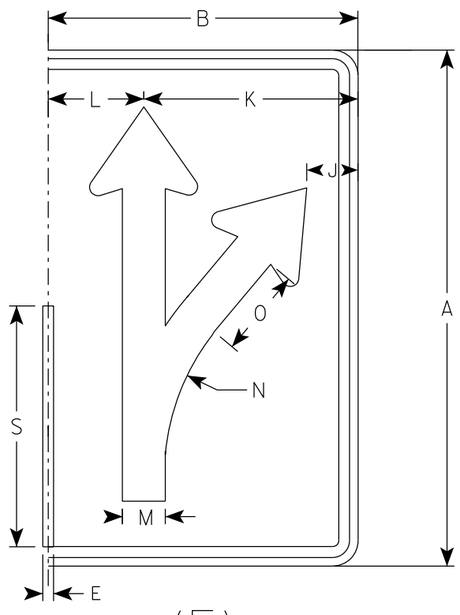
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



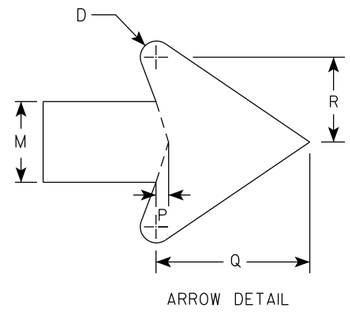

(F)




(F)




(F)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 18 | 1 1/2 | 1/2 | 5/8 | | 18 1/4 | 4 3/4 | 3 1/4 | 3 | 12 1/2 | 5 1/2 | 2 1/2 | 13 1/4 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 1/2 | 1/2 | 5/8 | | 18 1/4 | 4 3/4 | 3 1/4 | 3 | 12 1/2 | 5 1/2 | 2 1/2 | 13 1/4 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | | | | | | | | 3.75 |
| 3 | 36 | 24 | 1 1/2 | 1/2 | 5/8 | | 21 7/8 | 5 5/8 | 4 | 4 7/8 | 16 1/8 | 7 3/4 | 3 | 15 7/8 | 6 1/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | | | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 7 1/2 | 5 1/4 | 5 3/8 | 20 1/2 | 9 1/2 | 4 | 21 1/4 | 8 1/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 7 1/2 | 5 1/4 | 5 3/8 | 20 1/2 | 9 1/2 | 4 | 21 1/4 | 8 1/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | | | | | | | 10.0 |

STANDARD SIGN
R3-8 (F) Arrow

*WISCONSIN DEPT OF TRANSPORTATION*

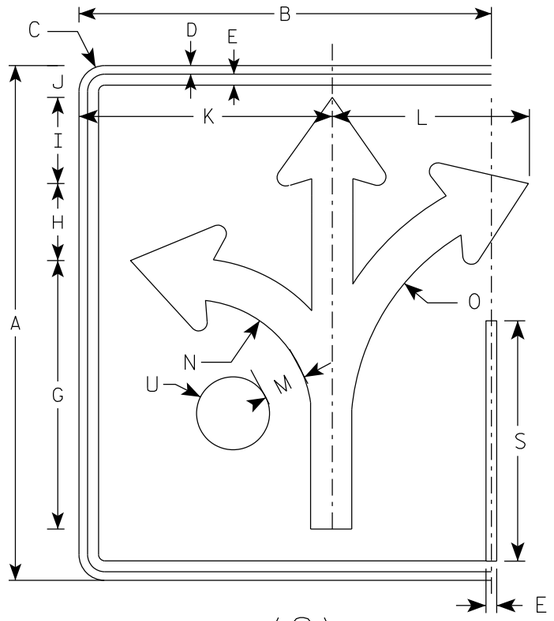
APPROVED Matthew R Rauch
*For* State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

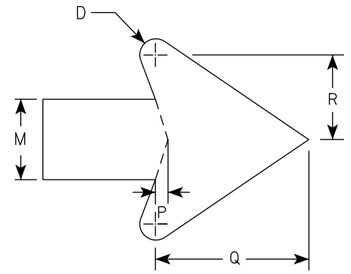
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 747 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None




(G)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 24 | 1 1/2 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 5 | 1 7/8 | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 2 1/8 | | | | | | 5.0 |
| 2M | 30 | 24 | 1 1/2 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 5 | 1 7/8 | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 2 1/8 | | | | | | 5.0 |
| 3 | 36 | 30 | 1 1/2 | 1/2 | 5/8 | | 18 3/4 | 5 1/2 | 6 | 3 1/8 | 17 1/4 | 17 1/4 | 2 7/8 | 8 3/8 | 16 | 1/2 | 5 1/2 | 3 | 16 3/4 | | 2 1/2 | | | | | | 7.5 |
| 4 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 7 7/8 | 3 1/8 | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 3 3/8 | | | | | | 12.0 |
| 5 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 7 7/8 | 3 1/8 | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 3 3/8 | | | | | | 12.0 |

STANDARD SIGN
R3-8 (G) Arrow

WISCONSIN DEPT OF TRANSPORTATION

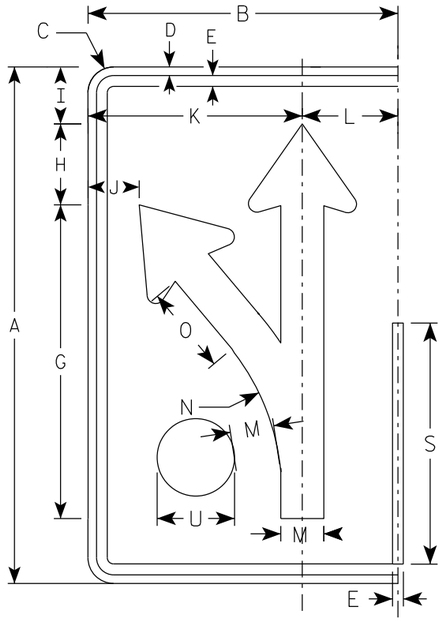
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

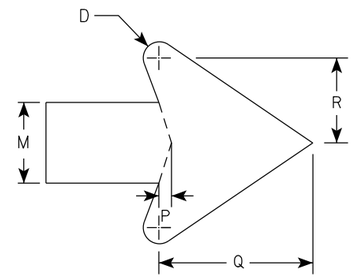
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 748 | E |
|---|---|---|---|---|---|

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None




(H)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 18 | 1 1/2 | 1/2 | 5/8 | | 18 1/4 | 4 3/4 | 3 1/4 | 3 | 12 1/2 | 5 1/2 | 2 1/2 | 13 1/4 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | | 2 1/8 | | | | | | 3.75 |
| 2M | 30 | 18 | 1 1/2 | 1/2 | 5/8 | | 18 1/4 | 4 3/4 | 3 1/4 | 3 | 12 1/2 | 5 1/2 | 2 1/2 | 13 1/4 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | | 2 1/8 | | | | | | 3.75 |
| 3 | 36 | 24 | 1 1/2 | 1/2 | 5/8 | | 21 7/8 | 5 5/8 | 4 | 4 7/8 | 16 1/8 | 7 3/4 | 3 | 15 7/8 | 6 1/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | | 2 1/2 | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 7 1/2 | 5 1/4 | 5 3/8 | 20 1/2 | 9 1/2 | 4 | 21 1/4 | 8 1/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | 3 3/8 | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 7 1/2 | 5 1/4 | 5 3/8 | 20 1/2 | 9 1/2 | 4 | 21 1/4 | 8 1/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | 3 3/8 | | | | | | 10.0 |

STANDARD SIGN
R3-8 (H) Arrow

WISCONSIN DEPT OF TRANSPORTATION

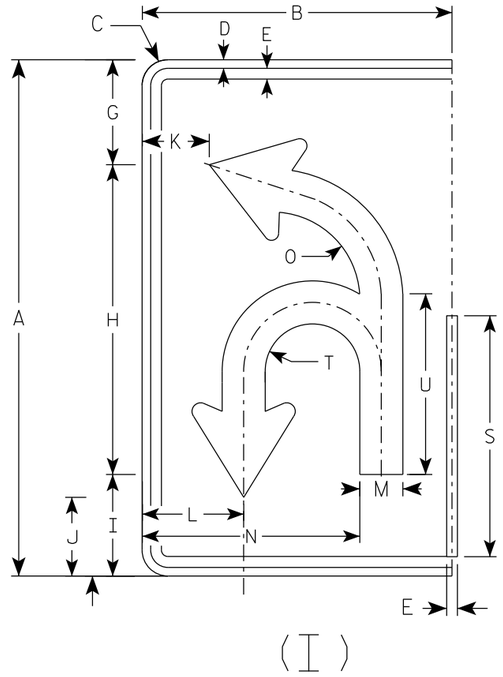
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

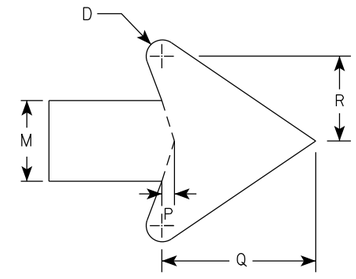
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 749 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None




(I)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 18 | 1 1/2 | 1/2 | 5/8 | | 6 1/8 | 18 | 5 7/8 | 4 5/8 | 3 7/8 | 5 7/8 | 2 1/2 | 12 5/8 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | 2 3/4 | 10 1/2 | | | | | | 3.75 |
| 2M | 30 | 18 | 1 1/2 | 1/2 | 5/8 | | 6 1/8 | 18 | 5 7/8 | 4 5/8 | 3 7/8 | 5 7/8 | 2 1/2 | 12 5/8 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | 2 3/4 | 10 1/2 | | | | | | 3.75 |
| 3 | 36 | 24 | 1 1/2 | 1/2 | 5/8 | | 21 7/8 | 21 5/8 | 7 1/8 | 5 1/2 | 5 7/8 | 8 1/4 | 3 | 16 3/8 | 6 1/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | 3 1/4 | 12 5/8 | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 28 3/4 | 9 3/8 | 7 1/4 | 6 7/8 | 10 | 4 | 20 7/8 | 8 1/8 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 4 3/8 | 16 3/4 | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 28 3/4 | 9 3/8 | 7 1/4 | 6 7/8 | 10 | 4 | 20 7/8 | 8 1/8 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 4 3/8 | 16 3/4 | | | | | | 10.0 |

STANDARD SIGN
R3-8 (I) Arrow

WISCONSIN DEPT OF TRANSPORTATION

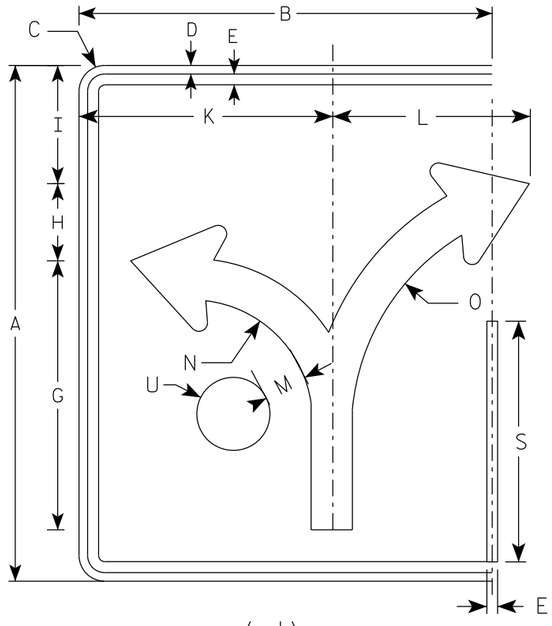
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

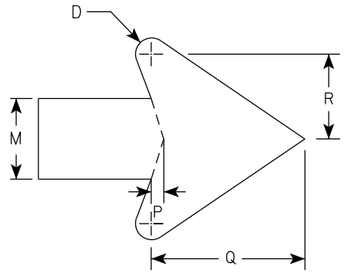
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 750 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None




(J)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 24 | 1 1/2 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 6 7/8 | | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 2 1/8 | | | | | | 5.0 |
| 2M | 30 | 24 | 1 1/2 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 6 7/8 | | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 2 1/8 | | | | | | 5.0 |
| 3 | 36 | 30 | 1 1/2 | 1/2 | 5/8 | | 18 3/4 | 5 1/2 | 8 1/4 | | 17 1/4 | 17 1/4 | 2 7/8 | 8 3/8 | 16 | 1/2 | 5 1/2 | 3 | 16 3/4 | | 2 1/2 | | | | | | 7.5 |
| 4 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 11 | | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 3 3/8 | | | | | | 12.0 |
| 5 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 11 | | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 3 3/8 | | | | | | 12.0 |

STANDARD SIGN
R3-8 (J) Arrow

WISCONSIN DEPT OF TRANSPORTATION

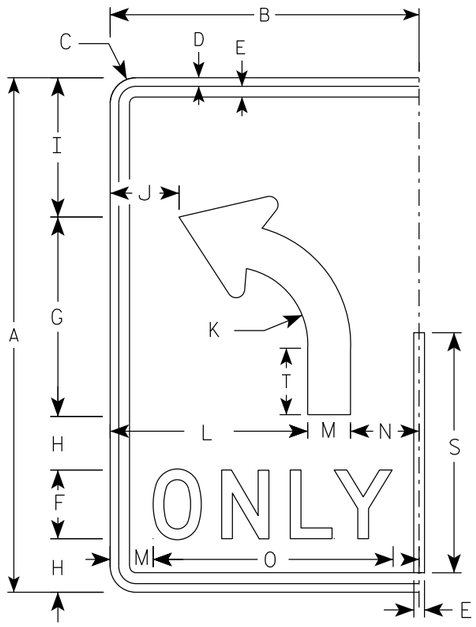
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

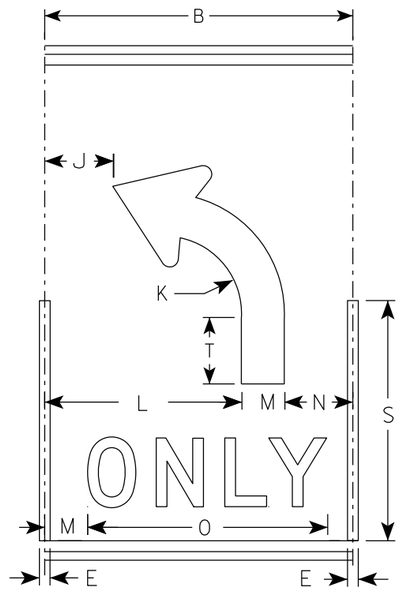
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 751 | E

NOTES

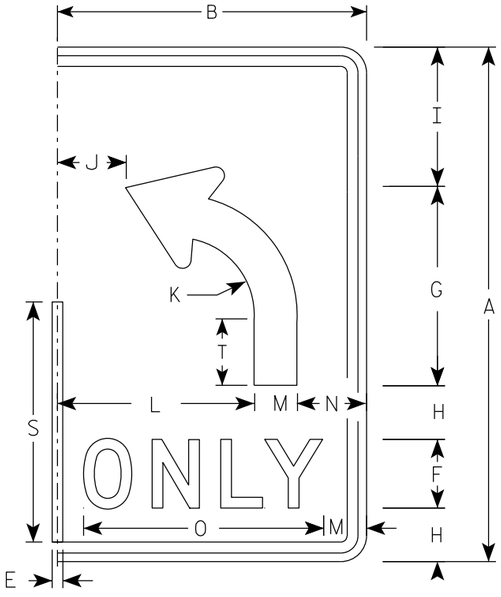
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



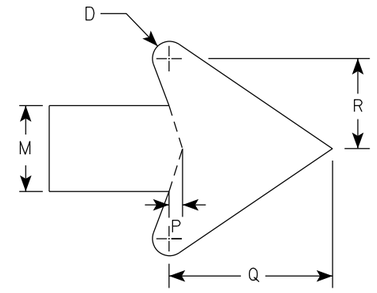

(L)




(L)




(L)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 18 | 1 ½ | ½ | ⅝ | 4 | 11 ⅝ | 3 ⅛ | 8 ⅛ | 4 | 4 ½ | 11 ½ | 2 ½ | 4 | 14 | ⅜ | 4 ¾ | 2 ⅝ | 14 | 3 ⅞ | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 ½ | ½ | ⅝ | 4 | 11 ⅝ | 3 ⅛ | 8 ⅛ | 4 | 4 ½ | 11 ½ | 2 ½ | 4 | 14 | ⅜ | 4 ¾ | 2 ⅝ | 14 | 3 ⅞ | | | | | | | 3.75 |
| 3 | 36 | 24 | 1 ½ | ½ | ⅝ | 5 | 14 | 3 ½ | 9 ¾ | 6 | 5 ⅜ | 15 | 3 | 6 | 17 ⅝ | ½ | 5 ¾ | 3 ⅛ | 16 ¾ | 4 ⅝ | | | | | | | 6.0 |
| 4 | 48 | 30 | 2 ¼ | ¾ | 1 | 6 | 18 ⅝ | 5 ⅛ | 13 ⅛ | 6 ⅛ | 7 ¼ | 18 | 4 | 8 | 21 ¾ | ⅝ | 7 ⅝ | 4 ¼ | 22 ⅜ | 6 ¼ | | | | | | | 10.0 |
| 5 | 48 | 30 | 2 ¼ | ¾ | 1 | 6 | 18 ⅝ | 5 ⅛ | 13 ⅛ | 6 ⅛ | 7 ¼ | 18 | 4 | 8 | 21 ¾ | ⅝ | 7 ⅝ | 4 ¼ | 22 ⅜ | 6 ¼ | | | | | | | 10.0 |

STANDARD SIGN

R3-8 (L) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

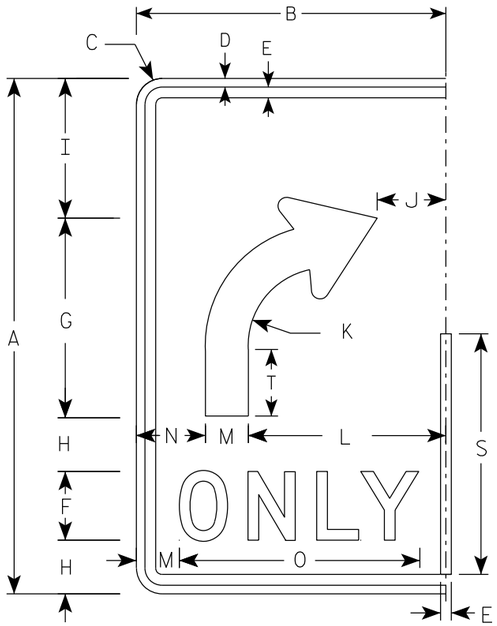
DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

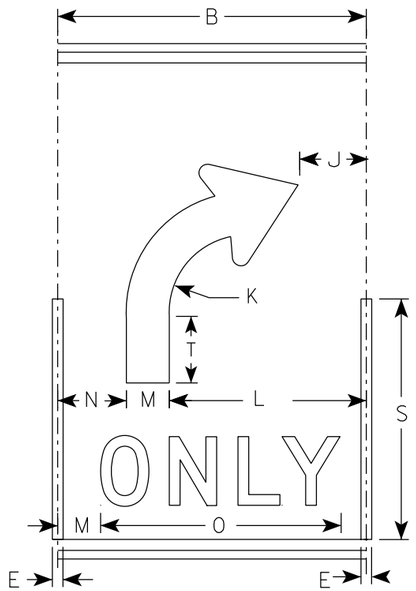
SHEET NO: 752 E

NOTES

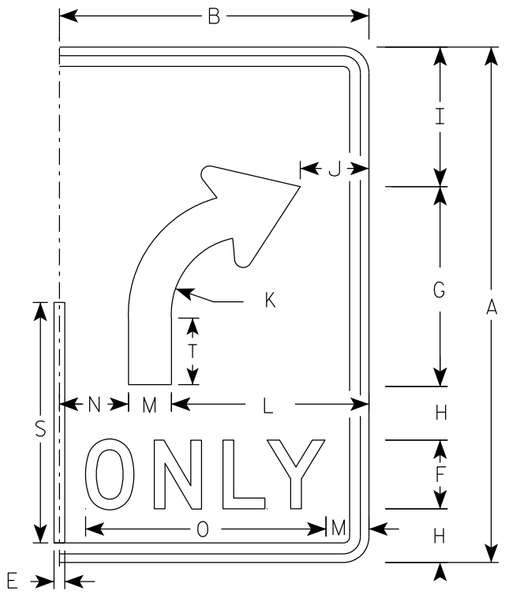
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



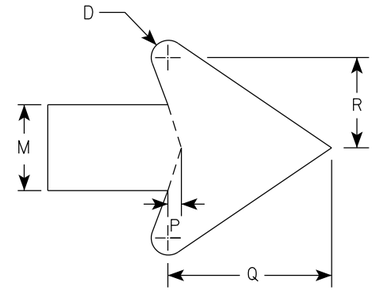

(R)




(R)




(R)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 18 | 1 1/2 | 1/2 | 5/8 | 4 | 11 5/8 | 3 1/8 | 8 1/8 | 4 | 4 1/2 | 11 1/2 | 2 1/2 | 4 | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | 3 7/8 | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 1/2 | 1/2 | 5/8 | 4 | 11 5/8 | 3 1/8 | 8 1/8 | 4 | 4 1/2 | 11 1/2 | 2 1/2 | 4 | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | 3 7/8 | | | | | | | 3.75 |
| 3 | 36 | 24 | 1 1/2 | 1/2 | 5/8 | 5 | 14 | 3 1/2 | 9 3/4 | 6 | 5 3/8 | 15 | 3 | 6 | 17 5/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | 4 5/8 | | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 18 5/8 | 5 1/8 | 13 1/8 | 6 1/8 | 7 1/4 | 18 | 4 | 8 | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 6 1/4 | | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 18 5/8 | 5 1/8 | 13 1/8 | 6 1/8 | 7 1/4 | 18 | 4 | 8 | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 6 1/4 | | | | | | | 10.0 |

STANDARD SIGN

R3-8 (R) Arrow

*WISCONSIN DEPT OF TRANSPORTATION*

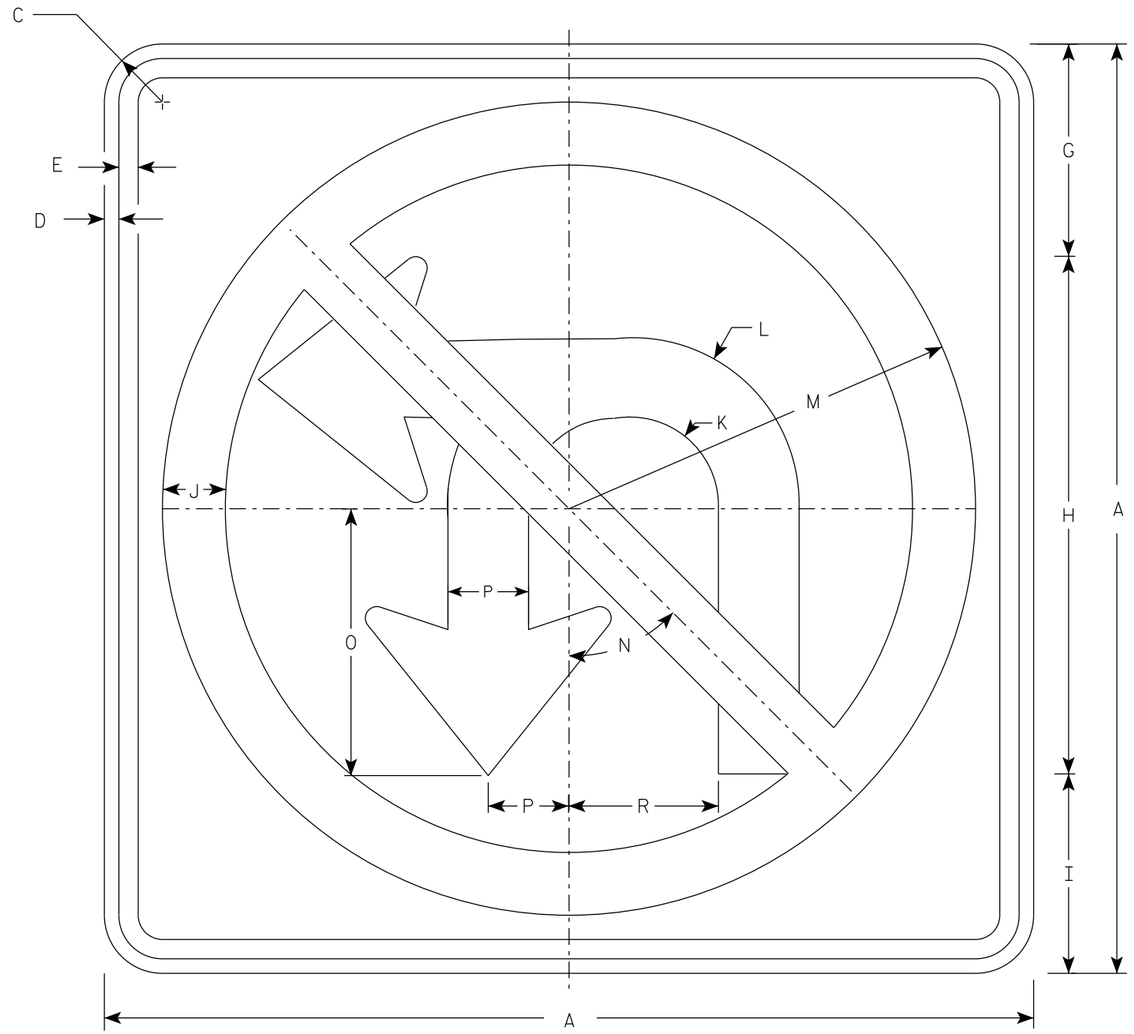
APPROVED Matthew R Rauch

for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

SHEET NO: 753 E




R3-18

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See note 3
3. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | | 1 1/2 | 3/8 | 1/2 | | 5 1/2 | 13 3/8 | 5 1/8 | 1 5/8 | 2 1/4 | 4 1/4 | 10 1/2 | 45° | 6 7/8 | 2 1/8 | | 3 7/8 | | | | | | | | | 4.0 |
| 2M | 36 | | 2 1/4 | 5/8 | 3/4 | | 8 1/4 | 20 | 7 3/4 | 2 1/2 | 3 3/8 | 6 1/2 | 15 3/4 | 45° | 10 3/8 | 3 1/8 | | 5 3/4 | | | | | | | | | 9.0 |
| 3 | 36 | | 2 1/4 | 5/8 | 3/4 | | 8 1/4 | 20 | 7 3/4 | 2 1/2 | 3 3/8 | 6 1/2 | 15 3/4 | 45 | 10 3/8 | 3 1/8 | | 5 3/4 | | | | | | | | | 9.0 |
| 4 | 36 | | 2 1/4 | 5/8 | 3/4 | | 8 1/4 | 20 | 7 3/4 | 2 1/2 | 3 3/8 | 6 1/2 | 15 3/4 | 45 | 10 3/8 | 3 1/8 | | 5 3/4 | | | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | | 11 | 26 3/4 | 10 1/4 | 3 1/4 | 4 5/8 | 8 5/8 | 21 | 45° | 13 3/4 | 4 1/8 | | 7 3/4 | | | | | | | | | 16.0 |

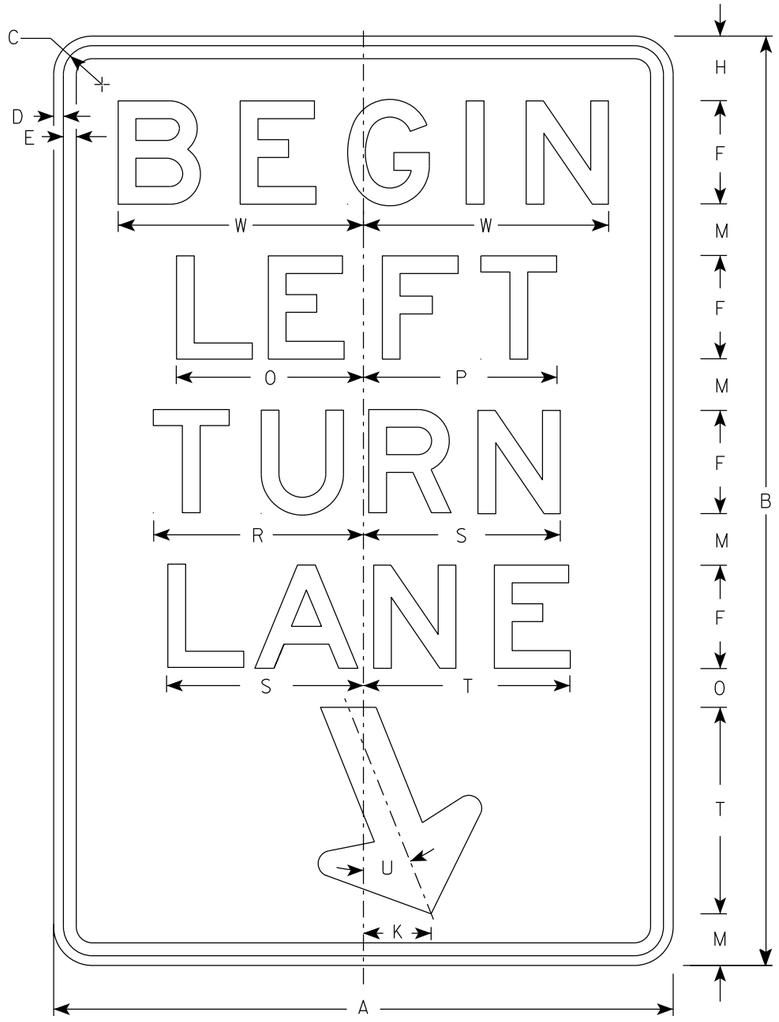
STANDARD SIGN
R3-18

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-18.3

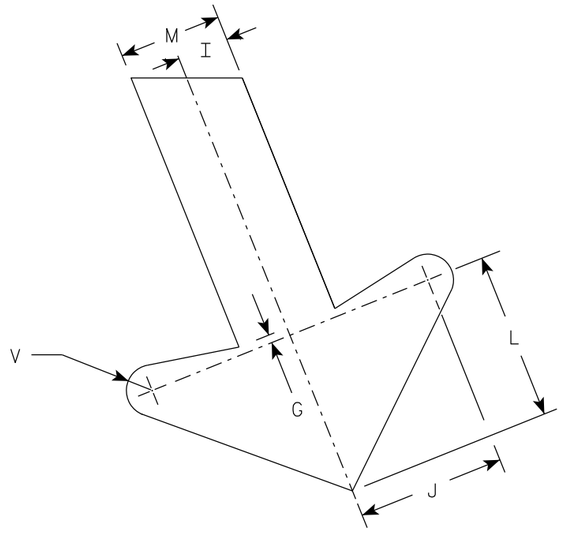
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 754 | E |
|---|---|---|---|---|---|




R3-20L

## NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 36 | 1 1/2 | 3/8 | 1/2 | 4 | 1/4 | 2 1/2 | 1 | 2 7/8 | 2 5/8 | 3 1/4 | 2 | 1 1/2 | 7 1/4 | 7 1/2 | | 8 1/8 | 7 5/8 | 8 | 22° | 1/2 | 9 1/2 | | | | 6.0 |
| 2M | 24 | 36 | 1 1/2 | 3/8 | 1/2 | 4 | 1/4 | 2 1/2 | 1 | 2 7/8 | 2 5/8 | 3 1/4 | 2 | 1 1/2 | 7 1/4 | 7 1/2 | | 8 1/8 | 7 5/8 | 8 | 22° | 1/2 | 9 1/2 | | | | 6.0 |
| 3 | 36 | 54 | 1 7/8 | 1/2 | 5/8 | 6 | 3/8 | 3 3/4 | 1 1/2 | 4 1/4 | 4 | 4 7/8 | 3 | 2 1/4 | 10 7/8 | 11 1/4 | | 12 1/4 | 11 1/2 | 12 | 22° | 3/4 | 13 1/4 | | | | 13.5 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

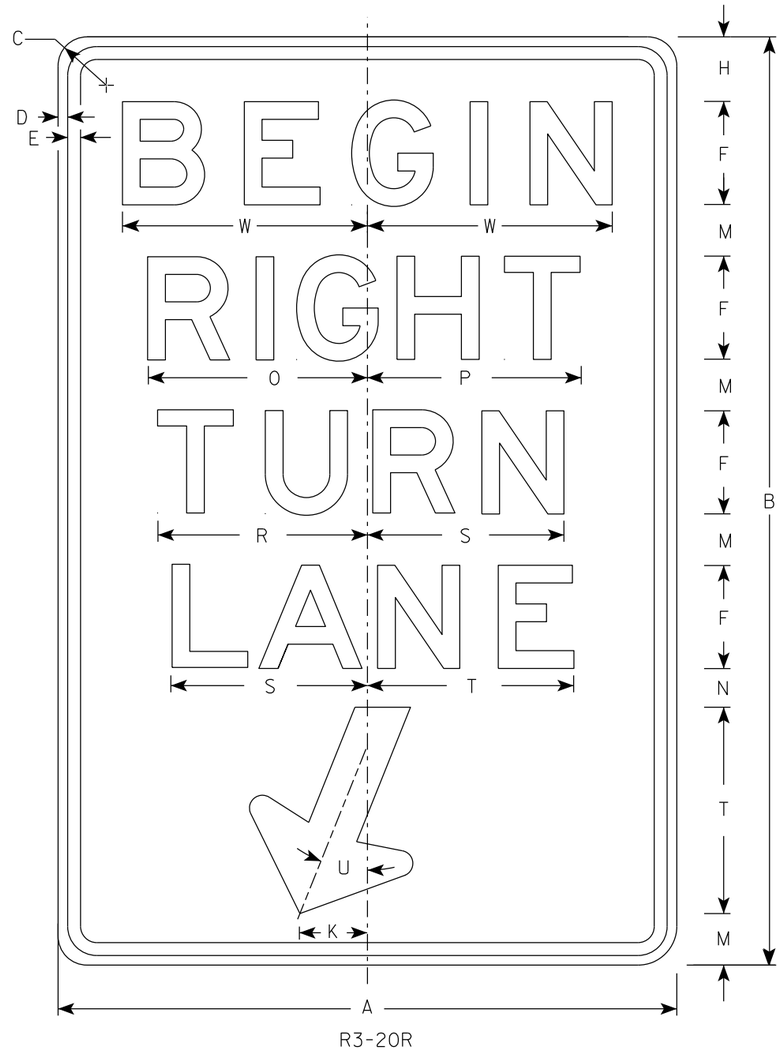
STANDARD SIGN
R3-20L

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-20L.8

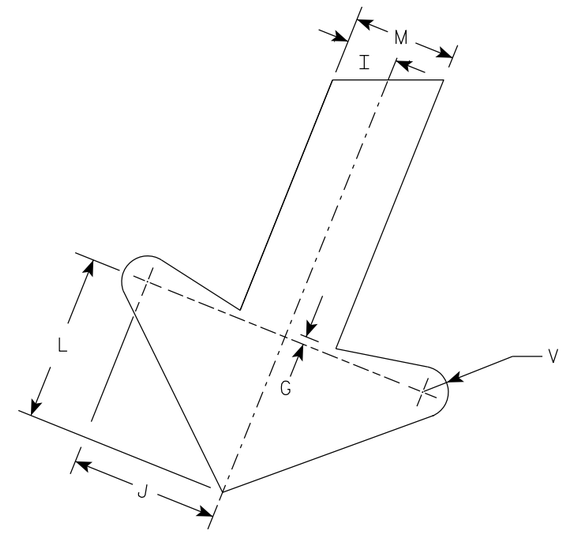
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 755 | E




R3-20R

## NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 36 | 1 1/2 | 3/8 | 1/2 | 4 | 1/4 | 2 1/2 | 1 | 2 7/8 | 2 5/8 | 3 1/4 | 2 | 1 1/2 | 8 1/2 | 8 1/4 | | 8 1/8 | 7 5/8 | 8 | 22° | 1/2 | 9 1/2 | | | | 6.0 |
| 2M | 24 | 36 | 1 1/2 | 3/8 | 1/2 | 4 | 1/4 | 2 1/2 | 1 | 2 7/8 | 2 5/8 | 3 1/4 | 2 | 1 1/2 | 8 1/2 | 8 1/4 | | 8 1/8 | 7 5/8 | 8 | 22° | 1/2 | 9 1/2 | | | | 6.0 |
| 3 | 36 | 54 | 1 7/8 | 1/2 | 5/8 | 6 | 3/8 | 3 3/4 | 1 1/2 | 4 1/4 | 4 | 4 7/8 | 3 | 2 1/4 | 12 3/4 | 12 1/2 | | 12 1/4 | 11 1/2 | 12 | 22° | 3/4 | 13 1/4 | | | | 13.5 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

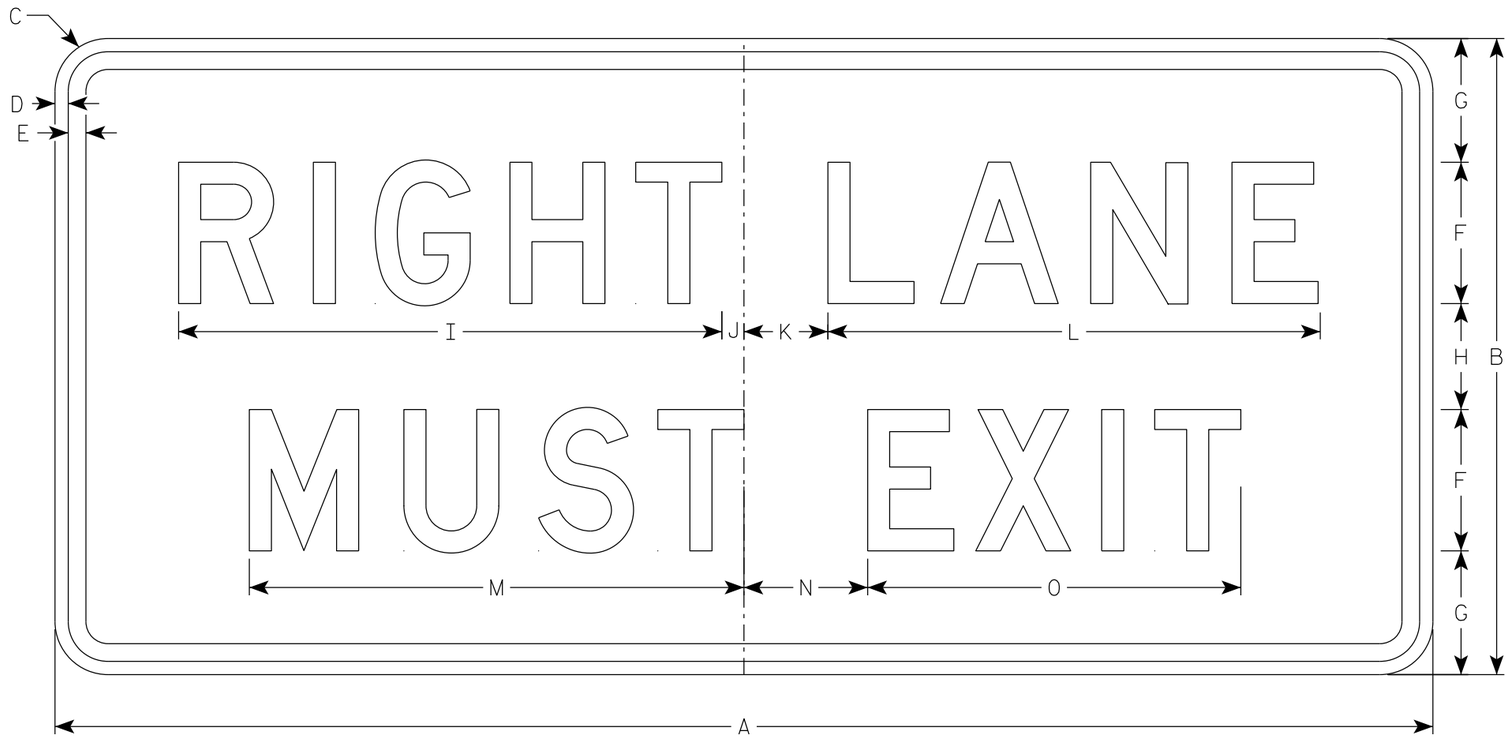
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-20R.7

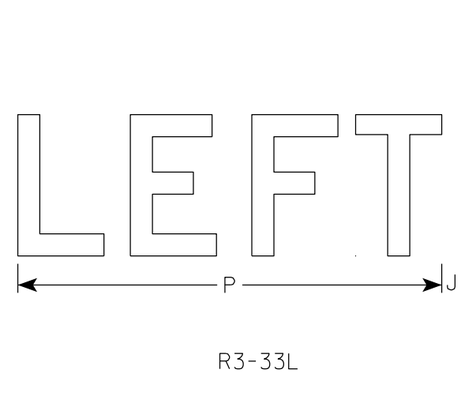
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 756 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D




R3-33R




R3-33L

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2M | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 78 | 36 | 3 | ¾ | 1 | 8 | 7 | 6 | 30 ¾ | 1 ¼ | 4 ¾ | 27 ⅞ | 28 | 7 | 21 ⅛ | 24 | | | | | | | | | | | 19.5 |
| 5 | 78 | 36 | 3 | ¾ | 1 | 8 | 7 | 6 | 30 ¾ | 1 ¼ | 4 ¾ | 27 ⅞ | 28 | 7 | 21 ⅛ | 24 | | | | | | | | | | | 19.5 |

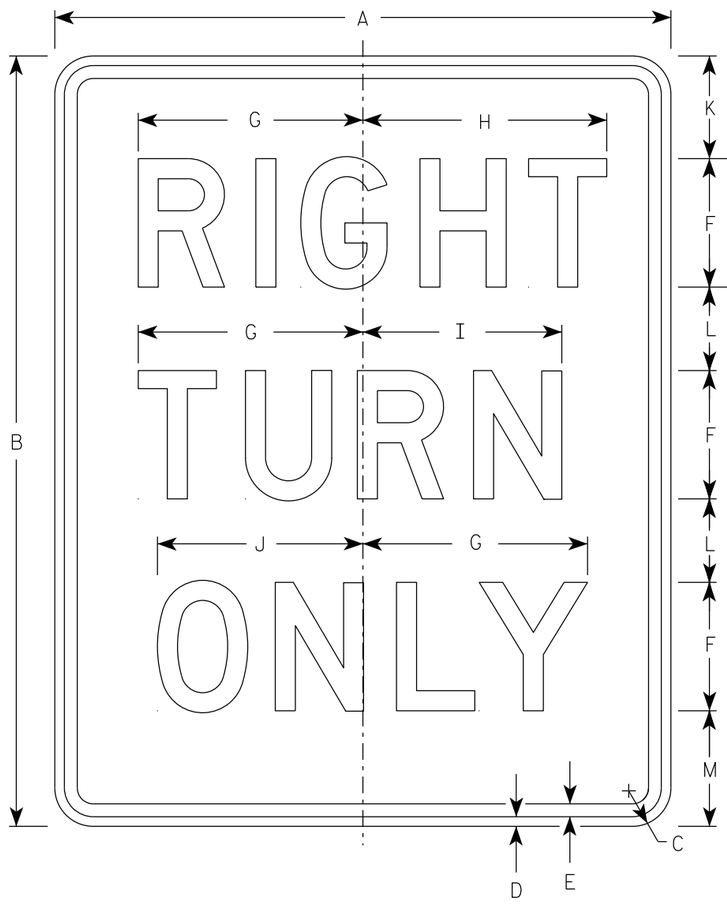
STANDARD SIGN
R3-33

WISCONSIN DEPT OF TRANSPORTATION

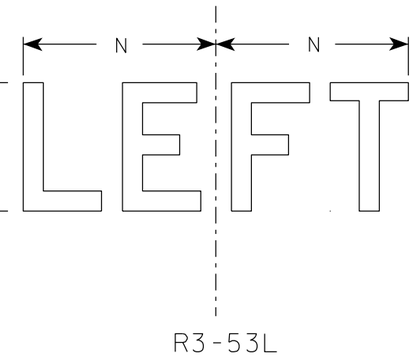
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/27/24 PLATE NO. R3-33.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 757 | E




R3-53R




R3-53L

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. R3-53L same as R3-53R except LEFT is substituted for RIGHT

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 30 | 1 1/2 | 3/8 | 1/2 | 5 | 8 3/4 | 9 1/2 | 7 3/4 | 8 | 4 | 3 1/4 | 4 1/2 | 7 1/2 | | | | | | | | | | | | | 5.0 |
| 2M | 24 | 30 | 1 1/2 | 3/8 | 1/2 | 5 | 8 3/4 | 9 1/2 | 7 3/4 | 8 | 4 | 3 1/4 | 4 1/2 | 7 1/2 | | | | | | | | | | | | | 5.0 |
| 3 | 24 | 30 | 1 1/2 | 3/8 | 1/2 | 5 | 8 3/4 | 9 1/2 | 7 3/4 | 8 | 4 | 3 1/4 | 4 1/2 | 7 1/2 | | | | | | | | | | | | | 5.0 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R3-53

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*for* State Traffic Engineer

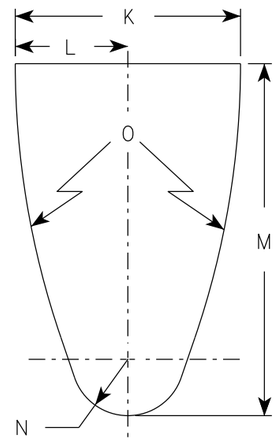
DATE 2/23/23 PLATE NO. R3-53.9

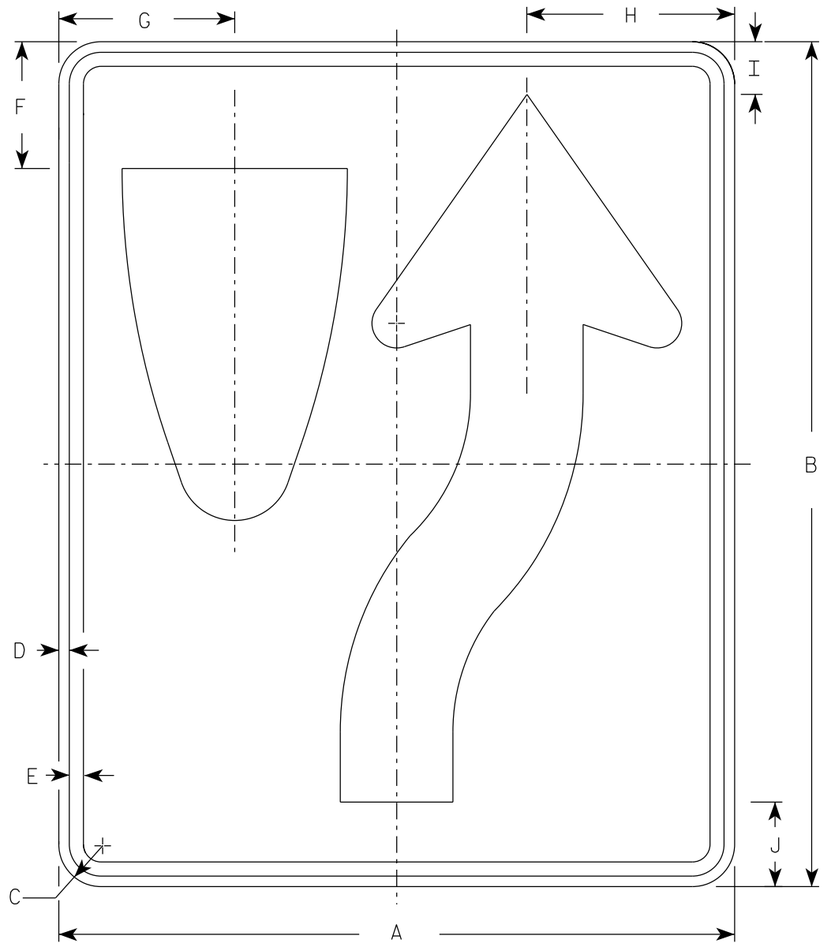
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 758 | E

## NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. R4-8 is the same as R4-7 except Legend is reversed.

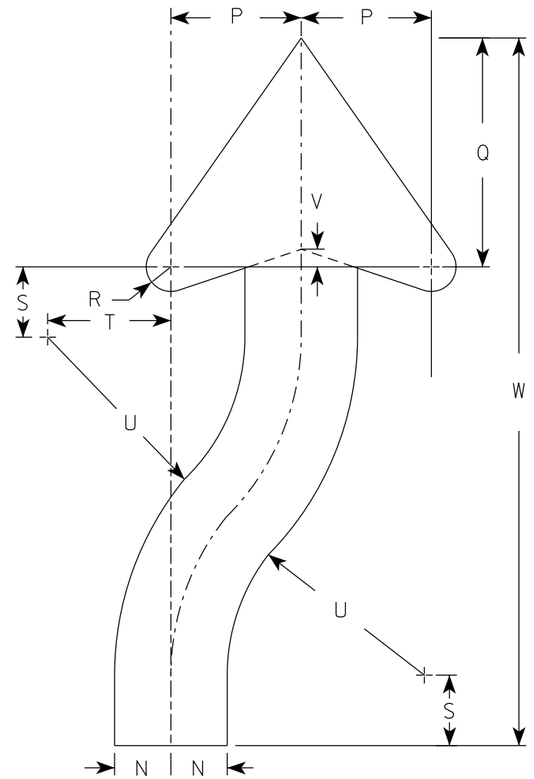
## DIVIDER DETAIL




R4-7

## ARROW DETAIL




| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18 | 24 | 1 1/2 | 3/8 | 1/2 | 3 3/8 | 4 3/4 | 5 1/2 | 1 3/8 | 2 1/4 | 6 | 3 | 9 3/8 | 1 1/2 | 22 1/2 | 3 1/2 | 6 1/8 | 5/8 | 1 7/8 | 3 1/4 | 6 3/4 | 1/2 | 20 3/8 | | | | 3.0 |
| 2S | 24 | 30 | 1 1/2 | 3/8 | 1/2 | 4 1/2 | 6 1/4 | 7 3/8 | 1 7/8 | 3 | 8 | 4 | 12 1/2 | 2 | 30 | 4 5/8 | 8 1/8 | 7/8 | 2 1/2 | 4 3/8 | 9 | 5/8 | 25 1/8 | | | | 5.0 |
| 2M | 24 | 30 | 1 1/2 | 3/8 | 1/2 | 4 1/2 | 6 1/4 | 7 3/8 | 1 7/8 | 3 | 8 | 4 | 12 1/2 | 2 | 30 | 4 5/8 | 8 1/8 | 7/8 | 2 1/2 | 4 3/8 | 9 | 5/8 | 25 1/8 | | | | 5.0 |
| 3 | 36 | 48 | 1 7/8 | 1/2 | 5/8 | 6 3/4 | 9 3/8 | 11 1/8 | 2 7/8 | 4 1/2 | 12 | 6 | 18 3/4 | 3 | 45 | 6 7/8 | 12 1/4 | 1 1/4 | 3 3/4 | 6 5/8 | 13 1/2 | 1 | 40 3/4 | | | | 12.0 |
| 4 | 36 | 48 | 1 7/8 | 1/2 | 5/8 | 6 3/4 | 9 3/8 | 11 1/8 | 2 7/8 | 4 1/2 | 12 | 6 | 18 3/4 | 3 | 45 | 6 7/8 | 12 1/4 | 1 1/4 | 3 3/4 | 6 5/8 | 13 1/2 | 1 | 40 3/4 | | | | 12.0 |
| 5 | 48 | 60 | 3 | 3/4 | 1 | 9 | 12 1/2 | 14 3/4 | 3 3/4 | 6 | 16 | 8 | 25 | 4 | 60 | 9 1/4 | 16 1/4 | 1 5/8 | 5 | 8 3/4 | 18 | 1 1/4 | 50 1/4 | | | | 20.0 |

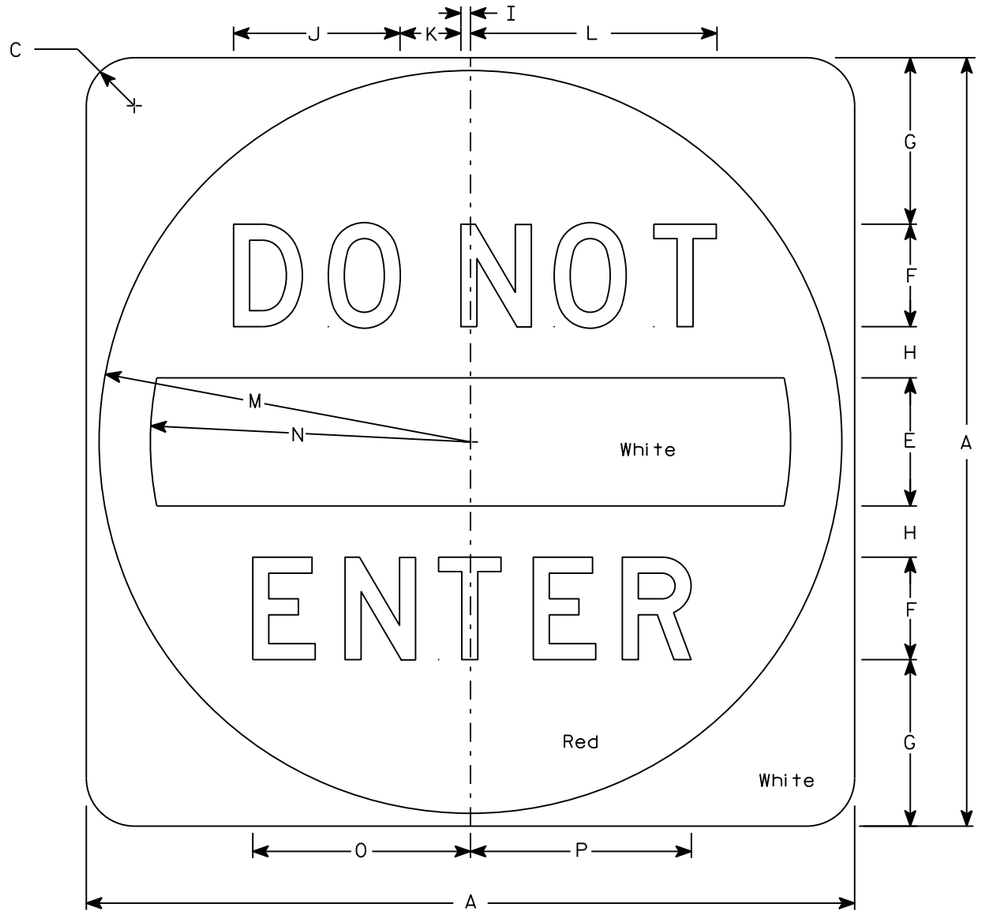
# STANDARD SIGN
# R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 8/17/23 PLATE NO. R4-7.9

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 759 | E |
|---|---|---|---|---|---|




R5-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See detail
   Message - White
3. Message Series - D

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | | 1 7/8 | | 5 | 4 | 6 1/2 | 2 | 3/8 | 6 1/2 | 2 3/8 | 9 5/8 | 14 1/2 | 12 1/2 | 8 1/2 | 8 5/8 | | | | | | | | | | | 6.25 |
| 2M | 36 | | 2 1/4 | | 6 | 5 | 7 1/2 | 2 1/2 | 1/2 | 8 1/8 | 3 | 12 1/8 | 17 1/2 | 15 | 10 5/8 | 10 3/4 | | | | | | | | | | | 9.0 |
| 3 | 36 | | 2 1/4 | | 6 | 5 | 7 1/2 | 2 1/2 | 1/2 | 8 1/8 | 3 | 12 1/8 | 17 1/2 | 15 | 10 5/8 | 10 3/4 | | | | | | | | | | | 9.0 |
| 4 | 36 | | 2 1/4 | | 6 | 5 | 7 1/2 | 2 1/2 | 1/2 | 8 1/8 | 3 | 12 1/8 | 17 1/2 | 15 | 10 5/8 | 10 3/4 | | | | | | | | | | | 9.0 |
| 5 | 48 | | 3 | | 8 | 6 | 11 | 3 | 5/8 | 9 3/4 | 3 5/8 | 14 1/2 | 23 1/2 | 20 | 12 3/4 | 12 7/8 | | | | | | | | | | | 16.0 |

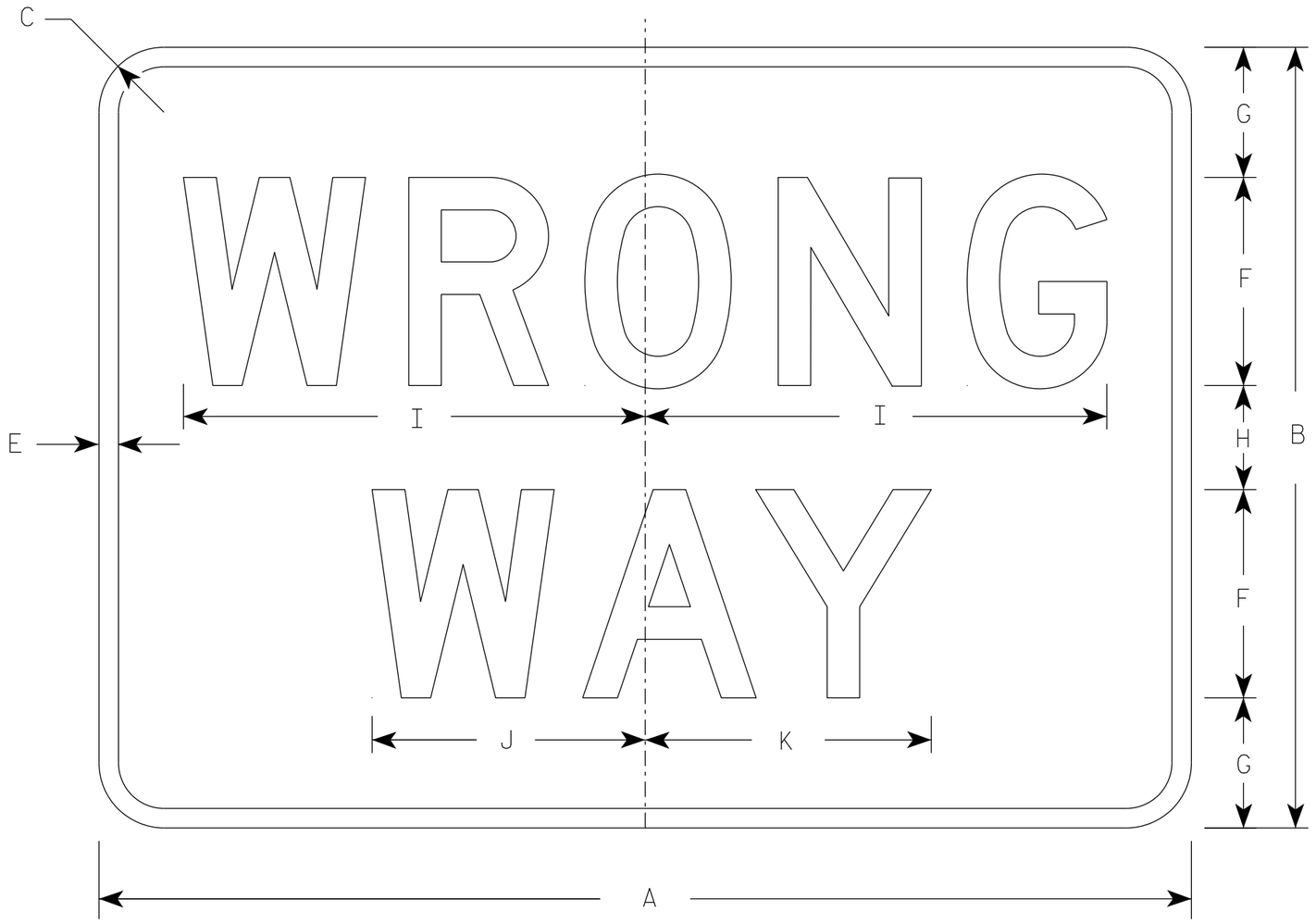
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 760 | E




R5-1A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Red
   Message - White
3. Message Series - D

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | 18 | 1 1/2 | | 1/2 | 5 | 3 | 2 | 11 | 6 1/2 | 6 7/8 | | | | | | | | | | | | | | | | 3.75 |
| 2S | 36 | 24 | 1 1/2 | | 5/8 | 6 | 4 1/2 | 3 | 13 1/4 | 7 7/8 | 8 1/4 | | | | | | | | | | | | | | | | 6.00 |
| 2M | 42 | 30 | 1 7/8 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |
| 3 | 42 | 30 | 1 7/8 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |
| 4 | 42 | 30 | 1 7/8 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |
| 5 | 42 | 30 | 1 7/8 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |

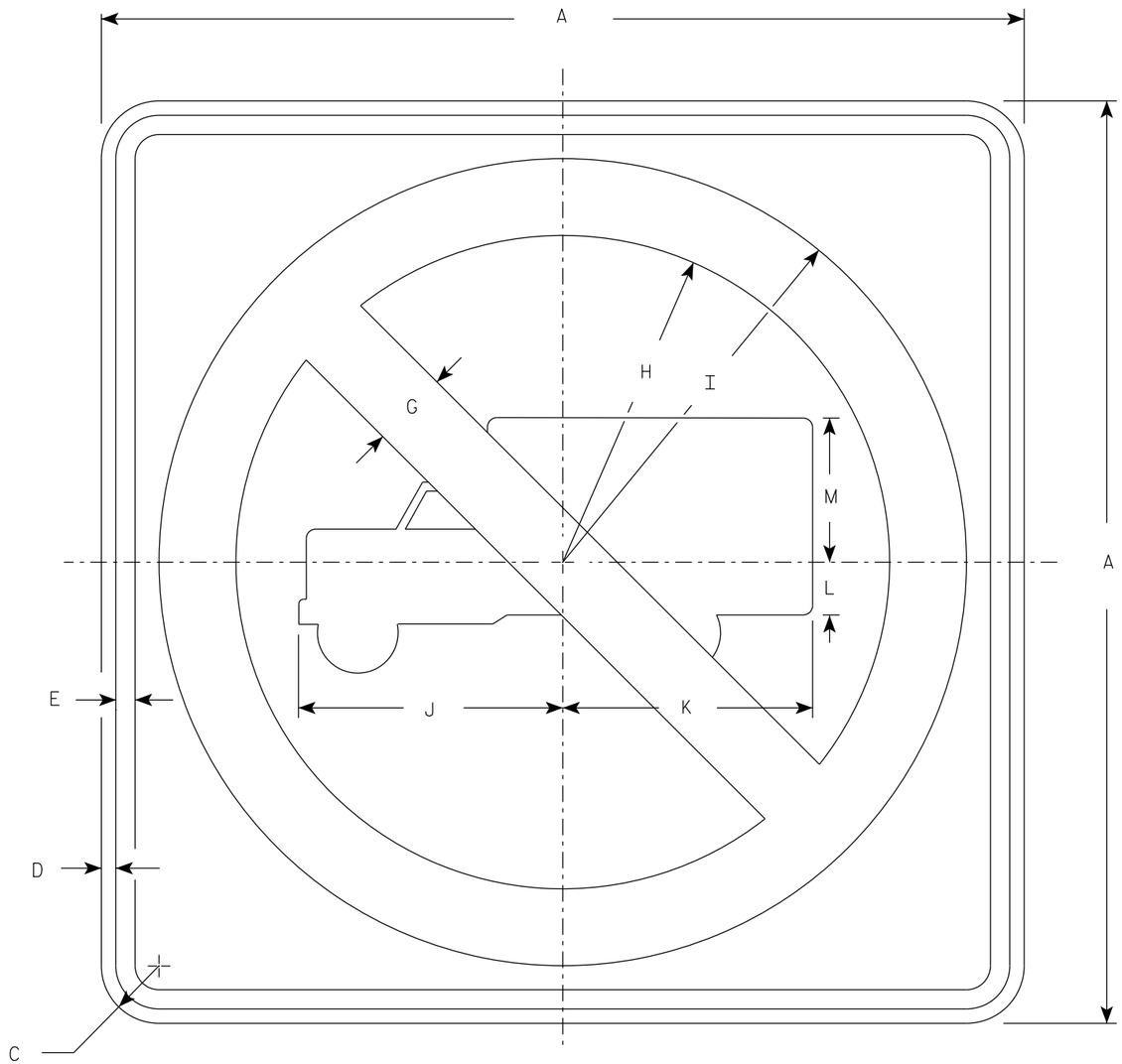
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/17/23 PLATE NO. R5-1A.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 761 | E




R5-2

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See Note 3
3. Circle & Diagonal - Red
   Truck Symbol & Border - Black

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | | 1 1/2 | 3/8 | 1/2 | | 2 | 8 1/2 | 10 1/2 | 6 7/8 | 6 1/2 | 1 3/8 | 3 3/4 | | | | | | | | | | | | | | 4.0 |
| 2M | 24 | | 1 1/2 | 3/8 | 1/2 | | 2 | 8 1/2 | 10 1/2 | 6 7/8 | 6 1/2 | 1 3/8 | 3 3/4 | | | | | | | | | | | | | | 4.0 |
| 3 | 30 | | 1 7/8 | 1/2 | 5/8 | | 2 1/2 | 10 5/8 | 13 1/8 | 8 1/2 | 8 1/8 | 1 5/8 | 4 3/4 | | | | | | | | | | | | | | 6.25 |
| 4 | 36 | | 2 1/4 | 5/8 | 3/4 | | 3 | 12 3/4 | 15 3/4 | 10 1/4 | 9 3/4 | 2 | 5 3/4 | | | | | | | | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | | 4 | 17 | 21 | 13 5/8 | 13 | 2 5/8 | 7 5/8 | | | | | | | | | | | | | | 16.0 |

STANDARD SIGN
R5-2

WISCONSIN DEPT OF TRANSPORTATION

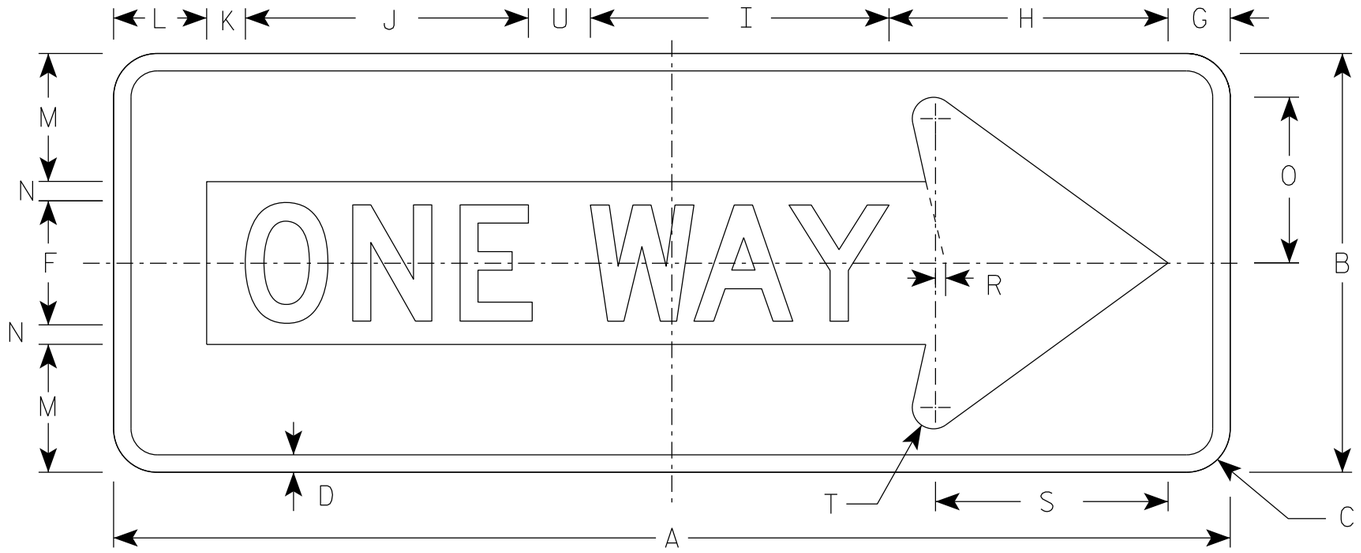
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/17/23 PLATE NO. R5-2.7

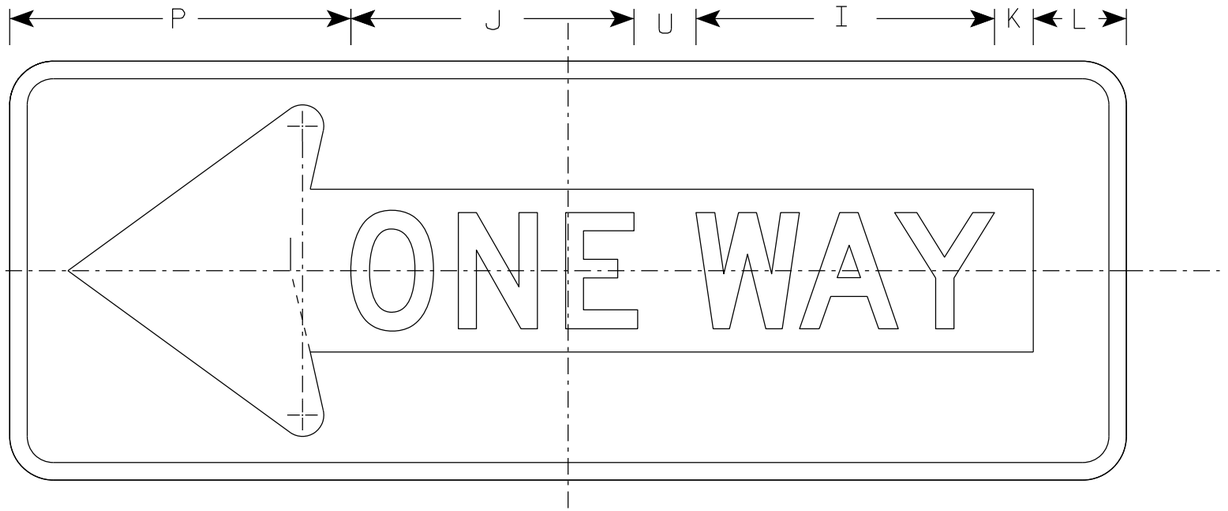
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 762 | E




7




R6-1R




R6-1L

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Black
   Message - Black Legend & White Arrow & Border
3. Message Series - D

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 36 | 12 | 1 ½ | ½ | | 4 | 2 | 7 ½ | 9 ⅝ | 9 ⅛ | 1 ¼ | 3 | 3 ⅜ | ⅝ | 4 ⅜ | 11 | | ⅜ | 7 ½ | ¾ | 2 | | | | | | 3.0 |
| 2M | 48 | 18 | 1 ⅞ | ¾ | | 5 | 2 ½ | 11 | 13 | 12 ¼ | 2 ¾ | 3 ½ | 5 ½ | 1 | 7 ⅛ | 13 ½ | | ½ | 10 ⅛ | ⅞ | 3 | | | | | | 6.0 |
| 3 | 48 | 18 | 1 ⅞ | ¾ | | 5 | 2 ½ | 11 | 13 | 12 ¼ | 2 ¾ | 3 ½ | 5 ½ | 1 | 7 ⅛ | 13 ½ | | ½ | 10 ⅛ | ⅞ | 3 | | | | | | 6.0 |
| 4 | 48 | 18 | 1 ⅞ | ¾ | | 5 | 2 ½ | 11 | 13 | 12 ¼ | 2 ¾ | 3 ½ | 5 ½ | 1 | 7 ⅛ | 13 ½ | | ½ | 10 ⅛ | ⅞ | 3 | | | | | | 6.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R6-1 L&R

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

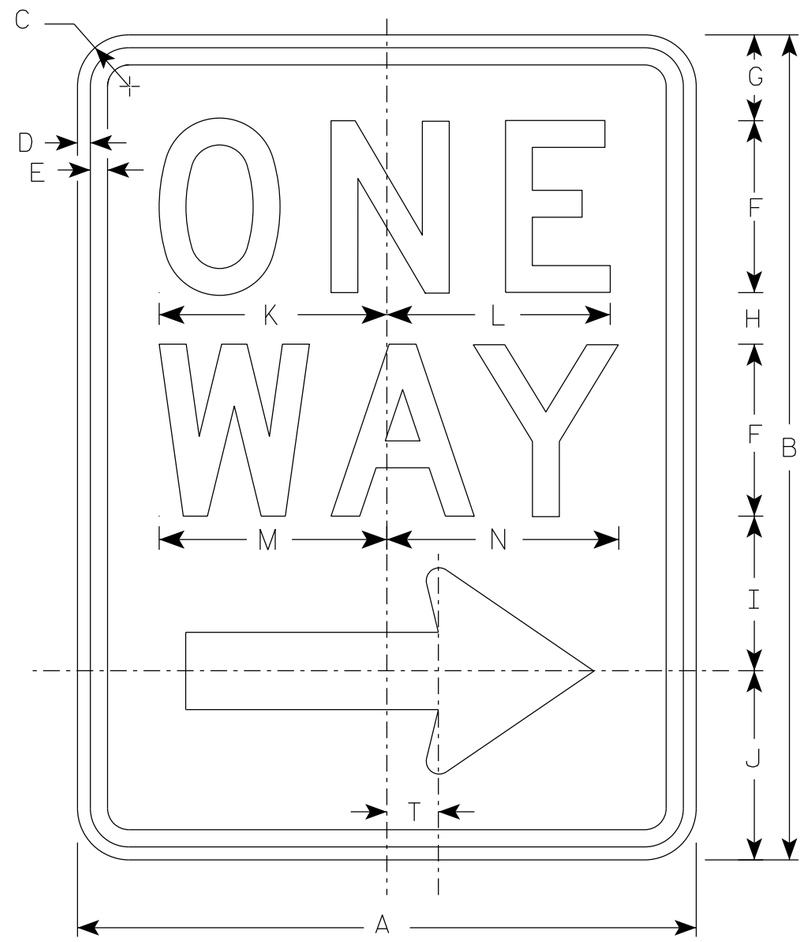
DATE 4/7/2025 PLATE NO. R6-1.5

PROJECT NO:

SHEET NO: 763 E

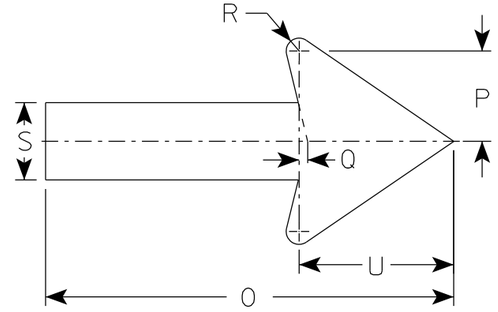
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. R6-2L same as R6-2R except arrow points to the left.




R6-2R

Arrow Detail




| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18 | 24 | 1 1/2 | 3/8 | 1/2 | 5 | 2 1/2 | 1 1/2 | 4 1/2 | 5 1/2 | 6 5/8 | 6 1/2 | 6 5/8 | 6 3/4 | 11 7/8 | 2 5/8 | 1/4 | 3/8 | 2 1/4 | 1 1/2 | 4 1/2 | | | | | |
| 2S | 24 | 1 1/2 | 1 1/2 | 3/8 | 1/2 | 6 | 3 | 2 1/2 | 5 1/2 | 7 | 8 1/8 | 8 1/8 | 8 1/2 | 8 5/8 | 16 | 3 1/2 | 3/8 | 1/2 | 3 | 2 | 6 | | | | | |
| 2M | 30 | 36 | 1 7/8 | 1/2 | 5/8 | 8 | 2 1/2 | 2 5/8 | 6 7/8 | 8 | 10 1/2 | 10 1/2 | 11 1/4 | 11 1/4 | 20 | 4 3/8 | 1/2 | 5/8 | 3 3/4 | 2 1/2 | 7 1/2 | | | | | |
| 3 | 36 | 48 | 1 7/8 | 1/2 | 5/8 | 10 | 5 1/4 | 3 1/4 | 9 | 10 1/2 | 12 3/4 | 12 3/4 | 13 1/4 | 13 1/2 | 24 | 5 5/8 | 1/2 | 3/4 | 4 3/4 | 3 | 9 | | | | | |
| 4 | 36 | 48 | 1 7/8 | 1/2 | 5/8 | 10 | 5 1/4 | 3 1/4 | 9 | 10 1/2 | 12 3/4 | 12 3/4 | 13 1/4 | 13 1/2 | 24 | 5 5/8 | 1/2 | 3/4 | 4 3/4 | 3 | 9 | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | |

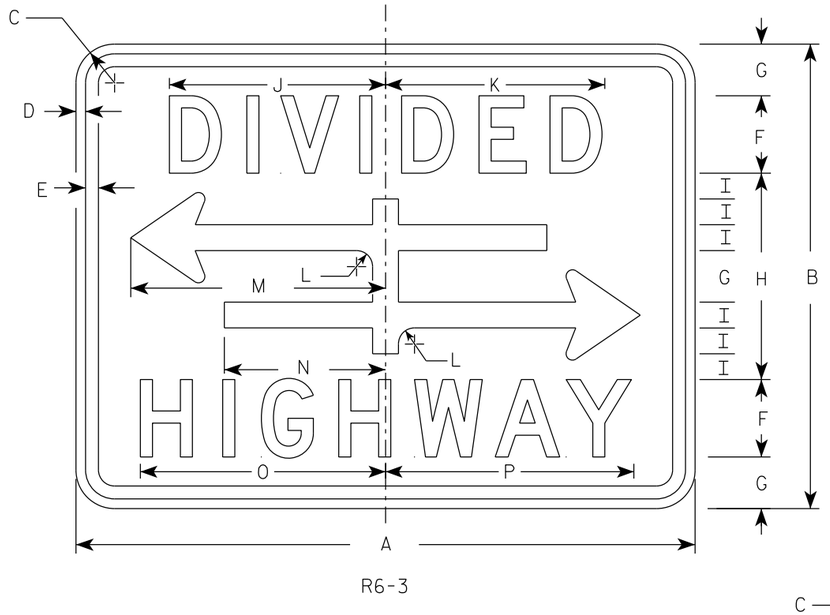
STANDARD SIGN
R6-2 R&L

*WISCONSIN DEPT OF TRANSPORTATION*

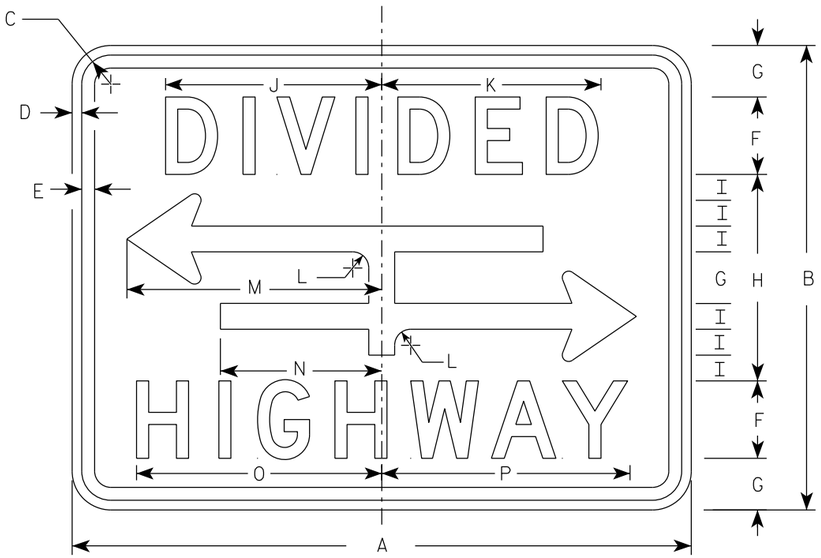
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 764 | E |
|---|---|---|---|---|---|



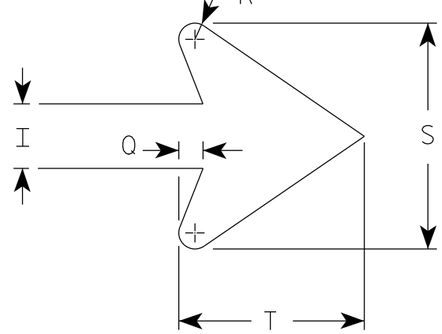

R6-3




R6-3A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24 | 18 | 1 1/2 | 3/8 | 3/8 | 3 | 2 | 8 | 1 | 8 3/8 | 8 1/2 | 5/8 | 9 7/8 | 6 1/4 | 9 1/2 | 9 5/8 | 3/8 | 1/4 | 3 1/2 | 2 3/4 | | | | | | | 3.0 |
| 2S | 30 | 24 | 1 1/2 | 3/8 | 1/2 | 4 | 2 5/8 | 10 3/4 | 1 3/8 | 10 1/2 | 10 5/8 | 7/8 | 12 1/2 | 7 7/8 | 12 1/4 | 12 3/8 | 1/2 | 3/8 | 4 5/8 | 3 5/8 | | | | | | | 5.0 |
| 2M | 30 | 24 | 1 1/2 | 3/8 | 1/2 | 4 | 2 5/8 | 10 3/4 | 1 3/8 | 10 1/2 | 10 5/8 | 7/8 | 12 1/2 | 7 7/8 | 12 1/4 | 12 3/8 | 1/2 | 3/8 | 4 5/8 | 3 5/8 | | | | | | | 5.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R6-3 & R6-3A

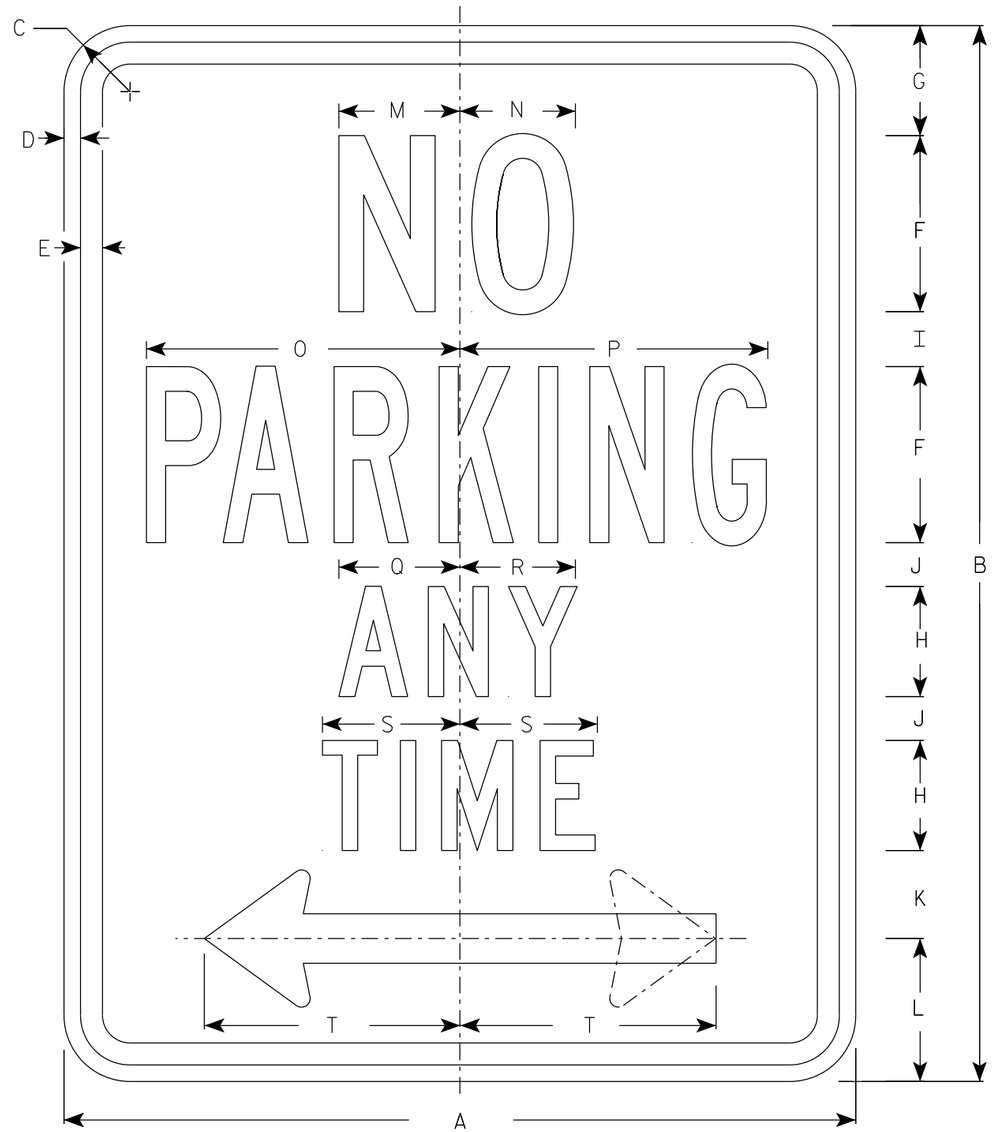
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/26/23 PLATE NO. R6-3.6

PROJECT NO:

SHEET NO: 765 E

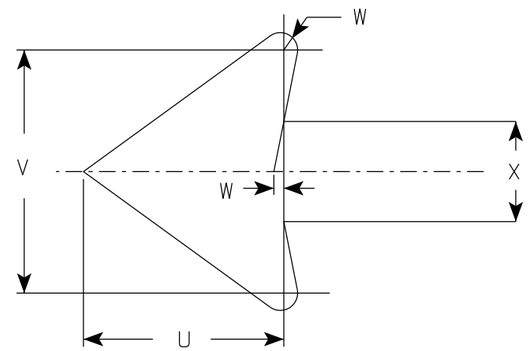



R7-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 4
4. Lines 1, 3 and 4 are series C, line 2 is series B.
5. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)

ARROW DETAIL




| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12 | 18 | 1 ½ | ⅜ | ⅜ | 3 | 1 ⅞ | 2 | ⅞ | ⅝ | 1 ½ | 2 ½ | 2 | 2 | 4 ⅞ | 4 ⅞ | 2 ¼ | 2 ⅛ | 2 ½ | 3 ⅞ | 1 ½ | 1 ¾ | ⅛ | ¾ | | | 1.5 |
| 2S | 18 | 24 | 1 ½ | ⅜ | ½ | 4 | 2 ½ | 2 ½ | 1 ¼ | 1 | 2 | 3 ¼ | 2 ¾ | 2 ⅝ | 7 ⅛ | 7 | 2 ¾ | 2 ⅝ | 3 ⅛ | 5 ⅞ | 2 ¼ | 2 ⅝ | ¼ | 1 ⅛ | | | 3.0 |
| 2M | 24 | 30 | 1 ½ | ⅜ | ½ | 5 | 3 | 3 | 2 | 1 ¼ | 2 ½ | 4 | 3 ¼ | 3 ⅜ | 9 ¼ | 9 ¼ | 3 ¼ | 3 ¼ | 3 ¾ | 7 ¾ | 3 | 3 ½ | ¼ | 1 ½ | | | 5.0 |
| 3 | 24 | 30 | 1 ½ | ⅜ | ½ | 5 | 3 | 3 | 2 | 1 ¼ | 2 ½ | 4 | 3 ¼ | 3 ⅜ | 9 ¼ | 9 ¼ | 3 ¼ | 3 ¼ | 3 ¾ | 7 ¾ | 3 | 3 ½ | ¼ | 1 ½ | | | 5.0 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/26/23 PLATE NO. R7-1.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



FILE NAME : C:\Users\PROJECTS\tr_stdplate\R71.dgn PLOT DATE : 26-OCT 2023 2:48 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

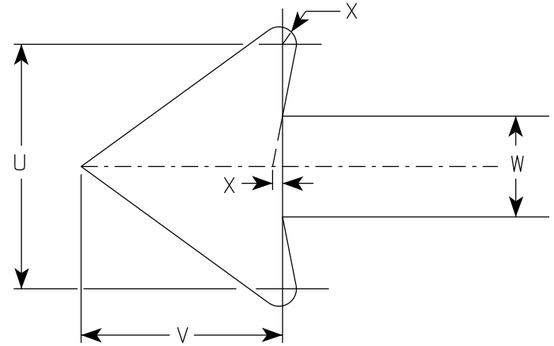
7

R7-7

## NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. R7-7D (double arrow)
   R7-7R (right arrow)
   R7-7L (left arrow)
5. Lines 1, 3 and 4 are Series C.
   Line 2 is Series B.

