GRE NOVEMBER 2026

PROJECT ID: **4685-11-70**

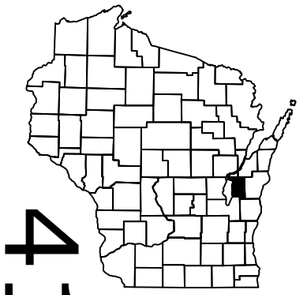
WITH: N/A

COUNTY: **CALUMET**

ORDER OF SHEETS

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

TOTAL SHEETS = 48



41

N

DESIGN DESIGNATION DESIGN_DESIG_PROJECT#

A.A.D.T.	2025	=	64700
A.A.D.T.	2045	=	64700
D.H.V.		=	N/A
D.D.		=	58/42
T.		=	6.2%
DESIGN SPEED		=	65
ESALS		=	N/A

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MENASHA - APPLETON

S. ONEIDA ST - E. CALUMET ST

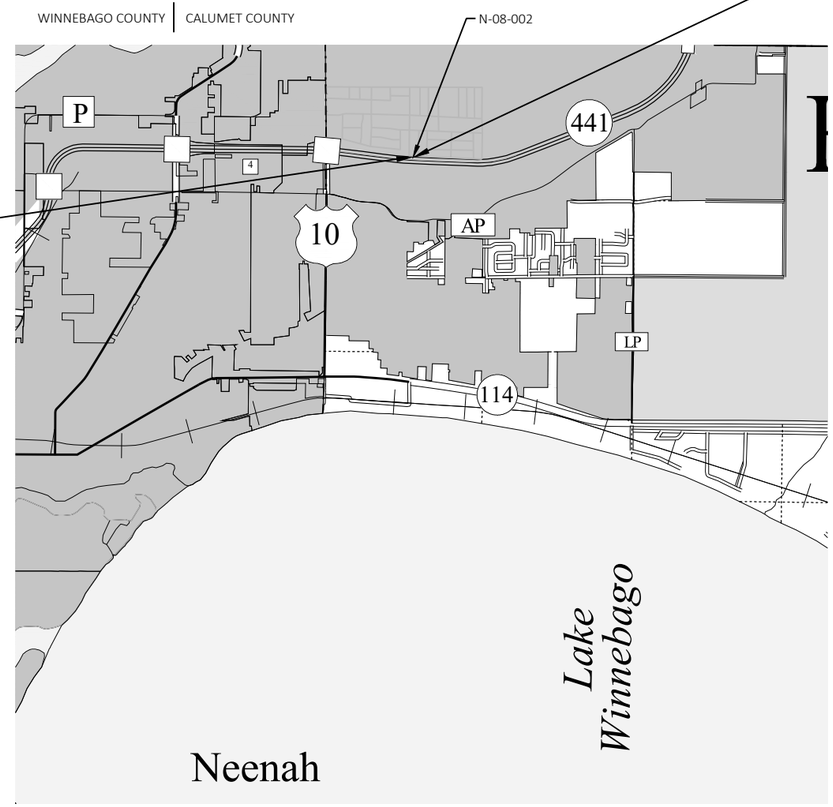
STH 441
CALUMET COUNTY

STATE PROJECT NUMBER
4685-11-70

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4685-11-70		

BEGIN PROJECT
374+47.73
X = 831436.32
Y = 551741.38

END PROJECT
STA 375+10.60
X = 831499.01
Y = 551741.18



LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.012

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), WINNEBAGO 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 GEOID 18.

ORIGINAL PLANS PREPARED BY

HNTB
480 PILGRIM WAY
GREEN BAY, WI 54304
(414) 359-2300

WISCONSIN
RYAN BETKER
E-38778
NEENAH
WI
PROFESSIONAL ENGINEER
10-7-2026

DATE: _____ _____
(Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	HNTB CORPORATION
Designer	HNTB CORPORATION
Project Manager	JESSE HANSEN
Regional Examiner	NORTHEAST REGION
Regional Supervisor	TAMMY RABE

APPROVED FOR THE DEPARTMENT

DATE: 10/8/26 _____
(Signature)

E

DIGGERS HOTLINE

Dial 811 or (800)242-8511

www.DiggersHotline.com

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
TRAFFIC CONTROL

GENERAL NOTES

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

WISDOT DESIGN CONTACT

JESSE HANSEN
WISCONSIN DEPARTMENT OF TRANSPORTATION
944 VAN DER PERREN WAY
GREEN BAY, WI 54304
PHONE: (920) 492-5630
EMAIL: jesse.hansen@dot.wi.gov

DESIGN PROJECT MANAGER

RYAN BETKER
HNTB CORPORATION
480 PILGRIM WAY
GREEN ABY, WI, 54304
PHONE: (920) 851-1240
EMAIL: rbetker@hntb.com

COUNTY HIGHWAY COMMISSIONER

CHAD SCHEINOHA
CALUMET
241 EAST CHESTNUT ST
CHILTON, WI 53014
PHONE: (920) 849-1434
EMAIL: chad.scheinoha@calumetcounty.org

WISCONSIN DNR LIAISON - CALUMET

MATT SCHAEVE
DNR NORTHEAST REGION HEADQUARTERS
2984 SHAWANO AVE
GREEN BAY, WI 54313
PHONE: (920) 366-1544
EMAIL: matthew.schaeve@wisconsin.gov

REGION SURVEY COORDINATOR

CORMAC MCINNIS
NORTHEAST REGION
944 VAN DER PERREN WAY
GREEN BAY, WI 54304
PHONE: (920) 492-5638
EMAIL: cormac.mcinnis@cot.wi.gov

UTILITIES CONTACTS

CITY OF APPLETON
SEWER
MARK LAHAY
100 NORTH APPLETON STREET
APPLETON, WI 54911
PHONE: (920) 832-6485
EMAIL: mark.lahay@appletonwi.gov

CITY OF APPLETON
WATER
MARK LAHAY
100 NORTH APPLETON STREET
APPLETON, WI 54911
PHONE: (920) 832-6485
EMAIL: mark.lahay@appletonwi.gov

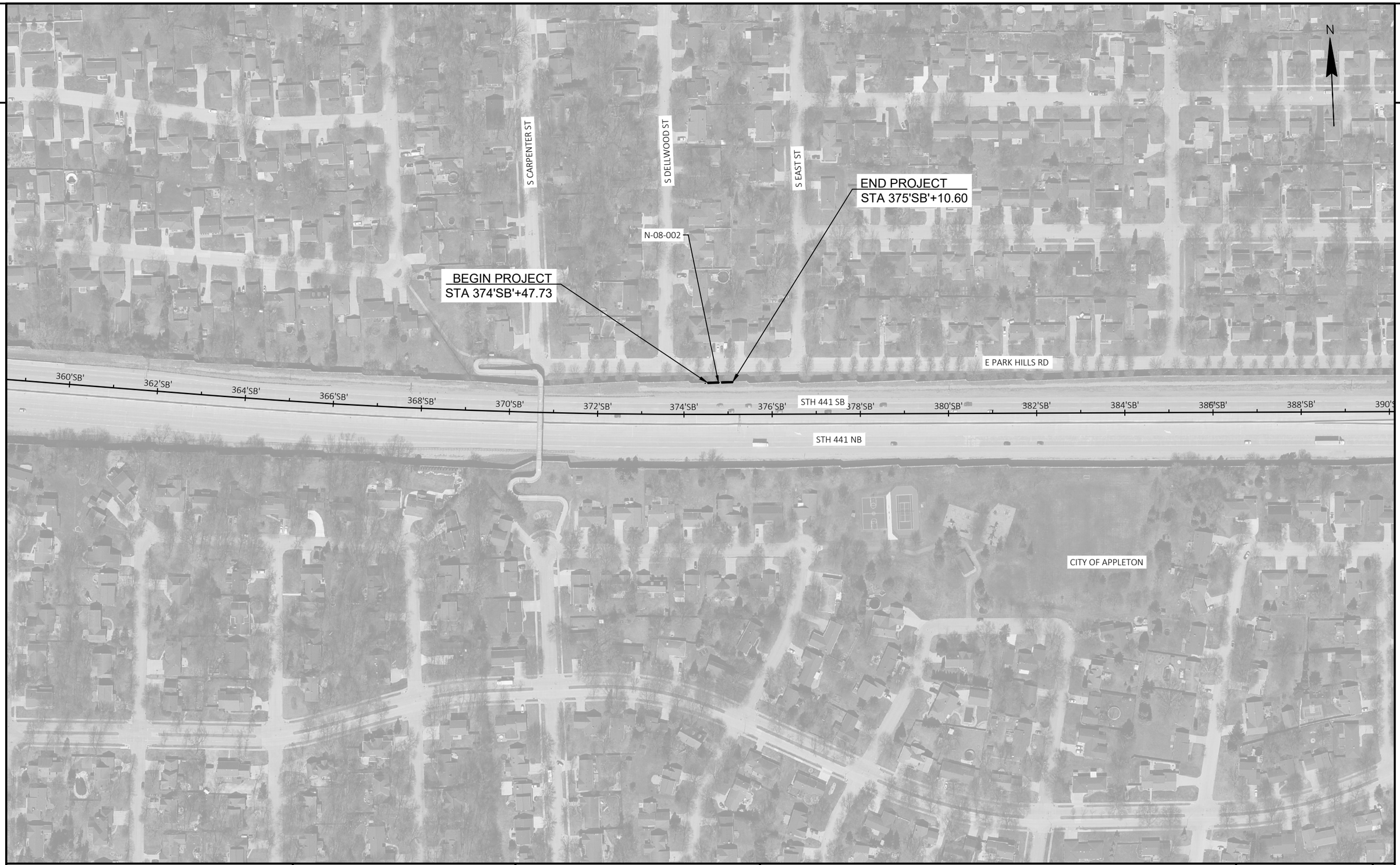
WE ENERGIES
ELECTRIC
ZACH DUGA
800 S LYNNDALE DR
APPLETON, WI 54912
PHONE: (920) 380-3458
EMAIL: zachary.duga@we-energies.com

WE ENERGIES
GAS/PETROLEUM
ZACH DUGA
800 S LYNNDALE DR
APPLETON, WI 54912
PHONE: (920) 380-3458
EMAIL: zachary.duga@we-energies.com

STANDARD ABBREVIATIONS

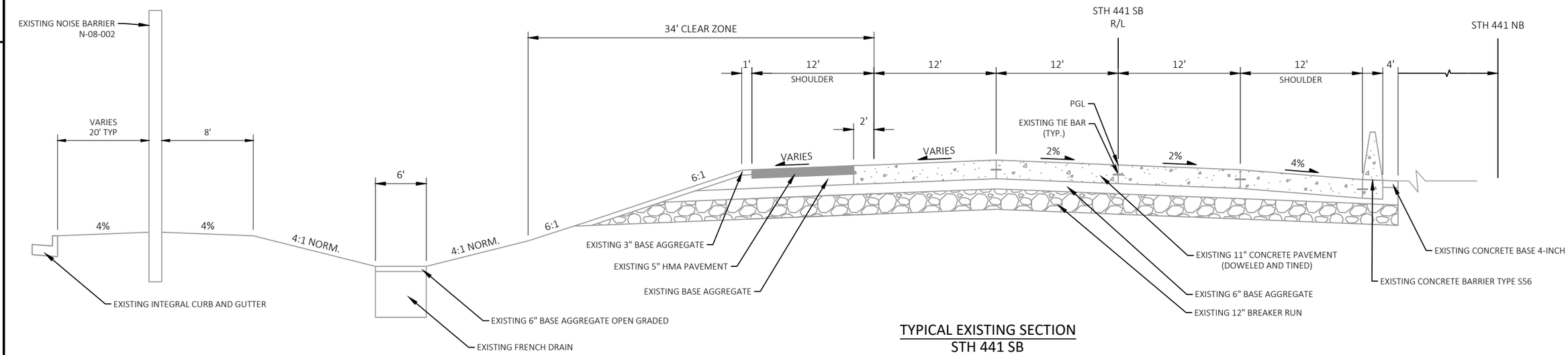
ABUT	ABUTMENT
AC	ACRE
AGG	AGGREGATE
AH	AHEAD
∠	ANGLE
AADT	ANNUAL AVERAGE DAILY TRAFFIC
AEW	APRON ENDWALL
ASPH	ASPHALTIC
BK	BACK
BC	BACK OF CURB
BAD	BASE AGGREGATE DENSE
BL OR B/L	BASE LINE
BM	BENCH MARK
CB	CATCH BASIN
CL OR C/L	CENTER LINE
Δ	CENTRAL ANGLE OR DELTA
CE	COMMERCIAL ENTRANCE
CONC	CONCRETE
CSW	CONCRETE SIDEWALK
CONST	CONSTRUCTION
CP	CONTROL POINT
CO	COUNTY
CTH	COUNTY TRUCK HIGHWAY
CY	CUBIC YARD
CP	CULVERT PIPE
CPCA	CULVERT PIPE CORRUGATED ALUMINUM
CPCPE	CULVERT PIPE CORRUGATED POLYETHYLENE
CPCPP	CULVERT PIPE CORRUGATED POLYPROPYLENE
CPCS	CULVERT PIPE CORRUGATED STEEL
CPCSAC	CULVERT PIPE CORRUGATED STEEL ALUMINUM COATED
CPCSPC	CULVERT PIPE CORRUGATED STEEL POLYMER COATED
CPRC	CULVERT PIPE REINFORCED CONCRETE
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
CPS	CULVERT PIPE SALVAGED
CPT	CULVERT PIPE TEMPORARY
C & G	CURB AND GUTTER
D	DEGREE OF CURVE
DHV	DESIGN HOUR VOLUME
DIA	DIAMETER
DD	DIRECTIONAL DISTRIBUTION
DE	DRAINAGE EASEMENT
DWY	DRIVEWAY
EA	EACH
EB	EASTBOUND
EL OR ELEV	ELEVATION
EMB	EMBANKMENT
EW	ENDWALL
EAT	ENERGY ABSORBING TERMINAL
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC	EXCAVATION
EBS	EXCAVATION BELOW SUBGRADE
EXIST	EXISTING
FERT	FERTILIZER
FE	FIELD ENTRANCE
FL OR F/L	FLOW LINE
FT	FOOT
FTMS	FREE TRAFFIC MANAGEMENT SYSTEM
HES	HIGH EARLY STRENGTH
HE	HIGHWAY EASEMENT
CWT	HUNDRED WEIGHT
IN DIA	INCH DIAMETER
INL	INLET
ID	INSIDE DIAMETER
INTERS	INTERSECTION
IH	INTERSTATE HIGHWAY
INV	INVERT
JT	JOINT
LT	LEFT
LHF	LEFT HAND FORWARD
L	LENGTH OF CURVE
LF	LINEAR FOOT
LC	LONG CHORD OF CURVE
LS	LUMP SUM
MGAL	ONE THOUSAND GALLONS
MH	MANHOLE
ML OR M/L	MATCH LINE
NOM	NOMINAL
NC	NORMAL CROWN
NB	NORTHBOUND
NO	NUMBER
OD	OUTSIDE DIAMETER
PAVT	PAVEMENT
PLE	PERMANENT LIMITED EASEMENT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
PCC	PORTLAND CEMENT CONCRETE
LB	POUND
PSI	POUNDS PER SQUARE INCH
PE	PRIVATE ENTRANCE
PROJ	PROJECT
PL	PROPERTY LINE
PRW	PROPOSED RIGHT OF WAY
R	RADIUS
RL OR R/L	REFERENCE LINE
REQD	REQUIRED
RT	RIGHT
RHF	RIGHT HAND FORWARD
R/W	RIGHT OF WAY
RD	ROAD
RDWY	ROADWAY
SHLDR	SHOULDER
SW	SIDEWALK
SB	SOUTHBOUND
SPECS	SPECIFICATIONS
SF	SQUARE FEET
SY	SQUARE YARD
SDD	STANDARD DETAIL DRAWINGS
STH	STATE TRUNK HIGHWAY
STA	STATION
SSPC	STORM SEWER PIPE COMPOSITE
SSCPE	STORM SEWER PIPE CORRUGATED POLYETHYLENE
SSCPP	STORM SEWER PIPE CORRUGATED POLYPROPYLENE
SSPNRC	STORM SEWER PIPE NON-REINFORCED CONCRETE
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
SSPRCHE	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
SE	SUPERELEVATION
SL OR S/L	SURVEY LINE
TEMP	TEMPORARY
TI	TEMPORARY INTEREST
TLE	TEMPORARY LIMITED EASEMENT
TC	TOP OF CURB
TL OR T/L	TRANSIT LINE
T	TRUCKS (PERCENT OF)
TYP	TYPICAL
USH	UNITED STATES HIGHWAY
VAR	VARIABLE
VC	VERTICAL CURVE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
W	WEST
WB	WESTBOUND

2

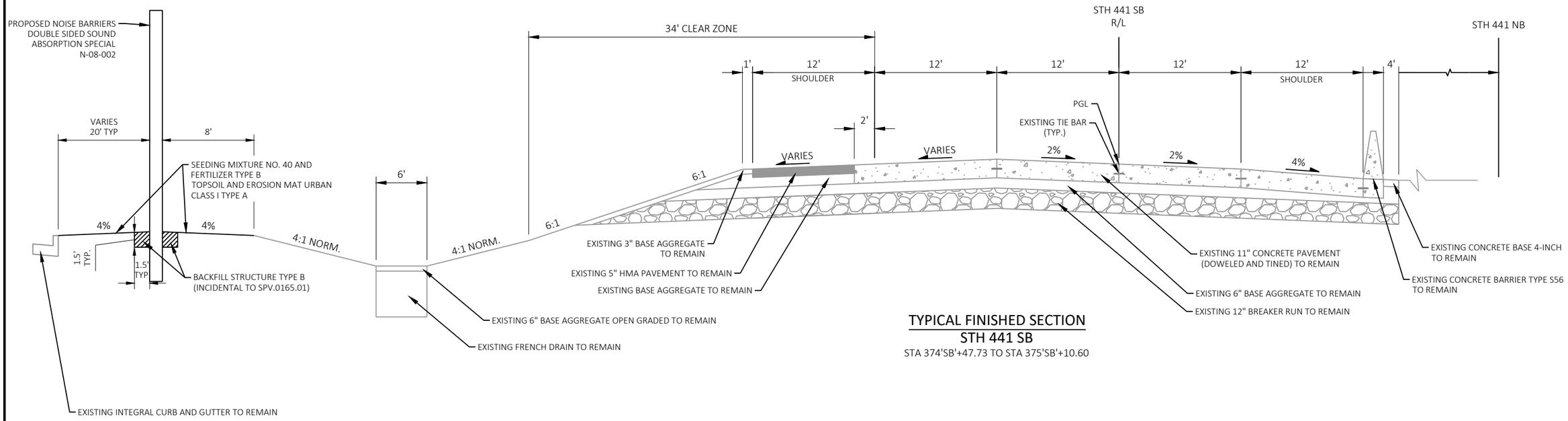


PROJECT NO: 4685-11-70	HWY: STH 441	COUNTY: CALUMET	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : C:\USERS\ARETRUM\DC\ACCDOCS\HNTB CORPORATION\83139 - WO6 - 441 EXPEDITED NOISE WALL REPAIR\PROJECT FILES\46851100\SHEETS\020201-PO.DWG
LAYOUT NAME - 01
PLOT DATE : 10/14/2026 2:18 PM
PLOT BY : AMELIA RETRUM
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42



TYPICAL EXISTING SECTION
STH 441 SB
STA 374'SB'+47.73 TO STA 375'SB'+10.60

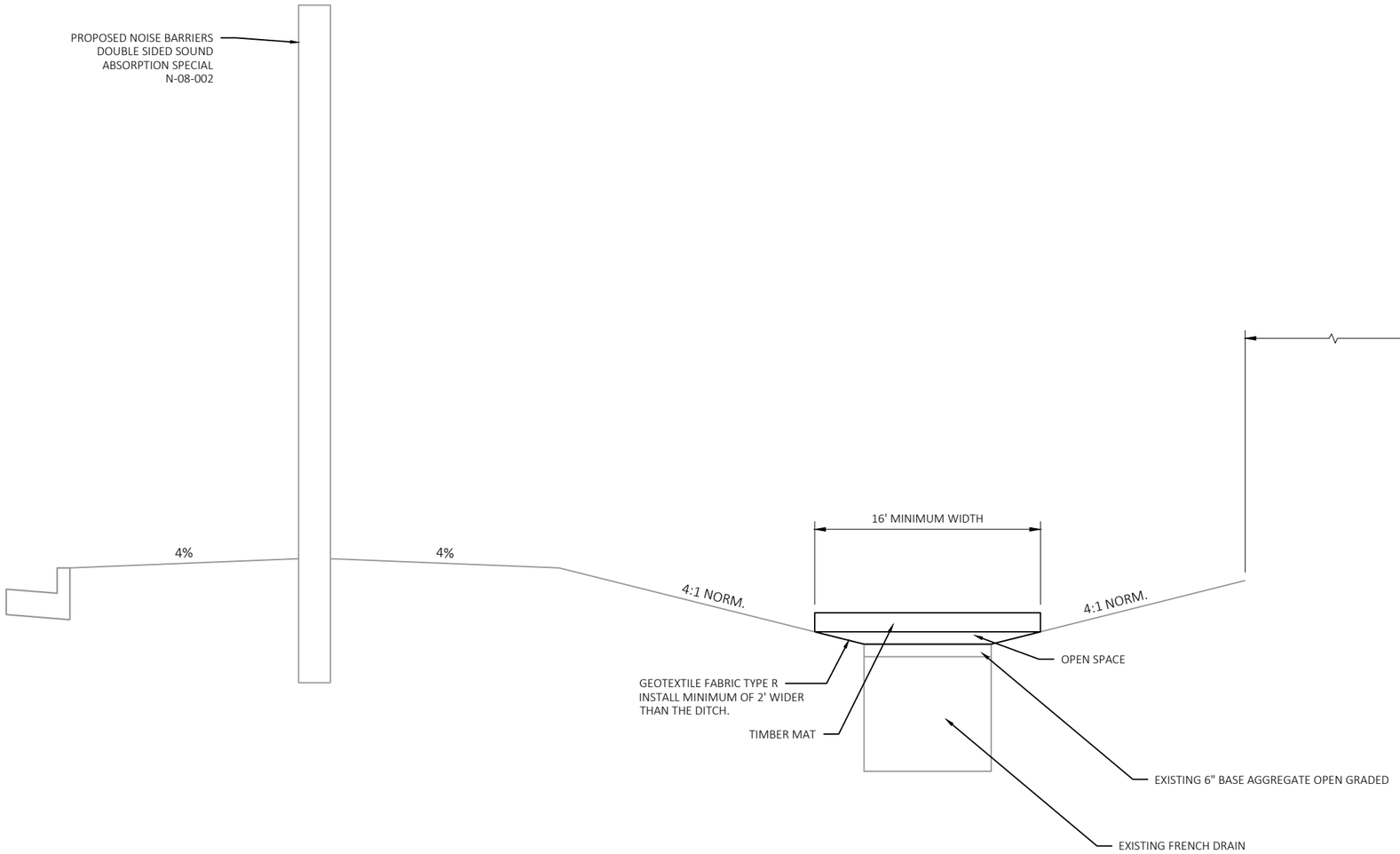


TYPICAL FINISHED SECTION
STH 441 SB
STA 374'SB'+47.73 TO STA 375'SB'+10.60

PROJECT NO: 4685-11-70	HWY: STH 441	COUNTY: CALUMET	TYPICAL SECTIONS	SHEET 4	E

FILE NAME : C:\USERS\ARETRUM\DC\ACCDOCS\HNTB CORPORATION\83139 - WO6 - 441 EXPEDITED NOISE WALL REPAIR\PROJECT FILES\46851100\SHEETS\020301-TS.DWG
LAYOUT NAME - 01
PLOT DATE : 10/14/2026 2:19 PM
PLOT BY : AMELIA RETRUM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



DETAIL FOR TIMBER MATS AT
EXISTING FRENCH DRAIN DITCH
STA 374+45 - STA 375+13

GENERAL NOTES FOR TRAFFIC CONTROL

1. ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE OTHERS IN THE PLANS.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
3. SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.

STAGE 1

TRAFFIC

1. TRAFFIC ON STH 441 SOUTHBOUND WILL BE REDUCED FROM 3 LANES TO 2 LANES. THE OUTSIDE LANE AND OUTSIDE SHOULDER WILL BE CLOSED.
2. TRAFFIC ON E PARK HILLS DR WILL REMAIN ON EXISTING PAVEMENT WITH CURB & GUTTER CLOSURE.
3. TRAFFIC ON STH 441 NORTHBOUND WILL NOT BE AFFECTED.

CONSTRUCTION

1. REMOVE AND INSTALL NOISE BARRIER N-08-002.
2. CLEARING & GRUBBING.

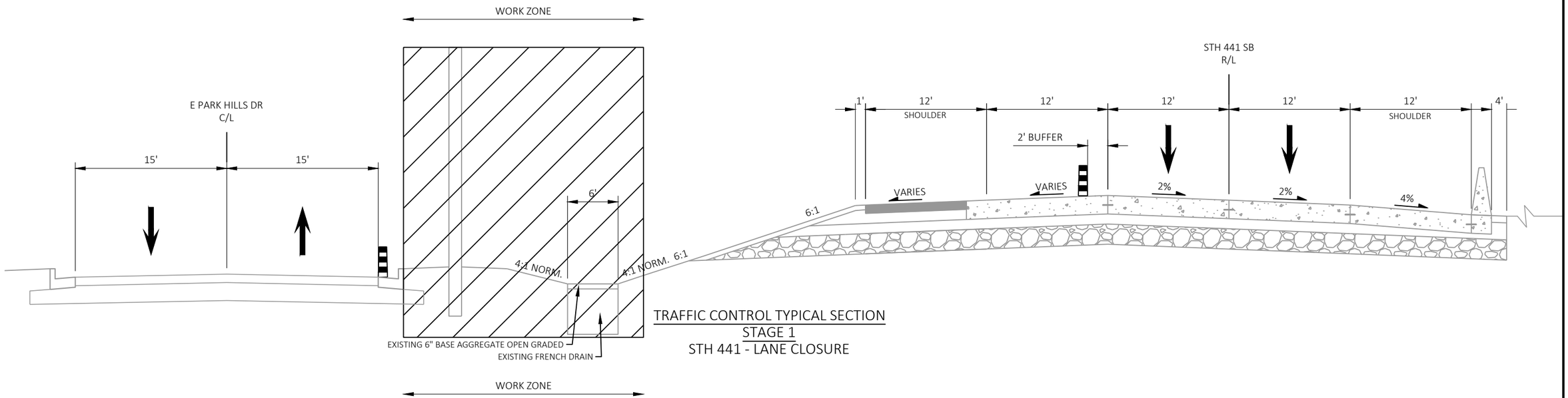
STAGE 2

TRAFFIC

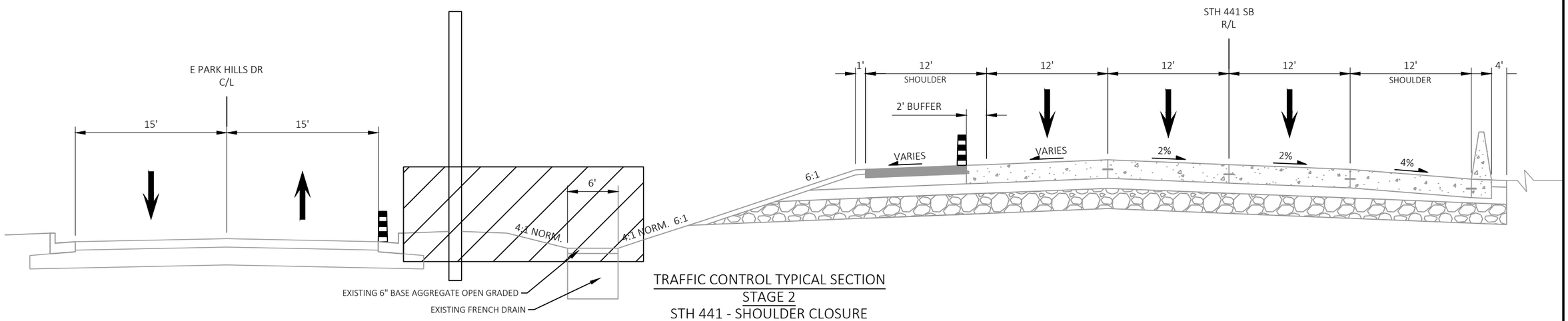
1. TRAFFIC ON STH 441 SOUTHBOUND WILL REMAIN ON EXISTING PAVEMENT WITH OUTSIDE SHOULDER CLOSURE.
2. TRAFFIC ON E PARK HILLS DR WILL REMAIN ON EXISTING PAVEMENT WITH CURB & GUTTER CLOSURE.
3. TRAFFIC ON STH 441 NORTHBOUND WILL NOT BE AFFECTED.

CONSTRUCTION

1. LAND RESTORATION.



TRAFFIC CONTROL TYPICAL SECTION
STAGE 1
STH 441 - LANE CLOSURE



TRAFFIC CONTROL TYPICAL SECTION
STAGE 2
STH 441 - SHOULDER CLOSURE

PROJECT NO: 4685-11-70	HWY: STH 441	COUNTY: CALUMET	TRAFFIC CONTROL - GENERAL NOTES	SHEET 6	E

2



STANDARD DETAILS

1. TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
2. TRAFFIC CONTROL, LANE CLOSURE
3. TRAFFIC CONTROL, LANE SHIFT, MULTI-LANE DIVIDED ROAD

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC MOUNTED ATTENUATOR (TMA)

PROJECT NO: 4685-11-70	HWY: STH 441	COUNTY: CALUMET	TRAFFIC CONTROL - STAGE 1	SHEET 7	E

FILE NAME : C:\USERS\ARETRUM\DC\ACCDOCS\HNTB CORPORATION\83139 - WO6 - 441 EXPEDITED NOISE WALL REPAIR\PROJECT FILES\46851100\SHEETS\025100-TC.DWG
LAYOUT NAME - 1
PLOT DATE : 10/21/2026 5:12 PM PLOT BY : AMELIA RETRUM PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

2

N

200'

200'

S CARPENTER ST

E PARK HILLS DR

200'

1

10'

155'

S DELLWOOD ST

200'

FOLLOW MANUFACTURER RECOMMENDATION FOR ROLL SPACE BUFFER

END ROAD WORK
G20-2A
48"X24"

25' TYP.

5 DRUMS MINIMUM IN TAPER

FENCE TEMPORARY, 130LF REQ'D

SHOULDER WORK
W21-5

WORK ZONE

MIN 645' BUFFER SPACE

END ROAD WORK
G20-2A
48"X24"

100' (TYP.)

PEDESTRIAN BRIDGE

2

MATCH LINE 375+32

370'SB' 371'SB' 372'SB' 373'SB' 374'SB' 375'SB'

STH 441 SB

STH 441 NB

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC MOUNTED ATTENUATOR (TMA)

S EAST ST

200'

200'

1

E PARK HILLS DR

ROAD WORK AHEAD
W20-1A

N

25' TYP.

FOLLOW MANUFACTURER RECOMMENDATION FOR ROLL SPACE BUFFER

END ROAD WORK
G20-2A
48"X24"

R11-2L
48"X30"

LANE CLOSED

MIN 645' BUFFER SPACE

MATCH LINE 375+32

2

376'SB' 377'SB' 378'SB' 379'SB' 380'SB'

100' (TYP.)

STH 441 SB

STH 441 NB

MATCH LINE 380+63

STANDARD DETAILS

1. TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
2. TRAFFIC CONTROL, LANE CLOSURE
3. TRAFFIC CONTROL, LANE SHIFT, MULTI-LANE DIVIDED ROAD

PROJECT NO: 4685-11-70	HWY: STH 441	COUNTY: CALUMET	TRAFFIC CONTROL - STAGE 1	SHEET 8	E

FILE NAME : C:\USERS\ARETRUM\DC\ACCDOCS\HNTB CORPORATION\83139 - WO6 - 441 EXPEDITED NOISE WALL REPAIR\PROJECT FILES\46851100\SHEETS\025100-TC.DWG
LAYOUT NAME - 2
PLOT DATE : 10/21/2026 5:12 PM PLOT BY : AMELIA RETRUM PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2

2

E PARK HILLS DR

N

MIN 645' BUFFER SPACE

100' (TYP.)

2

3

MATCH LINE 380+63

381'SB'

382'SB'

383'SB'

384'SB'

385'SB'

MATCH LINE 385+93

STH 441 SB

STH 441 NB

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC MOUNTED ATTENUATOR (TMA)

STANDARD DETAILS

1. TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
2. TRAFFIC CONTROL, LANE CLOSURE
3. TRAFFIC CONTROL, LANE SHIFT, MULTI-LANE DIVIDED ROAD

STH 441 NB

N

E PARK HILLS DR

MIN 645' BUFFER SPACE

390' SHIFTING TAPER

WO1-6
48"X24"

1000'

250'

200'

195'

15' (TYP.)

25' (TYP.)

LANE CLOSED
R11-2L
48"X30"

3

+10.63
-12.00' LT

+98.35
-24.00' LT

+98.35
-12.00' LT

+98.35
0.00'

+10.63
0.00'

+10.63
12.00' RT

+39.09
0.44' RT

386'SB'

387'SB'

388'SB'

389'SB'

390'SB'

391'SB'

MATCH LINE 385+93

MATCH LINE 391+23

STH 441 SB

TEMPORARY PAVEMENT MARKING LINE
PAINT 6-INCH, WHITE

TEMPORARY PAVEMENT MARKING LINE
PAINT 6-INCH, YELLOW

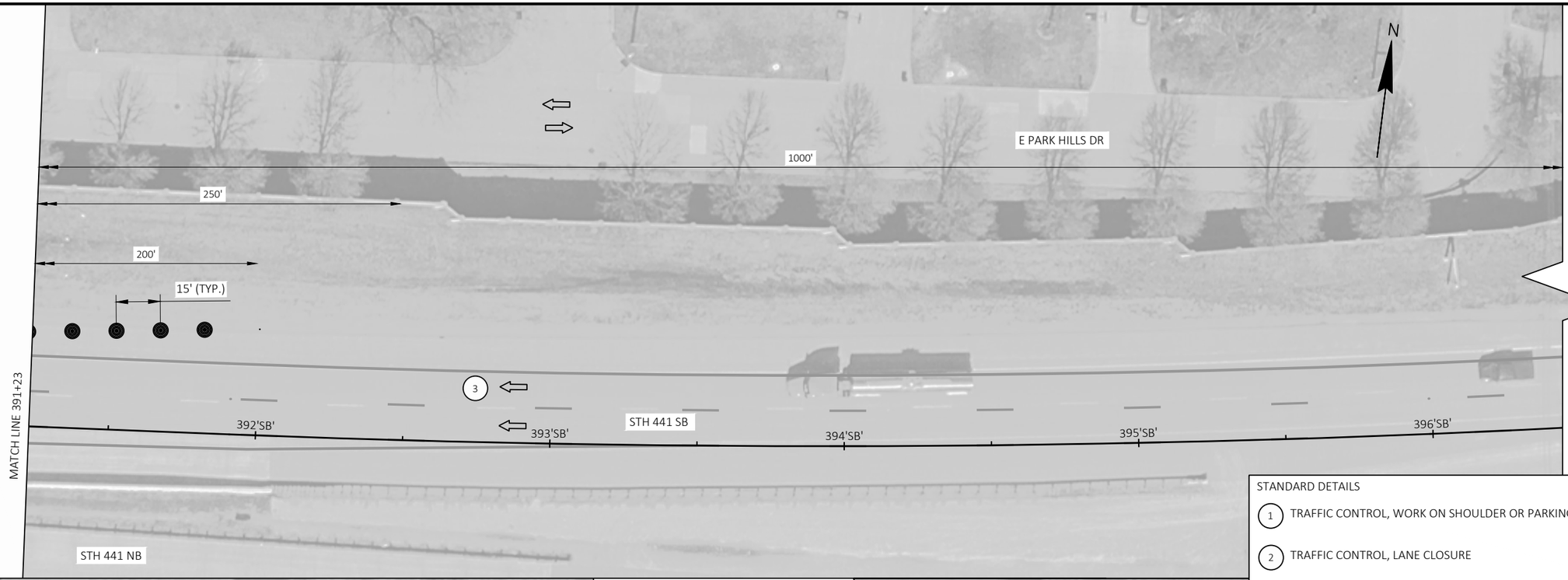
ONLY PLACE TEMPORARY MARKINGS ON TAPER

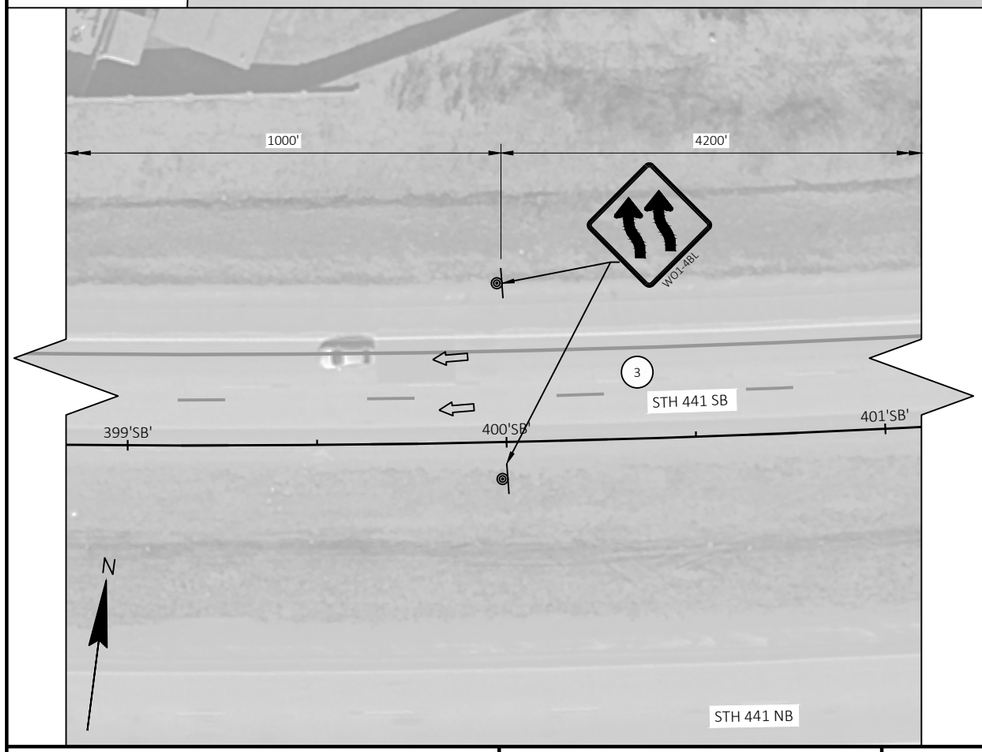
STH 441 NB

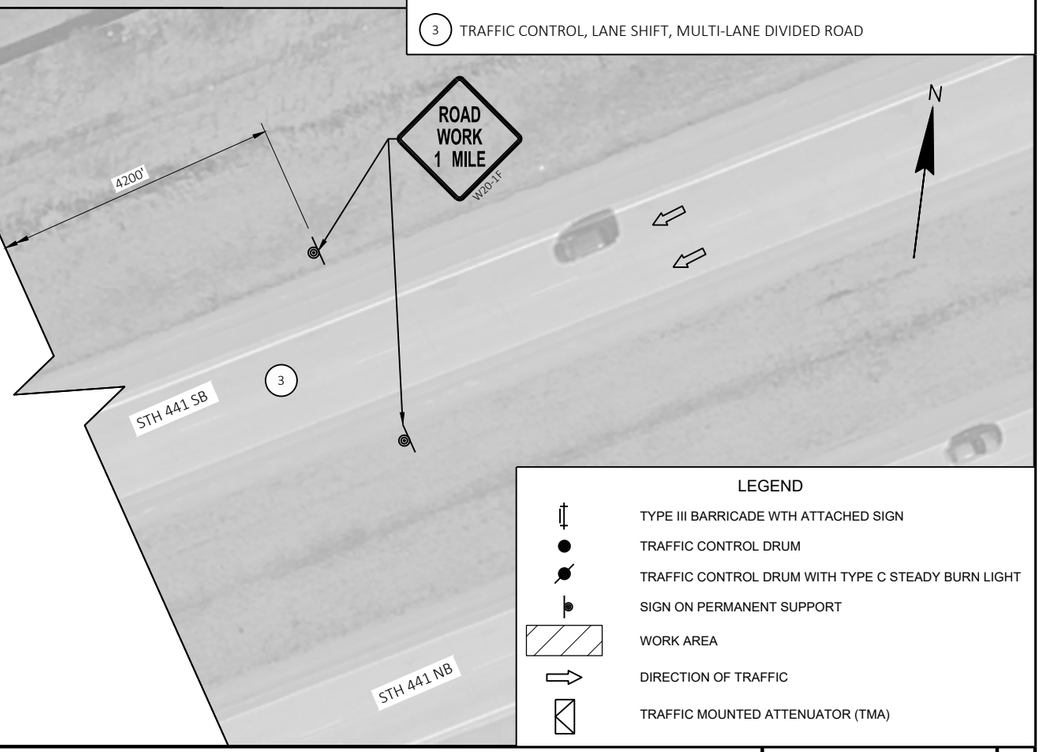
PROJECT NO: 4685-11-70	HWY: STH 441	COUNTY: CALUMET	TRAFFIC CONTROL - STAGE 1	SHEET 9	E

FILE NAME : C:\USERS\ARETRUM\DC\ACCDOCS\HNTB CORPORATION\83139 - WO6 - 441 EXPEDITED NOISE WALL REPAIR\PROJECT FILES\46851100\SHEETS\025100-TC.DWG
LAYOUT NAME - 3
PLOT DATE : 10/21/2026 5:12 PM PLOT BY : AMELIA RETRUM PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2







STANDARD DETAILS

1. TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
2. TRAFFIC CONTROL, LANE CLOSURE
3. TRAFFIC CONTROL, LANE SHIFT, MULTI-LANE DIVIDED ROAD

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC MOUNTED ATTENUATOR (TMA)

PROJECT NO: 4685-11-70	HWY: STH 441	COUNTY: CALUMET	TRAFFIC CONTROL - STAGE 1	SHEET 10	E

FILE NAME : C:\USERS\ARETRUM\DC\ACCDOCS\HNTB CORPORATION\83139 - WO6 - 441 EXPEDITED NOISE WALL REPAIR\PROJECT FILES\46851100\SHEETS\025100-TC.DWG
LAYOUT NAME - 4
PLOT DATE : 10/21/2026 5:12 PM PLOT BY : AMELIA RETRUM PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2

2

N

1

ROAD WORK AHEAD

W20-1A

200'

S CARPENTER ST

S DELLWOOD ST

STANDARD DETAILS

1 TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

2 TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

LEGEND

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

PROJECT NO: 4685-11-70	HWY: STH 441	COUNTY: CALUMET	TRAFFIC CONTROL - STAGE 2	SHEET 11	E

2

N

200'

S CARPENTER ST

200'

E PARK HILLS DR

200'

1

10'

S DELLWOOD ST

155'

200'

END ROAD WORK
G20-2A
48"X24"

SHOULDER WORK
W21-5

25' TYP.

5 DRUMS MINIMUM IN TAPER

WORK ZONE

MIN 645' BUFFER SPACE

END ROAD WORK
G20-2A
48"X24"

PEDESTRIAN BRIDGE

100' TYP.

MATCH LINE 375+32

370'SB'

371'SB'

372'SB'

373'SB'

374'SB'

2

STH 441 SB

STH 441 NB

LEGEND

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

S EAST ST

200'

200'

1

E PARK HILLS DR

ROAD WORK AHEAD
W20-1A

N

25' TYP.

END ROAD WORK
G20-2A
48"X24"

MIN 645' BUFFER SPACE

MATCH LINE 375+32

2

100' TYP.

MATCH LINE 380+63

376'SB'

377'SB'

378'SB'

379'SB'

380'SB'

STH 441 SB

STH 441 NB

STANDARD DETAILS

1. TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
2. TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

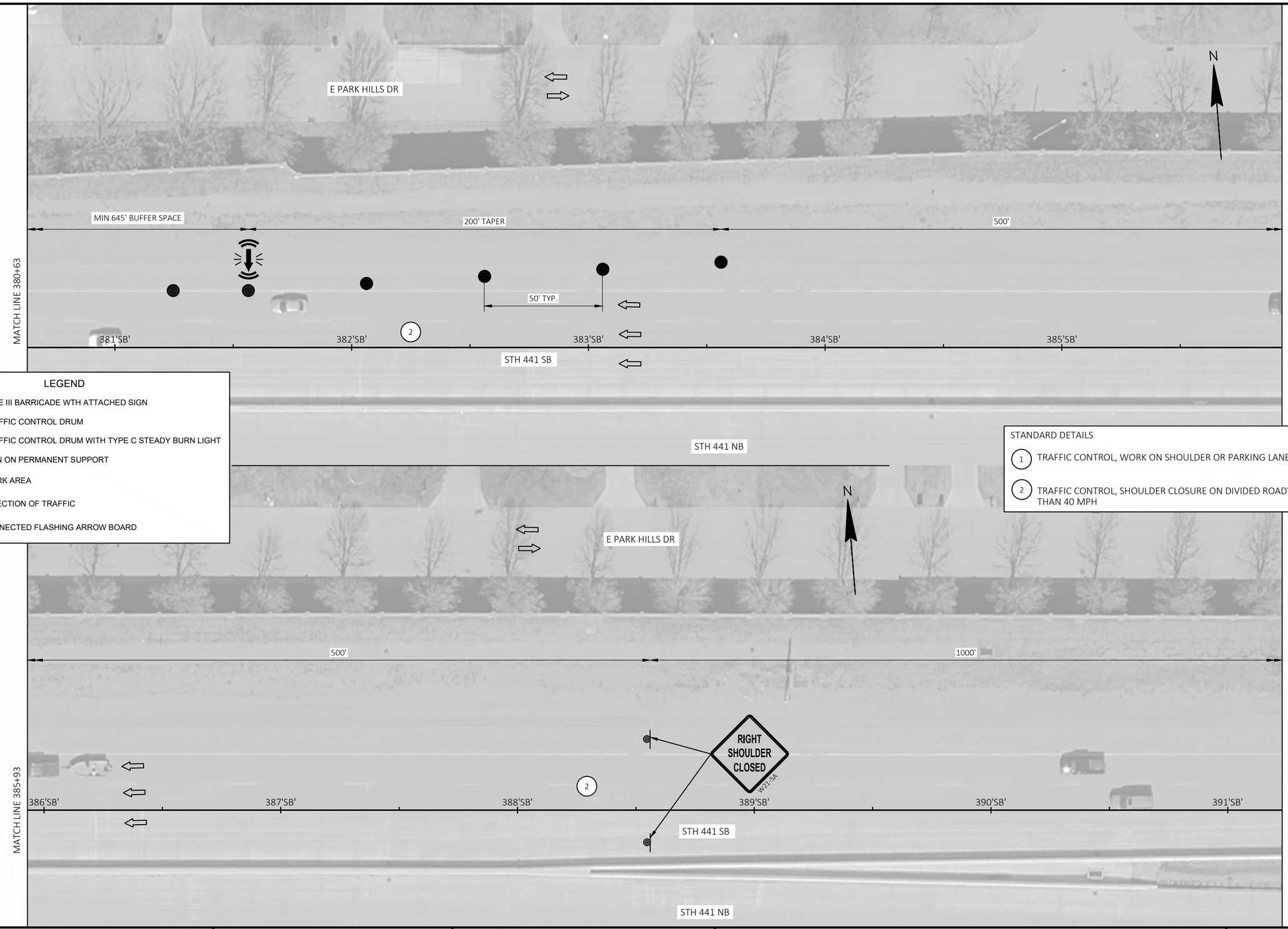
PROJECT NO: 4685-11-70	HWY: STH 441	COUNTY: CALUMET	TRAFFIC CONTROL - STAGE 2	SHEET 12	E

FILE NAME : C:\USERS\ARETRUM\DC\ACCDOCS\HNTB CORPORATION\83139 - WO6 - 441 EXPEDITED NOISE WALL REPAIR\PROJECT FILES\46851100\SHEETS\025101-TC.DWG
LAYOUT NAME - 2

PLOT DATE : 10/21/2026 5:15 PM PLOT BY : AMELIA RETRUM PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

2



LEGEND

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

STANDARD DETAILS

1. TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
2. TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

PROJECT NO: 4685-11-70	HWY: STH 441	COUNTY: CALUMET	TRAFFIC CONTROL - STAGE 2	SHEET 13	E

FILE NAME : C:\USERS\ARETRUM\DC\ACCDOCS\HNTB CORPORATION\83139 - WO6 - 441 EXPEDITED NOISE WALL REPAIR\PROJECT FILES\46851100\SHEETS\025101-TC.DWG
LAYOUT NAME - 3
PLOT DATE : 10/21/2026 5:16 PM
PLOT BY : AMELIA RETRUM
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

2

2

N

E PARK HILLS DR

1000'

2

MATCH LINE 391+23

392'SB'

393'SB'

STH 441 SB

394'SB'

395'SB'

396'SB'

STANDARD DETAILS

1 TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

2 TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

1000'

1600'

2

98'SB'

399'SB'

STH 441 SB

400'SB'

RIGHT SHOULDER CLOSED AHEAD

W21-5B

N

STH 441 NB

1600'

ROAD WORK AHEAD

W20-1A

N

2

STH 441 SB

STH 441 NB

LEGEND

TYPE III BARRICADE WTH ATTACHED SIGN

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

SIGN ON PERMANENT SUPPORT

WORK AREA

DIRECTION OF TRAFFIC

CONNECTED FLASHING ARROW BOARD

PROJECT NO: 4685-11-70	HWY: STH 441	COUNTY: CALUMET	TRAFFIC CONTROL - STAGE 2	SHEET 14	E

FILE NAME : C:\USERS\ARETRUM\DC\ACCDOCS\HNTB CORPORATION\83139 - WO6 - 441 EXPEDITED NOISE WALL REPAIR\PROJECT FILES\46851100\SHEETS\025101-TC.DWG
LAYOUT NAME - 4

PLOT DATE : 10/21/2026 5:16 PM PLOT BY : AMELIA RETRUM PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

Estimate Of Quantities

4685-11-70

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	2.000	2.000
0004	201.0205	Grubbing	STA	2.000	2.000
0006	203.0220	Removing Structure (structure) 01. N-08-002	EACH	1.000	1.000
0008	204.0170	Removing Fence	LF	33.000	33.000
0010	213.0100	Finishing Roadway (project) 01. 4685-11-70	EACH	1.000	1.000
0012	616.0600.S	Fence Temporary	LF	130.000	130.000
0014	619.1000	Mobilization	EACH	1.000	1.000
0016	625.0100	Topsoil	SY	250.000	250.000
0018	628.1504	Silt Fence	LF	140.000	140.000
0020	628.1520	Silt Fence Maintenance	LF	140.000	140.000
0022	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0024	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0026	628.2002	Erosion Mat Class I Type A	SY	250.000	250.000
0028	629.0210	Fertilizer Type B	CWT	1.000	1.000
0030	630.0140	Seeding Mixture No. 40	LB	20.000	20.000
0032	630.0500	Seed Water	MGAL	5.000	5.000
0034	642.5201	Field Office Type C	EACH	1.000	1.000
0036	643.0300	Traffic Control Drums	DAY	2,337.000	2,337.000
0038	643.0420	Traffic Control Barricades Type III	DAY	69.000	69.000
0040	643.0705	Traffic Control Warning Lights Type A	DAY	138.000	138.000
0042	643.0715	Traffic Control Warning Lights Type C	DAY	357.000	357.000
0044	643.0810	Traffic Control Connected Arrow Boards	DAY	5.000	5.000
0046	643.0900	Traffic Control Signs	DAY	598.000	598.000
0048	643.1050	Traffic Control Signs PCMS	DAY	7.000	7.000
0050	643.1055.S	Truck or Trailer Mounted Attenuator	DAY	23.000	23.000
0052	643.3165	Temporary Marking Line Paint 6-Inch	LF	1,290.000	1,290.000
0054	643.5000	Traffic Control	EACH	1.000	1.000
0056	645.0130	Geotextile Type R	SY	95.000	95.000
0058	650.6501	Construction Staking Structure Layout (structure) 01. N-08-002	EACH	1.000	1.000
0060	650.9911	Construction Staking Supplemental Control (project) 01. 4685-11-70	EACH	1.000	1.000
0062	SPV.0165	Special 01. Noise Barriers Double-Sided Sound Absorptive Special N-08-002	SF	1,190.000	1,190.000
0064	SPV.0165	Special 02. Timber Mats	SF	1,088.000	1,088.000

CLEARING & GRUBBING

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	201.0105 CLEARING STA	201.0205 GRUBBING STA
0010	1	STH 441	374'SB'+47.73	-	375'SB'+10.6	85 LT	2	2
PROJECT 4685-11-70 TOTAL							2	2

REMOVING FENCE

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	204.0170 REMOVING FENCE LF
0010	1	STH 441	374'SB'+62	-	374'SB'+95	LT	33
PROJECT 4685-11-70 TOTAL							33

REMOVING STRUCTURE

CATEGORY	STAGE	ROADWAY	STATION	OFFSET	203.0220 REMOVING STRUCTURE (N-08-002) EA
0010	1	STH 441	374'SB'+63	LT	1
PROJECT 4685-11-70 TOTAL					1

FENCE TEMPORARY

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	616.0600.S FENCE TEMPORARY LF
0010	1	STH 441	374'SB'+62.24	-	374'SB'+95.09	LT	130
PROJECT 4685-11-70 TOTAL							130

RESTORATION ITEMS

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	625.0100 TOPSOIL SY	628.2002 EROSION MAT URBAN CLASS I TYPE A SY	629.0210 FERTILIZER TYPE B CWT	630.0140 SEEDING MIXTURE NO. 40 LB	630.0500 SEED WATER MGAL
0010	2	STH 441	374'SB'+47.73	-	375'SB'+10.60	LT	210	210	1.0	10	1
		UNDISTRIBUTED					40	40	-	10	4
PROJECT 4685-11-70 TOTAL							250	250	1.0	20	5

SILT FENCE

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF
0010	1 & 2	STH 441	374'SB'+47.73	-	375'SB'+10.6	LT	132	132
		UNDISTRIBUTED					8	8
PROJECT 4685-11-70 TOTAL							140	140

GEOTEXTILE ITEMS

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	645.0130 GEOTEXTILE FABRIC TYPE R SY	SPV.0165.02 TIMBER MATS SF
0010	2	STH 441	374'SB'+45	-	375'SB'+13	LT	95	1088
PROJECT 4685-11-70 TOTAL							95	1,088

TRAFFIC CONTROL PAVEMENT MARKINGS

CATEGORY	ROADWAY	STAGE	STATION	TO	STATION	OFFSET	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH WHITE LF	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH YELLOW LF
0010	STH 441	1	386'SB'+11	-	389'SB'+98		776	388
	UNDISTRIBUTED						84	42
	SUBTOTAL						860	430
	PROJECT 4685-11-70 TOTAL						1,290	

TRAFFIC CONTROL ITEMS

CATEGORY	LOCATION	STAGE	STAGE DURATION CALENDAR DAYS	643.0300 TRAFFIC CONTROL DRUMS EACH*	643.0300 DAYS	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH*	643.0420 DAYS	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH*	643.0705 DAYS	643.0715 TYPE C EACH*	643.0715 DAYS	643.0810 TRAFFIC CONTROL CONNECTED ARROW BOARDS EACH*	643.0810 DAYS	643.0900 TRAFFIC CONTROL SIGNS EACH*	643.0900 DAYS	643.1050 TRAFFIC CONTROL SIGNS PCMS DAYS	643.1055.S TRUCK OR TRAILER-MOUNTED ATTENUATOR EACH*	643.1055.S DAYS
0010	STH 441	1	23	43	978	3	69	6	138	16	357	-	-	6	138	7	1	23
	E PARK HILLS DR	1	23	38	871	-	-	-	-	-	-	-	-	6	138	-	-	-
	STH 441	2	5	60	298	-	-	-	-	-	-	1	5	8	184	-	-	-
	E PARK HILLS DR	2	5	38	189	-	-	-	-	-	-	-	-	6	138	-	-	-
	PROJECT 4685-11-70 TOTAL				2,337		69		138		357		5		598	7		23

* FOR INFORMATION ONLY

PROJECT NO: 4685-11-70	HWY: STH 441	COUNTY: CALUMET	MISCELLANEOUS QUANTITIES	SHEET 17	E

FILE NAME : C:\USERS\ARETRUM\DC\ACCDOCS\HNTB CORPORATION\83139 - WO6 - 441 EXPEDITED NOISE WALL REPAIR\PROJECT FILES\46851100\SHEETS\030201-MQ.DWG
LAYOUT NAME - 02

PLOT DATE : 10/19/2026 3:33 PM PLOT BY : AMELIA RETRUM PLOT NAME : PLOT SCALE : 1" = 1'

WISDOT/CADDS SHEET 42

PI STA = 369+04.42
Y = 551692.179
X = 830893.932
DELTA = 4°43'11" LT
D = 0°24'13"
T = 584.93'
L = 1169.19'
R = 14193.77'
PC STA = 363+19.49
Y = 551763.552
X = 830313.375
PT STA = 374+92.89
Y = 551668.817
X = 831478.393
DB = S82°59'29"E
DA = S87°42'40"E

S DELLWOOD ST

S EAST ST

E PARK HILLS DR

STA 374'SB'+47.73 - STA 375'SB'+10.60
NOISE BARRIERS DOUBLE-SIDED SOUND ABSORPTION SPECIAL N-08-002

CLEARING AND GRUBBING

SI (TYP.)

+47.73
-70.75' LT

+10.60
-73.13' LT

END PROJECT
STA 375+10.60

BEGIN PROJECT
STA 374+47.73

N-08-002

REMOVING FENCE

REMOVING STRUCTURE (N-08-002)

SILT FENCE (TYP.)

CAUTION

WISDOT FIBER OPTIC

5

STH 441 SB

372'SB' 373'SB' 374'SB' 375'SB' 376'SB' 377'SB'

S87°42'40"E

STA BACK = 373+74.46
STA AHEAD = 373+78.66

PT: 374+92.89

STH 441 NB

N-08-001

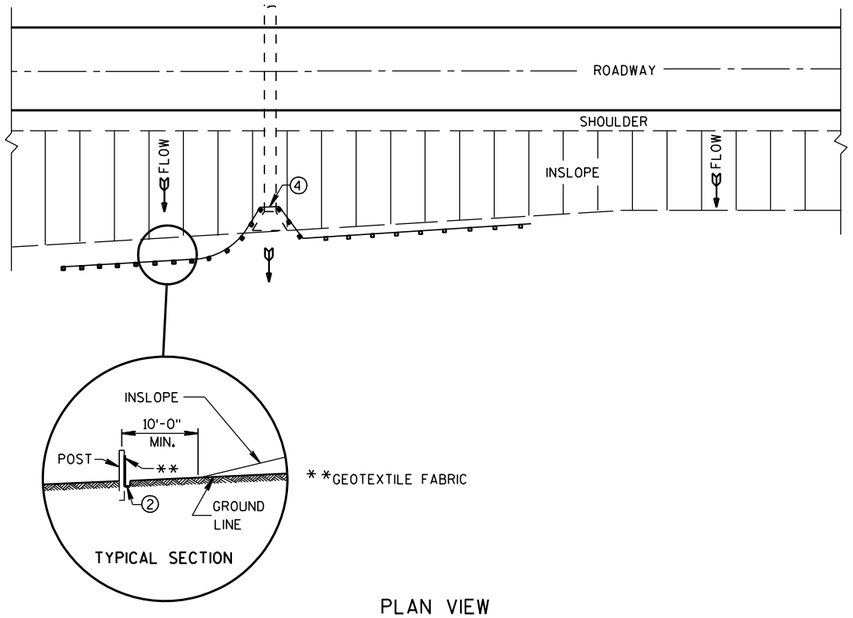
5

PROJECT NO: 4685-11-70	HWY: STH 441	COUNTY: CALUMET	PLAN VIEW	SHEET 18	E

Standard Detail Drawing List

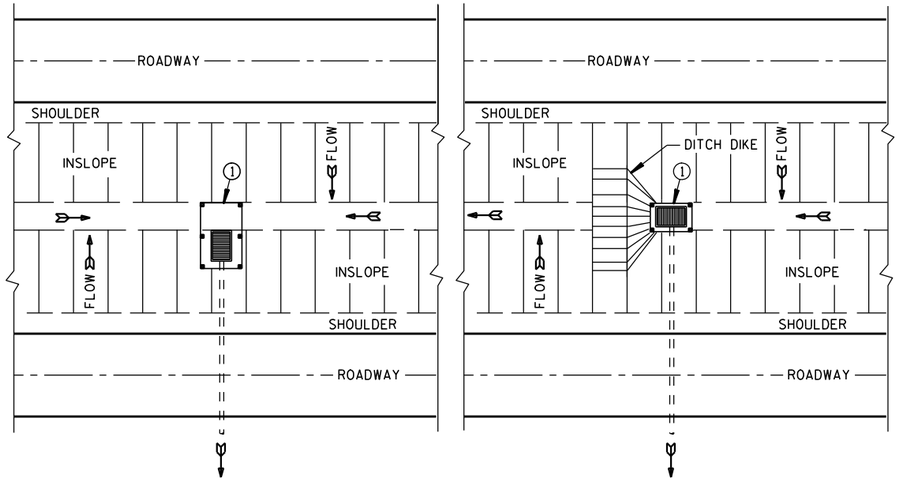
08E09-06	SILT FENCE
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-24B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C11-11B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15D12-17A	TRAFFIC CONTROL, LANE CLOSURE
15D27-06	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D28-06	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D41-07A	TRAFFIC CONTROL, MULTIPLE LANE SHIFT, MULTILANE DIVIDED ROAD

6



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.

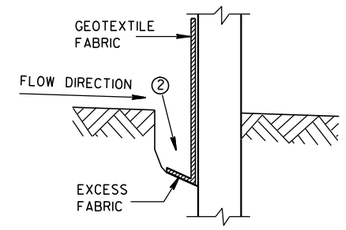
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

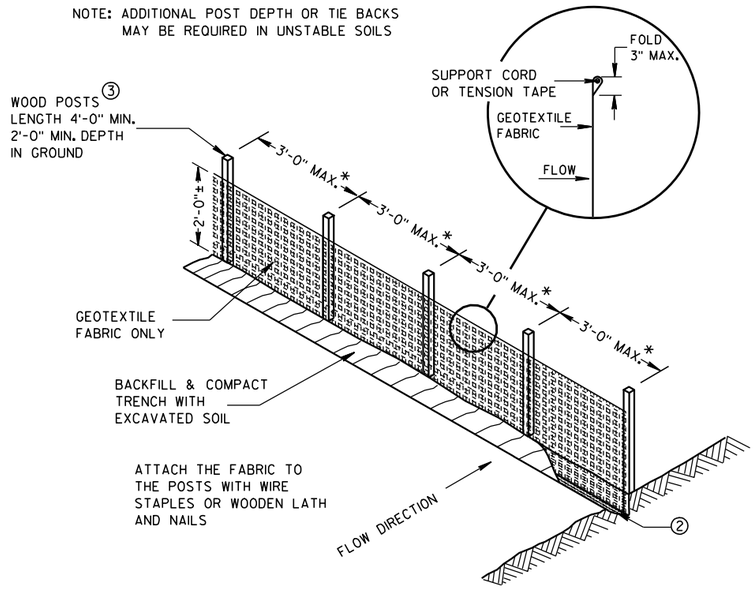
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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.

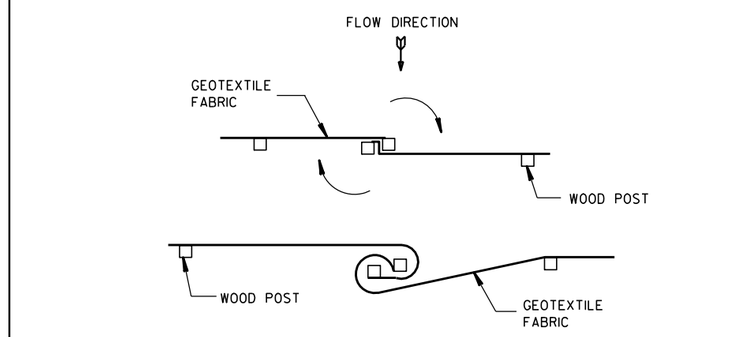


TRENCH DETAIL

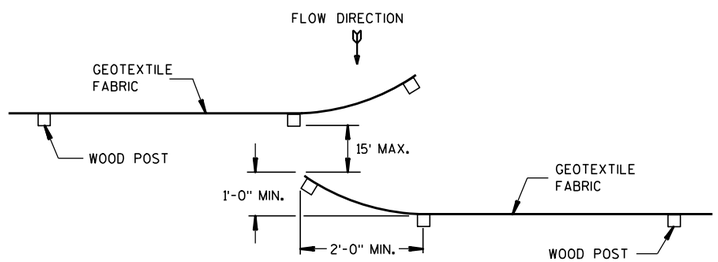


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

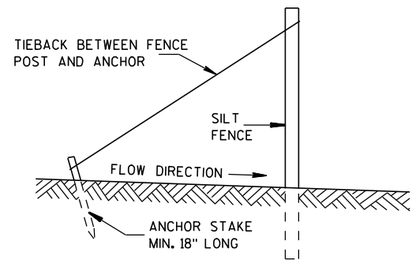


TWIST METHOD



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

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

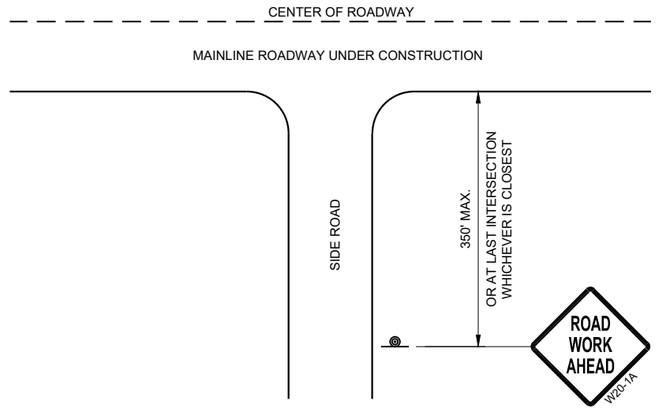
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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.



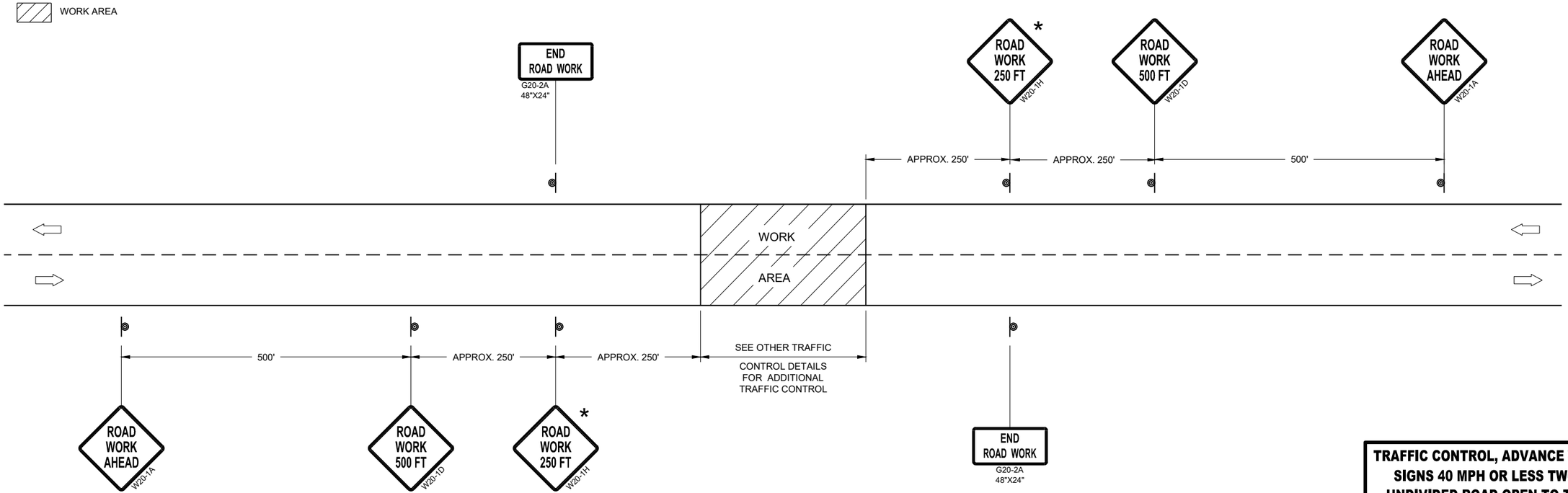
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

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

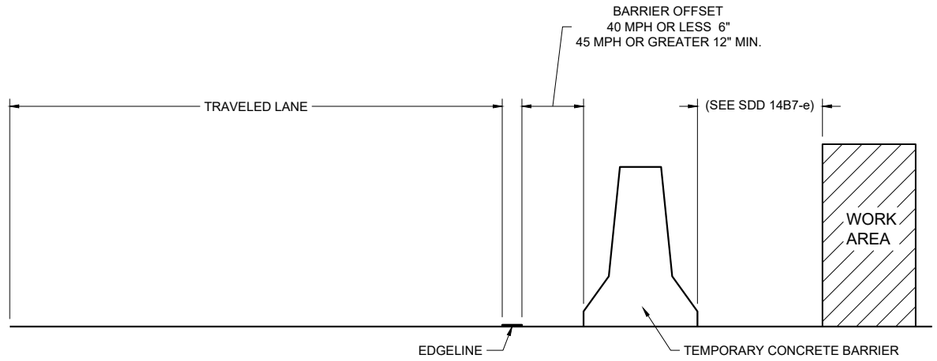
FHWA

6

SDD 15C05 - 05

6

SDD 15C05 - 05



TEMPORARY BARRIER OFFSET FROM EDGELINE

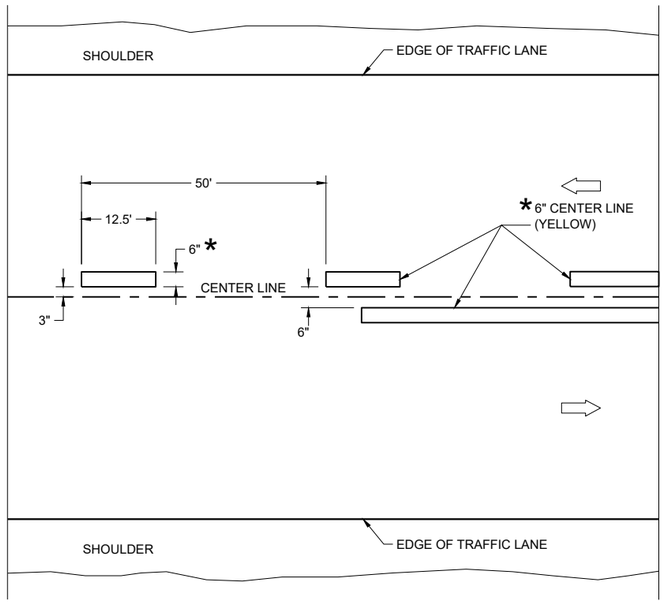
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

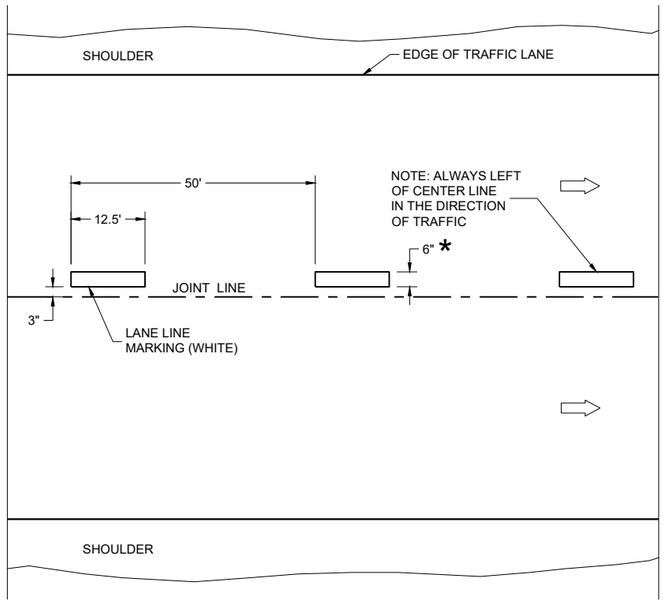
LEGEND

DIRECTION OF TRAFFIC

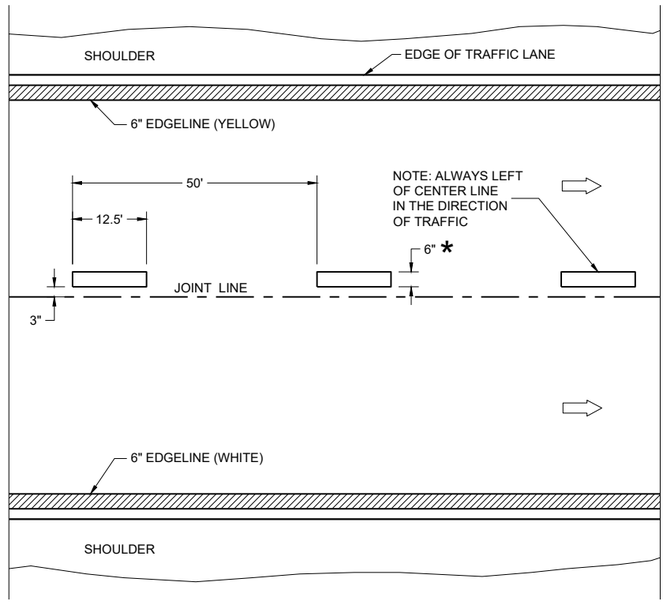
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

6

SDD 15C08-24b

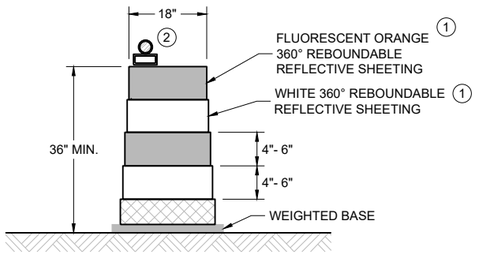
6

SDD 15C08-24b

GENERAL NOTES

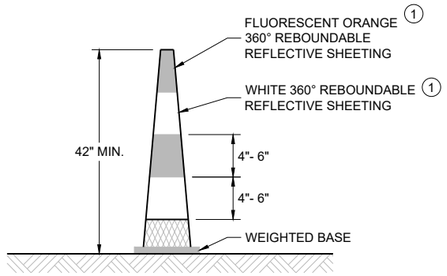
(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

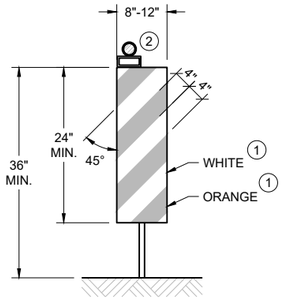
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

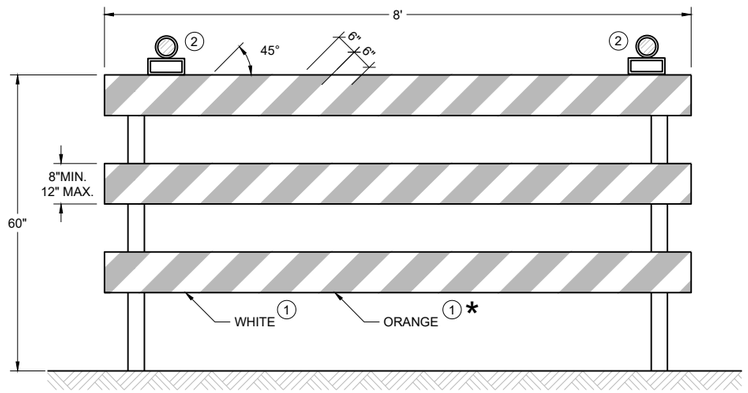
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE 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
February 2026 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

6
SDD 15C11-11b

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) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48" x 48" 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 OR AS APPROVED BY THE ENGINEER.

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 LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

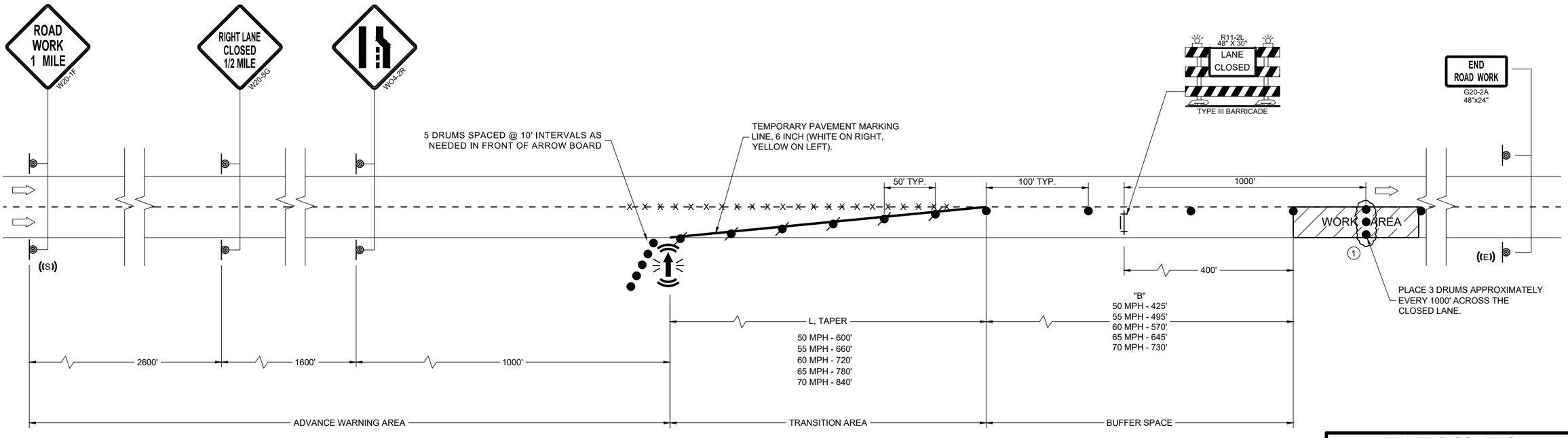
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF 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.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

(1) DRUMS IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- (S) WZ START LOCATION MARKER
- (E) WZ END LOCATION MARKER



TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2026 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6

SDD 15D12-17a

6

SDD 15D12-17a

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- DIRECTION OF TRAFFIC
- CONNECTED ARROW BOARD
- WORK AREA
- (S) WZ START LOCATION MARKER
- (E) WZ END LOCATION MARKER

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.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

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.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

WHEN A RAMP OR SIDE ROAD INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

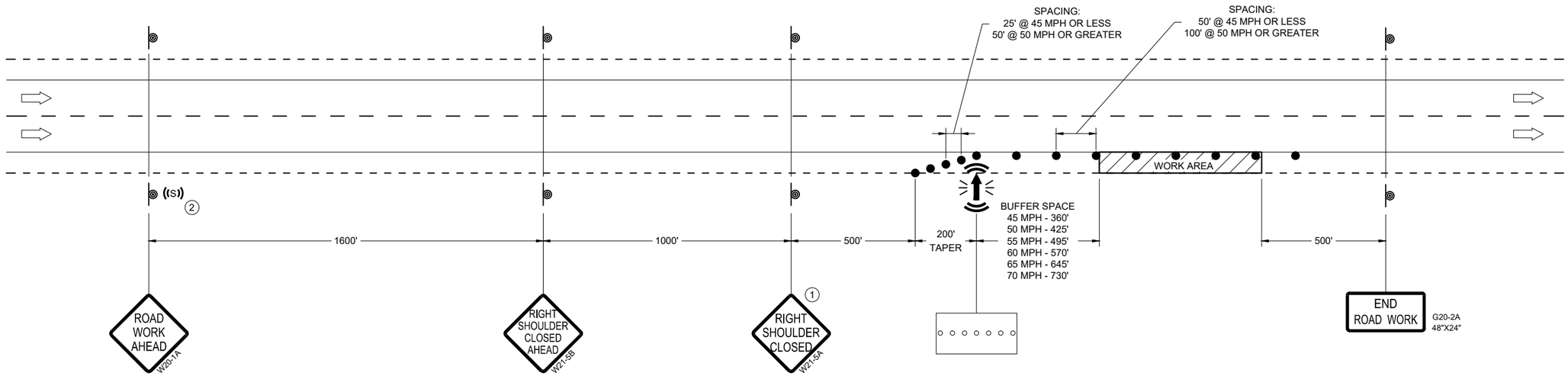
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

(1) FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR THE W21-5A SIGN MAY BE OMITTED.

(2) IF ALREADY PRESENT WITHIN PROJECT , DO NOT INCLUDE ADDITIONAL DEVICE.



TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2026
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA

6
SDD 15D27-06

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- DIRECTION OF TRAFFIC
- WORK ZONE

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

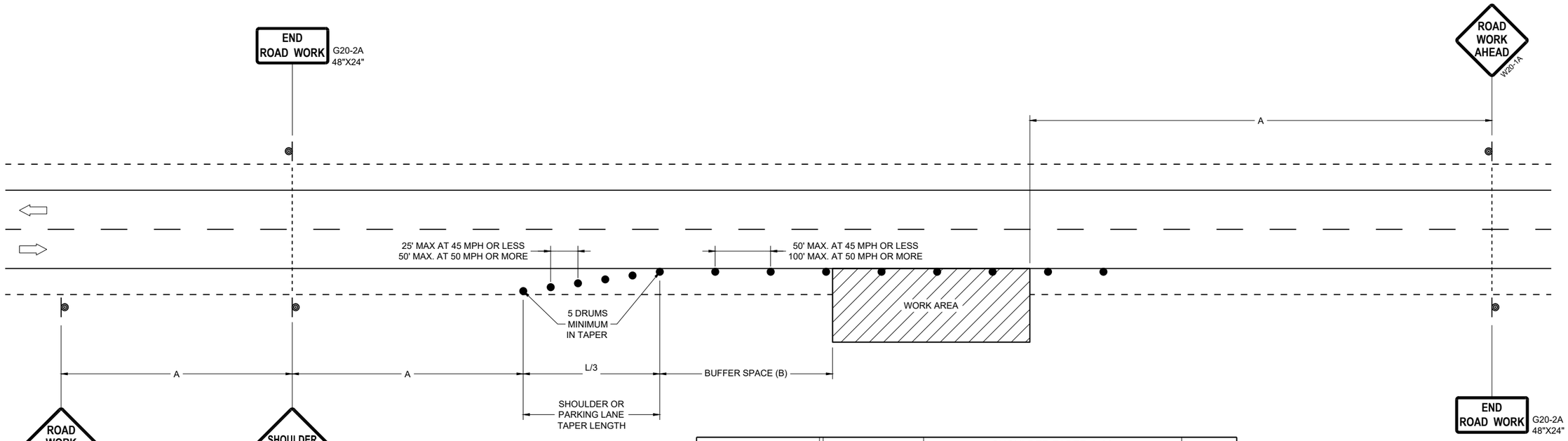
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	155
30	200'	15	20	25	30	35	40	200
35	350'	20	27	34	40	47	54	250
40	350'	26	35	44	53	62	70	305
45	500'	45	59	74	89	104	119	360
50	500'	50	66	83	99	116	132	425
55	500'	54	73	91	109	127	145	495

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2026
DATE

/S/ ANDREW HEIDTKE
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA

6

SDD 15D28-06

LEGEND

TYPE III BARRICADE WITH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

CONCRETE BARRIER TEMPORARY PRECAST

TYPE "A" WARNING LIGHT (FLASHING)

WORK AREA

SPEED LIMIT 60 — W03-5

OR

SPEED LIMIT 60 — R2-1 48"X60"

SPEED LIMIT 55 — W03-5

OR

SPEED LIMIT 55 — R2-1 48"X60"

LOCATED 3000 FEET BEYOND THE "ROAD WORK 1 MILE" (W20-1F) SIGN

(BLACK AND WHITE) LOCATED 700 FEET BEYOND THE W03-5 SIGN

IF THE REGULATORY SPEED HAS BEEN REDUCED, A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 3 MILES.

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 RIGHT - REVERSE FOR SHIFTING LEFT.

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.

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.

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.

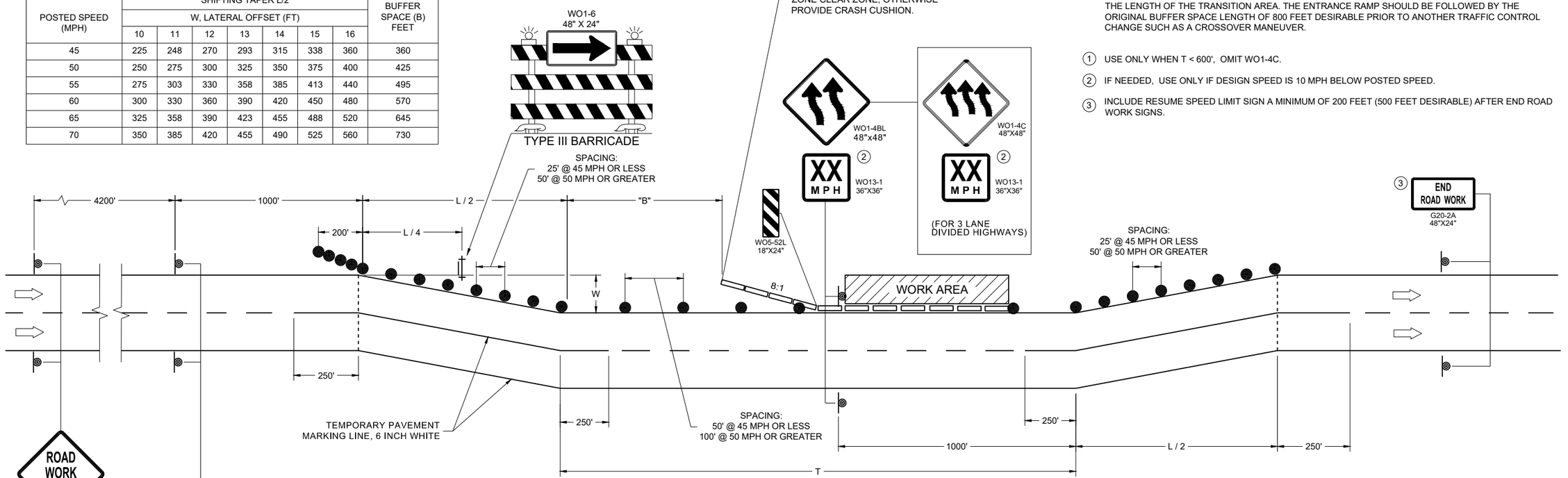
(1) USE ONLY WHEN T < 600', OMIT WO1-4C.

(2) IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

(3) INCLUDE RESUME SPEED LIMIT SIGN A MINIMUM OF 200 FEET (500 FEET DESIRABLE) AFTER END ROAD WORK SIGNS.

FULL SHIFT

POSTED SPEED (MPH)	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)							BUFFER SPACE (B) FEET
	10	11	12	13	14	15	16	
45	225	248	270	293	315	338	360	360
50	250	275	300	325	350	375	400	425
55	275	303	330	358	385	413	440	495
60	300	330	360	390	420	450	480	570
65	325	358	390	423	455	488	520	645
70	350	385	420	455	490	525	560	730



PARTIAL SHIFT

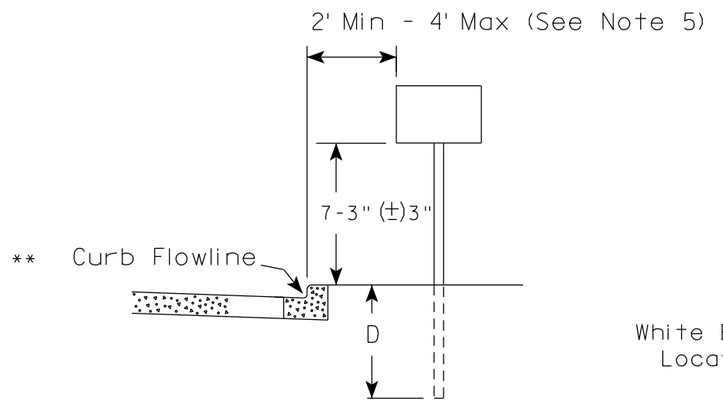
POSTED SPEED PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)									BUFFER SPACE (B) FEET
	1	2	3	4	5	6	7	8	9	
45	23	45	68	90	113	135	158	180	203	360
50	25	50	75	100	125	150	175	200	225	425
55	28	55	83	110	138	165	193	220	248	495
60	30	60	90	120	150	180	210	240	270	570
65	33	65	98	130	163	195	228	260	293	645
70	35	70	105	140	175	210	245	280	315	730

TRAFFIC CONTROL
MULTIPLE LANE SHIFT
MULTILANE DIVIDED ROAD

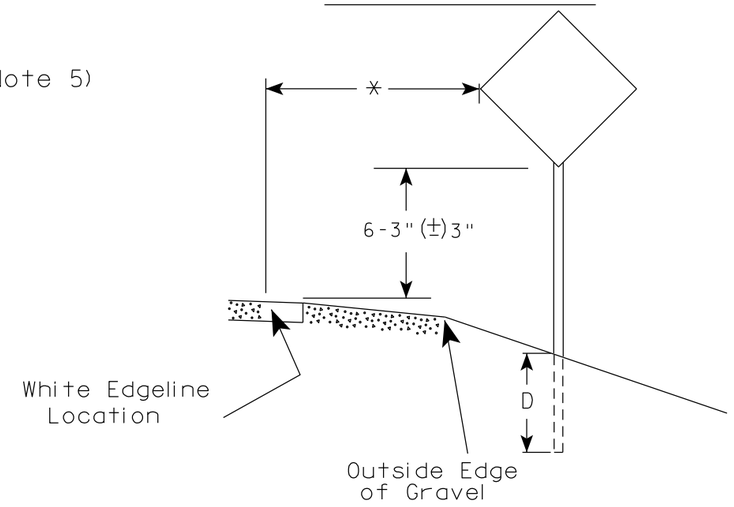
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

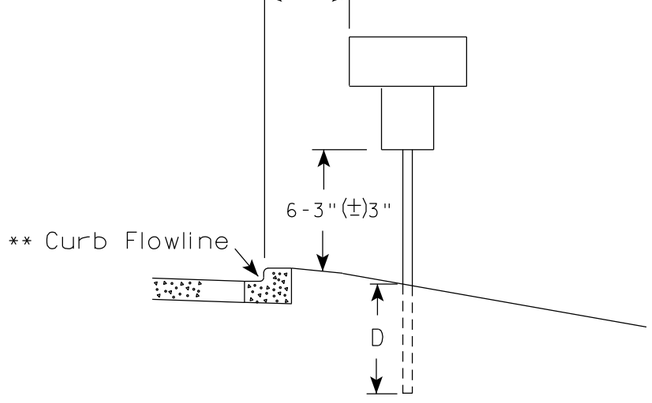
6
SDD 15D41-07a

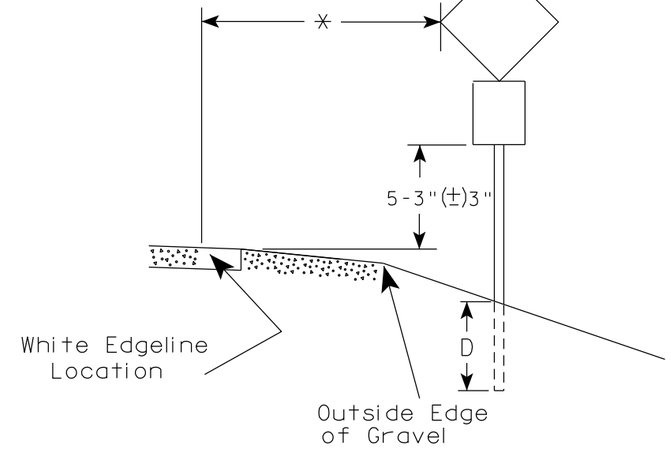
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

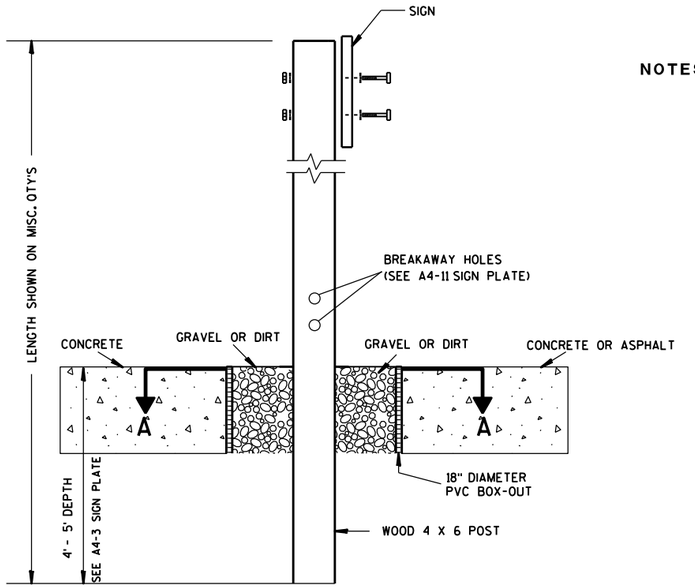
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

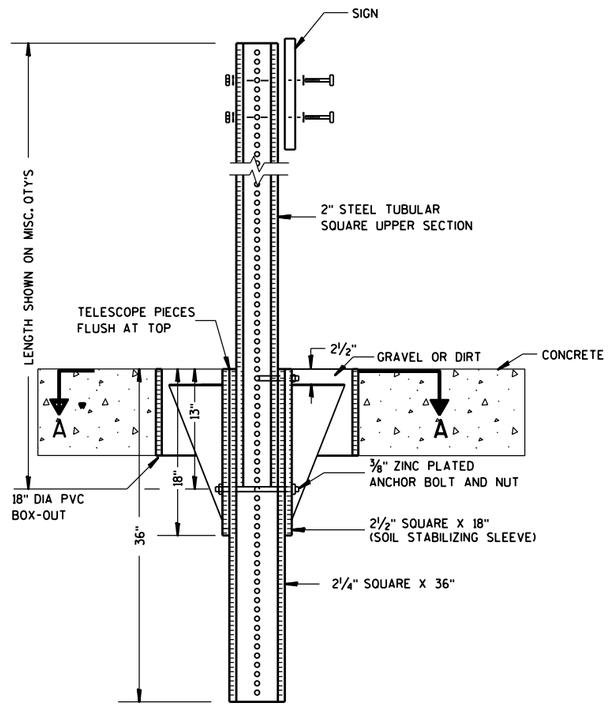
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 28	E



ELEVATION VIEW

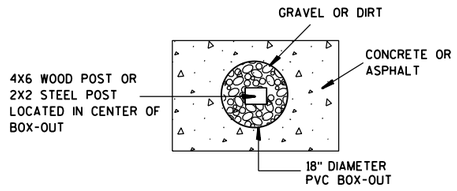
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

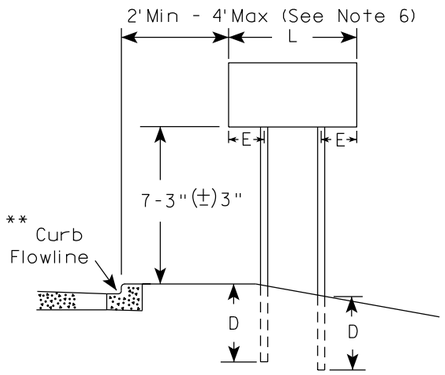
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

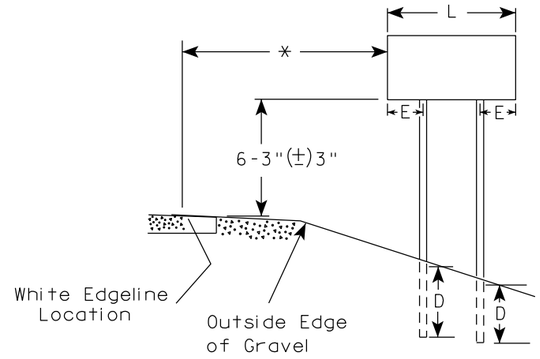
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

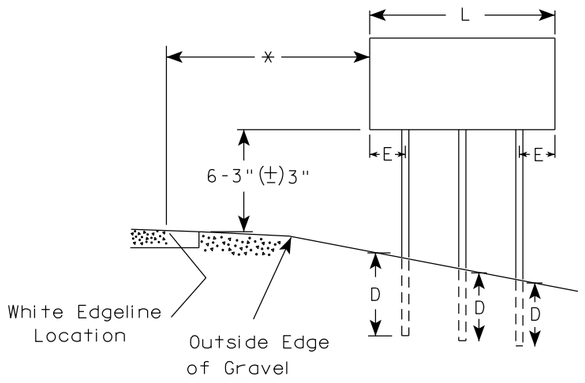
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

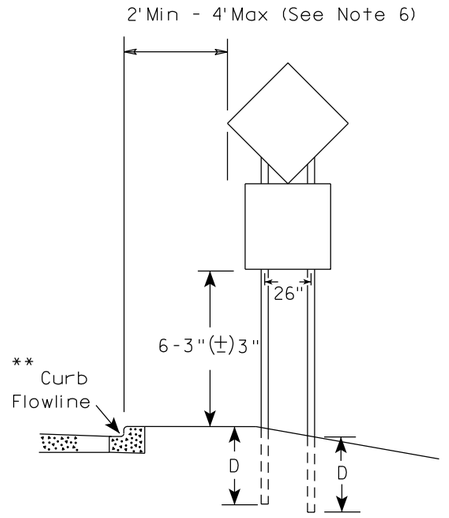
URBAN AREA



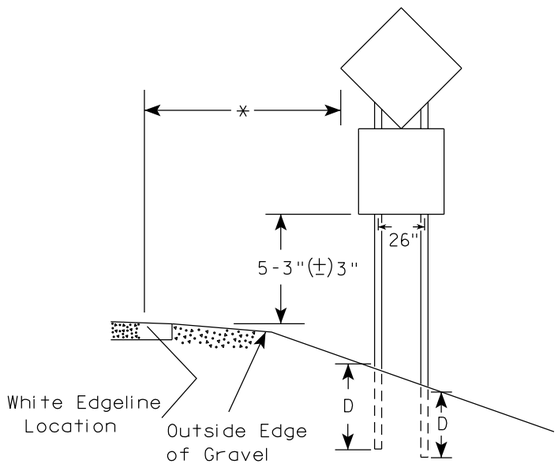
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

***	SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
	L	E
	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±) 3".

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

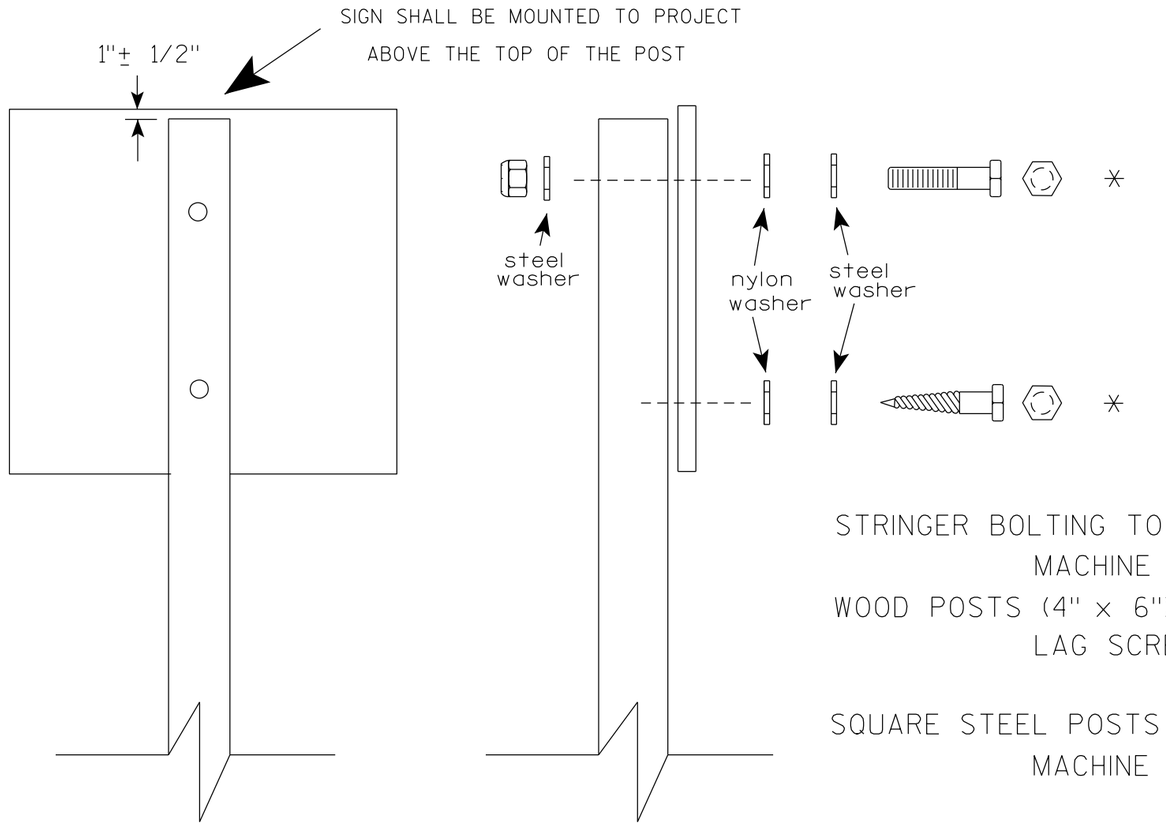
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 30	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

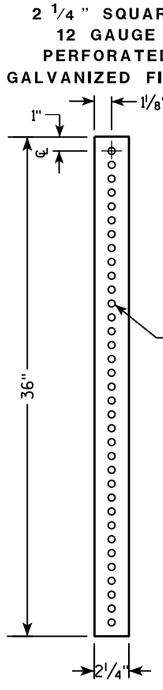
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

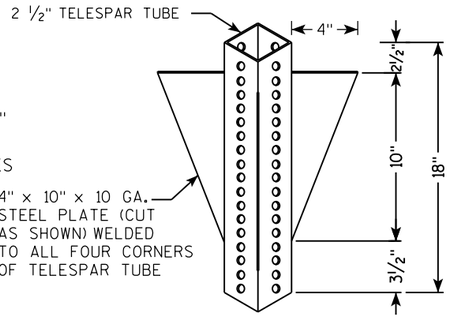
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

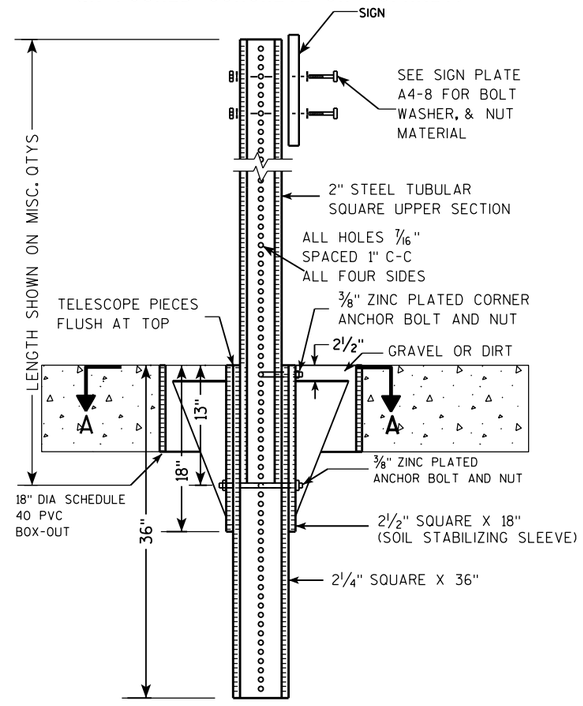
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



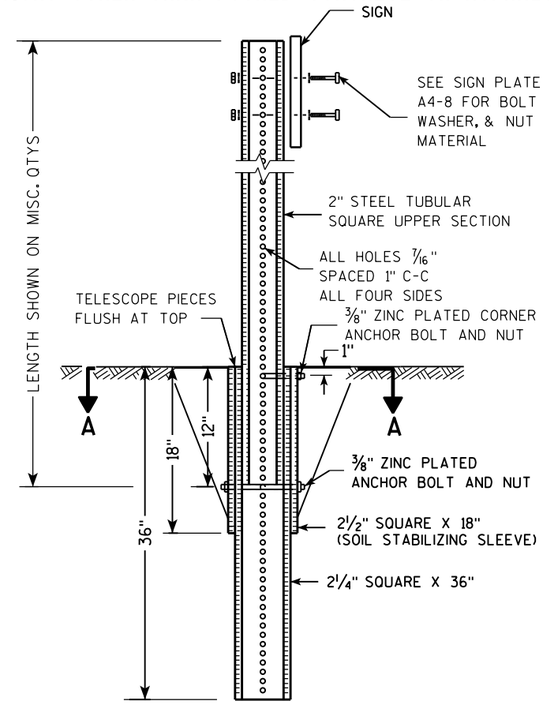
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

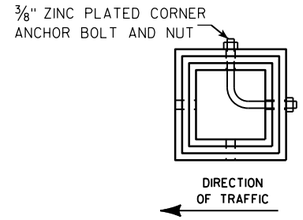


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

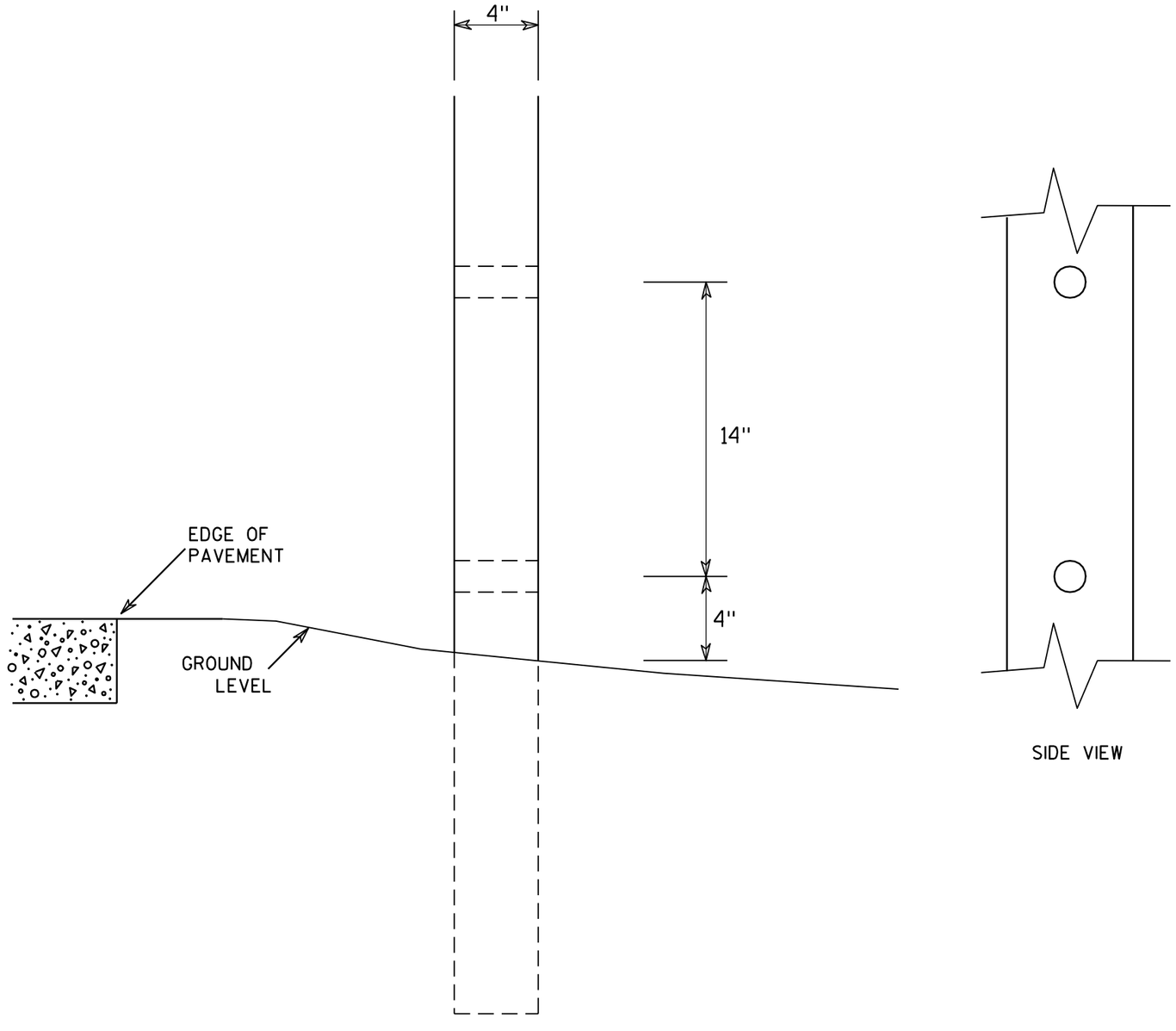
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42



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.

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

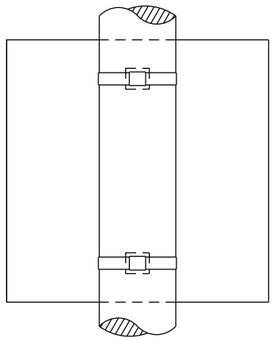
APPROVED Chester J Spang
for State Traffic Engineer

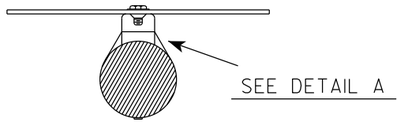
DATE 3/27/97 PLATE NO. A4-11.2

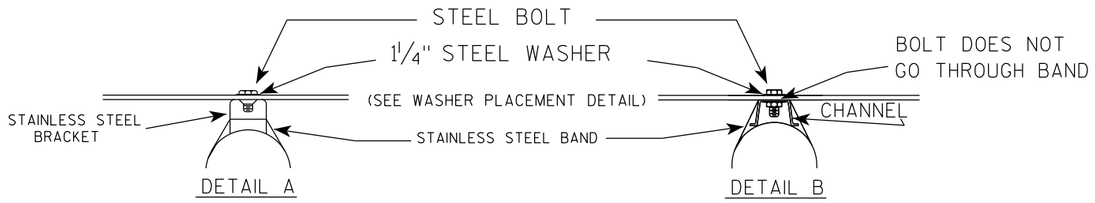
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 33	E

BANDING

SINGLE SIGN



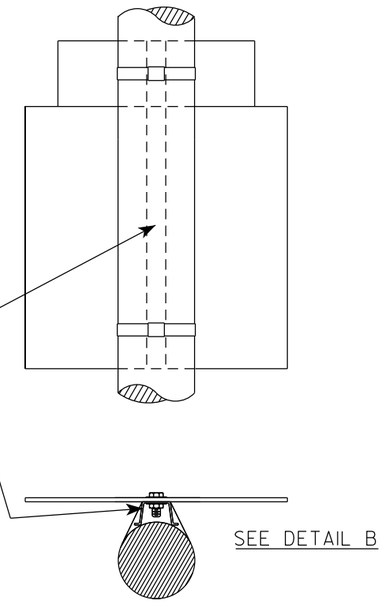




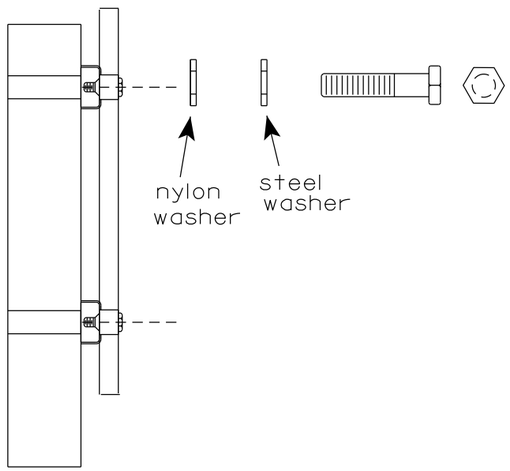
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

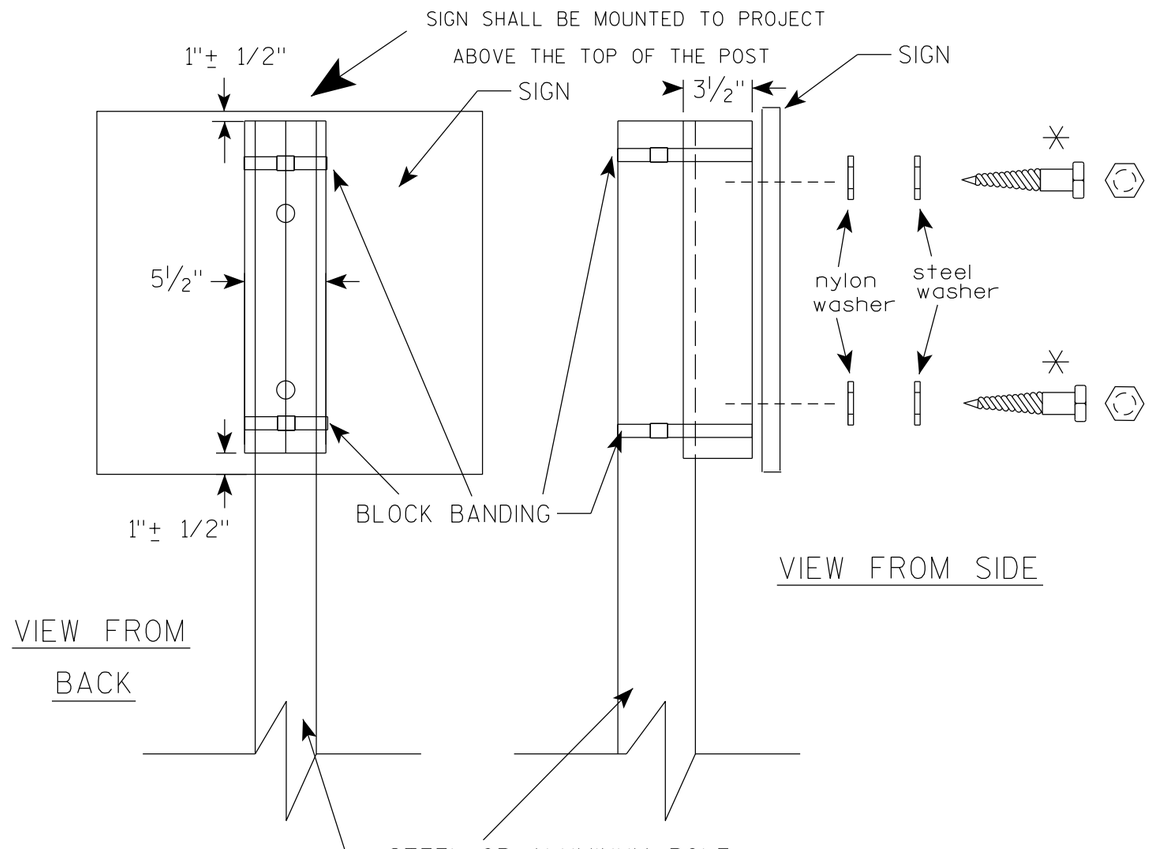
WISCONSIN DEPT OF TRANSPORTATION

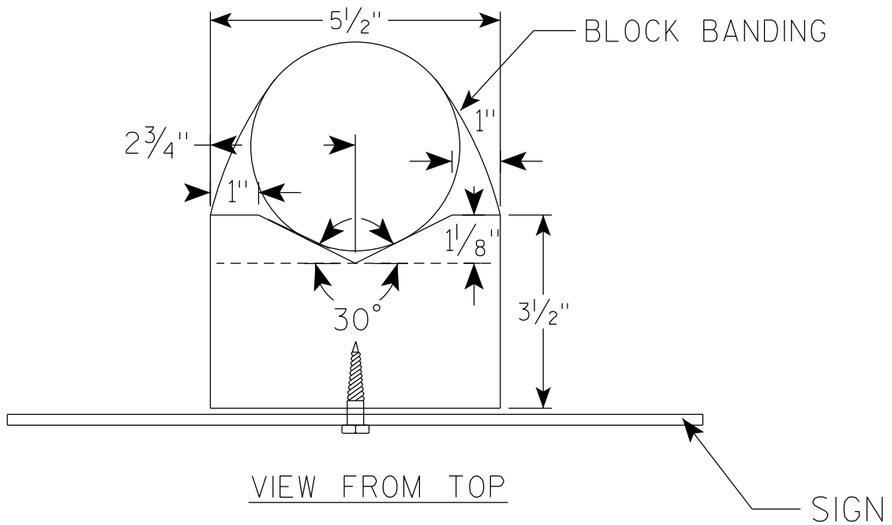
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-9.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 34	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

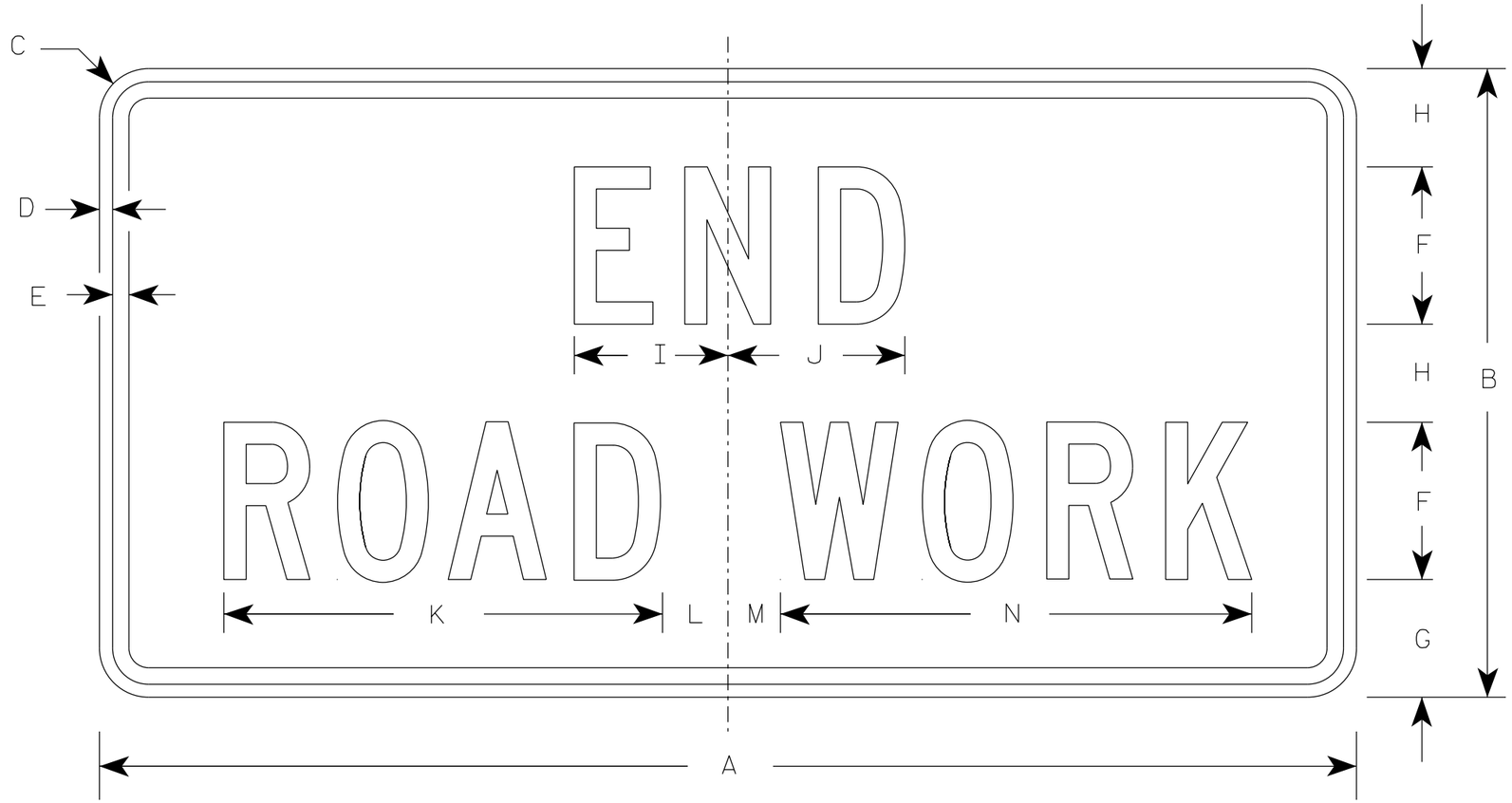
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 35 E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/2	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5
2	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
2M	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
3	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
4	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
5	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0

STANDARD SIGN

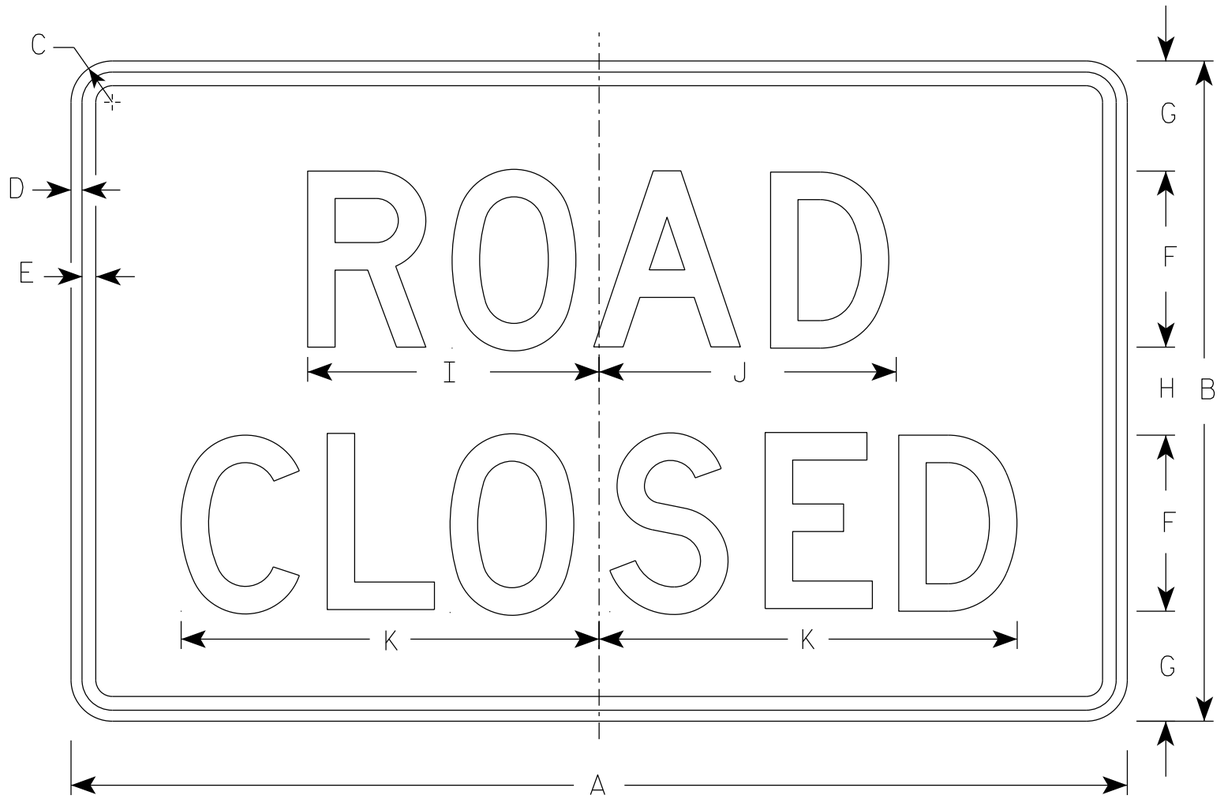
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. G20-2A.10

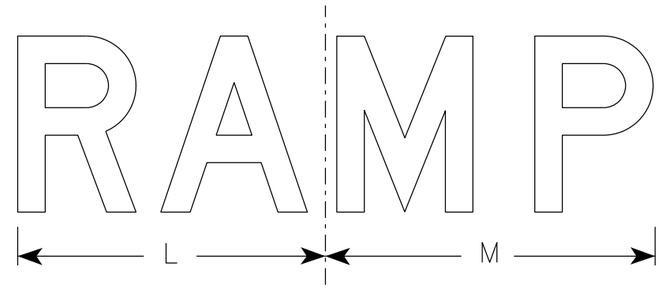
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 36 E



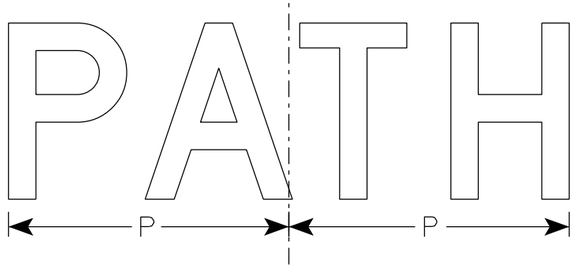
R11-2

NOTES

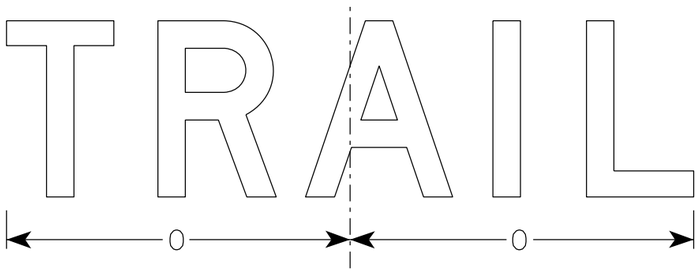
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



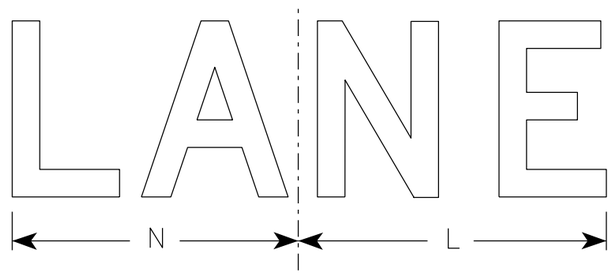
R11-2R



R11-2C



R11-2T



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8	12 3/4											10.0
2M	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8	12 3/4											10.0
3	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8	12 3/4											10.0
4	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8	12 3/4											10.0
5	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8	12 3/4											10.0

STANDARD SIGN
R11-2

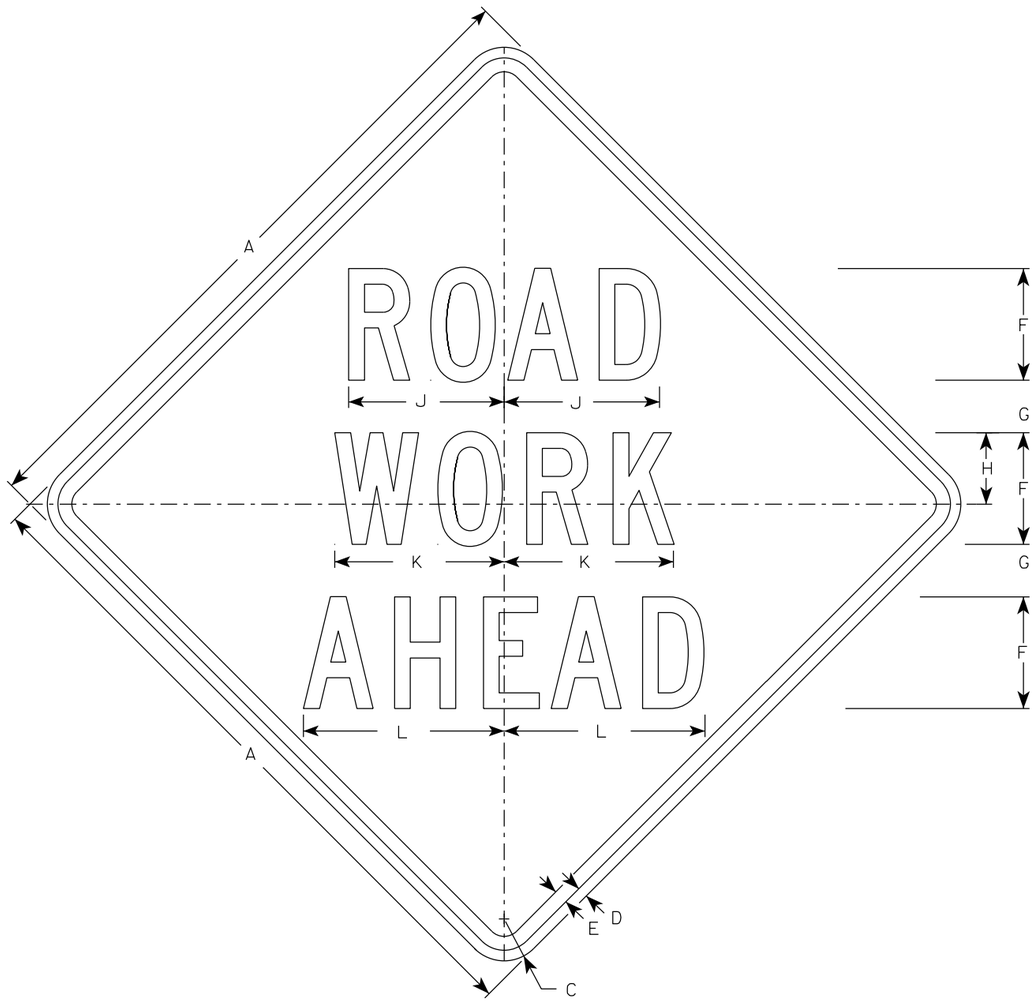
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

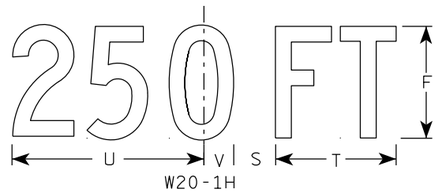
DATE 2/3/26 PLATE NO. R11-2.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

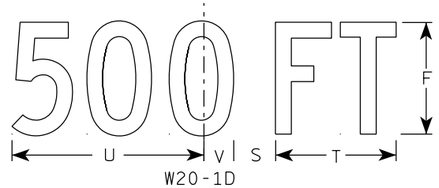
FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112.dgn PLOT DATE : 3-FEB 2026 9:02 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W20-1A



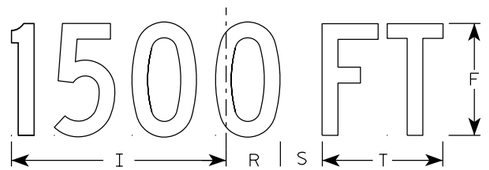
W20-1H



W20-1D



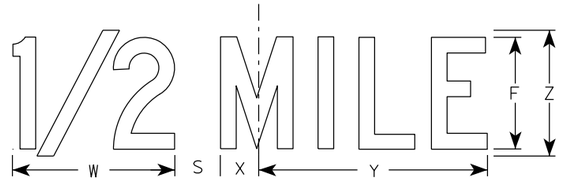
W20-1C



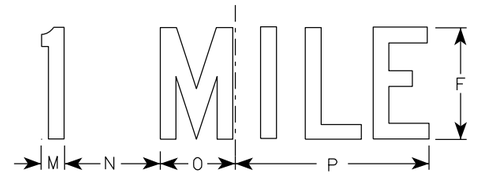
W20-1B

NOTES

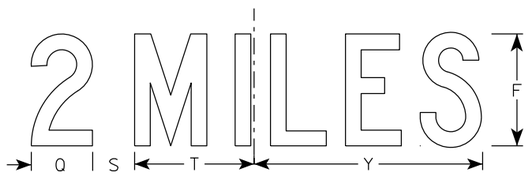
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G



W20-1F



W20-1E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-1.12

PROJECT NO:

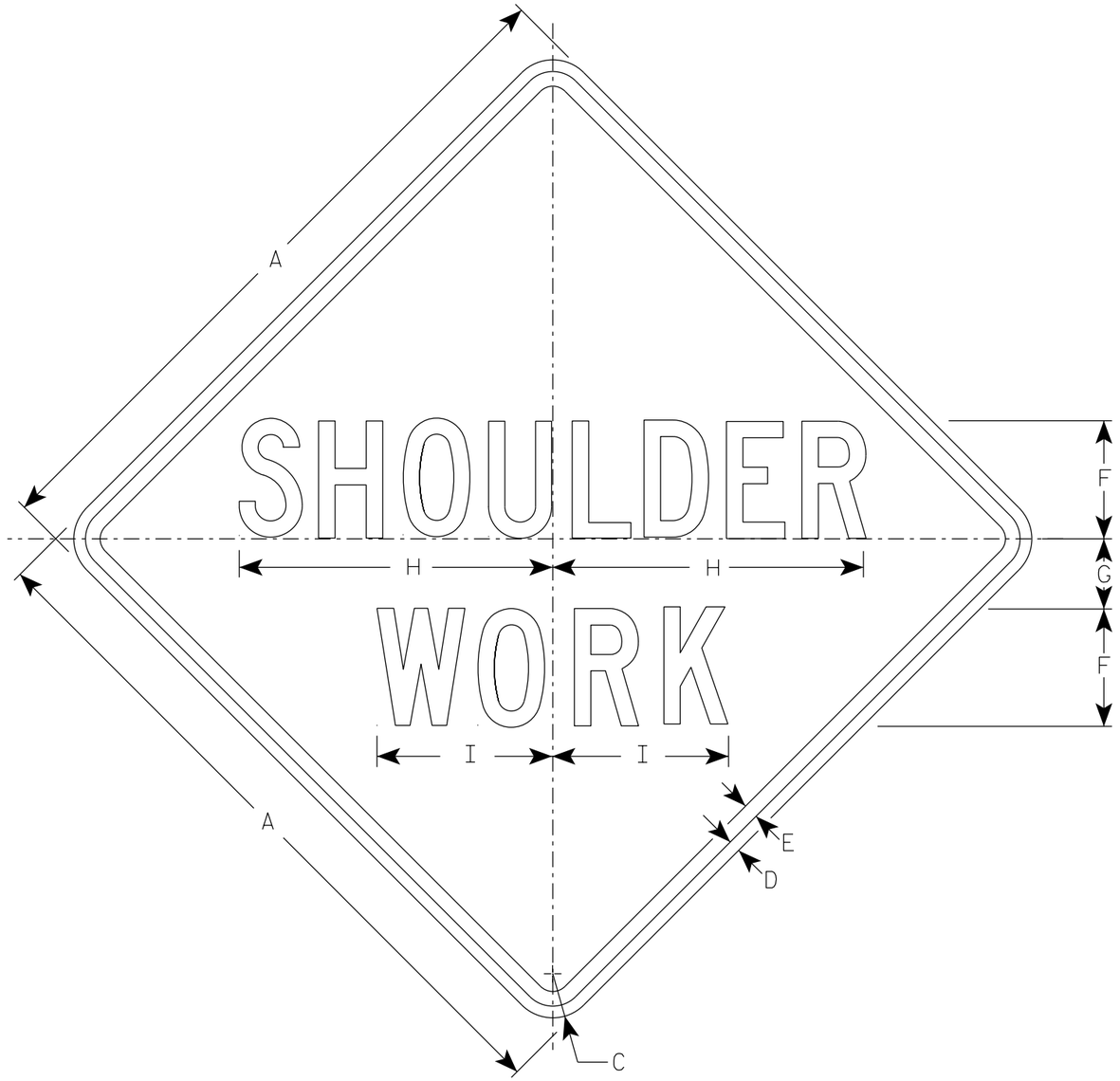
SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 10-JAN 2024 11:16 PLOT BY : dotc4c

WISDOT/CADDS SHEET 42

7

7



W21-5

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	6	3 1/2	16	9																		9.0
2S	48		3	3/4	1	8	5	21 3/8	11 1/4																		16.0
2M	48		3	3/4	1	8	5	21 3/8	11 1/4																		16.0
3	48		3	3/4	1	8	5	21 3/8	11 1/4																		16.0
4	48		3	3/4	1	8	5	21 3/8	11 1/4																		16.0
5	48		3	3/4	1	8	5	21 3/8	11 1/4																		16.0

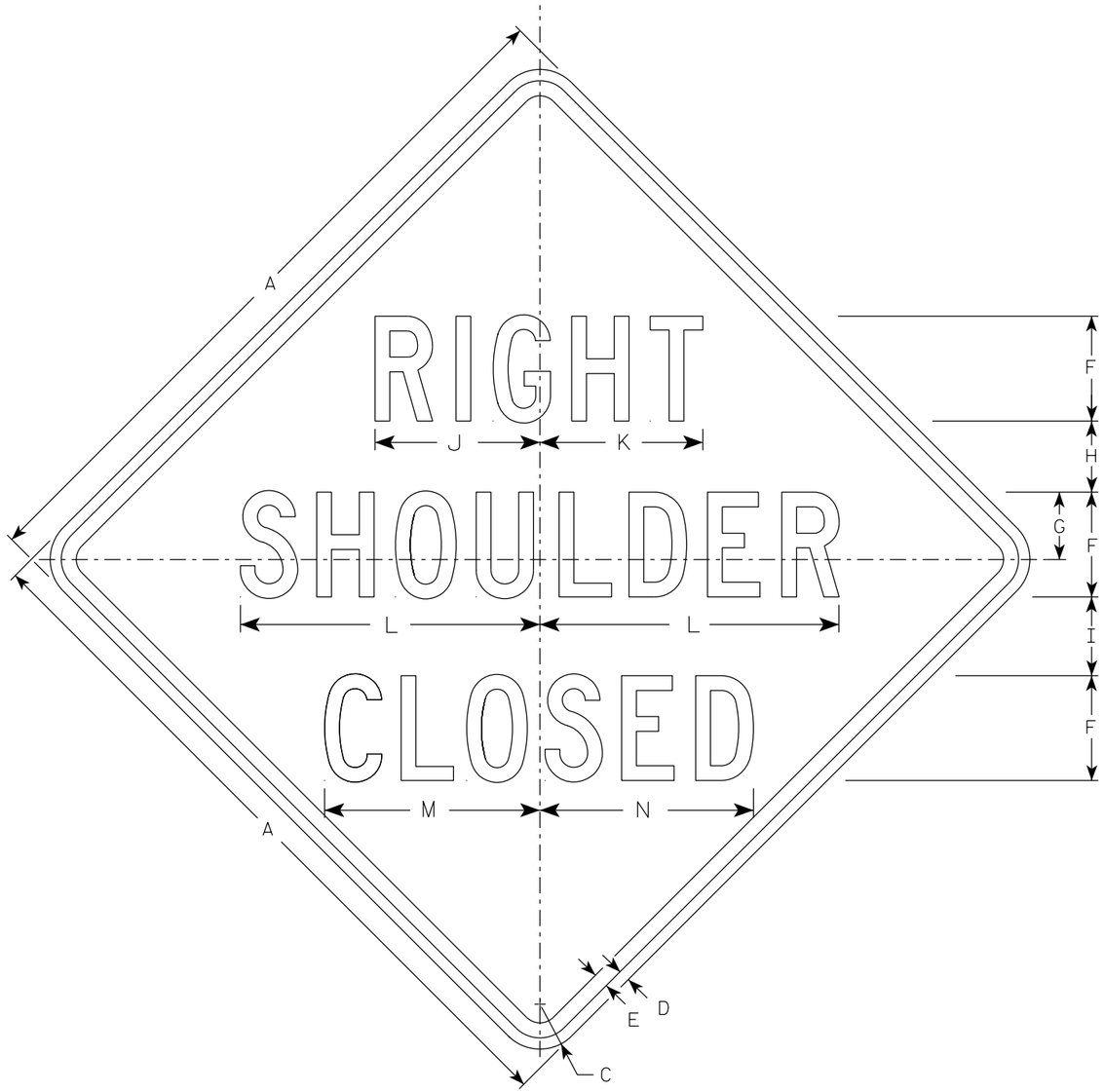
STANDARD SIGN
W21-5

WISCONSIN DEPT OF TRANSPORTATION

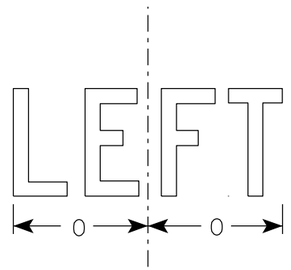
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/11/2024 PLATE NO. W21-5.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 39 | E



W21-5A



W21-5AL

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
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	36		2 1/4	5/8	3/4	5	3 3/8	3 1/2	4	7 7/8	7 3/4	14 1/4	10 1/4	10 1/8	6 1/4												9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
2M	48		3	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
3	48		3	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
4	48		3	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
5	48		3	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0

STANDARD SIGN
W21-5A

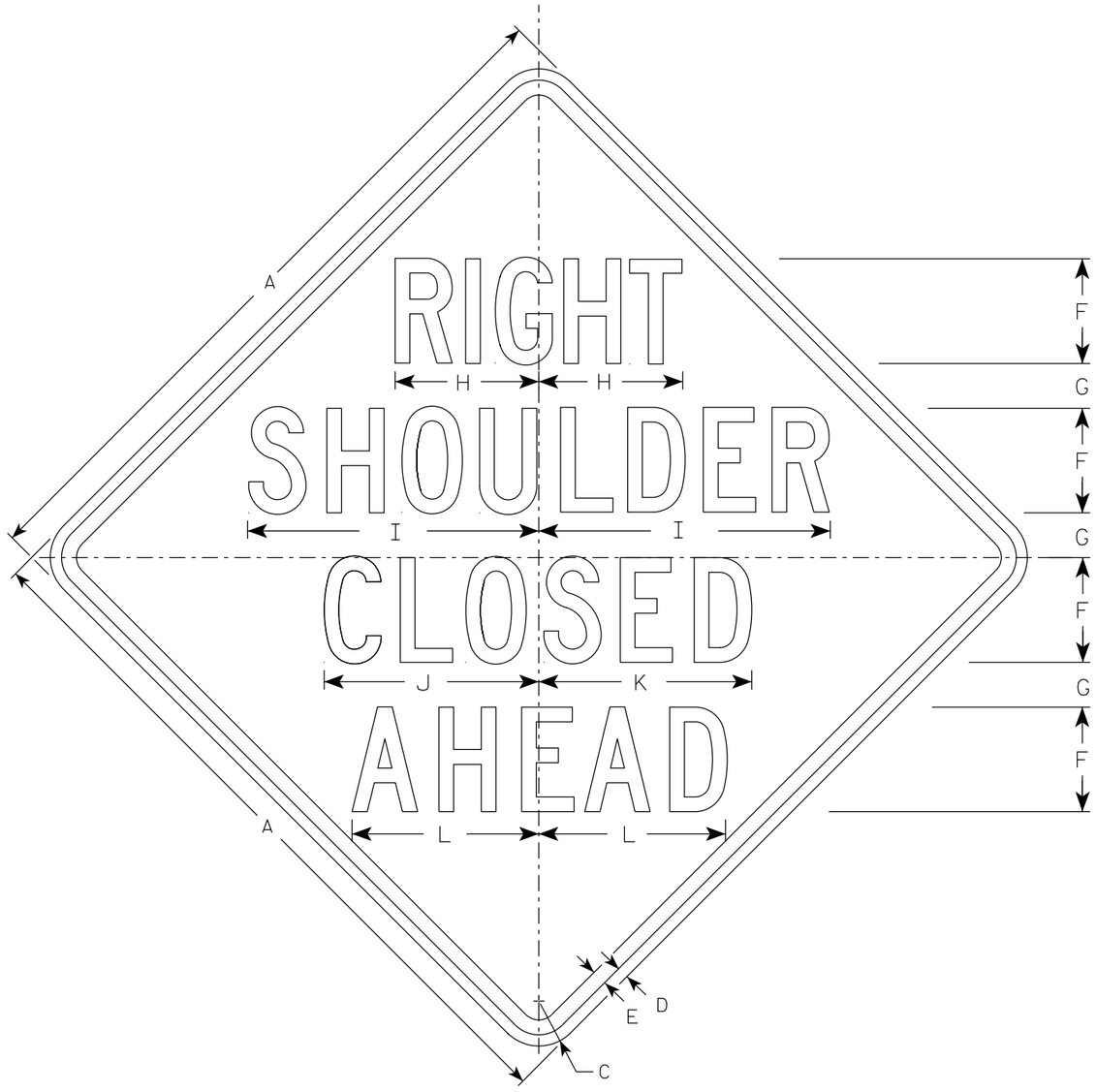
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/11/2024 PLATE NO. W21-5A.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 40 | E

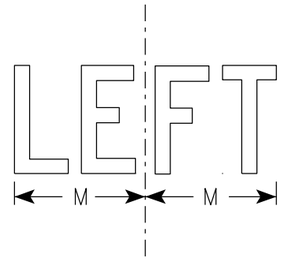
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W215A.dgn PLOT DATE : 11-JAN 2024 3:48 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W21-5B

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C



W21-5BL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	2 1/4	7 3/8	14 1/4	10 1/4	10 1/8	8 7/8	6 1/4														9.0
2S	48		3	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
2M	48		3	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
3	48		3	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
4	48		3	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
5	48		3	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0

STANDARD SIGN
W21-5B

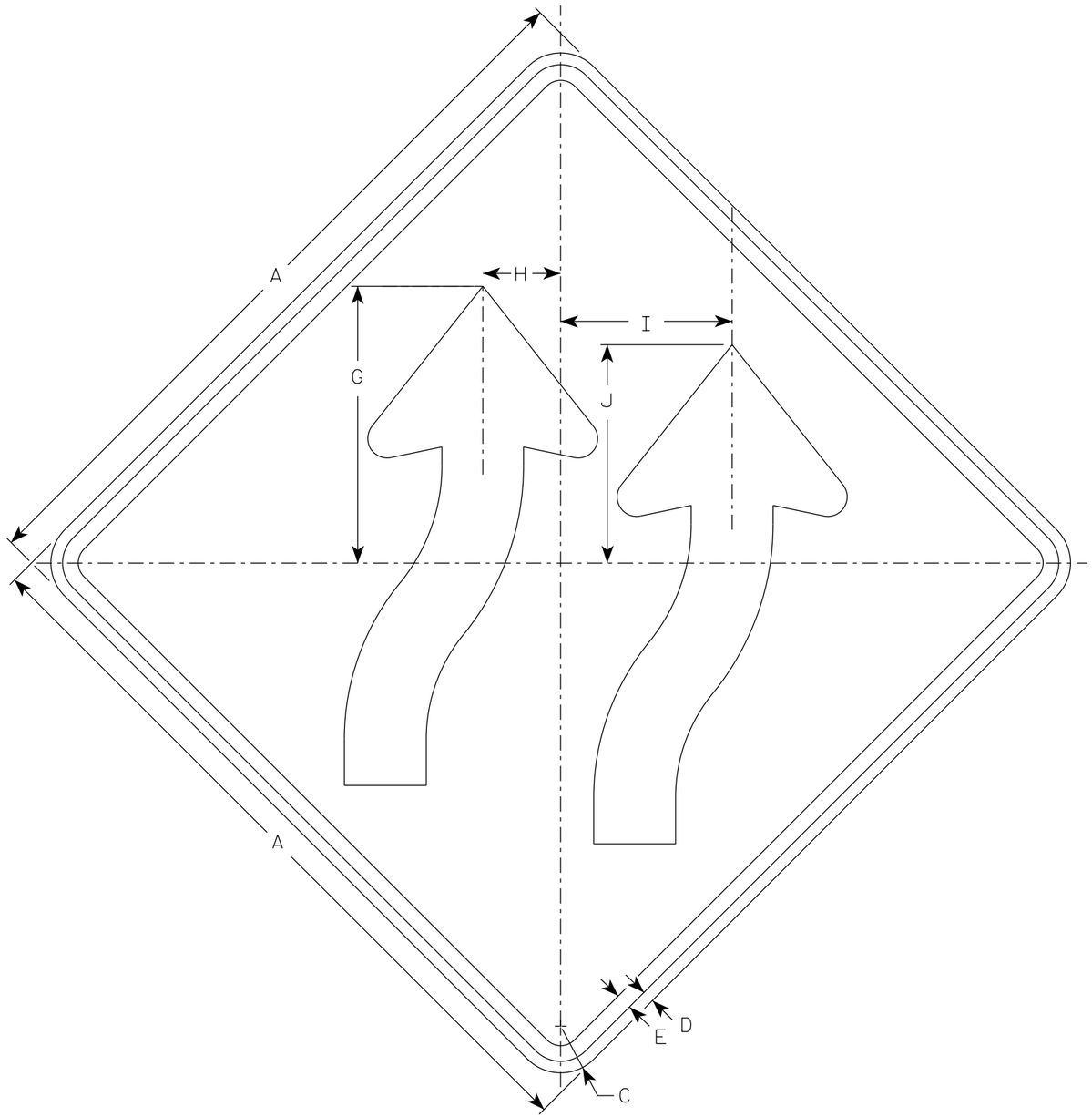
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/16/2024 PLATE NO. W21-5B.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 41 E

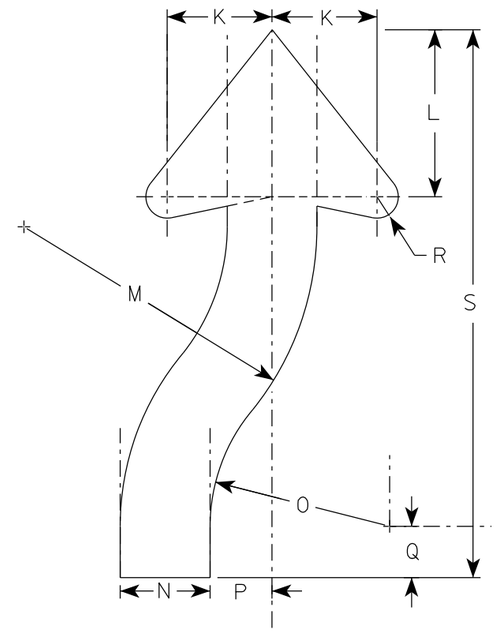
7



W01-4BR

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4BL is the same as W014-BR exept arrows are reversed along the vertical centerline



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4		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		3	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		3	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		3	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		3	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		3	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

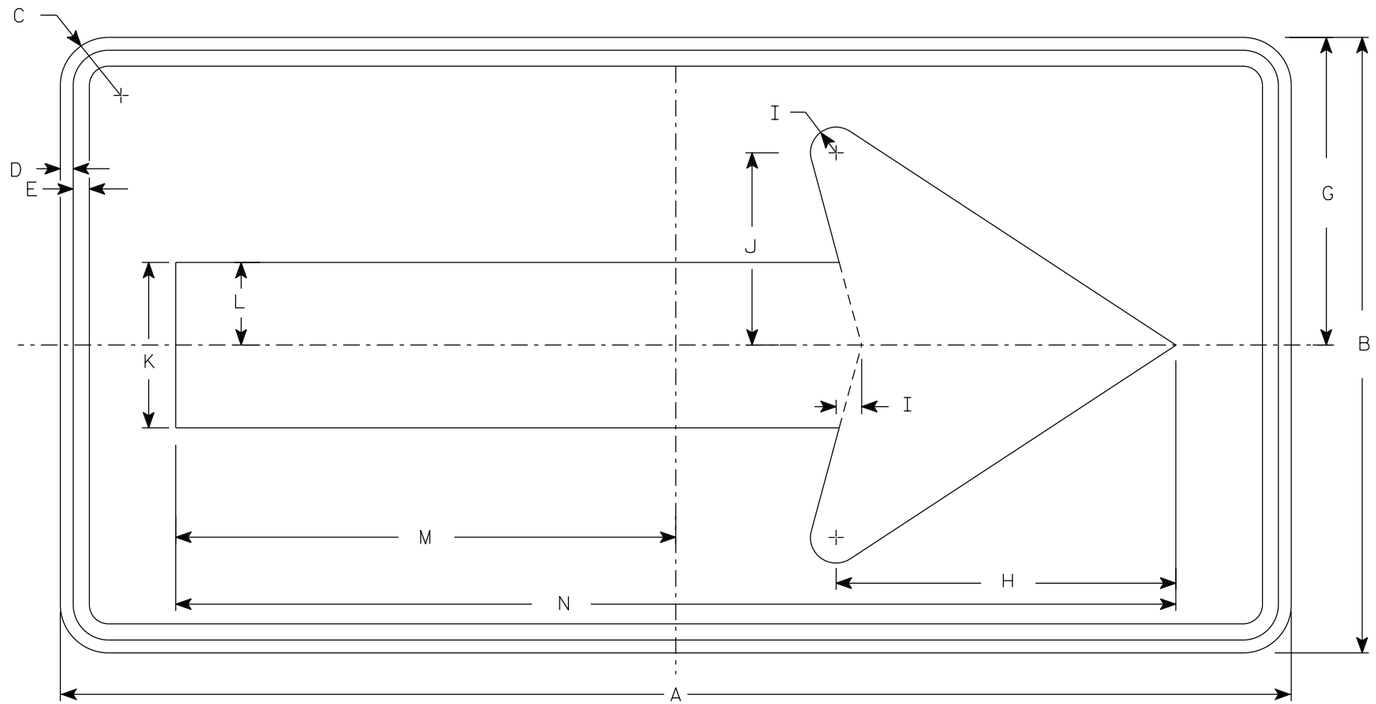
STANDARD SIGN
W01-4B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-4B.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



WO1-6

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

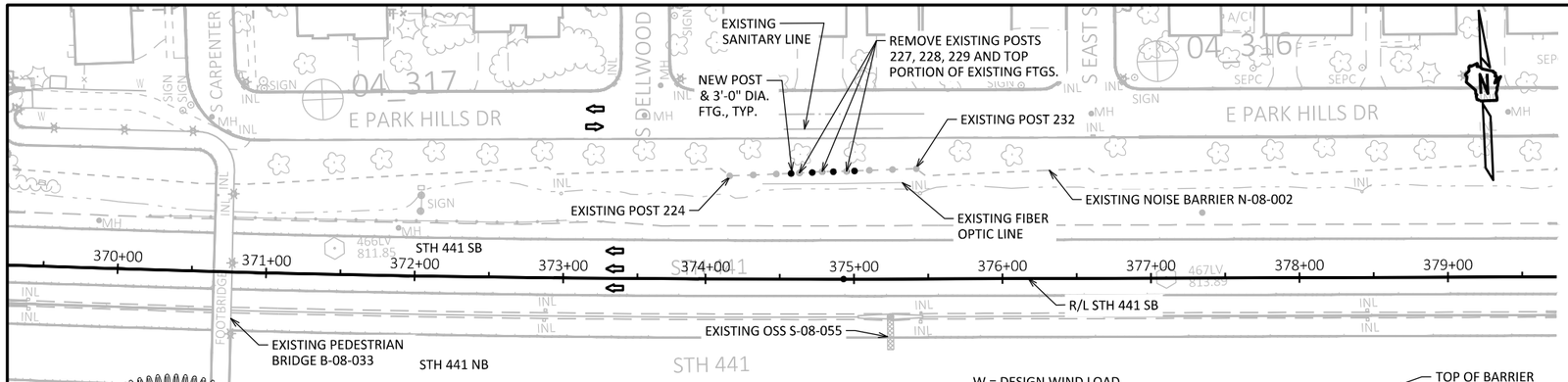
STANDARD SIGN
WO1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

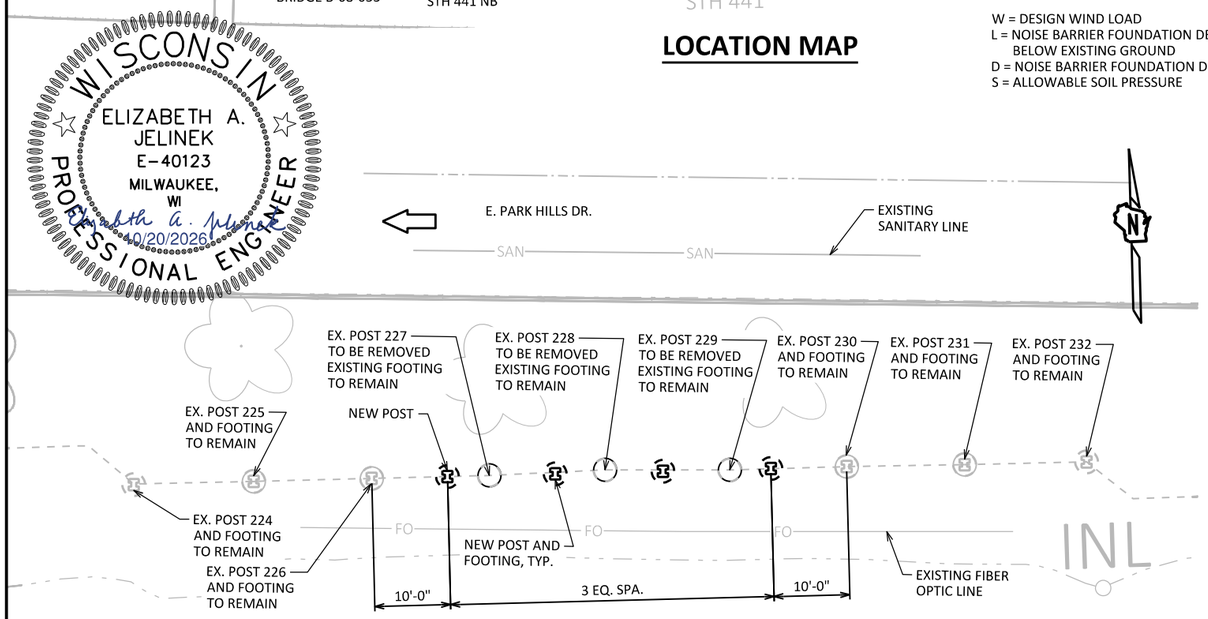
DATE 1/24/2024 PLATE NO. WO1-6.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

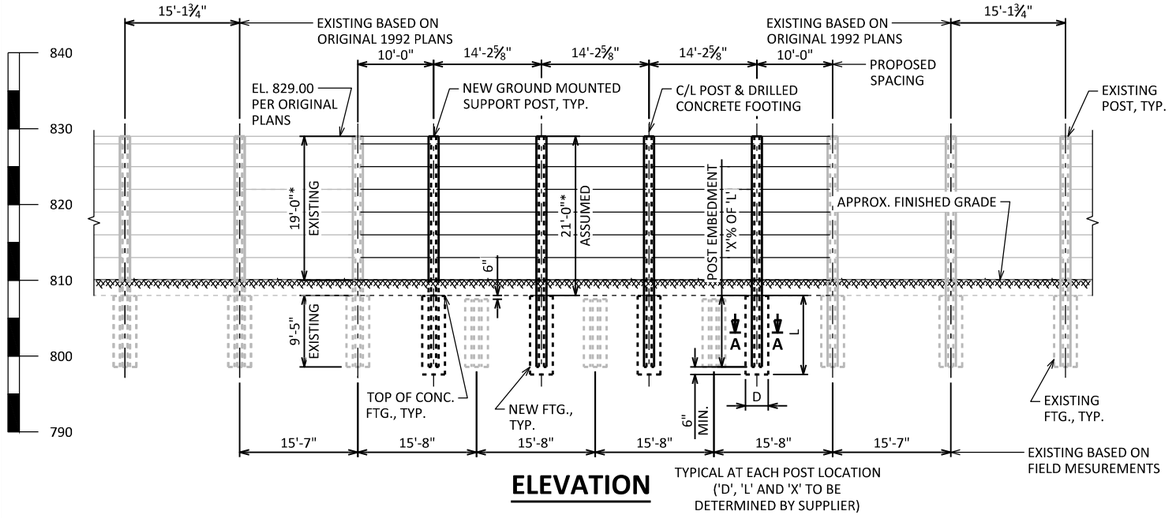


LOCATION MAP

W = DESIGN WIND LOAD
L = NOISE BARRIER FOUNDATION DEPTH BELOW EXISTING GROUND
D = NOISE BARRIER FOUNDATION DIAMETER
S = ALLOWABLE SOIL PRESSURE

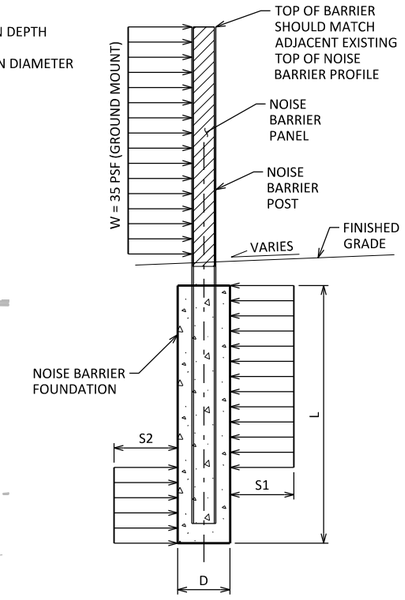


PLAN VIEW - REPAIR LOCATION



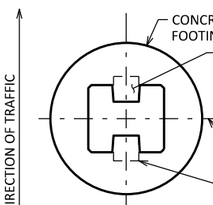
ELEVATION

TYPICAL AT EACH POST LOCATION ('D', 'L' AND 'X' TO BE DETERMINED BY SUPPLIER)



NOISE BARRIER LOADING DIAGRAM

(NOT TO SCALE)



SECTION A-A

(NOT TO SCALE)

LIST OF DRAWINGS:

1. GENERAL PLAN & ELEVATION
2. EXISTING ELEVATION (POSTS 222-233)
3. FOOTING & PANEL DETAILS
4. AESTHETIC DETAILS

STRUCTURE DESIGN CONTACTS

BRIDGE OFFICE:
AARON BONK (608) 261-0261
CONSULTANT:
ELIZABETH JELINEK (414) 410-6732

LEGEND

TRAFFIC DIRECTION

* EXPOSED HEIGHT VERIFIED. BURIED DIMENSION ARE CONSIDERED APPROXIMATE AND CONTRACTOR SHALL VERIFY BEFORE PROCEEDING WITH WORK INCLUDING PANEL FABRICATION.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
SPV.0165	NOISE BARRIERS DOUBLE-SIDED SOUND ABSORPTIVE SPECIAL N-08-002	SF	1190

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

PLANS, ELEVATIONS AND DETAILS SHOWN ARE INTENDED TO INDICATE LOCATION, LENGTHS, HEIGHTS AND DETAILS COMMON TO THE SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE NOISE BARRIER IS TO BE DESIGNED PER THE ORIGINAL PLANS DATED 1992.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR IN FOOTINGS UNLESS OTHERWISE SHOWN OR NOTED.

THE NOISE BARRIER PANELS SHALL HAVE NOISE BARRIER ABSORPTIVE FACING BONDED TO THE CONCRETE CORE AS SHOWN ON THE DRAWINGS AND AS SPECIFIED IN THE SPECIAL PROVISIONS.

THE NOISE BARRIER PANELS AND PRECAST POSTS SHALL BE PROVIDED WITH SUITABLE LIFTING DEVICES FOR HANDLING AND ERECTING.

THE TOP OF PANEL ELEVATION CALLED OUT ON THE ORIGINAL PLANS DATED 1992 IS THE TOP PAY LIMIT FOR THE BID ITEM "NOISE BARRIERS DOUBLE-SIDED SOUND ABSORPTIVE SPECIAL N-08-002". NOISE BARRIER PLACED ABOVE THIS ELEVATION WILL NOT BE MEASURED FOR PAYMENT.

THE APPROXIMATE FINISHED GRADE LINE ALONG THE PANELS WHICH IS ASSUMED TO BE 2'-0" ABOVE PROPOSED TOP OF FOOTING IS THE BOTTOM PAY LIMIT FOR THE BID ITEM "NOISE BARRIERS DOUBLE-SIDED SOUND ABSORPTIVE SPECIAL N-08-002". NOISE BARRIER PLACED BELOW THIS ELEVATION WILL NOT BE MEASURED FOR PAYMENT.

REPLACEMENT PORTIONS OF THE NOISE BARRIER SHALL BE DESIGNED IN ACCORDANCE WITH THE CURRENT EDITION OF "AASHTO LRFD BRIDGE DESIGN SPECIFCATIONS", PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO).

THE FOLLOWING DESIGN PRESSURES SHALL BE USED IN ACCORDANCE WITH THE SPECIAL PROVISIONS:
35 P.S.F. FOR GROUND MOUNTED BARRIERS

REINFORCING STEEL IN THE CONCRETE CORE OF THE NOISE BARRIER PANELS SHALL HAVE A MINIMUM CLEARANCE OF 1-INCH. THE CONCRETE CORE SHALL BE DESIGNED TO RESIST THE LOADS WITHOUT CONSIDERING ANY COMPOSITE ACTION FROM OTHER MATERIAL IN THE PANEL.

BOTTOM OF NOISE BARRIER PANELS SHALL BE DESIGNED TO SUPPORT THE DEAD LOAD (WEIGHT) OF THE PANELS DIRECTLY ABOVE IT AND ITS OWN DEAD LOAD. THE DEAD LOAD SHALL BE DISTRIBUTED UNIFORMLY ASSUMING SIMPLE BEAM ACTION WITH SUPPORTS AT THE POSTS. BOTTOM PANELS SHALL HAVE A MINIMUM AMOUNT OF PERIMETER REINFORCEMENT OF A #4 BAR WHICH SHALL BE CONTINUOUS AROUND THE CORNERS.

A COMPRESSIBLE BEARING PAD OF 1/4" THICKNESS SHALL BE PROVIDED BETWEEN THE FOUNDATION AND THE BOTTOM PANELS. THE BEARING PADS SHALL BE PREFORMED EPDM RUBBER CONFORMING TO ASTM D-2000, GRADE 2, TYPE A, CLASS A WITH A MINIMUM DUROMETER HARDNESS OF 80. BEARING SHALL BE INCIDENTAL TO THE BID ITEM "NOISE BARRIERS DOUBLE-SIDED SOUND ABSORPTIVE SPECIAL N-08-002".

INCLUDE THE COST OF THE PATTERNED SURFACE TREATMENT, REVEALS, COLORING/STAINING OF PANELS AND POSTS UNDER THE BID ITEM "NOISE BARRIERS DOUBLE-SIDED SOUND ABSORPTIVE SPECIAL N-08-002".

INSTALL FREE DRAINING GRANULAR MATERIAL ALONG THE ENTIRE LENGTH OF REPLACEMENT PANELS AT THE BOTTOM OF NOISE BARRIERS AS REQUIRED TO FILL GAPS UNDER THE NOISE BARRIER PANEL. FREE DRAINING GRANULAR MATERIAL IS INCIDENTAL TO THE BID ITEM "NOISE BARRIERS DOUBLE-SIDED SOUND ABSORPTIVE SPECIAL N-08-002".

ALL CONCRETE MASONRY FOR NOISE BARRIER FOUNDATIONS IS SUBJECT TO THE QMP REQUIREMENTS FOR CLASS II ANCILLARY CONCRETE. PERFORM QMP TESTING OF CONCRETE MASONRY FOR NOISE BARRIER FOUNDATIONS IN ACCORDANCE WITH SECTION 716 OF THE STANDARD SPECIFICATIONS FOR CLASS II ANCILLARY CONCRETE. QMP TESTING IS INCIDENTAL TO THE BID ITEM "NOISE BARRIERS DOUBLE-SIDED SOUND ABSORPTIVE SPECIAL N-08-002".

HOTLINE ALL UTILITIES. IN AREAS WHERE EXISTING UTILITIES ARE WITHIN 3 FEET OF THE PROPOSED WALL, EXPOSE EXISTING UTILITIES PRIOR TO EXCAVATION.

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE NOISE BARRIER IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE NOISE BARRIER MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCIDENTAL TO THE BID ITEM "NOISE BARRIERS DOUBLE-SIDED SOUND ABSORPTIVE SPECIAL N-08-002".

STATE PROJECT NUMBER
4685-11-70

WISCONSIN PROFESSIONAL ENGINEER
ELIZABETH A. JELINEK
E-40123
MILWAUKEE, WI
10/20/2026

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
HNTB
250 E WISCONSIN AVE #2000
MILWAUKEE, WI 53202
(414) 359-2300

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED EMK 10/21/26
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE N-08-002

NOISE BARRIER ALONG STH 441 SB

COUNTY	CITY
CALUMET	APPLETON

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	EAJ	DESIGN CK'D	HDA	DRAWN BY	EAJ	PLANS CK'D	HDA

GENERAL PLAN & ELEVATION

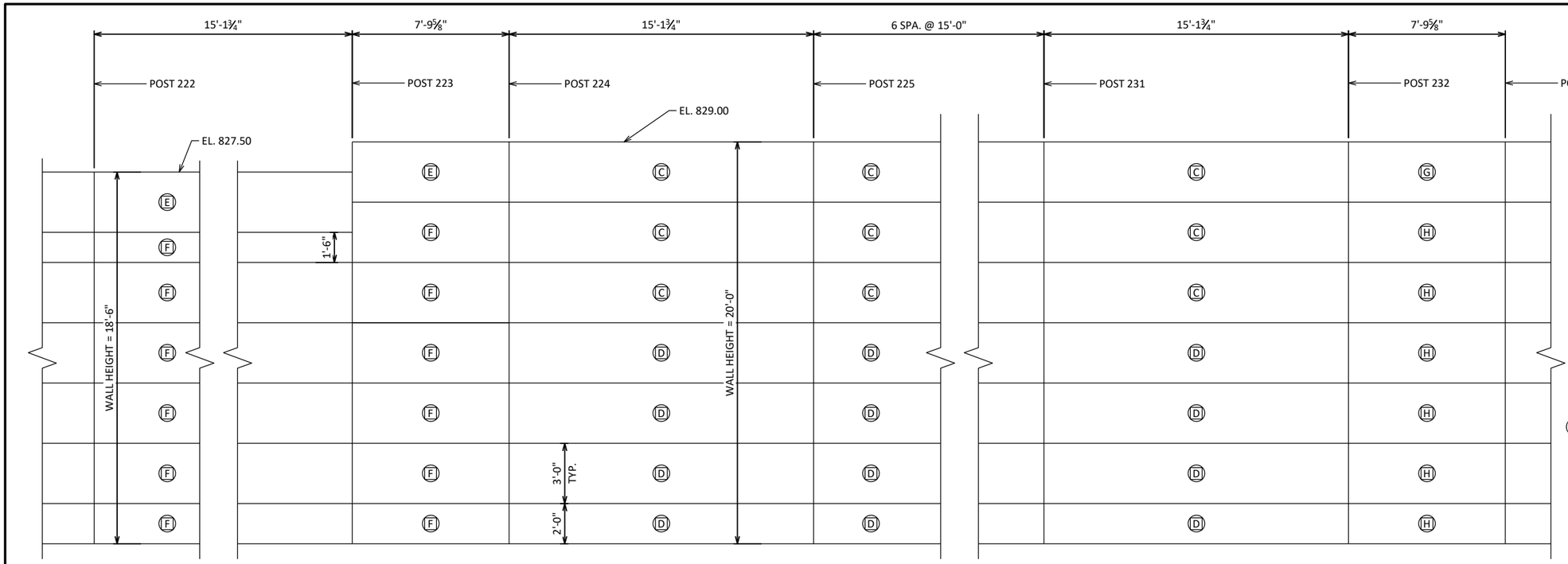
SHEET 1 OF 4
44

8

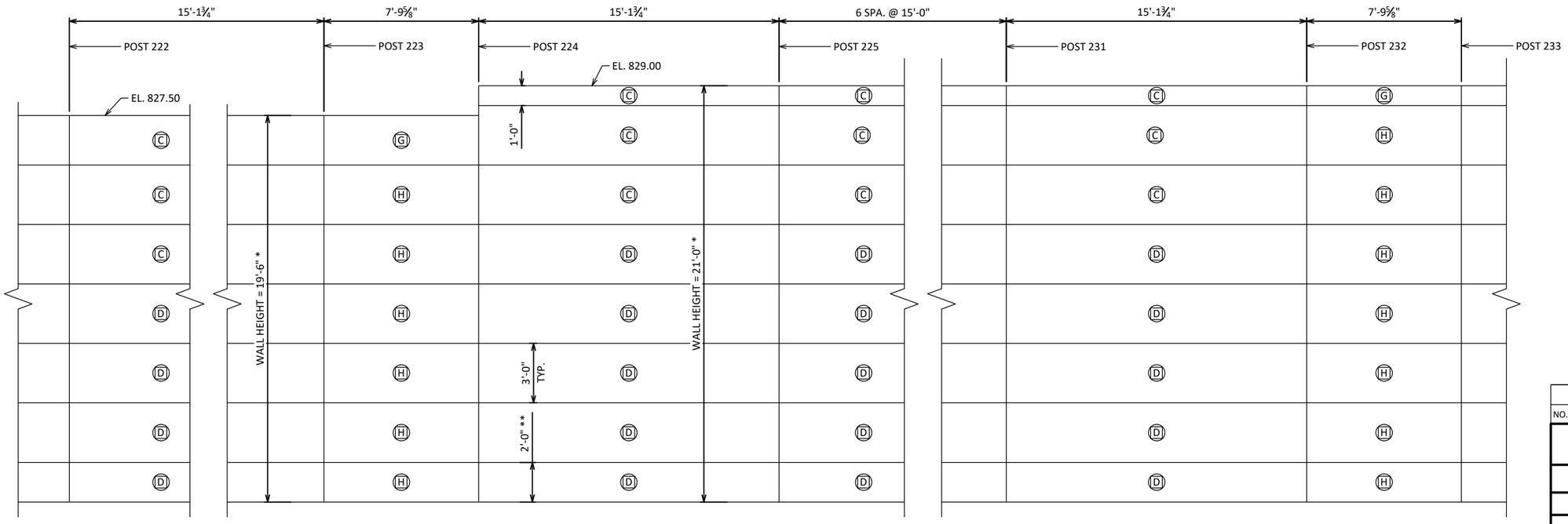
8

FILE NAME : C:\USERS\EJELINEK\DC\ACCDOCS\HNTB CORPORATION\83139 - WO6 - 441 EXPEDITED NOISE WALL REPAIR\PROJECT FILES\46851100\SHEETS\STRUCTURES\N002_080101_GP.DWG
LAYOUT NAME - GP&E
PLOT DATE : 10/20/2026 11:57 AM

STATE PROJECT NUMBER
4685-11-70



ELEVATION & PATTERNS PER 1992 PLANS



ELEVATION & PATTERNS OBSERVED EXISTING CONDITIONS

NOTES

POST LAYOUTS SHOWN ARE BASED ON 1992 PLANS.

DIMENSION OF PANELS TO BE FIELD VERIFIED.

SEE "GENERAL PLAN & ELEVATION" SHEET FOR NEW POST LAYOUT AND, INCLUDING AN ADDITIONAL POST.

PATTERN LAYOUT OF REPLACEMENT PANELS TO MATCH EXISTING PANEL PATTERN LAYOUT OF PANELS BETWEEN POSTS 225 THRU 231.

EXISTING POSTS 227, 228 AND 229 TO BE REPLACED.

LEGEND

(X) PANEL PATTERN, SEE "AESTHETIC DETAILS" SHEET FOR PANEL PATTERN DETAILS FOR "C" AND "D". FOR ALL OTHER PANEL PATTERNS REFER TO THE ORIGINAL 1992 PLANS.

* EXPOSED HEIGHT VERIFIED. BURIED DIMENSION ARE CONSIDERED APPROXIMATE AND CONTRACTOR SHALL VERIFY BEFORE PROCEEDING WITH WORK INCLUDING PANEL FABRICATION.

** BURIED PANEL DIMENSION ASSUMED BASED ON THE ORIGINAL PLANS. DIMENSION IS CONSIDERED APPROXIMATE AND CONTRACTOR SHALL VERIFY BEFORE PROCEEDING WITH WORK INCLUDING PANEL FABRICATION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE N-08-002

DRAWN BY EAJ | PLANS CK'D HDA

EXISTING ELEVATION (POSTS 222-233)

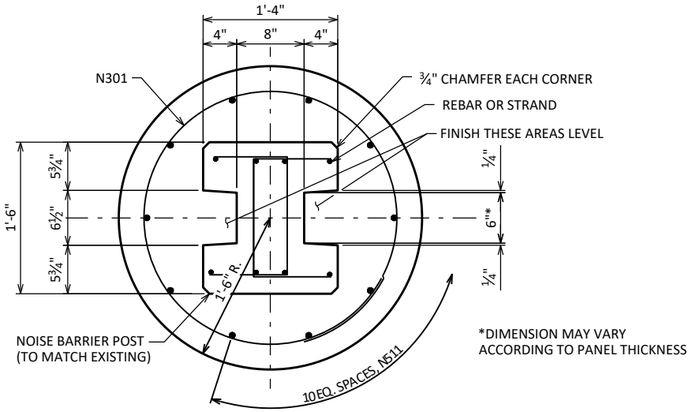
SHEET 2
45

8

8

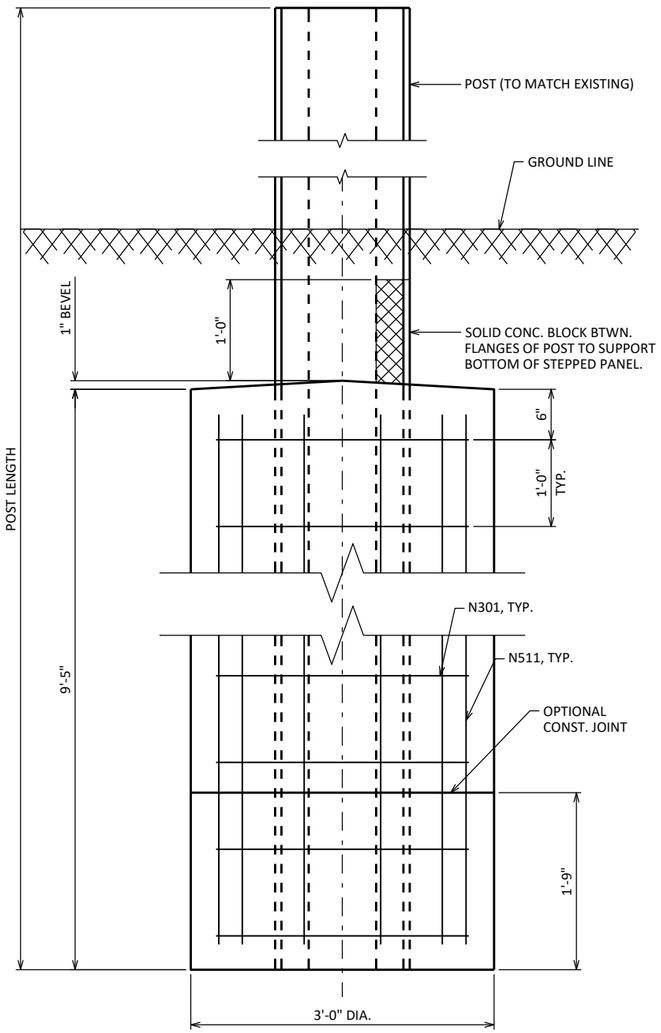
STATE PROJECT NUMBER

4685-11-70

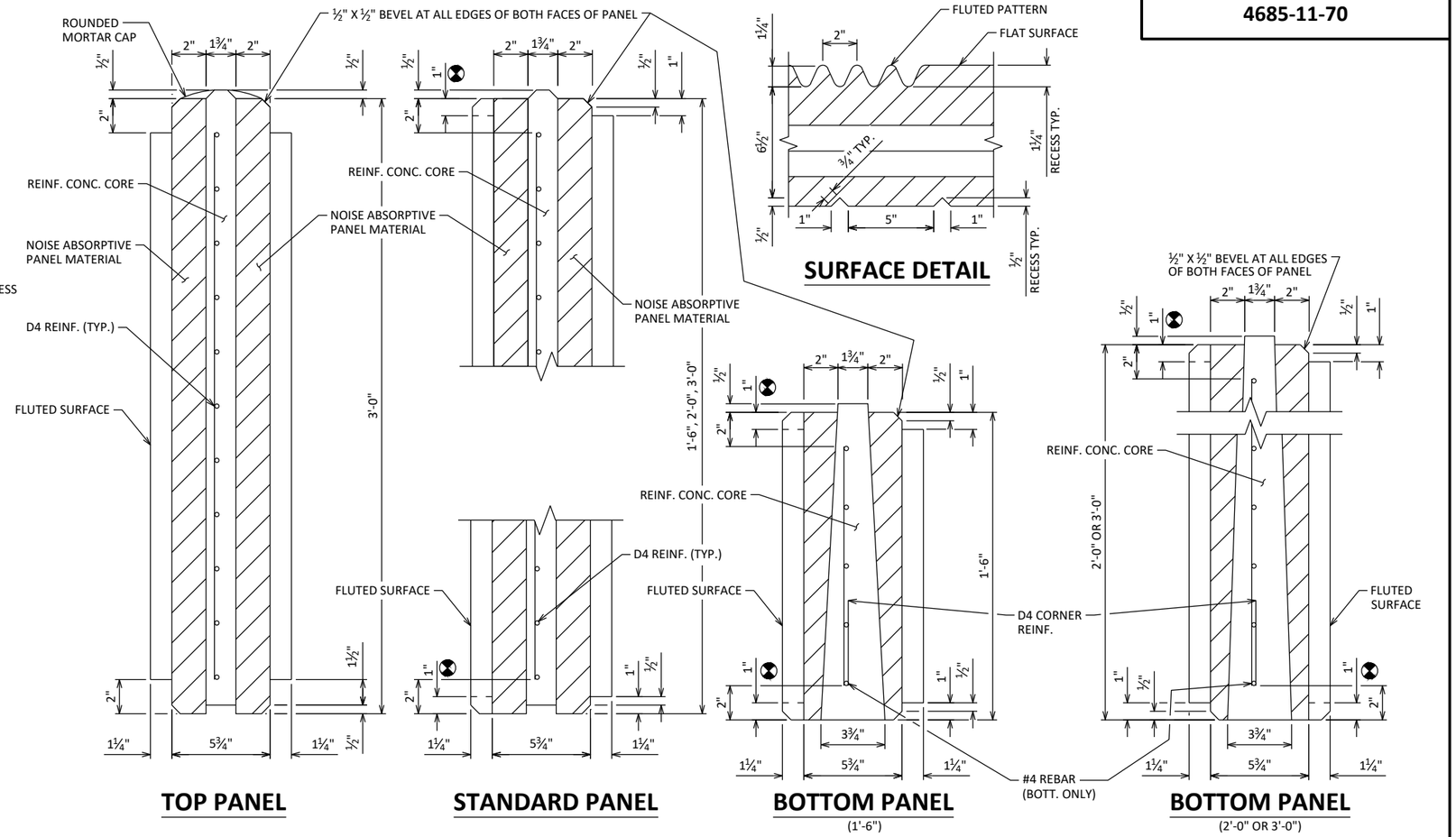


*DIMENSION MAY VARY ACCORDING TO PANEL THICKNESS

SECTION THRU FOOTING & POST



FOOTING ELEVATION



TOP PANEL

STANDARD PANEL

BOTTOM PANEL (1'-6")

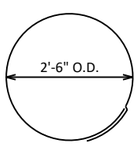
BOTTOM PANEL (2'-0" OR 3'-0")

SURFACE DETAIL

NOISE BARRIER PANEL DETAILS

(PER 1992 ORIGINAL PLANS)

1" RECESS AT PANEL F



N301

BILL OF BARS

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
N301		40	8'-10"	X		FOOTING HOOPS
N511		40	8'-10"			VERT. 9'-5" DEEP FOOTINGS

NOTES:

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR DIMENSIONS ARE OUT TO OUT OF BAR.

NOTES

PANEL AND FOOTING DETAILS SHOWN ARE BASED ON ORIGINAL 1992 PLANS.

PER ORIGINAL 1992 NOISE BARRIER PLANS, PANELS ARE DOUBLE-SIDED SOUND ABSORPTIVE.

POST DETAILS SHOWN MATCH 1992 SHOP DRAWINGS DETAILS.

OBSERVED EXISTING PANEL CONDITIONS SHOW PANEL DIMENSIONS NOT SHOWN ON ORIGINAL 1992 PLANS. PANEL DIMENSIONS TO BE FIELD VERIFIED BEFORE FABRICATION.

DETAILS FROM ORIGINAL 1992 PLANS - FOR INFORMATION ONLY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE N-08-002

DRAWN BY EAJ | PLANS CK'D HDA

FOOTING & PANEL DETAILS

SHEET 3
46

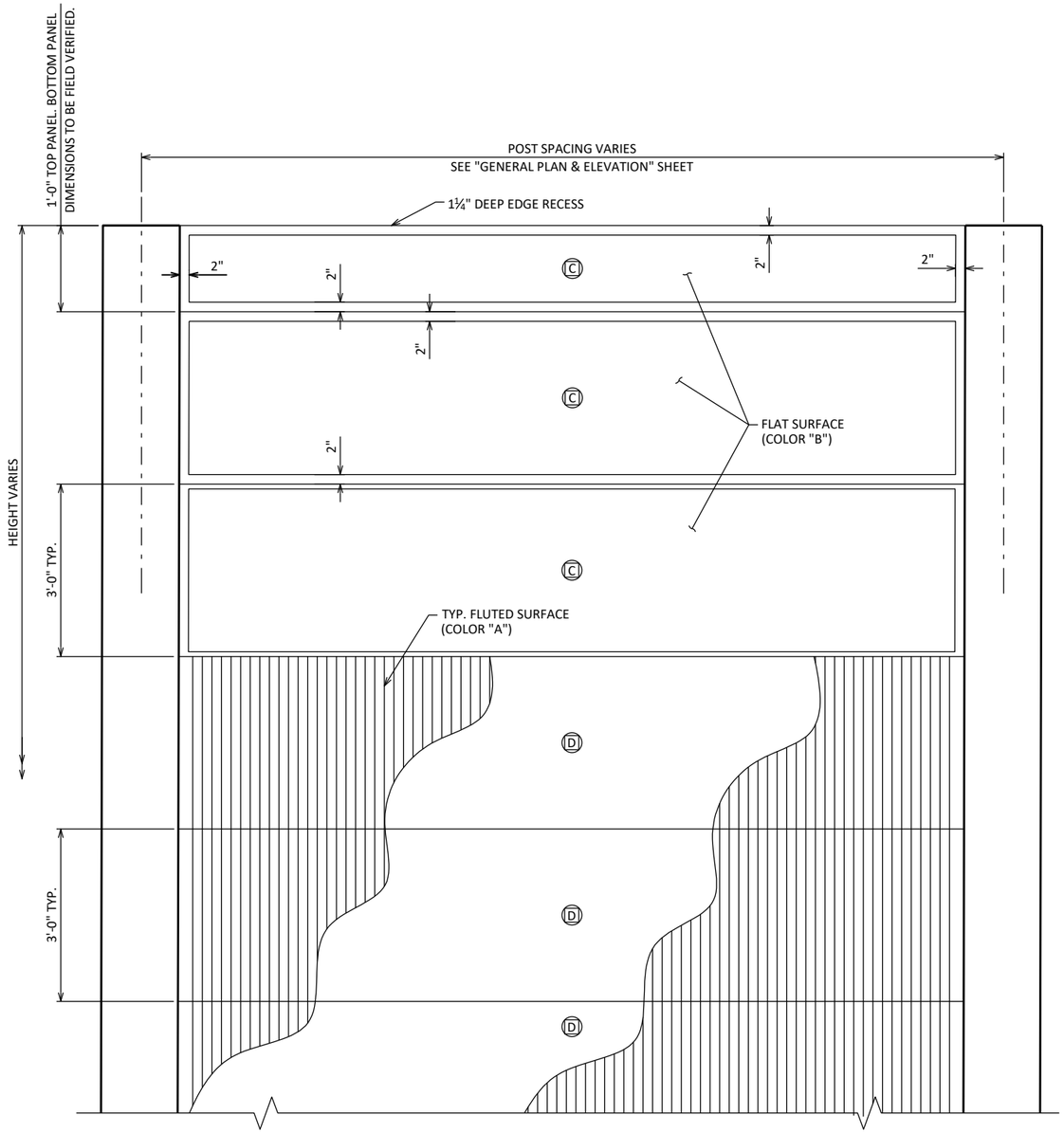
8

8

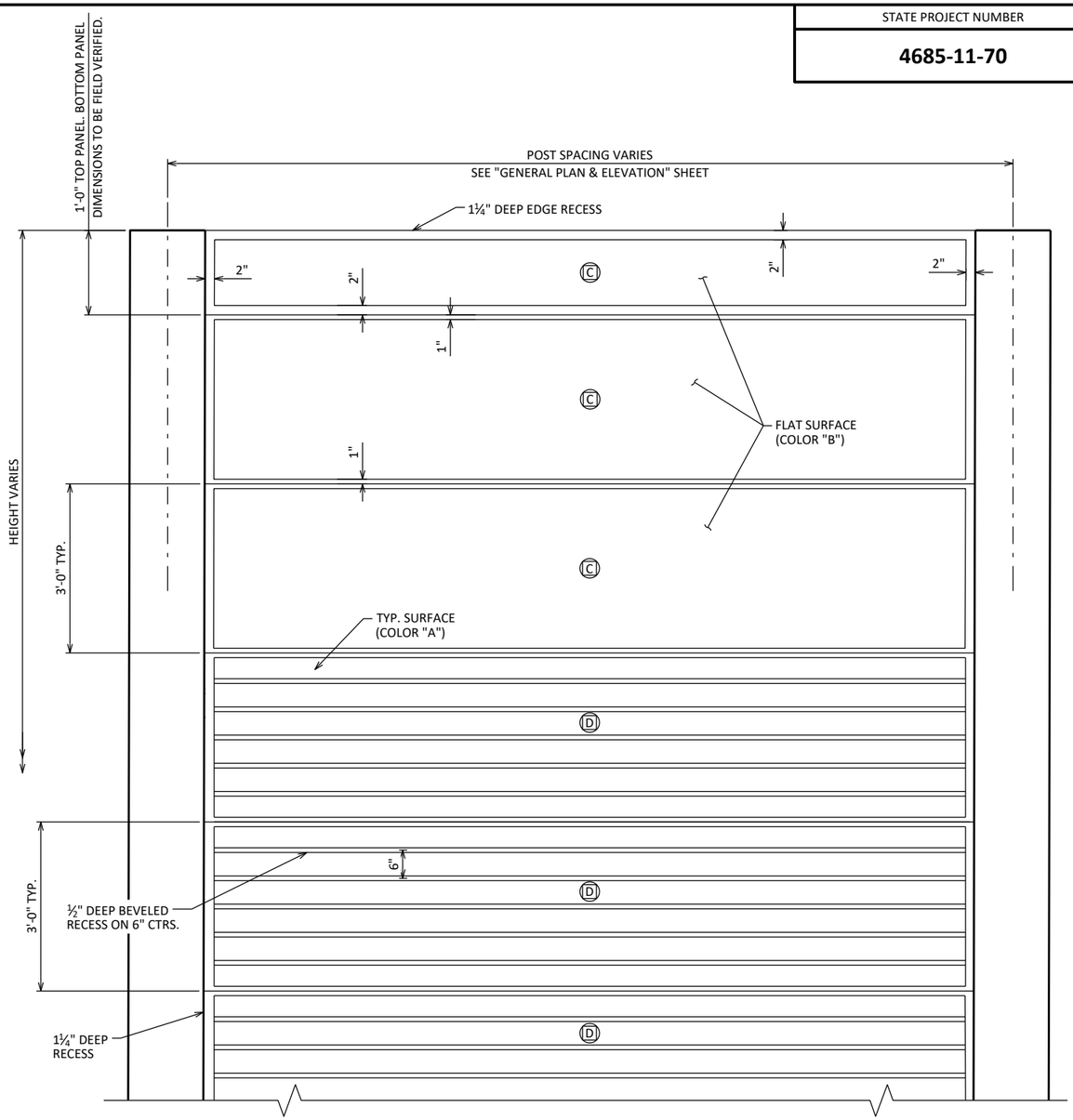
FILE NAME : C:\USERS\EJELINEK\DC\ACCDOCS\HNTB CORPORATION\83139 - WO6 - 441 EXPEDITED NOISE WALL REPAIR\PROJECT FILES\46851100\SHEETS\STRUCTURES\N002_080103_DET.DWG PLOT DATE : 10/19/2026 11:54 AM
LAYOUT NAME - FTG_PANEL_DET

STATE PROJECT NUMBER

4685-11-70



ELEVATION VIEW - FREEWAY SIDE



ELEVATION VIEW - RESIDENTIAL SIDE

8

8

COLORS

1992 PLAN NOTED COLORS SHALL BE IN ACCORDANCE WITH THE 1989 FEDERAL 595B COLORS.

COLOR "A" #30219 PER 1992 PLANS.

COLOR "B" #36521 PER 1992 PLANS.

NOTES

SEE "SURFACE DETAIL" ON "FOOTING & PANEL DETAILS" SHEET FOR DETAILS OF FLUTED SURFACE AND ½" DEEP BEVELED RECESSES.

PROVIDE NOISE BARRIER POSTS AND PANELS WITH COLORS THAT CLOSELY REPLICATE THE COLORS SPECIFIED ON THE 1992 NOISE BARRIER PLANS. PROPOSED COLOR SELECTIONS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

PANEL DETAILS FOR PANELS E, F, G & H, CALLED OUT ON SHEET 2 (EXISTING PANELS TO REMAIN), NOT SHOWN.

PANEL DIMENSIONS AND AESTHETIC DETAILS TO BE FIELD VERIFIED.

LEGEND

(X) PANEL PATTERN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE N-08-002

DRAWN BY EAJ | PLANS CK'D HDA

AESTHETIC DETAILS

SHEET 4
47

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov