GRE FEBRUARY 2023

PROJECT ID: 4160-06-71

COUNTY: OUTAGAMIE

29

ORDER OF SHEETS



TOTAL SHEETS = 230


DESIGN DESIGNATION

| | | | |
|---|---|---|---|
| A.A.D.T. | (2023) | = | 24,500 |
| A.A.D.T. | (2043) | = | 30,000 |
| D.H.V. | | = | - |
| D.D. | | = | 0.5 |
| T. | | = | 3.0% |
| DESIGN SPEED | | = | 40 MPH |
| ESALS | | = | 1,570,000 |

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
- 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

# STATE OF WISCONSIN
# DEPARTMENT OF TRANSPORTATION

**PLAN OF PROPOSED IMPROVEMENT**

# V KIMBERLY - CTH N

**S RAILROAD ST INTERSECTION**

## CTH CE

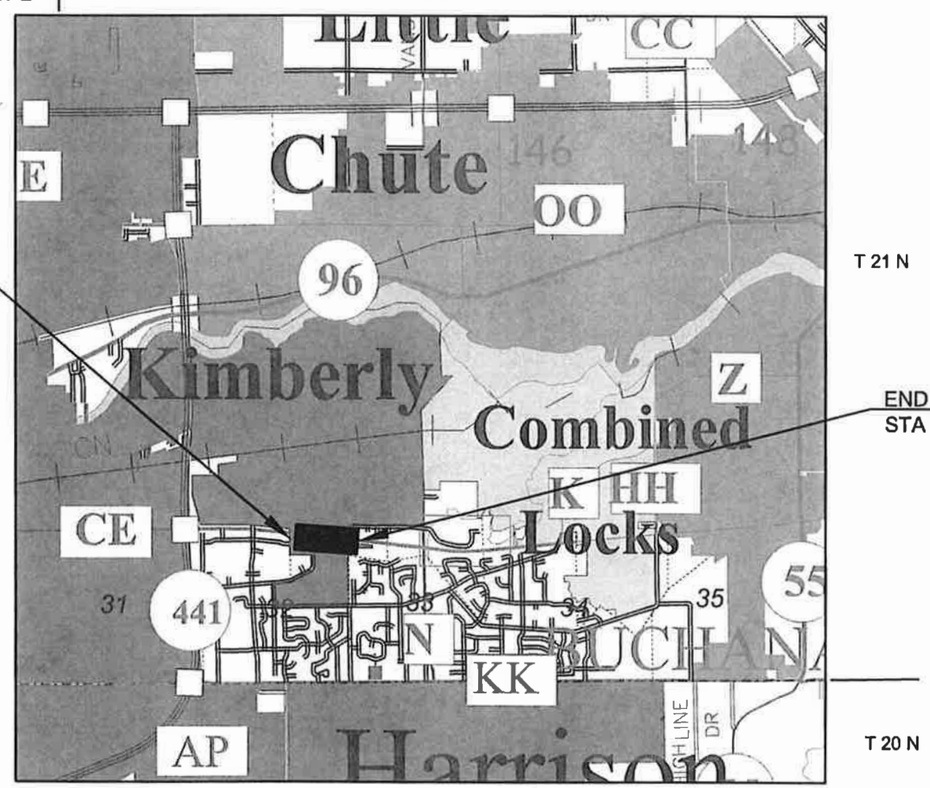
## OUTAGAMIE COUNTY

| COUNTY PROJECT NUMBER |
|---|
| 4160-06-71 |

| STATE PROJECT | FEDERAL PROJECT | |
|---|---|---|
| | PROJECT | CONTRACT |
| 4160-06-71 | WISC 2023231 | 1 |
| | | |
| | | |
| | | |

BEGIN PROJECT
STA 130+60EB
Y=560801.266
X=844375.511

END PROJECT
STA 149+00EB




LAYOUT
SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.348 Miles

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), OUTAGAMIE COUNTY, NAD83 ( 2011 ), 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 NAVD 88 ( 2012 ). GPS DERIVED ELEVATIONS ARE BASED ON GEOID12B.

ACCEPTED FOR OUTAGAMIE COUNTY

10/12/2022
DATE
COUNTY HIGHWAY COMMISSIONER

ORIGINAL PLANS PREPARED BY
AYRES

WISCONSIN
RYAN D. SCHAITEL
44367
GREEN BAY, WI
PROFESSIONAL ENGINEER

10/12/2022
(Date)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

| | |
|---|---|
| Surveyor | AYRES |
| Designer | AYRES |
| Project Manager | JODI JAROSINSKI |
| Regional Supervisor | BRIAN EDWARDS |

APPROVED FOR THE DEPARTMENT
DATE: 10/13/2022
Jodi Jarosinski
(Signature)

E

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\010101_TI.DWG PLOT DATE : 10/12/2022 10:44 AM PLOT BY : SCHAITEL, RYAN PLOT NAME :

## GENERAL NOTES

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

CURB AND GUTTER ELEVATIONS ARE ALONG THE FLANGE LINE UNLESS OTHERWISE NOTED.

RADIUS POINTS, UNLESS OTHERWISE NOTED, ARE TO FACE OF CURB.

BEARINGS SHOWN ON THIS PLAN ARE TRUE BEARINGS.

PROPERTY LINES SHOWN ARE APPROXIMATE.

## UTILITIES

* AMERICAN TRANSMISSION COMPANY — TELEPHONE 262-506-6884
P.O. BOX 47
WAUKESHA, WI 53187-0047
ATTN: MR. CHRIS DAILEY
E-MAIL: tmarciniak@atcllc.com

* AT&T WISCONSIN-DISTRIBUTION — TELEPHONE 920-465-3882
CELL 920-227-3535
3198 S. RIDGE ROAD
GREEN BAY, WI 54304
ATTN: MR. MATT WIRZ
E-MAIL: mw2416@att.com

* SPECTRUM — TELEPHONE 920-831-9249
3545 E. DESTINATION DRIVE
APPLETON, WI 54915
ATTN: MR. VINCE ALBIN
E-MAIL: vince.albin@charter.com

* TDS — TELEPHONE 608-845-2219
171 PAOLI STREET
VERONA, WI 53593
ATTN: MR. JEFF OLSON
E-MAIL: jeffrey.olson@tdstelecom.com

* VILLAGE OF KIMBERLY-WATER & SANITARY — TELEPHONE 920-788-7500
515 W. KIMBERLY AVENUE
KIMBERLY, WI 54136
ATTN: MR. JERRY VERSTEGEN
E-MAIL: water@vokimberly.org

* WE ENERGIES-ELECTRIC — TELEPHONE 920-380-3450
CELL 920-450-5648
800 S. LYNDALE DRIVE
APPLETON, WI 54914
ATTN: MR. SHANE BRUHNKE
E-MAIL: shane.bruhnke@we-energies.com

* WE ENERGIES-GAS — TELEPHONE 920-380-3240
800 S. LYNDALE DRIVE
APPLETON, WI 54914
ATTN: MR. EDDIE HEDLUND
E-MAIL: eddie.hedlund@we-energies.com

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

## 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-<br>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= 2.86 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.76 ACRES
SOIL GROUP D

## STANDARD ABBREVIATIONS

| | | | |
|---|---|---|---|
| ADT | AVERAGE DAILY TRAFFIC | NC | NORMAL CROWN |
| AC | ASPHALT CEMENT | PT | POINT OF TANGENCY |
| AGG | AGGREGATE | PC | POINT OF CURVATURE |
| ASPH | ASPHALT | PI | POINT OF INTERSECTION |
| BM | BENCH MARK | PE | PRIVATE ENTRANCE |
| C/L | CENTERLINE | R | RADIUS |
| CONC | CONCRETE | REM | REMOVE |
| CMP | CORRUGATED METAL PIPE | R/L OR RL | REFERENCE LINE |
| CR. | CREEK | RCCP | REINFORCED CONCRETE CULVERT PIPE |
| D | DEGREE OF CURVE | RCPSS | REINFORCED CONCRETE PIPE STORM SEWER |
| DHV | DESIGN HOUR VOLUME | R.O. | RUNOUT |
| ESALS | EQUIVALENT SINGLE AXIS LOADS | R/W | RIGHT-OF-WAY |
| EXIST | EXISTING | STA | STATION |
| FE | FIELD ENTRANCE | SE | SUPER ELEVATION |
| HYD | HYDRANT | SS | STORM SEWER |
| IP | IRON PIPE OR PIN | T | TANGENT |
| L | LENGTH OF CURVE | TEL | TELEPHONE |
| LC | LONG CHORD OF CURVE | TLE | TEMPORARY LIMITED EASEMENT |
| LR | LENGTH OF RUNOFF | T | TRUCKS |
| MH | MANHOLE | VC | VERTICAL CURVE |
| | | W | WELL |

## OUTAGAMIE COUNTY HIGHWAY COMMISSIONER

OUTAGAMIE COUNTY HIGHWAY DEPT — TELEPHONE 920-209-9807
CELL 920-832-5673
1313 HOLLAND ROAD
APPLETON, WI 54911
ATTN: MR. JOE ZELLMER

## DESIGN CONTACT

AYRES — TELEPHONE 920-327-7840
3376 PACKERLAND DRIVE
DE PERE, WI 54115-9586
ATTN: MR. RYAN SCHAITEL
E-MAIL: schaitelr@ayresassociates.com

## DEPARTMENT OF NATURAL RESOURCES

WDNR — TELEPHONE 920-366-1544
2984 SHAWANO AVENUE
P.O. BOX 10448
GREEN BAY, WISCONSIN 54313
ATTN: MATT SCHAEVE
E-MAIL: matthew.schaeve@wisconsin.gov

2

N

EISENHOWER DRIVE

TRUMAN STREET

RAILROAD STREET

CONSTRUCTION LIMITS
STA. 11+52.8RR

CE TRAIL

130EB

CTH CE

135EB

140EB

145EB

150EB

BEGIN PROJECT
STA. 130+60EB
Y = 560801.266
X = 844375.511

VAN ROY ROAD

CONSTRUCTION LIMITS
STA. 7+67.5RR

BETTER WAY

RAILROAD STREET

END PROJECT
STA. 149+00EB
Y = 560572.857
X = 846201.262

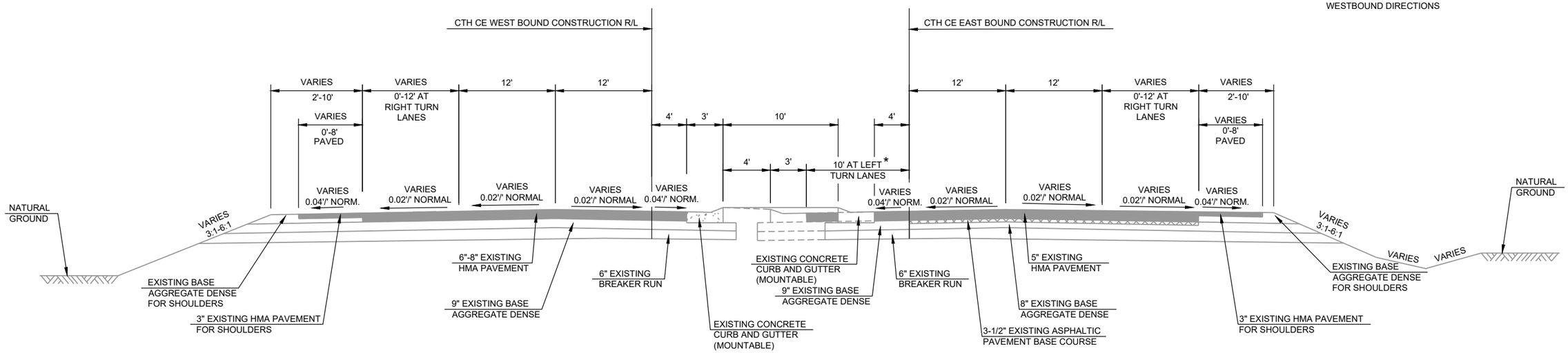
EISENHOWER DRIVE

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PLAN OVERVIEW | SHEET 3 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\020201_PO.DWG
LAYOUT NAME - 020201_po
PLOT DATE : 10/31/2022 8:04 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1:250
WISDOT/CADDS SHEET 42

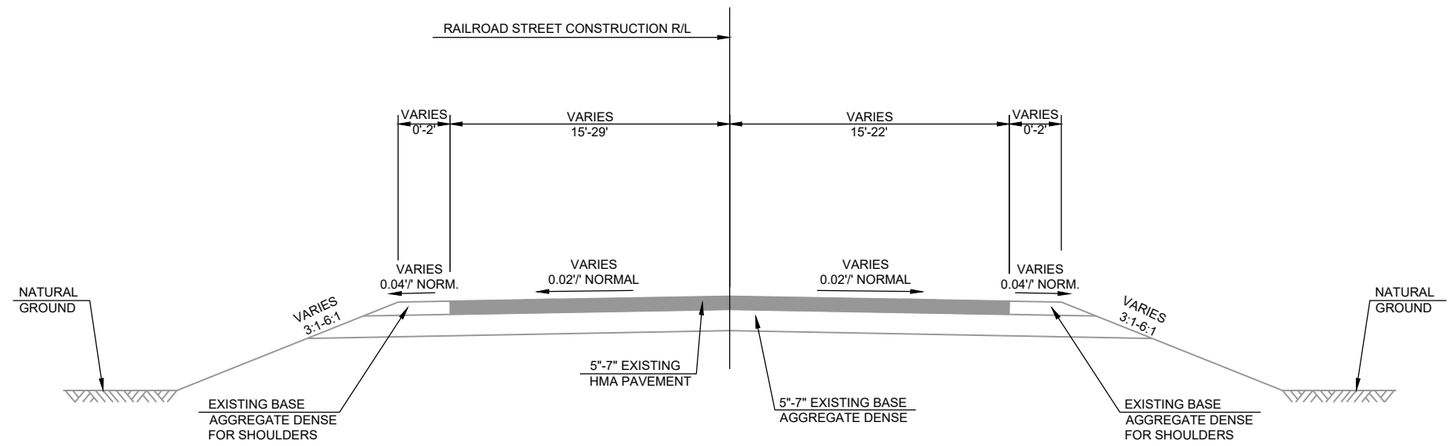
2

* LEFT TURN LANES FOR BOTH EASTBOUND AND WESTBOUND DIRECTIONS




## EXISTING TYPICAL SECTION FOR CTH CE

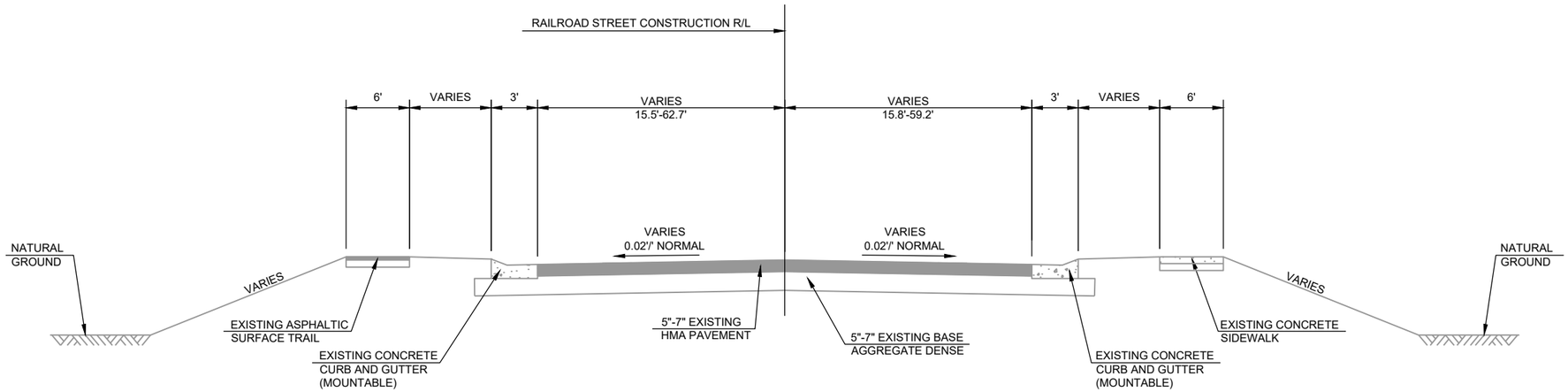
STA. 130+60EB - STA.149+00EB




## EXISTING TYPICAL SECTION FOR RAILROAD STREET

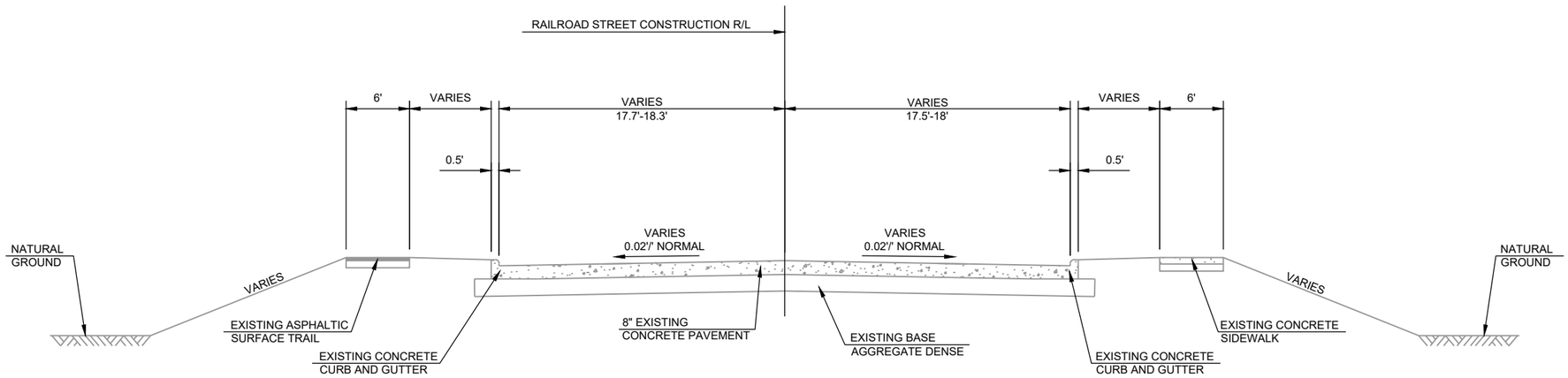
STA. 7+67.5RR - STA.9+51.5RR

2



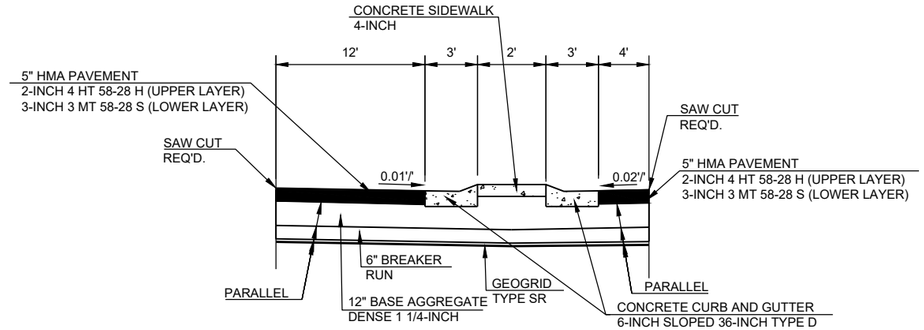

## EXISTING TYPICAL SECTION FOR RAILROAD STREET

STA. 10+28.7RR - STA. 11+19.8RR

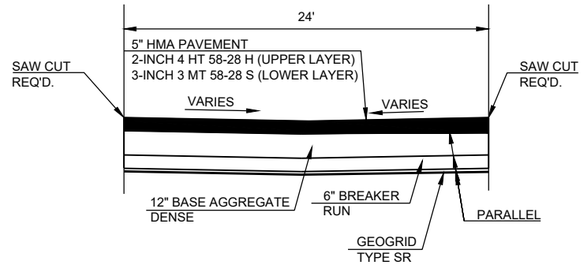



## EXISTING TYPICAL SECTION FOR RAILROAD STREET

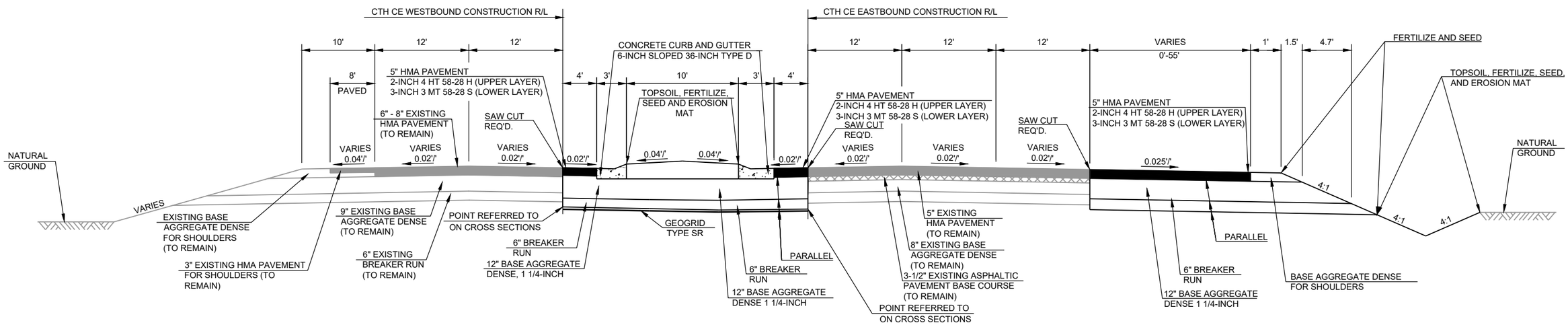
STA. 11+19.8RR - STA. 11+52.8RR




STA. 131+44.2EB - STA. 132+55.0EB




STA. 130+96.4EB - STA. 131+44.2EB

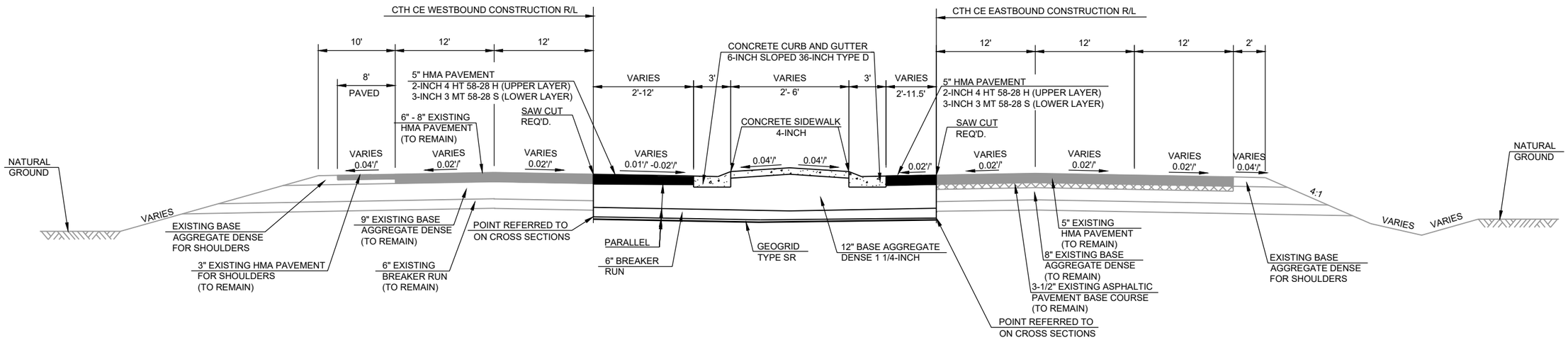



STA. 130+60.0EB - STA. 130+96.4EB

## FINISHED TYPICAL SECTION FOR CTH CE

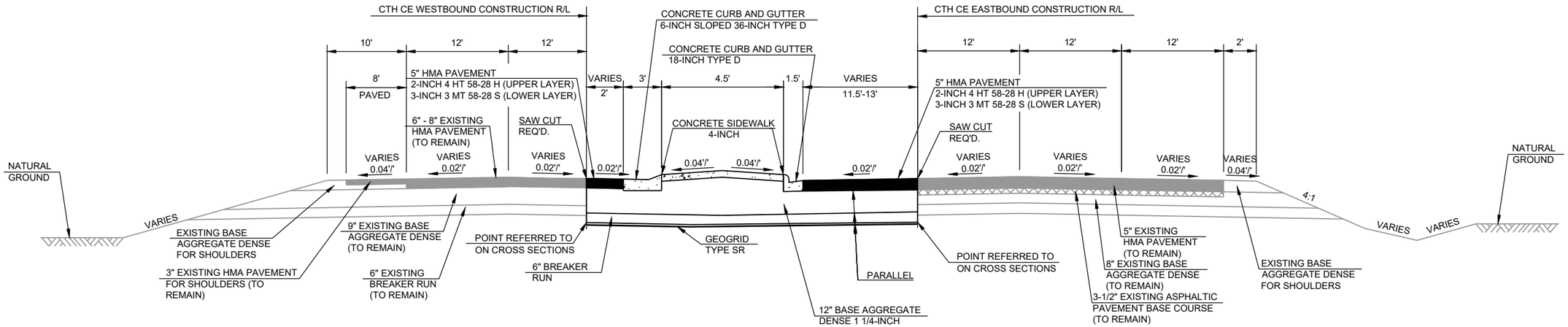
STA. 130+60EB -132+55EB

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | TYPICAL SECTIONS | SHEET 6 | E |
|---|---|---|---|---|---|




## FINISHED TYPICAL SECTION FOR CTH CE

STA. 132+55.0EB -135+64.5EB

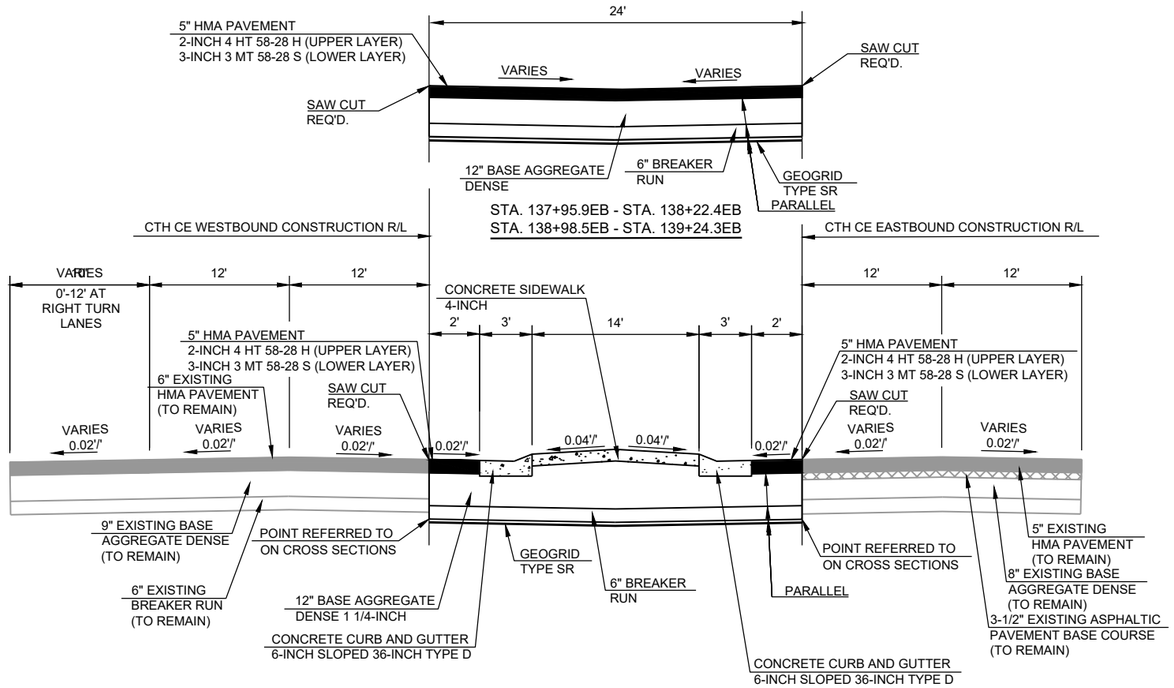



## FINISHED TYPICAL SECTION FOR CTH CE

STA. 135+64.5EB -137+95.9EB

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | TYPICAL SECTIONS | SHEET 7 | E |
|---|---|---|---|---|---|

2

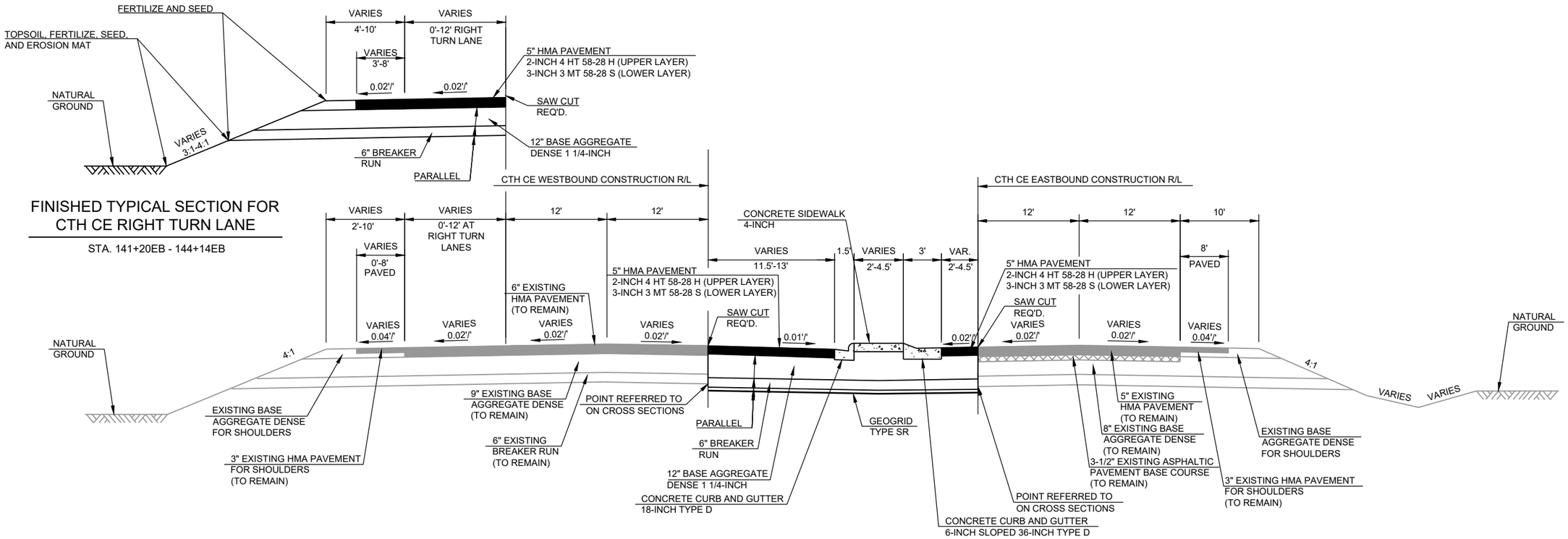



## FINISHED TYPICAL SECTION FOR CTH CE

STA. 137+95.9EB - 139+24.3EB

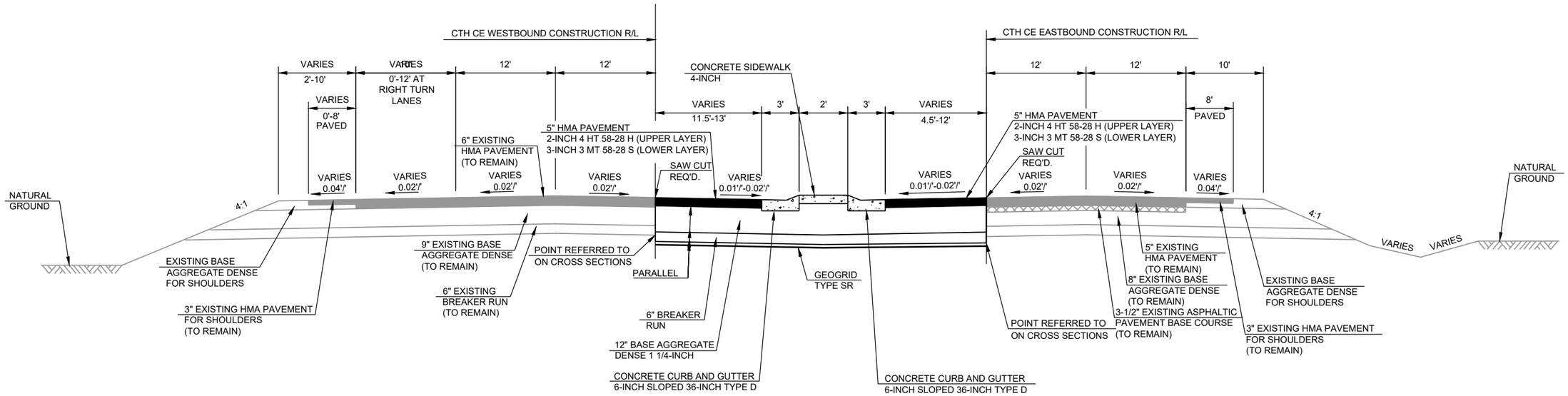
| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | TYPICAL SECTIONS | SHEET 8 | E |
|---|---|---|---|---|---|

2




## FINISHED TYPICAL SECTION FOR CTH CE RIGHT TURN LANE

STA. 141+20EB - 144+14EB




## FINISHED TYPICAL SECTION FOR CTH CE

STA. 139+24.3EB - 143+41.6EB

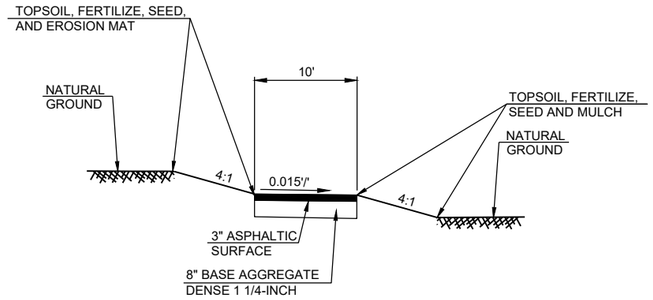



## FINISHED TYPICAL SECTION FOR CTH CE

STA. 143+41.6EB - 146+91.3EB

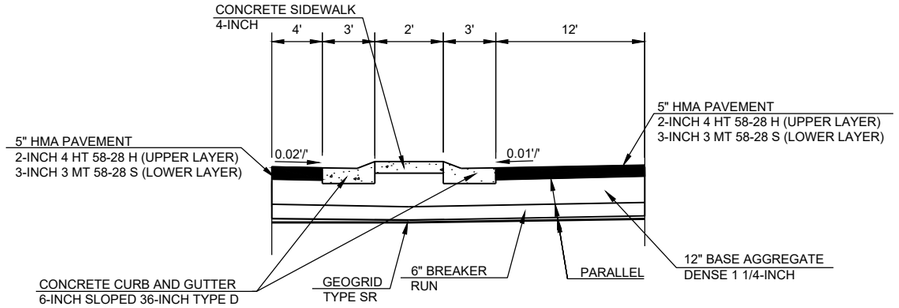
| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | TYPICAL SECTIONS | SHEET 9 | E |
|---|---|---|---|---|---|

2

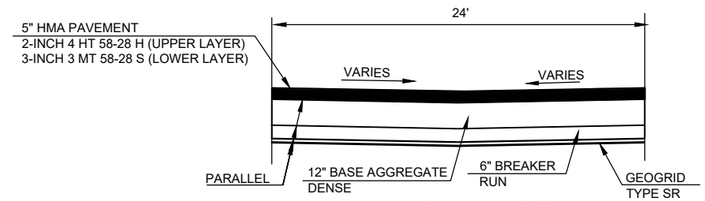



FINISHED TYPICAL SECTION FOR TRAIL

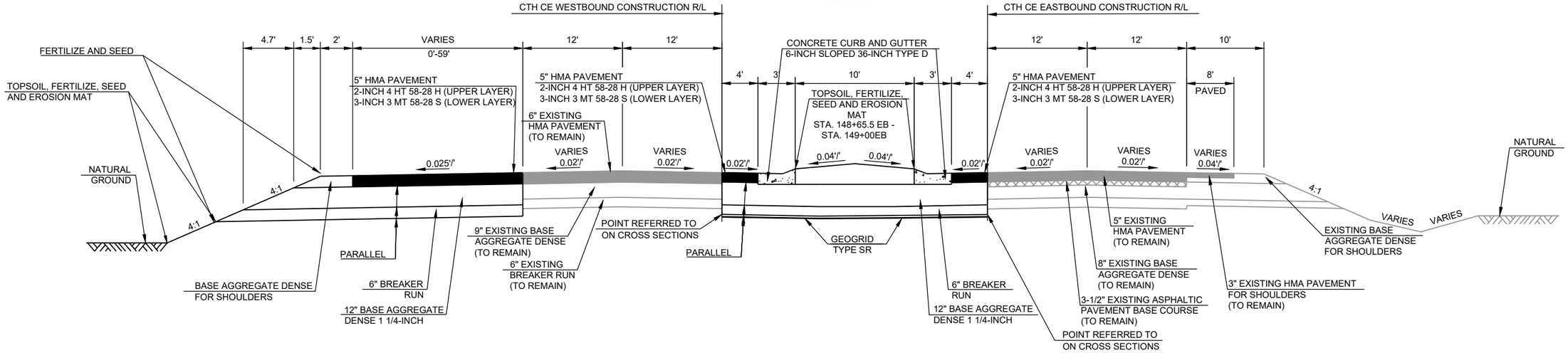
STA. 146+54.5EB - STA. 149+99.6EB




STA. 146+91.3EB - STA. 148+14.9EB




STA. 148+14.9EB - STA. 148+65.5EB



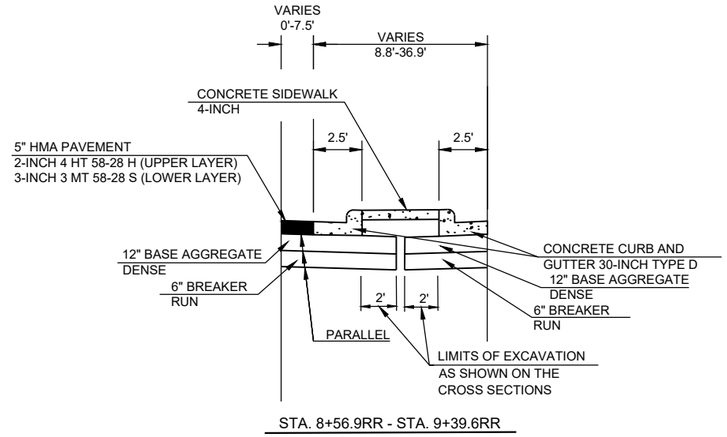

STA. 148+65.5EB - STA. 149+00.0EB

FINISHED TYPICAL SECTION FOR CTH CE

STA. 146+91.3EB - STA. 149+00.0EB

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | TYPICAL SECTIONS | SHEET 10 | E |
|---|---|---|---|---|---|

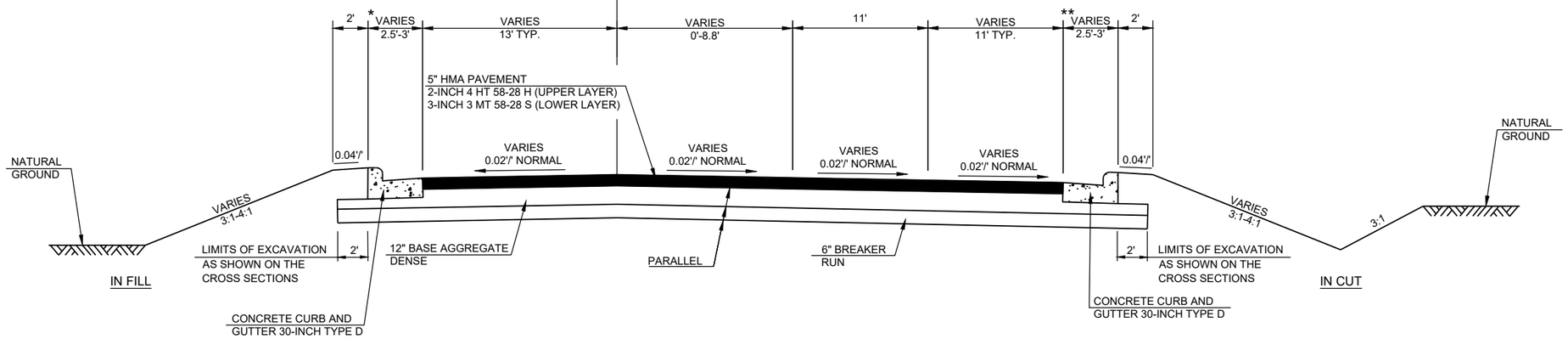
2




STA. 8+56.9RR - STA. 9+39.6RR

* TRANSITION TO CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D AT STA. 9+02.5RR (REFER TO CONSTRUCTION DETAIL)

** TRANSITION TO CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D AT STA. 8+67.7RR (REFER TO CONSTRUCTION DETAIL)

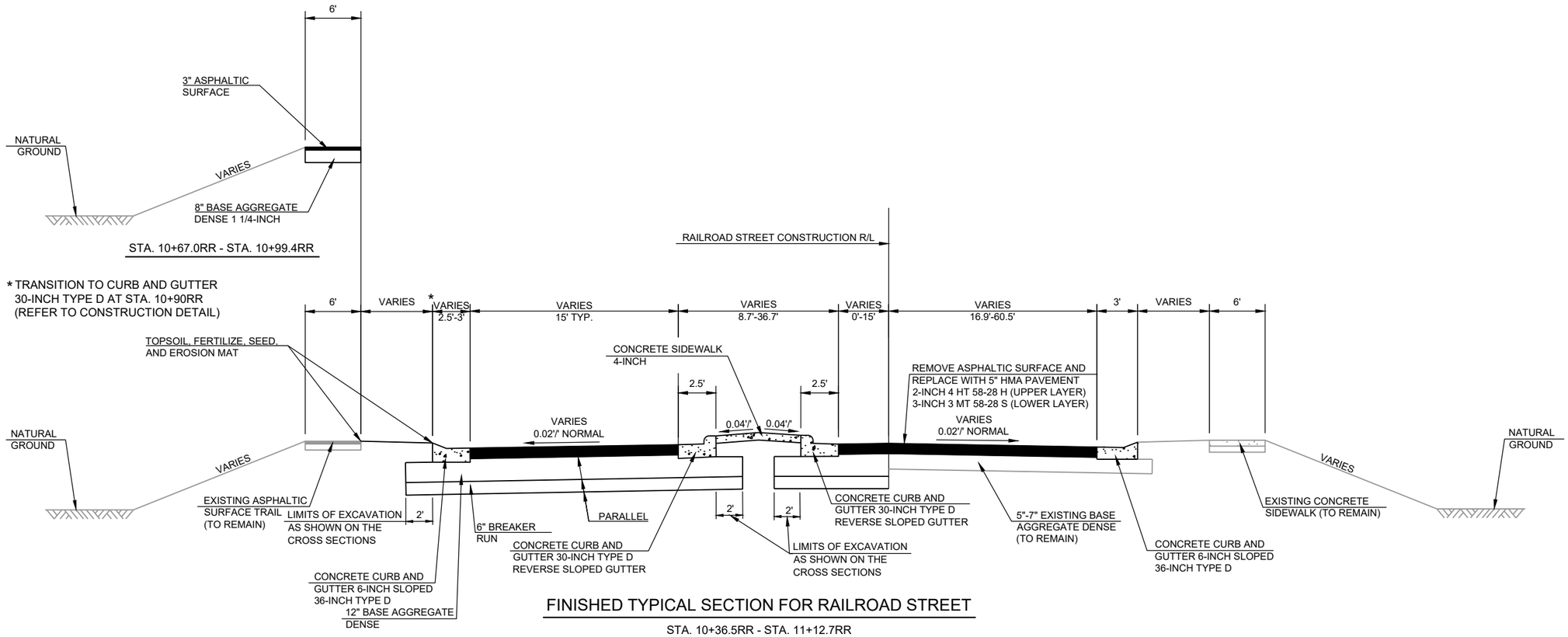



## FINISHED TYPICAL SECTION FOR RAILROAD STREET

STA. 7+67.5RR - STA. 9+39.5RR

NOTE: FOR CURB AND GUTTER AT PROJECT MATCH ALONG EAST SIDE OF RAILROAD, TRANSITION FROM CONCRETE CURB REVERSE SLOPE TO STANDARD SLOPED CONCRETE CURB AND GUTTER OVER 10'.

2



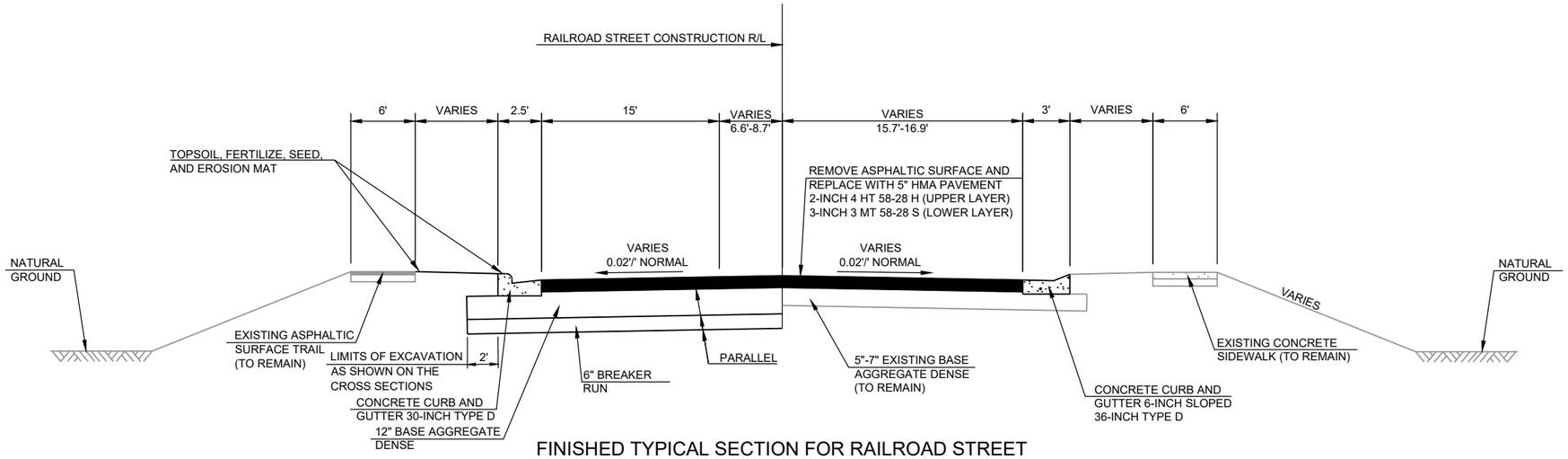

STA. 10+67.0RR - STA. 10+99.4RR

* TRANSITION TO CURB AND GUTTER 30-INCH TYPE D AT STA. 10+90RR (REFER TO CONSTRUCTION DETAIL)




## FINISHED TYPICAL SECTION FOR RAILROAD STREET

STA. 10+36.5RR - STA. 11+12.7RR

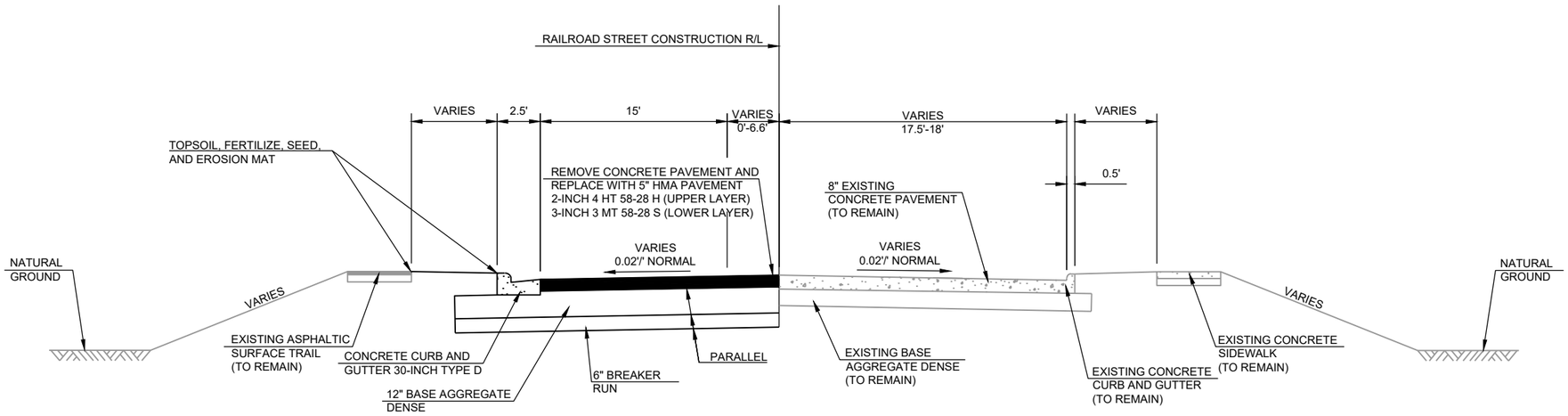



## FINISHED TYPICAL SECTION FOR RAILROAD STREET

STA. 11+12.7RR - STA. 11+19.8RR

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | TYPICAL SECTIONS | SHEET 12 | E |
|---|---|---|---|---|---|

2

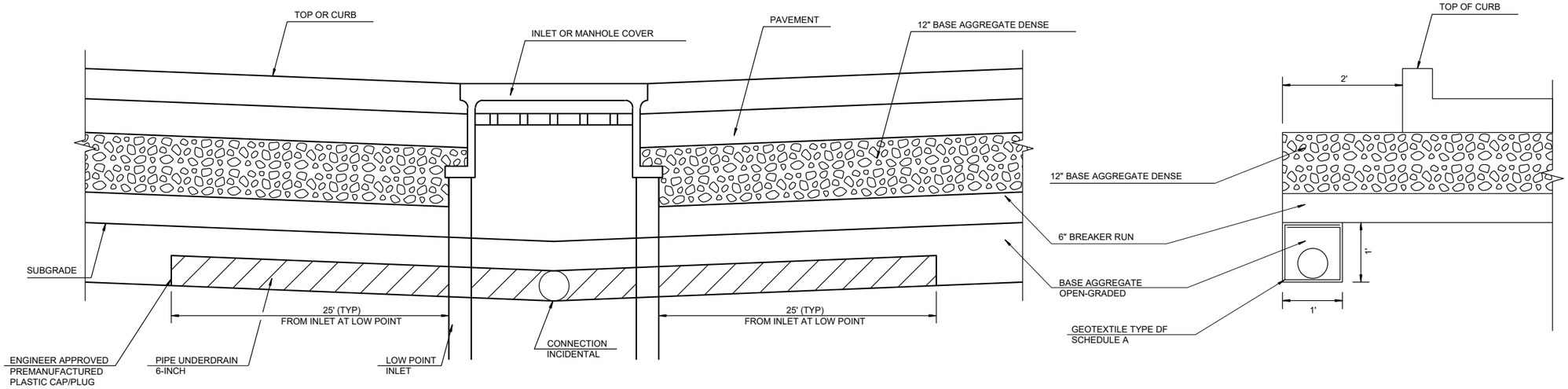



## FINISHED TYPICAL SECTION FOR RAILROAD STREET

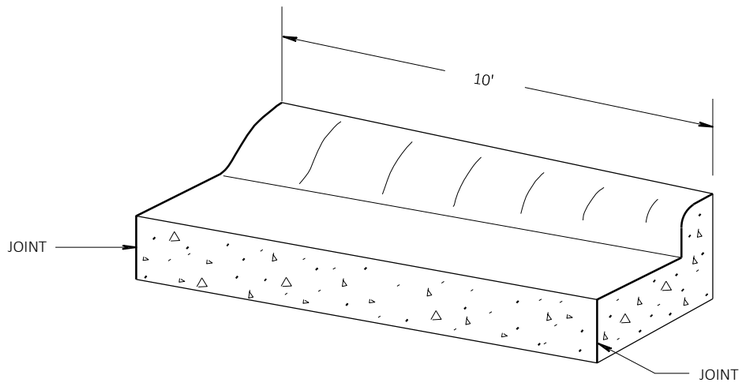
STA. 11+19.8RR - STA. 11+52.8RR

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | TYPICAL SECTIONS | SHEET 13 | E |
|---|---|---|---|---|---|

2

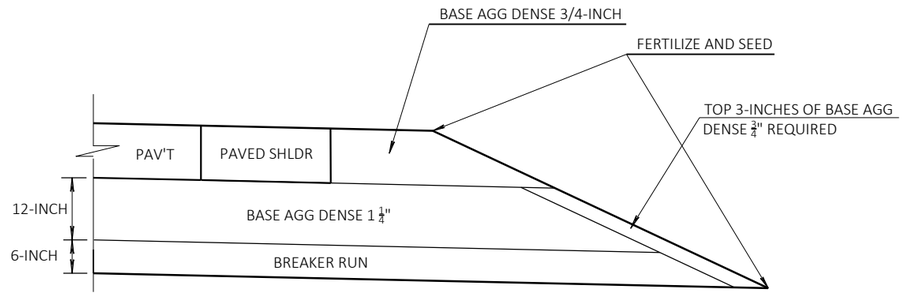



PIPE UNDERDRAIN DETAIL




TRANSITION DETAIL

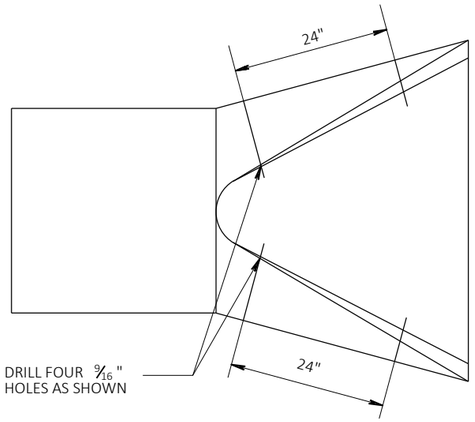
36" TYPE "D" CURB & GUTTER TO 18" OR 30" TYPE "D" CURB & GUTTER
(TO BE MEASURED & PAID FOR AS 36" CONC. C&G)

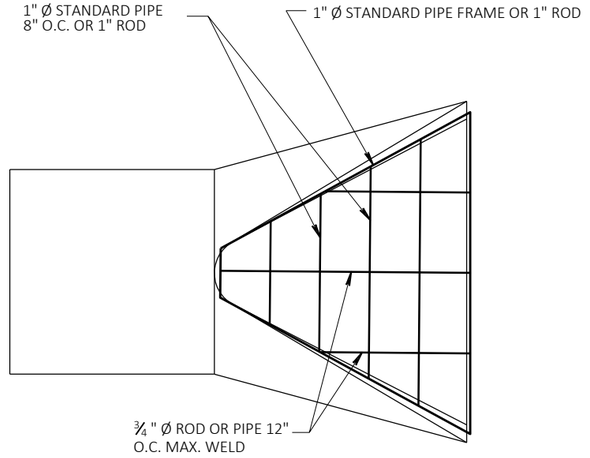



BASE AGGREGATE DENSE 3/4-INCH FOR SHOULDERS

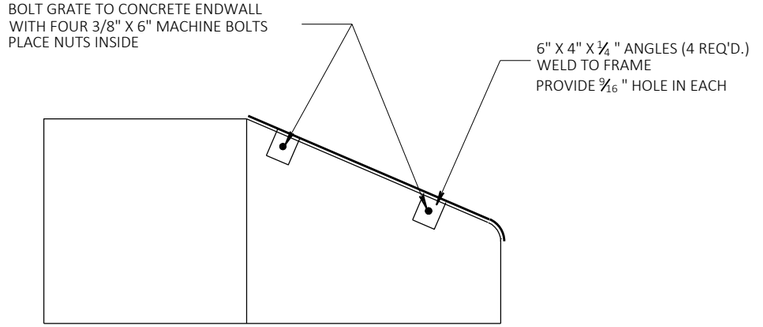
| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | CONSTRUCTION DETAILS | SHEET 14 | E |
|---|---|---|---|---|---|

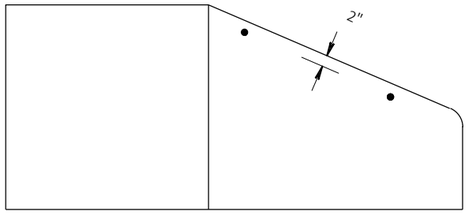
2

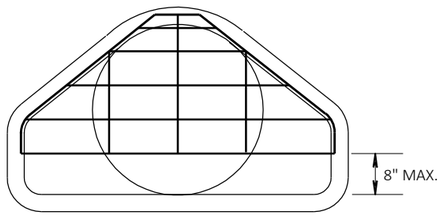



AT EACH PIPE

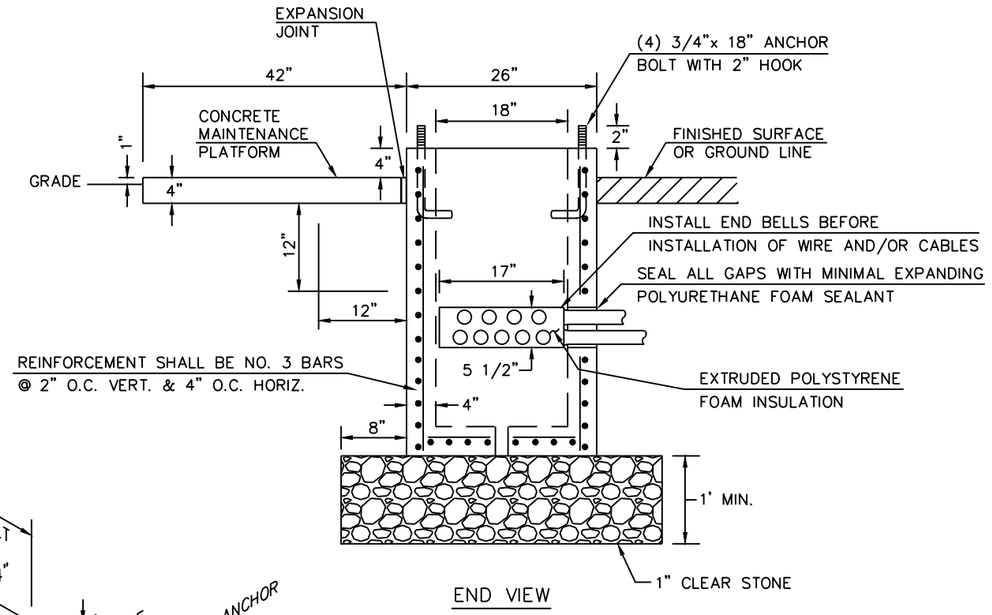


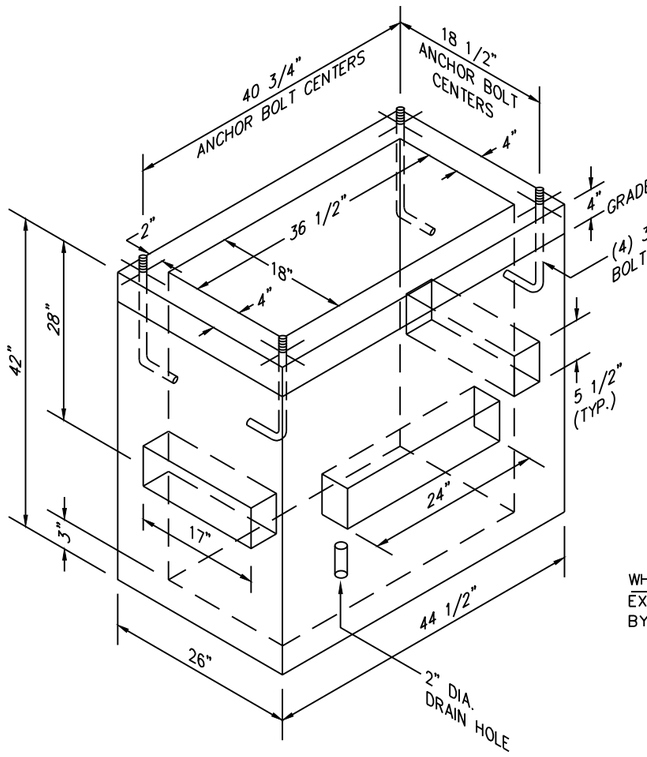




PIPE GRATE DETAIL

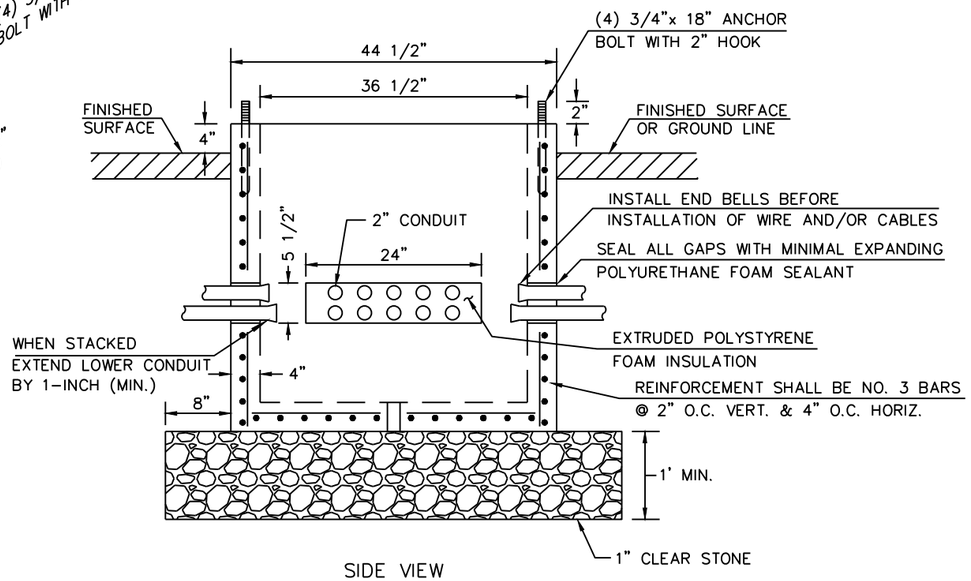
(SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS)




END VIEW




ISOMETRIC VIEW




SIDE VIEW

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

CONDUITS SHALL EXTEND BEYOND FACE OF CONCRETE WALL 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 AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

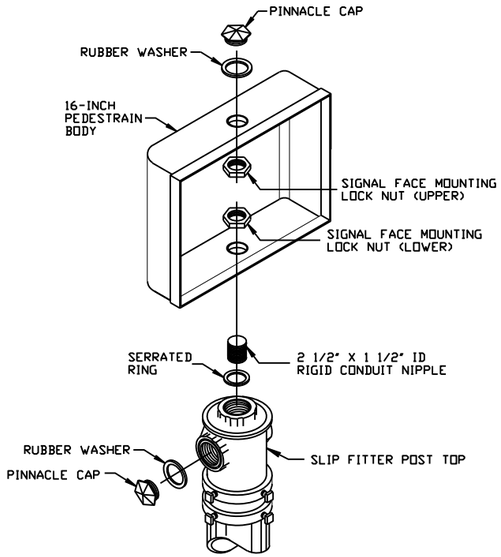
PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE CONCRETE BASE WALLS SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

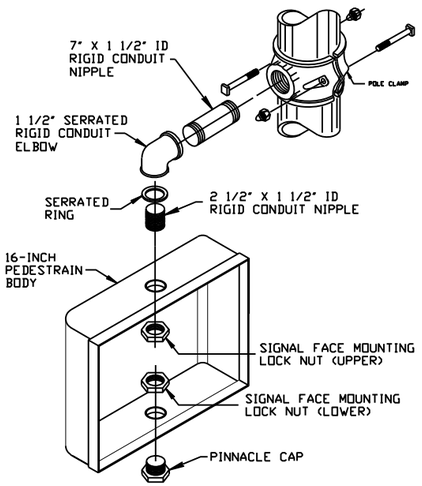
A TWO-INCH DIAMETER DRAIN HOLE IS REQUIRED AT THE BOTTOM OF THE BASE.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE WALL OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

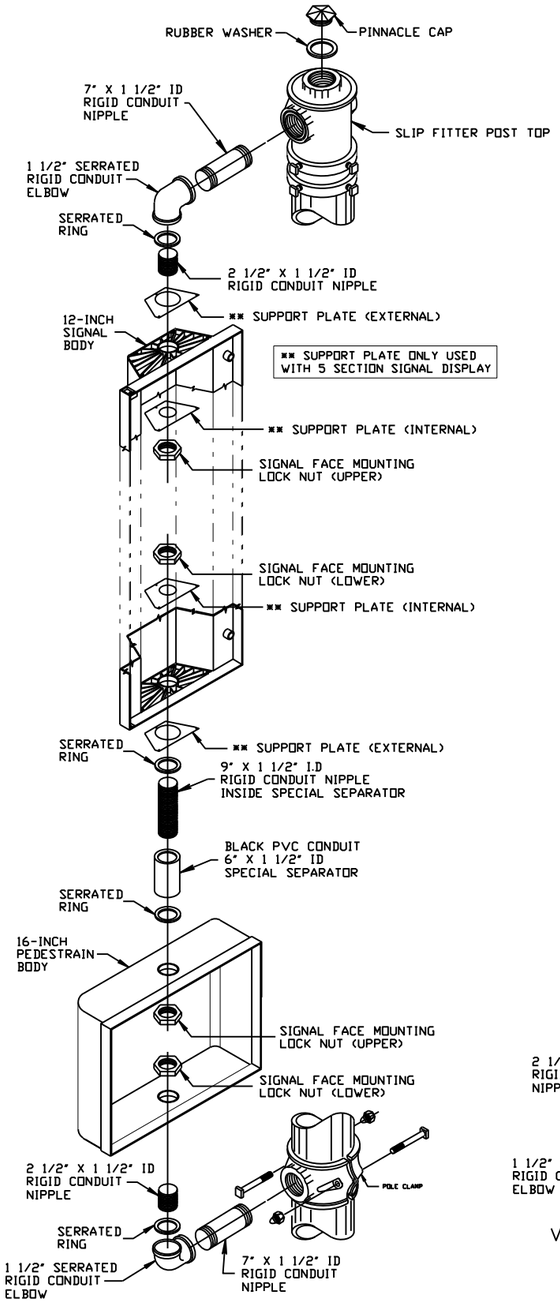
# CONCRETE CONTROL CABINET BASEMENT PRECAST




PEDESTRIAN DISPLAY MOUNTING DETAIL (POST TOP)




PEDESTRIAN DISPLAY MOUNTING DETAIL (POLE CLAMP)




VEHICLE DISPLAY WITH INLINE PEDESTRIAN DISPLAY MOUNTING DETAIL

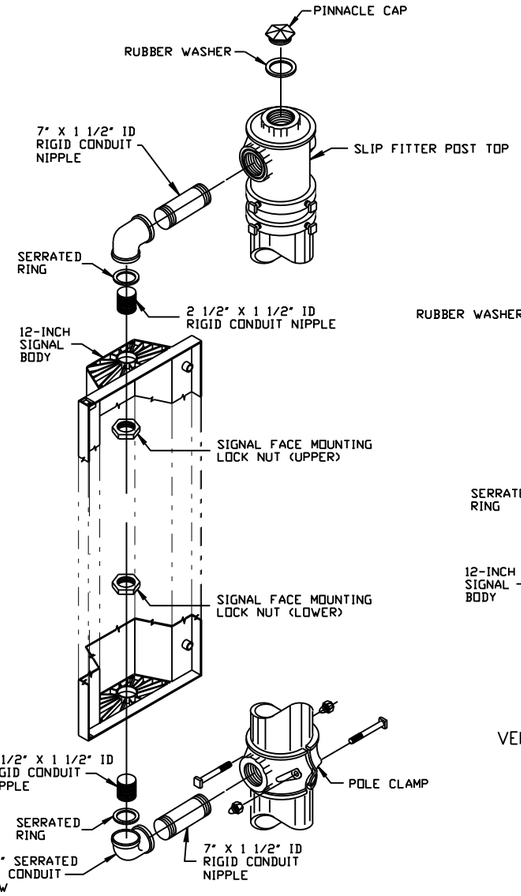
## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

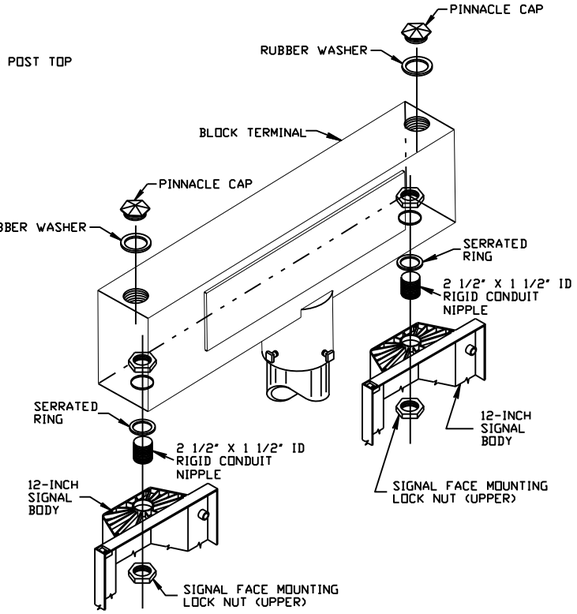
ORNAMENTAL MOUNTING HARDWARE WILL BE FURNISHED BY OTHERS AND PROVIDED TO THE CONTRACTOR.

SEE SEPARATE DETAIL FOR COMPLETE TYPE 1 SIGNAL ASSEMBLIES.

THE SIZE, NUMBER AND ORIENTATION OF TRAFFIC SIGNAL DISPLAYS SHALL BE AS SHOWN ON THE PLANS.




VEHICLE DISPLAY MOUNTING DETAIL (SLIP FITTER)



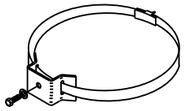

VEHICLE DISPLAY MOUNTING DETAIL (TERMINAL BLOCK)

# TRAFFIC SIGNAL ASSEMBLIES ORNAMENTAL HARDWARE DETAIL 7.5-FT, 13-FT AND 15-FT POLES

CITY OF APPLETON
TRAFFIC SECTION

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | CONSTRUCTION DETAILS | SHEET 17 | E |
|---|---|---|---|---|---|

2



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

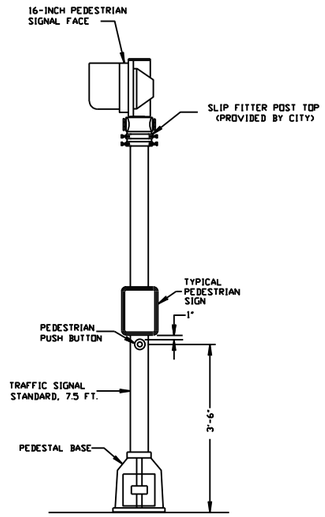
ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

ORNAMENTAL MOUNTING HARDWARE WILL BE FURNISHED BY OTHERS AND PROVIDED TO THE CONTRACTOR.

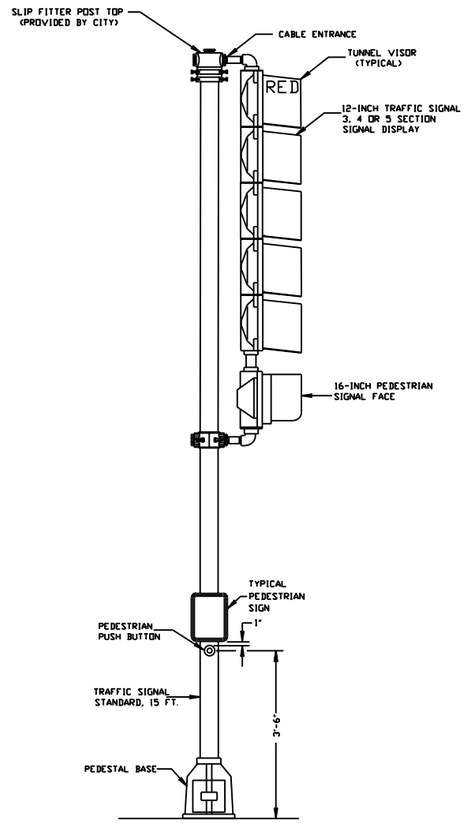
SEE SEPARATE DETAIL FOR MOUNTING HARDWARE AND ASSEMBLY.

LENGTH, LOCATION AND ORIENTATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

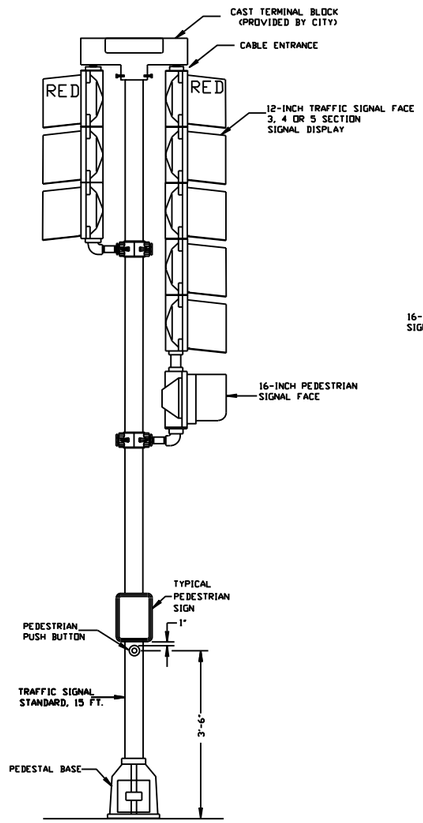
PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.



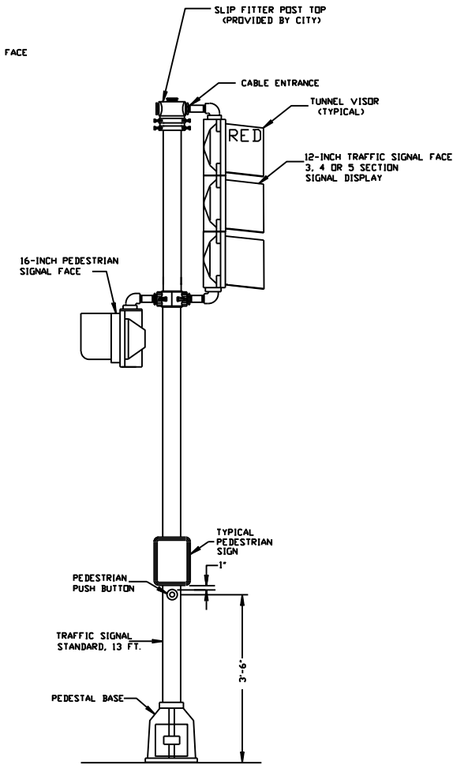

TRAFFIC SIGNAL STANDARD-7.5 FT.



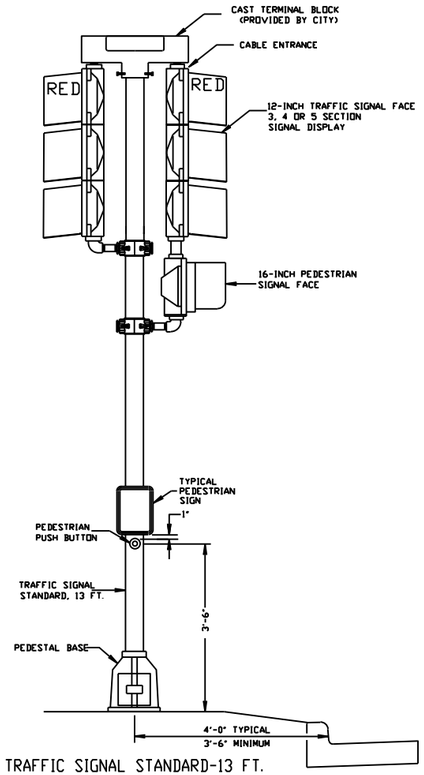

TRAFFIC SIGNAL STANDARD-15 FT.




TRAFFIC SIGNAL STANDARD-15 FT.




TRAFFIC SIGNAL STANDARD-13 FT.

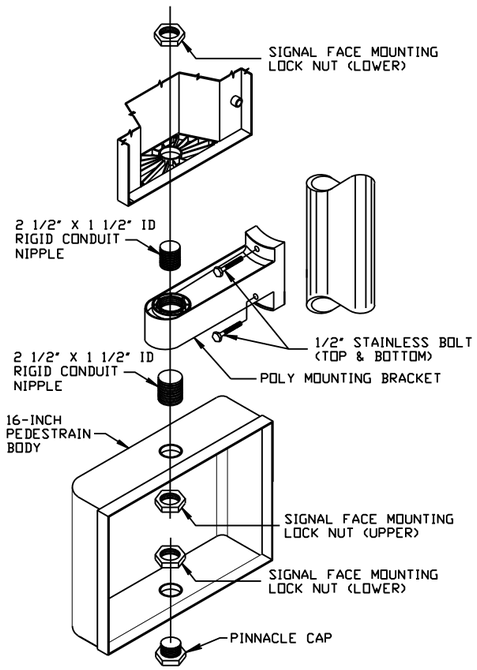



TRAFFIC SIGNAL STANDARD-13 FT.

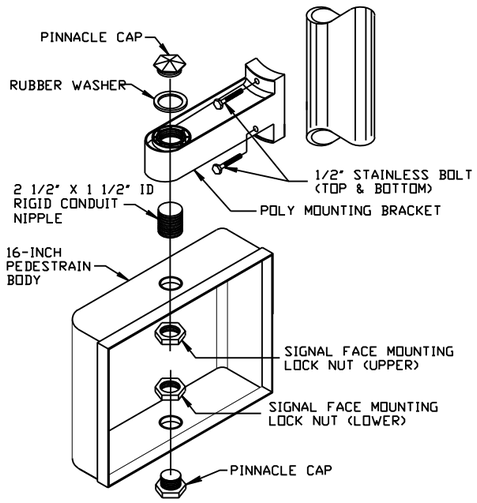
TRAFFIC SIGNAL STANDARD
ORNAMENTAL MOUNTINGS
7.5-FT, 13-FT AND 15-FT POLES

CITY OF APPLETON
TRAFFIC SECTION

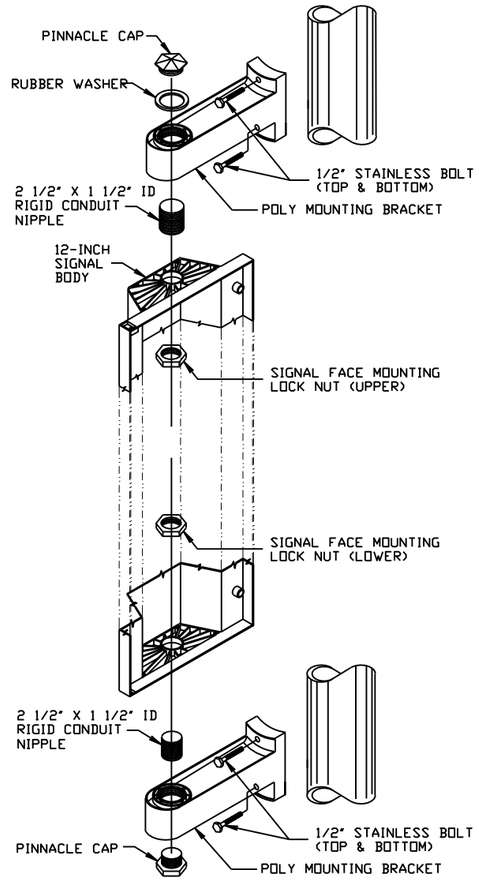
| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | CONSTRUCTION DETAILS | SHEET 18 | E |
|---|---|---|---|---|---|



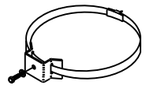

VEHICLE DISPLAY WITH INLINE PEDESTRIAN DISPLAY MOUNTING




PEDESTRIAN SIGNAL DISPLAY MOUNTING




VEHICLE SIGNAL DISPLAY MOUNTING




## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE SIGNAL MOUNTINGS SHOWN HER SUPERSEDE THOSE IN THE STANDARD DETAIL DRAWINGS.

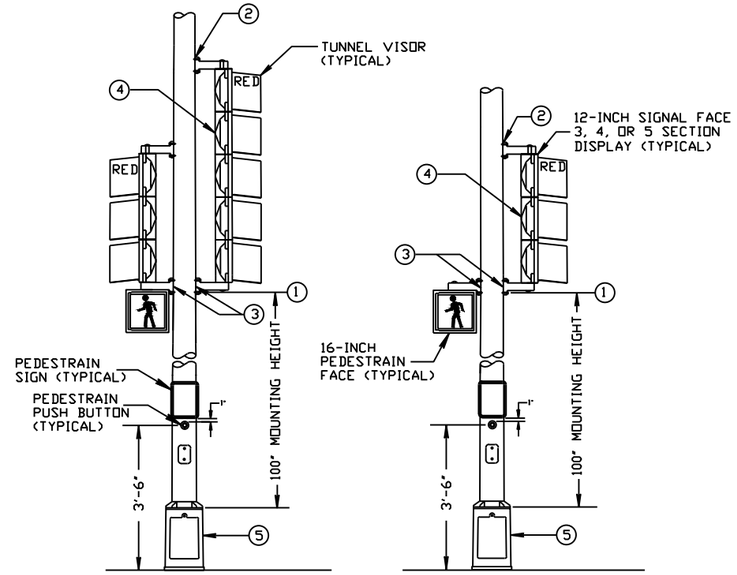
SIGNAL FACE SIZES TO BE 12-INCH.

PEDESTRIAN FACE SIZES TO BE 16-INCH.

MOUNTING HARDWARE SHALL BE FURNISHED BY THE CONTRACTOR.

THE SIZE, NUMBER AND ORIENTATION OF TRAFFIC SIGNAL DISPLAYS SHALL BE AS SHOWN ON THE PLANS.

1. MOUNTING HEIGHT FOR BOTTOM POLY BRACKET OF THE VEHICLE SIGNAL DISPLAY, DIMENSIONED FROM BOTTOM OF POLE SHOE PLATE TO BOTTOM BOLT OF POLY ARM. ADJUST HEIGHT IF NO TRANSFORMER BASE OR DIFFERENT SIZE.
2. SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH 1/2" STAINLESS BOLTS (ALL BRACKETS). DO NOT USE BANDING.
3. RUBBER GROMMET, TYPE 2 (1/4") OR TYPE 3 (3/8"), BASED ON POLE THICKNESS. SHALL BE PROVIDED FOR 1 3/8 " HOLE IN POLE SHAFT FOR WIRING.
4. THE NUMBER AND SIZE OF VEHICLE DISPLAYS MAY VARY. SEE SIGNAL PLAN SHEETS FOR ACTUAL PLACEMENT AND ORIENTATION. SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.
5. CAST ALUMINUM TRANSFORMER BASE, 17-INCH.



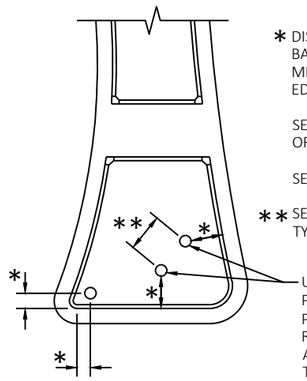

TYPICAL MOUNTING OF VEHICLE AND PEDESTRIAN SIGNAL DISPLAYS
(ACTUAL DISPLAYS MAY VARY IN SIZE AND ORIENTATION)

SIGNAL MOUNTING CONFIGURATIONS ON TYPE 2, 3 AND 4 POLES

TRAFFIC SIGNAL STANDARDS
SIGNAL DISPLAYS ON
TYPE 2, 3 AND 4 POLES

CITY OF APPLETON
TRAFFIC SECTION

2



* DISTANCE TO LAID OUT IN THE FIELD BASED ON SIGN SIZE. TWO FOOT MINIMUM CLEARANCE BETWEEN THE EDGE OF SIGN AND THE FACE OF CURB.

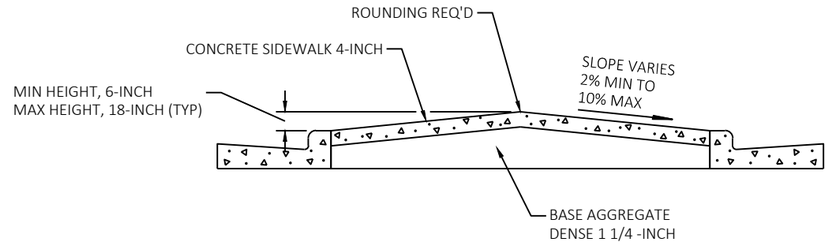
SEE A4-3 SIGN PLATE FOR "TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POST"

SEE A4-3B SIGN PLATE "SIGN POST BOX-OUTS"

** SEE A4-4 SIGN PLATE "TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE SUPPORTS"

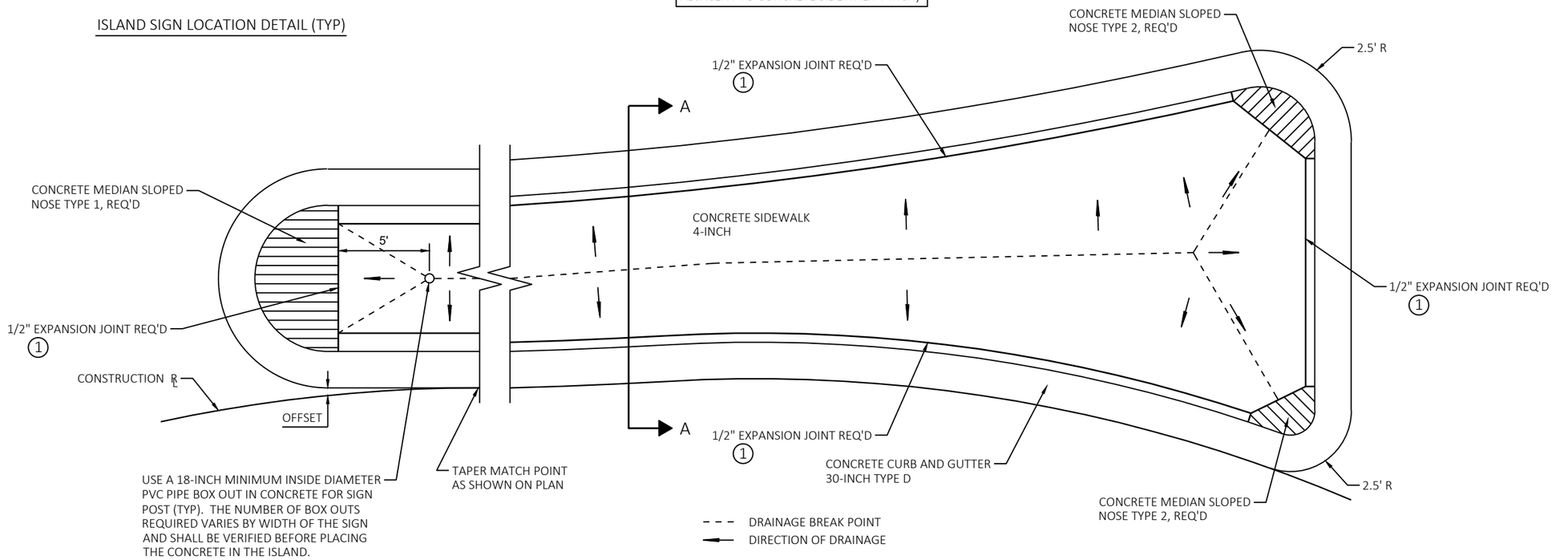
USE A 18-INCH MINIMUM INSIDE DIAMETER PVC PIPE BOX OUT IN CONCRETE FOR SIGN POST (TYP). THE NUMBER OF BOX OUTS REQUIRED VARIES BY WIDTH OF THE SIGN AND SHALL BE VERIFIED BEFORE PLACING THE CONCRETE IN THE ISLAND.

ISLAND SIGN LOCATION DETAIL (TYP)



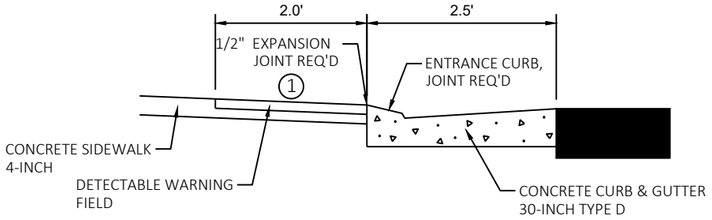

SECTION A-A

① EXPANSION MATERIAL TO BE 1" LONGER THAN ABUTTING MEDIAN CONCRETE THICKNESS. (i.e. 5" IN HEIGHT WHEN ADJACENT TO CONCRETE SIDEWALK 4-INCH)

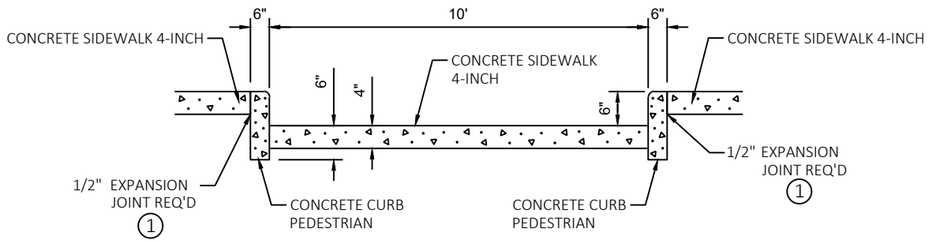



CONCRETE SPLITTER ISLAND DETAIL WITHOUT CROSSWALK

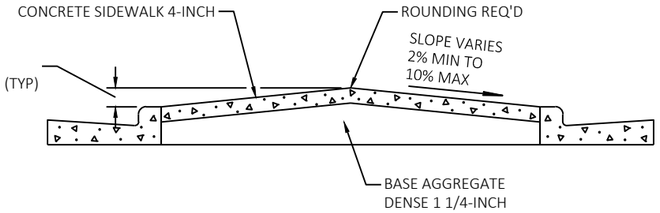
| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | CONSTRUCTION DETAILS | SHEET 20 | E |
|---|---|---|---|---|---|




SECTION A-A




SECTION B-B

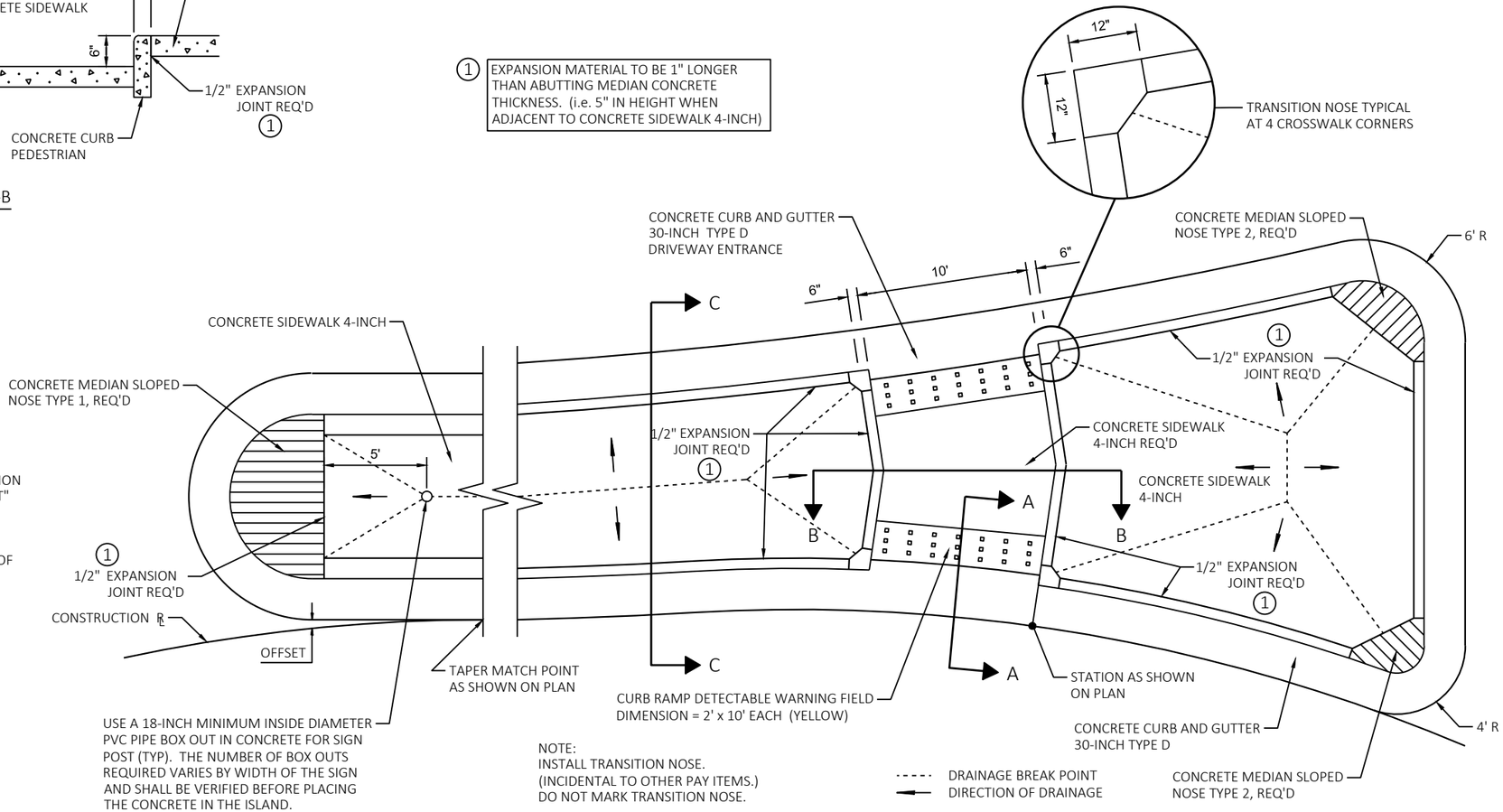



SECTION C-C

1 EXPANSION MATERIAL TO BE 1" LONGER THAN ABUTTING MEDIAN CONCRETE THICKNESS. (i.e. 5" IN HEIGHT WHEN ADJACENT TO CONCRETE SIDEWALK 4-INCH)




ISLAND SIGN LOCATION DETAIL (TYP)




CONCRETE SPLITTER ISLAND DETAIL WITH CROSSWALK

2

LEGEND

XXXXXXX SAW CUT

LIMITS OF WETLANDS

TRUMAN ST.

SIGN

EXISTING R/W

4"PCP

FO MARKER

18"RCP (TO REMAIN)

BURIED FIBER OPTIC CABLE (APPROXIMATE LOCATION)

BURIED ELECTRIC (APPROXIMATE LOCATION)

BURIED TELEPHONE LINE (APPROXIMATE LOCATION)

EXISTING R/W

24"RCP (TO REMAIN)

CP #100
STA. 131+99.62EB, 73.19' LT
Y=560855.469
X=844523.546
3/4" IRON W/CAP

12"RCP (TO REMAIN)

24"RCP (TO REMAIN)

24"RCP (TO REMAIN)

LIMITS OF WETLANDS

CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D REQ'D.

CONCRETE MEDIAN SLOPED NOSE, TYPE 1

CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D REQ'D.

CONCRETE SIDEWALK 4-INCH REQ'D.

CTH CE

S82° 26' 45"E

129WB 130WB 131WB 132WB 133WB 134WB

129EB 130EB 131EB 132EB 133EB 134EB

(TO REMAIN)

(TO REMAIN)

(REMOVE)

(REMOVE)

36"RCP (TO REMAIN)

4' 10' 12' 2' 12' 4'

MATCH LINE STA. 135+00EB

131+29.2EB
28.0' RT
52' R.

50'

BEGIN PROJECT
STA. 130+60EB
Y = 560801.266
X = 844375.511

PLANTER

EXISTING R/W

IP

R/W LINE

STA. 131+40.2, 62.8' RT.
1-CPRC CLASS IV 24-INCH REQ'D.
2-APRON ENDWALLS REQ'D.

SLOPE INTERCEPT

ASPHALT PARKING LOT

LIMITS OF WETLANDS

POST

BM #200

SIGN

SEPV

BUILDING

132+55.1EB
186.0' RT
147' R.

BENCH MARKS

| NO. | STATION | DESCRIPTION | ELEV. |
|---|---|---|---|
| 200 | 134+55EB | CHISELED BOX ON N. SIGN BASE-93' RT. | 741.75 |
| | | | |
| | | | |
| | | | |

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PLAN DETAILS | SHEET 22 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021201_pd

PLOT DATE : 11/30/2022 1:06 PM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

LEGEND

XXXXXXX SAW CUT

LIMITS OF WETLANDS

BENCH MARKS

| NO. | STATION | DESCRIPTION | ELEV. |
|---|---|---|---|
| 201 | 11+61RR | BURY BOLT ON HYDRANT-24' LT. | 748.36 |
| | | | |
| | | | |
| | | | |

N

BURIED GAS LINE (APPROXIMATE LOCATION)

CONSTRUCTION LIMITS STA. 11+52.8RR

BURIED TELEPHONE LINE (APPROXIMATE LOCATION)

BURIED ELECTRIC (APPROXIMATE LOCATION)

EXISTING R/W

BURIED FIBER OPTIC CABLE (APPROXIMATE LOCATION)

EP: 11+71.01

ADJUST INLET COVERS

BUILDING

CONCRETE CURB AND GUTTER 30-INCH TYPE D REQ'D.

BM #201

11+71.0RR 200.0' LT 183' R.

11+52.3RR 64.3' LT 46' R.

SLOPE INTERCEPTS

CONCRETE SIDEWALK 4-INCH REQ'D.

CONCRETE CURB AND GUTTER 30-INCH TYPE D REQ'D. REVERSE SLOPED GUTTER

11+08.0RR 92.0' LT 58' R.

TRANSITION CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D TO CONCRETE CURB AND GUTTER 30-INCH TYPE D IN 10 FEET (SEE DETAIL)

SEE CURB RAMP DETAILS

10+69.0RR 65.0' RT 38' R.

SLOPE INTERCEPTS

CP #101 STA. 139+06.92EB, 72.55' LT Y=560765.613 X=845224.367 3/4" IRON W/CAP

LIMITS OF WETLANDS

CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D REQ'D.

CONCRETE SIDEWALK 6-INCH REQ'D.

CONCRETE SIDEWALK 6-INCH REQ'D.

CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D REQ'D.

PED CURB REQ'D.

CONCRETE MEDIAN SLOPED NOSE, TYPE 1

CONCRETE SIDEWALK 4-INCH REQ'D.

CONCRETE CURB AND GUTTER 18-INCH TYPE D REQ'D.

MATCH LINE STA. 135+00EB

MATCH LINE STA. 141+00EB

PI: 135+34.23

STA BACK = 135+34.23

STA AHEAD = 135+34.47

12"RCP (TO REMAIN)

(REMOVE)

136WB

137WB

138WB

139WB

140WB

141

S83° 00' 58"E

PI: 10+00.18

N0° 33' 15"W

(REM.)

(REMOVE)

136EB

137EB

138EB

139EB

140EB

141

CTH CE

PI: 9+75.97

EP: 9+42.71

PCC: 9+30.30

CONCRETE SIDEWALK 4-INCH REQ'D.

CONCRETE CURB AND GUTTER 30-INCH TYPE D REQ'D.

STA. 138+62.02EB CTH CE EASTBOUND CONSTRUCTION R/L= STA. 9+75.80RR RAILROAD ST.

TRANSITION CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D TO CONCRETE CURB AND GUTTER 18-INCH TYPE D IN 10 FEET (SEE DETAIL)

SLOPE INTERCEPTS

CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D REQ'D.

9+06.8RR 64.9' LT 40' R.

RAILROAD ST.

N1° 35' 34"W

(REMOVE) CMP

LIMITS OF WETLANDS

EXISTING R/W

BURIED FIBER OPTIC CABLE (APPROXIMATE LOCATION)

TRANSITION CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D TO CONCRETE CURB AND GUTTER 30-INCH TYPE D IN 10 FEET (SEE DETAIL)

MATCH LINE STA. 9+00RR

PI: 135+34.35

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PLAN DETAILS | SHEET 23 | E |
|---|---|---|---|---|---|

2

2

LEGEND

XXXXXXX SAW CUT

LIMITS OF WETLANDS

EXISTING R/W

BURIED TELEPHONE LINE (APPROXIMATE LOCATION)

BURIED FIBER OPTIC CABLE (APPROXIMATE LOCATION)

(TO REMAIN) 18"RCP

BEGIN TRAIL RELOCATION STA. 10+00

BP: 10+00.00

PC: 10+33.26

S77° 54' 53"E

PLANTER

ASPHALT TRAIL

BURIED ELECTRIC (APPROXIMATE LOCATION)

LIMITS OF WETLANDS

SLOPE INTERCEPTS

3' PAVED SHOULDER

12"RCP (TO REMAIN)

(TO REMAIN) 24"PCP

CONCRETE CURB AND GUTTER 18-INCH TYPE D REQ'D.

CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D REQ'D.

(TO REMAIN) 18"RCP

142WB 143WB S83° 00' 58"E 144WB 145WB 146WB

(REMOVE)

142EB 143EB S83° 00' 58"E 144EB 145EB 146EB

MATCH LINE STA. 141+00EB

MATCH LINE STA. 147+00EB

CONCRETE SIDEWALK 4-INCH REQ'D.

CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D REQ'D.

TRANSITION CONCRETE CURB AND GUTTER 18-INCH TYPE D TO CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D IN 10 FEET (SEE DETAIL)

CTH CE

(TO REMAIN) 18"RCP

BURIED TELEPHONE LINE (APPROXIMATE LOCATION)

EXISTING R/W

BURIED FIBER OPTIC CABLE (APPROXIMATE LOCATION)

BURIED TELEPHONE LINE (APPROXIMATE LOCATION)

EXISTING R/W

BURIED ELECTRIC (APPROXIMATE LOCATION)

PLANTER

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PLAN DETAILS | SHEET 24 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021203_pd

PLOT DATE : 10/31/2022 8:06 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

LEGEND
XXXXXXX SAW CUT
LIMITS OF WETLANDS

N

TREES

BURIED TELEPHONE LINE (APPROXIMATE LOCATION)

SLOPE INTERCEPTS

PRC: 10+96.47

PT: 12+78.52

PC: 12+94.29

PT: 13+43.54

EP: 13+78.89

EXISTING R/W

EXISTING R/W

POST

FO

FOMH

ASPHALT TRAIL

S71° 32' 24"E

S82° 49' 34"E

END TRAIL RELOCATION
STA. 13+47

SLOPE INTERCEPTS

12"RCP (TO REMAIN)

BURIED FIBER OPTIC CABLE (APPROXIMATE LOCATION)

BURIED TELEPHONE LINE (APPROXIMATE LOCATION)

148+30.9EB
52.0' LT
52' R.

CONCRETE MEDIAN
SLOPED NOSE, TYPE 1

ADJUST INLET COVERS

MATCH LINE STA. 147+00EB

148WB 149WB S83° 00' 58"E 150WB 151WB 152WB 152WB

(TO REMAIN)

(TO REMAIN)

148EB 149EB S83° 00' 58"E 150EB 151EB 152EB

CTH CE

EP: 152+74.90

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE D
REQ'D.

CONCRETE MEDIAN
SLOPED NOSE, TYPE 1

CONCRETE SIDEWALK
4-INCH REQ'D.

END PROJECT
STA. 149+00EB

CAUTION

BURIED GAS LINE
(APPROXIMATE LOCATION)

EP: 152+74.90

EXISTING R/W

PLANTER

FOMH

EXISTING R/W

POST

FOMH

BURIED ELECTRIC
(APPROXIMATE LOCATION)

BURIED TELEPHONE LINE
(APPROXIMATE LOCATION)

ASPHALT PARKING LOT

LEGEND
LIMITS OF HMA PAVEMENT
LIMITS OF CONCRETE PAVEMENT
XXXXXXX SAW CUT
LIMITS OF WETLANDS

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PLAN DETAILS | SHEET 25 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021204_pd

PLOT DATE : 11/1/2022 10:17 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

LEGEND

XXXXXXX SAW CUT

LIMITS OF WETLANDS

N

EXISTING R/W

VAN ROY RD.

BUILDING

CABC

POST

CONCRETE SIDEWALK
4-INCH REQ'D.

CP #102
STA. 7+64.47RR, 48.05' LT
Y=560487.383
X=845127.689
3/4" IRON W/CAP

ASPHALT PARKING LOT

BURIED FIBER OPTIC CABLE
(APPROXIMATE LOCATION)

CONCRETE SURFACE
DRAIN REQ'D.

CONCRETE CURB AND GUTTER
30-INCH TYPE D REQ'D.

REMOVE
COMMERCIAL
ENTRANCE

SLOPE
INTERCEPTS

PI: 7+67.52

BURIED GAS LINE
(APPROXIMATE LOCATION)

BURIED ELECTRIC
(APPROXIMATE LOCATION)

BURIED TELEPHONE LINE
(APPROXIMATE LOCATION)

24"CMP

30"CMP

BP: 4+31.92

5RR

6RR

7RR

8RR

RAILROAD ST.

MATCH LINE STA. 9+00RR

CONSTRUCTION LIMITS
STA. 7+67.5RR

CONCRETE MEDIAN
SLOPED NOSE, TYPE 1

BM #202

10'

TLE LINE

BP: 7+86.22

SLOPE
INTERCEPTS

R/W LINE

BURIED TELEPHONE LINE
(APPROXIMATE LOCATION)

TRANSITION CONCRETE CURB
AND GUTTER 30-INCH TYPE D
REVERSE SLOPE TO CONCRETE
CURB AND GUTTER 30-INCH
TYPE D IN 10 FEET

CONCRETE CURB AND GUTTER
30-INCH TYPE D REQ'D.

TRANSITION CONCRETE CURB
AND GUTTER 30-INCH TYPE D TO
CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE D
IN 10 FEET
(SEE DETAIL)

LIMITS OF
WETLANDS

8+39.6RR
133.7' RT
98' R.

BETTER WAY

BURIED ELECTRIC
(APPROXIMATE LOCATION)

BURIED GAS LINE
(APPROXIMATE LOCATION)

BURIED TELEPHONE LINE
(APPROXIMATE LOCATION)

BENCH MARKS

| NO. | STATION | DESCRIPTION | ELEV. |
|---|---|---|---|
| 202 | 7+10RR | BURY BOLT ON HYDRANT-34' RT | 740.75 |
| | | | |
| | | | |
| | | | |

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PLAN DETAILS | SHEET 26 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021205_pd

PLOT DATE : 10/31/2022 8:06 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

N

TRUMAN ST.

129WB CTH CE 130WB 131WB 132WB 133WB 134WB 135

744.88 744.92 744.99 745.18 745.35 745.43 745.51 745.61 745.73 745.86 745.98 746.07 746.17 746.26 746.35 746.44 746.54 746.63 746.73

744.80 744.84 744.90 744.93 745.08 745.23 745.31 745.39 745.49 745.61 745.74 745.86 745.95 746.05 746.14 746.23 746.26 746.38 746.51 746.65

129EB 130EB 131EB 132EB 133EB 134EB 135

744.99 745.06 745.12 745.21 745.43 745.50 745.57 745.65 745.75 745.84 745.94 746.04 746.14 746.24 746.34 746.42 746.49 746.57 746.64

745.14 745.27 745.40 745.43 745.52 745.58 745.65 745.73 745.83 745.92 746.02 746.12 746.22 746.32 746.40 746.42 746.51 746.61 746.71 746.81

MATCH LINE STA. 135+00EB

742.92 742.96 743.07 743.18 743.27 743.37 743.47 743.50 743.58 743.69 743.71

742.86 743.21 743.43 743.62

743.13

742.78 742.70

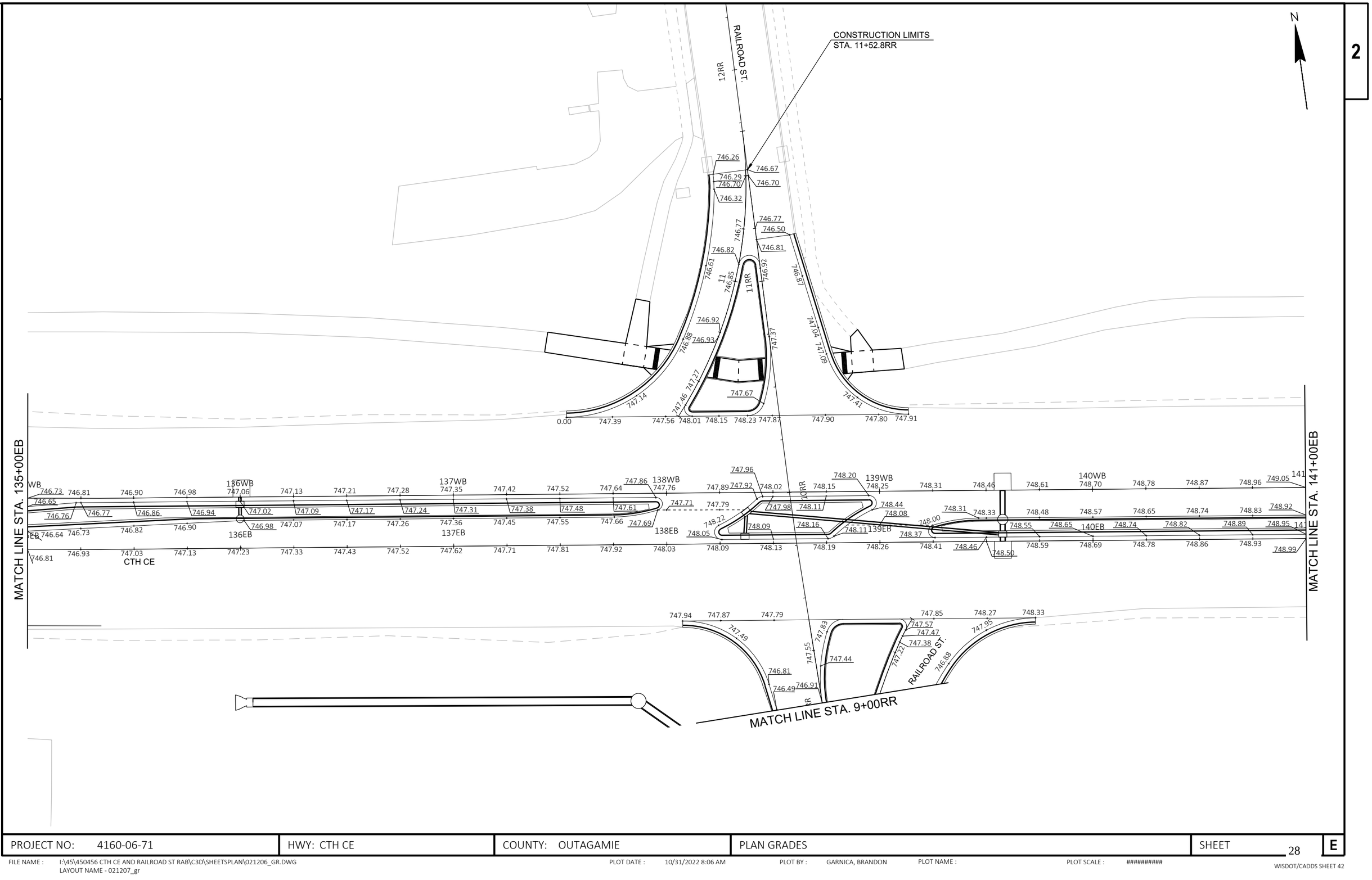
742.20 742.28

742.11 742.08 742.20

742.00

BEGIN PROJECT
STA. 130+60EB
Y = 560801.266
X = 844375.511

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PLAN GRADES | SHEET 27 | E |
|---|---|---|---|---|---|



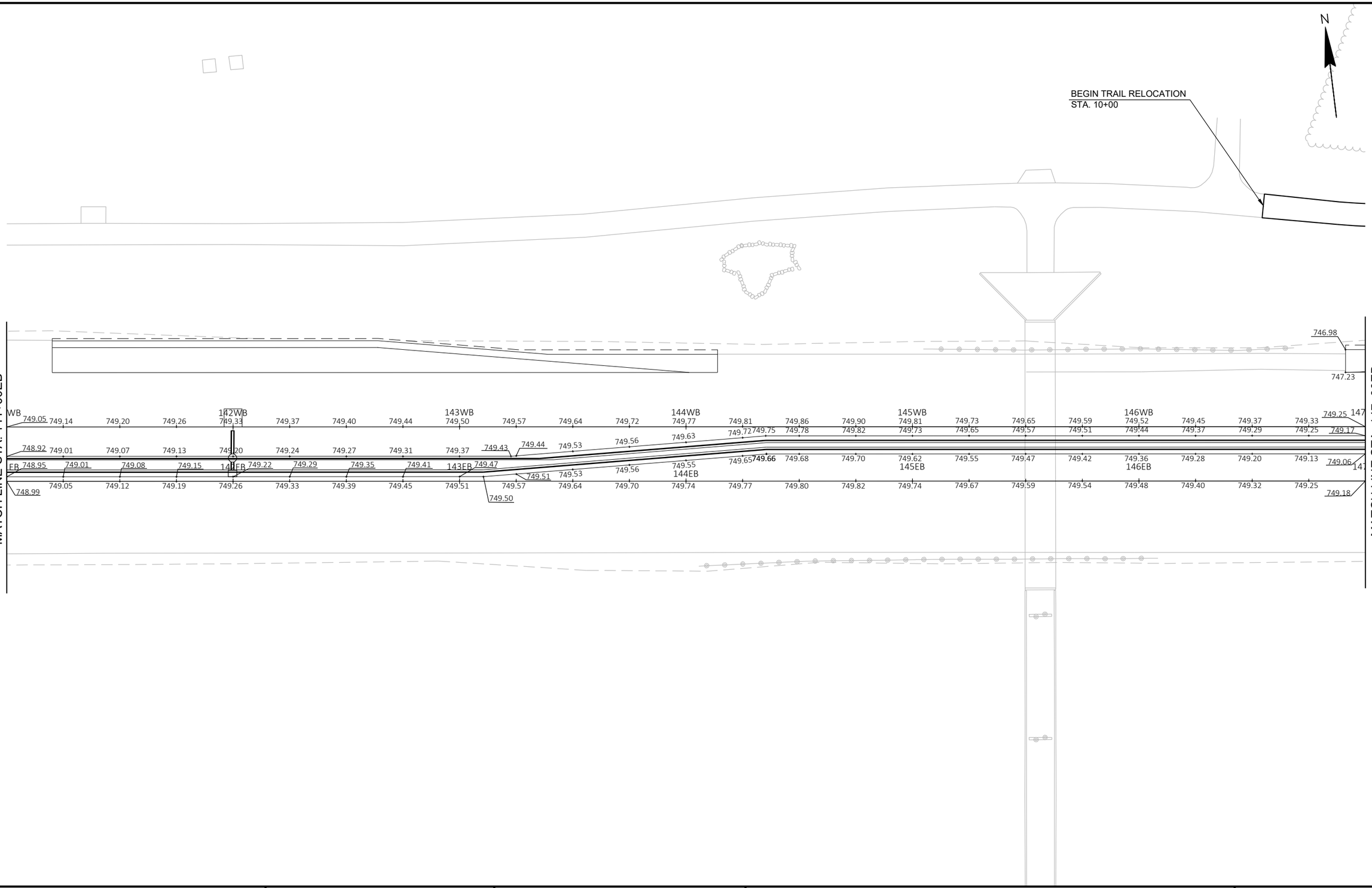

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PLAN GRADES | SHEET 28 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\021206_GR.DWG
LAYOUT NAME - 021207_gr

PLOT DATE : 10/31/2022 8:06 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PLAN GRADES | SHEET 29 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\021206_GR.DWG
LAYOUT NAME - 021208_gr

PLOT DATE : 10/31/2022 8:07 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : ##########

2

N

END TRAIL RELOCATION
STA. 13+47

745.43 745.44 745.74 745.51 745.52 745.83 745.83 745.97 746.29 746.65 746.39 746.86 746.79 747.05 746.48 746.73 747.14 747.09 747.03 746.98 746.90 746.83 746.75 746.68

MATCH LINE STA. 147+00EB

WB 749.25 749.16 749.11 749.05 148WB 748.99 748.91 748.83 748.75 149WB 748.67 150WB 151WB 152WB
749.17 749.08 749.03 748.97 748.91 748.88 748.69 748.67 748.59
749.06 749.00 748.95 748.89 748.84 748.80 748.82 748.75 748.92
EB 148EB 149EB 150EB 151EB 152EB
748.68 748.65 748.57
749.18 749.12 749.07 749.01 748.96 748.88 748.73 748.65

CTH CE

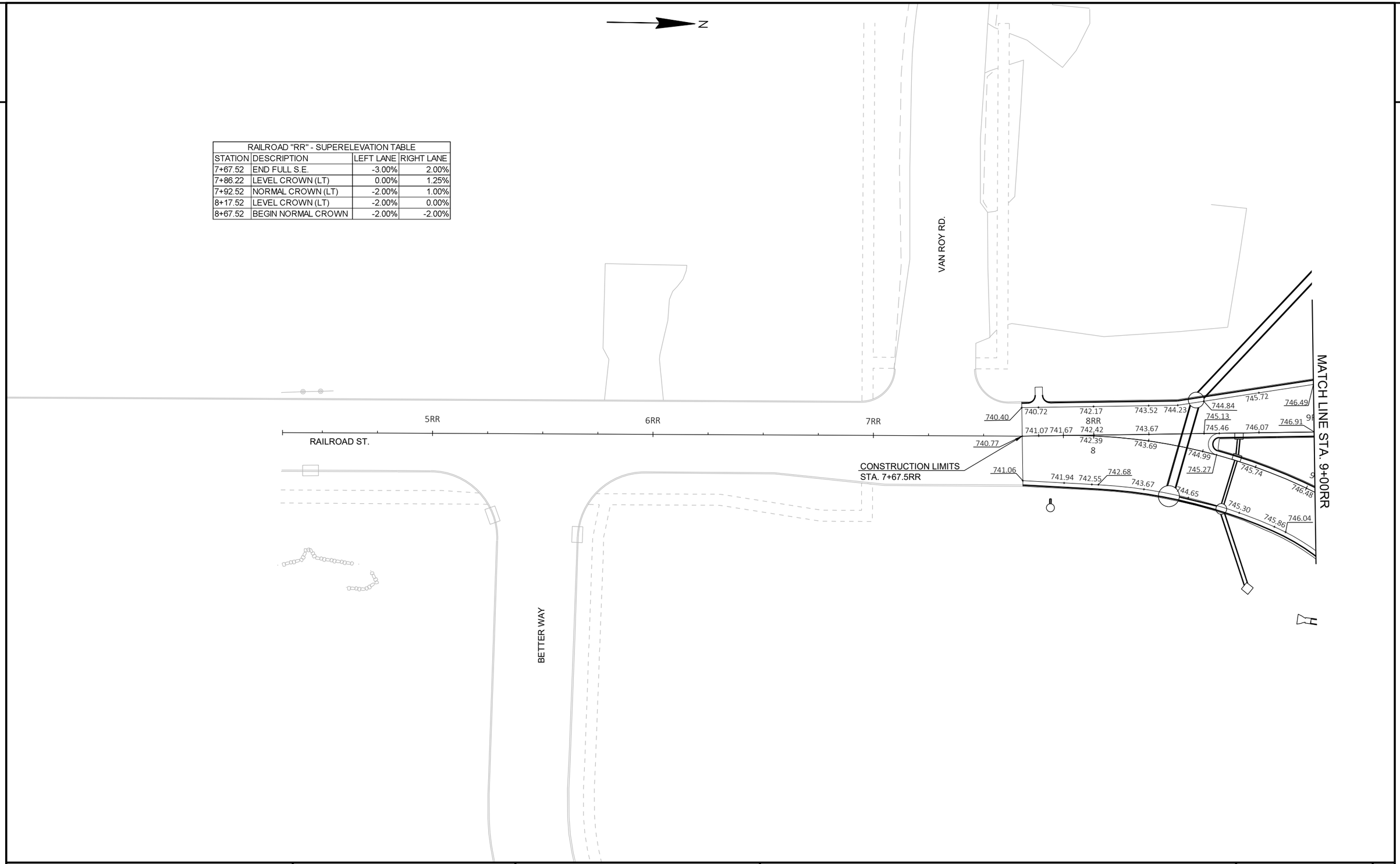
END PROJECT
STA. 149+00EB

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PLAN GRADES | SHEET 30 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\021206_GR.DWG
LAYOUT NAME - 021209_gr
PLOT DATE : 10/31/2022 8:07 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : ##########

2

| RAILROAD "RR" - SUPERELEVATION TABLE | | | |
|---|---|---|---|
| STATION | DESCRIPTION | LEFT LANE | RIGHT LANE |
| 7+67.52 | END FULL S.E. | -3.00% | 2.00% |
| 7+86.22 | LEVEL CROWN (LT) | 0.00% | 1.25% |
| 7+92.52 | NORMAL CROWN (LT) | -2.00% | 1.00% |
| 8+17.52 | LEVEL CROWN (LT) | -2.00% | 0.00% |
| 8+67.52 | BEGIN NORMAL CROWN | -2.00% | -2.00% |




| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PLAN GRADES | SHEET 31 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\021206_GR.DWG
LAYOUT NAME - 021210_gr
PLOT DATE : 10/31/2022 8:07 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

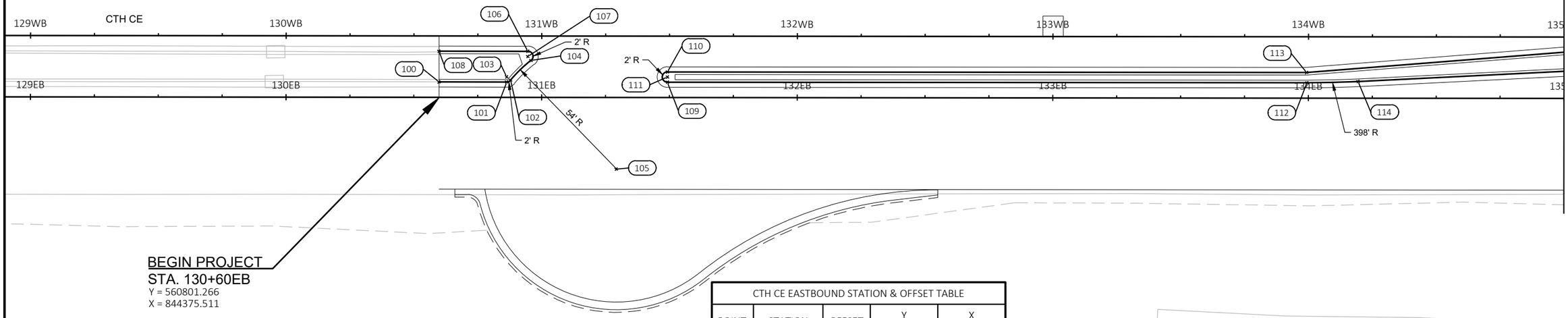
2

| CTH CE WESTBOUND STATION & OFFSET TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS |
| 104 | 130+95.8 WB | 9.6 RT | 560810.864 | 844412.890 |
| 106 | 130+94.6 WB | 6.0 RT | 560814.567 | 844412.133 |
| 107 | 130+94.6 WB | 8.0 RT | 560812.584 | 844411.870 |
| 108 | 130+59.8 WB | 6.0 RT | 560819.133 | 844377.701 |

N

ALL CURB AND GUTTTER POINTS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED AS
BOC-BACK OF CURB
EOA-EDGE OF ASPHALT
ALL RADIUS DISTANCES ARE TO FACE OF CURB

TRUMAN ST.




| CTH CE EASTBOUND STATION & OFFSET TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS |
| 100 | 130+59.8 EB | 6.0 LT | 560807.237 | 844376.124 |
| 101 | 130+86.3 EB | 6.0 LT | 560803.756 | 844402.373 |
| 102 | 130+87.8 EB | 6.7 LT | 560804.263 | 844403.985 |
| 103 | 130+86.3 EB | 8.0 LT | 560805.739 | 844402.636 |
| 105 | 131+29.2 EB | 28.0 RT | 560764.412 | 844440.426 |
| 109 | 131+49.2 EB | 6.0 LT | 560795.488 | 844464.722 |
| 110 | 131+49.2 EB | 10.0 LT | 560799.453 | 844465.248 |
| 111 | 131+49.2 EB | 8.0 LT | 560797.471 | 844464.985 |
| 112 | 133+99.4 EB | 6.0 LT | 560762.592 | 844712.780 |
| 113 | 133+99.3 EB | 10.0 LT | 560766.577 | 844713.157 |
| 114 | 134+19.4 EB | 6.5 LT | 560760.461 | 844732.677 |

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PLAN OFFSETS | SHEET 32 | E |
|---|---|---|---|---|---|

| CTH CE WESTBOUND STATION & OFFSET TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS |
| 115 | 135+22.9 WB | 4.1 RT | 560760.132 | 844836.968 |
| 121 | 137+74.5 WB | 64.0 LT | 560797.058 | 845094.781 |
| 122 | 137+95.1 WB | 4.0 RT | 560727.053 | 845107.000 |
| 123 | 137+95.1 WB | 5.5 RT | 560725.564 | 845106.818 |
| 127 | 138+43.8 WB | 4.5 RT | 560720.593 | 845155.287 |
| 128 | 137+94.6 WB | 48.0 LT | 560778.730 | 845112.811 |
| 129 | 138+45.2 WB | 4.0 RT | 560720.963 | 845156.710 |
| 130 | 138+45.2 WB | 6.0 RT | 560718.978 | 845156.467 |
| 134 | 138+95.6 WB | 6.9 RT | 560711.994 | 845206.427 |
| 136 | 138+95.0 WB | 4.0 RT | 560714.908 | 845206.140 |
| 137 | 138+95.0 WB | 5.5 RT | 560713.419 | 845205.958 |
| 172 | 137+53.5 WB | 38.0 LT | 560773.798 | 845070.779 |
| 173 | 137+85.3 WB | 47.5 LT | 560779.402 | 845103.546 |
| 174 | 138+06.7 WB | 73.0 LT | 560802.079 | 845127.854 |
| 183 | 137+43.5 WB | 66.7 LT | 560803.494 | 845064.366 |
| 184 | 137+45.0 WB | 76.1 LT | 560812.608 | 845066.987 |
| 185 | 137+81.5 WB | 70.5 LT | 560802.653 | 845102.537 |
| 186 | 137+86.5 WB | 91.3 LT | 560822.714 | 845110.014 |

| CTH CE WESTBOUND STATION & OFFSET TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS |
| 187 | 137+93.0 WB | 89.9 LT | 560820.487 | 845116.357 |
| 188 | 138+86.8 WB | 72.8 LT | 560792.171 | 845207.399 |
| 189 | 138+90.4 WB | 76.0 LT | 560794.888 | 845211.353 |
| 190 | 138+97.3 WB | 66.3 LT | 560784.428 | 845216.975 |
| 191 | 139+10.8 WB | 67.0 LT | 560783.406 | 845230.504 |
| 192 | 139+12.6 WB | 57.4 LT | 560773.705 | 845231.124 |

| RAILROAD STREET STATION & OFFSET TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS |
| | | | | |
| 143 | 9+01.0 RR | 2.0 RT | 560624.299 | 845173.996 |
| 144 | 9+31.8 RR | 9.3 RT | 560655.318 | 845180.458 |
| 145 | 9+35.1 RR | 15.5 RT | 560658.817 | 845186.595 |
| 146 | 9+29.2 RR | 14.7 RT | 560652.854 | 845185.929 |
| 147 | 9+12.3 RR | 25.2 LT | 560634.828 | 845146.448 |
| 148 | 9+34.9 RR | 36.4 LT | 560657.145 | 845134.655 |
| 149 | 9+46.4 RR | 58.9 LT | 560667.957 | 845111.847 |
| 150 | 9+06.8 RR | 64.9 LT | 560628.252 | 845106.992 |
| 157 | 10+40.3 RR | 14.6 LT | 560763.520 | 845155.114 |
| 158 | 10+43.8 RR | 8.4 LT | 560767.006 | 845161.308 |

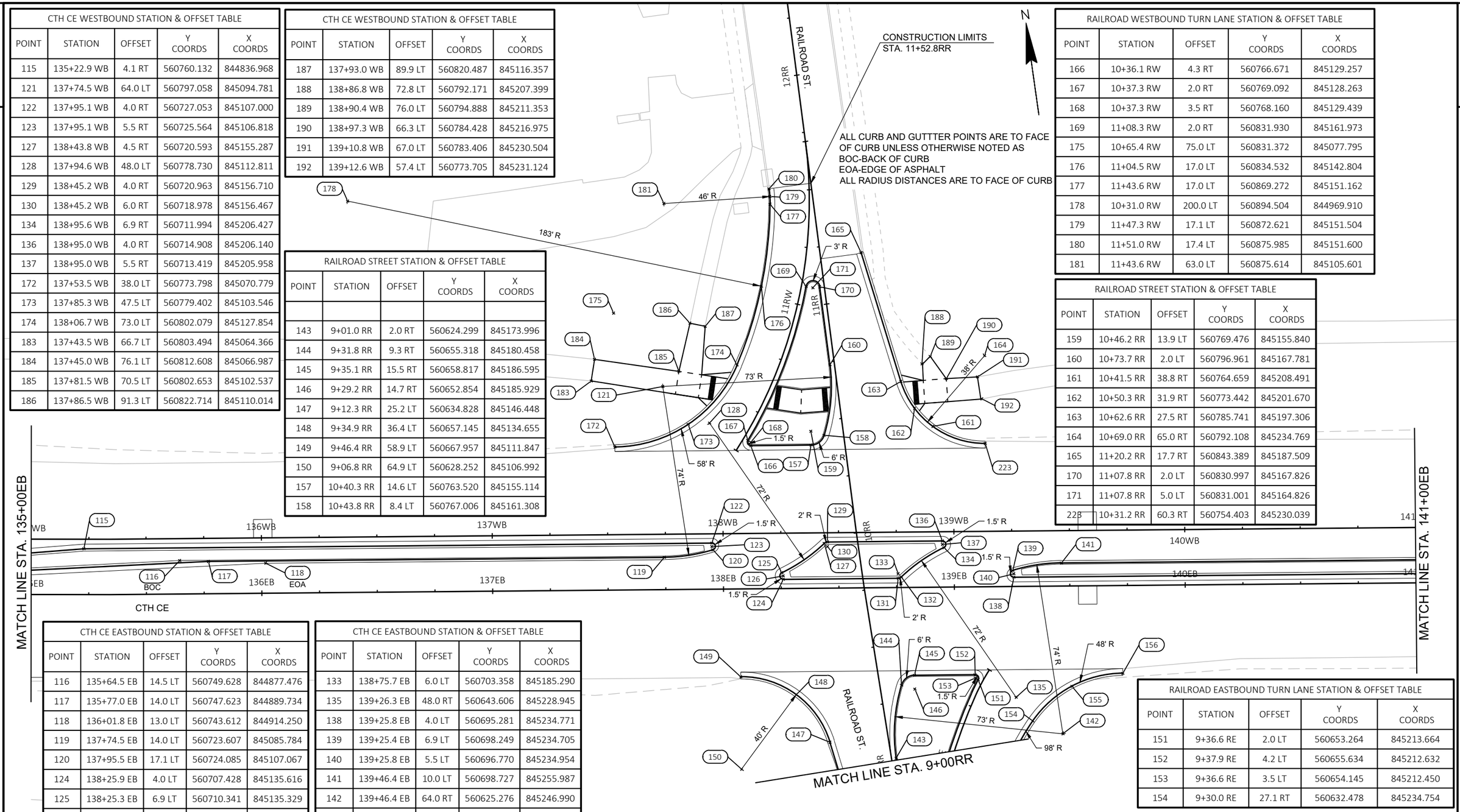
| RAILROAD WESTBOUND TURN LANE STATION & OFFSET TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS |
| 166 | 10+36.1 RW | 4.3 RT | 560766.671 | 845129.257 |
| 167 | 10+37.3 RW | 2.0 RT | 560769.092 | 845128.263 |
| 168 | 10+37.3 RW | 3.5 RT | 560768.160 | 845129.439 |
| 169 | 11+08.3 RW | 2.0 RT | 560831.930 | 845161.973 |
| 175 | 10+65.4 RW | 75.0 LT | 560831.372 | 845077.795 |
| 176 | 11+04.5 RW | 17.0 LT | 560834.532 | 845142.804 |
| 177 | 11+43.6 RW | 17.0 LT | 560869.272 | 845151.162 |
| 178 | 10+31.0 RW | 200.0 LT | 560894.504 | 844969.910 |
| 179 | 11+47.3 RW | 17.1 LT | 560872.621 | 845151.504 |
| 180 | 11+51.0 RW | 17.4 LT | 560875.985 | 845151.600 |
| 181 | 11+43.6 RW | 63.0 LT | 560875.614 | 845105.601 |

| RAILROAD STREET STATION & OFFSET TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS |
| 159 | 10+46.2 RR | 13.9 LT | 560769.476 | 845155.840 |
| 160 | 10+73.7 RR | 2.0 LT | 560796.961 | 845167.781 |
| 161 | 10+41.5 RR | 38.8 RT | 560764.659 | 845208.491 |
| 162 | 10+50.3 RR | 31.9 RT | 560773.442 | 845201.670 |
| 163 | 10+62.6 RR | 27.5 RT | 560785.741 | 845197.306 |
| 164 | 10+69.0 RR | 65.0 RT | 560792.108 | 845234.769 |
| 165 | 11+20.2 RR | 17.7 RT | 560843.389 | 845187.509 |
| 170 | 11+07.8 RR | 2.0 LT | 560830.997 | 845167.826 |
| 171 | 11+07.8 RR | 5.0 LT | 560831.001 | 845164.826 |
| 223 | 10+31.2 RR | 60.3 RT | 560754.403 | 845230.039 |

| CTH CE EASTBOUND STATION & OFFSET TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS |
| 116 | 135+64.5 EB | 14.5 LT | 560749.628 | 844877.476 |
| 117 | 135+77.0 EB | 14.0 LT | 560747.623 | 844889.734 |
| 118 | 136+01.8 EB | 13.0 LT | 560743.612 | 844914.250 |
| 119 | 137+74.5 EB | 14.0 LT | 560723.607 | 845085.784 |
| 120 | 137+95.5 EB | 17.1 LT | 560724.085 | 845107.067 |
| 124 | 138+25.9 EB | 4.0 LT | 560707.428 | 845135.616 |
| 125 | 138+25.3 EB | 6.9 LT | 560710.341 | 845135.329 |
| 126 | 138+25.9 EB | 5.5 LT | 560708.917 | 845135.798 |
| 131 | 138+75.7 EB | 4.0 LT | 560701.372 | 845185.047 |
| 132 | 138+77.1 EB | 4.5 LT | 560701.743 | 845186.470 |

| CTH CE EASTBOUND STATION & OFFSET TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS |
| 133 | 138+75.7 EB | 6.0 LT | 560703.358 | 845185.290 |
| 135 | 139+26.3 EB | 48.0 RT | 560643.606 | 845228.945 |
| 138 | 139+25.8 EB | 4.0 LT | 560695.281 | 845234.771 |
| 139 | 139+25.4 EB | 6.9 LT | 560698.249 | 845234.705 |
| 140 | 139+25.8 EB | 5.5 LT | 560696.770 | 845234.954 |
| 141 | 139+46.4 EB | 10.0 LT | 560698.727 | 845255.987 |
| 142 | 139+46.4 EB | 64.0 RT | 560625.276 | 845246.990 |
| 155 | 139+50.5 EB | 43.4 RT | 560645.212 | 845253.567 |
| 156 | 139+72.6 EB | 38.0 RT | 560647.870 | 845276.129 |

| RAILROAD EASTBOUND TURN LANE STATION & OFFSET TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS |
| 151 | 9+36.6 RE | 2.0 LT | 560653.264 | 845213.664 |
| 152 | 9+37.9 RE | 4.2 LT | 560655.634 | 845212.632 |
| 153 | 9+36.6 RE | 3.5 LT | 560654.145 | 845212.450 |
| 154 | 9+30.0 RE | 27.1 RT | 560632.478 | 845234.754 |



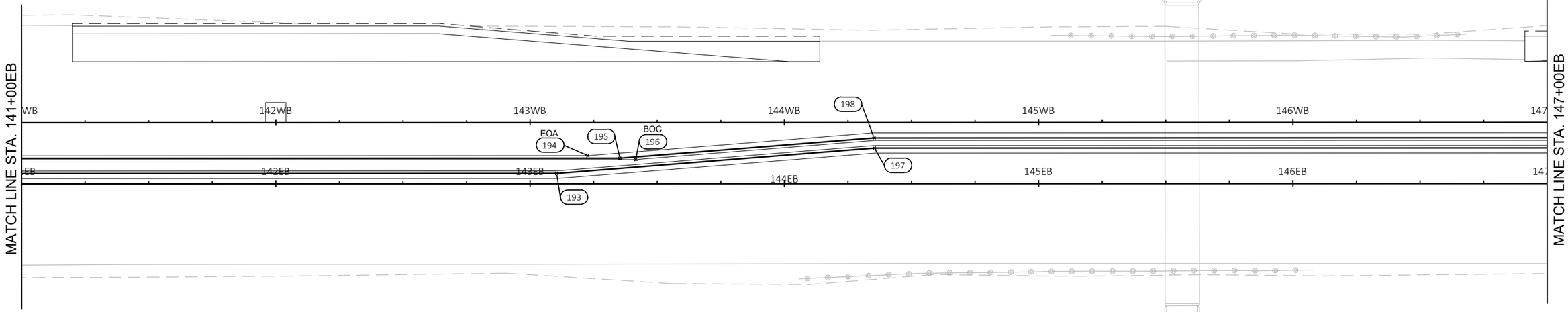
2

| CTH CE WESTBOUND STATION & OFFSET TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS |
| 194 | 143+22.7 WB | 13.0 RT | 560653.968 | 845629.592 |
| 195 | 143+35.3 WB | 14.0 RT | 560651.446 | 845641.957 |
| 196 | 143+41.6 WB | 14.5 RT | 560650.185 | 845648.139 |
| 198 | 144+35.3 WB | 6.0 RT | 560647.227 | 845742.188 |

N

ALL CURB AND GUTTTER POINTS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED AS
BOC-BACK OF CURB
EOA-EDGE OF ASPHALT
ALL RADIUS DISTANCES ARE TO FACE OF CURB

BEGIN TRAIL RELOCATION
STA. 10+00



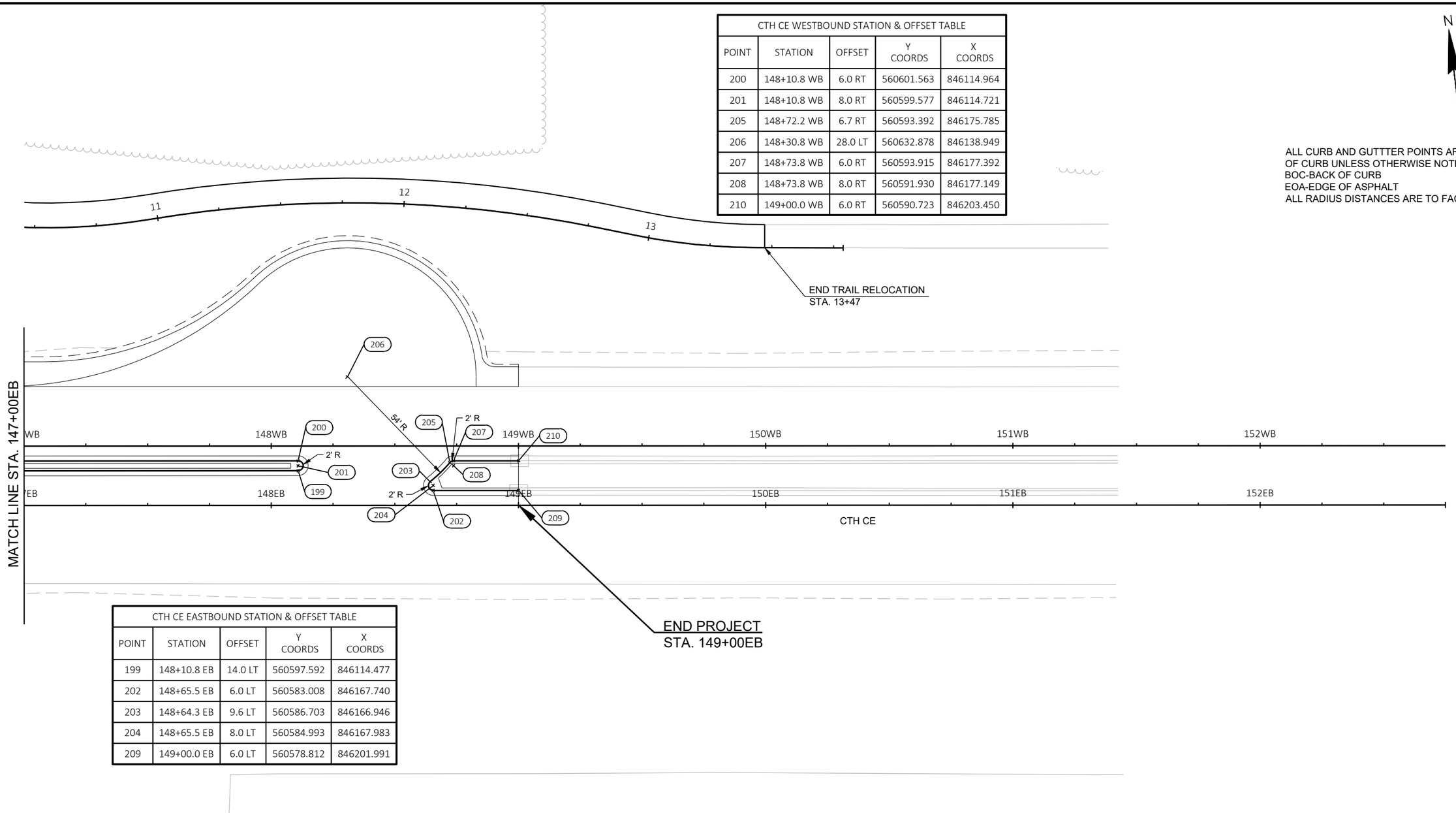

| CTH CE EASTBOUND STATION & OFFSET TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS |
| 193 | 143+10.4 EB | 4.0 LT | 560648.511 | 845616.571 |
| 197 | 144+35.4 EB | 14.0 LT | 560643.238 | 845741.860 |

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PLAN OFFSETS | SHEET 34 | E |
|---|---|---|---|---|---|

| CTH CE WESTBOUND STATION & OFFSET TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS |
| 200 | 148+10.8 WB | 6.0 RT | 560601.563 | 846114.964 |
| 201 | 148+10.8 WB | 8.0 RT | 560599.577 | 846114.721 |
| 205 | 148+72.2 WB | 6.7 RT | 560593.392 | 846175.785 |
| 206 | 148+30.8 WB | 28.0 LT | 560632.878 | 846138.949 |
| 207 | 148+73.8 WB | 6.0 RT | 560593.915 | 846177.392 |
| 208 | 148+73.8 WB | 8.0 RT | 560591.930 | 846177.149 |
| 210 | 149+00.0 WB | 6.0 RT | 560590.723 | 846203.450 |

N

ALL CURB AND GUTTTER POINTS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED AS
BOC-BACK OF CURB
EOA-EDGE OF ASPHALT
ALL RADIUS DISTANCES ARE TO FACE OF CURB




| CTH CE EASTBOUND STATION & OFFSET TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS |
| 199 | 148+10.8 EB | 14.0 LT | 560597.592 | 846114.477 |
| 202 | 148+65.5 EB | 6.0 LT | 560583.008 | 846167.740 |
| 203 | 148+64.3 EB | 9.6 LT | 560586.703 | 846166.946 |
| 204 | 148+65.5 EB | 8.0 LT | 560584.993 | 846167.983 |
| 209 | 149+00.0 EB | 6.0 LT | 560578.812 | 846201.991 |

2

| RAILROAD STREET STATION & OFFSET TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS |
| 211 | 7+67.2 RR | 15.0 LT | 560490.413 | 845160.745 |
| 212 | 7+67.5 RR | 22.2 RT | 560491.447 | 845197.906 |
| 213 | 7+82.5 RR | 15.0 LT | 560505.406 | 845160.322 |
| 214 | 8+09.3 RR | 15.0 LT | 560532.213 | 845159.566 |
| 215 | 8+38.1 RR | 15.0 LT | 560560.986 | 845158.755 |
| 220 | 8+56.9 RR | 2.0 RT | 560580.256 | 845175.226 |
| 222 | 8+56.9 RR | 5.0 RT | 560580.340 | 845178.224 |

N

ALL CURB AND GUTTTER POINTS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED AS
BOC-BACK OF CURB
EOA-EDGE OF ASPHALT
ALL RADIUS DISTANCES ARE TO FACE OF CURB

VAN ROY RD.