## ARROW DETAIL




| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12 | 18 | 1 ½ | ⅜ | ⅜ | 3 | 2 | 1 ⅞ | ⅞ | ⅝ | 1 ½ | 2 ½ | 2 | 2 | 4 ⅞ | 4 ⅞ | 2 | 2 ¾ | 2 ⅝ | 3 ⅞ | 1 ¾ | 1 ½ | ¾ | ⅛ | | | 1.50 |
| 2S | 18 | 24 | 1 ½ | ⅜ | ½ | 4 | 2 ½ | 2 ½ | 1 ¼ | 1 | 2 | 3 ¼ | 2 ¾ | 2 ⅝ | 7 ⅛ | 7 | 2 ½ | 3 ⅜ | 3 ⅜ | 5 ⅞ | 2 ⅝ | 2 ¼ | 1 ⅛ | ¼ | | | 3.00 |
| 2M | 24 | 30 | 1 ½ | ⅜ | ½ | 5 | 3 | 3 | 2 | 1 ¼ | 2 ½ | 4 | 3 ¼ | 3 ⅜ | 9 ¼ | 9 ¼ | 3 | 4 ⅛ | 4 | 7 ¾ | 3 ½ | 3 | 1 ½ | ¼ | | | 5.00 |
| 3 | 24 | 30 | 1 ½ | ⅜ | ½ | 5 | 3 | 3 | 2 | 1 ¼ | 2 ½ | 4 | 3 ¼ | 3 ⅜ | 9 ¼ | 9 ¼ | 3 | 4 ⅛ | 4 | 7 ¾ | 3 ½ | 3 | 1 ½ | ¼ | | | 5.00 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

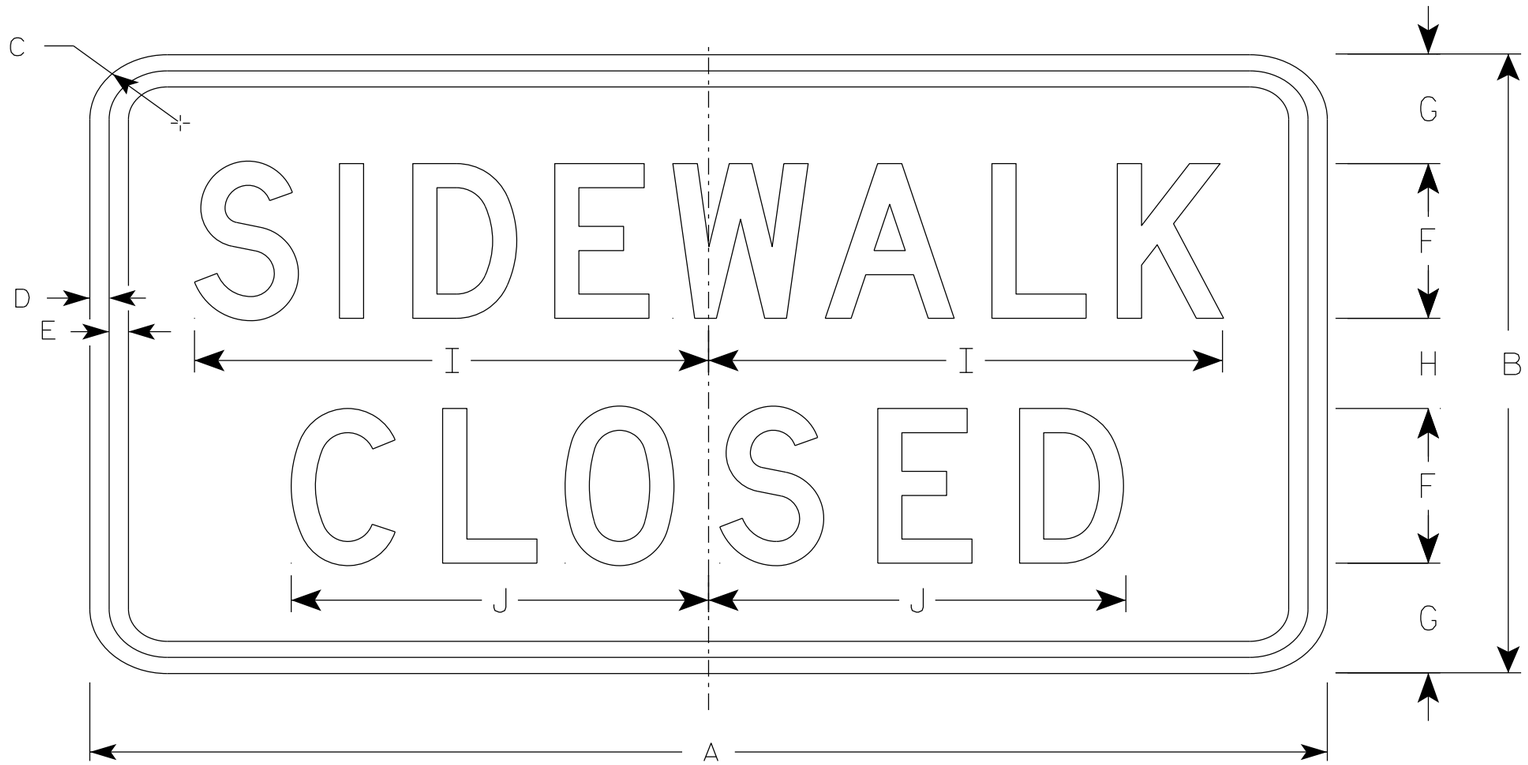
# STANDARD SIGN
# R7-7

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 10/26/23 PLATE NO. R7-7.9

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 767 | E |
|---|---|---|---|---|---|




R9-9

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 12 | 1 ½ | ½ | ½ | 3 | 2 ⅛ | 1 ¾ | 10 | 8 ⅛ | | | | | | | | | | | | | | | | | 2.0 |
| 2M | 24 | 12 | 1 ½ | ½ | ½ | 3 | 2 ⅛ | 1 ¾ | 10 | 8 ⅛ | | | | | | | | | | | | | | | | | 2.0 |
| 3 | 30 | 18 | 1 ½ | ½ | ½ | 4 | 3 ½ | 3 | 12 ½ | 10 ¼ | | | | | | | | | | | | | | | | | 3.75 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

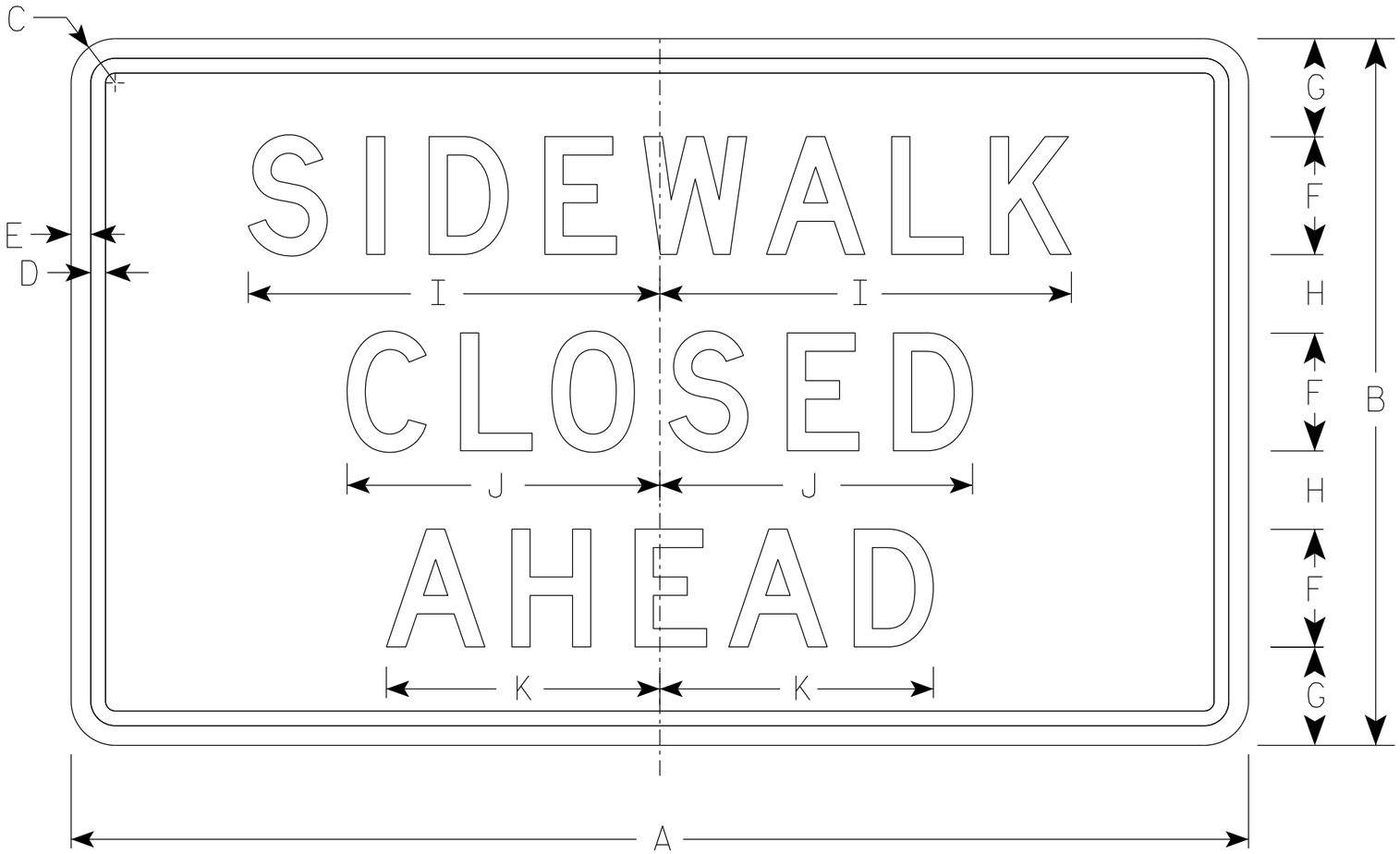
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 768 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D




R9-9A

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 18 | 1 ½ | ⅜ | ½ | 3 | 2 ½ | 2 | 10 ½ | 8 | 7 | | | | | | | | | | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 ½ | ⅜ | ½ | 3 | 2 ½ | 2 | 10 ½ | 8 | 7 | | | | | | | | | | | | | | | | 3.75 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

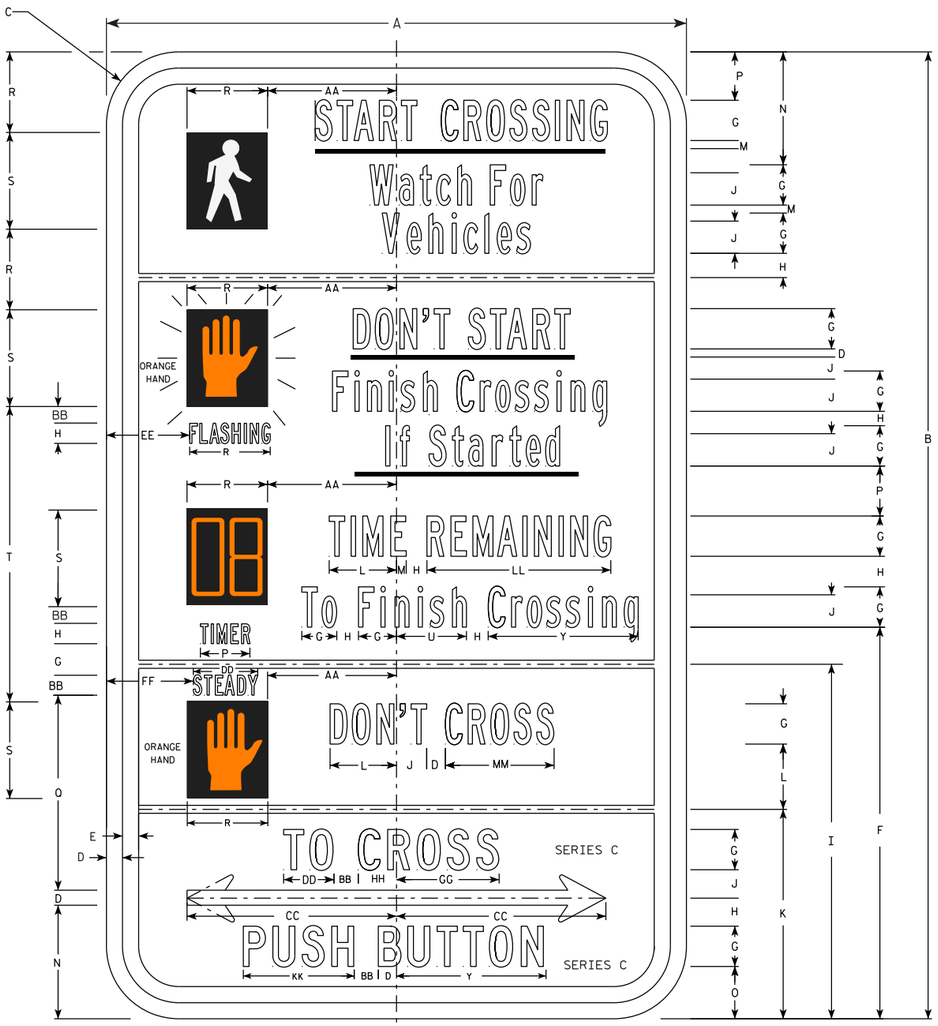
STANDARD SIGN
R9-9A

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9A.2

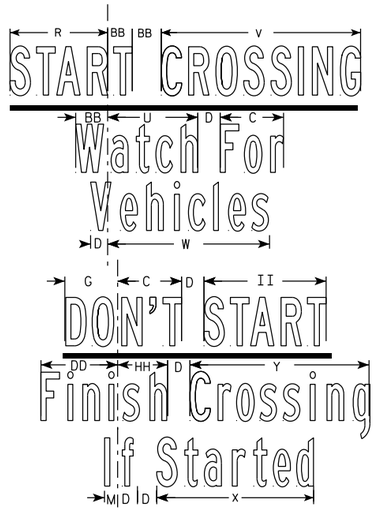
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 769 | E




R10-3E

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - WHITE
   Message - BLACK except Hand Symbol which is Orange with black background.
3. Message Series - B or as noted on the sign.
4. R10-3ER (right arrow)
   R10-3EL (left arrow)
   R10-3ED (double arrow)




| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 6 | 10 | 1 1/2 | 1/8 | 1/8 | 4 | 3/8 | 1/4 | 4 1/8 | 1/4 | 2 1/8 | 3/4 | 1/8 | 1 1/8 | 1/2 | 1/2 | 2 1/4 | 7/8 | 1 | 3 | 3/4 | 1 3/4 | 1 5/8 | 1 3/8 | 1 1/2 | 5/8 | 0.42 |
| 2S | 9 | 15 | 1 1/2 | 1/4 | 1/4 | 6 1/8 | 5/8 | 3/8 | 5 1/2 | 1/2 | 3 1/4 | 1 | 1/8 | 1 3/4 | 7/8 | 3/4 | 3 | 1 1/4 | 1 1/2 | 4 5/8 | 1 1/8 | 2 5/8 | 2 1/8 | 2 | 2 3/8 | 1 3/8 | 0.94 |
| 2M | 9 | 15 | 1 1/2 | 1/4 | 1/4 | 6 1/8 | 5/8 | 3/8 | 5 1/2 | 1/2 | 3 1/4 | 1 | 1/8 | 1 3/4 | 7/8 | 3/4 | 3 | 1 1/4 | 1 1/2 | 4 5/8 | 1 1/8 | 2 5/8 | 2 1/8 | 2 | 2 3/8 | 1 3/8 | 0.94 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| SIZE | AA | BB | CC | DD | EE | FF | GG | HH | II | JJ | KK | LL | MM | NN | OO | PP | QQ | RR | SS | TT | UU | VV | WW | XX | YY | ZZ | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 3/8 | 1/4 | 2 1/4 | 1/2 | 7/8 | 7/8 | 1 1/8 | 3/8 | 1 | 1/2 | 1 1/8 | 1 7/8 | 1 1/8 | | | | | | | | | | | | | | |
| 2S | 2 | 3/8 | 3 1/4 | 1 | 1 1/4 | 1 3/8 | 1 5/8 | 5/8 | 1 5/8 | 3/4 | 1 3/4 | 2 7/8 | 1 5/8 | | | | | | | | | | | | | | |
| 2M | 2 | 3/8 | 3 1/4 | 1 | 1 1/4 | 1 3/8 | 1 5/8 | 5/8 | 1 5/8 | 3/4 | 1 3/4 | 2 7/8 | 1 5/8 | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R10-3EL,R,D

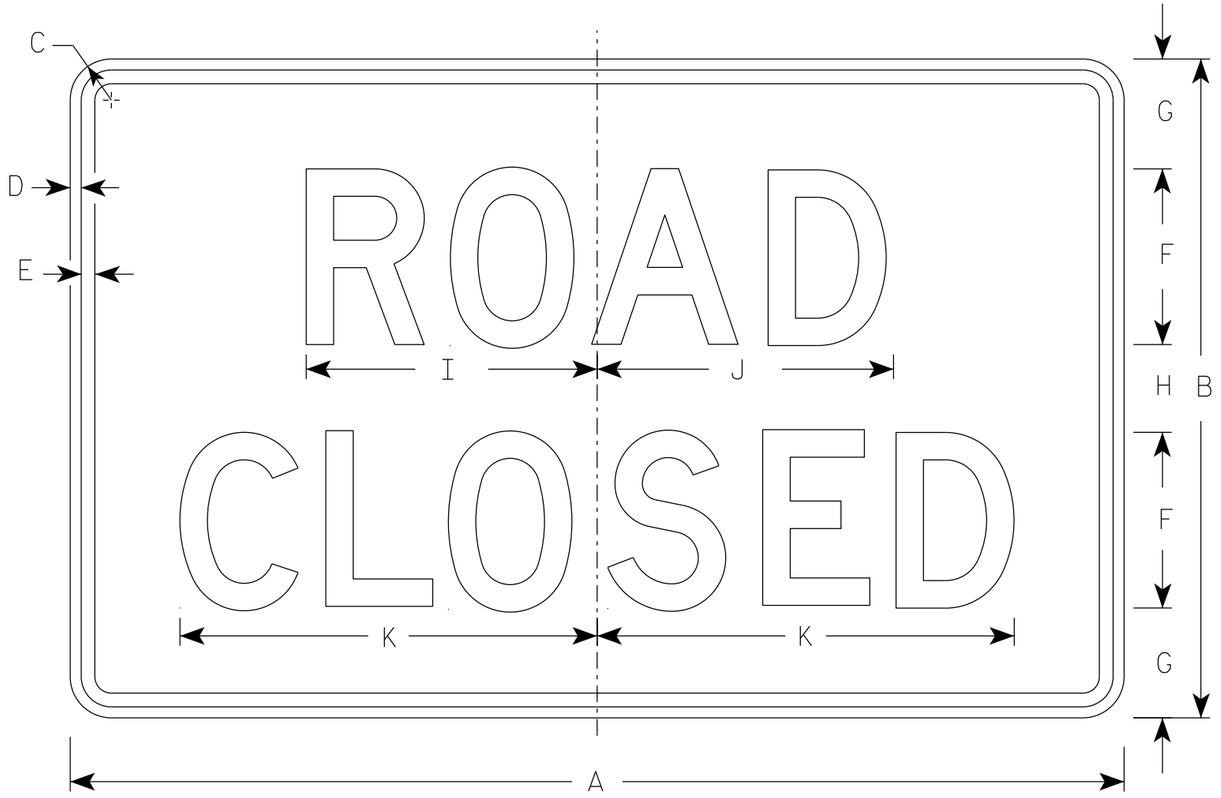
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/24 PLATE NO. R10-3E.3

PROJECT NO:

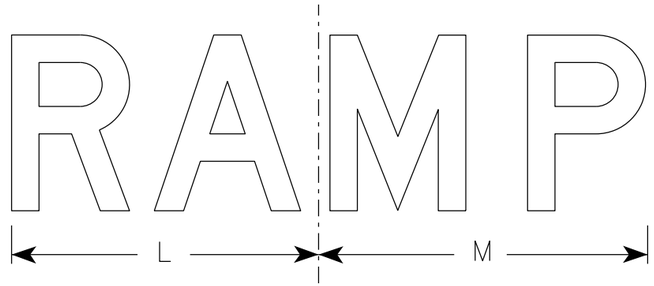
SHEET NO: 770 E



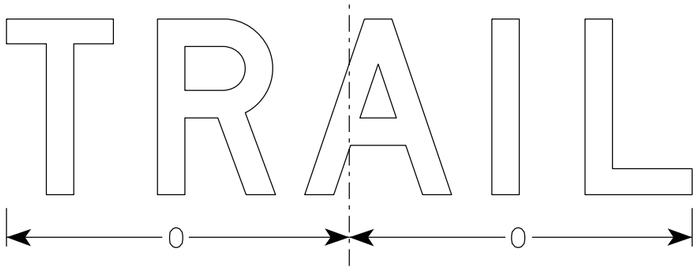

R11-2

NOTES

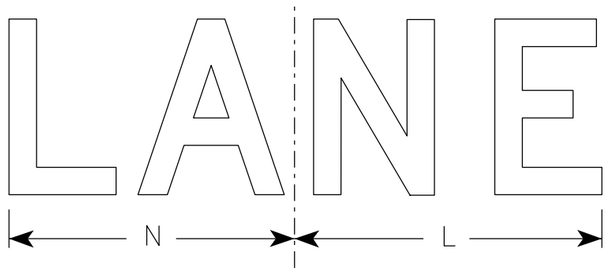
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.




R11-2R




R11-2T




R11-2L

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 48 | 30 | 1 7/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | 15 5/8 | | | | | | | | | | | | 10.0 |
| 2M | 48 | 30 | 1 7/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | 15 5/8 | | | | | | | | | | | | 10.0 |
| 3 | 48 | 30 | 1 7/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | 15 5/8 | | | | | | | | | | | | 10.0 |
| 4 | 48 | 30 | 1 7/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | 15 5/8 | | | | | | | | | | | | 10.0 |
| 5 | 48 | 30 | 1 7/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | 15 5/8 | | | | | | | | | | | | 10.0 |

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

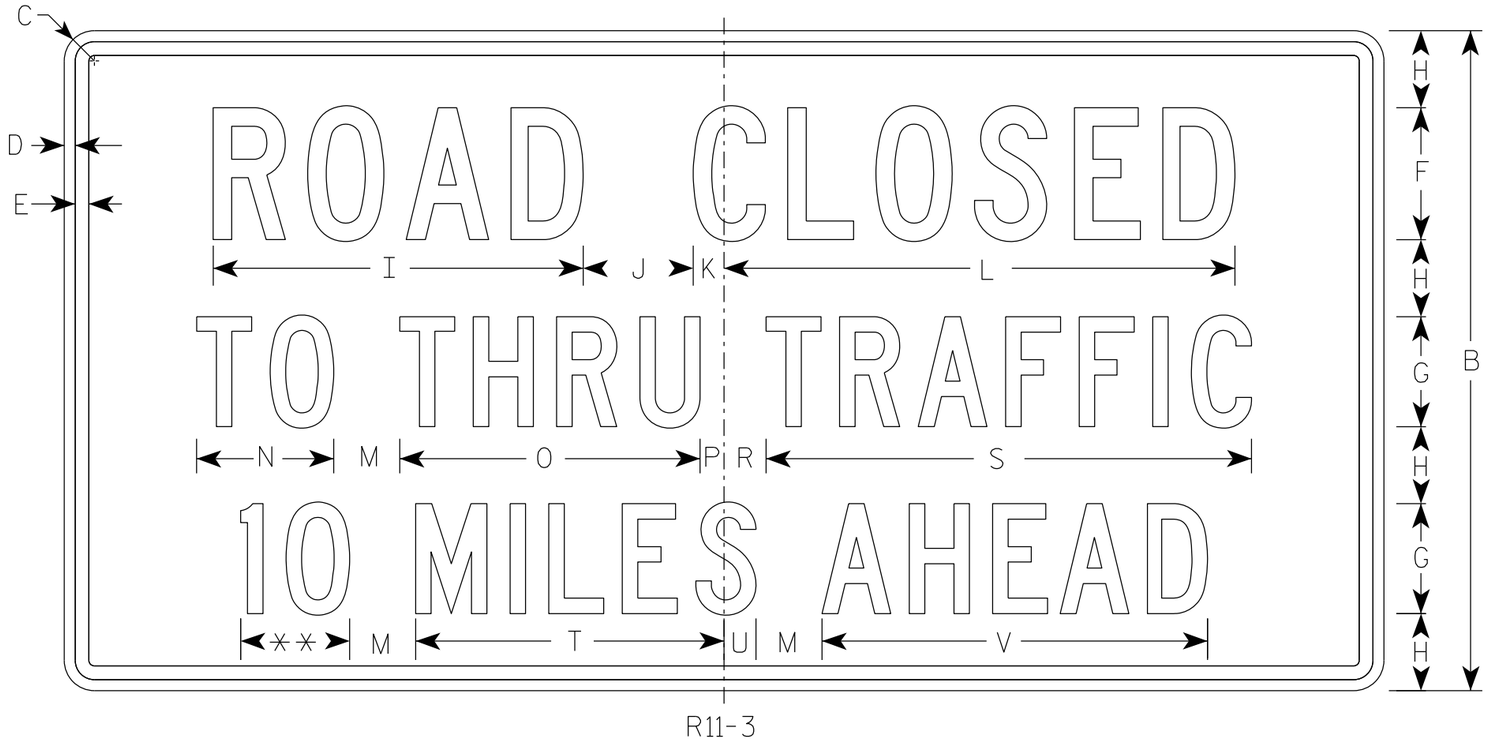
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-2.12

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 771 | E |
|---|---|---|---|---|---|

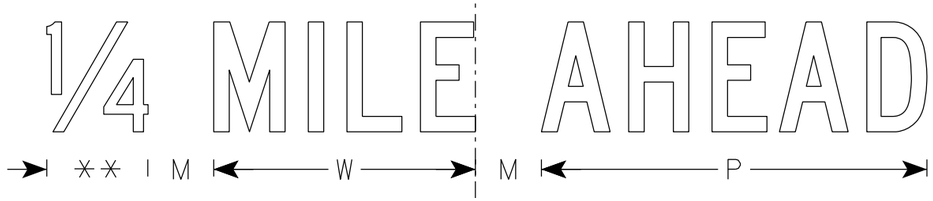
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.




R11-3

** See Note 5




| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | 18 | 1 1/2 | 3/8 | 3/8 | 4 | 3 | 2 | 11 1/4 | 3 | 1 1/8 | 15 3/8 | 2 | 3 3/4 | 8 1/4 | 5/8 | | 1 3/8 | 13 1/4 | 8 3/8 | 7/8 | 10 1/2 | 7 1/8 | | | | 4.5 |
| 2S | 60 | 30 | 1 7/8 | 1/2 | 5/8 | 6 | 5 | 3 1/2 | 16 7/8 | 5 | 1 3/8 | 23 1/4 | 3 | 6 1/4 | 13 5/8 | 1 1/8 | | 1 7/8 | 22 1/8 | 14 | 1 1/2 | 17 1/2 | 11 7/8 | | | | 12.5 |
| 2M | 60 | 30 | 1 7/8 | 1/2 | 5/8 | 6 | 5 | 3 1/2 | 16 7/8 | 5 | 1 3/8 | 23 1/4 | 3 | 6 1/4 | 13 5/8 | 1 1/8 | | 1 7/8 | 22 1/8 | 14 | 1 1/2 | 17 1/2 | 11 7/8 | | | | 12.5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

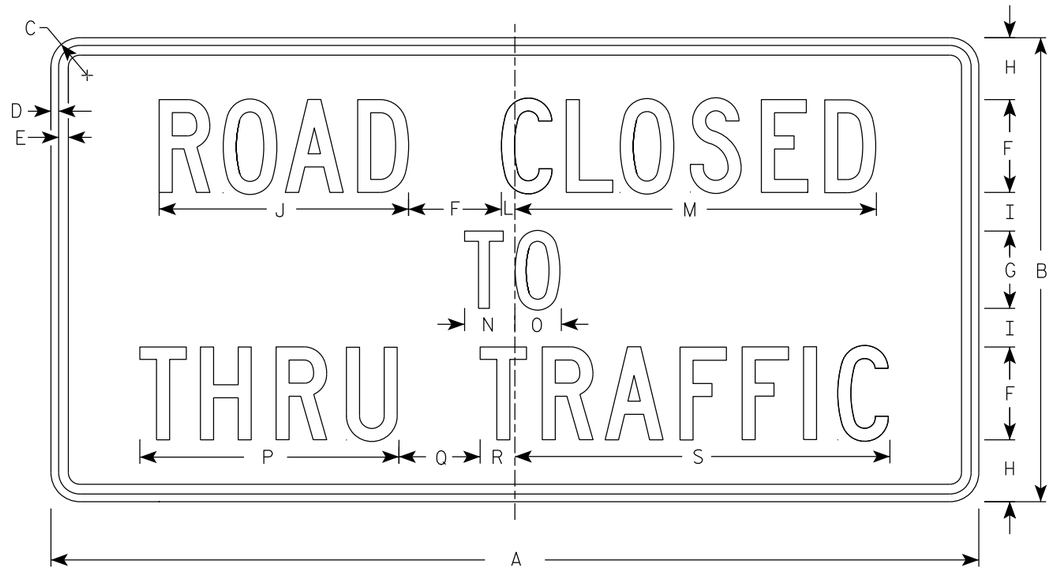
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-3.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 772 | E




R11-4

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 60 | 30 | 1 7/8 | 1/2 | 5/8 | 6 | 5 | 4 | 2 1/2 | 16 1/8 | | 7/8 | 23 3/8 | 3 1/4 | 3 | 16 3/4 | 5 1/4 | 2 1/4 | 24 1/4 | | | | | | | | 12.5 |
| 2M | 60 | 30 | 1 7/8 | 1/2 | 5/8 | 6 | 5 | 4 | 2 1/2 | 16 1/8 | | 7/8 | 23 3/8 | 3 1/4 | 3 | 16 3/4 | 5 1/4 | 2 1/4 | 24 1/4 | | | | | | | | 12.5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

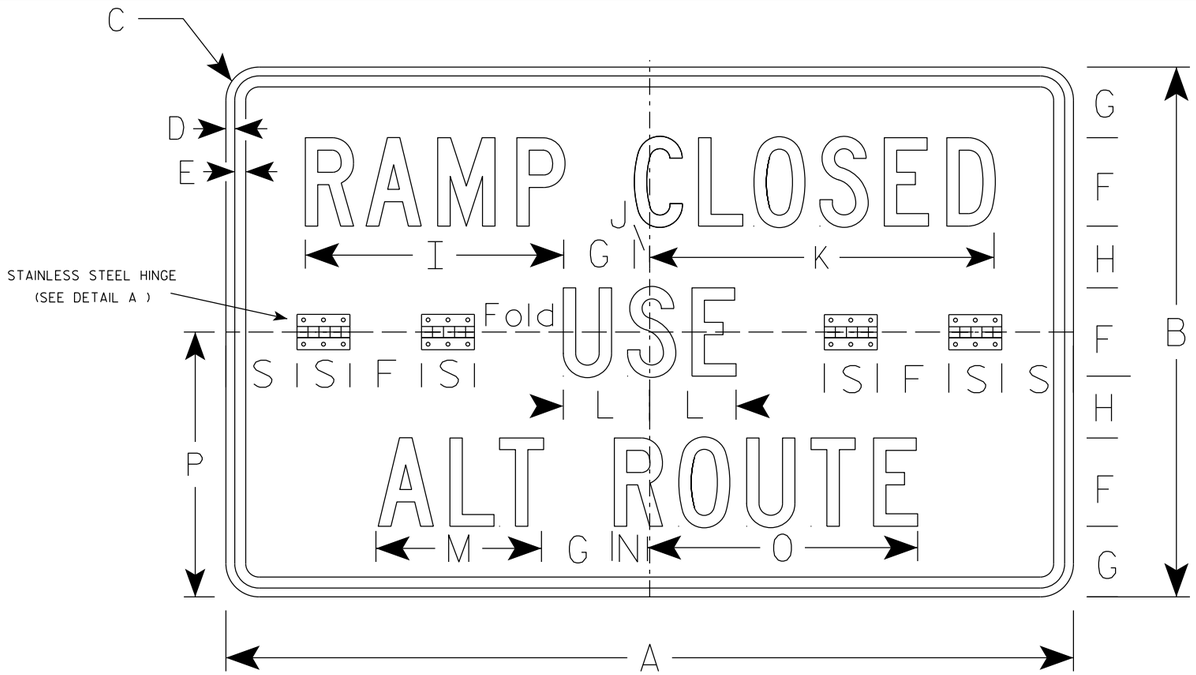
STANDARD SIGN
R11 - 4

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-4.4

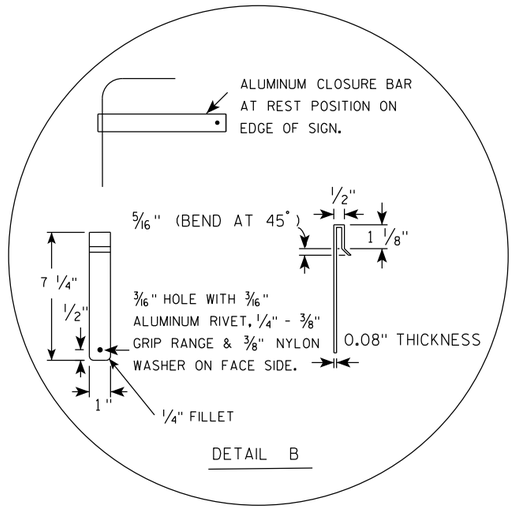
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 773 | E




R11-54F



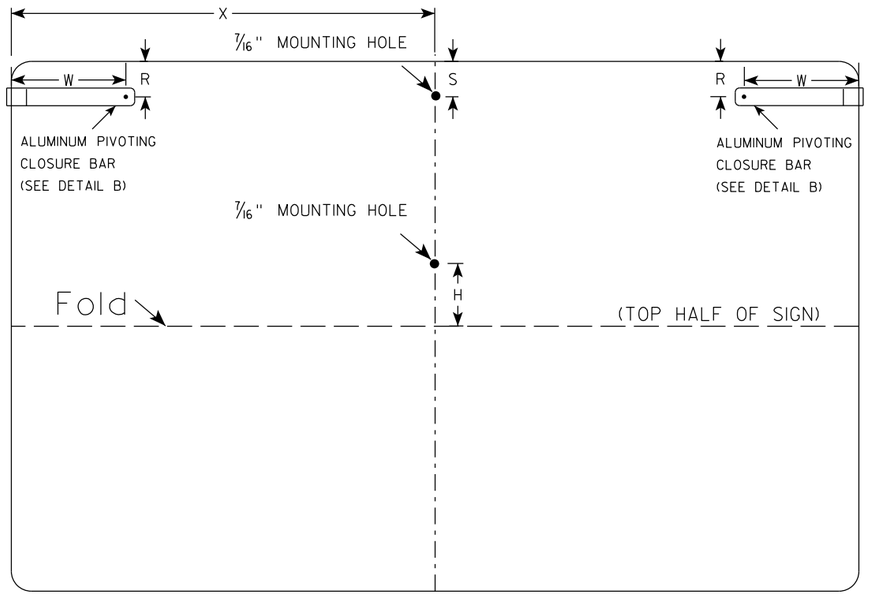

DETAIL A




DETAIL B

## NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Sign Base Material shall be aluminum, corners and borders shall be rounded.
5. All hardware used on the folding sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.
6. Refer to plate A5-3A for sign blank layout.




(BACK VIEW)

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 48 | 30 | 1 7/8 | 1/2 | 5/8 | 5 | 4 | 3 1/2 | 14 5/8 | 7/8 | 19 1/2 | 4 7/8 | 9 3/8 | 2 | 15 1/4 | 15 | | 2 | 3 | 2 5/8 | 1 1/4 | 11/16 | 6 1/2 | 24 | | | 10.0 |
| 2M | 48 | 30 | 1 7/8 | 1/2 | 5/8 | 5 | 4 | 3 1/2 | 14 5/8 | 7/8 | 19 1/2 | 4 7/8 | 9 3/8 | 2 | 15 1/4 | 15 | | 2 | 3 | 2 5/8 | 1 1/4 | 11/16 | 6 1/2 | 24 | | | 10.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

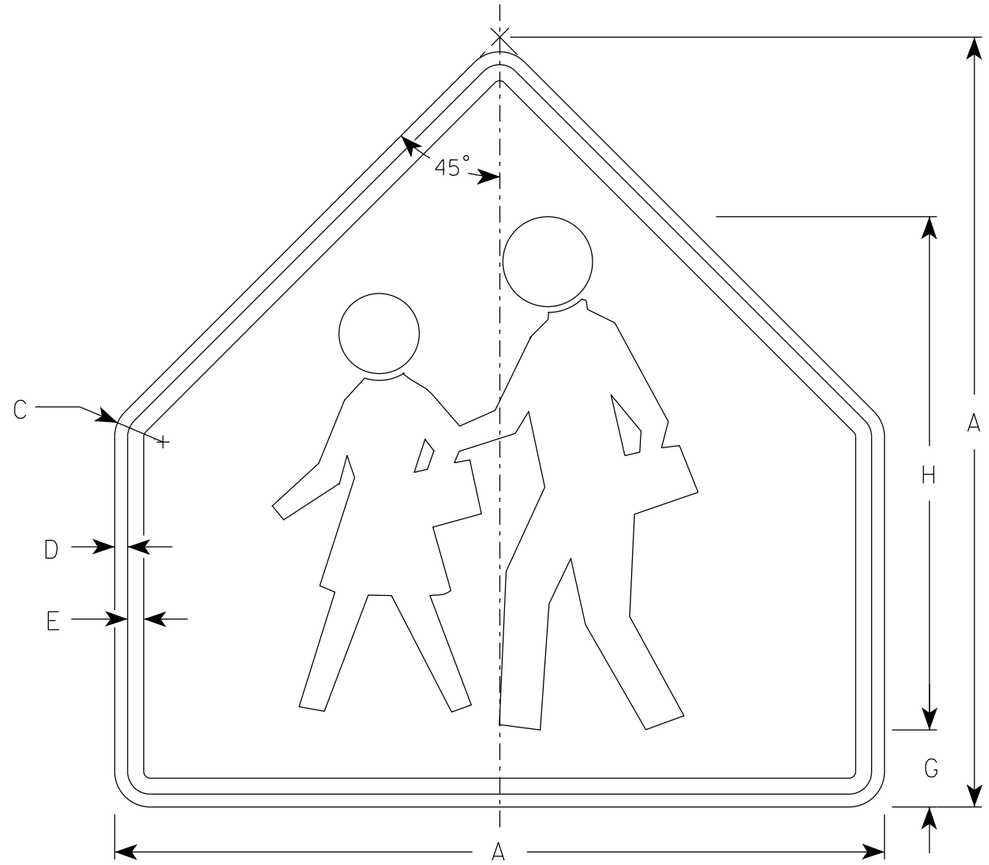
STANDARD SIGN
R11-54F

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*For* State Traffic Engineer

DATE 2/8/24 PLATE NO. R11-54F.4

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 774 | E |
|---|---|---|---|---|---|




S1-1

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow-Green
   Message - Black

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | 1 3/8 | 1/2 | 5/8 | | 3 | 20 | | | | | | | | | | | | | | | | | | | 4.69 |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | | 3 1/2 | 24 | | | | | | | | | | | | | | | | | | | 6.75 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | | 3 1/2 | 24 | | | | | | | | | | | | | | | | | | | 6.75 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | | 3 1/2 | 24 | | | | | | | | | | | | | | | | | | | 6.75 |
| 4 | 48 | | 1 7/8 | 3/4 | 1 | | 4 3/4 | 32 | | | | | | | | | | | | | | | | | | | 12 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

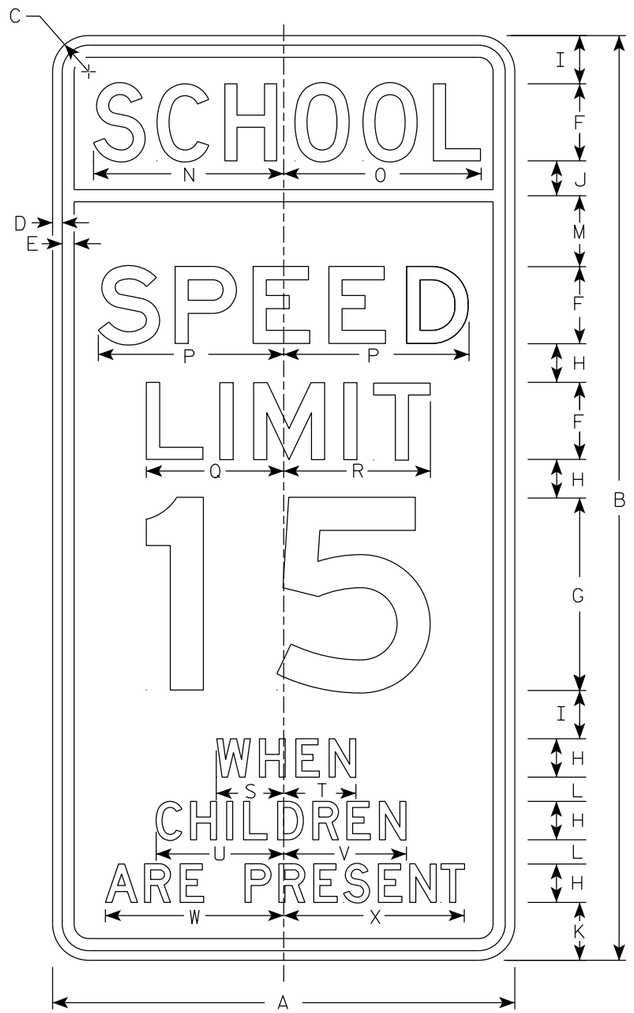
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/16/2023 PLATE NO. S1-1.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 775 | E




7




S4-51

## NOTES

1. Sign is Type II - See Note 2 for Sheeting Type
2. Color:
   Background - See Note 4
   Message - Black
3. Message Series - See Note 5
4. Top panel (SCHOOL) background - Yellow Green - Type F Reflective
   Lower panel background - White - Type SH Reflective
5. From top to bottom:
   Lines 1, 5, 6 & 7 are series D
   Lines 2, 3 & 4 are series E
6. Line 4 substitute appropriate numerals and adjust spacing to achieve proper balance.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 48 | 1 7/8 | 1/2 | 5/8 | 4 | 10 | 2 | 2 1/2 | 1 3/4 | 3 | 1 1/4 | 3 3/4 | 9 7/8 | 10 1/4 | 9 5/8 | 7 1/8 | 7 5/8 | 3 1/2 | 3 3/8 | 6 5/8 | 6 3/8 | 9 1/4 | 9 3/8 | | | 8.00 |
| 2M | 24 | 48 | 1 7/8 | 1/2 | 5/8 | 4 | 10 | 2 | 2 1/2 | 1 3/4 | 3 | 1 1/4 | 3 3/4 | 9 7/8 | 10 1/4 | 9 5/8 | 7 1/8 | 7 5/8 | 3 1/2 | 3 3/8 | 6 5/8 | 6 3/8 | 9 1/4 | 9 3/8 | | | 8.00 |
| 3 | 36 | 72 | 3 | 3/4 | 1 | 6 | 15 | 3 | 3 3/4 | 2 3/4 | 4 1/2 | 1 7/8 | 5 1/2 | 15 | 15 1/4 | 14 1/2 | 11 1/4 | 11 1/2 | 5 1/2 | 5 3/4 | 10 | 9 3/4 | 14 | 14 1/8 | | | 18.00 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
S4-51

WISCONSIN DEPT OF TRANSPORTATION

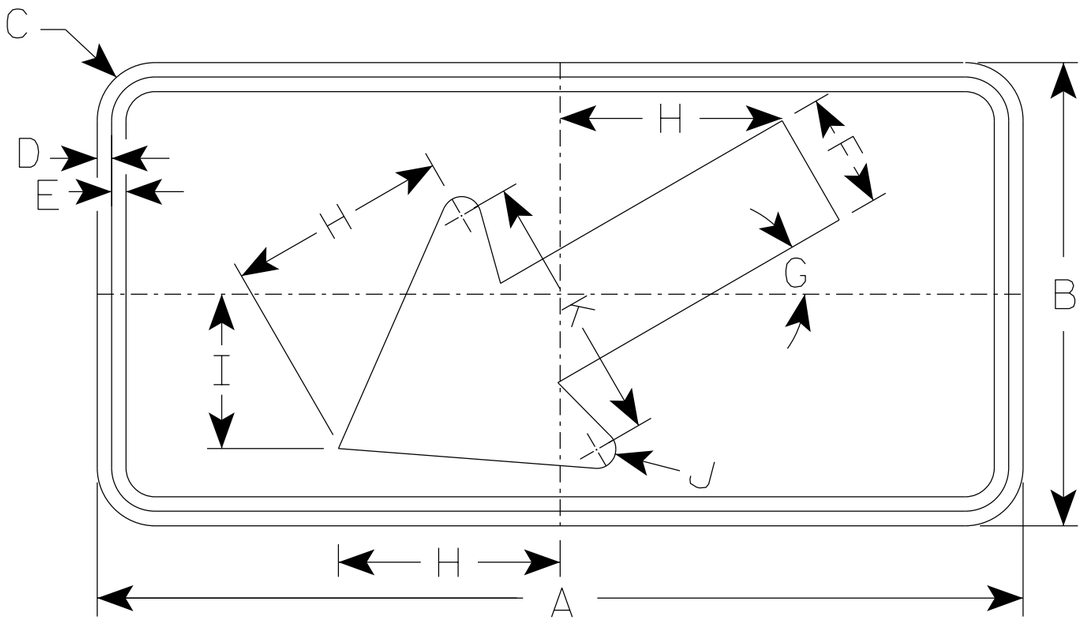
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/22/2023 PLATE NO. S4-51.11

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 776 | E |
|---|---|---|---|---|---|

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow-Green
   Message - Black
3. S16-7R is the same as S16-7L except the arrow is reversed along the vertical centerline.




S16-7L

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24 | 12 | 1 ½ | ⅜ | ⅜ | 3 | 30° | 5 ¾ | 4 | ½ | 7 | | | | | | | | | | | | | | | | 2.0 |
| 2S | 30 | 18 | 1 ½ | ⅜ | ½ | 4 ½ | 30° | 8 ½ | 6 | ⅝ | 10 ¼ | | | | | | | | | | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 ½ | ⅜ | ½ | 4 ½ | 30° | 8 ½ | 6 | ⅝ | 10 ¼ | | | | | | | | | | | | | | | | 3.75 |
| 3 | 30 | 18 | 1 ½ | ⅜ | ½ | 4 ½ | 30° | 8 ½ | 6 | ⅝ | 10 ¼ | | | | | | | | | | | | | | | | 3.75 |
| 4 | 48 | 24 | 1 ⅞ | ½ | ⅝ | 6 | 30° | 11 ½ | 8 | 1 | 14 | | | | | | | | | | | | | | | | 8.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
S16-7

*WISCONSIN DEPT OF TRANSPORTATION*

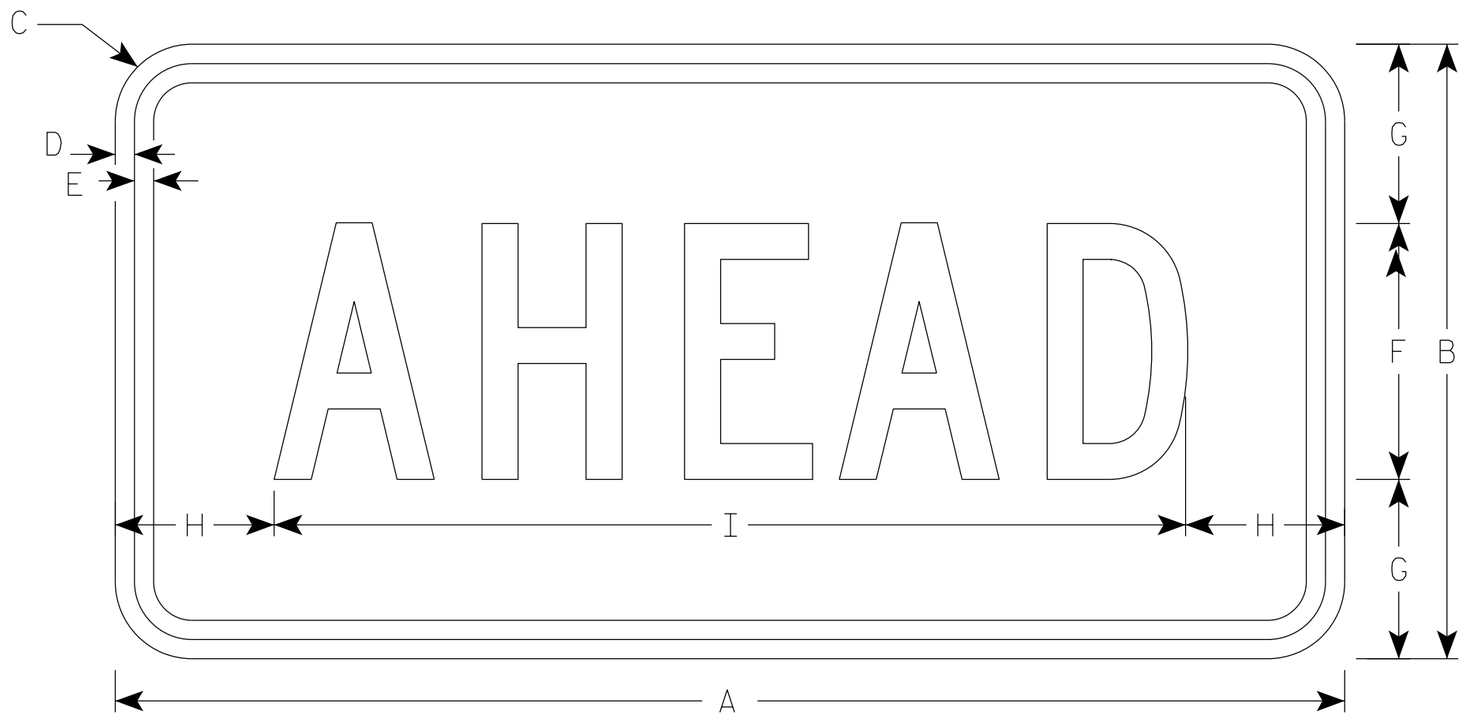
APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 2/23/2023 PLATE NO. S16-7.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 777 | E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow-Green
   Message - Black
3. Message Series - C




S16-9P

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24 | 12 | 1 1/2 | 3/8 | 3/8 | 5 | 3 1/2 | 3 1/8 | 17 3/4 | | | | | | | | | | | | | | | | | | 2.0 |
| 2S | 30 | 18 | 1 1/2 | 3/8 | 1/2 | 7 | 5 1/2 | 2 3/4 | 24 1/2 | | | | | | | | | | | | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 1/2 | 3/8 | 1/2 | 7 | 5 1/2 | 2 3/4 | 24 1/2 | | | | | | | | | | | | | | | | | | 3.75 |
| 3 | 30 | 18 | 1 1/2 | 3/8 | 1/2 | 7 | 3 1/2 | 2 3/4 | 24 1/2 | | | | | | | | | | | | | | | | | | 3.75 |
| 4 | 48 | 24 | 1 7/8 | 1/2 | 5/8 | 10 | 7 | 6 1/8 | 35 3/4 | | | | | | | | | | | | | | | | | | 8.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
S16-9P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/23/2023 PLATE NO. S16-9P.2

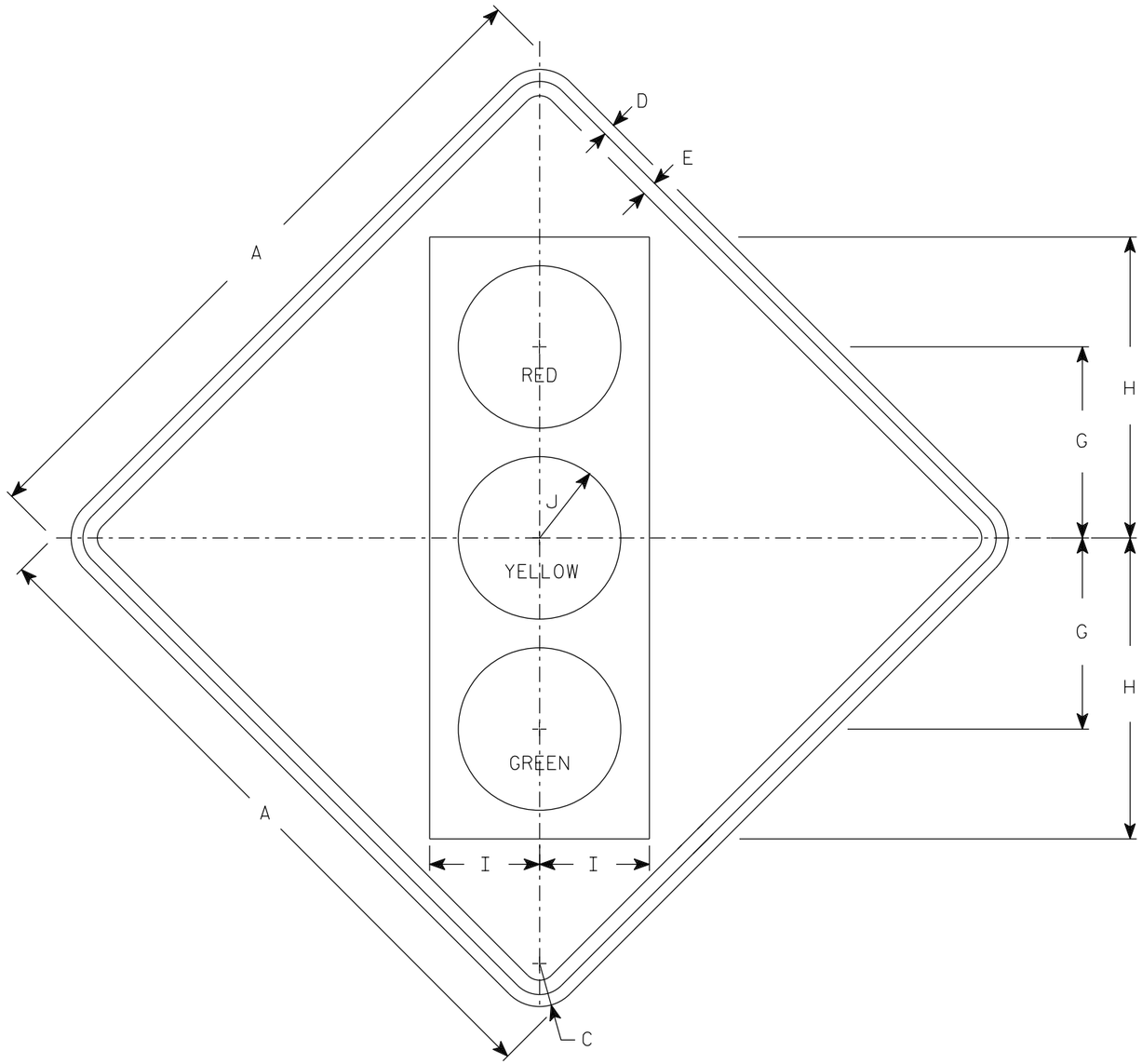
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|



FILE NAME : C:\Users\PROJECTS\tr_stdplate\S169P.dgn PLOT DATE : 23-FEB 2023 10:32 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7




W3-3

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - See Note 3
3. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | 1 7/8 | 1/2 | 5/8 | | 8 3/4 | 13 3/4 | 5 | 3 3/4 | | | | | | | | | | | | | | | | | 6.25 |
| 2S | 36 | | 2 1/4 | 5/8 | 3/4 | | 10 | 15 3/4 | 5 3/4 | 4 1/4 | | | | | | | | | | | | | | | | | 9.0 |
| 2M | 36 | | 2 1/4 | 5/8 | 3/4 | | 10 | 15 3/4 | 5 3/4 | 4 1/4 | | | | | | | | | | | | | | | | | 9.0 |
| 3 | 36 | | 2 1/4 | 5/8 | 3/4 | | 10 | 15 3/4 | 5 3/4 | 4 1/4 | | | | | | | | | | | | | | | | | 9.0 |
| 4 | 48 | | 3 | 3/4 | 1 | | 12 1/2 | 20 | 7 1/2 | 5 | | | | | | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 3 | 3/4 | 1 | | 12 1/2 | 20 | 7 1/2 | 5 | | | | | | | | | | | | | | | | | 16.0 |

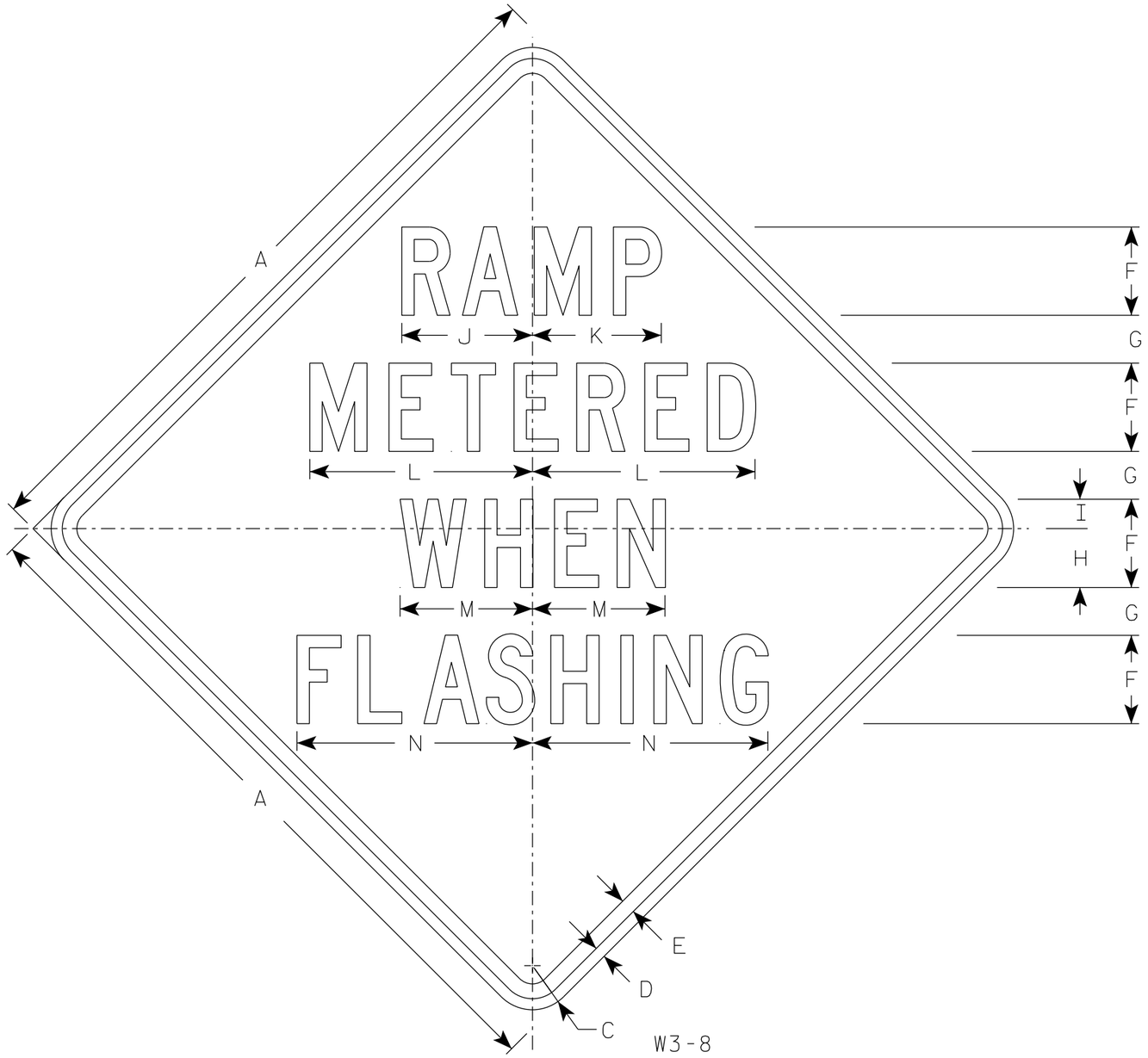
STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/2023 PLATE NO. W3-3.12

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 779 | E |
|---|---|---|---|---|---|




NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - C

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 48 | | 3 | 3/4 | 1 | 6 | 3 3/4 | 4 | 2 | 8 7/8 | 8 3/4 | 15 1/8 | 9 | 16 | | | | | | | | | | | | | 16.0 |
| 2M | 48 | | 3 | 3/4 | 1 | 6 | 3 3/4 | 4 | 2 | 8 7/8 | 8 3/4 | 15 1/8 | 9 | 16 | | | | | | | | | | | | | 16.0 |
| 3 | 48 | | 3 | 3/4 | 1 | 6 | 3 3/4 | 4 | 2 | 8 7/8 | 8 3/4 | 15 1/8 | 9 | 16 | | | | | | | | | | | | | 16.0 |
| 4 | 48 | | 3 | 3/4 | 1 | 6 | 3 3/4 | 4 | 2 | 8 7/8 | 8 3/4 | 15 1/8 | 9 | 16 | | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 3 | 3/4 | 1 | 6 | 3 3/4 | 4 | 2 | 8 7/8 | 8 3/4 | 15 1/8 | 9 | 16 | | | | | | | | | | | | | 16.0 |

STANDARD SIGN
W3-8

WISCONSIN DEPT OF TRANSPORTATION

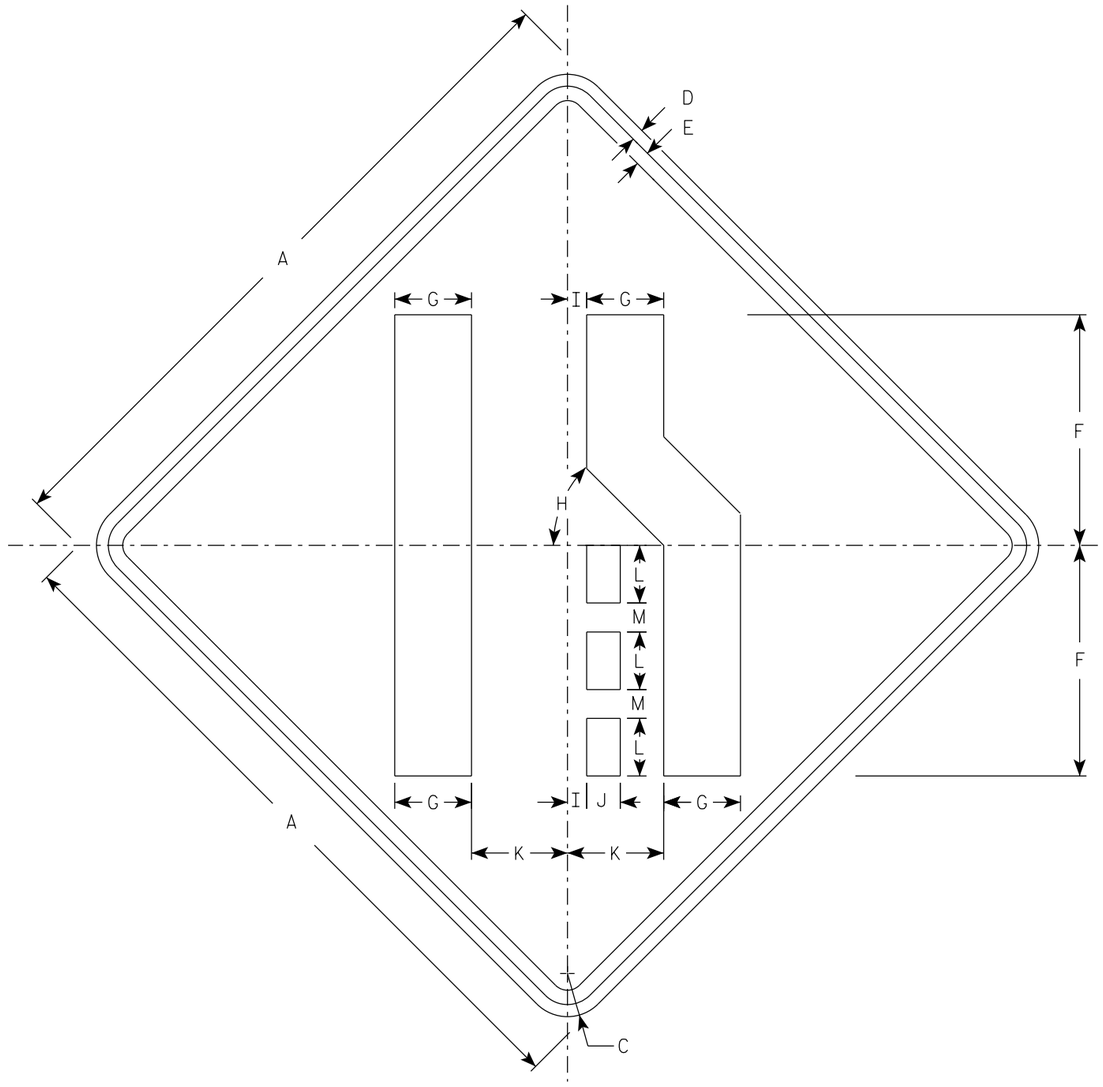
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/30/2023 PLATE NO. W3-8.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W38.DGN PLOT DATE : 30-AUG 2023 4:07 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42




W4-2R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W4-2L is the same as W4-2R except the symbolis reversed along the vertical centerline.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | 1 7/8 | 1/2 | 5/8 | 10 | 3 3/8 | 45° | 7/8 | 1 1/2 | 4 1/4 | 2 1/2 | 1 1/4 | | | | | | | | | | | | | | 6.25 |
| 2S | 36 | | 2 1/4 | 5/8 | 3/4 | 12 | 4 | 45° | 1 | 1 3/4 | 5 | 3 | 1 1/2 | | | | | | | | | | | | | | 9.0 |
| 2M | 36 | | 2 1/4 | 5/8 | 3/4 | 12 | 4 | 45° | 1 | 1 3/4 | 5 | 3 | 1 1/2 | | | | | | | | | | | | | | 9.0 |
| 3 | 36 | | 2 1/4 | 5/8 | 3/4 | 12 | 4 | 45° | 1 | 1 3/4 | 5 | 3 | 1 1/2 | | | | | | | | | | | | | | 9.0 |
| 4 | 48 | | 3 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 3 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |

STANDARD SIGN
W4-2

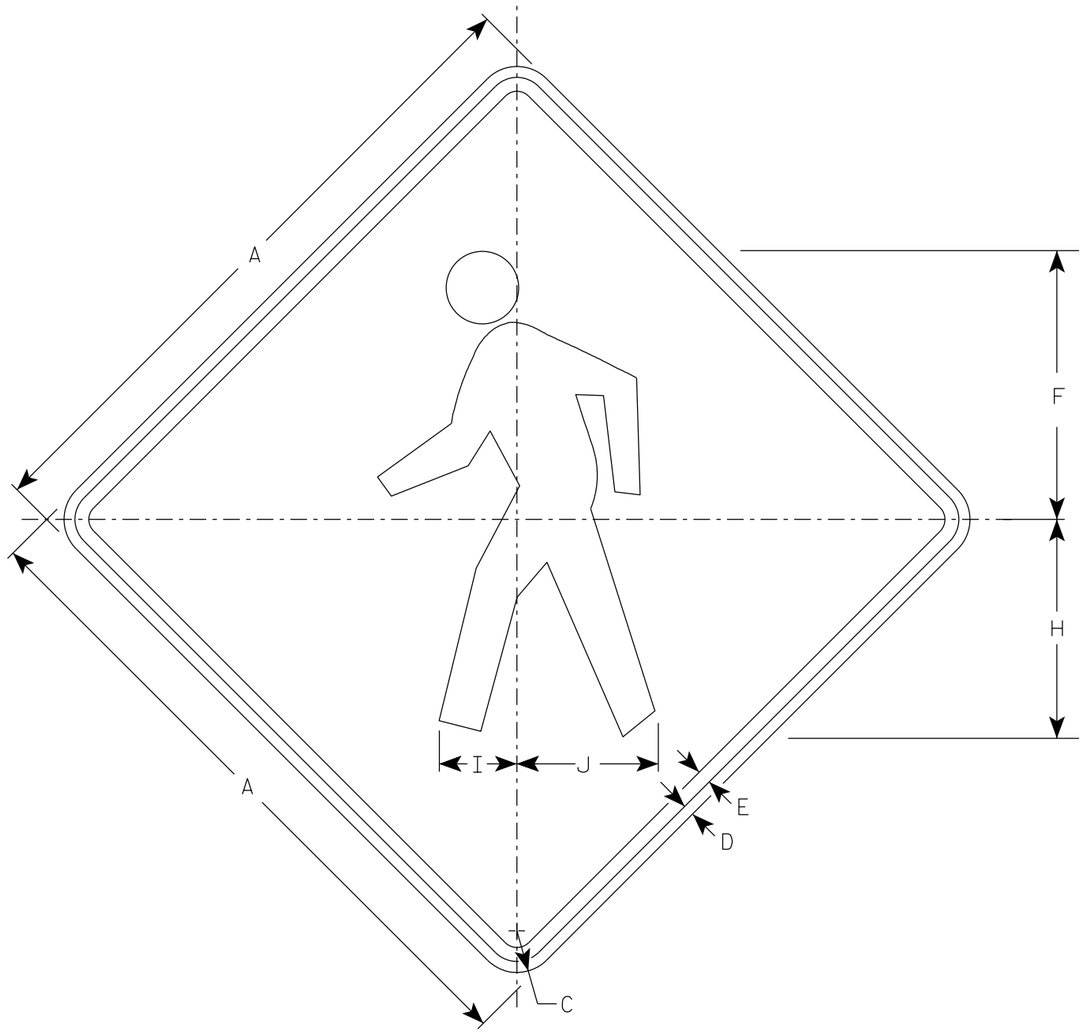
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/31/2023 PLATE NO. W4-2.15

PROJECT NO:

SHEET NO: 781 E




W11-2

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24 | | 1 1/2 | 3/8 | 1/2 | 9 3/4 | | 7 7/8 | 2 7/8 | 5 1/8 | | | | | | | | | | | | | | | | | 4.0 |
| 2S | 30 | | 1 7/8 | 1/2 | 5/8 | 12 1/8 | | 9 7/8 | 3 1/2 | 6 3/8 | | | | | | | | | | | | | | | | | 6.25 |
| 2M | 36 | | 2 1/4 | 5/8 | 3/4 | 14 1/2 | | 11 7/8 | 4 1/4 | 7 5/8 | | | | | | | | | | | | | | | | | 9.0 |
| 3 | 36 | | 2 1/4 | 5/8 | 3/4 | 14 1/2 | | 11 7/8 | 4 1/4 | 7 5/8 | | | | | | | | | | | | | | | | | 9.0 |
| 4 | 48 | | 3 | 3/4 | 1 | 19 3/8 | | 15 3/4 | 5 5/8 | 10 1/4 | | | | | | | | | | | | | | | | | 16.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN

W11-2

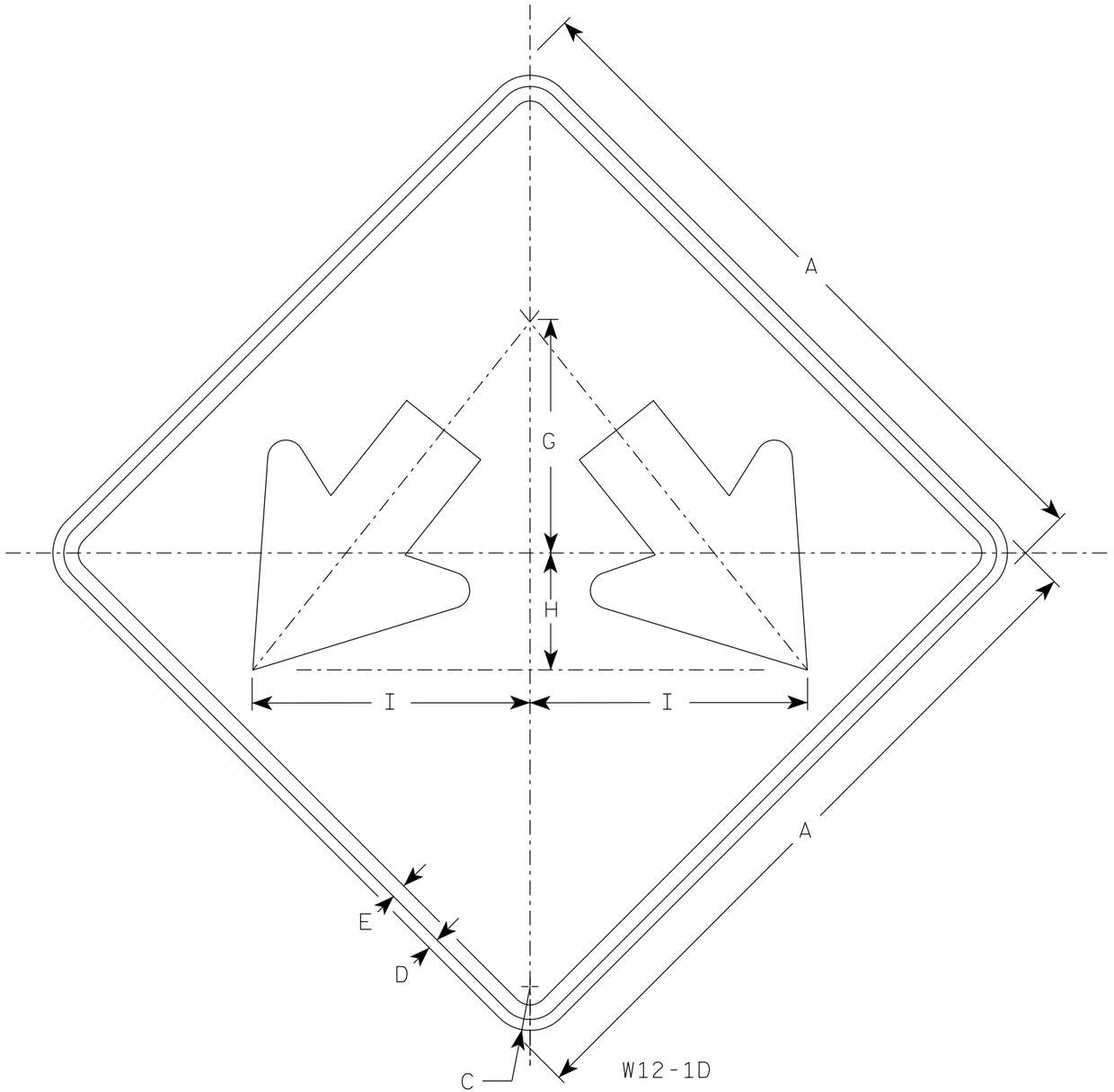
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

For State Traffic Engineer

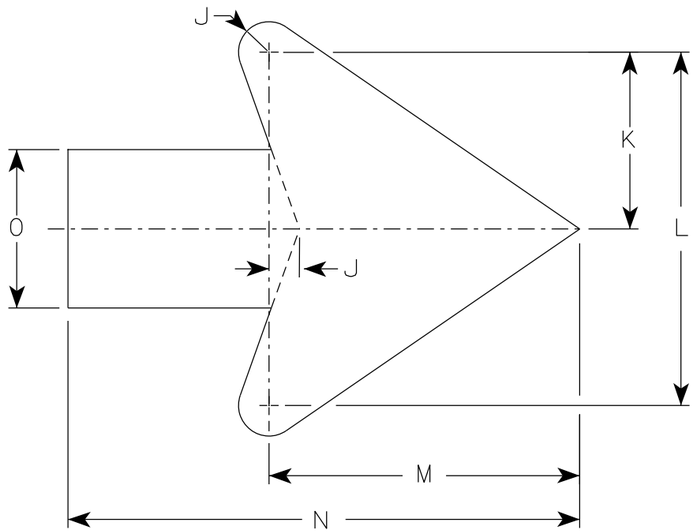
DATE 6/15/2023 PLATE NO. W11-2.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 782 | E




NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black




Arrow Detail

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Areq sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | | 1 1/2 | 1/2 | 3/8 | | 8 | 4 | 9 1/2 | 3/8 | 3 3/8 | 7 1/4 | 6 3/8 | 10 3/8 | 3 1/4 | | | | | | | | | | | | 4.0 |
| 2M | 24 | | 1 1/2 | 1/2 | 3/8 | | 8 | 4 | 9 1/2 | 3/8 | 3 3/8 | 7 1/4 | 6 3/8 | 10 3/8 | 3 1/4 | | | | | | | | | | | | 4.0 |
| 3 | 30 | | 1 7/8 | 1/2 | 5/8 | | 10 | 5 | 11 7/8 | 3/4 | 4 1/2 | 9 | 7 7/8 | 13 | 4 | | | | | | | | | | | | 6.25 |
| 4 | 36 | | 2 1/4 | 1/2 | 5/8 | | 12 | 6 | 14 1/4 | 1 | 5 1/2 | 10 7/8 | 9 5/8 | 15 3/4 | 4 3/4 | | | | | | | | | | | | 9.0 |
| 5 | 48 | | 3 | 3/4 | 1 | | 16 | 8 | 19 | 1 1/4 | 7 1/4 | 14 1/2 | 12 3/4 | 21 | 6 1/4 | | | | | | | | | | | | 16.0 |

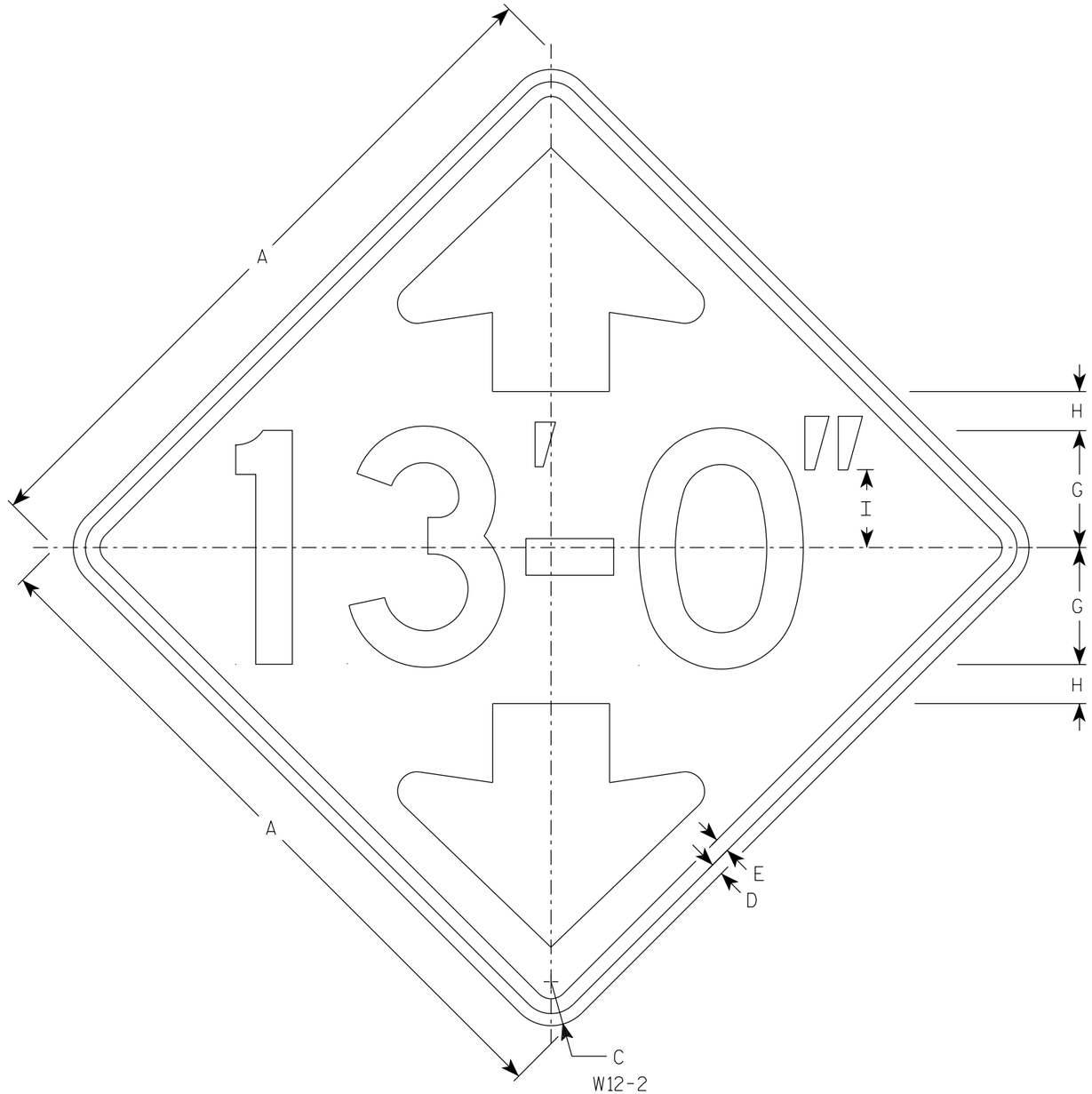
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

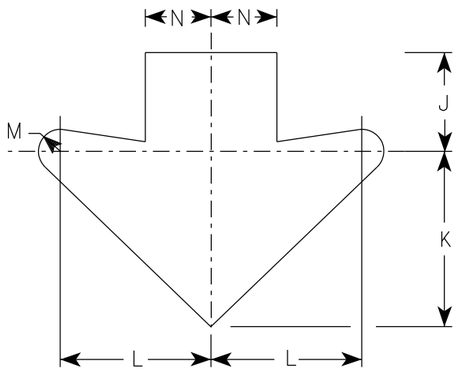
DATE 11/30/2023 PLATE NO. W12-1D.16

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 783 | E |
|---|---|---|---|---|---|

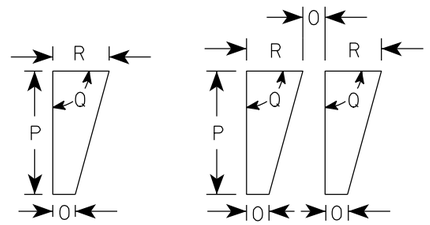



NOTES

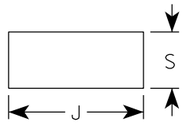
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Substitute appropriate numerals and optically adjust spacing of numerals, hyphen, foot & inch marks to achieve proper balance.




Arrow Detail




Foot Mark & Inch Mark Detail




Hyphen Detail

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | 1 7/8 | 1/2 | 5/8 | | 5 | 1 5/8 | 3 3/8 | 3 3/4 | 6 5/8 | 5 3/4 | 3/4 | 2 1/2 | 1/2 | 2 1/4 | 90° | 1 | 1 5/8 | | | | | | | | 6.25 |
| 2S | 36 | | 2 1/4 | 5/8 | 3/4 | | 6 | 2 | 4 | 4 1/2 | 8 | 6 7/8 | 1 | 3 | 1/2 | 2 3/4 | 90° | 1 1/4 | 1 7/8 | | | | | | | | 9.0 |
| 2M | 36 | | 2 1/4 | 5/8 | 3/4 | | 6 | 2 | 4 | 4 1/2 | 8 | 6 7/8 | 1 | 3 | 1/2 | 2 3/4 | 90° | 1 1/4 | 1 7/8 | | | | | | | | 9.0 |
| 3 | 36 | | 2 1/4 | 5/8 | 3/4 | | 6 | 2 | 4 | 4 1/2 | 8 | 6 7/8 | 1 | 3 | 1/2 | 2 3/4 | 90° | 1 1/4 | 1 7/8 | | | | | | | | 9.0 |
| 4 | 36 | | 2 1/4 | 5/8 | 3/4 | | 6 | 2 | 4 | 4 1/2 | 8 | 6 7/8 | 1 | 3 | 1/2 | 2 3/4 | 90° | 1 1/4 | 1 7/8 | | | | | | | | 9.0 |
| 5 | 48 | | 3 | 3/4 | 1 | | 8 | 2 5/8 | 5 1/2 | 5 7/8 | 10 5/8 | 9 1/4 | 1 3/8 | 4 | 5/8 | 3 5/8 | 90° | 1 5/8 | 2 1/2 | | | | | | | | 16.0 |

STANDARD SIGN
W12-2

WISCONSIN DEPT OF TRANSPORTATION

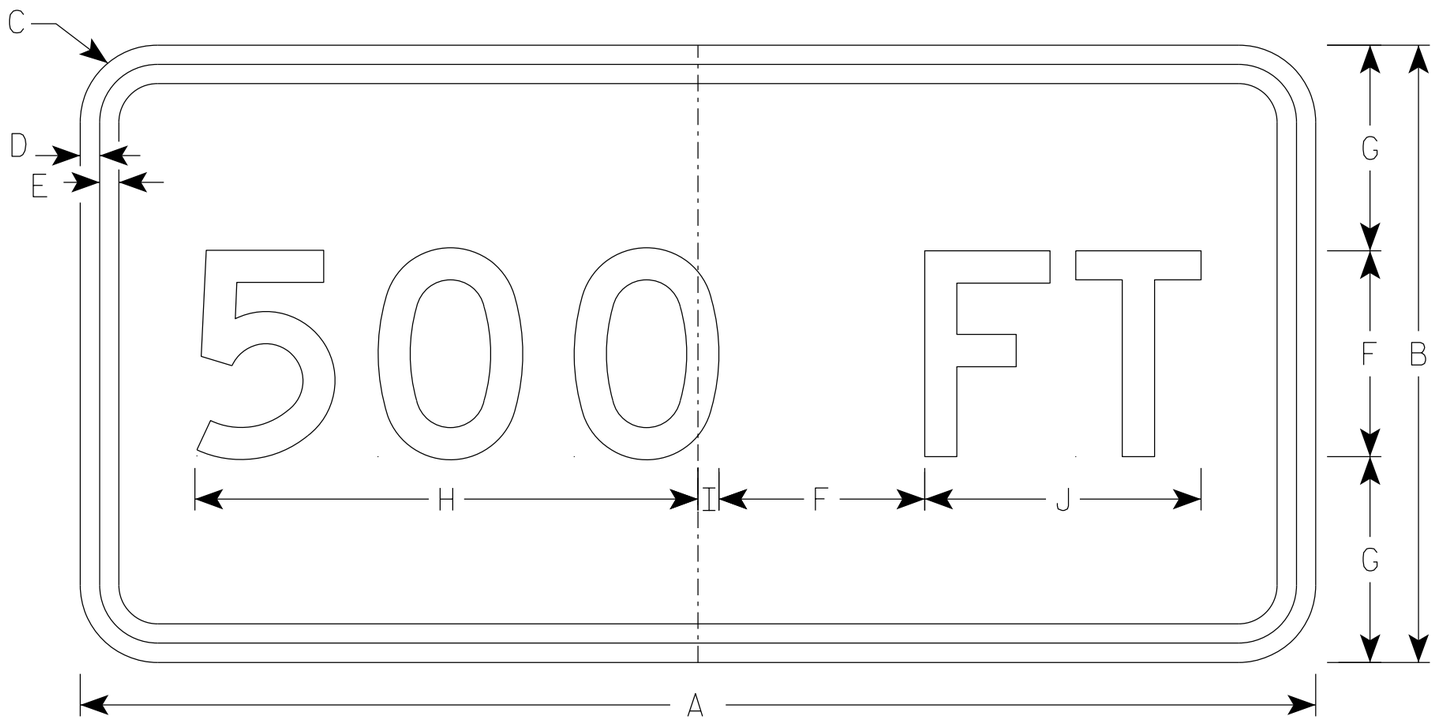
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/30/2023 PLATE NO. W12-2.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D




W16-2A

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 12 | 1 1/2 | 3/8 | 3/8 | 4 | 4 | 9 3/4 | 3/8 | 5 3/8 | | | | | | | | | | | | | | | | | 2.0 |
| 2M | 24 | 12 | 1 1/2 | 3/8 | 3/8 | 4 | 4 | 9 3/4 | 3/8 | 5 3/8 | | | | | | | | | | | | | | | | | 2.0 |
| 3 | 30 | 18 | 1 1/2 | 3/8 | 1/2 | 5 | 5 1/2 | 12 1/4 | 1/2 | 6 3/4 | | | | | | | | | | | | | | | | | 3.75 |
| 4 | 42 | 21 | 1 7/8 | 1/2 | 5/8 | 7 | 7 | 16 5/8 | 1 1/8 | 9 3/8 | | | | | | | | | | | | | | | | | 6.13 |
| 5 | 42 | 21 | 1 7/8 | 1/2 | 5/8 | 7 | 7 | 16 5/8 | 1 1/8 | 9 3/8 | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W16-2A

WISCONSIN DEPT OF TRANSPORTATION

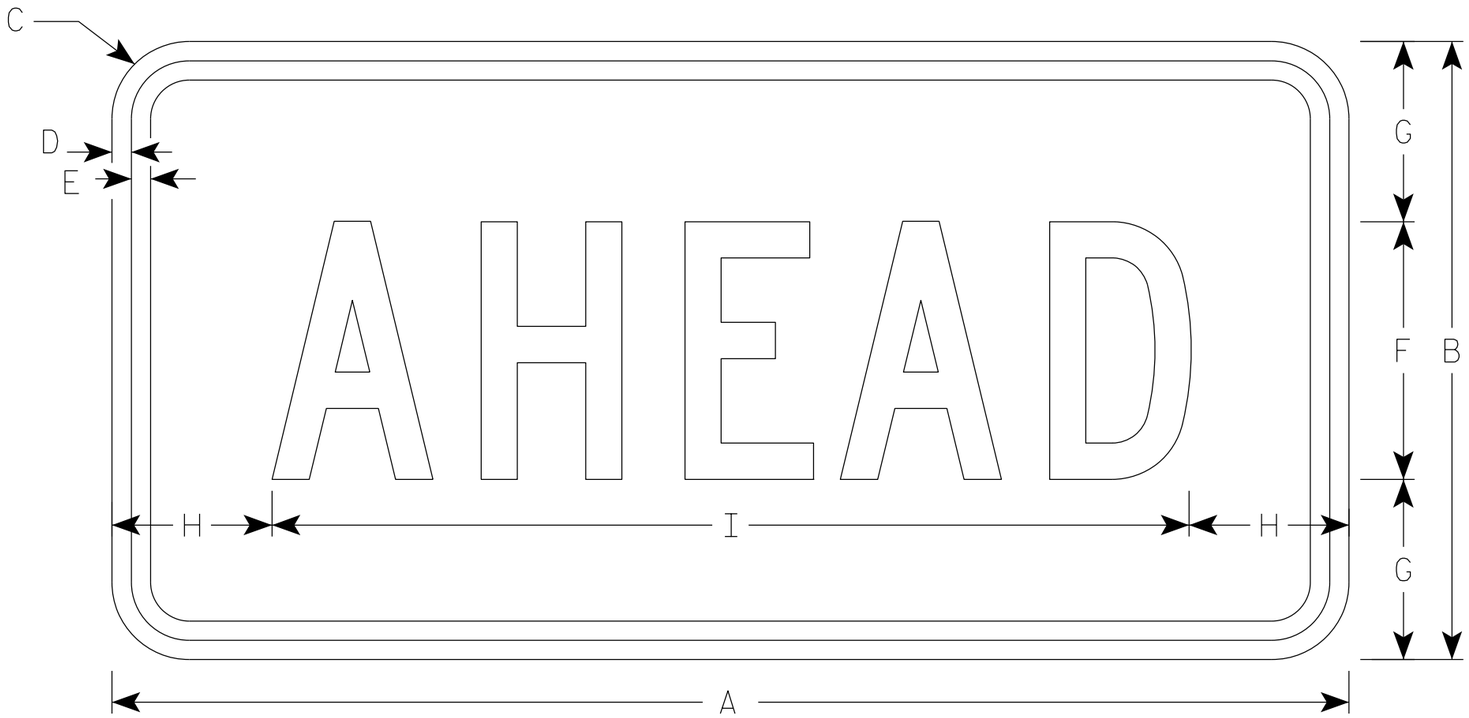
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/16/2024 PLATE NO. W16-2A.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 785 | E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - C




W16-9P

* For 36" x 36" Warning Signs, use 30" x 18" W16-9P signs.
* For 48" x 48" Warning Signs, use 48" x 24" W16-9P signs.

| | SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2S | 24 | 12 | 1 1/2 | 3/8 | 3/8 | 5 | 3 1/2 | 3 1/8 | 17 3/4 | | | | | | | | | | | | | | | | | | 2.0 |
| * | 2M | 30 | 18 | 1 1/2 | 3/8 | 1/2 | 7 | 5 1/2 | 2 3/4 | 24 1/2 | | | | | | | | | | | | | | | | | | 3.75 |
| * | 3 | 30 | 18 | 1 1/2 | 3/8 | 1/2 | 7 | 3 1/2 | 2 3/4 | 24 1/2 | | | | | | | | | | | | | | | | | | 3.75 |
| * | 4 | 48 | 24 | 1 7/8 | 1/2 | 5/8 | 10 | 7 | 6 1/8 | 35 3/4 | | | | | | | | | | | | | | | | | | 8.0 |
| | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

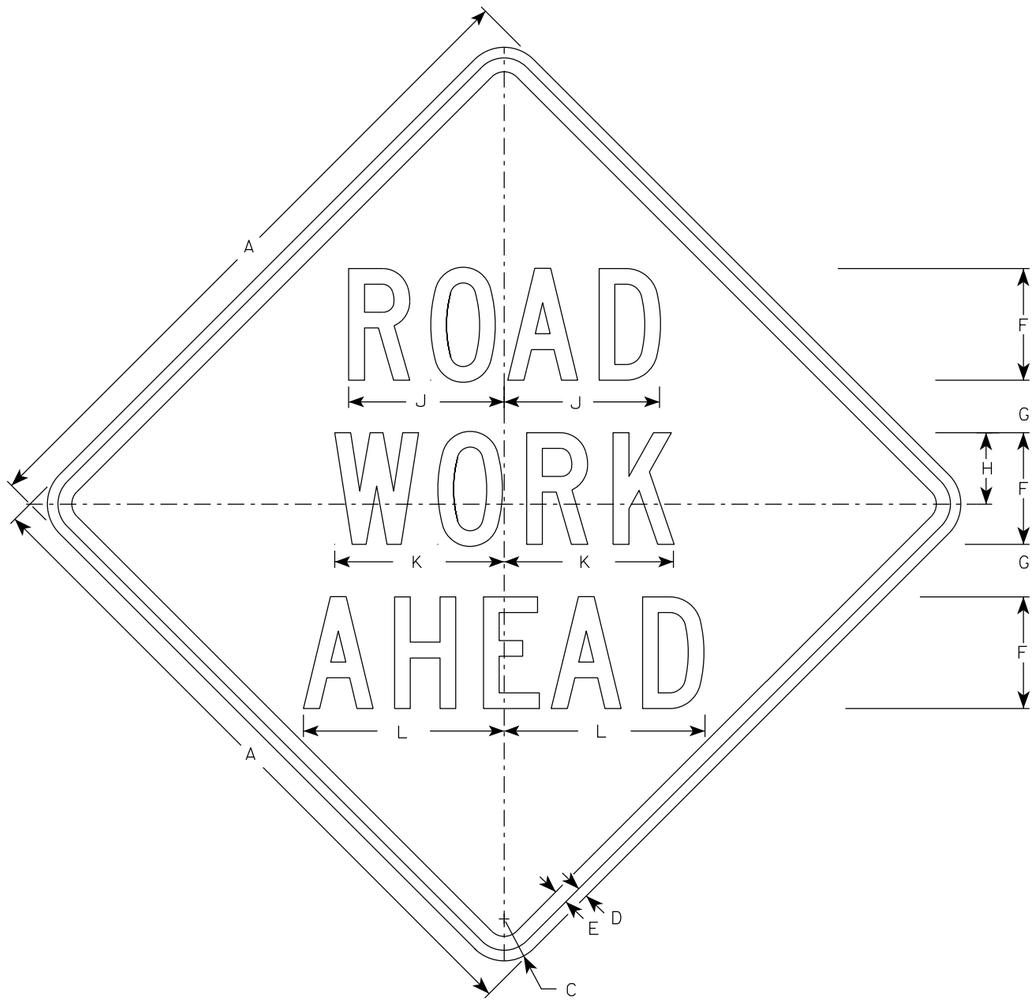
STANDARD SIGN
W16-9P

WISCONSIN DEPT OF TRANSPORTATION

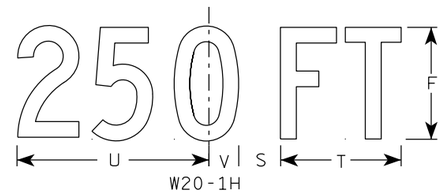
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/9/2024 PLATE NO. W16-9P.9

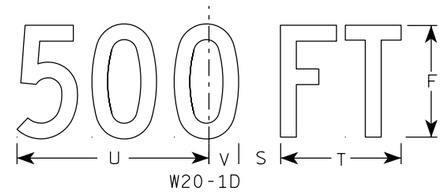
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 786 E




W20-1A




W20-1H



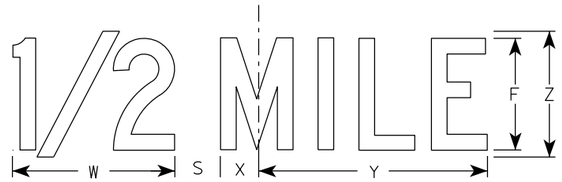

W20-1D

W20-1C

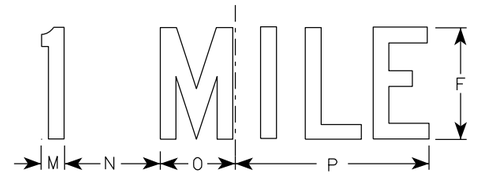
W20-1B

NOTES

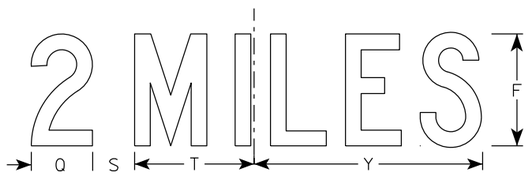
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.




W20-1G




W20-1F




W20-1E

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 2 1/4 | 5/8 | 3/4 | 5 | 2 5/8 | 3 1/4 | 10 1/8 | 7 | 7 5/8 | 8 7/8 | 1 1/8 | 4 1/2 | 3 1/2 | 9 | 3 1/4 | 2 1/2 | 2 1/4 | 5 5/8 | 9 | 1 3/8 | 8 | 1 3/4 | 10 3/4 | 6 | 9.0 |
| 2S | 48 | | 3 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 2M | 48 | | 3 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 3 | 48 | | 3 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 4 | 48 | | 3 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 5 | 48 | | 3 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-1.12

PROJECT NO:

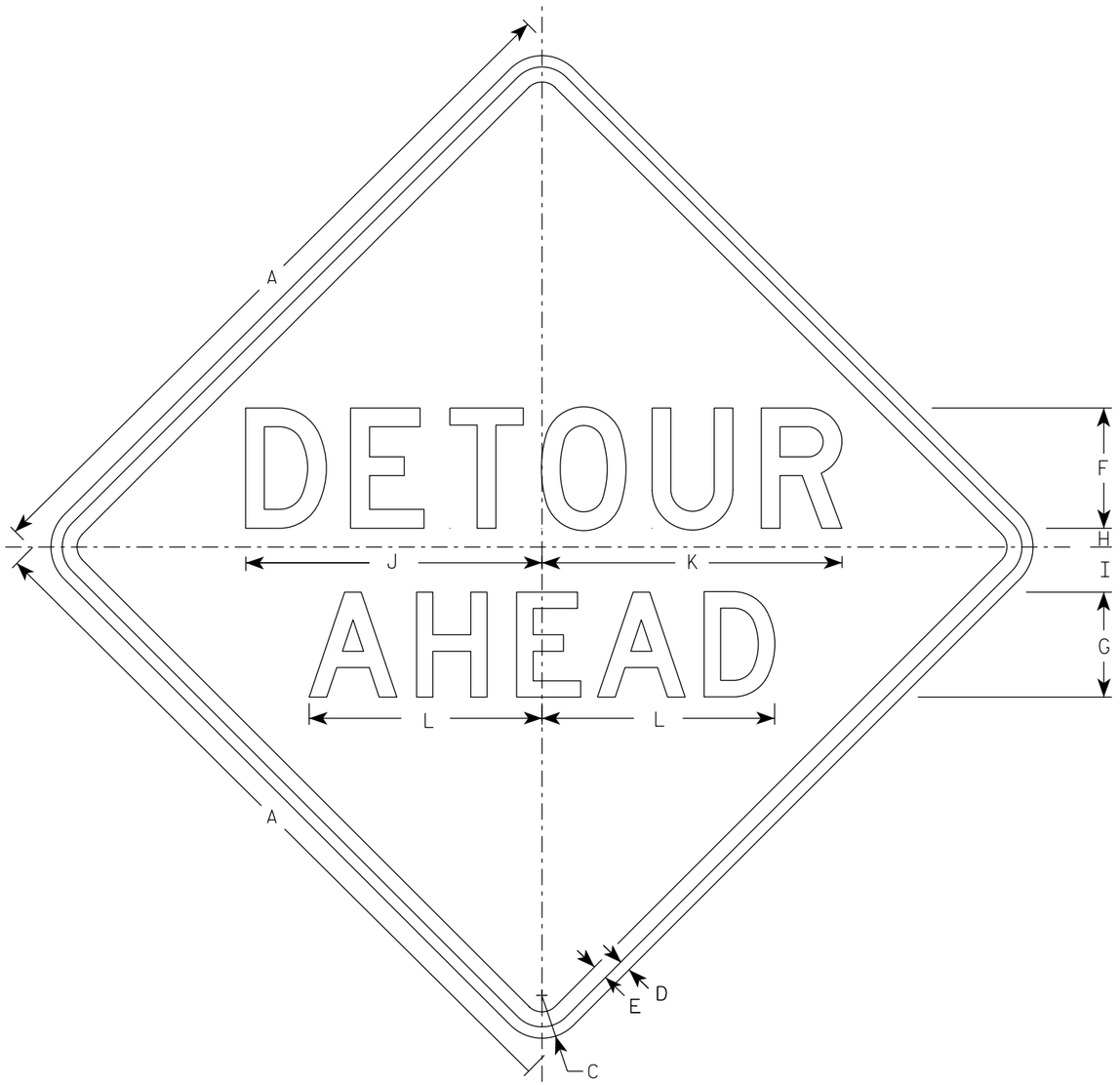
SHEET NO: 787 E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 10-JAN 2024 11:16 PLOT BY : dotc4c

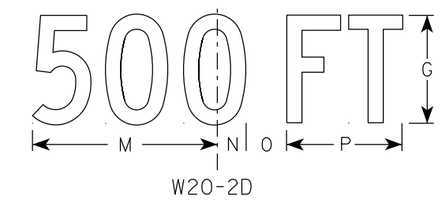
WISDOT/CADDS SHEET 42

7

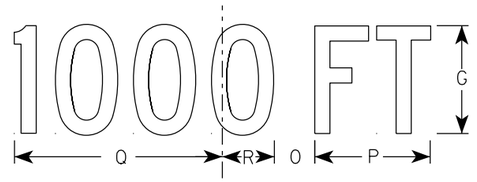
7



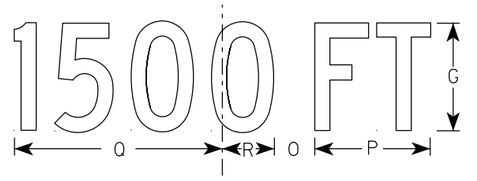

W20-2A



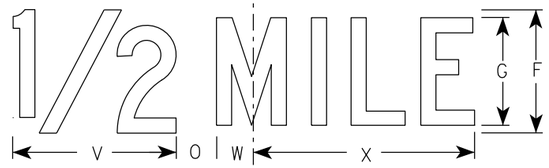

W20-2D



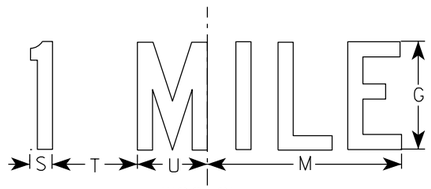

W20-2C




W20-2B




W20-2G




W20-2F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 2 1/4 | 5/8 | 3/4 | 6 | 5 | 1 | 2 1/4 | 14 3/4 | 15 | 11 5/8 | 9 | 1 3/8 | 1 7/8 | 5 5/8 | 10 1/8 | 2 1/2 | 1 1/8 | 4 1/2 | 3 1/2 | 8 | 1 3/4 | 10 3/4 | | | 9.0 |
| 2S | 48 | | 3 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 2M | 48 | | 3 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 3 | 48 | | 3 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 4 | 48 | | 3 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 5 | 48 | | 3 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

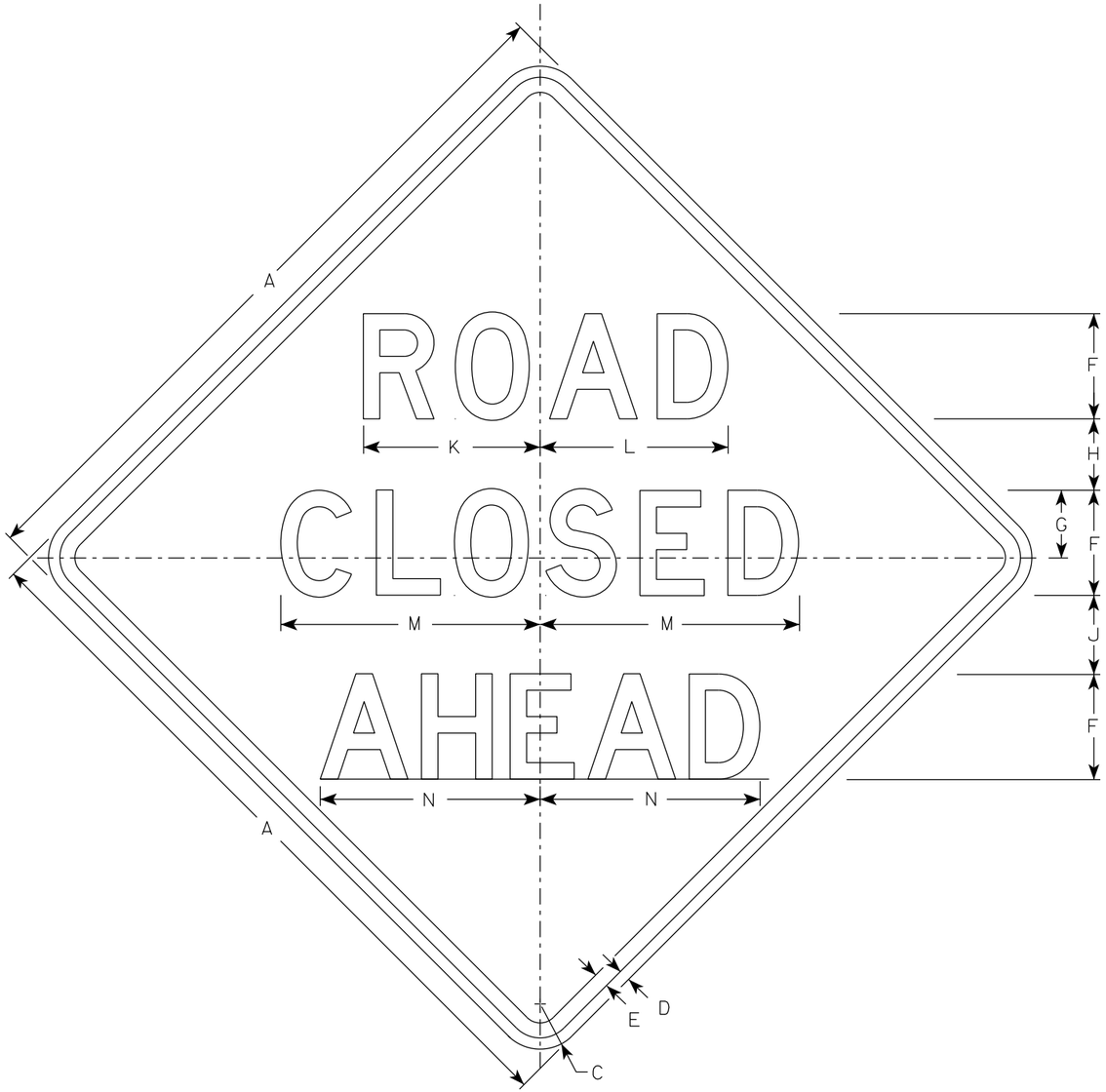
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-2.7

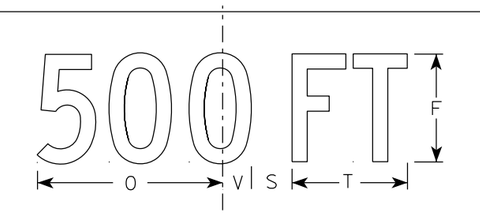
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|



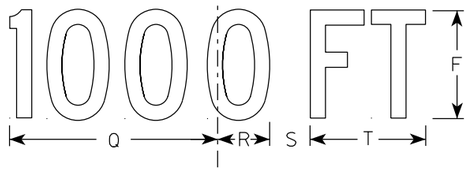
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W202.DGN PLOT DATE : 10-JAN 2024 11:36 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



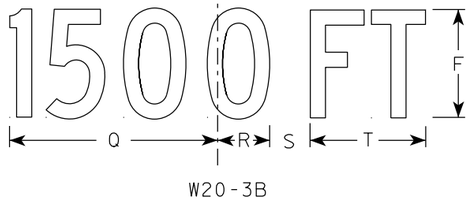

W20-3A



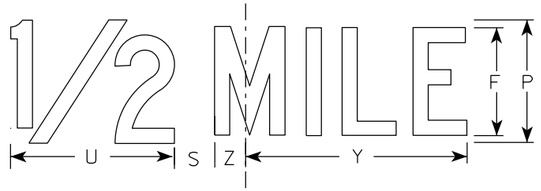

W20-3D



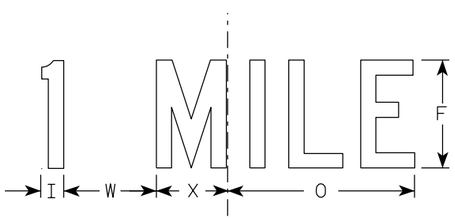

W20-3C




W20-3B




W20-3G




W20-3F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 2 1/4 | 5/8 | 3/4 | 5 | 3 3/8 | 3 1/2 | 1 1/8 | 4 | 8 3/8 | 8 7/8 | 12 1/2 | 11 | 9 | 6 | 10 1/8 | 2 1/2 | 1 7/8 | 5 5/8 | 8 | 1 3/8 | 4 1/2 | 3 1/2 | 10 3/4 | 1 3/4 | 9.0 |
| 2S | 48 | | 3 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 2M | 48 | | 3 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 3 | 48 | | 3 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 4 | 48 | | 3 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 5 | 48 | | 3 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

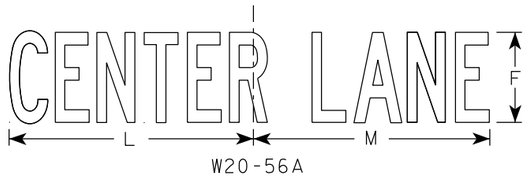
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-3.8

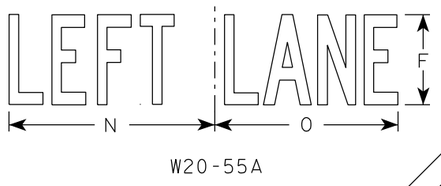
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



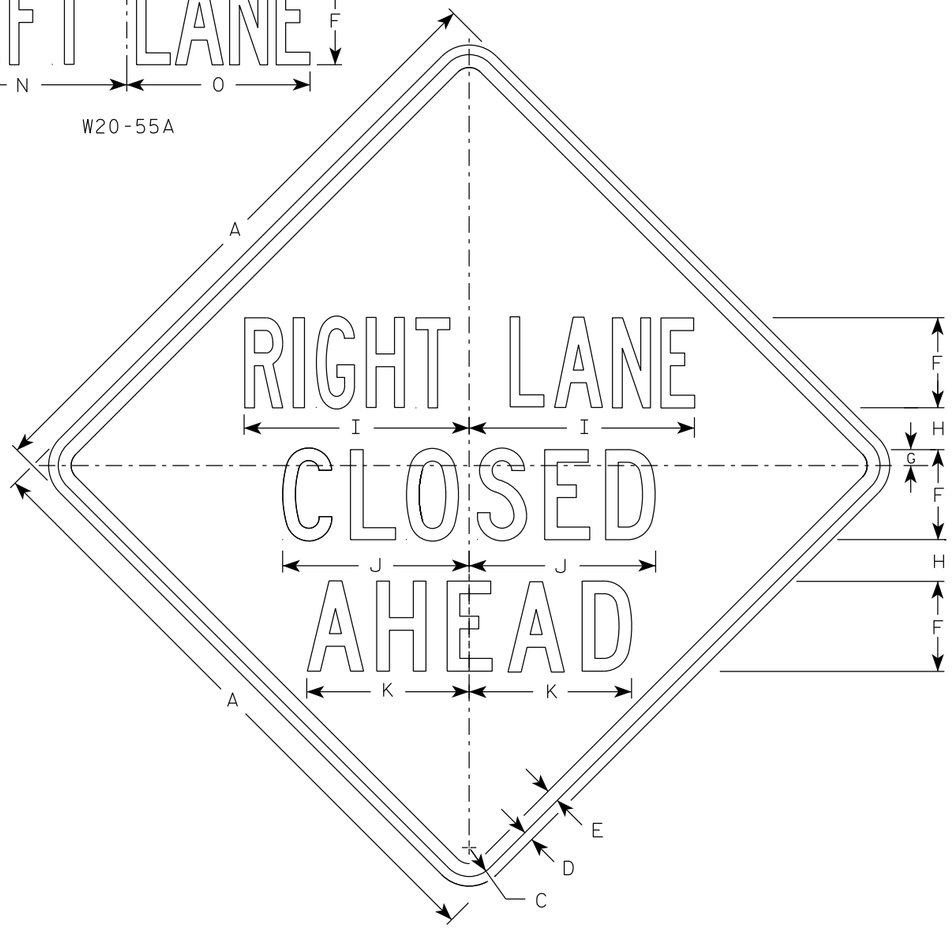
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W203.DGN PLOT DATE : 10-JAN 2024 12:02 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



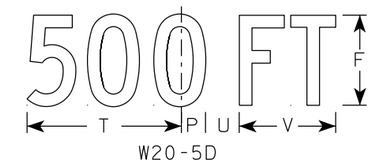

W20-56A



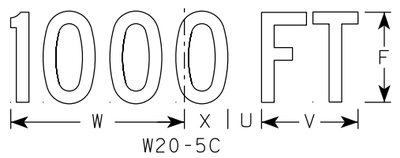

W20-55A



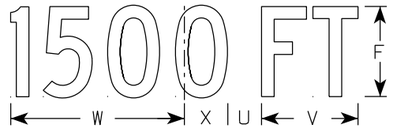

W20-5A



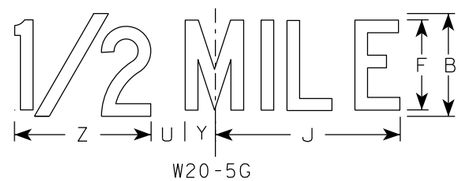

W20-5D




W20-5C




W20-5B




W20-5G

W20-5F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | 6 | 2 1/4 | 5/8 | 3/4 | 5 | 7/8 | 2 1/2 | 13 1/8 | 10 3/4 | 9 1/2 | 14 1/4 | 13 5/8 | 12 | 12 | 1 3/8 | 1 1/8 | 4 1/2 | 3 1/2 | 9 | 1 7/8 | 5 5/8 | 10 1/8 | 2 1/2 | 1 3/4 | 8 | 9.0 |
| 2S | 48 | 8 | 3 | 3/4 | 1 | 7 | 1 1/4 | 3 1/4 | 17 1/2 | 14 3/8 | 12 5/8 | 19 | 18 3/8 | 16 | 14 1/4 | 1 7/8 | 1 1/2 | 6 | 4 5/8 | 12 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 2 3/8 | 10 5/8 | 16.0 |
| 2M | 48 | 8 | 3 | 3/4 | 1 | 7 | 1 1/4 | 3 1/4 | 17 1/2 | 14 3/8 | 12 5/8 | 19 | 18 3/8 | 16 | 14 1/4 | 1 7/8 | 1 1/2 | 6 | 4 5/8 | 12 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 2 3/8 | 10 5/8 | 16.0 |
| 3 | 48 | 8 | 3 | 3/4 | 1 | 7 | 1 1/4 | 3 1/4 | 17 1/2 | 14 3/8 | 12 5/8 | 19 | 18 3/8 | 16 | 14 1/4 | 1 7/8 | 1 1/2 | 6 | 4 5/8 | 12 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 2 3/8 | 10 5/8 | 16.0 |
| 4 | 48 | 8 | 3 | 3/4 | 1 | 7 | 1 1/4 | 3 1/4 | 17 1/2 | 14 3/8 | 12 5/8 | 19 | 18 3/8 | 16 | 14 1/4 | 1 7/8 | 1 1/2 | 6 | 4 5/8 | 12 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 2 3/8 | 10 5/8 | 16.0 |
| 5 | 48 | 8 | 3 | 3/4 | 1 | 7 | 1 1/4 | 3 1/4 | 17 1/2 | 14 3/8 | 12 5/8 | 19 | 18 3/8 | 16 | 14 1/4 | 1 7/8 | 1 1/2 | 6 | 4 5/8 | 12 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 2 3/8 | 10 5/8 | 16.0 |

STANDARD SIGN

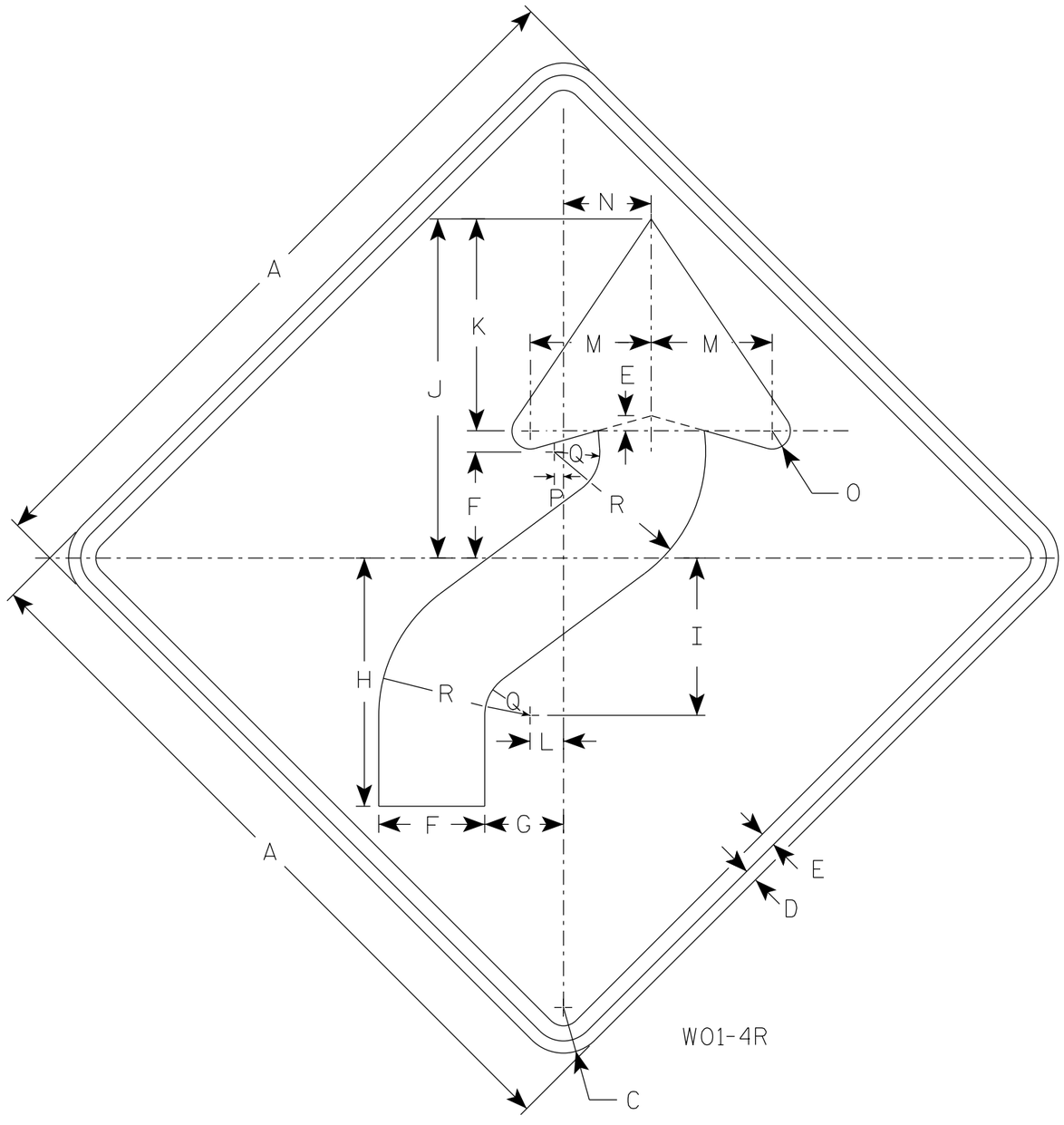
W20-5A, B, C, D, F & G

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 3/27/24 PLATE NO. W20-5.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 790 | E




WO1-4R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. WO1-4L is the same as WO1-4R except the arrow is reversed along the vertical centerline.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 2 1/4 | 5/8 | 3/4 | 5 1/4 | 4 | 12 3/8 | 7 7/8 | 16 7/8 | 10 1/2 | 1 5/8 | 6 | 4 1/2 | 1 | 1/2 | 2 1/4 | 7 1/2 | | | | | | | | | 9.0 |
| 2S | 48 | | 3 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 2M | 48 | | 3 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 3 | 48 | | 3 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 4 | 48 | | 3 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 5 | 48 | | 3 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |

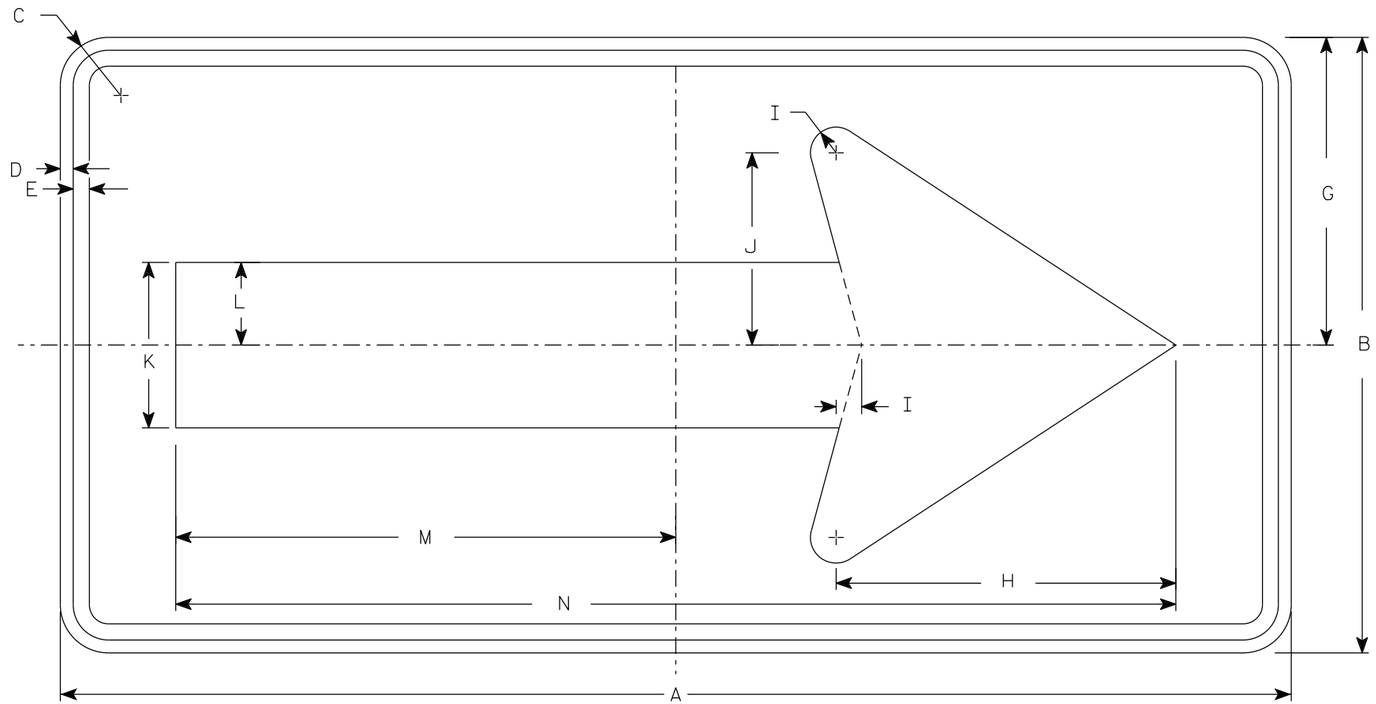
# STANDARD SIGN
# WO1-4

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*For* State Traffic Engineer

DATE 1/24/2024 PLATE NO. WO1-4.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 791 | E




WO1-6

## NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 48 | 24 | 1 7/8 | 1/2 | 5/8 | | 12 | 13 1/4 | 1 | 7 1/2 | 6 1/2 | 3 1/4 | 19 1/2 | 39 | | | | | | | | | | | | | 8.0 |
| 2M | 48 | 24 | 1 7/8 | 1/2 | 5/8 | | 12 | 13 1/4 | 1 | 7 1/2 | 6 1/2 | 3 1/4 | 19 1/2 | 39 | | | | | | | | | | | | | 8.0 |
| 3 | 60 | 30 | 1 7/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |
| 4 | 60 | 30 | 1 7/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |
| 5 | 60 | 30 | 1 7/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |

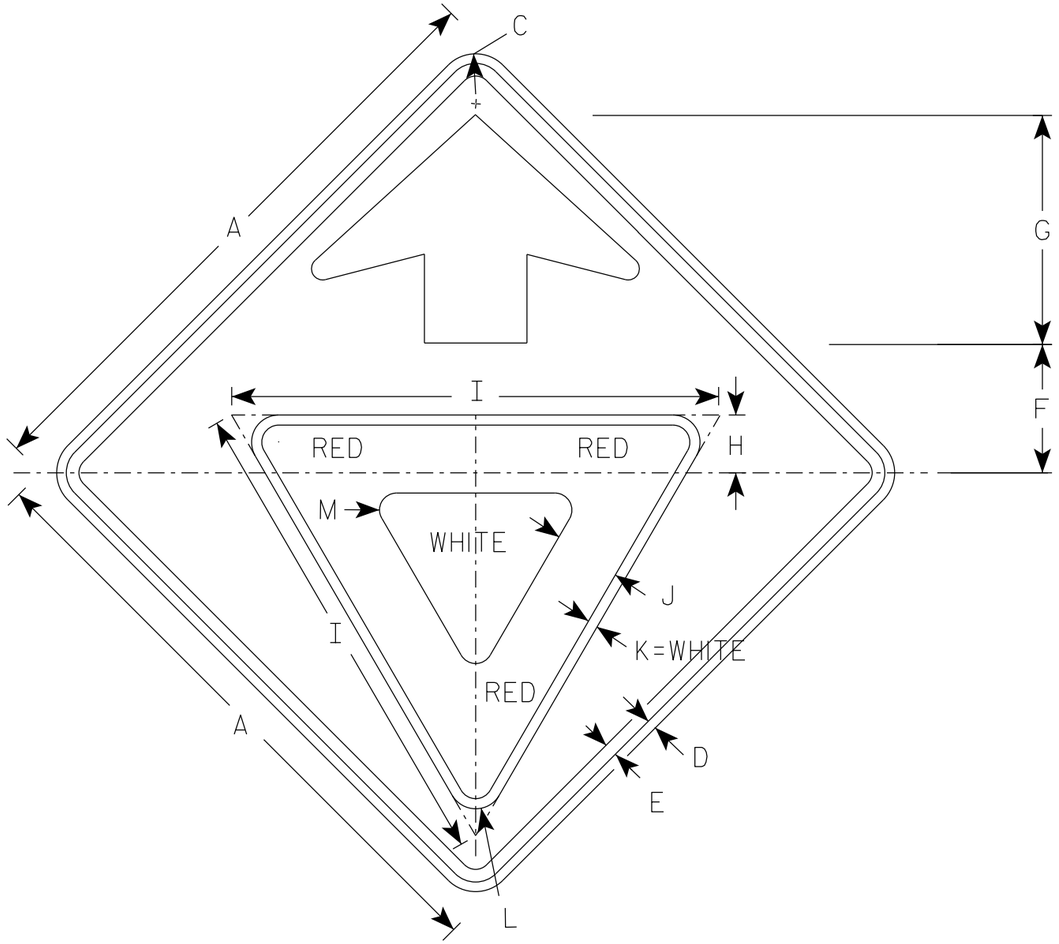
STANDARD SIGN
WO1-6

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 1/24/2024 PLATE NO. WO1-6.2

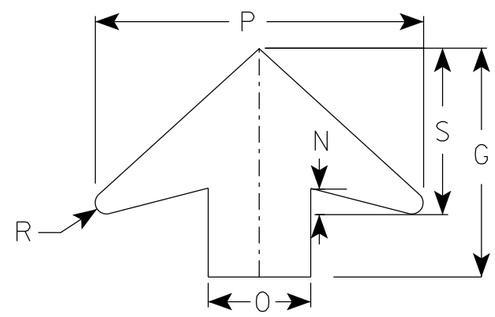
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E




W03-2

NOTES

1. All Signs Type II - Type F Reflective
2. Color:
   Background - ORANGE
   Arrow & Border - BLACK
   Yield Symbol - WHITE BORDER ON RED BACKGROUND




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 2 1/4 | 5/8 | 3/4 | 7 1/2 | 13 1/2 | 3 3/8 | 28 | 3 3/4 | 5/8 | 1 1/2 | 1 | 1 5/8 | 6 | 19 1/4 | | 5/8 | 9 3/4 | | | | | | | | 9.0 |
| 2S | 48 | | 3 | 3/4 | 1 | 10 | 17 7/8 | 4 1/2 | 38 | 5 | 3/4 | 2 1/8 | 1 3/8 | 2 | 8 | 25 5/8 | | 7/8 | 13 | | | | | | | | 16.0 |
| 2M | 48 | | 3 | 3/4 | 1 | 10 | 17 7/8 | 4 1/2 | 38 | 5 | 3/4 | 2 1/8 | 1 3/8 | 2 | 8 | 25 5/8 | | 7/8 | 13 | | | | | | | | 16.0 |
| 3 | 48 | | 3 | 3/4 | 1 | 10 | 17 7/8 | 4 1/2 | 38 | 5 | 3/4 | 2 1/8 | 1 3/8 | 2 | 8 | 25 5/8 | | 7/8 | 13 | | | | | | | | 16.0 |
| 4 | 48 | | 3 | 3/4 | 1 | 10 | 17 7/8 | 4 1/2 | 38 | 5 | 3/4 | 2 1/8 | 1 3/8 | 2 | 8 | 25 5/8 | | 7/8 | 13 | | | | | | | | 16.0 |
| 5 | 48 | | 3 | 3/4 | 1 | 10 | 17 7/8 | 4 1/2 | 38 | 5 | 3/4 | 2 1/8 | 1 3/8 | 2 | 8 | 25 5/8 | | 7/8 | 13 | | | | | | | | 16.0 |

STANDARD SIGN
W03-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W03-2.2

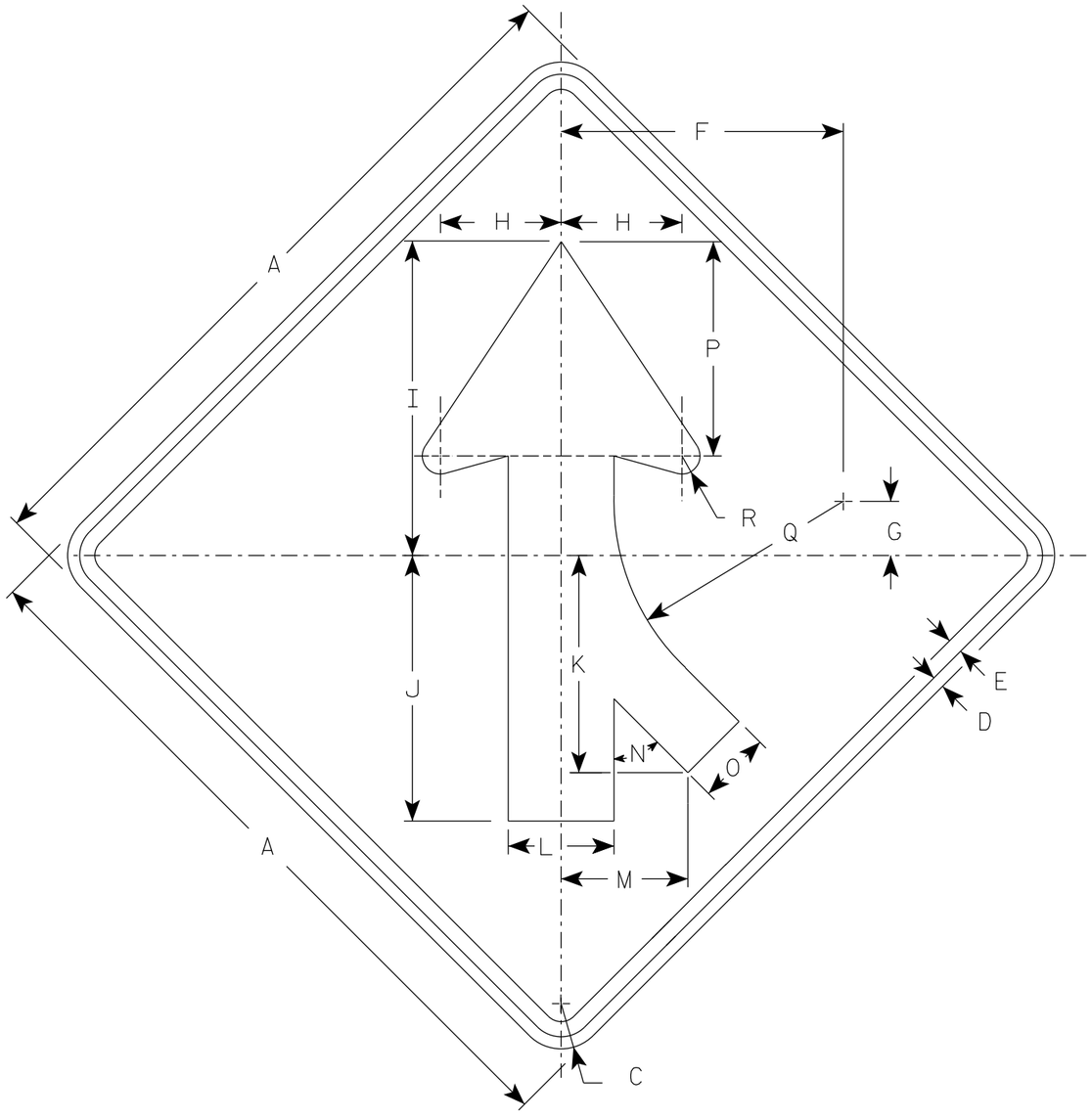
PROJECT NO:

SHEET NO: E



FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W032.DGN PLOT DATE : 24-JAN 2024 1:55 PLOT BY : dotc4c

WISDOT/CADDS SHEET 42




W04-1R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-1L is the same as W04-1R except the arrow is reversed along the vertical centerline.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 2 1/4 | 5/8 | 3/4 | 14 | 2 3/4 | 6 | 15 3/4 | 13 1/4 | 10 1/4 | 5 1/4 | 6 3/8 | 45° | 3 5/8 | 10 5/8 | 11 3/8 | 7/8 | | | | | | | | | 9.0 |
| 2S | 48 | | 3 | 3/4 | 1 | 18 3/4 | 3 5/8 | 8 | 20 1/2 | 17 1/2 | 14 3/8 | 7 | 8 3/8 | 45° | 4 3/4 | 14 1/4 | 15 1/4 | 1 1/4 | | | | | | | | | 16.0 |
| 2M | 48 | | 3 | 3/4 | 1 | 18 3/4 | 3 5/8 | 8 | 20 1/2 | 17 1/2 | 14 3/8 | 7 | 8 3/8 | 45° | 4 3/4 | 14 1/4 | 15 1/4 | 1 1/4 | | | | | | | | | 16.0 |
| 3 | 48 | | 3 | 3/4 | 1 | 18 3/4 | 3 5/8 | 8 | 20 1/2 | 17 1/2 | 14 3/8 | 7 | 8 3/8 | 45° | 4 3/4 | 14 1/4 | 15 1/4 | 1 1/4 | | | | | | | | | 16.0 |
| 4 | 48 | | 3 | 3/4 | 1 | 18 3/4 | 3 5/8 | 8 | 20 1/2 | 17 1/2 | 14 3/8 | 7 | 8 3/8 | 45° | 4 3/4 | 14 1/4 | 15 1/4 | 1 1/4 | | | | | | | | | 16.0 |
| 5 | 48 | | 3 | 3/4 | 1 | 18 3/4 | 3 5/8 | 8 | 20 1/2 | 17 1/2 | 14 3/8 | 7 | 8 3/8 | 45° | 4 3/4 | 14 1/4 | 15 1/4 | 1 1/4 | | | | | | | | | 16.0 |

STANDARD SIGN
W04-1

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2024 PLATE NO. W04-1.3

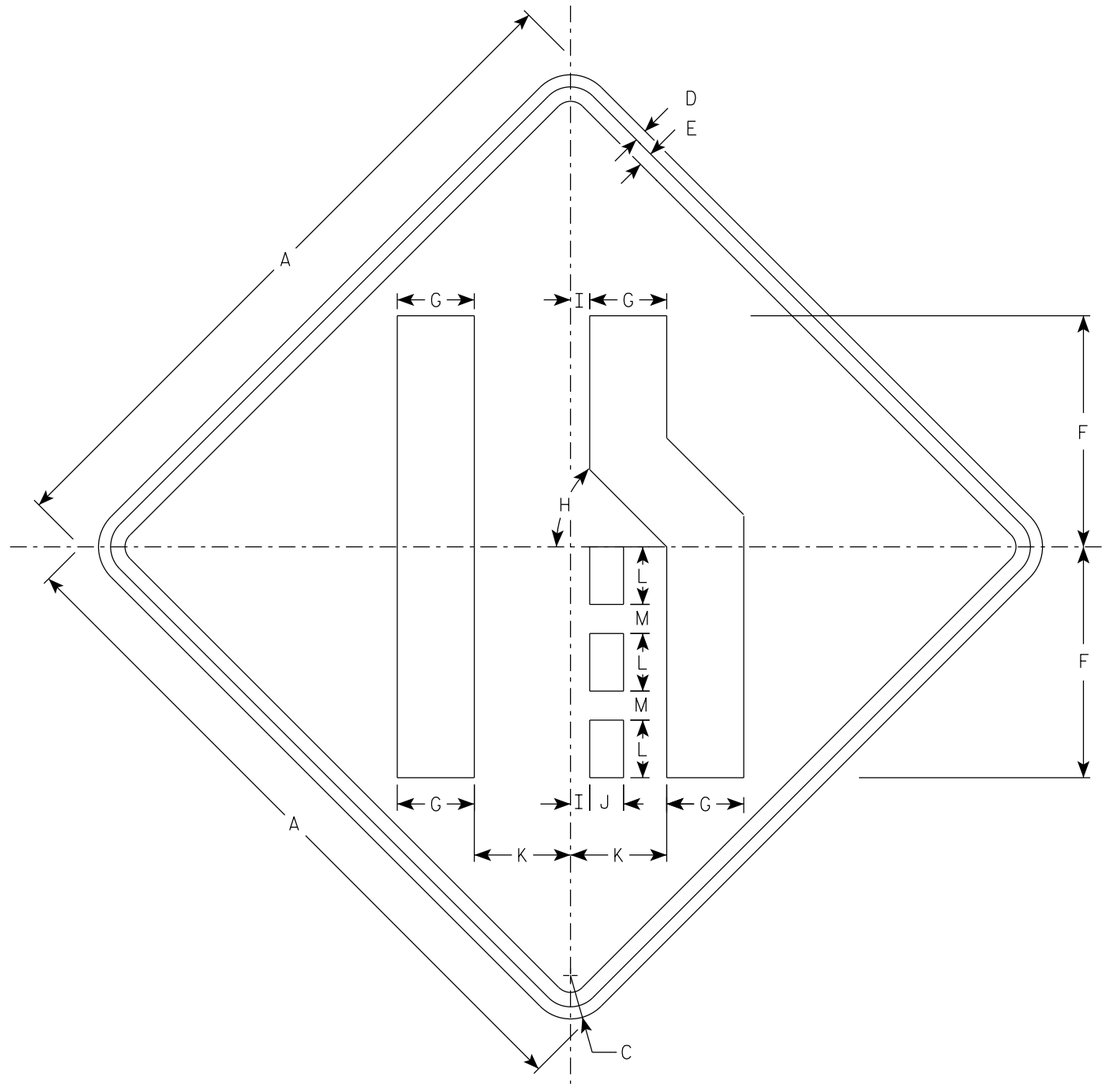
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 794 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W041.dgn PLOT DATE : 25-JAN 2024 8:20 PLOT BY : dotc4c PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

7

7




W04-2R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 2 1/4 | 5/8 | 3/4 | 12 | 4 | 45° | 1 | 1 3/4 | 5 | 3 | 1 1/2 | | | | | | | | | | | | | | 9.0 |
| 2S | 48 | | 3 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 2M | 48 | | 3 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 3 | 48 | | 3 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 4 | 48 | | 3 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 3 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |

STANDARD SIGN
W04-2

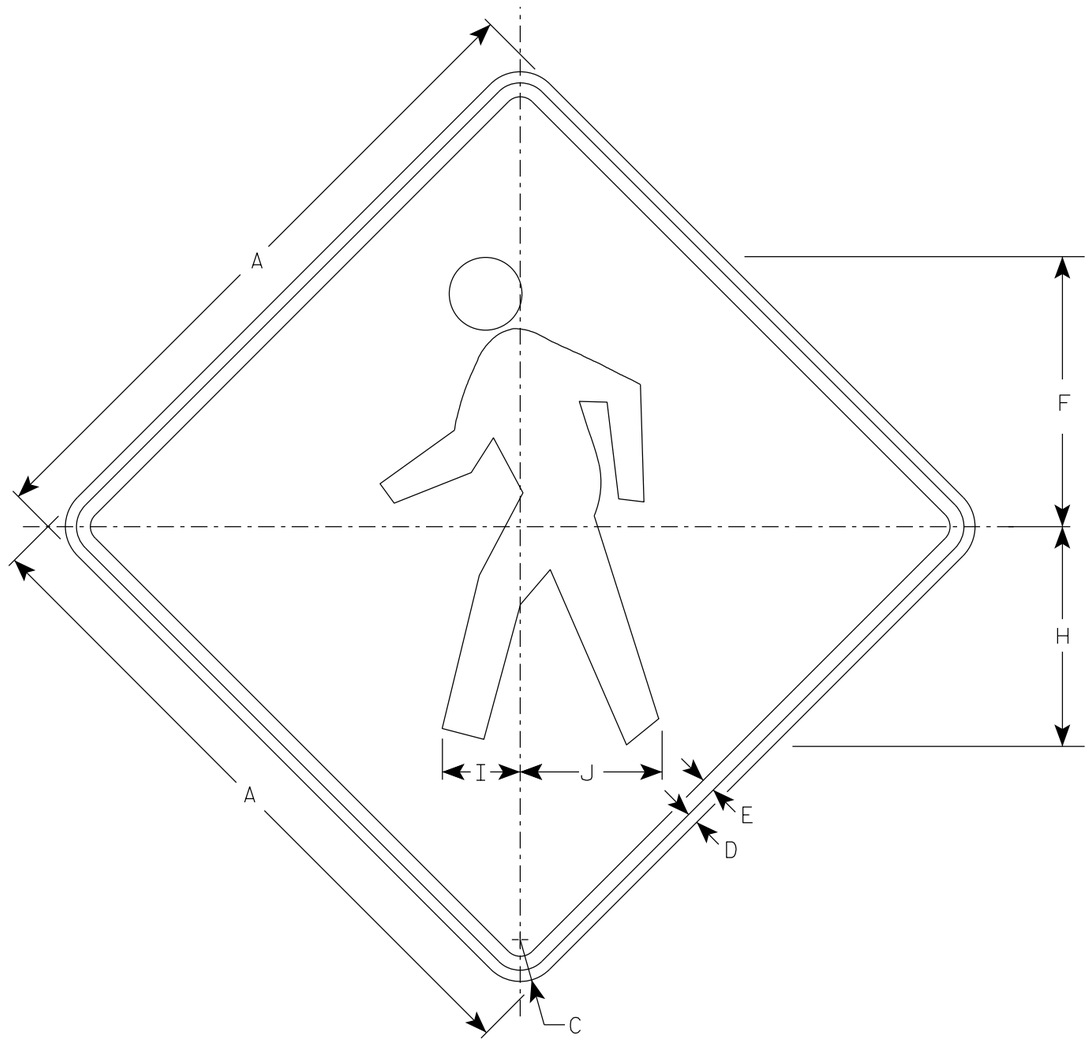
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2024 PLATE NO. W04-2.2

PROJECT NO:

SHEET NO: 795 E




WO11-2

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 2 1/4 | 5/8 | 3/4 | 14 1/2 | | 11 7/8 | 4 1/4 | 7 5/8 | | | | | | | | | | | | | | | | | 9.0 |
| 2S | 48 | | 3 | 3/4 | 1 | 19 3/8 | | 15 3/4 | 5 5/8 | 10 1/4 | | | | | | | | | | | | | | | | | 16.0 |
| 2M | 48 | | 3 | 3/4 | 1 | 19 3/8 | | 15 3/4 | 5 5/8 | 10 1/4 | | | | | | | | | | | | | | | | | 16.0 |
| 3 | 48 | | 3 | 3/4 | 1 | 19 3/8 | | 15 3/4 | 5 5/8 | 10 1/4 | | | | | | | | | | | | | | | | | 16.0 |
| 4 | 48 | | 3 | 3/4 | 1 | 19 3/8 | | 15 3/4 | 5 5/8 | 10 1/4 | | | | | | | | | | | | | | | | | 16.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN

WO11-2

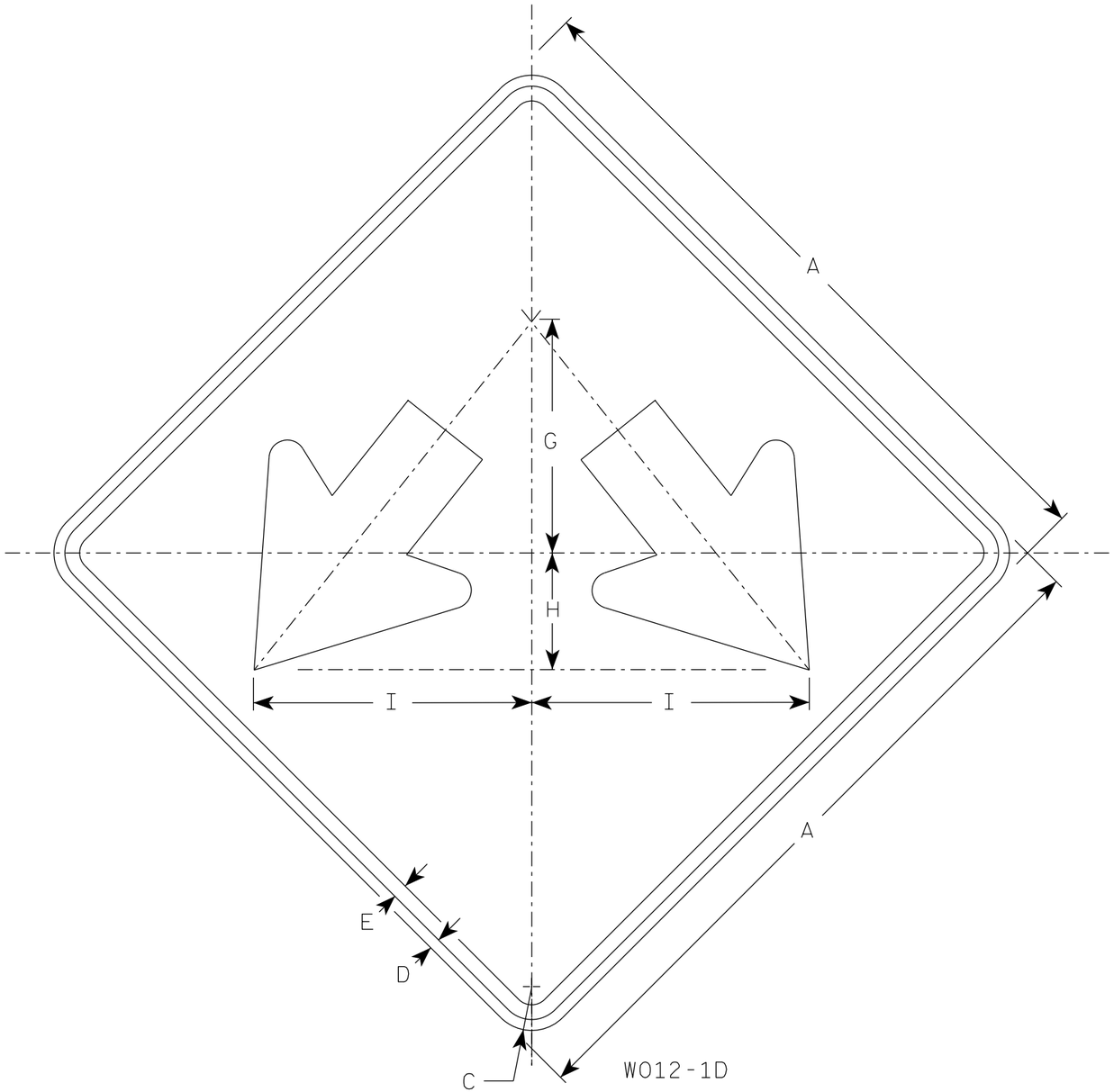
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch

For State Traffic Engineer

DATE 2/1/2024 PLATE NO. WO11-2.2

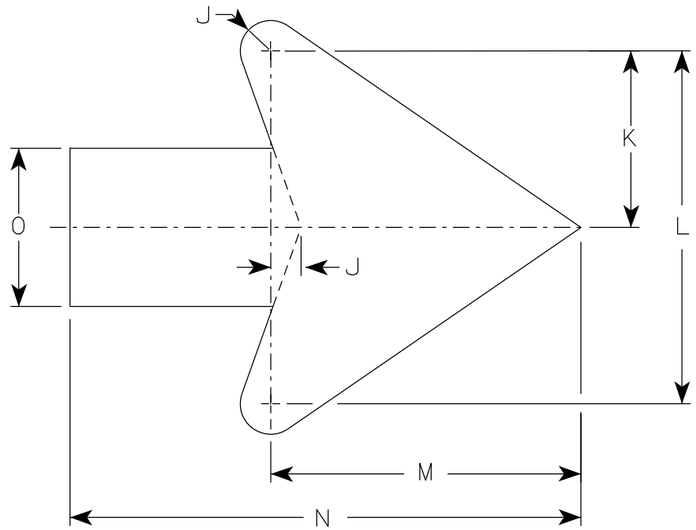
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 796 E




W012-1D

## NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.




Arrow Detail

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24 | | 1 1/2 | 1/2 | 3/8 | | 8 | 4 | 9 1/2 | 3/8 | 3 3/8 | 7 1/4 | 6 3/8 | 10 3/8 | 3 1/4 | | | | | | | | | | | | 4.0 |
| 2S | 24 | | 1 1/2 | 1/2 | 3/8 | | 8 | 4 | 9 1/2 | 3/8 | 3 3/8 | 7 1/4 | 6 3/8 | 10 3/8 | 3 1/4 | | | | | | | | | | | | 4.0 |
| 2M | 24 | | 1 1/2 | 1/2 | 3/8 | | 8 | 4 | 9 1/2 | 3/8 | 3 3/8 | 7 1/4 | 6 3/8 | 10 3/8 | 3 1/4 | | | | | | | | | | | | 4.0 |
| 3 | 30 | | 1 7/8 | 1/2 | 5/8 | | 10 | 5 | 11 7/8 | 3/4 | 4 1/2 | 9 | 7 7/8 | 13 | 4 | | | | | | | | | | | | 6.25 |
| 4 | 36 | | 2 1/4 | 1/2 | 5/8 | | 12 | 6 | 14 1/4 | 1 | 5 1/2 | 10 7/8 | 9 5/8 | 15 3/4 | 4 3/4 | | | | | | | | | | | | 9.0 |
| 5 | 36 | | 2 1/4 | 1/2 | 5/8 | | 12 | 6 | 14 1/4 | 1 | 5 1/2 | 10 7/8 | 9 5/8 | 15 3/4 | 4 3/4 | | | | | | | | | | | | 9.0 |

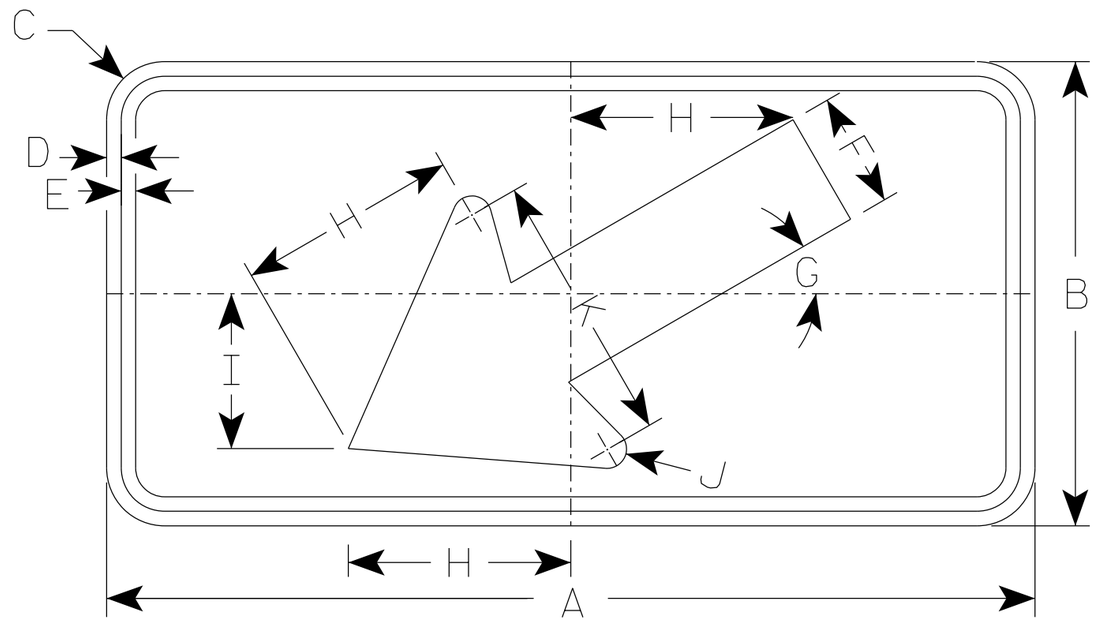
STANDARD SIGN
W012-1D

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 2/1/2024 PLATE NO. W012-1D.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 797 E




W016-7L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded but corners shall be rounded when base material is metal.
4. W016-7R is the same as W016-L except the arrow is reversed along the vertical centerline.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | 18 | 1 1/2 | 3/8 | 1/2 | 4 1/2 | 30° | 8 1/2 | 6 | 5/8 | 10 1/4 | | | | | | | | | | | | | | | | 3.75 |
| 2S | 48 | 24 | 1 7/8 | 1/2 | 5/8 | 6 | 30° | 11 1/2 | 8 | 1 | 14 | | | | | | | | | | | | | | | | 8.0 |
| 2M | 48 | 24 | 1 7/8 | 1/2 | 5/8 | 6 | 30° | 11 1/2 | 8 | 1 | 14 | | | | | | | | | | | | | | | | 8.0 |
| 3 | 48 | 24 | 1 7/8 | 1/2 | 5/8 | 6 | 30° | 11 1/2 | 8 | 1 | 14 | | | | | | | | | | | | | | | | 8.0 |
| 4 | 48 | 24 | 1 7/8 | 1/2 | 5/8 | 6 | 30° | 11 1/2 | 8 | 1 | 14 | | | | | | | | | | | | | | | | 8.0 |
| 5 | 48 | 24 | 1 7/8 | 1/2 | 5/8 | 6 | 30° | 11 1/2 | 8 | 1 | 14 | | | | | | | | | | | | | | | | 8.0 |

STANDARD SIGN
W016-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/2024 PLATE NO. W016-7.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 798 E




7

## DESIGN DATA

CONTRACTOR DESIGNED OVERHEAD SIGN STRUCTURES SHALL BE DESIGNED ACCORDING TO THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS", 1ST EDITION AND INTERIM SPECIFICATIONS, AND THE WISDOT BRIDGE MANUAL.

STANDARD FOUNDATIONs DESIGNED ACCORDING TO THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION.

DEAD LOAD: WT. OF SIGN AND SUPPORTING STRUCTURE
ICE LOAD: 3 PSF TO ONE FACE OF SIGN & SURFACE OF MEMBERS
WIND PRESSURE: 115 MPH (3-SEC. GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS (700 YEAR MEAN RECURRENCE INTERVAL)

| WIND COMPONENTS | NORMAL | TRANSVERSE |
|---|---|---|
| LOAD CASE 1: | 1.00 | 0.00 |
| LOAD CASE 2: | 0.00 | 1.00 |
| LOAD CASE 3: | 0.75 | 0.75 |

**LOAD COMBINATIONS**

| | |
|---|---|
| STRENGTH I: | 1.25 DC + 1.6 LL |
| EXTREME I (MAX DC): | 1.1 DC + 1.0 W + 1.0 ICE |
| EXTREME I (MIN DC): | 0.9 DC + 1.0 W |
| SERVICE I: | 1.0 DC + 1.0 W |
| FATIGUE: | 1.0 NW (NATURAL WIND GUST) |
| | 1.0 TrG (TRUCK INDUCED GUST) |
| | 1.0 GVW (GALLOPING - CANTILEVER ONLY) |

## MATERIAL PROPERTIES

CONCRETE MASONRY ——— $f'_c$ = 3,500 PSI

HIGH STRENGTH STEEL REINFORCEMENT, GRADE 60 ——— $f_y$ = 60,000 PSI

STRUCTURAL ANGLES, PLATES & BARS - ASTM A709 GRADE 36 ——— $f_y$ = 36,000 PSI

HIGH STRENGTH BOLTS - ASTM A3125 GRADE A325 ——— $f_y$ = 92,000 PSI

ANCHOR RODS - ASTM F1554 GRADE 55 ——— $f_y$ = 55,000 PSI

HEAVY HEX NUTS - ASTM A563 GRADE DH OR ASTM A194 GRADE 2H

WASHERS - ASTM F436

DTI WASHERS - ASTM F959 TYPE 325

## FOUNDATION DATA

SIGN STRUCTURE FOUNDATIONS ARE SUPPORTED ON DRILLED SHAFTS THAT HAVE BEEN DESIGN FOR SITES WHERE SOILS EXHIBIT A PHI-ANGLE GREATER THAN OR EQUAL TO 24° (GRANULAR SOILS), OR A COHESION VALUE GREATER THAN OR EQUAL TO 750 PSF (COHESIVE SOILS) AND A UNIT WEIGHT OF 125 PCF. THE GROUND WATER TABLE FOR DESIGN IS ASSUMED TO BE AT A DEPTH OF 10'-0" BELOW THE GROUND SURFACE, ACTUAL WATER LEVEL AT SITE MAY VARY. THE REGION GEOTECHNICAL ENGINEER SHALL VISUALLY INSPECT THE SUBSURFACE SOILS DURING THE DRILLING OF THE SHAFT HOLE TO CONFRIM THESE PROPERTIES PRIOR TO PLACEMENT OF THE DRILLED SHAFT CONCRETE.

## TOTAL ESTIMATED QUANTITIES

| BID ITEM NO. | BID ITEM | UNIT | S-40-673 |
|---|---|---|---|
| 531.2048 | DRILLING SHAFT 48-INCH | LF | 28 |
| 531.5340.01 | FOUNDATION SINGLE-SHAFT TYPE TC-IV (S-40-673) | EA | 1 |
| 532.5340.01 | TRUSS CANTILEVER 2-CHORD TYPE IV (S-40-673) | EA | 1 |

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALTERNATE DESIGNS ARE NOT ALLOWED.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM (WSPCS), SOUTH ZONE (NAD 27). ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE CITY OF WEST ALLIS VERTICAL DATUM.

ALL REINFORCING BARS ARE IN ENGLISH UNITS. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

SIGN BRIDGE ID PLAQUES SHALL BE CONSIDERED INCIDENTAL TO THE TRUSS OR MONOTUBE BID ITEMS FOR EACH APPLICABLE SIGN STRUCTURE IN THE PLAN SET. LOCATE THE ID PLAQUE ON THE FREEWAY SIDE OF THE SUPPORT COLUMN SO THAT IT CAN BE SEEN FROM THE ROADWAY. FABRICATE AND INSTALL THE ID PLAQUE IN ACCORDANCE WITH S.D.D. 12 A4-3.

UNLESS DETAILED OTHERWISE IN THE PLANS, ALL H.S. BOLTED CONNECTIONS SHALL BE MADE WITH ¾" DIA. A325 GALVANIZED BOLTS. FIELD CONNECTIONS SHALL BE INSTALLED WITH DTI WASHERS.

WELDED CONNECTIONS CAN BE USED IN LIEU OF BOLTED CONNECTIONS, IF A TRUSS UNIT CAN BE GALVANIZED IN ONE PIECE.

WELD TEST AS PER AWS D1.1.

SEE SIGN PLATE NO. A4-6, A4-7A & A4-7B OF THE SIGN PLATE MANUAL FOR INSTRUCTIONS ON CENTERING SIGNS VERTICALLY ON THE TRUSS.

SIGNS OR BLANKS SHALL BE INSTALLED ON TRUSS AT TIME OF ERECTION. BLANKS SHALL BE ¼ THE LENGTH OF THE CANTILEVER SPAN, 2'-0" DEEPER THAN THE C/L TO C/L OF CHORDS, AND SHALL BE CENTERED ON THE BRIDGE. SIGNS SHALL BE AS DESIGNATED ON THE PLANS.

THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION OF THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PER THE REQUIREMENTS IN THE STANDARD SPECIFICATIONS PRIOR TO FABRICATION OF THE STRUCTURE. CONTRACTOR SHALL SHOW SIGNS ON THE SHOP DRAWINGS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DRILLING OR EXCAVATING AND MAINTAINING A STABLE AND OPEN HOLE FOR SUBSEQUENT INSTALLATION OF CONCRETE MASONRY FOR THE DRILLED SHAFTS. PARTIAL OR FULL DEPTH TEMPORARY CASING MAY BE REQUIRED TO MAINTAIN THE STABILITY OF THE EXCAVATED HOLE FOR THE SIGN SUPPORT PRIOR TO FILLING THE HOLE WITH CONCRETE. PERMANENT CASING MADE FROM STEEL OR CORRUGATED METAL PIPE MAY BE USED IN LIEU OF TEMPORARY CASING. TEMPORARY/PERMANENT CASING, IF USED, SHALL BE INCIDENTAL TO THE BID ITEM "DRILLING SHAFT (DIA.)".

## STRUCTURE DATA

| STRUCTURE ID | SIGN AREA | SIGN DEPTH | FOUNDATION TYPE | TRUSS TYPE |
|---|---|---|---|---|
| S-40-673 | 150 SF | 7'-0" | TYPE TC-IV | TYPE IV |

## LIST OF DRAWINGS:

1. GENERAL NOTES & DESIGN DATA
2. LAYOUT S-40-673

## LIST OF STANDARD DESIGN DRAWINGS

3. I. MONOTUBE & 2-CHORD TRUSS CONNECTIONS 1
4. II. MONOTUBE & 2-CHORD TRUSS CONNECTIONS 2
5. III. MONOTUBE & 2-CHORD TRUSS ELECTRICAL DETAILS
6. IV. MONOTUBE & 2-CHORD TRUSS FOUNDATIONS

STATE PROJECT NUMBER

**2410-15-70**

## TRAFFIC VOLUME

A.D.T. (2046) = 21,100
R.D.S. = 40 MPH

THESE ARE STANDARD DESIGN PLANS DEVELOPED AND MAINTAINED BY THE WISDOT. THE DESIGNER CERTIFIES THAT THE DESIGN AND PLAN DETAILS CHOSEN ARE CONSISTENT WITH THE GUIDANCE PROVIDED IN THE CURRENT WISDOT BRIDGE MANUAL CHAPTER 39.

WISCONSIN
JAMES W. BLACKWOOD
E-41460
PEWAUKEE
WI
PROFESSIONAL ENGINEER

08/29/2025 Jim Blackwood

**STRUCTURE DESIGN CONTACTS:**

| | |
|---|---|
| AARON BONK | 608-261-0261 |
| JIM BLACKWOOD | (262) 317-3302 |

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

raSmith
CREATIVITY BEYOND ENGINEERING
16745 W. Bluemound Road
Brookfield, WI 53005-5938
(262) 781-1000
rasmith.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED JLR 11/12/25
CHIEF STRUCTURES DESIGN ENGINEER DATE

**MONOTUBE & 2-CHORD**

LOCATION DESCRIPTION

| COUNTY | TOWN/CITY/VILLAGE |
|---|---|
| MILWAUKEE | WEST ALLIS |

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

| DESIGNED BY | DESIGNED CK'D | DRAWN BY | PLANS CK'D |
|---|---|---|---|
| BOS | BOS | ARG | JWB |

**GENERAL NOTES & DESIGN DATA**

SHEET 1 OF 6

SCALE = 799

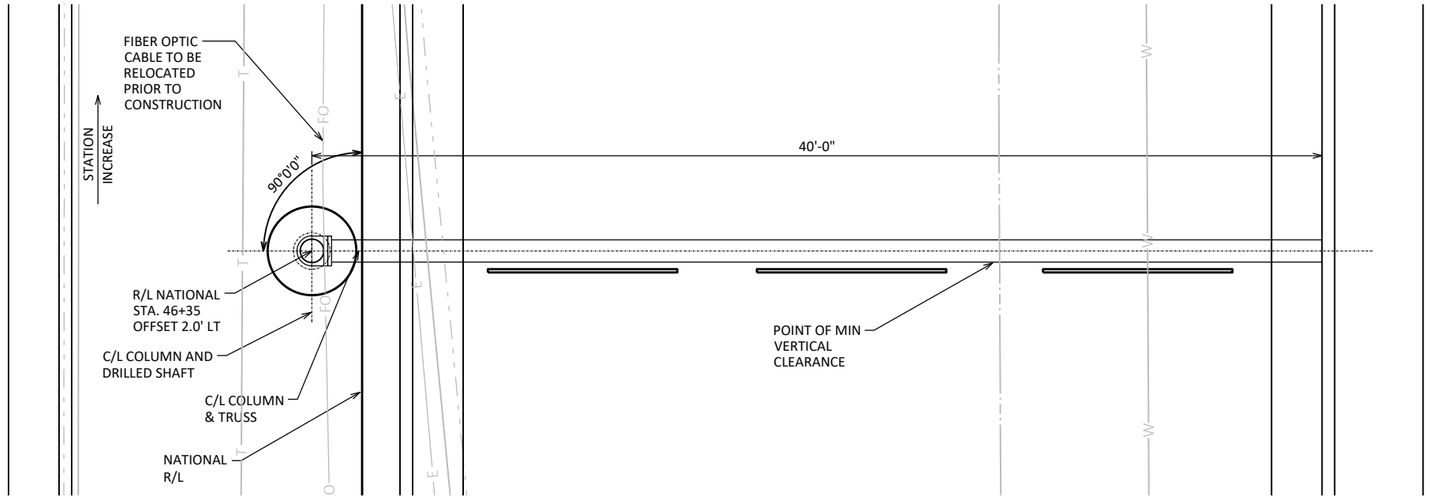
I.D. 2410-15-70 DATE: 8-29-2025

8

8

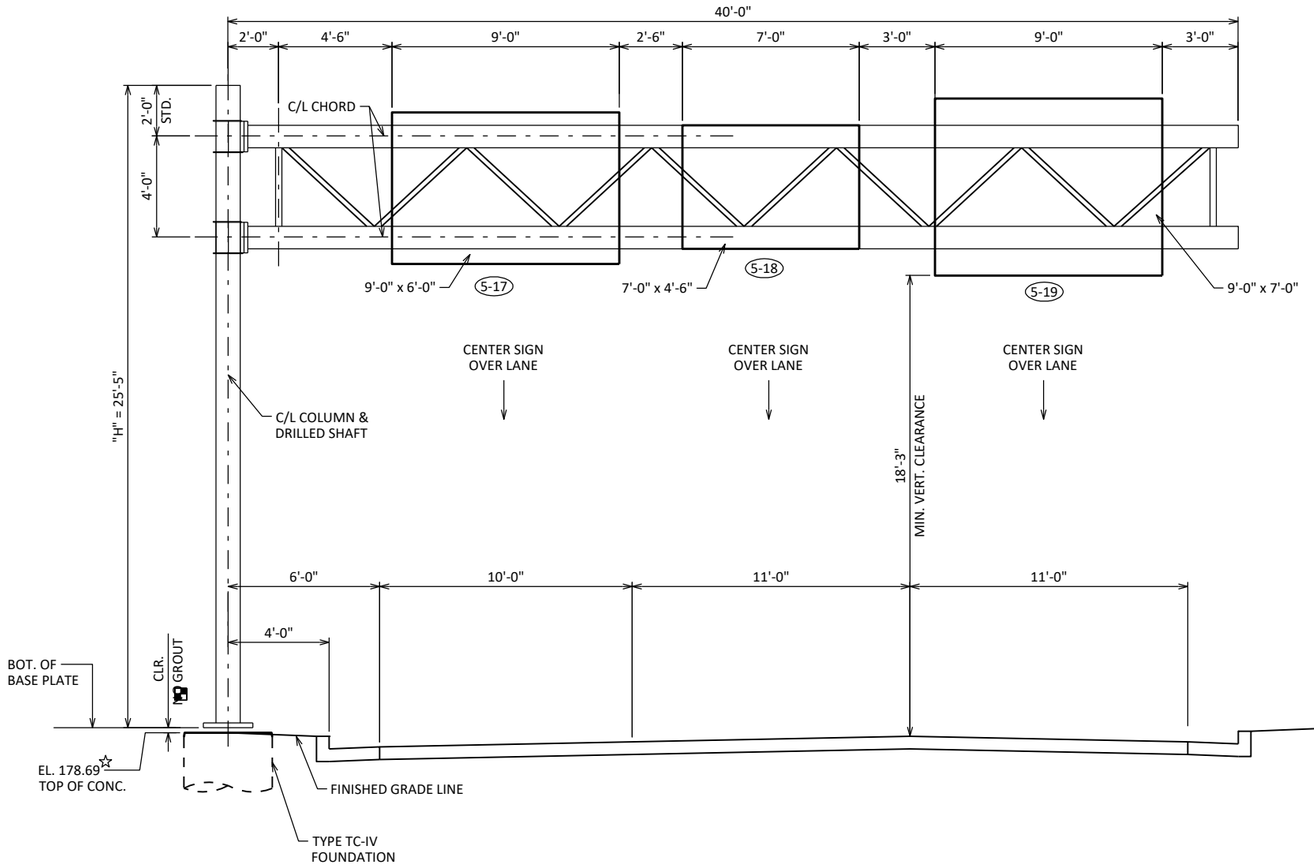
STATE PROJECT NUMBER

**2410-15-70**



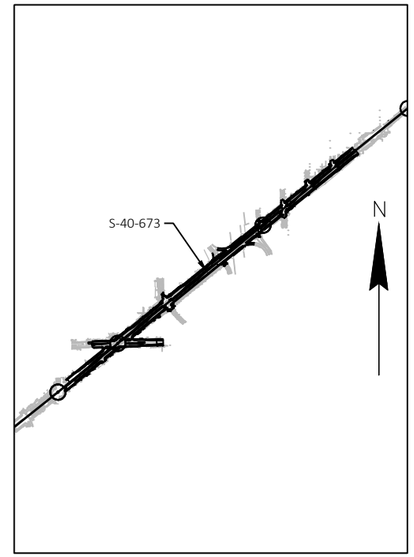

## PLAN

STA. 46+35'NATIONAL'
(240' SW. OF I-41 SB ON RAMP)




## ELEVATION

LOOKING DOWNSTATION AT F.F. OF SIGN




## LOCATION MAP

## LEGEND

☆ ELEVATIONS GIVEN ALONG C/L STRUCTURE

(XXX) SIGN NUMBER, SEE PERMANENT SIGNING PLAN

STANDOFF DIMENSION IS ASSUMED TO BE 2½", BUT IS A MAX. OF 2 x ANCHOR ROD DIAMETER. SEE FOUNDATION DETAILS SHEET AND SHOP DRAWINGS FOR MORE INFORMATION.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE S-40-673**

DRAWN BY ARG | PLANS CK'D JWB

**LAYOUT**

SHEET 2
800

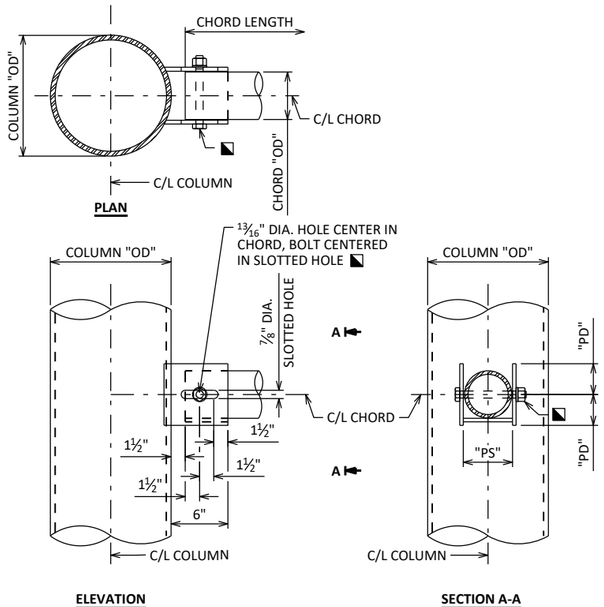
SCALE = 6.00

8

8

STATE PROJECT NUMBER

**STANDARD**



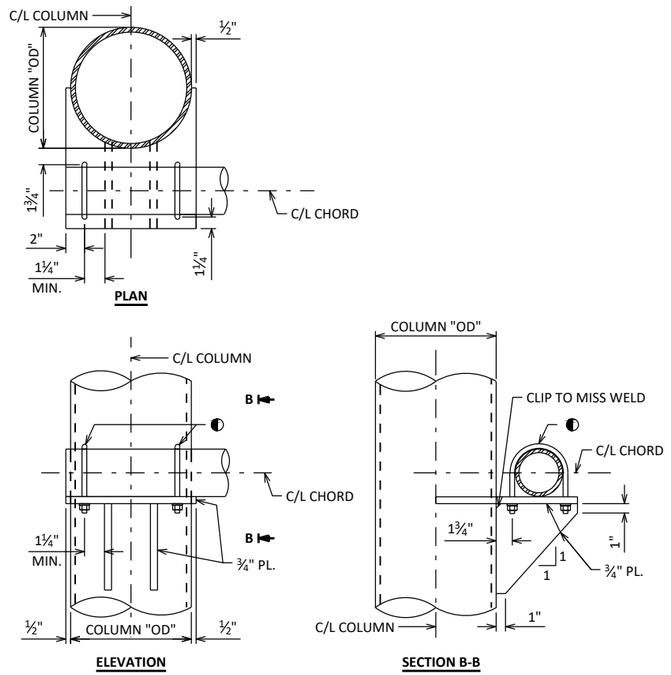

## FULL SPAN SADDLE CONNECTION

PREFERRED OPTION

¾" GALVANIZED A325 OR A449 HEAVY HEX BOLT, NUT AND WASHER SNUG TIGHT ONLY, DO NOT OVER TIGHTEN

"PD" = CHORD "OD"/2 + ¾"

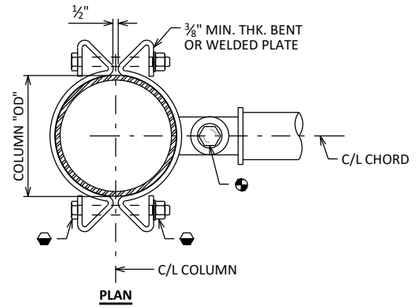
"PS" = CHORD "OD" + 1/16"

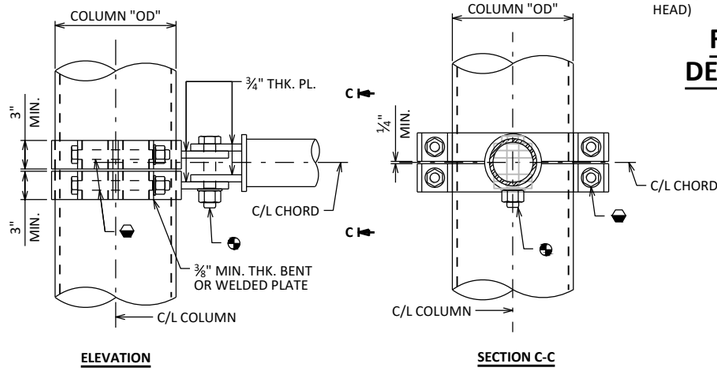



## FULL SPAN STIFFENED BEARING CONNECTION

ALTERNATE 1

MIN. (2) ½" MIN. GALVANIZED OR STAINLESS U-BOLT, LOCK NUT AND WASHER



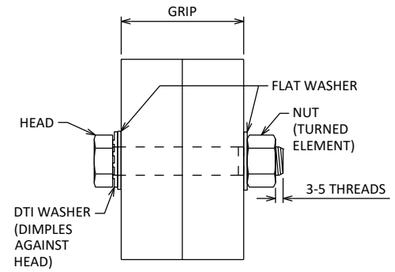




## FULL SPAN CLAMP CONNECTION

ALTERNATE 2 - TAPERED COLUMNS ONLY

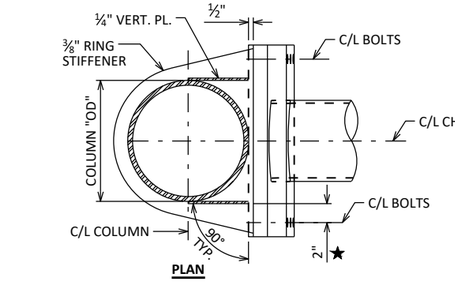
1¼" GALVANIZED A325 HEAVY HEX BOLT, NUT AND WASHER

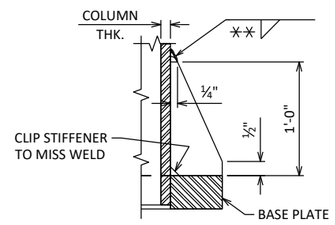
1" GALVANIZED A325 HEAVY HEX BOLT, NUT AND WASHER

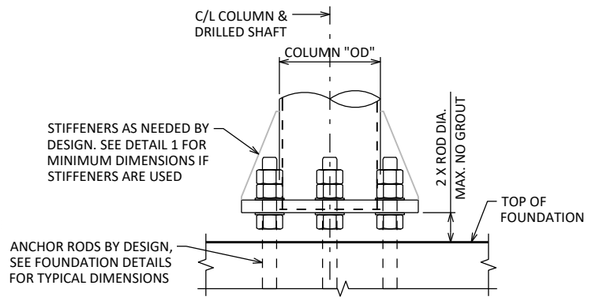



## RECOMMENDED BOLT DETAIL WITH DTI WASHER

NUT IS TURNED ELEMENT



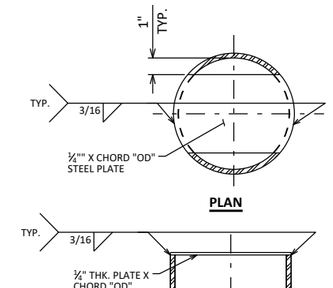




## PREFERRED BASE PLATE CONNECTION

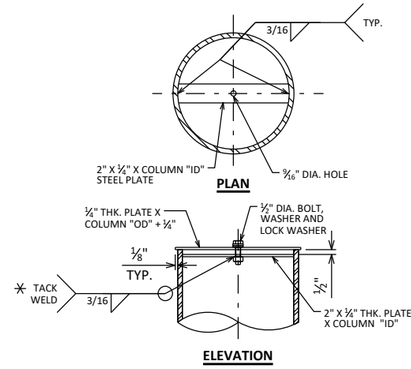
LOOKING AT F.F. OF STRUCTURE.

ALTERNATE BASE PLATE DESIGNS ALLOWED.



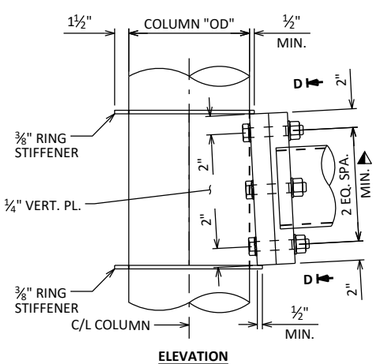

## CHORD CAP DETAIL

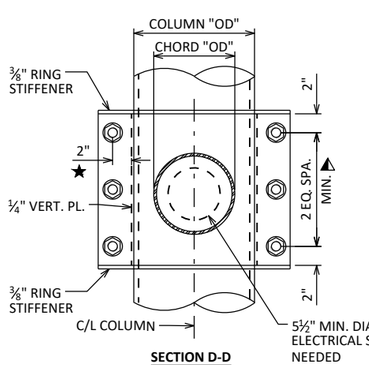
CANTILEVERS ONLY




## TOWER CAP DETAIL

✳ PLACE TACK WELD EVERY OTHER FLAT TO SECURE NUT. ALTERNATE: USE ½" THK. PL. AND DRILL AND TAP HOLE FOR BOLT.

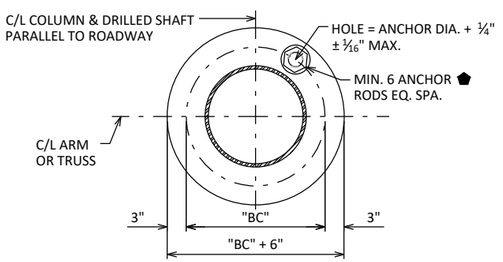



## CANTILEVER POST TO CHORD CONNECTION

MIN. (6) 1" GALVANIZED A325 HEAVY HEX BOLT, NUT, DTI WASHER AND WASHER

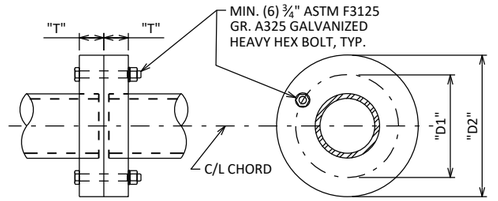
★ MIN. DIMENSIONS MEASURED FROM EXT. FACE OF VERTICAL PLATE.




## BASE PLATE

"BC" = COLUMN "OD" + 6"

⬟ ANCHOR SIZE AND ORIENTATION TO BE VERIFIED WITH SHOP DRAWINGS.




## CHORD SPLICE DETAIL

"D1" = COLUMN "OD" + (1.5 x DB)

"D2" = COLUMN "OD" + (3 x DB)

"T" = (BY DESIGN)

DB = BOLT DIAMETER (BY DESIGN)

## NOTES:

MINIMUM VALUES SHOWN. ALL CONNECTIONS ARE TO BE DESIGNED FOR ACTUAL STRUCTURAL LOADS.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

**UPDATED: JAN. 2023**

DRAWN BY: BOS | PLANS CK'D: BOS

**MONOTUBE & 2-CHORD TRUSS CONNECTIONS 1**

SHEET 1 — 801

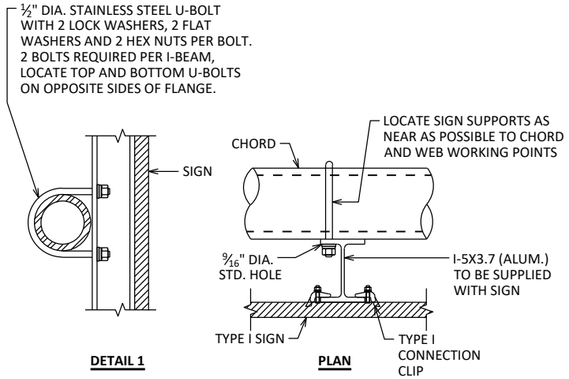
SCALE = 2.0

8

8

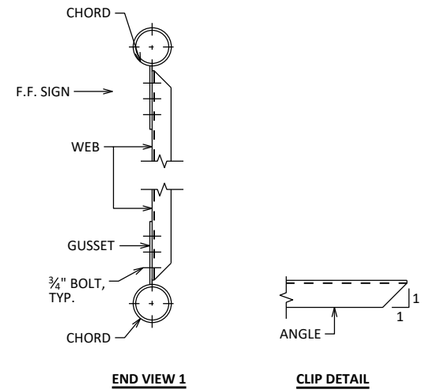
STATE PROJECT NUMBER

**STANDARD**



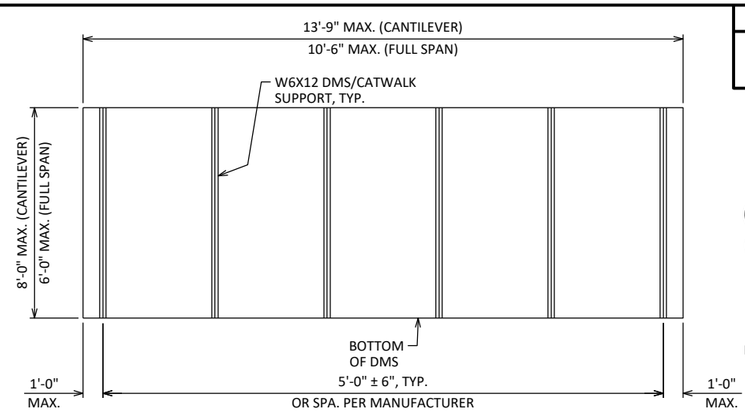

## 2-CHORD TRUSS SIGN CONNECTION

TYPE I SIGN PANEL SHOWN.
SEE SIGN PLATE MANUAL A4-7A AND A4-7BFOR DETAILS.
ALUMINUM I-5X3.7 I-BEAMS ARE TO BE SUPPLIED WITH SIGN PANEL, HARDWARE TO BE SUPPLIED BY THE CONTRACTOR.



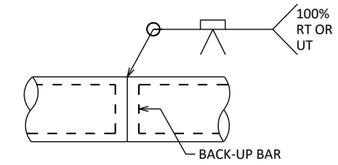

## TRUSS CONNECTION DETAILS

MEMBER ORIENTATION FOR BOLTED CONNECTIONS SHOWN, WELDED CONNECTIONS SIMILAR.
ANGLES PREFERRED, OTHER WEB DESIGNS ALLOWED.



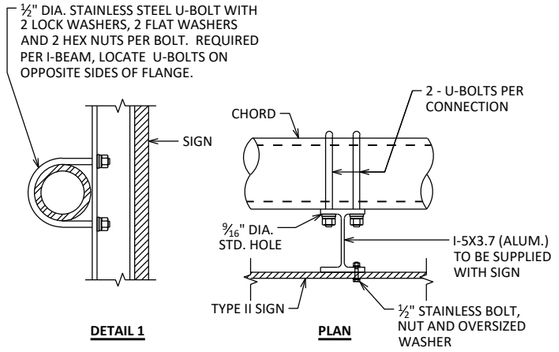

## DMS MOUNTING POST DETAIL

POST SPACING MAY BE ADJUSTED AS REQUIRED IF SPACING CONFLICTS WITH GUSSET PLATES OF TRUSS WITHIN TOLERANCES NOTED.



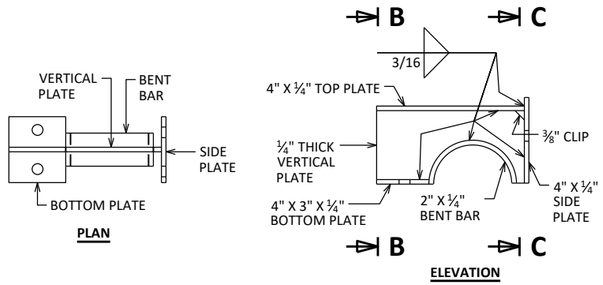

## CHORD SPLICE

SEPARATE OPTIONAL SPLICE FROM GUSSET PLATES BY 6" MIN.



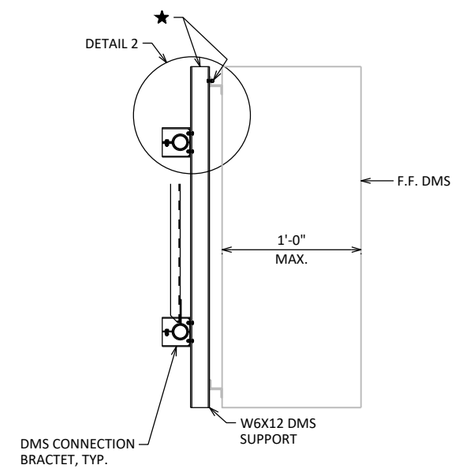

## MONOTUBE SIGN CONNECTION

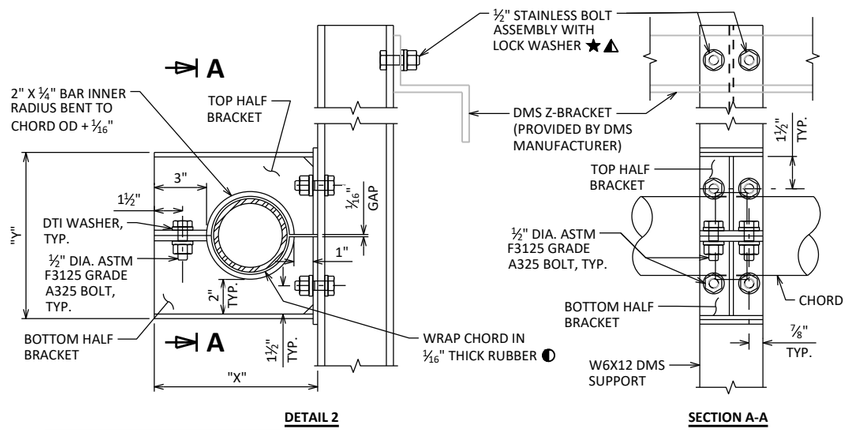
TYPE II SIGN PANEL SHOWN.
SEE SIGN PLATE MANUAL A4-7A AND A4-7B FOR DETAILS.
ALUMINUM I-5X3.7 I-BEAMS ARE TO BE SUPPLIED WITH SIGN PANEL, HARDWARE TO BE SUPPLIED BY THE CONTRACTOR.



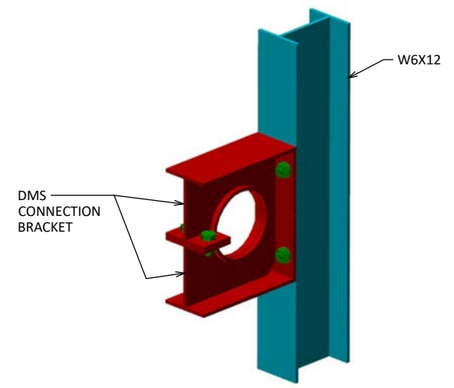

## DMS WELDED PLATE CONNECTION DETAILS

TOP HALF OF BRACKET SHOWN, BOTTOM HALF SIMILAR.




| CHORD "OD" | "X" | "Y" |
|---|---|---|
| "OD" | "OD" + $4\frac{13}{16}$" | "OD" + $5\frac{5}{16}$" |




## 3-D VIEW OF DMS CONNECTION

CHORD NOT SHOW FOR CLARITY

## SECTION THRU TRUSS - DMS

FOR DMS/CATWALK CONNECTIONS

★ W6X12 SUPPORTS AND HARDWARE ARE TO BE SUPPLIED BY THE CONTRACTOR. ½" STAINLESS BOLT, NUT, WASHER AND LOCK WASHER REQUIRED, 4 PER W6X12

## TYPICAL DMS CONNECTION

◐ NEOPRENE, GRADE 45±5, OTHERWISE MEETING THE REQUIREMENTS OF STD. SPEC. 506.2.6.1

⚠ IF DMS CONNECTION BRACKET IS USED WITH A TYPE II SIGN PANEL, THE BOLT HOLE MUST BE GALVANIZED AND A STAINLESS WASHER USED BETWEEN THE I-BEAM AND SIGN PANEL.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

**UPDATED: OCT. 2023**

DRAWN BY BOS | PLANS CK'D BOS

**MONOTUBE & 2-CHORD TRUSS CONNECTIONS 2**

SHEET II
802

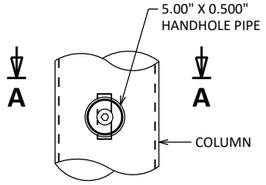
SCALE = 4.0

8

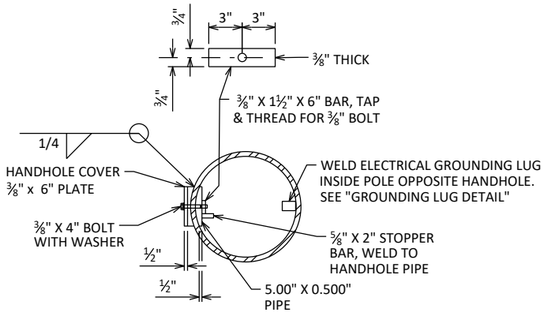
8

STATE PROJECT NUMBER

**STANDARD**




ELEVATION

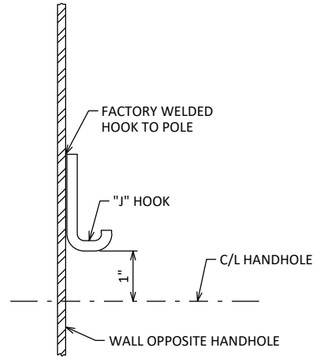



SECTION A-A

## HANDHOLE DETAILS

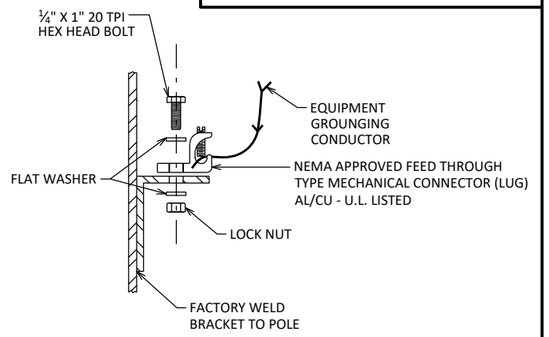
HANDHOLES SHALL BE LOCATED IN ONE COLUMN OF THE SIGN BRIDGE STRUCTURE IF ELECTRICALLY OPERATED DEVICES ARE INSTALLED ON/IN THE STRUCTURE. COLUMNS WITH HANDHOLES SHALL BE NEAR THE ELECTRICAL SERVICE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE ELECTRICAL SERVICE ENTRANCE WITH THE REGION TRAFFIC SECTION PRIOR TO FABRICATION OF THE SIGN BRIDGE COLUMNS AND MEMBERS. CONDUIT (AS REQ'D.) SHALL BE LOCATED, PLACED AND SIZED AS SHOWN ON THE ELECTRICAL PLAN DETAIL SHEETS.

UNLESS OTHERWISE NOTED, ALL HANDHOLE ELEMENTS TO BE GALVANIZED PER THE WISDOT STANDARD SPECIFICATIONS.



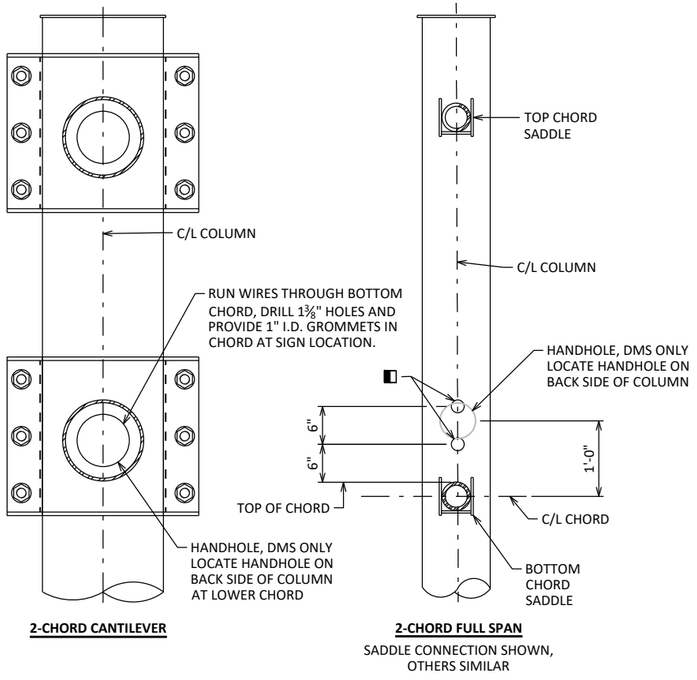

## TYPICAL "J" HOOK LOCATION

THE "J" HOOK SHALL BE FACTORY WELDED TO THE INSIDE OF THE COLUMN CONTAINING ELECTRICAL WIRING. THE "J" HOOK SHALL BE ATTACHED ABOVE THE CENTERLINE OF THE UPPER HANDHOLE AND MOUNTED DIRECTLY OPPOSITE THE HANDHOLE AS SHOWN IN THE DRAWING.




## GROUNDING LUG DETAIL

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



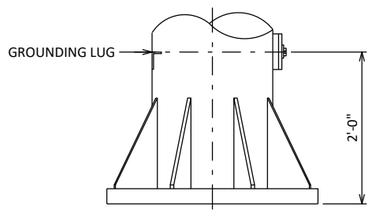

2-CHORD CANTILEVER

2-CHORD FULL SPAN

SADDLE CONNECTION SHOWN, OTHERS SIMILAR

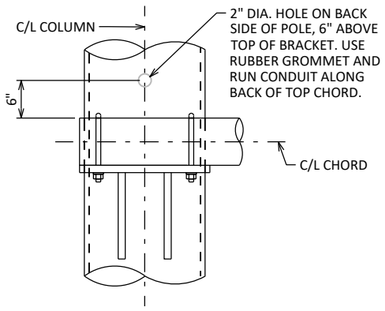
## CONDUIT HOLE LOCATIONS

◧ 2" HOLE WITH STANDARD PIPE THREADS, USE THREADED CONDUIT PLUG FOR UNUSED HOLES

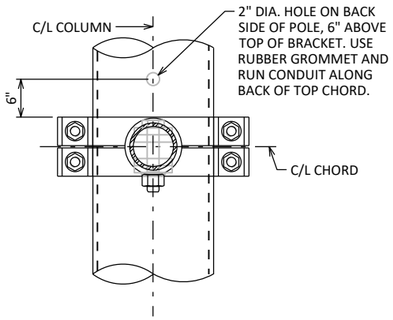



## GROUNDING LUG LOCATION

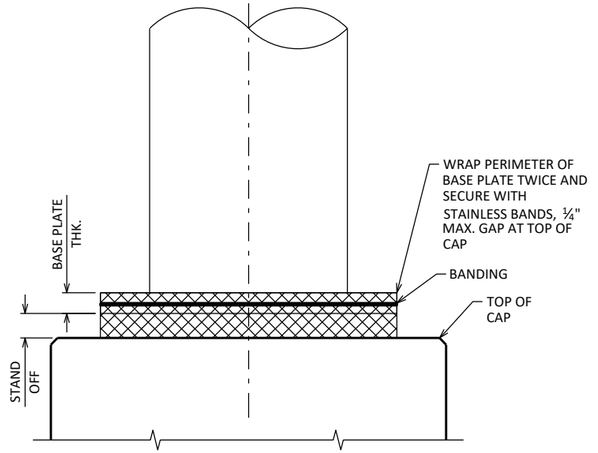
LOOKING AT THE F.F. OF STRUCTURE




## FULL SPAN STIFFENED BEARING CONNECTION

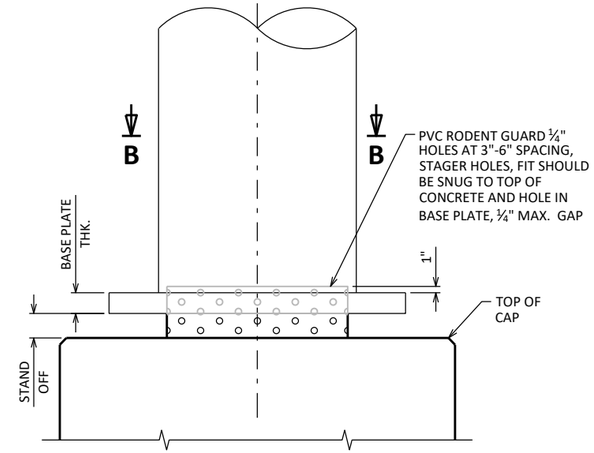



## FULL SPAN CLAMP CONNECTION



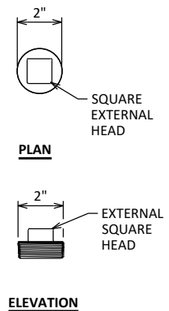

## RODENT SCREEN

ONLY REQ'D WHEN ELECTRICAL DEVICES ARE PRESENT
ANCHOR RODS NOT SHOWN

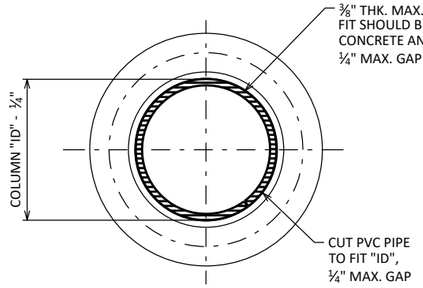



## RODENT SCREEN - ALTERNATE

ONLY REQ'D WHEN ELECTRICAL DEVICES ARE PRESENT
ANCHOR RODS NOT SHOWN




## CONDUIT PLUG DETAILS




## SECTION B-B

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

**UPDATED: OCT. 2024**

DRAWN BY BOS | PLANS CK'D BOS

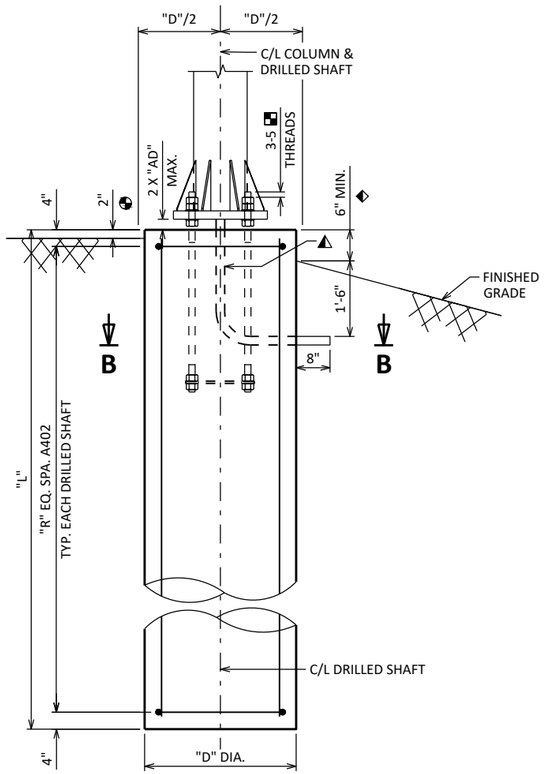
**MONOTUBE & 2-CHORD TRUSS ELECTRICAL DETAILS**

SHEET III
803

SCALE = 2.0

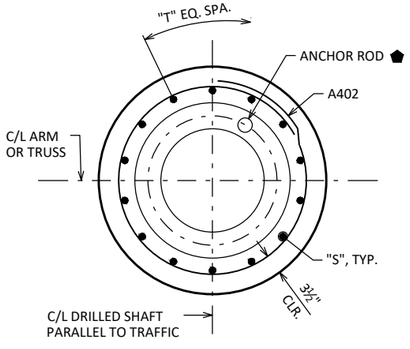
8

8




## ELEVATION

- TYPICAL FOR DRILLED SHAFT FOOTINGS INSTALLED ADJACENT TO SIDEWALKS OR BEHIND CURB AND GUTTER ON LOW SPEED ROADS. TOP OF SHAFT SHALL BE FLUSH IF SURROUNDED BY CONCRETE AND 2" ABOVE FINISHED GRADE FOR ALL OTHER SURFACES.
- TYPICAL FOR EACH DRILLED SHAFT FOOTING INSTALLED ADJACENT TO ROADWAY FACILITIES OR ON SIDE SLOPES WITHIN CLEAR ZONE. BARRIER OR BEAMGUARD MAY BE REQUIRED.




## SECTION B-B

TYPICAL FOR EACH DRILLED SHAFT FOOTING

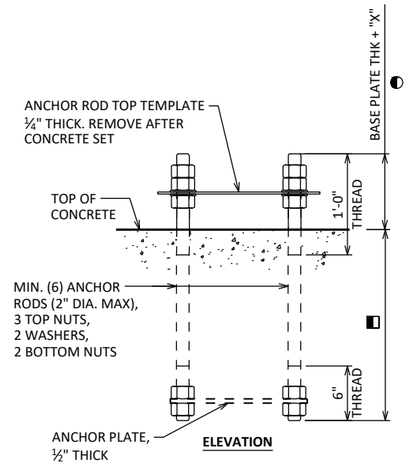
## FOUNDATION DIMENSION DATA

| STANDARD DESIGN TYPE | FOUNDATION DIMENSIONS | | | | | | |
|---|---|---|---|---|---|---|---|
| | "A" | "D" | "L" | "R" | "S" | "T" | "BC" MAX. |
| MFI | 1'-11" | 2'-6" | 12'-0" | 12 | A801 | 10 | 1'-5" |
| MCI/MCII/TFI | 1'-11" | 2'-6" | 17'-0" | 17 | A801 | 10 | 1'-5" |
| MFII | 2'-5" | 3'-0" | 13'-0" | 13 | A801 | 14 | 1'-10" |
| TCI | 2'-5" | 3'-0" | 18'-0" | 18 | A801 | 14 | 1'-10" |
| TFII | 2'-5" | 3'-0" | 20'-0" | 20 | A801 | 14 | 1'-10" |
| MCIII/TCII/TFIII | 2'-11" | 3'-6" | 18'-0" | 18 | A901 | 14 | 2'-4" |
| MCIV/TFIV | 2'-11" | 3'-6" | 23'-0" | 23 | A901 | 14 | 2'-4" |
| TCIII | 3'-5" | 4'-0" | 23'-0" | 23 | A1001 | 14 | 2'-10" |
| TCIV | 3'-5" | 4'-0" | 28'-0" | 28 | A1001 | 14 | 2'-10" |

## ESTIMATED QUANTITIES - FOUNDATION

| STANDARD DESIGN TYPE | CONCRETE MASONRY | STEEL REINFORCEMENT HS | FOUNDATION DRILLING (DIA.) (LF) | | | |
|---|---|---|---|---|---|---|
| | (CY) | (LBS) | 30" | 36" | 42" | 48" |
| MFI | 2.2 | 380 | 12 | --- | --- | --- |
| MCI/MCII/TFI | 3.1 | 540 | 17 | --- | --- | --- |
| MFII | 3.4 | 560 | --- | 13 | --- | --- |
| TCI | 4.7 | 780 | --- | 18 | --- | --- |
| TFII | 5.2 | 870 | --- | 20 | --- | --- |
| MCIII/TCII/TFIII | 6.4 | 980 | --- | --- | 18 | --- |
| MCIV/TFIV | 8.2 | 1,250 | --- | --- | 23 | --- |
| TCIII | 10.7 | 1,570 | --- | --- | --- | 23 |
| TCIV | 13.0 | 1,910 | --- | --- | --- | 28 |

✶✶ QUANTITIES ARE FOR INFORMATION ONLY AND ARE BASED ON A SINGLE DRILLED SHAFT. MULTIPLY BY 2 FOR FULL SPAN STRUCTURES.



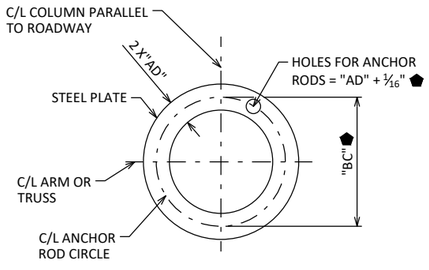

## ANCHOR ROD ASSEMBLY DETAILS

◧ ANCHOR RODS PER ASSEMBLY TO BE DESIGNED BY CONTRACTOR AND SHOWN ON SHOP DRAWINGS. SHOW DIAMETER, NUMBER, ORIENTATION AND EMBEDMENT OF ANCHOR RODS.

CENTER ANCHOR ROD ASSEMBLY AND ENSURE ASSEMBLY IS PLUMB. MAINTAIN ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE AS DETAILED. ANCHOR ROD ASSEMBLY SHALL BE RIGIDLY SECURED IN POSITION DURING AND AFTER CONCRETE PLACEMENT. DO NOT WELD THE ANCHORS.

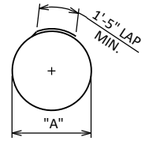
| ANCHOR DIAMETER "AD" | MAX. STICK OUT ◐ |
|---|---|
| | "X" |
| 1" | 5" |
| 1¼" | 6" |
| 1½" | 7" |
| 1¾" | 8" |
| 2" | 9" |

◐ ADD BASE PLATE THICKNESS TO VALUE SHOWN FOR MAX. STICK OUT DIMENSION. CONTRACTOR TO COORDINATE WITH FABRICATOR FOR PROPER ANCHOR PLACEMENT.




## ANCHOR PLATE & TOP TEMPLATE

⬟ ANCHOR SIZE, BOLT CIRCLE, AND POSITION TO BE VERIFIED WITH SHOP DRAWINGS.




**A402**

## LEGEND

◪ ANCHOR ROD STICK OUT IN FINAL CONDITION. EXCESSIVE STICK OUT BEYOND DIMENSION SHOWN TO BE CUT OFF AFTER PLACING STRUCTURE. ANCHORS TO BE ULTRASONIC TESTED TO DETERMINE EMBEDDED LENGTH MEETS REQUIREMENTS PRIOR TO CUTTING. NOTE REMAINING LENGTH ON AS-BUILT.

◭ 2 - 2" DIA. NON-METALLIC CONDUITS. INSTALL ONLY WITH DMS. EXTEND CONDUITS AS SHOWN AND CAP OR SEAL EACH END WITH A SUITABLE REMOVABLE PLUG. PLACE CONDUITS UNDER COLUMN ADJACENT TO DMS. CONDUITS INCIDENTAL TO THE FOUNDATION BID ITEMS.

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

## BILL OF BARS

**STANDARD TYPE MFI**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A801 | | 10 | 11'-8" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 13 | 7'-6" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD TYPES MCI/MCII/TFI**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A801 | | 10 | 16'-8" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 18 | 7'-6" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD TYPE MFII**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A801 | | 14 | 12'-8" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 14 | 9'-1" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD TYPE TCI**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A801 | | 14 | 17'-8" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 19 | 9'-1" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD TYPE TFII**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A801 | | 14 | 19'-8" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 21 | 9'-1" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD TYPES MCIII/TCII/TFIII**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A901 | | 14 | 17'-8" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 19 | 10'-7" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD TYPES MCIV/TFIV**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A901 | | 14 | 22'-8" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 24 | 10'-7" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD TYPE TCIII**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A1001 | | 14 | 22'-8" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 24 | 12'-2" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD TYPE TCIV**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A1001 | | 14 | 27'-8" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 29 | 12'-2" | X | | DRILLED SHAFT - HORIZONTAL |

✶✶ VALUES IN BAR TABLES ARE FOR A SINGLE FOUNDATION ONLY. MULTIPLY BY 2 FOR FULL ✶✶ SPAN STRUCTURES.

STATE PROJECT NUMBER

**STANDARD**

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

**UPDATED: OCT. 2024**

DRAWN BY BOS | PLANS CK'D BOS

**MONOTUBE & 2-CHORD TRUSS FOUNDATIONS**

SHEET IV
804

SCALE = 3.0


8

DIVISION 1 - NATIONAL AVE STAGE 1

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.25 | MASS ORDINATE |
| 49+00.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 49+50.00 | 50.00 | 8.44 | 2.65 | 0.00 | 8 | 2 | 0 | 8 | 0 | 6 |
| 50+00.00 | 50.00 | 11.59 | 2.59 | 0.00 | 19 | 5 | 0 | 27 | 0 | 20 |
| 50+50.00 | 50.00 | 15.19 | 2.78 | 0.00 | 25 | 5 | 0 | 52 | 0 | 40 |
| 51+00.00 | 50.00 | 14.75 | 2.66 | 0.01 | 28 | 5 | 0 | 80 | 0 | 63 |
| 51+50.00 | 50.00 | 14.57 | 2.64 | 0.03 | 27 | 5 | 0 | 107 | 0 | 85 |
| 52+00.00 | 50.00 | 14.29 | 2.73 | 0.04 | 27 | 5 | 0 | 134 | 0 | 107 |
| 52+50.00 | 50.00 | 13.82 | 2.80 | 0.00 | 26 | 5 | 0 | 160 | 0 | 128 |
| 53+00.00 | 50.00 | 12.47 | 2.81 | 0.00 | 24 | 5 | 0 | 184 | 0 | 147 |
| 53+50.00 | 50.00 | 11.38 | 2.18 | 0.00 | 22 | 5 | 0 | 206 | 0 | 164 |
| 54+00.00 | 50.00 | 0.00 | 0.00 | 0.00 | 11 | 2 | 0 | 217 | 0 | 173 |

DIVISION 2 - NATIONAL AVE STAGE 2

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.25 | MASS ORDINATE |
| 48+00.00 | 0.00 | 94.28 | 12.97 | 3.11 | 0 | 0 | 0 | 0 | 0 | 0 |
| 48+50.00 | 50.00 | 15.05 | 21.14 | 3.40 | 101 | 32 | 6 | 101 | 8 | 62 |
| 49+00.00 | 50.00 | 6.83 | 22.72 | 3.53 | 20 | 41 | 6 | 121 | 15 | 33 |
| 49+50.00 | 50.00 | 18.22 | 10.77 | 2.65 | 23 | 31 | 6 | 144 | 23 | 18 |
| 50+00.00 | 50.00 | 20.93 | 11.01 | 2.82 | 36 | 20 | 5 | 180 | 29 | 27 |
| 50+50.00 | 50.00 | 18.49 | 10.76 | 0.00 | 37 | 20 | 3 | 217 | 33 | 41 |
| 51+00.00 | 50.00 | 27.84 | 10.78 | 0.02 | 43 | 20 | 0 | 260 | 33 | 64 |
| 51+50.00 | 50.00 | 32.83 | 11.10 | 0.01 | 56 | 20 | 0 | 316 | 33 | 100 |
| 52+00.00 | 50.00 | 29.90 | 10.23 | 0.00 | 58 | 20 | 0 | 374 | 33 | 138 |
| 52+50.00 | 50.00 | 16.19 | 0.00 | 0.00 | 43 | 9 | 0 | 417 | 33 | 172 |
| 53+00.00 | 50.00 | 17.40 | 4.51 | 1.21 | 31 | 4 | 1 | 448 | 34 | 197 |
| 53+50.00 | 50.00 | 17.41 | 4.51 | 2.16 | 32 | 8 | 3 | 480 | 38 | 218 |
| 54+00.00 | 50.00 | 17.79 | 4.49 | 2.67 | 33 | 8 | 4 | 513 | 43 | 238 |
| 54+50.00 | 50.00 | 15.96 | 4.58 | 6.26 | 31 | 8 | 8 | 544 | 53 | 251 |
| 54+57.50 | 7.50 | 17.86 | 4.55 | 5.20 | 5 | 1 | 2 | 549 | 55 | 252 |
| 55+00.00 | 42.50 | 0.00 | 0.00 | 0.00 | 14 | 4 | 4 | 563 | 60 | 257 |

DIVISION 2 - WEST 894 EXIT RAMP

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.25 | MASS ORDINATE |
| 0+00.00 | 0.00 | 10.09 | 4.13 | 1.24 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0+25.00 | 25.00 | 11.04 | 3.83 | 0.09 | 10 | 4 | 1 | 10 | 1 | 5 |
| 0+40.00 | 15.00 | 20.13 | 5.50 | 0.04 | 9 | 3 | 0 | 19 | 1 | 11 |
| 0+50.00 | 10.00 | 21.22 | 5.32 | 0.15 | 8 | 2 | 0 | 27 | 1 | 17 |
| 0+65.00 | 15.00 | 22.50 | 5.21 | 0.00 | 12 | 3 | 0 | 39 | 1 | 26 |
| 0+75.00 | 10.00 | 22.25 | 5.24 | 0.06 | 8 | 2 | 0 | 47 | 1 | 32 |
| 1+00.00 | 25.00 | 10.45 | 3.17 | 0.00 | 15 | 4 | 0 | 62 | 1 | 43 |

DIVISION 2 - WEST 894 ENTRY RAMP

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.25 | MASS ORDINATE |
| 0+75.00 | 0.00 | 10.26 | 7.15 | 0.76 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1+00.00 | 25.00 | 6.77 | 7.42 | 1.53 | 8 | 7 | 1 | 8 | 1 | 0 |
| 1+25.00 | 25.00 | 6.69 | 7.31 | 4.40 | 6 | 7 | 3 | 14 | 5 | -5 |
| 1+50.00 | 25.00 | 26.39 | 26.10 | 1.81 | 15 | 15 | 3 | 29 | 9 | -9 |
| 1+75.00 | 25.00 | 30.46 | 22.52 | 1.31 | 26 | 23 | 1 | 55 | 10 | -7 |
| 2+00.00 | 25.00 | 17.37 | 6.67 | 0.35 | 22 | 14 | 1 | 77 | 11 | 0 |
| 2+25.00 | 25.00 | 17.54 | 7.06 | 0.17 | 16 | 6 | 0 | 93 | 11 | 10 |
| 2+45.92 | 20.92 | 18.16 | 6.76 | 0.00 | 14 | 5 | 0 | 107 | 11 | 19 |

DIVISION 2 - EAST 894 ENTRY RAMP

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.25 | MASS ORDINATE |
| 4+25.00 | 0.00 | 6.60 | 8.92 | 5.66 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4+50.00 | 25.00 | 6.51 | 7.68 | 5.82 | 6 | 8 | 5 | 6 | 6 | -8 |
| 4+75.00 | 25.00 | 13.97 | 10.97 | 3.69 | 9 | 9 | 4 | 15 | 11 | -13 |
| 5+00.00 | 25.00 | 14.66 | 6.64 | 0.91 | 13 | 8 | 2 | 28 | 14 | -11 |
| 5+25.00 | 25.00 | 16.32 | 4.77 | 0.00 | 14 | 5 | 0 | 42 | 14 | -2 |
| 5+50.00 | 25.00 | 15.80 | 4.85 | 0.06 | 15 | 4 | 0 | 57 | 14 | 9 |
| 5+66.39 | 16.39 | 7.58 | 2.45 | 0.63 | 7 | 2 | 0 | 64 | 14 | 14 |

DIVISION 2 - EAST 894 EXIT RAMP

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.25 | MASS ORDINATE |
| 0+65.73 | 0.00 | 6.14 | 2.75 | 0.14 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0+75.00 | 9.27 | 20.08 | 4.47 | 1.04 | 5 | 1 | 0 | 5 | 0 | 4 |
| 1+00.00 | 25.00 | 22.87 | 11.84 | 6.82 | 20 | 8 | 4 | 25 | 5 | 11 |
| 1+25.00 | 25.00 | 9.76 | 4.52 | 0.23 | 15 | 8 | 3 | 40 | 9 | 14 |
| 1+50.00 | 25.00 | 9.75 | 4.52 | 0.00 | 9 | 4 | 0 | 49 | 9 | 19 |
| 1+67.91 | 17.91 | 9.77 | 4.52 | 0.00 | 6 | 3 | 0 | 55 | 9 | 22 |

DIVISION 3 - NATIONAL AVE STAGE 3

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.25 | MASS ORDINATE |
| 54+57.50 | 0.00 | 75.71 | 37.52 | 5.03 | 0 | 0 | 0 | 0 | 0 | 0 |
| 55+00.00 | 42.50 | 69.42 | 37.45 | 4.84 | 114 | 59 | 8 | 114 | 10 | 45 |
| 55+34.50 | 34.50 | 68.81 | 37.43 | 6.58 | 88 | 48 | 7 | 202 | 19 | 76 |
| 55+50.00 | 15.50 | 180.39 | 37.31 | 0.00 | 72 | 21 | 2 | 274 | 21 | 125 |
| 55+85.68 | 35.68 | 279.74 | 64.45 | 0.00 | 304 | 67 | 0 | 578 | 21 | 362 |
| 56+00.00 | 14.32 | 270.20 | 64.47 | 0.00 | 146 | 34 | 0 | 724 | 21 | 474 |
| 56+50.00 | 50.00 | 182.40 | 37.23 | 0.22 | 419 | 94 | 0 | 1143 | 21 | 799 |
| 57+00.00 | 50.00 | 111.73 | 37.34 | 0.34 | 272 | 69 | 1 | 1415 | 23 | 1001 |
| 57+25.00 | 25.00 | 115.88 | 37.30 | 0.00 | 105 | 35 | 0 | 1520 | 23 | 1071 |
| 57+50.00 | 25.00 | 111.42 | 37.24 | 0.45 | 105 | 35 | 0 | 1625 | 23 | 1141 |
| 58+00.00 | 50.00 | 112.67 | 37.30 | 0.08 | 207 | 69 | 0 | 1832 | 23 | 1279 |
| 58+50.00 | 50.00 | 126.88 | 37.36 | 0.06 | 222 | 69 | 0 | 2054 | 23 | 1432 |
| 59+00.00 | 50.00 | 144.94 | 47.31 | 0.19 | 252 | 78 | 0 | 2306 | 23 | 1606 |
| 59+50.00 | 50.00 | 202.18 | 59.68 | 0.00 | 321 | 99 | 0 | 2627 | 23 | 1828 |
| 60+00.00 | 50.00 | 172.74 | 53.44 | 0.00 | 347 | 105 | 0 | 2974 | 23 | 2070 |
| 60+50.00 | 50.00 | 158.76 | 47.34 | 0.26 | 307 | 93 | 0 | 3281 | 23 | 2284 |
| 61+00.00 | 50.00 | 136.25 | 43.94 | 0.78 | 273 | 85 | 1 | 3554 | 24 | 2470 |
| 61+28.21 | 28.21 | 147.82 | 40.48 | 0.02 | 148 | 44 | 0 | 3702 | 24 | 2574 |
| 61+50.00 | 21.79 | 141.54 | 37.82 | 0.59 | 117 | 32 | 0 | 3819 | 24 | 2659 |
| 62+00.00 | 50.00 | 124.68 | 37.40 | 0.66 | 246 | 70 | 1 | 4065 | 25 | 2834 |
| 62+25.00 | 25.00 | 125.80 | 37.42 | 0.00 | 116 | 35 | 0 | 4181 | 25 | 2915 |
| 62+50.00 | 25.00 | 108.81 | 37.39 | 0.52 | 109 | 35 | 0 | 4290 | 25 | 2989 |
| 63+00.00 | 50.00 | 106.86 | 41.29 | 0.84 | 200 | 73 | 1 | 4490 | 26 | 3115 |
| 63+12.50 | 12.50 | 99.51 | 45.76 | 0.83 | 48 | 20 | 0 | 4538 | 26 | 3143 |
| 63+50.00 | 37.50 | 124.80 | 49.64 | 0.00 | 156 | 66 | 1 | 4694 | 28 | 3232 |
| 64+00.00 | 50.00 | 198.23 | 59.97 | 0.00 | 299 | 101 | 0 | 4993 | 28 | 3430 |
| 64+50.00 | 50.00 | 110.11 | 37.44 | 0.13 | 285 | 90 | 0 | 5278 | 28 | 3625 |
| 65+00.00 | 50.00 | 119.69 | 37.35 | 0.68 | 213 | 69 | 1 | 5491 | 29 | 3767 |
| 65+50.00 | 50.00 | 113.31 | 37.36 | 0.74 | 216 | 69 | 1 | 5707 | 30 | 3913 |
| 66+00.00 | 50.00 | 106.66 | 37.41 | 0.60 | 204 | 69 | 1 | 5911 | 31 | 4047 |
| 66+45.00 | 45.00 | 115.24 | 37.35 | 0.00 | 185 | 62 | 0 | 6096 | 31 | 4170 |
| 66+50.00 | 5.00 | 116.62 | 37.34 | 0.08 | 21 | 7 | 0 | 6117 | 31 | 4184 |
| 66+52.85 | 2.85 | 117.79 | 37.34 | 0.00 | 12 | 4 | 0 | 6129 | 31 | 4192 |
| 66+85.00 | 32.15 | 117.42 | 37.38 | 0.00 | 140 | 44 | 0 | 6269 | 31 | 4288 |
| 67+00.00 | 15.00 | 110.29 | 37.40 | 0.11 | 63 | 21 | 0 | 6332 | 31 | 4330 |
| 67+50.00 | 50.00 | 131.18 | 50.39 | 0.37 | 224 | 81 | 0 | 6556 | 31 | 4473 |
| 68+00.00 | 50.00 | 222.25 | 71.75 | 0.00 | 327 | 113 | 0 | 6883 | 31 | 4687 |
| 68+50.00 | 50.00 | 114.48 | 20.97 | 0.00 | 312 | 86 | 0 | 7195 | 31 | 4913 |
| 69+00.00 | 50.00 | 208.64 | 37.36 | 0.05 | 299 | 54 | 0 | 7494 | 31 | 5158 |
| 69+50.00 | 50.00 | 219.92 | 37.40 | 0.07 | 397 | 69 | 0 | 7891 | 31 | 5486 |
| 69+75.00 | 25.00 | 219.98 | 37.38 | 0.00 | 204 | 35 | 0 | 8095 | 31 | 5655 |
| 70+00.00 | 25.00 | 211.85 | 37.40 | 0.05 | 200 | 35 | 0 | 8295 | 31 | 5820 |
| 70+50.00 | 50.00 | 197.10 | 37.35 | 0.37 | 379 | 69 | 0 | 8674 | 31 | 6130 |
| 71+00.00 | 50.00 | 191.54 | 37.32 | 0.00 | 360 | 69 | 0 | 9034 | 31 | 6421 |
| 71+50.00 | 50.00 | 95.61 | 40.58 | 0.01 | 266 | 72 | 0 | 9300 | 31 | 6615 |
| 71+58.30 | 8.30 | 107.18 | 40.62 | 0.01 | 31 | 12 | 0 | 9331 | 31 | 6634 |
| 71+97.88 | 39.58 | 46.40 | 28.10 | 0.00 | 113 | 50 | 0 | 9444 | 31 | 6697 |

DIVISION 3 - S. 99TH ST STAGE 3

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.25 | MASS ORDINATE |
| 130+90.00 | 0.00 | 123.26 | 53.82 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 131+00.00 | 10.00 | 101.50 | 45.18 | 0.02 | 42 | 18 | 0 | 42 | 0 | 24 |
| 131+17.69 | 17.69 | 85.22 | 36.32 | 0.09 | 61 | 27 | 0 | 103 | 0 | 58 |

DIVISION 3 - S. 98TH ST STAGE 3

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.25 | MASS ORDINATE |
| 140+85.00 | 0.00 | 133.73 | 58.11 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 141+00.00 | 15.00 | 104.77 | 40.29 | 0.00 | 66 | 27 | 0 | 66 | 0 | 39 |
| 141+02.65 | 2.65 | 102.63 | 38.40 | 0.14 | 10 | 4 | 0 | 76 | 0 | 45 |
| 141+13.32 | 10.67 | 92.13 | 35.39 | 0.19 | 38 | 15 | 0 | 114 | 0 | 68 |

DIVISION 3 - S. 97TH ST STAGE 3

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.25 | MASS ORDINATE |
| 150+76.67 | 0.00 | 208.23 | 64.30 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 151+00.00 | 23.33 | 108.96 | 45.67 | 0.00 | 137 | 48 | 0 | 137 | 0 | 89 |
| 151+13.98 | 13.98 | 96.62 | 37.33 | 0.01 | 53 | 21 | 0 | 190 | 0 | 121 |

9

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PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EARTHWORK DATA | SHEET: 808 | E

FILE NAME: "T:\1232708\Civil3D\24101500\sheets\030200_mq.pptx" PLOT DATE 1/14/2026 9:20:05 AM PLOT BY : ARG PLOT SCALE : 1:1

DIVISION 4 - NATIONAL AVE STAGE 4

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.25 | MASS ORDINATE |
| 55+34.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 55+50.00 | 15.50 | 68.99 | 38.78 | 0.29 | 20 | 11 | 0 | 20 | 0 | 9 |
| 55+85.68 | 35.68 | 81.98 | 37.53 | 0.41 | 100 | 50 | 0 | 120 | 0 | 59 |
| 56+00.00 | 14.32 | 83.84 | 37.50 | 0.33 | 44 | 20 | 0 | 164 | 0 | 83 |
| 56+50.00 | 50.00 | 106.02 | 37.52 | 0.06 | 176 | 69 | 0 | 340 | 0 | 190 |
| 57+00.00 | 50.00 | 147.38 | 37.33 | 0.01 | 235 | 69 | 0 | 575 | 0 | 356 |
| 57+25.00 | 25.00 | 161.36 | 37.20 | 0.00 | 143 | 35 | 0 | 718 | 0 | 464 |
| 57+50.00 | 25.00 | 159.06 | 40.07 | 0.01 | 148 | 36 | 0 | 866 | 0 | 576 |
| 58+00.00 | 50.00 | 140.38 | 46.32 | 0.03 | 277 | 80 | 0 | 1143 | 0 | 773 |
| 58+50.00 | 50.00 | 104.64 | 47.71 | 0.01 | 227 | 87 | 0 | 1370 | 0 | 913 |
| 59+00.00 | 50.00 | 184.69 | 62.24 | 0.00 | 268 | 102 | 0 | 1638 | 0 | 1079 |
| 59+50.00 | 50.00 | 136.88 | 49.53 | 0.00 | 298 | 103 | 0 | 1936 | 0 | 1274 |
| 60+00.00 | 50.00 | 93.46 | 37.32 | 0.28 | 213 | 80 | 0 | 2149 | 0 | 1407 |
| 60+50.00 | 50.00 | 108.83 | 37.33 | 0.40 | 187 | 69 | 1 | 2336 | 1 | 1524 |
| 61+00.00 | 50.00 | 105.10 | 37.40 | 0.14 | 198 | 69 | 1 | 2534 | 3 | 1652 |
| 61+28.21 | 28.21 | 112.47 | 37.41 | 0.24 | 114 | 39 | 0 | 2648 | 3 | 1727 |
| 61+50.00 | 21.79 | 123.24 | 37.41 | 0.25 | 95 | 30 | 0 | 2743 | 3 | 1792 |
| 62+00.00 | 50.00 | 144.17 | 37.34 | 1.11 | 248 | 69 | 1 | 2991 | 4 | 1969 |
| 62+25.00 | 25.00 | 151.35 | 37.34 | 0.30 | 137 | 35 | 1 | 3128 | 5 | 2070 |
| 62+50.00 | 25.00 | 153.33 | 37.62 | 0.24 | 141 | 35 | 0 | 3269 | 5 | 2176 |
| 63+00.00 | 50.00 | 160.58 | 45.83 | 0.00 | 291 | 77 | 0 | 3560 | 5 | 2390 |
| 63+12.50 | 12.50 | 165.38 | 51.76 | 0.00 | 75 | 23 | 0 | 3635 | 5 | 2442 |
| 63+50.00 | 37.50 | 137.09 | 47.88 | 0.24 | 210 | 69 | 0 | 3845 | 5 | 2583 |
| 64+00.00 | 50.00 | 145.23 | 42.05 | 0.08 | 261 | 83 | 0 | 4106 | 5 | 2761 |
| 64+50.00 | 50.00 | 102.74 | 37.42 | 0.35 | 230 | 74 | 0 | 4336 | 5 | 2917 |
| 65+00.00 | 50.00 | 112.36 | 37.45 | 0.21 | 199 | 69 | 1 | 4535 | 6 | 3046 |
| 65+50.00 | 50.00 | 135.62 | 37.39 | 0.26 | 230 | 69 | 0 | 4765 | 6 | 3207 |
| 66+00.00 | 50.00 | 159.23 | 37.38 | 0.14 | 273 | 69 | 0 | 5038 | 6 | 3411 |
| 66+45.00 | 45.00 | 150.15 | 37.30 | 0.30 | 258 | 62 | 0 | 5296 | 6 | 3607 |
| 66+50.00 | 5.00 | 148.74 | 37.29 | 0.33 | 28 | 7 | 0 | 5324 | 6 | 3628 |
| 66+52.85 | 2.85 | 149.37 | 37.30 | 0.35 | 16 | 4 | 0 | 5340 | 6 | 3640 |
| 66+85.00 | 32.15 | 145.65 | 38.38 | 0.85 | 176 | 45 | 1 | 5516 | 8 | 3770 |
| 67+00.00 | 15.00 | 144.71 | 40.73 | 0.97 | 81 | 22 | 1 | 5597 | 9 | 3827 |
| 67+50.00 | 50.00 | 127.44 | 47.08 | 0.69 | 252 | 81 | 2 | 5849 | 11 | 3996 |
| 68+00.00 | 50.00 | 147.10 | 48.50 | 0.15 | 254 | 88 | 1 | 6103 | 13 | 4161 |
| 68+50.00 | 50.00 | 115.47 | 37.41 | 0.00 | 243 | 80 | 0 | 6346 | 13 | 4324 |
| 69+00.00 | 50.00 | 112.29 | 37.29 | 0.59 | 211 | 69 | 1 | 6557 | 14 | 4464 |
| 69+50.00 | 50.00 | 109.37 | 37.32 | 1.09 | 205 | 69 | 2 | 6762 | 16 | 4598 |
| 69+75.00 | 25.00 | 110.13 | 37.36 | 1.46 | 102 | 35 | 1 | 6864 | 18 | 4664 |
| 70+00.00 | 25.00 | 109.41 | 37.37 | 1.52 | 102 | 35 | 1 | 6966 | 19 | 4729 |
| 70+50.00 | 50.00 | 94.58 | 37.31 | 2.16 | 189 | 69 | 3 | 7155 | 23 | 4846 |
| 71+00.00 | 50.00 | 91.56 | 37.27 | 2.97 | 172 | 69 | 5 | 7327 | 29 | 4942 |
| 71+50.00 | 50.00 | 94.58 | 33.97 | 0.33 | 172 | 66 | 3 | 7499 | 33 | 5045 |
| 72+00.00 | 50.00 | 106.78 | 33.95 | 0.00 | 186 | 63 | 0 | 7685 | 33 | 5168 |
| 72+22.05 | 22.05 | 86.15 | 33.26 | 0.00 | 79 | 27 | 0 | 7764 | 33 | 5220 |

DIVISION 4 - S. 99TH ST STAGE 4

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.25 | MASS ORDINATE |
| 118+81.98 | 0.00 | 100.80 | 41.45 | 0.24 | 0 | 0 | 0 | 0 | 0 | 0 |
| 118+95.38 | 13.40 | 100.98 | 47.47 | 3.55 | 50 | 22 | 1 | 50 | 1 | 27 |
| 119+00.00 | 4.62 | 101.46 | 53.42 | 4.66 | 17 | 9 | 1 | 67 | 3 | 34 |
| 119+20.00 | 20.00 | 144.74 | 55.87 | 0.00 | 91 | 40 | 2 | 158 | 5 | 82 |



PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | EARTHWORK DATA | SHEET: 809 | E

FILE NAME: "T:\1232708\Civil3D\24101500\sheets\030200_mq.pptx" PLOT DATE 1/14/2026 9:20:05 AM PLOT BY : ARG PLOT SCALE : 1:1

DIVISION 6 - NATIONAL AVE STAGE 6

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.25 | MASS ORDINATE |
| 21+82.62 | 0.00 | 36.80 | 13.09 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 22+00.00 | 17.38 | 37.39 | 12.88 | 0.38 | 24 | 8 | 0 | 24 | 0 | 16 |
| 22+29.20 | 29.20 | 94.57 | 37.34 | 0.08 | 71 | 27 | 0 | 95 | 0 | 60 |
| 22+50.00 | 20.80 | 95.65 | 37.36 | 0.90 | 73 | 29 | 0 | 168 | 0 | 104 |
| 23+00.00 | 50.00 | 100.42 | 37.47 | 0.69 | 182 | 69 | 1 | 350 | 1 | 216 |
| 23+10.06 | 10.06 | 104.96 | 37.41 | 0.34 | 38 | 14 | 0 | 388 | 1 | 240 |
| 23+37.50 | 27.44 | 124.00 | 37.35 | 0.12 | 116 | 38 | 0 | 504 | 1 | 318 |
| 23+50.00 | 12.50 | 130.91 | 37.35 | 0.00 | 59 | 17 | 0 | 563 | 1 | 360 |
| 24+00.00 | 50.00 | 114.66 | 37.38 | 0.13 | 227 | 69 | 0 | 790 | 1 | 518 |
| 24+25.00 | 25.00 | 109.49 | 45.17 | 0.19 | 104 | 38 | 0 | 894 | 1 | 584 |
| 24+50.00 | 25.00 | 114.14 | 45.19 | 0.97 | 104 | 42 | 1 | 998 | 3 | 645 |
| 24+62.50 | 12.50 | 113.10 | 45.14 | 0.04 | 53 | 21 | 0 | 1051 | 3 | 677 |
| 25+00.00 | 37.50 | 105.49 | 37.45 | 0.18 | 152 | 57 | 0 | 1203 | 3 | 772 |
| 25+50.00 | 50.00 | 118.71 | 37.43 | 0.00 | 208 | 69 | 0 | 1411 | 3 | 911 |
| 25+87.50 | 37.50 | 115.67 | 37.33 | 0.04 | 163 | 52 | 0 | 1574 | 3 | 1022 |
| 26+00.00 | 12.50 | 116.02 | 37.35 | 0.01 | 54 | 17 | 0 | 1628 | 3 | 1059 |
| 26+50.00 | 50.00 | 122.33 | 39.87 | 0.00 | 221 | 72 | 0 | 1849 | 3 | 1208 |
| 27+00.00 | 50.00 | 109.64 | 47.31 | 0.03 | 215 | 81 | 0 | 2064 | 3 | 1342 |
| 27+50.00 | 50.00 | 108.57 | 47.60 | 0.08 | 202 | 88 | 0 | 2266 | 3 | 1456 |
| 28+00.00 | 50.00 | 133.70 | 55.35 | 0.00 | 224 | 95 | 0 | 2490 | 3 | 1585 |
| 28+29.91 | 29.91 | 178.33 | 63.21 | 0.00 | 173 | 66 | 0 | 2663 | 3 | 1692 |
| 28+50.00 | 20.09 | 190.04 | 62.81 | 0.00 | 137 | 47 | 0 | 2800 | 3 | 1782 |
| 29+00.00 | 50.00 | 168.20 | 45.28 | 0.00 | 332 | 100 | 0 | 3132 | 3 | 2014 |
| 29+50.00 | 50.00 | 171.67 | 44.95 | 0.00 | 315 | 84 | 0 | 3447 | 3 | 2245 |
| 30+00.00 | 50.00 | 169.98 | 37.55 | 0.00 | 316 | 76 | 0 | 3763 | 3 | 2485 |
| 30+50.00 | 50.00 | 89.63 | 44.22 | 0.20 | 240 | 76 | 0 | 4003 | 3 | 2649 |
| 31+00.00 | 50.00 | 84.33 | 47.47 | 0.00 | 161 | 85 | 0 | 4164 | 3 | 2725 |
| 31+50.00 | 50.00 | 67.85 | 35.55 | 0.00 | 141 | 77 | 0 | 4305 | 3 | 2789 |
| 32+00.00 | 50.00 | 68.28 | 29.06 | 0.00 | 126 | 60 | 0 | 4431 | 3 | 2855 |
| 32+50.00 | 50.00 | 86.56 | 26.75 | 0.00 | 143 | 52 | 0 | 4574 | 3 | 2946 |
| 33+00.00 | 50.00 | 85.98 | 31.84 | 0.00 | 160 | 54 | 0 | 4734 | 3 | 3052 |
| 33+50.00 | 50.00 | 101.71 | 45.88 | 0.00 | 174 | 72 | 0 | 4908 | 3 | 3154 |
| 34+00.00 | 50.00 | 93.78 | 47.48 | 1.70 | 181 | 86 | 2 | 5089 | 5 | 3246 |
| 34+25.00 | 25.00 | 177.00 | 47.43 | 0.04 | 125 | 44 | 1 | 5214 | 6 | 3326 |
| 34+50.00 | 25.00 | 186.59 | 47.29 | 0.86 | 168 | 44 | 0 | 5382 | 6 | 3450 |
| 35+00.00 | 50.00 | 206.48 | 47.45 | 1.53 | 364 | 88 | 2 | 5746 | 9 | 3723 |
| 35+50.00 | 50.00 | 210.99 | 47.14 | 0.21 | 387 | 88 | 2 | 6133 | 11 | 4020 |
| 35+62.50 | 12.50 | 211.38 | 45.25 | 0.16 | 98 | 21 | 0 | 6231 | 11 | 4097 |
| 36+00.00 | 37.50 | 214.97 | 39.53 | 0.04 | 296 | 59 | 0 | 6527 | 11 | 4334 |
| 36+50.00 | 50.00 | 208.94 | 37.65 | 0.20 | 393 | 71 | 0 | 6920 | 11 | 4656 |
| 36+87.50 | 37.50 | 175.08 | 41.55 | 0.00 | 267 | 55 | 0 | 7187 | 11 | 4868 |
| 37+00.00 | 12.50 | 165.09 | 43.92 | 0.28 | 79 | 20 | 0 | 7266 | 11 | 4927 |
| 37+37.50 | 37.50 | 169.77 | 62.69 | 0.00 | 233 | 74 | 0 | 7499 | 11 | 5086 |
| 37+50.00 | 12.50 | 173.16 | 72.52 | 0.00 | 79 | 31 | 0 | 7578 | 11 | 5134 |
| 37+75.00 | 25.00 | 202.96 | 65.85 | 0.05 | 174 | 64 | 0 | 7752 | 11 | 5244 |
| 38+00.00 | 25.00 | 171.15 | 65.87 | 0.00 | 173 | 61 | 0 | 7925 | 11 | 5356 |
| 38+50.00 | 50.00 | 186.15 | 65.82 | 0.00 | 331 | 122 | 0 | 8256 | 11 | 5565 |
| 38+75.00 | 25.00 | 193.22 | 65.80 | 0.00 | 176 | 61 | 0 | 8432 | 11 | 5680 |
| 39+00.00 | 25.00 | 90.60 | 62.79 | 0.50 | 131 | 60 | 0 | 8563 | 11 | 5751 |
| 39+50.00 | 50.00 | 101.34 | 49.20 | 0.00 | 178 | 104 | 0 | 8741 | 11 | 5825 |
| 40+00.00 | 50.00 | 122.00 | 51.11 | 0.17 | 207 | 93 | 0 | 8948 | 11 | 5939 |
| 40+50.00 | 50.00 | 98.84 | 56.54 | 0.09 | 204 | 100 | 0 | 9152 | 11 | 6043 |
| 41+00.00 | 50.00 | 101.25 | 56.44 | 0.08 | 185 | 105 | 0 | 9337 | 11 | 6123 |
| 41+50.00 | 50.00 | 98.62 | 65.58 | 0.08 | 185 | 113 | 0 | 9522 | 11 | 6195 |
| 42+00.00 | 50.00 | 103.46 | 56.57 | 0.12 | 187 | 113 | 0 | 9709 | 11 | 6269 |

DIVISION 6 - NATIONAL AVE STAGE 6

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.25 | MASS ORDINATE |
| 42+50.00 | 50.00 | 111.03 | 56.65 | 0.04 | 199 | 105 | 0 | 9908 | 11 | 6363 |
| 43+00.00 | 50.00 | 207.85 | 56.54 | 0.07 | 295 | 105 | 0 | 10203 | 11 | 6553 |
| 43+50.00 | 50.00 | 206.21 | 56.68 | 0.06 | 383 | 105 | 0 | 10586 | 11 | 6831 |
| 44+00.00 | 50.00 | 205.40 | 56.75 | 0.15 | 381 | 105 | 0 | 10967 | 11 | 7107 |
| 44+50.00 | 50.00 | 211.69 | 56.81 | 0.06 | 386 | 105 | 0 | 11353 | 11 | 7388 |
| 45+00.00 | 50.00 | 121.30 | 56.74 | 0.09 | 308 | 105 | 0 | 11661 | 11 | 7591 |
| 45+50.00 | 50.00 | 134.15 | 57.36 | 0.04 | 237 | 106 | 0 | 11898 | 11 | 7722 |
| 46+00.00 | 50.00 | 140.72 | 62.26 | 0.09 | 255 | 111 | 0 | 12153 | 11 | 7866 |
| 46+50.00 | 50.00 | 124.03 | 66.72 | 1.41 | 245 | 119 | 1 | 12398 | 13 | 7991 |
| 47+00.00 | 50.00 | 100.71 | 66.79 | 4.82 | 208 | 124 | 6 | 12606 | 20 | 8067 |
| 47+45.57 | 45.57 | 89.62 | 66.83 | 5.97 | 161 | 113 | 9 | 12767 | 31 | 8104 |
| 47+50.00 | 4.43 | 89.95 | 66.83 | 5.46 | 15 | 11 | 1 | 12782 | 33 | 8107 |
| 48+00.00 | 50.00 | 89.80 | 73.61 | 2.87 | 166 | 130 | 8 | 12948 | 43 | 8133 |

DIVISION 6 - W. CLEVELAND AVE STAGE 6

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.25 | MASS ORDINATE |
| 100+60.00 | 0.00 | 133.41 | 35.09 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 101+00.00 | 40.00 | 213.54 | 60.37 | 0.00 | 257 | 71 | 0 | 257 | 0 | 186 |
| 101+50.00 | 50.00 | 290.04 | 98.24 | 0.05 | 466 | 147 | 0 | 723 | 0 | 505 |
| 102+00.00 | 50.00 | 223.28 | 67.25 | 0.15 | 475 | 153 | 0 | 1198 | 0 | 827 |
| 102+50.00 | 50.00 | 203.78 | 57.39 | 0.06 | 395 | 115 | 0 | 1593 | 0 | 1107 |
| 103+00.00 | 50.00 | 192.22 | 62.40 | 1.63 | 367 | 111 | 2 | 1960 | 3 | 1361 |
| 103+12.50 | 12.50 | 188.90 | 60.53 | 1.69 | 88 | 28 | 1 | 2048 | 4 | 1419 |
| 103+50.00 | 37.50 | 182.32 | 54.71 | 0.73 | 258 | 80 | 2 | 2306 | 6 | 1595 |
| 104+00.00 | 50.00 | 189.59 | 53.18 | 0.00 | 344 | 100 | 1 | 2650 | 8 | 1838 |
| 104+50.00 | 50.00 | 163.67 | 53.25 | 0.14 | 327 | 99 | 0 | 2977 | 8 | 2066 |
| 105+00.00 | 50.00 | 139.64 | 53.27 | 1.35 | 281 | 99 | 1 | 3258 | 9 | 2246 |
| 105+37.50 | 37.50 | 131.07 | 53.33 | 5.20 | 188 | 74 | 5 | 3446 | 15 | 2354 |
| 105+50.00 | 12.50 | 128.11 | 53.31 | 5.63 | 60 | 25 | 3 | 3506 | 19 | 2385 |
| 106+00.00 | 50.00 | 137.61 | 53.34 | 0.92 | 246 | 99 | 6 | 3752 | 26 | 2525 |

DIVISION 6 - S. 102ND ST STAGE 6

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.25 | MASS ORDINATE |
| 108+93.92 | 0.00 | 79.82 | 31.50 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 109+00.00 | 6.08 | 82.76 | 31.57 | 0.00 | 18 | 7 | 0 | 18 | 0 | 11 |
| 109+25.00 | 25.00 | 247.17 | 150.00 | 0.00 | 153 | 84 | 0 | 171 | 0 | 80 |
| 109+50.00 | 25.00 | 161.76 | 57.69 | 0.20 | 189 | 96 | 0 | 360 | 0 | 173 |

DIVISION 7 - NATIONAL AVE STAGE 7

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.25 | MASS ORDINATE |
| 22+50.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 23+00.00 | 50.00 | 16.88 | 0.98 | 0.00 | 16 | 1 | 0 | 16 | 0 | 15 |
| 23+10.06 | 10.06 | 125.67 | 46.78 | 0.00 | 27 | 9 | 0 | 43 | 0 | 33 |
| 23+37.50 | 27.44 | 130.02 | 49.08 | 0.20 | 130 | 49 | 0 | 173 | 0 | 114 |
| 23+50.00 | 12.50 | 133.77 | 46.86 | 0.05 | 61 | 22 | 0 | 234 | 0 | 153 |
| 24+00.00 | 50.00 | 152.34 | 46.23 | 0.00 | 265 | 86 | 0 | 499 | 0 | 332 |
| 24+25.00 | 25.00 | 155.05 | 52.30 | 0.00 | 142 | 46 | 0 | 641 | 0 | 428 |
| 24+50.00 | 25.00 | 150.00 | 52.26 | 0.35 | 141 | 48 | 0 | 782 | 0 | 521 |
| 24+62.50 | 12.50 | 151.37 | 52.18 | 0.22 | 70 | 24 | 0 | 852 | 0 | 567 |
| 25+00.00 | 37.50 | 145.75 | 37.42 | 1.14 | 206 | 62 | 1 | 1058 | 1 | 710 |
| 25+50.00 | 50.00 | 143.93 | 37.37 | 1.22 | 268 | 69 | 2 | 1326 | 4 | 906 |
| 25+87.50 | 37.50 | 169.54 | 37.40 | 0.00 | 218 | 52 | 1 | 1544 | 5 | 1071 |
| 26+00.00 | 12.50 | 171.31 | 37.39 | 0.00 | 79 | 17 | 0 | 1623 | 5 | 1133 |
| 26+50.00 | 50.00 | 196.84 | 37.33 | 0.16 | 341 | 69 | 0 | 1964 | 5 | 1405 |
| 27+00.00 | 50.00 | 200.31 | 37.36 | 0.77 | 368 | 69 | 1 | 2332 | 6 | 1703 |
| 27+50.00 | 50.00 | 215.24 | 37.37 | 0.05 | 385 | 69 | 1 | 2717 | 8 | 2018 |
| 28+00.00 | 50.00 | 192.63 | 45.09 | 0.15 | 378 | 76 | 0 | 3095 | 8 | 2320 |
| 28+29.91 | 29.91 | 172.79 | 45.66 | 0.02 | 202 | 50 | 0 | 3297 | 8 | 2472 |
| 28+50.00 | 20.09 | 159.20 | 46.01 | 0.01 | 124 | 34 | 0 | 3421 | 8 | 2562 |
| 29+00.00 | 50.00 | 114.21 | 39.17 | 0.06 | 253 | 79 | 0 | 3674 | 8 | 2736 |
| 29+50.00 | 50.00 | 114.29 | 36.34 | 0.00 | 212 | 70 | 0 | 3886 | 8 | 2878 |
| 30+00.00 | 50.00 | 100.82 | 35.59 | 0.00 | 199 | 67 | 0 | 4085 | 8 | 3010 |
| 30+50.00 | 50.00 | 130.32 | 50.35 | 0.00 | 214 | 80 | 0 | 4299 | 8 | 3144 |
| 31+00.00 | 50.00 | 161.58 | 59.18 | 0.00 | 270 | 101 | 0 | 4569 | 8 | 3313 |
| 31+50.00 | 50.00 | 128.63 | 49.49 | 0.00 | 269 | 101 | 0 | 4838 | 8 | 3481 |
| 32+00.00 | 50.00 | 137.03 | 41.55 | 0.00 | 246 | 84 | 0 | 5084 | 8 | 3643 |
| 32+50.00 | 50.00 | 199.92 | 37.57 | 0.00 | 312 | 73 | 0 | 5396 | 8 | 3882 |
| 33+00.00 | 50.00 | 191.59 | 37.48 | 0.00 | 363 | 69 | 0 | 5759 | 8 | 4176 |
| 33+50.00 | 50.00 | 195.30 | 37.34 | 0.00 | 358 | 69 | 0 | 6117 | 8 | 4465 |
| 34+00.00 | 50.00 | 160.59 | 37.32 | 0.11 | 330 | 69 | 0 | 6447 | 8 | 4726 |
| 34+25.00 | 25.00 | 138.04 | 37.28 | 0.50 | 138 | 35 | 0 | 6585 | 8 | 4829 |
| 34+50.00 | 25.00 | 123.76 | 37.24 | 0.45 | 121 | 35 | 0 | 6706 | 8 | 4915 |
| 35+00.00 | 50.00 | 109.28 | 37.21 | 0.34 | 216 | 69 | 1 | 6922 | 9 | 5060 |
| 35+50.00 | 50.00 | 121.98 | 50.38 | 0.00 | 214 | 81 | 0 | 7136 | 9 | 5193 |
| 35+62.50 | 12.50 | 122.05 | 52.26 | 0.00 | 56 | 24 | 0 | 7192 | 9 | 5225 |
| 36+00.00 | 37.50 | 120.84 | 57.99 | 0.00 | 169 | 77 | 0 | 7361 | 9 | 5317 |
| 36+50.00 | 50.00 | 110.99 | 37.37 | 0.09 | 215 | 88 | 0 | 7576 | 9 | 5444 |
| 36+87.50 | 37.50 | 114.67 | 37.26 | 0.02 | 157 | 52 | 0 | 7733 | 9 | 5549 |
| 37+00.00 | 12.50 | 114.87 | 37.30 | 0.01 | 53 | 17 | 0 | 7786 | 9 | 5585 |
| 37+37.50 | 37.50 | 123.75 | 37.47 | 0.00 | 166 | 52 | 0 | 7952 | 9 | 5699 |
| 37+50.00 | 12.50 | 119.88 | 37.46 | 0.43 | 56 | 17 | 0 | 8008 | 9 | 5738 |
| 37+75.00 | 25.00 | 128.47 | 37.36 | 0.00 | 115 | 35 | 0 | 8123 | 9 | 5818 |
| 38+00.00 | 25.00 | 120.09 | 37.39 | 0.00 | 115 | 35 | 0 | 8238 | 9 | 5898 |
| 38+50.00 | 50.00 | 115.72 | 37.40 | 1.30 | 218 | 69 | 1 | 8456 | 10 | 6046 |
| 38+75.00 | 25.00 | 115.00 | 37.36 | 0.48 | 107 | 35 | 1 | 8563 | 11 | 6117 |
| 39+00.00 | 25.00 | 124.46 | 53.94 | 0.00 | 111 | 42 | 0 | 8674 | 11 | 6186 |
| 39+50.00 | 50.00 | 135.82 | 50.84 | 0.00 | 241 | 97 | 0 | 8915 | 11 | 6330 |
| 40+00.00 | 50.00 | 89.74 | 47.40 | 0.00 | 209 | 91 | 0 | 9124 | 11 | 6448 |
| 40+50.00 | 50.00 | 174.29 | 47.19 | 0.08 | 244 | 88 | 0 | 9368 | 11 | 6604 |
| 41+00.00 | 50.00 | 152.53 | 47.07 | 0.04 | 303 | 87 | 0 | 9671 | 11 | 6820 |
| 41+50.00 | 50.00 | 153.81 | 51.07 | 0.49 | 284 | 91 | 0 | 9955 | 11 | 7013 |
| 42+00.00 | 50.00 | 163.20 | 37.28 | 0.21 | 294 | 82 | 1 | 10249 | 13 | 7224 |
| 42+50.00 | 50.00 | 140.92 | 37.24 | 0.04 | 282 | 69 | 0 | 10531 | 13 | 7437 |
| 43+00.00 | 50.00 | 110.78 | 37.38 | 0.78 | 233 | 69 | 1 | 10764 | 14 | 7599 |
| 43+50.00 | 50.00 | 109.35 | 37.49 | 0.42 | 204 | 69 | 1 | 10968 | 15 | 7733 |

DIVISION 7 - NATIONAL AVE STAGE 7

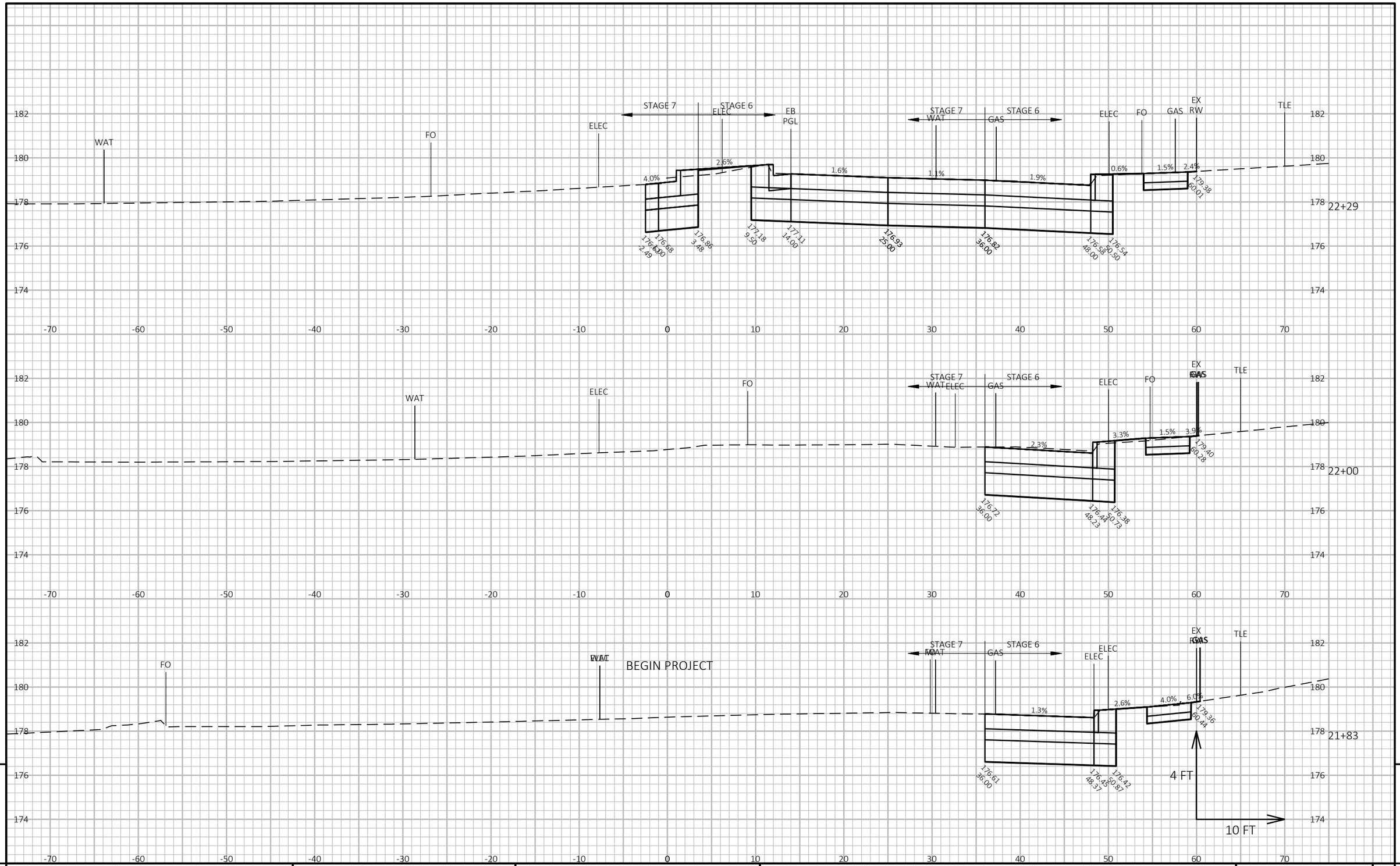
| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.25 | MASS ORDINATE |
| 44+00.00 | 50.00 | 110.04 | 37.37 | 0.16 | 203 | 69 | 1 | 11171 | 16 | 7866 |
| 44+50.00 | 50.00 | 112.57 | 37.43 | 0.16 | 206 | 69 | 0 | 11377 | 16 | 8003 |
| 45+00.00 | 50.00 | 111.58 | 37.39 | 0.03 | 208 | 69 | 0 | 11585 | 16 | 8142 |
| 45+50.00 | 50.00 | 107.41 | 37.40 | 0.17 | 203 | 69 | 0 | 11788 | 16 | 8276 |
| 46+00.00 | 50.00 | 94.01 | 37.38 | 1.34 | 186 | 69 | 1 | 11974 | 18 | 8392 |
| 46+50.00 | 50.00 | 73.99 | 37.40 | 4.34 | 156 | 69 | 5 | 12130 | 24 | 8472 |
| 47+00.00 | 50.00 | 77.46 | 37.42 | 1.39 | 140 | 69 | 5 | 12270 | 30 | 8537 |
| 47+45.57 | 45.57 | 93.06 | 38.93 | 0.53 | 144 | 64 | 2 | 12414 | 33 | 8615 |

DIVISION 7 - W. CLEVELAND AVE STAGE 7

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.25 | MASS ORDINATE |
| 96+64.94 | 0.00 | 139.24 | 69.44 | 5.96 | 0 | 0 | 0 | 0 | 0 | 0 |
| 97+00.00 | 35.06 | 166.28 | 69.46 | 4.14 | 198 | 90 | 7 | 198 | 9 | 99 |
| 97+50.00 | 50.00 | 199.06 | 69.29 | 0.11 | 338 | 128 | 4 | 536 | 14 | 304 |
| 98+00.00 | 50.00 | 237.65 | 67.47 | 0.00 | 404 | 127 | 0 | 940 | 14 | 581 |
| 98+50.00 | 50.00 | 297.57 | 86.08 | 0.00 | 496 | 142 | 0 | 1436 | 14 | 935 |
| 99+00.00 | 50.00 | 189.30 | 48.25 | 0.00 | 451 | 124 | 0 | 1887 | 14 | 1262 |

DIVISION 7 - S. 102ND ST STAGE 7

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.25 | MASS ORDINATE |
| 110+50.00 | 0.00 | 302.39 | 88.21 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 110+75.00 | 25.00 | 179.25 | 58.89 | 0.00 | 223 | 68 | 0 | 223 | 0 | 155 |
| 110+76.16 | 1.16 | 166.82 | 59.04 | 0.00 | 7 | 3 | 0 | 230 | 0 | 159 |
| 110+97.66 | 21.50 | 85.85 | 29.20 | 0.01 | 101 | 35 | 0 | 331 | 0 | 225 |
| 111+00.00 | 2.34 | 84.75 | 29.12 | 0.01 | 7 | 3 | 0 | 338 | 0 | 229 |
| 111+25.00 | 25.00 | 19.91 | 4.50 | 0.00 | 48 | 16 | 0 | 386 | 0 | 261 |
| 111+50.00 | 25.00 | 16.80 | 4.38 | 0.00 | 17 | 4 | 0 | 403 | 0 | 274 |
| 111+66.74 | 16.74 | 16.07 | 4.33 | 0.00 | 10 | 3 | 0 | 413 | 0 | 281 |

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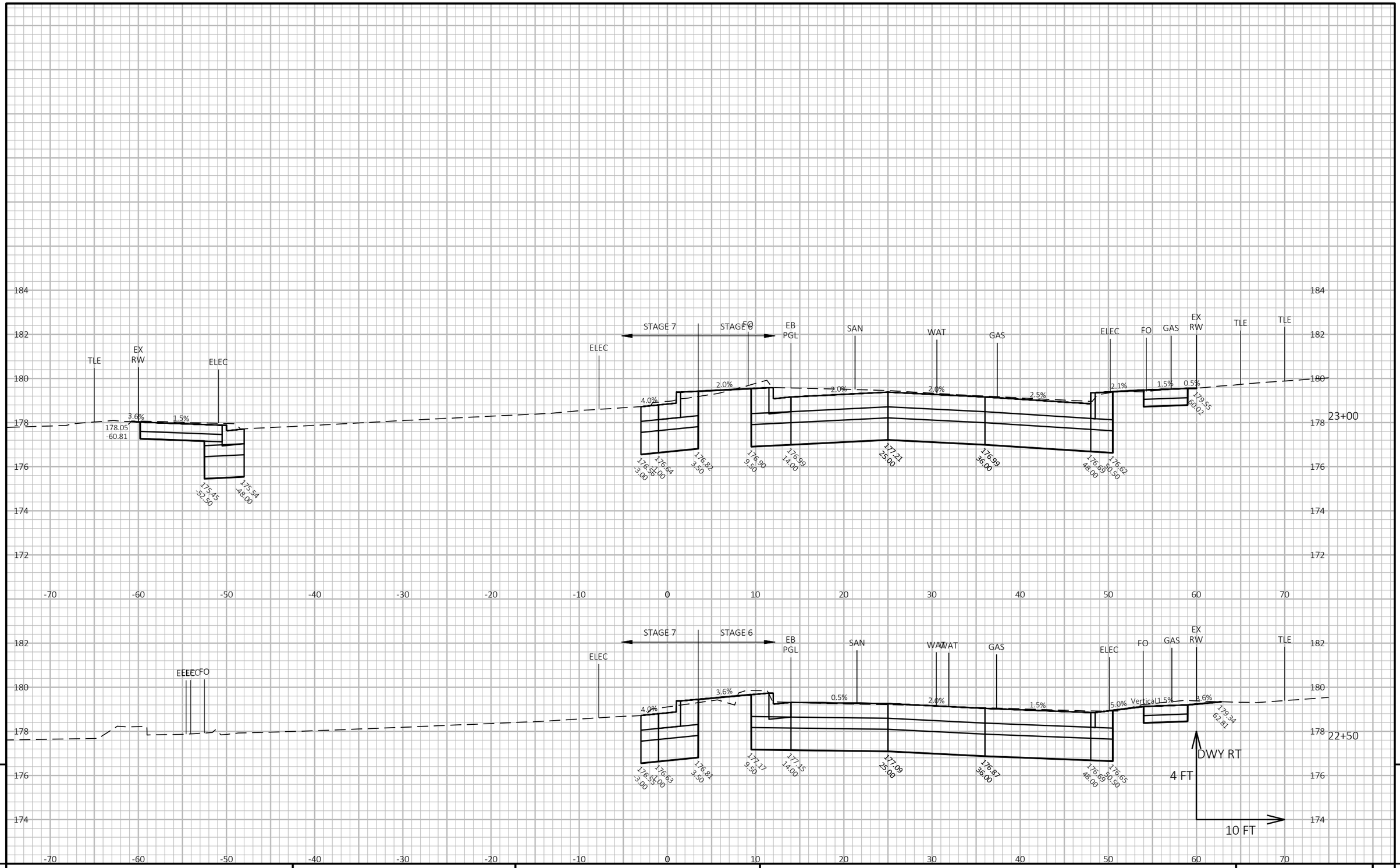
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 814 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 01

PLOT DATE : 1/9/2026 2:23 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

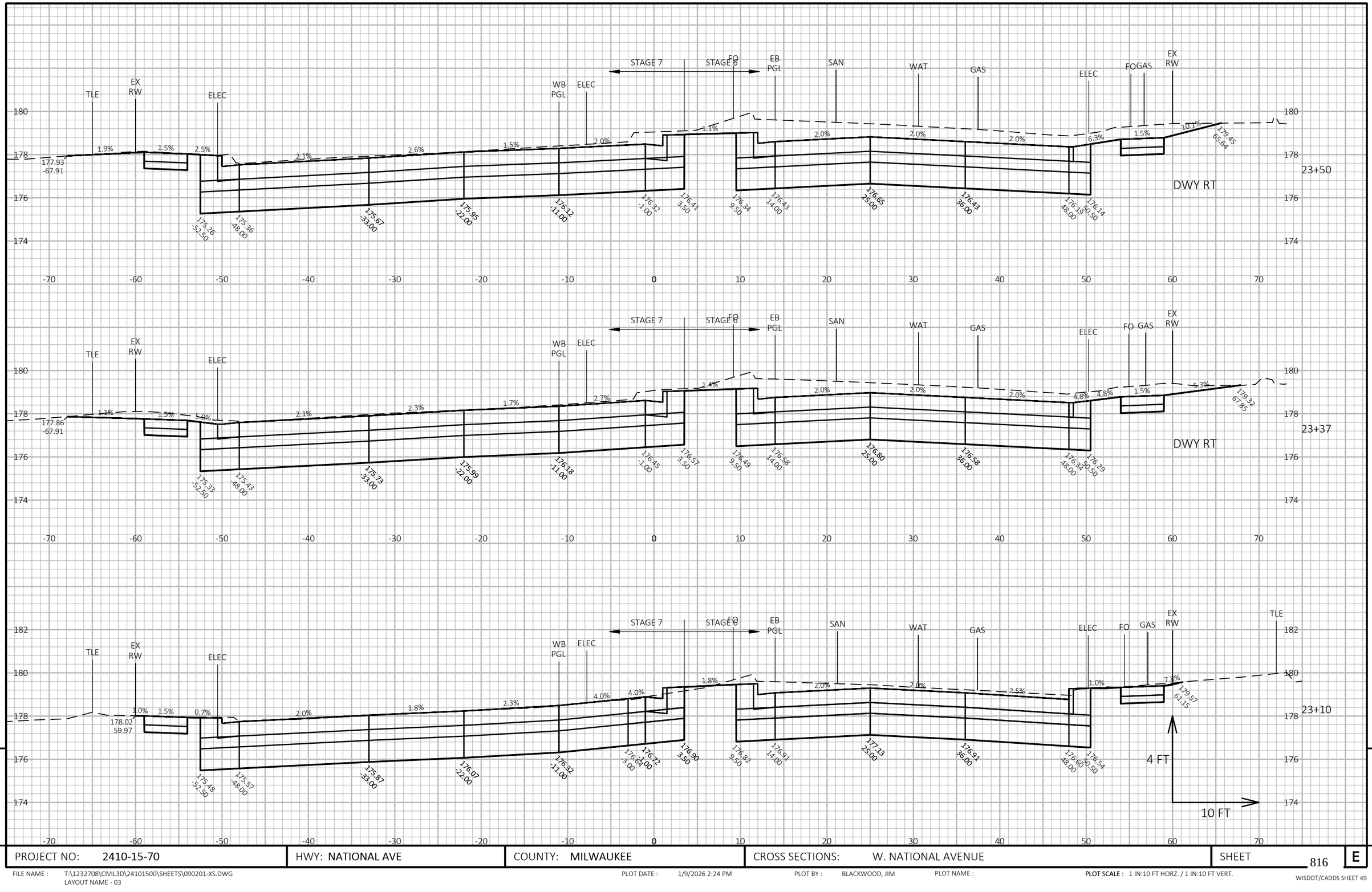



| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 815 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 1/9/2026 2:23 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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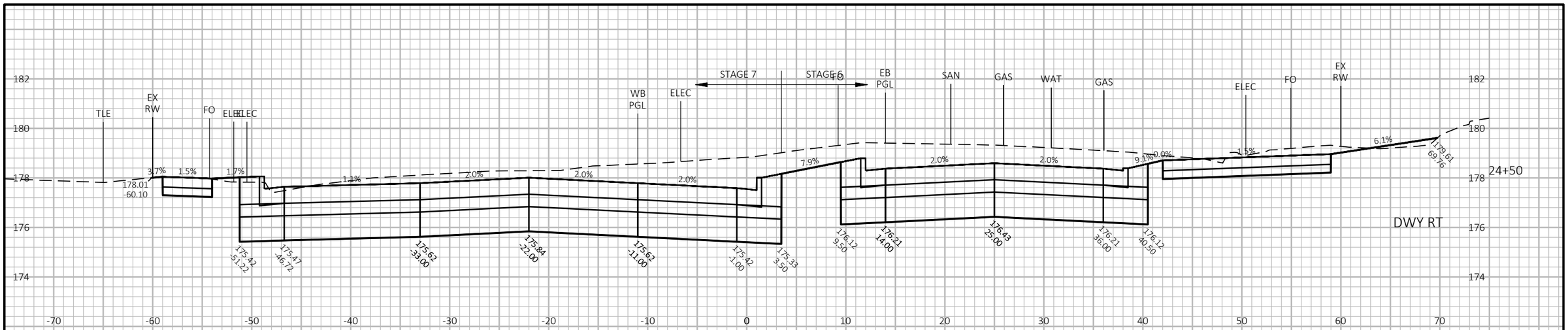
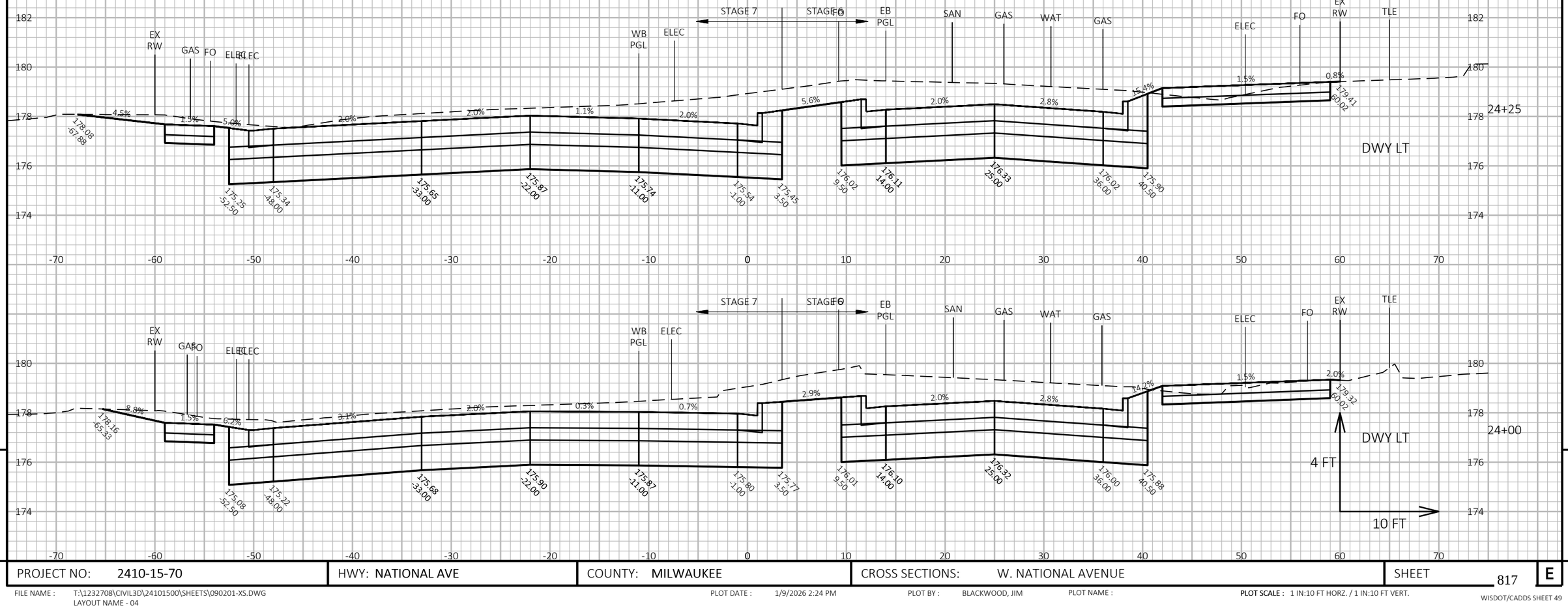
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 816 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 03

PLOT DATE : 1/9/2026 2:24 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 817 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 04

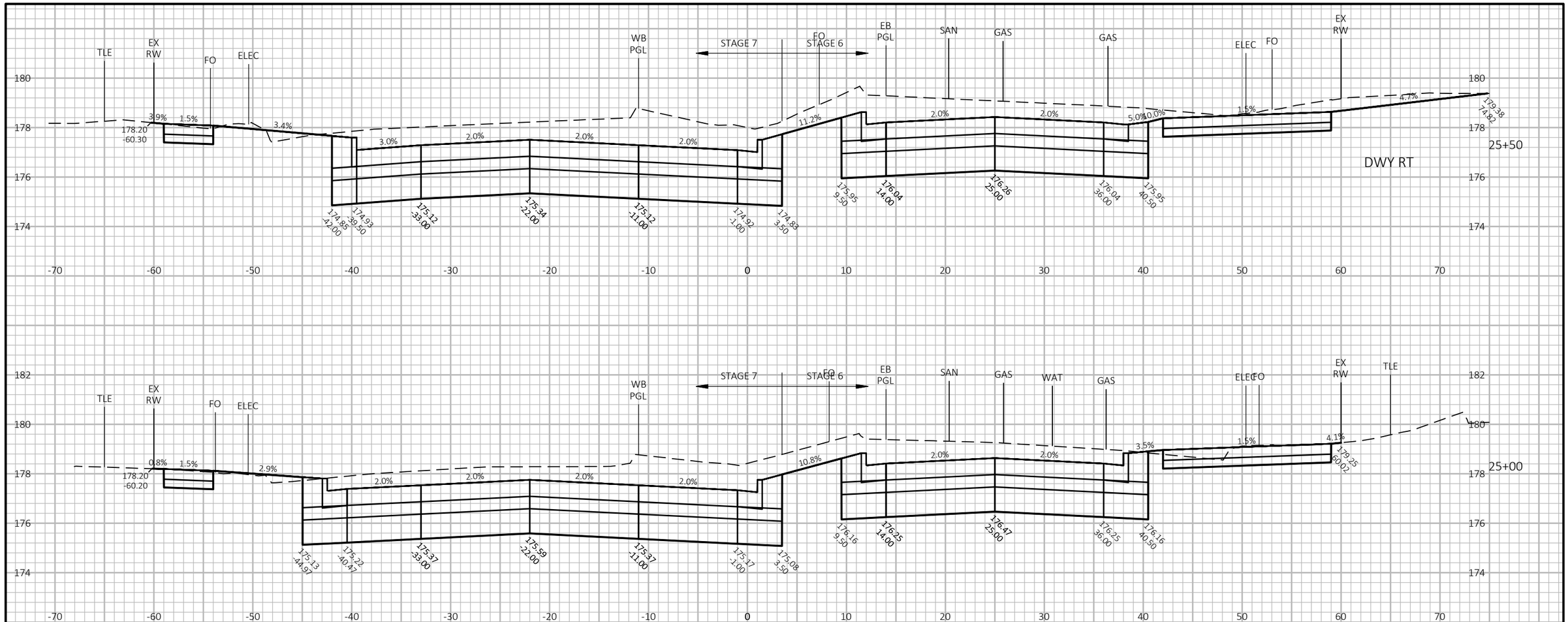
PLOT DATE : 1/9/2026 2:24 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

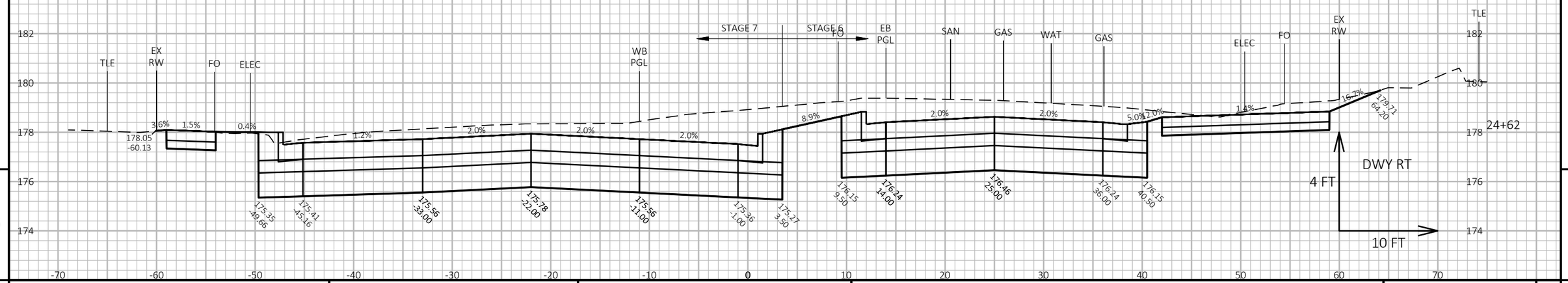
**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 818 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 05

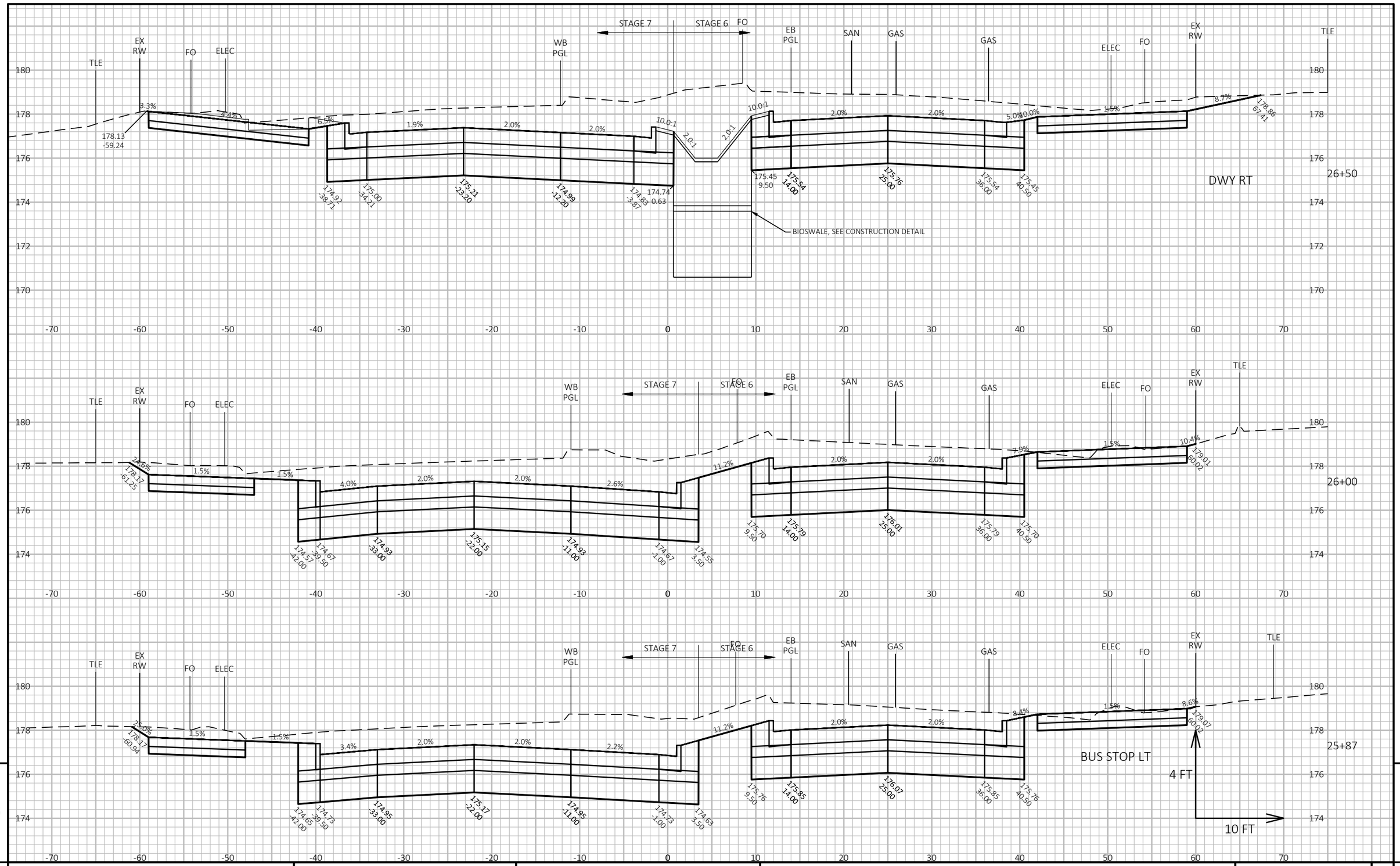
PLOT DATE : 1/9/2026 2:24 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 819 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 06

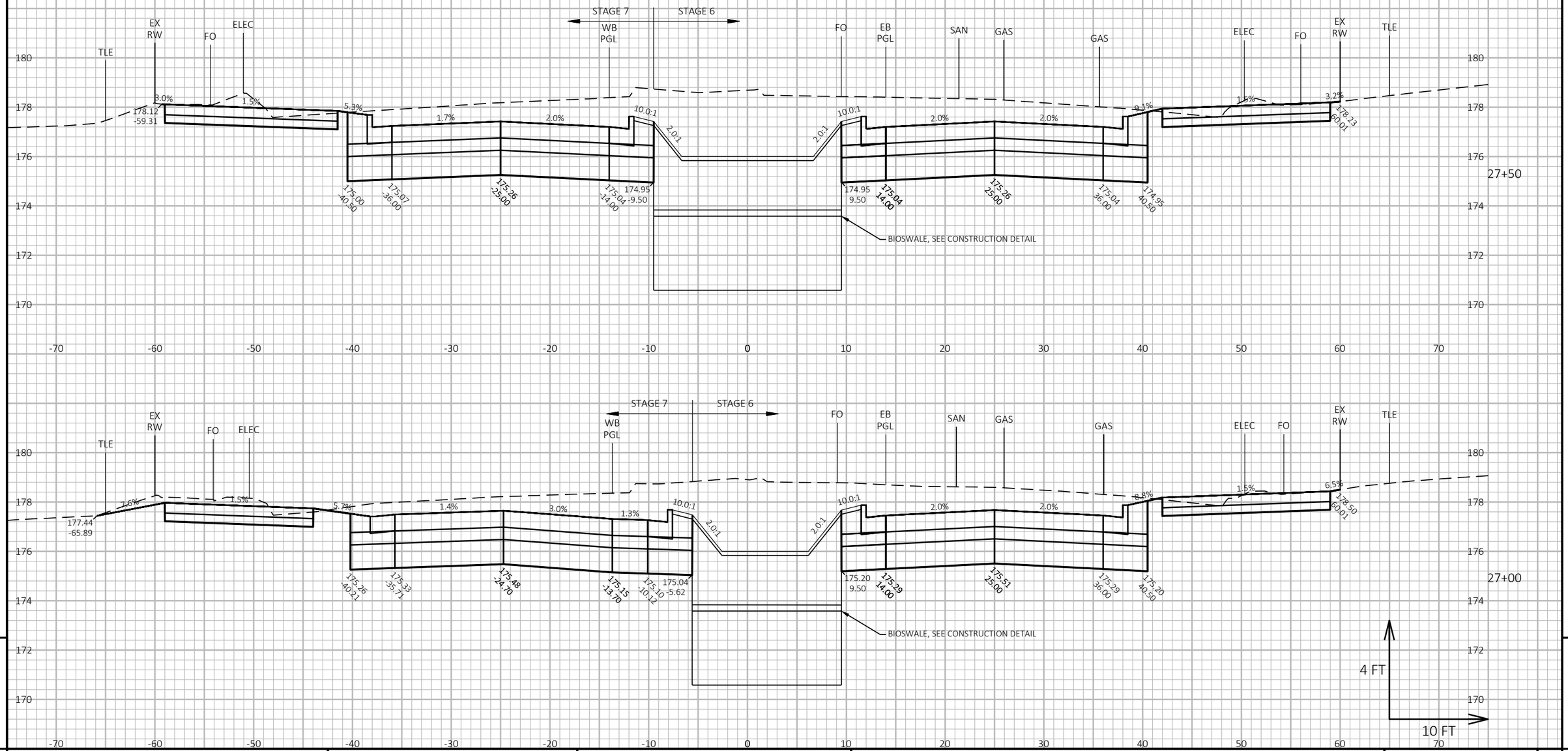
PLOT DATE : 1/9/2026 2:24 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

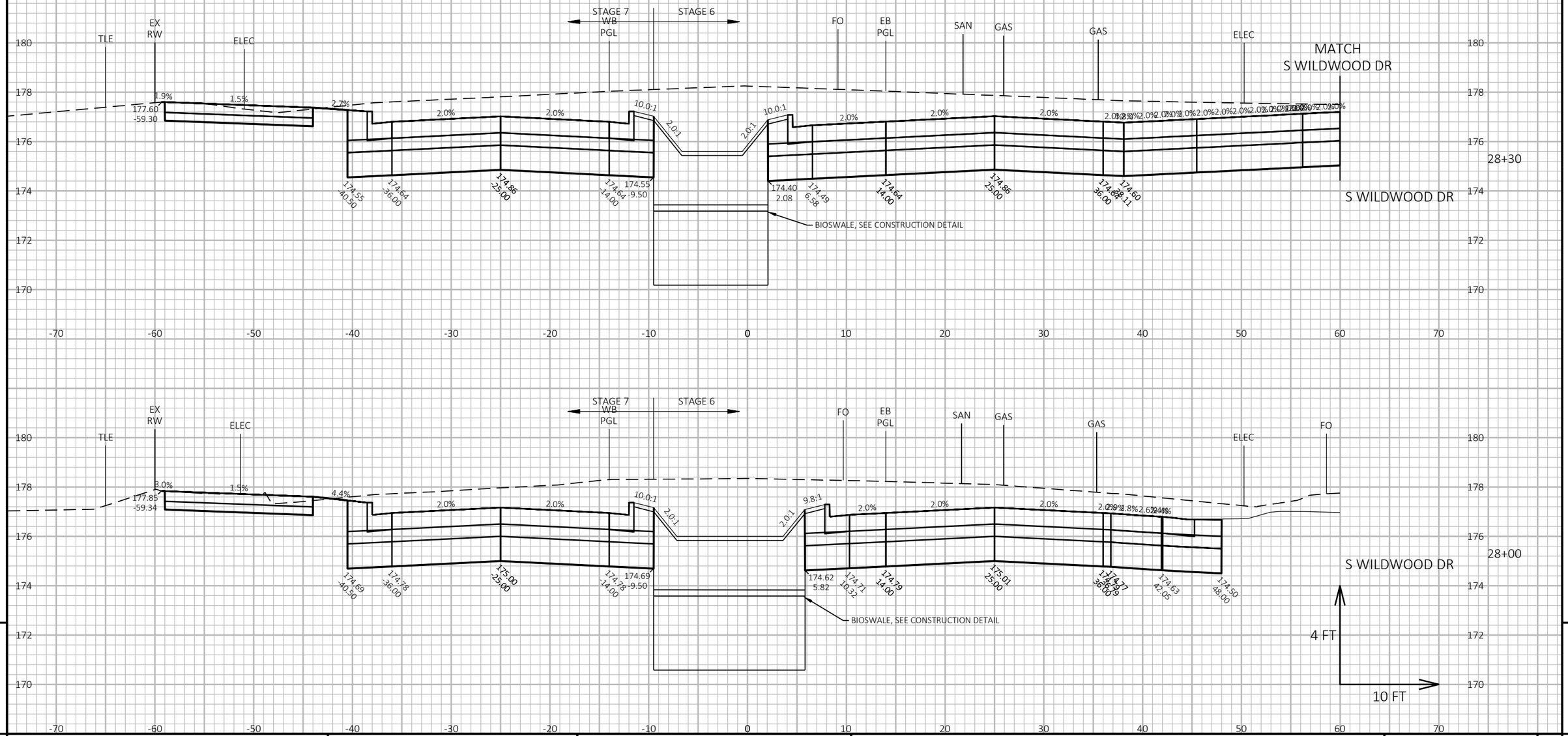



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 820 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 07

PLOT DATE : 1/9/2026 2:24 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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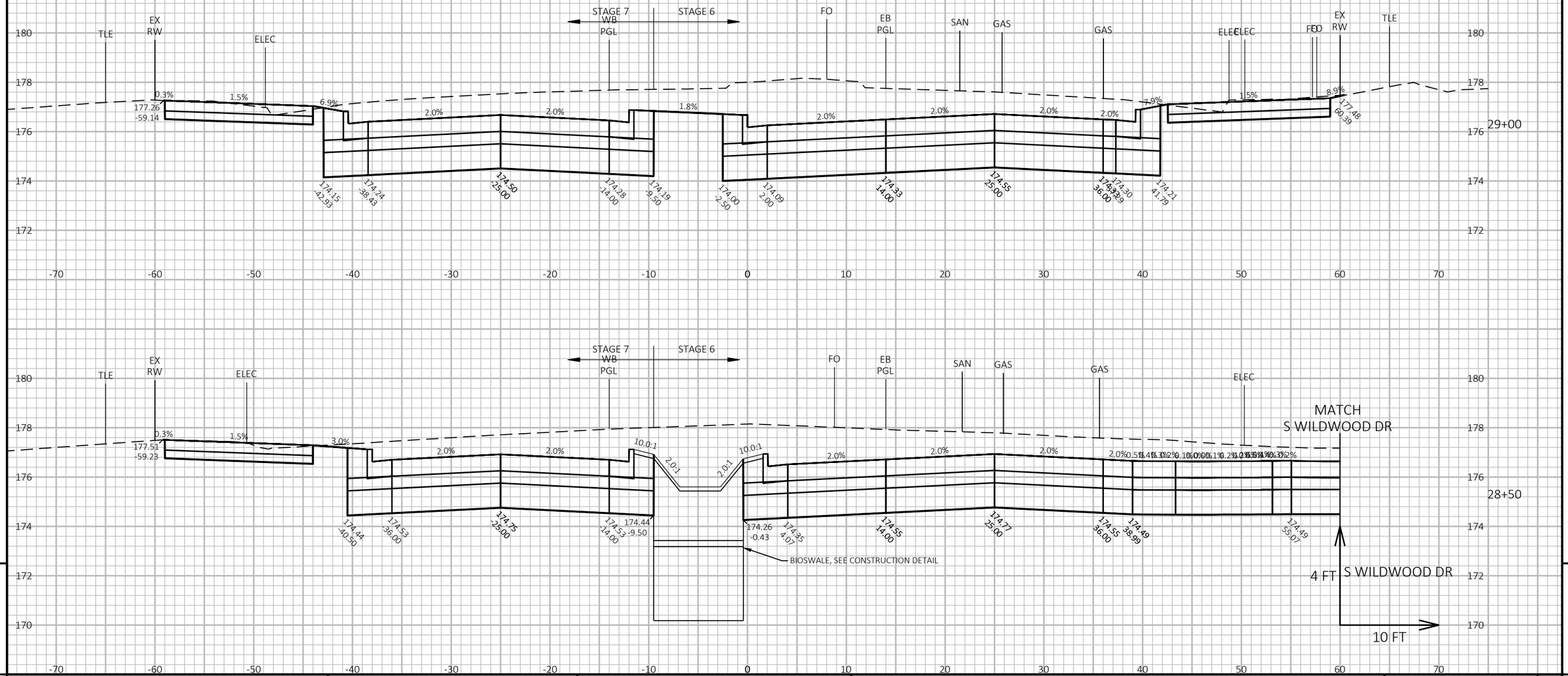
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 821 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 08

PLOT DATE : 1/9/2026 2:24 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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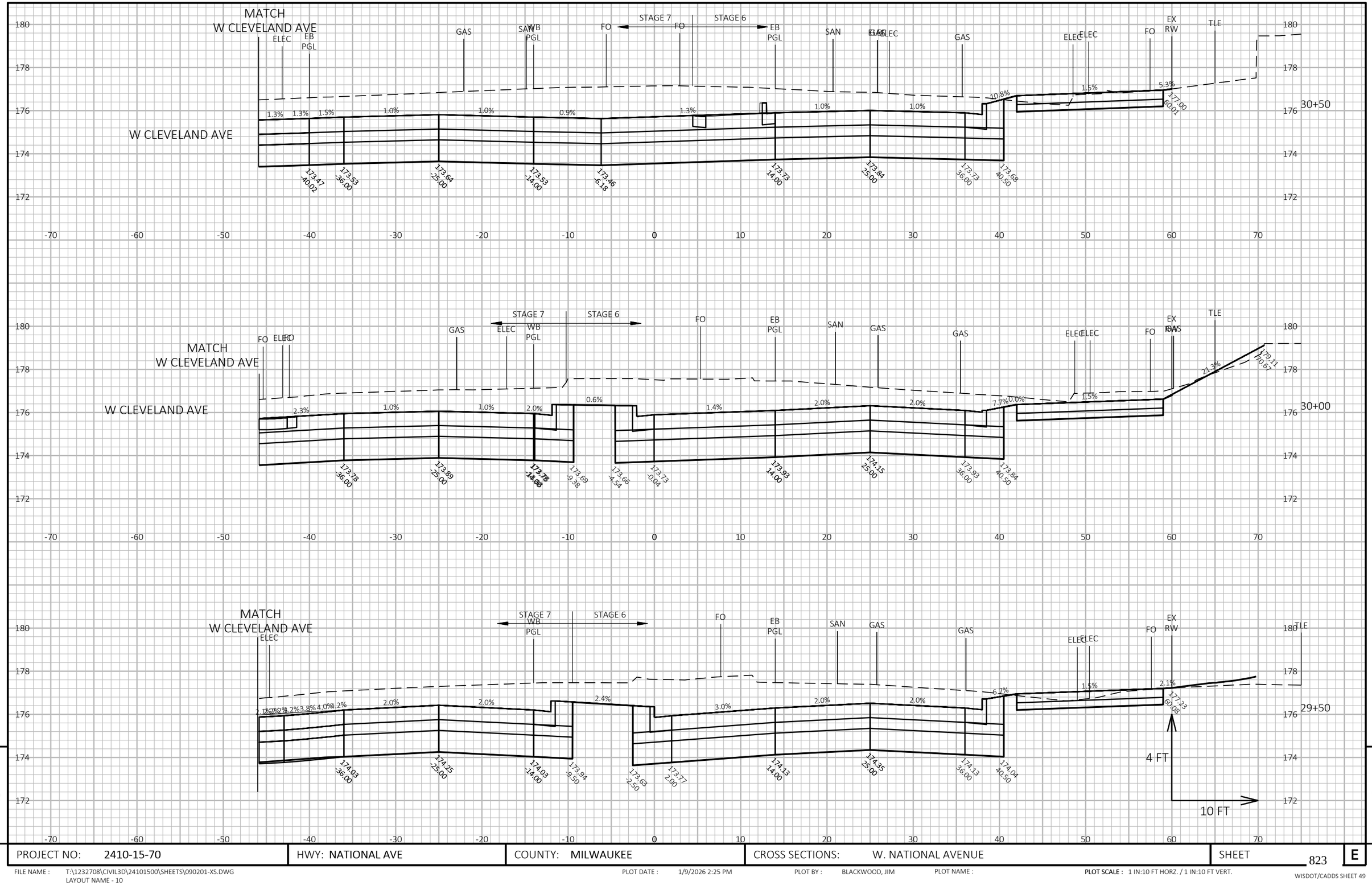
|---|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 822 | E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 09

PLOT DATE : 1/9/2026 2:25 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

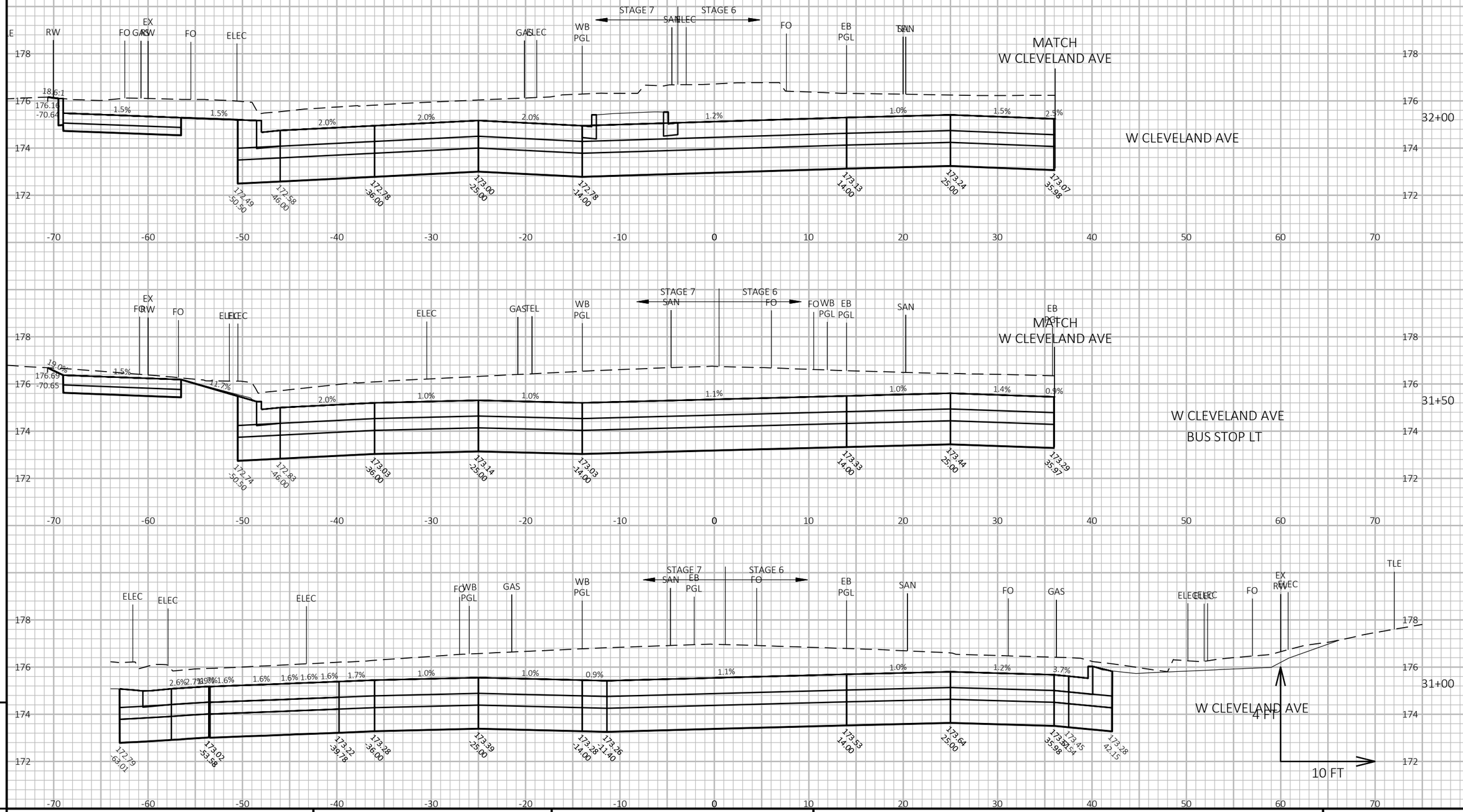



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 823 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 10

PLOT DATE : 1/9/2026 2:25 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 824 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 11

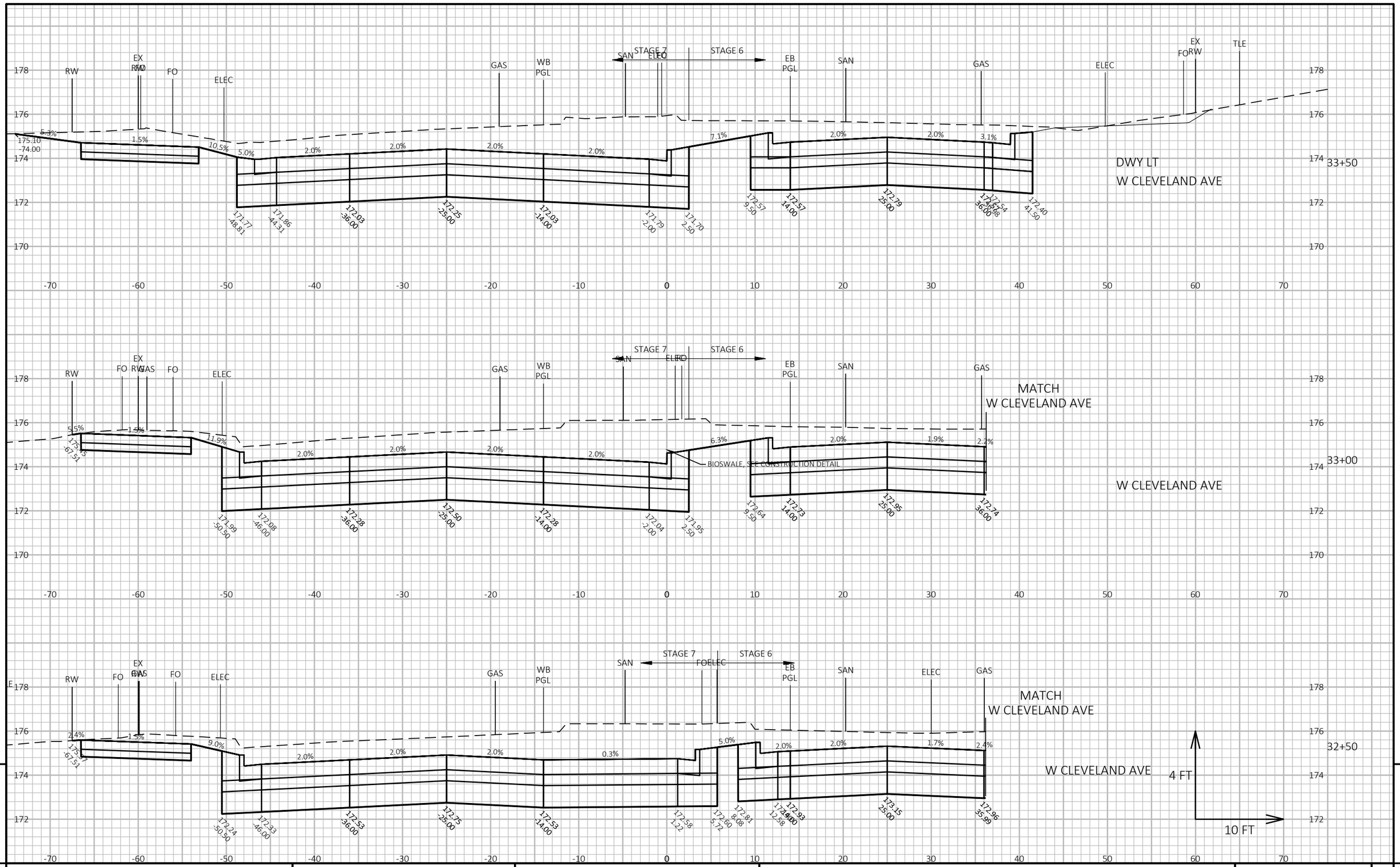
PLOT DATE : 1/9/2026 2:25 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 825 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 12

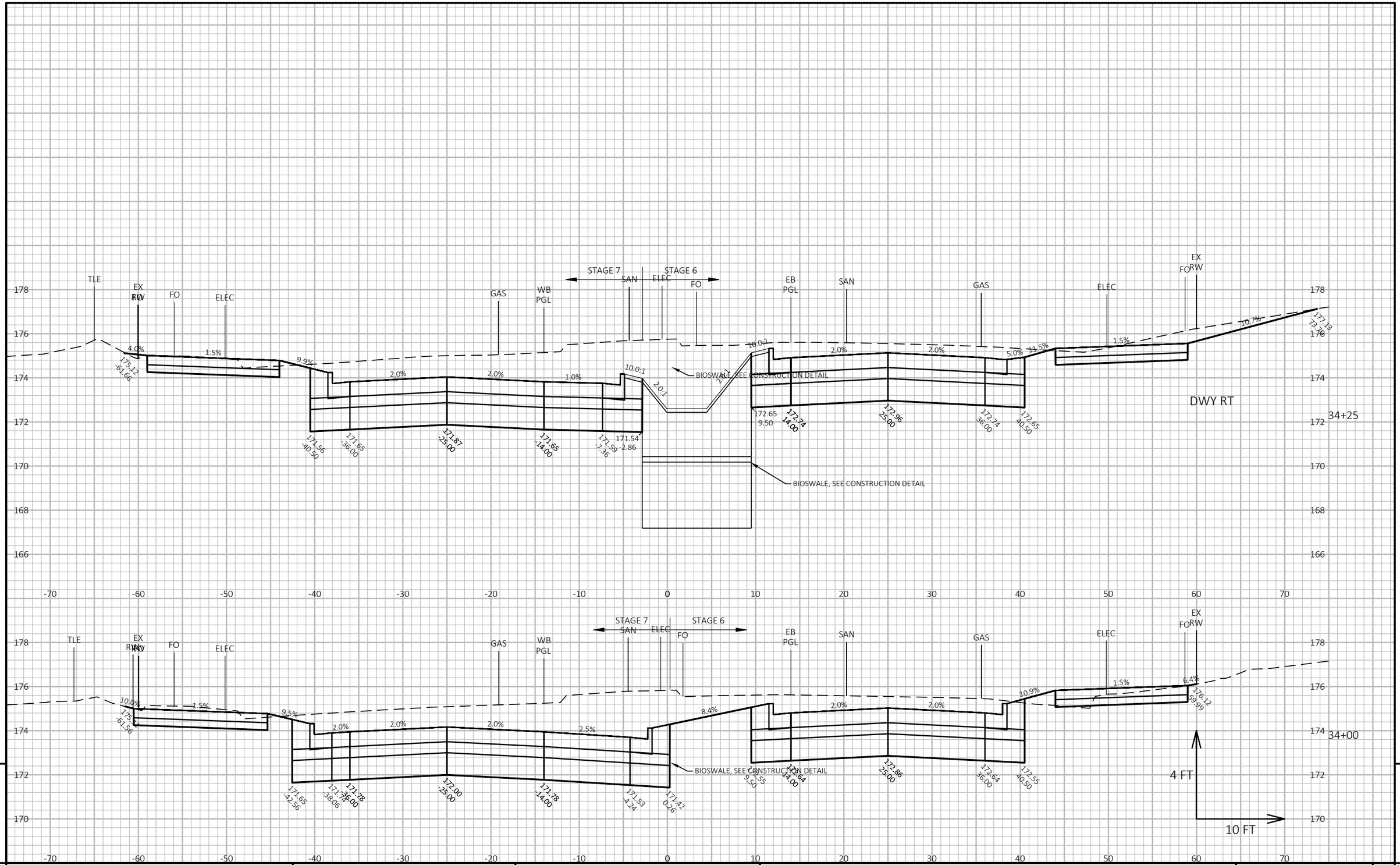
PLOT DATE : 1/9/2026 2:25 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 826 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 13

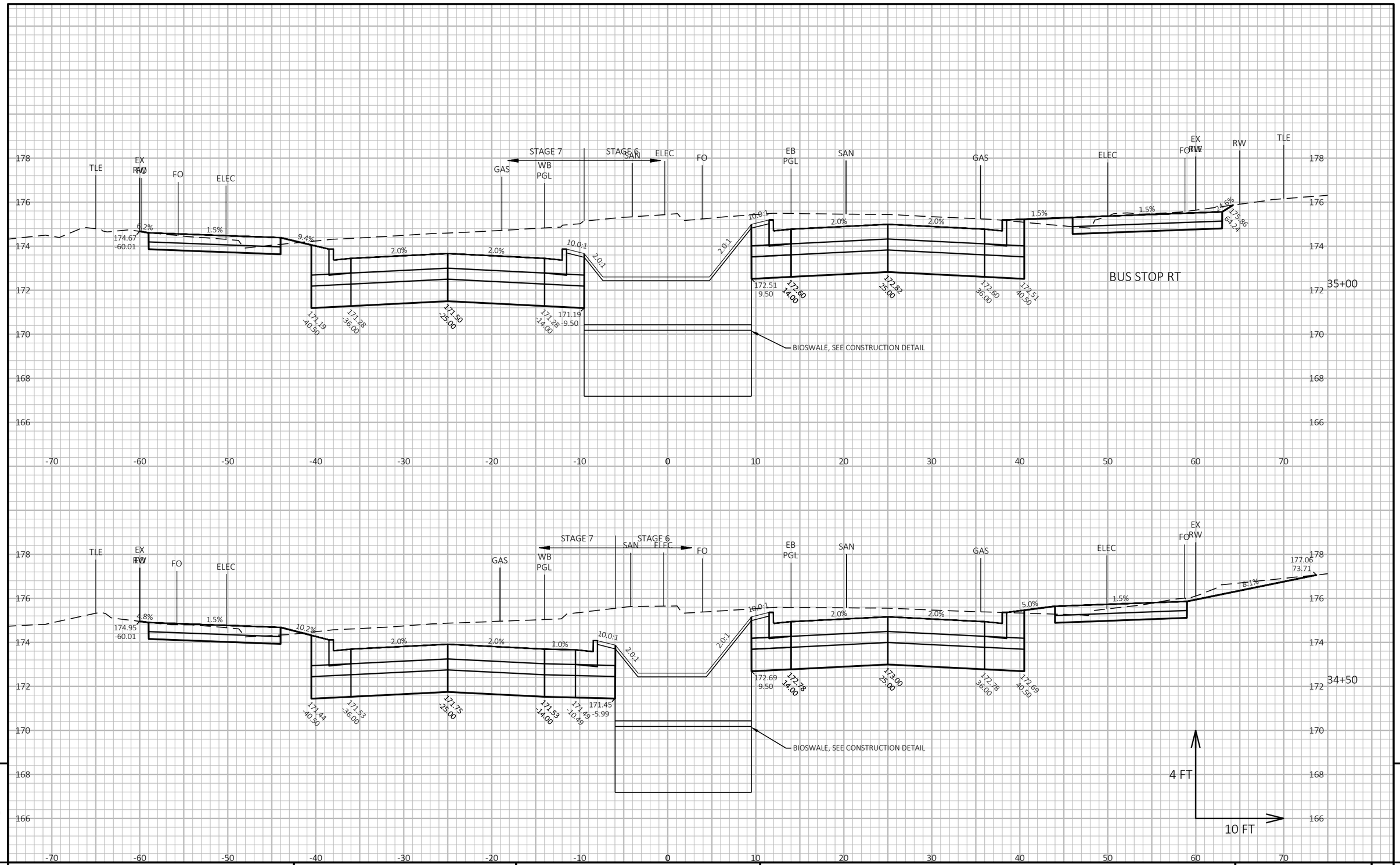
PLOT DATE : 1/9/2026 2:25 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

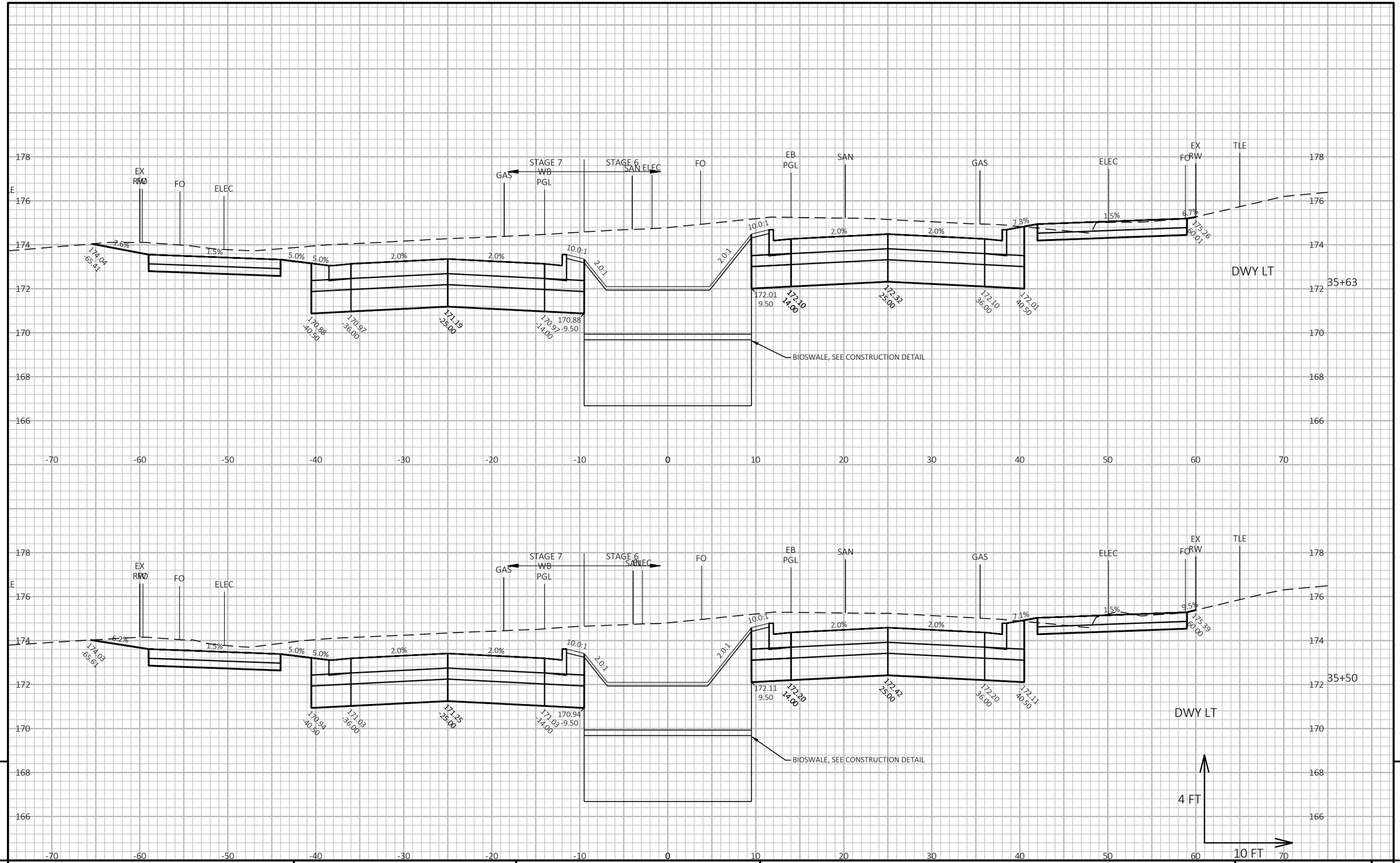
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 827 | E |
|---|---|---|---|---|---|


FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 14
PLOT DATE : 1/9/2026 2:25 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

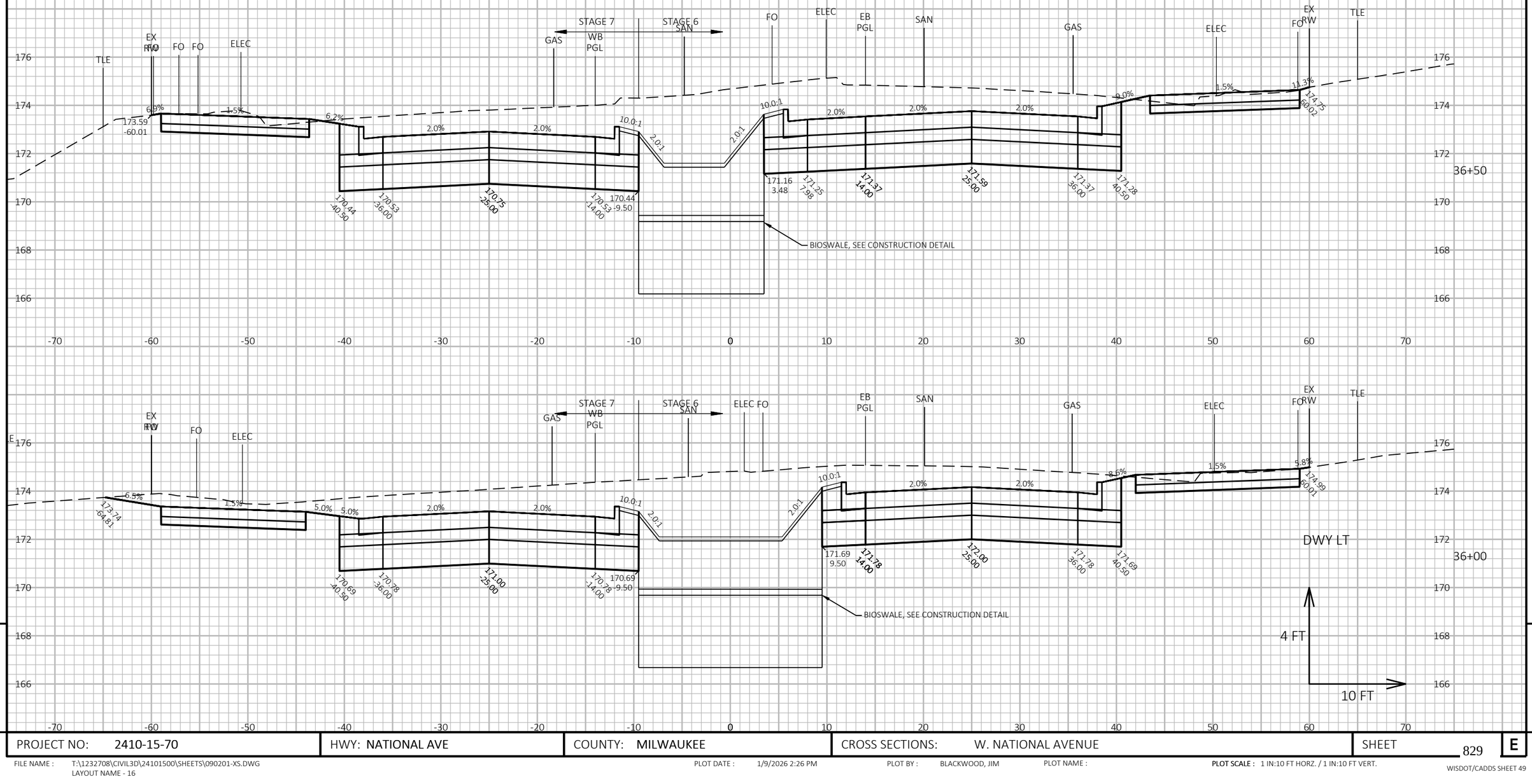



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 828 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 15

PLOT DATE : 1/9/2026 2:26 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

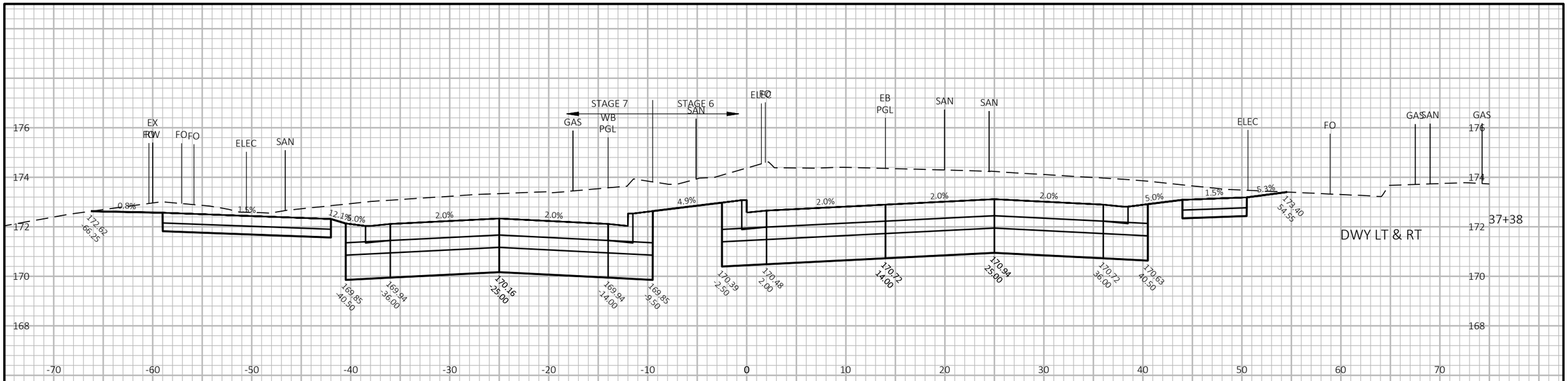


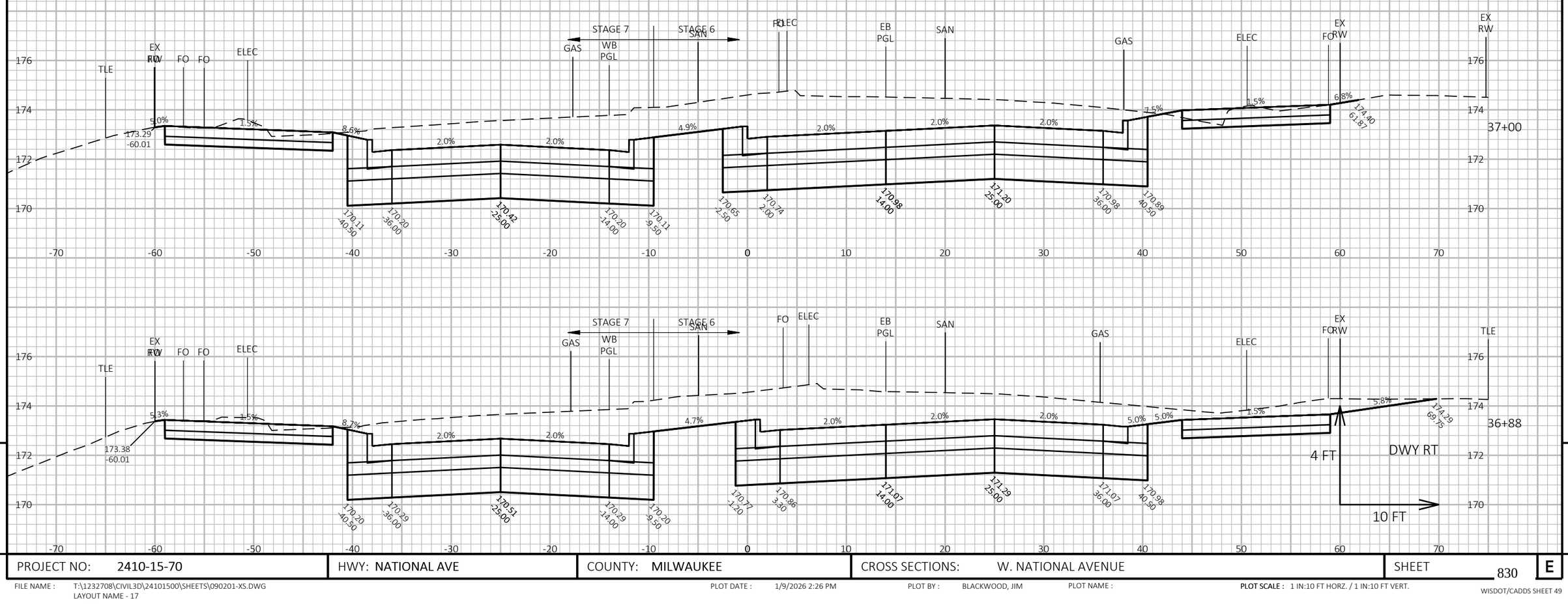

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 829 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 16

PLOT DATE : 1/9/2026 2:26 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 830 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 17

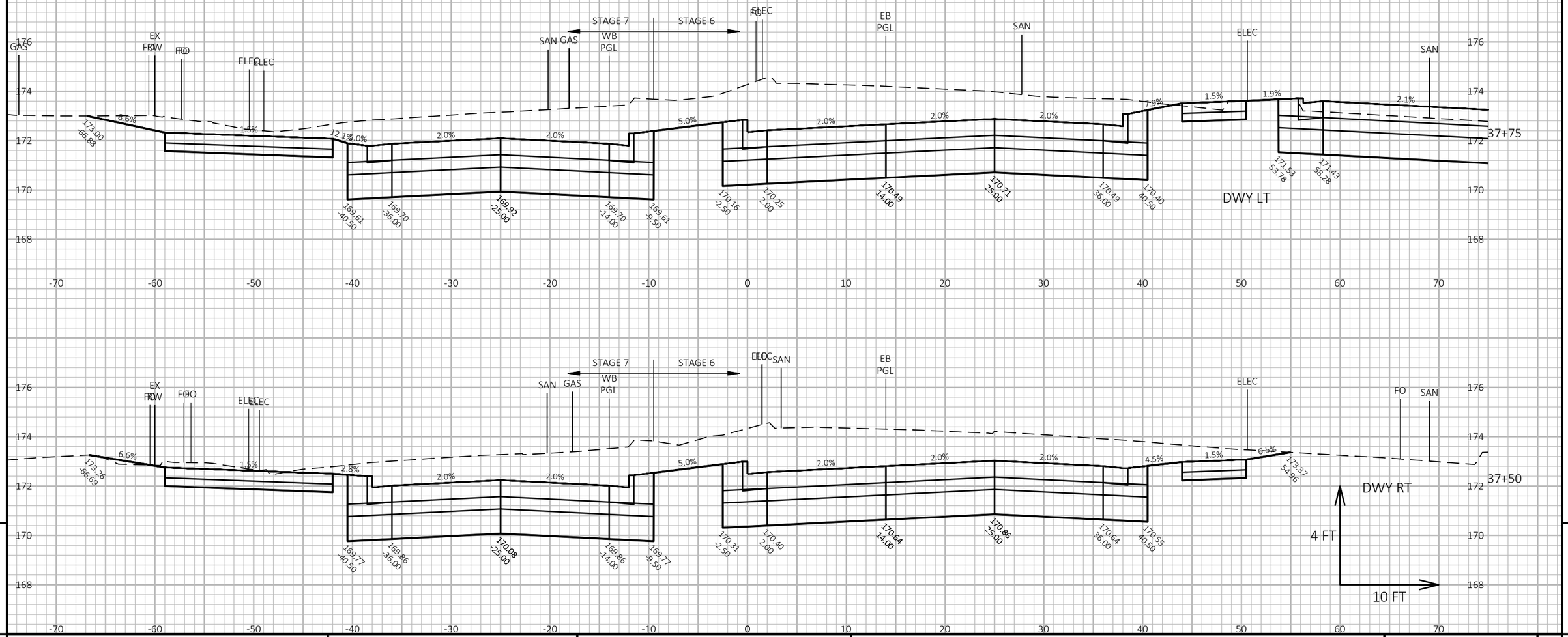
PLOT DATE : 1/9/2026 2:26 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 831 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 18

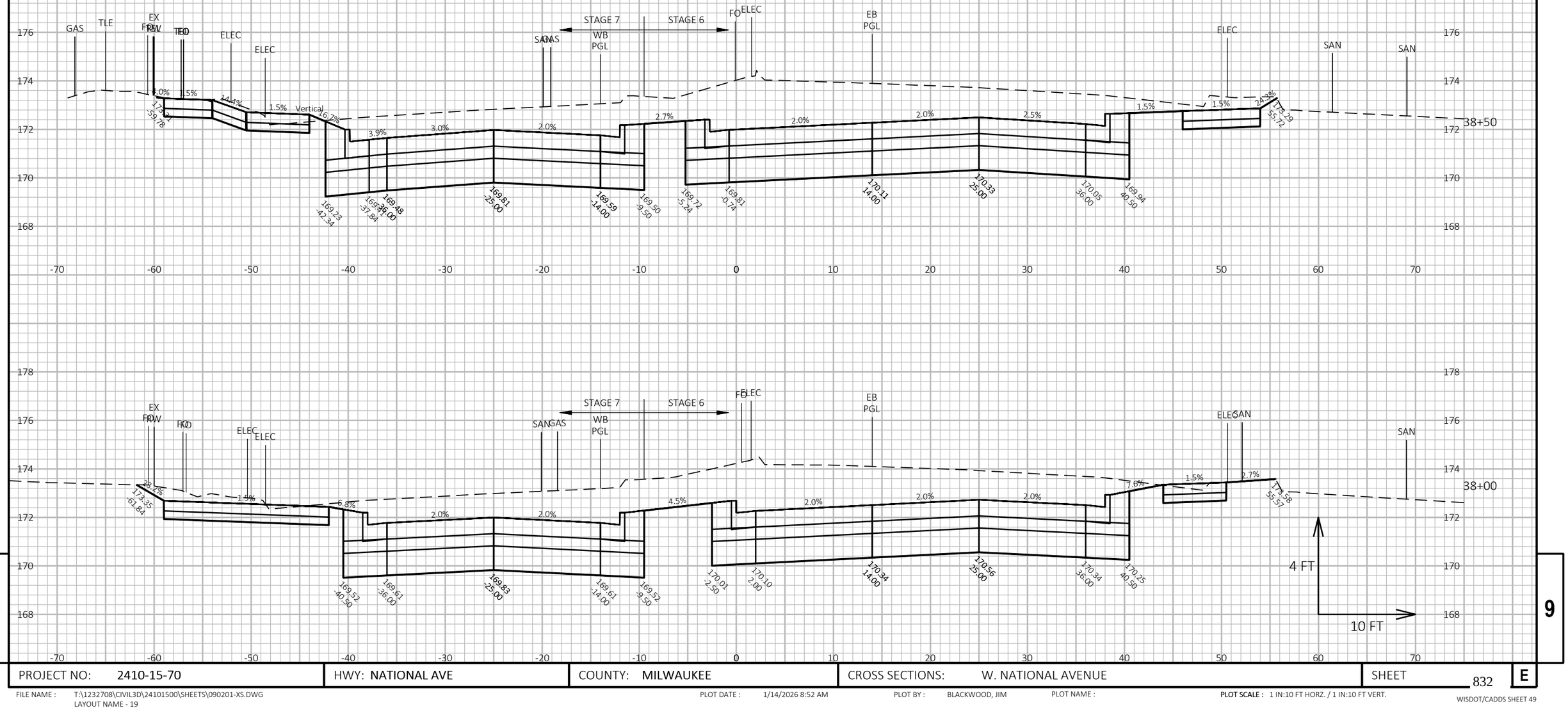
PLOT DATE : 1/9/2026 2:26 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

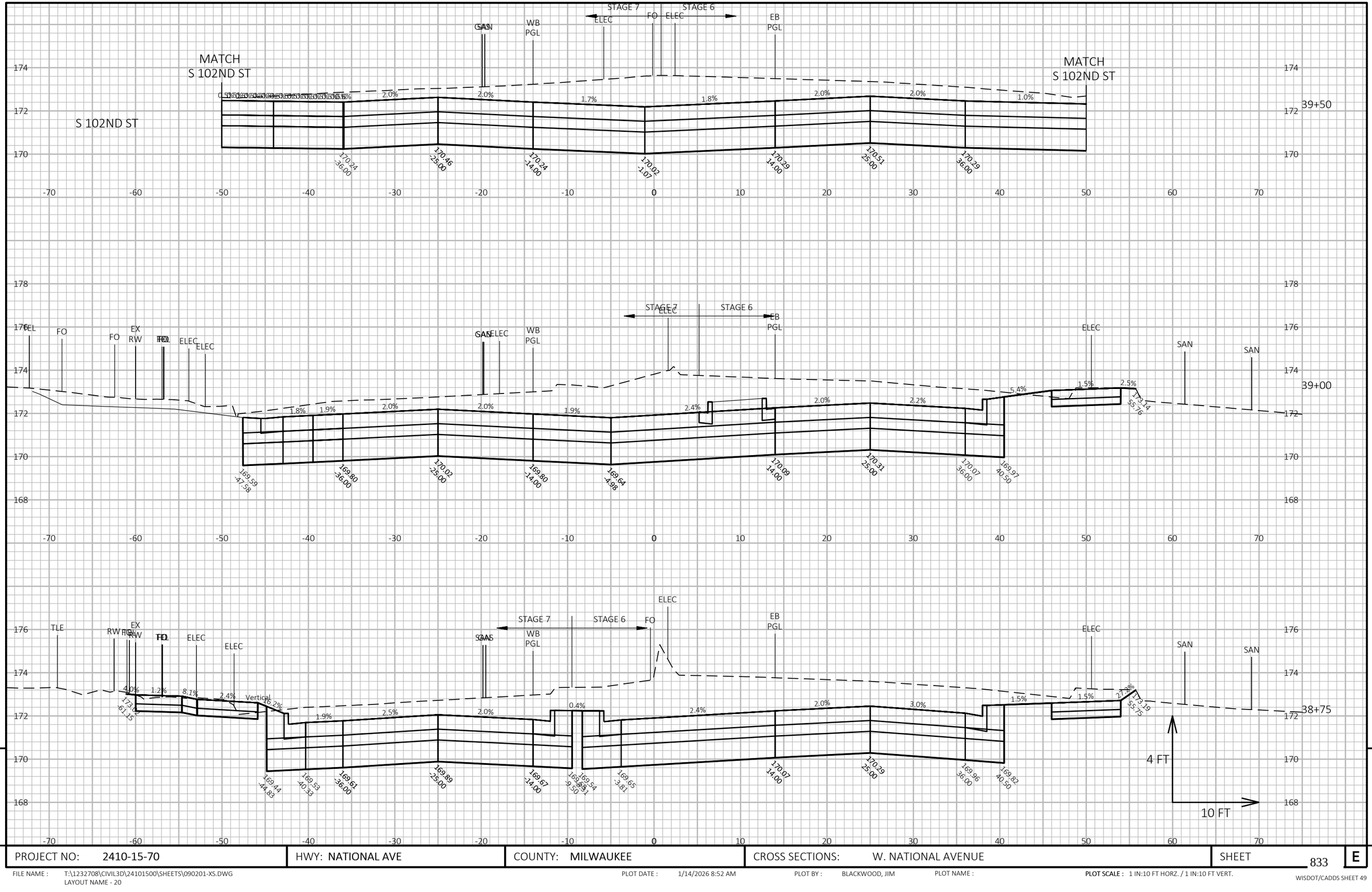



| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 832 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 19

PLOT DATE : 1/14/2026 8:52 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

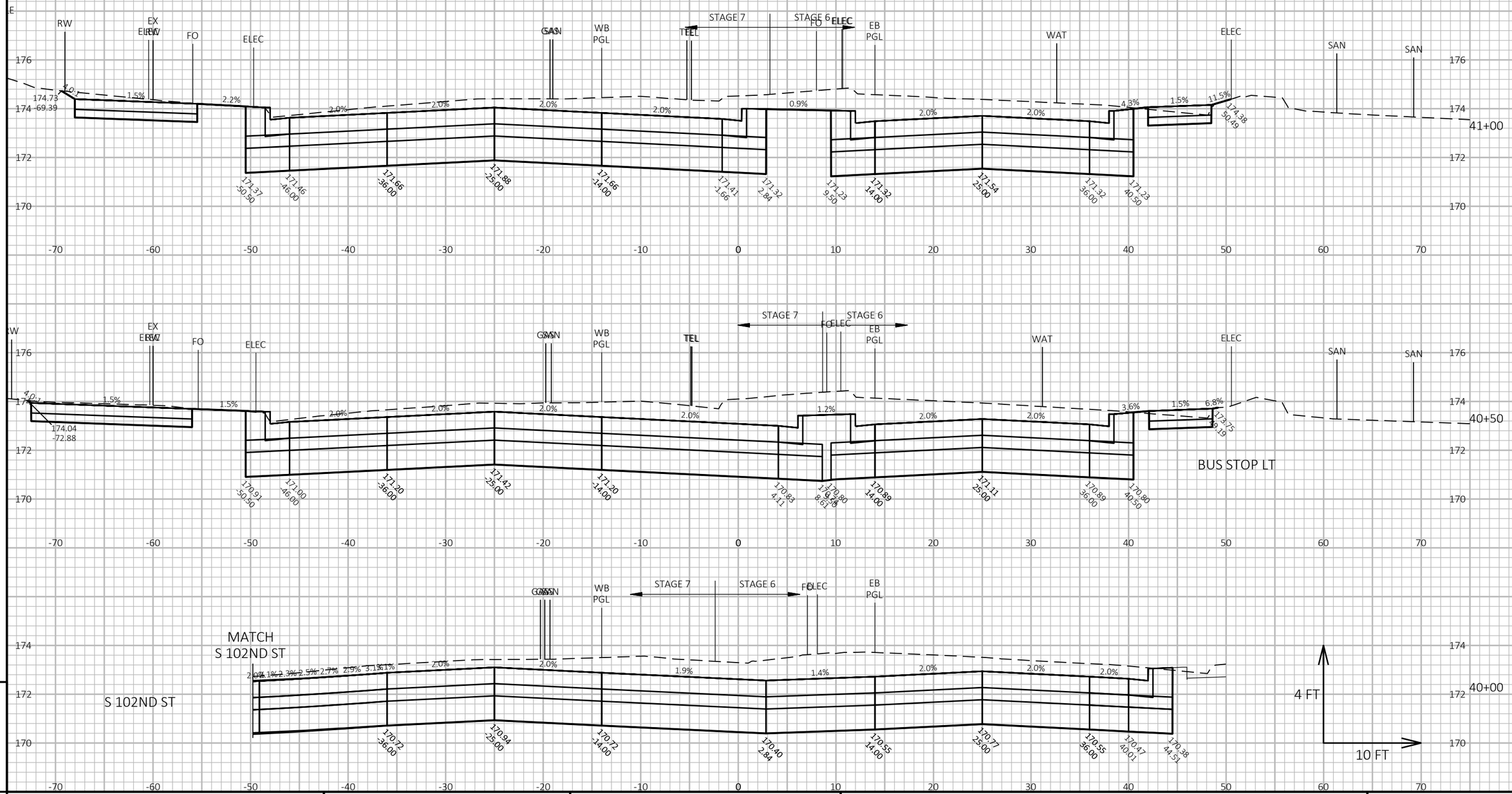



| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 833 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 20

PLOT DATE : 1/14/2026 8:52 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 834 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 21

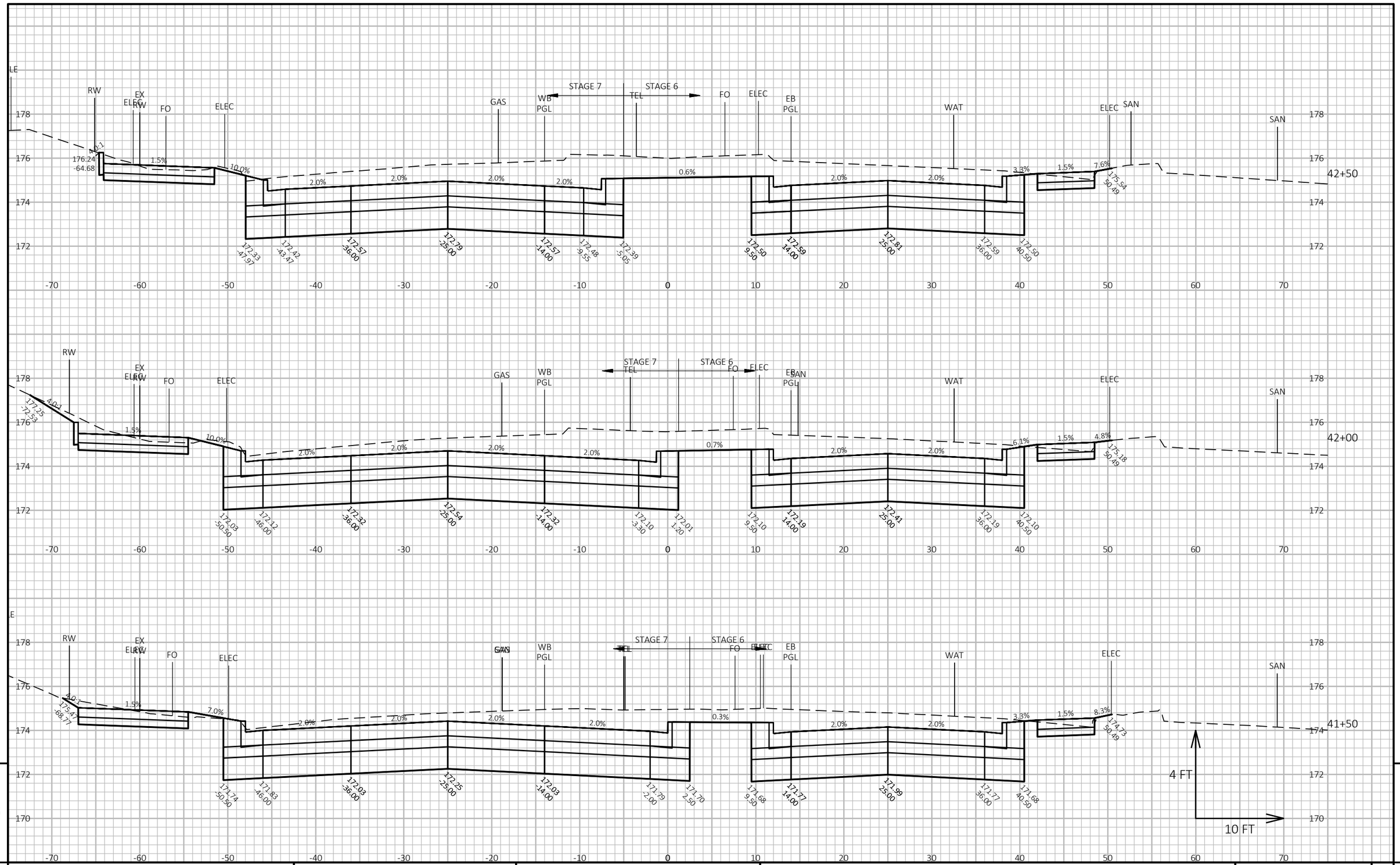
PLOT DATE : 1/9/2026 2:27 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 835 E |
|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 22

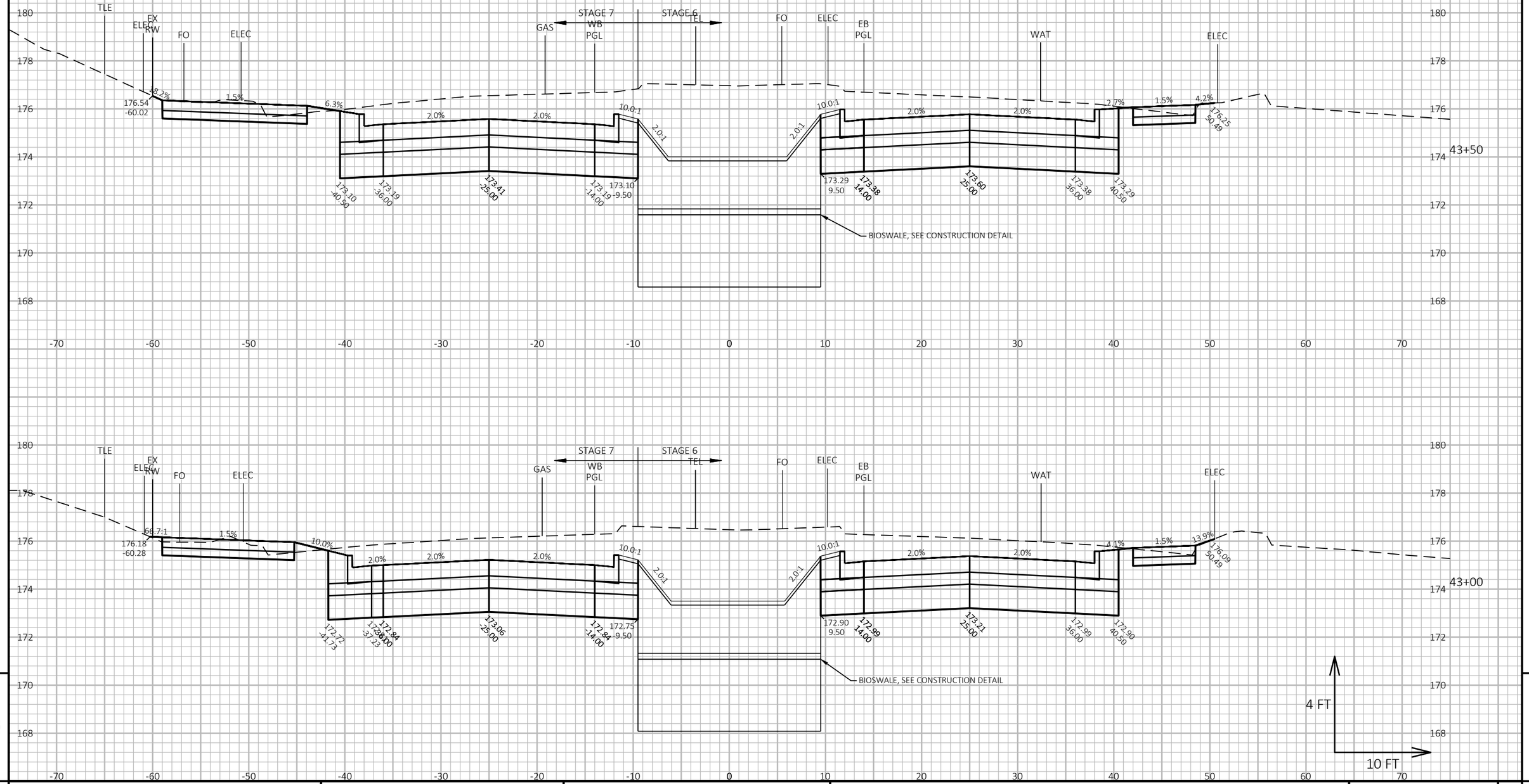
PLOT DATE : 1/9/2026 2:27 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 836 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 23

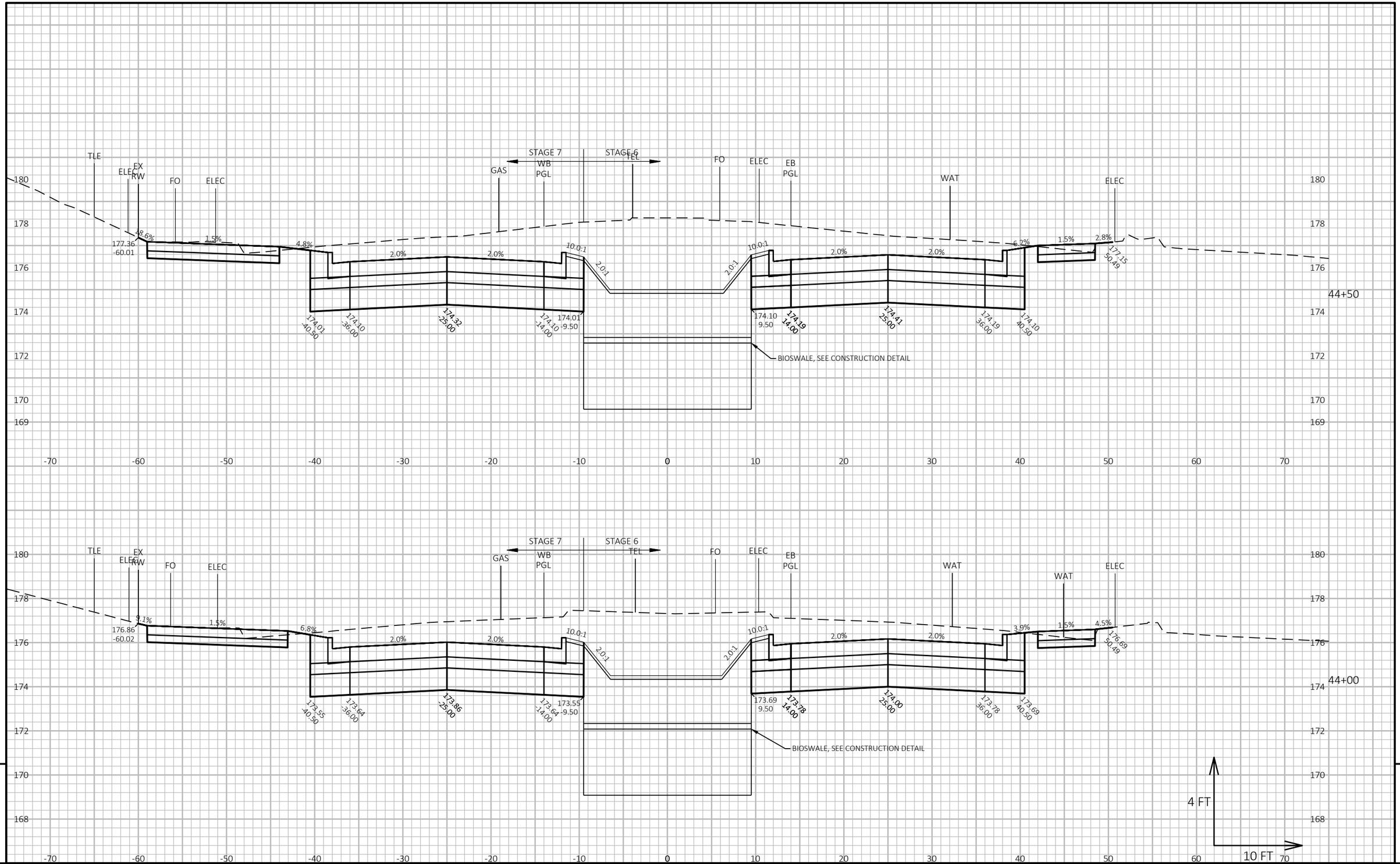
PLOT DATE : 1/9/2026 2:27 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 837 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 24

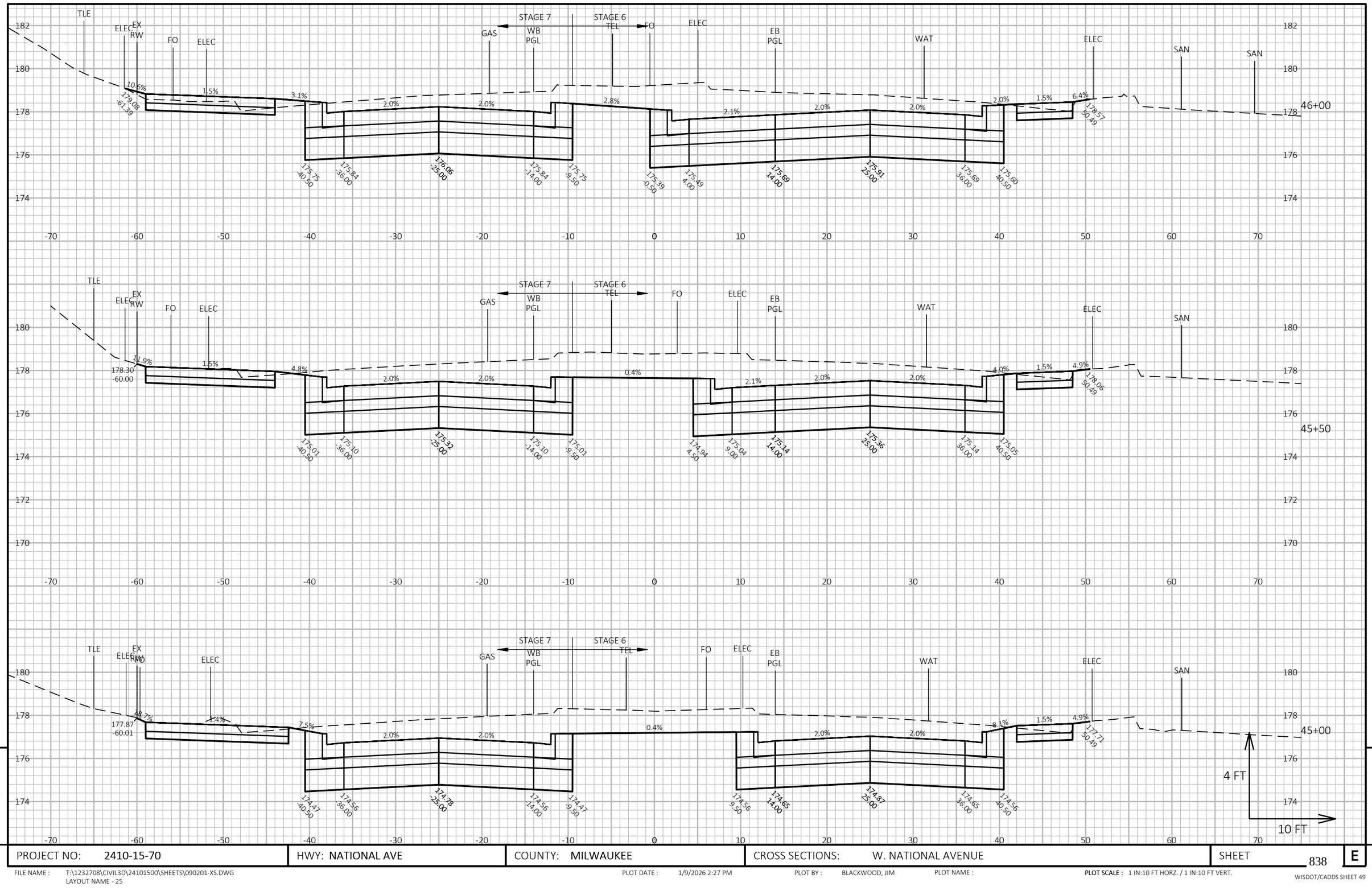
PLOT DATE : 1/9/2026 2:27 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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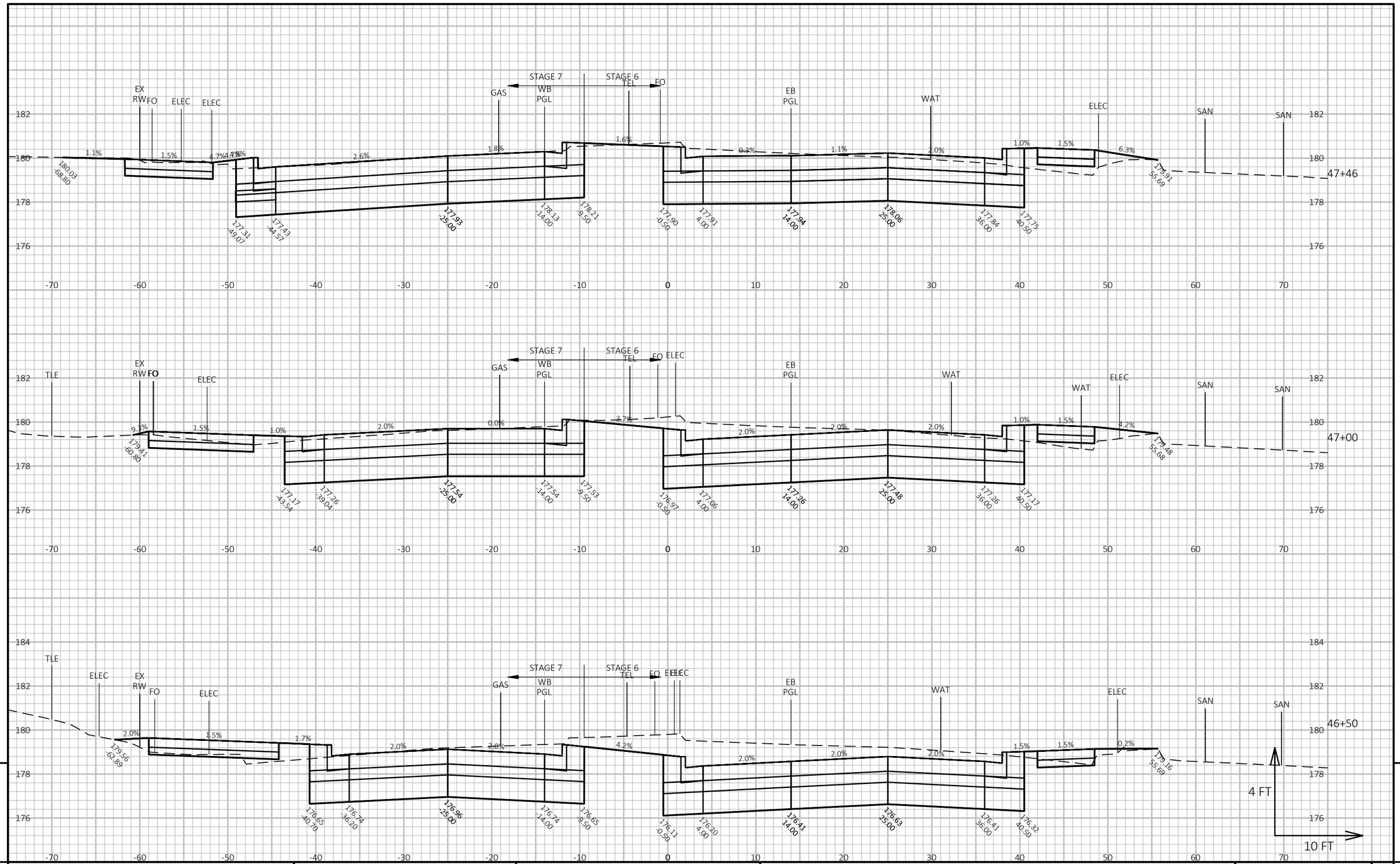
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 838 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 25

PLOT DATE : 1/9/2026 2:27 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 839 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 26

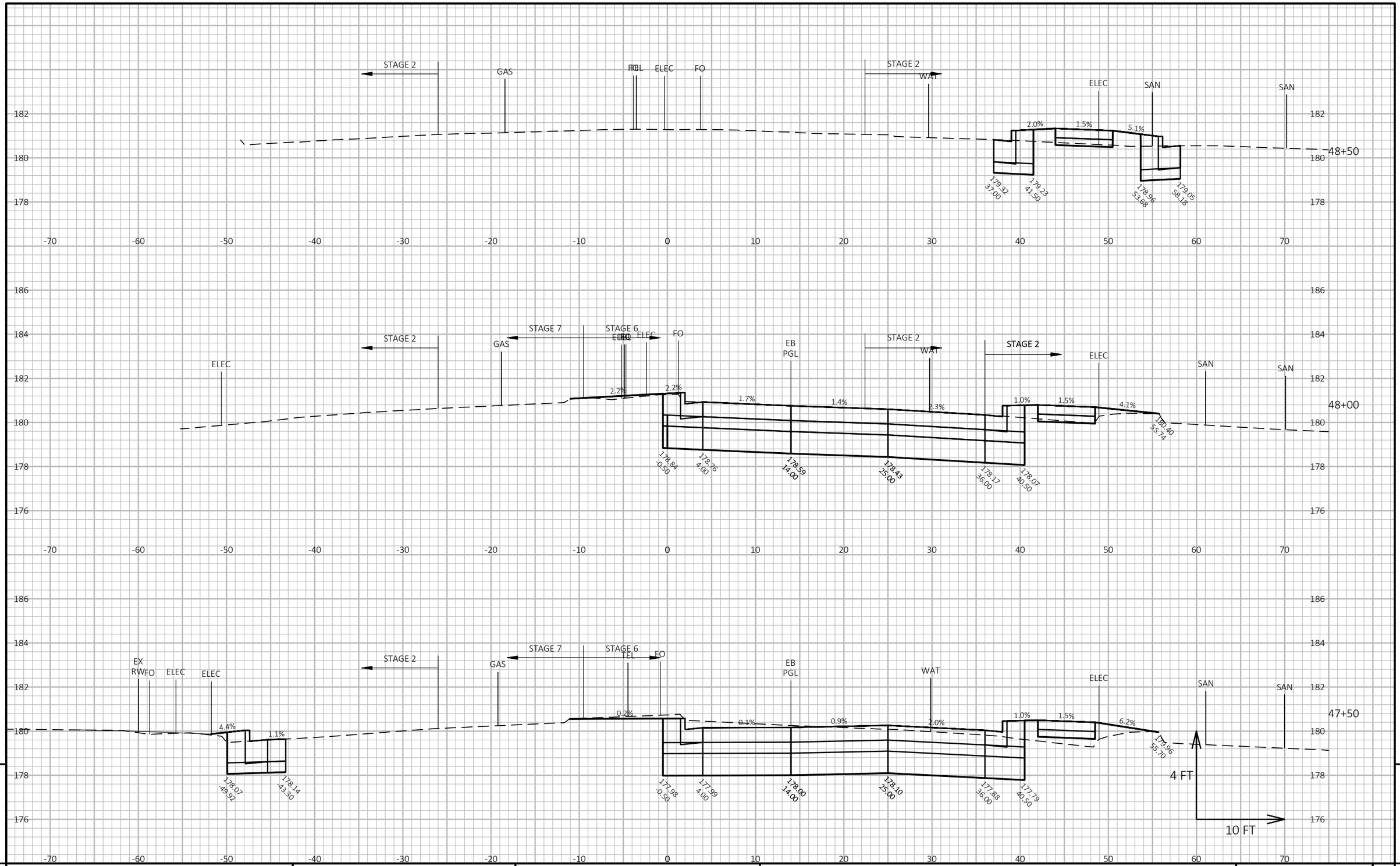
PLOT DATE : 1/9/2026 2:27 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



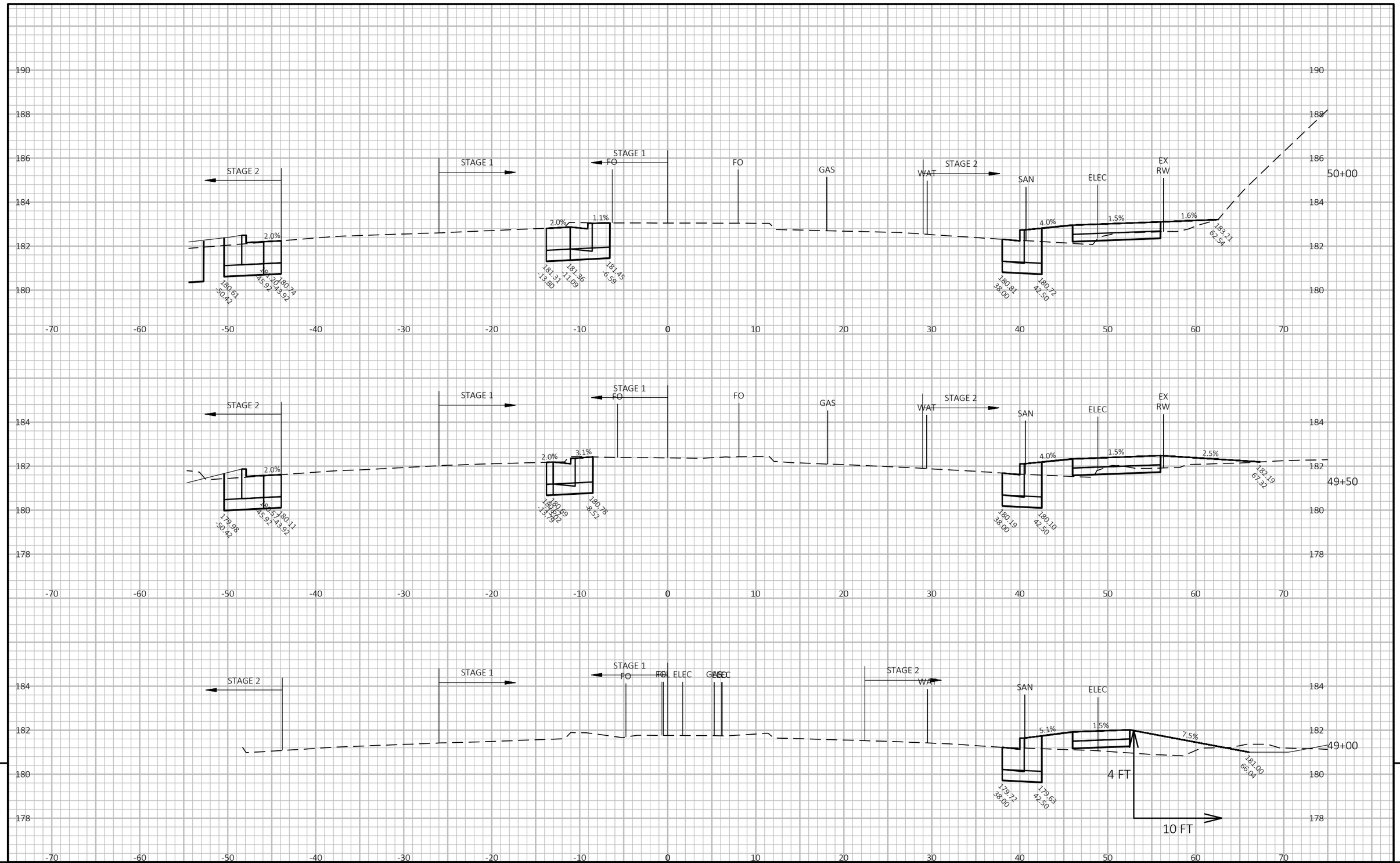

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 840 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 27

PLOT DATE : 1/9/2026 2:28 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 841 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 28

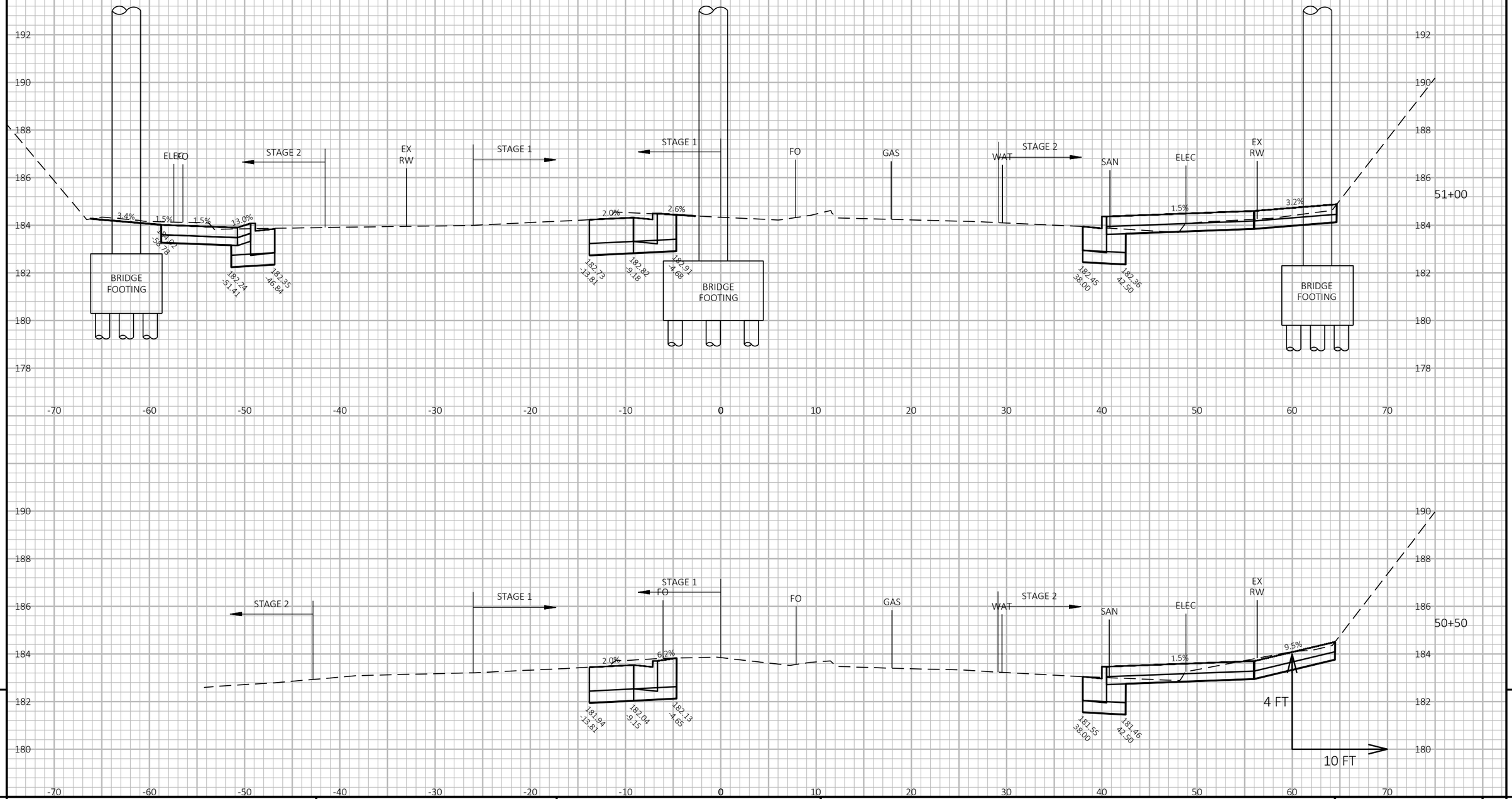
PLOT DATE : 1/9/2026 2:28 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 842 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 29

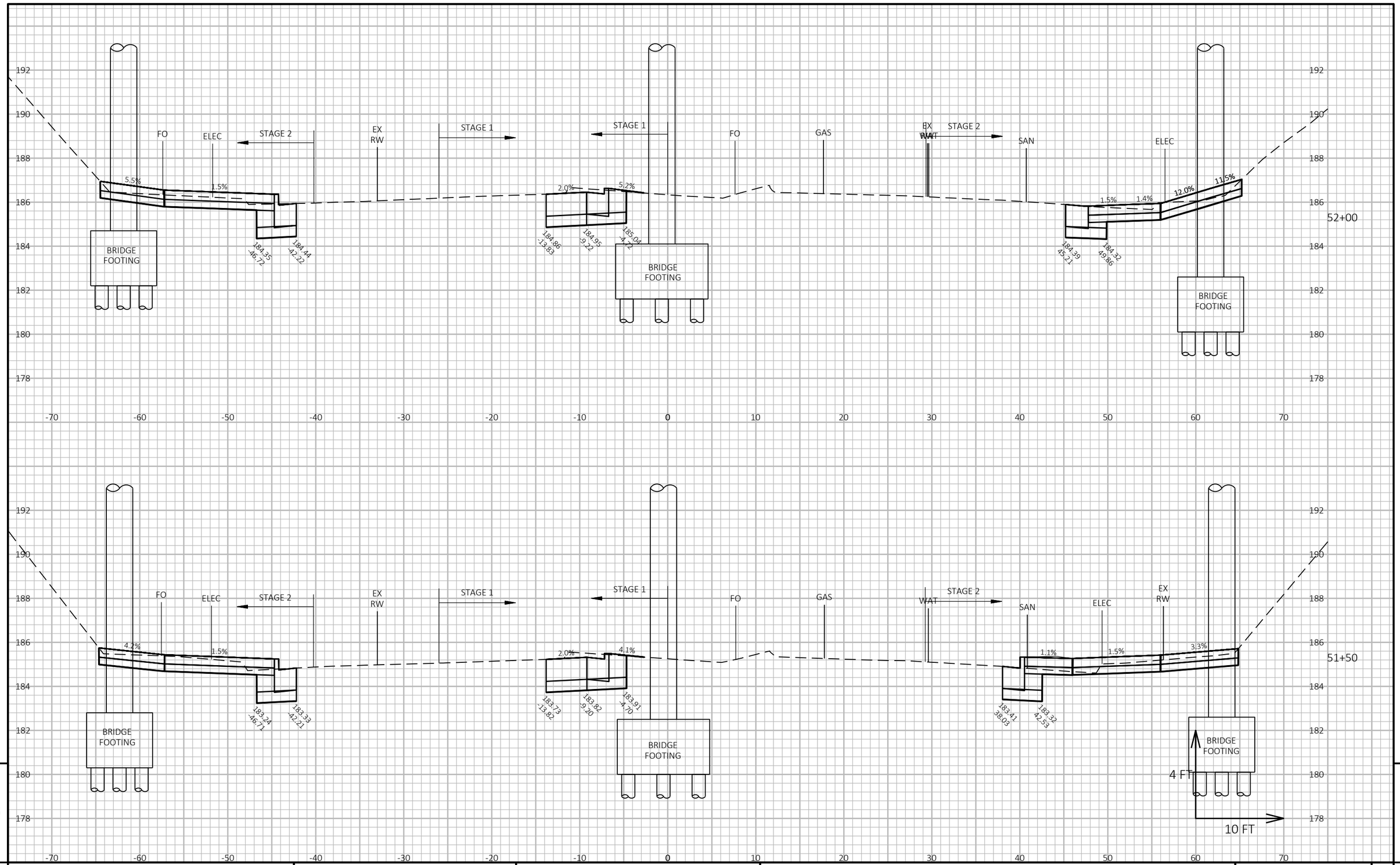
PLOT DATE : 1/9/2026 2:28 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 843 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 30

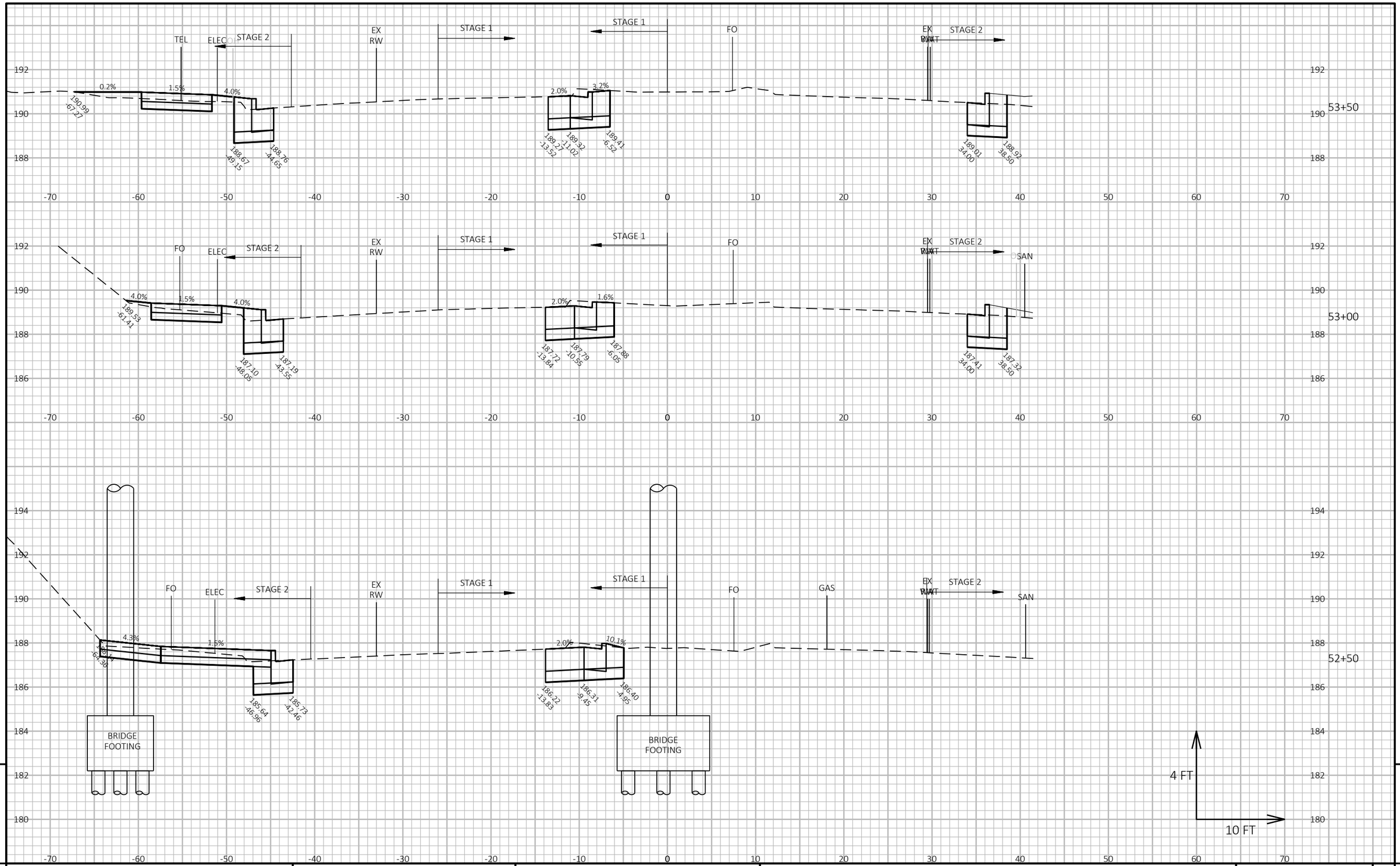
PLOT DATE : 1/9/2026 2:28 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 844 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 31

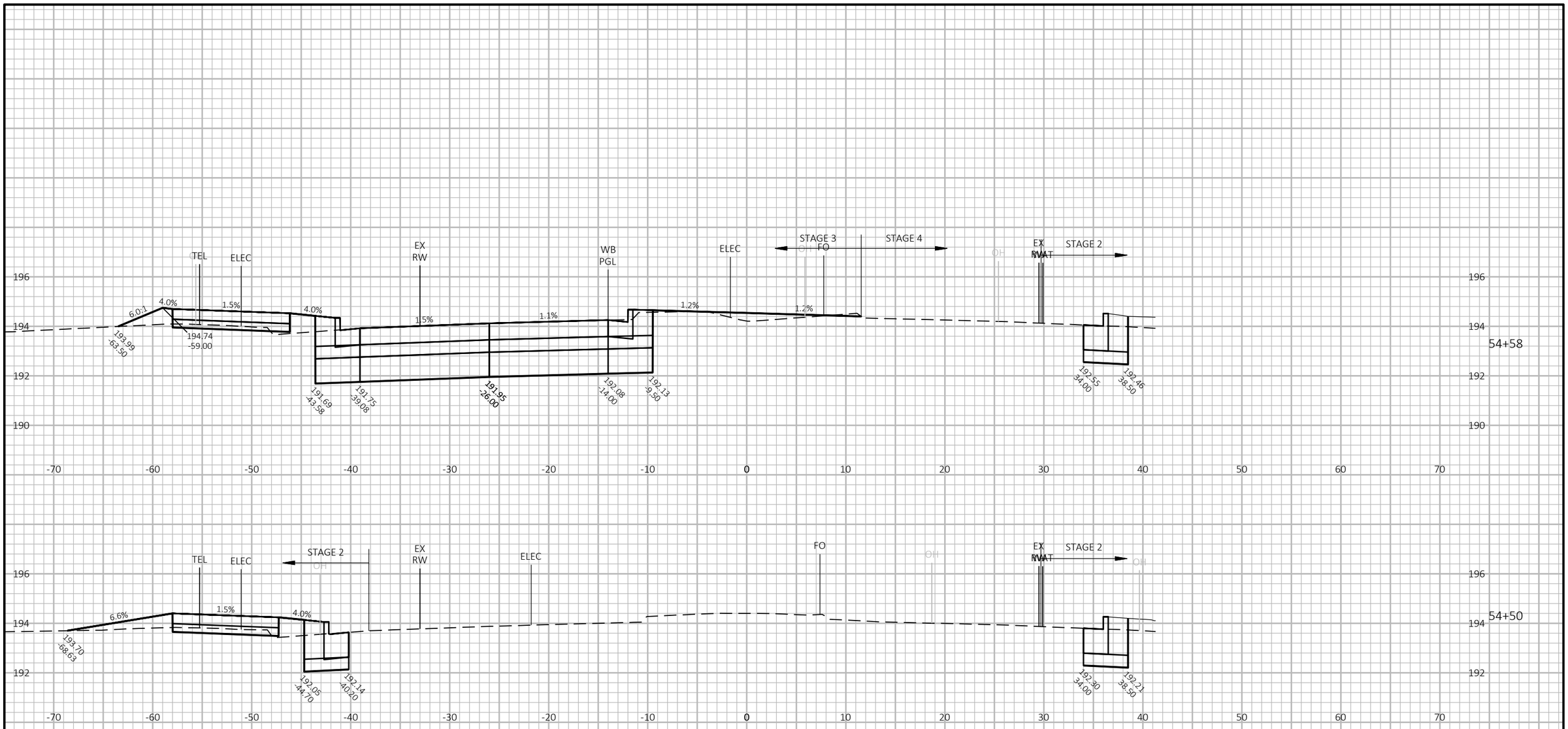
PLOT DATE : 1/9/2026 2:28 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 845 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 32

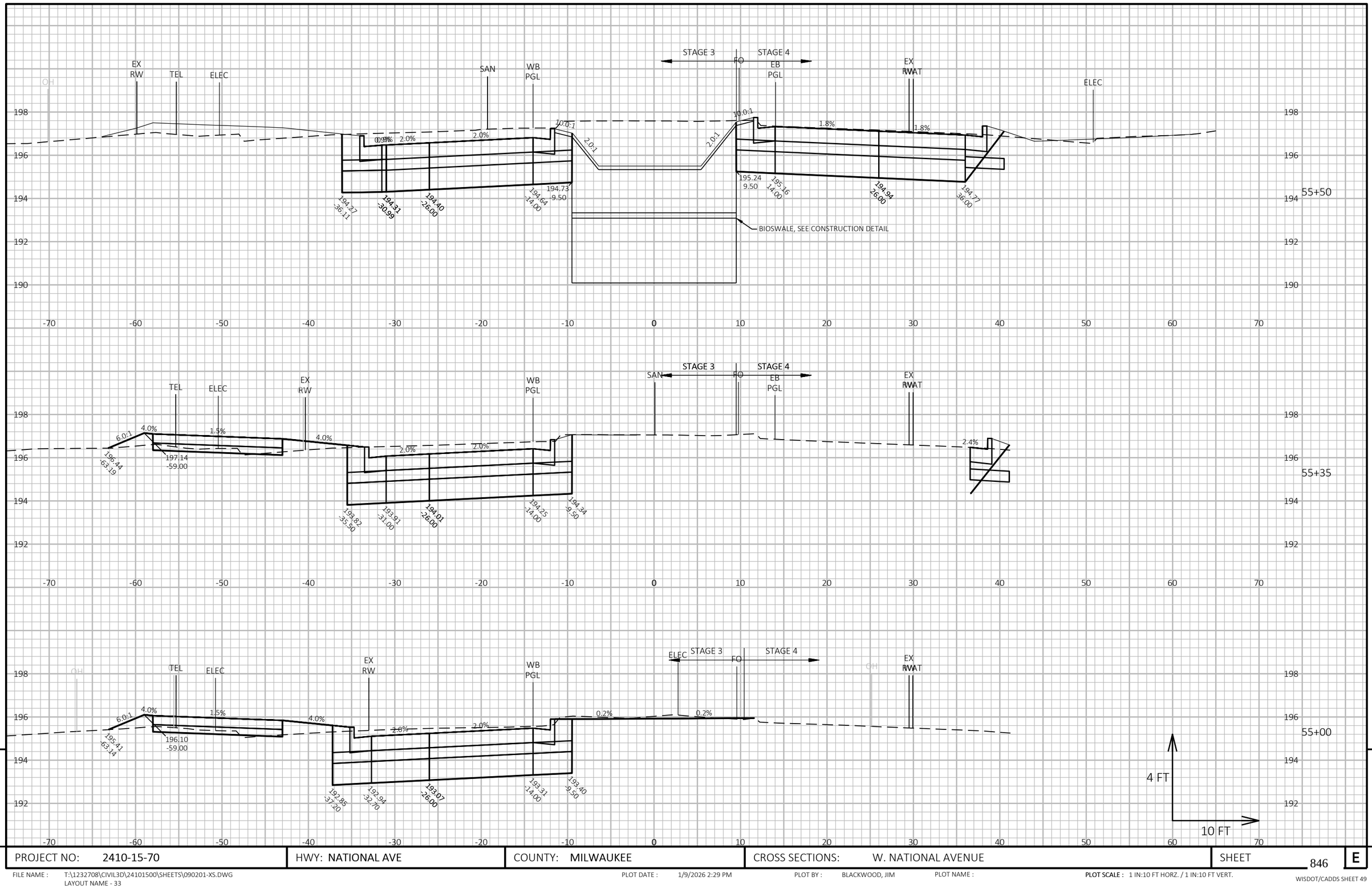
PLOT DATE : 1/9/2026 2:28 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 846 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 33

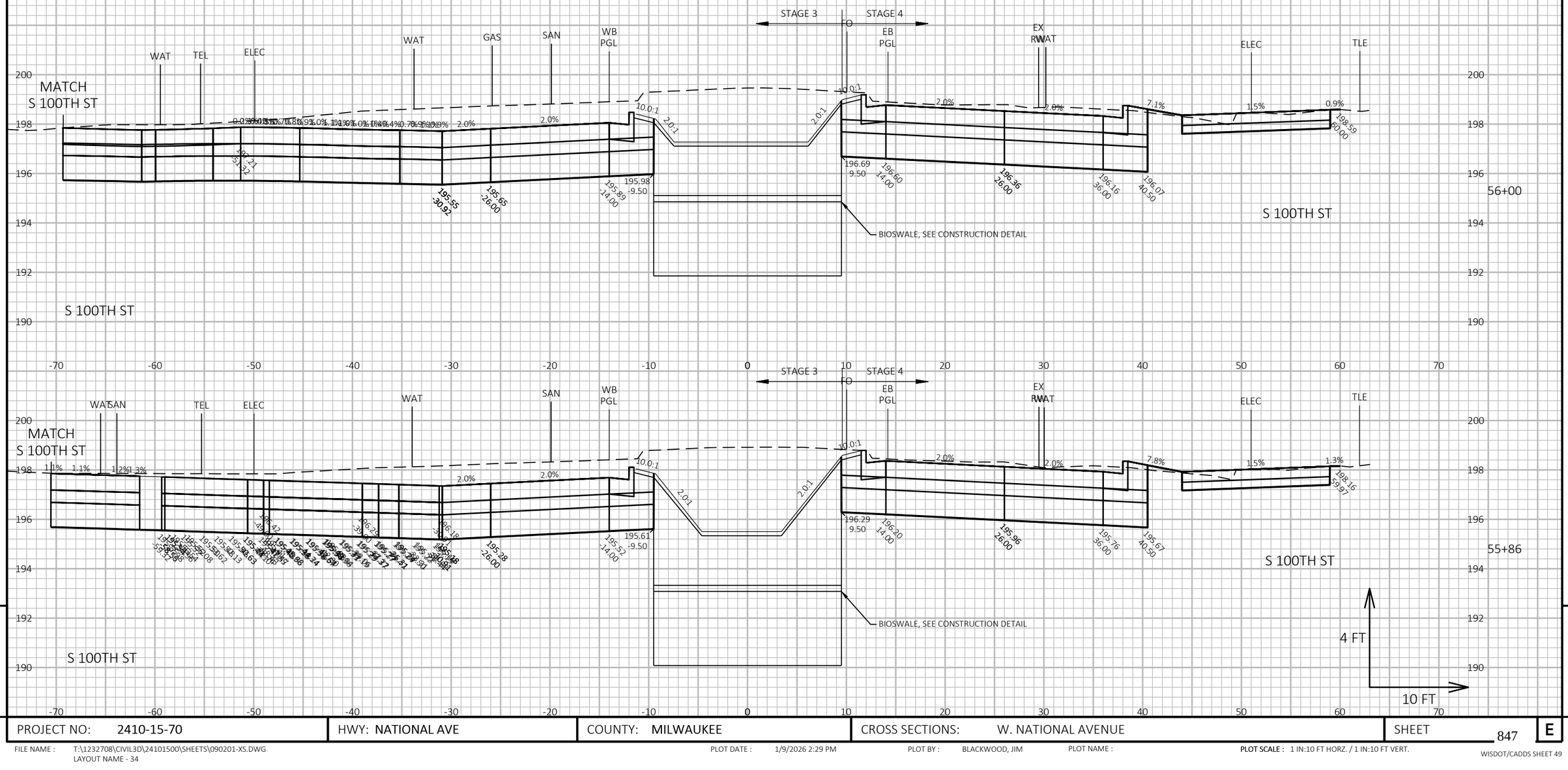
PLOT DATE : 1/9/2026 2:29 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

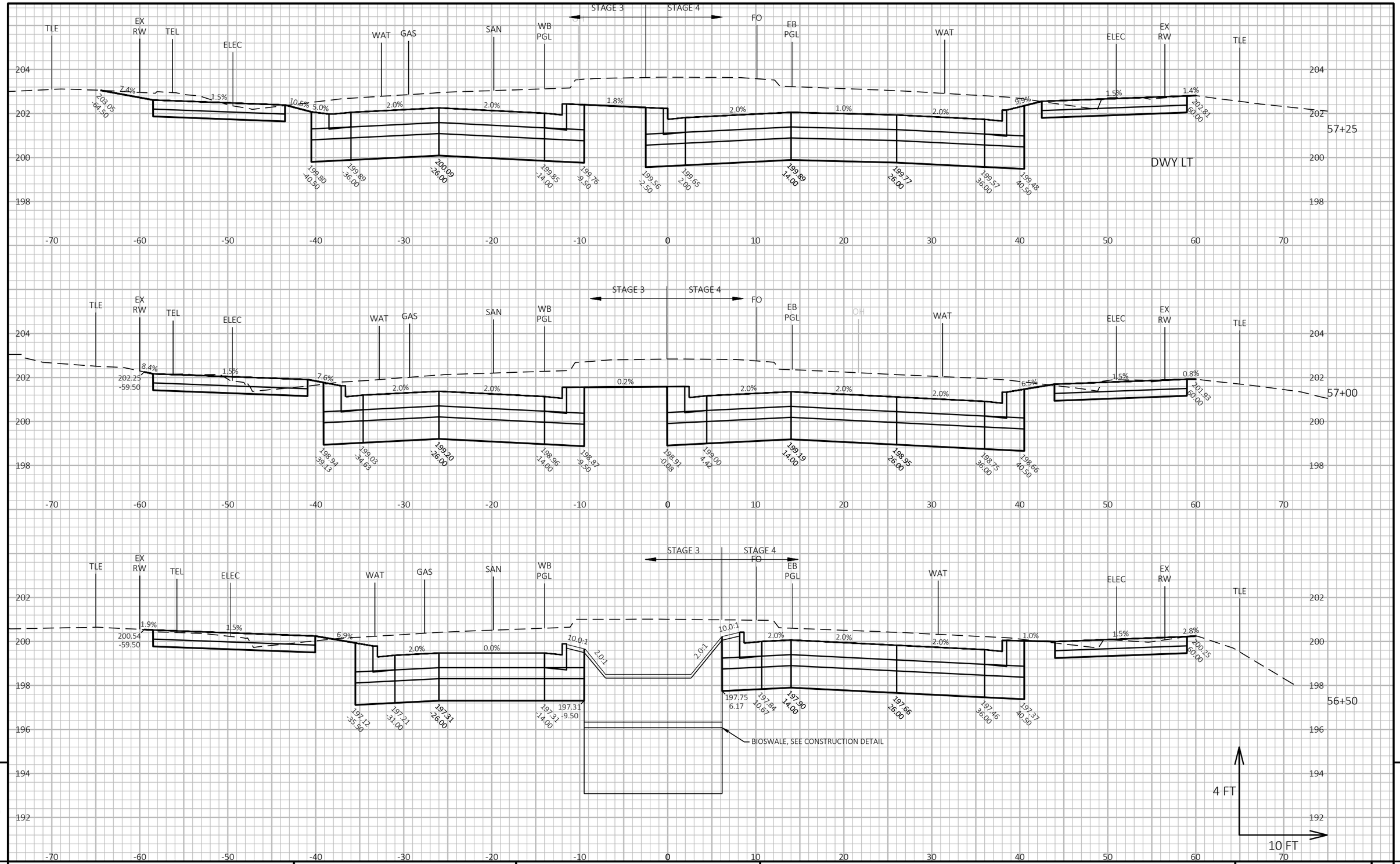



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 847 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 34

PLOT DATE : 1/9/2026 2:29 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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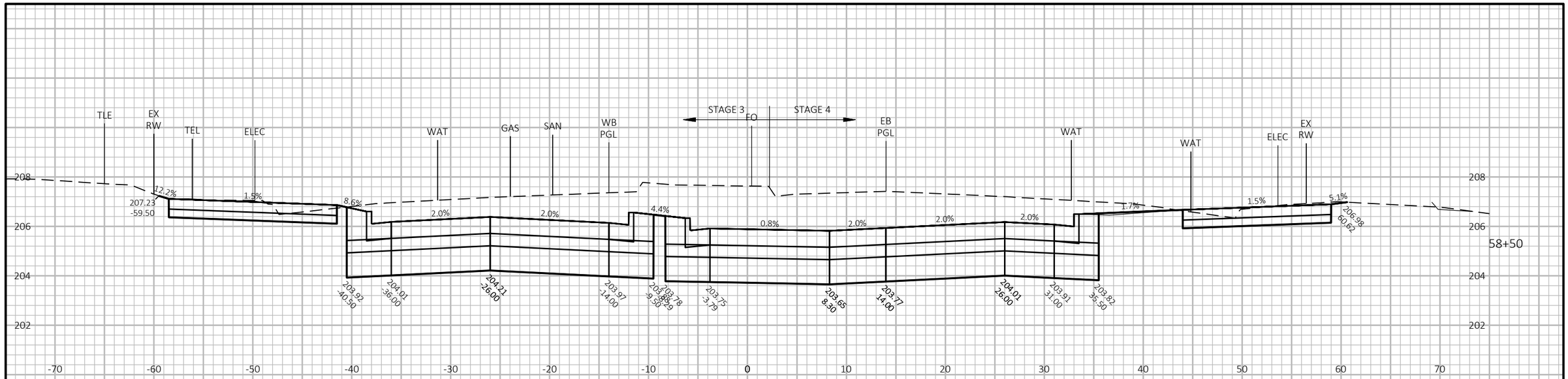
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 848 | E |
|---|---|---|---|---|---|

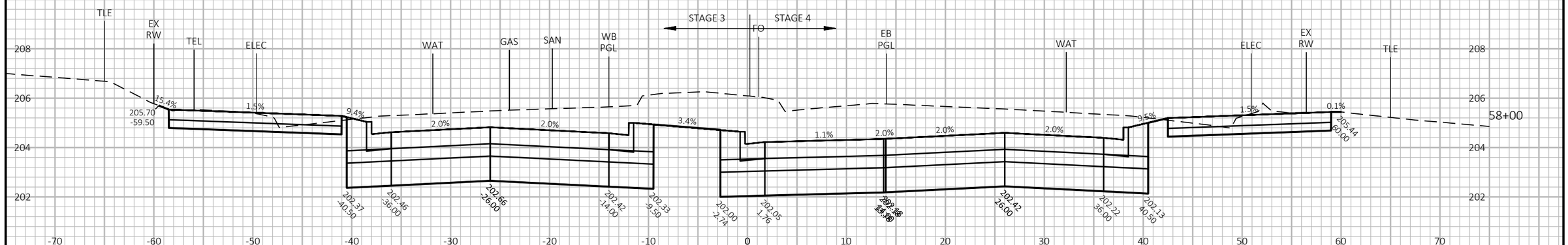
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 35

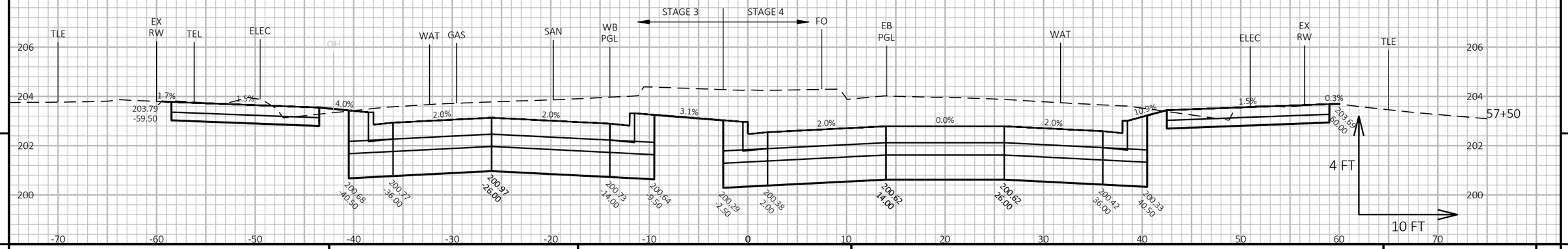
PLOT DATE : 1/9/2026 2:29 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 849 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 36

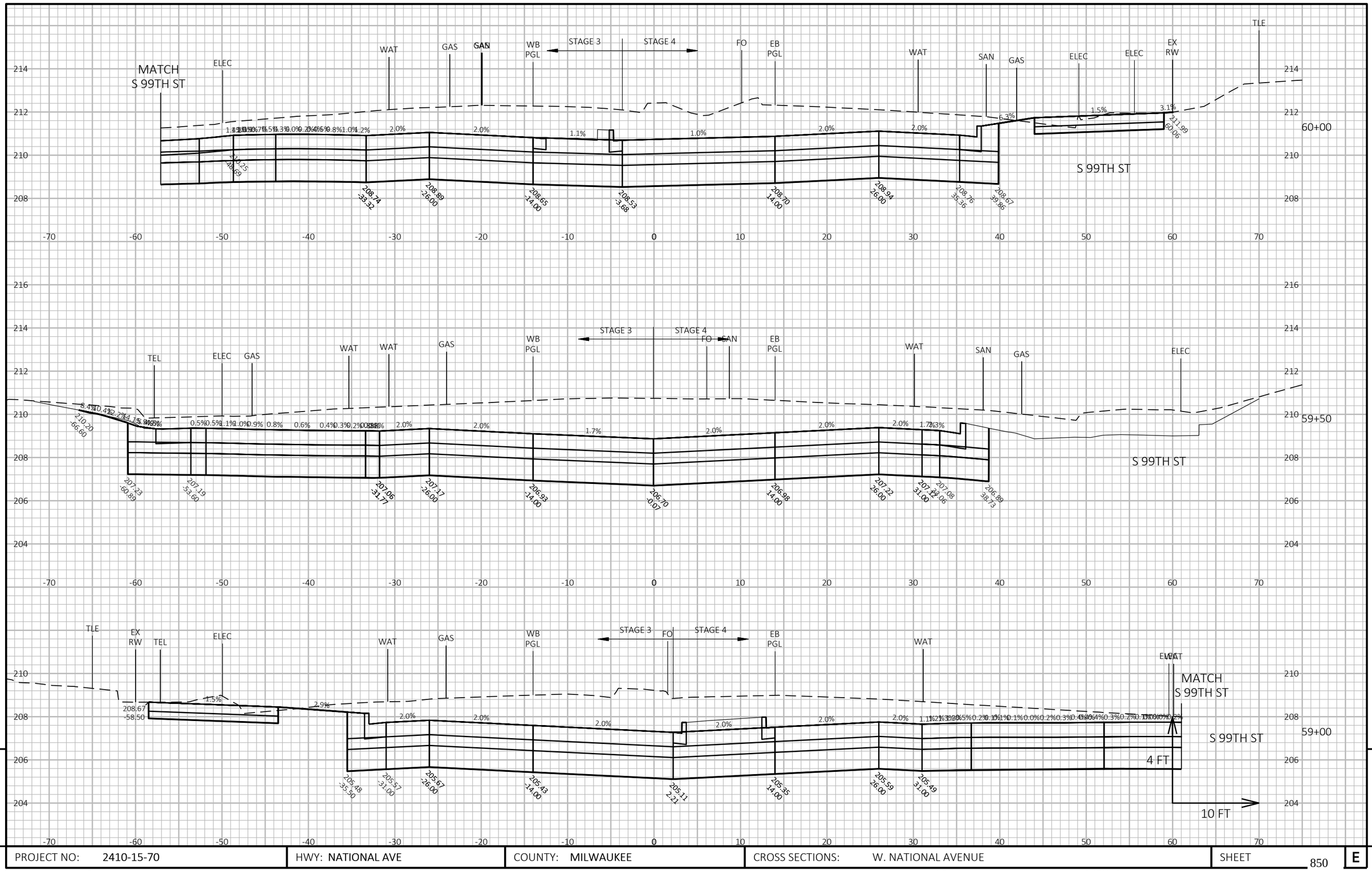
PLOT DATE : 1/9/2026 2:29 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 850 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 37

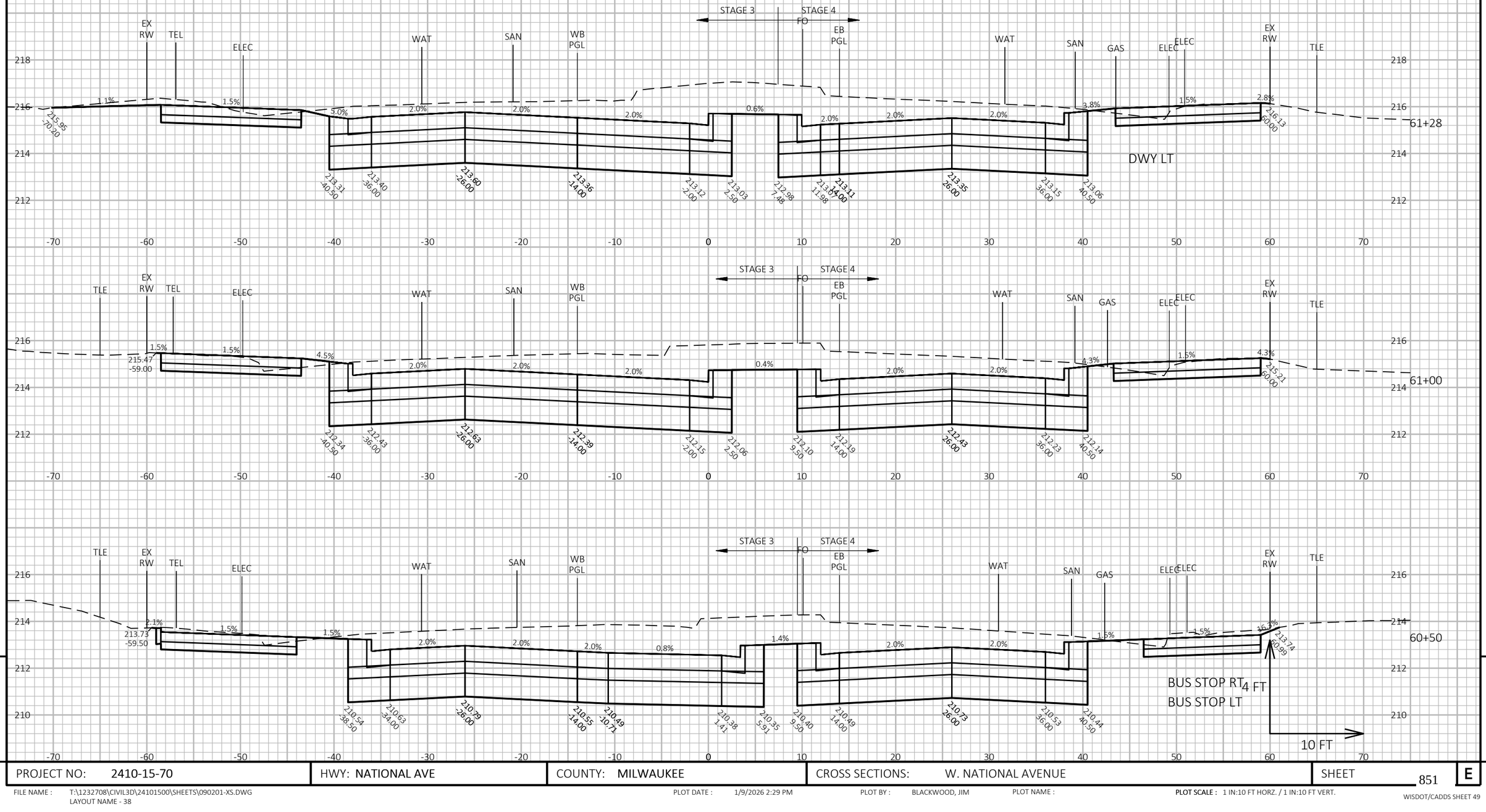
PLOT DATE : 1/9/2026 2:29 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



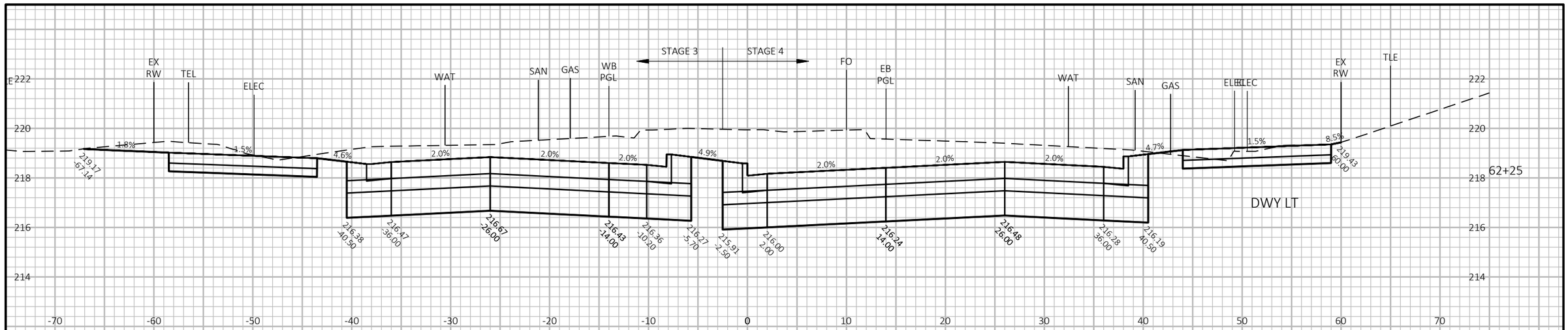

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 851 | E |
|---|---|---|---|---|---|

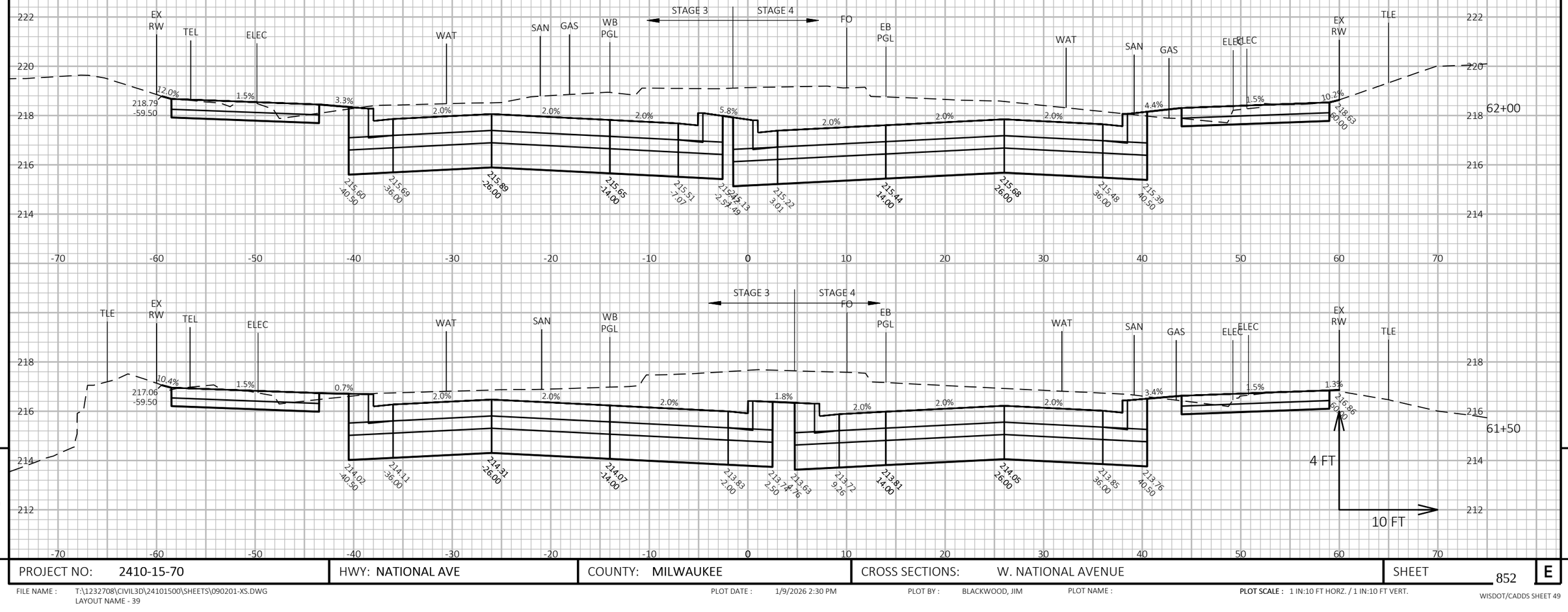
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 38

PLOT DATE : 1/9/2026 2:29 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 852 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 39

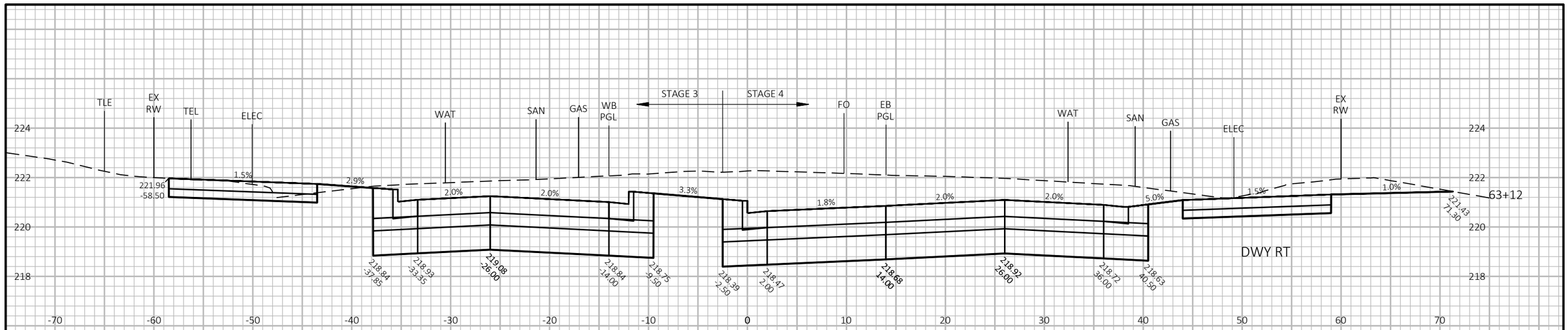
PLOT DATE : 1/9/2026 2:30 PM

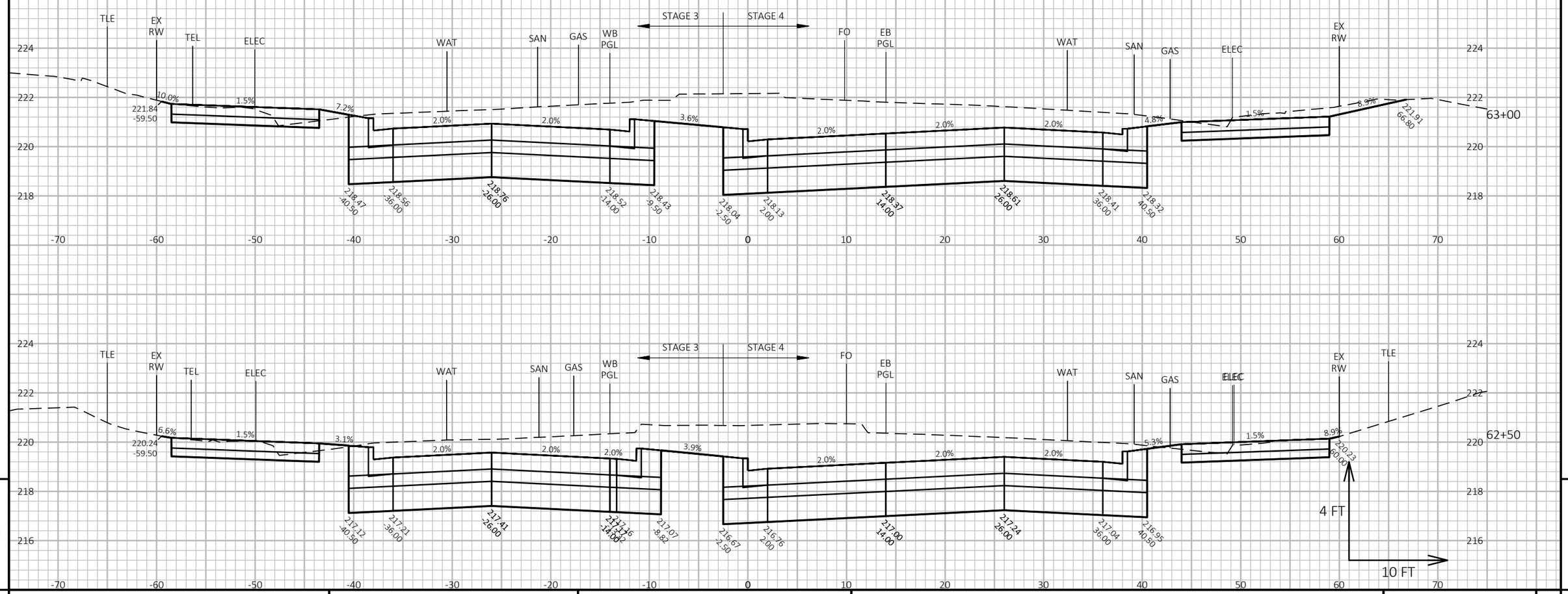
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 853 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 40

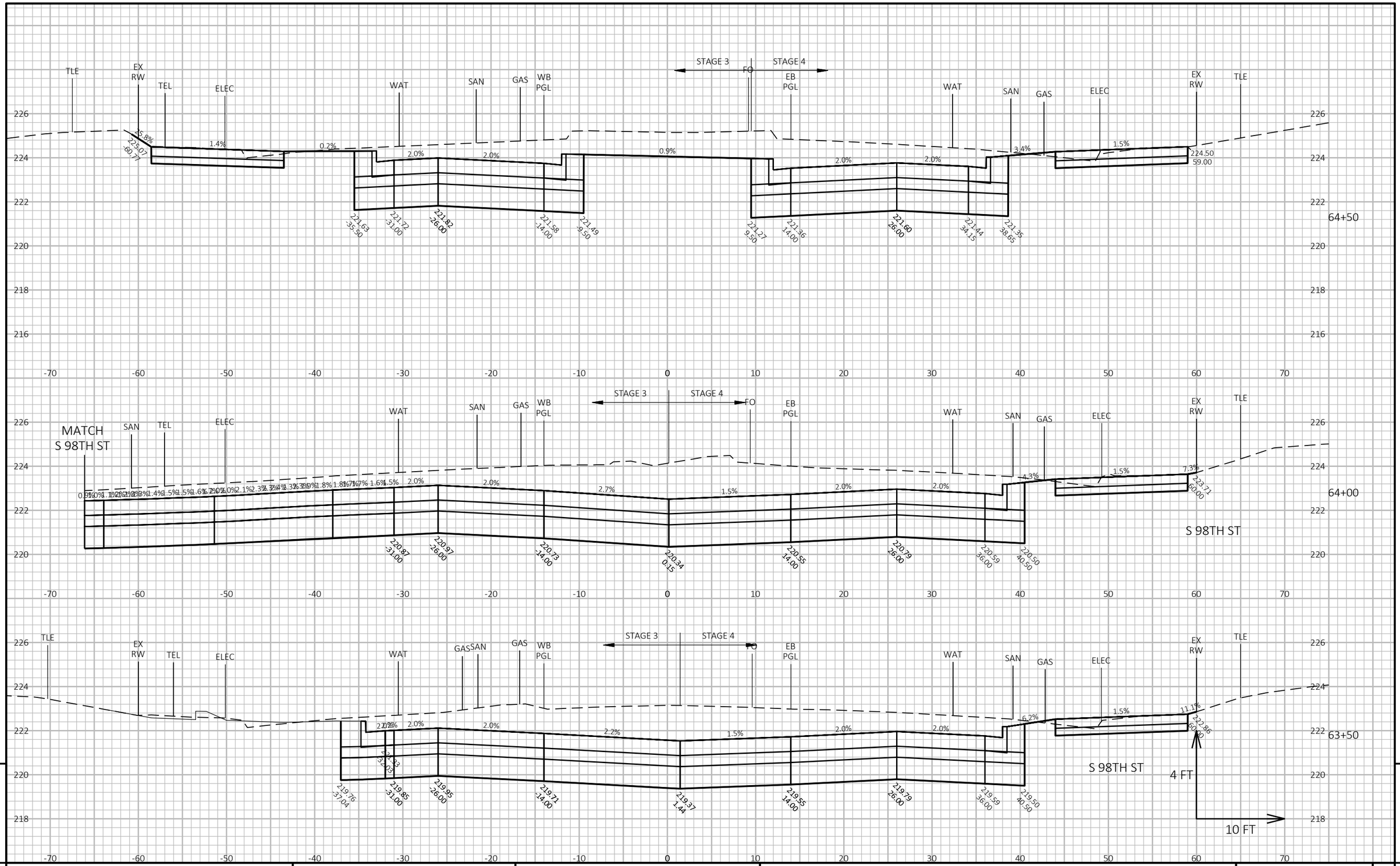
PLOT DATE : 1/9/2026 2:30 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 854 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 41

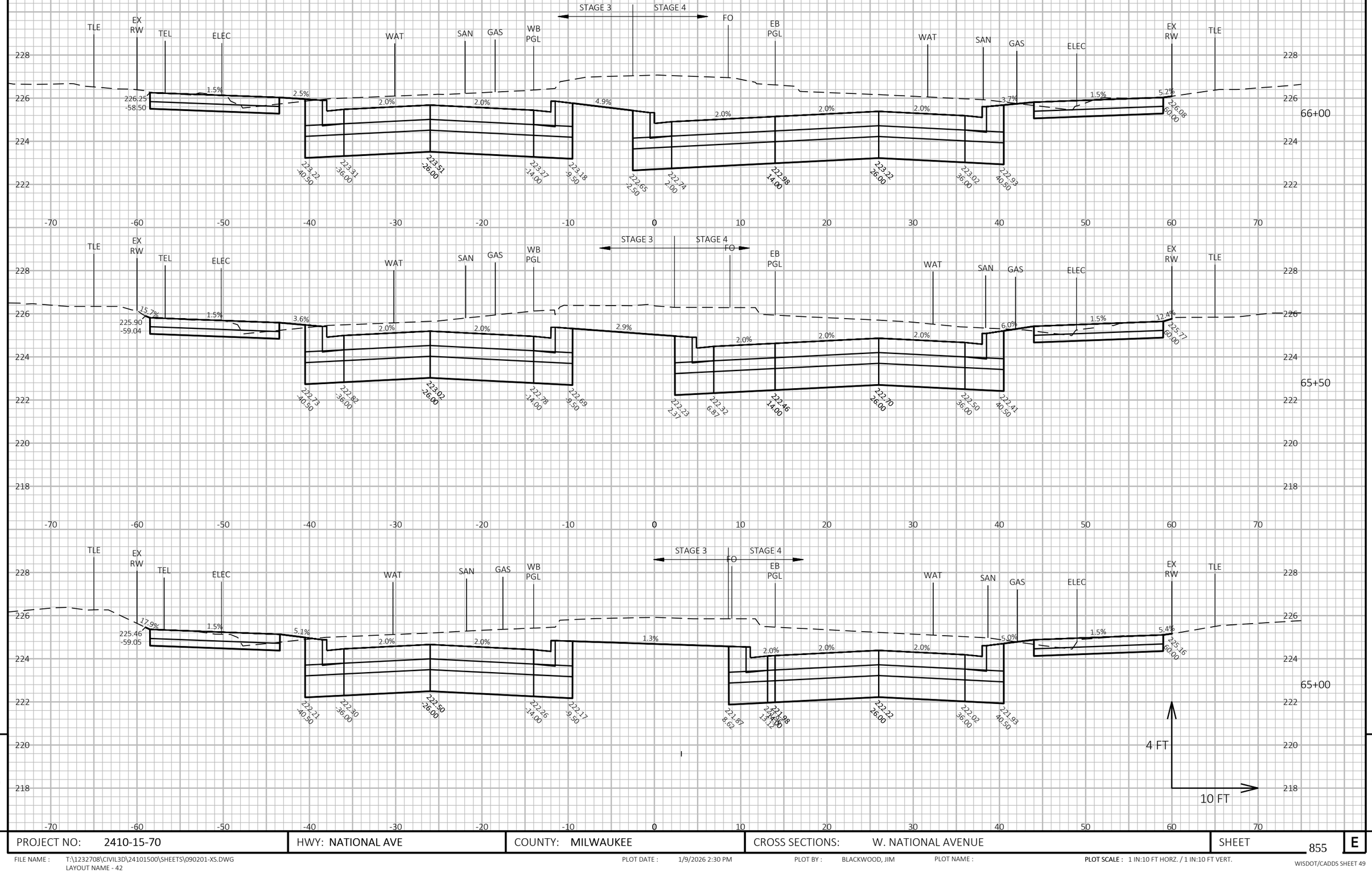
PLOT DATE : 1/9/2026 2:30 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

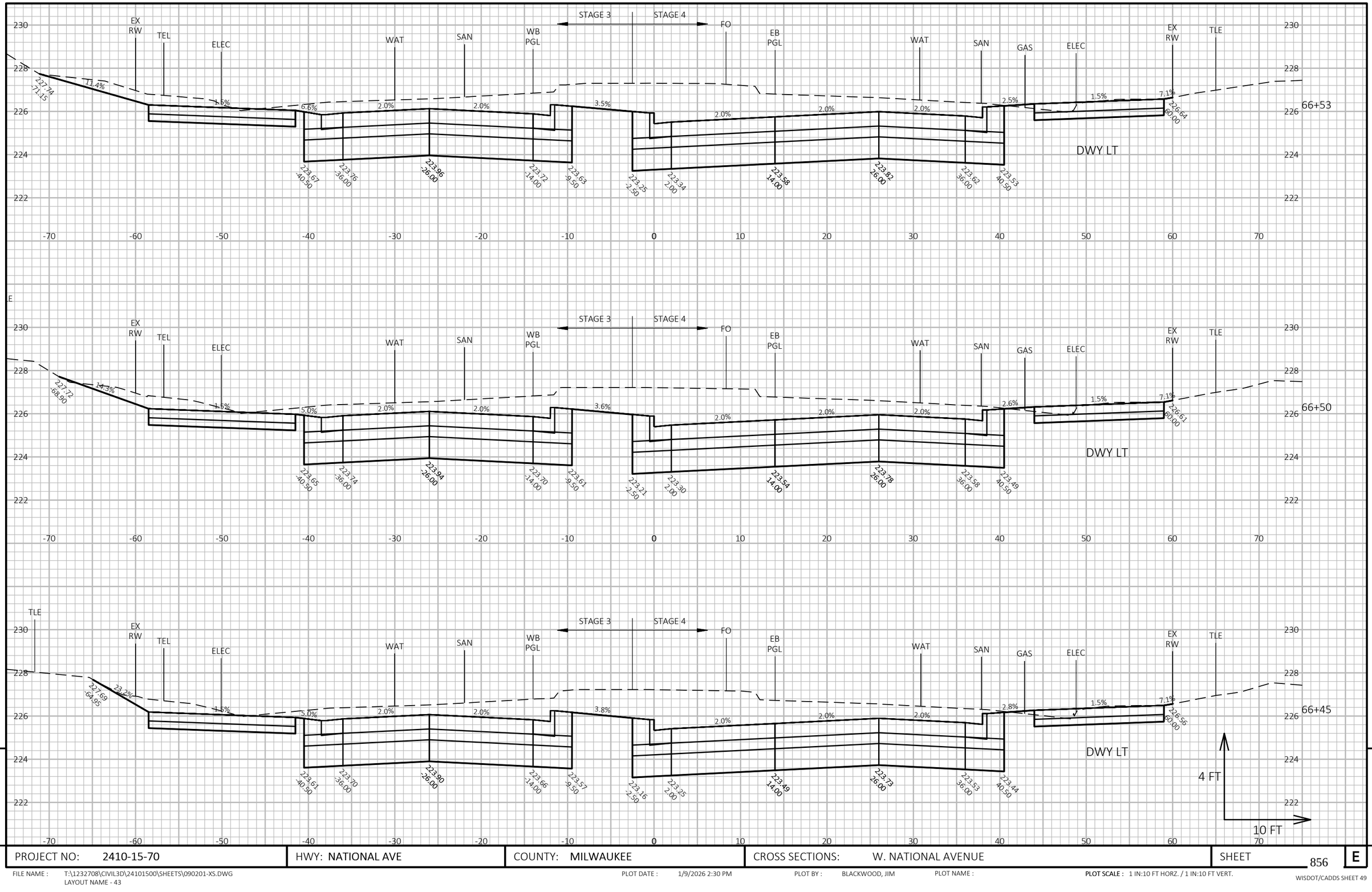



| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 855 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 42

PLOT DATE : 1/9/2026 2:30 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 856 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 43

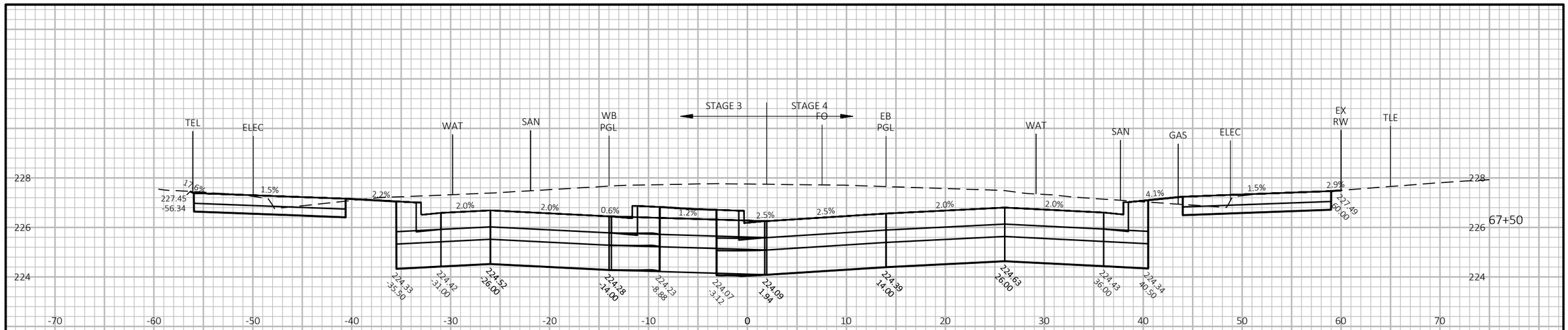
PLOT DATE : 1/9/2026 2:30 PM

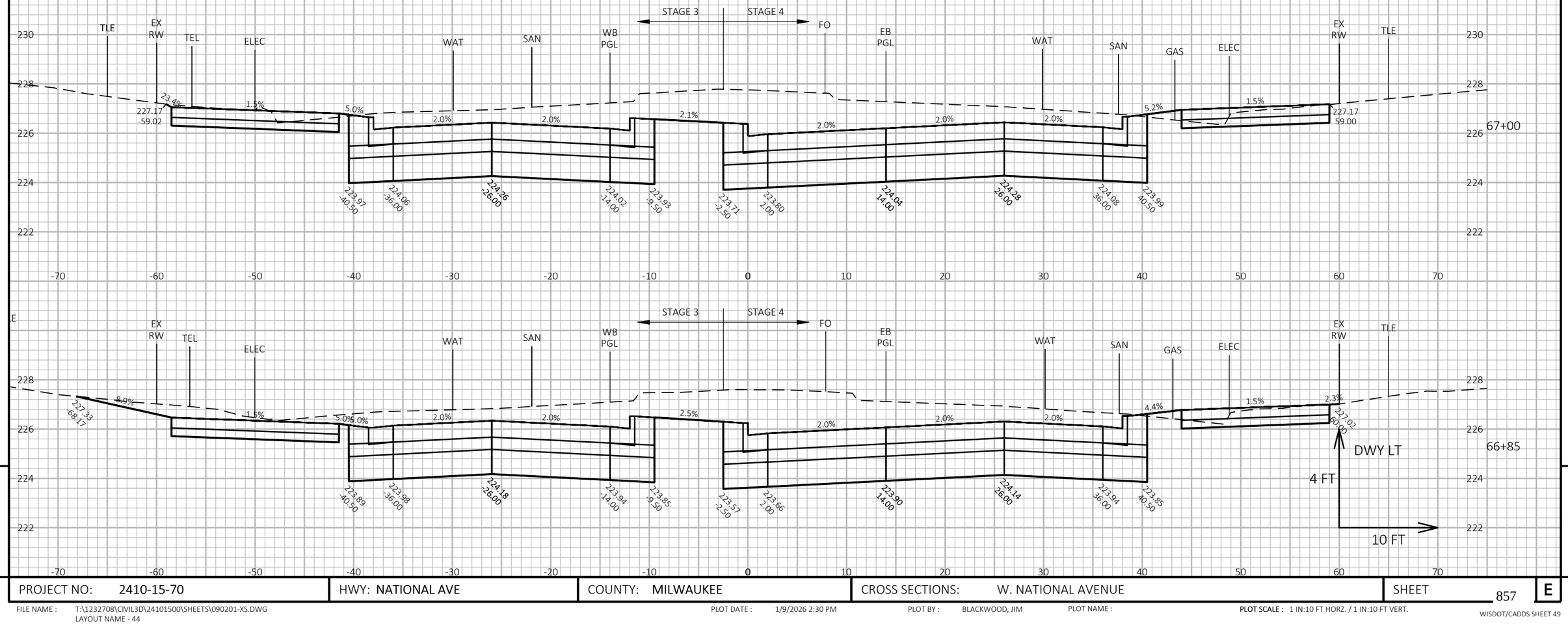
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 857 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 44

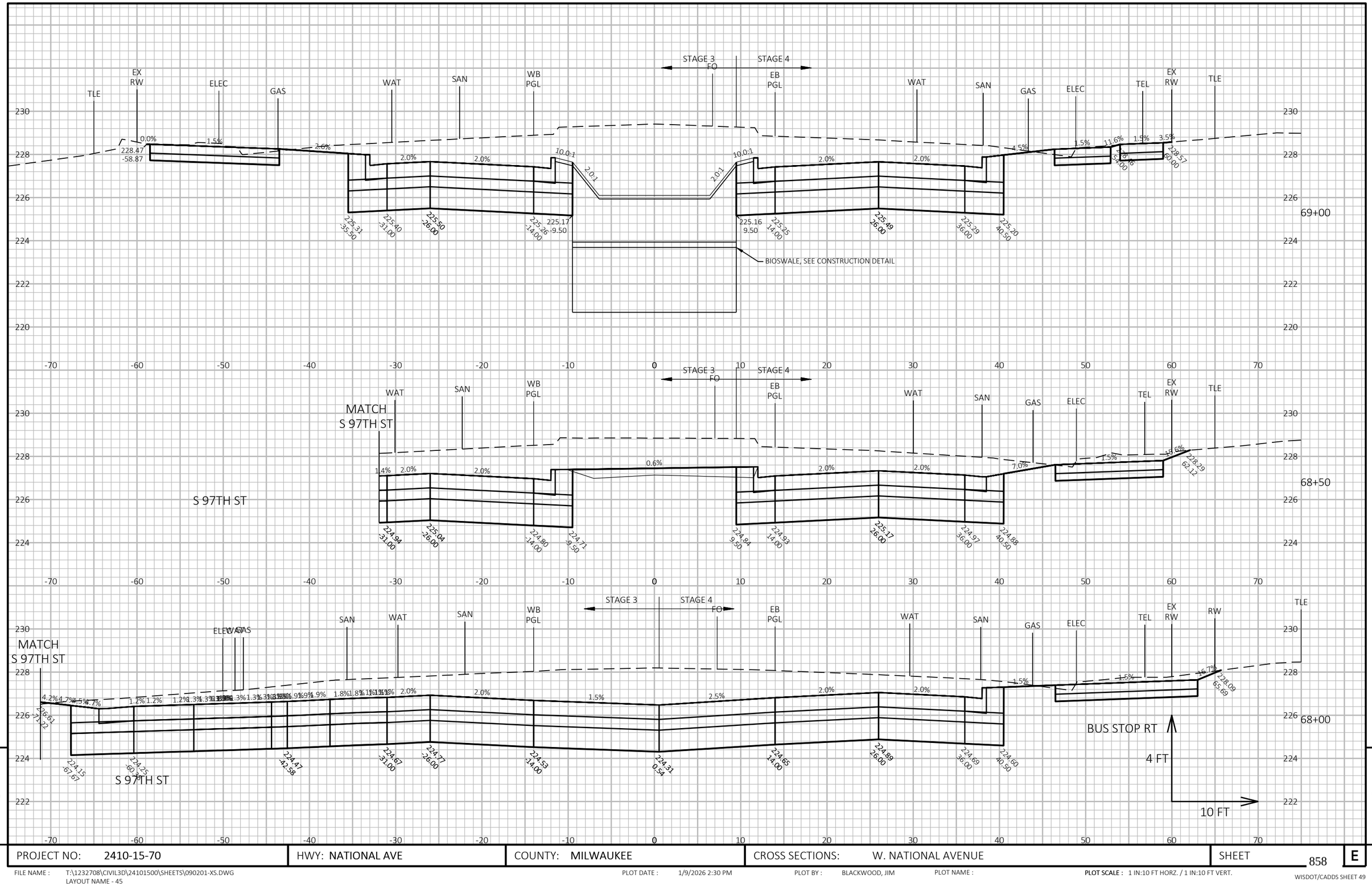
PLOT DATE : 1/9/2026 2:30 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 858 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 45

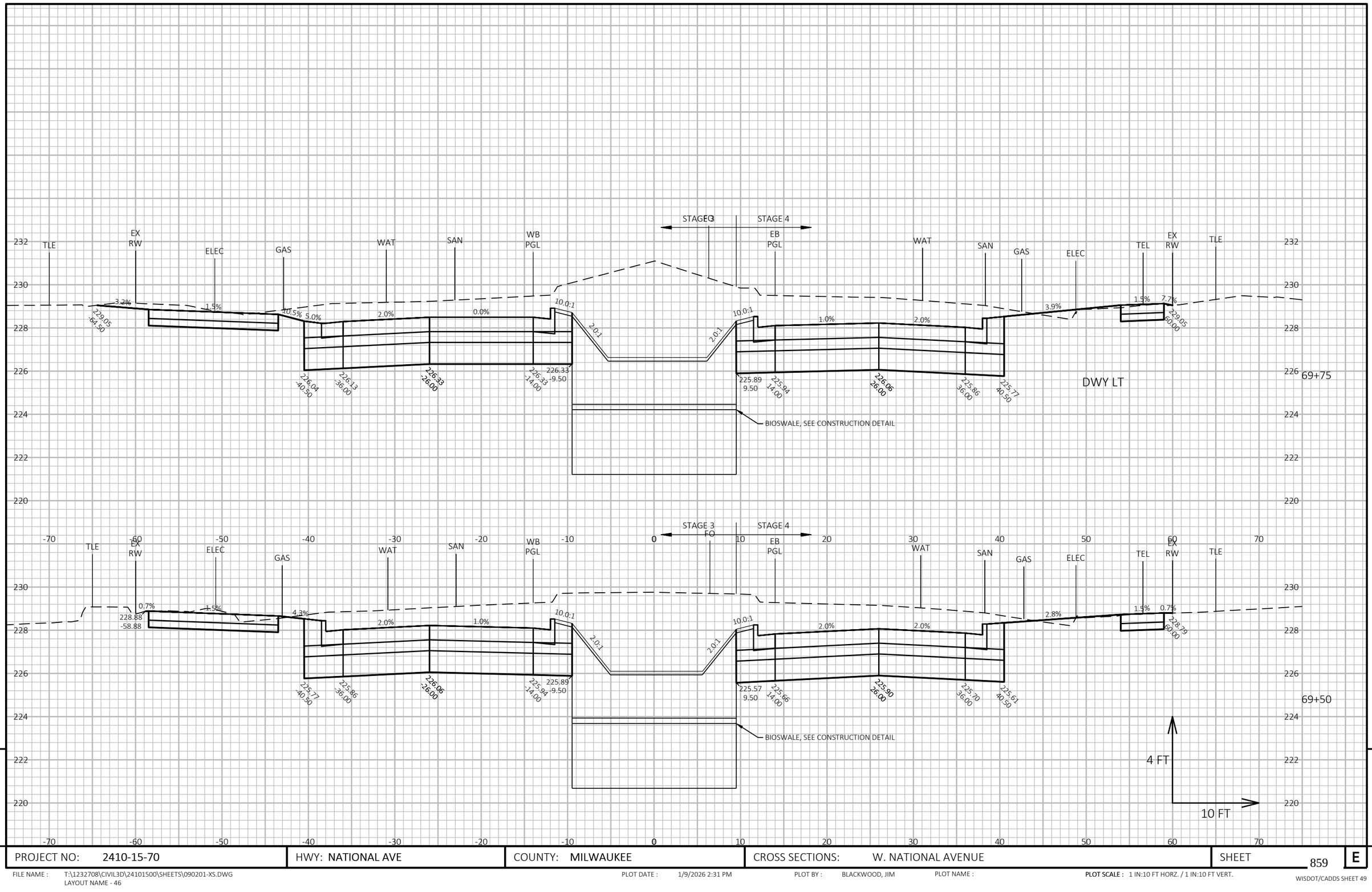
PLOT DATE : 1/9/2026 2:30 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 859 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 46

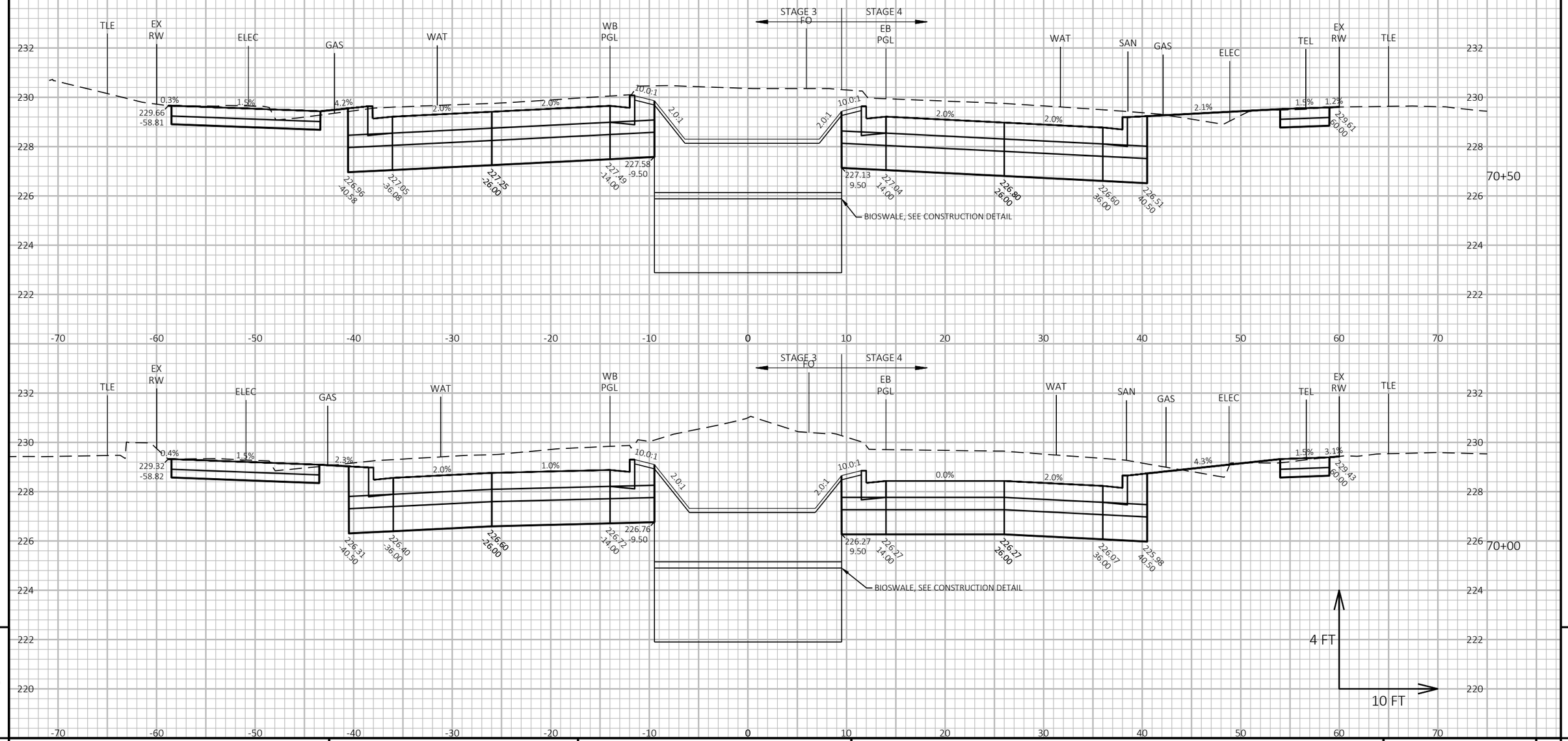
PLOT DATE : 1/9/2026 2:31 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

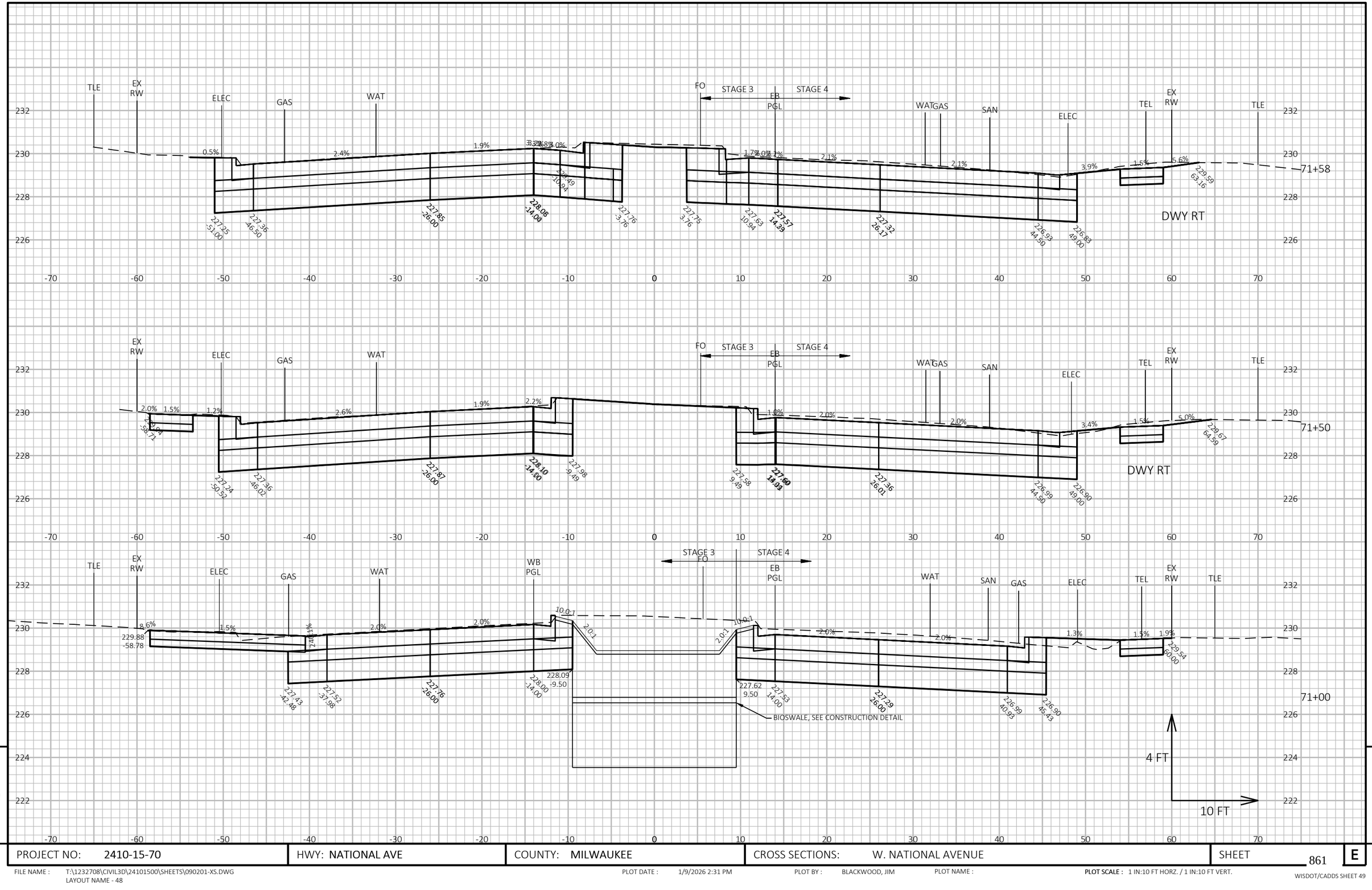
**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 860 | E |
|---|---|---|---|---|---|


FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 47
PLOT DATE : 1/9/2026 2:31 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49




| | | | | |
|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 861 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 48

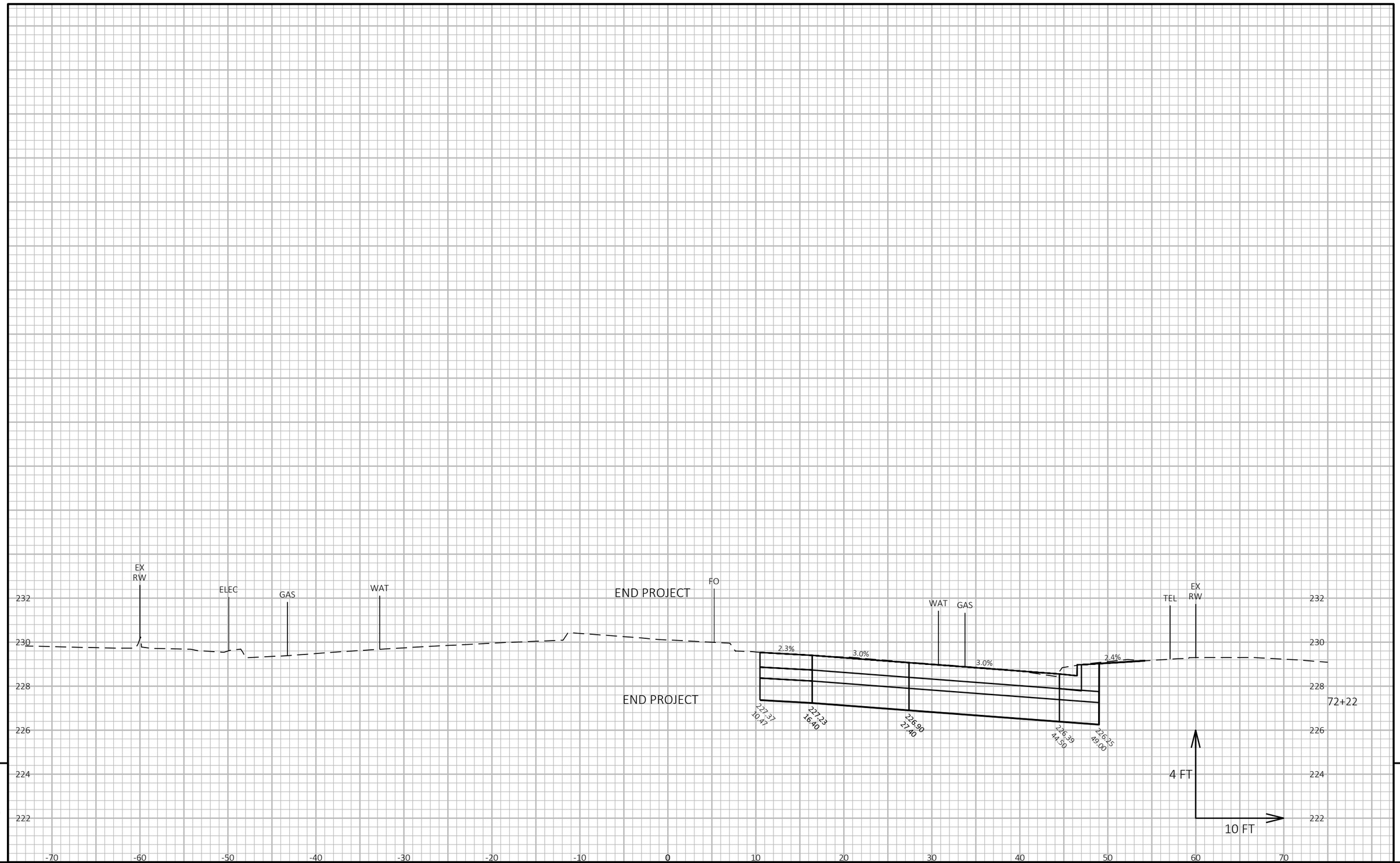
PLOT DATE : 1/9/2026 2:31 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. NATIONAL AVENUE | SHEET 862 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 49

PLOT DATE : 1/9/2026 2:31 PM

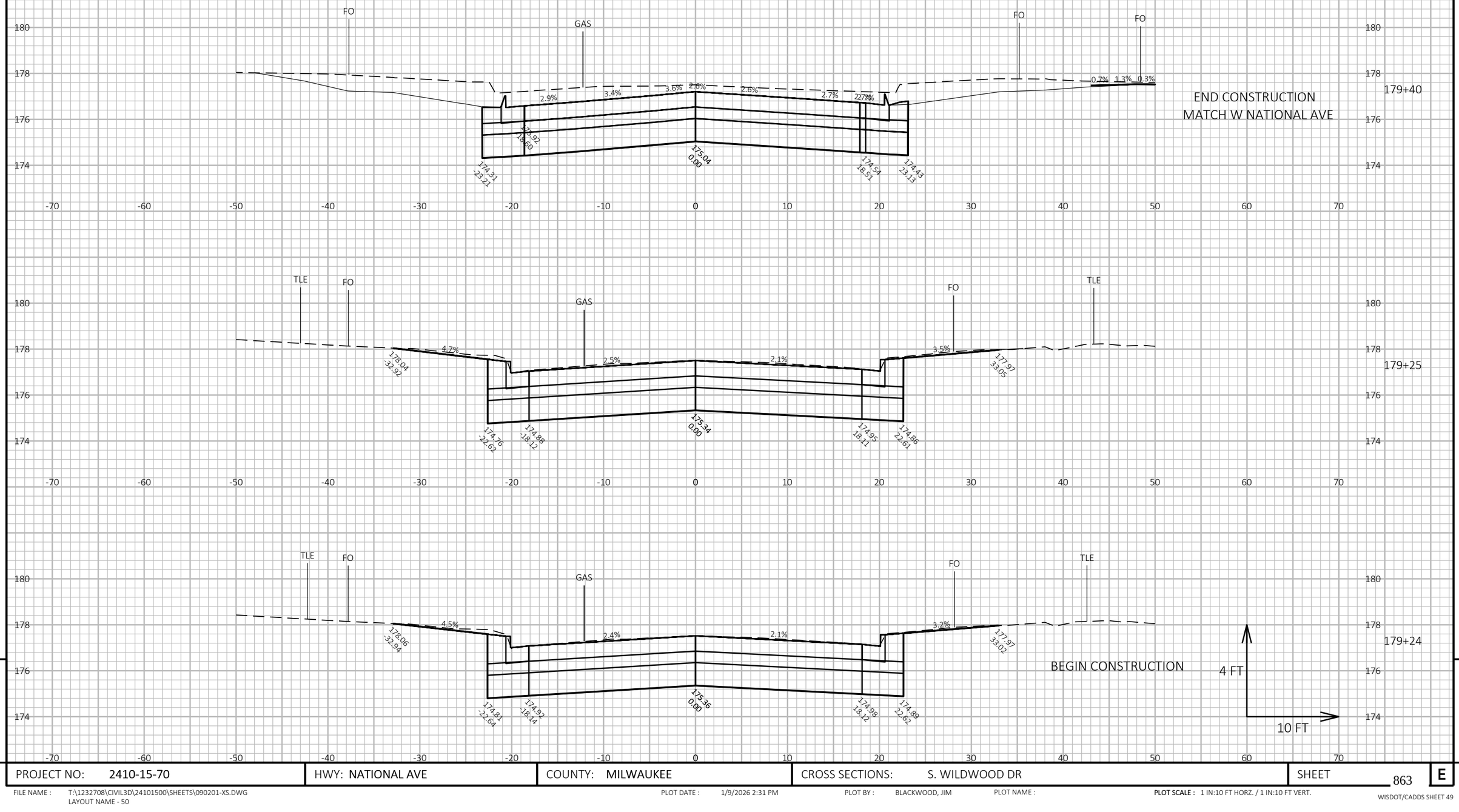
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 6







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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: S. WILDWOOD DR | SHEET 863 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 50

PLOT DATE : 1/9/2026 2:31 PM

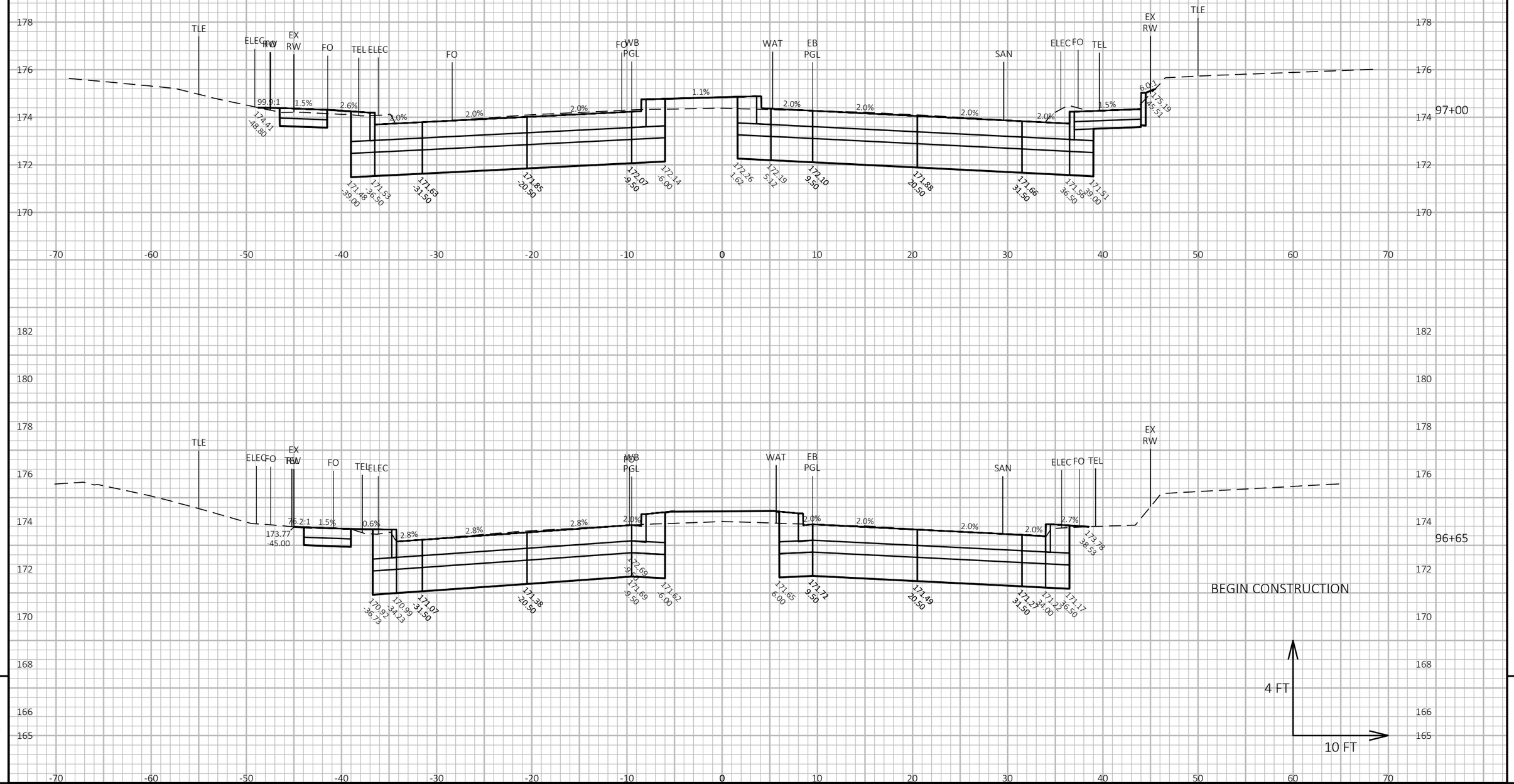
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 7

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. CLEVELAND AVE | SHEET 864 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 51

PLOT DATE : 1/9/2026 2:31 PM

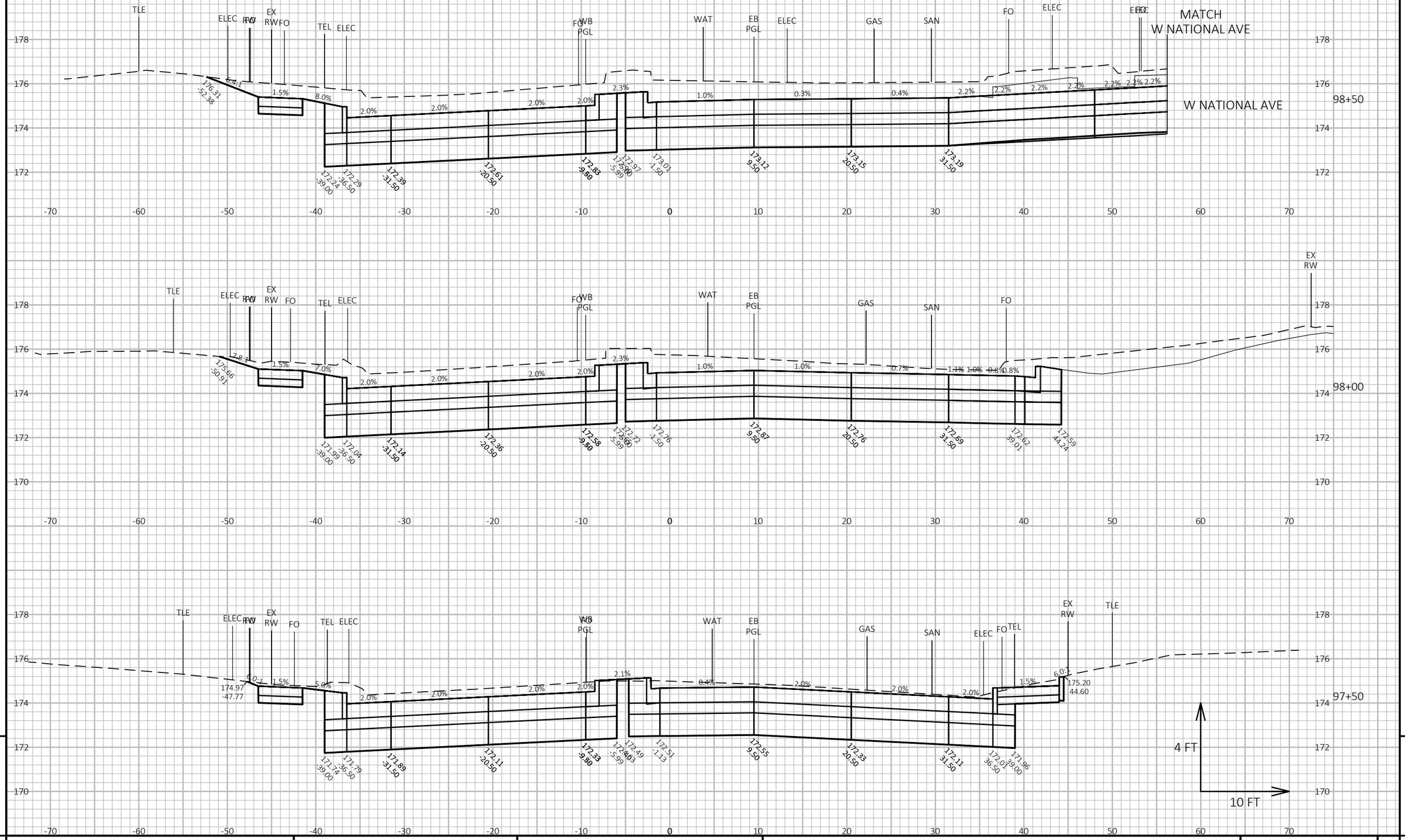
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 7

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. CLEVELAND AVE | SHEET 865 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 52

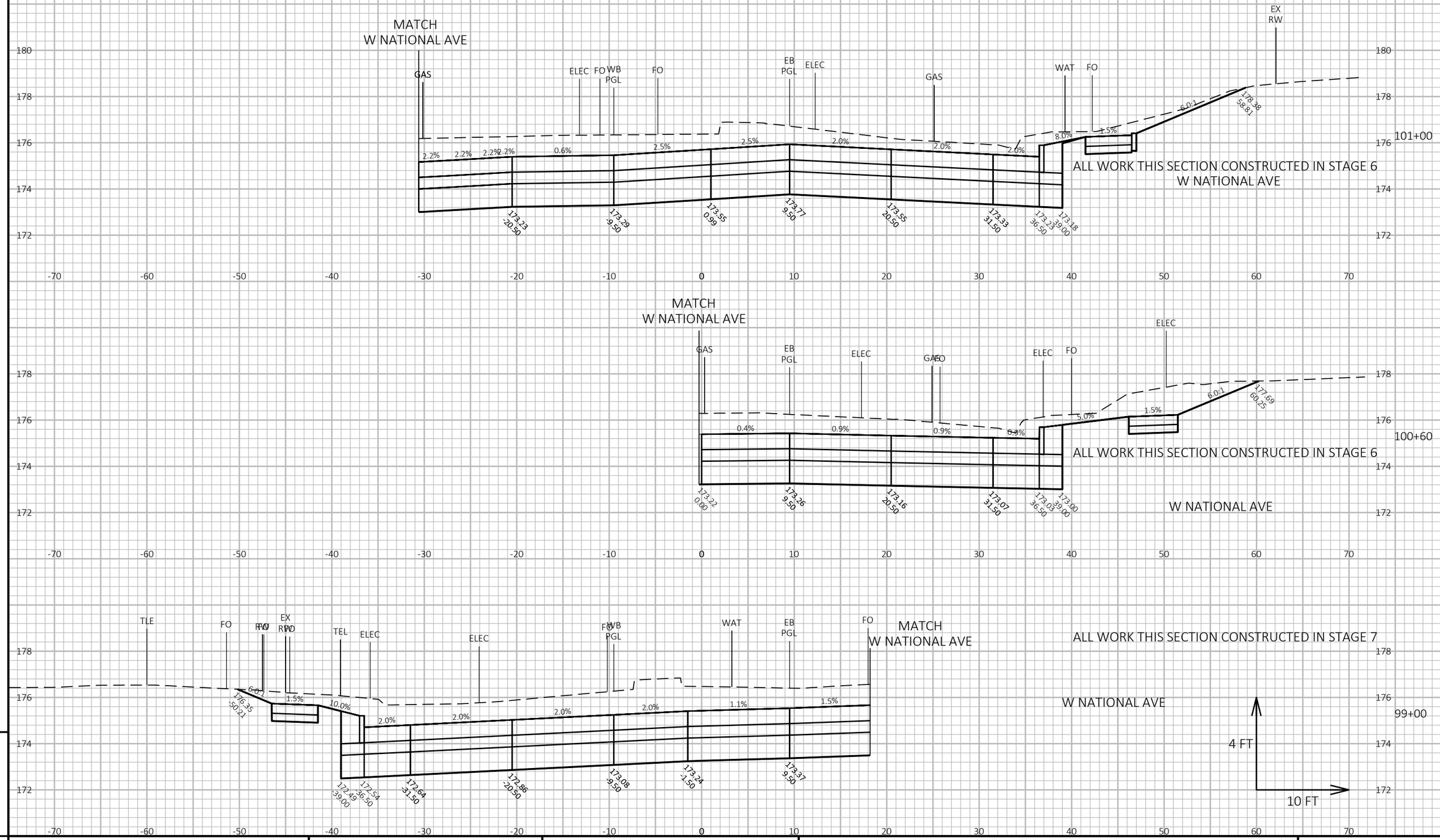
PLOT DATE : 1/9/2026 2:32 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. CLEVELAND AVE | SHEET 866 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 53

PLOT DATE : 1/9/2026 2:32 PM

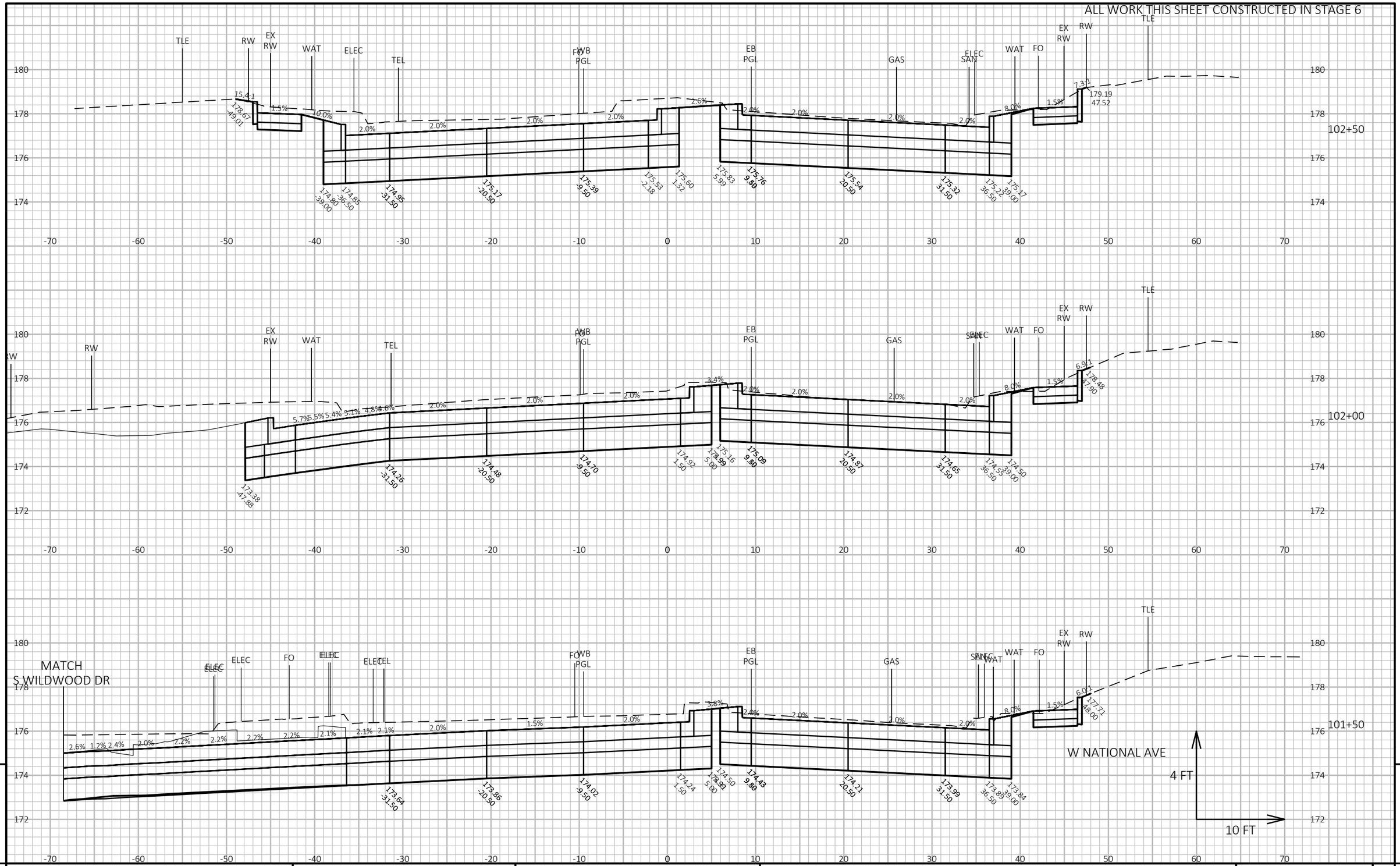
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 6

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|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. CLEVELAND AVE | SHEET 867 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 54

PLOT DATE : 1/9/2026 2:32 PM

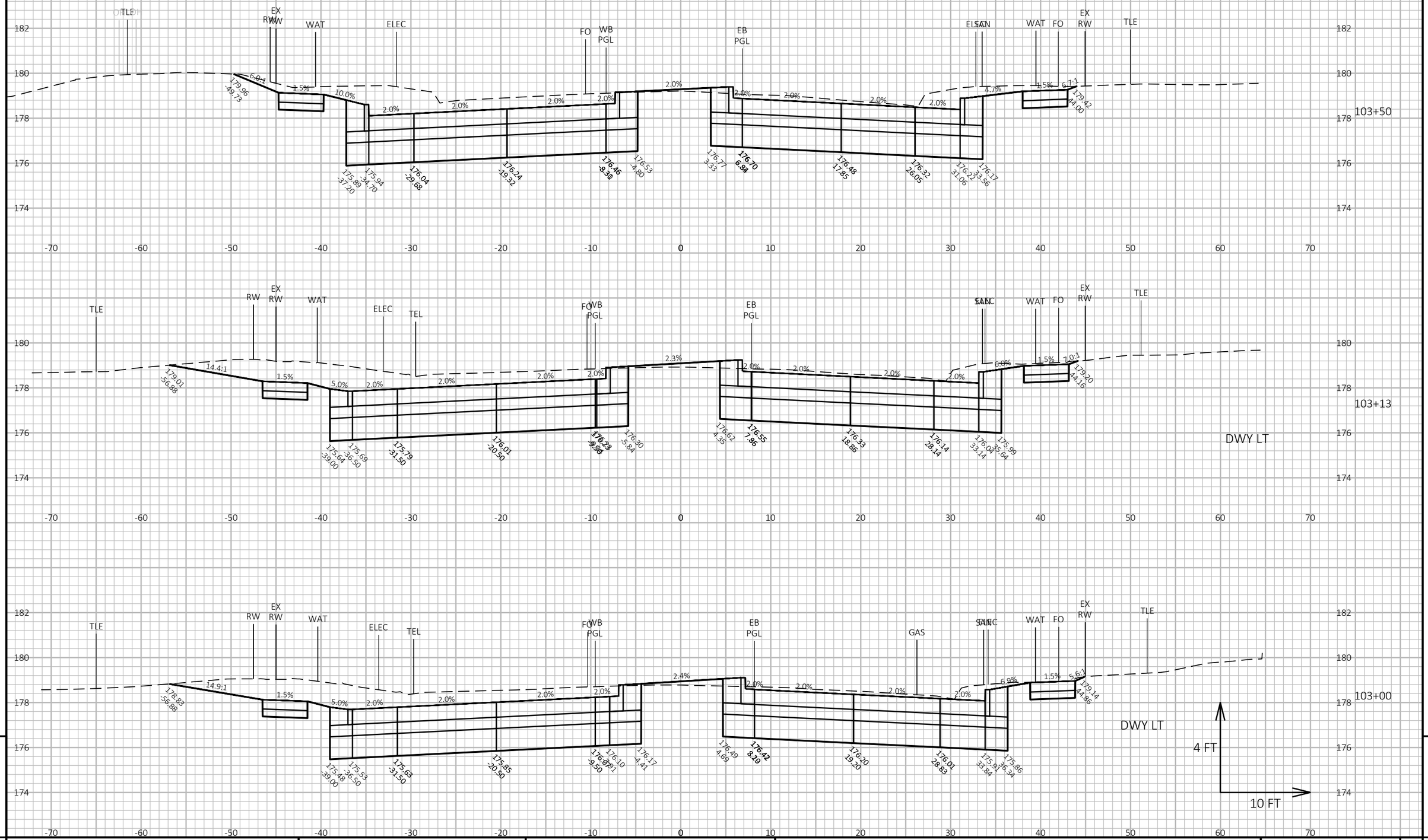
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 6




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. CLEVELAND AVE | SHEET 868 E |
|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 55

PLOT DATE : 1/9/2026 2:32 PM

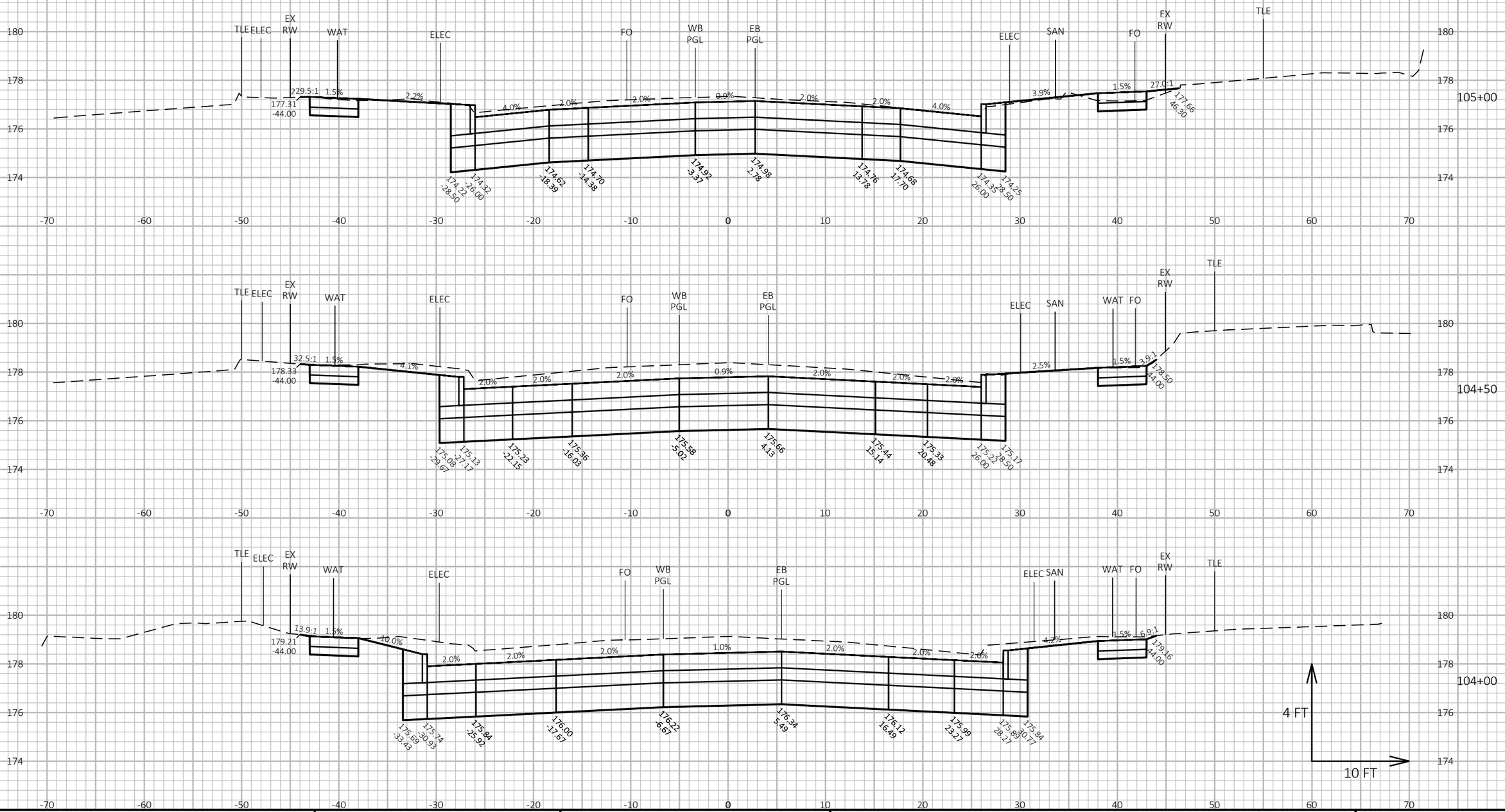
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 6

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. CLEVELAND AVE | SHEET 869 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 56

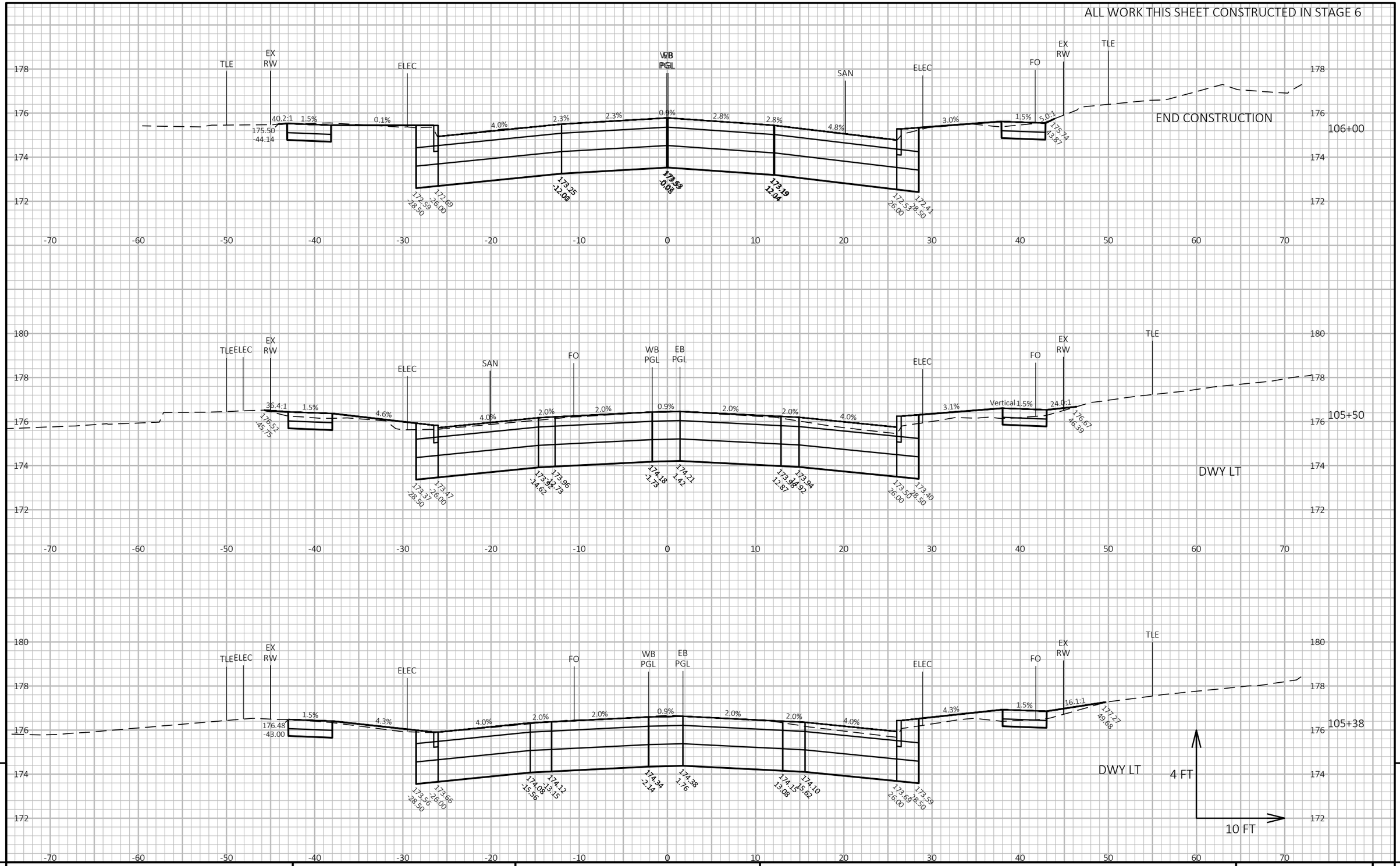
PLOT DATE : 1/9/2026 2:32 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 6

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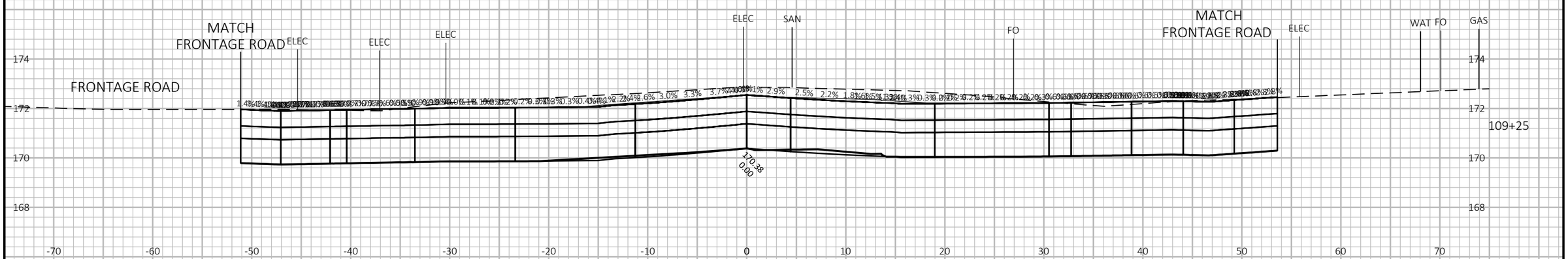
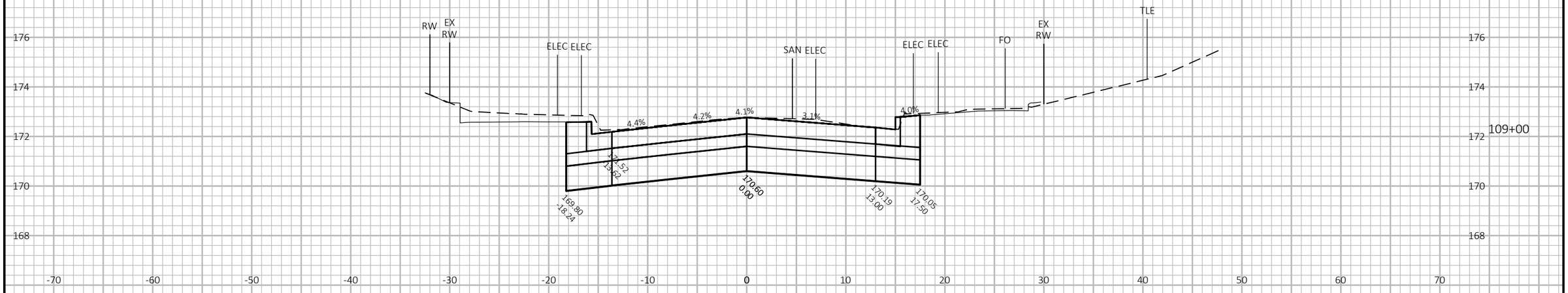
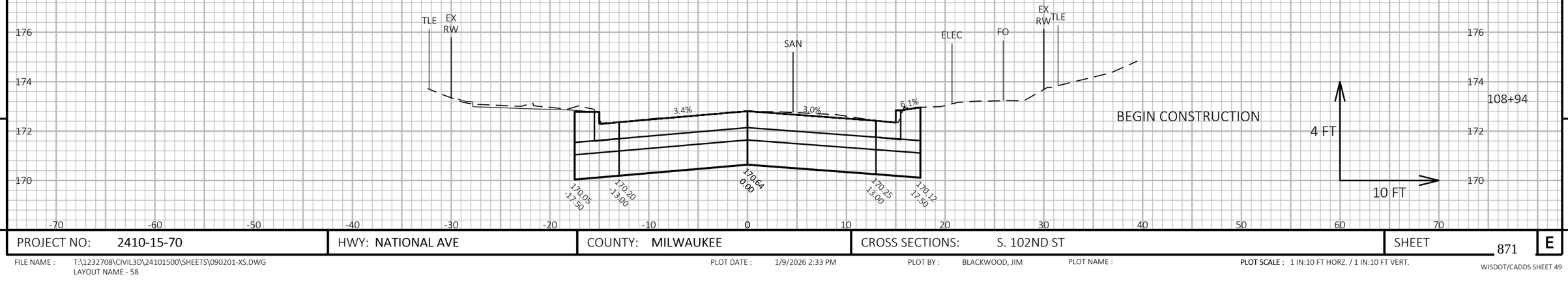
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: W. CLEVELAND AVE | SHEET 870 | E |
|---|---|---|---|---|---|


FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 57
PLOT DATE : 1/9/2026 2:33 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 6

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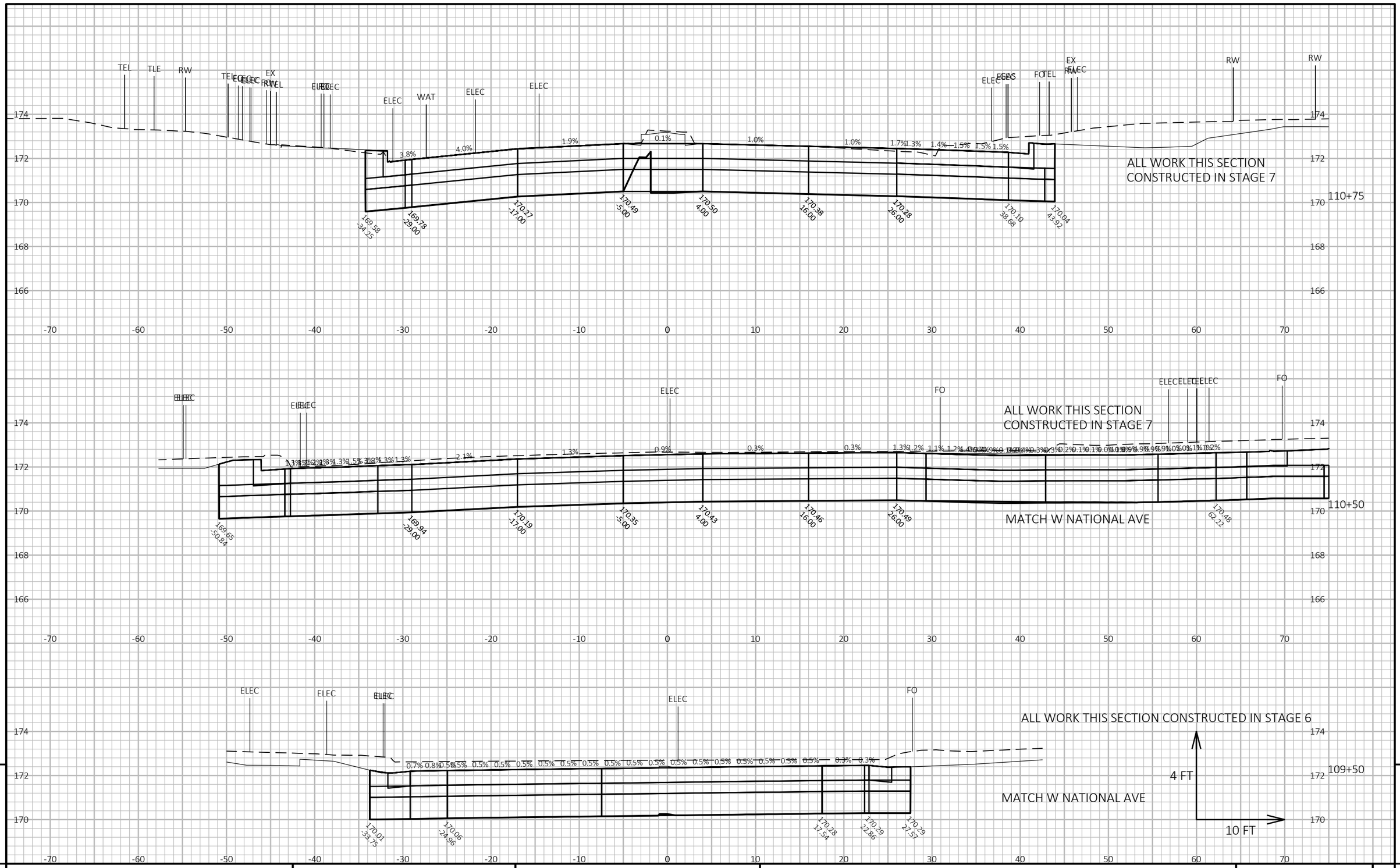
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: S. 102ND ST | SHEET 871 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 58

PLOT DATE : 1/9/2026 2:33 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: S. 102ND ST | SHEET 872 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 59

PLOT DATE : 1/9/2026 2:33 PM

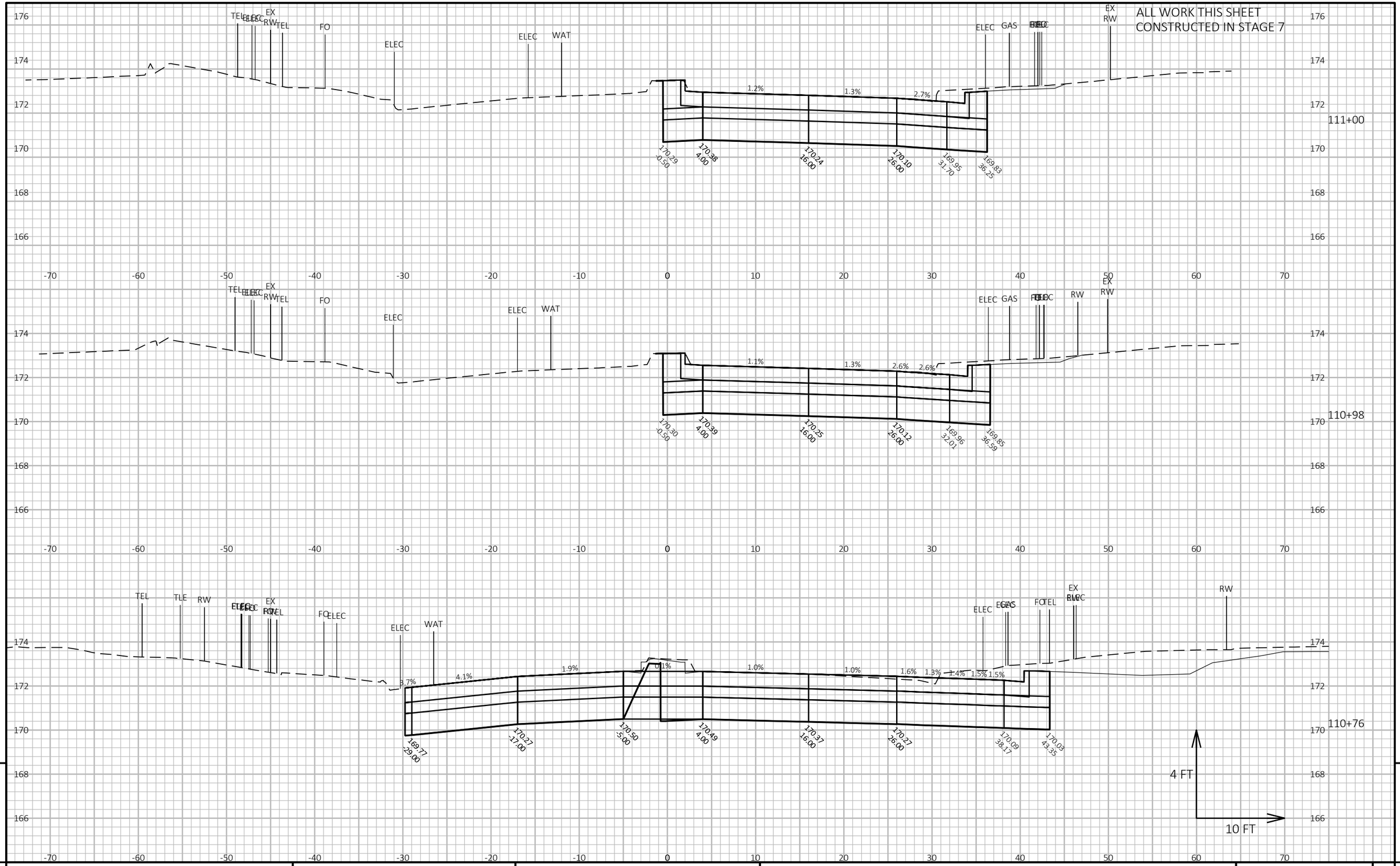
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET
CONSTRUCTED IN STAGE 7

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: S. 102ND ST | SHEET 873 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 60

PLOT DATE : 1/9/2026 2:33 PM

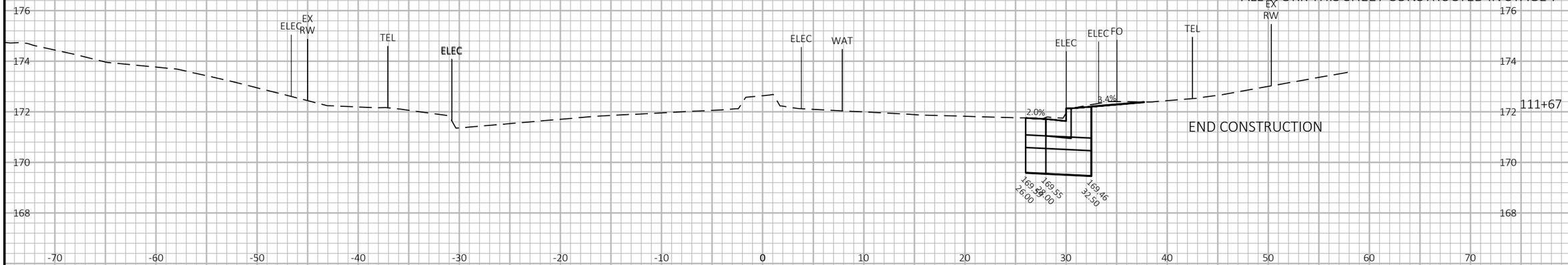
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

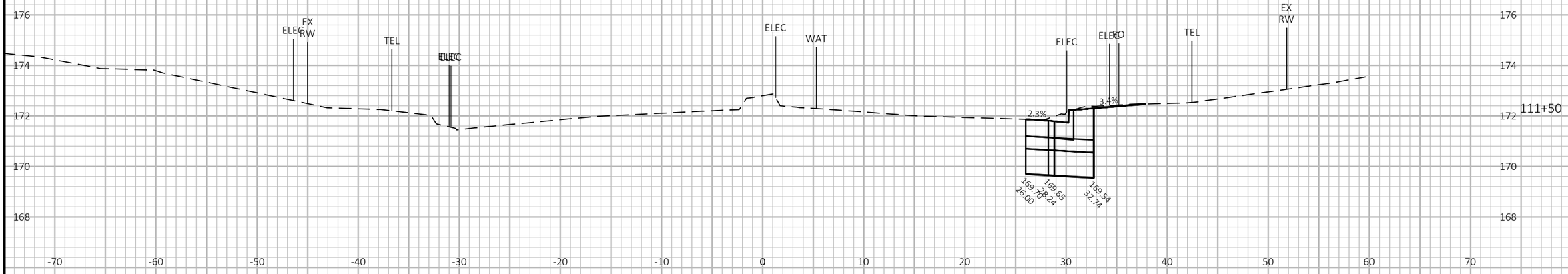
WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 7




111+67

END CONSTRUCTION




111+50

111+25

9

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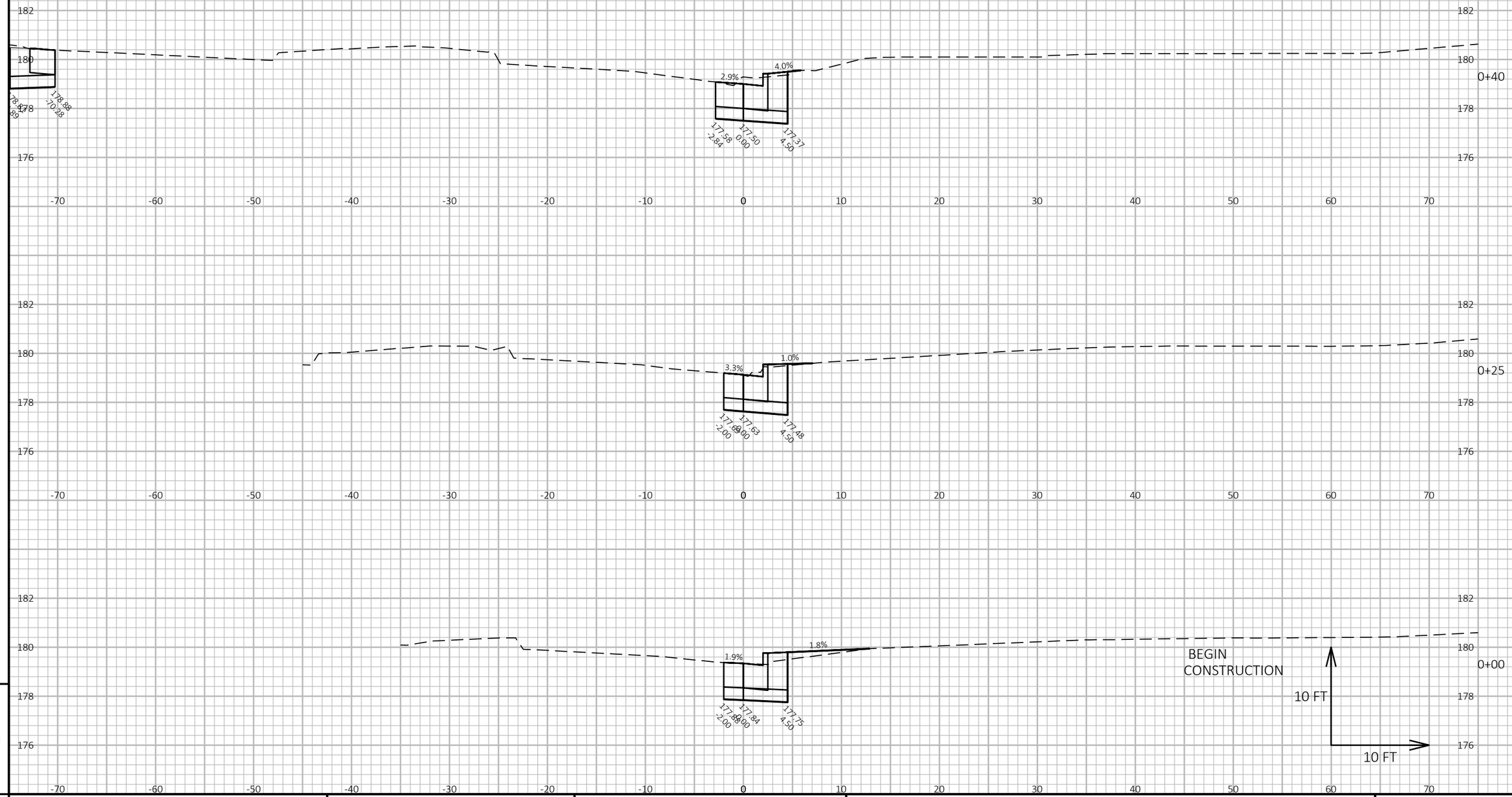
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: S. 102ND ST | SHEET 874 | E |
|---|---|---|---|---|---|


FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 61

PLOT DATE : 1/9/2026 2:33 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 2

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: WEST 894 EXIT RAMP | SHEET 875 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 62

PLOT DATE : 1/9/2026 2:33 PM

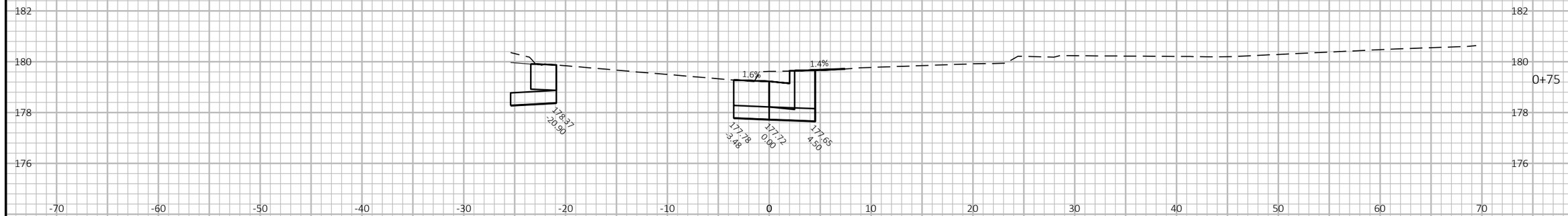
PLOT BY : BLACKWOOD, JIM

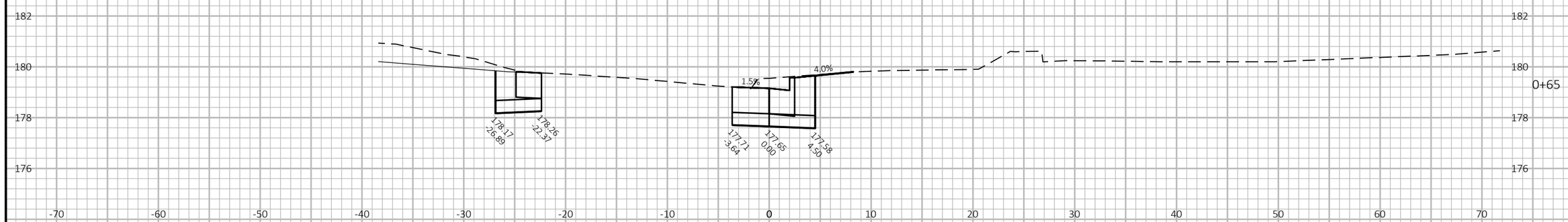
PLOT NAME :

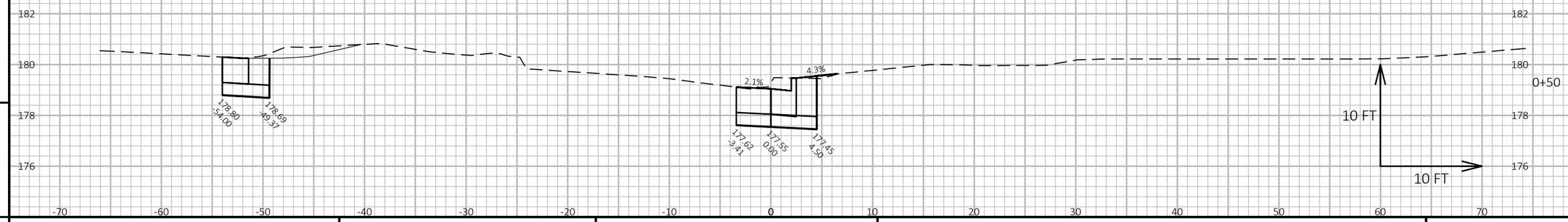
**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 2

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9

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: WEST 894 EXIT RAMP | SHEET 876 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 63

PLOT DATE : 1/9/2026 2:34 PM

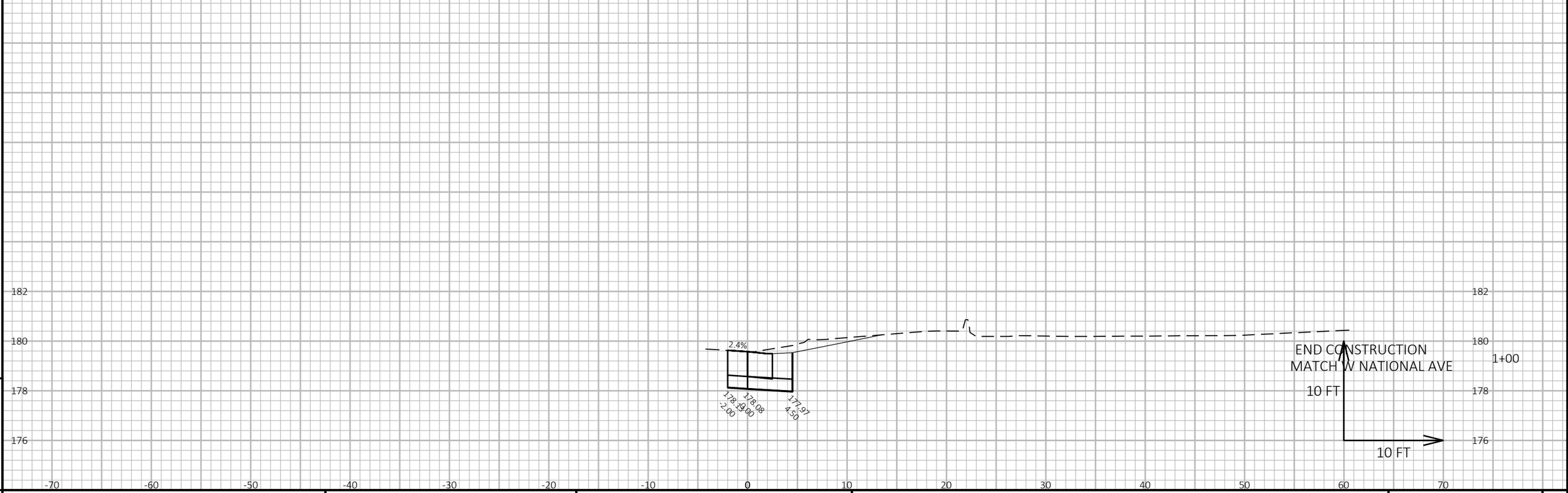
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 2

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9

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: WEST 894 EXIT RAMP | SHEET 877 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 64

PLOT DATE : 1/9/2026 2:34 PM

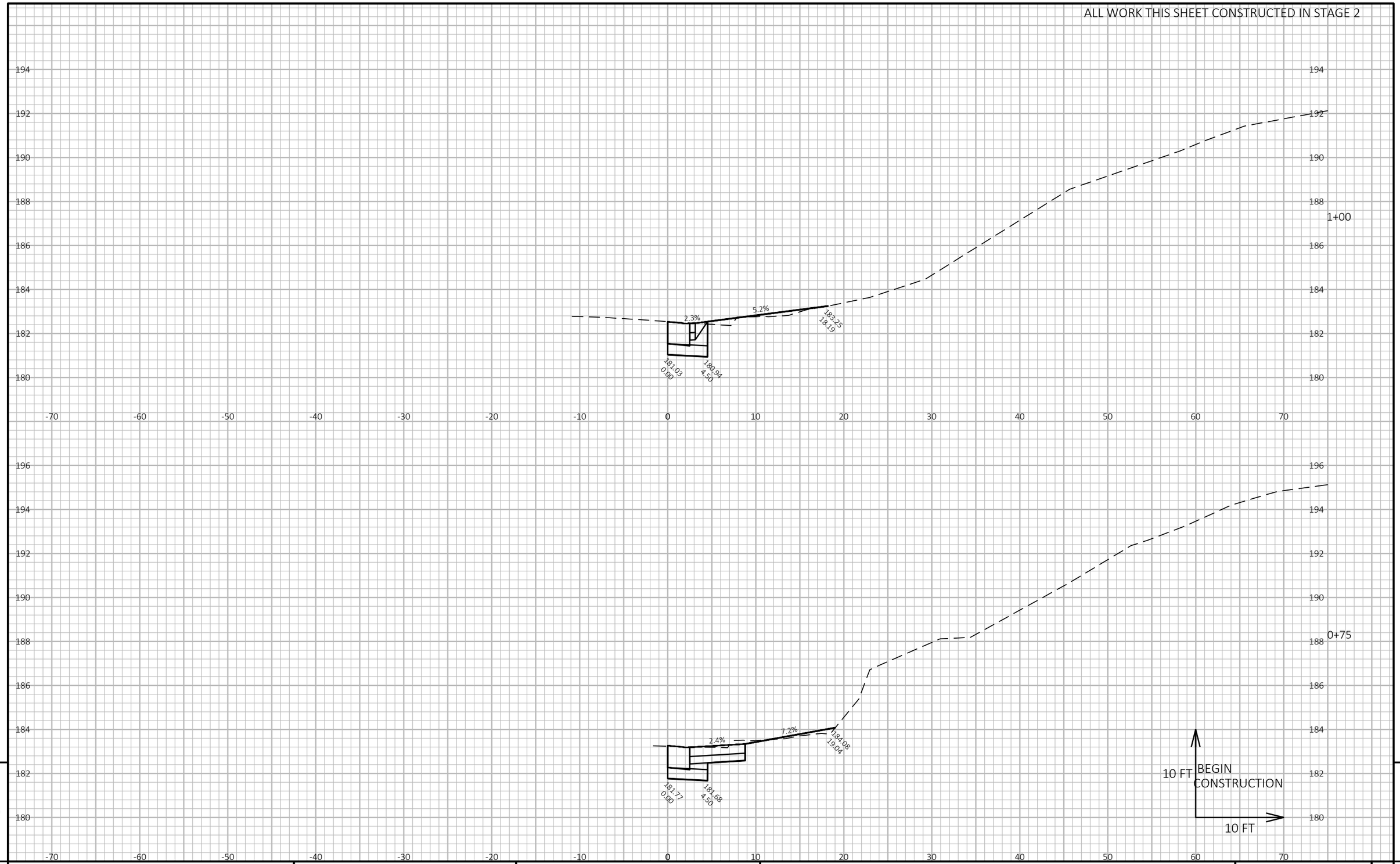
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 2




9

9

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: WEST 894 ENTRY RAMP | SHEET 878 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 65

PLOT DATE : 1/9/2026 2:34 PM

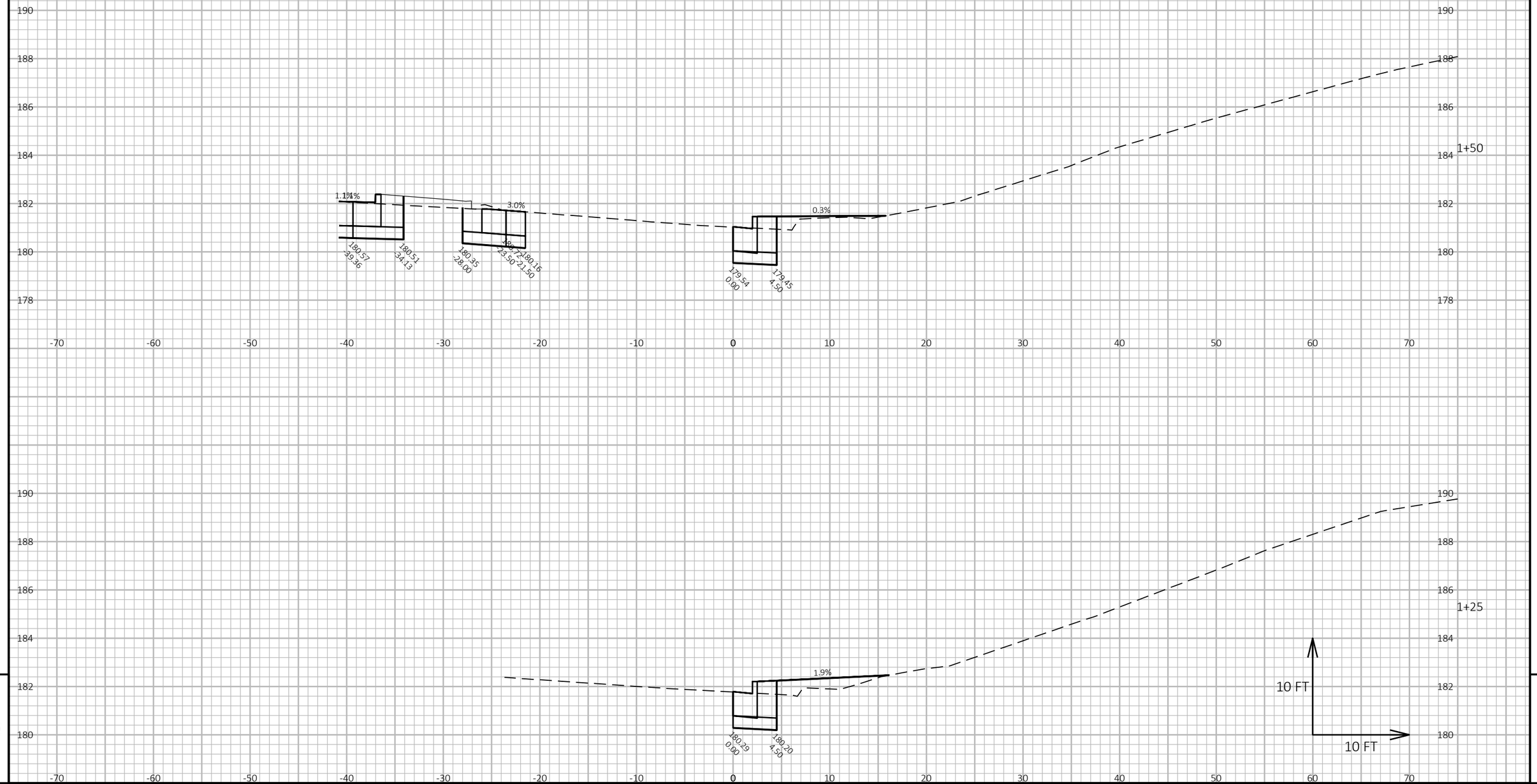
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 2




9

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: WEST 894 ENTRY RAMP | SHEET 879 | E |
|---|---|---|---|---|---|

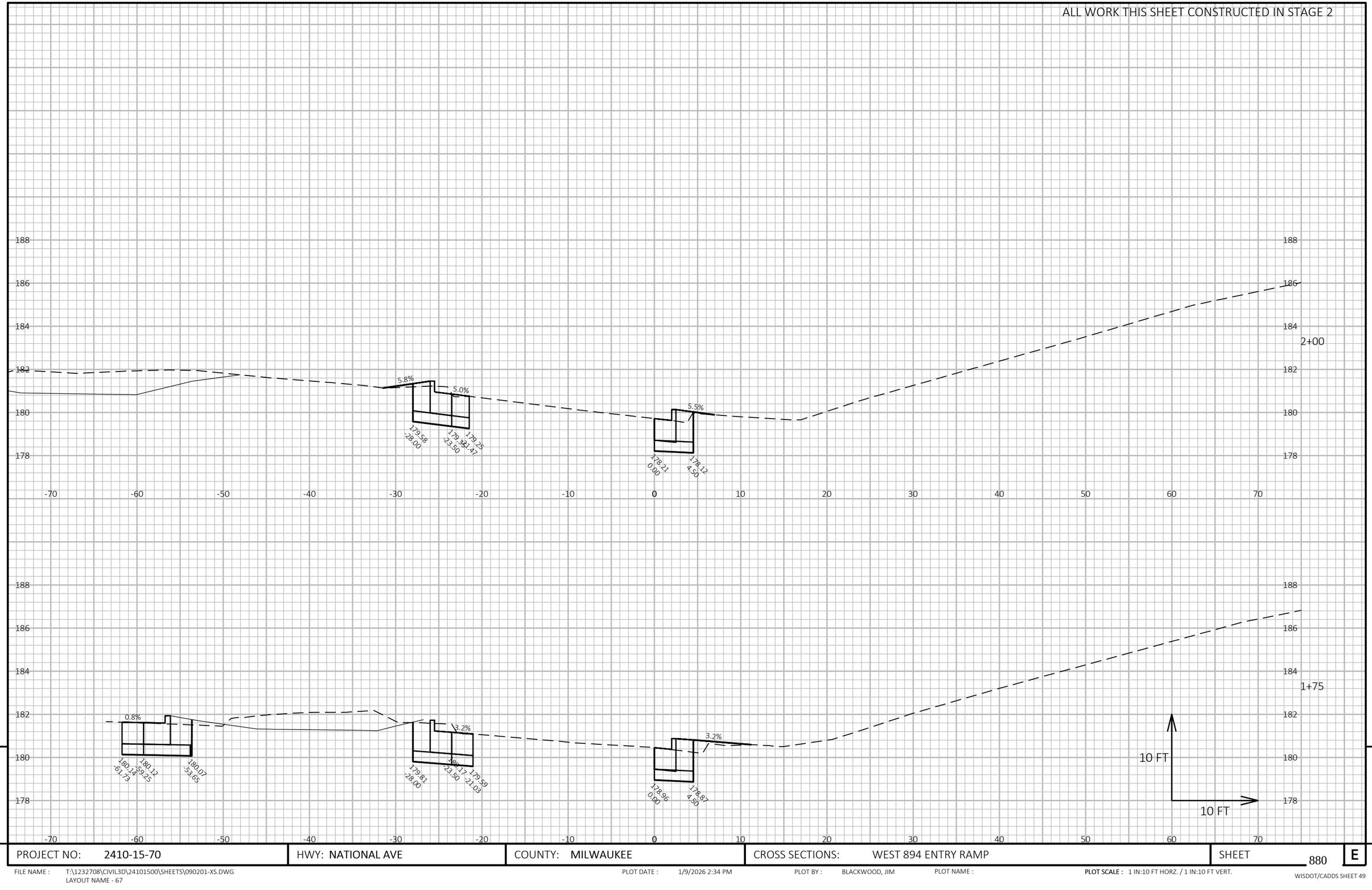
9

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 66

PLOT DATE : 1/9/2026 2:34 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 2

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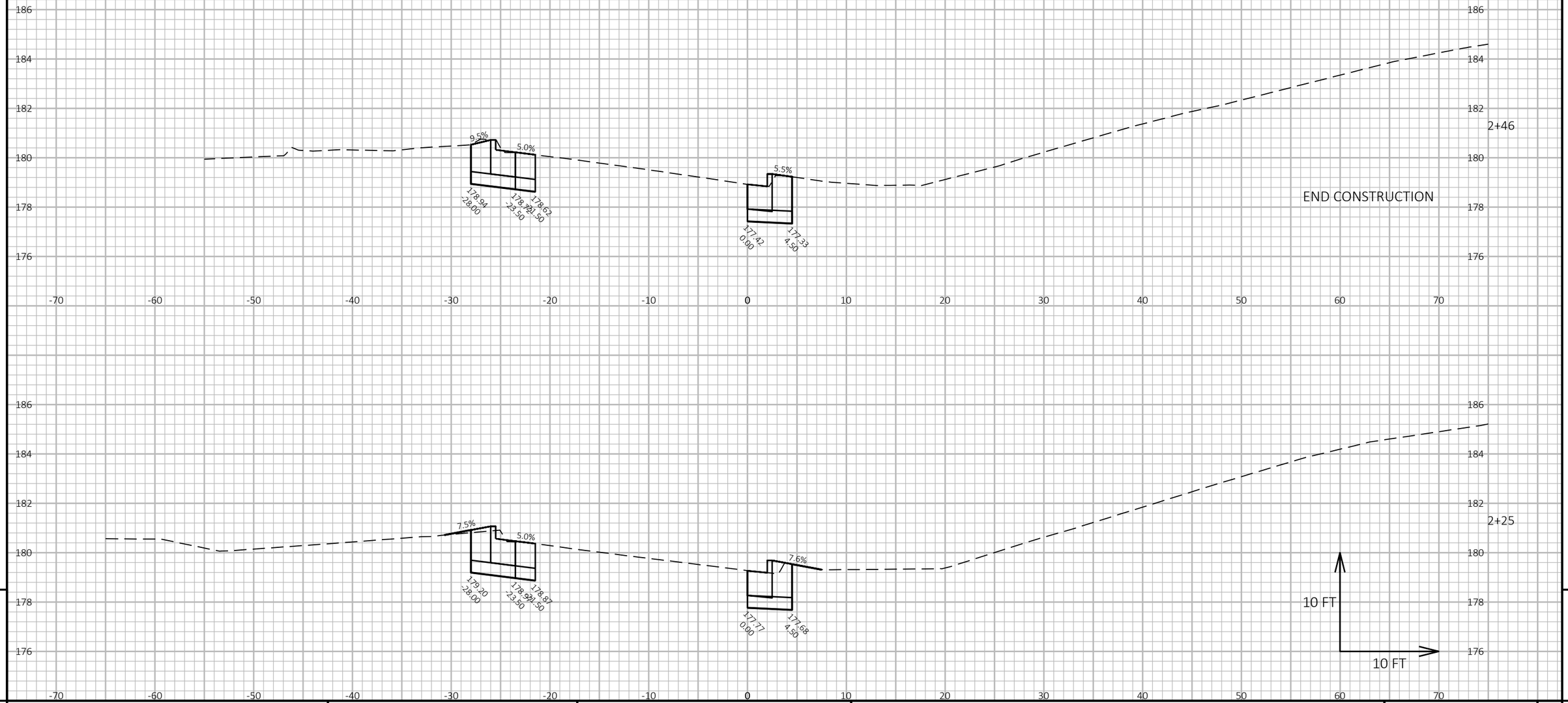
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: WEST 894 ENTRY RAMP | SHEET 880 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 67

PLOT DATE : 1/9/2026 2:34 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 2



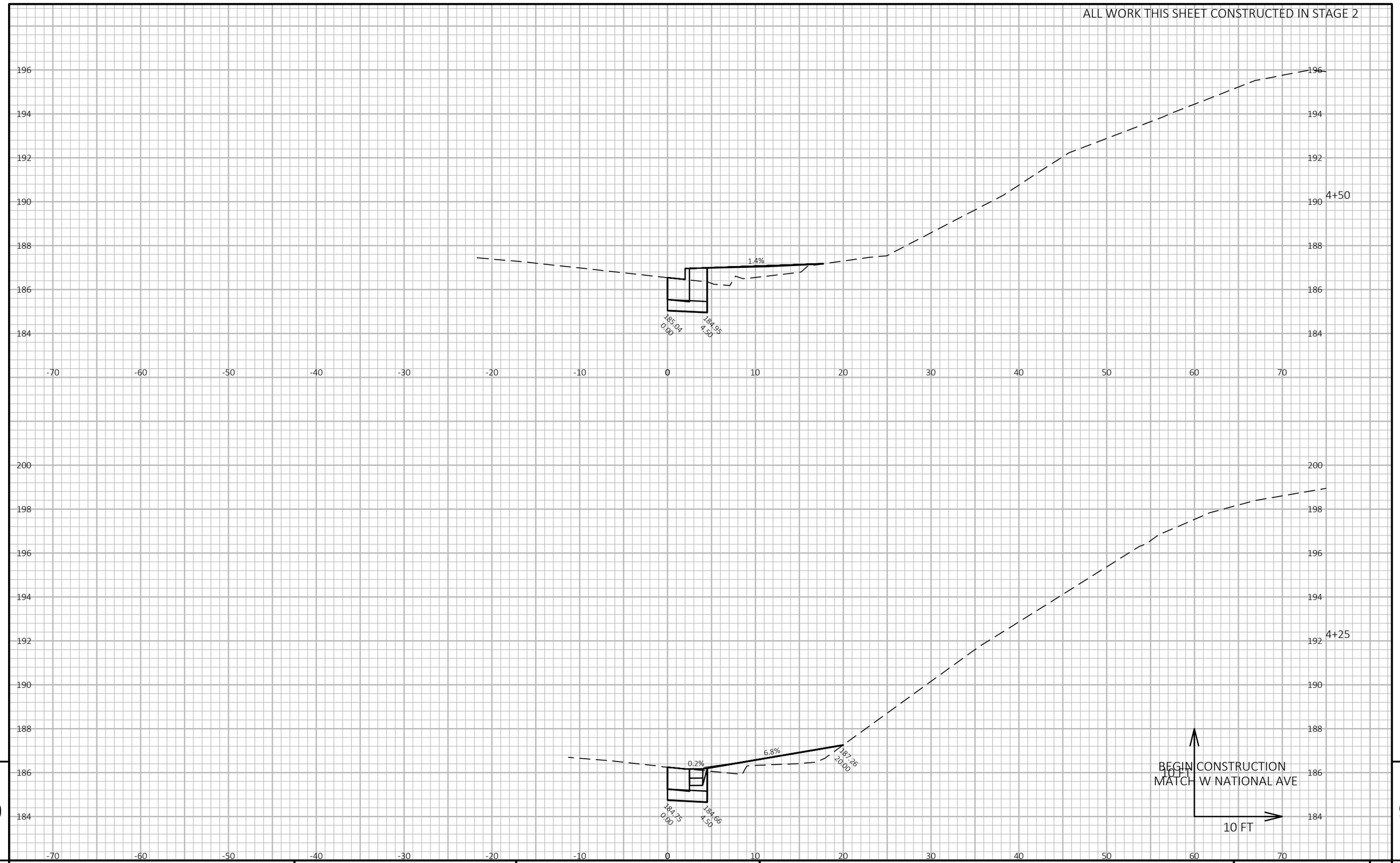

| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: WEST 894 ENTRY RAMP | SHEET 881 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 68

PLOT DATE : 1/9/2026 2:34 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 2




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: EAST 894 ENRTY RAMP | SHEET 882 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 69

PLOT DATE : 1/9/2026 2:35 PM

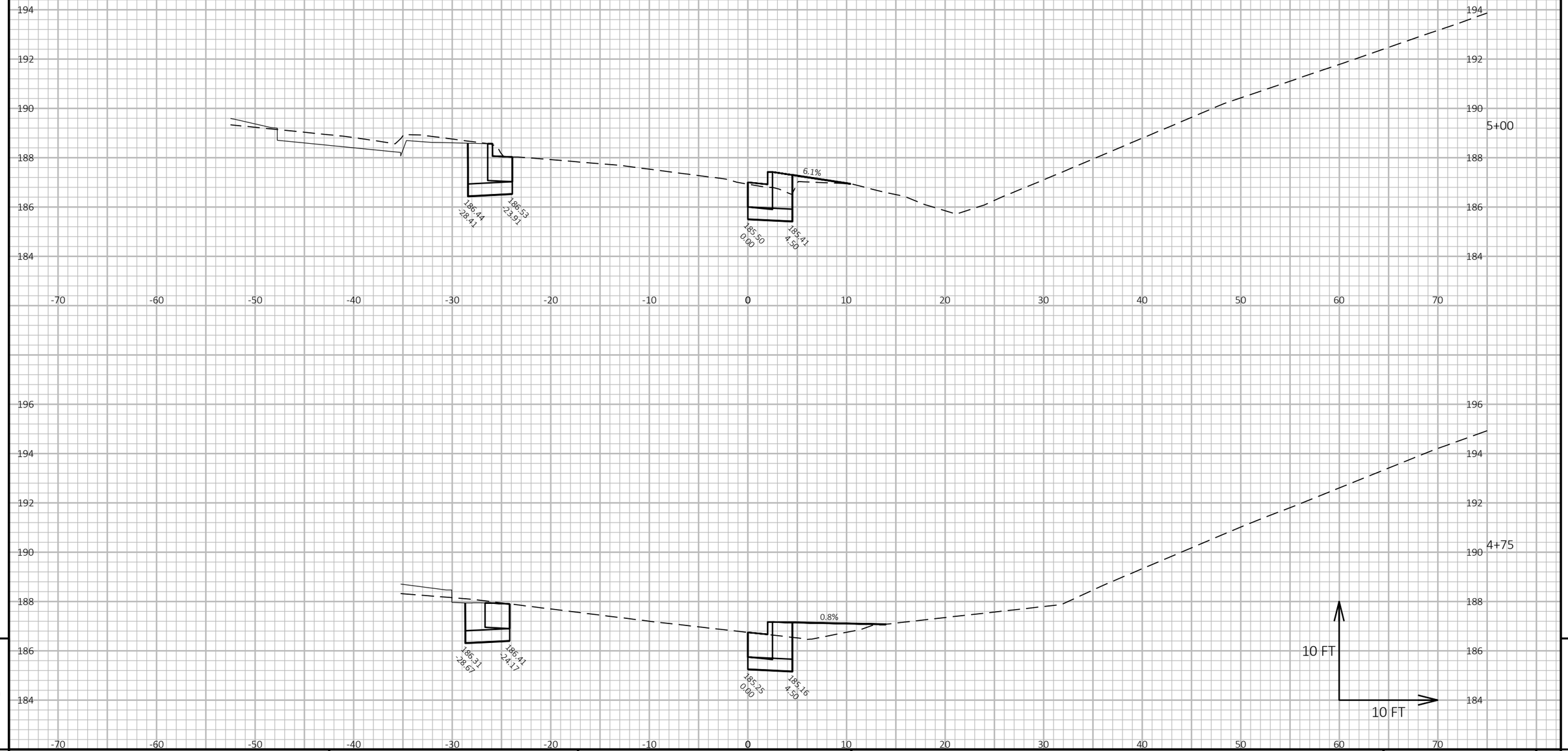
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 2

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: EAST 894 ENRTY RAMP | SHEET 883 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 70

PLOT DATE : 1/9/2026 2:35 PM

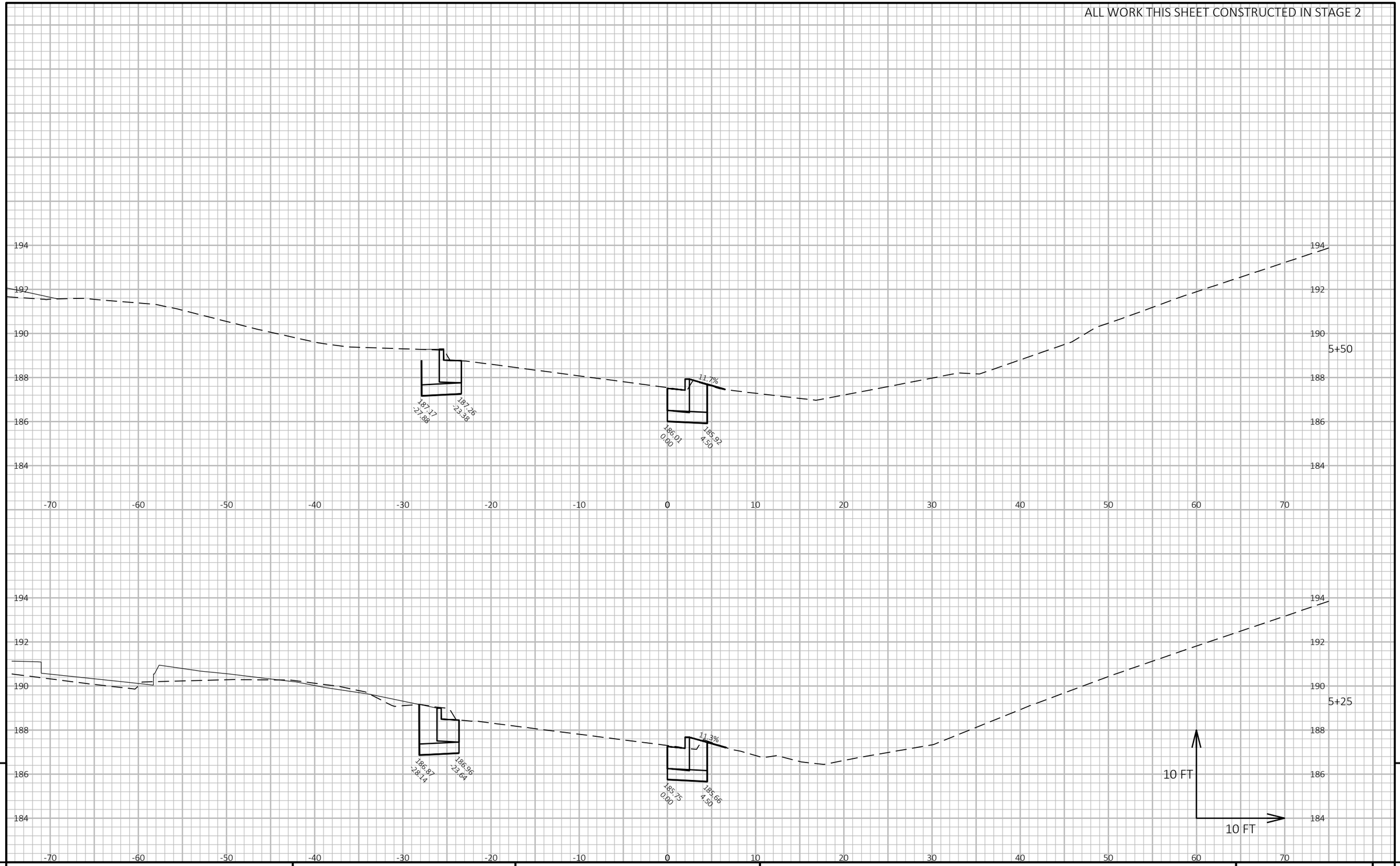
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 2

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: EAST 894 ENRTY RAMP | SHEET 884 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 71

PLOT DATE : 1/9/2026 2:35 PM

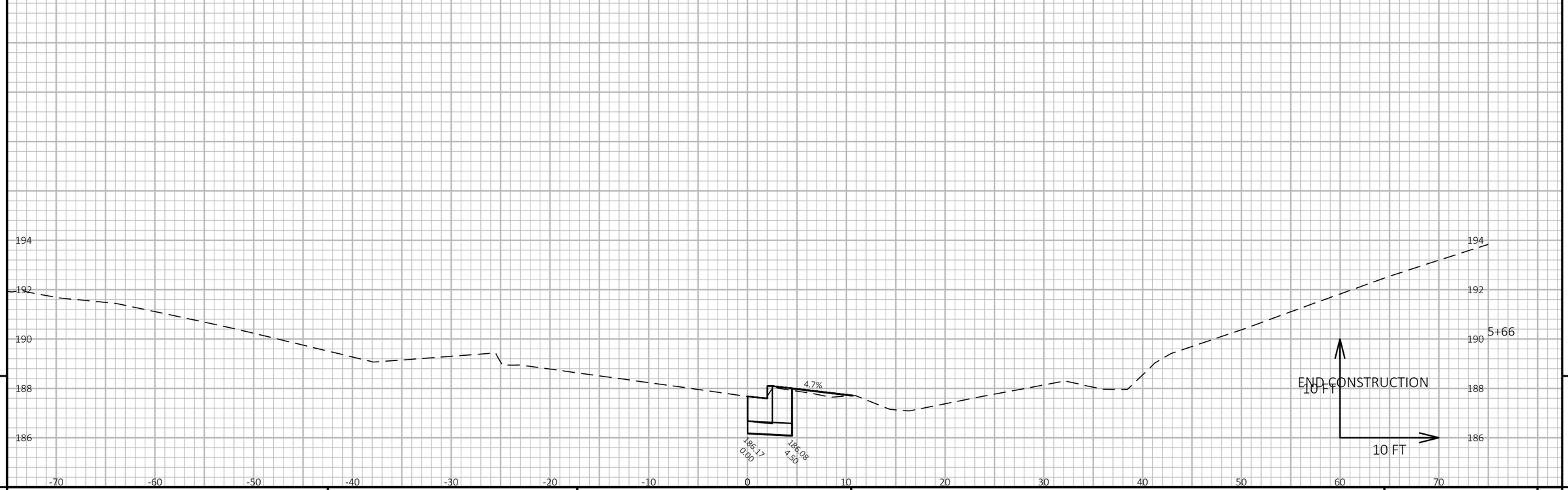
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 2

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: EAST 894 ENRTY RAMP | SHEET 885 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 72

PLOT DATE : 1/9/2026 2:35 PM

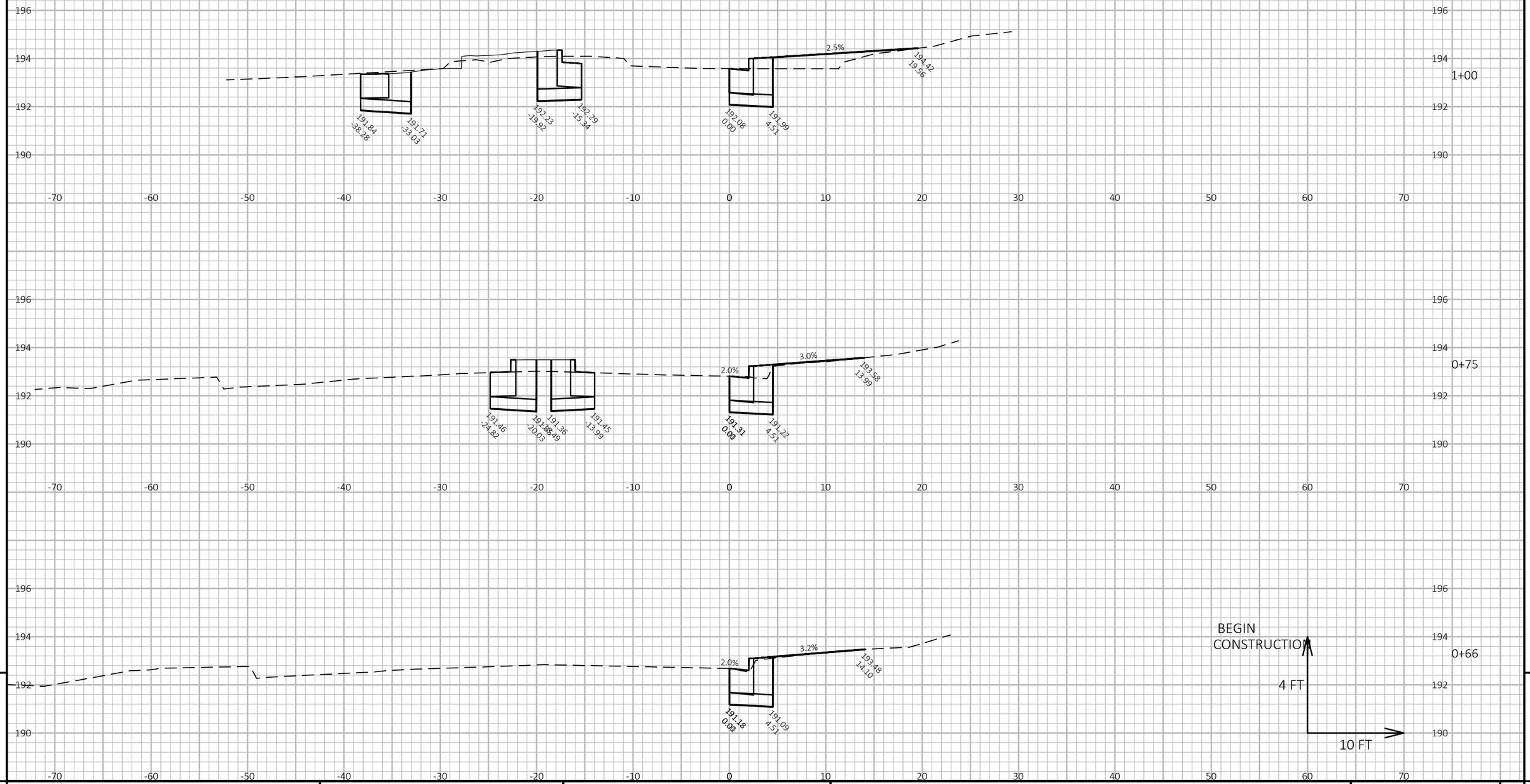
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 2

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|---|---|---|---|---|
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: EAST 894 EXIT RAMP | SHEET 886 E |

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 73

PLOT DATE : 1/9/2026 2:35 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:4 FT VERT.

WISDOT/CADDS SHEET 49

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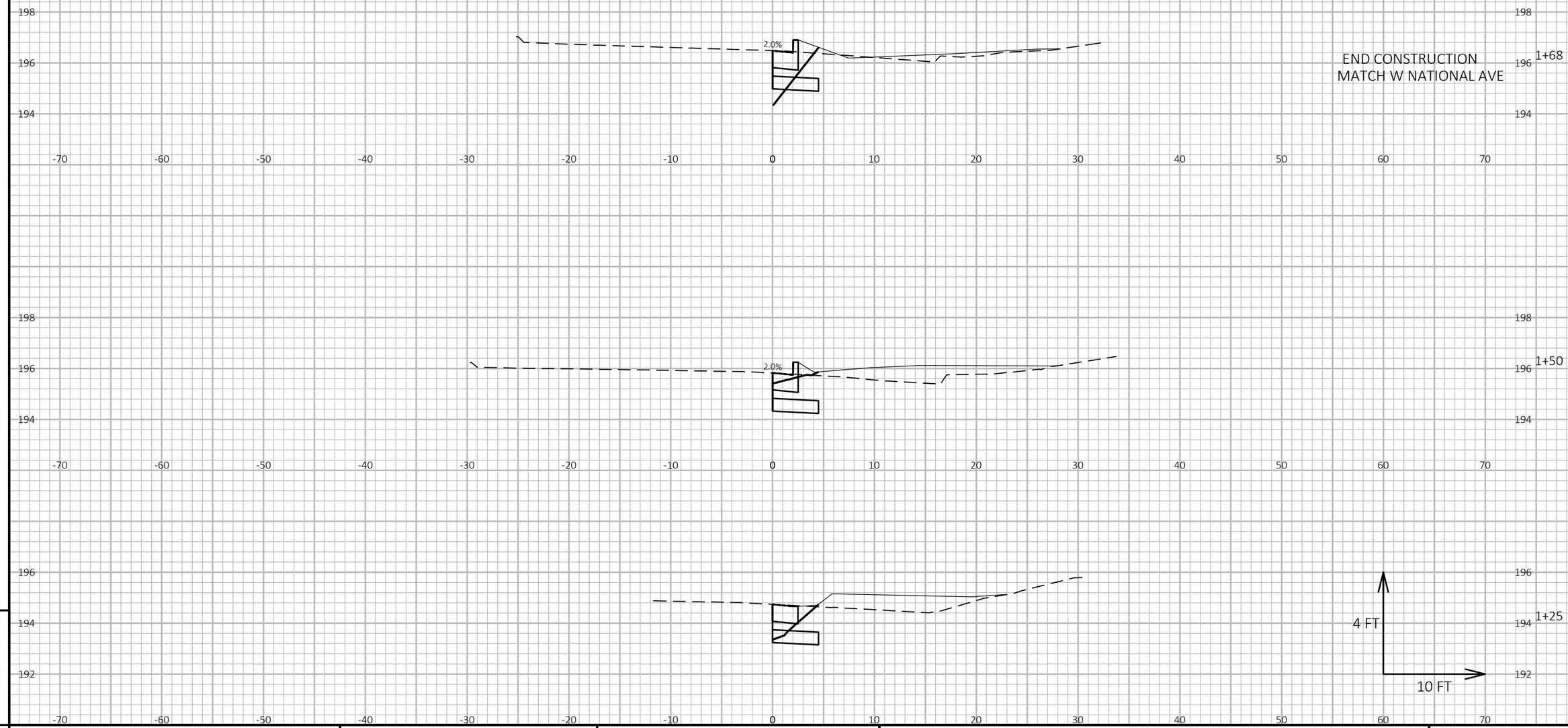
ALL WORK THIS SHEET CONSTRUCTED IN STAGE 2

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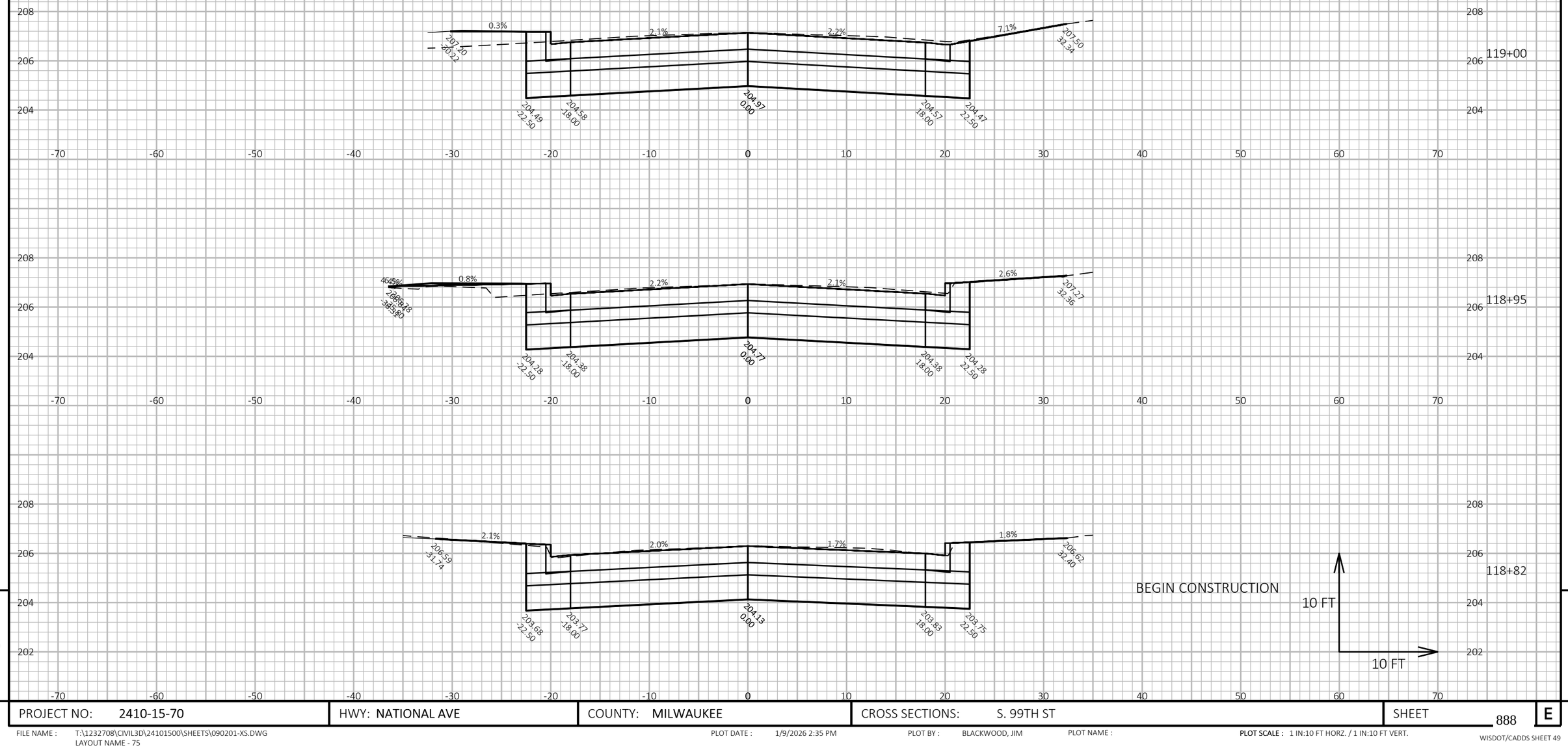
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: EAST 894 EXIT RAMP | SHEET 887 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 74

PLOT DATE : 1/9/2026 2:35 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:4 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 4

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: S. 99TH ST | SHEET 888 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 75

PLOT DATE : 1/9/2026 2:35 PM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 4

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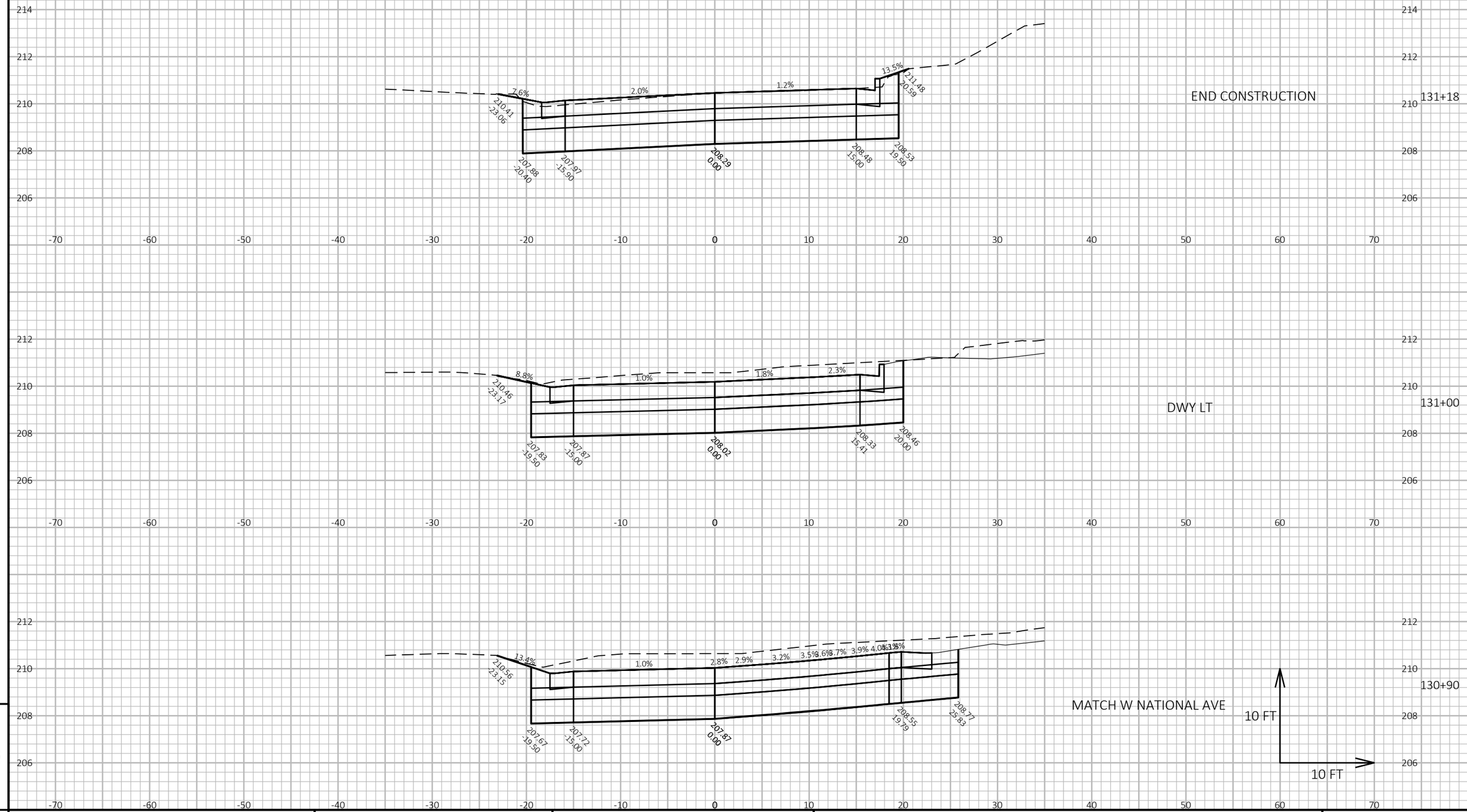
| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: S. 99TH ST | SHEET 889 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 76

PLOT DATE : 1/9/2026 2:36 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 3

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: S. 99TH ST | SHEET 890 | E |
|---|---|---|---|---|---|

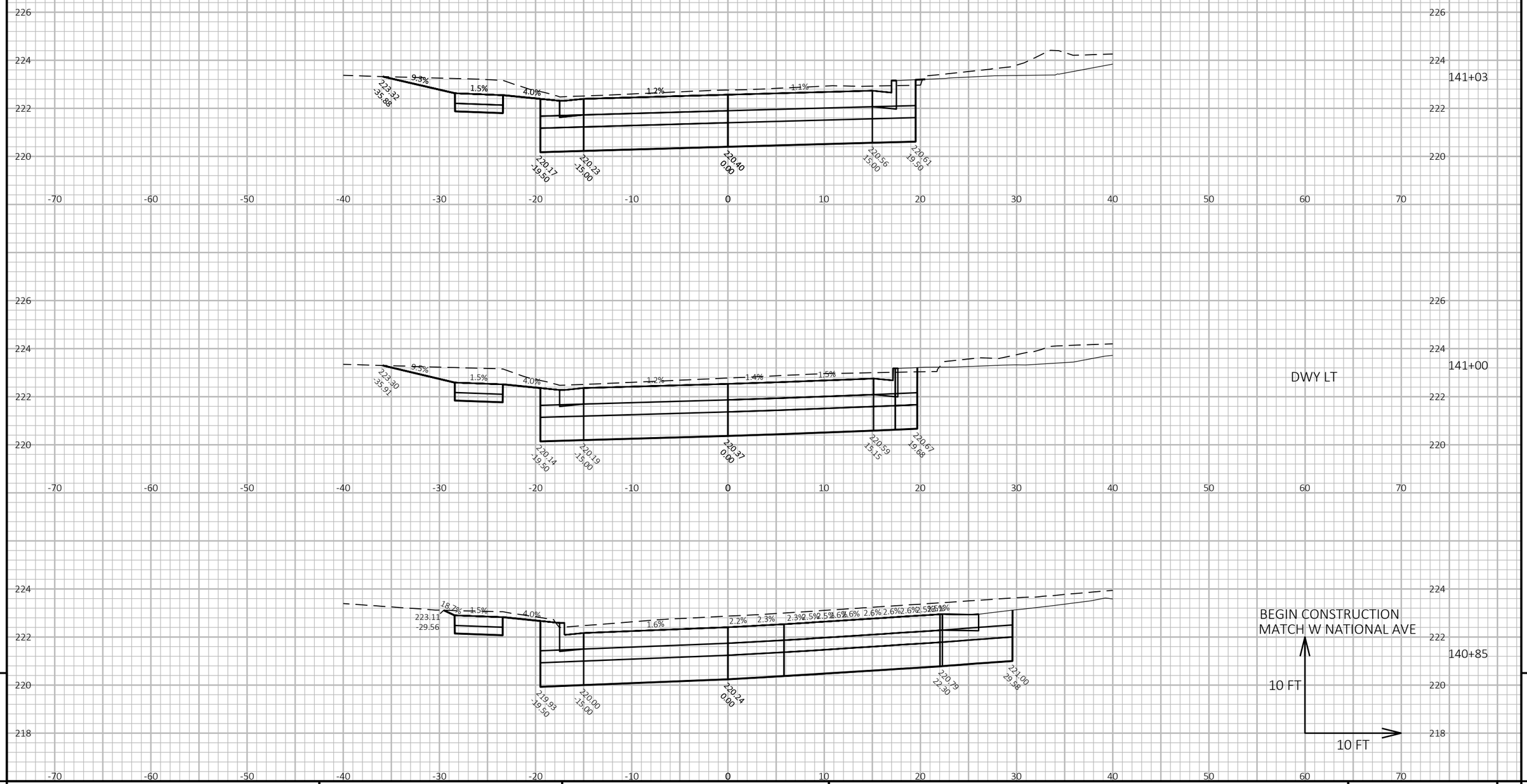

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 77

PLOT DATE : 1/9/2026 2:36 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

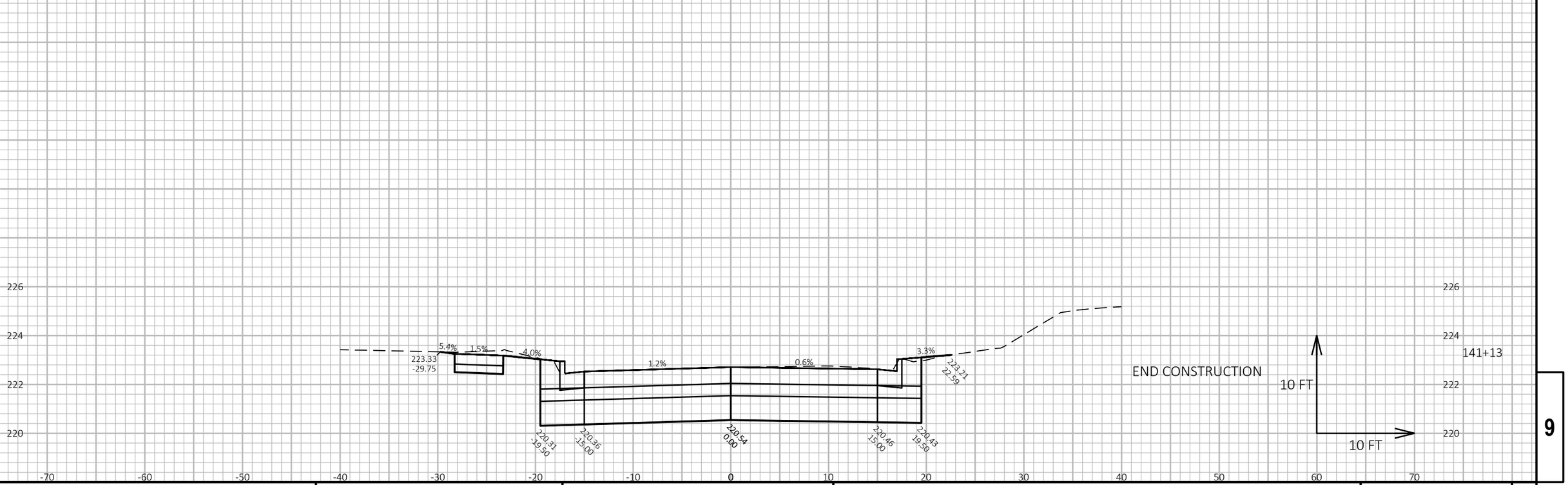
WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 3




| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: S. 98TH ST | SHEET 891 | E |
|---|---|---|---|---|---|

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 3

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: S. 98TH ST | SHEET 892 | E |
|---|---|---|---|---|---|

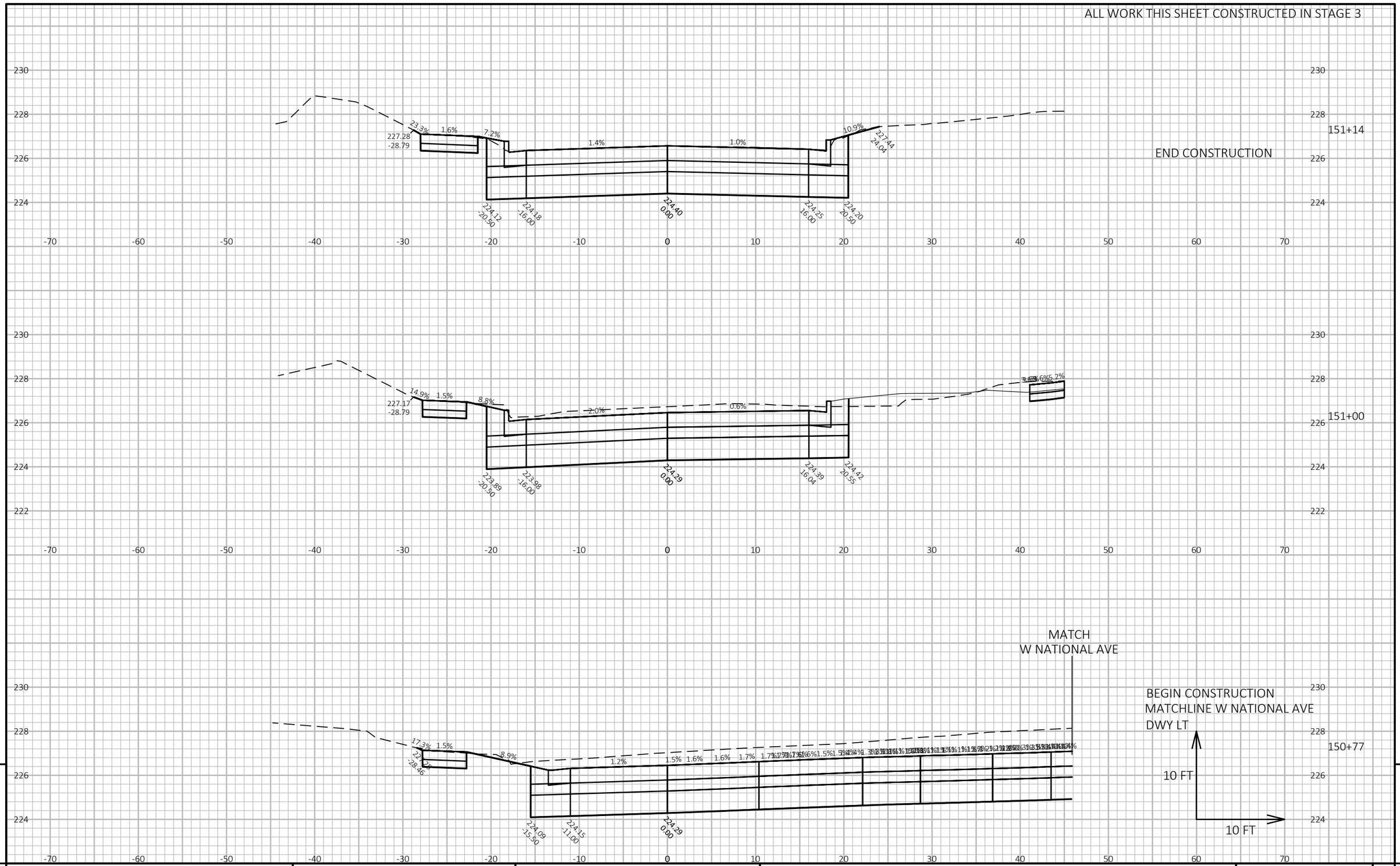
FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 79

PLOT DATE : 1/9/2026 2:36 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK THIS SHEET CONSTRUCTED IN STAGE 3

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| PROJECT NO: 2410-15-70 | HWY: NATIONAL AVE | COUNTY: MILWAUKEE | CROSS SECTIONS: S. 97TH ST | SHEET 893 | E |
|---|---|---|---|---|---|

FILE NAME : T:\1232708\CIVIL3D\24101500\SHEETS\090201-XS.DWG
LAYOUT NAME - 80

PLOT DATE : 1/9/2026 2:36 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

*Wisconsin Department of Transportation*

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov