WKE

PROJECT ID: 2565-02-71

WITH:

COUNTY: MILWAUKEE

Mar 14, 2023

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 = 230

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2565-02-71	WISC 2023284	1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

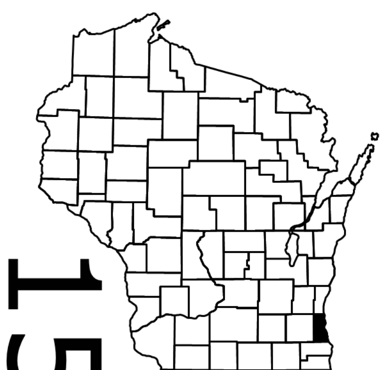
C GLENDALE, N. GREEN BAY AVE.

INTERSECTION WITH CTH PP

STH 57
MILWAUKEE COUNTY

STATE PROJECT NUMBER
2565-02-71

15



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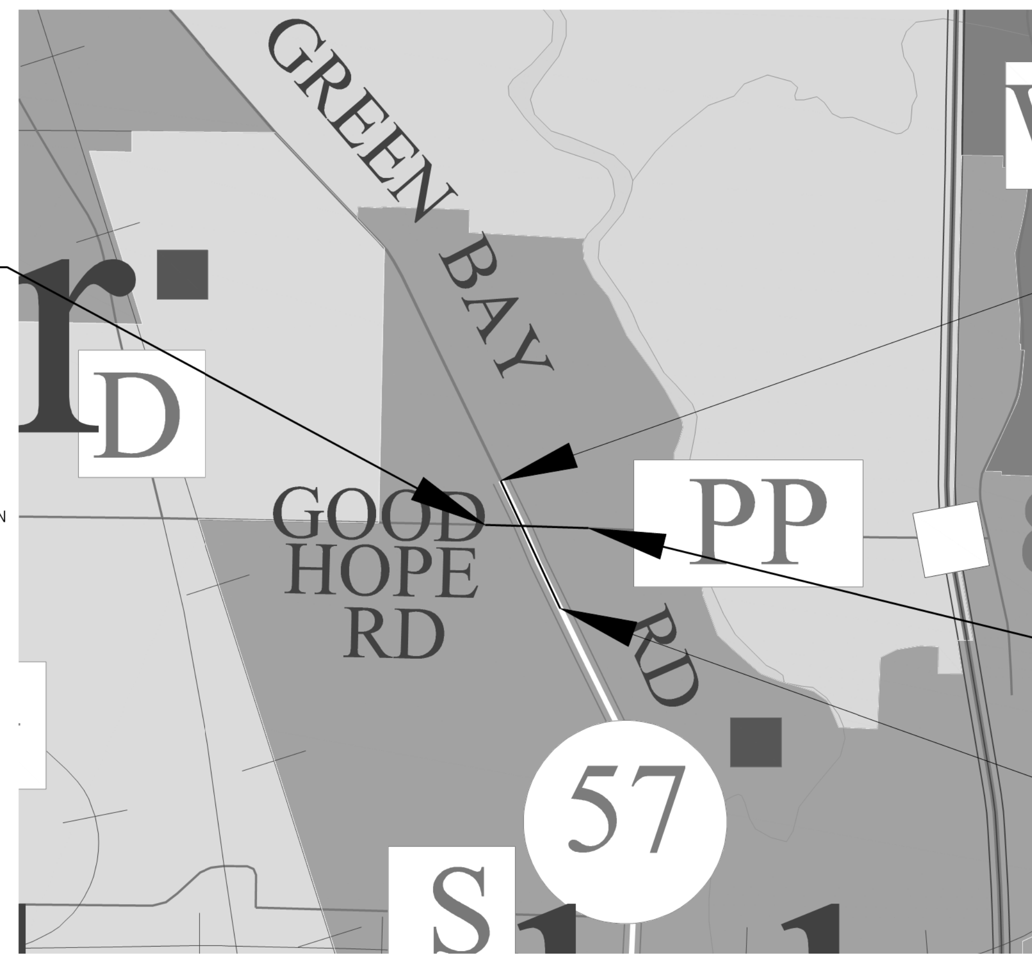


BEGIN CONSTRUCTION
STA 214+54.91

END PROJECT
STA 115+90.00

T-8-N

END CONSTRUCTION
STA 224+15.00

BEGIN PROJECT
STA 108+90.54
X=2,550,439.136
Y=424,915.355

R-21-W R-22-W

LAYOUT

SCALE 0 0.5 MI

TOTAL NET LENGTH OF CENTERLINE = 0.132

DESIGN DESIGNATION

A.A.D.T.	2019	=	10,900 - 29,600
A.A.D.T.	N/A	=	N/A
D.H.V.		=	N/A
D.D.		=	N/A
T.		=	N/A
DESIGN SPEED		=	45 M.P.H.
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'E8')
EXISTING CULVERT
PROPOSED CULVERT (Box or Pipe)
COMBUSTIBLE FLUIDS (CAUTION)
MARSH AREA
WOODED OR SHRUB AREA

PROFILE

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

UTILITIES

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

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN STATE PLANE COORDINATES, SOUTH ZONE, NAD27, IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO NGVD29.

ORIGINAL PLANS PREPARED BY

Milwaukee County Department of Transportation

WISCONSIN
DANIEL M. MURPHY
E-42735
MILWAUKEE, WIS.
PROFESSIONAL ENGINEER

DATE: 10/25/2022 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	BAXTER WOODMAN
Designer	MILWAUKEE COUNTY
Project Manager	ROBERT BELLIN
Regional Examiner	
Regional Supervisor	

APPROVED FOR THE DEPARTMENT

DATE: 11/1/2022 Robert A. Bellin (Signature)

E

GENERAL NOTES

REMOVALS
- DO NOT REMOVE TREES OR SHRUBS WITHOUT THE CONSENT OF THE ENGINEER.

EXCAVATION/GRADING
- EBS IS NOT USED TO BALANCE EARTHWORK. EBS IS MEASURED AND PAID FOR AS EXCAVATION COMMON. NEED, LOCATION, DEPTH AND BACKFILL MATERIAL FOR EBS WILL BE DETERMINED AND APPROVED BY THE ENGINEER.

UTILITIES
- 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.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF EXISTING UTILITIES AND TO NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES.

EROSION CONTROL
- EROSION CONTROL ITEMS SHOWN ARE AT SUGGESTED LOCATIONS AND THE EXACT LOCATIONS/DIMENSIONS WILL BE DETERMINED BY THE ENGINEER. MAINTAIN ALL EROSION CONTROL MEASURES UNTIL SUCH TIME THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.
- TOPSOIL, SEED, FERTILIZE AND WATER OR SOD AND WATER DISTURBED AREAS WITHIN THE RIGHT OF WAY.
- TOPSOIL SHOULD BE FREE OF DEBRIS SUCH AS LARGE ROOTS, STICKS, WEEDS, BRUSH, STONES, LITTER AND WASTE PRODUCTS IN ACCORDANCE WITH THE STANDARD SPECIFICATION. REMOVE ANY DEBRIS AND BREAKDOWN ALL CLODS AND LUMPS THAT WILL HINDER PLANT GROWTH OR ROOT ESTABLISHMENT. ENGINEER HAS THE AUTHORITY TO REJECT TOPSOIL NOT CONFORMING TO THE STANDARD SPECIFICATION.

STORM SEWER/DRAINAGE
- COST OF CONNECTING STORM SEWER OR CULVERT PIPE TO EXISTING STRUCTURES IS INCIDENTAL TO THE COST OF THE PIPE.
- EXISTING ELEVATIONS OF STORM SEWER CONNECTIONS SHOWN ON THE PLANS ARE APPROXIMATE. FIELD ADJUSTMENTS MAY BE NECESSARY.
- UNCOVER AND CHECK ELEVATIONS OF EXISTING UTILITIES WHERE THEY CROSS PROPOSED STORM SEWER/CULVERT PIPES. ADJUSTMENT OF UTILITY OR REVISION OF SEWER/CULVERT ELEVATION MAY BE REQUIRED TO RESOLVE CONFLICT. THE COST OF UNCOVERING AND CHECKING UTILITIES IS NOT INCIDENTAL TO THE COST OF THE PIPE AND WILL BE PAID FOR UNDER A SEPERATE BID ITEM.

SIGNING/MARKING
- DO NOT REMOVE SIGNS WITHOUT THE CONSENT OF THE ENGINEER.

MISCELLANEOUS
- ADJUST TRAFFIC CONTROL DEVICES TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- CONSTRUCT TRANSVERSE JOINTS IN THE CONCRETE SIDEWALK AT INTERVALS EQUAL TO THE WIDTH OF THE SIDEWALK UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES WITHIN THE PROJECT LIMITS AT ALL TIMES.
- STAMP ALL ENDS OF MONOLITHIC CONCRETE SURFACES WITH A STAMP BEARING CONTRACTOR'S NAME AND YEAR OF CONSTRUCTION. ALL LETTERING SHALL BE 2-INCH. THE COST OF THIS WORK IS INCIDENTAL TO THE ASSOCIATED CONCRETE ITEM.
- DETAILS OF CONSTRUCTION NOT SHOWN IN THE PLANS SHALL CONFORM TO THE PERTINENT STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.
- RESTORE EXISTING DRIVEWAYS IN-KIND BEHIND THE APRON. EXACT LOCATION AND WIDTH WILL BE DETERMINED BY THE ENGINEER DURING CONSTRUCTION.
- CONTACT THE PROJECT ENGINEER AND THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION (SEWRPC), AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY PUBLIC SURVEY MONUMENT.

LIST OF STANDARD ABBREVIATIONS

ABUT	ABUTMENT
AEW	APRON ENDWALL
AGG	AGGREGATE
AH	AHEAD
ASPH	ASPHALT OR ASPHALTIC
BAD	BASE AGGREGATE DENSE
BK	BACK
BM	BENCHMARK
CABC	CRUSHED AGGREGATE BASE COURSE
CB	CATCH BASIN
CL or C/L	CENTER LINE
CONC	CONCRETE
CTH	COUNTY TRUNK HIGHWAY
C&G	CURB AND GUTTER
DWY	DRIVEWAY
EL or ELEV	ELEVATION
EBS	EXCAVATION BELOW SUBGRADE
HMA	HOT MIX ASPHALT
INL	INLET
INV	INVERT
LT	LEFT
MH	MANHOLE
MIS	METROPOLITAN INTERCEPTOR SEWER
PAVT	PAVEMENT
PLE	PERMANENT LIMITED EASEMENT
PT	POINT OF TANGENT
PCC	POINT OF COMPOUND CURVATURE
RL or R/L	REFERENCE LINE
R	RADIUS
RAB	ROUNDABOUT
REQD	REQUIRED
RT	RIGHT
R/W	RIGHT-OF-WAY
SE	SUPERELEVATION
SEC	SECTION
SDD	STANDARD DETAIL DRAWING
STH	STATE TRUNK HIGHWAY
STA	STATION
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
S/W	SIDEWALK
TLE	TEMPORARY LIMITED EASEMENT
VERT	VERTICAL
VC	VERTICAL CURVE
VCL	VERTICAL CURVE LENGTH
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY

UTILITIES

AT&T Wisconsin
2005 Pewaukee Rd
Waukesha, WI 53188
Attn: Mr. Robert Wieczorek
Phone: (262) 259-0266

City of Glendale – Sanitary & Water
5909 N. Milwaukee River Pkwy
Glendale, WI 53209
Attn: Mr. Charlie Imig
Phone: (414) 228-1746
c.imig@glendale-wi.gov

Everstream
324 E. Wisconsin Ave, Suite 730
Milwaukee, WI 53202
Attn: Shad Garcia
Phone: (414) 522-6685
sgarcia@everstream.net

Level 3 Communications LLC
19 W Fond du Lac St
Ripon, WI 54971
Attn: Mr. Thomas Dineen
Phone: (920) 748-2752
Mobile: (920) 246-7752
relocations@lumen.com

Midwest Fiber Networks LLC
Planning and Design Manager
6070 N. Flint Rd
Glendale, WI 53209
Attn: Mr. Cory Schmuki
Phone: (414) 459-3561
cschmuki@midwestfibernetworks.com

Milwaukee County Department of Transportation
Electrical Shop
10320 W. Watertown Plank Rd
Wauwatosa, WI 53226
Phone: (414) 257-6566

Spectrum
1320 N. Martin Luther King Dr.
Milwaukee, WI 53212
Attn: Mr. Charlie Brasile
Phone: (414) 908-4822
wis.engineering@charter.com

We Energies – Gas
500 S. 116th Street
West Allis, WI 53214
Attn: Jafar Amin
Phone: (414) 930-4348
jafar.amin@daarcorp.com

We Energies – Electric
200 Lakefront Parkway
Edwardsville, IL 62025
Attn: Mr. Kevin Lauterbach
Phone: (262) 305-7515
kevinlauterbach@utilitra.com

Wisconsin Department of Transportation– Communication Line
433 W. St Paul Ave, Suite 300
Milwaukee, WI 53203
Attn: Mr. John Mittelstadt
Phone: (608) 205-7859
john.mittelstadt@dot.wi.gov

STATE AGENCIES

Wisconsin Department of Natural Resources
Ms. Kristina Betzold
Environmental Analysis and Review Specialist
1027 W. St. Paul Ave.
Milwaukee, WI 53233
Phone: (414) 343-9346
Kristina.Betzold@wi.gov

Wisconsin Department of Transportation – Signals
141 NW Barstow St
Waukesha, WI 53188
Attn: Jarret Gates
Phone: (262) 548-5894
Jarrett.Gates@dot.wi.gov

Wisconsin Department of Transportation - Signal Operations
141 NW Barstow Street
Waukesha, WI 53187
Phone: (414) 750-2605

Wisconsin Department of Transportation - Electrical Field Unit
935 S. 60th Street
West Allis, WI 53214
Phone: (414) 266-1170

AGENCIES

City of Glendale
Mr. Charlie Imig
Director of Public Works
5909 N. Milwaukee River Pkwy
Glendale, WI 53209
Phone: (414) 228-1746
c.imig@glendale-wi.gov

Southeastern Wisconsin Regional Planning Commission (SEWRPC)
Mr. Rob Merry
W239 N1812 Rockwood Drive
P.O. Box 1607
Waukesha, WI 53187-1607
Phone: (262) 547-6722 Ext. 289
rmerry@sewrpc.org

WISDOT

Mr. Robert Bellin
Project Manager
141 NW Barstow St.
Waukesha, WI 53187
Phone:262-521-4405
Robert.Bellin@dot.wi.gov

ORDER OF SECTION 2 SHEETS

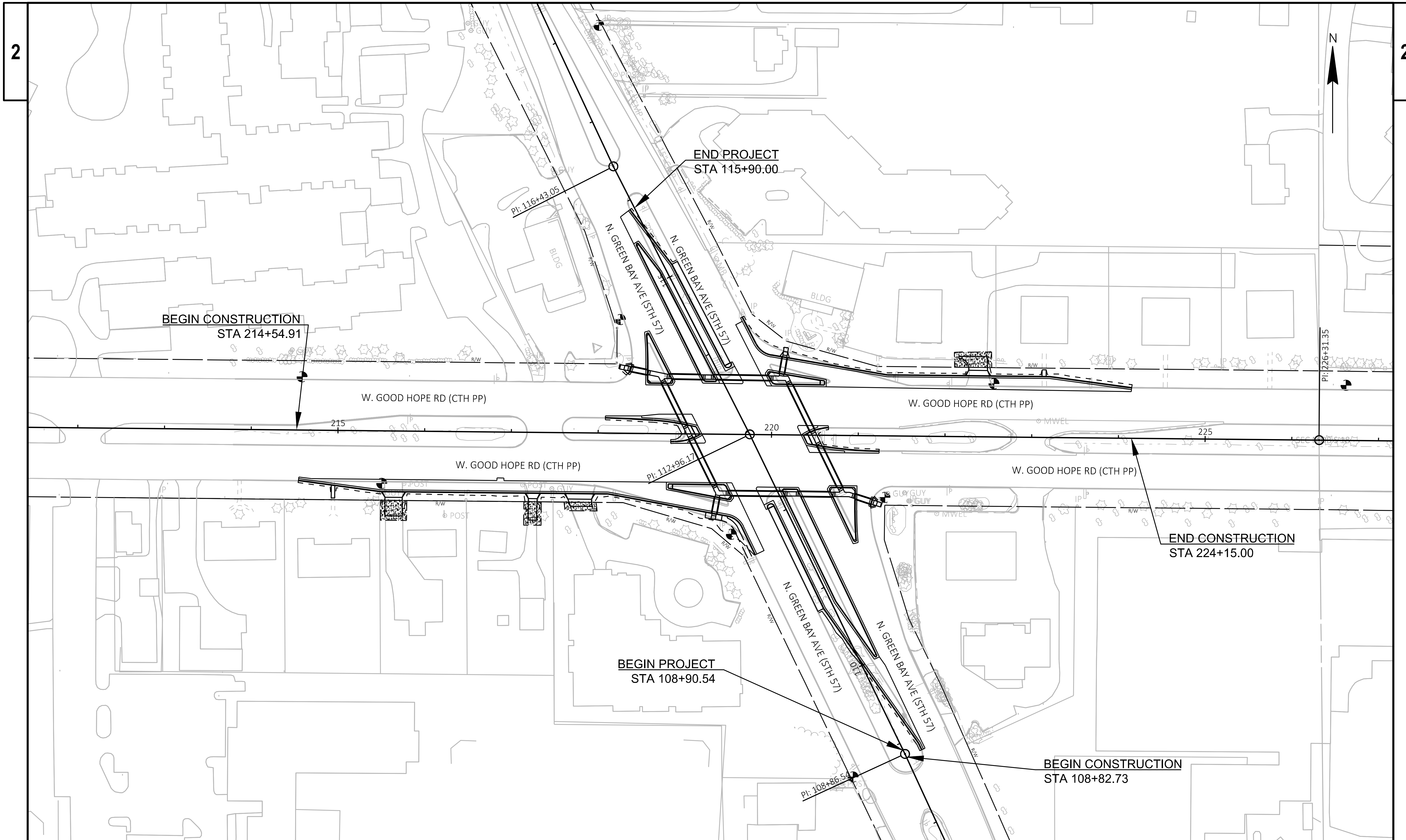
MILWAUKEE COUNTY

Ms. Andrea Weddle-Henning
Director of Transportation Engineering
10320 W. Watertown Plank Rd, 2nd Floor
Wauwatosa, WI 53226
Phone: (414) 257-5934
Andrea.Weddle-Henning@milwaukeecountywi.gov

Mr. Daniel Murphy
Traffic Engineer Manager
10320 W. Watertown Plank Rd, 2nd Floor
Wauwatosa, WI 53226
Phone: (414) 257-5942
Daniel.Murphy@milwaukeecountywi.gov

Mr. Eddie Sanitago
Highway Director
10320 W. Watertown Plank Rd
Wauwatosa, WI 53226
Phone: (414) 257-6569
Eddie.santiago@milwaukeecountywi.gov

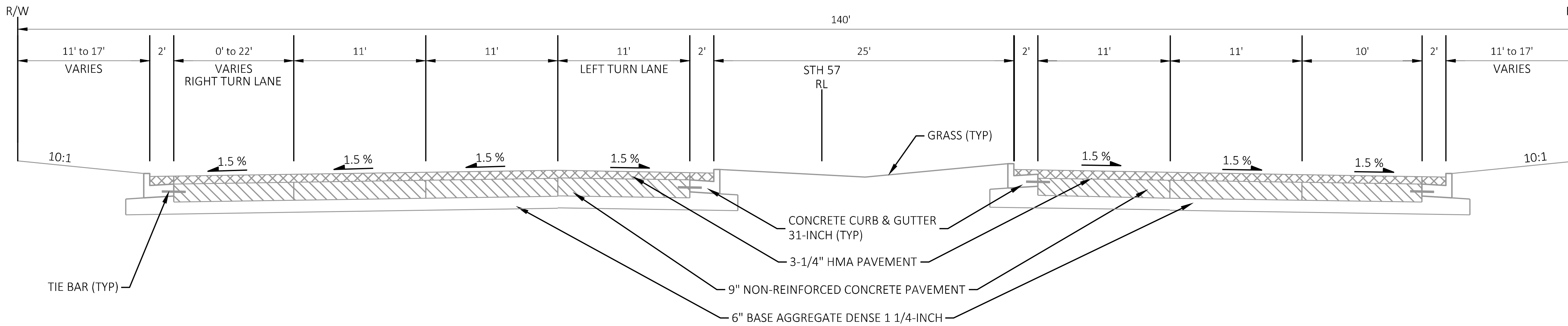
DIGGERS HOTLINE
Dial 811 or (800) 242-8511
www.DiggersHotline.com



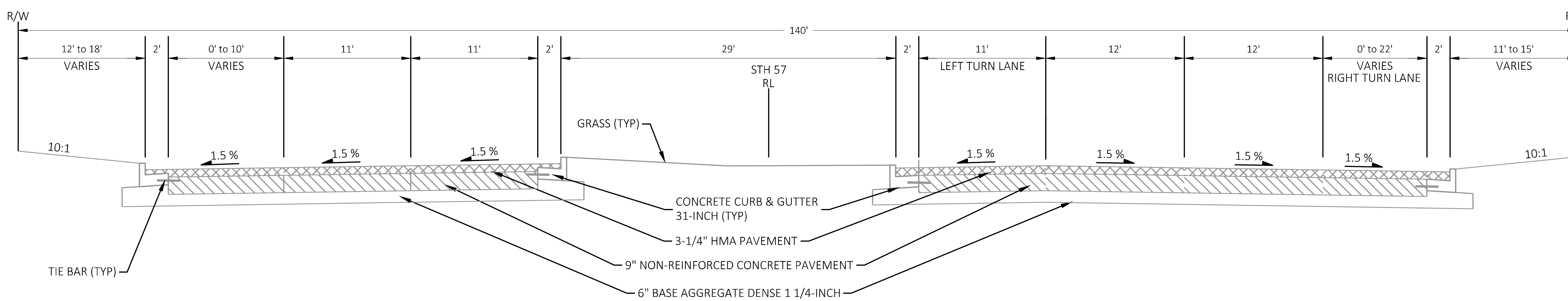
PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PROJECT OVERVIEW	SHEET 4	E

FILE NAME : O:\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN\PLANS\CADD FILES\SHEETSPLAN\020201-PO.DWG PLOT DATE: 10/26/2022 5:46 PM PLOT BY : THORNBURG, ALEX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - Plan 1 IN 100 FT

WISDOT/CADDS SHEET 42

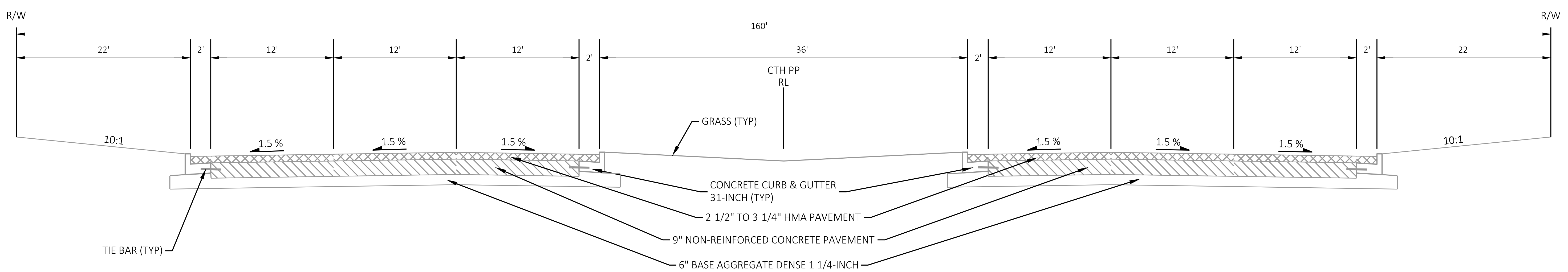


EXISTING TYPICAL SECTION
STA 113+51 - 115+90
STH 57 (N. GREEN BAY AVE.)



EXISTING TYPICAL SECTION
STA 108+90 - 112+39
STH 57 (N. GREEN BAY AVE.)

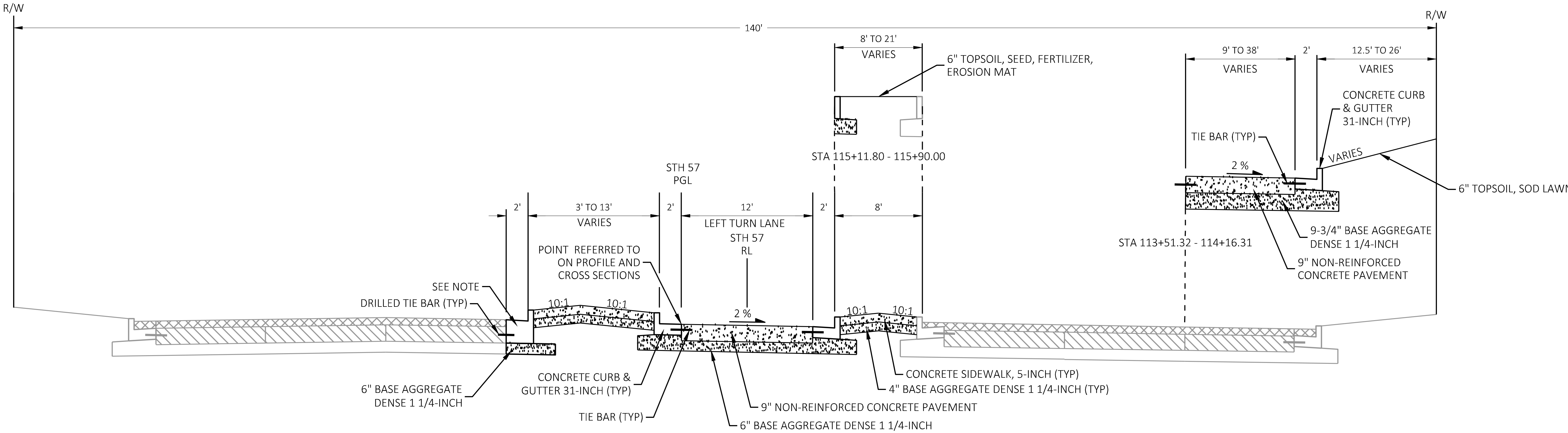
PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 5	E



EXISTING TYPICAL SECTION

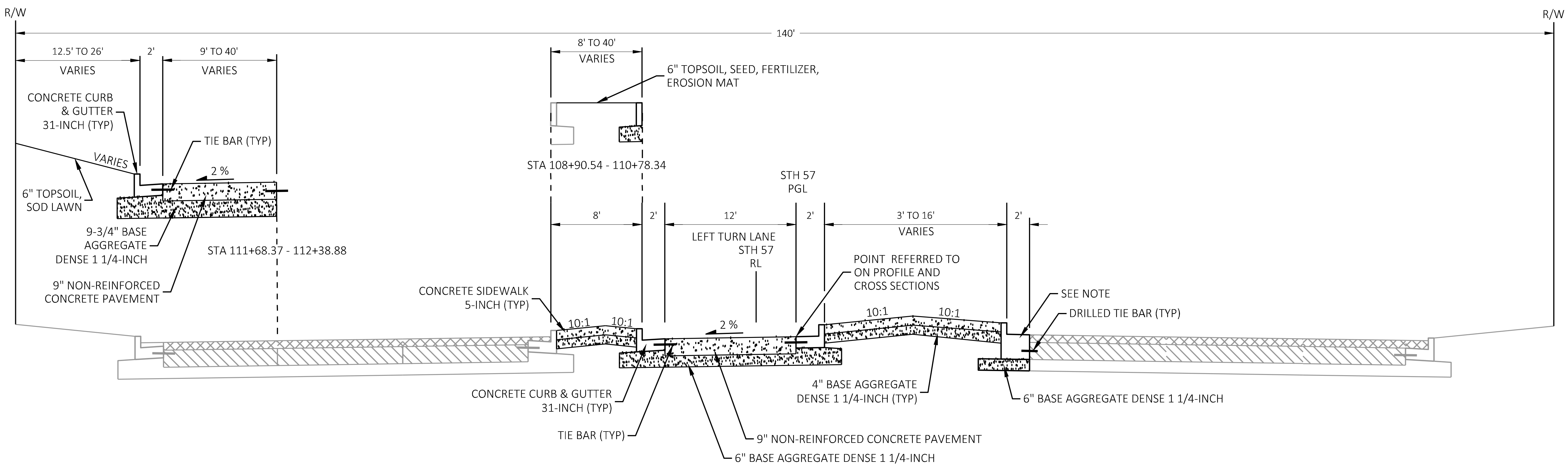
STA 214+54 - 219+55
STA 219+98 - 224+26
CTH PP (W. GOOD HOPE RD.)

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 6 E



FINISHED TYPICAL SECTION

STA 113+51.32 - 115+90.00
STH 57 (N. GREEN BAY AVE.)

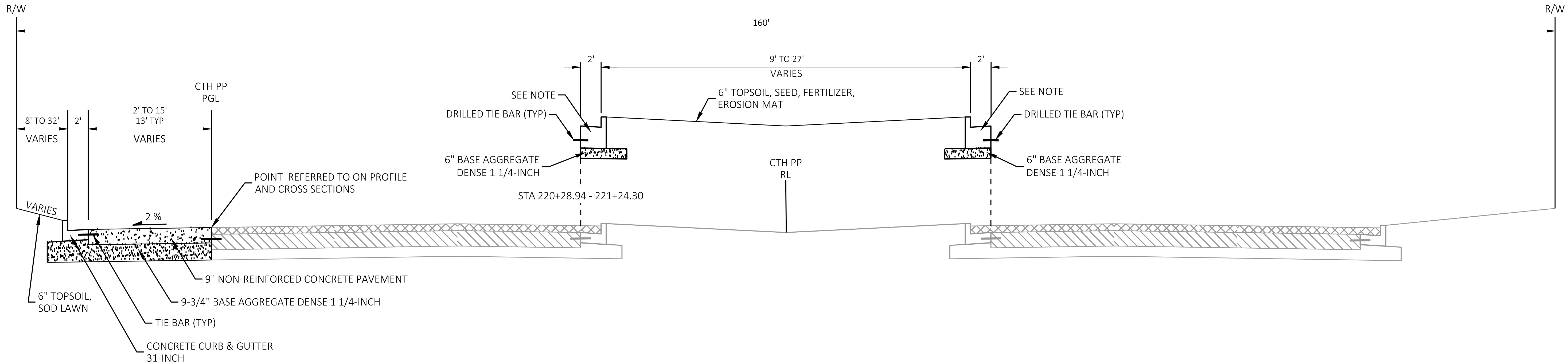


FINISHED TYPICAL SECTION

STA 108+90.54 - 112+38.88
STH 57 (N. GREEN BAY AVE.)

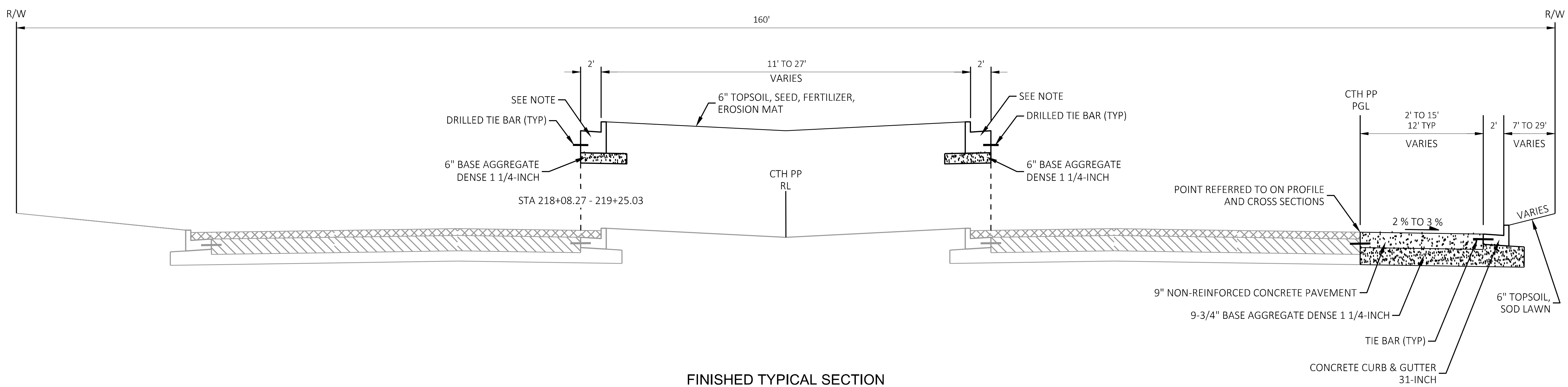
NOTE:
CONCRETE CURB & GUTTER 31" SPECIAL
(SEE CONSTRUCTION DETAIL)

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 7	E



FINISHED TYPICAL SECTION

STA 219+94.05 - 224+15.00
CTH PP (W. GOOD HOPE RD.)

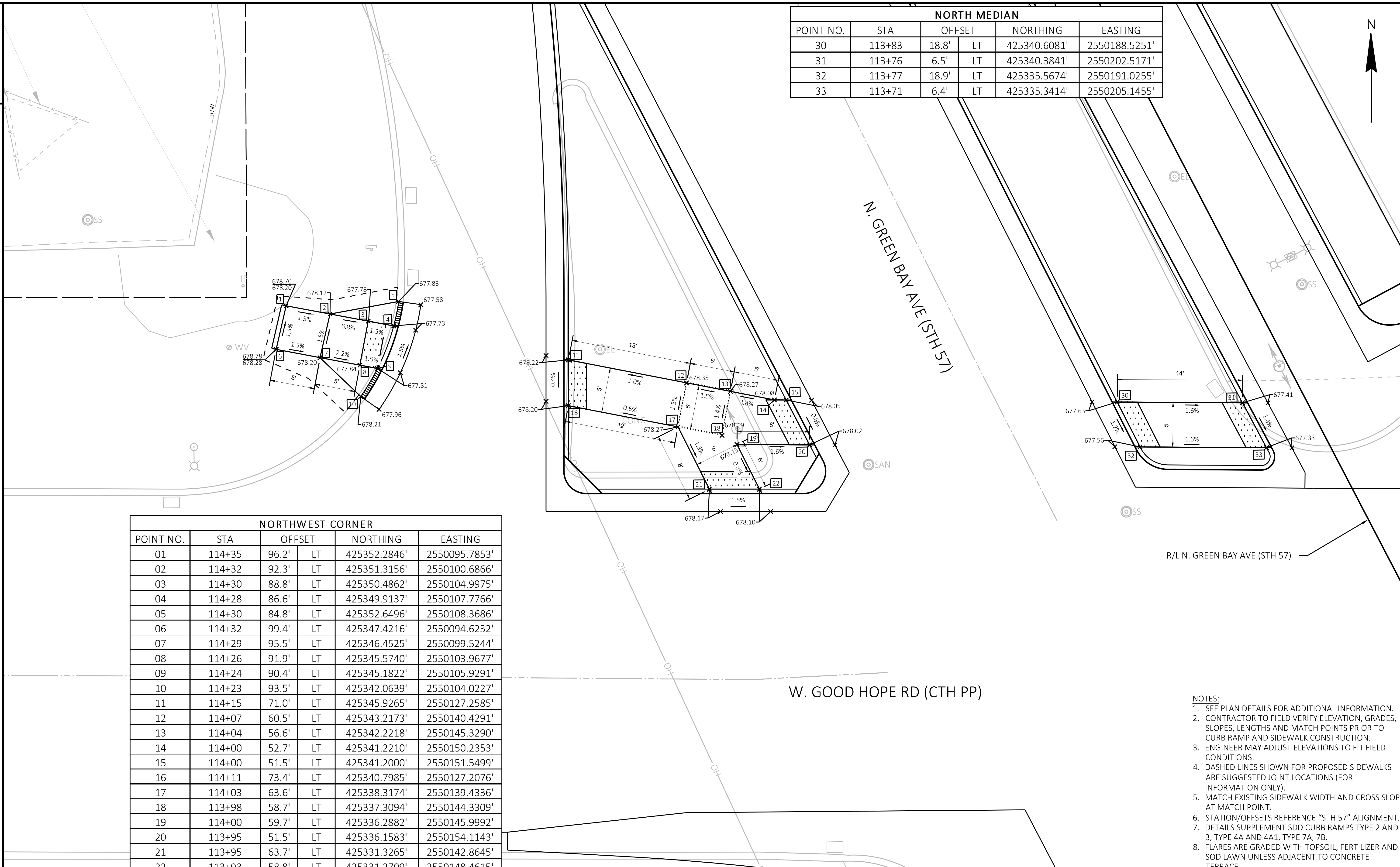


FINISHED TYPICAL SECTION

STA 215+54.91 - 219+54.80
CTH PP (W. GOOD HOPE RD.)

NOTE:
CONCRETE CURB & GUTTER 31" SPECIAL
(SEE CONSTRUCTION DETAIL)

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 8	E

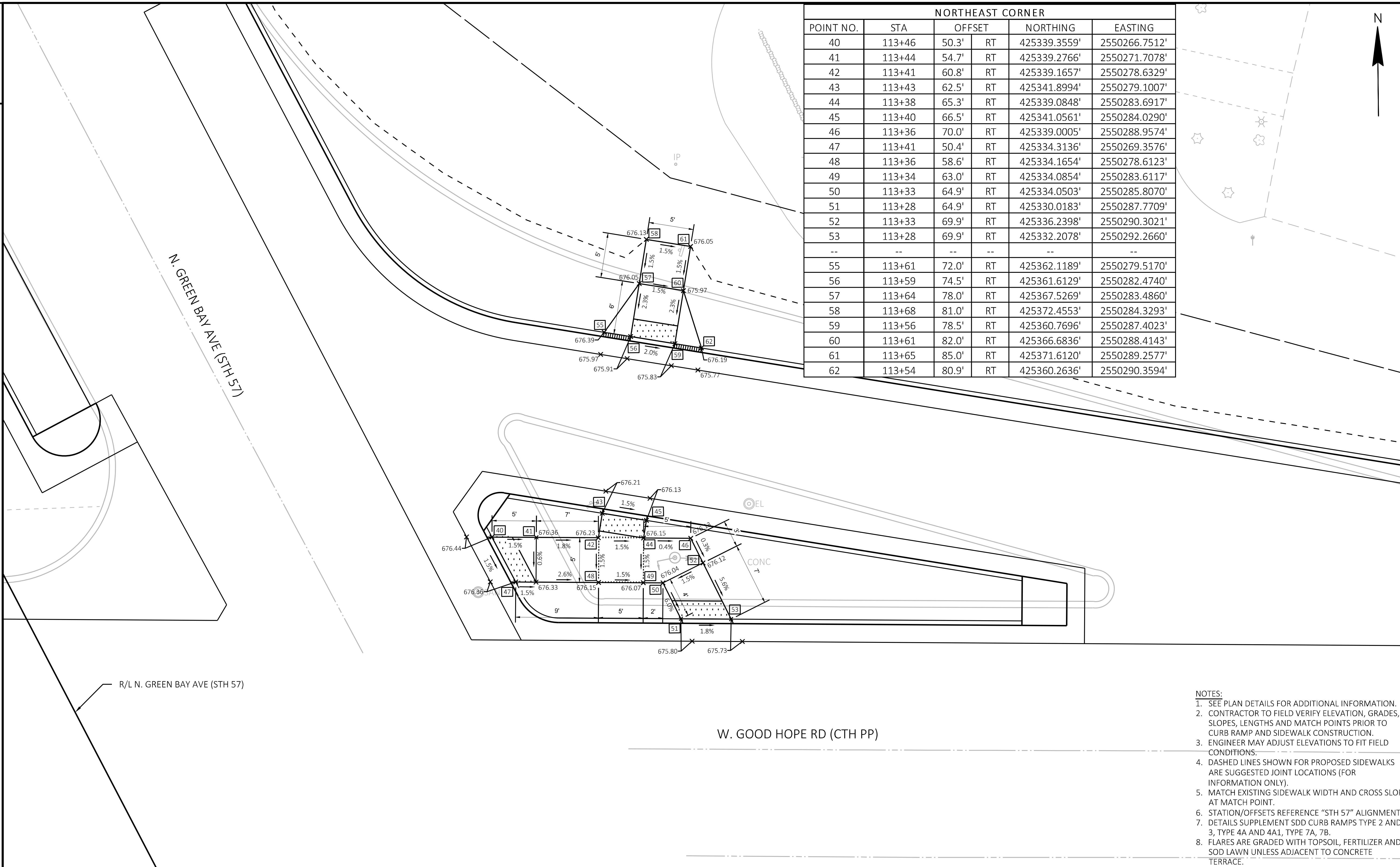


NORTH MEDIAN					
POINT NO.	STA	OFFSET		NORTHING	EASTING
30	113+83	18.8'	LT	425340.6081'	2550188.5251'
31	113+76	6.5'	LT	425340.3841'	2550202.5171'
32	113+77	18.9'	LT	425335.5674'	2550191.0255'
33	113+71	6.4'	LT	425335.3414'	2550205.1455'

NORTHWEST CORNER					
POINT NO.	STA	OFFSET		NORTHING	EASTING
01	114+35	96.2'	LT	425352.2846'	2550095.7853'
02	114+32	92.3'	LT	425351.3156'	2550100.6866'
03	114+30	88.8'	LT	425350.4862'	2550104.9975'
04	114+28	86.6'	LT	425349.9137'	2550107.7766'
05	114+30	84.8'	LT	425352.6496'	2550108.3686'
06	114+32	99.4'	LT	425347.4216'	2550094.6232'
07	114+29	95.5'	LT	425346.4525'	2550099.5244'
08	114+26	91.9'	LT	425345.5740'	2550103.9677'
09	114+24	90.4'	LT	425345.1822'	2550105.9291'
10	114+23	93.5'	LT	425342.0639'	2550104.0227'
11	114+15	71.0'	LT	425345.9265'	2550127.2585'
12	114+07	60.5'	LT	425343.2173'	2550140.4291'
13	114+04	56.6'	LT	425342.2218'	2550145.3290'
14	114+00	52.7'	LT	425341.2210'	2550150.2353'
15	114+00	51.5'	LT	425341.2000'	2550151.5499'
16	114+11	73.4'	LT	425340.7985'	2550127.2076'
17	114+03	63.6'	LT	425338.3174'	2550139.4336'
18	113+98	58.7'	LT	425337.3094'	2550144.3309'
19	114+00	59.7'	LT	425336.2882'	2550145.9992'
20	113+95	51.5'	LT	425336.1583'	2550154.1143'
21	113+95	63.7'	LT	425331.3265'	2550142.8645'
22	113+93	58.8'	LT	425331.2709'	2550148.4615'

NOTES:
1. SEE PLAN DETAILS FOR ADDITIONAL INFORMATION.
2. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
3. ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
4. DASHED LINES SHOWN FOR PROPOSED SIDEWALKS ARE SUGGESTED JOINT LOCATIONS (FOR INFORMATION ONLY).
5. MATCH EXISTING SIDEWALK WIDTH AND CROSS SLOPE AT MATCH POINT.
6. STATION/OFFSETS REFERENCE "STH 57" ALIGNMENT.
7. DETAILS SUPPLEMENT SDD CURB RAMPS TYPE 2 AND 3, TYPE 4A AND 4A1, TYPE 7A, 7B.
8. FLARES ARE GRADED WITH TOPSOIL, FERTILIZER AND SOD LAWN UNLESS ADJACENT TO CONCRETE TERRACE.

2



NORTHEAST CORNER					
POINT NO.	STA	OFFSET		NORTHING	EASTING
40	113+46	50.3'	RT	425339.3559'	2550266.7512'
41	113+44	54.7'	RT	425339.2766'	2550271.7078'
42	113+41	60.8'	RT	425339.1657'	2550278.6329'
43	113+43	62.5'	RT	425341.8994'	2550279.1007'
44	113+38	65.3'	RT	425339.0848'	2550283.6917'
45	113+40	66.5'	RT	425341.0561'	2550284.0290'
46	113+36	70.0'	RT	425339.0005'	2550288.9574'
47	113+41	50.4'	RT	425334.3136'	2550269.3576'
48	113+36	58.6'	RT	425334.1654'	2550278.6123'
49	113+34	63.0'	RT	425334.0854'	2550283.6117'
50	113+33	64.9'	RT	425334.0503'	2550285.8070'
51	113+28	64.9'	RT	425330.0183'	2550287.7709'
52	113+33	69.9'	RT	425336.2398'	2550290.3021'
53	113+28	69.9'	RT	425332.2078'	2550292.2660'
--	--	--	--	--	--
55	113+61	72.0'	RT	425362.1189'	2550279.5170'
56	113+59	74.5'	RT	425361.6129'	2550282.4740'
57	113+64	78.0'	RT	425367.5269'	2550283.4860'
58	113+68	81.0'	RT	425372.4553'	2550284.3293'
59	113+56	78.5'	RT	425360.7696'	2550287.4023'
60	113+61	82.0'	RT	425366.6836'	2550288.4143'
61	113+65	85.0'	RT	425371.6120'	2550289.2577'
62	113+54	80.9'	RT	425360.2636'	2550290.3594'

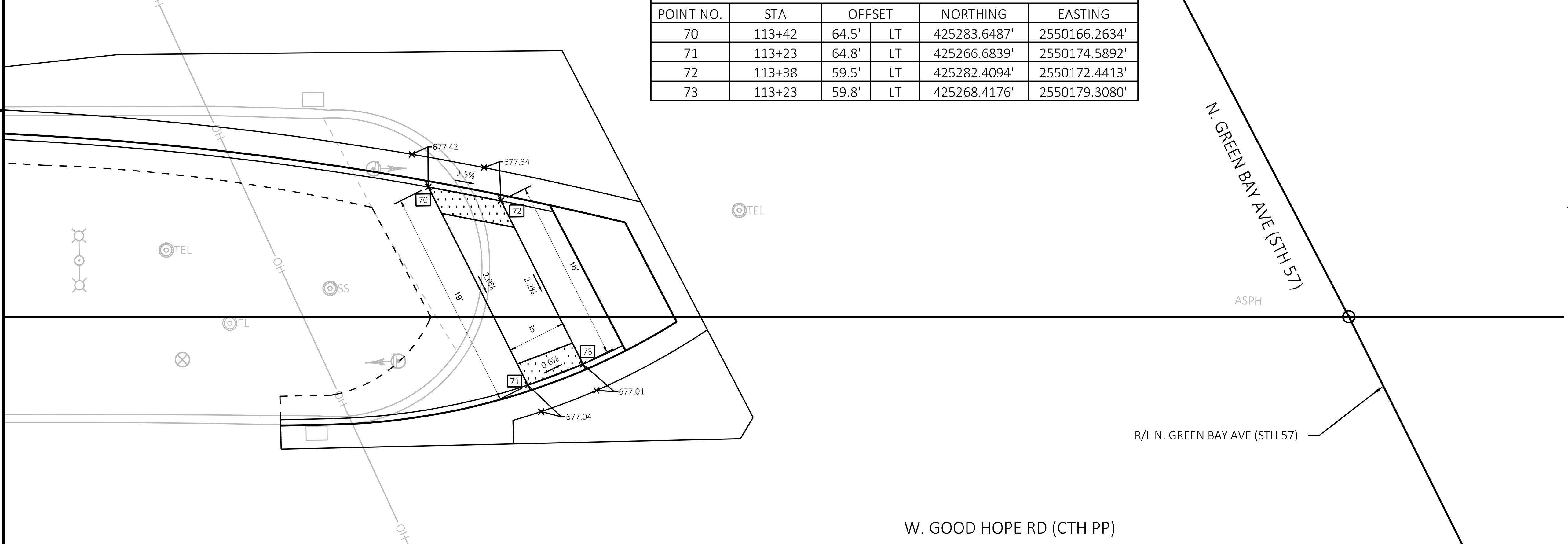
2

NOTES:
1. SEE PLAN DETAILS FOR ADDITIONAL INFORMATION.
2. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
3. ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
4. DASHED LINES SHOWN FOR PROPOSED SIDEWALKS ARE SUGGESTED JOINT LOCATIONS (FOR INFORMATION ONLY).
5. MATCH EXISTING SIDEWALK WIDTH AND CROSS SLOPE AT MATCH POINT.
6. STATION/OFFSETS REFERENCE "STH 57" ALIGNMENT.
7. DETAILS SUPPLEMENT SDD CURB RAMPS TYPE 2 AND 3, TYPE 4A AND 4A1, TYPE 7A, 7B.
8. FLARES ARE GRADED WITH TOPSOIL, FERTILIZER AND SOD LAWN UNLESS ADJACENT TO CONCRETE TERRACE.

2

2

WEST MEDIAN					
POINT NO.	STA	OFFSET		NORTHING	EASTING
70	113+42	64.5'	LT	425283.6487'	2550166.2634'
71	113+23	64.8'	LT	425266.6839'	2550174.5892'
72	113+38	59.5'	LT	425282.4094'	2550172.4413'
73	113+23	59.8'	LT	425268.4176'	2550179.3080'



NOTES:
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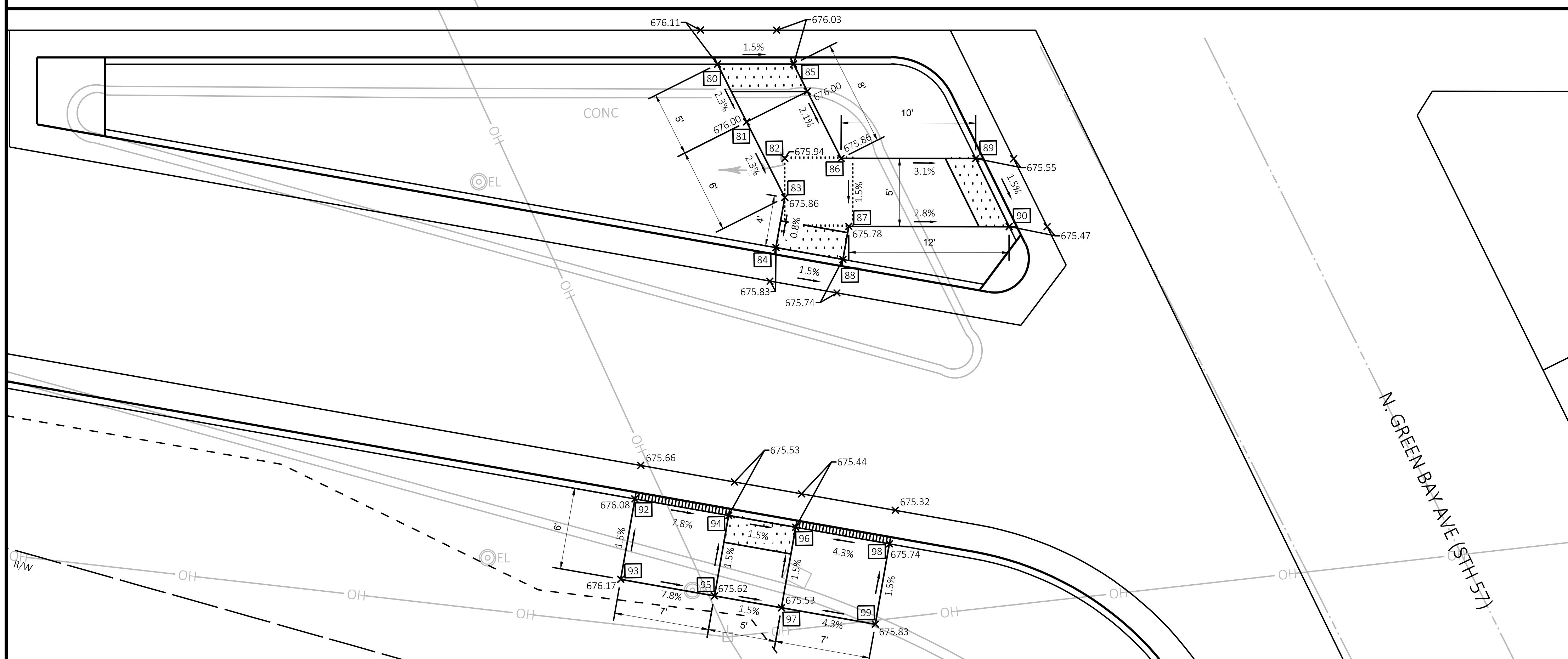
2. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
3. ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
4. DASHED LINES SHOWN FOR PROPOSED SIDEWALKS ARE SUGGESTED JOINT LOCATIONS (FOR INFORMATION ONLY).
5. MATCH EXISTING SIDEWALK WIDTH AND CROSS SLOPE AT MATCH POINT.
6. STATION/OFFSETS REFERENCE "STH 57" ALIGNMENT.
7. DETAILS SUPPLEMENT SDD CURB RAMPS TYPE 2 AND 3, TYPE 4A AND 4A1, TYPE 7A, 7B.
8. FLARES ARE GRADED WITH TOPSOIL, FERTILIZER AND SOD LAWN UNLESS ADJACENT TO CONCRETE TERRACE.

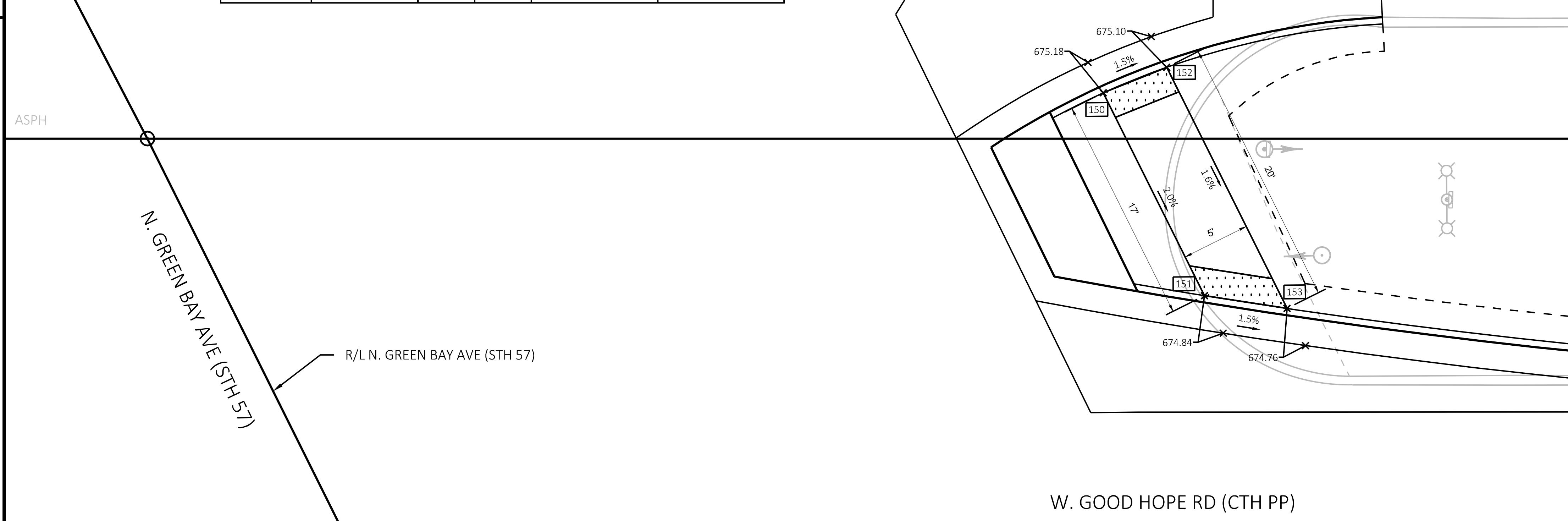
SOUTHWEST CORNER					
POINT NO.	STA	OFFSET		NORTHING	EASTING
80	112+63	65.0'	LT	425213.7481'	2550200.5685'
81	112+58	65.0'	LT	425209.4798'	2550202.6632'
82	112+55	63.7'	LT	425206.7753'	2550205.4417'
83	112+52	65.0'	LT	425203.8894'	2550205.4068'
84	112+49	67.2'	LT	425200.2178'	2550204.7218'
85	112+61	60.0'	LT	425213.6926'	2550206.1654'
86	112+53	60.0'	LT	425206.7288'	2550209.5830'
87	112+48	61.7'	LT	425201.7228'	2550210.0889'
88	112+46	63.2'	LT	425199.3008'	2550209.6370'
89	112+49	51.1'	LT	425206.6178'	2550219.4685'
90	112+43	51.1'	LT	425201.5904'	2550221.8829'
--	--	--	--	--	--
92	112+37	84.7'	LT	425181.8410'	2550194.1723'
93	112+33	88.3'	LT	425175.9428'	2550193.0718'
94	112+33	79.1'	LT	425180.5571'	2550201.0536'
95	112+28	82.6'	LT	425174.6589'	2550199.9531'
96	112+30	75.0'	LT	425179.6400'	2550205.9687'
97	112+25	78.6'	LT	425173.7418'	2550204.8683'
98	112+26	69.4'	LT	425178.3562'	2550212.8500'
99	112+21	73.0'	LT	425172.4579'	2550211.7495'



PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS- CURB RAMPS	SHEET 11	E

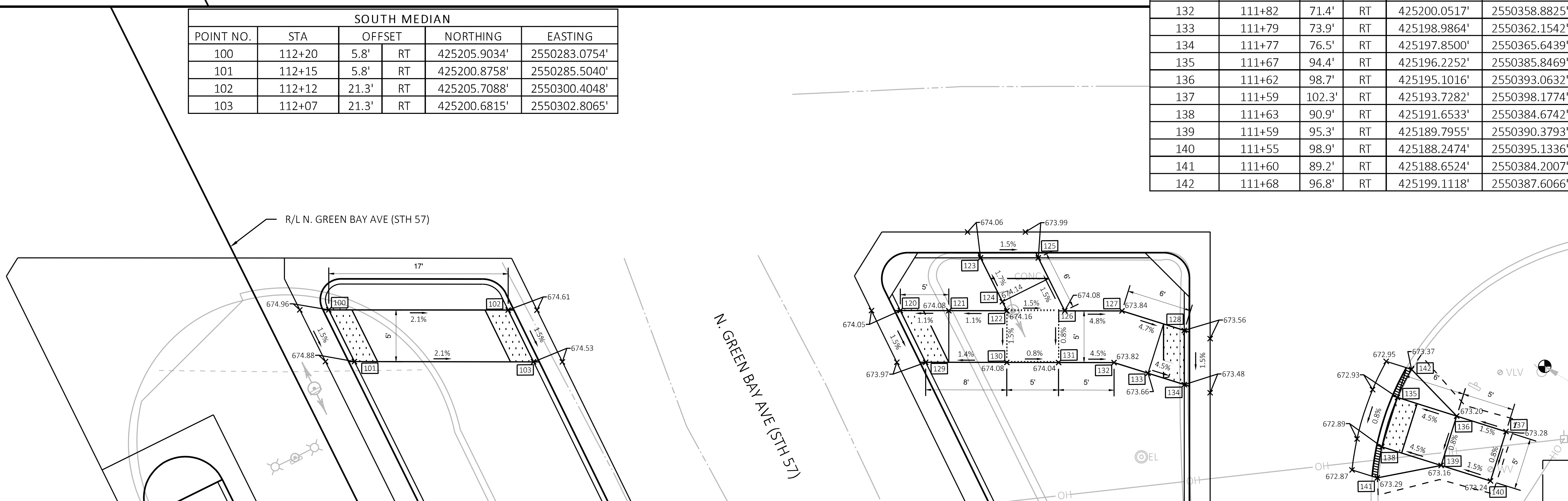
EAST MEDIAN					
POINT NO.	STA	OFFSET		NORTHING	EASTING
150	112+68	64.3'	RT	425274.4779'	2550314.8241'
151	112+51	64.3'	RT	425259.5259'	2550322.1071'
152	112+68	69.3'	RT	425276.3046'	2550319.4959'
153	112+48	69.3'	RT	425258.5302'	2550328.1537'

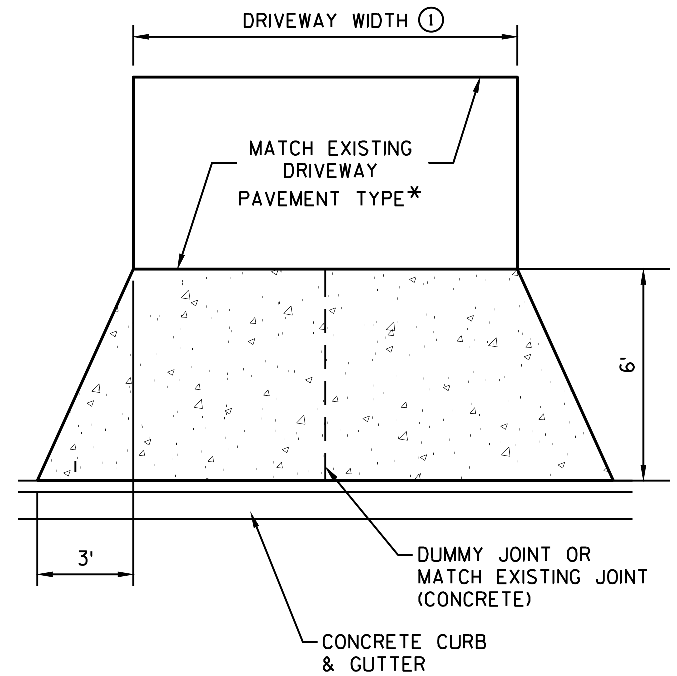
NOTES:
1. SEE PLAN DETAILS FOR ADDITIONAL INFORMATION.
2. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
3. ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
4. DASHED LINES SHOWN FOR PROPOSED SIDEWALKS ARE SUGGESTED JOINT LOCATIONS (FOR INFORMATION ONLY).
5. MATCH EXISTING SIDEWALK WIDTH AND CROSS SLOPE AT MATCH POINT.
6. STATION/OFFSETS REFERENCE "STH 57" ALIGNMENT.
7. DETAILS SUPPLEMENT SDD CURB RAMPS TYPE 2 AND 3, TYPE 4A AND 4A1, TYPE 7A, 7B.
8. FLARES ARE GRADED WITH TOPSOIL, FERTILIZER AND SOD LAWN UNLESS ADJACENT TO CONCRETE TERRACE.



SOUTHEAST CORNER					
POINT NO.	STA	OFFSET		NORTHING	EASTING
120	111+95	55.2'	RT	425205.2833'	2550338.2886'
121	111+93	59.4'	RT	425205.2307'	2550342.9748'
122	111+91	64.4'	RT	425205.1677'	2550348.5844'
123	111+97	64.4'	RT	425210.3040'	2550346.0825'
124	111+92	64.4'	RT	425206.0493'	2550348.1550'
125	111+94	69.4'	RT	425210.2486'	2550351.6711'
126	111+88	69.4'	RT	425205.1049'	2550354.1766'
127	111+86	74.3'	RT	425205.0428'	2550359.7034'
128	111+82	78.9'	RT	425203.0915'	2550365.6959'
129	111+90	55.1'	RT	425200.2560'	2550340.6902'
130	111+86	62.2'	RT	425200.1680'	2550348.5283'
131	111+84	66.6'	RT	425200.1119'	2550353.5279'
132	111+82	71.4'	RT	425200.0517'	2550358.8825'
133	111+79	73.9'	RT	425198.9864'	2550362.1542'
134	111+77	76.5'	RT	425197.8500'	2550365.6439'
135	111+67	94.4'	RT	425196.2252'	2550385.8469'
136	111+62	98.7'	RT	425195.1016'	2550393.0632'
137	111+59	102.3'	RT	425193.7282'	2550398.1774'
138	111+63	90.9'	RT	425191.6533'	2550384.6742'
139	111+59	95.3'	RT	425189.7955'	2550390.3793'
140	111+55	98.9'	RT	425188.2474'	2550395.1336'
141	111+60	89.2'	RT	425188.6524'	2550384.2007'
142	111+68	96.8'	RT	425199.1118'	2550387.6066'

SOUTH MEDIAN					
POINT NO.	STA	OFFSET		NORTHING	EASTING
100	112+20	5.8'	RT	425205.9034'	2550283.0754'
101	112+15	5.8'	RT	425200.8758'	2550285.5040'
102	112+12	21.3'	RT	425205.7088'	2550300.4048'
103	112+07	21.3'	RT	425200.6815'	2550302.8065'





PLAN VIEW

TYPICAL FLARED DRIVEWAY
(WITHOUT SIDEWALK)

DRIVEWAY NOTES:

① RESIDENTIAL WIDTH: 10' MIN. / 24' MAX.
COMMERCIAL WIDTH: 12' MIN / 35' MAX.

CONCRETE DRIVEWAYS:
CONCRETE DRIVEWAY 7-INCH ON 4" BASE AGGREGATE DENSE 1-¼"

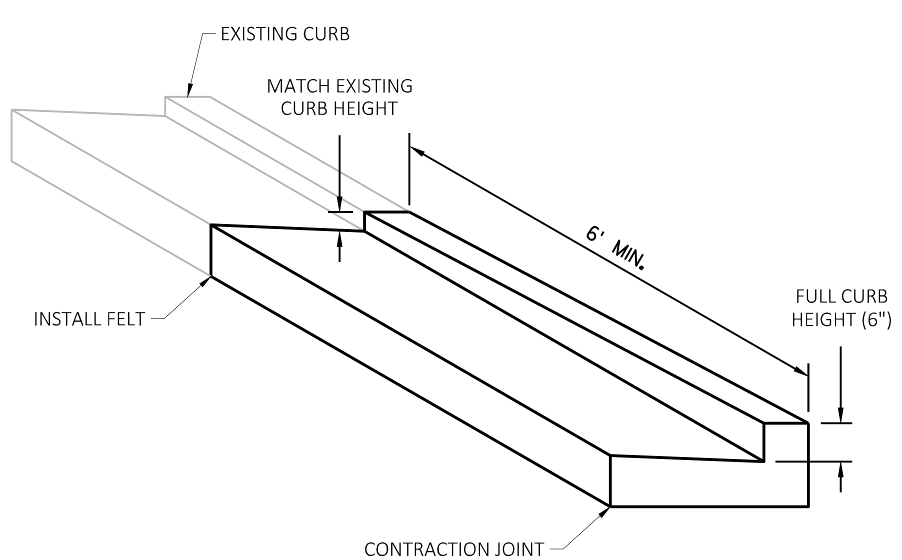
ASPHALT DRIVEWAYS:
4" ASPHALTIC SURFACE DRIVEWAYS

	NOMINAL SIZE	MSCR	THICKNESS
UPPER LAYER	9.5mm	58-28S	2.0 in
LOWER LAYER	9.5mm	58-28S	2.0 in
BASE AGG. DENSE	1-¼"	N/A	4.0 in

GRAVEL DRIVEWAYS:
6" BASE AGGREGATE DENSE 3/4"

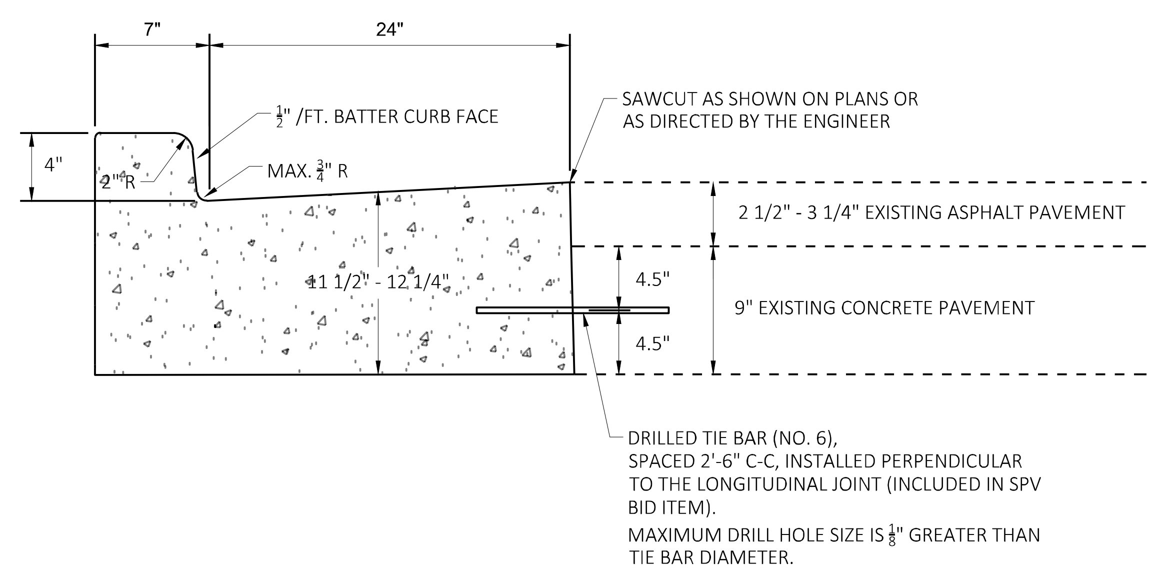
ALL DRIVEWAY APRONS ARE CONCRETE UNLESS NOTED OTHERWISE IN THE PLANS. PLACE DUMMY JOINT AT CENTER OF DRIVEWAY APRON 14' WIDE OR GREATER OR AT ALL JOINTS IN THE CURB & GUTTER IF NO JOINTS EXIST, OTHERWISE MATCH EXISTING JOINTS.

*MATCHING DRIVEWAY PAVEMENT TYPE DOES NOT INCLUDE:
- FINISH OR TEXTURE
- COLOR
- PATTERN

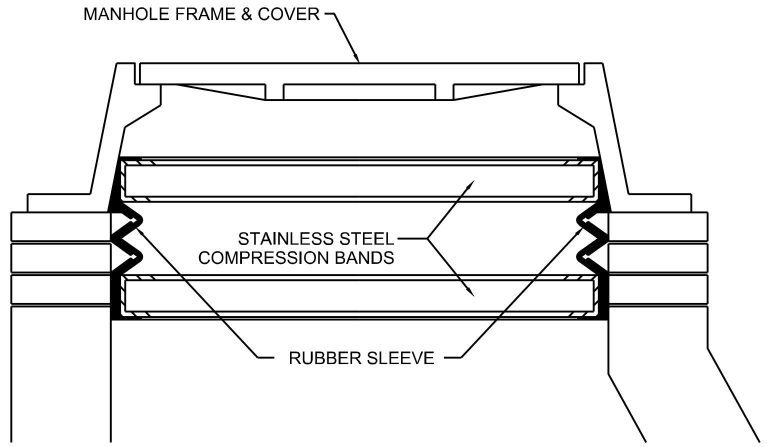


CURB HEIGHT MATCH DETAIL

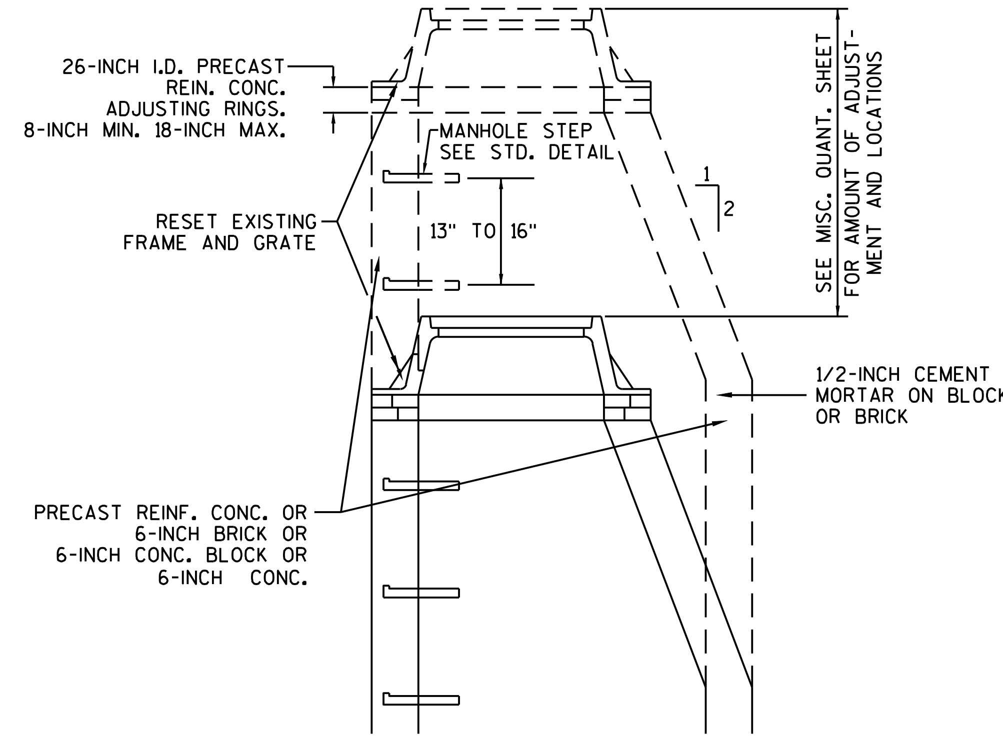
CURB HEIGHT MATCH SECTION TO BE PAID FOR UNDER SPV.0090.03 CONCRETE CURB AND GUTTER 31-INCH SPECIAL



CONCRETE CURB AND GUTTER 31-INCH SPECIAL
(NOT TO SCALE)



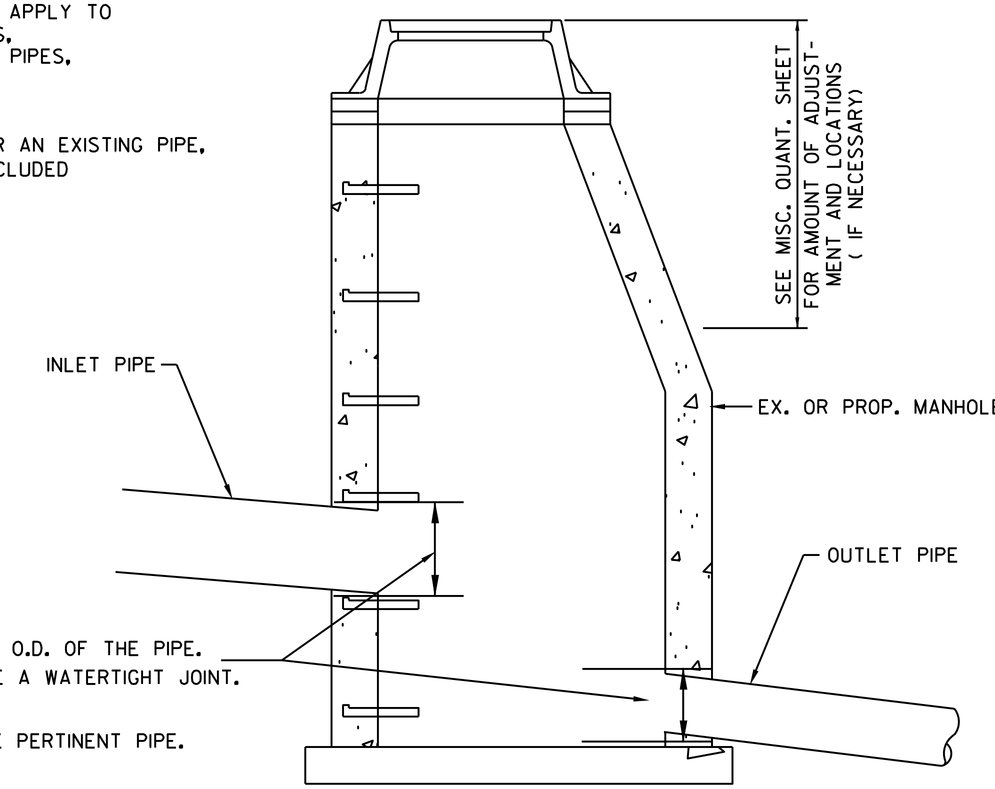
INTERNAL SANITARY MANHOLE SEAL



DETAIL FOR RECONSTRUCTING MANHOLES

CONSTRUCTION NOTES

1. CONSTRUCTION METHODS ARE "TYPICAL" AND APPLY TO NEW PIPE CONNECTING TO EXISTING MANHOLES, NEW MANHOLES CONSTRUCTED OVER EXISTING PIPES, AND NEW CONSTRUCTION
2. WHEN A NEW MANHOLE IS CONSTRUCTED OVER AN EXISTING PIPE, THE COST OF THE CONNECTION SHALL BE INCLUDED IN THE UNIT BID PRICE OF THE MANHOLE.



CUT IN CONNECTION 1-INCH LARGER THAN THE O.D. OF THE PIPE.
ANNULAR SPACE TO BE MORTARED TO ENSURE A WATERTIGHT JOINT.
COST OF THIS CONNECTION IS TO BE INCLUDED IN THE UNIT PRICE PER LINEAL FOOT OF THE PERTINENT PIPE.

DETAIL FOR CONNECTION TO MANHOLES

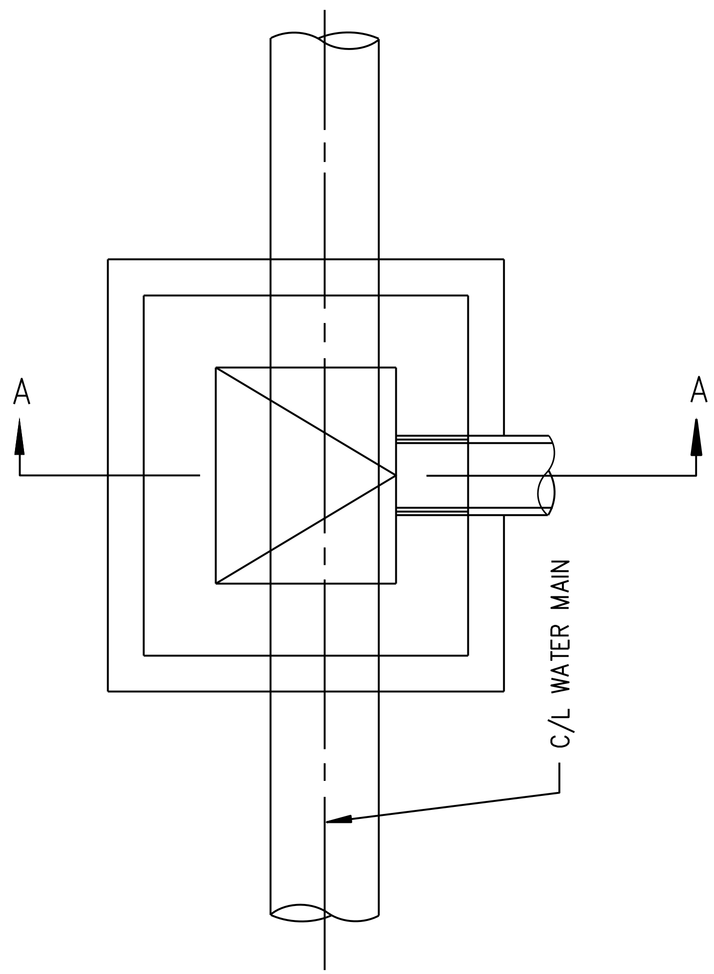
NOTES FOR RECONSTRUCTING MANHOLES

1. SEE MISCELLANEOUS QUANTITY SHEET FOR ADJUSTMENT DEPTH.
2. CONSTRUCTION METHODS ARE "TYPICAL" AND MAY APPLY TO EITHER RECONSTRUCTING OR ADJUSTING MANHOLES.
3. ADJUST FRAME TO GRATE WITH PRECAST CONCRETE RINGS OF VARIABLE THICKNESS. MAXIMUM RING HEIGHT IS 18-INCHES . MINIMUM RING HEIGHT IS 8-INCHES. CONCRETE RINGS SHALL BE REINFORCED WITH ONE LINE OF STEEL CENTERED WITHIN THE RING. WHERE NECESSARY, RINGS SHALL BE GROOVED TO RECEIVE STEP.

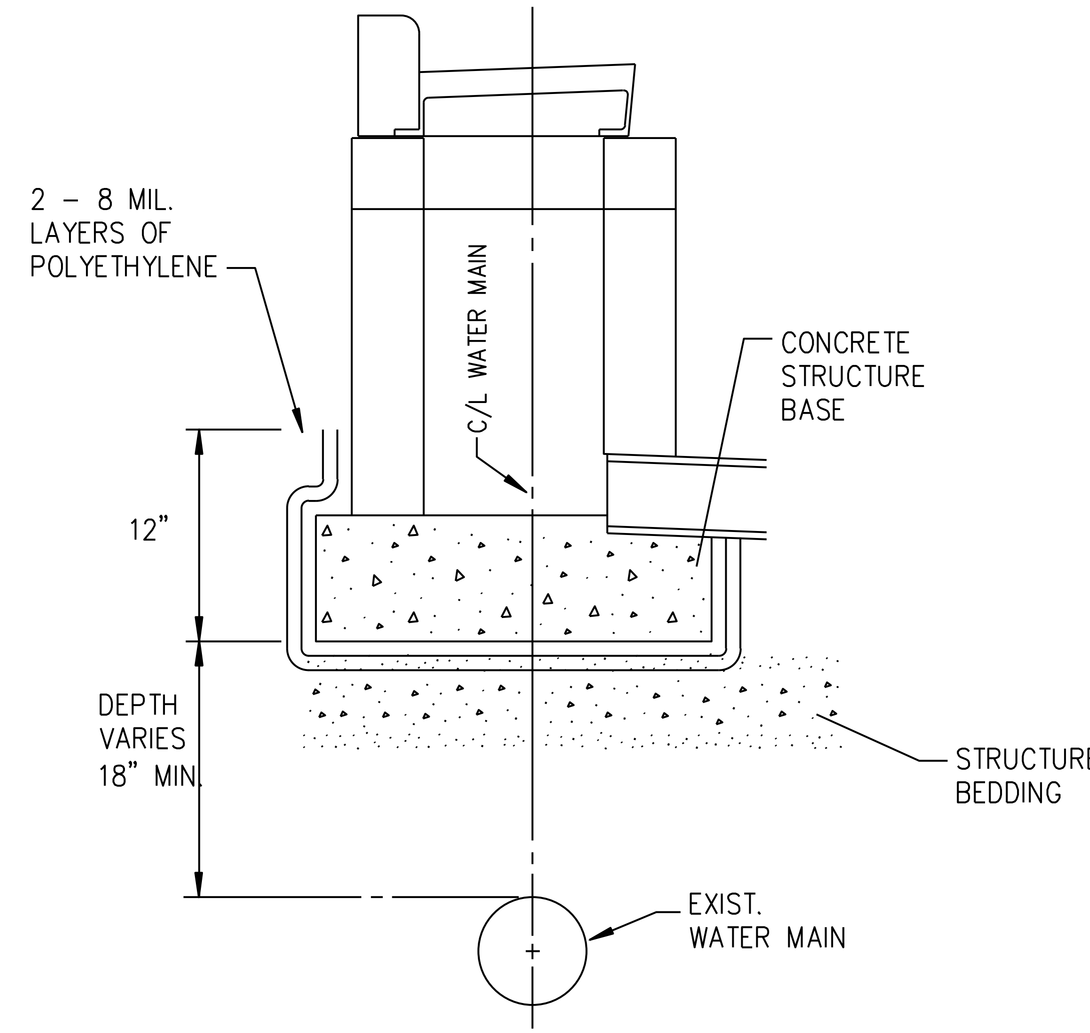
   CONCRETE AND STEEL REINFORCEMENT SHALL CONFORM TO DESIGNATION C-478 REQUIREMENTS OF ASTM SPECIFICATIONS. JOINTS SHALL BE WATERTIGHT AND SHALL BE MADE USING RUBBER GASKETS FOR SANITARY MANHOLES.
4. WHEN RESETTING EXISTING COVERS, REPAIRING BRICKWORK UP TO 12-INCH DEPTH IS PAID AS ADJUSTING COVERS, UNLESS THERE IS A RECONSTRUCT. WHERE NEW COVERS ARE PLACED, THE FIRST 6-INCHES OF ADJUSTMENT OR REPAIR IS PART OF THE NEW COVER. ADJUSTING OR REPAIRING GREATER THAN 6-INCH AND UP TO 12-INCHES SHALL BE PAID AS ADJUSTING COVERS. WHEN THE DEPTH OF THE WORK IS GREATER THAN 12-INCHES, ALL WORK SHALL BE PAID AS RECONSTRUCT.

2

2



PLAN VIEW

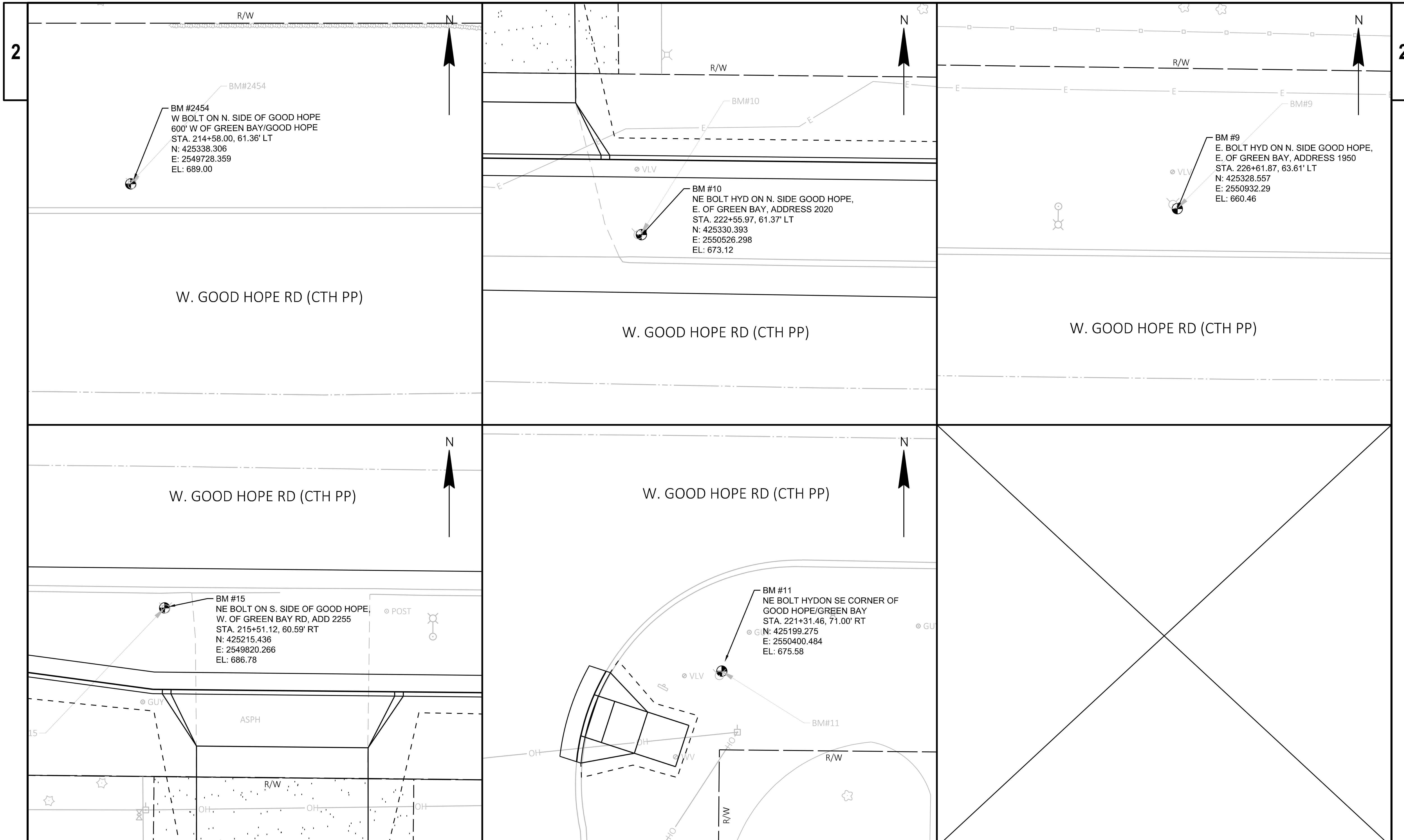


SECTION A-A

WATER MAIN PROTECTION

INSTALL ON ALL CATCH BASINS OR INLETS WITH LESS THAN 24"
HORIZONTAL OUT-TO-OUT CLEARANCE FROM STRUCTURE TO WATER MAIN

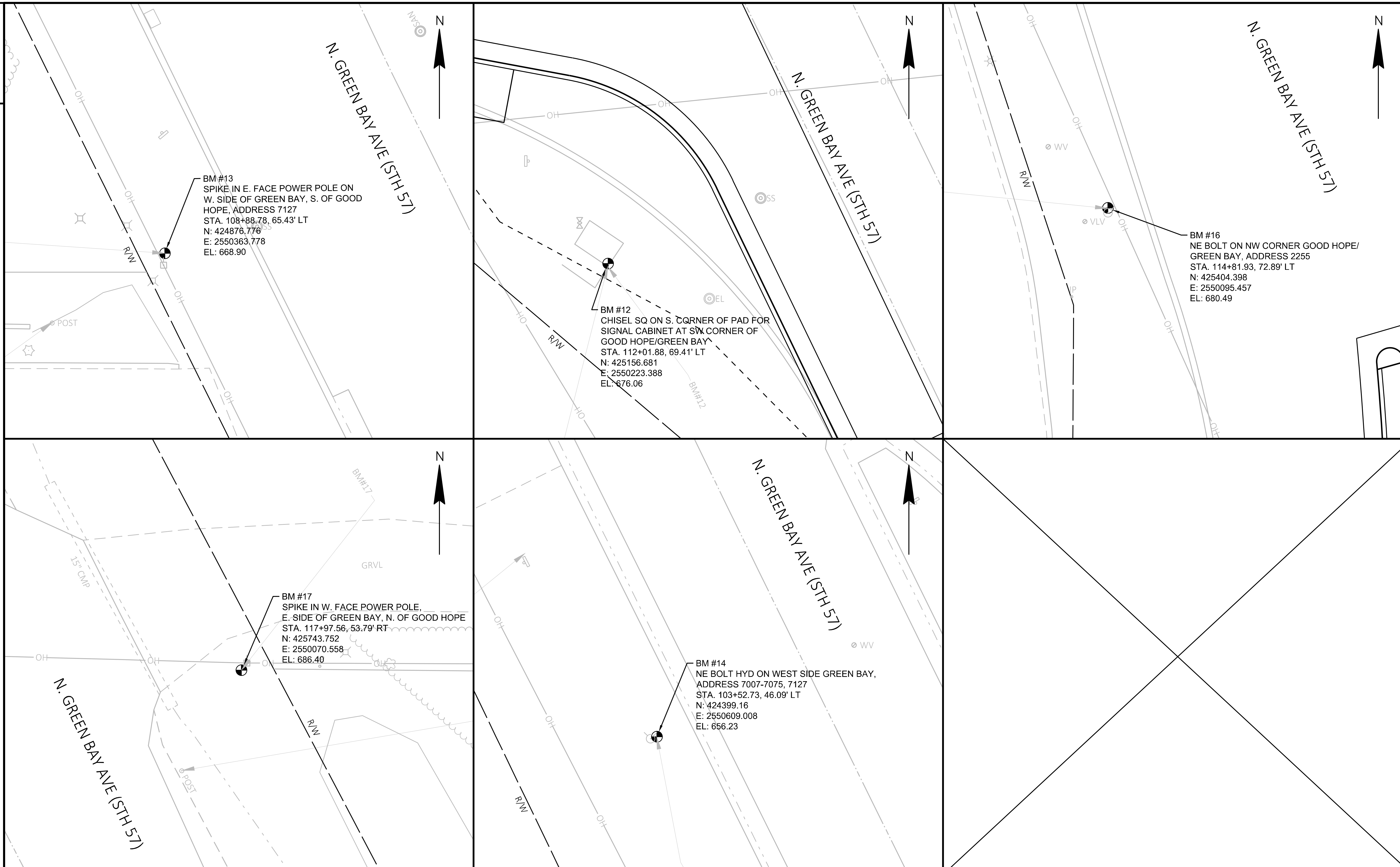
PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SHEET 15	E



PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT- SURVEY CONTROL (CTH PP)	SHEET 16	E

FILE NAME : \\W3027S02\DPPI$\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN DATA\CADD\SHEETS PLAN\021101-SC.DWG PLOT DATE : 10/4/2021 1:15 PM PLOT BY : HILLIARD, MARC PLOT NAME : PLOT SCALE : 1 IN:10 FT
LAYOUT NAME - 01

WISDOT/CADDS SHEET 42



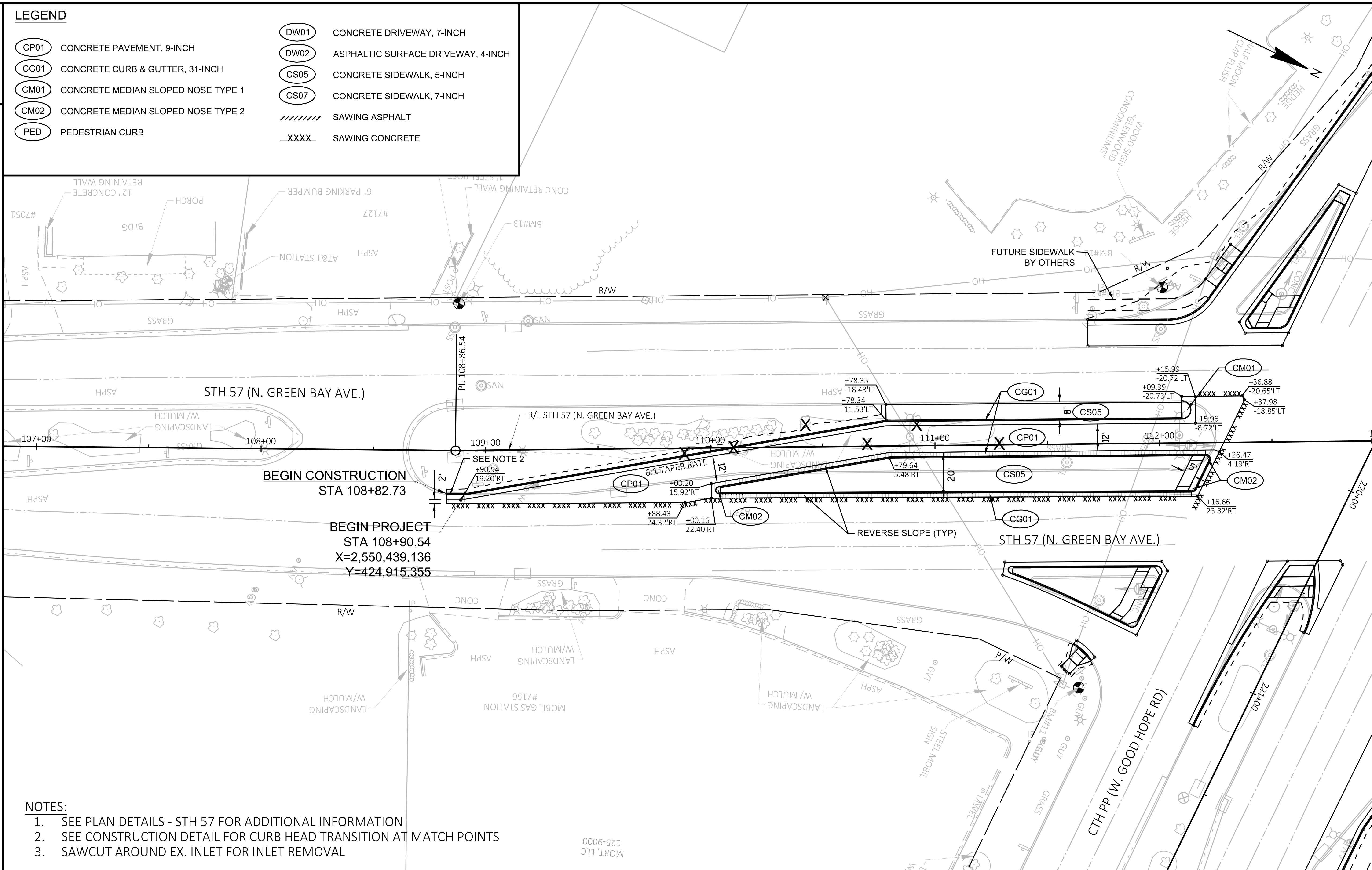
PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT- SURVEY CONTROL (STH 57)	SHEET 17	E

FILE NAME : \\W3027S02\DPPI$\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN DATA\CADD\SHEETS\SURVEY PLAN\021101-SC.DWG PLOT DATE : 10/4/2021 1:15 PM PLOT BY : HILLIARD, MARC PLOT NAME : PLOT SCALE : 1 IN:10 FT
LAYOUT NAME - 02

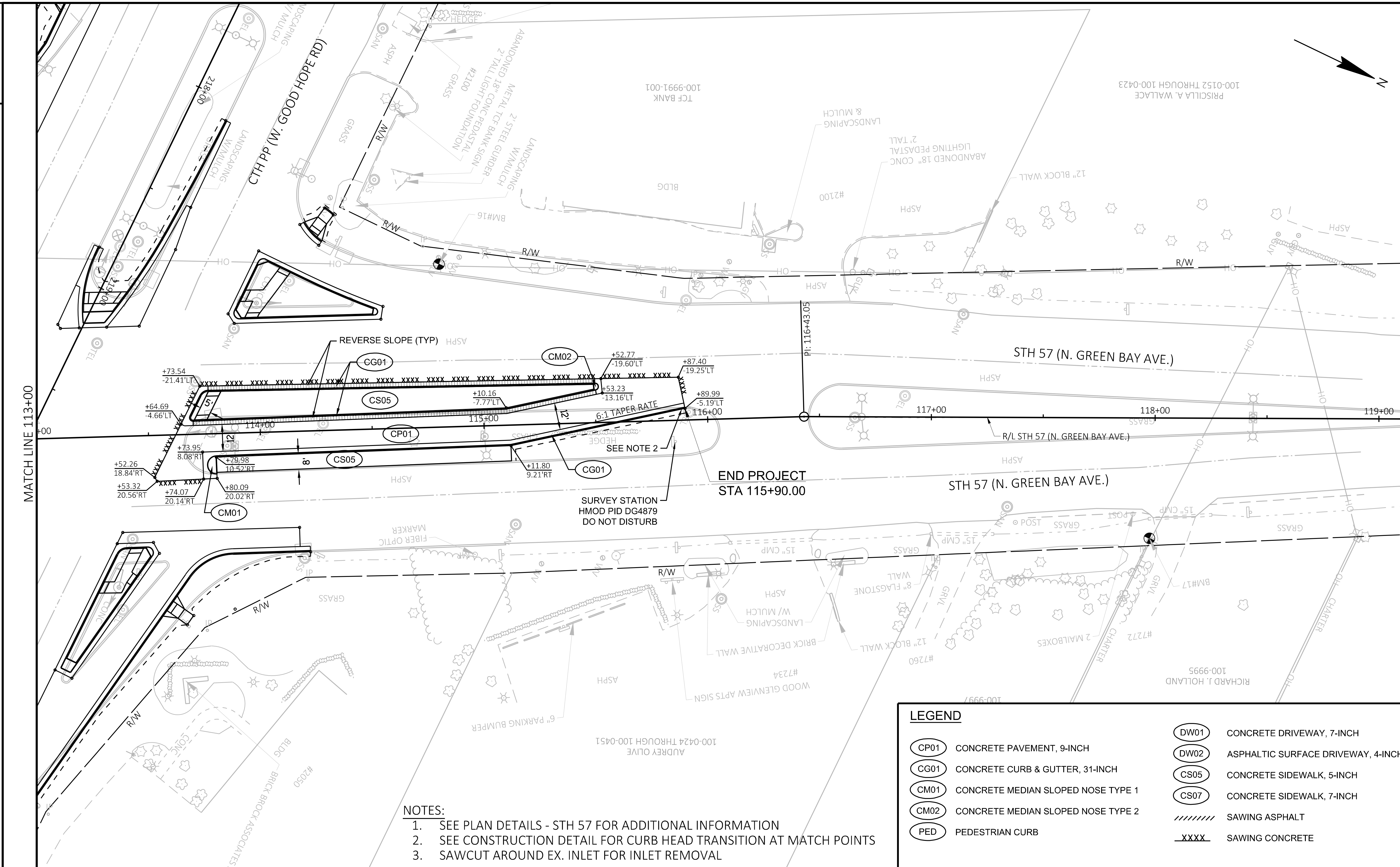
WISDOT/CADDS SHEET 42

LEGEND

CP01	CONCRETE PAVEMENT, 9-INCH
CG01	CONCRETE CURB & GUTTER, 31-INCH
CM01	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM02	CONCRETE MEDIAN SLOPED NOSE TYPE 2
PED	PEDESTRIAN CURB
DW01	CONCRETE DRIVEWAY, 7-INCH
DW02	ASPHALTIC SURFACE DRIVEWAY, 4-INCH
CS05	CONCRETE SIDEWALK, 5-INCH
CS07	CONCRETE SIDEWALK, 7-INCH
//////////	SAWING ASPHALT
XXXX	SAWING CONCRETE



NOTES:
1. SEE PLAN DETAILS - STH 57 FOR ADDITIONAL INFORMATION
2. SEE CONSTRUCTION DETAIL FOR CURB HEAD TRANSITION AT MATCH POINTS
3. SAWCUT AROUND EX. INLET FOR INLET REMOVAL



NOTES:

1. SEE PLAN DETAILS - STH 57 FOR ADDITIONAL INFORMATION
2. SEE CONSTRUCTION DETAIL FOR CURB HEAD TRANSITION AT MATCH POINTS
3. SAWCUT AROUND EX. INLET FOR INLET REMOVAL

LEGEND

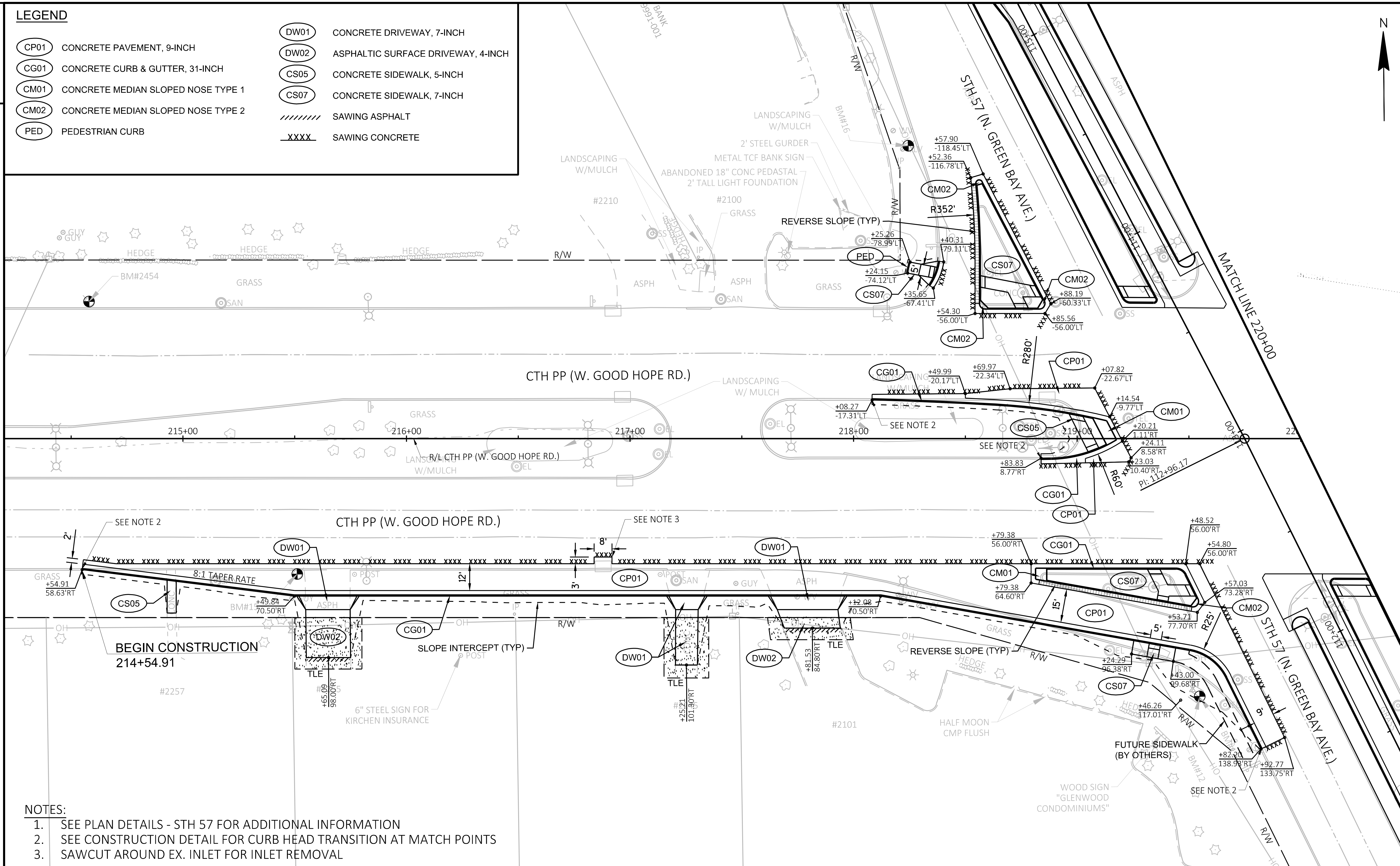
CP01	CONCRETE PAVEMENT, 9-INCH
CG01	CONCRETE CURB & GUTTER, 31-INCH
CM01	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM02	CONCRETE MEDIAN SLOPED NOSE TYPE 2
PED	PEDESTRIAN CURB
DW01	CONCRETE DRIVEWAY, 7-INCH
DW02	ASPHALTIC SURFACE DRIVEWAY, 4-INCH
CS05	CONCRETE SIDEWALK, 5-INCH
CS07	CONCRETE SIDEWALK, 7-INCH
/////////	SAWING ASPHALT
XXXX	SAWING CONCRETE

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PLAN DETAILS - STH 57	SHEET 19	E

2

LEGEND

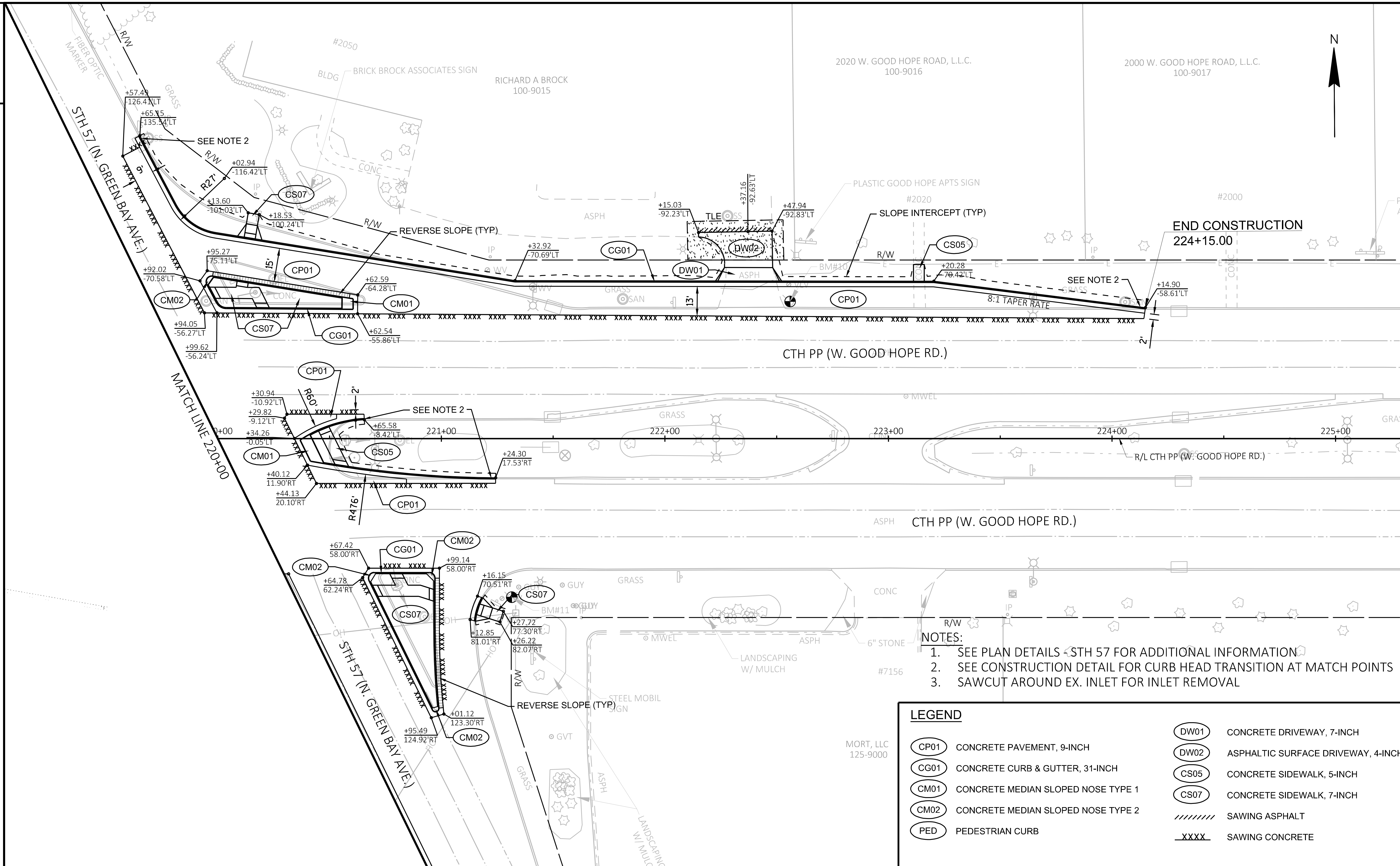
CP01	CONCRETE PAVEMENT, 9-INCH
CG01	CONCRETE CURB & GUTTER, 31-INCH
CM01	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM02	CONCRETE MEDIAN SLOPED NOSE TYPE 2
PED	PEDESTRIAN CURB
DW01	CONCRETE DRIVEWAY, 7-INCH
DW02	ASPHALTIC SURFACE DRIVEWAY, 4-INCH
CS05	CONCRETE SIDEWALK, 5-INCH
CS07	CONCRETE SIDEWALK, 7-INCH
//////////	SAWING ASPHALT
xxxx	SAWING CONCRETE



NOTES:

1. SEE PLAN DETAILS - STH 57 FOR ADDITIONAL INFORMATION
2. SEE CONSTRUCTION DETAIL FOR CURB HEAD TRANSITION AT MATCH POINTS
3. SAWCUT AROUND EX. INLET FOR INLET REMOVAL

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 20	E



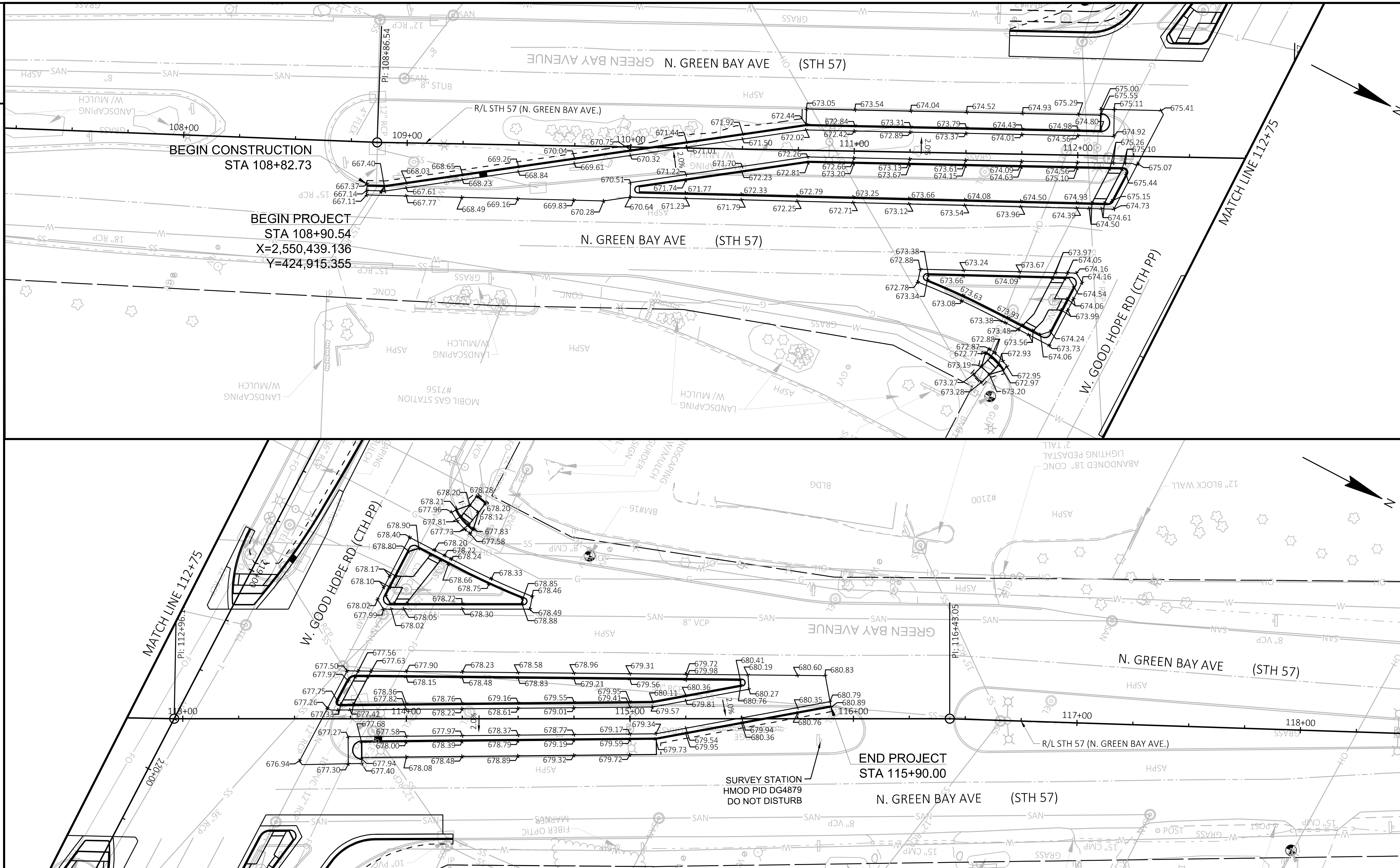
NOTES:

1. SEE PLAN DETAILS - STH 57 FOR ADDITIONAL INFORMATION
2. SEE CONSTRUCTION DETAIL FOR CURB HEAD TRANSITION AT MATCH POINTS
3. SAWCUT AROUND EX. INLET FOR INLET REMOVAL

LEGEND

CP01	CONCRETE PAVEMENT, 9-INCH
CG01	CONCRETE CURB & GUTTER, 31-INCH
CM01	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM02	CONCRETE MEDIAN SLOPED NOSE TYPE 2
PED	PEDESTRIAN CURB
DW01	CONCRETE DRIVEWAY, 7-INCH
DW02	ASPHALTIC SURFACE DRIVEWAY, 4-INCH
CS05	CONCRETE SIDEWALK, 5-INCH
CS07	CONCRETE SIDEWALK, 7-INCH
/////////	SAWING ASPHALT
XXXX	SAWING CONCRETE

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 21	E

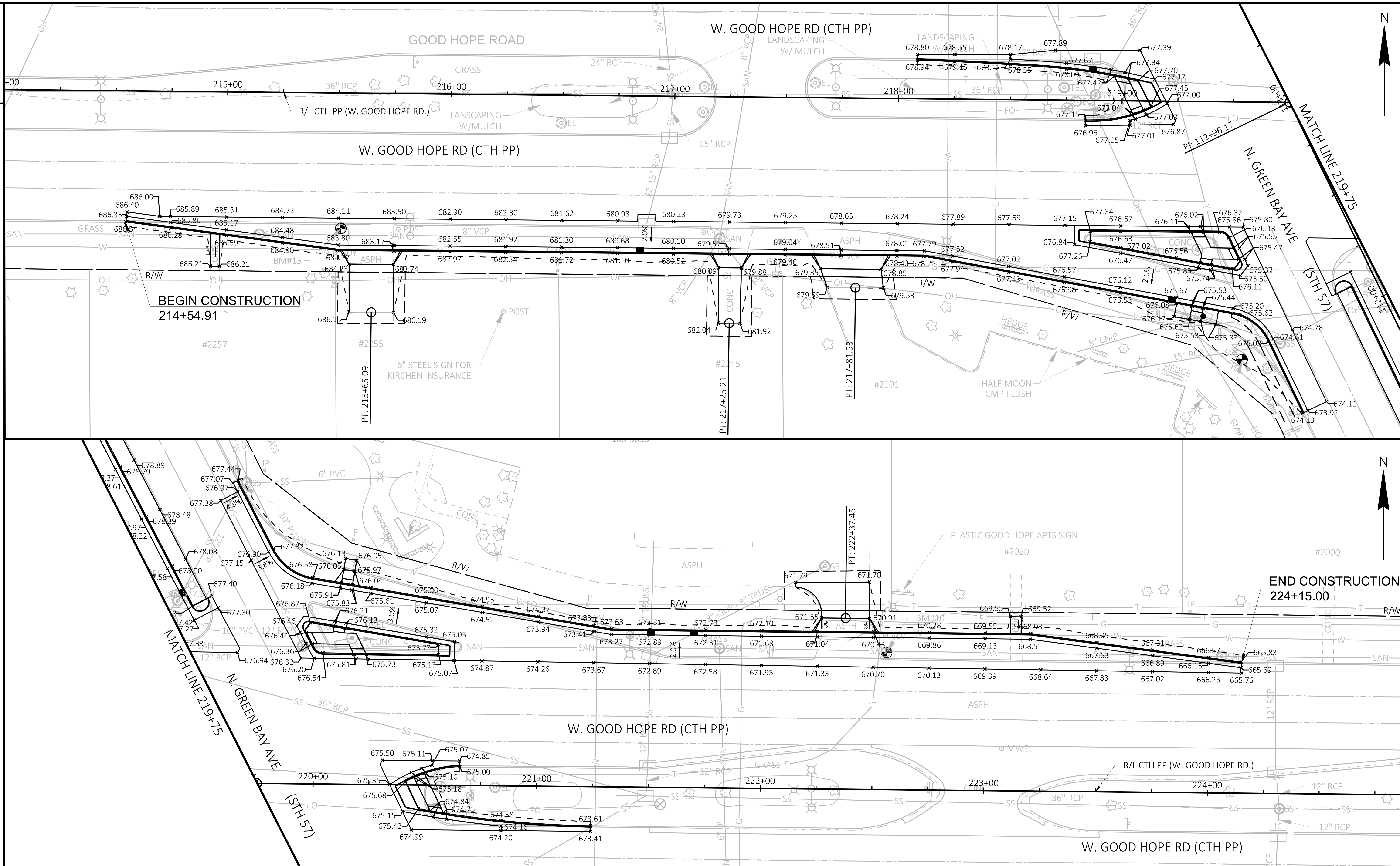


PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PAVING GRADES - STH 57	SHEET 22	E

FILE NAME : \\W3027S02\DPPIS\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN DATA\CADD\SHEETS PLAN\021202-PG.DWG PLOT DATE : 11/12/2012 3:31 PM PLOT BY : MURPHY, DANIEL PLOT NAME : PLOT SCALE : ##########
LAYOUT NAME - 01

WISDOT/CADDS SHEET 42

2



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PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PAVING GRADES - CTH PP	SHEET 23	E

FILE NAME : \\W30275O2\DPPIS\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN DATA\CADD\ 021202-PG.DWG PLOT BY : MURPHY, DANIEL PLOT NAME : PLOT SCALE : ##########
LAYOUT NAME - 02

2

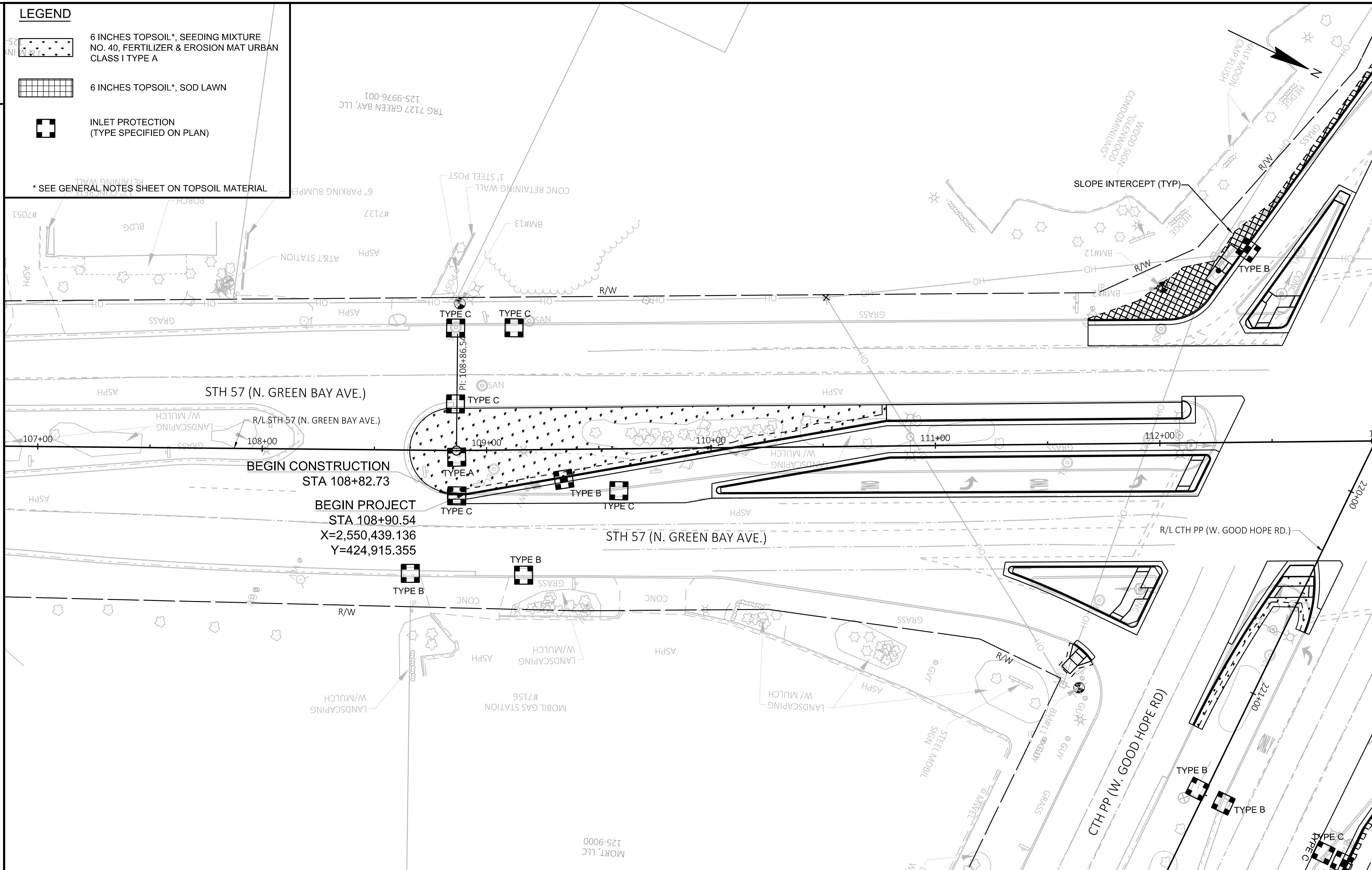
LEGEND

6 INCHES TOPSOIL*, SEEDING MIXTURE NO. 40, FERTILIZER & EROSION MAT URBAN CLASS I TYPE A

6 INCHES TOPSOIL*, SOD LAWN

INLET PROTECTION (TYPE SPECIFIED ON PLAN)

* SEE GENERAL NOTES SHEET ON TOPSOIL MATERIAL



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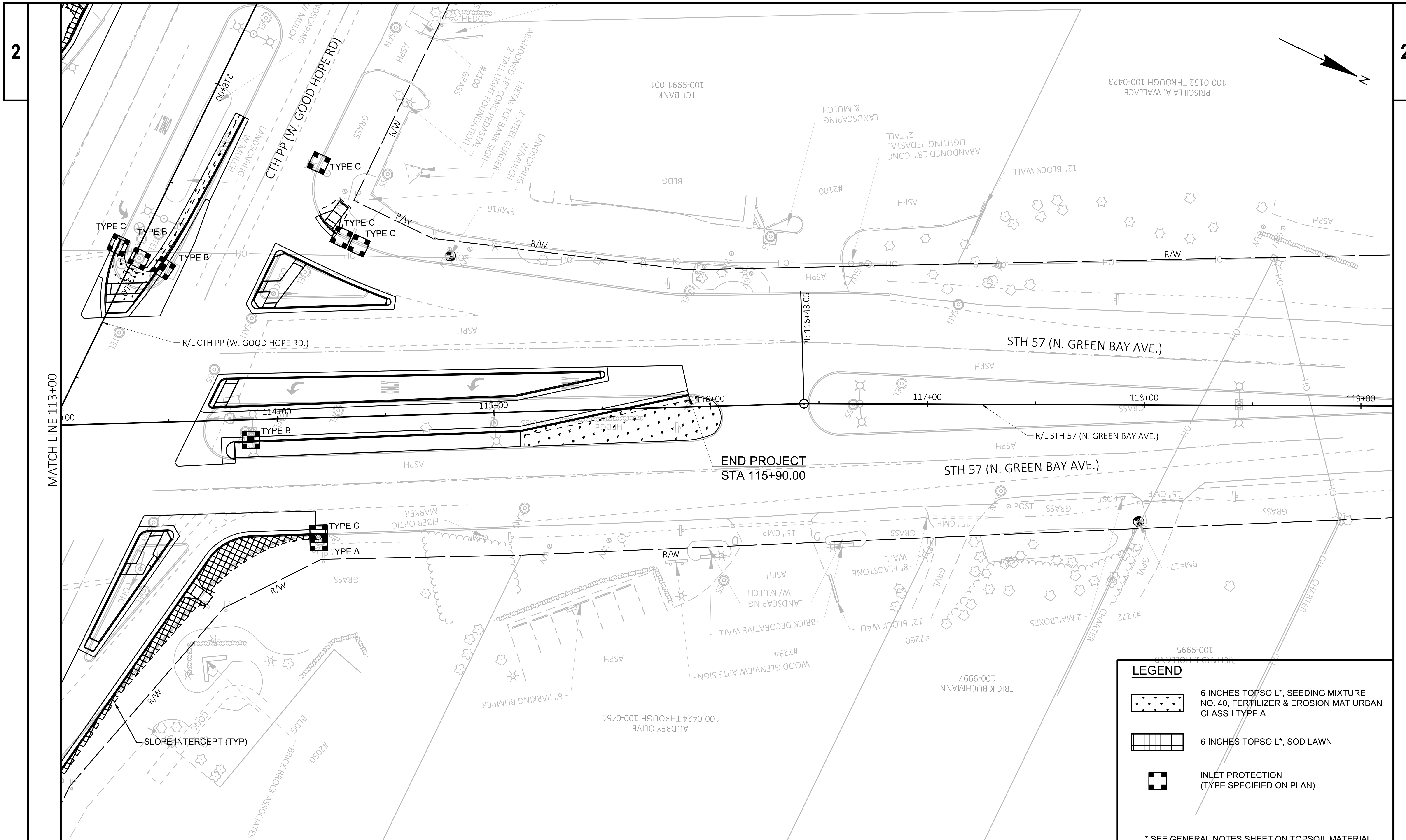
PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	EROSION CONTROL	SHEET 24	E

FILE NAME : \\W3027S02\DPPIS\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN DATA\CADD\...\022001-EC.DWG PLOT BY : MURPHY, DANIEL PLOT NAME : PLOT SCALE : 1 IN:40 FT

LAYOUT NAME - 01

WISDOT/CADDS SHEET 42

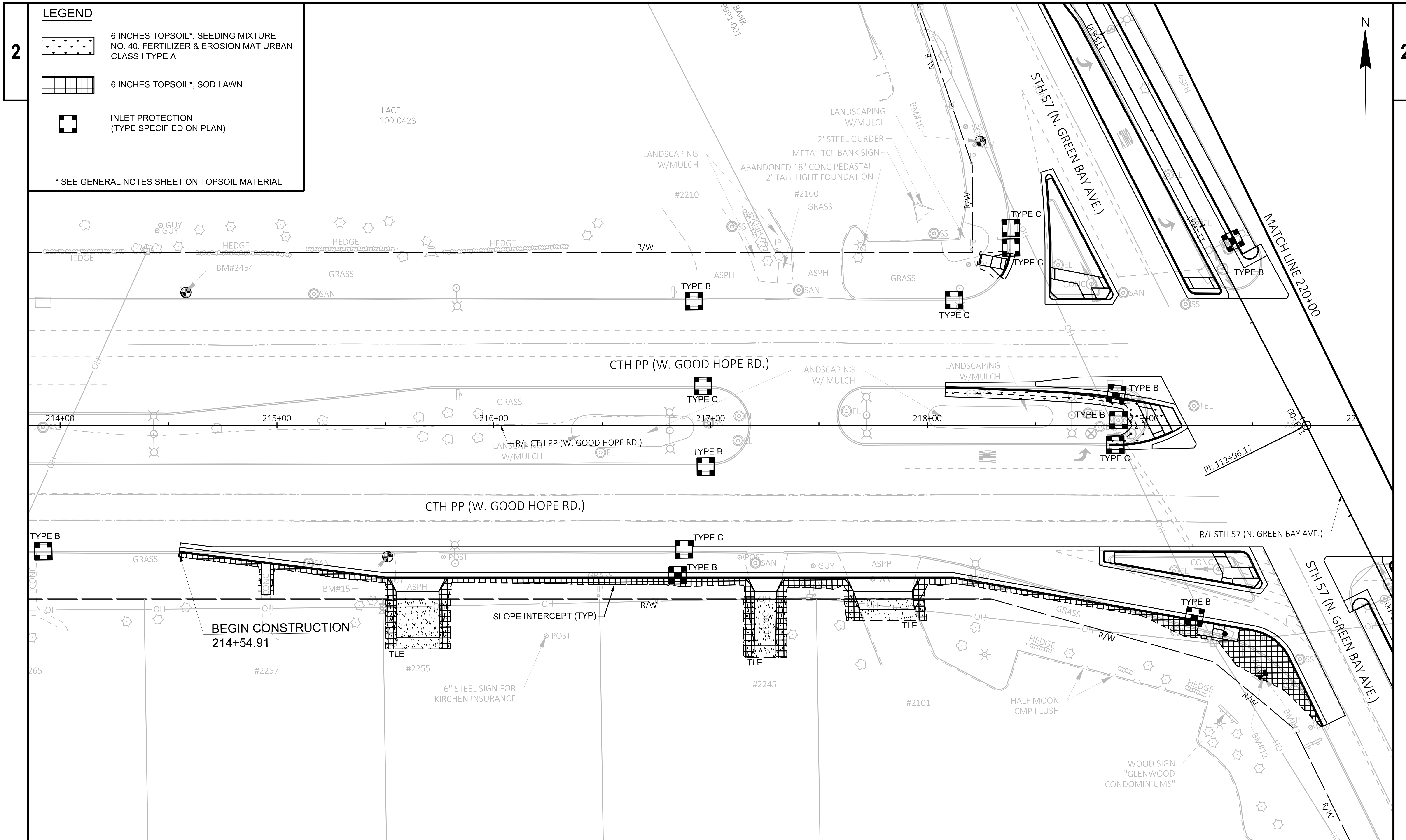


PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	EROSION CONTROL	SHEET 25	E

FILE NAME : \\W3027S02\DPPIS\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN DATA\CADD FILES\SHEETSPLAN\022001-EC.DWG PLOT BY : MURPHY, DANIEL PLOT NAME : PLOT SCALE : 1 IN:40 FT

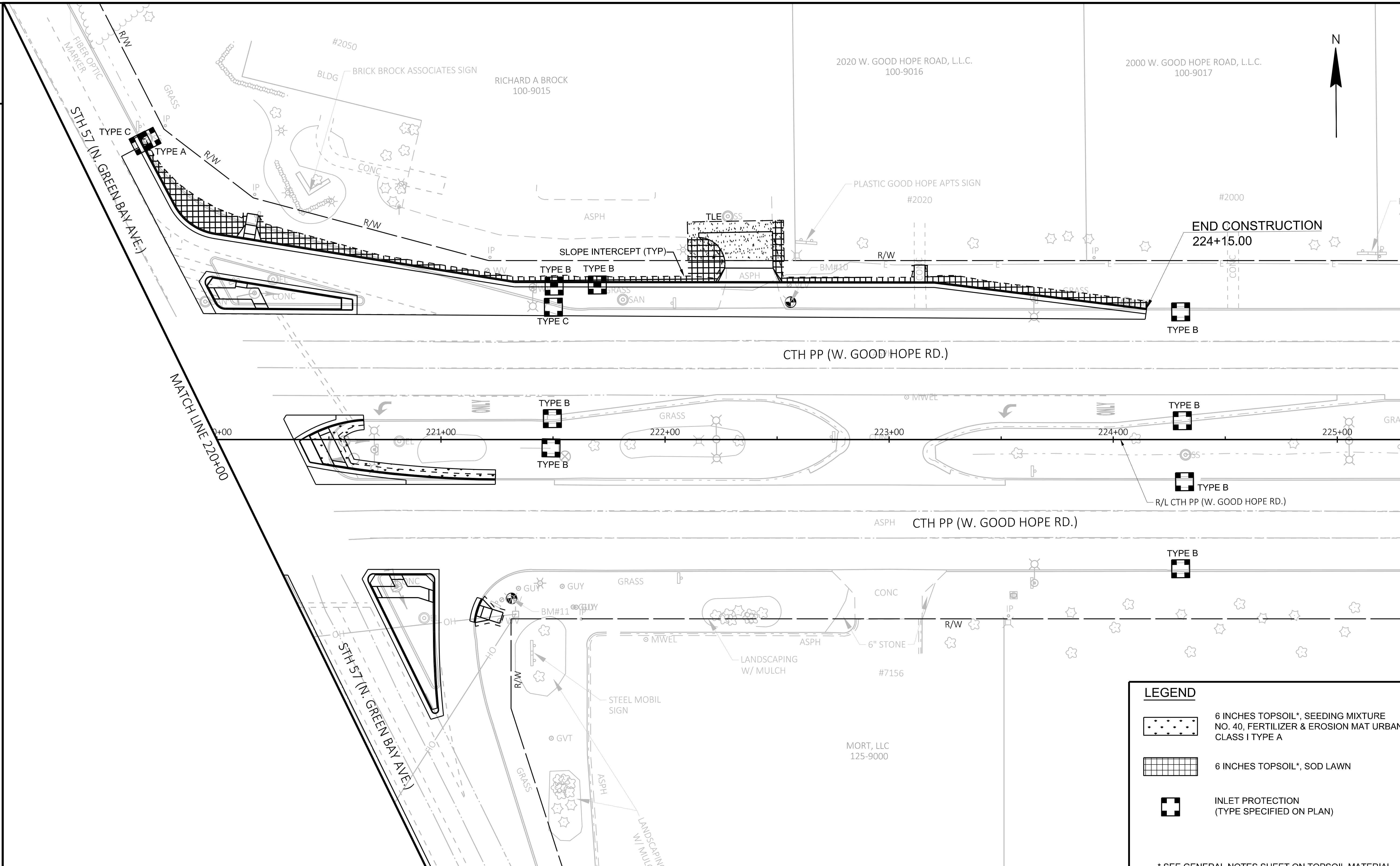
LAYOUT NAME - 02

WISDOT/CADDS SHEET 42



PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	EROSION CONTROL	SHEET 26	E

FILE NAME : \\W3027S02\DPPIS\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN DATA\CADD FILES\SHEETS PLAN\022001-EC.DWG PLOT BY : MURPHY, DANIEL PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 03



LEGEND

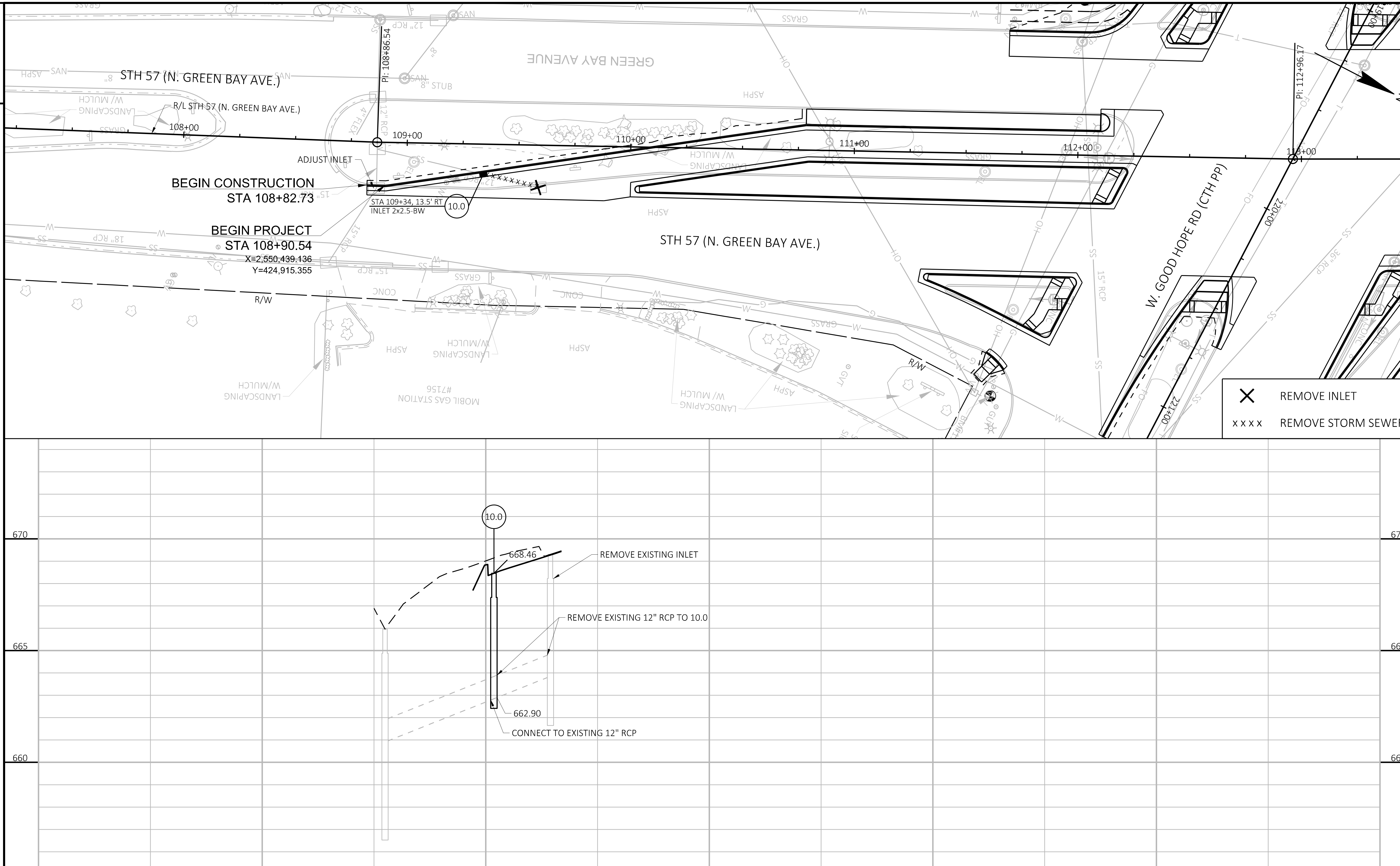
6 INCHES TOPSOIL*, SEEDING MIXTURE NO. 40, FERTILIZER & EROSION MAT URBAN CLASS I TYPE A

6 INCHES TOPSOIL*, SOD LAWN

INLET PROTECTION (TYPE SPECIFIED ON PLAN)

* SEE GENERAL NOTES SHEET ON TOPSOIL MATERIAL

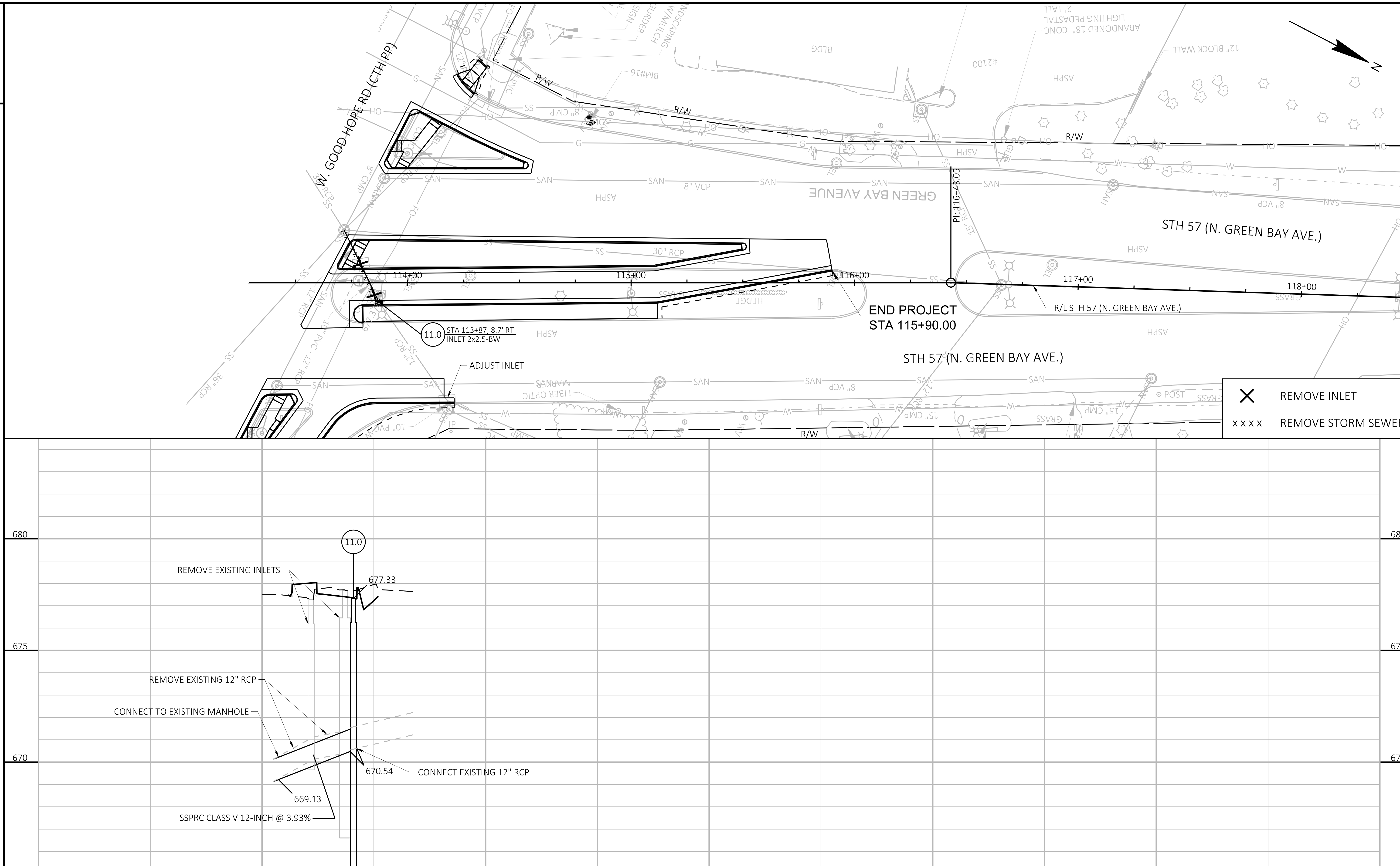
2



PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	STORM SEWER - STH 57 (N. GREEN BAY AVE)	SHEET 28	E

FILE NAME : \\W3027S02\DPPI$\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN DATA\CADD\SHEETS PLAN\022501-SS.DWG PLOT BY : HILLIARD, MARC PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 01

2



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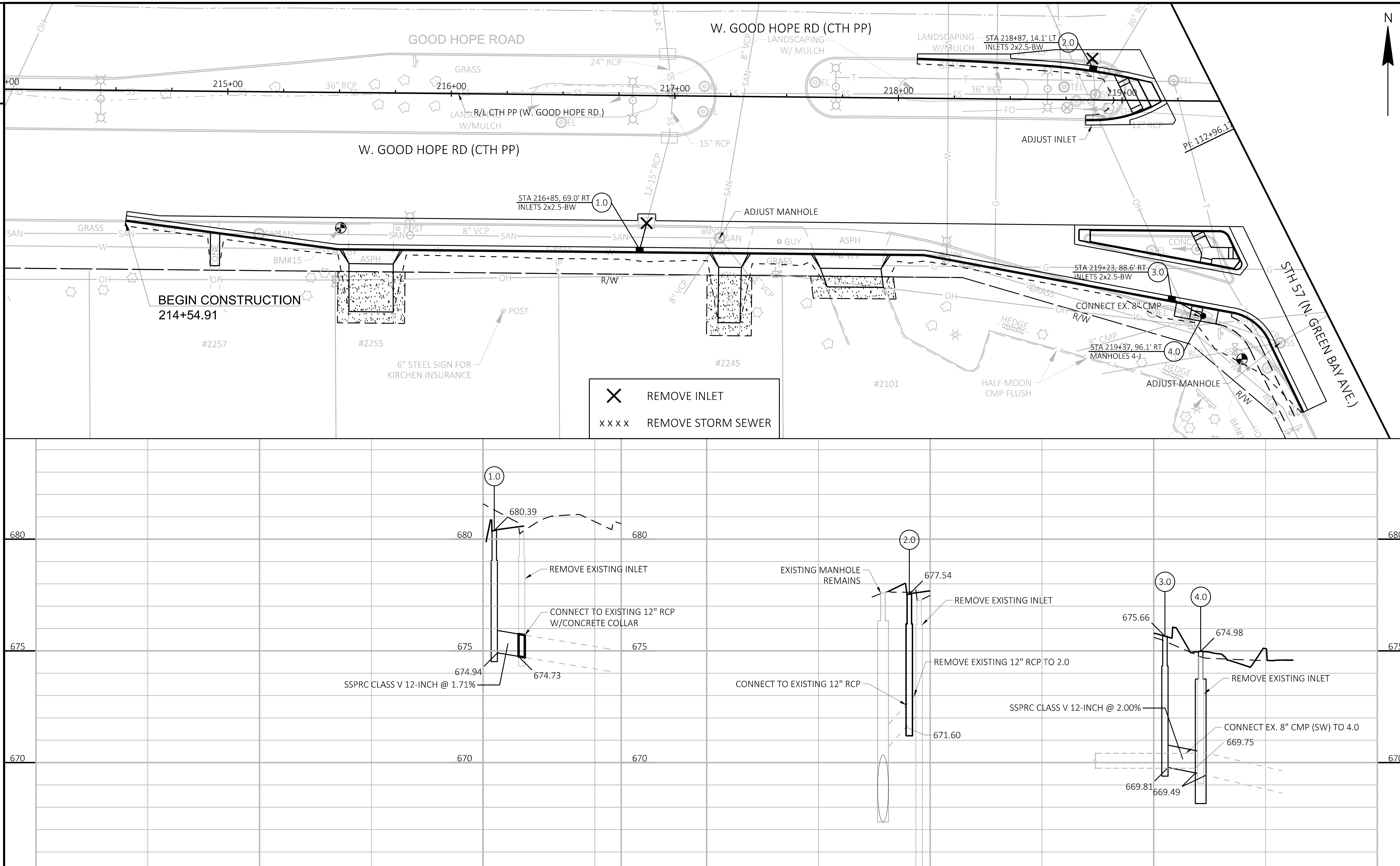
PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	STORM SEWER - STH 57 (N. GREEN BAY AVE)	SHEET 29	E

FILE NAME : \\W3027S02\DPPIS\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN DATA\CADD\SHEETS\2565022501-SS.DWG PLOT BY : HILLIARD, MARC PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 02

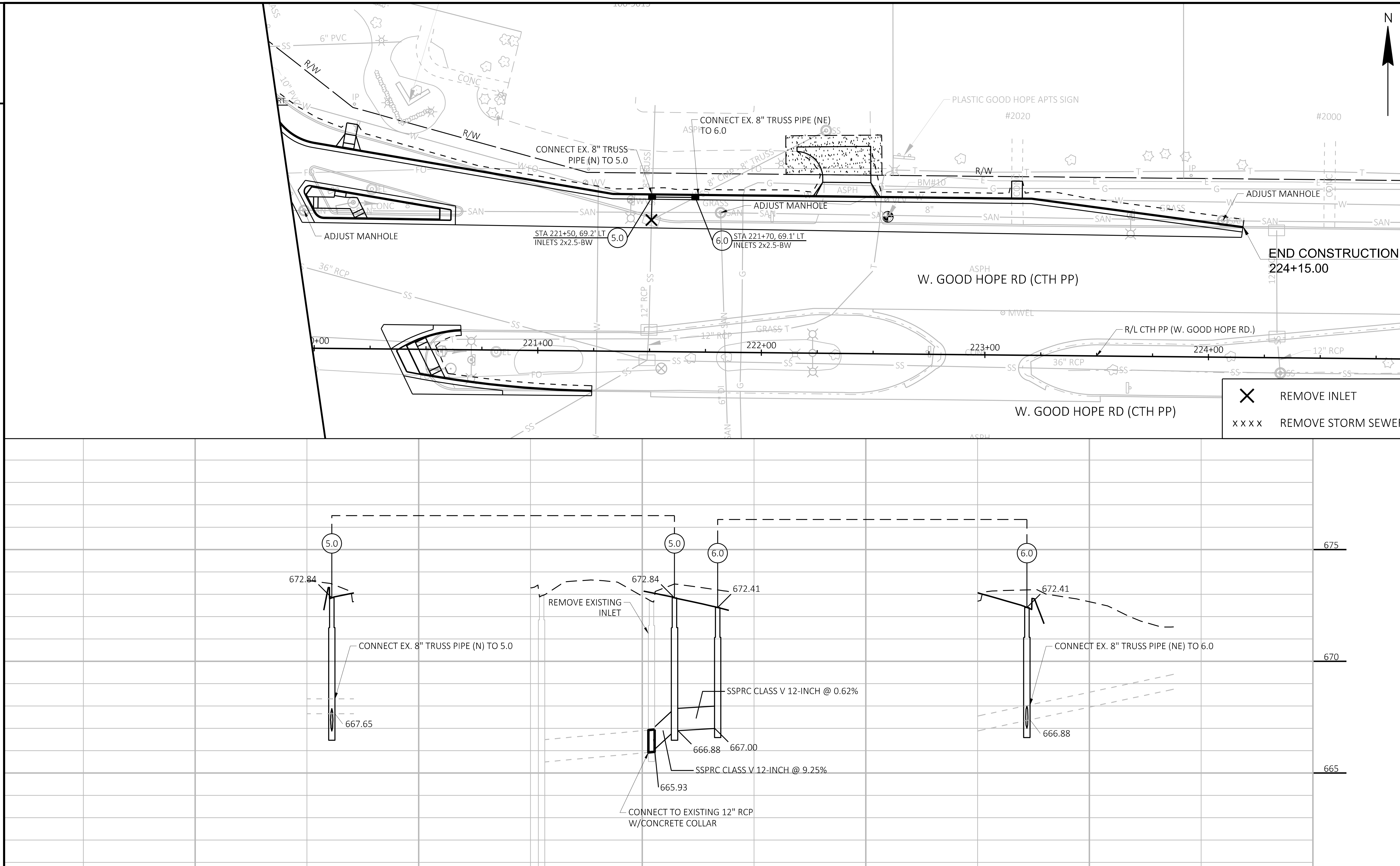
WISDOT/CADDS SHEET 41



PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	STORM SEWER - CTH PP (W. GOOD HOPE RD)	SHEET 30	E

FILE NAME : \\W3027S02\DPPIS\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN\PLANS\CADD\10\2565022501-SS.DWG PLOT BY : HILLIARD, MARC PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 03

2



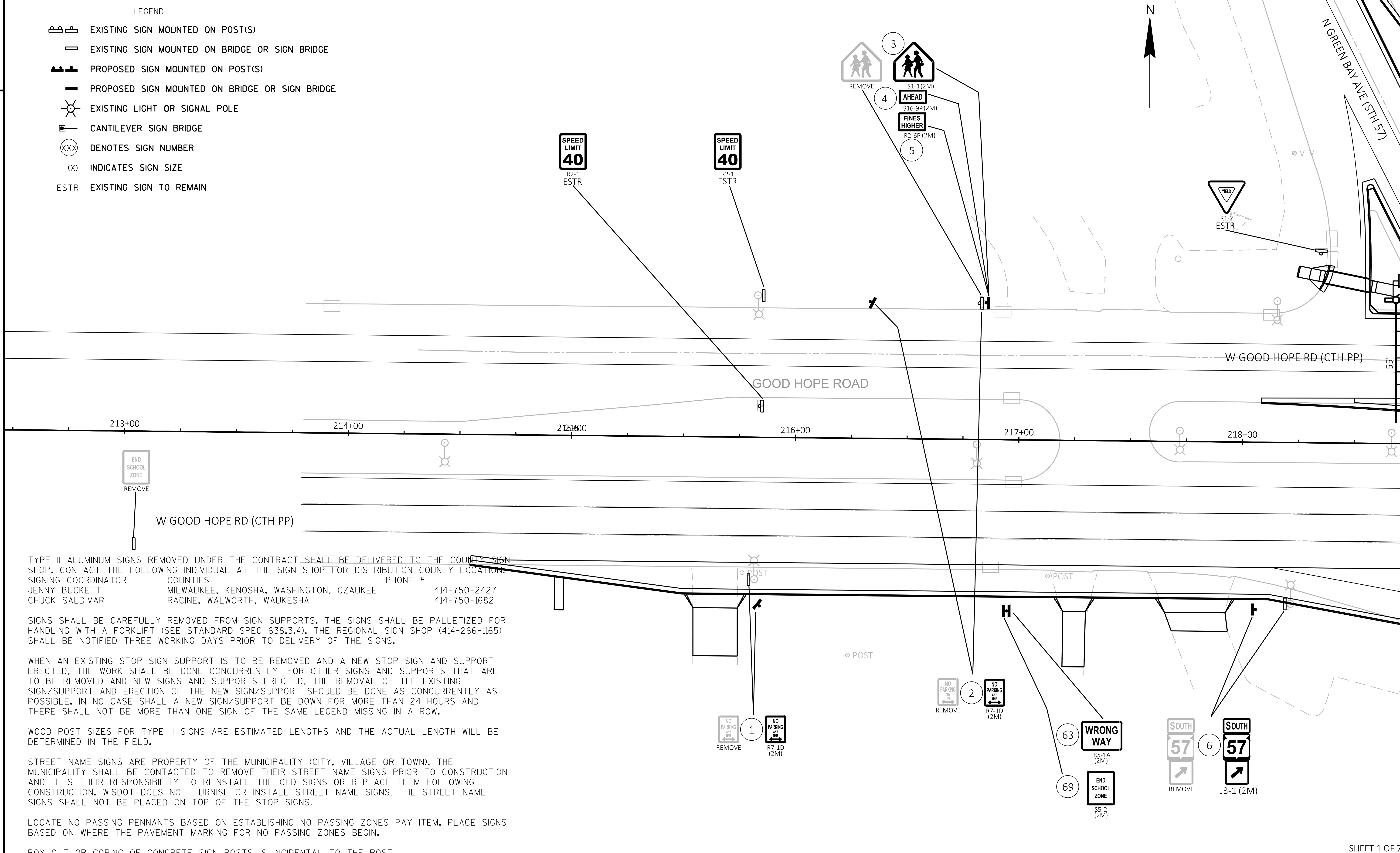
2

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	STORM SEWER - CTH PP (W. GOOD HOPE RD)	SHEET 31	E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN



TYPE II ALUMINUM SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE COUNTY SIGN SHOP. CONTACT THE FOLLOWING INDIVIDUAL AT THE SIGN SHOP FOR DISTRIBUTION COUNTY LOCATION.

SIGNING COORDINATOR	COUNTIES	PHONE #
JENNY BUCKETT	MILWAUKEE, KENOSHA, WASHINGTON, OZAUKEE	414-750-2427
CHUCK SALDIVAR	RACINE, WALWORTH, WAUKESHA	414-750-1682

SIGNS SHALL BE CAREFULLY REMOVED FROM SIGN SUPPORTS. THE SIGNS SHALL BE PALLETIZED FOR HANDLING WITH A FORKLIFT (SEE STANDARD SPEC 638.3.4). THE REGIONAL SIGN SHOP (414-266-1165) SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF THE SIGNS.

WHEN AN EXISTING STOP SIGN SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED, THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POST SIZES FOR TYPE II SIGNS ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

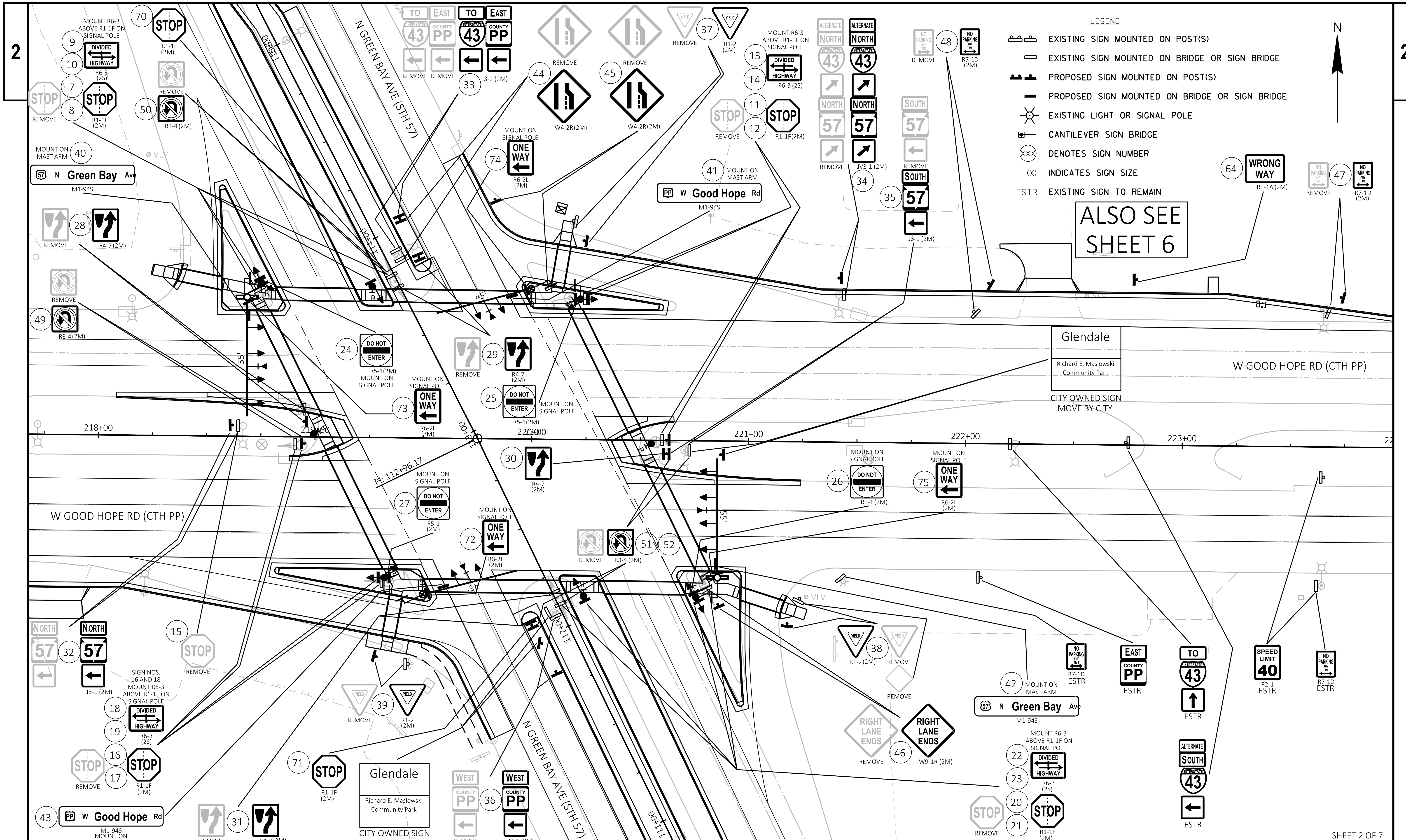
STREET NAME SIGNS ARE PROPERTY OF THE MUNICIPALITY (CITY, VILLAGE OR TOWN). THE MUNICIPALITY SHALL BE CONTACTED TO REMOVE THEIR STREET NAME SIGNS PRIOR TO CONSTRUCTION AND IT IS THEIR RESPONSIBILITY TO REINSTALL THE OLD SIGNS OR REPLACE THEM FOLLOWING CONSTRUCTION. WISDOT DOES NOT FURNISH OR INSTALL STREET NAME SIGNS. THE STREET NAME SIGNS SHALL NOT BE PLACED ON TOP OF THE STOP SIGNS.

LOCATE NO PASSING PENNANTS BASED ON ESTABLISHING NO PASSING ZONES PAY ITEM. PLACE SIGNS BASED ON WHERE THE PAVEMENT MARKING FOR NO PASSING ZONES BEGIN.

BOX OUT OR CORING OF CONCRETE SIGN POSTS IS INCIDENTAL TO THE POST

SHEET 1 OF 7

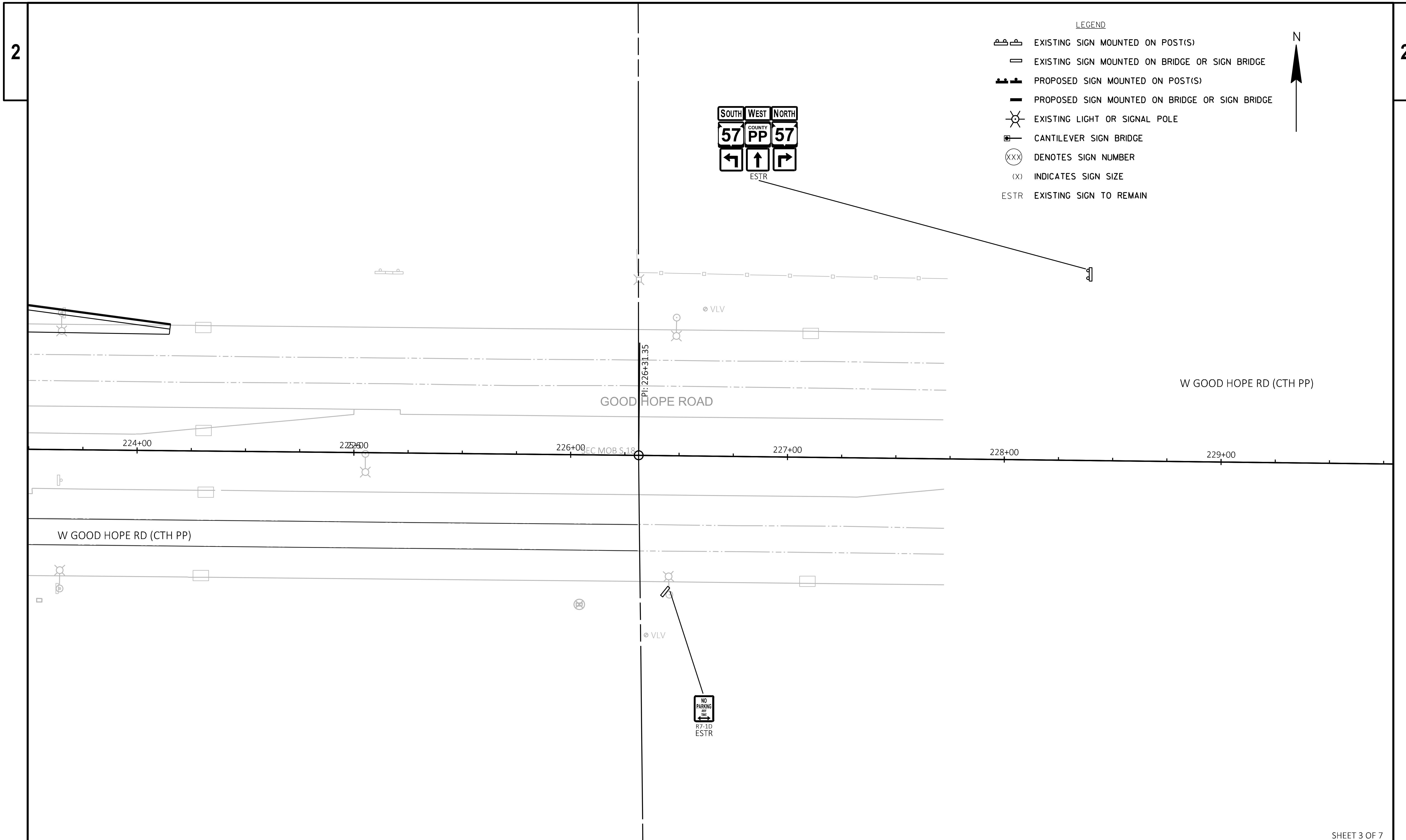
PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 32	E



PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 33	E

SHEET 2 OF 7

FILE NAME: N:\PDS\C3D\CAD\25650201\SIGN\023201_PS.DWG
LAYOUT NAME - 02
PLOT DATE: 6/29/2022 11:03 AM
PLOT BY: ASHENFELTER, DANIEL
PLOT NAME:
PLOT SCALE: 1 IN:40 FT
WISDOT/CADDS SHEET 42



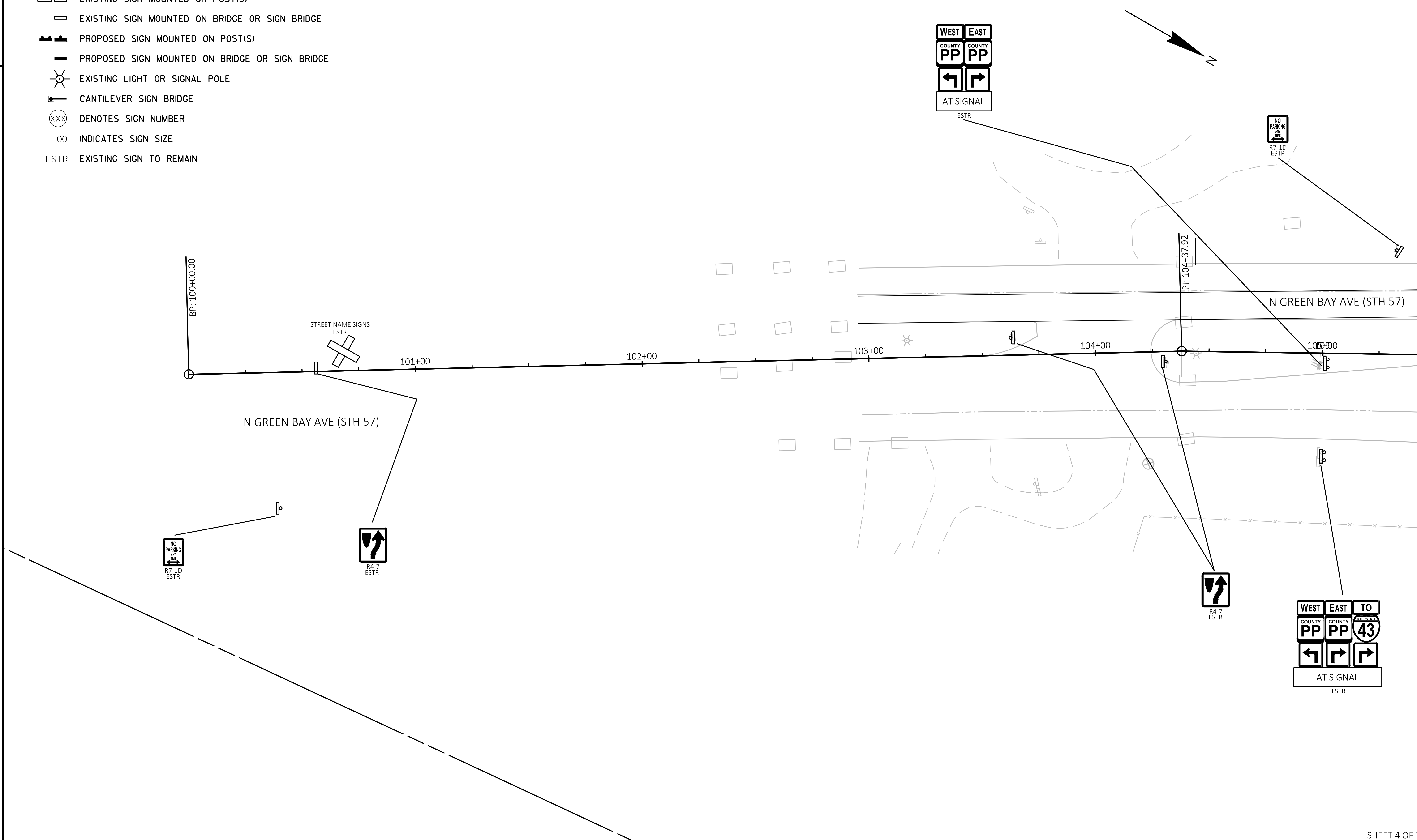
SHEET 3 OF 7

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 34	E

FILE NAME : N:\PDS\C3D\CAD\25650201\SIGN\023201_PS.DWG
LAYOUT NAME - 03
PLOT DATE : 6/29/2022 11:03 AM
PLOT BY : ASHENFELTER, DANIEL
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN



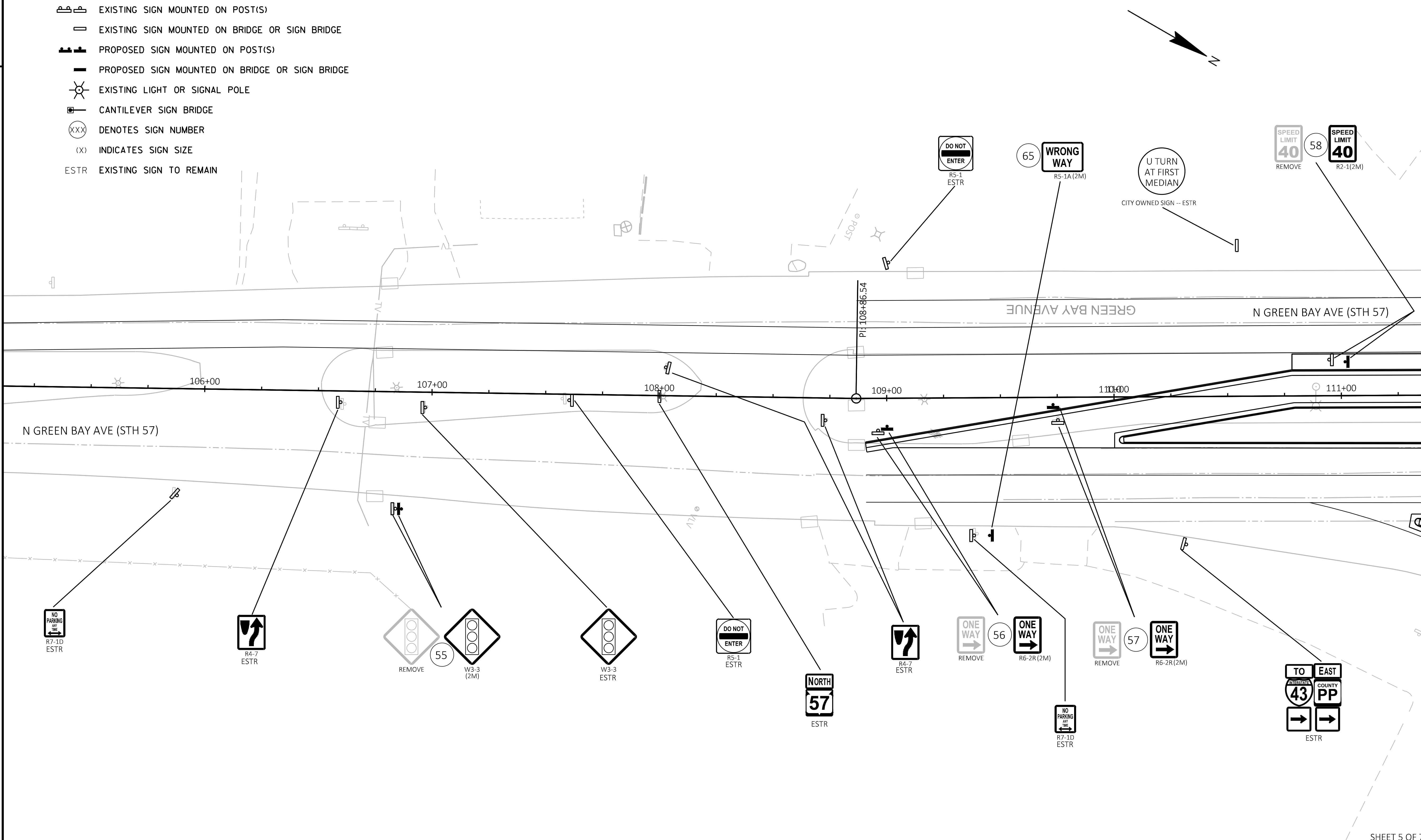
SHEET 4 OF 7

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 35	E

2

LEGEND

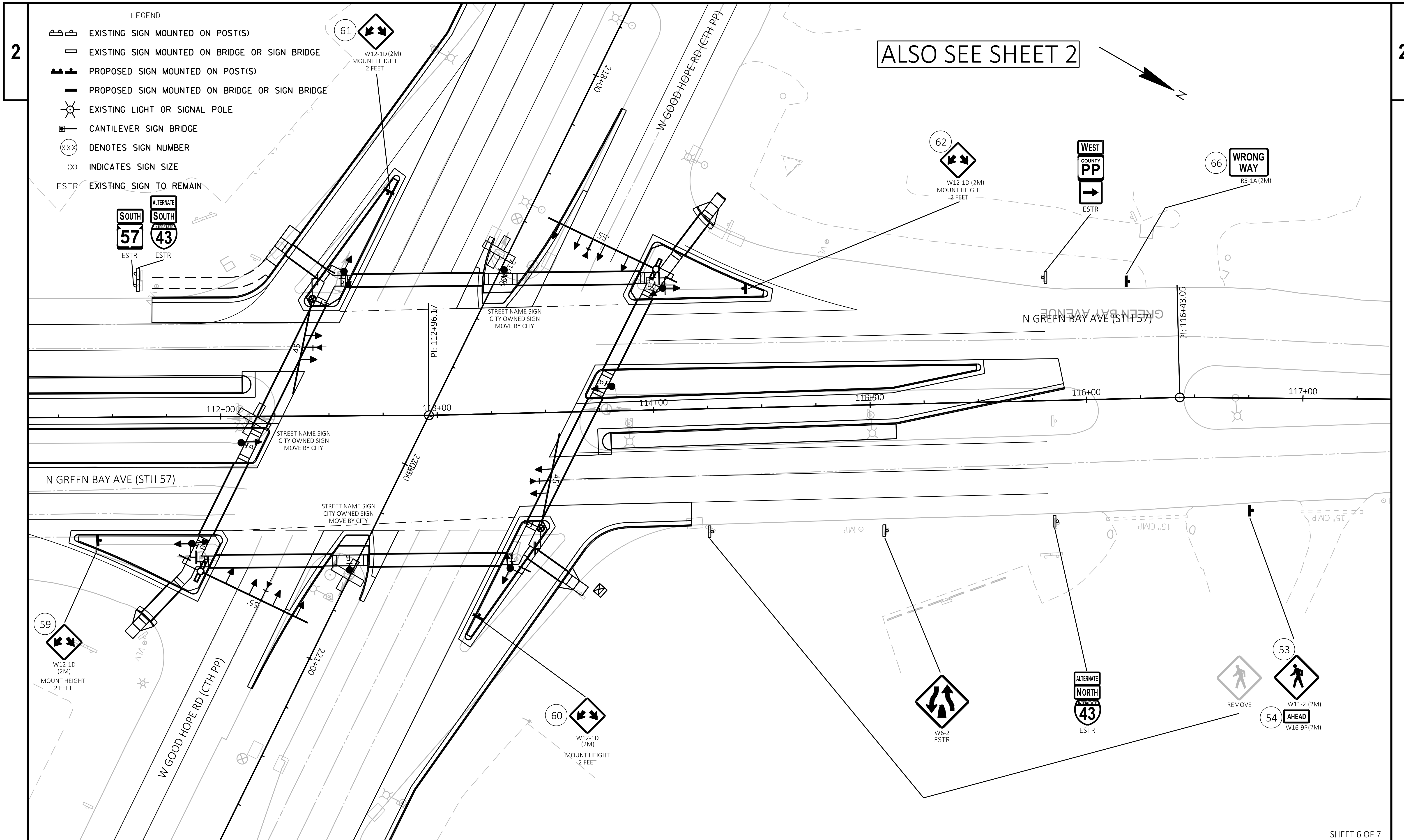
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN



PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 36	E

FILE NAME : N:\PDS\C3D\CAD\25650201\SIGN\023201_PS.DWG
LAYOUT NAME - 05
PLOT DATE : 6/29/2022 11:03 AM
PLOT BY : ASHENFELTER, DANIEL
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

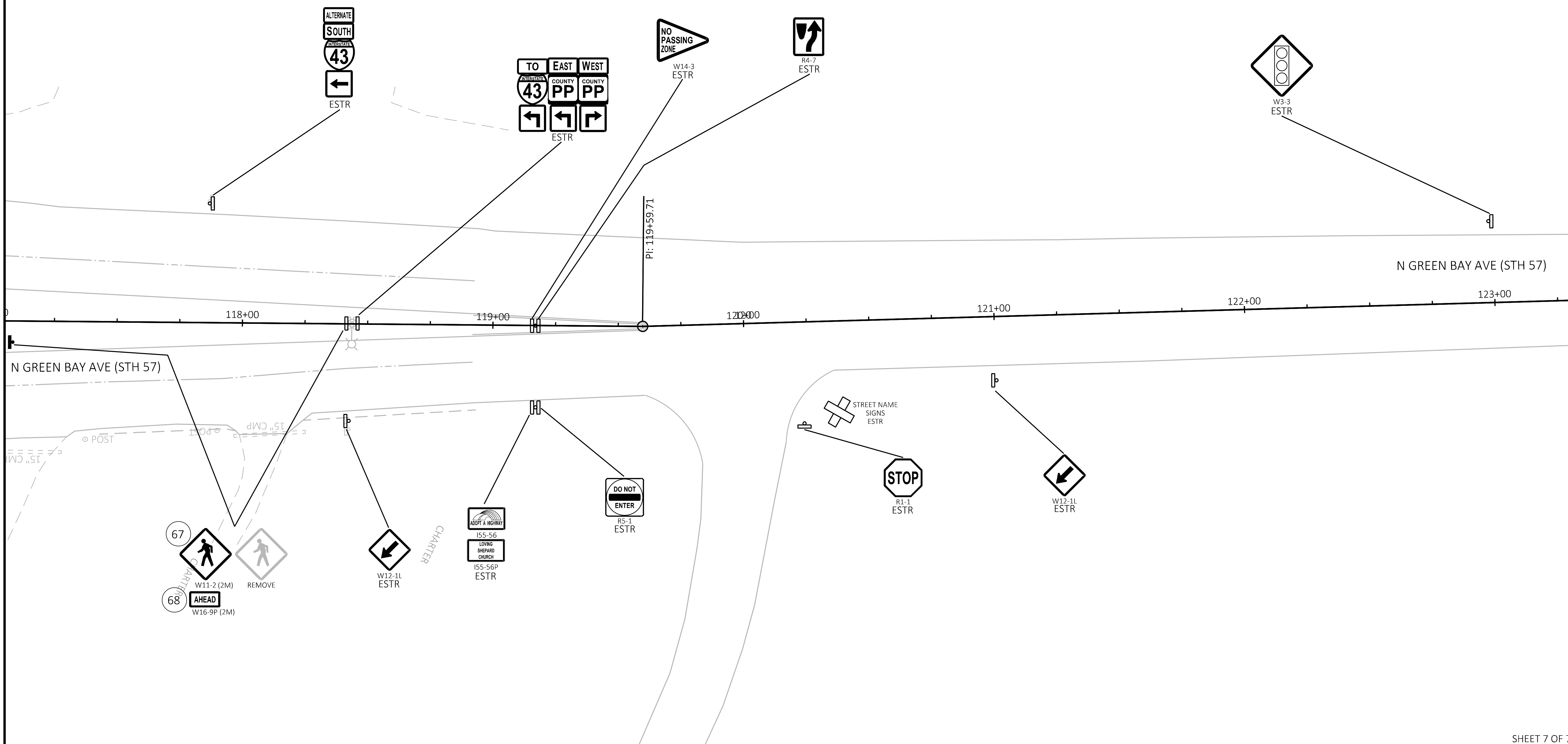


PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 37	E

FILE NAME : N:\PDS\C3D\CAD\25650201\SIGN\023201_PS.DWG
LAYOUT NAME - 06
PLOT DATE : 6/29/2022 11:03 AM
PLOT BY : ASHENFELTER, DANIEL
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

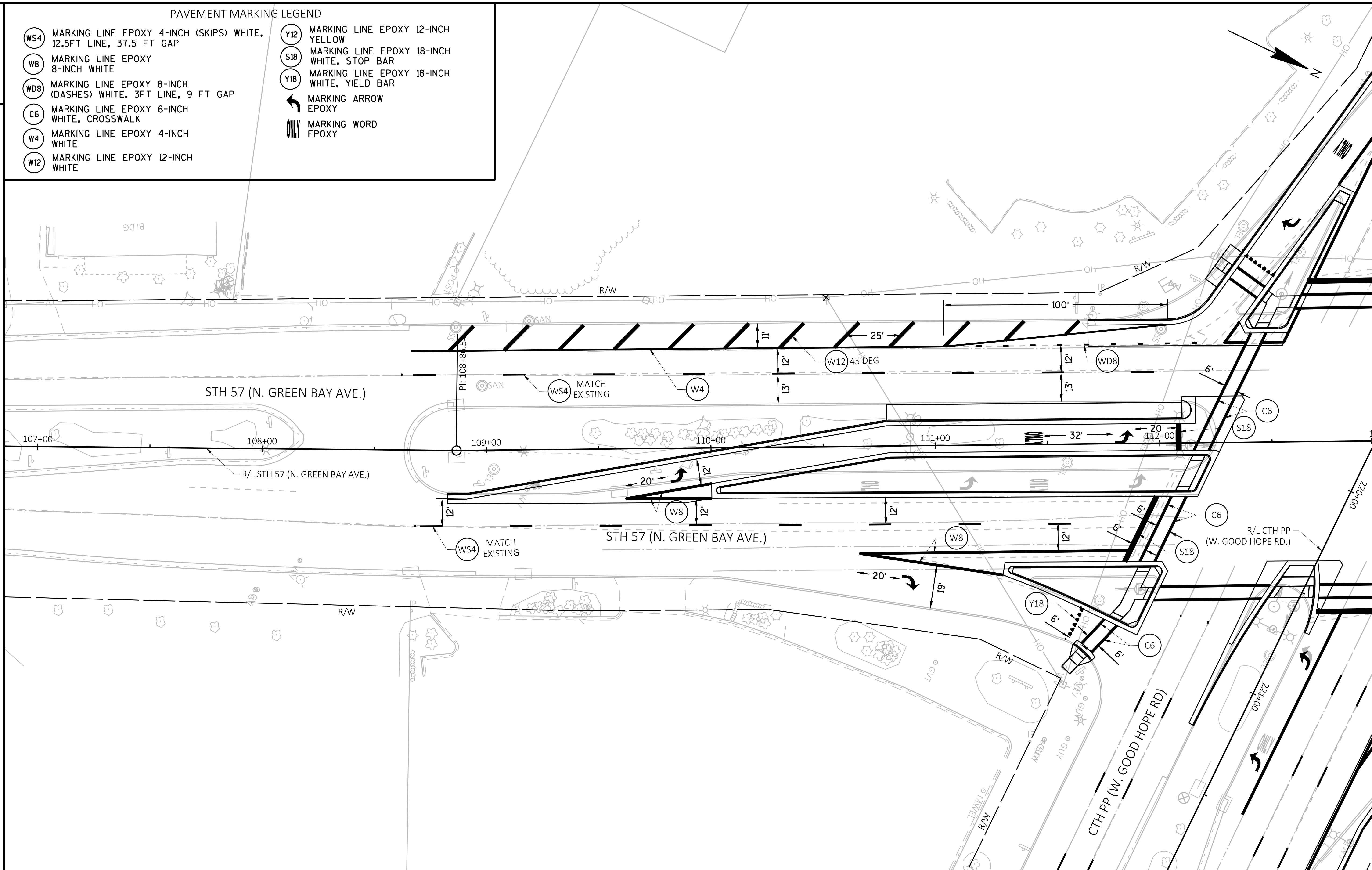


PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 38	E

FILE NAME : N:\PDS\C3D\CAD\25650201\SIGN\023201_PS.DWG
LAYOUT NAME - 07
PLOT DATE : 6/29/2022 11:03 AM
PLOT BY : ASHENFELTER, DANIEL
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

PAVEMENT MARKING LEGEND

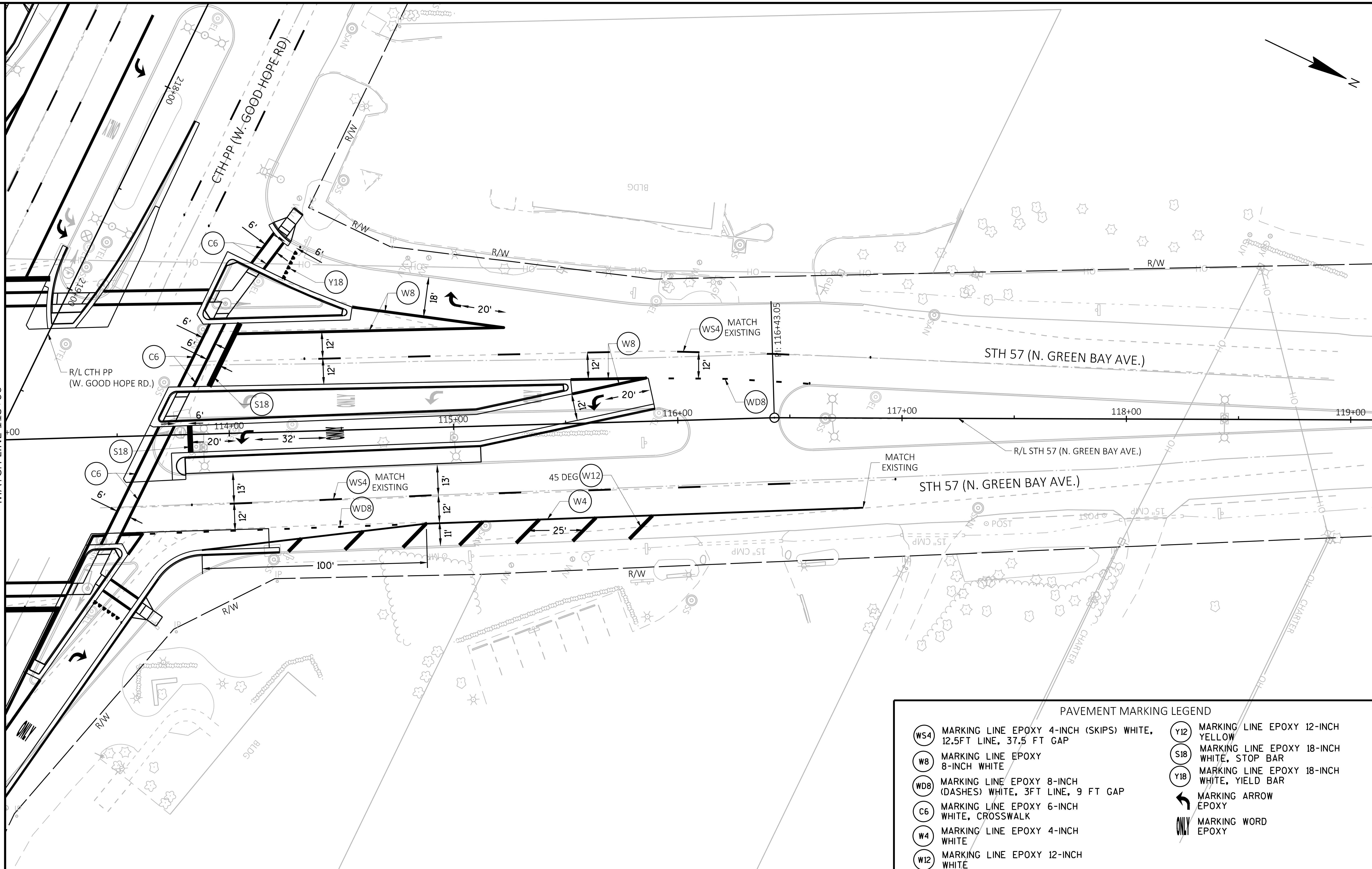
- (WS4) MARKING LINE EPOXY 4-INCH (SKIPS) WHITE, 12.5FT LINE, 37.5 FT GAP
- (W8) MARKING LINE EPOXY 8-INCH WHITE
- (WD8) MARKING LINE EPOXY 8-INCH (DASHES) WHITE, 3FT LINE, 9 FT GAP
- (C6) MARKING LINE EPOXY 6-INCH WHITE, CROSSWALK
- (W4) MARKING LINE EPOXY 4-INCH WHITE
- (W12) MARKING LINE EPOXY 12-INCH WHITE
- (Y12) MARKING LINE EPOXY 12-INCH YELLOW
- (S18) MARKING LINE EPOXY 18-INCH WHITE, STOP BAR
- (Y18) MARKING LINE EPOXY 18-INCH WHITE, YIELD BAR
- MARKING ARROW EPOXY
- ONLY MARKING WORD EPOXY



PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PAVEMENT MARKING	SHEET 39	E

FILE NAME : O:\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN\PLANS\CADD FILES\SHEETSPLAN\0245PM.DWG 11/1/2022 7:27 AM PLOT BY : THORNBURG, ALEX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 01

WISDOT/CADDS SHEET 42



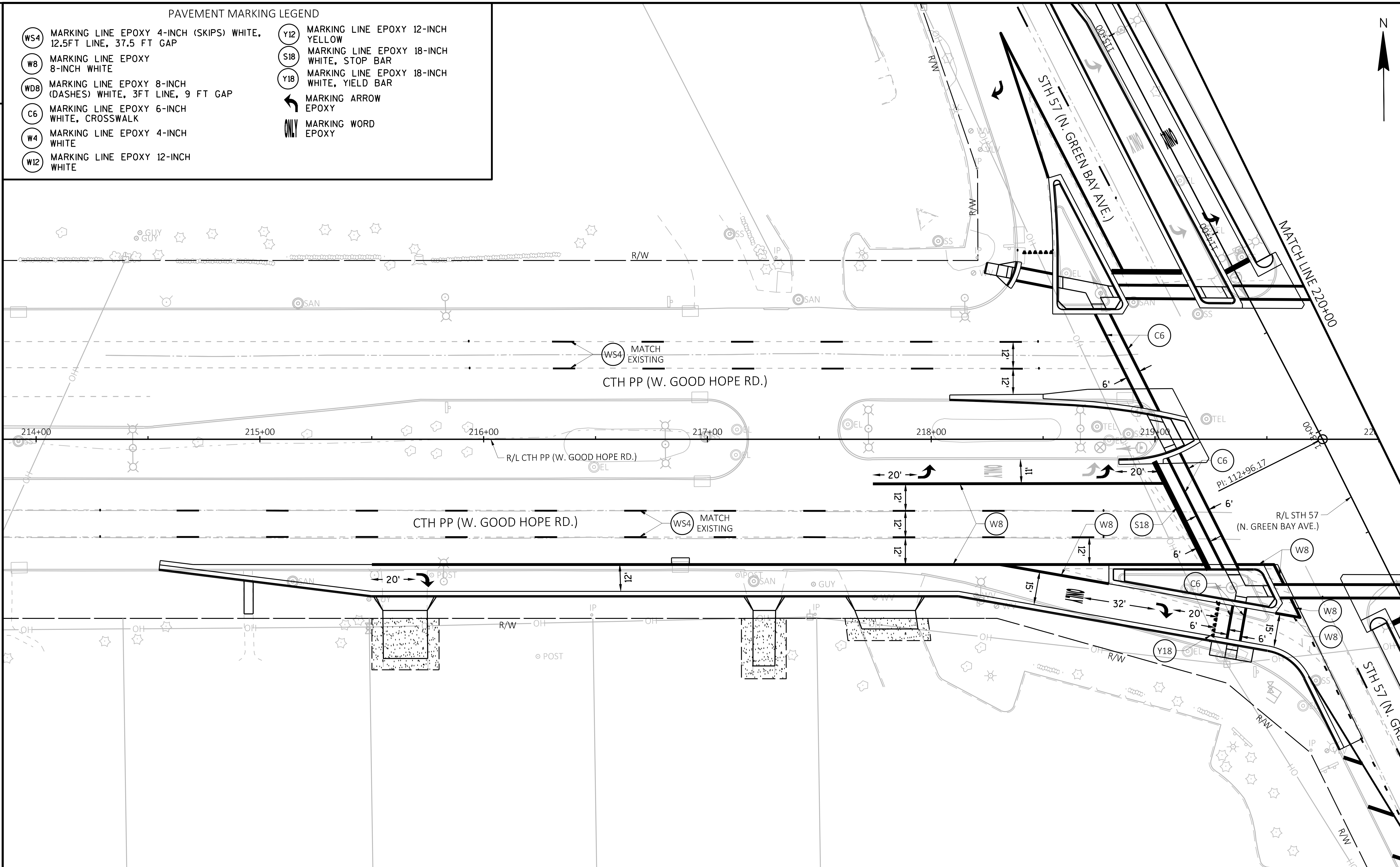
PAVEMENT MARKING LEGEND

- WS4 MARKING LINE EPOXY 4-INCH (SKIPS) WHITE, 12.5FT LINE, 37.5 FT GAP
- W8 MARKING LINE EPOXY 8-INCH WHITE
- WD8 MARKING LINE EPOXY 8-INCH (DASHES) WHITE, 3FT LINE, 9 FT GAP
- C6 MARKING LINE EPOXY 6-INCH WHITE, CROSSWALK
- W4 MARKING LINE EPOXY 4-INCH WHITE
- W12 MARKING LINE EPOXY 12-INCH WHITE
- Y12 MARKING LINE EPOXY 12-INCH YELLOW
- S18 MARKING LINE EPOXY 18-INCH WHITE, STOP BAR
- Y18 MARKING LINE EPOXY 18-INCH WHITE, YIELD BAR
- MARKING ARROW EPOXY
- ONLY MARKING WORD EPOXY

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PAVEMENT MARKING	SHEET 40	E

PAVEMENT MARKING LEGEND

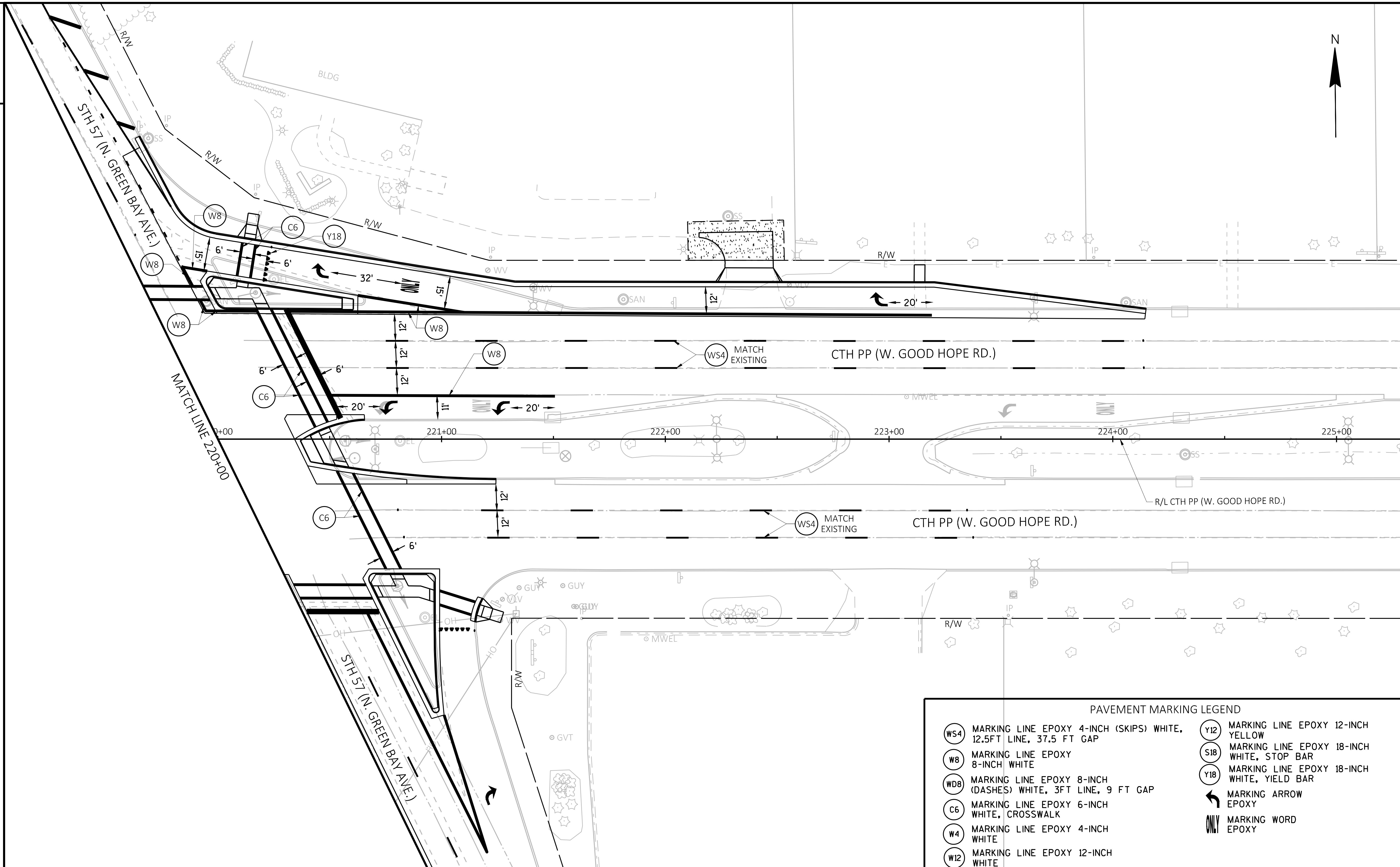
WS4	MARKING LINE EPOXY 4-INCH (SKIPS) WHITE, 12.5FT LINE, 37.5 FT GAP
W8	MARKING LINE EPOXY 8-INCH WHITE
WD8	MARKING LINE EPOXY 8-INCH (DASHES) WHITE, 3FT LINE, 9 FT GAP
C6	MARKING LINE EPOXY 6-INCH WHITE, CROSSWALK
W4	MARKING LINE EPOXY 4-INCH WHITE
W12	MARKING LINE EPOXY 12-INCH WHITE
Y12	MARKING LINE EPOXY 12-INCH YELLOW
S18	MARKING LINE EPOXY 18-INCH WHITE, STOP BAR
Y18	MARKING LINE EPOXY 18-INCH WHITE, YIELD BAR
↰	MARKING ARROW EPOXY
ONLY	MARKING WORD EPOXY



PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PAVEMENT MARKING	SHEET 41	E

FILE NAME : O:\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN\PLANS\CADD FILES\SHEETSPLAN\024501-PM.DWG 11/1/2022 7:27 AM PLOT BY : THORNBURG, ALEX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 03

WISDOT/CADDS SHEET 42



PAVEMENT MARKING LEGEND

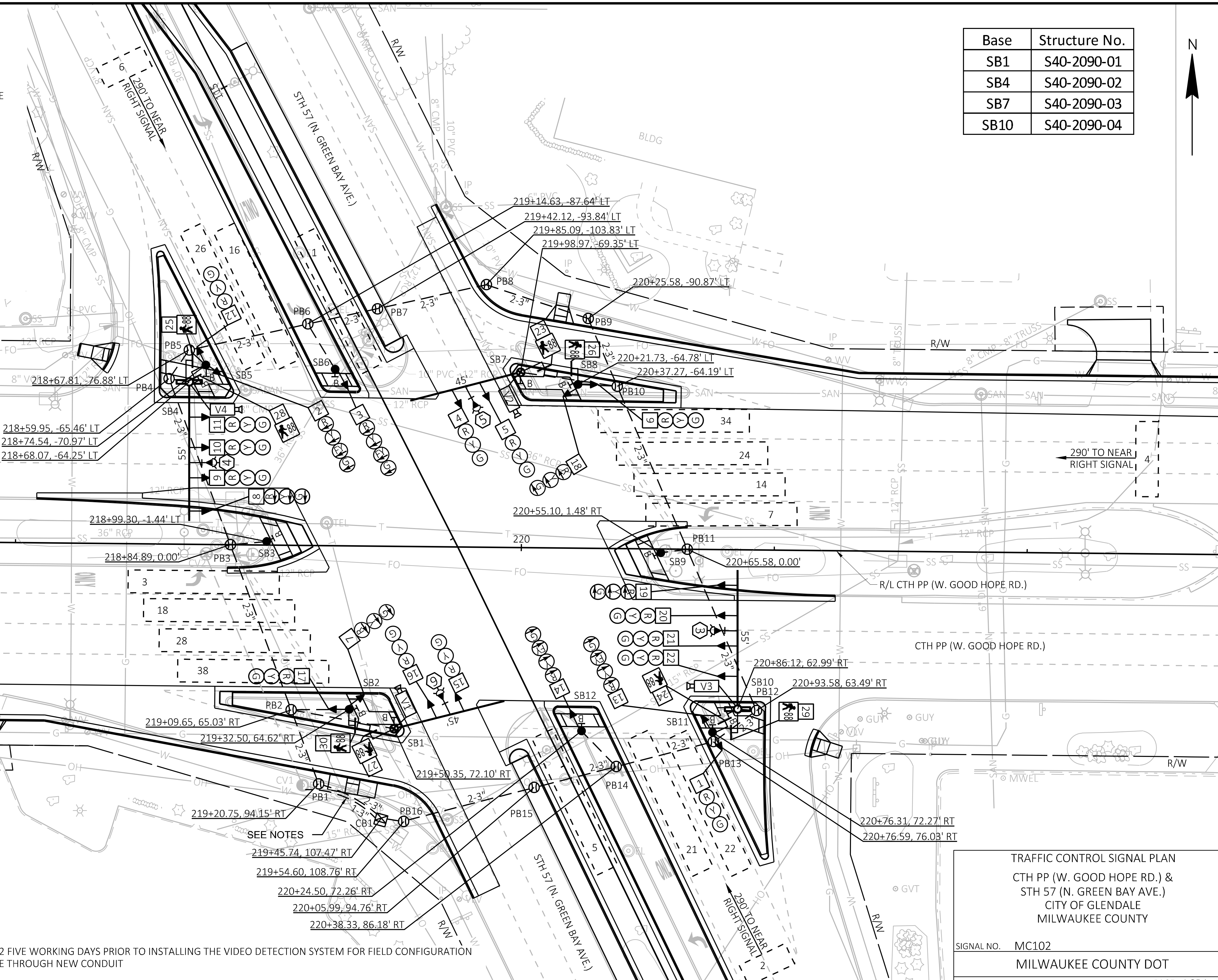
WS4	MARKING LINE EPOXY 4-INCH (SKIPS) WHITE, 12.5FT LINE, 37.5 FT GAP
W8	MARKING LINE EPOXY 8-INCH WHITE
WD8	MARKING LINE EPOXY 8-INCH (DASHES) WHITE, 3FT LINE, 9 FT GAP
C6	MARKING LINE EPOXY 6-INCH WHITE, CROSSWALK
W4	MARKING LINE EPOXY 4-INCH WHITE
W12	MARKING LINE EPOXY 12-INCH WHITE
Y12	MARKING LINE EPOXY 12-INCH YELLOW
S18	MARKING LINE EPOXY 18-INCH WHITE, STOP BAR
Y18	MARKING LINE EPOXY 18-INCH WHITE, YIELD BAR
↰	MARKING ARROW EPOXY
ONLY	MARKING WORD EPOXY

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PAVEMENT MARKING	SHEET 42	E

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SB# PROPOSED CONCRETE SIGNAL BASE
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-45' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- PEDESTRIAN HEAD
- PUSH BUTTON
- VIDEO DETECTION AREA

Base	Structure No.
SB1	S40-2090-01
SB4	S40-2090-02
SB7	S40-2090-03
SB10	S40-2090-04



LEGEND CONTINUED

- EVP DETECTOR HEAD
- CONFIRMATION LIGHT
- CAM VIDEO DETECTION CAMERA ON LUMINAIRE ARM
- XX XX TRAFFIC SIGNAL HEAD NUMBER - 12" INDICATIONS
- R RED ARROW/CIRCULAR INDICATOR
- Y YELLOW ARROW/CIRCULAR INDICATOR
- FY FLASHING YELLOW ARROW INDICATOR
- G GREEN ARROW/CIRCULAR INDICATOR
- DON'T WALK INDICATOR 16"
- WALK INDICATOR 16"

NOTES:

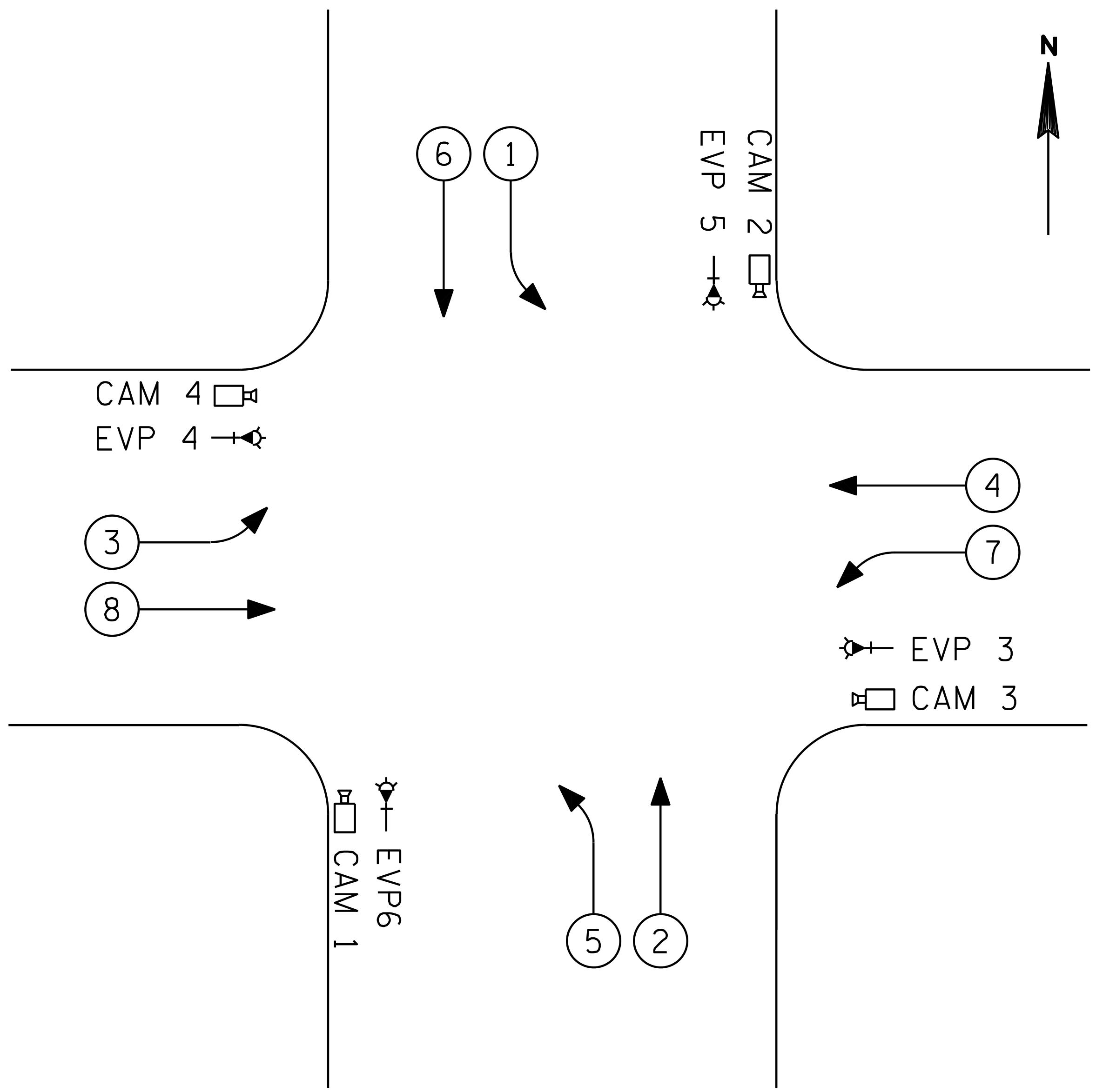
- GRAYSHADE REPRESENTS EXISTING
- NOTIFY THE MCDOT TRAFFIC ENGINEER, DANIEL MURPHY AT 414-257-5942 FIVE WORKING DAYS PRIOR TO INSTALLING THE VIDEO DETECTION SYSTEM FOR FIELD CONFIGURATION
- DISCONNECT AND BACKPULL EXISTING SIGNAL FIBER TO CV1 AND REROUTE THROUGH NEW CONDUIT
- SEE SPLICE DIAGRAM FOR FIBER SPLICING AT CV2

TRAFFIC CONTROL SIGNAL PLAN
CTH PP (W. GOOD HOPE RD.) & STH 57 (N. GREEN BAY AVE.)
CITY OF GLENDALE
MILWAUKEE COUNTY

SIGNAL NO. MC102

MILWAUKEE COUNTY DOT

PAGE 1 OF 4



PHASES				OVERLAPS		
PHASE	VEHICLE	LEFT TURN TYPE	PED	OVLP	INCLUDES	OUTPUT
1	X	FYA		A		
2	X		X	B		
3	X	PROT		C		
4	X		X	D		
5	X	FYA		E	1 FY	9 Y
6	X		X	F		
7	X	PROT		G	5 FY	11 Y
8	X		X	H		

COMMUNICATION	
ETHERNET SWITCH	X
SM FIBER	X
MM FIBER	
5.8 GHZ RADIO	
900 MHZ ETHERNET RADIO	
900 MHZ SERIAL RADIO	
ETHERNET OVER COPPER	

AUXILARY EQUIPMENT	
LIGHTING FROM CABINET	
BATTERY BACKUP	
PTZ CAMERA	
AUDIBLE PEDESTRIAN HEADS	
AUDIBLE PEDESTRIAN BUTTONS	

PRE-EMPTION	
EMERGENCY VEHICLE	X
CONFIRMATION BEACONS	X
RAILROAD	

TRAFFIC CONTROL SIGNAL PLAN

CTH PP (W. GOOD HOPE RD.) &
STH 57 (N. GREEN BAY AVE.)
CITY OF GLENDALE
MILWAUKEE COUNTY

SIGNAL NO. MC102

MILWAUKEE COUNTY DOT

PAGE 2 OF 4

PROJECT ID:	2565-02-71
INTERSECTION:	CTH PP (W. GOOD HOPE RD.) & STH 57 (N. GREEN BAY AVE.)

SIGNAL WIRE COLOR CODING			
	BLK-BLACK	RED-RED	GRN-GREEN
	WHT-WHITE	BLU-BLUE	ORG-ORANGE

				SIGNAL INDICATION WIRE COLOR									PED BUTTONS	
CB1 TO	# OF COND.	HEAD NO.	PHASE	RED	YELLOW	GREEN	<RED>	<YELLOW>	<FL YLW>	<GREEN>	D/WALK	WALK		
SB1	15	15 / 16	6	RED	ORG	GRN								
		27	6P								BLU	BLK		
		B	8P										WHT/BLK	BLK/WHT
SB2	15	7	7				RED/BLK	ORG/BLK		GRN/BLK				
		17	8	RED	ORG	GRN								
		30	8P								BLU	BLK		
		B	6P										WHT/BLK	BLK/WHT
SB3	5	B	6P										BLK	WHT
SB4	15	9 / 10 / 11	4	RED	ORG	GRN								
		8	7				RED/BLK	ORG/BLK		GRN/BLK				
		25	4P								BLU	BLK		
		B	6P										WHT/BLK	BLK/WHT
SB5	15	2	5				RED/BLK	ORG/BLK		GRN/BLK				
		12	6	RED	ORG	GRN								
		28	6P								BLU	BLK		
		B	4P										WHT/BLK	BLK/WHT
SB6	12	3	5				RED	ORG		GRN				
		B	4P										BLK	WHT/BLK
SB7	15	4 / 5	6	RED	ORG	GRN								
		23	2P								BLU	BLK		
		B	4P										WHT/BLK	BLK/WHT
SB8	15	18	3				RED/BLK	ORG/BLK		GRN/BLK				
		6	4	RED	ORG	GRN								
		26	4P								BLU	BLK		
		B	2P										WHT/BLK	BLK/WHT
SB9	5	B	2P										BLK	WHT
SB10	15	20 / 21 / 22	8	RED	ORG	GRN								
		19	3				RED/BLK	ORG/BLK		GRN/BLK				
		29	8P								BLU	BLK		
		B	2P										WHT/BLK	BLK/WHT
SB11	15	13	1				RED/BLK	ORG/BLK		GRN/BLK				
		1	2	RED	ORG	GRN								
		24	2P								BLU	BLK		
		B	8P										WHT/BLK	BLK/WHT
SB12	12	14	1				RED	ORG		GRN				
		B	8P										BLK	WHT/BLK

NOTES:

1. DO NOT USE THE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.

TRAFFIC CONTROL SIGNAL PLAN

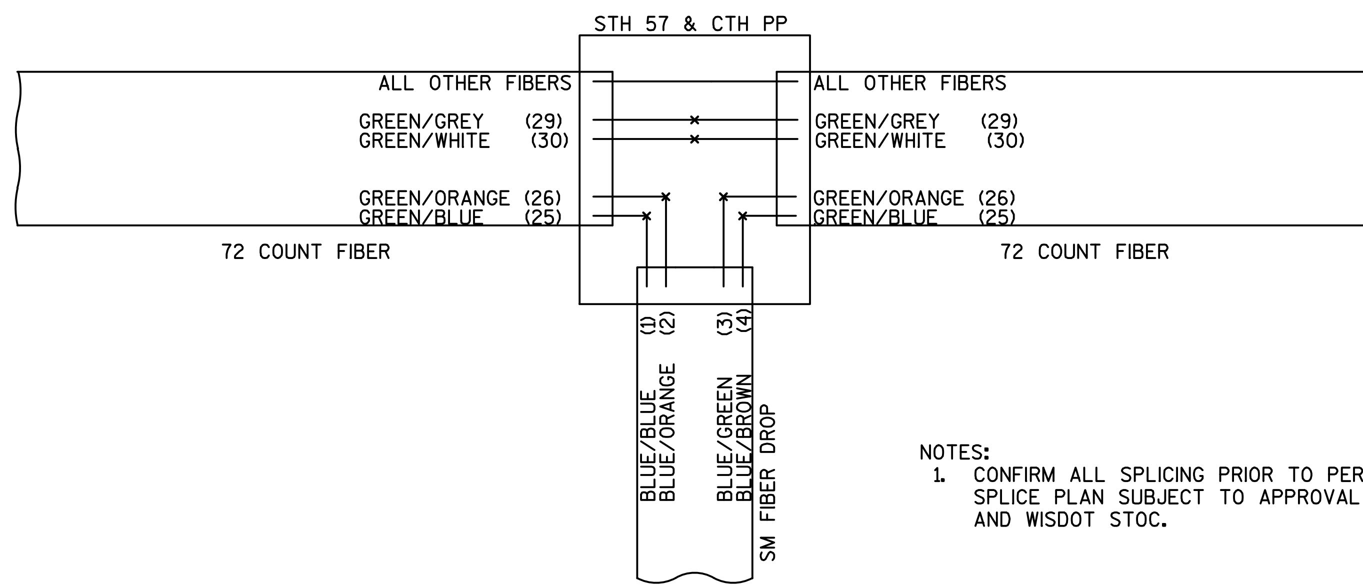
CTH PP (W. GOOD HOPE RD.) &
STH 57 (N. GREEN BAY AVE.)
CITY OF GLENDALE
MILWAUKEE COUNTY

SIGNAL NO. MC102

MILWAUKEE COUNTY DOT

PAGE 3 OF 4

2 2



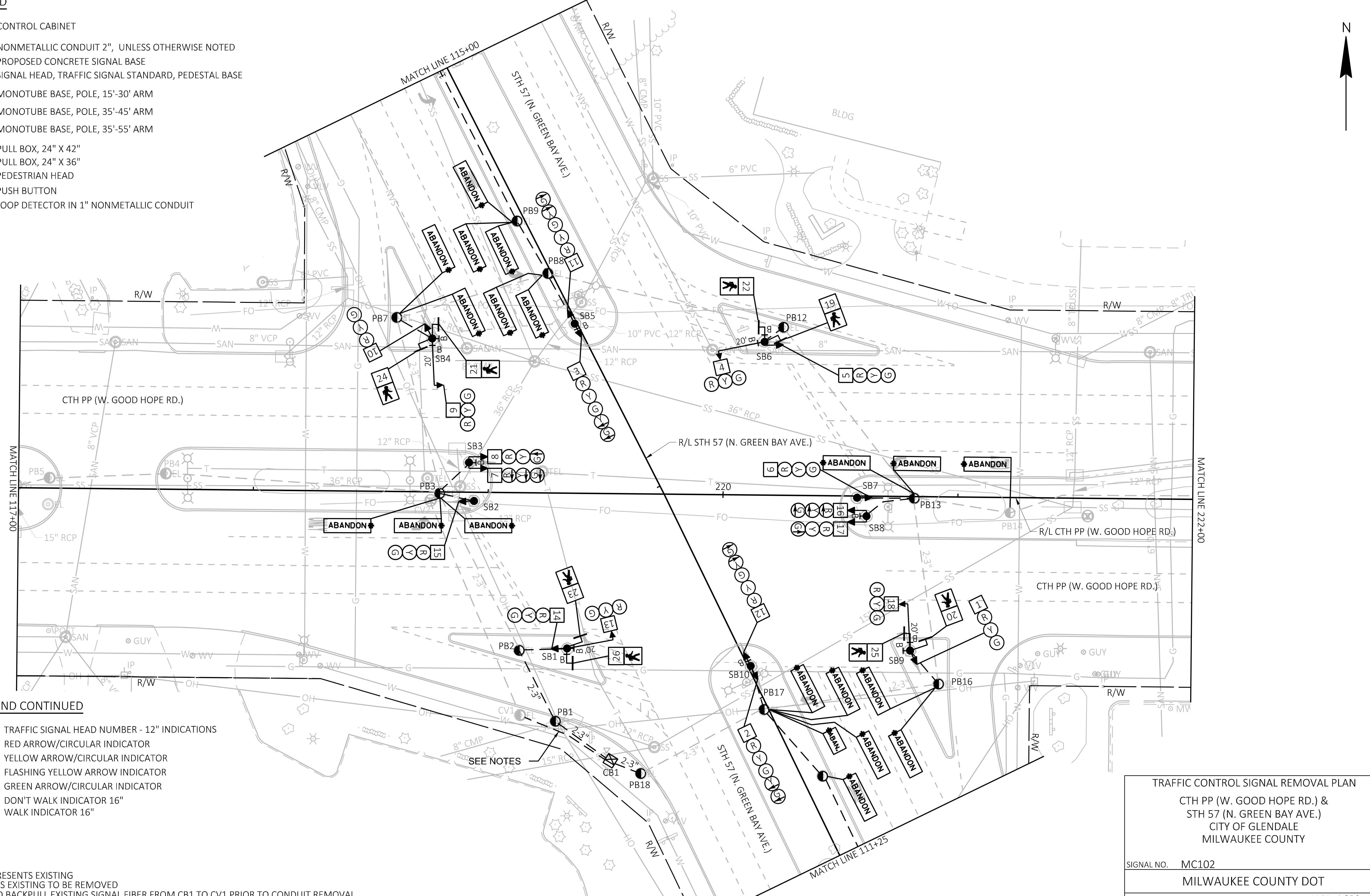
NOTES:

1. CONFIRM ALL SPLICING PRIOR TO PERFORMING SPLICES. FINAL SPLICE PLAN SUBJECT TO APPROVAL OF MILWAUKEE COUNTY AND WISDOT STOC.

2

LEGEND

CONTROL CABINET
NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
SB# PROPOSED CONCRETE SIGNAL BASE
SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
(XX) MONOTUBE BASE, POLE, 15'-30' ARM
(XX) MONOTUBE BASE, POLE, 35'-45' ARM
(XX) MONOTUBE BASE, POLE, 35'-55' ARM
PULL BOX, 24" X 42"
PULL BOX, 24" X 36"
PEDESTRIAN HEAD
PUSH BUTTON
LOOP DETECTOR IN 1" NONMETALLIC CONDUIT



LEGEND CONTINUED

XX XX	TRAFFIC SIGNAL HEAD NUMBER - 12" INDICATIONS
R R	RED ARROW/CIRCULAR INDICATOR
Y Y	YELLOW ARROW/CIRCULAR INDICATOR
FY	FLASHING YELLOW ARROW INDICATOR
G G	GREEN ARROW/CIRCULAR INDICATOR
	DON'T WALK INDICATOR 16" WALK INDICATOR 16"

NOTES:

- GRAYSHADE REPRESENTS EXISTING
- BOLD REPRESENTS EXISTING TO BE REMOVED
- DISCONNECT AND BACKPULL EXISTING SIGNAL FIBER FROM CB1 TO CV1 PRIOR TO CONDUIT REMOVAL

TRAFFIC CONTROL SIGNAL REMOVAL PLAN
CTH PP (W. GOOD HOPE RD.) &
STH 57 (N. GREEN BAY AVE.)
CITY OF GLENDALE
MILWAUKEE COUNTY

SIGNAL NO. MC102

MILWAUKEE COUNTY DOT

PAGE 1 OF 3

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 47	E

2

LEGEND

CONTROL CABINET

NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED

SB# PROPOSED CONCRETE SIGNAL BASE

SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE

(XX) MONOTUBE BASE, POLE, 15'-30' ARM

(XX) MONOTUBE BASE, POLE, 35'-45' ARM

(XX) MONOTUBE BASE, POLE, 35'-55' ARM

PULL BOX, 24" X 42"

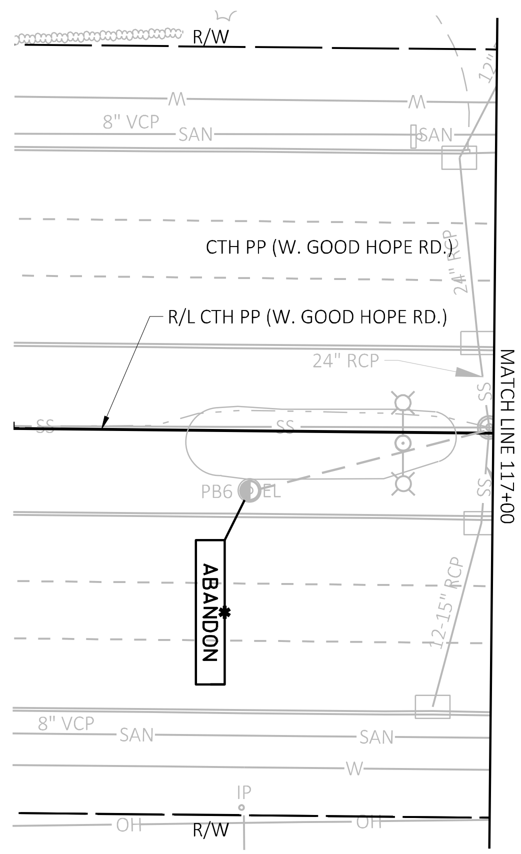
PULL BOX, 24" X 36"

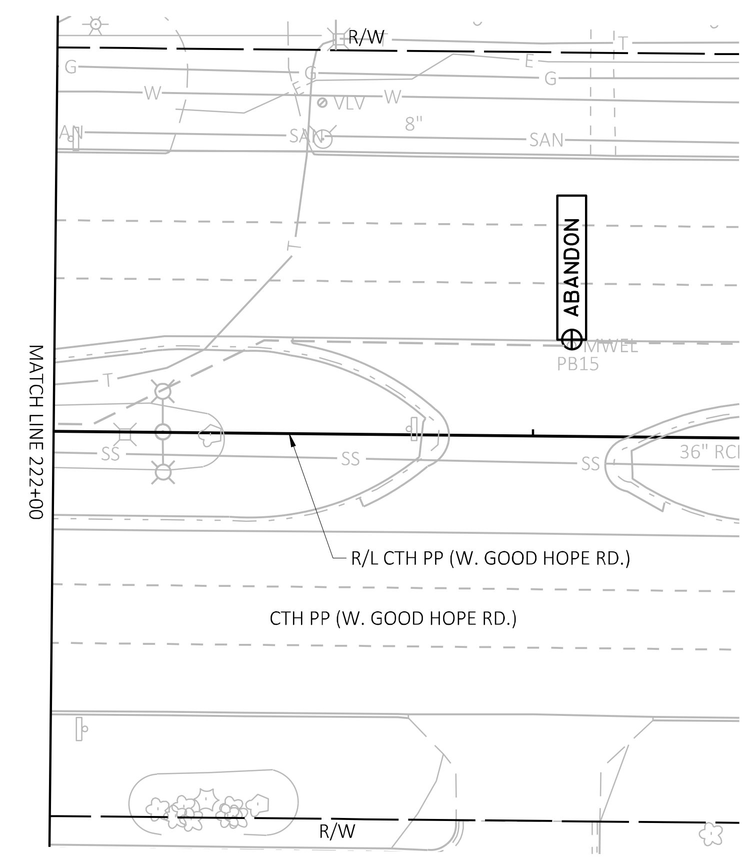
PEDESTRIAN HEAD

PUSH BUTTON

LOOP DETECTOR IN 1" NONMETALLIC CONDUIT

N





LEGEND CONTINUED

XX XX TRAFFIC SIGNAL HEAD NUMBER - 12" INDICATIONS

R RED ARROW/CIRCULAR INDICATOR

Y YELLOW ARROW/CIRCULAR INDICATOR

FY FLASHING YELLOW ARROW INDICATOR

G GREEN ARROW/CIRCULAR INDICATOR

DON'T WALK INDICATOR 16"
WALK INDICATOR 16"

NOTES:

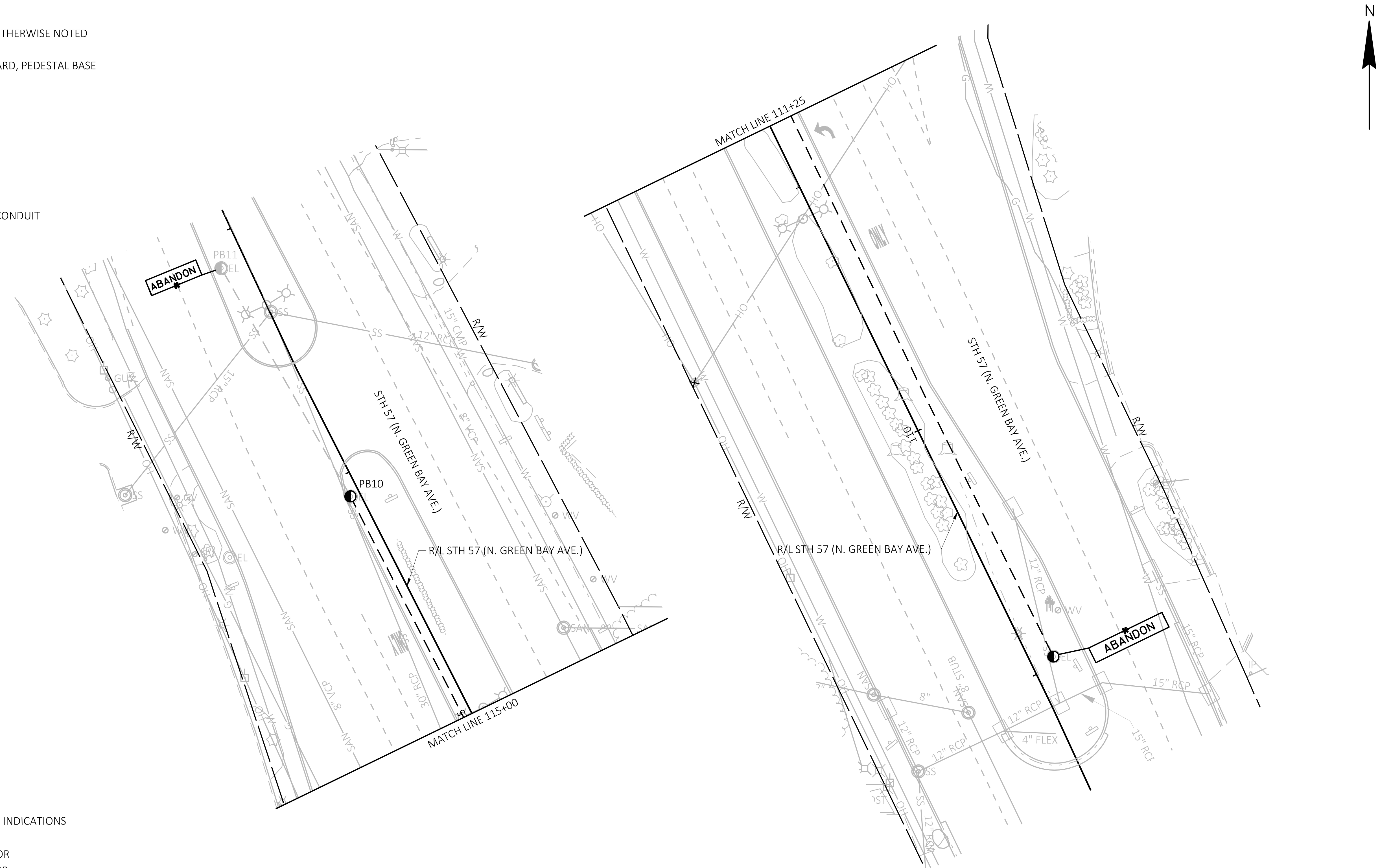
- GRAYSHADE REPRESENTS EXISTING
- BOLD REPRESENTS EXISTING TO BE REMOVED

TRAFFIC CONTROL SIGNAL REMOVAL PLAN
CTH PP (W. GOOD HOPE RD.) & STH 57 (N. GREEN BAY AVE.) CITY OF GLENDALE MILWAUKEE COUNTY
SIGNAL NO. MC102
MILWAUKEE COUNTY DOT
PAGE 2 OF 3

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 48	E

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SB# PROPOSED CONCRETE SIGNAL BASE
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-45' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- PEDESTRIAN HEAD
- B PUSH BUTTON
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT



LEGEND CONTINUED

- XX XX TRAFFIC SIGNAL HEAD NUMBER - 12" INDICATIONS
- R RED ARROW/CIRCULAR INDICATOR
- Y YELLOW ARROW/CIRCULAR INDICATOR
- FY FLASHING YELLOW ARROW INDICATOR
- G GREEN ARROW/CIRCULAR INDICATOR
- DON'T WALK INDICATOR 16"
  WALK INDICATOR 16"

NOTES:
- GRAYSHADE REPRESENTS EXISTING
- BOLD REPRESENTS EXISTING TO BE REMOVED

TRAFFIC CONTROL SIGNAL REMOVAL PLAN
CTH PP (W. GOOD HOPE RD.) &
STH 57 (N. GREEN BAY AVE.)
CITY OF GLENDALE
MILWAUKEE COUNTY

SIGNAL NO. MC102

MILWAUKEE COUNTY DOT

PAGE 3 OF 3

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 49	E

2

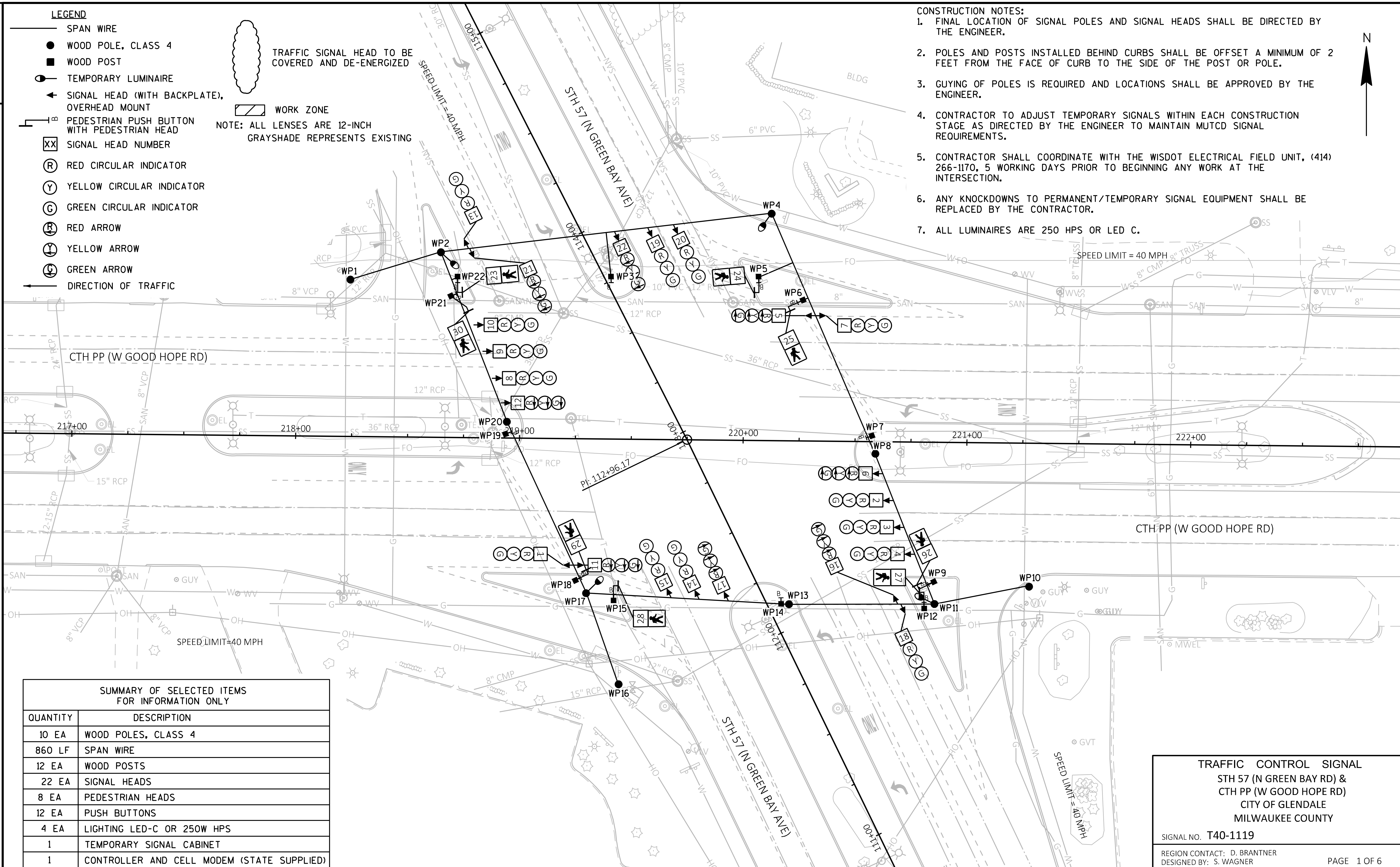
LEGEND

- SPAN WIRE
- WOOD POLE, CLASS 4
- WOOD POST
- TEMPORARY LUMINAIRE
- SIGNAL HEAD (WITH BACKPLATE), OVERHEAD MOUNT
- PEDESTRIAN PUSH BUTTON WITH PEDESTRIAN HEAD
- XX SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (Y) YELLOW ARROW
- (G) GREEN ARROW
- DIRECTION OF TRAFFIC
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- WORK ZONE

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

1. FINAL LOCATION OF SIGNAL POLES AND SIGNAL HEADS SHALL BE DIRECTED BY THE ENGINEER.
2. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POST OR POLE.
3. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
4. CONTRACTOR TO ADJUST TEMPORARY SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
5. CONTRACTOR SHALL COORDINATE WITH THE WISDOT ELECTRICAL FIELD UNIT, (414) 266-1170, 5 WORKING DAYS PRIOR TO BEGINNING ANY WORK AT THE INTERSECTION.
6. ANY KNOCKDOWNS TO PERMANENT/TEMPORARY SIGNAL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR.
7. ALL LUMINAIRES ARE 250 HPS OR LED C.



SUMMARY OF SELECTED ITEMS
FOR INFORMATION ONLY

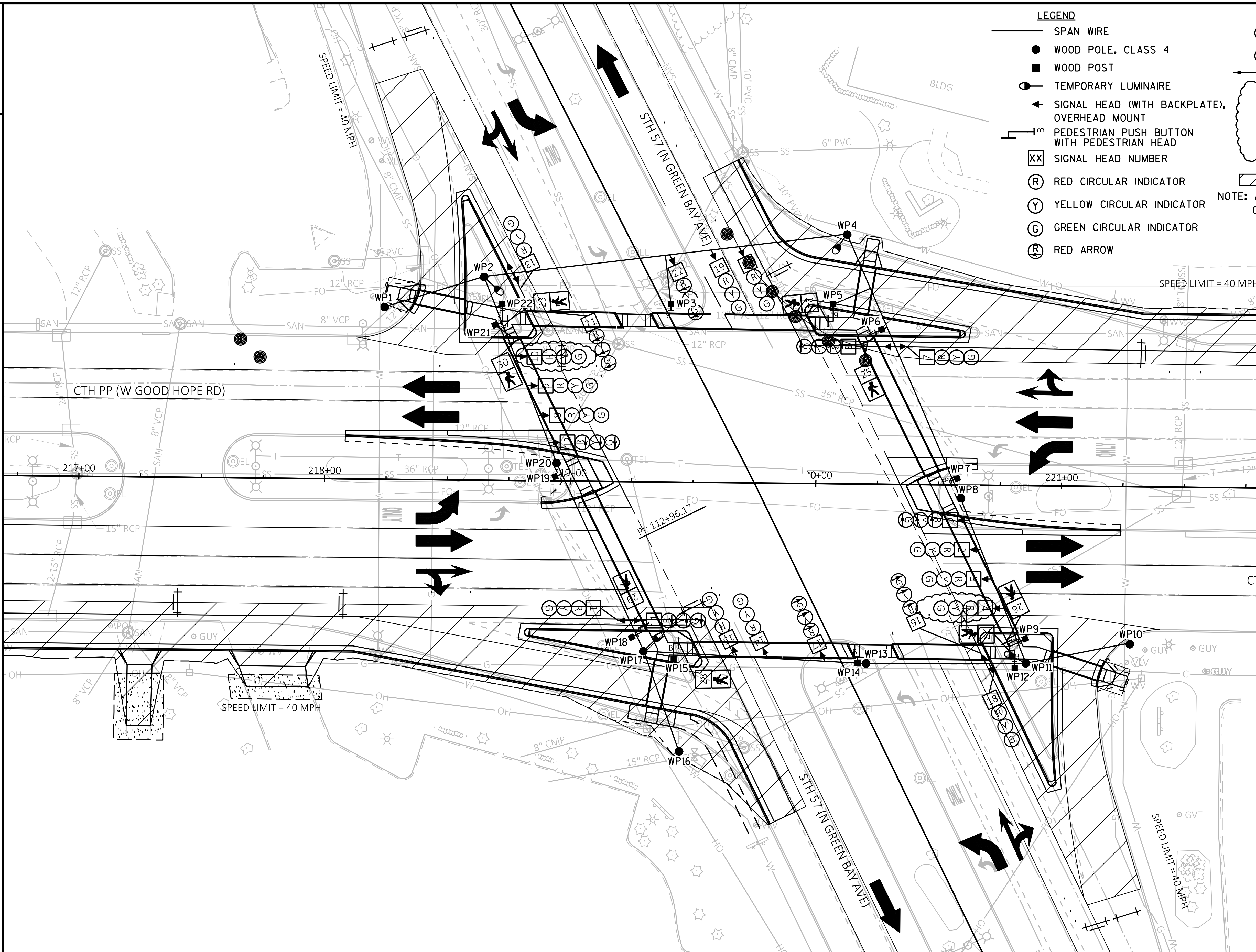
QUANTITY	DESCRIPTION
10 EA	WOOD POLES, CLASS 4
860 LF	SPAN WIRE
12 EA	WOOD POSTS
22 EA	SIGNAL HEADS
8 EA	PEDESTRIAN HEADS
12 EA	PUSH BUTTONS
4 EA	LIGHTING LED-C OR 250W HPS
1	TEMPORARY SIGNAL CABINET
1	CONTROLLER AND CELL MODEM (STATE SUPPLIED)

TRAFFIC CONTROL SIGNAL
STH 57 (N GREEN BAY RD) &
CTH PP (W GOOD HOPE RD)
CITY OF GLENDALE
MILWAUKEE COUNTY

SIGNAL NO. T40-1119

REGION CONTACT: D. BRANTNER
DESIGNED BY: S. WAGNER
REVISED BY:

PAGE 1 OF 6



LEGEND

- SPAN WIRE
- WOOD POLE, CLASS 4
- WOOD POST
- TEMPORARY LUMINAIRE
- SIGNAL HEAD (WITH BACKPLATE), OVERHEAD MOUNT
- PEDESTRIAN PUSH BUTTON WITH PEDESTRIAN HEAD
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW
- DIRECTION OF TRAFFIC
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- WORK ZONE

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

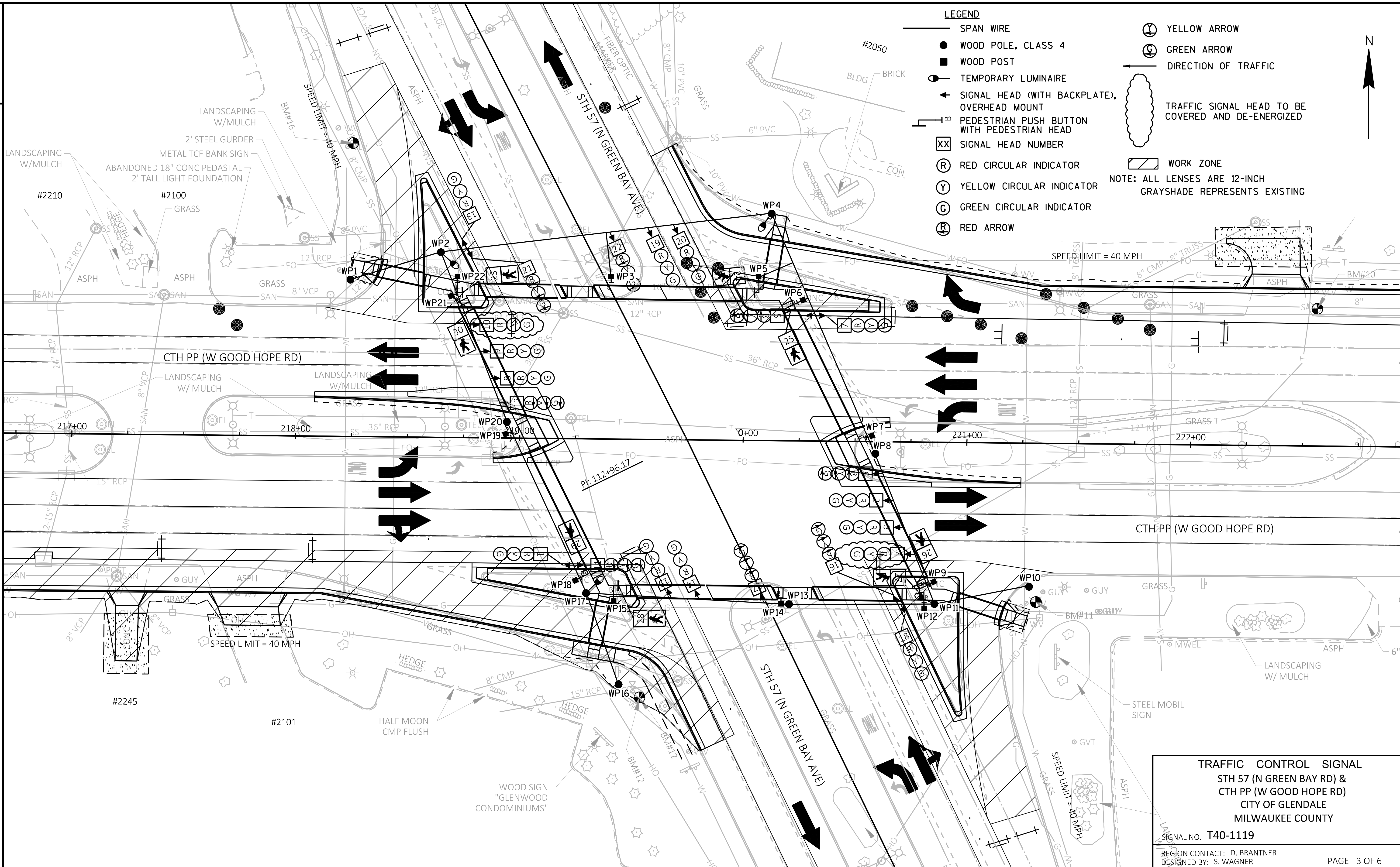
TRAFFIC CONTROL SIGNAL
STH 57 (N GREEN BAY RD) &
CTH PP (W GOOD HOPE RD)
CITY OF GLENDALE
MILWAUKEE COUNTY

SIGNAL NO. T40-1119

REGION CONTACT: D. BRANTNER
DESIGNED BY: S. WAGNER
REVISED BY:

PAGE 2 OF 6

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TEMPORARY TRAFFIC SIGNAL PLAN STAGE 1	SHEET 51	E



TRAFFIC CONTROL SIGNAL
STH 57 (N GREEN BAY RD) &
CTH PP (W GOOD HOPE RD)
CITY OF GLENDALE
MILWAUKEE COUNTY

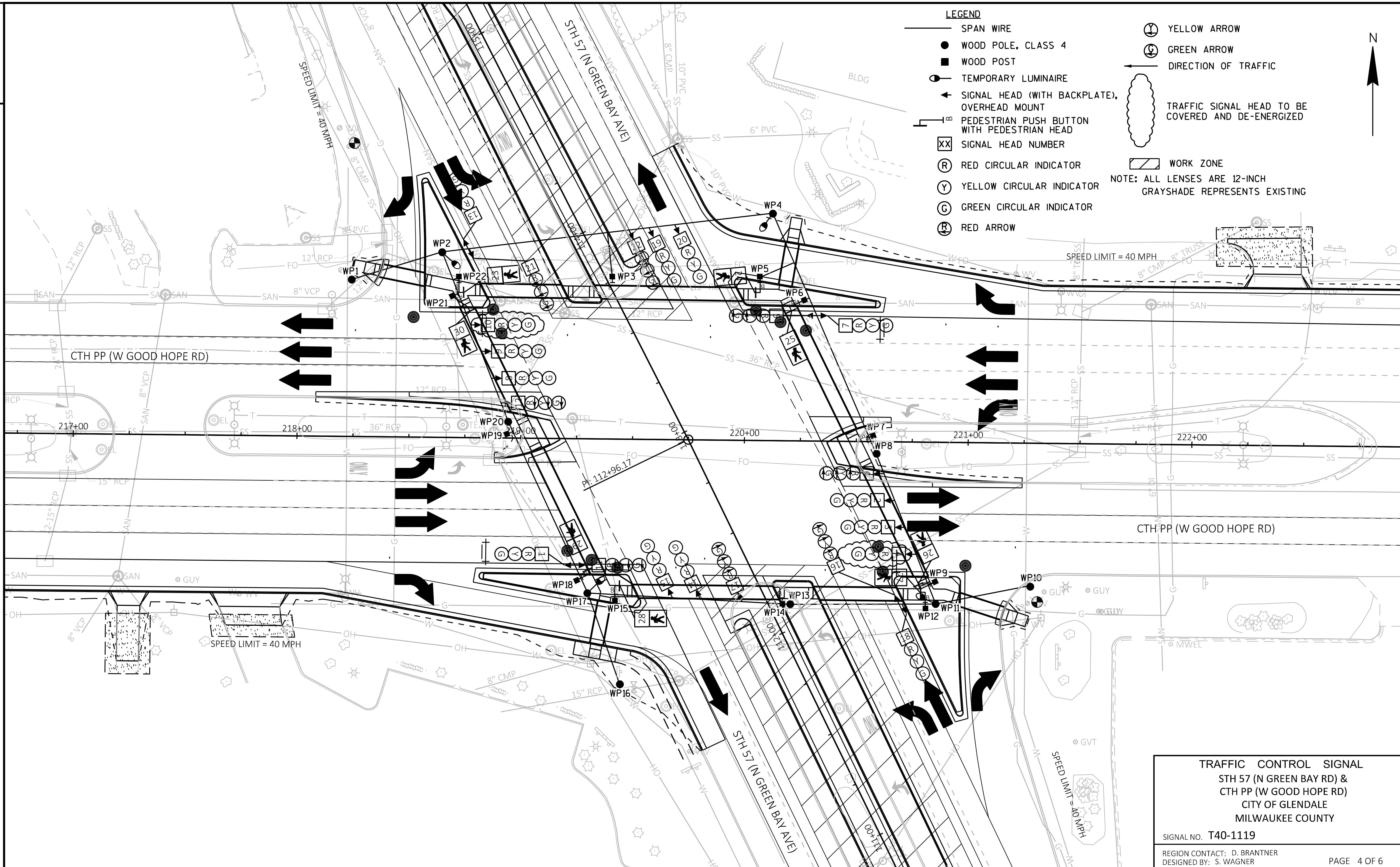
SIGNAL NO. T40-1119

REGION CONTACT: D. BRANTNER
DESIGNED BY: S. WAGNER
REVISED BY:

PAGE 3 OF 6

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TEMPORARY TRAFFIC SIGNAL PLAN STAGE 1B	SHEET 52	E

2



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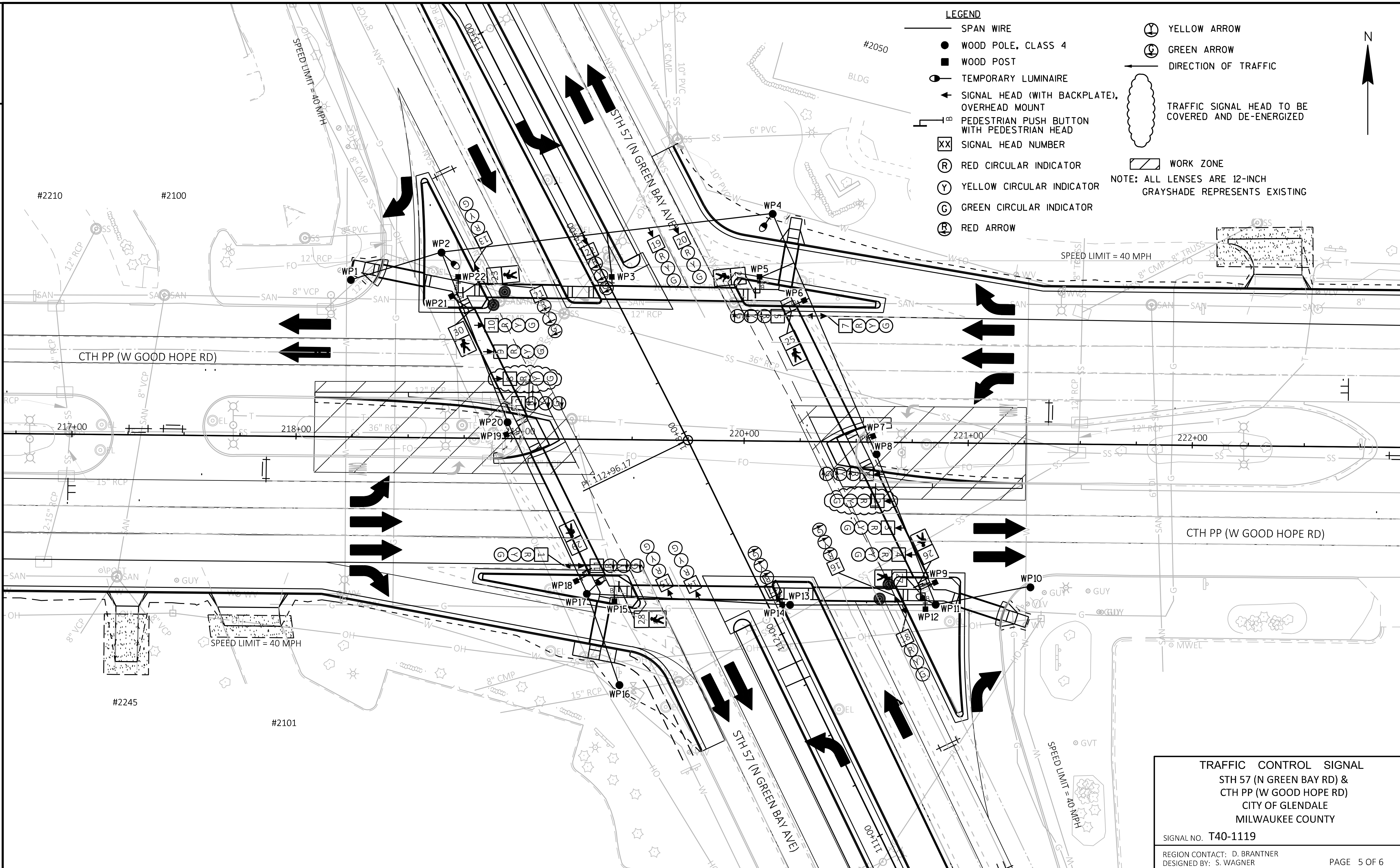
TRAFFIC CONTROL SIGNAL
STH 57 (N GREEN BAY RD) &
CTH PP (W GOOD HOPE RD)
CITY OF GLENDALE
MILWAUKEE COUNTY

SIGNAL NO. T40-1119

REGION CONTACT: D. BRANTNER
DESIGNED BY: S. WAGNER
REVISED BY:

PAGE 4 OF 6

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TEMPORARY TRAFFIC SIGNAL PLAN STAGE 2	SHEET 53	E



LEGEND

SPAN WIRE
WOOD POLE, CLASS 4
WOOD POST
TEMPORARY LUMINAIRE
SIGNAL HEAD (WITH BACKPLATE), OVERHEAD MOUNT
PEDESTRIAN PUSH BUTTON WITH PEDESTRIAN HEAD
XX SIGNAL HEAD NUMBER
R RED CIRCULAR INDICATOR
Y YELLOW CIRCULAR INDICATOR
G GREEN CIRCULAR INDICATOR
R RED ARROW
Y YELLOW ARROW
G GREEN ARROW
DIRECTION OF TRAFFIC
TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
WORK ZONE

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TRAFFIC CONTROL SIGNAL
STH 57 (N GREEN BAY RD) &
CTH PP (W GOOD HOPE RD)
CITY OF GLENDALE
MILWAUKEE COUNTY

SIGNAL NO. T40-1119

REGION CONTACT: D. BRANTNER
DESIGNED BY: S. WAGNER
REVISED BY:

PAGE 5 OF 6

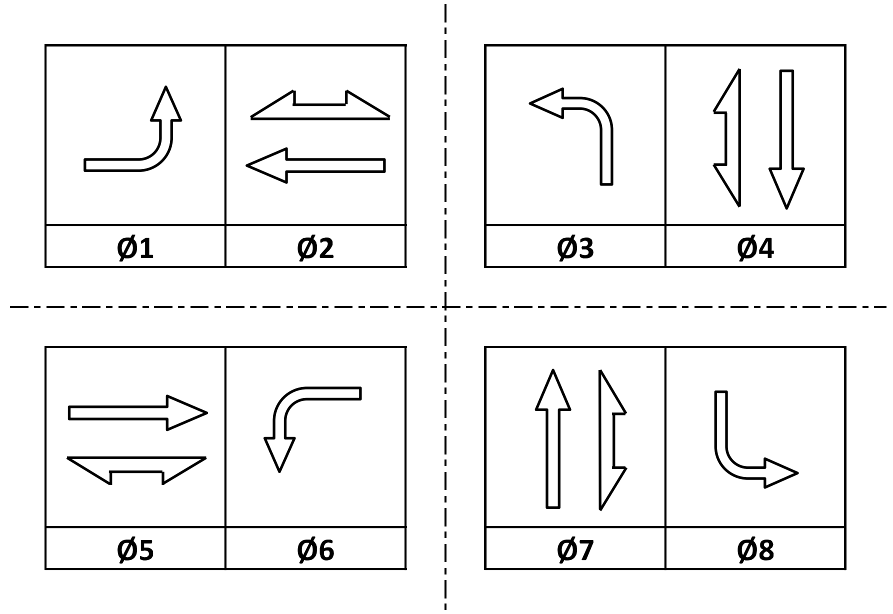
2

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TEMPORARY TRAFFIC SIGNAL PLAN STAGE 3	SHEET 54	E

	HEAD NUMBERS	FLASH
Ø1	5,6	R ←
Ø2	7,8,9,10	R
Ø3	21,22	R ←
Ø4	13,14,15	R
Ø5	1,2,3,4	R
Ø6	11,12	R ←
Ø7	18,19,20	R
Ø8	16,17	R ←
Ø2P	23,24	
Ø4P	29,30	
Ø5P	27,28	
Ø7P	25,26	
OLA		
OLB		
OLC		

RING 1

RING 2



BARRIER

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		5	MAX	
2		5	MAX	
3		7	MAX	
4		7	MAX	
5		2	MAX	
6		2	MAX	
7		4	MAX	
8		4	MAX	

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	X

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

TYPE OF COORDINATION	
NONE	X
TBC	
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	

GENERAL NOTES:

1 PHASES 1 AND 6 ARE IN CONFLICT AND NOT ALLOWED TO TIME CONCURRENTLY.

2 PHASES 3 AND 8 ARE IN CONFLICT AND NOT ALLOWED TO TIME CONCURRENTLY.

STH 57 (N GREEN BAY RD) &CTH PP (W GOOD HOPE RD)
CITY OF GLENDALE
MILWAUKEE COUNTY

SIGNAL NO: T40-1119		CABINET TYPE: TEMP
		CONTROLLER TYPE: TEMP
DATE:	10/22	PAGE NUMBER: 6 OF 6

2

GENERAL NOTES:

RIGHT TURNS AT N. GREEN BAY AVE. (STH 57) AND W. GOOD HOPE RD (CTH PP) SHALL BE PROHIBITED FOR THE DURATION OF STAGE 1. DURING STAGE 1B, THE WESTBOUND RIGHT TURN MOVEMENT MAY BE OPEN AND THE CORRESPONDING DETOUR REMOVED. ACCESS TO RESIDENCES AND BUSINESSES MUST BE MAINTAINED AT ALL TIMES.

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

IF THERE ARE EXISTING ROUTE MARKERS ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES.

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

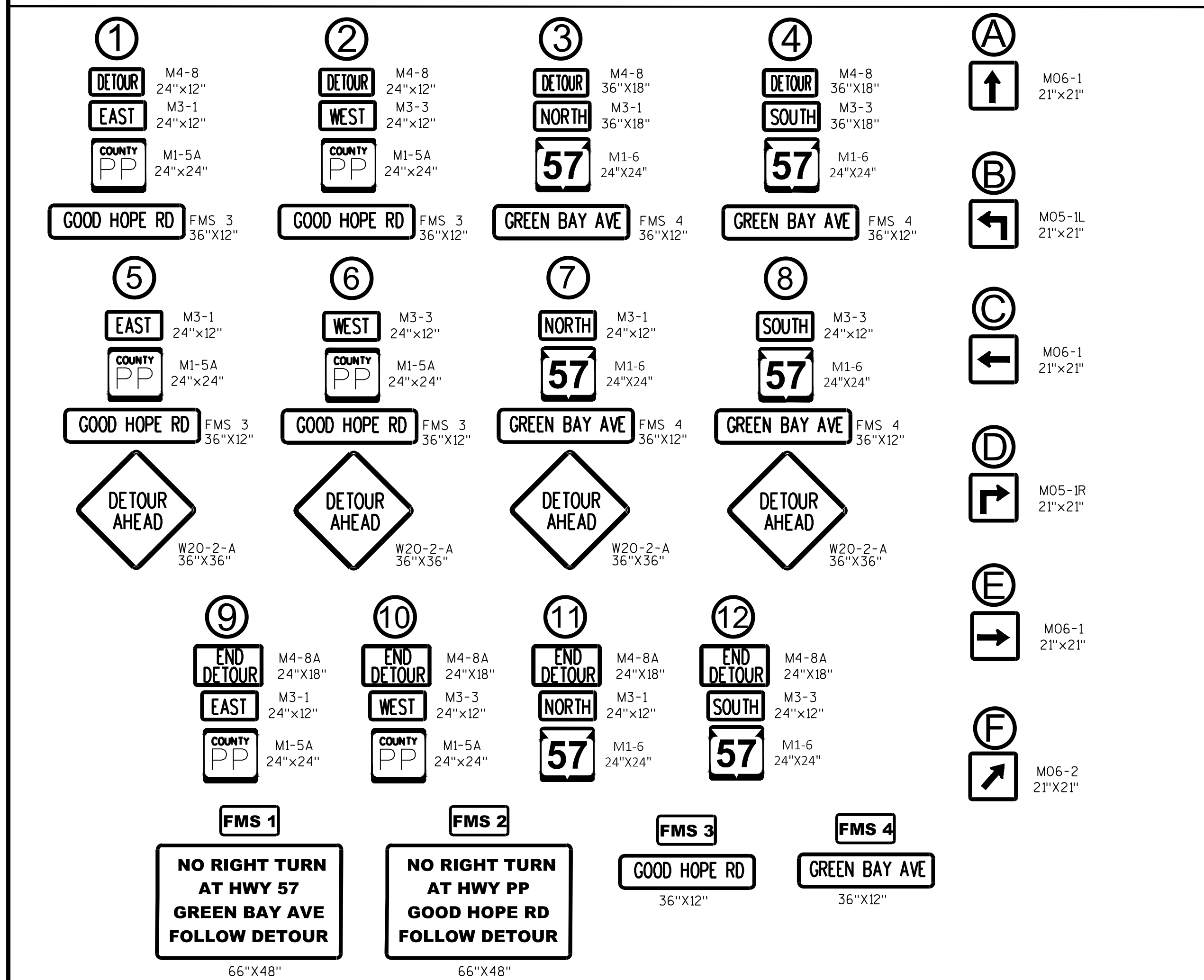
REMOVE OR COVER ANY SIGNS TEMPORARY OR EXISTING WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" AS NEEDED AND APPROVED BY THE ENGINEER.

"MO" SIGNS ARE THE SAME AS "M" SIGN EXCEPT THE BACKGROUND IS ORANGE.

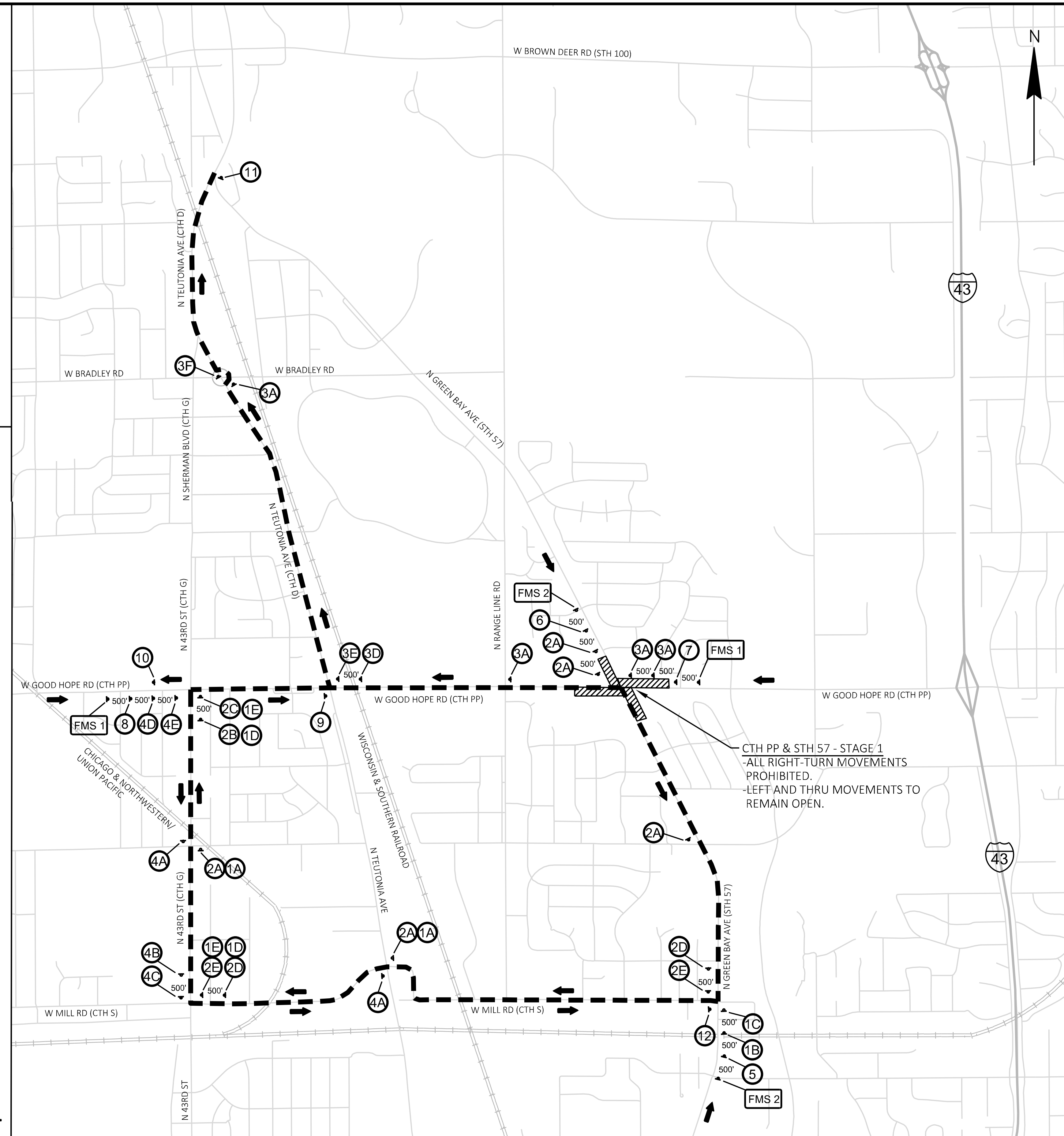
FIXED MESSAGE SIGNS (FMS): SEE TEMPORARY SIGNING SHEET

LEGEND:

- PROJECT I.D. 2565-02-71 WORK ZONE
- DETOUR ROUTE
- SIGN ON FIXED SUPPORT(S)
- SIGN NUMBER
- TRAFFIC FLOW ARROW



COORDINATE SIGN PLACEMENT WITH ADJACENT WISDOT PROJECTS:
- -2270-04-70, STH 57 - KURT FLIERL, 414-750-3085, KURT.FLIERL@DOT.WI.GOV.
- -2565-07-70, GREEN BAY RD - KURT FLIERL, 414-750-3085, KURT.FLIERL@DOT.WI.GOV.
- -1229-04-77, GREEN BAY RD AT RANGE LINE RD - KEN KIEPCZYNSKI, 414-659-3055, KENNETH.KIEPCZYNSKI@DOT.WI.GOV.
- -I-43 N/S - KEN KIEPCZYNSKI, 414-659-3055, KENNETH.KIEPCZYNSKI@DOT.WI.GOV.



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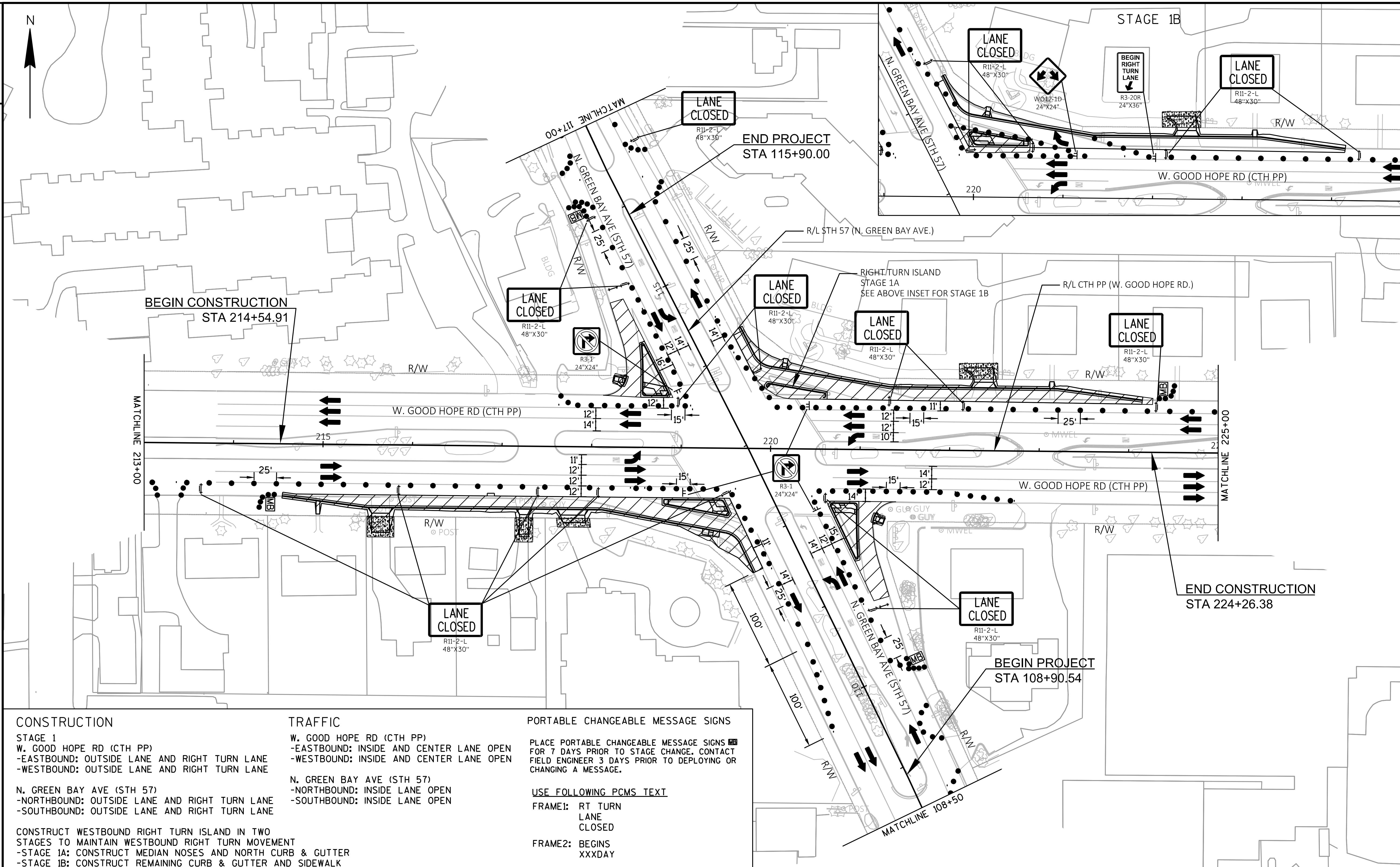
PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL: DETOUR PLAN - STAGE 1	SHEET 56	E

LEGEND

- TYPE III BARRICADE WITH TWO TYPE A LIGHTS (FLASHING)
- TYPE III BARRICADE WITH ATTACHED SIGN AND TWO TYPE A WARNING LIGHT (FLASHING)
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK ZONE
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
- YT TEMPORARY PAVEMENT MARKING REMOVABLE 4-INCH TAPE (YELLOW)
- WT TEMPORARY PAVEMENT MARKING REMOVABLE 4-INCH TAPE (WHITE)
- WTD TEMPORARY PAVEMENT MARKING REMOVABLE 4-INCH TAPE DASHES 3-FT GAP, 9-FT SPACE (WHITE)

NOTES:

1. REMOVE ANY CONFLICTING EXISTING PAVEMENT MARKING WHEN PLACING PAVEMENT MARKING TEMPORARY TAPE. RESTORE PAVEMENT MARKING TO EXISTING CONDITIONS ONCE TEMPORARY TRAFFIC CONTROL IS REMOVED.
2. ALL TEMPORARY PAVEMENT MARKING ARROWS OR WORDS SHOWN IN THE TRAFFIC CONTROL PLANS ARE TO BE REMOVABLE TAPE.
3. REMOVE OR COVER ANY SIGNS TEMPORARY OR EXISTING WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" AS NEEDED AND APPROVED BY THE ENGINEER.
4. FOR ALL WORK NEXT TO SIDEWALKS:
   -ALL WORK OPERATIONS MUST BE PROTECTED NEXT TO SIDEWALKS.
   -ALL DROP-OFFS MUST BE PROTECTED FROM SIDEWALKS AS WELL.
   -ALL EQUIPMENT USED FOR PROTECTION MUST BE MUTCD, MASH, AND/OR NCHRP 350 COMPLIANT AS WELL.



CONSTRUCTION

STAGE 1
W. GOOD HOPE RD (CTH PP)
-EASTBOUND: OUTSIDE LANE AND RIGHT TURN LANE
-WESTBOUND: OUTSIDE LANE AND RIGHT TURN LANE

N. GREEN BAY AVE (STH 57)
-NORTHBOUND: OUTSIDE LANE AND RIGHT TURN LANE
-SOUTHBOUND: OUTSIDE LANE AND RIGHT TURN LANE

CONSTRUCT WESTBOUND RIGHT TURN ISLAND IN TWO STAGES TO MAINTAIN WESTBOUND RIGHT TURN MOVEMENT
-STAGE 1A: CONSTRUCT MEDIAN NOSES AND NORTH CURB & GUTTER
-STAGE 1B: CONSTRUCT REMAINING CURB & GUTTER AND SIDEWALK

TRAFFIC

W. GOOD HOPE RD (CTH PP)
-EASTBOUND: INSIDE AND CENTER LANE OPEN
-WESTBOUND: INSIDE AND CENTER LANE OPEN

N. GREEN BAY AVE (STH 57)
-NORTHBOUND: INSIDE LANE OPEN
-SOUTHBOUND: INSIDE LANE OPEN

PORTABLE CHANGEABLE MESSAGE SIGNS

PLACE PORTABLE CHANGEABLE MESSAGE SIGNS MB FOR 7 DAYS PRIOR TO STAGE CHANGE. CONTACT FIELD ENGINEER 3 DAYS PRIOR TO DEPLOYING OR CHANGING A MESSAGE.

USE FOLLOWING PCMS TEXT

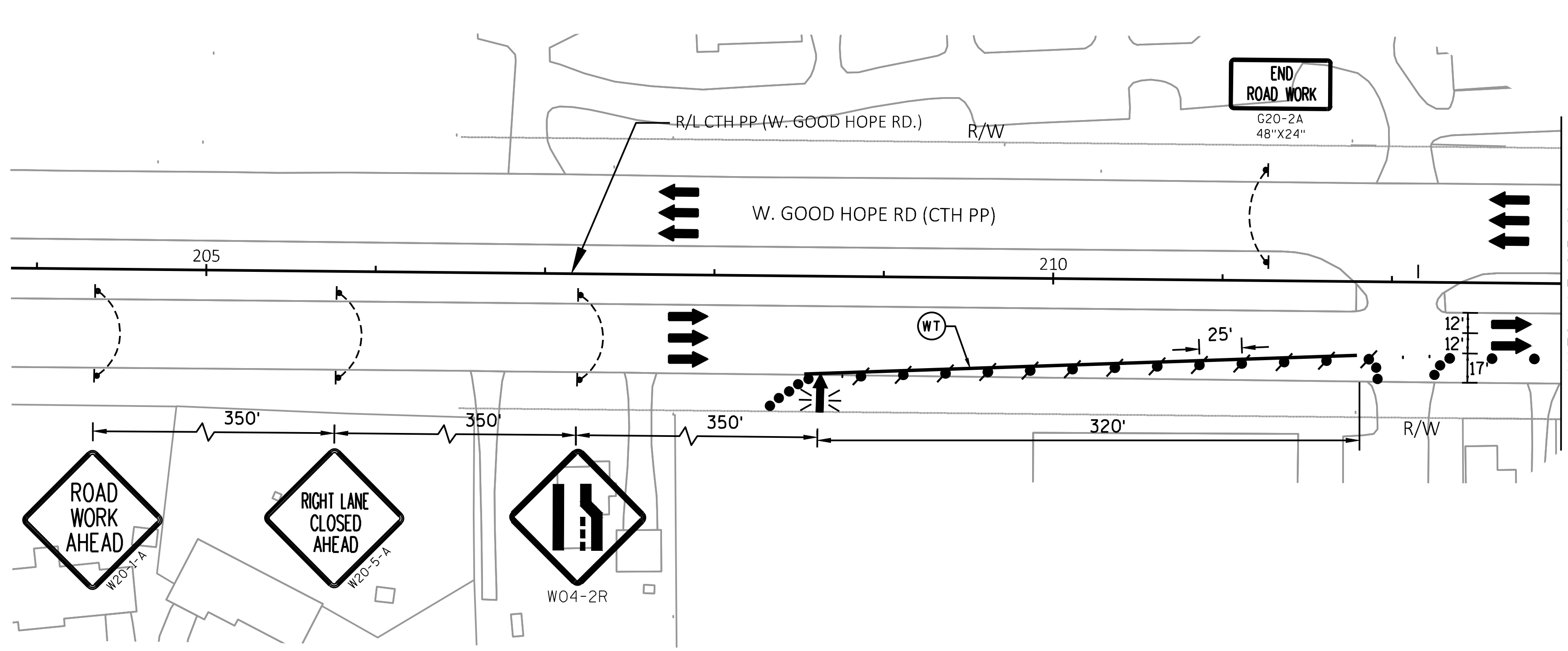
FRAME1: RT TURN
LANE
CLOSED

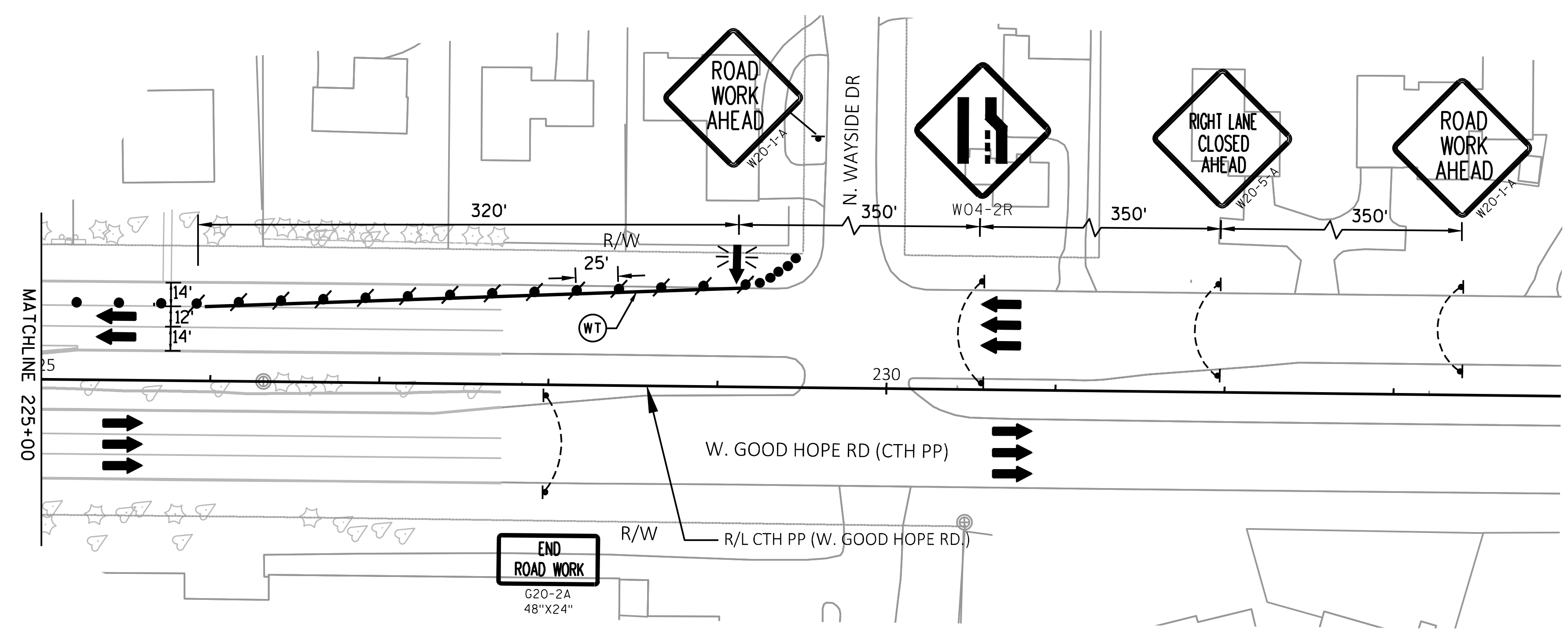
FRAME2: BEGINS
XXXDAY

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL PLANS - STAGE 1	SHEET 58	E

2

2





CONSTRUCTION

STAGE 1
W. GOOD HOPE RD (CTH PP)
-EASTBOUND: OUTSIDE LANE AND RIGHT TURN LANE
-WESTBOUND: OUTSIDE LANE AND RIGHT TURN LANE

N. GREEN BAY AVE (STH 57)
-NORTHBOUND: OUTSIDE LANE AND RIGHT TURN LANE
-SOUTHBOUND: OUTSIDE LANE AND RIGHT TURN LANE

TRAFFIC

W. GOOD HOPE RD (CTH PP)
-EASTBOUND: INSIDE AND CENTER LANE OPEN
-WESTBOUND: INSIDE AND CENTER LANE OPEN

N. GREEN BAY AVE (STH 57)
-NORTHBOUND: INSIDE LANE OPEN
-SOUTHBOUND: INSIDE LANE OPEN

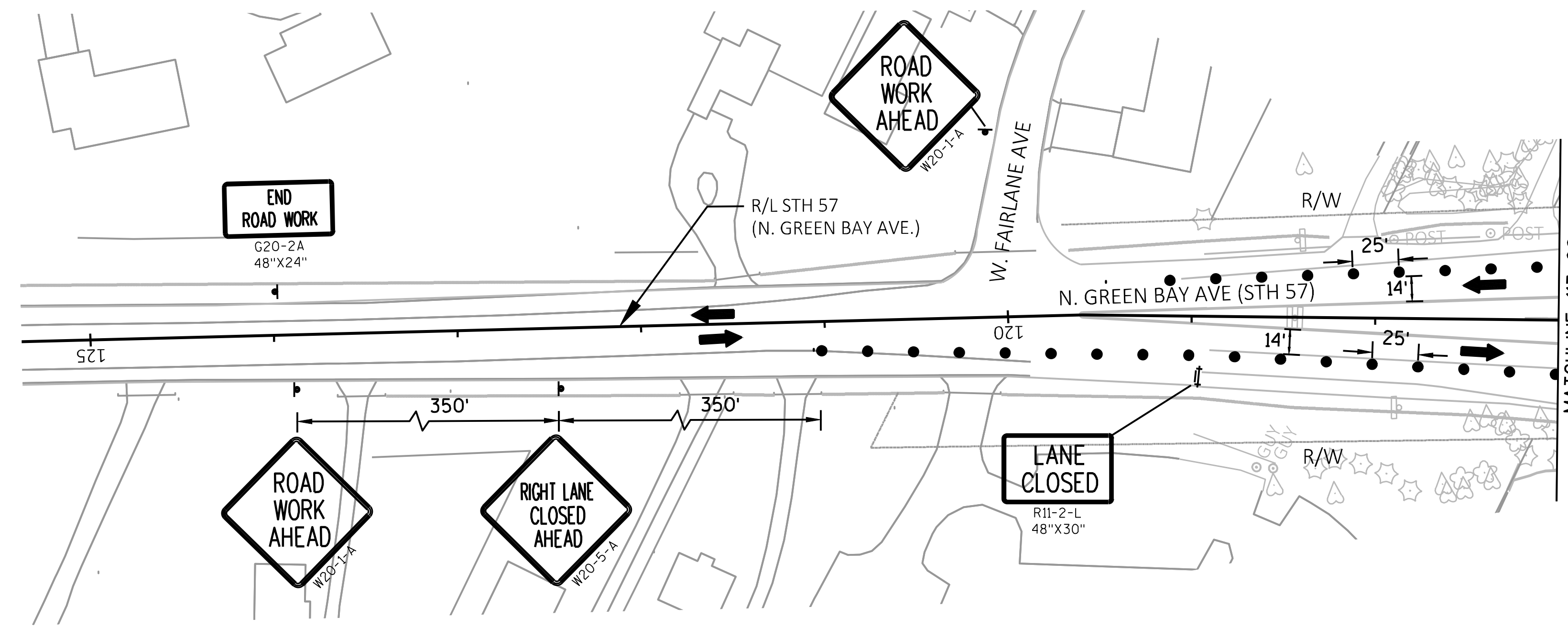
PORTABLE CHANGEABLE MESSAGE SIGNS

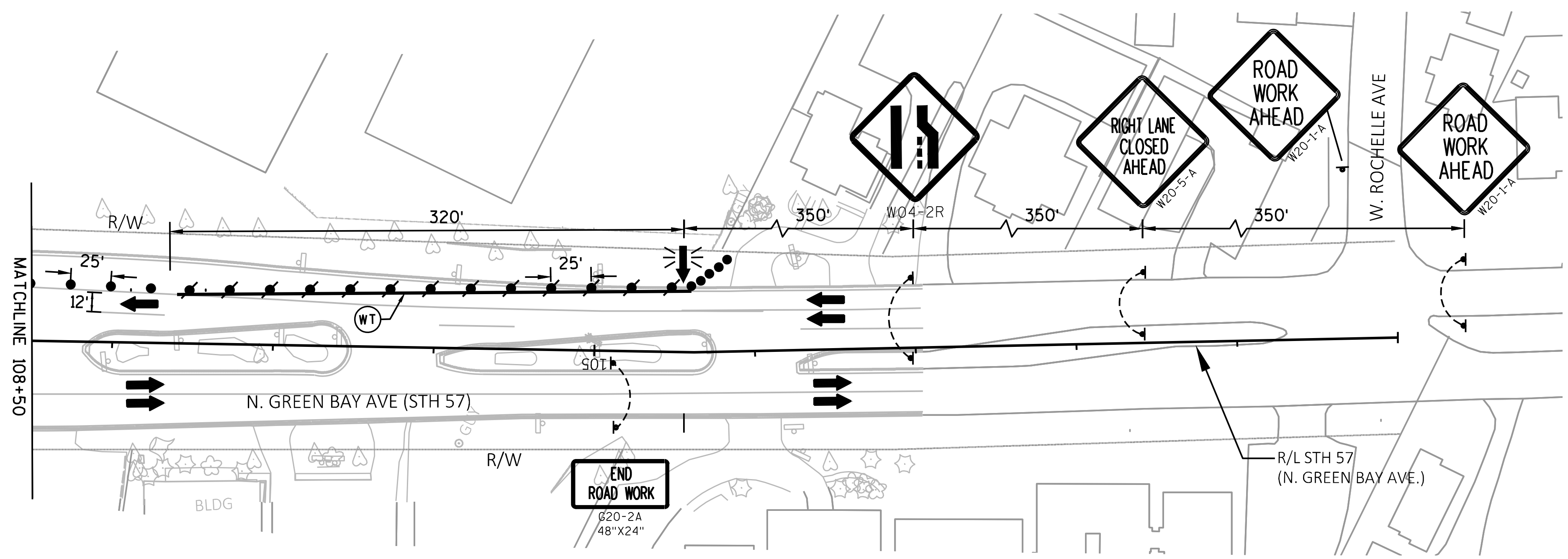
PLACE PORTABLE CHANGEABLE MESSAGE SIGNS FOR 7 DAYS PRIOR TO STAGE CHANGE. CONTACT FIELD ENGINEER 3 DAYS PRIOR TO DEPLOYING OR CHANGING A MESSAGE.

USE FOLLOWING PCMS TEXT

FRAME1: RT TURN LANE CLOSED
FRAME2: BEGINS XXXDAY

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL PLANS - STAGE 1	SHEET 59	E





CONSTRUCTION

STAGE 1
W. GOOD HOPE RD (CTH PP)
-EASTBOUND: OUTSIDE LANE AND RIGHT TURN LANE
-WESTBOUND: OUTSIDE LANE AND RIGHT TURN LANE

N. GREEN BAY AVE (STH 57)
-NORTHBOUND: OUTSIDE LANE AND RIGHT TURN LANE
-SOUTHBOUND: OUTSIDE LANE AND RIGHT TURN LANE

TRAFFIC

W. GOOD HOPE RD (CTH PP)
-EASTBOUND: INSIDE AND CENTER LANE OPEN
-WESTBOUND: INSIDE AND CENTER LANE OPEN

N. GREEN BAY AVE (STH 57)
-NORTHBOUND: INSIDE LANE OPEN
-SOUTHBOUND: INSIDE LANE OPEN

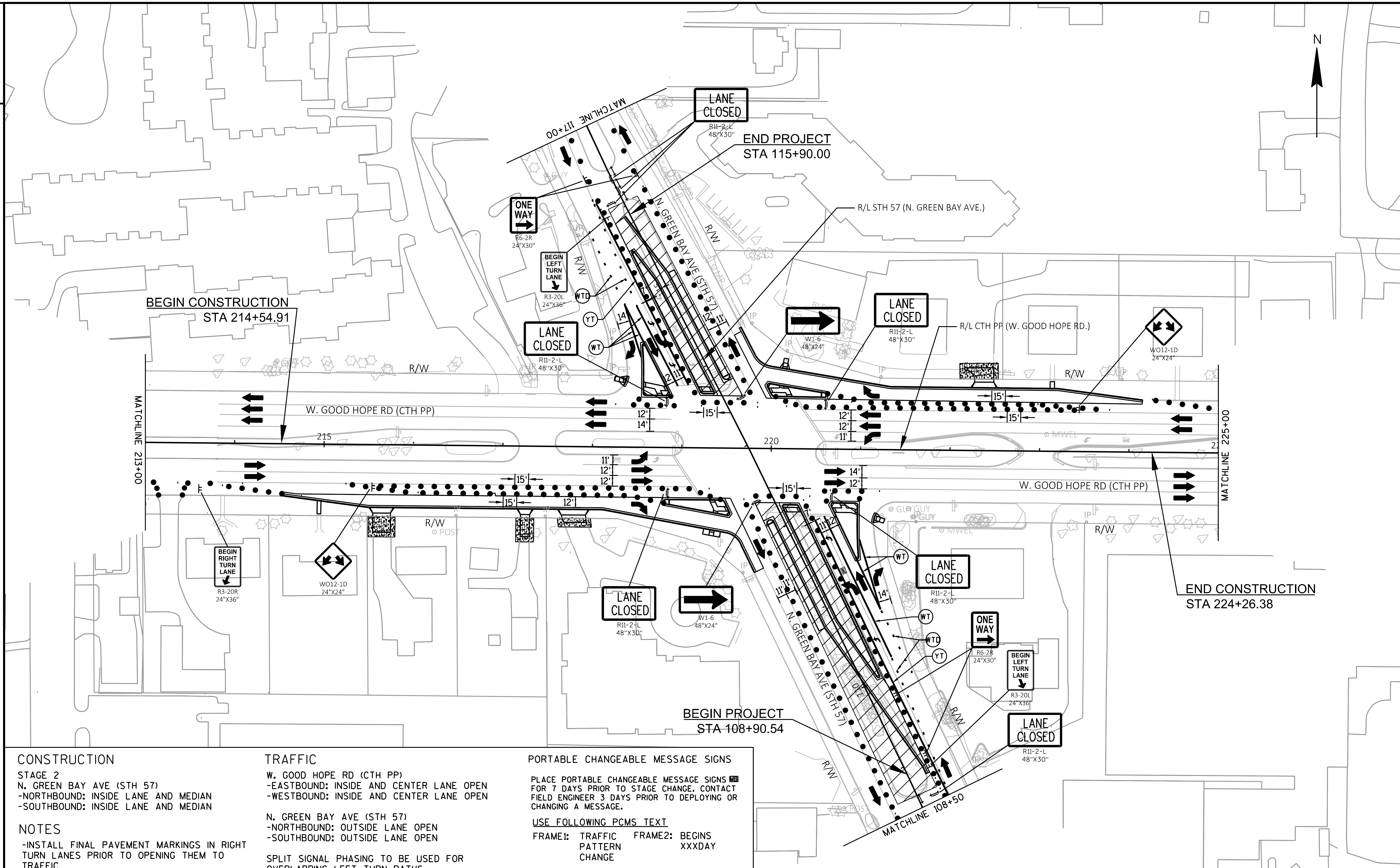
PORTABLE CHANGEABLE MESSAGE SIGNS

PLACE PORTABLE CHANGEABLE MESSAGE SIGNS FOR 7 DAYS PRIOR TO STAGE CHANGE. CONTACT FIELD ENGINEER 3 DAYS PRIOR TO DEPLOYING OR CHANGING A MESSAGE.

USE FOLLOWING PCMS TEXT

FRAME1: RT TURN LANE CLOSED
FRAME2: BEGINS XXXDAY

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL PLANS - STAGE 1	SHEET 60	E



CONSTRUCTION

STAGE 2
N. GREEN BAY AVE (STH 57)
-NORTHBOUND: INSIDE LANE AND MEDIAN
-SOUTHBOUND: INSIDE LANE AND MEDIAN

NOTES

-INSTALL FINAL PAVEMENT MARKINGS IN RIGHT TURN LANES PRIOR TO OPENING THEM TO TRAFFIC

TRAFFIC

W. GOOD HOPE RD (CTH PP)
-EASTBOUND: INSIDE AND CENTER LANE OPEN
-WESTBOUND: INSIDE AND CENTER LANE OPEN

N. GREEN BAY AVE (STH 57)
-NORTHBOUND: OUTSIDE LANE OPEN
-SOUTHBOUND: OUTSIDE LANE OPEN

SPLIT SIGNAL PHASING TO BE USED FOR OVERLAPPING LEFT TURN PATHS

PORTABLE CHANGEABLE MESSAGE SIGNS

PLACE PORTABLE CHANGEABLE MESSAGE SIGNS FOR 7 DAYS PRIOR TO STAGE CHANGE. CONTACT FIELD ENGINEER 3 DAYS PRIOR TO DEPLOYING OR CHANGING A MESSAGE.

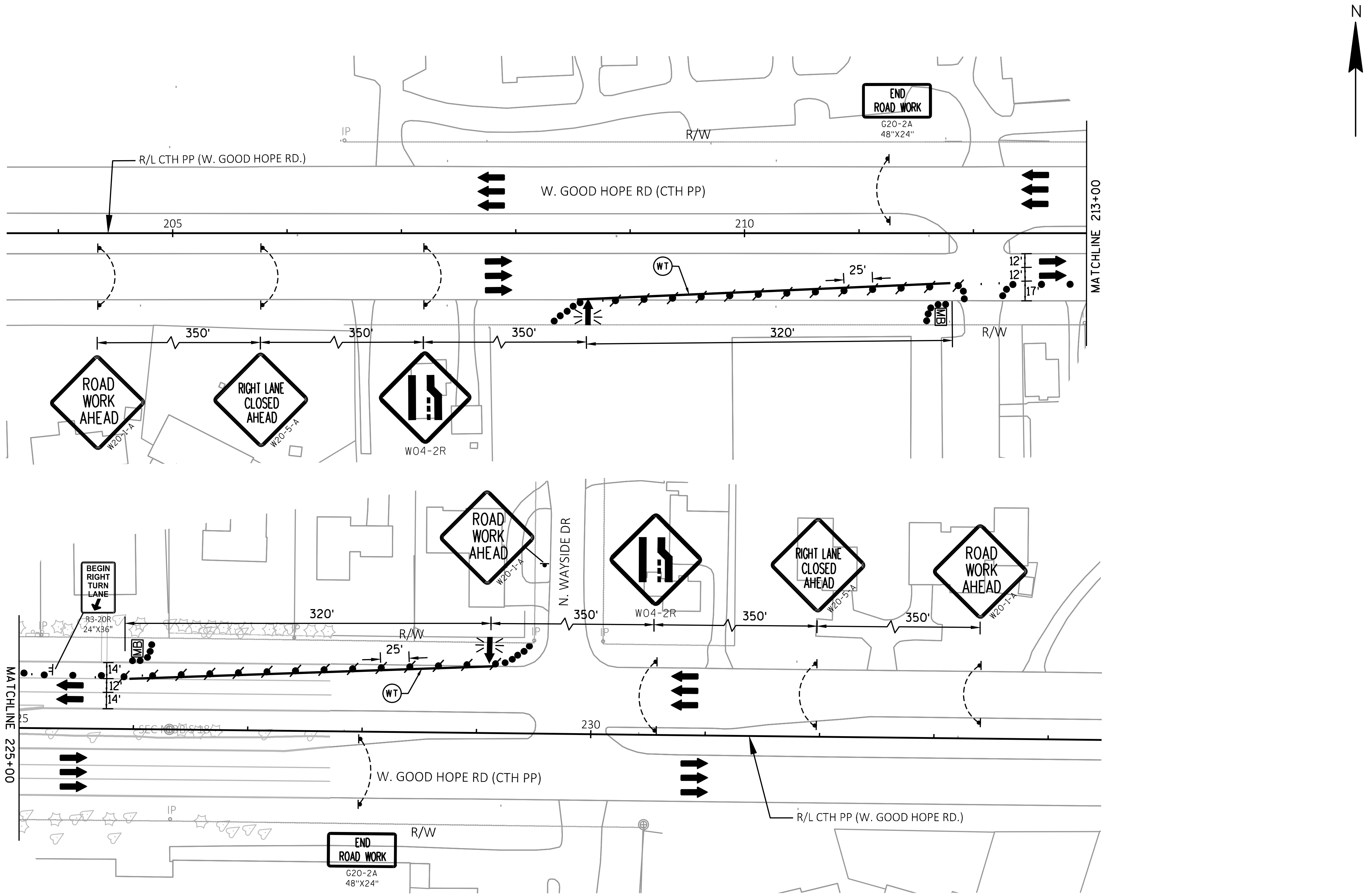
USE FOLLOWING PCMS TEXT

FRAME1: TRAFFIC PATTERN CHANGE
FRAME2: BEGINS XXXDAY

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL PLANS - STAGE 2	SHEET 61	E

2

2



CONSTRUCTION

STAGE 2
N. GREEN BAY AVE (STH 57)
-NORTHBOUND: INSIDE LANE AND MEDIAN
-SOUTHBOUND: INSIDE LANE AND MEDIAN

TRAFFIC

W. GOOD HOPE RD (CTH PP)
-EASTBOUND: INSIDE AND CENTER LANE OPEN
-WESTBOUND: INSIDE AND CENTER LANE OPEN

N. GREEN BAY AVE (STH 57)
-NORTHBOUND: OUTSIDE LANE OPEN
-SOUTHBOUND: OUTSIDE LANE OPEN

SPLIT SIGNAL PHASING TO BE USED FOR OVERLAPPING LEFT TURN PATHS

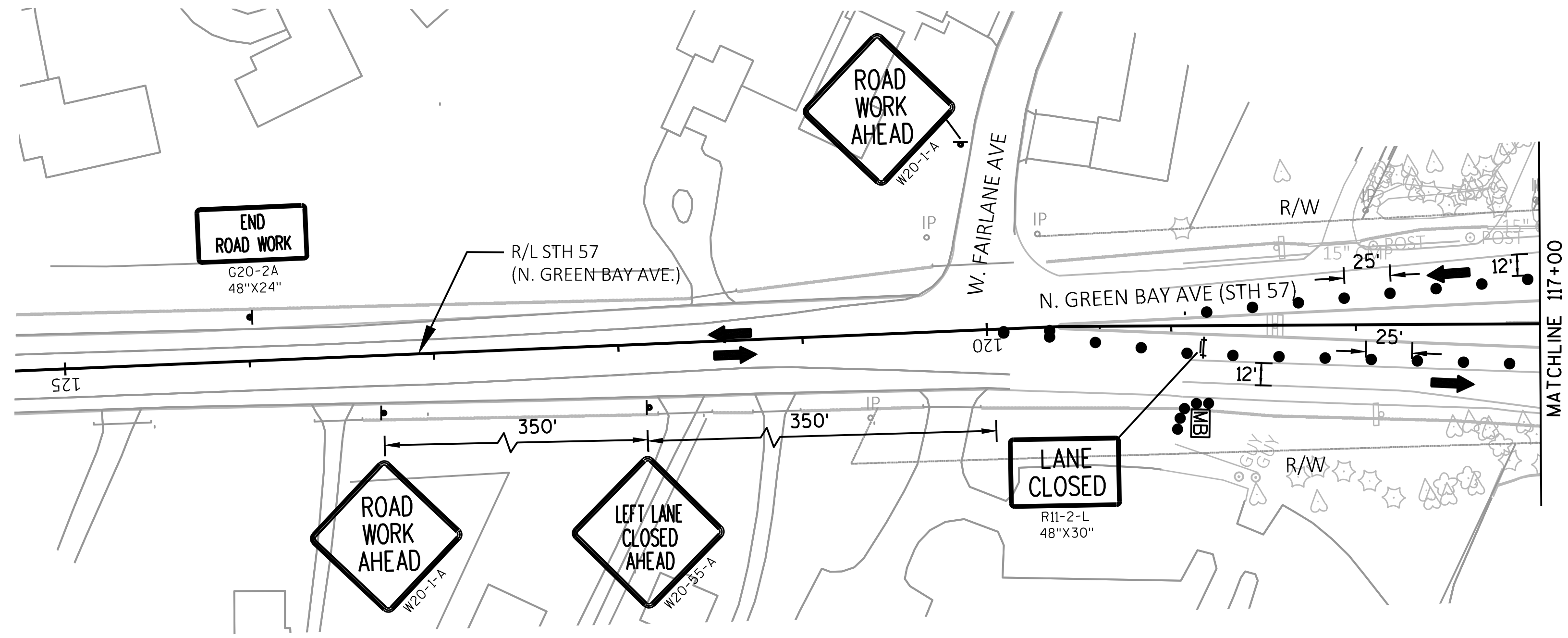
PORTABLE CHANGEABLE MESSAGE SIGNS

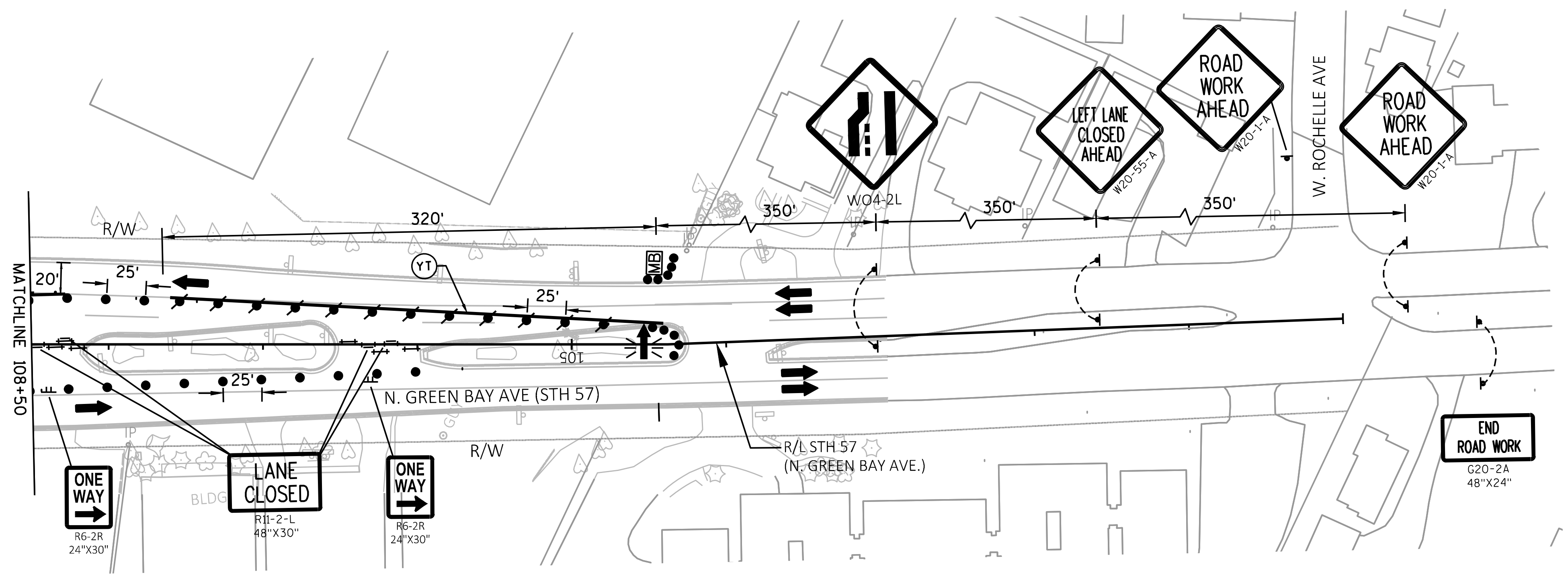
PLACE PORTABLE CHANGEABLE MESSAGE SIGNS MB FOR 7 DAYS PRIOR TO STAGE CHANGE. CONTACT FIELD ENGINEER 3 DAYS PRIOR TO DEPLOYING OR CHANGING A MESSAGE.

USE FOLLOWING PCMS TEXT

FRAME1: TRAFFIC PATTERN CHANGE
FRAME2: BEGINS XXXDAY

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL PLANS - STAGE 2	SHEET 62	E





CONSTRUCTION

STAGE 2
N. GREEN BAY AVE (STH 57)
-NORTHBOUND: INSIDE LANE AND MEDIAN
-SOUTHBOUND: INSIDE LANE AND MEDIAN

TRAFFIC

W. GOOD HOPE RD (CTH PP)
-EASTBOUND: INSIDE AND CENTER LANE OPEN
-WESTBOUND: INSIDE AND CENTER LANE OPEN

N. GREEN BAY AVE (STH 57)
-NORTHBOUND: OUTSIDE LANE OPEN
-SOUTHBOUND: OUTSIDE LANE OPEN

SPLIT SIGNAL PHASING TO BE USED FOR OVERLAPPING LEFT TURN PATHS

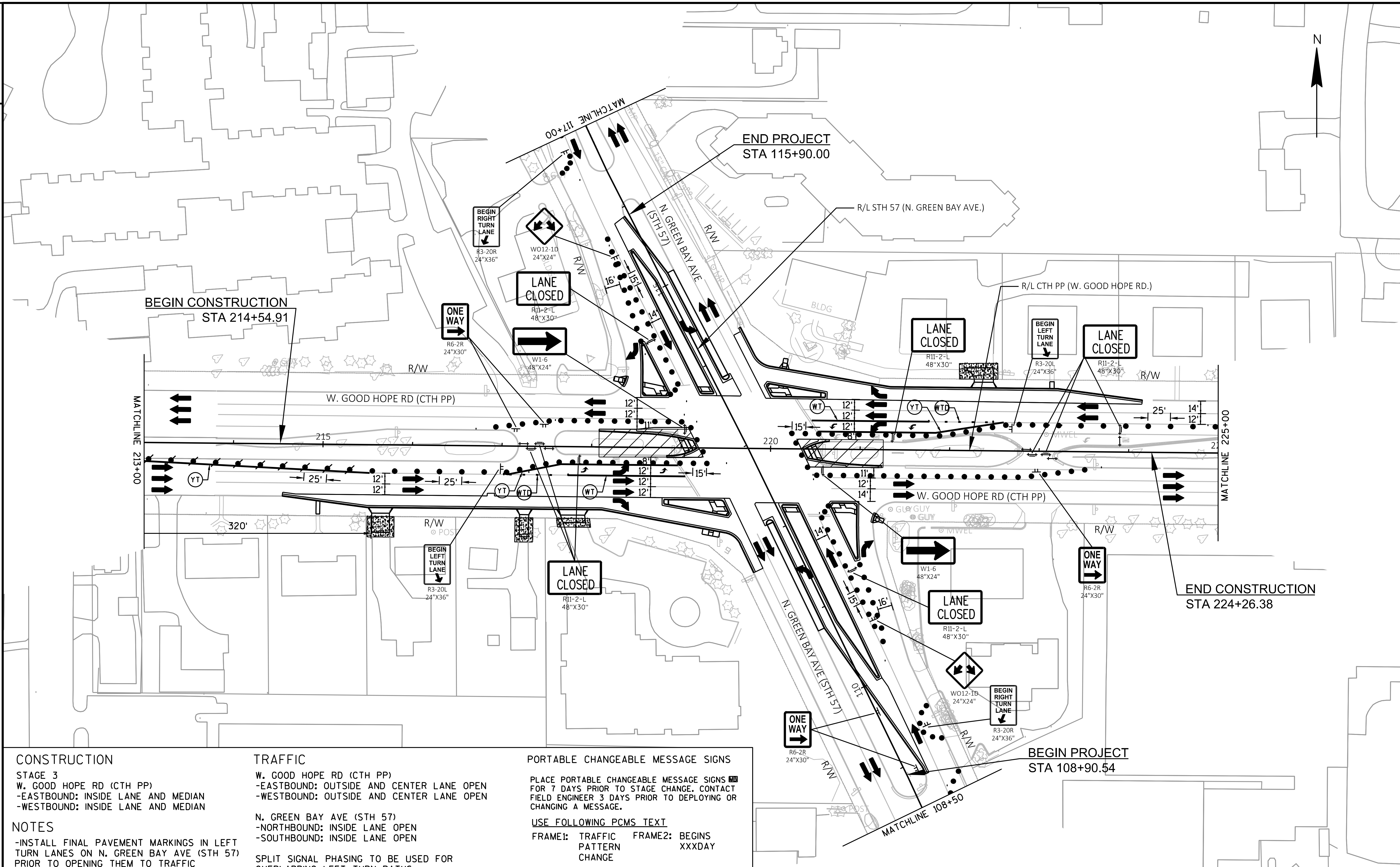
PORTABLE CHANGEABLE MESSAGE SIGNS

PLACE PORTABLE CHANGEABLE MESSAGE SIGNS MB FOR 7 DAYS PRIOR TO STAGE CHANGE. CONTACT FIELD ENGINEER 3 DAYS PRIOR TO DEPLOYING OR CHANGING A MESSAGE.

USE FOLLOWING PCMS TEXT

FRAME1: TRAFFIC PATTERN CHANGE
FRAME2: BEGINS XXXDAY

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL PLANS - STAGE 2	SHEET 63	E



CONSTRUCTION

STAGE 3
W. GOOD HOPE RD (CTH PP)
-EASTBOUND: INSIDE LANE AND MEDIAN
-WESTBOUND: INSIDE LANE AND MEDIAN

NOTES

-INSTALL FINAL PAVEMENT MARKINGS IN LEFT TURN LANES ON N. GREEN BAY AVE (STH 57) PRIOR TO OPENING THEM TO TRAFFIC

TRAFFIC

W. GOOD HOPE RD (CTH PP)
-EASTBOUND: OUTSIDE AND CENTER LANE OPEN
-WESTBOUND: OUTSIDE AND CENTER LANE OPEN

N. GREEN BAY AVE (STH 57)
-NORTHBOUND: INSIDE LANE OPEN
-SOUTHBOUND: INSIDE LANE OPEN

SPLIT SIGNAL PHASING TO BE USED FOR OVERLAPPING LEFT TURN PATHS

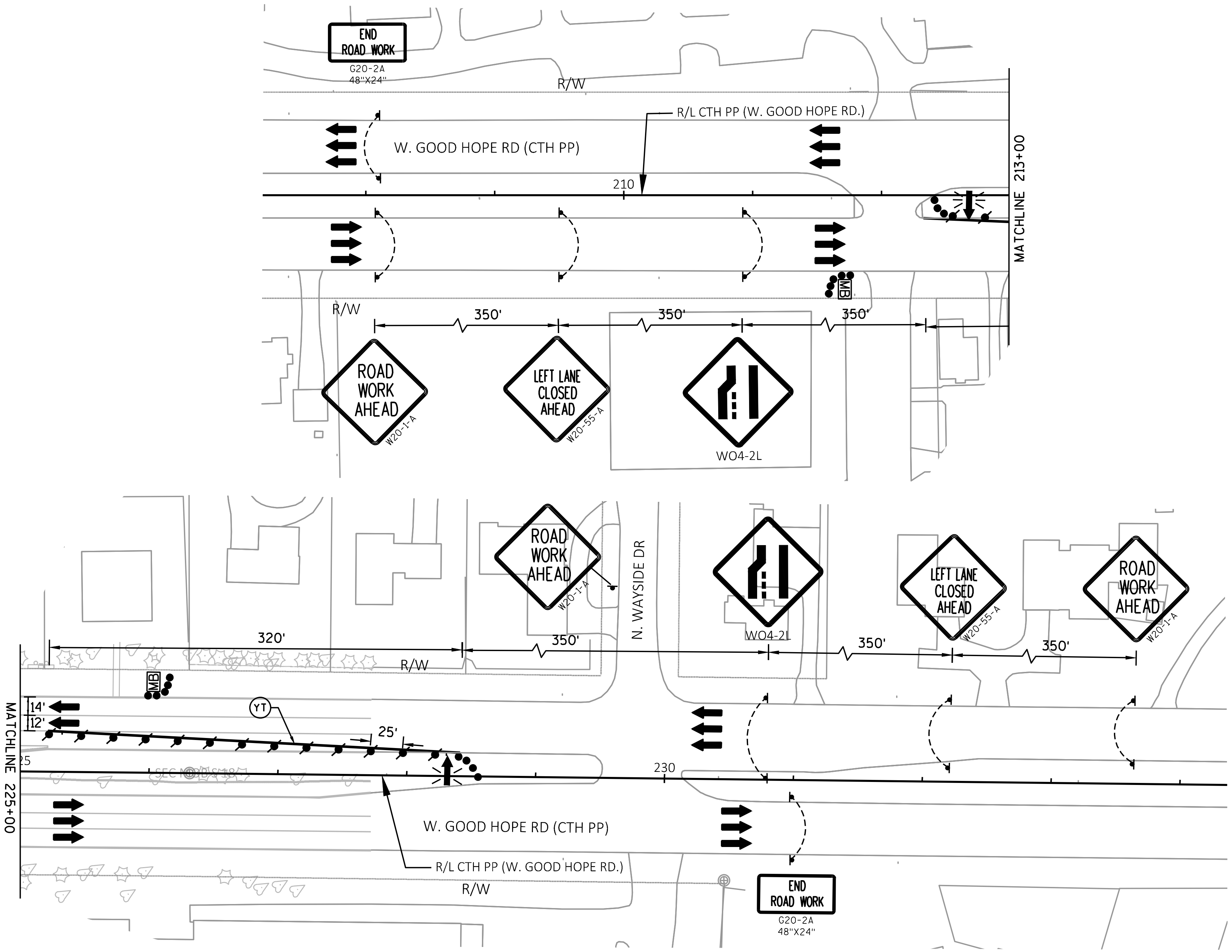
PORTABLE CHANGEABLE MESSAGE SIGNS

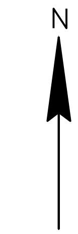
PLACE PORTABLE CHANGEABLE MESSAGE SIGNS FOR 7 DAYS PRIOR TO STAGE CHANGE. CONTACT FIELD ENGINEER 3 DAYS PRIOR TO DEPLOYING OR CHANGING A MESSAGE.

USE FOLLOWING PCMS TEXT

FRAME1: TRAFFIC PATTERN CHANGE
FRAME2: BEGINS XXXDAY

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL PLANS - STAGE 3	SHEET 64	E





CONSTRUCTION

STAGE 3
W. GOOD HOPE RD (CTH PP)
-EASTBOUND: INSIDE LANE AND MEDIAN
-WESTBOUND: INSIDE LANE AND MEDIAN

TRAFFIC

W. GOOD HOPE RD (CTH PP)
-EASTBOUND: OUTSIDE AND CENTER LANE OPEN
-WESTBOUND: OUTSIDE AND CENTER LANE OPEN

N. GREEN BAY AVE (STH 57)
-NORTHBOUND: INSIDE LANE OPEN
-SOUTHBOUND: INSIDE LANE OPEN

SPLIT SIGNAL PHASING TO BE USED FOR OVERLAPPING LEFT TURN PATHS

PORTABLE CHANGEABLE MESSAGE SIGNS

PLACE PORTABLE CHANGEABLE MESSAGE SIGNS MB FOR 7 DAYS PRIOR TO STAGE CHANGE. CONTACT FIELD ENGINEER 3 DAYS PRIOR TO DEPLOYING OR CHANGING A MESSAGE.

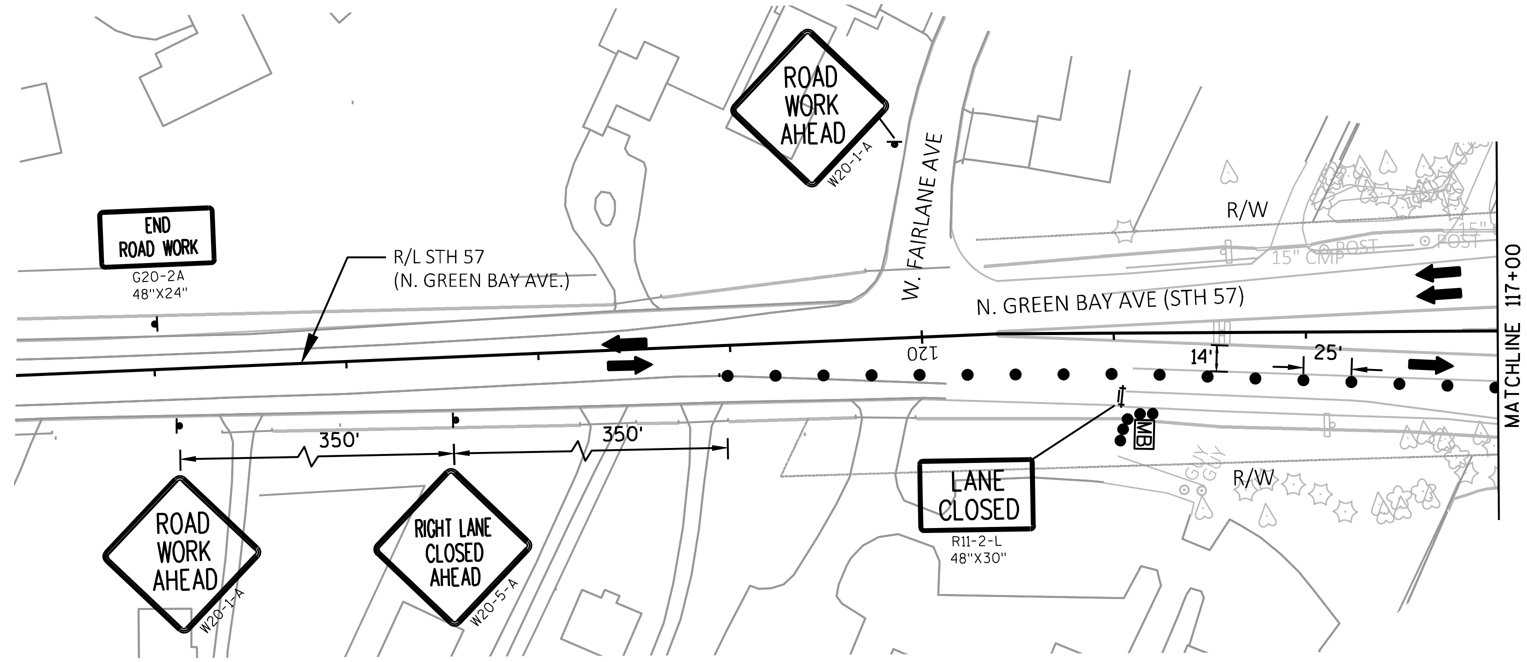
USE FOLLOWING PCMS TEXT

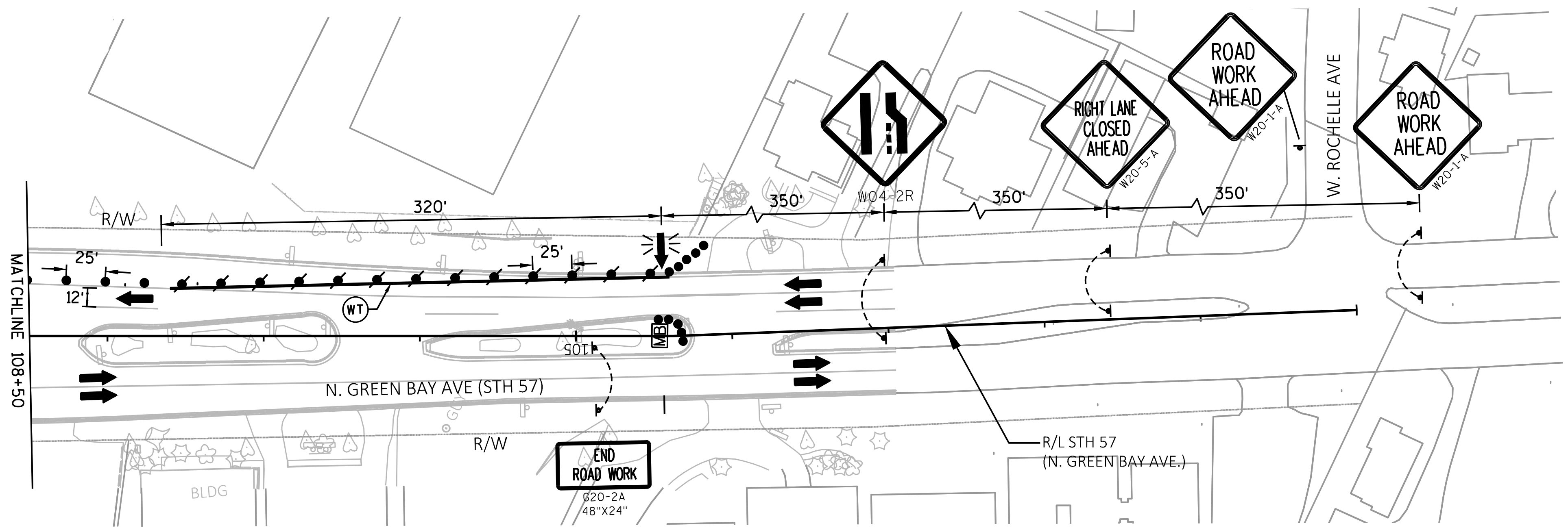
FRAME1: TRAFFIC PATTERN CHANGE
FRAME2: BEGINS XXXDAY

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL PLANS - STAGE 3	SHEET 65	E

2

2





CONSTRUCTION

STAGE 3
W. GOOD HOPE RD (CTH PP)
-EASTBOUND: INSIDE LANE AND MEDIAN
-WESTBOUND: INSIDE LANE AND MEDIAN

TRAFFIC

W. GOOD HOPE RD (CTH PP)
-EASTBOUND: OUTSIDE AND CENTER LANE OPEN
-WESTBOUND: OUTSIDE AND CENTER LANE OPEN

N. GREEN BAY AVE (STH 57)
-NORTHBOUND: INSIDE LANE OPEN
-SOUTHBOUND: INSIDE LANE OPEN

SPLIT SIGNAL PHASING TO BE USED FOR OVERLAPPING LEFT TURN PATHS

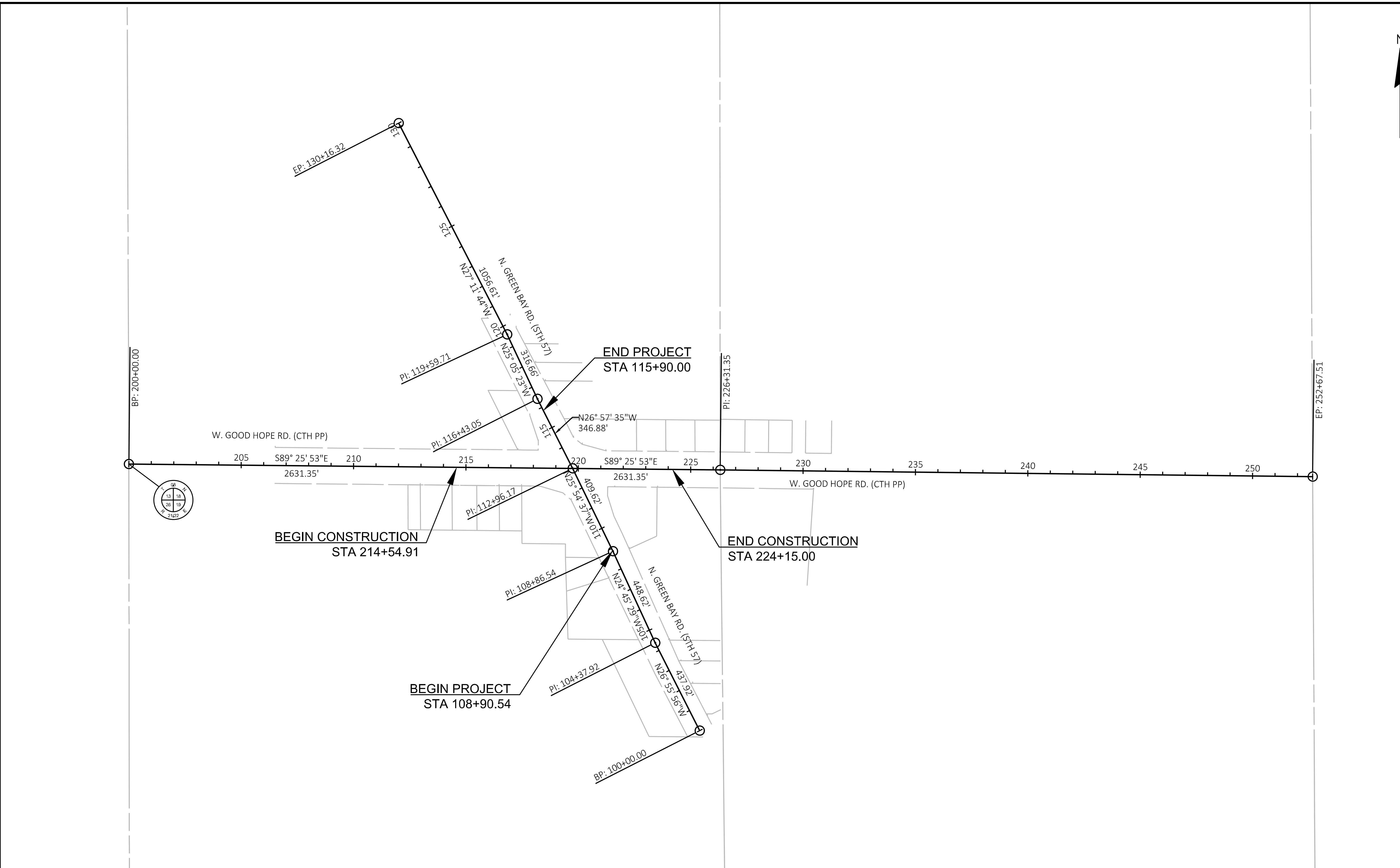
PORTABLE CHANGEABLE MESSAGE SIGNS

PLACE PORTABLE CHANGEABLE MESSAGE SIGNS MB FOR 7 DAYS PRIOR TO STAGE CHANGE. CONTACT FIELD ENGINEER 3 DAYS PRIOR TO DEPLOYING OR CHANGING A MESSAGE.

USE FOLLOWING PCMS TEXT

FRAME1: TRAFFIC PATTERN CHANGE
FRAME2: BEGINS XXXDAY

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL PLANS - STAGE 3	SHEET 66	E

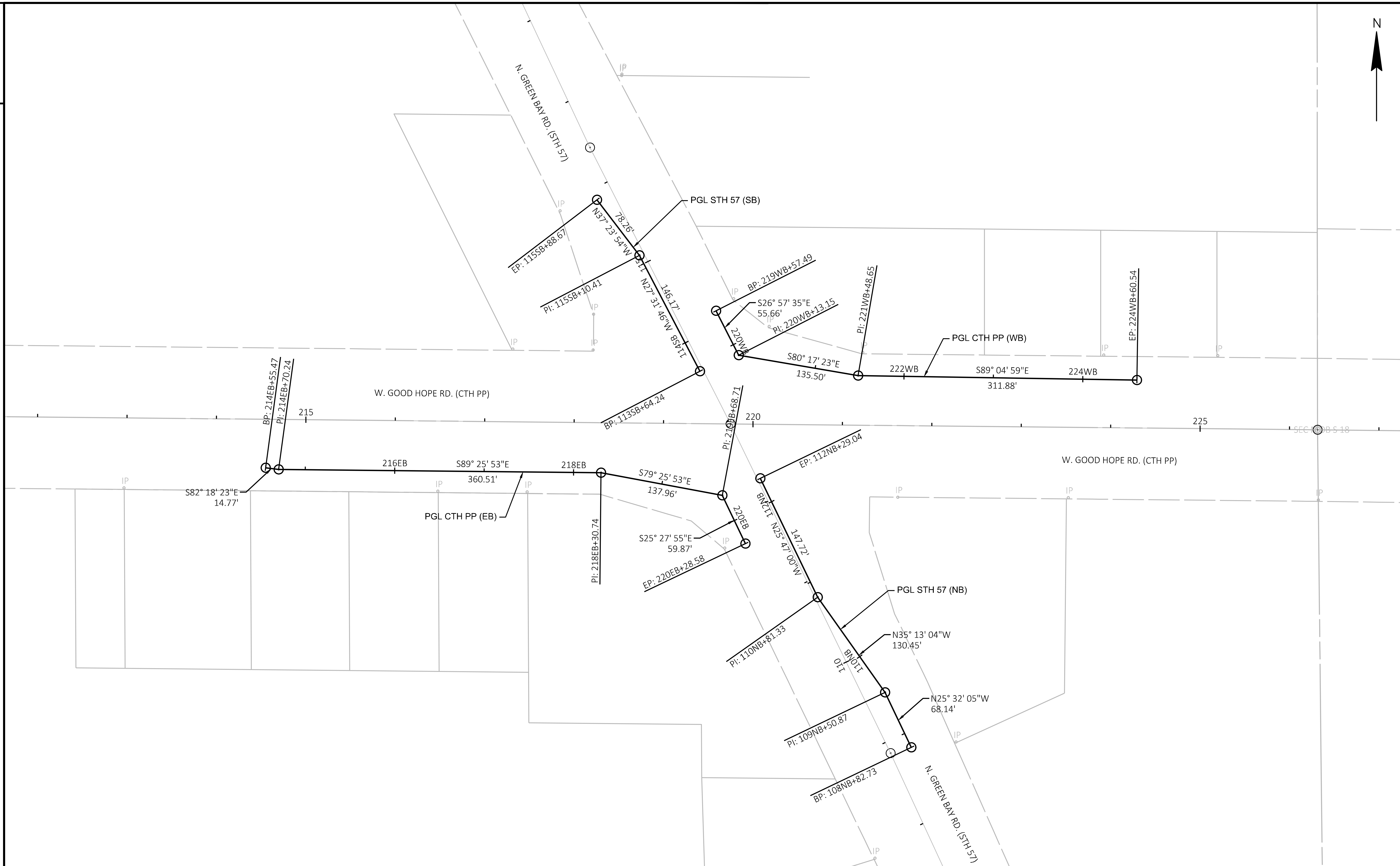


PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	ALIGNMENT DIAGRAM	SHEET 67	E

2

2

2



PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	ALIGNMENT DIAGRAM- OFFSET ALIGNMENTS	SHEET 68	E

FILE NAME : \\W3027S02\DPPIS\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN\CADDS\SHEETS\027201-AD1.DWG PLOT DATE : PLOT BY : HILLIARD, MARC PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - ad1

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Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	1.000	1.000
0004	201.0120	Clearing	ID	54.000	54.000
0006	201.0205	Grubbing	STA	1.000	1.000
0008	201.0220	Grubbing	ID	54.000	54.000
0010	204.0100	Removing Concrete Pavement	SY	1,900.000	1,900.000
0012	204.0150	Removing Curb & Gutter	LF	1,100.000	1,100.000
0014	204.0155	Removing Concrete Sidewalk	SY	400.000	400.000
0016	204.0195	Removing Concrete Bases	EACH	11.000	11.000
0018	204.0220	Removing Inlets	EACH	5.000	5.000
0020	204.0245	Removing Storm Sewer (size) 01. 12-INCH	LF	62.000	62.000
0022	204.9060.S	Removing (item description) 01. Traffic Signals CTH PP & STH 57	EACH	1.000	1.000
0024	204.9060.S	Removing (item description) 02. Loop Detector Wire and Lead-in Cable CTH PP & STH 57	EACH	1.000	1.000
0026	205.0100	Excavation Common	CY	3,000.000	3,000.000
0028	213.0100	Finishing Roadway (project) 01. 2565-02-71	EACH	1.000	1.000
0030	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	647.000	647.000
0032	415.0090	Concrete Pavement 9-Inch	SY	2,300.000	2,300.000
0034	415.0210	Concrete Pavement Gaps	EACH	4.000	4.000
0036	415.1090	Concrete Pavement HES 9-Inch	SY	160.000	160.000
0038	416.0170	Concrete Driveway 7-Inch	SY	80.000	80.000
0040	416.0270	Concrete Driveway HES 7-Inch	SY	20.000	20.000
0042	416.0610	Drilled Tie Bars	EACH	1,000.000	1,000.000
0044	416.0620	Drilled Dowel Bars	EACH	50.000	50.000
0046	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	30.000	30.000
0048	520.8000	Concrete Collars for Pipe	EACH	2.000	2.000
0050	601.0331	Concrete Curb & Gutter 31-Inch	LF	2,250.000	2,250.000
0052	602.0410	Concrete Sidewalk 5-Inch	SF	2,800.000	2,800.000
0054	602.0420	Concrete Sidewalk 7-Inch	SF	2,700.000	2,700.000
0056	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	256.000	256.000
0058	608.0512	Storm Sewer Pipe Reinforced Concrete Class V 12-Inch	LF	94.000	94.000
0060	611.0420	Reconstructing Manholes	EACH	5.000	5.000
0062	611.0555	Manhole Covers Type Q	EACH	1.000	1.000
0064	611.0610	Inlet Covers Type BW	EACH	7.000	7.000
0066	611.2004	Manholes 4-FT Diameter	EACH	1.000	1.000
0068	611.3225	Inlets 2x2.5-FT	EACH	7.000	7.000
0070	611.8110	Adjusting Manhole Covers	EACH	1.000	1.000
0072	611.8115	Adjusting Inlet Covers	EACH	3.000	3.000
0074	611.8120.S	Cover Plates Temporary	EACH	8.000	8.000
0076	612.0700	Drain Tile Exploration	LF	50.000	50.000
0078	618.0100	Maintenance And Repair of Haul Roads (project) 01. 2565-02-71	EACH	1.000	1.000
0080	619.1000	Mobilization	EACH	1.000	1.000
0082	620.0300	Concrete Median Sloped Nose	SF	280.000	280.000
0084	624.0100	Water	MGAL	10.000	10.000
0086	625.0100	Topsoil	SY	1,400.000	1,400.000
0088	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0090	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0092	628.2006	Erosion Mat Urban Class I Type A	SY	900.000	900.000
0094	628.7005	Inlet Protection Type A	EACH	3.000	3.000
0096	628.7010	Inlet Protection Type B	EACH	25.000	25.000

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Line	Item	Item Description	Unit	Total	Qty
0098	628.7015	Inlet Protection Type C	EACH	23.000	23.000
0100	629.0210	Fertilizer Type B	CWT	1.000	1.000
0102	630.0140	Seeding Mixture No. 40	LB	45.000	45.000
0104	630.0500	Seed Water	MGAL	25.000	25.000
0106	631.0300	Sod Water	MGAL	15.000	15.000
0108	631.1000	Sod Lawn	SY	550.000	550.000
0110	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	37.000	37.000
0112	637.2210	Signs Type II Reflective H	SF	397.500	397.500
0114	637.2215	Signs Type II Reflective H Folding	SF	74.600	74.600
0116	637.2230	Signs Type II Reflective F	SF	88.000	88.000
0118	638.2602	Removing Signs Type II	EACH	38.000	38.000
0120	638.3000	Removing Small Sign Supports	EACH	11.000	11.000
0122	642.5001	Field Office Type B	EACH	1.000	1.000
0124	643.0300	Traffic Control Drums	DAY	30,000.000	30,000.000
0126	643.0420	Traffic Control Barricades Type III	DAY	2,500.000	2,500.000
0128	643.0705	Traffic Control Warning Lights Type A	DAY	4,880.000	4,880.000
0130	643.0715	Traffic Control Warning Lights Type C	DAY	5,560.000	5,560.000
0132	643.0800	Traffic Control Arrow Boards	DAY	490.000	490.000
0134	643.0900	Traffic Control Signs	DAY	15,200.000	15,200.000
0136	643.0920	Traffic Control Covering Signs Type II	EACH	40.000	40.000
0138	643.1000	Traffic Control Signs Fixed Message	SF	200.000	200.000
0140	643.1050	Traffic Control Signs PCMS	DAY	100.000	100.000
0142	643.3150	Temporary Marking Line Removable Tape 4-Inch	LF	7,000.000	7,000.000
0144	643.3550	Temporary Marking Arrow Removable Tape	EACH	10.000	10.000
0146	643.3650	Temporary Marking Word Removable Tape	EACH	5.000	5.000
0148	643.5000	Traffic Control	EACH	1.000	1.000
0150	646.1020	Marking Line Epoxy 4-Inch	LF	2,000.000	2,000.000
0152	646.3020	Marking Line Epoxy 8-Inch	LF	2,000.000	2,000.000
0154	646.5020	Marking Arrow Epoxy	EACH	14.000	14.000
0156	646.5120	Marking Word Epoxy	EACH	4.000	4.000
0158	646.6120	Marking Stop Line Epoxy 18-Inch	LF	250.000	250.000
0160	646.6220	Marking Yield Line Epoxy 18-Inch	EACH	32.000	32.000
0162	646.7120	Marking Diagonal Epoxy 12-Inch	LF	300.000	300.000
0164	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	1,100.000	1,100.000
0166	646.9000	Marking Removal Line 4-Inch	LF	150.000	150.000
0168	646.9100	Marking Removal Line 8-Inch	LF	1,400.000	1,400.000
0170	646.9200	Marking Removal Line Wide	LF	200.000	200.000
0172	646.9300	Marking Removal Special Marking	EACH	4.000	4.000
0174	650.4000	Construction Staking Storm Sewer	EACH	8.000	8.000
0176	650.4500	Construction Staking Subgrade	LF	1,800.000	1,800.000
0178	650.5000	Construction Staking Base	LF	1,800.000	1,800.000
0180	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	600.000	600.000
0182	650.7000	Construction Staking Concrete Pavement	LF	1,800.000	1,800.000
0184	650.8501	Construction Staking Electrical Installations (project) 01. 2565-02-71	EACH	1.000	1.000
0186	650.9000	Construction Staking Curb Ramps	EACH	24.000	24.000
0188	650.9500	Construction Staking Sidewalk (project) 01. 2565-02-71	EACH	1.000	1.000
0190	650.9911	Construction Staking Supplemental Control (project) 01. 2565-02-71	EACH	1.000	1.000
0192	650.9920	Construction Staking Slope Stakes	LF	1,800.000	1,800.000
0194	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	200.000	200.000

Line	Item	Item Description	Unit	Total	2565-02-71 Qty
0196	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	550.000	550.000
0198	652.0615	Conduit Special 3-Inch	LF	1,200.000	1,200.000
0200	652.0700.S	Install Conduit into Existing Item	EACH	1.000	1.000
0202	653.0140	Pull Boxes Steel 24x42-Inch	EACH	18.000	18.000
0204	653.0905	Removing Pull Boxes	EACH	12.000	12.000
0206	654.0101	Concrete Bases Type 1	EACH	8.000	8.000
0208	654.0113	Concrete Bases Type 13	EACH	2.000	2.000
0210	654.0120	Concrete Bases Type 10-Special	EACH	2.000	2.000
0212	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	1.000	1.000
0214	655.0210	Cable Traffic Signal 3-14 AWG	LF	1,200.000	1,200.000
0216	655.0230	Cable Traffic Signal 5-14 AWG	LF	600.000	600.000
0218	655.0240	Cable Traffic Signal 7-14 AWG	LF	900.000	900.000
0220	655.0260	Cable Traffic Signal 12-14 AWG	LF	600.000	600.000
0222	655.0270	Cable Traffic Signal 15-14 AWG	LF	2,000.000	2,000.000
0224	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	1,500.000	1,500.000
0226	655.0900	Traffic Signal EVP Detector Cable	LF	1,300.000	1,300.000
0228	656.0201	Electrical Service Meter Breaker Pedestal (location) 01. CTH PP & STH 57	EACH	1.000	1.000
0230	657.0100	Pedestal Bases	EACH	8.000	8.000
0232	657.0405	Traffic Signal Standards Aluminum 3.5-FT	EACH	2.000	2.000
0234	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	6.000	6.000
0236	658.0173	Traffic Signal Face 3S 12-Inch	EACH	18.000	18.000
0238	658.0174	Traffic Signal Face 4S 12-Inch	EACH	4.000	4.000
0240	658.0416	Pedestrian Signal Face 16-Inch	EACH	8.000	8.000
0242	658.0500	Pedestrian Push Buttons	EACH	12.000	12.000
0244	658.5070	Signal Mounting Hardware (location) 01. CTH PP & STH 57	EACH	1.000	1.000
0246	661.0201	Temporary Traffic Signals for Intersections (location) 01. CTH PP & STH 57	EACH	1.000	1.000
0248	678.0200	Fiber Optic Splice Enclosure	EACH	1.000	1.000
0250	678.0300	Fiber Optic Splice	EACH	4.000	4.000
0252	678.0400	Fiber Optic Termination	EACH	4.000	4.000
0254	690.0150	Sawing Asphalt	LF	100.000	100.000
0256	690.0250	Sawing Concrete	LF	2,600.000	2,600.000
0258	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	1,000.000	1,000.000
0260	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,200.000	1,200.000
0262	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	600.000	600.000
0264	SPV.0035	Special 01. Backfill Slurry	CY	20.000	20.000
0266	SPV.0060	Special 01. Remove and Reinstall Mailboxes	EACH	2.000	2.000
0268	SPV.0060	Special 02. Temporary Mailboxes	EACH	3.000	3.000
0270	SPV.0060	Special 03. Replacement Mailbox Posts & Hardware	EACH	2.000	2.000
0272	SPV.0060	Special 04. Emergency Vehicle Preemption System	EACH	1.000	1.000
0274	SPV.0060	Special 05. Exposing Existing Infrastructure Unpaved Area	EACH	4.000	4.000
0276	SPV.0060	Special 06. Hydro Excavation	EACH	4.000	4.000
0278	SPV.0060	Special 07. Vehicular Video Detection System, (4 Cameras)	EACH	1.000	1.000
0280	SPV.0060	Special 08. Traffic Signal Cabinet 16-Phase, CTH PP & STH 57	EACH	1.000	1.000
0282	SPV.0060	Special 09. Cored Holes 6-Inch	EACH	10.000	10.000
0284	SPV.0060	Special 10. Adjusting Water Boxes	EACH	8.000	8.000
0286	SPV.0060	Special 11. Internal Sanitary Manhole Seal	EACH	5.000	5.000
0288	SPV.0060	Special 12. Transport and Install Poles Type 10-Special	EACH	2.000	2.000
0290	SPV.0060	Special 13. Transport and Install Poles Type 13	EACH	2.000	2.000
0292	SPV.0060	Special 14. Transport and Install Monotube Arms 45-FT-Special	EACH	2.000	2.000

2565-02-71

Line	Item	Item Description	Unit	Total	Qty
0294	SPV.0060	Special 15. Transport and Install Monotube Arms 55-FT	EACH	2.000	2.000
0296	SPV.0060	Special 16. Transport and Install Luminaire Arms Steel 15-FT	EACH	4.000	4.000
0298	SPV.0090	Special 01. Tracer Wire, 12 AWG	LF	40.000	40.000
0300	SPV.0090	Special 02. Remove and Reinstall Fiber Optic Cable	LF	40.000	40.000
0302	SPV.0090	Special 03. Concrete Curb & Gutter 31-Inch Special	LF	1,250.000	1,250.000

3

CLEARING AND GRUBBING

CATEGORY	LOCATION	STATION	OFFSET (FT)	201.0105 CLEARING STA	201.0120 CLEARING ID	201.0205 GRUBBING STA	201.0220 GRUBBING ID
0010	STH 57						
0010	NB LEFT TURN LN	109+89	7 RT	-	8	-	8
0010		110+15	1 RT	-	6	-	6
0010		110+43	12 LT	-	6	-	6
0010		110+70	1 LT	-	12	-	12
0010		110+92	11 LT	-	10	-	10
0010		111+29	1 LT	-	12	-	12
0010							
0010	SB LEFT TURN LN	114+68	6 RT	-	-	-	-
0010		115+31	5 RT	1	-	1	-
0010							
			TOTAL 0010	1	54	1	54

REMOVING CONCRETE BASES

CATEGORY	LOCATION	204.0195 REMOVING CONCRETE BASES EACH
	CTH PP (W. GOOD HOPE RD.) & STH 57 (N. GREEN BAY AVE.)	
0010	CB1	1
0010	SB1	1
0010	SB2	1
0010	SB3	1
0010	SB4	1
0010	SB5	1
0010	SB6	1
0010	SB7	1
0010	SB8	1
0010	SB9	1
0010	SB10	1
0010		
	TOTAL 0010	11

3

REMOVING CURB & GUTTER

CATEGORY	LOCATION	STATION	TO	STATION	204.0150 REMOVING CURB & GUTTER LF
0010	CTH PP				
0010	EB RIGHT TURN LN	214+55	-	219+55	400
0010	MEDIAN- WEST LEG	218+50	-	219+25	80
0010	WB RIGHT TURN LN	219+94	-	224+14	331
0010	MEDIAN- EAST LEG	220+29	-	220+84	62
0010					
0010	SUBTOTAL				873
0010					
0010	STH 57				
0010	NB LEFT TURN LN	108+91	-	112+39	49
0010	NB RIGHT TURN ISLAND	111+31	-	112+03	83
0010	SB LEFT TURN LN	113+51	-	115+87	0
0010	SB RIGHT TURN ISLAND	113+87	-	114+55	42
0010					
0010	SUBTOTAL				174
0010					
0010	UNDISTRIBUTED				53
0010					
				TOTAL 0010	1,100

REMOVING STORM SEWER

CATEGORY	LOCATION	STATION	OFFSET	204.0220 REMOVING INLETS EACH	204.0245.01 REMOVING STORM SEWER (SIZE) (12-INCH) LF
0010	CTH PP				
0010		216+88	57' RT	1	-
0010		218+87	19' LT	-	5
0010		221+50	59' LT	1	-
0010					
0010	SUBTOTAL			2	5
0010					
0010	STH 57				
0010		109+59	19' RT	1	25
0010		113+72	24' LT	-	-
0010		113+80	9' LT	1	17
0010		113+85	5' LT	1	15
0010					
0010	SUBTOTAL			3	57
0010					
			TOTAL 0010	5	62

3

REMOVING CONCRETE SIDEWALK

CATEGORY	LOCATION	STATION	TO	STATION	204.0155 REMOVING CONCRETE SIDEWALK SY
0010	CTH PP				
0010	EB RIGHT TURN LN	214+55	-	219+55	81
0010	MEDIAN- WEST LEG	218+50	-	219+25	13
0010	WB RIGHT TURN LN	219+94	-	224+14	85
0010	MEDIAN- EAST LEG	220+29	-	220+84	15
0010					
0010	SUBTOTAL				194
0010					
0010	STH 57				
0010	NB LEFT TURN LN	108+91	-	112+39	17
0010	NB RIGHT TURN ISLAND	111+31	-	112+03	73
0010	SB LEFT TURN LN	113+51	-	115+87	14
0010	SB RIGHT TURN ISLAND	113+87	-	114+55	60
0010					
0010	SUBTOTAL				164
0010					
0010	UNDISTRIBUTED				42
0010					
				TOTAL 0010	400

REMOVING CONCRETE PAVEMENT

CATEGORY	LOCATION	STATION	TO	STATION	204.0100 REMOVING CONCRETE PAVEMENT SY
0010	CTH PP				
0010	EB RIGHT TURN LN	214+55	-	219+55	426
0010	MEDIAN- WEST LEG	218+50	-	219+25	73
0010	WB RIGHT TURN LN	219+94	-	224+14	417
0010	MEDIAN- EAST LEG	220+29	-	220+84	63
0010					
0010	SUBTOTAL				979
0010					
0010	STH 57				
0010	NB LEFT TURN LN	108+91	-	112+39	388
0010	NB RIGHT TURN ISLAND	111+31	-	112+03	54
0010	SB LEFT TURN LN	113+51	-	115+87	360
0010	SB RIGHT TURN ISLAND	113+87	-	114+55	65
0010					
0010	SUBTOTAL				867
0010					
0010	UNDISTRIBUTED				54
0010					
				TOTAL 0010	1,900

3

AGGREGATE ITEMS

CATEGORY	LOCATION	STATION	TO	STATION	* 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON
0010	CTH PP				
0010	EB RIGHT TURN LN	214+55	-	219+55	163
0010	MEDIAN- WEST LEG	218+50	-	219+25	12
0010	WB RIGHT TURN LN	219+94	-	224+14	158
0010	MEDIAN- EAST LEG	220+29	-	220+84	11
0010					
0010	SUBTOTAL				344
0010					
0010	STH 57				
0010	NB LEFT TURN LN	108+91	-	112+39	94
0010	NB RIGHT TURN ISLAND	111+31	-	112+03	13
0010	SB LEFT TURN LN	113+51	-	115+87	70
0010	SB RIGHT TURN ISLAND	113+87	-	114+55	12
0010					
0010	SUBTOTAL				189
0010					
0010	UNDISTRIBUTED				67
0010					
				TOTAL 0010	600

*ADDITIONAL QUANTITES LISTED ELSEWHERE

CONCRETE PAVEMENT ITEMS

CATEGORY	LOCATION	STATION	TO	STATION	415.0090 CONCRETE PAVEMENT 9-INCH SY	415.0210 CONCRETE PAVEMENT GAPS EACH	415.1090 CONCRETE PAVEMENT HES 9-INCH SY	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH
0010	CTH PP								
0010	EB RIGHT TURN LN	214+55	-	219+55	731	3	109	235	-
0010	MEDIAN- WEST LEG	218+50	-	219+25	47	-	-	70	-
0010	WB RIGHT TURN LN	219+94	-	224+14	668	1	44	200	-
0010	MEDIAN- EAST LEG	220+29	-	220+84	37	-	-	61	-
0010									
0010	SUBTOTAL				1483	4	153	566	0
0010									
0010	STH 57								
0010	NB LEFT TURN LN	108+91	-	112+39	449	-	-	162	-
0010	NB RIGHT TURN ISLAND	111+31	-	112+03	0	-	-	72	-
0010	SB LEFT TURN LN	113+51	-	115+87	344	-	-	121	-
0010	SB RIGHT TURN ISLAND	113+87	-	114+55	0	-	-	68	-
0010									
0010	SUBTOTAL				793	0	0	423	0
0010									
0010	UNDISTRIBUTED				24	0	7	11	50
0010									
				TOTAL 0010	2,300	4	160	1,000	50

3

3

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1) CUT (2)	205.0100 COMMON EXCAVATION (1) EBS EXCAVATION (3)	SALVAGED/ UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	205.0500 MARSH EXCAVATION (6)	205.0200 ROCK EXCAVATION (7)	REDUCED MARSH IN FILL (8) FACTOR 1.00	REDUCED EBS IN FILL (9) FACTOR 1.00	EXPANDED MARSH BACKFILL (10) FACTOR 1.00	EXPANDED EBS BACKFILL (11) FACTOR 1.00	EXPANDED ROCK (12) FACTOR 1.00	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.00	MASS ORDINATE +/- (14)	WASTE	208.0100 BORROW	COMMENT
DIVISION 1																			
57_NB LT LN	108+91/112+25	N. GREEN BAY AVE	595	0	118	477	0	0	0	0	0	0	0	0	0	477	477	0	
57_SB LT LN	113+64/115+69	N. GREEN BAY AVE	441	0	114	327	0	0	0	0	0	0	0	0	0	327	327	0	
PP_EB RT LN	214+55/220+29	W. GOOD HOPE RD	727	0	159	568	0	0	0	0	0	0	0	0	0	568	568	0	
PP_WB RT LN	219+57/224+47	W. GOOD HOPE RD	592	0	183	409	0	0	0	0	0	0	0	0	0	409	409	0	
DIVISION 1 SUBTOTAL			2,355	0	574	1,781	0	0	0	0	0	0	0	0	0	1,781	1,781	0	
UNDISTRIBUTED			200	445															
GRAND TOTAL			2,555	445	574	1,781	0	0	0	0	0	0	0	0	0	1,781	1,781	0	
TOTAL COMMON EXC			3,000																

NOTES:

(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(3) EBS EXCAVATION TO BE BACKFILLED WITH BASE AGGREGATE DENSE 1 1/4".
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(6) MARSH EXCAVATION - TO BE BACKFILLED WITH SELECT BORROW MATERIAL. NOTE: THIS IS DESIGNERS CHOICE, CAN BE BACKFILLED WITH BORROW, OR CUT AS WELL. ITEM NUMBER 205.0500
(7) ROCK EXCAVATION ITEM NUMBER 205.0200
(8) REDUCED MARSH IN FILL - EXCAVATED MARSH MATERIAL IS USUABLE IN FILLS OUTSIDE THE 1:1 SLOPE. MARSH IN FILL REDUCTION FACTOR = X.1X
(9) REDUCED EBS IN FILL - EXCAVATED EBS MATERIAL IS USUABLE IN FILLS OUTSIDE THE 1:1 SLOPE. EBS IN FILL REDUCTION FACTOR = X.2X
(10) EXPANDED MARSH BACKFILL - THIS IS TO BE FILLED WITH SELECT BORROW MATERIAL. MARSH BACKFILL FACTOR = X.3X. ITEM NUMBER 208.1100
(11) EXPANDED EBS BACKFILL - THIS IS TO BE FILLED WITH BASE AGGREGATE DENSE 1 1/4". EBS BACKFILL FACTOR = X.4X. ITEM NUMBER 208.1100
(12) EXPANDED ROCK FACTOR = X.5X
(13) EXPANDED FILL FACTOR = X.6X

DEPENDING ON SELECTIONS: EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED MARSH - REDUCED EBS) * FILL FACTOR
OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED EBS) * FILL FACTOR
OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED MARSH) * FILL FACTOR
OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK) * 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 WITHIN THE DIVISION.
(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

DRIVEWAYS

CATEGORY	LOCATION	OFFSET	* 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	416.0170 CONCRETE DRIVEWAY 7-INCH SY	416.0270 CONCRETE DRIVEWAY HES 7-INCH SY	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON
0010	CTH PP					
0010	215+64	RT	11	16	-	12
0010	217+26	RT	7	37	-	0
0010	217+79	RT	8	21	-	6
0010	222+37	LT	11	0	17	11
0010	SUBTOTAL		37	74	17	29
0010						
0010	UNDISTRIBUTED		3	6	3	1
0010						
*ADDITIONAL QUANTITES LISTED ELSEWHERE		TOTAL 0010	40	80	20	30

STORM SEWER PIPE REINFORCED CONCRETE

CATEGORY	BEGIN OF PIPE STR. NUM.	END OF PIPE STR. NUM.	520.8000 CONCRETE COLLARS FOR PIPE EACH	608.0512 STORM SEWER PIPE REINFORCED CONCRETE CLASS V 12-INCH LF
0010	1.0	EX. INL	1	12
0010	3.0	4.0	-	16
0010	6.0	5.0	-	20
0010	5.0	EX. RCP	1	10
0010	11.0	EX. MH	-	36
0010			-	-
0010			-	-
0010				
		TOTAL 0010	2	94

3

CONCRETE SIDEWALK ITEMS

CATEGORY	LOCATION	STATION	TO	STATION	* 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0420 CONCRETE SIDEWALK 7-INCH SF	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF
0010	CTH PP								
0010	EB RIGHT TURN LN	214+55	-	219+55	2	173	525	42	24
0010	MEDIAN- WEST LEG	218+50	-	219+25	0	138	-	22	59
0010	WB RIGHT TURN LN	219+94	-	224+14	1	109	410	42	14
0010	MEDIAN- EAST LEG	220+29	-	220+84	0	154	-	22	64
0010									
0010	SUBTOTAL				3	574	935	128	161
0010									
0010	STH 57								
0010	NB LEFT TURN LN	108+91	-	112+39	0	1036	-	22	32
0010	NB RIGHT TURN ISLAND	111+31	-	112+03	1	74	921	42	22
0010	SB LEFT TURN LN	113+51	-	115+87	0	994	-	22	32
0010	SB RIGHT TURN ISLAND	113+87	-	114+55	1	84	840	42	22
0010									
0010	SUBTOTAL				2	2188	1761	128	108
0010									
0010	UNDISTRIBUTED				2	38	4	0	11
0010									
*ADDITIONAL QUANTITES LISTED ELSEWHERE				TOTAL 0010	7	2,800	2,700	256	280

CONCRETE CURB & GUTTER

CATEGORY	LOCATION	STATION	TO	STATION	601.0331 CONCRETE CURB & GUTTER 31-INCH LF	SPV.0090.03 SPECIAL (CONCRETE CURB & GUTTER 31-INCH SPECIAL) LF
0010	CTH PP					
0010	EB RIGHT TURN LN	214+55	-	219+55	632	60
0010	MEDIAN- WEST LEG	218+50	-	219+25		126
0010	WB RIGHT TURN LN	219+94	-	224+14	543	60
0010	MEDIAN- EAST LEG	220+29	-	220+84		104
0010						
0010	SUBTOTAL				1175	350
0010						
0010	STH 57					
0010	NB LEFT TURN LN	108+91	-	112+39	532	222
0010	NB RIGHT TURN ISLAND	111+31	-	112+03		153
0010	SB LEFT TURN LN	113+51	-	115+87	393	184
0010	SB RIGHT TURN ISLAND	113+87	-	114+55		137
0010						
0010	SUBTOTAL				925	696
0010						
0010	UNDISTRIBUTED				150	204
0010						
				TOTAL 0010	2,250	1,250

3

STORM SEWER STRUCTURES

CATEGORY	STR. NO.	STATION	OFFSET	611.0555 MANHOLE COVERS TYPE Q EACH	611.0610 INLET COVERS TYPE BW EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.3225 INLETS 2X2.5-FT EACH	611.8110 ADJUSTING MANHOLE COVERS EACH	611.8115 ADJUSTING INLET COVERS EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH
0010	CTH PP									
0010	1.0	216+85	69.0 RT	-	1	-	1	-	-	1
0010	2.0	218+87	14.1 LT	-	1	-	1	-	-	1
0010	EX. INL	218+87	10.0 RT	-	-	-	-	-	1	-
0010	3.0	219+23	88.6 RT	-	1	-	1	-	-	1
0010	4.0	219+37	96.1 RT	1	-	1	-	-	-	1
0010	EX. MH	219+72	108.0 RT	-	-	-	-	1	-	-
0010	5.0	221+50	69.2 LT	-	1	-	1	-	-	1
0010	6.0	221+70	69.1 LT	-	1	-	1	-	-	1
0010										
0010	STH 57									
0010	EX. INL	108+86	20.5 RT	-	-	-	-	-	1	-
0010	10.0	109+34	13.5 RT	-	1	-	1	-	-	1
0010	11.0	113+87	8.7 RT	-	1	-	1	-	-	1
0010	EX. INL	114+18	52.7 RT	-	-	-	-	-	1	-
0010										
0010										
			TOTAL 0010	1	7	1	7	1	3	8

EROSION CONTROL

CATEGORY	LOCATION	STATION	TO	STATION	624.0100 WATER MGAL	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH
0010	CTH PP							
0010	W. GOOD HOPE RD	214+00	-	224+50	-	-	15	5
0010								
0010	SUBTOTAL				0	0	15	5
0010								
0010	STH 57							
0010	N. GREEN BAY AVE	108+91	-	114+55	-	2	4	8
0010								
0010	SUBTOTAL				0	2	4	8
0010								
0010	UNDISTRIBUTED				10	1	6	10
0010								
				TOTAL 0010	10	3	25	23

3

LANDSCAPE ITEMS

CATEGORY	LOCATION	STATION	-	STATION	625.0100 TOPSOIL SY	628.2006 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	631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY
0010	CTH PP										
0010	EB RIGHT TURN LN	214+55	-	219+55	288	0	0.00	0	0	7	288
0010	MEDIAN- WEST LEG	218+50	-	219+25	64	64	0.04	3	2	0	0
0010	WB RIGHT TURN LN	219+94	-	224+14	209	0	0.00	0	0	5	209
0010	MEDIAN- EAST LEG	220+29	-	220+84	50	50	0.03	3	2	0	0
0010											
0010	SUBTOTAL				611	114	0.07	6	4	12	497
0010											
0010	STH 57										
0010	NB LEFT TURN LN	108+91	-	112+39	558	558	0.35	26	14	0	0
0010	NB RIGHT TURN ISLAND	111+31	-	112+03	0	0	0.00	0	0	0	0
0010	SB LEFT TURN LN	113+51	-	115+87	145	145	0.09	7	4	0	0
0010	SB RIGHT TURN ISLAND	113+87	-	114+55	0	0	0.00	0	0	0	0
0010											
0010	SUBTOTAL				703	703	0.44	33	18	0	0
0010											
0010	UNDISTRIBUTED				86	83	0.49	6	3	3	53
0010											
				TOTAL 0010	1,400	900	1.00	45	25	15	550

MOBILIZATIONS EROSION CONTROL

CATEGORY	PROJECT ID	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	2565-02-71	4	4
0010			
	TOTAL 0010	4	4

DRAIN TILE EXPLORATION

CATEGORY	LOCATION	612.0700 DRAIN TILE EXPLORATION LF
0010	UNDISTRIBUTED	50
0010		
	TOTAL 0010	50

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	X x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
1	R7-1D (2M)		24	X	30	5.000			1		1		
2	R7-1D (2M)		24	X	30	5.000			1	1	1		REMOVES S1-1
3	S1-1 (2M)		36	X	36		6.750				1		
4	S16-9P (2M)		30	X	18		3.750					3	
5	R2-6P (2M)		36	X	24	6.000						4	
6	J3-1 (2M)		24	X	57	9.500			1		1		
	M3-3		24	x	12								
	M1-6	WIS 57	24	x	24								
	M6-2		21	x	21								
7	R1-1F (2M)		36	X	36			7.460	1				SHEET 2 OF 7; MOUNT ON SIGNAL POLE
8	R1-1F (2M)		36	X	36			7.460	1				MOUNT ON SIGNAL POLE
9	R6-3 (2S)		30	X	24	5.000						7	MOUNT ABOVE R1-1F ON SIGNAL POLE
10	R6-3 (2S)		30	X	24	5.000						8	MOUNT ABOVE R1-1F ON SIGNAL POLE
11	R1-1F (2M)		36	X	36			7.460	1				MOUNT ON SIGNAL POLE
12	R1-1F (2M)		36	X	36			7.460	1		1		
13	R6-3 (2S)		30	X	24	5.000						11	MOUNT ABOVE R1-1F ON SIGNAL POLE
14	R6-3 (2S)		30	X	24	5.000						12	MOUNT ABOVE R1-1F ON POST
15	R1-1F								1				
16	R1-1F (2M)		36	X	36			7.460	1				MOUNT ON SIGNAL POLE
17	R1-1F (2M)		36	X	36			7.460	1		1		
18	R6-3 (2S)		30	X	24	5.000						16	MOUNT ABOVE R1-1F ON SIGNAL POLE
19	R6-3 (2S)		30	X	24	5.000						17	MOUNT ABOVE R1-1F ON POST
20	R1-1F (2M)		36	X	36			7.460	1				MOUNT ON SIGNAL POLE
21	R1-1F (2M)		36	X	36			7.460	1				MOUNT ON SIGNAL POLE
22	R6-3 (2S)		30	X	24	5.000						20	MOUNT ABOVE R1-1F ON SIGNAL POLE
23	R6-3 (2S)		30	X	24	5.000						21	MOUNT ABOVE R1-1F ON SIGNAL POLE
24	R5-1 (2M)		36	X	36	9.000						7	MOUNT ON SIGNAL POLE
25	R5-1 (2M)		36	X	36	9.000						11	MOUNT ON SIGNAL POLE
26	R5-1 (2M)		36	X	36	9.000						20	MOUNT ON SIGNAL POLE
27	R5-1 (2M)		36	X	36	9.000						16	MOUNT ON SIGNAL POLE
28	R4-7 (2M)		24	X	30	5.000			1		1		
29	R4-7 (2M)		24	X	30	5.000			1		1		
30	R4-7 (2M)		24	X	30	5.000					1		

SHEET 1 OF 4

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	X x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
31	R4-7 (2M)		24	X	30	5.000			1		1		
32	J3-1 (2M)		24	X	57	9.500			1		1		
	M3-1		24	x	12								
	M1-6	WIS 57	24	x	24								
	M6-1		21	x	21								
33	J3-2 (2M)		48	X	57	19.000			1		1		
	MB4-5		24	x	12								
	M1-1	IH 43	24	x	24								
	MB6-1		21	x	21								
	M3-2		24	x	12								
	M1-5A	COUNTY PP	24	x	24								
	M6-1		21	x	21								
34	JV3-1 (2M)		24	X	126	21.000			1		1		
	MB4-1		24	x	12								
	MB3-1		24	x	12								
	M1-1	IH 43	24	x	24								
	MB6-2		21	x	21								
	MB3-1		24	x	12								
	M1-6	WIS 57	24	x	24								
	MB6-2		21	x	21								
35	J3-1 (2M)		24	X	57	9.500			1			30	MOUNT ON BACK OF SIGN NO. 30
	M3-3		24	x	12								
	M1-6	WIS 57	24	x	24								
	M6-1		21	x	21								
36	J3-1 (2M)		24	X	57	9.500			1		1		
	M3-4		24	x	12								
	M1-5A	COUNTY PP	24	x	24								
	M6-1		21	x	21								
37	R1-2 (2M)		48	X	42	7.000			1	1	1		
38	R1-2 (2M)		48	X	42	7.000			1	1	1		REMOVES W5-54
39	R1-2 (2M)		48	X	42	7.000			1	1	1		
40	M1-94S	WIS 57 N GREEN BAY AVE	96	X	18	12.000							MOUNT ON MAST ARM

3

TYPE II PERMANENT SIGNING -

2565-02-70 STH 57

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	X x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
41	M1-94S	COUNTY PP W GOOD HOPE RD	96	X	18	12.000							MOUNT ON MAST ARM
42	M1-94S	WIS 57 N GREEN BAY ANE	96	X	18	12.000							MOUNT ON MAST ARM
43	M1-94S	COUNTY PP W GOOD HOPE RD	96	X	18	12.000							MOUNT ON MAST ARM
44	W4-2R (2M)		36	X	36		9.000		1			33	MOUNT ON BACK OF SIGN NO. 33
45	W4-2R (2M)		36	X	36		9.000		1	1	1		
46	W9-1R (2M)		36	X	36		9.000		1		1		
47	R7-1D (2M)		24	X	30	5.000			1		1		
48	R7-1D (2M)		24	X	30	5.000			1	1	1		
49	R3-4 (2M)		36	X	36	9.000			1			17	
50	R3-4 (2M)		36	X	36	9.000			1			29	MOUNT ON BACK OF SIGN NO. 29
51	R3-4 (2M)		36	X	36	9.000			1			35	
52	R3-4 (2M)		36	X	36	9.000			1			31	MOUNT ON BACK OF SIGN NO. 31
53	W11-2 (2M)		36	X	36		9.000		1	1	1		SHEET 6 OF 7
54	W16-9P (2M)		30	X	18		3.750					53	
55	W3-3 (2M)		36	X	36		9.000		1	1	1		SHEET 5 OF 7
56	R6-2R (2M)		30	X	36	7.500			1	1	1		
57	R6-2R (2M)		30	X	36	7.500			1	1	1		
58	R2-1 (2M)		30	X	36	7.500			1	1	1		
59	W12-1D (2M)		24	X	24		4.000				1		SHEET 6 OF 7; MOUNT HEIGHT 2 FEET
60	W12-1D (2M)		24	X	24		4.000				1		MOUNT HEIGHT 2 FEET
61	W12-1D (2M)		24	X	24		4.000				1		MOUNT HEIGHT 2 FEET
62	W12-1D (2M)		24	X	24		4.000				1		MOUNT HEIGHT 2 FEET
63	R5-1A (2M)		42	X	30	8.750					1		SHEET 1 OF 7
64	R5-1A (2M)		42	X	30	8.750					1		SHEET 2 OF 7
65	R5-1A (2M)		42	X	30	8.750					1		SHEET 5 OF 7

SHEET 3 OF 4

3

TYPE II PERMANENT SIGNING -

2565-02-70 STH 57

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
66	R5-1A (2M)		42	X	30	8.750					1		SHEET 6 OF 7
67	W11-2 (2M)		36	X	36		9.000		1		1		SHEET 7 OF 7
68	W16-9P (2M)		30	X	18		3.750					67	
69	S5-2 (2M)		24	X	30	5.000						63	SHEET 1 OF 7; MOUNT BACK OF R5-1A
70	R1-1F (2M)		36	X	36			7.460				50	SHEET 2 OF 7
71	R1-1F (2M)		36	X	36			7.460				52	
72	R6-2L (2M)		30	X	36	7.500							MOUNT ON SIGNAL POLE
73	R6-2L (2M)		30	X	36	7.500							MOUNT ON SIGNAL POLE
74	R6-2L (2M)		30	X	36	7.500							MOUNT ON SIGNAL POLE
75	R6-2L (2M)		30	X	36	7.500							MOUNT ON SIGNAL POLE
		UNDISTRIBUTED									2		
	TOTALS					397.500	88.000	74.600	38	11	37		

3

SHEET 4 OF 4

3

TRAFFIC CONTROL

CATEGORY	STAGE	DAYS	EACH*	643.0300 TRAFFIC CONTROL DRUMS DAY	EACH*	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	EACH*	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	EACH*	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	EACH*	643.0800 TRAFFIC CONTROL ARROW BOARDS DAY	EACH*	643.0900 TRAFFIC CONTROL SIGNS DAY	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	EACH*	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	643.3150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH LF	643.3550 TEMPORARY MARKING ARROW REMOVABLE TAPE EACH	643.3650 TEMPORARY MARKING WORD REMOVABLE TAPE EACH	643.5000 TRAFFIC CONTROL EACH
0010	DETOUR - STAGE 1	30	--	--	--	--	--	--	--	--	--	--	156	4680	--	--	184	--	--	--	--	--
0010	DETOUR - STAGE 1B	20	--	--	--	--	--	--	--	--	--	--	126	2520	--	--	--	--	--	--	--	--
0010	SUBTOTAL			0		0		0		0		0		7200	0		184	0	0	0	0	0
0010																						
0010	STAGE 1	30	260	7800	18	540	36	1080	42	1260	3	90	50	1500	--	--	--	28	975	--	--	--
0010	STAGE 1B	20	270	5400	20	400	40	800	42	840	3	60	55	1100	--	--	--	--	975	--	--	--
0010	SUBTOTAL			13200		940		1880		2100		150		2600	0		0	28	1950	0	0	0
0010																						
0010	STAGE 2	30	330	9900	24	720	48	1440	42	1260	3	90	56	1680	--	--	--	28	2270	4	1	--
0010	SUBTOTAL			9900		720		1440		1260		90		1680	0		0	28	2270	4	1	0
0010																						
0010	STAGE 3	30	230	6900	18	540	36	1080	42	1260	3	90	53	1590	--	--	--	28	1650	4	--	--
0010	SUBTOTAL			6900		540		1080		1260		90		1590	0		0	28	1650	4	0	0
0010	UNDISTRIBUTED					300		480		940		160		2,130	40		16	16	1,130	2	4	1
0010																						
	* FOR INFORMATIONAL USE ONLY	TOTAL 0010		30,000		2,500		4,880		5,560		490		15,200	40		200	100	7,000	10	5	1

PAVEMENT MARKING

CATEGORY	LOCATION	STATION	TO	STATION	646.1020 MARKING LINE EPOXY 4-INCH (WHITE)* (12.5' LINE 37.5' SKIP)* LF	646.1020 MARKING LINE EPOXY 4-INCH (WHITE)* LF	646.3020 MARKING LINE EPOXY 8-INCH (WHITE)* (3' DASH 9' SKIP)* LF	646.3020 MARKING LINE EPOXY 8-INCH (WHITE)* LF	646.5020 MARKING ARROW EPOXY (TYPE 2)* EACH	646.5120 MARKING WORD EPOXY (ONLY)* EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH (WHITE)* LF	646.6220 MARKING YIELD LINE EPOXY 18-INCH (WHITE)* EACH	646.7120 MARKING DIAGONAL EPOXY 12-INCH (WHITE)* LF	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)* LF	646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9100 MARKING REMOVAL LINE 8-INCH LF	646.9200 MARKING REMOVAL LINE WIDE LF	646.9300 MARKING REMOVAL SPECIAL MARKING EACH
0010	CTH PP (W. GOOD HOPE RD.)	215+00	-	223+50	800	--	--	1,100	8	2	110	16	--	500	--	110	120	4
0010	STH 57 (N. GREEN BAY AVE.)	108+50	-	117+00	375	640	90	525	6	2	100	16	270	450	100	1,150	60	--
0010	SUBTOTAL				1815		1715											
0010	UNDISTRIBUTED				185		285		--	--	40	--	30	150	50	140	20	--
0010																		
* FOR INFORMATIONAL USE ONLY				TOTAL 0010	2,000		2,000		14	4	250	32	300	1,100	150	1,400	200	4

3

*CONSTRUCTION STAKING

CATEGORY	LOCATION	STATION	TO	STATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	650.9000 CONSTRUCTION STAKING CURB RAMPS EACH	650.9500.01 CONSTRUCTION STAKING SIDEWALK (PROJECT) (2565-02-71) EACH	650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (2565-02-71) EACH	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
0010	CTH PP											
0010	EB RIGHT TURN LN	214+55	-	219+55	500	500	--	500	4	--	--	500
0010	MEDIAN- WEST LEG	218+50	-	219+25	75	75	126	75	2	--	--	75
0010	WB RIGHT TURN LN	219+94	-	224+14	420	420	--	420	4	--	--	420
0010	MEDIAN- EAST LEG	220+29	-	220+84	55	55	104	55	2	--	--	55
0010												
0010	SUBTOTAL				1050	1050	230	1050	12	--	--	1050
0010												
0010	STH 57											
0010	NB LEFT TURN LN	108+91	-	112+39	348	348	--	348	2	--	--	348
0010	NB RIGHT TURN ISLAND	111+31	-	112+03	72	72	153	72	4	--	--	72
0010	SB LEFT TURN LN	113+51	-	115+87	236	236	--	236	2	--	--	236
0010	SB RIGHT TURN ISLAND	113+87	-	114+55	68	68	137	68	4	--	--	68
0010												
0010	SUBTOTAL				724	724	290	724	12	--	--	724
0010												
0010	UNDISTRIBUTED				26	26	80	26	--	1	1	26
0010												
	*ADDITIONAL QUANTITES LISTED ELSEWHERE			TOTAL 0010	1,800	1,800	600	1,800	24	1	1	1,800

CONDUIT

CATEGORY	LOCATION	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
	CTH PP (W. GOOD HOPE RD.) & STH 57 (N. GREEN BAY AVE.)						
0010		CB1	CV1	35	--	--	--
0010		CB1	PB1	--	--	60	2 RUNS
0010		PB1	PB2	--	--	70	2 RUNS
0010		PB2	SB1	--	45	--	--
0010		PB2	SB2	25	--	--	--
0010		PB2	PB3	--	--	140	2 RUNS
0010		PB3	SB3	15	--	--	--
0010		PB3	PB4	--	--	140	2 RUNS
0010		PB4	SB4	--	10	--	--
0010		PB4	PB5	--	30	--	2 RUNS
0010		PB5	SB5	10	--	--	--
0010		PB5	PB6	--	--	100	2 RUNS
0010		PB6	SB6	25	--	--	--
0010		PB6	PB7	--	60	--	2 RUNS
0010		PB7	PB8	--	--	90	2 RUNS
0010		PB8	PB9	--	90	--	2 RUNS
0010		PB9	PB10	--	60	--	2 RUNS
0010		PB10	SB7	--	40	--	--
0010		PB10	SB8	20	--	--	--
0010		PB10	PB11	--	--	150	2 RUNS
0010		PB11	SB9	15	--	--	--
0010		PB11	PB12	--	--	140	2 RUNS
0010		PB12	SB10	--	10	--	--
0010		PB12	PB13	--	50	--	2 RUNS
0010		PB13	SB11	5	--	--	--
0010		PB13	PB14	--	--	80	2 RUNS
0010		PB14	SB12	20	--	--	--
0010		PB14	PB15	--	70	--	2 RUNS
0010		PB15	PB16	--	--	110	2 RUNS
0010		PB16	CB1	--	20	--	2 RUNS
0010	UNDISTRIBUTED			30	65	120	
0010							
			TOTAL 0010	200	550	1,200	

PULL BOXES

CATEGORY	LOCATION	NO.	653.0140 PULL BOXES STEEL 24X42-INCH EACH	653.0905 REMOVING PULL BOXES EACH
	CTH PP (W. GOOD HOPE RD.) & STH 57 (N. GREEN BAY AVE.)			
0010		PB1	1	1
0010		PB2	1	1
0010		PB3	1	1
0010		PB4	1	
0010		PB5	1	
0010		PB6	1	
0010		PB7	1	1
0010		PB8	1	1
0010		PB9	1	1
0010		PB10	1	1
0010		PB11	1	
0010		PB12	1	1
0010		PB13	1	1
0010		PB14	1	
0010		PB15	1	
0010		PB16	1	1
0010		PB17	1	1
0010		PB18	1	1
0010				
		TOTAL 0010	18	12

CONCRETE BASES

CATEGORY	LOCATION	NO.	654.0101 CONCRETE BASES TYPE 1 EACH	654.0113 CONCRETE BASES TYPE 13 EACH	654.0120 CONCRETE BASES TYPE 10-SPECIAL EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
	CTH PP (W. GOOD HOPE RD.) & STH 57 (N. GREEN BAY AVE.)					
0010		SB1	--	--	1	--
0010		SB2	1	--	--	--
0010		SB3	1	--	--	--
0010		SB4	--	1	--	--
0010		SB5	1	--	--	--
0010		SB6	1	--	--	--
0010		SB7	--	--	1	--
0010		SB8	1	--	--	--
0010		SB9	1	--	--	--
0010		SB10	--	1	--	--
0010		SB11	1	--	--	--
0010		SB12	1	--	--	--
0010		CB1	--	--	--	1
0010						
		TOTAL 0010	8	2	2	1

TRAFFIC SIGNAL BASES, STANDARDS, POLES, MAST ARMS, FACES, AND EQUIPMENT

CATEGORY	LOCATION	NO.	657.0100 PEDESTAL BASES EACH	657.0405 TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH	SPV.0060.12 SPECIAL (TRANSPORT AND INSTALL POLES TYPE 10-SPECIAL) EACH	SPV.0060.13 SPECIAL (TRANSPORT AND INSTALL POLES TYPE 13) EACH	SPV.0060.14 SPECIAL (TRANSPORT AND INSTALL MONOTUBE ARMS 45-FT-SPECIAL) EACH	SPV.0060.15 SPECIAL (TRANSPORT AND INSTALL MONOTUBE ARMS 55-FT) EACH	SPV.0060.16 SPECIAL (TRANSPORT AND INSTALL LUMINAIRE ARMS STEEL 15-FT) EACH
	CTH PP (W. GOOD HOPE RD.) & STH 57 (N. GREEN BAY AVE.)													
0010		SB1	--	--	--	2	--	1	1	1	--	1	--	1
0010		SB2	1	--	1	2	--	1	1	--	--	--	--	--
0010		SB3	1	1	--	--	--	--	1	--	--	--	--	--
0010		SB4	--	--	--	4	--	1	1	--	1	--	1	1
0010		SB5	1	--	1	1	1	1	1	--	--	--	--	--
0010		SB6	1	--	1	--	1	--	1	--	--	--	--	--
0010		SB7	--	--	--	2	--	1	1	1	--	1	--	1
0010		SB8	1	--	1	2	--	1	1	--	--	--	--	--
0010		SB9	1	1	--	--	--	--	1	--	--	--	--	--
0010		SB10	--	--	--	4	--	1	1	--	1	--	1	1
0010		SB11	1	--	1	1	1	1	1	--	--	--	--	--
0010		SB12	1	--	1	--	1	--	1	--	--	--	--	--
0010														
		TOTAL 0010	8	2	6	18	4	8	12	2	2	2	2	4

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TRAFFIC SIGNAL CABLE AND ELECTRICAL WIRING

CATEGORY	LOCATION	FROM	THROUGH	TO	(PUSH BUTTON & EVP LIGHT**) 655.0210 CABLE TRAFFIC SIGNAL 3-14 AWG LF	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG LF	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG LF	655.0270 CABLE TRAFFIC SIGNAL 15-14 AWG LF	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF	655.0900 TRAFFIC SIGNAL EVP DETECTOR CABLE LF
	CTH PP (W. GOOD HOPE RD.) & STH 57 (N. GREEN BAY AVE.)										
0010		CB1	PB1, PB2	SB1	120	--	--	--	120	--	120
0010		CB1	PB1, PB2	SB2	--	--	--	--	100	--	--
0010		CB1	PB1, PB2, PB3	SB3	--	170	--	--	--	--	--
0010		CB1	PB1, PB2, PB3, PB4	SB4	235	--	--	--	235	--	235
0010		CB1	PB1, PB2, PB3, PB4, PB5	SB5	--	--	--	--	255	--	--
0010		CB1	PB1, PB2, PB3, PB4, PB5, PB6	SB6	--	--	--	330	--	--	--
0010		CB1	PB16, PB15, PB14, PB13, PB12, PB11, PB10	SB7	385	--	--	--	385	--	385
0010		CB1	PB16, PB15, PB14, PB13, PB12, PB11, PB10	SB8	--	--	--	--	360	--	--
0010		CB1	PB16, PB15, PB14, PB13, PB12, PB11	SB9	--	280	--	--	--	--	--
0010		CB1	PB16, PB15, PB14, PB13, PB12	SB10	195	--	--	--	195	--	195
0010		CB1	PB16, PB15, PB14, PB13	SB11	--	--	--	--	165	--	--
0010		CB1	PB16, PB15, PB14	SB12	--	--	--	140	--	--	--
0010		CB1	PB1, PB2	SB1	--	--	--	--	--	120	--
0010		SB1	PB2	SB2	--	--	--	--	--	75	--
0010		SB2	PB2, PB3	SB3	--	--	--	--	--	125	--
0010		SB3	PB3, PB4	SB4	--	--	--	--	--	110	--
0010		SB4	PB4, PB5	SB5	--	--	--	--	--	45	--
0010		SB5	PB5, PB6	SB6	--	--	--	--	--	95	--
0010		SB6	PB6, PB7, PB8, PB9, PB10	SB7	--	--	--	--	--	240	--
0010		SB7	PB10	SB8	--	--	--	--	--	70	--
0010		SB8	PB10, PB11	SB9	--	--	--	--	--	115	--
0010		SB9	PB11, PB12	SB10	--	--	--	--	--	105	--
0010		SB10	PB12, PB13	SB11	--	--	--	--	--	50	--
0010		SB11	PB13, PB14	SB12	--	--	--	--	--	80	--
0010		SB12	PB14, PB15, PB16	CB1	--	--	--	--	--	140	--
0010			BASE TO SIGNAL HEAD WIRING		205	90	790	--	--	--	180
0010			UNDISTRIBUTED		60	60	110	130	185	130	185
0010	**FOR INFORMATION ONLY		-								
				TOTAL 0010	1,200	600	900	600	2,000	1,500	1,300

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FIBER OPTIC TERMINATION

CATEGORY	LOCATION		652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EACH	678.0200 FIBER OPTIC SPLICE ENCLOSURE EACH	678.0300 FIBER OPTIC SPLICE EACH	678.0400 FIBER OPTIC TERMINATION EACH	SPV.0090.01 SPECIAL (TRACER WIRE, 12 AWG) LF	SPV.0090.02 SPECIAL (REMOVE AND REINSTALL FIBER OPTIC CABLE) LF
	CTH PP (W. GOOD HOPE RD.) & STH 57 (N. GREEN BAY AVE.)							
0010	CB1		1	1	4	4	40	40
0010								
		TOTAL 0010	1	1	4	4	40	40

SAWING

CATEGORY	LOCATION	STATION	TO	STATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
0010	CTH PP					
0010	EB RIGHT TURN LN	214+55	-	219+55	45	617
0010	MEDIAN- WEST LEG	218+50	-	219+25	-	178
0010	WB RIGHT TURN LN	219+94	-	224+14	35	521
0010	MEDIAN- EAST LEG	220+29	-	220+84	-	157
0010						
0010	SUBTOTAL				80	1473
0010						
0010	STH 57					
0010	NB LEFT TURN LN	108+91	-	112+39	-	412
0010	NB RIGHT TURN ISLAND	111+31	-	112+03	-	195
0010	SB LEFT TURN LN	113+51	-	115+87	-	308
0010	SB RIGHT TURN ISLAND	113+87	-	114+55	-	187
0010						
0010	SUBTOTAL				0	1102
0010						
0010	UNDISTRIBUTED				20	25
0010						
				TOTAL 0010	100	2,600

WATER VALVE ADJUSTMENTS

CATEGORY	LOCATION	STATION	OFFSET		SPV.0060.10 SPECIAL (ADJUSTING WATER BOXES) EACH
	CTH PP				
0020	EB RIGHT TURN LN	217+75	70.8'	RT	1
0020		218+20	70.0'	RT	1
0020		218+29	74.5'	RT	1
0020	WB RIGHT TURN LN	221+21	75.5'	LT	1
0020		221+41	67.3'	LT	1
0020		222+55	69.0'	LT	1
0020					
0020	STH 57				
0020	NB LEFT TURN LN	111+56	99.4'	RT	1
0020		111+71	60.4'	LT	1
0020					
				TOTAL 0020	8

SANITARY MANHOLE ADJUSTMENTS

CATEGORY	LOCATION	STATION	OFFSET		611.0420 RECONSTRUCTING MANHOLES EACH	SPV.0060.11 SPECIAL (INTERNAL SANITARY MANHOLE SEAL) EACH
	CTH PP					
0020	EB RIGHT TURN LN	215+15	63.6'	RT	1	1
0020		217+21	63.5'	RT	1	1
0020						
0020	WB RIGHT TURN LN	219+95	61.6'	LT	1	1
0020		221+81	62.5'	LT	1	1
0020		224+06	61.1'	LT	1	1
0020						
				TOTAL 0020	5	5

3

MISCELLANEOUS ITEMS CONT'D

CATEGORY	LOCATION	204.9060.S.01 REMOVING (ITEM DESCRIPTION) (REMOVING TRAFFIC SIGNALS CTH PP & STH 57) EACH	204.9060.S.02 REMOVING (ITEM DESCRIPTION) (REMOVING LOOP DETECTOR WIRE AND LEAD-IN CABLE) EACH	650.8501.01 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) (2565-02-71) EACH	656.0201.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) (CTH PP & STH 57) EACH	658.5070.01 SIGNAL MOUNTING HARDWARE (LOCATION) (CTH PP & STH 57) EACH	661.0201.01 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS (LOCATION) (CTH PP & STH 57) EACH	SPV.0060.04 SPECIAL (EMERGENCY VEHICLE PREEMPTION SYSTEM) EACH	SPV.0060.07 SPECIAL (VEHICULAR VIDEO DETECTION SYSTEM, (4 CAMERAS)) EACH	SPV.0060.08 SPECIAL (TRAFFIC SIGNAL CABINET 16-PHASE, CTH PP & STH 57) EACH
0010		1	1	1	1	1	1	1	1	1
	TOTAL 0010	1	1	1	1	1	1	1	1	1
0020		-	-	-	-	-	-	-	-	-
	TOTAL 0020	0	0	0	0	0	0	0	0	0
	PROJECT TOTAL	1	1	1	1	1	1	1	1	1

MISCELLANEOUS ITEMS CONT'D

CATEGORY	LOCATION	213.0100.01 FINISHING ROADWAY (PROJECT) (2565-02-71) EACH	611.8120.S COVER PLATES TEMPORARY EACH	618.0100.01 MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) (2565-02-71) EACH	619.1000 MOBILIZATION EACH	642.5001 FIELD OFFICE TYPE B EACH	SPV.0035.01 SPECIAL (BACKFILL SLURRY) CY	SPV.0060.01 SPECIAL (REMOVE AND REINSTALL MAILBOXES) EACH	SPV.0060.02 SPECIAL (TEMPORARY MAILBOXES) EACH	SPV.0060.03 SPECIAL (REPLACEMENT MAILBOX POSTS & HARDWARE) EACH	SPV.0060.05 SPECIAL (EXPOSING EXISTING INFRASTRUCTURE UNPAVED AREA) EACH	SPV.0060.06 SPECIAL (HYDRO EXCAVATION) EACH	SPV.0060.09 SPECIAL (CORED HOLES 6-INCH) EACH
0010	CTH PP (W. GOOD HOPE RD.) & STH 57 (N. GREEN BAY AVE.)	1	-	1	1	1	-	-	-	-	-	-	-
0010	UNDISTRIBUTED	-	8	-	-	-	20	2	3	2	4	4	10
0010													
	TOTAL 0010	1	8	1	1	1	20	2	3	2	4	4	10

4

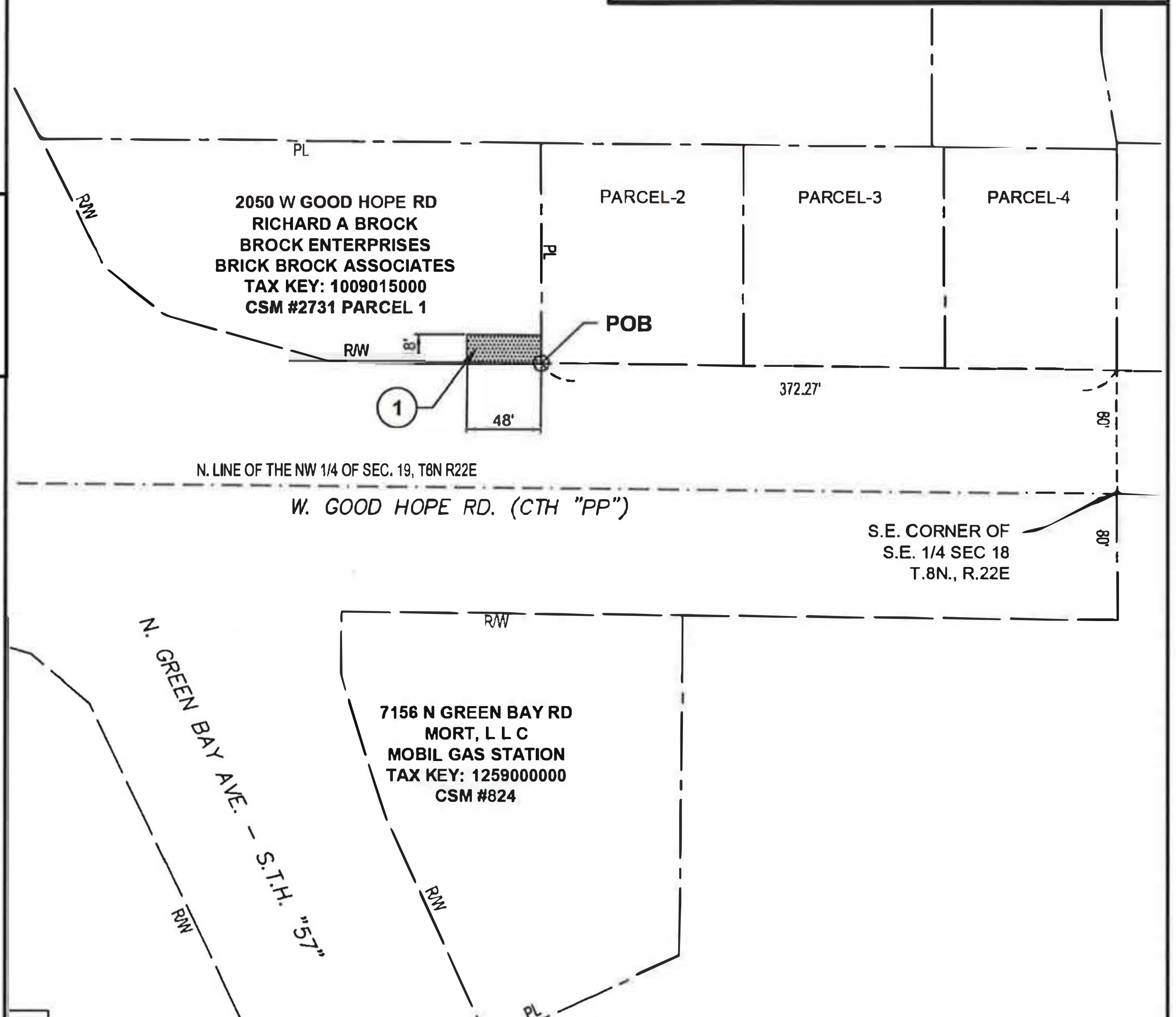
NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY.
REFER TO THE CONVEYANCE DOCUMENTS FOR PARCEL RELATED DETAILS.

THE PURPOSE OF THE TLE IS FOR DRIVEWAY RECONSTRUCTION

R/W PROJECT NUMBER: 2565-02-21 EXHIBIT NUMBER: 1

TLE ACQUISITION EXHIBIT
CITY OF GLENDALE, GOOD HOPE RD
INTERSECTION OF GREEN BAY RD (STH 57)
MILWAUKEE COUNTY

PART OF CERTIFIED SURVEY MAP #2371 PARCEL 1 LOCATED IN THE SE 1/4 OF THE SW 1/4 SECTION 18, T8N R22E, CITY OF GLENDALE, MILWAUKEE COUNTY WISCONSIN



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
1	RICHARD A. BROCK	TLE	864

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
N/A	N/A	N/A

SCALE, FEET
0' 20' 40'

THIS EXHIBIT IS APPROVED FOR THE CITY OF GLENDALE

SIGNATURE: Rachel A. Safstrom DATE: 10/27/21

PRINT NAME: Rachel A. Safstrom

PARCEL 1

A Temporary Limited Easement (TLE) is a right for DRIVEWAY RECONSTRUCTION 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 the highway authorities may deem desirable. All TLEs expire at the completion of the construction project for which this instrument is given.

A part of Parcel 1 of Certified Survey Map #2371 located in the Southwest Quarter of Section 18, Township 8 North, Range 22 East in the City of Glendale, Milwaukee County, Wisconsin and more fully described as follows: The south 18.0 feet of the east 48.0 feet of said Parcel 1 and containing 864 square feet, more or less.

Subject to all other easements, restrictions and covenants, recorded and unrecorded.

4

NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY.
REFER TO THE CONVEYANCE DOCUMENTS FOR PARCEL RELATED DETAILS.

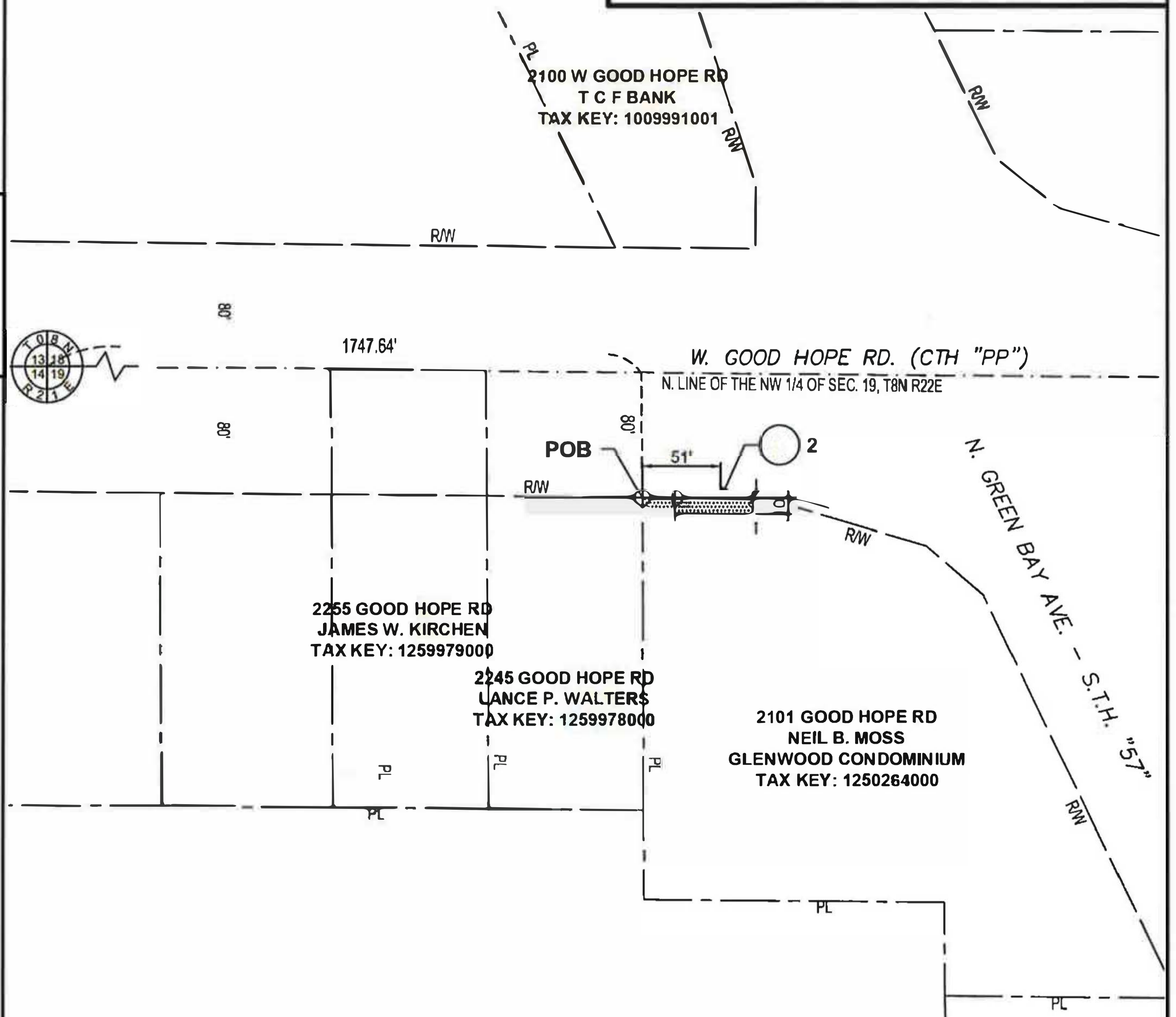
THE PURPOSE OF THE TLE IS FOR DRIVEWAY RECONSTRUCTION

R/W PROJECT NUMBER: 2565-02-21 EXHIBIT NUMBER: 2

TLE ACQUISITION EXHIBIT
CITY OF GLENDALE, GOOD HOPE RD (CTH "PP")
INTERSECTION OF GREEN BAY RD (STH 57)
MILWAUKEE COUNTY

A PART OF THE GLENWOOD CONDOMINIUM PLAT LOCATED IN THE NE 1/4 OF THE NW 1/4 OF SECTION 19, T8N R22E, CITY OF GLENDALE, MILWAUKEE COUNTY WISCONSIN

4



4

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
2	NEIL B. MOSS	TLE	506

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
N/A	N/A	N/A

SCALE, FEET
0' 50' 100'

THIS EXHIBIT IS APPROVED FOR THE CITY OF GLENDALE

SIGNATURE: [signature] DATE: 10-27-21

PRINT NAME: Rachel A. Safstrom

PARCEL 2

A Temporary Limited Easement (TLE) is a right for DRIVEWAY RECONSTRUCTION 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 the highway authorities may deem desirable. All TLEs expire at the completion of the construction project for which this instrument is given.

A part of the Glenwood Condominium Plat located in the Northwest Quarter of Section 19, Township 8 North, Range 22 East in the City of Glendale, Milwaukee County, Wisconsin and more fully described as follows: The north 10.0 feet of the west 51.0 feet of said Condominium Plat and containing 506 square feet, more or less.

Subject to all other easements, restrictions and covenants, recorded and unrecorded.

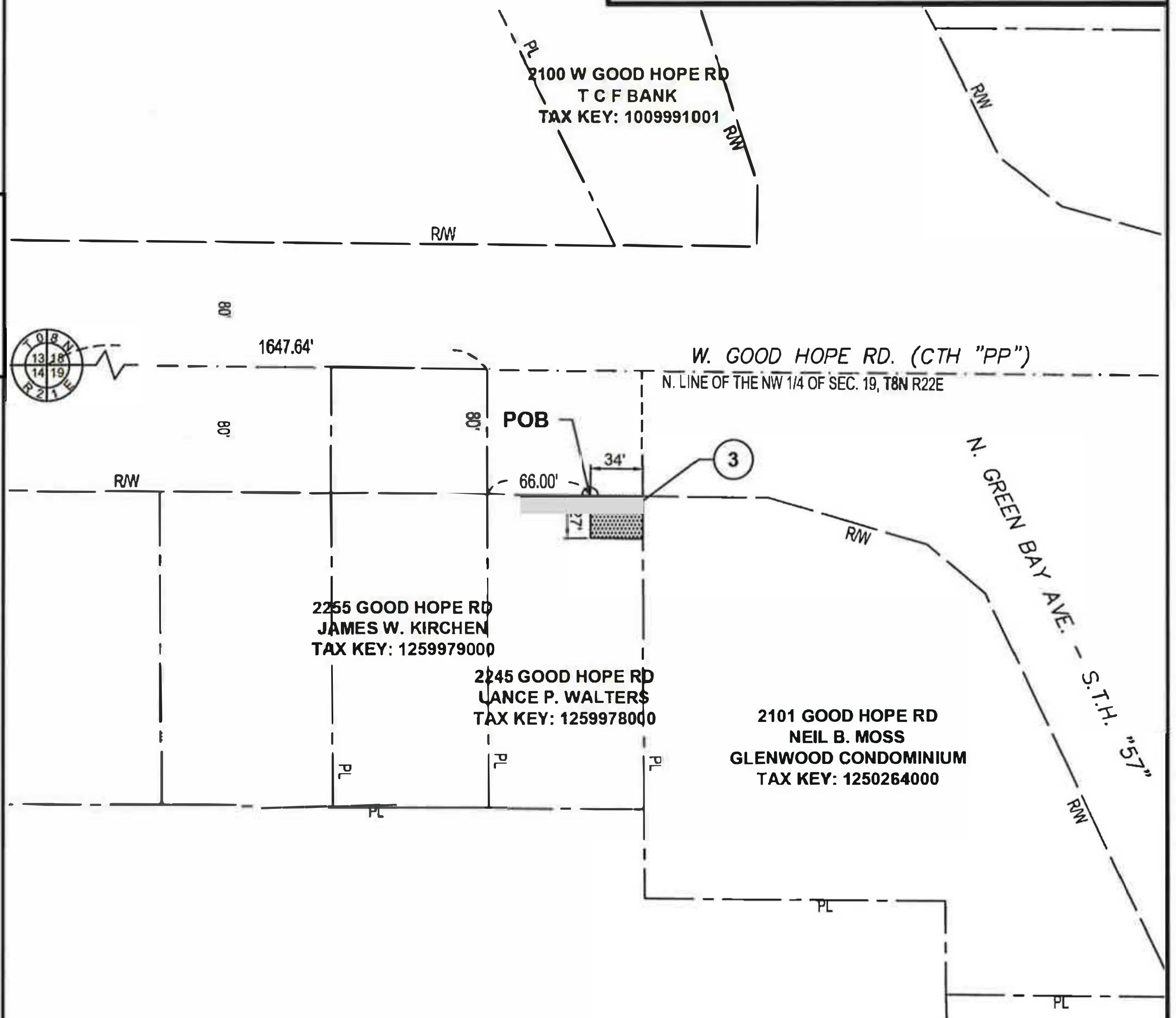
NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY.
REFER TO THE CONVEYANCE DOCUMENTS FOR PARCEL RELATED DETAILS.

THE PURPOSE OF THE TLE IS FOR DRIVEWAY RECONSTRUCTION

R/W PROJECT NUMBER: 2565-02-21 EXHIBIT NUMBER: 3

TLE ACQUISITION EXHIBIT
CITY OF GLENDALE, GOOD HOPE RD (CTH "PP")
INTERSECTION OF GREEN BAY RD (STH 57)
MILWAUKEE COUNTY

PART OF THE NE 1/4 OF THE NW 1/4 OF SECTION 19, T8N R22E, CITY OF GLENDALE, MILWAUKEE COUNTY WISCONSIN



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
3	LANCE P. WALTERS	TLE	909

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
N/A	N/A	N/A

THIS EXHIBIT IS APPROVED FOR THE CITY OF GLENDALE

SIGNATURE: Rachel A. Safstrom DATE: 10-27-21

PRINT NAME: Rachel A. Safstrom

4

PARCEL 3

A Temporary Limited Easement (TLE) is a right for DRIVEWAY RECONSTRUCTION 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 the highway authorities may deem desirable. All TLEs expire at the completion of the construction project for which this instrument is given.

A parcel located in the Northwest Quarter of Section 19, Township 8 North, Range 22 East, in the City of Glendale, Milwaukee County, Wisconsin, and more fully described as follows:Commencing at a point 1,647.64 feet east of the Northwest corner of said Quarter corner; thence south parallel to the east line of said quarter section, 80 feet to the northwest corner of the Grantor's land; thence east along the north line of the Grantor's land, 66.00 feet being the Point of Beginning of this description; thence continuing east along the north line of the Grantor's land, 34.00 feet to the northeast corner of the Grantor's land; thence south along the east line of the Grantor's land, 27.00 feet, thence west parallel with the north line of the Grantor's land, 34.00 feet; thence north parallel to the east line of Grantor's land, 27.00 feet to the Point of Beginning and containing 909 square feet, more or less.

Subject to all other easements, restrictions and covenants, recorded and unrecorded.

4

4

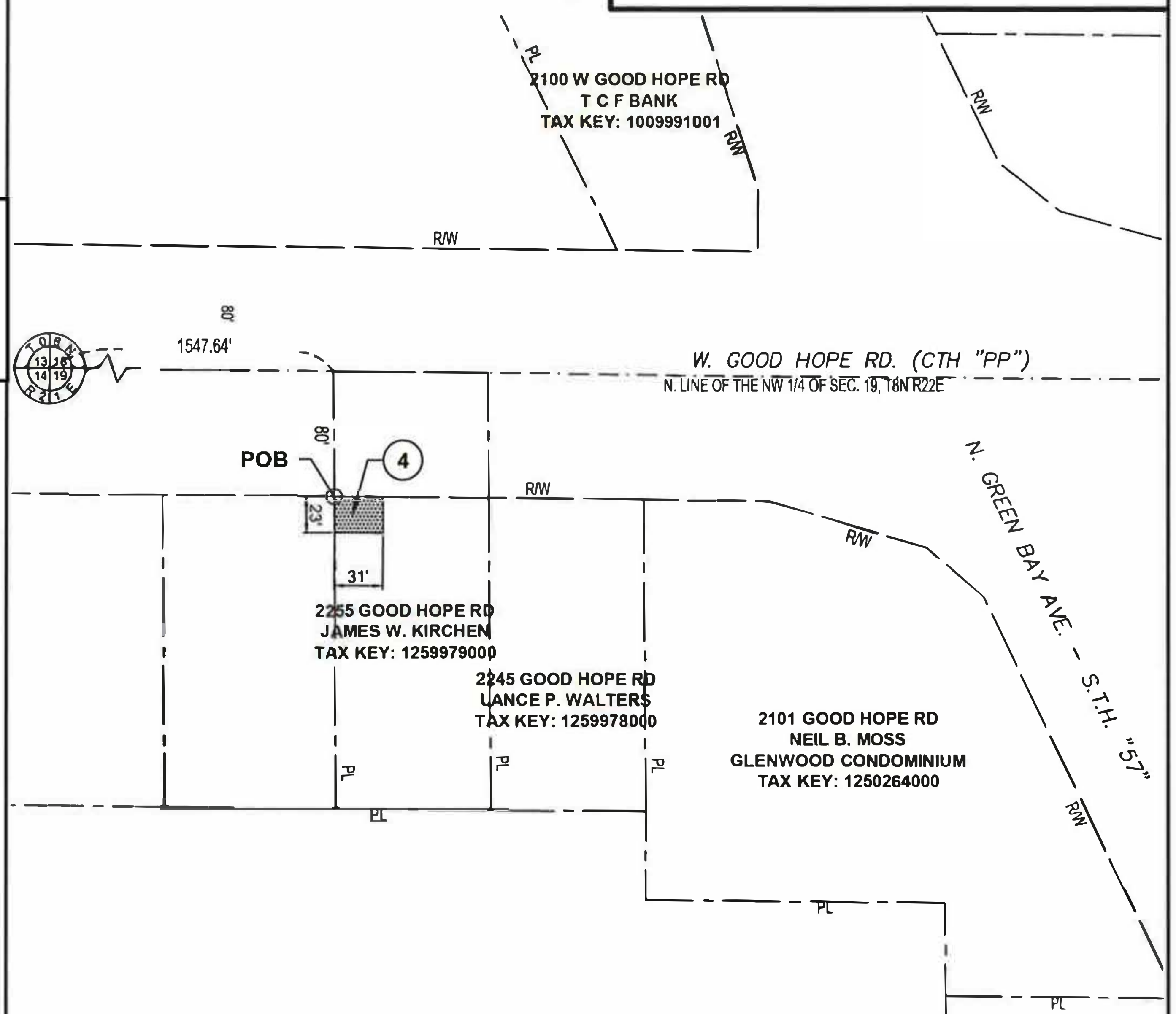
NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY.
REFER TO THE CONVEYANCE DOCUMENTS FOR PARCEL RELATED DETAILS.

THE PURPOSE OF THE TLE IS FOR DRIVEWAY RECONSTRUCTION

R/W PROJECT NUMBER: 2565-02-21 EXHIBIT NUMBER: 4

TLE ACQUISITION EXHIBIT
CITY OF GLENDALE, GOOD HOPE RD (CTH "PP")
INTERSECTION OF GREEN BAY RD (STH 57)
MILWAUKEE COUNTY

PART OF THE NE 1/4 OF THE NW 1/4 OF SECTION 19, T8N R22E, CITY OF GLENDALE, MILWAUKEE COUNTY WISCONSIN



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
4	JAMES W. KIRCHEN	TLE	713

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
N/A	N/A	N/A

SCALE, FEET
0' 50' 100'

THIS EXHIBIT IS APPROVED FOR THE CITY OF GLENDALE

SIGNATURE: Rachel A Safstrom DATE: 10-27-21

PRINT NAME: Rachel A. Safstrom

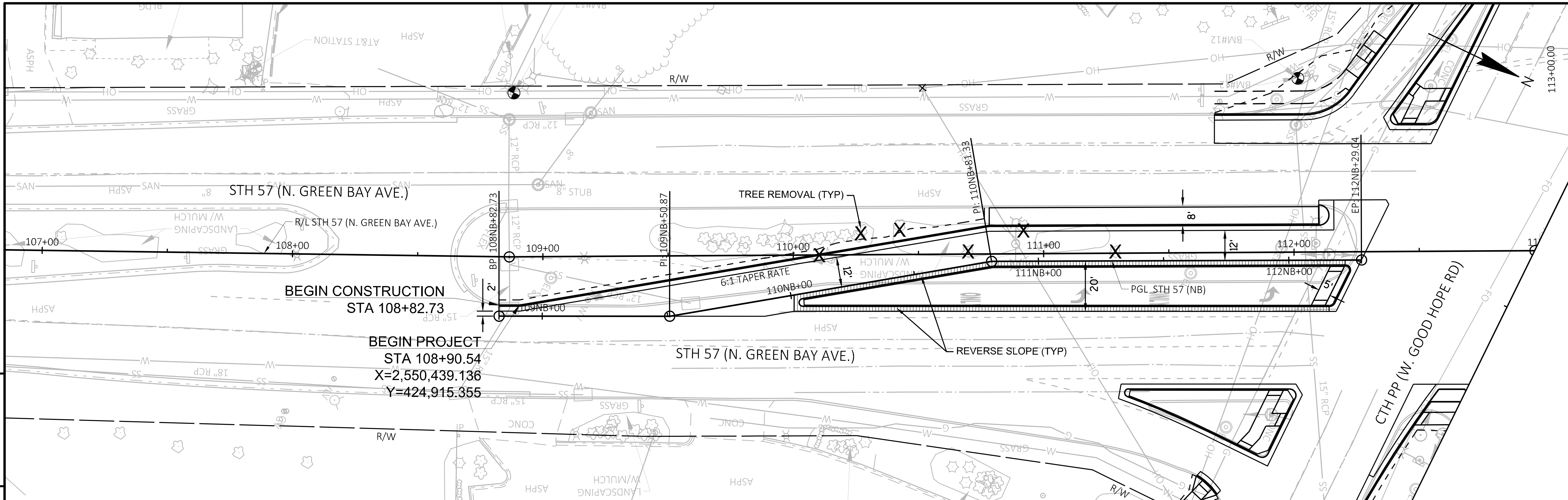
PARCEL 4

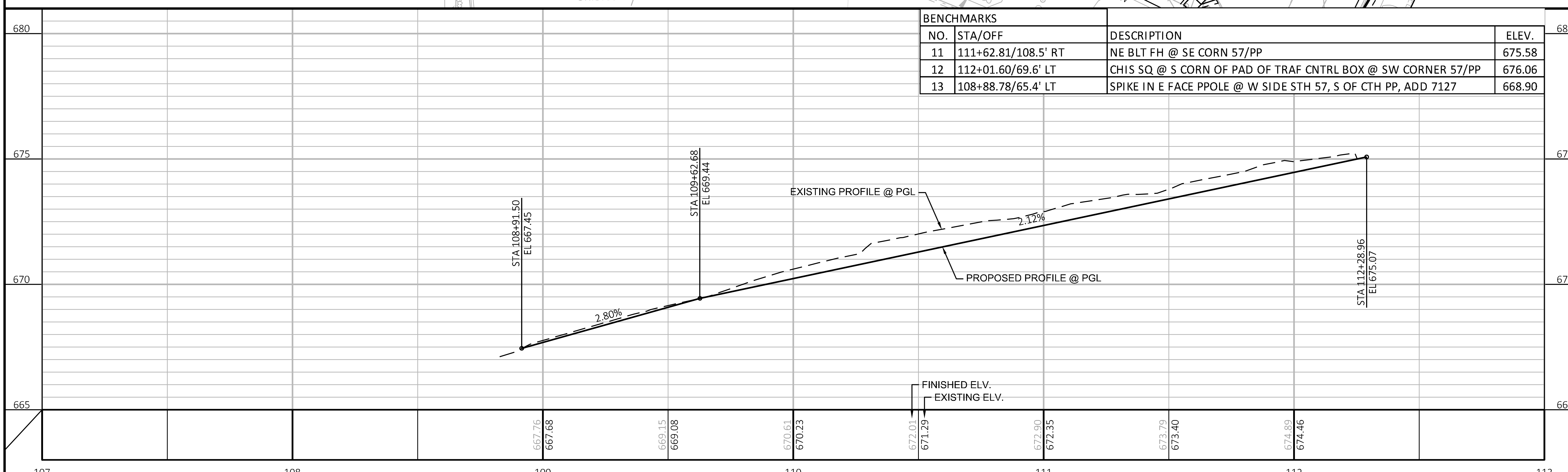
A Temporary Limited Easement (TLE) is a right for DRIVEWAY RECONSTRUCTION purposes as defined herein, including the right to operate necessary equipment thereon, the right of ingress and egress, as long as required for such public purpose, including the right to preserve, protect, remove or plant thereon any vegetation the highway authorities may deem desirable. All TLEs expire at the completion of the construction project for which this instrument is given.

A parcel located in the Northwest Quarter of Section 19, Township 8 North, Range 22 East, in the City of Glendale, Milwaukee County, Wisconsin, and more fully described as follows:Commencing at a point 1,547.64 fee east of the Northwest comer of said Quarter corner; thence south parallel to the east line of said quarter section, 80 feet to the northwest comer of the Grantor's land being the Point of Beginning of this description; thence east along the north line of the Grantor's land, 31.00 feet; thence south parallel to the west line of the Grantor's land, 23.00 feet, thence west parallel with the north line of the Grantor's land, 31.00 feet; thence north along the west line of the Grantor's land, 23.00 feet to the Point of Beginning and containing 713 square feet, more or less.

Subject to all other easements, restrictions and covenants, recorded and unrecorded.

4



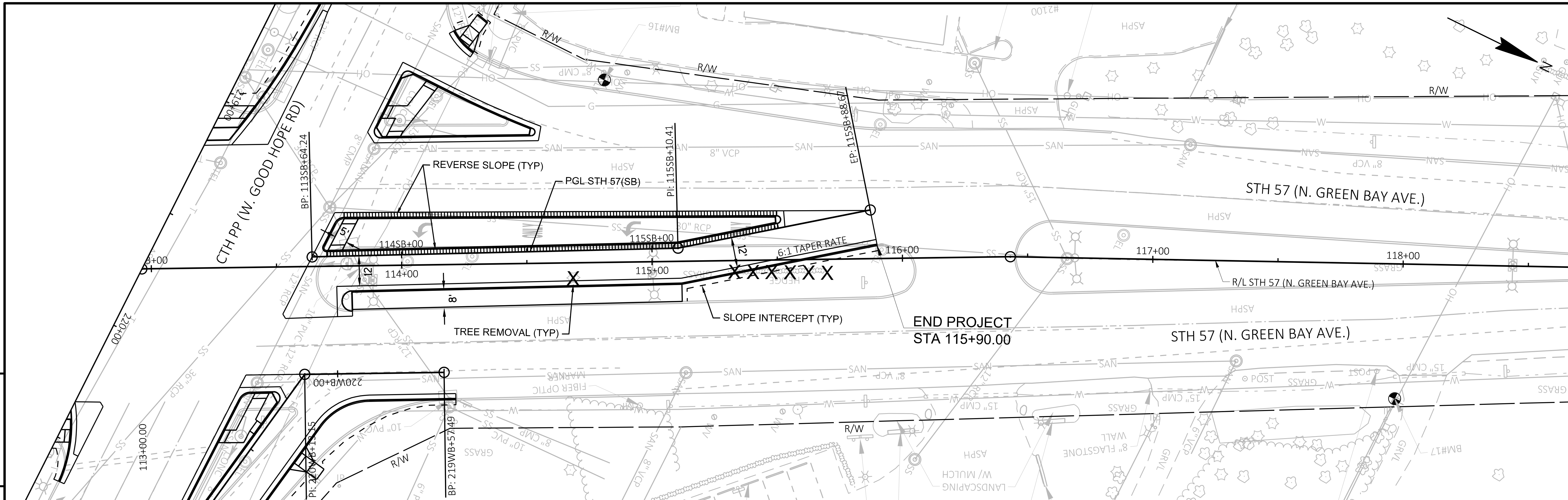


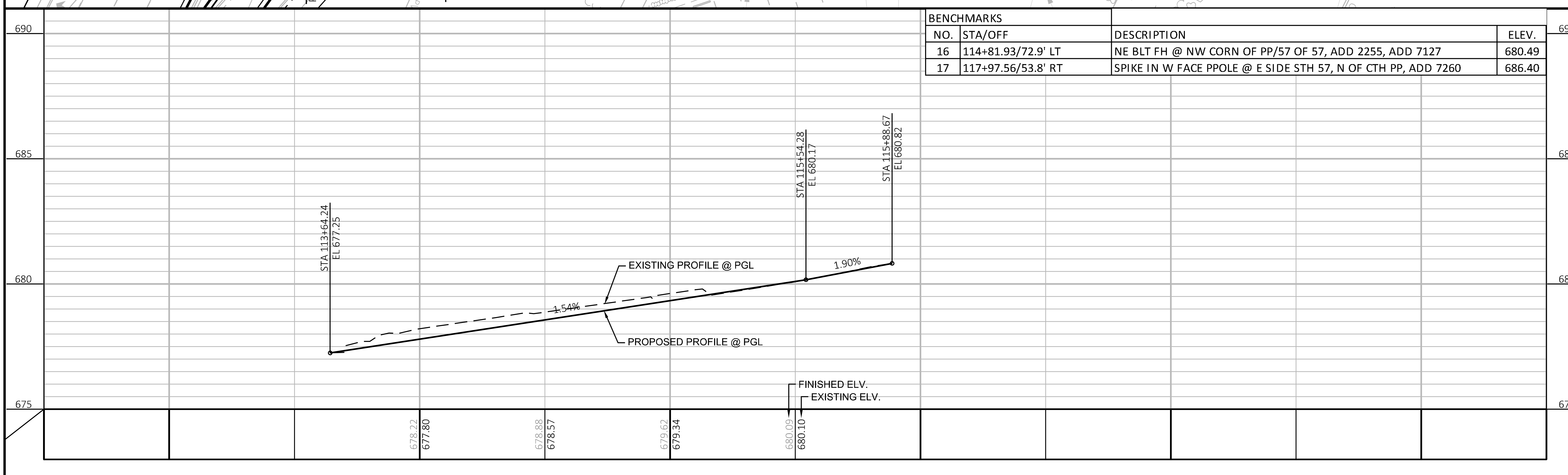
BENCHMARKS

NO.	STA/OFF	DESCRIPTION	ELEV.
11	111+62.81/108.5' RT	NE BLT FH @ SE CORN 57/PP	675.58
12	112+01.60/69.6' LT	CHIS SQ @ S CORN OF PAD OF TRAF CNTRL BOX @ SW CORNER 57/PP	676.06
13	108+88.78/65.4' LT	SPIKE IN E FACE PPOLE @ W SIDE STH 57, S OF CTH PP, ADD 7127	668.90

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PLAN AND PROFILE: N. GREEN BAY AVE	SHEET 93	E

FILE NAME : \\W3027S02\DPPIS\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN\PLANS\CADD\...\050101-PP.DWG PLOT BY : MURPHY, DANIEL PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 01

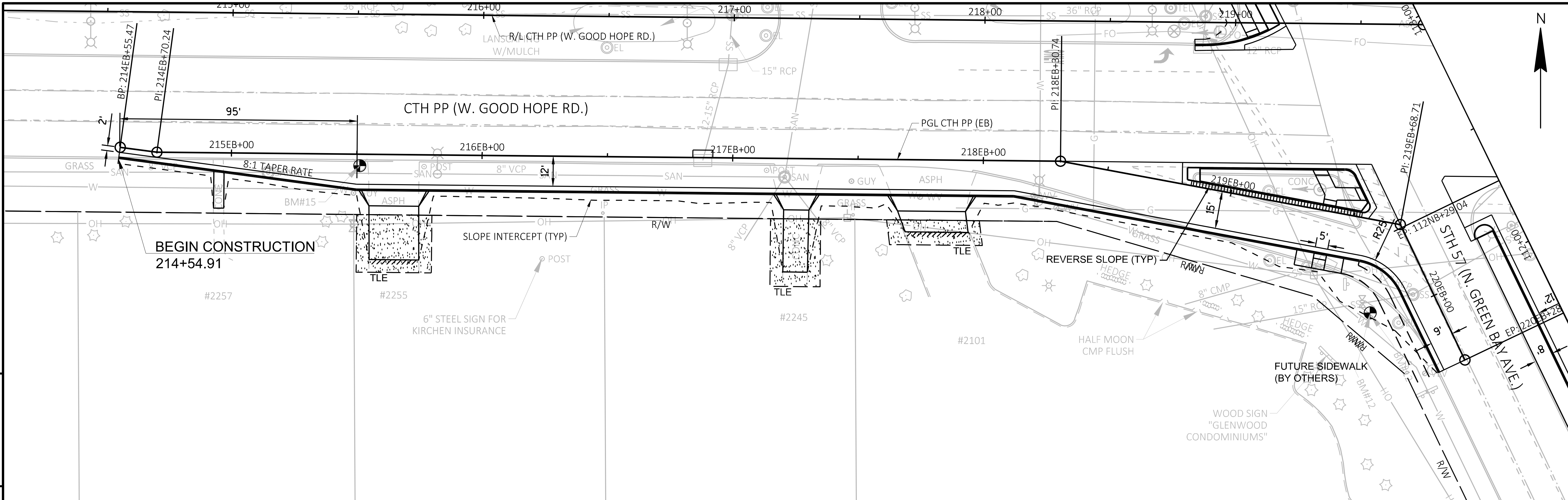


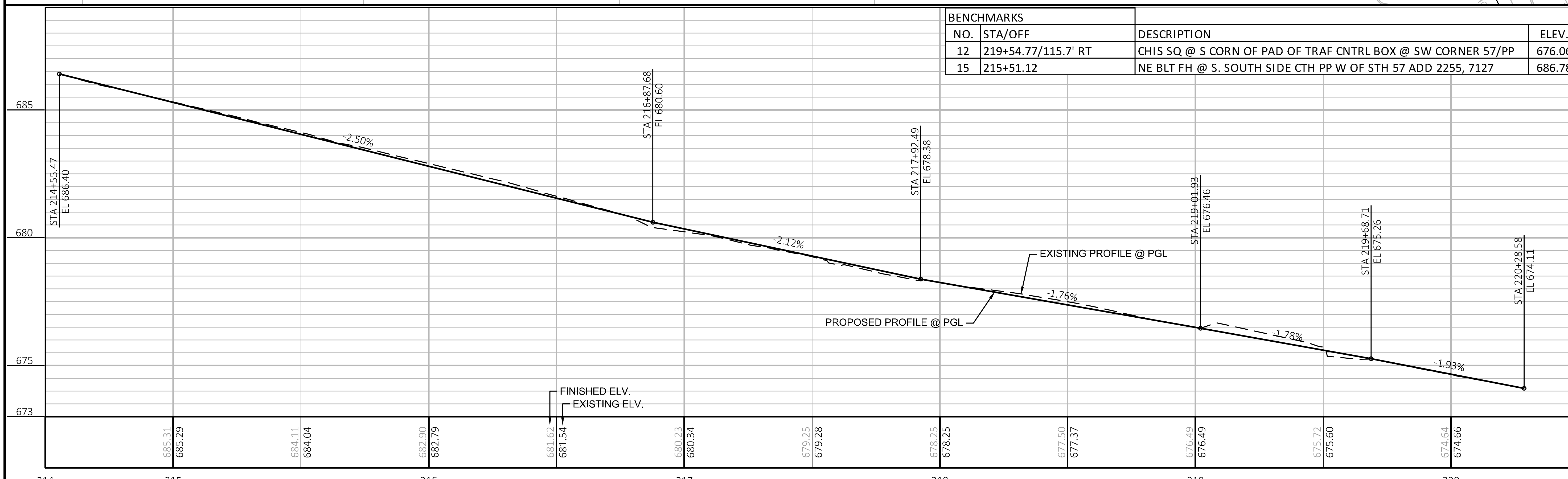


BENCHMARKS

NO.	STA/OFF	DESCRIPTION	ELEV.
16	114+81.93/72.9' LT	NE BLT FH @ NW CORN OF PP/57 OF 57, ADD 2255, ADD 7127	680.49
17	117+97.56/53.8' RT	SPIKE IN W FACE PPOLE @ E SIDE STH 57, N OF CTH PP, ADD 7260	686.40

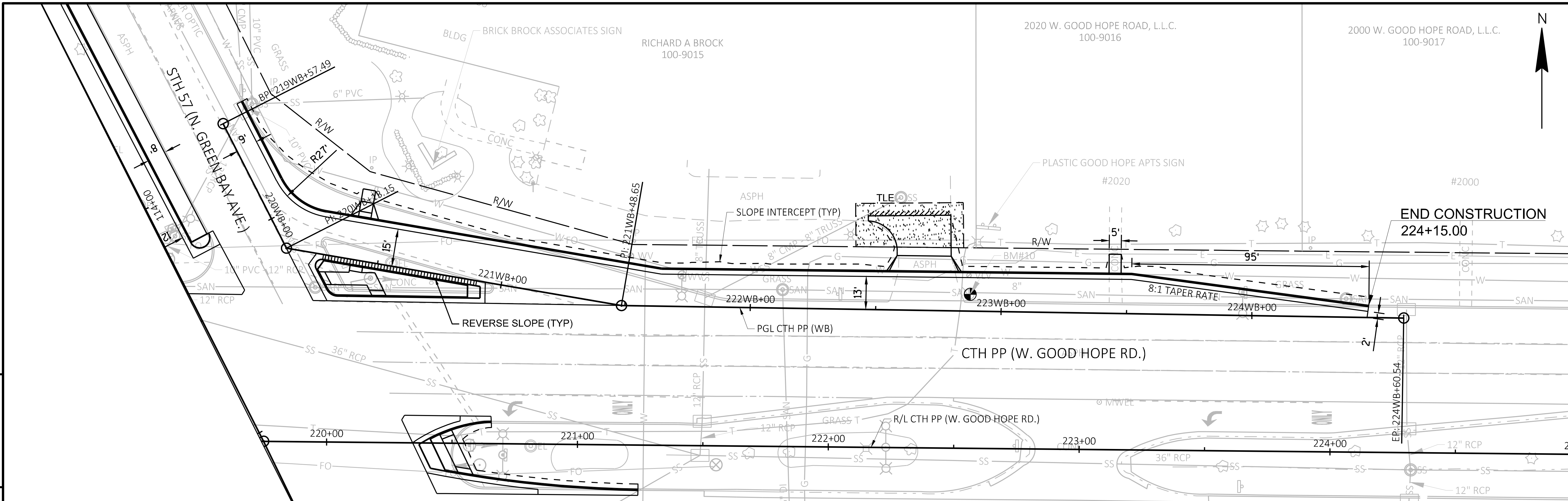
PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PLAN AND PROFILE: N. GREEN BAY AVE	SHEET 94	E

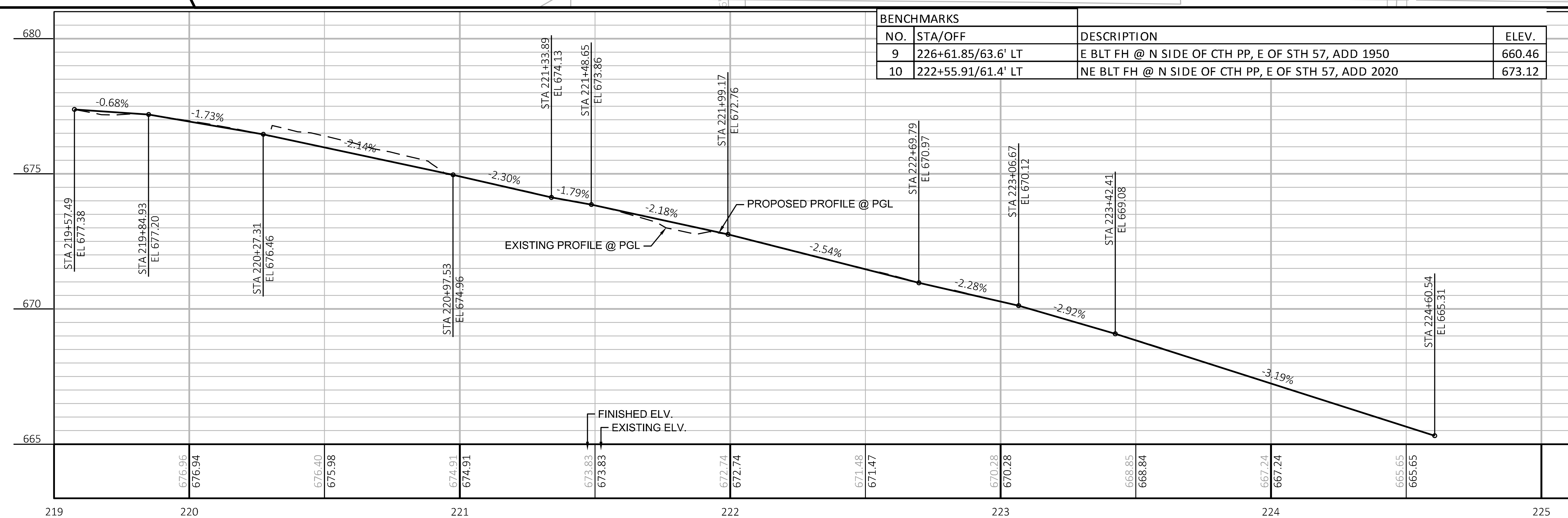




BENCHMARKS			
NO.	STA/OFF	DESCRIPTION	ELEV.
12	219+54.77/115.7' RT	CHIS SQ @ S CORN OF PAD OF TRAF CNTRL BOX @ SW CORNER 57/PP	676.06
15	215+51.12	NE BLT FH @ S. SOUTH SIDE CTH PP W OF STH 57 ADD 2255, 7127	686.78

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PLAN AND PROFILE: W. GOOD HOPE RD	SHEET 95	E





BENCHMARKS			
NO.	STA/OFF	DESCRIPTION	ELEV.
9	226+61.85/63.6' LT	E BLT FH @ N SIDE OF CTH PP, E OF STH 57, ADD 1950	660.46
10	222+55.91/61.4' LT	NE BLT FH @ N SIDE OF CTH PP, E OF STH 57, ADD 2020	673.12

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PLAN AND PROFILE: W. GOOD HOPE RD	SHEET 96	E

Standard Detail Drawing List

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
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
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
08D16-11	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
08D17-06	MANHOLES, MANHOLE & INLET COVERS
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	CONDUIT
09B04-12	PULL BOX
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C12-09A	CONCRETE BASE TYPE 13
09C12-09B	CONCRETE BASE TYPE 13
09C15-01	CONCRETE BASE TYPE 10 SPECIAL
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
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
09E08-09H	TYPE 10 SPECIAL POLE 45' MONOTUBE ARM
09E08-09J	TYPE 13 POLE 35'-55' MONOTBE ARM
09E08-09K	GENERAL NOTES,HARDWARE DETAILS FOR TYPE 9/10,9/10 SPECIAL,12 & 13 POLES W/MONOTUBE ARMS
09G01-04A	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04B	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04C	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04D	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04E	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04F	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04G	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
11B02-02	CONCRETE MEDIAN NOSE
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-10	URBAN DOWELED CONCRETE PAVEMENT
13C18-07A	CONCRETE PAVEMENT JOINTING
13C18-07B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-07C	CONCRETE PAVEMENT JOINT TYPES
13C18-07D	CONCRETE PAVEMENT JOINT TYPES AT UTILITY FIXTURES
13C18-07F	CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER
13C18-07G	CONCRETE PAVEMENT JOINTING ACCELERATION/DECELERATION LANE
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-21A	LONGITUDINAL MARKING (MAINLINE)
15C08-21B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-21D	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
15C20-02	YIELD MARKING
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D20-06A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D20-06B	TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D20-06C	TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D22-05	TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D23-07A	TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE
15D23-07B	TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE

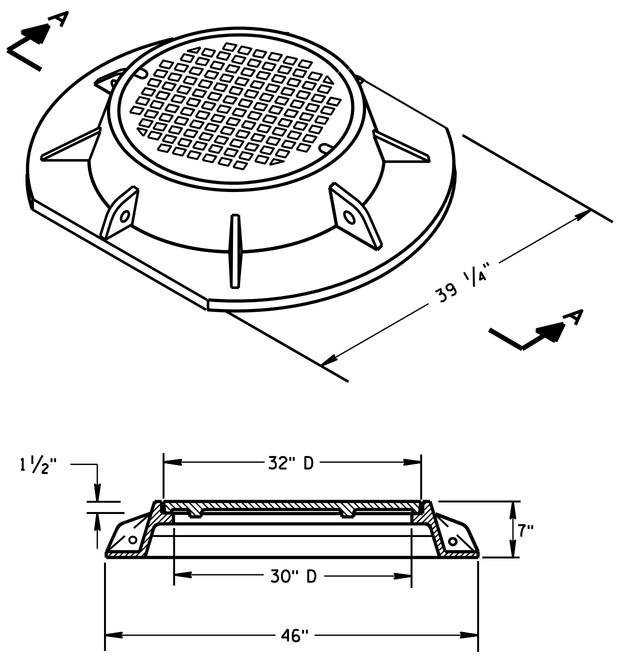
6

GENERAL NOTES

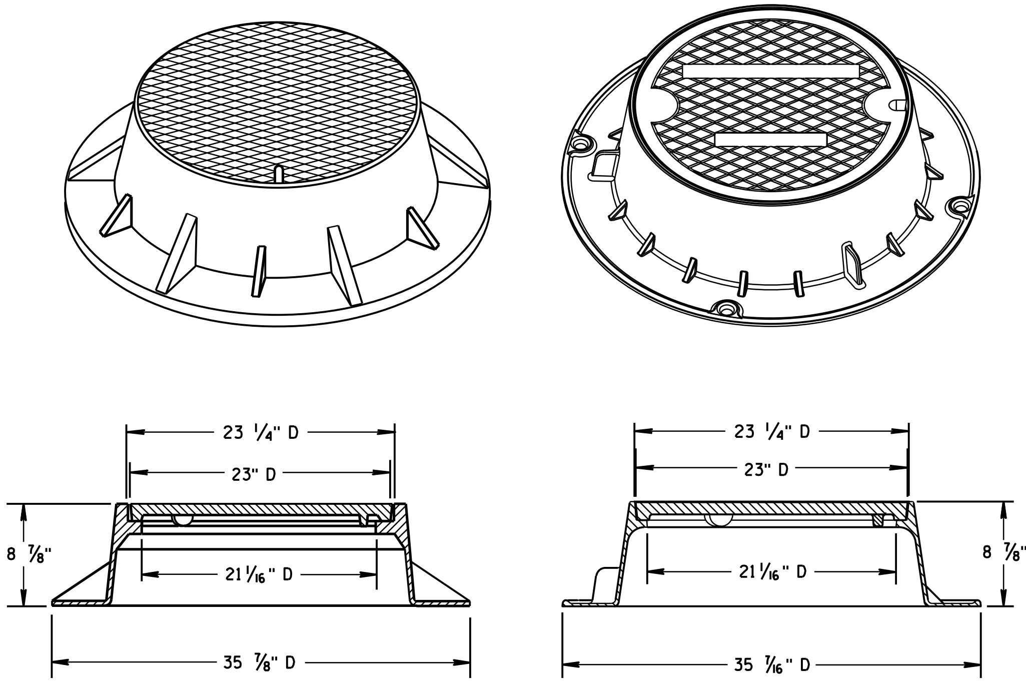
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

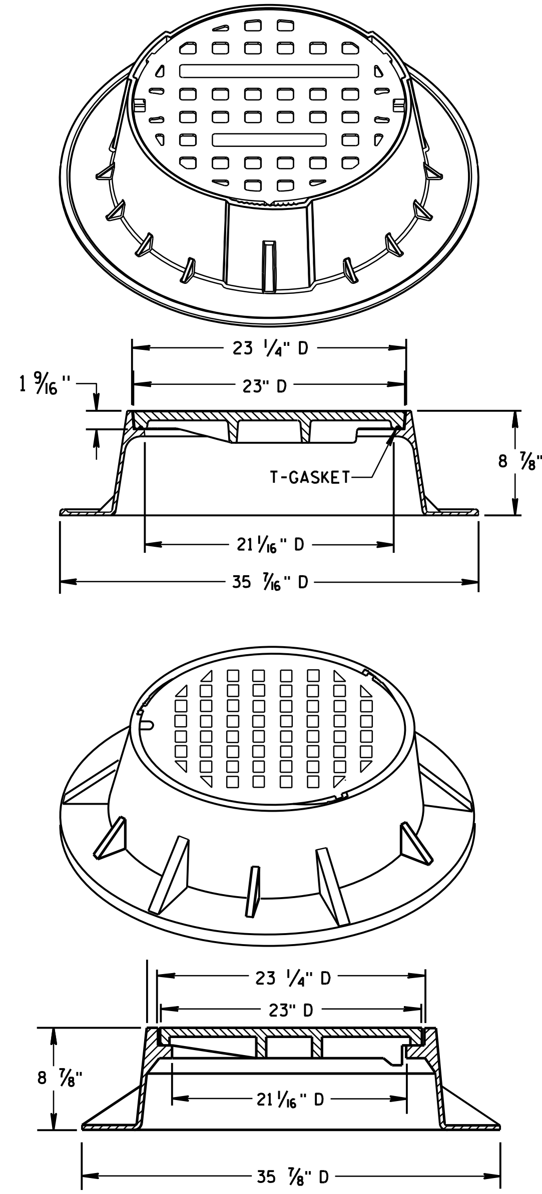
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



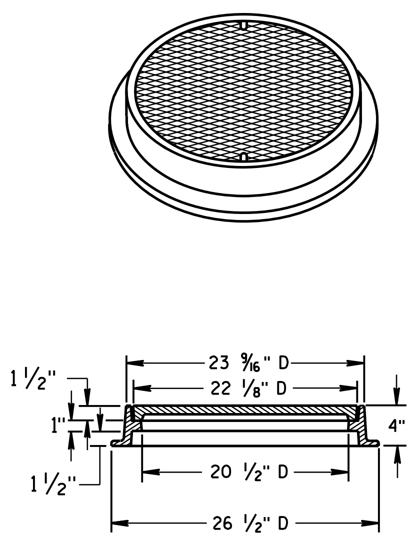
SECTION A-A
TYPE "K"



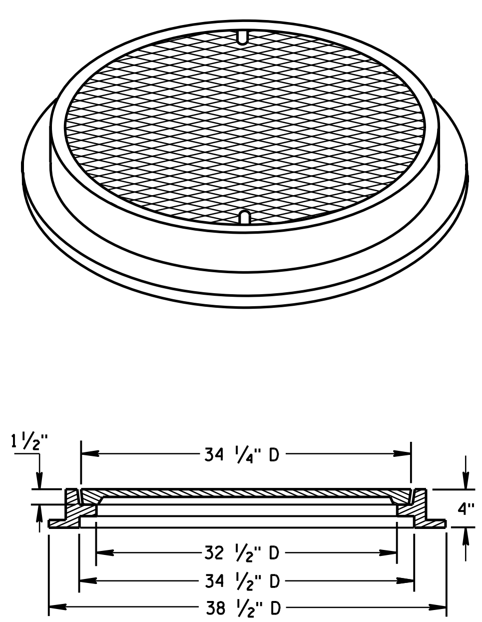
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE



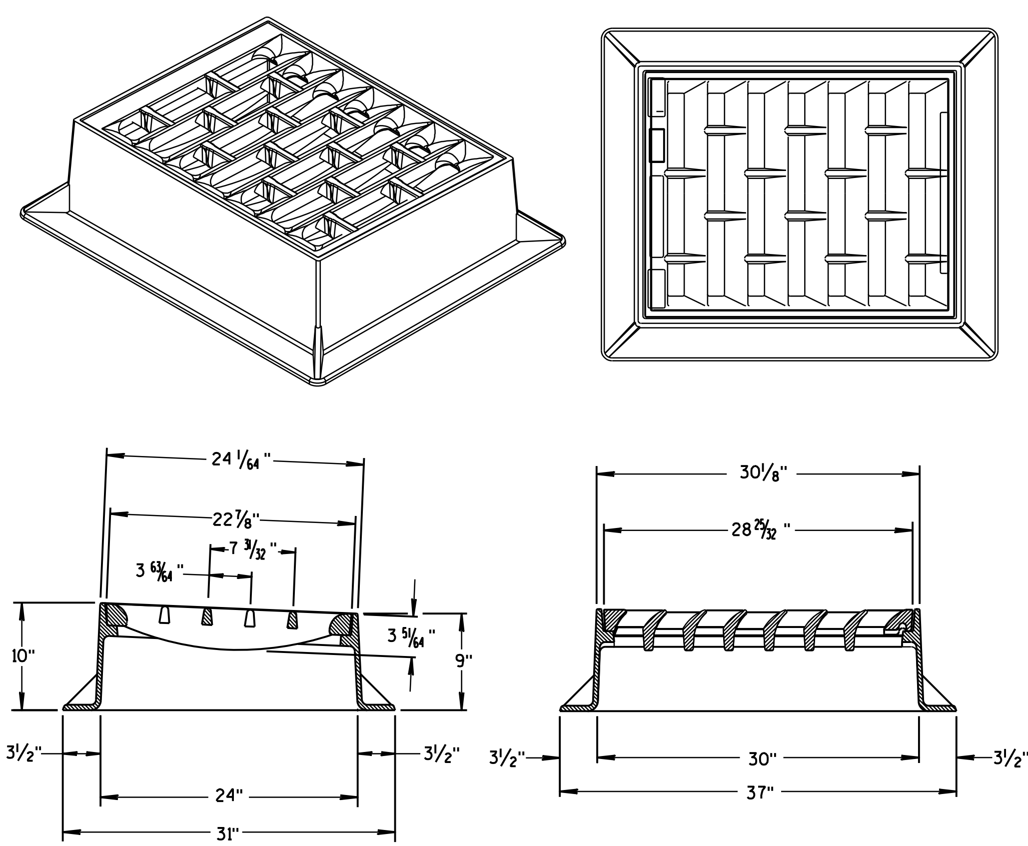
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



TYPE "L"



TYPE "M"



INLET COVER TYPE "BW"

6

6

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS D 98 NT
ENGINEER
FHWA

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

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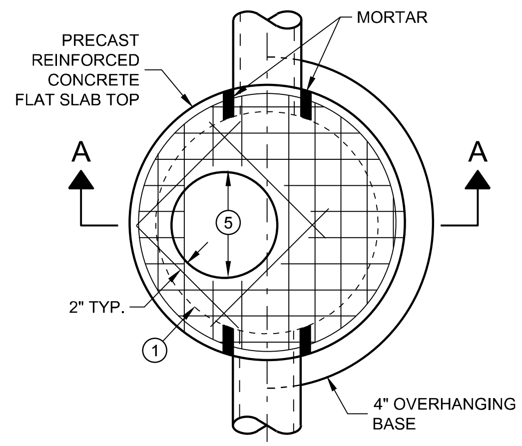
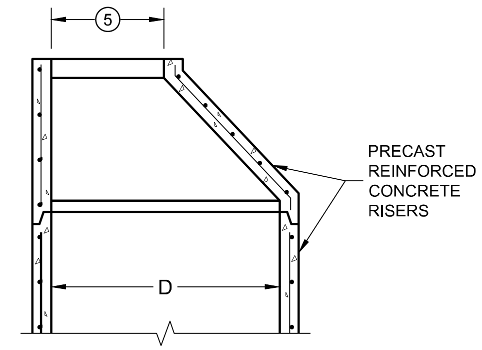
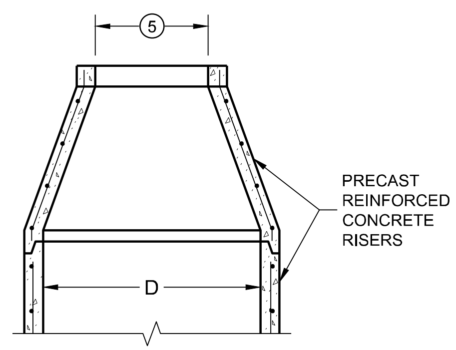


PLAN VIEW
CIRCULAR OPENING



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".

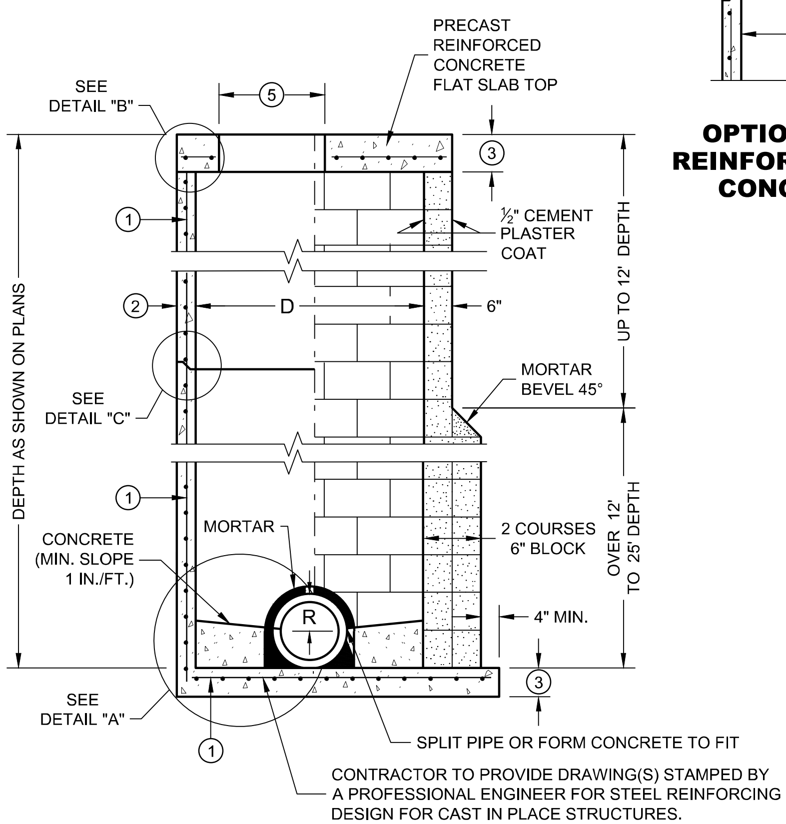
1 FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

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.).

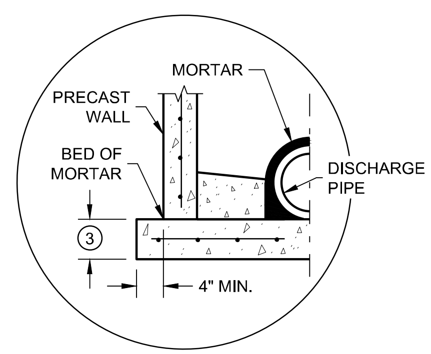
5 SEE MANHOLE COVER OPENING MATRIX.



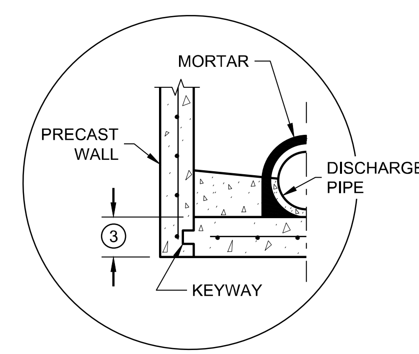
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE 1

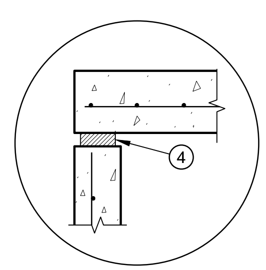


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

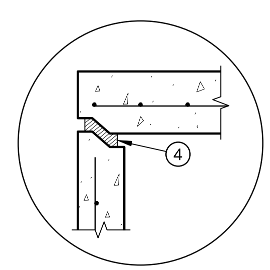


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

DETAIL "A"

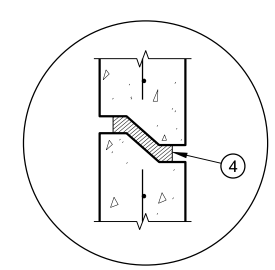


TOP WITH PLAIN END JOINT



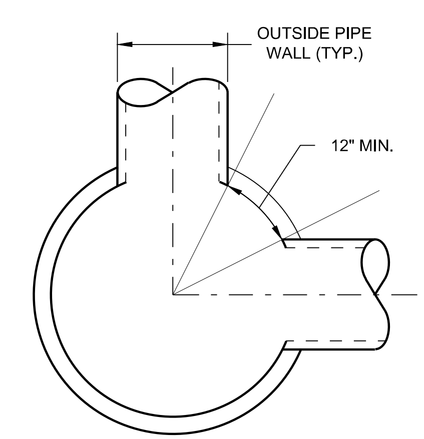
TOP WITH TONGUE AND GROOVE JOINT

DETAIL "B"



RISER WITH TONGUE AND GROOVE JOINT

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 DEVELOPMENT ENGINEER
FHWA

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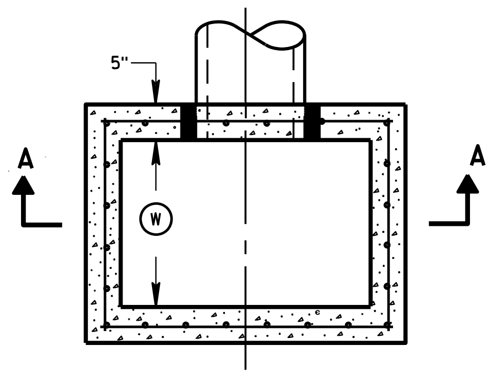
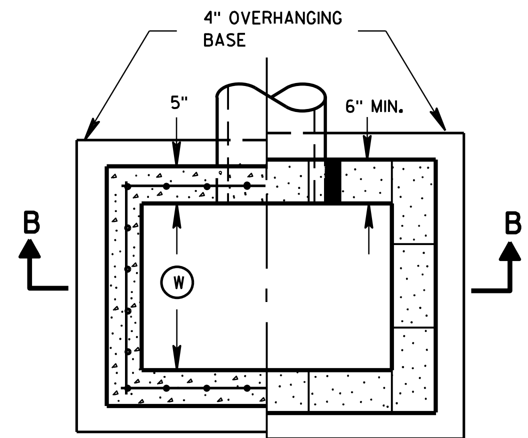
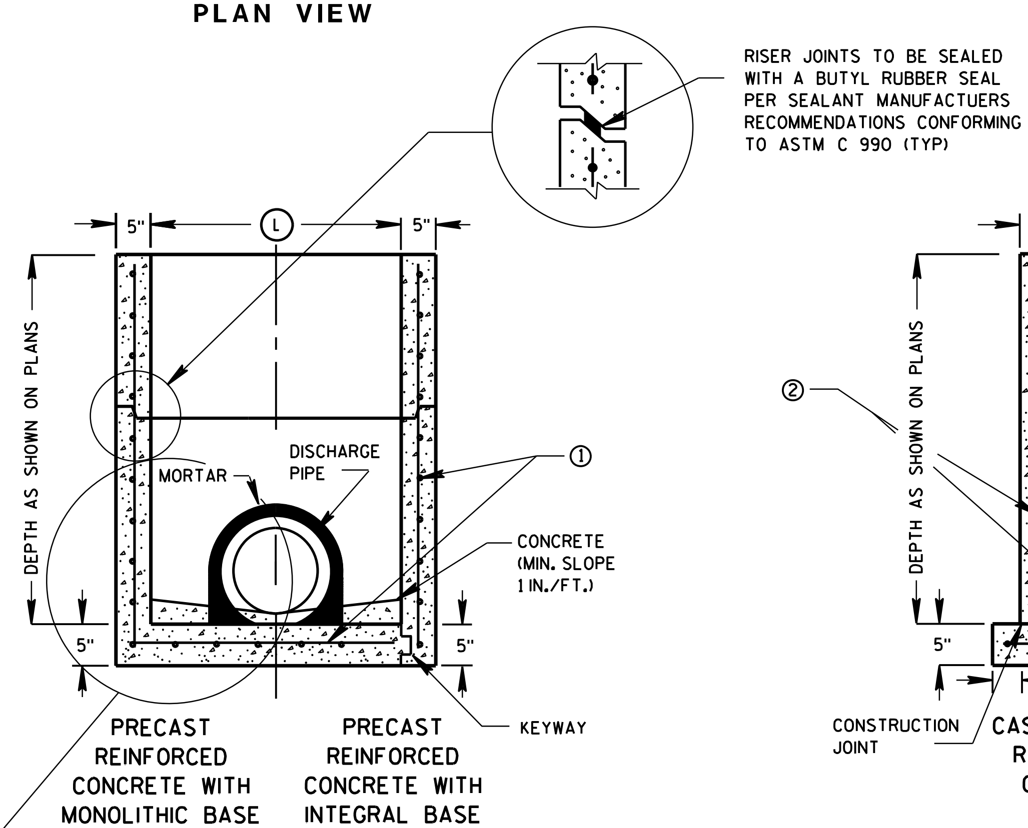
SDD 08B09 - 03



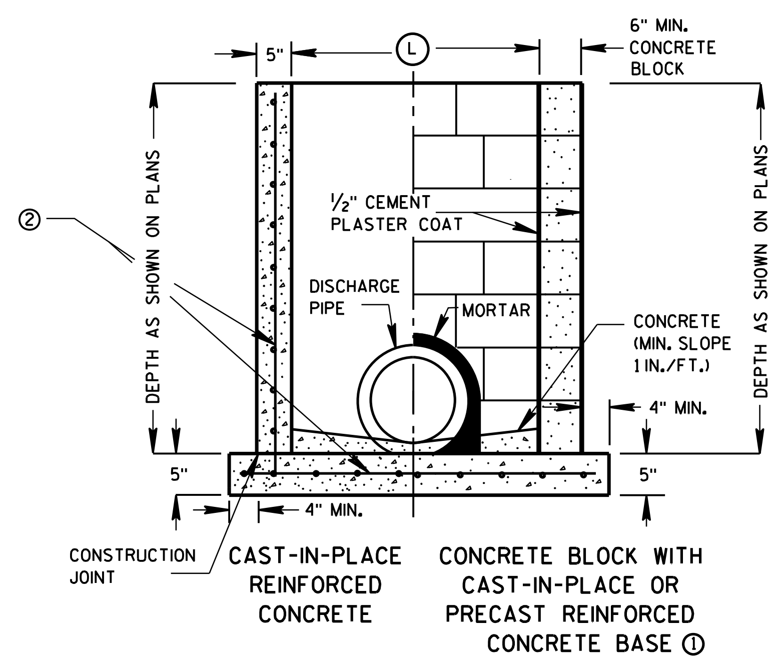
PLAN VIEW



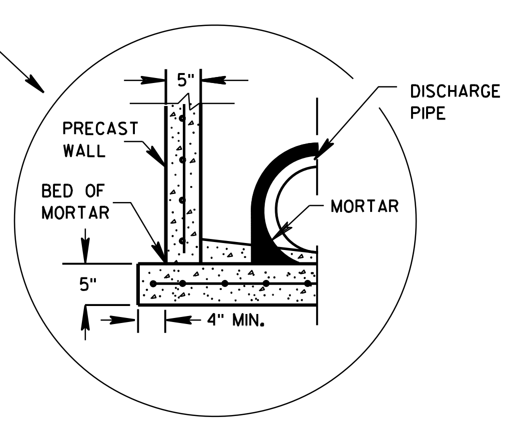
PLAN VIEW



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.

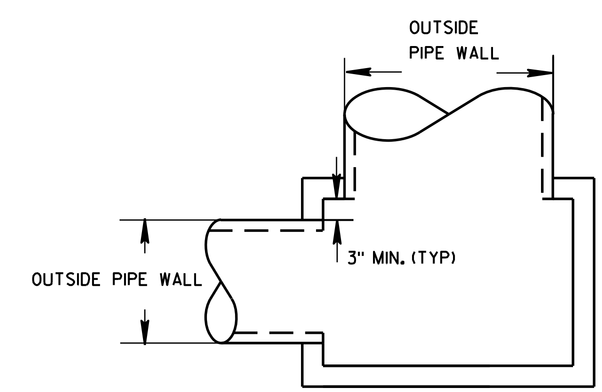
2 CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS D 100 IT UNIT SUPERVIS
FHWA

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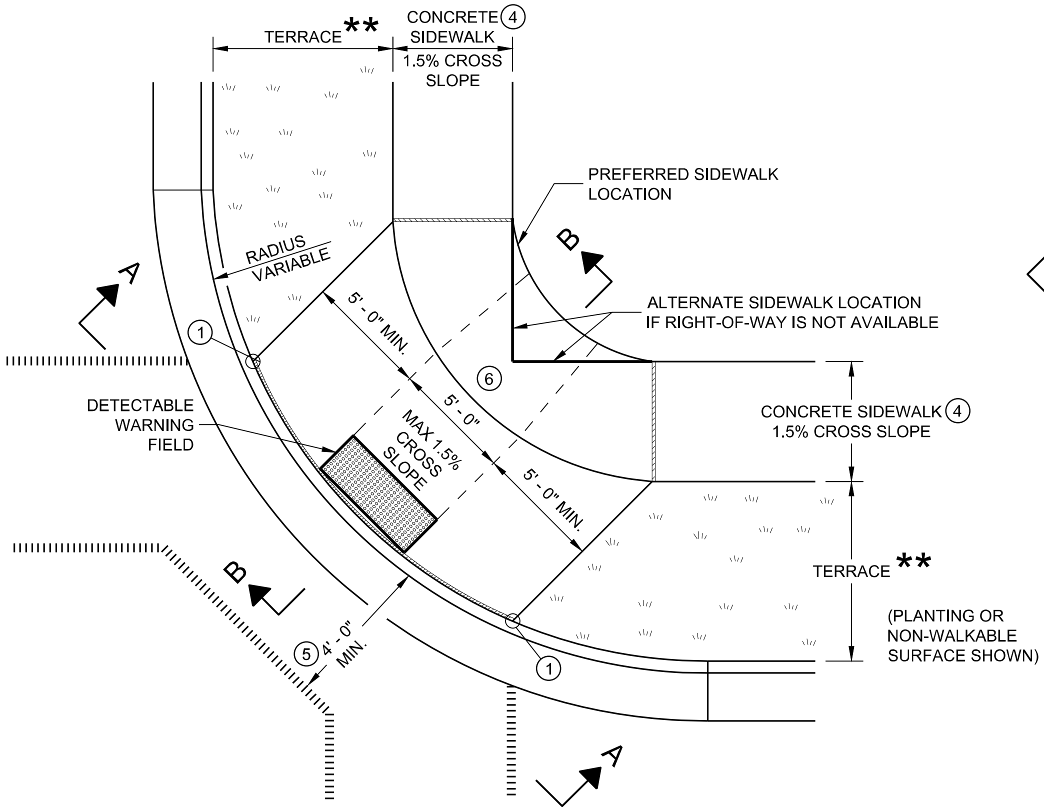
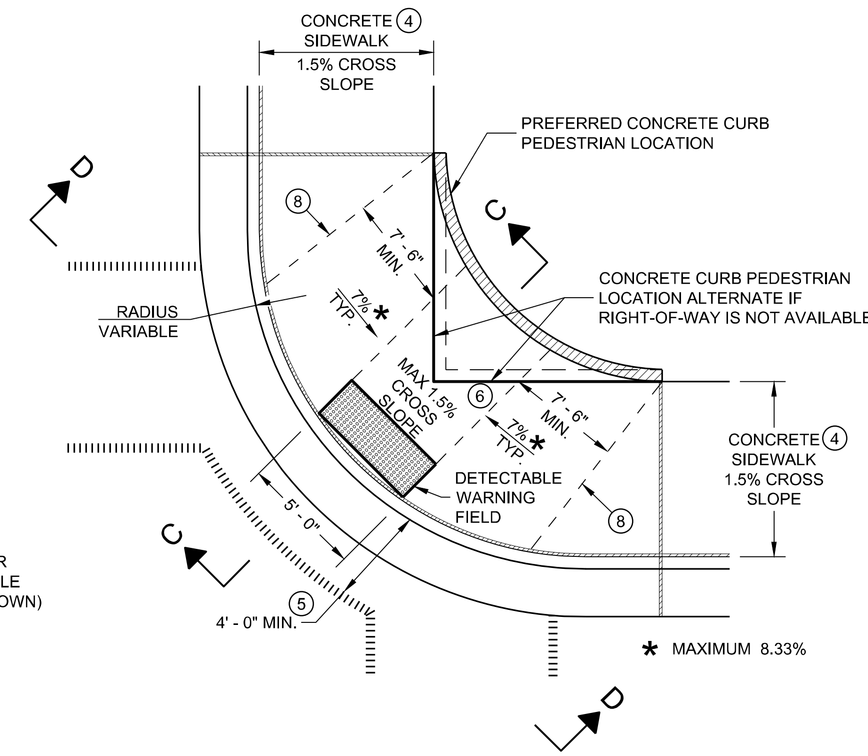


PLAN VIEW

CURB RAMP TYPE 1

(CENTER OF CORNER RADIUS)



PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

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.

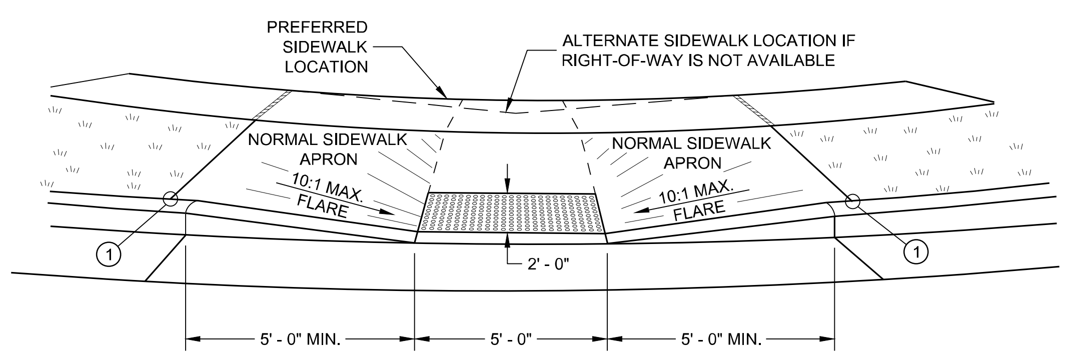
SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"

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.
7.
8. PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

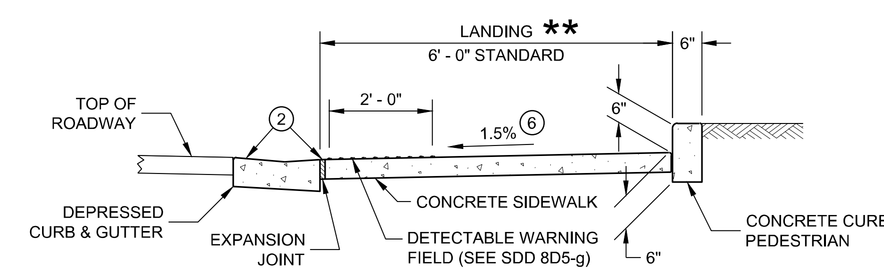
6



VIEW A - A FOR TYPE 1

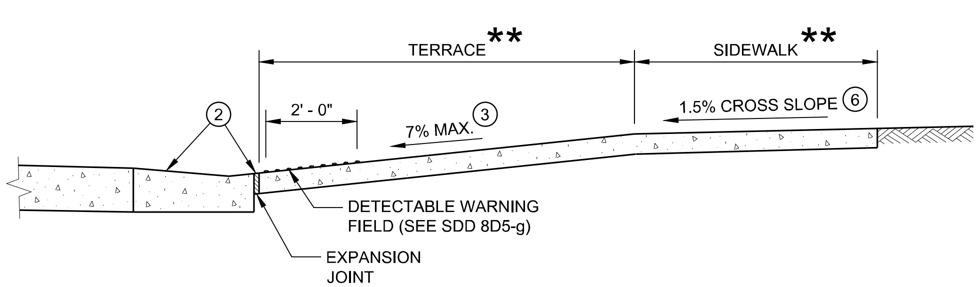
LEGEND

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

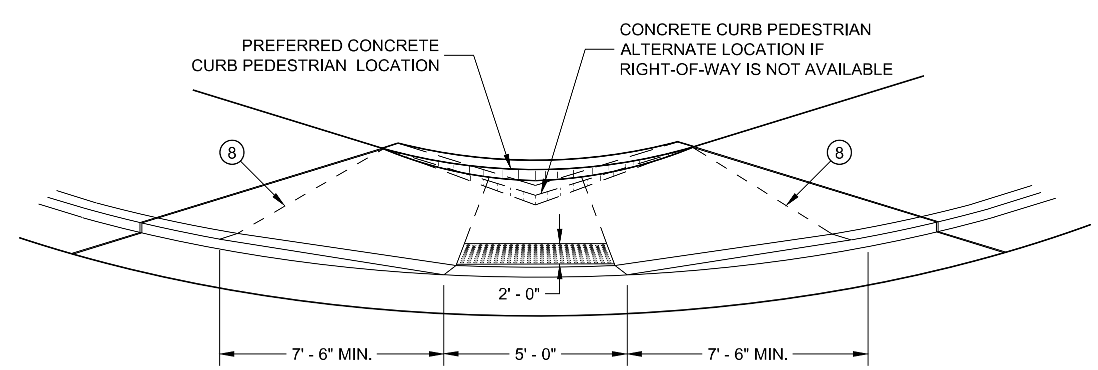


SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1

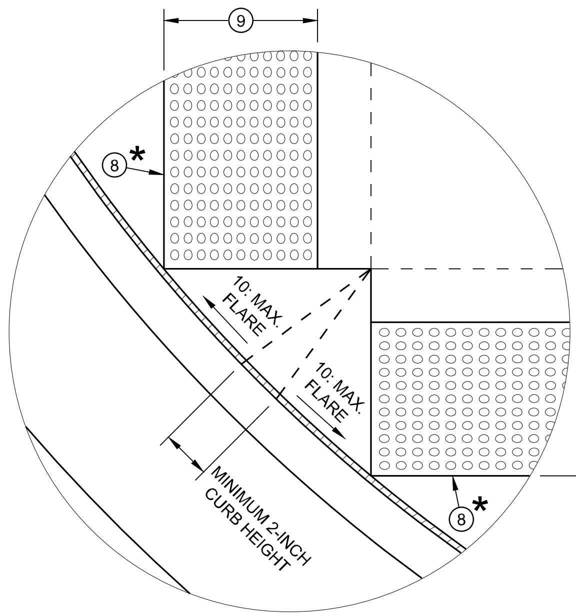


VIEW D - D FOR TYPE 1 - A

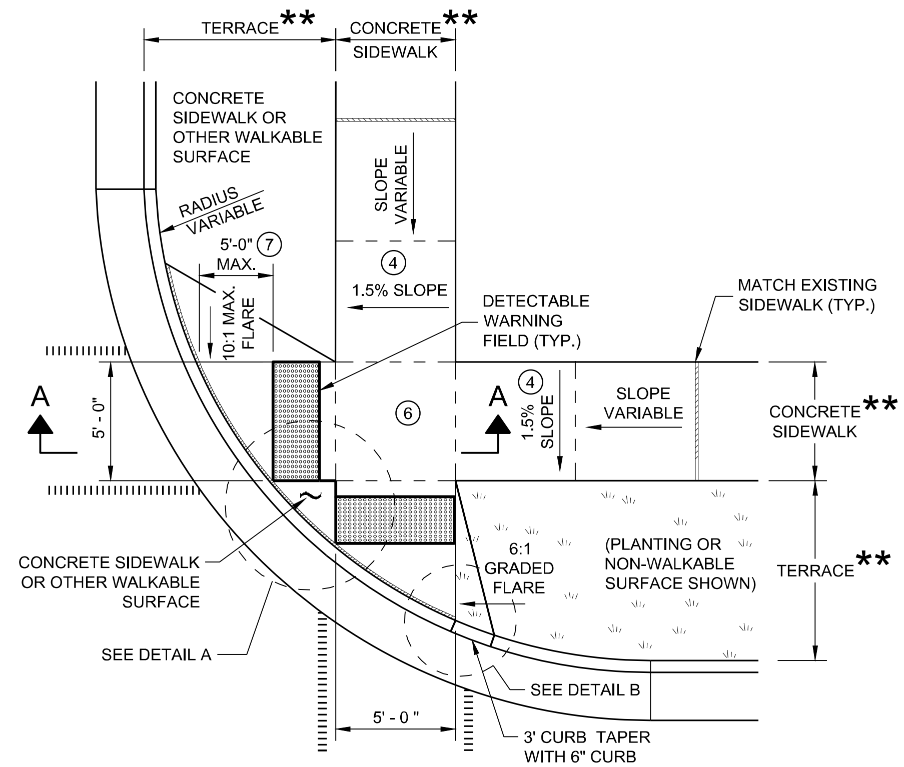
CURB RAMPS TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

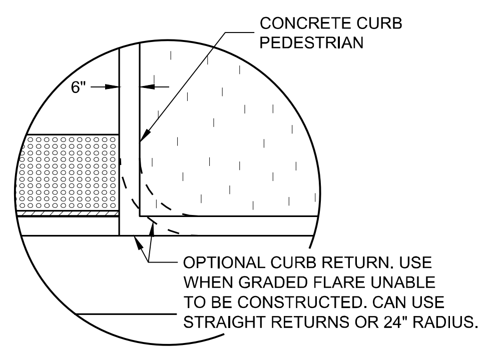
SDD 08D05 - 20a



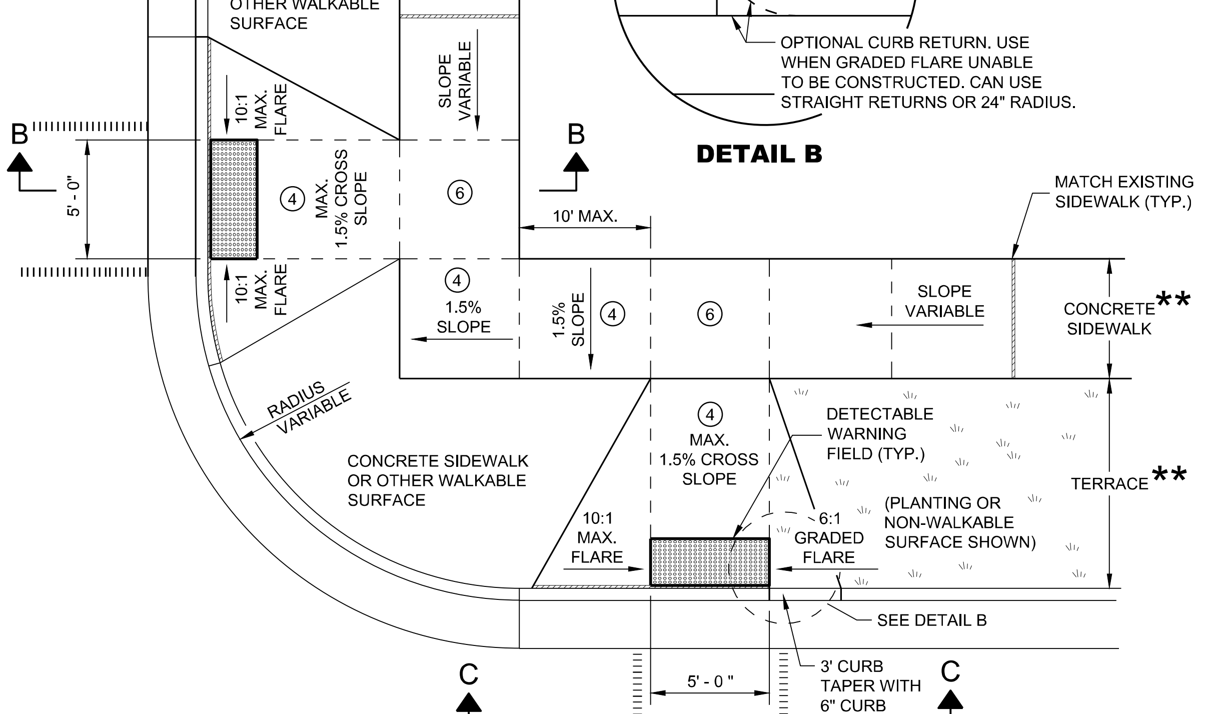
DETAIL A



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



DETAIL B



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

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.

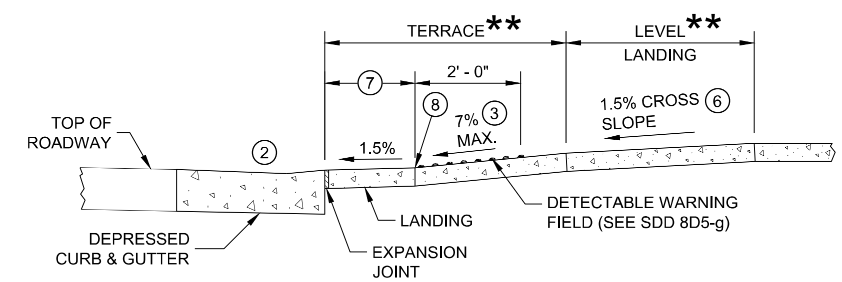
4 ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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.



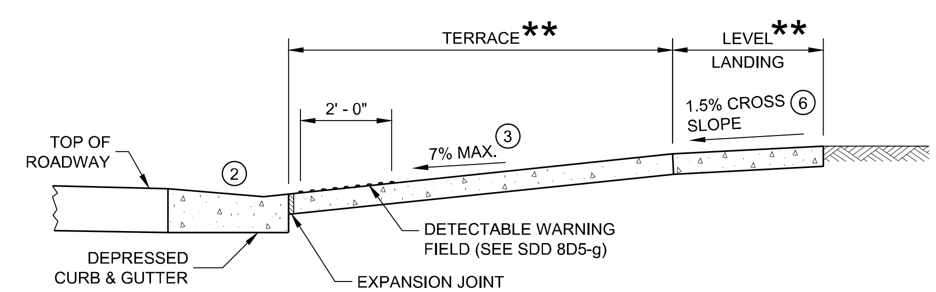
SECTION A - A FOR TYPE 2

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

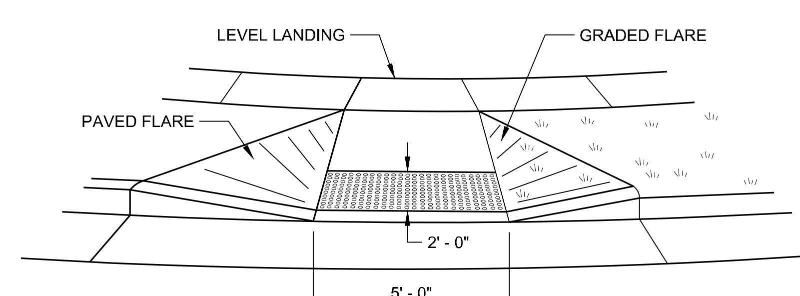
** WIDTH SHOWN ELSEWHERE IN THE PLANS

LEGEND

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



SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3

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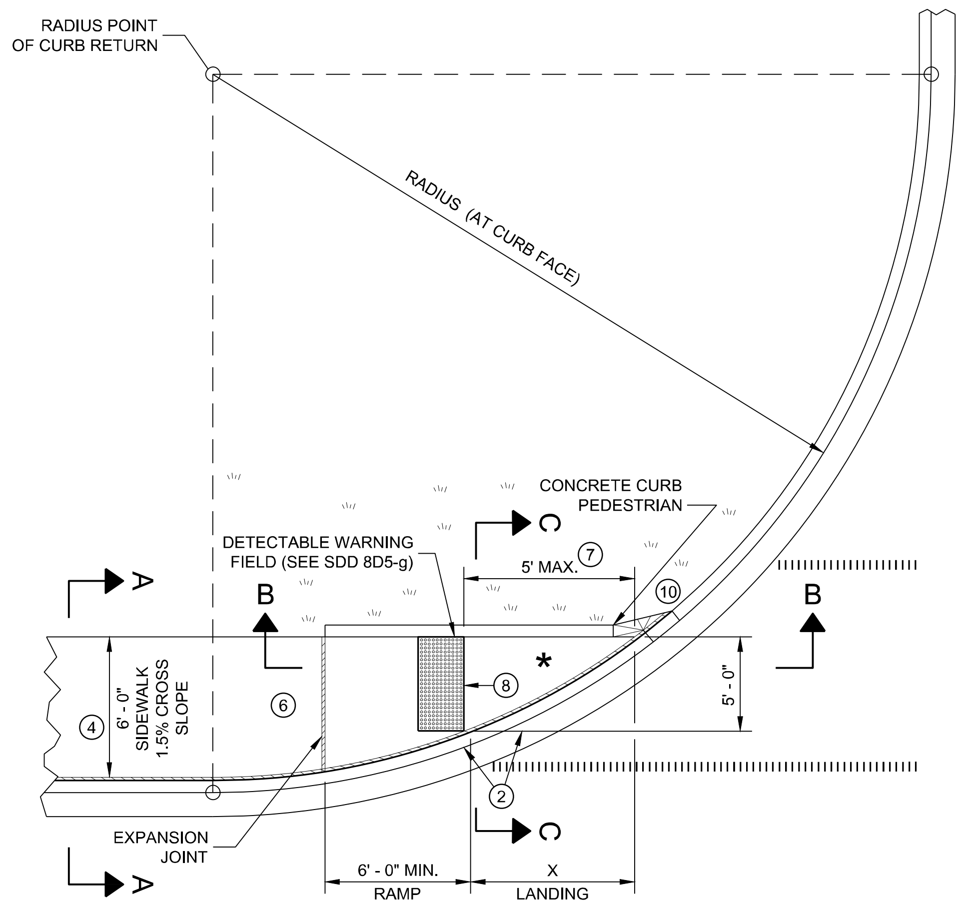
CURB RAMPS
TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA 102

SDD 08D05 - 20b

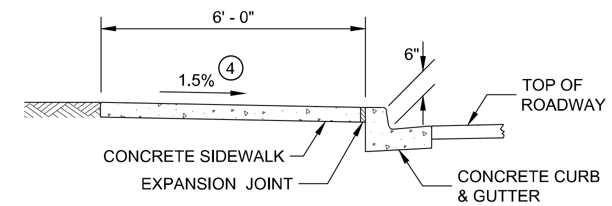


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5 ½"

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.

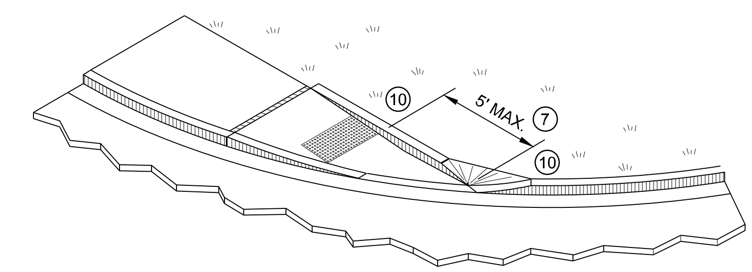
10 INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

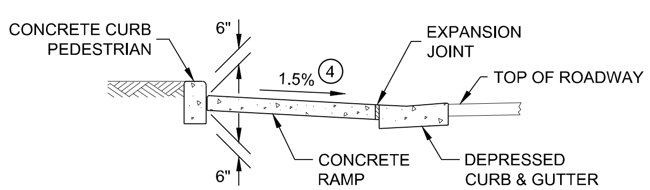
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)

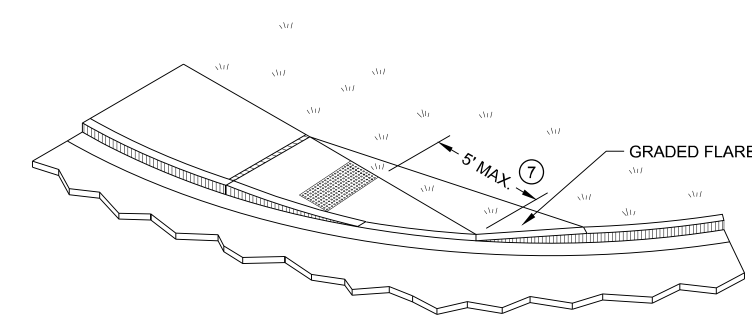


ISOMETRIC VIEW FOR TYPE 4A

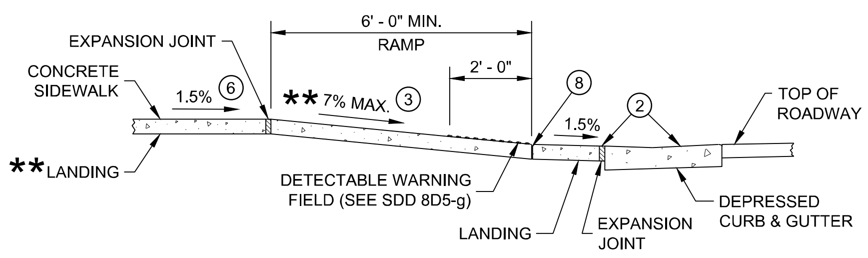


SECTION C - C FOR TYPE 4A

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

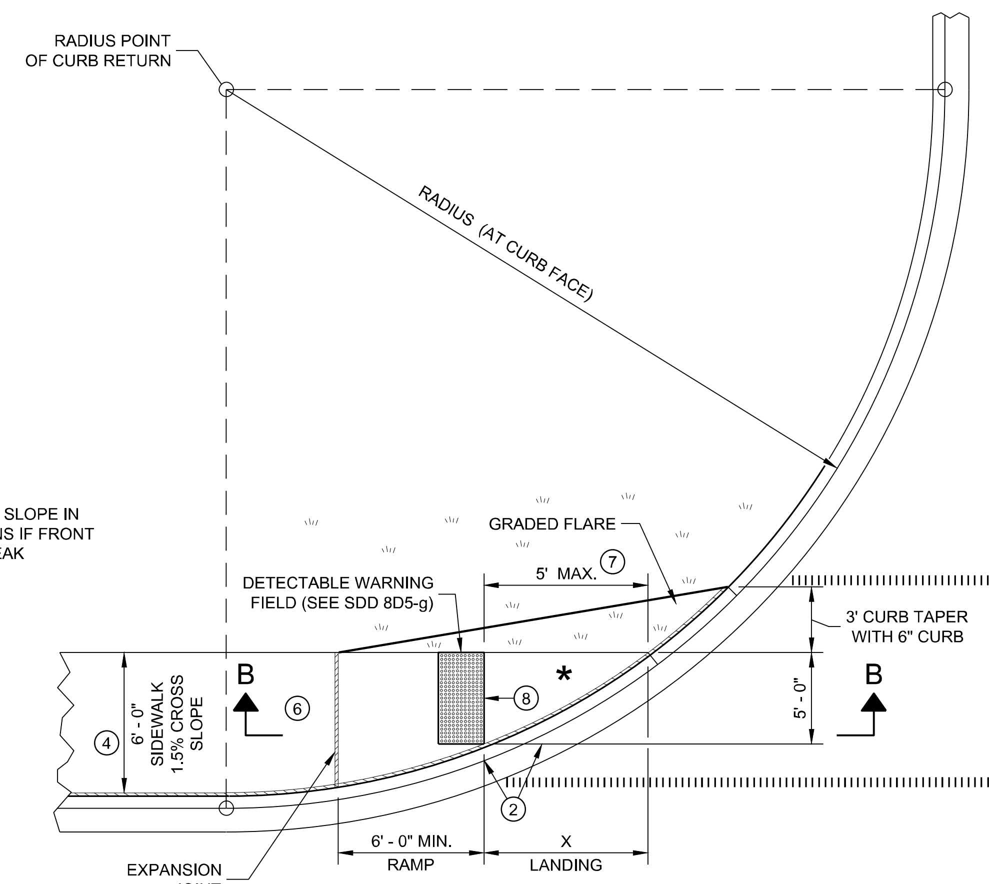


ISOMETRIC VIEW FOR TYPE 4A1



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

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



PLAN VIEW

CURB RAMP TYPE 4A1

CURB RAMPS TYPE 4A AND 4A1

STATE OF WISCONSIN
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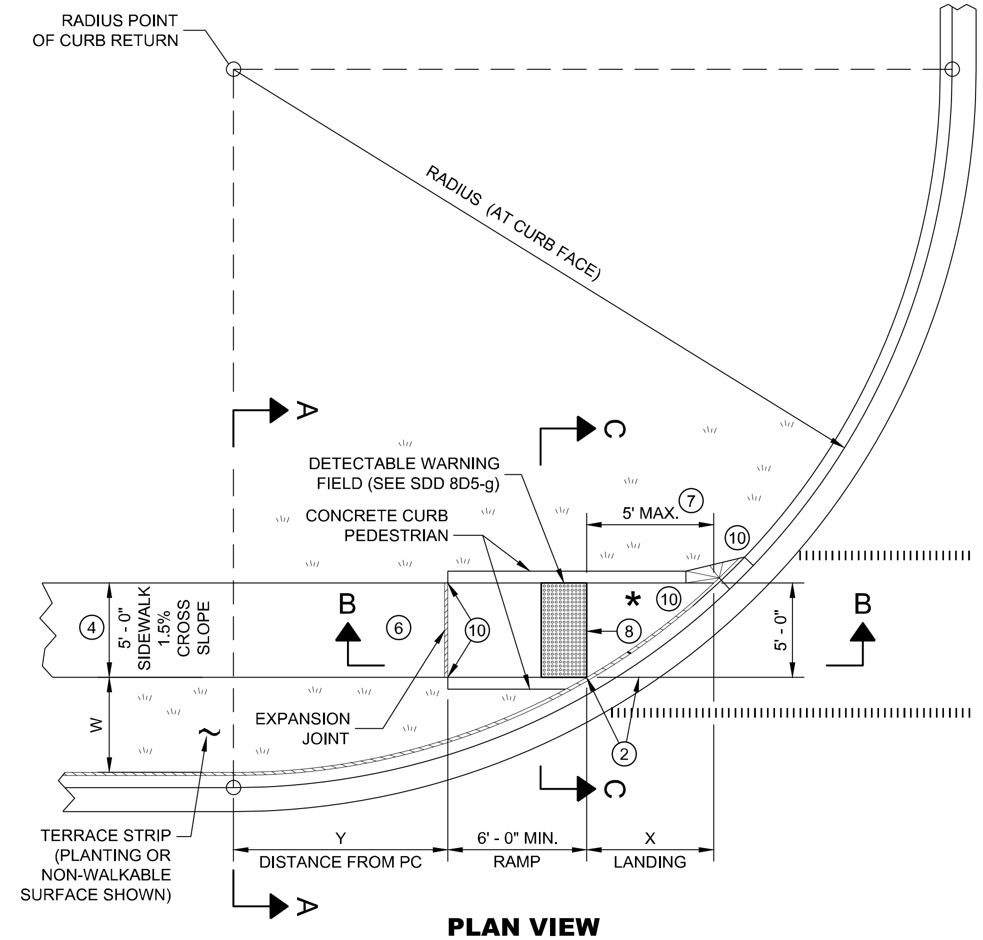


PLAN VIEW
CURB RAMP TYPE 4B

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

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.

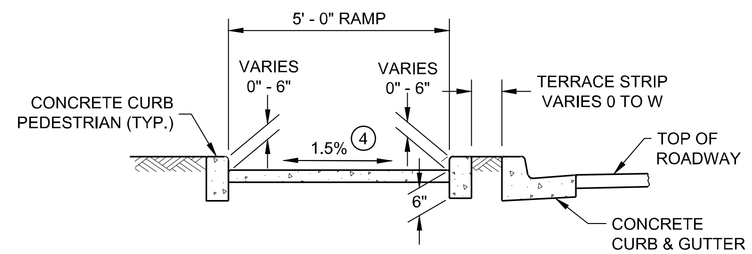
4 ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

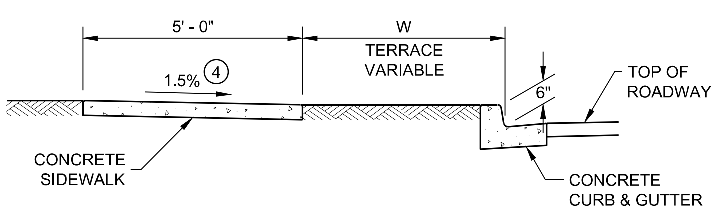
7 WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

8 PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

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

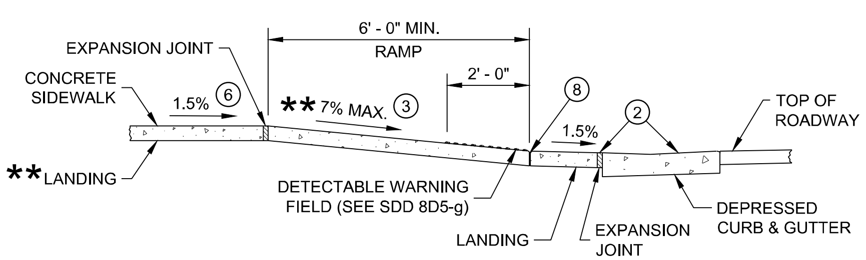


SECTION C - C FOR TYPE 4B



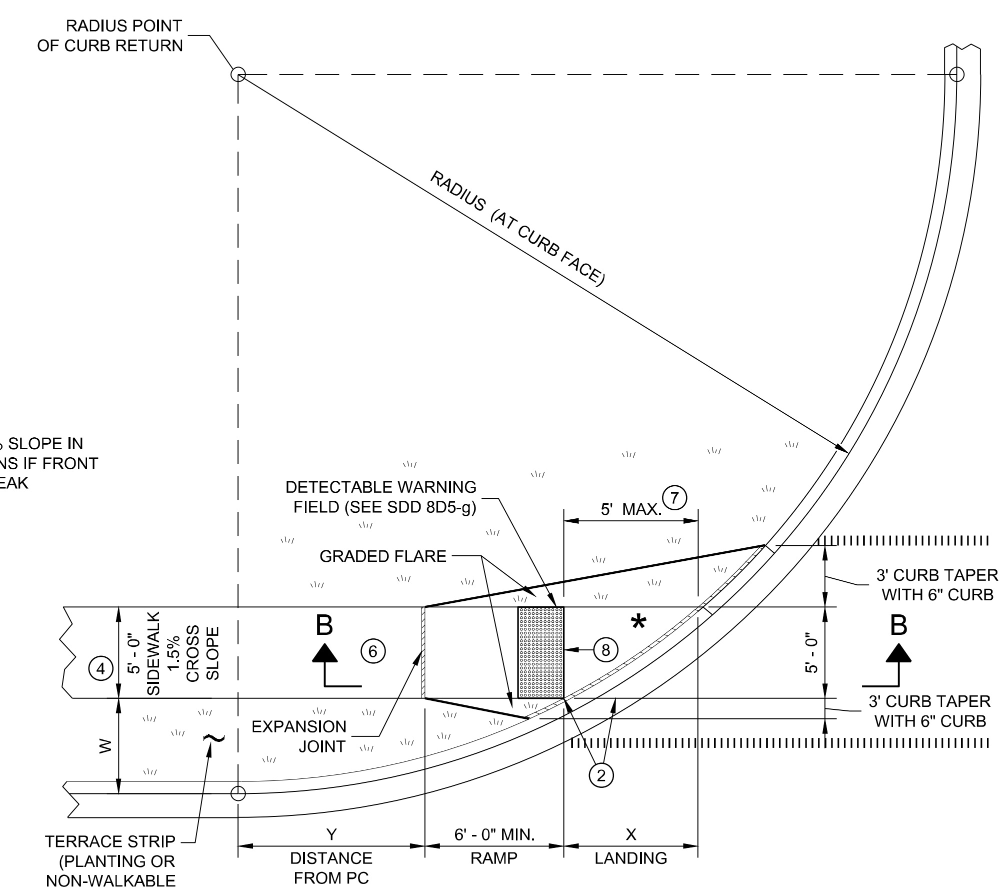
SECTION A - A FOR TYPE 4B

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

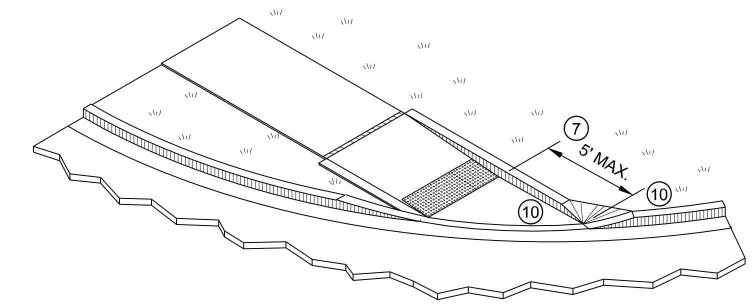


** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

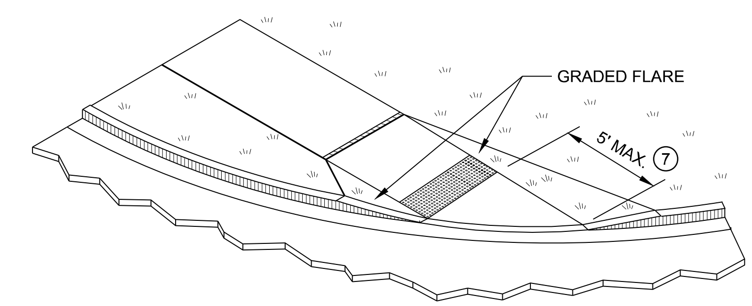
SECTION B - B FOR TYPE 4B AND TYPE 4B1



PLAN VIEW
CURB RAMP TYPE 4B1



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

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CURB RAMPS TYPE 4B AND 4B1

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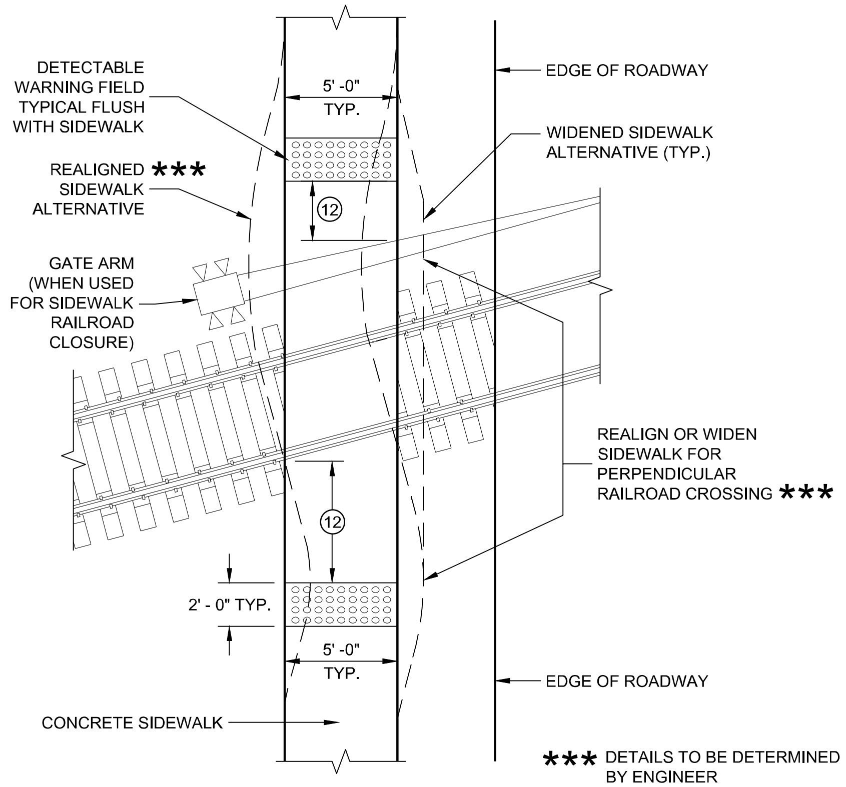
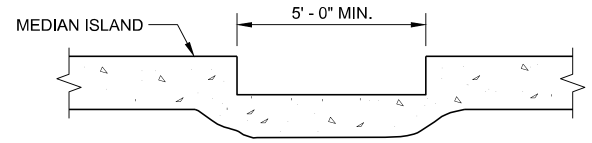
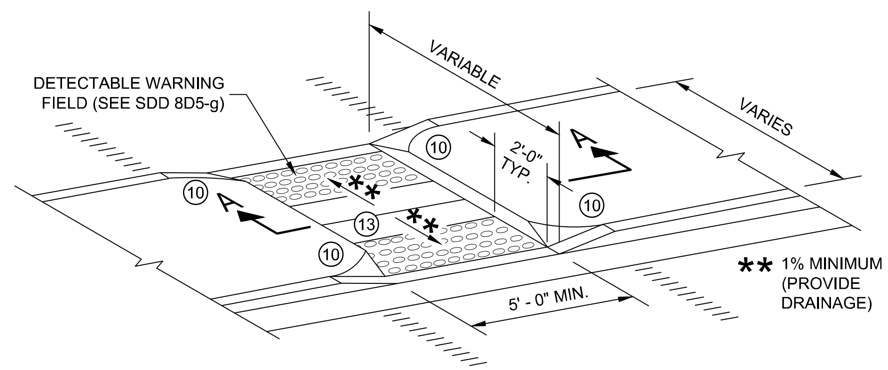


CURB RAMP TYPE 8

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 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.

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

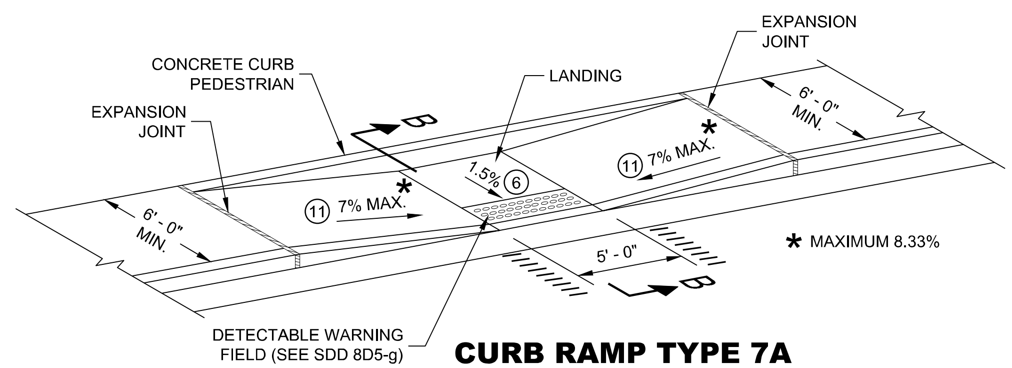
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(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.

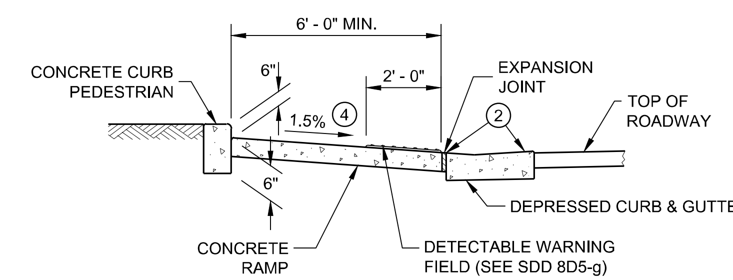
LEGEND

▨▨▨	½" EXPANSION JOINT SIDEWALK
— — —	CONTRACTION JOINT FIELD LOCATED
IIIIIIIIII	PAVEMENT MARKING CROSSWALK (WHITE)

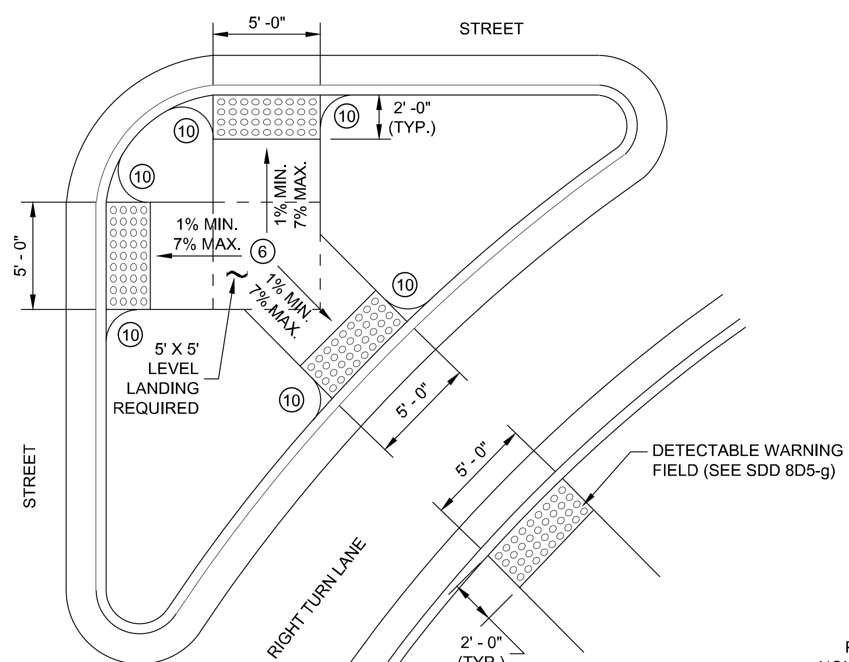


CURB RAMP TYPE 7A

MID BLOCK CROSSING



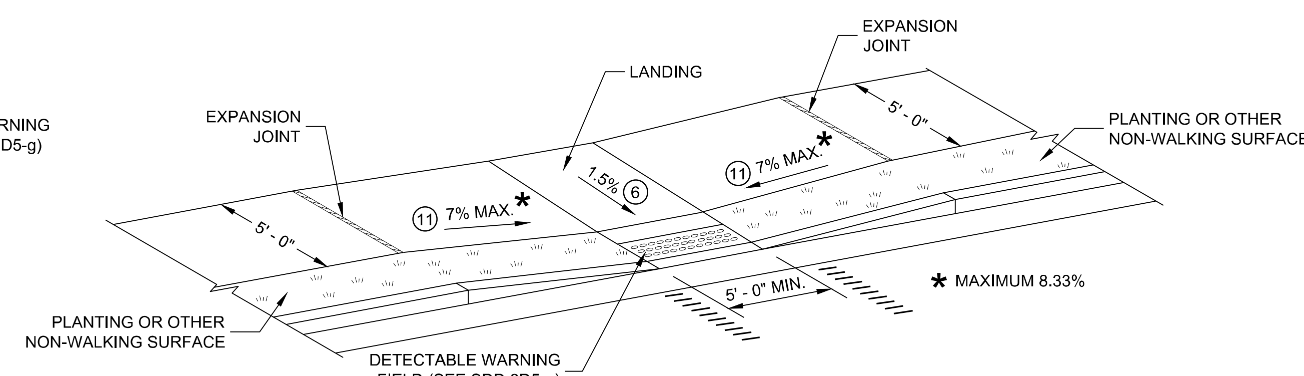
SECTION B - B FOR TYPE 7A



CURB RAMP TYPE 6

DETECTABLE WARNING AT ISLANDS

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



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

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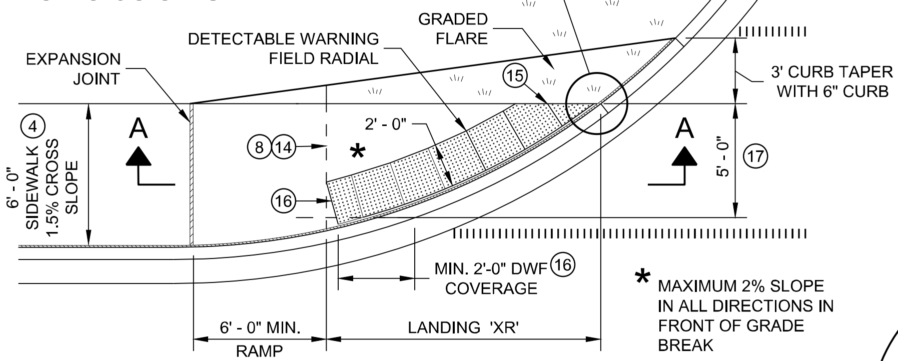
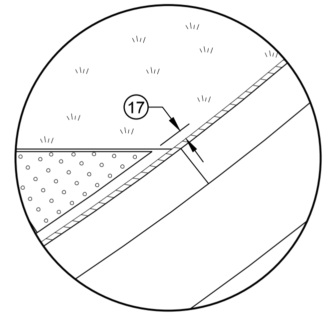
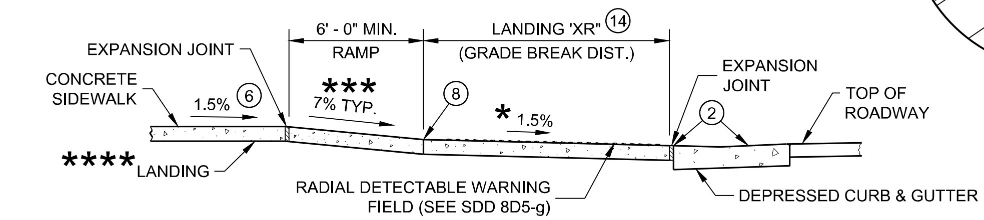
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



PLAN VIEW
CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL A

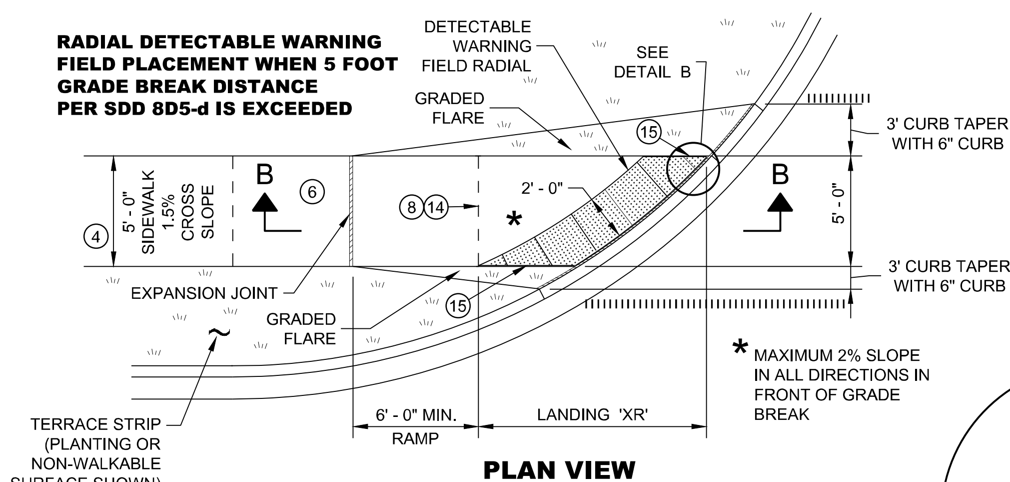


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

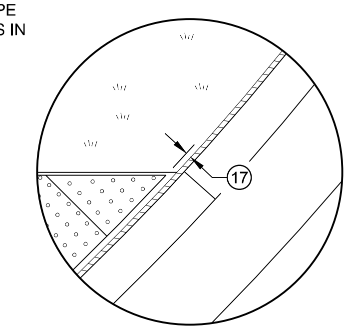
*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1

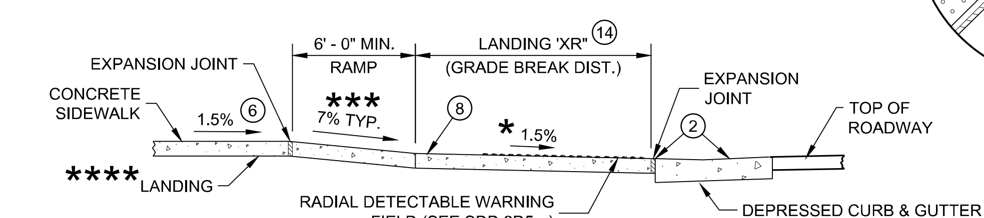
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



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.

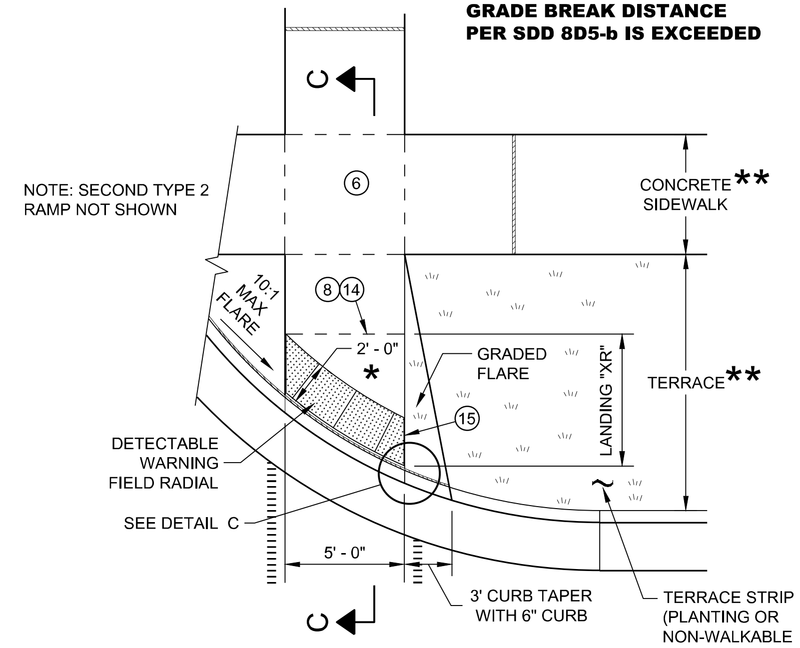
14 CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

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.

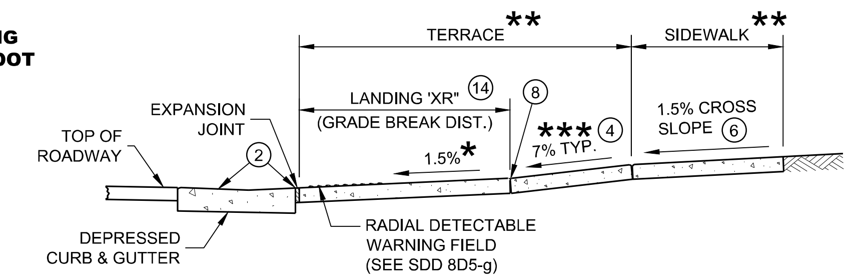
16 USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

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)

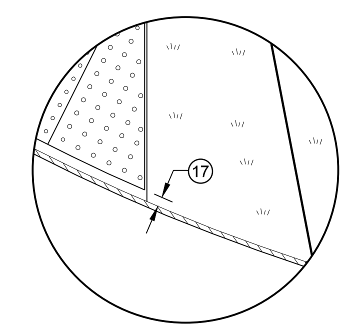


SECTION C - C FOR TYPE 2

* 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 DEPARTMENT OF TRANSPORTATI 106

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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.

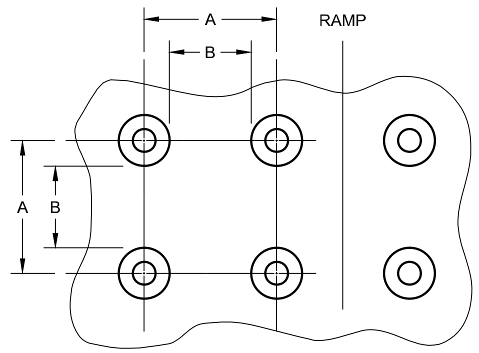
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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.

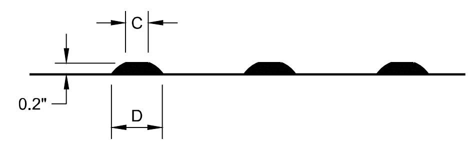
(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

	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.

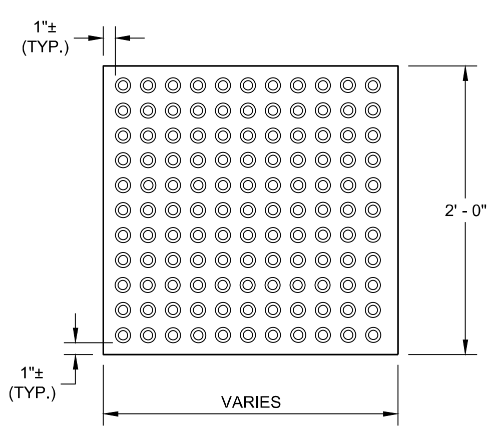


PLAN VIEW

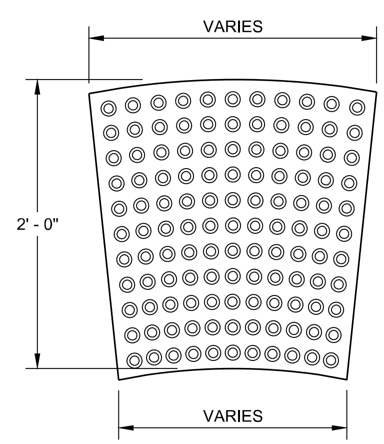


ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

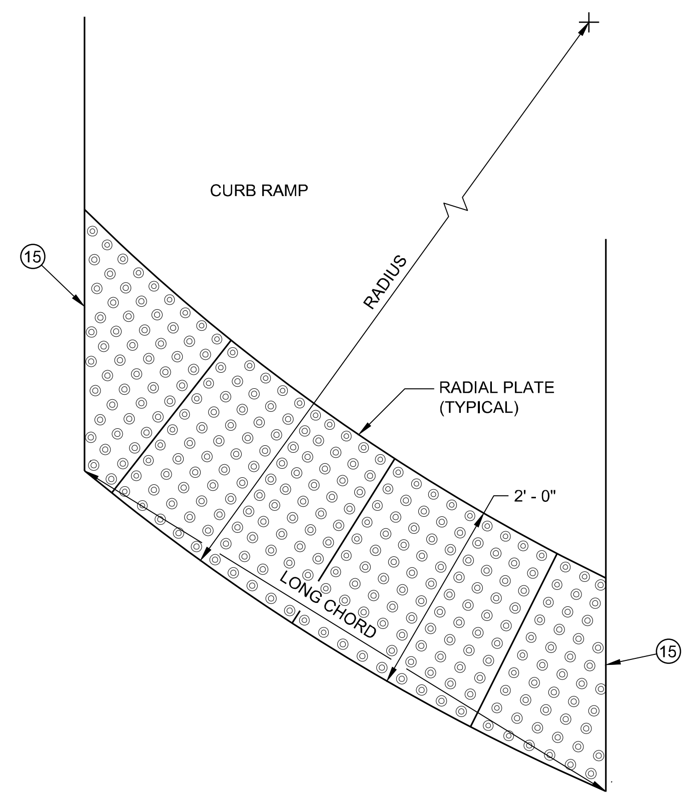


RECTANGULAR PLATES

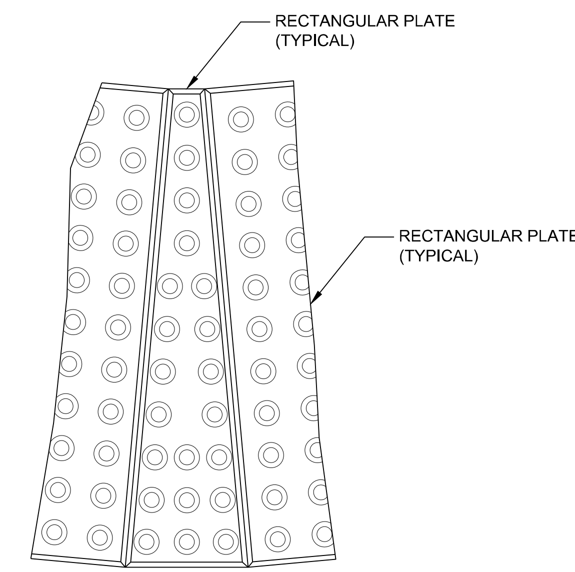


RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

6

6

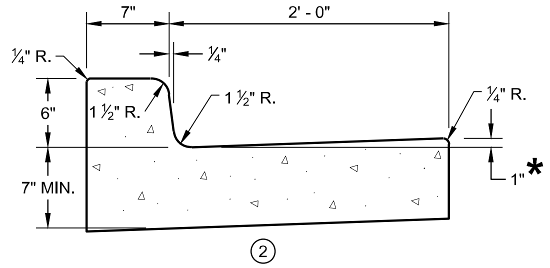
CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA

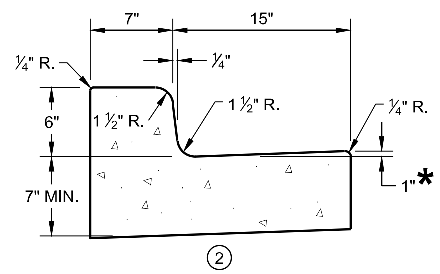
SDD 08D05 - 20g

SDD 08D05 - 20g

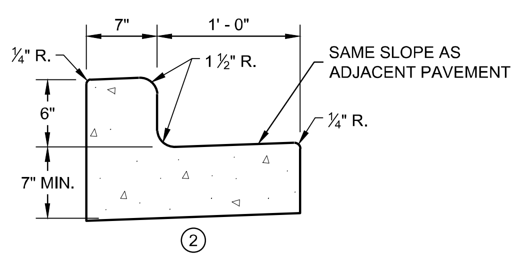


CONCRETE CURB AND GUTTER 31" ①

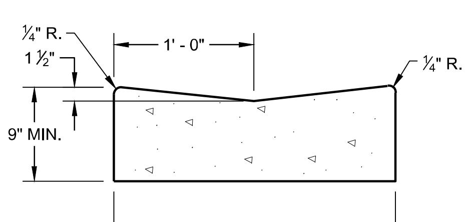
*TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



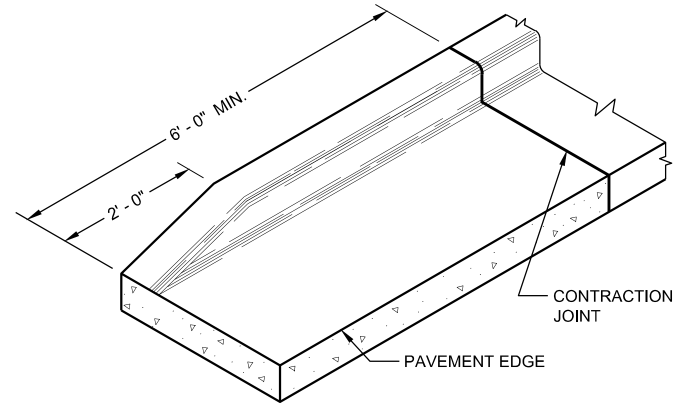
CONCRETE CURB AND GUTTER 22" ①



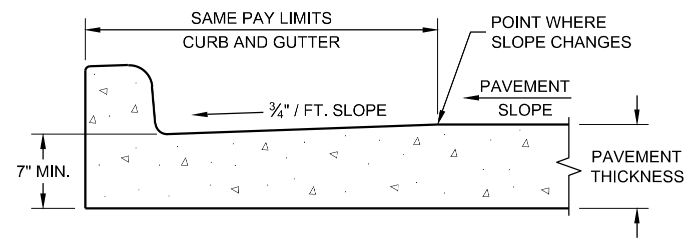
CONCRETE CURB AND GUTTER 19" ①



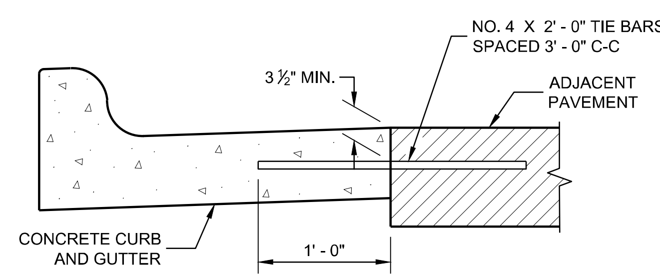
CONCRETE GUTTER 24" ①



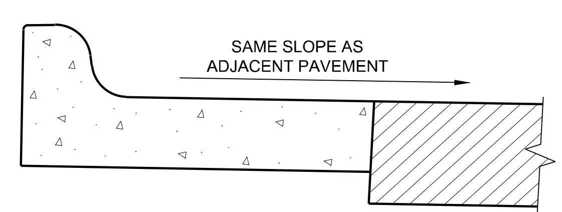
END SECTIONCURB AND GUTTER



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER



TYPICAL TIE BAR LOCATION ①



HIGH SIDE SECTION ③

(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

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

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

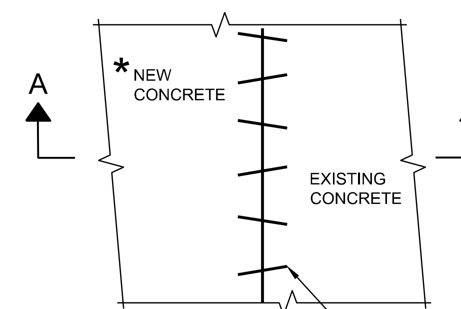
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

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

① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUITED FOR CURB AND GUTTER 31", 22", 19" AND CONCRETE GUTTER 24".

② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MINIMUM GUTTER THICKNESS IS MAINTAINED.

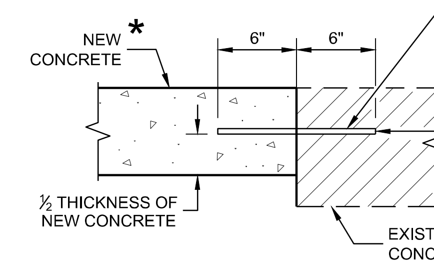
③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLANS



*EXISTING AND NEW CONCRETE MAY BE CURB AND GUTTER, SURFACE DRAINS, PAVEMENT OR OTHER CONCRETE STRUCTURE.

PLAN VIEW

NO. 6 X 12" DEF. BARS SPACED 3' - 0" C-C, INSTALLED ON 6:1 SKEW HORIZONTALLY. DIRECTION OF SKEW ALTERNATING AFTER EVERY ONE OR TWO BARS.



THE HOLE FOR THE BAR SHALL BE DRILLED TO A DEPTH OF 7" AND TO A DIAMETER TO PROVIDE A TIGHT DRIVEN FIT.

SECTION A - A

PAVEMENT TIES

6

6

CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES

(For Optional use in Milwaukee Co. Only)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

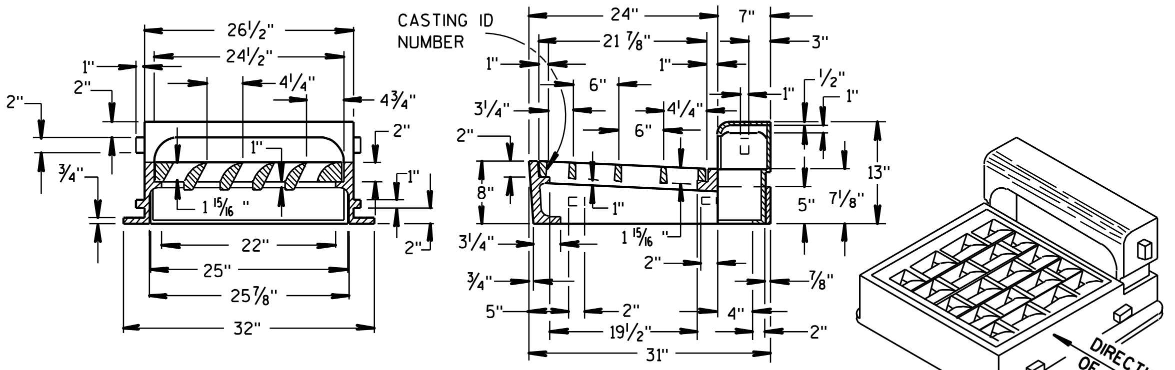
APPROVED	
February 2020	/S/ Rodney Taylor
DATE	ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

SDD 08D16 - 11

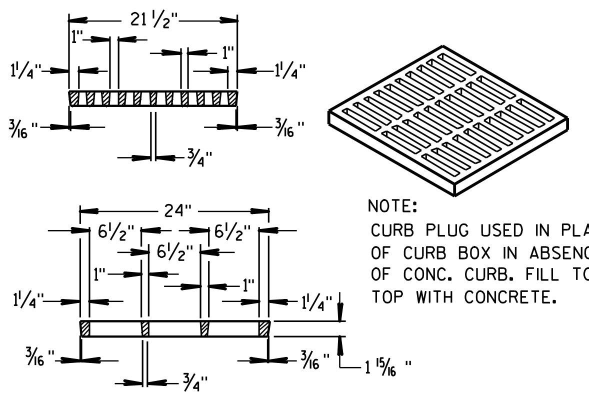
SDD 08D16 - 11

INLET COVERS



TYPE "R"

SHOWING SPECIAL GRATE NO. 1
(TO BE NOTED AS R-1 IN DRAINAGE TABLE)

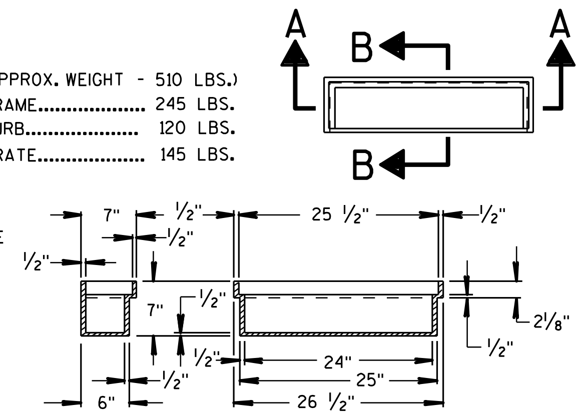


GRATE FOR TYPE "R" INLET COVER

(GRATE.................150 LBS.)
(TO BE USED UNLESS OTHERWISE NOTED IN DRAINAGE TABLE)

(APPROX. WEIGHT - 510 LBS.)
FRAME.................. 245 LBS.
CURB.................... 120 LBS.
GRATE.................. 145 LBS.

NOTE:
CURB PLUG USED IN PLACE OF CURB BOX IN ABSENCE OF CONC. CURB. FILL TO TOP WITH CONCRETE.

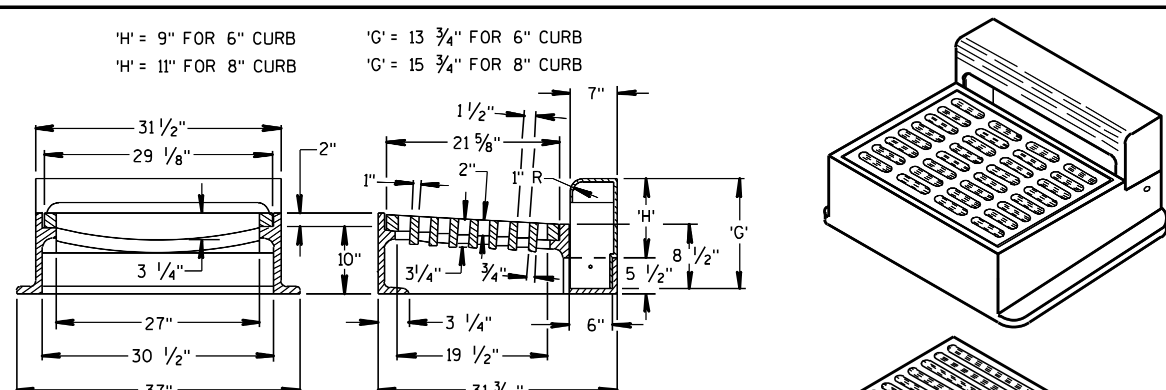


SECTION B-B SECTION A-A

SPECIAL CURB PLUG "P"

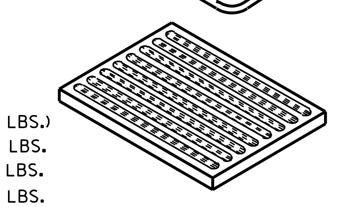
(CURB PLUG.............85 LBS.)
(TO BE NOTED AS R-P IN DRAINAGE TABLE)

'H' = 9" FOR 6" CURB
'H' = 11" FOR 8" CURB
'G' = 13 3/4" FOR 6" CURB
'G' = 15 3/4" FOR 8" CURB



TYPE "W"

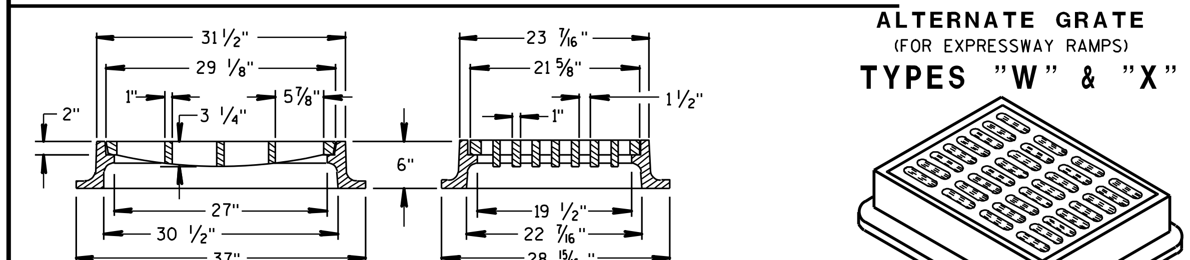
(APPROX. WEIGHT - 670 LBS.)
FRAME.................. 350 LBS.
CURB BOX............ 135 LBS.
GRATE.................. 185 LBS.



ALTERNATE GRATE

(FOR EXPRESSWAY RAMPS)

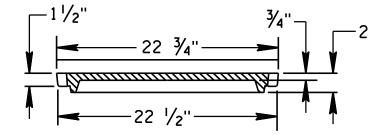
TYPES "W" & "X"



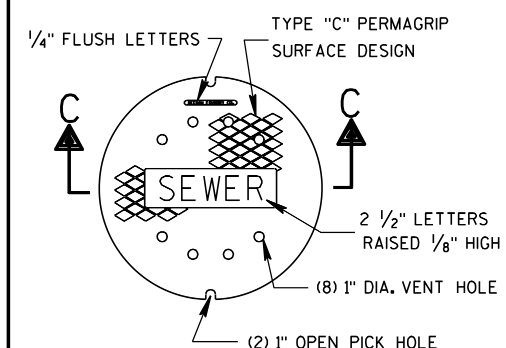
TYPE "X"

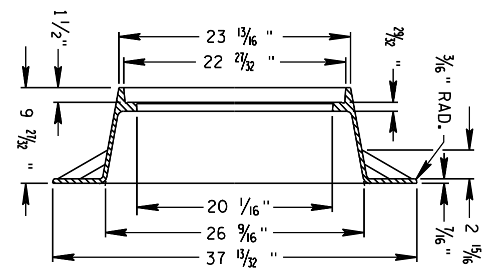
(APPROX. WEIGHT - 470 LBS.)

MANHOLE COVER



SECTION C-C





TYPE "Q"

(APPROX. WEIGHT - 290 LBS.)

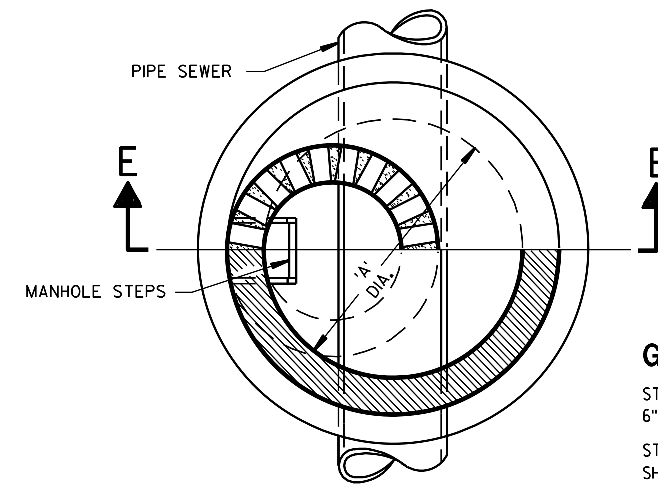
TABLE OF DIMENSIONS

TYPE	'A'	'B'	'C'
11	3'-6"	2'-8"	12" - 36"*
12	4'-0"	3'-8"	12" - 42"**
13	5'-0"	5'-8"	42" - 48"
14	6'-0"	7'-8"	54" - 60"

* 12" - 21" FOR PRECAST MANHOLES
** 12" - 24" FOR PRECAST MANHOLES

THE FIRST STEP SHALL BE PLACED 16" ABOVE THE BENCH.

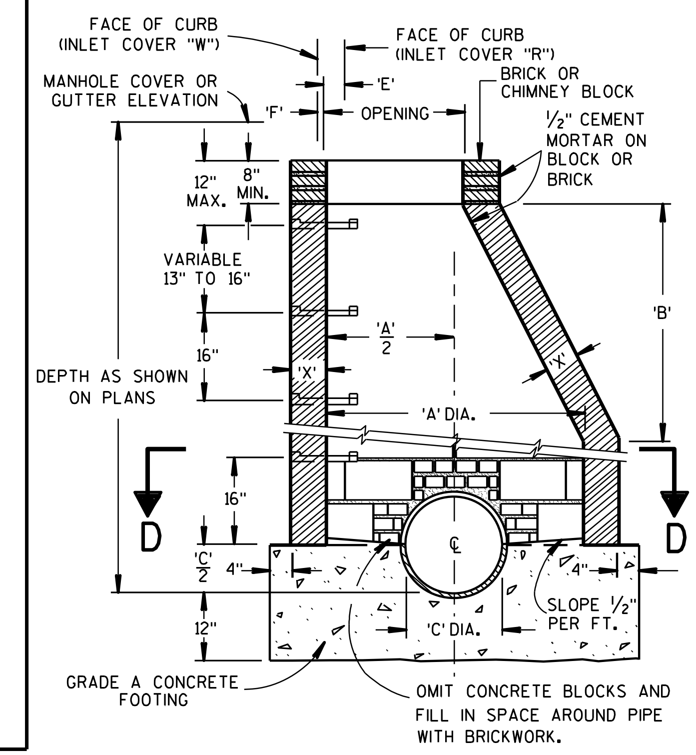
MANHOLE



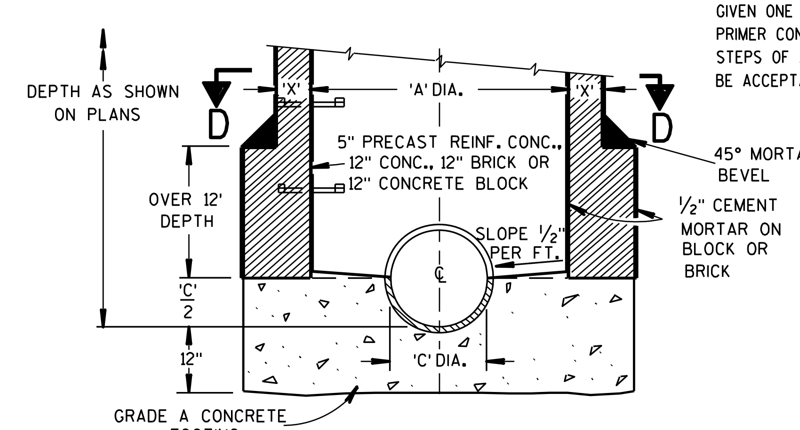
HALF SECTION D-D

TABLE OF OPENING DIMENSIONS

COVER				
TYPE	DESCRIPTION	OPENING	'E'	'F'
"Q"	ROUND	2'-2" DIA.	—	—
"W"	CURB BOX	1'-8" X 2'-6"	—	1"
"X"	INLET	1'-10" X 2'-6"	—	—
"R"	CURB BOX	2'-0" X 2'-1"	4"	—



SECTION E-E



SECTION E-E

TYPES 11, 12, 13 & 14

GENERAL NOTES

STRUCTURE WALL THICKNESS 'X' TO BE 8" BRICK, 6" CONCRETE BLOCK, 6" GRADE A CONCRETE OR 5" PRECAST REINFORCED CONCRETE.

STRUCTURE FOOTINGS ARE TO BE GRADE A CONCRETE OF THE THICKNESS SHOWN IN THE DETAIL OR 5" PRECAST REINFORCED CONCRETE.

REINFORCEMENT FOR 5" PRECAST REINFORCED CONCRETE SHALL BE 6" X 6" W16 X W16 WELDED SREEL WIRE FABRIC AND SHALL BE EMBEDDED 2" CLEAR.

PRECAST INLET UNITS AND BASES SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

PRECAST CONCRETE FLAT SLAB TOPS MAY BE USED ON THE STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6" IN DEPTH, WHICH MEETS THE REQUIREMENTS FOR GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

SET FRAME ELEVATION 0.03 FT. LOWER THAN ELEVATION INDICATED ON THE PLANS.

THE CONTRACTOR MAY FORM AND POUR MONOLITHIC CONCRETE INVERT PROVIDED THE PIPE ENDS ARE EXTENDED INTO THE M.H. AND NOT TERMINATED WITHIN THE M.H. WALLS.

MANHOLE STEPS

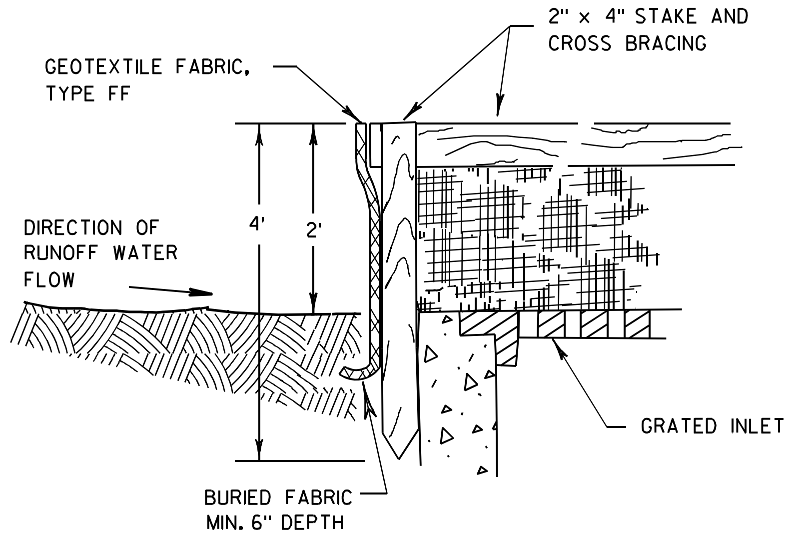
STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH; 16 INCH C-C MAX. SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM WALL EMBEDMENT OF 3 INCHES IN PRECAST MANHOLE AND 6 INCHES IN 8 INCH BRICK OR 6 INCH BLOCK MANHOLE; TREAD OF STEP SHALL HAVE A NON-SKID SURFACE AND BE FLANKED BY CLEATS, WITH A MINIMUM OF 10 INCHES CLEAR BETWEEN CLEATS, TO PREVENT FOOT SLIPPING OFF THE EDGE CLEATS SHALL BE A MINIMUM OF 3/4 INCH HIGH BY 3/4 INCH WIDE HAVING A MINIMUM THICKNESS OF 3/8 INCH. STEPS SHALL BE CAPABLE OF SUPPORTING A CONCENTRATED LOAD OF 300 LBS. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

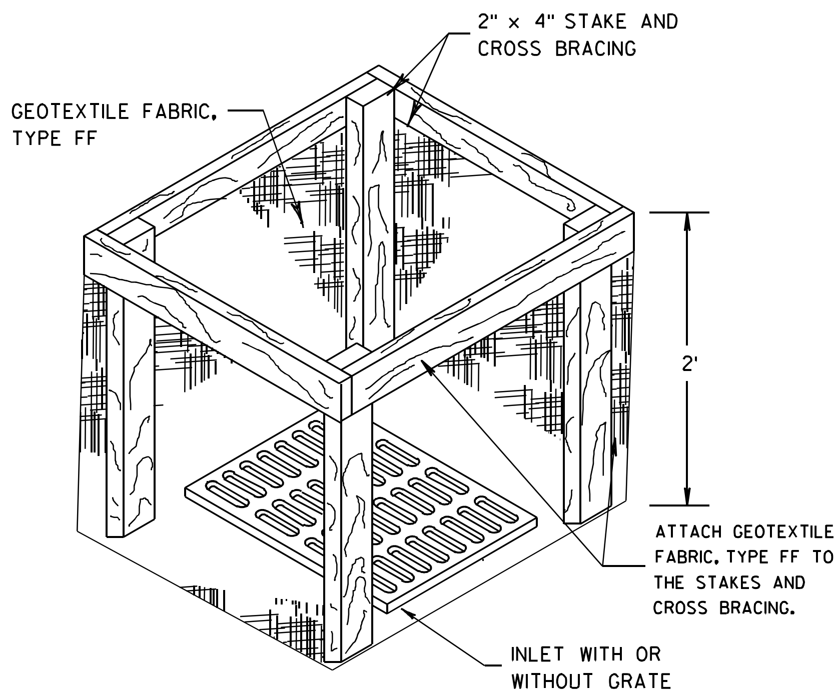
SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 0.75 INCH. ALUMINUM SURFACES TO BE EMBEDDED IN CONCRETE SHALL BE GIVEN ONE COAT OF SUITABLE QUALITY PAINT, SUCH AS ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645 OR EQUIVALENT. STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCING BAR WILL BE ACCEPTABLE.

MANHOLES, MANHOLE & INLET COVERS

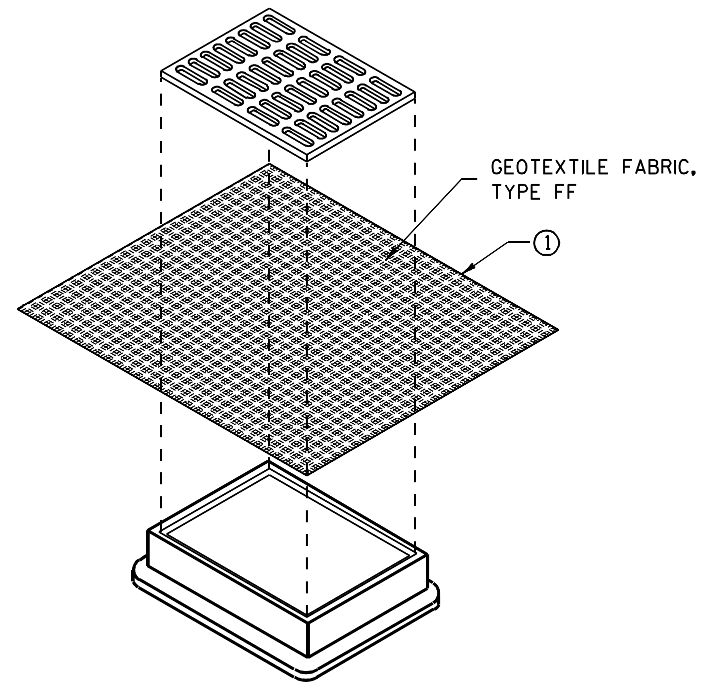
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/12/2011 — DATE
/S/ Jerry H. Zogg — ROADSIDE STANDARDS ENGINEER
FHWA



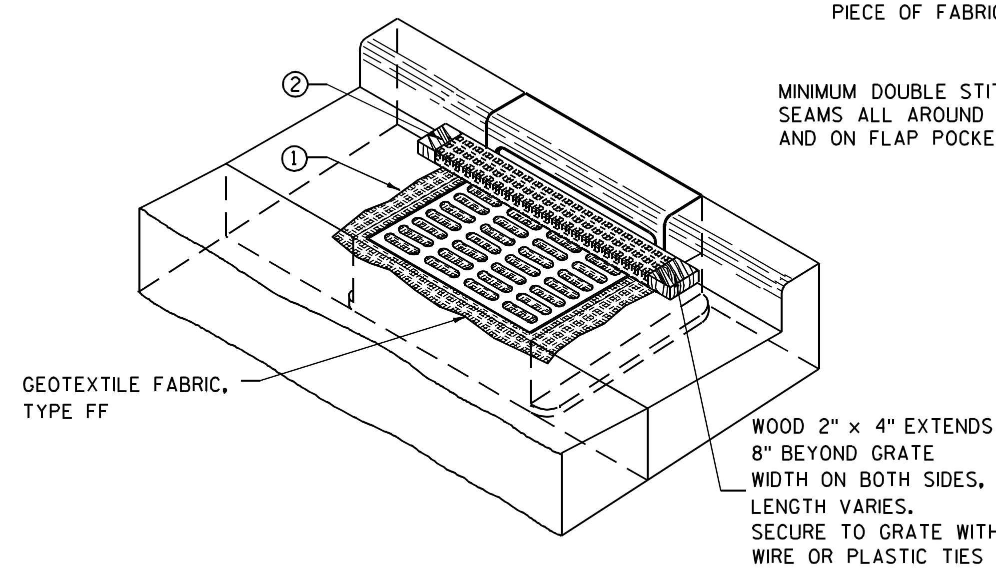


INLET PROTECTION, TYPE A

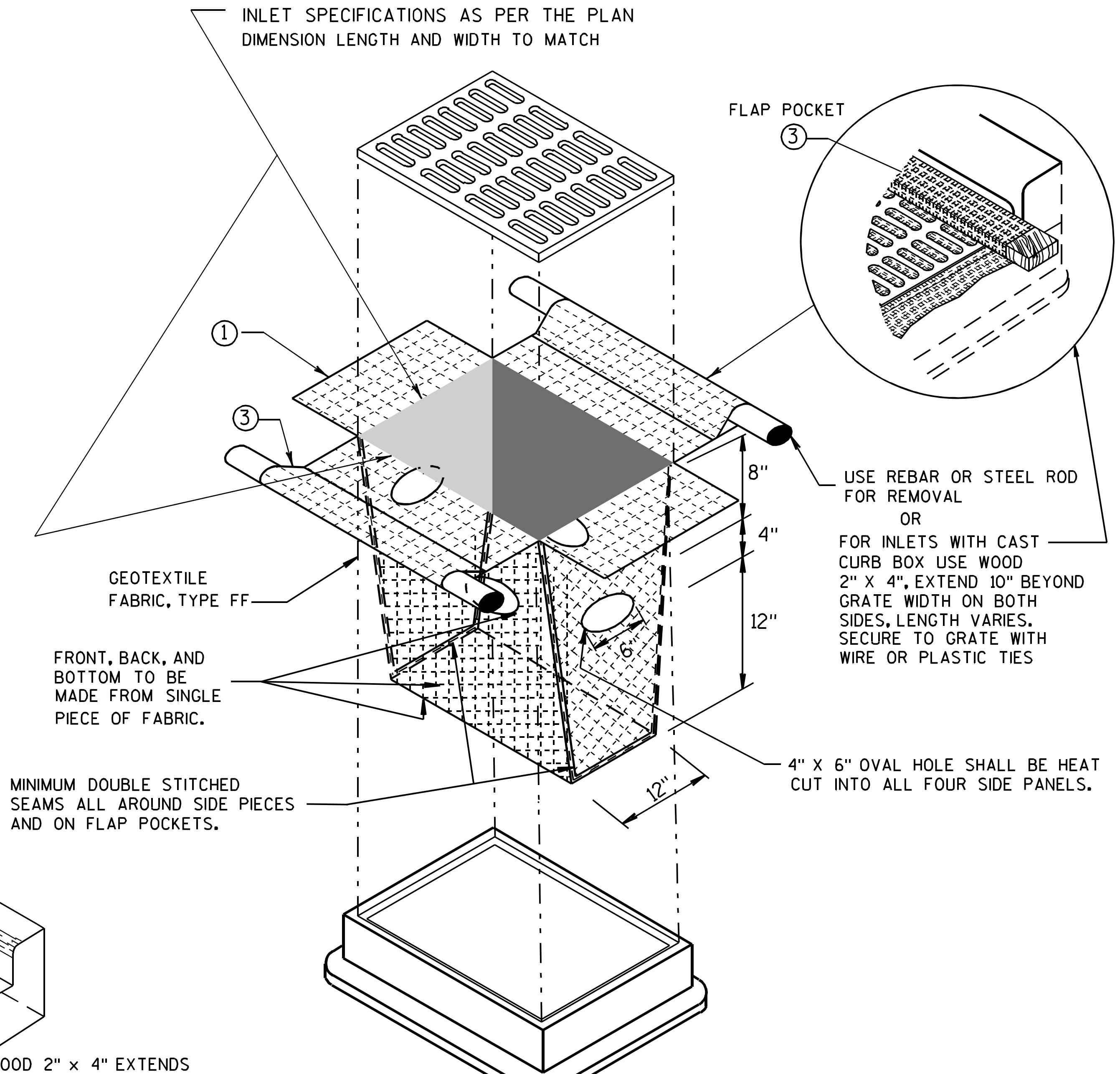


INLET PROTECTION, TYPE B (WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

6

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

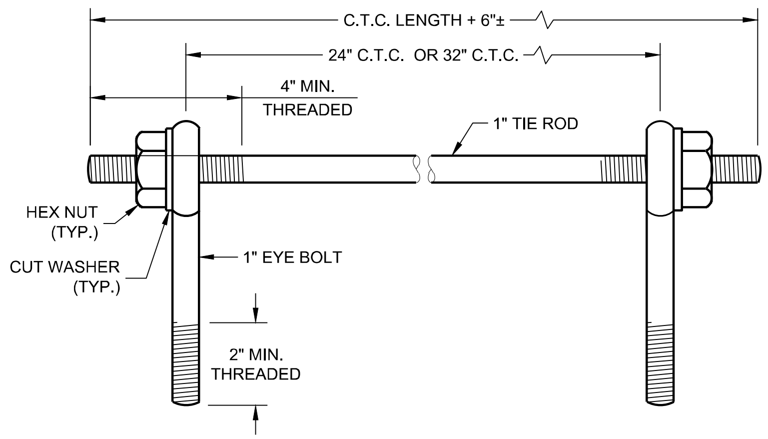
DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

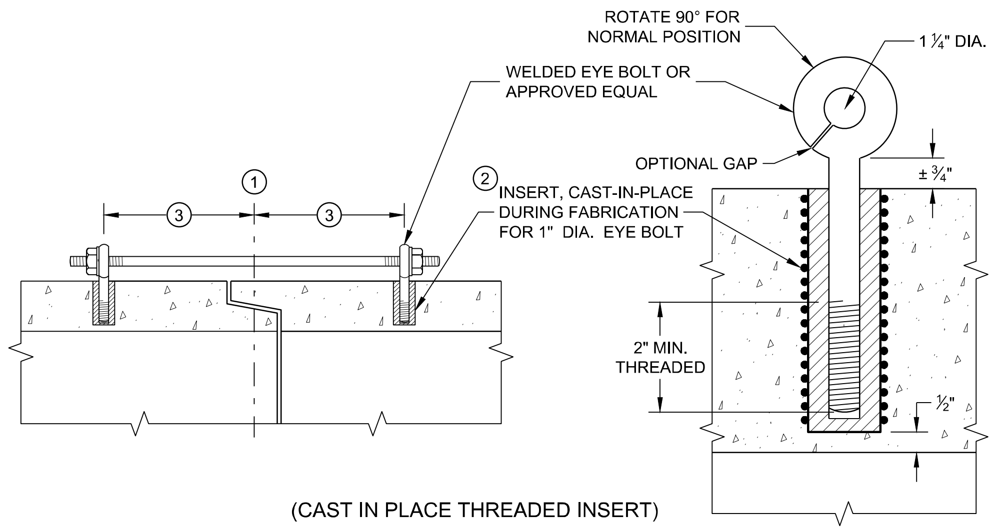
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE 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

S.D.D. 8 E 10-2



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.

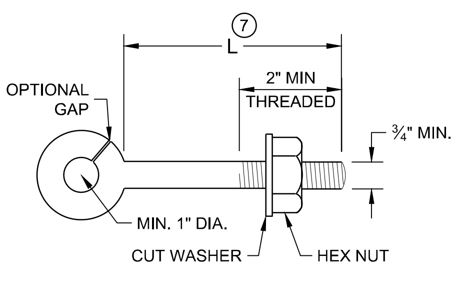
3 HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

5 OPENING TO BE ROD DIAMETER PLUS 1 INCH.

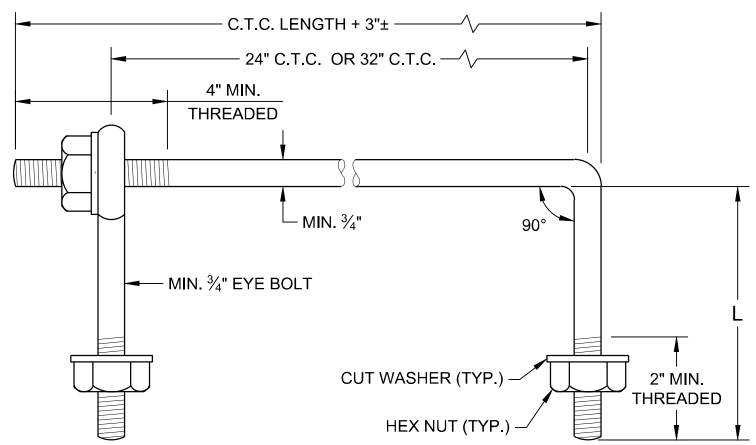
6 LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

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

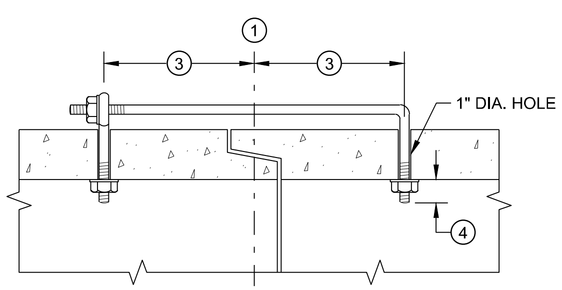


EYE BOLT 7

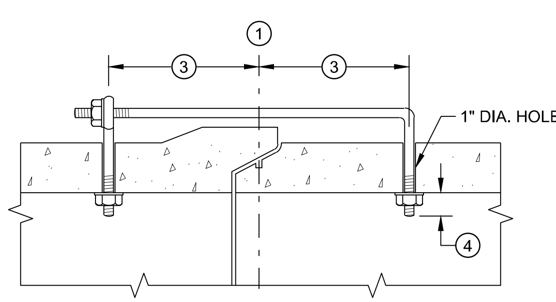
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

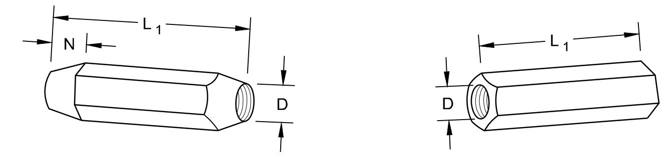
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

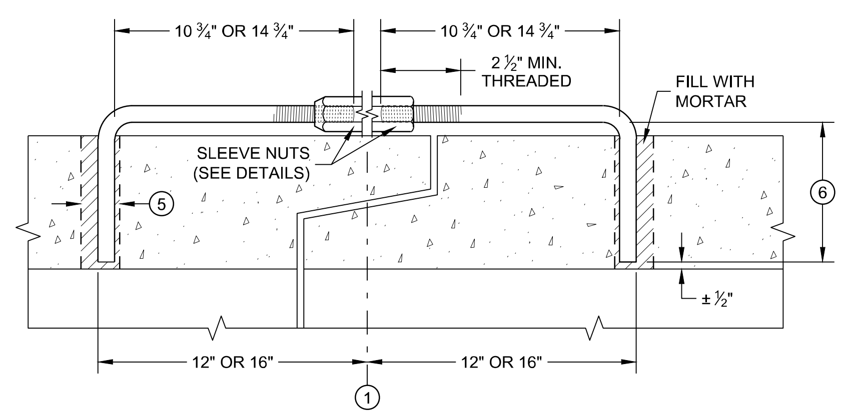
PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 $\frac{7}{16}$

DIMENSIONS SHOWN ARE IN INCHES



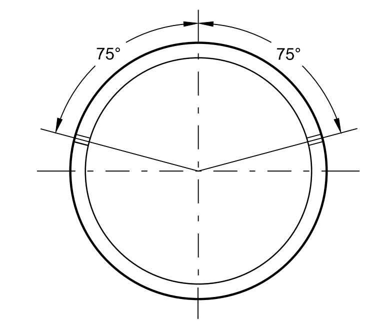
RIGHT AND LEFT THREADS

SLEEVE NUTS



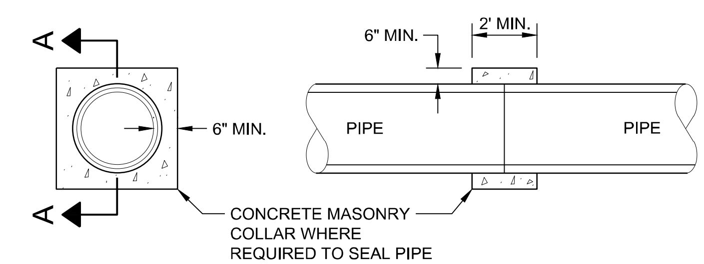
LONGITUDINAL SECTION

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



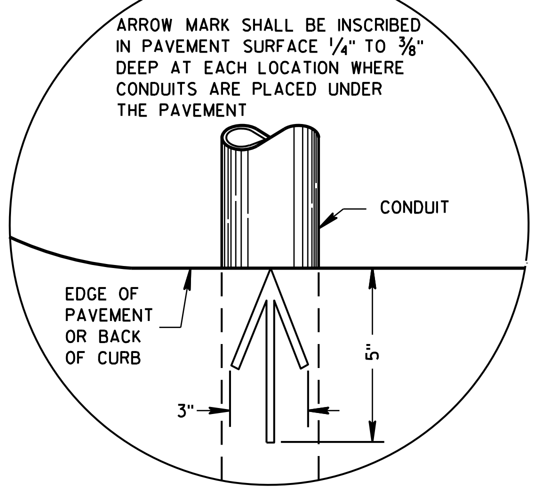
SECTION A - A

CONCRETE COLLAR DETAIL

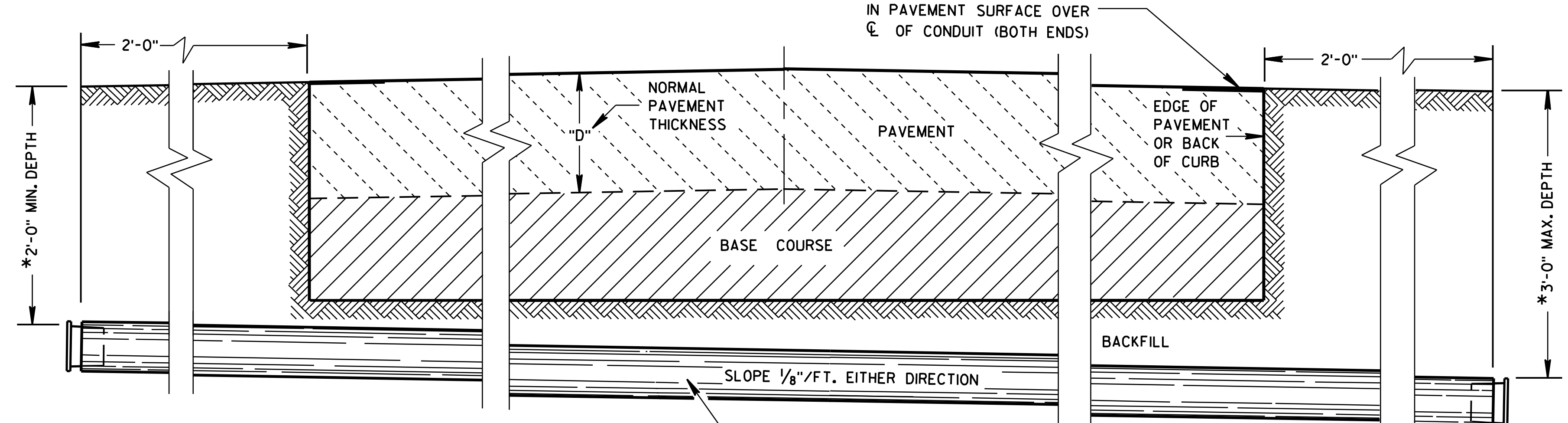
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



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.

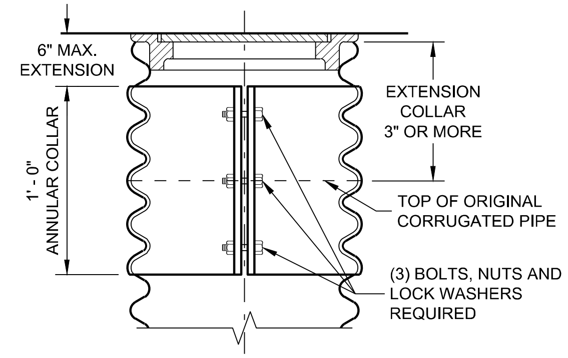
ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

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.).

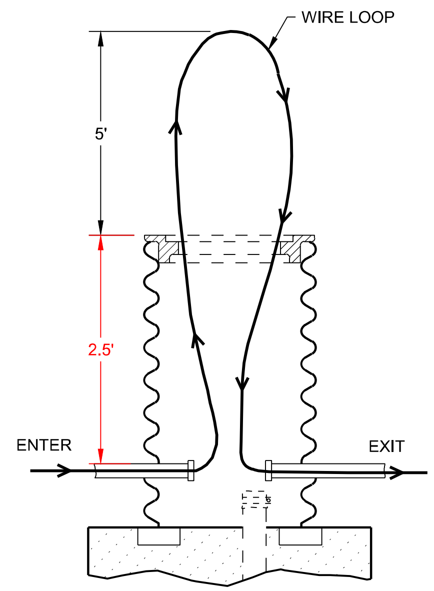
TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

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.

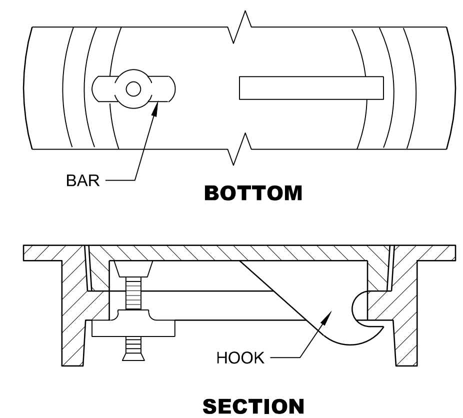
CONDUIT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March, 2017 DATE FHWA	/S/ Ahmet Demirbilek STATE ELECTRICAL



CORRUGATED PIPE EXTENDER



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

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

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

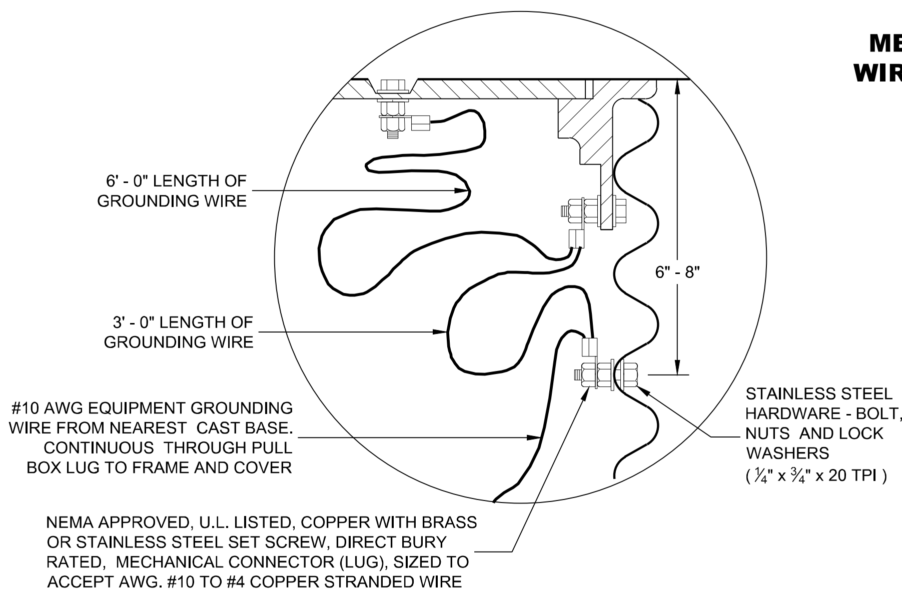
WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

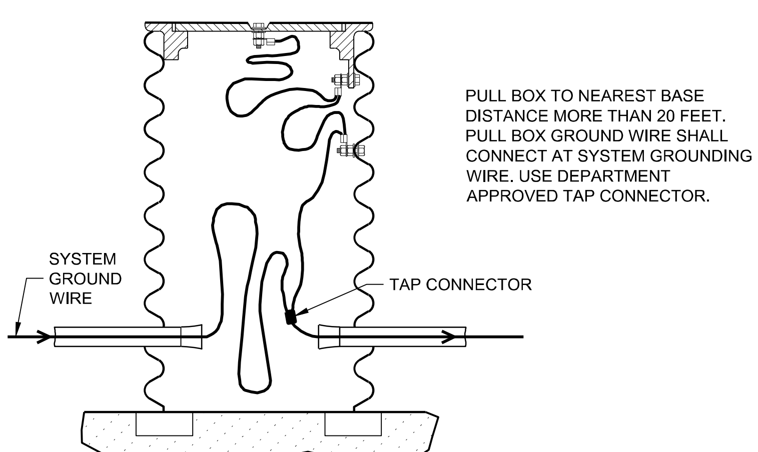
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH**	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 ¼	10 ¼	10 ¼	16 ¼	16 ¼	16 ¼	22 ¼	22 ¼	22 ¼
FRAME	E	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½	26 ½	26 ½	26 ½
FRAME	F	8 ½	8 ½	8 ½	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½
FRAME	G	11 ½	11 ½	11 ½	17 ½	17 ½	17 ½	23 ½	23 ½	23 ½
WEIGHT IN POUNDS*										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

*THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

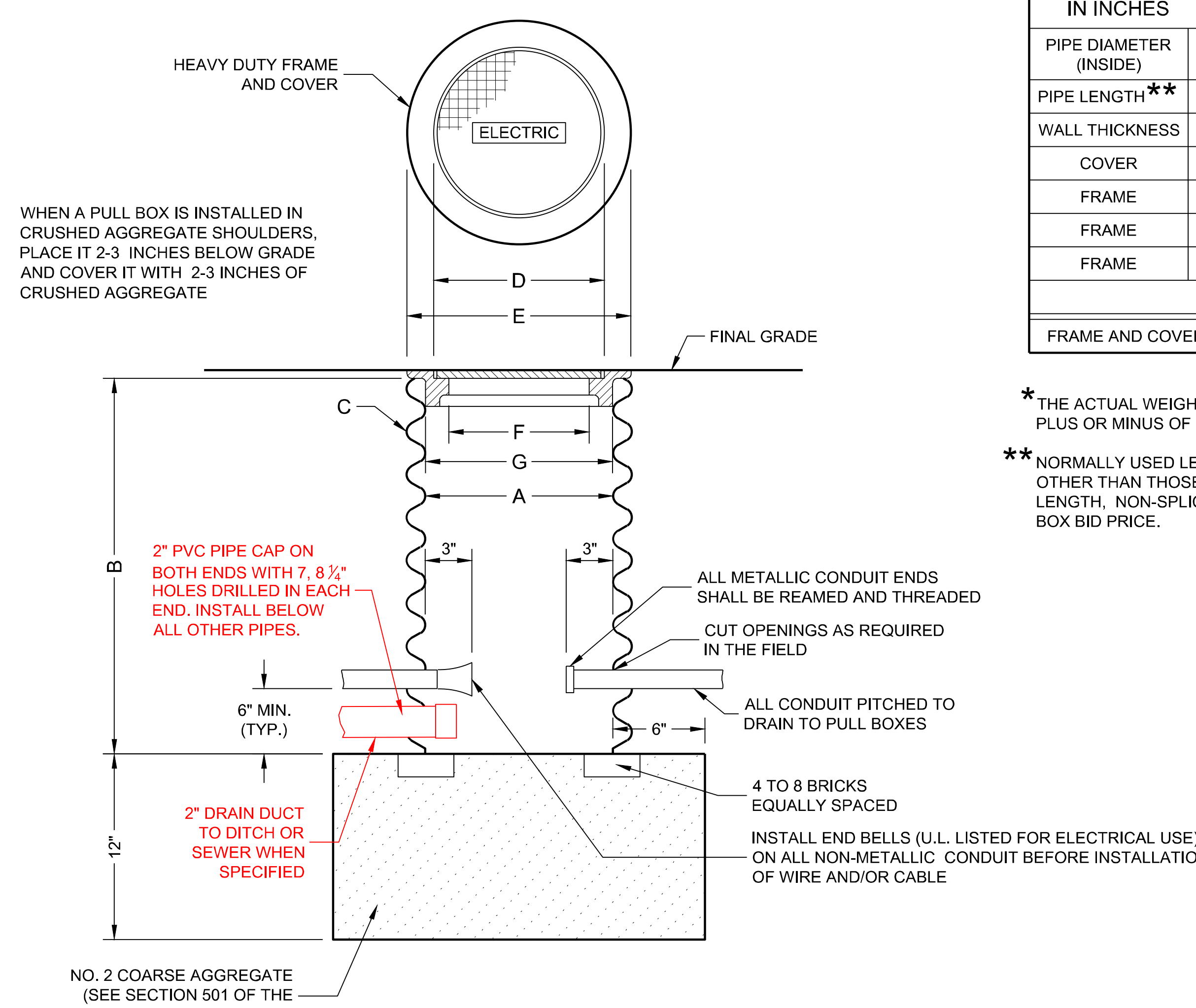
**NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

PULL BOX	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
May 2022	/S/ Ahmet Demirbilek
DATE	STATE ELECTRICAL ENGI

FHWA

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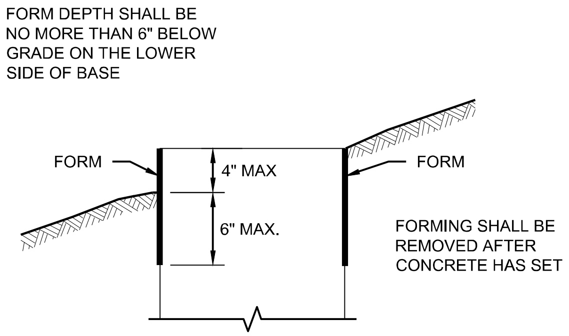
SDD 09B04 -12



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.

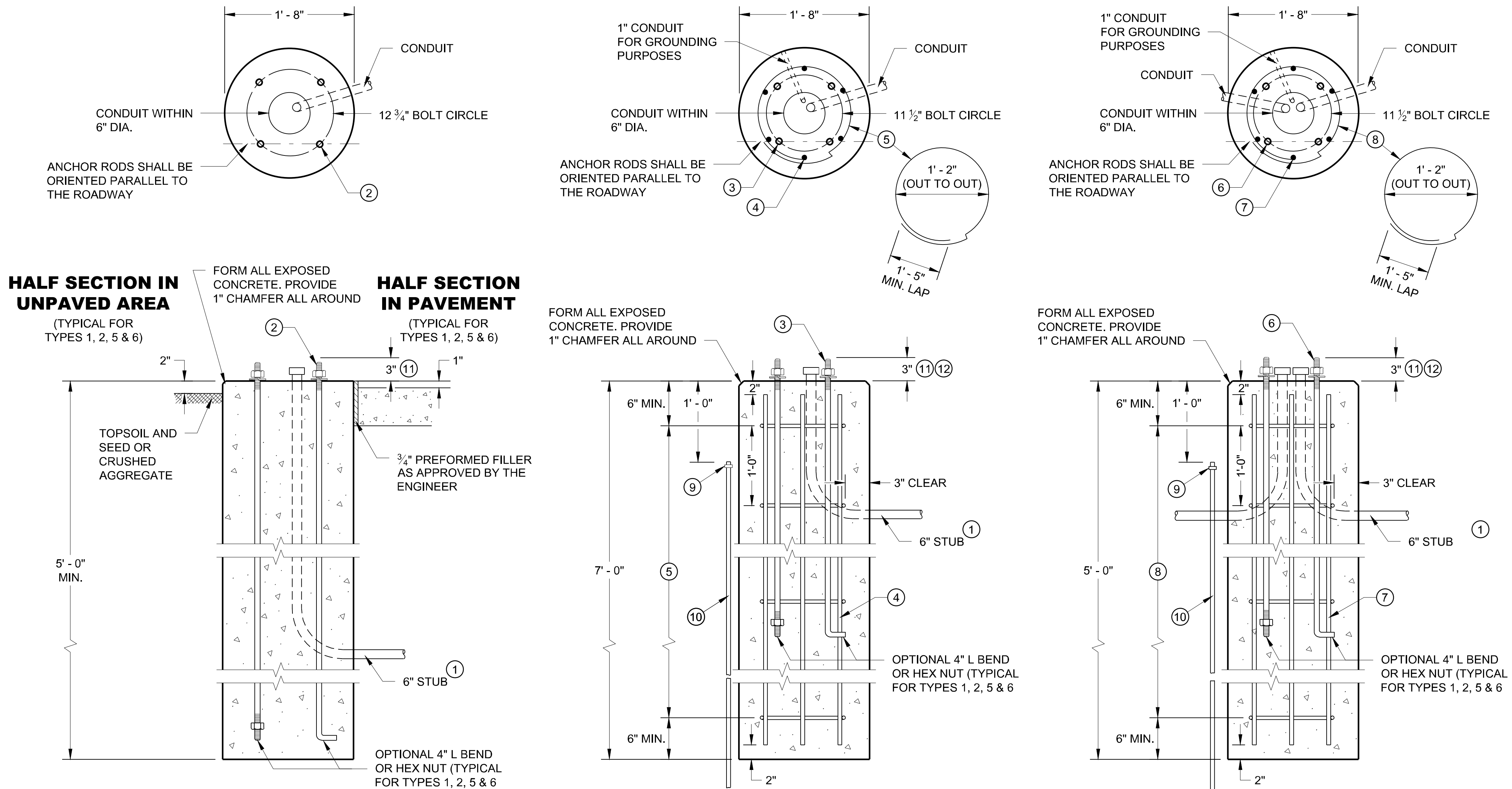
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

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.



CONCRETE BASES

6

6

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL ENGI

FHWA

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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.

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.

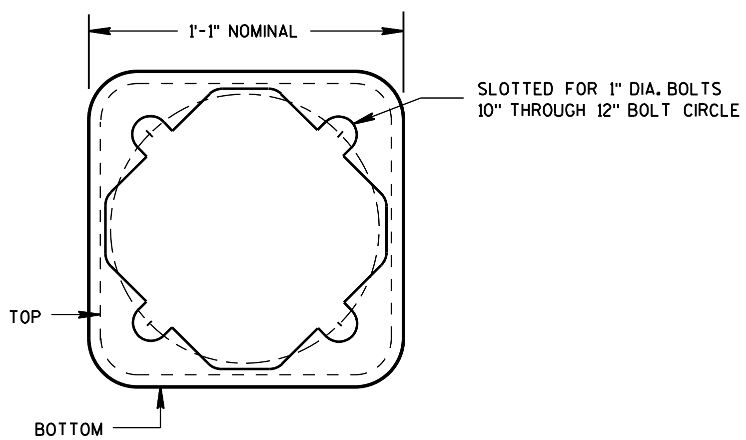
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

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.

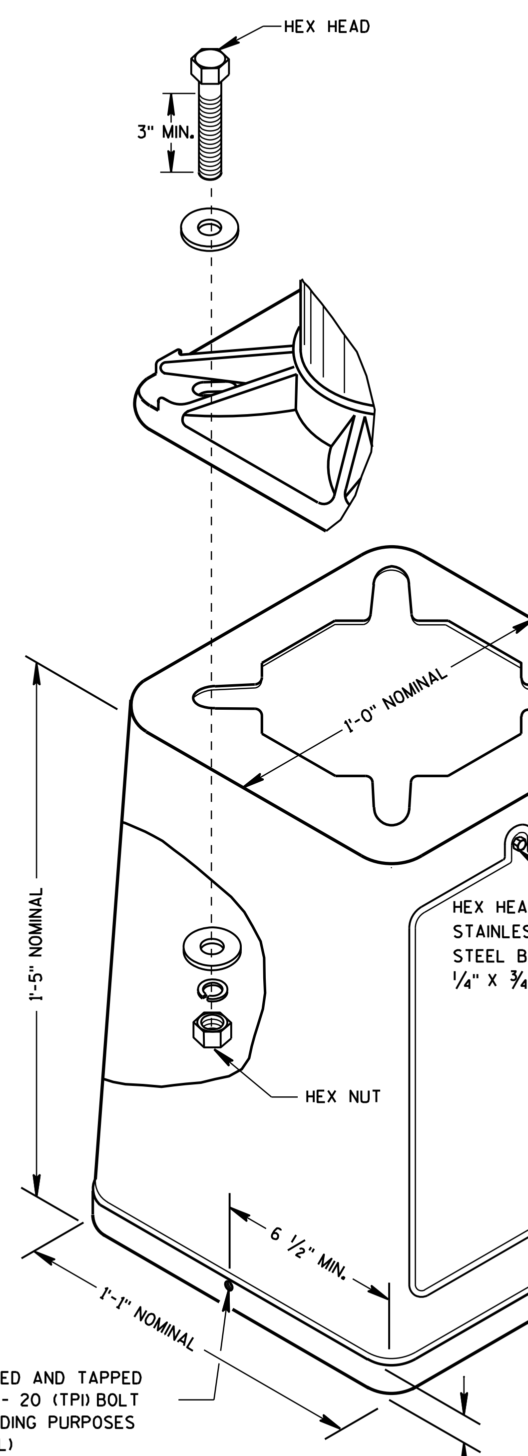
PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1½", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

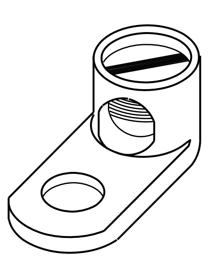
THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.



BOTTOM VIEW
(TRANSFORMER BASE)



ISOMETRIC VIEW

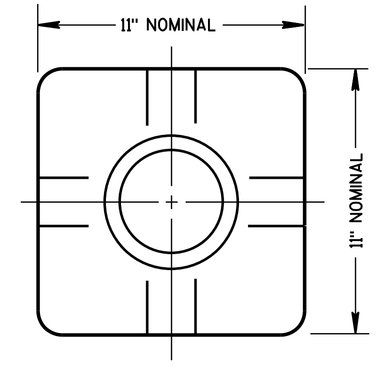


TYPICAL MECHANICAL CONNECTOR LUG

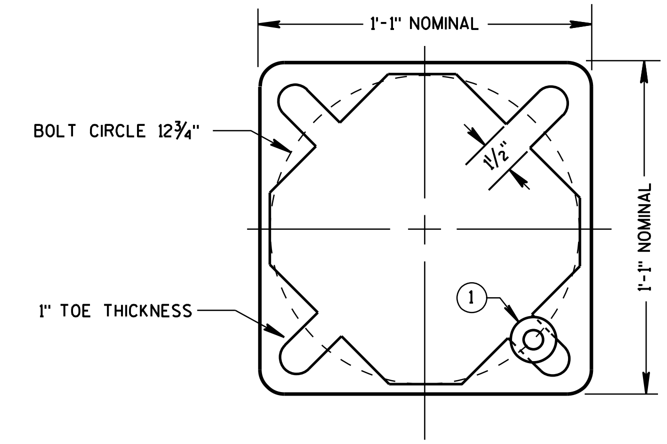
TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

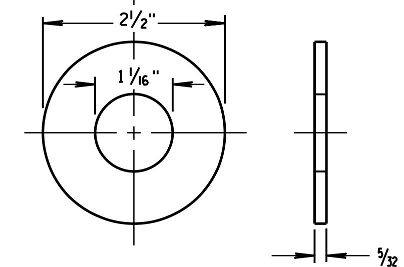
INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



TOP VIEW
(PEDESTAL BASE)

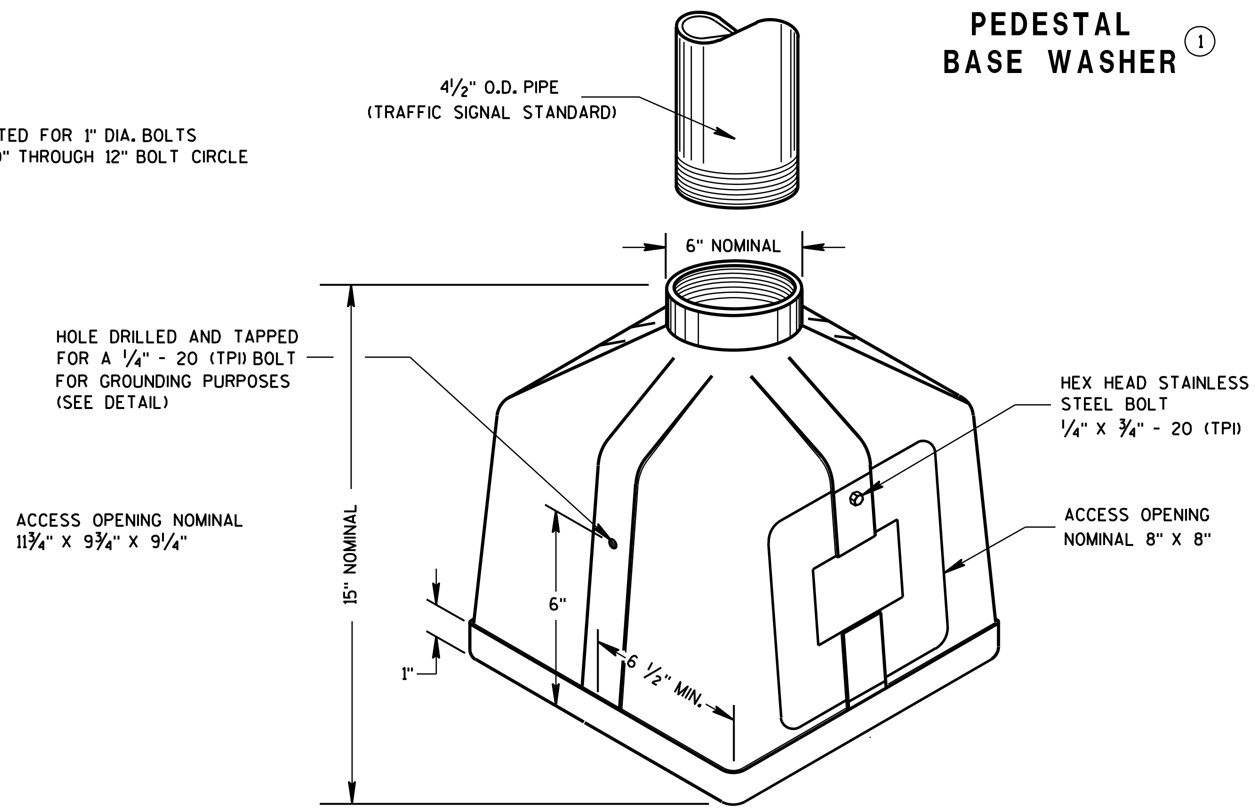


BOTTOM VIEW
(PEDESTAL BASE)



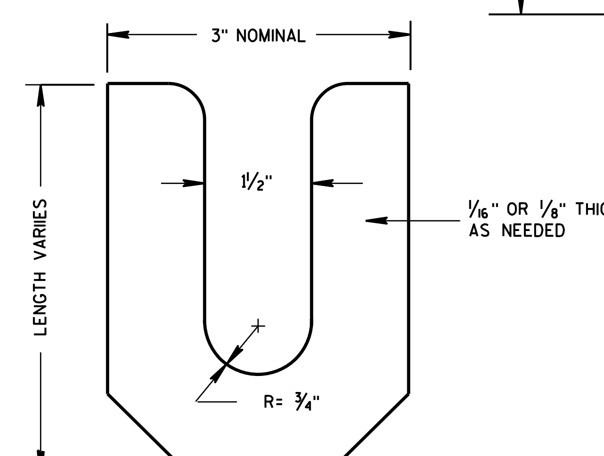
ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)



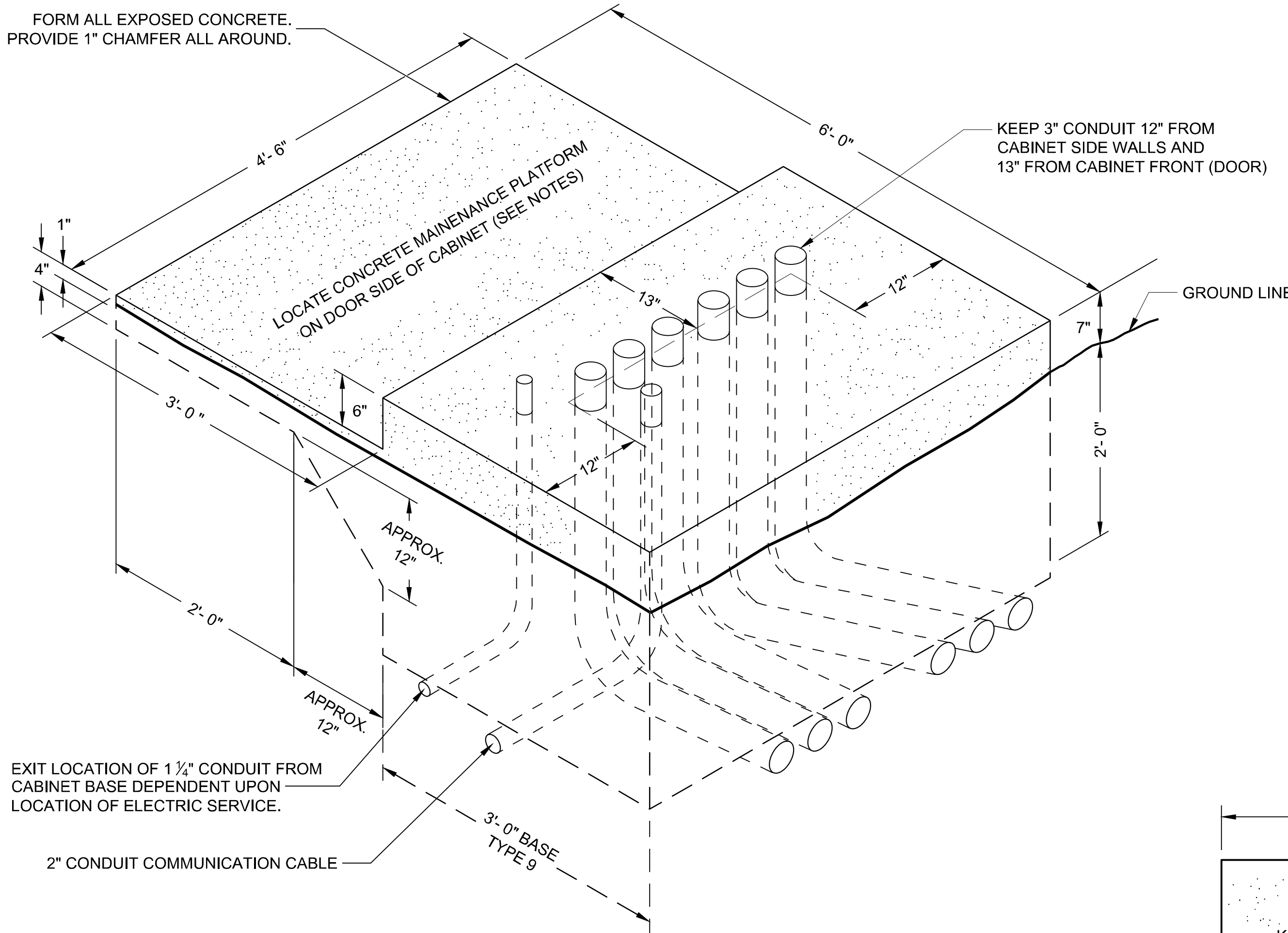
ISOMETRIC VIEW

PEDESTAL BASE



LEVELING SHIM

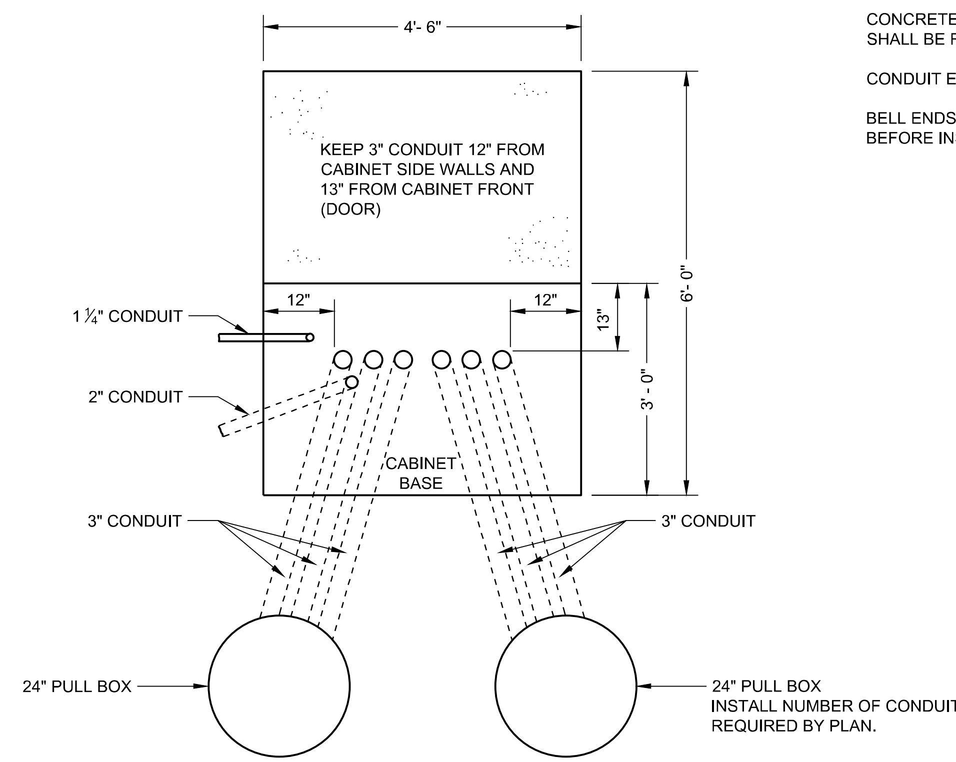
TRANSFORMER/PEDESTAL BASES
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED Sept. 2014 — /S/ Ahmet Demirbilek DATE — STATE ELECTRICAL FHWA



ISOMETRIC VIEW

TYPE 9 SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9 SPECIAL

GENERAL NOTES

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

INSTALL FOUR INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NON - METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U. L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND LEVEL.

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

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

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

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON - METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCHES MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

CONDUIT EXITING THE CONCRETE BASE (SIX 3") SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

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

6

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CONCRETE CONTROL CABINET BASE TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014 /S/ Ahmet Demerbilek
DATE STATE ELECTRICAL ENGI
FHWA

SDD 09C06 - 07

GENERAL NOTES

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

BASES (SHAFT), 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.

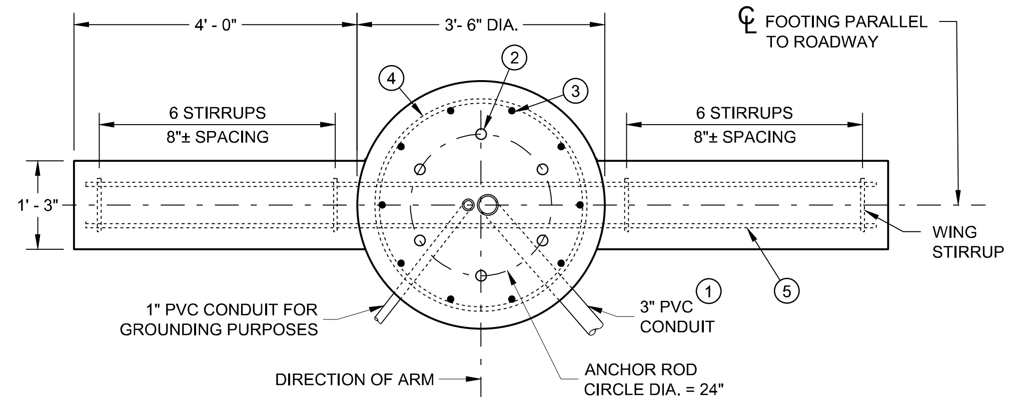
(2) (6) 1 ¾" DIA. X 7' - 2" ANCHOR RODS

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

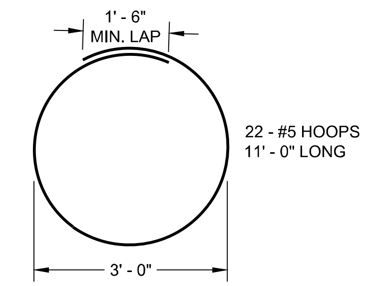
(4) (22) NO. 5 X 11'- 0" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

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

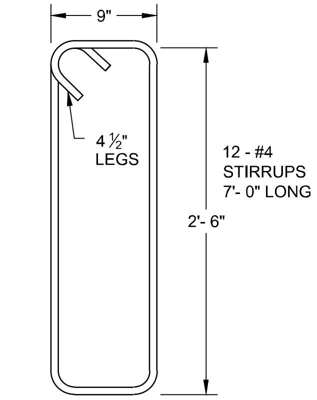
CONCRETE MASONRY...fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60......................fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE ....fy = 55,000 p.s.i.
WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)
TEMPLATES, ASTM A709, GRADE 36.......................................fy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



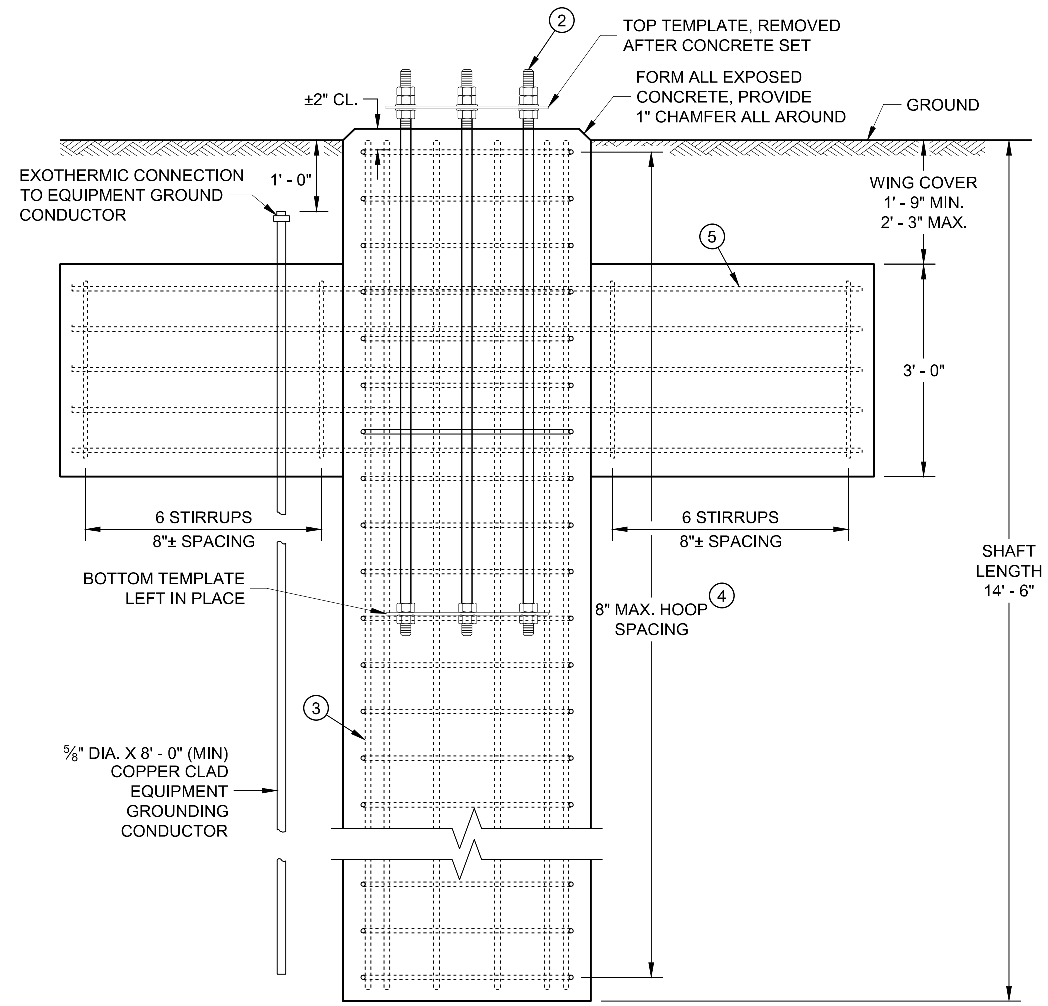
PLAN VIEW



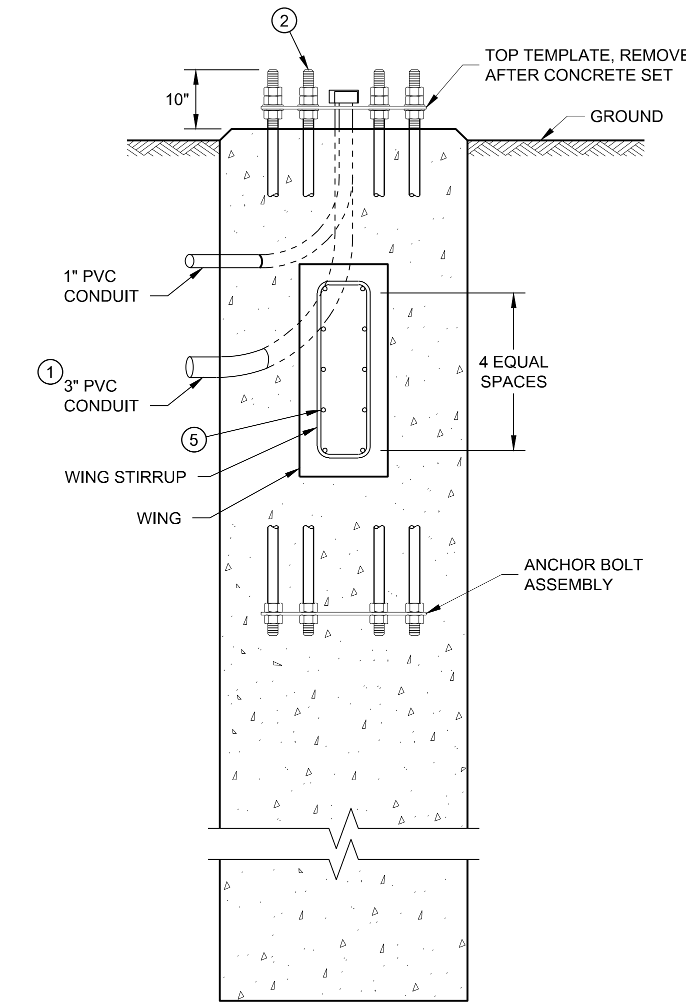
HOOP DETAIL



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)

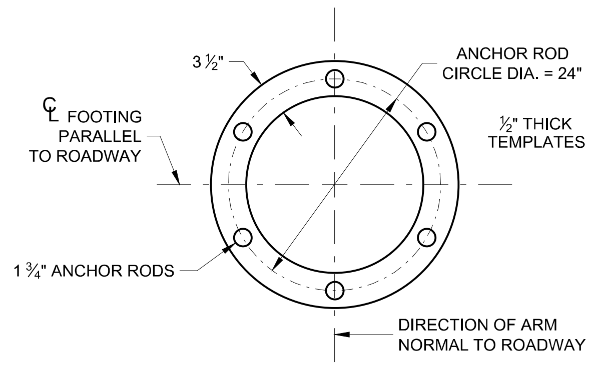
CONCRETE BASE, TYPE 13
(FOR TYPE 12, TYPE 13 AND OVER HEIGHT (OH) POLES)

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

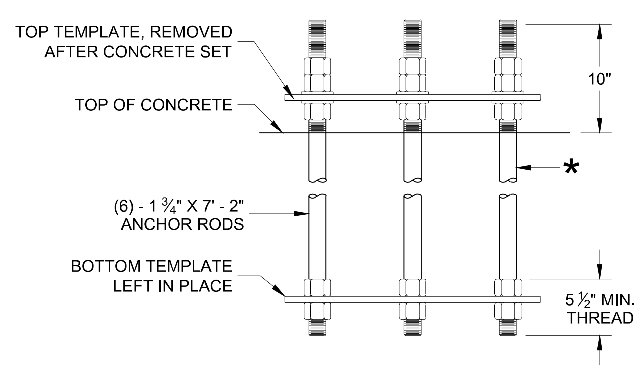
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE 9C13 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION

CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTAT

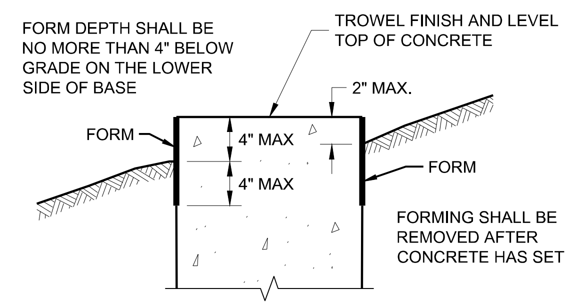


TOP AND BOTTOM TEMPLATE



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.



FORMING DETAIL

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CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2017 — DATE

/S/ Ahmet Demirbilek — WIND LOADED STRUCTU PROGRAM LEADER

FHWA

SDD 09C12 - 09b

SDD 09C12 - 09b

GENERAL NOTES

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

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

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

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

ANY DAMAGE TO THE CONCRETE BASE AND ANCHOR RODS DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

THE REINFORCEMENT AND ANCHOR RODS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

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

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

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

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

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

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

FORM ALL EXPOSED CONCRETE CORNERS WITH 1" CHAMFER ALL AROUND. TOP OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

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

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 ½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

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

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

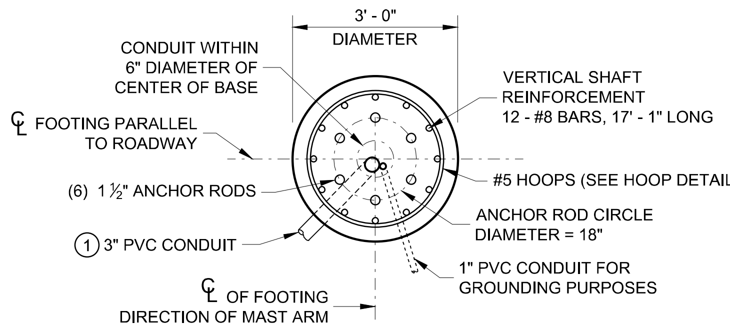
A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

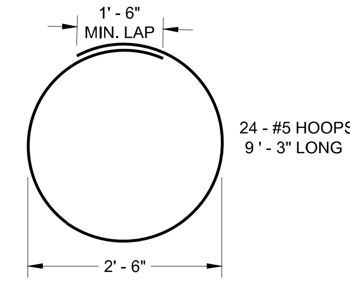
THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER RUN) EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

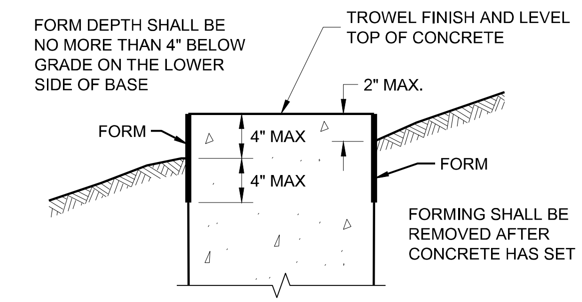
CONCRETE MASONRY..	fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60..................	fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)	fy = 55,000 p.s.i.
TEMPLATES, ASTM A709, GRADE 36..	fy = 36,000 p.s.i.



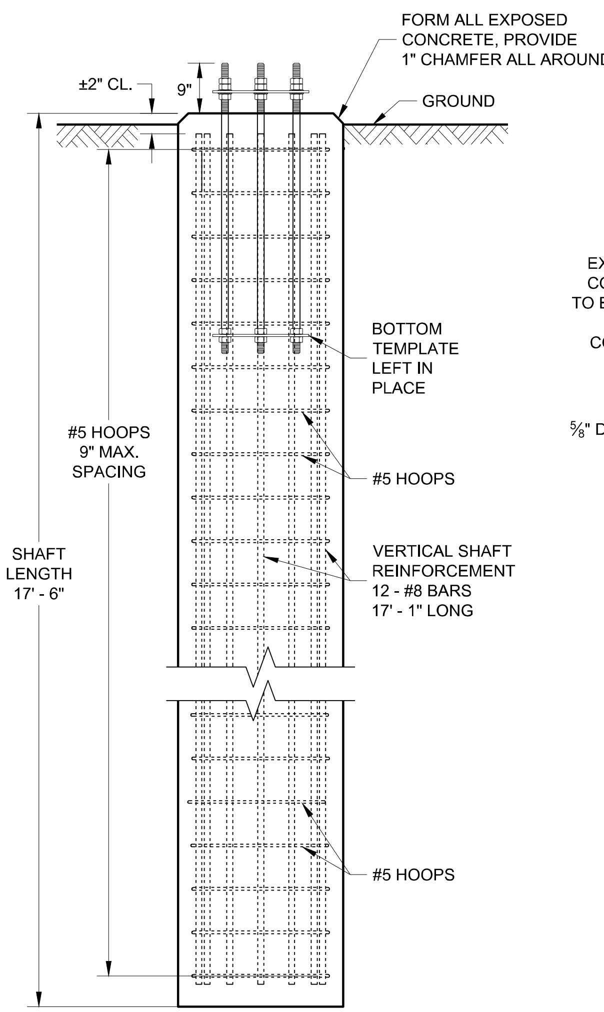
PLAN VIEW



HOOP DETAIL

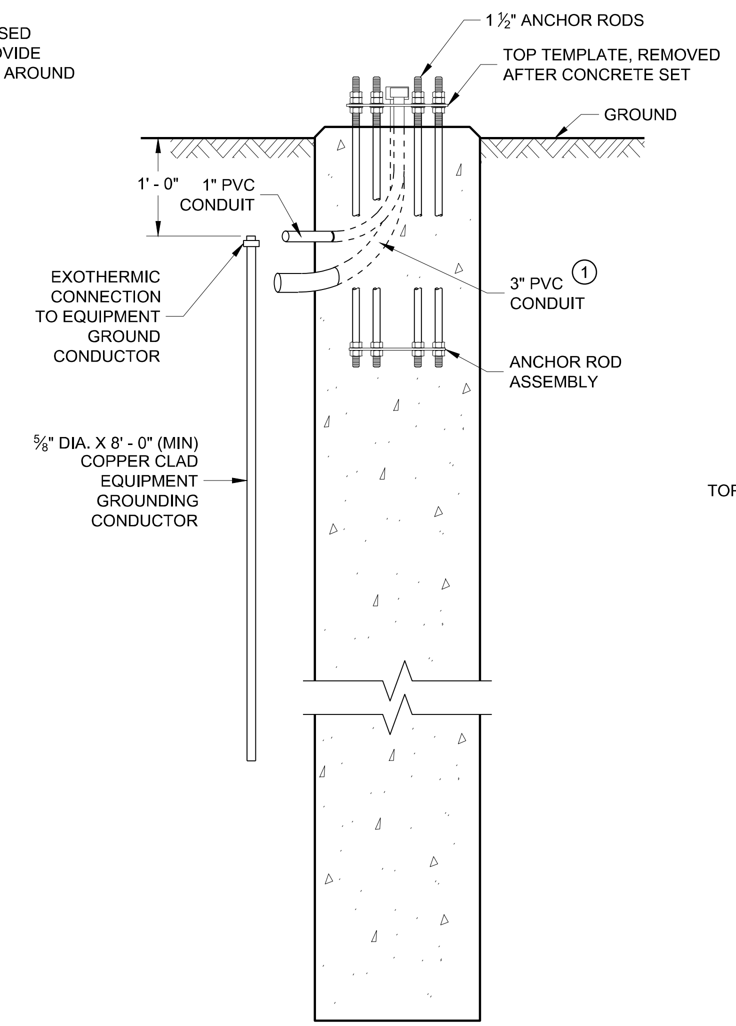


FORMING DETAIL



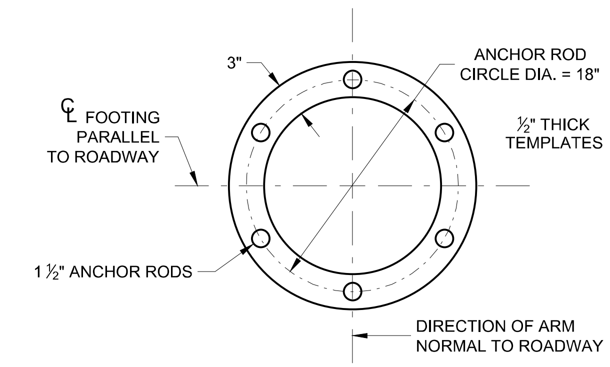
ELEVATION VIEW

(CONDUITS NOT SHOWN ON THIS VIEW FOR CLARITY)

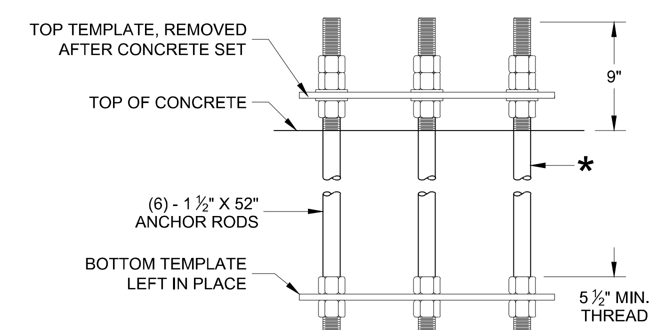


SIDE VIEW

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



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 10" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE, TYPE 10 SPECIAL
(FOR TYPE 9 SPECIAL AND TYPE 10 SPECIAL POLES)

CONCRETE = 4.6 CUBIC YARD
H.S. REINFORCEMENT = 779 LBS.

FOR USE WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.

CONCRETE BASE TYPE 10 SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 — DATE
/S/ Alex Crabtree — WIND LOADED STRUCTL PROGRAM LEADER
FHWA

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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 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.

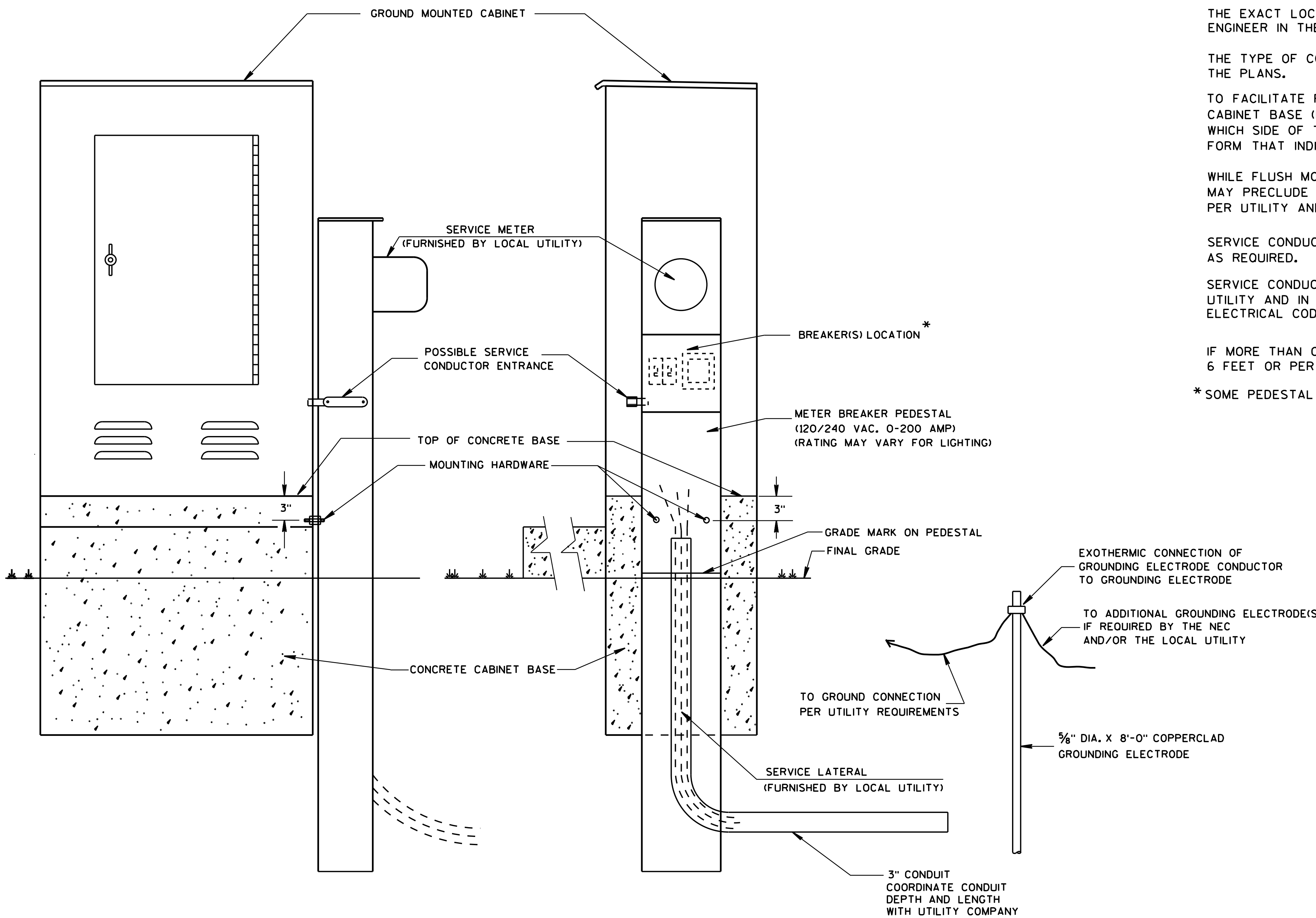
WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

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.



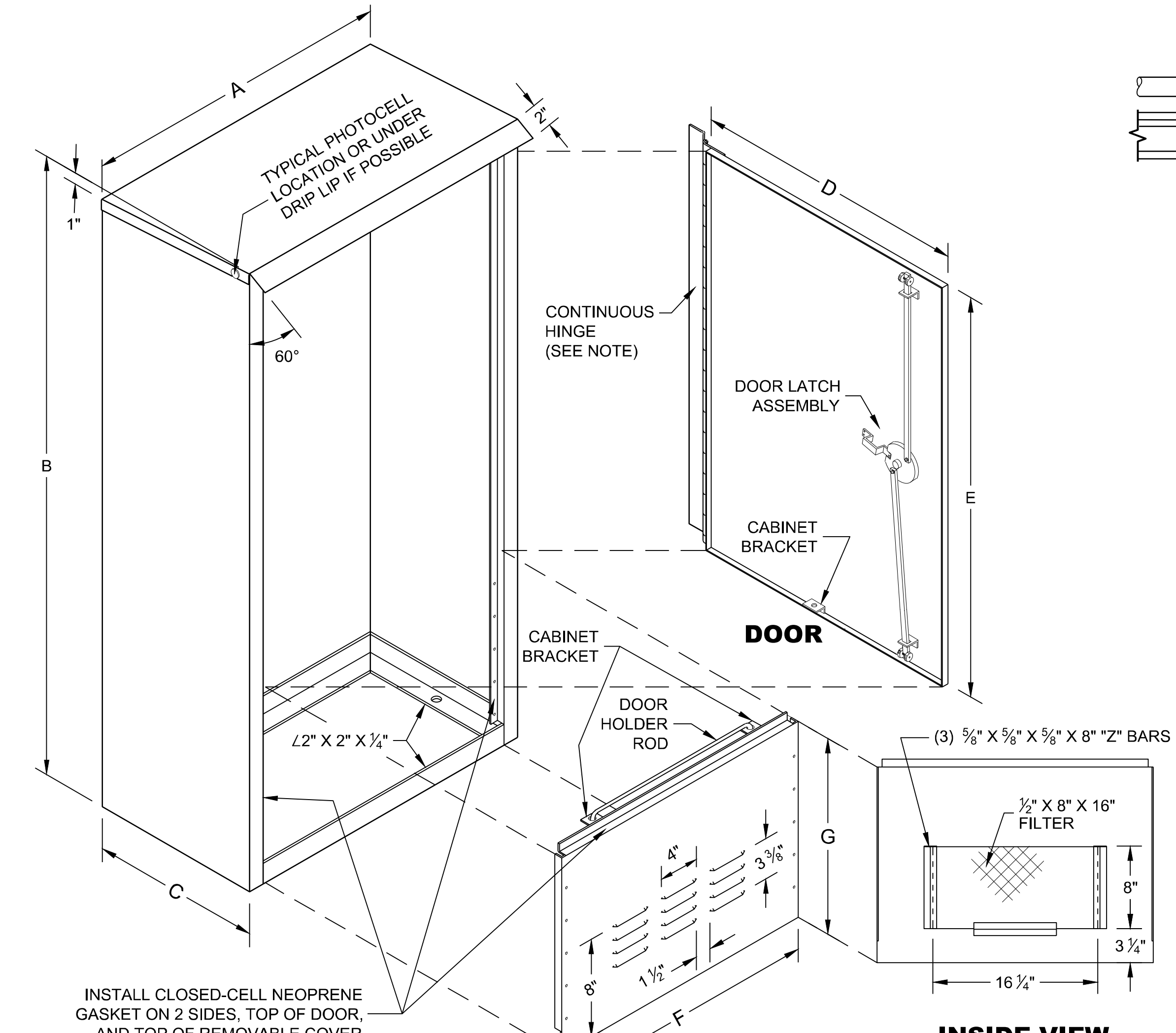
TYPICAL CABINET SERVICE INSTALLATION

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

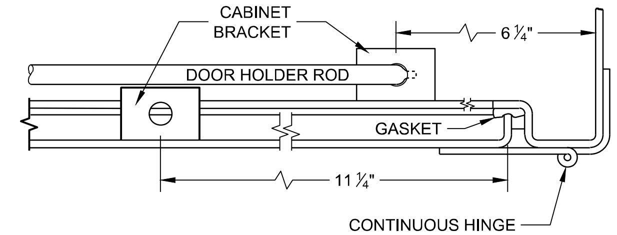
S.D.D. 9 D 1-5



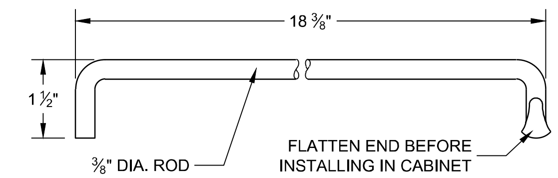
DOOR

REMOVABLE COVER

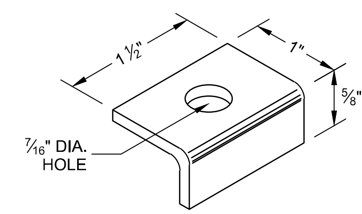
INSIDE VIEW SHOWING FILTER



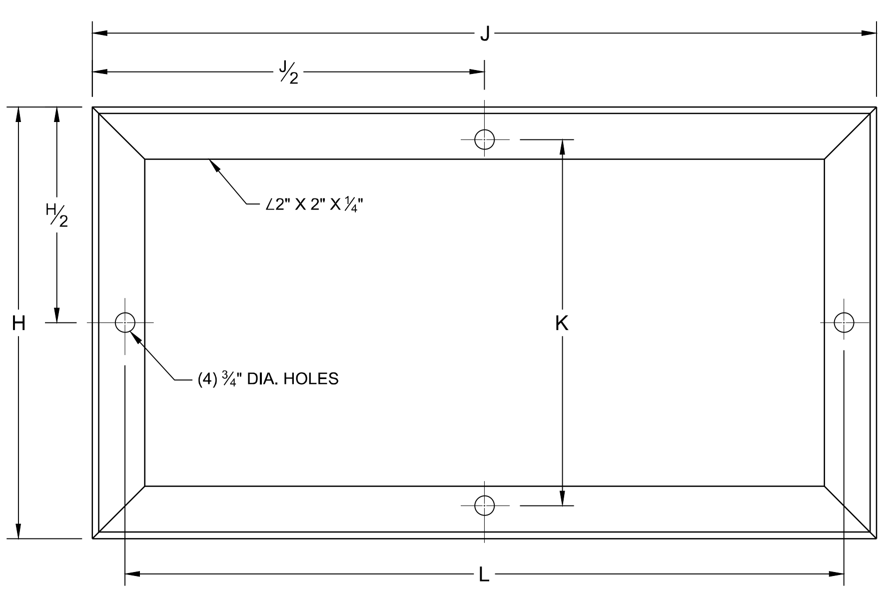
HINGE AND DOOR HOLDER



HOLDER ROD



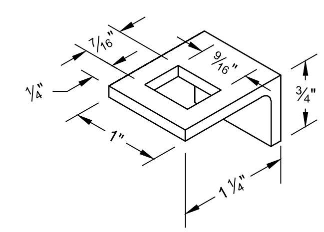
CABINET BRACKET



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE 3060	3860	3866
A	30	38	38
B	60	60	66
C	16½	16½	24
D	26½	34¾	33¾
E	38¾	38¾	38¾
F	26½	34¾	33¾
G	19	19	25
H	16½	16½	24
H/2	8¼	8¼	12
J	30	38	38
J/2	15	19	19
K	13¾	13¾	21¼
L	27½	35½	35½



LATCH BAR GUIDE

GENERAL NOTES

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

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

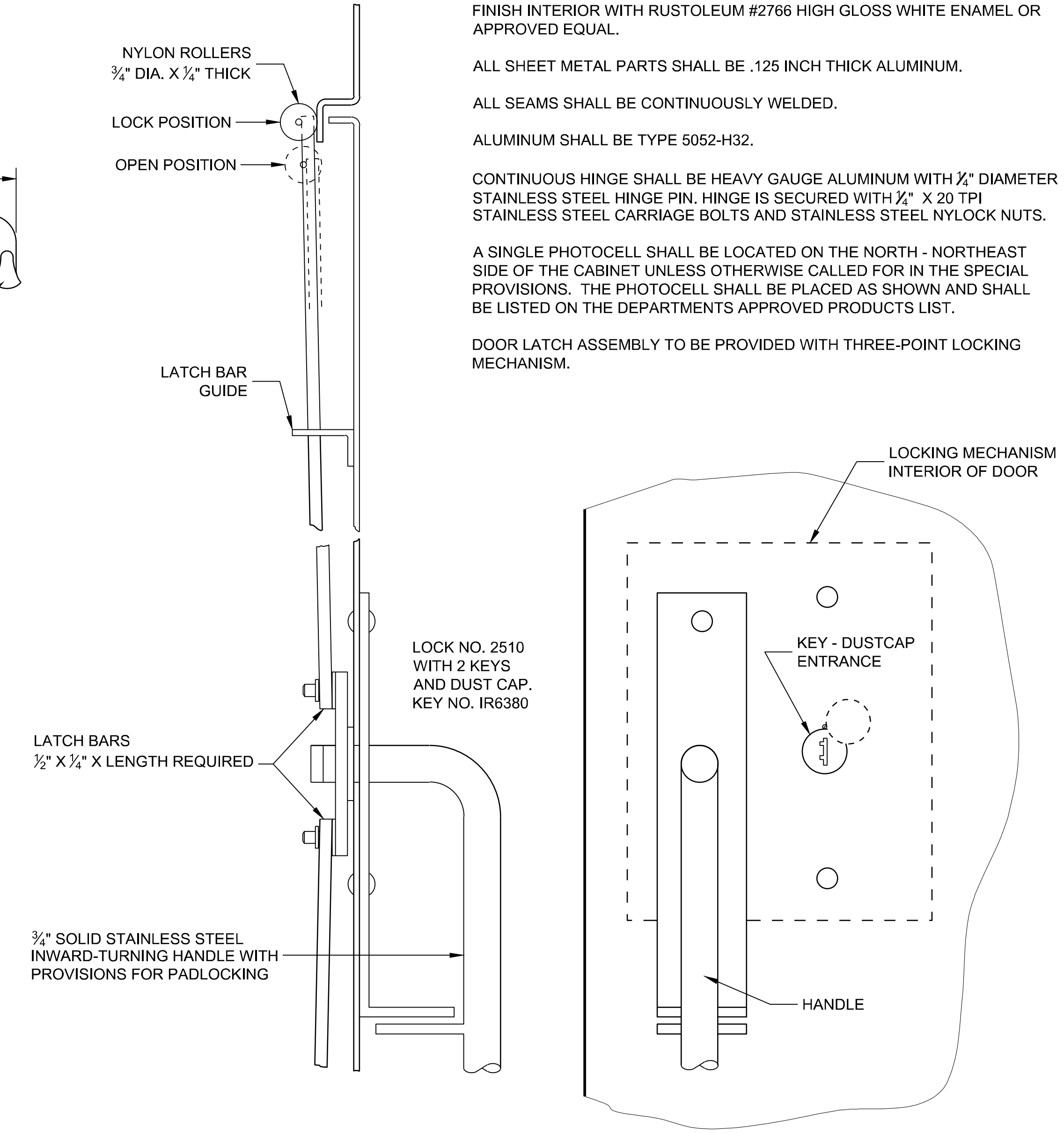
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH ¼" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH ¼" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH - NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY

SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

September 2014 /S/ Ahmet Demerbilek
DATE STATE ELECTRICAL ENGI

FHWA

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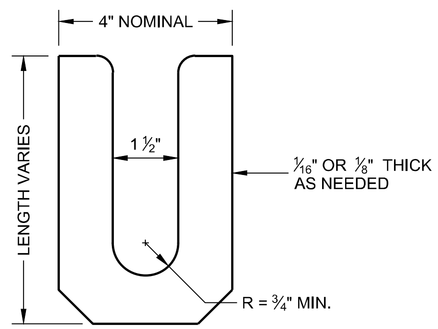
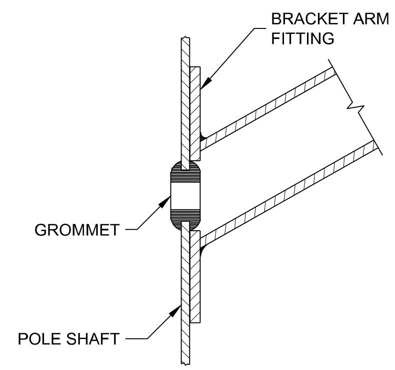
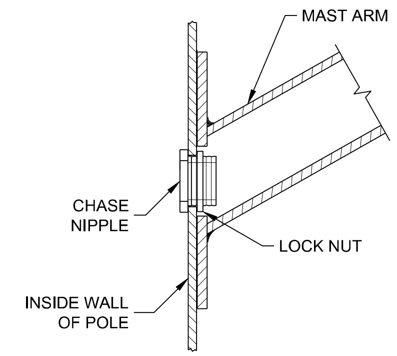
SDD 09D02 - 03



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.

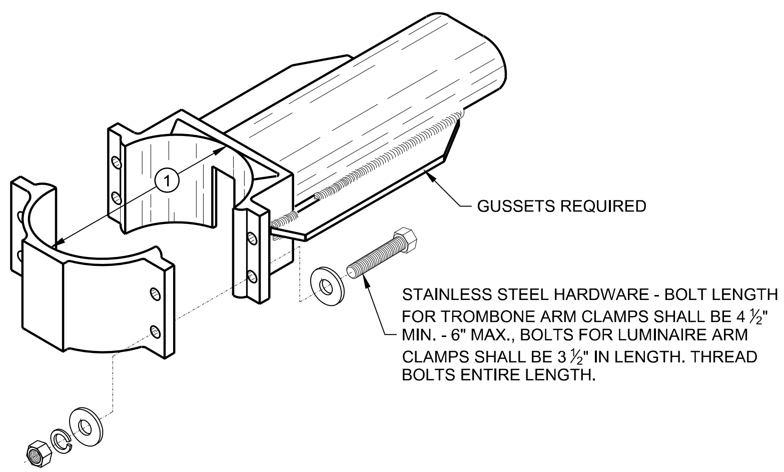
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

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

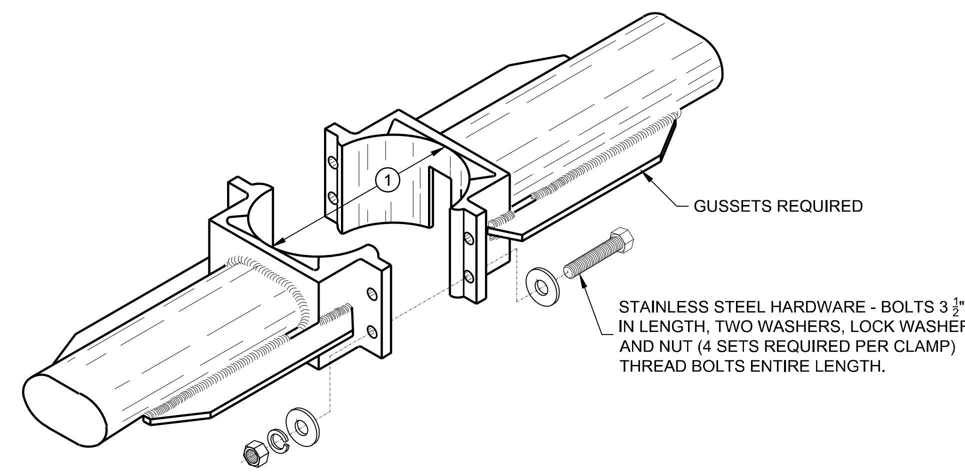
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(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.

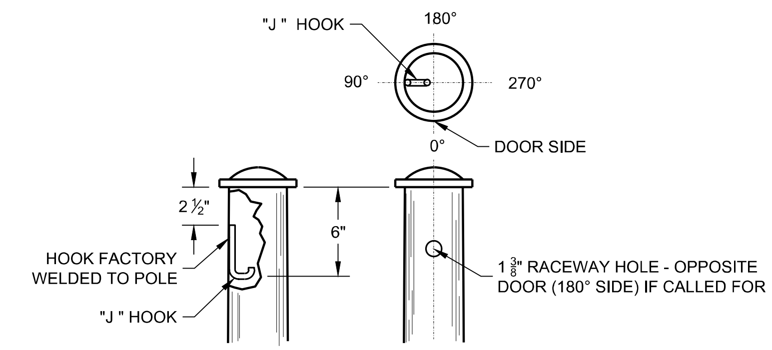
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



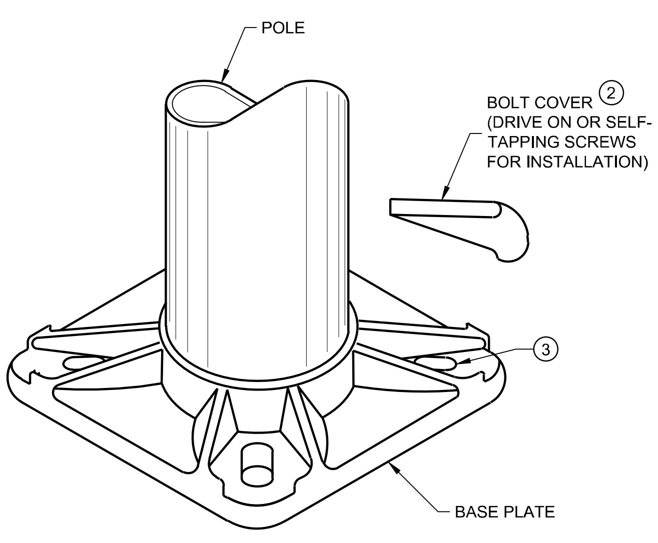
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



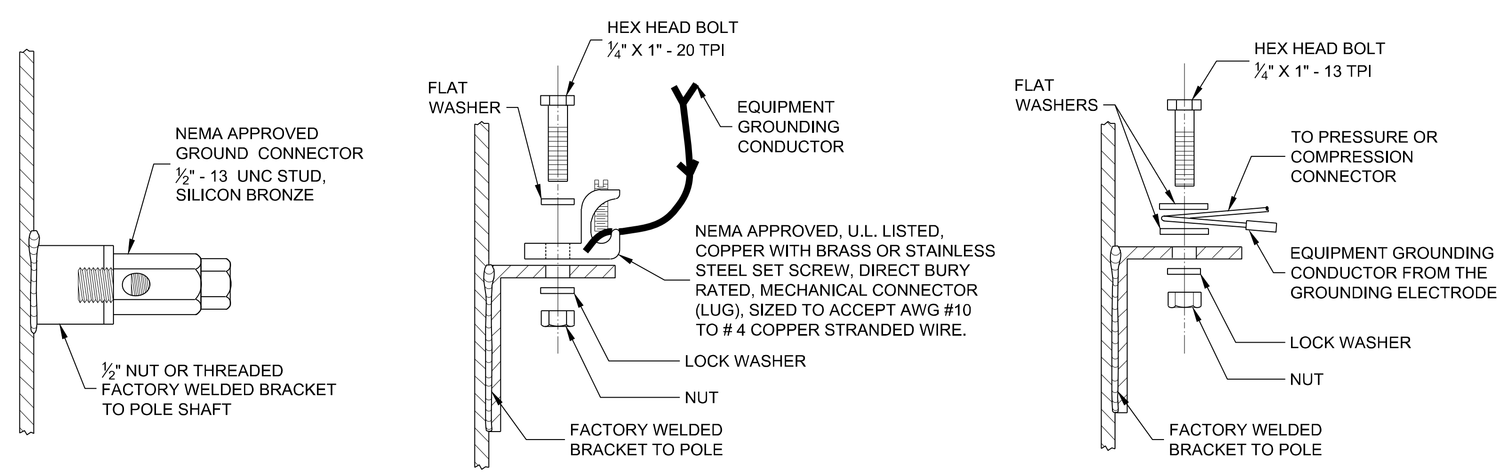
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS



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

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November 2018 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGI

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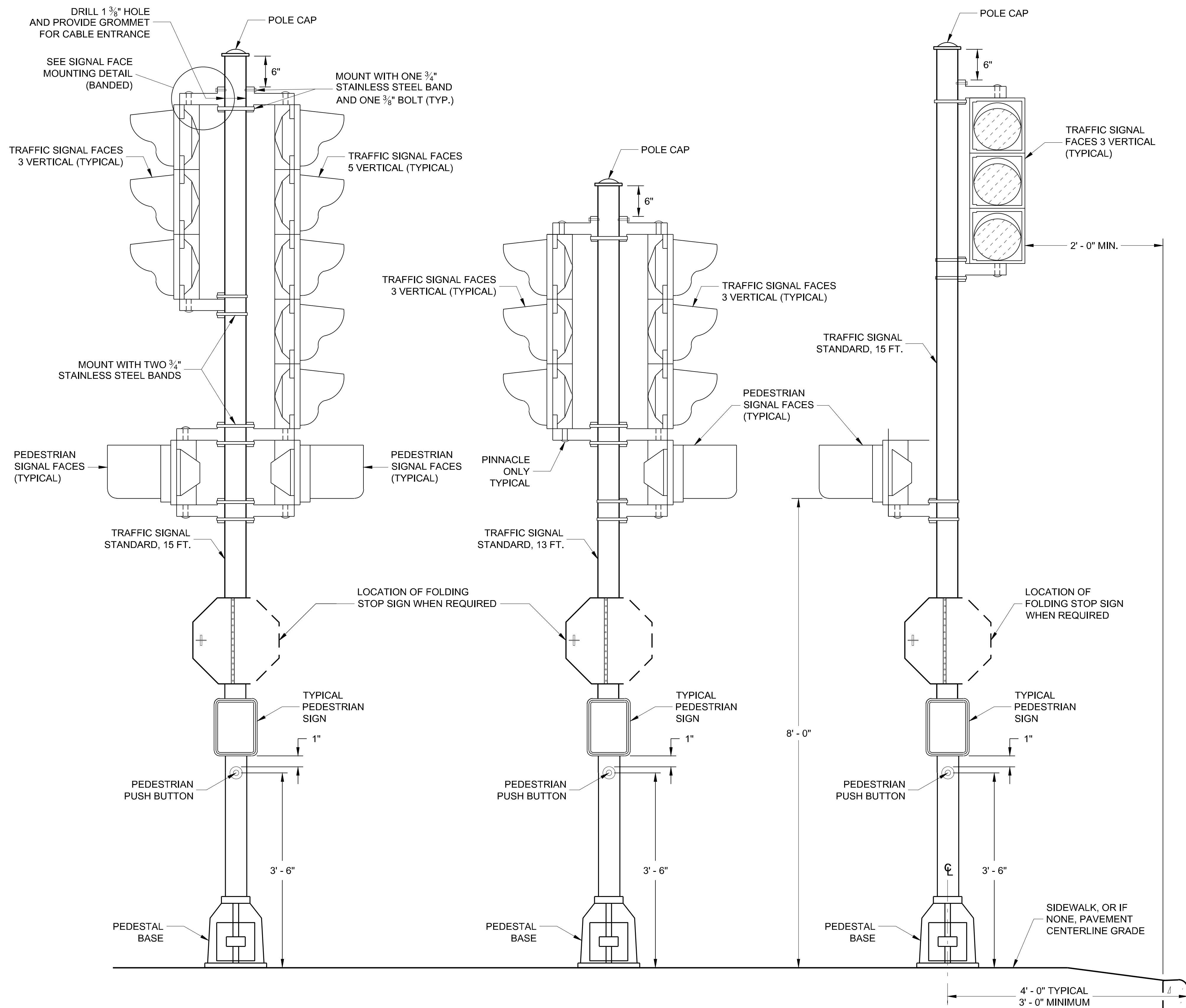


TRAFFIC SIGNAL STANDARD - 15 FT.

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.

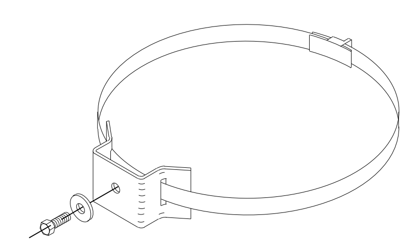
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

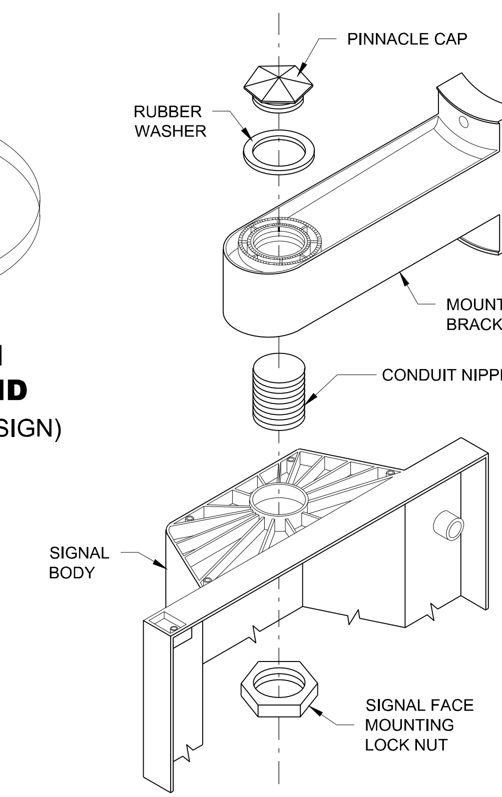
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

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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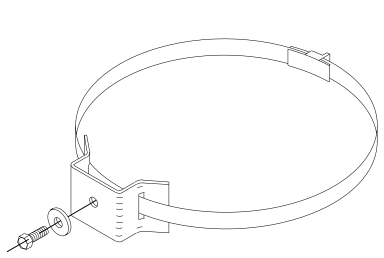
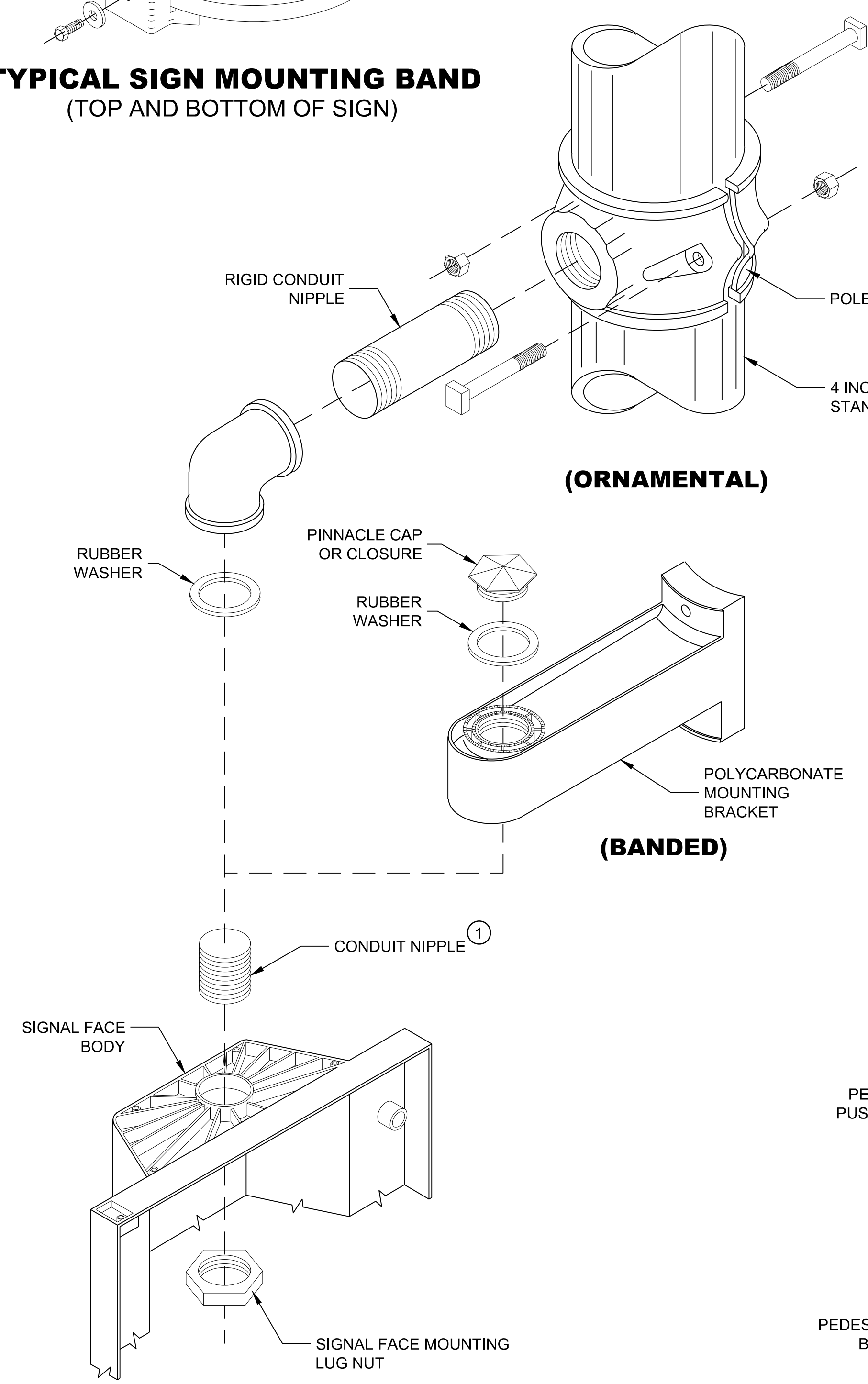
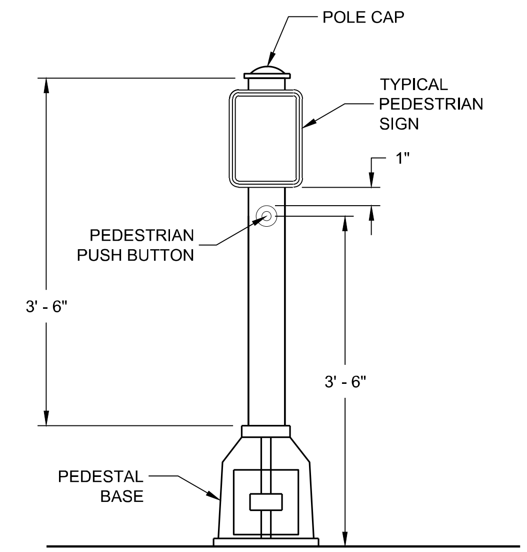


TYPICAL SIGN MOUNTING BAND

(TOP AND BOTTOM OF SIGN)



SIGNAL FACE MOUNTING DETAILS



PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING

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.

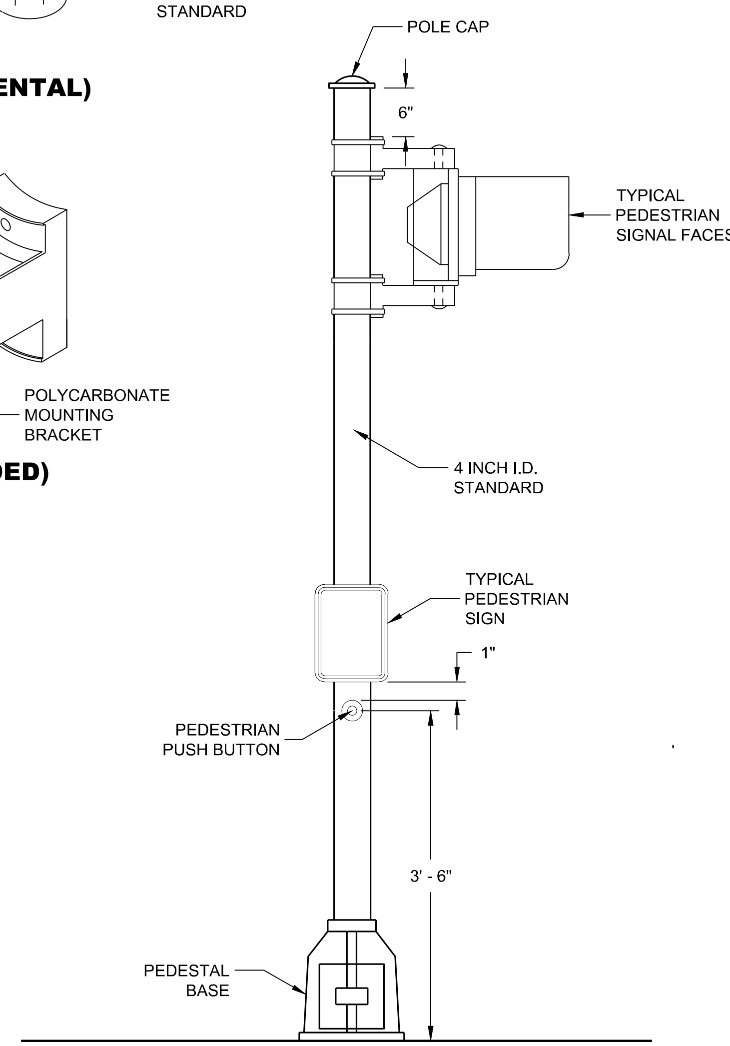
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

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.

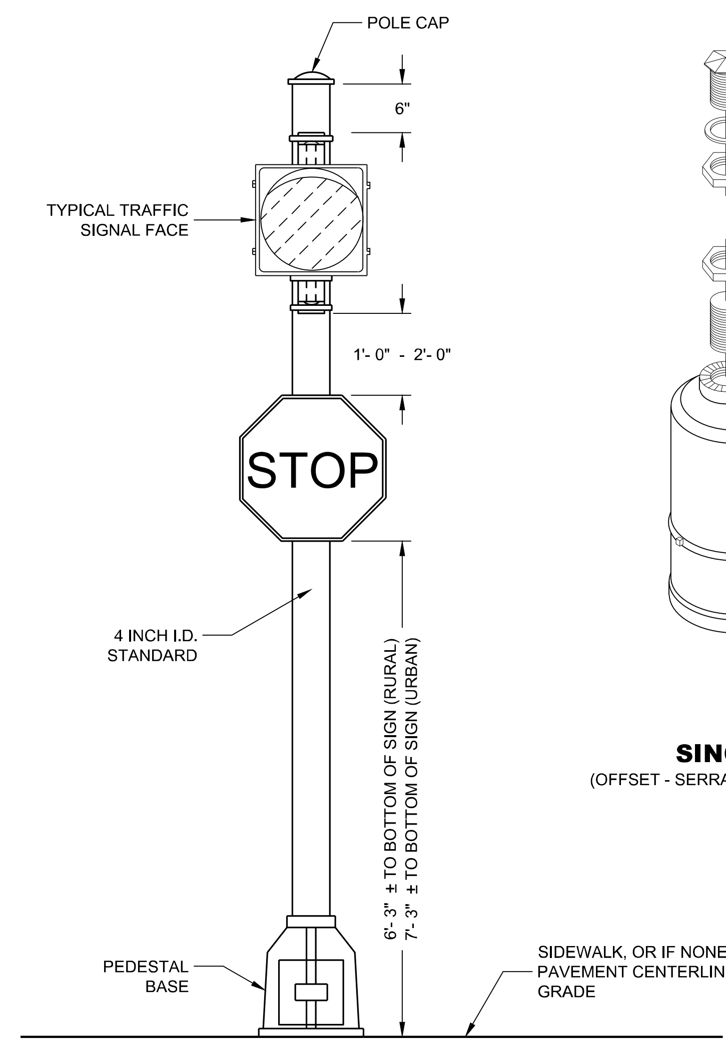
FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

1 USE 1 1/2" 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 1/2" OPENING IN SIGNAL FACESAND BRACKET ENDS.



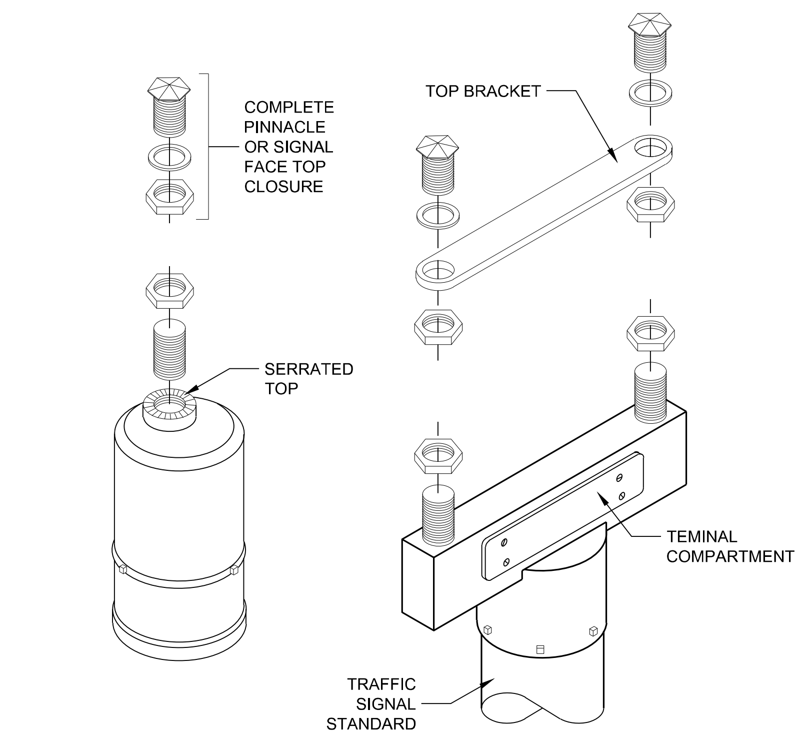
PEDESTRIAN FACE STANDARD - 10 FT.

(WALK - DON'T WALK)



STANDARD FLASHER

10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED



SINGLE

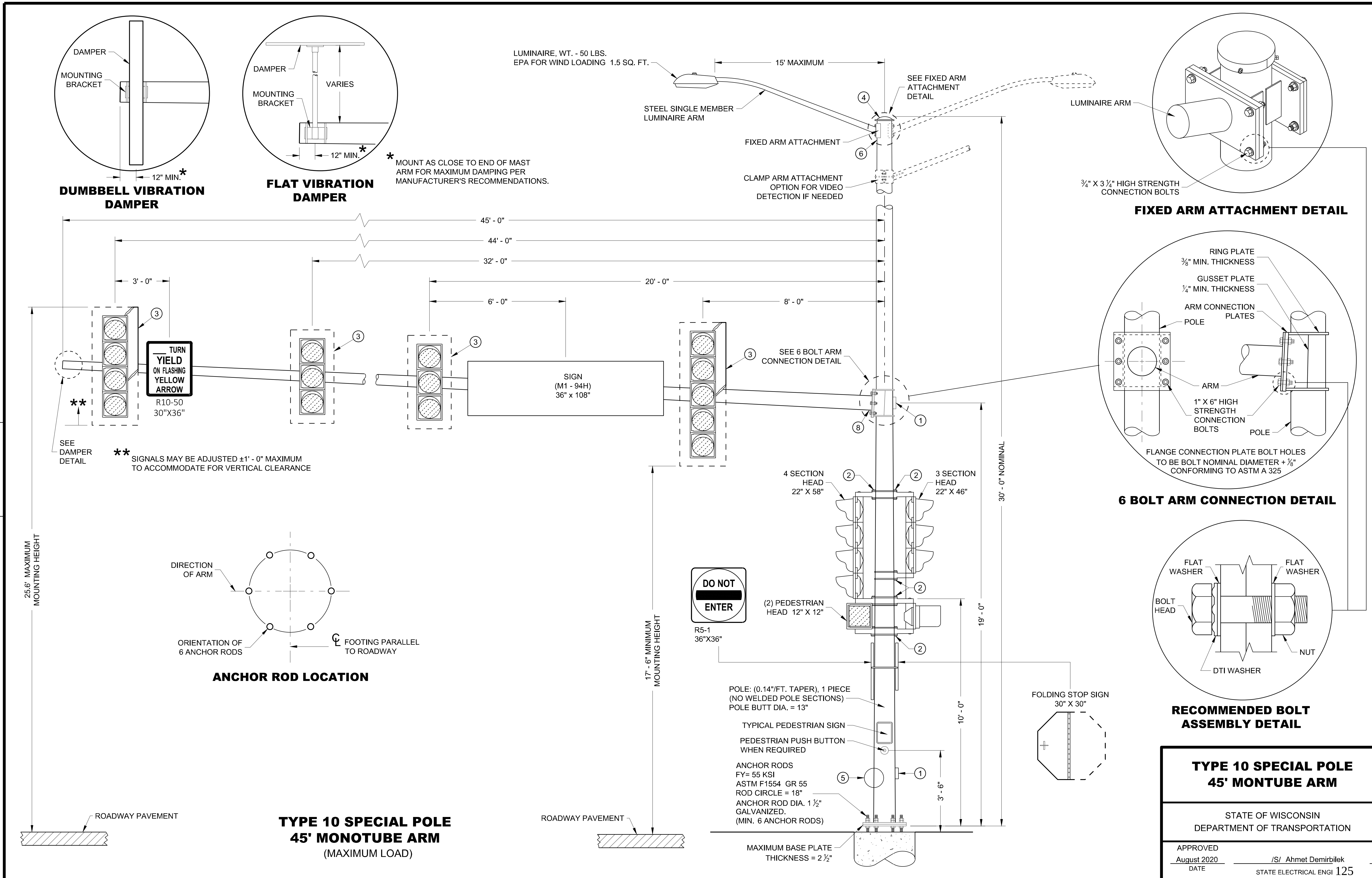
(OFFSET - SERRATED MOUNTING)

DOUBLE

(SERRATED MOUNTING)

SLIPFITTERS

TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED November 2018 /S/ Ahmet Demirbilek DATE STATE ELECTRICAL ENGI FHWA



TYPE 10 SPECIAL POLE
45' MONTUBE ARM

STATE OF WISCONSIN
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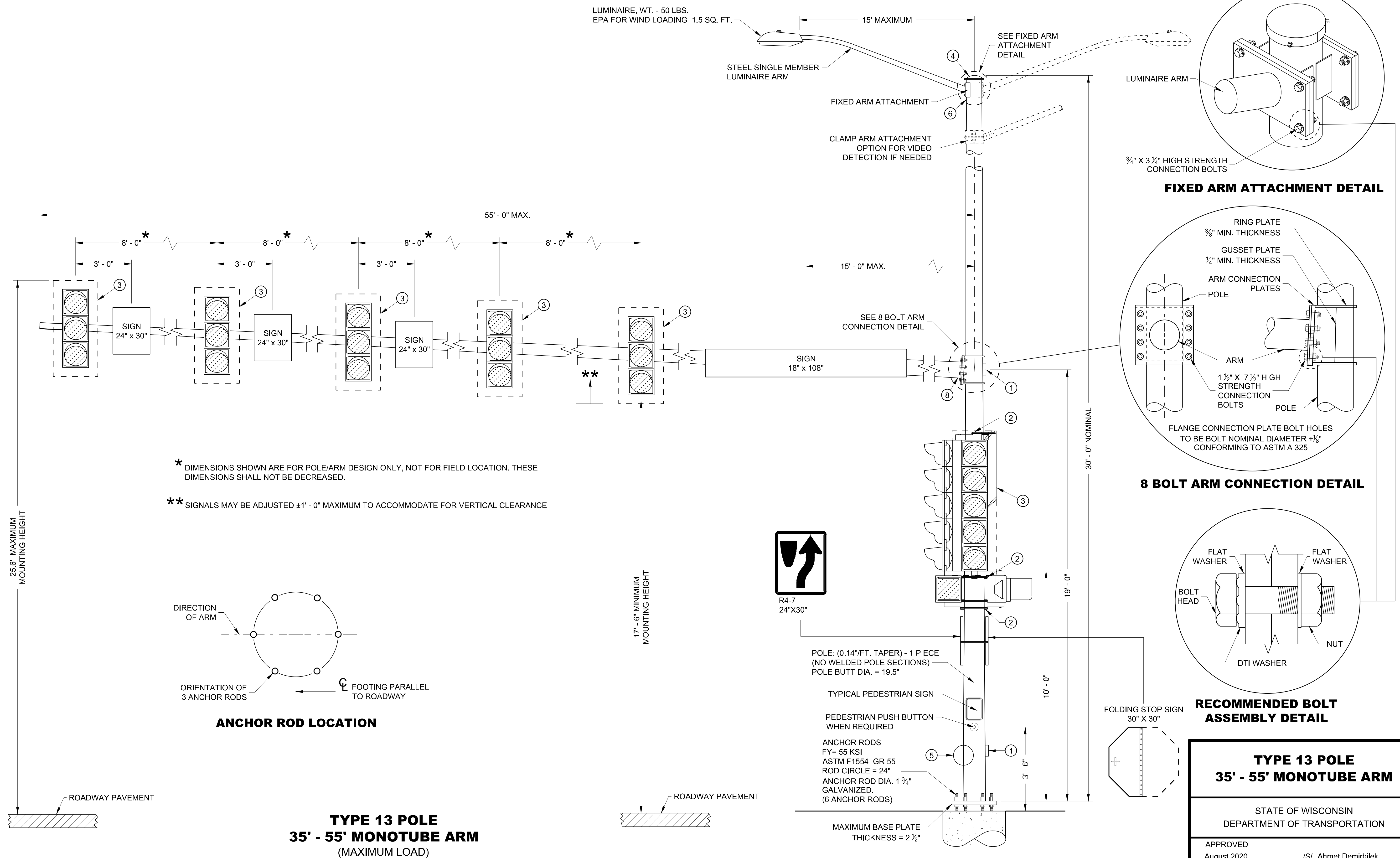

TYPE 13 POLE
35' - 55' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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.

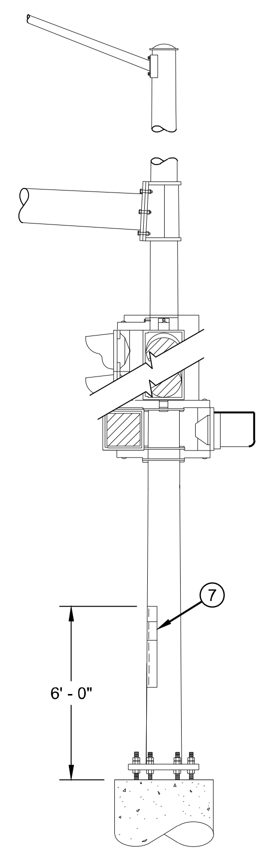
SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR A S DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEAD AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

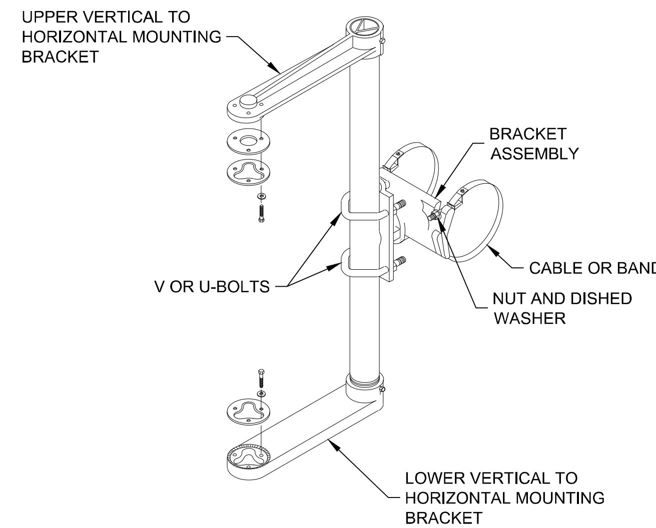
1. DESIGN FOR MAXIMUM ALLOWABLE HAND HOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.
2. SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING (SEE SPECIFICATION SECTION 658).
3. SECURELY MOUNT BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE 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.

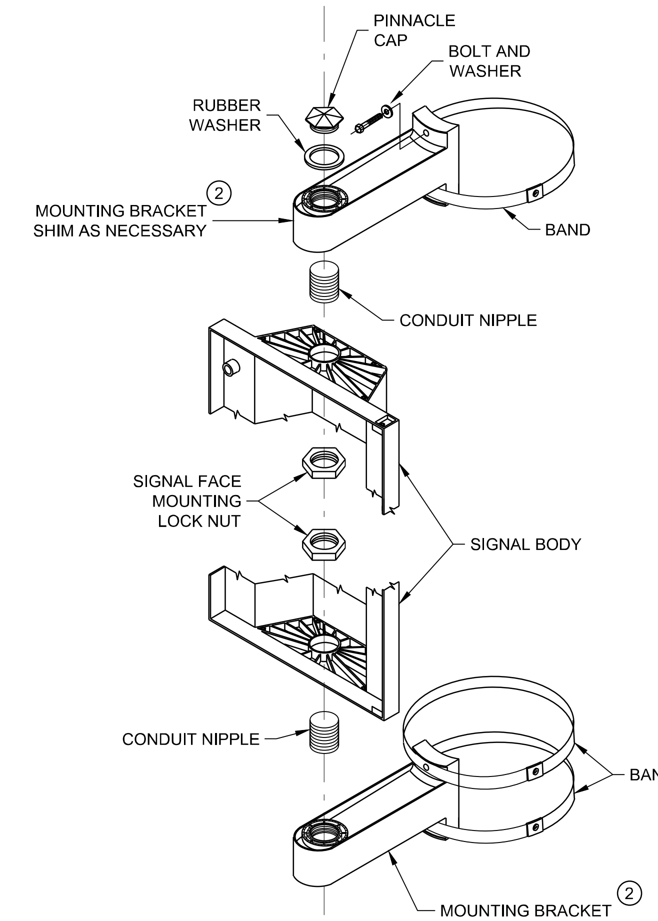


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT

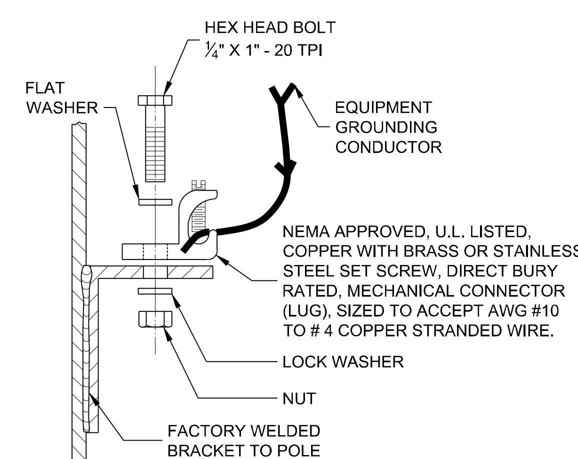


SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANFACTURER'S RECOMMENDATION)

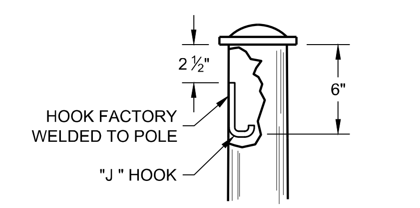


SIGNAL FACE VERTICAL MOUNTING DETAIL



TYPICAL GROUNDING CONNECTIONS 5

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



TYPICAL "J" HOOK WIRE SUPPORT 6

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 /S/ Ahmet Demirbilek

DATE STATE ELECTRICAL ENGINEER

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GENERAL NOTES

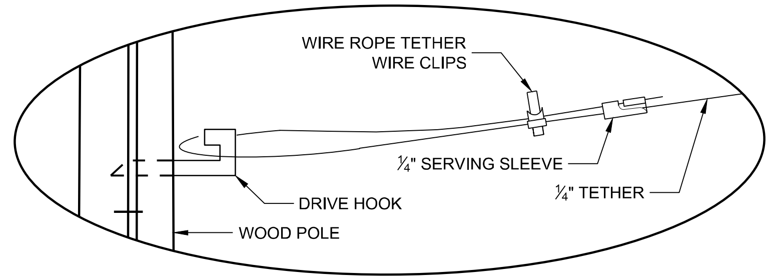
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.

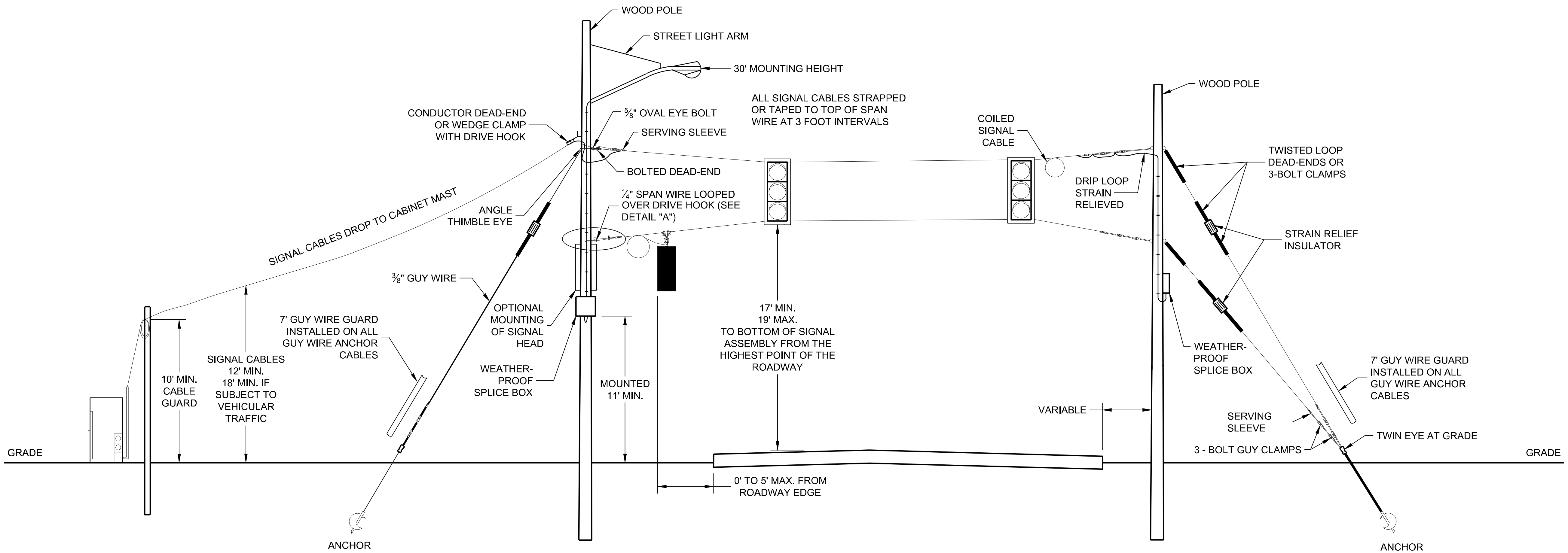
2. SIGNAL FACES:
   - A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   - B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   - C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   - D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.

3. SPAN WIRE:
   - A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED
   - B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   - C. THE SIGNAL ASSEMBLY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.

MINIMUM POLE LENGTHS	POLE BURIAL DEPTHS
25'	5'
30'	6'
35'	7'
40'	8'
45'	9'



DETAIL "A"



SPAN WIRE TEMPORARY SIGNALS

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SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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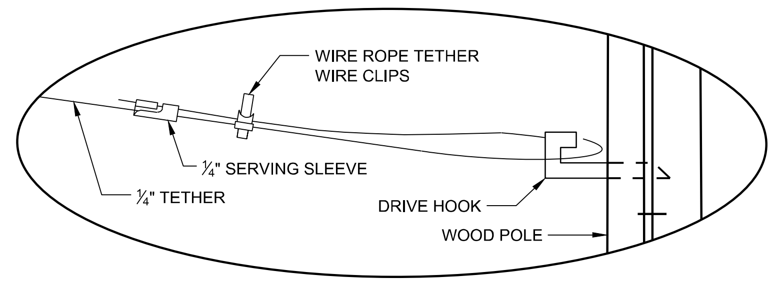
MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'



DETAIL "A"

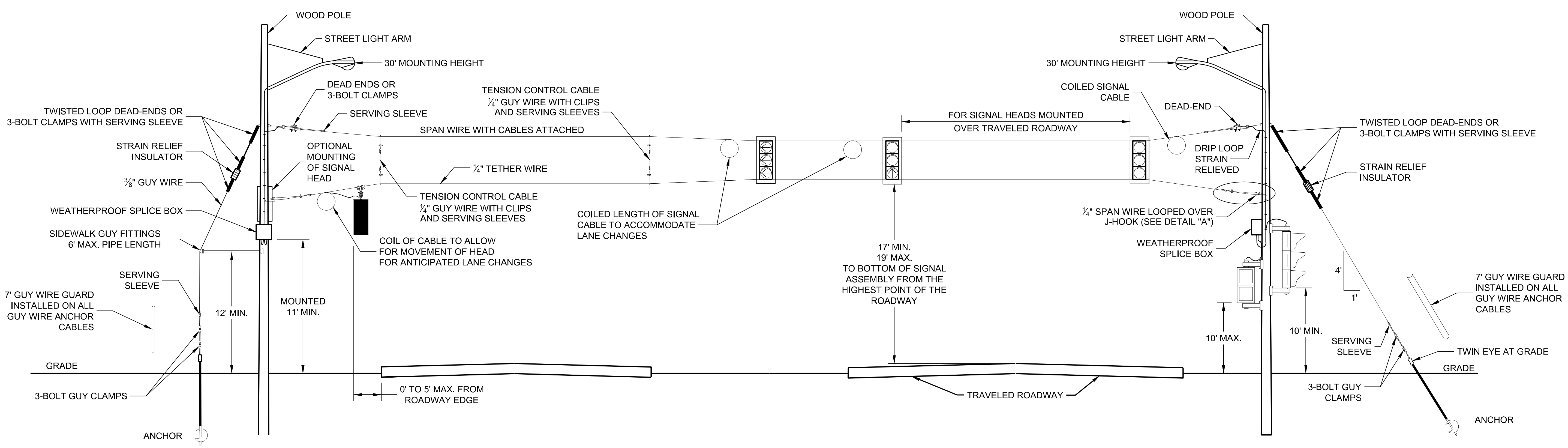
GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.

2. SIGNAL FACES:
   - A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   - B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   - C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   - D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   - E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.

3. SPAN WIRE:
   - A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED
   - B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   - C. THE SIGNAL ASSEMBLY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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June 2015 /S/ Ahmet Demerbilek

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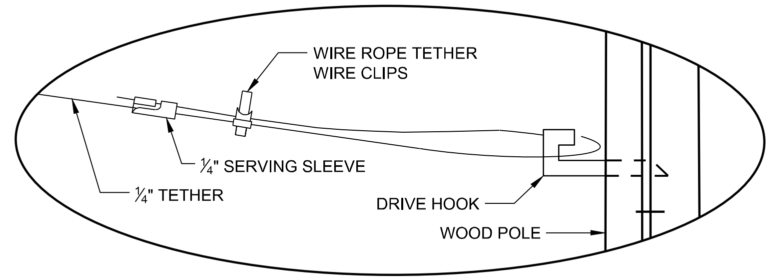
MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'



DETAIL "A"

GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.

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   - E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.

3. SPAN WIRE:
   - A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED
   - B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   - C. THE SIGNAL ASSEMBLY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.

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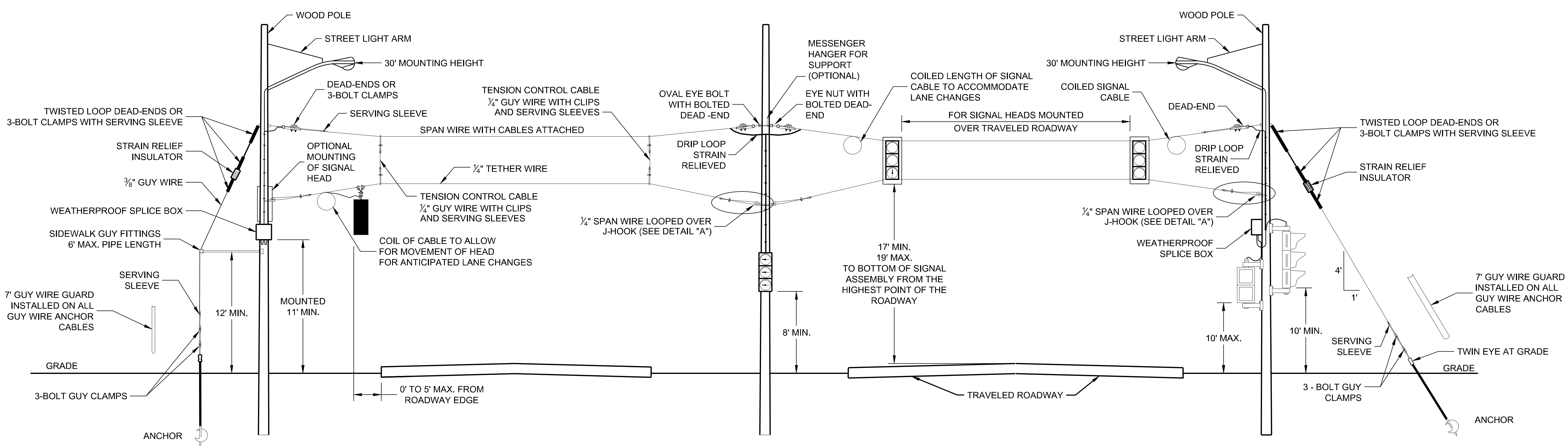

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SPAN WIRE TEMPORARY SIGNALS

4 LANE ROADWAYS

SDD09G01 - 04c

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

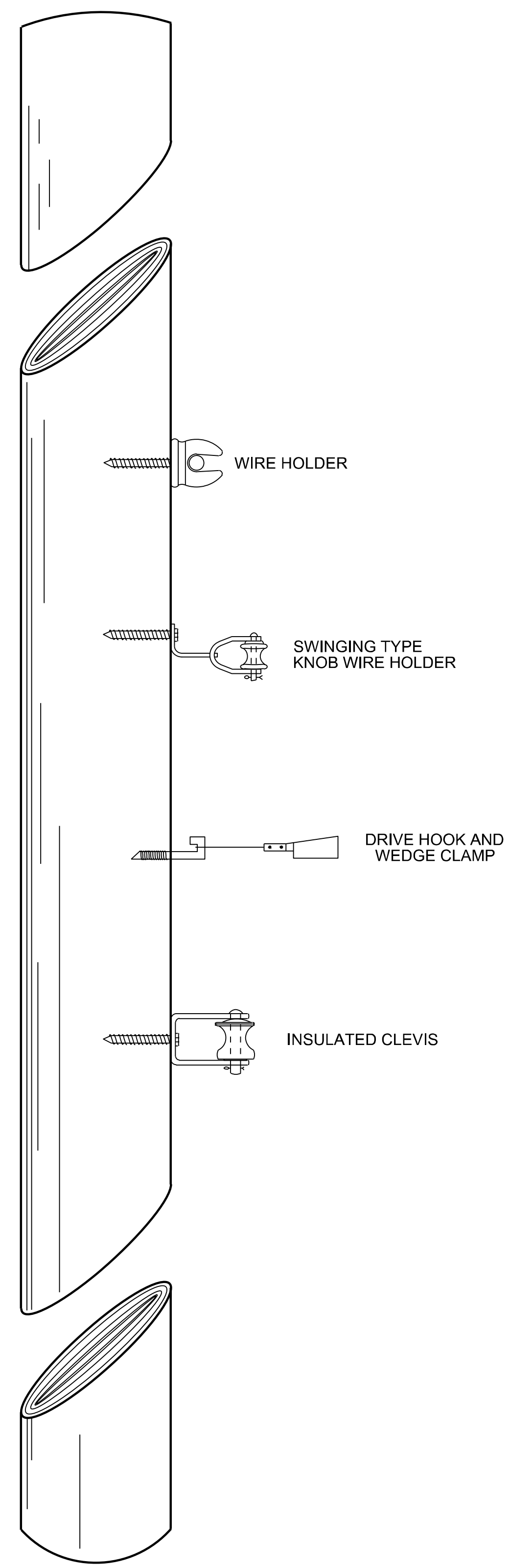
APPROVED

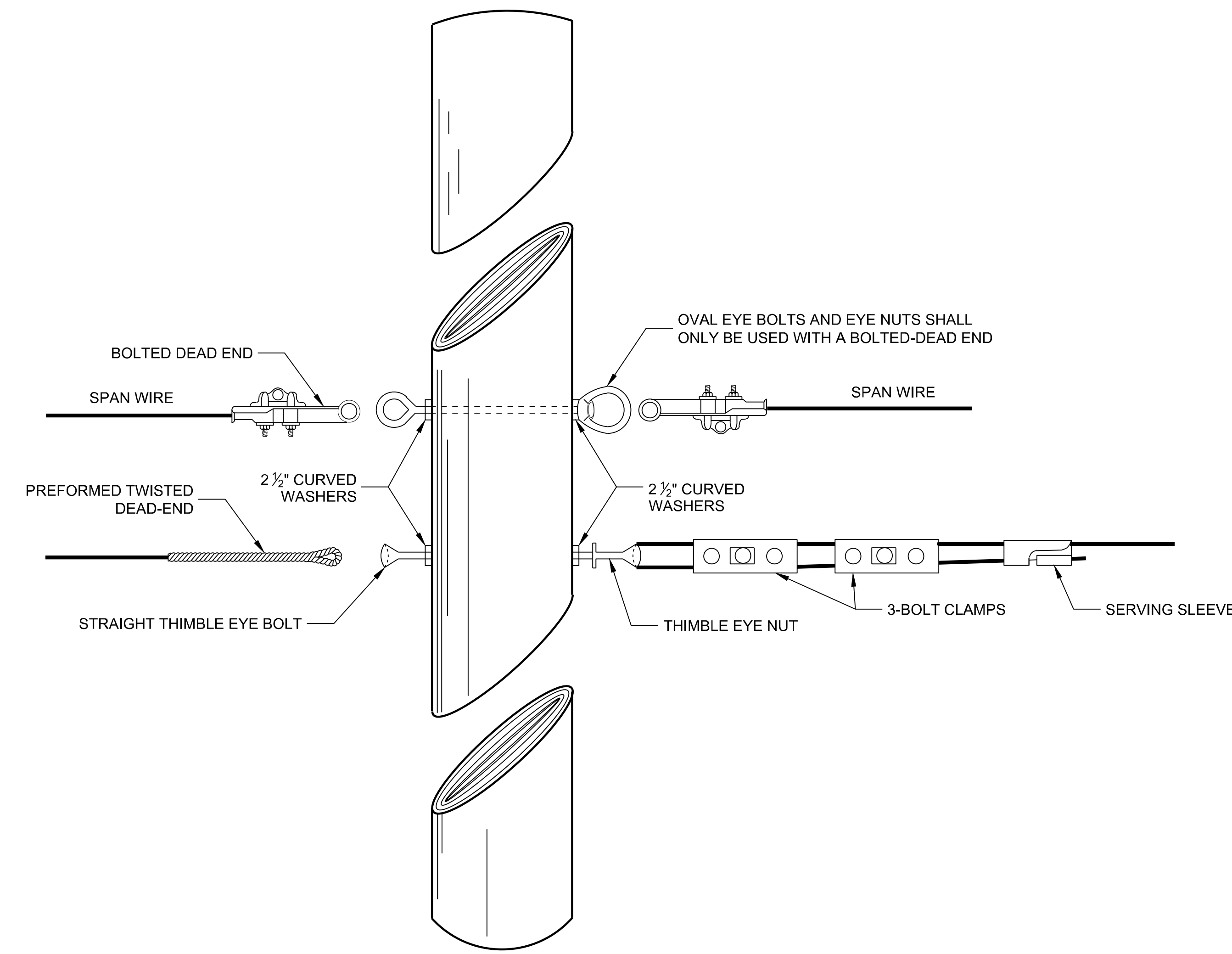
June 2015 — DATE

/S/ Ahmet Demerbilek — STATE ELECTRICAL ENGI

FHWA

SDD09G01 - 04c





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SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

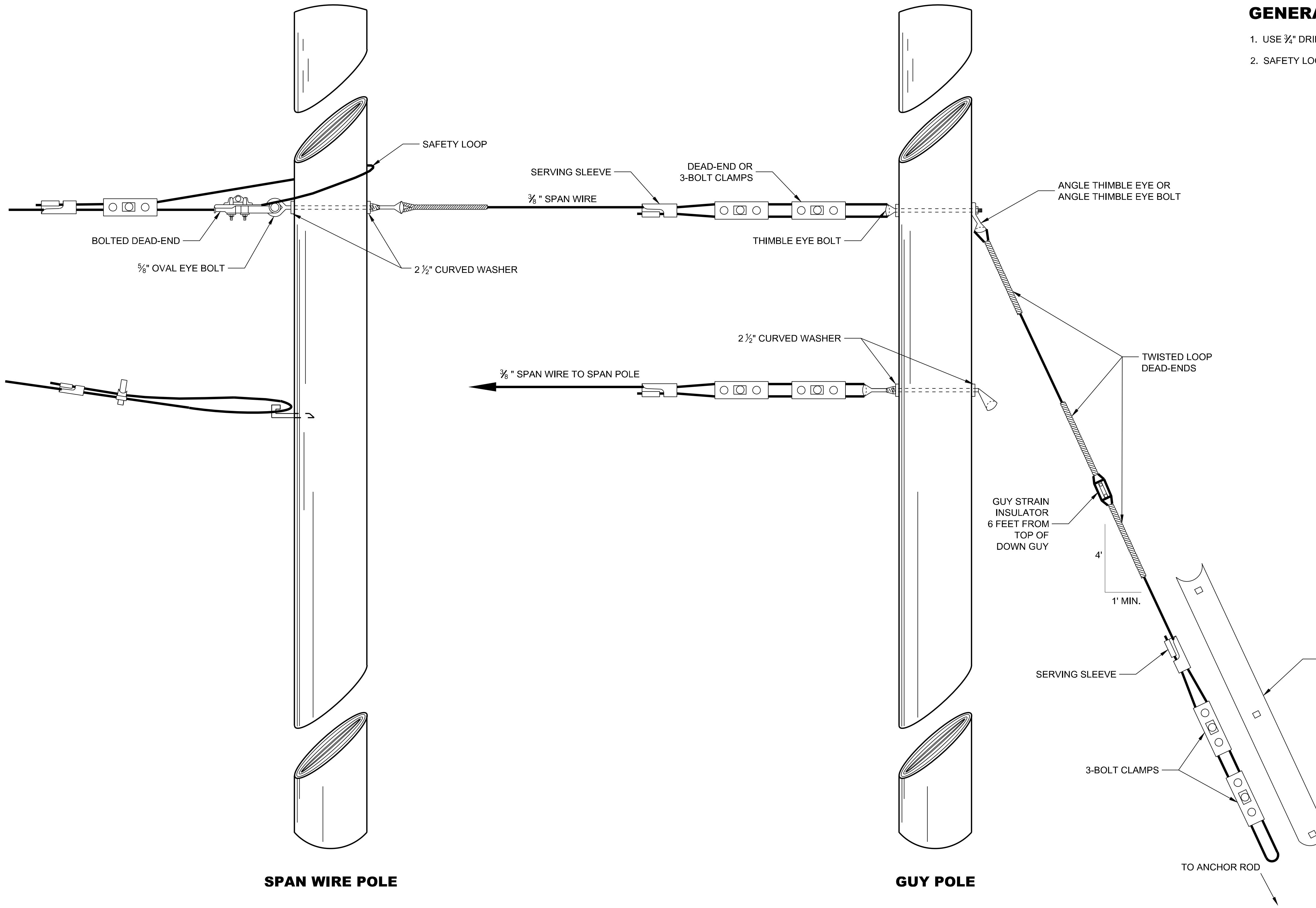
APPROVED

June 2015 — DATE

/S/ Ahmet Demerbilek — ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

SDD 09G01 - 4d



TYPICAL DEAD-ENDINGS OR GUYING

GENERAL NOTES

1. USE ¾" DRILL IN WOOD POLE TO PROVIDE FOR ⅝" BOLTS.
2. SAFETY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.

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SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

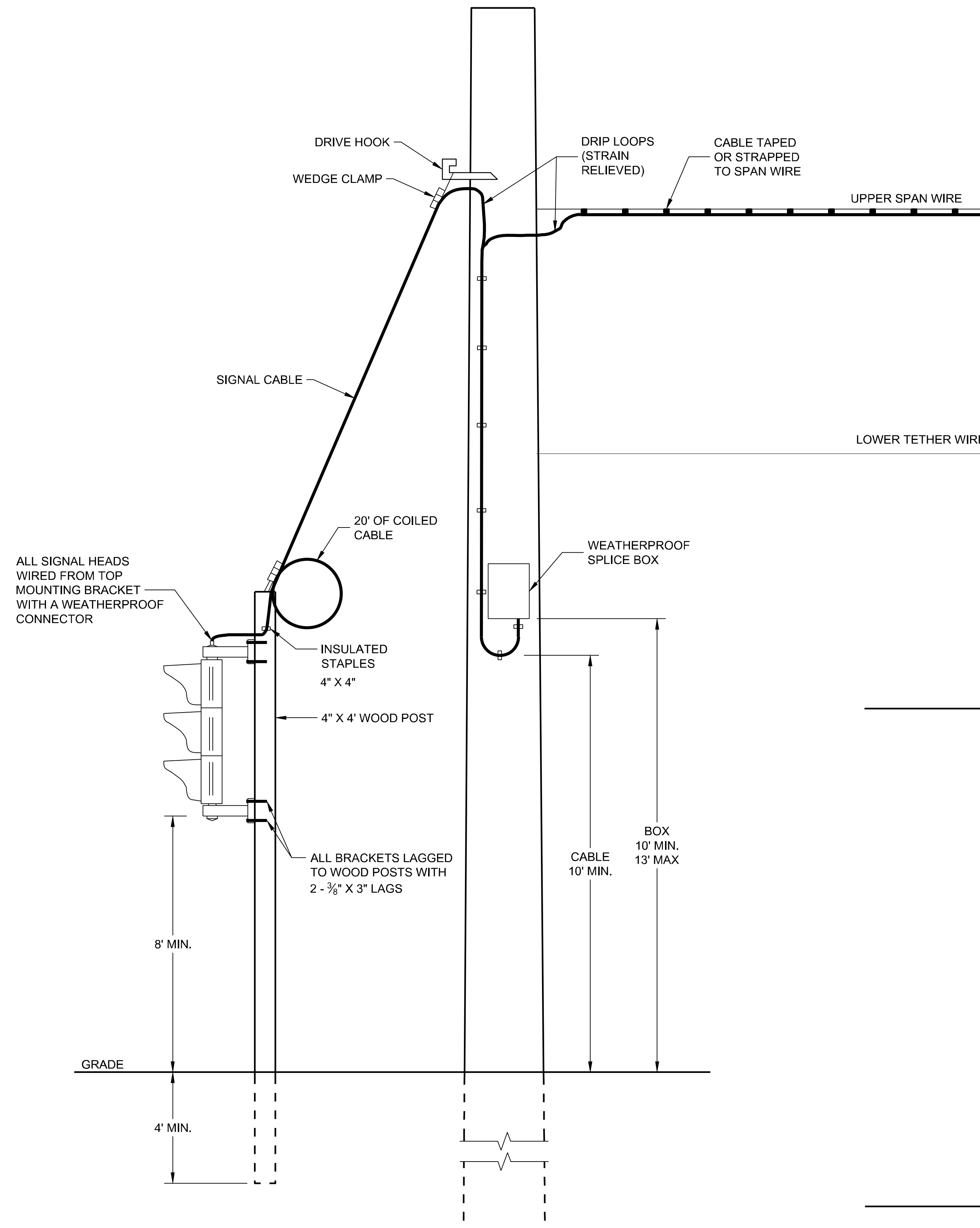
June 2015 — DATE

/S/ Ahmet Demerbilek — ROADWAY STANDARDS DEVELOPMENT ENGINEER

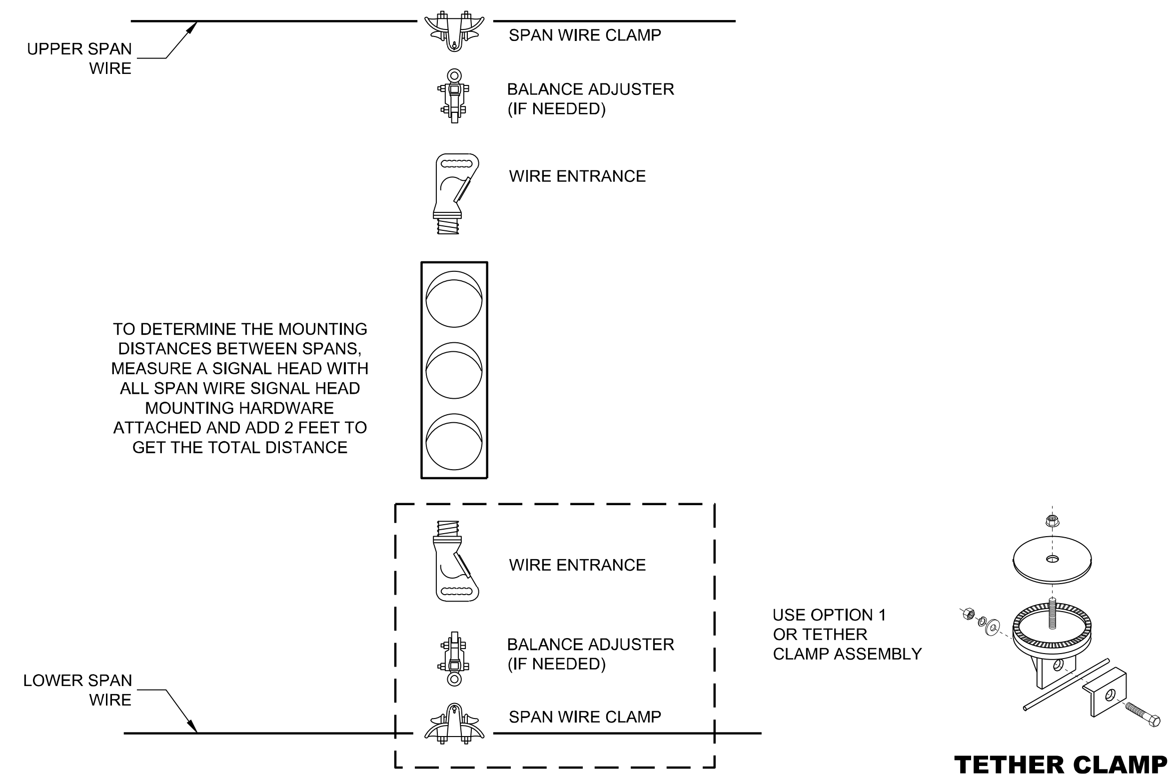
FHWA

SDD 09G01 - 4e

SDD 09G01 - 4e



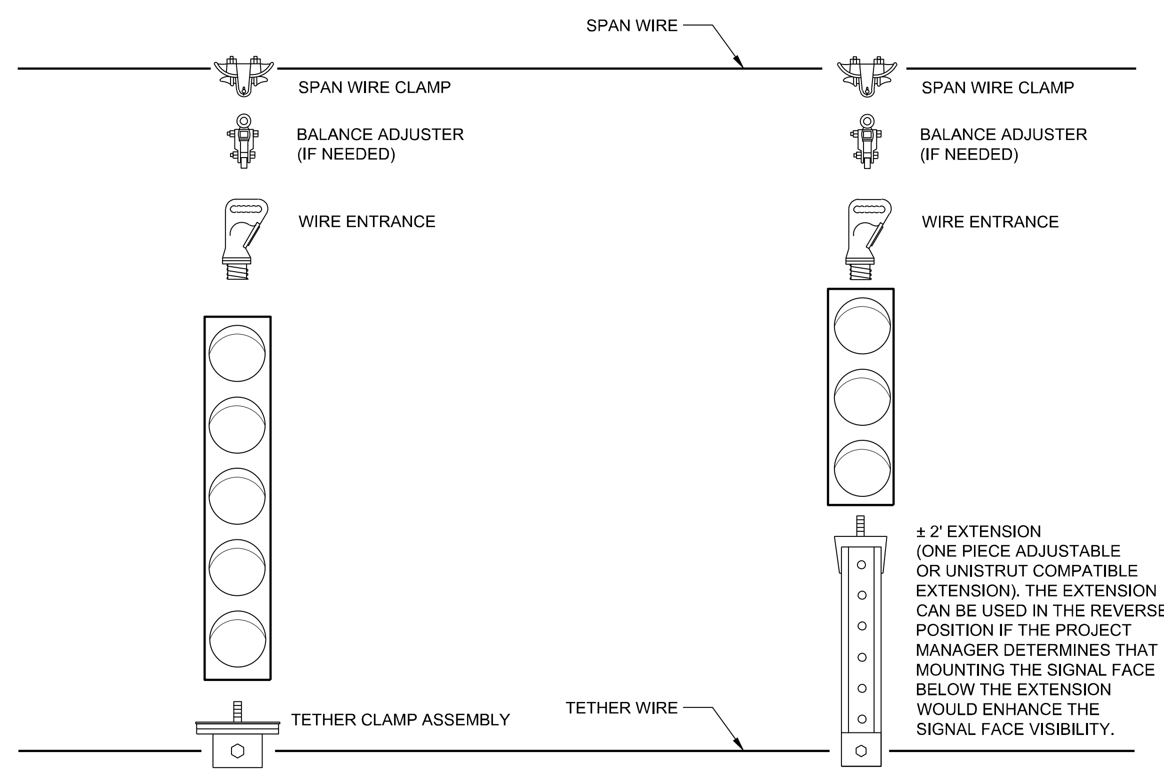
TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL



OPTION 1

TETHER CLAMP ASSEMBLY OPTION

TYPICAL SPAN WIRE MOUNTING HARDWARE



5 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN WIRE

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

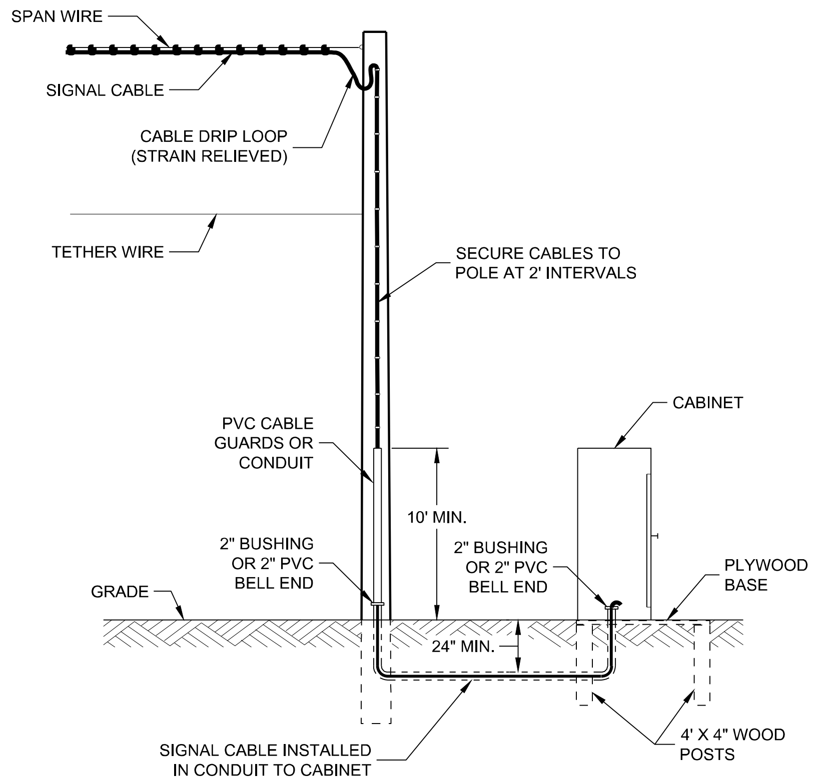
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

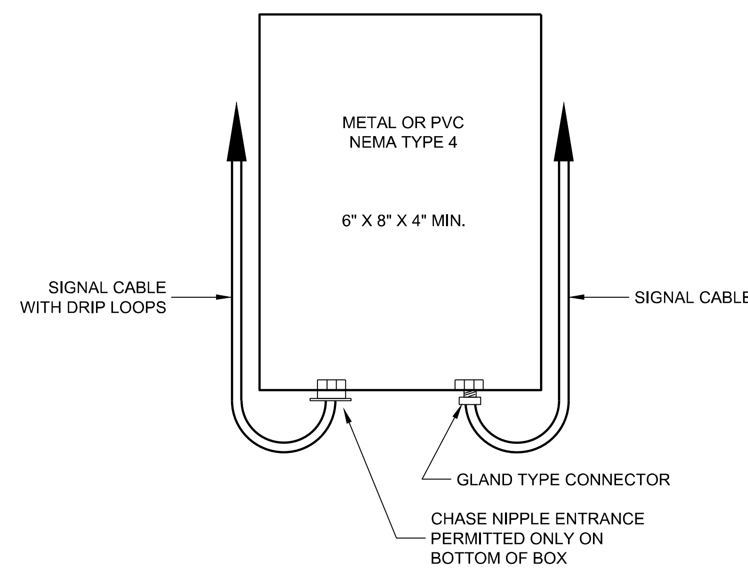
APPROVED

June 2015 — DATE

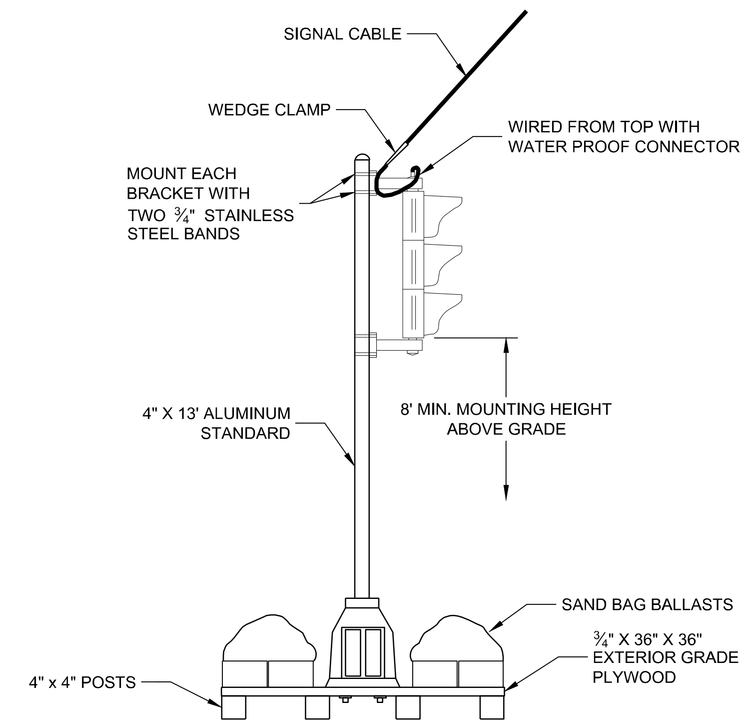
/S/ Ahmet Demerbilek — ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA





SPLICE BOX



TYPICAL SKID TYPE TEMPORARY

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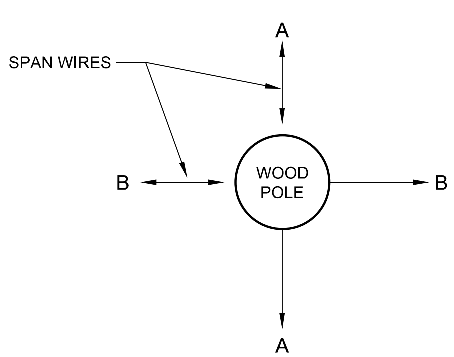
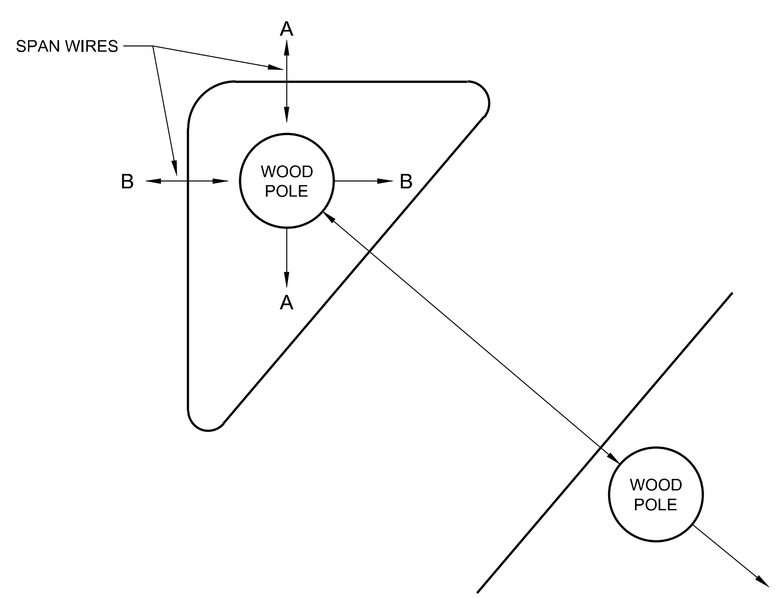
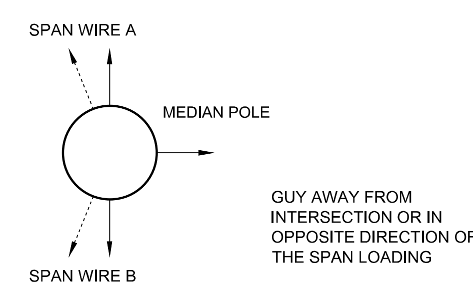


ALL DOWN OR SIDEWALK GUYS SHALL BE INSTALLED IN THE OPPOSITE DIRECTION OF THE STRAIN OF THE SPAN WIRE

CORNER POLES



ISLAND POLES



MEDIAN POLES

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2015	/S/ Ahmet Demerbilek
DATE	ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

SDD 09G01 - 4g

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.

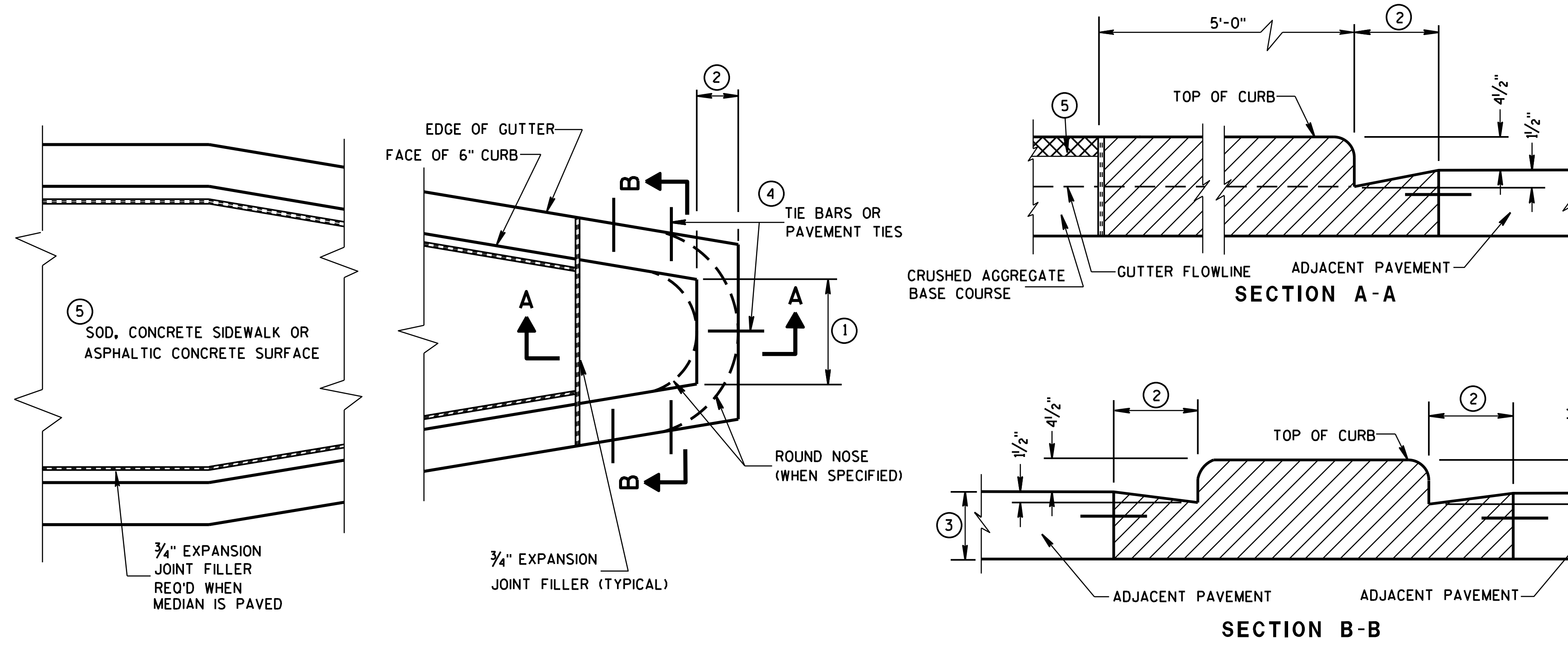
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

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

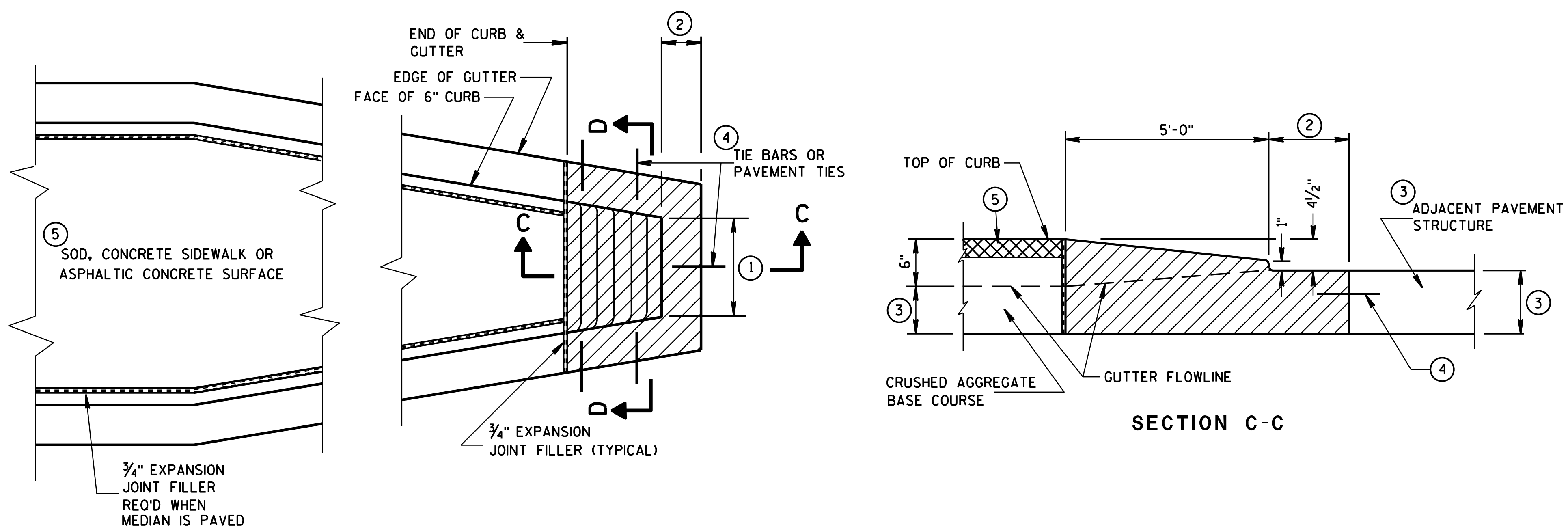
4 TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

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.

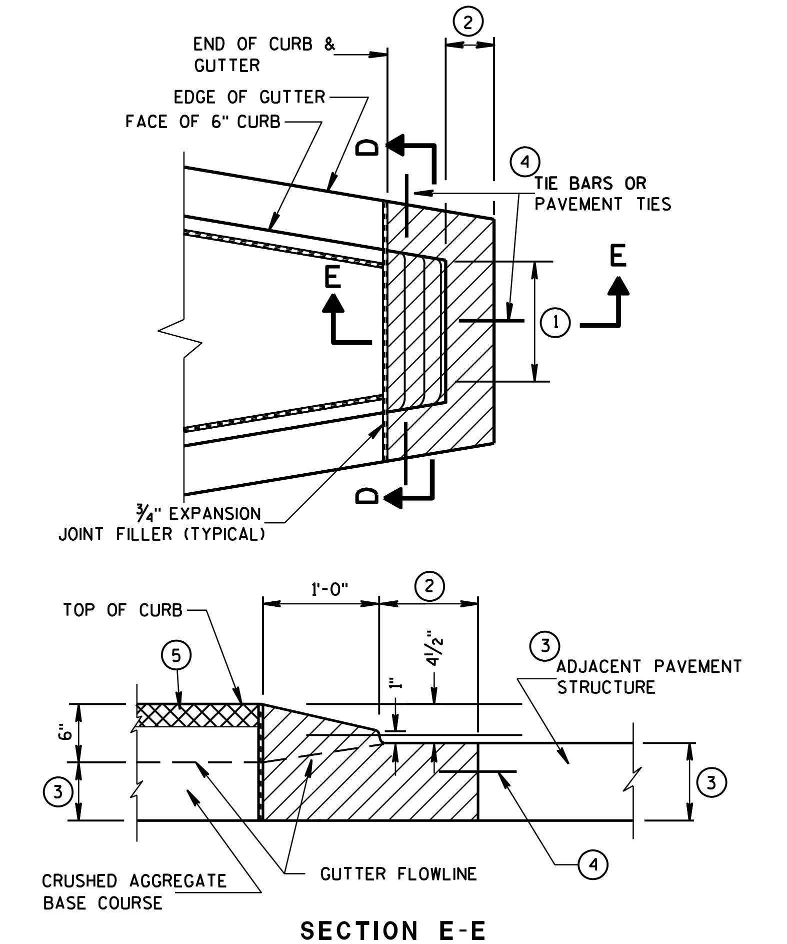
5 SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



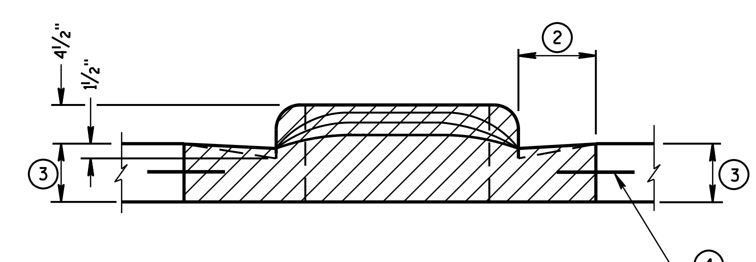
CONCRETE MEDIAN BLUNT NOSE DETAIL



CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN SLOPED NOSE TYPE 2



SECTION D-D

CONCRETE MEDIAN NOSE
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 6/8/2006 DATE   /S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER FHWA

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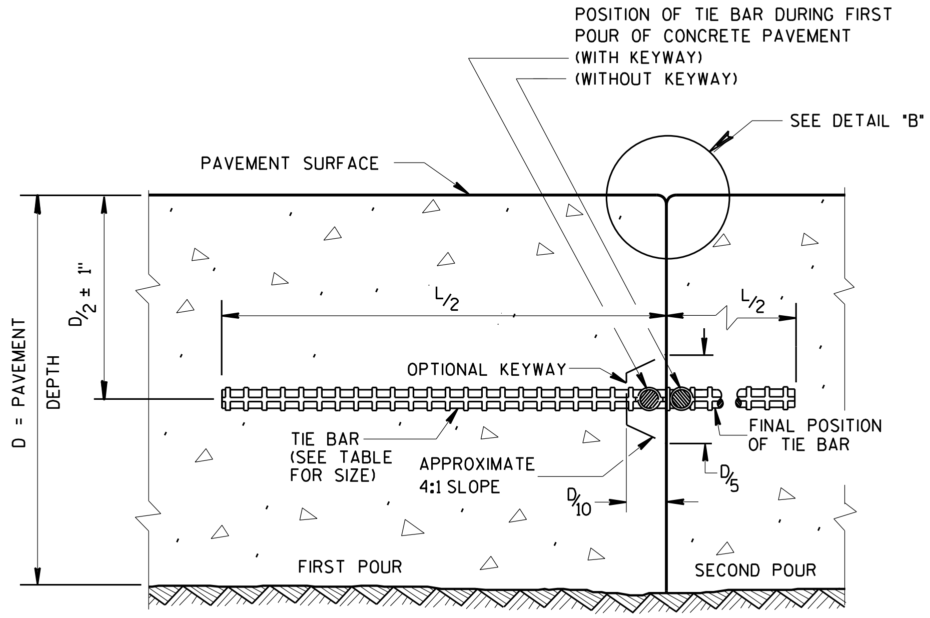
GENERAL NOTES

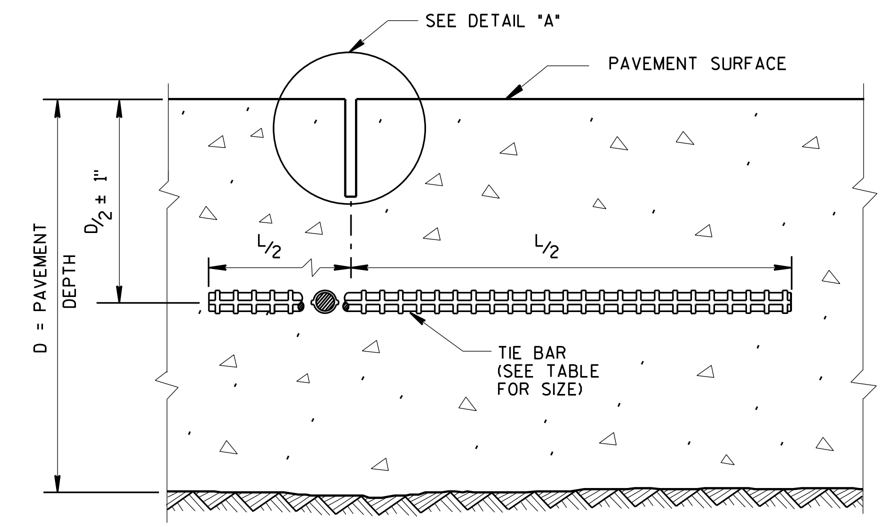
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

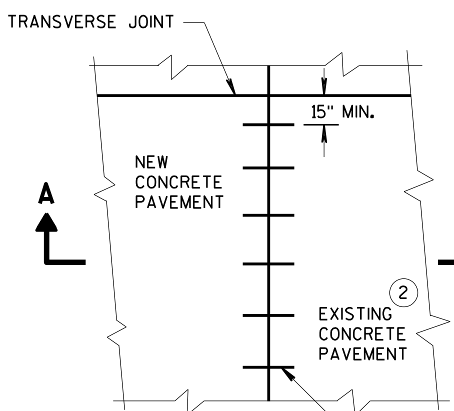
1. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.
2. PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



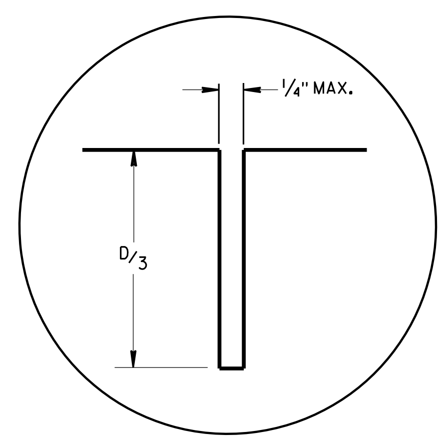
CONSTRUCTION JOINT



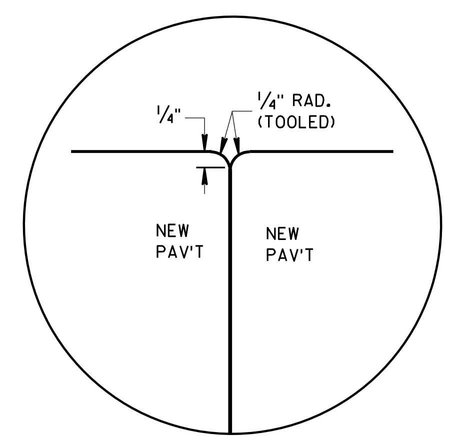
SAWED JOINT



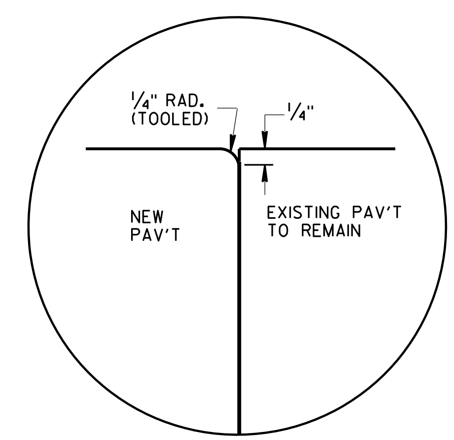
PLAN VIEW



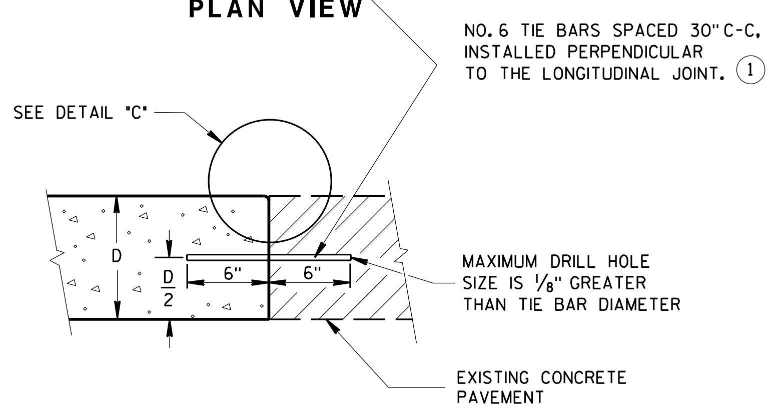
DETAIL "A"



DETAIL "B"



DETAIL "C"



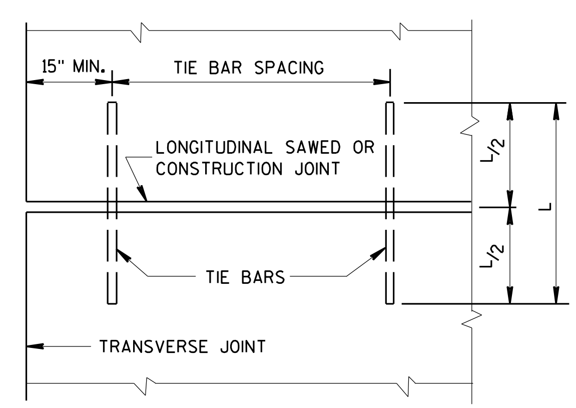
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
$< 10\frac{1}{2}$"	NO. 4	30"	36"
$\geq 10\frac{1}{2}$"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUPE
FHWA

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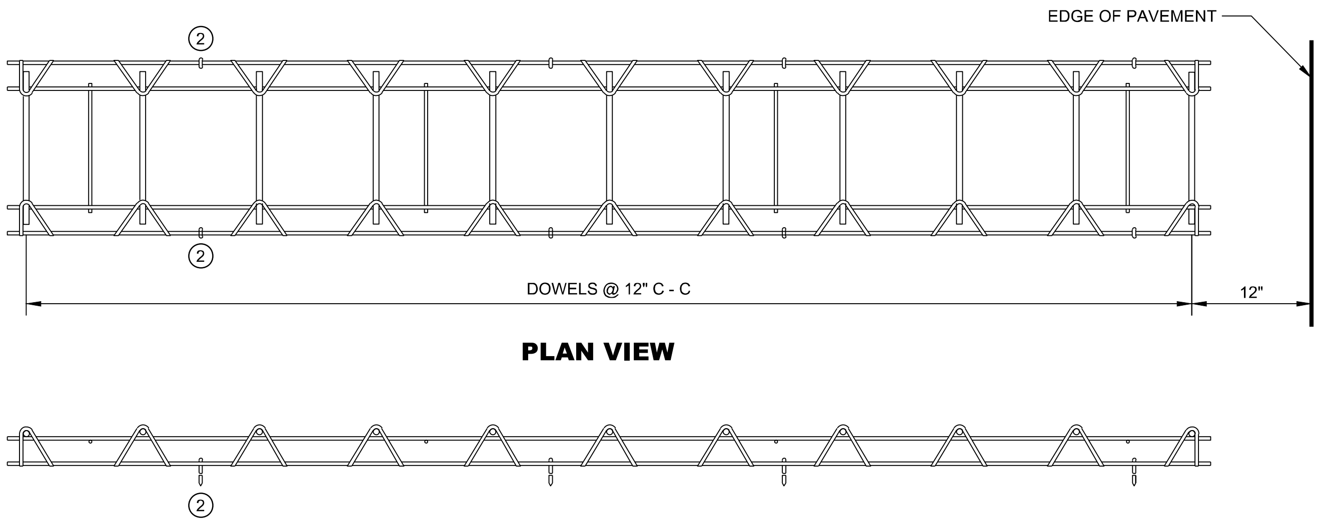
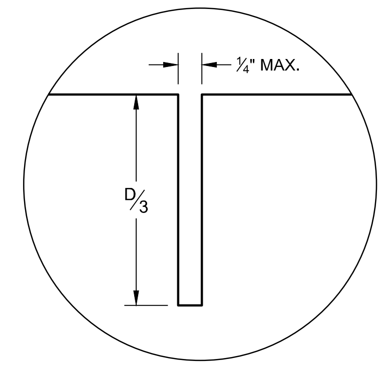


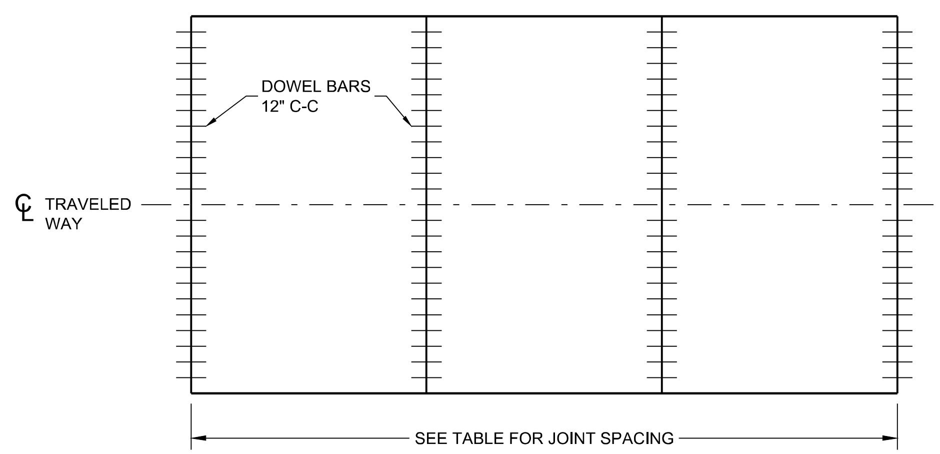
PLAN VIEW

SIDE VIEW

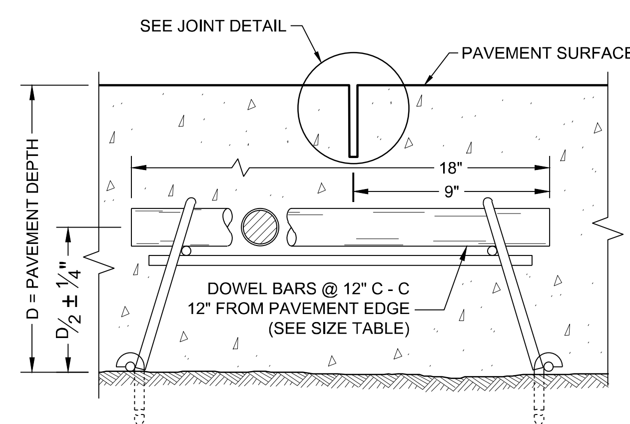
CONTRACTION JOINT DOWEL ASSEMBLY (1)



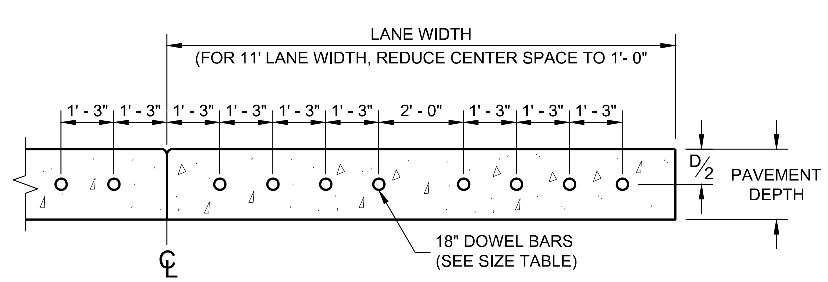
JOINT DETAIL



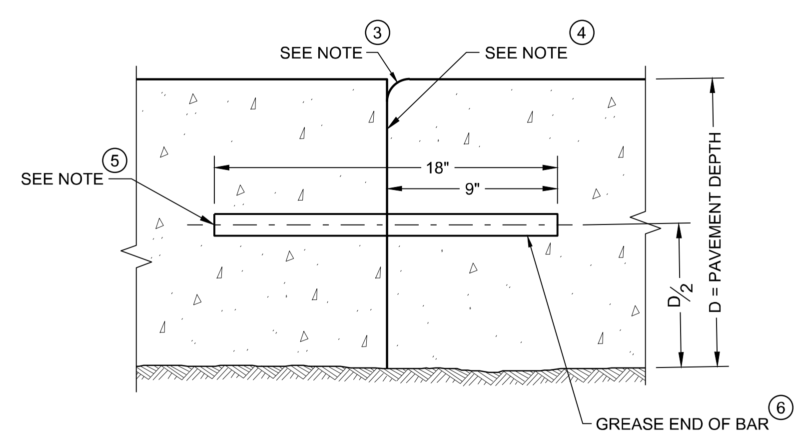
CONTRACTION JOINT LOCATIONS



DOWELED CONTRACTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



TRANSVERSE CONSTRUCTION JOINT

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

(1) OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.

(2) SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

(3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.

(4) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED DOWEL BAR CONSTRUCTION JOINT" DETAIL.

(6) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

(7) ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5½", 6", 6½"	NONE	12'
7", 7½"	1"	14'
8", 8½"	1¼"	15'
9" & ABOVE	1½"	15'

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 /S/ Peter Kemp P.E.
DATE PAVEMENT SUPERVISOR

FHWA

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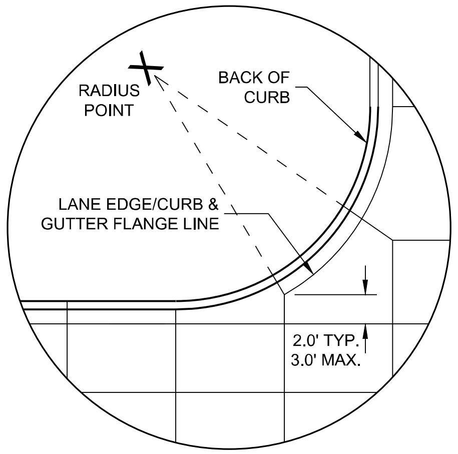
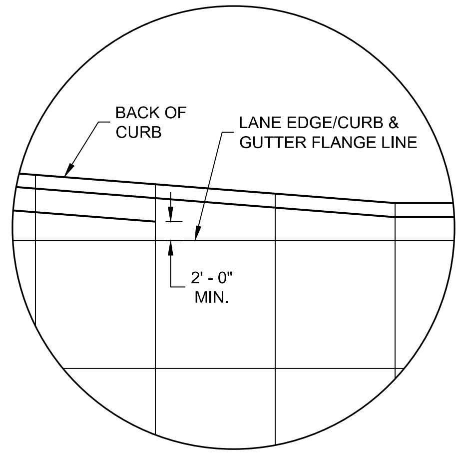
SDD 13C13 - 10

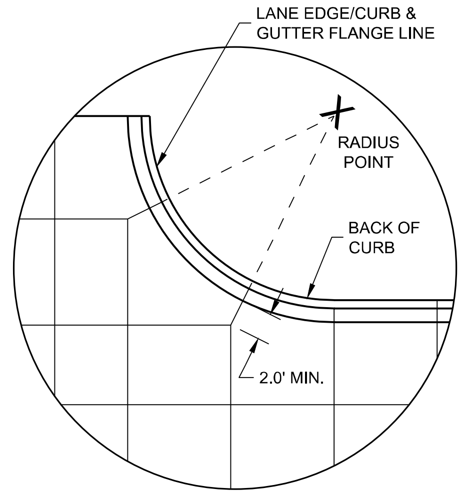
SDD 13C13 - 10



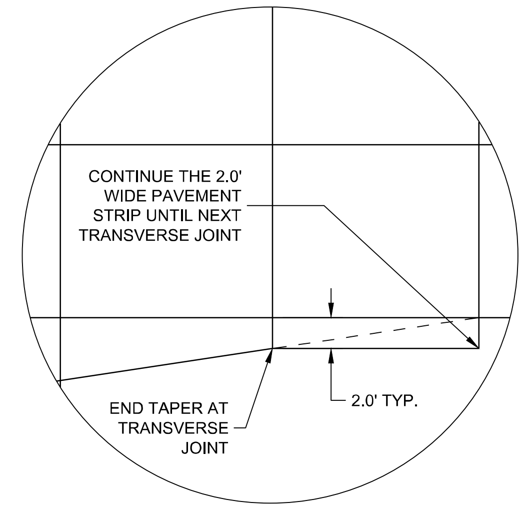
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

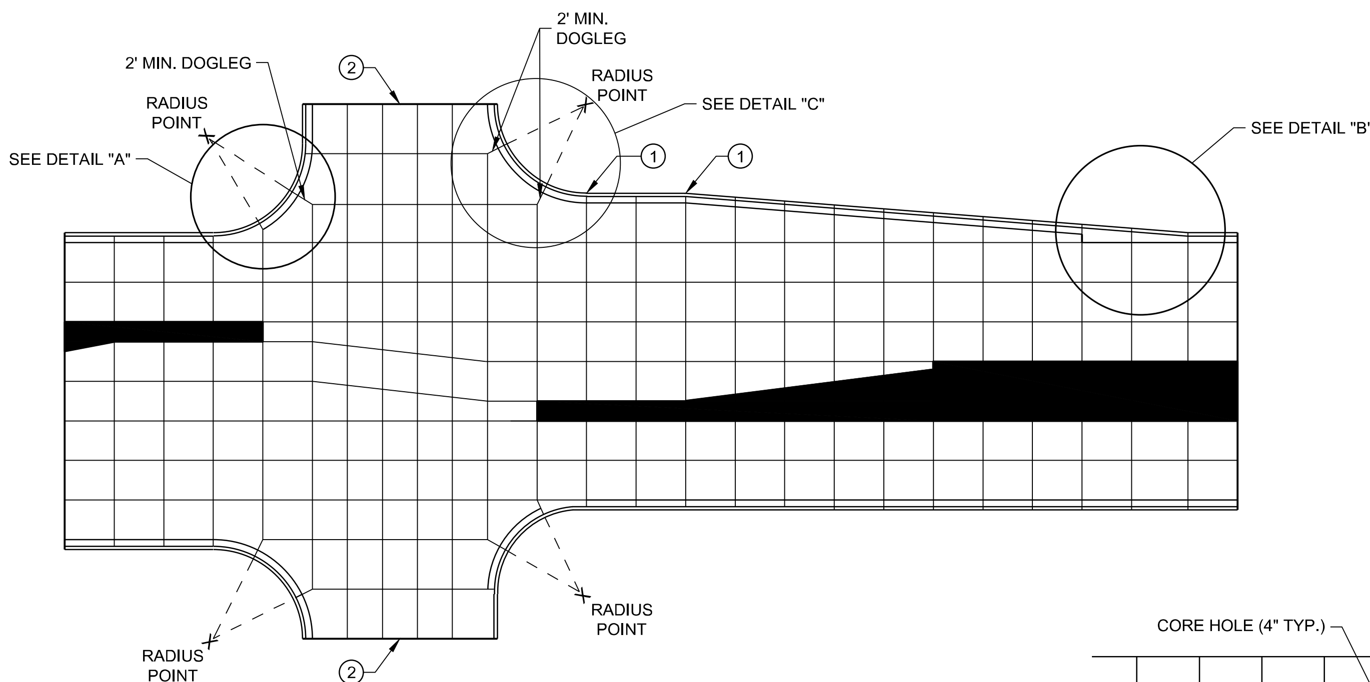
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

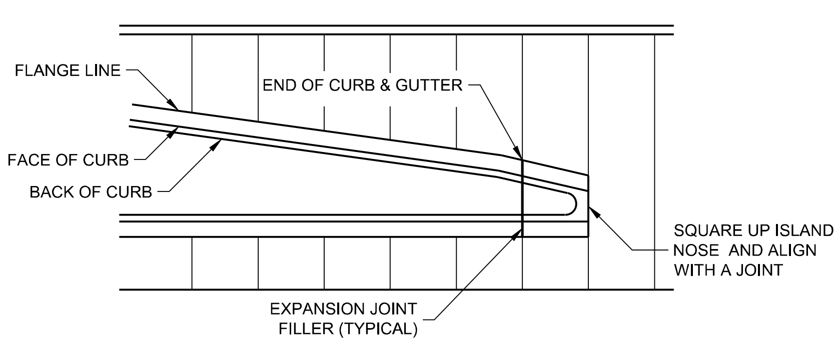
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITHEDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



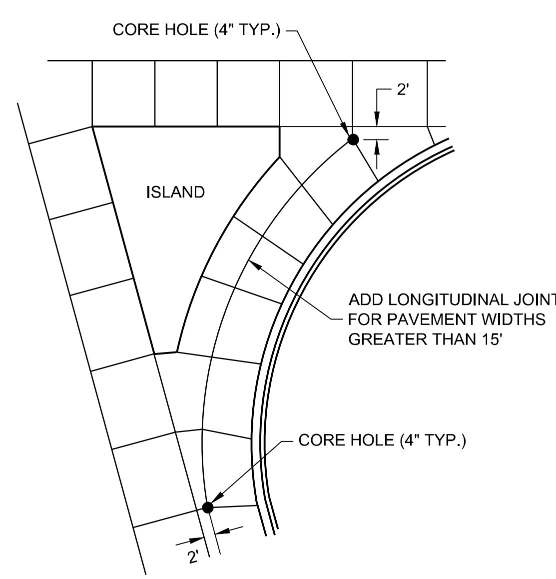
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

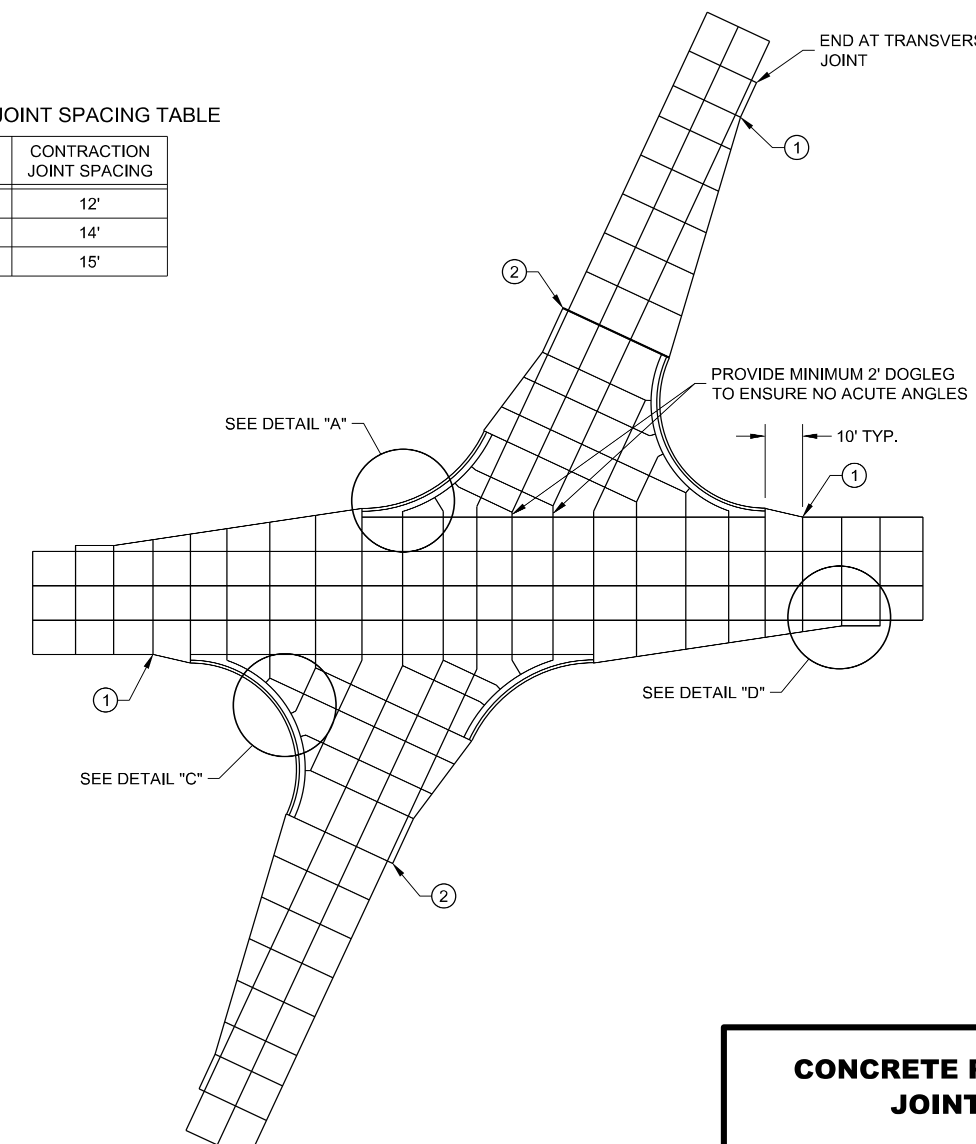
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



APPROACH TO MEDIAN



LARGE RIGHT TURN



SKEWED INTERSECTION

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATI 138

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SDD 13C18 - 07a

SDD 13C18 - 07a

LEGEND

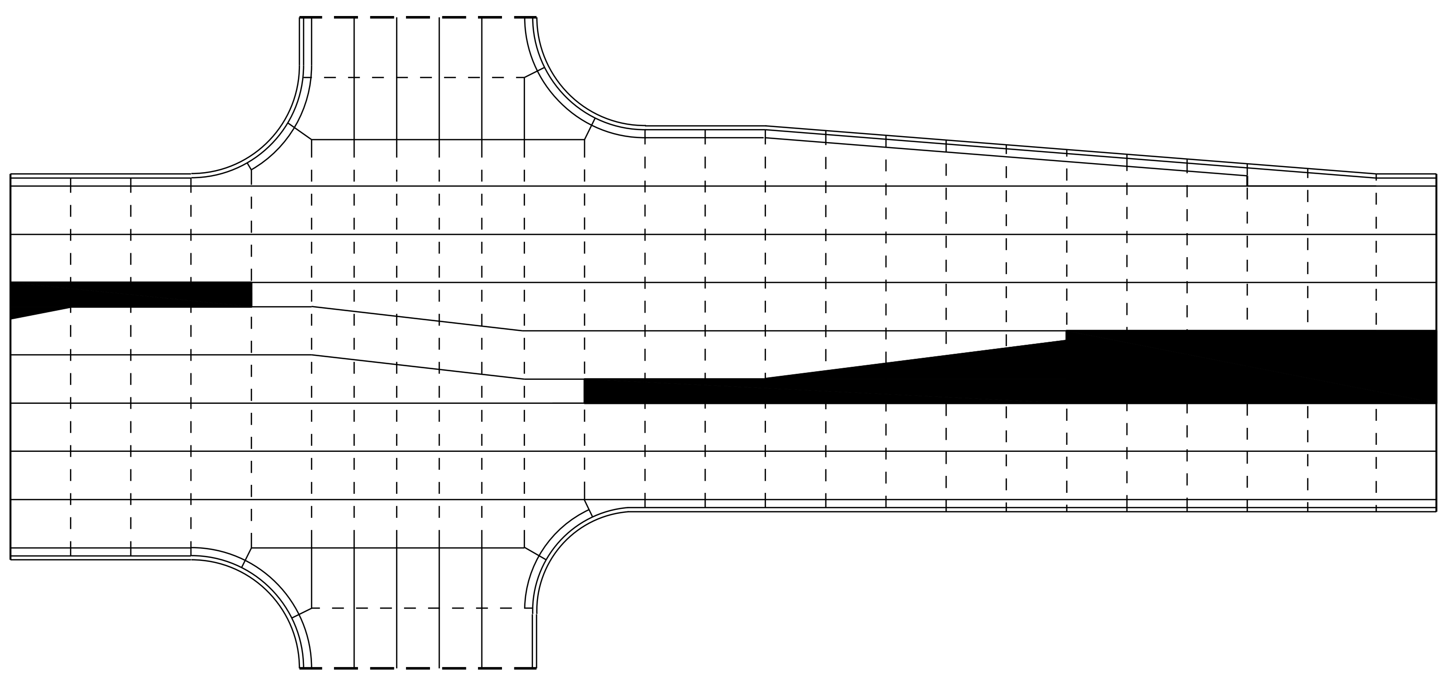
POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

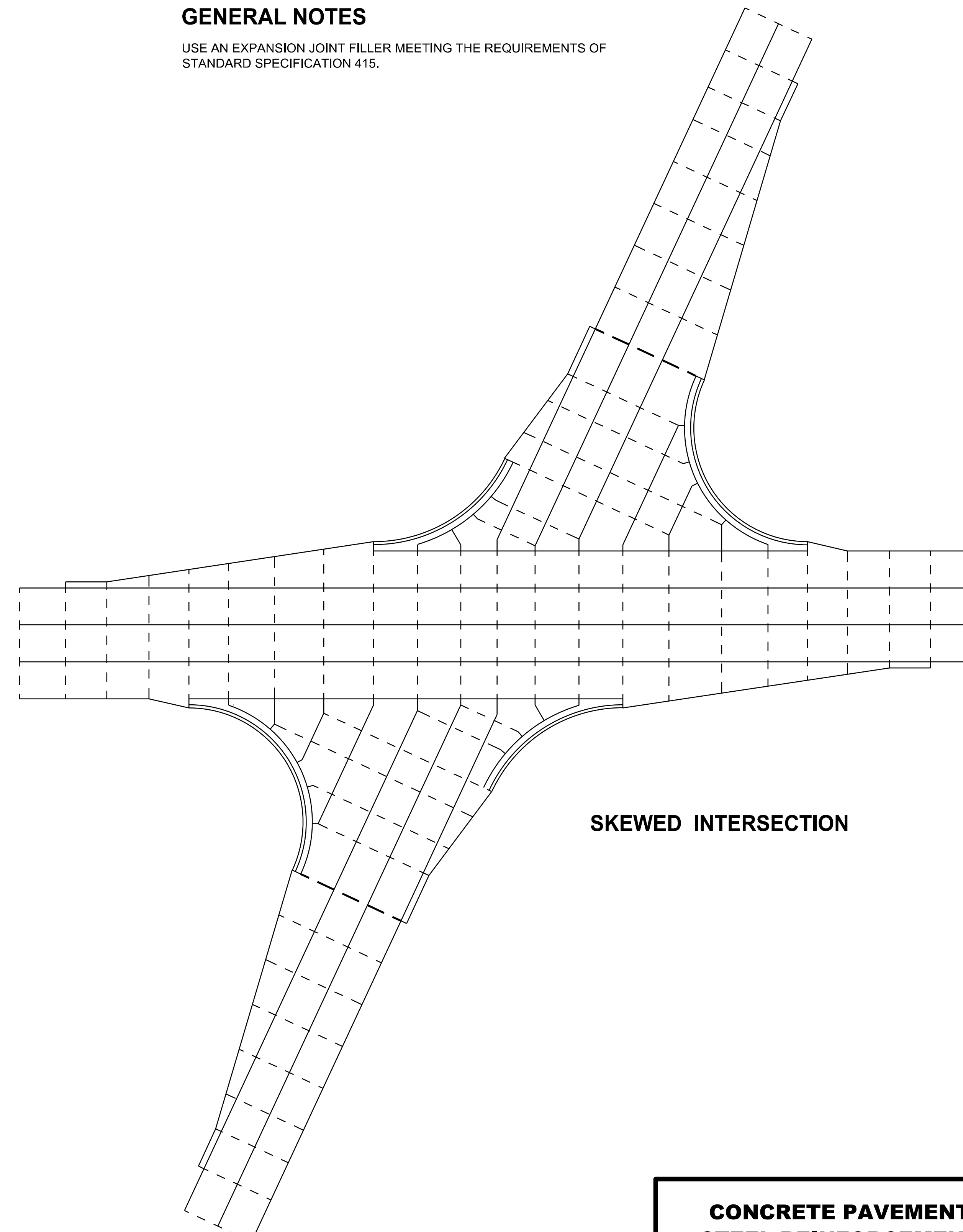
TIED JOINT

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



STANDARD INTERSECTION



SKEWED INTERSECTION

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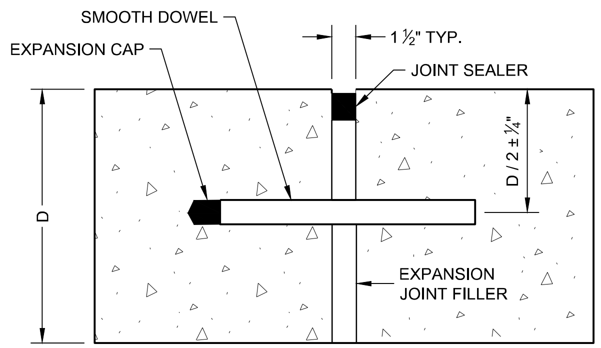
CONCRETE PAVEMENT STEEL REINFORCEMENT

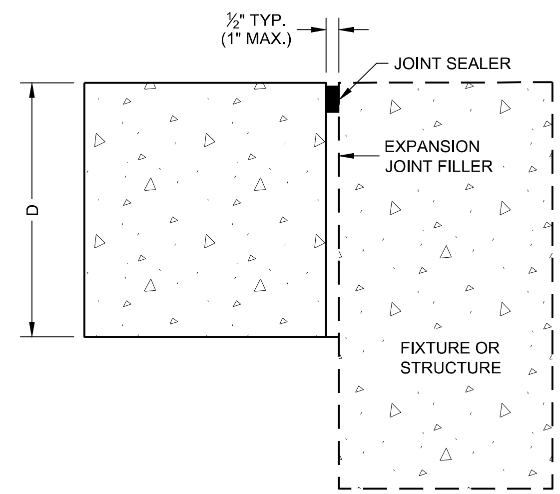
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTAT

SDD 13C18 - 07b

SDD 13C18 - 07b



DOWELED TRANSVERSE ①



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

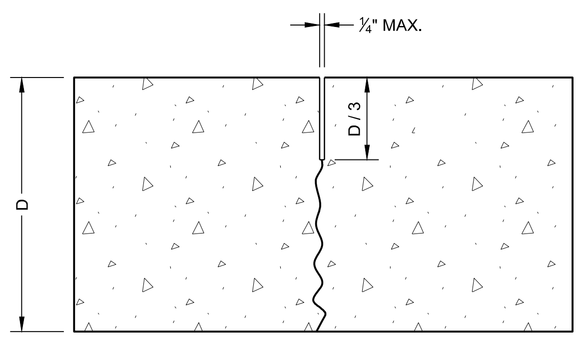
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

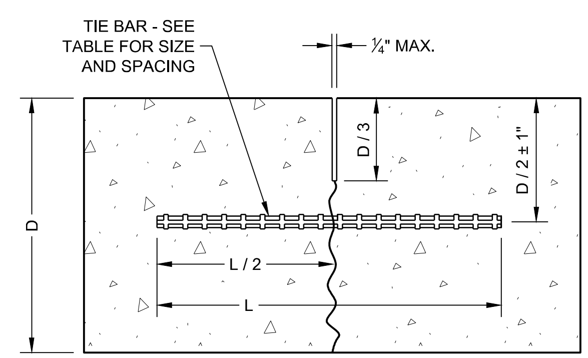
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

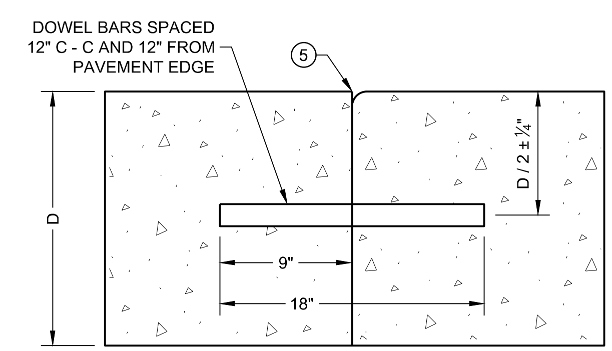
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



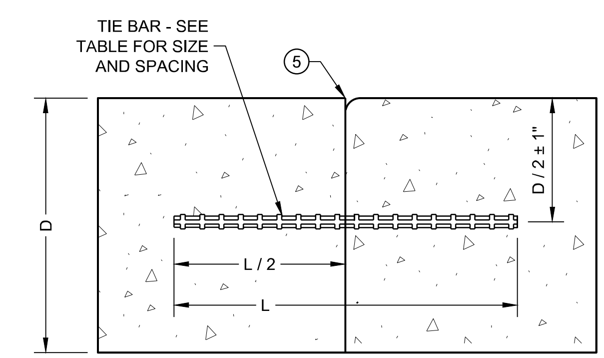
UNDOWELED TRANSVERSE



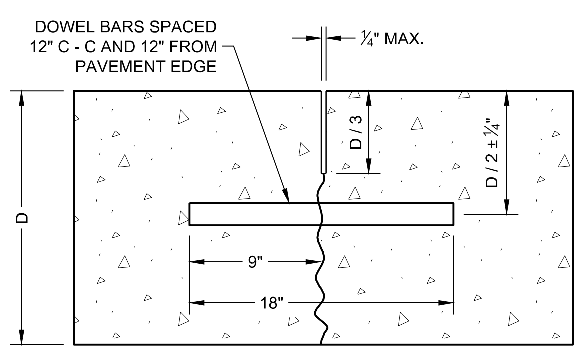
TIED LONGITUDINAL



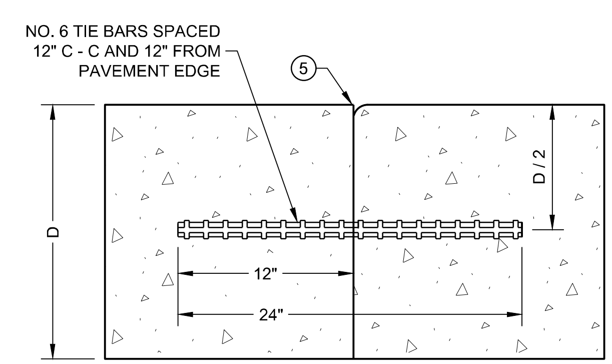
DOWELED TRANSVERSE ③



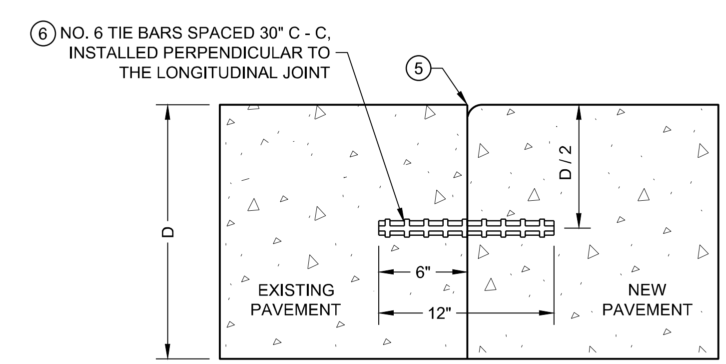
TIED LONGITUDINAL



DOWELED TRANSVERSE



TIED TRANSVERSE ③
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



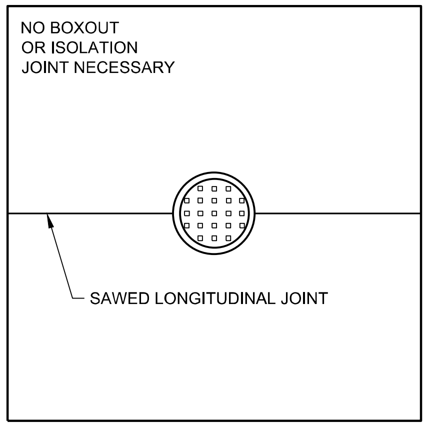
TIED LONGITUDINAL TO EXISTING

CONTRACTION JOINTS ②

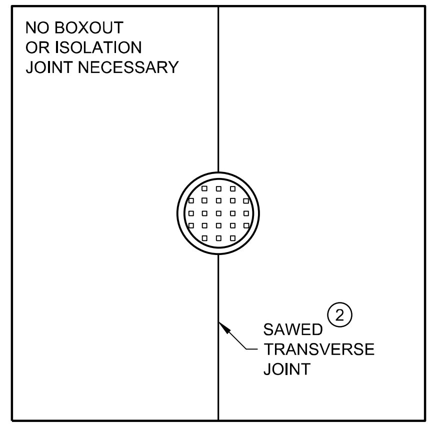
CONSTRUCTION JOINTS ④

CONCRETE PAVEMENT JOINT TYPES

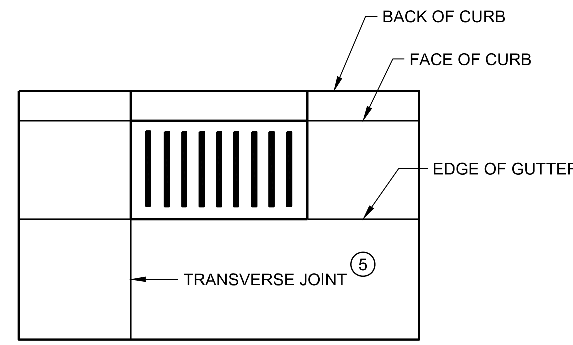
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



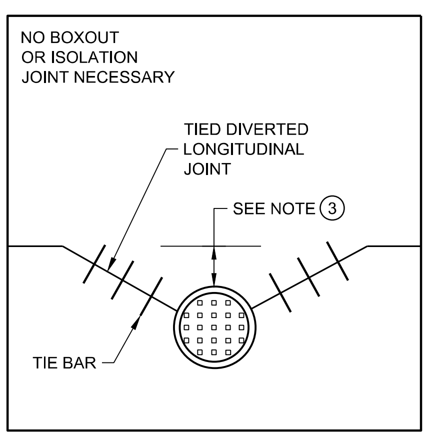
MANHOLE WITH LONGITUDINAL JOINT



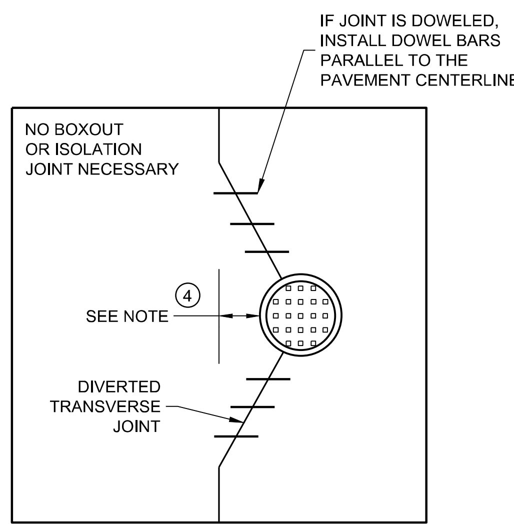
MANHOLE WITH TRANSVERSE JOINT



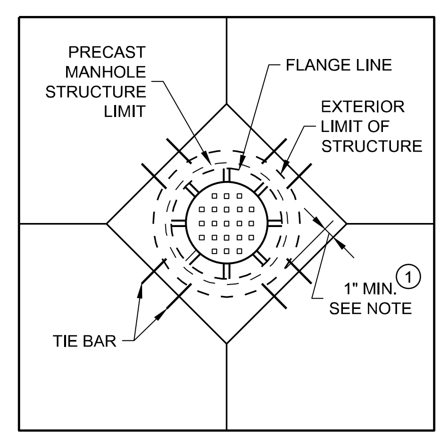
INLET WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

GENERAL NOTES

1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUPERVIS
FHWA

LEGEND

DOWELED JOINT

TIED JOINT

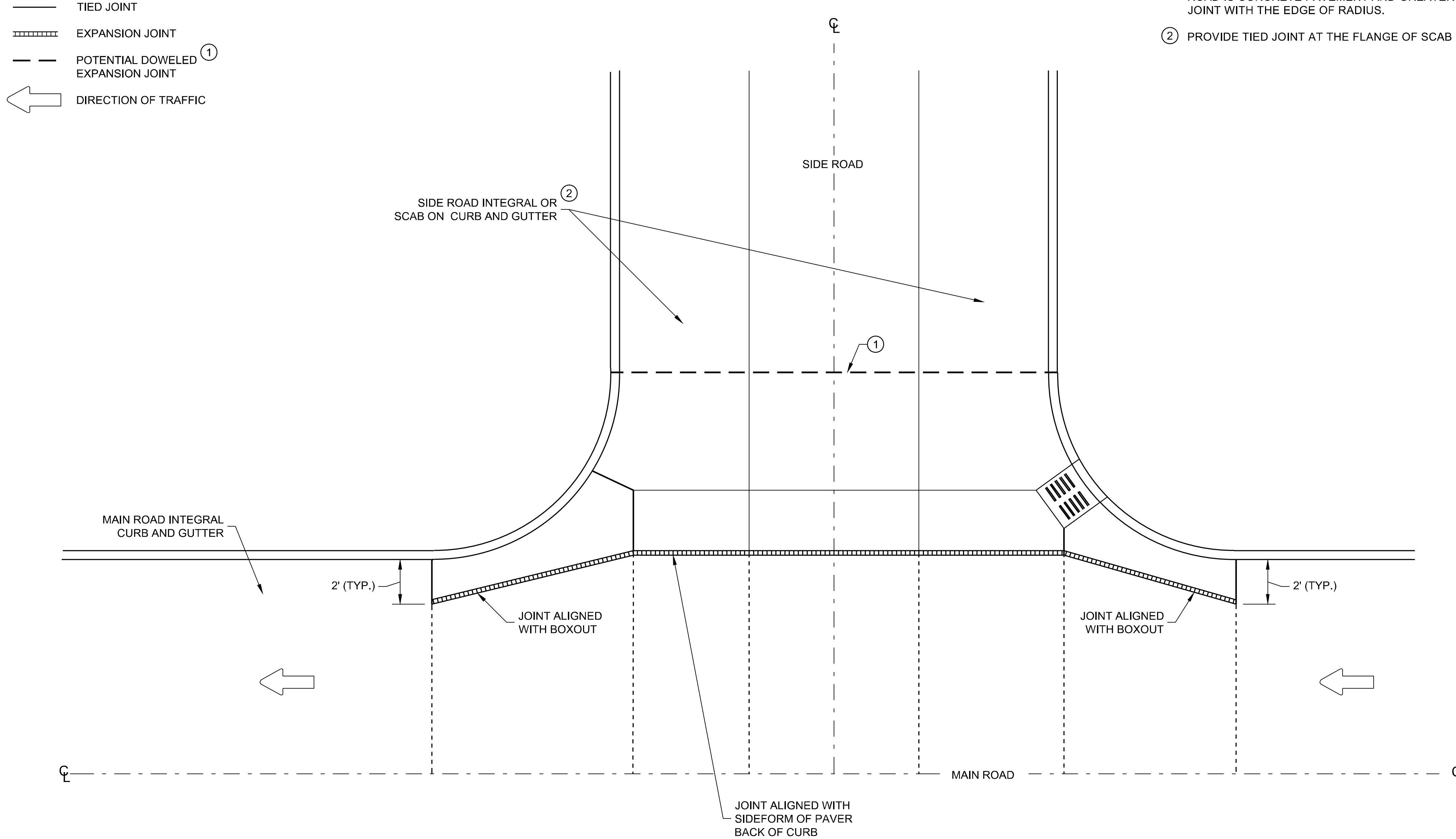
EXPANSION JOINT

POTENTIAL DOWELED (1) EXPANSION JOINT

DIRECTION OF TRAFFIC

GENERAL NOTES

1. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH THE EDGE OF RADIUS.
2. PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USE.



INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

6

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SDD 13C18 - 07f

SDD 13C18 - 07f

CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

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November 2018 — DATE

/S/ Peter Kemp P.E. — ROADWAY STANDARDS DEVELOPMENT ENGINEER

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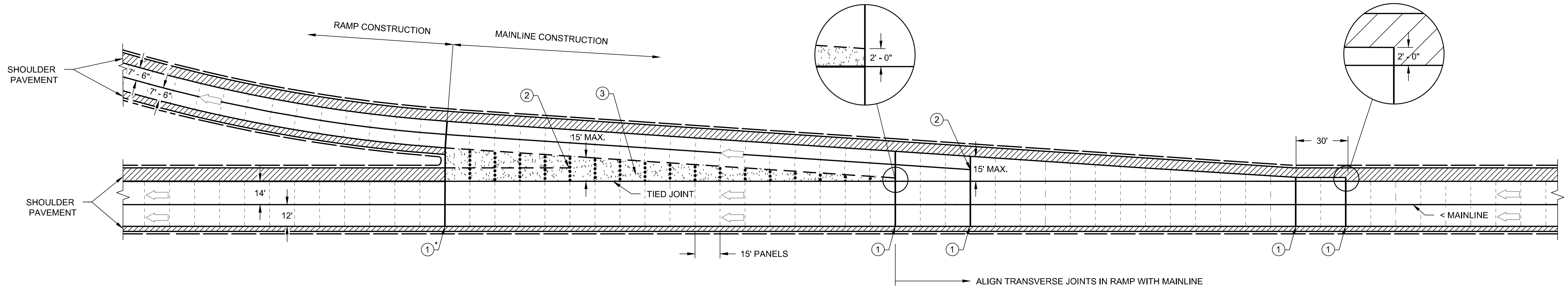
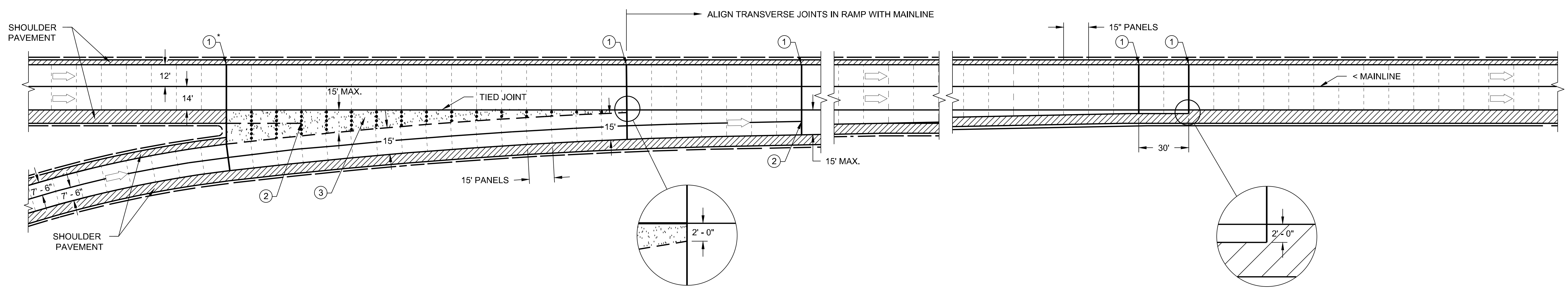


DECELERATION LANE



ACCELERATION LANE

GENERAL NOTES

PAVEMENT AND BASE THICKNESS, PANEL LENGTHS, JOINTS AND REINFORCEMENT FOR THE DECELERATION AND ACCELERATION LANES, INCLUDING TAPERS, SHALL BE THE SAME AS THE MAINLINE, EXCEPT WHERE OTHERWISE NOTED.

ALL REINFORCEMENT BARS SHALL BE EPOXY COATED CONFORMING TO SUBSECTION 505.2.6 OF THE STANDARD SPECIFICATIONS.

LANE AND SHOULDER WIDTHS MAY VARY FROM SHOWN. SEE CONSTRUCTION PLANS FOR ACTUAL PROPOSED WIDTHS.

(1) CRITICAL TRANSVERSE JOINT LOCATIONS AT PAVEMENT WIDTH CHANGES. ((1)* IS NOT A CRITICAL TRANSVERSE JOINT WHEN ASPHALTIC GORE IS INSTALLED).

(2) STOP LONGITUDINAL JOINT WITH CORE HOLE (2" TYP.) WHEN IT MEETS THE FIRST TRANSVERSE JOINT LESS THAN 15' WIDE OR STOP LONGITUDINAL JOINT WHEN IT MEETS 2' AWAY FROM THE TIED JOINT OF THE MAINLINE.

(3) DISREGARD THE JOINT DETAILS IN AND AROUND THE GORE WHEN ASPHALTIC GORE IS INSTALLED.

LEGEND

- DOWELED JOINT
- UNDOWELED JOINT
- TIED JOINT
- UNTIED JOINT
- GORE
- DIRECTION OF TRAVEL

CONCRETE PAVEMENT JOINTING ACCELERATION/ DECELERATION LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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November 2018 — DATE
/S/ Peter Kemp P.E. — ROADWAY STANDARDS DEVE ENGINEER
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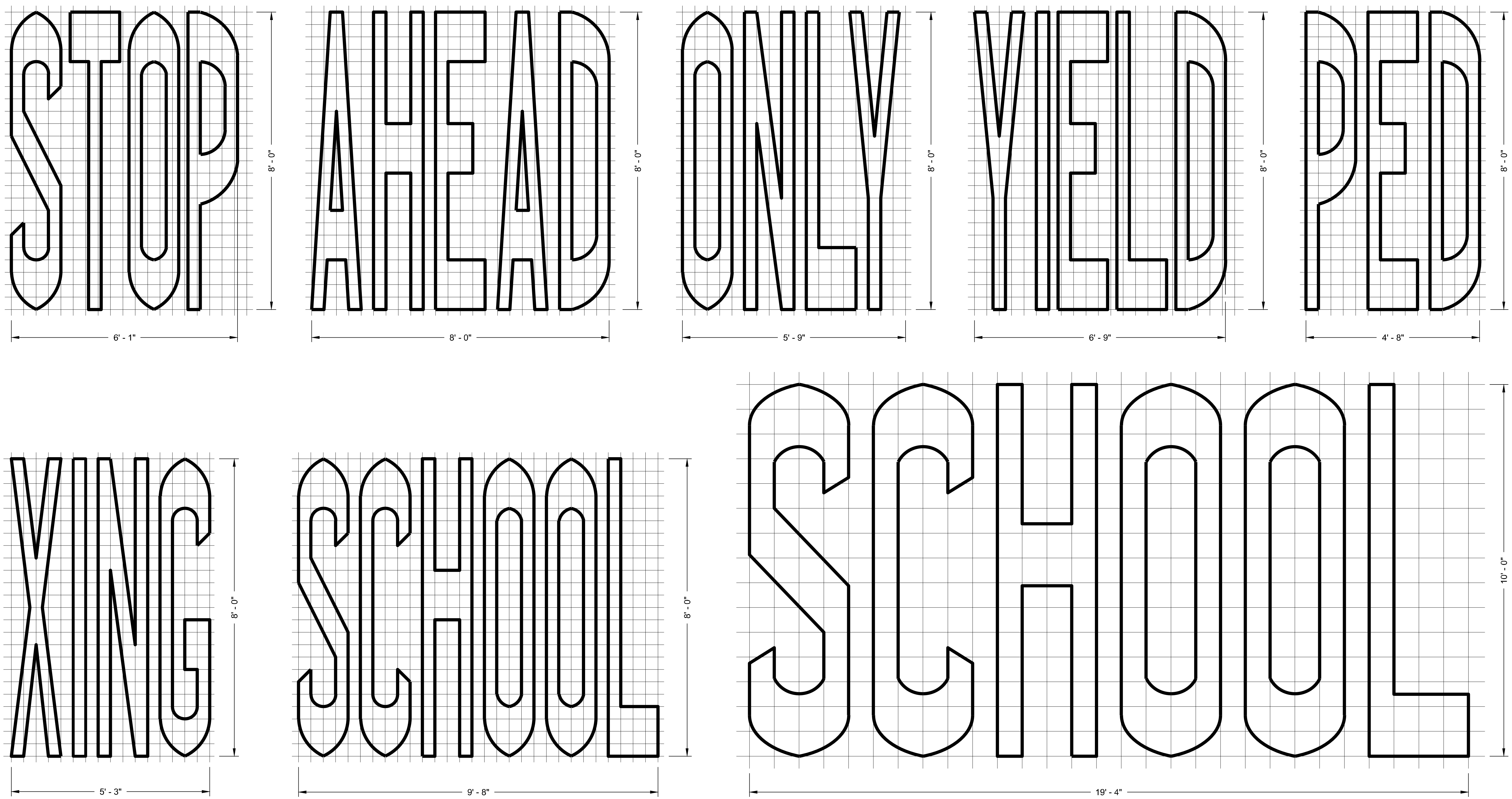
SDD 13C18 - 07g

SDD 13C18 - 07g



SINGLE LANE

TWO - LANE

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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.

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

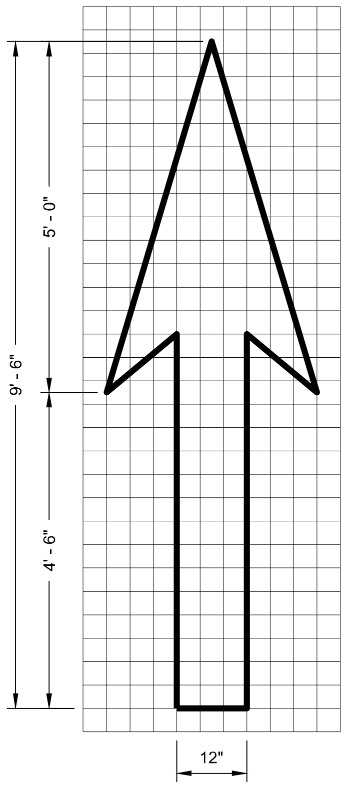
November 2019 | /S/ Matthew Rauch
DATE | STATE SIGNING AND MAF ENGINEER

FHWA

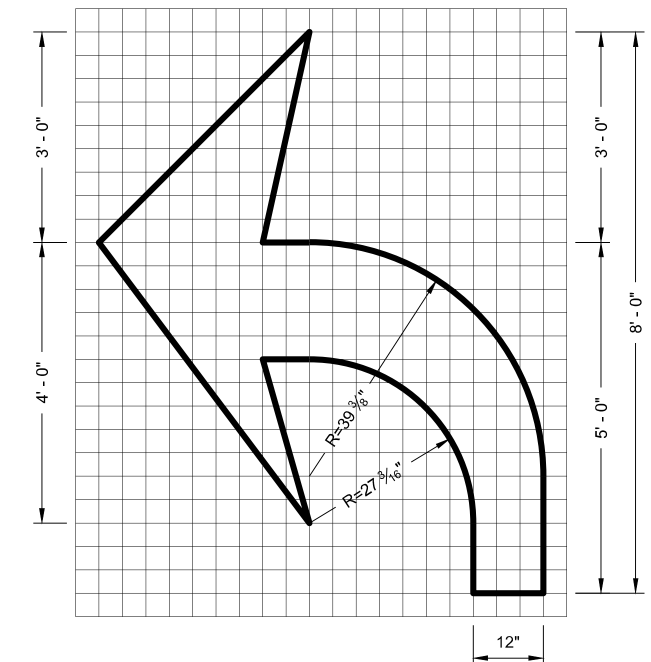
SDD 15C07 - 15b

GENERAL NOTES

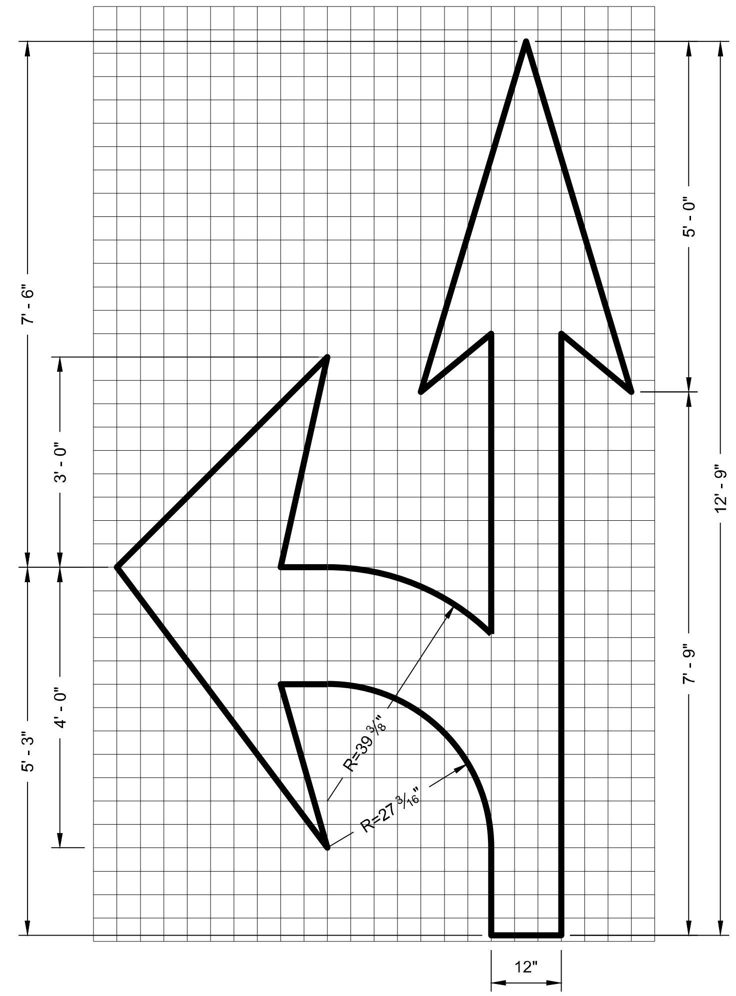
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



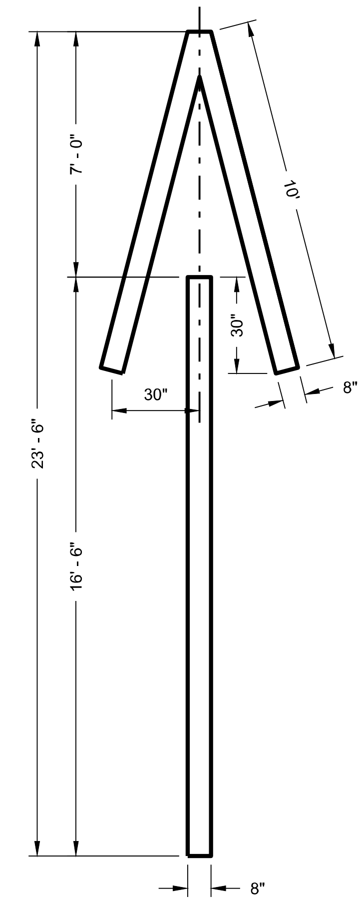
TYPE 1



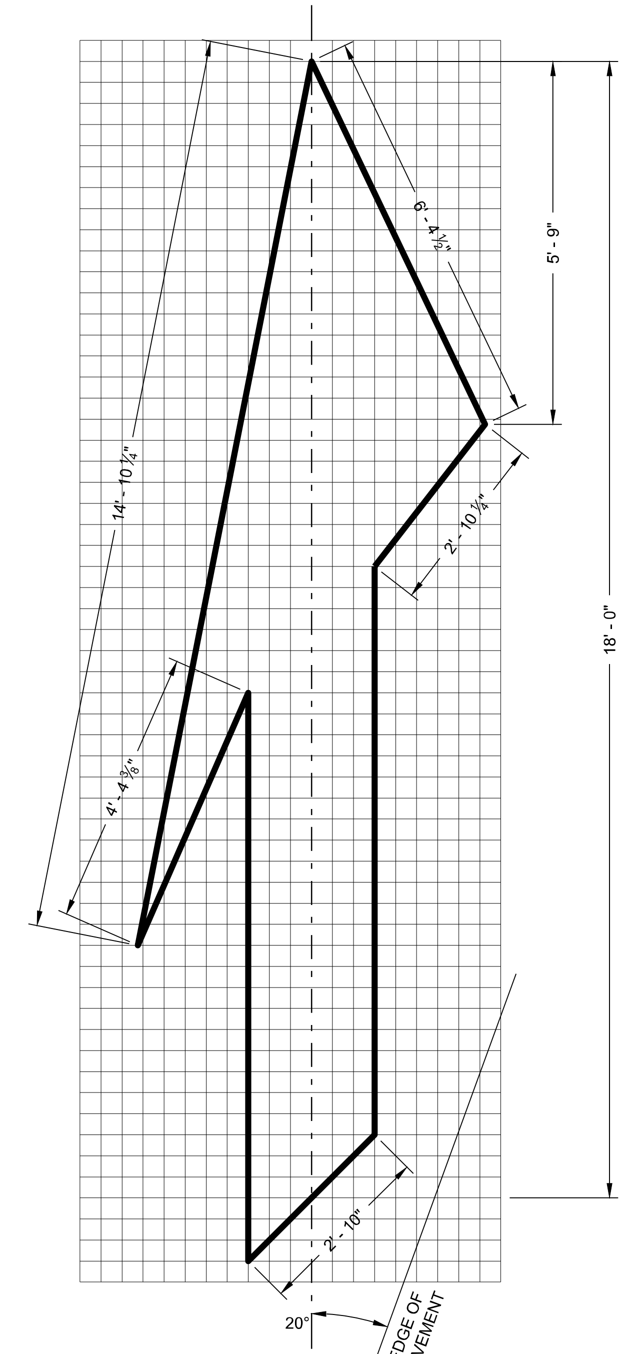
TYPE 2



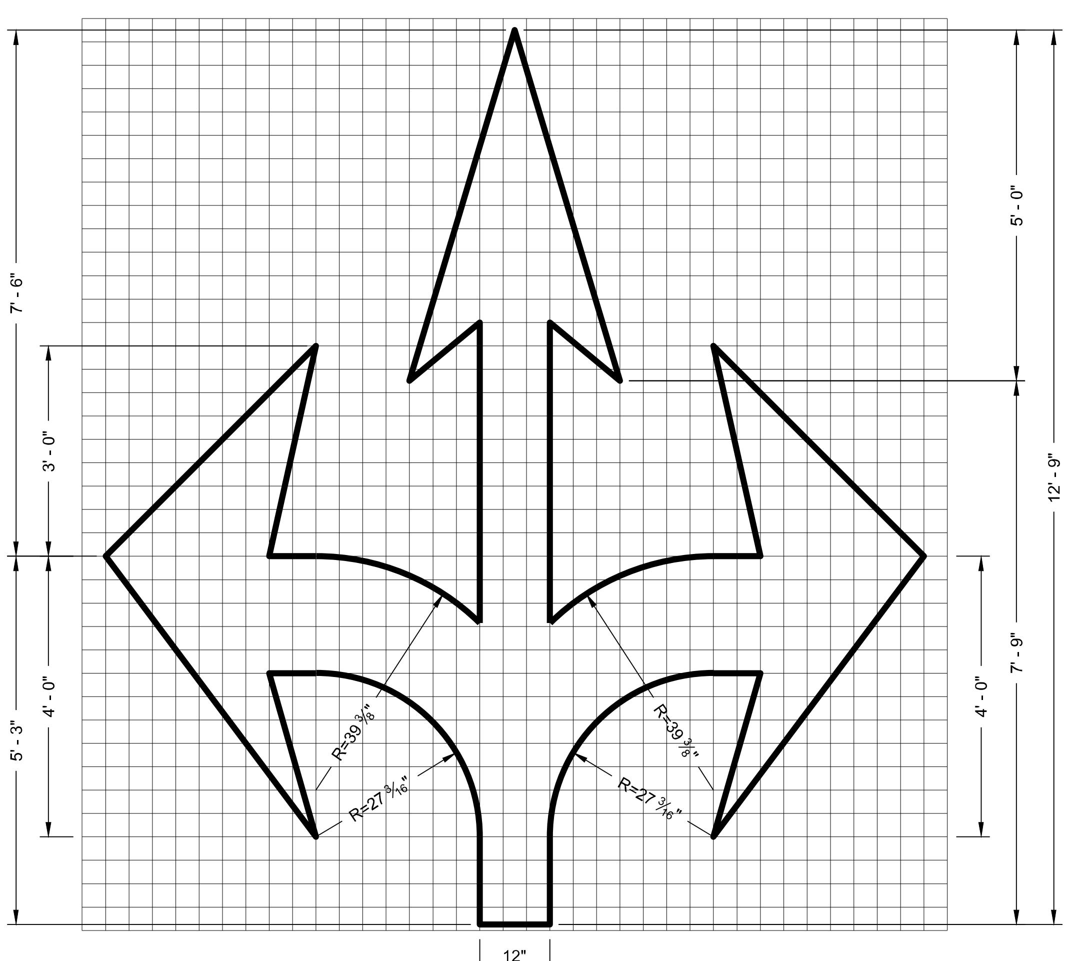
TYPE 3



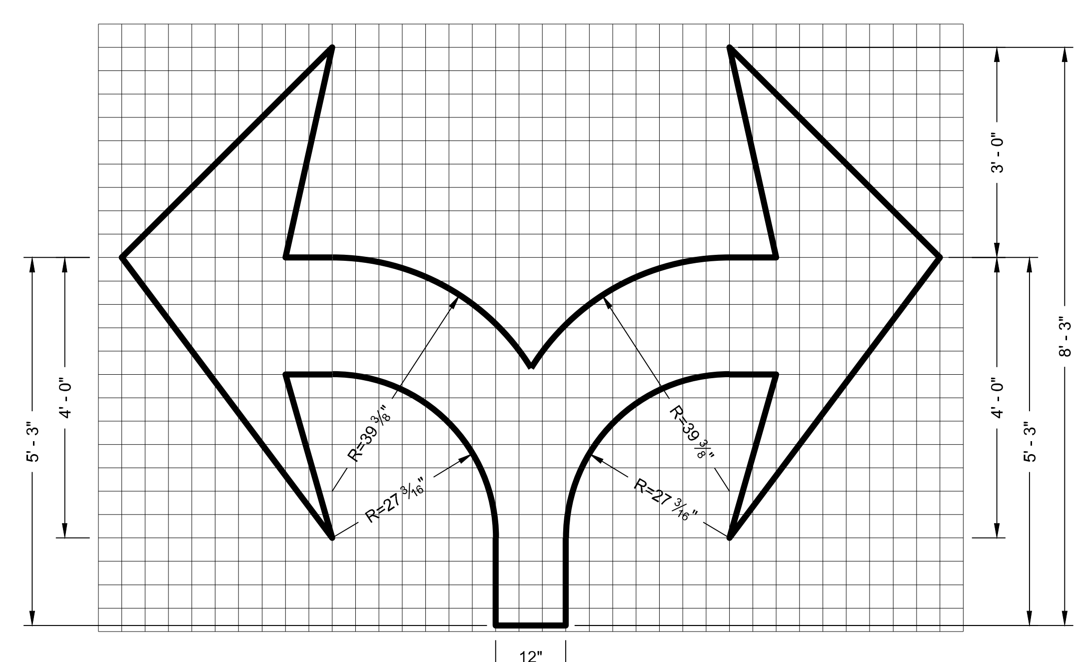
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

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SDD 15C07 - 15c

SDD 15C07 - 15c

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

November 2019 — DATE

/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

FHWA

GENERAL NOTES

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

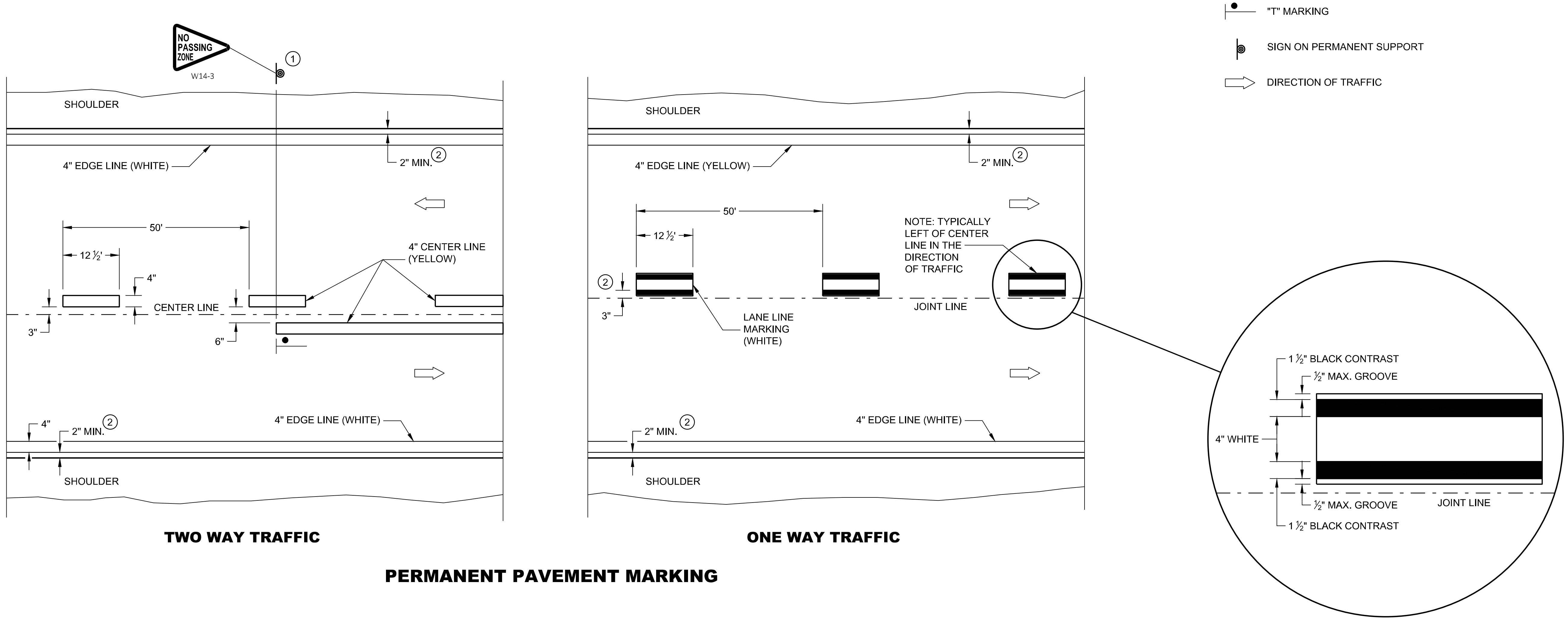
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



PERMANENT PAVEMENT MARKING

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SDD 15C08 - 21a

SDD 15C08 - 21a

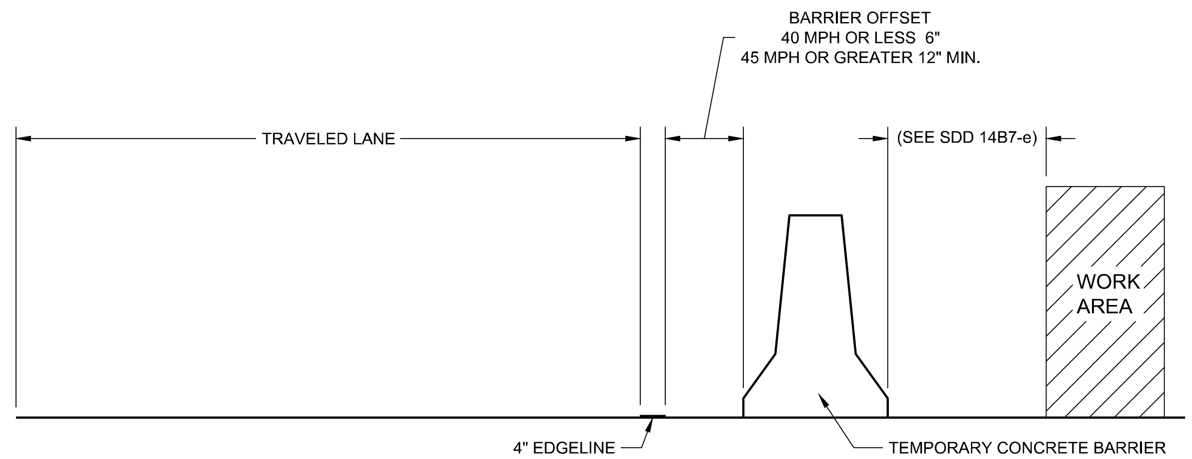
PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2022 /S/ Jeannie Silver
DATE STATEWIDE SIGNING AND MARKING ENGINEER

FHWA



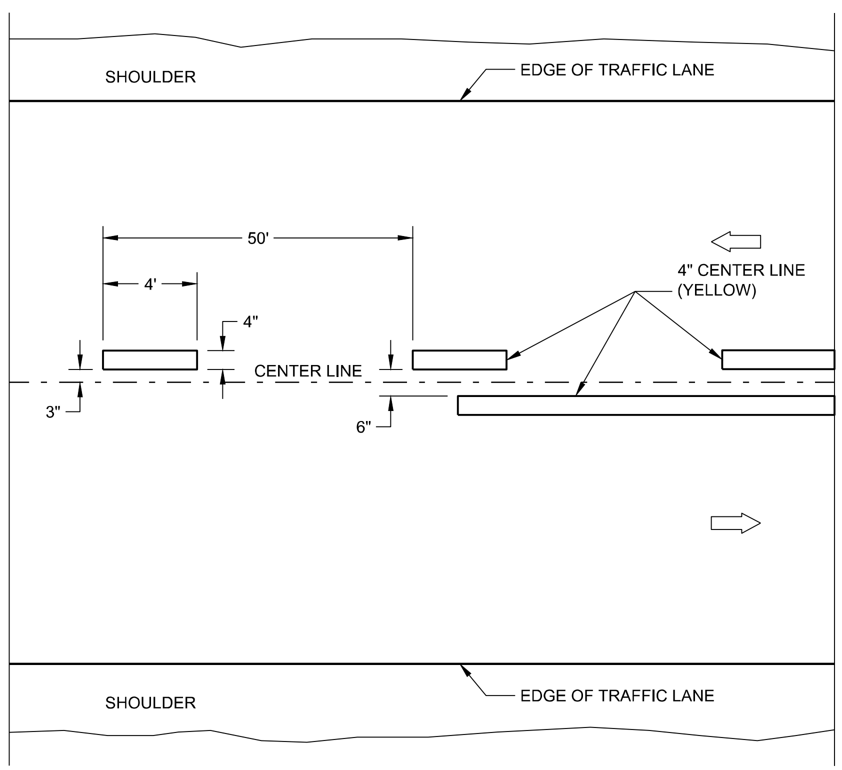
TEMPORARY BARRIER OFFSET FROM EDGELINE

GENERAL NOTES

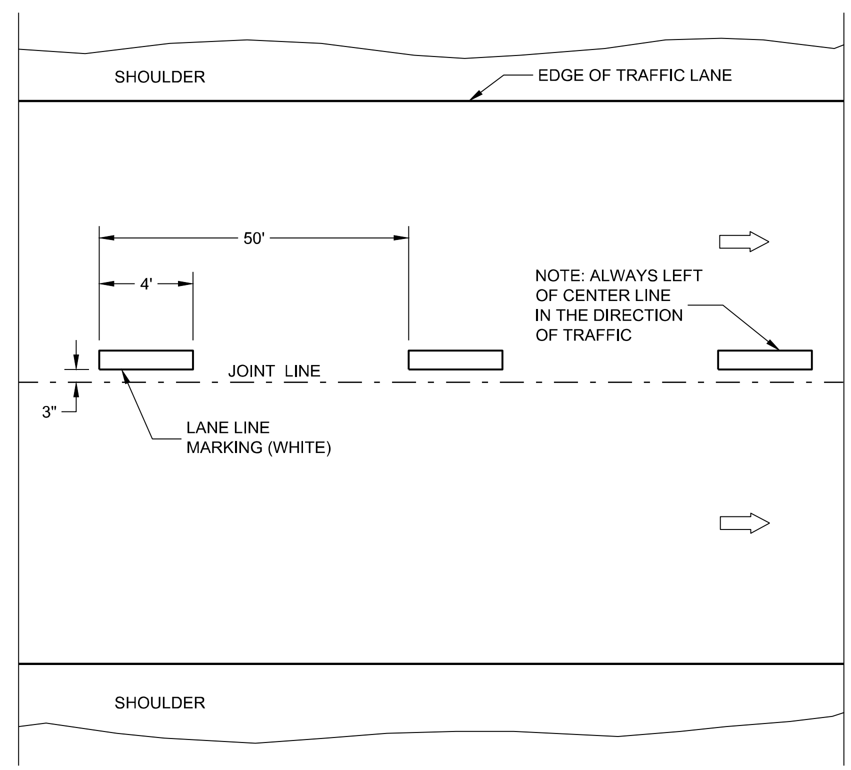
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

LEGEND

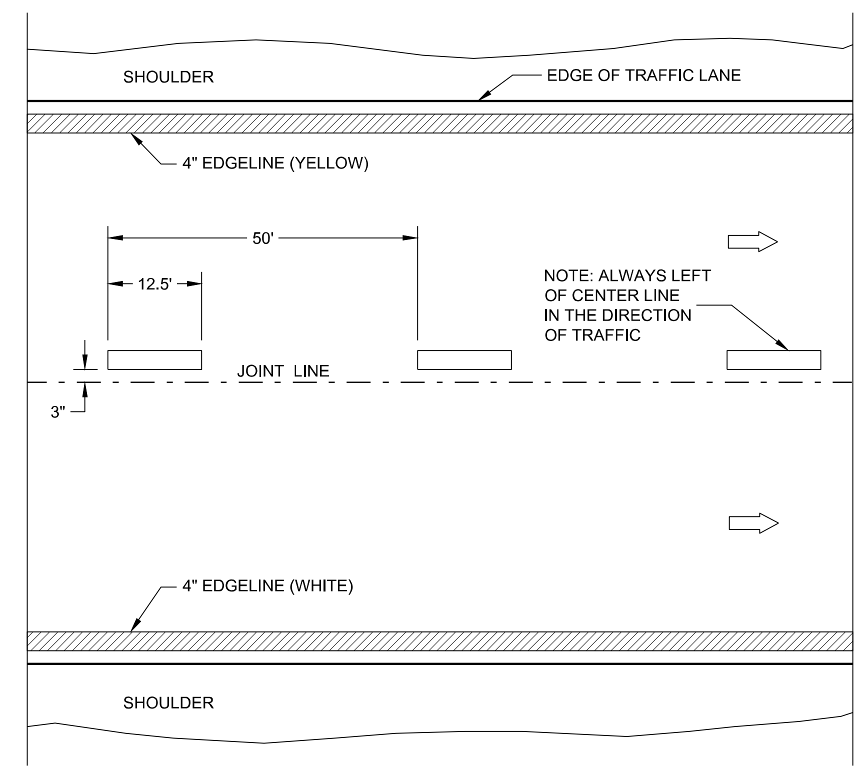
DIRECTION OF TRAFFIC



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

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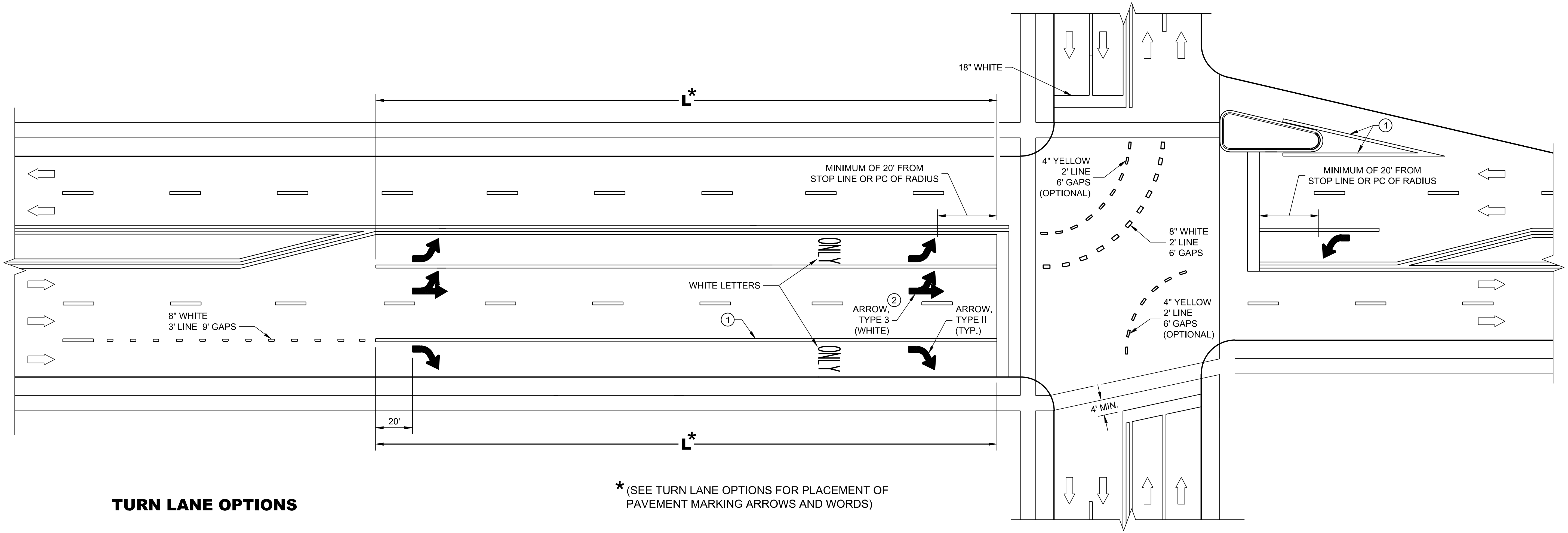
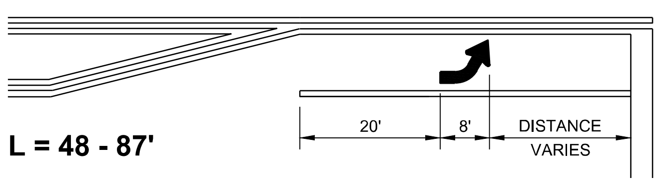
SDD 15C08 - 21b



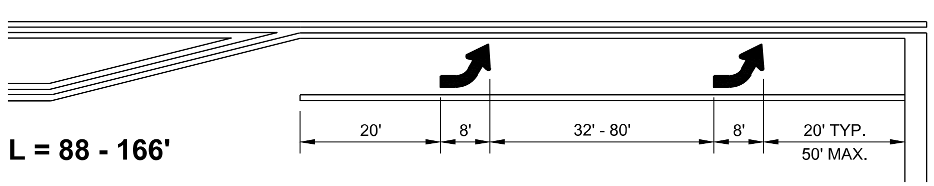
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

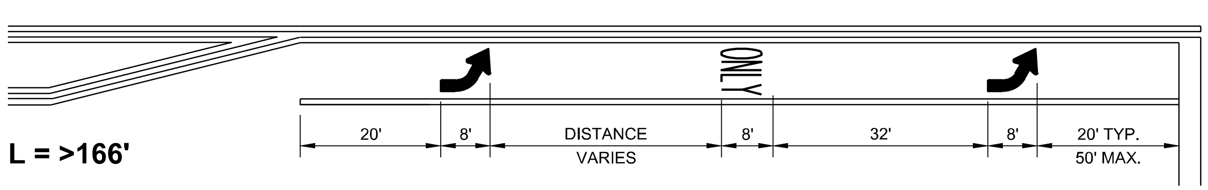
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



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

6

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SDD 15C08 - 21d

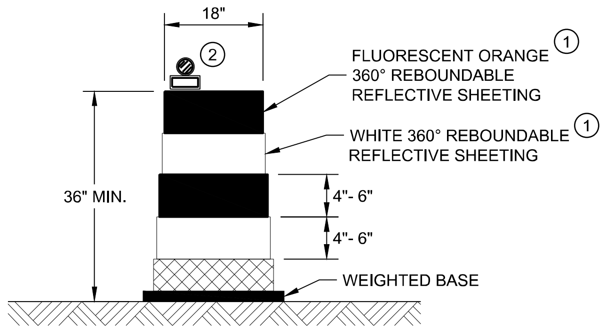
SDD 15C08 - 21d

PAVEMENT MARKING (TURN LANES)

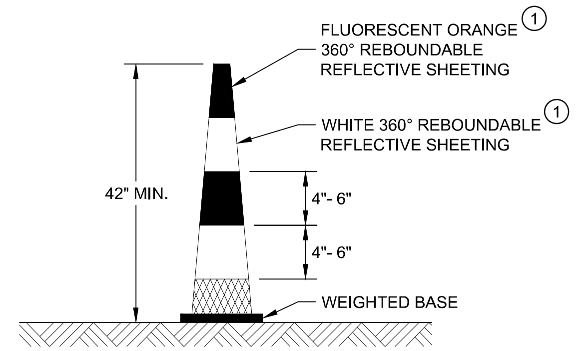
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTAT

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.

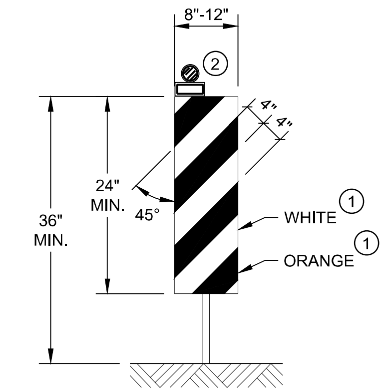


DRUM



42" CONE

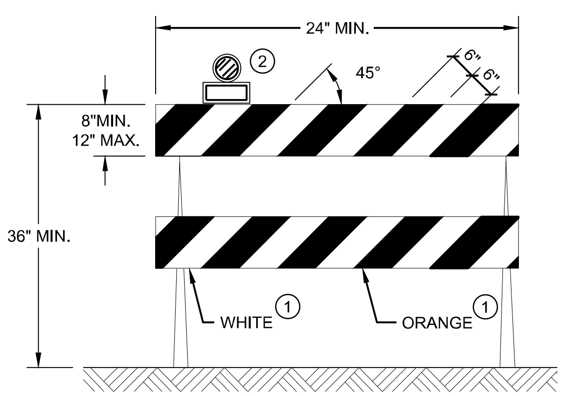
DO NOT USE IN TAPERS
½ SPACING OF DRUMS



VERTICAL PANEL

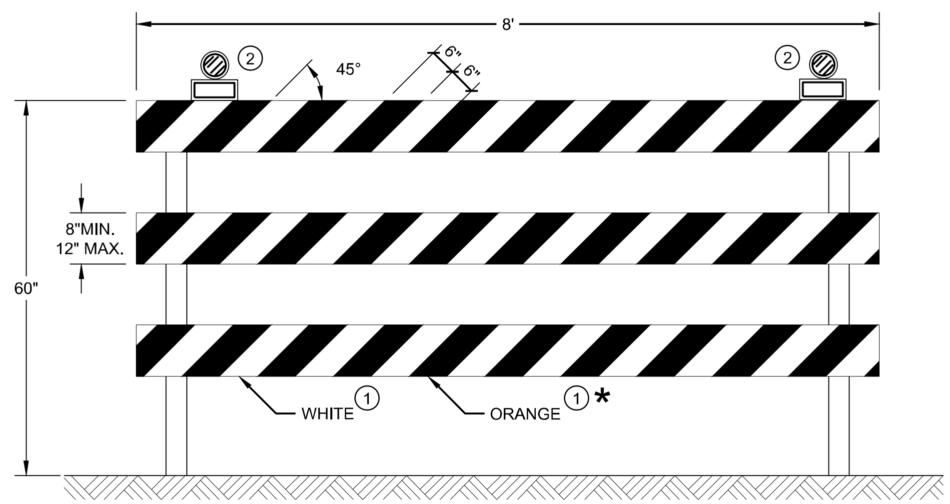
THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.

6



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.

6

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

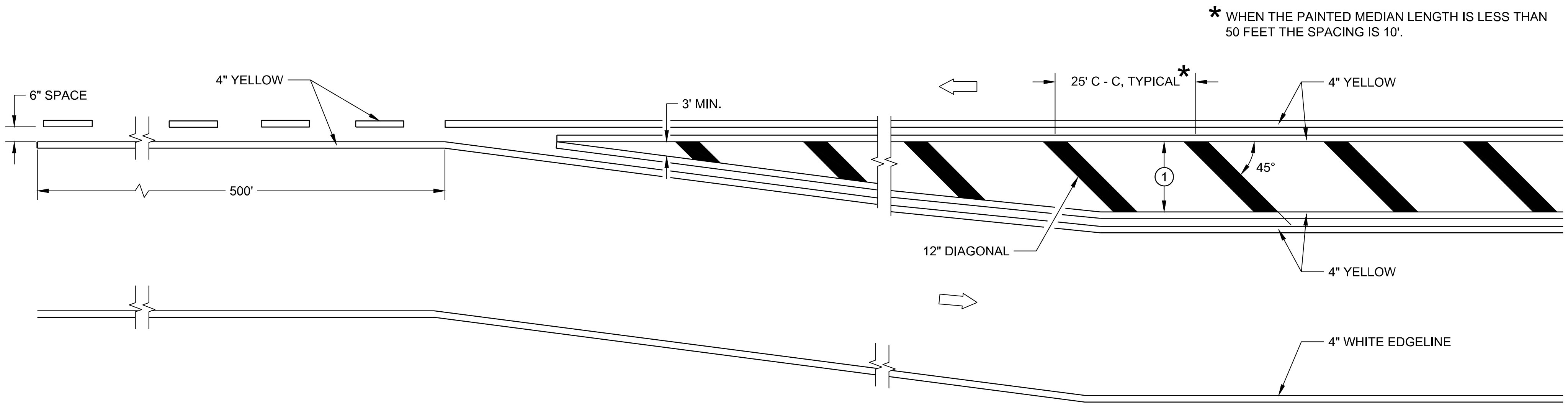
SDD 15C11 - 09b

SDD 15C11 - 09b

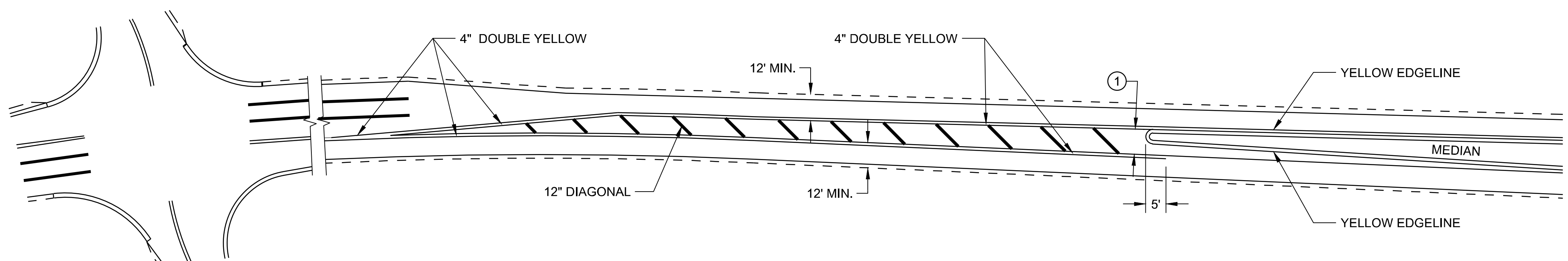
GENERAL NOTES

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.

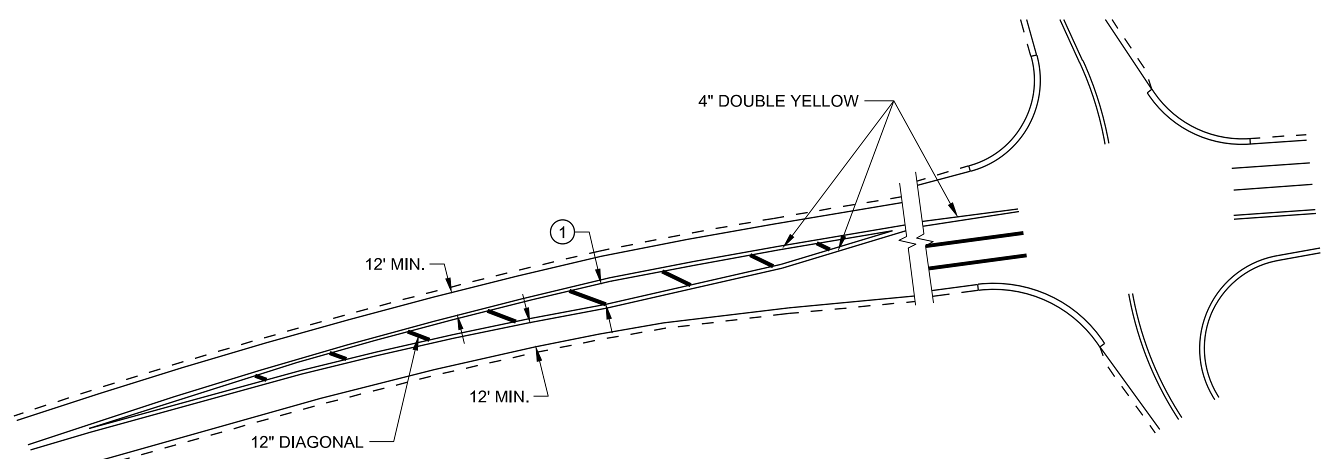
⇨ DIRECTION OF TRAVEL



MEDIAN ISLAND DETAIL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

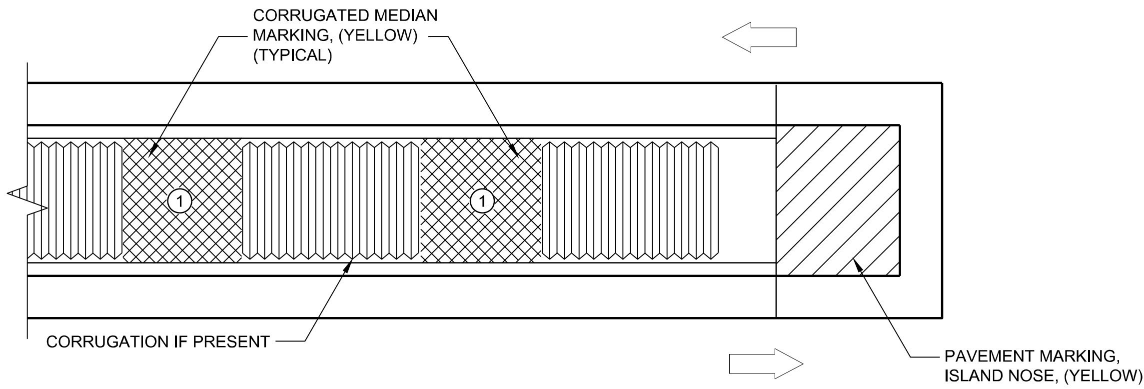
MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

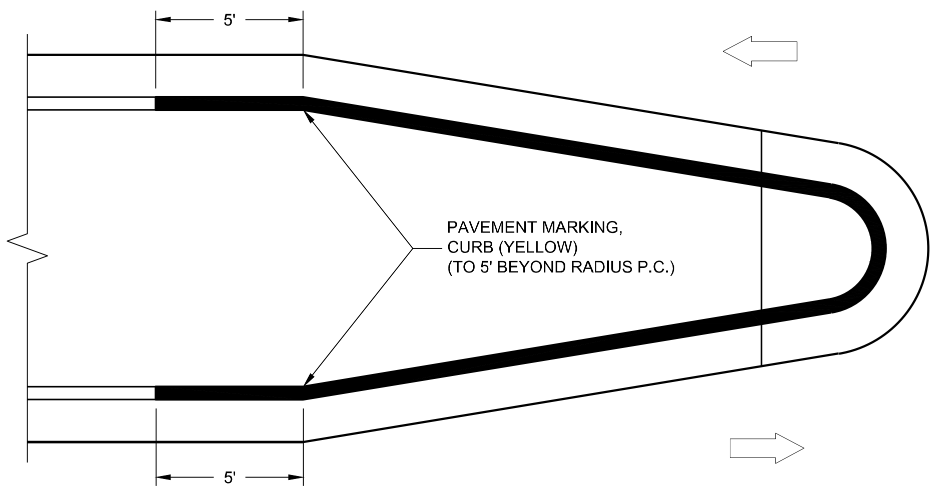
APPROVED
May 2022 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MARKING ENGINEER
FHWA

6

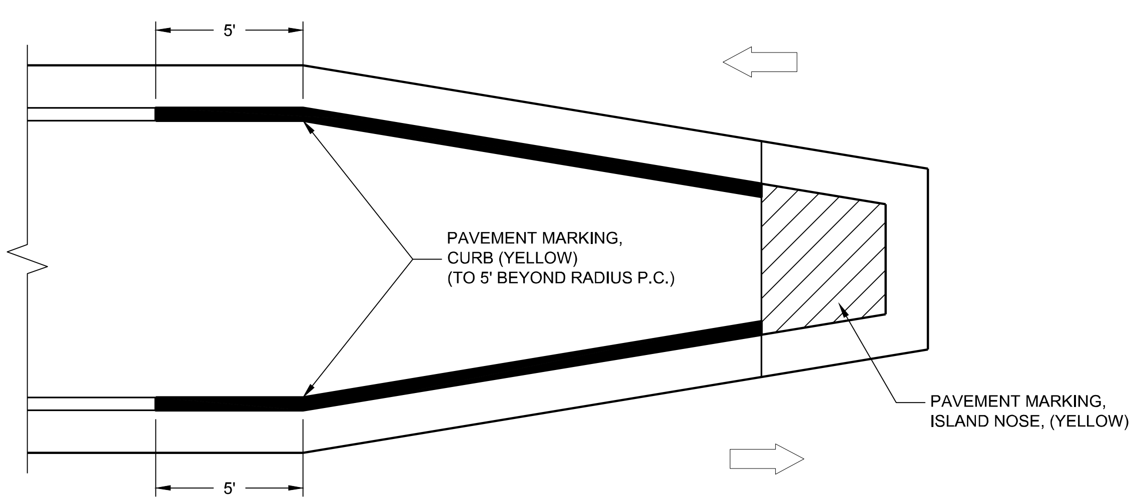
SDD 15C18 - 06a



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



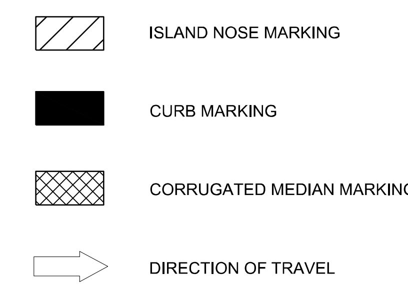
MEDIAN ISLAND WITH SLOPED NOSE

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.



PAVEMENT MARKINGS, MEDIAN ISLAND NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2022 — DATE

/S/ Jeannie Silver — STATE SIGNING AND MAR ENGINEER

FHWA

REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING?	
	YES	NO
≤ 30 MPH	NO	OPTIONAL
35 OR 40 MPH	OPTIONAL	RECOMMENDED
≥ 45 MPH	RECOMMENDED	REQUIRED

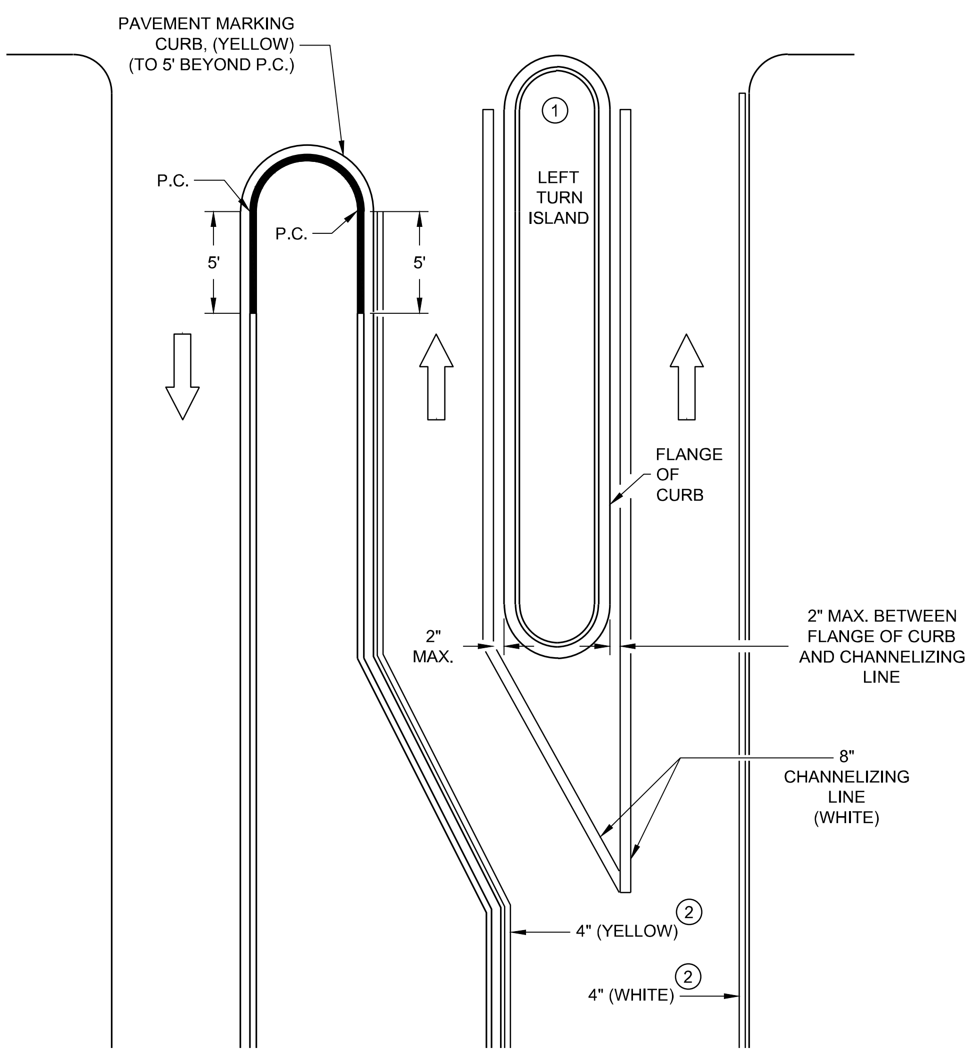
GENERAL NOTES

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

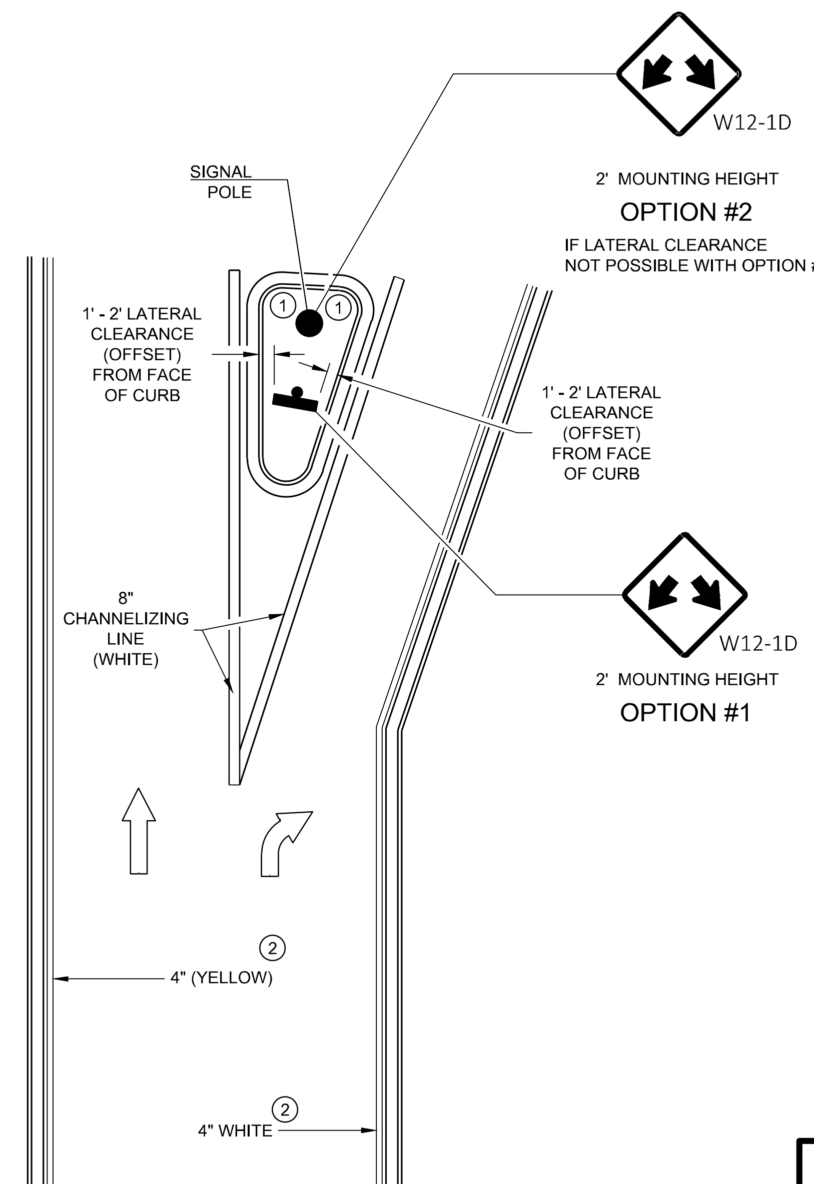
SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

1. MARK CURB NOSES YELLOW.
2. MARK ACCORDING TO TABLE.

DIRECTION OF TRAVEL



LEFT TURN & MEDIAN ISLAND



RIGHT TURN ISLAND

6

6

SDD 15C18 - 06c

SDD 15C18 - 06c

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2022
DATE

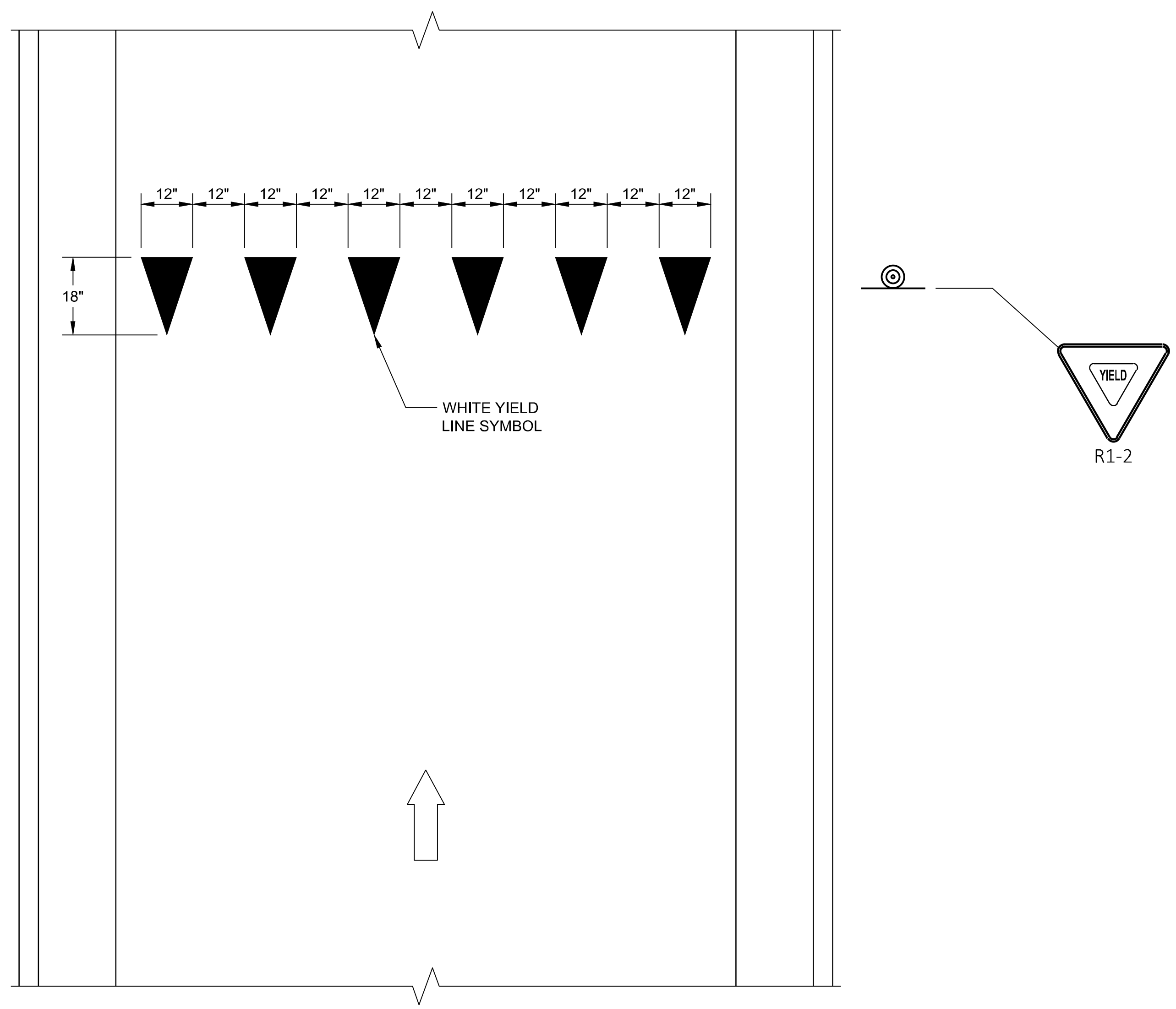
/S/ Jeannie Silver
STATE SIGNING AND MARKING ENGINEER

FHWA

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL



YIELD LINE

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YIELD MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-81-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAF
ENGINEER

153

FHWA

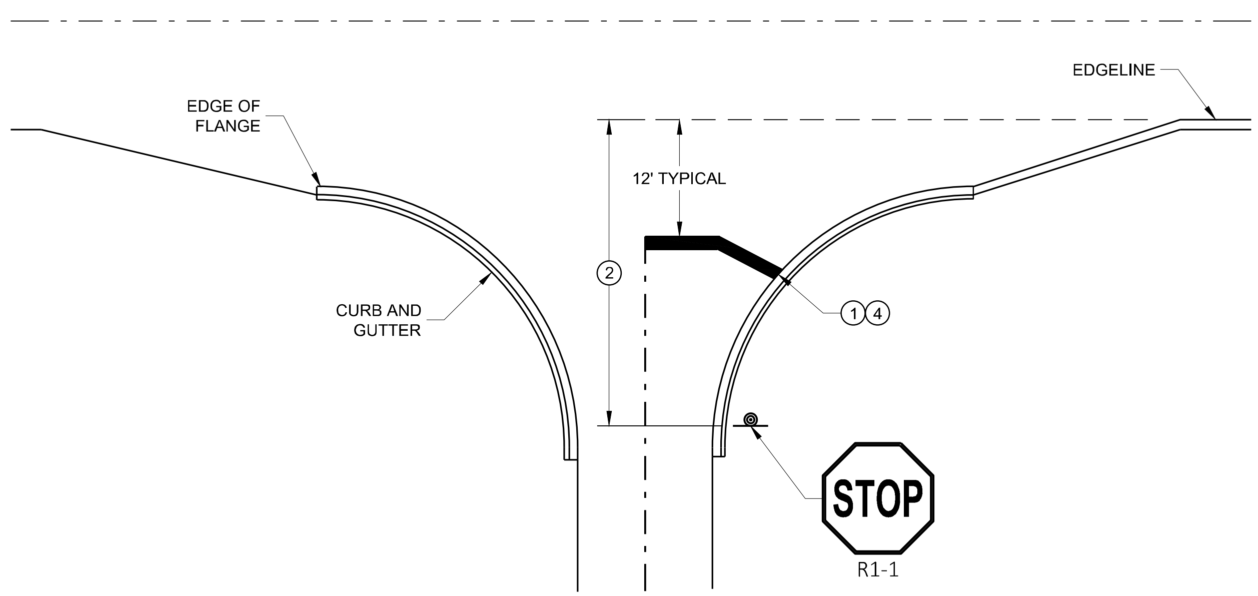
SDD 15C20 - 02

SDD 15C20 - 02

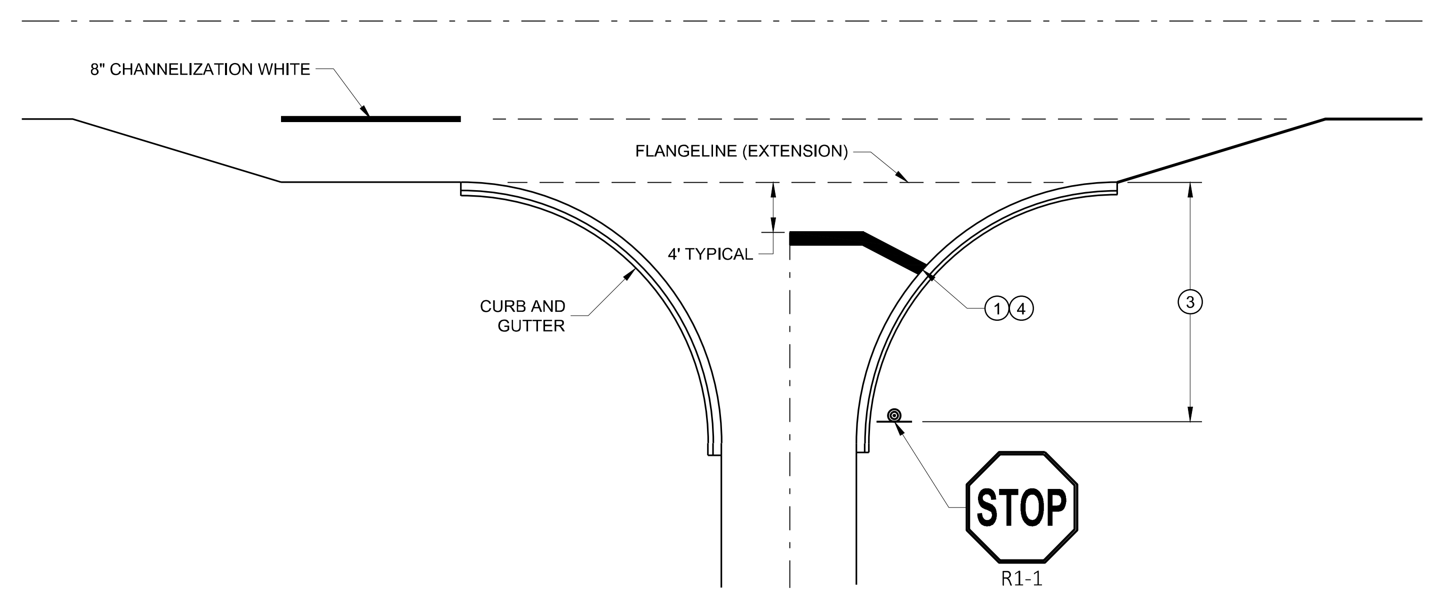
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

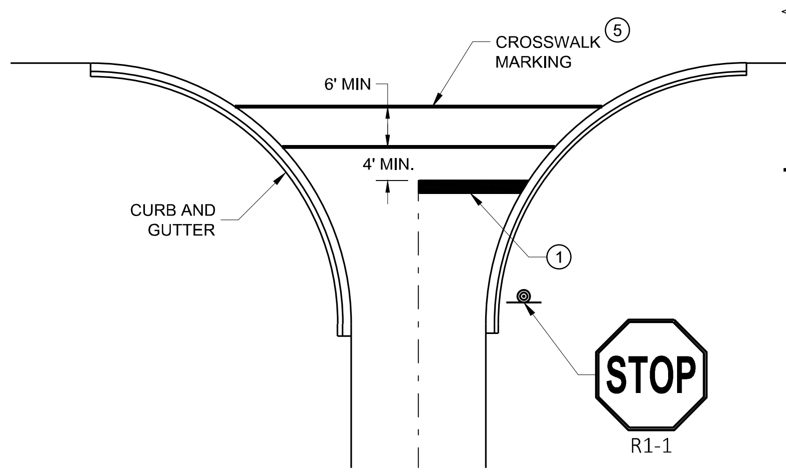
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE 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.

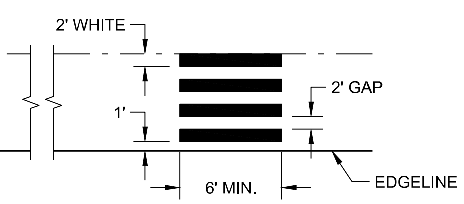


TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



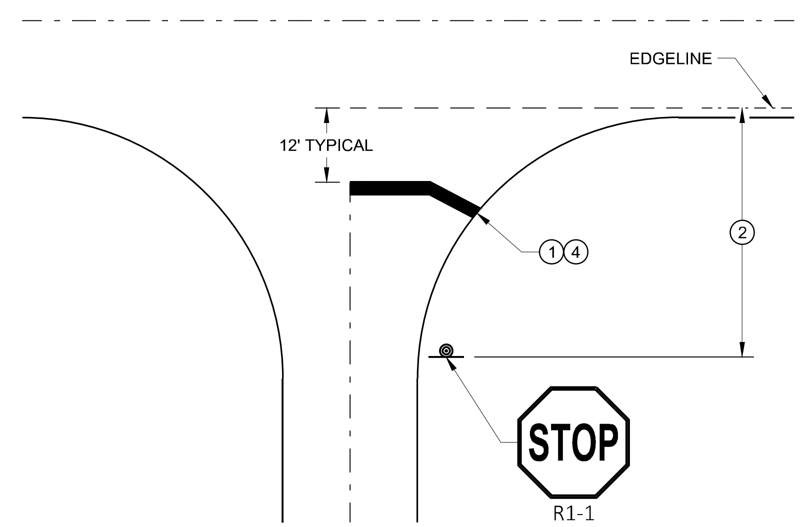
TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE





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 MARKING ENGINEER

FHWA

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.

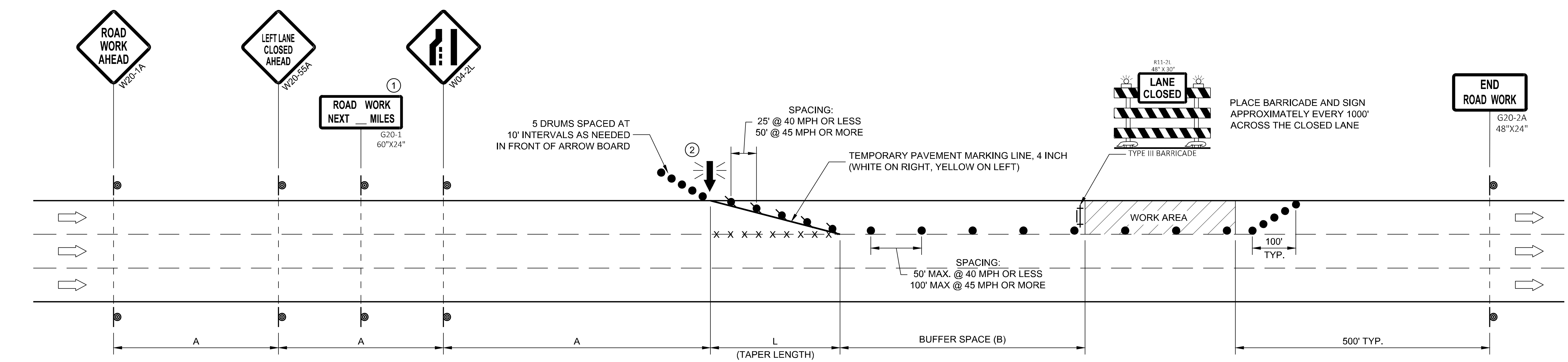
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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.

6



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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 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA

SDD 15D20 - 06a

SDD 15D20 - 06a

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

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.

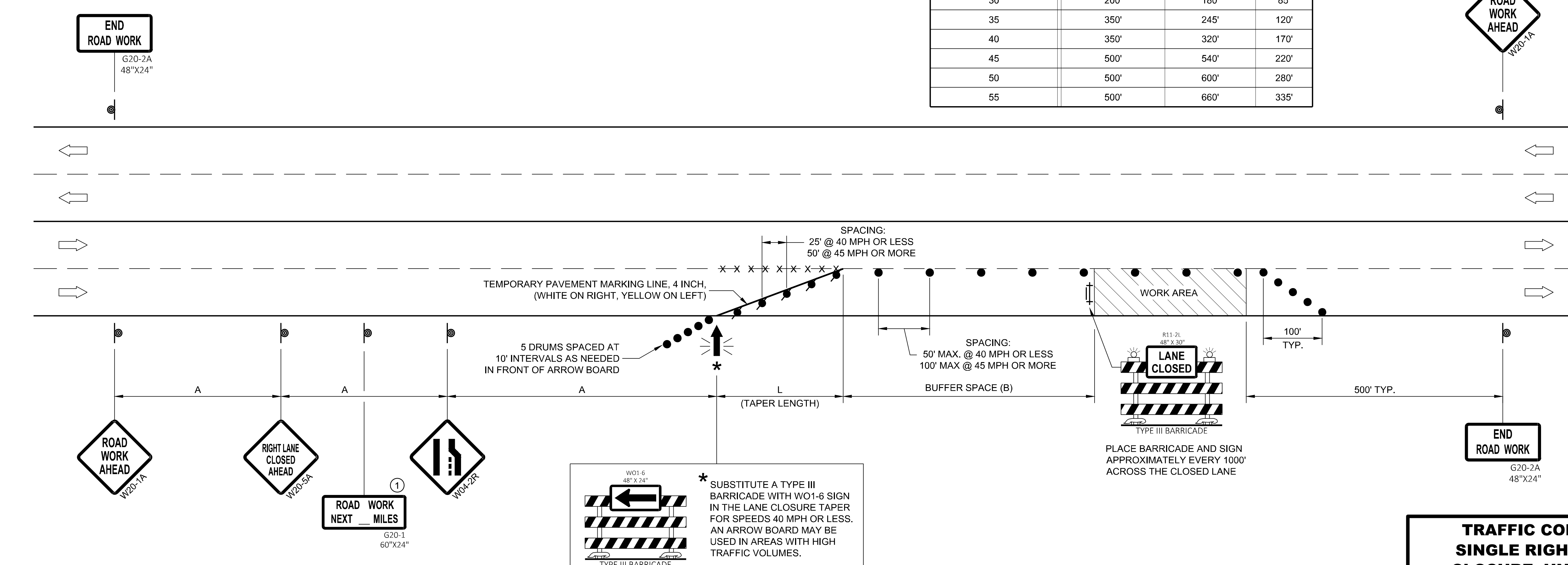
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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.

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'
50	500'	600'	280'
55	500'	660'	335'



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TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

SDD 15D20 - 06b

SDD 15D20 - 06b

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

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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

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

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

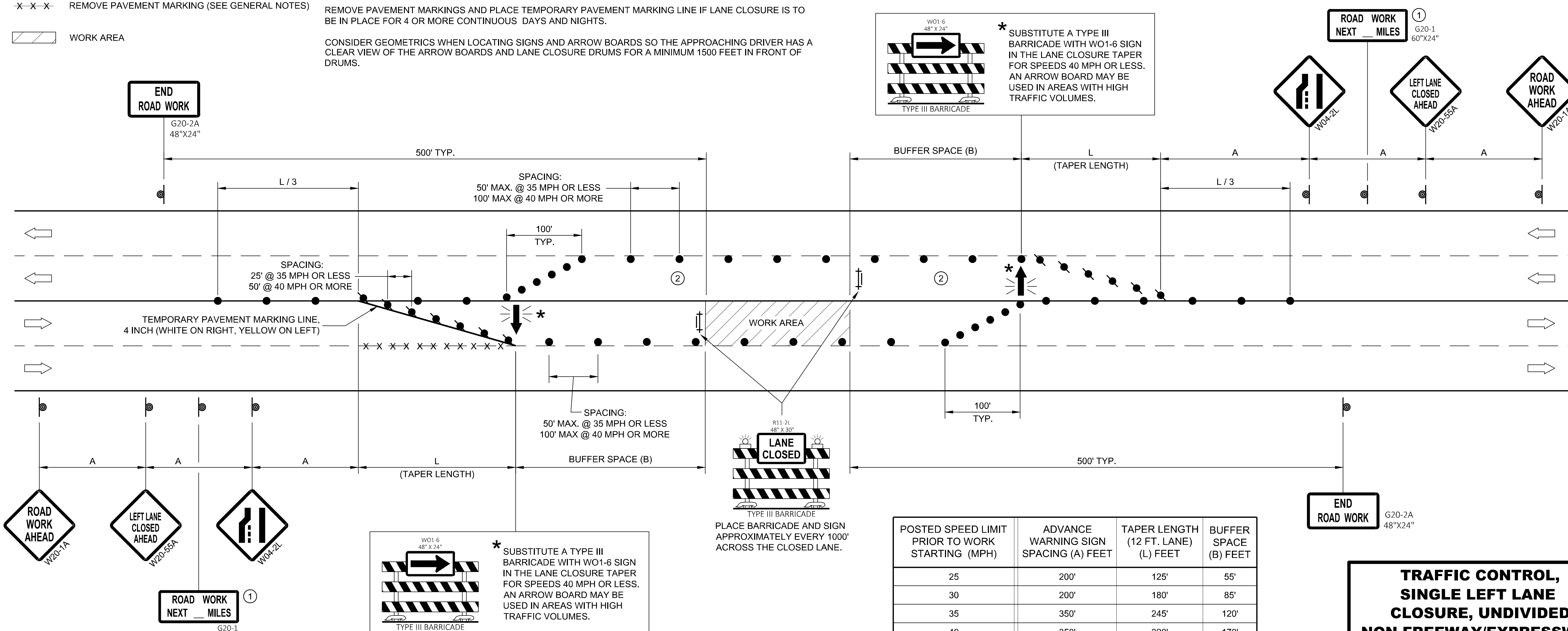
DUE TO LACK OF SHOULDER/MEDIAN, ARROW BOARD IS PLACED AT THE THE END OF THE TAPER.

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. LANE MAY BE OPENED WHEN WORKERS ARE NOT PRESENT IN THE WORK AREA.



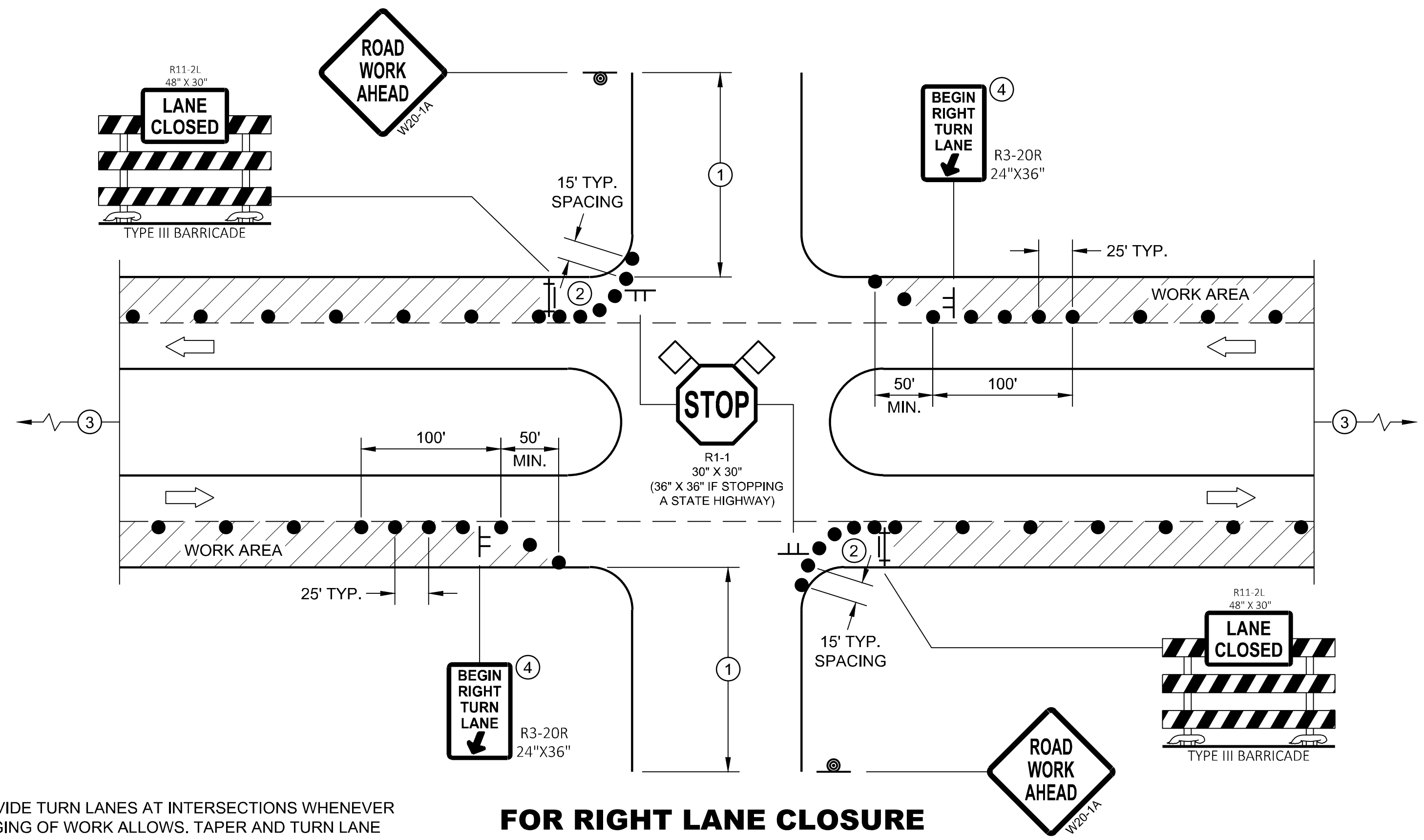
POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'
50	500'	600'	280'
55	500'	660'	335'

TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

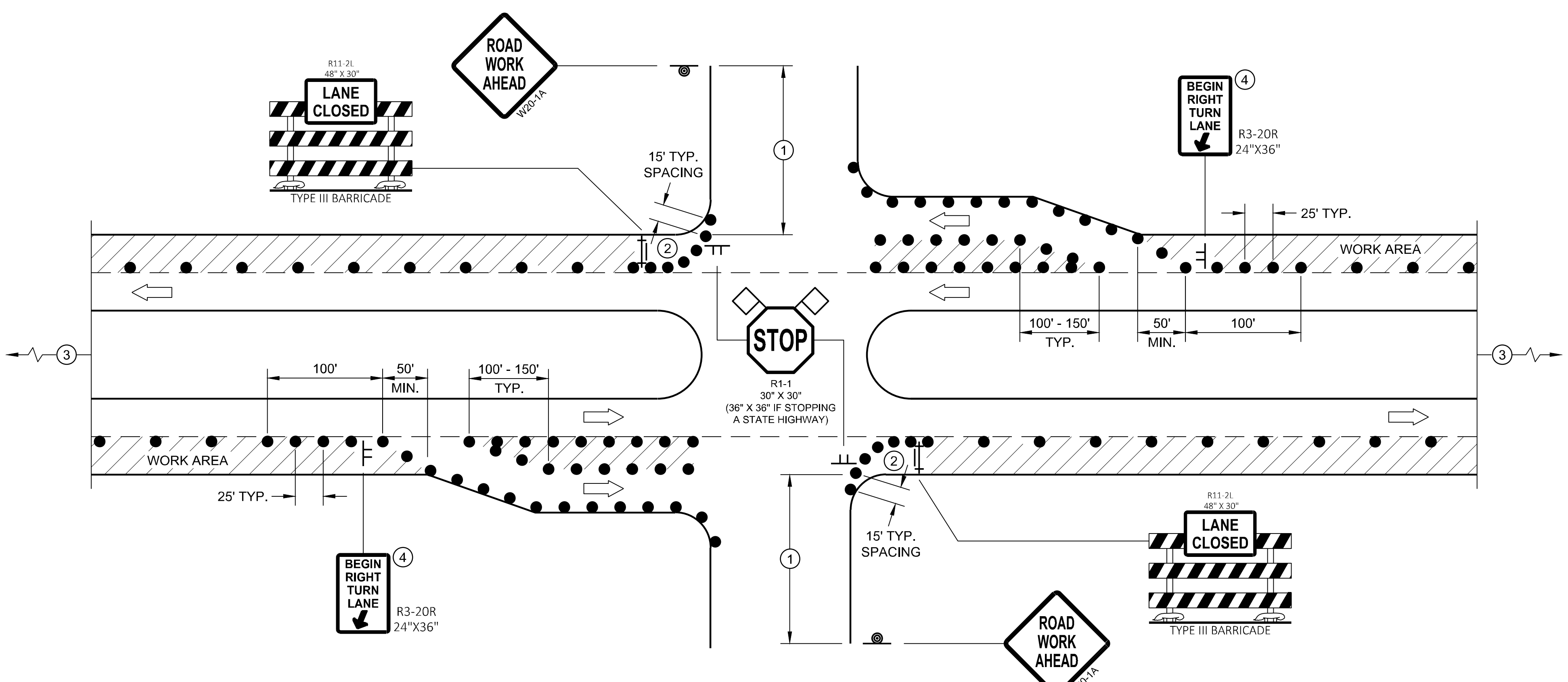
APPROVED
February 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA

SDD 15D20 - 06c



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR RIGHT LANE CLOSURE AT INTERSECTION



FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

GENERAL NOTES

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

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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

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

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

1 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

2 ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

3 SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

4 MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.

LEGEND

SIGN ON TEMPORARY SUPPORT

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

TYPE III BARRICADE WITH ATTACHED SIGN

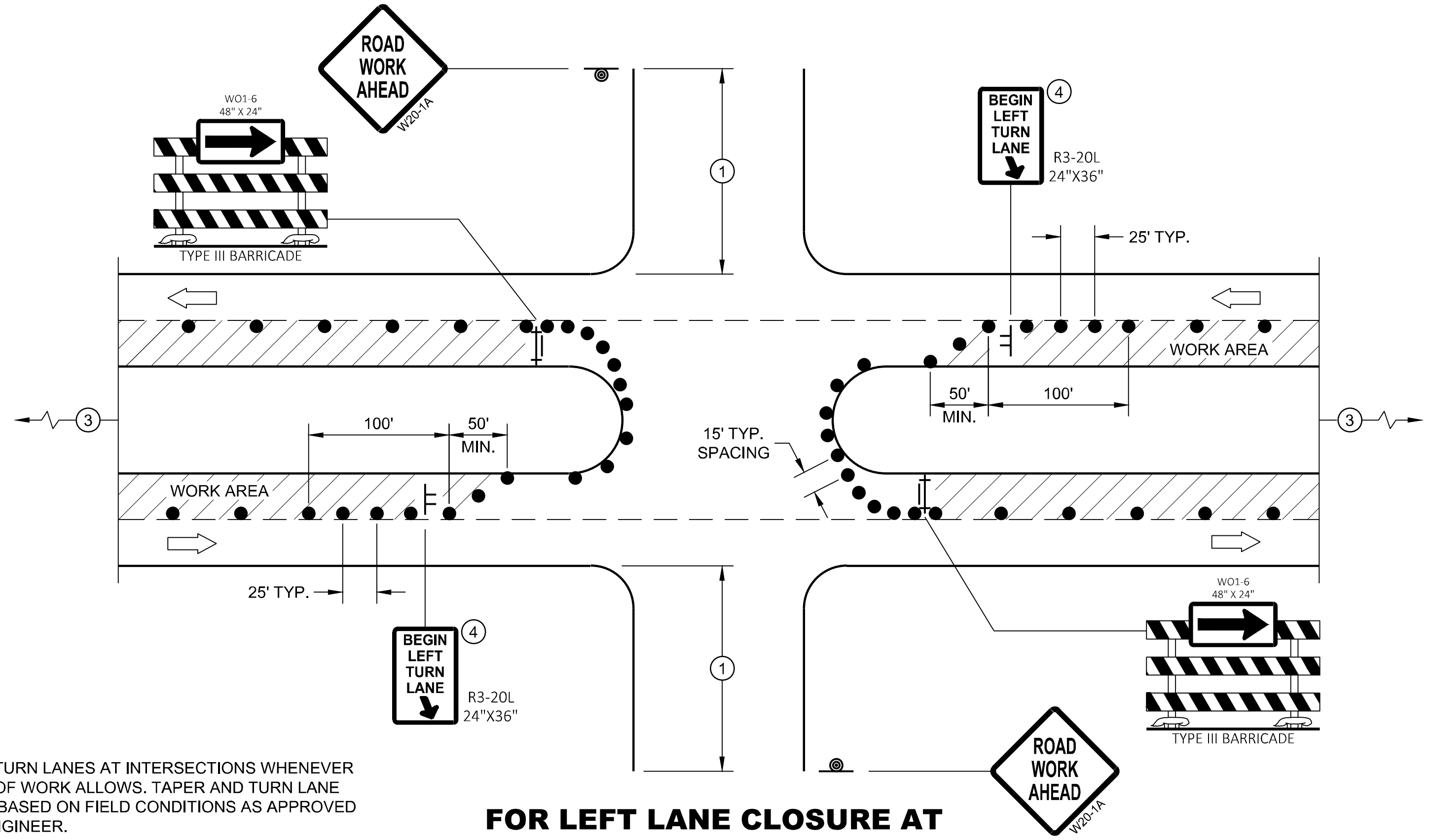
DIRECTION OF TRAFFIC

FLAGS, 16" X 16" MIN., ORANGE

WORK AREA

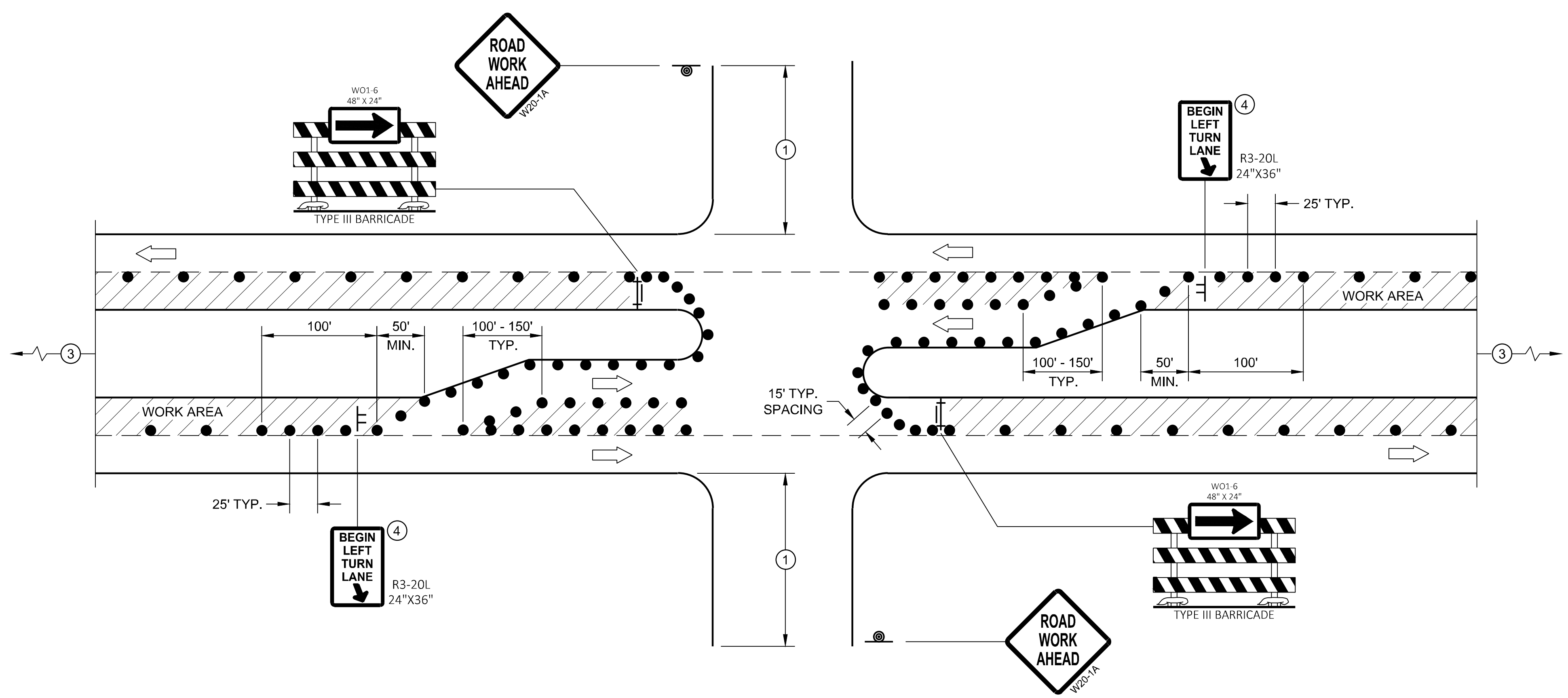
TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATI



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

GENERAL NOTES

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

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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

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

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

1 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

2 ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

3 SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

4 MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.

LEGEND

SIGN ON TEMPORARY SUPPORT

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

TYPE III BARRICADE WITH ATTACHED SIGN

DIRECTION OF TRAFFIC

FLAGS, 16" X 16" MIN., ORANGE

WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA

6 6

SDD 15D21 - 07b

SDD 15D21 - 07b

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.

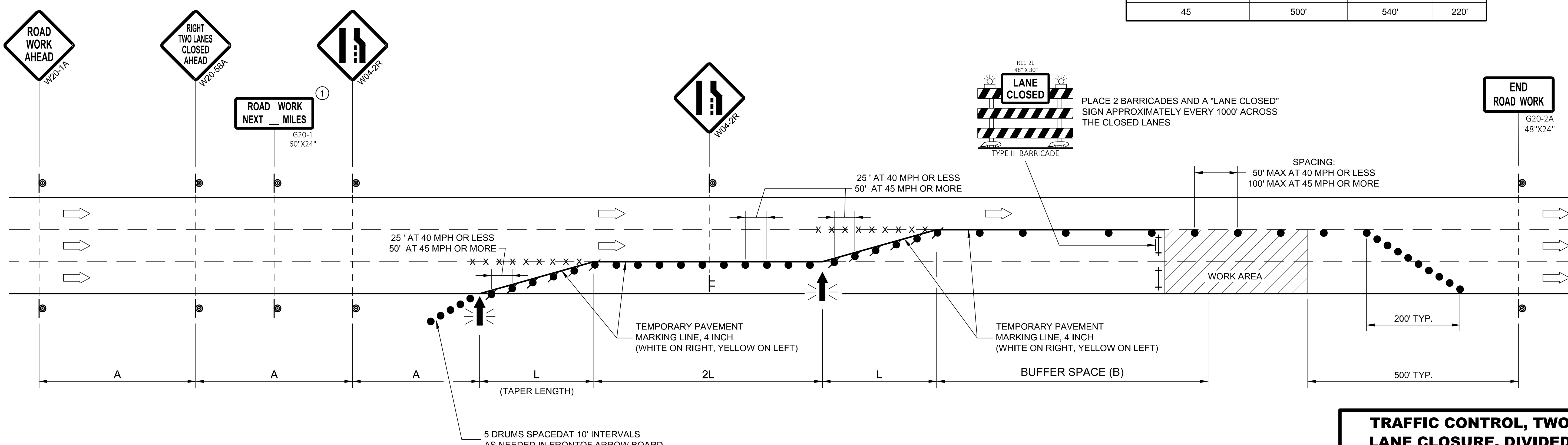
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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'



6

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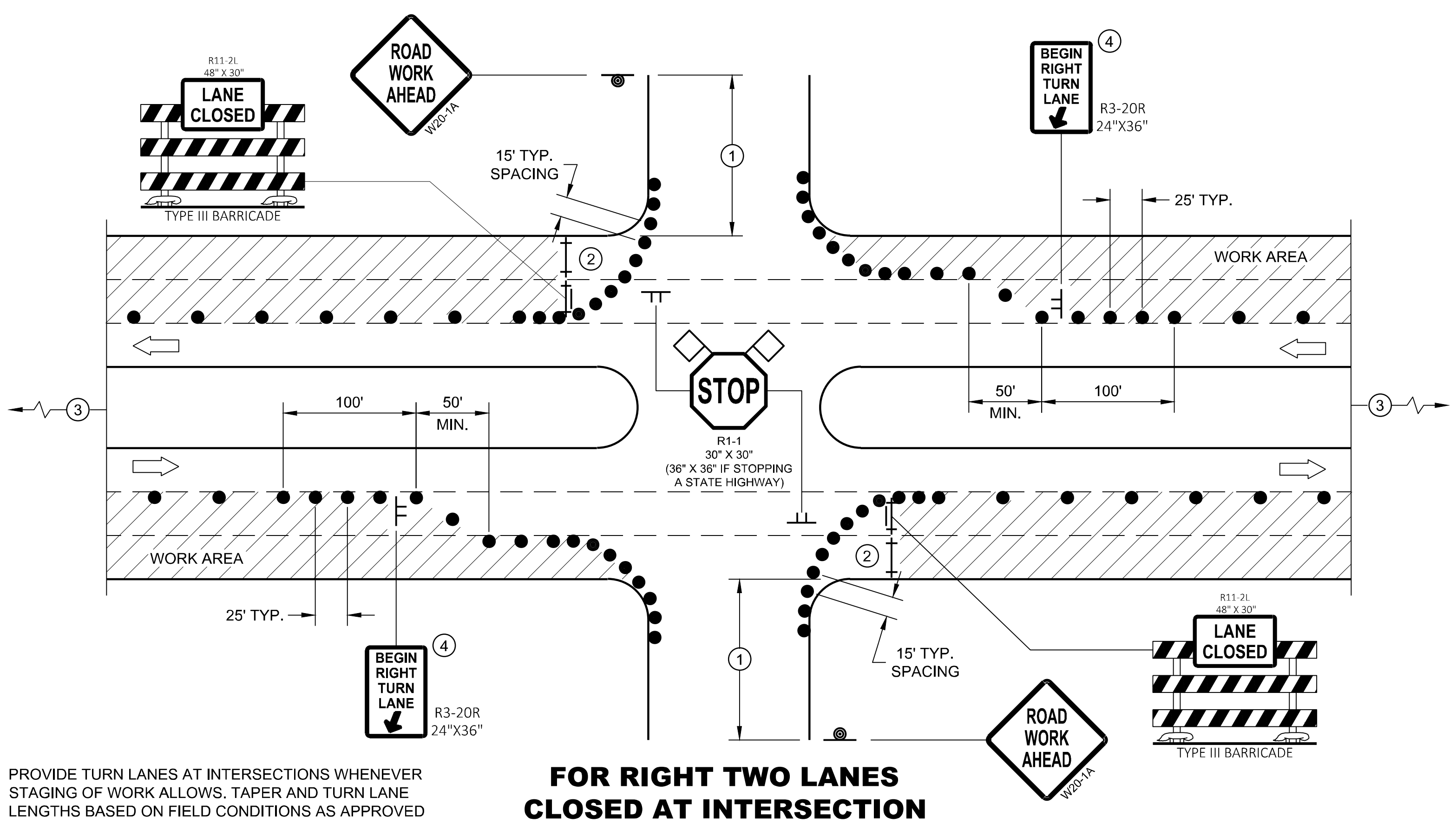
SDD 15D22 - 05

SDD 15D22 - 05

TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

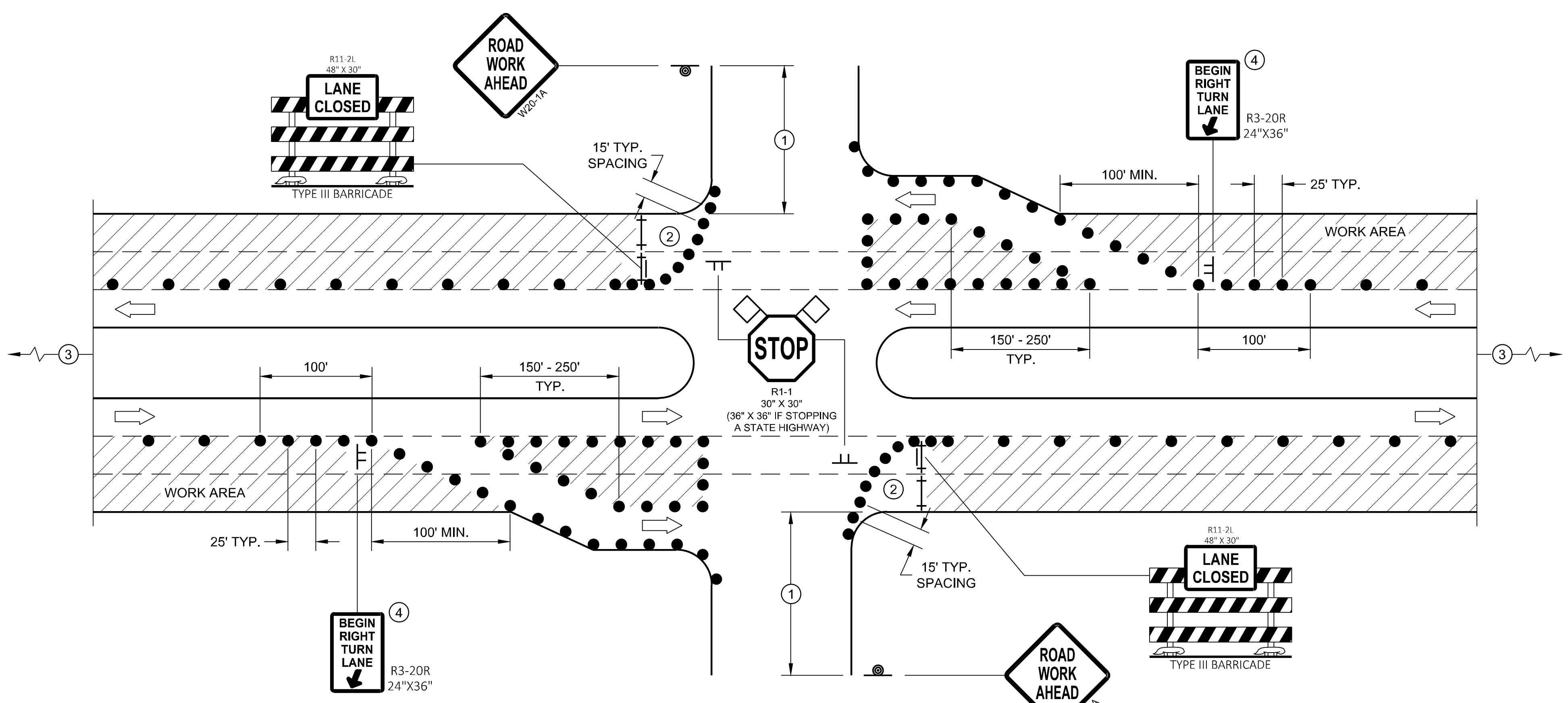
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022 DATE
/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR RIGHT TWO LANES CLOSED AT INTERSECTION



FOR RIGHT TWO LANES CLOSED AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

GENERAL NOTES

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

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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

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

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

1. 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER. 350' IF 35 - 40 MPH. 200' IF 25 - 30 MPH.
2. ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS
3. SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.
4. MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

6

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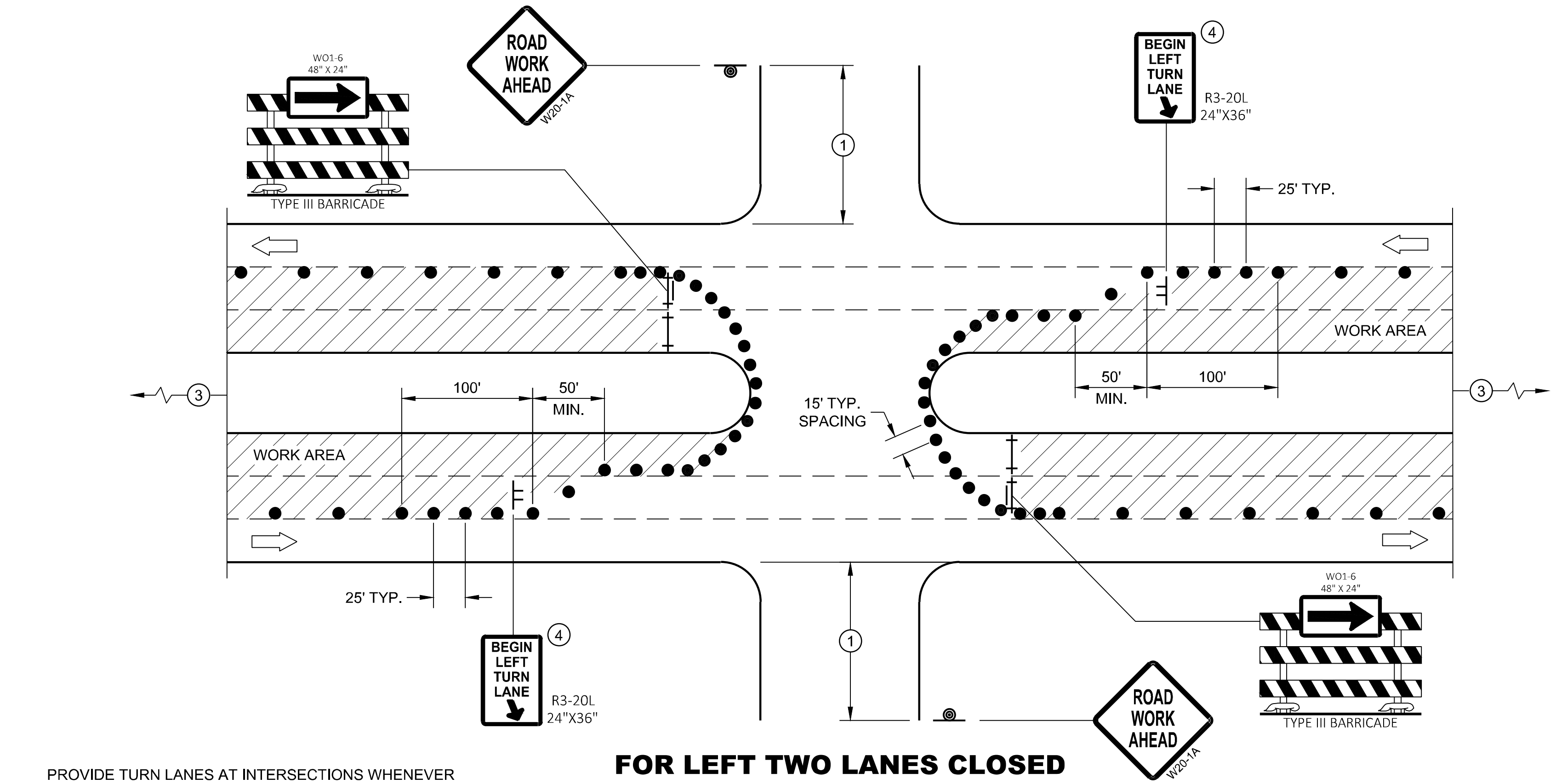
TRAFFIC CONTROL, INTERSECTION WITHIN TWO RIGHT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTAT

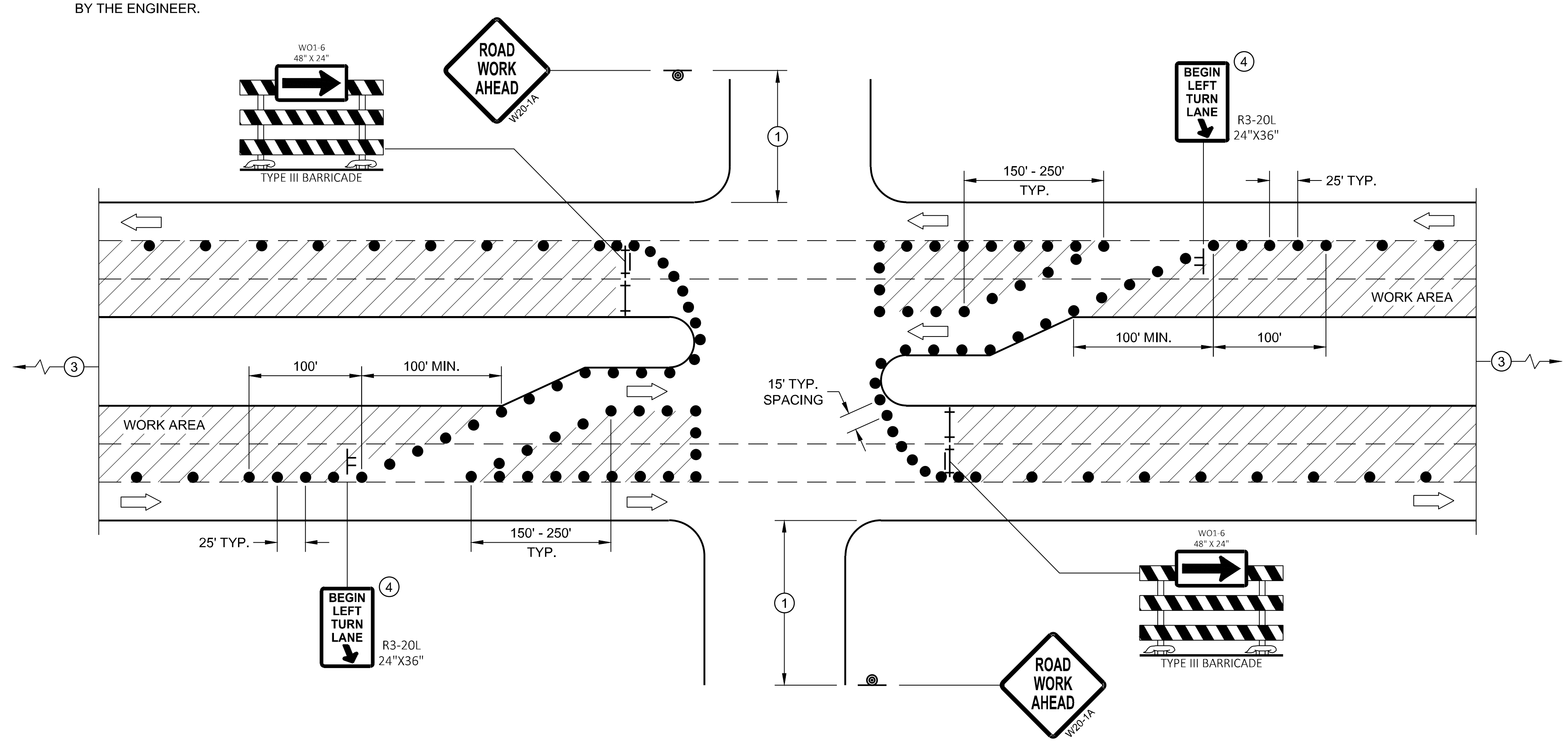
SDD 15D23 - 07a

SDD 15D23 - 07a



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK



FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK (WITH LEFT TURN BAY OPEN)

GENERAL NOTES

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

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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

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

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

1. 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
   350' IF 35 - 40 MPH.
   200' IF 25 - 30 MPH.
2. ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS
3. SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.
4. MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

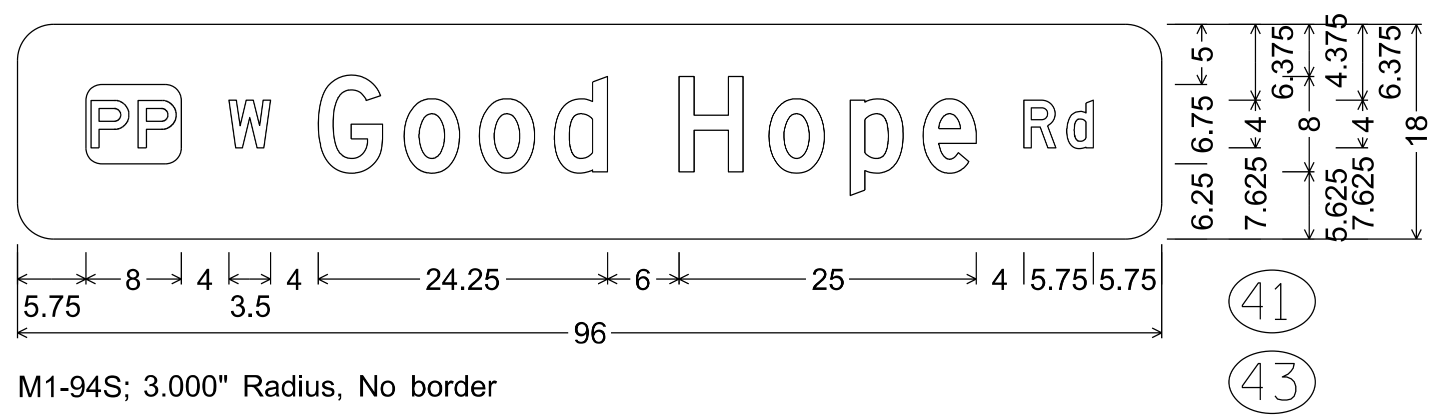
TRAFFIC CONTROL, INTERSECTION WITHIN TWO LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

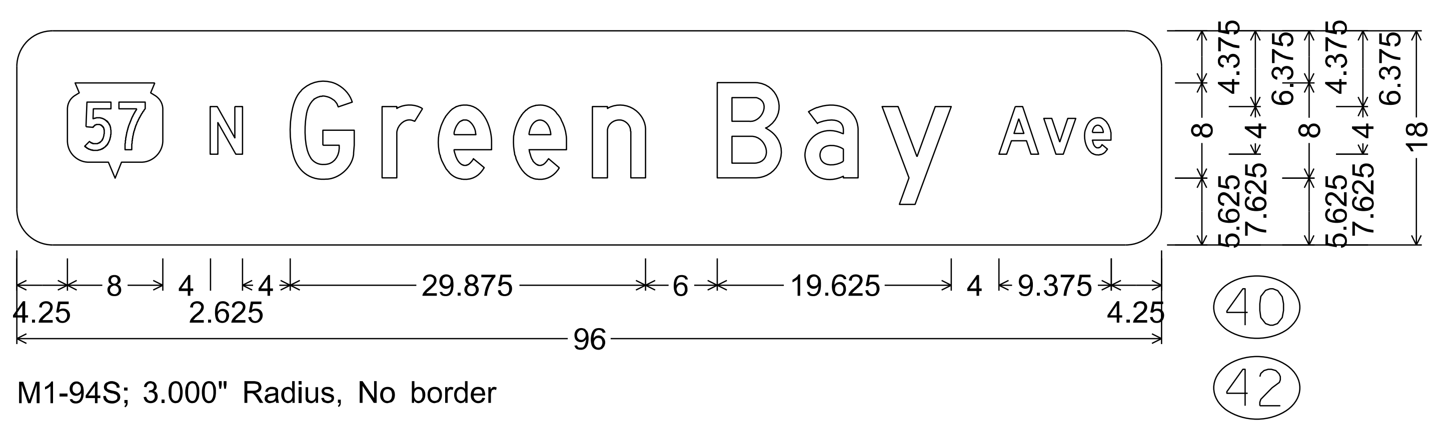
APPROVED
August 2021 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA

NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - D



M1-94S; 3.000" Radius, No border



M1-94S; 3.000" Radius, No border

PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET NO: 163	E

FILE NAME : C:\CAEfiles\Projects\tr_d2_2403c722.DGN PLOT DATE : 20-JUL 2022 2:48 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : WISDOT/CADDS SHEET 42

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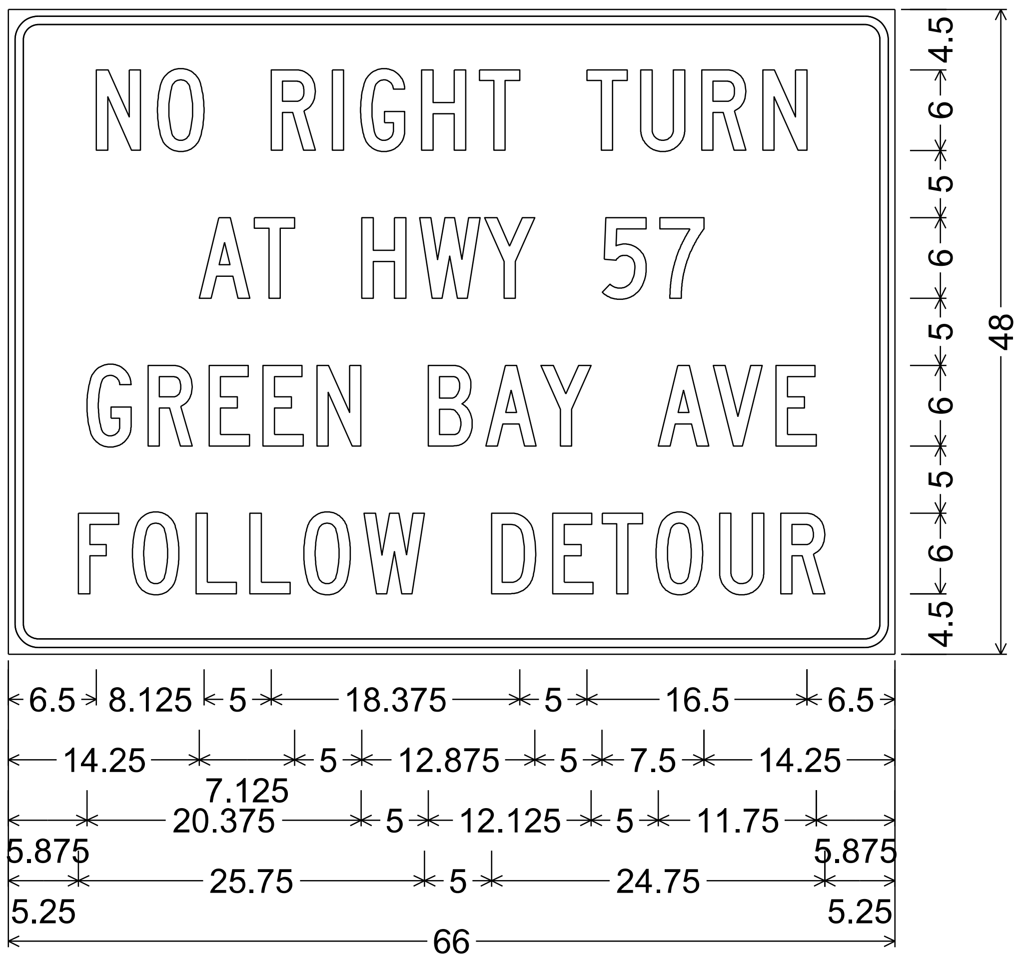
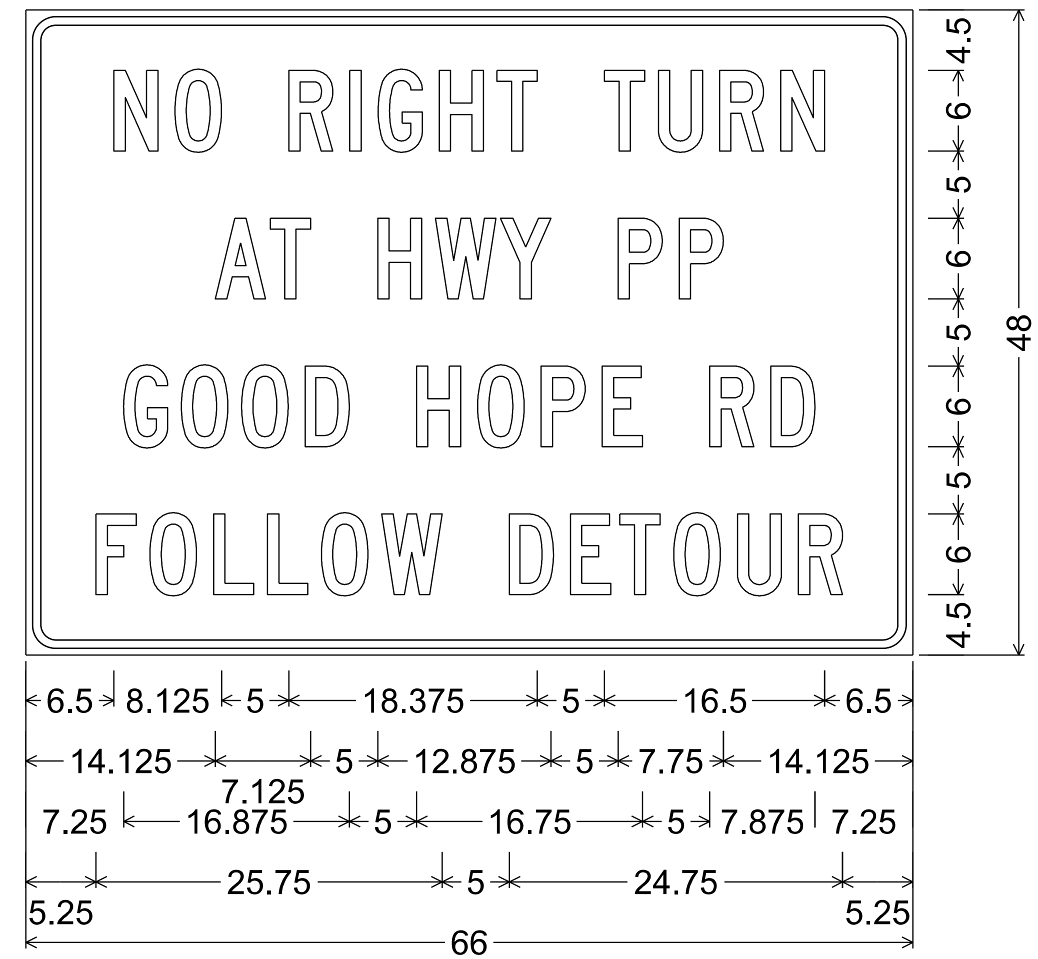
NOTES

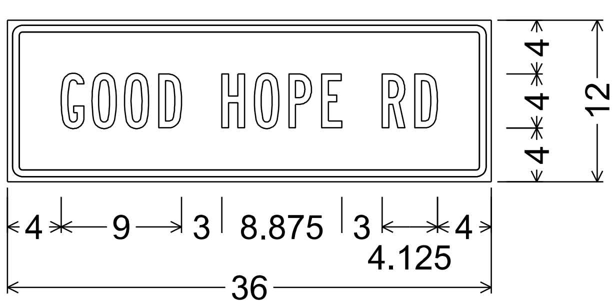
1. Fixed Message Signs Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C or as noted



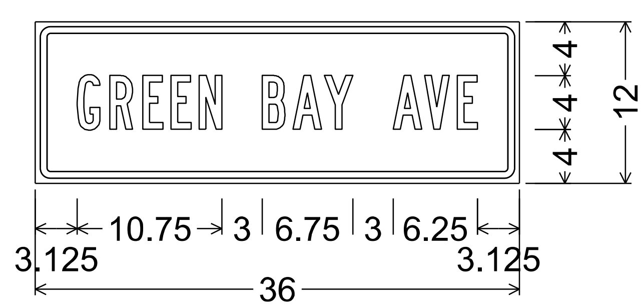
2.250" Radius, 0.625" Border, 0.500" Indent



2.250" Radius, 0.625" Border, 0.500" Indent

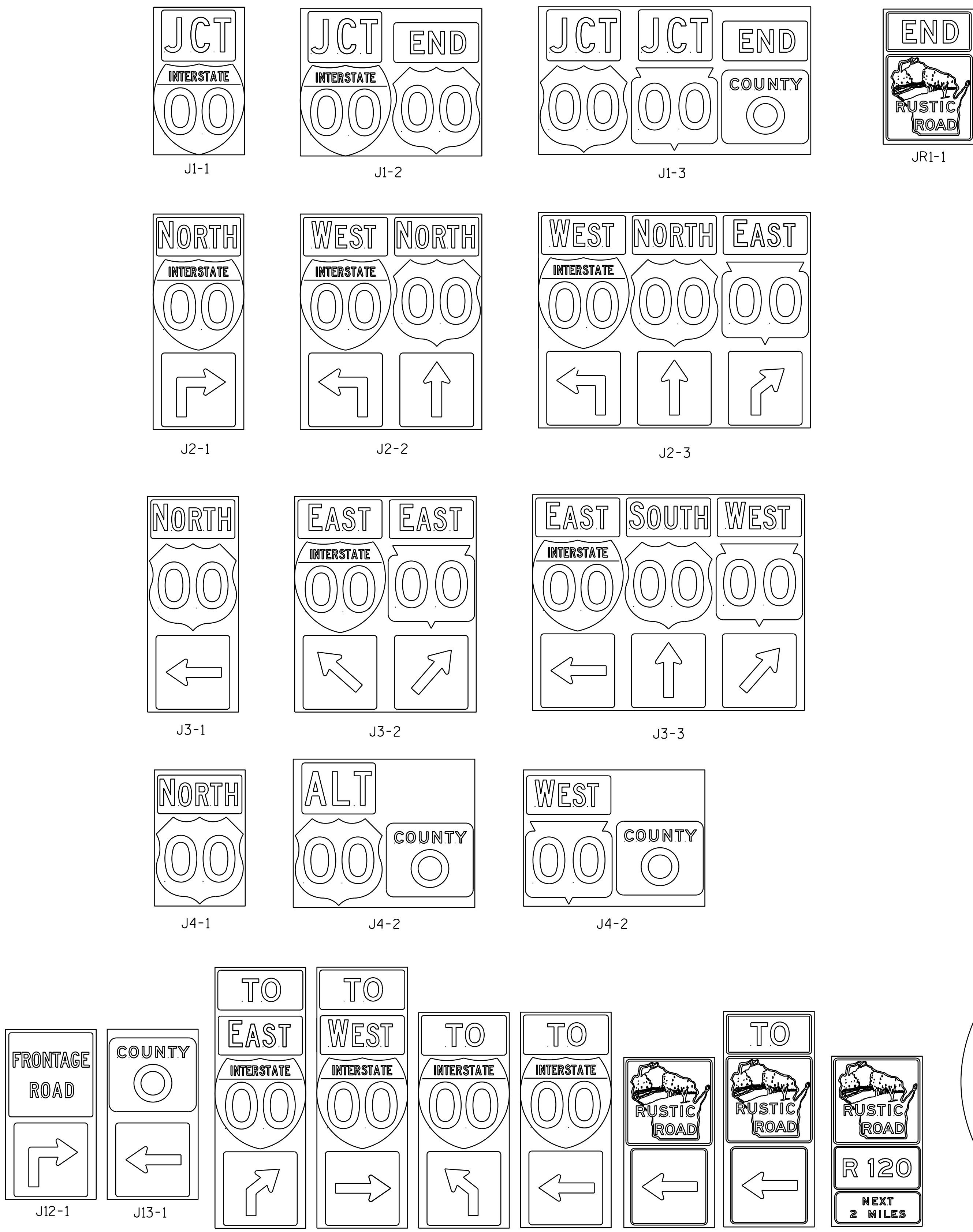


1.125" Radius, 0.500" Border, 0.375" Indent
"GOOD", B; "HOPE", B;
"RD", B;



1.125" Radius, 0.500" Border, 0.375" Indent
"GREEN", B; "BAY", B;
"AVE", B;

TYPICAL ASSEMBLIES



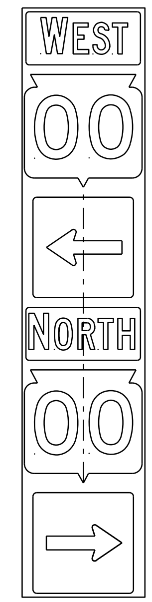
J1-1 J1-2 J1-3 JR1-1

J2-1 J2-2 J2-3

J3-1 J3-2 J3-3

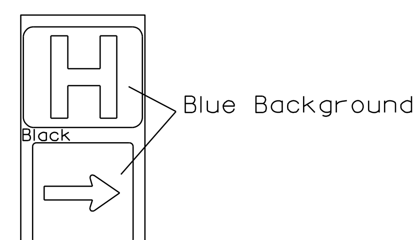
J4-1 J4-2 J4-2

J12-1 J13-1 J32-1 J33-1 J22-1 J23-1 JR13-1 JR23-1 JR99-1



JV

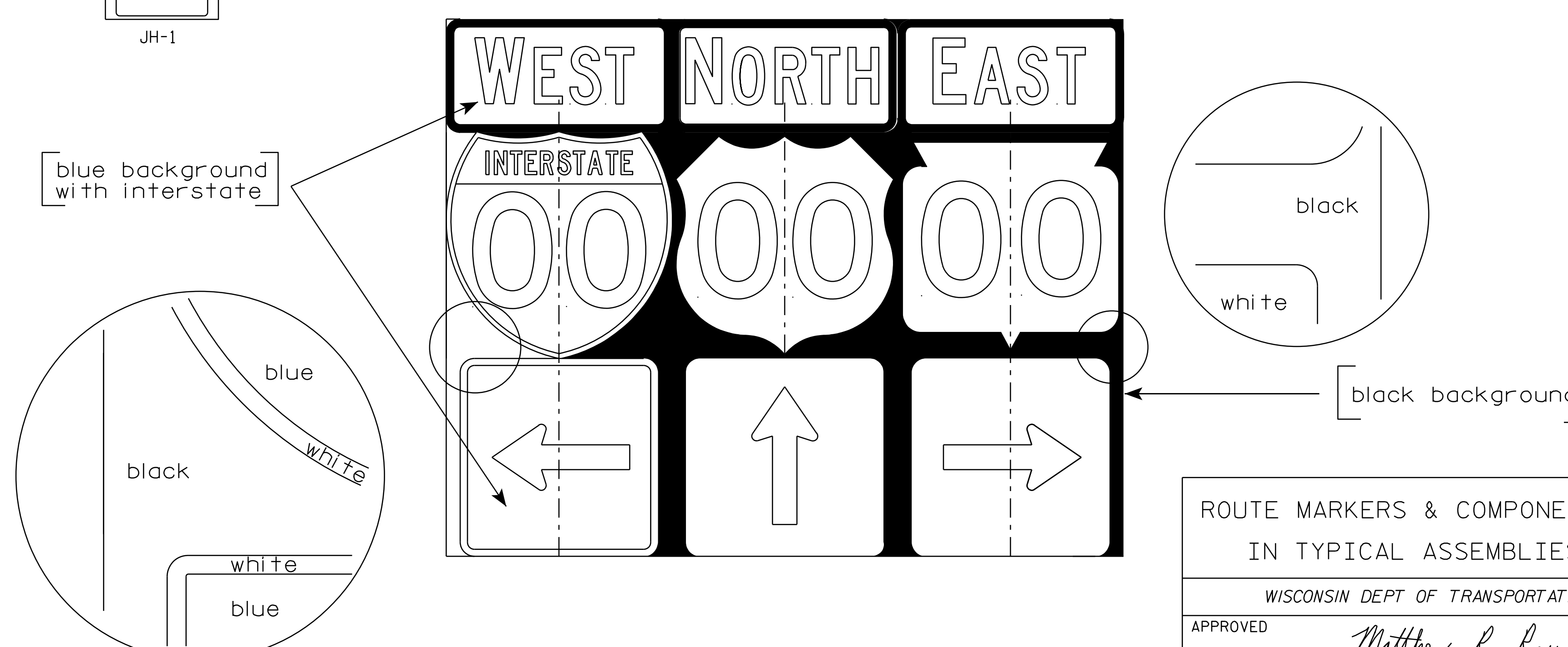
(Typical Vertical J-Assembly See Note 10 and 11)



JH-1

NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.



ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

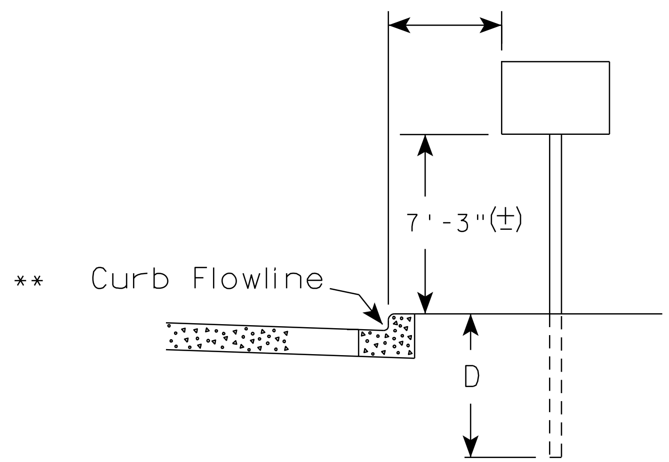
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/21 PLATE NO. A2-1S.9

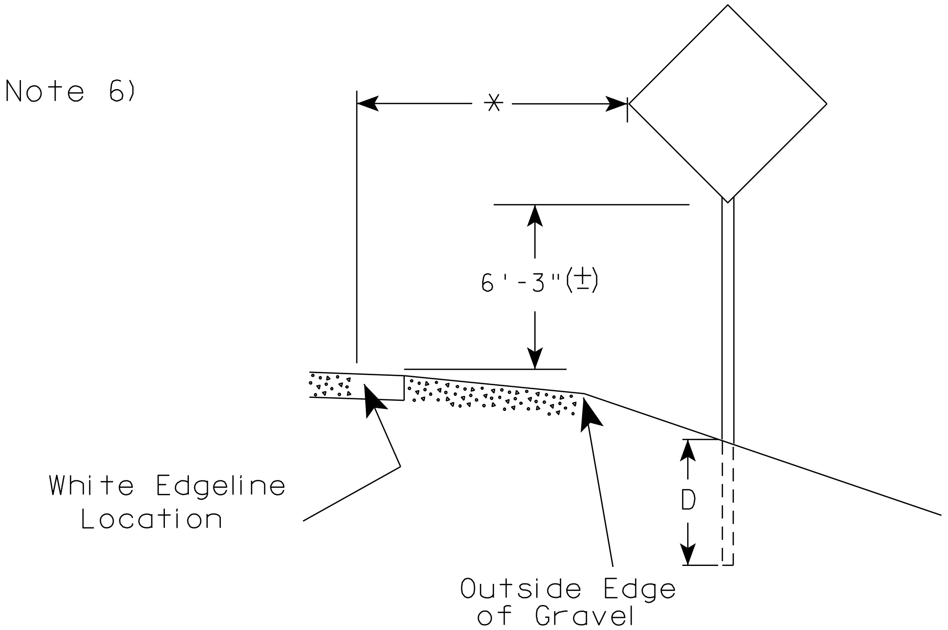
PROJECT NO:				SHEET NO: 165	E

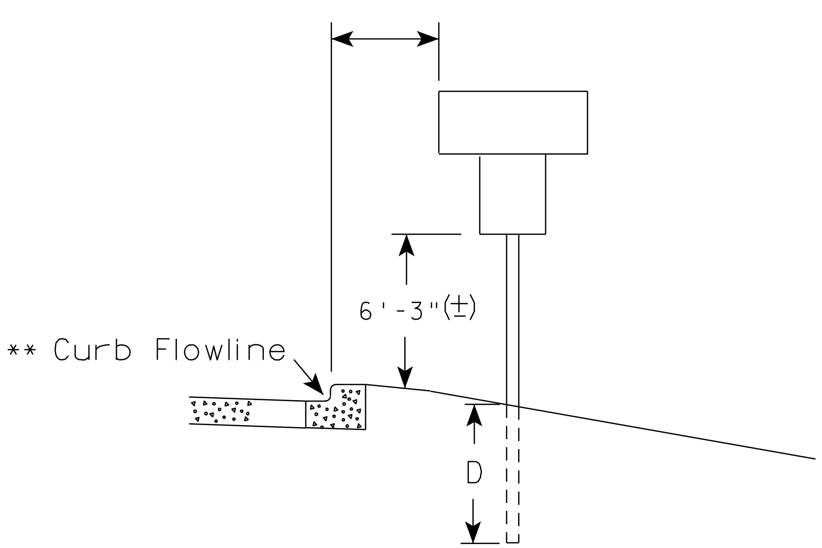
7

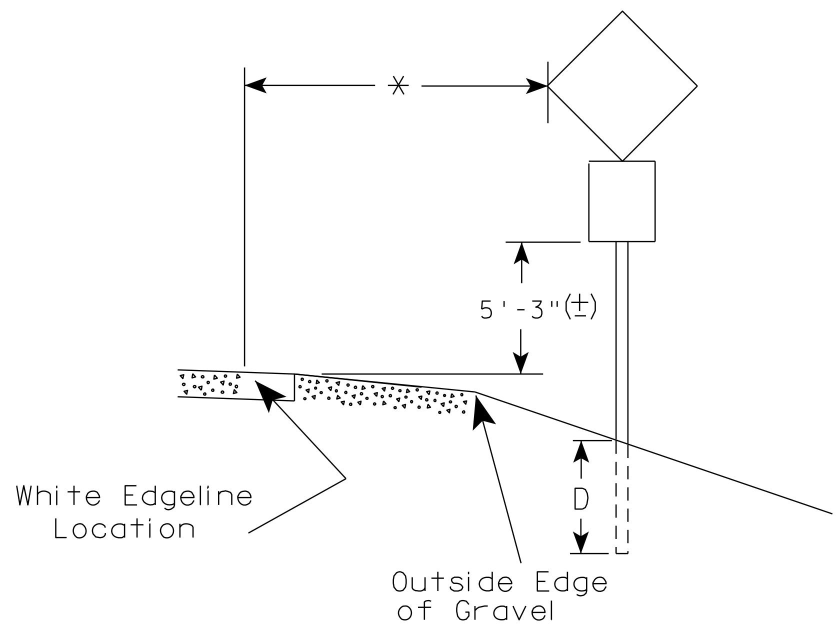
URBAN AREA



RURAL AREA (See Note 2)







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.

POST EMBEDMENT DEPTH

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

** 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.

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

7

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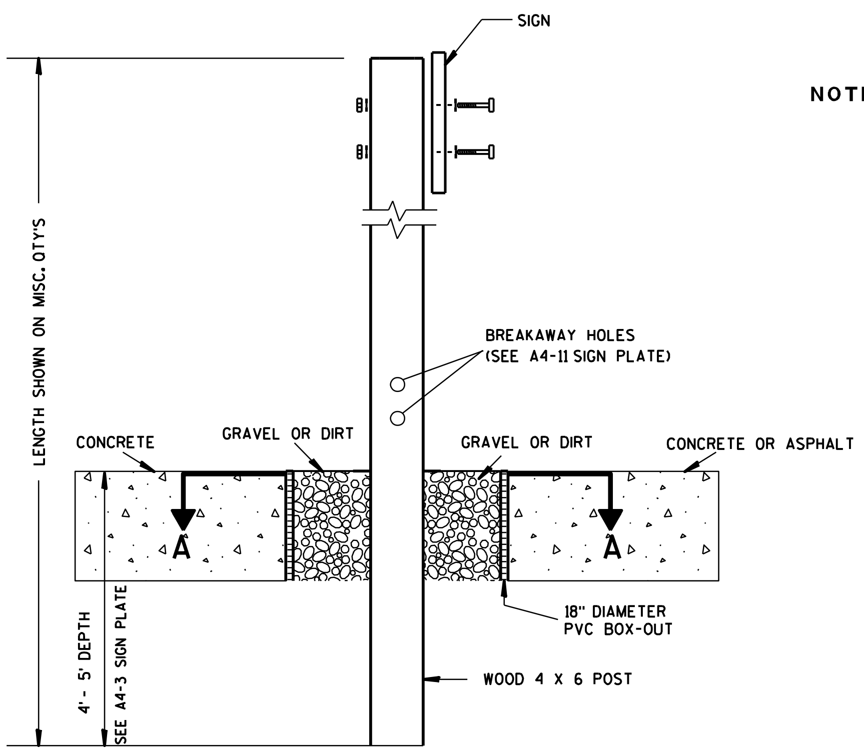
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 166	E

NOTES: 1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION

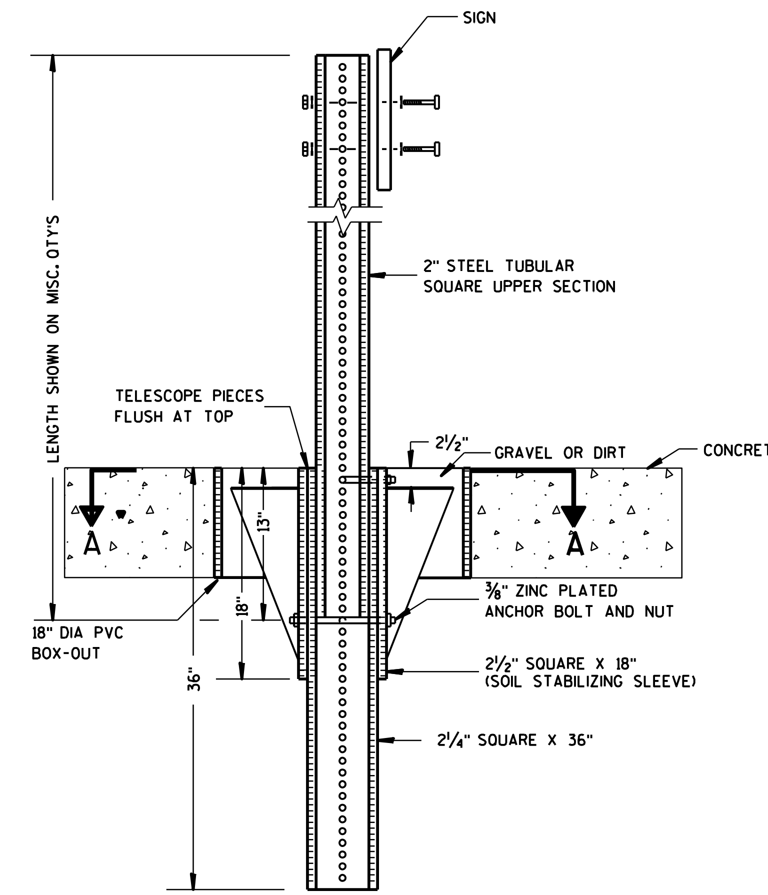
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS

3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



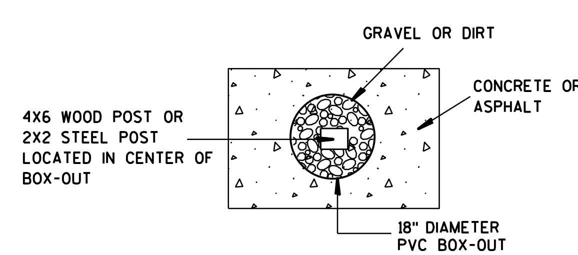
ELEVATION VIEW

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



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

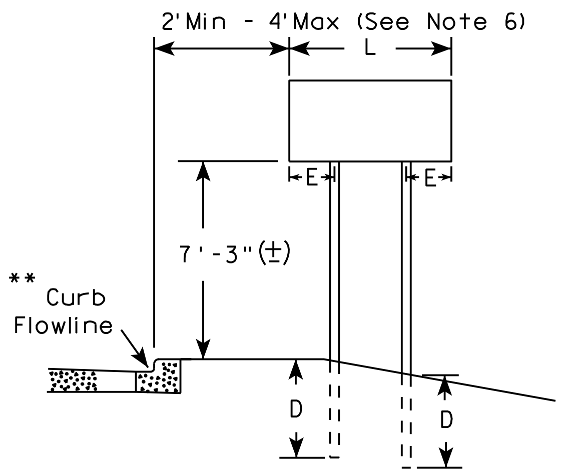
APPROVED Matthew R Rauch
for State Traffic Engineer

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

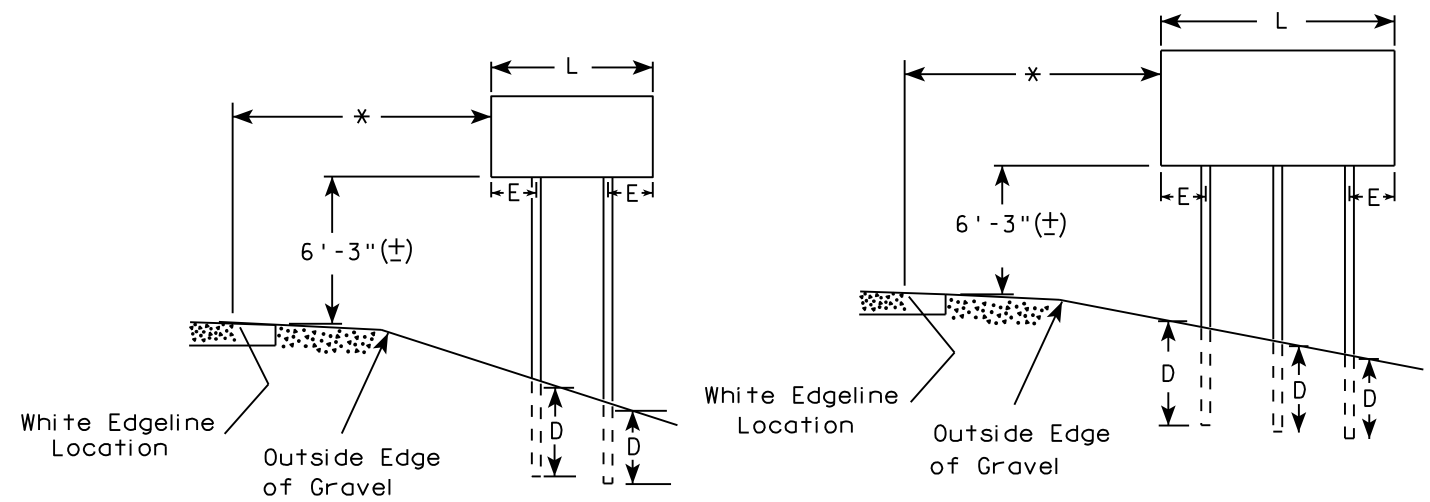
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

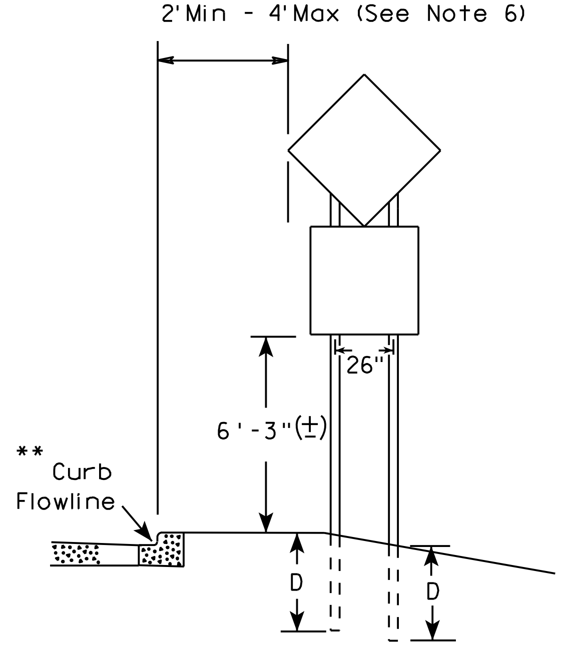
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsjo PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

URBAN AREA

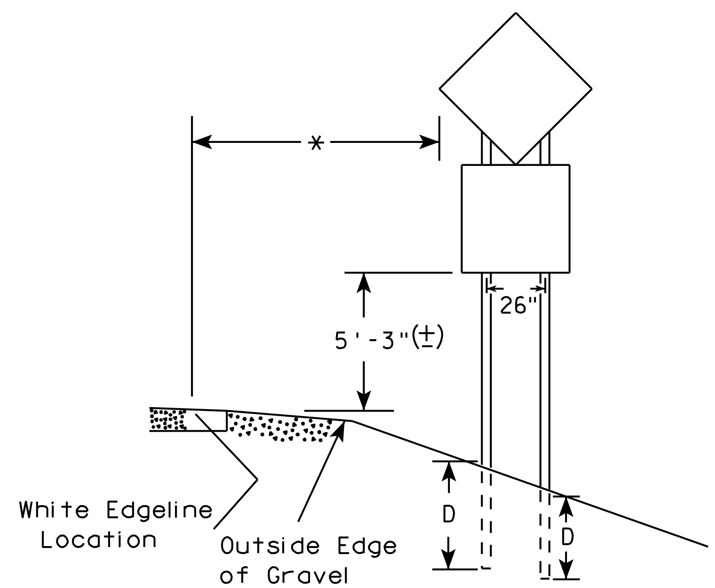


RURAL AREA (See Note 3)





48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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.

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"

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

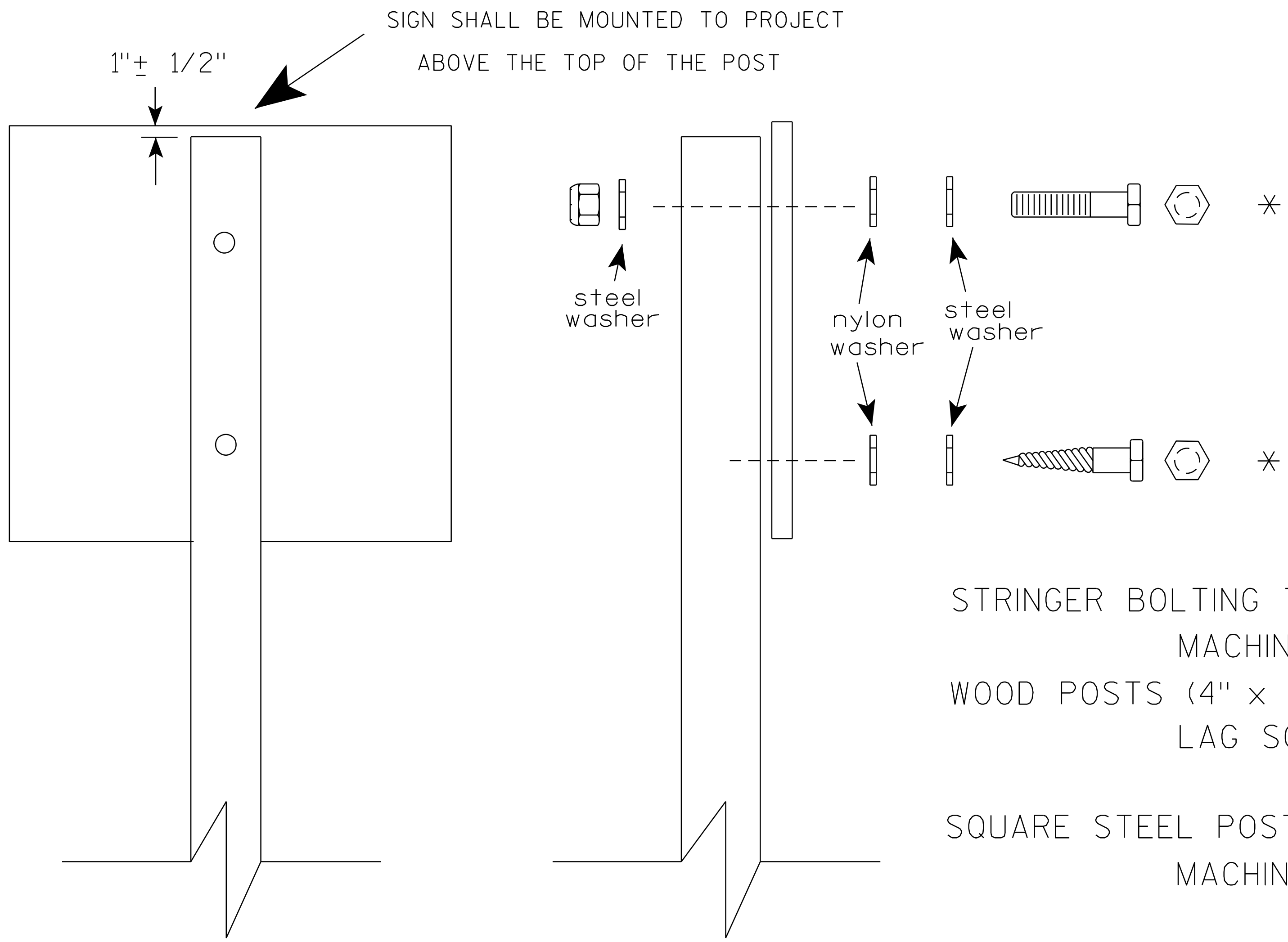
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 168	E

7

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

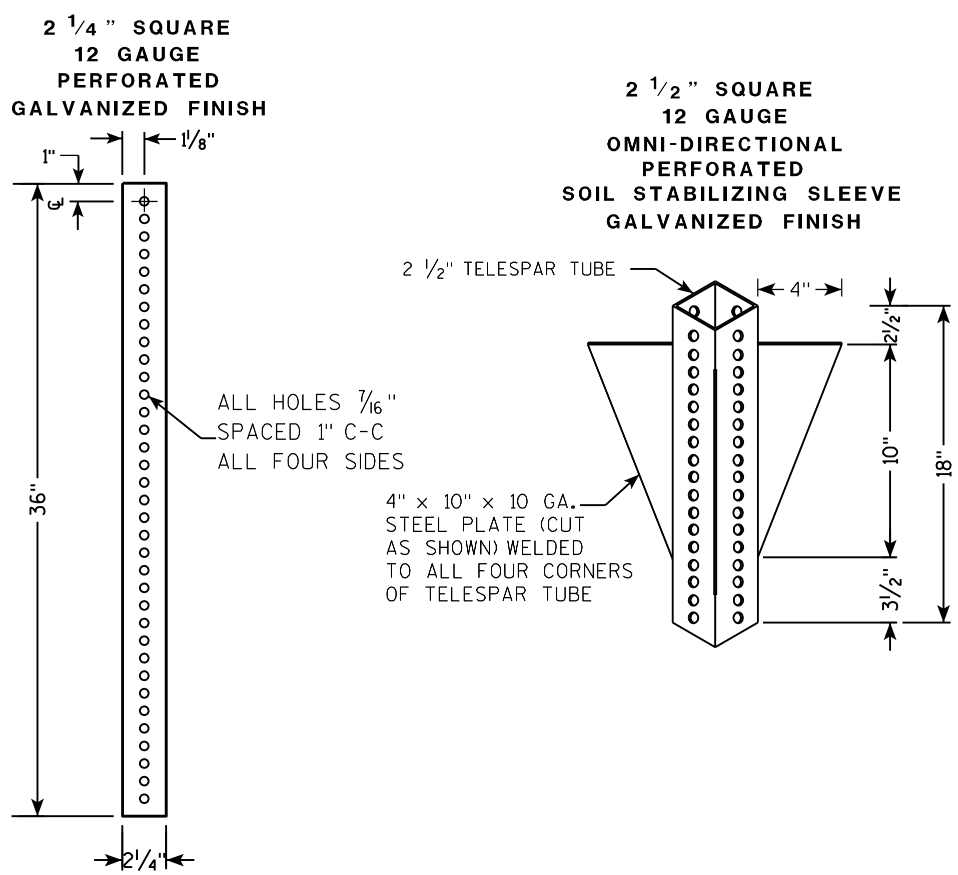
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

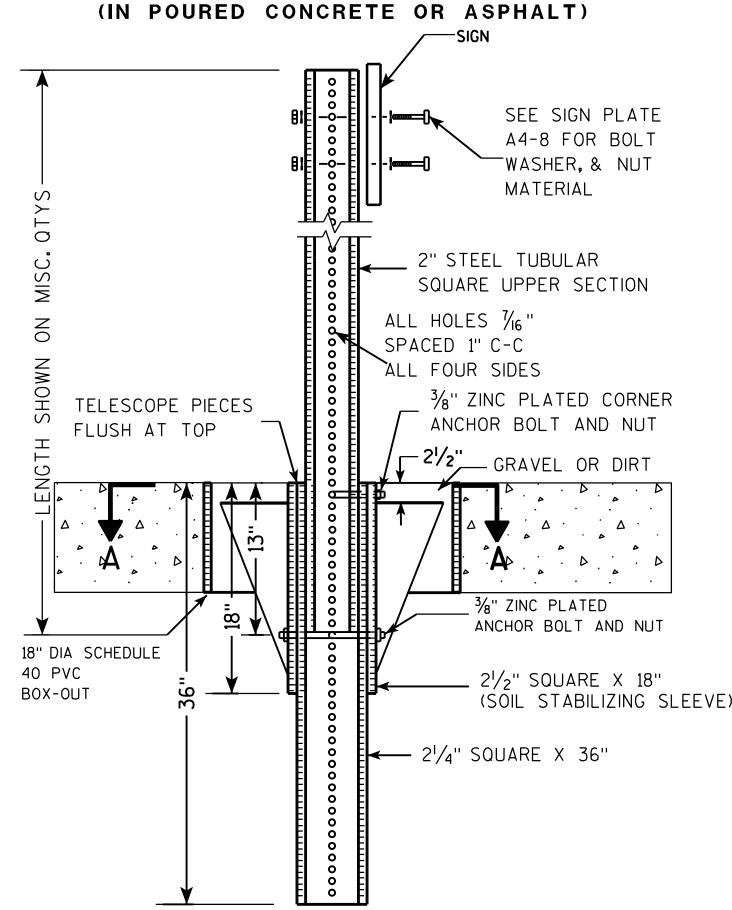
7

7

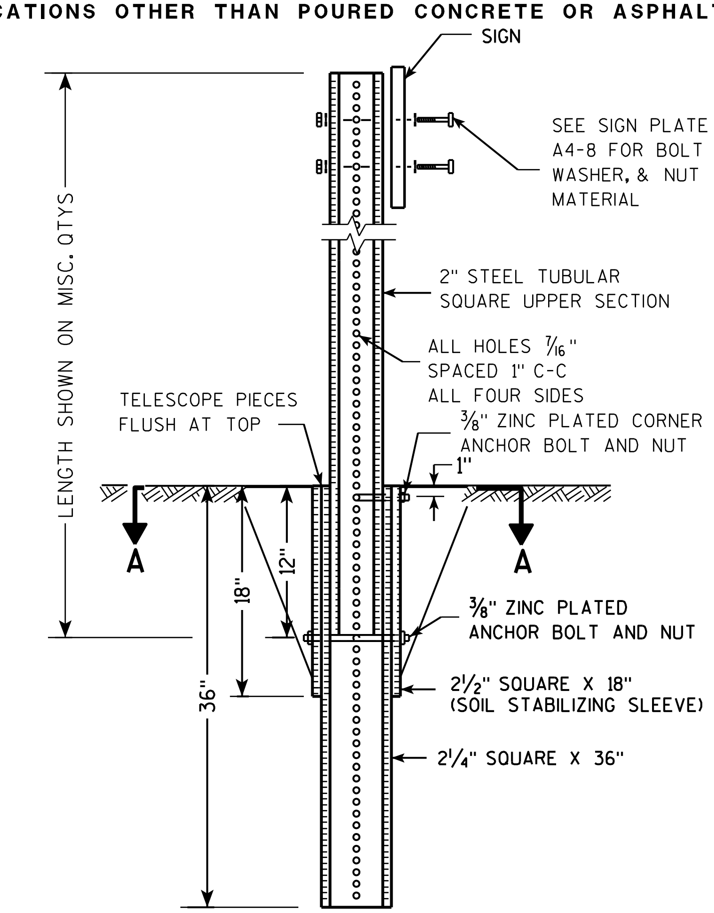
TELESCOPIC TUBING ANCHORS TWO PIECE SYSTEM

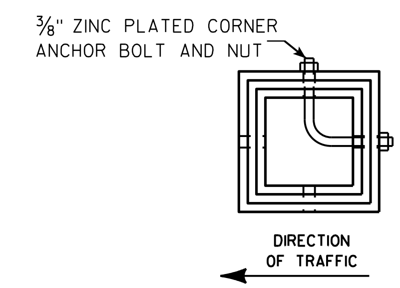


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

7

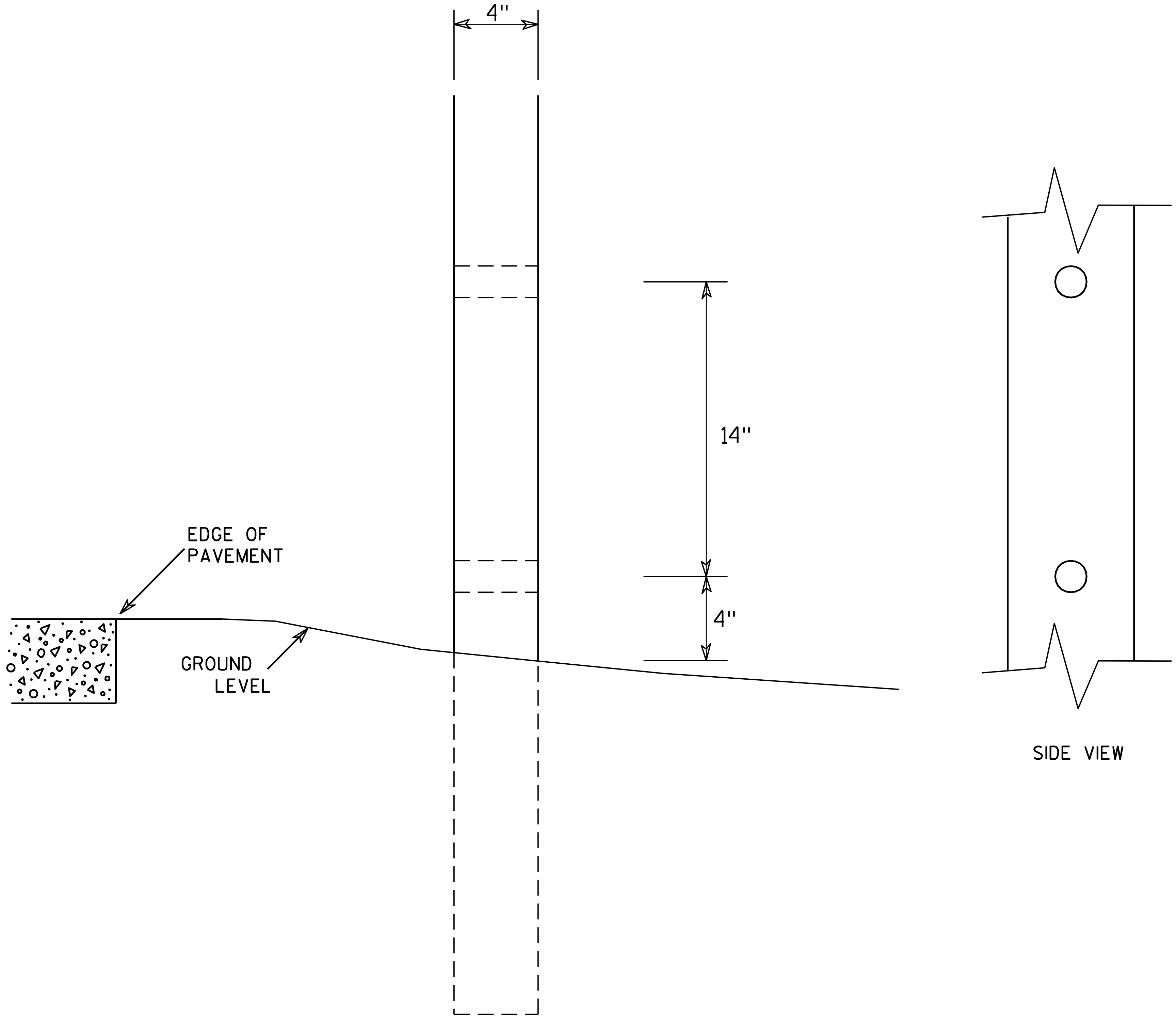
7

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



GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two $1\frac{1}{2}$" diameter holes drilled perpendicular to the roadway centerline.

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

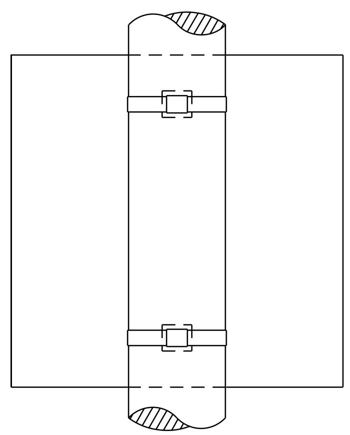
APPROVED Chester J Spang
for State Traffic Engineer

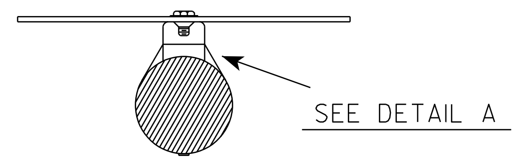
DATE 3/27/97 PLATE NO. A4-11.2

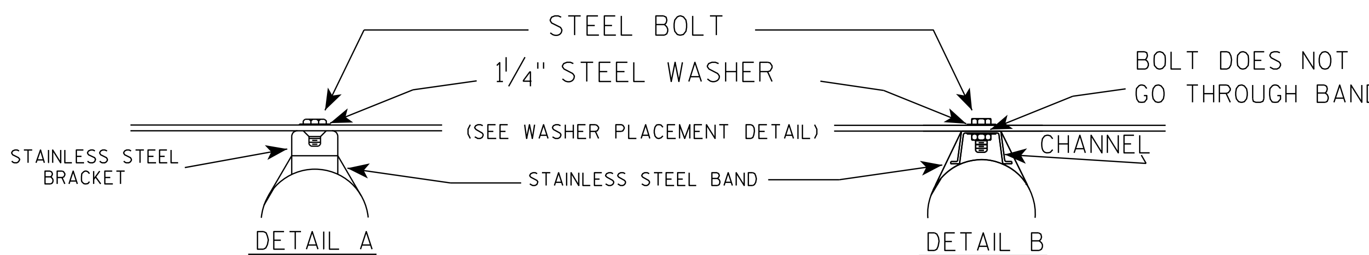
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 171	E

BANDING

SINGLE SIGN



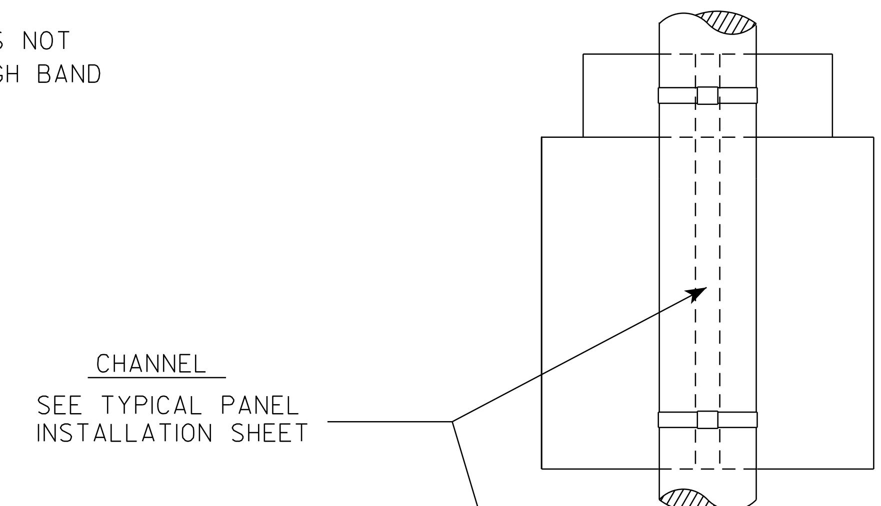


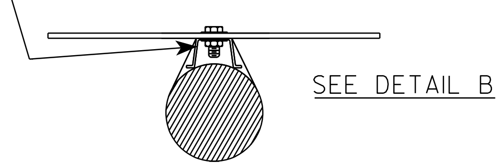


GENERAL NOTES

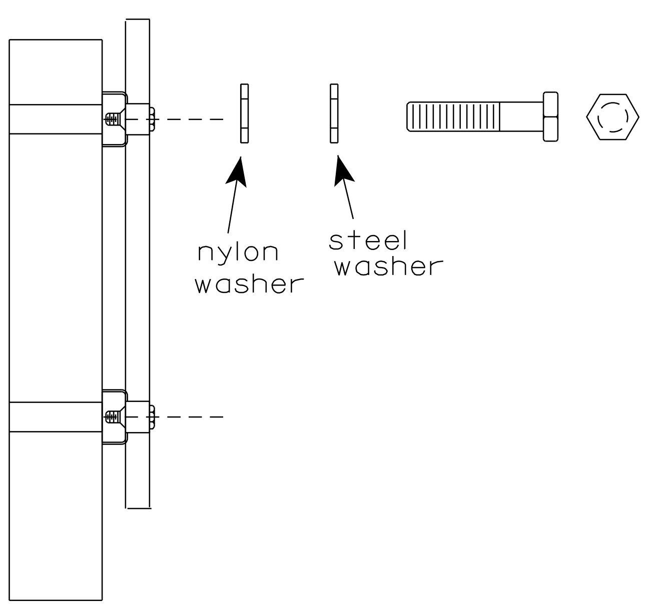
1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. 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



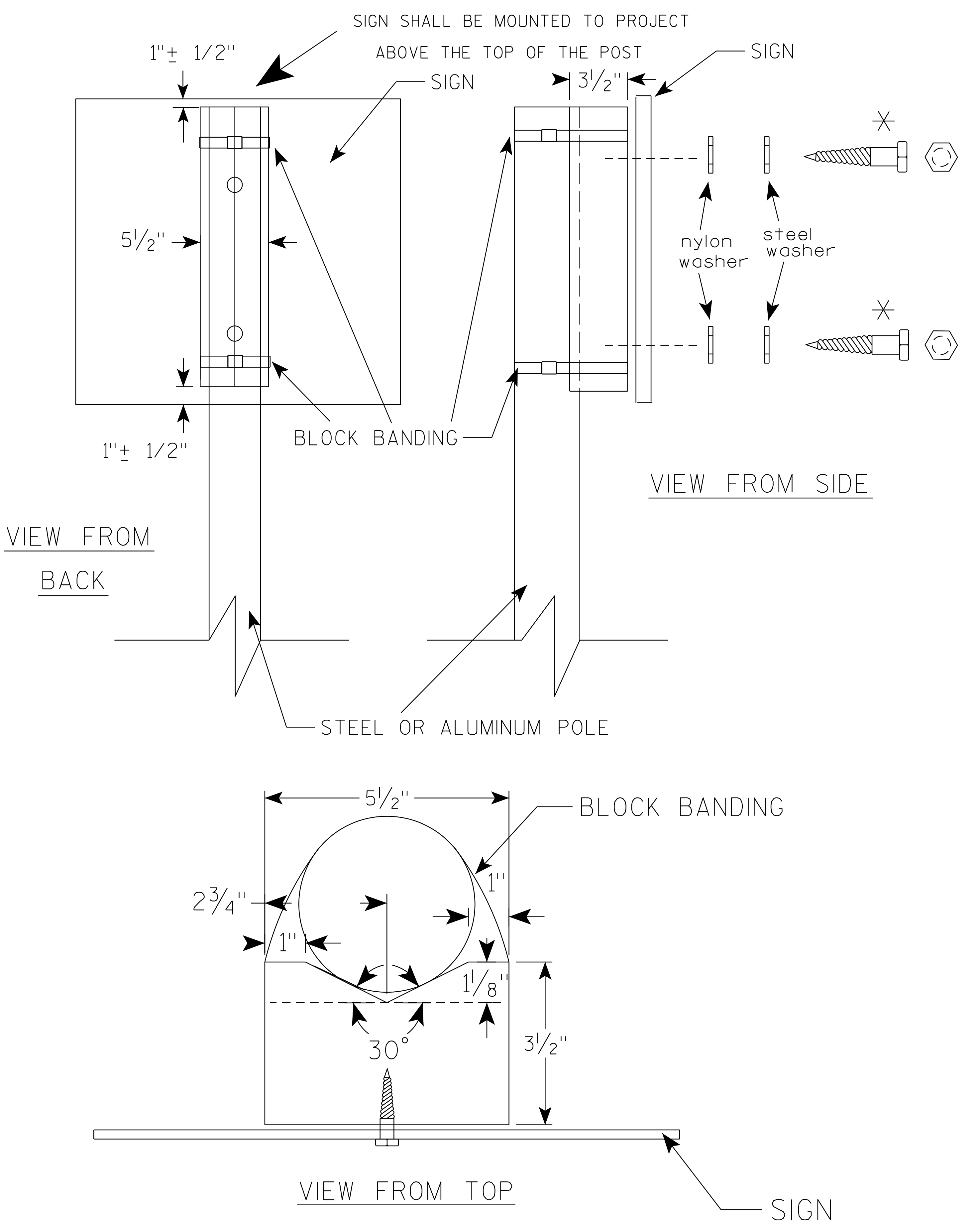
WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X $1/16$" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

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: 172	E

7

7



GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, 3/4" 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 1 1/4" O.D. X 3/8" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1 1/4" O.D. X 3/8" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

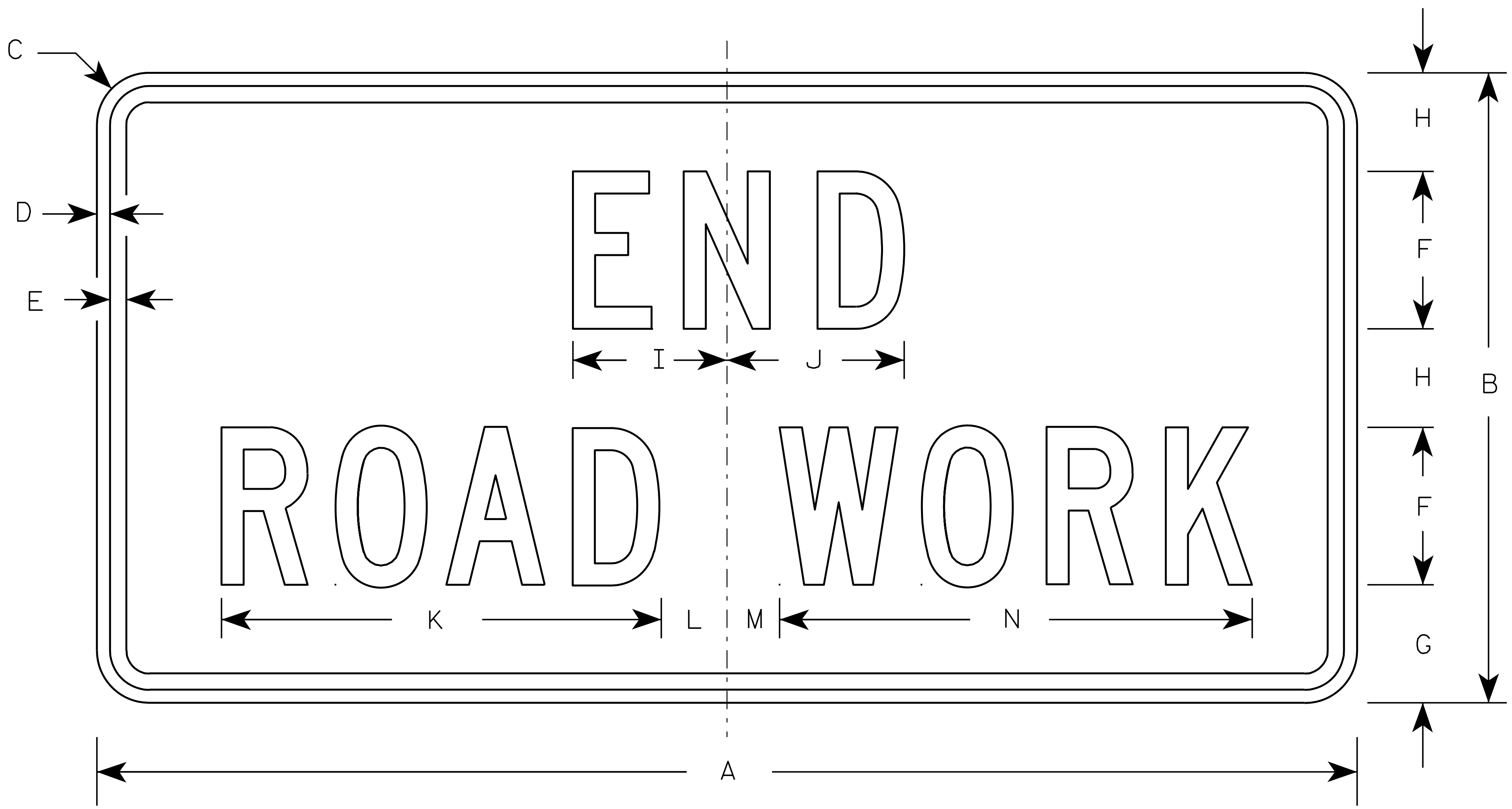
✳ LAG BOLTS SHALL BE 3/8" X 2 1/2"

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



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

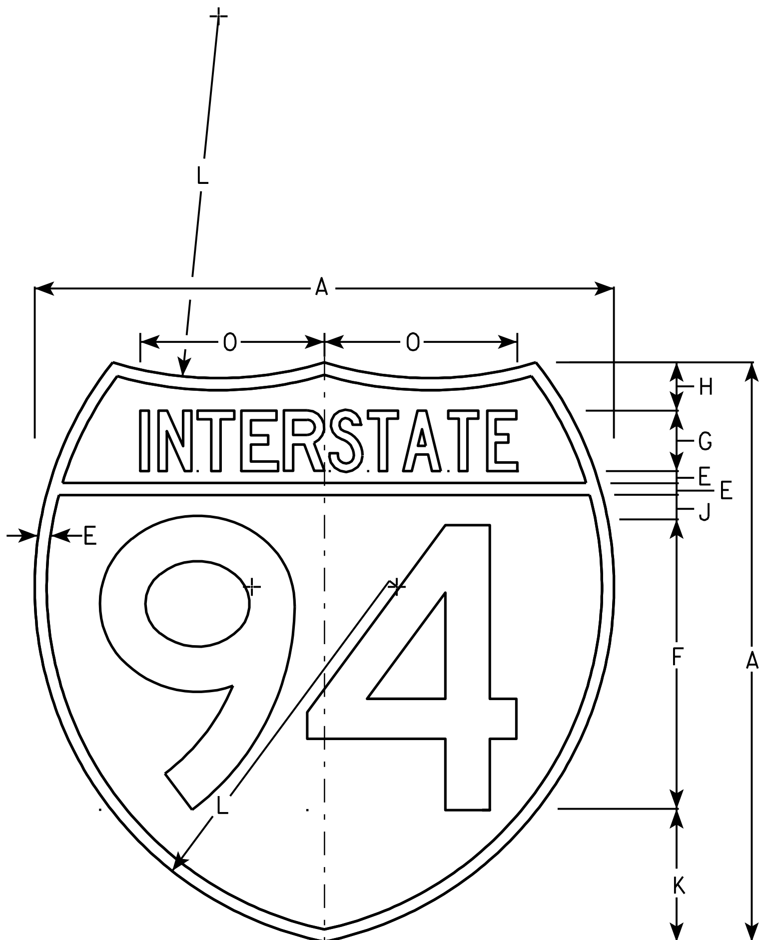
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	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

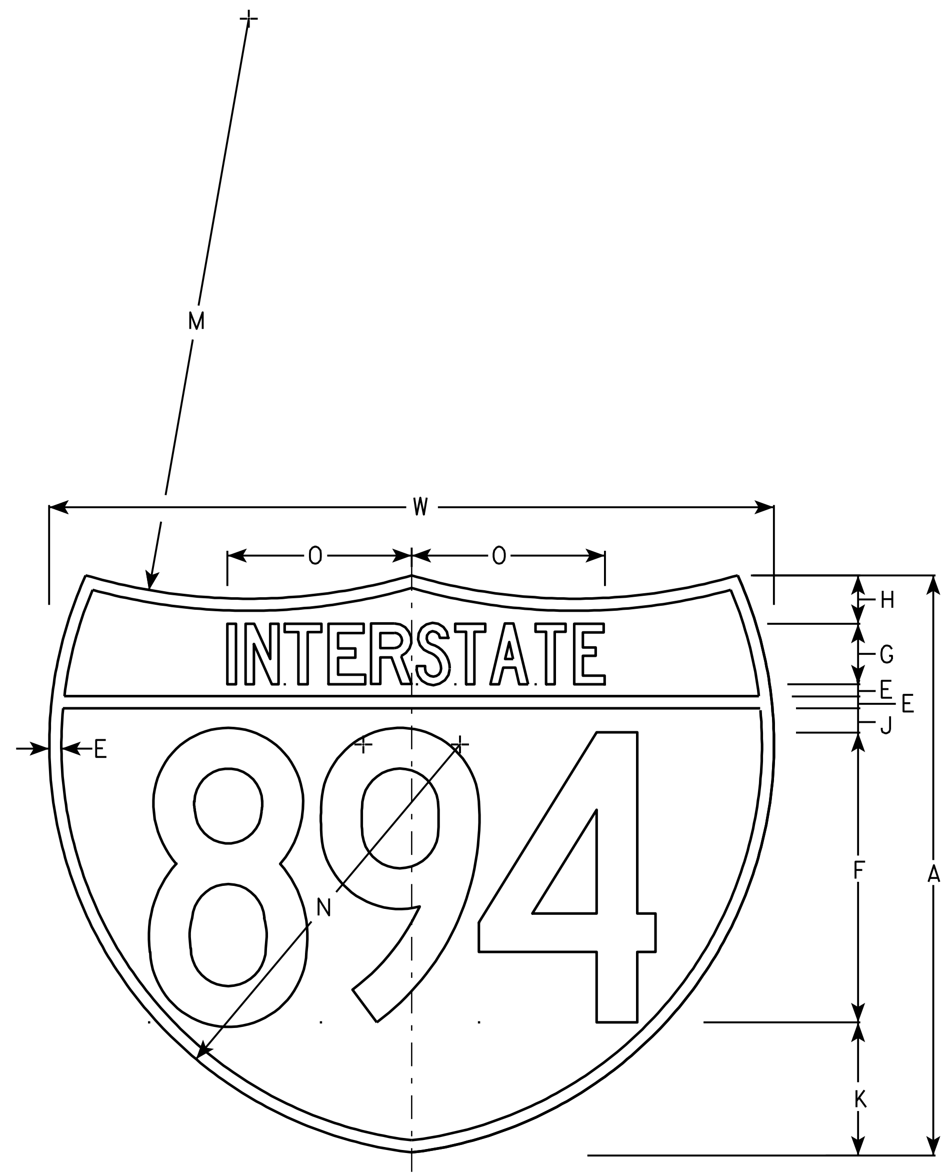
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8



M1-1



M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 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	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

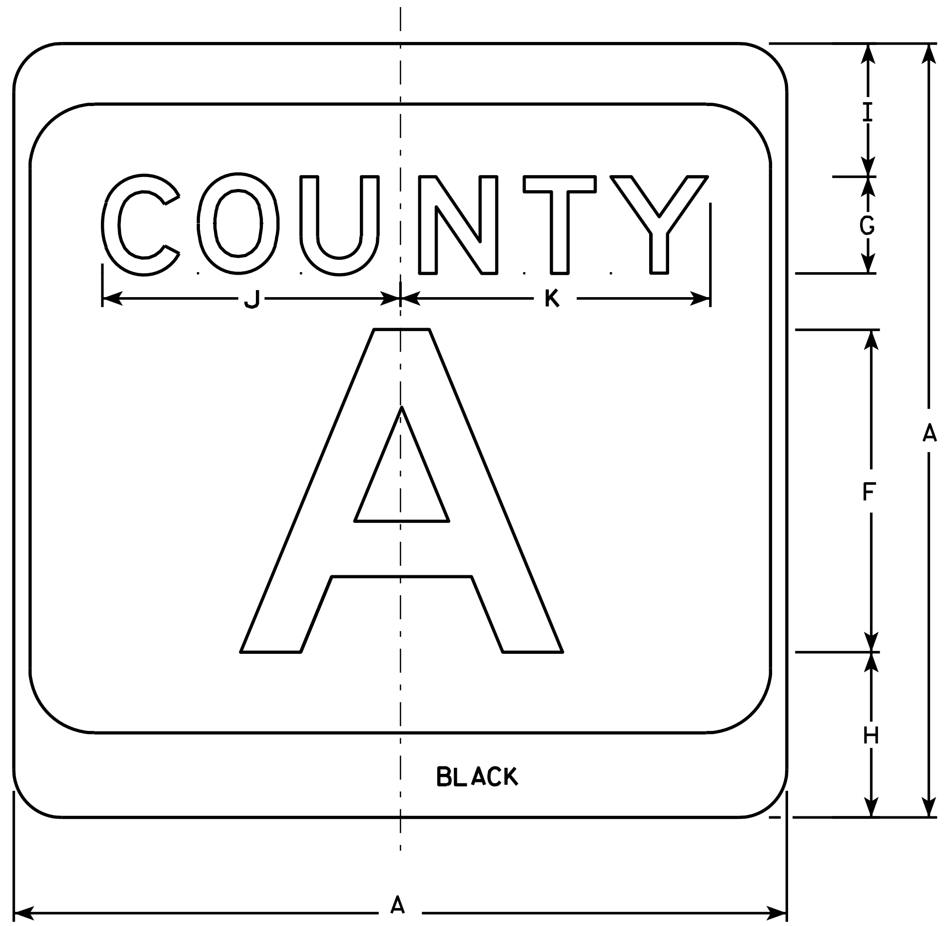
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

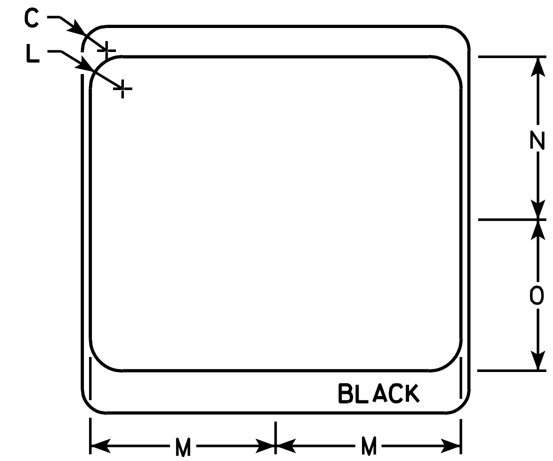
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 175 | E

7

7

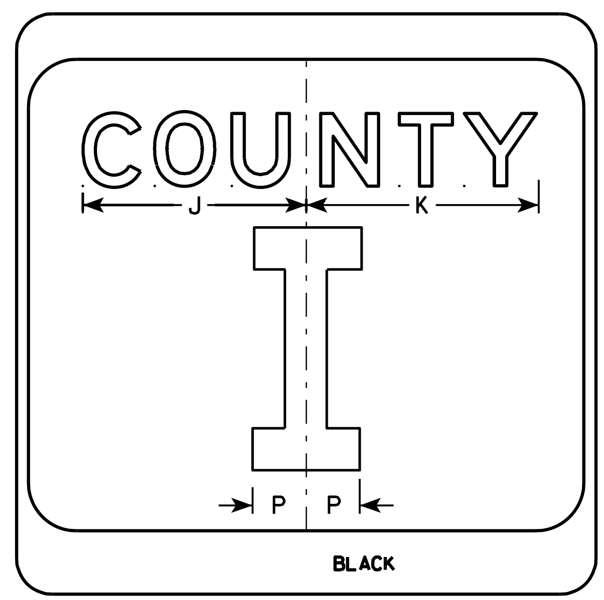


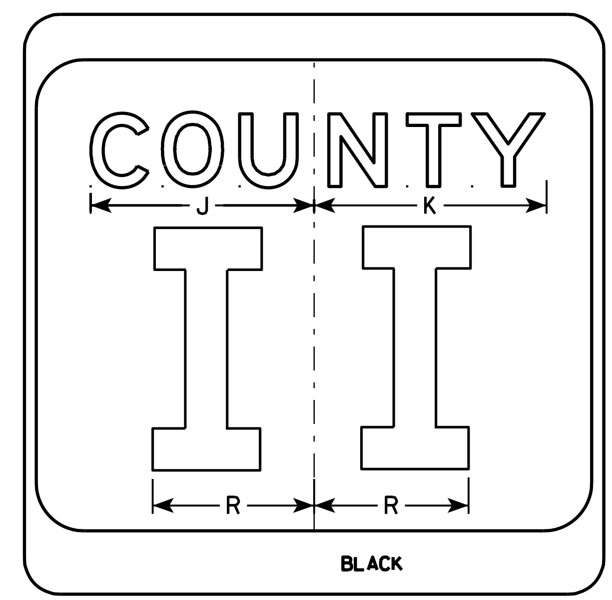
M1-5A



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

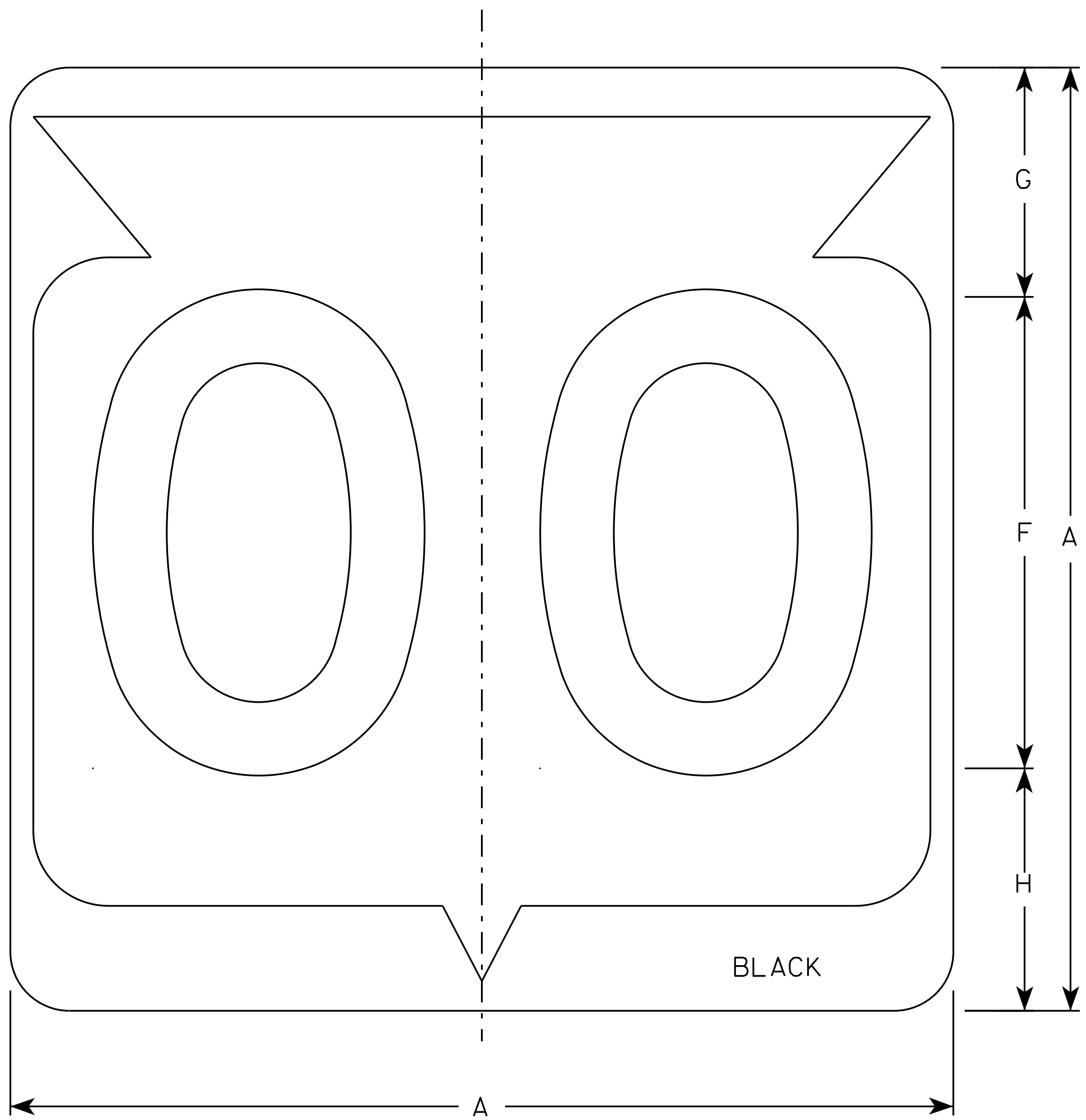
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

7

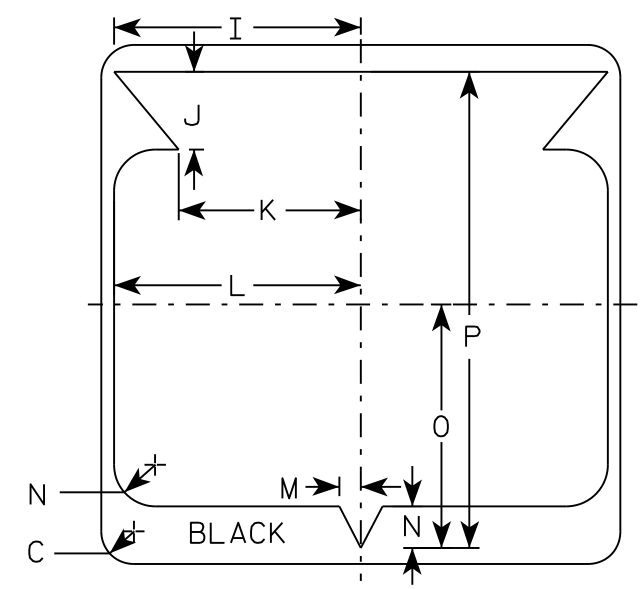
7



M1-6

NOTES

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



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

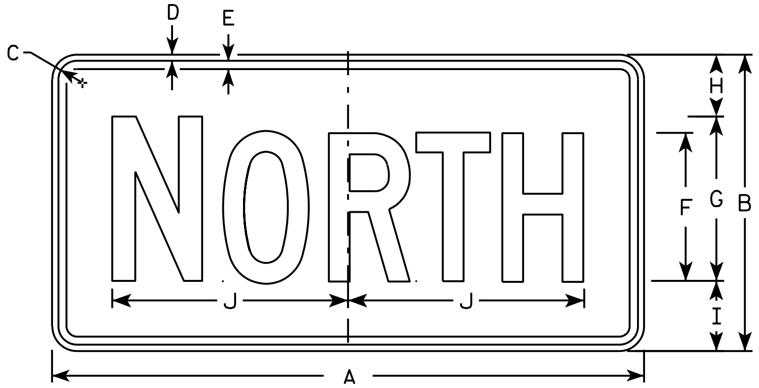
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

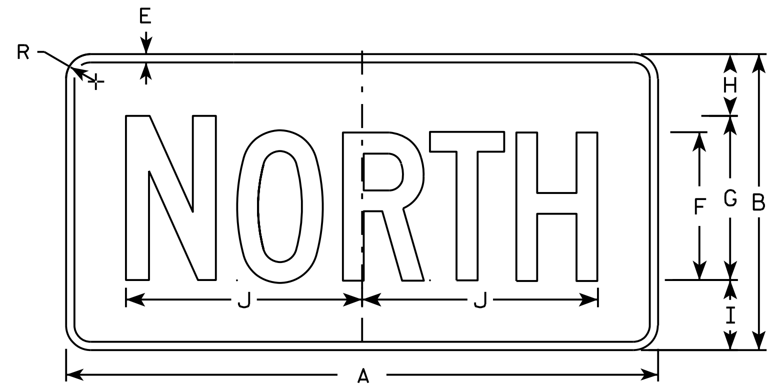
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 177 | E

7

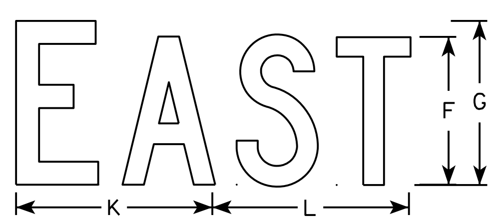
7



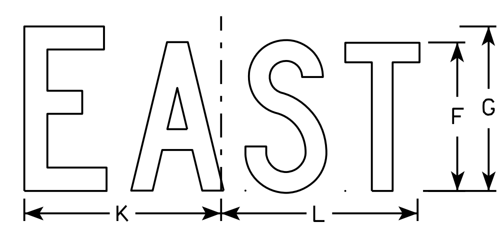
M3-1
MM3-1
MP3-1



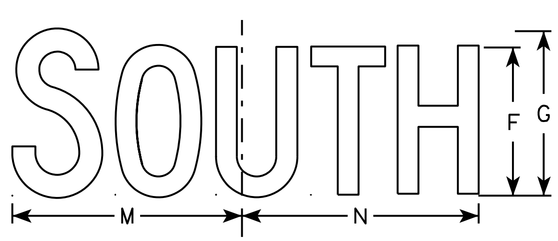
MB3-1
MK3-1
MN3-1



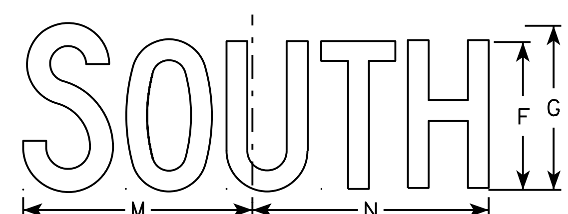
M3-2
MM3-2
MP3-2



MB3-2
MK3-2
MN3-2

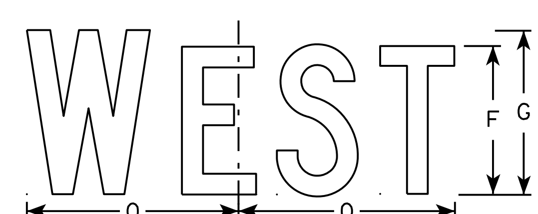


M3-3
MM3-3
MP3-3



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

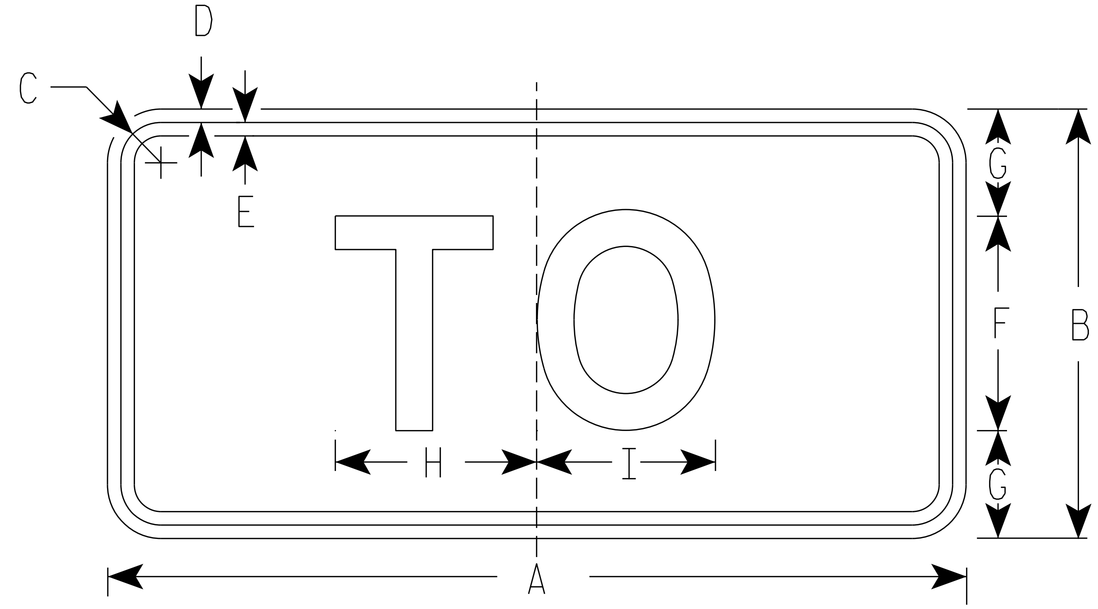
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

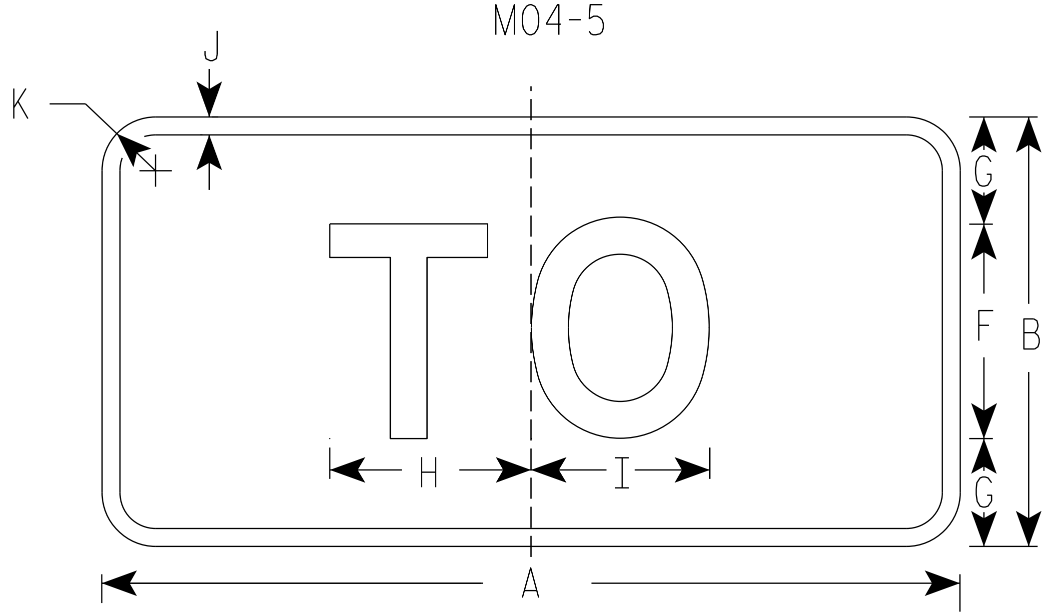
DATE 10/15/15 PLATE NO. M3-1.14

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



M4-5
MM4-5
MP4-5
MO4-5



MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White
   Message - Black
   MB4-5 Background - Blue
   Message - White
   MK4-5 Background - Green
   Message - White
   MM4-5 Background - White
   Message - Green
   MN4-5 Background - Brown
   Message - White
   MP4-5 Background - White
   Message - Blue
   MO4-5 Background - Orange Type F Reflective
   Message - Black

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	5 3/8	5 1/4	1/2	1 1/2																2.00
3	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
4	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
5	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5

STANDARD SIGN
M4-5

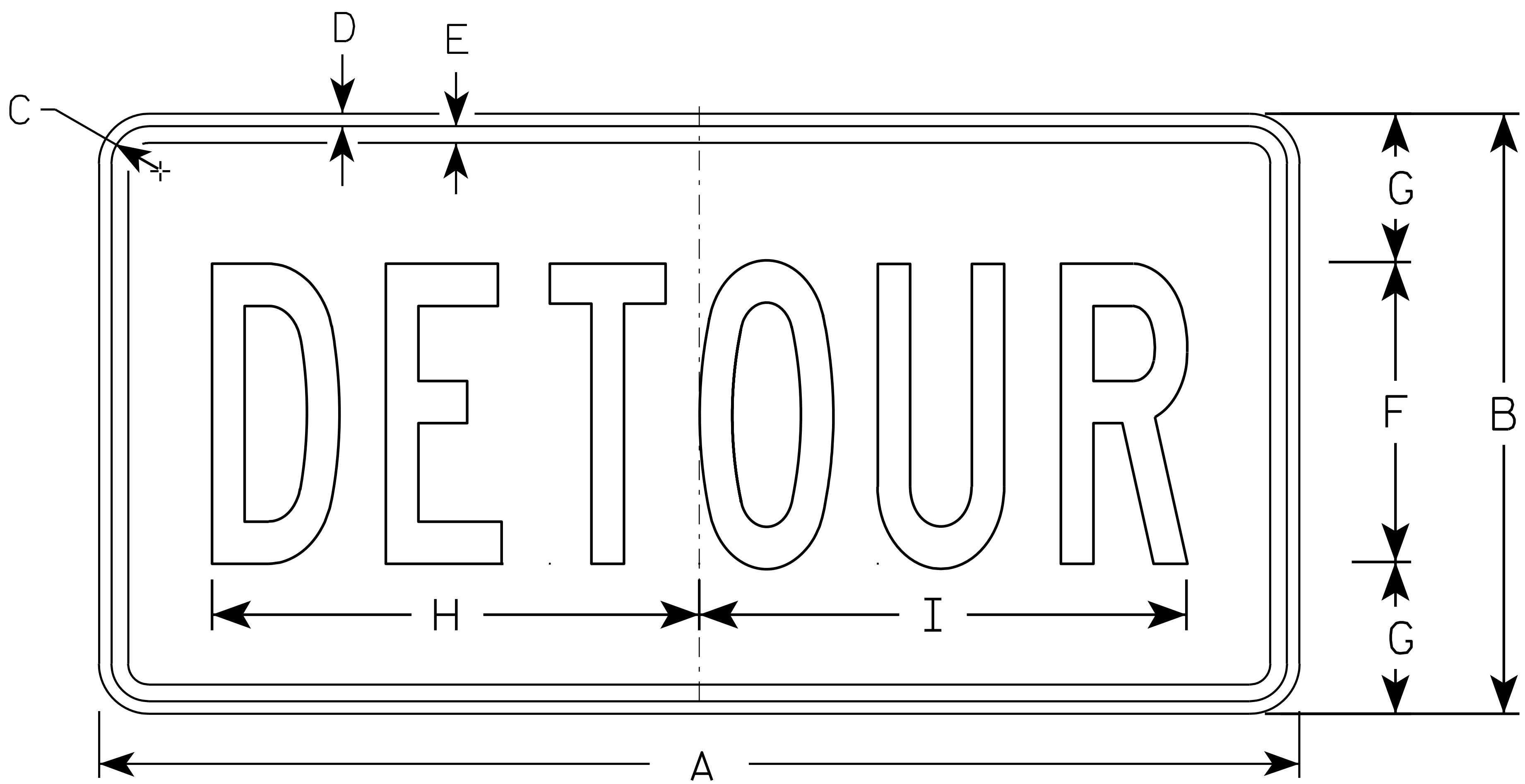
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/7/19 PLATE NO. M4-5.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 179 | E

7
7



M4-8

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 - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

STANDARD SIGN
M4-8

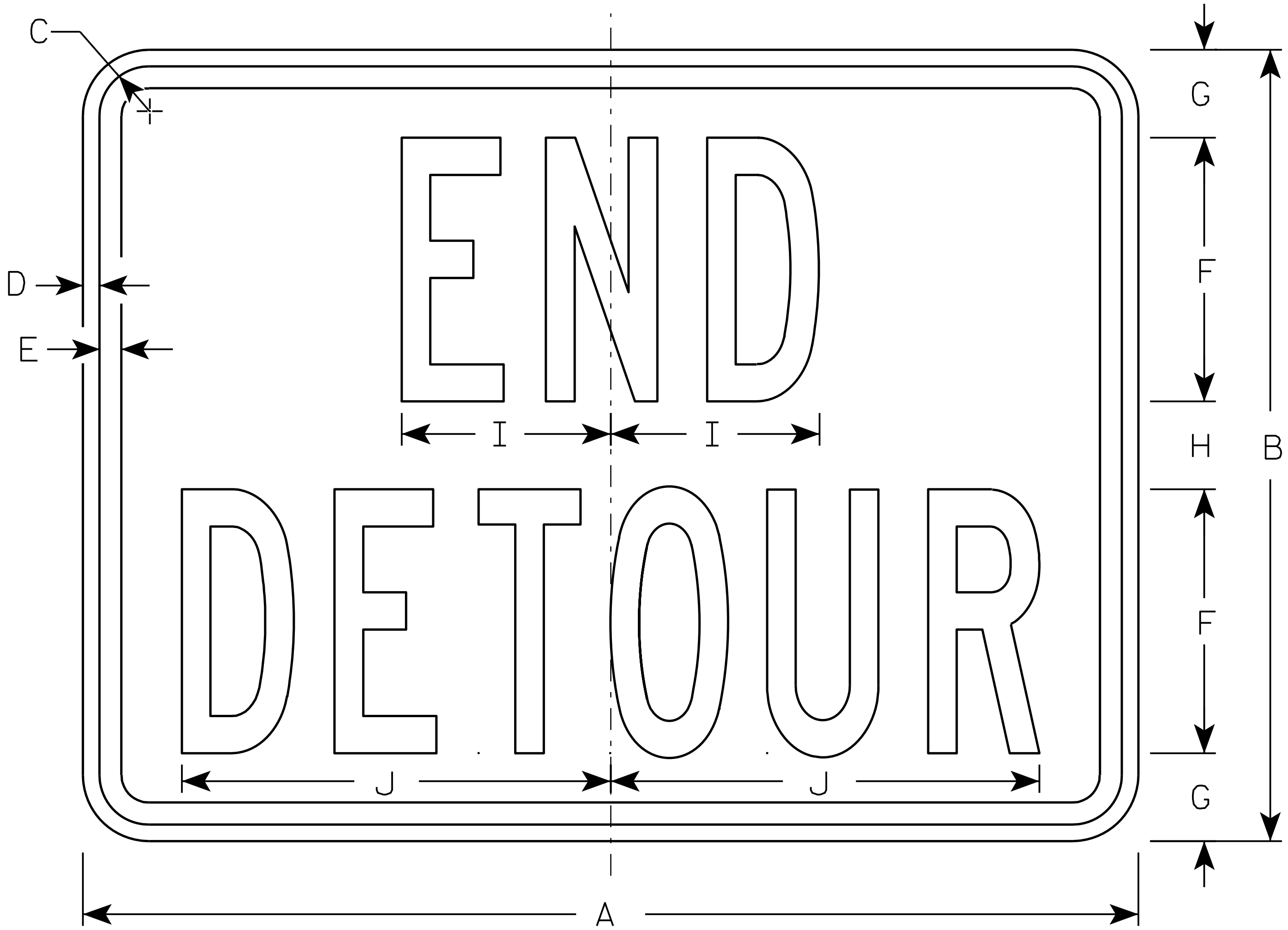
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

7 7

PROJECT NO: HWY: COUNTY: SHEET NO: 180 E



M4-8A

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 - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

STANDARD SIGN
M4-8A

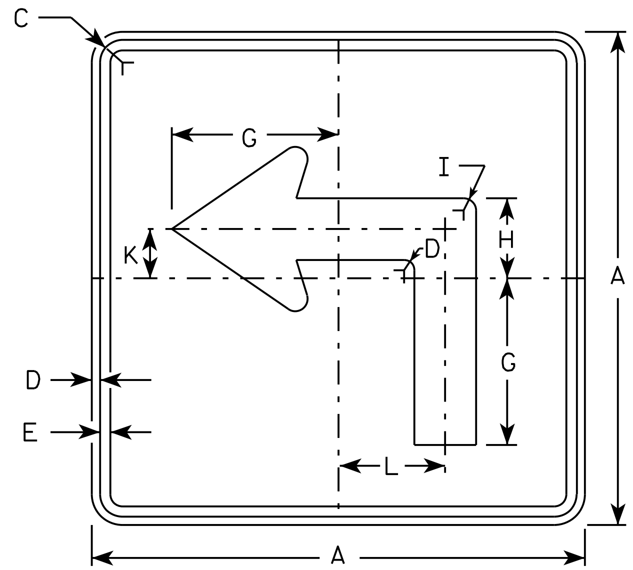
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

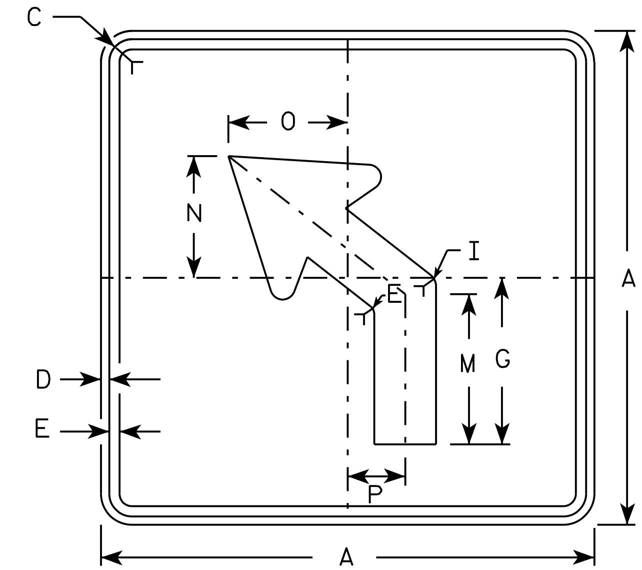
DATE 3/9/11 PLATE NO. M4-8A.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 181 | E

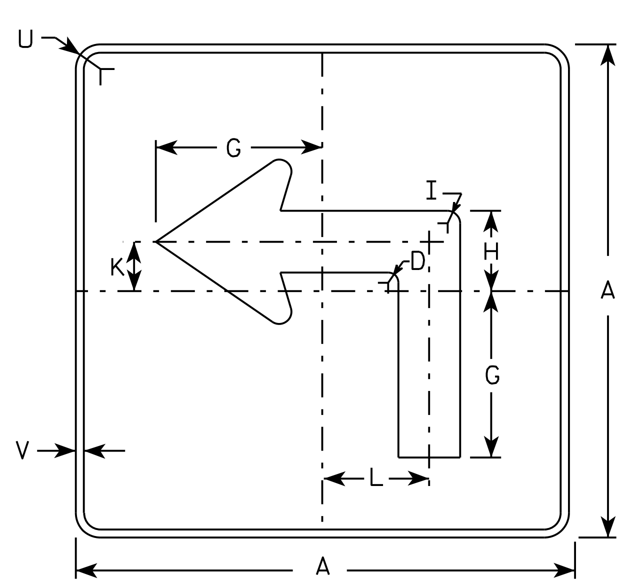
7 7



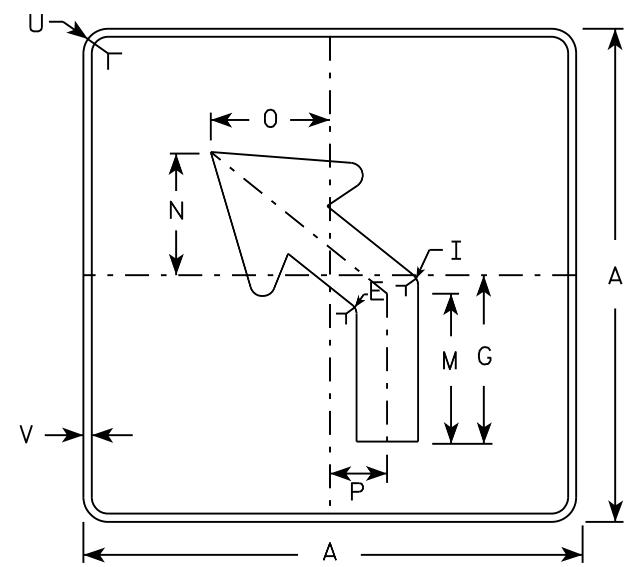
M5-1L
MM5-1L
MO5-1L
MP5-1L



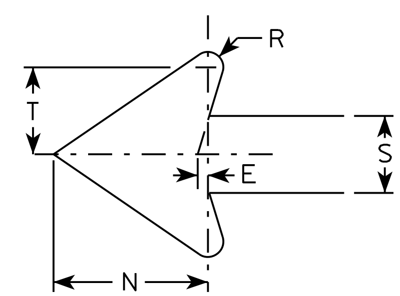
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

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	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

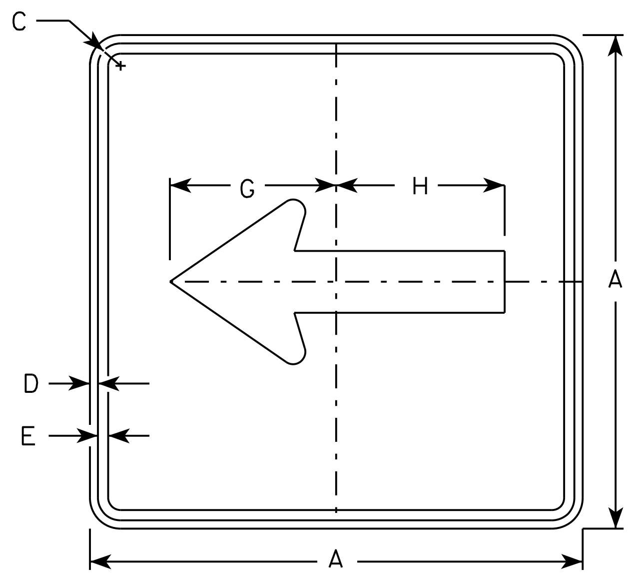
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

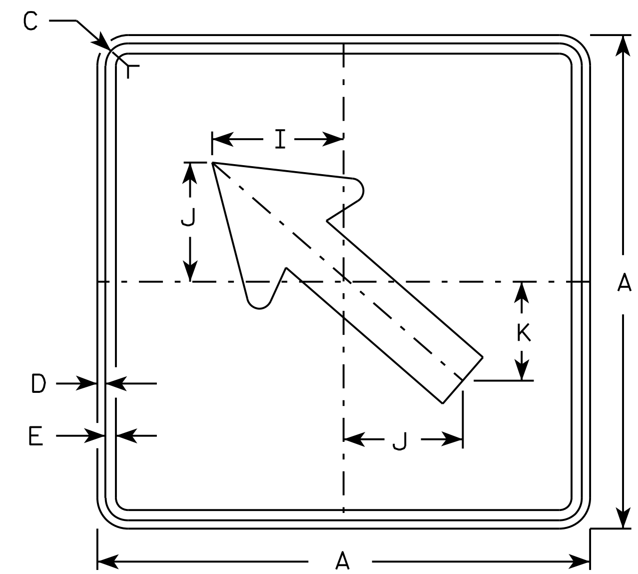
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: HWY: COUNTY: SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



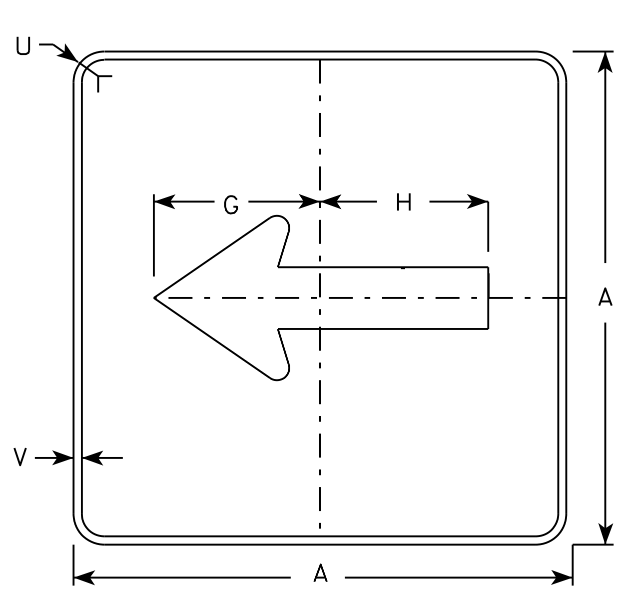
M6-1
MM6-1
MO6-1
MP6-1



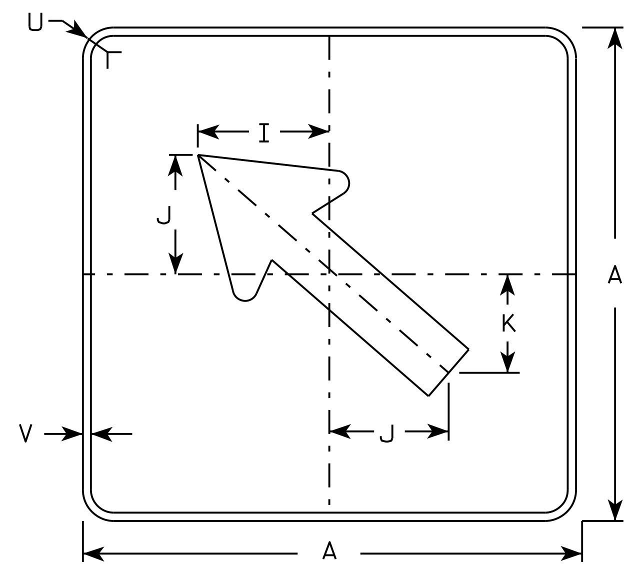
M6-2
MM6-2
MO6-2
MP6-2

NOTES

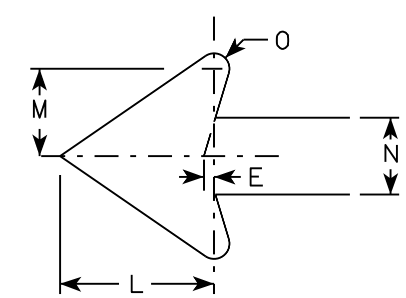
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - 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

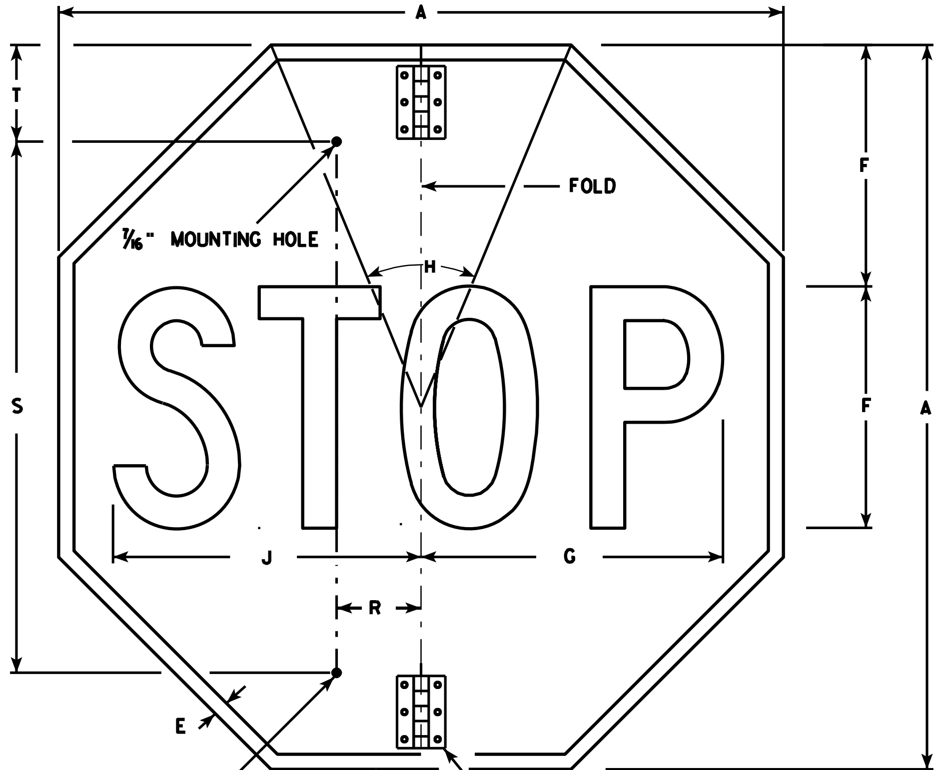
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 183 M6-1.15

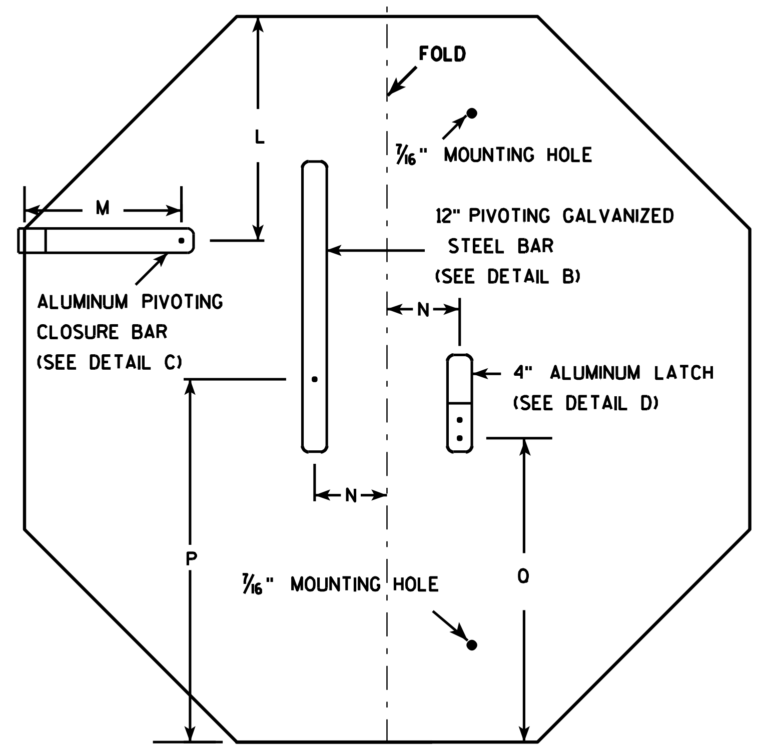
PROJECT NO: HWY: COUNTY: SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



(FRONT VIEW)

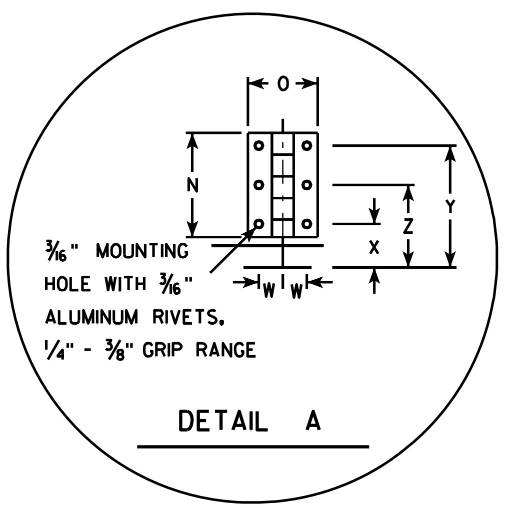
STAINLESS STEEL HINGE
(SEE DETAIL A)

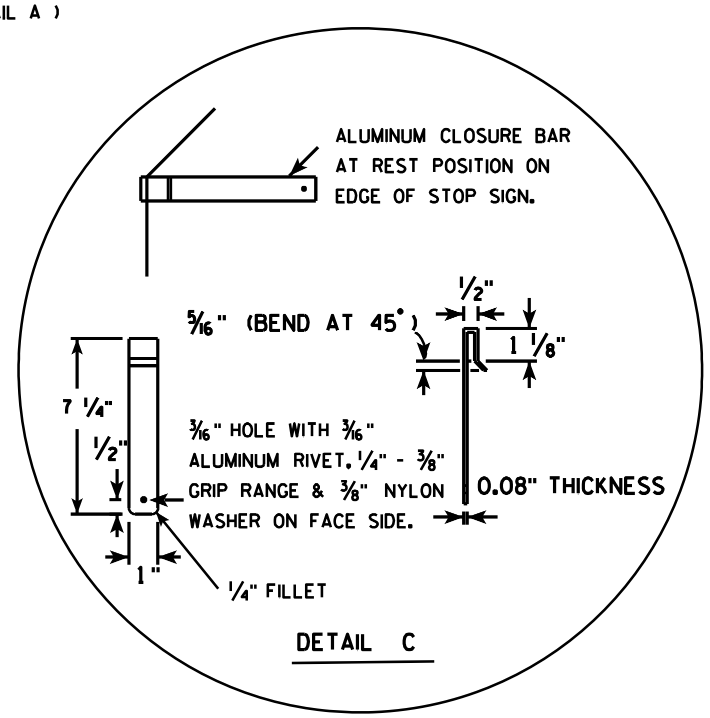


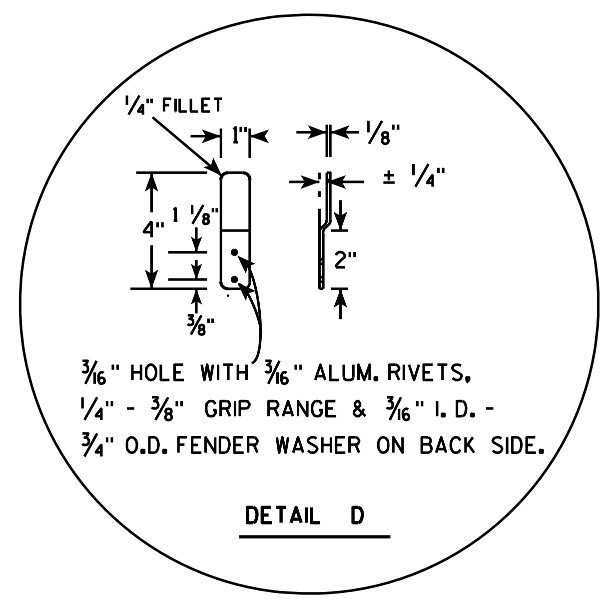
(BACK VIEW)

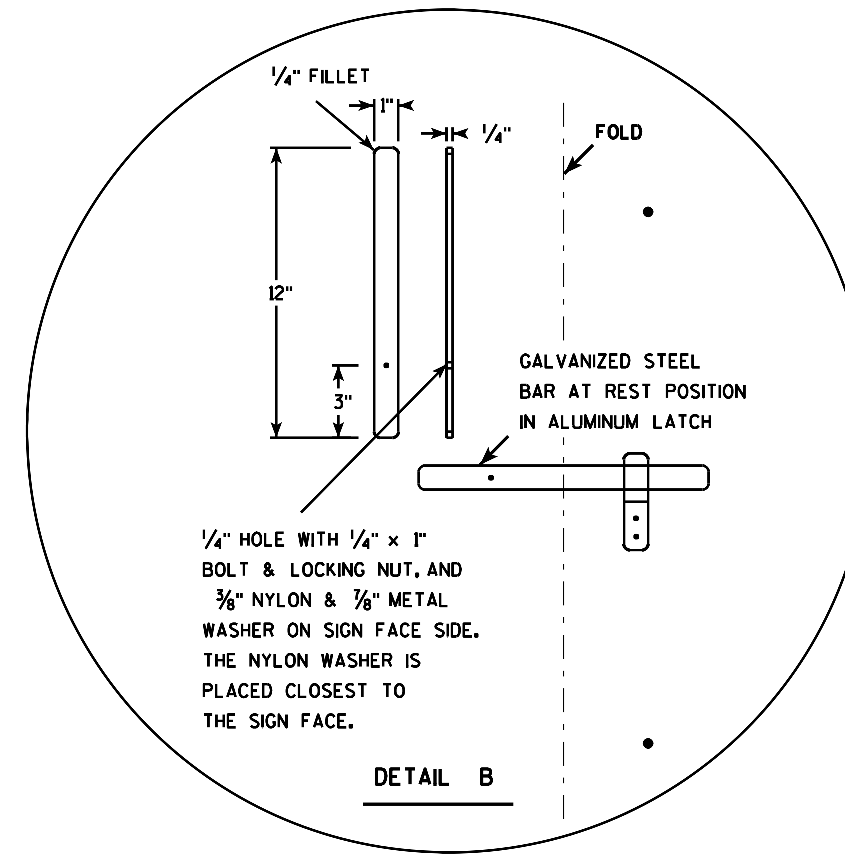
NOTES

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				$\frac{5}{8}$	10	12 $\frac{1}{2}$	45		12 $\frac{3}{4}$		9 $\frac{1}{4}$	6 $\frac{1}{2}$	3	2	15	12 $\frac{3}{8}$	2 $\frac{1}{2}$	22	5			$\frac{11}{16}$	1 $\frac{1}{4}$	3 $\frac{1}{2}$	2 $\frac{3}{8}$	5.18
2M	36				$\frac{3}{4}$	12	15	45		15 $\frac{3}{8}$		11	6 $\frac{1}{2}$	3	2	18	15 $\frac{3}{8}$	2 $\frac{1}{2}$	26	5			$\frac{11}{16}$	1 $\frac{1}{4}$	3 $\frac{1}{2}$	2 $\frac{3}{8}$	7.46
3	36				$\frac{3}{4}$	12	15	45		15 $\frac{3}{8}$		11	6 $\frac{1}{2}$	3	2	18	15 $\frac{3}{8}$	2 $\frac{1}{2}$	26	5			$\frac{11}{16}$	1 $\frac{1}{4}$	3 $\frac{1}{2}$	2 $\frac{3}{8}$	7.46
4																											
5																											

STANDARD SIGN
R1-1F

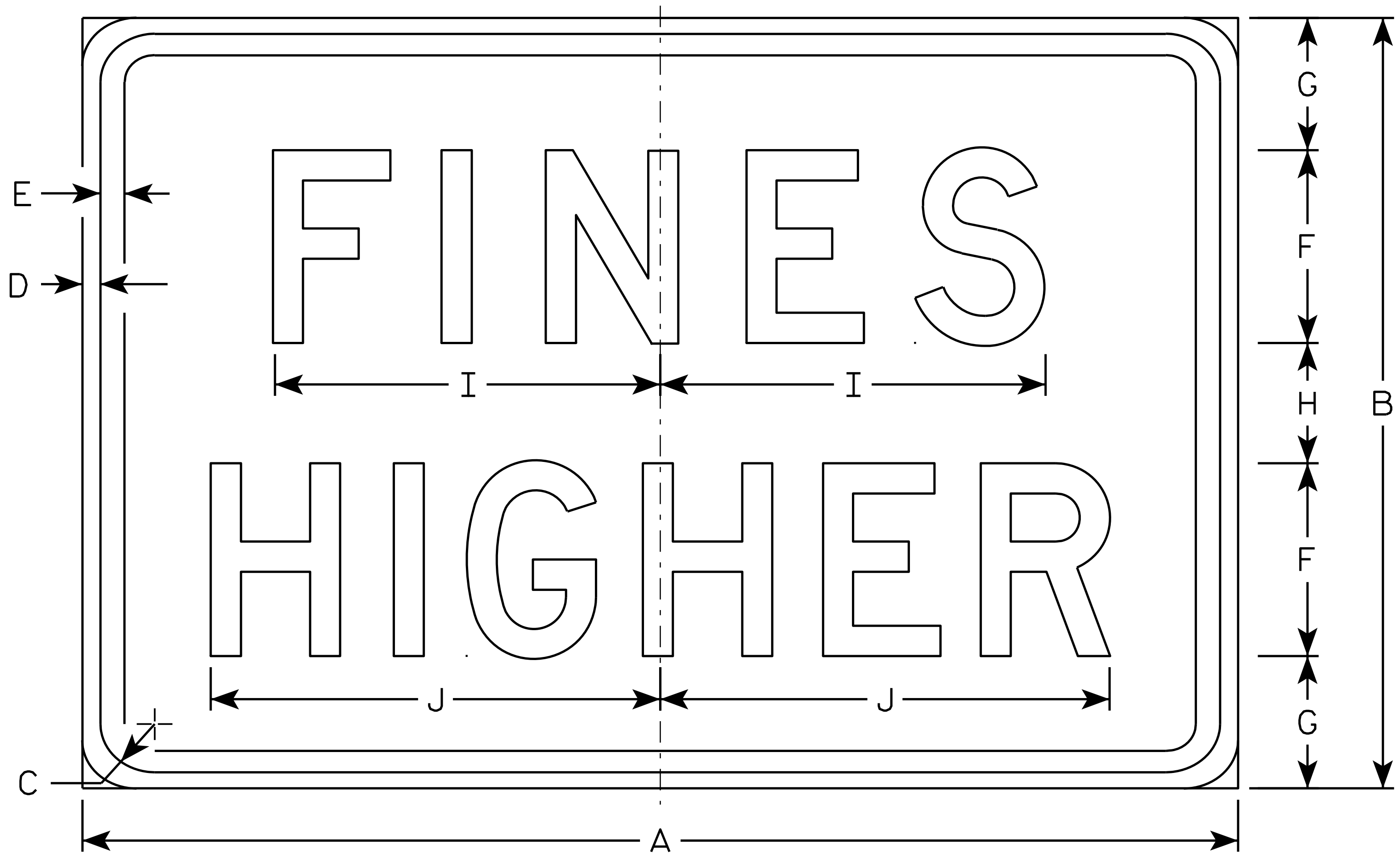
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

7

7



R2-6P

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	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
2M	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
3	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
4	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
5	48	36	1 3/8	1/2	5/8	8	7	6	15 1/8	19																	12.0

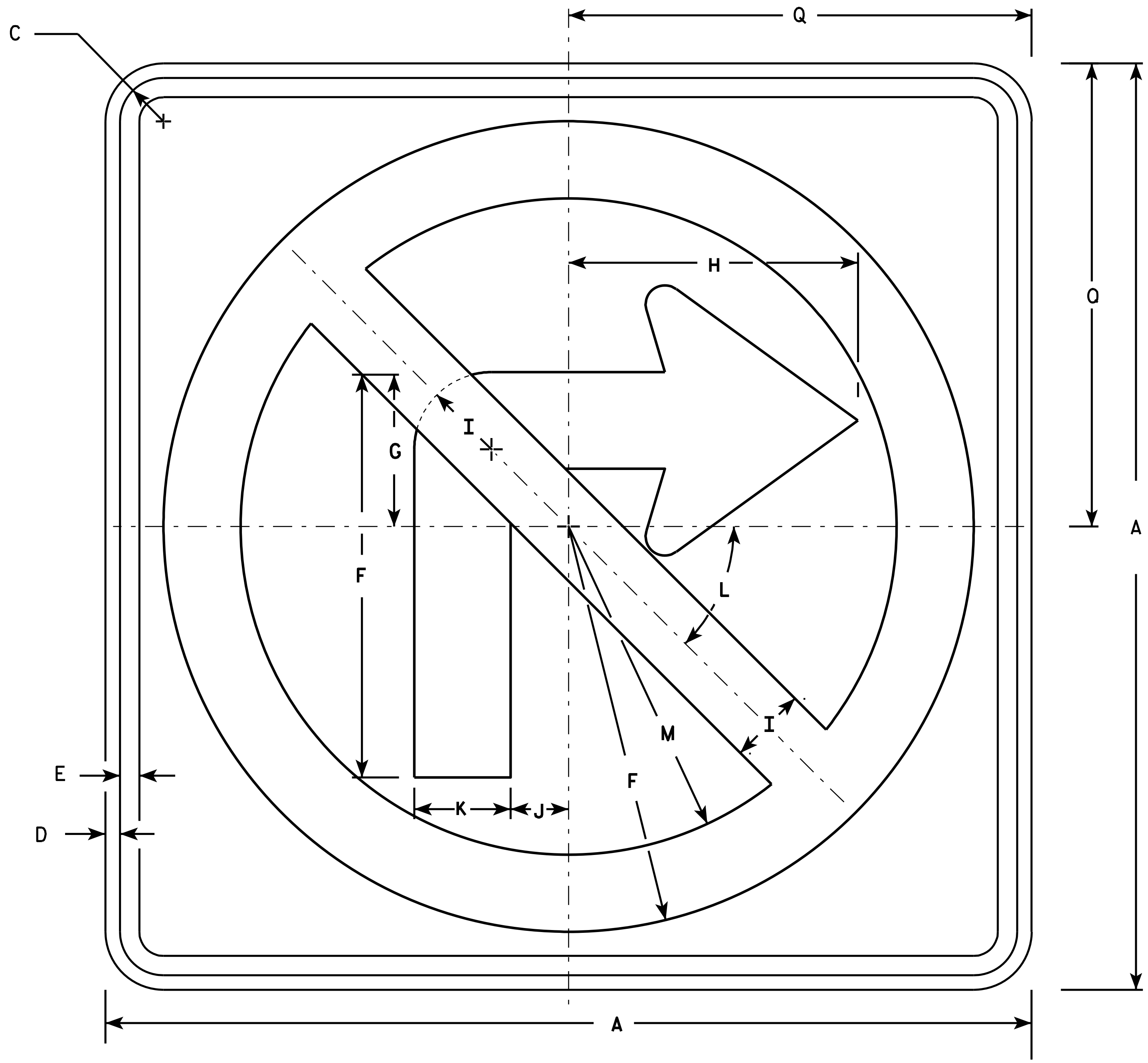
STANDARD SIGN
R2-6P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/10 PLATE NO. R2-6P.2

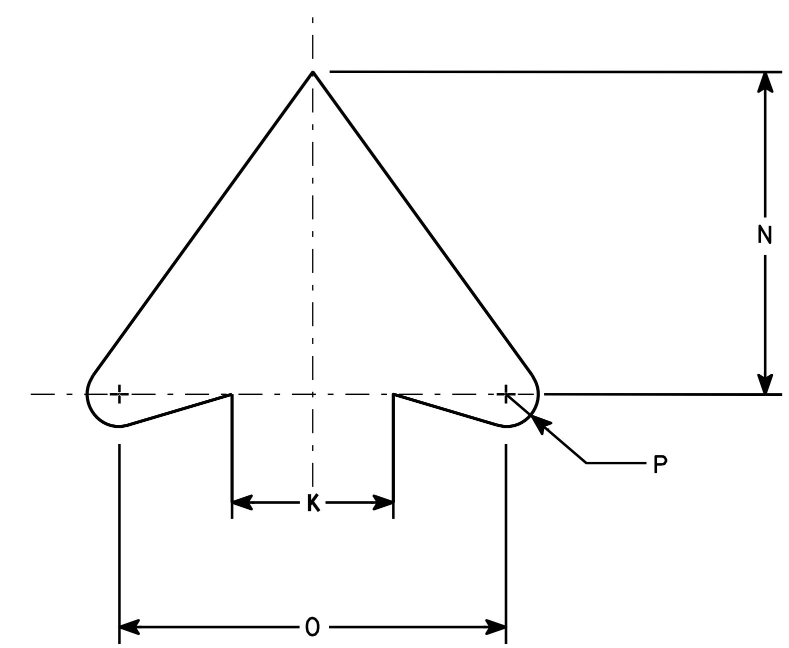
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 185 | E



R3-1

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 - 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	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

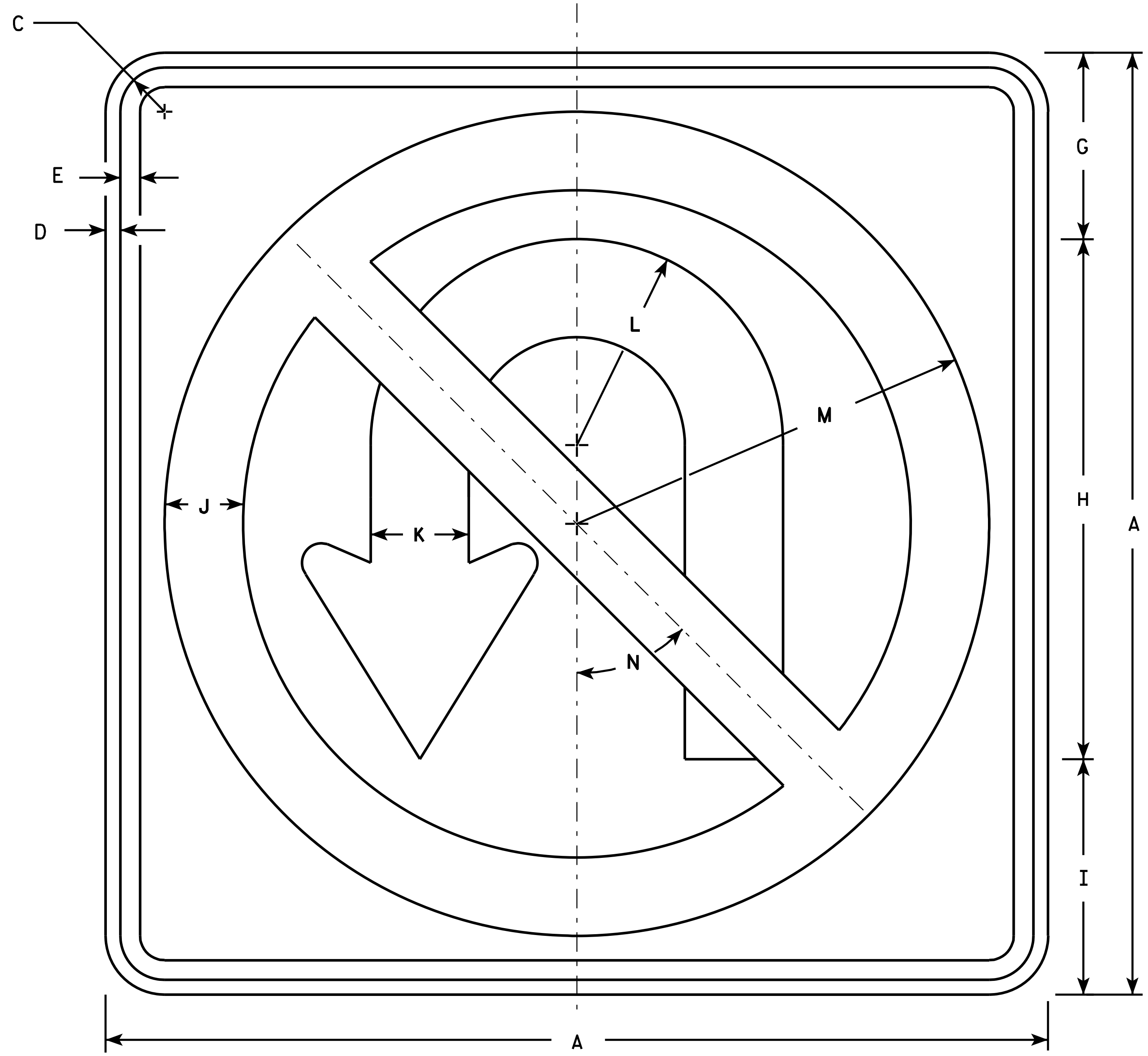
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 186 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R31.DGN PLOT DATE : 08-DEC-2010 13:23 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 5.959043:1.000000 WISDOT/CADDS SHEET 42

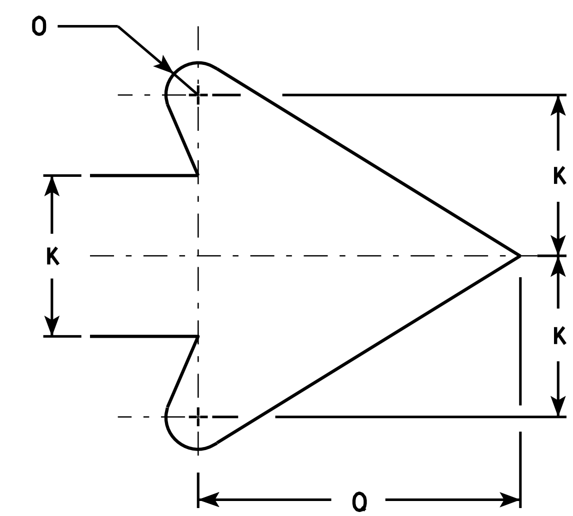
7 7



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	Q	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

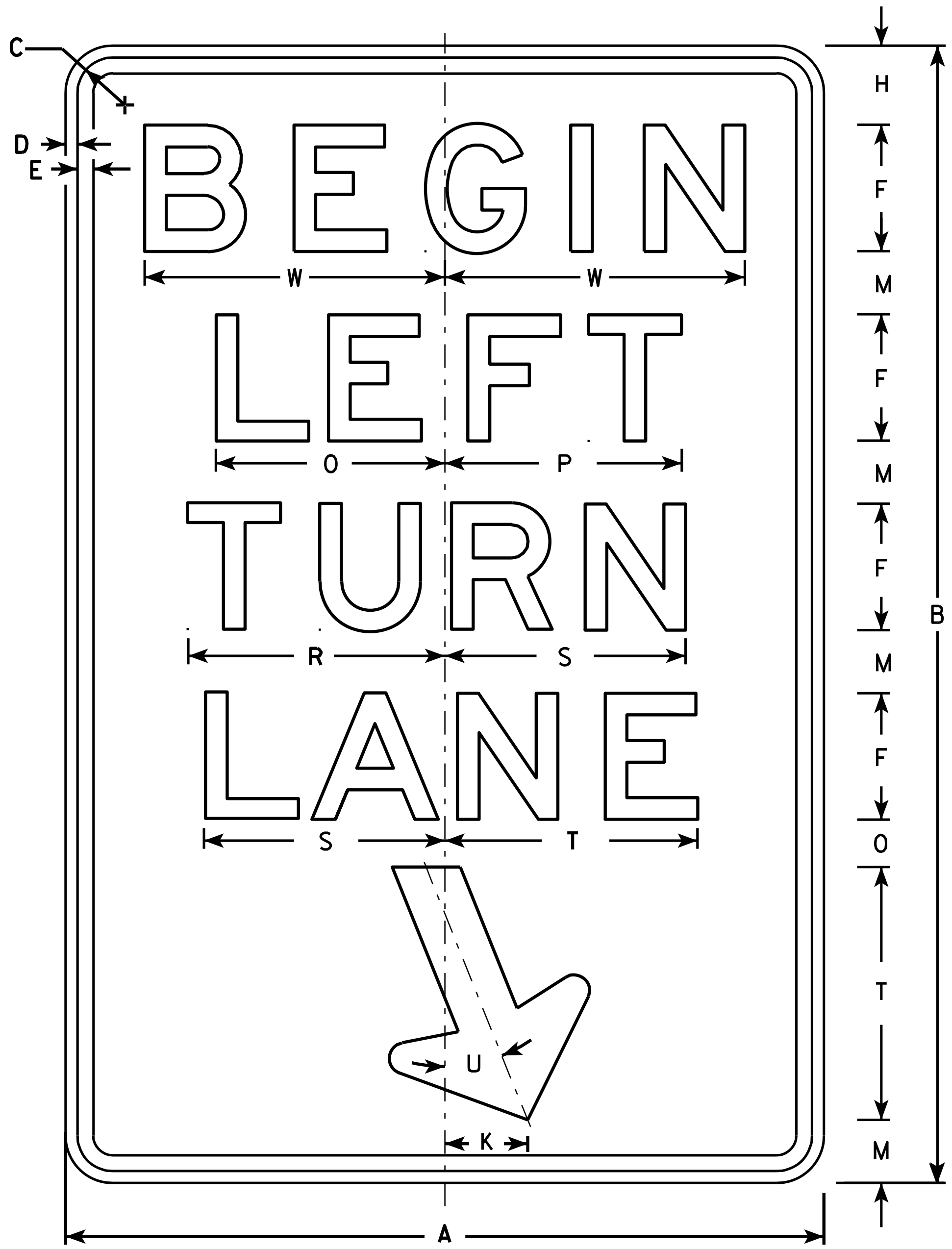
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-4.11

7

7

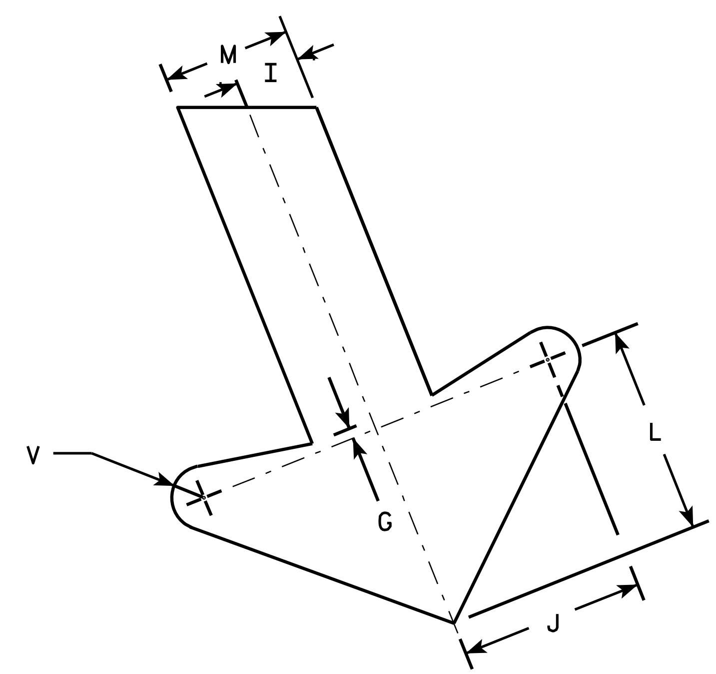
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 187 | E



R3-20L

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.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

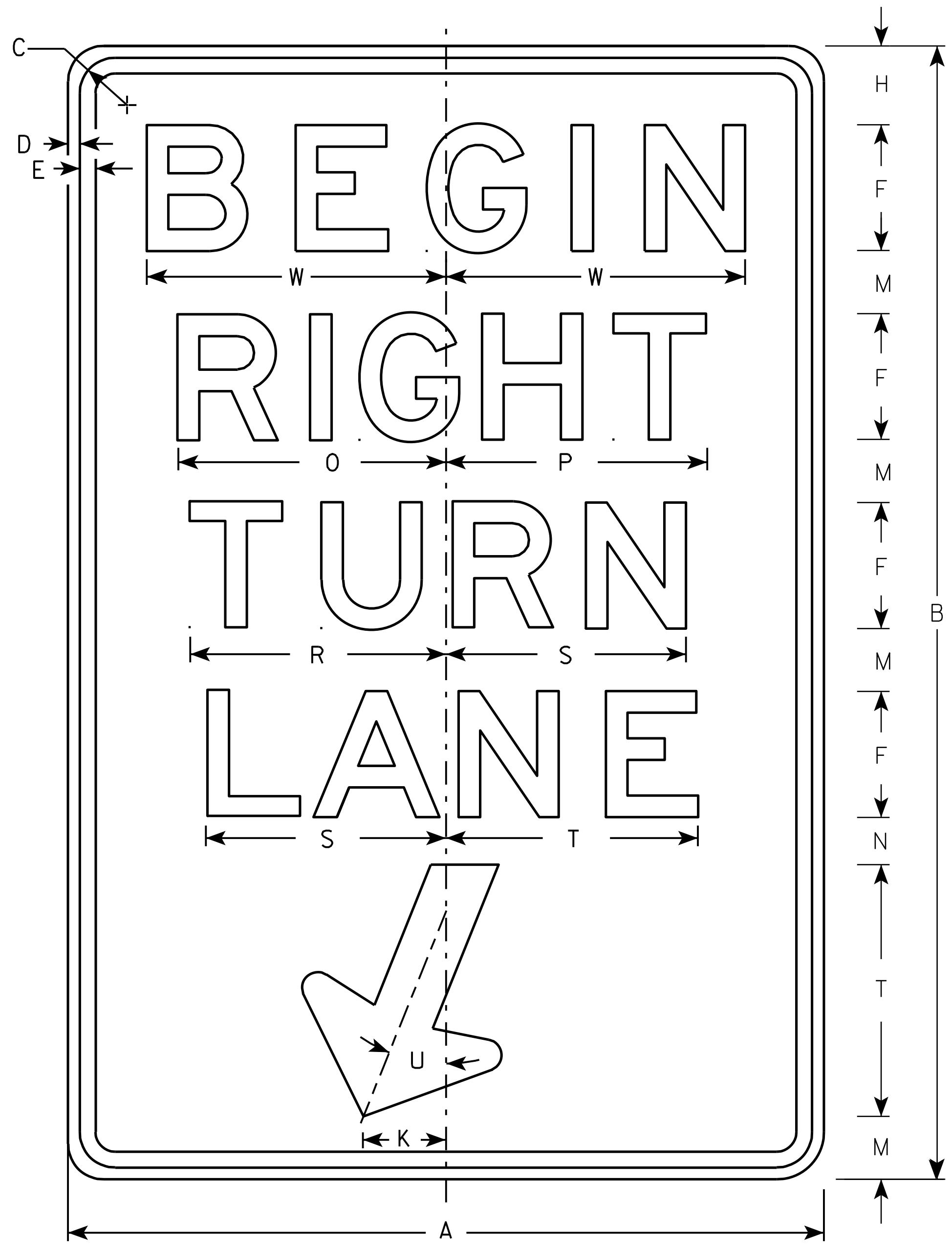
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

7

7

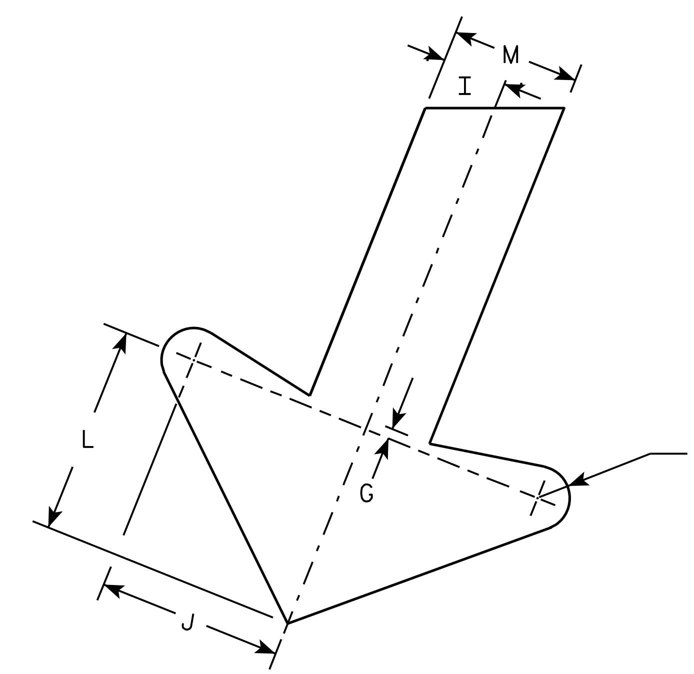
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 188 | E



R3-20R

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.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

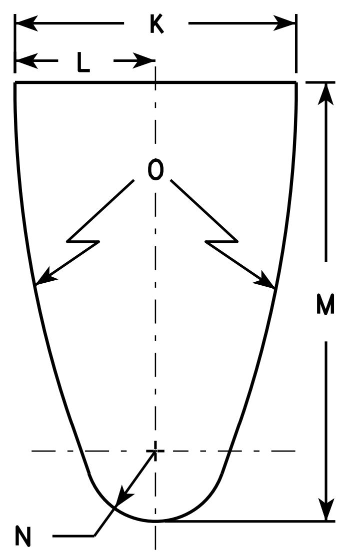
PROJECT NO: HWY: COUNTY:

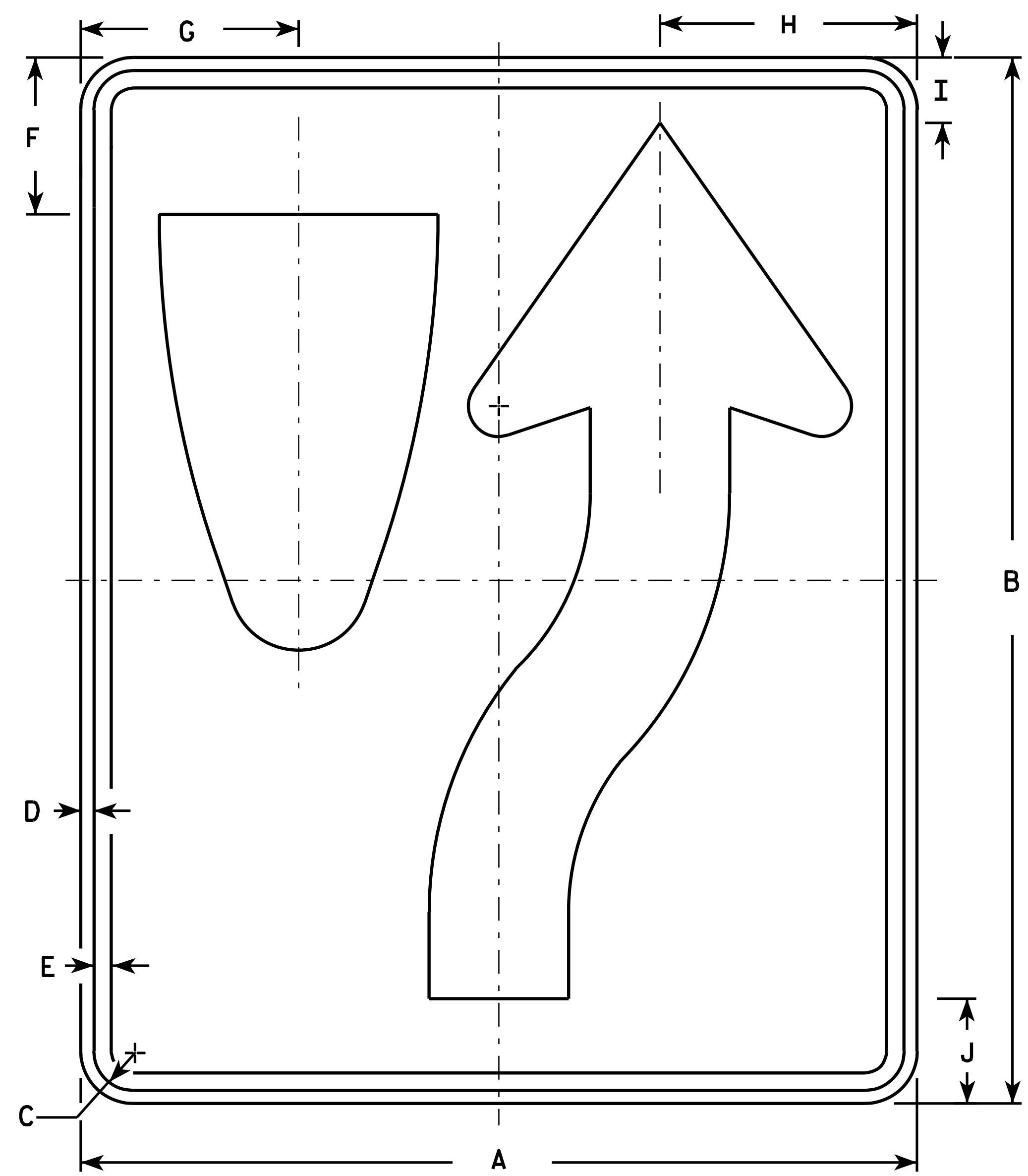
FILE NAME : C:\Users\PROJECTS\tr_stdplate\R320R.DGN PLOT DATE : 15-OCT-2010 14:59 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42

7

7

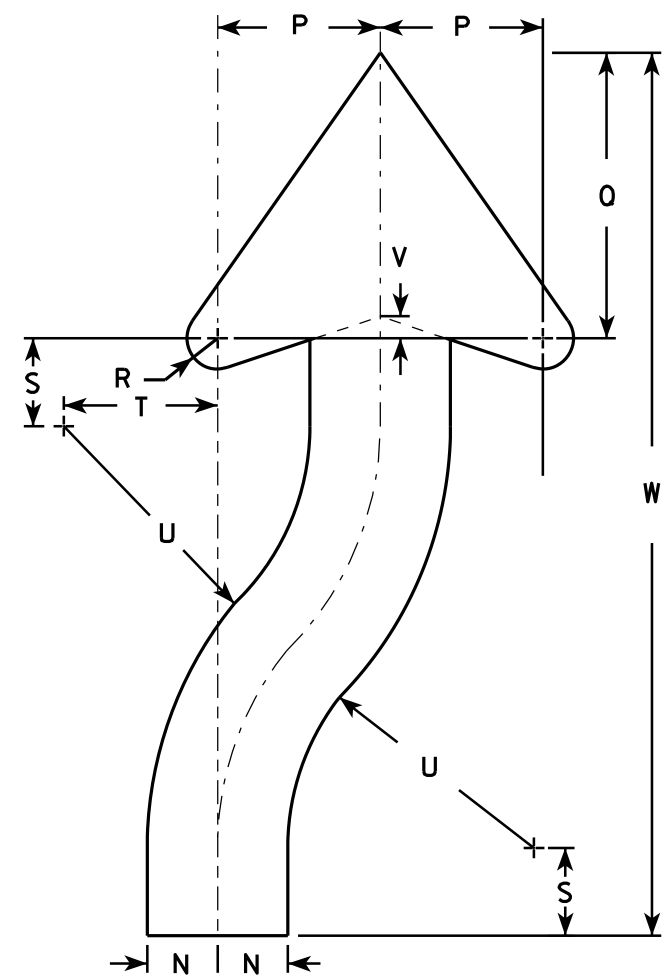




R4-7

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

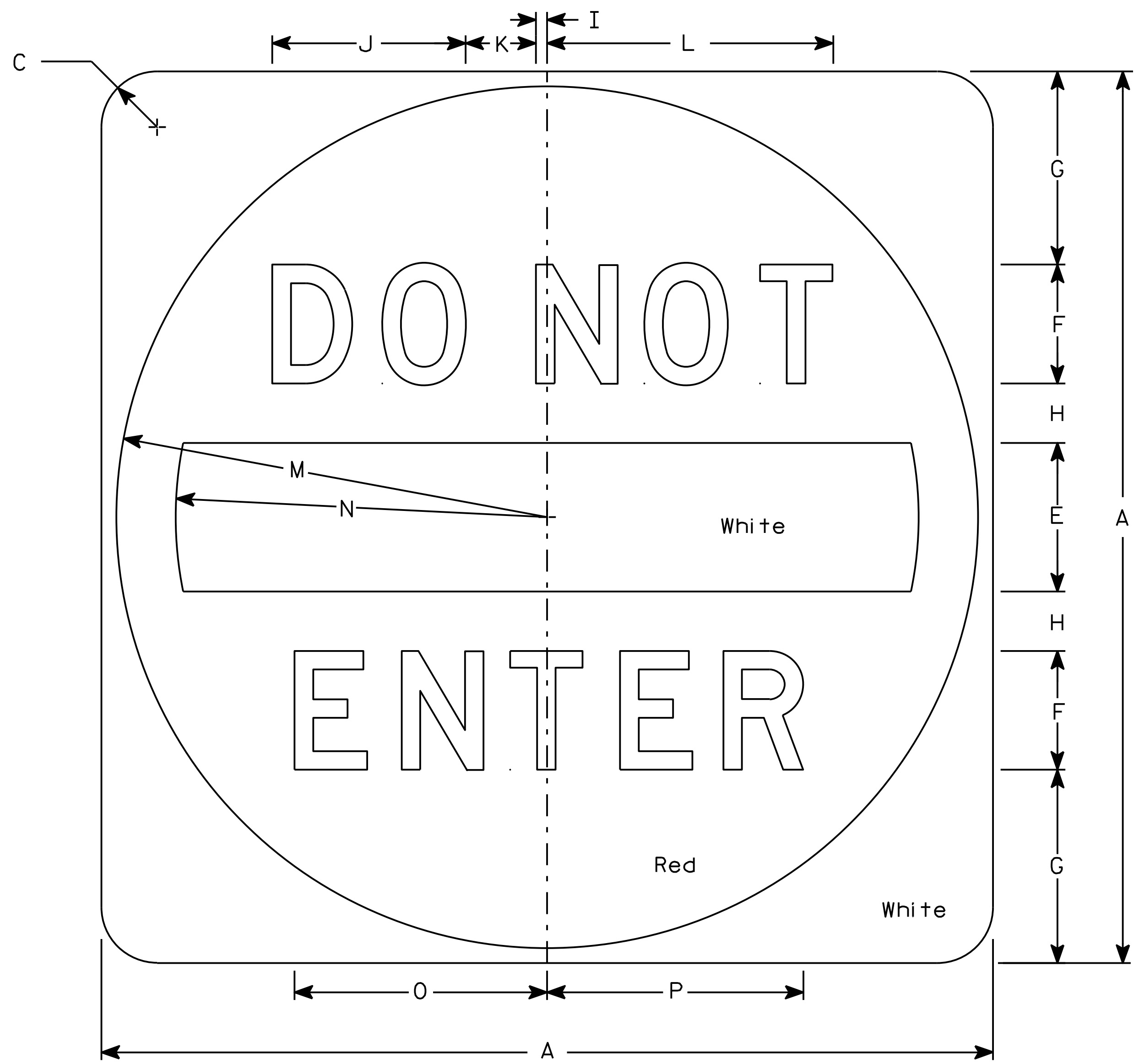
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 190 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See detail
   Message - White
3. Message Series - D



R5-1

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

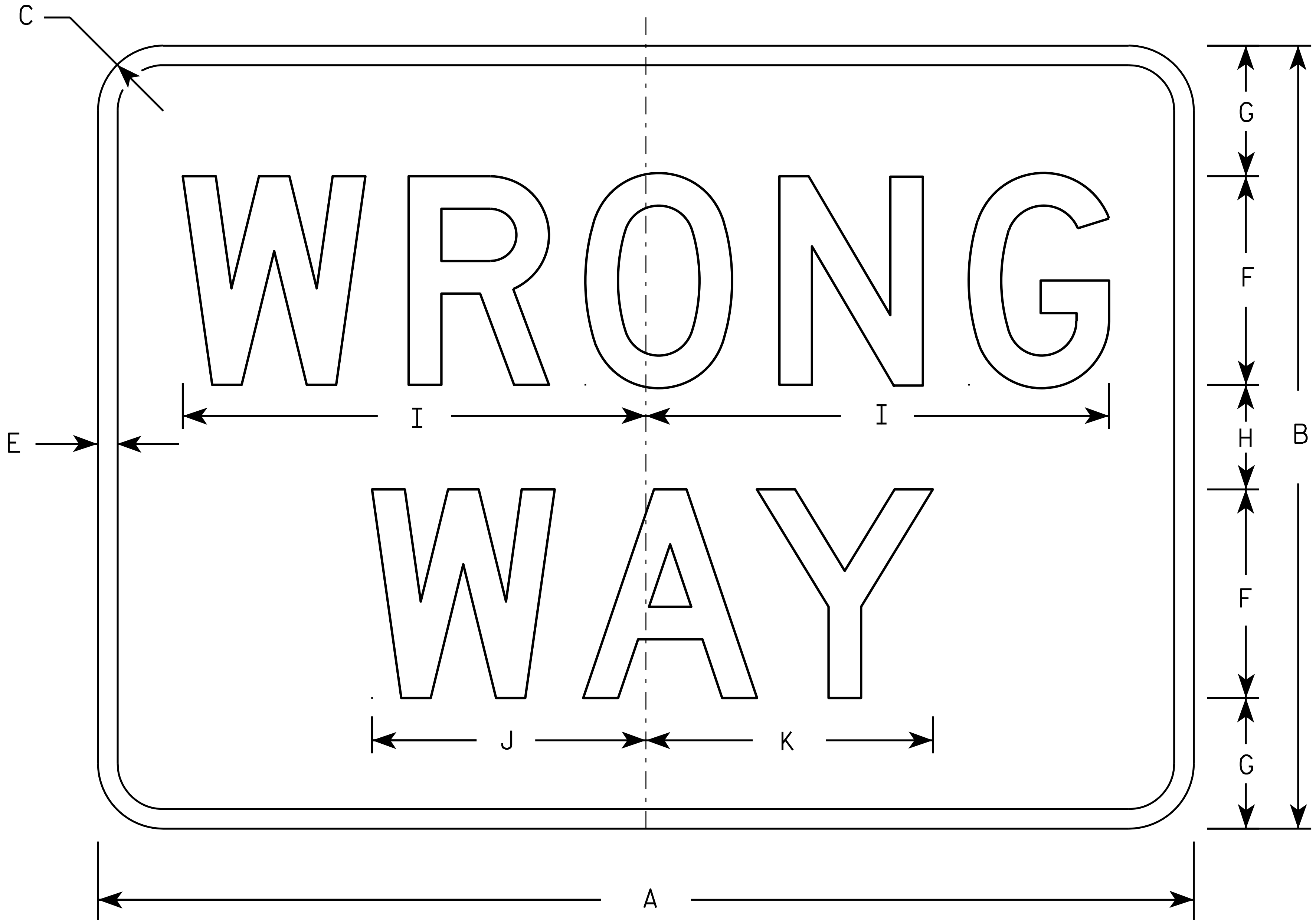
DATE 3/15/18 PLATE NO. R5-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 191 | E

7

7

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R51.DGN PLOT DATE : 15-MAR-2018 14:31 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 5.914594:1.000000



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

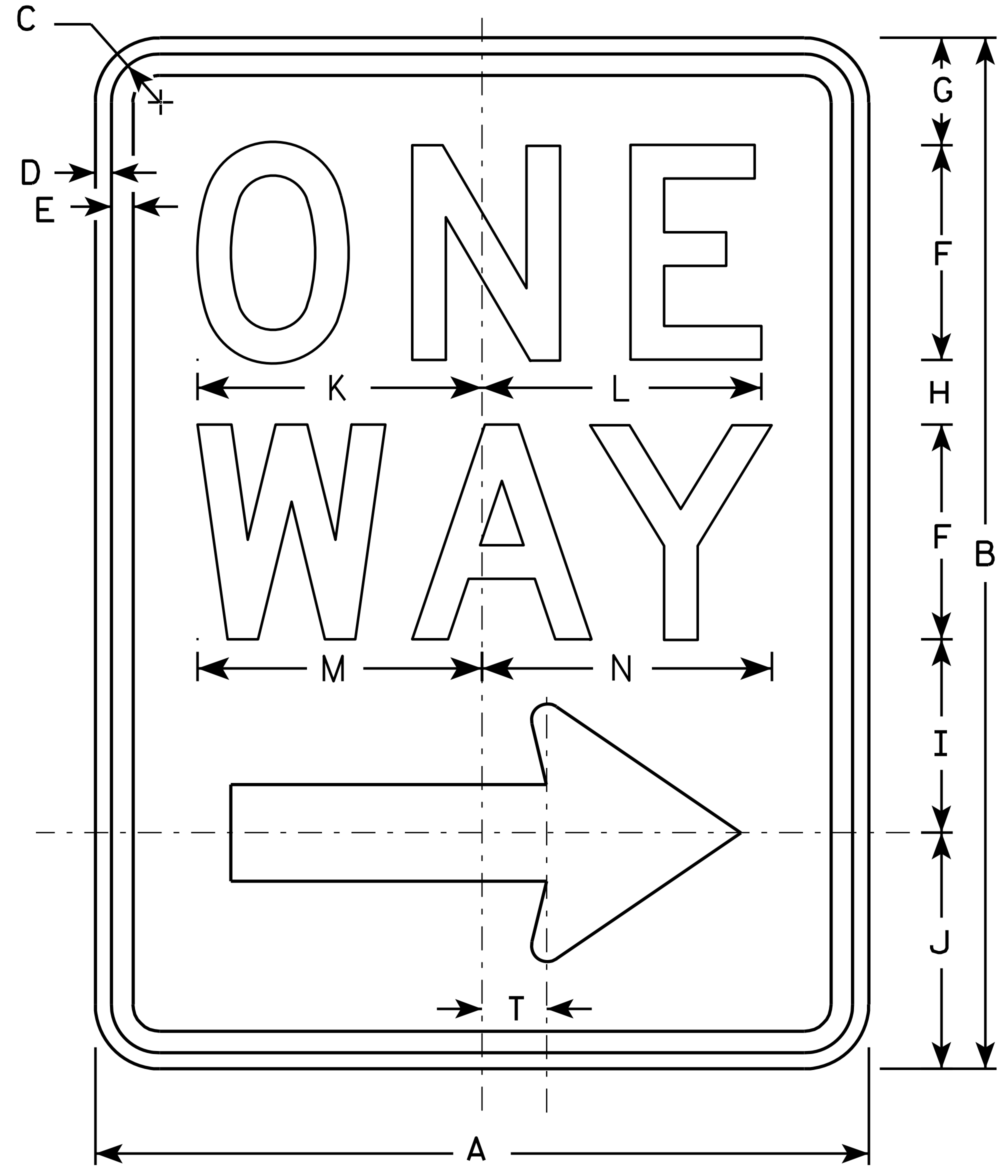
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 192 | E

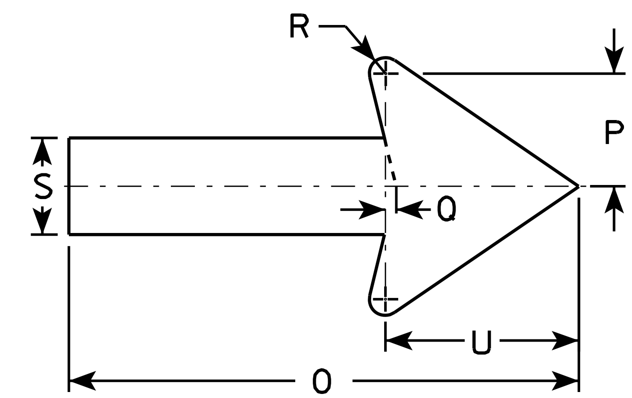
7



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

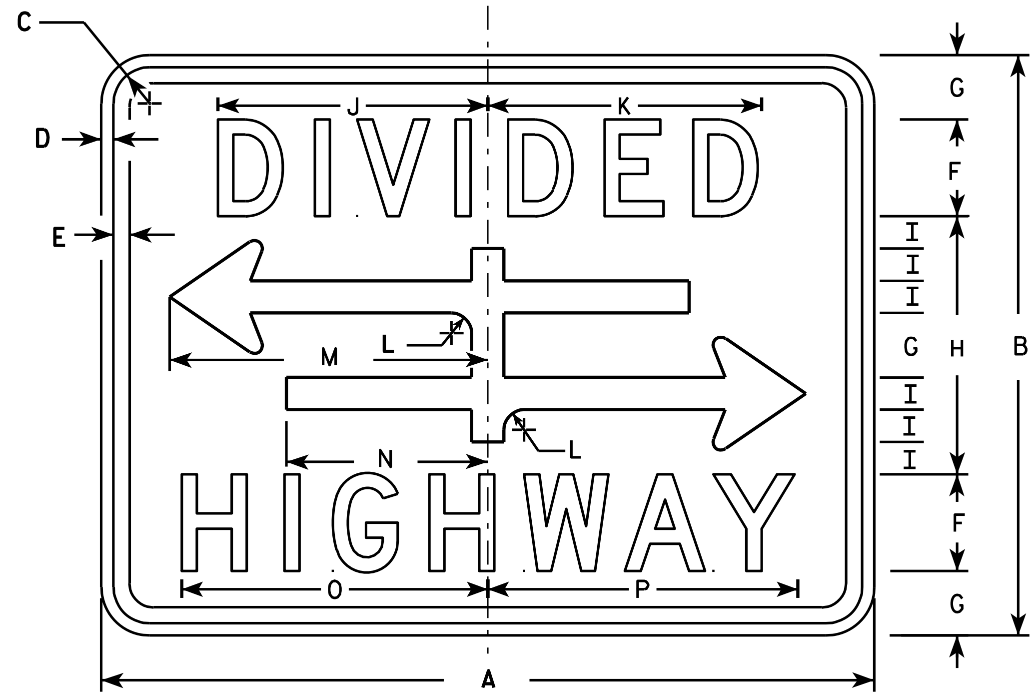
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

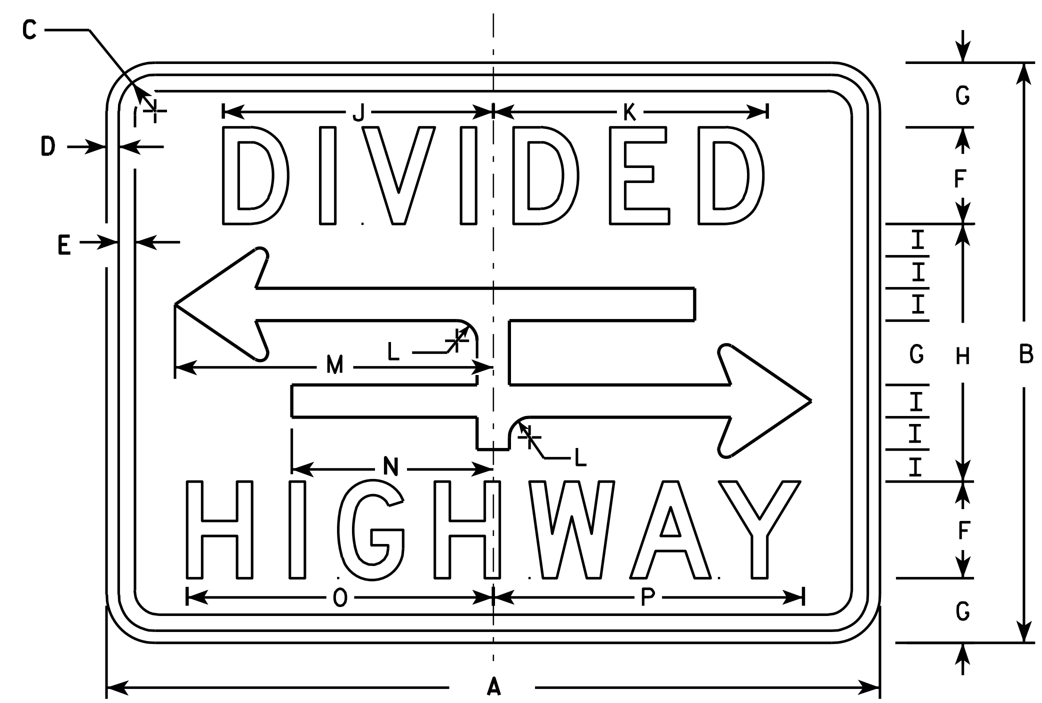
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 193 | E

7 7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R62.DGN   PLOT DATE : 02-NOV-2010 15:25   PLOT BY : ditjph   PLOT NAME :   PLOT SCALE : 4.469282:1.000000   WISDOT/CADDS SHEET 42



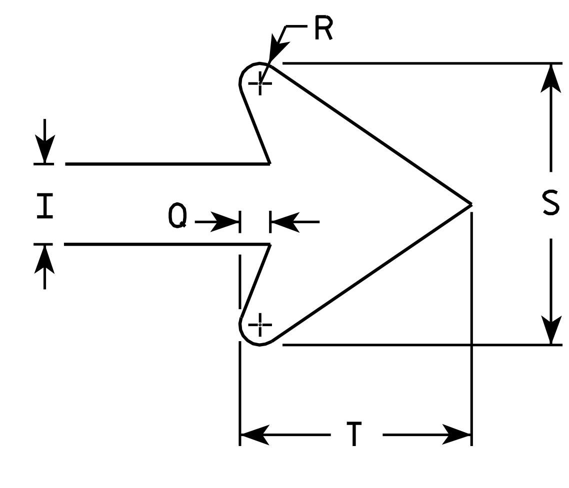
R6-3



R6-3A

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.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	18	1 1/8	3/8	3/8	3	2	8	1	8 3/8	8 1/2	5/8	9 7/8	6 1/4	9 1/2	9 5/8	3/8	1/4	3 1/2	2 3/4							3.0
2S	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
2M	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
3																											
4																											
5																											

STANDARD SIGN
R6-3 & R6-3A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

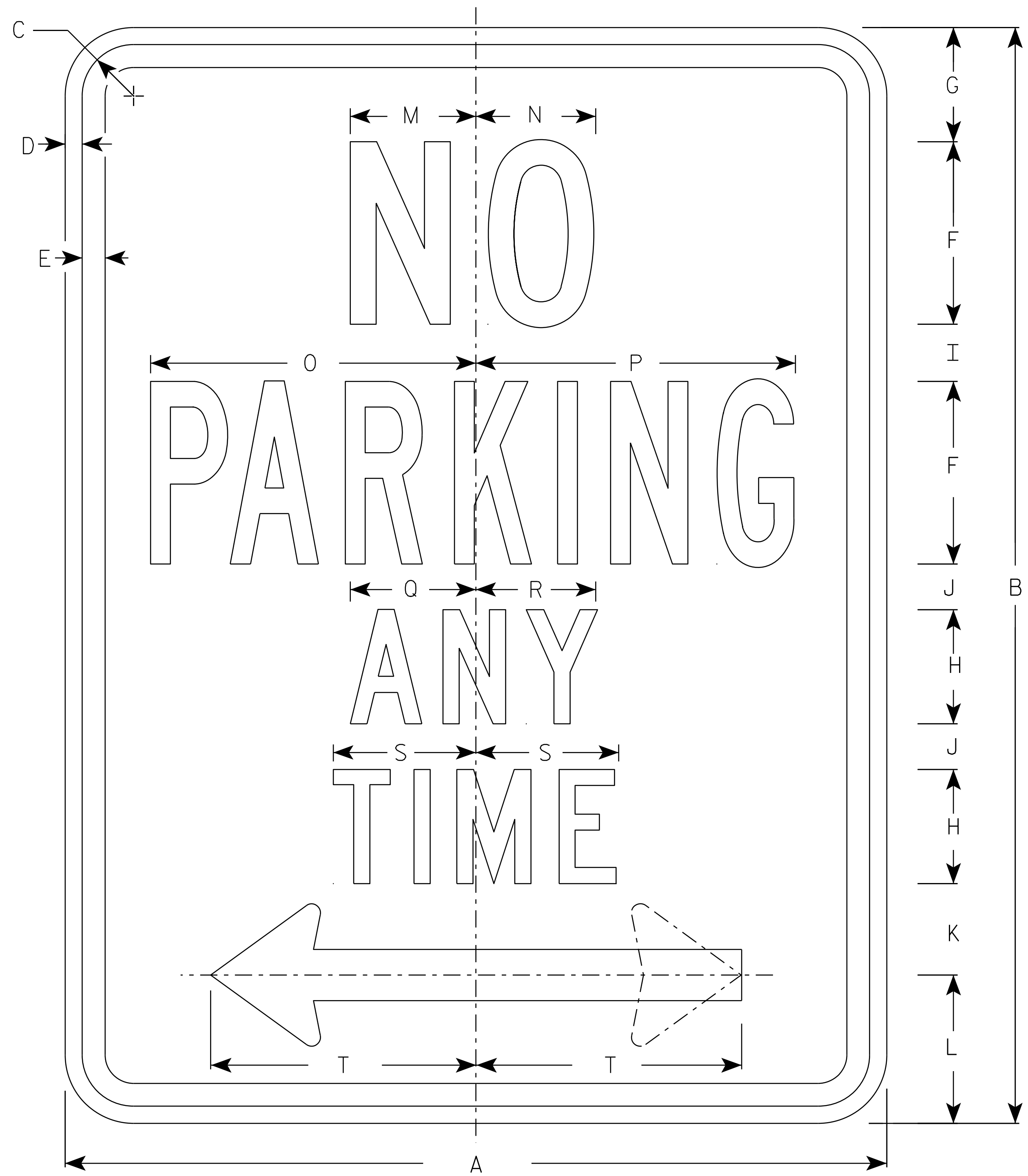
DATE 3/31/2011 PLATE NO. R6-3.5

7

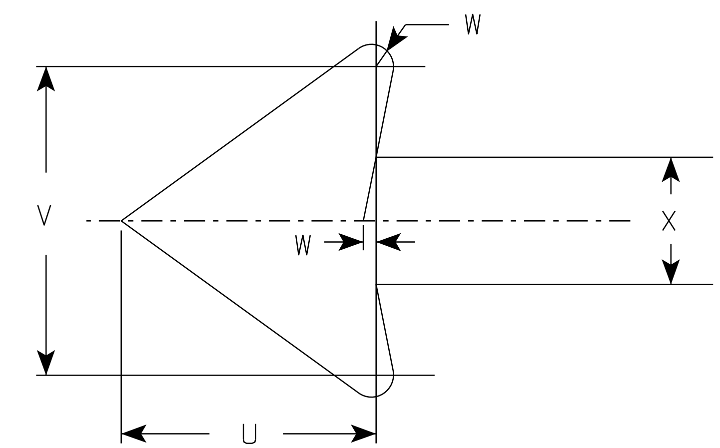
7

PROJECT NO:

SHEET NO: 194 E



R7-1



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Lines 1, 3 and 4 are series C, line 2 is series B.
5. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

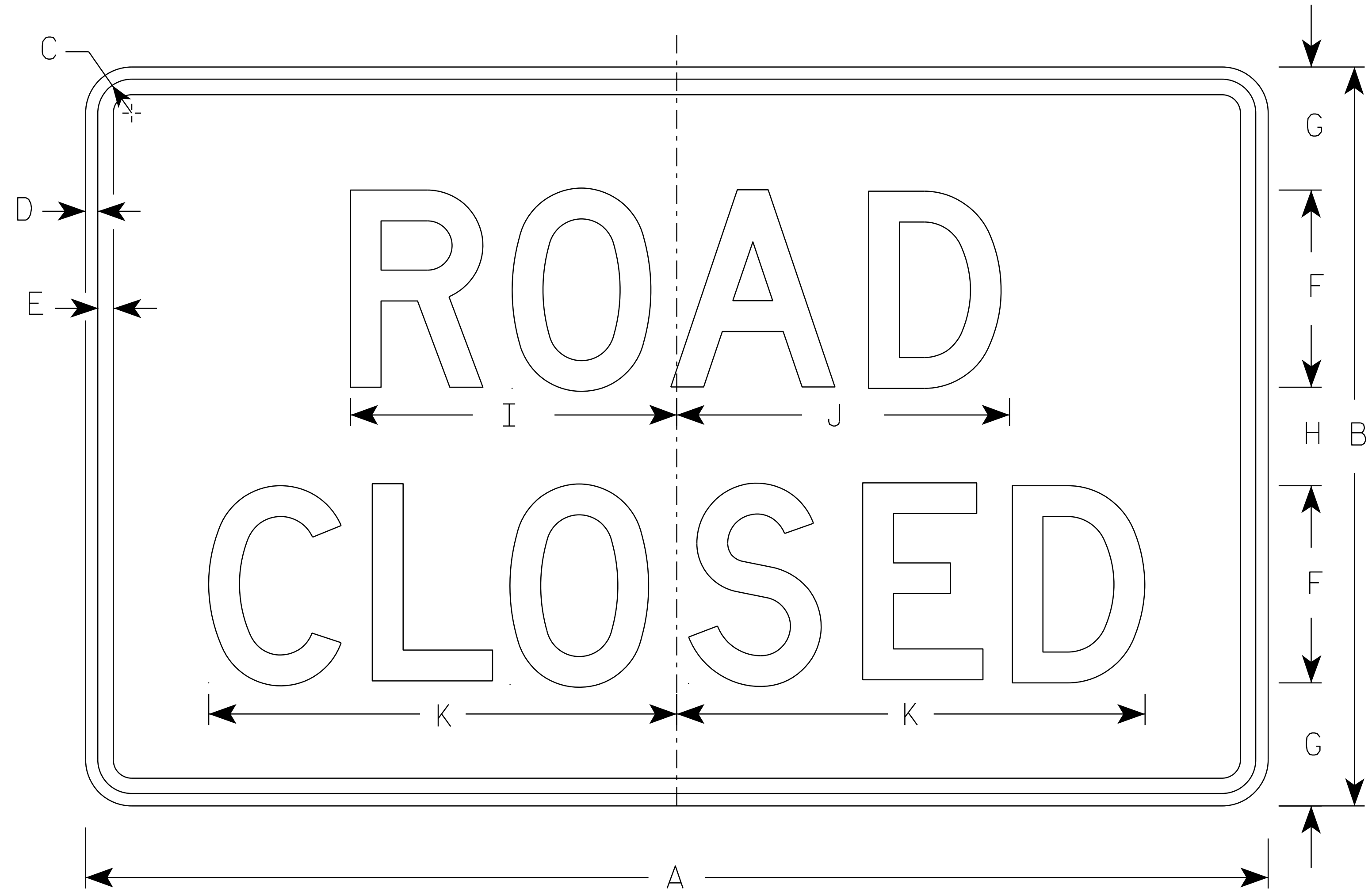
STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2021 PLATE NO. R7-1.10

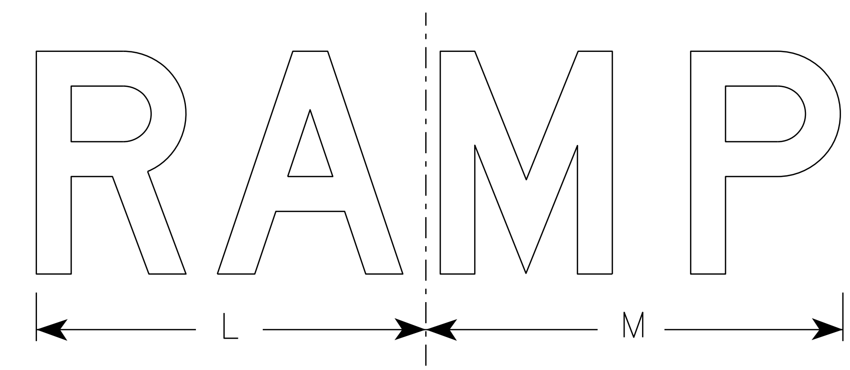
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 195 | E



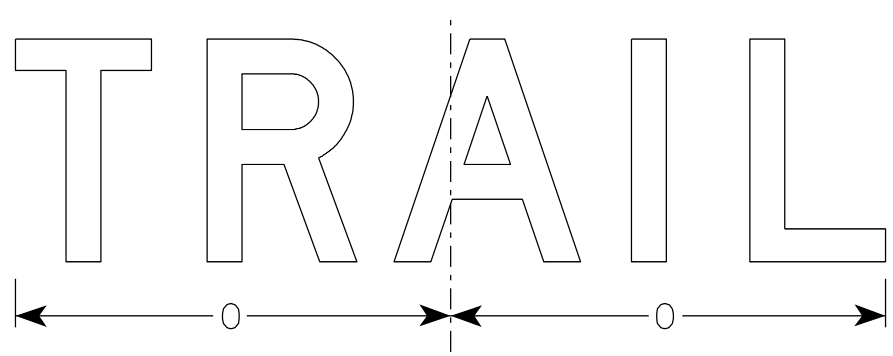
R11-2

NOTES

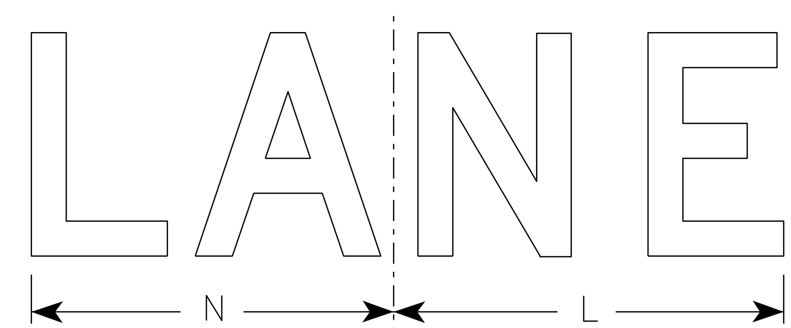
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the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

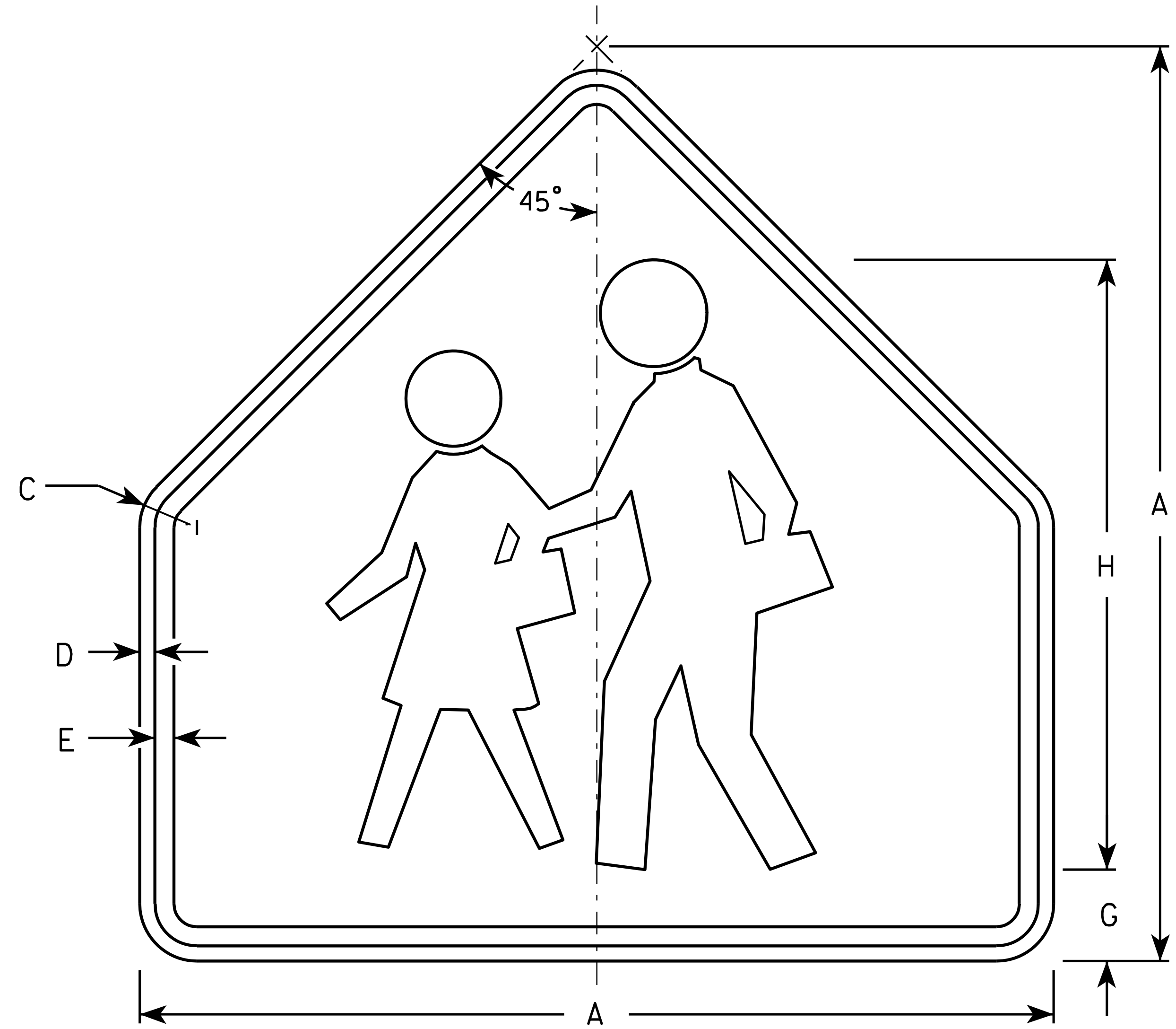
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

7

7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 196 | E



S1-1

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-Green
   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	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

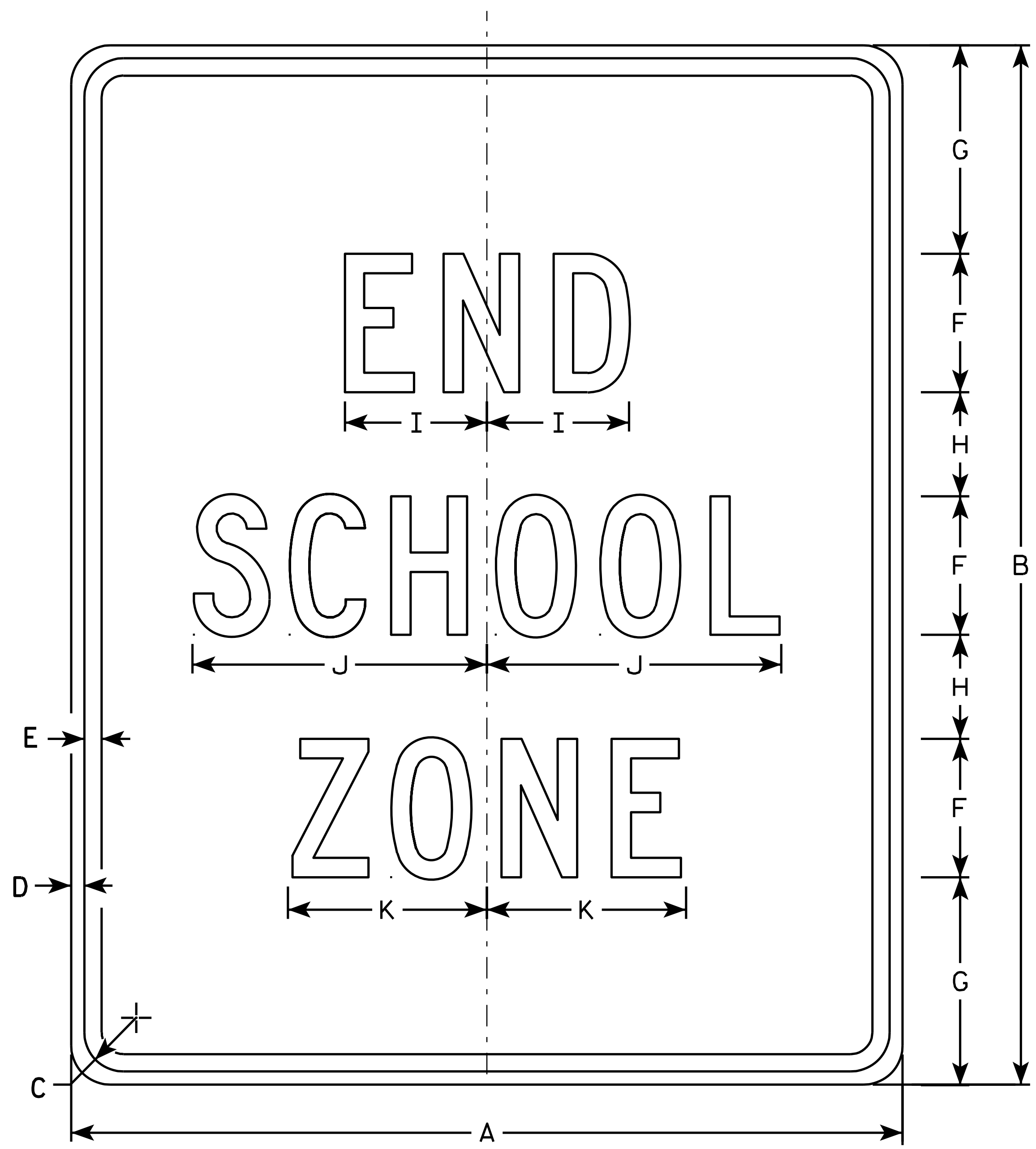
STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 6/30/05 PLATE NO. S1-1.8

PROJECT NO: HWY: COUNTY: SHEET NO: 197 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\S11.DGN PLOT DATE : 26-MAY-2010 16:12 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 5.959043:1.000000



S5-2

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.

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	30	1 1/8	3/8	1/2	4	6	3	4 1/8	8 1/2	5 3/4																5.0
3	36	42	1 5/8	5/8	3/4	6	7	5	6 1/8	12 5/8	8 5/8																10.5
4																											
5																											

STANDARD SIGN
S5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/8/11 PLATE NO. S5-2.2

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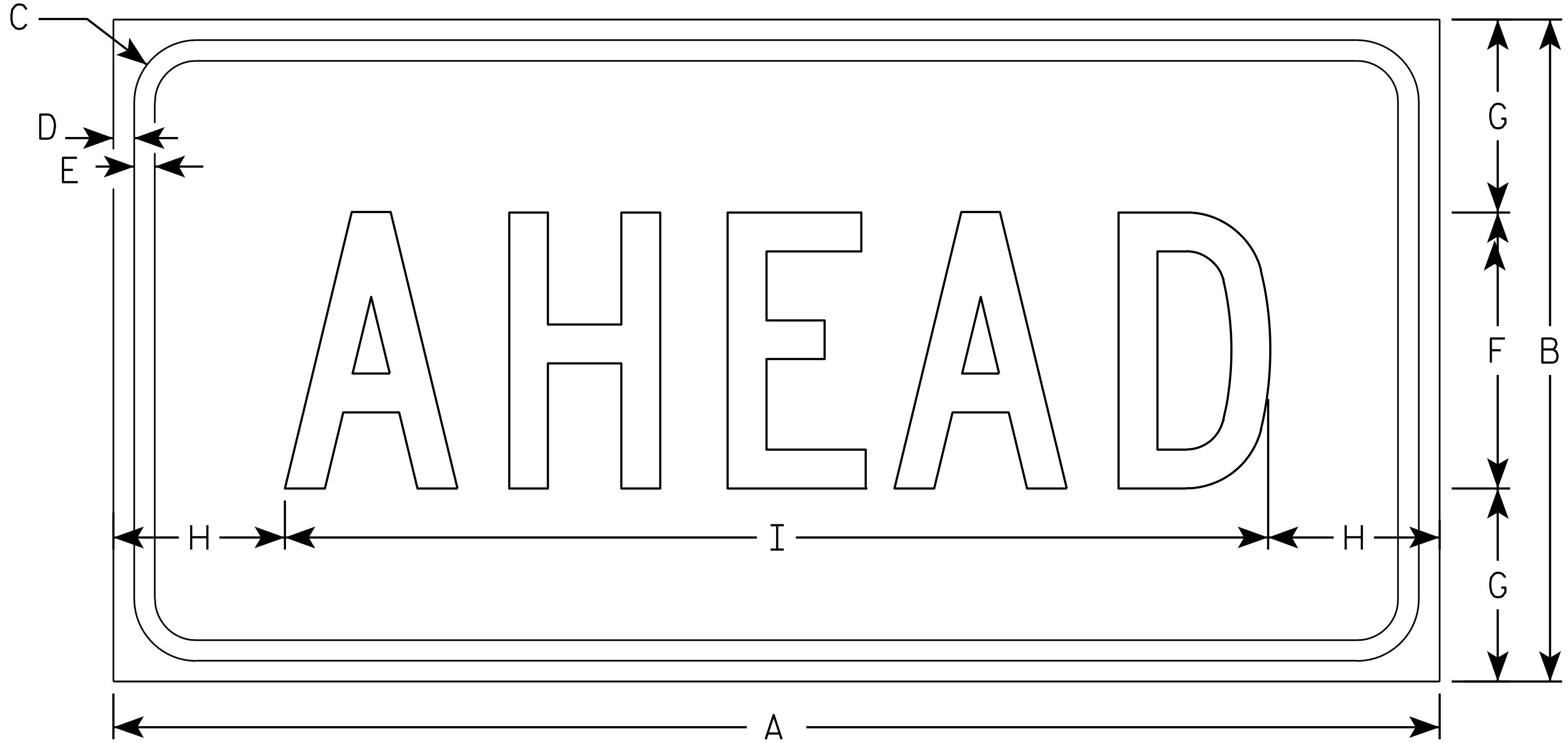
7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 198 | 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-Green
   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.



S16-9P

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2S	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

STANDARD SIGN
S16-9P

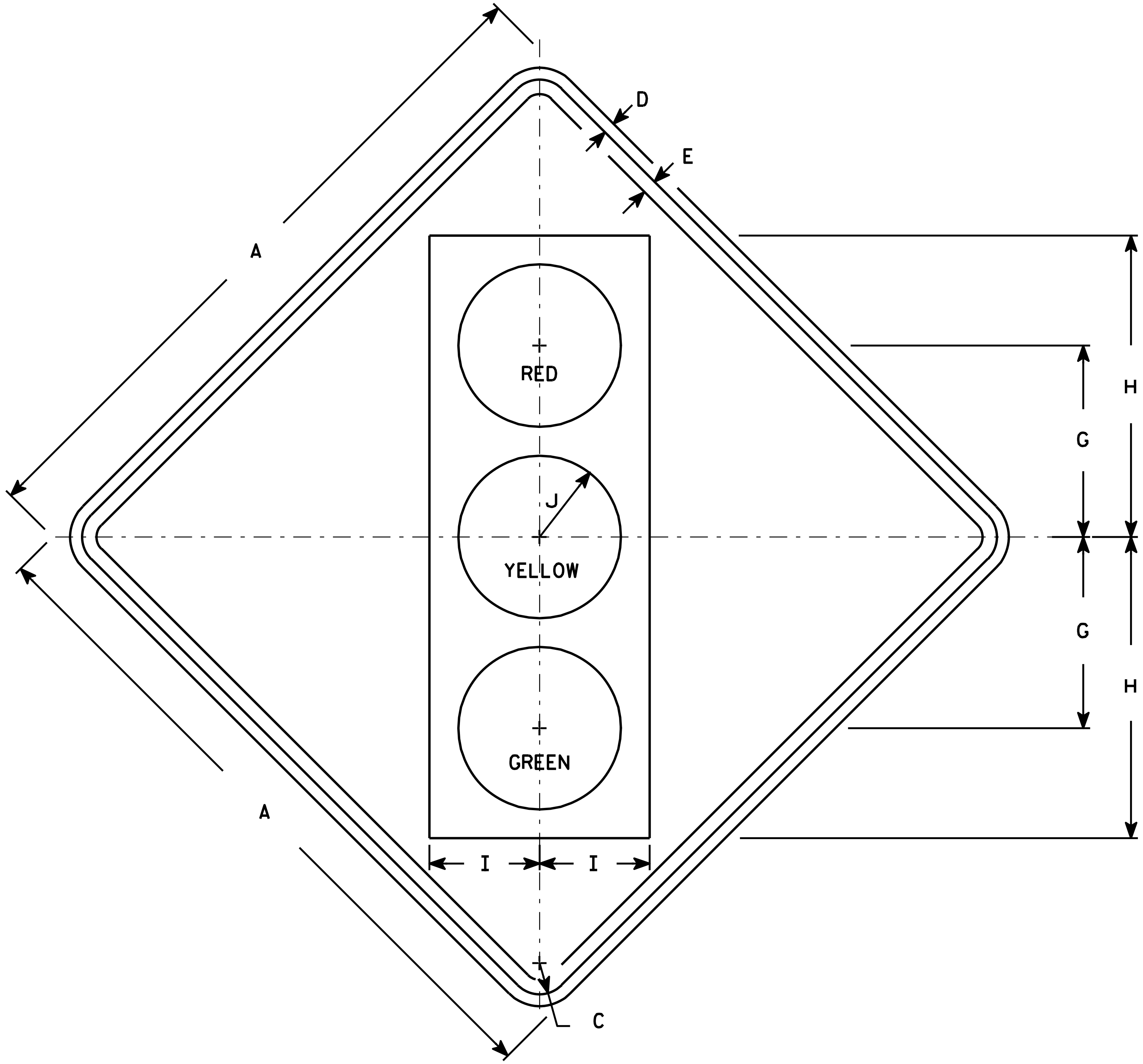
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-9P.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 199 | E

7 7



W3-3

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

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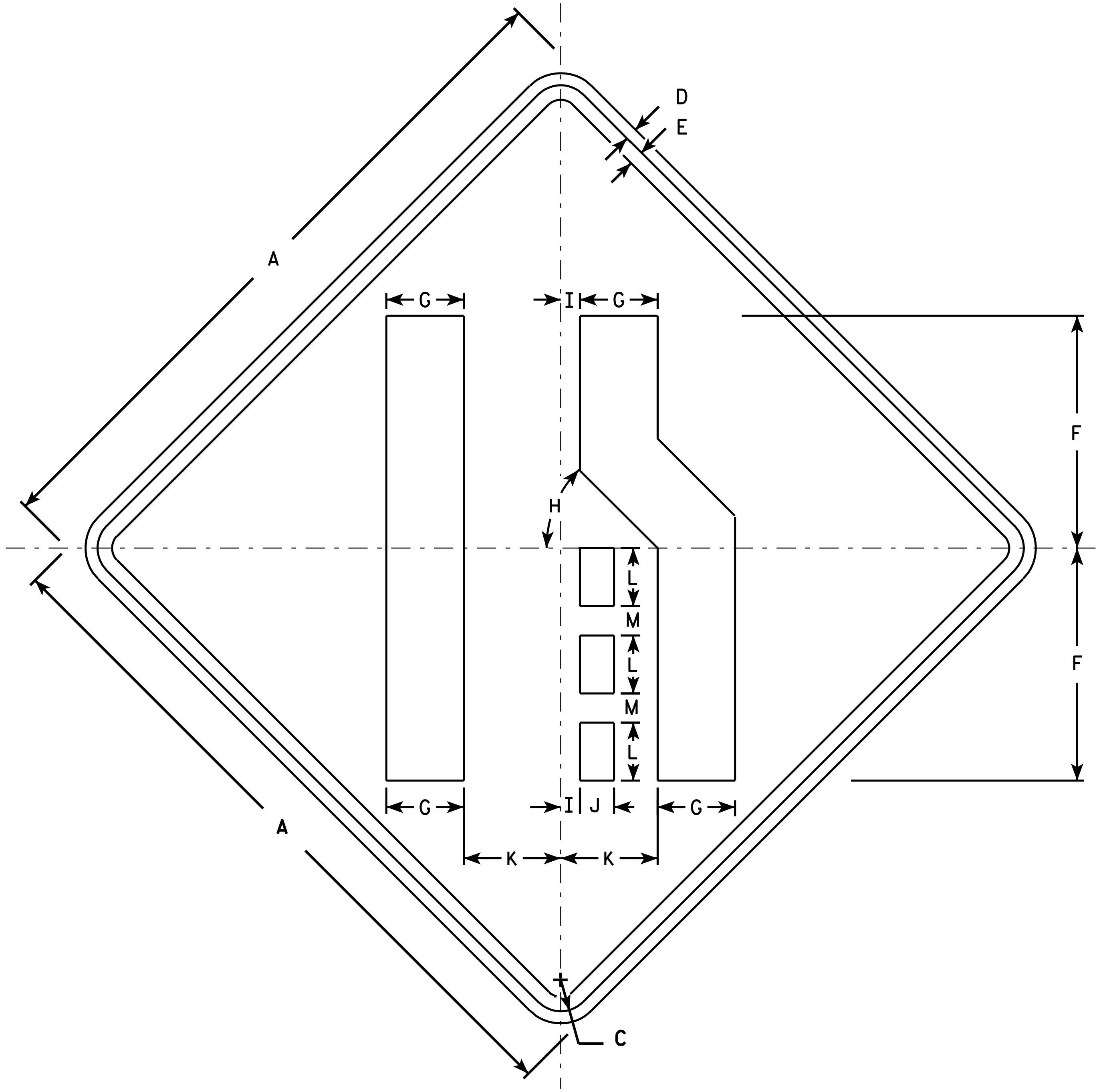


W4-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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.
4. W4-2L is the same as W4-2R except the symbolis reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10	3 3/8	45°	7/8	1 1/2	4 1/4	2 1/2	1 1/4														6.25
2S	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2M	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
3	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
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
W4-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

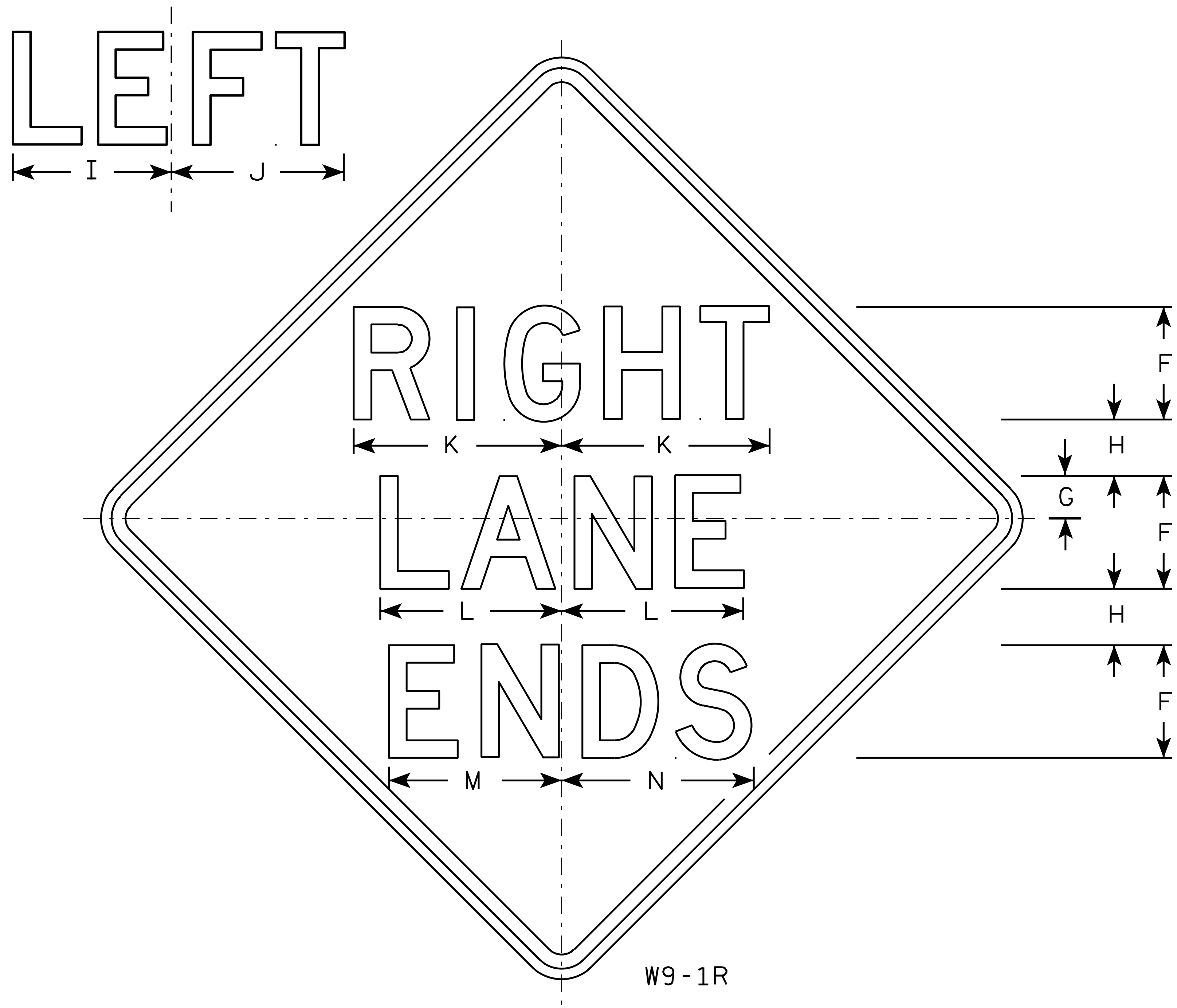
DATE 3/12/13 PLATE NO. W4-2.14

PROJECT NO:

SHEET NO: 201 E

7

7



W9-1R

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. 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. W9-1L same as W9-1R except the word Left replaces Right.

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	30		1 3/8	1/2	5/8	5	1 1/2	2 1/2	7 1/8	7 5/8	9 1/4	8 1/8	7 5/8	8 5/8													6.25
2S	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
2M	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
3	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
4	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
5	48		2 1/4	3/4	1	8	3	4	11 1/4	12 1/4	14 3/4	12 7/8	12 1/4	13 5/8													16.0

STANDARD SIGN
W9-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/18/13 PLATE NO. W9-1.8

PROJECT NO:

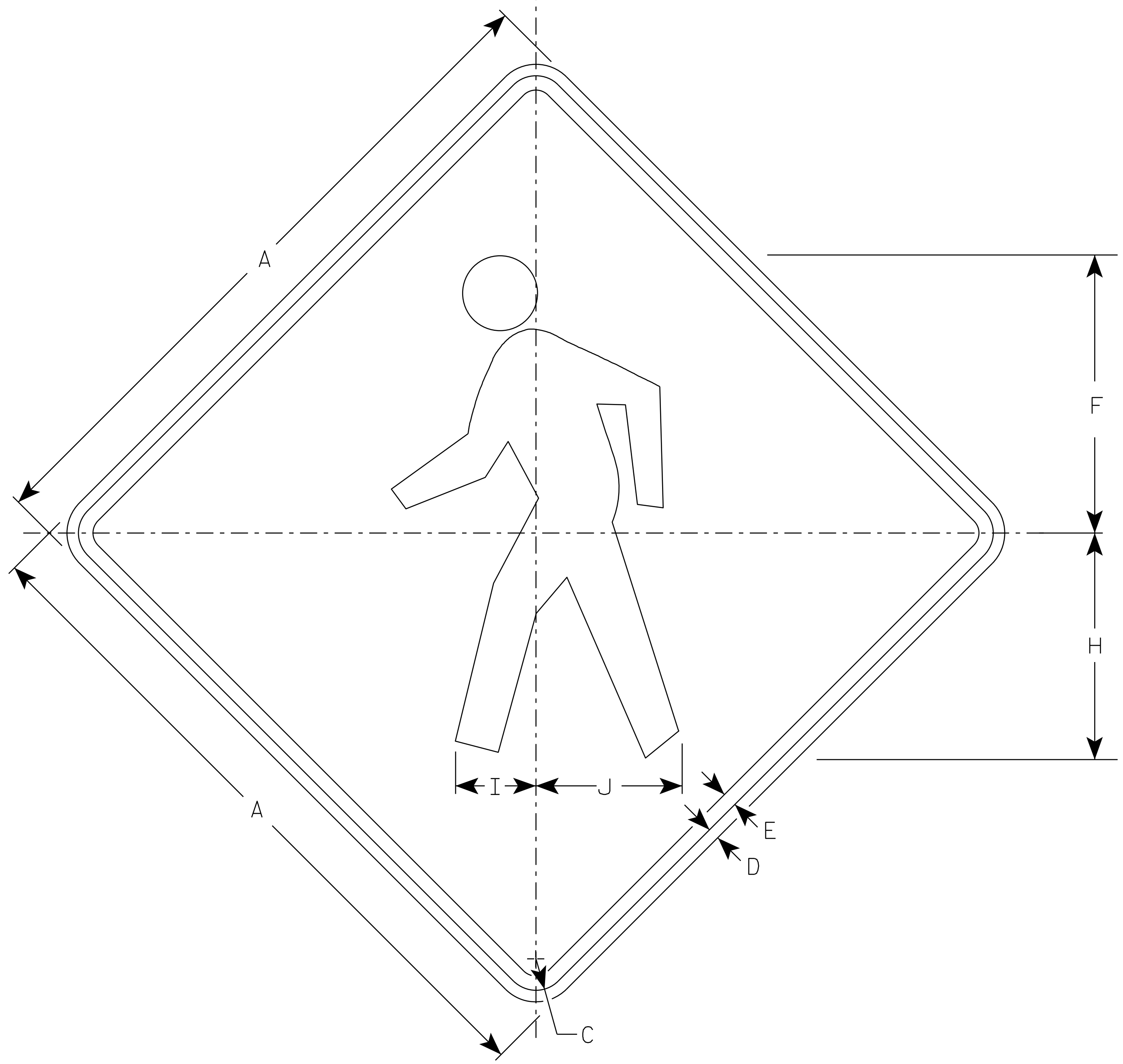
SHEET NO: 202 E

7

7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W91.DGN PLOT DATE : 18-MAR-2013 11:42 PLOT BY : mscsja

WISDOT/CADDS SHEET 42



W11-2

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

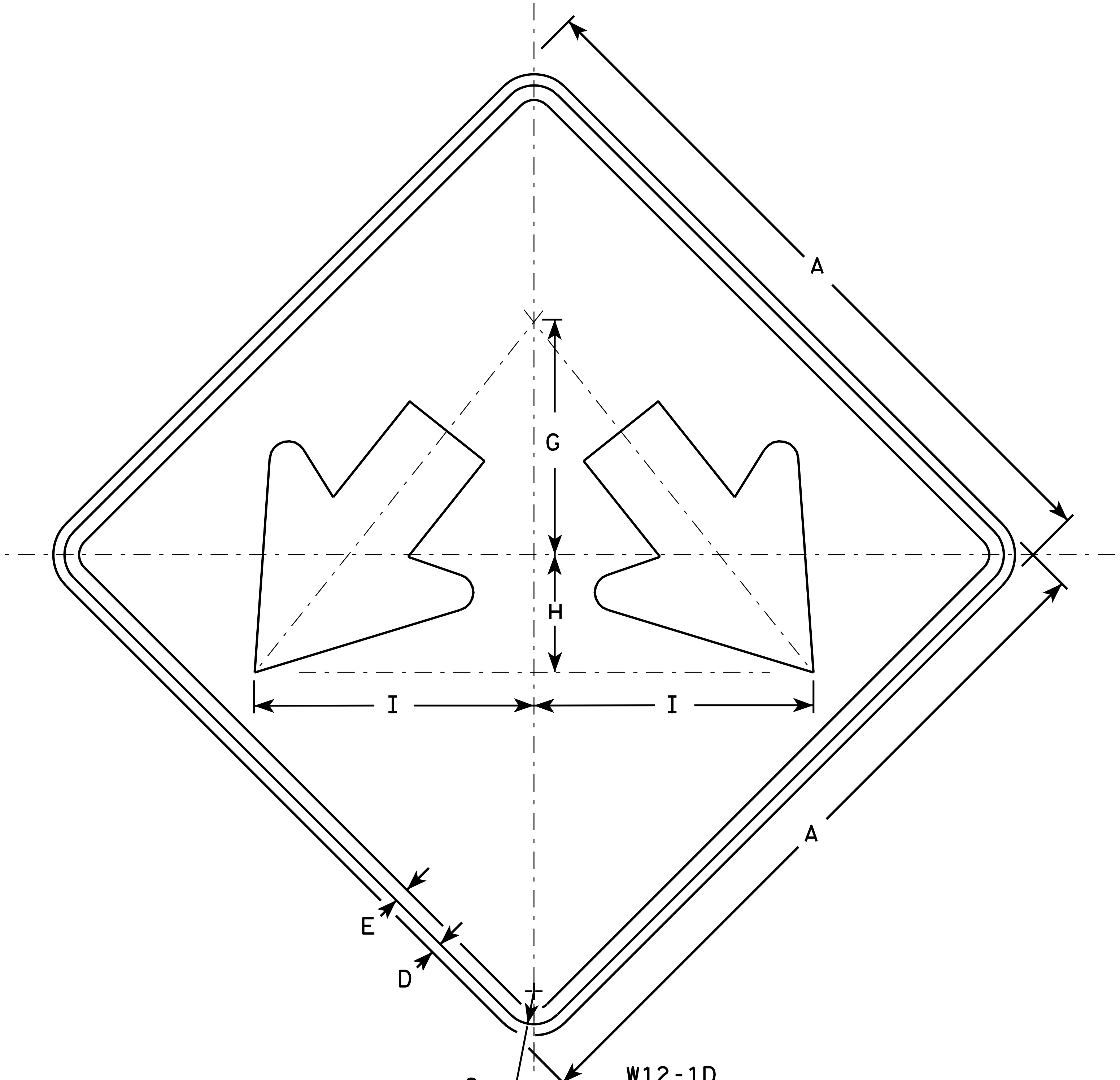
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/8/2020 PLATE NO. W11-2.8

PROJECT NO: HWY: COUNTY: SHEET NO: 203 E

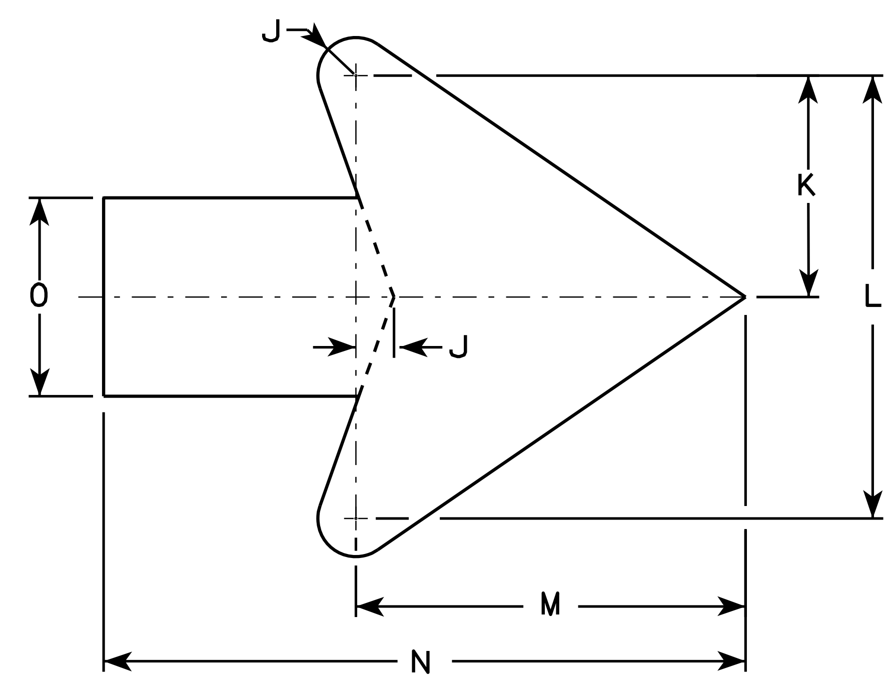
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W112.DGN PLOT DATE : 08-APRIL-2020 PLOT BY : dotc4c PLOT NAME : PLOT SCALE :

7



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		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 204 | E

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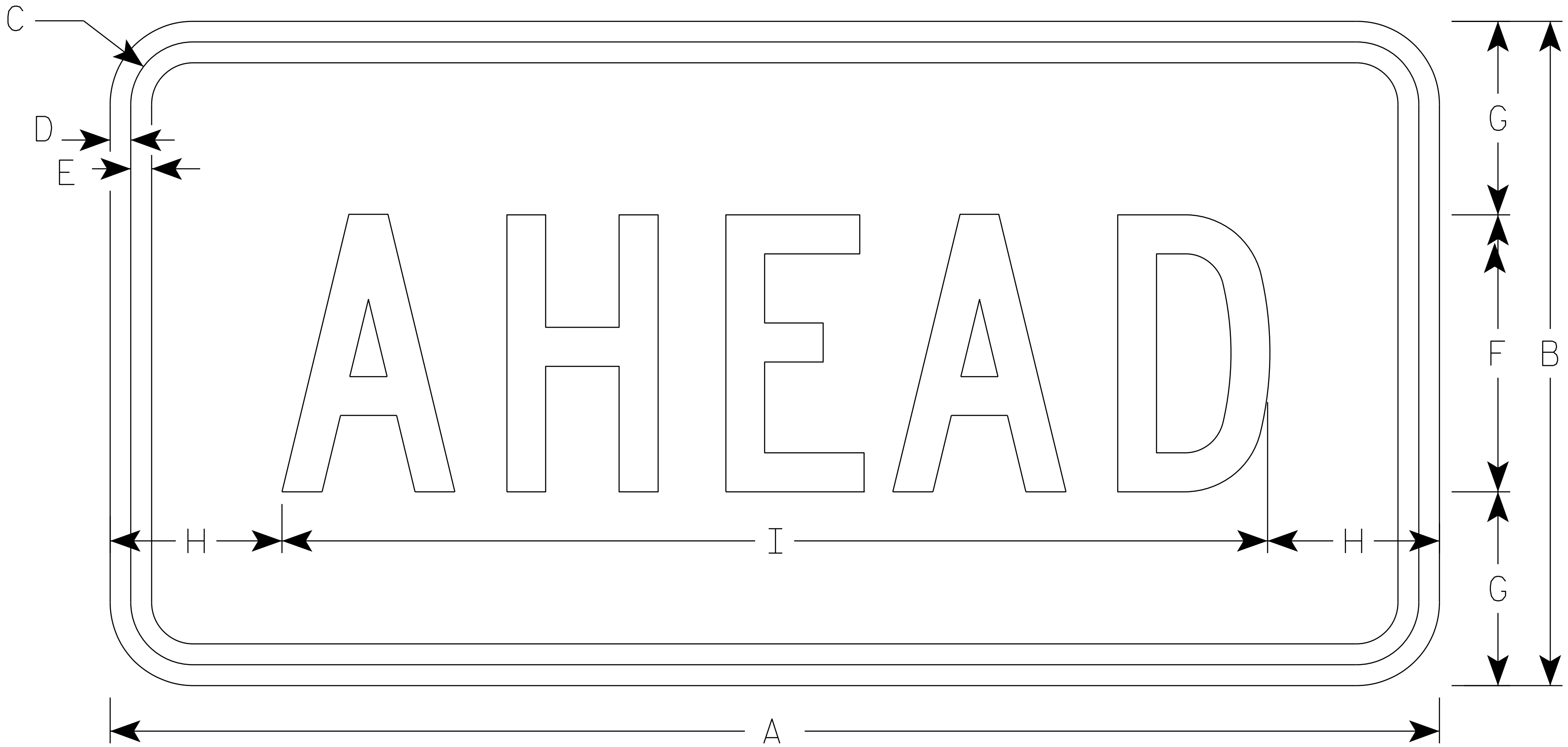
NOTES

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



W16-9P

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

STANDARD SIGN
W16-9P

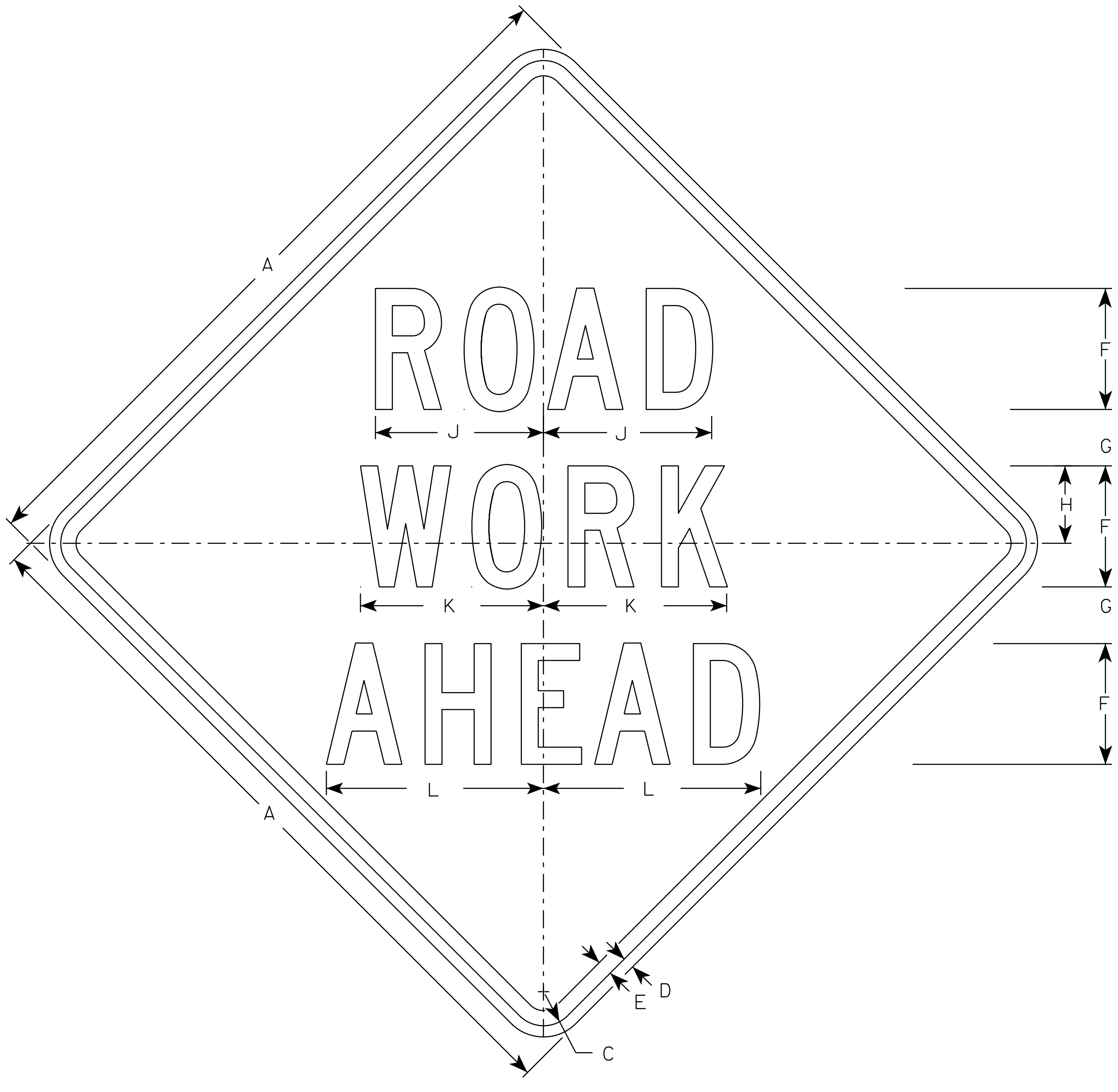
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

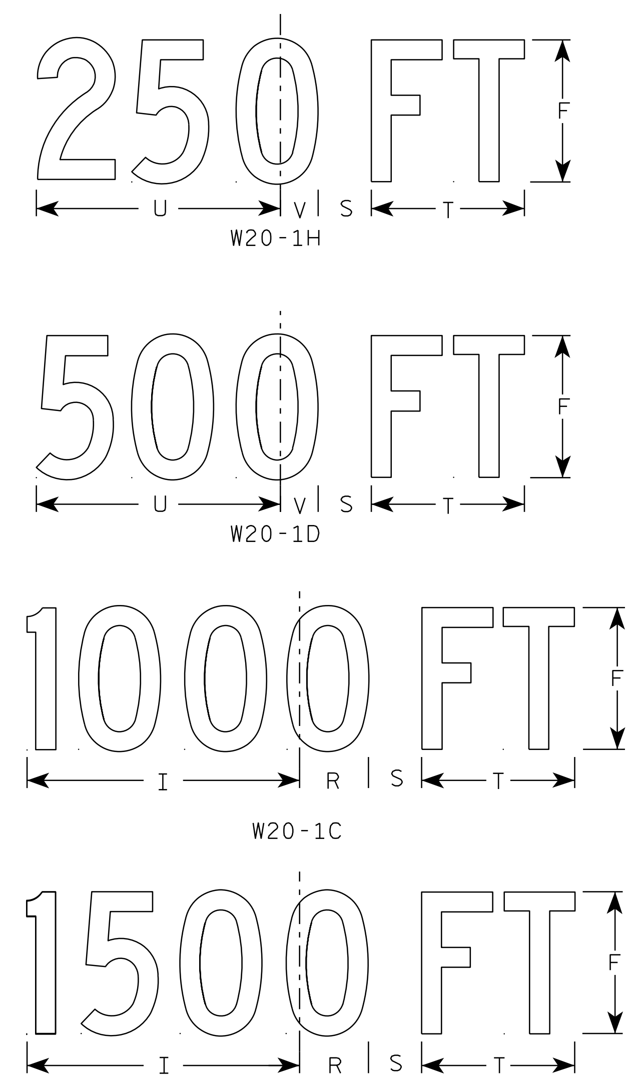
DATE 3/7/19 PLATE NO. W16-9P.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 205 | E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W169P.DGN PLOT DATE : 07-MAR-2019 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W20-1A



W20-1H

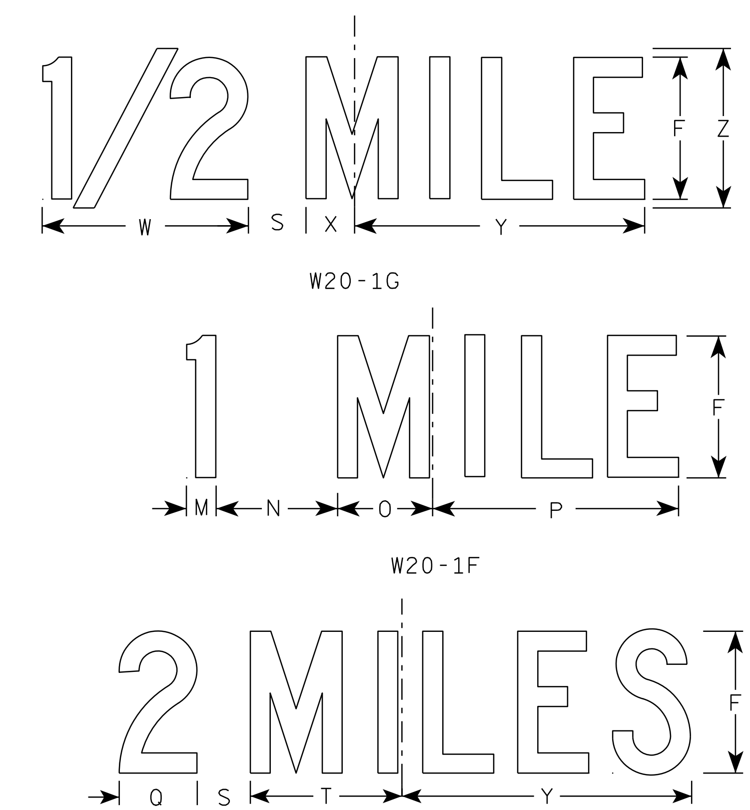
W20-1D

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		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

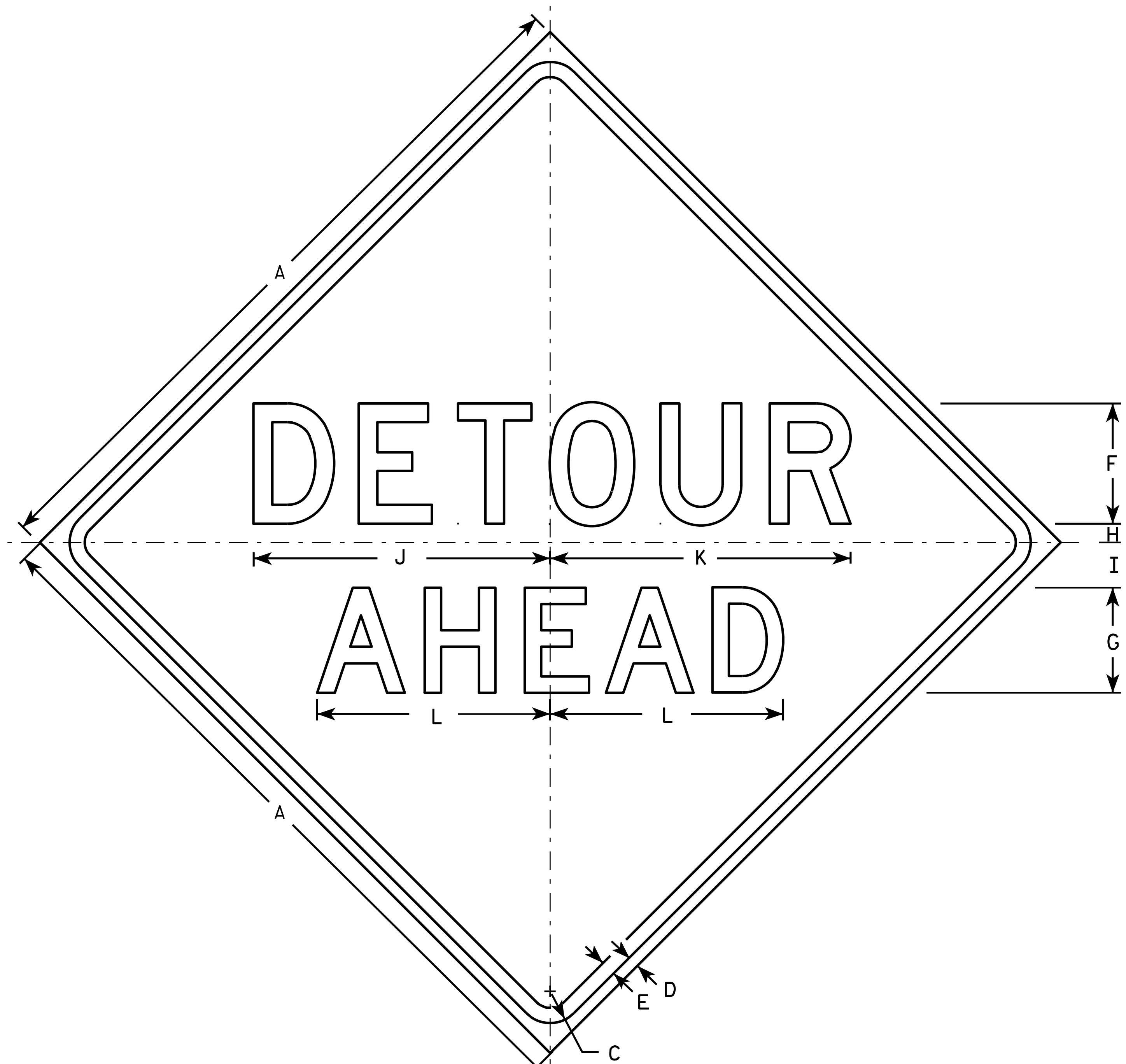
7

7

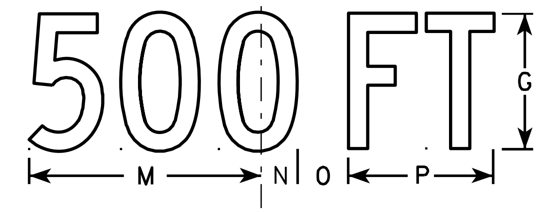
PROJECT NO:

SHEET NO: E

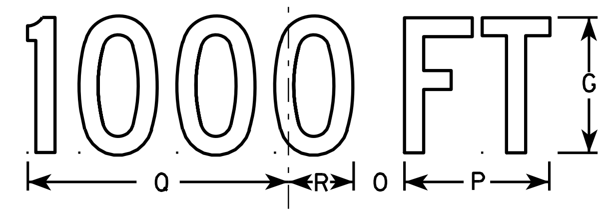
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 25-MARCH-2020 PLOT BY : dotc4c WISDOT/CADDS SHEET 42



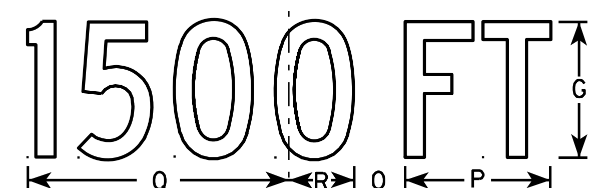
W20-2A



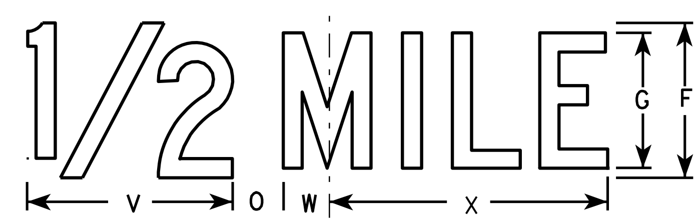
W20-2D



W20-2C



W20-2B



W20-2G

W20-2F

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. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

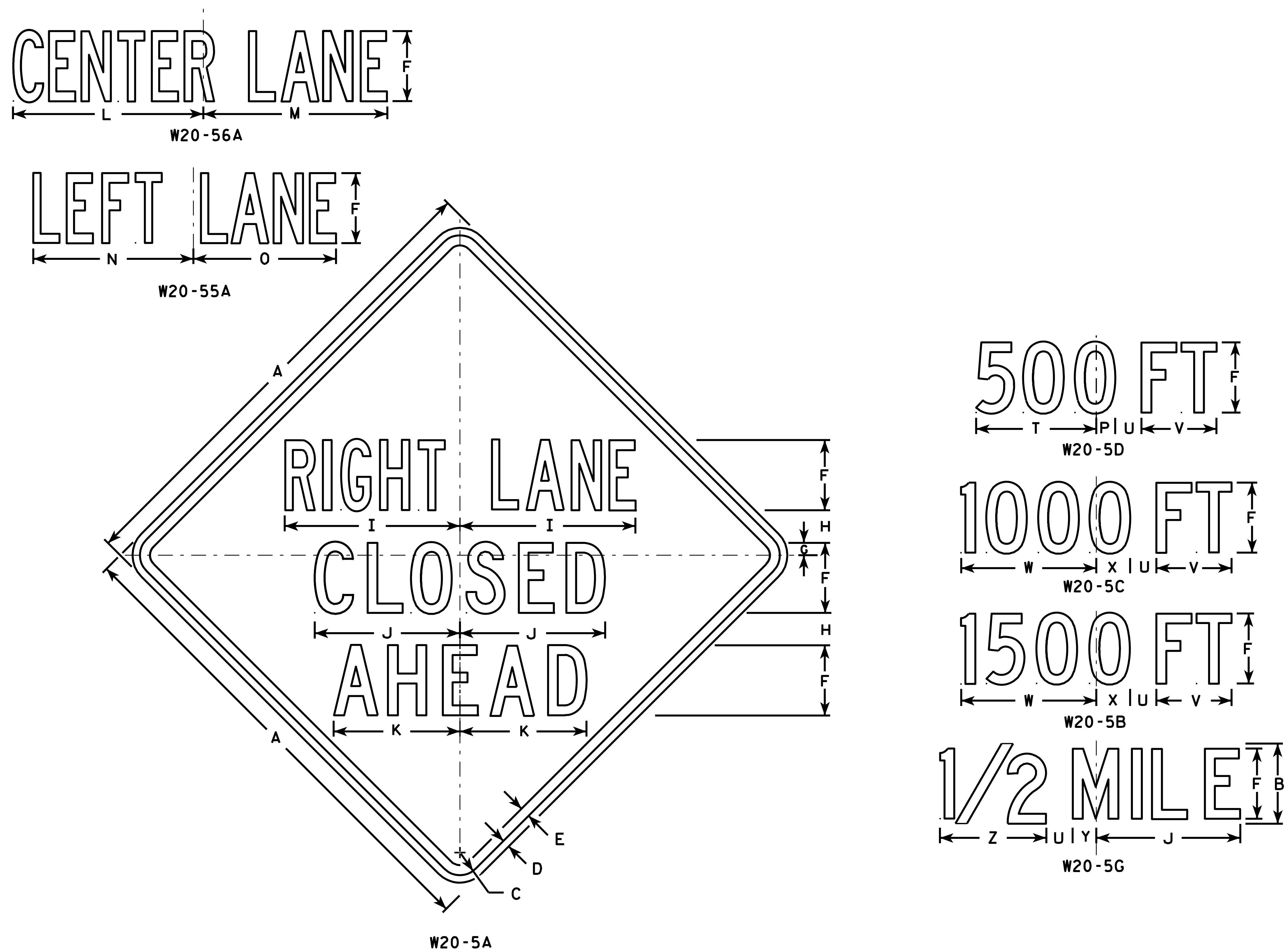
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

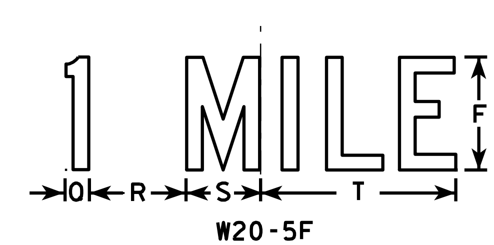
DATE 3/18/11 PLATE NO. W20-2.6

7



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	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	7/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	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

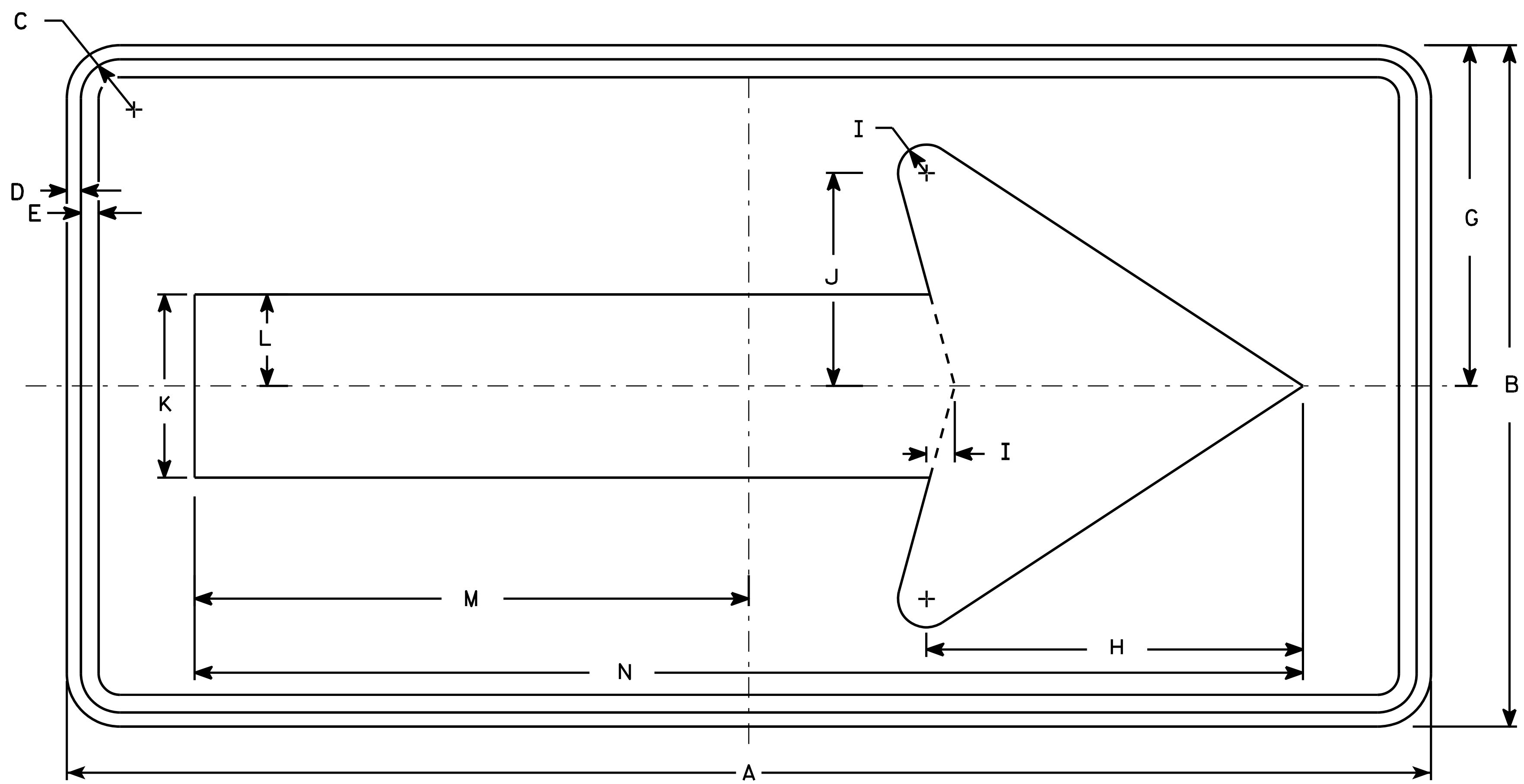
DATE 3/18/11 PLATE NO. W20-5.11

7

7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 208 | E

7



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

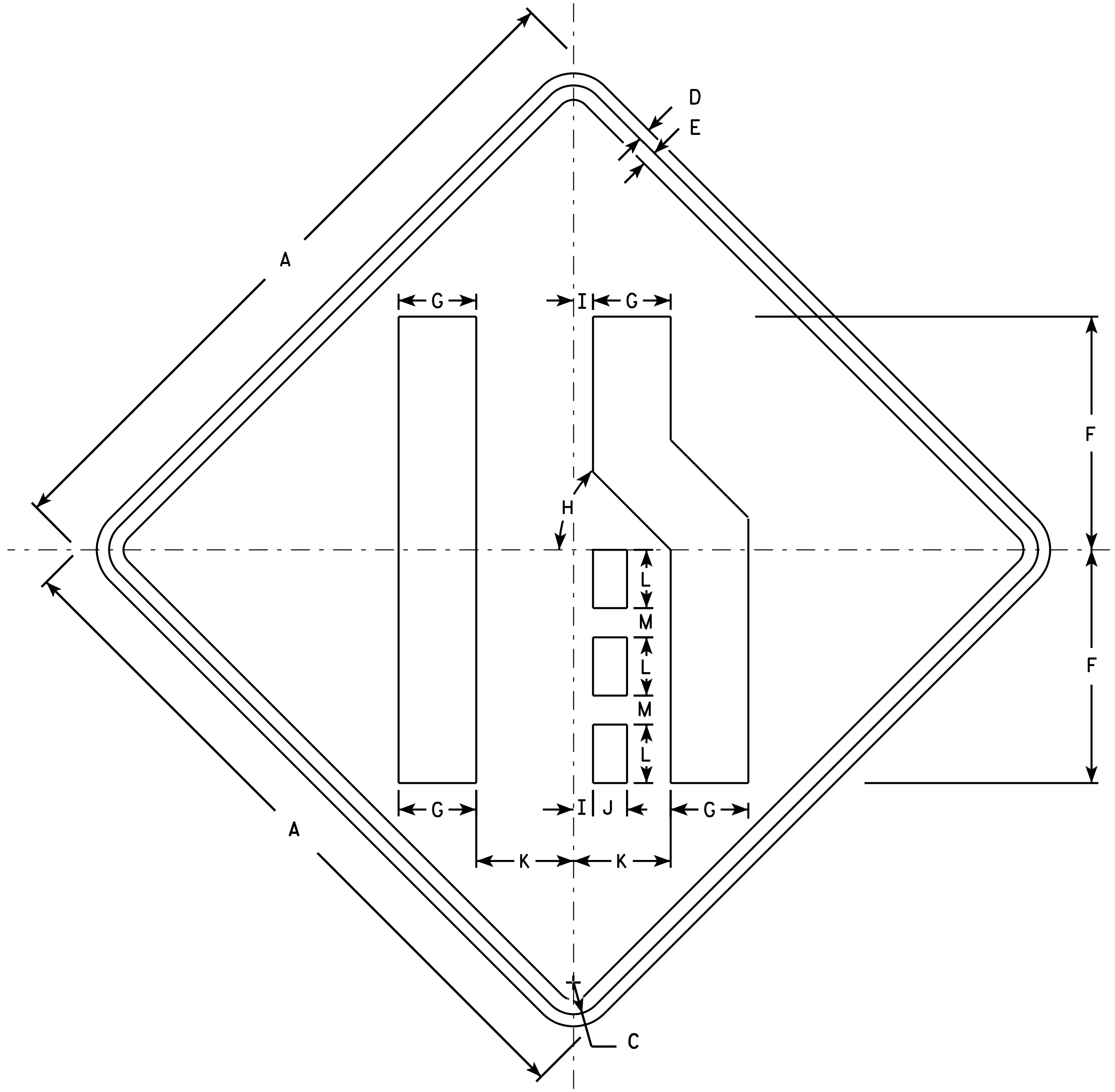
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

7

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 symbolis reversed along the vertical centerline.

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

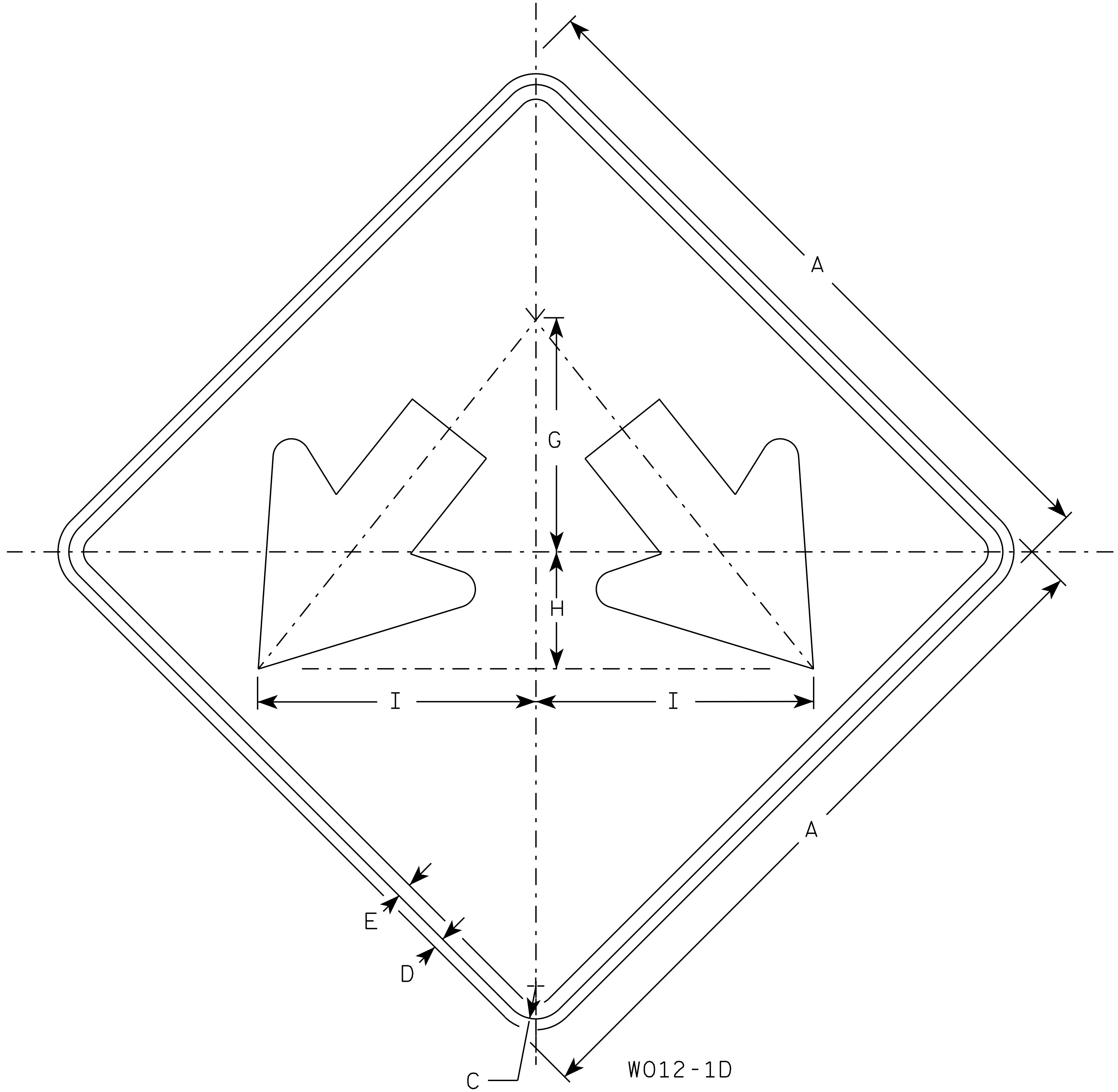
DATE 11/20/13 PLATE 210 "/04-2.1

7

7

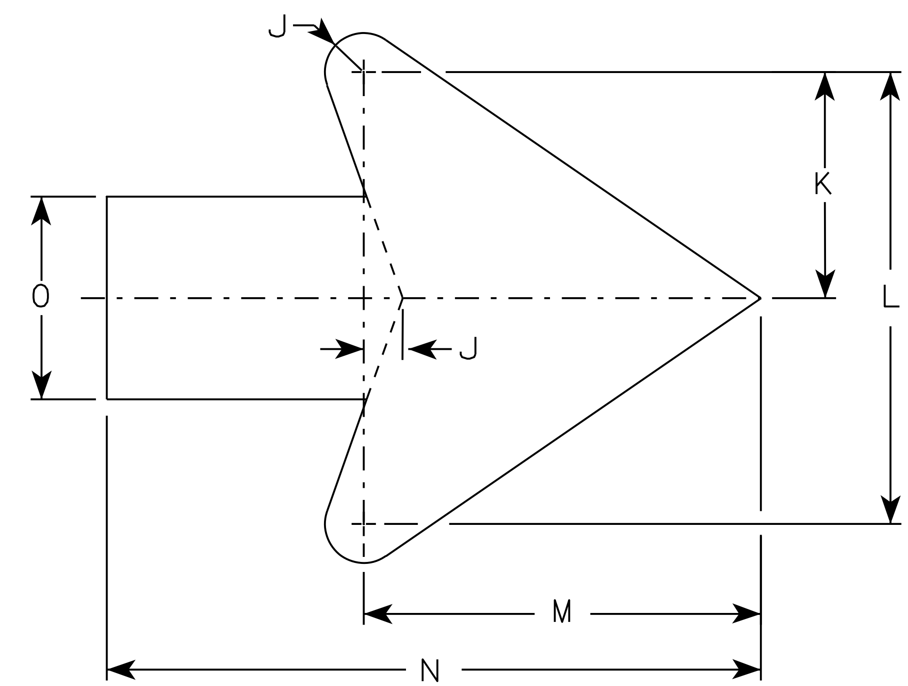
PROJECT NO:

SHEET NO: E



NOTES

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



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0

STANDARD SIGN
W012-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/28/16 PLATE NO W012-1D.2

PROJECT NO: HWY: COUNTY: SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W0121D.DGN PLOT DATE : 11-AUG-2016 11:28 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.621375:1.000000

N. GREEN BAY AVE (STH 57)

DIVISION 1 - 57_NB LT LANE

STATION	REAL STATION	DISTANCE	AREA (SF)						INCREMENTAL VOL (CY) (UNADJUSTED)						CUMULATIVE VOL (CY)							
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDINATE
															1.00	1.00	1.00	1.00	1.00	1.00	1.00	
									NOTE 1	NOTE 2	NOTE 3				NOTE 1		NOTE 4		NOTE 5	NOTE 6	NOTE 7	NOTE 8
108+90	10891.00	0.00	5.72	2.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
109+00	10900.00	9.00	11.81	2.00	0.00	0.00	0.00	0.00	3	1	0	0	0	0	3	0	0	0	0	0	0	2
109+25	10925.00	25.00	20.06	3.00	0.00	0.00	0.00	0.00	15	2	0	0	0	0	18	0	0	0	0	0	0	15
109+50	10950.00	25.00	26.40	4.00	0.00	0.00	0.00	0.00	22	3	0	0	0	0	40	0	0	0	0	0	0	34
109+75	10975.00	25.00	32.60	8.00	0.00	0.00	0.00	0.00	27	6	0	0	0	0	67	0	0	0	0	0	0	55
110+00	11000.00	25.00	37.62	11.00	0.00	0.00	0.00	0.00	33	9	0	0	0	0	100	0	0	0	0	0	0	79
110+25	11025.00	25.00	43.16	11.00	0.00	0.00	0.00	0.00	37	10	0	0	0	0	137	0	0	0	0	0	0	106
110+50	11050.00	25.00	54.83	11.00	0.03	0.00	0.00	0.00	45	10	0	0	0	0	182	0	0	0	0	0	0	141
110+75	11075.00	25.00	65.33	12.00	0.00	0.00	0.00	0.00	56	11	0	0	0	0	238	0	0	0	0	0	0	186
111+00	11100.00	25.00	69.60	12.00	0.00	0.00	0.00	0.00	62	11	0	0	0	0	300	0	0	0	0	0	0	237
111+25	11125.00	25.00	65.37	12.00	0.00	0.00	0.00	0.00	62	11	0	0	0	0	362	0	0	0	0	0	0	288
111+50	11150.00	25.00	66.86	12.00	0.00	0.00	0.00	0.00	61	11	0	0	0	0	423	0	0	0	0	0	0	338
111+75	11175.00	25.00	66.92	12.00	0.00	0.00	0.00	0.00	62	11	0	0	0	0	485	0	0	0	0	0	0	389
112+00	11200.00	25.00	69.51	12.00	0.00	0.00	0.00	0.00	63	11	0	0	0	0	548	0	0	0	0	0	0	441
112+25	11225.00	25.00	32.45	12.00	0.00	0.00	0.00	0.00	47	11	0	0	0	0	595	0	0	0	0	0	0	477

DIVISION 1 - 57_SB LT LANE

STATION	REAL STATION	DISTANCE	AREA (SF)						INCREMENTAL VOL (CY) (UNADJUSTED)						CUMULATIVE VOL (CY)							
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDINATE
															1.00	1.00	1.00	1.00	1.00	1.00	1.00	
									NOTE 1	NOTE 2	NOTE 3				NOTE 1		NOTE 4		NOTE 5	NOTE 6	NOTE 7	NOTE 8
113+64	11364.00	0.00	32.18	2.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113+75	11375.00	11.00	57.57	14.00	0.00	0.00	0.00	0.00	18	3	0	0	0	0	18	0	0	0	0	0	0	15
114+00	11400.00	25.00	61.34	14.00	0.00	0.00	0.00	0.00	55	13	0	0	0	0	73	0	0	0	0	0	0	57
114+25	11425.00	25.00	60.09	14.00	0.00	0.00	0.00	0.00	56	13	0	0	0	0	129	0	0	0	0	0	0	100
114+50	11450.00	25.00	53.92	14.00	0.00	0.00	0.00	0.00	53	13	0	0	0	0	182	0	0	0	0	0	0	140
114+75	11475.00	25.00	52.31	14.00	0.00	0.00	0.00	0.00	49	13	0	0	0	0	231	0	0	0	0	0	0	176
115+00	11500.00	25.00	54.03	14.00	0.00	0.00	0.00	0.00	49	13	0	0	0	0	280	0	0	0	0	0	0	212
115+25	11525.00	25.00	50.08	14.00	0.00	0.00	0.00	0.00	48	13	0	0	0	0	328	0	0	0	0	0	0	247
115+50	11550.00	25.00	47.64	14.00	0.00	0.00	0.00	0.00	45	13	0	0	0	0	373	0	0	0	0	0	0	279
115+89	11589.00	39.00	46.48	14.00	0.00	0.00	0.00	0.00	68	20	0	0	0	0	441	0	0	0	0	0	0	327

Notes:		
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL	
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS	
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME	
4 - EXPANDED MARSH BACKFILL	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)	NOTE 4 - SELECT ONE BASED ON INPUT DIALOG SELECTION
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)	NOTE 5 - SELECT ONE BASED ON INPUT DIALOG SELECTION
6 - REDUCED MARSH IN FILL	REDUCED MARSH EXCAVATION THAT CAN BE USED IN FILL	NOTE 6 - IF EXCAVATED MARSH CAN BE USED IN FILL
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL	NOTE 7 - IF EXCAVATED EBS CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]	NOTE 8 - SELECT ONE BASED ON MASS HAUL INPUT DIALOG SELECTION. EBS AND MARSH EXC USED OUTSIDE 1:1 IN FILL SLOPES
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]	EBS AND MARSH EXC USED OUTSIDE 1:1 IN FILL SLOPES
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]	MARSH AND EBS ARE NOT USABLE OUTSIDE THE 1:1 SLOPES
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - EXPANDED ROCK) * FILL FACTOR)]	MARSH AND EBS ARE NOT USABLE OUTSIDE THE 1:1 SLOPES

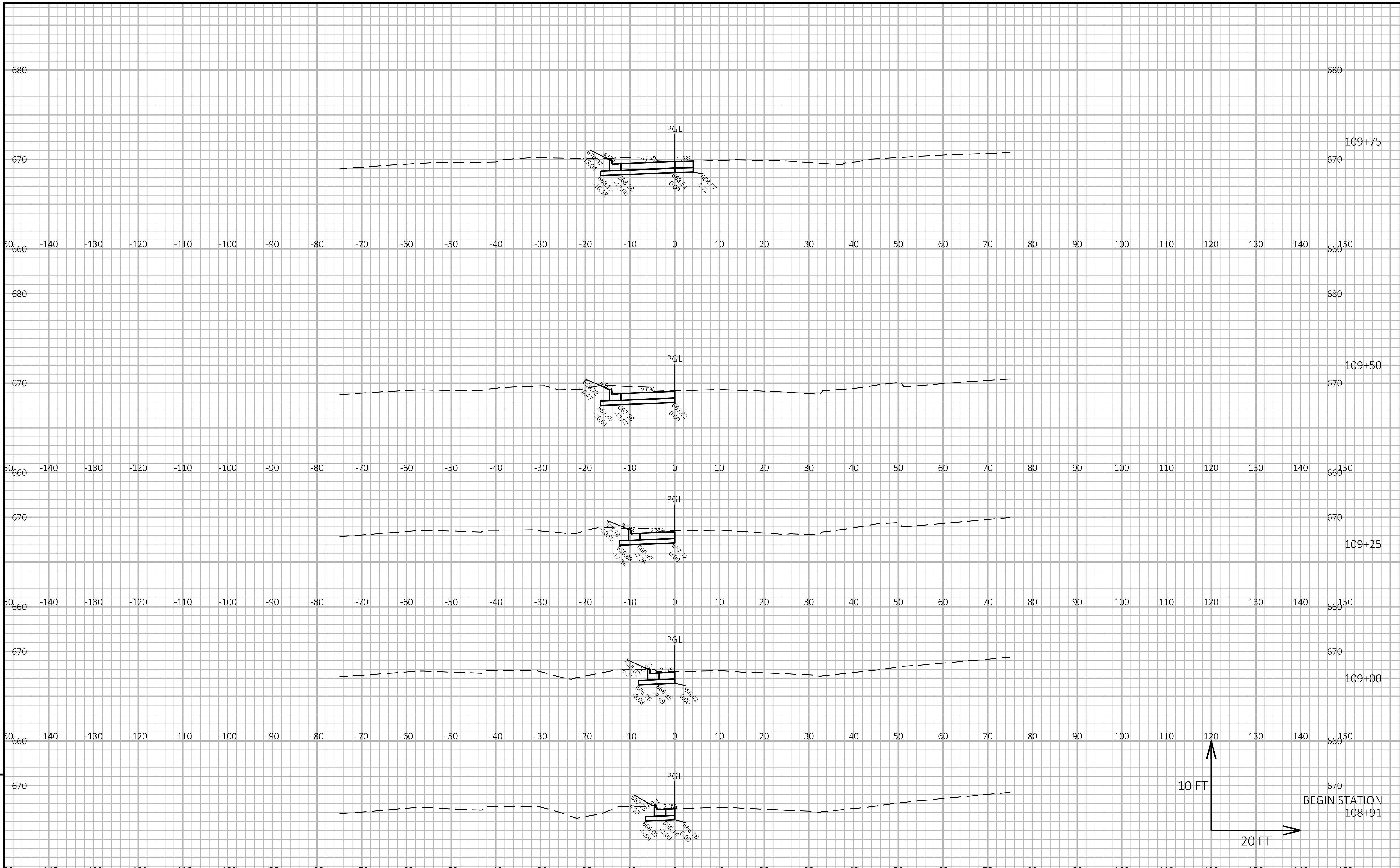
W. GOOD HOPE RD (CTH PP)

DIVISION 1 - PP_EB RT Ln

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) SALVAGED/UNUSABLE PAVEMENT MATERIAL	AREA (SF) FILL	AREA (SF) MARSH EXC	AREA (SF) ROCK EXC	AREA (SF) EBS	INCREMENTAL VOL (CY) (UNADJUSTED) CUT	INCREMENTAL VOL (CY) SALVAGED/UNUSABLE PAVEMENT MATERIAL	INCREMENTAL VOL (CY) FILL	INCREMENTAL VOL (CY) MARSH EXC	INCREMENTAL VOL (CY) ROCK EXC	INCREMENTAL VOL (CY) EBS	CUMULATIVE VOL (CY) CUT	CUMULATIVE VOL (CY) EXPANDED FILL	CUMULATIVE VOL (CY) EXPANDED MARSH BACKFILL	CUMULATIVE VOL (CY) EXPANDED ROCK	CUMULATIVE VOL (CY) EXPANDED EBS BACKFILL	CUMULATIVE VOL (CY) REDUCED MARSH IN FILL	CUMULATIVE VOL (CY) REDUCED EBS IN FILL	CUMULATIVE VOL (CY) MASS ORDINATE
															1.00	1.00	1.00	1.00	1.00	1.00	1.00	
									NOTE 1	NOTE 2	NOTE 3				NOTE 1		NOTE 4		NOTE 5	NOTE 6	NOTE 7	NOTE 8
214+55	21455.00	0.00	5.51	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214+75	21475.00	20.00	8.47	0.00	0.00	0.00	0.00	0.00	5	0	0	0	0	0	5	0	0	0	0	0	0	5
215+00	21500.00	25.00	15.24	0.00	0.00	0.00	0.00	0.00	11	0	0	0	0	0	16	0	0	0	0	0	0	16
215+25	21525.00	25.00	28.42	0.00	0.00	0.00	0.00	0.00	20	0	0	0	0	0	36	0	0	0	0	0	0	36
215+50	21550.00	25.00	51.12	0.00	0.00	0.00	0.00	0.00	37	0	0	0	0	0	73	0	0	0	0	0	0	73
215+65	21565.00	15.00	57.78	0.00	0.00	0.00	0.00	0.00	30	0	0	0	0	0	103	0	0	0	0	0	0	103
215+75	21575.00	10.00	33.09	0.00	0.00	0.00	0.00	0.00	17	0	0	0	0	0	120	0	0	0	0	0	0	120
216+00	21600.00	25.00	34.41	0.00	0.00	0.00	0.00	0.00	31	0	0	0	0	0	151	0	0	0	0	0	0	151
216+25	21625.00	25.00	35.93	0.00	0.00	0.00	0.00	0.00	33	0	0	0	0	0	184	0	0	0	0	0	0	184
216+50	21650.00	25.00	34.68	0.00	0.00	0.00	0.00	0.00	33	0	0	0	0	0	217	0	0	0	0	0	0	217
216+75	21675.00	25.00	32.66	0.00	0.00	0.00	0.00	0.00	31	0	0	0	0	0	248	0	0	0	0	0	0	248
217+00	21700.00	25.00	32.36	0.00	0.00	0.00	0.00	0.00	30	0	0	0	0	0	278	0	0	0	0	0	0	278
217+25	21725.00	25.00	61.99	0.00	0.00	0.00	0.00	0.00	44	0	0	0	0	0	322	0	0	0	0	0	0	322
217+50	21750.00	25.00	33.59	0.00	0.32	0.00	0.00	0.00	44	0	0	0	0	0	366	0	0	0	0	0	0	366
217+75	21775.00	25.00	40.02	0.00	0.00	0.00	0.00	0.00	34	0	0	0	0	0	400	0	0	0	0	0	0	400
217+82	21782.00	7.00	36.22	3.00	0.00	0.00	0.00	0.00	10	0	0	0	0	0	410	0	0	0	0	0	0	410
218+00	21800.00	18.00	30.21	6.00	0.00	0.00	0.00	0.00	22	3	0	0	0	0	432	0	0	0	0	0	0	429
218+25	21825.00	25.00	32.15	12.00	0.00	0.00	0.00	0.00	29	8	0	0	0	0	461	0	0	0	0	0	0	450
218+50	21850.00	25.00	30.48	19.00	0.00	0.00	0.00	0.00	29	14	0	0	0	0	490	0	0	0	0	0	0	465
218+75	21875.00	25.00	33.81	26.00	0.00	0.00	0.00	0.00	30	21	0	0	0	0	520	0	0	0	0	0	0	474
219+00	21900.00	25.00	46.12	19.00	0.00	0.00	0.00	0.00	37	21	0	0	0	0	557	0	0	0	0	0	0	490
219+25	21925.00	25.00	52.05	18.00	0.00	0.00	0.00	0.00	45	17	0	0	0	0	602	0	0	0	0	0	0	518
219+50	21950.00	25.00	46.73	25.00	0.00	0.00	0.00	0.00	46	20	0	0	0	0	648	0	0	0	0	0	0	544
219+75	21975.00	25.00	26.43	24.00	0.00	0.00	0.00	0.00	34	23	0	0	0	0	682	0	0	0	0	0	0	555
220+00	22000.00	25.00	22.24	14.00	0.00	0.00	0.00	0.00	23	18	0	0	0	0	705	0	0	0	0	0	0	560
220+29	22029.00	29.00	19.63	12.00	0.00	0.00	0.00	0.00	22	14	0	0	0	0	727	0	0	0	0	0	0	568

DIVISION 1 - PP_WB RT Ln

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) SALVAGED/UNUSABLE PAVEMENT MATERIAL	AREA (SF) FILL	AREA (SF) MARSH EXC	AREA (SF) ROCK EXC	AREA (SF) EBS	INCREMENTAL VOL (CY) (UNADJUSTED) CUT	INCREMENTAL VOL (CY) SALVAGED/UNUSABLE PAVEMENT MATERIAL	INCREMENTAL VOL (CY) FILL	INCREMENTAL VOL (CY) MARSH EXC	INCREMENTAL VOL (CY) ROCK EXC	INCREMENTAL VOL (CY) EBS	CUMULATIVE VOL (CY) CUT	CUMULATIVE VOL (CY) EXPANDED FILL	CUMULATIVE VOL (CY) EXPANDED MARSH BACKFILL	CUMULATIVE VOL (CY) EXPANDED ROCK	CUMULATIVE VOL (CY) EXPANDED EBS BACKFILL	CUMULATIVE VOL (CY) REDUCED MARSH IN FILL	CUMULATIVE VOL (CY) REDUCED EBS IN FILL	CUMULATIVE VOL (CY) MASS ORDINATE
															1.00	1.00	1.00	1.00	1.00	1.00	1.00	
									NOTE 1	NOTE 2	NOTE 3				NOTE 1		NOTE 4		NOTE 5	NOTE 6	NOTE 7	NOTE 8
219+57	21957.00	0.00	14.70	10.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
219+75	21975.00	18.00	20.10	16.00	0.00	0.00	0.00	0.00	12	9	0	0	0	0	12	0	0	0	0	0	0	3
220+00	22000.00	25.00	43.43	33.00	0.00	0.00	0.00	0.00	29	23	0	0	0	0	41	0	0	0	0	0	0	9
220+25	22025.00	25.00	62.91	31.00	0.00	0.00	0.00	0.00	49	30	0	0	0	0	90	0	0	0	0	0	0	28
220+50	22050.00	25.00	59.21	18.00	0.00	0.00	0.00	0.00	57	23	0	0	0	0	147	0	0	0	0	0	0	62
220+75	22075.00	25.00	48.29	18.00	0.00	0.00	0.00	0.00	50	17	0	0	0	0	197	0	0	0	0	0	0	95
221+00	22100.00	25.00	39.12	23.00	0.00	0.00	0.00	0.00	40	19	0	0	0	0	237	0	0	0	0	0	0	116
221+25	22125.00	25.00	32.86	17.00	0.00	0.00	0.00	0.00	33	19	0	0	0	0	270	0	0	0	0	0	0	130
221+50	22150.00	25.00	26.65	11.00	0.00	0.00	0.00	0.00	28	13	0	0	0	0	298	0	0	0	0	0	0	145
221+75	22175.00	25.00	22.46	5.00	0.00	0.00	0.00	0.00	23	7	0	0	0	0	321	0	0	0	0	0	0	161
222+00	22200.00	25.00	27.18	2.00	0.00	0.00	0.00	0.00	23	3	0	0	0	0	344	0	0	0	0	0	0	181
222+25	22225.00	25.00	27.67	2.00	0.00	0.00	0.00	0.00	25	2	0	0	0	0	369	0	0	0	0	0	0	204
222+50	22250.00	25.00	26.28	2.00	0.00	0.00	0.00	0.00	25	2	0	0	0	0	394	0	0	0	0	0	0	227
222+75	22275.00	25.00	26.38	2.00	0.00	0.00	0.00	0.00	24	2	0	0	0	0	418	0	0	0	0	0	0	249
223+00	22300.00	25.00	26.29	2.00	0.00	0.00	0.00	0.00	24	2	0	0	0	0	442	0	0	0	0	0	0	271
223+25	22325.00	25.00	26.16	2.00	0.00	0.00	0.00	0.00	24	2	0	0	0	0	466	0	0	0	0	0	0	293
223+50	22350.00	25.00	33.45	2.00	0.00	0.00	0.00	0.00	28	2	0	0	0	0	494	0	0	0	0	0	0	319
223+75	22375.00	25.00	31.50	2.00	0.00	0.00	0.00	0.00	30	2	0	0	0	0	524	0	0	0	0	0	0	347
224+00	22400.00	25.00	27.22	2.00	0.00	0.00	0.00	0.00	27	2	0	0	0	0	551	0	0	0	0	0	0	372
224+25	22425.00	25.00	22.97	2.00	0.00	0.00	0.00	0.00	23	2	0	0	0	0	574	0	0	0	0	0	0	393
224+47	22447.00	22.00	21.44	2.00	0.00	0.00	0.00	0.00	18	2	0	0	0	0	592	0	0	0	0	0	0	409



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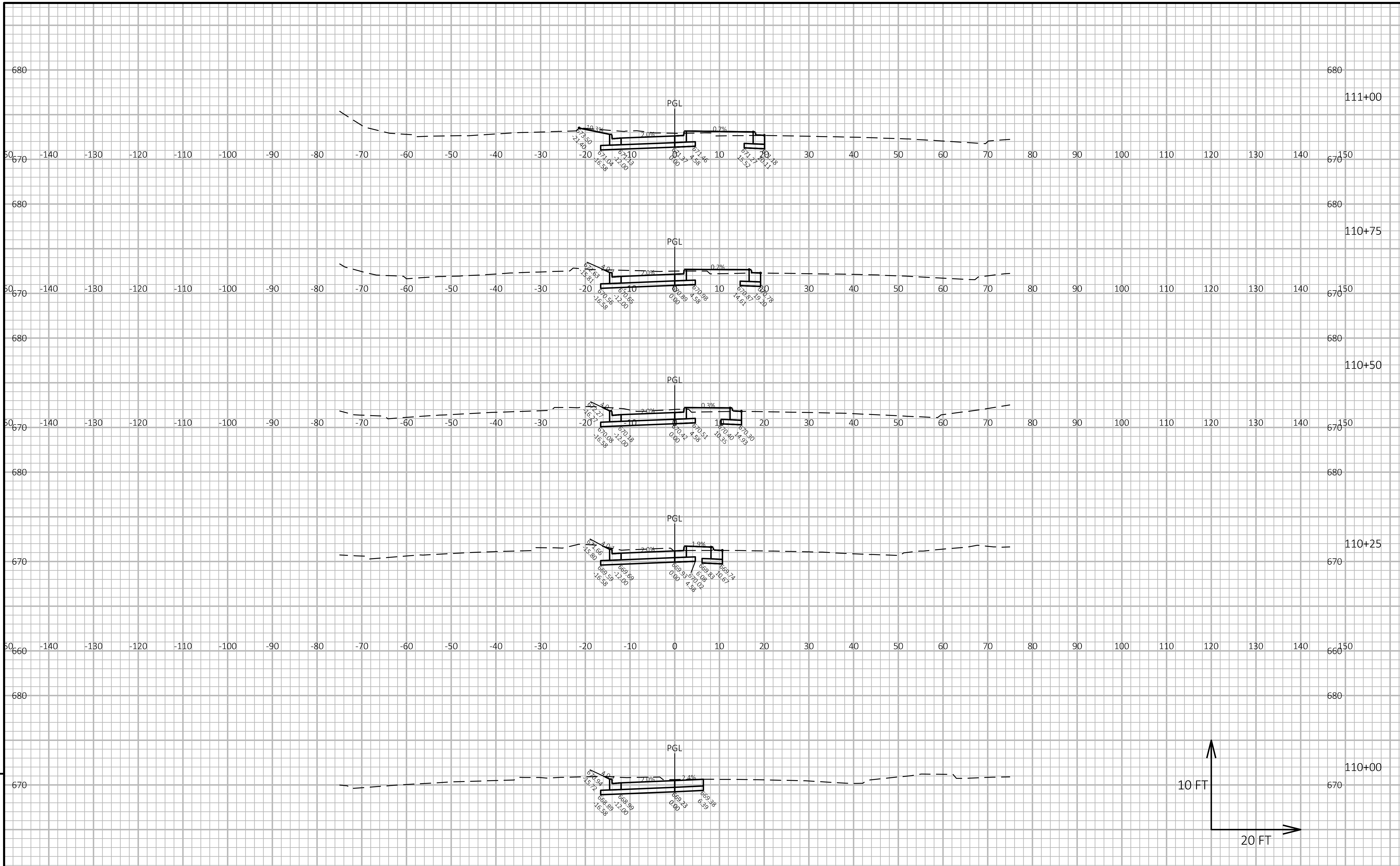
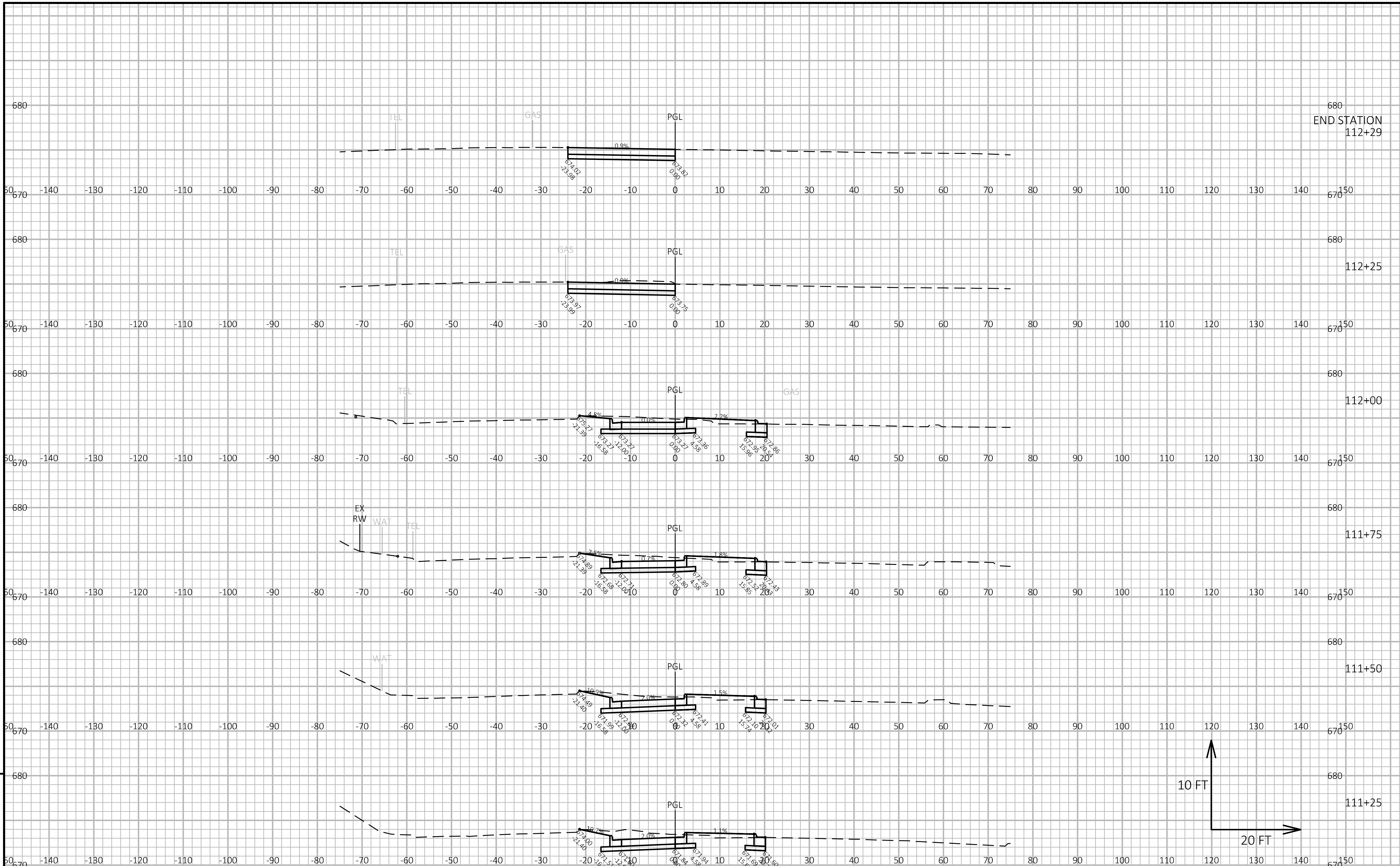
PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	CROSS SECTIONS: STH 57- NB LEFT TURN LANE	SHEET 214	E



111+00
110+75
110+50
110+25
110+00
PGL
10 FT
20 FT



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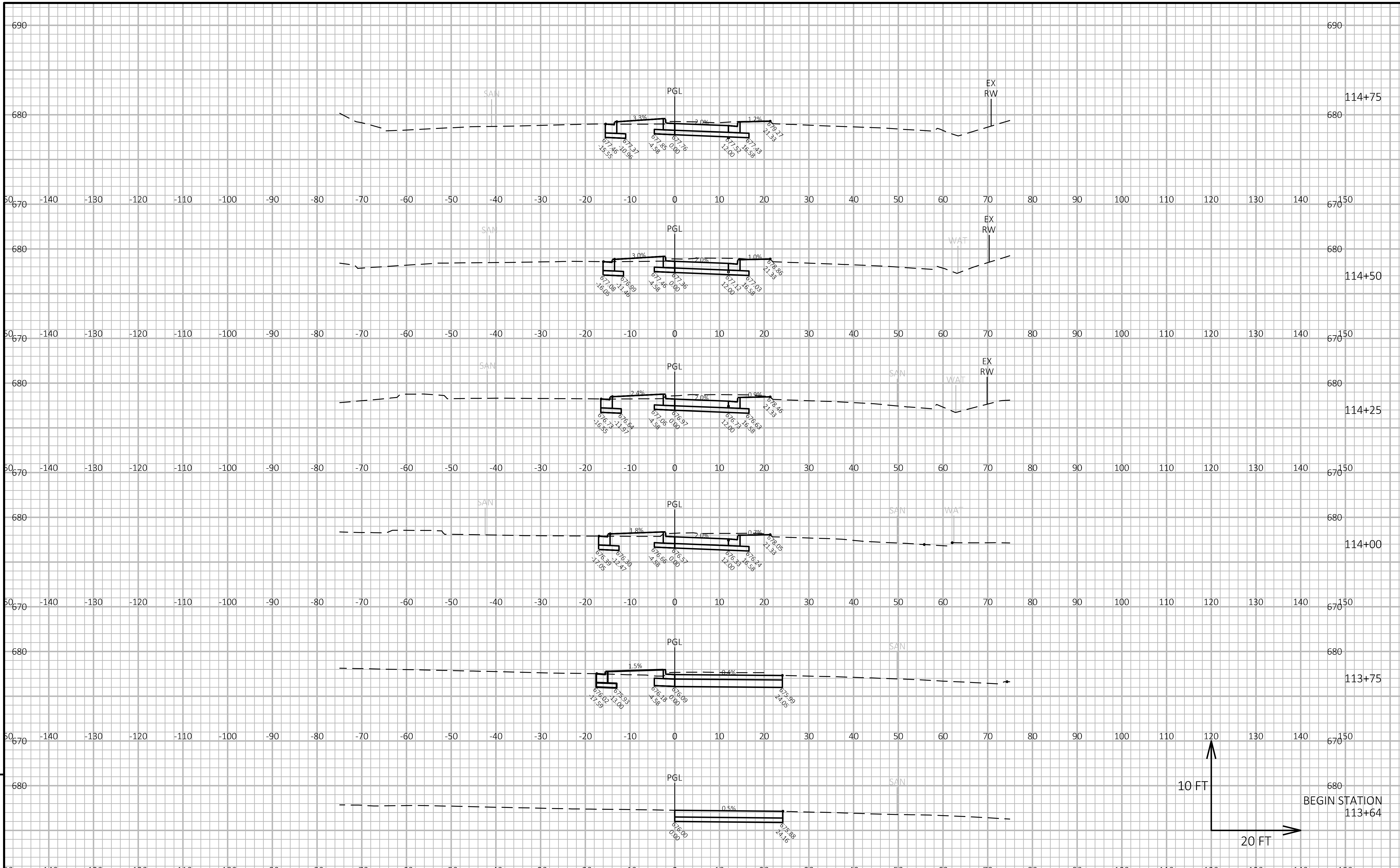
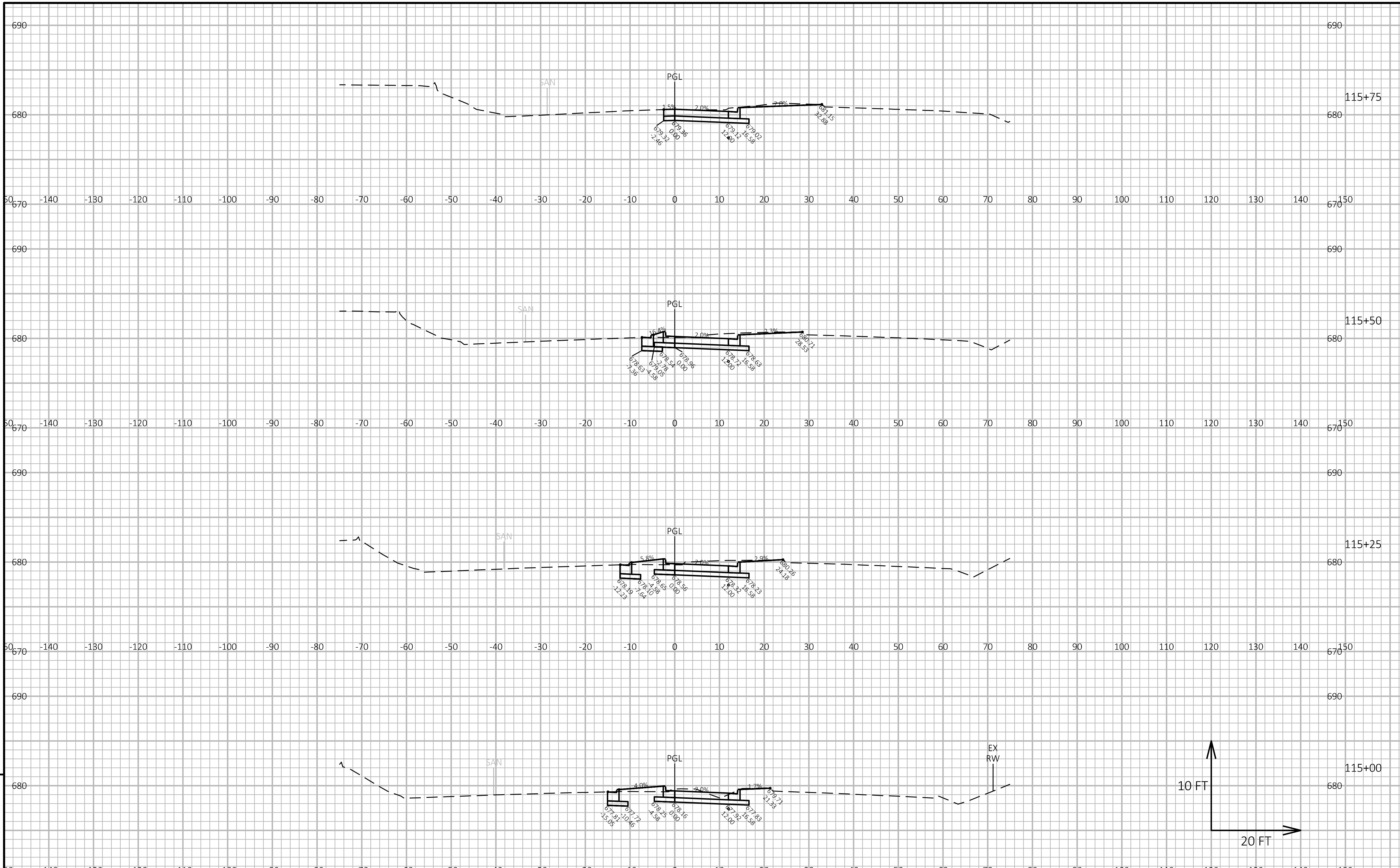
PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	CROSS SECTIONS: STH 57- NB LEFT TURN LANE	SHEET 216	E

FILE NAME : \\W3027S02\DPPIS\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN\PLANS\CADD\0090201-XS.DWG PLOT BY : HILLIARD, MARC PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 03

WISDOT/CADDS SHEET 49



PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	CROSS SECTIONS: STH 57- SB LEFT TURN LANE	SHEET 217	E



PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	CROSS SECTIONS: STH 57- SB LEFT TURN LANE	SHEET 218	E

FILE NAME : \\W3027S02\DPPI$\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN\PLANS\CADD\XS\2565020100201-XS.DWG PLOT BY : HILLIARD, MARC PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 05

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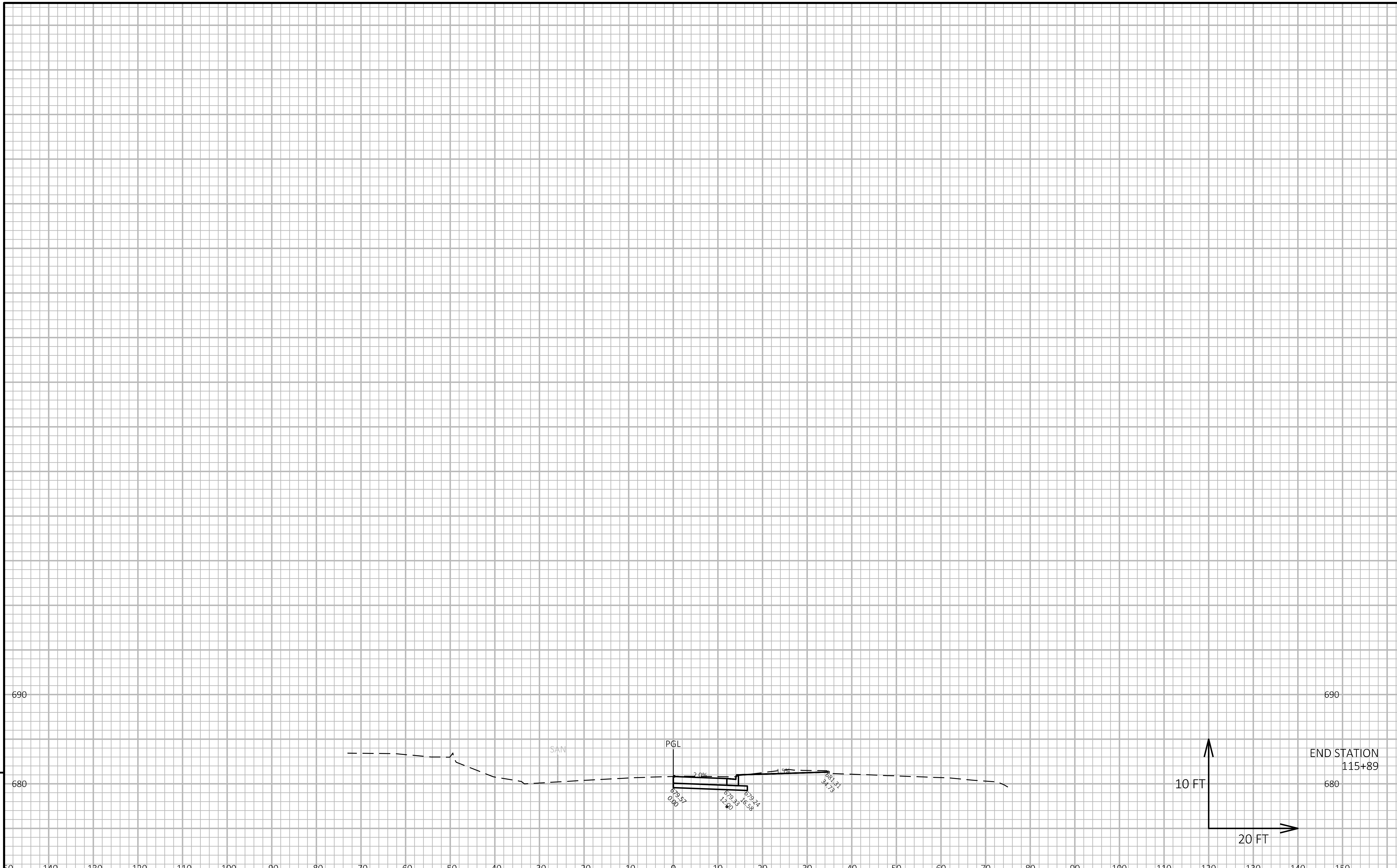

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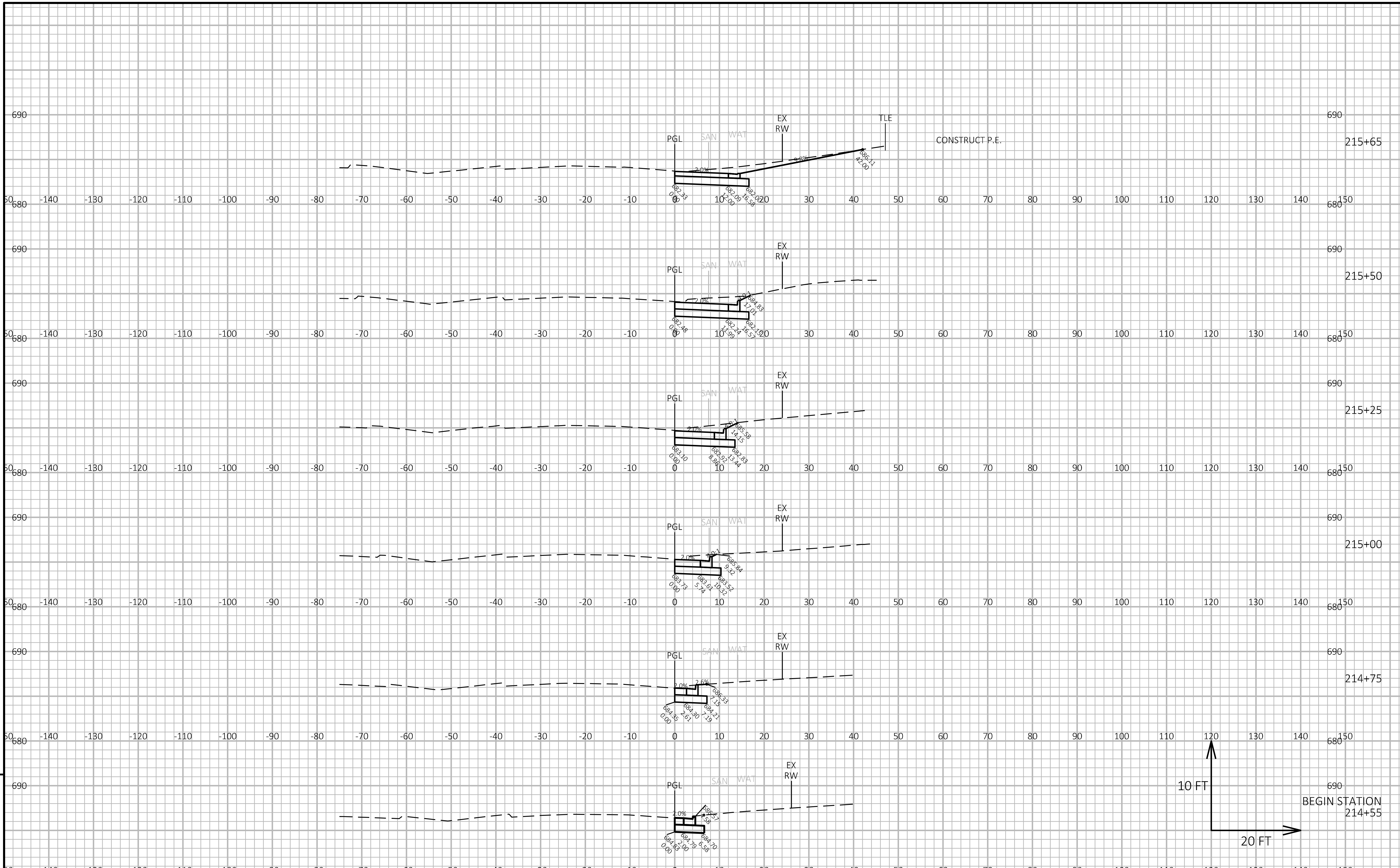
PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	CROSS SECTIONS: STH 57- SB LEFT TURN LANE	SHEET 219	E



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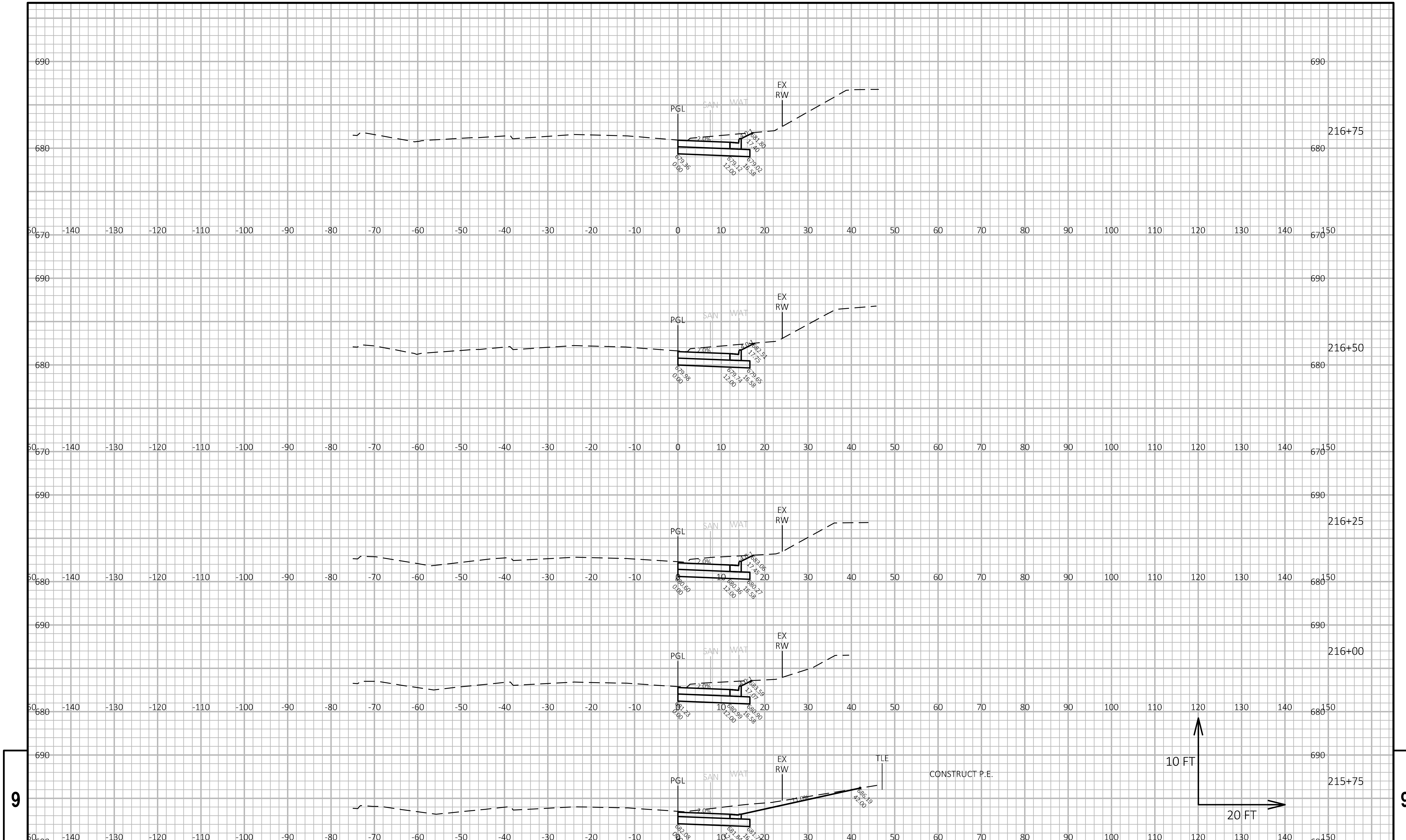
PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	CROSS SECTIONS: CTH PP- EB RIGHT TURN LANE	SHEET 220	E

FILE NAME : \\W3027S02\DPPIS\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN\PLANS\CADD\090201-XS.DWG PLOT BY : HILLIARD, MARC PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 07

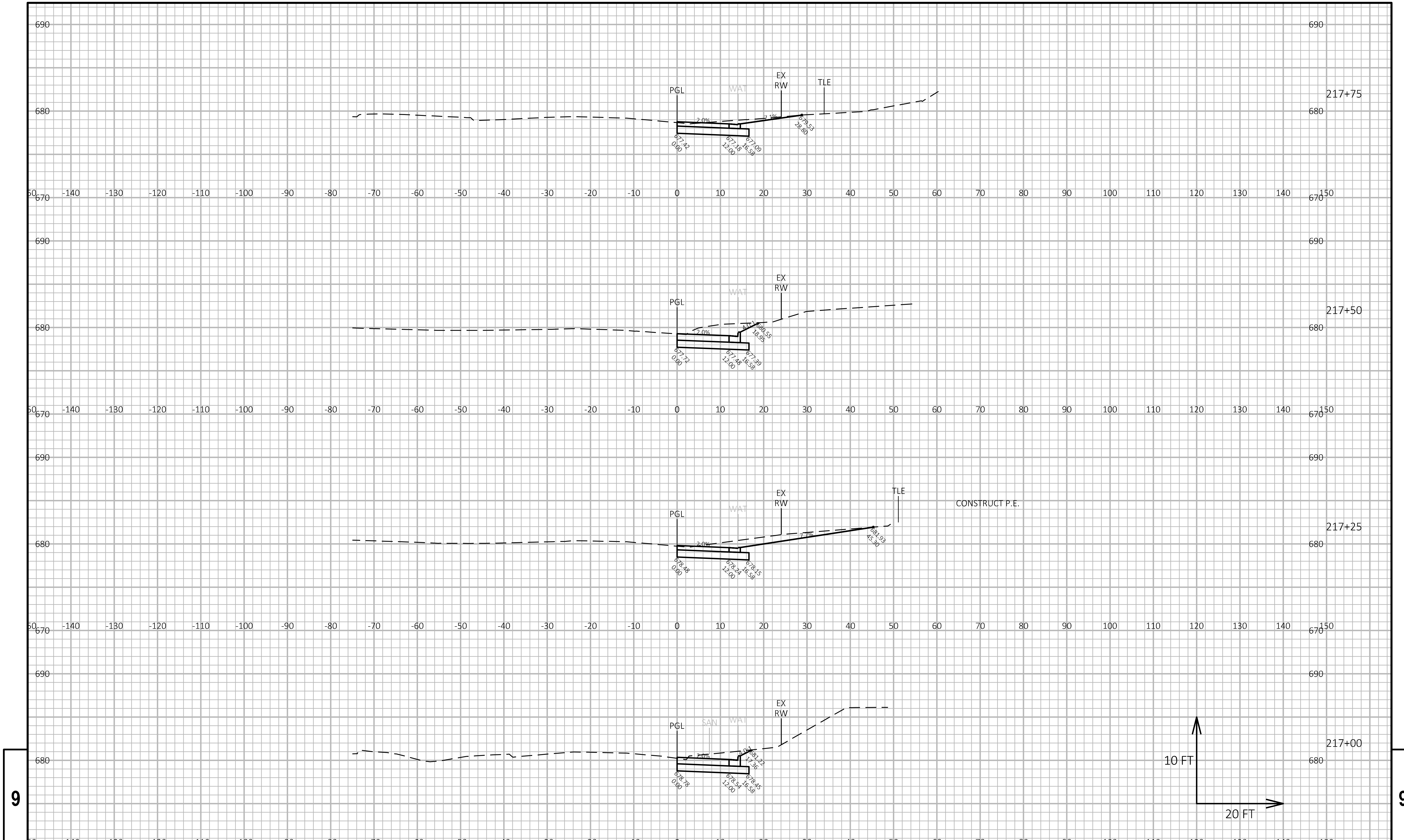
WISDOT/CADDS SHEET 49



PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	CROSS SECTIONS: CTH PP- EB RIGHT TURN LANE	SHEET 221	E

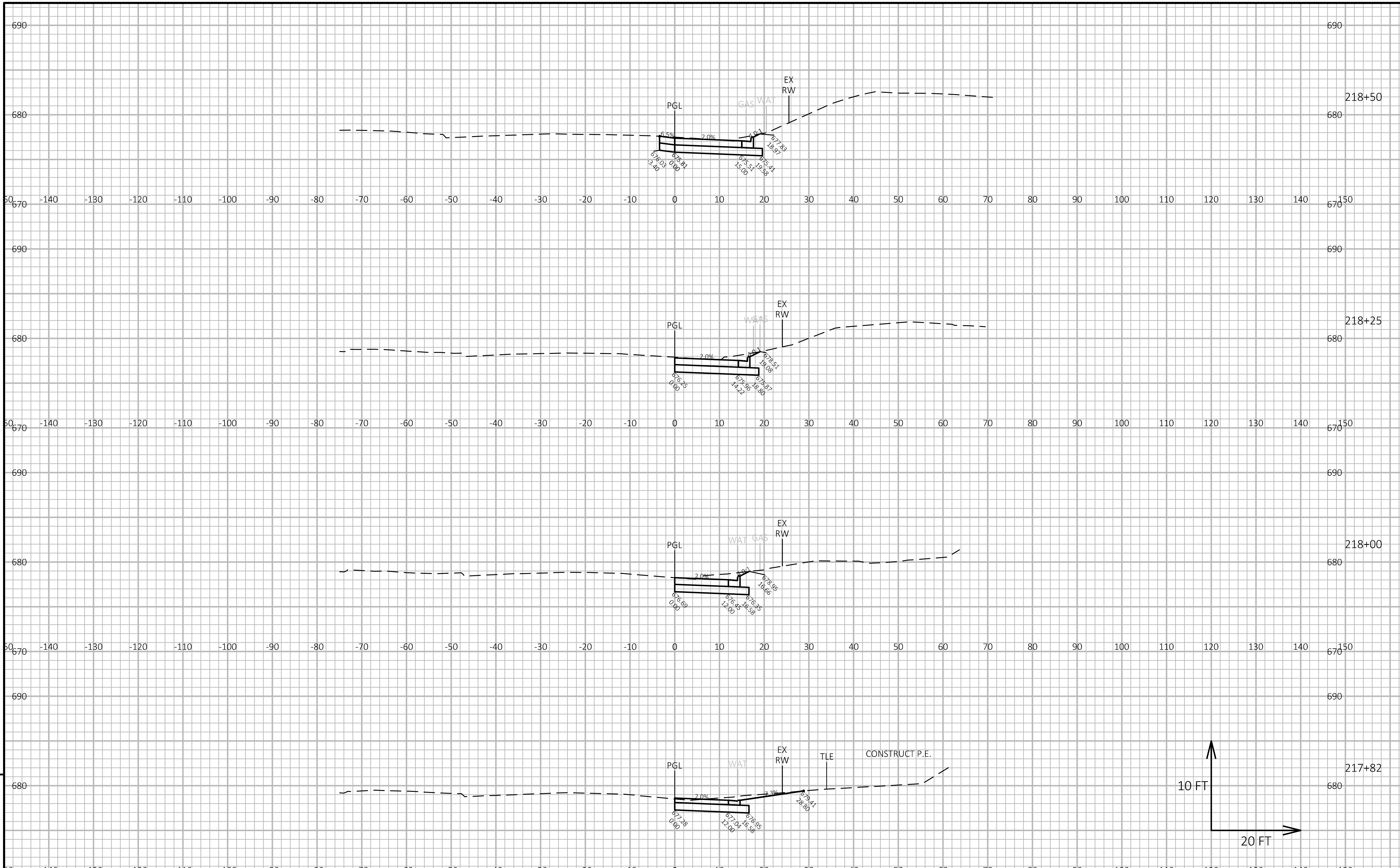
FILE NAME : \\W3027S02\DPPI$\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN\PLANS\CADD\...090201-XS.DWG PLOT BY : HILLIARD, MARC PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 08

WISDOT/CADDS SHEET 49



PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	CROSS SECTIONS: CTH PP- EB RIGHT TURN LANE	SHEET 222	E

FILE NAME : \\W3027S02\DPPI$\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN\PLANS\CADD\...\090201-XS.DWG PLOT DATE : 10/25/2012 4:53 AM PLOT BY : HILLIARD, MARC PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 09



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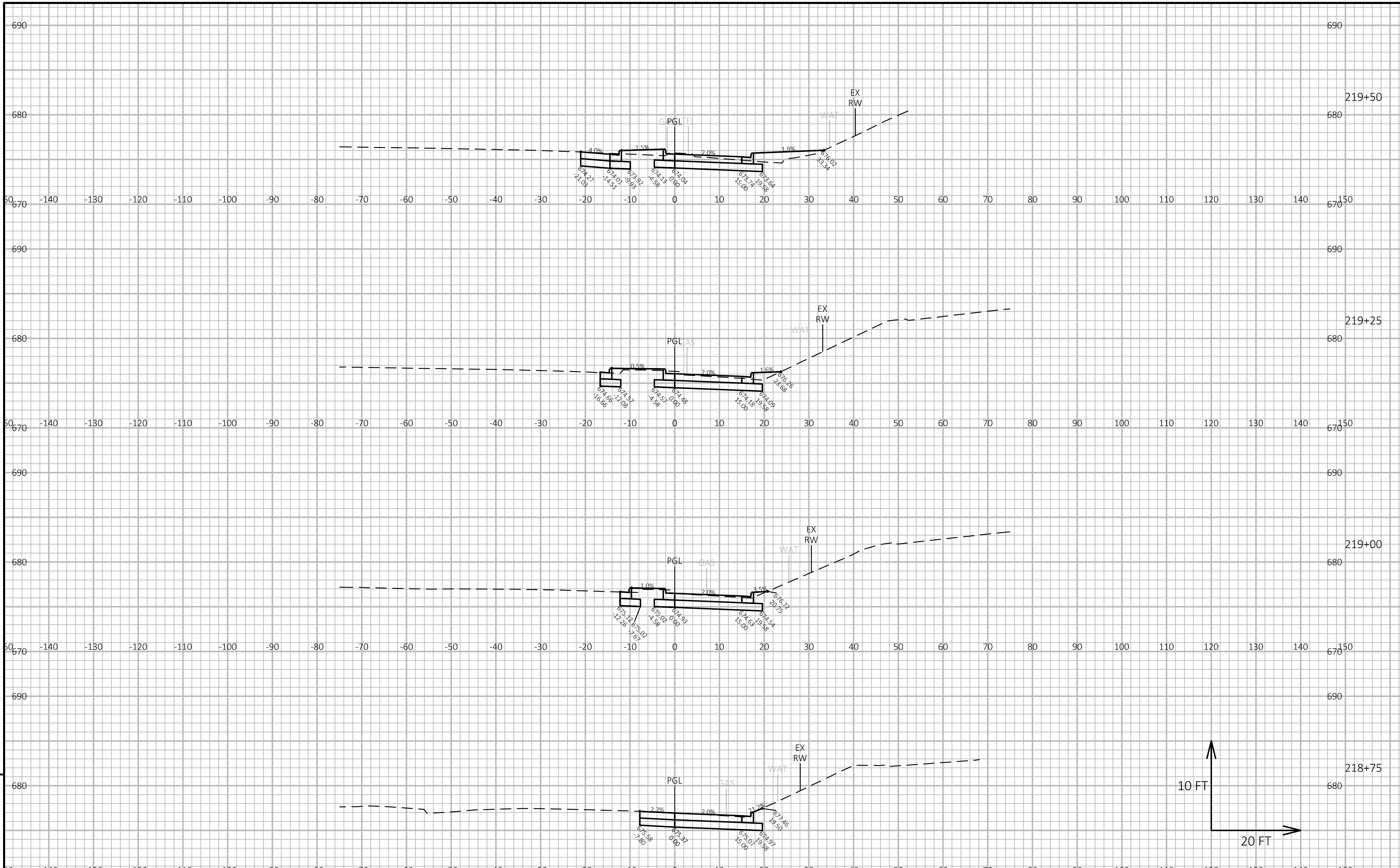
PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	CROSS SECTIONS: CTH PP- EB RIGHT TURN LANE	SHEET 223 E

FILE NAME : \\W3027S02\DPPIS\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN\PLANS\CADD\090201-XS.DWG PLOT BY : HILLIARD, MARC PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

LAYOUT NAME - 10

WISDOT/CADDS SHEET 49



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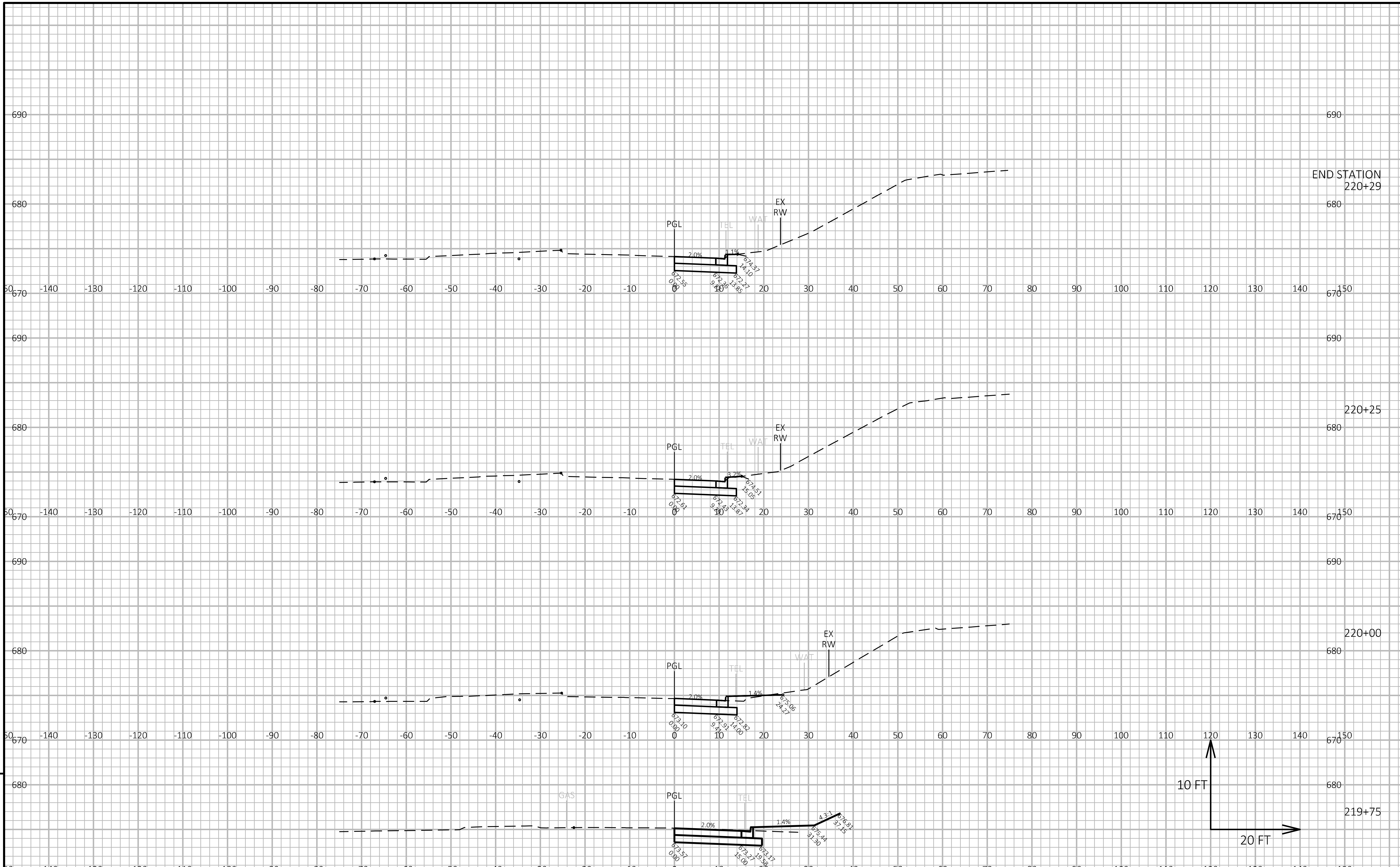
PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	CROSS SECTIONS: CTH PP- EB RIGHT TURN LANE	SHEET 224	E

FILE NAME : \\W3027S02\DPPI$\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN DATA\CADD\SHEETSPLAN\090201-XS.DWG PLOT BY : HILLIARD, MARC PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 11

WISDOT/CADDS SHEET 49

9



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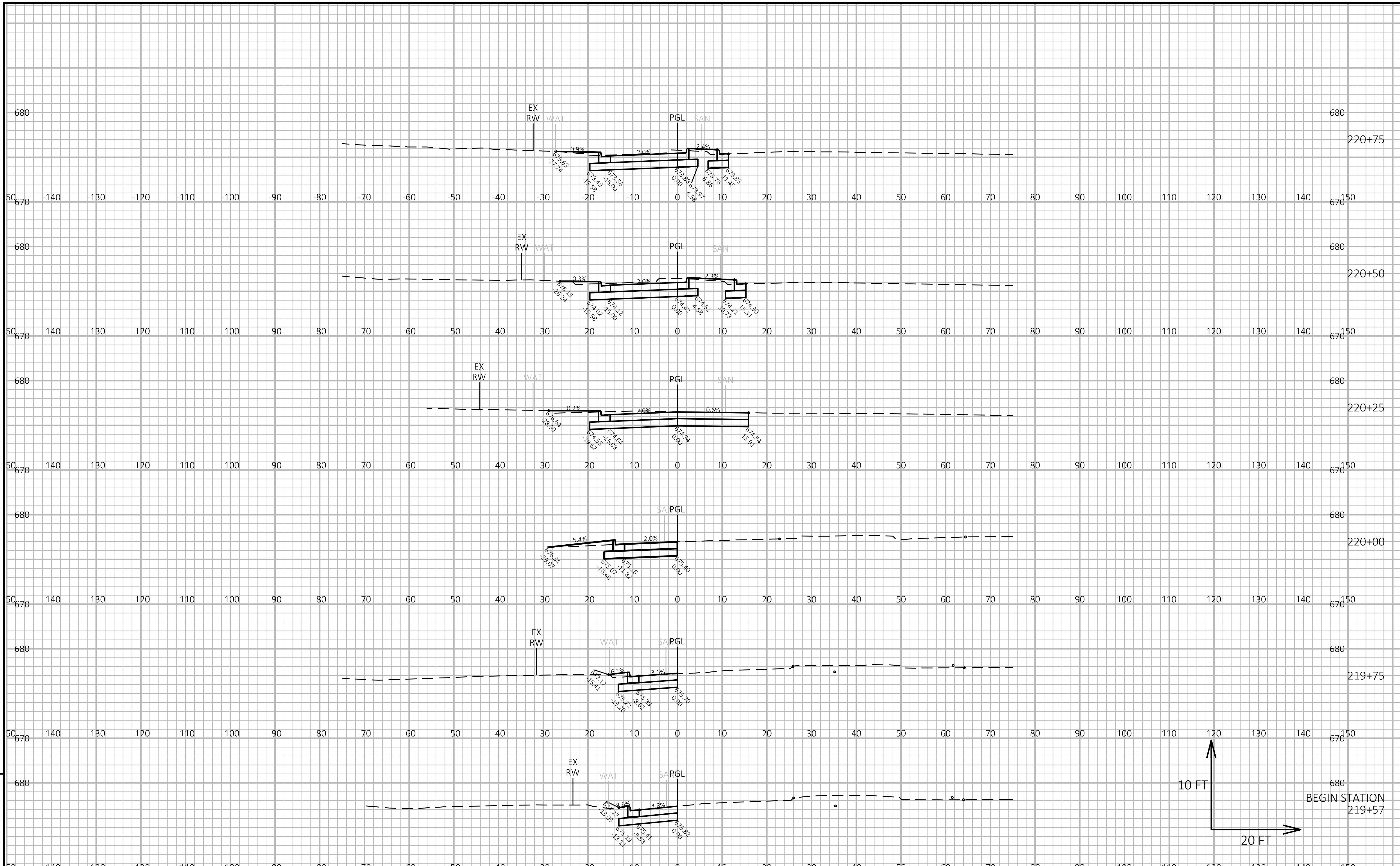
PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	CROSS SECTIONS: CTH PP- EB RIGHT TURN LANE	SHEET 225	E

FILE NAME : \\W3027S02\DPPIS\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN DATA\CADD\...090201-XS.DWG PLOT BY : HILLIARD, MARC PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 12

WISDOT/CADDS SHEET 49

9



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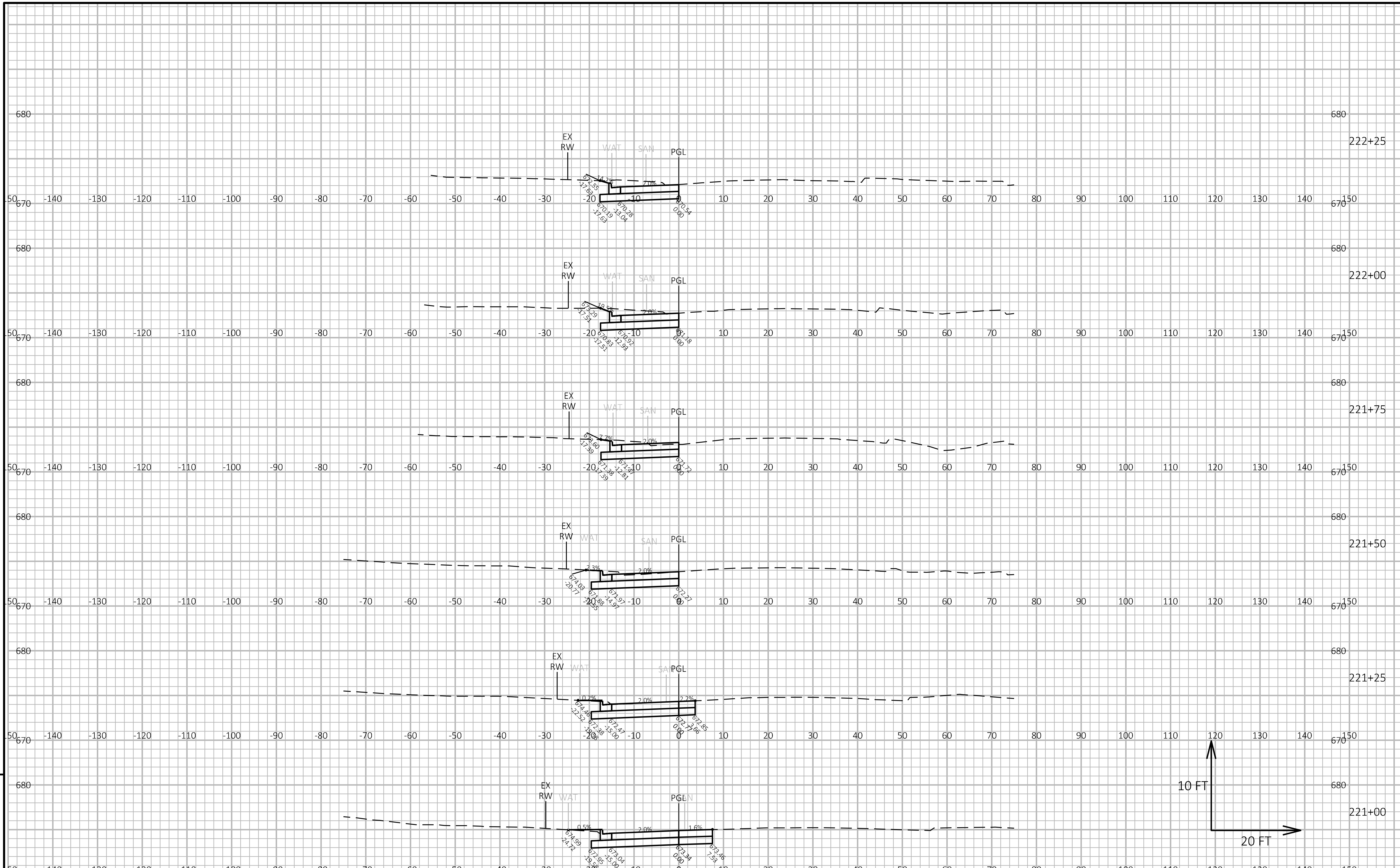
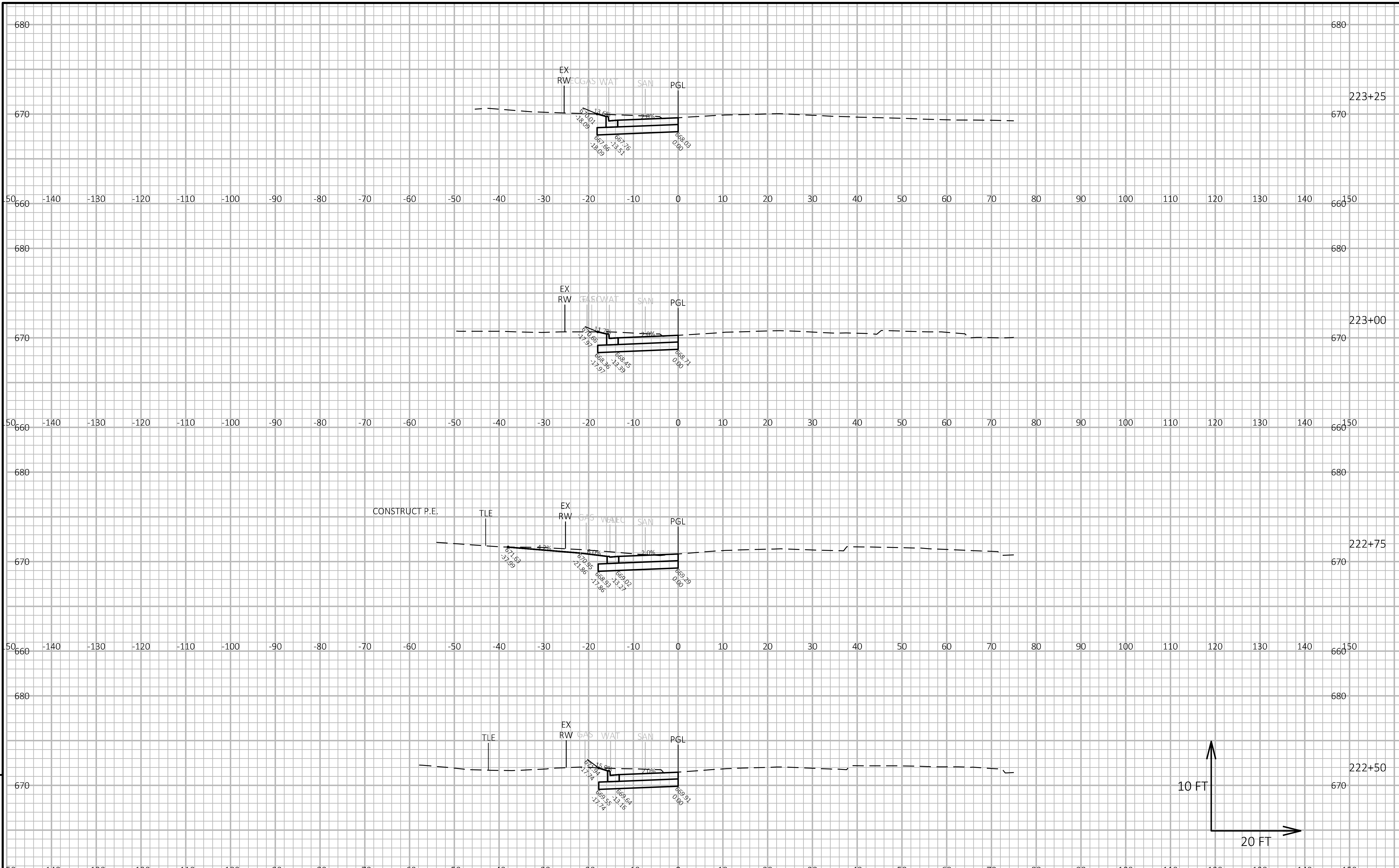
PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	CROSS SECTIONS: CTH PP- WB RIGHT TURN LANE	SHEET 226	E



PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	CROSS SECTIONS: CTH PP- WB RIGHT TURN LANE	SHEET 227	E

FILE NAME : \\W3027S02\DPPIS\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN DATA\CADD\ 090201-XS.DWG PLOT BY : HILLIARD, MARC PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 14



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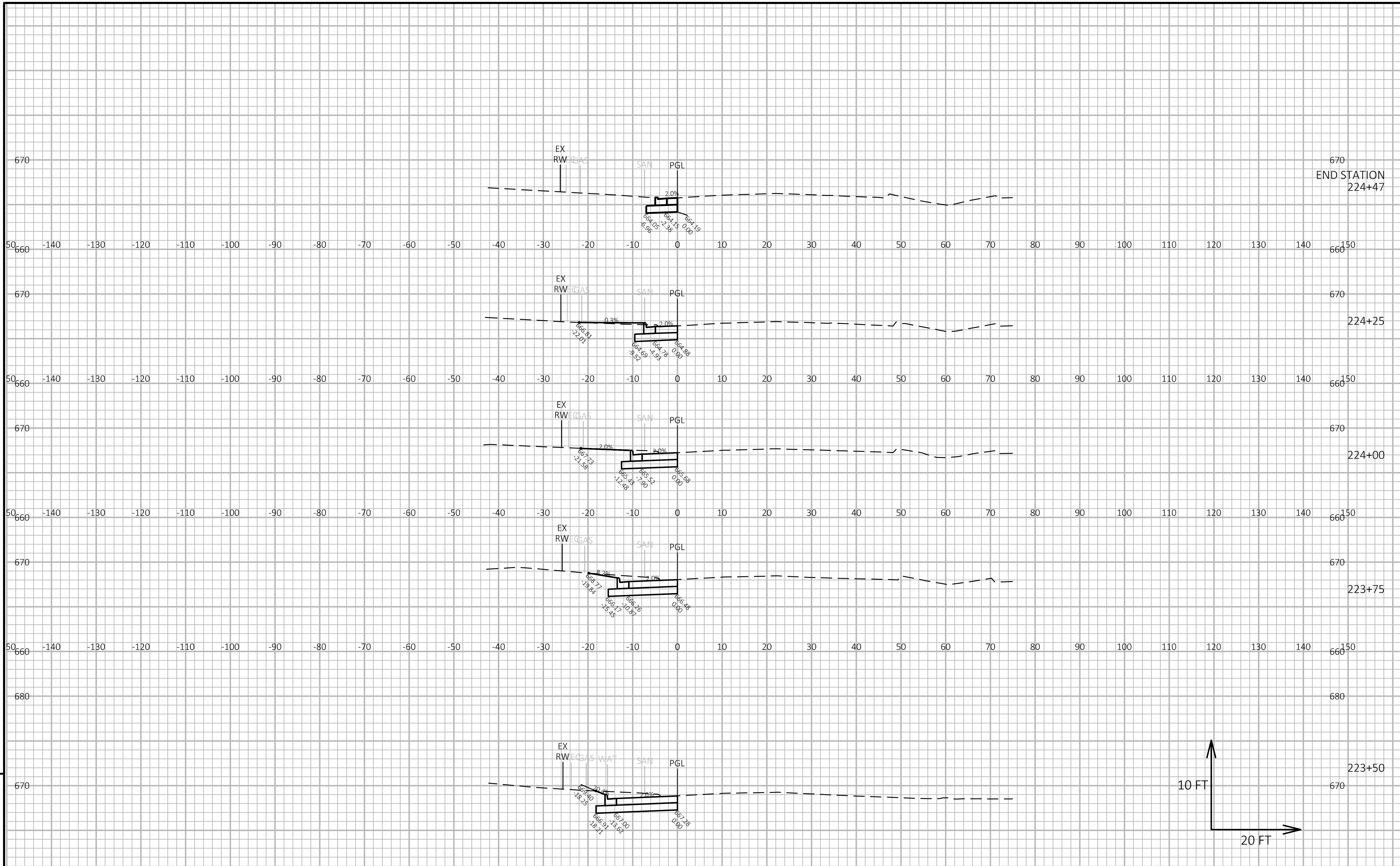
PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	CROSS SECTIONS: CTH PP- WB RIGHT TURN LANE	SHEET 228	E

FILE NAME : \\W3027S02\DPPIS\DPW PROFESSIONAL\DATA\HIGHWAY OPERATIONS CONTROL FILE\CENTRAL FILES\2010-2014\CTH PP - W. GOOD HOPE RD\2565-02-01_71 - STH 57 INT WITH CTH PP\DESIGN DATA\CADD\...\090201-XS.DWG PLOT BY : HILLIARD, MARC PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 15

WISDOT/CADDS SHEET 49

9



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PROJECT NO: 2565-02-71	HWY: STH 57	COUNTY: MILWAUKEE	CROSS SECTIONS: CTH PP- WB RIGHT TURN LANE	SHEET 229	E

Wisconsin Department of Transportation

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