MATCH LINE STA. 9+00RR

5RR 6RR 7RR 8RR 9RR

RAILROAD ST.

8RE

CONSTRUCTION LIMITS
STA. 7+67.5RR

211 213 214 215 220 222 221 212 216 217 218 219

3' R

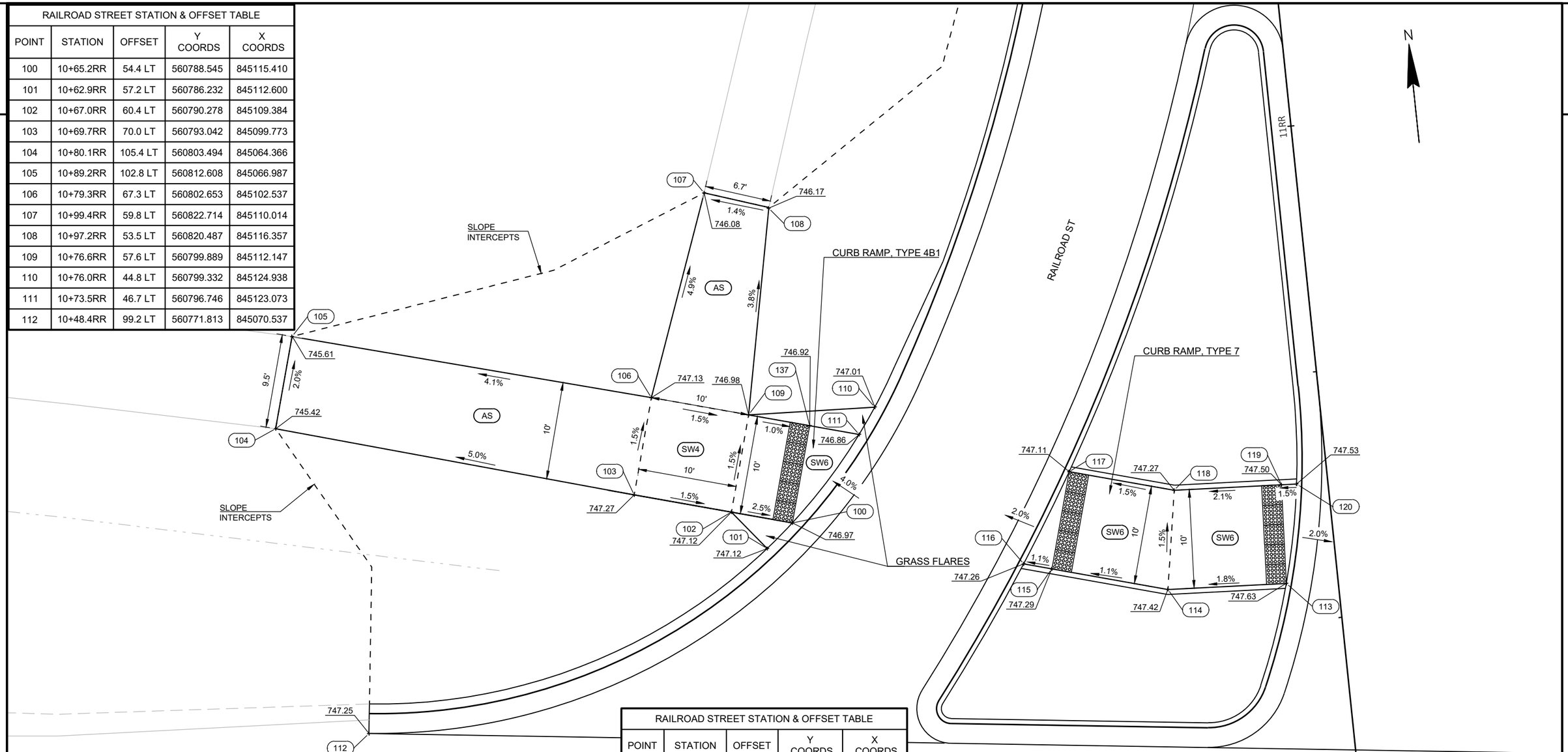
226' R

98' R

BETTER WAY

| RAILROAD EASTBOUND TURN LANE STATION & OFFSET TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS |
| 216 | 8+03.2 RE | 24.0 RT | 560525.547 | 845199.278 |
| 217 | 8+48.5 RE | 24.0 RT | 560566.102 | 845204.613 |
| 218 | 8+93.8 RE | 24.0 RT | 560605.032 | 845217.172 |
| 219 | 8+93.8 RE | 122.0 RT | 560566.627 | 845307.333 |
| 221 | 8+56.5 RE | 2.0 LT | 560579.588 | 845181.129 |

| RAILROAD STREET STATION & OFFSET TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS |
| 100 | 10+65.2RR | 54.4 LT | 560788.545 | 845115.410 |
| 101 | 10+62.9RR | 57.2 LT | 560786.232 | 845112.600 |
| 102 | 10+67.0RR | 60.4 LT | 560790.278 | 845109.384 |
| 103 | 10+69.7RR | 70.0 LT | 560793.042 | 845099.773 |
| 104 | 10+80.1RR | 105.4 LT | 560803.494 | 845064.366 |
| 105 | 10+89.2RR | 102.8 LT | 560812.608 | 845066.987 |
| 106 | 10+79.3RR | 67.3 LT | 560802.653 | 845102.537 |
| 107 | 10+99.4RR | 59.8 LT | 560822.714 | 845110.014 |
| 108 | 10+97.2RR | 53.5 LT | 560820.487 | 845116.357 |
| 109 | 10+76.6RR | 57.6 LT | 560799.889 | 845112.147 |
| 110 | 10+76.0RR | 44.8 LT | 560799.332 | 845124.938 |
| 111 | 10+73.5RR | 46.7 LT | 560796.746 | 845123.073 |
| 112 | 10+48.4RR | 99.2 LT | 560771.813 | 845070.537 |



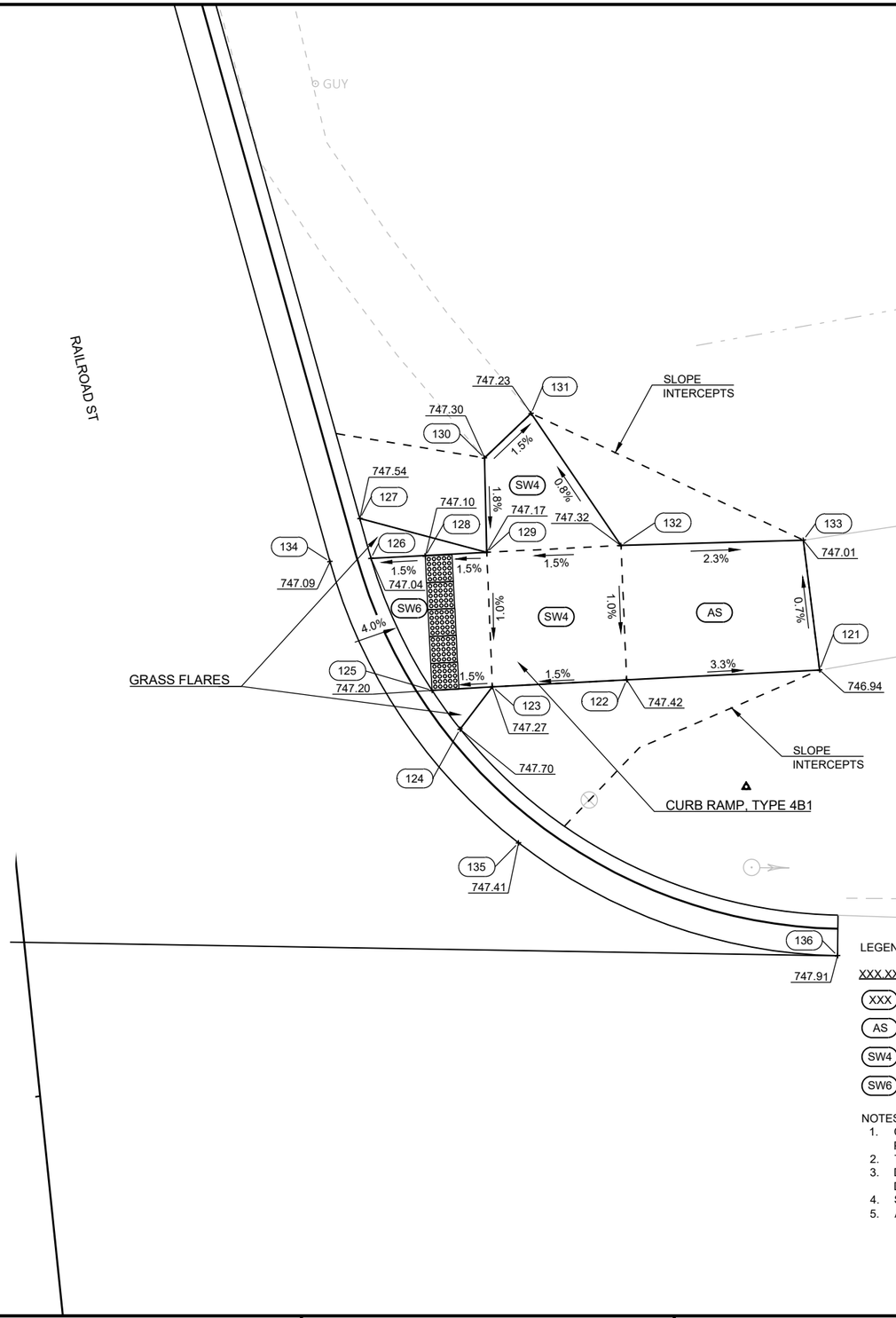

| RAILROAD STREET STATION & OFFSET TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS |
| 113 | 10+54.0RR | 5.2 LT | 560777.227 | 845164.516 |
| 114 | 10+54.6RR | 17.2 LT | 560777.869 | 845152.523 |
| 115 | 10+57.9RR | 28.7 LT | 560781.171 | 845141.055 |
| 116 | 10+58.7RR | 31.5 LT | 560781.971 | 845138.262 |
| 117 | 10+67.5RR | 25.9 LT | 560790.778 | 845143.827 |
| 118 | 10+64.5RR | 15.6 LT | 560787.793 | 845154.213 |
| 119 | 10+64.0RR | 4.7 LT | 560787.211 | 845165.061 |
| 120 | 10+63.9RR | 3.2 LT | 560787.129 | 845166.598 |
| 137 | 10+74.9RR | 51.6 LT | 560798.153 | 845118.182 |

LEGEND

| | |
|---|---|
| XXX.XX | ELEVATION |
| (XXX) | POINT NUMBER |
| (AS) | ASPHALTIC SURFACE |
| (SW4) | CONCRETE SIDEWALK 4-INCH |
| (SW6) | CONCRETE SIDEWALK 6-INCH |

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS
4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS
5. ALL STATION AND OFFSET INFORMATION REFERENCE RAILROAD ST R/L

2




| RAILROAD STREET STATION & OFFSET TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS |
| 121 | 10+50.5RR | 61.0 RT | 560773.678 | 845230.701 |
| 122 | 10+51.3RR | 46.6 RT | 560774.448 | 845216.348 |
| 123 | 10+51.8RR | 36.6 RT | 560774.983 | 845206.362 |
| 124 | 10+48.9RR | 33.9 RT | 560772.103 | 845203.644 |
| 125 | 10+52.0RR | 32.1 RT | 560775.187 | 845201.865 |
| 126 | 10+62.2RR | 28.6 RT | 560785.425 | 845198.378 |
| 127 | 10+65.3RR | 28.1 RT | 560788.456 | 845197.872 |
| 128 | 10+62.0RR | 32.6 RT | 560785.172 | 845202.411 |
| 129 | 10+61.8RR | 37.2 RT | 560784.963 | 845206.989 |
| 130 | 10+68.8RR | 37.8 RT | 560791.960 | 845207.563 |
| 131 | 10+71.7RR | 41.6 RT | 560794.888 | 845211.353 |
| 132 | 10+61.3RR | 47.2 RT | 560784.428 | 845216.975 |
| 133 | 10+60.3RR | 60.7 RT | 560783.406 | 845230.504 |
| 134 | 10+62.3RR | 25.6 RT | 560785.502 | 845195.319 |
| 135 | 10+40.1RR | 37.3 RT | 560763.241 | 845207.080 |
| 136 | 10+29.3RR | 60.1 RT | 560752.417 | 845229.810 |

LEGEND

| | |
|---|---|
| XXX.XX | ELEVATION |
| (XXX) | POINT NUMBER |
| (AS) | ASPHALTIC SURFACE |
| (SW4) | CONCRETE SIDEWALK 4-INCH |
| (SW6) | CONCRETE SIDEWALK 6-INCH |

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS
4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS
5. ALL STATION AND OFFSET INFORMATION REFERENCE RAILROAD ST R/L

CTH CE

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | CURB RAMPS | SHEET 38 | E |
|---|---|---|---|---|---|

2

2

N

EXISTING R/W

EXISTING R/W

TRUMAN ST.

MH

MH

MH

129WB 130WB 131WB 132WB 133WB 134WB 135

CTH CE

129EB 130EB 131EB 132EB 133EB 134EB 135

MATCH LINE STA. 135+00EB

EXISTING R/W

EXISTING R/W

R/W LINE

P.L.

P.L.

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B
- SLOPE INTERCEPT
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- RIPRAP LIGHT

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | EROSION CONTROL | SHEET 39 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022001_ec

PLOT DATE : 10/31/2022 8:08 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

EXISTING R/W

EXISTING R/W

P.L.

12

11RR

RAILROAD ST.

MATCH LINE STA. 135+00EB

MATCH LINE STA. 141+00EB

WB 136WB 137WB 138WB 10RR 139WB 140WB 141

EB 136EB 137EB 138EB 139EB 140EB 141

CTH CE

RAILROAD ST.

MATCH LINE STA. 9+00RR

EXISTING R/W

P.L.

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B
- SLOPE INTERCEPT
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- RIPRAP LIGHT

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | EROSION CONTROL | SHEET 40 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022002_ec
PLOT DATE : 10/31/2022 8:08 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

P.L.

EXISTING R/W

EXISTING R/W

N

MATCH LINE STA. 141+00EB

MATCH LINE STA. 147+00EB

WB 142WB 143WB 144WB 145WB 146WB 147

CTH CE

EB 142EB 143EB 144EB 145EB 146EB 147

MH

MH

EXISTING R/W

EXISTING R/W

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B
- SLOPE INTERCEPT
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- RIPRAP LIGHT

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | EROSION CONTROL | SHEET 41 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022003_ec

PLOT DATE : 10/31/2022 8:08 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : ##########

2

2

N

EXISTING R/W

EXISTING R/W

P.L.

MATCH LINE STA. 147+00EB

WB 148WB 149WB 150WB 151WB 152WB

CTH CE

EB 148EB 150EB 151EB 152EB

EXISTING R/W

EXISTING R/W

LEGEND

EROSION MAT URBAN CLASS I, TYPE A

EROSION MAT URBAN CLASS I, TYPE B

SLOPE INTERCEPT

SILT FENCE

SURFACE WATER FLOW

INLET PROTECTION

CULVERT PIPE CHECK

TEMPORARY DITCH CHECK

RIPRAP LIGHT

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | EROSION CONTROL | SHEET 42 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022004_ec

PLOT DATE : 11/1/2022 10:20 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : ##########

2

N

N

2

VAN ROY RD.

EXISTING R/W

EXISTING R/W

EXISTING R/W

5RR

6RR

RAILROAD ST.

7RR

8RR

MATCH LINE STA. 9+00RR

EXISTING R/W

EXISTING R/W

EXISTING R/W

TLE LINE

R/W LINE

EXISTING R/W

BETTER WAY

LEGEND

EROSION MAT URBAN CLASS I, TYPE A

EROSION MAT URBAN CLASS I, TYPE B

SLOPE INTERCEPT

SILT FENCE

SURFACE WATER FLOW

INLET PROTECTION

CULVERT PIPE CHECK

TEMPORARY DITCH CHECK

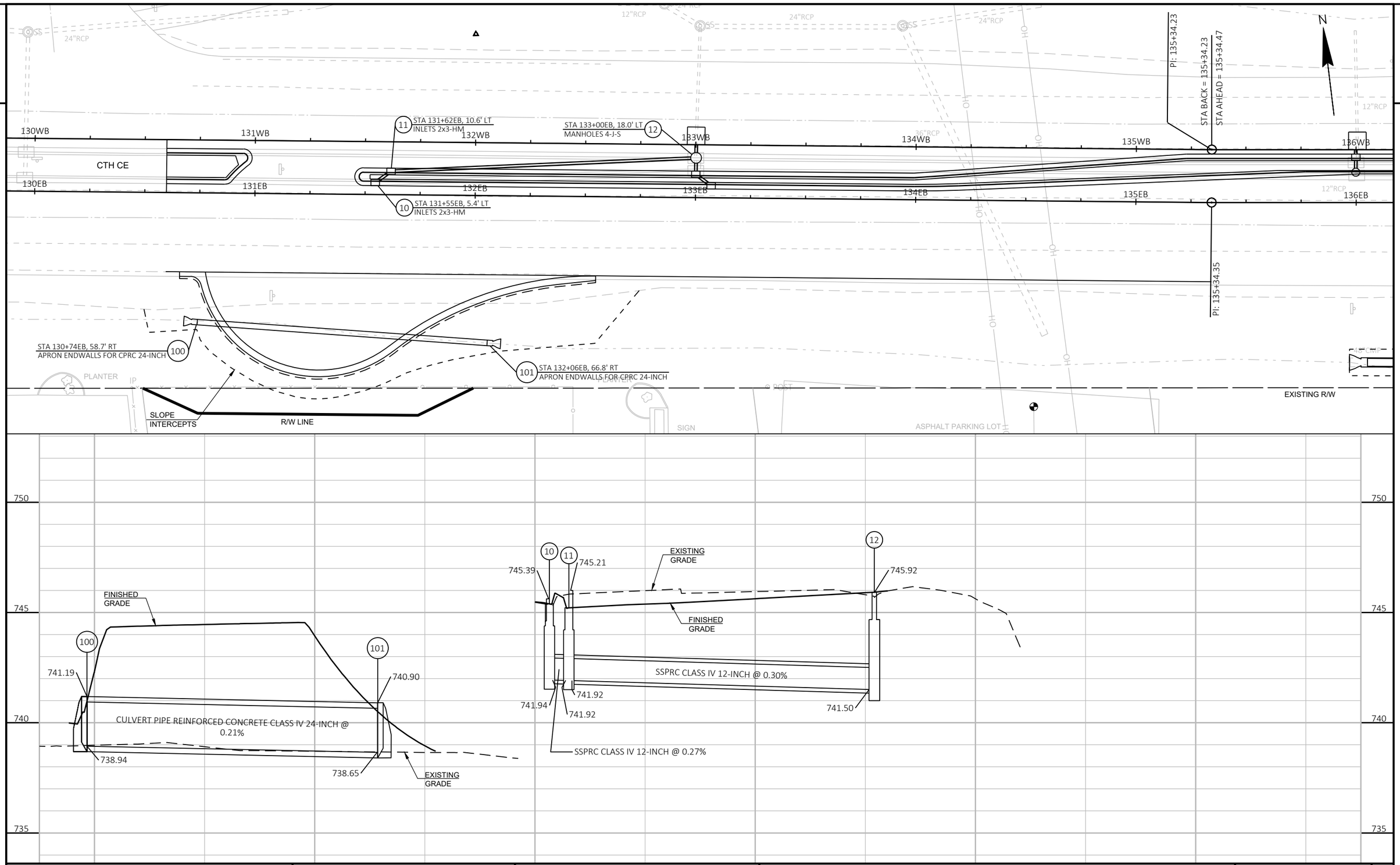
RIPRAP LIGHT

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | EROSION CONTROL | SHEET 43 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022005_ec

PLOT DATE : 10/31/2022 8:08 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : ##########

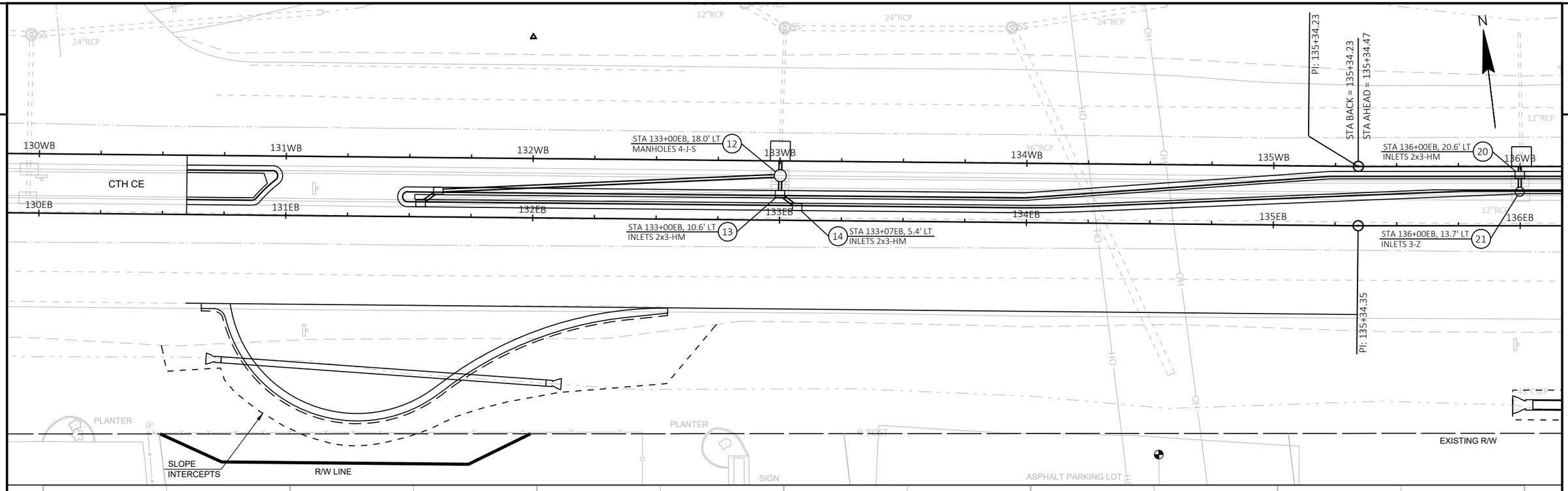
2

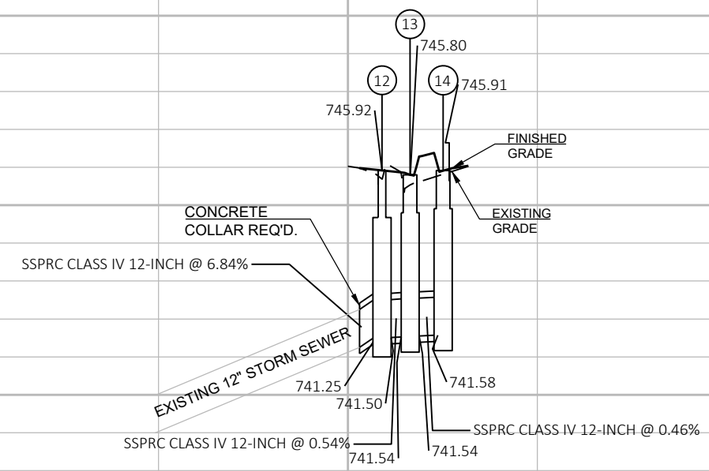


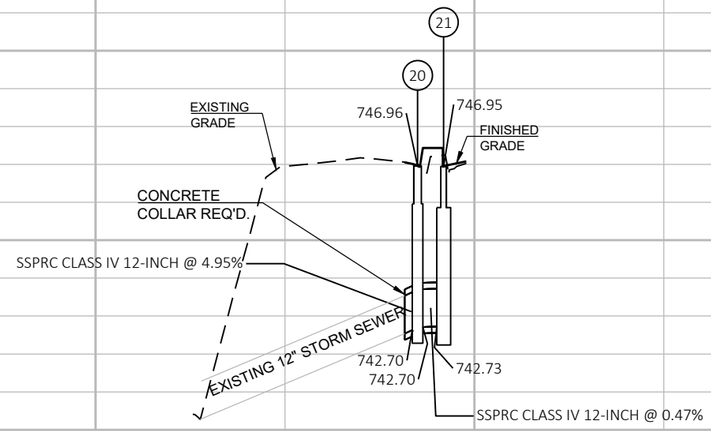

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | STORM SEWER | SHEET 44 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 022501_ss
PLOT DATE : 10/31/2022 2:44 PM
PLOT BY : GARNICA, BRANDON
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

2




750
745
740
735

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | STORM SEWER | SHEET 45 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\022502_SS.DWG
LAYOUT NAME - 022502_ss
PLOT DATE : 10/31/2022 8:08 AM
PLOT BY : GARNICA, BRANDON
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

N

RAILROAD ST.

BURIED TELEPHONE LINE
(APPROXIMATE LOCATION)

SLOPE
INTERCEPTS

12"RCP

BURIED TELEPHONE LINE
(APPROXIMATE LOCATION)

STA 138+37EB, 14.7' LT
INLETS 2x3-HM
31

136WB 137WB 138WB 139WB 140WB 141WB 142WB

12"SS

CTH CE

136EB 137EB 138EB 139EB 140EB 141EB 142EB

STA 138+37EB, 3.4' LT
INLETS 2x3-HM
30

4"PCP

32
STA 139+58EB, 3.4' LT
INLETS 2x3-HM

BURIED FIBER OPTIC CABLE
(APPROXIMATE LOCATION)

CAUTION

BURIED GAS LINE
(APPROXIMATE LOCATION)

SLOPE
INTERCEPTS

RAILROAD ST.

SLOPE
INTERCEPTS

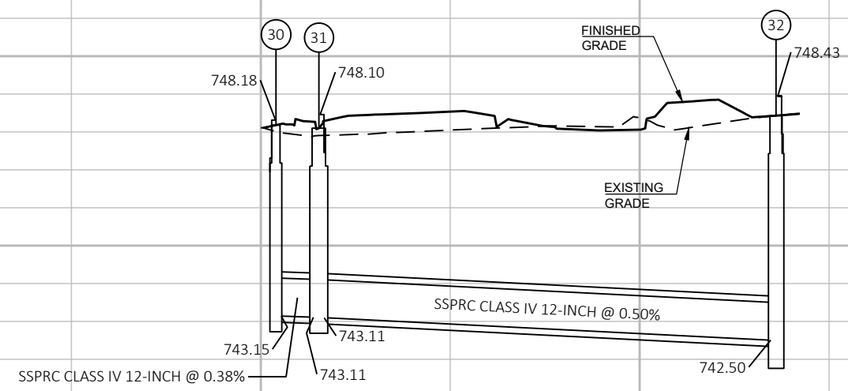
BURIED TELEPHONE LINE
(APPROXIMATE LOCATION)

BURIED FIBER OPTIC CABLE
(APPROXIMATE LOCATION)

12"CMP

EXISTING R/W

EXISTING R/W




750
745
740

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | STORM SEWER | SHEET 46 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\022503_SS.DWG
LAYOUT NAME - 022503_ss

PLOT DATE : 10/31/2022 8:09 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

RAILROAD ST.

BURIED TELEPHONE LINE
(APPROXIMATE LOCATION)

SLOPE
INTERCEPTS

12"RCP

BURIED TELEPHONE LINE
(APPROXIMATE LOCATION)

136WB 137WB 138WB 139WB 140WB 141WB 142WB

CTH CE

136EB 137EB 138EB 139EB 140EB 141EB 142EB

33 STA 139+58EB, 10.2' LT
INLETS 4-Z

50 STA 142+00EB, 10.3' LT
INLETS 3-Z

32 STA 139+58EB, 3.4' LT
INLETS 2x3-HM

51 STA 142+00EB, 3.4' LT
INLETS 2x3-HM

BURIED FIBER OPTIC CABLE
(APPROXIMATE LOCATION)

SLOPE
INTERCEPTS

CAUTION

BURIED GAS LINE
(APPROXIMATE LOCATION)

RAILROAD ST.

SLOPE
INTERCEPTS

BURIED FIBER OPTIC CABLE
(APPROXIMATE LOCATION)

BURIED TELEPHONE LINE
(APPROXIMATE LOCATION)

32A STA 139+58EB, 65.1' RT
APRON ENDWALLS FOR CPRC 24-INCH

EXISTING R/W

EXISTING R/W

755

750

745

740

32

33

FINISHED
GRADE

748.35

748.43

EXISTING
GRADE

CONCRETE
COLLARD REQ'D.

CONCRETE
COLLAR REQ'D.

32A

743.47

EXISTING 24" STORM SEWER

EXISTING 24" STORM SEWER

742.45

SSPRC CLASS III 24-INCH @ 1.35%

742.27

742.27

742.12

741.28

741.22

SSPRC CLASS III 24-INCH @ 1.32%

742.18

742.18

SSPRC CLASS III 24-INCH @ 1.38%

SSPRC CLASS III 24-INCH @ 1.70%

51

50

749.17

749.17

FINISHED
GRADE

CONCRETE
COLLAR REQ'D.

EXISTING
GRADE

EXISTING 12" STORM SEWER

745.11

SSPRC CLASS IV 12-INCH @ 0.48%

744.66

745.08

745.08

SSPRC CLASS IV 12-INCH @ 3.46%

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | STORM SEWER | SHEET 47 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\022504_SS.DWG
LAYOUT NAME - 022504_ss

PLOT DATE : 10/31/2022 8:09 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

SLOPE INTERCEPTS

ASPHALT TRAIL

N

12"RCP

CAUTION

BURIED GAS LINE
(APPROXIMATE LOCATION)

145WB 146WB 147WB 148WB 149WB 150WB 151WB

61 STA 148+05EB, 18.6' LT
INLETS 2x3-HM

CTH CE

145EB 146EB 147EB 148EB 149EB 150EB 151EB

STA 147+98EB, 13.5' LT
INLETS 2x3-HM 60

18"RCP

18"RCP

BURIED TELEPHONE LINE
(APPROXIMATE LOCATION)

EXISTING R/W

PLANTER

FOMH

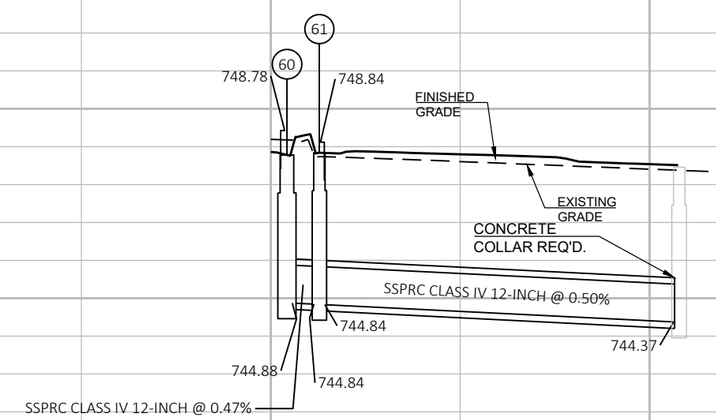
EXISTING R/W

755

750

745

740




| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | STORM SEWER | SHEET 48 | E |
|---|---|---|---|---|---|


FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\022505_SS.DWG
LAYOUT NAME - 022505_ss
PLOT DATE : 11/1/2022 10:25 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

CTH CE

SLOPE INTERCEPTS

CAUTION

BURIED GAS LINE (APPROXIMATE LOCATION)

STA 8+66RR, 1.4' RT
INLETS 2x3-H
40

RAILROAD ST.
9RR

SLOPE INTERCEPTS

BURIED TELEPHONE LINE (APPROXIMATE LOCATION)

41 STA 8+65RR, 11.1' RT
INLETS 2x3-H

EXISTING R/W

BURIED FIBER OPTIC CABLE (APPROXIMATE LOCATION)

43 STA 8+69RR, 70.5' RT
INLETS MEDIAN 1G-MS

R/W LINE

BURIED FIBER OPTIC CABLE (APPROXIMATE LOCATION)

EXISTING R/W

42 STA 8+57RR, 34.4' RT
INLETS 4-HM

BURIED TELEPHONE LINE (APPROXIMATE LOCATION)

EXISTING R/W

47 STA 139+10EB, 136.6' RT
INLETS 9-H

8RR

34 STA 7+80RR, 32.7' RT
INLETS 3-C

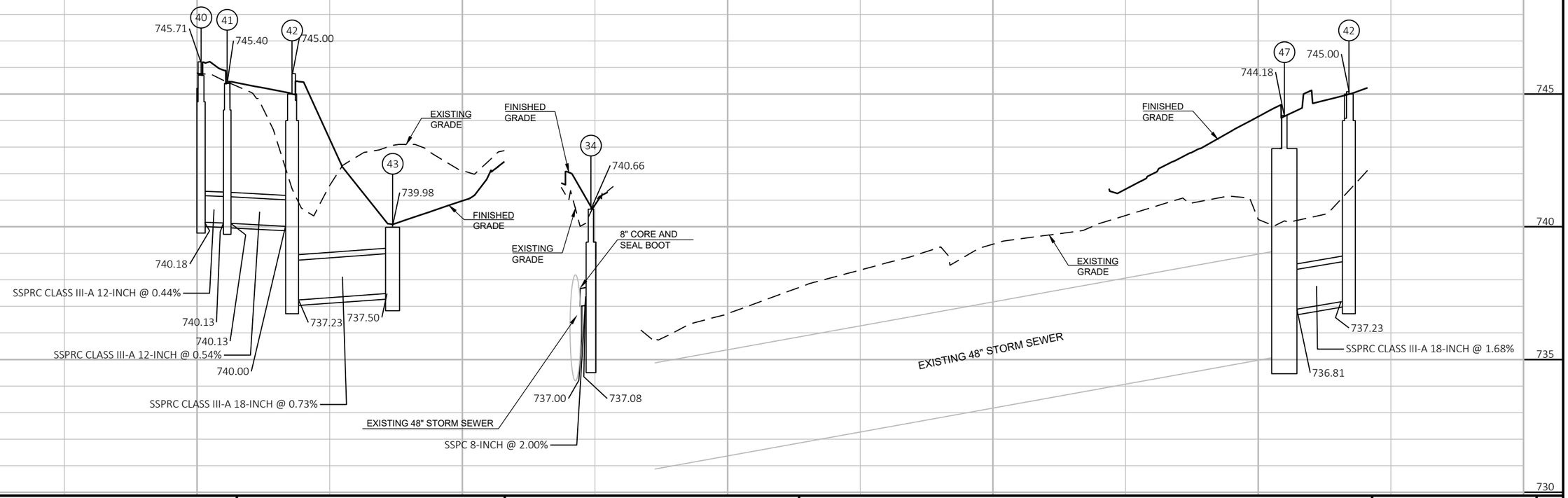
NOTE:
8" CORE AND SEAL BOOT

BUILDING

ASPHALT PARKING LOT

SEPV

POST




| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | STORM SEWER | SHEET 49 | E |
|---|---|---|---|---|---|


FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\022506_SS.DWG
LAYOUT NAME - 022506_ss
PLOT DATE : 10/31/2022 1:38 PM
PLOT BY : GARNICA, BRANDON
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

2

CTH CE

136EB 137EB 138EB 139EB 140EB 141EB 142EB

12"RCP 4"PCP

SLOPE INTERCEPTS

CAUTION

BURIED GAS LINE (APPROXIMATE LOCATION)

RAILROAD ST.

SLOPE INTERCEPTS

BURIED TELEPHONE LINE (APPROXIMATE LOCATION)

EXISTING R/W

EXISTING R/W

44 STA 136+05EB, 72.5' RT
APRON ENDWALLS FOR CPRC 42-INCH

STA 137+86EB, 73.4' RT 45
MANHOLES 6-J

BURIED FIBER OPTIC CABLE (APPROXIMATE LOCATION)

EXISTING R/W

BURIED FIBER OPTIC CABLE (APPROXIMATE LOCATION)

R/W LINE

SEPV

BUILDING

ASPHALT PARKING LOT

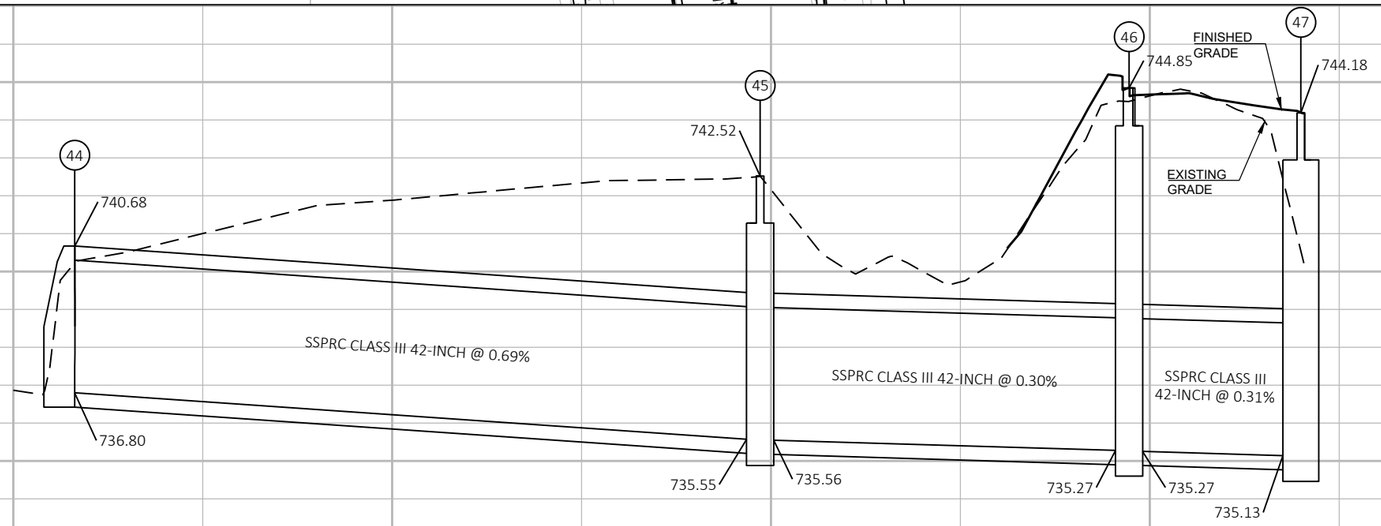
BURIED TELEPHONE LINE (APPROXIMATE LOCATION)

STA 138+65EB, 130.1' RT 46
INLETS 6-H

47 STA 139+10EB, 136.6' RT
INLETS, SPECIAL 9-H

TLE LINE

48"RCP




| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | STORM SEWER | SHEET 50 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\022507_SS.DWG
LAYOUT NAME - 022507_ss

PLOT DATE : 10/31/2022 8:09 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

EXISTING SIGN TO REMAIN

ONE WAY

TRUMAN ST.

SPEED LIMIT 40
R2-1
30"X36"
03

STOP
R1-1
TRAIL
04

BIKE ROUTE
D11-1
24"X18"
05

RAILROAD STREET

RAILROAD ST
STREET NAME MOVE
12
ON EXISTING SIGNAL POLE

06

R4-7

07
ON EXISTING SIGNAL POLE

CTH CE

130

135

ASPHALT TRAIL

ASPHALT

CONCRETE

CEMETARY

POST

IP

SIGN

PLANTER

ASPHALT PARKING LOT

01

02

W3-3
36"X36"

08

RIGHT LANE MUST TURN RIGHT
R3-7R

09

WRONG WAY
R5-1A

10

RIGHT LANE MUST TURN RIGHT
R3-7R

11

DO NOT ENTER
R5-1

ON EXISTING SIGNAL POLE

CABC

CE

## LEGEND

- EXISTING SIGN MOUNTED ON POST
- EXISTING SIGN MOUNTED ON POLE
- XX — REMOVING SIGN
- 1XX — MOVING SIGN

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | EXISTING SIGNS | SHEET 51 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - 023201-ps

PLOT DATE : 10/31/2022 8:09 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

DO NOT ENTER
R5-1
30"X30"
13

WRONG WAY
R5-1A
36"X24"
14

RIGHT LANE MUST TURN RIGHT
R3-7R
30"X30"
15

W3-3
36"X36"
16
17

SPEED LIMIT 40
R2-1
30"X36"
18
19

22

SPEED LIMIT 40
R2-1
30"X36"

20
21

SPEED LIMIT 45
R2-1
30"X36"

POST
IP
PLANTER
ASPHALT TRAIL
TREES
ASPHALT PARKING LOT
CTH CE
140
145
150

## LEGEND

- EXISTING SIGN MOUNTED ON POST
- EXISTING SIGN MOUNTED ON POLE
- XX — REMOVING SIGN
- 1XX — MOVING SIGN

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | EXISTING SIGNS | SHEET 52 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - 023202-ps

PLOT DATE : 10/31/2022 8:09 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POLE OR MAST ARM
- (XXX) PROPOSED SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] MOVING SIGN NUMBER

2

N

TRUMAN ST.

CTH CE

129WB 130WB 131WB 132WB 133WB 134WB

129EB 130EB 131EB 132EB 133EB 134EB

105

ONLY

108 R3-18 30"X30"

109 EAST COUNTY CE J3-1 24"X57"

110 R3-18 30"X30"

111 STOP R1-1F 36"X36"

101 102 W3-3 36"X36"

INSTALL APPROX STA 126+25

103 WRONG WAY R5-1A 36"X24"

104 STOP R1-1F 36"X36"

105 STOP R1-1F 36"X36"

106 DO NOT ENTER R5-1 30"X30"

106 ONE WAY R6-2L 24"X30"

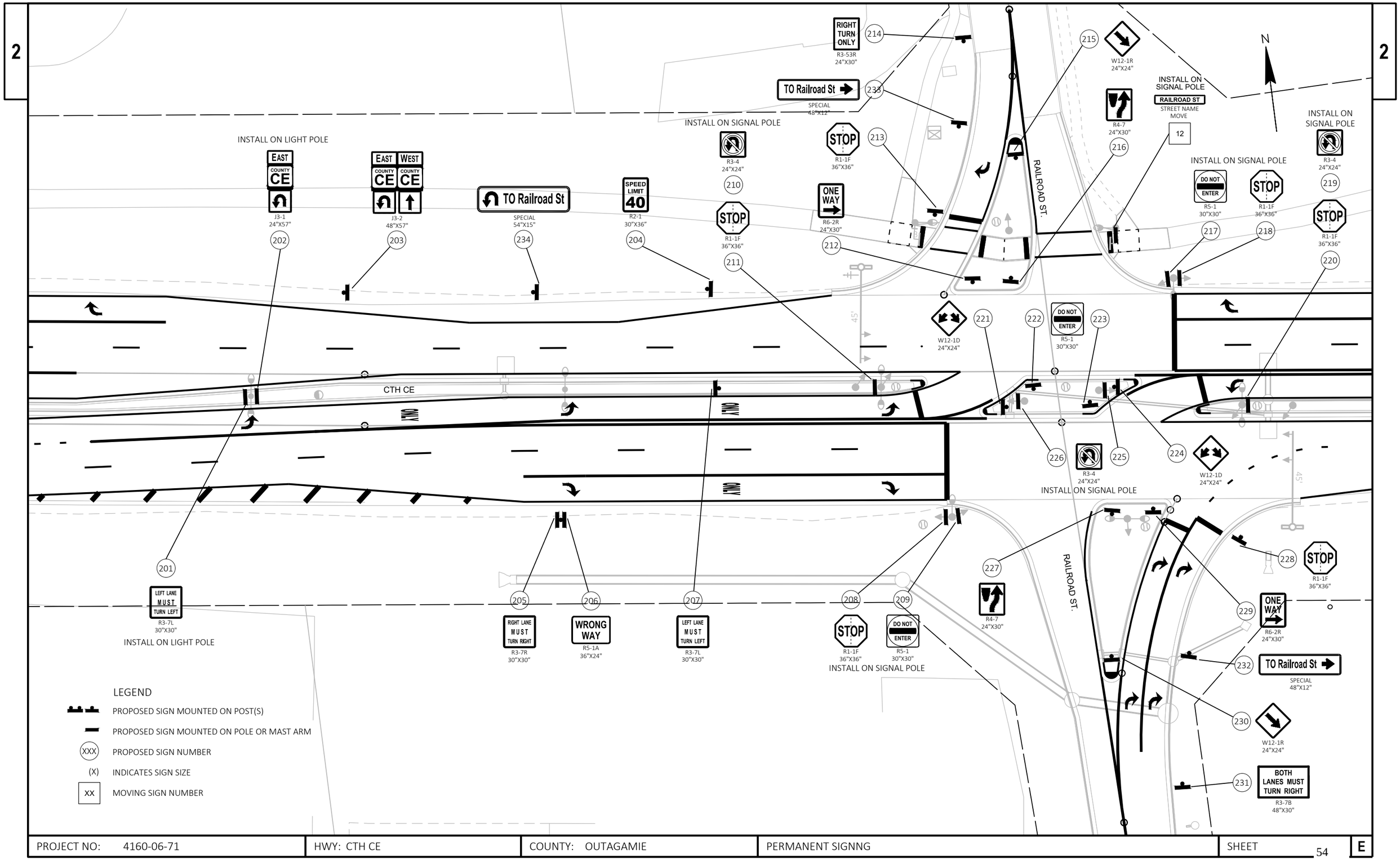
112 ONLY R3-5L 42"X48"

INSTALL ON OVERHEAD SUPPORT

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PERMANENT SIGNING | SHEET 53 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\023203_PS.DWG
LAYOUT NAME - 023203_ps

PLOT DATE : 10/31/2022 8:10 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT




| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PERMANENT SIGNNG | SHEET 54 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\023203_PS.DWG
LAYOUT NAME - 023204_ps

PLOT DATE : 10/31/2022 8:10 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

WRONG WAY
R5-1A
30"X24"
301

RIGHT LANE MUST TURN RIGHT
R3-7R
30"X30"
302

CTH CE

140WB 141WB 142WB 143WB 144WB 145WB 146WB

140EB 141EB 142EB 143EB 144EB 145EB 146EB

2-3

2ND AVE

PEDESTRIAN UNDERPASS

303
SPEED LIMIT 40
R2-1
30"X36"

304
TO Railroad St
SPECIAL
54"X15"

305
WEST COUNTY CE
J3-1
24"X57"

306
WEST COUNTY CE | EAST COUNTY CE
J3-2
48"X57"

LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POLE OR MAST ARM
- (XXX) PROPOSED SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] MOVING SIGN NUMBER

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PERMANENT SIGNING | SHEET 55 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\023203_PS.DWG
LAYOUT NAME - 023205_ps

PLOT DATE : 10/31/2022 8:10 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

INSTALL APPROX STA 154+50

SPEED LIMIT 40
R2-1
30"X36"
401 402

ONE WAY
R6-2L
24"X30"
403

DO NOT ENTER
R5-1
30"X30"
404

STOP
R1-1F
36"X36"
405

STOP
R1-1F
36"X36"
406

WRONG WAY
R5-1A
36"X24"
413

W3-3
36"X36"
414 415

146WB 147WB 148WB 149WB 150WB 151WB 152WB

CTH CE

146EB 147EB 148EB 149EB 150EB 151EB 152EB

407 408 409 410 411 412

R3-18
30"X30"

STOP
R1-1F
36"X36"

WEST COUNTY CE
J3-1
24"X57"

R3-18
30"X30"

SPEED LIMIT 45
R2-1
30"X36"

LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POLE OR MAST ARM
- (XXX) PROPOSED SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] MOVING SIGN NUMBER

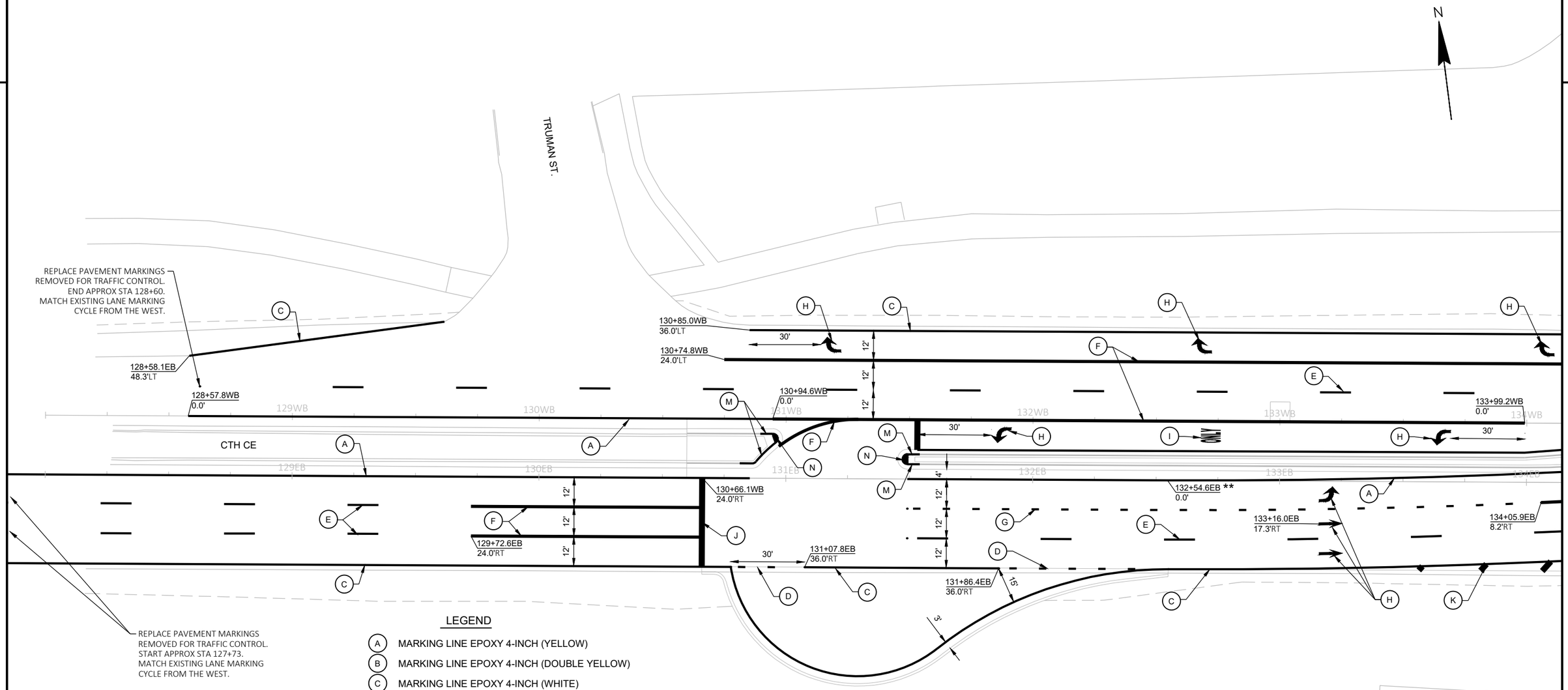
| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PERMANENT SIGNING | SHEET 56 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\023203_PS.DWG
LAYOUT NAME - 023206_ps

PLOT DATE : 10/31/2022 8:10 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2




## LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 3' LINE 9' GAP
- (E) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (F) MARKING LINE EPOXY 8-INCH (WHITE)
- (G) MARKING LINE EPOXY 8-INCH (WHITE) 3' LINE 9' GAP
- (H) MARKING ARROW EPOXY (WHITE)
- (I) MARKING WORD EPOXY (WHITE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- (L) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (M) MARKING CURB EPOXY (YELLOW)
- (N) MARKING ISLAND NOSE EPOXY (YELLOW)

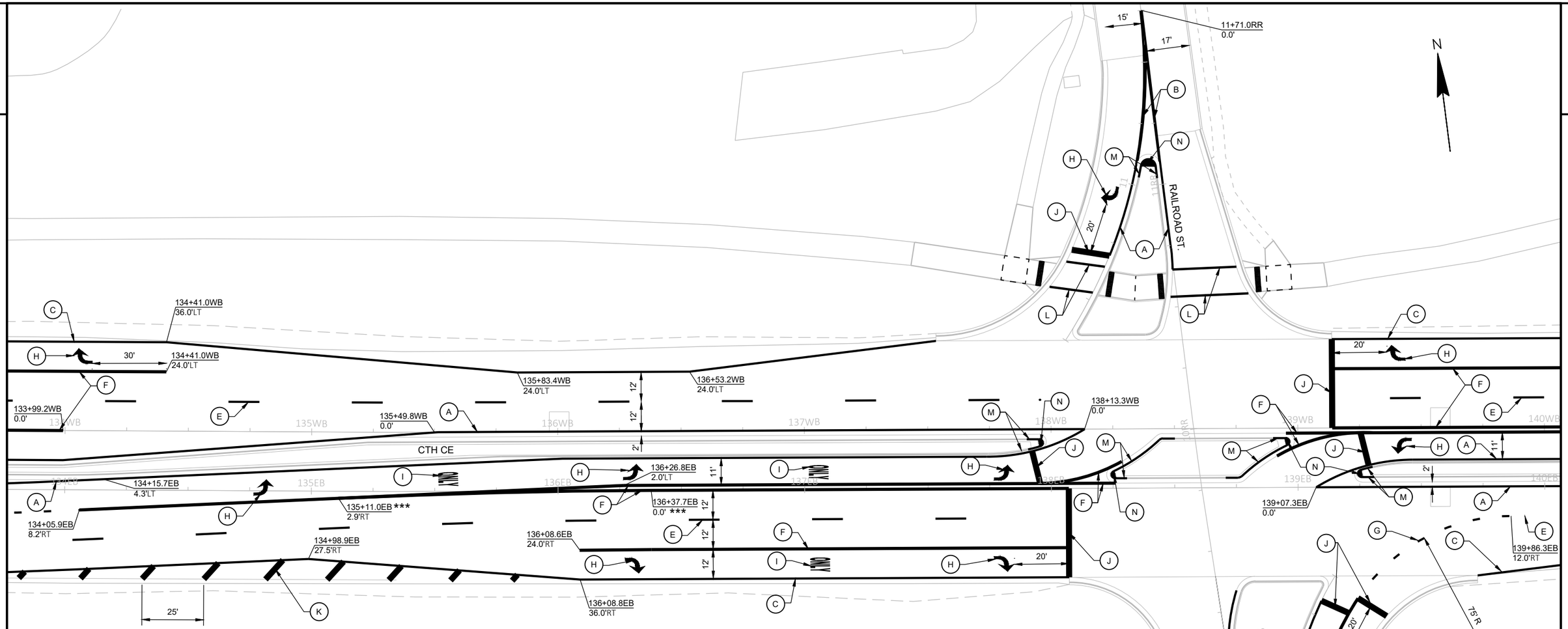
SPACE ARROWS AND ONLY EQUAL DISTANCE APART WITHIN EACH TURN LANE. DISTANCES VARY.

** START 3000' RADIUS CURVE FOR PAVEMENT MARKING, FROM 4-FT OFFSET TO 0-FT OFFSET FROM CURB FLANGE.
USE AS GUIDE FOR OTHER ADJACENT LANE LINE MARKINGS.

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PAVEMENT MARKING | SHEET 57 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024501_pm
PLOT DATE : 10/31/2022 8:10 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2




LEGEND

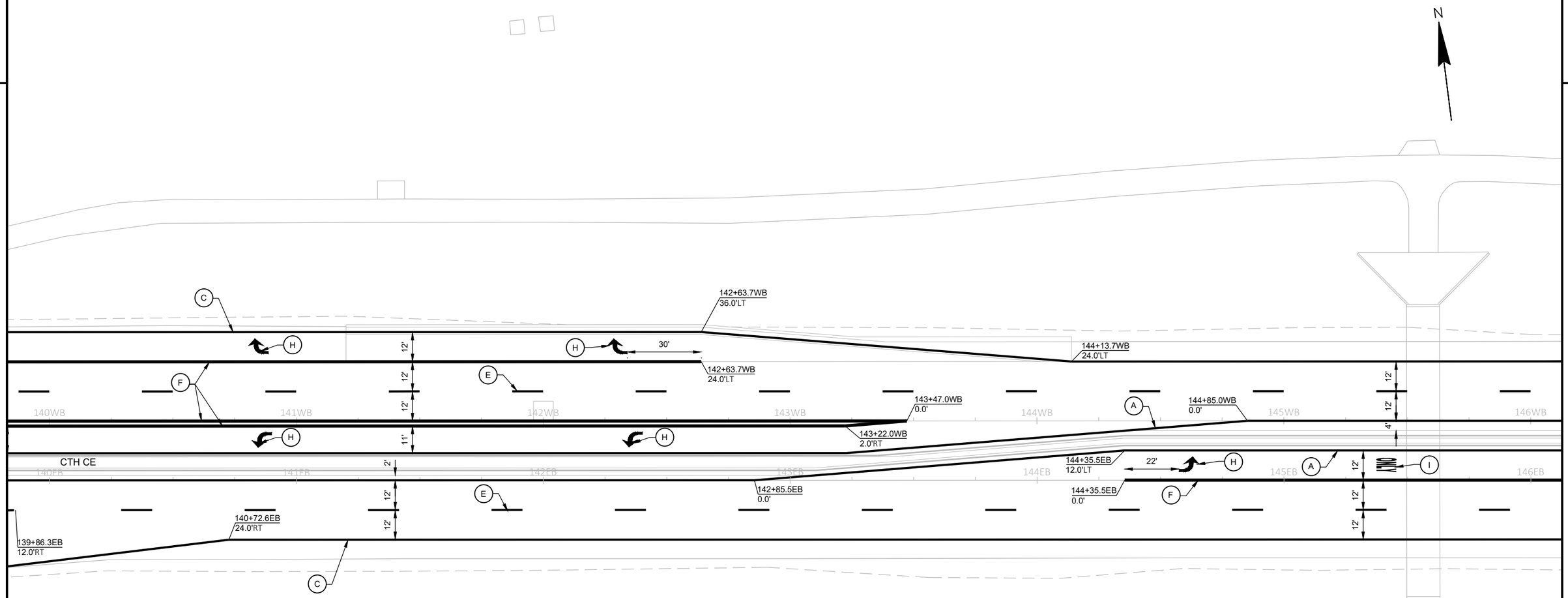
- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 3' LINE 9' GAP
- (E) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (F) MARKING LINE EPOXY 8-INCH (WHITE)
- (G) MARKING LINE EPOXY 8-INCH (WHITE) 3' LINE 9' GAP
- (H) MARKING ARROW EPOXY (WHITE)
- (I) MARKING WORD EPOXY (WHITE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- (L) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (M) MARKING CURB EPOXY (YELLOW)
- (N) MARKING ISLAND NOSE EPOXY (YELLOW)

*** 3012' RADIUS BETWEEN POINTS. USE AS GUIDE FOR OTHER ADJACENT LANE LINE MARKINGS.

SPACE ARROWS AND ONLY EQUAL DISTANCE APART WITHIN EACH TURN LANE. DISTANCES VARY.

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PAVEMENT MARKING | SHEET 58 | E |
|---|---|---|---|---|---|

2



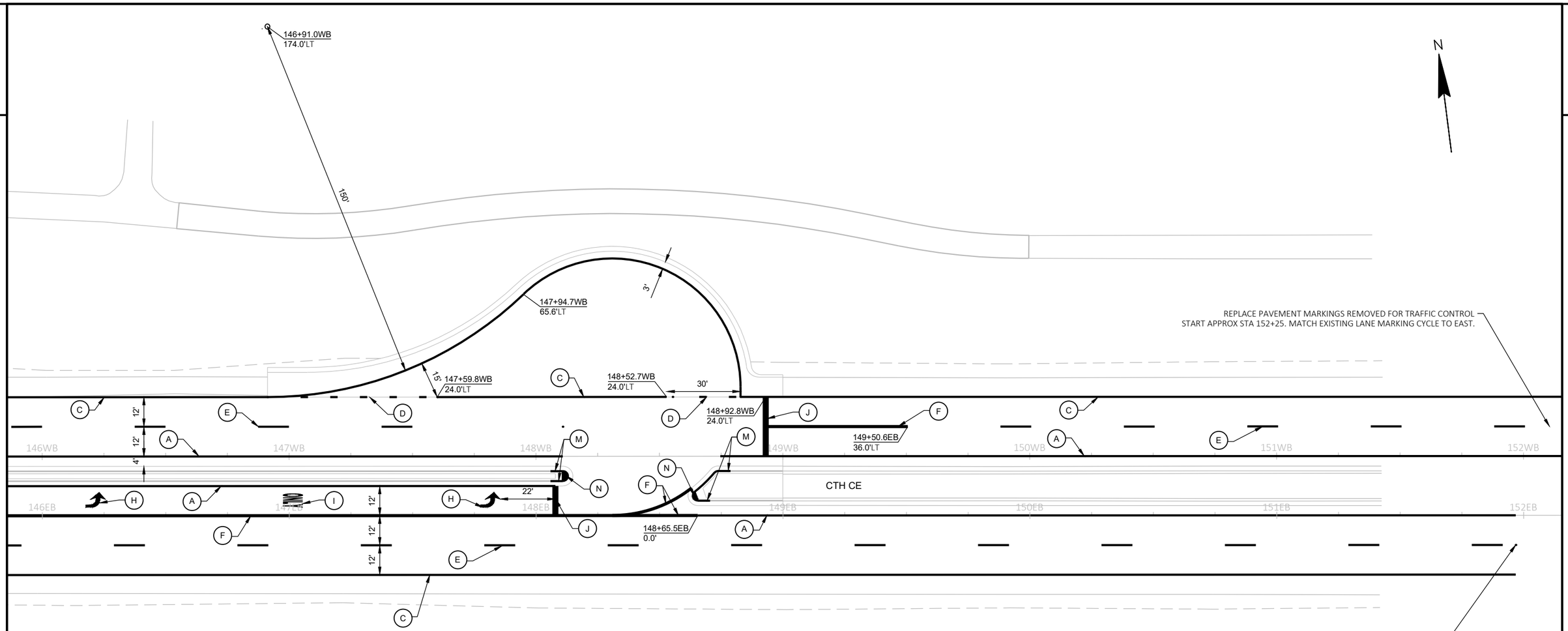

## LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 3' LINE 9' GAP
- (E) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (F) MARKING LINE EPOXY 8-INCH (WHITE)
- (G) MARKING LINE EPOXY 8-INCH (WHITE) 3' LINE 9' GAP
- (H) MARKING ARROW EPOXY (WHITE)
- (I) MARKING WORD EPOXY (WHITE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- (L) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (M) MARKING CURB EPOXY (YELLOW)
- (N) MARKING ISLAND NOSE EPOXY (YELLOW)

SPACE ARROWS AND ONLY EQUAL DISTANCE APART
WITHIN EACH TURN LANE. DISTANCES VARY.

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PAVEMENT MARKING | SHEET 59 | E |
|---|---|---|---|---|---|

2




LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 3' LINE 9' GAP
- (E) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (F) MARKING LINE EPOXY 8-INCH (WHITE)
- (G) MARKING LINE EPOXY 8-INCH (WHITE) 3' LINE 9' GAP
- (H) MARKING ARROW EPOXY (WHITE)
- (I) MARKING WORD EPOXY (WHITE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- (L) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (M) MARKING CURB EPOXY (YELLOW)
- (N) MARKING ISLAND NOSE EPOXY (YELLOW)

SPACE ARROWS AND ONLY EQUAL DISTANCE APART
WITHIN EACH TURN LANE. DISTANCES VARY.

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PAVEMENT MARKING | SHEET 60 | E |
|---|---|---|---|---|---|

2

N

BUILDING

ASPHALT

R/W

IP POST

RAILROAD ST.

EXCB1

EXPB1

GUY

CONC

ASPHALT TRAIL

EXSB1

EXPB2

EXSB2

EXPB3

ABANDON

EXSB3

25'

EXPB4

EXSB4

APPROX 160'

EXPB5

EXPB6

CTH CE WESTBOUND

136WB

137WB

138WB

139WB

140WB

141WB

EXSB10

EXPB14

136EB

137EB

138EB

139EB

140EB

141EB

EXPB7

EXSB5

24"PCP

CTH CE EASTBOUND

EXPB13

EXPB12

EXSB9

EXPB11

EXPB10

EXSB8

EXSB6

EXPB8

EXSB7

EXPB9

ASPHALT PARKING LOT

## SIGNAL REMOVAL NOTES

1. THE LOCATION OF EXISTING UTILITIES IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
2. REMOVE ALL ABOVE GROUND SIGNAL EQUIPMENT AND RETURN TO THE OWNER EXCEPT AS DESCRIBED IN THE SPECIAL PROVISIONS.
3. SALVAGE EXISTING BROADBAND RADIO INTERCONNECT ANTENNA FOR REINSTALLATION.
4. REMOVE AND DISPOSE OF ALL SIGNAL AND ELECTRICAL CABLE FROM EXISTING CONDUIT.
5. ABANDON ALL EXISTING LOOP DETECTORS. ABANDON CONDUIT AND SMALL PULL BOXES FOR CTH CE EXTENSION LOOPS OUTSIDE OF GRADING LIMITS.
6. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.

## LEGEND

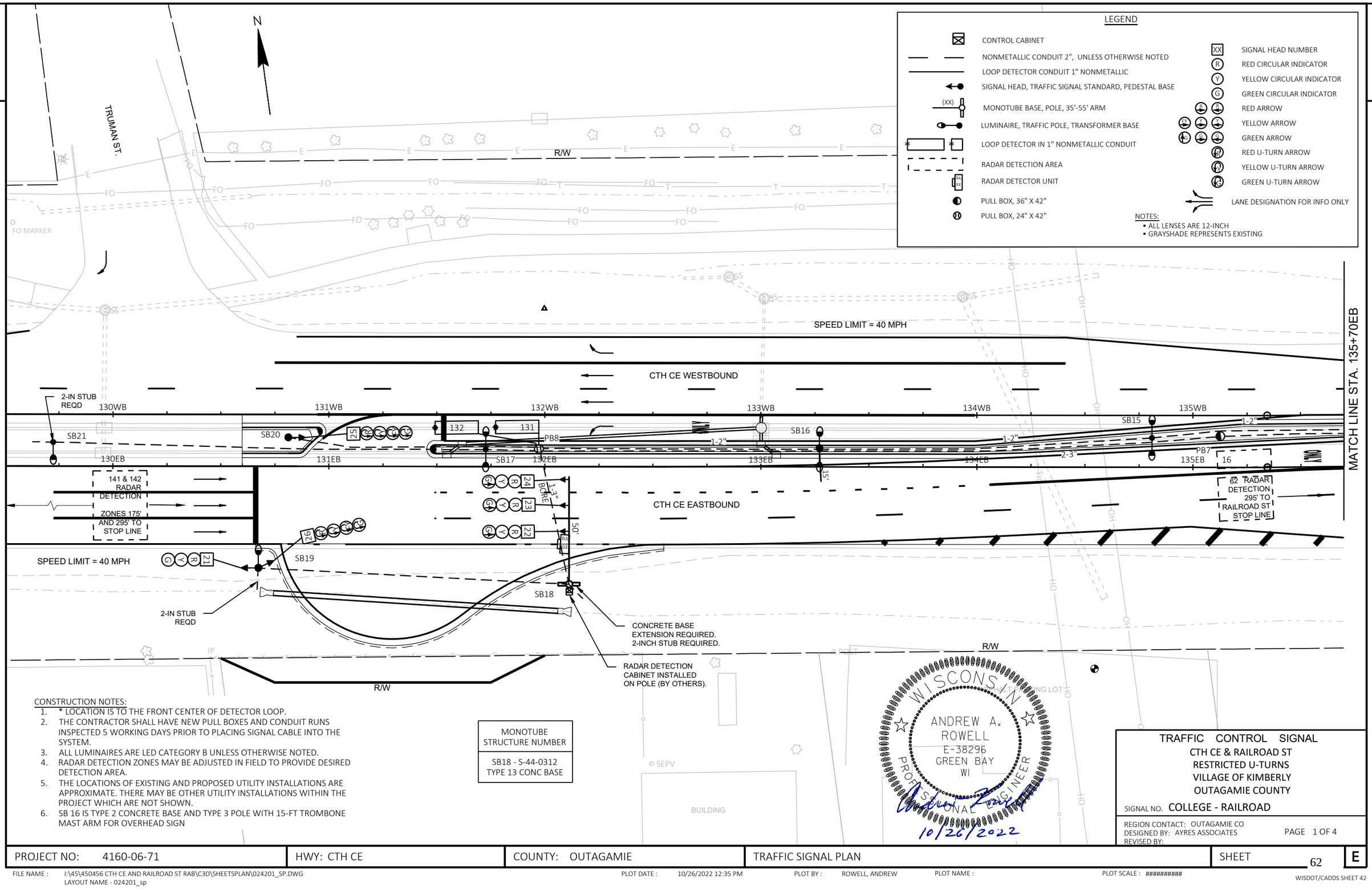
- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- RADIO INTERCONNECT ANTENNA
- RADAR DETECTOR UNIT
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- DON'T WALK INDICATOR 16" WALK INDICATOR 16"
- LANE DESIGNATION FOR INFO ONLY

NOTES:
- ALL LENSES ARE 12-INCH
- GRAYSHADE REPRESENTS EXISTING

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | SIGNAL REMOVAL PLAN - RAILROAD ST | SHEET 61 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\024001_SR.DWG
LAYOUT NAME - Removal

PLOT DATE : 10/31/2022 8:10 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT




CONSTRUCTION NOTES:

1. * LOCATION IS TO THE FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE NEW PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO THE SYSTEM.
3. ALL LUMINAIRES ARE LED CATEGORY B UNLESS OTHERWISE NOTED.
4. RADAR DETECTION ZONES MAY BE ADJUSTED IN FIELD TO PROVIDE DESIRED DETECTION AREA.
5. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
6. SB 16 IS TYPE 2 CONCRETE BASE AND TYPE 3 POLE WITH 15-FT TROMBONE MAST ARM FOR OVERHEAD SIGN

| MONOTUBE STRUCTURE NUMBER |
|---|
| SB18 - S-44-0312 TYPE 13 CONC BASE |

WISCONSIN
ANDREW A. ROWELL
E-38296
GREEN BAY
WI
PROFESSIONAL ENGINEER
10/26/2022

TRAFFIC CONTROL SIGNAL
CTH CE & RAILROAD ST
RESTRICTED U-TURNS
VILLAGE OF KIMBERLY
OUTAGAMIE COUNTY

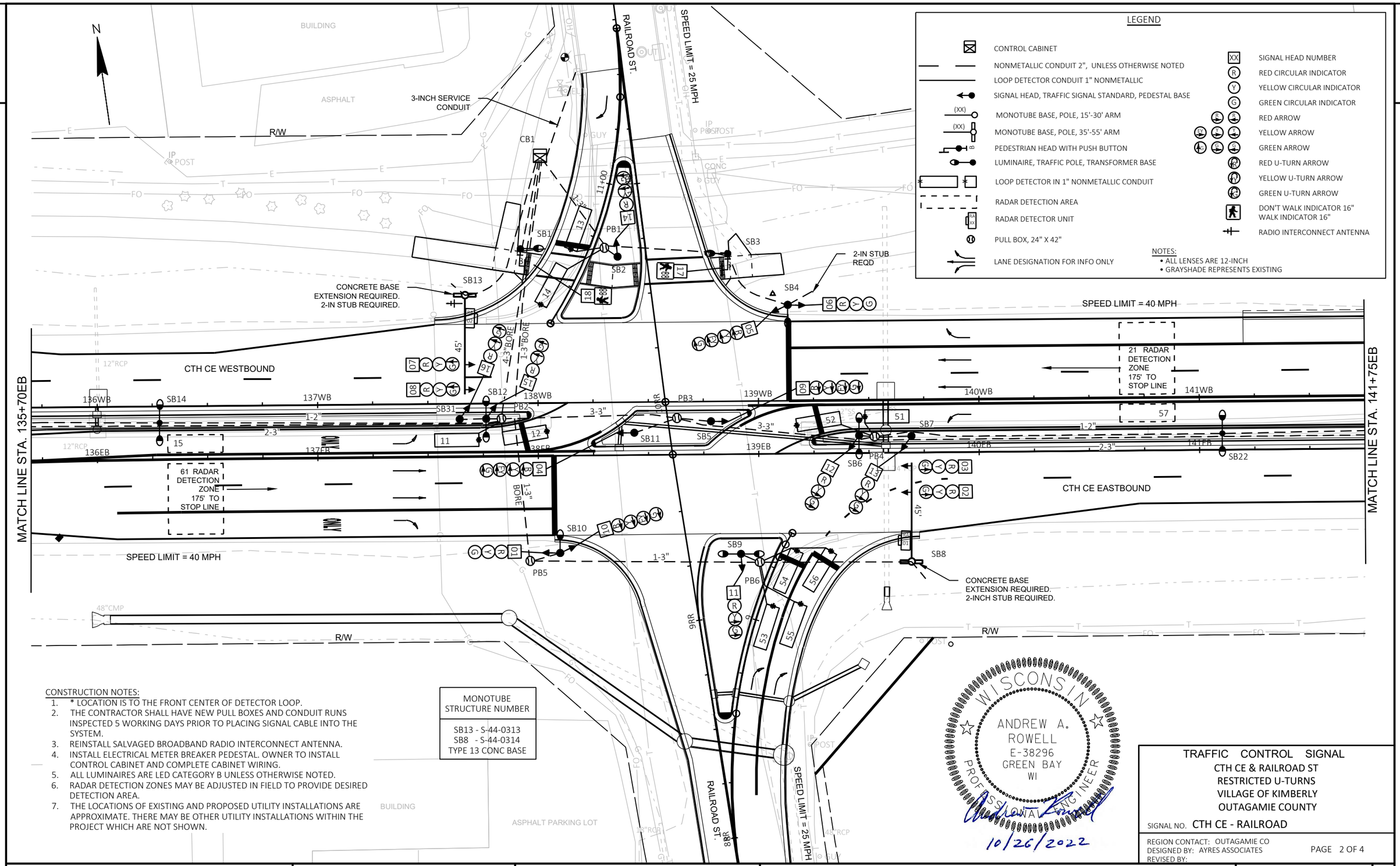
SIGNAL NO. COLLEGE - RAILROAD

REGION CONTACT: OUTAGAMIE CO
DESIGNED BY: AYRES ASSOCIATES
REVISED BY:

PAGE 1 OF 4

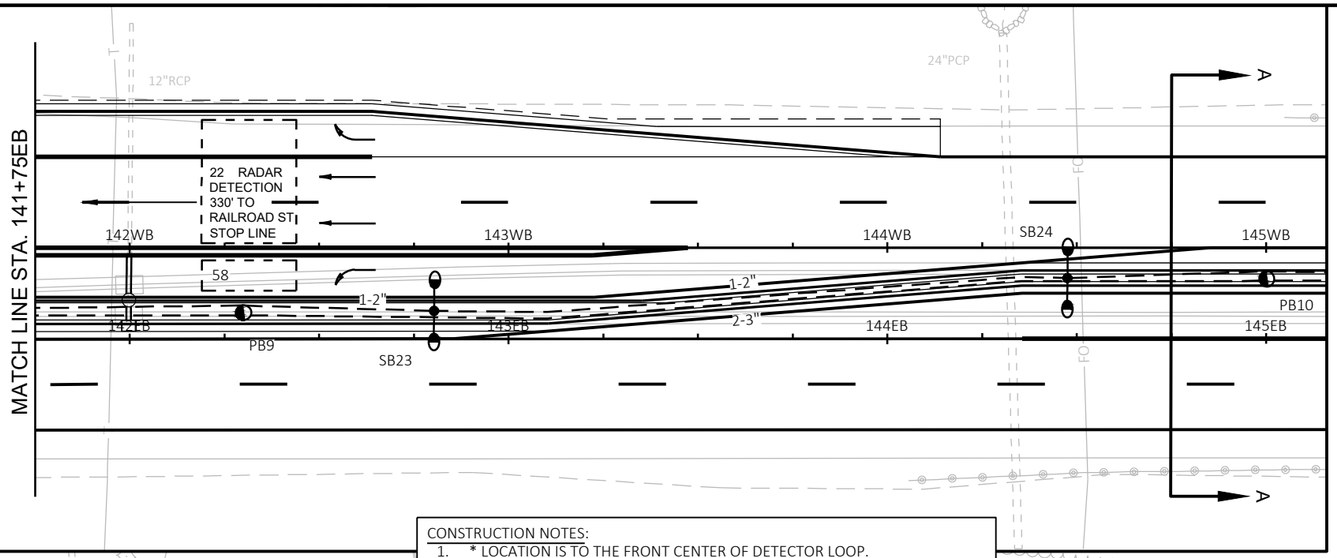
| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | TRAFFIC SIGNAL PLAN | SHEET 62 | E |
|---|---|---|---|---|---|

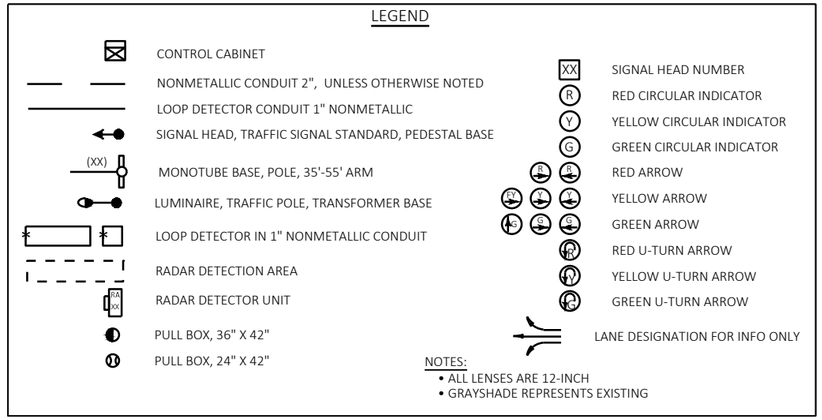
FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\024201_SP.DWG
LAYOUT NAME - 024201_sp
PLOT DATE : 10/26/2022 12:35 PM
PLOT BY : ROWELL, ANDREW
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

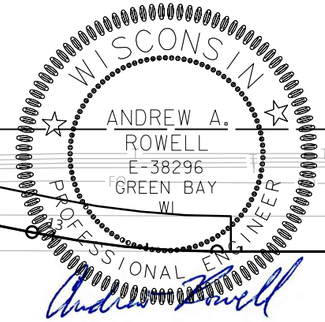



| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | TRAFFIC SIGNAL PLAN | SHEET 63 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\024201_SP.DWG
LAYOUT NAME - 024202_sp
PLOT DATE : 10/26/2022 3:28 PM PLOT BY : ROWELL, ANDREW PLOT NAME : PLOT SCALE : ##########




CONSTRUCTION NOTES:
1. * LOCATION IS TO THE FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE NEW PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO THE SYSTEM.
3. ALL LUMINAIRES ARE LED CATEGORY B UNLESS OTHERWISE NOTED.
4. RADAR DETECTION ZONES MAY BE ADJUSTED IN FIELD TO PROVIDE DESIRED DETECTION AREA.
5. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.




| MONOTUBE STRUCTURE NUMBER |
|---|
| SB27 - S-44-0315 TYPE 13 CONC BASE |

TRAFFIC CONTROL SIGNAL
CTH CE & RAILROAD ST
RESTRICTED U-TURNS
VILLAGE OF KIMBERLY
OUTAGAMIE COUNTY

SIGNAL NO. CTH CE - RAILROAD

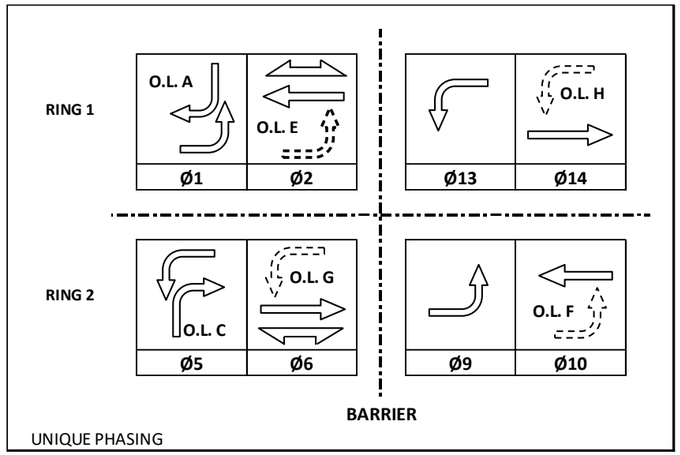
REGION CONTACT: OUTAGAMIE CO
DESIGNED BY: AYRES ASSOCIATES
REVISED BY:



| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | TRAFFIC SIGNAL PLAN | SHEET 64 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\024201_SP.DWG
LAYOUT NAME - 024203_sp
PLOT DATE : 10/26/2022 12:35 PM
PLOT BY : ROWELL, ANDREW
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

| | HEAD NUMBERS | FLASH |
|---|---|---|
| Ø1 | 04,05 | R |
| Ø2 | 06,07,08 | R |
| Ø3 | | -- |
| Ø4 | | -- |
| Ø5 | 09,10 | R |
| Ø6 | 01,02,03 | R |
| Ø7 | | -- |
| Ø8 | | -- |
| Ø9 | 34,35 | R |
| Ø10 | 31,32,33 | Y |
| Ø13 | 25,26 | R |
| Ø14 | 21,22,23,24 | Y |
| Ø2P | 17,18 | DW |
| Ø4P | | |
| OLA | 14,15,16 | R |
| OLB | | |
| OLC | 11,12,13 | R |
| OLD | | |
| OLE | 04,05 | R |
| OLF | 34,35 | R |
| OLG | 09,10 | R |
| OLH | 25,26 | R |



UNIQUE PHASING

N

CONTROLLER LOGIC

| PHASE NUMBER | PHASE LOCKING | DUAL ENTRY W / Ø | PHASE RECALL | PHASE ACTIVE |
|---|---|---|---|---|
| 1 | | 5 | NONE | X |
| 2 | | 6 | MIN | X |
| 3 | | | | |
| 4 | | | | |
| 5 | | 1 | NONE | X |
| 6 | | 2 | MIN | X |
| 7 | | | | |
| 8 | | | | |
| 9 | | 5 | NONE | X |
| 10 | | --- | MIN | X |
| 11 | | | | |
| 12 | | | | |
| 13 | | 1 | NONE | X |
| 14 | | --- | MIN | X |
| 15 | | | | |
| 16 | | | | |

**GENERAL NOTES:**

1. OMIT PHASE 9 OR PHASE 13 IF NO CALLS.
2. O.L. A IS GREEN ARROW WITH PHASE 1 GREEN. O.L. A IS RED AT ALL OTHER TIMES.
3. O.L. C IS GREEN ARROW WITH PHASE 5 GREEN. O.L. C IS RED AT ALL OTHER TIMES.

| TYPE OF INTERCONNECT/COMMUNICATION | |
|---|---|
| NONE | |
| CLOSED LOOP | |
| TWISTED PAIR | |
| FIBER OPTIC* | |
| FIBER OPTIC (ETHERNET) | |
| RADIO | X |
| 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 DOT LIGHTING CABINET | |

| TYPE OF PRE-EMPT | |
|---|---|
| NONE | X |
| RAILROAD | |
| EMERGENCY VEHICLE | |
| GTT | |
| TOMAR | |
| HARDWIRE | |
| OTHER | |
| LIFT BRIDGE | |
| QUEUE DETECTION | |

SHEET PROVIDED FOR INFORMATION ONLY

**DETECTOR LOGIC**

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DETECTOR INPUT | 3 | 1 | 7 | 5 | 11 | 9 | 15 | 13 | 19 | 17 | 23 | 21 | 27 | 25 | | | DETECTOR INPUT |
| PLAN LOOP DETECTOR*(S) | 13 | 11 | 21 | 15 | 53 | 51 | 57 | 55 | 91 | 61 | 131 | 101 | | 141 | | | PLAN LOOP DETECTOR*(S) |
| CALLED PHASE | 1 | 1 | 2 | 1 | 5 | 5 | 5 | 5 | 9 | 6 | 13 | 10 | | 14 | | | CALLED PHASE |
| CALL OPTION | X | X | | | X | X | | X | X | | X | | | X | | | CALL OPTION |
| DELAY TIME | | | | | | | | | | | | | | | | | DELAY TIME |
| EXTENTION OPTION | X | X | X | X | X | X | X | X | X | X | X | X | | X | | | EXTENTION OPTION |
| EXTEND TIME | | | | | | | | | | | | | | | | | EXTEND TIME |
| USE ADDED INITIAL | | | | | | | | | | | | | | | | | USE ADDED INITIAL |
| CROSS SWITCH PHASE | | | | | | | | | | | | | | | | | CROSS SWITCH PHASE |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DETECTOR INPUT | 4 | 2 | 8 | 6 | 12 | 10 | 16 | 14 | 20 | 18 | 24 | 22 | 28 | 26 | | | DETECTOR INPUT |
| PLAN LOOP DETECTOR*(S) | 14 | 12 | 22 | 16 | 54 | 52 | 58 | 56 | 92 | 62 | 132 | 102 | | 142 | | | PLAN LOOP DETECTOR*(S) |
| CALLED PHASE | 1 | 1 | 2 | 1 | 5 | 5 | 5 | 5 | 9 | 6 | 13 | 10 | | 14 | | | CALLED PHASE |
| CALL OPTION | X | X | | | X | X | | X | X | | X | | | X | | | CALL OPTION |
| DELAY TIME | | | | | | | | | | | | | | | | | DELAY TIME |
| EXTENTION OPTION | X | X | X | X | X | X | X | X | X | X | X | X | | X | | | EXTENTION OPTION |
| EXTEND TIME | | | | | | | | | | | | | | | | | EXTEND TIME |
| USE ADDED INITIAL | | | | | | | | | | | | | | | | | USE ADDED INITIAL |
| CROSS SWITCH PHASE | | | | | | | | | | | | | | | | | CROSS SWITCH PHASE |

CTH CE & RAILROAD STREET RESTRICTED U-TURN

VILLAGE OF KIMBERLY

OUTAGAMIE COUNTY

SIGNAL NO: COUNTY CABINET TYPE: TS-2

CONTROLLER TYPE: EPAC

DATE: 11/2022 PAGE NO. 4 OF 4

3

## TRAFFIC SIGNAL WIRE COLOR CODE (CABINET TO POLE)

16 CONDUCTOR IMSA 20-1 CABLE

| | | |
|---|---|---|
| R | RED | TRAFFIC NB & WB DIRECTION |
| Y | ORANGE | |
| G | GREEN | |
| R-ARROW | RED | ADJACENT ARROW PHASE |
| Y-ARROW | ORANGE | TRAFFIC NB & WB |
| FY-ARROW | GREEN | |
| G-ARROW | BLACK/RED | |
| R | RED/BLACK | TRAFFIC SB & EB DIRECTION |
| Y | ORANGE/BLACK | |
| G | GREEN/BLACK | |
| R-ARROW | RED/BLACK | ADJACENT ARROW PHASE |
| Y-ARROW | ORANGE/BLACK | TRAFFIC SB & EB |
| FY-ARROW | GREEN/BLACK | |
| G-ARROW | BLACK/RED | |
| W | BLUE | PEDESTRIAN CROSSING SIDE ST |
| DW | BLACK | (WITH PHASE 2 & 6) |
| W | BLUE/BLACK | PEDESTRIAN CROSSING MAIN ST |
| DW | BLACK/WHITE | (WITH PHASE 4 & 8) |
| PED BUTTON | BLUE/WHITE | PED BUTTONS |
| PED BUTTON | BLACK/WHITE | |
| R | RED/WHITE | SPECIAL MOVEMENTS |
| G | GREEN/WHITE | |
| NEUTRAL | WHITE | |

## TRAFFIC SIGNAL WIRE COLOR CODE (UP THE POLE)

3 SECTION DISPLAY

5 CONDUCTOR IMSA 20-1 CABLE

| | |
|---|---|
| RED | RED BALL |
| ORANGE | YELLOW BALL |
| GREEN | GREEN BALL |
| BLACK | NOT USED |
| WHITE | NEUTRAL |

4 SECTION FYA DISPLAY

5 CONDUCTOR IMSA 20-1 CABLE

| | |
|---|---|
| RED | RED BALL |
| ORANGE | YELLOW BALL |
| GREEN | F-YELLOW ARROW |
| BLACK | GREEN ARROW |
| WHITE | NEUTRAL |

3 SECTION WITH PEDESTRIAN DISPLAY

7 CONDUCTOR IMSA 20-1 CABLE

| | |
|---|---|
| RED | RED BALL |
| ORANGE | YELLOW BALL |
| GREEN | GREEN BALL |
| WHITE/BLACK | NOT USED |
| BLUE | WALK |
| BLACK | DON'T WALK |
| WHITE | NEUTRAL |

4 SECTION WITH PEDESTRIAN DISPLAY

7 CONDUCTOR IMSA 20-1 CABLE

| | |
|---|---|
| RED | RED BALL |
| ORANGE | YELLOW BALL |
| GREEN | F-YELLOW ARROW |
| WHITE/BLACK | GREEN ARROW |
| BLUE | WALK |
| BLACK | DON'T WALK |
| WHITE | NEUTRAL |

PEDESTRIAN DISPLAY

3 CONDUCTOR IMSA 20-1 CABLE

| | |
|---|---|
| BLACK | WALK |
| RED | DON'T WALK |
| WHITE | NEUTRAL |

TAPE COLORS FOR CIRCUIT IDENTIFICATION

| | |
|---|---|
| WHITE | NB |
| YELLOW | WB |
| ORANGE | SB |
| BLUE | EB |
| RED | PED BUTTON |

USE ANY COLOR, TWO (2) INDIVIDUAL 14 AWG THHN CONDUCTORS FOR PUSH BUTTON, TAPED FOR CIRCUIT ID

**CTH CE & RAILROAD STREET RESTRICTED U-TURN**
**VILLAGE OF KIMBERLY**
**OUTAGAMIE COUNTY**

**SIGNAL NO: COUNTY CABINET TYPE: TS-2**
**CONTROLLER TYPE: EPAC**
**DATE: 11/2022 PAGE NO. 1 OF 1**

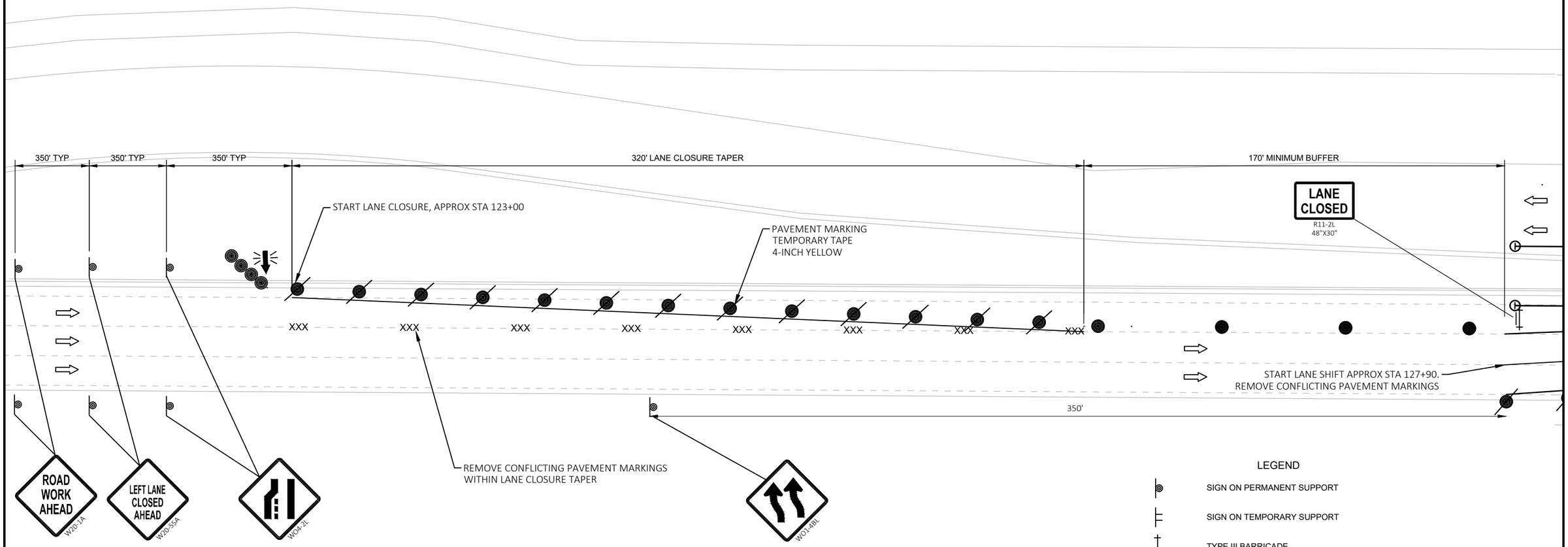
2

2

CONSTRUCTION NOTES:

1. REMOVE ALL EXISTING PAVEMENT MARKINGS IN CONFLICT WITH TRAFFIC CONTROL
2. FOR WESTBOUND OFF-PEAK LANE CLOSURES, ADJUST TRAFFIC CONTROL TO FOLLOW STANDARD DETAIL DRAWING "TRAFFIC CONTROL SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"
3. FOR EASTBOUND OFF-PEAK LANE CLOSURES, ADJUST TRAFFIC CONTROL TO FOLLOW STANDARD DETAIL DRAWING "TRAFFIC CONTROL TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"
4. COMPLETE CTH CE WESTBOUND RIGHT TURN LANE AFTER COMPLETION OF ALL MEDIAN WORK.

N




INSTALL SIGNS WEST OF EISENHOWER DR INTERSECTION

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY" FOR ADDITIONAL GUIDANCE

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | TRAFFIC CONTROL STAGING | SHEET 67 | E |
|---|---|---|---|---|---|

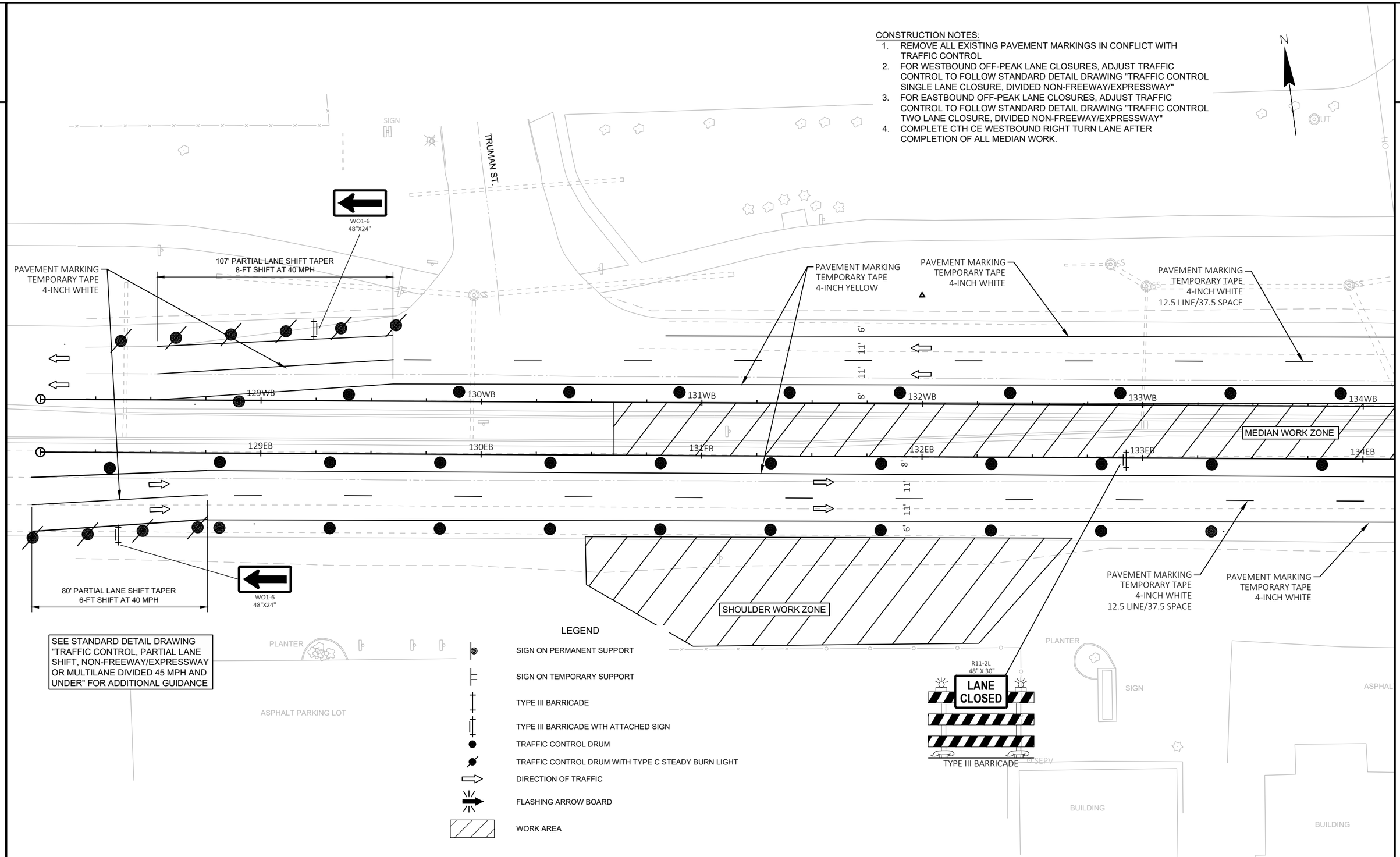
FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\026001_S1.DWG
LAYOUT NAME - 026001_s1

PLOT DATE : 11/30/2022 1:09 PM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

CONSTRUCTION NOTES:

1. REMOVE ALL EXISTING PAVEMENT MARKINGS IN CONFLICT WITH TRAFFIC CONTROL
2. FOR WESTBOUND OFF-PEAK LANE CLOSURES, ADJUST TRAFFIC CONTROL TO FOLLOW STANDARD DETAIL DRAWING "TRAFFIC CONTROL SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"
3. FOR EASTBOUND OFF-PEAK LANE CLOSURES, ADJUST TRAFFIC CONTROL TO FOLLOW STANDARD DETAIL DRAWING "TRAFFIC CONTROL TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"
4. COMPLETE CTH CE WESTBOUND RIGHT TURN LANE AFTER COMPLETION OF ALL MEDIAN WORK.

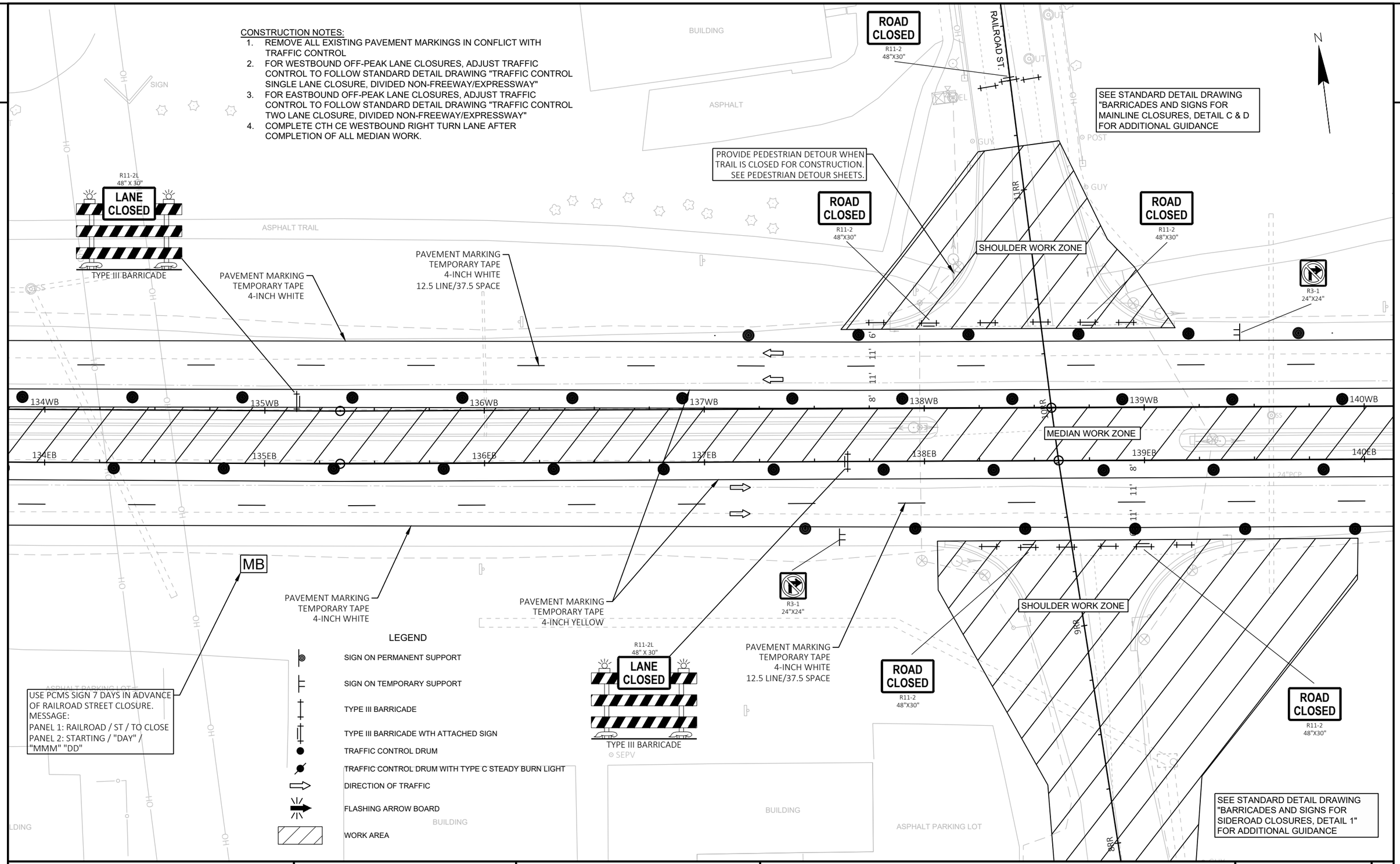



| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | TRAFFIC CONTROL STAGING | SHEET 68 | E |
|---|---|---|---|---|---|

2

CONSTRUCTION NOTES:

1. REMOVE ALL EXISTING PAVEMENT MARKINGS IN CONFLICT WITH TRAFFIC CONTROL
2. FOR WESTBOUND OFF-PEAK LANE CLOSURES, ADJUST TRAFFIC CONTROL TO FOLLOW STANDARD DETAIL DRAWING "TRAFFIC CONTROL SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"
3. FOR EASTBOUND OFF-PEAK LANE CLOSURES, ADJUST TRAFFIC CONTROL TO FOLLOW STANDARD DETAIL DRAWING "TRAFFIC CONTROL TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"
4. COMPLETE CTH CE WESTBOUND RIGHT TURN LANE AFTER COMPLETION OF ALL MEDIAN WORK.




| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | TRAFFIC CONTROL STAGING | SHEET 69 | E |
|---|---|---|---|---|---|

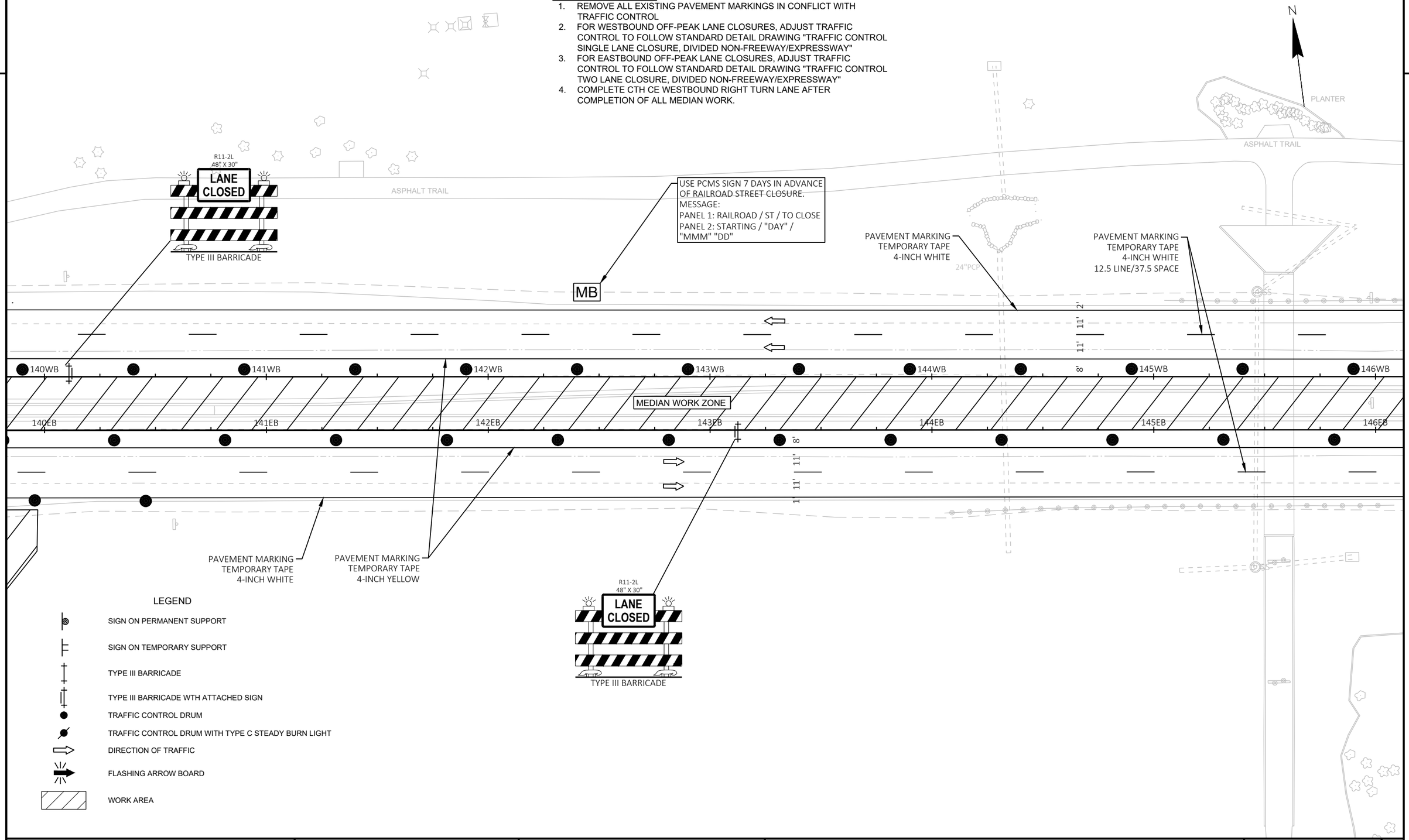

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\026001_S1.DWG
LAYOUT NAME - 026003_s1
PLOT DATE : 11/30/2022 1:09 PM
PLOT BY : GARNICA, BRANDON
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

CONSTRUCTION NOTES:

1. REMOVE ALL EXISTING PAVEMENT MARKINGS IN CONFLICT WITH TRAFFIC CONTROL
2. FOR WESTBOUND OFF-PEAK LANE CLOSURES, ADJUST TRAFFIC CONTROL TO FOLLOW STANDARD DETAIL DRAWING "TRAFFIC CONTROL SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"
3. FOR EASTBOUND OFF-PEAK LANE CLOSURES, ADJUST TRAFFIC CONTROL TO FOLLOW STANDARD DETAIL DRAWING "TRAFFIC CONTROL TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"
4. COMPLETE CTH CE WESTBOUND RIGHT TURN LANE AFTER COMPLETION OF ALL MEDIAN WORK.




LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | TRAFFIC CONTROL STAGING | SHEET 70 | E |
|---|---|---|---|---|---|

2

2

CONSTRUCTION NOTES:

1. REMOVE ALL EXISTING PAVEMENT MARKINGS IN CONFLICT WITH TRAFFIC CONTROL
2. FOR WESTBOUND OFF-PEAK LANE CLOSURES, ADJUST TRAFFIC CONTROL TO FOLLOW STANDARD DETAIL DRAWING "TRAFFIC CONTROL SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"
3. FOR EASTBOUND OFF-PEAK LANE CLOSURES, ADJUST TRAFFIC CONTROL TO FOLLOW STANDARD DETAIL DRAWING "TRAFFIC CONTROL TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"
4. COMPLETE CTH CE WESTBOUND RIGHT TURN LANE AFTER COMPLETION OF ALL MEDIAN WORK.

N

PROVIDE PEDESTRIAN DETOUR WHEN TRAIL IS CLOSED FOR CONSTRUCTION. SEE PLAN DETAILS.

TREES

TRAIL WORK ZONE

ASPHALT TRAIL

R11-2L
48" X 30"
LANE CLOSED

TYPE III BARRICADE

SHOULDER WORK ZONE

PAVEMENT MARKING TEMPORARY TAPE 4-INCH WHITE 12.5 LINE/37.5 SPACE

PAVEMENT MARKING TEMPORARY TAPE 4-INCH WHITE

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, PARTIAL LANE SHIFT, NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER" FOR ADDITIONAL GUIDANCE

WO1-6
48"X24"

2' 11' 11' 8'

146WB 147WB 148WB 149WB 150WB 151WB 152WB

MEDIAN WORK ZONE

146EB 147EB 148EB 149EB 150EB 151EB 152EB

2' 11' 11' 8'

PAVEMENT MARKING TEMPORARY TAPE 4-INCH WHITE 12.5 LINE/37.5 SPACE

PAVEMENT MARKING TEMPORARY TAPE 4-INCH WHITE

PAVEMENT MARKING TEMPORARY TAPE 4-INCH YELLOW

WO1-6
48"X24"

PAVEMENT MARKING TEMPORARY TAPE 4-INCH WHITE

180' PARTIAL LANE SHIFT TAPER
8-FT SHIFT AT 45 MPH

PLANTER

ASPHALT PARKING LOT

PLANTER

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | TRAFFIC CONTROL STAGING | SHEET 71 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\026001_S1.DWG
LAYOUT NAME - 026005_s1

PLOT DATE : 11/30/2022 1:09 PM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

ADDITIONAL SIGNING ON
CTH N WESTBOUND
ENTRANCE RAMP

ROAD WORK AHEAD
W20-1A

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, PARTIAL LANE SHIFT, NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER" FOR ADDITIONAL GUIDANCE

PAVEMENT MARKING
TEMPORARY TAPE
4-INCH WHITE

180' PARTIAL LANE SHIFT TAPER
8 FT SHIFT AT 45 MPH

WO1-6
48"X24"

500'

500' TYP

2'
11'
11'

START LANE SHIFT APPROX STA 153+00.
REMOVE CONFLICTING PAVEMENT MARKINGS

151WB

152WB

151EB

152EB

PAVEMENT MARKING
TEMPORARY TAPE
4-INCH YELLOW

WO1-4BR

ROAD WORK AHEAD
W20-1A

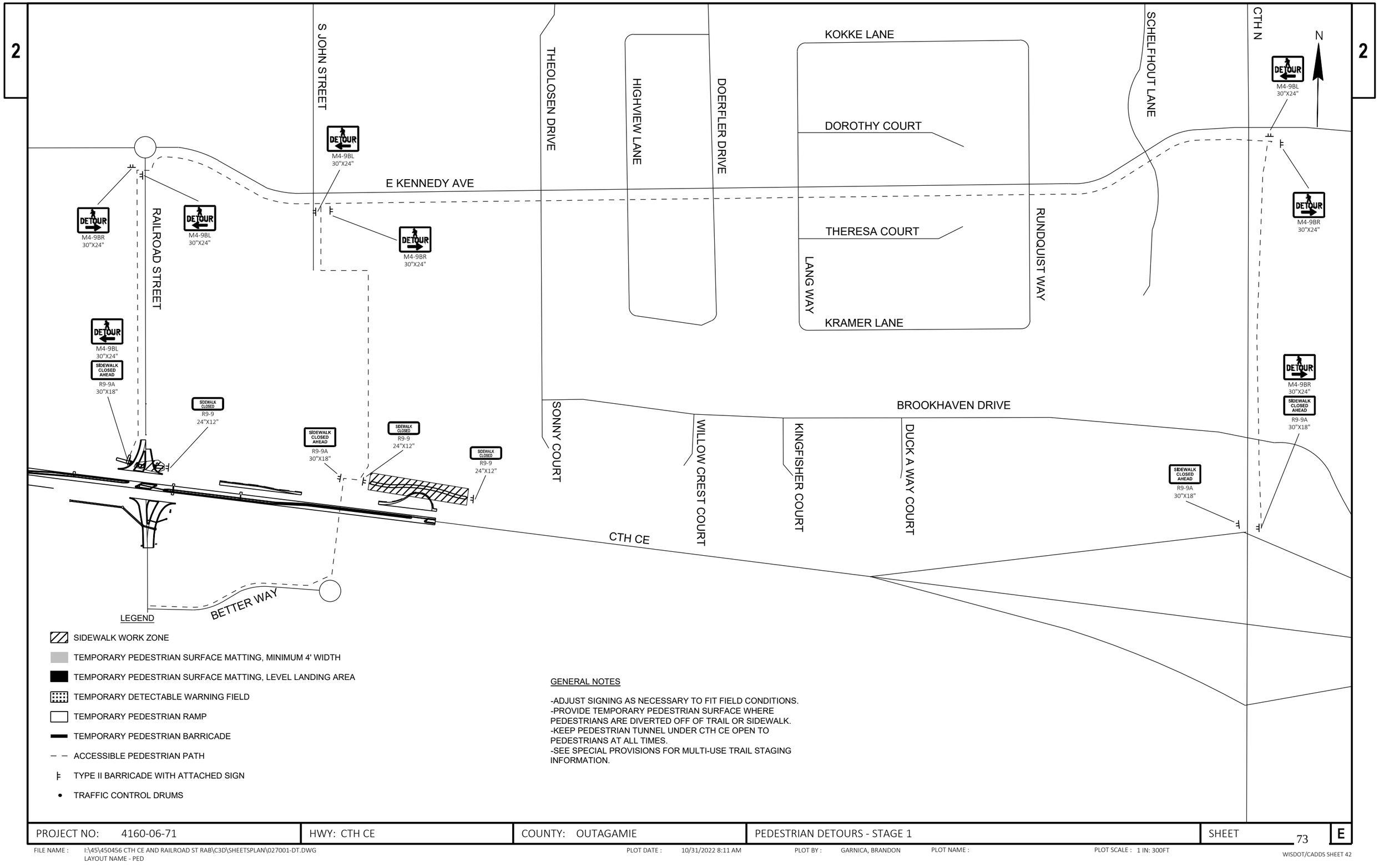
LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

CONSTRUCTION NOTES:

1. REMOVE ALL EXISTING PAVEMENT MARKINGS IN CONFLICT WITH TRAFFIC CONTROL
2. FOR WESTBOUND OFF-PEAK LANE CLOSURES, ADJUST TRAFFIC CONTROL TO FOLLOW STANDARD DETAIL DRAWING "TRAFFIC CONTROL SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"
3. FOR EASTBOUND OFF-PEAK LANE CLOSURES, ADJUST TRAFFIC CONTROL TO FOLLOW STANDARD DETAIL DRAWING "TRAFFIC CONTROL TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"
4. COMPLETE CTH CE WESTBOUND RIGHT TURN LANE AFTER COMPLETION OF ALL MEDIAN WORK.

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | TRAFFIC CONTROL STAGING | SHEET 72 | E |
|---|---|---|---|---|---|



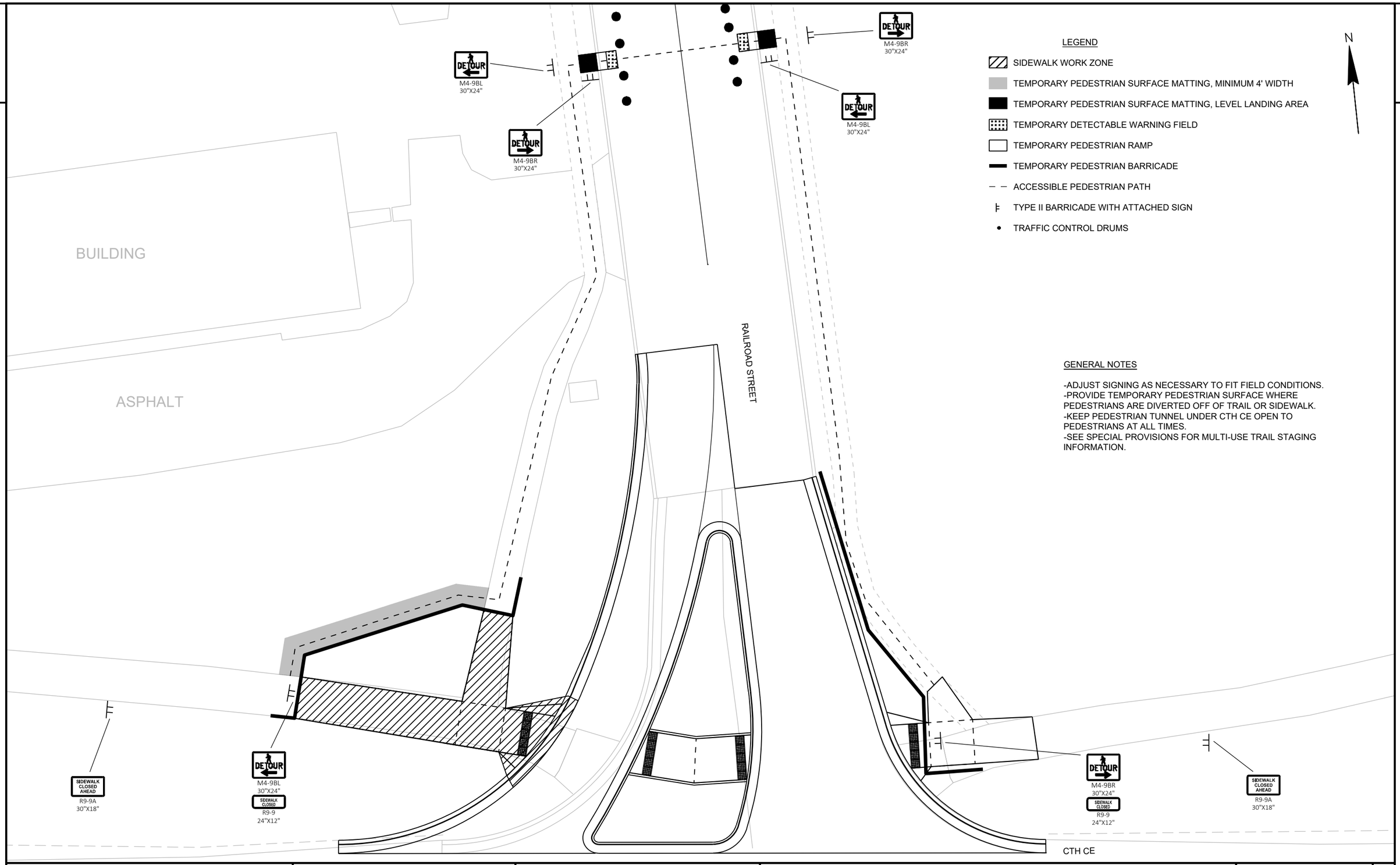

GENERAL NOTES

-ADJUST SIGNING AS NECESSARY TO FIT FIELD CONDITIONS.
-PROVIDE TEMPORARY PEDESTRIAN SURFACE WHERE PEDESTRIANS ARE DIVERTED OFF OF TRAIL OR SIDEWALK.
-KEEP PEDESTRIAN TUNNEL UNDER CTH CE OPEN TO PEDESTRIANS AT ALL TIMES.
-SEE SPECIAL PROVISIONS FOR MULTI-USE TRAIL STAGING INFORMATION.

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PEDESTRIAN DETOURS - STAGE 1 | SHEET 73 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\027001-DT.DWG
LAYOUT NAME - PED
PLOT DATE : 10/31/2022 8:11 AM
PLOT BY : GARNICA, BRANDON
PLOT NAME :
PLOT SCALE : 1 IN: 300FT

2




LEGEND

- SIDEWALK WORK ZONE
- TEMPORARY PEDESTRIAN SURFACE MATTING, MINIMUM 4' WIDTH
- TEMPORARY PEDESTRIAN SURFACE MATTING, LEVEL LANDING AREA
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN RAMP
- TEMPORARY PEDESTRIAN BARRICADE
- ACCESSIBLE PEDESTRIAN PATH
- TYPE II BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUMS

N

GENERAL NOTES

-ADJUST SIGNING AS NECESSARY TO FIT FIELD CONDITIONS.
-PROVIDE TEMPORARY PEDESTRIAN SURFACE WHERE PEDESTRIANS ARE DIVERTED OFF OF TRAIL OR SIDEWALK.
-KEEP PEDESTRIAN TUNNEL UNDER CTH CE OPEN TO PEDESTRIANS AT ALL TIMES.
-SEE SPECIAL PROVISIONS FOR MULTI-USE TRAIL STAGING INFORMATION.

| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PEDESTRIAN DETOURS - STAGE 2 | SHEET 74 | E |
|---|---|---|---|---|---|

2

N

## RAILROAD WESTBOUND TURN LANE

C1

PI STA = 11+04.0
Y = 560821.232
X = 845169.813
DELTA = 40°06'30" LT
D = 28°38'52"
T = 73.0'
L = 140.0'
R = 200.0'
PC STA = 10+31.0
Y = 560765.455
X = 845122.705
PT STA = 11+71.0
Y = 560894.240
X = 845169.909
DB = N40°11'03"E
DA = N00°04'33"E

## TRAIL CURVE DATA

C4

PI STA = 10+65.0
Y = 560704.403
X = 846035.282
DELTA = 14°29'07" LT
D = 22°55'06"
T = 31.8'
L = 63.2'
R = 250.0'
PC STA = 10+33.3
Y = 560711.055
X = 846004.214
PT STA = 10+96.5
Y = 560705.733
X = 846067.025
DB = S77°54'53"E
DA = N87°36'00"E

C5

PI STA = 11+88.5
Y = 560709.588
X = 846158.988
DELTA = 20°51'37" RT
D = 11°27'31"
T = 92.0'
L = 182.0'
R = 500.0'
PC STA = 10+96.5
Y = 560705.733
X = 846067.025
PT STA = 12+78.5
Y = 560680.443
X = 846246.296
DB = N87°36'00"E
DA = S71°32'24"E

C6

PI STA = 13+19.0
Y = 560667.625
X = 846284.691
DELTA = 11°17'10" LT
D = 22°55'06"
T = 24.7'
L = 49.2'
R = 250.0'
PC STA = 12+94.3
Y = 560675.447
X = 846261.260
PT STA = 13+43.5
Y = 560664.540
X = 846309.201
DB = S71°32'24"E
DA = S82°49'34"E

RAILROAD WESTBOUND TURN LANE CONSTRUCTION R/L

BP: 128+00.00
Y = 560859.238
X = 844120.924

CTH CE WESTBOUND CONSTRUCTION R/L

130WB
S82°26'45"E
130EB
S82°26'45"E

BP: 128+00.00
Y = 560835.446
X = 844117.768

CTH CE EASTBOUND CONSTRUCTION R/L

BEGIN PROJECT
STA. 130+60EB
Y = 560801.266
X = 844375.511

PI: 135+34.23
Y = 560762.714
X = 844848.781

STA BACK = 135+34.23
STA AHEAD = 135+34.47

BP: 10+31.01
Y = 560765.455
X = 845122.705

135WB
135EB

PI: 135+34.35
Y = 560738.907
X = 844845.745

N0°04'33"E
10RR
N0°33'15"W

EP: 13+38.01
Y = 561061.233
X = 845170.130

CONSTRUCTION LIMTS
STA. 11+52.8RR

EP: 11+71.01
Y = 560894.240
X = 845169.909

PI: 10+00.18
Y = 560723.404
X = 845169.683

PI: 9+75.97
Y = 560699.196
X = 845169.917

140WB
140EB

N1°35'34"W

C2
C3

PCC: 9+30.30

RAILROAD EASTBOUND TURN LANE CONSTRUCTION R/L

EP: 9+42.71
Y = 560656.866
X = 845219.033

PI: 7+67.52
Y = 560490.828
X = 845175.711

BP: 7+86.22
Y = 560509.518
X = 845175.192

CONSTRUCTION LIMTS
STA. 7+67.5RR

N0°28'12"W
5RR

RAILROAD STREET CONSTRUCTION R/L

BP: 4+31.92
Y = 560155.243
X = 845178.464

S83°00'58"E
S83°00'58"E
145WB
145EB

BP: 10+00.00
Y = 560718.019
X = 845971.687

PC: 10+33.26
PRC: 10+96.47

S77°54'53"E
TRAIL CONSTRUCTION R/L
S71°32'24"E

PT: 12+78.52
PC: 12+94.29
PT: 13+43.54
EP: 13+78.89
Y = 560660.126
X = 846344.272

S82°49'34"E

150WB
150EB

EP: 152+74.90
Y = 560551.094
X = 846576.301

END PROJECT
STA. 149+00EB
Y = 560572.857
X = 846201.262

EP: 152+74.90
Y = 560527.272
X = 846573.383

## RAILROAD EASTBOUND TURN LANE

C2

PI STA = 8+60.3
Y = 560583.591
X = 845173.132
DELTA = 33°01'14" RT
D = 22°55'06"
T = 74.1'
L = 144.1'
R = 250.0'
PC STA = 7+86.2
Y = 560509.518
X = 845175.192
PT STA = 9+30.3
Y = 560646.822
X = 845211.771
DB = N01°35'34"W
DA = N31°25'40"E

C3

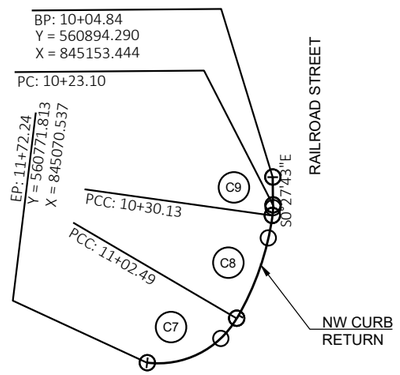
PI STA = 9+36.5
Y = 560652.126
X = 845215.012
DELTA = 8°53'07" RT
D = 71°37'11"
T = 6.2'
L = 12.4'
R = 80.0'
PC STA = 9+30.3
Y = 560646.822
X = 845211.771
PT STA = 9+42.7
Y = 560656.866
X = 845219.033
DB = N31°25'40"E
DA = N40°18'47"E

2

N

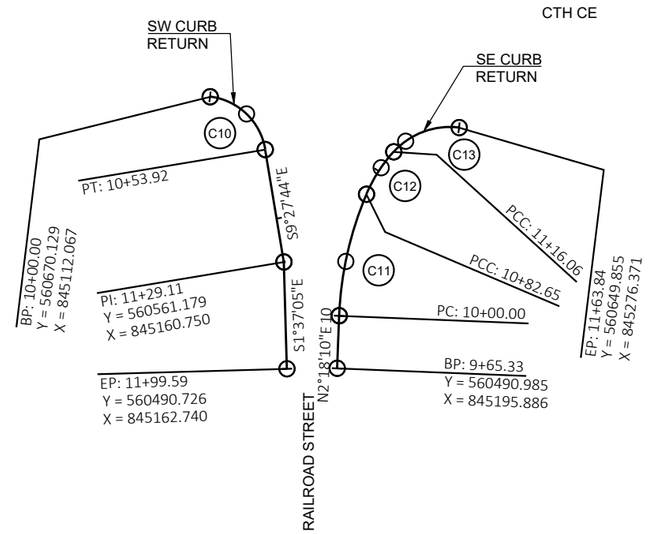
## NW CURB RETURN

| C7 | C8 | C9 |
|---|---|---|
| PI STA = 11+41.9 | PI STA = 10+66.8 | PI STA = 10+26.6 |
| Y = 560767.044 | Y = 560832.699 | Y = 560872.482 |
| X = 845109.670 | X = 845148.090 | X = 845153.628 |
| DELTA = 66°36'48" RT | DELTA = 22°24'35" RT | DELTA = 8°23'14" RT |
| D = 95°29'35" | D = 30°58'14" | D = 119°21'58" |
| T = 39.4' | T = 36.6' | T = 3.5' |
| L = 69.8' | L = 72.4' | L = 7.0' |
| R = 60.0' | R = 185.0' | R = 48.0' |
| PC STA = 11+02.5 | PC STA = 10+30.1 | PC STA = 10+23.1 |
| Y = 560801.069 | Y = 560868.996 | Y = 560876.002 |
| X = 845129.581 | X = 845153.143 | X = 845153.600 |
| PT STA = 11+72.2 | PT STA = 11+02.5 | PT STA = 10+30.1 |
| Y = 560771.813 | Y = 560801.069 | Y = 560868.996 |
| X = 845070.537 | X = 845129.581 | X = 845153.143 |
| DB = S30°20'07"W | DB = S07°55'31"W | DB = S00°27'43"E |
| DA = N83°03'06"W | DA = S30°20'07"W | DA = S07°55'31"W |




CTH CE

CTH CE




## SE CURB RETURN

C10

PI STA = 10+31.4
Y = 560666.312
X = 845143.229
DELTA = 73°33'22" RT
D = 136°25'07"
T = 31.4'
L = 53.9'
R = 42.0'
PC STA = 10+00.0
Y = 560670.129
X = 845112.067
PT STA = 10+53.9
Y = 560635.344
X = 845148.389
DB = S83°00'58"E
DA = S09°27'36"E

## SE CURB RETURN

| C11 | C12 | C13 |
|---|---|---|
| PI STA = 10+41.8 | PI STA = 10+99.5 | PI STA = 11+42.0 |
| Y = 560567.376 | Y = 560621.332 | Y = 560652.997 |
| X = 845198.958 | X = 845221.941 | X = 845250.671 |
| DELTA = 20°46'08" RT | DELTA = 19°08'45" RT | DELTA = 54°45'13" RT |
| D = 25°07'47" | D = 57°17'45" | D = 114°35'30" |
| T = 41.8' | T = 16.9' | T = 25.9' |
| L = 82.6' | L = 33.4' | L = 47.8' |
| R = 228.0' | R = 100.0' | R = 50.0' |
| PC STA = 10+00.0 | PC STA = 10+82.6 | PC STA = 11+16.1 |
| Y = 560525.628 | Y = 560605.816 | Y = 560633.822 |
| X = 845197.279 | X = 845215.332 | X = 845233.273 |
| PT STA = 10+82.6 | PT STA = 11+16.1 | PT STA = 11+63.8 |
| Y = 560605.816 | Y = 560633.822 | Y = 560649.855 |
| X = 845215.332 | X = 845233.273 | X = 845276.371 |
| DB = N02°18'10"E | DB = N23°04'18"E | DB = N42°13'03"E |
| DA = N23°04'18"E | DA = N42°13'03"E | DA = S83°01'45"E |

4160-06-71

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0002 | 203.0100 | Removing Small Pipe Culverts | EACH | 1.000 | 1.000 |
| 0004 | 204.0100 | Removing Concrete Pavement | SY | 68.000 | 68.000 |
| 0006 | 204.0110 | Removing Asphaltic Surface | SY | 344.000 | 344.000 |
| 0008 | 204.0150 | Removing Curb & Gutter | LF | 3,813.000 | 3,813.000 |
| 0010 | 204.0155 | Removing Concrete Sidewalk | SY | 312.000 | 312.000 |
| 0012 | 204.0170 | Removing Fence | LF | 50.000 | 50.000 |
| 0014 | 204.0195 | Removing Concrete Bases | EACH | 11.000 | 11.000 |
| 0016 | 204.0210 | Removing Manholes | EACH | 2.000 | 2.000 |
| 0018 | 204.0220 | Removing Inlets | EACH | 8.000 | 8.000 |
| 0020 | 204.0245 | Removing Storm Sewer (size) 01. 12-Inch | LF | 76.000 | 76.000 |
| 0022 | 204.0245 | Removing Storm Sewer (size) 02. 36-Inch | LF | 188.000 | 188.000 |
| 0024 | 204.0245 | Removing Storm Sewer (size) 03. 42-Inch | LF | 139.000 | 139.000 |
| 0026 | 204.9060.S | Removing (item description) 01. Removing Traffic Signals CTH CE & Railroad St | EACH | 1.000 | 1.000 |
| 0028 | 205.0100 | Excavation Common | CY | 5,027.000 | 5,027.000 |
| 0030 | 213.0100 | Finishing Roadway (project) 01. 4160-06-71 | EACH | 1.000 | 1.000 |
| 0032 | 305.0110 | Base Aggregate Dense 3/4-Inch | TON | 92.000 | 92.000 |
| 0034 | 305.0120 | Base Aggregate Dense 1 1/4-Inch | TON | 6,630.000 | 6,630.000 |
| 0036 | 310.0115 | Base Aggregate Open-Graded | CY | 14.000 | 14.000 |
| 0038 | 311.0110 | Breaker Run | TON | 2,730.000 | 2,730.000 |
| 0040 | 416.1010 | Concrete Surface Drains | CY | 2.000 | 2.000 |
| 0042 | 455.0605 | Tack Coat | GAL | 130.000 | 130.000 |
| 0044 | 460.2000 | Incentive Density HMA Pavement | DOL | 1,150.000 | 1,150.000 |
| 0046 | 460.6223 | HMA Pavement 3 MT 58-28 S | TON | 1,070.000 | 1,070.000 |
| 0048 | 460.7424 | HMA Pavement 4 HT 58-28 H | TON | 715.000 | 715.000 |
| 0050 | 465.0105 | Asphaltic Surface | TON | 80.000 | 80.000 |
| 0052 | 465.0125 | Asphaltic Surface Temporary | TON | 10.000 | 10.000 |
| 0054 | 520.8000 | Concrete Collars for Pipe | EACH | 7.000 | 7.000 |
| 0056 | 522.0424 | Culvert Pipe Reinforced Concrete Class IV 24-Inch | LF | 132.000 | 132.000 |
| 0058 | 522.1024 | Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch | EACH | 3.000 | 3.000 |
| 0060 | 522.1042 | Apron Endwalls for Culvert Pipe Reinforced Concrete 42-Inch | EACH | 1.000 | 1.000 |
| 0062 | 601.0407 | Concrete Curb & Gutter 18-Inch Type D | LF | 601.000 | 601.000 |
| 0064 | 601.0411 | Concrete Curb & Gutter 30-Inch Type D | LF | 691.000 | 691.000 |
| 0066 | 601.0557 | Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D | LF | 3,202.000 | 3,202.000 |
| 0068 | 601.0600 | Concrete Curb Pedestrian | LF | 50.000 | 50.000 |
| 0070 | 602.0405 | Concrete Sidewalk 4-Inch | SF | 8,721.000 | 8,721.000 |
| 0072 | 602.0415 | Concrete Sidewalk 6-Inch | SF | 156.000 | 156.000 |
| 0074 | 602.0515 | Curb Ramp Detectable Warning Field Natural Patina | SF | 80.000 | 80.000 |
| 0076 | 606.0100 | Riprap Light | CY | 2.000 | 2.000 |
| 0078 | 608.0324 | Storm Sewer Pipe Reinforced Concrete Class III 24-Inch | LF | 32.000 | 32.000 |
| 0080 | 608.0342 | Storm Sewer Pipe Reinforced Concrete Class III 42-Inch | LF | 324.000 | 324.000 |
| 0082 | 608.0412 | Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch | LF | 434.000 | 434.000 |
| 0084 | 608.3012 | Storm Sewer Pipe Class III-A 12-Inch | LF | 36.000 | 36.000 |
| 0086 | 608.3018 | Storm Sewer Pipe Class III-A 18-Inch | LF | 64.000 | 64.000 |
| 0088 | 611.0530 | Manhole Covers Type J | EACH | 1.000 | 1.000 |
| 0090 | 611.0535 | Manhole Covers Type J-Special | EACH | 1.000 | 1.000 |
| 0092 | 611.0612 | Inlet Covers Type C | EACH | 1.000 | 1.000 |
| 0094 | 611.0624 | Inlet Covers Type H | EACH | 4.000 | 4.000 |
| 0096 | 611.0627 | Inlet Covers Type HM | EACH | 12.000 | 12.000 |
| 0098 | 611.0642 | Inlet Covers Type MS | EACH | 1.000 | 1.000 |

4160-06-71

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0100 | 611.0666 | Inlet Covers Type Z | EACH | 3.000 | 3.000 |
| 0102 | 611.2004 | Manholes 4-FT Diameter | EACH | 1.000 | 1.000 |
| 0104 | 611.2006 | Manholes 6-FT Diameter | EACH | 1.000 | 1.000 |
| 0106 | 611.3003 | Inlets 3-FT Diameter | EACH | 3.000 | 3.000 |
| 0108 | 611.3004 | Inlets 4-FT Diameter | EACH | 2.000 | 2.000 |
| 0110 | 611.3230 | Inlets 2x3-FT | EACH | 13.000 | 13.000 |
| 0112 | 611.3901 | Inlets Median 1 Grate | EACH | 1.000 | 1.000 |
| 0114 | 611.8115 | Adjusting Inlet Covers | EACH | 3.000 | 3.000 |
| 0116 | 611.9800.S | Pipe Grates | EACH | 1.000 | 1.000 |
| 0118 | 612.0106 | Pipe Underdrain 6-Inch | LF | 280.000 | 280.000 |
| 0120 | 619.1000 | Mobilization | EACH | 1.000 | 1.000 |
| 0122 | 620.0300 | Concrete Median Sloped Nose | SF | 520.000 | 520.000 |
| 0124 | 625.0100 | Topsoil | SY | 4,700.000 | 4,700.000 |
| 0126 | 627.0200 | Mulching | SY | 3,500.000 | 3,500.000 |
| 0128 | 628.1504 | Silt Fence | LF | 235.000 | 235.000 |
| 0130 | 628.1520 | Silt Fence Maintenance | LF | 470.000 | 470.000 |
| 0132 | 628.1905 | Mobilizations Erosion Control | EACH | 5.000 | 5.000 |
| 0134 | 628.1910 | Mobilizations Emergency Erosion Control | EACH | 3.000 | 3.000 |
| 0136 | 628.2006 | Erosion Mat Urban Class I Type A | SY | 4,700.000 | 4,700.000 |
| 0138 | 628.2008 | Erosion Mat Urban Class I Type B | SY | 175.000 | 175.000 |
| 0140 | 628.7005 | Inlet Protection Type A | EACH | 20.000 | 20.000 |
| 0142 | 628.7010 | Inlet Protection Type B | EACH | 1.000 | 1.000 |
| 0144 | 628.7015 | Inlet Protection Type C | EACH | 24.000 | 24.000 |
| 0146 | 628.7020 | Inlet Protection Type D | EACH | 1.000 | 1.000 |
| 0148 | 628.7504 | Temporary Ditch Checks | LF | 75.000 | 75.000 |
| 0150 | 628.7555 | Culvert Pipe Checks | EACH | 5.000 | 5.000 |
| 0152 | 629.0210 | Fertilizer Type B | CWT | 6.000 | 6.000 |
| 0154 | 630.0120 | Seeding Mixture No. 20 | LB | 63.000 | 63.000 |
| 0156 | 630.0140 | Seeding Mixture No. 40 | LB | 86.000 | 86.000 |
| 0158 | 630.0200 | Seeding Temporary | LB | 244.000 | 244.000 |
| 0160 | 630.0500 | Seed Water | MGAL | 204.000 | 204.000 |
| 0162 | 634.0614 | Posts Wood 4x6-Inch X 14-FT | EACH | 38.000 | 38.000 |
| 0164 | 637.2210 | Signs Type II Reflective H | SF | 338.250 | 338.250 |
| 0166 | 637.2215 | Signs Type II Reflective H Folding | SF | 89.520 | 89.520 |
| 0168 | 637.2230 | Signs Type II Reflective F | SF | 36.000 | 36.000 |
| 0170 | 638.2102 | Moving Signs Type II | EACH | 1.000 | 1.000 |
| 0172 | 638.2602 | Removing Signs Type II | EACH | 21.000 | 21.000 |
| 0174 | 638.3000 | Removing Small Sign Supports | EACH | 13.000 | 13.000 |
| 0176 | 642.5001 | Field Office Type B | EACH | 1.000 | 1.000 |
| 0178 | 643.0300 | Traffic Control Drums | DAY | 18,000.000 | 18,000.000 |
| 0180 | 643.0420 | Traffic Control Barricades Type III | DAY | 4,600.000 | 4,600.000 |
| 0182 | 643.0705 | Traffic Control Warning Lights Type A | DAY | 8,450.000 | 8,450.000 |
| 0184 | 643.0715 | Traffic Control Warning Lights Type C | DAY | 4,100.000 | 4,100.000 |
| 0186 | 643.0800 | Traffic Control Arrow Boards | DAY | 107.000 | 107.000 |
| 0188 | 643.0900 | Traffic Control Signs | DAY | 4,750.000 | 4,750.000 |
| 0190 | 643.1050 | Traffic Control Signs PCMS | DAY | 14.000 | 14.000 |
| 0192 | 643.3150 | Temporary Marking Line Removable Tape 4-Inch | LF | 12,700.000 | 12,700.000 |
| 0194 | 643.5000 | Traffic Control | EACH | 1.000 | 1.000 |
| 0196 | 644.1440 | Temporary Pedestrian Surface Matting | SF | 292.000 | 292.000 |

4160-06-71

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0198 | 644.1601 | Temporary Pedestrian Curb Ramp | DAY | 20.000 | 20.000 |
| 0200 | 644.1605 | Temporary Pedestrian Detectable Warning Field | SF | 16.000 | 16.000 |
| 0202 | 644.1810 | Temporary Pedestrian Barricade | LF | 170.000 | 170.000 |
| 0204 | 645.0111 | Geotextile Type DF Schedule A | SY | 140.000 | 140.000 |
| 0206 | 645.0130 | Geotextile Type R | SY | 4.000 | 4.000 |
| 0208 | 645.0220 | Geogrid Type SR | SY | 4,910.000 | 4,910.000 |
| 0210 | 646.1020 | Marking Line Epoxy 4-Inch | LF | 10,845.000 | 10,845.000 |
| 0212 | 646.3020 | Marking Line Epoxy 8-Inch | LF | 3,000.000 | 3,000.000 |
| 0214 | 646.5020 | Marking Arrow Epoxy | EACH | 27.000 | 27.000 |
| 0216 | 646.5120 | Marking Word Epoxy | EACH | 6.000 | 6.000 |
| 0218 | 646.6120 | Marking Stop Line Epoxy 18-Inch | LF | 224.000 | 224.000 |
| 0220 | 646.7120 | Marking Diagonal Epoxy 12-Inch | LF | 60.000 | 60.000 |
| 0222 | 646.7420 | Marking Crosswalk Epoxy Transverse Line 6-Inch | LF | 92.000 | 92.000 |
| 0224 | 646.8120 | Marking Curb Epoxy | LF | 180.000 | 180.000 |
| 0226 | 646.8220 | Marking Island Nose Epoxy | EACH | 10.000 | 10.000 |
| 0228 | 646.9010 | Marking Removal Line Water Blasting 4-Inch | LF | 6,800.000 | 6,800.000 |
| 0230 | 646.9110 | Marking Removal Line Water Blasting 8-Inch | LF | 900.000 | 900.000 |
| 0232 | 646.9210 | Marking Removal Line Water Blasting Wide | LF | 70.000 | 70.000 |
| 0234 | 646.9310 | Marking Removal Special Marking Water Blasting | EACH | 4.000 | 4.000 |
| 0236 | 650.4000 | Construction Staking Storm Sewer | EACH | 29.000 | 29.000 |
| 0238 | 650.4500 | Construction Staking Subgrade | LF | 2,137.000 | 2,137.000 |
| 0240 | 650.5000 | Construction Staking Base | LF | 2,137.000 | 2,137.000 |
| 0242 | 650.5500 | Construction Staking Curb Gutter and Curb & Gutter | LF | 4,494.000 | 4,494.000 |
| 0244 | 650.6000 | Construction Staking Pipe Culverts | EACH | 1.000 | 1.000 |
| 0246 | 650.8501 | Construction Staking Electrical Installations (project) 01. 4160-06-71 | EACH | 1.000 | 1.000 |
| 0248 | 650.9000 | Construction Staking Curb Ramps | EACH | 4.000 | 4.000 |
| 0250 | 650.9500 | Construction Staking Sidewalk (project) 01. 4160-06-71 | EACH | 1.000 | 1.000 |
| 0252 | 650.9911 | Construction Staking Supplemental Control (project) 01. 4160-06-71 | EACH | 1.000 | 1.000 |
| 0254 | 650.9920 | Construction Staking Slope Stakes | LF | 2,137.000 | 2,137.000 |
| 0256 | 652.0225 | Conduit Rigid Nonmetallic Schedule 40 2-Inch | LF | 2,839.000 | 2,839.000 |
| 0258 | 652.0235 | Conduit Rigid Nonmetallic Schedule 40 3-Inch | LF | 3,449.000 | 3,449.000 |
| 0260 | 652.0615 | Conduit Special 3-Inch | LF | 785.000 | 785.000 |
| 0262 | 652.0800 | Conduit Loop Detector | LF | 1,186.000 | 1,186.000 |
| 0264 | 653.0154 | Pull Boxes Non-Conductive 24x36-Inch | EACH | 3.000 | 3.000 |
| 0266 | 653.0164 | Pull Boxes Non-Conductive 24x42-Inch | EACH | 8.000 | 8.000 |
| 0268 | 653.0905 | Removing Pull Boxes | EACH | 10.000 | 10.000 |
| 0270 | 654.0105 | Concrete Bases Type 5 | EACH | 10.000 | 10.000 |
| 0272 | 654.0113 | Concrete Bases Type 13 | EACH | 4.000 | 4.000 |
| 0274 | 655.0230 | Cable Traffic Signal 5-14 AWG | LF | 796.000 | 796.000 |
| 0276 | 655.0240 | Cable Traffic Signal 7-14 AWG | LF | 865.000 | 865.000 |
| 0278 | 655.0515 | Electrical Wire Traffic Signals 10 AWG | LF | 8,154.000 | 8,154.000 |
| 0280 | 655.0700 | Loop Detector Lead In Cable | LF | 5,712.000 | 5,712.000 |
| 0282 | 655.0800 | Loop Detector Wire | LF | 3,880.000 | 3,880.000 |
| 0284 | 656.0201 | Electrical Service Meter Breaker Pedestal (location) 01. CTH CE & Railroad Street | EACH | 1.000 | 1.000 |
| 0286 | 657.0100 | Pedestal Bases | EACH | 7.000 | 7.000 |
| 0288 | 657.0255 | Transformer Bases Breakaway 11 1/2-Inch Bolt Circle | EACH | 20.000 | 20.000 |
| 0290 | 657.0310 | Poles Type 3 | EACH | 1.000 | 1.000 |
| 0292 | 657.0315 | Poles Type 4 | EACH | 9.000 | 9.000 |
| 0294 | 657.0322 | Poles Type 5-Aluminum | EACH | 10.000 | 10.000 |

4160-06-71

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0296 | 657.0420 | Traffic Signal Standards Aluminum 13-FT | EACH | 3.000 | 3.000 |
| 0298 | 657.0425 | Traffic Signal Standards Aluminum 15-FT | EACH | 4.000 | 4.000 |
| 0300 | 657.0585 | Trombone Arms 15-FT | EACH | 1.000 | 1.000 |
| 0302 | 657.0614 | Luminaire Arms Single Member 4-Inch Clamp 8-FT | EACH | 14.000 | 14.000 |
| 0304 | 657.0615 | Luminaire Arms Single Member 4 1/2-Inch Clamp 8-FT | EACH | 18.000 | 18.000 |
| 0306 | 658.0173 | Traffic Signal Face 3S 12-Inch | EACH | 20.000 | 20.000 |
| 0308 | 658.0174 | Traffic Signal Face 4S 12-Inch | EACH | 7.000 | 7.000 |
| 0310 | 658.0416 | Pedestrian Signal Face 16-Inch | EACH | 2.000 | 2.000 |
| 0312 | 658.0500 | Pedestrian Push Buttons | EACH | 2.000 | 2.000 |
| 0314 | 658.5070 | Signal Mounting Hardware (location) 01. CTH CE & Railroad Street | EACH | 1.000 | 1.000 |
| 0316 | 659.1120 | Luminaires Utility LED B | EACH | 32.000 | 32.000 |
| 0318 | 690.0150 | Sawing Asphalt | LF | 4,940.000 | 4,940.000 |
| 0320 | 690.0250 | Sawing Concrete | LF | 98.000 | 98.000 |
| 0322 | ASP.1T0A | On-the-Job Training Apprentice at $5.00/HR | HRS | 1,200.000 | 1,200.000 |
| 0324 | ASP.1T0G | On-the-Job Training Graduate at $5.00/HR | HRS | 600.000 | 600.000 |
| 0326 | SPV.0060 | Special 01. Concrete Control Cabinet Basement Precast | EACH | 1.000 | 1.000 |
| 0328 | SPV.0060 | Special 02. Concrete Bases Type 1 Special | EACH | 7.000 | 7.000 |
| 0330 | SPV.0060 | Special 03. Concrete Bases Type 2 Special | EACH | 10.000 | 10.000 |
| 0332 | SPV.0060 | Special 04. Install Poles Type 12 | EACH | 4.000 | 4.000 |
| 0334 | SPV.0060 | Special 05. Install Monotube Arms 45-FT | EACH | 3.000 | 3.000 |
| 0336 | SPV.0060 | Special 06. Install Monotube Arms 50-FT | EACH | 1.000 | 1.000 |
| 0338 | SPV.0060 | Special 07. Transport and Install Traffic Signal Detection System CTH CE & Railroad St | EACH | 1.000 | 1.000 |
| 0340 | SPV.0060 | Special 08. Remove, Salvage and Reinstall Broadband Radio Interconnect Antenna | EACH | 1.000 | 1.000 |
| 0342 | SPV.0060 | Special 09. Inlets 6-FT Diameter | EACH | 1.000 | 1.000 |
| 0344 | SPV.0060 | Special 10. Inlets 9-FT Diameter | EACH | 1.000 | 1.000 |
| 0346 | SPV.0090 | Special 01. Cable Traffic Signal 16-14 AWG | LF | 4,497.000 | 4,497.000 |
| 0348 | SPV.0090 | Special 02. Tray Cable for Street Lighting 3 Conductor 12 AWG | LF | 5,849.000 | 5,849.000 |
| 0350 | SPV.0090 | Special 03. Tray Cable for Street Lighting 2 Conductor 10 AWG | LF | 3,015.000 | 3,015.000 |
| 0352 | SPV.0090 | Special 04. Install Communications Cable | LF | 2,742.000 | 2,742.000 |
| 0354 | SPV.0090 | Special 05. Storm Sewer Lateral 8-Inch | LF | 6.000 | 6.000 |

## REMOVING SMALL PIPE CULVERTS

| CATEGORY | STATION | LOCATION | 203.0100 REMOVING SMALL PIPE CULVERTS EACH | REMARKS |
|---|---|---|---|---|
| 0010 | 7+95 | RAILROAD STREET, LT | 1 | 18" x 36' CMP |
| | | TOTAL 0010 | 1 | |

## REMOVING ASPHALTIC SURFACE, CONCRETE PAVEMENT, AND CONCRETE SIDEWALK

| CATEGORY | STATION | TO | STATION | LOCATION | 204.0100 REMOVING CONCRETE PAVEMENT SY | 204.0110 REMOVING ASPHALTIC SURFACE SY | 204.0155 REMOVING CONCRETE SIDEWALK SY | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0010 | 10+55 | - | 10+99 | RAILROAD STREET, LT | - | 84 | 13 | NW QUADRANT CURB RAMP |
| 0010 | 10+45 | - | 10+72 | RAILROAD STREET, RT | - | 24 | 18 | NE QUADRANT CURB RAMP |
| 0010 | 11+13 | - | 11+20 | RAILROAD STREET, RT | - | 236 | - | NB LANE |
| 0010 | 11+20 | - | 11+53 | RAILROAD STREET, LT | 68 | - | - | SB LANE |
| 0010 | 133+02 | - | 138+01 | CTH CE (EB), LT | - | - | 215 | WEST MEDIAN |
| 0010 | 139+21 | - | 140+77 | CTH CE (EB), LT | - | - | 66 | EAST MEDIAN |
| | | | | TOTAL 0010 | 68 | 344 | 312 | |

## REMOVING FENCE

| CATEGORY | STATION | TO | STATION | LOCATION | 204.0170 REMOVING FENCE LF |
|---|---|---|---|---|---|
| 0010 | 131+05 | - | 131+55 | CTH CE (EB), RT | 50 |
| | | | | TOTAL 0010 | 50 |

## REMOVING CURB & GUTTER

| CATEGORY | STATION | TO | STATION | LOCATION | 204.0150 REMOVING CURB & GUTTER LF | REMARKS |
|---|---|---|---|---|---|---|
| 0010 | 7+68 | - | 9+40 | RAILROAD STREET, RT | 71 | SE QUADRANT |
| 0010 | 7+68 | - | 9+40 | RAILROAD STREET, LT | 55 | SW QUADRANT |
| 0010 | 10+37 | - | 11+20 | RAILROAD STREET, LT | 106 | NW QUADRANT |
| 0010 | 10+37 | - | 11+20 | RAILROAD STREET, RT | 107 | NE QUADRANT |
| 0010 | 130+60 | - | 138+06 | CTH CE (EB), LT | 749 | MEDIAN ISLAND |
| 0010 | 130+60 | - | 138+06 | CTH CE (WB), RT | 749 | MEDIAN ISLAND |
| 0010 | 139+16 | - | 149+00 | CTH CE (EB), LT | 988 | MEDIAN ISLAND |
| 0010 | 139+16 | - | 149+00 | CTH CE (WB), RT | 988 | MEDIAN ISLAND |
| | | | | TOTAL 0010 | 3,813 | |

## REMOVING MANHOLES & INLETS

| CATEGORY | STATION | LOCATION | 204.0210 REMOVING MANHOLES EACH | 204.0220 REMOVING INLETS EACH |
|---|---|---|---|---|
| 0010 | 8+34 | RAILROAD STREET, RT | 1 | - |
| 0010 | 133+00 | CTH CE (EB), LT | - | 2 |
| 0010 | 136+00 | CTH CE (EB ), LT | - | 2 |
| 0010 | 139+25 | CTH CE (EB), LT | - | 2 |
| 0010 | 139+55 | CTH CE (EB), LT | 1 | - |
| 0010 | 142+00 | CTH CE (EB), LT | - | 2 |
| | | TOTAL 0010 | 2 | 8 |

## REMOVING STORM SEWER

| CATEGORY | STATION | TO | STATION | LOCATION | 204.0245.01 REMOVING STORM SEWER 12-INCH LF | 204.0245.02 REMOVING STORM SEWER 36-INCH LF | 204.0245.03 REMOVING STORM SEWER 42-INCH LF | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0010 | 133+00 | | | STH CE (EB), LT | 12 | - | - | RCP |
| 0010 | 136+00 | | | CTH CE (EB), LT | 12 | - | - | RCP |
| 0010 | 136+00 | - | 137+77 | CTH CE (EB), RT | - | 188 | - | CMP |
| 0010 | 137+77 | - | 139+10 | CTH CE (EB), RT | - | - | 139 | CMP |
| 0010 | 139+23 | - | 139+58 | CTH CE (EB), RT | 34 | - | - | SS |
| 0010 | 142+00 | | | CTH CE (EB), LT | 18 | - | - | RCP |
| | | | | TOTAL 0010 | 76 | 188 | 139 | |

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## EARTHWORK SUMMARY

| Division | From/To Station | Location | Common Excavation (item #205.0100) Cut (1) | Unusable Pavement Material (4) | Available Material (5) | Unexpanded Fill | Expanded Fill (13) Factor 1.30 | Mass Ordinate +/- (14) | Waste |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 130+66.4 to 132+55 | CTH CE-EB LOONHEAD | 89 | 7 | 82 | 408 | 530 | -448 | -448 |
| | 130+60 to 149+00 | CTH CE-MAINLINE | 3,930 | 733 | 3,197 | 136 | 177 | 3,020 | 3,020 |
| | 7+67.5 to 11+71 | RAILROAD STREET | 655 | 115 | 540 | 235 | 306 | 235 | 235 |
| | 146+54.5 to 150+00 | TRAIL | 86 | 34 | 52 | 8 | 10 | 42 | 42 |
| | 146+91.25 to 149+00 | CTH CE-WB LOONHEAD | 267 | 25 | 242 | 110 | 143 | 99 | 99 |
| Division 1 Totals | | | 5,027 | 914 | 4,113 | 897 | 1,166 | 2,947 | 2,947 |

1) Unsuable Pavement Material is included in Cut

4) Unusable Pavement Material = Existing Asphaltic Pavement.

5) Available Material = Cut - Unusuable Pavement Material

13) Expanded Fill. Factor = 1.3 Expanded Fill = Unexpanded Fill * Fill Factor

14) 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 w ithin the Division.

## PIPE UNDERDRAIN ITEMS

| CATEGORY | STRUCTURE | LOCATION | 310.0115 BASE AGGREGATE OPEN-GRADED CY | 612.0106 PIPE UNDERDRAIN 6-INCH LF | 645.0111 GEOTEXTILE TYPE DF SCHEDULE A SY |
|---|---|---|---|---|---|
| 0010 | 10 | CTH CE (EB), LT | 1 | 20 | 10 |
| 0010 | 11 | CTH CE (EB), LT | 1 | 20 | 10 |
| 0010 | 13 | CTH CE (EB), LT | 1 | 20 | 10 |
| 0010 | 14 | CTH CE (EB), LT | 1 | 20 | 10 |
| 0010 | 20 | CTH CE (EB), LT | 1 | 20 | 10 |
| 0010 | 21 | CTH CE (EB), LT | 1 | 20 | 10 |
| 0010 | 30 | CTH CE (EB), LT | 1 | 20 | 10 |
| 0010 | 31 | CTH CE (EB), LT | 1 | 20 | 10 |
| 0010 | 32 | CTH CE (EB), LT | 1 | 20 | 10 |
| 0010 | 33 | CTH CE (EB), LT | 1 | 20 | 10 |
| 0010 | 50 | CTH CE (EB), LT | 1 | 20 | 10 |
| 0010 | 51 | CTH CE (EB), LT | 1 | 20 | 10 |
| 0010 | 60 | CTH CE (EB), LT | 1 | 20 | 10 |
| 0010 | 61 | CTH CE (EB), LT | 1 | 20 | 10 |
| | | TOTAL 0010 | 14 | 280 | 140 |

## CONCRETE SURFACE DRAINS

| CATEGORY | STATION | LOCATION | 416.1010 CONCRETE SURFACE DRAINS CY | REMARKS |
|---|---|---|---|---|
| 0010 | 7+75 | RAILROAD STREET, LT | 2 | SW QUADRANT |
| | | TOTAL 0010 | 2 | |

## CULVERT PIPE AND APRON ENDWALLS

| CATEGORY | STATION | TO | STATION | LOCATION | * 5221024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH | 522.0424 CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF |
|---|---|---|---|---|---|---|
| 0010 | 130+74 | | | CTH CE (EB), LT | 1 | - |
| 0010 | 130+74 | - | 132+06 | CTH CE (EB), LT | - | 132 |
| 0010 | 132+06 | | | CTH CE (EB), LT | 1 | - |
| | | | | TOTAL 0010 | 2 | 132 |

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

## BASE AGGREGATE DENSE

| CATEGORY | STATION | TO | STATION | LOCATION | 305.0110 BASE AGGREGATE DENSE 3/4-INCH TON | 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON | 311.0110 BREAKER RUN TON | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0010 | 7+68 | - | 9+40 | RAILROAD STREET, RT & LT | - | 703 | 344 | SOUTH OF INTERSECTION |
| 0010 | 10+37 | - | 11+53 | RAILROAD STREET, RT & LT | - | 660 | 226 | NORTH OF INTERSECTION |
| 0010 | 10+55 | - | 10+99 | RAILROAD STREET, LT | - | 31 | - | NW QUADRANT CURB RAMP |
| 0010 | 10+45 | - | 10+72 | RAILROAD STREET, RT | - | 12 | - | NE QUADRANT CURB RAMP |
| 0010 | 130+60 | - | 138+60 | CTH CE (EB), LT | - | 1,558 | 644 | MEDIAN |
| 0010 | 130+66 | - | 132+55 | CTH CE (EB), RT | 20 | 438 | 208 | WEST LOON |
| 0010 | 138+60 | - | 149+00 | CTH CE (EB), LT | - | 2,017 | 839 | MEDIAN |
| 0010 | 141+20 | - | 144+14 | CTH CE (WB), LT | 50 | 441 | 198 | EAST RIGHT TURN |
| 0010 | 146+54 | - | 150+00 | CTH CE (WB), LT | - | 171 | - | EAST PATH REPLACEMENT |
| 0010 | 146+91 | - | 149+00 | CTH CE (WB), LT | 22 | 599 | 271 | EAST LOON |
| | | | | TOTAL 0010 | 92 | 6,630 | 2,730 | |

## HMA PAVEMENT

| CATEGORY | STATION | TO | STATION | LOCATION | 455.0605 TACK COAT GAL | 460.6223 HMA PAVEMENT 3 MT 58-28 S TON | 460.7424 HMA PAVEMENT 4 HT 58-28 H TON | 465.0105 ASPHALTIC SURFACE TON | 465.0125 ASPHALTIC SURFACE TEMPORARY TON | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 7+67 | - | 9+48 | RAILROAD STREET, RT & LT | 43 | 146 | 97 | - | - | SOUTH OF INTERSECTION |
| 0010 | 10+36 | - | 11+53 | RAILROAD STREET, RT & LT | 25 | 86 | 57 | - | - | NORTH OF INTERSECTION |
| 0010 | 10+45 | - | 10+72 | RAILROAD STREET, RT | - | - | - | 10 | - | NW QUADRANT CURB RAMP |
| 0010 | 10+55 | - | 10+99 | RAILROAD STREET, LT | - | - | - | 3 | - | NE QUADRANT CURB RAMP |
| 0010 | 130+66 | - | 132+55 | CTH CE (EB), RT | 26 | 90 | 60 | - | - | WEST LOON |
| 0010 | 130+60 | - | 138+59 | CTH CE (EB), LT | 68 | 237 | 158 | - | - | MEDIAN |
| 0010 | 138+59 | - | 149+00 | CTH CE (EB), LT | 92 | 317 | 211 | - | - | MEDIAN |
| 0010 | 141+20 | - | 144+14 | CTH CE (WB), LT | 19 | 66 | 44 | - | - | EAST RIGHT TURN |
| 0010 | 146+54 | - | 150+00 | CTH CE (WB), LT | - | - | - | 67 | - | EAST PATH REPLACEMENT |
| 0010 | 146+91 | - | 149+00 | CTH CE (WB), LT | 37 | 128 | 88 | - | - | EAST LOON |
| | | | | STORM SEWER LEADS | - | - | - | - | 10 | FOR PATCHES IN EXISTING PAVEMENT |
| | | | | TOTAL 0010 | 310 | 1,070 | 715 | 80 | 10 | |

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## CONCRETE CURB AND GUTTER

| CATEGORY | STATION | TO | STATION | LOCATION | 601.0407 CONCRETE CURB & GUTTER 18-INCH TYPE D LF | 601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF | 601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0010 | 7+68 | - | 9+24 | RAILROAD STREET, RT | - | 103 | 95 | SE QUADRANT |
| 0010 | 7+83 | - | 9+03 | RAILROAD STREET, LT | - | 120 | - | SW QUADRANT |
| 0010 | 8+52 | - | 9+37 | RAILROAD STREET, RT | - | 215 | - | MEDIAN ISLAND |
| 0010 | 9+03 | - | 9+48 | RAILROAD STREET, LT | - | - | 64 | SW QUADRANT |
| 0010 | 10+38 | - | 11+13 | RAILROAD STREET, LT | - | 195 | - | MEDIAN ISLAND |
| 0010 | 10+37 | - | 11+20 | RAILROAD STREET, RT | - | - | 107 | NE QUADRANT |
| 0010 | 10+37 | - | 10+89 | RAILROAD STREET, LT | - | - | 91 | NW QUADRANT |
| 0010 | 10+89 | - | 11+53 | RAILROAD STREET, LT | - | 58 | - | NW QUADRANT |
| 0010 | 130+60 | - | 130+99 | CTH CE (EB), LT | - | - | 85 | MEDIAN |
| 0010 | 131+45 | - | 137+98 | CTH CE (EB), LT | - | - | 1,116 | MEDIAN |
| 0010 | 136+02 | - | 137+98 | CTH CE (EB), LT | 199 | - | - | MEDIAN |
| 0010 | 138+22 | - | 138+98 | CTH CE (EB), LT | - | - | 168 | MEDIAN |
| 0010 | 139+23 | - | 143+23 | CTH CE (EB), LT | 402 | - | - | MEDIAN |
| 0010 | 139+23 | - | 148+15 | CTH CE (EB), LT | - | - | 1,391 | MEDIAN |
| 0010 | 148+62 | - | 149+00 | CTH CE (EB), LT | - | - | 85 | MEDIAN |
| | | | | TOTAL 0010 | 601 | 691 | 3,202 | |

## ADJUSTING INLET COVERS

| CATEGORY | STATION | LOCATION | 611.8115 ADJUSTING INLET COVERS EACH |
|---|---|---|---|
| 0010 | 11+57 | RAILROAD STREET, LT | 1 |
| 0010 | 149+00 | CTH CE, EB, LT | 2 |
| | | TOTAL 0010 | 3 |

## RIPRAP AND GEOTEXTILE

| CATEGORY | STATION | LOCATION | 606.0100 RIPRAP LIGHT CY | 645.0130 GEOTEXTILE TYPE R SY |
|---|---|---|---|---|
| 0010 | 7+75 | RAILROAD STREET, LT | 2 | 4 |
| | | TOTAL 0010 | 2 | 4 |

## CONCRETE SIDEWALK

| CATEGORY | STATION | TO | STATION | LOCATION | 601.0600 CONCRETE CURB PEDESTRIAN LF | 602.0405 CONCRETE SIDEWALK 4-INCH SF | 602.0415 CONCRETE SIDEWALK 6-INCH SF | 602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0010 | 8+56 | - | 9+35 | RAILROAD STREET, RT | - | 1,501 | - | - | SOUTH MEDIAN ISLAND |
| 0010 | 10+41 | - | 11+10 | RAILROAD STREET, LT | 50 | 1,276 | - | 40 | NORTH MEDIAN ISLAND |
| 0010 | 10+45 | - | 10+72 | RAILROAD STREET, RT | - | 163 | 68 | 20 | NE QUADRANT CURB RAMP |
| 0010 | 10+55 | - | 10+99 | RAILROAD STREET, LT | - | 100 | 88 | 20 | NW QUADRANT CURB RAMP |
| 0010 | 131+52 | - | 137+92 | CTH CE (EB), LT | - | 2,259 | - | - | MEDIAN ISLAND |
| 0010 | 138+29 | - | 138+92 | CTH CE (EB), LT | - | 684 | - | - | MEDIAN ISLAND |
| 0010 | 139+29 | - | 148+08 | CTH CE (EB), LT | - | 2,738 | - | - | MEDIAN ISLAND |
| | | | | TOTAL 0010 | 50 | 8,721 | 156 | 80 | |

## STORM SEWER PIPE

| FROM | TO | LOCATION | 520.8000 CONCRETE COLLARS FOR PIPE EACH | 608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF | 608.0342 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 42-INCH LF | 608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF | 608.3012 STORM SEWER PIPE CLASS III-A 12-INCH LF | 608.3018 STORM SEWER PIPE CLASS III-A 18-INCH LF | SPV.0090.05 STORM SEWER LATERAL 8-INCH LF |
|---|---|---|---|---|---|---|---|---|---|
| 10 | 11 | CTH CE (EB) | - | - | - | 6 | - | - | - |
| 11 | 12 | CTH CE (EB) | - | - | - | 140 | - | - | - |
| 12 | EXIST | CTH CE (EB) | 1 | - | - | 6 | - | - | - |
| 13 | 12 | CTH CE (EB) | - | - | - | 8 | - | - | - |
| 14 | 13 | CTH CE (EB) | - | - | - | 6 | - | - | - |
| 20 | EXIST | CTH CE (EB) | 1 | - | - | 4 | - | - | - |
| 21 | 20 | CTH CE (EB) | - | - | - | 8 | - | - | - |
| 30 | 31 | CTH CE (EB) | - | - | - | 12 | - | - | - |
| 31 | 32 | CTH CE (EB) | - | - | - | 122 | - | - | - |
| EXIST | 32A | CTH CE (EB) | 1 | 6 | - | - | - | - | - |
| 32 | EXIST | CTH CE (EB) | 1 | 4 | - | - | - | - | - |
| 33 | 32 | CTH CE (EB) | - | 8 | - | - | - | - | - |
| EXIST | 33 | CTH CE (EB) | 1 | 14 | - | - | - | - | - |
| 34 | EXIST | RAILROAD STREET | - | - | - | - | - | - | 6 |
| 50 | EXIST | CTH CE (EB) | 1 | - | - | 14 | - | - | - |
| 51 | 50 | CTH CE (EB) | - | - | - | 8 | - | - | - |
| 60 | 61 | CTH CE (EB) | - | - | - | 6 | - | - | - |
| 61 | EXIST | CTH CE (EB) | 1 | - | - | 94 | - | - | - |
| 40 | 41 | RAILROAD STREET | - | - | - | - | 10 | - | - |
| 41 | 42 | RAILROAD STREET | - | - | - | - | 26 | - | - |
| 43 | 42 | RAILROAD STREET | - | - | - | - | - | 38 | - |
| 42 | 47 | CTH CE (EB) | - | - | - | - | - | 26 | - |
| 44 | 45 | CTH CE (EB) | - | - | 180 | - | - | - | - |
| 45 | 46 | CTH CE (EB) | - | - | 98 | - | - | - | - |
| 46 | 47 | CTH CE (EB) | - | - | 46 | - | - | - | - |
| | | TOTAL 0010 | 7 | 32 | 324 | 434 | 36 | 64 | 6 |

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STORM SEWER STRUCTURES AND COVERS

| CATEGORY | STRUCTURE | * 522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH | 522.1042 APRON ENDWALLS FOR CULVERT PIPE REINFORECED CONCRETE 42-INCH EACH | 611.0530 MANHOLE COVERS TYPE J EACH | 611.0535 MANHOLE COVERS TYPE J-SPECIAL EACH | 611.0612 INLET COVERS TYPE C EACH | 611.0624 INLET COVERS TYPE H EACH | 611.0627 INLET COVERS TYPE HM EACH | 611.0642 INLET COVERS TYPE MS EACH | 611.0666 INLET COVERS TYPE Z EACH | 611.2004 MANHOLES 4-FT DIAMETER EACH | 611.2006 MANHOLES 6-FT DIAMETER EACH | 611.3003 INLETS 3-FT DIAMETER EACH | 611.3004 INLETS 4-FT DIAMETER EACH | 611.3230 INLETS 2X3-FT EACH | 611.3901 INLETS MEDIAN 1 GRATE EACH | 611.9800.S PIPE GRATES EACH | SPV.0060.09 INLETS 6-FT DIAMETER EACH | SPV.0060.10 INLETS 9-FT DIAMETER EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 10 | - | - | - | - | - | - | 1 | - | - | - | - | - | - | 1 | - | - | - | - |
| 0010 | 11 | - | - | - | - | - | - | 1 | - | - | - | - | - | - | 1 | - | - | - | - |
| 0010 | 12 | - | - | - | 1 | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - |
| 0010 | 13 | - | - | - | - | - | - | 1 | - | - | - | - | - | - | 1 | - | - | - | - |
| 0010 | 14 | - | - | - | - | - | - | 1 | - | - | - | - | - | - | 1 | - | - | - | - |
| 0010 | 20 | - | - | - | - | - | - | 1 | - | - | - | - | - | - | 1 | - | - | - | - |
| 0010 | 21 | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | - | - | - | - | - |
| 0010 | 30 | - | - | - | - | - | - | 1 | - | - | - | - | - | - | 1 | - | - | - | - |
| 0010 | 31 | - | - | - | - | - | - | 1 | - | - | - | - | - | - | 1 | - | - | - | - |
| 0010 | 32 | - | - | - | - | - | - | 1 | - | - | - | - | - | - | 1 | - | - | - | - |
| 0010 | 32A | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 0010 | 33 | - | - | - | - | - | - | - | - | 1 | - | - | - | 1 | - | - | - | - | - |
| 0011 | 34 | - | - | - | - | 1 | - | - | - | - | - | - | 1 | - | - | - | - | - | - |
| 0010 | 40 | - | - | - | - | - | 1 | - | - | - | - | - | - | - | 1 | - | - | - | - |
| 0010 | 41 | - | - | - | - | - | 1 | - | - | - | - | - | - | - | 1 | - | - | - | - |
| 0010 | 42 | - | - | - | - | - | - | 1 | - | - | - | - | - | 1 | - | - | - | - | - |
| 0010 | 43 | - | - | - | - | - | - | - | 1 | - | - | - | - | - | - | 1 | - | - | - |
| 0010 | 44 | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| 0010 | 45 | - | - | 1 | - | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - |
| 0010 | 46 | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | 1 | - |
| 0010 | 47 | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | 1 |
| 0010 | 50 | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | - | - | - | - | - |
| 0010 | 51 | - | - | - | - | - | - | 1 | - | - | - | - | - | - | 1 | - | - | - | - |
| 0010 | 60 | - | - | - | - | - | - | 1 | - | - | - | - | - | - | 1 | - | - | - | - |
| 0010 | 61 | - | - | - | - | - | - | 1 | - | - | - | - | - | - | 1 | - | - | - | - |
| | | 1 | 1 | 1 | 1 | 1 | 4 | 12 | 1 | 3 | 1 | 1 | 3 | 2 | 13 | 1 | 1 | 1 | 1 |

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE MEDIAN SLOPED NOSE

| CATEGORY | STATION | LOCATION | 620.0300 CONCRETE MEDIAN SLOPED NOSE SF |
|---|---|---|---|
| 0010 | 8+55 | RAILROAD STREET, RT | 35 |
| 0010 | 9+35 | RAILROAD STREET, RT | 35 |
| 0010 | 10+40 | RAILROAD STREET, LT | 35 |
| 0010 | 11+10 | RAILROAD STREET, LT | 35 |
| 0010 | 130+95 | CTH CE (EB), LT | 55 |
| 0010 | 131+50 | CTH CE (EB), LT | 50 |
| 0010 | 137+95 | CTH CE (EB), LT | 40 |
| 0010 | 138+25 | CTH CE (EB), LT | 45 |
| 0010 | 138+95 | CTH CE (EB), LT | 45 |
| 0010 | 139+25 | CTH CE (EB), LT | 40 |
| 0010 | 148+10 | CTH CE (EB), LT | 50 |
| 0010 | 148+65 | CTH CE (EB), LT | 55 |
| | | TOTAL 0010 | 520 |

MOBILIZATION EROSION CONTROL

| CATEGORY | LOCATION | 628.1905 MOBILIZATIONS EROSION CONTROL EACH | 628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH |
|---|---|---|---|
| 0010 | PROJECT | 5 | 3 |
| | TOTAL 0010 | 5 | 3 |

INLET PROTECTION

| CATEGORY | STATION | LOCATION | 628.7005 INLET PROTECTION TYPE A EACH | 628.7010 INLET PROTECTION TYPE B EACH | 628.7015 INLET PROTECTION TYPE C EACH | 628.7020 INLET PROTECTION TYPE D EACH |
|---|---|---|---|---|---|---|
| 0010 | 5+66 | RAILROAD STREET,LT | - | - | 1 | - |
| 0010 | 7+68 | RAILROAD STREET,LT | - | - | - | 1 |
| 0010 | 7+80 | RAILROAD STREET,RT | 1 | 1 | - | - |
| 0010 | 8+57 | RAILROAD STREET,LT | 1 | - | 1 | - |
| 0010 | 8+65 | RAILROAD STREET,LT | 1 | - | 1 | - |
| 0010 | 8+66 | RAILROAD STREET,LT | 1 | - | 1 | - |
| 0010 | 8+69 | RAILROAD STREET,LT | 1 | - | 1 | - |
| 0010 | 11+58 | RAILROAD STREET,LT | - | - | 1 | - |
| 0010 | 130+00 | CTH CE (EB), LT | - | - | 2 | - |
| 0010 | 131+55 | CTH CE (EB), LT | 1 | - | 1 | - |
| 0010 | 131+62 | CTH CE (EB), LT | 1 | - | 1 | - |
| 0010 | 133+00 | CTH CE (EB), LT | 2 | - | 1 | - |
| 0010 | 133+07 | CTH CE (EB), LT | 1 | - | 1 | - |
| 0010 | 136+00 | CTH CE (EB), RT | 2 | - | 2 | - |
| 0010 | 138+37 | CTH CE (EB), LT | 2 | - | 2 | - |
| 0010 | 139+58 | CTH CE (EB), LT | 2 | - | 2 | - |
| 0010 | 142+00 | CTH CE (EB), LT | 2 | - | 2 | - |
| 0010 | 147+98 | CTH CE (EB), LT | 1 | - | 1 | - |
| 0010 | 148+05 | CTH CE (EB), LT | 1 | - | 1 | - |
| 0010 | 149+00 | CTH CE (EB), LT | - | - | 2 | - |
| | | TOTAL 0010 | 20 | 1 | 24 | 1 |

SILT FENCE

| CATEGORY | STATION | TO | STATION | LOCATION | 628.1504 SILT FENCE LF | 628.1520 SILT FENCE MAINTENANCE LF | REMARKS |
|---|---|---|---|---|---|---|---|
| 0010 | 7+75 | - | 8+25 | RAILROAD STREET, LT | 50 | 100 | SW QUADRANT |
| 0010 | 10+36 | - | 11+53 | RAILROAD STREET, LT | 146 | 292 | NE QUADRANT |
| 0010 | | | | UNDISTRIBUTED | 39 | 78 | |
| | | | | TOTAL 0010 | 235 | 470 | |

3

## EROSION MAT

| CATEGORY | STATION | TO | STATION | LOCATION | 628.2006 EROSION MAT URBAN CLASS I TYPE A SY | 628.2008 EROSION MAT URBAN CLASS I TYPE B SY | REMARKS |
|---|---|---|---|---|---|---|---|
| 0010 | 7+67 | - | 9+48 | RAILROAD STREET, LT | 850 | 37 | SOUTHWEST QUADRANT |
| 0010 | 7+67 | - | 9+18 | RAILROAD STREET, RT | 498 | 48 | SOUTH EAST QUADRANT |
| 0010 | 10+41 | - | 10+72 | RAILROAD STREET, LT | 28 | - | NORTHEAST QUADRANT |
| 0010 | 10+51 | - | 11+70 | RAILROAD STREET, RT | 206 | - | NORTHWEST QUADRANT |
| 0010 | 130+50 | - | 132+75 | CTH CE (EB), RT | 297 | 54 | WEST LOON |
| 0010 | 130+60 | - | 130+92 | CTH CE (EB), LT | 34 | - | MEDIAN |
| 0010 | 141+20 | - | 144+14 | CTH CE (WB), LT | 598 | - | EAST RIGHT TURN |
| 0010 | 146+54 | - | 150+00 | CTH CE (WB), LT | 273 | - | EAST PATH |
| 0010 | 146+67 | - | 149+09 | CTH CE (WB), LT | 942 | - | EAST LOON |
| 0010 | 148+68 | - | 149+00 | CTH CE (EB), LT | 34 | - | EAST MEDIAN ISLAND |
| | | | | UNDISTRIBUTED | 940 | 36 | |
| | | | | TOTAL 0010 | 4,700 | 175 | |

## DITCH CHECKS AND PIPE CHECKS

| CATEGORY | STATION | LOCATION | 628.7504 TEMPORARY DITCH CHECKS LF | 628.7555 CULVERT PIPE CHECKS EACH |
|---|---|---|---|---|
| 0010 | 130+75 | CTH CE (EB), RT | - | 4 |
| 0010 | 132+75 | CTH CE (EB), RT | 15 | - |
| 0010 | 144+00 | CTH CE (WB), LT | 15 | - |
| 0010 | 146+75 | CTH CE (WB), LT | 15 | - |
| 0010 | 149+25 | CTH CE (WB), LT | 15 | - |
| | | UNDISTRIBUTED | 15 | 1 |
| | | TOTAL 0010 | 75 | 5 |

## LANDSCAPING ITEMS

| CATEGORY | STATION | TO | STATION | LOCATION | 625.0100 TOPSOIL SY | 627.0200 MULCHING SY | 629.0210 FERTILIZER TYPE B CWT | 630.0120 SEEDING MIXTURE NO. 20 LB | 630.0140 SEEDING MIXTURE NO. 40 LB | 630.0200 SEEDING TEMPORARY LB | 630.0500 SEED WATER MGAL | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 7+67 | - | 9+48 | RAILROAD STREET, LT | 818 | - | 0.5 | - | 15 | 22 | 18 | SOUTHWEST QUADRANT |
| 0010 | 7+67 | - | 9+18 | RAILROAD STREET, RT | 500 | - | 0.3 | - | 9 | 13 | 11 | SOUTH EAST QUADRANT |
| 0010 | 130+50 | - | 132+75 | CTH CE (EB), RT | 351 | - | 0.3 | - | 6 | 9 | 8 | WEST LOON |
| 0010 | 130+60 | - | 130+92 | CTH CE (EB), LT | 34 | - | 0.1 | - | 1 | 1 | 1 | MEDIAN |
| 0010 | 141+20 | - | 144+14 | CTH CE (WB), LT | 600 | - | 0.4 | - | 11 | 16 | 13 | EAST RIGHT TURN |
| 0010 | 146+67 | - | 149+09 | CTH CE (WB), LT | 904 | - | 0.6 | - | 16 | 24 | 20 | EAST LOON |
| 0010 | 146+54 | - | 150+00 | CTH CE (WB), LT | 273 | - | 0.2 | - | 5 | 7 | 6 | EAST PATH |
| 0010 | 148+68 | - | 149+00 | CTH CE (EB), LT | 34 | - | 0.0 | - | 1 | 1 | 1 | MEDIAN |
| 0010 | 10+41 | - | 10+72 | RAILROAD STREET, LT | 28 | - | 0.1 | - | 1 | 1 | 1 | NORTHEAST QUADRANT |
| 0010 | 10+51 | - | 11+70 | RAILROAD STREET, RT | 221 | - | 0.1 | - | 4 | 6 | 5 | NORTHWEST QUADRANT |
| | | | | WASTE SITE | - | 3,500 | 2.2 | 63 | - | 95 | 79 | |
| | | | | UNDISTRIBUTED | 937 | - | 1.2 | - | 17 | 49 | 41 | |
| | | | | TOTAL 0010 | 4,700 | 3,500 | 6.0 | 63 | 86 | 244 | 204 | |

## ERECTION & REMOVAL OF PERMANENT SIGNING TYPE II

| SIGN NO. | LOCATION | STATION | SIGN CODE | W X H | 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 | 634.0614 POSTS WOOD 4x6x14 EACH | 638.2102 MOVING SIGNS TYPE II EACH | 638.2602 REMOVING SIGNS TYPE II EACH | 638.3000 REMOVING SMALL SIGN SUPPORTS EACH | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01 | CTH CE | 131+10 | W3-3 | -- -- -- | -- | -- | -- | -- | -- | 1 | 1 | SIGNAL AHEAD |
| 02 | CTH CE | 131+10 | W3-3 | -- -- -- | -- | -- | -- | -- | -- | 1 | 1 | SIGNAL AHEAD |
| 03 | CTH CE | 136+25 | R2-1 | -- -- -- | -- | -- | -- | -- | -- | 1 | 1 | 40 MPH |
| 04 | CTH CE | 138+00 | R1-1 | -- -- -- | -- | -- | -- | -- | -- | 1 | 1 | STOP SIGN FOR TRAIL |
| 05 | RAILROAD | 10+50 | D11-1 | -- -- -- | -- | -- | -- | -- | -- | 1 | 1 | BIKE |
| 06 | CTH CE | 138+00 | R4-7 | -- -- -- | -- | -- | -- | -- | -- | 1 | -- | KEEP RIGHT INSTALLED ON SIGNAL POLE |
| 07 | CTH CE | 139+20 | R4-7 | -- -- -- | -- | -- | -- | -- | -- | 1 | -- | KEEP RIGHT INSTALLED ON SIGNAL POLE |
| 08 | CTH CE | 136+00 | R3-7R | -- -- -- | -- | -- | -- | -- | -- | 1 | 1 | RIGHT LANE MUST TURN RIGHT |
| 09 | CTH CE | 136+00 | R5-1A | -- -- -- | -- | -- | -- | -- | -- | 1 | -- | WRONG WAY |
| 10 | CTH CE | 138+10 | R3-7R | -- -- -- | -- | -- | -- | -- | -- | 1 | -- | RIGHT LANE MUST TURN RIGHT INSTALLED ON SIGNAL POLE |
| 11 | CTH CE | 138+10 | R5-1 | -- -- -- | -- | -- | -- | -- | -- | 1 | -- | DO NOT ENTER INSTALLED ON SIGNAL POLE |
| 12 | RAILROAD | 10+65 | SPECIAL | -- -- -- | -- | -- | -- | -- | 1 | -- | -- | STREET NAME SIGN INSTALLED ON SIGNAL POLE |
| 13 | CTH CE | 140+10 | R5-1 | -- -- -- | -- | -- | -- | -- | -- | 1 | 1 | DO NOT ENTER |
| 14 | CTH CE | 140+10 | R5-1A | -- -- -- | -- | -- | -- | -- | -- | 1 | -- | WRONG WAY |
| 15 | CTH CE | 140+10 | R3-7R | -- -- -- | -- | -- | -- | -- | -- | 1 | -- | RIGHT LANE MUST TURN RIGHT |
| 16 | CTH CE | 146+00 | W3-3 | -- -- -- | -- | -- | -- | -- | -- | 1 | 1 | SIGNAL AHEAD |
| 17 | CTH CE | 146+00 | W3-3 | -- -- -- | -- | -- | -- | -- | -- | 1 | 1 | SIGNAL AHEAD |
| 18 | CTH CE | 148+50 | R2-1 | -- -- -- | -- | -- | -- | -- | -- | 1 | 1 | SPEED LIMIT 40 |
| 19 | CTH CE | 148+50 | R2-1 | -- -- -- | -- | -- | -- | -- | -- | 1 | 1 | SPEED LIMIT 40 |
| 20 | CTH CE | 148+50 | R2-1 | -- -- -- | -- | -- | -- | -- | -- | 1 | -- | SPEED LIMIT 45 |
| 21 | CTH CE | 148+50 | R2-1 | -- -- -- | -- | -- | -- | -- | -- | 1 | 1 | SPEED LIMIT 45 |
| 22 | CTH CE | 140+55 | R2-1 | -- -- -- | -- | -- | -- | -- | -- | 1 | 1 | SPEED LIMIT 40 |
| 101 | CTH CE | 126+25 | W3-3 | 36" X 36" | -- | -- | 9.00 | 1 | -- | -- | -- | |
| 102 | CTH CE | 126+25 | W3-3 | 36" X 36" | -- | -- | 9.00 | 1 | -- | -- | -- | |
| 103 | CTH CE | 129+00 | R5-1A | 36" X 24" | 6.00 | -- | -- | 1 | -- | -- | -- | |
| 104 | CTH CE | 130+80 | R1-1F | 36" X 36" | -- | 7.46 | -- | -- | -- | -- | -- | INSTALL ON SIGNAL POLE |
| 105 | CTH CE | 130+65 | R1-1F | 36" X 36" | -- | 7.46 | -- | -- | -- | -- | -- | INSTALL ON SIGNAL POLE |
| 106 | CTH CE | 130+68 | R5-1 | 30" X 30" | 6.25 | -- | -- | 1 | -- | -- | -- | |
| 107 | CTH CE | 130+75 | R6-2L | 24" X 30" | 5.00 | -- | -- | 1 | -- | -- | -- | |
| 108 | CTH CE | 130+82 | R3-18 | 30" X 30" | 6.25 | -- | -- | 1 | -- | -- | -- | |
| 109 | CTH CE | 130+82 | J3-1 | | 0.00 | -- | -- | -- | -- | -- | -- | |
| | | | M3-2 | 24" X 12" | 2.00 | -- | -- | -- | -- | -- | -- | EAST |
| | | | M1-5A | 24" X 24" | 4.00 | -- | -- | -- | -- | -- | -- | COUNTY CE |
| | | | M5-1 | 21" X 21" | 3.06 | -- | -- | -- | -- | -- | -- | U TURN |
| 110 | CTH CE | 131+56 | R3-18 | 30" X 30" | 6.25 | -- | -- | 1 | -- | -- | -- | |
| 111 | CTH CE | 131+56 | R1-1F | 36" X 36" | -- | 7.46 | -- | -- | -- | -- | -- | |
| 112 | CTH CE | 133+25 | R3-5L | 42" X 48" | 14.00 | -- | -- | -- | -- | -- | -- | INSTALL ON OVERHEAD SUPPORT |
| 201 | CTH CE | 134+80 | R3-7L | 30" X 30" | 6.25 | -- | -- | -- | -- | -- | -- | INSTALL ON LIGHT POLE |
| 202 | CTH CE | 134+80 | J3-1 | | 0.00 | -- | -- | -- | -- | -- | -- | INSTALL ON LIGHT POLE |
| | | | M3-2 | 24" X 12" | 2.00 | -- | -- | -- | -- | -- | -- | EAST |
| | | | M1-5A | 24" X 24" | 4.00 | -- | -- | -- | -- | -- | -- | COUNTY CE |
| | | | M5-1 | 21" X 21" | 3.06 | -- | -- | -- | -- | -- | -- | U TURN |
| 203 | CTH CE | 135+25 | J3-2 | | 0.00 | -- | -- | 1 | -- | -- | -- | |
| | | | M3-2 | 24" X 12" | 2.00 | -- | -- | -- | -- | -- | -- | EAST |
| | | | M1-5A | 24" X 24" | 4.00 | -- | -- | -- | -- | -- | -- | COUNTY CE |
| | | | M5-1 | 21" X 21" | 3.06 | -- | -- | -- | -- | -- | -- | U TURN |
| | | | M3-4 | 24" X 12" | 2.00 | -- | -- | -- | -- | -- | -- | WEST |
| | | | M1-5A | 24" X 24" | 4.00 | -- | -- | -- | -- | -- | -- | COUNTY CE |
| | | | M6-3 | 21" X 21" | 3.06 | -- | -- | -- | -- | -- | -- | UPWARD ARROW |
| 204 | CTH CE | 13+700 | R2-1 | 30" X 36" | 7.50 | -- | -- | 1 | -- | -- | -- | SPEED LIMIT 40 |
| | PAGE SUBTOTALS | | | | 93.75 | 22.38 | 18.00 | 9 | 1 | 21 | 13 | |

## ERECTION & REMOVAL OF PERMANENT SIGNING TYPE II CONTINUED

| SIGN NO. | LOCATION | STATION | SIGN CODE | W X H | 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 | 634.0614 POSTS WOOD 4x6x14 EACH | 638.2102 MOVING SIGNS TYPE II EACH | 638.2602 REMOVING SIGNS TYPE II EACH | 638.3000 REMOVING SMALL SIGN SUPPORTS EACH | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 205 | CTH CE | 136+25 | R3-7R | 30" X 30" | 6.25 | -- | -- | 1 | -- | -- | -- | |
| 206 | CTH CE | 136+25 | R5-1 | 36" X 24" | 6.00 | -- | -- | -- | -- | -- | -- | |
| 207 | CTH CE | 137+00 | R3-7L | 30" X 30" | 6.25 | -- | -- | 1 | -- | -- | -- | |
| 208 | CTH CE | 138+10 | R1-1F | 36" X 36" | -- | 7.46 | -- | -- | -- | -- | -- | INSTALL ON SIGNAL POLE |
| 209 | CTH CE | 138+10 | R5-1 | 30" X 30" | 6.25 | -- | -- | -- | -- | -- | -- | INSTALL ON SIGNAL POLE |
| 210 | CTH CE | 137+75 | R3-4 | 24" X 24" | 4.00 | -- | -- | -- | -- | -- | -- | INSTALL ON SIGNAL POLE |
| 211 | CTH CE | 137+75 | R1-1F | 36" X 36" | -- | 7.46 | -- | -- | -- | -- | -- | INSTALL ON SIGNAL POLE |
| 212 | RAILROAD | 10+42 | R6-2R | 24" X 30" | 5.00 | -- | -- | 1 | -- | -- | -- | |
| 213 | RAILROAD | 10+70 | R1-1F | 36" X 36" | -- | 7.46 | -- | 1 | -- | -- | -- | |
| 214 | RAILROAD | 11+58 | R3-53R | 24" X 30" | 5.00 | -- | -- | 1 | -- | -- | -- | |
| 215 | RAILROAD | 11+05 | W12-1R | 24" X 24" | 4.00 | -- | -- | 1 | -- | -- | -- | INSTALL AT 4-FT MOUNTING HEIGHT |
| 216 | RAILROAD | 10+42 | R4-7 | 24" X 30" | 5.00 | -- | -- | 1 | -- | -- | -- | |
| 217 | CTH CE | 139+18 | R5-1 | 30" X 30" | 6.25 | -- | -- | -- | -- | -- | -- | INSTALL ON SIGNAL POLE |
| 218 | CTH CE | 139+18 | R1-1F | 36" X 36" | -- | 7.46 | -- | -- | -- | -- | -- | INSTALL ON SIGNAL POLE |
| 219 | CTH CE | 139+45 | R3-4 | 24" X 24" | 4.00 | -- | -- | -- | -- | -- | -- | INSTALL ON SIGNAL POLE |
| 220 | CTH CE | 139+45 | R1-1F | 36" X 36" | -- | 7.46 | -- | -- | -- | -- | -- | INSTALL ON SIGNAL POLE |
| 221 | CTH CE | 138+34 | W12-1D | 24" X 24" | 4.00 | -- | -- | 1 | -- | -- | -- | INSTALL AT 4-FT MOUNTING HEIGHT |
| 222 | CTH CE | 138+48 | R5-1 | 30" X 30" | 6.25 | -- | -- | 1 | -- | -- | -- | |
| 223 | CTH CE | 138+73 | R5-1 | 30" X 30" | 6.25 | -- | -- | 1 | -- | -- | -- | |
| 224 | CTH CE | 138+86 | W12-1D | 24" X 24" | 4.00 | -- | -- | 1 | -- | -- | -- | INSTALL AT 4-FT MOUNTING HEIGHT |
| 225 | CTH CE | 138+80 | R3-4 | 24" X 24" | 4.00 | -- | -- | -- | -- | -- | -- | INSTALL ON SIGNAL POLE |
| 226 | CTH CE | 138+42 | R3-4 | 24" X 24" | 4.00 | -- | -- | -- | -- | -- | -- | INSTALL ON SIGNAL POLE |
| 227 | RAILROAD | 9+35 | R4-7 | 24" X 30" | 5.00 | -- | -- | 1 | -- | -- | -- | |
| 213 | RAILROAD | 9+30 | R1-1F | 36" X 36" | -- | 7.46 | -- | 1 | -- | -- | -- | |
| 229 | RAILROAD | 9+35 | R6-2R | 24" X 30" | 5.00 | -- | -- | 1 | -- | -- | -- | |
| 230 | RAILROAD | 8+65 | W12-1R | 24" X 24" | 4.00 | -- | -- | 1 | -- | -- | -- | INSTALL AT 4-FT MOUNTING HEIGHT |
| 231 | RAILROAD | 8+00 | R3-7B | 48" X 30" | 10.00 | -- | -- | 1 | -- | -- | -- | |
| 232 | RAILROAD | 8+70 | SPECIAL | 48" X 12" | 4.00 | -- | -- | -- | -- | -- | -- | TO RAILROAD ST -> |
| 233 | RAILROAD | 11+15 | SPECIAL | 48" X 12" | 4.00 | -- | -- | -- | -- | -- | -- | TO RAILROAD ST -> |
| 234 | CTH CE | 136+15 | SPECIAL | 54" X 15" | 5.63 | -- | -- | -- | -- | -- | -- | U-TURN TO RAILROAD ST |
| 301 | CTH CE | 141+00 | R5-1A | 30" X 24" | 5.00 | -- | -- | 1 | -- | -- | -- | |
| 302 | CTH CE | 141+00 | R3-7R | 30" X 30" | 6.25 | -- | -- | -- | -- | -- | -- | |
| 303 | CTH CE | 141+00 | R2-1 | 30" X 36" | 7.50 | -- | -- | 1 | -- | -- | -- | SPEED LIMIT 40 |
| 304 | CTH CE | 142+00 | SPECIAL | 54" X 15" | 5.63 | -- | -- | -- | -- | -- | -- | U-TURN TO RAILROAD ST - SEE SIGN DETAILS |
| 305 | CTH CE | 142+80 | J3-1 | | 0.00 | -- | -- | -- | -- | -- | -- | INSTALL ON LIGHT POLE |
| | | | M3-4 | 24" X 12" | 2.00 | -- | -- | -- | -- | -- | -- | WEST |
| | | | M1-5A | 24" X 24" | 4.00 | -- | -- | -- | -- | -- | -- | COUNTY CE |
| | | | M5-1 | 21" X 21" | 3.06 | -- | -- | -- | -- | -- | -- | U TURN |
| 306 | CTH CE | 143+00 | J3-2 | | 0.00 | -- | -- | 1 | -- | -- | -- | |
| | | | M3-4 | 24" X 12" | 2.00 | -- | -- | -- | -- | -- | -- | WEST |
| | | | M1-5A | 24" X 24" | 4.00 | -- | -- | -- | -- | -- | -- | COUNTY CE |
| | | | M5-1 | 21" X 21" | 3.06 | -- | -- | -- | -- | -- | -- | U TURN |
| | | | M3-2 | 24" X 12" | 2.00 | -- | -- | -- | -- | -- | -- | EAST |
| | | | M1-5A | 24" X 24" | 4.00 | -- | -- | -- | -- | -- | -- | COUNTY CE |
| | | | M6-3 | 21" X 21" | 3.06 | -- | -- | -- | -- | -- | -- | UP ARROW |
| 401 | CTH CE | 146+20 | R2-1 | 30" X 36" | 7.50 | -- | -- | 1 | -- | -- | -- | SPEED LIMIT 40 |
| 402 | CTH CE | 146+20 | R2-1 | 30" X 36" | 7.50 | -- | -- | -- | -- | -- | -- | SPEED LIMIT 40; INSTALL ON LIGHT POLE |
| 403 | CTH CE | 148+85 | R6-2L | 24" X 30" | 5.00 | -- | -- | 1 | -- | -- | -- | |
| 404 | CTH CE | 148+95 | R5-1 | 30" X 30" | 6.25 | -- | -- | 1 | -- | -- | -- | |
| 405 | CTH CE | 148+95 | R1-1F | 36" X 36" | -- | 7.46 | -- | -- | -- | -- | -- | INSTALL ON SIGNAL POLE |
| | PAGE SUBTOTALS | | | | 201.94 | 52.22 | 0.00 | 22 | 0 | 0 | 0 | |

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## ERECTION & REMOVAL OF PERMANENT SIGNING TYPE II CONTINUED

| SIGN NO. | LOCATION | STATION | SIGN CODE | W X H | 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 | 634.0614 POSTS WOOD 4x6x14 EACH | 638.2102 MOVING SIGNS TYPE II EACH | 638.2602 REMOVING SIGNS TYPE II EACH | 638.3000 REMOVING SMALL SIGN SUPPORTS EACH | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 406 | CTH CE | 148+82 | R1-1F | 36" X 36" | -- | 7.46 | -- | -- | -- | -- | -- | INSTALL ON SIGNAL POLE |
| 407 | CTH CE | 148+04 | R3-18 | 30" X 30" | 6.25 | -- | -- | 1 | -- | -- | -- | |
| 408 | CTH CE | 148+04 | R1-1F | 36" X 36" | -- | 7.46 | -- | -- | -- | -- | -- | |
| 409 | CTH CE | 148+79 | J3-1 | | 0.00 | -- | -- | 1 | -- | -- | -- | |
| | | | M3-4 | 24" X 12" | 2.00 | -- | -- | -- | -- | -- | -- | WEST |
| | | | M1-5A | 24" X 24" | 4.00 | -- | -- | -- | -- | -- | -- | COUNTY CE |
| | | | M5-1 | 21" X 21" | 3.06 | -- | -- | -- | -- | -- | -- | U TURN |
| 410 | CTH CE | 148+79 | R3-18 | 30" X 30" | 6.25 | -- | -- | -- | -- | -- | -- | |
| 411 | CTH CE | 149+50 | R2-1 | 30" X 36" | 7.50 | -- | -- | 1 | -- | -- | -- | SPEED LIMIT 45 |
| 412 | CTH CE | 149+50 | R2-1 | 30" X 36" | 7.50 | -- | -- | 1 | -- | -- | -- | SPEED LIMIT 45 |
| 413 | CTH CE | 150+75 | R5-1A | 36" X 24" | 6.00 | -- | -- | 1 | -- | -- | -- | |
| 414 | CTH CE | 154+50 | W3-3 | 36" X 36" | -- | -- | 9.00 | 1 | -- | -- | -- | |
| 415 | CTH CE | 154+50 | W3-3 | 36" X 36" | -- | -- | 9.00 | 1 | -- | -- | -- | |
| | | | | | | | | | | | | |
| | PAGE SUBTOTALS | | | | 42.56 | 14.92 | 18.00 | 7 | 0 | 0 | 0 | |
| | **PROJECT TOTALS** | | | | **338.25** | **89.52** | **36.00** | **38** | **1** | **21** | **13** | |

## TRAFFIC CONTROL

| CATEGORY | LOCATION | APPROX SERVICE DAYS | 643.0300 TRAFFIC CONTROL DRUMS NO. IN SERVICE | 643.0300 DAY | 643.0420 TRAFFIC CONTROL BARRICADES TYPE III NO. IN SERVICE | 643.0420 DAY | 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A NO. IN SERVICE | 643.0705 DAY | 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C NO. IN SERVICE | 643.0715 DAY | 643.0800 TRAFFIC CONTROL ARROW BOARDS NO. IN SERVICE | 643.0800 DAY | 643.0900 TRAFFIC CONTROL SIGNS NO. IN SERVICE | 643.0900 DAY | 643.1050 TRAFFIC CONTROL SIGNS PCMS NO. IN SERVICE | 643.1050 DAY | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **CTH CE LANE CLOSURES** | | | | | | | | | | | | | | | | | |
| 0010 | CTH CE & RAILROAD ST PROJECT | 7 | - | - | - | - | - | - | - | - | - | - | - | - | 2 | 14 | ADVANCED WARNING FOR RAILROAD ST CLOSURE AND CONSTRUCTION ALONG CTH CE |
| 0010 | CTH CE LANE SHIFT EASTBOUND FOR MEDIAN CLOSURE | 87 | 85 | 7,395 | 12 | 1,044 | 24 | 2,088 | 26 | 2,262 | 1 | 87 | 16 | 1,392 | - | - | SEE SDD "PARTIAL LANE SHIFT, NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH & UNDER" |
| 0010 | CTH CE LANE SHIFT WESTBOUND FOR MEDIAN CLOSURE | 87 | 60 | 5,220 | 12 | 1,044 | 24 | 2,088 | 16 | 1,392 | - | - | 12 | 1,044 | - | - | SEE SDD "PARTIAL LANE SHIFT, NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH & UNDER" |
| 0010 | ADDITIONAL FOR EASTBOUND SHOUDLER CLOSURE | 87 | 16 | 1,392 | 2 | 174 | 4 | 348 | - | - | - | - | 2 | 174 | - | - | |
| 0010 | ADDITIONAL FOR WESTBOUND SHOUDLER CLOSURE | 87 | 16 | 1,392 | 2 | 174 | 4 | 348 | - | - | - | - | 2 | 174 | - | - | |
| 0010 | ADDT'L OFF PEAK EB DOUBLE LANE CLOSURE | 10 | 25 | 250 | 2 | 20 | 2 | 20 | 13 | 130 | 1 | 10 | 6 | 60 | - | - | SEE SDD "DOUBLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY" |
| 0010 | ADDT'L OFF PEAK WB SINGLE LANE CLOSURES | 10 | 20 | 200 | 2 | 20 | 2 | 20 | 13 | 130 | 1 | 10 | 6 | 60 | - | - | SEE SDD "SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY" |
| | | | | 15,849 | | 2,476 | | 4,912 | | 3,914 | | 107 | | 2,904 | | 14 | |
| **RAILROAD STREET** | | | | | | | | | | | | | | | | | |
| 0010 | RAILROAD STREET NORTH | 87 | 6 | 522 | 12 | 1,044 | 20 | 1,740 | - | - | - | - | 8 | 696 | - | - | SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSEURS" AND |
| 0010 | RAILROAD STREET SOUTH | 87 | 8 | 696 | 10 | 870 | 16 | 1,392 | - | - | - | - | 8 | 696 | - | - | SEE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" |
| | | | | 1,218 | | 1,914 | | 3,132 | | 0 | | 0 | 16 | 1,392 | | 0 | |
| **PEDESTRIAN DETOUR** | | | | | | | | | | | | | | | | | |
| 0010 | STAGE 1 | 10 | - | - | - | - | - | - | - | - | - | - | 14 | 140 | - | - | SEE PEDESTRIAN DETOUR STAGE 1 |
| 0010 | STAGE 2 | 10 | 8 | 80 | - | - | - | - | - | - | - | - | 10 | 100 | - | - | SEE PEDESTRIAN DETOUR STAGE 2 |
| | | | | 80 | | 0 | | 0 | | 0 | | 0 | | 240 | | 0 | |
| 0010 | UNDISTRIBUTED | | | 853 | | 210 | | 406 | | 186 | | 0 | | 214 | | 0 | |
| | TOTAL 0010 | | | 18,000 | | 4,600 | | 8,450 | | 4,100 | | 107 | | 4,750 | | 14 | |

### TEMPORARY MARKING LINE

| CATEGORY | STATION | TO | STATION | LOCATION | 643.3150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW) LF | 643.3150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE) LF | REMARKS |
|---|---|---|---|---|---|---|---|
| 0010 | 123+00 | - | 126+20 | CTH CE EASTBOUND | 320 | - | EASTBOUND LANE CLOSURE TAPER |
| 0010 | 127+90 | - | 152+00 | CTH CE EASTBOUND | 2,400 | 3,210 | |
| 0010 | 128+50 | - | 153+00 | CTH CE WESTBOUND | 2,450 | 3,160 | |
| | | | | UNDISTRIBUTED | 520 | 640 | |
| | | | | SUBTOTAL | 5,690 | 7,010 | |
| | | | | TOTAL 0010 | | 12,700 | |

### TEMPORARY PEDESTRIAN ACCOMODATION

| CATEGORY | STATION | LOCATION | 644.1440 TEMPORARY PEDESTRIAN SURFACE MATTING SF | 644.1601 TEMPORARY PEDESTRIAN CURB RAMP DAY | 644.1605 TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD SF | 644.1810 TEMPORARY PEDESTRIAN BARRICADE LF | REMARKS |
|---|---|---|---|---|---|---|---|
| 0010 | 10+90 | RAILROAD STREET, LT | 260 | - | - | 85 | PEDESTRIAN DETOUR STAGE 2 |
| 0010 | 12+18 | RAILROAD STREET, LT | 16 | 10 | 8 | - | PEDESTRIAN DETOUR STAGE 2 |
| 0010 | 12+18 | RAILROAD STREET, RT | 16 | 10 | 8 | 85 | PEDESTRIAN DETOUR STAGE 2 |
| | | TOTAL 0010 | 292 | 20 | 16 | 170 | |

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## GEOGRID TYPE SR

| CATEGORY | STATION | TO | STATION | LOCATION | 645.0220 GEOGRID TYPE SR SY | REMARKS |
|---|---|---|---|---|---|---|
| 0010 | 130+60 | - | 138+59 | CTH CE (EB), LT | 2,146 | MEDIAN |
| 0010 | 138+59 | - | 149+00 | CTH CE (EB), LT | 2,799 | MEDIAN |
| | | | | TOTAL 0010 | 4,945 | |

## REMOVING PAVEMENT MARKING

| CATEGORY | STATION | TO | STATION | LOCATION | 646.9010 MARKING REMOVAL LINE WATER BLASTING 4-INCH LF | 646.9110 MARKING REMOVAL LINE WATER BLASTING 8-INCH LF | 646.9210 MARKING REMOVAL LINE WIDE WATER BLASTING LF | 646.9310 MARKING REMOVAL SPECIAL MARKING WATER BLASTING EACH | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0010 | 123+00 | - | 126+20 | CTH CE EASTBOUND | 100 | - | - | - | FOR EASTBOUND LANE CLOSURE |
| 0010 | 127+90 | - | 138+50 | CTH CE EASTBOUND | 2,200 | 400 | 35 | 4 | |
| 0010 | 139+00 | - | 152+00 | CTH CE EASTBOUND | 1,600 | - | - | - | |
| 0010 | 128+50 | - | 138+50 | CTH CE WESTBOUND | 1,050 | 300 | - | - | |
| 0010 | 139+00 | - | 152+00 | CTH CE WESTBOUND | 1,600 | 170 | 35 | - | |
| | | | | RAILROAD ST / UNDISTRIBUTED | 250 | 30 | - | - | CONFLICTING WITH PROPOSED |
| | | | | TOTAL 0010 | 6,800 | 900 | 70 | 4 | |

## MARKING LINE

| CATEGORY | STATION | TO | STATION | LOCATION | 646.1020 MARKING LINE EPOXY 4-INCH (YELLOW) LF | 646.1020 MARKING LINE EPOXY 4-INCH (WHITE) LF | 646.3020 MARKING LINE EPOXY 8-INCH (WHITE) LF | 646.5020 MARKING ARROW EPOXY (WHITE) EACH | 646.5120 MARKING WORD EPOXY (WHITE) EACH | 646.6120 MARKING STOP LINE EPOXY 18-INCH (WHITE) LF | 646.7120 MARKING DIAGONAL EPOXY 12-INCH (WHITE) LF | 646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE) LF | 646.8120 MARKING CURB EPOXY (YELLOW) LF | 646.8220 MARKING ISLAND NOSE EPOXY (YELLOW) EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 7+67 | - | 9+48 | RAILROAD STREET | 420 | - | 115 | 4 | - | 26 | - | - | 10 | 1 |
| 0010 | 10+36 | - | 11+71 | RAILROAD STREET | 300 | - | - | 1 | - | 16 | - | 92 | 10 | 1 |
| 0011 | 123+00 | - | 130+75 | CTH CE EASTBOUND | 300 | 500 | 190 | - | - | 36 | - | - | - | - |
| 0012 | 130+75 | - | 138+50 | CTH CE EASTBOUND | 663 | 1,028 | 1,008 | 8 | 3 | 49 | 60 | - | 45 | 2 |
| 0013 | 139+00 | - | 151+96 | CTH CE EASTBOUND | 1,235 | 1,520 | 21 | 3 | 2 | 12 | - | - | 35 | 2 |
| 0014 | 128+50 | - | 138+50 | CTH CE WESTBOUND | 900 | 1,020 | 695 | 5 | 1 | 12 | - | - | 35 | 2 |
| 0015 | 138+50 | - | 148+85 | CTH CE WESTBOUND | 905 | 1,311 | 914 | 6 | - | 49 | - | - | 45 | 2 |
| 0016 | 148+85 | - | 152+25 | CTH CE WESTBOUND | 340 | 403 | 57 | - | - | 24 | - | - | - | - |
| | | | | TOTAL 0010 | 10,845 | | 3,000 | 27 | 6 | 224 | 60 | 92 | 180 | 10 |

## CONSTRUCTION STAKING

| CATEGORY | STATION | TO | STATION | LOCATION | 650.4000 CONSTRUCTION STAKING STORM SEWER EACH | 650.4500 CONSTRUCTION STAKING SUBGRADE LF | 650.5000 CONSTRUCTION STAKING BASE LF | 650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF | 650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH | 650.8501.01 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (4160-06-71) EACH | 650.9000 CONSTRUCTION STAKING CURB RAMPS EACH | 650.9500.01 CONSTRUCTION STAKING SIDEWALK (4160-06-71) EACH | 650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (4160-06-71) EACH | 650.9920 CONSTRUCTION STAKING SLOPE STAKES LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | | | | PROJECT | 29 | - | - | 4,494 | 1 | 1 | 4 | 1 | 1 | - |
| 0010 | 7+67 | - | 9+48 | RAILROAD STREET, LT & RT | - | 181 | 181 | - | - | - | - | - | - | 181 |
| 0010 | 10+37 | - | 11+53 | RAILROAD STREET, LT & RT | - | 116 | 116 | - | - | - | - | - | - | 116 |
| 0010 | 130+60 | - | 149+00 | CTH CE (EB), LT & RT | - | 1,840 | 1,840 | - | - | - | - | - | - | 1,840 |
| | | | | TOTAL 0010 | 29 | 2,137 | 2,137 | 4,494 | 1 | 1 | 4 | 1 | 1 | 2,137 |

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## REMOVING TRAFFIC SIGNALS

| CATEGORY | LOCATION | 204.9060.S.01 EA |
|---|---|---|
| 0010 | CTH CE & RAILROAD ST | 1 |
| | **PROJECT TOTAL** | **1** |

## REMOVING CONCRETE BASES

| CATEGORY | BASE NO. | STATION | LOCATION | OFFSET | 204.0195 REMOVING CONCRETE BASES EACH |
|---|---|---|---|---|---|
| 0010 | EXCB1 | 138+10 | CTH CE WESTBND | 140' LT | 1 |
| 0010 | EXSB1 | 138+14 | CTH CE WESTBND | 68' LT | 1 |
| 0010 | EXSB2 | 137+85 | CTH CE WESTBND | 43' LT | 1 |
| 0010 | EXSB3 | 138+82 | CTH CE WESTBND | 64' LT | 1 |
| 0010 | EXSB4 | 139+08 | CTH CE WESTBND | 43' LT | 1 |
| 0010 | EXSB5 | 139+34 | CTH CE EASTBND | 9' LT | 1 |
| 0010 | EXSB6 | 139+39 | CTH CE EASTBND | 42' RT | 1 |
| 0010 | EXSB7 | 139+02 | CTH CE EASTBND | 71' RT | 1 |
| 0010 | EXSB8 | 138+40 | CTH CE EASTBND | 76' RT | 1 |
| 0010 | EXSB9 | 138+15 | CTH CE EASTBND | 46' RT | 1 |
| 0010 | EXSB10 | 137+95 | CTH CE EASTBND | 5' LT | 1 |
| | | | **PROJECT TOTAL** | | **11** |

## REMOVING PULL BOXES

| CATEGORY | PULL BOX NO. | STATION | LOCATION | OFFSET | 653.0905 REMOVING PULL BOXES EACH |
|---|---|---|---|---|---|
| 0010 | EXPB1 | 138+14 | CTH CE WESTBND | 141' LT | 1 |
| 0010 | EXPB2 | 138+16 | CTH CE WESTBND | 64' LT | 1 |
| 0010 | EXPB3 | 137+98 | CTH CE WESTBND | 48' LT | 1 |
| 0010 | EXPB4 | 138+95 | CTH CE WESTBND | 47' LT | 1 |
| 0010 | EXPB7 | 139+32 | CTH CE EASTBND | 9' LT | 1 |
| 0010 | EXPB8 | 139+21 | CTH CE EASTBND | 50' RT | 1 |
| 0010 | EXPB9 | 139+89 | CTH CE EASTBND | 81' RT | 1 |
| 0010 | EXPB10 | 138+28 | CTH CE EASTBND | 52' RT | 1 |
| 0010 | EXPB11 | 137+98 | CTH CE EASTBND | 45' RT | 1 |
| 0010 | EXPB14 | 137+98 | CTH CE EASTBND | 15' LT | 1 |
| | | | **PROJECT TOTAL** | | **10** |

## PULL BOXES

| CATEGORY | PULL BOX NO. | STATION | LOCATION | OFFSET | 653.0154 PULL BOXES NON-CONDUCTIVE 24x36-INCH EACH | 653.0164 PULL BOXES NON-CONDUCTIVE 24x42-INCH EACH |
|---|---|---|---|---|---|---|
| 0010 | PB1 | 138+30 | CTH CE WESTBND | 70' LT | -- | 1 |
| 0010 | PB2 | 137+86 | CTH CE WESTBND | 7' RT | -- | 1 |
| 0010 | PB3 | 138+63 | CTH CE WESTBND | 7' RT | -- | 1 |
| 0010 | PB4 | 139+52 | CTH CE EASTBND | 7' LT | -- | 1 |
| 0010 | PB5 | 138+04 | CTH CE EASTBND | 47' RT | -- | 1 |
| 0010 | PB6 | 139+00 | CTH CE EASTBND | 49' RT | -- | 1 |
| 0010 | PB7 | 135+13 | CTH CE WESTBND | 10' RT | 1 | -- |
| 0010 | PB8 | 131+97 | CTH CE EASTBND | 8' LT | -- | 1 |
| 0010 | PB9 | 142+30 | CTH CE EASTBND | 7' LT | 1 | -- |
| 0010 | PB10 | 145+00 | CTH CE WESTBND | 8' RT | 1 | -- |
| 0010 | PB11 | 147+64 | CTH CE WESTBND | 8' RT | -- | 1 |
| | | | **PROJECT TOTAL** | | **3** | **8** |

## CONDUIT ITEMS

| 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 | REMARKS |
|---|---|---|---|---|---|---|
| 0010 | CB1 | PB1 | - | 50 | - | |
| 0010 | CB1 | PB2 | - | - | 480 | 4 RUNS |
| 0010 | CB1 | PB5 | - | - | 180 | |
| 0010 | CB1 | SB1 | 42 | - | - | |
| 0010 | CB1 | SB13 | 74 | - | - | |
| 0010 | PB1 | SB2 | 7 | - | - | |
| 0010 | PB1 | SB3 | 56 | - | - | |
| 0010 | PB2 | PB3 | - | 240 | - | 3 RUNS |
| 0010 | PB2 | PB7 | - | 1166 | - | 2 RUNS |
| 0010 | PB2 | SB12 | 7 | - | - | |
| 0010 | PB3 | PB4 | - | 270 | - | 3 RUNS |
| 0010 | PB3 | SB11 | 20 | - | - | |
| 0010 | PB3 | SB5 | 15 | - | - | |
| 0010 | PB4 | PB8 | - | 1618 | - | 2 RUNS |
| 0010 | PB4 | SB6 | 7 | - | - | |
| 0010 | PB4 | SB7 | 17 | - | - | |
| 0010 | PB4 | SB22 | 157 | - | - | |
| 0010 | PB5 | PB6 | - | 105 | - | |
| 0010 | PB5 | SB10 | 14 | - | - | |
| 0010 | PB6 | SB8 | 69 | - | - | |
| 0010 | PB6 | SB9 | 10 | - | - | |
| 0010 | PB7 | SB16 | 130 | - | - | |
| 0010 | PB7 | SB17 | 25 | - | - | |
| 0010 | PB7 | SB18 | - | - | 64 | |
| 0010 | PB7 | SB20 | 116 | - | - | |
| 0010 | PB8 | SB25 | 145 | - | - | |
| 0010 | PB8 | SB26 | 22 | - | - | |
| 0010 | PB8 | SB27 | - | - | 61 | |
| 0010 | PB8 | SB29 | 116 | - | - | |
| 0010 | SB3 | SB4 | 38 | - | - | |
| 0010 | SB8 | STUB | 10 | - | - | |
| 0010 | SB12 | SB14 | 148 | - | - | |
| 0010 | SB12 | SB31 | 12 | - | - | |
| 0010 | SB13 | STUB | 10 | - | - | |
| 0010 | SB14 | SB15 | 148 | - | - | |
| 0010 | SB15 | SB16 | 155 | - | - | |
| 0010 | SB17 | SB21 | 200 | - | - | |
| 0010 | SB18 | SB19 | 144 | - | - | |
| 0010 | SB18 | STUB | 10 | - | - | |
| 0010 | SB19 | STUB | 10 | - | - | |
| 0010 | SB21 | STUB | 10 | - | - | |
| 0010 | SB22 | SB23 | 170 | - | - | |
| 0010 | SB23 | SB24 | 168 | - | - | |
| 0010 | SB24 | SB25 | 170 | - | - | |
| 0010 | SB26 | SB30 | 207 | - | - | |
| 0010 | SB27 | SB28 | 150 | - | - | |
| 0010 | SB27 | STUB | 10 | - | - | |
| 0010 | SB28 | STUB | 10 | - | - | |
| 0010 | SB30 | STUB | 10 | - | - | |
| | | **PROJECT TOTAL** | **2,839** | **3,449** | **785** | |

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## CONCRETE BASES

| CATEGORY | BASE NO. | STATION | LOCATION | OFFSET | SPV.0060.02 CONCRETE BASES TYPE 1 SPECIAL EACH | SPV.0060.03 CONCRETE BASES TYPE 2 SPECIAL EACH | 654.0105 CONCRETE BASES TYPE 5 EACH | 654.0113 CONCRETE BASES TYPE 13 EACH |
|---|---|---|---|---|---|---|---|---|
| 0010 | SB1 | 137+93 | CTH CE WESTBND | 70' LT | - | 1 | - | - |
| 0010 | SB2 | 138+36 | CTH CE WESTBND | 66' LT | 1 | - | - | - |
| 0010 | SB3 | 138+87 | CTH CE WESTBND | 67' LT | - | 1 | - | - |
| 0010 | SB4 | 139+14 | CTH CE WESTBND | 43' LT | - | 1 | - | - |
| 0010 | SB5 | 138+78 | CTH CE WESTBND | 9' RT | 1 | - | - | - |
| 0010 | SB6 | 139+45 | CTH CE EASTBND | 8' LT | - | 1 | - | - |
| 0010 | SB7 | 139+69 | CTH CE EASTBND | 8' LT | 1 | - | - | - |
| 0010 | SB8 | 139+69 | CTH CE EASTBND | 49' RT | - | - | - | 1 |
| 0010 | SB9 | 138+92 | CTH CE EASTBND | 45' RT | - | 1 | - | - |
| 0010 | SB10 | 138+09 | CTH CE EASTBND | 44' RT | - | 1 | - | - |
| 0010 | SB11 | 138+44 | CTH CE EASTBND | 10' LT | 1 | - | - | - |
| 0010 | SB12 | 137+24 | CTH CE WESTBND | 7.5' RT | - | 1 | - | - |
| 0010 | SB13 | 137+67 | CTH CE WESTBND | 49' LT | - | - | - | 1 |
| 0010 | SB14 | 136+28 | CTH CE WESTBND | 7.5' RT | - | - | 1 | - |
| 0010 | SB15 | 134+80 | CTH CE WESTBND | 11' RT | - | - | 1 | - |
| 0010 | SB16 | 133+27 | CTH CE EASTBND | 8' LT | - | 1 | - | - |
| 0010 | SB17 | 131+72 | CTH CE EASTBND | 8' LT | - | - | 1 | - |
| 0010 | SB18 | 132+11 | CTH CE EASTBND | 55' RT | - | - | - | 1 |
| 0010 | SB19 | 130+67 | CTH CE EASTBND | 47' RT | - | 1 | - | - |
| 0010 | SB20 | 130+81 | CTH CE WESTBND | 10' RT | 1 | - | - | - |
| 0010 | SB21 | 129+73 | CTH CE EASTBND | 11' LT | - | - | 1 | - |
| 0010 | SB22 | 141+10 | CTH CE WESTBND | 7.5' LT | - | - | 1 | - |
| 0010 | SB23 | 142+80 | CTH CE EASTBND | 7.5' LT | - | - | 1 | - |
| 0010 | SB24 | 144+47 | CTH CE WESTBND | 8' RT | - | - | 1 | - |
| 0010 | SB25 | 146+18 | CTH CE WESTBND | 8' RT | - | - | 1 | - |
| 0010 | SB26 | 147+86 | CTH CE WESTBND | 8' RT | - | - | 1 | - |
| 0010 | SB27 | 147+44 | CTH CE WESTBND | 50' LT | - | - | - | 1 |
| 0010 | SB28 | 148+93 | CTH CE WESTBND | 38' LT | - | 1 | - | - |
| 0010 | SB29 | 148+80 | CTH CE EASTBND | 11' LT | 1 | - | - | - |
| 0010 | SB30 | 149+93 | CTH CE WESTBND | 11' RT | - | - | 1 | - |
| 0010 | SB31 | 137+64 | CTH CE WESTBND | 7' RT | 1 | - | - | - |
| | | | **PROJECT TOTAL** | | **7** | **10** | **10** | **4** |

## TRAFFIC SIGNAL CONTROL ITEMS

| CATEGORY | BASE NO. | STATION | LOCATION | OFFSET | SPV.0060.01 CONCRETE CONTROL CABINET BASEMENT PRECAST EACH | 656.0201.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL EACH | SPV.0060.07 TRANSPORT AND INSTALL TRAFFIC SIGNAL DETECTION SYSTEM EACH | SPV.0060.08 REMOVE, SALVAGE AND REINSTALL BROADBAND RADIO INTERCONNECT ANTENNA EACH |
|---|---|---|---|---|---|---|---|---|
| 0010 | CB1 | 11+05 | RAILROAD SBRT | 33' LT | 1 | | | |
| | | | CTH CE & RAILROAD ST | | | 1 | 1 | 1 |
| | | | **PROJECT TOTAL** | | **1** | **1** | **1** | **1** |

## TRAFFIC DETECTOR LOOPS

| CATEGORY | LOOP NO. | HOME RUN PULL BOX | LOCATION* | | SIZE (FT. X FT.) | NO. OF TURNS | 652.0800 CONDUIT LOOP DETECTOR LF | 655.0700 LOOP DETECTOR LEAD-IN CABLE LF | 655.0800 LOOP DETECTOR WIRE LF |
|---|---|---|---|---|---|---|---|---|---|
| 0010 | 11 | PB2 | 137+73 | CTH CE EASTBND 7.5' LT | 6' X 20' | 2 | 76 | 132 | 160 |
| 0010 | 12 | PB2 | 138+04 | CTH CE EASTBND 11.0' LT | 6' X 20' | 2 | 64 | 132 | 136 |
| 0010 | 13 | PB1 | 10+66 | RAILROAD SBRT 7.5' LT | 6' X 20' | 2 | 76 | 62 | 160 |
| 0010 | 14 | PB1 | 10+36 | RAILROAD SBRT 8.5' LT | 6' X 20' | 2 | 90 | 62 | 188 |
| 0010 | 51 | PB4 | 139+48 | CTH CE WESTBND 7.5' RT | 6' X 20' | 3 | 66 | 302 | 206 |
| 0010 | 52 | PB4 | 139+17 | CTH CE WESTBND 11.0' RT | 6' X 20' | 3 | 84 | 302 | 260 |
| 0010 | 53 | PB6 | 9+08 | RAILROAD NBRT 5.5' RT | 6' X 20' | 3 | 90 | 297 | 278 |
| 0010 | 54 | PB6 | 9+36 | RAILROAD NBRT 6.0' RT | 6' X 20' | 3 | 84 | 297 | 260 |
| 0010 | 55 | PB6 | 9+14 | RAILROAD NBRT 17.0' RT | 6' X 20' | 3 | 102 | 297 | 314 |
| 0010 | 56 | PB6 | 9+45 | RAILROAD NBRT 19.0' RT | 6' X 20' | 3 | 110 | 297 | 338 |
| 0010 | 91 | PB8 | 147+84 | CTH CE EASTBND 6.0' LT | 6' X 20' | 5 | 64 | 1081 | 328 |
| 0010 | 92 | PB8 | 148+12 | CTH CE EASTBND 6.0' LT | 6' X 20' | 5 | 108 | 1081 | 548 |
| 0010 | 131 | PB7 | 131+77 | CTH CE WESTBND 6.0' RT | 6' X 20' | 4 | 64 | 685 | 264 |
| 0010 | 132 | PB7 | 131+49 | CTH CE WESTBND 6.0' RT | 6' X 20' | 4 | 108 | 685 | 440 |
| | | | | | **PROJECT TOTAL** | | **1,186** | **5,712** | **3,880** |

* LOCATION IS TO FRONT CENTER OF DETECTOR

NOTE A - LOOP DETECTOR PLACED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2) SDD 9F15-4B

## TRAFFIC SIGNAL CABLE AND ELECTRICAL WIRE

| CATEGORY | FROM | TO | 655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF | 655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG LF | SPV.0090.01 CABLE TRAFFIC SIGNAL 16-14 AWG LF | SPV.0090.02 TRAY CABLE FOR STREET LIGHTING 3 CONDUCTOR 12 AWG LF | SPV.0090.03 TRAY CABLE FOR STREET LIGHTING 2 CONDUCTOR 10 AWG LF | SPV.0090.04 INSTALL COMMUNICATIONS CABLE LF | 655.0515 ELECTRICAL WIRE FOR TRAFFIC SIGNALS 10 AWG LF |
|---|---|---|---|---|---|---|---|---|---|
| 0010 | CB1 | SB1 | - | 63 | - | 63 | - | - | 63 |
| 0010 | CB1 | SB2 | - | 93 | - | - | - | - | - |
| 0010 | CB1 | SB3 | - | - | 142 | 142 | - | - | - |
| 0010 | CB1 | SB4 | - | - | - | 195 | - | - | - |
| 0010 | CB1 | SB5 | - | - | 266 | 266 | - | - | - |
| 0010 | CB1 | SB6 | - | - | 363 | 363 | - | - | - |
| 0010 | CB1 | SB8 | - | - | 405 | 405 | - | - | - |
| 0010 | CB1 | SB9 | - | - | 346 | 346 | - | - | - |
| 0010 | CB1 | SB10 | - | - | 230 | 230 | - | - | 230 |
| 0010 | CB1 | SB12 | - | - | 163 | 163 | - | - | 163 |
| 0010 | CB1 | SB13 | - | - | 95 | - | - | - | 95 |
| 0010 | CB1 | SB14 | - | - | - | - | 304 | - | - |
| 0010 | CB1 | SB18 | - | - | 833 | - | - | - | - |
| 0010 | CB1 | SB22 | - | - | - | - | 513 | - | - |
| 0010 | CB1 | SB27 | - | - | 1271 | - | - | - | - |
| | | **PAGE SUBTOTAL** | **0** | **156** | **4,114** | **2,173** | **817** | **0** | **551** |

3

## TRAFFIC SIGNAL CABLE AND ELECTRICAL WIRE CONTINUED

| CATEGORY | FROM | TO | 655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF | 655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG LF | SPV.0090.01 CABLE TRAFFIC SIGNAL 16-14 AWG LF | SPV.0090.02 TRAY CABLE FOR STREET LIGHTING 3 CONDUCTOR 12 AWG LF | SPV.0090.03 TRAY CABLE FOR STREET LIGHTING 2 CONDUCTOR 10 AWG LF | SPV.0090.04 INSTALL COMMUNICATIONS CABLE LF | 655.0515 ELECTRICAL WIRE FOR TRAFFIC SIGNALS 10 AWG LF |
|---|---|---|---|---|---|---|---|---|---|
| 0010 | CB1 | RADAR DET 1 | - | - | - | - | - | 427 | - |
| 0010 | CB1 | RADAR DET 2 | - | - | - | - | - | 125 | - |
| 0010 | CB1 | RADAR DET 3 | - | - | - | - | - | 842 | - |
| 0010 | CB1 | RADAR DET 4 | - | - | - | - | - | 1233 | - |
| 0010 | CB1 | ANTENNA | - | - | - | - | - | 115 | - |
| 0010 | SB2 | SB3 | - | - | - | - | - | - | 90 |
| 0010 | SB3 | SB4 | - | - | 65 | 65 | - | - | 65 |
| 0010 | SB5 | SB6 | - | - | - | - | - | - | 154 |
| 0010 | SB5 | SB11 | - | 47 | - | - | - | - | 47 |
| 0010 | SB6 | SB7 | - | 51 | - | - | - | - | 51 |
| 0010 | SB8 | SB9 | - | - | - | - | - | - | 106 |
| 0010 | SB9 | SB10 | - | - | - | - | - | - | 171 |
| 0010 | SB11 | SB12 | - | - | - | - | - | - | 149 |
| 0010 | SB12 | SB14 | - | - | - | - | - | - | 174 |
| 0010 | SB12 | SB31 | - | 24 | - | - | - | - | 24 |
| 0010 | SB14 | SB15 | - | - | - | - | 160 | - | 320 |
| 0010 | SB15 | SB16 | - | - | - | - | 167 | - | 334 |
| 0010 | SB16 | SB17 | - | - | - | - | 182 | - | 364 |
| 0010 | SB17 | SB19 | - | - | - | - | 245 | - | 520 |
| 0010 | SB17 | SB20 | - | - | - | - | - | - | 168 |
| 0010 | SB17 | SB21 | - | - | - | - | 212 | - | 424 |
| 0010 | SB18 | SB19 | - | - | 156 | - | - | - | 156 |
| 0010 | SB18 | SB20 | - | 207 | - | - | - | - | 207 |
| 0010 | SB22 | SB23 | - | - | - | - | 182 | - | 364 |
| 0010 | SB23 | SB24 | - | - | - | - | 180 | - | 360 |
| 0010 | SB24 | SB25 | - | - | - | - | 182 | - | 364 |
| 0010 | SB25 | SB26 | - | - | - | - | 194 | - | 388 |
| 0010 | SB26 | SB28 | - | - | - | - | 260 | - | 520 |
| 0010 | SB26 | SB29 | - | - | - | - | - | - | 165 |
| 0010 | SB26 | SB30 | - | - | - | - | 234 | - | 468 |
| 0010 | SB27 | SB28 | - | - | 162 | - | - | - | 162 |
| 0010 | SB27 | SB29 | - | 204 | - | - | - | - | 204 |
| 0010 | PB1 | SB2 | - | - | - | - | - | - | 19 |
| 0010 | PB2 | SB12 | - | - | - | - | - | - | 19 |
| 0010 | PB3 | SB5 | - | - | - | - | - | - | 27 |
| 0010 | PB4 | SB6 | - | - | - | - | - | - | 19 |
| 0010 | PB5 | SB10 | - | - | - | - | - | - | 26 |
| 0010 | PB6 | SB9 | - | - | - | - | - | - | 22 |
| 0010 | PB7 | SB12 | - | - | - | - | - | - | 289 |
| 0010 | PB8 | SB17 | - | - | - | - | - | - | 37 |
| 0010 | PB9 | SB6 | - | - | - | - | - | - | 296 |
| 0010 | PB10 | SB26 | - | - | - | - | - | - | 296 |
| 0010 | PB11 | SB26 | - | - | - | - | - | - | 34 |
| 0010 | SB1 | HEAD 18 | 15 | - | - | - | - | - | - |
| 0010 | SB1 | LUMINAIRE | - | - | - | 48 | - | - | - |
| 0010 | SB2 | HEAD 14 | 19 | - | - | - | - | - | - |
| 0010 | SB3 | HEAD 17 | 15 | - | - | - | - | - | - |
| 0010 | SB3 | LUMINAIRE | - | - | - | 48 | - | - | - |
| 0010 | SB4 | HEAD 05 | - | 22 | - | - | - | - | - |
| 0010 | SB4 | HEAD 06 | 22 | - | - | - | - | - | - |
| **SUBTOTAL** | | | **71** | **555** | **383** | **161** | **2,198** | **2,742** | **7,603** |

## TRAFFIC SIGNAL CABLE AND ELECTRICAL WIRE CONTINUED

| CATEGORY | FROM | TO | 655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF | 655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG LF | SPV.0090.01 CABLE TRAFFIC SIGNAL 16-14 AWG LF | SPV.0090.02 TRAY CABLE FOR STREET LIGHTING 3 CONDUCTOR 12 AWG LF | SPV.0090.03 TRAY CABLE FOR STREET LIGHTING 2 CONDUCTOR 10 AWG LF | SPV.0090.04 INSTALL COMMUNICATIONS CABLE LF | 655.0515 ELECTRICAL WIRE FOR TRAFFIC SIGNALS 10 AWG LF |
|---|---|---|---|---|---|---|---|---|---|
| 0010 | SB4 | LUMINAIRE | - | - | - | 48 | - | - | - |
| 0010 | SB5 | HEAD 09 | - | 22 | - | - | - | - | - |
| 0010 | SB6 | HEAD 12 | 19 | - | - | - | - | - | - |
| 0010 | SB6 | LUMINAIRE | - | - | - | 96 | - | - | - |
| 0010 | SB7 | HEAD 13 | 19 | - | - | - | - | - | - |
| 0010 | SB8 | HEAD 02 | 57 | - | - | - | - | - | - |
| 0010 | SB8 | HEAD 03 | 69 | - | - | - | - | - | - |
| 0010 | SB9 | HEAD 11 | 19 | - | - | - | - | - | - |
| 0010 | SB9 | LUMINAIRE | - | - | - | 96 | - | - | - |
| 0010 | SB10 | HEAD 01 | 22 | - | - | - | - | - | - |
| 0010 | SB10 | HEAD 10 | - | 22 | - | - | - | - | - |
| 0010 | SB10 | LUMINAIRE | - | - | - | 48 | - | - | - |
| 0010 | SB11 | HEAD 04 | - | 22 | - | - | - | - | - |
| 0010 | SB12 | HEAD 15 | 19 | - | - | - | - | - | - |
| 0010 | SB12 | LUMINAIRE | - | - | - | 96 | - | - | - |
| 0010 | SB31 | HEAD 16 | 19 | - | - | - | - | - | - |
| 0010 | SB13 | HEAD 07 | 57 | - | - | - | - | - | - |
| 0010 | SB13 | HEAD 08 | 69 | - | - | - | - | - | - |
| 0010 | SB14 | LUMINAIRE | - | - | - | 96 | - | - | - |
| 0010 | SB15 | LUMINAIRE | - | - | - | 96 | - | - | - |
| 0010 | SB16 | LUMINAIRE | - | - | - | 96 | - | - | - |
| 0010 | SB17 | LUMINAIRE | - | - | - | 96 | - | - | - |
| 0010 | SB18 | HEAD 22 | 50 | - | - | - | - | - | - |
| 0010 | SB18 | HEAD 23 | 62 | - | - | - | - | - | - |
| 0010 | SB18 | HEAD 24 | 74 | - | - | - | - | - | - |
| 0010 | SB19 | HEAD 21 | 22 | - | - | - | - | - | - |
| 0010 | SB19 | HEAD 26 | - | 22 | - | - | - | - | - |
| 0010 | SB19 | LUMINAIRE | - | - | - | 48 | - | - | - |
| 0010 | SB20 | HEAD 25 | - | 22 | - | - | - | - | - |
| 0010 | SB21 | LUMINAIRE | - | - | - | 48 | - | - | - |
| 0010 | SB22 | LUMINAIRE | - | - | - | 96 | - | - | - |
| 0010 | SB23 | LUMINAIRE | - | - | - | 96 | - | - | - |
| 0010 | SB24 | LUMINAIRE | - | - | - | 96 | - | - | - |
| 0010 | SB25 | LUMINAIRE | - | - | - | 96 | - | - | - |
| 0010 | SB26 | LUMINAIRE | - | - | - | 96 | - | - | - |
| 0010 | SB27 | HEAD 32 | 57 | - | - | - | - | - | - |
| 0010 | SB27 | HEAD 33 | 69 | - | - | - | - | - | - |
| 0010 | SB28 | HEAD 31 | 22 | - | - | - | - | - | - |
| 0010 | SB28 | HEAD 35 | - | 22 | - | - | - | - | - |
| 0010 | SB28 | LUMINAIRE | - | - | - | 48 | - | - | - |
| 0010 | SB29 | HEAD 34 | - | 22 | - | - | - | - | - |
| 0010 | SB30 | LUMINAIRE | - | - | - | 48 | - | - | - |
| 0010 | CB1 | CAB RADAR DET 3 | - | - | - | 842 | - | - | - |
| 0010 | CB1 | CAB RADAR DET 4 | - | - | - | 1233 | - | - | - |
| **SUBTOTAL** | | | **725** | **154** | **0** | **3,515** | **0** | **0** | **0** |
| **PROJECT TOTAL** | | | **796** | **865** | **4,497** | **5,849** | **3,015** | **2,742** | **8,154** |

3

## TRAFFIC SIGNAL AND LIGHTING ABOVE GROUND STRUCTURE ITEMS

| CATEGORY | BASE NO. | STATION | LOCATION | OFFSET | 657.0100 PEDESTAL BASES EACH | 657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH | 657.0310 POLES TYPE 3 EACH | 657.0315 POLES TYPE 4 EACH | 657.0322 POLES TYPE 5 ALUMINUM EACH | 657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH | 657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH | 657.0585 TROMBONE ARMS 15-FT EACH | 657.0614 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 8-FT EACH | 657.0615 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 8-FT EACH | 658.0500 PEDESTRIAN PUSH BUTTONS EACH | 659.1120 LUMINAIRES UTILITY LED B EACH | SPV.0060.04 INSTALL POLES TYPE 12 EACH | SPV.0060.05 INSTALL MONOTUBE ARMS 45-FT | SPV.0060.06 INSTALL MONOTUBE ARMS 50-FT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | SB1 | 137+93 | CTH CE WESTBND | 70' LT | - | 1 | - | 1 | - | - | - | - | 1 | - | 1 | 1 | - | - | - |
| 0010 | SB2 | 138+36 | CTH CE WESTBND | 66' LT | 1 | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - |
| 0010 | SB3 | 138+87 | CTH CE WESTBND | 67' LT | - | 1 | - | 1 | - | - | - | - | 1 | - | 1 | 1 | - | - | - |
| 0010 | SB4 | 139+14 | CTH CE WESTBND | 43' LT | - | 1 | - | 1 | - | - | - | - | 1 | - | - | 1 | - | - | - |
| 0010 | SB5 | 138+78 | CTH CE WESTBND | 9' RT | 1 | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - |
| 0010 | SB6 | 139+45 | CTH CE EASTBND | 8' LT | - | 1 | - | 1 | - | - | - | - | 2 | - | - | 2 | - | - | - |
| 0010 | SB7 | 139+69 | CTH CE EASTBND | 8' LT | 1 | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - |
| 0010 | SB8 | 139+69 | CTH CE EASTBND | 49' RT | - | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | - |
| 0010 | SB9 | 138+92 | CTH CE EASTBND | 45' RT | - | 1 | - | 1 | - | - | - | - | 2 | - | - | 2 | - | - | - |
| 0010 | SB10 | 138+09 | CTH CE EASTBND | 44' RT | - | 1 | - | 1 | - | - | - | - | 1 | - | - | 1 | - | - | - |
| 0010 | SB11 | 138+44 | CTH CE EASTBND | 10' LT | 1 | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - |
| 0010 | SB12 | 137+24 | CTH CE WESTBND | 7.5' RT | - | 1 | - | 1 | - | - | - | - | 2 | - | - | 2 | - | - | - |
| 0010 | SB13 | 137+67 | CTH CE WESTBND | 49' LT | - | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | - |
| 0010 | SB14 | 136+28 | CTH CE WESTBND | 7.5' RT | - | 1 | - | - | 1 | - | - | - | - | 2 | - | 2 | - | - | - |
| 0010 | SB15 | 134+80 | CTH CE WESTBND | 11' RT | - | 1 | - | - | 1 | - | - | - | - | 2 | - | 2 | - | - | - |
| 0010 | SB16 | 133+27 | CTH CE EASTBND | 8' LT | - | 1 | 1 | - | - | - | - | 1 | 2 | - | - | 2 | - | - | - |
| 0010 | SB17 | 131+72 | CTH CE EASTBND | 8' LT | - | 1 | - | - | 1 | - | - | - | - | 2 | - | 2 | - | - | - |
| 0010 | SB18 | 132+11 | CTH CE EASTBND | 55' RT | - | - | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 |
| 0010 | SB19 | 130+67 | CTH CE EASTBND | 47' RT | - | 1 | - | 1 | - | - | - | - | 1 | - | - | 1 | - | - | - |
| 0010 | SB20 | 130+81 | CTH CE WESTBND | 10' RT | 1 | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - |
| 0010 | SB21 | 129+73 | CTH CE EASTBND | 11' LT | - | 1 | - | - | 1 | - | - | - | - | 1 | - | 1 | - | - | - |
| 0010 | SB22 | 141+10 | CTH CE WESTBND | 7.5' LT | - | 1 | - | - | 1 | - | - | - | - | 2 | - | 2 | - | - | - |
| 0010 | SB23 | 142+80 | CTH CE EASTBND | 7.5' LT | - | 1 | - | - | 1 | - | - | - | - | 2 | - | 2 | - | - | - |
| 0010 | SB24 | 144+47 | CTH CE WESTBND | 8' RT | - | 1 | - | - | 1 | - | - | - | - | 2 | - | 2 | - | - | - |
| 0010 | SB25 | 146+18 | CTH CE WESTBND | 8' RT | - | 1 | - | - | 1 | - | - | - | - | 2 | - | 2 | - | - | - |
| 0010 | SB26 | 147+86 | CTH CE WESTBND | 8' RT | - | 1 | - | - | 1 | - | - | - | - | 2 | - | 2 | - | - | - |
| 0010 | SB27 | 147+44 | CTH CE WESTBND | 50' LT | - | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | - |
| 0010 | SB28 | 148+93 | CTH CE WESTBND | 38' LT | - | 1 | - | 1 | - | - | - | - | 1 | - | - | 1 | - | - | - |
| 0010 | SB29 | 148+80 | CTH CE EASTBND | 11' LT | 1 | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - |
| 0010 | SB30 | 149+93 | CTH CE WESTBND | 11' RT | - | 1 | - | - | 1 | - | - | - | - | 1 | - | 1 | - | - | - |
| 0010 | SB31 | 137+64 | CTH CE WESTBND | 7' RT | 1 | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - |
| | | | **PROJECT TOTAL** | | **7** | **20** | **1** | **9** | **10** | **3** | **4** | **1** | **14** | **18** | **2** | **32** | **4** | **3** | **1** |

## SIGNAL FACES

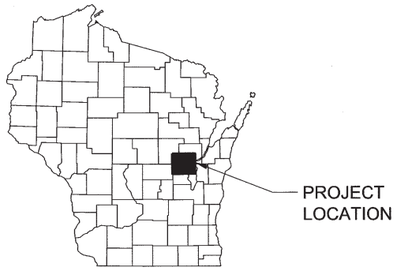
| CATEGORY | BASE NO. | SIGNAL HEAD NO. | TYPE OF MOUNT | 658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH | 658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH | + BACKPLATE 3-SEC EACH | + BACKPLATE 4-SEC EACH | + LED RED BALL EACH | + LED YELLOW BALL EACH | + LED GREEN BALL EACH | + LED RED ARROW EACH | + LED YELLOW ARROW EACH | + LED GREEN ARROW EACH | + LED RED U-TURN ARROW EACH | + LED YELLOW U-TURN ARROW EACH | + LED GREEN U-TURN ARROW EACH | 658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | SB1 | 18 | POST MOUNT VERTICAL | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 | |
| 0010 | SB2 | 14 | POST MOUNT VERTICAL | 1 | - | 1 | - | 1 | - | - | - | 1 | 1 | - | - | - | - | RIGHT ARROWS |
| 0010 | SB3 | 17 | POST MOUNT VERTICAL | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 | |
| 0010 | SB4 | 05 | POST MOUNT VERTICAL | 1 | - | 1 | - | - | - | - | 1 | 2 | 1 | - | - | - | - | LEFT ARROWS |
| 0010 | | 06 | POST MOUNT VERTICAL | - | 1 | - | 1 | 1 | 1 | 1 | - | - | - | - | - | - | - | |
| 0010 | SB5 | 09 | POST MOUNT VERTICAL | - | 1 | - | 1 | - | - | - | 1 | 2 | 1 | - | - | - | - | LEFT ARROWS |
| 0010 | SB6 | 12 | POST MOUNT VERTICAL | 1 | - | 1 | - | 1 | - | - | - | 1 | 1 | - | - | - | - | RIGHT ARROWS |
| 0010 | SB7 | 13 | POST MOUNT VERTICAL | 1 | - | 1 | - | 1 | - | - | - | 1 | 1 | - | - | - | - | RIGTH ARROWS |
| 0010 | SB8 | 02 | MONOTUBE ARM MOUNT VERTICAL | 1 | - | 1 | - | 1 | 1 | - | - | - | 1 | - | - | - | - | FORWARD ARROW |
| 0010 | | 03 | MONOTUBE ARM MOUNT VERTICAL | 1 | - | 1 | - | 1 | 1 | - | - | - | 1 | - | - | - | - | FORWARD ARROW |
| 0010 | SB9 | 11 | POST MOUNT VERTICAL | 1 | - | 1 | - | 1 | - | - | - | 1 | 1 | - | - | - | - | RIGHT ARROWS |
| 0010 | SB10 | 01 | POST MOUNT VERTICAL | 1 | - | 1 | - | 1 | 1 | 1 | - | - | - | - | - | - | - | |
| 0010 | | 10 | POST MOUNT VERTICAL | - | 1 | - | 1 | - | - | - | 1 | 2 | 1 | - | - | - | - | LEFT ARROWS |
| 0010 | SB11 | 04 | POST MOUNT VERTICAL | 1 | - | 1 | - | - | - | - | 1 | 2 | 1 | - | - | - | - | LEFT ARROWS |
| 0010 | SB12 | 15 | POST MOUNT VERTICAL | 1 | - | 1 | - | 1 | - | - | - | 1 | 1 | - | - | - | - | RIGHT ARROWS |
| 0010 | SB13 | 7 | MONOTUBE ARM MOUNT VERTICAL | 1 | - | 1 | - | 1 | 1 | - | - | - | 1 | - | - | - | - | FORWARD ARROW |
| 0010 | | 8 | MONOTUBE ARM MOUNT VERTICAL | 1 | - | 1 | - | 1 | 1 | - | - | - | 1 | - | - | - | - | FORWARD ARROW |
| 0010 | SB18 | 22 | MONOTUBE ARM MOUNT VERTICAL | 1 | - | 1 | - | 1 | 1 | - | - | - | 1 | - | - | - | - | FORWARD ARROW |
| 0010 | | 23 | MONOTUBE ARM MOUNT VERTICAL | 1 | - | 1 | - | 1 | 1 | - | - | - | 1 | - | - | - | - | FORWARD ARROW |
| 0010 | | 24 | MONOTUBE ARM MOUNT VERTICAL | 1 | - | 1 | - | 1 | 1 | - | - | - | 1 | - | - | - | - | FORWARD ARROW |
| 0010 | SB19 | 21 | POST MOUNT VERTICAL | 1 | - | 1 | - | 1 | 1 | 1 | - | - | - | - | - | - | - | |
| 0010 | | 26 | POST MOUNT VERTICAL | - | 1 | - | 1 | - | - | - | - | - | - | 1 | 2 | 1 | - | |
| 0010 | SB20 | 25 | POST MOUNT VERTICAL | - | 1 | - | 1 | - | - | - | - | - | - | 1 | 2 | 1 | - | |
| 0010 | SB27 | 32 | MONOTUBE ARM MOUNT VERTICAL | 1 | - | 1 | - | 1 | 1 | - | - | - | 1 | - | - | - | - | FORWARD ARROW |
| 0010 | | 33 | MONOTUBE ARM MOUNT VERTICAL | 1 | - | 1 | - | 1 | 1 | - | - | - | 1 | - | - | - | - | FORWARD ARROW |
| 0010 | SB28 | 31 | POST MOUNT VERTICAL | 1 | - | 1 | - | 1 | 1 | 1 | - | - | - | - | - | - | - | |
| 0010 | | 35 | POST MOUNT VERTICAL | - | 1 | - | 1 | - | - | - | - | - | - | 1 | 2 | 1 | - | |
| 0010 | SB29 | 34 | POST MOUNT VERTICAL | - | 1 | - | 1 | - | - | - | - | - | - | 1 | 2 | 1 | - | |
| 0010 | SB31 | 15 | POST MOUNT VERTICAL | 1 | - | 1 | - | 1 | - | - | - | 1 | 1 | - | - | - | - | |
| | | | **PROJECT TOTAL** | **20** | **7** | **20** | **7** | **19** | **13** | **4** | **4** | **14** | **19** | **4** | **8** | **4** | **2** | |

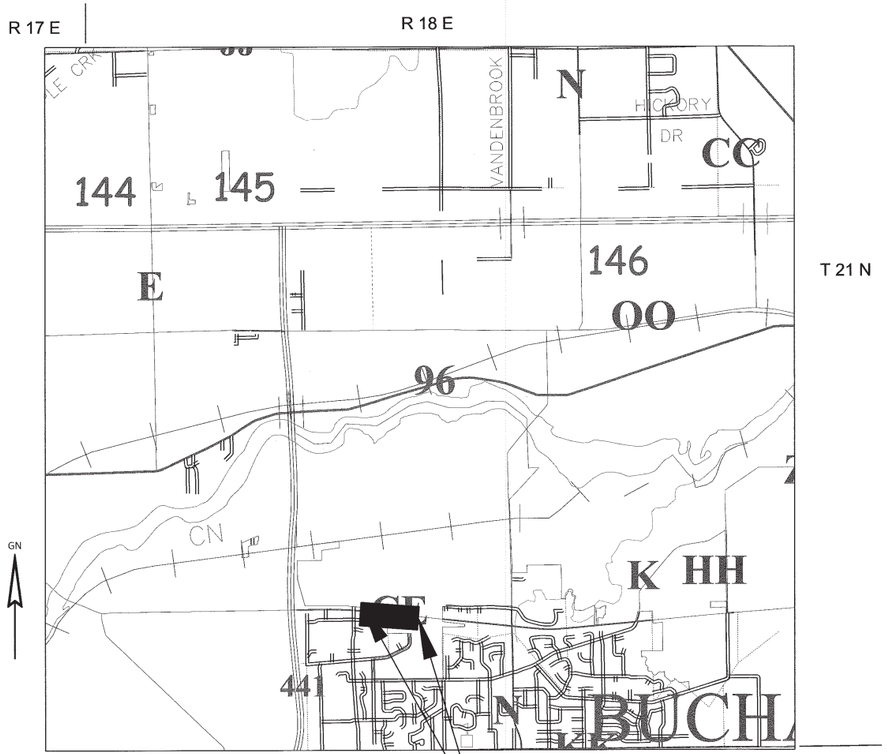
+ ITEM IS INCIDENTAL TO 658.0173 OR 658.0174

SAWING ASPHALT AND CONCRETE

| CATEGORY | STATION | TO | STATION | LOCATION | 690.0150 SAWING ASPHALT LF | 690.0250 SAWING CONCRETE LF | REMARKS |
|---|---|---|---|---|---|---|---|
| 0010 | 7+68 | | | RAILROAD STREET, LT & RT | 33 | 5 | BEGIN PAVEMENT REPLACEMENT |
| 0010 | 9+40 | | | RAILROAD STREET, LT & RT | 166 | - | END PAVEMENT REPLACEMENT |
| 0010 | 10+37 | | | RAILROAD STREET, LT & RT | 161 | - | BEGIN PAVEMENT REPLACEMENT |
| 0010 | 11+20 | - | 11+53 | RAILROAD STREET, LT & RT | - | 70 | END PAVEMENT REPLACEMENT |
| 0010 | 130+60 | | | CTH CE (EB), LT | 8 | 6 | BOP |
| 0010 | 130+60 | - | 149+00 | CTH CE (EB) | 1,868 | - | MEDIAN LIMITS |
| 0010 | 130+60 | - | 149+00 | CTH CE (WB) | 1,939 | - | MEDIAN LIMITS |
| 0010 | 130+66 | - | 132+55 | CTH CE (EB), LT | 189 | - | WEST LOON |
| 0010 | 137+44 | - | 137+94 | CTH CE (WB), LT | 17 | - | NW QUAD CURB RAMP |
| 0010 | 138+72 | - | 139+12 | CTH CE (WB), LT | 10 | 11 | NE QUAD CURB RAMP & CURB & GUTTER |
| 0010 | 141+20 | - | 144+14 | CTH CE (EB), LT | 316 | - | EAST TURN LANE |
| 0010 | 146+91 | - | 149+00 | CTH CE (EB), LT | 225 | - | EAST LOON |
| 0010 | 149+00 | | | CTH CE (EB), LT | 8 | 6 | EOP |
| | | | | TOTAL 0010 | 4,940 | 98 | |

# STATE OF WISCONSIN
# DEPARTMENT OF TRANSPORTATION
# TRANSPORTATION PROJECT PLAT TITLE SHEET
# 4160-06-00-21-4.01
## S. RAILROAD STREET INTERSECTION
### V KIMBERLY - CTH N
## OUTAGAMIE COUNTY




THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 4160-06-00-21.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), OUTAGAMIE COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

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.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE OUTAGAMIE COUNTY HIGHWAY DEPARTMENT IN APPLETON.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TPP DETAIL PAGES.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGES.

## 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
- SECTION CORNER SYMBOL
- SECTION CORNER MONUMENT
- GEODETIC SURVEY MONUMENT
- SIXTEENTH CORNER MONUMENT
- SIGN
- OFF-PREMISE SIGN
- R/W MONUMENT (TO BE SET)
- 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 ABBREVIATIONS

| | | | |
|---|---|---|---|
| ACCESS RIGHTS | AR | POINT OF INTERSECTION | PI |
| ACRES | AC | PROPERTY LINE | PL |
| AHEAD | AH | RECORDED AS | (100') |
| ALUMINUM | ALUM | REEL / IMAGE | R/I |
| AND OTHERS | ET AL | REFERENCE LINE | R/L |
| BACK | BK | REMAINING | REM |
| BLOCK | BLK | RESTRICTIVE DEVELOPMENT EASEMENT | RDE |
| CENTERLINE | C/L | RIGHT | RT |
| CERTIFIED SURVEY MAP | CSM | RIGHT OF WAY | R/W |
| CONCRETE | CONC | SECTION | SEC |
| COUNTY | CO | SEPTIC VENT | SEPV |
| COUNTY TRUNK HIGHWAY | CTH | SQUARE FEET | SF |
| DISTANCE | DIST | STATE TRUNK HIGHWAY | STH |
| CORNER | COR | STATION | STA |
| DOCUMENT NUMBER | DOC | TELEPHONE PEDESTAL | TP |
| EASEMENT | EASE | TEMPORARY LIMITED EASEMENT | TLE |
| EXISTING | EX | TRANSPORTATION PROJECT PLAT | TPP |
| GAS VALVE | GV | UNITED STATES HIGHWAY | USH |
| GRID NORTH | GN | VOLUME | V |
| HIGHWAY EASEMENT | HE | | |
| 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 | | |
| POINT OF COMPOUND CURVE | PCC | | |

## CURVE DATA

| | |
|---|---|
| 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 |

## CONVENTIONAL UTILITY SYMBOLS

- W — WATER
- G — GAS
- T — TELEPHONE
- OH — OVERHEAD TRANSMISSION LINES
- E — ELECTRIC
- TV — CABLE TELEVISION
- FO — FIBER OPTIC
- SAN — SANITARY SEWER
- SS — STORM SEWER

LAYOUT SCALE 0 0.5 MI.

| | |
|---|---|
| PROJECT NUMBER | 4160-06-00-21 - 4. 01 |
| SHEET | 2 OF 2 |
| AMENDMENT NO: | |

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\RW\4.01.DWG
LAYOUT NAME: title
PLOT DATE : 9/16/2015 3:04 PM PLOT BY : TACKMIER, JILL PLOT NAME : 4.01.DWG
APPRAISAL PLAT DATE : MAY 3, 2022
4160-06-00-21-4.01

# TRANSPORTATION PROJECT PLAT NO: 4160-06-00-21-4.01

**THAT PART OF LOT 1, VOLUME 35 OF CERTIFIED SURVEY MAPS, PAGE 5976, MAP NO. 5976, DOC. NO. 1833395, LOCATED IN PART OF GOVERNMENT LOT 6, AND THAT PART OF GOVERNMENT LOT 7, AND THAT PART OF LOT 1, VOLUME 44 OF CERTIFIED SURVEY MAPS, PAGE 7340, MAP NO. 7340, DOC. NO. 2098141, LOCATED IN PART OF GOVERNMENT LOT 8, OF SECTION 27, IN T21N-R18E, VILLAGE OF KIMBERLY, OUTAGAMIE COUNTY, WISCONSIN.**

*RELOCATION ORDER - S. RAILROAD STREET INTERSECTION - (V KIMBERLY - CTH N ) OUTAGAMIE COUNTY*

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

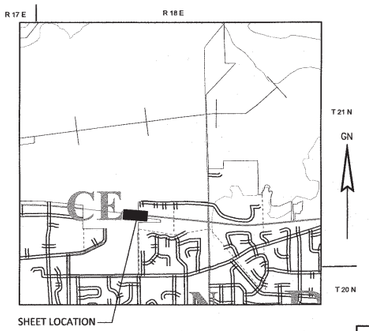
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30 WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTIONS 84.09 (1) OR (2), WISCONSIN STATUTES.

## SCHEDULE OF LANDS & INTERESTS REQUIRED

| PARCEL NUMBER | OWNER(S) | INTEREST(S) REQUIRED | NEW R/W ACRES | EXISTING R/W ACRES | TOTAL R/W ACRES | TLE ACRES |
|---|---|---|---|---|---|---|
| 1 | R&M PROPERTIES OF THE VALLEY LLC | FEE | 0.034 | ------ | 0.034 | ------ |
| 2 | US OIL CO INC | FEE & TLE | 0.017 | ------ | 0.017 | 0.008 |

**OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.**
**PURPOSE OF ALL THE TLES IS FOR GRADING, UNLESS NOTED.**



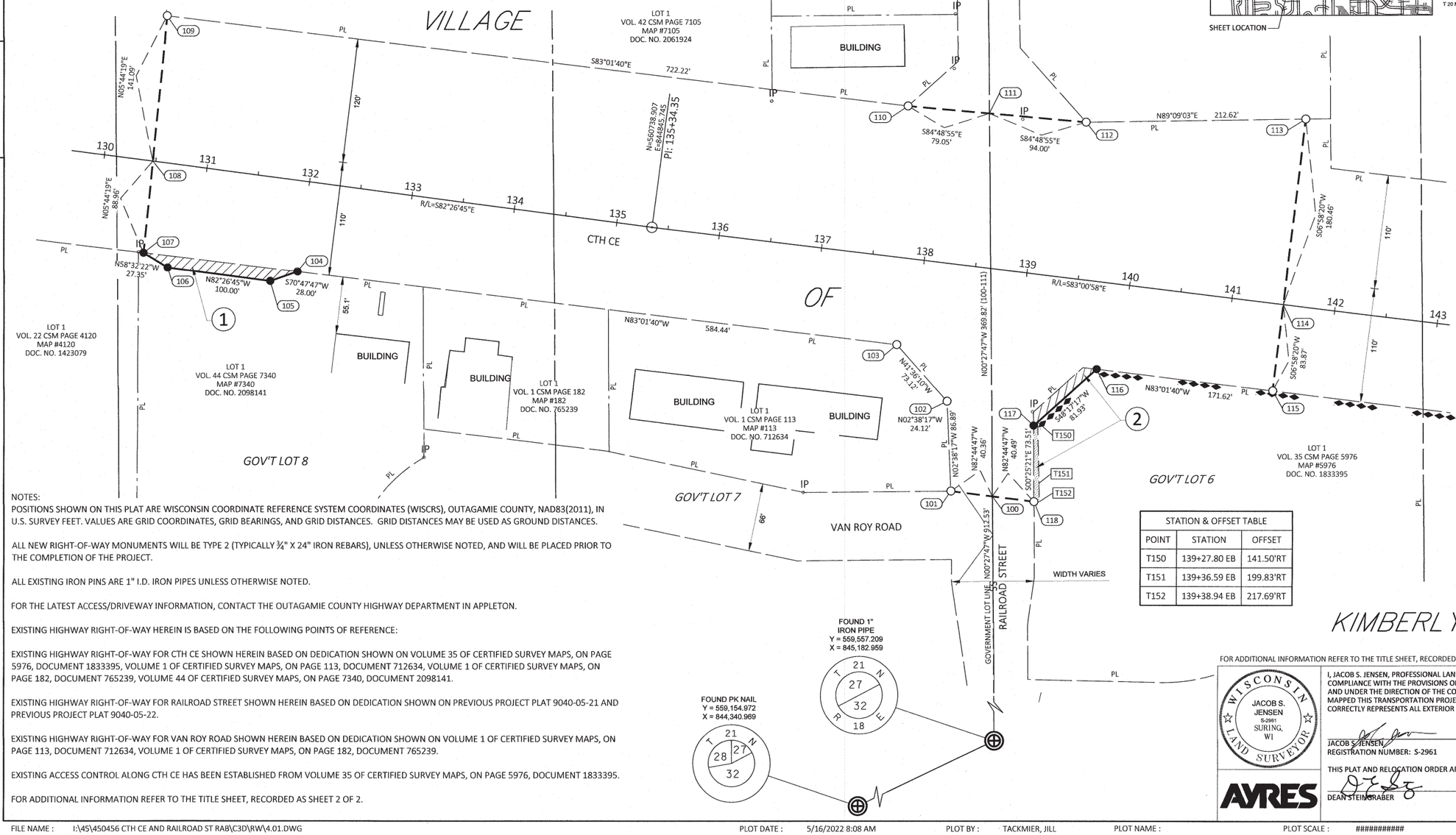

Document #: **2269634**
Date: **05-18-2022** Time: **2:30 PM**
Pages: 2 Fee: **$25.00**
County: **OUTAGAMIE COUNTY** State: **WI**

SARAH R VAN CAMP, REGISTER OF DEEDS
Return via RETURN TO FILE
FILE

Cabinet N-Pages 154+155

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4160-06-00-21-4.01
SHEET 1 OF 2

0 50 100
SCALE, FEET




## STATION & OFFSET TABLE

| POINT | STATION | OFFSET |
|---|---|---|
| 100 | 138+93.31 EB | 218.16'RT |
| 101 | 138+52.95 EB | 217.97'RT |
| 102 | 138+38.42 EB | 132.31'RT |
| 103 | 137+83.59 EB | 83.94'RT |
| 104 | 132+00.00 EB | 87.39'RT |
| 105 | 131+75.00 EB | 100.00'RT |
| 106 | 130+75.00 EB | 100.00'RT |
| 107 | 130+50.00 EB | 88.92'RT |
| 108 | 130+47.18 EB | 0.00'LT |
| 109 | 130+42.71 EB | 141.02'LT |
| 110 | 137+66.36 EB | 146.05'LT |
| 111 | 138+45.38 EB | 148.54'LT |
| 112 | 139+39.33 EB | 151.49'LT |
| 113 | 141+49.96 EB | 180.46'LT |
| 114 | 141+50.00 EB | 0.00' |
| 115 | 141+50.02 EB | 83.87'RT |
| 116 | 139+78.40 EB | 83.90'RT |
| 117 | 139+24.32 EB | 145.45'RT |
| 118 | 139+33.80 EB | 218.35'RT |

## STATION & OFFSET TABLE

| POINT | STATION | OFFSET |
|---|---|---|
| T150 | 139+27.80 EB | 141.50'RT |
| T151 | 139+36.59 EB | 199.83'RT |
| T152 | 139+38.94 EB | 217.69'RT |

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), OUTAGAMIE COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL EXISTING IRON PINS ARE 1" I.D. IRON PIPES UNLESS OTHERWISE NOTED.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE OUTAGAMIE COUNTY HIGHWAY DEPARTMENT IN APPLETON.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR CTH CE SHOWN HEREIN BASED ON DEDICATION SHOWN ON VOLUME 35 OF CERTIFIED SURVEY MAPS, ON PAGE 5976, DOCUMENT 1833395, VOLUME 1 OF CERTIFIED SURVEY MAPS, ON PAGE 113, DOCUMENT 712634, VOLUME 1 OF CERTIFIED SURVEY MAPS, ON PAGE 182, DOCUMENT 765239, VOLUME 44 OF CERTIFIED SURVEY MAPS, ON PAGE 7340, DOCUMENT 2098141.

EXISTING HIGHWAY RIGHT-OF-WAY FOR RAILROAD STREET SHOWN HEREIN BASED ON DEDICATION SHOWN ON PREVIOUS PROJECT PLAT 9040-05-21 AND PREVIOUS PROJECT PLAT 9040-05-22.

EXISTING HIGHWAY RIGHT-OF-WAY FOR VAN ROY ROAD SHOWN HEREIN BASED ON DEDICATION SHOWN ON VOLUME 1 OF CERTIFIED SURVEY MAPS, ON PAGE 113, DOCUMENT 712634, VOLUME 1 OF CERTIFIED SURVEY MAPS, ON PAGE 182, DOCUMENT 765239.

EXISTING ACCESS CONTROL ALONG CTH CE HAS BEEN ESTABLISHED FROM VOLUME 35 OF CERTIFIED SURVEY MAPS, ON PAGE 5976, DOCUMENT 1833395.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2.

I, JACOB S. JENSEN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE COUNTY OF OUTAGAMIE, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT 4160-06-00-21-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

JACOB S. JENSEN — MAY 16, 2022 (DATE)
REGISTRATION NUMBER: S-2961

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR OUTAGAMIE COUNTY

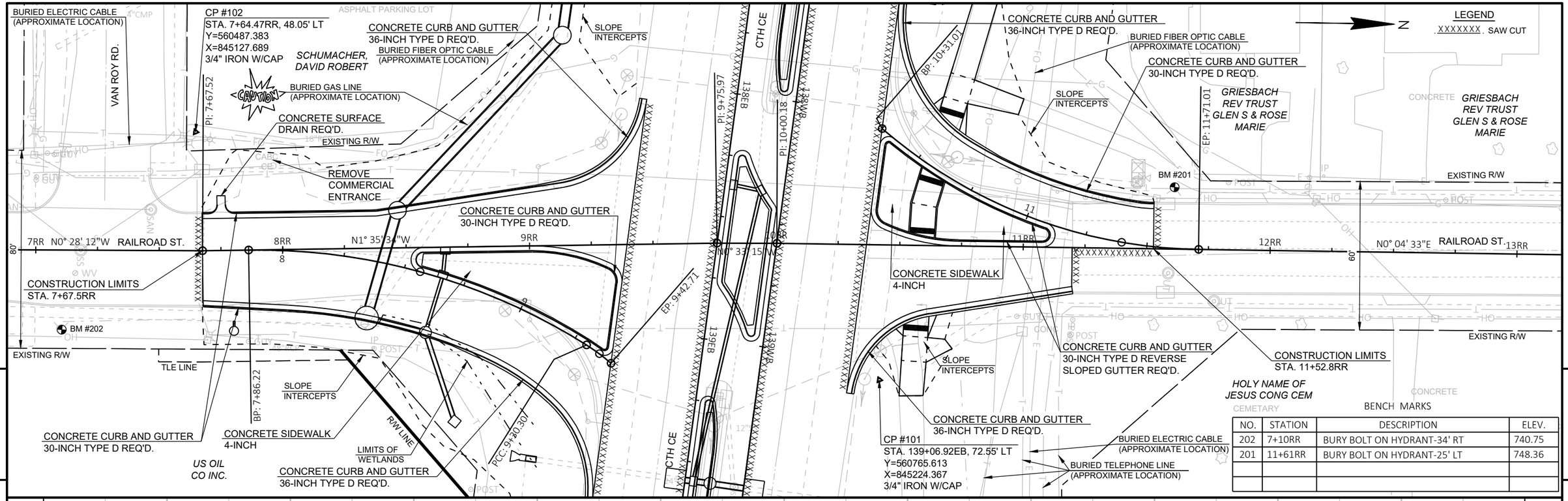
DEAN STEINGRABER — 5/17/2022 (DATE)

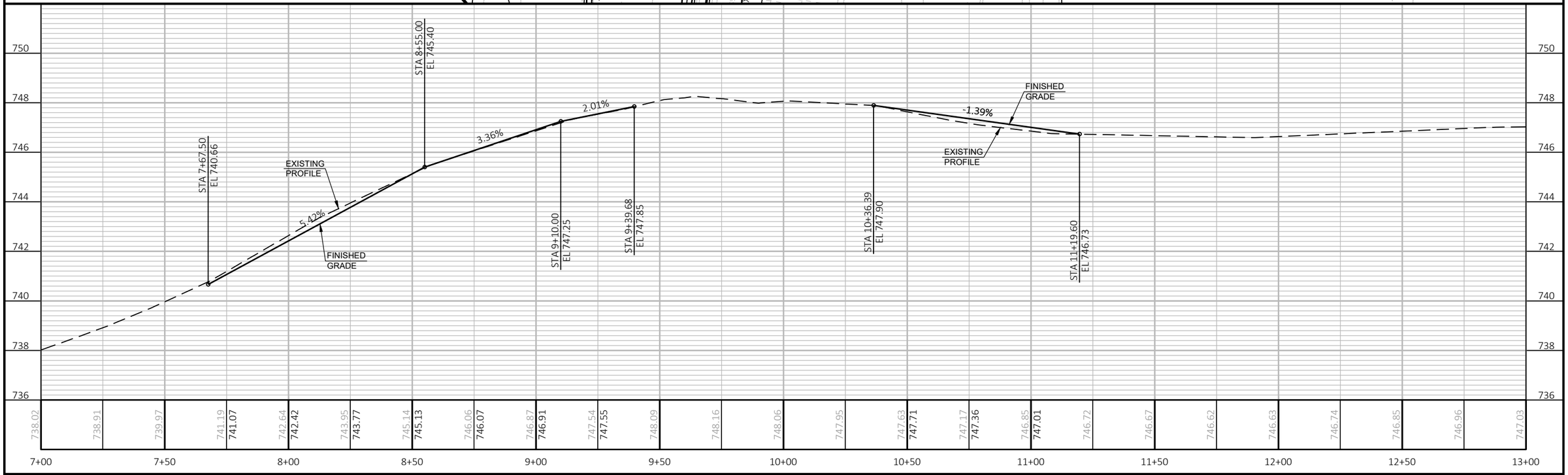
WISCONSIN LAND SURVEYOR — JACOB S. JENSEN S-2961 SURING, WI

AYRES

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\RW\4.01.DWG
APPRAISAL PLAT DATE : MAY 16, 2022
PLOT DATE : 5/16/2022 8:08 AM PLOT BY : TACKMIER, JILL PLOT NAME : PLOT SCALE : ##########

4160-06-00-21-4.01




| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | PLAN AND PROFILE: RAILROAD STREET | SHEET 100 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - 050101_pp
PLOT DATE : 10/31/2022 8:12 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

# Standard Detail Drawing List

| | |
|---|---|
| 08A05-19A | INLET COVERS TYPE A, H, A-S, H-S & Z |
| 08A05-19B | INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM |
| 08A05-19C | INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S |
| 08A05-19D | INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M |
| 08B09-03 | MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER |
| 08C06-02 | INLETS 3-FT AND 4-FT DIAMETER |
| 08C07-02 | INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT |
| 08C08-02 | INLETS MEDIAN 1 AND 2 GRATE |
| 08D01-22A | CONCRETE CURB & GUTTER |
| 08D01-22B | CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS |
| 08D04-06 | CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES |
| 08D05-20A | CURB RAMPS TYPES 1 AND 1-A |
| 08D05-20B | CURB RAMPS TYPES 2 AND 3 |
| 08D05-20C | CURB RAMPS TYPES 4A AND 4A1 |
| 08D05-20D | CURB RAMPS TYPE 4B AND 4B1 |
| 08D05-20E | CURB RAMPS TYPES 5, 6, 7A, 7B & 8 |
| 08D05-20F | CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS |
| 08D05-20G | CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES |
| 08E08-03 | TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS |
| 08E09-06 | SILT FENCE |
| 08E10-02 | INLET PROTECTION TYPE A, B, C AND D |
| 08E15-01 | CULVERT PIPE CHECK |
| 08F01-11 | APRON ENDWALLS FOR CULVERT PIPE |
| 08F04-08 | JOINT TIES FOR CONCRETE PIPE  AND CONCRETE COLLAR DETAIL |
| 09B02-10 | CONDUIT |
| 09B16-02 | PULL BOX  NON-CONDUCTIVE |
| 09C02-09 | CONCRETE BASES, TYPES 1, 2,  5, & 6 |
| 09C03-04 | TRANSFORMER/PEDESTAL BASES |
| 09C12-09A | CONCRETE BASE TYPE 13 |
| 09C12-09B | CONCRETE BASE TYPE 13 |
| 09C13-02 | CONCRETE BASE TYPE 10 & TYPE 13 EXTENSION |
| 09D01-05 | CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL) |
| 09E01-15B | POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY) |
| 09E01-15C | POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4 |
| 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 |
| 09E08-09I | TYPE 12 POLE 35'-55' 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) |
| 11B02-02 | CONCRETE MEDIAN NOSE |
| 12A04-03 | STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD  SIGN SUPPORTS & TRAFFIC SIGNALS |
| 13C19-03 | HMA LONGITUDINAL JOINTS |
| 15C02-08A | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C02-08B | BARRICADES AND SIGNS FOR VARIOUS CLOSURES |
| 15C03-05 | BARRICADES AND SIGNS FOR SIDEROAD CLOSURES |
| 15C05-05 | TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS |
| 15C07-15B | PAVEMENT MARKING WORDS |
| 15C07-15C | PAVEMENT MARKING ARROWS |
| 15C08-22A | LONGITUDINAL MARKING (MAINLINE) |
| 15C08-22B | TEMPORARY LONGITUDINAL PAVEMENT MARKING |
| 15C08-22D | PAVEMENT MARKING (TURN LANES) |
| 15C11-09B | CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS |
| 15C18-06A | MEDIAN ISLAND MARKING PAVEMENT MARKINGS |
| 15C18-06B | MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE |
| 15C18-06C | MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT |
| 15C19-07C | MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY |
| 15C33-04 | STOP LINE AND CROSSWALK PAVEMENT MARKING |
| 15D20-06A | TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY |
| 15D22-05 | TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY |
| 15D27-03 | TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY,  SPEEDS GREATER THAN 40 MPH |
| 15D30-07A | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-07C | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-07F | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-07G | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |

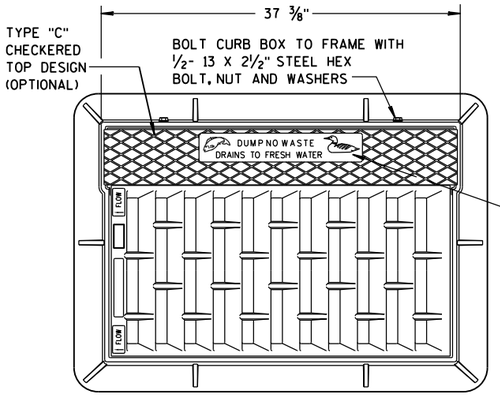
6

# Standard Detail Drawing List

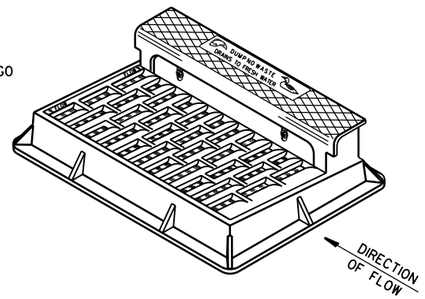
| | |
|---|---|
| 15D39-02 | TRAFFIC CONTROL, DROP-OFF SIGNING |
| 15D40-04C | TRAFFIC CONTROL, PARTIAL LANE SHIFT NON-FREEWAY OR MULTILANE DIVIDED 45 MPH AND UNDER |



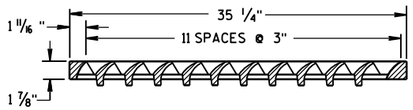
6

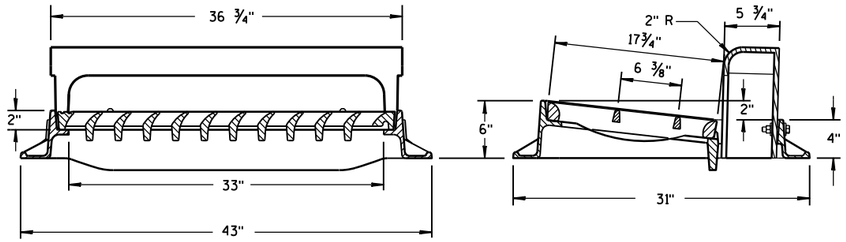


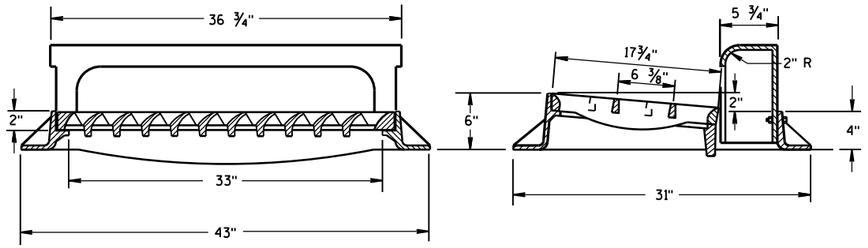

**NOTE:**
**GRATE IS REVERSIBLE.**




NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

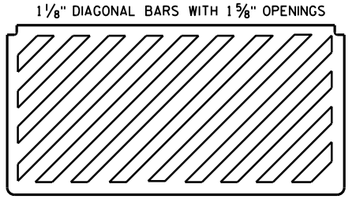



## TYPE "H"

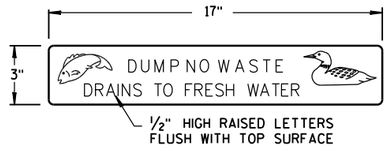
**NOTE: EITHER CASTING IS ACCEPTABLE**



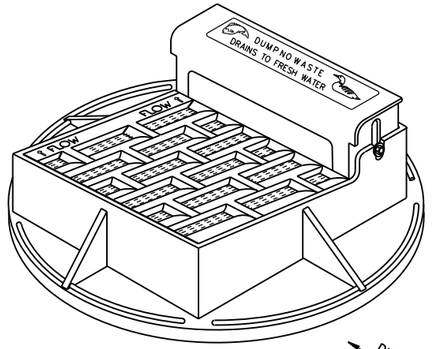

**SPECIAL GRATE FOR TYPE "H" COVER**

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)




**LOGO DETAIL**




NOTE: CURB BOX ADJUSTABLE 4" TO 9"

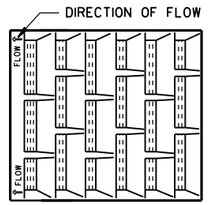
**NOTE:**
**GRATE IS REVERSIBLE.**

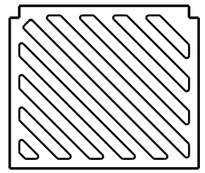
## GENERAL NOTES

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.

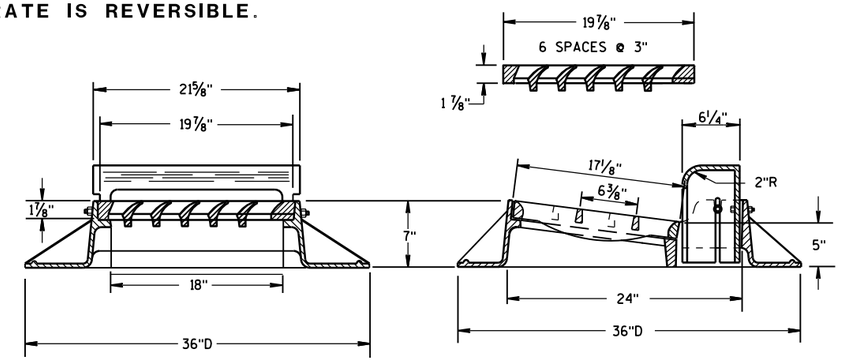


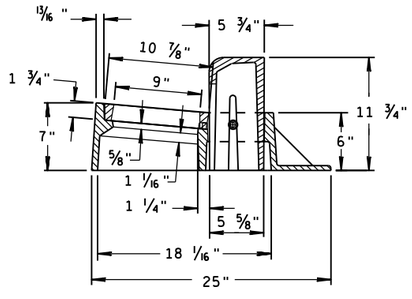

**SPECIAL GRATE FOR TYPE "A" COVER**

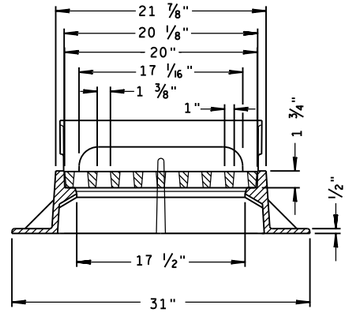
(MEASURES 19 3/4" X 17" X 1 7/8")

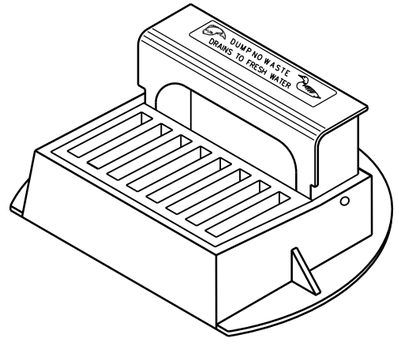
(NOTED AS TYPE A-S ON DRAINAGE TABLE)




## TYPE "A"




## TYPE "Z"

**INLET COVERS**
**TYPE A, H, A-S, H-S & Z**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA





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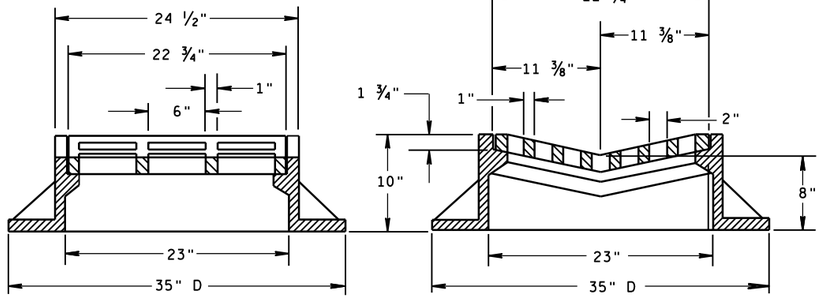
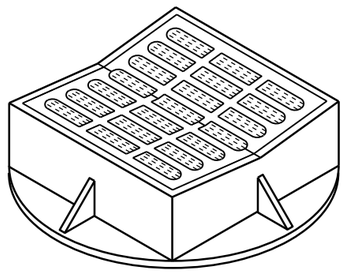
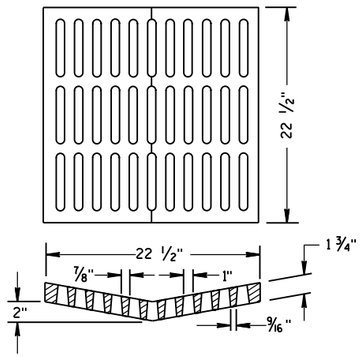
S.D.D. 8 A 5-19a



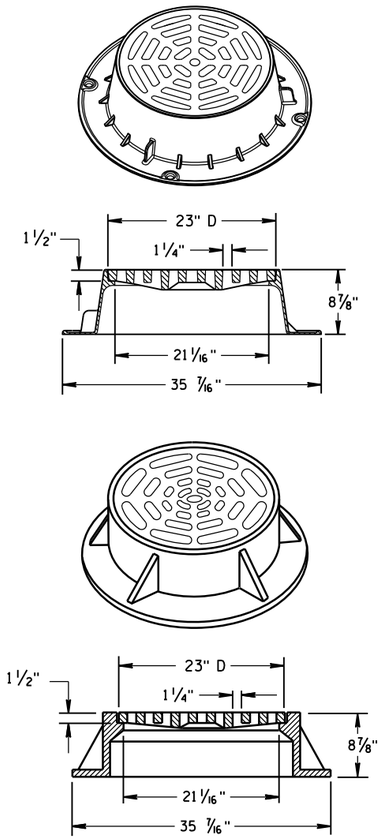



TYPE "B"




ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE




TYPE "C"

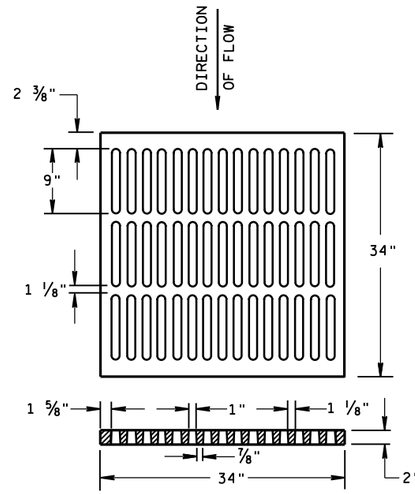
NOTE: EITHER CASTING IS ACCEPTABLE

## 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.

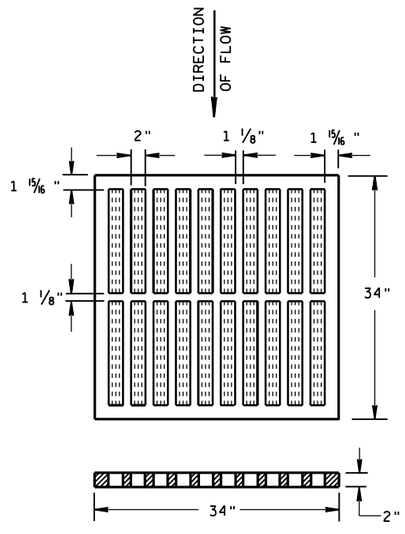
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



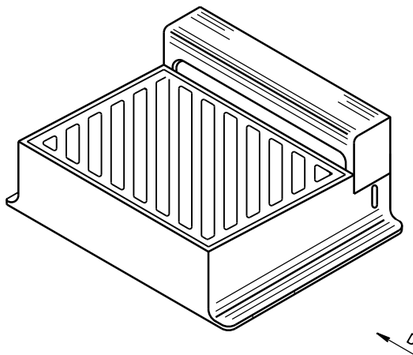

ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



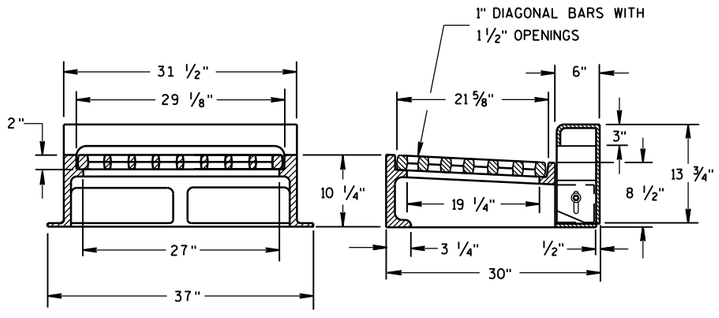

TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE






DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.




NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

**INLET COVERS**
**TYPE B, B-A, C, MS, MS-A, & WM**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA



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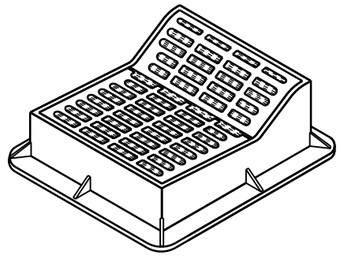
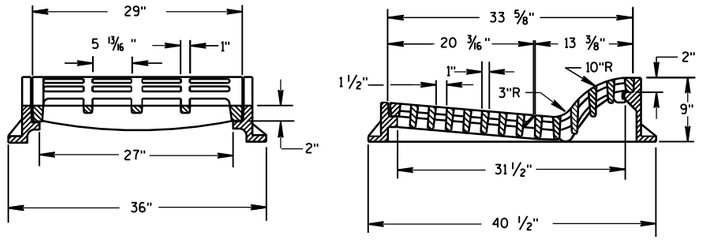
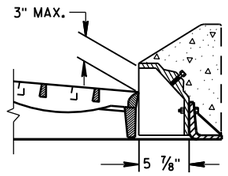
S.D.D. 8 A 5-19b






## TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.




## ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

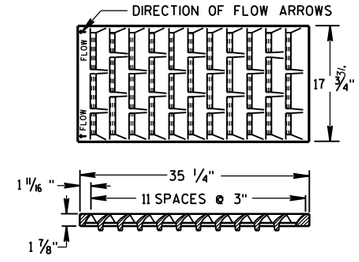
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

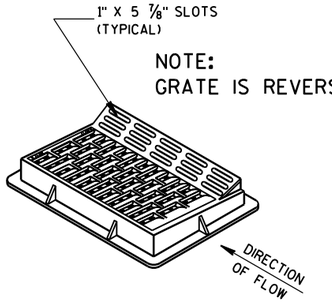
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

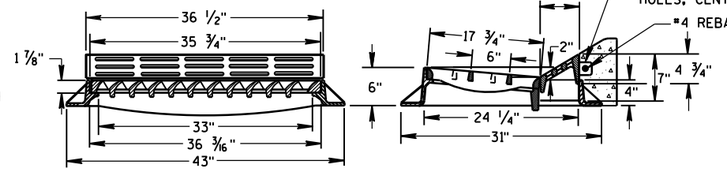
## GENERAL NOTES

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 INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.



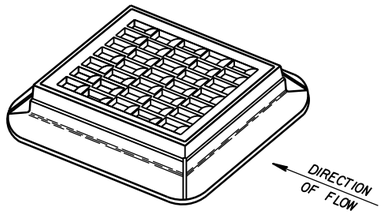



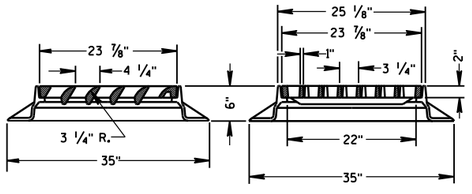




## TYPE "HM"

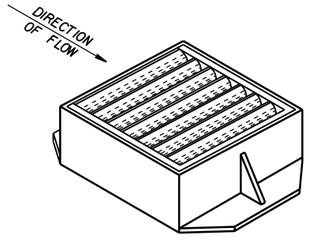
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

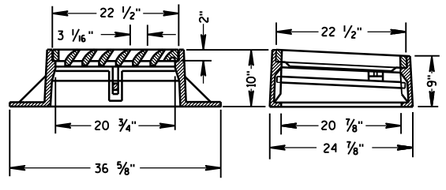
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



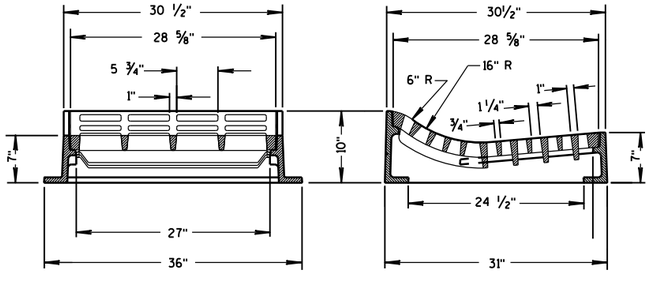




## TYPE "S"



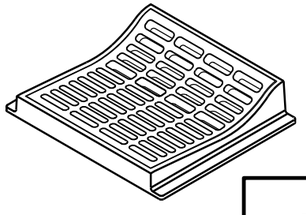




## TYPE "V"




## TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



## INLET COVERS
## TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE

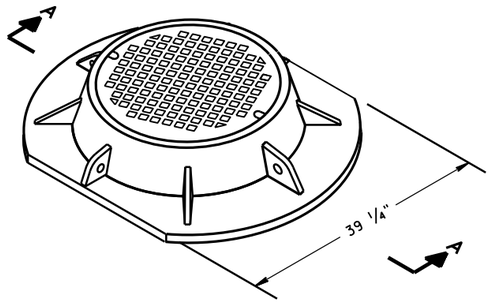
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

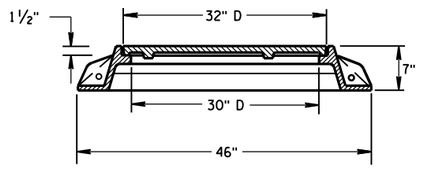
FHWA



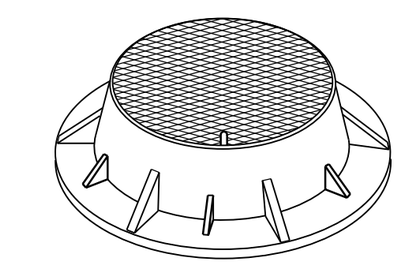

6

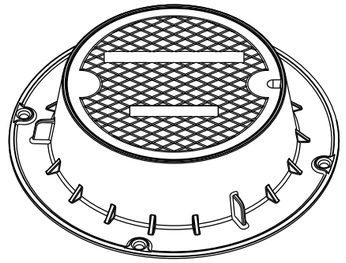

S.D.D. 8 A 5-19c

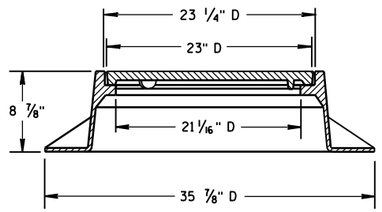


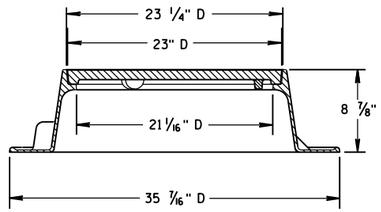




SECTION A-A
TYPE "K"







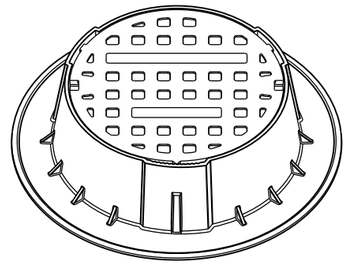

TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

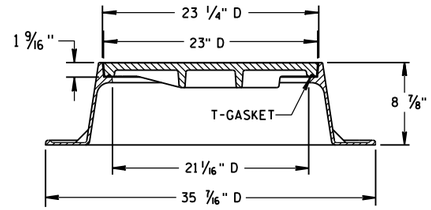
## GENERAL NOTES

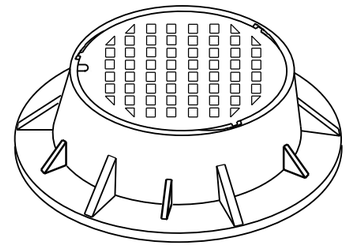
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

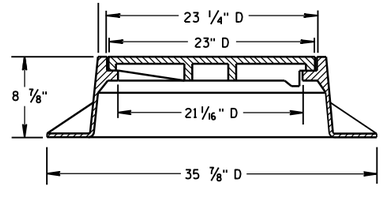
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

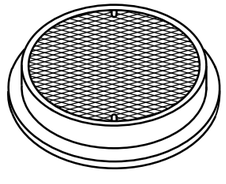


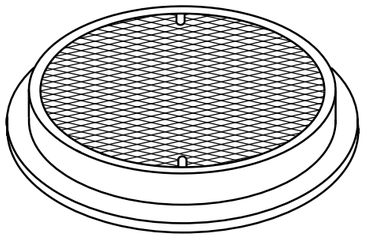


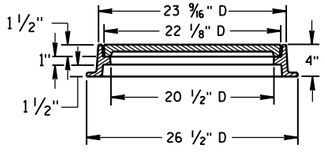






TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE





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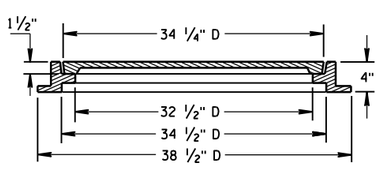


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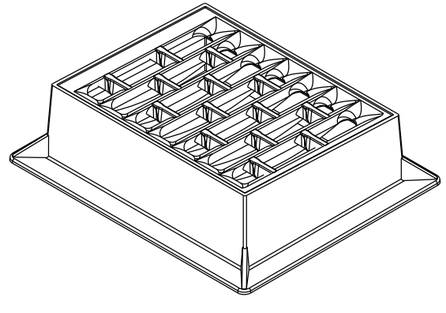
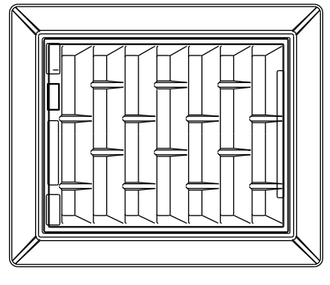
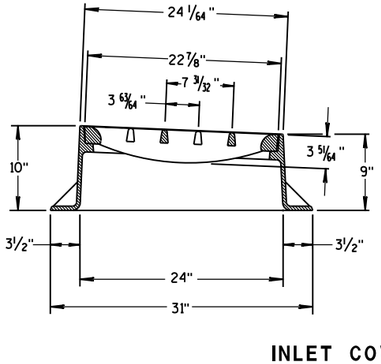
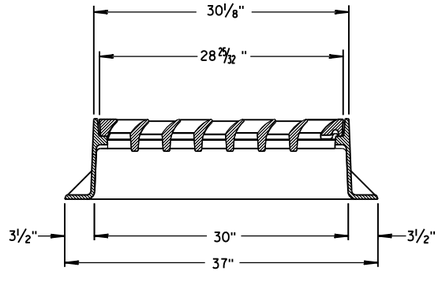







INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

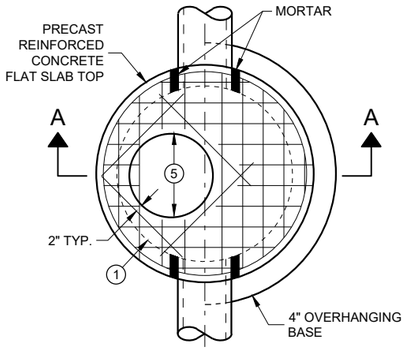


6

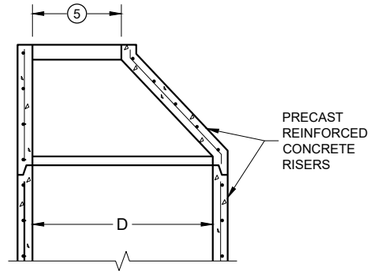
S.D.D. 8 A 5-19d

6

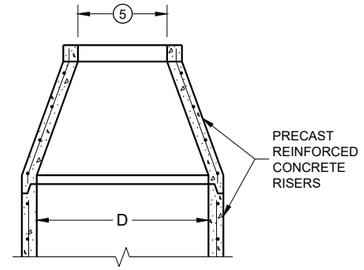
S.D.D. 8 A 5-19d




**PLAN VIEW**
**CIRCULAR OPENING**




**OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP**




**OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP**

## MANHOLE COVER OPENING MATRIX

| OPENING SIZE (FT.) \ 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 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 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".

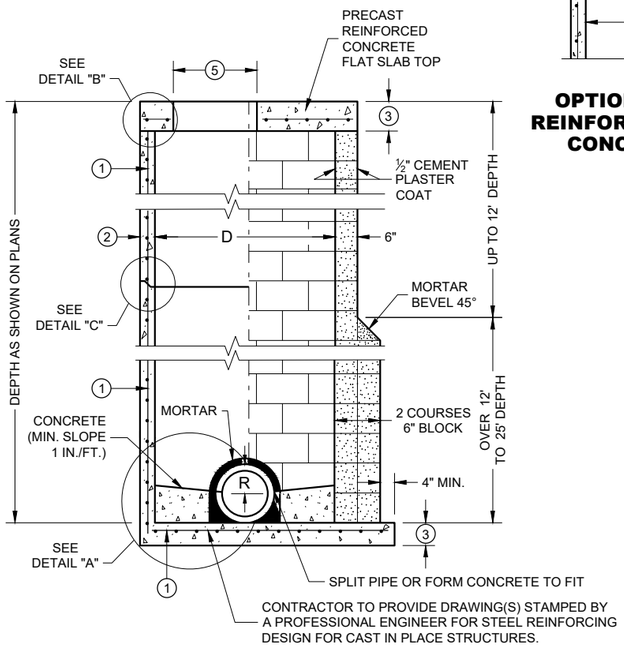
(1) FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(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 (TYP.).

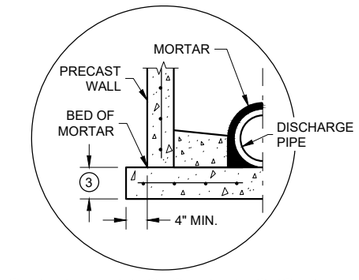
(5) SEE MANHOLE COVER OPENING MATRIX.



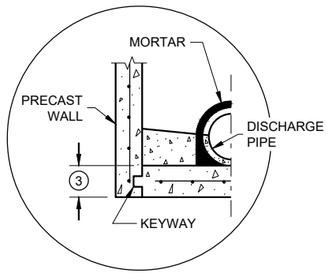

**SECTION A - A**

**PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE**

**CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)**

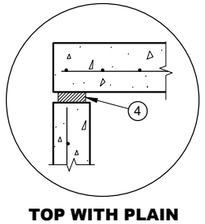



**SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION**

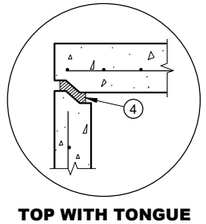



**PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION**

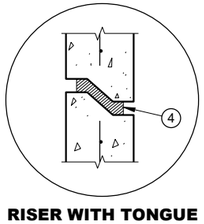
**DETAIL "A"**




**TOP WITH PLAIN END JOINT**

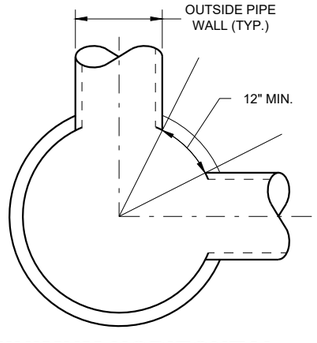



**TOP WITH TONGUE AND GROOVE JOINT**




**RISER WITH TONGUE AND GROOVE JOINT**

**DETAIL "B"** **DETAIL "C"**




**MINIMUM HORIZONTAL PIPE SEPARATION**

**MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER**

**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
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA



SDD 08B09 - 03

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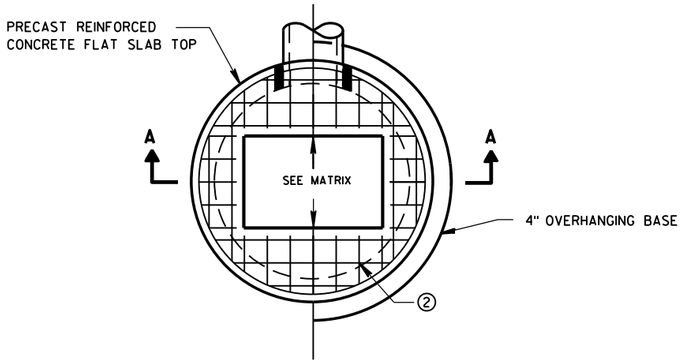
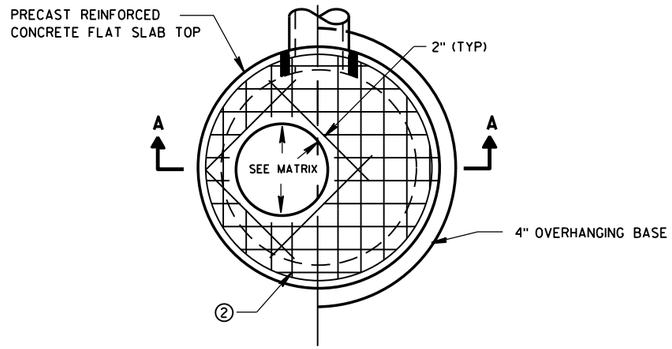
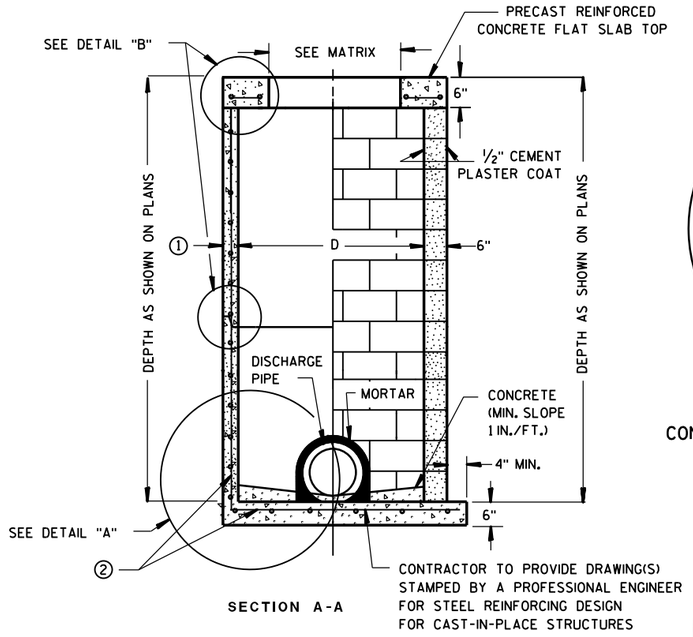
SDD 08B09 - 03




PLAN VIEW RECTANGULAR OPENING




PLAN VIEW CIRCULAR OPENING

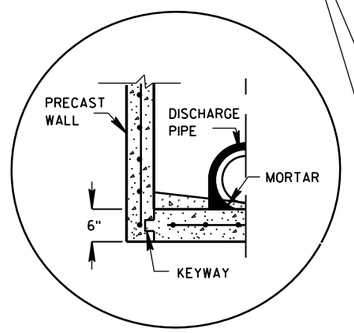



SECTION A-A

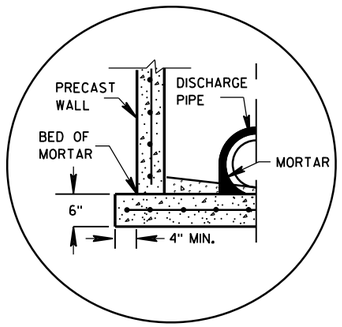
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

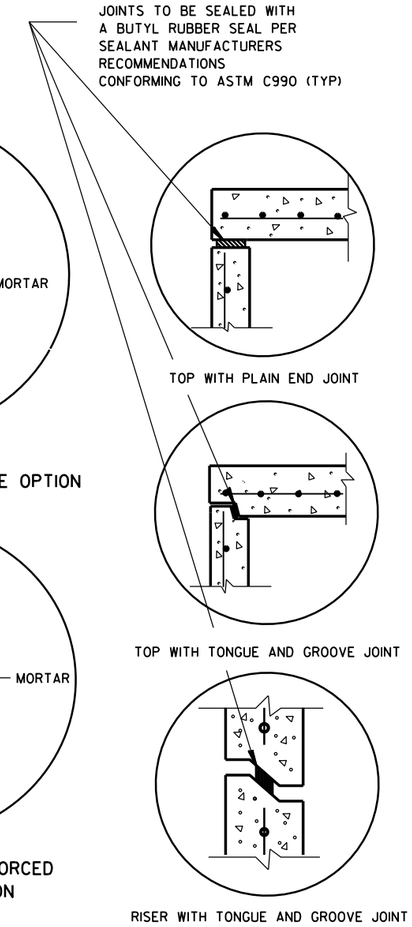



PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION




SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"




DETAIL "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.

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.

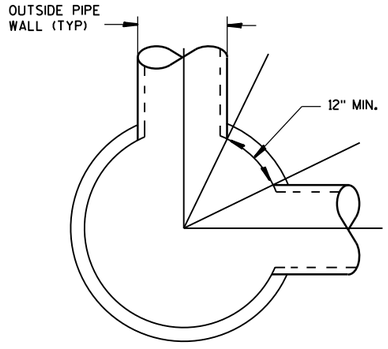
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

## INLET COVER OPENING MATRIX

| | INLET COVER TYPE | ALL A'S | ALL B'S | BW | C | F | ALL H'S | S | T | V | WM | Z |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| INLET SIZE | OPENING SIZE (FT) | | | | | | | | | | | |
| 3-FT | 2 DIA. | | | | X | | | | | | | X |
| | 2X2 | X | X | | | | | X | | X | | |
| 4-FT | 2 DIA. | | | | X | | | | | | | X |
| | 2X2 | X | X | | | | | X | | X | | |
| | 2X2.5 | | | X | | | | X | X | X | X | |
| | 2X3 | | | | | | X | | | | | |
| | 2.5X3 | | | | | X | | | | | | |




DETAIL "C"

## 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 |

INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — /S/ Rodney Taylor
DATE — ROADWAY STANDARDS | UNIT SUPERVI ENT
FHWA



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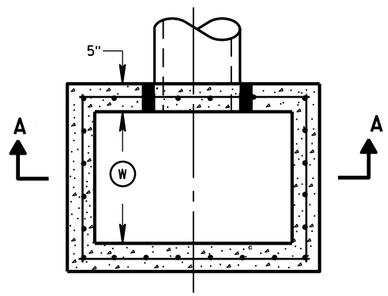
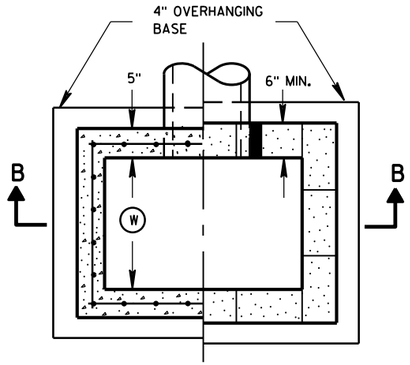
S.D.D. 8 C 6-2

6

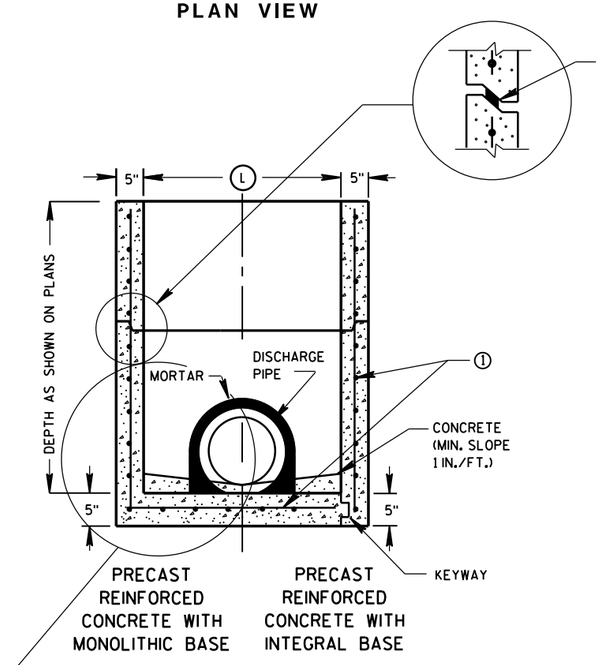
S.D.D. 8 C 6-2



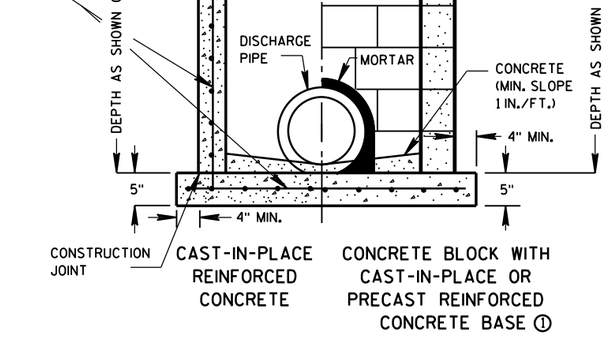

PLAN VIEW



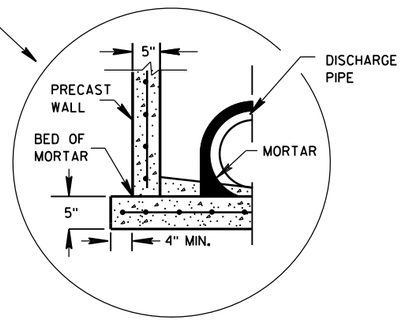

PLAN VIEW




SECTION A-A




SECTION B-B




SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

## 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 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 INCH 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 PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

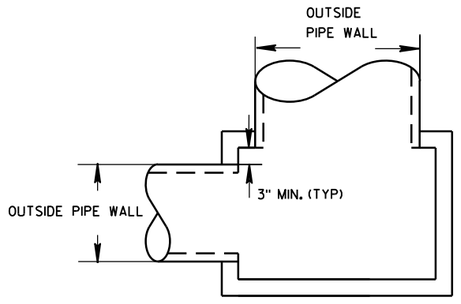
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

## INLET COVER MATRIX

| INLET SIZE | | INLET COVER TYPE | ALL A'S | ALL B'S | BW | F | ALL H'S | S | T | V | WM |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | WIDTH (W) (FT) | LENGTH (L) (FT) | | | | | | | | | |
| 2X2-FT | 2 | 2 | X | X | | | | X | | X | |
| 2X2.5-FT | 2 | 2.5 | | | X | | | X | X | X | X |
| 2X3-FT | 2 | 3 | | | | | X | | | | |
| 2.5X3-FT | 2.5 | 3 | | | | X | | | | | |

## PIPE MATRIX

| INLET SIZE | MAXIMUM INSIDE PIPE DIAMETER | |
|---|---|---|
| | WIDTH (IN) | LENGTH (IN) |
| 2X2-FT | 12 | 12 |
| 2X2.5-FT | 12 | 18 |
| 2X3-FT | 12 | 24 |
| 2.5X3-FT | 18 | 24 |




DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

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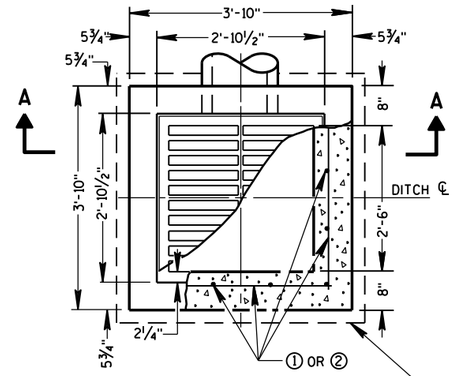
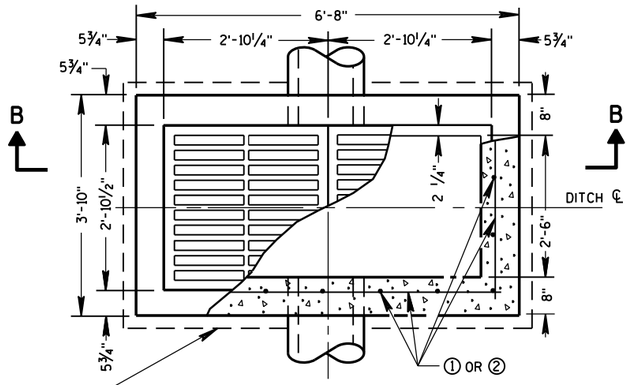
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

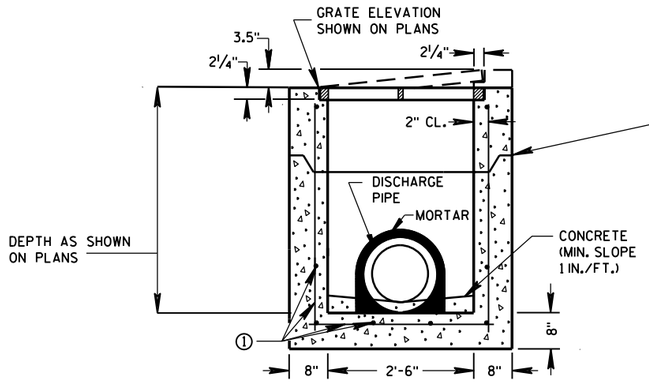



PLAN VIEW

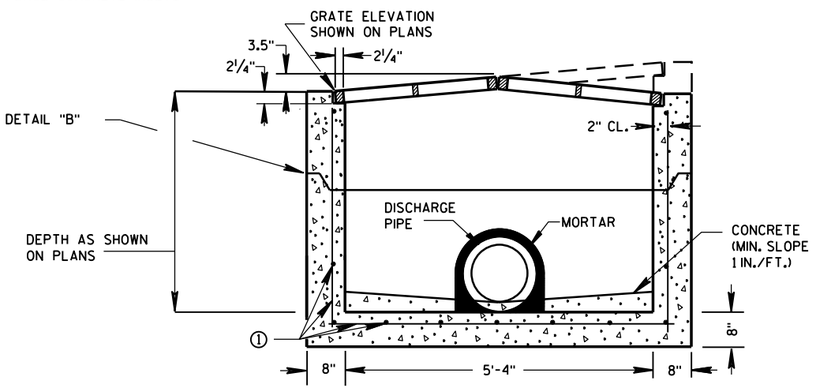



PLAN VIEW

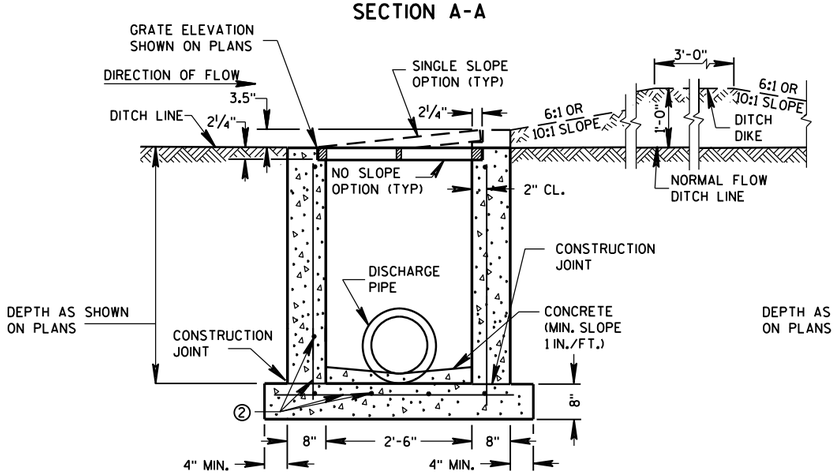
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



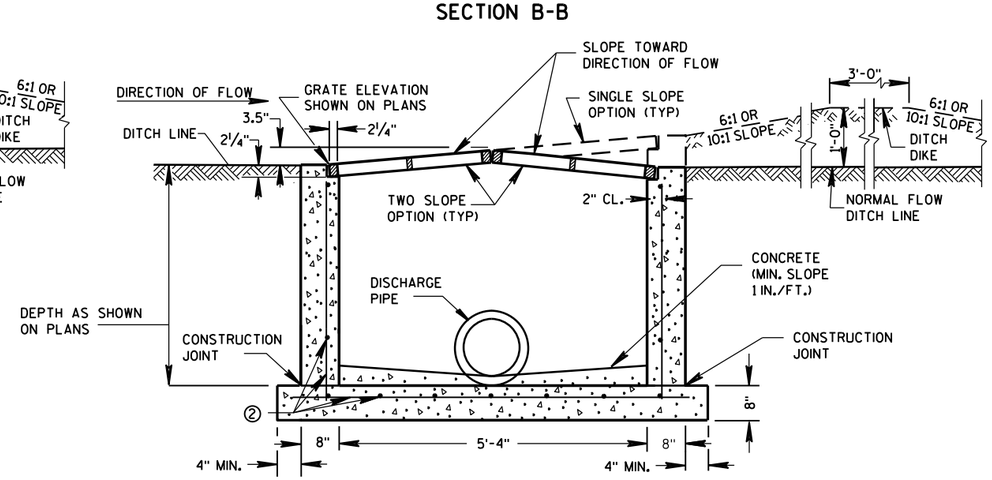

PRECAST REINFORCED CONCRETE SECTION A-A




PRECAST REINFORCED CONCRETE SECTION B-B




REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A




REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

## INLETS MEDIAN 1 GRATE

## INLETS MEDIAN 2 GRATE

## 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 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 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.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

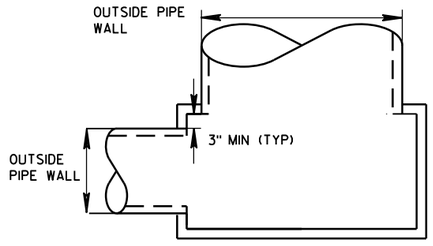
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS 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.

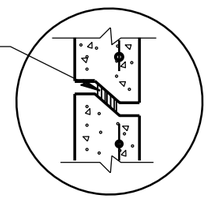
### PIPE MATRIX

| | MAXIMUM INSIDE PIPE DIAMETER | |
|---|---|---|
| INLET SIZE | WIDTH (IN) | LENGTH (IN) |
| 1 GRATE | 18 | 18 |
| 2 GRATE | 18 | 42 |




DETAIL "A"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

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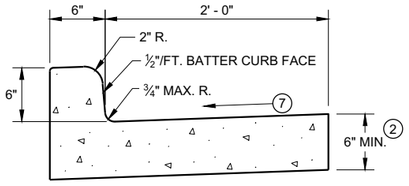
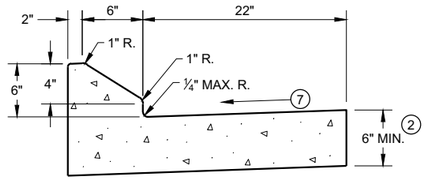
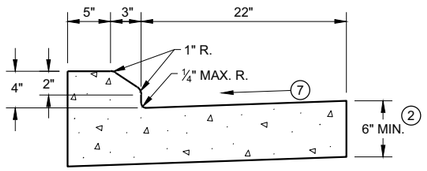


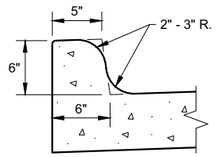

**TYPES A (1) & D**



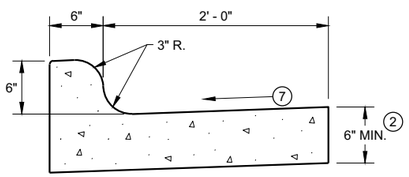

**6" SLOPED CURB TYPES G (1) & J**




**4" SLOPED CURB TYPES G (1) & J**

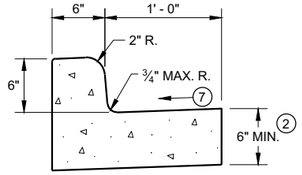



**TYPES K (1) & L**
(OPTIONAL CURB SHAPE)



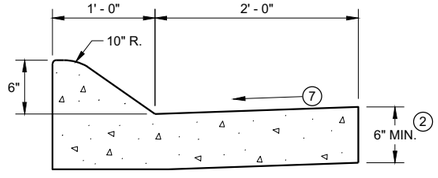

**TYPES K (1) & L**

**CONCRETE CURB AND GUTTER 30"**




**TYPES A (1) & D**

**CONCRETE CURB AND GUTTER 18"**



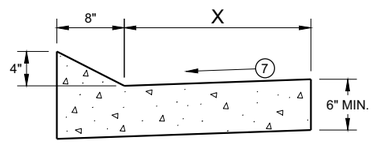

**6" SLOPED CURB TYPES A (1) & D**




**4" SLOPED CURB TYPES A (1) & D**

**CONCRETE CURB AND GUTTER 36"**

| TBT & TBTT | X |
|---|---|
| 30" | 22" |
| 36" | 28" |

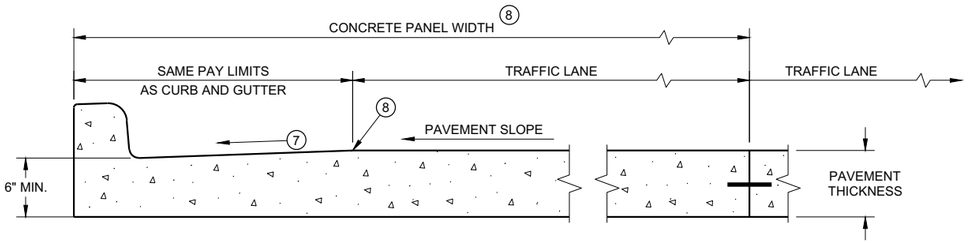



**TYPES TBT & TBTT (1)**

**CONCRETE CURB AND GUTTER**

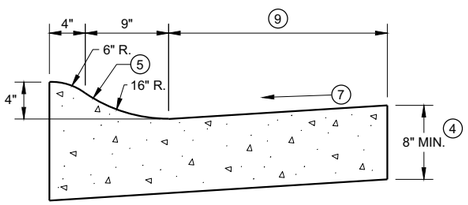
**PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE**

| PAVEMENT THICKNESS | MAXIMUM PANEL WIDTH |
|---|---|
| LESS THAN 10" | 12' |
| 10" & ABOVE | 15' |

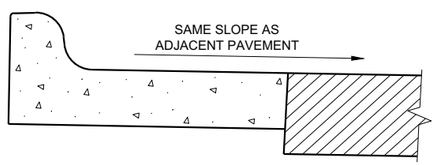



**PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER**

* BIKE LANE IS NOT SHOWN




**4" SLOPED CURB TYPES R (1) & T**




**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) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

**CONCRETE CURB AND GUTTER**

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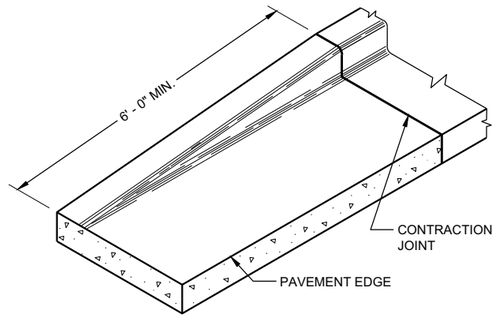
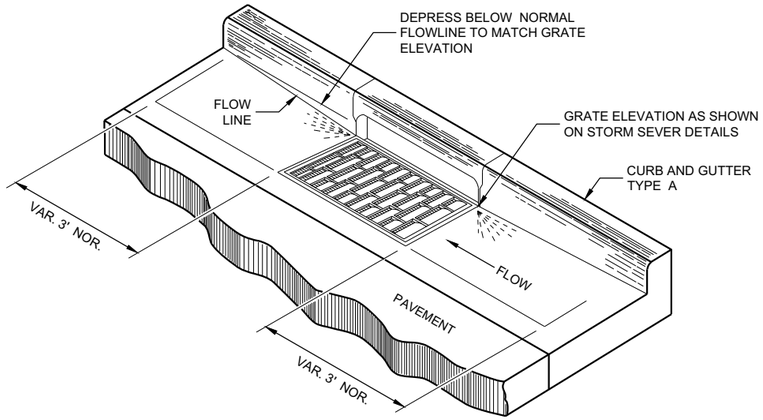
SDD 08D01 - 22a




**END SECTIONCURB 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.

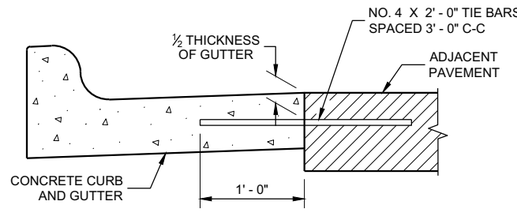
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

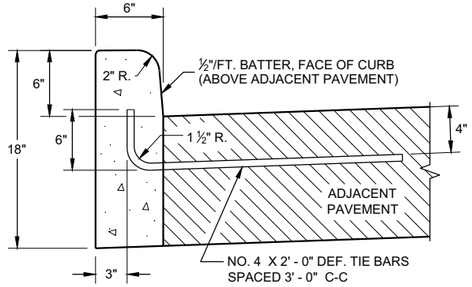
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(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.

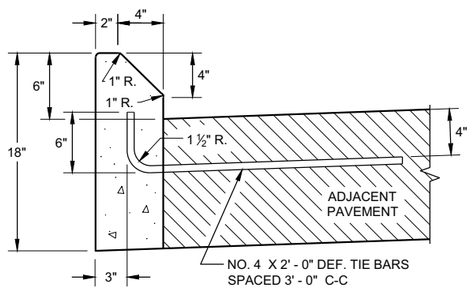
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.




**TYPICAL TIE BAR LOCATION (1)**

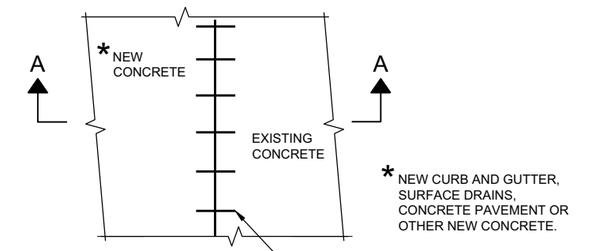



**TYPES A (1) & D**

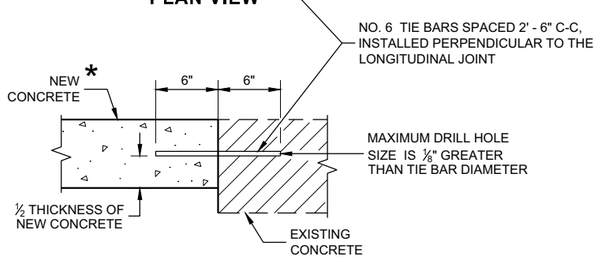



**TYPES G (1) & J**

**CONCRETE CURB**

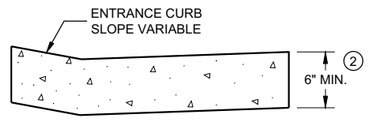



**PLAN VIEW**




**SECTION A - A**

**TIE BARS DRILLED INTO EXISTING PAVEMENT**




**DRIVEWAY ENTRANCE CURB (9)**

(WHEN DIRECTED BY THE ENGINEER)

**CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS**

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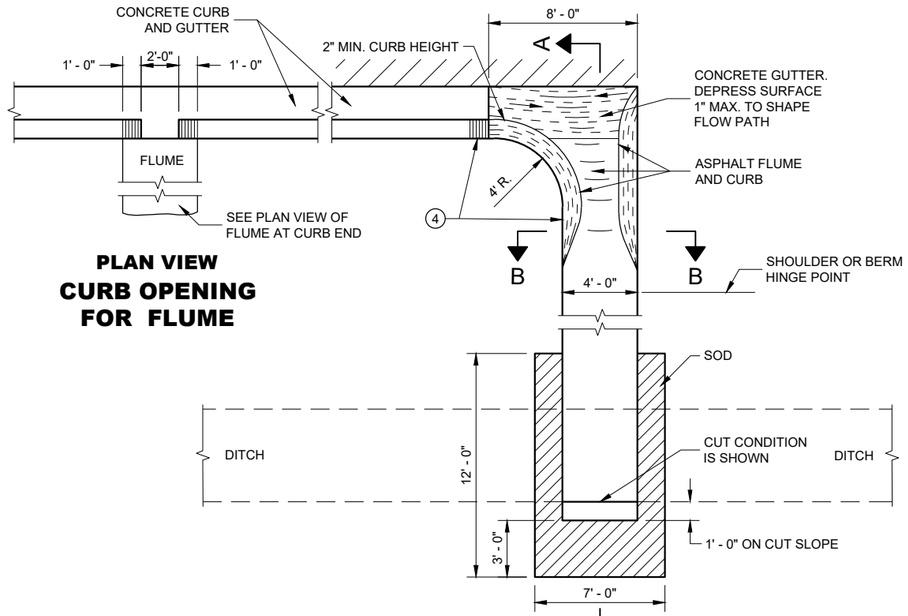
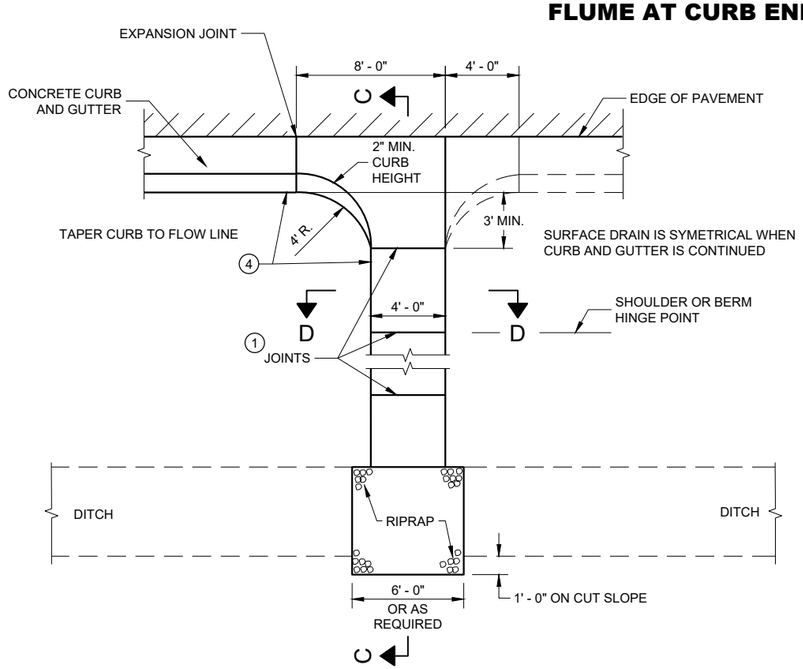
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

## ASPHALTIC FLUME




**PLAN VIEW**
**CURB OPENING FOR FLUME**

**PLAN VIEW**
**FLUME AT CURB END**



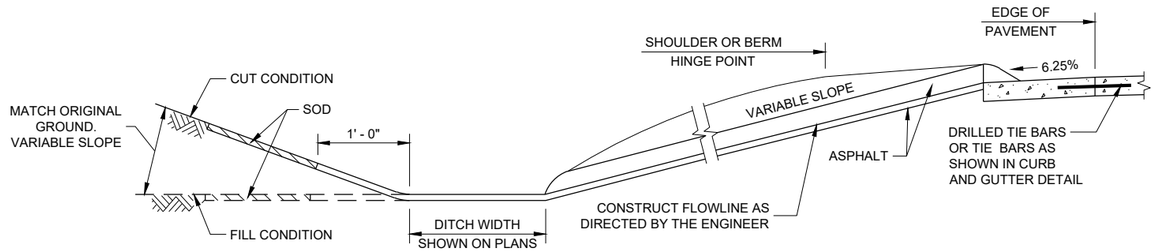

**PLAN VIEW**
**CONCRETE SURFACE DRAIN**

## GENERAL NOTES

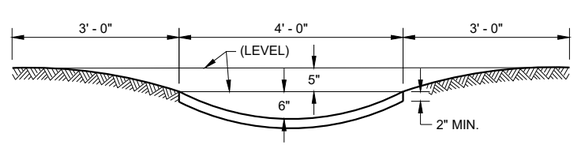
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

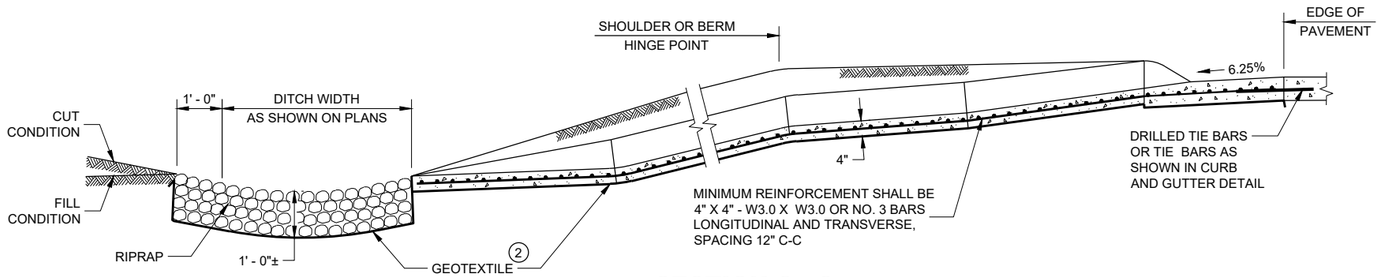
1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.



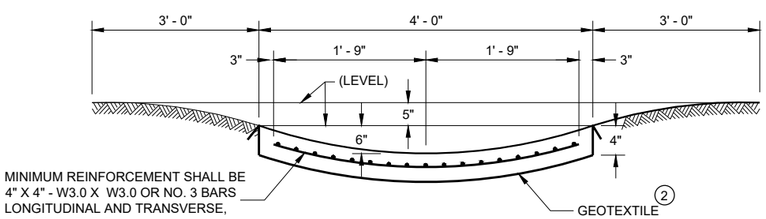

**SECTION A - A**




**SECTION B - B**




**SECTION C - C**




**SECTION D - D**

**CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES**

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DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

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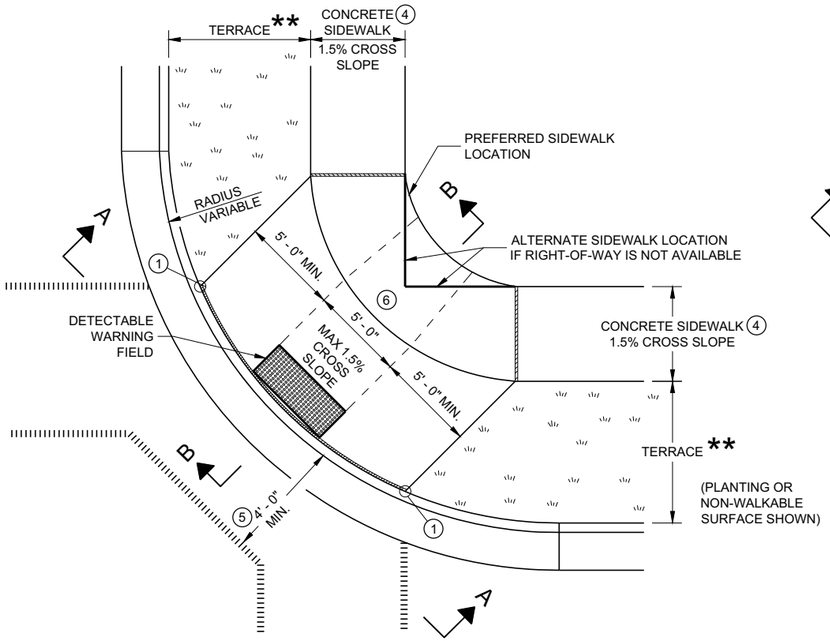
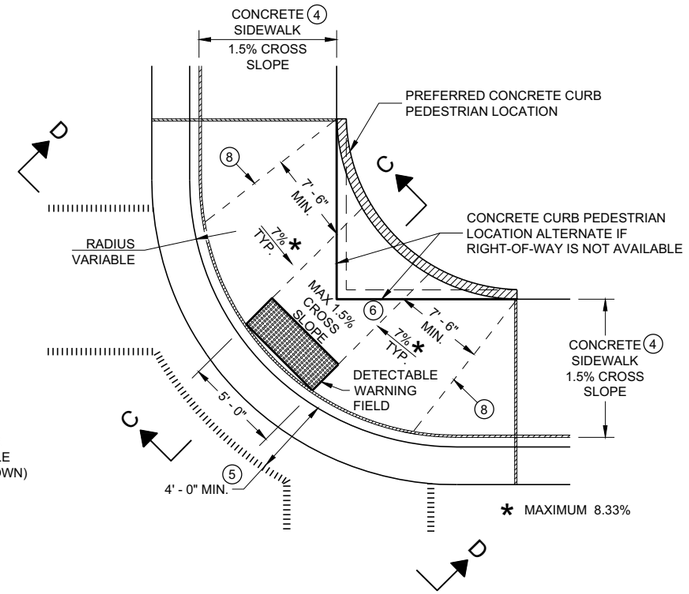



**PLAN VIEW**

## CURB RAMP TYPE 1

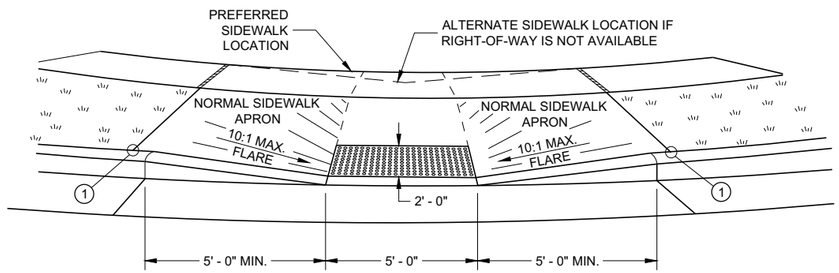
**(CENTER OF CORNER RADIUS)**



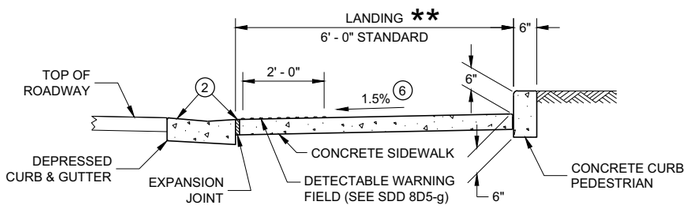

**PLAN VIEW**

## CURB RAMP TYPE 1 - A

**(NO TERRACE)**

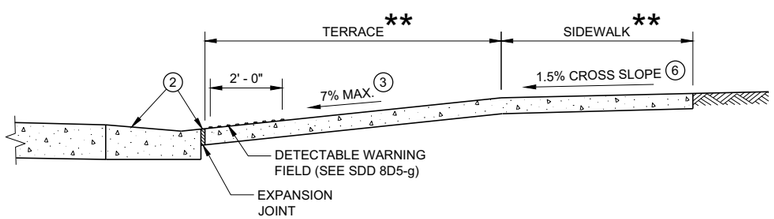



**VIEW A - A FOR TYPE 1**

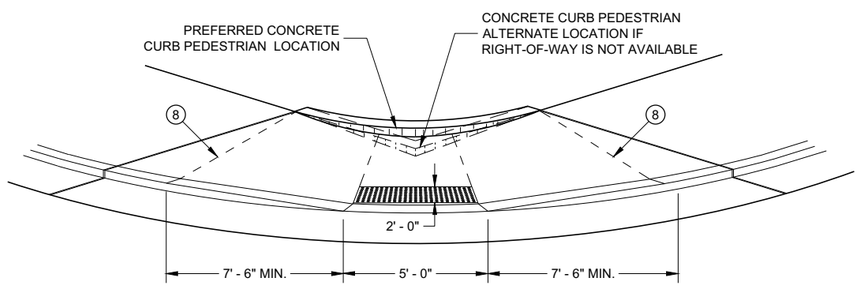



**SECTION C - C FOR TYPE 1 - A**

** WIDTH SHOWN ELSEWHERE IN THE PLANS




**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 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 RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF 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 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 FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

## LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

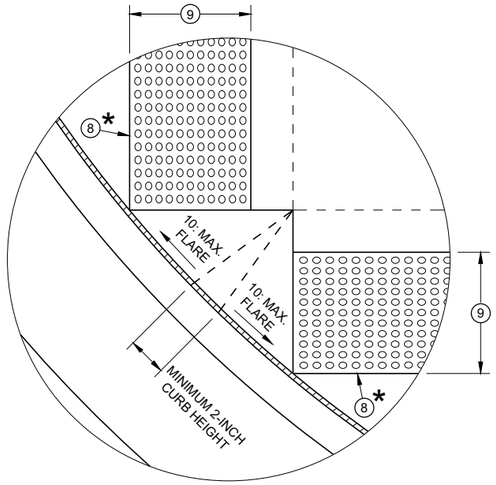
**CURB RAMPS**
**TYPE 1 AND 1-A**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

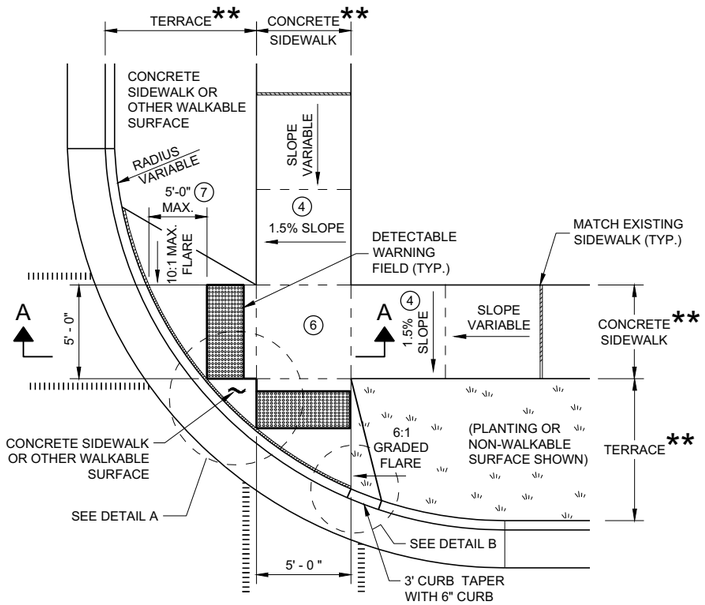



6

SDD 08D05 - 20a
SDD 08D05 - 20a




**DETAIL A**




**PLAN VIEW**
**CURB RAMP TYPE 2**
**(CENTER OF CORNER RADIUS)**

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF 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 FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

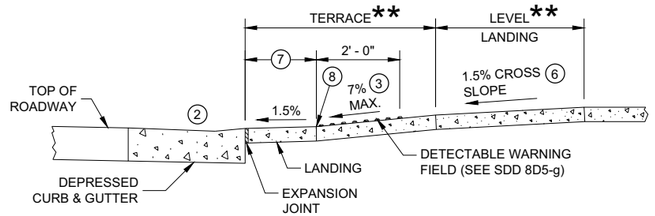
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(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.

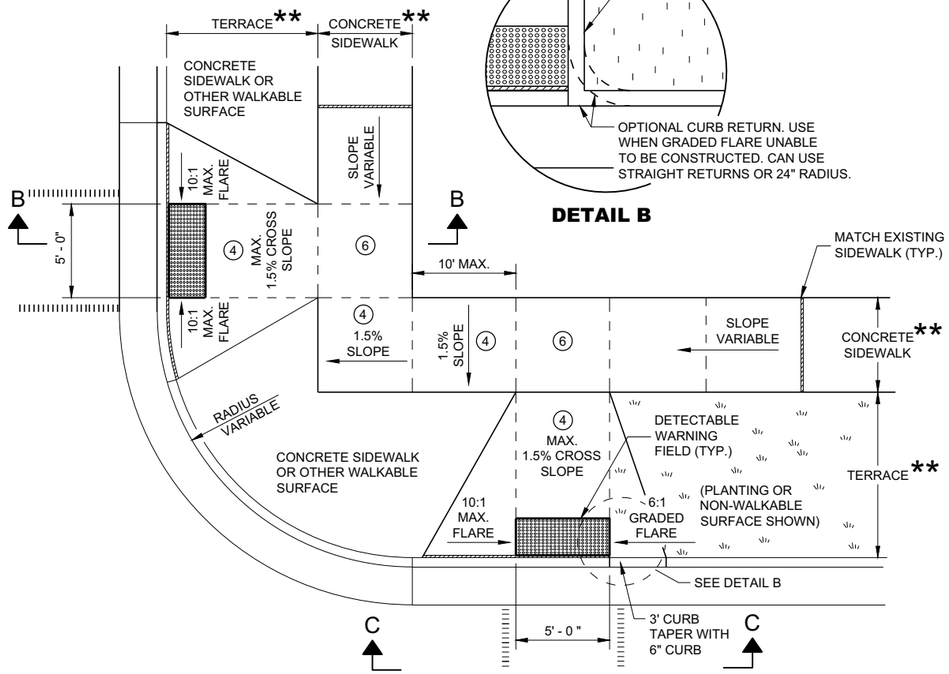
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.




**SECTION A - A FOR TYPE 2**

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS



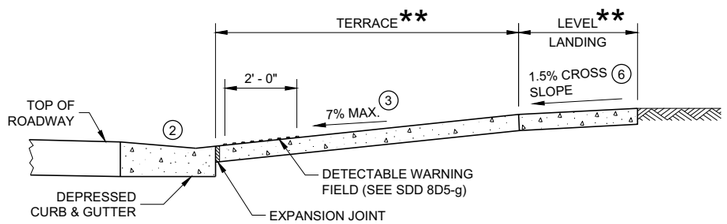

**PLAN VIEW**
**CURB RAMP TYPE 3**
**(OUTSIDE OF CROSSWALK AREA)**



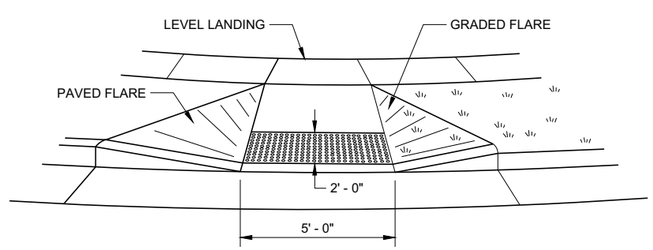

**DETAIL B**

## LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)




**SECTION B - B FOR TYPE 3**




**VIEW C - C FOR TYPE 3**

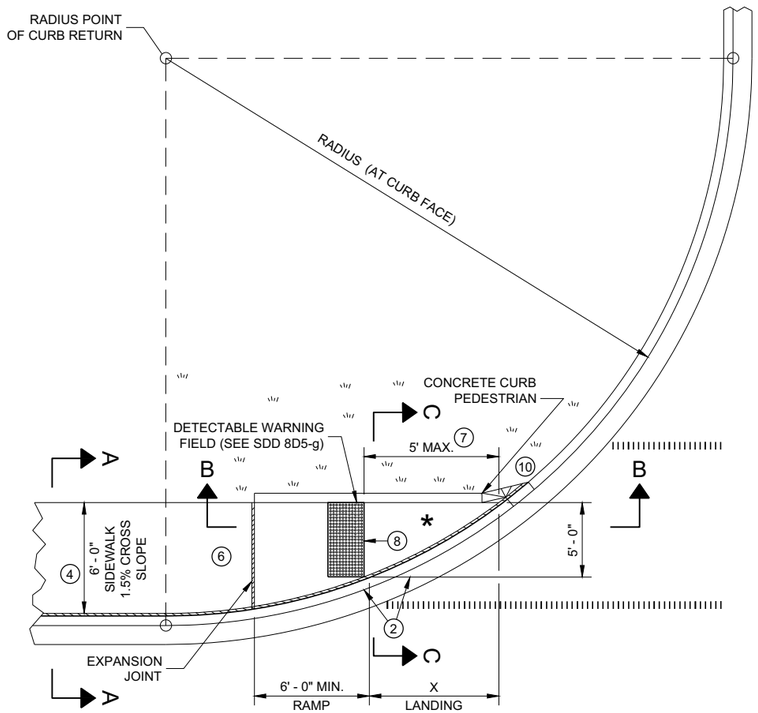
**CURB RAMPS TYPE 2 AND 3**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION




6


SDD 08D05 - 20b

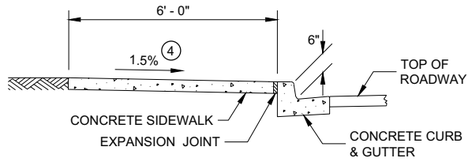



**PLAN VIEW**

**CURB RAMP TYPE 4A**

| RADIUS (AT CURB FACE) | X |
|---|---|
| 10 FEET | 4' - 7" |
| 15 FEET | 6' - 5½" |

INTERMEDIATE RADII CAN BE INTERPOLATED




**SECTION A - A FOR TYPE 4A**

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF 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 FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(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.

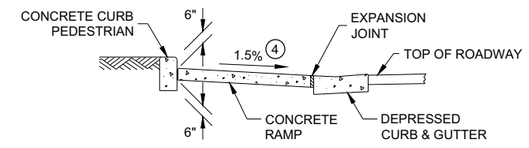
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

## LEGEND

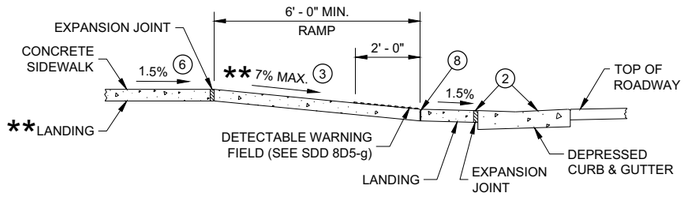
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



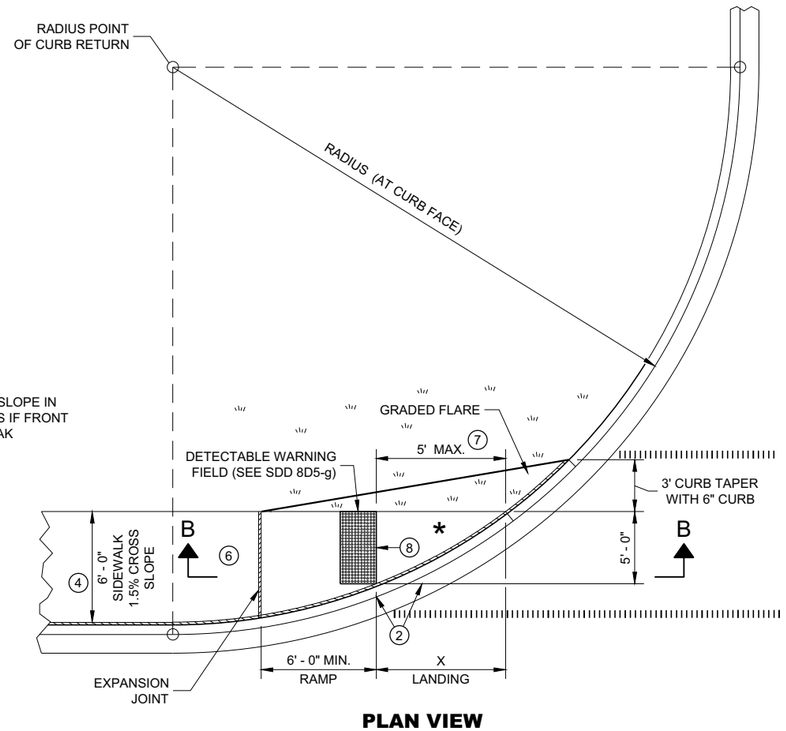

**SECTION C - C FOR TYPE 4A**




**SECTION B - B FOR TYPE 4A AND TYPE 4A1**

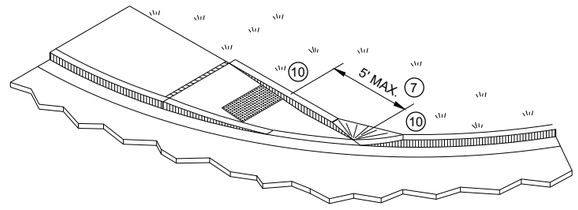
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

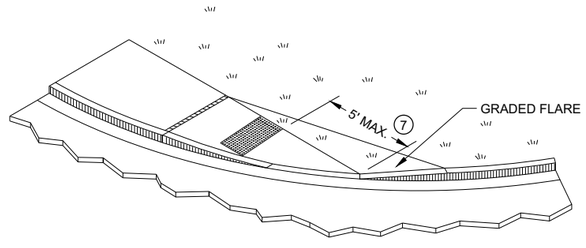



**PLAN VIEW**

**CURB RAMP TYPE 4A1**




**ISOMETRIC VIEW FOR TYPE 4A**




**ISOMETRIC VIEW FOR TYPE 4A1**

**CURB RAMPS**
**TYPE 4A AND 4A1**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

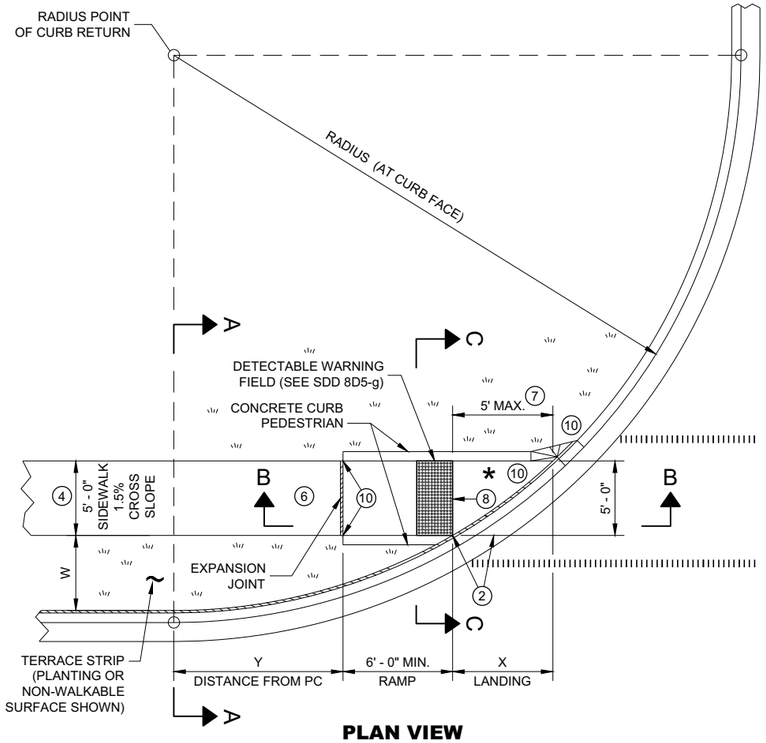




6



SDD 08D05 - 20c

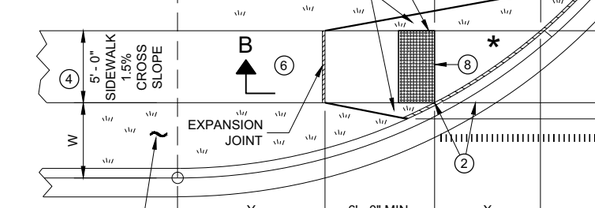



**PLAN VIEW**

**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 | 5' - 9 ¾" | 3' - 6 ½" | 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 | | | 6' - 9 ¼" | 7' - 11 ¼" | 6' - 0 ¼" | 9' - 8" | 5' - 5" | 11' - 1 ¾" | 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 | | | | | | | | | 6' - 1 ¾" | 15' - 8 ½" | 5' - 8" | 17' - 2" | 5' - 3" | 18' - 5 ¾" | 4' - 10 ¾" | 19' - 8 ¼" |
| 50 FEET | | | | | | | | | | | | | | | 5' - 10 ¼" | 23' - 2" |

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)

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF 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 FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

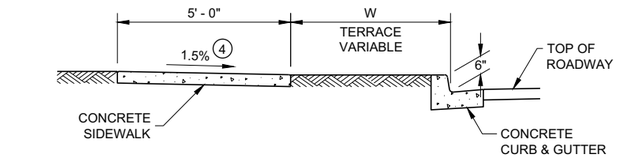
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

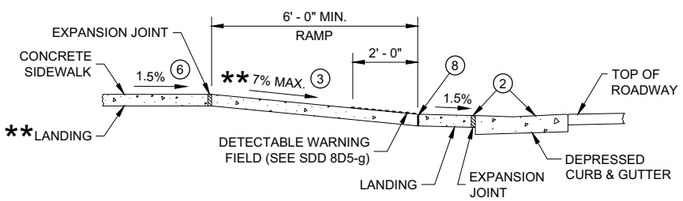
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.




**SECTION A - A FOR TYPE 4B**




** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

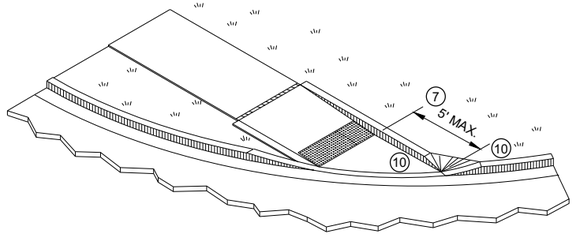
**SECTION B - B FOR TYPE 4B AND TYPE 4B1**



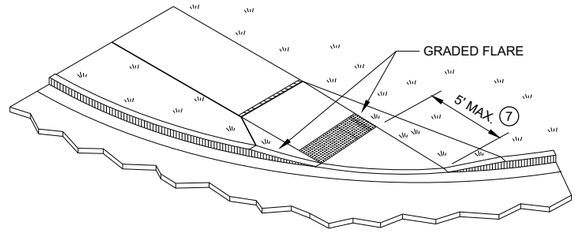

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

**PLAN VIEW**

**CURB RAMP TYPE 4B1**




**ISOMETRIC VIEW FOR TYPE 4B**




**ISOMETRIC VIEW FOR TYPE 4B1**

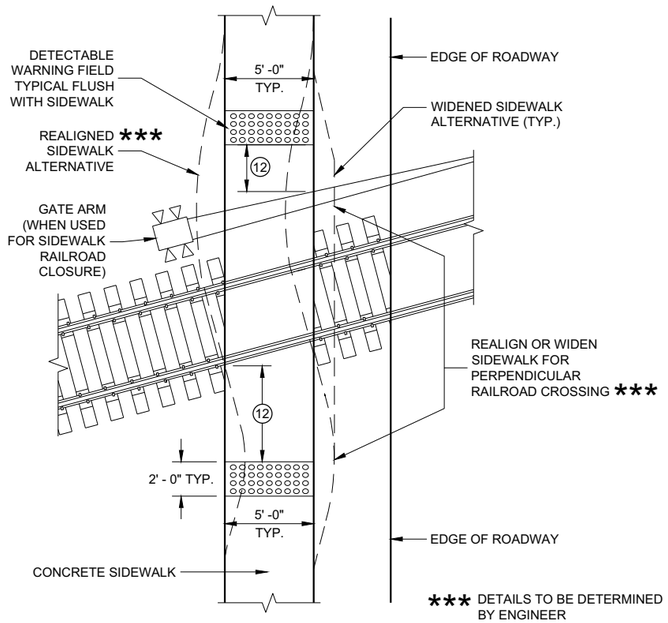
**CURB RAMPS TYPE 4B AND 4B1**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



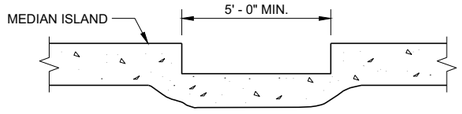

6


SDD 08D05 - 20d

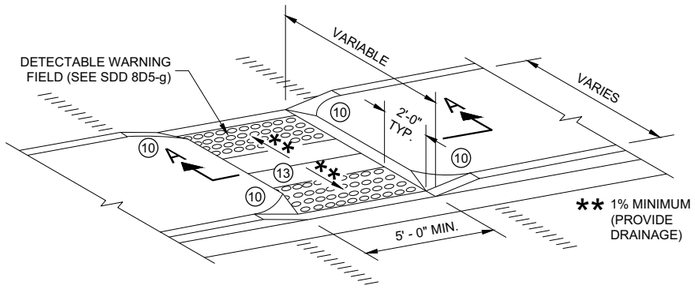



## CURB RAMP TYPE 8

### DETECTABLE WARNINGS AT RAILROAD CROSSING




### 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 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%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ½ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

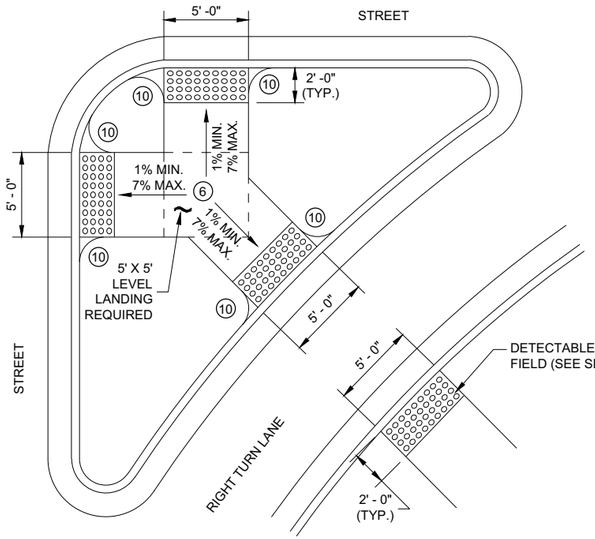
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(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. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET 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.

## LEGEND

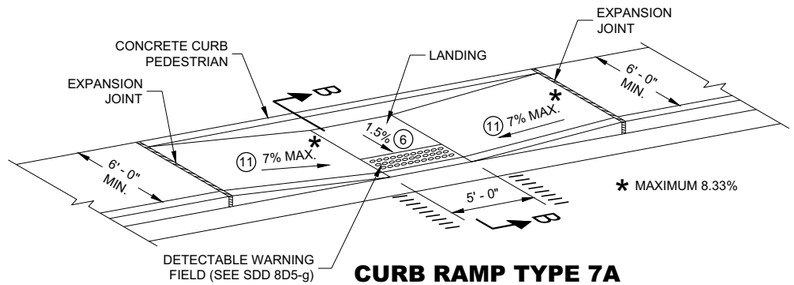
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)




## CURB RAMP TYPE 6

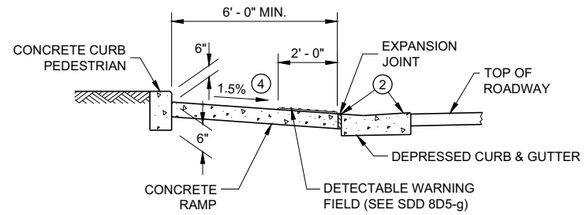
### DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS

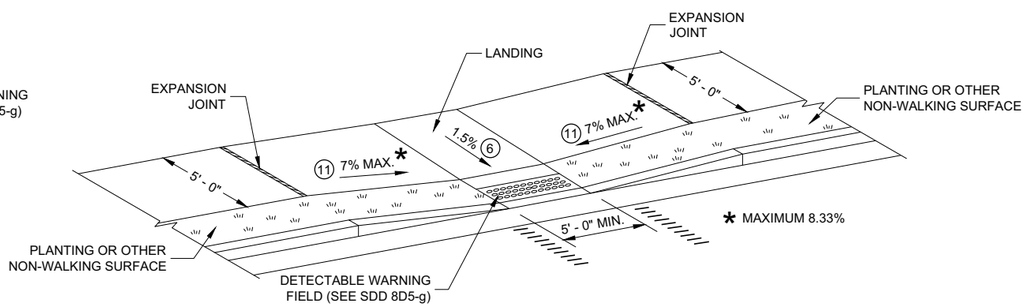



## CURB RAMP TYPE 7A

### MID BLOCK CROSSING




### SECTION B - B FOR TYPE 7A




## CURB RAMP TYPE 7B

### MID BLOCK CROSSING

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

**CURB RAMPS TYPE 5, 6, 7A, 7B & 8**

STATE OF WISCONSIN
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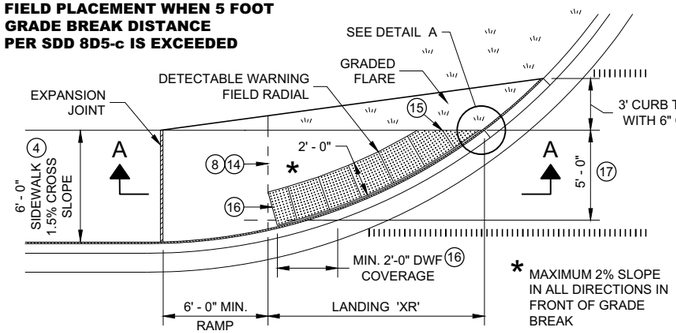
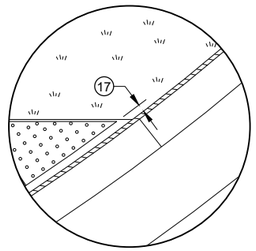
**RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED**



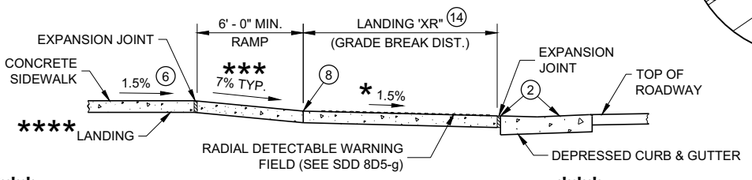

**PLAN VIEW**

## CURB RAMP TYPE 4A1

**(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**



**DETAIL A**

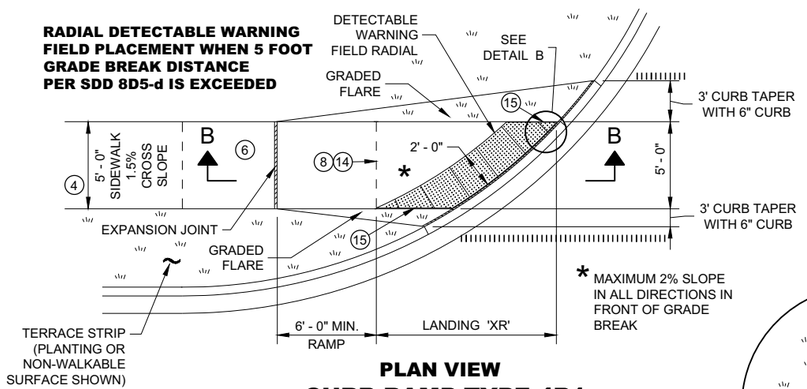



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

**SECTION A - A FOR TYPE 4A1**

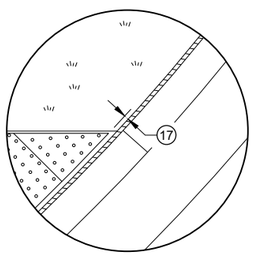
**RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED**



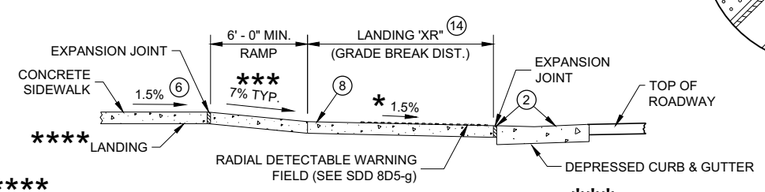

**PLAN VIEW**

## CURB RAMP TYPE 4B1

**(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**



**DETAIL B**




**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

**SECTION B - B FOR TYPE 4B1**

## LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF 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 FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

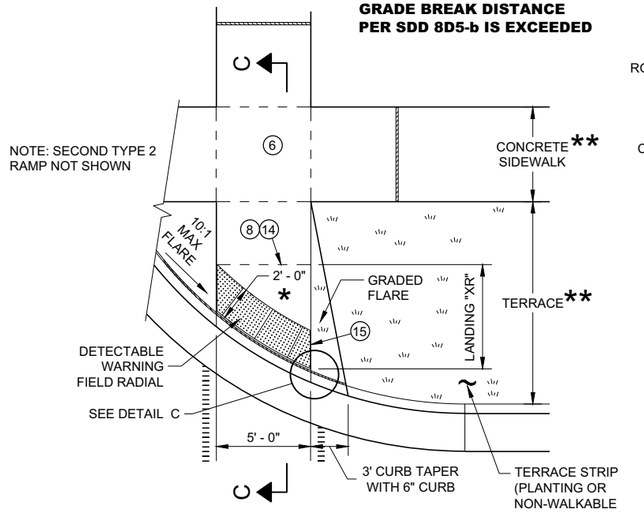
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(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 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

**RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED**

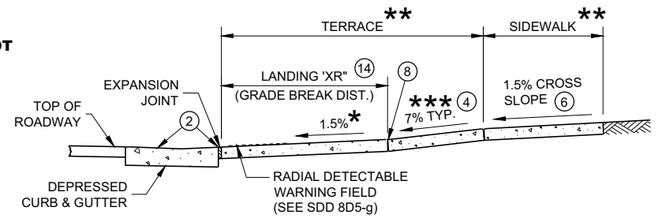



**PLAN VIEW**

## CURB RAMP TYPE 2

**(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**

**(ON LINE WITH SIDEWALK)**

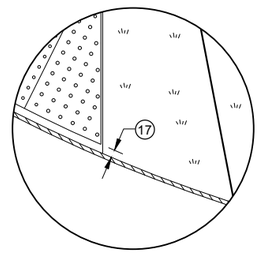



**SECTION C - C FOR TYPE 2**

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



**DETAIL C**

**CURB RAMPS**
**RADIAL DETECTABLE WARNING FIELD APPLICATIONS**

STATE OF WISCONSIN
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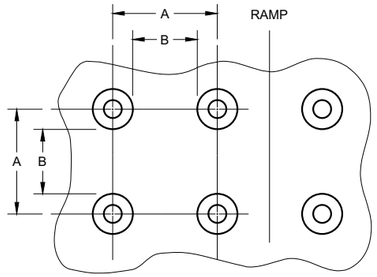
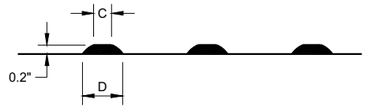
| | MIN. | MAX. |
|---|---|---|
| A | 1.6" | 2.4" |
| B | 0.65" | 1.5" |
| C | * | * |
| D | 0.9" | 1.4" |

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

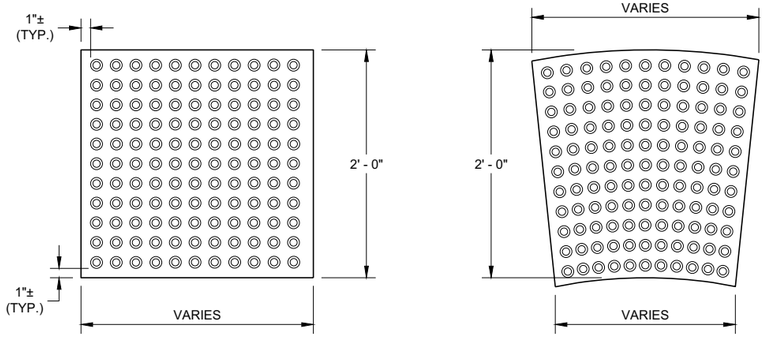



**PLAN VIEW**




**ELEVATION VIEW**

## TRUNCATED DOMES
### DETECTABLE WARNING PATTERN DETAIL




**RECTANGULAR PLATES**

**RADIAL PLATES**

**PLAN VIEW**
**DETECTABLE WARNING FIELDS (TYPICAL)**

## 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.

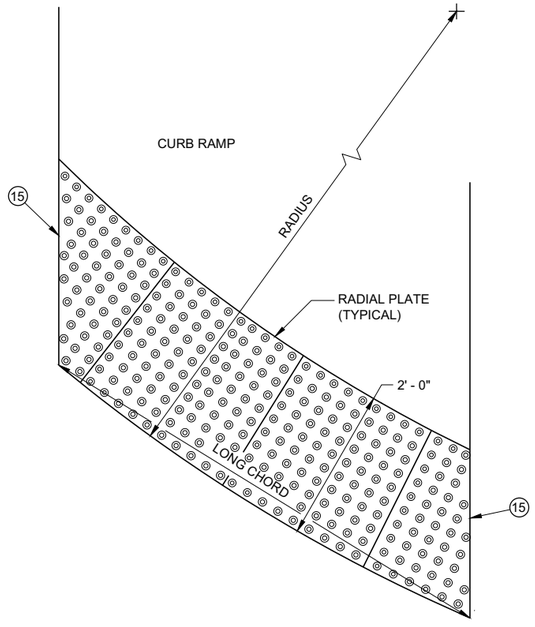
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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.

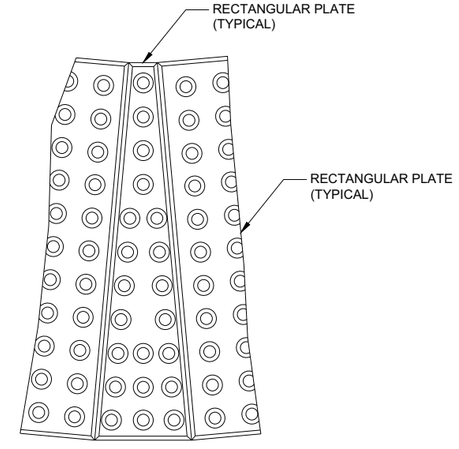
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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.




**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

APPROVED
May 2019
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

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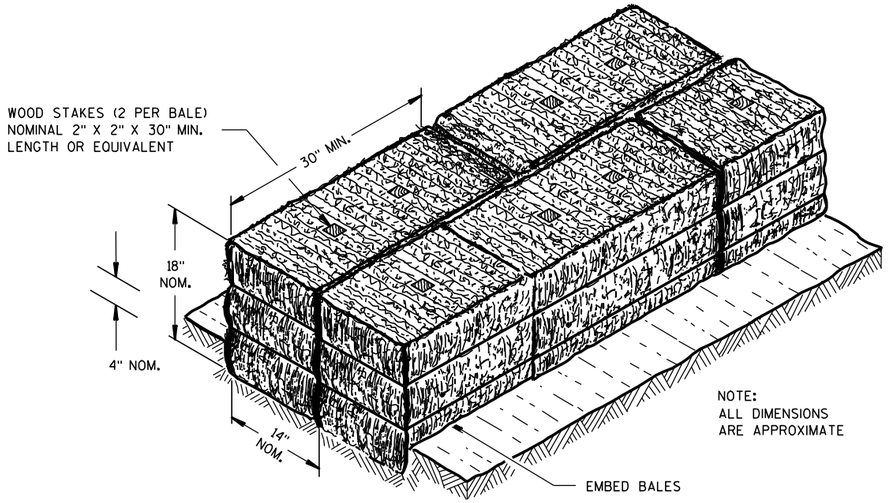
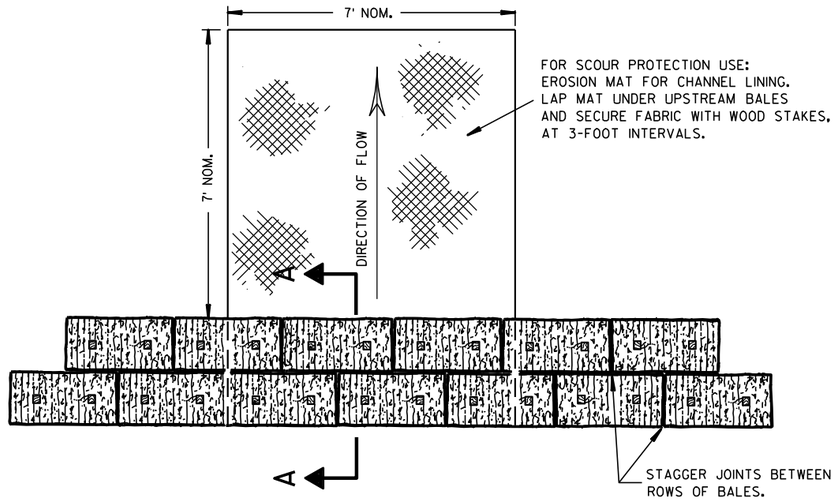
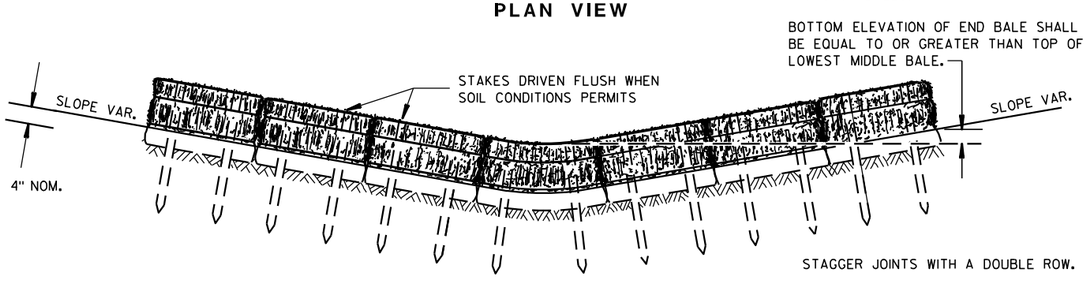
SDD 08D05 - 20g




SECTION A-A




PLAN VIEW



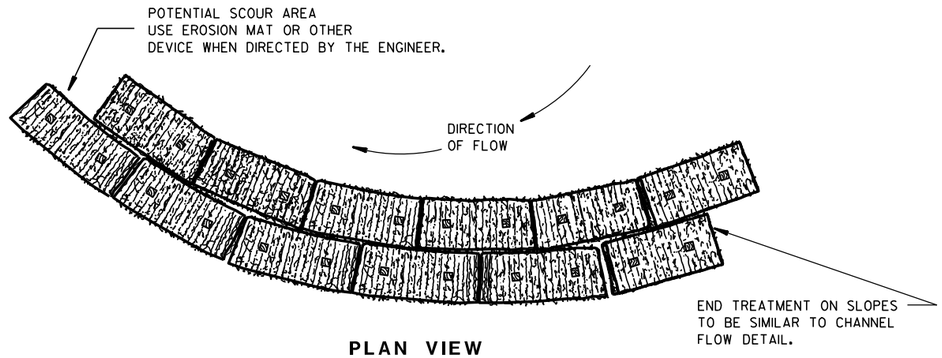

FRONT ELEVATION

## TEMPORARY DITCH CHECK USING EROSION BALES (1)

## GENERAL NOTES

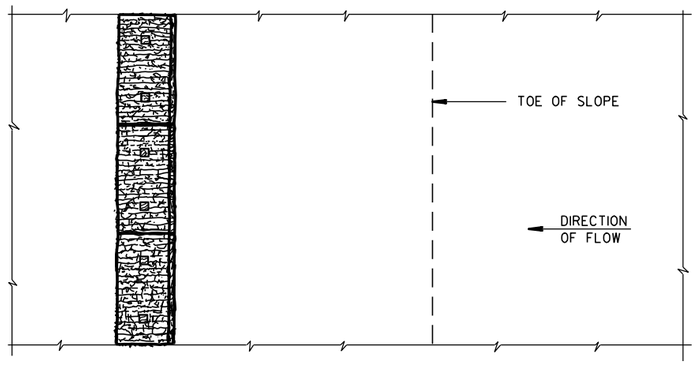
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

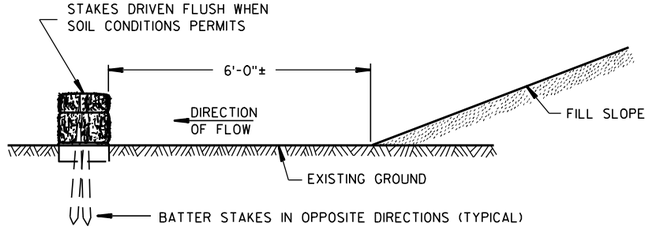



PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW




PLAN VIEW




FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

## EROSION BALES FOR SHEET FLOW

**TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 DATE — /S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA



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S.D.D. 8 E 8-3

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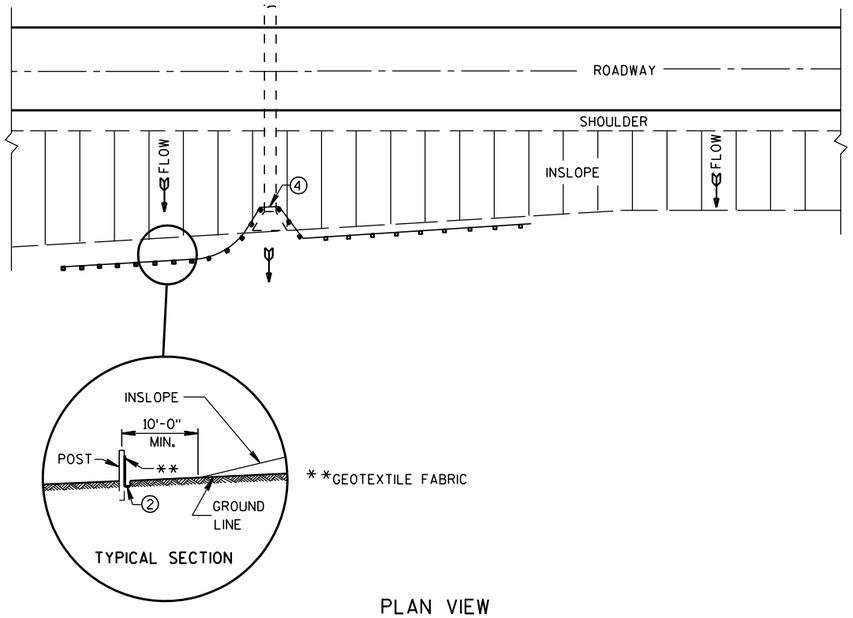
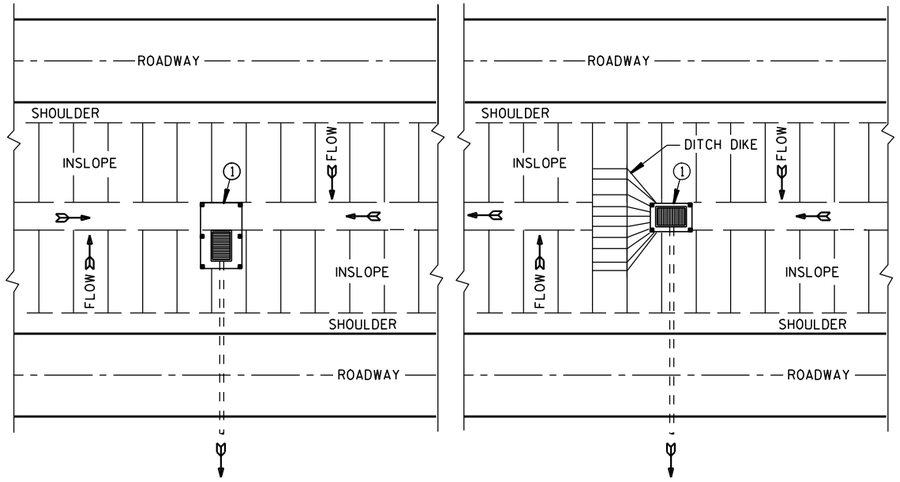
S.D.D. 8 E 8-3




PLAN VIEW

## TYPICAL APPLICATION OF SILT FENCE



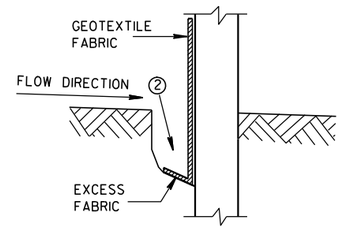

PLAN VIEW

## SILT FENCE AT MEDIAN SURFACE DRAINS

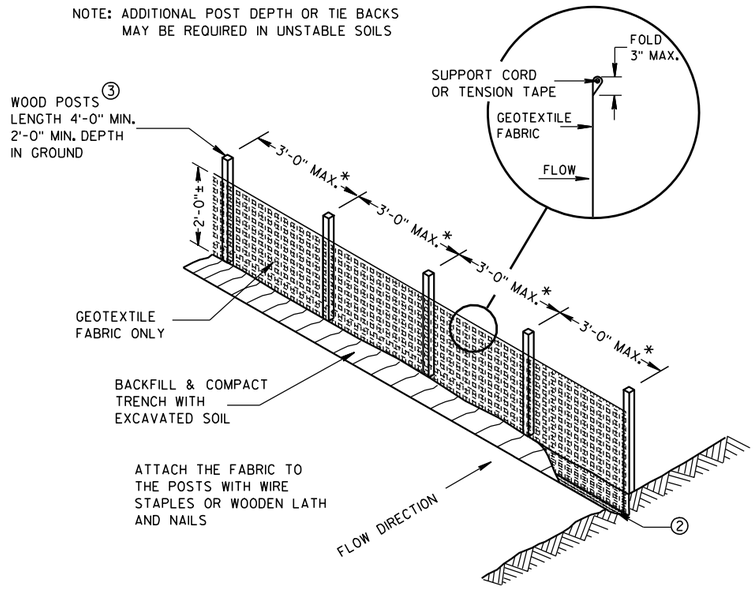
## GENERAL NOTES

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.

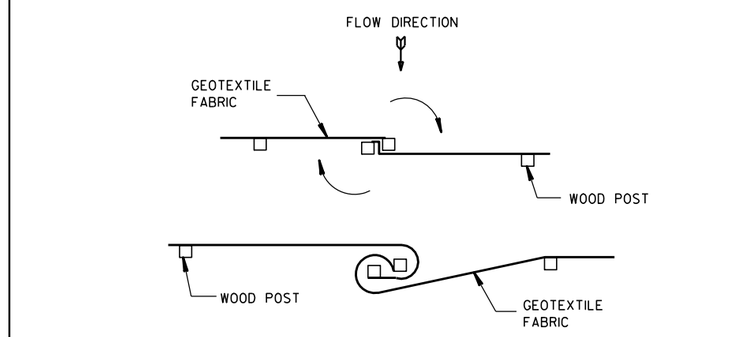



## TRENCH DETAIL

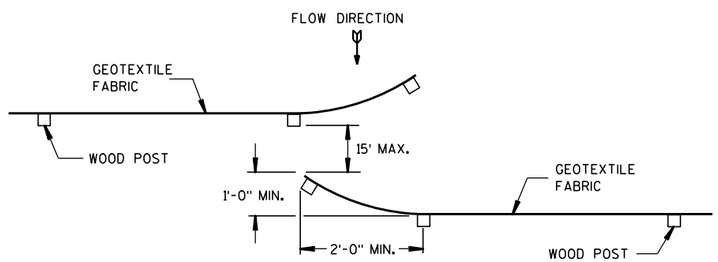



*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

## SILT FENCE

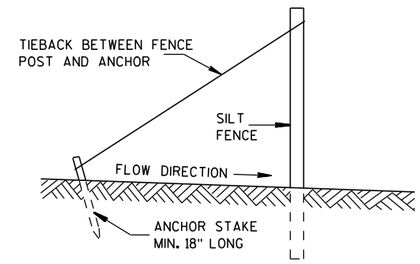



TWIST METHOD




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

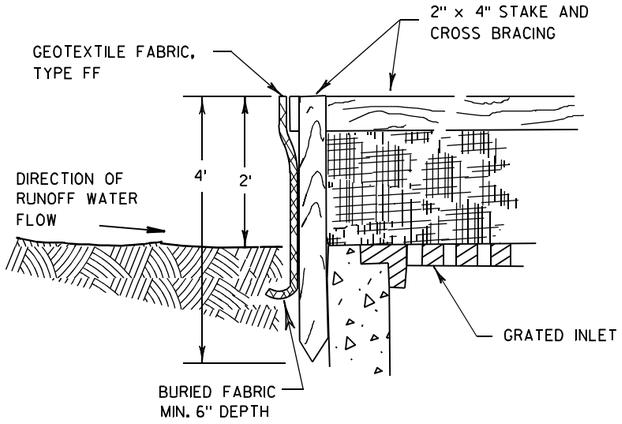


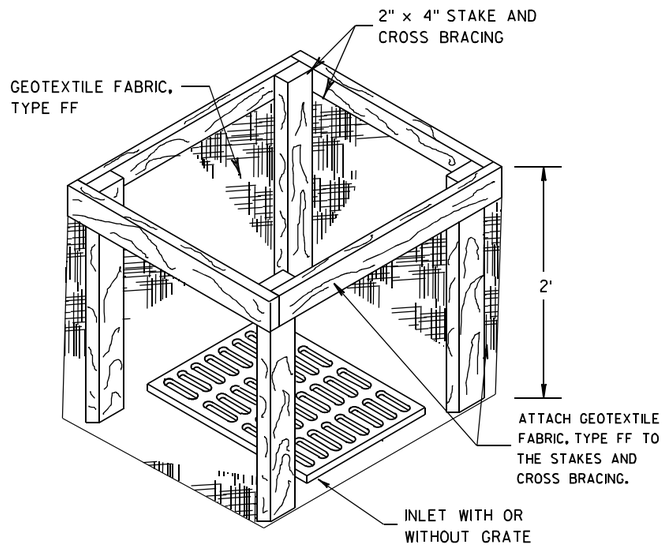
6

S.D.D. 8 E 9-6

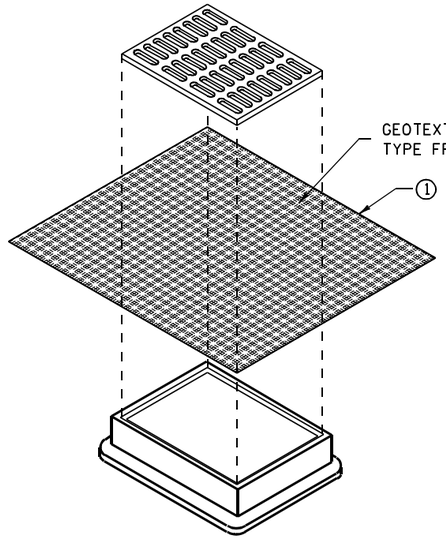
6

S.D.D. 8 E 9-6



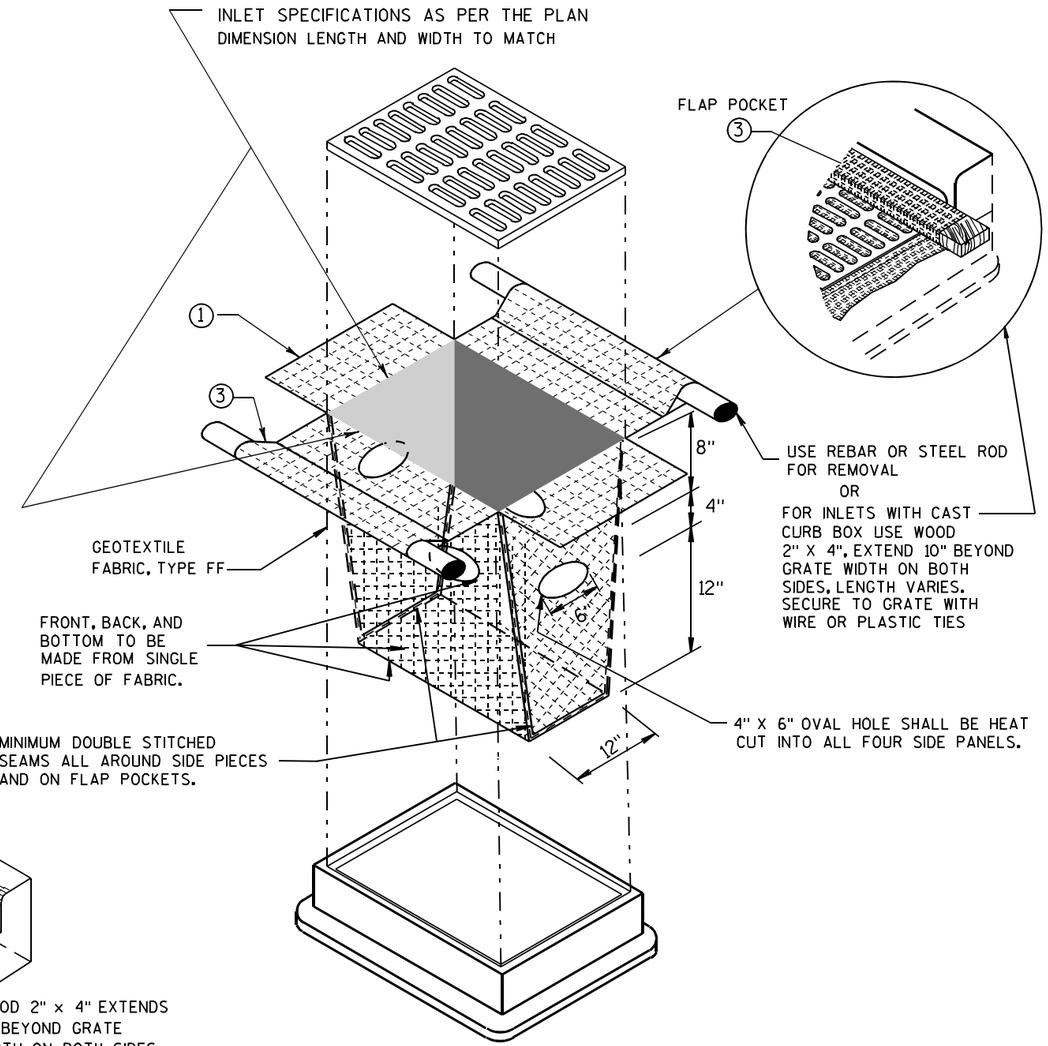




## INLET PROTECTION, TYPE A



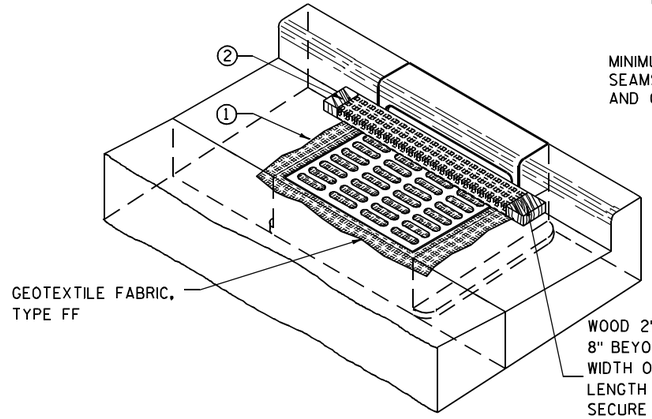

## INLET PROTECTION, TYPE B
## (WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)




## INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ② )




## INLET PROTECTION, TYPE C (WITH CURB BOX)

## 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.

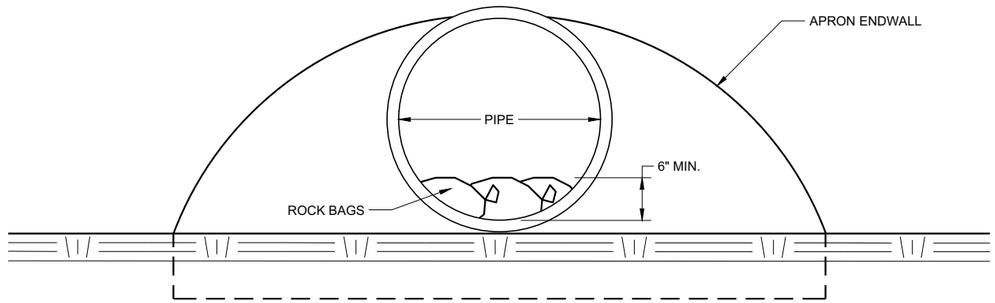
**INLET PROTECTION**
**TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

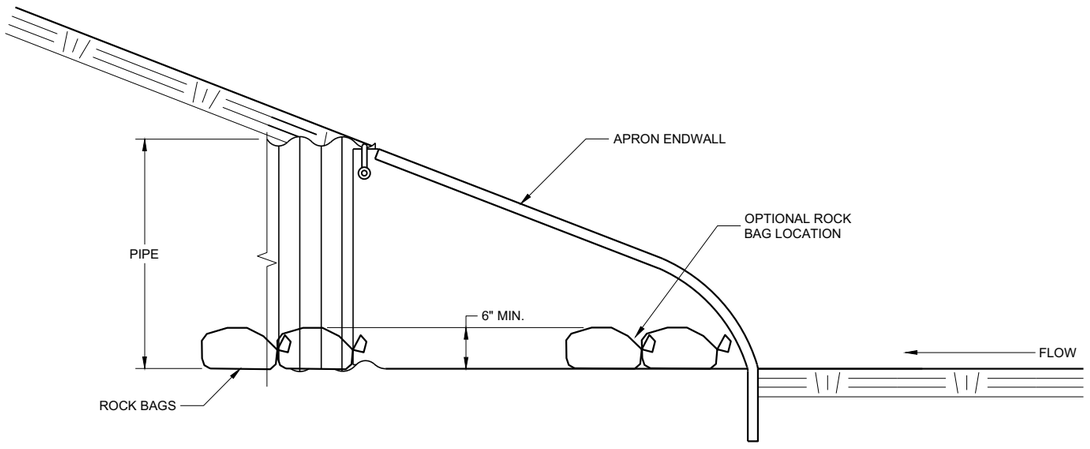
APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA




6
S.D.D. 8 E 10-2




**END VIEW**




**SIDE VIEW**

## CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

**CULVERT PIPE CHECK**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA



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SDD 08E15 - 01

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SDD 08E15 - 01

## METAL APRON ENDWALLS

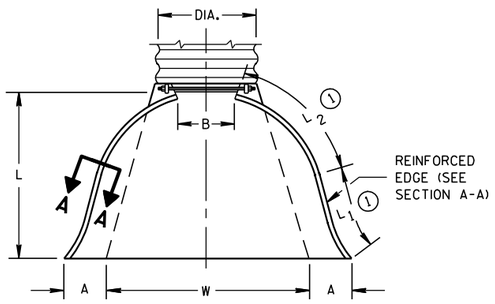
| PIPE DIA. (IN.) | MIN. THICK. (Inches) STEEL | MIN. THICK. (Inches) ALUM. | DIMENSIONS (Inches) A (±1") | B (MAX.) | H (±1") | L (±1 1/2") | L1 ① | L2 ① | W (±2") | APPROX. SLOPE | BODY |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | .064 | .060 | 6 | 6 | 6 | 21 | 12 | 17 1/2 | 24 | 2 1/2 to 1 | 1 Pc. |
| 15 | .064 | .060 | 7 | 8 | 6 | 26 | 14 | 21 3/4 | 30 | 2 1/2 to 1 | 1 Pc. |
| 18 | .064 | .060 | 8 | 10 | 6 | 31 | 15 | 28 1/4 | 36 | 2 1/2 to 1 | 1 Pc. |
| 21 | .064 | .060 | 9 | 12 | 6 | 36 | 18 | 29 5/8 | 42 | 2 1/2 to 1 | 1 Pc. |
| 24 | .064 | .075 | 10 | 13 | 6 | 41 | 18 | 37 1/4 | 48 | 2 1/2 to 1 | 1 Pc. |
| 30 | .079 | .075 | 12 | 16 | 8 | 51 | 18 | 52 1/4 | 60 | 2 1/2 to 1 | 1 Pc. |
| 36 | .079 | .105 | 14 | 19 | 9 | 60 | 24 | 59 3/4 | 72 | 2 1/2 to 1 | 2 Pc. |
| 42 | .109 | .105 | 16 | 22 | 11 | 69 | 24 | 75 5/8 | 84 | 2 1/2 to 1 | 2 Pc. |
| 48 | .109 | .105 | 18 | 27 | 12 | 78 | 24 | 81 | 90 | 2 1/4 to 1 | 3 Pc. |
| 54 | .109 | .105 | 18 | 30 | 12 | 84 | 30 | 85 1/2 | 102 | 2 1/4 to 1 | 3 Pc. |
| 60 | .109× | .105× | 18 | 33 | 12 | 87 | — | — | 114 | 2 to 1 | 3 Pc. |
| 66 | .109× | .105× | 18 | 36 | 12 | 87 | — | — | 120 | 2 to 1 | 3 Pc. |
| 72 | .109× | .105× | 18 | 39 | 12 | 87 | — | — | 126 | 2 to 1 | 3 Pc. |
| 78 | .109× | .105× | 18 | 42 | 12 | 87 | — | — | 132 | 1 1/2 to 1 | 3 Pc. |
| 84 | .109× | .105× | 18 | 45 | 12 | 87 | — | — | 138 | 1 1/2 to 1 | 3 Pc. |
| 90 | .109× | .105× | 18 | 37 | 12 | 87 | — | — | 144 | 1 1/2 to 1 | 3 Pc. |
| 96 | .109× | .105× | 18 | 35 | 12 | 87 | — | — | 150 | 1 1/2 to 1 | 3 Pc. |

× EXCEPT CENTER PANEL SEE GENERAL NOTES

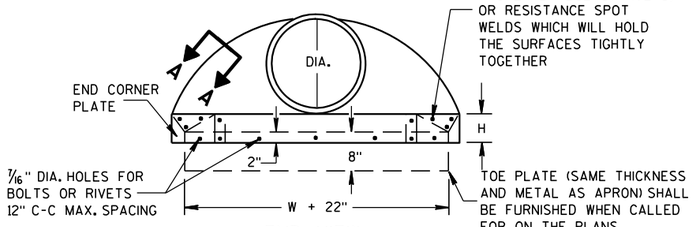
## REINFORCED CONCRETE APRON ENDWALLS

| PIPE DIA. (IN.) | DIMENSIONS (Inches) T | A | B | C | D | E | G | APPROX. SLOPE |
|---|---|---|---|---|---|---|---|---|
| 12 | 2 | 4 | 24 | 48 7/8 | 72 1/8 | 24 | 2 | 3 to 1 |
| 15 | 2 1/4 | 6 | 27 | 46 | 73 | 30 | 2 1/4 | 3 to 1 |
| 18 | 2 1/2 | 9 | 27 | 46 | 73 | 36 | 2 1/2 | 3 to 1 |
| 21 | 2 3/4 | 9 | 36 | 37 1/2 | 73 1/2 | 42 | 2 3/4 | 3 to 1 |
| 24 | 3 | 9 1/2 | 43 1/2 | 30 | 73 1/2 | 48 | 3 | 3 to 1 |
| 27 | 3 1/4 | 10 1/2 | 49 1/2 | 24 | 73 1/2 | 54 | 3 1/4 | 3 to 1 |
| 30 | 3 1/2 | 12 | 54 | 19 3/4 | 73 1/2 | 60 | 3 1/2 | 3 to 1 |
| 36 | 4 | 15 | 63 | 34 3/4 | 97 3/4 | 72 | 4 | 3 to 1 |
| 42 | 4 1/2 | 21 | 63 | 35 | 98 | 78 | 4 1/2 | 3 to 1 |
| 48 | 5 | 24 | 72 | 26 | 98 | 84 | 5 | 3 to 1 |
| 54 | 5 1/2 | 27 | 65 | * 33 1/4 - ** 35 | * 98 1/4 - ** 100 | 90 | 5 1/2 | 2 2/5 to 1 |
| 60 | 6 | * 30 - ** 35 | 60 | 39 | 99 | 96 | 5 | 2 to 1 |
| 66 | 6 1/2 | * 24 - ** 30 | * 72 - ** 78 | * 21 - ** 27 | 99 | 102 | 5 1/2 | 2 to 1 |
| 72 | 7 | * 24 - ** 36 | 78 | 21 | 99 | 108 | 6 | 2 to 1 |
| 78 | 7 1/2 | * 24 - ** 36 | 78 | 21 | 99 | 114 | 6 1/2 | 2 to 1 |
| 84 | 8 | 36 | 90 1/2 | 21 | 111 1/2 | 120 | 6 1/2 | 1 1/2 to 1 |
| 90 | 8 1/2 | 41 | 87 1/2 | 24 | 111 1/2 | 132 | 6 1/2 | 1 1/2 to 1 |

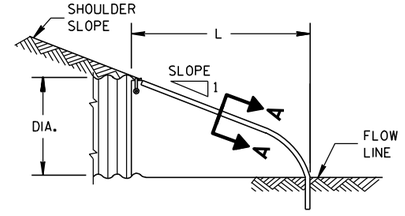
*MINIMUM
**MAXIMUM




PLAN VIEW

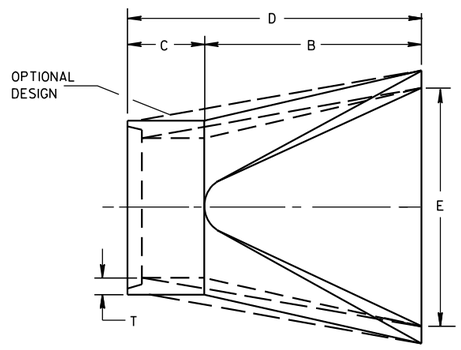



END VIEW

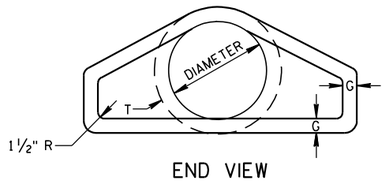



SIDE ELEVATION

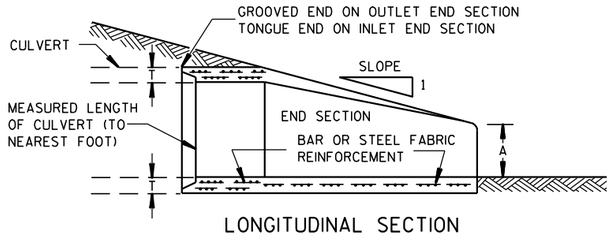
## METAL ENDWALLS




PLAN

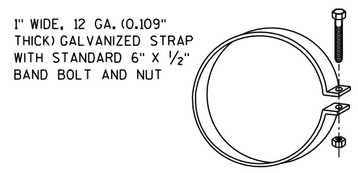



END VIEW



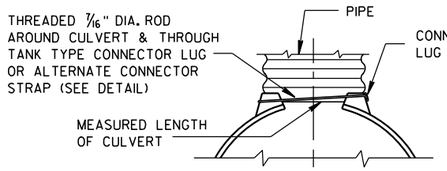

LONGITUDINAL SECTION

## CONCRETE ENDWALLS

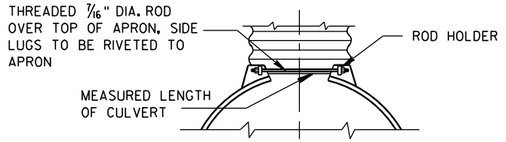



ALTERNATE FOR TYPE 1 CONNECTION

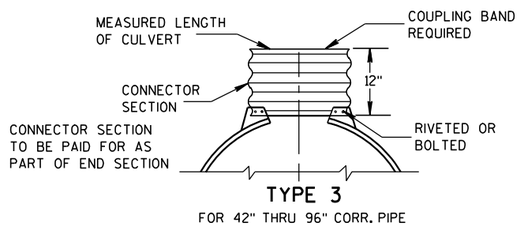
## END SECTION CONNECTOR STRAP



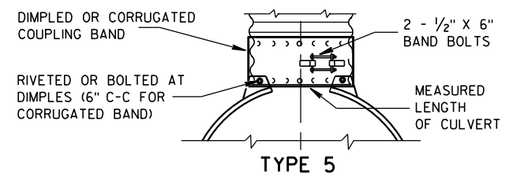

TYPE 1
FOR 12" THRU 24" CORR. PIPE




TYPE 2
FOR 30" THRU 96" CORR. PIPE




TYPE 3
FOR 42" THRU 96" CORR. PIPE




TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

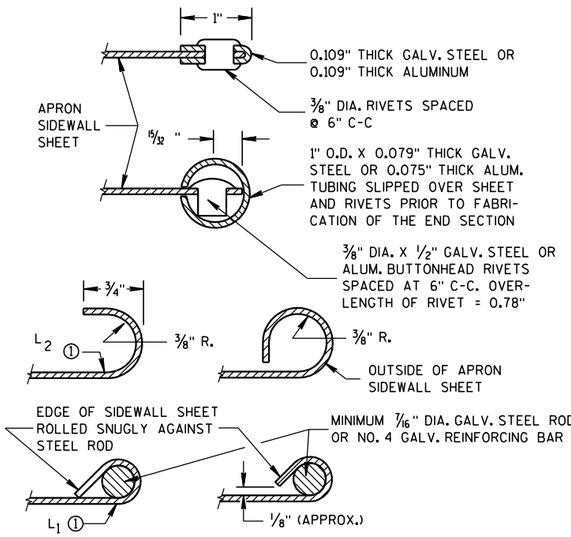
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

## CONNECTION DETAILS




## SECTION A-A

## 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.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

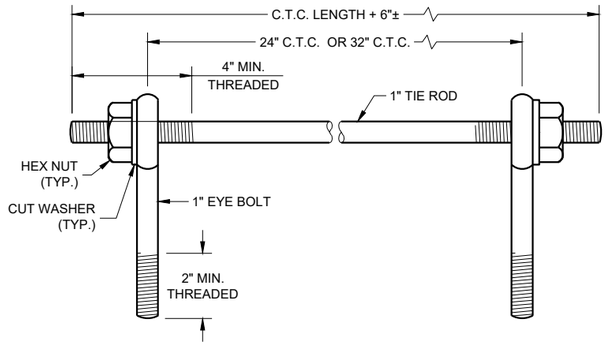
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

# APRON ENDWALLS FOR CULVERT PIPE

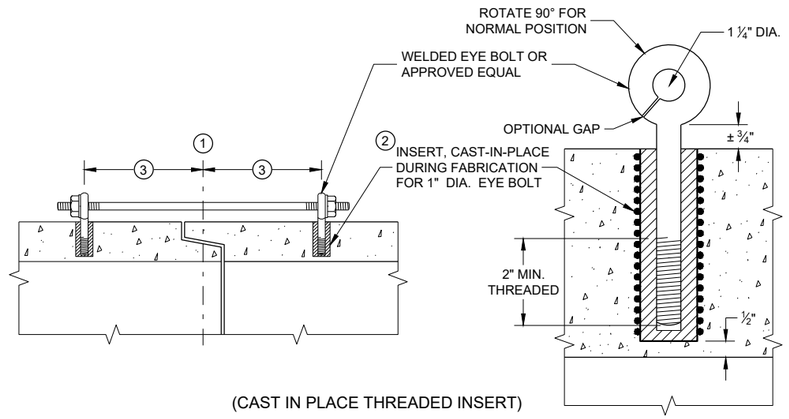
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOP 125 NEER
FHWA


6
S.D.D. 8 F 1-11




**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.

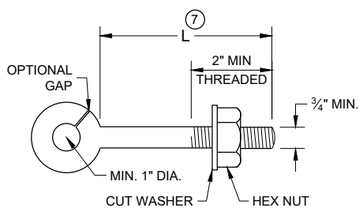
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

(4) BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

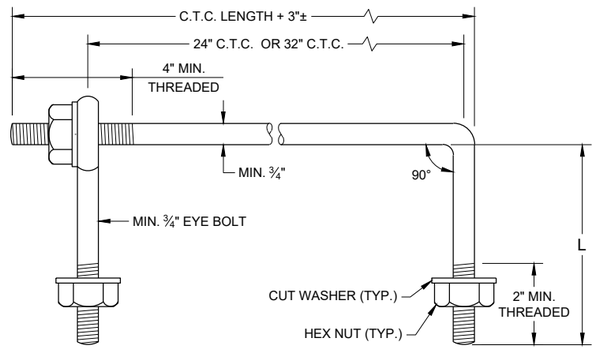
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

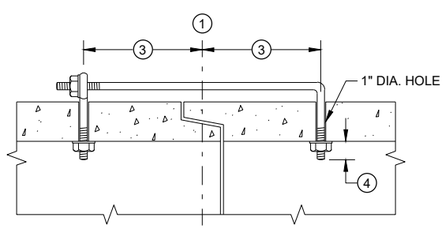



**EYE BOLT** (7)

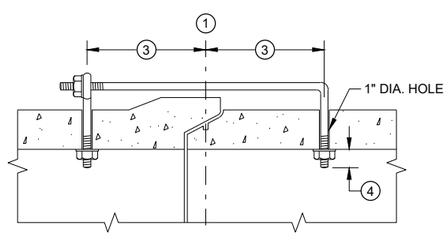
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.




**EYE BOLT AND TIE ROD**




(TONGUE AND GROOVE PIPE)




(MODIFIED BELL PIPE)

**LONGITUDINAL SECTION**

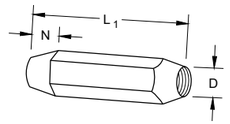
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

## 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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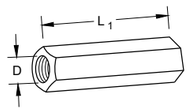
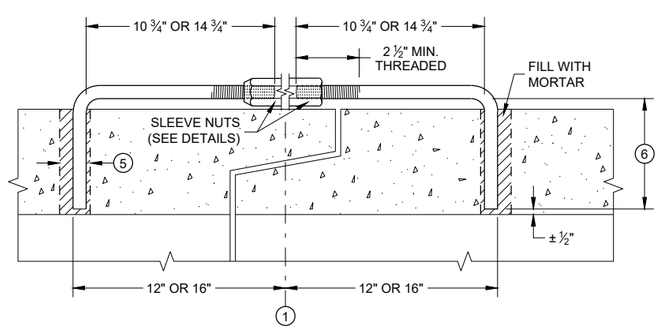



PLAIN

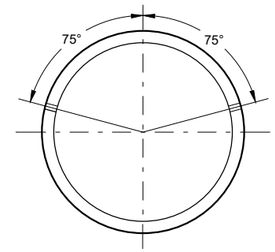
RIGHT AND LEFT THREADS

**SLEEVE NUTS**



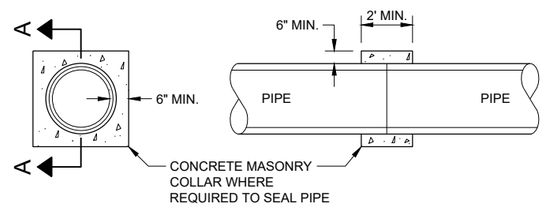

**LONGITUDINAL SECTION**

## 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**

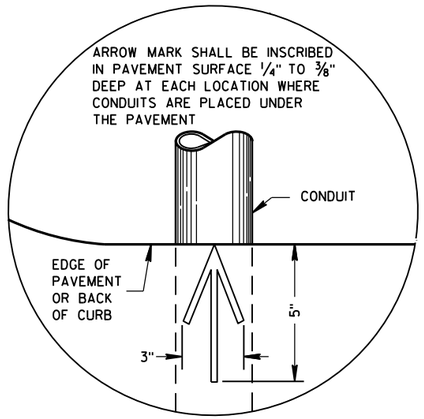
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA



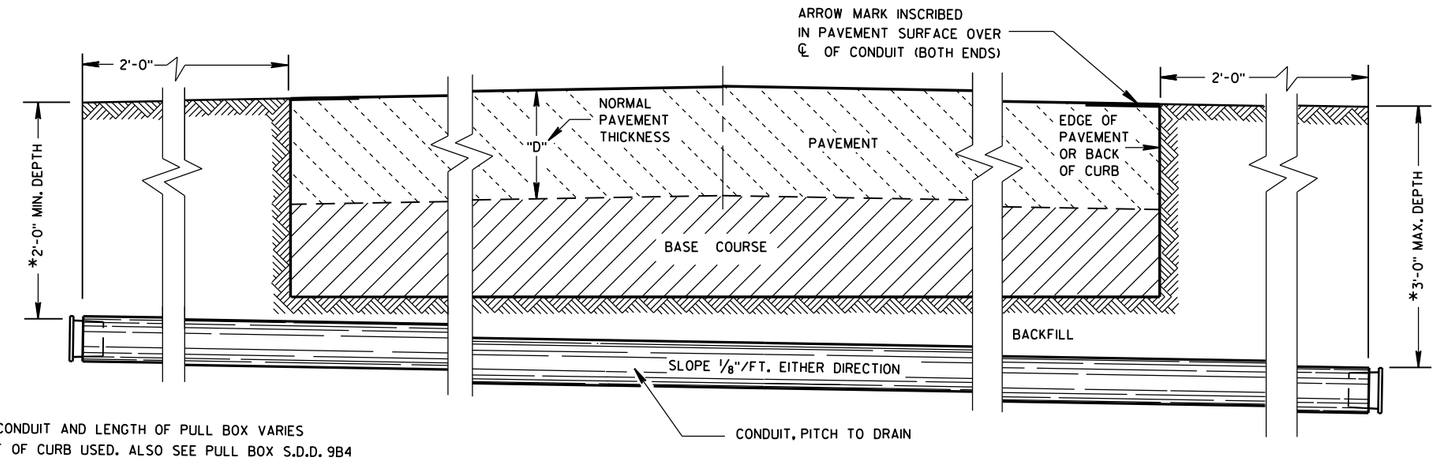
SDD 08F04 - 08

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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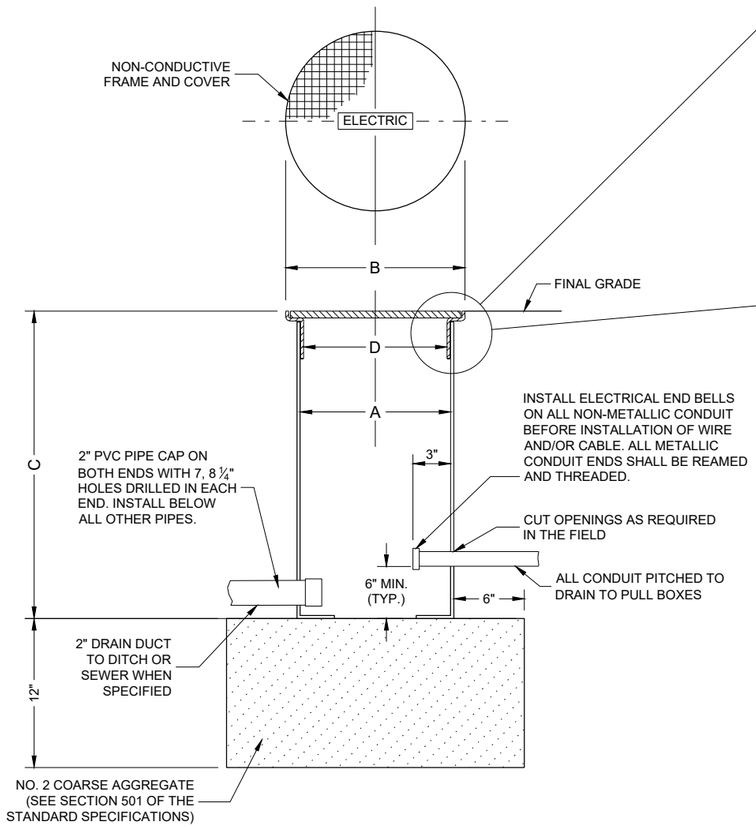
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

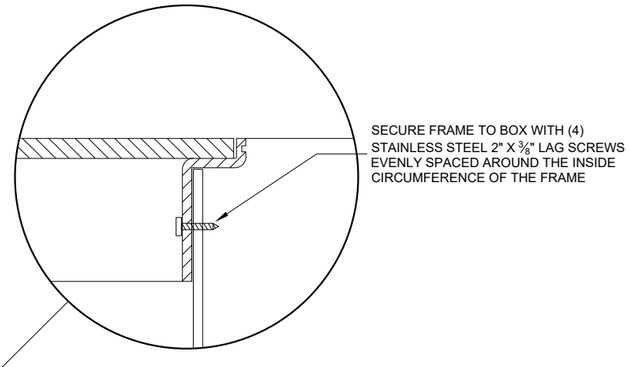
| DIMENSION IN INCHES | | NON- CONDUCTIVE PULL BOX | |
|---|---|---|---|
| BOX DIAMETER ** (INSIDE) | A | 24 | 24 |
| BOX OVERALL OUTSIDE DIAMETER | B | 27 | 27 |
| BOX LENGTH | C | 36 | 42 |
| FRAME OPENING | D | 22 ½ | 22 ½ |
| WEIGHT IN POUNDS * | | | |
| COVER | | 50 | 50 |
| BOX ONLY | | 75 | 85 |

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

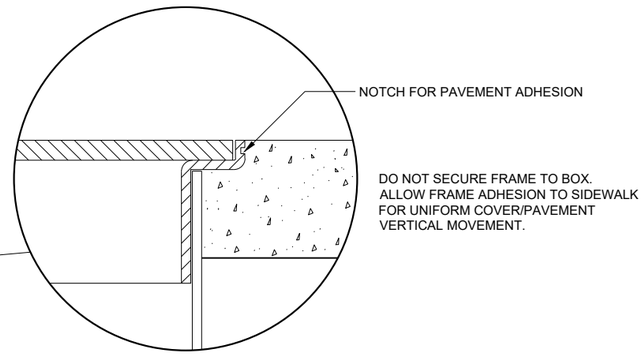
** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE.



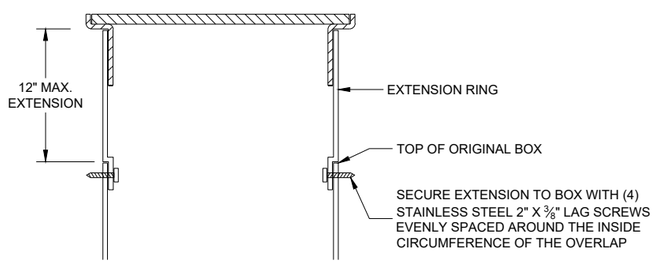

**NON-CONDUCTIVE PULL BOX**




**INSTALLED IN SOD OR CRUSHED AGGREGATE**




**INSTALLED IN SIDEWALK**




**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".

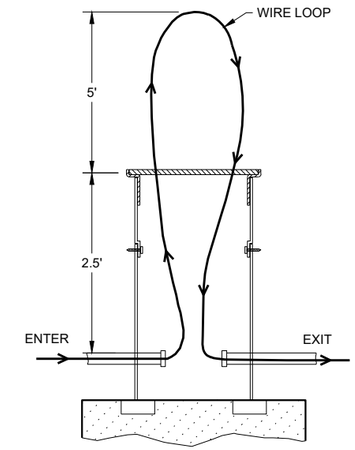
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

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
May 2022
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA





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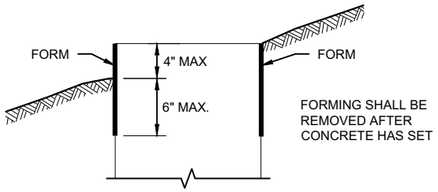
SDD 09B16 - 02

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.

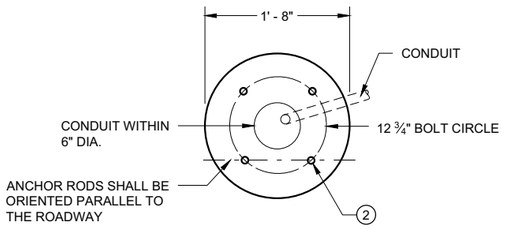
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

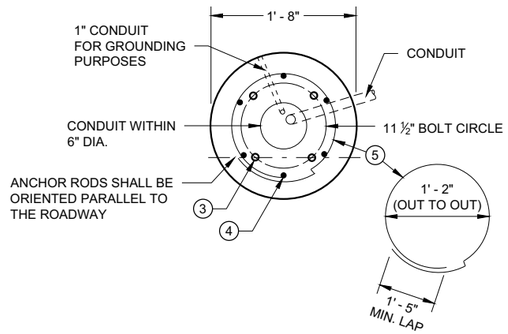
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

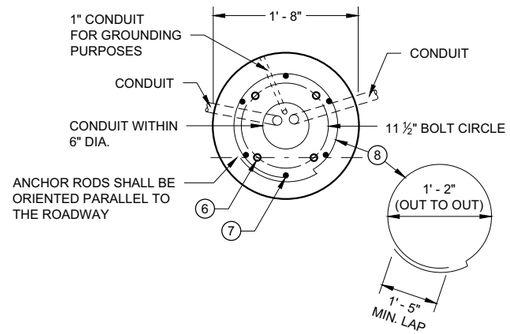
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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

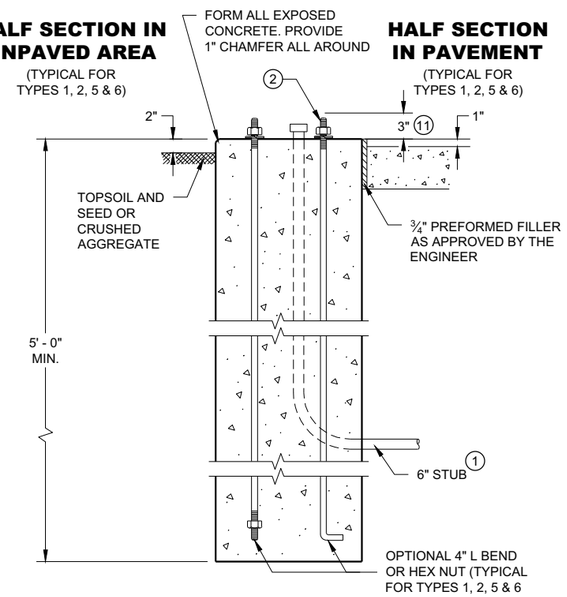
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

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.

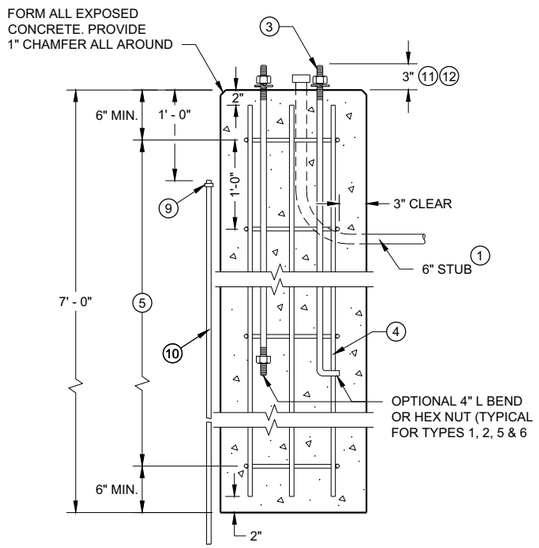
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

**HALF SECTION IN UNPAVED AREA**
(TYPICAL FOR TYPES 1, 2, 5 & 6)

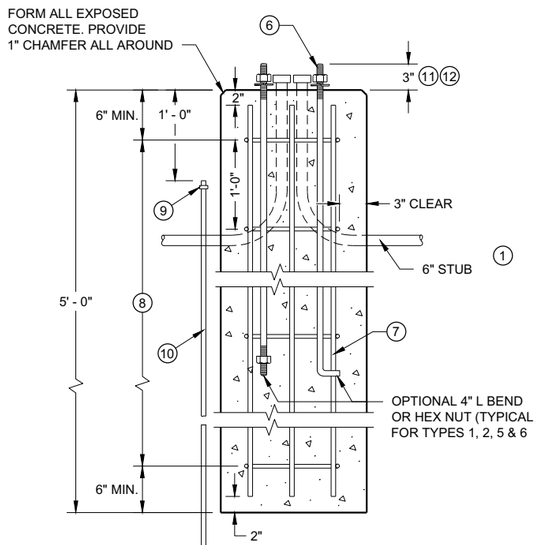
**HALF SECTION IN PAVEMENT**
(TYPICAL FOR TYPES 1, 2, 5 & 6)




TYPE 1




TYPE 2




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.

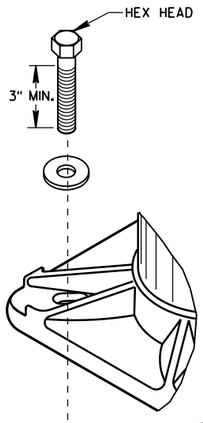
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

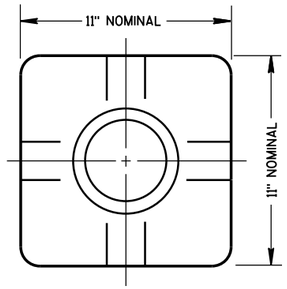
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

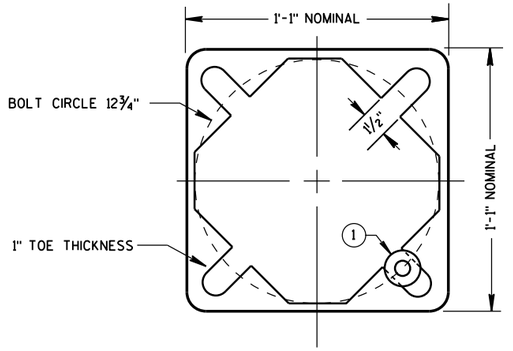
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

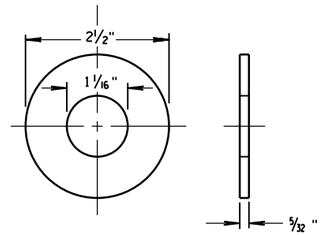



TOP VIEW
(PEDESTAL BASE)

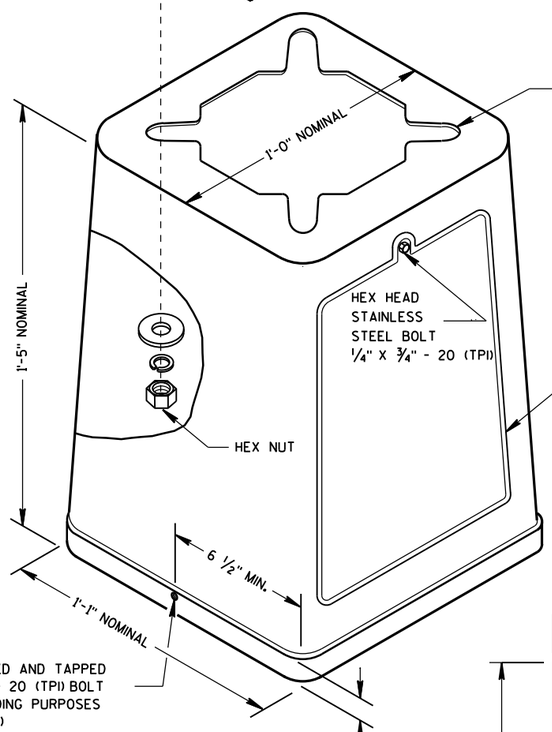



BOTTOM VIEW
(PEDESTAL BASE)

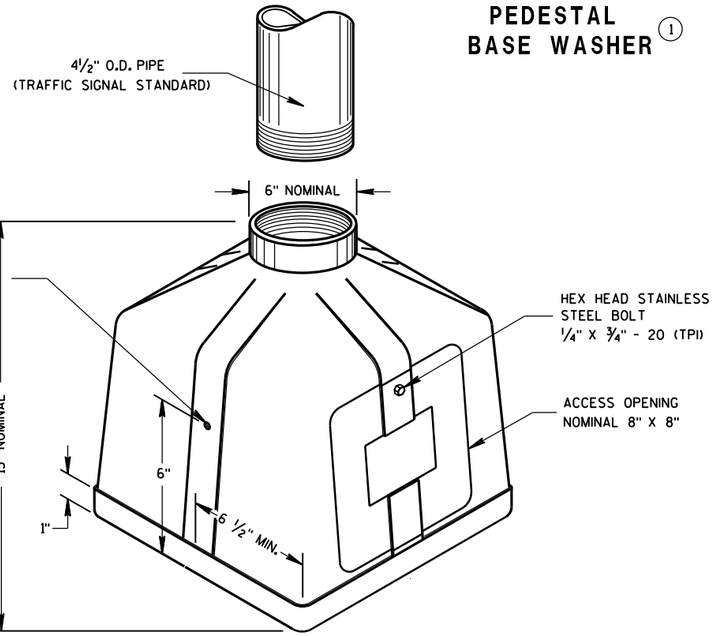



ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

**PEDESTAL BASE WASHER** (1)

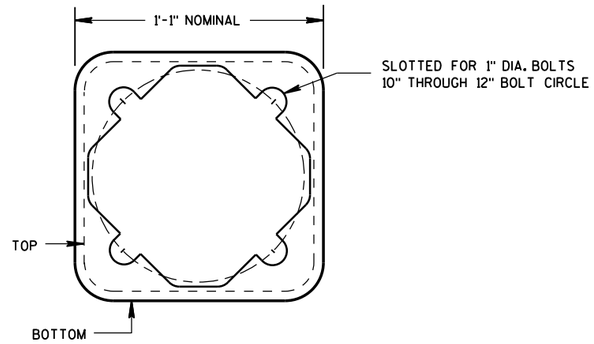



ISOMETRIC VIEW

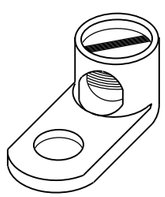



ISOMETRIC VIEW

**PEDESTAL BASE**




BOTTOM VIEW
(TRANSFORMER BASE)

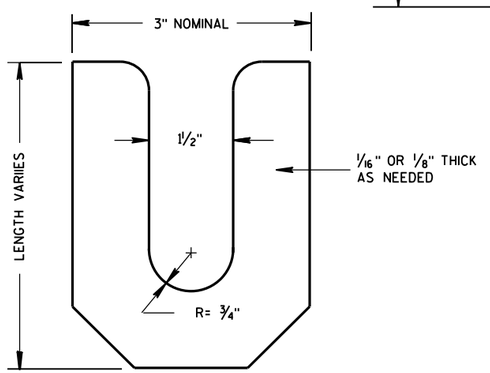


**TYPICAL MECHANICAL CONNECTOR LUG**

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

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES (SHAFT), BELOW THE WING, SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, 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.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

CONDUIT SIZE AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4 ½ INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC 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 NONMETALLIC 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 NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTOR 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.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVEL 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 THE WRITTEN APPROVAL OF THE ENGINEER.

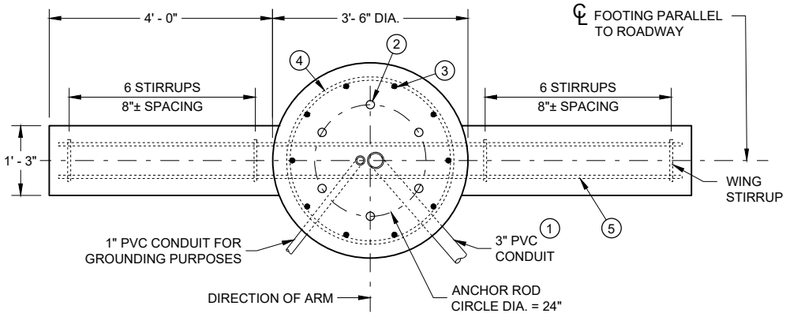
(2) (6) 1 ¾" DIA. X 7' - 2" ANCHOR RODS

(3) (10) NO. 6 X 14' - 1" BAR STEEL VERTICAL REINFORCEMENT.

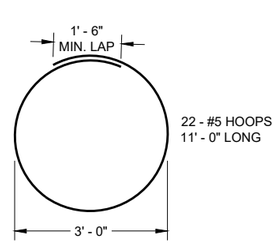
(4) (22) NO. 5 X 11'- 0" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

(5) (10) NO. 5 X 11' - 0" BAR STEEL HORIZONTAL REINFORCEMENT

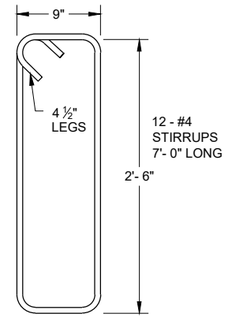
CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 ( IN ACCORDANCE .....fy = 55,000 p.s.i.
WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.



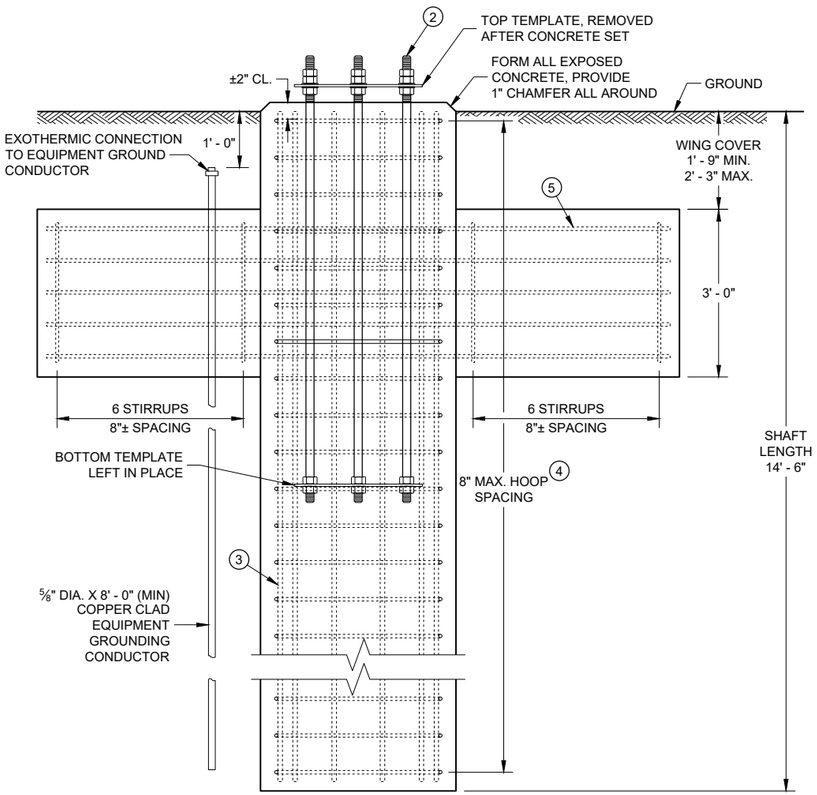

**PLAN VIEW**



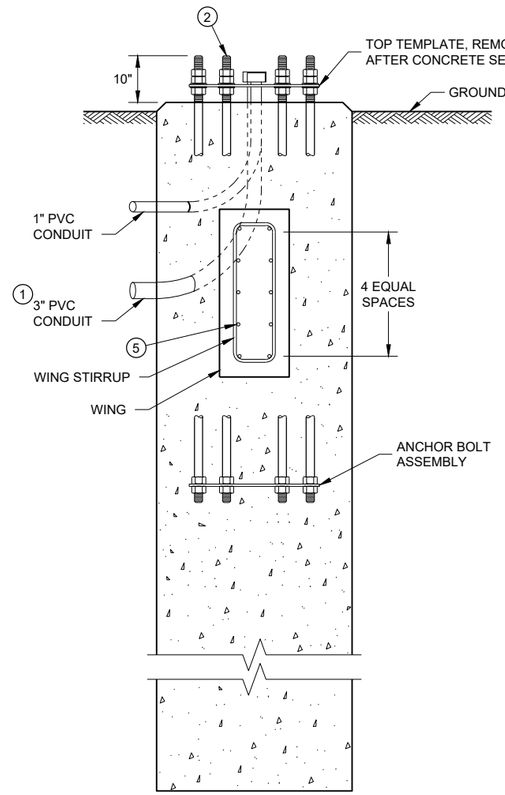

**HOOP DETAIL**




**WING STIRRUP DETAIL**




**ELEVATION VIEW**
(CONDUITS NOT SHOWN ON THIS VIEW FOR CLARITY)




(HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY)

## CONCRETE BASE, TYPE 13
### (FOR TYPE 12, TYPE 13 AND OVER HEIGHT (OH) POLES)

CONCRETE = 6.3 CUBIC YARD
H.S. REINFORCEMENT = 635 LBS.

TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE 9C13 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION

**CONCRETE BASE TYPE 13**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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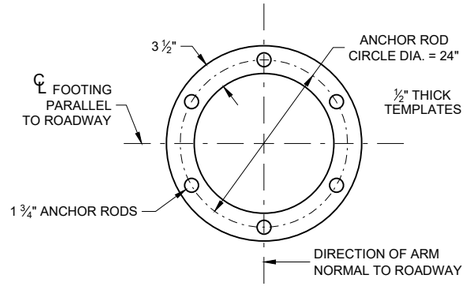
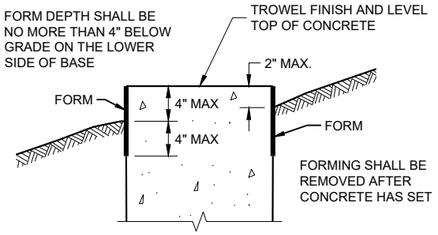
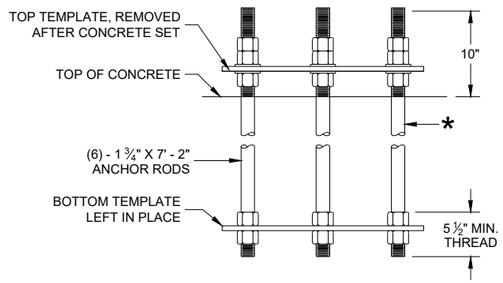
SDD 09C12 - 09a




**TOP AND BOTTOM TEMPLATE**




**FORMING DETAIL**




**ANCHOR ROD ASSEMBLY DETAILS**

* THREAD TOP 11" 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 13**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017
DATE
/S/ Ahmet Demirbilek
WIND LOADED STRUCTU
PROGRAM LEADER

FHWA



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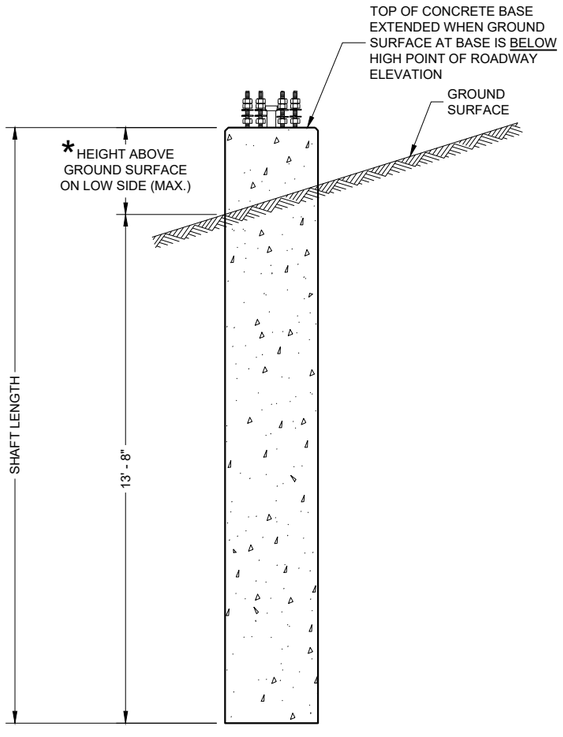
SDD 09C12 - 09b

## REINFORCEMENT AND CONCRETE QUANTITIES ADJUSTED FOR EXTENDED TYPE 10 CONCRETE BASE

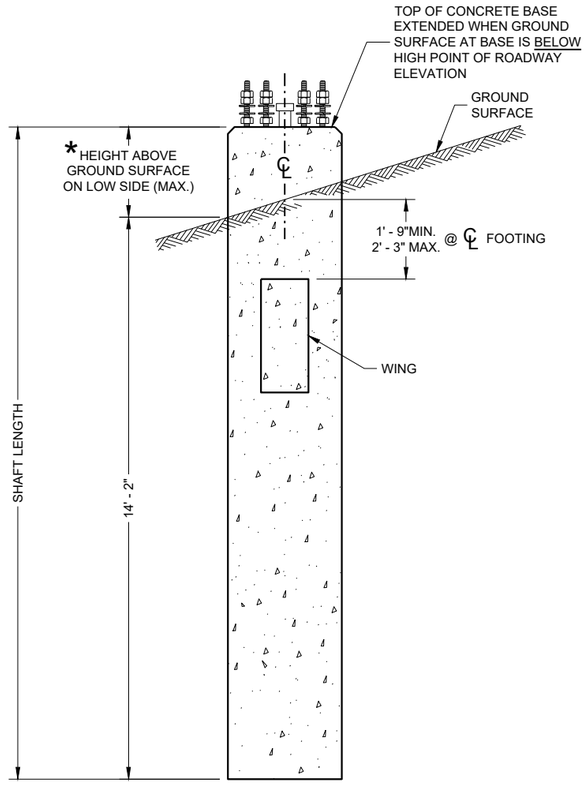
| HEIGHT INCREASE REQUIRED | *HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAX.) | SHAFT LENGTH | LENGTH OF #6 VERTICAL REINF. | NO. OF #4 HOOPS | CU. YD. OF CONCRETE | LBS. OF HOOP BAR STEEL | LBS. OF VERTICAL STEEL |
|---|---|---|---|---|---|---|---|
| >0" TO 6" | 10" | 14' - 6" | 14' - 1" | 16 | 2.6 | 78 | 127 |
| >6" TO 1' - 0" | 1' - 4" | 15' - 0" | 14' - 7" | 16 | 2.7 | 78 | 131 |
| >1' - 0" TO 1' - 6" | 1' - 10" | 15' - 6" | 15' - 1" | 17 | 2.8 | 83 | 136 |
| >1' - 6" TO 2 - 0" | 2' - 4" | 16' - 0" | 15' - 7" | 17 | 2.9 | 83 | 141 |




**CONCRETE BASE TYPE 10 (EXTENDED)**

## REINFORCEMENT AND CONCRETE QUANTITIES ADJUSTED FOR EXTENDED TYPE 13 CONCRETE BASE

| HEIGHT INCREASE REQUIRED | *HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAX.) | SHAFT LENGTH | LENGTH OF #6 VERTICAL REINF. | NO. OF #4 HOOPS | CU. YD. OF CONCRETE | LBS. OF H.S. BAR STEEL |
|---|---|---|---|---|---|---|
| >0" TO 6" | 10" | 15' - 0" | 14' - 7" | 16 | 6.5 | 447 |
| >6" TO 1' - 0" | 1' - 4" | 15' - 6" | 15' - 1" | 16 | 6.6 | 454 |
| >1' - 0" TO 1' - 6" | 1' - 10" | 16' - 0" | 15' - 7" | 17 | 6.8 | 469 |
| >1' - 6" TO 2 - 0" | 2' - 4" | 16' - 6" | 16' - 1" | 17 | 7.0 | 476 |




**CONCRETE BASE TYPE 13 (EXTENDED)**

**CONCRETE BASE TYPE 10 AND TYPE13 EXTENSION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/26/2013
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA



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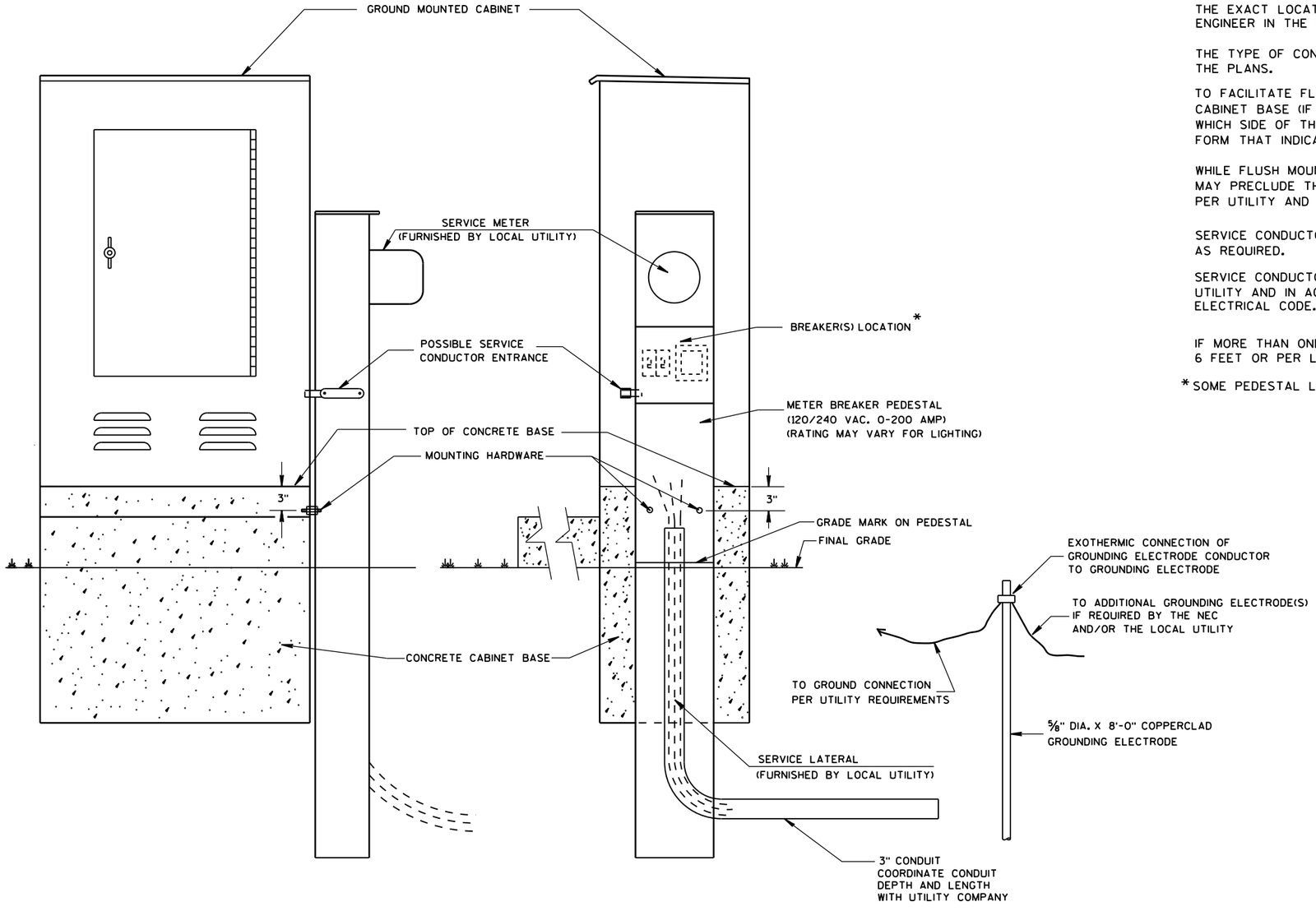


**TYPICAL CABINET SERVICE INSTALLATION**

## 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.

**CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA




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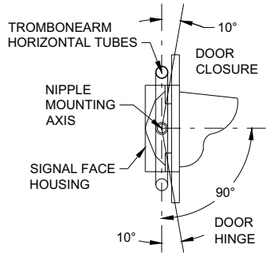
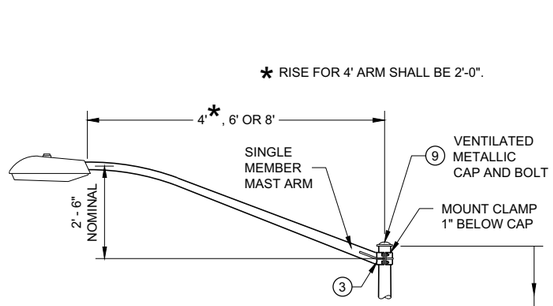
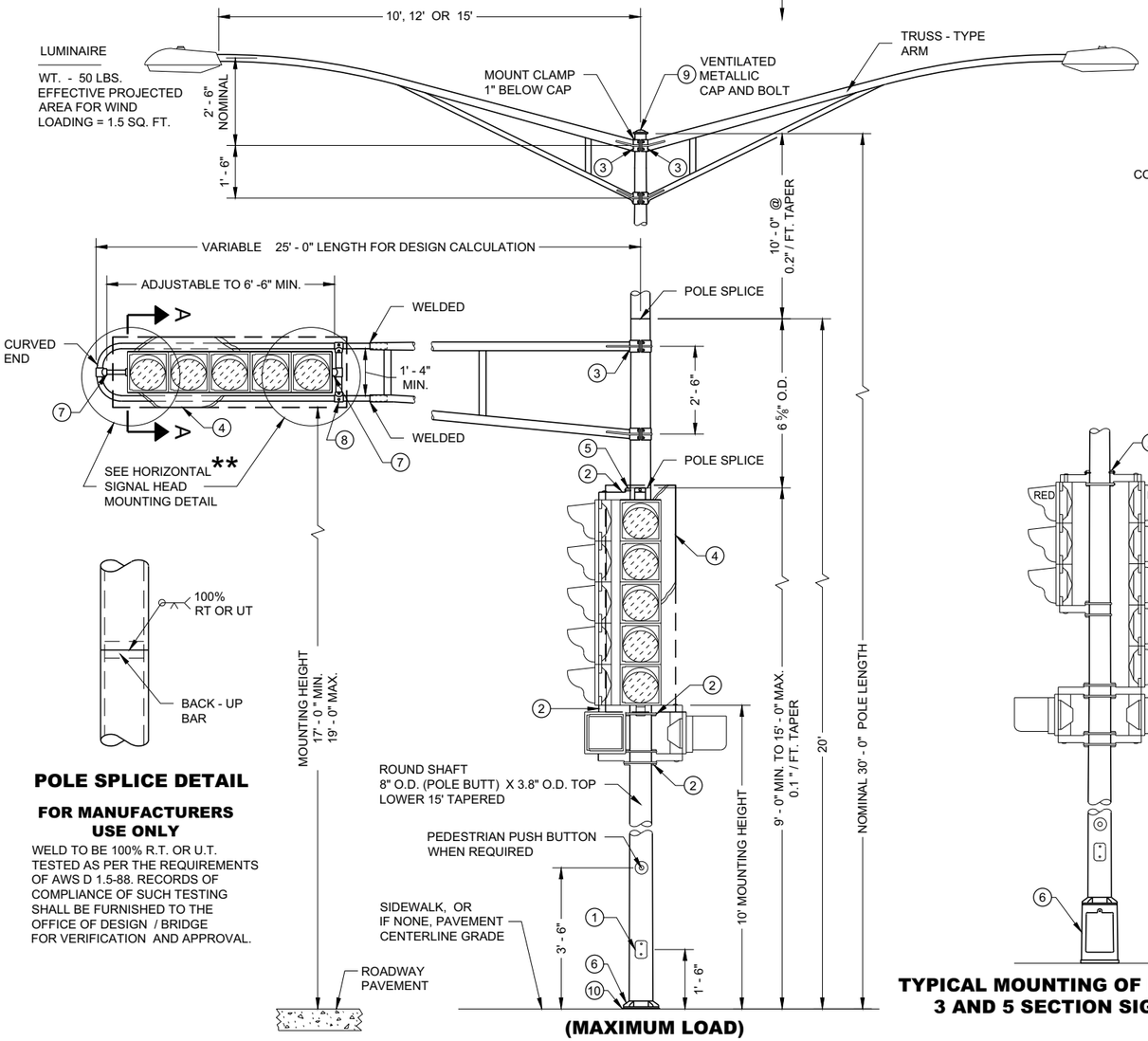
S.D.D. 9 D 1-5

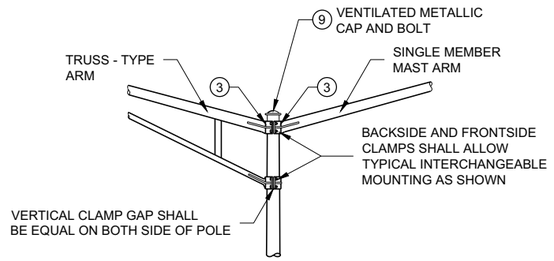



**SECTION A-A**

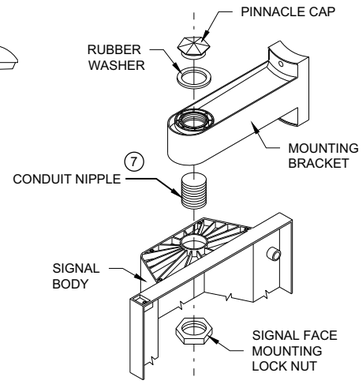



**(MAXIMUM LOAD)**



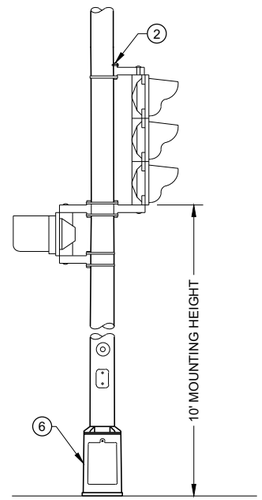

**INTERCHANGEABLE MOUNTING DETAIL**




**SIGNAL FACE MOUNTING DETAIL**
**(BANDED)**




**TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES**



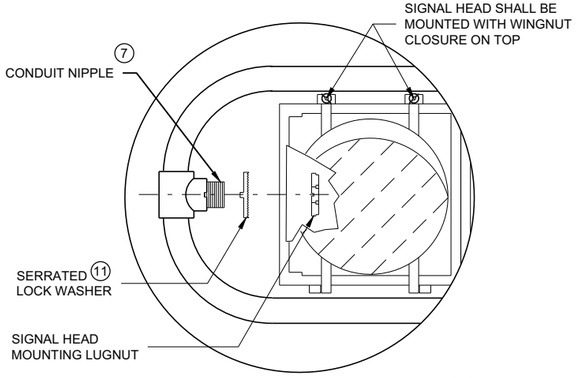

**TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE**




**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.




**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.

**TYPE 3 POLE MOUNTING CONFIGURATION**

**POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS TYPE 3 (HEAVY DUTY)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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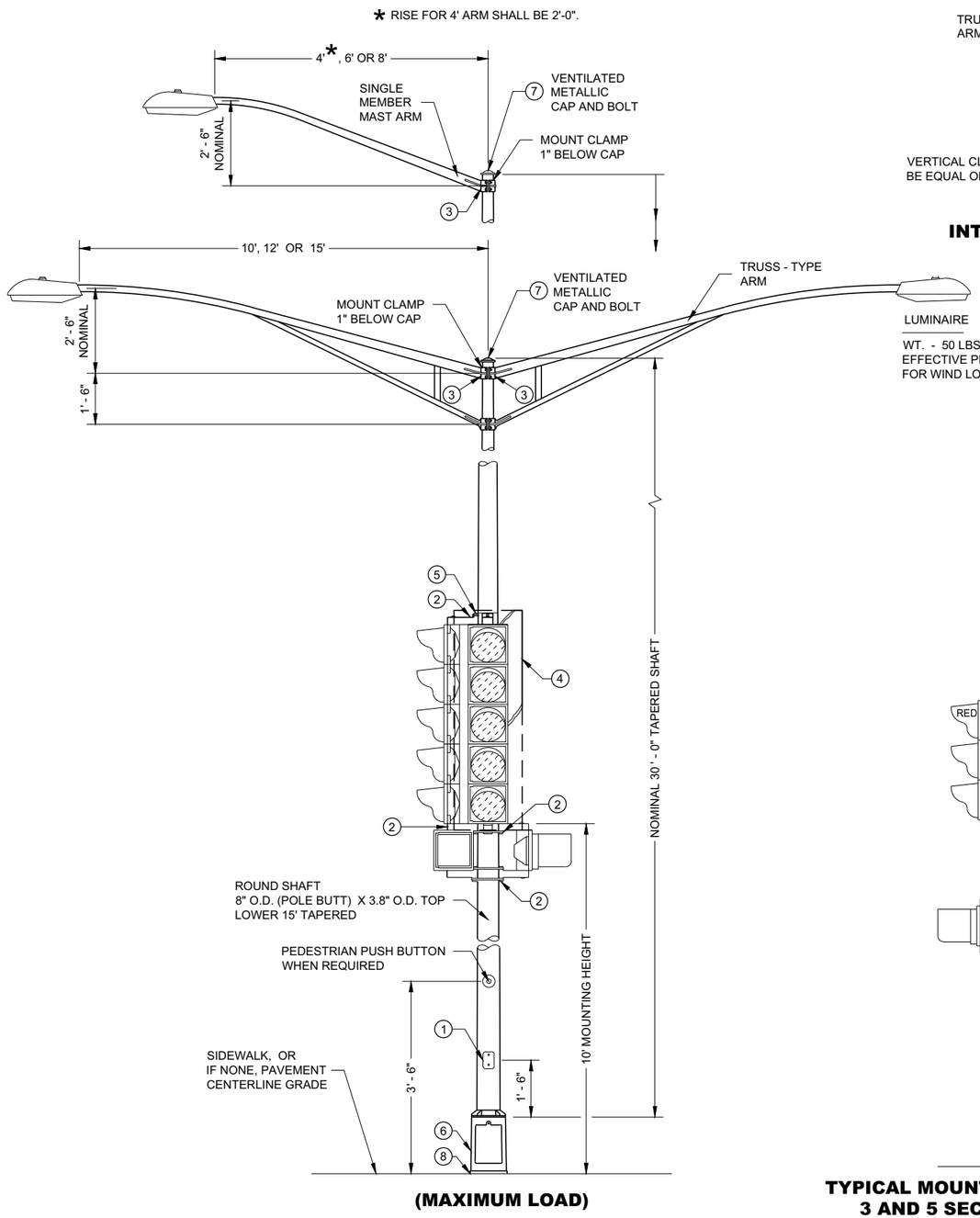
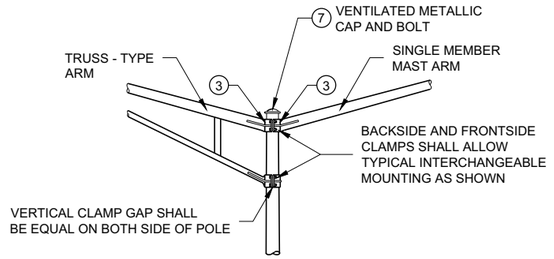



**(MAXIMUM LOAD)**




**INTERCHANGEABLE MOUNTING DETAIL**

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL WITH A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE ( .1196" ).

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 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) 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 ⅜" 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.

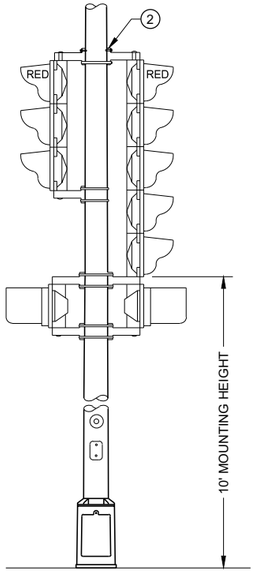
(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

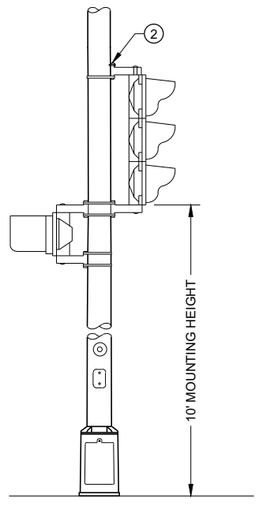
(7) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(8) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

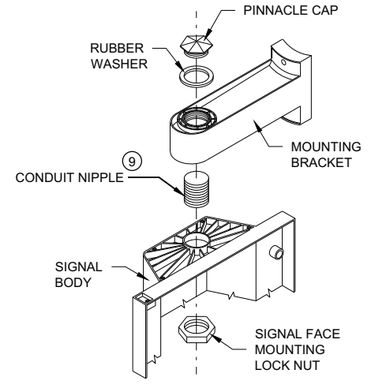
(9) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.




**TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES**




**TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE**




**SIGNAL FACE MOUNTING DETAIL**
**(BANDED)**

**TYPE 4 POLE MOUNTING CONFIGURATION**

**POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4**

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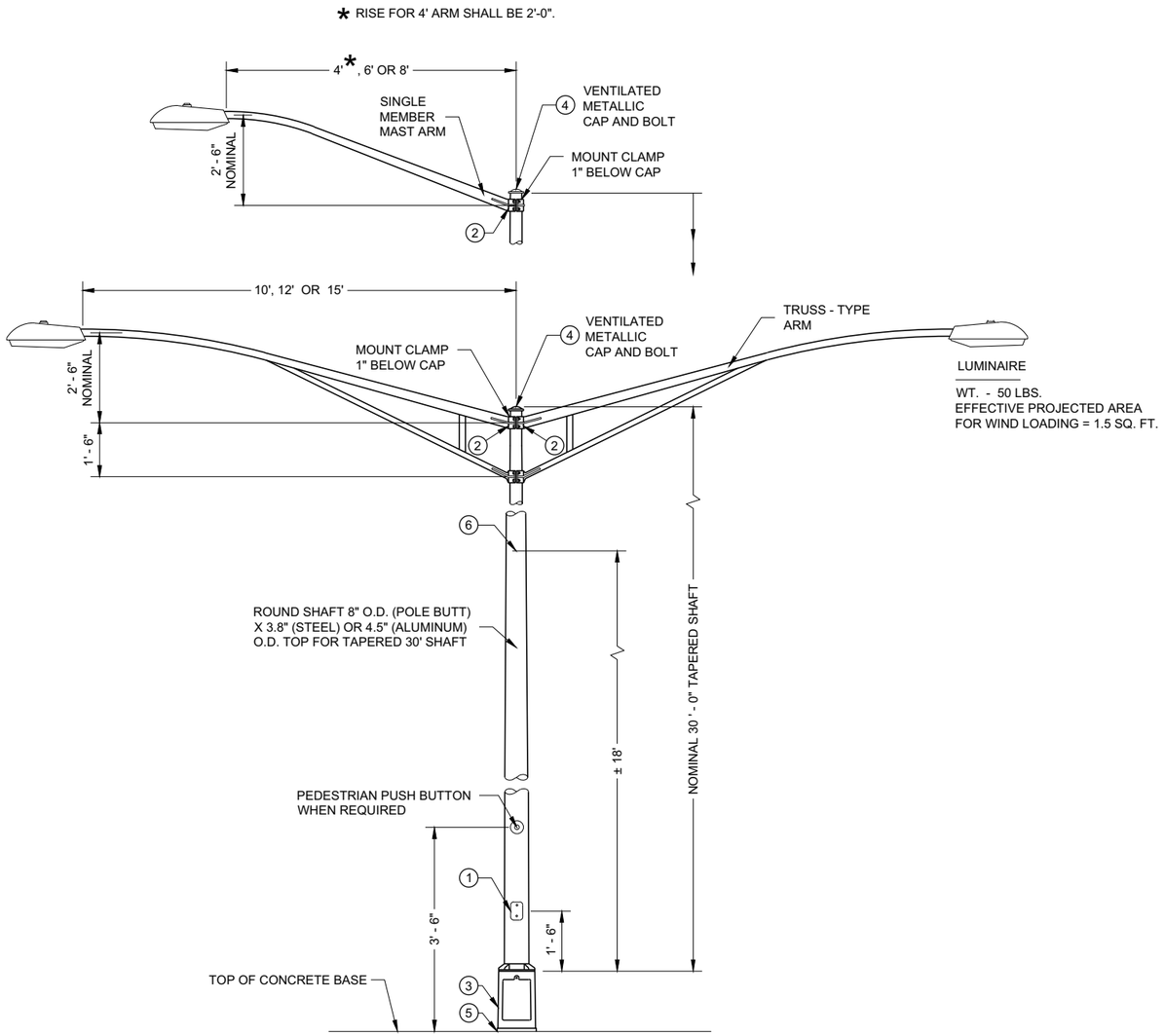



**TYPE 5 POLE MOUNTING CONFIGURATION**
**(MAXIMUM LOAD)**
**LIGHTING ONLY**

## 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.

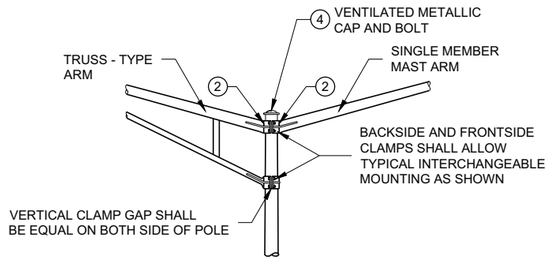
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(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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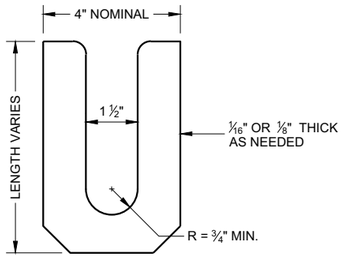
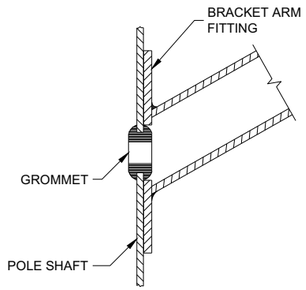
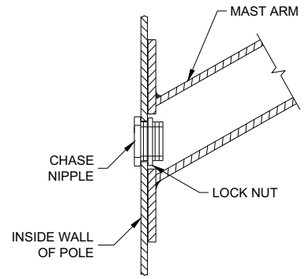



**LEVELING SHIM** (1)
SHALL BE ALUMINUM




**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.

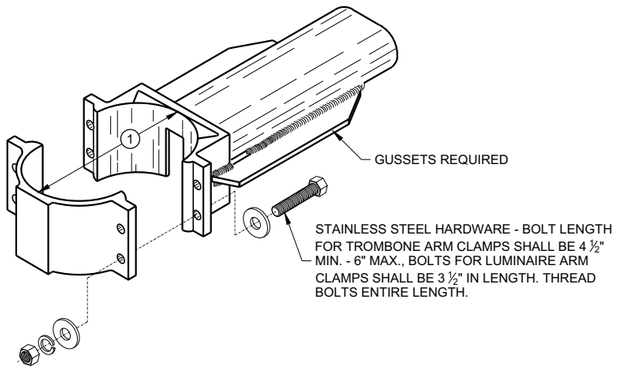
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(2) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

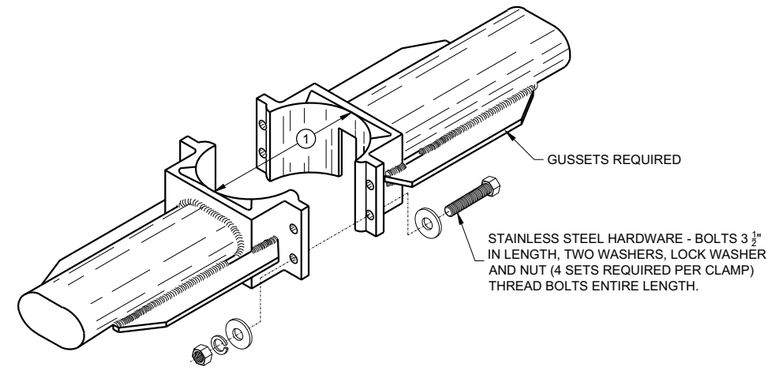
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(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.

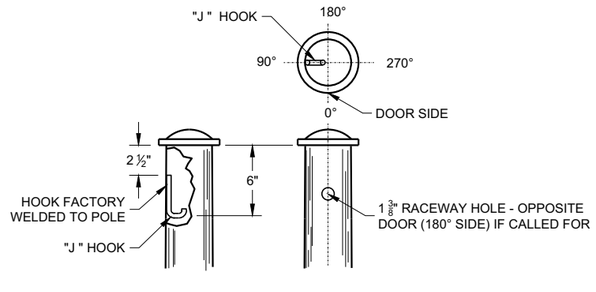
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



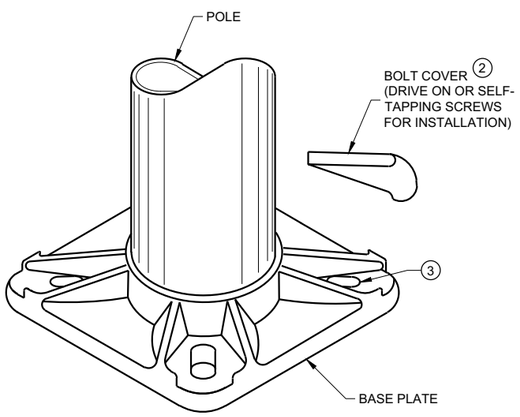

**TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP**



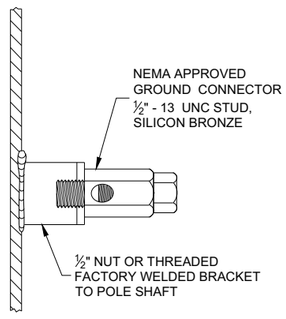

**TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS**

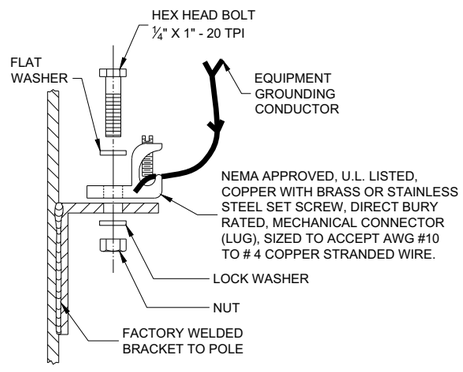


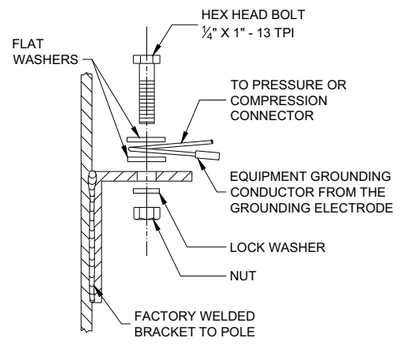

**TYPICAL "J" HOOK LOCATION**




**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

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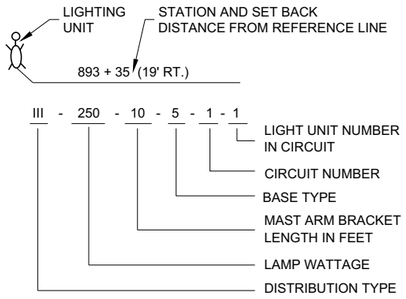
## GENERAL NOTES

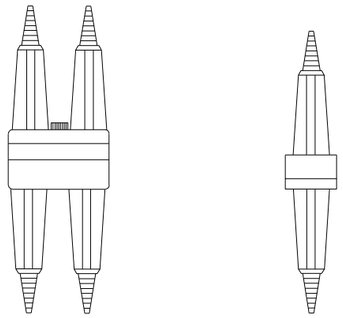
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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.



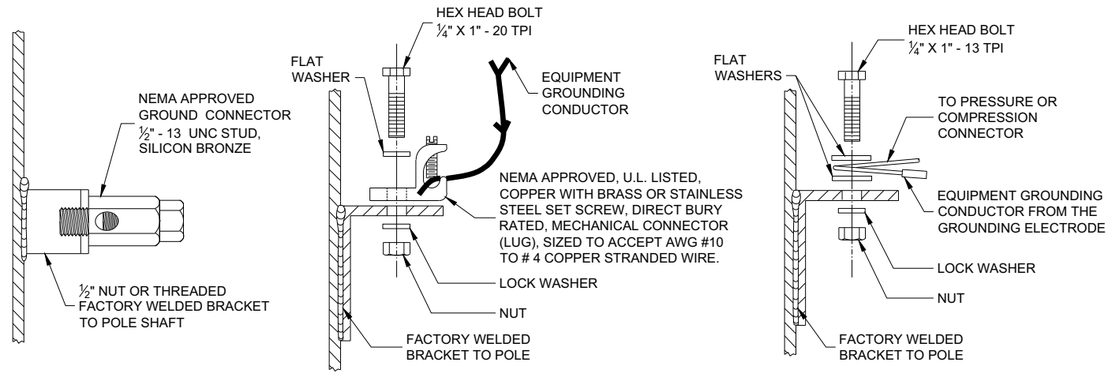

**LIGHTING UNIT CODE**
**(TYPICAL)**



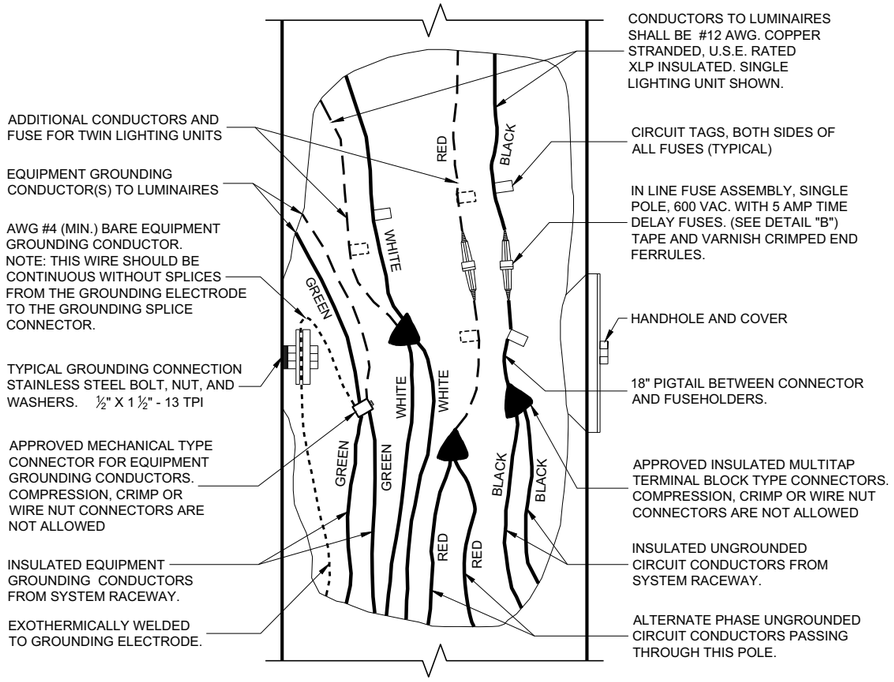
**DETAIL "A"**
**BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT**



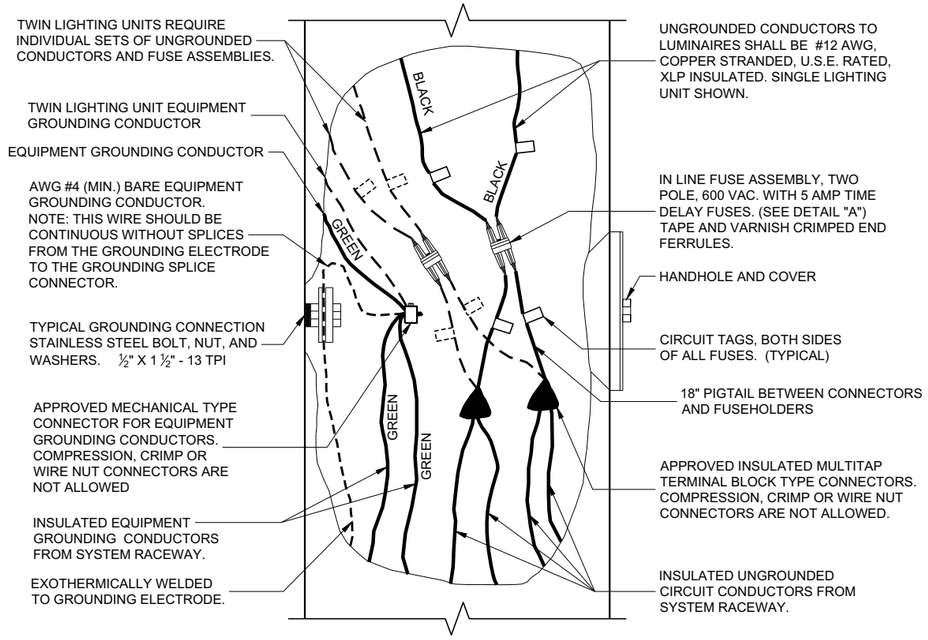
**DETAIL "B"**
**BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT**




**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**

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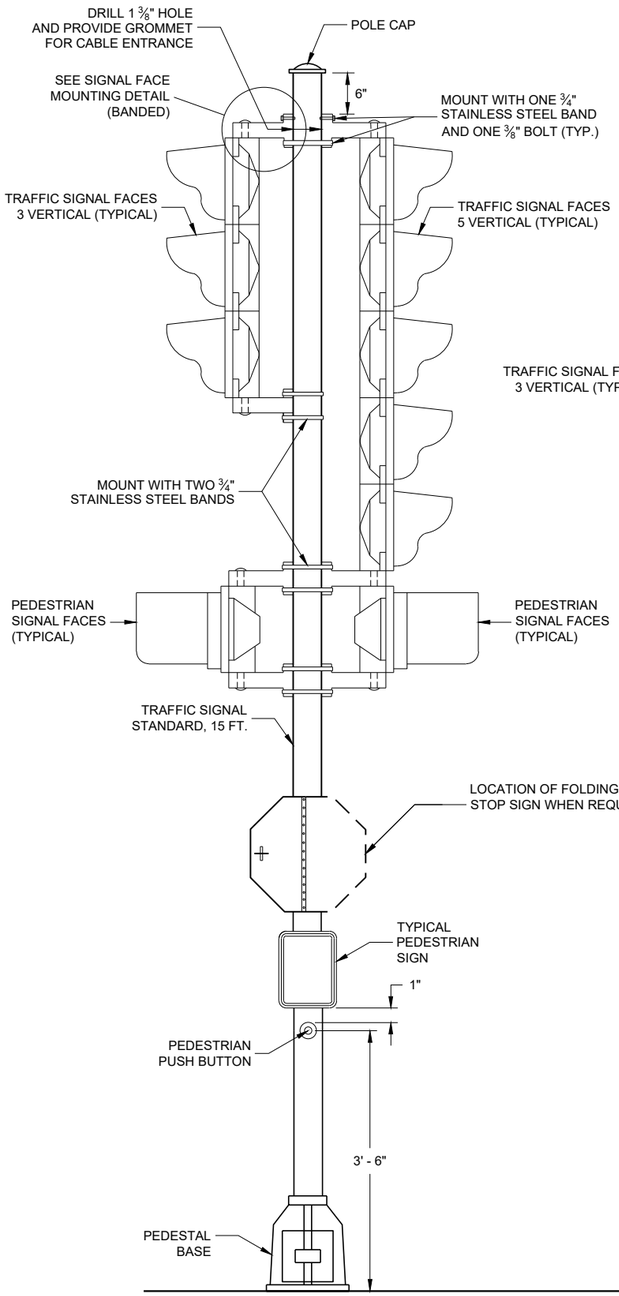
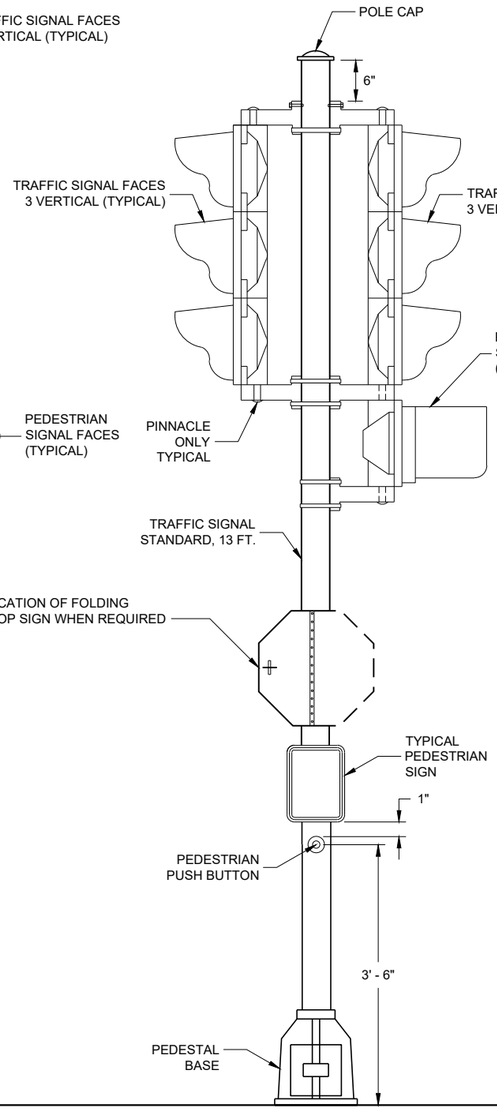
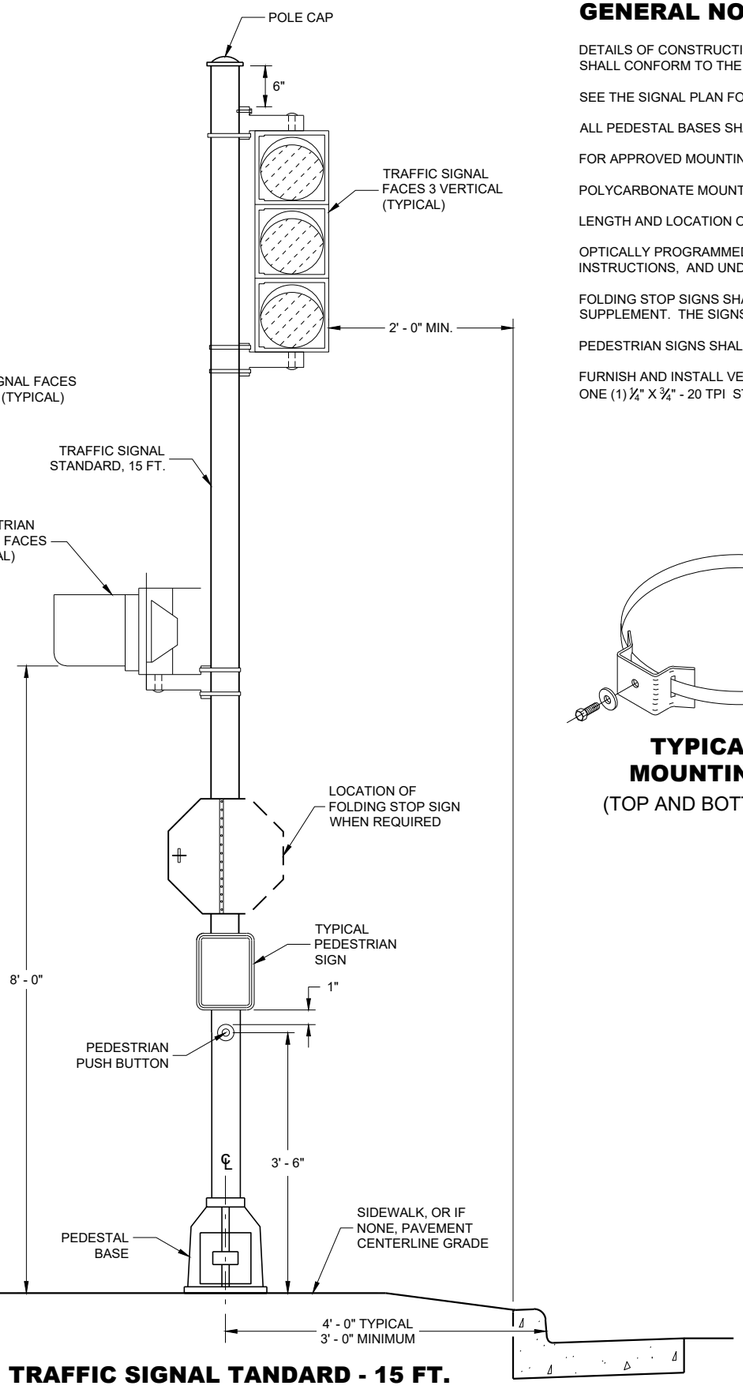



**TRAFFIC SIGNAL STANDARD - 15 FT.**




**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.

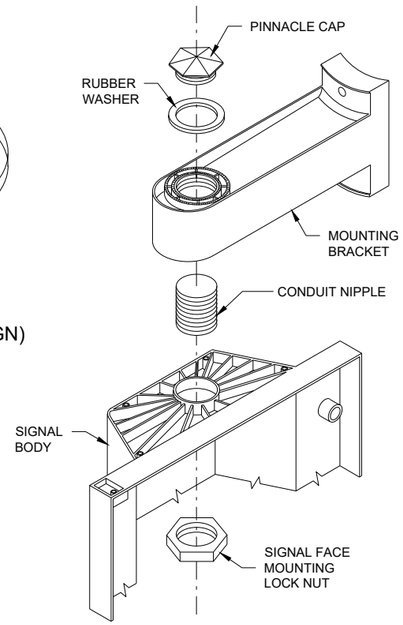
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

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.**

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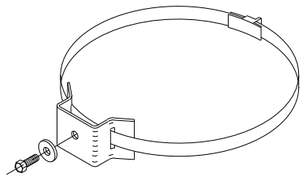
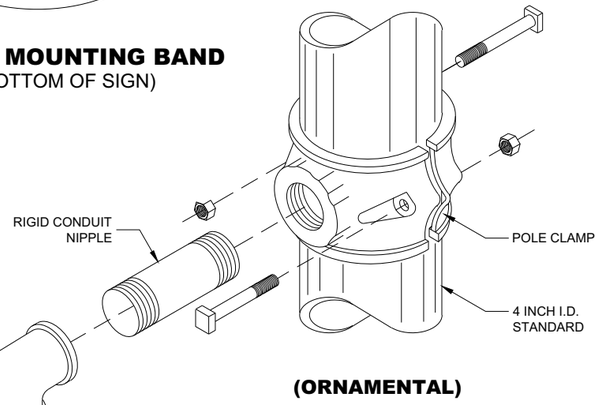
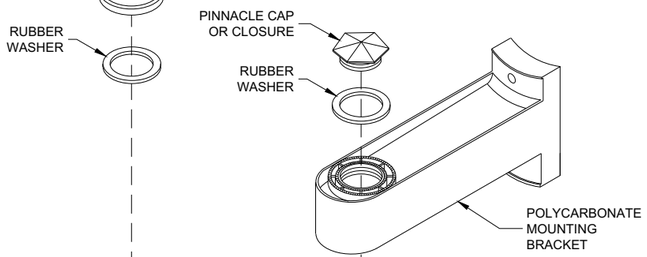


**TYPICAL SIGN MOUNTING BAND**
(TOP AND BOTTOM OF SIGN)




**(ORNAMENTAL)**

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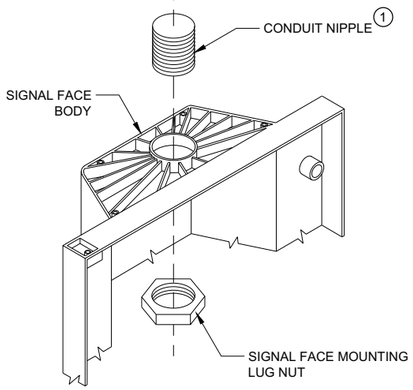
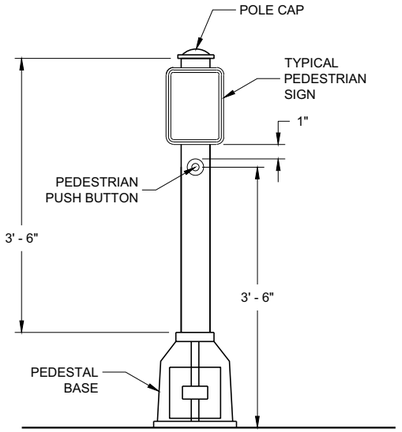
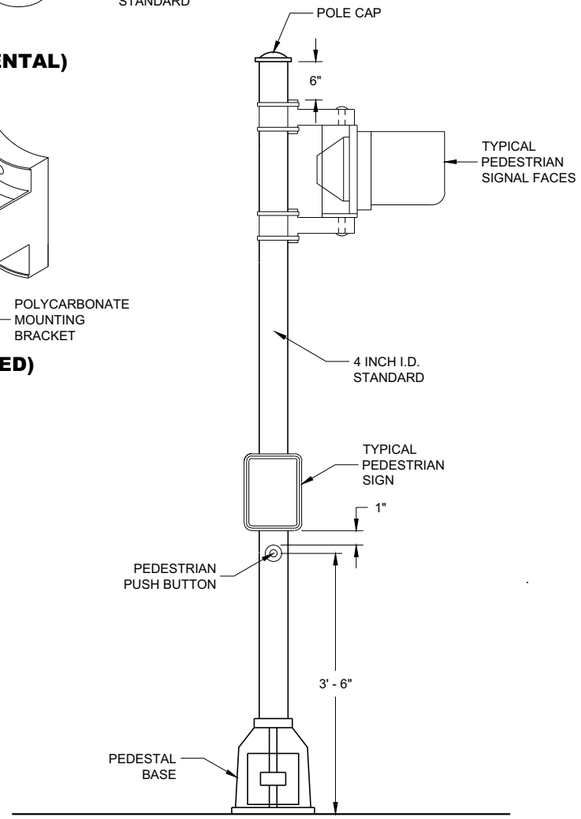


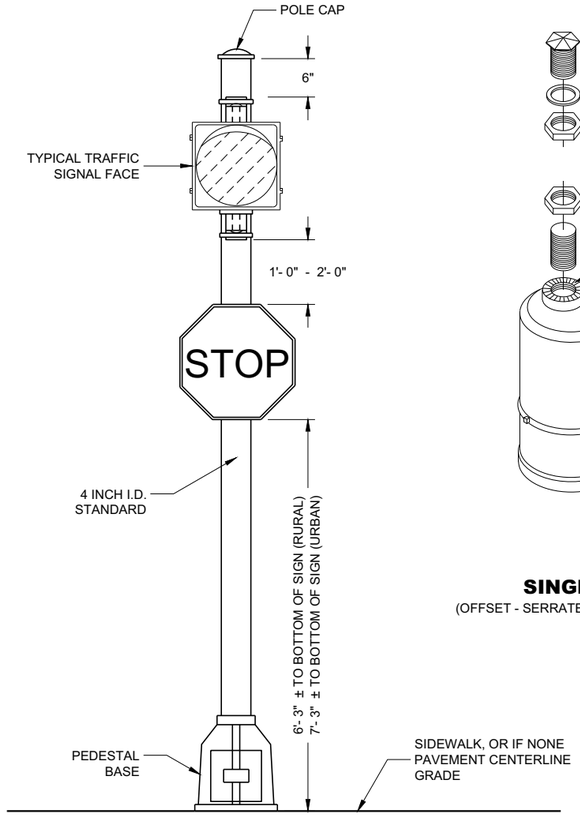

**SIGNAL FACE MOUNTING DETAILS**




**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.

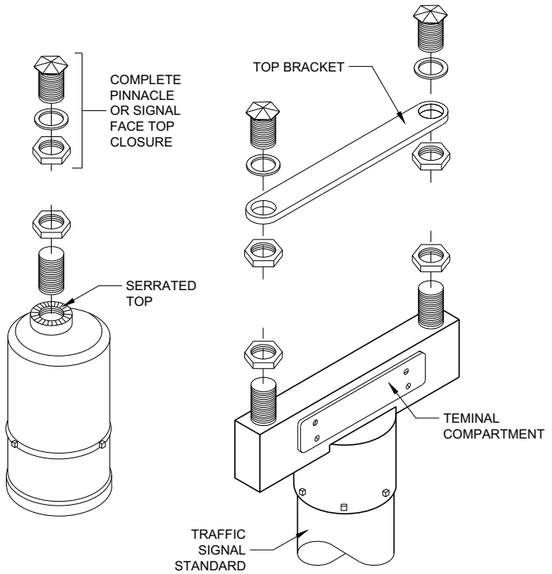
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

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
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APPROVED
November 2018
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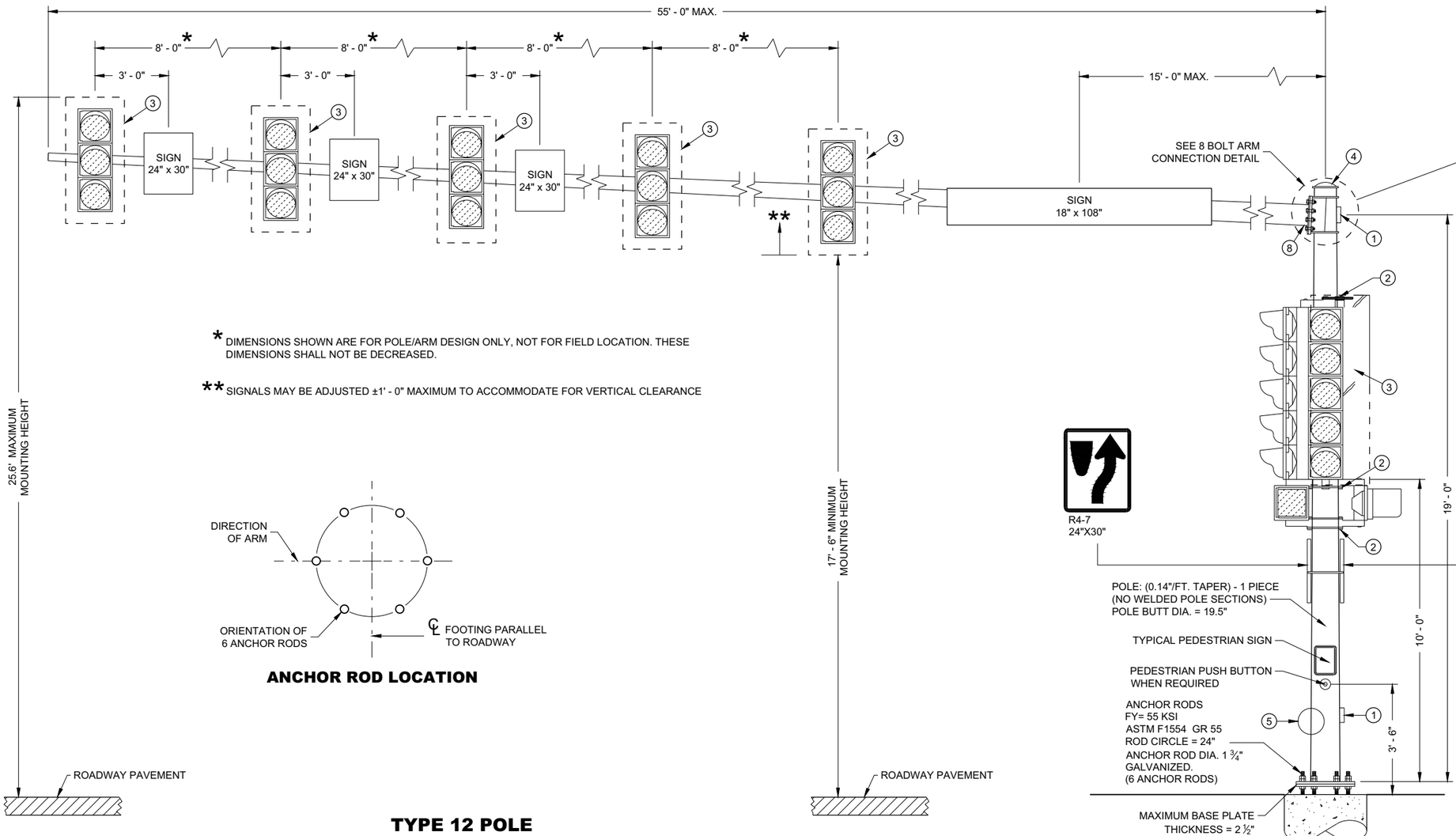
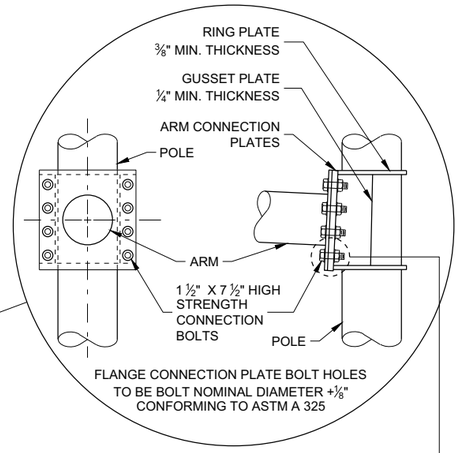



* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

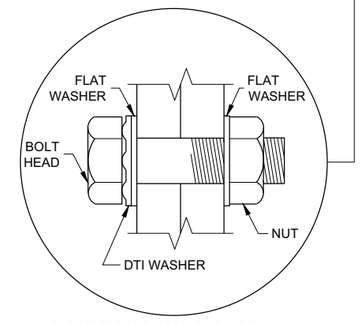
** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE




**ANCHOR ROD LOCATION**




**8 BOLT ARM CONNECTION DETAIL**




**RECOMMENDED BOLT ASSEMBLY DETAIL**

**TYPE 12 POLE**
**35' - 55' MONOTUBE ARM**
(MAXIMUM LOAD)

**TYPE 12 POLE**
**35' - 55' MONOTUBE ARM**

STATE OF WISCONSIN
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APPROVED
August 2020
DATE

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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.

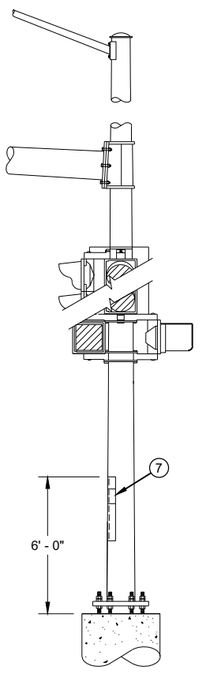
(6) FACTORY WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

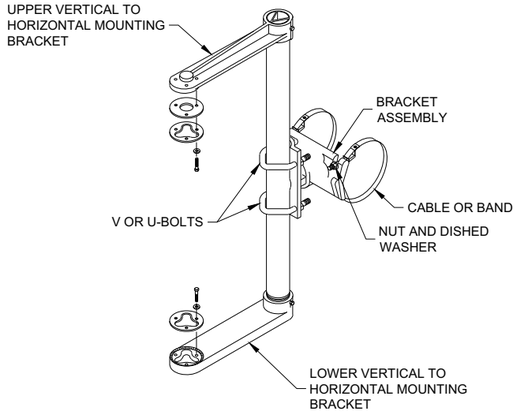
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

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**



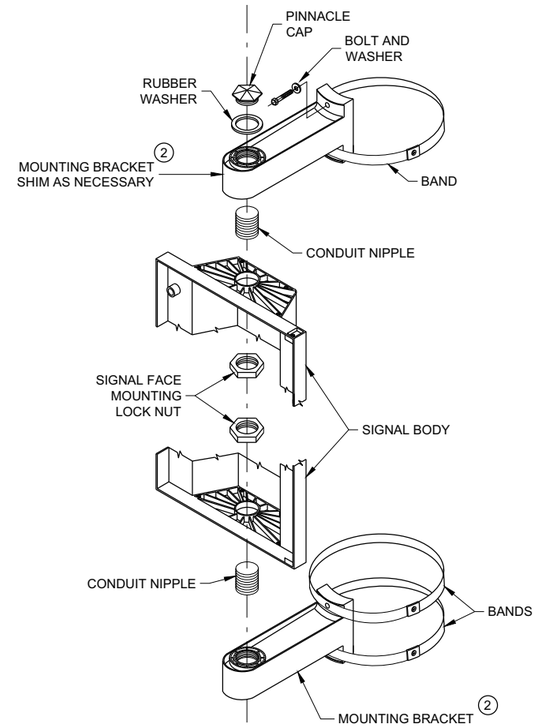

**SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM**

(MOUNT PER MANFACTURER'S RECOMMENDATION)

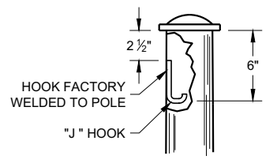



**TYPICAL GROUNDING (5) CONNECTIONS**

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
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

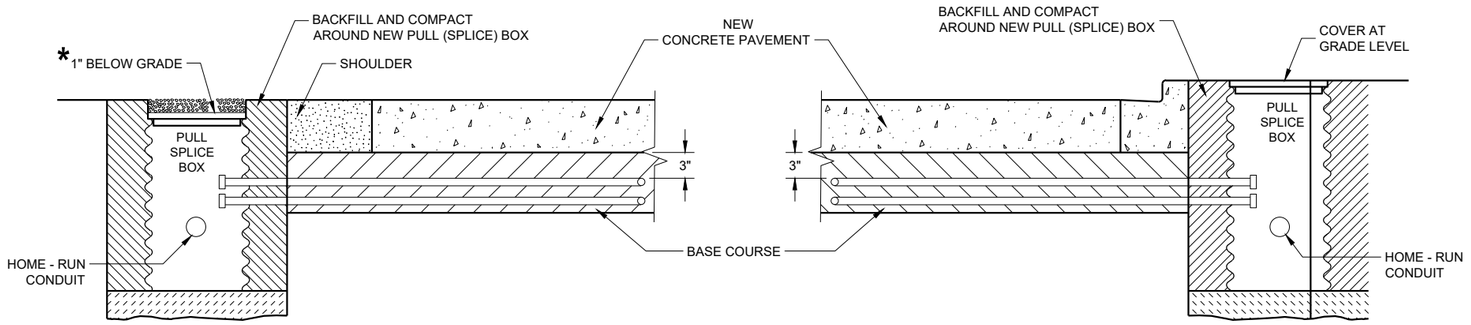
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

FHWA




6


SDD 09E08 - 09k




**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.

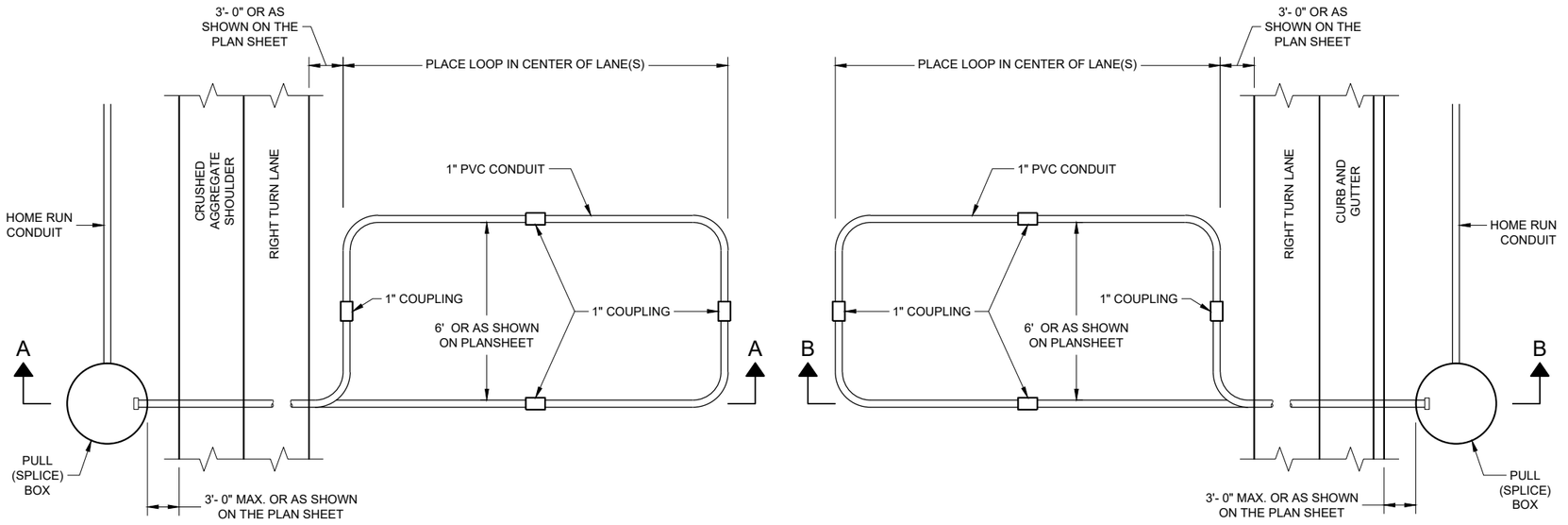
THE #12 AWG LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

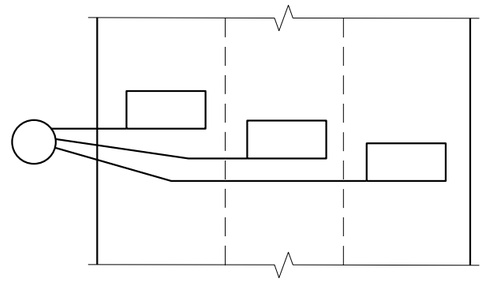
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE NON-SPLICED, CONTINUOUS LENGTH.

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

FHWA



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SDD 09F15 - 04b

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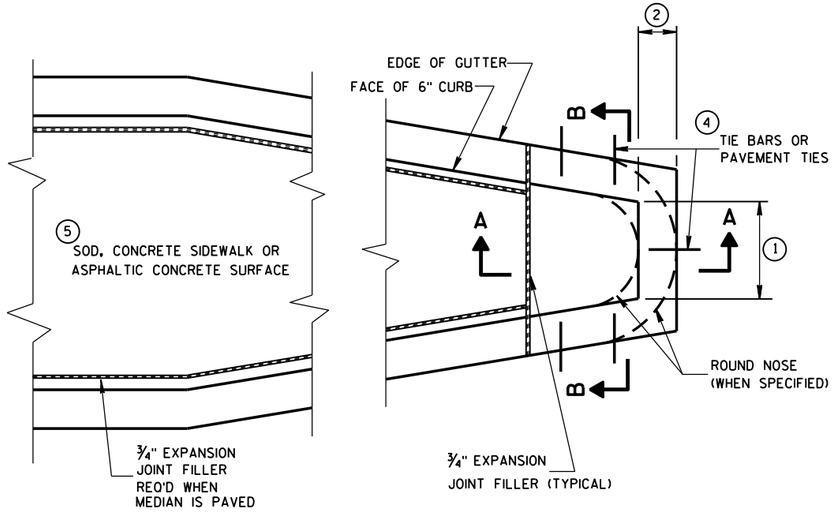
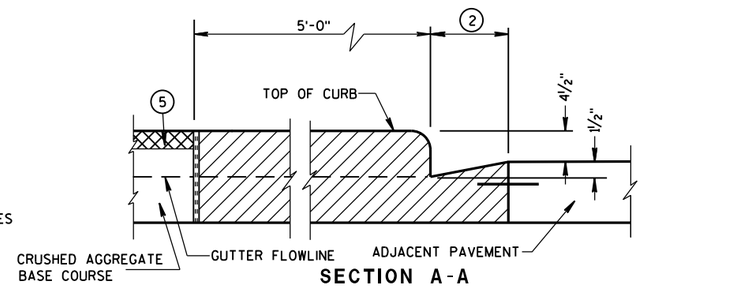
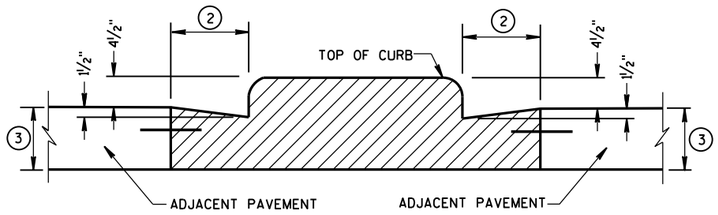
SDD 09F15 - 04b




## 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.

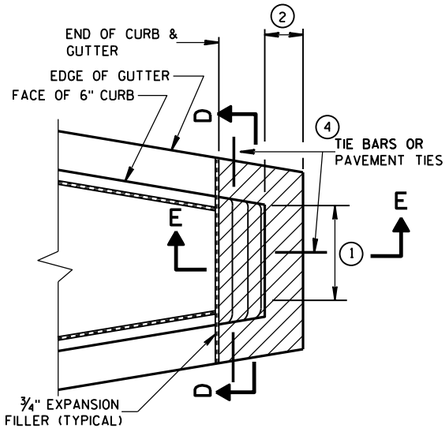
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

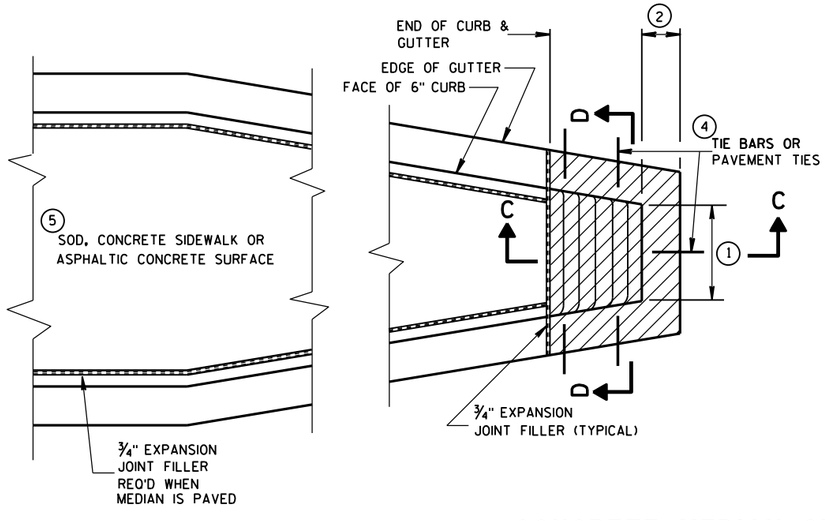
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

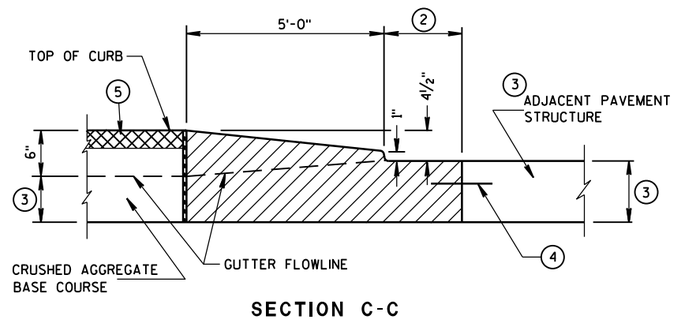
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

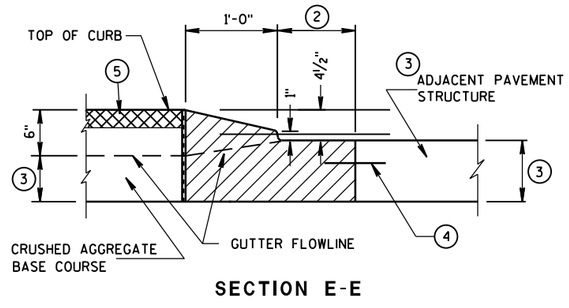
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



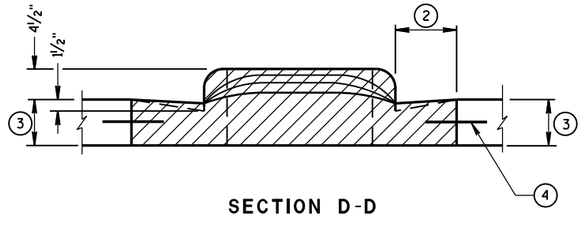




## CONCRETE MEDIAN SLOPED NOSE TYPE 1

## CONCRETE MEDIAN SLOPED NOSE TYPE 2




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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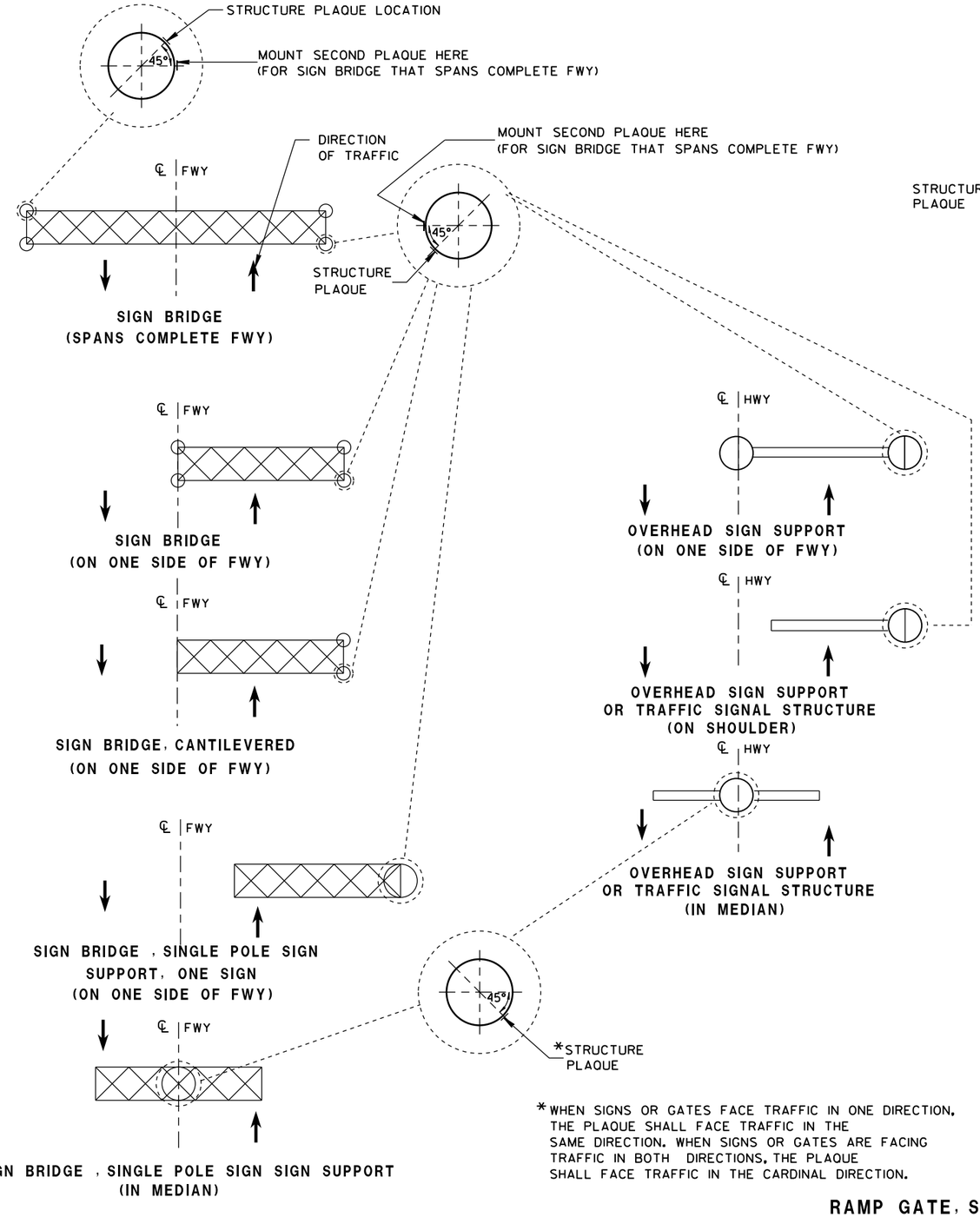
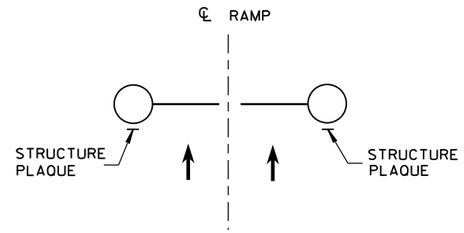
S.D.D. 11 B 2-2

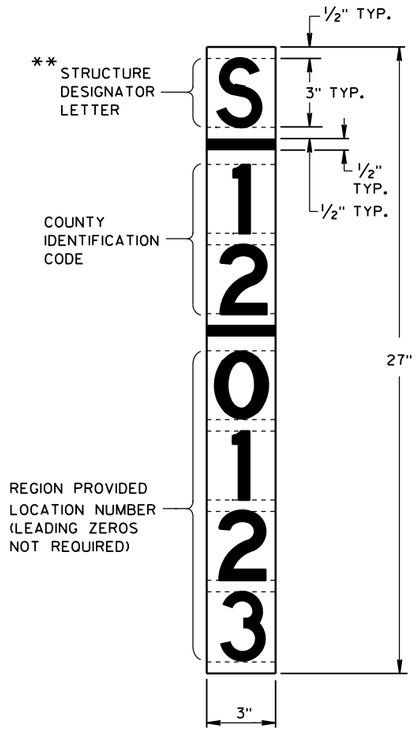



LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES

*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.

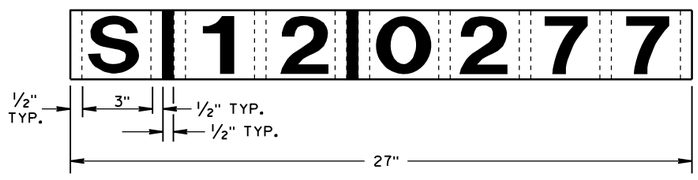
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

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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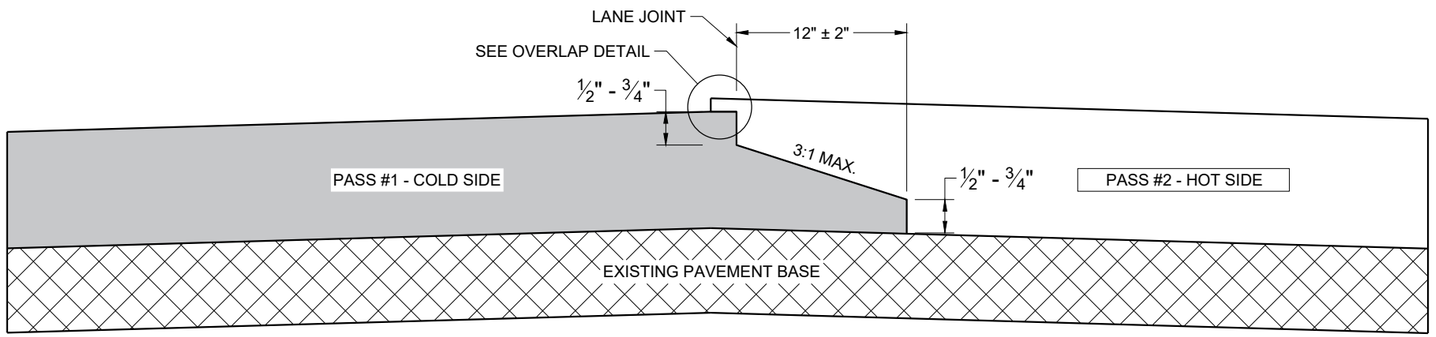
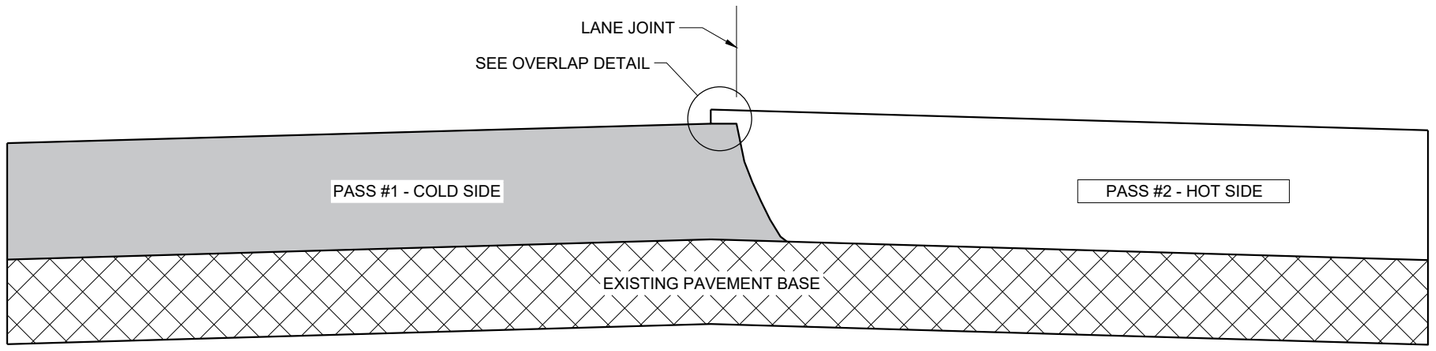
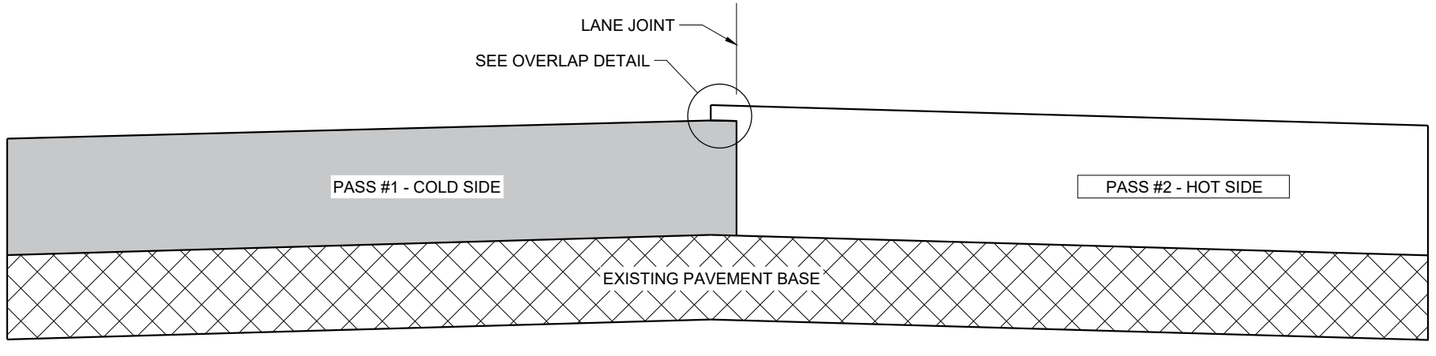
S.D.D. 12 A 4-3




**TYPICAL PAVEMENT CROSS SECTION**
**NOTCHED WEDGE JOINT**




**TYPICAL PAVEMENT CROSS SECTION**
**VERTICAL JOINT**




**TYPICAL PAVEMENT CROSS SECTION**
**VERTICAL JOINT (MILLED)**

## GENERAL NOTES

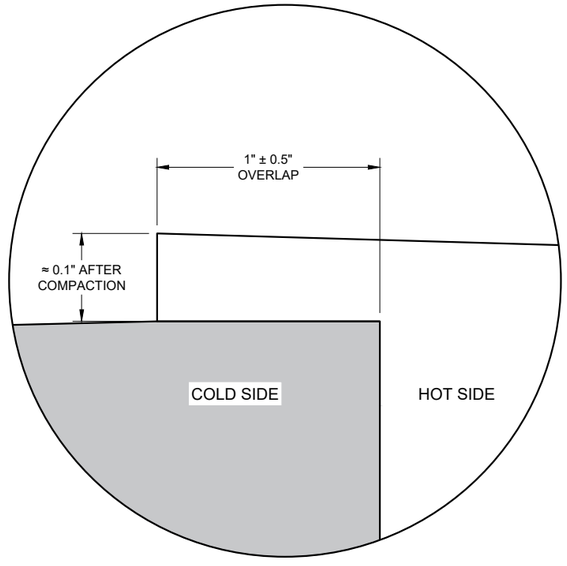
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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)**

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SDD 13C19 - 03

SDD 13C19 - 03

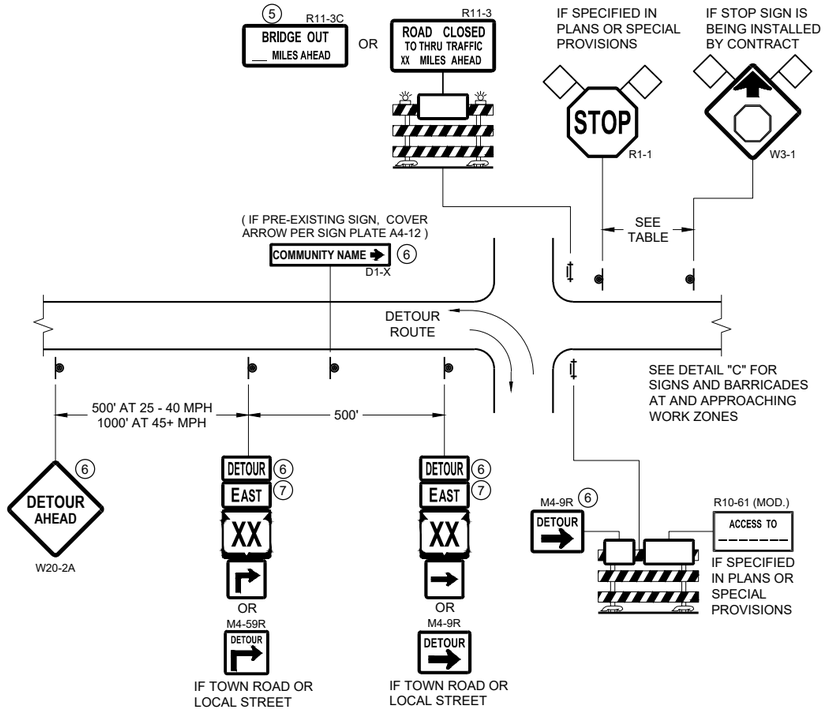
**HMA LONGITUDINAL JOINTS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

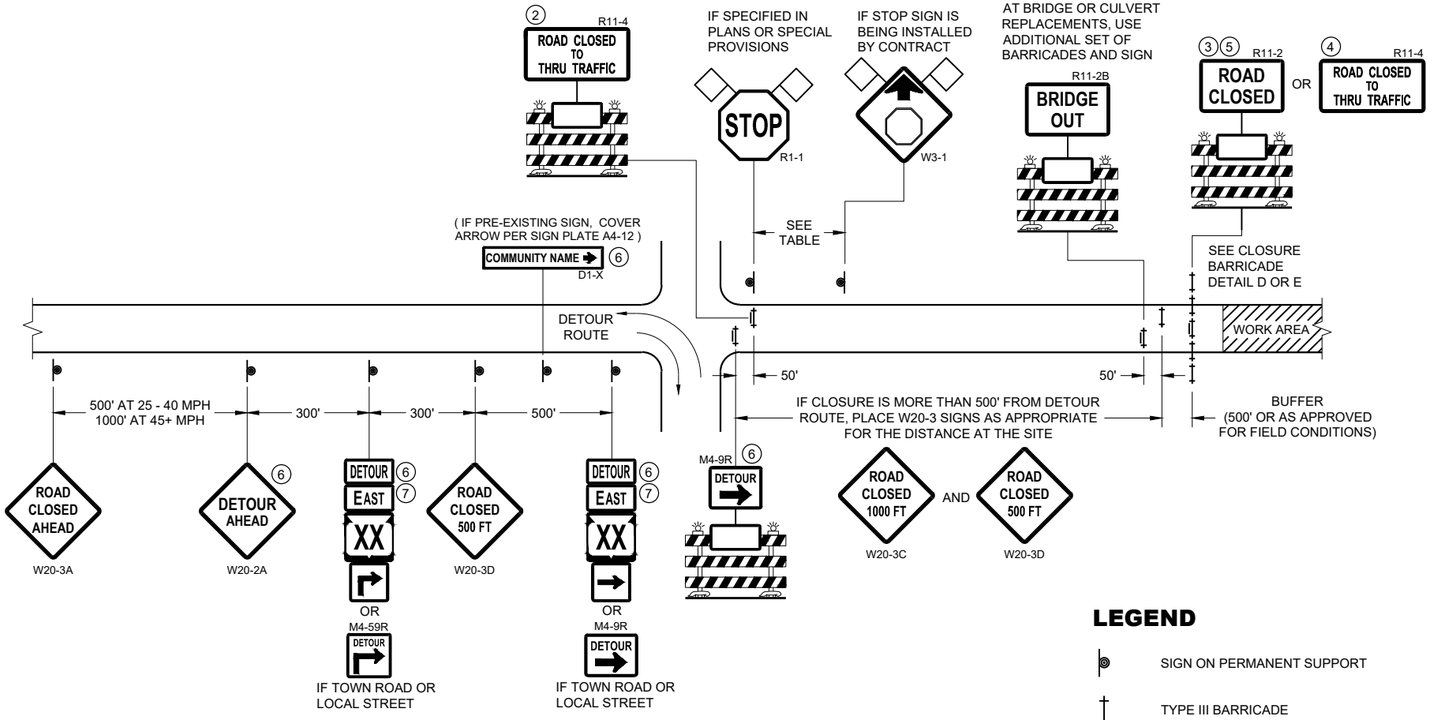
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



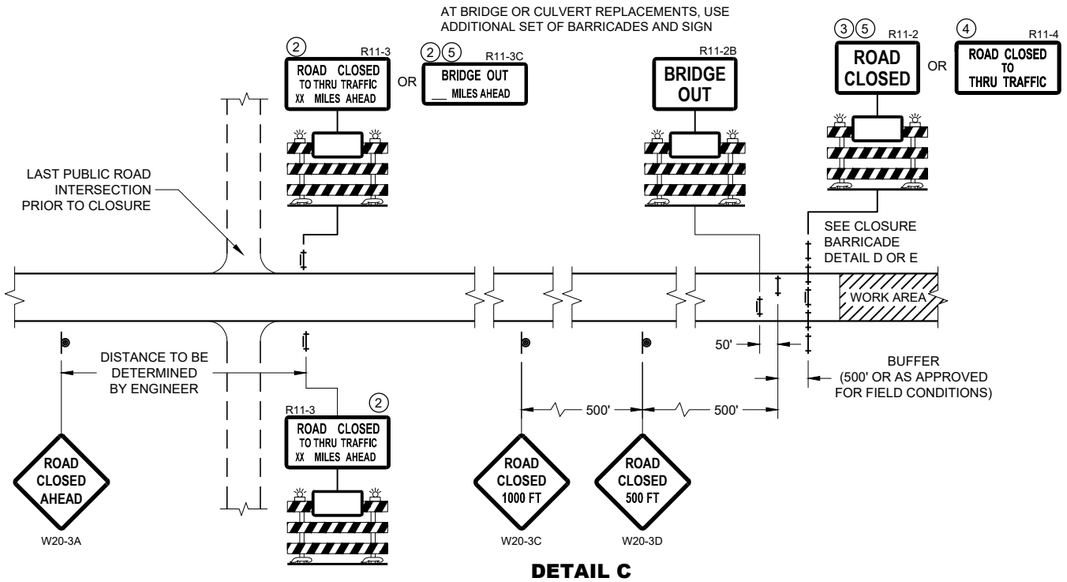

## DETAIL A
## MAINLINE CLOSURE WITH POSTED DETOUR

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
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

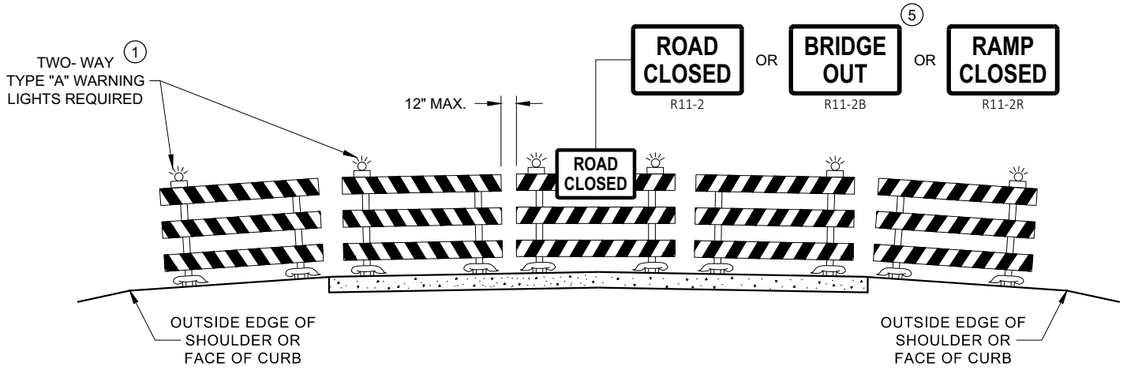
FHWA



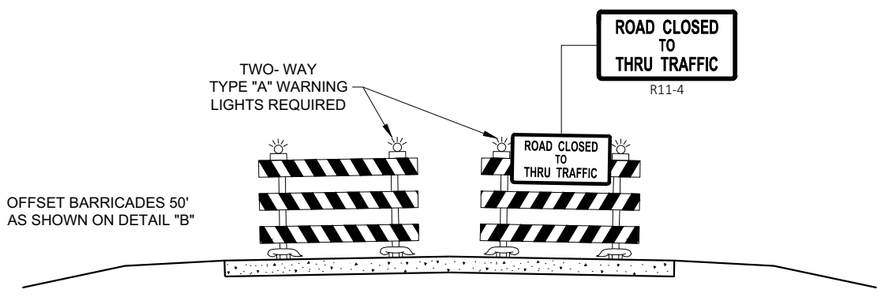
6

SDD 15C02 - 08a

SDD 15C02 - 08a




**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**

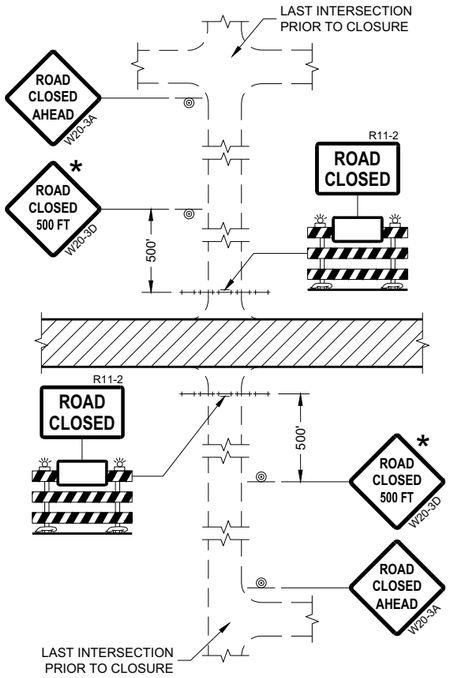
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

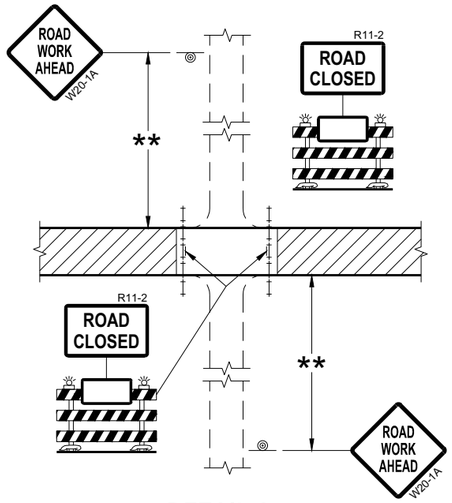



6


SDD 15C02 - 08b




**DETAIL 1**
(NO ACCESS TO PROJECT)




**DETAIL 2**
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO 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.

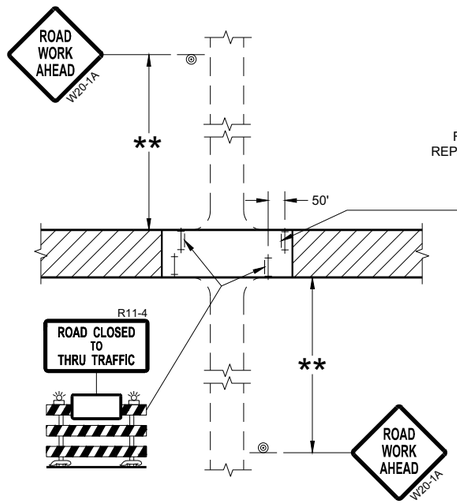
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

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.

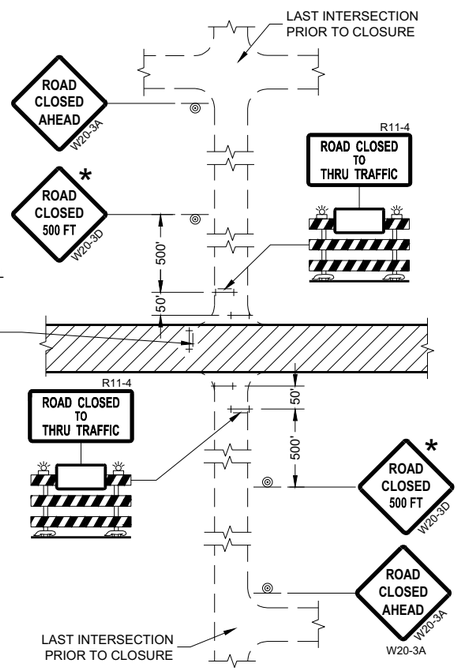
** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.







**DETAIL 3**
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)




**DETAIL 4**
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

## 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

SDD 15C03 - 05

## GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

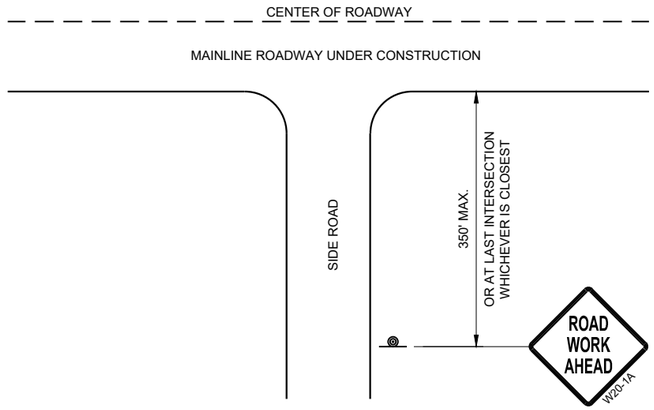
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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.

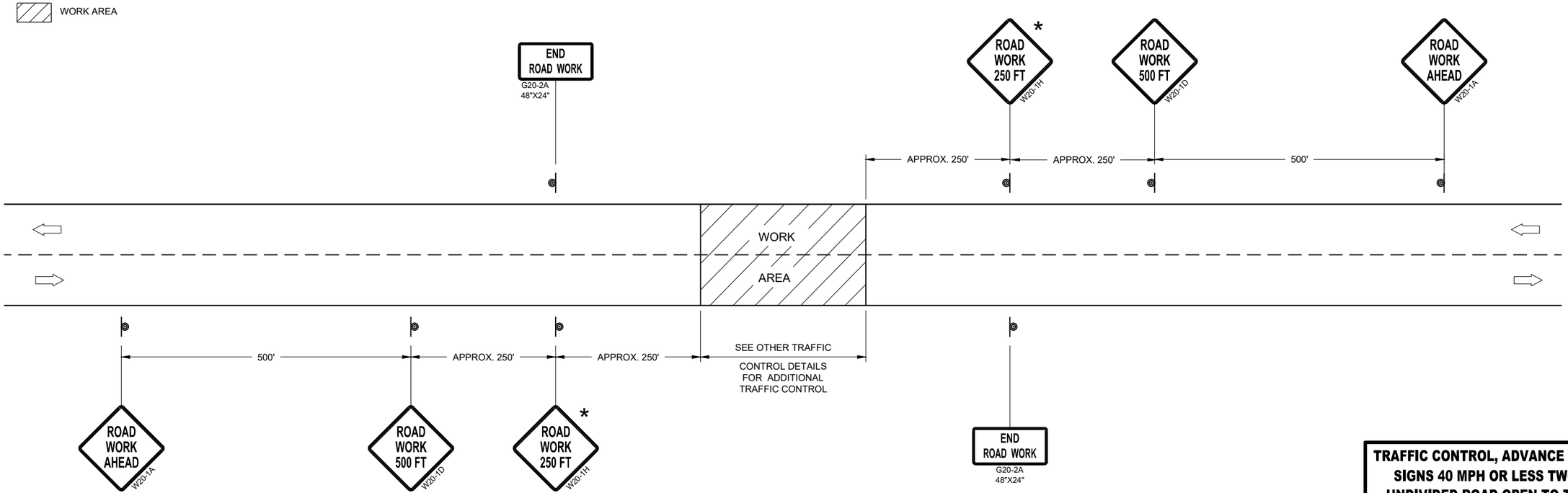
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.




**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

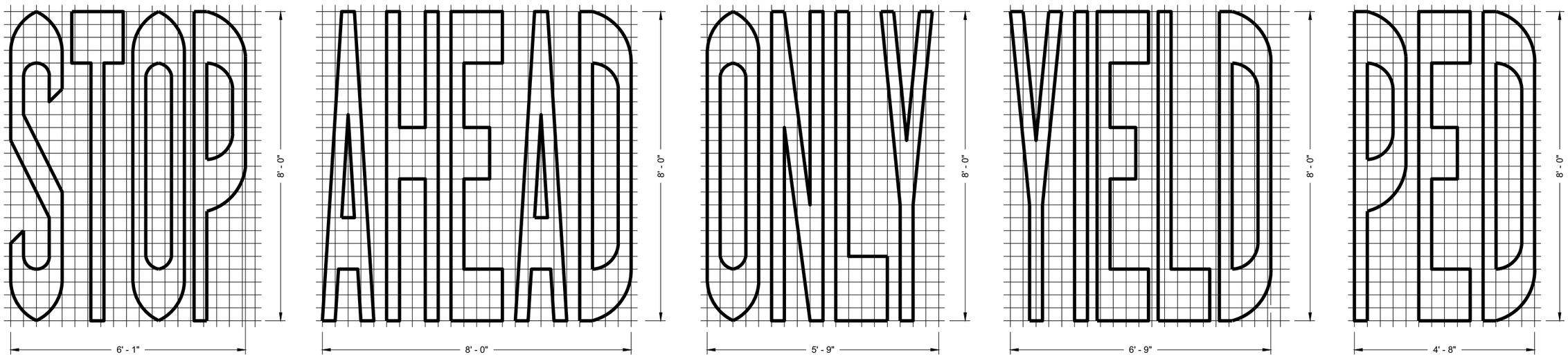
/S/ Andrew Heidtke
WORK ZONE ENGINEE

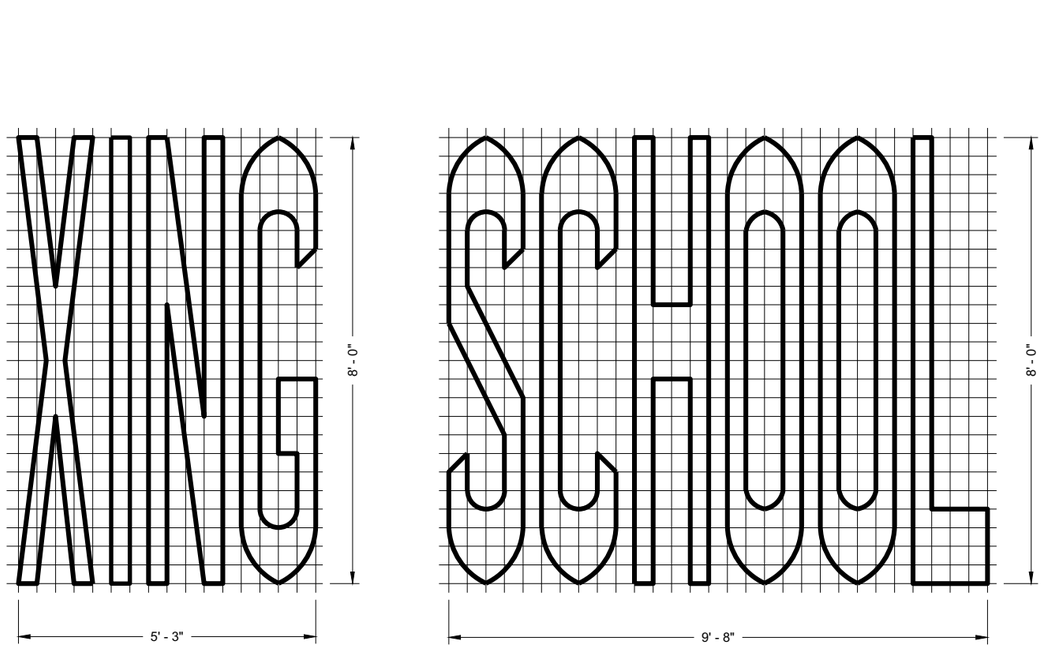
FHWA



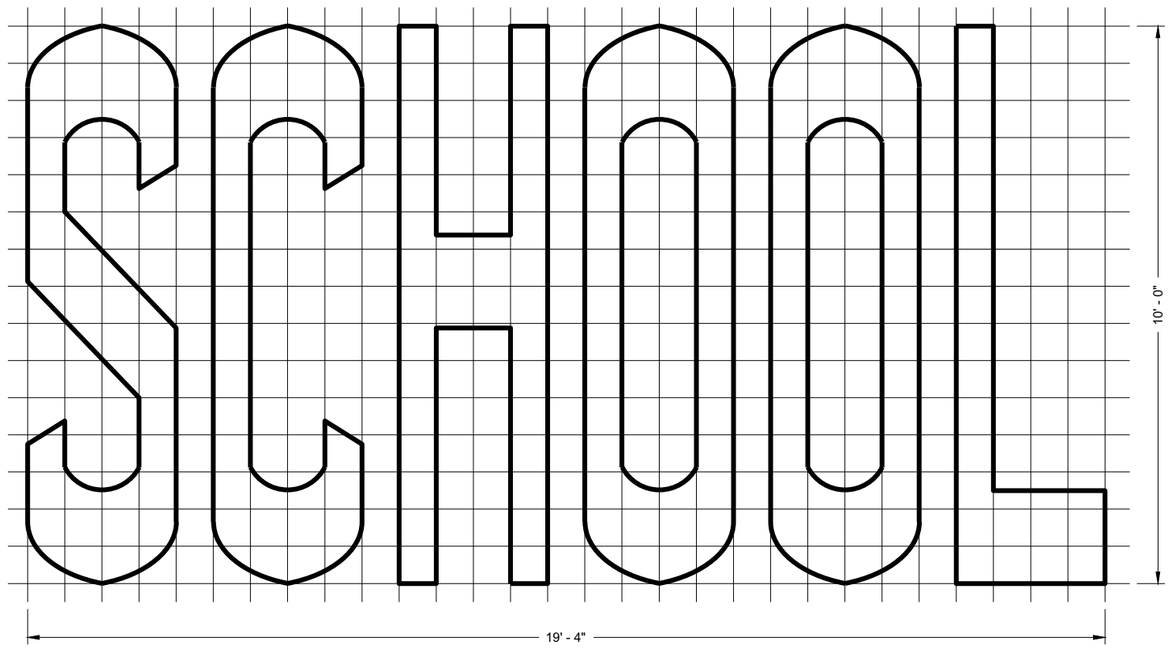

6


SDD 15C05 - 05




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 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA



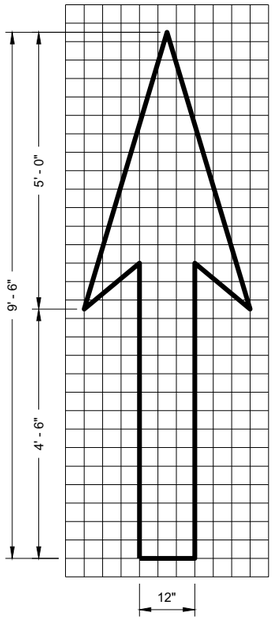
6

SDD 15C07 - 15b

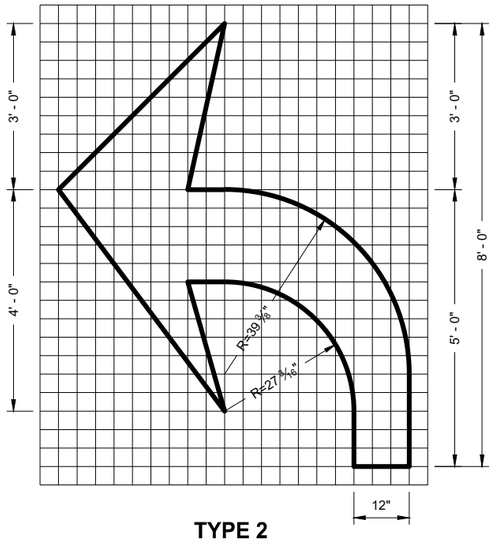
SDD 15C07 - 15b

## GENERAL NOTES

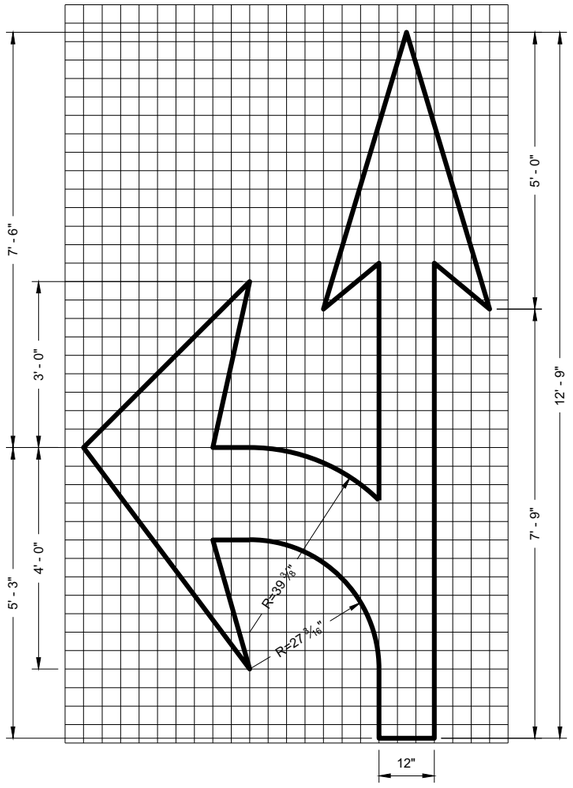
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



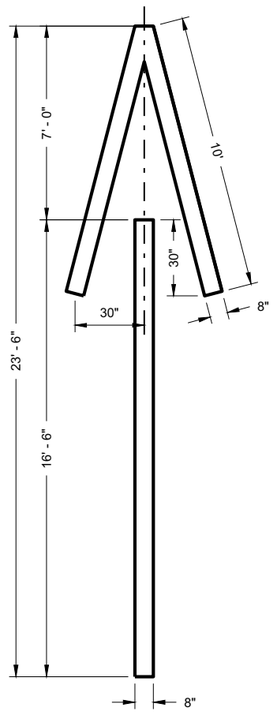

TYPE 1



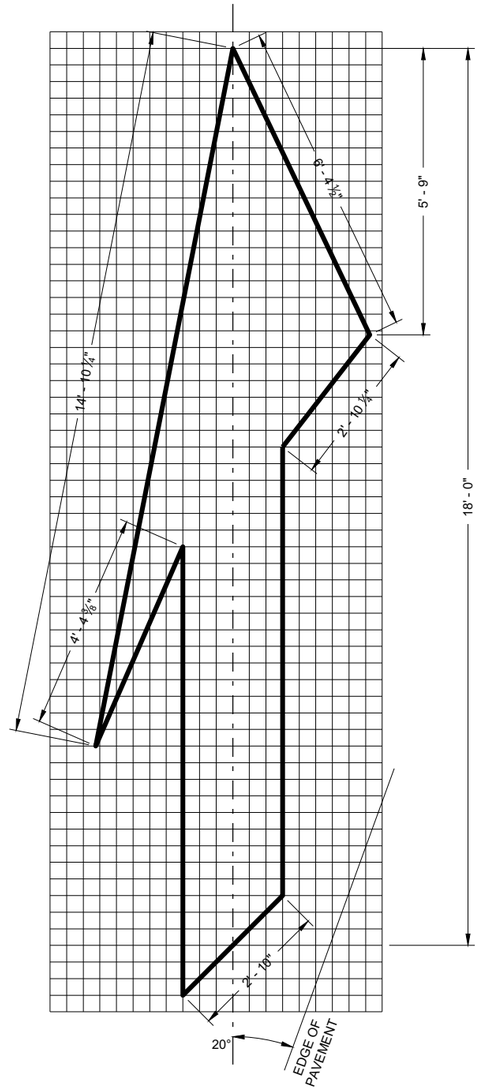

TYPE 2



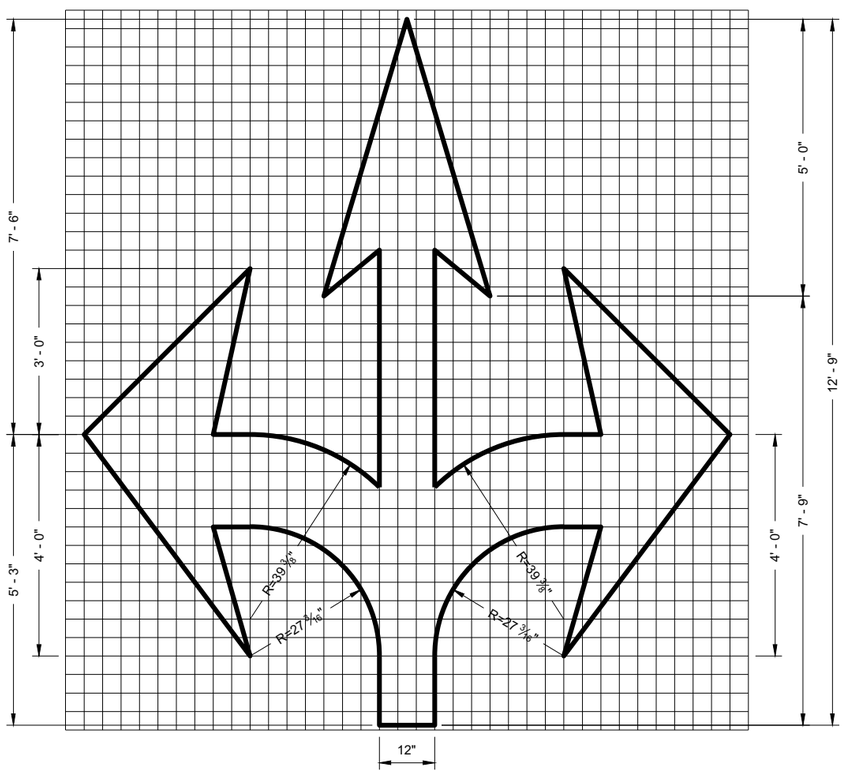

TYPE 3



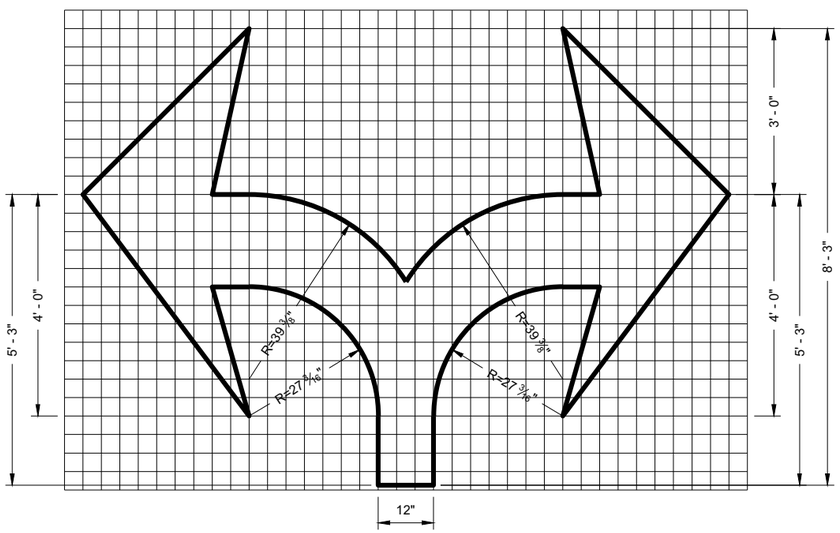

TYPE 4




TYPE 5 LANE DROP ARROW




TYPE 6




TYPE 7

**PAVEMENT MARKING ARROWS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA



6

SDD 15C07 - 15c

6

SDD 15C07 - 15c

## 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

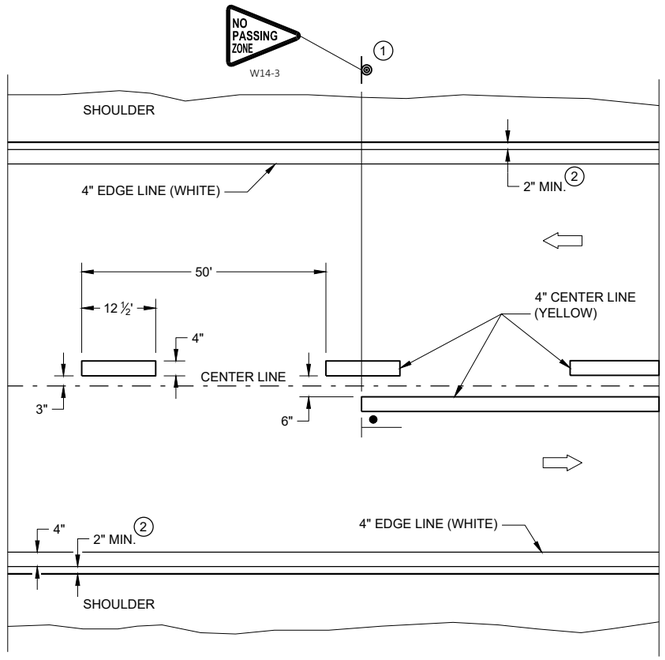
(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

## LEGEND

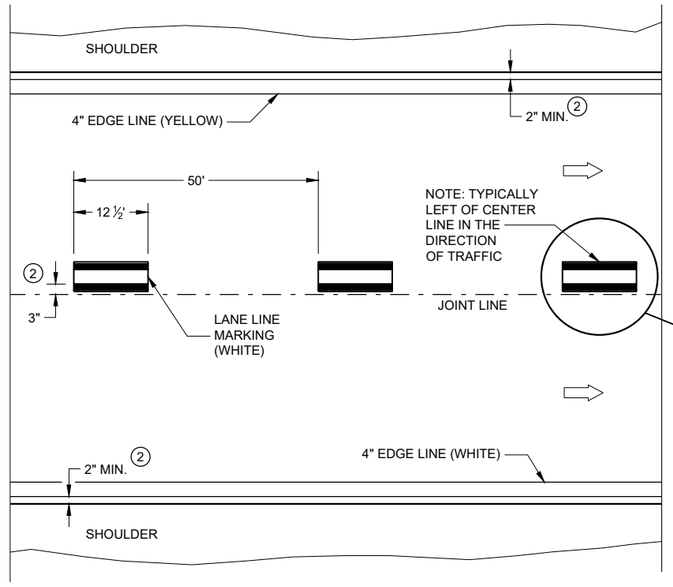
"T" MARKING

SIGN ON PERMANENT SUPPORT

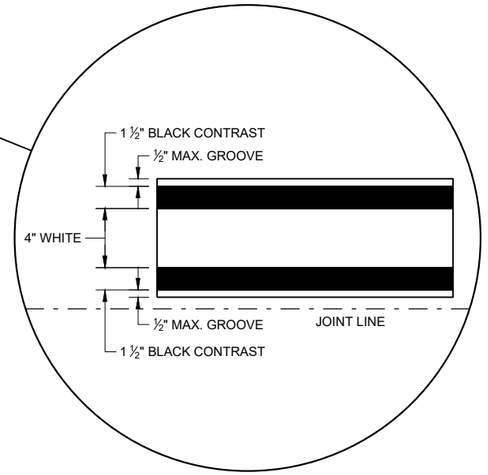
DIRECTION OF TRAFFIC




TWO WAY TRAFFIC




ONE WAY TRAFFIC




## PERMANENT PAVEMENT MARKING

**PERMANENT LONGITUDINAL PAVEMENT MARKINGS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

FHWA

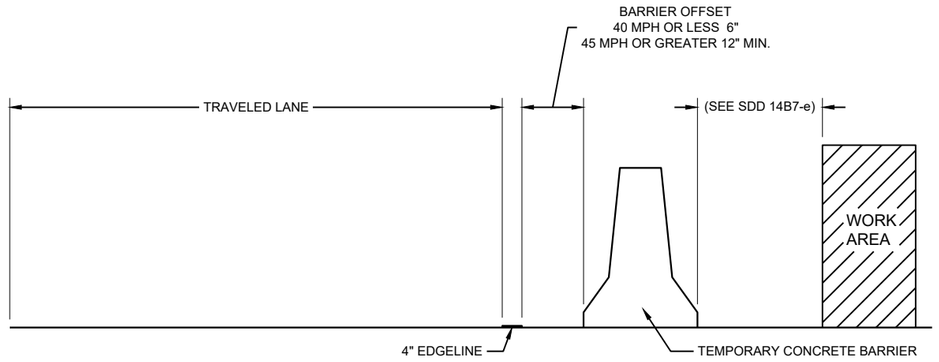


6

SDD 15C08 - 22a

6

SDD 15C08 - 22a



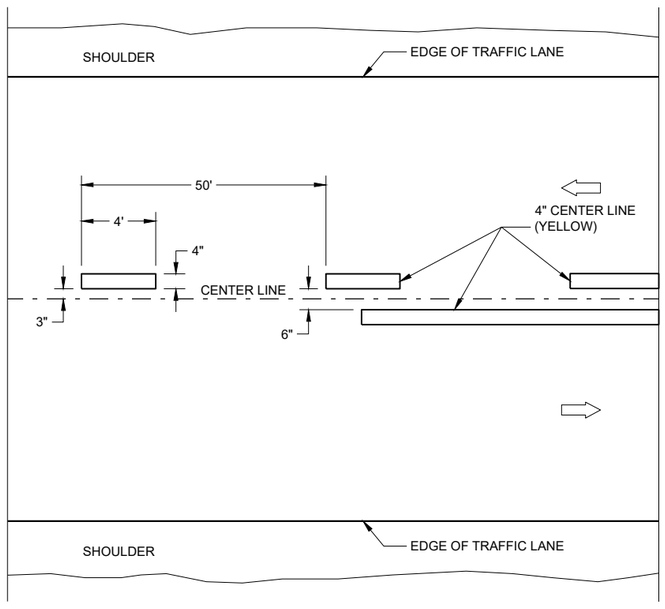

**TEMPORARY BARRIER OFFSET FROM EDGELINE**

## GENERAL NOTES

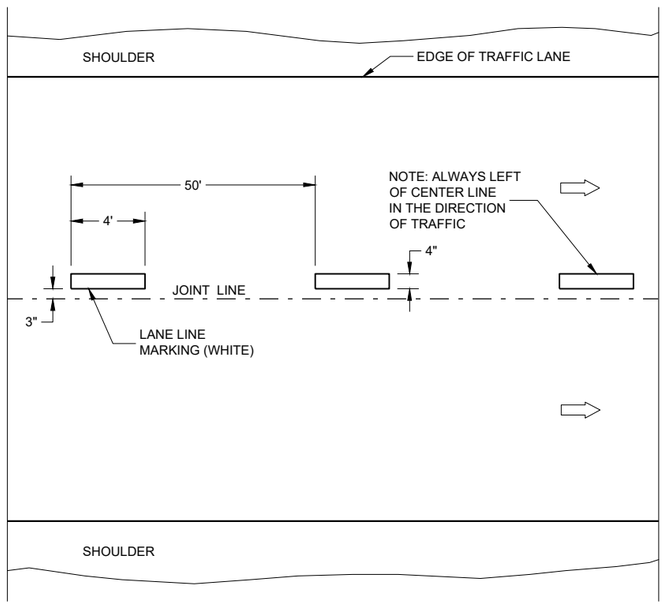
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

## LEGEND

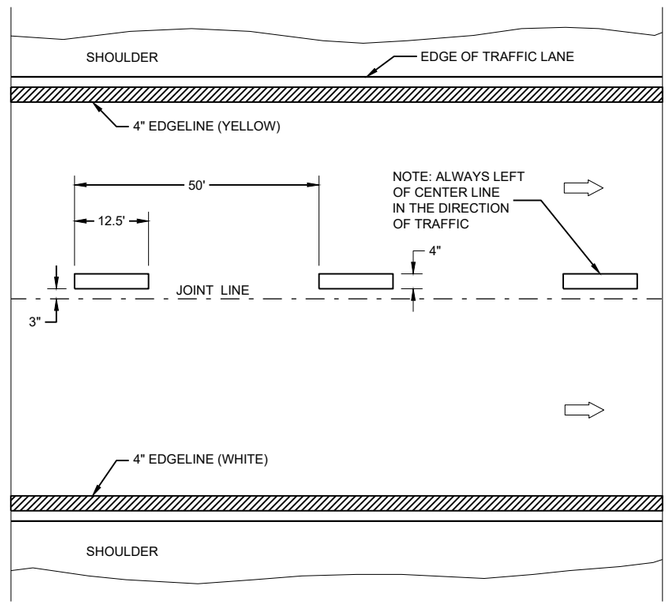
DIRECTION OF TRAFFIC




**TWO WAY TRAFFIC**




**ONE WAY TRAFFIC**




**FREEWAYS AND EXPRESSWAYS**

**TEMPORARY PAVEMENT MARKING**

**TEMPORARY LONGITUDINAL PAVEMENT MARKING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2022
DATE

/S/ Jeannie Silver
STATEWIDE SIGNING AND M
ENGINEER

FHWA

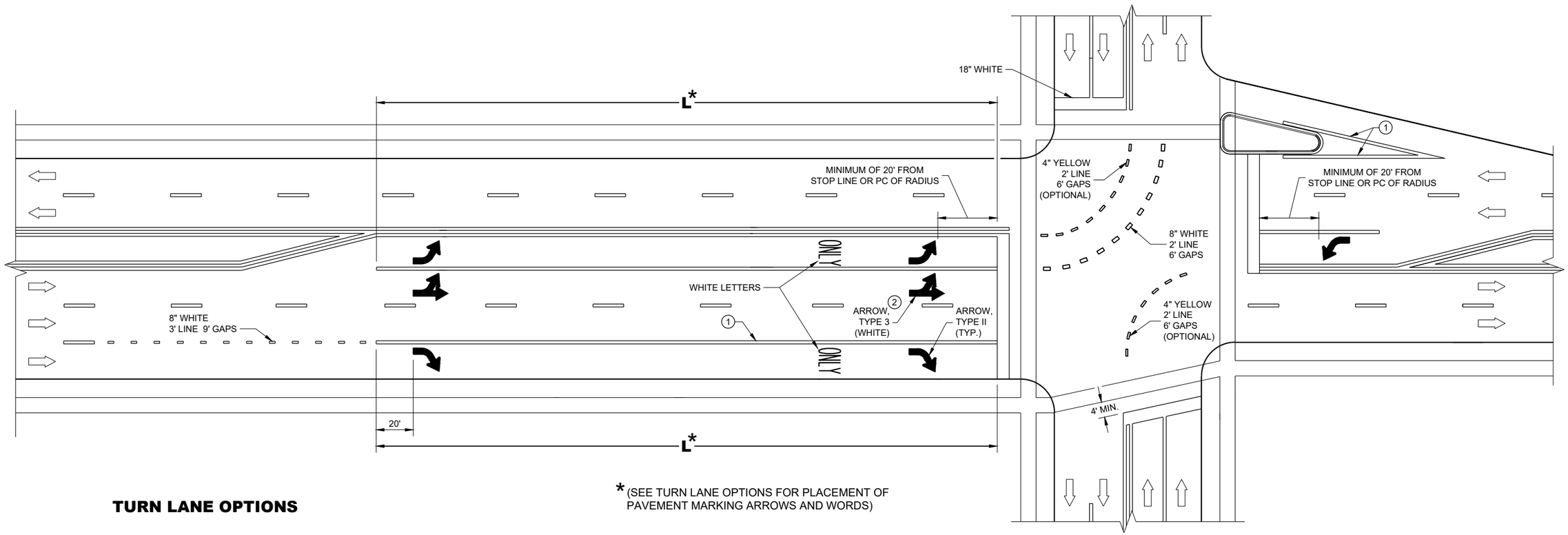


6

SDD 15C08 - 22b

6

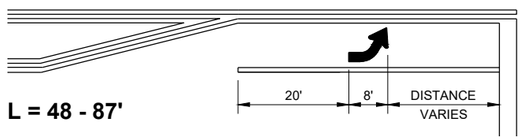
SDD 15C08 - 22b



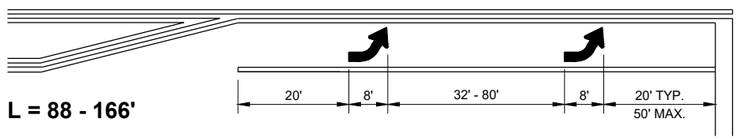

* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

## TURN LANE OPTIONS

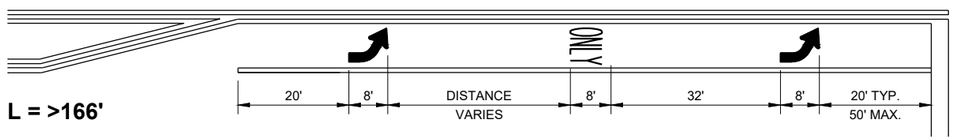
LENGTH OF TURN BAY ( **L** ) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS




**L = 48 - 87'**




**L = 88 - 166'**




**L = >166'**

## GENERAL NOTES

1. 8" WHITE
2. 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

**PAVEMENT MARKING (TURN LANES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



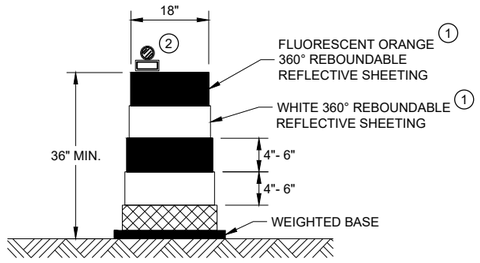


6

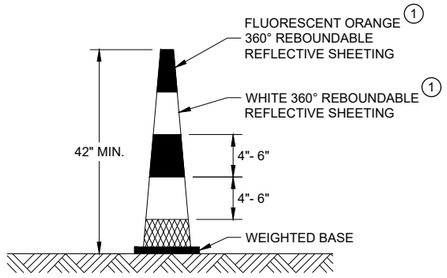
SDD 15C08 - 22d

## 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.

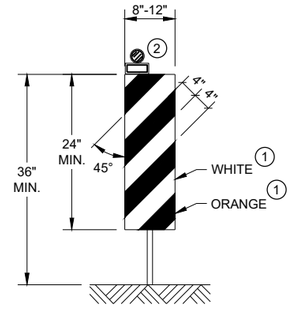



### DRUM



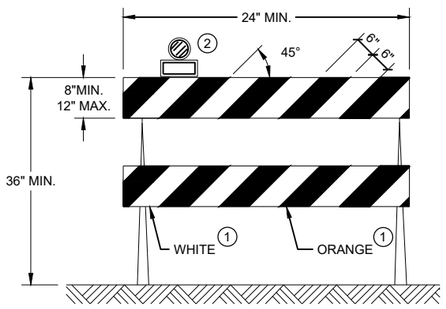

### 42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



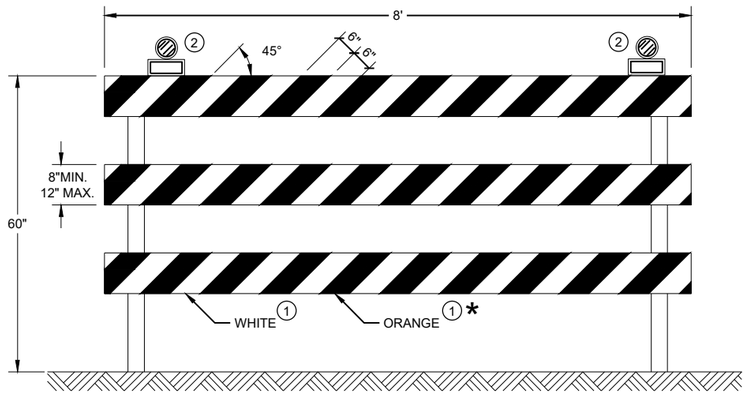

### VERTICAL PANEL

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
May 2021 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA



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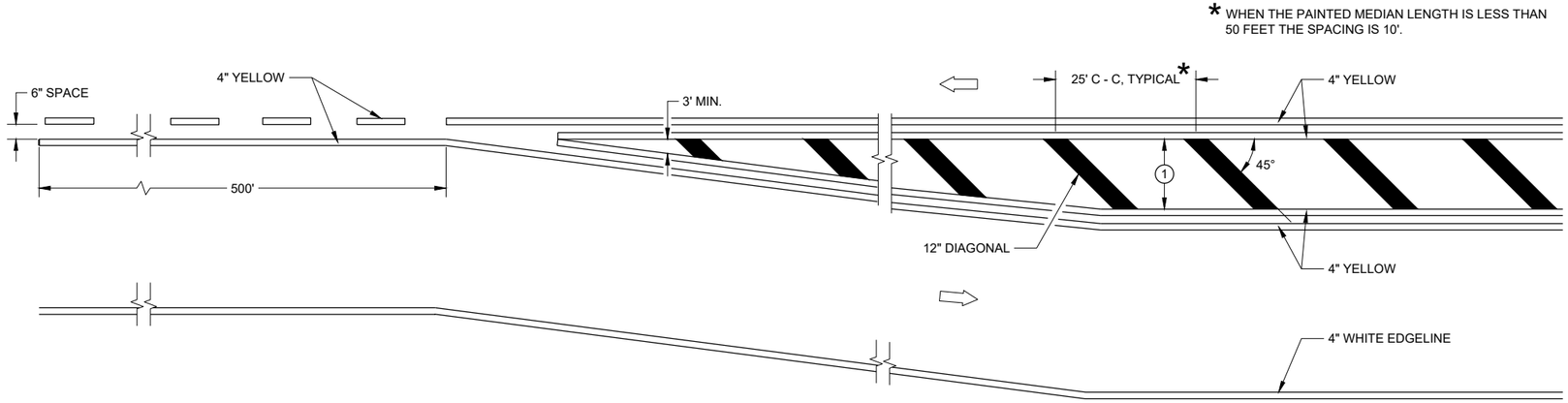
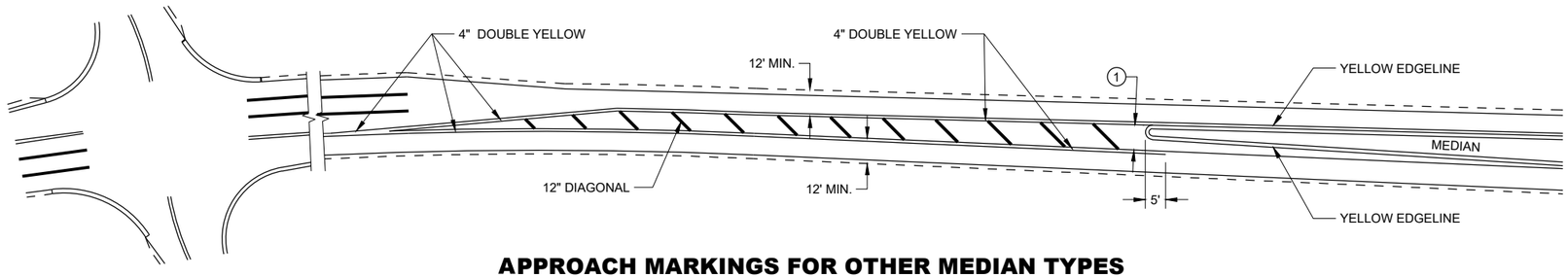
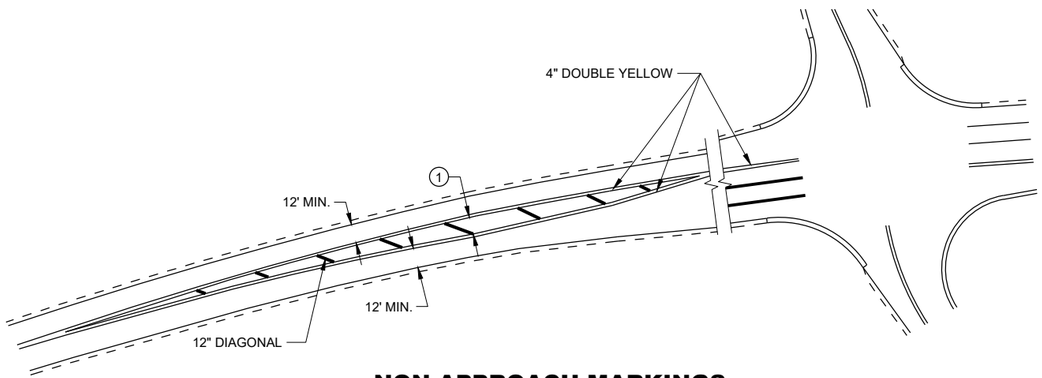



**MEDIAN ISLAND DETAIL**




**APPROACH MARKINGS FOR OTHER MEDIAN TYPES**




**NON-APPROACH MARKINGS**

## 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

**MEDIAN ISLAND PAVEMENT MARKINGS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MAF ENGINEER
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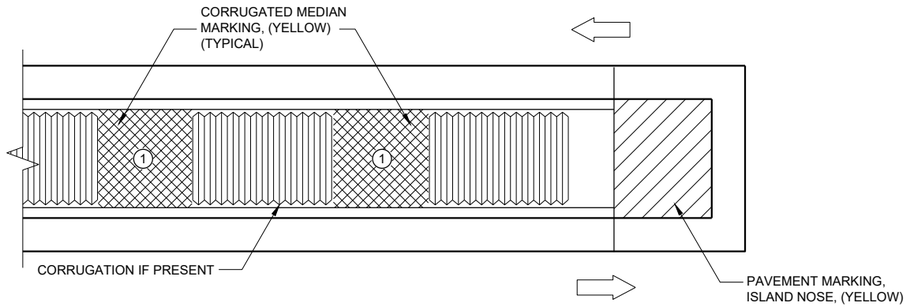
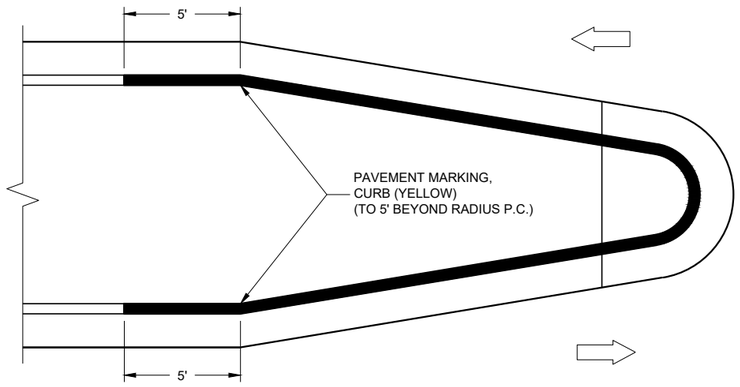
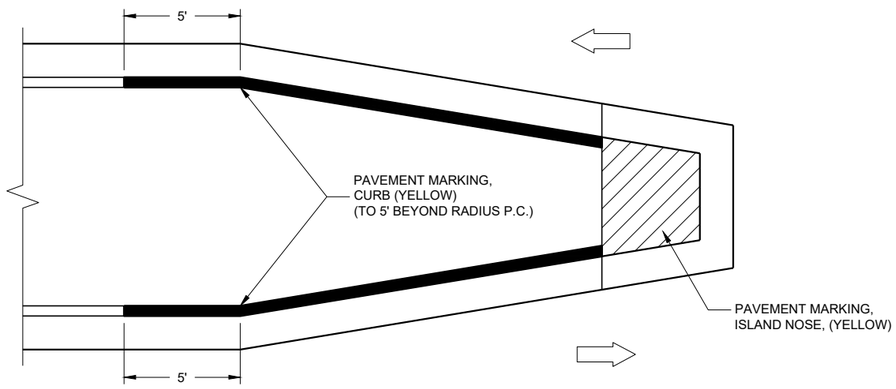
SDD 15C18 - 06a




**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

**PAVEMENT MARKINGS, MEDIAN ISLAND NOSE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2022
DATE

/S/ Jeannie Silver
STATE SIGNING AND MAF ENGINEER

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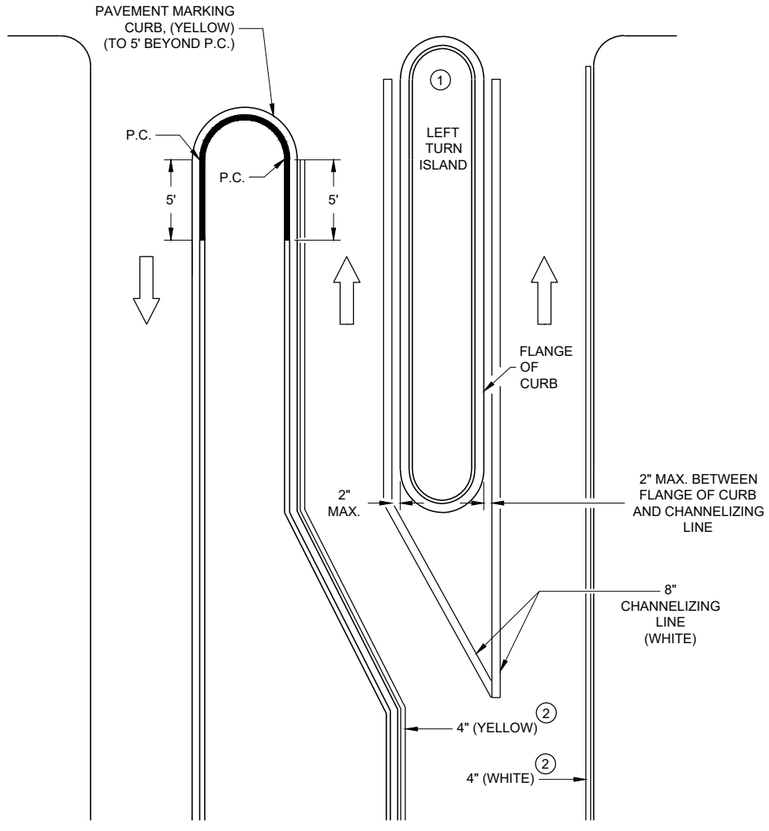
| REQUIREMENTS FOR EDGE LINES | | |
|---|---|---|
| POSTED SPEED | IS THERE CONTINUOUS LIGHTING? | |
| | YES | NO |
| ≤ 30 MPH | NO | OPTIONAL |
| 35 OR 40 MPH | OPTIONAL | RECOMMENDED |
| ≥ 45 MPH | RECOMMENDED | REQUIRED |




**LEFT TURN & MEDIAN ISLAND**

## GENERAL NOTES

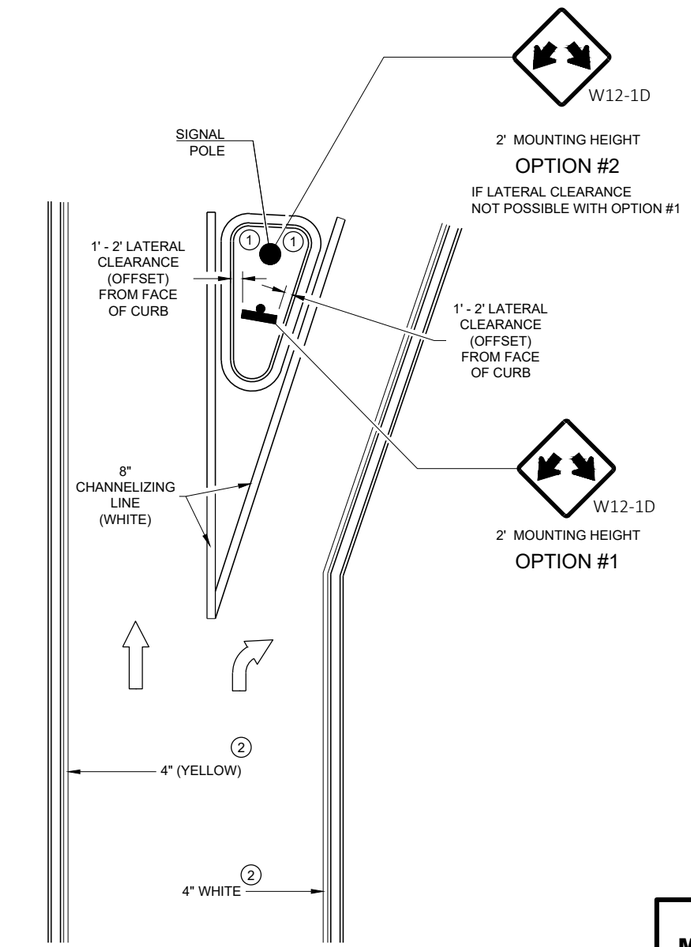
APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

(1) MARK CURB NOSES YELLOW.

(2) MARK ACCORDING TO TABLE.

DIRECTION OF TRAVEL




**RIGHT TURN ISLAND**

**MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2022 — DATE

/S/ Jeannie Silver — STATE SIGNING AND MAF ENGINEER

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SDD15C18 - 06c

## LEGEND

V1 MARKING VEHICLE

V2 SHADOW VEHICLE

V3 TRAIL VEHICLE

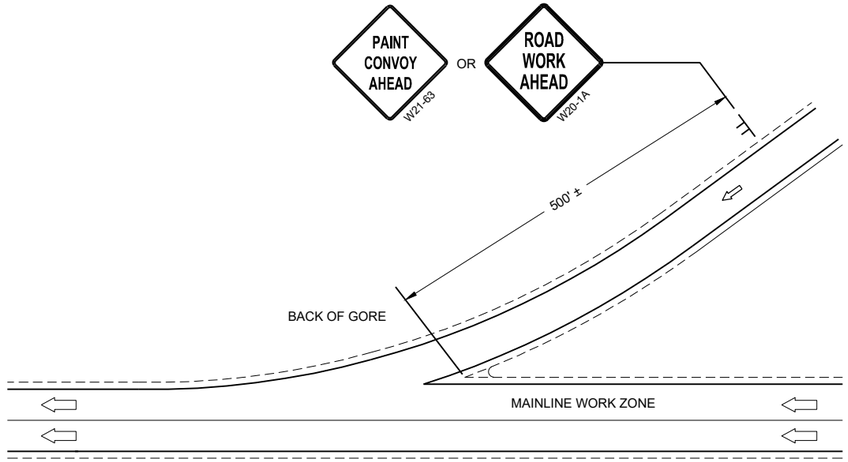
TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (MERGE)

FLASHING ARROW PANEL (CAUTION)




## 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. 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.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

IF THE SHOULDER IS TOO NARROW TO ACCOMMODATE THE LAST TRAILING VEHICLE, THE VEHICLE SHOULD STRADDLE THE EDGE LINE.

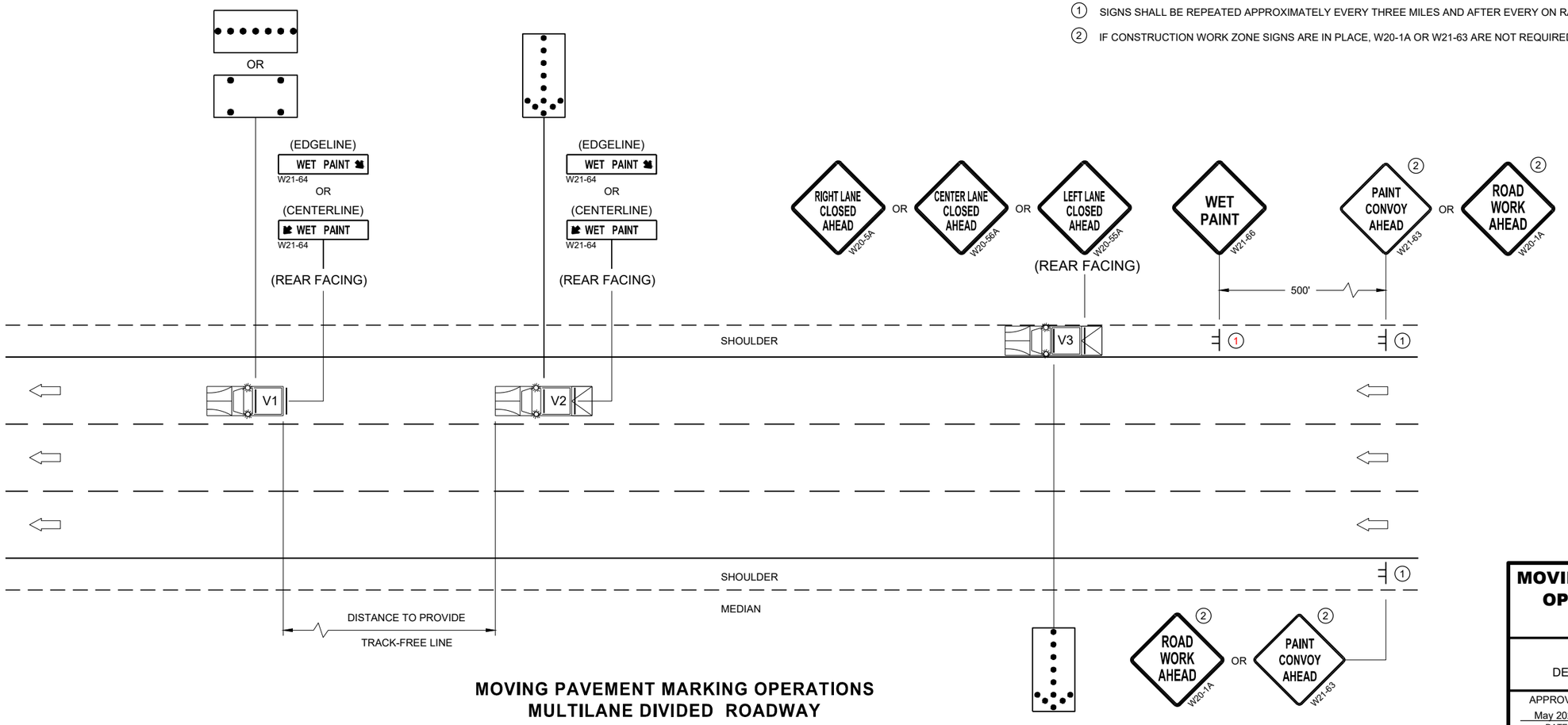
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC

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 HEIGHT OF 28" FOR WET PAVEMENT MARKINGS

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY ON RAMP.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.




**MOVING PAVEMENT MARKING OPERATIONS**
**MULTILANE DIVIDED ROADWAY**

**MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA



6

SDD15C19 - 07c

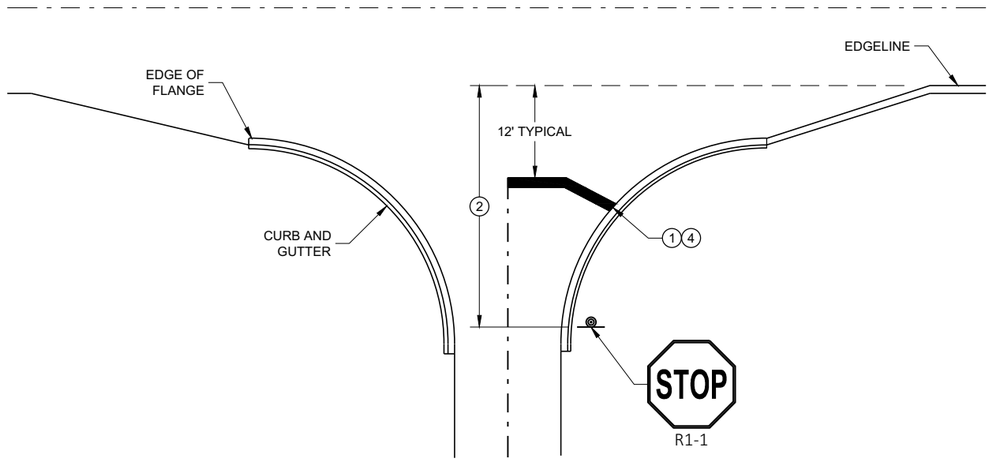
6

SDD15C19 - 07c

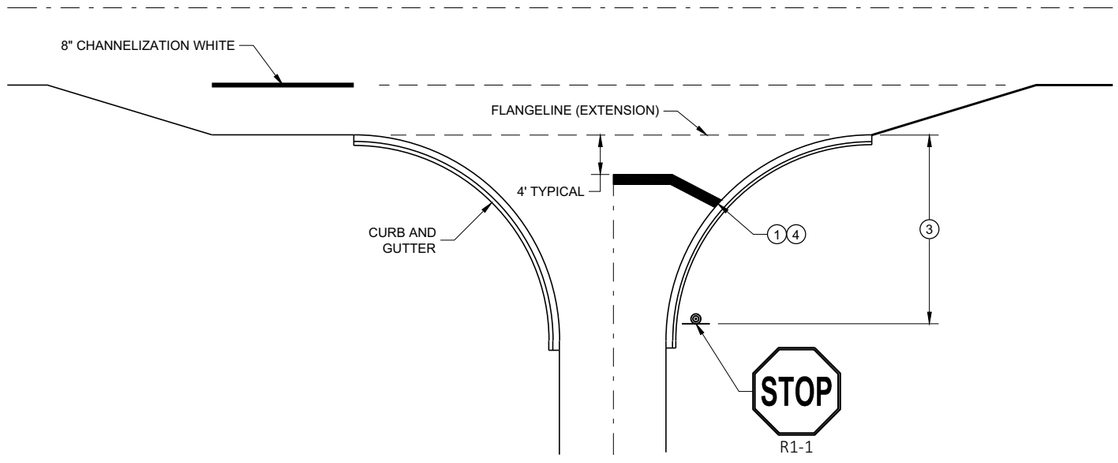
## GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

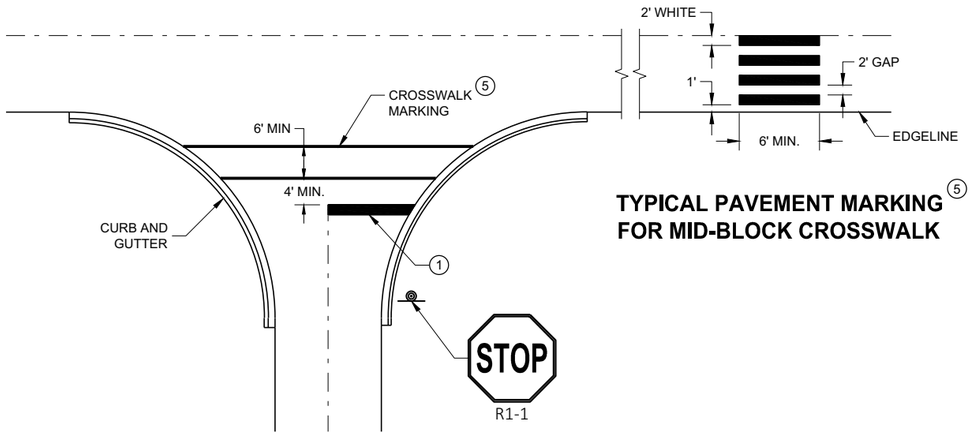
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.




**TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER**

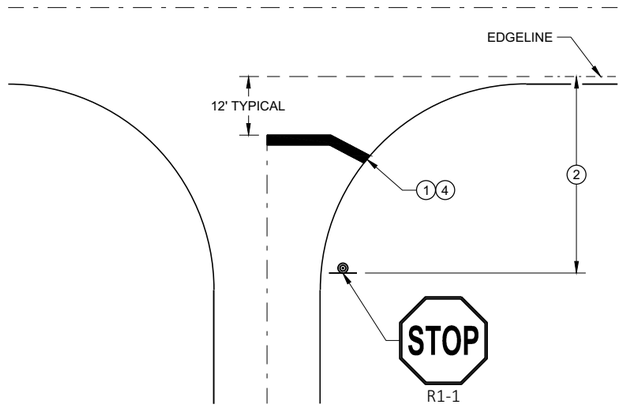



**TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE**




**TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK** 5

**TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING**




**TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER**

**STOP LINE AND CROSSWALK PAVEMENT MARKING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA



6

SDD 15C33 - 04

6

SDD 15C33 - 04

## 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)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

## 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.

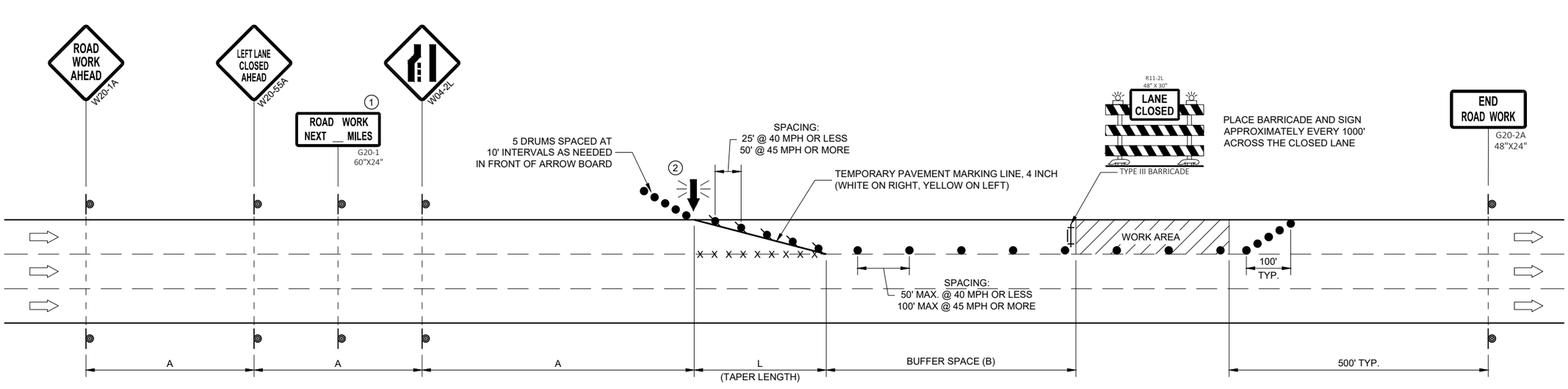
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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.




| 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' | 55' |
| 30 | 200' | 180' | 85' |
| 35 | 350' | 245' | 120' |
| 40 | 350' | 320' | 170' |
| 45 | 500' | 540' | 220' |

# TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA




6


SDD15D20 - 06a

## LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

## GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45 MPH, USE SDD 15D14.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES.
FOR CLOSING LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

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 LINES 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.

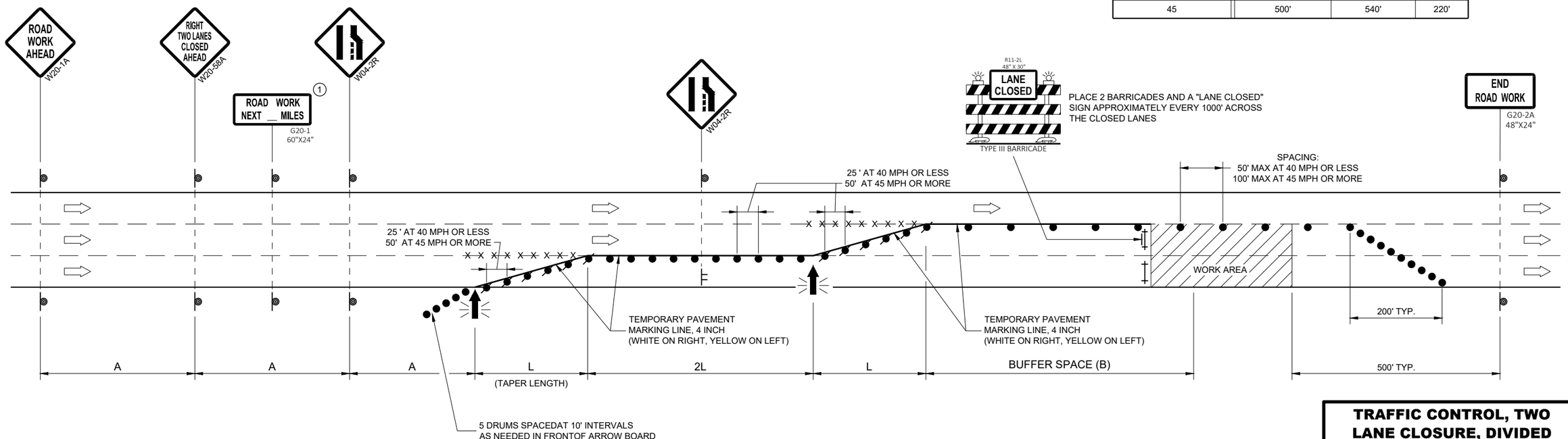
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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.

| 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' | 55' |
| 30 | 200' | 180' | 85' |
| 35 | 350' | 245' | 120' |
| 40 | 350' | 320' | 170' |
| 45 | 500' | 540' | 220' |




# TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA



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SDD 15D22 - 05

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SDD 15D22 - 05

## LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

## GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

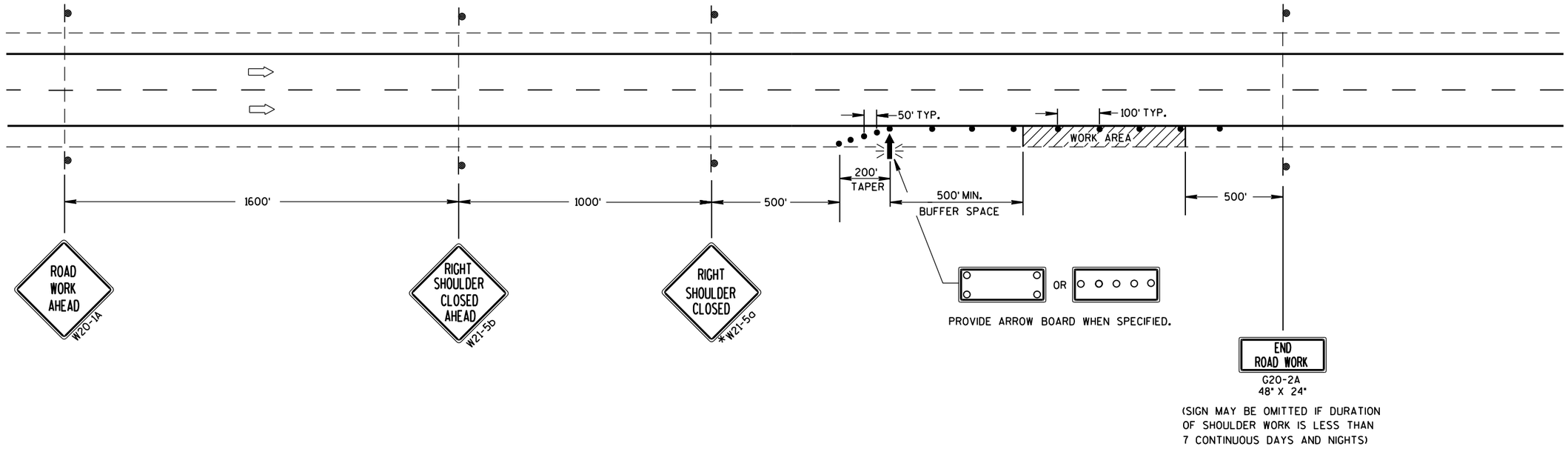
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN A 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.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.




# TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

FHWA

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S.D.D. 15 D 27-3

## GENERAL NOTES

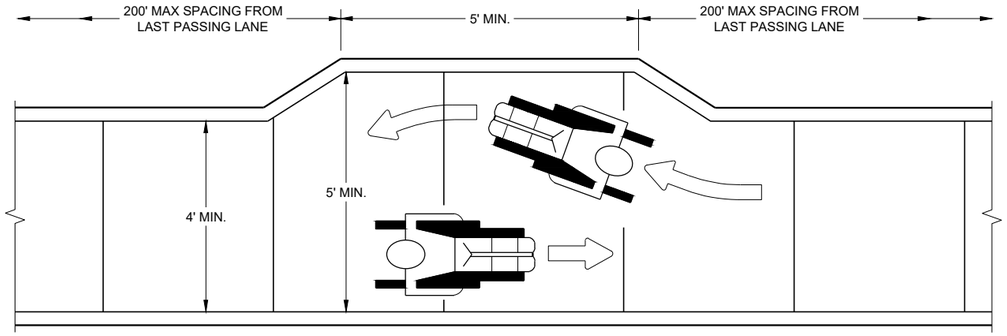
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

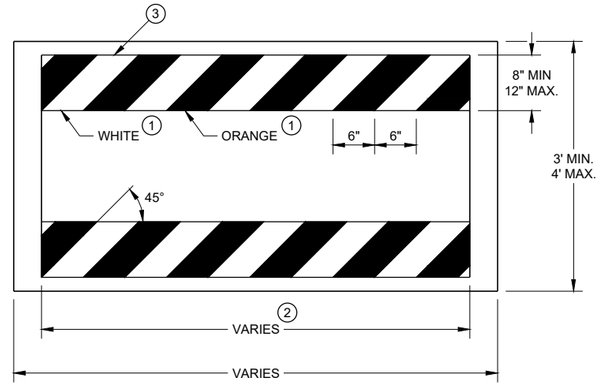
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

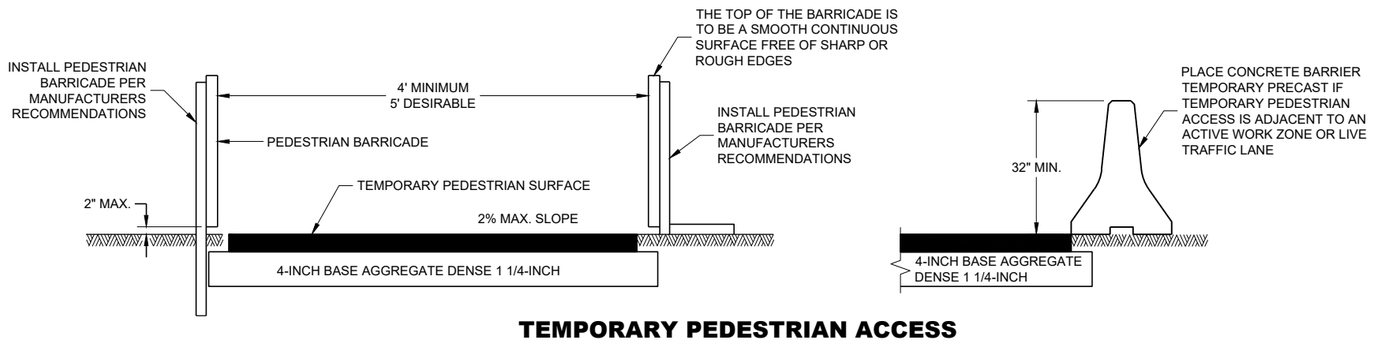
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.




**NARROW SIDEWALK PASSING DETAIL**




**TEMPORARY PEDESTRIAN BARRICADE***




**TEMPORARY PEDESTRIAN ACCESS**

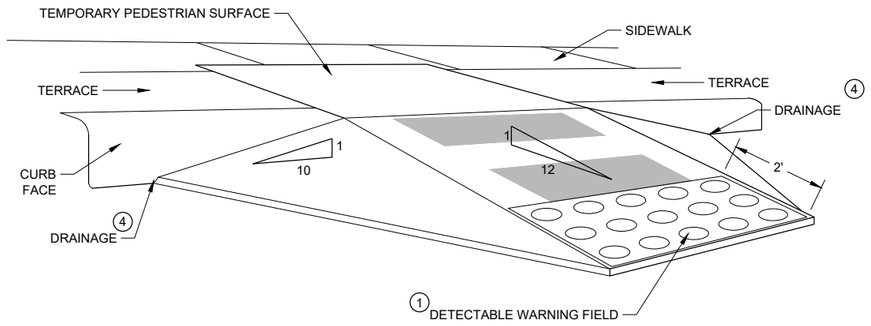
6

6

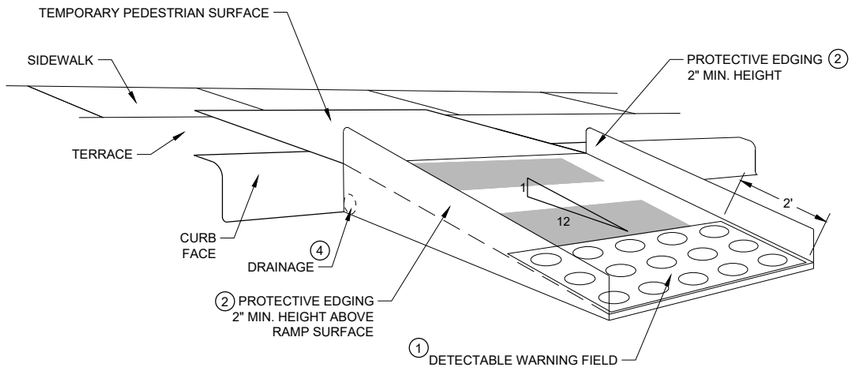
SDD 15D30 - 07a

SDD 15D30 - 07a

**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**




**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 1:50 (2%) 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.

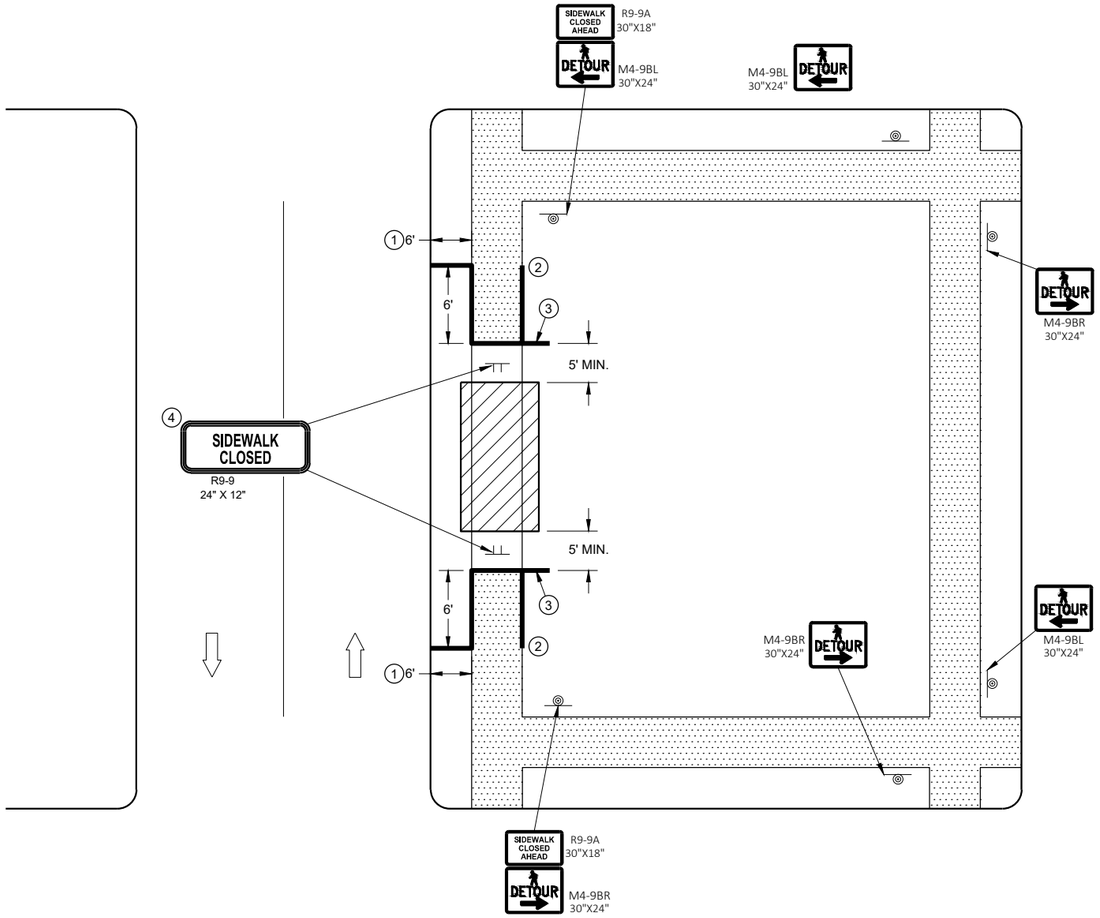

6


SDD 15D30 - 07c

**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**

## LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC




**SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE**

## GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

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. 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.

## 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

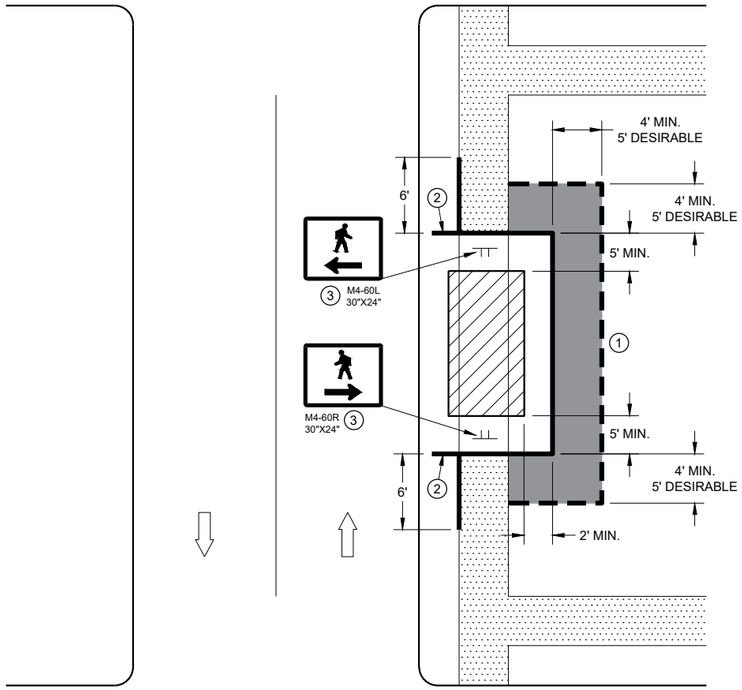
TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

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 DIVERSION**
**SINGLE SIDE**

6

SDD 15D30 - 07g

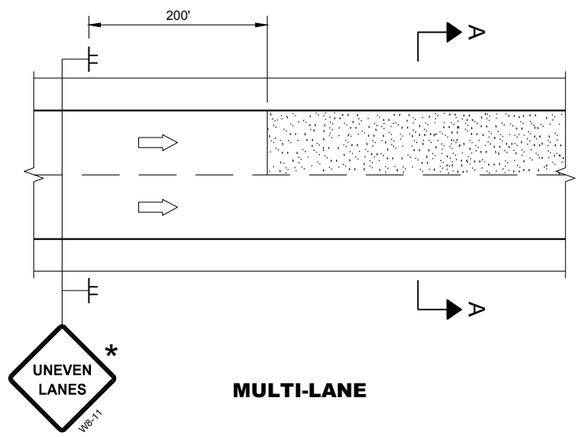
**TRAFFIC CONTROL,**
**PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

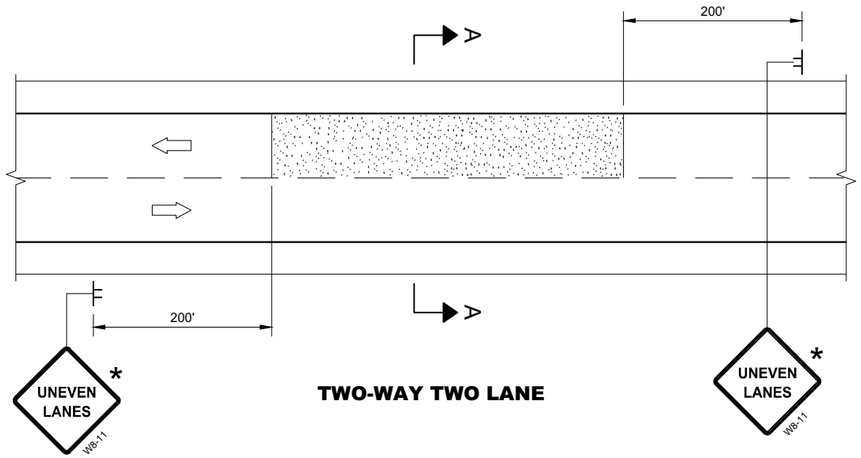


6

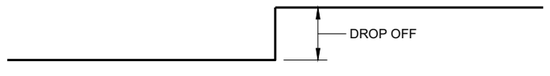
SDD15D30 - 07g




**MULTI-LANE**

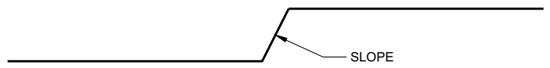



**TWO-WAY TWO LANE**

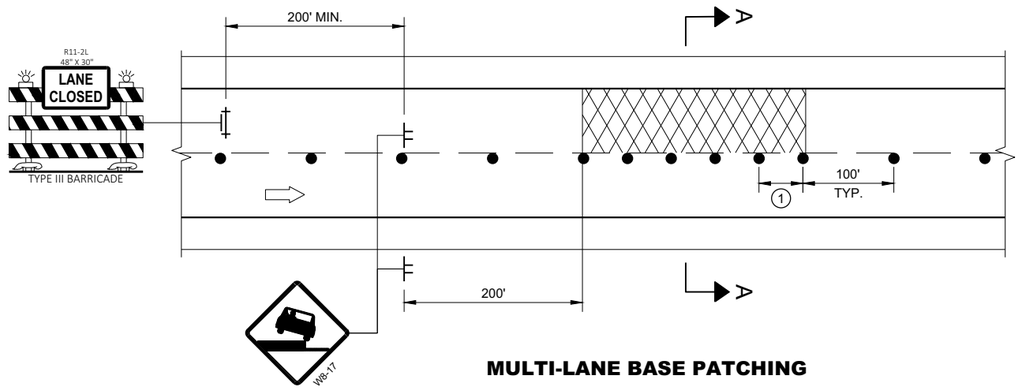



**SECTION A - A**

**OR**

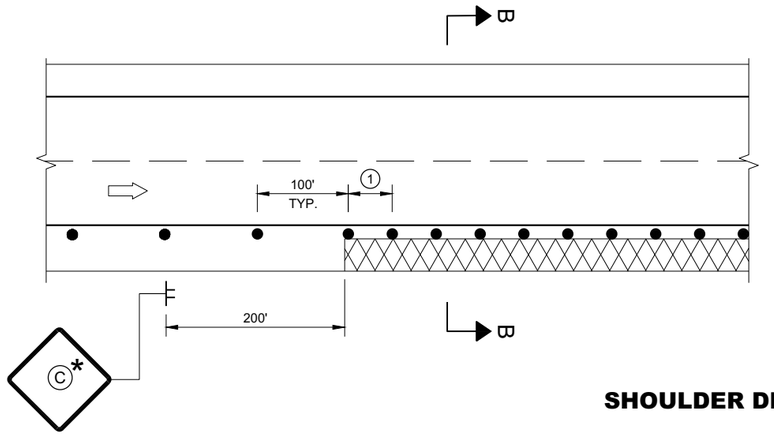



**SECTION A - A**

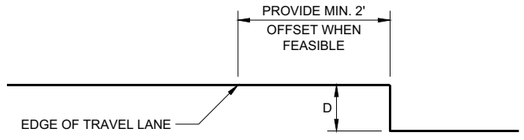



**MULTI-LANE BASE PATCHING**

**ADJACENT LANE DROP-OFFS**




**SHOULDER DROP-OFFS**




**SECTION B - B**

| D | SIGN (C) |
|---|---|
| < 2" WITH A SLOPE STEEPER THAN 3:1 | LOW SHOULDER<br>WO8-9 |
| 2" < 6" WITH A SLOPE STEEPER THAN 3:1 | SHOULDER DROP - OFF<br>W8-9A<br>PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT |

## GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

## LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

**TRAFFIC CONTROL, DROP-OFF SIGNING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA




6


SDD 15D39 - 02

## LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- CONCRETE BARRIER TEMPORARY PRECAST

## GENERAL NOTES

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 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT LEFT - REVERSE FOR SHIFTING RIGHT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

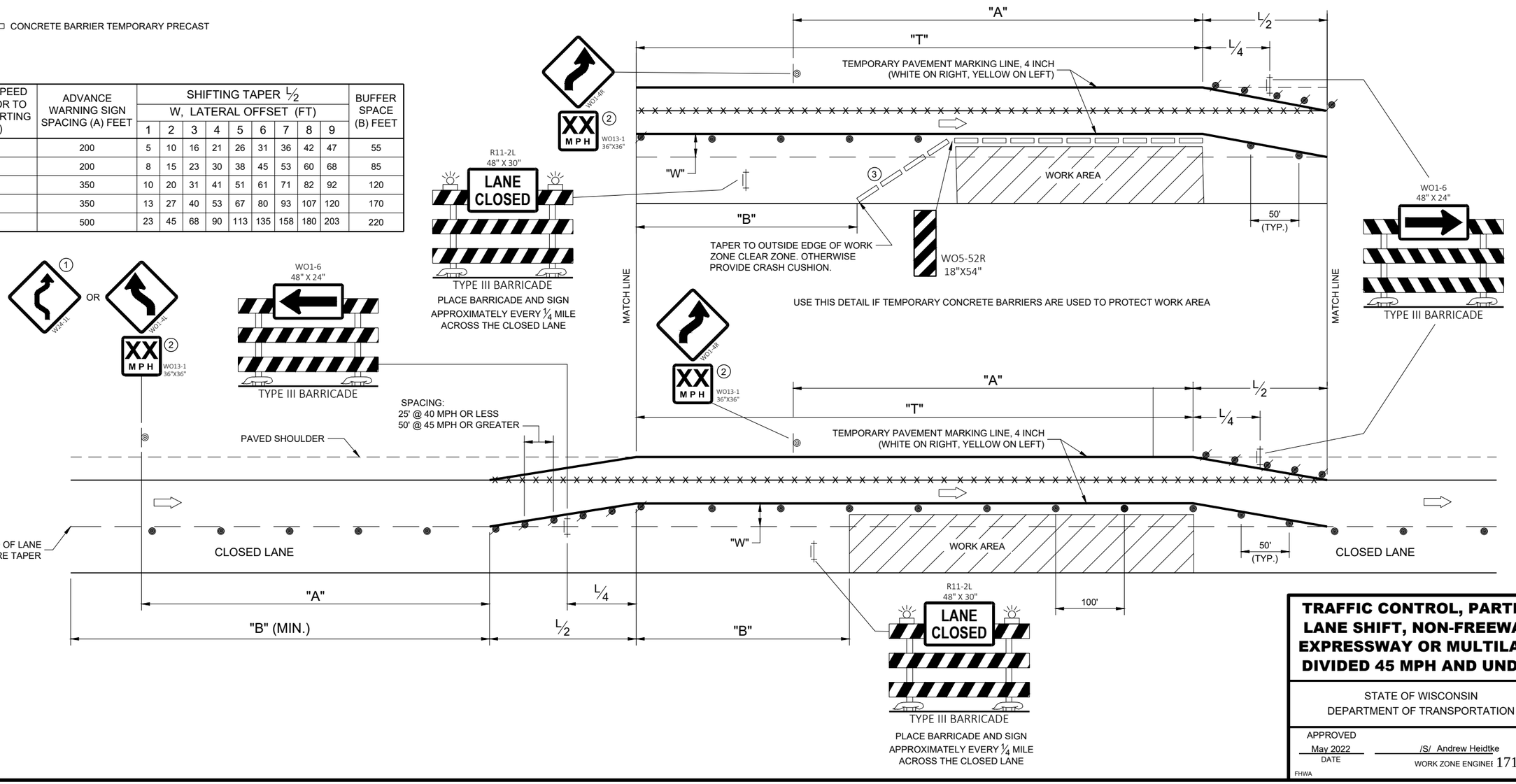
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

(1) USE ONLY WHEN T<600', OMIT WO1-4R.

(2) IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

(3) BARRIER FLARE RATE: 6:1 @ 40 MPH OR LESS
8:1 @ 45 MPH OR GREATER

| POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH) | ADVANCE WARNING SIGN SPACING (A) FEET | SHIFTING TAPER L/2 W, LATERAL OFFSET (FT) | | | | | | | | | BUFFER SPACE (B) FEET |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| 25 | 200 | 5 | 10 | 16 | 21 | 26 | 31 | 36 | 42 | 47 | 55 |
| 30 | 200 | 8 | 15 | 23 | 30 | 38 | 45 | 53 | 60 | 68 | 85 |
| 35 | 350 | 10 | 20 | 31 | 41 | 51 | 61 | 71 | 82 | 92 | 120 |
| 40 | 350 | 13 | 27 | 40 | 53 | 67 | 80 | 93 | 107 | 120 | 170 |
| 45 | 500 | 23 | 45 | 68 | 90 | 113 | 135 | 158 | 180 | 203 | 220 |




# TRAFFIC CONTROL, PARTIAL LANE SHIFT, NON-FREEWAY/ EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

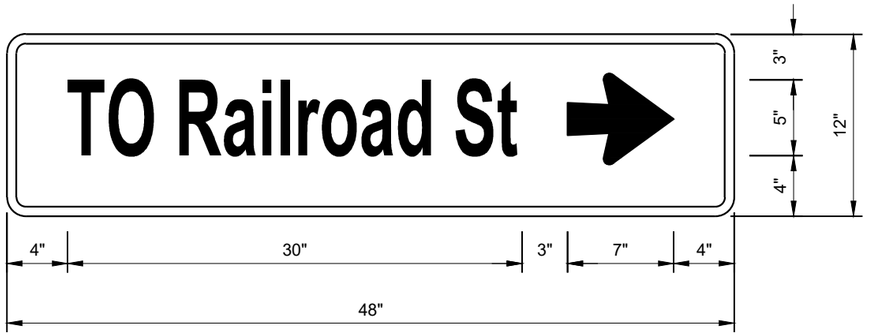
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA



SDD 15D40 - 04c

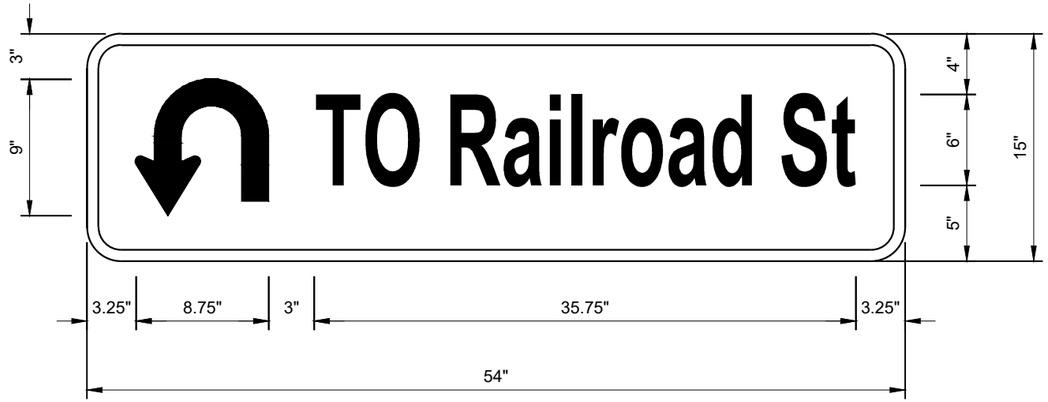
SDD 15D40 - 04c




1.25" Radius, 0.625" Boarder

NOTES:

1. ALL SIGNS TYPE II - TYPE H REFLECTIVE
2. COLOR:
   BACKGROUND - GREEN
   MESSAGE - WHITE
3. MESSAGE SERIES - C
4. SEE STANDARD SIGN PLATE M5-52 FOR U-TURN AND ARROW SYMBOL GUIDANCE




2.25" Radius, 0.75" Boarder

7

7

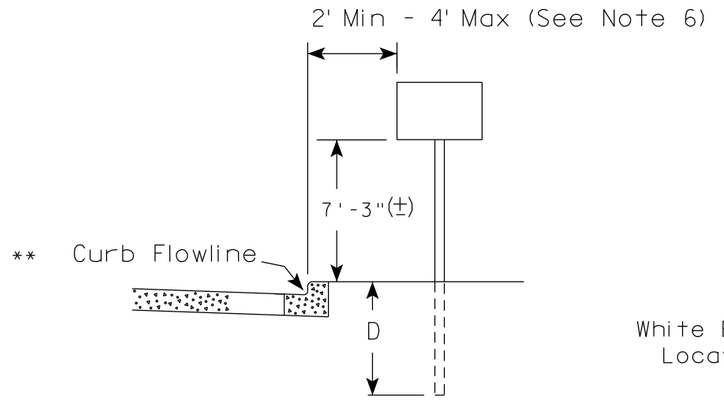
| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | SIGN DETAILS | SHEET 172 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\070101-SD.DWG
LAYOUT NAME - 070101-sd1

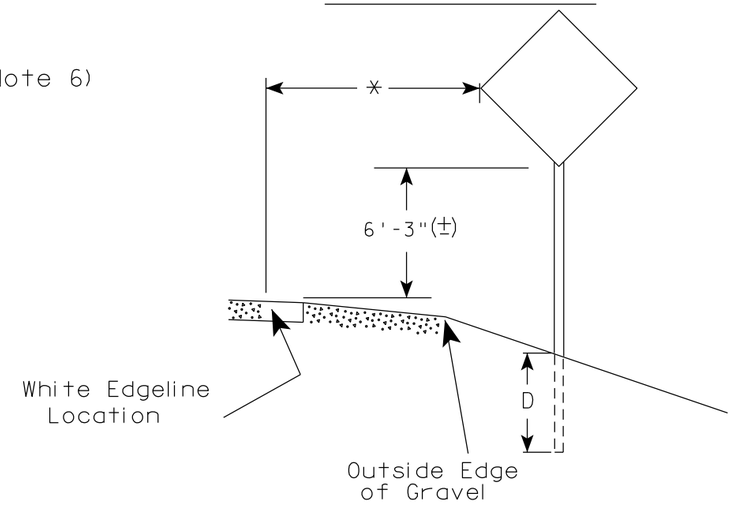
PLOT DATE : 10/31/2022 8:12 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:10 FT

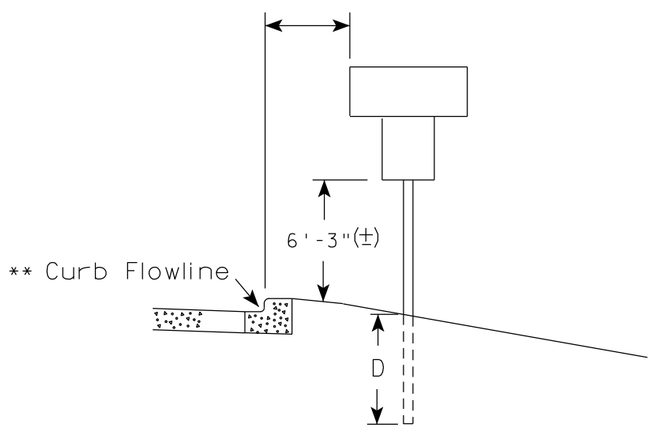
WISDOT/CADDS SHEET 42

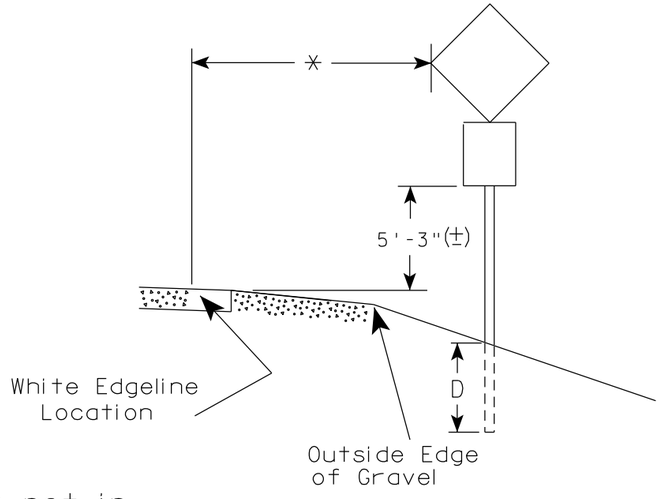
## URBAN AREA




## 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" (±). 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. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

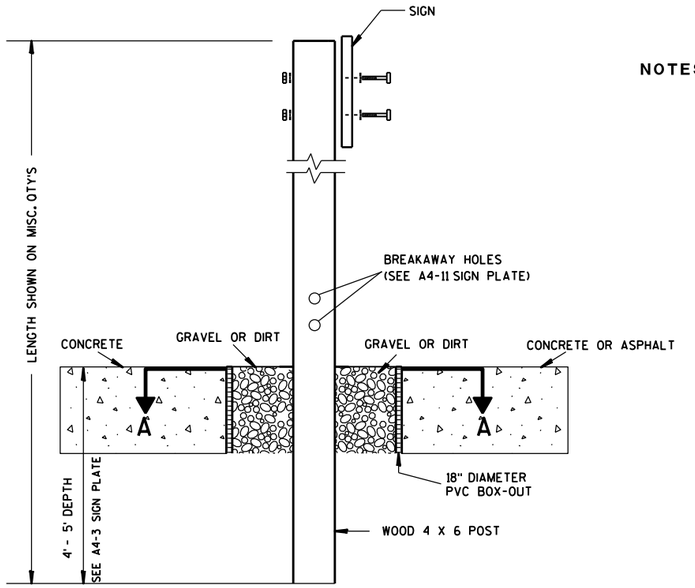
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

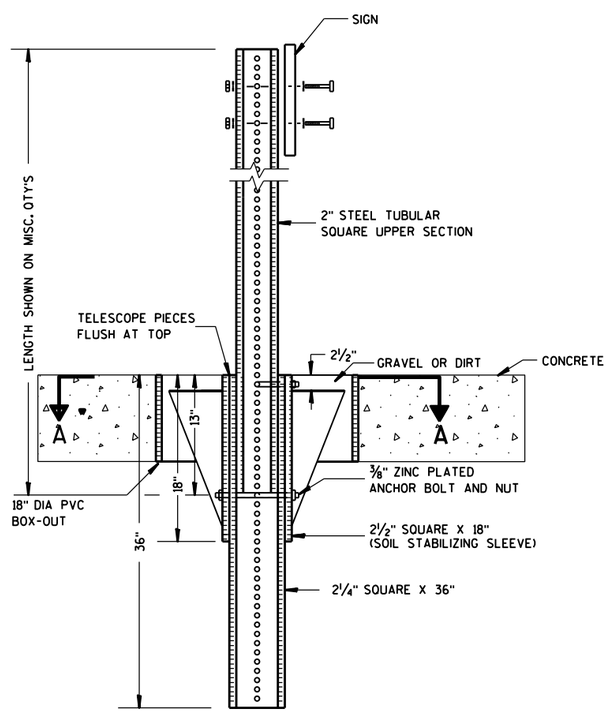
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 173 | E |
|---|---|---|---|---|---|




**ELEVATION VIEW**

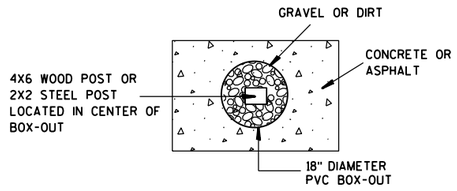
**DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT**

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

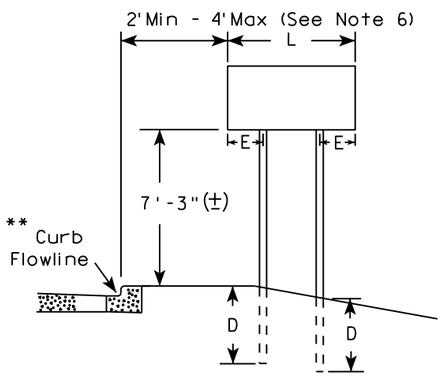
DATE 1/27/14 PLATE NO. A4-3B.1

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

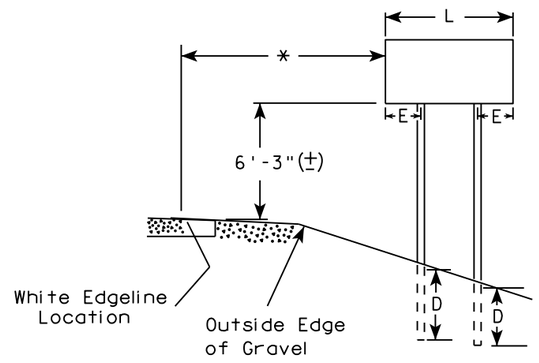


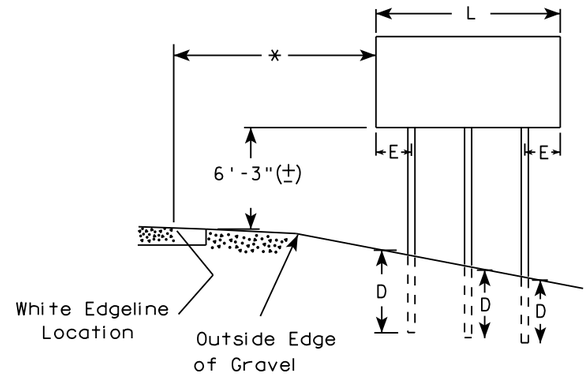
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

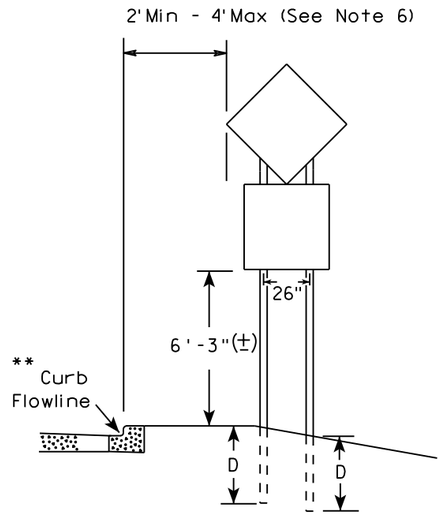
URBAN AREA



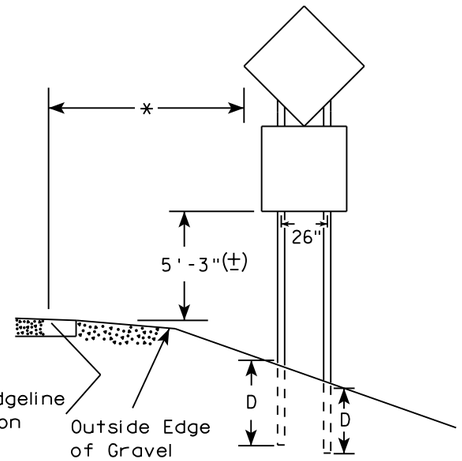

RURAL AREA (See Note 3)




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" (±) or 6'-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" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-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" (±).

* 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

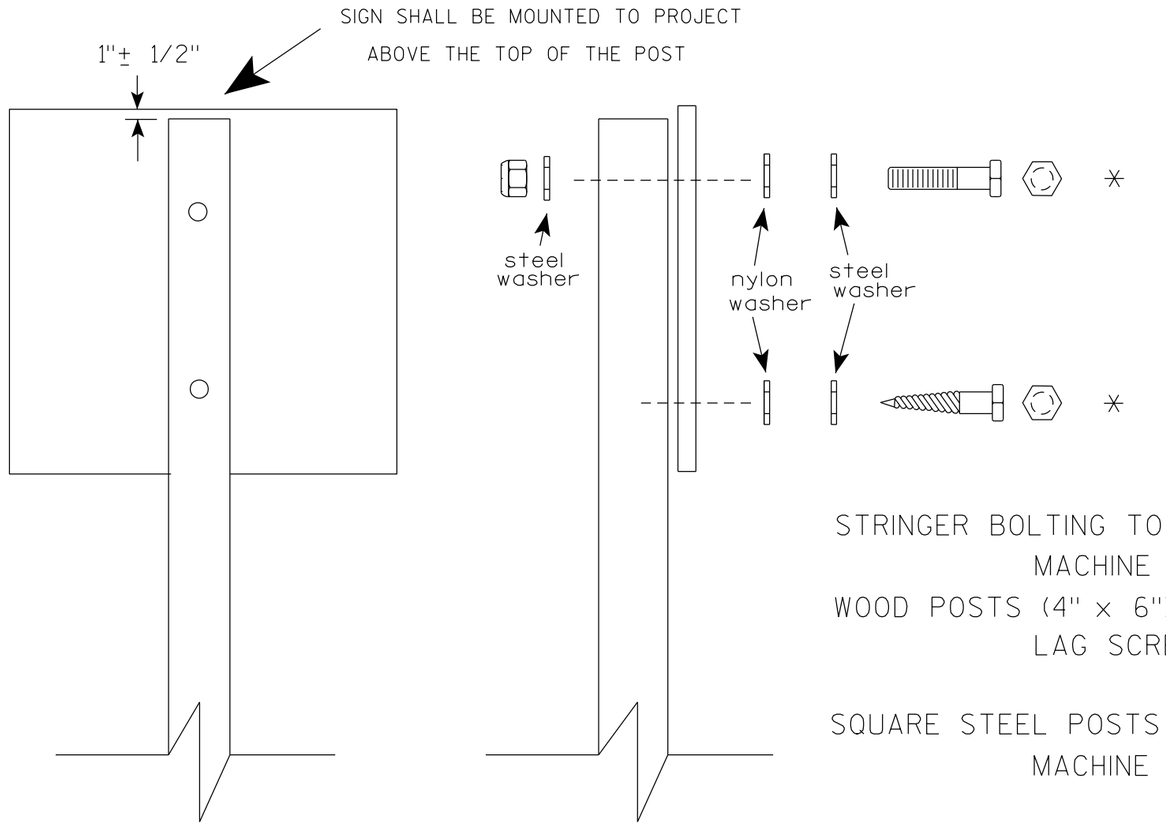
DATE 8/21/17 PLATE NO. A4-4.15

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 175 | E |
|---|---|---|---|---|---|

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A44.DGN PLOT DATE : 21-AUG-2017 15:54 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 108.188297:1.000000




7




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

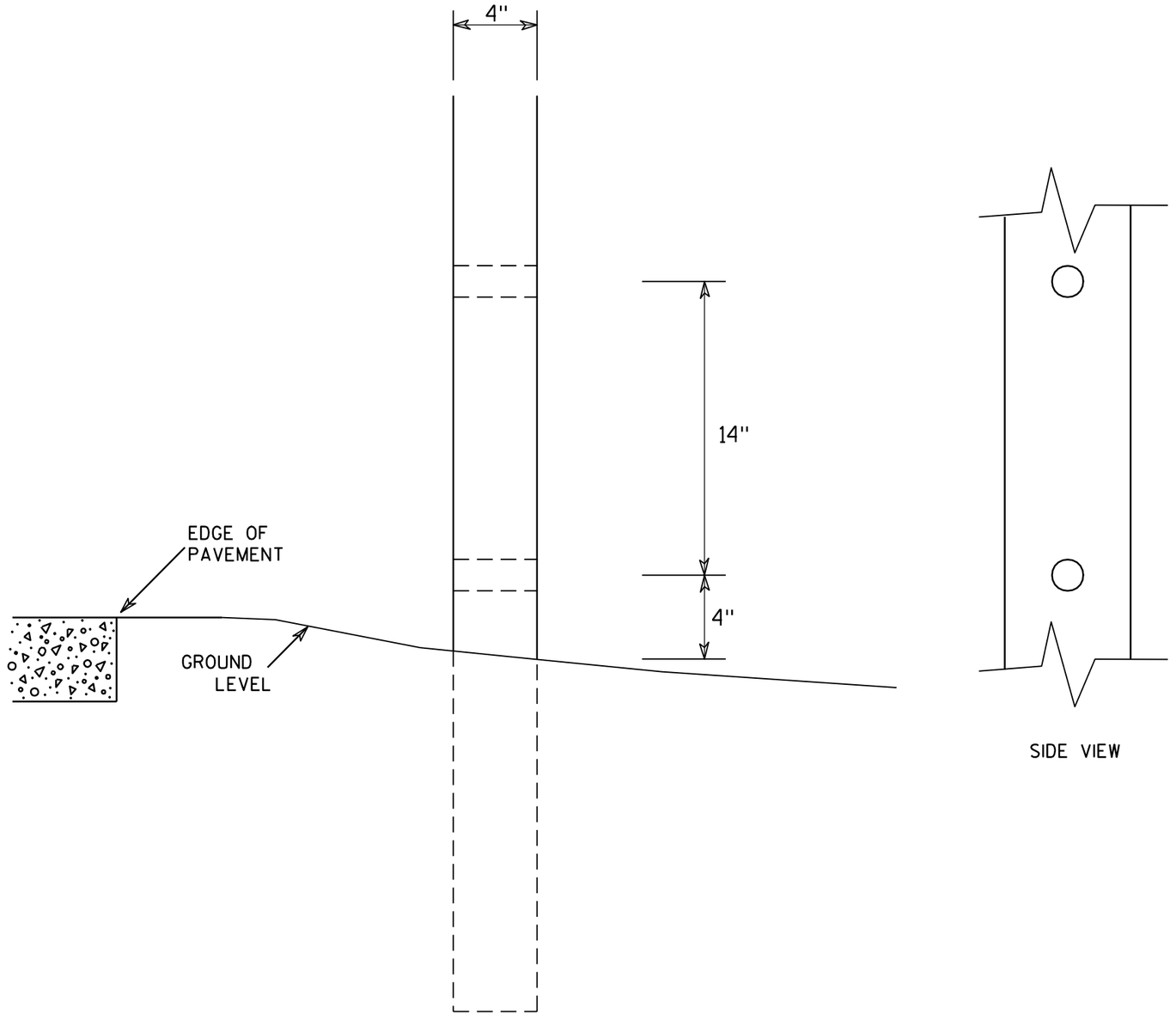
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

SHEET NO: 176 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.

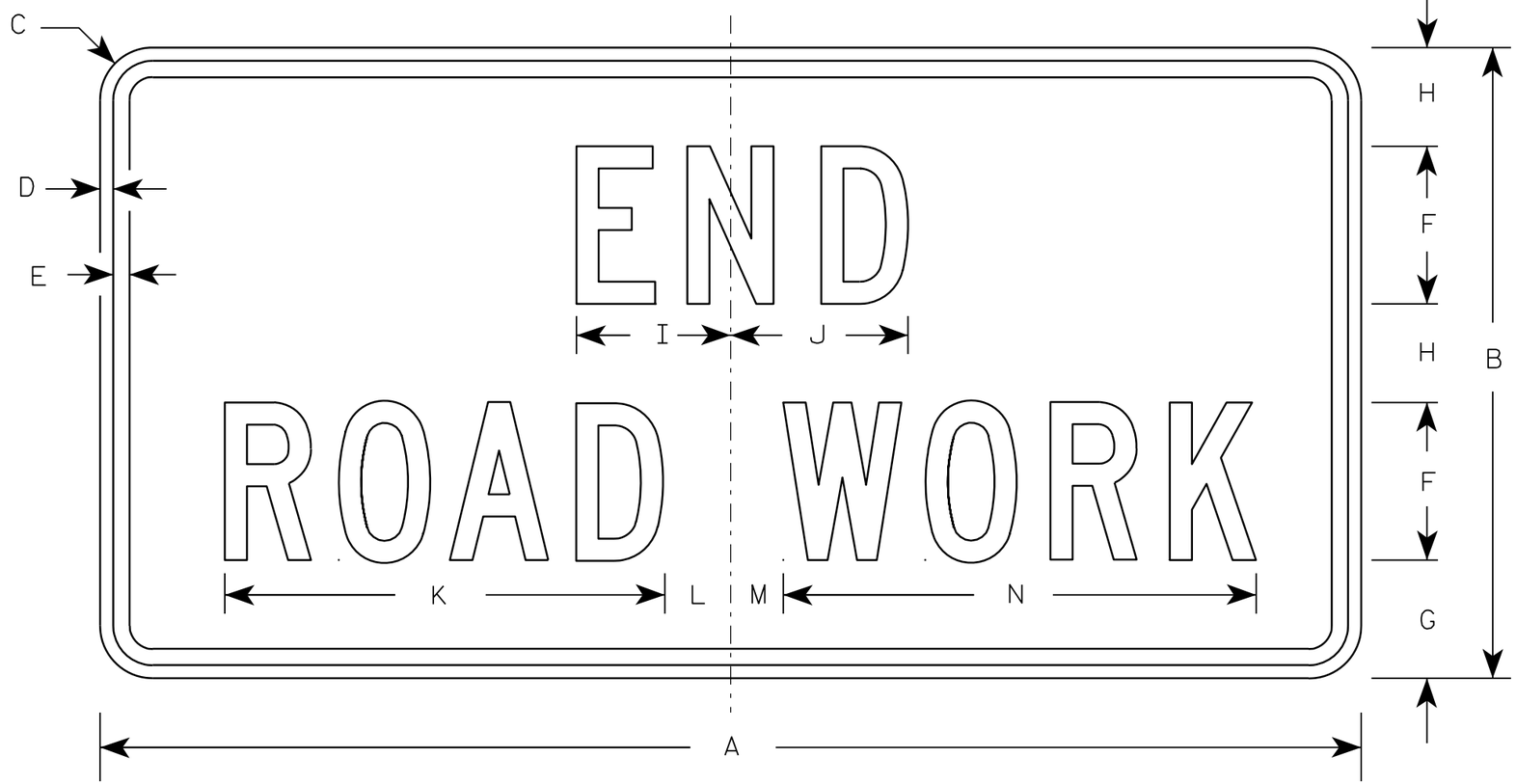
# 4 X 6 WOOD POST MODIFICATIONS

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: 177 | E |
|---|---|---|---|---|---|




G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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.

Metric equivalent for this sign is:

| SIZE | |
|---|---|
| 1 | 900 mm X 450 mm |
| 2 | 1200 mm X 600 mm |
| 3 | 1200 mm X 600 mm |
| 4 | 1200 mm X 600 mm |
| 5 | 1200 mm X 600 mm |

| 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. | Area m2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | 18 | 1 1/8 | 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 | 0.41 |
| 2 | 48 | 24 | 1 1/2 | 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 | 0.72 |
| 3 | 48 | 24 | 1 1/2 | 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 | 0.72 |
| 4 | 48 | 24 | 1 1/2 | 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 | 0.72 |
| 5 | 48 | 24 | 1 1/2 | 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 | 0.72 |

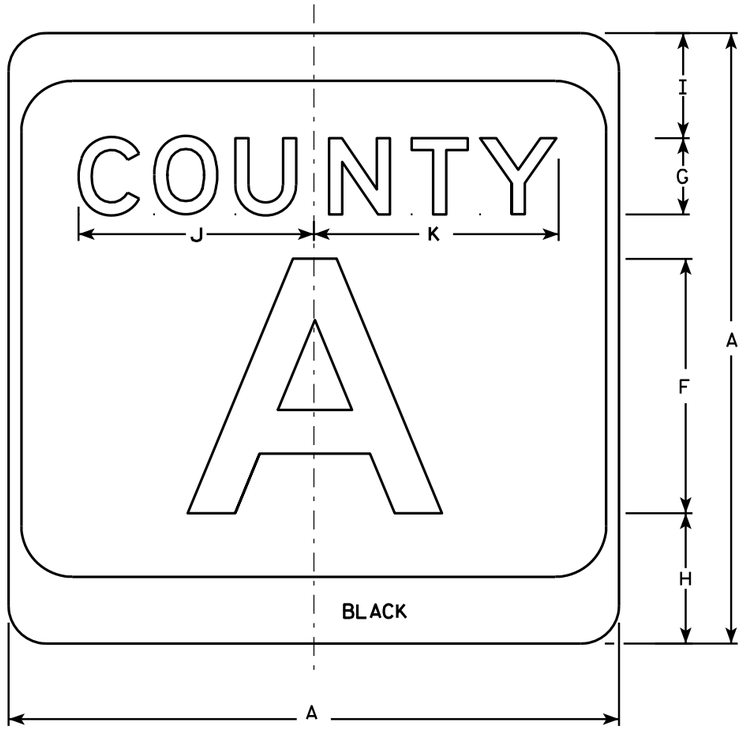
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

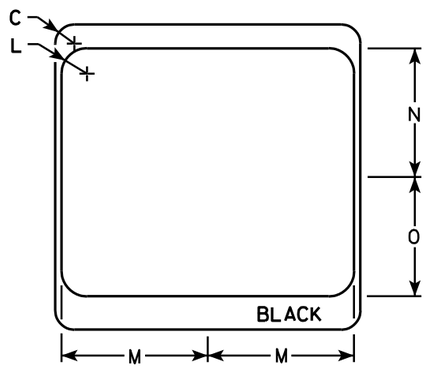
APPROVED Matthew R Rauch
for State Traffic Engineer

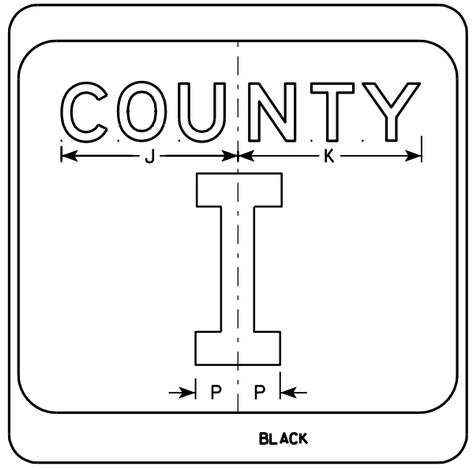
DATE 9/30/09 PLATE NO. G20-2A.8

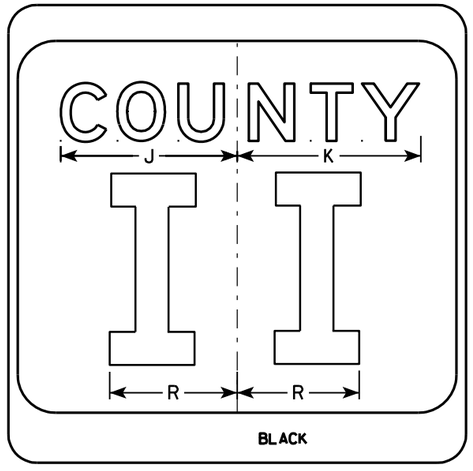
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 178 | E |
|---|---|---|---|---|---|




M1-5A




NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   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. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

| 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 | | | 10 | 3 | 5 1/8 | 4 1/8 | 9 1/4 | 9 5/8 | 2 | 11 1/2 | 10 1/8 | 9 3/8 | 2 1/4 | | 6 5/8 | | | | | | | | | 4.0 |
| 3 | 36 | | 2 1/4 | | | 16 | 4 | 7 5/8 | 5 5/8 | 12 1/4 | 12 7/8 | 3 | 17 1/8 | 15 1/4 | 14 | 3 3/8 | | 10 | | | | | | | | | 9.0 |
| 4 | 36 | | 2 1/4 | | | 16 | 4 | 7 5/8 | 5 5/8 | 12 1/4 | 12 7/8 | 3 | 17 1/8 | 15 1/4 | 14 | 3 3/8 | | 10 | | | | | | | | | 9.0 |
| 5 | 36 | | 2 1/4 | | | 16 | 4 | 7 5/8 | 5 5/8 | 12 1/4 | 12 7/8 | 3 | 17 1/8 | 15 1/4 | 14 | 3 3/8 | | 10 | | | | | | | | | 9.0 |

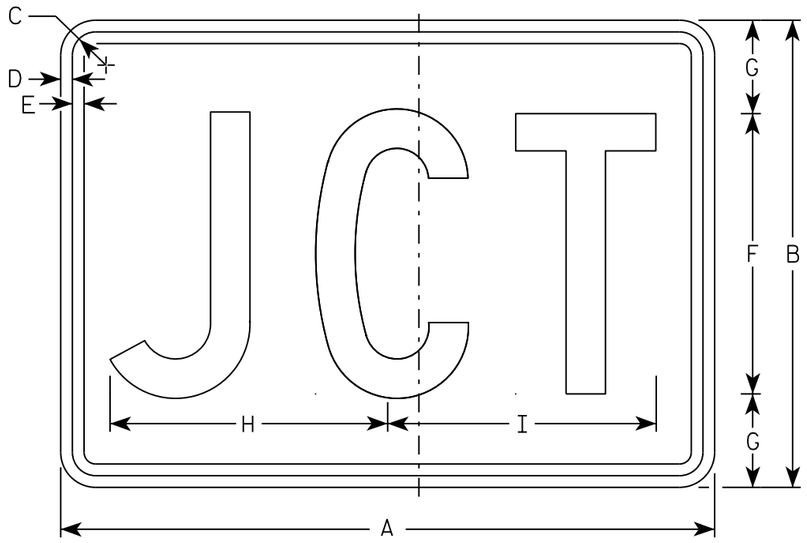
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

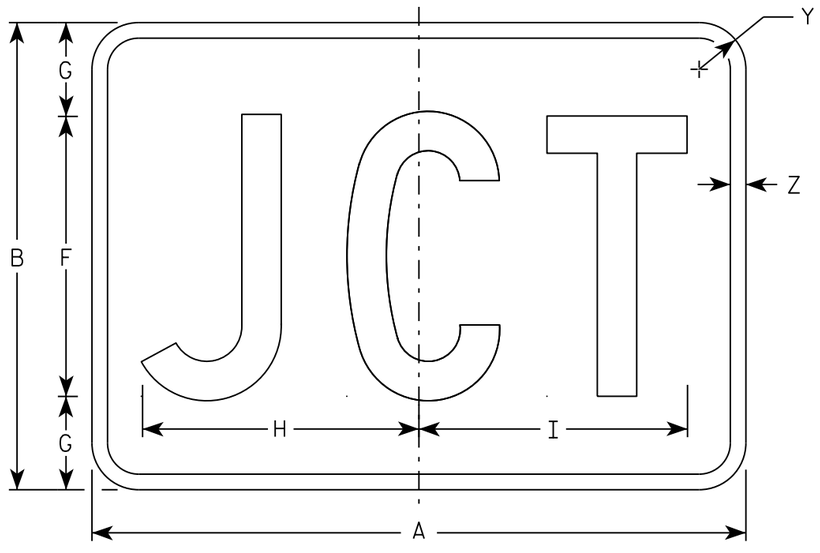
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 179 | E




M2-1
MM2-1
MP2-1




MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
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. 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | 15 | 1 1/8 | 3/8 | 3/8 | 9 | 3 | 8 7/8 | 8 5/8 | | | | | | | | | | | | | | | | 1 1/2 | 1/2 | 2.20 |
| 3 | 30 | 21 | 1 1/8 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | 1 1/2 | 1/2 | 4.40 |
| 4 | 30 | 21 | 1 1/8 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | 1 1/2 | 1/2 | 4.40 |
| 5 | 30 | 21 | 1 1/8 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | 1 1/2 | 1/2 | 4.40 |

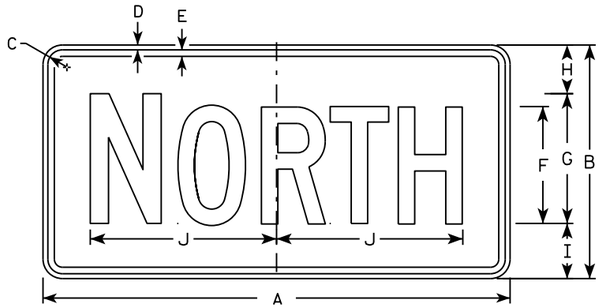
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

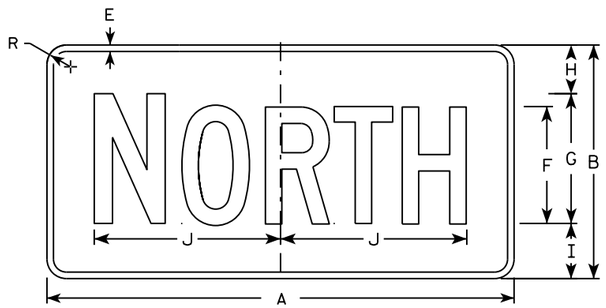
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 180 12-1.12

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|



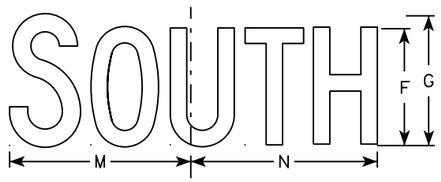

M3-1
MM3-1
MP3-1



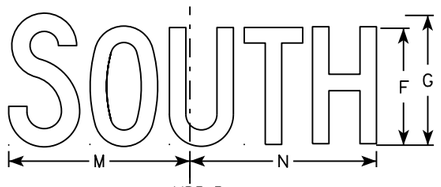

MB3-1
MK3-1
MN3-1


M3-2
MM3-2
MP3-2

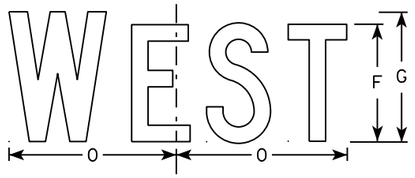

MB3-2
MK3-2
MN3-2



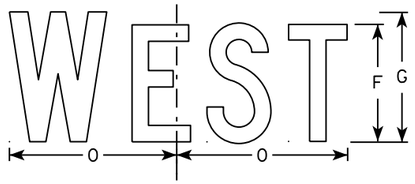

M3-3
MM3-3
MP3-3




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
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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 12 | 1 1/8 | 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 | | | 1 1/2 | | | | | | | | | 2.00 |
| 3 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |
| 4 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |
| 5 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |

STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

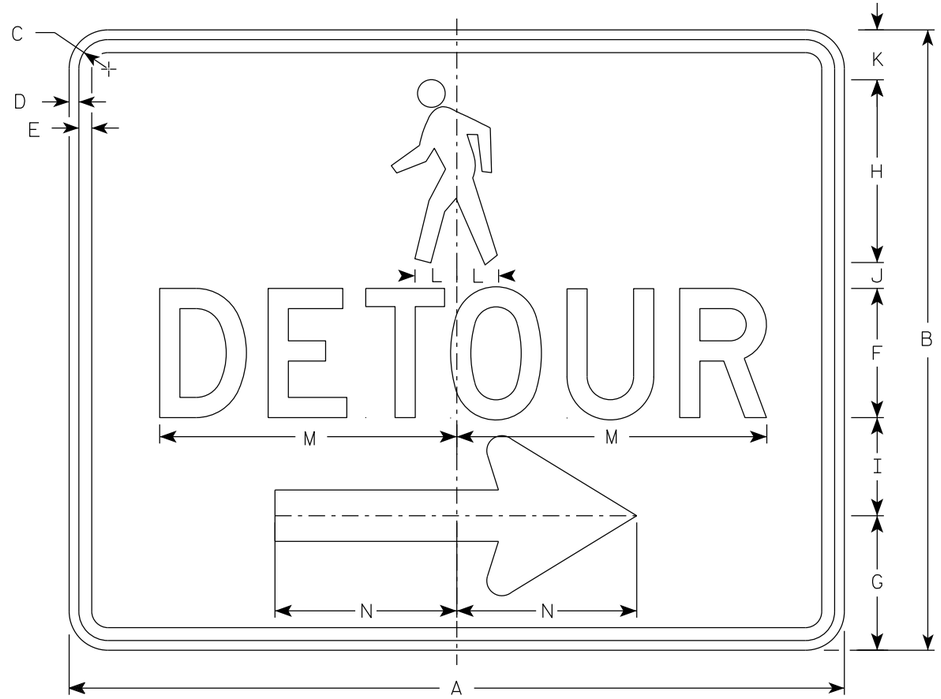
APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14



PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

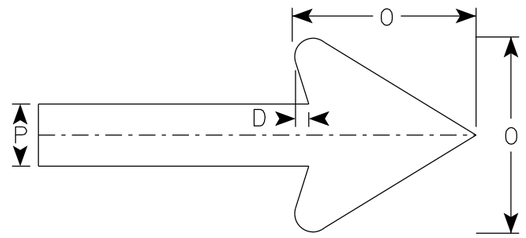
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000




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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 30 | 24 | 1 1/8 | 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 | | | | | | | | | | | 5.00 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

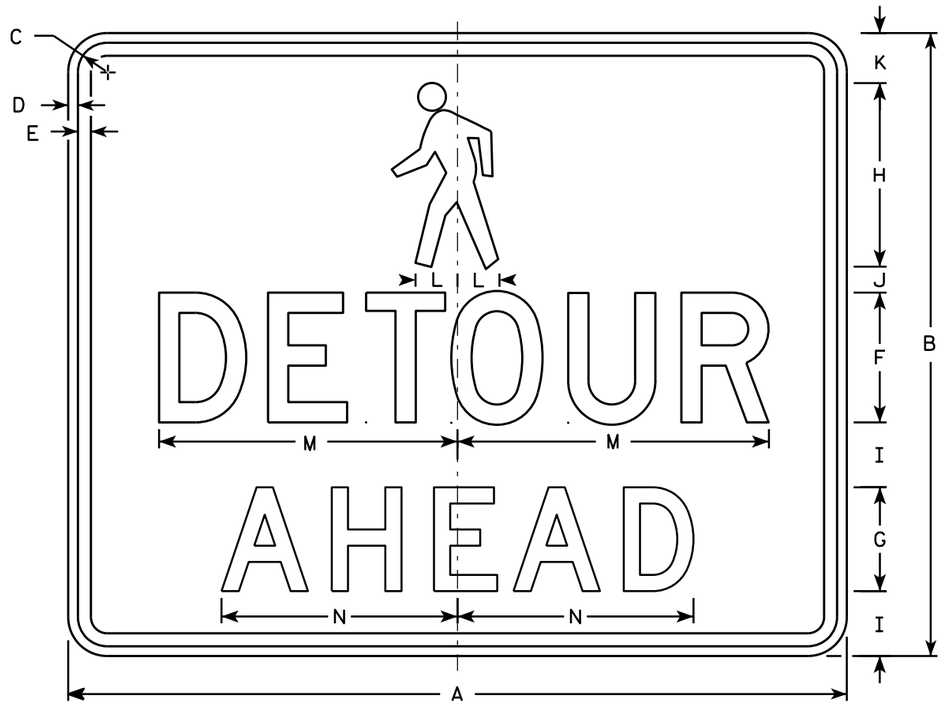
STANDARD SIGN
M4-9B L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 7/1/19 PLATE NO. M4-9B.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 182 | E




M4-9BA

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.

| 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 | 30 | 24 | 1 1/8 | 3/8 | 1/2 | 5 | 4 | 7 1/8 | 2 1/2 | 1 | 1 7/8 | 1 5/8 | 11 3/4 | 9 1/8 | | | | | | | | | | | | | 5.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
M4-9BA

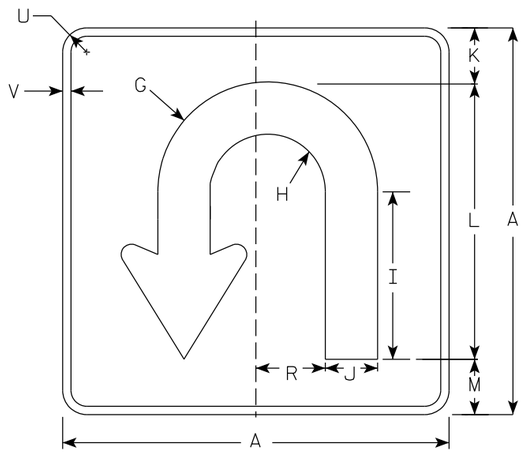
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

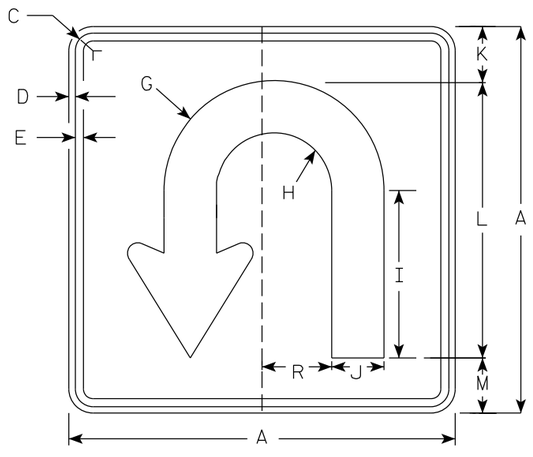
DATE 3/24/16 PLATE NO. M4-9BA.1



PROJECT NO: | HWY: | COUNTY: | SHEET NO: E




M5-52




M5-52

NOTES

1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See note 4
3. M5-52 Background - White
   Message - Black

   MB5-52 Background - Blue
   Message - White

   MK5-52 Background - Green
   Message - White

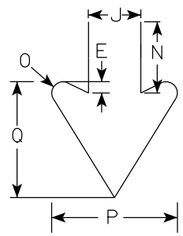
   MM5-52 Background - White
   Message - Green

   MN5-52 Background - Brown
   Message - White

   M05-52 Background - Orange - Type F Reflective
   Message - Black

   MP5-52 Background - White
   Message - Blue

   MR5-52 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | | 1 1/8 | 3/8 | 3/8 | | 6 | 3 1/8 | 9 1/8 | 2 7/8 | 3 | 15 | 3 | 3 7/8 | 5/8 | 6 7/8 | 6 3/4 | 3 3/4 | | | 1 1/2 | 1/2 | | | | | 3.06 |
| 3 | 30 | | 1 3/8 | 1/2 | 5/8 | | 8 1/2 | 4 1/2 | 13 | 4 1/8 | 4 3/8 | 21 3/8 | 4 1/4 | 5 1/2 | 7/8 | 9 3/4 | 8 1/8 | 5 1/4 | | | 2 1/2 | 5/8 | | | | | 6.25 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

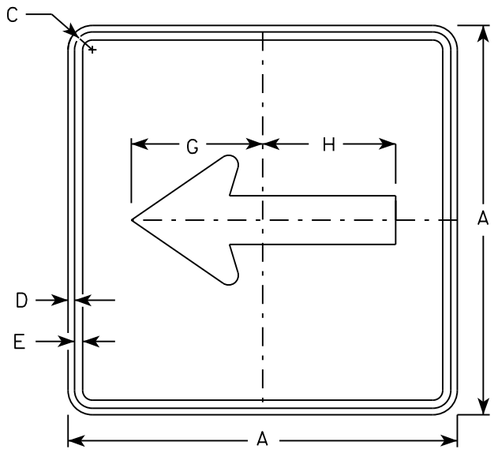
STANDARD SIGN
M5-52
SERIES

*WISCONSIN DEPT OF TRANSPORTATION*

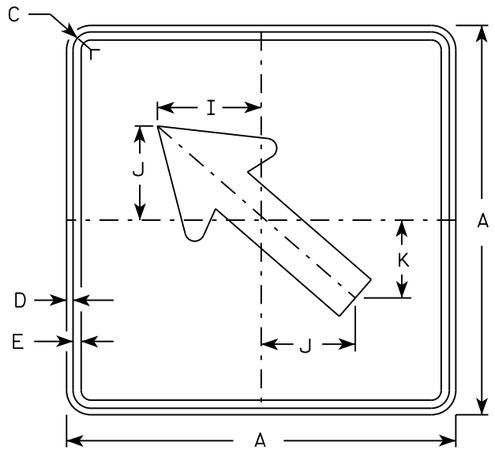
APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 5/21/19 PLATE NO. M5-52.1

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 184 | E |
|---|---|---|---|---|---|



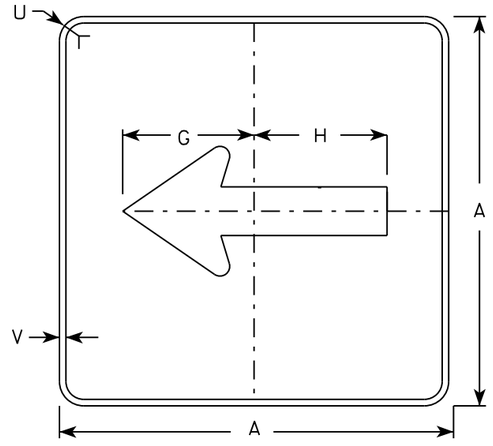

M6-1
MM6-1
MO6-1
MP6-1



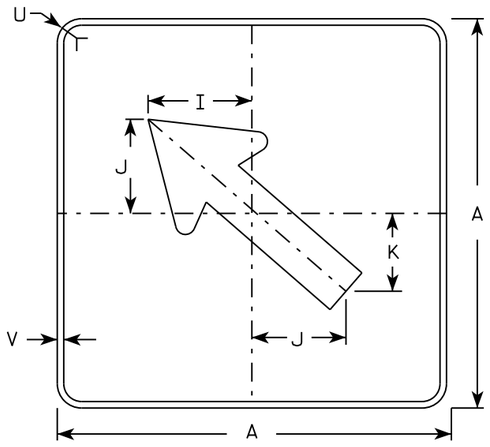

M6-2
MM6-2
MO6-2
MP6-2

NOTES

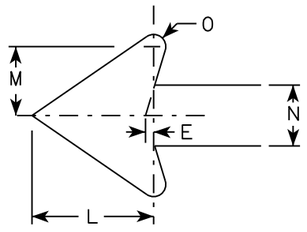
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - 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




MB6-1
MK6-1
MN6-1
MR6-1




MB6-2
MK6-2
MN6-2
MR6-2




| 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 | 21 | | 1 1/8 | 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 1/2 | 1/2 | | | | | | 3.06 |
| 3 | 30 | | 1 3/8 | 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 7/8 | 1/2 | | | | | | 6.25 |
| 4 | 30 | | 1 3/8 | 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 7/8 | 1/2 | | | | | | 6.25 |
| 5 | 30 | | 1 3/8 | 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 7/8 | 1/2 | | | | | | 6.25 |

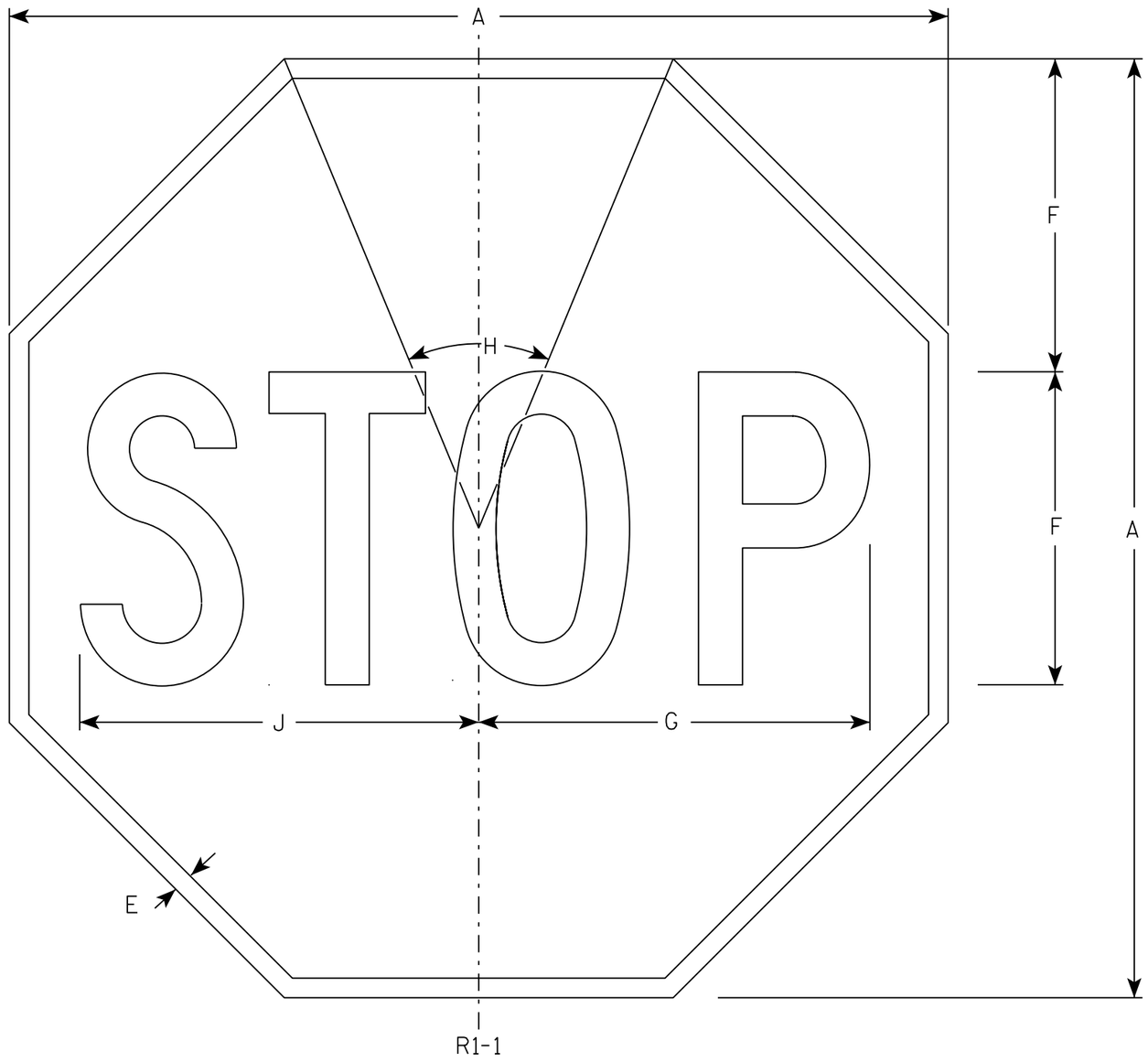
# STANDARD SIGN M6-1 & M6-2 SERIES

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 10/15/15 PLATE 185 M6-1.15

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | 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

| 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 | | | | 5/8 | 10 | 12 1/2 | 45° | | 12 3/4 | | | | | | | | | | | | | | | | | 5.18 |
| 2S | 30 | | | | 5/8 | 10 | 12 1/2 | 45° | | 12 3/4 | | | | | | | | | | | | | | | | | 5.18 |
| 2M | 36 | | | | 3/4 | 12 | 15 | 45° | | 15 3/8 | | | | | | | | | | | | | | | | | 7.46 |
| 3 | 36 | | | | 3/4 | 12 | 15 | 45° | | 15 3/8 | | | | | | | | | | | | | | | | | 7.46 |
| 4 | 48 | | | | 1 | 16 | 20 | 45° | | 20 1/2 | | | | | | | | | | | | | | | | | 13.25 |
| 5 | 48 | | | | 1 | 16 | 20 | 45° | | 20 1/2 | | | | | | | | | | | | | | | | | 13.25 |
| 6 | 18 | | | | 3/8 | 6 | 7 3/4 | 45° | | 7 3/4 | | | | | | | | | | | | | | | | | 1.86 |
| 7 | 12 | | | | 1/4 | 4 | 5 | 45° | | 5 1/8 | | | | | | | | | | | | | | | | | 0.78 |

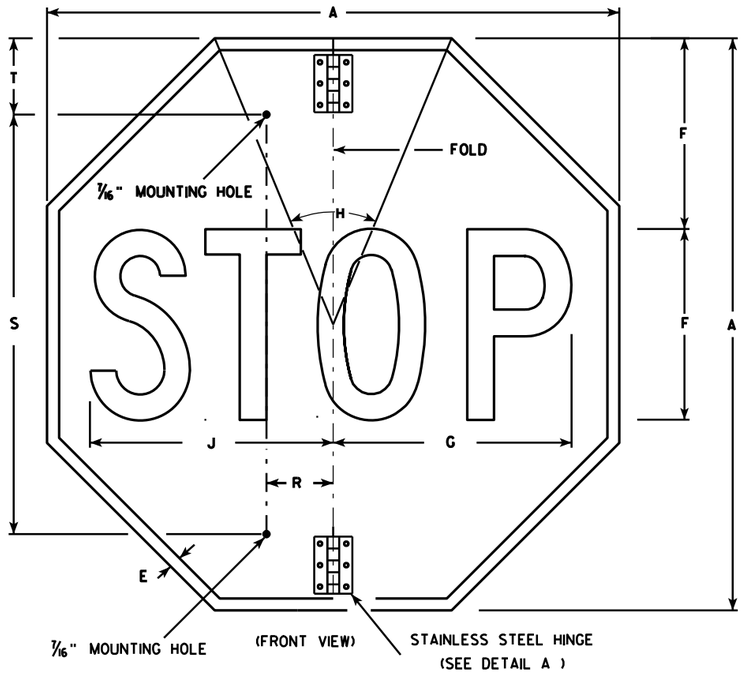
# STANDARD SIGN
# R1-1

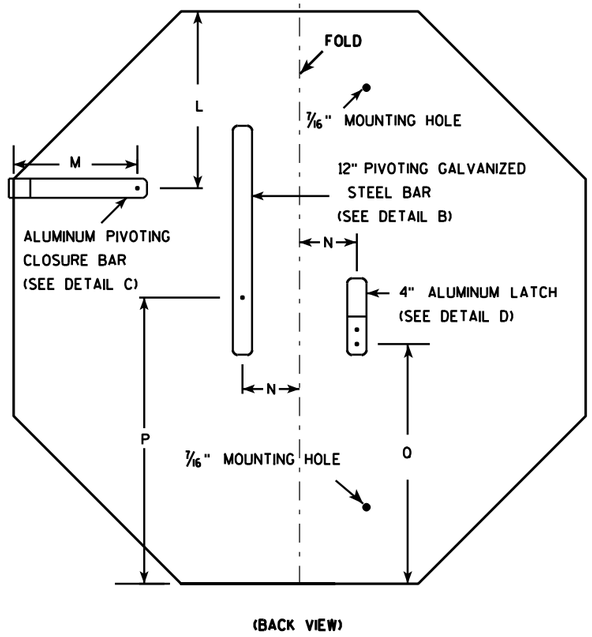
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

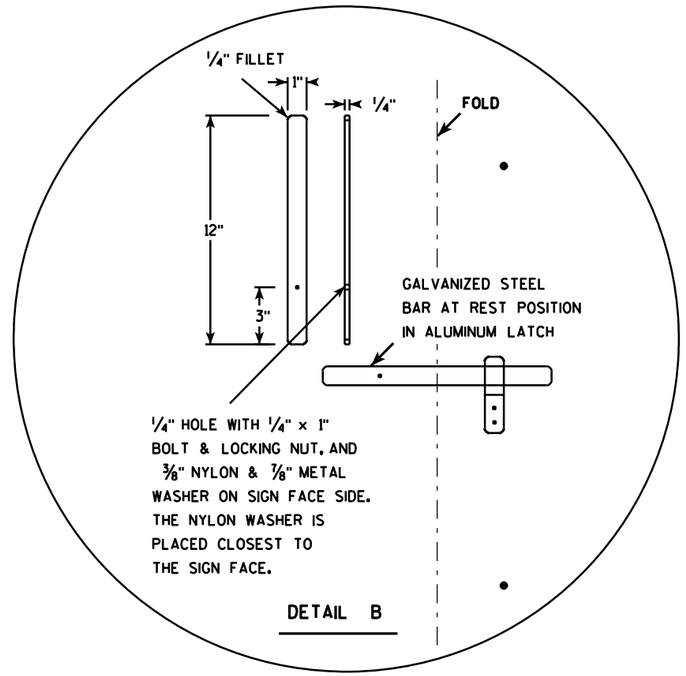
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 186 | E |
|---|---|---|---|---|---|

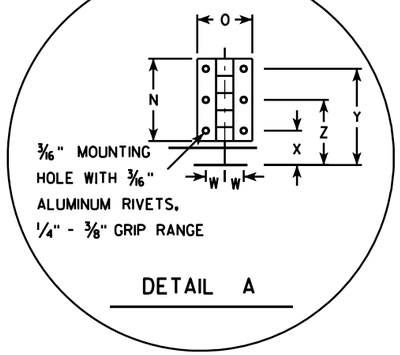


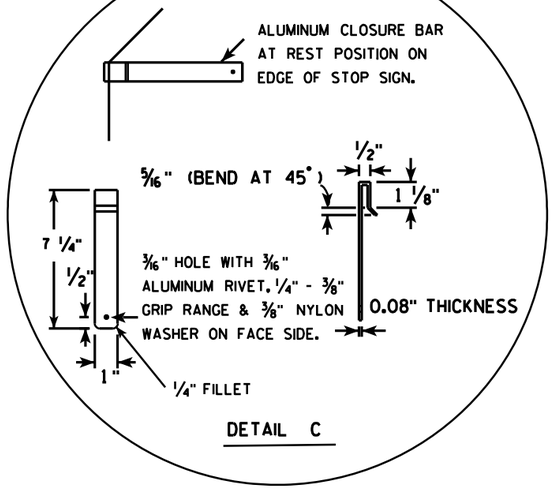



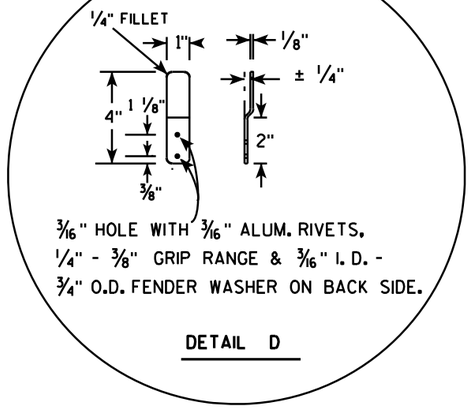

## NOTES

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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

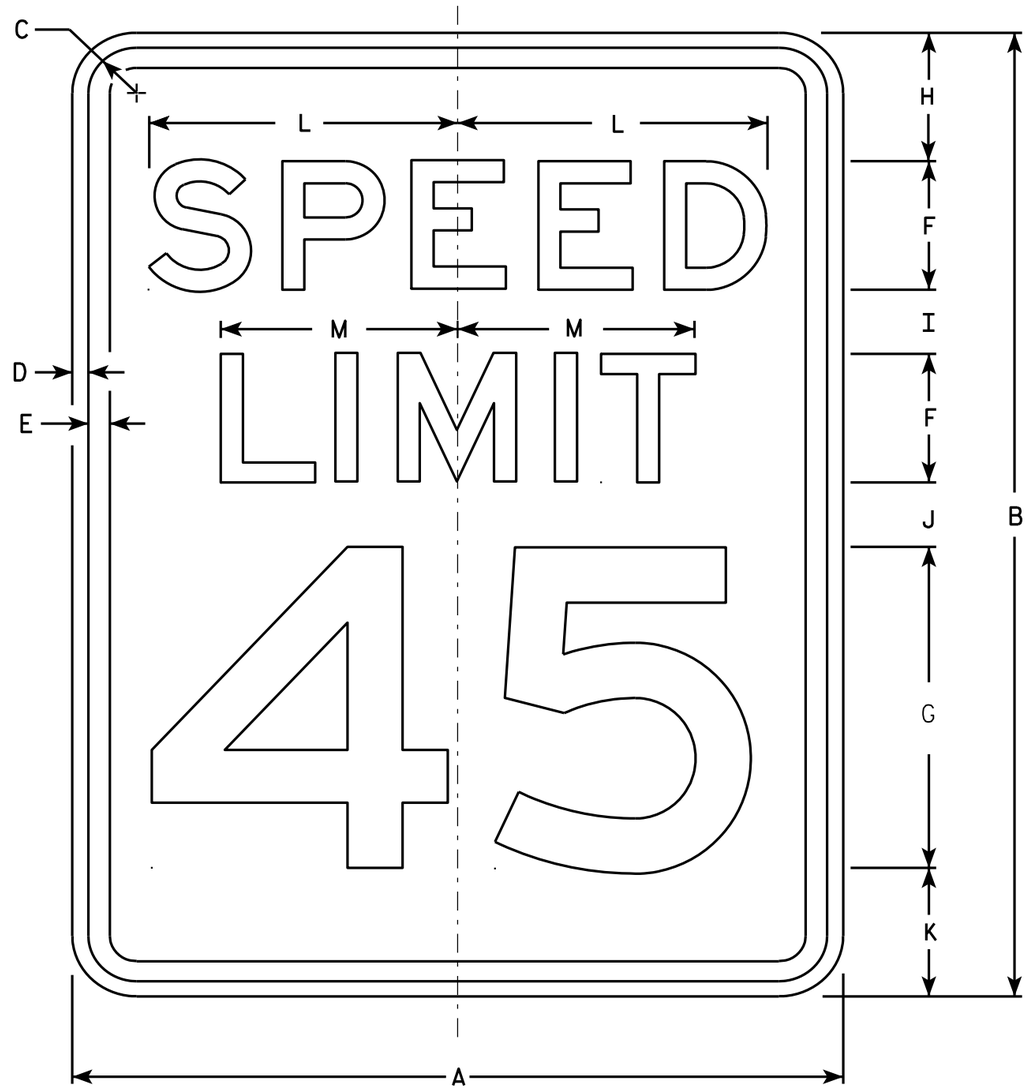
# STANDARD SIGN
# R1-1F

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: 187 | E |
|---|---|---|---|---|---|




R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
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. 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 1/8 | 3/8 | 1/2 | 3 | 8 | 3 | 2 | 2 | 3 | 7 1/4 | 5 1/2 | | | | | | | | | | | | | | 3.0 |
| 2S | 24 | 30 | 1 1/8 | 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 3/8 | 1/2 | 5/8 | 5 | 12 | 5 | 2 1/2 | 2 1/2 | 4 | 12 | 9 1/4 | | | | | | | | | | | | | | 7.5 |
| 3 | 36 | 48 | 1 3/8 | 1/2 | 5/8 | 6 | 14 | 6 | 5 | 5 | 6 | 14 3/8 | 11 | | | | | | | | | | | | | | 12.0 |
| 4 | 36 | 48 | 1 3/8 | 1/2 | 5/8 | 6 | 14 | 6 | 5 | 5 | 6 | 14 3/8 | 11 | | | | | | | | | | | | | | 12.0 |
| 5 | 48 | 60 | 2 1/4 | 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

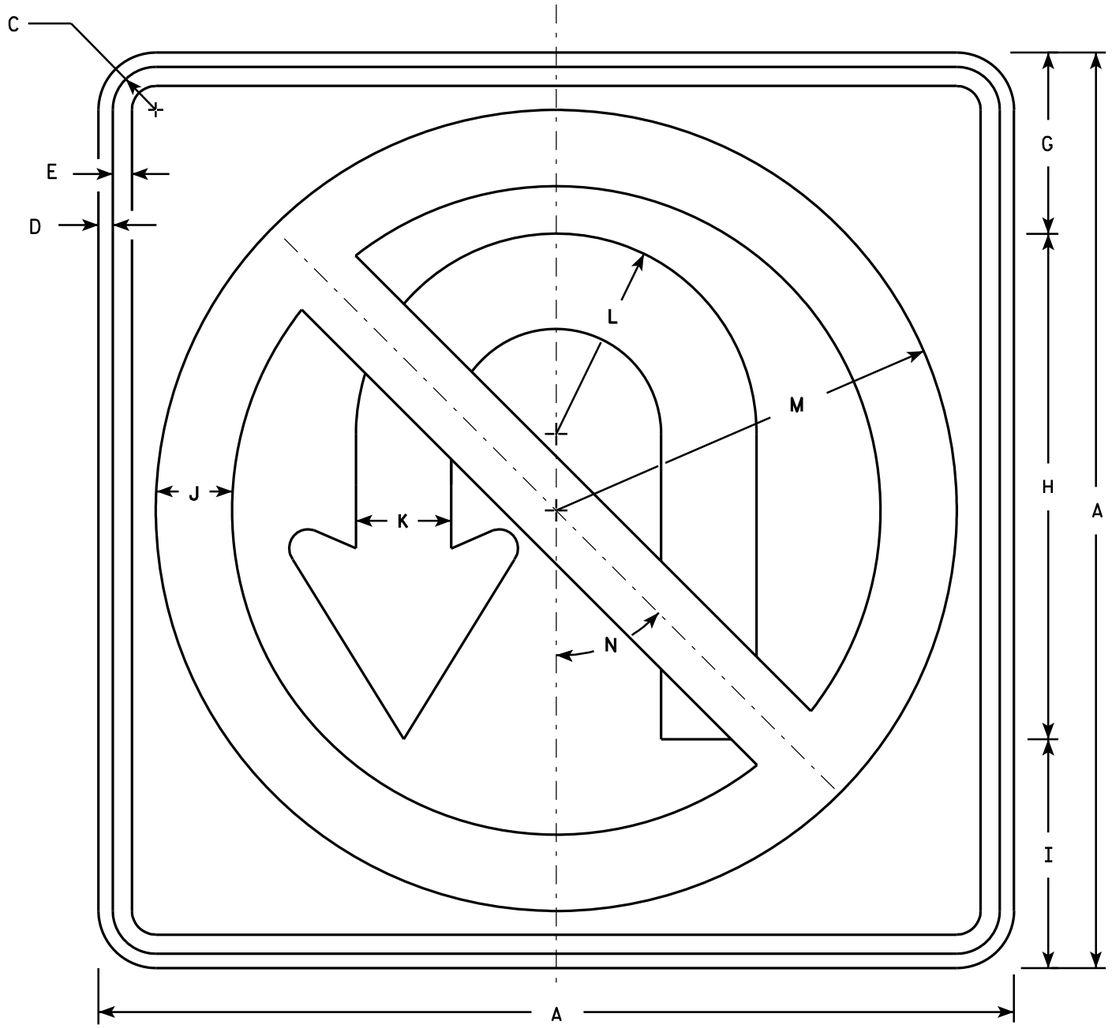
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 188 | E



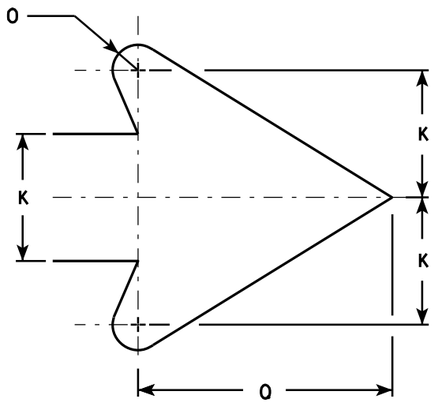
FILE NAME : C:\Users\PROJECTS\tr_stdplate\R21.DGN PLOT DATE : 28-MAY-2010 08:32 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.717577:1.000000
WISDOT/CADDS SHEET 42




R3-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   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. 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 | O | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | | 1 1/8 | 3/8 | 1/2 | | 4 3/4 | 13 1/4 | 6 | 2 | 2 1/2 | 5 1/4 | 10 1/2 | 45° | 1/2 | | 5 | | | | | | | | | | 4.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | | 7 1/8 | 19 7/8 | 9 | 3 | 3 3/4 | 7 7/8 | 15 3/4 | 45° | 3/4 | | 7 5/8 | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | | 7 1/8 | 19 7/8 | 9 | 3 | 3 3/4 | 7 7/8 | 15 3/4 | 45° | 3/4 | | 7 5/8 | | | | | | | | | | 9.0 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | | 7 1/8 | 19 7/8 | 9 | 3 | 3 3/4 | 7 7/8 | 15 3/4 | 45° | 3/4 | | 7 5/8 | | | | | | | | | | 9.0 |
| 5 | 36 | | 1 5/8 | 5/8 | 3/4 | | 7 1/8 | 19 7/8 | 9 | 3 | 3 3/4 | 7 7/8 | 15 3/4 | 45° | 3/4 | | 7 5/8 | | | | | | | | | | 9.0 |

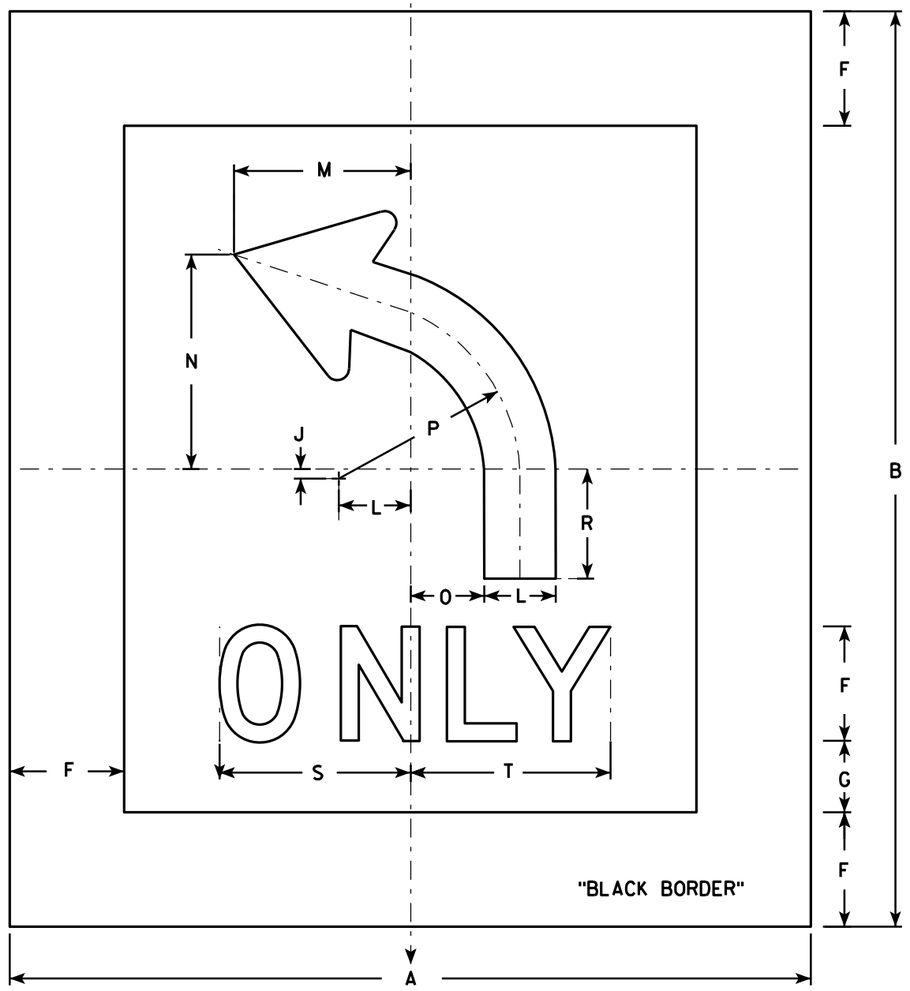
# STANDARD SIGN
# R3-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-4.11

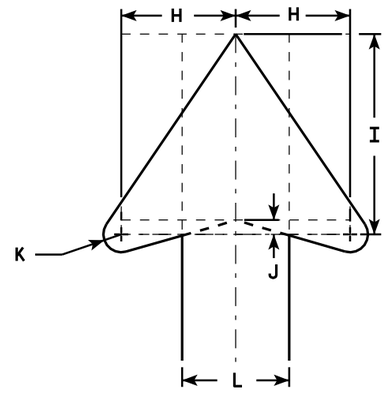
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 189 | E |
|---|---|---|---|---|---|




R3-5L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood. When base material is metal, the corners shall be rounded.
5. R3-5R is the same as R3-5L except curved portion of arrow points right.
6. The 6" border is non-reflective 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 | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 42 | 48 | | | | 6 | 3 3/4 | 4 | 7 | 1/2 | 5/8 | 3 3/4 | 9 1/4 | 11 1/4 | 3 7/8 | 9 1/2 | | 5 3/4 | 10 | 10 1/2 | | | | | | | 1.26 |
| 2M | 42 | 48 | | | | 6 | 3 3/4 | 4 | 7 | 1/2 | 5/8 | 3 3/4 | 9 1/4 | 11 1/4 | 3 7/8 | 9 1/2 | | 5 3/4 | 10 | 10 1/2 | | | | | | | 1.26 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

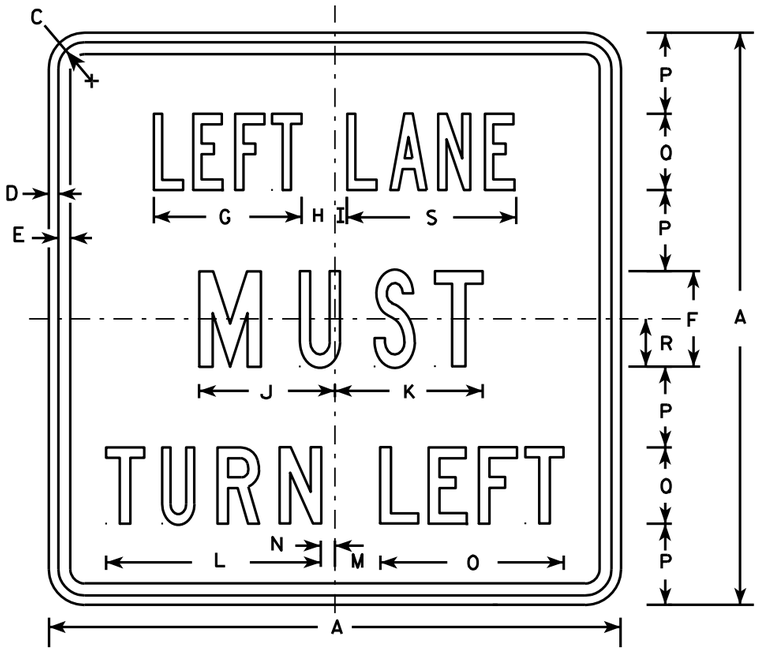
STANDARD SIGN
R3-5

WISCONSIN DEPT OF TRANSPORTATION

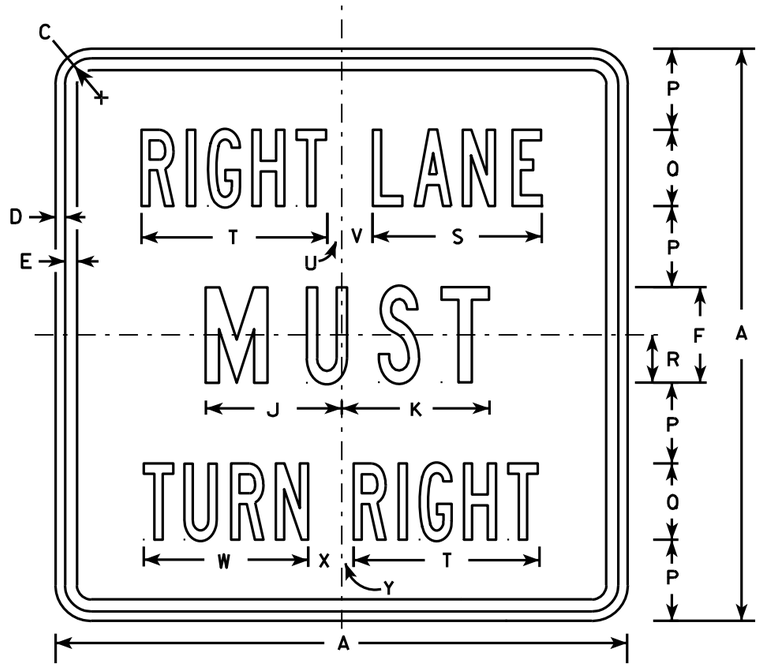
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/24/11 PLATE NO. R3-5.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 190 | E




R3-7L




R3-7R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series B.
   Line 2 is Series C.
   Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.
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 | 30 | | 1 3/8 | 1/2 | 5/8 | 5 | 7 3/4 | 1 3/4 | 5/8 | 7 1/8 | 7 3/4 | 11 1/4 | 2 3/8 | 3/4 | 9 5/8 | 4 1/4 | 4 | 2 1/2 | 8 7/8 | 9 3/4 | 3/4 | 1 5/8 | 8 5/8 | 1 5/8 | 5/8 | | 6.25 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | 5 | 7 3/4 | 1 3/4 | 5/8 | 7 1/8 | 7 3/4 | 11 1/4 | 2 3/8 | 3/4 | 9 5/8 | 4 1/4 | 4 | 2 1/2 | 8 7/8 | 9 3/4 | 3/4 | 1 5/8 | 8 5/8 | 1 5/8 | 5/8 | | 6.25 |
| 2M | 30 | | 1 3/8 | 1/2 | 5/8 | 5 | 7 3/4 | 1 3/4 | 5/8 | 7 1/8 | 7 3/4 | 11 1/4 | 2 3/8 | 3/4 | 9 5/8 | 4 1/4 | 4 | 2 1/2 | 8 7/8 | 9 3/4 | 3/4 | 1 5/8 | 8 5/8 | 1 5/8 | 5/8 | | 6.25 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 9 5/8 | 2 | 1 1/8 | 8 3/4 | 9 | 13 1/2 | 3 7/8 | 1 1/2 | 12 1/2 | 5 | 5 | 3 | 10 5/8 | 12 | 7/8 | 2 1/4 | 10 5/8 | 2 1/8 | 1 | | 9.00 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 13 1/2 | 2 3/8 | 1 1/2 | 11 1/2 | 11 7/8 | 17 3/4 | 3 5/8 | 2 1/2 | 16 3/8 | 6 1/2 | 7 | 4 | 14 3/8 | 16 7/8 | 5/8 | 3 1/4 | 15 1/8 | 2 3/4 | 1 1/8 | | 16.00 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

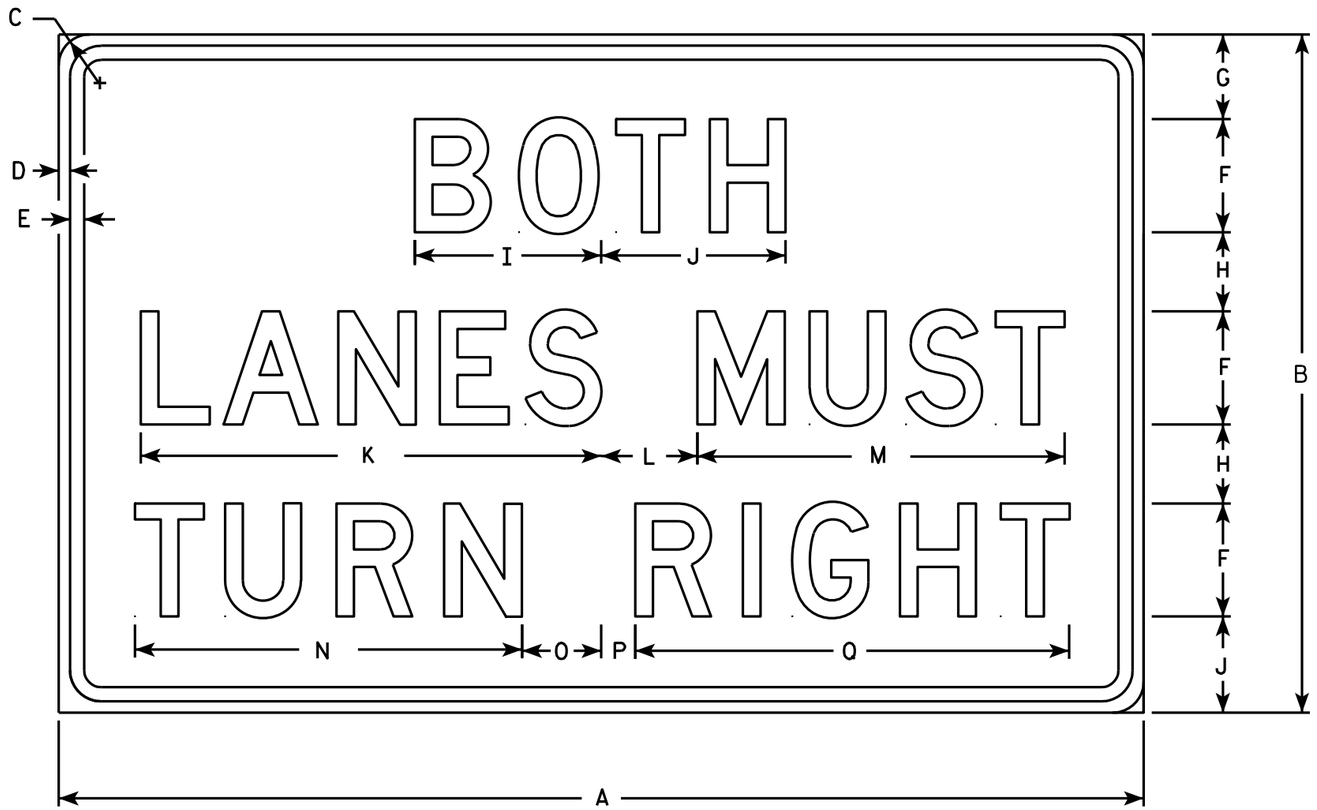
STANDARD SIGN
R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-7.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 191 | E




R3-7B

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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.

| 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 3/8 | 1/2 | 5/8 | 5 | 3 3/4 | 3 1/2 | 8 1/4 | 8 1/8 | 20 3/8 | 4 1/4 | 16 1/4 | 17 1/8 | 3 1/2 | 1 1/2 | 19 1/4 | | | | | | | | | | 10.0 |
| 2M | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 5 | 3 3/4 | 3 1/2 | 8 1/4 | 8 1/8 | 20 3/8 | 4 1/4 | 16 1/4 | 17 1/8 | 3 1/2 | 1 1/2 | 19 1/4 | | | | | | | | | | 10.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

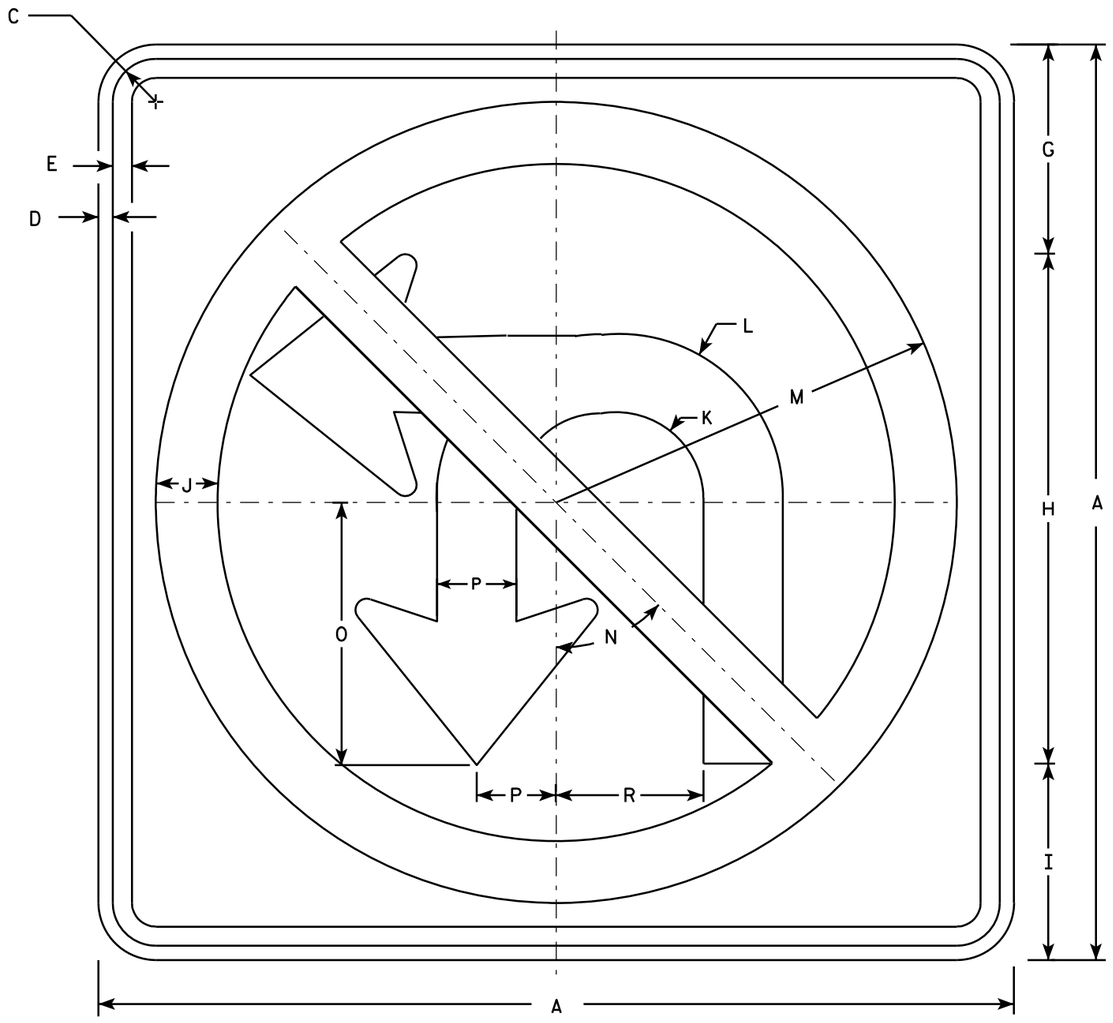
STANDARD SIGN
R3-7B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-7B.2

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 192 | E |
|---|---|---|---|---|---|




R3-18

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   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. 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 1/8 | 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 | | 1 5/8 | 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 | | 1 5/8 | 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 | | 1 5/8 | 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 |

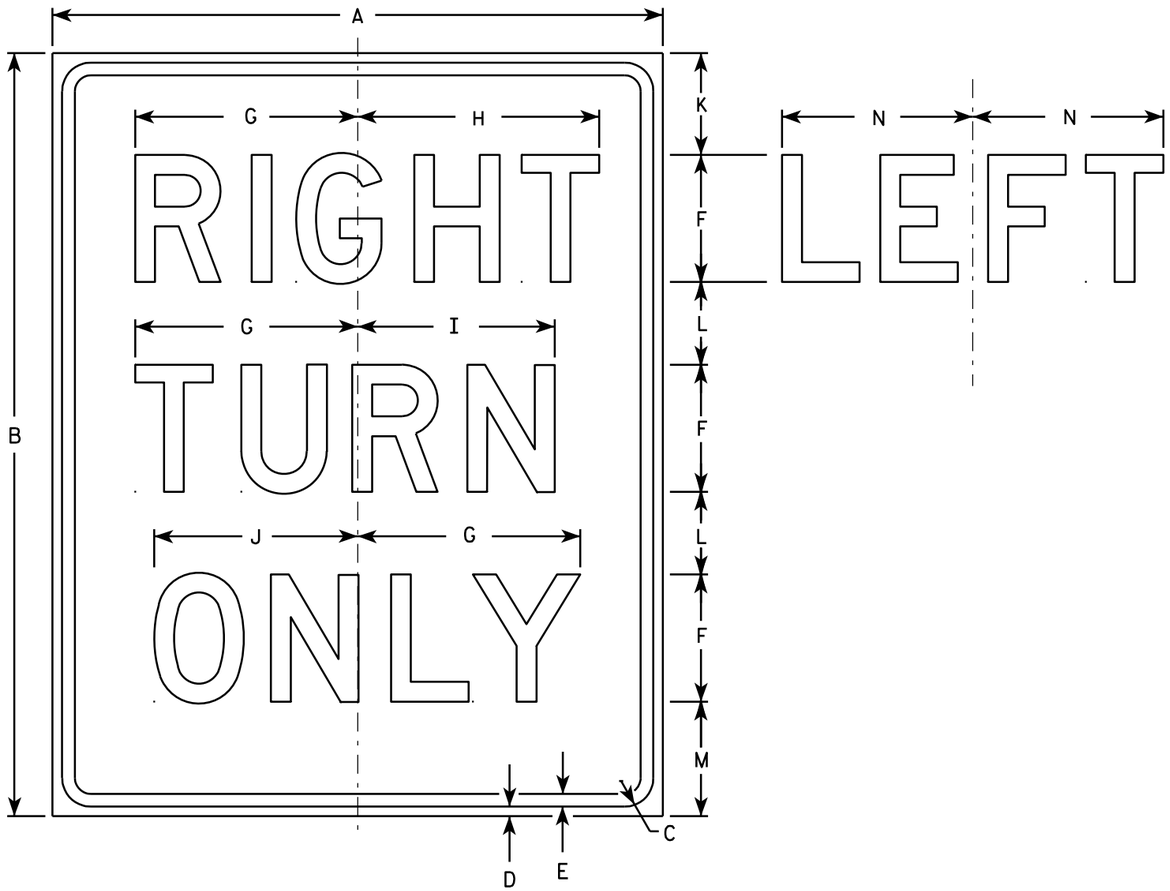
STANDARD SIGN
R3-18

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/10 PLATE NO. R3-18.2

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 193 | E |
|---|---|---|---|---|---|




R3-53R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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. 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 1/8 | 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 1/8 | 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 1/8 | 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

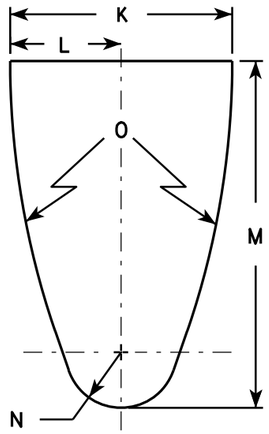
WISCONSIN DEPT OF TRANSPORTATION

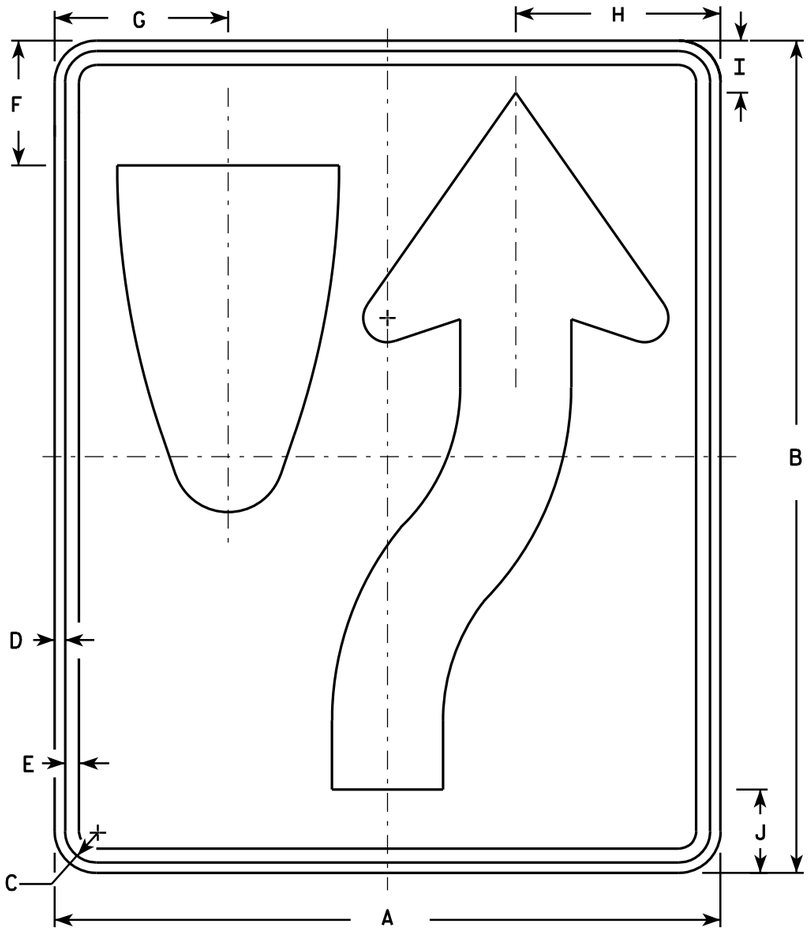
APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/24/2011 PLATE NO. R3-53.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 194 | E


7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R353.DGN PLOT DATE : 24-MAR-2011 14:54 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.959043:1.000000
WISDOT/CADDS SHEET 42

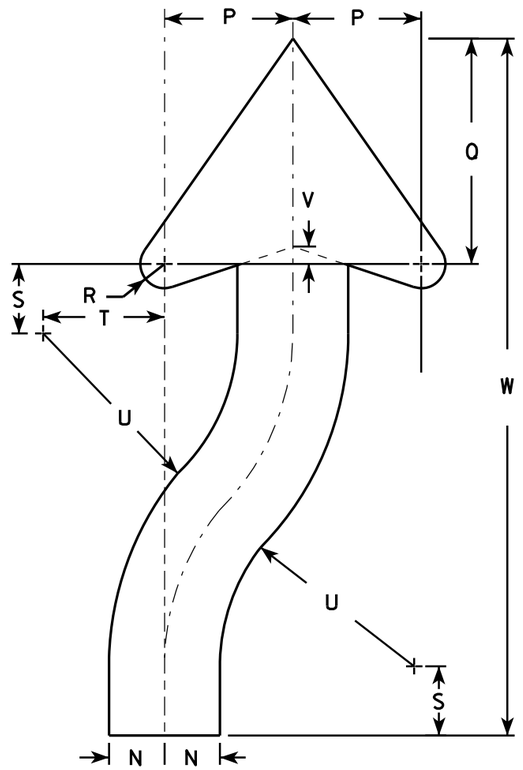



R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend 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 | 18 | 24 | 1 1/8 | 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 1/8 | 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 1/8 | 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 3/4 | 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 3/4 | 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 | 2 1/4 | 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 |

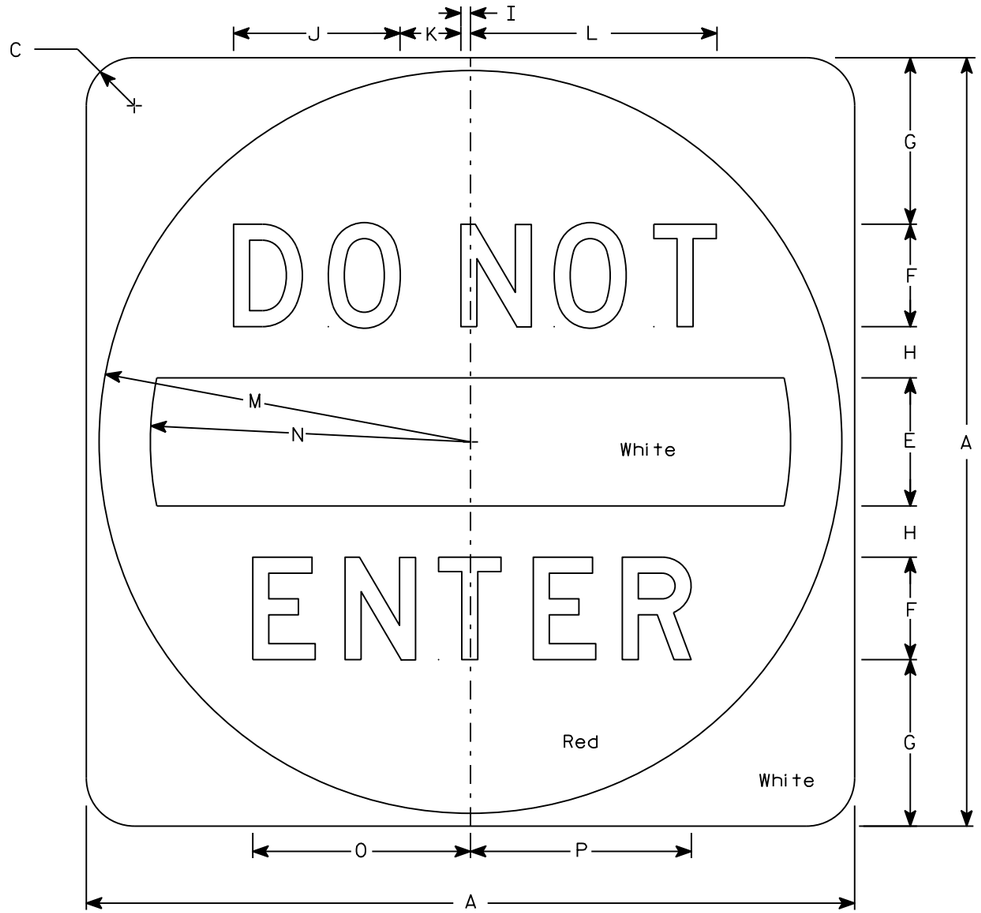
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 195 | 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 |

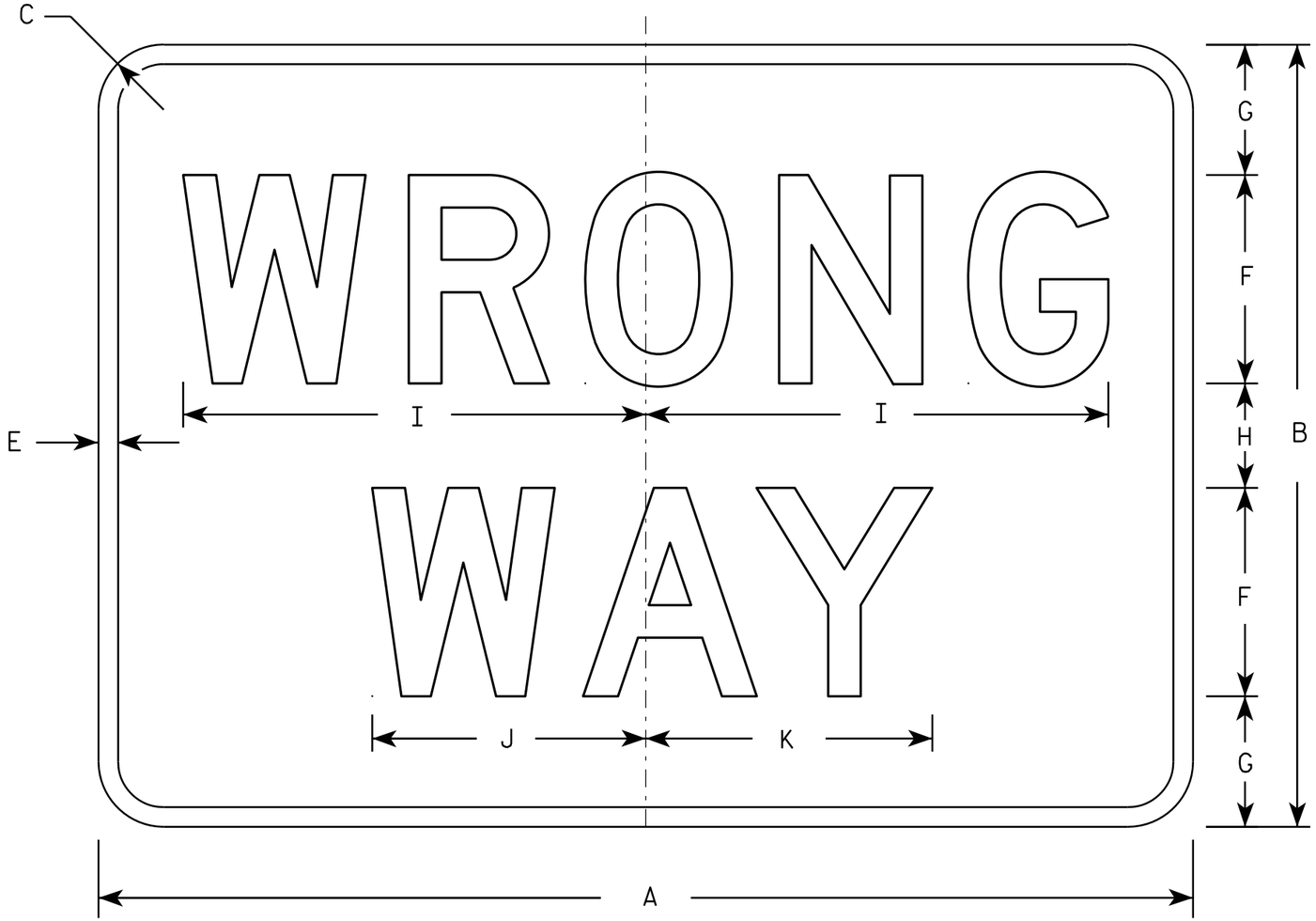
STANDARD SIGN
R5-1

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: 196 | E




R5-1A

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 - 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.

| 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 | 2 | | 5/8 | 6 | 4 1/2 | 3 | 13 1/4 | 7 7/8 | 8 1/4 | | | | | | | | | | | | | | | | 6.00 |
| 2M | 42 | 30 | 2 1/2 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |
| 3 | 42 | 30 | 2 1/2 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |
| 4 | 42 | 30 | 2 1/2 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |
| 5 | 42 | 30 | 2 1/2 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |

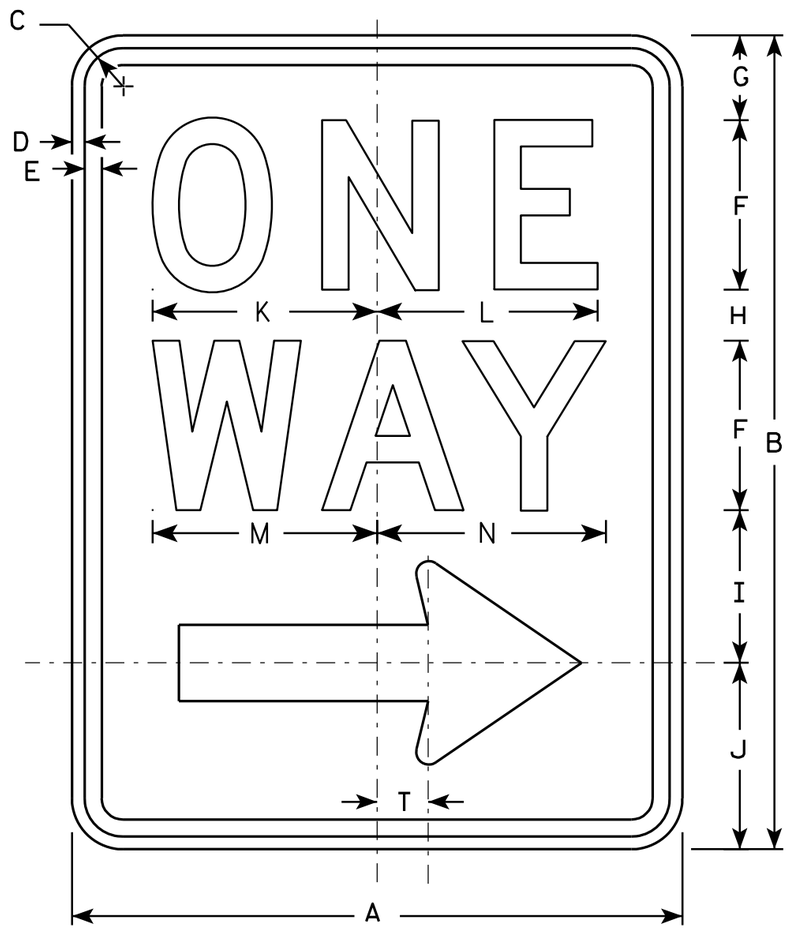
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

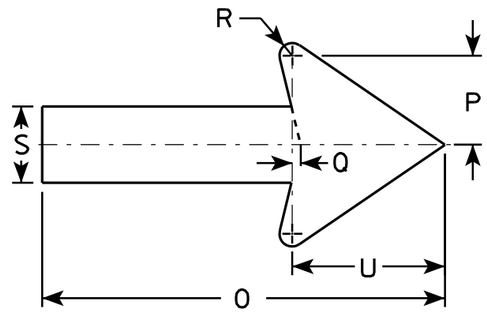
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 197 | E




R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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. R6-2L same as R6-2R except arrow points to the left.




| 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 1/8 | 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 | 30 | 1 1/8 | 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 3/8 | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | |

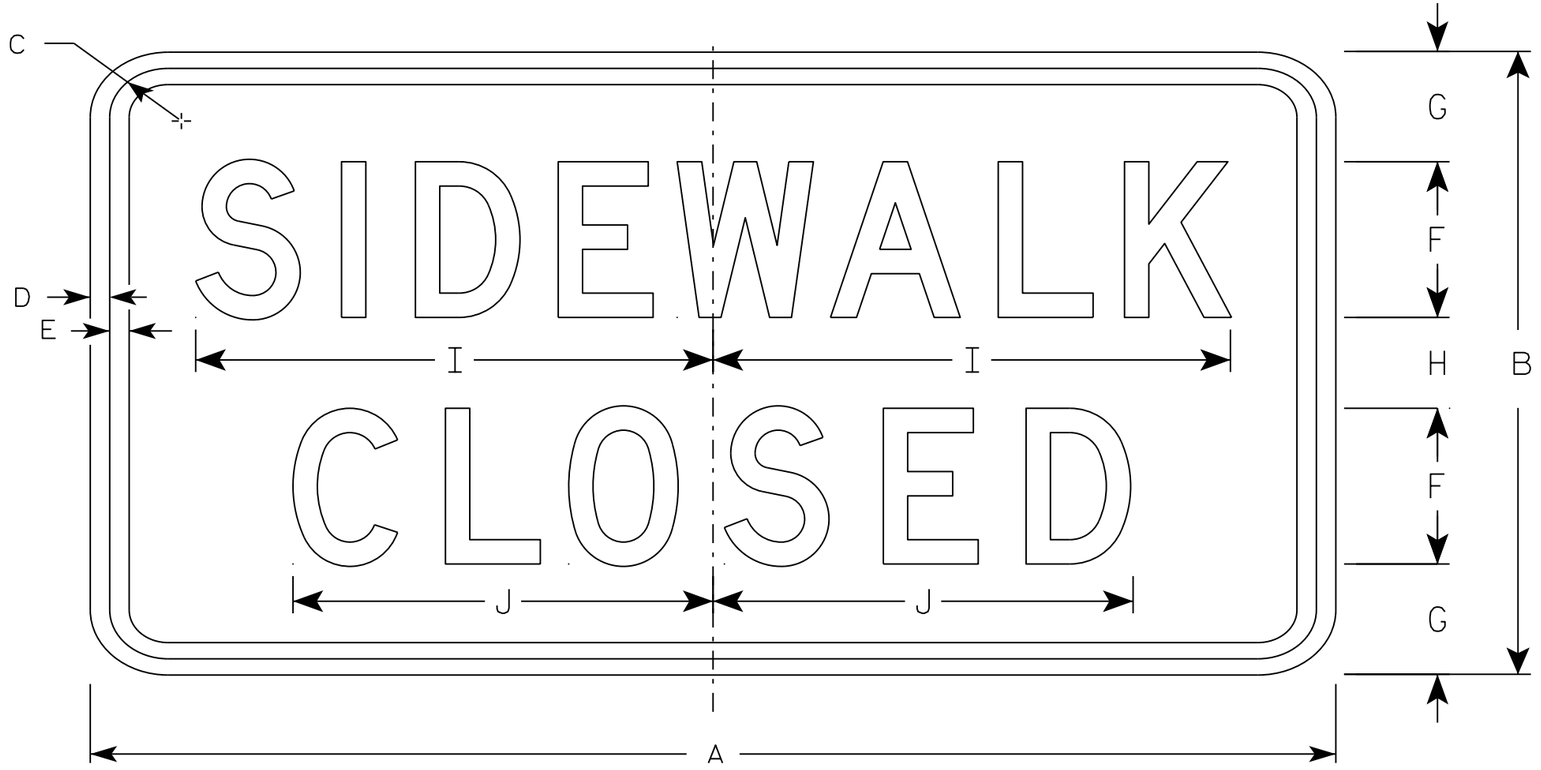
STANDARD SIGN
R6-2 R&L

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: 198 | E |
|---|---|---|---|---|---|




R9-9

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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. 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 3/4 | 1/2 | 1/2 | 3 | 2 1/8 | 1 3/4 | 10 | 8 1/8 | | | | | | | | | | | | | | | | | 2.0 |
| 2M | 24 | 12 | 1 3/4 | 1/2 | 1/2 | 3 | 2 1/8 | 1 3/4 | 10 | 8 1/8 | | | | | | | | | | | | | | | | | 2.0 |
| 3 | 30 | 18 | 1 3/4 | 1/2 | 1/2 | 4 | 3 1/2 | 3 | 12 1/2 | 10 1/4 | | | | | | | | | | | | | | | | | 3.75 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

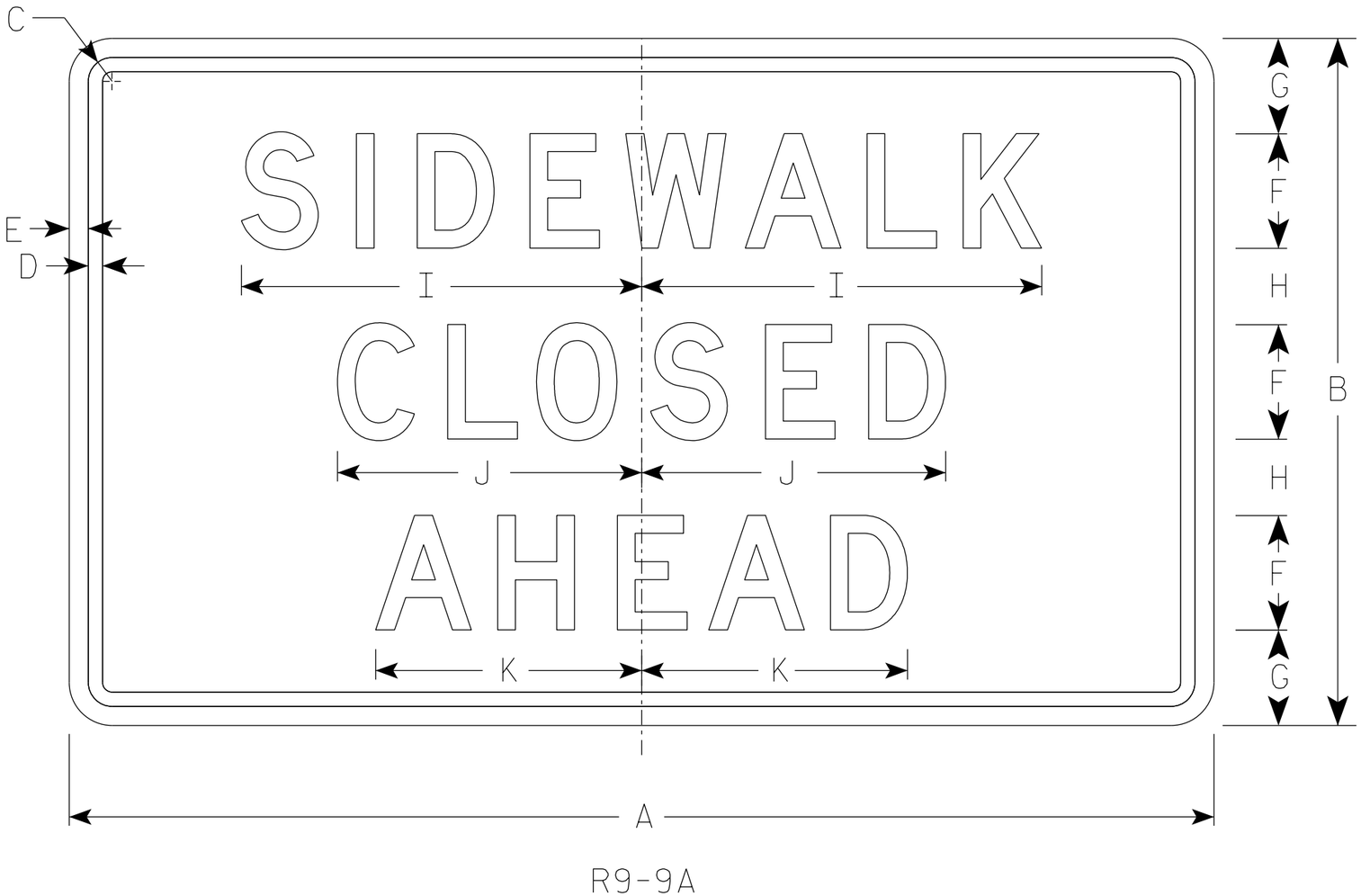
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE 199 R9-9.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000




R9-9A

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.

| 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 1/8 | 3/8 | 1/2 | 3 | 2 1/2 | 2 | 10 1/2 | 8 | 7 | | | | | | | | | | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 1/8 | 3/8 | 1/2 | 3 | 2 1/2 | 2 | 10 1/2 | 8 | 7 | | | | | | | | | | | | | | | | 3.75 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R9-9A

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*For* State Traffic Engineer

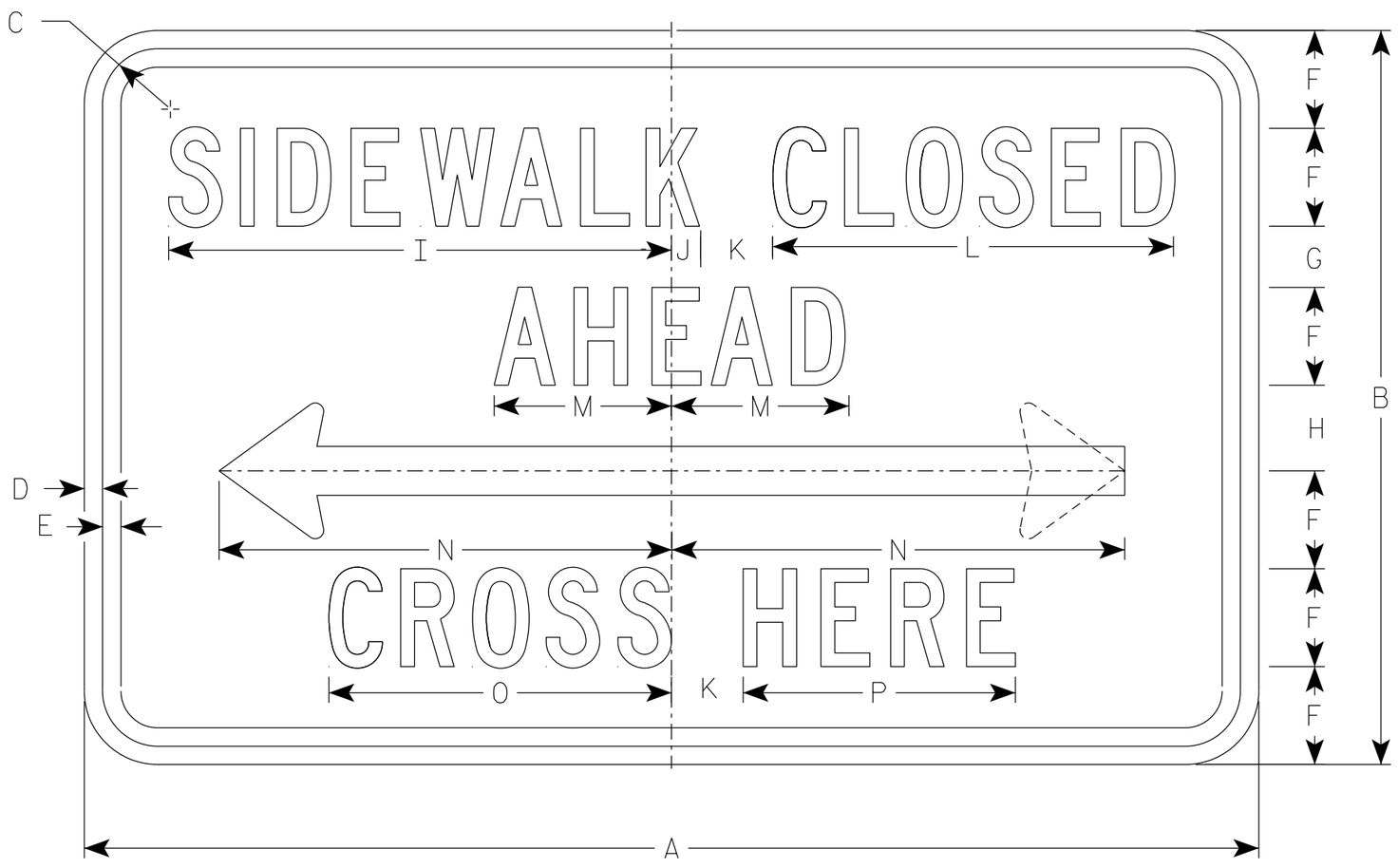
DATE 8/31/2020 PLATE NO. R9-9A.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 200 | E

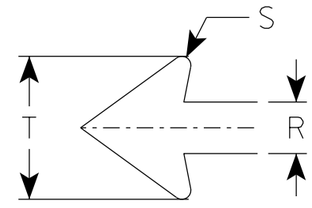
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R99A.DGN PLOT DATE : 31-AUG-2020 3:26 PLOT BY : dotc4c PLOT SCALE : $$.....plotscale.....$$




7




R9-11




NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C except Size 1 is 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. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.
6. R9-11 D (double arrow)
   R9-11 L (left arrow)
   R9-11 R (right 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 1 1/2 | 1 1/2 | 1 1/2 | 9 3/4 | 5/8 | 1 1/2 | 7 5/8 | 3 1/2 | 9 1/4 | 6 5/8 | 5 1/8 | | 1 | 1/8 | 2 3/4 | | | | | | | 2.0 |
| 2M | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 1 1/2 | 1 1/2 | 1 1/2 | 9 3/4 | 5/8 | 1 1/2 | 7 5/8 | 3 1/2 | 9 1/4 | 6 5/8 | 5 1/8 | | 1 | 1/8 | 2 3/4 | | | | | | | 2.0 |
| 3 | 30 | 15 | 1 1/8 | 3/8 | 1/2 | 2 | 1 1/2 | 1 1/2 | 13 | 3/4 | 2 | 10 1/4 | 4 5/8 | 12 3/8 | 8 7/8 | 6 7/8 | | 1 1/4 | 1/4 | 3 5/8 | | | | | | | 3.125 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

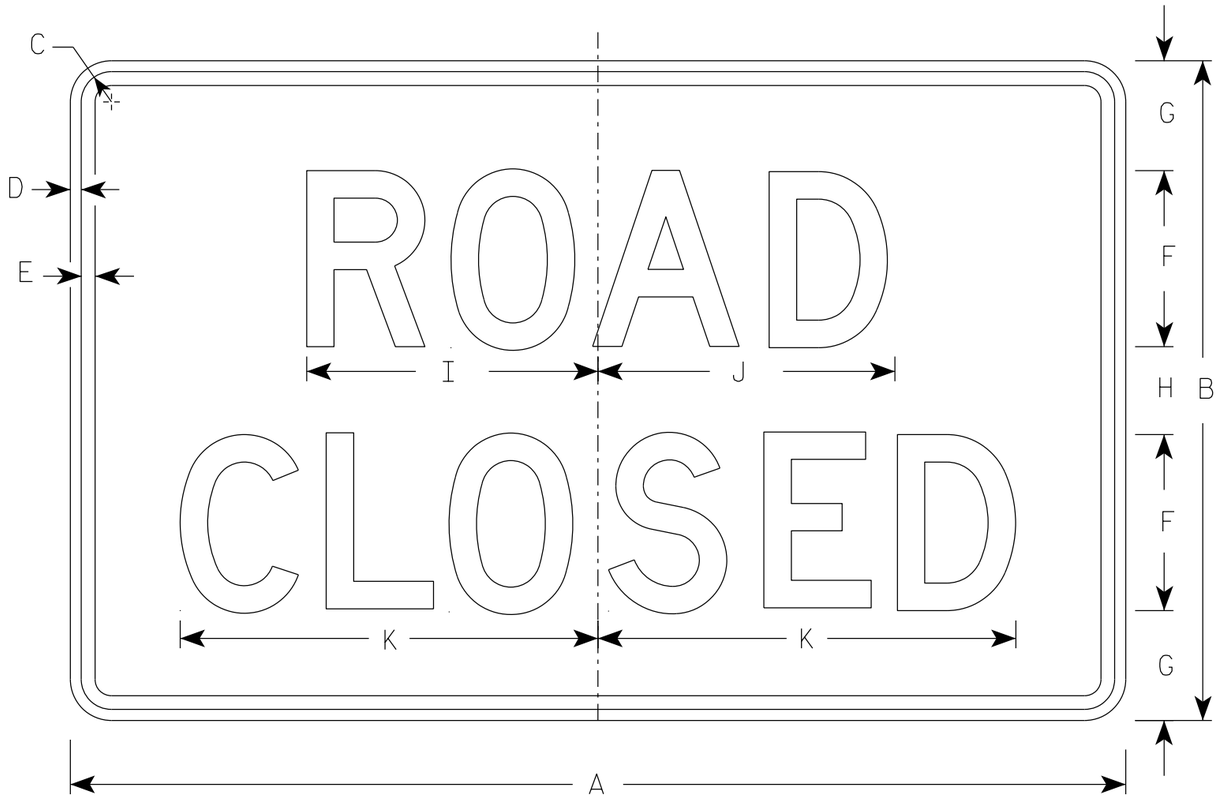
STANDARD SIGN
R9-11

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*For* State Traffic Engineer

DATE 3/30/2021 PLATE NO. R9-11.4

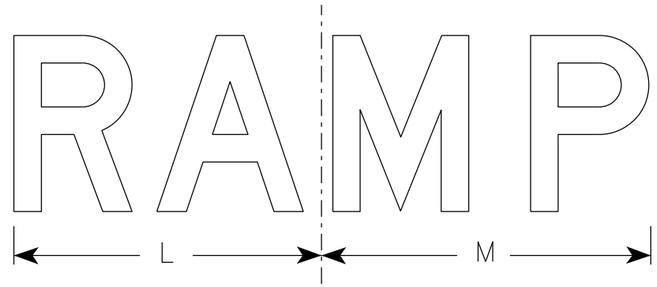
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 201 | E |
|---|---|---|---|---|---|



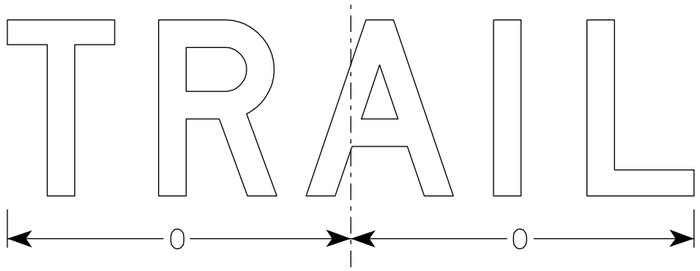

R11-2

NOTES

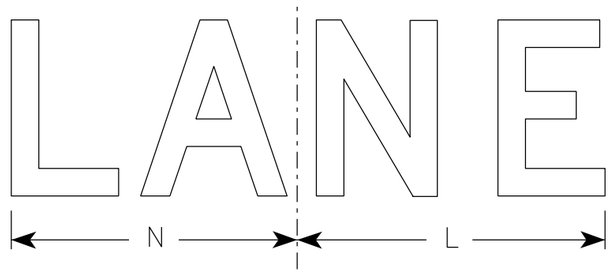
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the 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 3/8 | 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 3/8 | 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 3/8 | 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 3/8 | 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 3/8 | 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

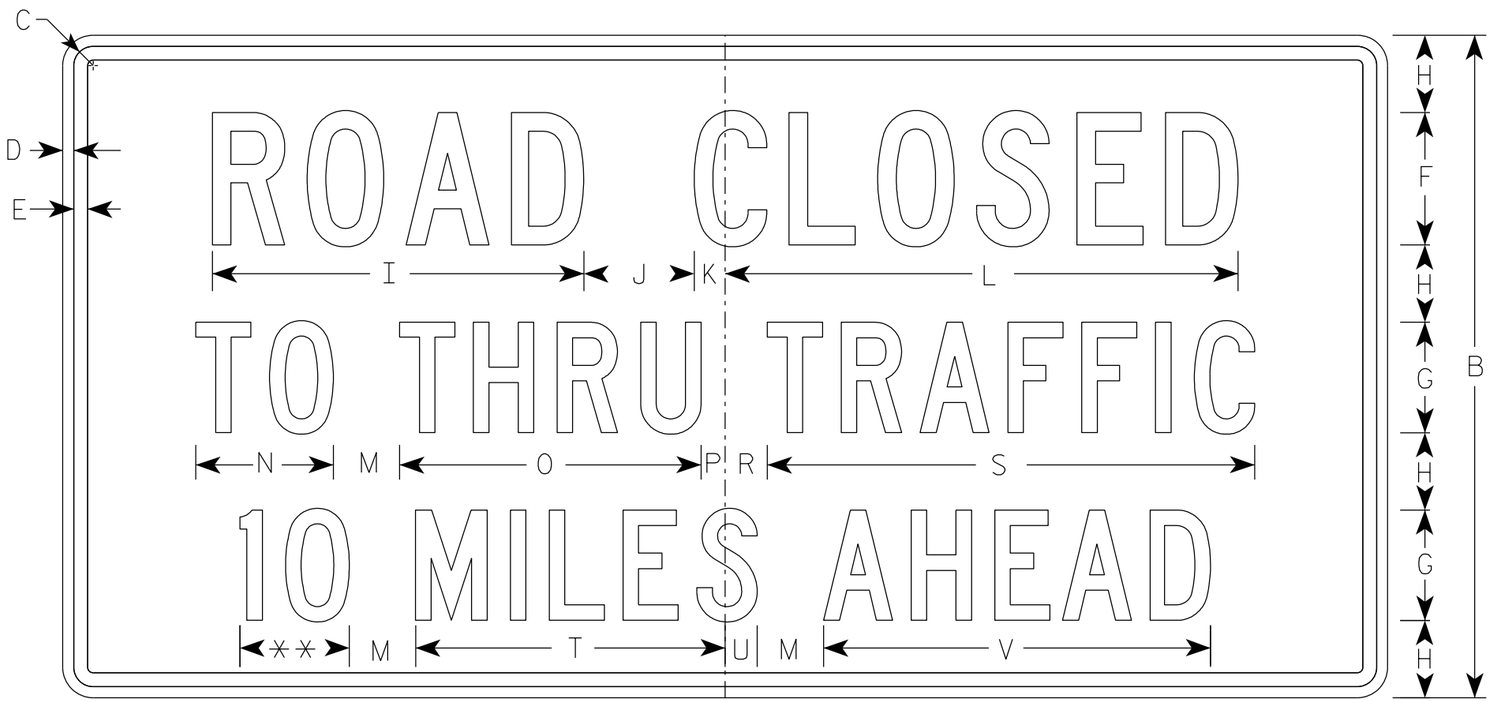
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 202 | E |
|---|---|---|---|---|---|

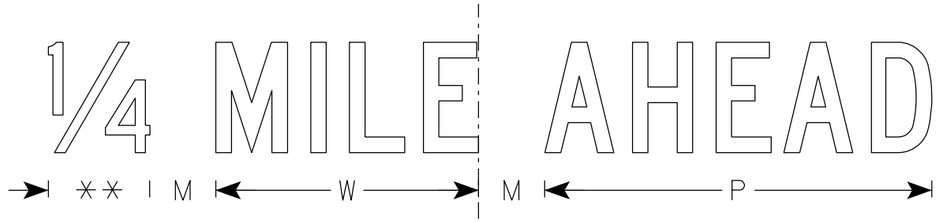
NOTES

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



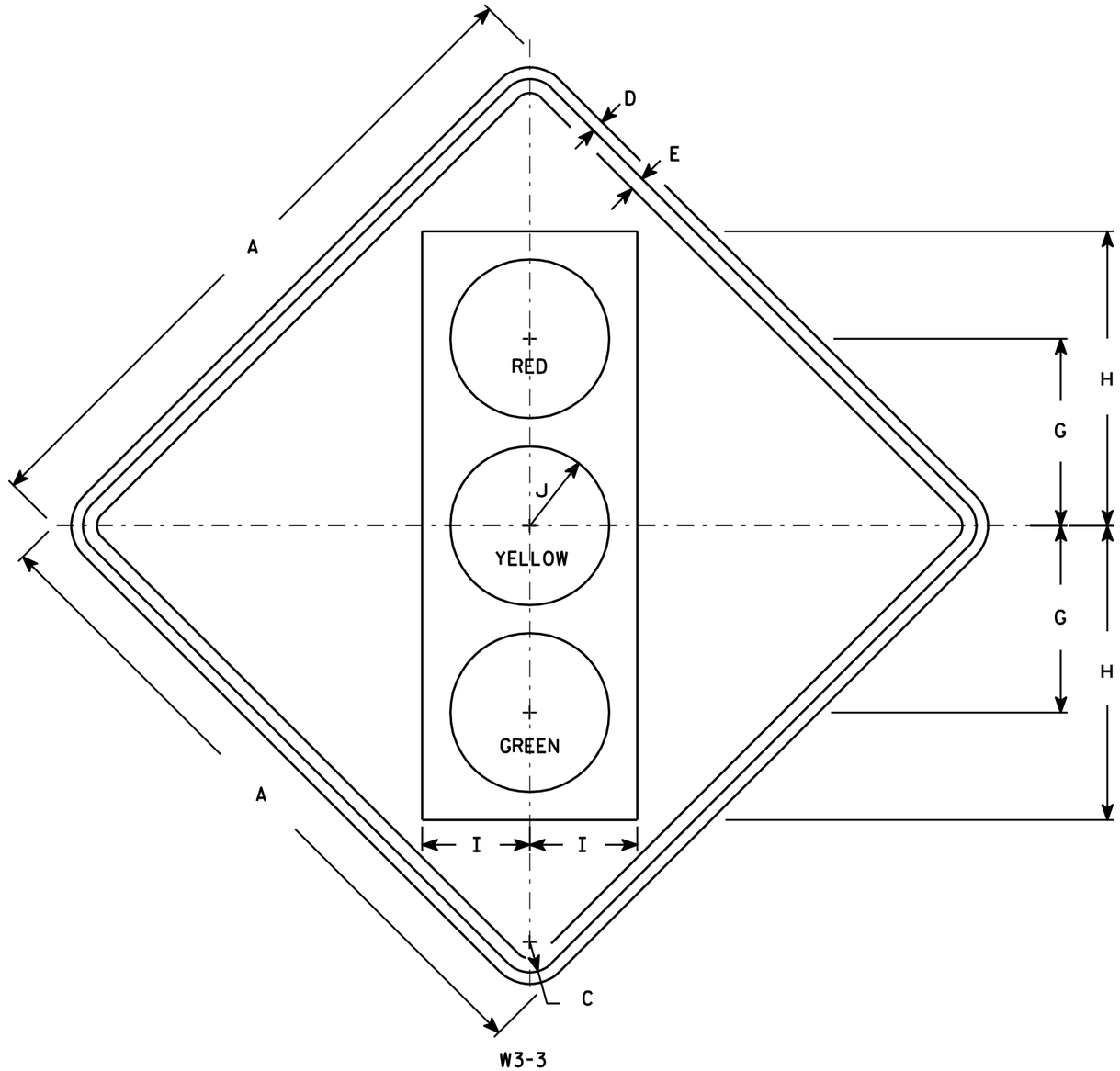

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | 18 | 1 1/4 | 3/8 | 3/8 | 4 | 3 | 2 | 11 1/4 | 3 | 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 3/8 | 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 3/8 | 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 6/14/2021 PLATE NO. R11-3.9

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 203 | E |
|---|---|---|---|---|---|




NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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. 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 3/8 | 1/2 | 5/8 | | 8 3/4 | 13 3/4 | 5 | 3 3/4 | | | | | | | | | | | | | | | | | 6.25 |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | | 10 | 15 3/4 | 5 3/4 | 4 1/4 | | | | | | | | | | | | | | | | | 9.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | | 10 | 15 3/4 | 5 3/4 | 4 1/4 | | | | | | | | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | | 10 | 15 3/4 | 5 3/4 | 4 1/4 | | | | | | | | | | | | | | | | | 9.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | | 12 1/2 | 20 | 7 1/2 | 5 | | | | | | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | | 12 1/2 | 20 | 7 1/2 | 5 | | | | | | | | | | | | | | | | | 16.0 |

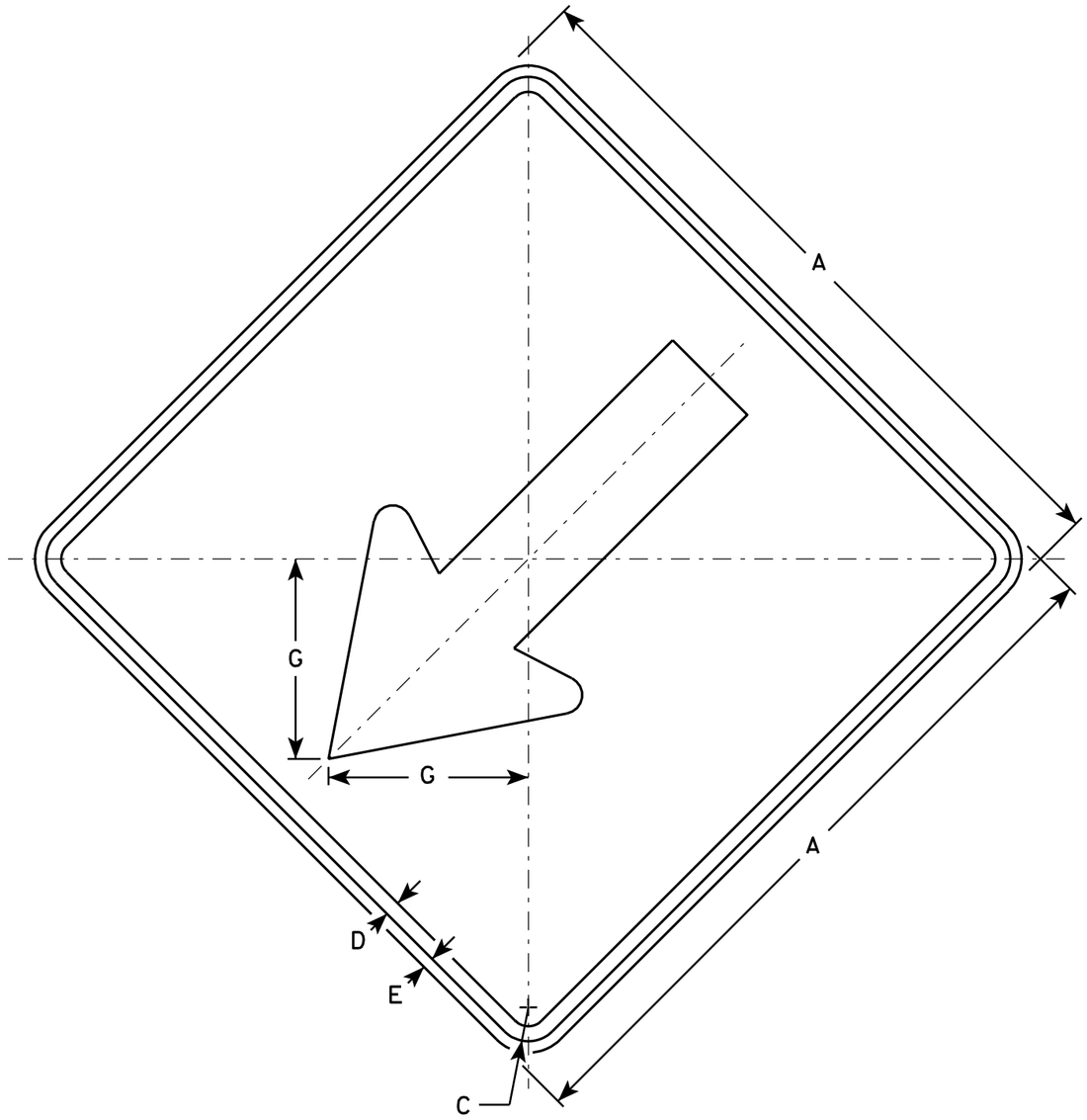
STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

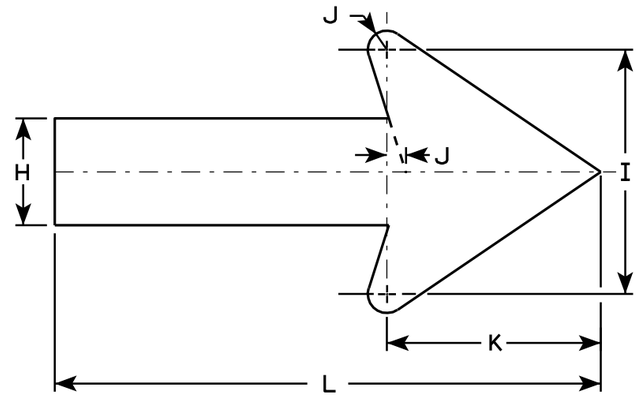
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 204 | E




W12-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | | 1 1/8 | 1/2 | 3/8 | | 6 5/8 | 3 1/2 | 8 | 5/8 | 7 | 18 | | | | | | | | | | | | | | | 4 |
| 2M | 24 | | 1 1/8 | 1/2 | 3/8 | | 6 5/8 | 3 1/2 | 8 | 5/8 | 7 | 18 | | | | | | | | | | | | | | | 4 |
| 3 | 30 | | 1 3/8 | 5/8 | 1/2 | | 8 1/4 | 4 3/8 | 10 | 3/4 | 8 3/4 | 22 3/8 | | | | | | | | | | | | | | | 6.25 |
| 4 | 36 | | 1 3/4 | 3/4 | 5/8 | | 10 3/8 | 5 1/2 | 12 1/2 | 1 | 11 | 27 7/8 | | | | | | | | | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | | 12 1/2 | 6 5/8 | 15 | 1 1/4 | 13 1/4 | 33 1/2 | | | | | | | | | | | | | | | 16 |

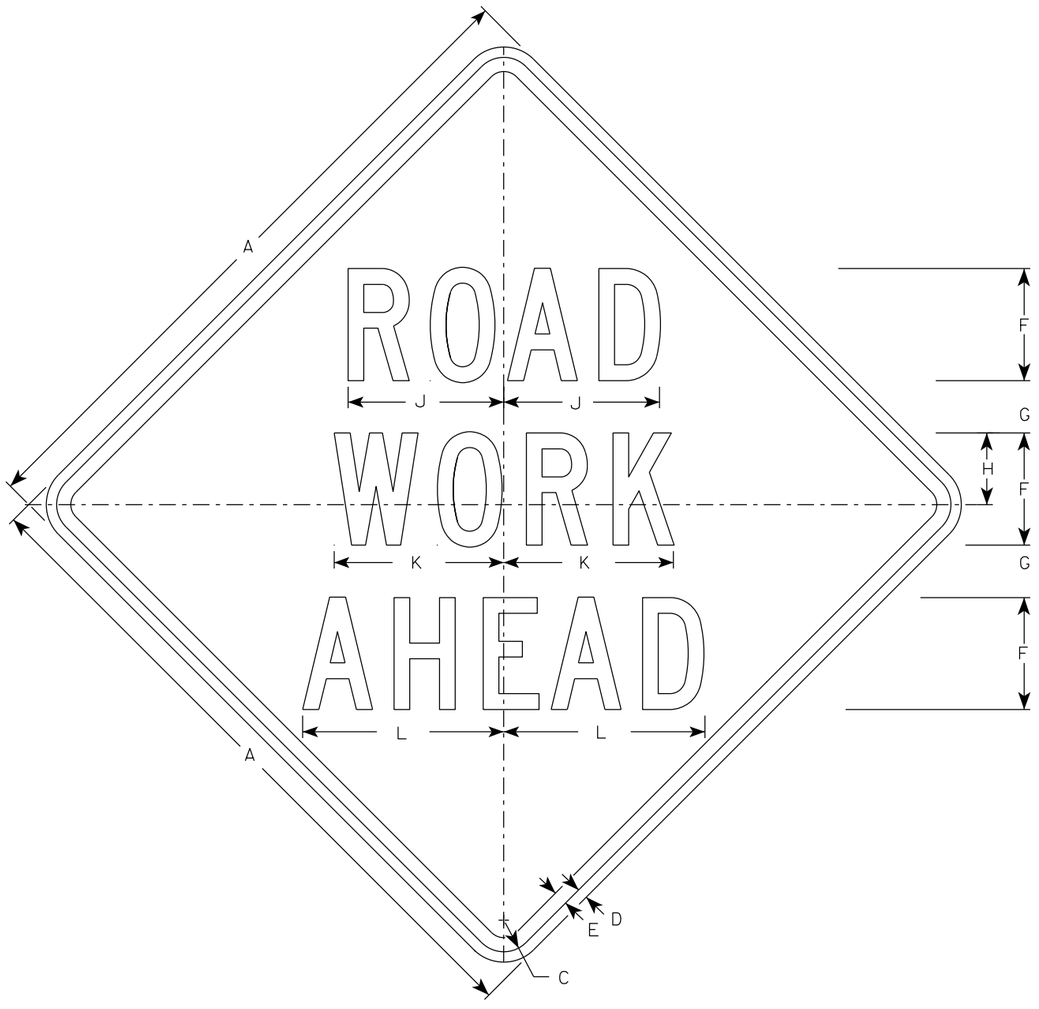
STANDARD SIGN
W12-1

WISCONSIN DEPT OF TRANSPORTATION

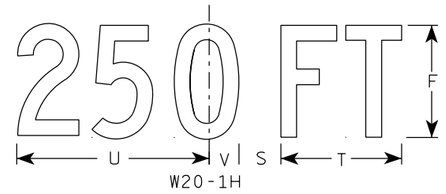
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1.12

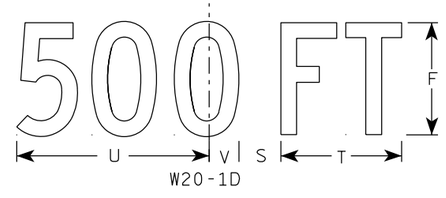
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 205 | E




W20-1A

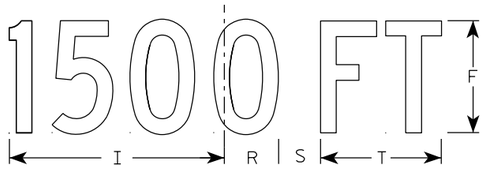



W20-1H




W20-1D

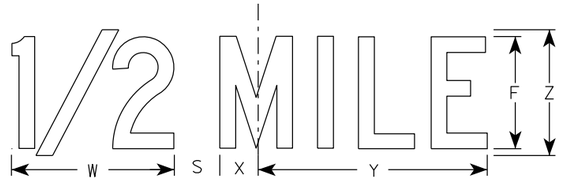

W20-1C



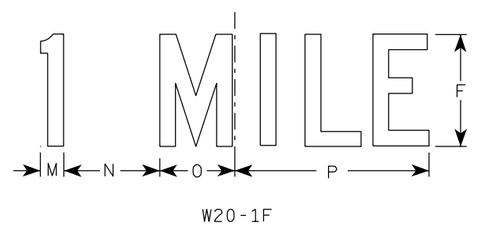

W20-1B

NOTES

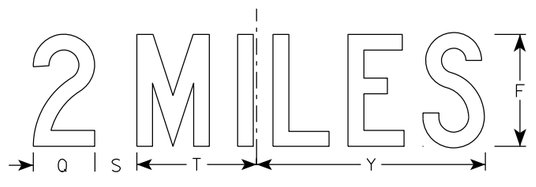
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.




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 | | 1 5/8 | 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 | | 2 1/4 | 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 | | 2 1/4 | 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 | | 2 1/4 | 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 | | 2 1/4 | 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 | | 2 1/4 | 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 3/25/2020 PLATE NO. W20-1.11

PROJECT NO:

SHEET NO: E

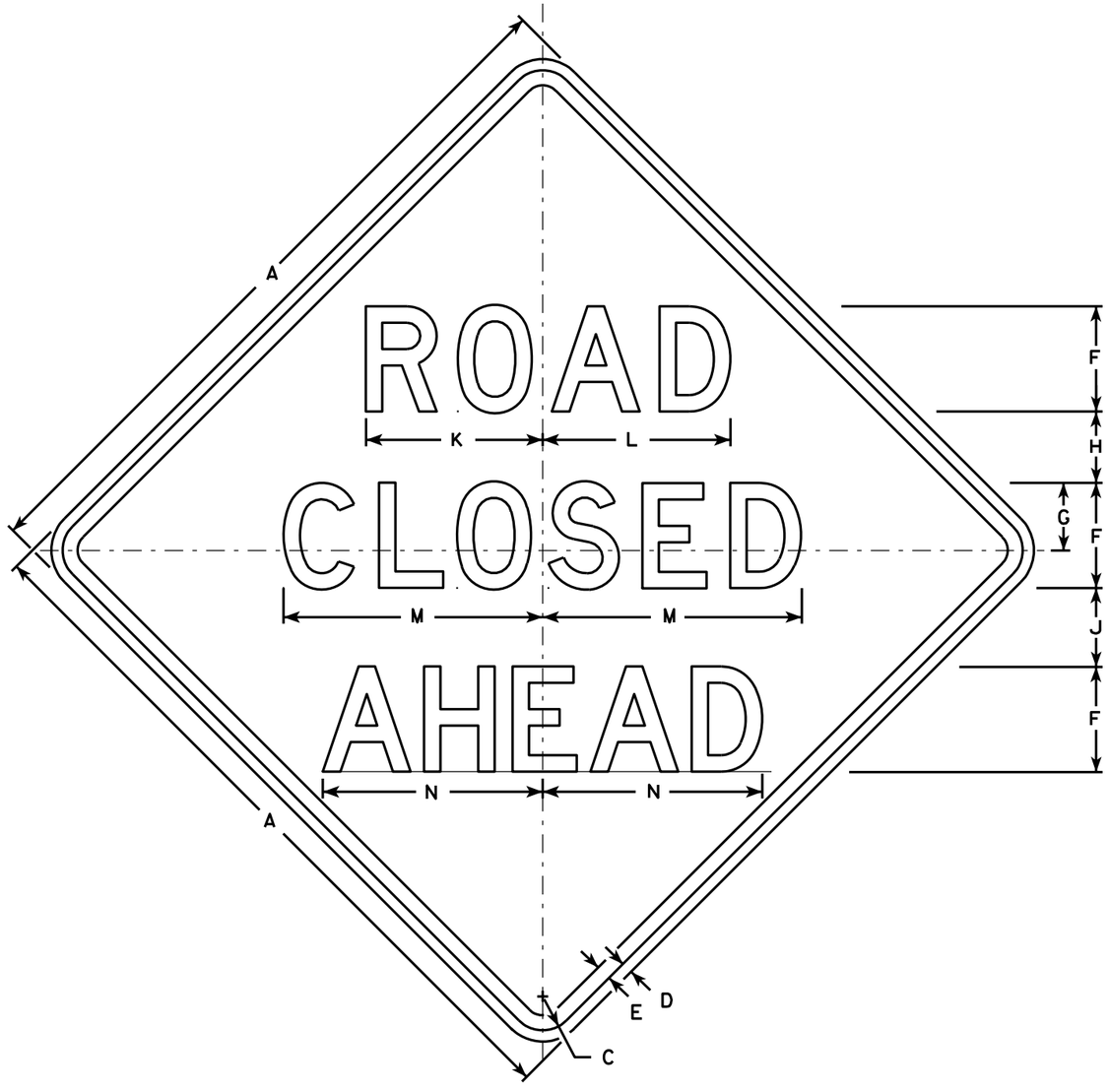


FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 25-MARCH-2020 PLOT BY : dotc4c

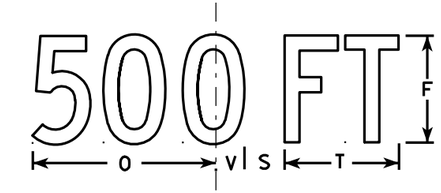
WISDOT/CADDS SHEET 42

7

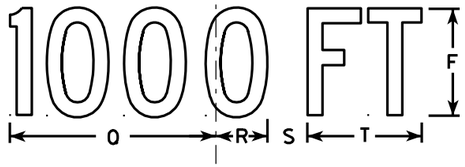
7



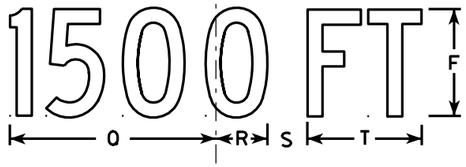

W20-3A



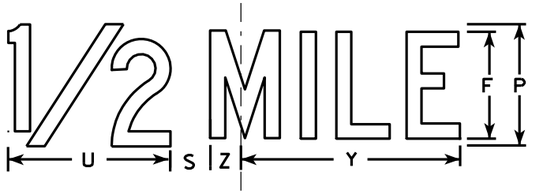

W20-3D



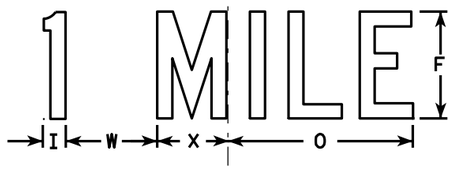

W20-3C




W20-3B




W20-3G




W20-3F

**NOTES**

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 | | 1 5/8 | 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 | | 2 1/4 | 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 | | 2 1/4 | 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 | | 2 1/4 | 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 | | 2 1/4 | 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 | | 2 1/4 | 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

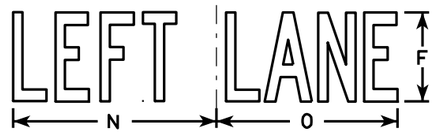
DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 207 | E


7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42

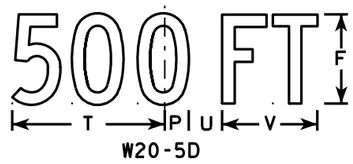

W20-56A



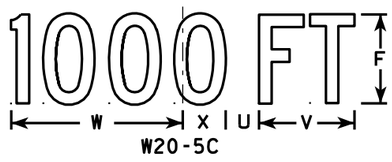

W20-55A



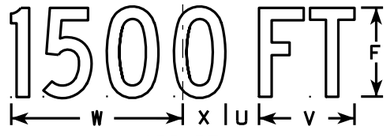

W20-5A




W20-5D




W20-5C




W20-5B


W20-5G


W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 | 1 5/8 | 5/8 | 3/4 | 5 | 1/8 | 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 1/8 | 5 5/8 | 10 1/8 | 2 1/2 | 1 3/4 | 8 | 9.0 |
| 2S | 48 | 8 | 2 1/4 | 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 | 2 1/4 | 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 | 2 1/4 | 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 | 2 1/4 | 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 | 2 1/4 | 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

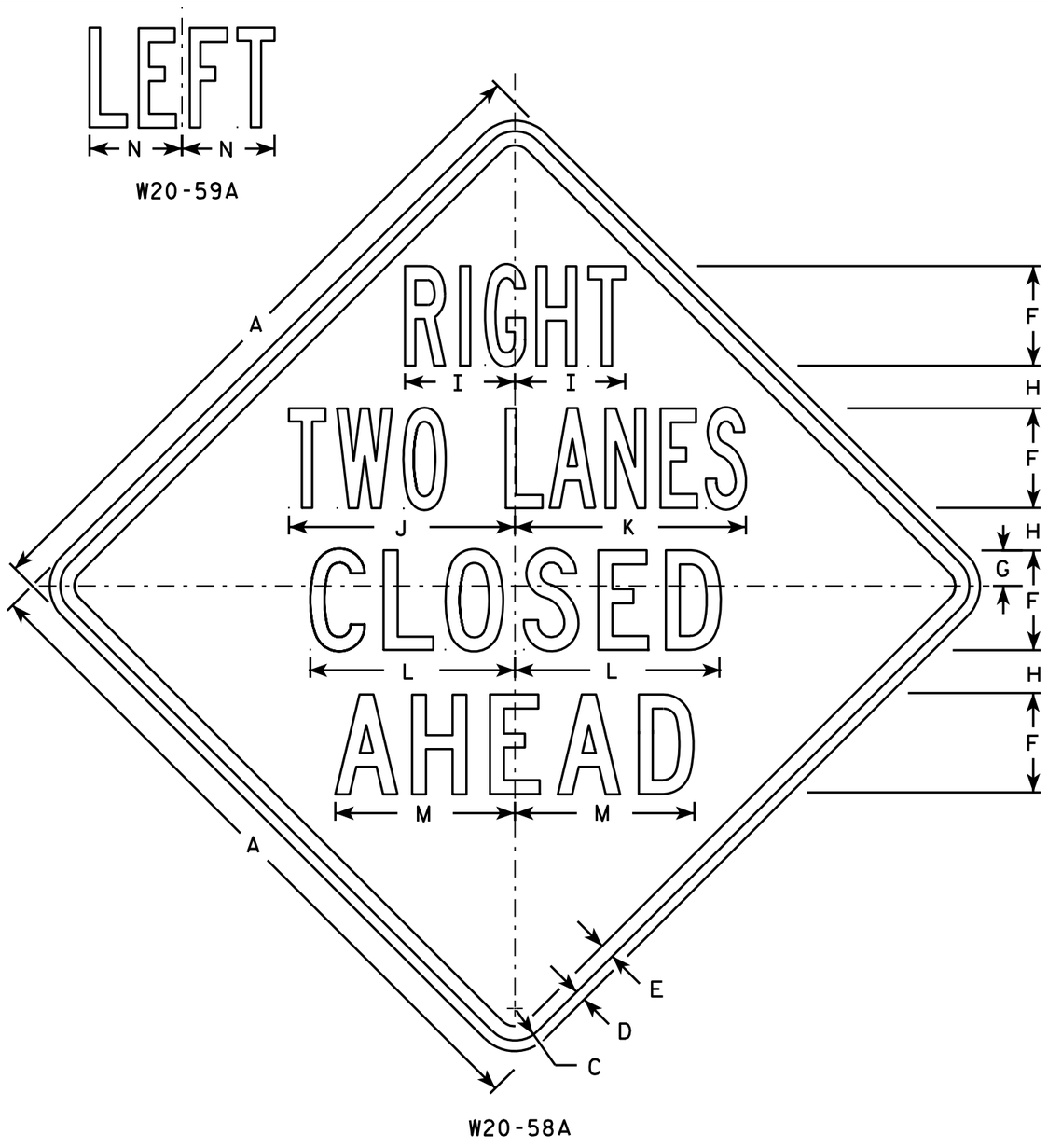
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

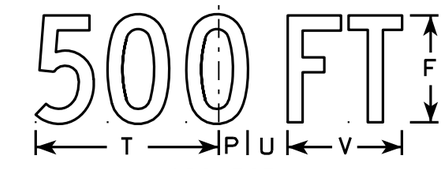
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 208 | E |
|---|---|---|---|---|---|


7

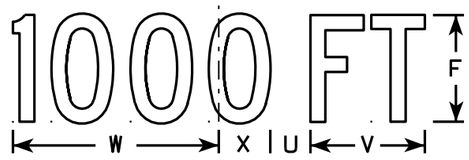
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



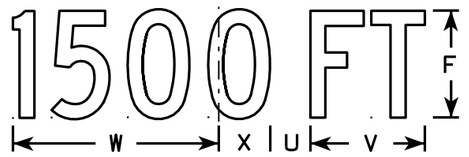

W20-58A



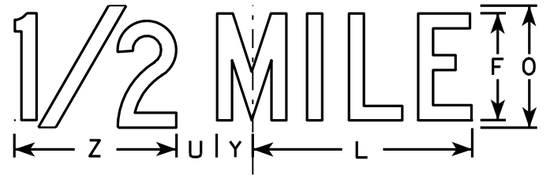

W20-58D




W20-58C




W20-58B




W20-58G


W20-58F

## NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 & 2 Series B.
   Lines 3 & 4 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 | | 1 5/8 | 5/8 | 3/4 | 5 | 1 7/8 | 2 1/4 | 5 7/8 | 11 7/8 | 12 1/8 | 10 3/4 | 9 1/2 | 4 7/8 | 6 | 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 | | 2 1/4 | 3/4 | 1 | 7 | 2 1/2 | 3 | 7 3/4 | 15 7/8 | 16 1/4 | 14 3/8 | 12 5/8 | 6 1/2 | 8 | 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 | | 2 1/4 | 3/4 | 1 | 7 | 2 1/2 | 3 | 7 3/4 | 15 7/8 | 16 1/4 | 14 3/8 | 12 5/8 | 6 1/2 | 8 | 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 | | 2 1/4 | 3/4 | 1 | 7 | 2 1/2 | 3 | 7 3/4 | 15 7/8 | 16 1/4 | 14 3/8 | 12 5/8 | 6 1/2 | 8 | 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 | | 2 1/4 | 3/4 | 1 | 7 | 2 1/2 | 3 | 7 3/4 | 15 7/8 | 16 1/4 | 14 3/8 | 12 5/8 | 6 1/2 | 8 | 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 | | 2 1/4 | 3/4 | 1 | 7 | 2 1/2 | 3 | 7 3/4 | 15 7/8 | 16 1/4 | 14 3/8 | 12 5/8 | 6 1/2 | 8 | 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 |

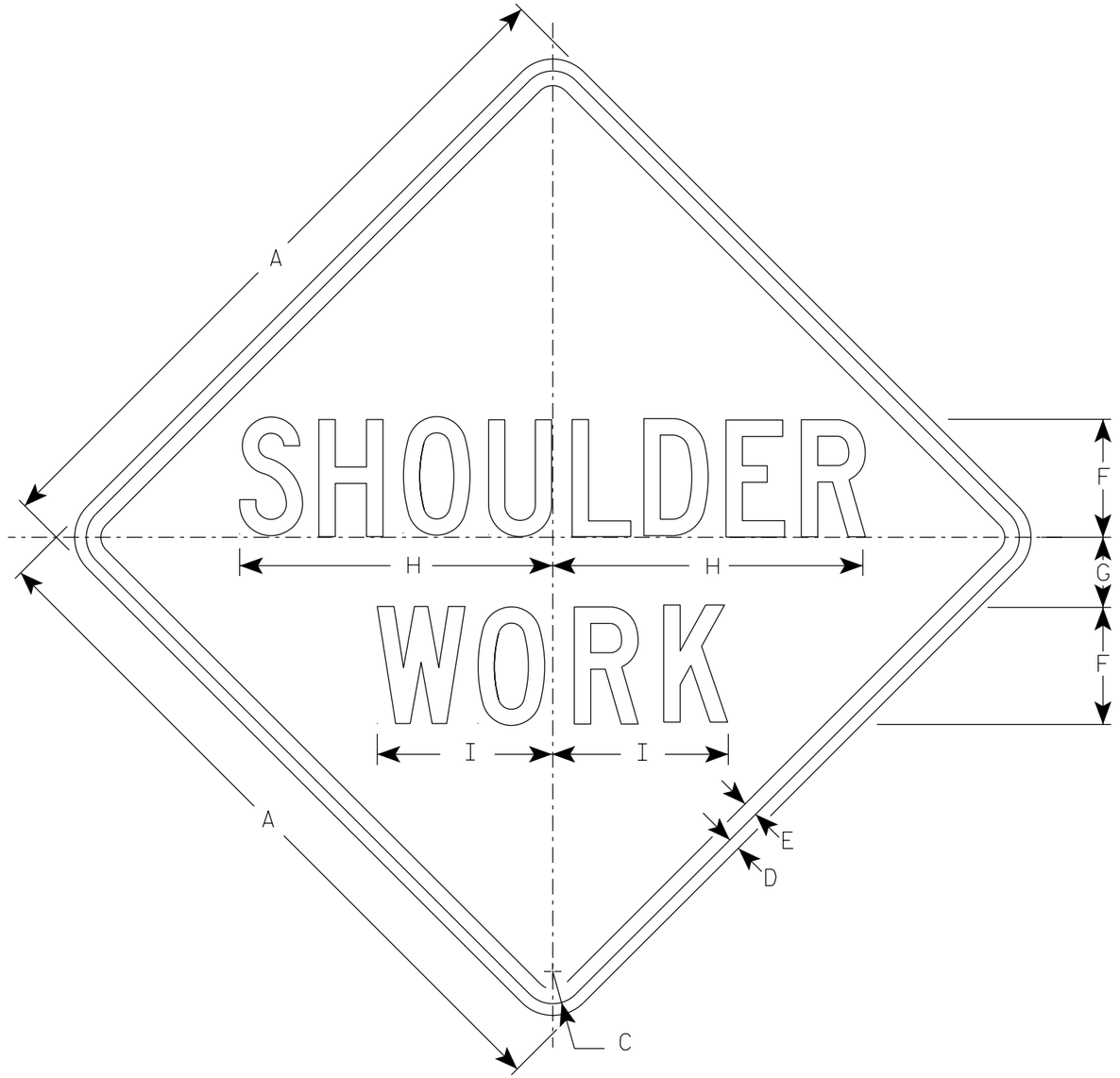
STANDARD SIGN
W20-58A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-58.4

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 209 | E |
|---|---|---|---|---|---|




W21-5

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 | | 1 5/8 | 5/8 | 3/4 | 6 | 3 1/2 | 16 | 9 | | | | | | | | | | | | | | | | | | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 8 | 5 | 21 3/8 | 11 1/4 | | | | | | | | | | | | | | | | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 8 | 5 | 21 3/8 | 11 1/4 | | | | | | | | | | | | | | | | | | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 5 | 21 3/8 | 11 1/4 | | | | | | | | | | | | | | | | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 5 | 21 3/8 | 11 1/4 | | | | | | | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 5 | 21 3/8 | 11 1/4 | | | | | | | | | | | | | | | | | | 16.0 |

STANDARD SIGN
W21-5

WISCONSIN DEPT OF TRANSPORTATION

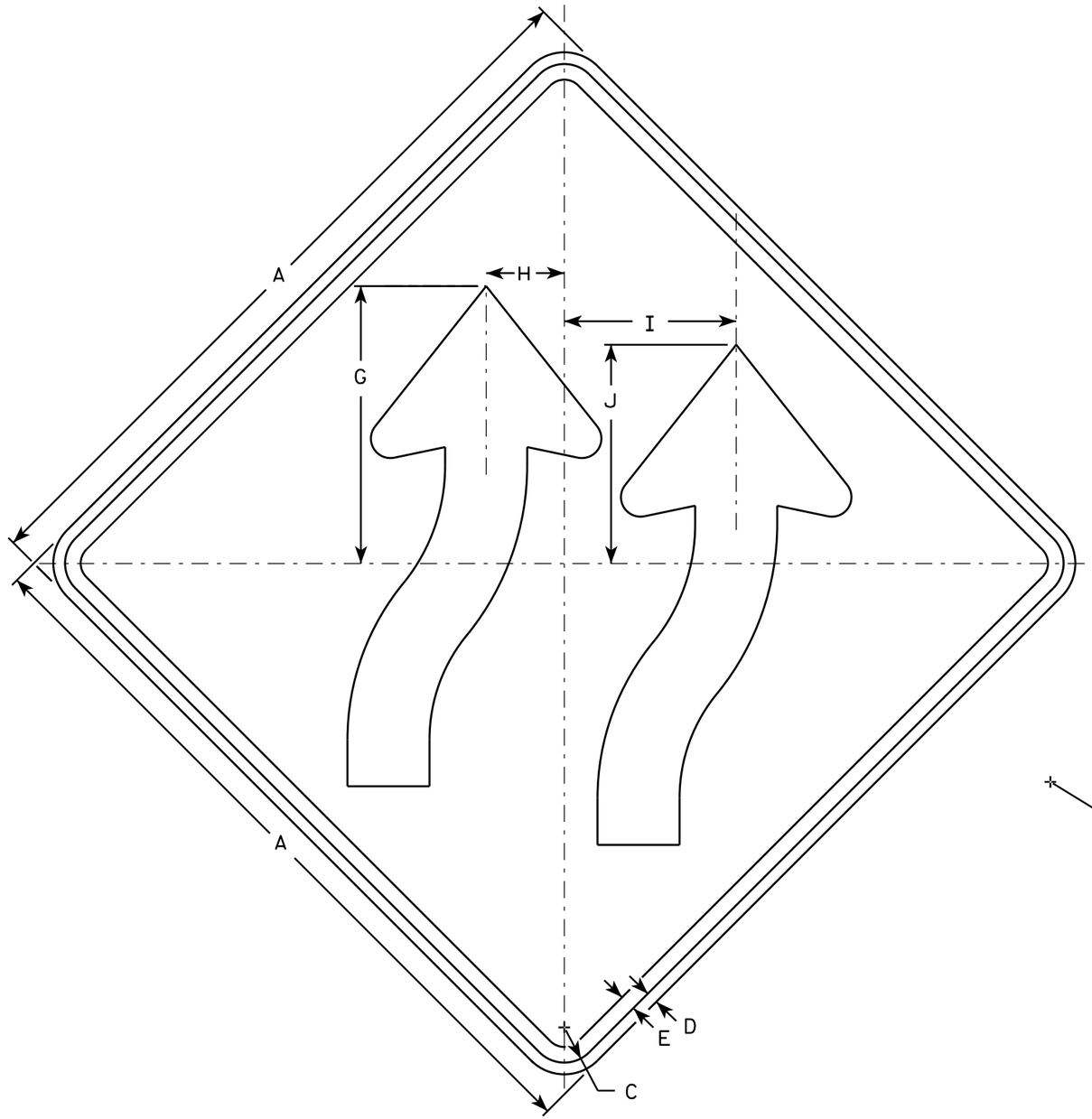
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/30/2020 PLATE NO. W21-5.6

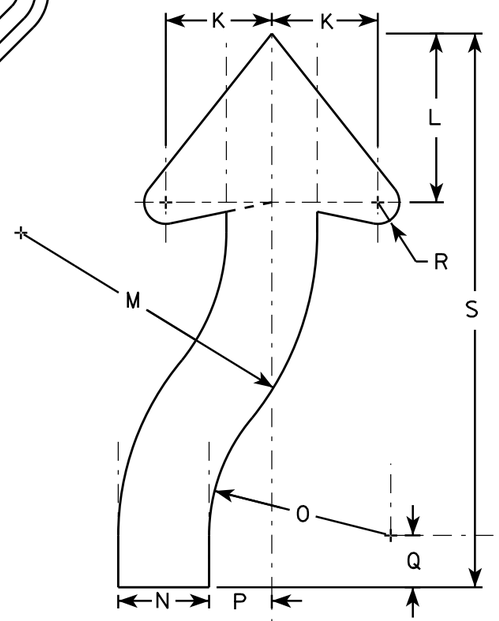
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 210 | E




7




W01-4bR




NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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. W01-4bL is the same as W014-bR exept arrows are 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 | | 1 5/8 | 5/8 | 3/4 | | 13 3/8 | 3 3/4 | 8 1/4 | 10 1/2 | 4 5/8 | 7 3/8 | 12 7/8 | 3 7/8 | 7 7/8 | 2 3/4 | 2 1/4 | 7/8 | 24 | | | | | | | | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | | 17 3/4 | 5 | 11 | 14 | 6 1/8 | 9 3/4 | 17 1/8 | 5 1/4 | 10 1/2 | 3 5/8 | 3 | 1 1/4 | 32 | | | | | | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | | 17 3/4 | 5 | 11 | 14 | 6 1/8 | 9 3/4 | 17 1/8 | 5 1/4 | 10 1/2 | 3 5/8 | 3 | 1 1/4 | 32 | | | | | | | | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | | 17 3/4 | 5 | 11 | 14 | 6 1/8 | 9 3/4 | 17 1/8 | 5 1/4 | 10 1/2 | 3 5/8 | 3 | 1 1/4 | 32 | | | | | | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | | 17 3/4 | 5 | 11 | 14 | 6 1/8 | 9 3/4 | 17 1/8 | 5 1/4 | 10 1/2 | 3 5/8 | 3 | 1 1/4 | 32 | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | | 17 3/4 | 5 | 11 | 14 | 6 1/8 | 9 3/4 | 17 1/8 | 5 1/4 | 10 1/2 | 3 5/8 | 3 | 1 1/4 | 32 | | | | | | | | 16.0 |

# STANDARD SIGN
# W01-4b

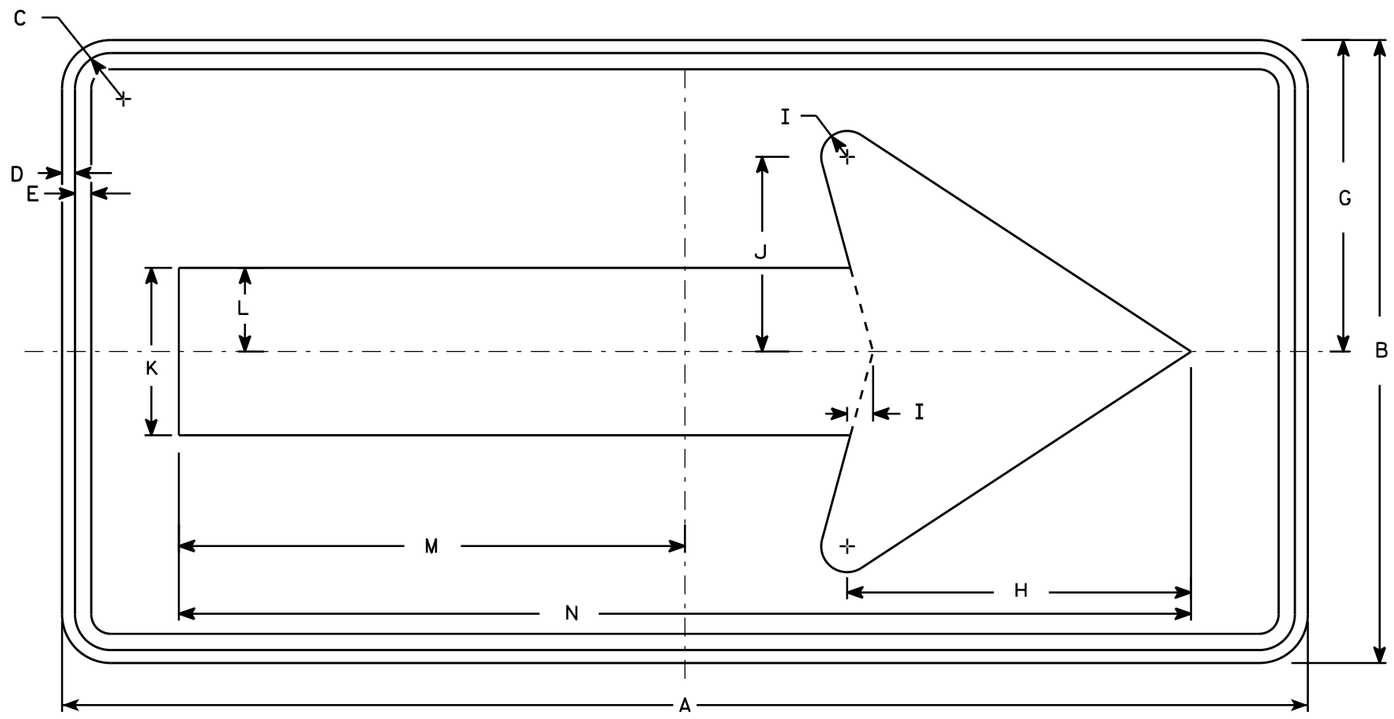
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-4b.1



| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|




W01-6

## NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 3/8 | 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 3/8 | 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 3/8 | 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 3/8 | 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 3/8 | 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
# W01-6

WISCONSIN DEPT OF TRANSPORTATION

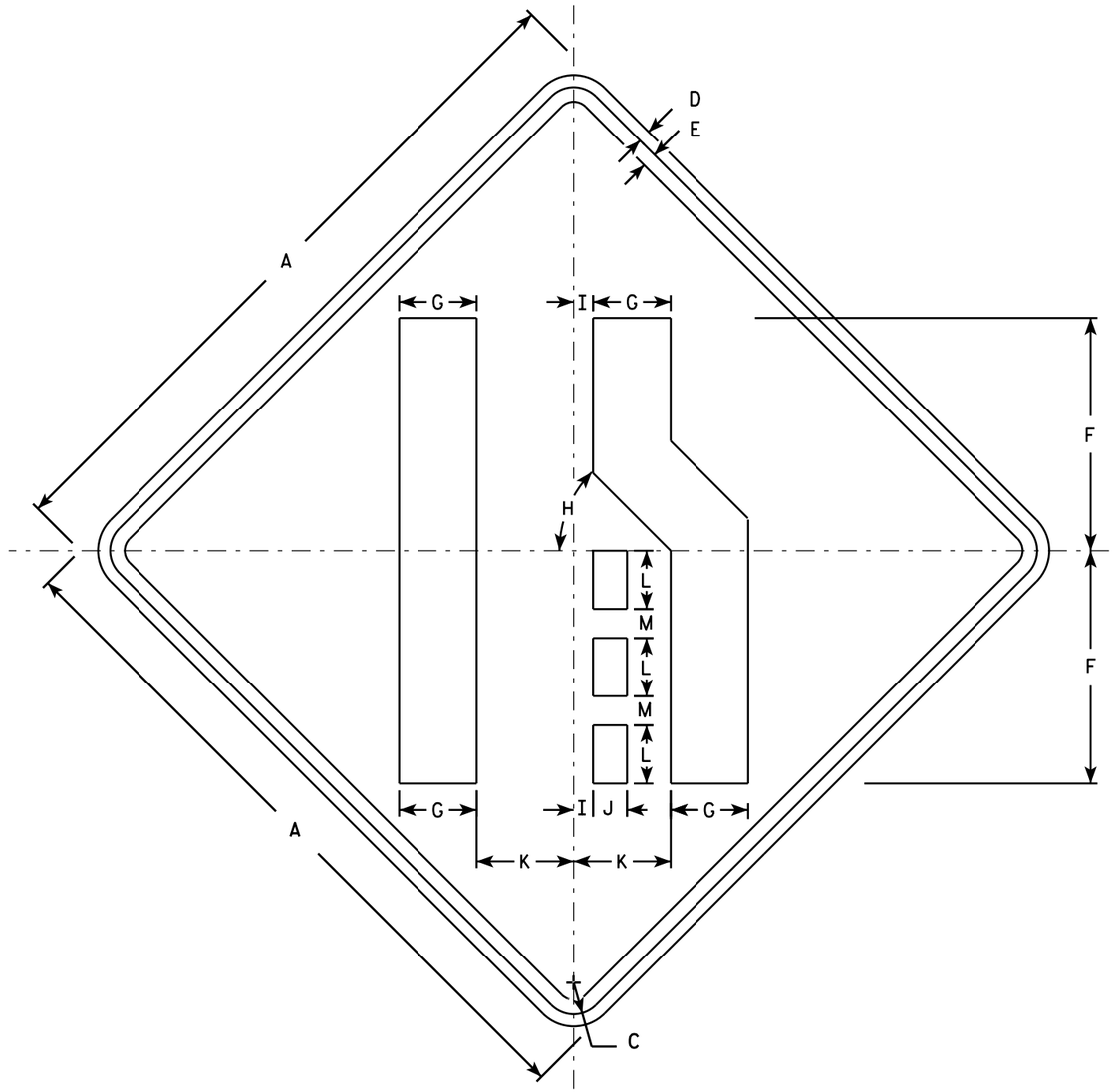
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1



PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42




W04-2R

## NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 | | 1 5/8 | 5/8 | 3/4 | 12 | 4 | 45° | 1 | 1 3/4 | 5 | 3 | 1 1/2 | | | | | | | | | | | | | | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 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 11/20/13 PLATE 213 W04-2.1

PROJECT NO: | SHEET NO: E

EARTHWORK-CTH CE EB LOONHEAD

| STATION | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|
| | CUT | UNUSABLE PAVEMENT MATERIAL | FILL | CUT | UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.30 | MASS ORDINATE |
| | | | | NOTE 1 | NOTE 2 | NOTE 3 | NOTE 1 | | NOTE 8 |
| 130+66.40 | 12.27 | 0.83 | 14.15 | 0 | 0 | 0 | 0 | 0 | 0 |
| 131+00 | 13.51 | 0.83 | 78.09 | 16 | 1 | 57 | 16 | 74 | -59 |
| 131+50 | 12.43 | 0.83 | 83.71 | 24 | 2 | 150 | 40 | 269 | -232 |
| 132+00 | 12.90 | 0.83 | 55.12 | 23 | 2 | 129 | 63 | 437 | -379 |
| 132+50 | 13.23 | 0.83 | 18.86 | 24 | 2 | 68 | 87 | 525 | -445 |
| 132+55 | 13.23 | 0.83 | 18.86 | 2 | 0 | 4 | 89 | 530 | -448 |
| | | | | 89 | 7 | 408 | | | |

EARTHWORK-CTH CE MAINLINE

| STATION | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|
| | CUT | UNUSABLE PAVEMENT MATERIAL | FILL | CUT | UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.30 | MASS ORDINATE |
| | | | | NOTE 1 | NOTE 2 | NOTE 3 | NOTE 1 | | NOTE 8 |
| 130+60 | 49.29 | 10.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 130+66.40 | 49.26 | 10.00 | 0.00 | 12 | 2 | 0 | 12 | 0 | 10 |
| 131+00 | 47.83 | 10.00 | 0.00 | 60 | 12 | 0 | 72 | 0 | 58 |
| 131+50 | 50.62 | 10.00 | 0.00 | 91 | 19 | 0 | 163 | 0 | 130 |
| 132+00 | 50.03 | 10.00 | 0.00 | 93 | 19 | 0 | 256 | 0 | 204 |
| 132+50 | 47.03 | 10.00 | 0.00 | 90 | 19 | 0 | 346 | 0 | 275 |
| 133+00 | 43.82 | 10.00 | 0.00 | 84 | 19 | 0 | 430 | 0 | 340 |
| 133+50 | 44.42 | 10.00 | 0.00 | 82 | 19 | 0 | 512 | 0 | 403 |
| 134+00 | 45.46 | 10.00 | 0.00 | 83 | 19 | 0 | 595 | 0 | 467 |
| 134+50 | 46.37 | 10.00 | 0.00 | 85 | 19 | 0 | 680 | 0 | 533 |
| 135+00 | 46.78 | 10.00 | 0.00 | 86 | 19 | 0 | 766 | 0 | 600 |
| 135+50 | 46.74 | 10.00 | 0.00 | 87 | 19 | 0 | 853 | 0 | 668 |
| 136+00 | 46.31 | 10.00 | 0.00 | 86 | 19 | 0 | 939 | 0 | 735 |
| 136+50 | 46.04 | 10.00 | 0.00 | 86 | 19 | 0 | 1,025 | 0 | 802 |
| 137+00 | 46.25 | 10.00 | 0.00 | 85 | 19 | 0 | 1,110 | 0 | 868 |
| 137+50 | 46.39 | 10.00 | 0.00 | 86 | 19 | 0 | 1,196 | 0 | 935 |
| 138+00 | 58.95 | 10.00 | 0.00 | 98 | 19 | 0 | 1,294 | 0 | 1,014 |
| 138+50 | 137.54 | 10.00 | 0.00 | 182 | 19 | 0 | 1,476 | 0 | 1,177 |
| 139+00 | 113.15 | 10.00 | 0.00 | 232 | 19 | 0 | 1,708 | 0 | 1,390 |
| 139+50 | 61.19 | 10.00 | 36.12 | 161 | 19 | 33 | 1,869 | 43 | 1,489 |
| 140+00 | 45.57 | 10.00 | 0.00 | 99 | 19 | 33 | 1,968 | 86 | 1,526 |
| 140+50 | 45.15 | 10.00 | 0.00 | 84 | 19 | 0 | 2,052 | 86 | 1,591 |
| 141+00 | 44.87 | 10.00 | 0.00 | 83 | 19 | 0 | 2,135 | 86 | 1,655 |
| 141+50 | 86.45 | 13.33 | 0.00 | 122 | 22 | 0 | 2,257 | 86 | 1,755 |
| 142+00 | 80.09 | 13.33 | 15.05 | 154 | 25 | 14 | 2,411 | 104 | 1,866 |
| 142+50 | 78.97 | 13.33 | 8.13 | 147 | 25 | 21 | 2,558 | 131 | 1,961 |
| 143+00 | 79.49 | 13.33 | 1.82 | 147 | 25 | 9 | 2,705 | 143 | 2,071 |
| 143+50 | 77.82 | 13.33 | 1.20 | 146 | 25 | 3 | 2,851 | 147 | 2,188 |
| 144+00 | 77.02 | 13.33 | 11.35 | 143 | 25 | 12 | 2,994 | 163 | 2,291 |
| 144+50 | 49.34 | 10.00 | 0.00 | 117 | 22 | 11 | 3,111 | 177 | 2,371 |
| 145+00 | 49.71 | 10.00 | 0.00 | 92 | 19 | 0 | 3,203 | 177 | 2,444 |
| 145+50 | 50.17 | 10.00 | 0.00 | 92 | 19 | 0 | 3,295 | 177 | 2,517 |
| 146+00 | 48.17 | 10.00 | 0.00 | 91 | 19 | 0 | 3,386 | 177 | 2,589 |
| 146+50 | 49.10 | 10.00 | 0.00 | 90 | 19 | 0 | 3,476 | 177 | 2,660 |
| 147+00 | 49.05 | 10.00 | 0.00 | 91 | 19 | 0 | 3,567 | 177 | 2,732 |
| 147+50 | 49.30 | 10.00 | 0.00 | 91 | 19 | 0 | 3,658 | 177 | 2,804 |
| 148+00 | 48.62 | 10.00 | 0.00 | 91 | 19 | 0 | 3,749 | 177 | 2,876 |
| 148+50 | 49.94 | 10.00 | 0.00 | 91 | 19 | 0 | 3,840 | 177 | 2,948 |
| 149+00 | 48.40 | 10.00 | 0.00 | 90 | 18 | 0 | 3,930 | 177 | 3,020 |
| | | | | 3,930 | 733 | 136 | | | |

| Notes: | |
|---|---|
| 1 - Cut | Cut includes Salvaged/Unusable Pavement material |
| 2 - Unusable Pavement Material | This does not show up in cross sections |
| 3 - Fill | Does not include Unusable Pavement Exc volume |
| 8 - Mass Ordinate | Cut - Unusable Pavement - (Fill * Fill Factor) |

EARTHWORK-RAILROAD STREET

| STATION | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|
| | CUT | UNUSABLE PAVEMENT MATERIAL | FILL | CUT | UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.30 | MASS ORDINATE |
| | | | | NOTE 1 | NOTE 2 | NOTE 3 | NOTE 1 | | NOTE 8 |
| 7+67.5 | 87.64 | 15.42 | 12.74 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7+75 | 89.90 | 15.42 | 17.16 | 25 | 4 | 4 | 25 | 5 | 16 |
| 8+00 | 103.55 | 15.42 | 17.91 | 90 | 14 | 16 | 115 | 26 | 71 |
| 8+25 | 75.84 | 15.42 | 44.16 | 83 | 14 | 29 | 198 | 64 | 102 |
| 8+50 | 76.18 | 15.42 | 61.92 | 70 | 14 | 49 | 268 | 127 | 95 |
| 8+75 | 104.40 | 17.50 | 64.57 | 84 | 15 | 59 | 352 | 204 | 87 |
| 9+00 | 86.96 | 20.00 | 45.53 | 89 | 17 | 51 | 441 | 270 | 93 |
| 10+50 | 87.59 | 20.00 | 17.88 | 0 | 0 | 0 | 441 | 270 | 93 |
| 10+75 | 58.73 | 10.00 | 14.15 | 68 | 14 | 15 | 509 | 290 | 127 |
| 11+00 | 56.35 | 7.50 | 4.72 | 53 | 8 | 9 | 562 | 302 | 160 |
| 11+25 | 47.44 | 7.50 | 0.71 | 48 | 7 | 3 | 610 | 306 | 198 |
| 11+50 | 40.20 | 7.50 | 0.00 | 41 | 7 | 0 | 651 | 306 | 232 |
| 1152.75 | 40.28 | 7.50 | 0.07 | 4 | 1 | 0 | 655 | 306 | 235 |
| | | | | 655 | 115 | 235 | | | |

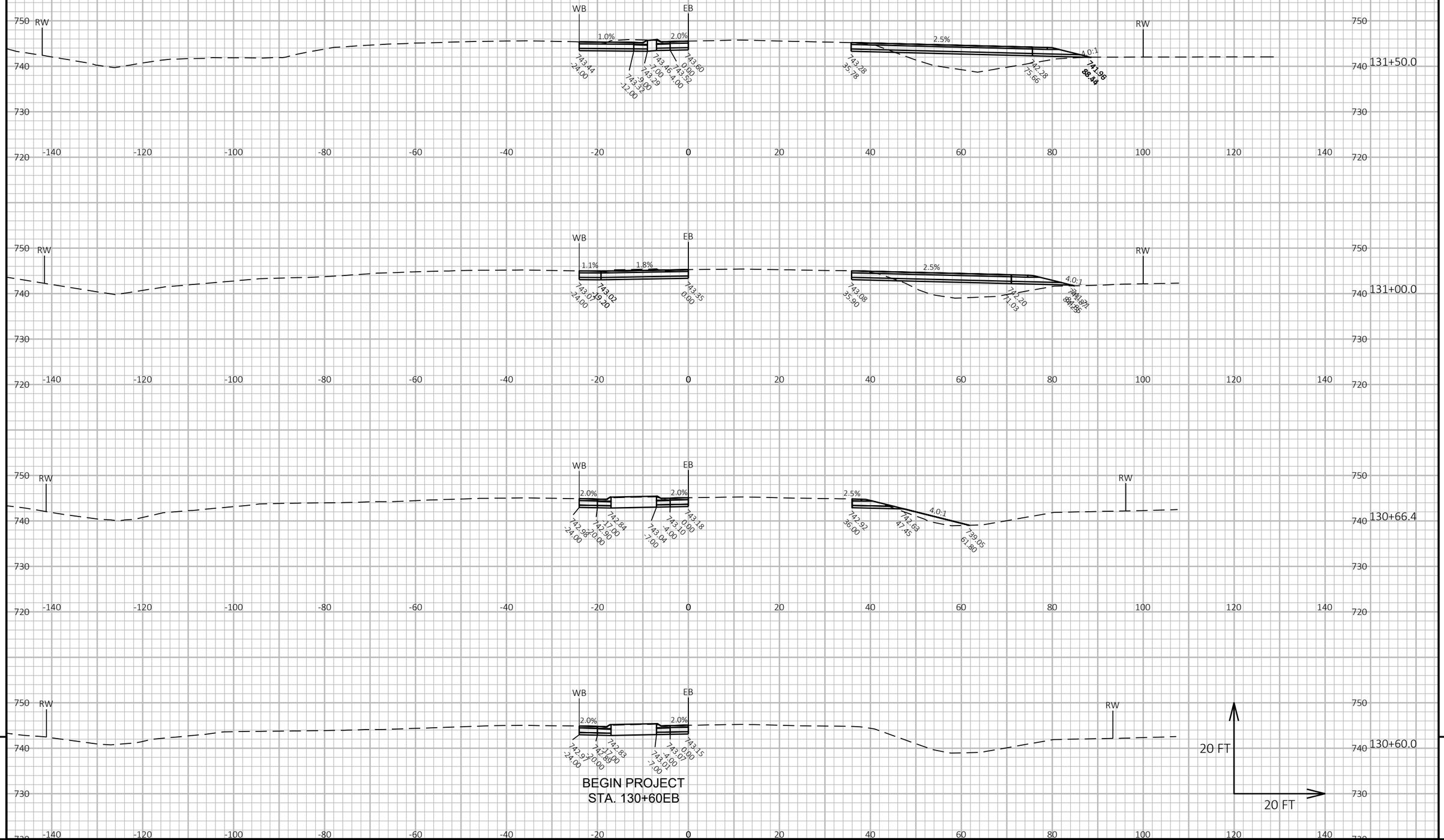
EARTHWORK - TRAIL

| STATION | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|
| | CUT | UNUSABLE PAVEMENT MATERIAL | FILL | CUT | UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.30 | MASS ORDINATE |
| | | | | NOTE 1 | NOTE 2 | NOTE 3 | NOTE 1 | | NOTE 8 |
| 146+54.5 | 4.39 | 2.50 | 0.81 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147+00 | 4.39 | 2.50 | 0.81 | 7 | 4 | 1 | 7 | 1 | 2 |
| 147+50 | 5.39 | 2.50 | 0.81 | 9 | 5 | 1 | 16 | 3 | 4 |
| 148+00 | 6.99 | 2.50 | 0.55 | 11 | 5 | 1 | 27 | 4 | 9 |
| 148+50 | 9.50 | 2.50 | 1.41 | 15 | 5 | 2 | 42 | 7 | 17 |
| 149+00 | 7.78 | 2.50 | 0.68 | 16 | 5 | 2 | 58 | 9 | 25 |
| 149+50 | 7.44 | 2.50 | 0.00 | 14 | 5 | 1 | 72 | 10 | 33 |
| 150+00 | 7.32 | 2.50 | 0.00 | 14 | 5 | 0 | 86 | 10 | 42 |
| | | | | 86 | 34 | 8 | | | |

EARTHWORK-CTH CE WB LOONHEAD

| STATION | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---|---|---|---|---|---|---|---|---|---|
| | CUT | UNUSABLE PAVEMENT MATERIAL | FILL | CUT | UNUSABLE PAVEMENT MATERIAL | FILL | CUT 1.00 | EXPANDED FILL 1.30 | MASS ORDINATE |
| | | | | NOTE 1 | NOTE 2 | NOTE 3 | NOTE 1 | | NOTE 8 |
| 146+91.25 | 37.94 | 3.33 | 1.39 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147+00 | 37.94 | 3.33 | 1.39 | 12 | 1 | 0 | 12 | 0 | 11 |
| 147+50 | 37.15 | 3.33 | 5.57 | 70 | 6 | 6 | 82 | 8 | 67 |
| 148+00 | 35.50 | 3.33 | 18.73 | 67 | 6 | 23 | 149 | 38 | 98 |
| 148+50 | 32.88 | 3.33 | 30.27 | 63 | 6 | 45 | 212 | 96 | 97 |
| 149+00 | 26.73 | 3.33 | 8.38 | 55 | 6 | 36 | 267 | 143 | 99 |
| | | | | 267 | 25 | 110 | | | |

| Notes: | |
|---|---|
| 1 - Cut | Cut includes Salvaged/Unusable Pavement material |
| 2 - Unusable Pavement Material | This does not show up in cross sections |
| 3 - Fill | Does not include Unusable Pavement Exc volume |
| 8 - Mass Ordinate | Cut - Unusable Pavement - (Fill * Fill Factor) |

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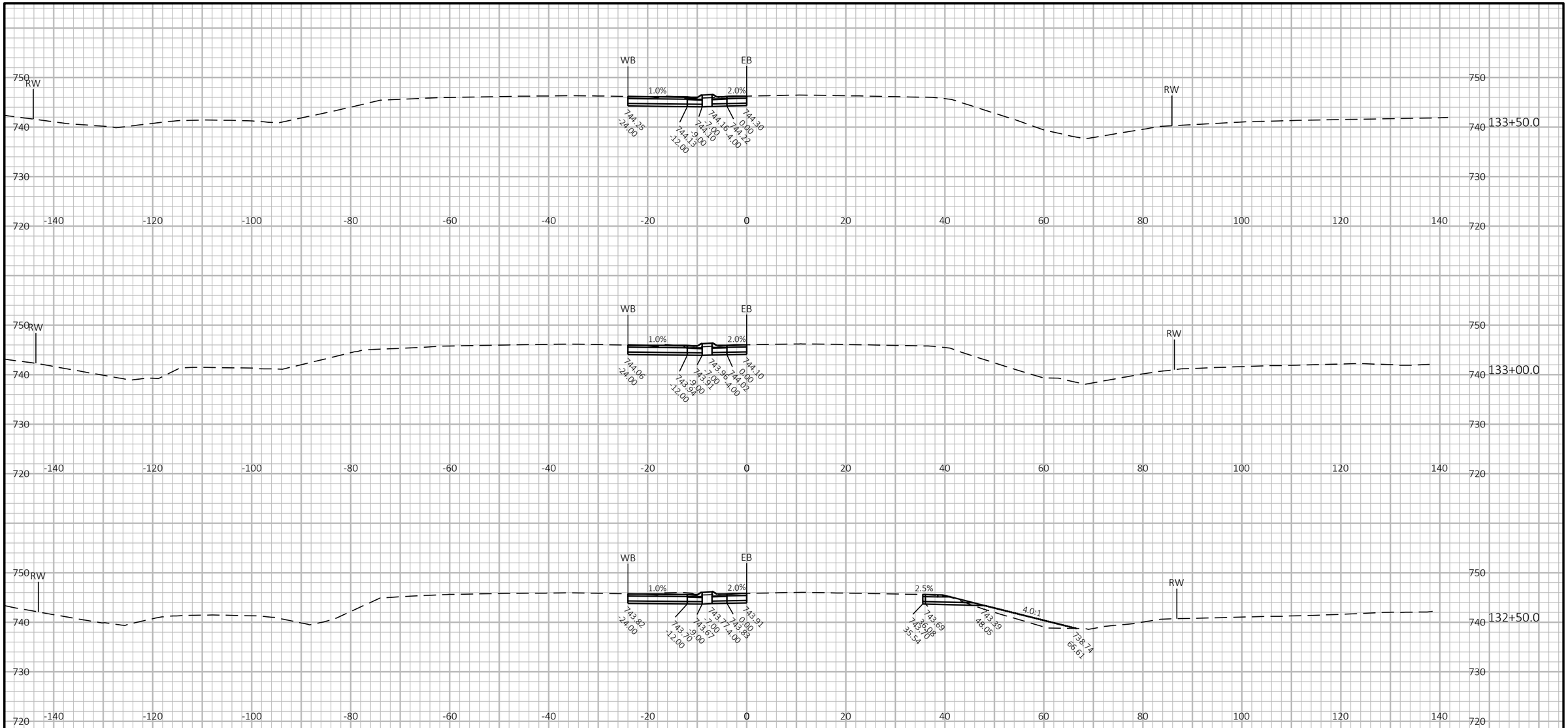
| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | CROSS SECTIONS: CTH CE | SHEET 216 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201-xs

PLOT DATE : 10/31/2022 11:53 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

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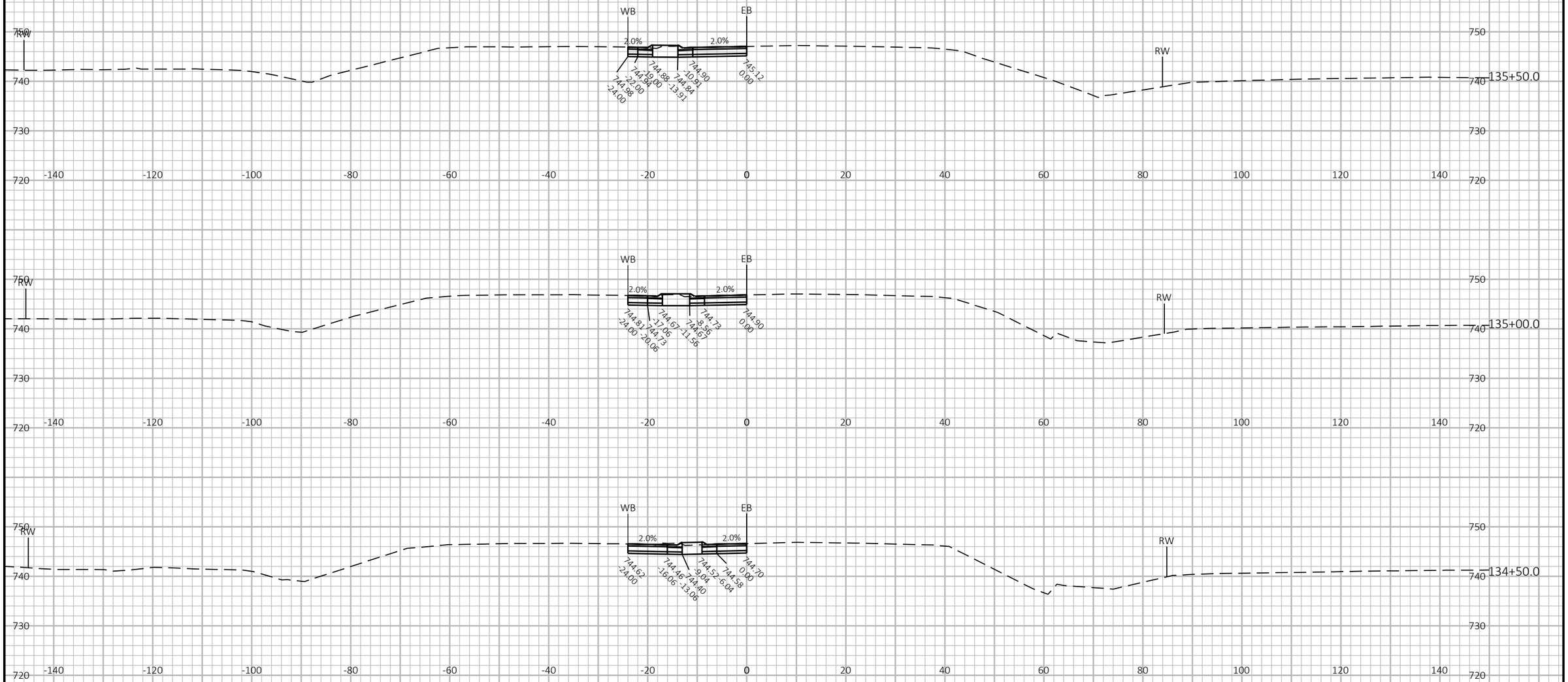
| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | CROSS SECTIONS: CTH CE | SHEET 217 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090202-xs

PLOT DATE : 10/31/2022 11:53 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

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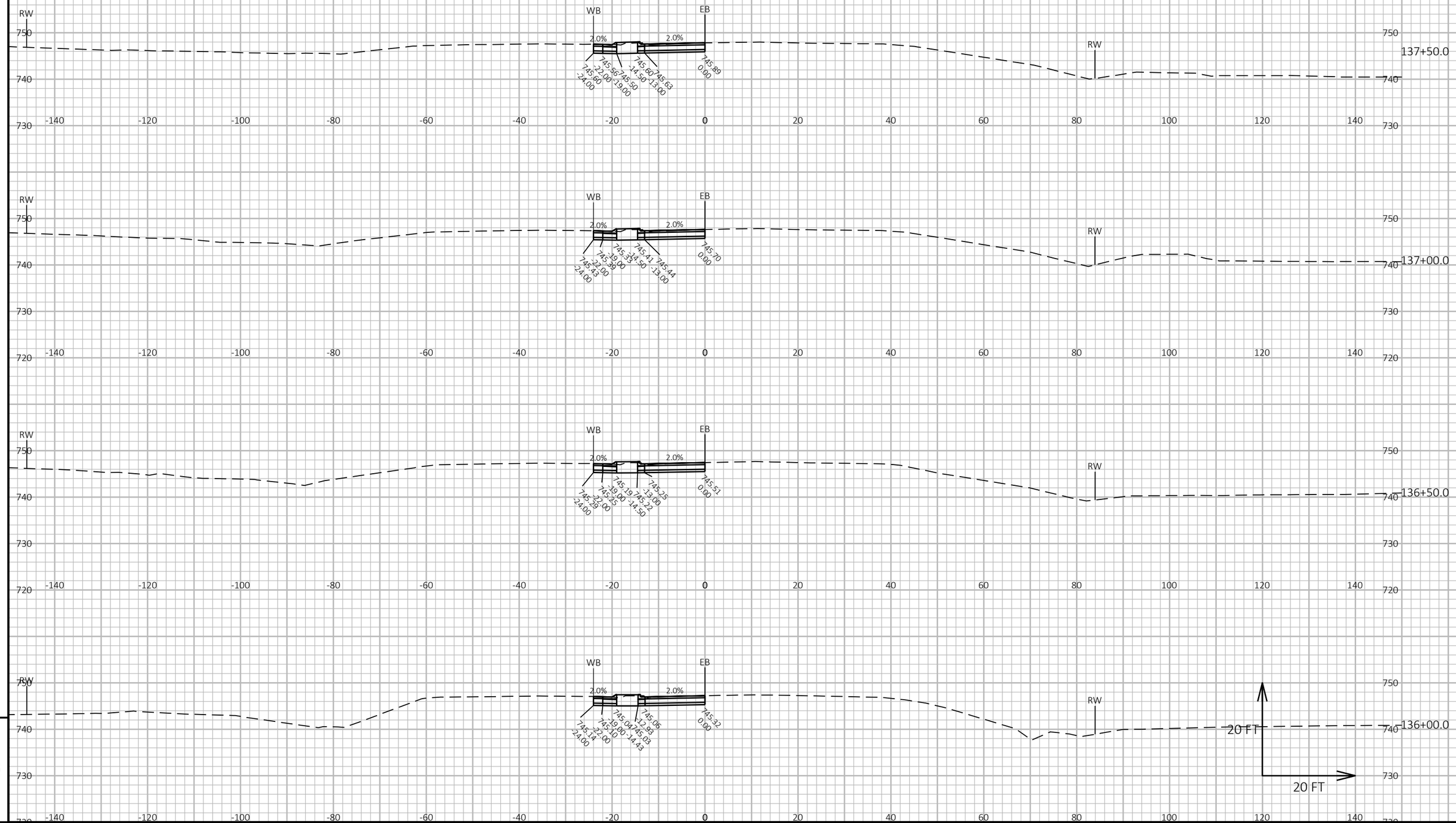
| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | CROSS SECTIONS: CTH CE | SHEET 218 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090203-xs

PLOT DATE : 10/31/2022 11:53 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

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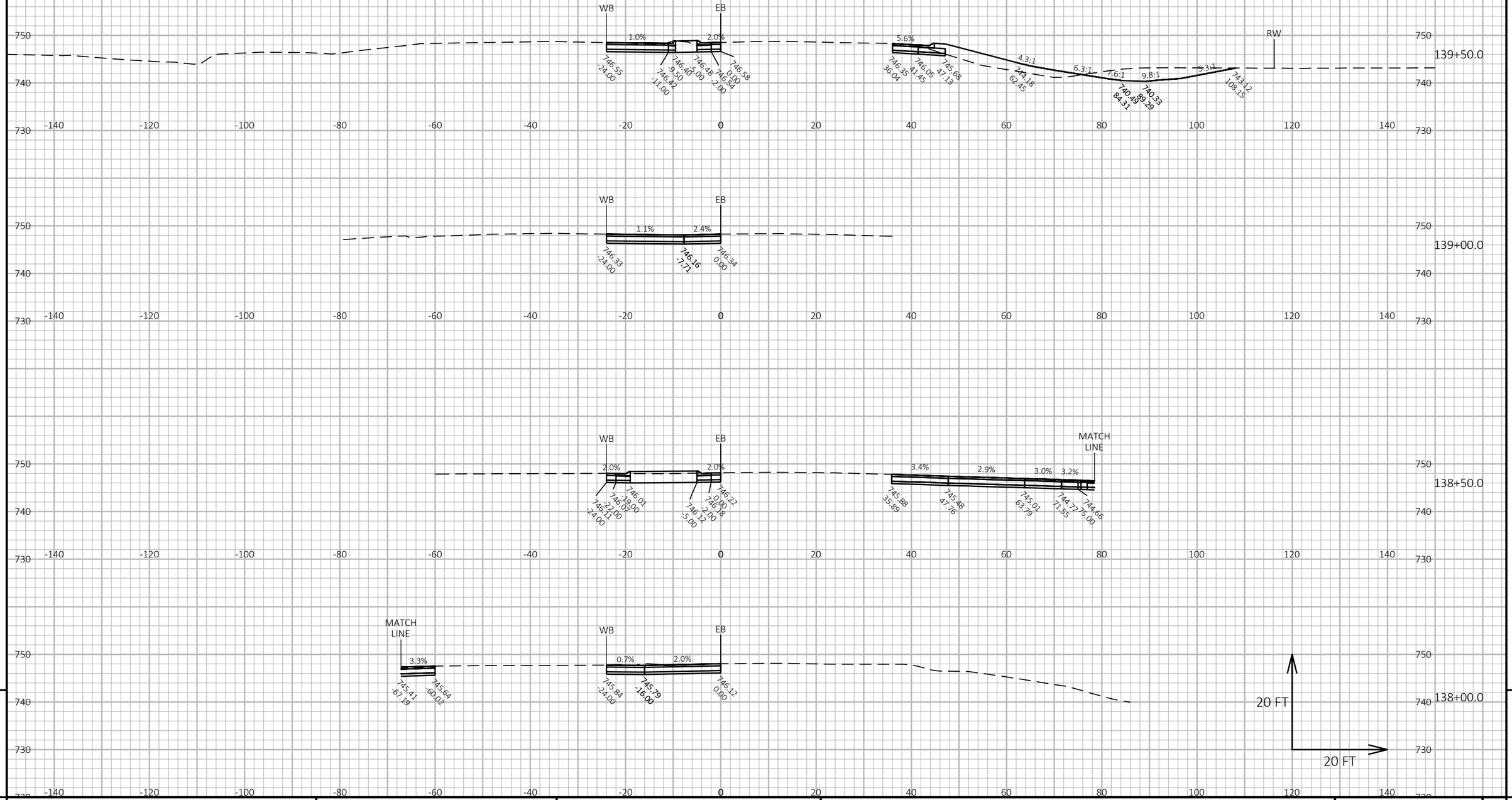
| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | CROSS SECTIONS: CTH CE | SHEET 219 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090204-xs

PLOT DATE : 10/31/2022 11:54 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

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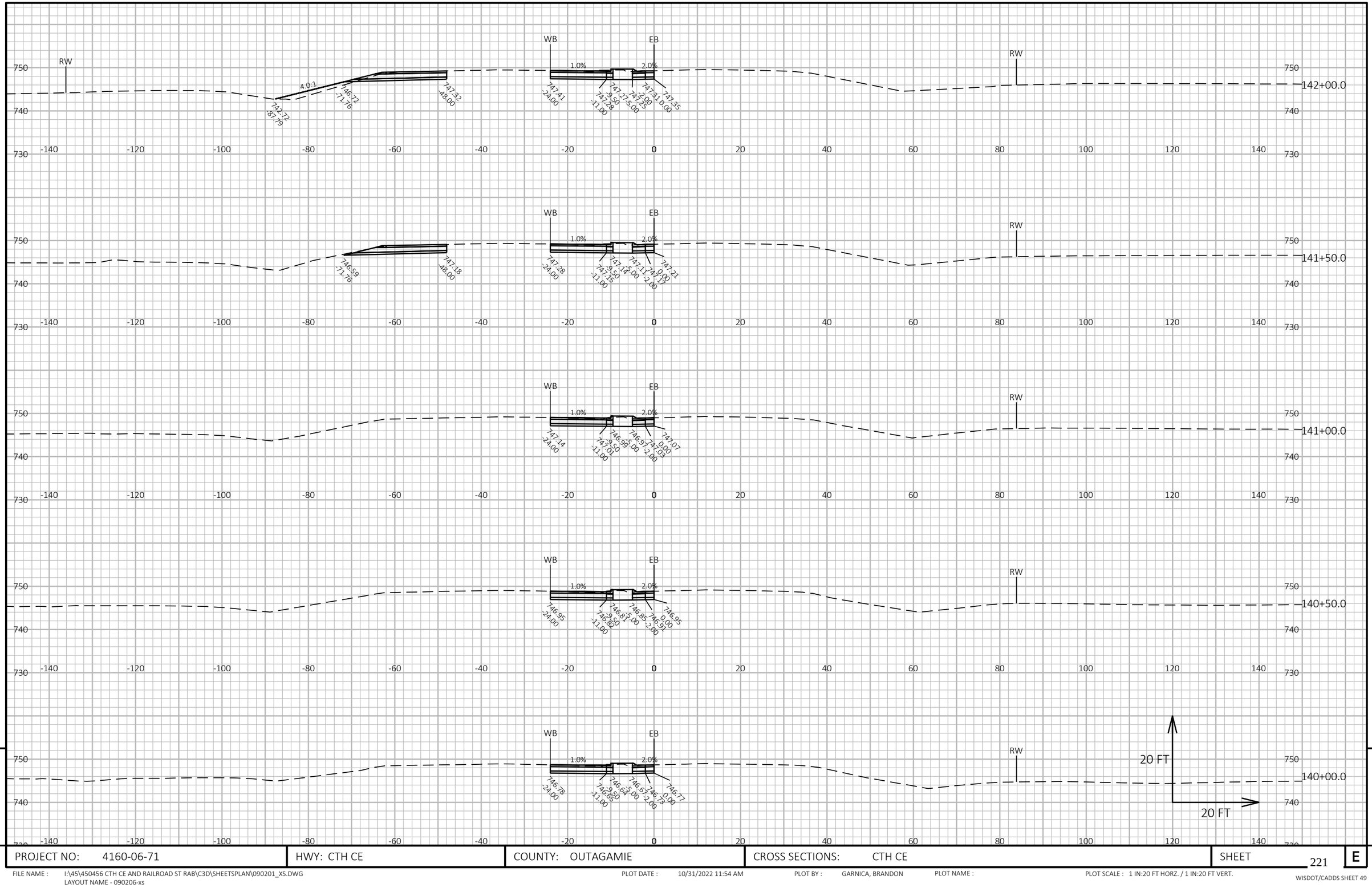
| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | CROSS SECTIONS: CTH CE | SHEET 220 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090205-xs

PLOT DATE : 10/31/2022 11:54 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

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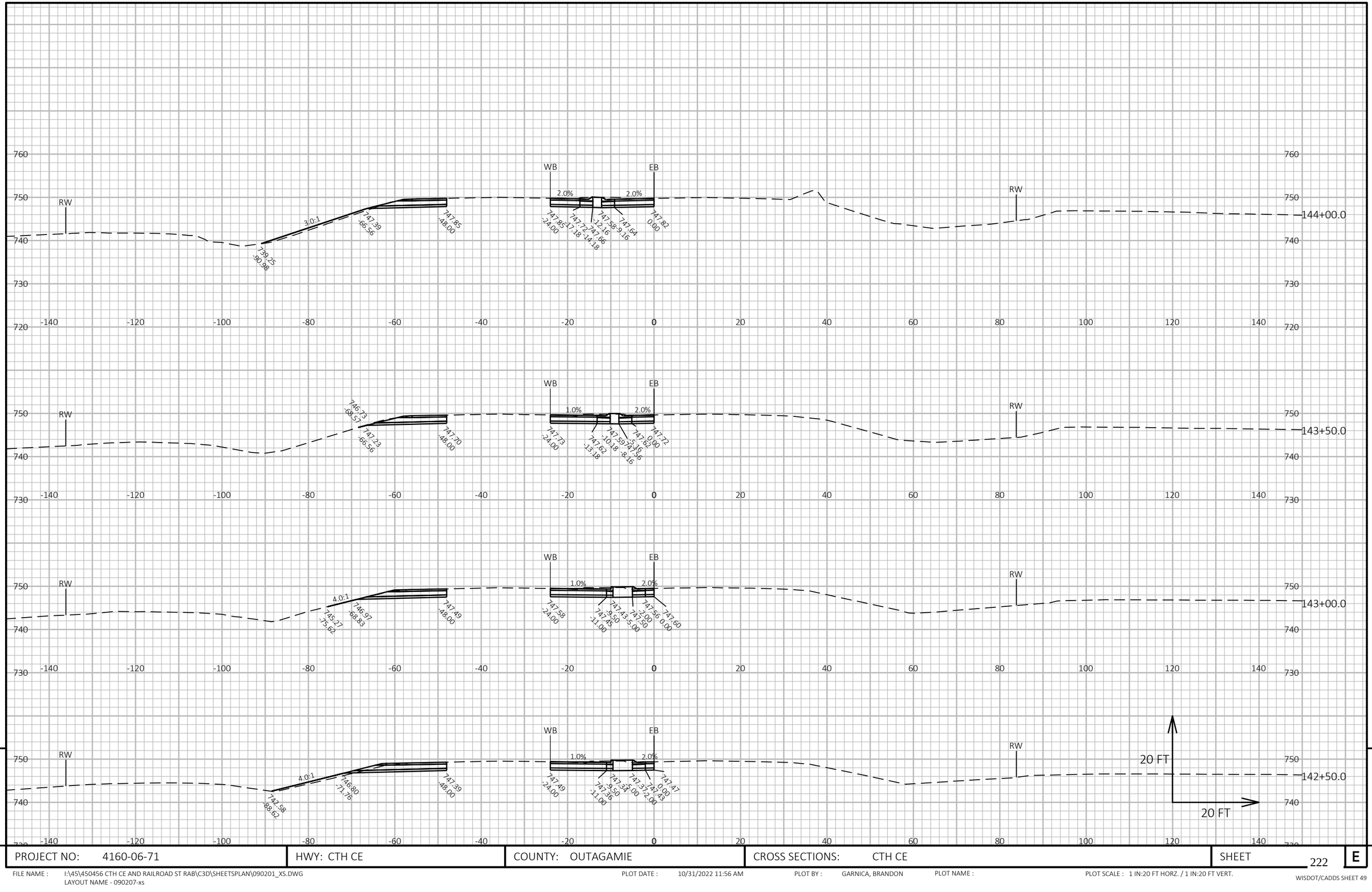
| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | CROSS SECTIONS: CTH CE | SHEET 221 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090206-xs

PLOT DATE : 10/31/2022 11:54 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | CROSS SECTIONS: CTH CE | SHEET 222 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090207-xs

PLOT DATE : 10/31/2022 11:56 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

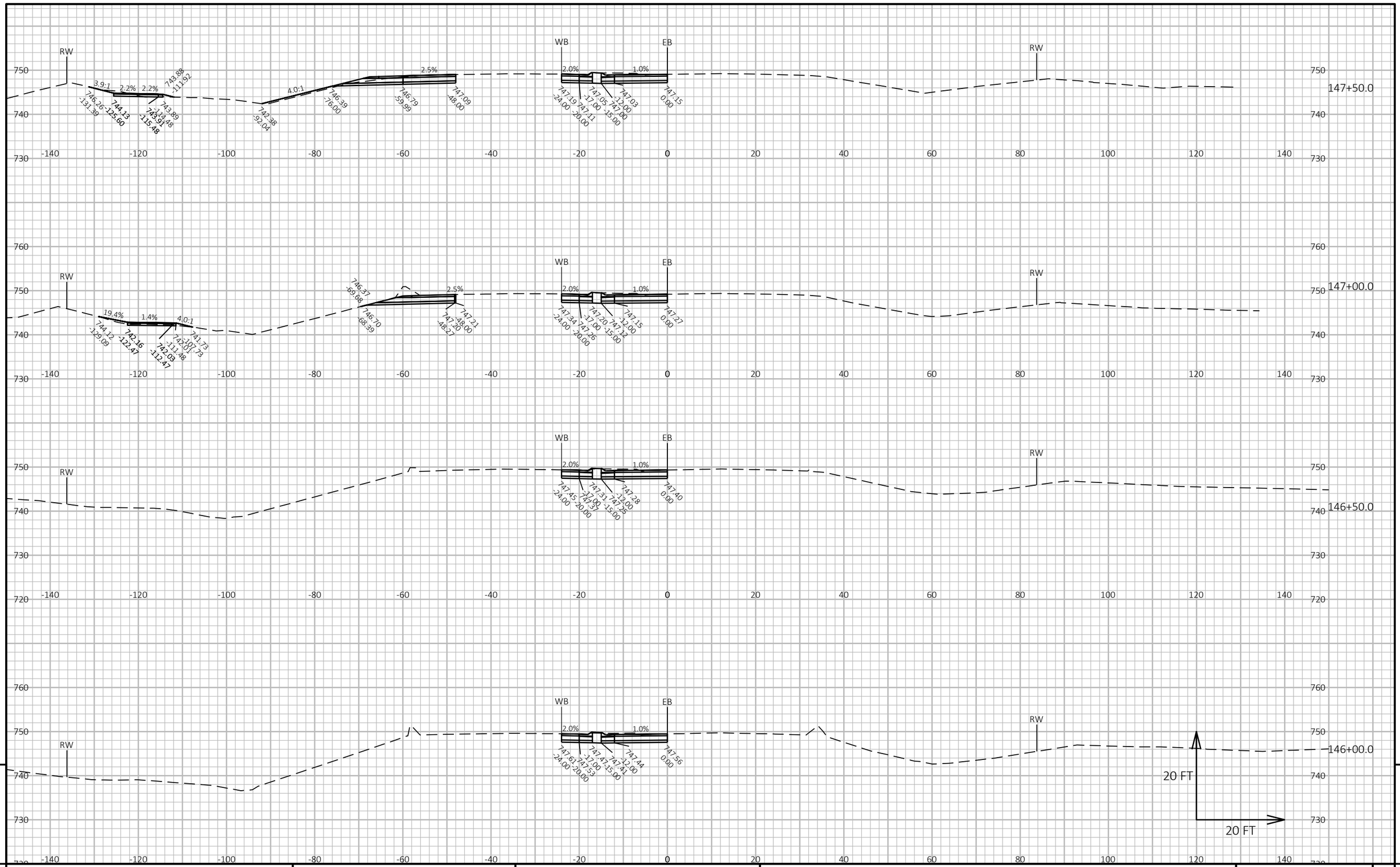
WISDOT/CADDS SHEET 49

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | CROSS SECTIONS: CTH CE | SHEET 223 E |

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090208-xs

PLOT DATE : 10/31/2022 11:56 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

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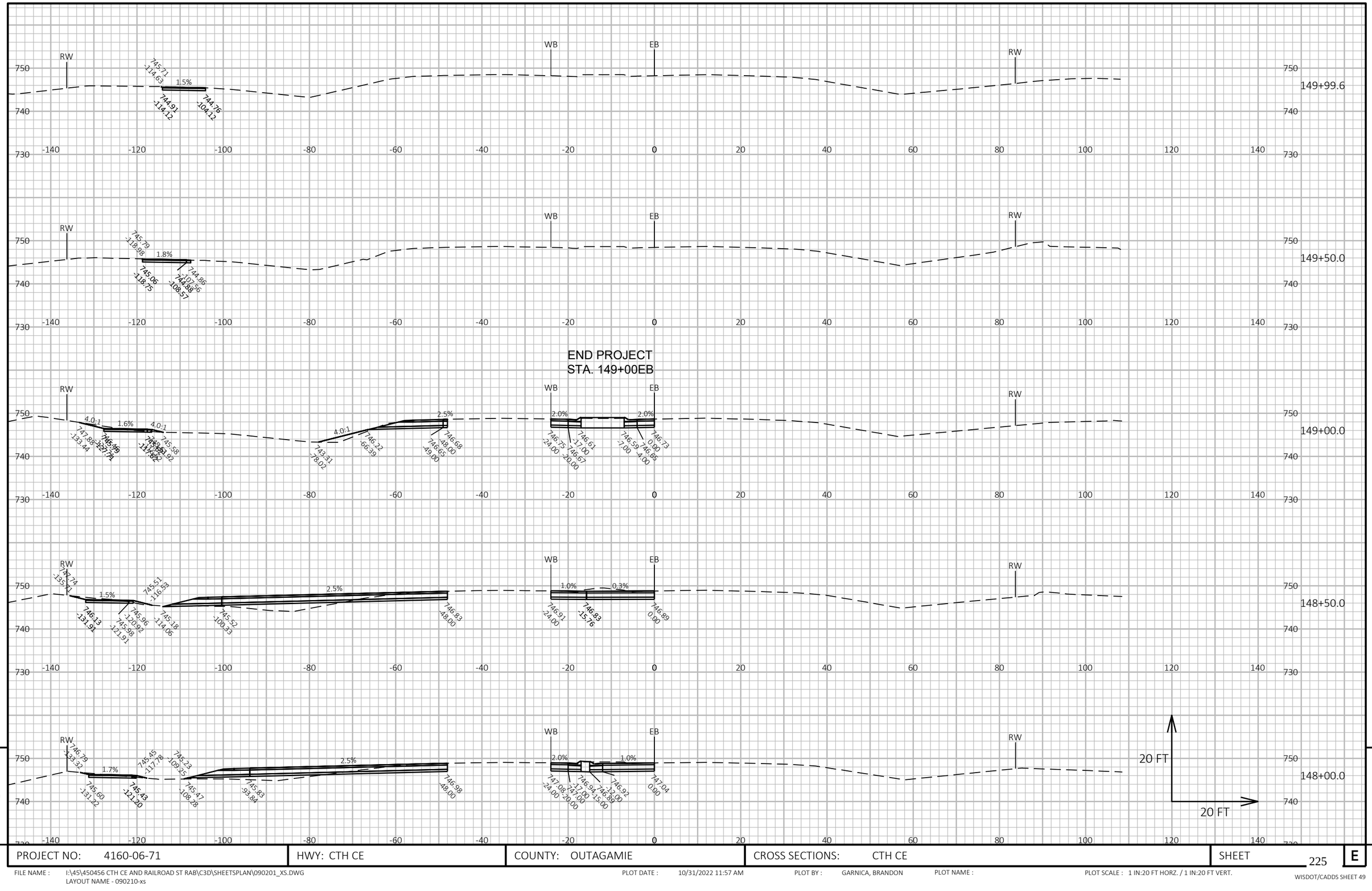
| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | CROSS SECTIONS: CTH CE | SHEET 224 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090209-xs

PLOT DATE : 10/31/2022 11:56 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

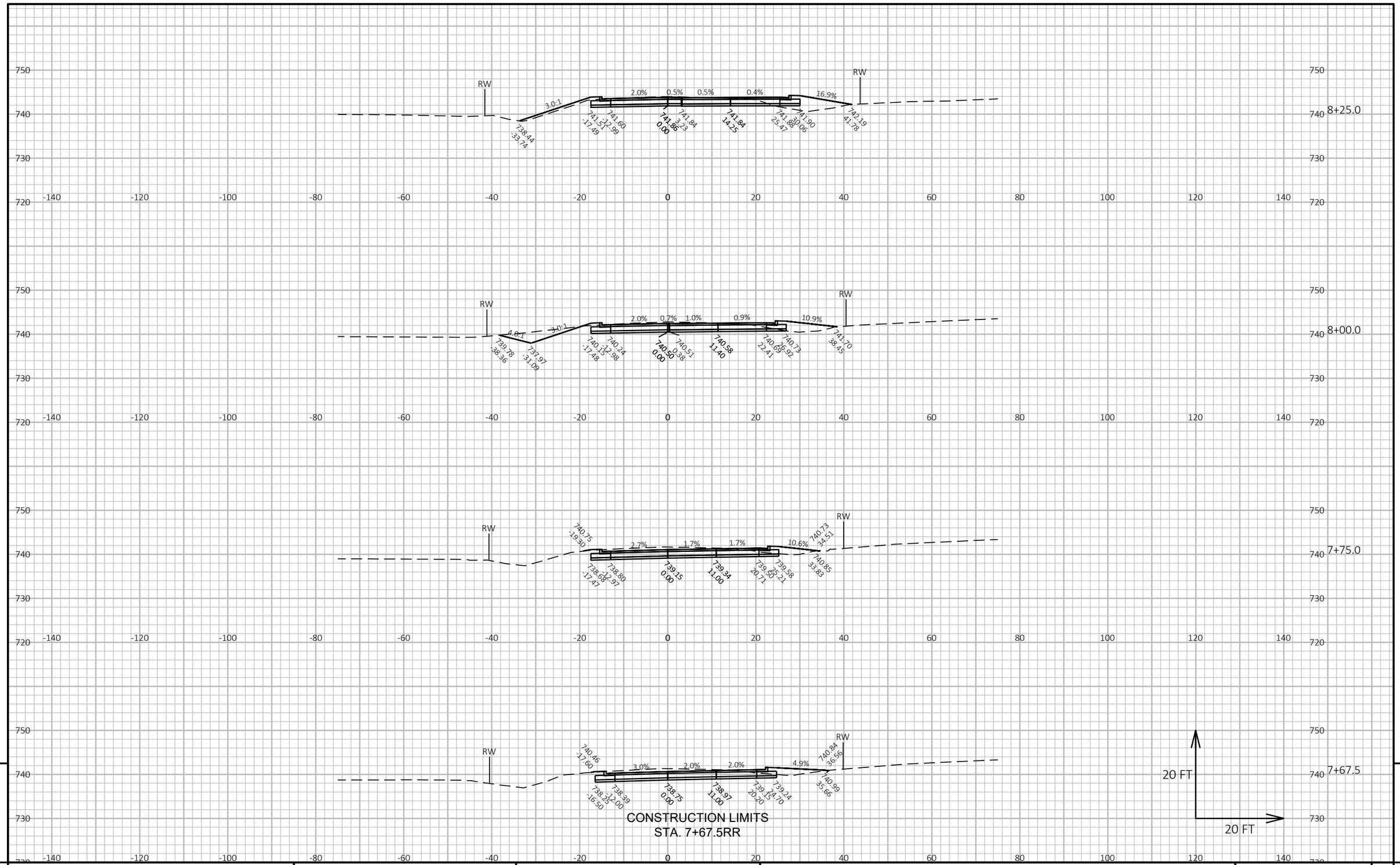



| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | CROSS SECTIONS: CTH CE | SHEET 225 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090210-xs

PLOT DATE : 10/31/2022 11:57 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

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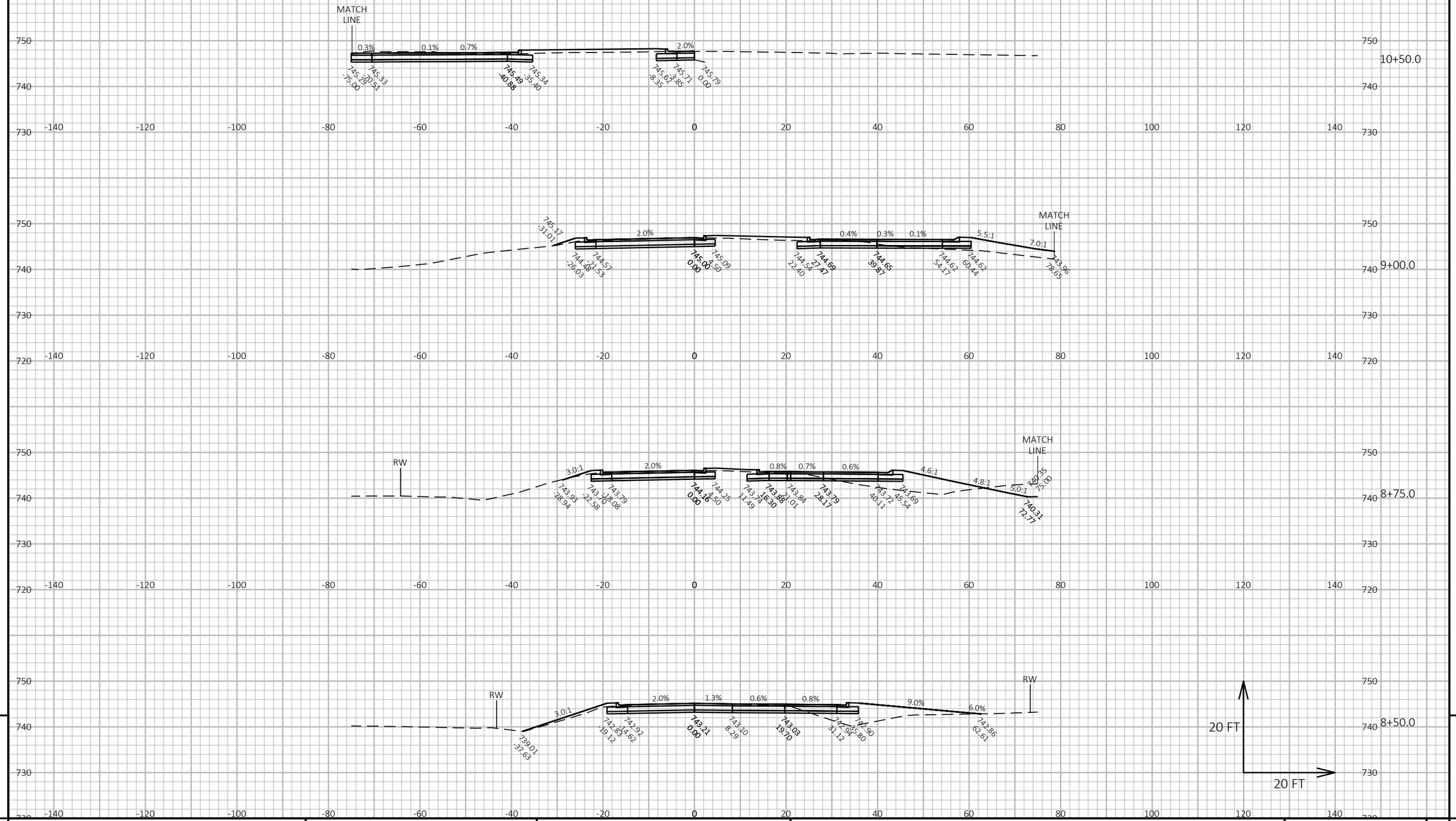
| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAILROAD STREET | SHEET 226 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090211-xs

PLOT DATE : 10/31/2022 11:57 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



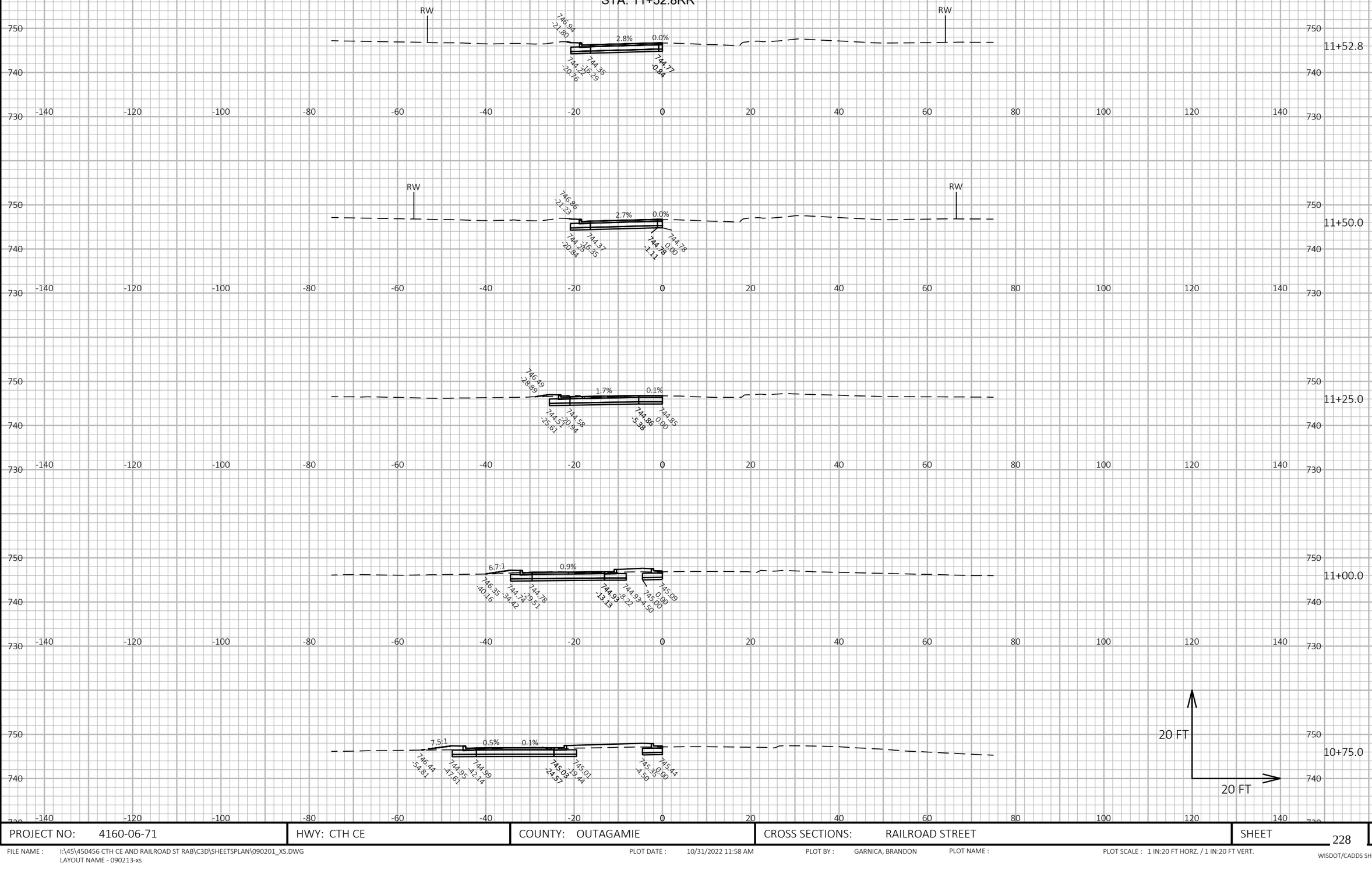

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAILROAD STREET | SHEET 227 E |

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090212-xs

PLOT DATE : 10/31/2022 11:57 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

CONSTRUCTION LIMITS
STA. 11+52.8RR




| PROJECT NO: 4160-06-71 | HWY: CTH CE | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAILROAD STREET | SHEET 228 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450456 CTH CE AND RAILROAD ST RAB\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090213-xs
PLOT DATE : 10/31/2022 11:58 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

Notes

**Wisconsin Department of Transportation**

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov