WKE SEPTEMBER 2024

PROJECT ID: 1330-00-73

WITH: N/A

COUNTY: WAUKESHA

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 = 510



N

DESIGN DESIGNATION

A.A.D.T.	2024	=	16250
A.A.D.T.	2044	=	18500
D.H.V.		=	5.5
D.D.		=	59/41
T.		=	6.4%
DESIGN SPEED		=	50 MPH
ESALS		=	2,000,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

DELAFIELD - HARTLAND

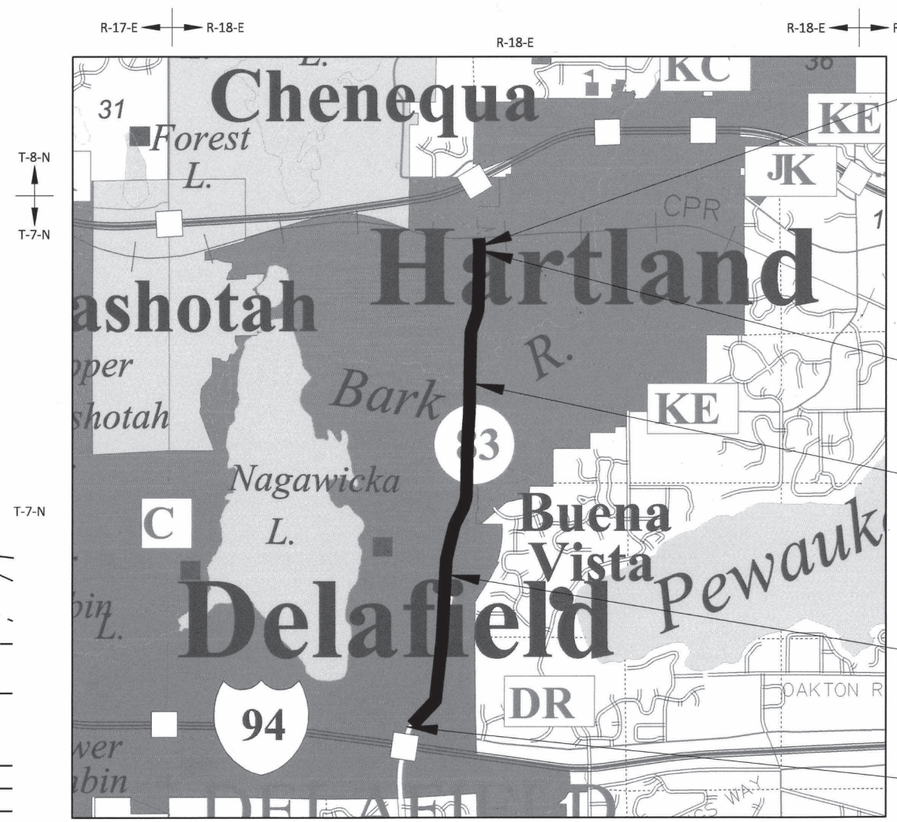
GOLF RD TO VETTELSON RD

STH 83

WAUKESHA COUNTY

STATE PROJECT NUMBER
1330-00-73

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1330-00-73	WISC 2024433	1



LAYOUT SCALE 0 1 M

TOTAL NET LENGTH OF CENTERLINE = 3.215 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), WAUKESHA COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

ORIGINAL PLANS PREPARED BY

benesch

Alfred Benesch & Company
1300 West Canal Street, Suite 150
Milwaukee, Wisconsin 53233
414-308-1310 Job No. 20312

WISCONSIN PROFESSIONAL ENGINEER
BENJAMIN J. WEIGAND
E-39495
RACINE, WI

DATE: 1/26/2024 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	KL ENGINEERING
Designer	ALFRED BENESCH & CO
Project Manager	GARY METZER
Regional Examiner	SE REGION
Regional Supervisor	JANET CANNON

APPROVED FOR THE DEPARTMENT

DATE: 1/26/2024 Gary Metzer (Signature)

E

GENERAL NOTES

1. 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. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.
2. THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPALITY OR PUBLIC AGENCY WHICH IS NOT A MEMBER OF DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.
3. STATION, OFFSET, AND INVERT ELEVATIONS FOR CULVERT PIPES GIVEN TO END OF PIPE. ENDWALLS TO BE PLACED AT THE SAME SLOPE AS CONNECTING PIPE.
4. ALL ELEVATIONS AND OFFSETS SHOWN IN THE PLAN SHALL BE VERIFIED IN THE FIELD.
5. NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.
6. THE COST OF GRADING, CONSTRUCTING, MAINTAINING, AND REMOVING TEMPORARY ACCESS IS INCIDENTAL TO THE CONTRACT.
7. THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING OR TURNING LANE.
8. CONTACT THE PROJECT ENGINEER AND THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION (SEWRPC), AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY PUBLIC SURVEY MONUMENT.

EROSION CONTROL GENERAL NOTES

1. RESTORE ANY DISTURBED SOIL OR GRADED AREAS WITHIN SEVEN (7) CALENDAR DAYS OF DISTURBANCE OR TEMPORARILY SEED AND MULCH THE AREA WITHIN 72 HOURS OF ANY DISTURBANCE.
2. STOCKPILE EXCESS MATERIAL OR SPOILS ON UPLAND AREAS AWAY FROM WETLANDS, FLOODPLAINS AND WATERWAYS. STOCKPILED SOIL SHALL BE PROTECTED AGAINST EROSION. IF STOCKPILED MATERIAL IS LEFT FOR MORE THAN FOURTEEN (14) CALENDAR DAYS, SEED THE STOCKPILE WITH TEMPORARY SEED AND MULCHED EVERY THREE (3) DAYS AS THE MATERIAL IS BEING STOCKPILED.
3. ALL ROADWAY OR CONSTRUCTION RELATED SWEEPING WILL BE DONE BY VACUUM ASSISTED SWEEPER.
4. MANAGE ALL SAWCUT SLURRY BY EITHER SQUEEGEEING SLURRY TO AGGREGATE SHOULDER OR SHOVEL UP AND REMOVE FROM THE PROJECT BEFORE MOVING TO THE NEXT SAWCUT LOCATION (OR DISTANCE NO GREATER THAN 100' IN LENGTH FOR LONG LINEAR CUTS).
5. WHEN EXCAVATING IN AREAS SUBJECT TO HIGH GROUNDWATER, PLACE GEOGRID, BACKFILL, AND COMPACT TO A POINT ABOVE THE GROUNDWATER ELEVATION AS SOON AS POSSIBLE, AND NO LATER THAN SUSPENSION OF DAILY OPERATIONS.
6. QUANTITIES FOR EROSION CONTROL ITEMS HAVE BEEN INCLUDED IN THE PROJECT, BUT MAY NOT BE REPRESENTED ON THE PLAN. THE LOCATIONS AND TYPE OF EROSION CONTROL ITEMS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL ITEMS SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE ITEMS IS NO LONGER REQUIRED.

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANCE (PERCENT)			SLOPE RANCE (PERCENT)			SLOPE RANCE (PERCENT)			SLOPE RANCE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	0.08 0.22	0.16 0.30	0.22 0.38	0.12 0.26	0.20 0.34	0.27 0.44	0.15 0.30	0.24 0.37	0.33 0.50	0.19 0.34	0.28 0.41	0.38 0.56
MEDIAN STRIP TURF	0.19 0.24	0.20 0.26	0.24 0.30	0.19 0.25	0.22 0.28	0.26 0.33	0.20 0.26	0.23 0.30	0.30 0.37	0.20 0.27	0.25 0.32	0.30 0.40
SIDE SLOPE TURF	0.25 0.34	0.27 0.36	0.25 0.32	0.30		0.27 0.34			0.28 0.36			0.30 0.38
PAVEMENT:												
ASPHALT	0.70 - 0.95											
CONCRETE	0.80 - 0.95											
BRICK	0.70 -0.80											
DRIVES, WALKS	0.75 - 0.85											
ROOFS	0.75 - 0.95											
GRAVEL ROADS, SHOULDERS	0.40 - 0.60											

TOTAL PROJECT AREA = 28.7 ACRES

TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 19.4 ACRES

PAVEMENT LOCATION	TOTAL PAVEMENT THICKNESS	LAYER	TYPE
GOLF RD. TO NAGAWICKA RD.	3.75"	1.5" UPPER 2.25" LOWER	5 MT 58-28 H 3 MT 58-28 S
NAGAWICKA RD. TO VETTELSON RD. (MAINLINE)	8.5"	1.5" UPPER 3.5" UPPER-LOWER 3.5" LOWER	5 MT 58-28 H 3 MT 58-28 S 3 MT 58-28 S
NAGAWICKA RD. TO VETTELSON RD. (SHOULDERS)	5"	1.5" UPPER 3.5" LOWER	5 MT 58-28 H 3 MT 58-28 S
VETTELSON RD TO END PROJECT	2"	2" UPPER	5 MT 58-28 H

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
PLAN DETAILS - MGS GUARDRAIL
EROSION CONTROL
CULVERT DETAILS
CURB RAMP DETAILS
SIGNAL PLAN
PERMANENT PAVEMENT MARKING
PERMANENT SIGNING
TRAFFIC CONTROL
DETOUR PLAN
ALIGNMENT AND SURVEY CONTROL

OTHER AGENCIES

WISDOT CONTACT

SOUTHEAST REGION
GARY METZER
141 NW BARSTOW ST
WAUKESHA, WI 53188
PHONE: (262) 548- 5685
EMAIL: GARY.METZER@DOT.WI.GOV

WISDOT SIGNALS

WISCONSIN DEPARTMENT OF TRANSPORTATION - WISCONSIN SIGNAL
JOYCE MURPHY
141 NW BARSTOW ST
WAUKESHA, WI 53188
PHONE: (262) 548-5933
EMAIL: JOYCE.MURPHY@DOT.WI.GOV

DESIGN CONTACT

BENESCH
AMANDA ZACHARIAS
247 W FRESHWATER WAY
SUITE #650
MILWAUKEE, WI 53204
PHONE: (414) 308-1320
AZACHARIAS@BENESCH.COM

WISDOT ELECTRICAL FIELD UNIT

935 S. 60TH ST.
WEST ALLIS, WI 53214
PHONE: (414) 266-1170

WISDOT SIGNAL OPERATIONS

141 NW BARSTOW ST.
WAUKESHA, WI 53187
PHONE: (414) 750-2605

DNR CONTACT

DNR - SOUTHEAST REGION
CRAIG WEBSTER
141 NW BARSTOW, ROOM 180
WAUKESHA, WI 53188
PHONE: (262) 574-2141
PHONE: (414) 303-3011
EMAIL: CRAIG.WEBSTER@WISCONSIN.GOV

SEWRPC CONTACT

ATTN: ROB MERRY (CHIEF SURVEYOR)
SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION
W239 N1812 ROCKWOOD DRIVE
P.O. BOX 1607
WAUKESHA, WI 53187-1607
PHONE: (262) 953-4289
CELL: (920) 912-1036
FAX: (262) 547-1103
EMAIL: RMERRY@SEWRPC.ORG

ATC COMMUNICATIONS

JASON SAARI
STEIGERWALDT
856 N 4TH STREET
TOMAHAWK, WI 54487
PHONE: (715) 453-3274
CELL: (715) 409-8469
FAX: (715) 453-8325
EMAIL: JASON.SAARI@STEIGERWALDT.COM

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

UTILITIES

2

COMMUNICATIONS
JASON STERENBERG
AT&T LOCAL NETWORK - COMMUNICATION LINE
5101 THATCHER ROAD
DOWNERS GROVE, IL 60515
(708) 240-9085
JSTERENBERG@NETWORKCONNEX.COM

COMMUNICATIONS
DEAN HERRO
AT&T WISCONSIN - COMMUNICATION LINE
435 S 95TH STREET
MILWAUKEE, WI 53214
(262) 226-9639
DH2572@ATT.COM

ELECTRICITY
CHRIS DAILEY
ATC MANAGEMENT, INC. - ELECTRICITY-TRANSMISSION
P.O. BOX 47
WAUKESHA, WI 53187
(262) 506-6884
CDAILEY@ATCLLC.COM

COMMUNICATIONS
JAMES WINTER
BRIGHTSPEED OF WESTERN WISCONSIN - COMMUNICATION LINE
224 INDUSTRIAL DRIVE
NORTH PRAIRIE, WI 53153
(262) 392-5210
(262) 720-4936
JAMES.WINTER@BRIGHTSPEED.COM

WATER
PAUL ZELLNER
CITY OF DELAFIELD DEPARTMENT OF PUBLIC WORKS - WATER
500 GENESSEE ST
DELAFIELD, WI 53018
(262) 303-4627
(262) 370-8202
PZELLNER@CI.DELAFIELD.WI.US

SEWER
SCOTT LUCZAK
DELAFIELD-HARTLAND WPCC - SEWER
416 BUTLER DR
DELAFIELD, WI 53018
(262) 646-4364 EXTENSION 2
(262) 719-5132
SLDELHART@CENTURYTEL.NET

COMMUNICATIONS
SHAD GARCIA
EVERSTREAM - COMMUNICATION LINE
324 E. WISCONSIN AVE, SUITE 730
MILWAUKEE, WI 53202
(414) 522-6685
SGARCIA@EVERSTREAM.NET

SEWER
DAVE FELKNER
HARTLAND DPW, VILLAGE OF - SEWER
210 COTTONWOOD AVE
HARTLAND, WI 53029
(262) 367-2714
DAVEF@VILLAGEOFHARTLAND.WI.GOV

WATER
DAVE FELKNER
HARTLAND DPW, VILLAGE OF - WATER
210 COTTONWOOD AVE
HARTLAND, WI 53029
(262) 367-2714
DAVEF@VILLAGEOFHARTLAND.WI.GOV

COMMUNICATIONS
BRAHIM GADDOUR
LEVEL 3 COMMUNICATIONS LLC - COMMUNICATION LINE
3235 INTERTECH DR, SUITE 600
BROOKFIELD, WI 53045
(414) 908-1027
(414) 704-1026
BRAHIM.GADDOUR@LUMEN.COM

COMMUNICATIONS
CORY SCHMUKI
MIDWEST FIBER NETWORKS LLC - COMMUNICATION LINE
6070 NORTH FLINT RD
GLENDALE, WI 53209
(414) 459-3561
(414) 349-2764
CSCHMUKI@MIDWESTFIBERNETWORKS.COM

COMMUNICATIONS
JULIE PAULSON
ROGERS TELECOM - COMMUNICATION LINE
4804 N 40TH ST
SHEBOYGAN, WI 53083
(920) 459-2600
(920) 889-9832
JPAULSON@GABES.COM

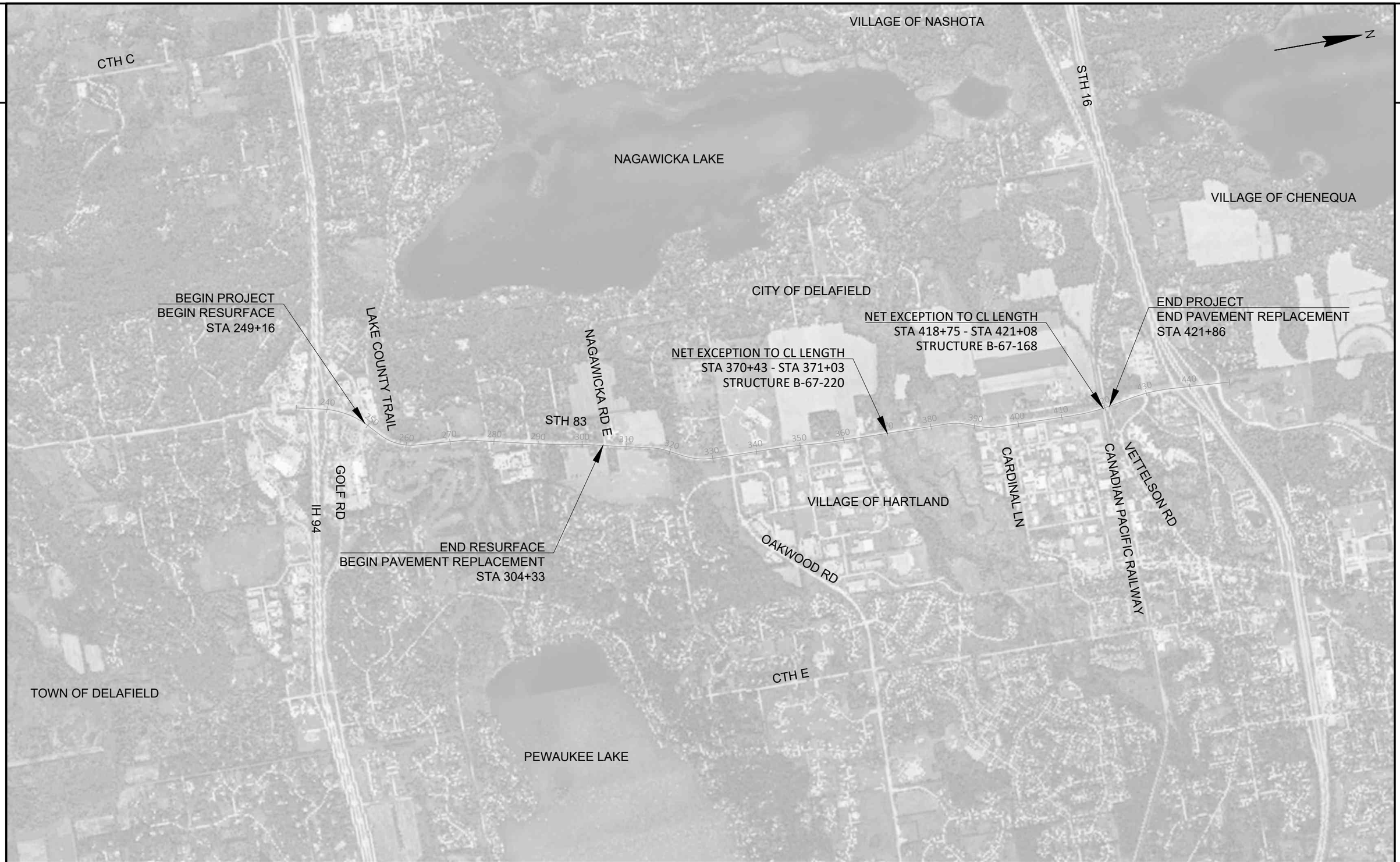
COMMUNICATIONS
BEAU ABUYA
SPECTRUM - COMMUNICATION LINE
1320 N DR MARTIN LUTHER KING JR DR
MILWAUKEE, WI 53212
(414) 758-9241
BEAU.ABUYA@CHARTER.COM

COMMUNICATIONS
RANDY CICATELLO JR.
VERIZON BUSINESS - COMMUNICATION LINE
15725 WEST RYERSON RD
NEW BERLIN, WI 53151
(262)232-1323
RANDY.CICATELLO@VERIZON.COM

ELECTRICITY
STEVEN J. KING
WE ENERGIES - ELECTRICITY
S13 W33800 HWY 18
DELAFIELD, WI 53018
(262) 968-5768
(414) 944-0570
STEVE.KING@WE-ENERGIES.COM

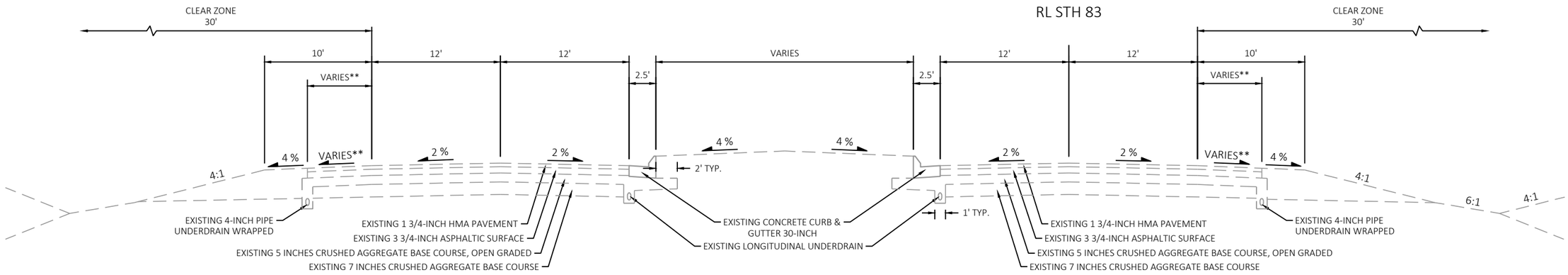
GAS/PETROLEUM
JACOB SPENCER
WE ENERGIES - GAS/PETROLEUM
S13 W33800 STH 18
DELAFIELD, WI 53018
(262) 968-7009
(414) 507-2021
WE-UTILITY-RELOCATIONS@WE-ENERGIES.COM
JACOB.SPENCER@WE-ENERGIES.COM

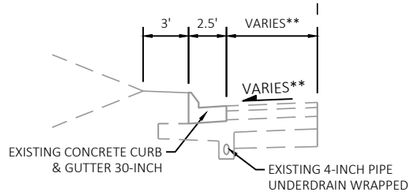
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PROJECT OVERVIEW	SHEET 4	E

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LAYOUT NAME - 01
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PLOT BY : WATT, TIMOTHY
PLOT NAME :
PLOT SCALE : 1 IN:2000 FT
WISDOT/CADDS SHEET 42



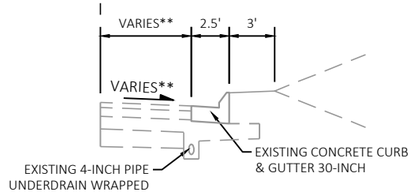


EXISTING TYPICAL SECTION

STA 249+22 - 251+50
STA 259+00 - 262+00
STA 293+00 - 303+53
STA 365+00 - 368+20
STA 374+25 - 377+00

EXISTING TYPICAL SECTION

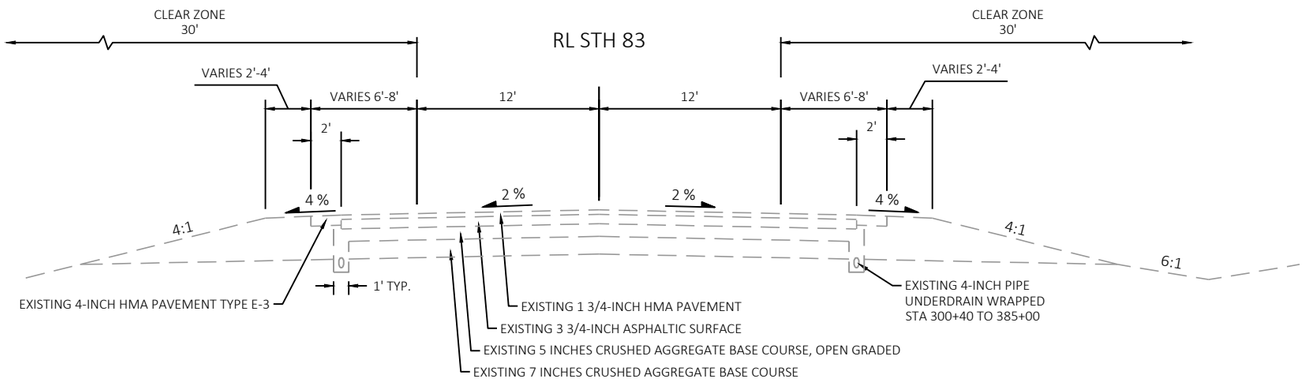
STA 249+16 - 288+00
STA 288+00 - 300+40*



EXISTING TYPICAL SECTION

STA 249+22 - 254+00
STA 273+50 - 278+00
STA 288+00 - 292+50
STA 301+00 - 303+33
STA 344+00 - 346+50

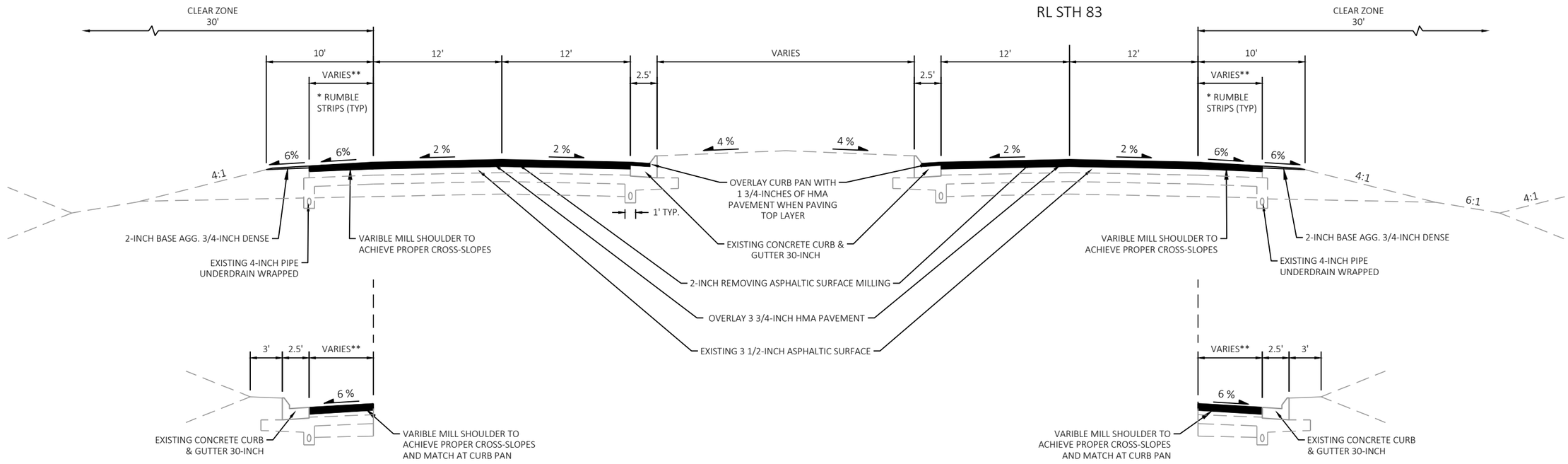
* TRANSITIONS FROM 4-LANE DIVIDED TO 2-LANE UNDIVIDED
** 3' SHOULDER AT 2%, 8' SHOULDER AT 4%, OR 12' TURN LANE AT 2%



EXISTING TYPICAL SECTION

STA 300+40 - 421+86

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	EXISTING TYPICAL SECTIONS	SHEET 5	E

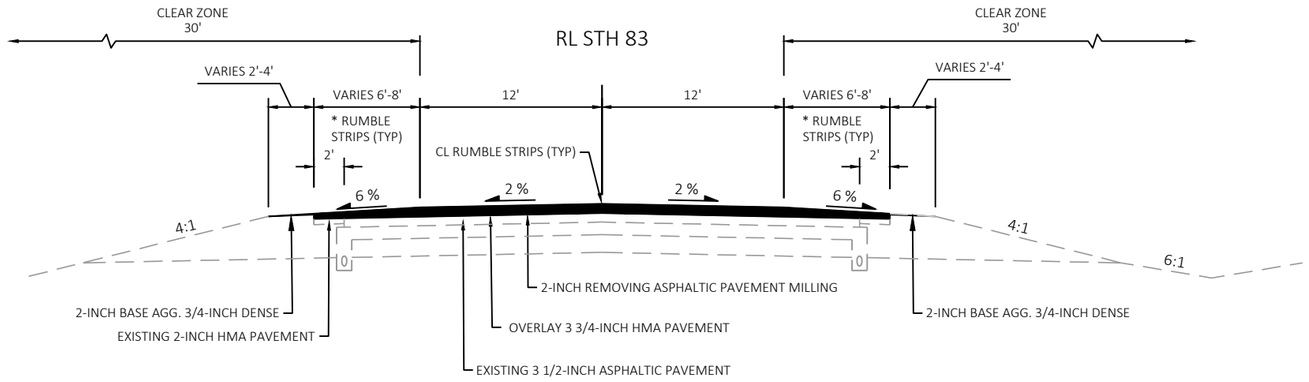


PROPOSED TYPICAL SECTION
STA 259+00 - 262+00
STA 293+00 - 303+53

FINISHED TYPICAL SECTION
STA 249+16 - 288+00
STA 288+00 - 300+40*

FINISHED TYPICAL SECTION
STA 273+50 - 278+00
STA 288+00 - 292+50
STA 301+00 - 303+33

* TRANSITIONS FROM 4-LANE DIVIDED TO 2-LANE UNDIVIDED
** 3' SHOULDER, 8' SHOULDER, OR 12' TURN LANE

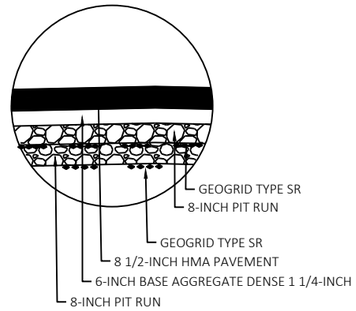


FINISHED TYPICAL SECTION
STA 300+40 - 304+33

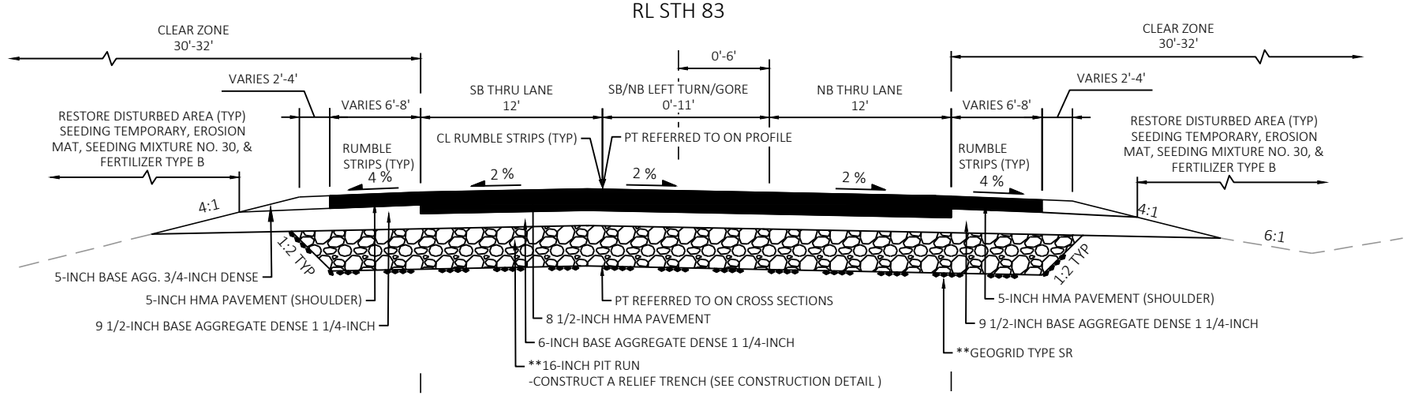
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PROPOSED TYPICAL SECTIONS - RESURFACING	SHEET 6	E

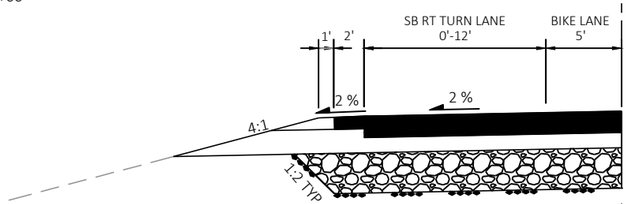
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LAYOUT NAME - 02
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WISDOT/CADDS SHEET 42

RL STH 83

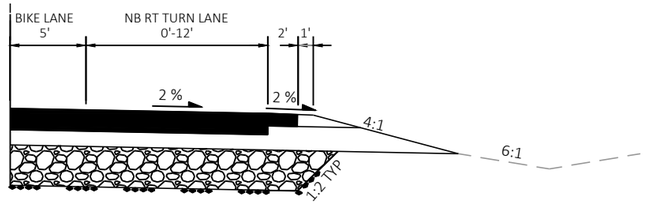


** MODIFIED SUBGRADE IMPROVEMENT
STA 372+60 TO 391+00

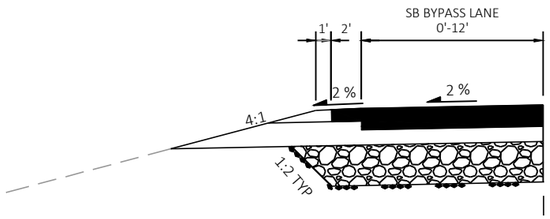




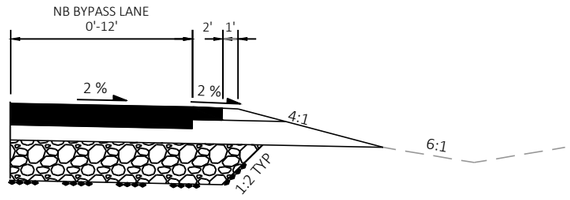
SOUTHBOUND RIGHT TURN LANE
STA 334+63 TO STA 337+91
STA 397+41 TO STA 401+75



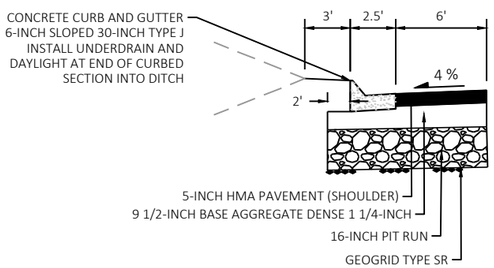
NORTHBOUND RIGHT TURN LANE
STA 329+78 TO STA 333+28
STA 394+10 TO STA 396+80



SOUTHBOUND BYPASS LANE
STA 346+75 TO STA 354+67
STA 358+23 TO STA 367+04

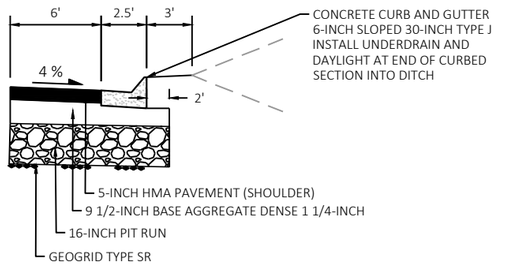


NORTHBOUND BYPASS LANE
STA 371+20 TO STA 381+12



SOUTHBOUND CURBED SHOULDER
STA 365+04 to STA 368+32
STA 374+32 TO STA 377+07

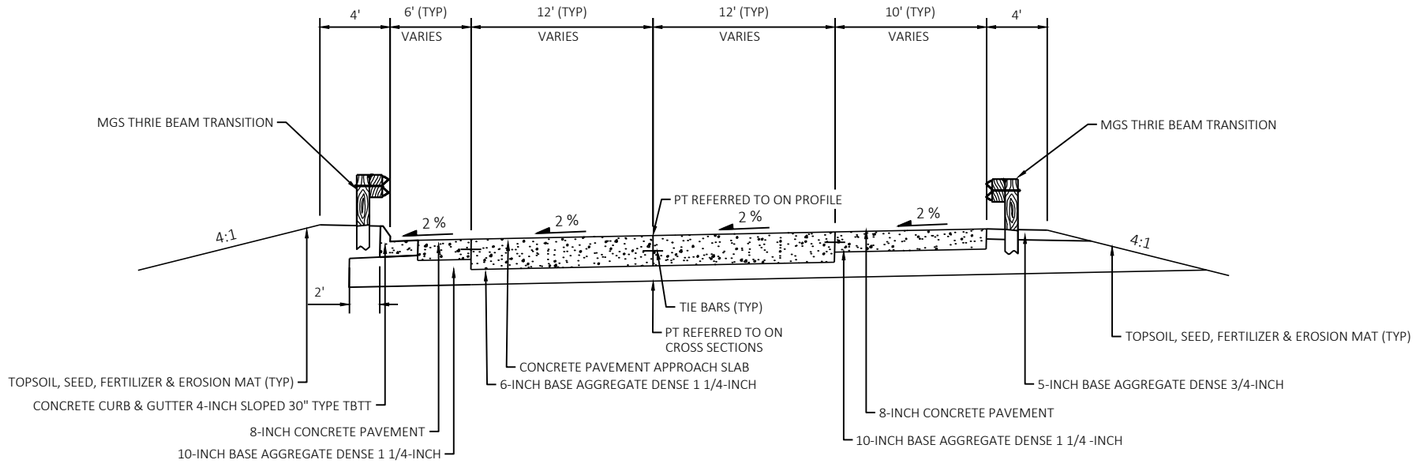
FINISHED TYPICAL SECTION
STA 304+33 - 370+43
STA 371+03 - 418+30



NORTHBOUND CURBED SHOULDER
STA 314+90 TO STA 318+13
STA 342+24 TO STA 346+81

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PROPOSED TYPICAL SECTIONS - PAVEMENT REPLACEMENT	SHEET 7	E

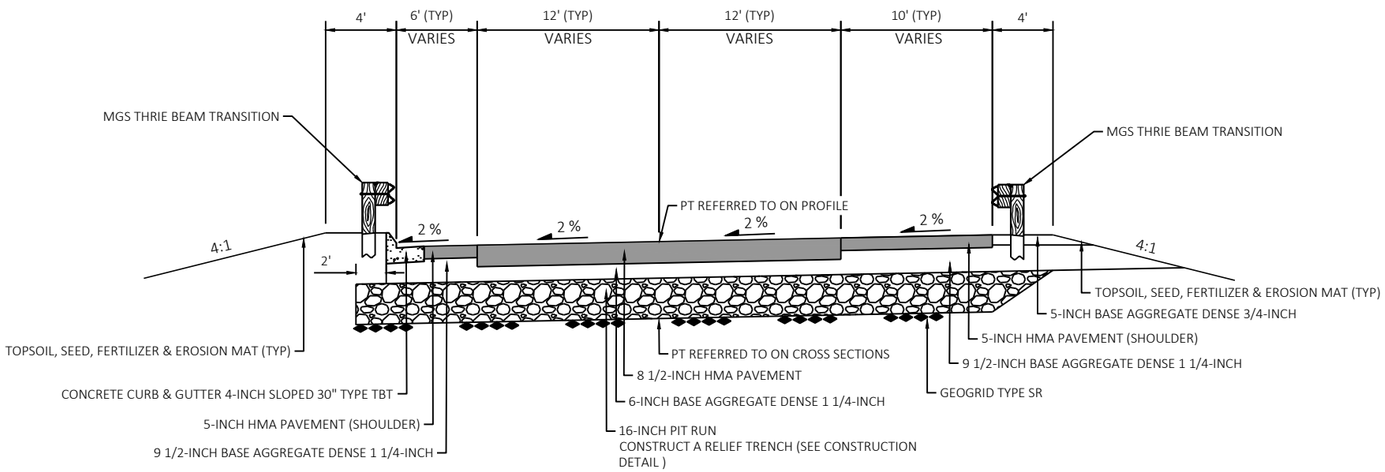
RL STH 83



FINISHED TYPICAL SECTION

STA 418+58 - 418+75
STA 421+08 - 421+24

RL STH 83

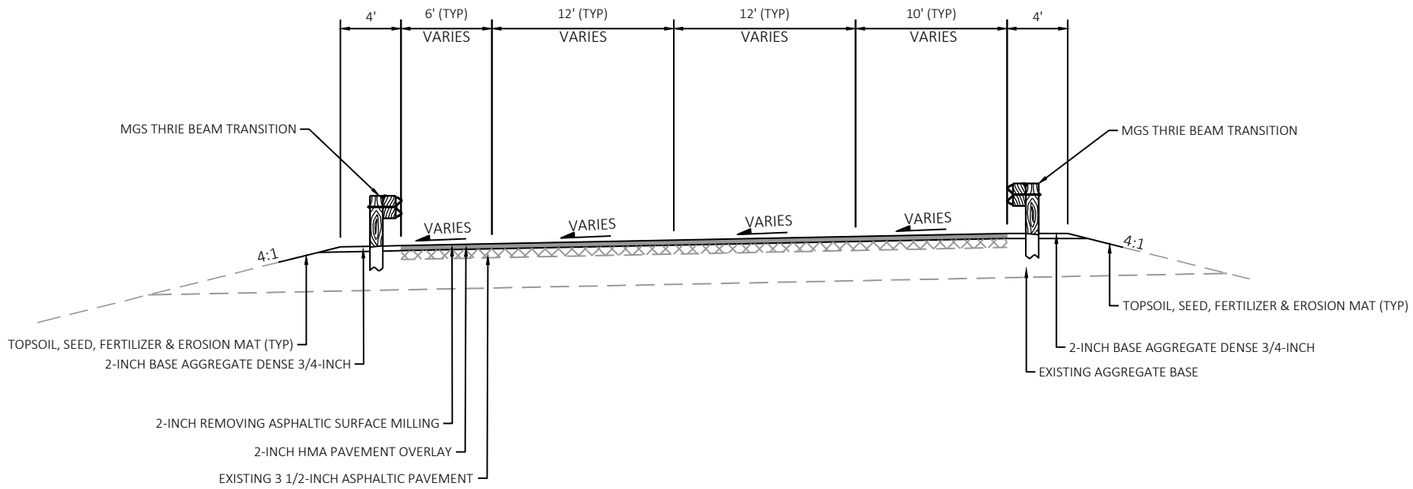


FINISHED TYPICAL SECTION

STA 418+30 - 418+58

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PROPOSED TYPICAL SECTIONS - PAVEMENT REPLACEMENT	SHEET 8	E

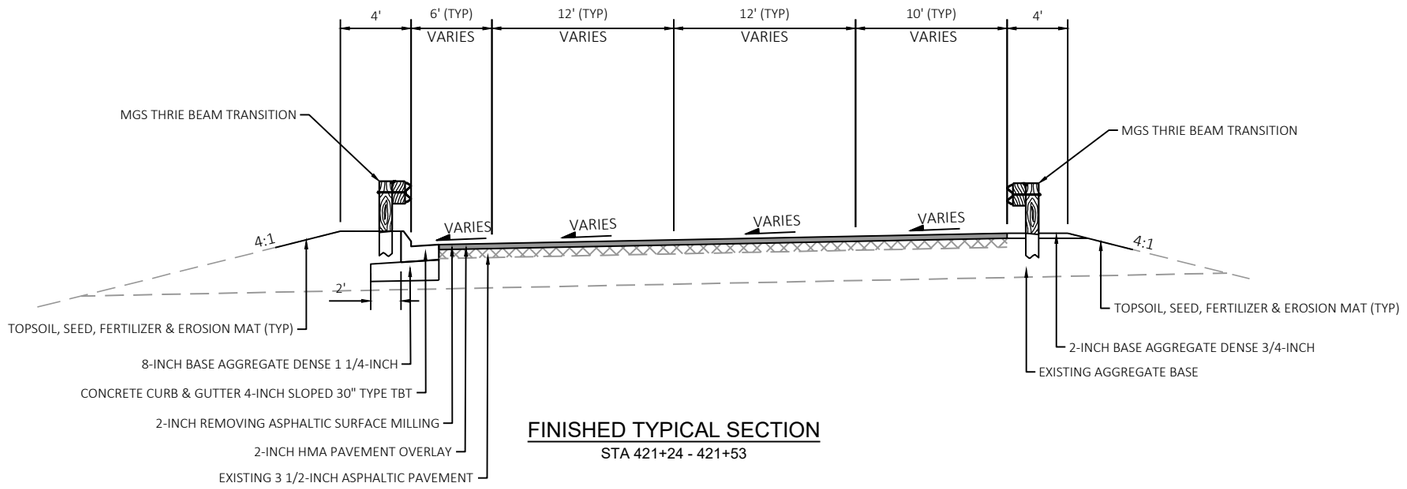
RL STH 83



FINISHED TYPICAL SECTION

STA 421+53 - 421+86

RL STH 83



FINISHED TYPICAL SECTION

STA 421+24 - 421+53

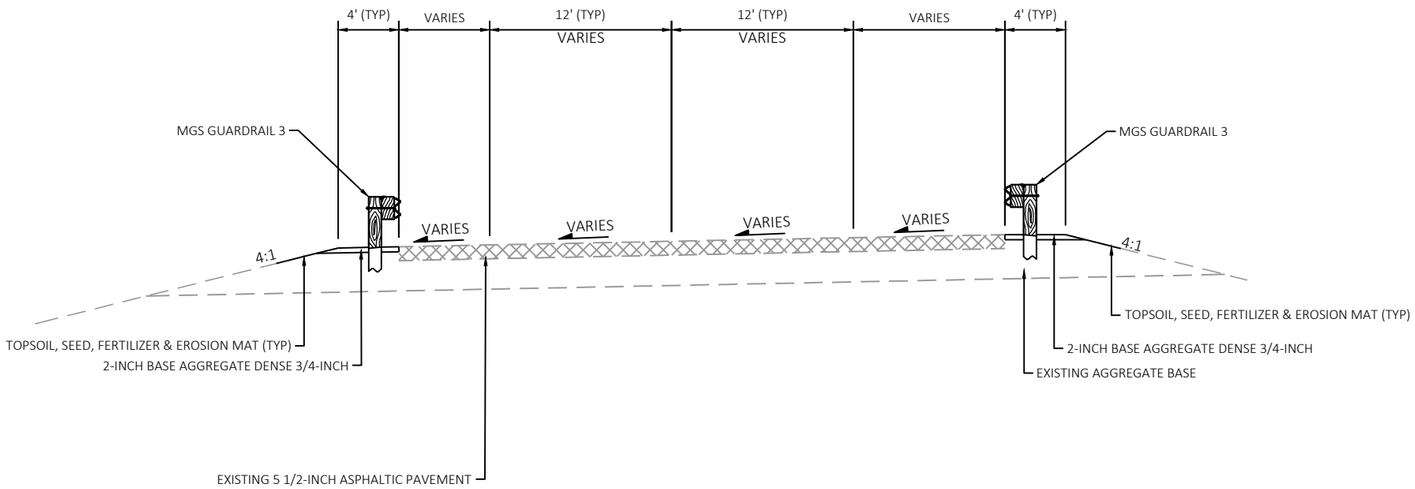
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PROPOSED TYPICAL SECTIONS - PAVEMENT REPLACEMENT	SHEET 9	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\020301_TS.DWG
LAYOUT NAME - 05

PLOT DATE : 3/21/2024 7:36 AM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

RL STH 83



FINISHED TYPICAL SECTION

STA 421+53 - 422+50

STATION	RATE (FT/FT)			
	LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
	LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER
313+43.99	-0.04	-0.02	-0.02	-0.04
313+97.33	-0.04	-0.02	-0.02	-0.04
314+50.66	-0.04	0	-0.02	-0.04
315+03.99	-0.04	0.02	-0.02	-0.04
315+57.33	-0.04	0.04	-0.04	-0.04
316+10.66	-0.04	0.06	-0.06	-0.06
318+78.12	-0.04	0.06	-0.06	-0.06
319+31.46	-0.04	0.04	-0.04	-0.04
319+84.79	-0.04	0.02	-0.02	-0.04
320+38.12	-0.04	0	-0.02	-0.04
320+91.46	-0.04	-0.02	-0.02	-0.04
321+44.79	-0.04	-0.02	-0.02	-0.04

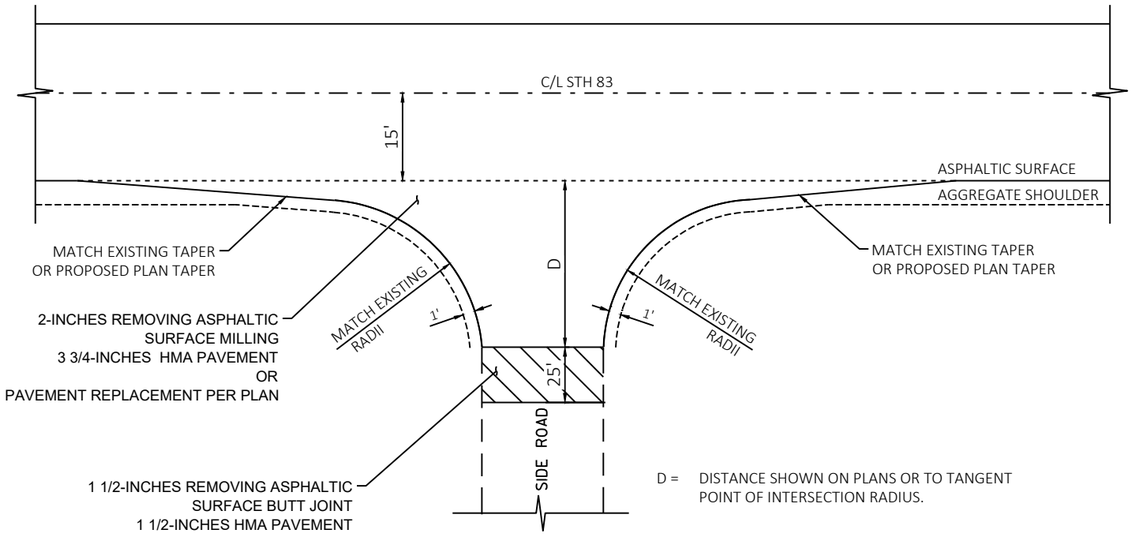
STATION	RATE (FT/FT)			
	LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
	LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER
321+26.88	-0.04	-0.02	-0.02	-0.04
321+80.21	-0.04	-0.02	-0.02	-0.04
322+33.54	-0.04	-0.02	0	-0.04
322+86.88	-0.04	-0.02	0.02	-0.04
323+40.21	-0.04	-0.04	0.04	-0.04
323+93.54	-0.06	-0.06	0.06	-0.04
329+47.87	-0.06	-0.06	0.06	-0.04
330+01.20	-0.04	-0.04	0.04	-0.04
330+54.53	-0.04	-0.02	0.02	-0.04
331+07.87	-0.04	-0.02	0	-0.04
331+61.20	-0.04	-0.02	-0.02	-0.04
332+14.53	-0.04	-0.02	-0.02	-0.04

STATION	RATE (FT/FT)			
	LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
	LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER
381+79.27	-0.04	-0.02	-0.02	-0.04
382+32.61	-0.04	-0.02	-0.02	-0.04
382+85.94	-0.04	0	-0.02	-0.04
383+39.27	-0.04	0.02	-0.02	-0.04
383+92.61	-0.04	0.04	-0.04	-0.04
384+45.94	-0.04	0.06	-0.06	-0.06
387+12.86	-0.04	0.06	-0.06	-0.06
387+66.20	-0.04	0.04	-0.04	-0.04
388+19.53	-0.04	0.02	-0.02	-0.04
388+72.86	-0.04	0	-0.02	-0.04
389+26.20	-0.04	-0.02	-0.02	-0.04
389+79.53	-0.04	-0.02	-0.02	-0.04

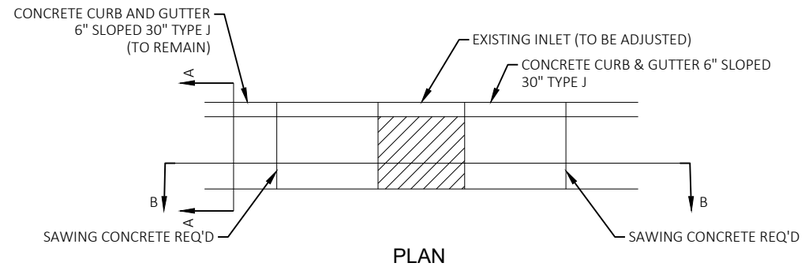
STATION	RATE (FT/FT)			
	LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
	LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER
389+34.29	-0.04	-0.02	-0.02	-0.04
389+87.62	-0.04	-0.02	-0.02	-0.04
390+40.95	-0.04	-0.02	0	-0.04
390+94.29	-0.04	-0.02	0.02	-0.04
391+47.62	-0.04	-0.04	0.04	-0.04
392+00.95	-0.06	-0.06	0.06	-0.04
394+60.06	-0.06	-0.06	0.06	-0.04
395+13.39	-0.04	-0.04	0.04	-0.04
395+66.72	-0.04	-0.02	0.02	-0.04
396+20.06	-0.04	-0.02	0	-0.04
396+73.39	-0.04	-0.02	-0.02	-0.04
397+26.72	-0.04	-0.02	-0.02	-0.04

STATION	RATE (FT/FT)			
	LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
	LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER
411+16.59	-0.04	-0.02	-0.02	-0.04
411+69.74	-0.04	-0.02	-0.02	-0.04
412+22.90	-0.04	-0.02	0	-0.04
412+76.06	-0.04	-0.02	0.02	-0.04
413+23.90	-0.04	-0.038	0.038	-0.04
420+81.99	-0.04	-0.038	0.038	-0.04
421+29.83	-0.04	-0.02	0.02	-0.04
421+82.99	-0.04	-0.02	0	-0.04
422+36.15	-0.04	-0.02	-0.02	-0.04
422+89.31	-0.04	-0.02	-0.02	-0.04

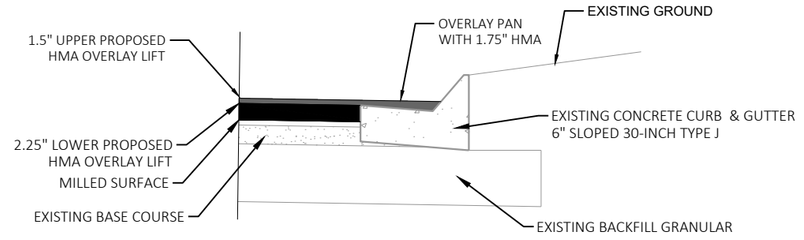
SUPER ELEVATION TABLES - PAVEMENT REPLACEMENT



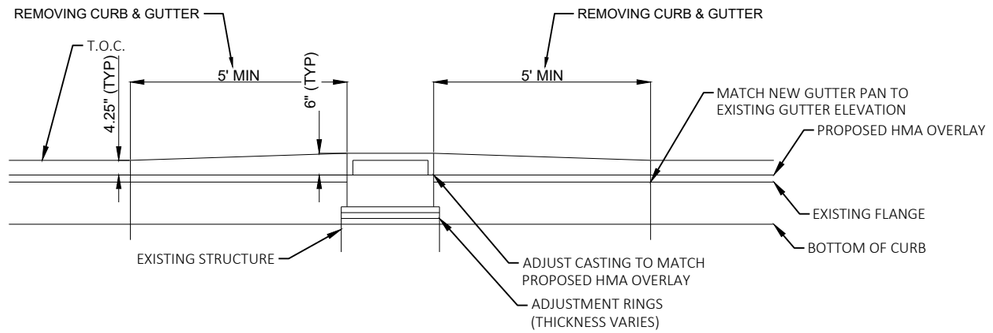
TYPICAL MAINLINE & SIDE ROAD PLAN VIEW



PLAN



SECTION "A-A"

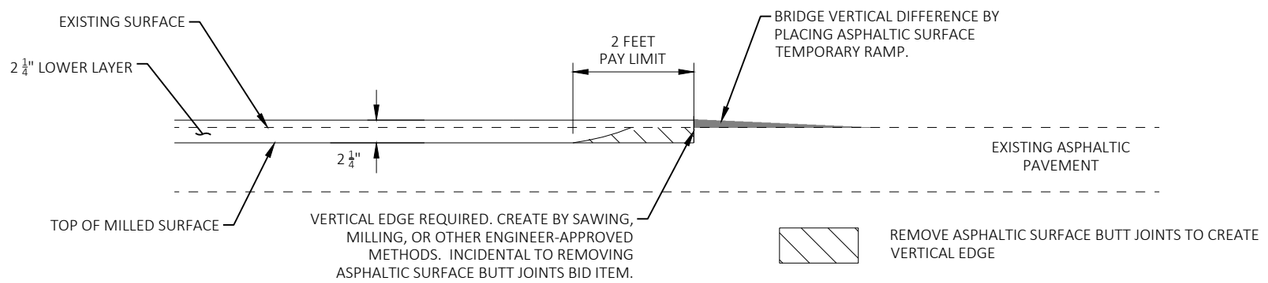


SECTION "B-B"

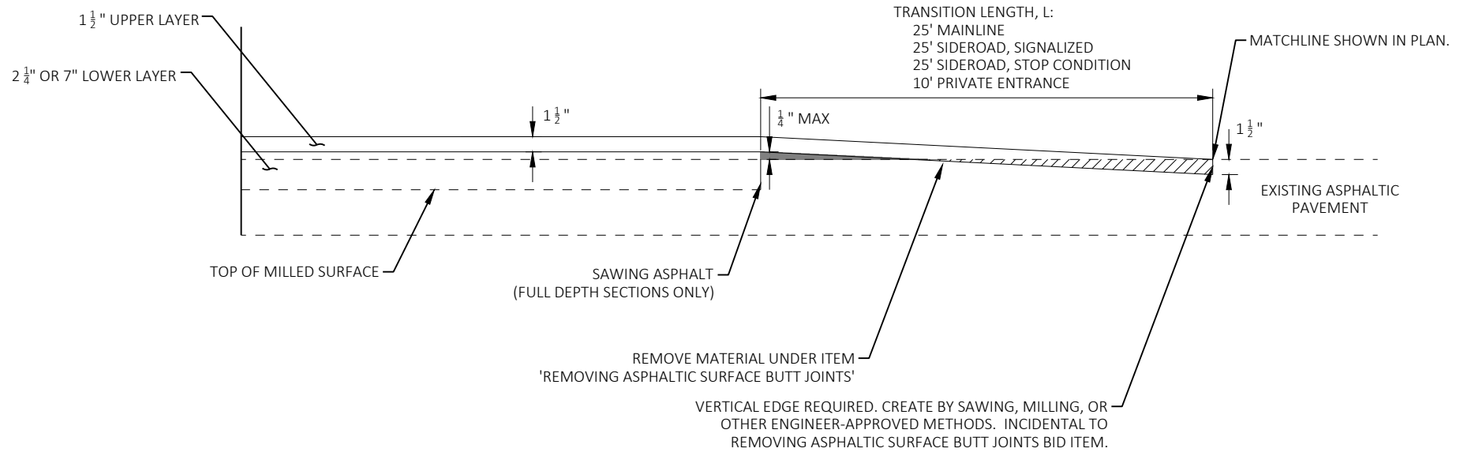
DETAIL FOR ADJUSTING INLET COVERS
STA 249+16 TO 300+40

2

OPERATIONS
- REMOVING ASPHALTIC SURFACE MILLING AND REMOVING ASPHALTIC SURFACE BUTT JOINT.
- PAVE LOWER LAYER, PAVE TEMPORARY RAMP.
- REMOVING ASPHALTIC SURFACE BUTT JOINT.
- PAVE UPPER LAYER.

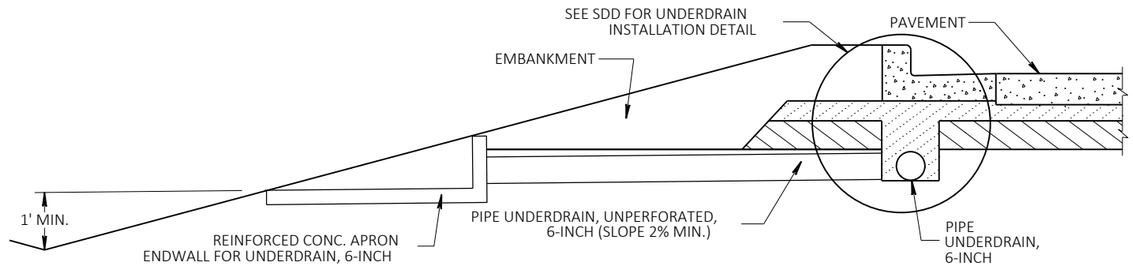


MILLING AND PAVING LOWER LAYER



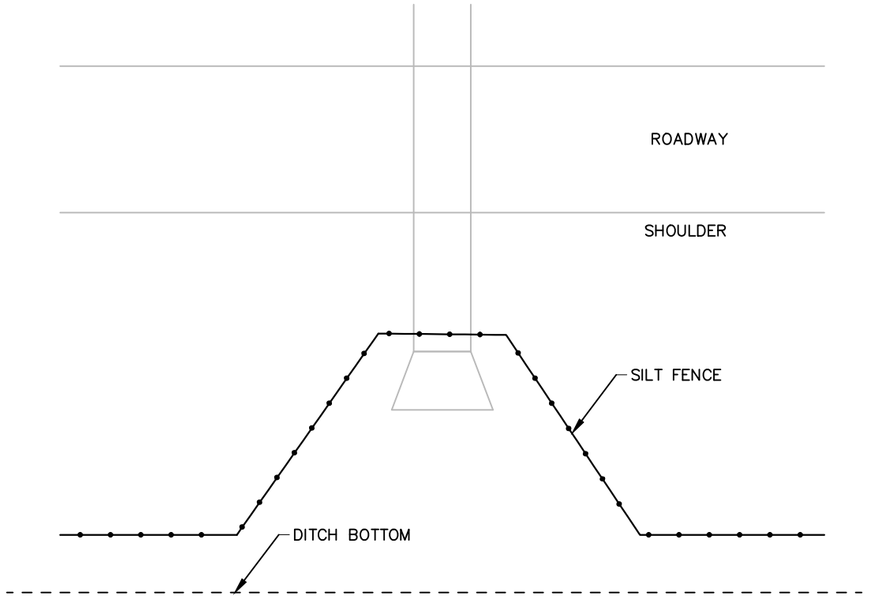
MILLING BUTT JOINT AND PAVING UPPER LAYER

2



PIPE UNDERDRAIN OUTFALL DETAIL

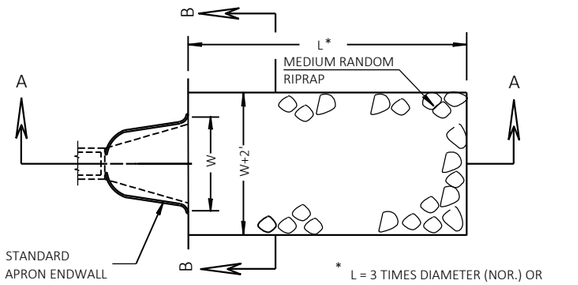
2

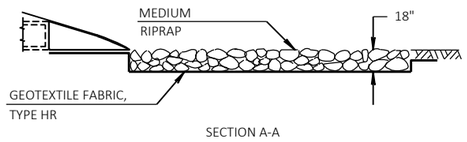


TYPICAL SILT FENCE DETAIL AT PIPE INLET

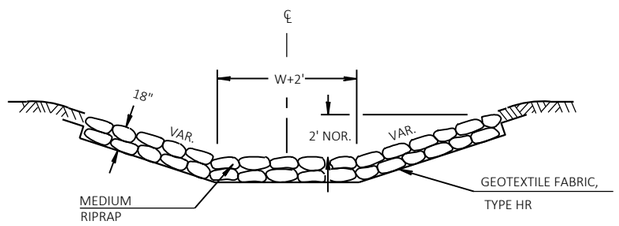
NOTE

SEE SILT FENCE SDD FOR ADDITIONAL INFORMATION.



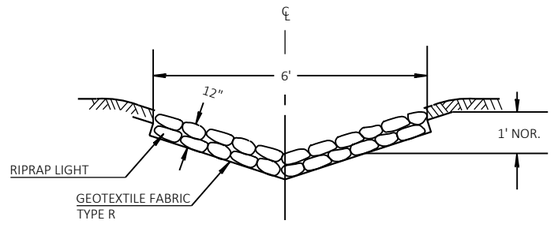


SECTION A-A

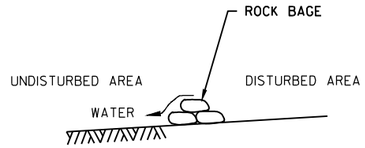


SECTION B-B

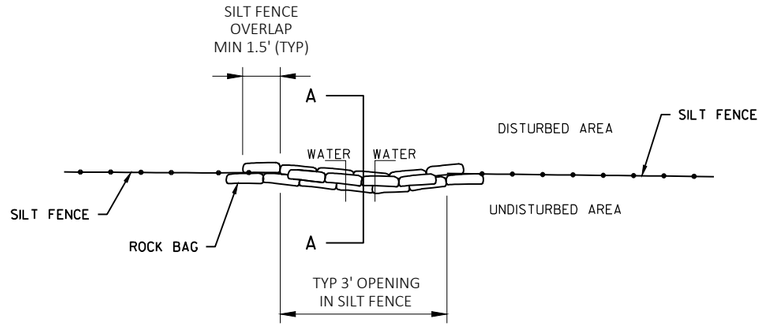
SOD, MEDIUM RANDOM RIPRAP AND GEOTEXTILE FABRIC DETAIL
AT ARPON ENDWALL



ROCK FLUME DETAIL



SECTION A-A

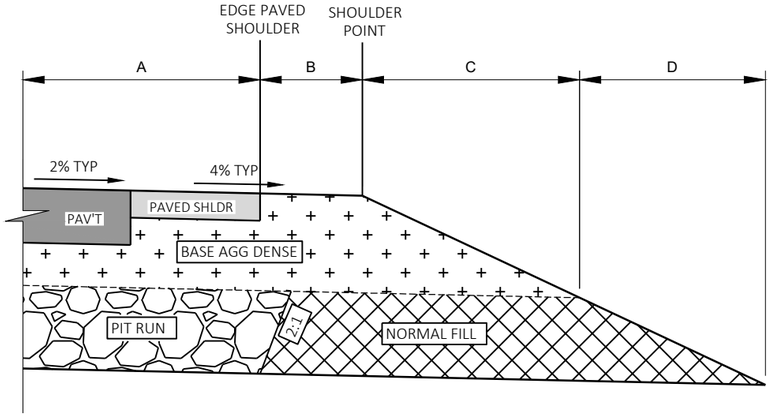


PLAN VIEW

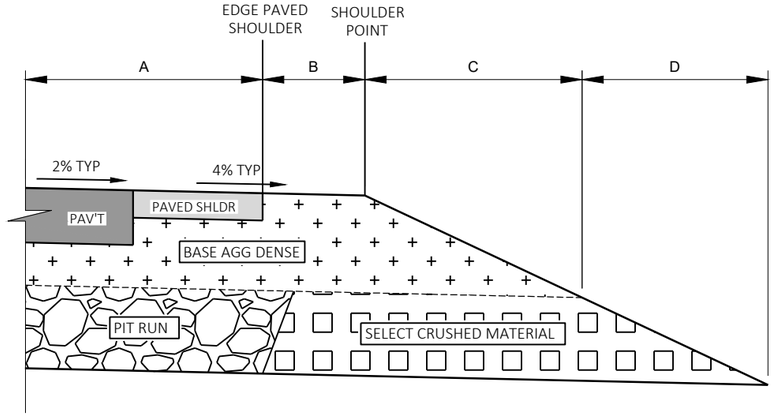
ROCK BAGS USED FOR SILT FENCE RELIEF POINT

1. DESIGNER SHALL PLACE SILT FENCE RELIEFS AS NECESSARY

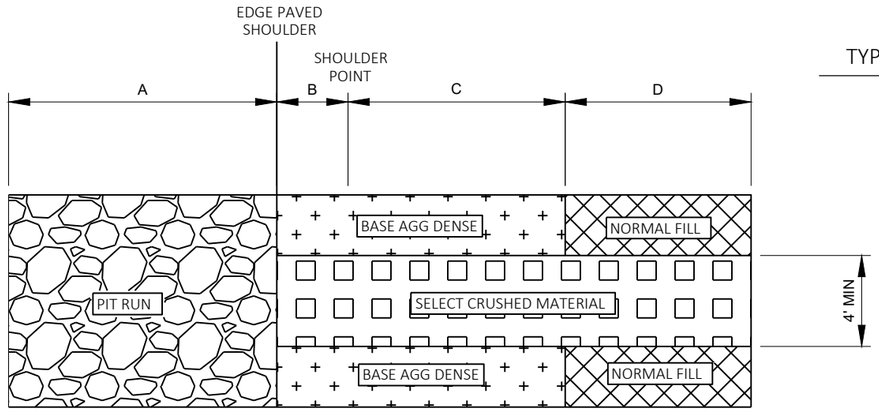
DESIGNER NOTE: PLACE SILT FENCE RELIEF AS NECESSARY
CONSULT SER EROSION CONTROL ENGINEER



TYPICAL HALF SECTION WITHOUT RELIEF TRENCH



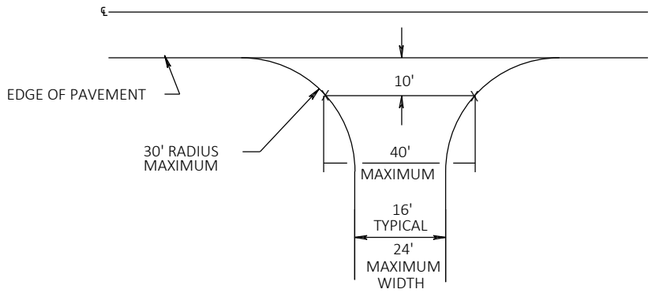
TYPICAL HALF SECTION WITH RELIEF TRENCH



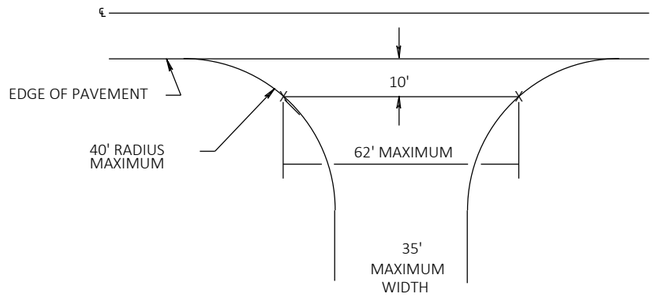
PLAN VIEW

RELIEF TRENCH DETAIL

STA 306+00, RT/LT
STA 308+00, RT/LT
STA 311+00, RT/LT
STA 313+44, RT
STA 318+50, RT
STA 319+85, RT
STA 322+00, RT/LT
STA 324+00, LT
STA 326+50, LT
STA 329+00, LT
STA 331+61, LT
STA 333+00, RT
STA 335+50, RT/LT
STA 338+00, RT/LT
STA 341+00, RT/LT
STA 344+00, LT
STA 373+50, RT/LT
STA 347+00, RT/LT
STA 349+50, RT/LT
STA 351+50, RT/LT
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STA 361+50, RT/LT
STA 364+00, RT/LT
STA 366+50, RT
STA 368+50, RT/LT
STA 377+50, RT/LT
STA 380+00, RT/LT
STA 382+50, RT/LT
STA 385+50, RT
STA 387+50, RT
STA 389+25. RT/LT
STA 391+00, LT
STA 393+00, LT
STA 395+67, LT
STA 400+00, RT/LT
STA 404+00RT/LT
STA 406+50, RT/LT
STA 409+50, RT/LT
STA 411+50, RT/LT
STA 413+50, LT
STA 418+00, LT

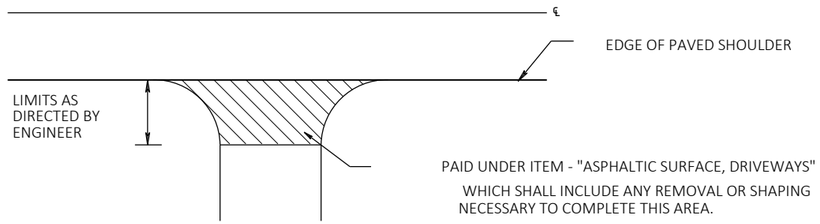


TYPICAL DRIVEWAY DETAIL
(NON-COMMERCIAL RURAL)

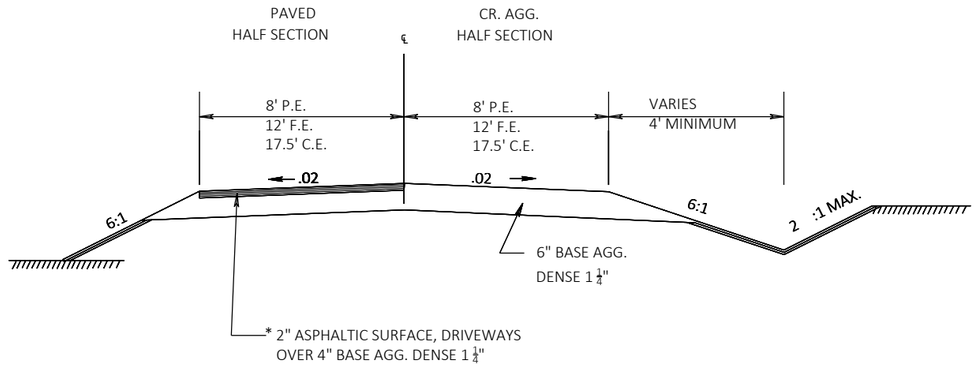


TYPICAL DRIVEWAY DETAIL
(COMMERCIAL RURAL)

RURAL DRIVEWAY DETAIL - ASPHALT



ANY ADDITIONAL BASE AGG. DENSE REQ'D. SHALL BE PAID
UNDER ITEM - "BASE AGGREGATE DENSE 1 14/-INCH"

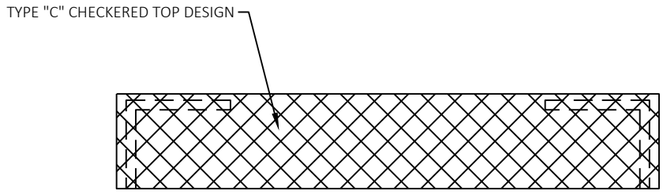


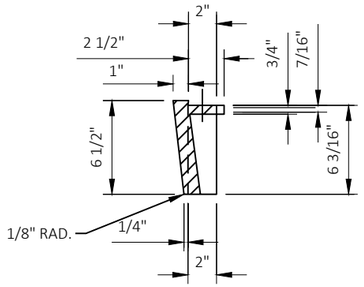
* OR MATCH EXIST.
ASPH. DEPTH

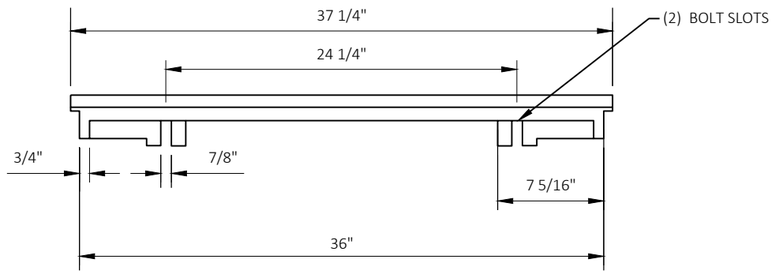
TYPICAL SECTION
FOR PRIVATE ENTRANCES

NOTE:
DRIVEWAY PROFILES NOT EXPECTED TO EXCEED
10%. PLACE LOW POINT OF DRIVEWAY PROFILE
OVER DITCH FLOW LINE.

2





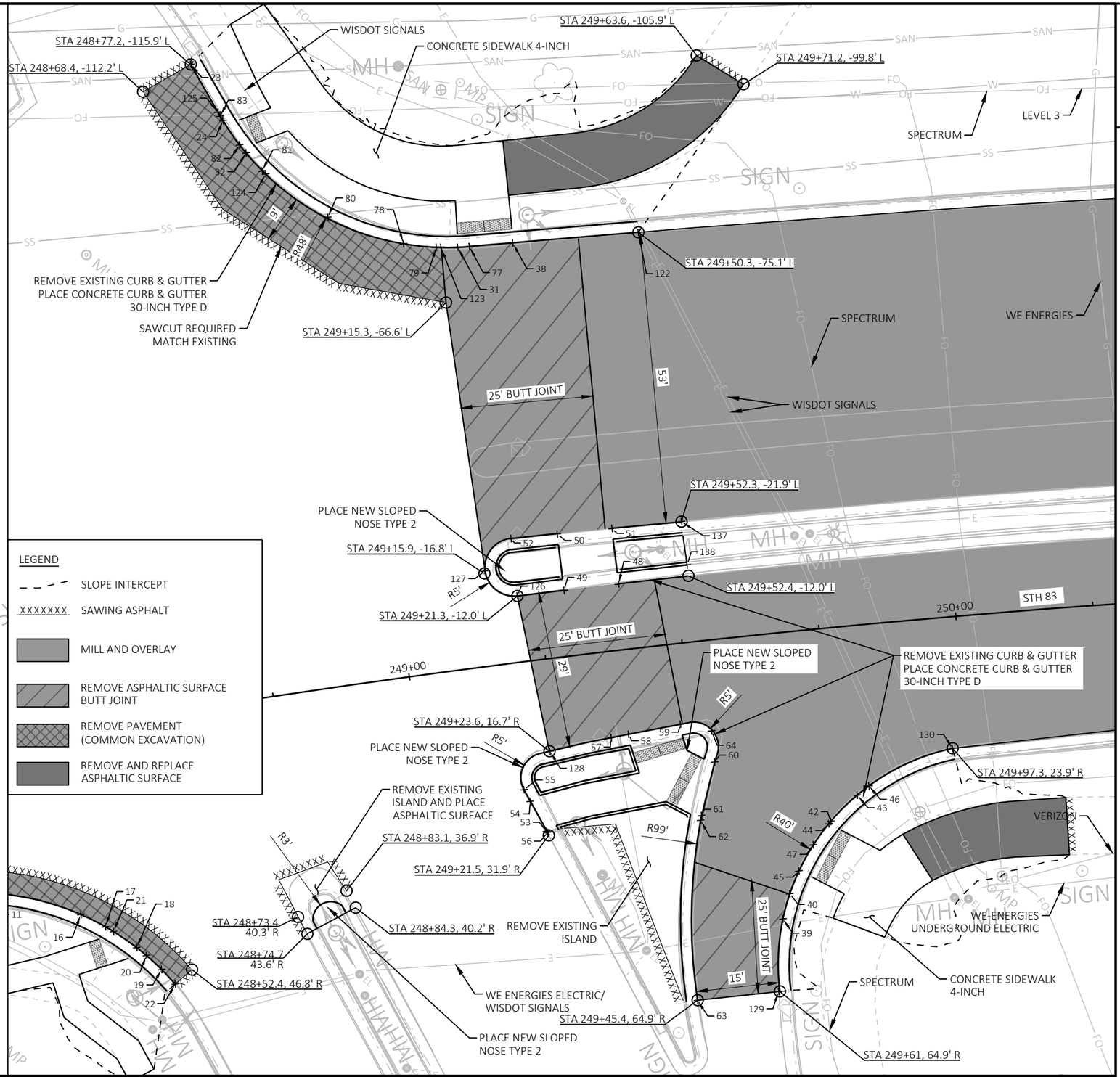


MOUNTABLE CURB PLATE

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CONSTRUCTION DETAILS	SHEET 18	E

2

CURB & GUTTER INFORMATION							
Point #	ELEVATION	CURB HEIGHT	GUTTER SLOPE	STA	OFF	NORTHING	EASTING
23	970.11	6"	4%	248+77.16	115.86 LT	176832.01	645739.27
24	970.73	0"	4%	248+81.24	104.91 LT	176827.80	645750.26
31	972.36	0"	4%	249+18.62	76.25 LT	176836.82	645797.94
32	970.85	0"	4%	248+84.35	98.48 LT	176825.86	645757.22
38	972.49	0"	4%	249+28.25	75.80 LT	176843.74	645805.19
39	970.17	6"	4%	249+63.03	51.86 RT	176779.31	645920.82
40	970.41	-	4%	249+64.79	47.43 RT	176783.66	645918.90
42	971.05	-	4%	249+73.71	35.08 RT	176798.57	645916.38
43	971.49	6"	4%	249+79.05	30.79 RT	176805.31	645917.10
44	971.01	0"	4%	249+73.29	35.48 RT	176798.00	645916.37
45	970.63	0"	4%	249+66.92	43.47 RT	176787.93	645917.57
46	971.67	6"	4%	249+81.36	29.33 RT	176807.94	645917.70
47	970.70	0"	4%	249+70.07	39.01 RT	176793.27	645916.61
48	971.71	0" / 6"	4%	249+39.75	11.94 LT	176807.74	645859.23
49	971.56	0" / 6"	4%	249+29.81	11.95 LT	176800.57	645852.26
50	971.50	0" / 6"	4%	249+29.85	22.30 LT	176807.78	645844.84
51	971.65	0" / 6"	4%	249+39.73	22.11 LT	176814.83	645851.94
52	971.18	6"	4%	249+21.50	22.50 LT	176801.83	645838.85
53	970.16	0" / 6"	4%	249+21.21	31.11 RT	176764.57	645877.38
54	970.25	0" / 6"	4%	249+18.95	25.33 RT	176766.94	645871.67
55	970.29	6"	4%	249+18.07	23.08 RT	176767.87	645869.44
56	970.15	6"	4%	249+21.40	31.31 RT	176764.56	645877.66
57	970.87	6"	4%	249+35.14	15.66 RT	176785.20	645875.80
58	970.96	0" / 6"	4%	249+38.37	15.38 RT	176787.68	645877.83
59	971.00	0" / 6"	4%	249+48.04	14.64 RT	176795.06	645884.01
60	970.95	0" / 6"	4%	249+53.55	22.17 RT	176793.65	645893.21
61	970.80	0" / 6"	4%	249+50.04	31.59 RT	176784.57	645897.48
62	970.76	6"	4%	249+49.77	32.41 RT	176783.81	645897.88
63	969.38	6"	4%	249+45.45	64.88 RT	176758.04	645918.08
64	971.18	6"	4%	249+53.59	16.47 RT	176797.69	645889.18
77	972.39	0"	4%	249+20.65	76.11 LT	176838.25	645799.50
78	971.87	6"	4%	249+09.29	78.15 LT	176831.09	645789.88
79	972.18	6"	4%	249+14.91	76.75 LT	176834.37	645794.91
80	971.40	6"	4%	248+96.83	84.79 LT	176826.16	645776.14
81	970.94	-	4%	248+86.70	94.82 LT	176825.20	645761.58
82	970.83	0"	4%	248+83.46	100.09 LT	176826.26	645755.39
83	970.68	-	4%	248+80.91	105.76 LT	176828.12	645749.40
122	973.34	6"	4%	249+50.29	75.08 LT	176859.64	645821.70
123	972.23	-	4%	249+15.70	76.61 LT	176834.87	645795.58
124	970.97	6"	4%	248+87.20	94.16 LT	176825.14	645762.42
125	970.64	6"	4%	248+80.62	106.53 LT	176828.42	645748.62
126	971.12	6"	4%	249+21.31	12.03 LT	176794.45	645846.28
127	970.85	0"	4%	249+16.11	17.26 LT	176794.27	645838.88
128	970.56	6"	4%	249+23.69	16.74 RT	176776.27	645868.70
129	969.51	6"	4%	249+60.85	64.89 RT	176768.61	645928.55
130	972.78	6"	4%	249+97.33	23.90 RT	176822.82	645925.19
137	972.24	6"	4%	249+52.28	21.94 LT	176823.77	645860.95
138	972.22	6"	4%	249+52.42	14.00 LT	176818.28	645866.70

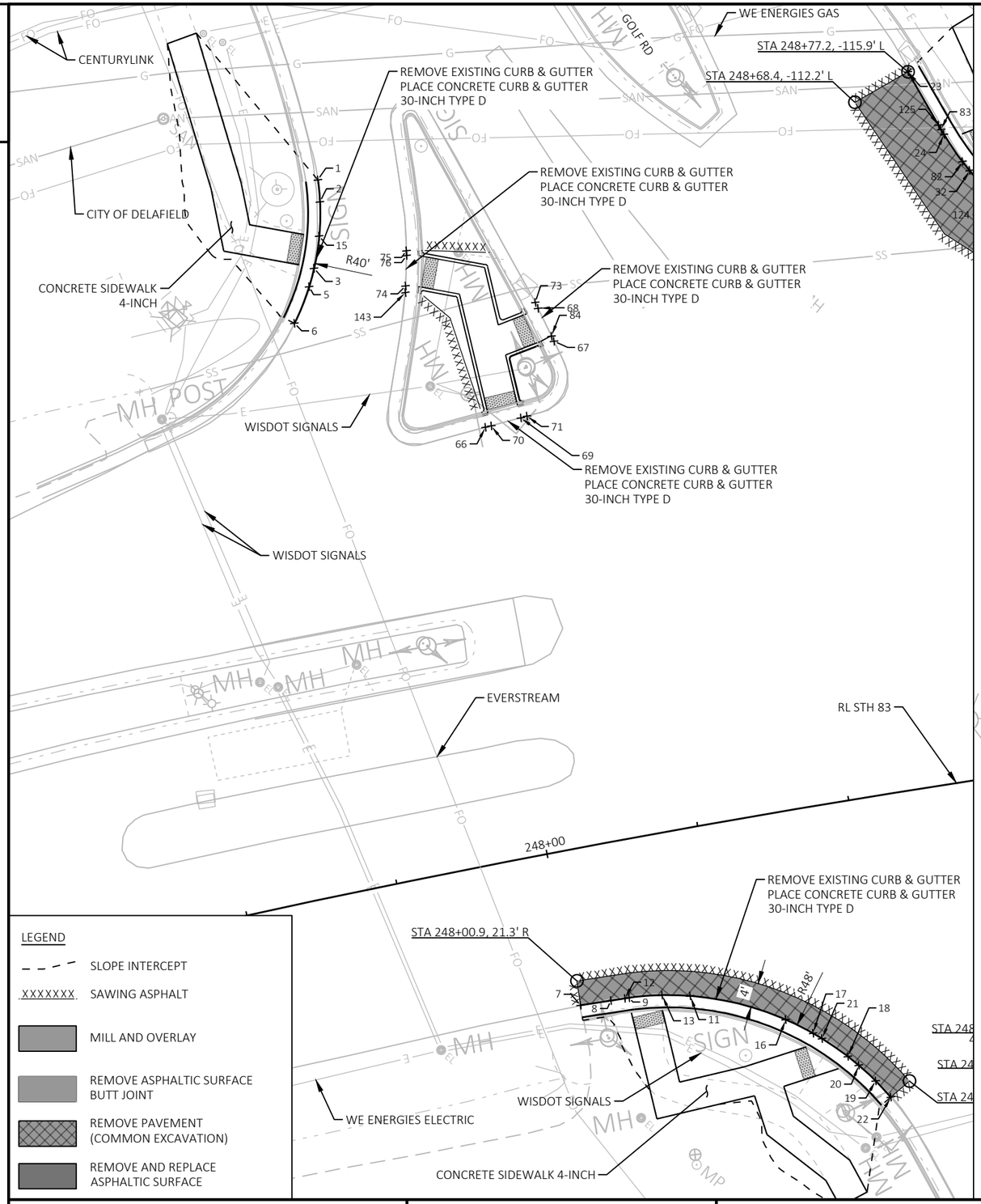


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	INTERSECTION DETAILS - GOLF RD	SHEET 19	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - Golf North

PLOT DATE : 7/12/2024 9:59 AM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

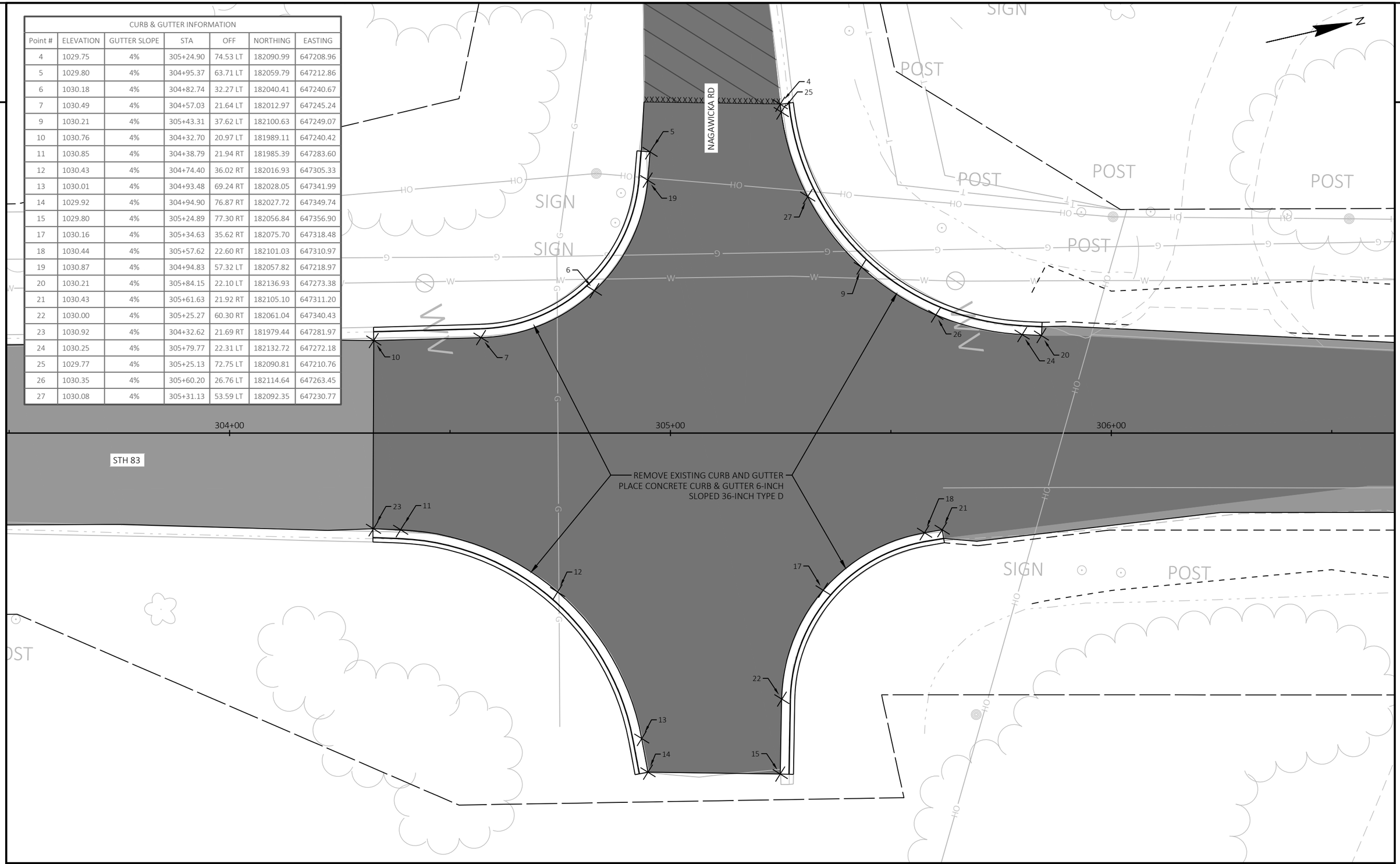
WISDOT/CADDS SHEET 42



N

CURB & GUTTER INFORMATION							
Point #	ELEVATION	CURB HEIGHT	GUTTER SLOPE	STA	OFF	NORTHING	EASTING
1	968.85	6"	4%	247+84.82	115.05 LT	176757.60	645675.62
2	968.62	6"	4%	247+84.47	111.47 LT	176755.03	645678.14
3	968.00	0"	4%	247+81.57	101.04 LT	176746.03	645684.23
5	967.85	6"	4%	247+80.26	98.27 LT	176743.20	645685.49
6	967.54	6"	4%	247+76.89	92.89 LT	176737.05	645687.40
7	965.31	6"	4%	248+00.75	25.25 RT	176680.18	645793.76
8	965.48	6"	4%	248+05.83	25.43 RT	176683.89	645797.13
9	965.58	0"	4%	248+08.88	25.53 RT	176686.13	645799.15
11	965.77	6"	4%	248+18.86	27.03 RT	176692.63	645806.68
12	965.56	0"	4%	248+08.16	25.51 RT	176685.59	645798.67
13	965.65	0"	4%	248+14.31	26.08 RT	176689.84	645803.04
15	968.27	0"	4%	247+83.33	106.04 LT	176750.65	645681.56
16	966.21	6"	4%	248+33.77	33.55 RT	176699.46	645821.21
17	966.34	0"	4%	248+37.88	36.52 RT	176700.55	645826.11
18	966.43	0"	4%	248+42.96	41.19 RT	176701.20	645832.89
19	966.60	6"	4%	248+46.86	45.85 RT	176700.97	645838.91
20	966.50	0"	4%	248+44.50	42.90 RT	176701.20	645835.18
21	966.37	0"	4%	248+39.19	37.60 RT	176700.80	645827.76
22	966.71	6"	4%	248+48.92	48.88 RT	176700.46	645842.52
66	968.00	6"	4%	248+03.09	70.24 LT	176743.55	645722.29
67	968.64	0"/6"	4%	248+16.13	81.98 LT	176761.49	645722.12
68	968.70	0"/6"	4%	248+14.62	87.73 LT	176764.02	645716.73
69	968.08	0"/6"	4%	248+08.86	70.67 LT	176748.39	645725.82
70	968.01	0"/6"	4%	248+04.03	70.29 LT	176744.33	645722.88
71	968.09	6"	4%	248+09.83	70.78 LT	176749.23	645726.39
73	968.72	6"	4%	248+14.35	88.74 LT	176764.47	645715.78
74	968.43	0"/6"	4%	247+94.98	95.33 LT	176753.22	645697.63
75	968.51	6"	4%	247+96.15	100.92 LT	176757.75	645694.14
76	968.50	0"/6"	4%	247+96.01	100.16 LT	176757.15	645694.63
84	968.65	6"	4%	248+15.89	82.87 LT	176761.88	645721.28
143	968.42	6"	4%	247+94.75	94.27 LT	176752.36	645698.29

CURB & GUTTER INFORMATION						
Point #	ELEVATION	GUTTER SLOPE	STA	OFF	NORTHING	EASTING
4	1029.75	4%	305+24.90	74.53 LT	182090.99	647208.96
5	1029.80	4%	304+95.37	63.71 LT	182059.79	647212.86
6	1030.18	4%	304+82.74	32.27 LT	182040.41	647240.67
7	1030.49	4%	304+57.03	21.64 LT	182012.97	647245.24
9	1030.21	4%	305+43.31	37.62 LT	182100.63	647249.07
10	1030.76	4%	304+32.70	20.97 LT	181989.11	647240.42
11	1030.85	4%	304+38.79	21.94 RT	181985.39	647283.60
12	1030.43	4%	304+74.40	36.02 RT	182016.93	647305.33
13	1030.01	4%	304+93.48	69.24 RT	182028.05	647341.99
14	1029.92	4%	304+94.90	76.87 RT	182027.72	647349.74
15	1029.80	4%	305+24.89	77.30 RT	182056.84	647356.90
17	1030.16	4%	305+34.63	35.62 RT	182075.70	647318.48
18	1030.44	4%	305+57.62	22.60 RT	182101.03	647310.97
19	1030.87	4%	304+94.83	57.32 LT	182057.82	647218.97
20	1030.21	4%	305+84.15	22.10 LT	182136.93	647273.38
21	1030.43	4%	305+61.63	21.92 RT	182105.10	647311.20
22	1030.00	4%	305+25.27	60.30 RT	182061.04	647340.43
23	1030.92	4%	304+32.62	21.69 RT	181979.44	647281.97
24	1030.25	4%	305+79.77	22.31 LT	182132.72	647272.18
25	1029.77	4%	305+25.13	72.75 LT	182090.81	647210.76
26	1030.35	4%	305+60.20	26.76 LT	182114.64	647263.45
27	1030.08	4%	305+31.13	53.59 LT	182092.35	647230.77



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVING DETAILS	SHEET 21	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021103_ID.DWG
LAYOUT NAME - 09

PLOT DATE : 2/1/2024 3:13 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

CURB & GUTTER INFORMATION						
Point #	ELEVATION	GUTTER SLOPE	STA	OFF	NORTHING	EASTING
28	1006.63	4%	314+89.72	18.00 RT	183011.79	647510.28
29	1006.48	4%	315+00.00	18.00 RT	183021.83	647512.49
30	1003.21	4%	315+50.00	18.00 RT	183070.67	647523.23
31	1000.10	4%	316+00.00	18.00 RT	183118.83	647534.47
32	997.08	4%	316+50.00	18.00 RT	183166.49	647547.35
33	993.95	4%	317+00.00	18.00 RT	183213.68	647561.87

2

2

MATCH LINE 317+40.20

N

RIPRAP

SIGN

315+00

316+00

317+00

28

29

30

31

32

33

REMOVE EXISTING CURB & GUTTER
PLACE CONCRETE CURB & GUTTER 6-INCH
SLOPED 30-INCH TYPE J

SIGN

RIPRAP

SIGN

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVING DETAILS	SHEET 22	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021103_ID.DWG
LAYOUT NAME - 10

PLOT DATE : 2/1/2024 3:13 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

CURB & GUTTER INFORMATION						
Point #	ELEVATION	GUTTER SLOPE	STA	OFF	NORTHING	EASTING
36	987.17	4%	318+00.00	18.00 RT	183306.38	647595.83
37	986.24	4%	318+13.17	18.00 RT	183318.40	647600.78
50	990.65	4%	317+50.00	18.00 RT	183260.32	647578.04

RIPRAP

POST

SIGN

318+00

319+00

320+00

50

36

37

SIGN

REMOVE EXISTING CURB AND GUTTER
PLACE CONCRETE CURB & GUTTER 6-INCH
SLOPED 30-INCH TYPE J

MATCH LINE 317+40.20

2

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVING DETAILS	SHEET 23	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021103_ID.DWG
LAYOUT NAME - 11

PLOT DATE : 2/1/2024 3:13 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

2

N

MIDWEST FIBER NETWORK, LEVEL 3,
SPECTRUM, AT&T TEL, AT&T LOCAL,
WE ENERGIES

EXISTING R/W

WE ENERGIES GAS

PROPOSED TLE

SPECTRUM

CITY OF DELAFIELD

SI

STA 331+29.9, -25.5' L

STA 331+25.9, -17.4' L

STA 332+18.2, -17.5' L

STA 329+70.6, -13.7' L

STA 329+78.1, 0.0' R

STA 329+78.3, 12.3' R

STA 330+07.4, 17.3' R

STA 331+28.1, 28.6' R

STA 331+28, 30.6' R

330+00

331+00

STH 83

332+00

8'

14'

12'

6'

4'

2'

1'

11'

RL STH 83

WISDOT SIGNALS

WE ENERGIES ELECTRIC

CENTURYLINK

EXISTING R/W

SI

SIGN

LEGEND

SLOPE INTERCEPT

REPLACE PAVEMENT

PAVED SHOULDERS

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	INTERSECTION DETAILS - OAKWOOD RD	SHEET 24	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 02

PLOT DATE : 1/31/2024 8:46 PM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

2

CONCRETE SURFACE DRAIN

MIDWEST FIBER NETWORK, LEVEL 3, SPECTRUM, AT&T TEL, AT&T LOCAL, WE ENERGIES

OAKWOOD RD

STA 333+51.7, -83.2' L

STA 334+08.1, -78.5' L

STA 334+05.8, -75.3' L

STA 334+09.9, -66.0' L

AT&T

CONCRETE SURFACE DRAIN

SPECTRUM

EXISTING R/W

N

REMOVE EXISTING CURB & GUTTER PLACE CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

CONCRETE SIDEWALK 4-INCH

SI

CONCRETE SIDEWALK 4-INCH

REMOVE EXISTING CURB & GUTTER PLACE CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

WISDOT SIGNALS

R41'

R60'

CITY OF DELAFIELD WATER

STA 332+54.6, -25.5' L

STA 332+60.6, -27.5' L

STA 332+48.7, -22.5' L

STA 333+17.5, -30.8' L

SPECTRUM

WE ENERGIES ELECTRIC

RL OAKWOOD RD

STA 334+63.2, -33.5' L

WE ENERGIES GAS

WISDOT SIGNALS

STH 83

333+00

334+00

335+00

WE ENERGIES GAS

AT&T

WISDOT SIGNALS

RL STH 83

STA 333+09.9, 29.6' R

R60'

STA 334+50.4, 32.5' R

R38'

STA 335+10.9, 27.5' R

STA 335+16.5, 25.5' R

CONCRETE SIDEWALK 4-INCH

EXISTING R/W

CONCRETE SIDEWALK 4-INCH

REMOVE EXISTING CURB & GUTTER PLACE CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

REMOVE EXISTING CURB & GUTTER PLACE CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

VILLAGE OF HARTLAND

STA 333+70.4, 92.8' R

STA 334+17.1, 73.0' R

CONCRETE SURFACE DRAIN

EXISTING R/W

46'

MATCH LINE 332+50

LEGEND

SLOPE INTERCEPT

XXXXXXX SAWING ASPHALT

REPLACE PAVEMENT

PAVED SHOULDERS

REMOVE ASPHALTIC SURFACE BUTT JOINT

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	INTERSECTION DETAILS - OAKWOOD RD	SHEET 25	E

2

2

MATCH LINE 338+40

MIDWEST FIBER NETWORK, LEVEL 3, SPECTRUM, AT&T TEL, AT&T LOCAL, WE ENERGIES

WE ENERGIES

N

PROPOSED TLE

EXISTING R/W

CITY OF DELAFIELD

SIGN

STA 336+40.5, -36.5' L

STA 336+40.5, -35.5' L

SI

STA 337+03.4, -29.8' L

STA 337+40.8, -24.8' L

WE ENERGIES GAS
WISDOT SIGNALS

SIGN

STA 336+40.4, -33.5' L

1'

2'

11'

5'

12'

4'

6'

STA 337+90.7, -17.5' L

12'

336+00

STH 83

337+00

338+00

11'

12'

RL STH 83

STA 338+07.5, 17.4' R

8'

8'

SIGN

STA 337+97.8, 25.5' R

2'

7'

SI

EXISTING R/W

POST

MH

MATCH LINE 335+50

LEGEND

SLOPE INTERCEPT

REPLACE PAVEMENT

PAVED SHOULDERS

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	INTERSECTION DETAILS - OAKWOOD RD	SHEET 26	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 04

PLOT DATE : 1/31/2024 8:46 PM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

N

MIDWEST FIBER NETWORK, LEVEL 3,
SPECTRUM, AT&T TEL, AT&T LOCAL,
WE ENERGIES

EXISTING R/W

WE ENERGIES GAS

SI

WISDOT SIGNALS

CITY OF DELAFIELD

SIGN

SIGN

SIGN

STA 340+13.1, -22.0' L

STA 340+13.1, -18.0' L

STA 340+13.1, -12.0' L

STA 340+11, 0.0'

STA 340+11, 12.0' R

STA 340+11, 20.0' R

STA 340+11, 22.0' R

4"

6"

12"

8"

2"

RL STH 83

339+00

STH 83

340+00

341+00

POST

SI

EXISTING R/W

MATCH LINE 338+40

LEGEND

SLOPE INTERCEPT

REPLACE PAVEMENT

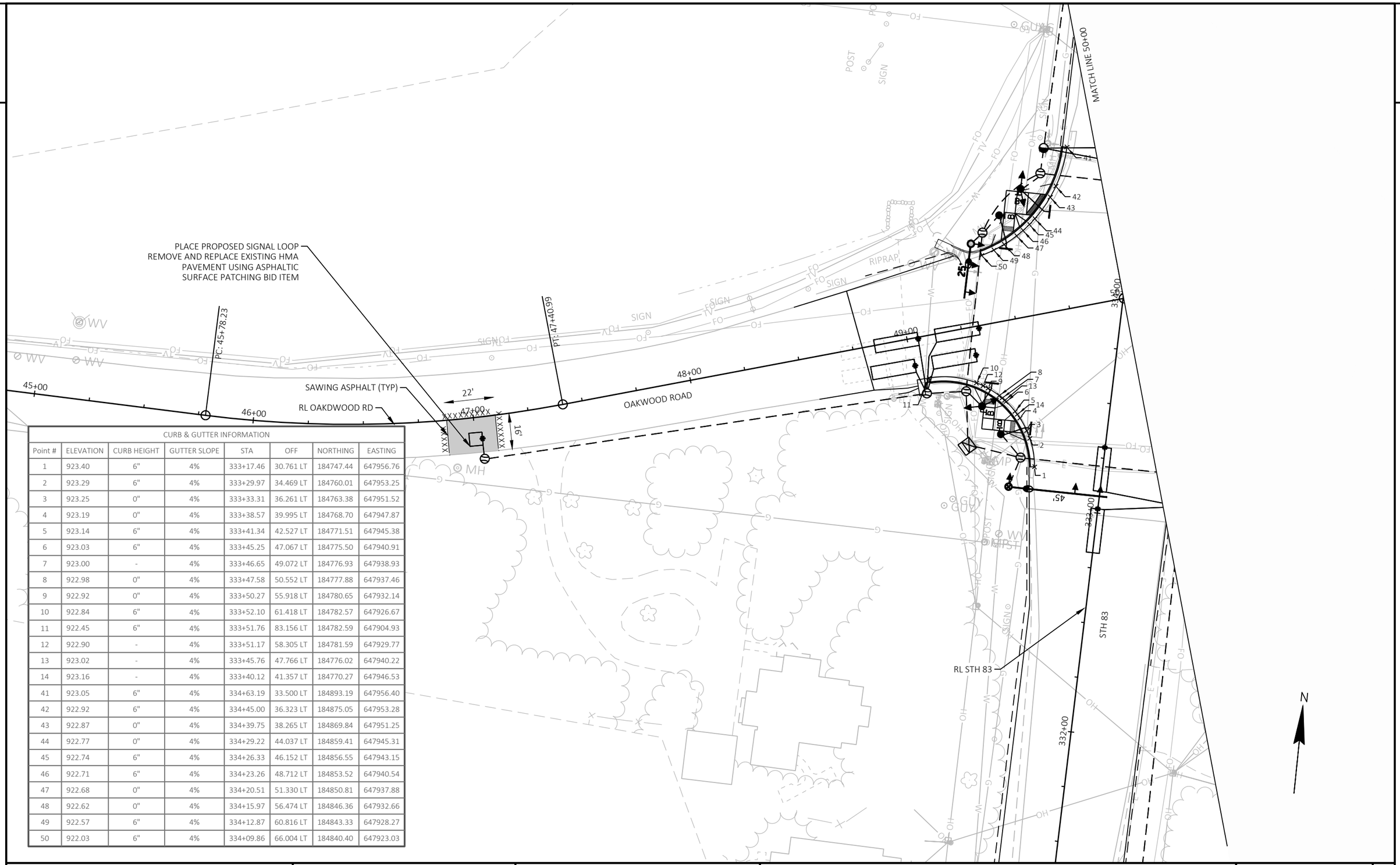
PAVED SHOULDERS

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	INTERSECTION DETAILS - OAKWOOD RD	SHEET 27	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 05

PLOT DATE : 1/31/2024 8:46 PM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

2



CURB & GUTTER INFORMATION							
Point #	ELEVATION	CURB HEIGHT	GUTTER SLOPE	STA	OFF	NORTHING	EASTING
1	923.40	6"	4%	333+17.46	30.761 LT	184747.44	647956.76
2	923.29	6"	4%	333+29.97	34.469 LT	184760.01	647953.25
3	923.25	0"	4%	333+33.31	36.261 LT	184763.38	647951.52
4	923.19	0"	4%	333+38.57	39.995 LT	184768.70	647947.87
5	923.14	6"	4%	333+41.34	42.527 LT	184771.51	647945.38
6	923.03	6"	4%	333+45.25	47.067 LT	184775.50	647940.91
7	923.00	-	4%	333+46.65	49.072 LT	184776.93	647938.93
8	922.98	0"	4%	333+47.58	50.552 LT	184777.88	647937.46
9	922.92	0"	4%	333+50.27	55.918 LT	184780.65	647932.14
10	922.84	6"	4%	333+52.10	61.418 LT	184782.57	647926.67
11	922.45	6"	4%	333+51.76	83.156 LT	184782.59	647904.93
12	922.90	-	4%	333+51.17	58.305 LT	184781.59	647929.77
13	923.02	-	4%	333+45.76	47.766 LT	184776.02	647940.22
14	923.16	-	4%	333+40.12	41.357 LT	184770.27	647946.53
41	923.05	6"	4%	334+63.19	33.500 LT	184893.19	647956.40
42	922.92	6"	4%	334+45.00	36.323 LT	184875.05	647953.28
43	922.87	0"	4%	334+39.75	38.265 LT	184869.84	647951.25
44	922.77	0"	4%	334+29.22	44.037 LT	184859.41	647945.31
45	922.74	6"	4%	334+26.33	46.152 LT	184856.55	647943.15
46	922.71	6"	4%	334+23.26	48.712 LT	184853.52	647940.54
47	922.68	0"	4%	334+20.51	51.330 LT	184850.81	647937.88
48	922.62	0"	4%	334+15.97	56.474 LT	184846.36	647932.66
49	922.57	6"	4%	334+12.87	60.816 LT	184843.33	647928.27
50	922.03	6"	4%	334+09.86	66.004 LT	184840.40	647923.03

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	INTERSECTION DETAILS - PROPOSED SIGNAL LOOPS OAKWOOD	SHEET 28	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021102_ID.DWG
LAYOUT NAME - 01-OAKWOOD
PLOT DATE : 7/12/2024 10:06 AM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

CURB & GUTTER INFORMATION							
Point #	ELEVATION	CURB HEIGHT	GUTTER SLOPE	STA	OFF	NORTHING	EASTING
15	922.75	6"	4%	333+70.45	92.786 RT	184798.40	648081.15
16	922.82	6"	4%	333+69.18	82.518 RT	184797.30	648070.87
17	922.90	6"	4%	333+66.84	71.627 RT	184795.14	648059.94
18	922.98	6"	4%	333+62.53	61.357 RT	184791.00	648049.60
19	923.00	6"	4%	333+60.95	58.577 RT	184789.46	648046.79
20	923.03	0"	4%	333+58.59	54.981 RT	184787.17	648043.16
21	923.08	0"	4%	333+54.51	49.829 RT	184783.17	648037.94
22	923.11	6"	4%	333+50.95	46.144 RT	184779.67	648034.20
23	923.18	6"	4%	333+43.17	39.887 RT	184771.99	648027.82
24	923.21	-	4%	333+40.60	38.252 RT	184769.45	648026.14
25	923.21	0"	4%	333+39.55	37.631 RT	184768.41	648025.50
26	923.26	0"	4%	333+34.29	34.936 RT	184763.19	648022.72
27	923.28	6"	4%	333+30.76	33.474 RT	184759.68	648021.20

CURB & GUTTER INFORMATION							
Point #	ELEVATION	CURB HEIGHT	GUTTER SLOPE	STA	OFF	NORTHING	EASTING
28	923.36	6"	4%	333+09.94	29.622 RT	184738.94	648017.01
29	922.96	6"	4%	334+17.11	73.010 RT	184845.38	648062.14
30	923.18	6"	4%	334+18.84	58.938 RT	184847.34	648048.10
31	923.24	0"	4%	334+20.66	54.264 RT	184849.24	648043.46
32	923.30	0"	4%	334+23.75	48.861 RT	184852.42	648038.11
33	923.35	6"	4%	334+26.67	45.120 RT	184855.39	648034.41
34	923.37	6"	4%	334+28.03	43.657 RT	184856.78	648032.97
35	923.40	0"	4%	334+30.46	41.393 RT	184859.24	648030.75
36	923.51	0"	4%	334+41.26	34.868 RT	184870.16	648024.40
37	923.55	6"	4%	334+46.37	33.244 RT	184875.28	648022.86
38	923.59	6"	4%	334+50.35	32.495 RT	184879.28	648022.18
39	923.21	-	4%	334+19.47	57.094 RT	184848.00	648046.27
40	923.33	-	4%	334+25.38	46.652 RT	184854.08	648035.92

RL STH 83

STH 83

335+00

PI: 50+00.00

45'

OAKWOOD ROAD

51+00

52+00

53+00

54+00

55+00

RL OAKWOOD ROAD

REMOVE EXISTING CURB & GUTTER
PLACE CONCRETE CURB & GUTTER
30-INCH TYPE D

ROSE DR

SAWING ASPHALT (TYP)

PLACE PROPOSED SIGNAL LOOP
REMOVE AND REPLACE EXISTING
HMA PAVEMENT USING ASPHALTIC
SURFACE PATCHING BID ITEM

SAWING ASPHALT (TYP)

PLACE PROPOSED SIGNAL LOOP
REMOVE AND REPLACE EXISTING HMA
PAVEMENT USING ASPHALTIC
SURFACE PATCHING BID ITEM

FOXWOOD RD

MATCH LINE 50+00

N

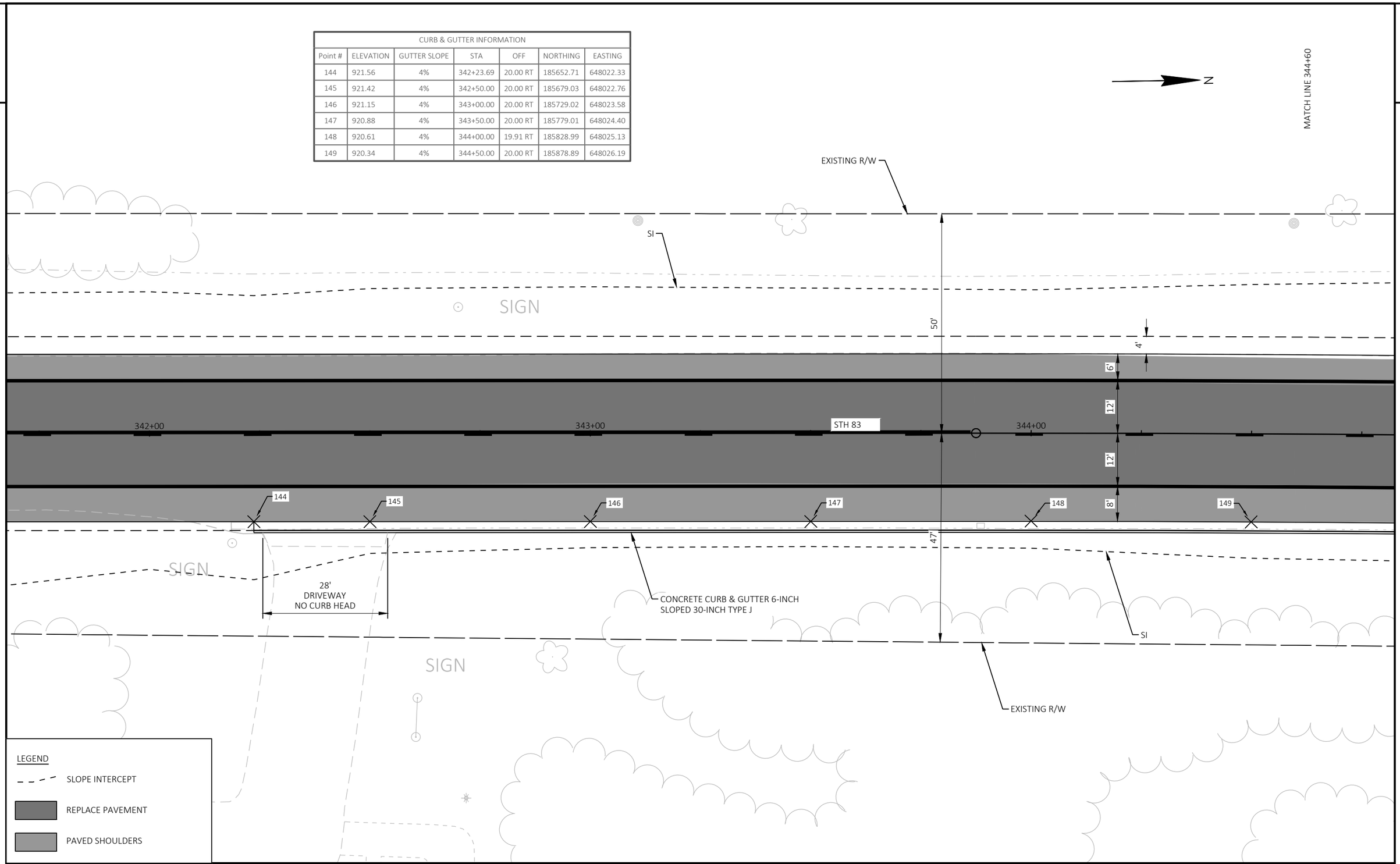
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	INTERSECTION DETAILS - PROPOSED SIGNAL LOOPS OAKWOOD	SHEET 29 E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021102_ID.DWG
LAYOUT NAME - 02-OAKWOOD

PLOT DATE : 7/12/2024 10:06 AM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

CURB & GUTTER INFORMATION						
Point #	ELEVATION	GUTTER SLOPE	STA	OFF	NORTHING	EASTING
144	921.56	4%	342+23.69	20.00 RT	185652.71	648022.33
145	921.42	4%	342+50.00	20.00 RT	185679.03	648022.76
146	921.15	4%	343+00.00	20.00 RT	185729.02	648023.58
147	920.88	4%	343+50.00	20.00 RT	185779.01	648024.40
148	920.61	4%	344+00.00	19.91 RT	185828.99	648025.13
149	920.34	4%	344+50.00	20.00 RT	185878.89	648026.19



2

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVING DETAILS	SHEET 30	E

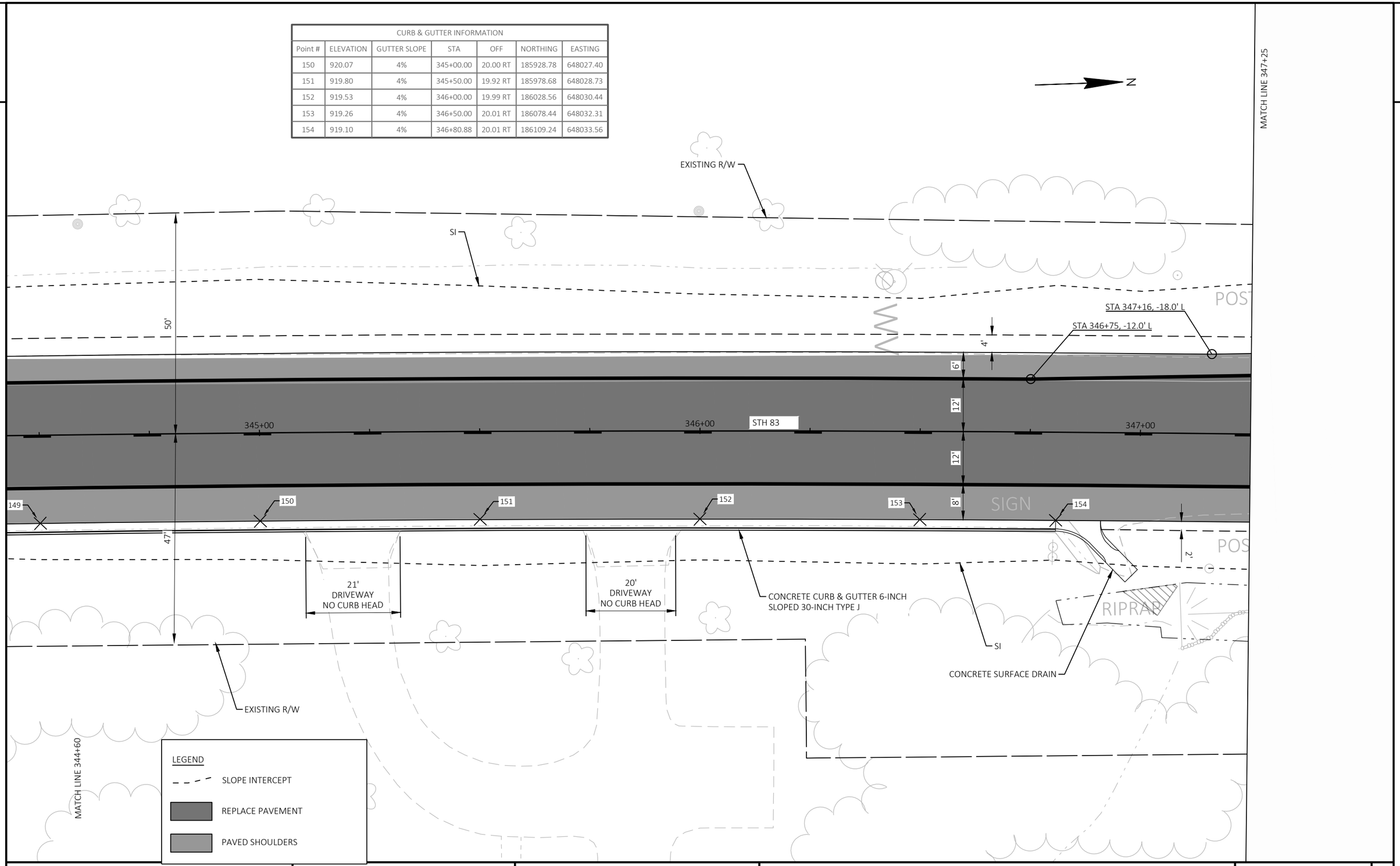
FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021104_ID.DWG
LAYOUT NAME - 10

PLOT DATE : 2/1/2024 4:40 PM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

CURB & GUTTER INFORMATION						
Point #	ELEVATION	GUTTER SLOPE	STA	OFF	NORTHING	EASTING
150	920.07	4%	345+00.00	20.00 RT	185928.78	648027.40
151	919.80	4%	345+50.00	19.92 RT	185978.68	648028.73
152	919.53	4%	346+00.00	19.99 RT	186028.56	648030.44
153	919.26	4%	346+50.00	20.01 RT	186078.44	648032.31
154	919.10	4%	346+80.88	20.01 RT	186109.24	648033.56



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVING DETAILS	SHEET 31	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021104_ID.DWG
LAYOUT NAME - 11

PLOT DATE : 2/1/2024 4:40 PM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

2

N

PROP R/W

TLE

EXISTING R/W

RIPRAP

SI

3'

48'

5'

348+00

STH 83

349+00

12'

STA 347+98.5, 12.0' R

STA 348+96.6, 20.0' R

8'

2'

2'

1'

POST

SI

W

RIPRAP

SIGN

EXISTING R/W

MATCH LINE 347+25

MATCH LINE 349+75

LEGEND

SLOPE INTERCEPT

REPLACE PAVEMENT

PAVED SHOULDERS

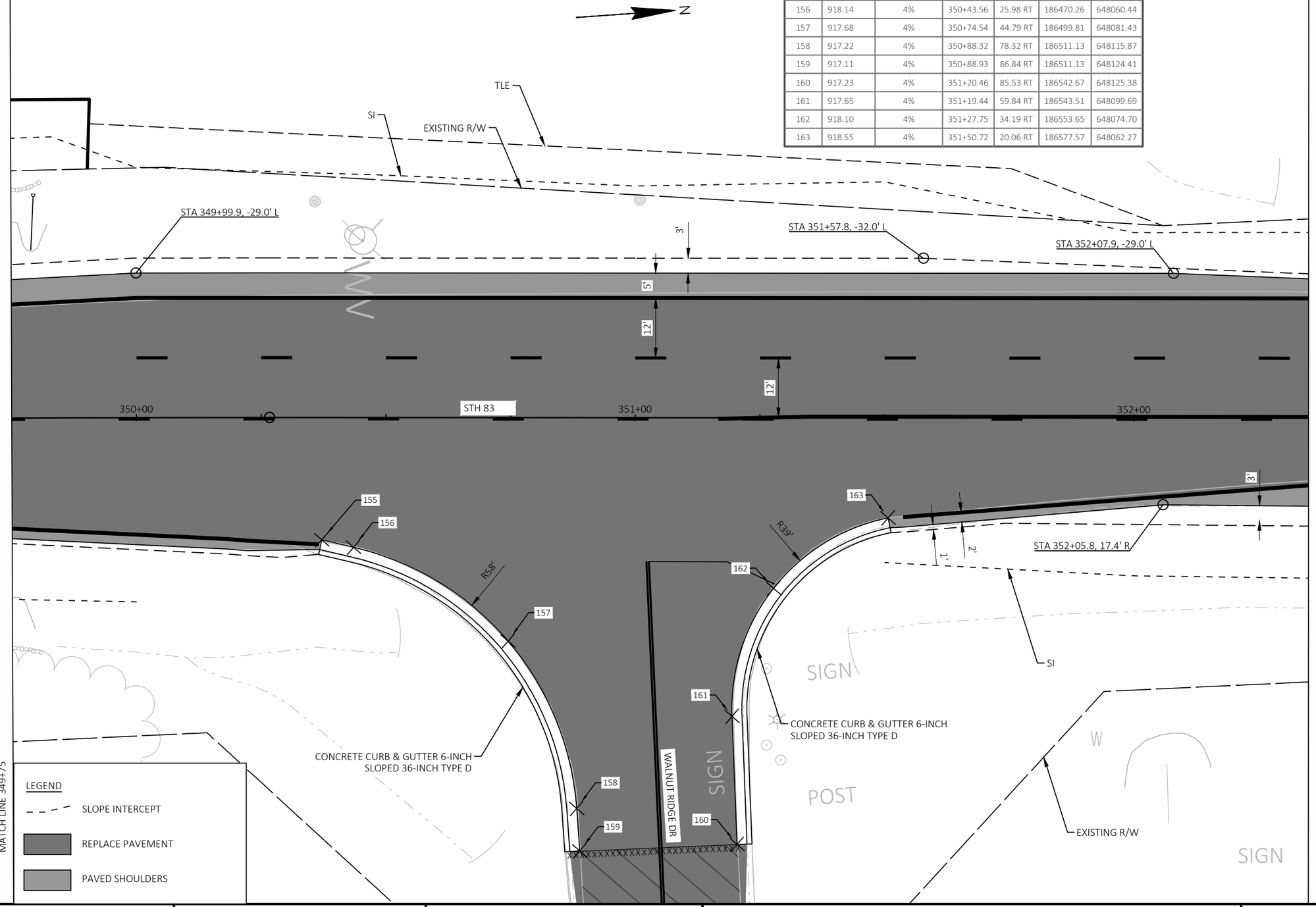
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVING DETAILS	SHEET 32	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021104_ID.DWG
LAYOUT NAME - 12

PLOT DATE : 2/1/2024 4:40 PM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

CURB & GUTTER INFORMATION						
Point #	ELEVATION	GUTTER SLOPE	STA	OFF	NORTHING	EASTING
155	918.22	4%	350+37.17	24.50 RT	186464.00	648058.51
156	918.14	4%	350+43.56	25.98 RT	186470.26	648060.44
157	917.68	4%	350+74.54	44.79 RT	186499.81	648081.43
158	917.22	4%	350+88.32	78.32 RT	186511.13	648115.87
159	917.11	4%	350+88.93	86.84 RT	186511.13	648124.41
160	917.23	4%	351+20.46	85.53 RT	186542.67	648125.38
161	917.65	4%	351+19.44	59.84 RT	186543.51	648099.69
162	918.10	4%	351+27.75	34.19 RT	186553.65	648074.70
163	918.55	4%	351+50.72	20.06 RT	186577.57	648062.27



2

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVING DETAILS	SHEET 33	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021104_ID.DWG
LAYOUT NAME - 13
PLOT DATE : 2/1/2024 4:40 PM
PLOT BY : WEIGAND, BEN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

2

N

EXISTING R/W

SI

STA 354+04.4, -22.0' L

STA 354+67, -18.0' L

SIGN

4'

7'

4'

6'

12'

12'

6'

353+00

STH 83

354+00

355+00

4'

SIGN

RIPRAP

SI

EXISTING R/W

MATCH LINE 352+35

LEGEND

SLOPE INTERCEPT

REPLACE PAVEMENT

PAVED SHOULDERS

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVING DETAILS	SHEET 34	E

2

N

MATCH LINE 362+50

2

EXISTING R/W

STA 359+11, -18.0' L

SI

STA 362+36, -29.0' L

2'

56'

6'

12'

12'

360+00

STH 83

361+00

362+00

12'

6'

4'

54'

POST

STA 361+42.9, 19.3' R

SI

POST

POST

SIGN

ST

SIGN

SIGN

EXISTING R/W

LEGEND

SLOPE INTERCEPT

REPLACE PAVEMENT

PAVED SHOULDERS

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVING DETAILS	SHEET 35	E

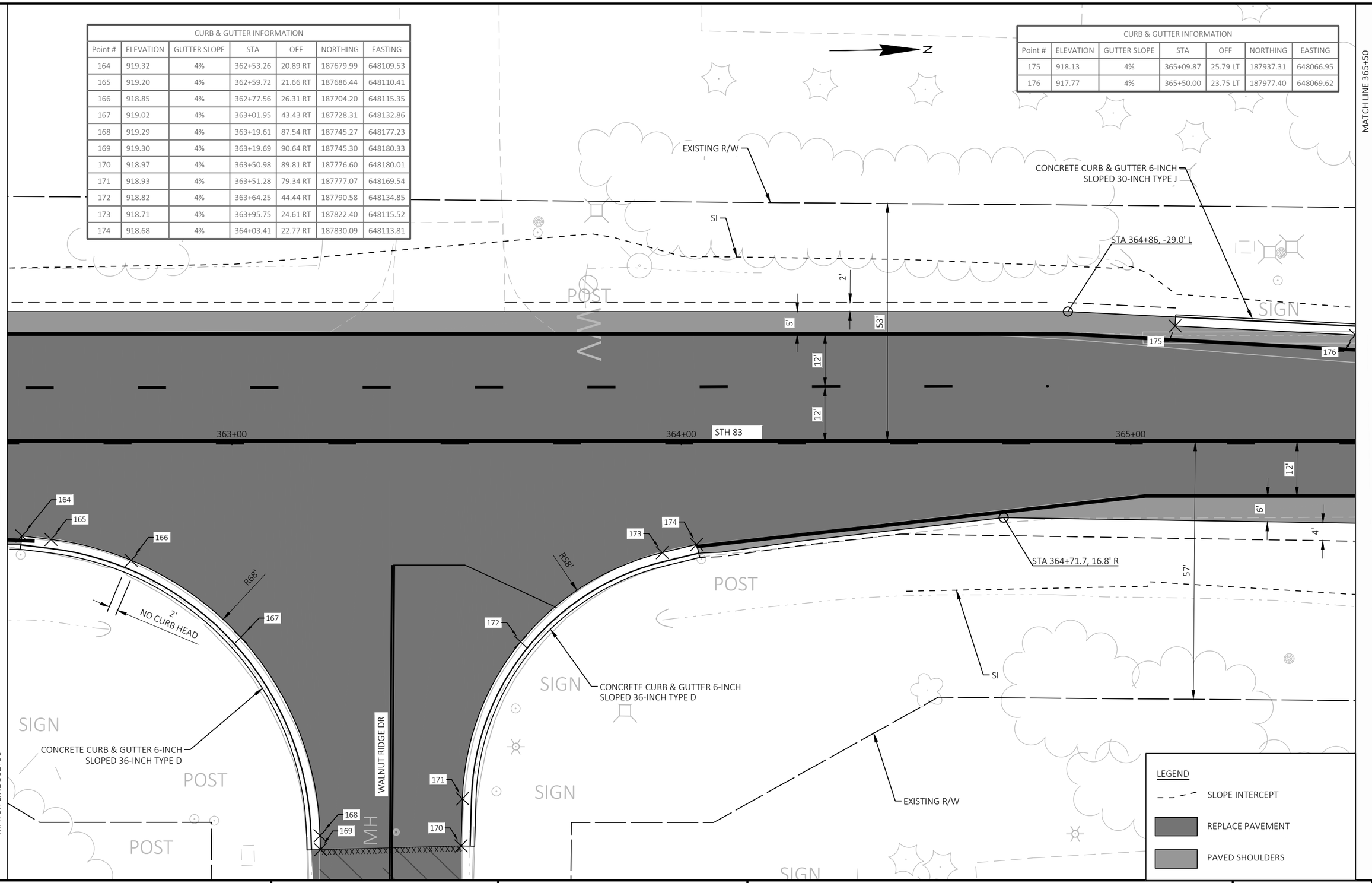
FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021104_ID.DWG
LAYOUT NAME - 15

PLOT DATE : 2/1/2024 4:40 PM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

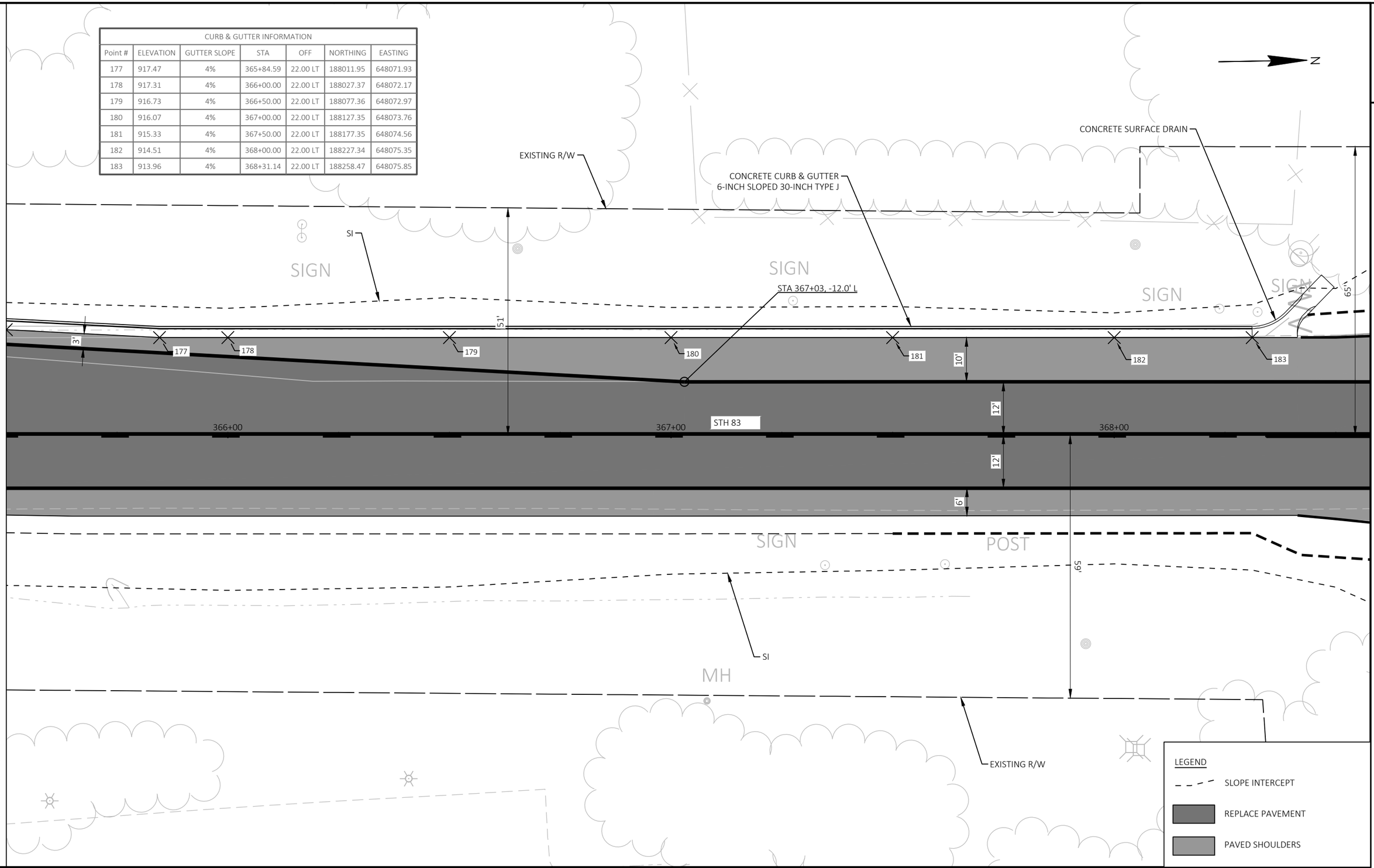
WISDOT/CADDS SHEET 42

CURB & GUTTER INFORMATION						
Point #	ELEVATION	GUTTER SLOPE	STA	OFF	NORTHING	EASTING
164	919.32	4%	362+53.26	20.89 RT	187679.99	648109.53
165	919.20	4%	362+59.72	21.66 RT	187686.44	648110.41
166	918.85	4%	362+77.56	26.31 RT	187704.20	648115.35
167	919.02	4%	363+01.95	43.43 RT	187728.31	648132.86
168	919.29	4%	363+19.61	87.54 RT	187745.27	648177.23
169	919.30	4%	363+19.69	90.64 RT	187745.30	648180.33
170	918.97	4%	363+50.98	89.81 RT	187776.60	648180.01
171	918.93	4%	363+51.28	79.34 RT	187777.07	648169.54
172	918.82	4%	363+64.25	44.44 RT	187790.58	648134.85
173	918.71	4%	363+95.75	24.61 RT	187822.40	648115.52
174	918.68	4%	364+03.41	22.77 RT	187830.09	648113.81

CURB & GUTTER INFORMATION						
Point #	ELEVATION	GUTTER SLOPE	STA	OFF	NORTHING	EASTING
175	918.13	4%	365+09.87	25.79 LT	187937.31	648066.95
176	917.77	4%	365+50.00	23.75 LT	187977.40	648069.62



CURB & GUTTER INFORMATION						
Point #	ELEVATION	GUTTER SLOPE	STA	OFF	NORTHING	EASTING
177	917.47	4%	365+84.59	22.00 LT	188011.95	648071.93
178	917.31	4%	366+00.00	22.00 LT	188027.37	648072.17
179	916.73	4%	366+50.00	22.00 LT	188077.36	648072.97
180	916.07	4%	367+00.00	22.00 LT	188127.35	648073.76
181	915.33	4%	367+50.00	22.00 LT	188177.35	648074.56
182	914.51	4%	368+00.00	22.00 LT	188227.34	648075.35
183	913.96	4%	368+31.14	22.00 LT	188258.47	648075.85



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVING DETAILS	SHEET 37	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021104_ID.DWG
LAYOUT NAME - 17

PLOT DATE : 2/1/2024 4:40 PM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

2

N

SPECTRUM
WE ENERGIES ELECTRIC

SI

STA 396+52, -27.5' L
STA 396+35.1, -23.5' L
STA 396+12.7, -17.5' L

RL STH 83

394+00
395+00
STH 83
396+00

4'
6'
12'
12'
6'
4'
4'
6'
12'
11'
12'
5'
11'
5'

STA 395+14.8, 33.5' R
STA 395+00.9, 35.6' R
STA 394+84.9, 36.9' R

1'
2'

WISDOT SIGNALS

SI

AT&T UNDERGROUND TELEPHONE

VILLAGE OF HARTLAND

EXISTING R/W

SIGN
MH
POST
MP
SIGN

LEGEND

- SLOPE INTERCEPT
- REPLACE PAVEMENT
- PAVED SHOULDERS

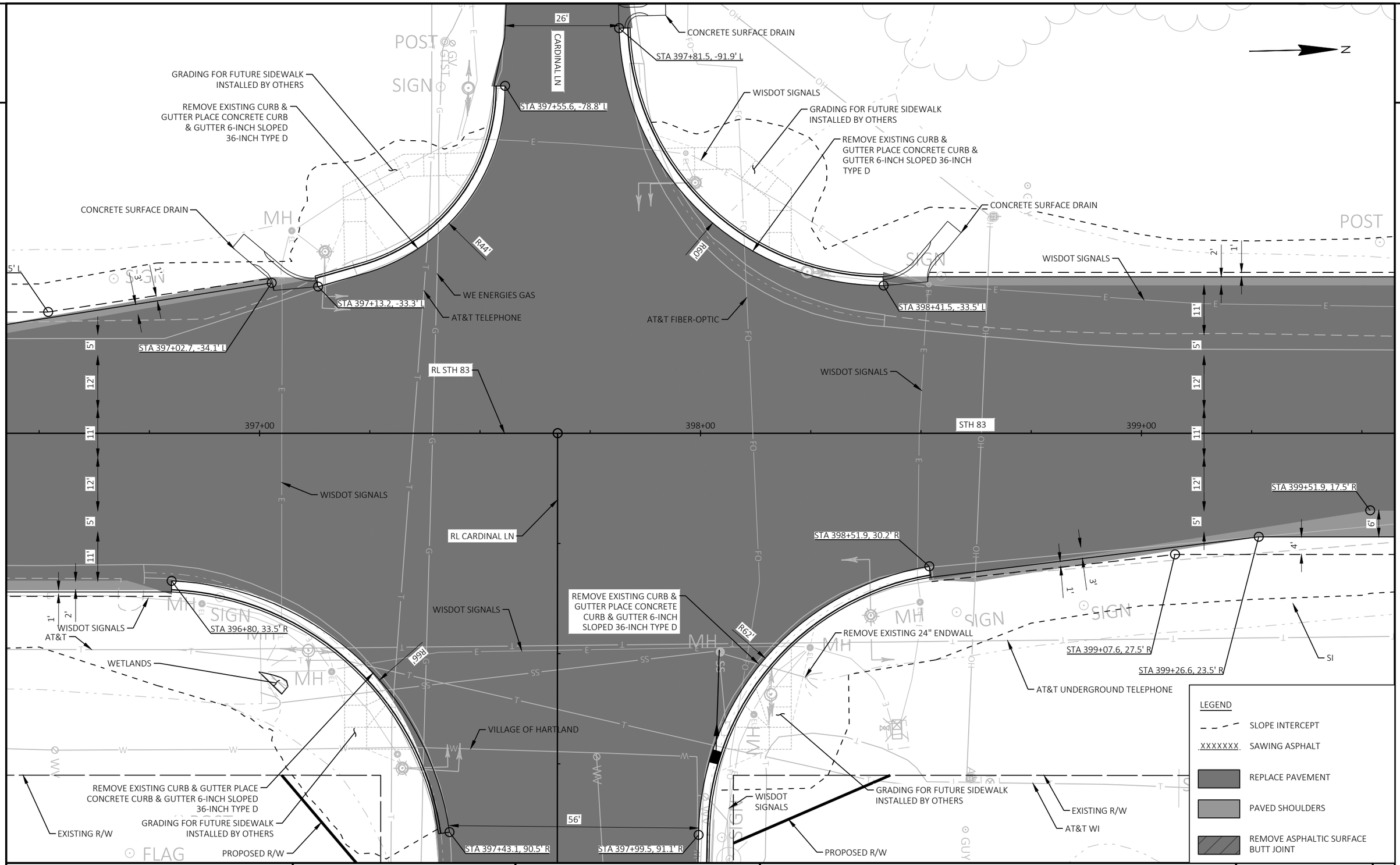
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	INTERSECTION DETAILS - CARDINAL LN	SHEET 38	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 06

PLOT DATE : 1/31/2024 8:47 PM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	INTERSECTION DETAILS - CARDINAL LN	SHEET 39	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 07
PLOT DATE : 1/31/2024 8:47 PM
PLOT BY : WEIGAND, BEN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

2

N

WISDOT SIGNALS

POST

STA 400+25.2, -36.5' L

STA 400+25.2, -35.5' L

STA 400+87.6, -29.9' L

SI

SIGN

STA 401+00, -27.5' L

STA 400+25.1, -33.5' L

SIGN

STA 401+75.1, -17.5' L

RL STH 83

STH 83

400+00

401+00

402+00

17.5' R

STA 401+88.8, 17.1' R

STA 401+89, 23.1' R

SI

AT&T UNDERGROUND TELEPHONE

EXISTING R/W

AT&T WI UNDERGROUND TELEPHONE

LEGEND

SLOPE INTERCEPT

REPLACE PAVEMENT

PAVED SHOULDERS

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	INTERSECTION DETAILS - CARDINAL LN	SHEET 40	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 08

PLOT DATE : 1/31/2024 8:47 PM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

2

RL STH 83

REMOVE EXISTING CURB & GUTTER
PLACE CONCRETE CURB & GUTTER
30-INCH TYPE D

REMOVE EXISTING CURB & GUTTER
PLACE CONCRETE CURB & GUTTER
30-INCH TYPE D

CARDINAL LANE

RL CARDINAL LN

SAWING ASPHALT (TYP)

PLACE PROPOSED SIGNAL LOOP
REMOVE AND REPLACE EXISTING
HMA PAVEMENT USING ASPHALTIC
SURFACE PATCHING BID ITEM

CULVERS LN

CURB & GUTTER INFORMATION

Point #	ELEVATION	CURB HEIGHT	GUTTER SLOPE	STA	OFF	NORTHING	EASTING
83	920.84	6"	4%	397+15.16	33.801 LT	191105.37	648353.75
84	920.86	0"	4%	397+20.00	35.172 LT	191110.24	648352.49
85	920.89	0"	4%	397+25.05	36.627 LT	191115.32	648351.15
86	920.94	6"	4%	397+30.37	38.714 LT	191120.68	648349.18
87	920.96	6"	4%	397+31.46	39.244 LT	191121.79	648348.68
88	920.90	-	4%	397+27.64	37.542 LT	191117.93	648350.29
89	920.88	0"	4%	397+23.67	36.212 LT	191113.93	648351.53
90	921.42	6"	4%	397+48.31	54.207 LT	191138.97	648334.10
91	921.45	-	4%	397+49.18	55.572 LT	191139.87	648332.76
92	921.46	0"	4%	397+50.24	57.413 LT	191140.98	648330.94
93	921.49	0"	4%	397+52.72	62.771 LT	191143.58	648325.64
94	921.51	6"	4%	397+54.08	66.899 LT	191145.03	648321.54
95	921.57	6"	4%	397+55.64	78.784 LT	191146.86	648309.70
96	921.96	6"	4%	397+81.53	91.888 LT	191173.04	648297.19
97	922.05	6"	4%	397+87.96	66.436 LT	191178.89	648322.78
98	922.06	0"	4%	397+89.63	63.350 LT	191180.49	648325.90

CURB & GUTTER INFORMATION

Point #	ELEVATION	CURB HEIGHT	GUTTER SLOPE	STA	OFF	NORTHING	EASTING
51	922.08	0"	4%	397+92.98	58.208 LT	191183.73	648331.12
52	922.11	6"	4%	397+99.65	50.507 LT	191190.22	648338.97
53	922.09	6"	4%	397+95.38	55.135 LT	191186.05	648334.24
54	922.10	6"	4%	398+11.33	41.641 LT	191201.69	648348.10
55	922.09	0"	4%	398+14.46	39.942 LT	191204.78	648349.87
56	922.07	0"	4%	398+19.68	37.612 LT	191209.95	648352.32
57	922.06	6"	4%	398+22.81	36.488 LT	191213.05	648353.51
58	922.01	6"	4%	398+41.51	33.500 LT	191231.68	648356.92
59	919.51	6"	4%	397+99.55	91.107 RT	191186.89	648480.54
60	919.46	6"	4%	398+01.51	76.238 RT	191189.19	648465.72
61	919.52	0"	4%	398+03.16	70.863 RT	191190.96	648460.39
62	919.59	0"	4%	398+05.28	65.654 RT	191193.20	648455.23
63	919.66	6"	4%	398+07.92	60.549 RT	191195.96	648450.18
64	919.87	6"	4%	398+10.53	56.423 RT	191198.66	648446.12
65	920.09	0"	4%	398+13.65	52.260 RT	191201.88	648442.03
66	920.17	0"	4%	398+18.86	46.637 RT	191207.21	648436.52

CURB & GUTTER INFORMATION

Point #	ELEVATION	CURB HEIGHT	GUTTER SLOPE	STA	OFF	NORTHING	EASTING
67	920.40	6"	4%	398+24.38	41.950 RT	191212.83	648431.97
68	921.78	6"	4%	398+51.89	30.184 RT	191240.60	648420.83
69	920.20	-	4%	398+20.92	44.754 RT	191209.32	648434.69
70	922.13	6"	4%	398+03.47	47.097 LT	191193.96	648342.46
71	920.68	6"	4%	396+80.03	33.500 RT	191068.71	648420.23
72	920.01	6"	4%	397+16.47	46.143 RT	191104.86	648433.70
73	919.99	0"	4%	397+20.93	49.691 RT	191109.23	648437.35
74	919.95	0"	4%	397+26.13	54.738 RT	191114.32	648442.51
75	919.91	6"	4%	397+29.41	58.576 RT	191117.51	648446.42
76	919.88	6"	4%	397+30.63	60.163 RT	191118.69	648448.04
77	919.81	0"	4%	397+34.15	65.407 RT	191122.10	648453.36
78	919.78	0"	4%	397+36.98	70.604 RT	191124.81	648458.62
79	919.74	6"	4%	397+39.28	75.883 RT	191126.99	648463.95
80	919.55	6"	4%	397+43.06	90.495 RT	191130.43	648478.65
81	919.98	0"	4%	397+21.90	50.549 RT	191110.18	648438.23
82	920.83	6"	4%	397+13.22	33.250 LT	191103.41	648354.25

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	INTERSECTION DETAILS - PROPOSED SIGNAL LOOPS CARDINAL	SHEET 41	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021102_ID.DWG
LAYOUT NAME - 1-Cardinal

PLOT DATE : 7/12/2024 10:07 AM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

CURB & GUTTER INFORMATION						
Point #	ELEVATION	GUTTER SLOPE	STA	OFF	NORTHING	EASTING
1	909.29	4%	371+03.12	23.0	188530.44	648079.18
2	909.29	4%	371+02.78	23.0	188529.37	648125.16
3	908.05	4%	371+55.00	22.9	188582.31	648080.11
4	908.04	4%	371+55.00	23.0	188581.58	648125.99

N

CONCRETE CURB & GUTTER
6-INCH SLOPE 30-INCH TYPE D

STA 368+41.37, -22.00' L

SI

MGS TERMINAL EAT
POST 1: 369+30.57, 27.00' LT
POST 5: 369+55.57
POST 9: 369+83.69

WE ENERGIES GAS

LEVEL 3
CHARTER
AT&T TELEPHONE
AT&T LOCAL
WE ENERGIES ELECTRIC

REMOVE EXISTING GUARDRAIL/BACKFILL SLURRY
INSTALL MGS GUARDRAIL TERMINAL EAT,
2 PANELS MGS GUARDRAIL 3 K & MGS THRIE
BEAM TRANSITION
MOW STRIP

STA 370+42.71, -25.00' L

MATCH
EXISTING
STRUCTURE

EXISTING R/W

STA 371+03.14, -25.00' L

REMOVE EXISTING GUARDRAIL/BACKFILL SLURRY
INSTALL MGS GUARDRAIL TERMINAL EAT &
MGS THRIE BEAM TRANSITION
MOW STRIP

CONCRETE CURB &
GUTTER 6-INCH SLOPED
30-INCH TYPE J

REMOVE INLET AND PIPE
INSTALL CONCRETE
SURFACE DRAINS

MGS TERMINAL EAT
POST 1: 372+11.94, 27.00' LT
POST 5: 371+86.94
POST 9: 371+61.94

WETLANDS

STA 373+43.74, -17.99' L

STA 373+07.72, -22.00' L

10' 12' 2.0% 4.0% 13' 12' 4.0% 2.0%

368+00 369+00 370+00 371+00 372+00 STH 83 373+00

4' 6' 12' 2.0% 4.0% 13' 12' 4.0% 2.0%

STA 368+41, 18.1' R

RL STH 83

STA 368+41.08, 22.13' R

MGS TERMINAL EAT
POST 1: 369+30.57, 27.00' RT
POST 5: 369+55.57
POST 9: 369+83.69

SI

REMOVE EXISTING GUARDRAIL/BACKFILL SLURRY
INSTALL MGS GUARDRAIL TERMINAL EAT &
MGS THRIE BEAM TRANSITION
MOW STRIP

STA 370+43.12, 25.00' R

EXISTING STRUCTURE
B-67-220
NET EXCEPTION TO CL LENGTH

BARK RIVER

CHARTER

EXISTING R/W

STA 373+11.92, 19.60' R

STA 373+20.03, 16.99' R

STA 373+20.27, 12.00

MGS TERMINAL EAT
POST 1: 372+11.94, 27.00' RT
POST 5: 371+86.94
POST 9: 371+61.94

SI

REMOVE INLET AND PIPE
INSTALL CONCRETE SURFACE DRAINS

REMOVE EXISTING GUARDRAIL/BACKFILL SLURRY
INSTALL MGS GUARDRAIL TERMINAL EAT &
MGS THRIE BEAM TRANSITION
MOW STRIP

CONCRETE CURB & GUTTER 6-INCH
SLOPED 30-INCH TYPE J

STA 371+02.95, 25.00' R

EXISTING R/W

WETLANDS

AT&T

LEGEND

SLOPE INTERCEPT

REPLACE PAVEMENT

PAVED SHOULDERS

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PLAN DETAILS - MGS GUARDRAIL B-67-220	SHEET 42	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 01
PLOT DATE : 4/26/2024 9:49 AM
PLOT BY : BAILEY, RYAN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE 413+25

RL STH 83

SI

SIGN

SIGN

SIGN

SIGN

2'

8'

12'

12'

10'

4'

408+00

409+00

410+00

STH 83

411+00

412+00

413+00

SIGN

SIGN

AT&T

MGS GUARDRAIL TERMINAL EAT
POST 1: 408+26.54, 24.00' RT
POST 5: 408+51.54
POST 9: 408+79.66

SI

REMOVE EXISTING GUARDRAIL/BACKFILL SLURRY
PLACE MGS GUARDRAIL TERMINAL EAT,
77 PANELS MGS GUARDRAIL 3 & MGS GUARDRAIL
THRIE BEAM TRANSITION
MOW STRIP

EXISTING R/W

FLAG

FLAG

FLAG

POST

POST

A/C

A/C

A/C

A/C

W

W

W

W

LEGEND

SLOPE INTERCEPT

REPLACE PAVEMENT

PAVED SHOULDERS

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PLAN DETAILS - MGS GUARDRAIL B-67-168	SHEET 43	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 02

PLOT DATE : 4/26/2024 9:51 AM PLOT BY : BAILEY, RYAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

CURB & GUTTER INFORMATION						
Point #	ELEVATION	GUTTER SLOPE	STA	OFF	NORTHING	EASTING
5	973.89	4%	418+06.68	15.7	193193.04	648384.68
6	975.92	4%	418+73.59	16.0	193259.15	648376.34

N

REMOVE EXISTING GUARDRAIL/BACKFILL SLURRY
PLACE MGS GUARDRAIL TERMINAL EAT,
6 PANELS MGS GUARDRAIL 3 & MGS GUARDRAIL
THRIE BEAM TRANSITION
MOW STRIP

EXISTING STRUCTURE B-67-168
NET EXCEPTION TO CL LENGTH

MGS GUARDRAIL TERMINAL EAT
POST 1: 417+13.39, 20.00' LT
POST 5: 417+38.39
POST 9: 417+66.51

SI

STA 418+73.59, -15.99' L

STA 418+58.50, -15.86' L

STA 418+29.62, -15.71' L

RL STH 83

SIGN

414+00

415+00

STH 83

416+00

417+00

418+00

419

12'

8'

12'

12'

10'

4'

4'

5

6

AT&T

REMOVE EXISTING GUARDRAIL/BACKFILL SLURRY
PLACE MGS GUARDRAIL TERMINAL EAT,
77 PANELS MGS GUARDRAIL 3 & MGS GUARDRAIL
THRIE BEAM TRANSITION
MOW STRIP

SI

CONCRETE SURFACE
DRAINS

CONCRETE CURB &
GUTTER 4-INCH SLOPED
30-INCH TYPE TBT

CONCRETE CURB &
GUTTER 4-INCH SLOPED
30-INCH TYPE TBTT

CONCRETE PAVEMENT APPROACH

MATCH EXISTING STRUCTURE

STA 418+74.51, 22.00

EXISTING R/W

ATC

OH

MATCH LINE 419+00

LEGEND

SLOPE INTERCEPT

REPLACE PAVEMENT

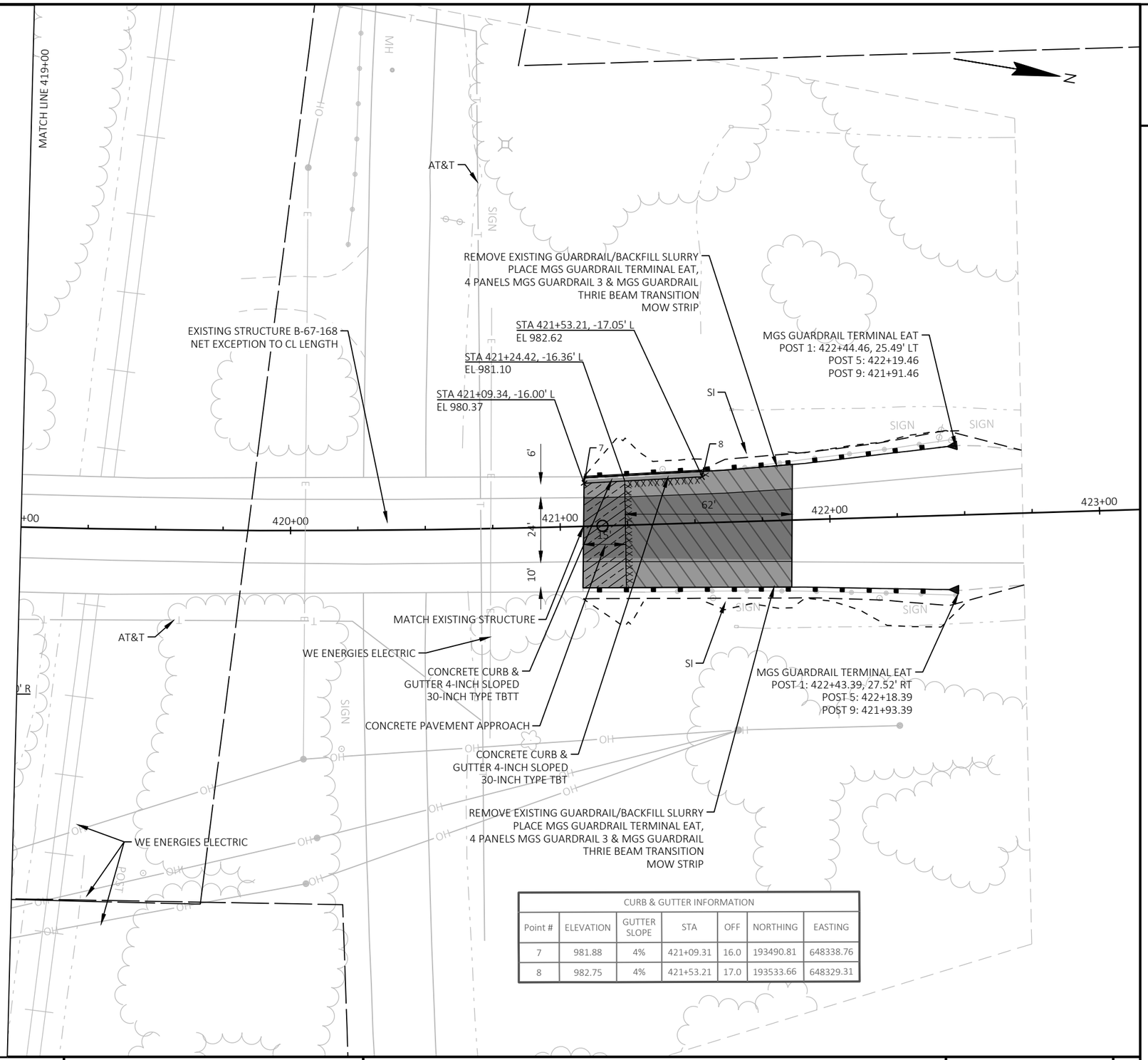
PAVED SHOULDERS

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PLAN DETAILS - MGS GUARDRAIL B-67-168	SHEET 44	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 03

PLOT DATE : 4/26/2024 9:51 AM PLOT BY : BAILEY, RYAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42



CURB & GUTTER INFORMATION						
Point #	ELEVATION	GUTTER SLOPE	STA	OFF	NORTHING	EASTING
7	981.88	4%	421+09.31	16.0	193490.81	648338.76
8	982.75	4%	421+53.21	17.0	193533.66	648329.31

LEGEND

- SLOPE INTERCEPT
- REPLACE PAVEMENT
- PAVED SHOULDERS

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PLAN DETAILS - MGS GUARDRAIL B-67-168	SHEET 45	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 04

PLOT DATE : 7/12/2024 10:11 AM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

EXISTING R/W

STH 83 SB

STH 83 NB

R/L STH 83

246+00 247+00 248+00 249+00 250+00 251+00

RL STH 83

SI

C

D

SIGN

GOLF RD SIGN

MH

MH POST

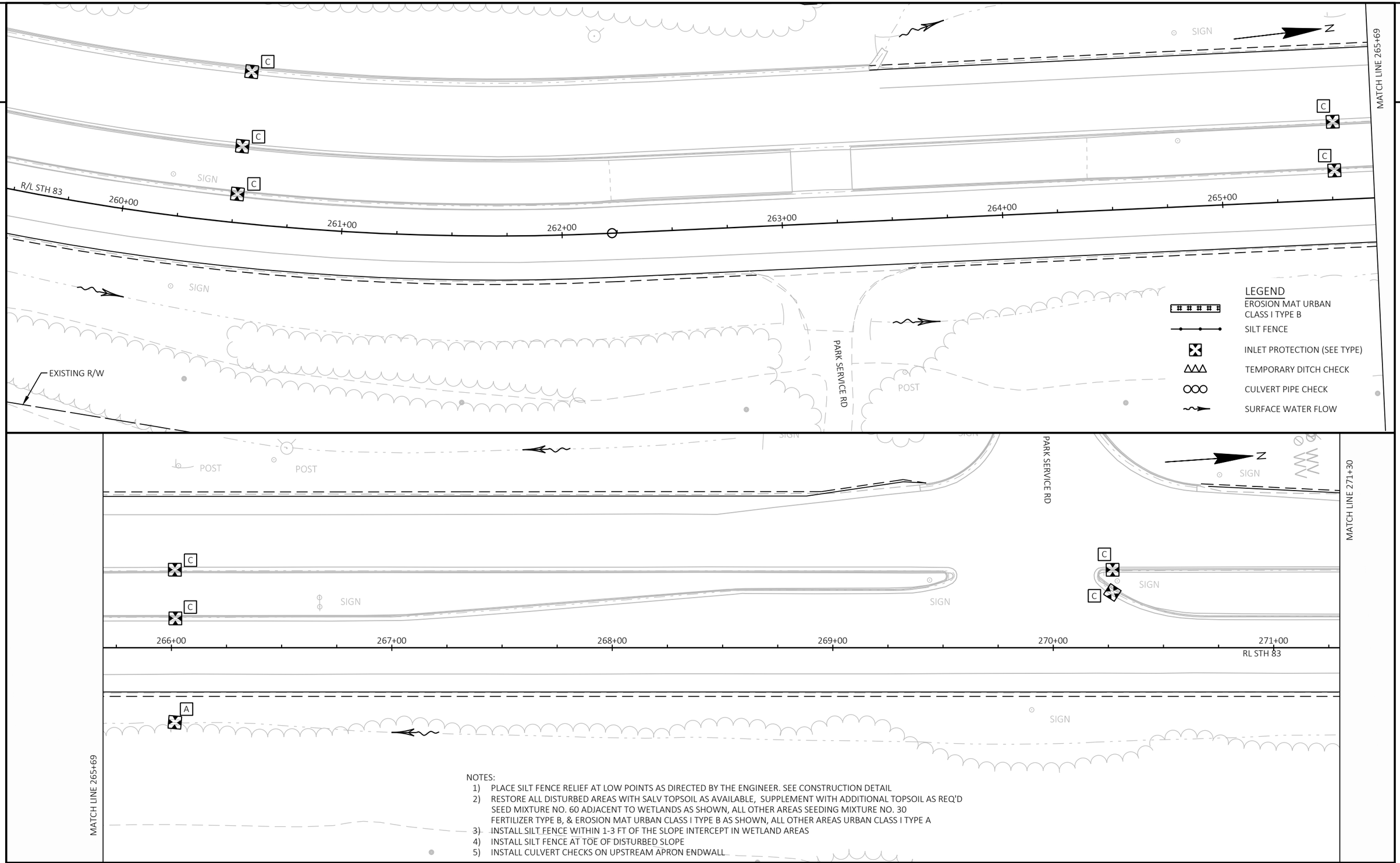
NOTES:
1) PLACE SILT FENCE RELIEF AT LOW POINTS AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAIL
2) RESTORE ALL DISTURBED AREAS WITH SALV TOPSOIL AS AVAILABLE, SUPPLEMENT WITH ADDITIONAL TOPSOIL AS REQ'D SEED MIXTURE NO. 60 ADJACENT TO WETLANDS AS SHOWN, ALL OTHER AREAS SEEDING MIXTURE NO. 30 FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B AS SHOWN, ALL OTHER AREAS URBAN CLASS I TYPE A
3) INSTALL SILT FENCE WITHIN 1-3 FT OF THE SLOPE INTERCEPT IN WETLAND AREAS
4) INSTALL SILT FENCE AT TOE OF DISTURBED SLOPE
5) INSTALL CULVERT CHECKS ON UPSTREAM APRON ENDWALL

LEGEND

- EROSION MAT URBAN CLASS I TYPE B
- SILT FENCE
- INLET PROTECTION (SEE TYPE)
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 46	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 01
PLOT DATE : 7/12/2024 10:17 AM
PLOT BY : WEIGAND, BEN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

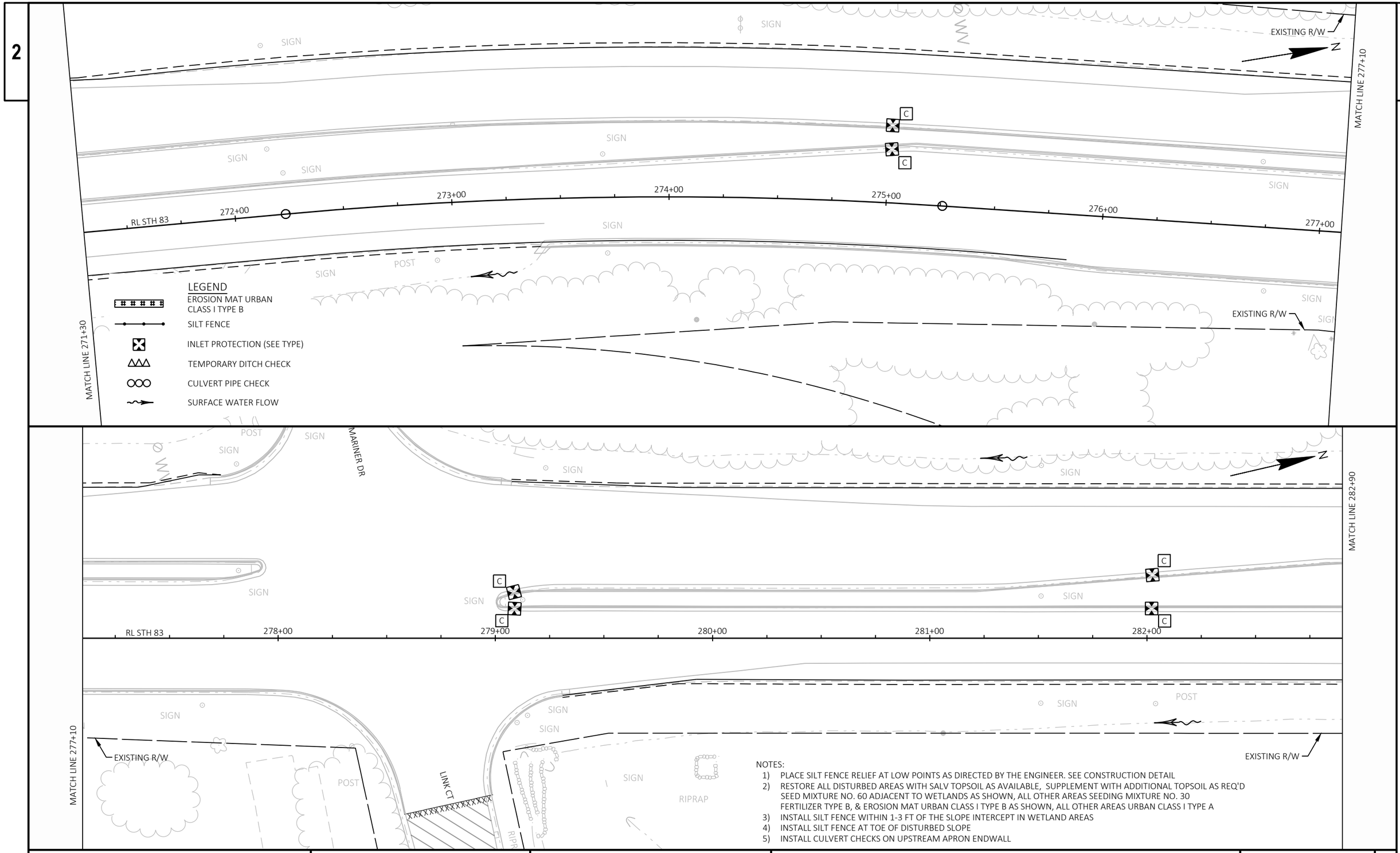


NOTES:

1) PLACE SILT FENCE RELIEF AT LOW POINTS AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAIL
2) RESTORE ALL DISTURBED AREAS WITH SALV TOPSOIL AS AVAILABLE, SUPPLEMENT WITH ADDITIONAL TOPSOIL AS REQ'D
   SEED MIXTURE NO. 60 ADJACENT TO WETLANDS AS SHOWN, ALL OTHER AREAS SEEDING MIXTURE NO. 30
   FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B AS SHOWN, ALL OTHER AREAS URBAN CLASS I TYPE A
3) INSTALL SILT FENCE WITHIN 1-3 FT OF THE SLOPE INTERCEPT IN WETLAND AREAS
4) INSTALL SILT FENCE AT TOE OF DISTURBED SLOPE
5) INSTALL CULVERT CHECKS ON UPSTREAM APRON ENDWALL

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 47	E

2

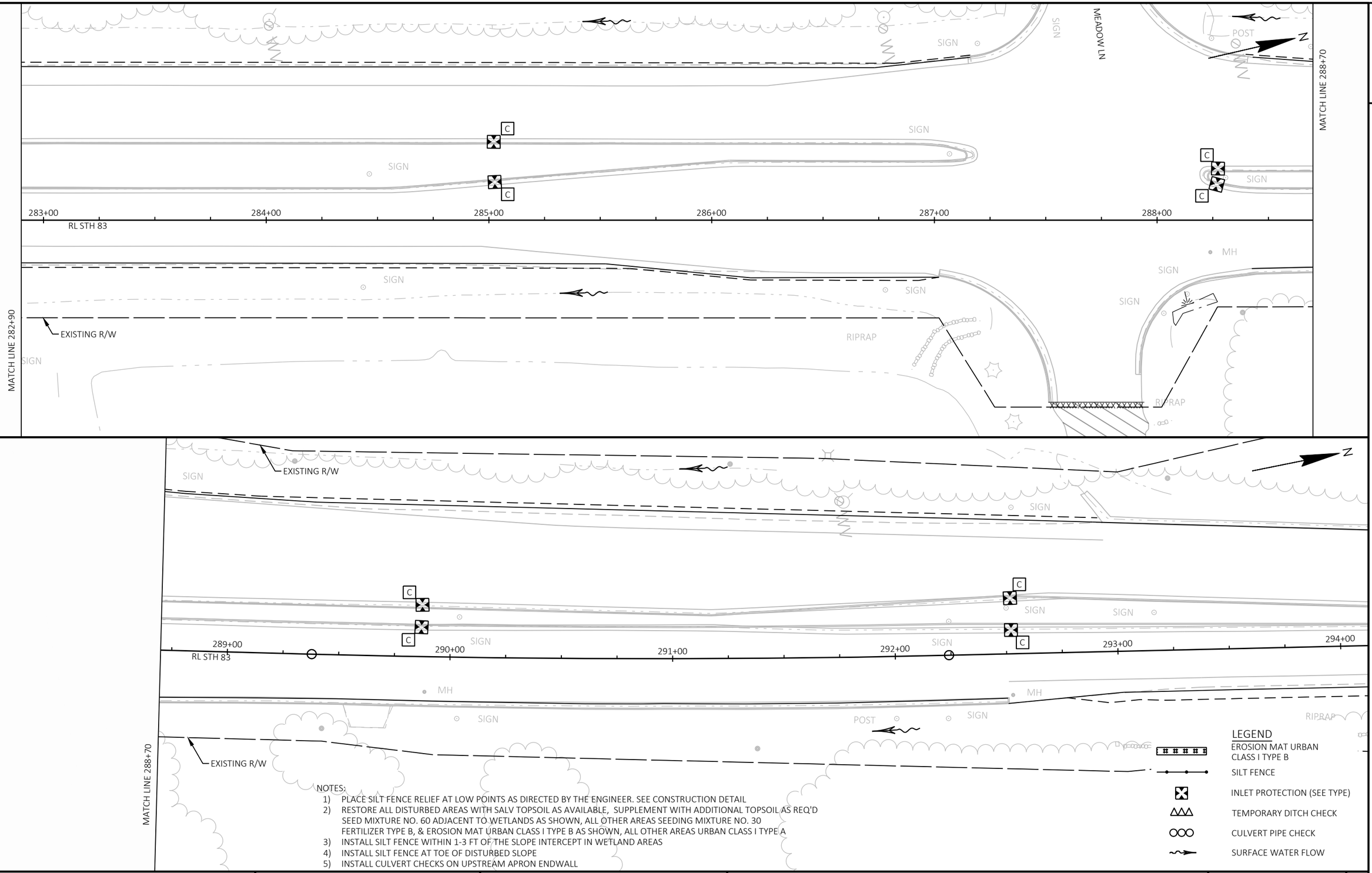


NOTES:

1) PLACE SILT FENCE RELIEF AT LOW POINTS AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAIL
2) RESTORE ALL DISTURBED AREAS WITH SALV TOPSOIL AS AVAILABLE, SUPPLEMENT WITH ADDITIONAL TOPSOIL AS REQ'D SEED MIXTURE NO. 60 ADJACENT TO WETLANDS AS SHOWN, ALL OTHER AREAS SEEDING MIXTURE NO. 30 FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B AS SHOWN, ALL OTHER AREAS URBAN CLASS I TYPE A
3) INSTALL SILT FENCE WITHIN 1-3 FT OF THE SLOPE INTERCEPT IN WETLAND AREAS
4) INSTALL SILT FENCE AT TOE OF DISTURBED SLOPE
5) INSTALL CULVERT CHECKS ON UPSTREAM APRON ENDWALL

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 48	E

2



NOTES:

1) PLACE SILT FENCE RELIEF AT LOW POINTS AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAIL
2) RESTORE ALL DISTURBED AREAS WITH SALV TOPSOIL AS AVAILABLE, SUPPLEMENT WITH ADDITIONAL TOPSOIL AS REQ'D SEED MIXTURE NO. 60 ADJACENT TO WETLANDS AS SHOWN, ALL OTHER AREAS SEEDING MIXTURE NO. 30 FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B AS SHOWN, ALL OTHER AREAS URBAN CLASS I TYPE A
3) INSTALL SILT FENCE WITHIN 1-3 FT OF THE SLOPE INTERCEPT IN WETLAND AREAS
4) INSTALL SILT FENCE AT TOE OF DISTURBED SLOPE
5) INSTALL CULVERT CHECKS ON UPSTREAM APRON ENDWALL

LEGEND

- EROSION MAT URBAN CLASS I TYPE B
- SILT FENCE
- INLET PROTECTION (SEE TYPE)
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 49	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 04
PLOT DATE : 7/12/2024 10:18 AM
PLOT BY : WEIGAND, BEN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2

2

EXISTING R/W

NAGAWICKA RD

SIGN

POST

SEPC

SEPC

EXISTING R/W

SI

MATCH LINE 308+40

RL STH 83

303+00

304+00

305+00

306+00

307+00

308+00

EXISTING R/W

POST

FLAG

SIGN

POST

SI

EXISTING R/W

LEGEND

EROSION MAT URBAN CLASS I TYPE B

SILT FENCE

INLET PROTECTION (SEE TYPE)

TEMPORARY DITCH CHECK

CULVERT PIPE CHECK

SURFACE WATER FLOW

MATCH LINE 314+20

SEPV

EXISTING R/W

SIGN

SI

SIGN

SIGN

RL STH 83

309+00

310+00

311+00

312+00

313+00

314+00

PIPE REMOVAL SEE CULVERT DETAILS FOR MORE DETAILS

SI

SI

SIGN

SIGN

SIGN

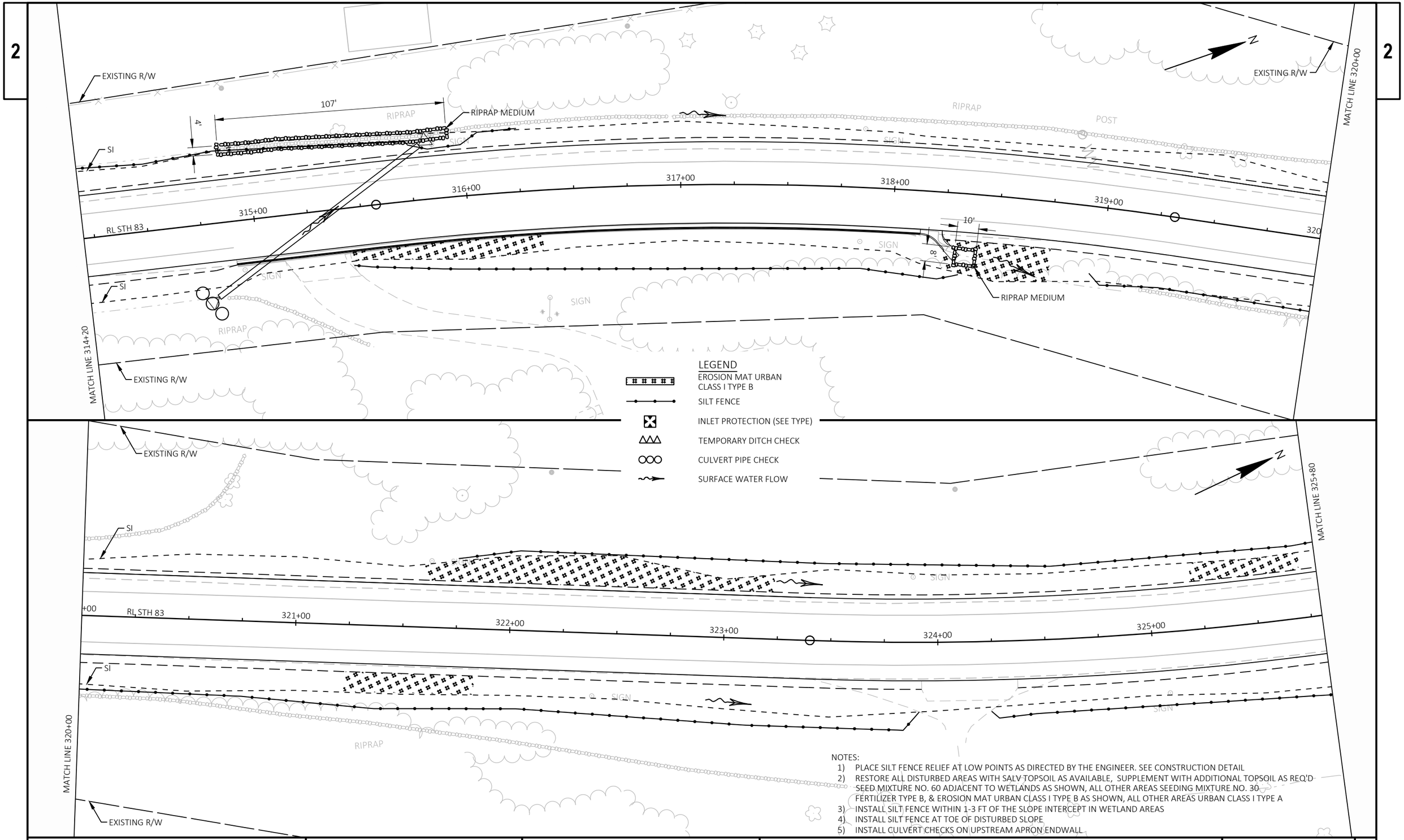
MATCH LINE 308+40

EXISTING R/W

NOTES:

1) PLACE SILT FENCE RELIEF AT LOW POINTS AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAIL
2) RESTORE ALL DISTURBED AREAS WITH SALV TOPSOIL AS AVAILABLE, SUPPLEMENT WITH ADDITIONAL TOPSOIL AS REQ'D SEED MIXTURE NO. 60 ADJACENT TO WETLANDS AS SHOWN, ALL OTHER AREAS SEEDING MIXTURE NO. 30 FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B AS SHOWN, ALL OTHER AREAS URBAN CLASS I TYPE A
3) INSTALL SILT FENCE WITHIN 1-3 FT OF THE SLOPE INTERCEPT IN WETLAND AREAS
4) INSTALL SILT FENCE AT TOE OF DISTURBED SLOPE
5) INSTALL CULVERT CHECKS ON UPSTREAM APRON ENDWALL

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 50	E



NOTES:

1) PLACE SILT FENCE RELIEF AT LOW POINTS AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAIL
2) RESTORE ALL DISTURBED AREAS WITH SALV TOPSOIL AS AVAILABLE, SUPPLEMENT WITH ADDITIONAL TOPSOIL AS REQ'D SEED MIXTURE NO. 60 ADJACENT TO WETLANDS AS SHOWN, ALL OTHER AREAS SEEDING MIXTURE NO. 30 FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B AS SHOWN, ALL OTHER AREAS URBAN CLASS I TYPE A
3) INSTALL SILT FENCE WITHIN 1-3 FT OF THE SLOPE INTERCEPT IN WETLAND AREAS
4) INSTALL SILT FENCE AT TOE OF DISTURBED SLOPE
5) INSTALL CULVERT CHECKS ON UPSTREAM APRON ENDWALL

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 51	E

NOTES:
1) PLACE SILT FENCE RELIEF AT LOW POINTS AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAIL
2) RESTORE ALL DISTURBED AREAS WITH SALV TOPSOIL AS AVAILABLE, SUPPLEMENT WITH ADDITIONAL TOPSOIL AS REQ'D SEED MIXTURE NO. 60 ADJACENT TO WETLANDS AS SHOWN, ALL OTHER AREAS SEEDING MIXTURE NO. 30 FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B AS SHOWN, ALL OTHER AREAS URBAN CLASS I TYPE A
3) INSTALL SILT FENCE WITHIN 1-3 FT OF THE SLOPE INTERCEPT IN WETLAND AREAS
4) INSTALL SILT FENCE AT TOE OF DISTURBED SLOPE
5) INSTALL CULVERT CHECKS ON UPSTREAM APRON ENDWALL

2

EXISTING R/W
SI
MATCH LINE 325+80
326+00
R/L STH 83
327+00
328+00
329+00
330+00
331+00
MATCH LINE 331+44
SIGN
POST
RIPRAP LIGHT
OAKWOOD RD
12'
18'
MH
TLE
EXISTING R/W
SI
RL STH 83
332+00
333+00
334+00
335+00
336+00
337+00
MATCH LINE 331+44
MATCH LINE 337+40
N SHORE DR
SI
EXISTING R/W

LEGEND
EROSION MAT URBAN CLASS I TYPE B
SILT FENCE
INLET PROTECTION (SEE TYPE)
TEMPORARY DITCH CHECK
CULVERT PIPE CHECK
SURFACE WATER FLOW

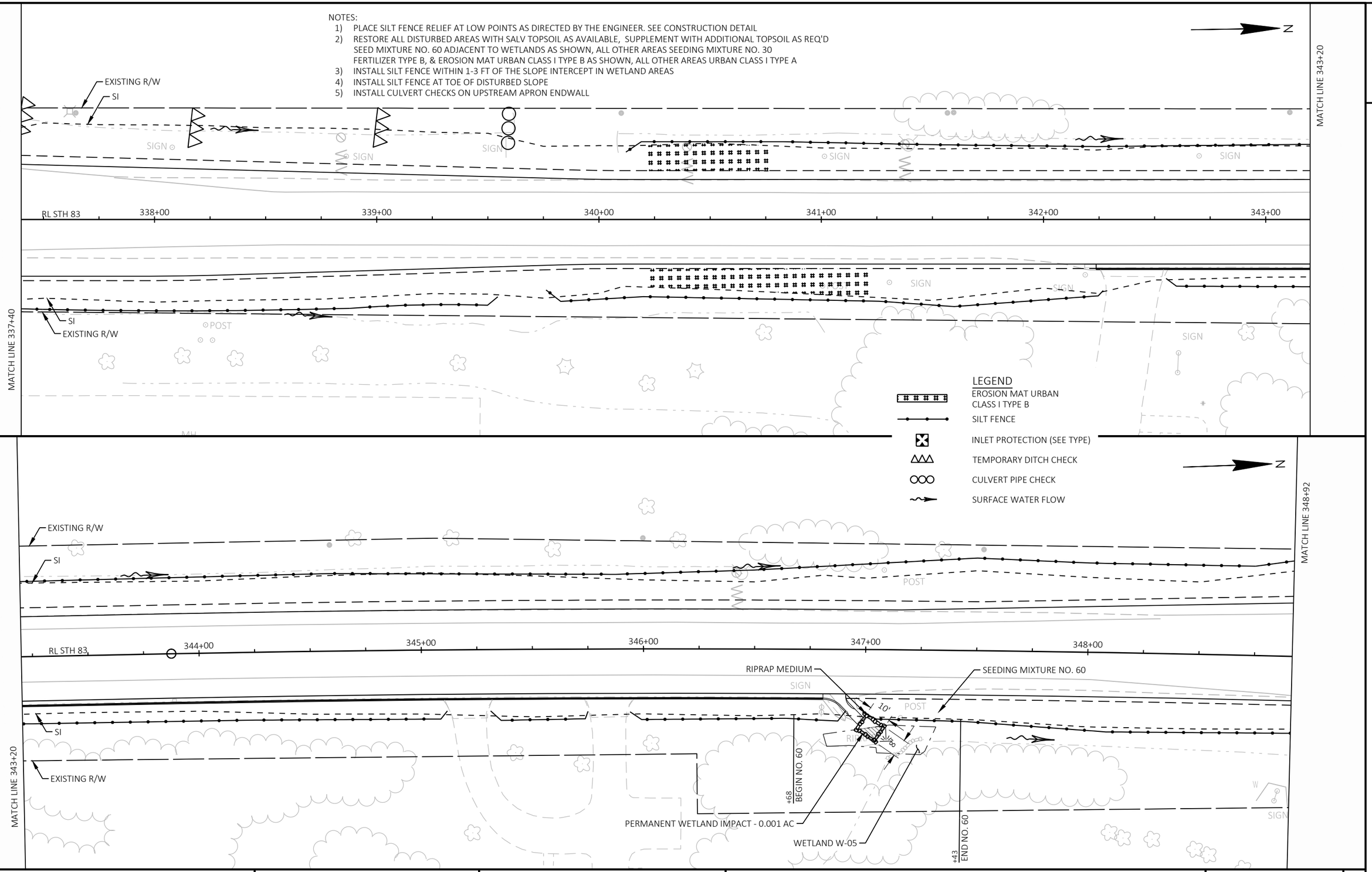
N

2

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 52	E

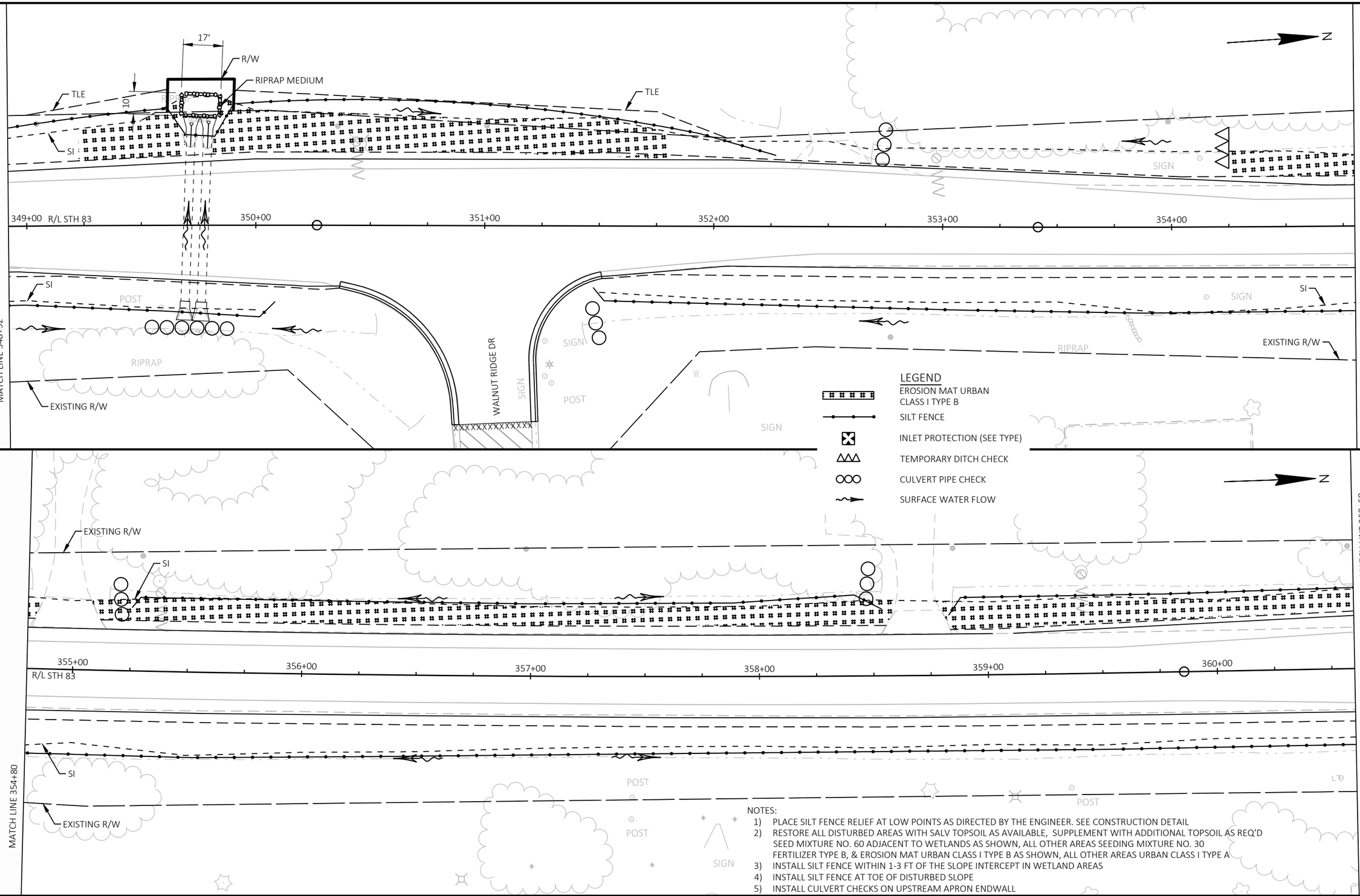
FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 07
PLOT DATE : 7/12/2024 10:18 AM
PLOT BY : WEIGAND, BEN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

NOTES:
1) PLACE SILT FENCE RELIEF AT LOW POINTS AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAIL
2) RESTORE ALL DISTURBED AREAS WITH SALV TOPSOIL AS AVAILABLE, SUPPLEMENT WITH ADDITIONAL TOPSOIL AS REQ'D
SEED MIXTURE NO. 60 ADJACENT TO WETLANDS AS SHOWN, ALL OTHER AREAS SEEDING MIXTURE NO. 30
FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B AS SHOWN, ALL OTHER AREAS URBAN CLASS I TYPE A
3) INSTALL SILT FENCE WITHIN 1-3 FT OF THE SLOPE INTERCEPT IN WETLAND AREAS
4) INSTALL SILT FENCE AT TOE OF DISTURBED SLOPE
5) INSTALL CULVERT CHECKS ON UPSTREAM APRON ENDWALL



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 53	E

2



NOTES:

1) PLACE SILT FENCE RELIEF AT LOW POINTS AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAIL
2) RESTORE ALL DISTURBED AREAS WITH SALV TOPSOIL AS AVAILABLE, SUPPLEMENT WITH ADDITIONAL TOPSOIL AS REQ'D SEED MIXTURE NO. 60 ADJACENT TO WETLANDS AS SHOWN, ALL OTHER AREAS SEEDING MIXTURE NO. 30 FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B AS SHOWN, ALL OTHER AREAS URBAN CLASS I TYPE A
3) INSTALL SILT FENCE WITHIN 1-3 FT OF THE SLOPE INTERCEPT IN WETLAND AREAS
4) INSTALL SILT FENCE AT TOE OF DISTURBED SLOPE
5) INSTALL CULVERT CHECKS ON UPSTREAM APRON ENDWALL

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 54	E

NOTES:
1) PLACE SILT FENCE RELIEF AT LOW POINTS AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAIL
2) RESTORE ALL DISTURBED AREAS WITH SALV TOPSOIL AS AVAILABLE, SUPPLEMENT WITH ADDITIONAL TOPSOIL AS REQ'D SEED MIXTURE NO. 60 ADJACENT TO WETLANDS AS SHOWN, ALL OTHER AREAS SEEDING MIXTURE NO. 30 FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B AS SHOWN, ALL OTHER AREAS URBAN CLASS I TYPE A
3) INSTALL SILT FENCE WITHIN 1-3 FT OF THE SLOPE INTERCEPT IN WETLAND AREAS
4) INSTALL SILT FENCE AT TOE OF DISTURBED SLOPE
5) INSTALL CULVERT CHECKS ON UPSTREAM APRON ENDWALL

LEGEND
- EROSION MAT URBAN CLASS I TYPE B
- SILT FENCE
- INLET PROTECTION (SEE TYPE)
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

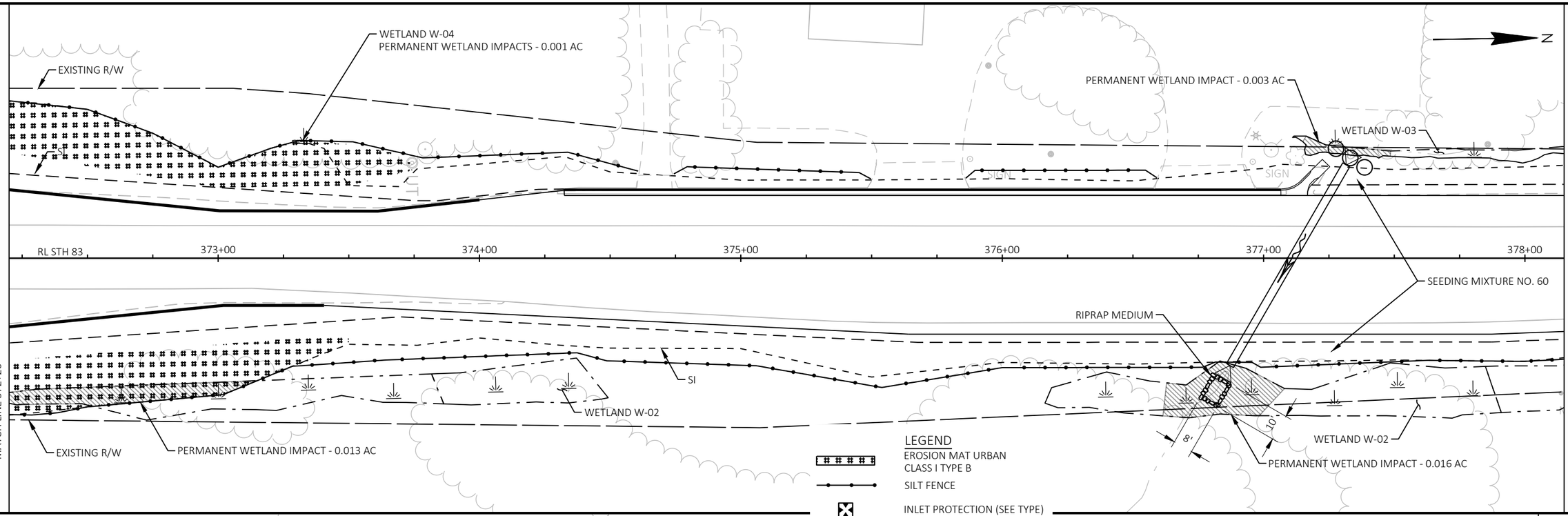
2 2

N

EXISTING R/W
SI
SIGN
POST
MATCH LINE 360+60
MATCH LINE 366+40
MATCH LINE 372+20
RL STH 83
361+00
362+00
363+00
364+00
365+00
366+00
367+00
368+00
369+00
370+00
371+00
372+00
WALNUT RIDGE DR
MH
SEEDING MIXTURE NO. 60
+47 BEGIN NO. 60
+89 END NO. 60
+44 BEGIN NO. 60
+42 BEGIN NO. 60
RIPRAP MEDIUM
10'
8'
BARK RIVER
6'
32'
28'
RIPRAP LIGHT
SEEDING MIXTURE NO. 60
WETLANDS
WETLAND W-02

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 55	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 10
PLOT DATE : 7/12/2024 10:19 AM
PLOT BY : WEIGAND, BEN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT



NOTES:
1) PLACE SILT FENCE RELIEF AT LOW POINTS AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAIL
2) RESTORE ALL DISTURBED AREAS WITH SALV TOPSOIL AS AVAILABLE, SUPPLEMENT WITH ADDITIONAL TOPSOIL AS REQ'D SEED MIXTURE NO. 60 ADJACENT TO WETLANDS AS SHOWN, ALL OTHER AREAS SEEDING MIXTURE NO. 30 FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B AS SHOWN, ALL OTHER AREAS URBAN CLASS I TYPE A
3) INSTALL SILT FENCE WITHIN 1-3 FT OF THE SLOPE INTERCEPT IN WETLAND AREAS
4) INSTALL SILT FENCE AT TOE OF DISTURBED SLOPE
5) INSTALL CULVERT CHECKS ON UPSTREAM APRON ENDWALL

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 56	E

2

EXISTING R/W

SI

GN

POST

385+00

386+00

387+00

388+00

389+00

R/L STH 83

MATCH LINE 389+25

MH

WETLANDS

SEEDING MIXTURE NO. 60

MATCH LINE 384+15.25

EXISTING R/W

LEGEND

EROSION MAT URBAN CLASS I TYPE B

SILT FENCE

INLET PROTECTION (SEE TYPE)

TEMPORARY DITCH CHECK

CULVERT PIPE CHECK

SURFACE WATER FLOW

N

MATCH LINE 395+10

SIGN

390+00

391+00

392+00

393+00

394+00

395+00

RIPRAP MEDIUM

RIPRAP

9'

10'

+19 END NO. 60

NOTES:

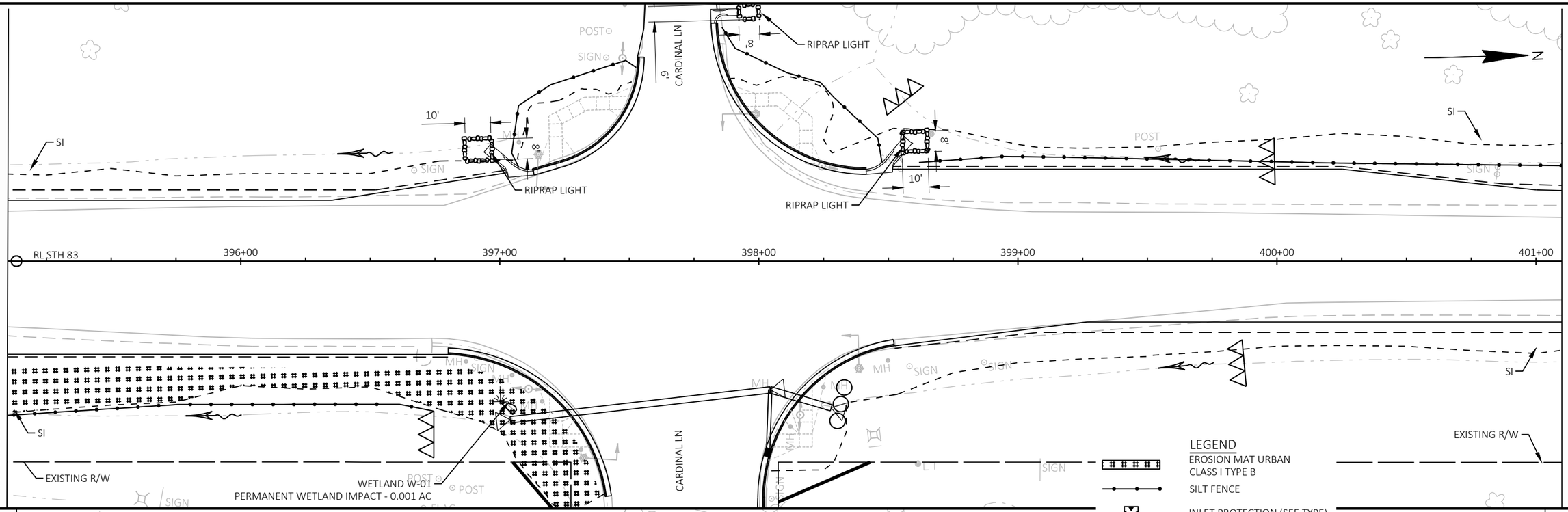
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2) RESTORE ALL DISTURBED AREAS WITH SALV TOPSOIL AS AVAILABLE, SUPPLEMENT WITH ADDITIONAL TOPSOIL AS REQ'D SEED MIXTURE NO. 60 ADJACENT TO WETLANDS AS SHOWN, ALL OTHER AREAS SEEDING MIXTURE NO. 30 FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B AS SHOWN, ALL OTHER AREAS URBAN CLASS I TYPE A
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5) INSTALL CULVERT CHECKS ON UPSTREAM APRON ENDWALL

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 57	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 12

PLOT DATE : 7/12/2024 10:19 AM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

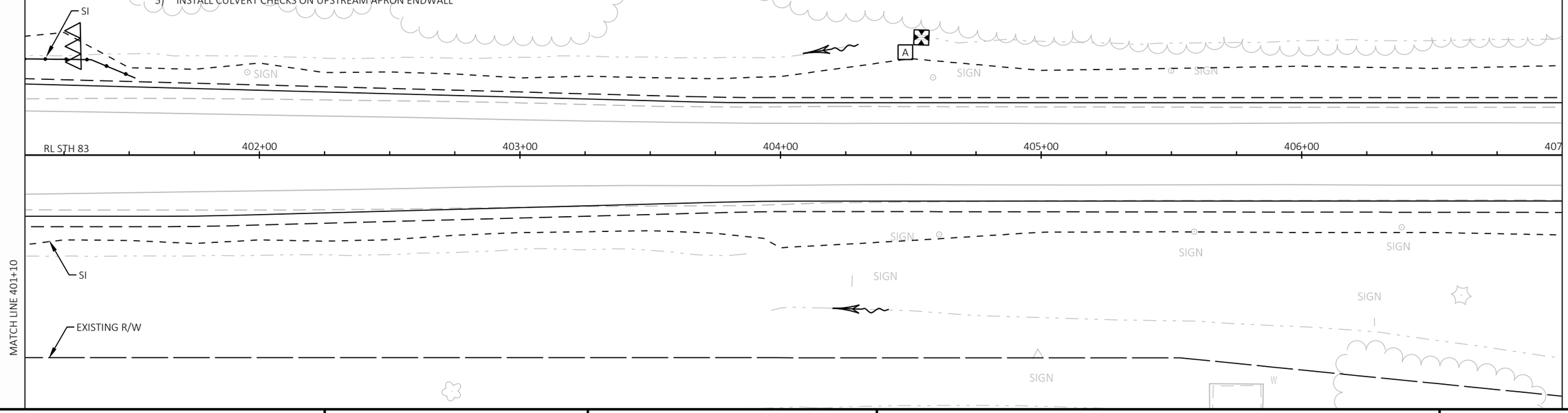


NOTES:

1) PLACE SILT FENCE RELIEF AT LOW POINTS AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAIL
2) RESTORE ALL DISTURBED AREAS WITH SALV TOPSOIL AS AVAILABLE, SUPPLEMENT WITH ADDITIONAL TOPSOIL AS REQ'D SEED MIXTURE NO. 60 ADJACENT TO WETLANDS AS SHOWN, ALL OTHER AREAS SEEDING MIXTURE NO. 30 FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B AS SHOWN, ALL OTHER AREAS URBAN CLASS I TYPE A
3) INSTALL SILT FENCE WITHIN 1-3 FT OF THE SLOPE INTERCEPT IN WETLAND AREAS
4) INSTALL SILT FENCE AT TOE OF DISTURBED SLOPE
5) INSTALL CULVERT CHECKS ON UPSTREAM APRON ENDWALL

LEGEND

- EROSION MAT URBAN CLASS I TYPE B
- SILT FENCE
- INLET PROTECTION (SEE TYPE)
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 58	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 13
PLOT DATE : 7/12/2024 10:20 AM
PLOT BY : WEIGAND, BEN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

2

N

MATCH LINE 412+80

A

SI

SIGN

+00

408+00

409+00

410+00

411+00

412+00

RL STH 83

MATCH LINE 407+00

LEGEND

EROSION MAT URBAN CLASS I TYPE B

SILT FENCE

INLET PROTECTION (SEE TYPE)

TEMPORARY DITCH CHECK

CULVERT PIPE CHECK

SURFACE WATER FLOW

N

MATCH LINE 417+65

413+00

414+00

415+00

416+00

417+00

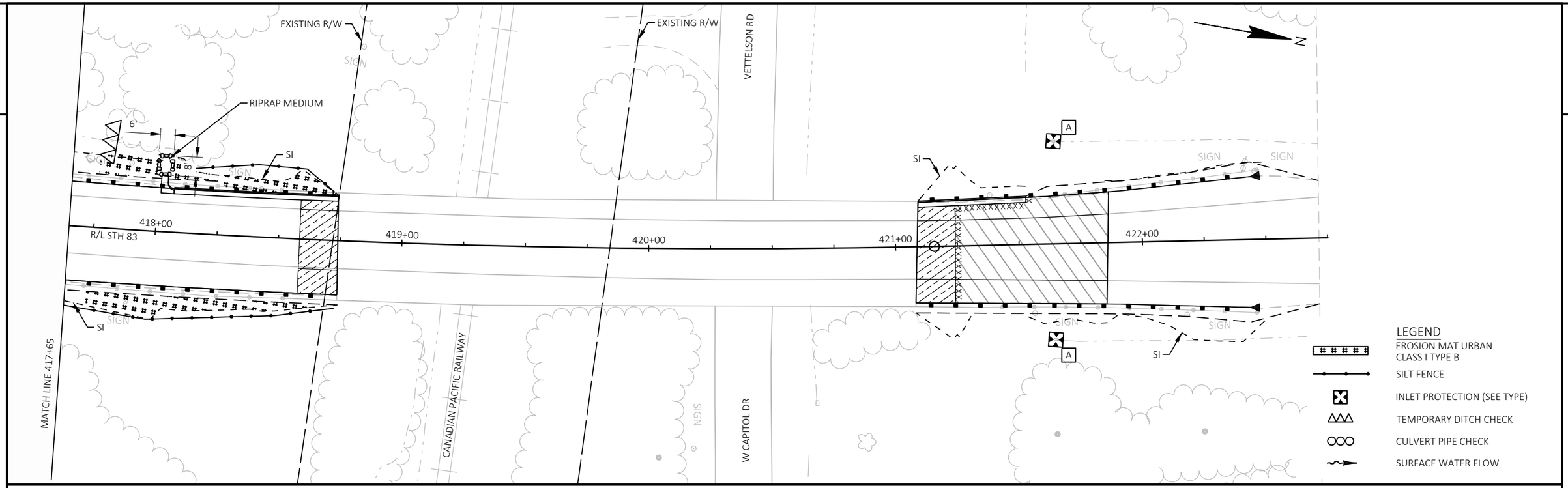
R/L STH 83

MATCH LINE 412+80

NOTES:

1) PLACE SILT FENCE RELIEF AT LOW POINTS AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAIL
2) RESTORE ALL DISTURBED AREAS WITH SALV TOPSOIL AS AVAILABLE, SUPPLEMENT WITH ADDITIONAL TOPSOIL AS REQ'D SEED MIXTURE NO. 60 ADJACENT TO WETLANDS AS SHOWN, ALL OTHER AREAS SEEDING MIXTURE NO. 30 FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B AS SHOWN, ALL OTHER AREAS URBAN CLASS I TYPE A
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5) INSTALL CULVERT CHECKS ON UPSTREAM APRON ENDWALL

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 59	E



NOTES:

1) PLACE SILT FENCE RELIEF AT LOW POINTS AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAIL
2) RESTORE ALL DISTURBED AREAS WITH SALV TOPSOIL AS AVAILABLE, SUPPLEMENT WITH ADDITIONAL TOPSOIL AS REQ'D
   SEED MIXTURE NO. 60 ADJACENT TO WETLANDS AS SHOWN, ALL OTHER AREAS SEEDING MIXTURE NO. 30
   FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B AS SHOWN, ALL OTHER AREAS URBAN CLASS I TYPE A
3) INSTALL SILT FENCE WITHIN 1-3 FT OF THE SLOPE INTERCEPT IN WETLAND AREAS
4) INSTALL SILT FENCE AT TOE OF DISTURBED SLOPE
5) INSTALL CULVERT CHECKS ON UPSTREAM APRON ENDWALL

INTENTIONALLY LEFT BLANK

2

LEGEND

- WETLAND IMPACTS
- ESTIMATED SLOPE INTERCEPT
- SURFACE WATER FLOW
- SAWCUT
- DELINEATED WETLAND BOUNDARY
- EXISTING WATER FLOWLINE

MIDWEST FIBER NETWORK, LEVEL 3,
SPECTRUM, AT&T TEL, AT&T LOCAL,
WE ENERGIES

WE ENERGIES GAS

CITY OF DELAFIELD

STA 309+49, 35.9' LT
APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 18-INCH 6 TO 1
INVERT: 1022.70
101

REMOVE EXISTING DRIVEWAY CULVERT
PLACE 35' CULVERT PIPE CORRUGATED STEEL 18-INCH
AND 2X APRON ENDWALLS FOR CULVERT PIPE SLOPED DRAINS STEEL 18-INCH 6 TO 1
CORRUGATED STEEL 18-INCH

EXISTING R/W

SI

STA 309+15, 35.9' LT
APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 18-INCH 6 TO 1
INVERT: 1023.35
100

PI: 309+07.24

51'

RL STH 83

STH 83

308+00

309+00

310+00

59'

SI

STA 308+62
CULVERT 67083034027
REMOVE 1 - 12" CMP AND ENDWALLS

EXISTING R/W

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CULVERT DETAILS	SHEET 61	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 01

PLOT DATE : 3/21/2024 8:02 AM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WETLAND IMPACTS
- ESTIMATED SLOPE INTERCEPT
- SURFACE WATER FLOW
- SAWCUT
- DELINEATED WETLAND BOUNDARY
- EXISTING WATER FLOWLINE

MIDWEST FIBER NETWORK, LEVEL 3, SPECTRUM, AT&T TEL, AT&T LOCAL, WE ENERGIES

WE ENERGIES GAS

EXISTING R/W

N

STA 315+50
CULVERT 67083034028
REMOVE 8' - 24" CPRC
8' - CPRC CLASS IV 24"
1 - APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24"
2 - MARKER FOR CULVERT END REQ'D
CLEANING CULVERT PIPES

CITY OF DELAFIELD

STA 315+80, 25.5' LT
APRON ENDWALLS FOR CPRC 24-INCH
INVERT: 1000.02

103

RIPRAP

SI

RL STH 83

314+00

STH 83

315+00

316+00

PC: 315+57.33

WE ENERGIES GAS

SI

RIPRAP

EXISTING R/W

2

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CULVERT DETAILS	SHEET 62	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 02

PLOT DATE : 3/20/2024 2:51 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WETLAND IMPACTS
- ESTIMATED SLOPE INTERCEPT
- SURFACE WATER FLOW
- SAWCUT
- DELINEATED WETLAND BOUNDARY
- EXISTING WATER FLOWLINE

CITY OF DELAFIELD

MIDWEST FIBER NETWORK, LEVEL 3, SPECTRUM, AT&T TEL, AT&T LOCAL, WE ENERGIES

EXISTING R/W

EXISTING RIPRAP TO REMAIN

SI

STA 334+09, 103.8' LT
APRON ENDWALLS FOR CULVERT PIPE 24-INCH
INVERT: 919.77
107

SPECTRUM

AT&T

AT&T

RIPRAP

MH

WE ENERGIES GAS

WISDOT SIGNALS

PT: 47+40.99

PT: 50+00.00

334+00

AT&T

OAKWOOD RD

WISDOT SIGNALS

STA 333+46, 92.1' LT
APRON ENDWALLS FOR CULVERT PIPE 24-INCH
INVERT: 920.36
105

STA 334+00
REMOVE 1 - 18" CMCP
64' - CULVERT PIPE CLASS IV 24"
2 - APRON ENDWALLS FOR CULVERT PIPE 24"
2 - MARKER FOR CULVERT END REQ'D

WISDOT SIGNALS

RL STH 83

AT&T

SI

WE ENERGIES

EXISTING R/W

CITY OF DELAFIELD

STH 83

333+00

VILLAGE OF HARTLAND

SI

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CULVERT DETAILS	SHEET 63	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 03

PLOT DATE : 3/20/2024 2:51 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WETLAND IMPACTS
- ESTIMATED SLOPE INTERCEPT
- SURFACE WATER FLOW
- SAWCUT
- DELINEATED WETLAND BOUNDARY
- EXISTING WATER FLOWLINE

N

MIDWEST FIBER NETWORK, LEVEL 3, SPECTRUM, AT&T TEL, AT&T LOCAL, WE ENERGIES

TLE

EXISTING R/W

STA 349+80
CULVERT 67083034030
EXISTING 36" CPRC
EXTEND 8' - CULVERT PIPE REINFORCED CONCRETE CLASS IV 36"
1 - APRON ENDWALLS FOR CULVERT PIPE SALVAGED 36"
2 - MARKER FOR CULVERT END REQ'D

R/W

STA 349+90
CULVERT 67083047994
EXISTING 36" CPRC
EXTEND 8' - CULVERT PIPE REINFORCED CONCRETE CLASS IV 36"
1 - APRON ENDWALLS FOR CULVERT PIPE SALVAGED 36"
2 - MARKER FOR CULVERT END REQ'D

TLE

CITY OF DELAFIELD

RIPRAP

116 STA 349+79, 39.1' LT
APRON ENDWALLS FOR CPRC 36-INCH
INVERT: 911.39

SI

STA 349+72, 39.5' LT
APRON ENDWALLS FOR CPRC 36-INCH
INVERT: 911.44
114

PT: 350+26.69

WE ENERGIES GAS

RL STH 83

STH 83

349+00

350+00

351+00

WE ENERGIES ELECTRIC

SPECTRUM

SPECTRUM

AT&T

WE ENERGIES

AT&T

SI

RIPRAP

WALNUT RIDGE DR

EXISTING R/W

SPECTRUM

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CULVERT DETAILS	SHEET 64	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 04

PLOT DATE : 3/20/2024 2:51 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

LEGEND

- WETLAND IMPACTS
- ESTIMATED SLOPE INTERCEPT
- SURFACE WATER FLOW
- SAWCUT (XXXXXXXX)
- DELINEATED WETLAND BOUNDARY
- EXISTING WATER FLOWLINE

N

STA 363+50
REMOVING SMALL PIPE CULVERTS
2-APRON ENDWALLS
65'-CULVERT PIPE CORRUGATED
STEEL 18-INCH

EXISTING R/W

MIDWEST FIBER NETWORK, LEVEL 3, SPECTRUM, AT&T TEL, AT&T LOCAL, WE ENERGIES

WE ENERGIES GAS

AT&T

SI

CITY OF DELAFIELD

118 STA 363+80, 41.4' LT
APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 18-INCH 6 TO 1
INVERT: 916.49

117 STA 363+15, 40.5' LT
APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 18-INCH 6 TO 1
INVERT: 916.05

RL STH 83

363+00 STH 83 364+00 365+00

LEVEL 3

AT&T

SPECTRUM

SI

STA 365+60
CULVERT 67083034031
EXISTING 24" CPRC
CLEANING CULVERT PIPES
2 - MARKER FOR
CULVERT END REQ'D

EXISTING R/W

MH

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CULVERT DETAILS	SHEET 65	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 05

PLOT DATE : 3/20/2024 2:51 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WETLAND IMPACTS
- ESTIMATED SLOPE INTERCEPT
- SURFACE WATER FLOW
- SAWCUT
- DELINEATED WETLAND BOUNDARY
- EXISTING WATER FLOWLINE

STA 377+00
CULVERT 67083034032
REMOVE EXISTING 24" CPRC
CLEANING CULVERT PIPES
90' - CULVERT PIPE REINFORCED CONCRETE CLASS IV 30"
2 - APRON ENDWALLS FOR CPRC 30"
2 - MARKER FOR CULVERT END REQ'D

N

STA 377+32, 35.7' LT
APRON ENDWALLS FOR CULVERT PIPE 30-INCH
INVERT: 896.64
124

MIDWEST FIBER NETWORK, LEVEL 3,
SPECTRUM, AT&T TEL, AT&T LOCAL,
WE ENERGIES

EXISTING R/W

WE ENERGIES GAS

SI

CITY OF DELAFIELD

RL STH 83

376+00

STH 83

377+00

378+00

STA 376+87, 41.0' RT
APRON ENDWALLS FOR CULVERT PIPE 30-INCH
INVERT: 895.71
125

AT&T

EXISTING R/W

MH

2

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CULVERT DETAILS	SHEET 66	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 06
PLOT DATE : 3/20/2024 2:51 PM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- WETLAND IMPACTS
- ESTIMATED SLOPE INTERCEPT
- SURFACE WATER FLOW
- SAWCUT
- DELINEATED WETLAND BOUNDARY
- EXISTING WATER FLOWLINE

N

STA 389+78, 35.6' LT
APRON ENDWALLS FOR CULVERT PIPE 36-INCH
INVERT: 904.81
122

RIPRAP

RL STH 83

STH 83

389+00

390+00

391+00

AT&T

STA 389+46, 55.7' RT
APRON ENDWALLS FOR CULVERT PIPE 36-INCH
INVERT: 901.10
123

RIPRAP

MH

STA 389+80
CULVERT 67083034033
REMOVE 1 - 36" CMCP
97' - CULVERT PIPE CLASS III-A 36"
2 - APRON ENDWALLS FOR CULVERT PIPE 36"
2 - MARKER FOR CULVERT END REQ'D

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CULVERT DETAILS	SHEET 67	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 07

PLOT DATE : 3/20/2024 2:51 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WETLAND IMPACTS
- ESTIMATED SLOPE INTERCEPT
- SURFACE WATER FLOW
- SAWCUT
- DELINEATED WETLAND BOUNDARY
- EXISTING WATER FLOWLINE

AT&T

CARDINAL RD

WISDOT SIGNALS

AT&T

SI

MH

SI

N

RL STH 83

STH 83

397+00

398+00

BP: 50+00.00

399+00

WISDOT SIGNALS

WE ENERGIES GAS

ADJUSTING MANHOLE COVERS
CONNECT PROPOSED 12-INCH STORM SEWER
EX EL: 920.31'
PR EL: 920.20'

WISDOT SIGNALS

WISDOT SIGNALS

108 STA 398+28, 56.6' RT
APRON ENDWALLS FOR CPRC 24-INCH
INVERT: 918.55

AT&T

DITCHING AND SHAPING

10' TYP

20' TYP

SI

STA 397+00
EXISTING 36" STORM SEWER REINFORCED CONCRETE
CLEANING CULVERT PIPES
1 - MARKER FOR CULVERT END REQ'D

STA 398+03, 73.9' RT
INLETS 4-BW
INVERT: 916.24

110

AT&T

SI

AT&T

STA 398+20
EXISTING 24" STORM SEWER REINFORCED CONCRETE
8' - STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24"
1 - APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24"
1 - MARKER FOR CULVERT END REQ'D

VILLAGE OF HARTLAND

EXISTING R/W

R/W

STA 398+00
REMOVE INLET & 17' - 12" STORM SEWER REINFORCED CONCRETE
24' - STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12"
INLET 4-FT DIAMETER, INLET COVER TYPE BW

R/W

AT&T WISCONSIN

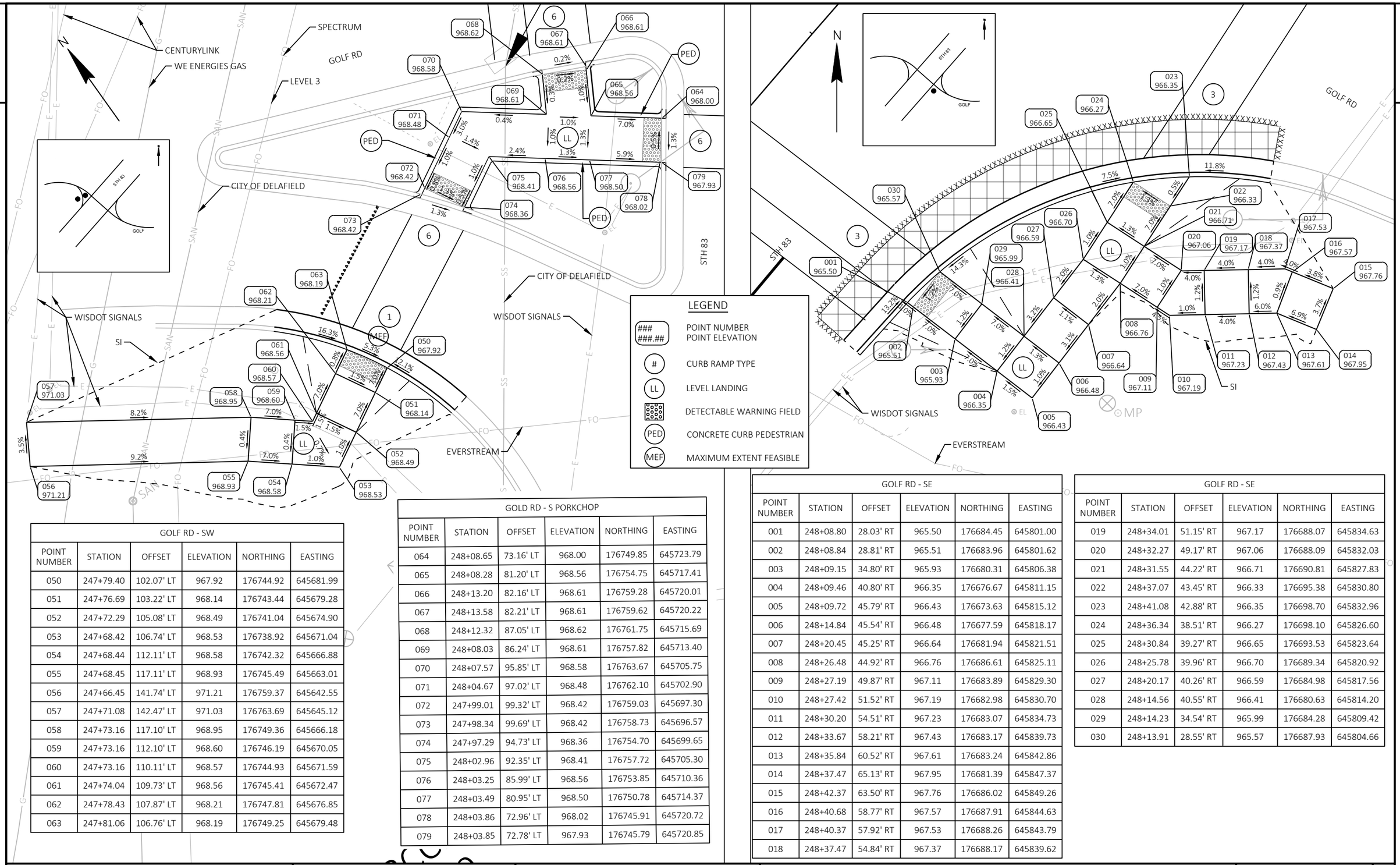
EXISTING R/W

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CULVERT DETAILS	SHEET 68	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 08

PLOT DATE : 3/20/2024 2:52 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42



GOLF RD - SW

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
050	247+79.40	102.07' LT	967.92	176744.92	645681.99
051	247+76.69	103.22' LT	968.14	176743.44	645679.28
052	247+72.29	105.08' LT	968.49	176741.04	645674.90
053	247+68.42	106.74' LT	968.53	176738.92	645671.04
054	247+68.44	112.11' LT	968.58	176742.32	645666.88
055	247+68.45	117.11' LT	968.93	176745.49	645663.01
056	247+66.45	141.74' LT	971.21	176759.37	645642.55
057	247+71.08	142.47' LT	971.03	176763.69	645645.12
058	247+73.16	117.10' LT	968.95	176749.36	645666.18
059	247+73.16	112.10' LT	968.60	176746.19	645670.05
060	247+73.16	110.11' LT	968.57	176744.93	645671.59
061	247+74.04	109.73' LT	968.56	176745.41	645672.47
062	247+78.43	107.87' LT	968.21	176747.81	645676.85
063	247+81.06	106.76' LT	968.19	176749.25	645679.48

GOLD RD - S PORKCHOP

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
064	248+08.65	73.16' LT	968.00	176749.85	645723.79
065	248+08.28	81.20' LT	968.56	176754.75	645717.41
066	248+13.20	82.16' LT	968.61	176759.28	645720.01
067	248+13.58	82.21' LT	968.61	176759.62	645720.22
068	248+12.32	87.05' LT	968.62	176761.75	645715.69
069	248+08.03	86.24' LT	968.61	176757.82	645713.40
070	248+07.57	95.85' LT	968.58	176763.67	645705.75
071	248+04.67	97.02' LT	968.48	176762.10	645702.90
072	247+99.01	99.32' LT	968.42	176759.03	645697.30
073	247+98.34	99.69' LT	968.42	176758.73	645696.57
074	247+97.29	94.73' LT	968.36	176754.70	645699.65
075	248+02.96	92.35' LT	968.41	176757.72	645705.30
076	248+03.25	85.99' LT	968.56	176753.85	645710.36
077	248+03.49	80.95' LT	968.50	176750.78	645714.37
078	248+03.86	72.96' LT	968.02	176745.91	645720.72
079	248+03.85	72.78' LT	967.93	176745.79	645720.85

GOLF RD - SE

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
001	248+08.80	28.03' RT	965.50	176684.45	645801.00
002	248+08.84	28.81' RT	965.51	176683.96	645801.62
003	248+09.15	34.80' RT	965.93	176680.31	645806.38
004	248+09.46	40.80' RT	966.35	176676.67	645811.15
005	248+09.72	45.79' RT	966.43	176673.63	645815.12
006	248+14.84	45.54' RT	966.48	176677.59	645818.17
007	248+20.45	45.25' RT	966.64	176681.94	645821.51
008	248+26.48	44.92' RT	966.76	176686.61	645825.11
009	248+27.19	49.87' RT	967.11	176683.89	645829.30
010	248+27.42	51.52' RT	967.19	176682.98	645830.70
011	248+30.20	54.51' RT	967.23	176683.07	645834.73
012	248+33.67	58.21' RT	967.43	176683.17	645839.73
013	248+35.84	60.52' RT	967.61	176683.24	645842.86
014	248+37.47	65.13' RT	967.95	176681.39	645847.37
015	248+42.37	63.50' RT	967.76	176686.02	645849.26
016	248+40.68	58.77' RT	967.57	176687.91	645844.63
017	248+40.37	57.92' RT	967.53	176688.26	645843.79
018	248+37.47	54.84' RT	967.37	176688.17	645839.62

GOLF RD - SE

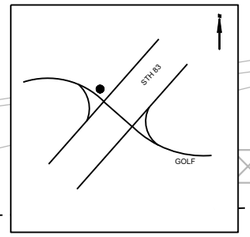
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
019	248+34.01	51.15' RT	967.17	176688.07	645834.63
020	248+32.27	49.17' RT	967.06	176688.09	645832.03
021	248+31.55	44.22' RT	966.71	176690.81	645827.83
022	248+37.07	43.45' RT	966.33	176695.38	645830.80
023	248+41.08	42.88' RT	966.35	176698.70	645832.96
024	248+36.34	38.51' RT	966.27	176698.10	645826.60
025	248+30.84	39.27' RT	966.65	176693.53	645823.64
026	248+25.78	39.96' RT	966.70	176689.34	645820.92
027	248+20.17	40.26' RT	966.59	176684.98	645817.56
028	248+14.56	40.55' RT	966.41	176680.63	645814.20
029	248+14.23	34.54' RT	965.99	176684.28	645809.42
030	248+13.91	28.55' RT	965.57	176687.93	645804.66

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 69	E

2

LEGEND

- ### / ###.## — POINT NUMBER / POINT ELEVATION
- # — CURB RAMP TYPE
- LL — LEVEL LANDING
- DETECTABLE WARNING FIELD
- PED — CONCRETE CURB PEDESTRIAN
- MEF — MAXIMUM EXTENT FEASIBLE



CENTURYLINK
SPECTRUM
LEVEL 3
EXISTING R/W
CITY OF DELAFIELD
WE ENERGIES GAS
WE ENERGIES ELECTRIC
WISDOT SIGNALS
SI
ASPHALT SHARED USE PATH
STH 83
GOLF RD
N

GOLF RD - NW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
150	248+86.27	99.97' LT	970.77	176828.36	645757.48
151	248+92.09	101.40' LT	970.96	176833.83	645760.59
152	249+19.24	84.71' LT	972.70	176843.13	645792.25
153	249+18.83	78.74' LT	972.28	176838.70	645796.29
154	249+28.42	78.30' LT	972.41	176845.60	645803.52
155	249+28.53	84.49' LT	972.84	176849.98	645799.13
156	249+40.85	84.31' LT	973.76	176859.09	645808.22
157	249+71.15	99.83' LT	976.38	176892.57	645819.57
158	249+63.61	105.91' LT	976.27	176891.27	645809.65
159	249+40.95	94.31' LT	974.02	176866.15	645801.14
160	249+28.69	94.49' LT	972.98	176857.04	645792.05
161	249+19.90	94.69' LT	972.84	176850.52	645785.52
162	249+00.42	106.25' LT	971.06	176843.56	645763.04
163	248+98.06	110.58' LT	971.01	176844.70	645758.16
164	248+91.02	124.82' LT	971.39	176848.92	645742.65
165	248+84.90	122.00' LT	971.27	176842.22	645740.30
166	248+89.73	105.96' LT	970.91	176835.10	645755.56
167	248+85.19	104.84' LT	970.71	176830.82	645753.13
168	248+83.97	104.54' LT	970.70	176829.68	645752.48

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 70	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\023101_CR.DWG
LAYOUT NAME - 023102_cr
PLOT DATE : 3/19/2024 11:36 AM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : ##########

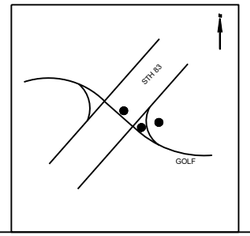
2

GOLF RD - N ISLAND					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
127	249+29.82	14.45' LT	971.48	176802.31	645850.47
128	249+39.75	14.44' LT	971.63	176809.48	645857.44
129	249+39.69	19.61' LT	971.57	176813.05	645853.70
130	249+29.81	19.80' LT	971.42	176806.02	645846.61

GOLF RD - NE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
100	249+69.12	44.75' RT	970.55	176788.54	645920.00
101	249+69.87	45.23' RT	970.56	176788.72	645920.86
102	249+74.83	48.37' RT	970.72	176789.89	645926.51
103	249+72.39	52.63' RT	970.88	176785.20	645927.81
104	249+81.66	56.97' RT	971.14	176788.43	645937.27
105	249+83.57	53.64' RT	970.87	176792.10	645936.26
106	249+88.30	49.43' RT	970.95	176798.33	645936.61
107	249+91.54	47.49' RT	971.22	176801.92	645937.52
108	250+07.12	44.53' RT	972.37	176814.60	645946.42
109	250+17.35	44.89' RT	973.18	176821.23	645953.91
110	250+17.46	34.47' RT	973.06	176828.87	645946.83
111	250+06.86	34.38' RT	972.47	176821.77	645939.22
112	249+86.78	38.64' RT	971.22	176805.02	645928.01
113	249+82.41	41.25' RT	970.87	176800.16	645926.78
114	249+75.48	36.87' RT	970.97	176798.52	645918.88

GOLF RD - N PORKCHOP					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
115	249+51.22	21.19' RT	970.87	176792.70	645890.90
116	249+48.72	19.54' RT	970.89	176792.10	645887.98
117	249+48.21	17.13' RT	970.92	176793.44	645885.91
118	249+38.58	17.87' RT	970.88	176786.10	645879.77
119	249+39.56	22.65' RT	970.81	176783.45	645883.86
120	249+29.28	23.36' RT	970.23	176775.67	645877.30
121	249+21.32	24.44' RT	970.17	176769.25	645872.64
122	249+23.57	30.19' RT	970.08	176766.88	645878.33
123	249+29.91	29.33' RT	970.14	176771.97	645882.03
124	249+40.00	28.63' RT	970.74	176779.59	645888.45
125	249+43.87	28.35' RT	970.72	176782.51	645890.91
126	249+47.61	30.84' RT	970.72	176783.40	645895.27

WISDOT SIGNALS
SPECTRUM
WE ENERGIES GAS
VERIZON
WE ENERGIES ELEC
WISDOT SIGNALS
ASPHALT SHARED USE PATH
SPECTRUM
WE ENERGIES ELECTRIC/ WISDOT SIGNALS
WISDOT SIGNALS
STH 83
GOLF RD
MH
MP
EL
SI

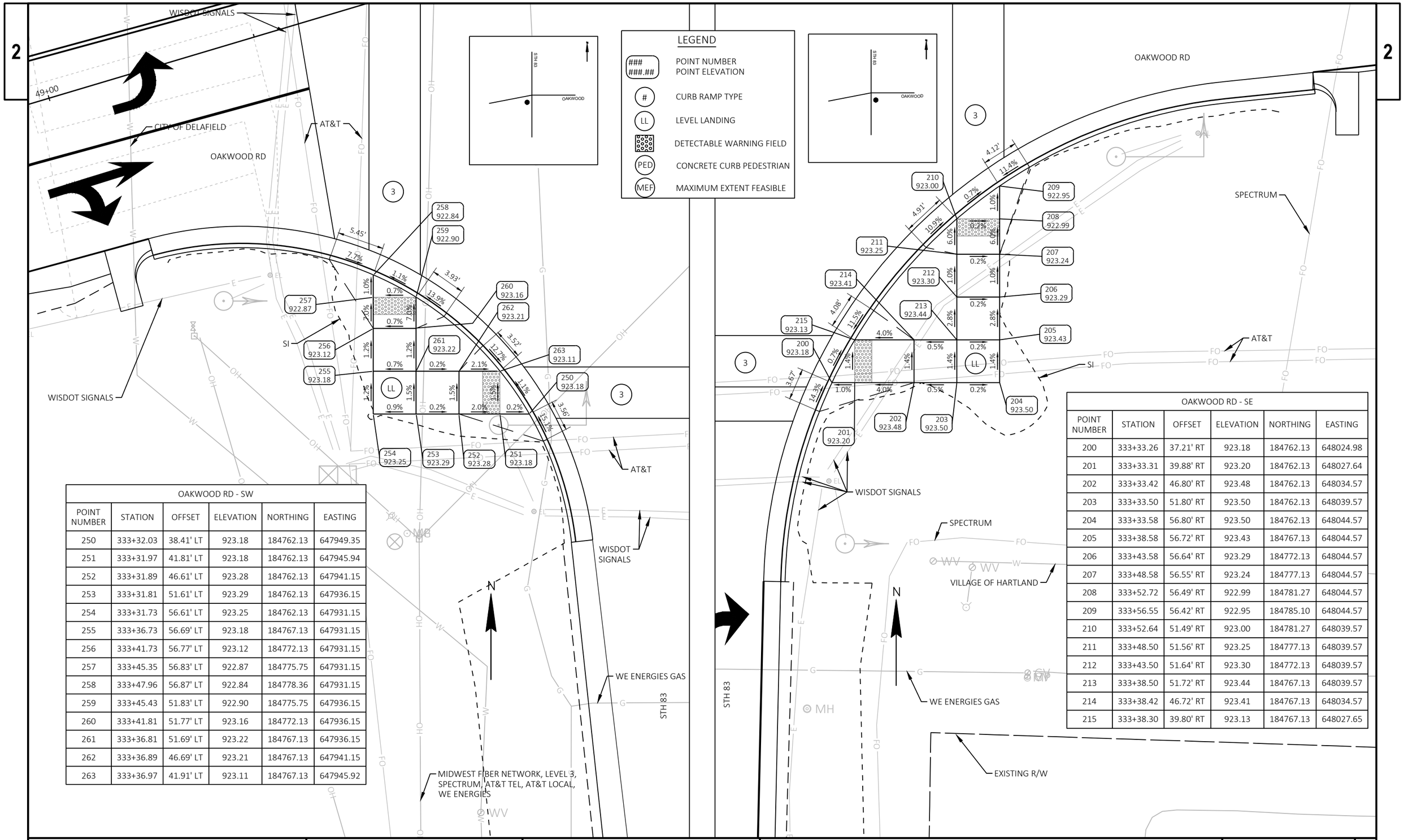


LEGEND

### / ###.##	POINT NUMBER / POINT ELEVATION
#	CURB RAMP TYPE
LL	LEVEL LANDING
	DETECTABLE WARNING FIELD
PED	CONCRETE CURB PEDESTRIAN
MEF	MAXIMUM EXTENT FEASIBLE

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 71	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\023101_CR.DWG
LAYOUT NAME - 023103_cr
PLOT DATE : 3/19/2024 11:36 AM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:10 FT



OAKWOOD RD - SW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
250	333+32.03	38.41' LT	923.18	184762.13	647949.35
251	333+31.97	41.81' LT	923.18	184762.13	647945.94
252	333+31.89	46.61' LT	923.28	184762.13	647941.15
253	333+31.81	51.61' LT	923.29	184762.13	647936.15
254	333+31.73	56.61' LT	923.25	184762.13	647931.15
255	333+36.73	56.69' LT	923.18	184767.13	647931.15
256	333+41.73	56.77' LT	923.12	184772.13	647931.15
257	333+45.35	56.83' LT	922.87	184775.75	647931.15
258	333+47.96	56.87' LT	922.84	184778.36	647931.15
259	333+45.43	51.83' LT	922.90	184775.75	647936.15
260	333+41.81	51.77' LT	923.16	184772.13	647936.15
261	333+36.81	51.69' LT	923.22	184767.13	647936.15
262	333+36.89	46.69' LT	923.21	184767.13	647941.15
263	333+36.97	41.91' LT	923.11	184767.13	647945.92

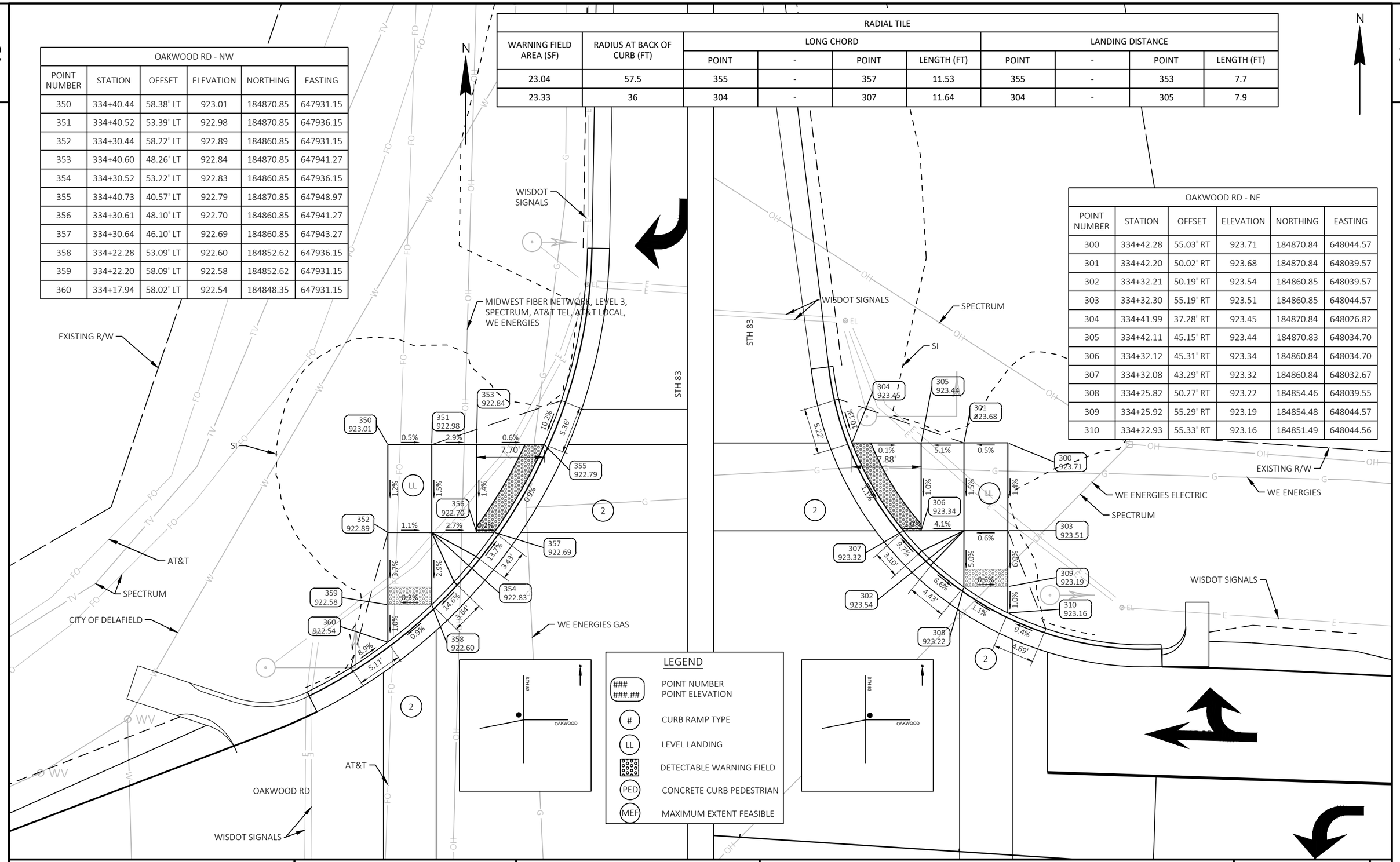
OAKWOOD RD - SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
200	333+33.26	37.21' RT	923.18	184762.13	648024.98
201	333+33.31	39.88' RT	923.20	184762.13	648027.64
202	333+33.42	46.80' RT	923.48	184762.13	648034.57
203	333+33.50	51.80' RT	923.50	184762.13	648039.57
204	333+33.58	56.80' RT	923.50	184762.13	648044.57
205	333+38.58	56.72' RT	923.43	184767.13	648044.57
206	333+43.58	56.64' RT	923.29	184772.13	648044.57
207	333+48.58	56.55' RT	923.24	184777.13	648044.57
208	333+52.72	56.49' RT	922.99	184781.27	648044.57
209	333+56.55	56.42' RT	922.95	184785.10	648044.57
210	333+52.64	51.49' RT	923.00	184781.27	648039.57
211	333+48.50	51.56' RT	923.25	184777.13	648039.57
212	333+43.50	51.64' RT	923.30	184772.13	648039.57
213	333+38.50	51.72' RT	923.44	184767.13	648039.57
214	333+38.42	46.72' RT	923.41	184767.13	648034.57
215	333+38.30	39.80' RT	923.13	184767.13	648027.65

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 72	E

OAKWOOD RD - NW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
350	334+40.44	58.38' LT	923.01	184870.85	647931.15
351	334+40.52	53.39' LT	922.98	184870.85	647936.15
352	334+30.44	58.22' LT	922.89	184860.85	647931.15
353	334+40.60	48.26' LT	922.84	184870.85	647941.27
354	334+30.52	53.22' LT	922.83	184860.85	647936.15
355	334+40.73	40.57' LT	922.79	184870.85	647948.97
356	334+30.61	48.10' LT	922.70	184860.85	647941.27
357	334+30.64	46.10' LT	922.69	184860.85	647943.27
358	334+22.28	53.09' LT	922.60	184852.62	647936.15
359	334+22.20	58.09' LT	922.58	184852.62	647931.15
360	334+17.94	58.02' LT	922.54	184848.35	647931.15

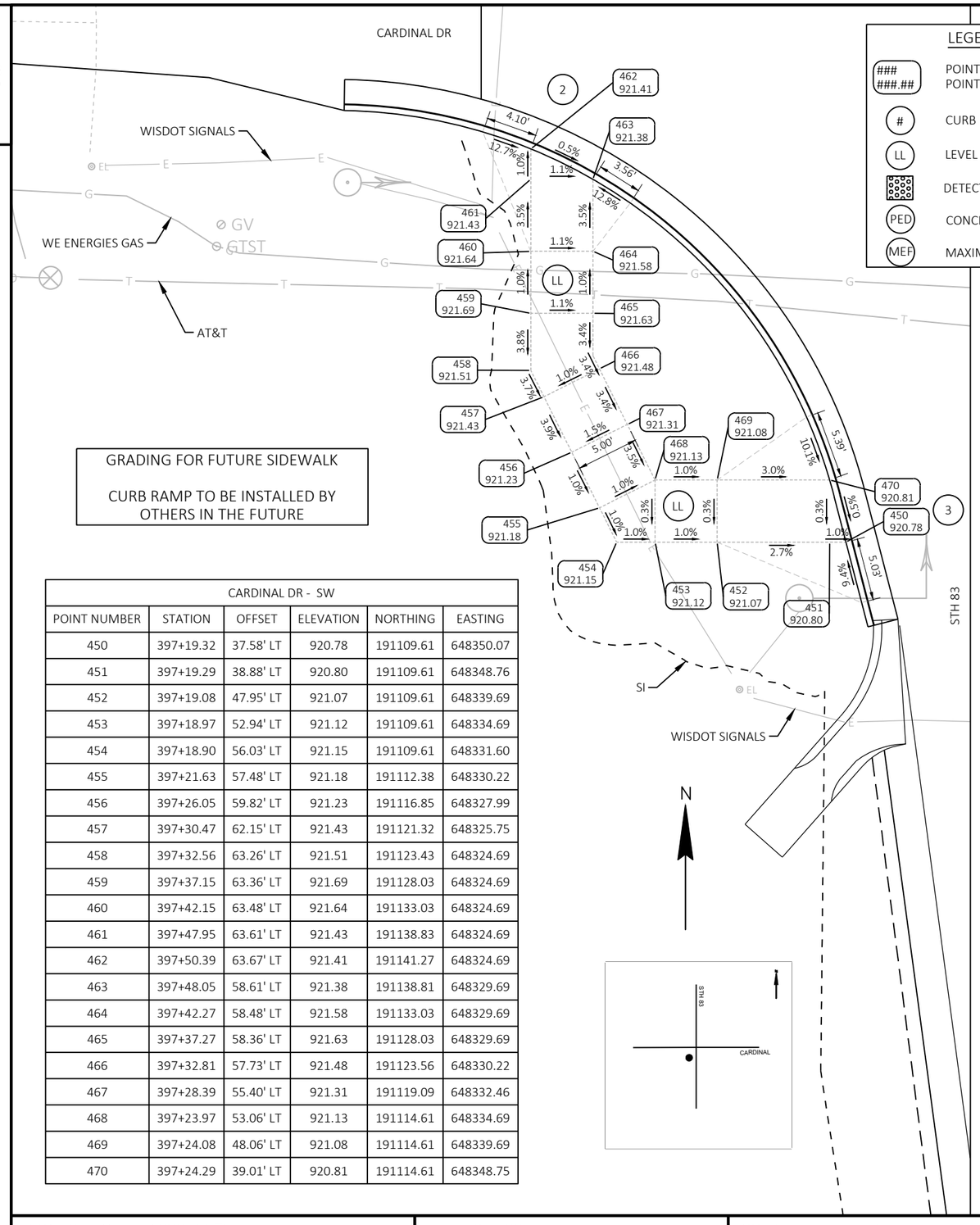
RADIAL TILE									
WARNING FIELD AREA (SF)	RADIUS AT BACK OF CURB (FT)	LONG CHORD				LANDING DISTANCE			
		POINT	-	POINT	LENGTH (FT)	POINT	-	POINT	LENGTH (FT)
23.04	57.5	355	-	357	11.53	355	-	353	7.7
23.33	36	304	-	307	11.64	304	-	305	7.9

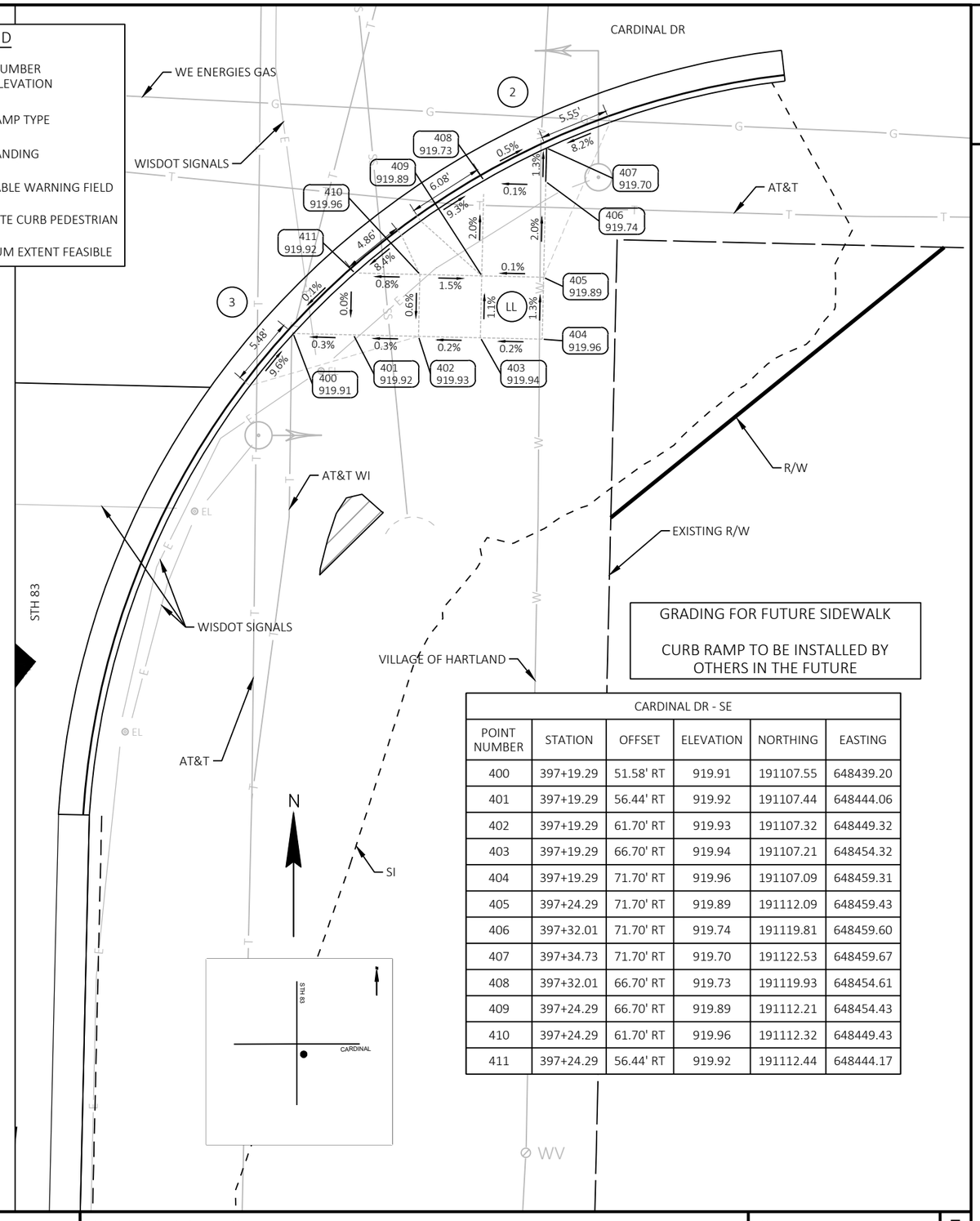
OAKWOOD RD - NE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
300	334+42.28	55.03' RT	923.71	184870.84	648044.57
301	334+42.20	50.02' RT	923.68	184870.84	648039.57
302	334+32.21	50.19' RT	923.54	184860.85	648039.57
303	334+32.30	55.19' RT	923.51	184860.85	648044.57
304	334+41.99	37.28' RT	923.45	184870.84	648026.82
305	334+42.11	45.15' RT	923.44	184870.83	648034.70
306	334+32.12	45.31' RT	923.34	184860.84	648034.70
307	334+32.08	43.29' RT	923.32	184860.84	648032.67
308	334+25.82	50.27' RT	923.22	184854.46	648039.55
309	334+25.92	55.29' RT	923.19	184854.48	648044.57
310	334+22.93	55.33' RT	923.16	184851.49	648044.56



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 73	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\023101_CR.DWG
LAYOUT NAME - 023105_cr
PLOT DATE : 3/19/2024 11:36 AM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:10 FT





LEGEND

### / ###.##	POINT NUMBER / POINT ELEVATION
#	CURB RAMP TYPE
LL	LEVEL LANDING
	DETECTABLE WARNING FIELD
PED	CONCRETE CURB PEDESTRIAN
MEF	MAXIMUM EXTENT FEASIBLE

GRADING FOR FUTURE SIDEWALK

CURB RAMP TO BE INSTALLED BY OTHERS IN THE FUTURE

GRADING FOR FUTURE SIDEWALK

CURB RAMP TO BE INSTALLED BY OTHERS IN THE FUTURE

CARDINAL DR - SW

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
450	397+19.32	37.58' LT	920.78	191109.61	648350.07
451	397+19.29	38.88' LT	920.80	191109.61	648348.76
452	397+19.08	47.95' LT	921.07	191109.61	648339.69
453	397+18.97	52.94' LT	921.12	191109.61	648334.69
454	397+18.90	56.03' LT	921.15	191109.61	648331.60
455	397+21.63	57.48' LT	921.18	191112.38	648330.22
456	397+26.05	59.82' LT	921.23	191116.85	648327.99
457	397+30.47	62.15' LT	921.43	191121.32	648325.75
458	397+32.56	63.26' LT	921.51	191123.43	648324.69
459	397+37.15	63.36' LT	921.69	191128.03	648324.69
460	397+42.15	63.48' LT	921.64	191133.03	648324.69
461	397+47.95	63.61' LT	921.43	191138.83	648324.69
462	397+50.39	63.67' LT	921.41	191141.27	648324.69
463	397+48.05	58.61' LT	921.38	191138.81	648329.69
464	397+42.27	58.48' LT	921.58	191133.03	648329.69
465	397+37.27	58.36' LT	921.63	191128.03	648329.69
466	397+32.81	57.73' LT	921.48	191123.56	648330.22
467	397+28.39	55.40' LT	921.31	191119.09	648332.46
468	397+23.97	53.06' LT	921.13	191114.61	648334.69
469	397+24.08	48.06' LT	921.08	191114.61	648339.69
470	397+24.29	39.01' LT	920.81	191114.61	648348.75

CARDINAL DR - SE

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
400	397+19.29	51.58' RT	919.91	191107.55	648439.20
401	397+19.29	56.44' RT	919.92	191107.44	648444.06
402	397+19.29	61.70' RT	919.93	191107.32	648449.32
403	397+19.29	66.70' RT	919.94	191107.21	648454.32
404	397+19.29	71.70' RT	919.96	191107.09	648459.31
405	397+24.29	71.70' RT	919.89	191112.09	648459.43
406	397+32.01	71.70' RT	919.74	191119.81	648459.60
407	397+34.73	71.70' RT	919.70	191122.53	648459.67
408	397+32.01	66.70' RT	919.73	191119.93	648454.61
409	397+24.29	66.70' RT	919.89	191112.21	648454.43
410	397+24.29	61.70' RT	919.96	191112.32	648449.43
411	397+24.29	56.44' RT	919.92	191112.44	648444.17

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 74	E

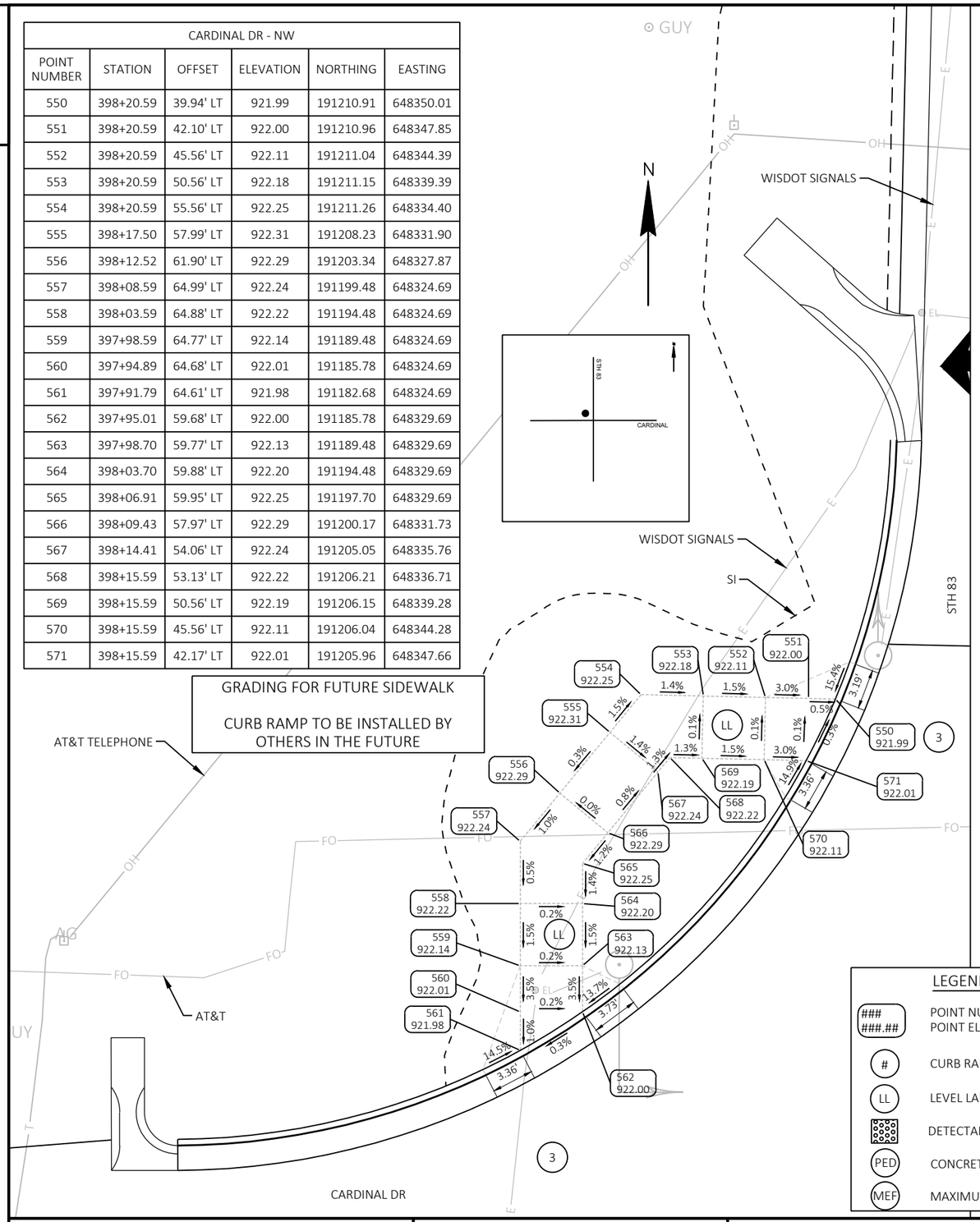
FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\023101_CR.DWG
LAYOUT NAME - 023106_cr
PLOT DATE : 3/19/2024 11:36 AM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

CARDINAL DR - NW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
550	398+20.59	39.94' LT	921.99	191210.91	648350.01
551	398+20.59	42.10' LT	922.00	191210.96	648347.85
552	398+20.59	45.56' LT	922.11	191211.04	648344.39
553	398+20.59	50.56' LT	922.18	191211.15	648339.39
554	398+20.59	55.56' LT	922.25	191211.26	648334.40
555	398+17.50	57.99' LT	922.31	191208.23	648331.90
556	398+12.52	61.90' LT	922.29	191203.34	648327.87
557	398+08.59	64.99' LT	922.24	191199.48	648324.69
558	398+03.59	64.88' LT	922.22	191194.48	648324.69
559	397+98.59	64.77' LT	922.14	191189.48	648324.69
560	397+94.89	64.68' LT	922.01	191185.78	648324.69
561	397+91.79	64.61' LT	921.98	191182.68	648324.69
562	397+95.01	59.68' LT	922.00	191185.78	648329.69
563	397+98.70	59.77' LT	922.13	191189.48	648329.69
564	398+03.70	59.88' LT	922.20	191194.48	648329.69
565	398+06.91	59.95' LT	922.25	191197.70	648329.69
566	398+09.43	57.97' LT	922.29	191200.17	648331.73
567	398+14.41	54.06' LT	922.24	191205.05	648335.76
568	398+15.59	53.13' LT	922.22	191206.21	648336.71
569	398+15.59	50.56' LT	922.19	191206.15	648339.28
570	398+15.59	45.56' LT	922.11	191206.04	648344.28
571	398+15.59	42.17' LT	922.01	191205.96	648347.66

GRADING FOR FUTURE SIDEWALK

CURB RAMP TO BE INSTALLED BY OTHERS IN THE FUTURE

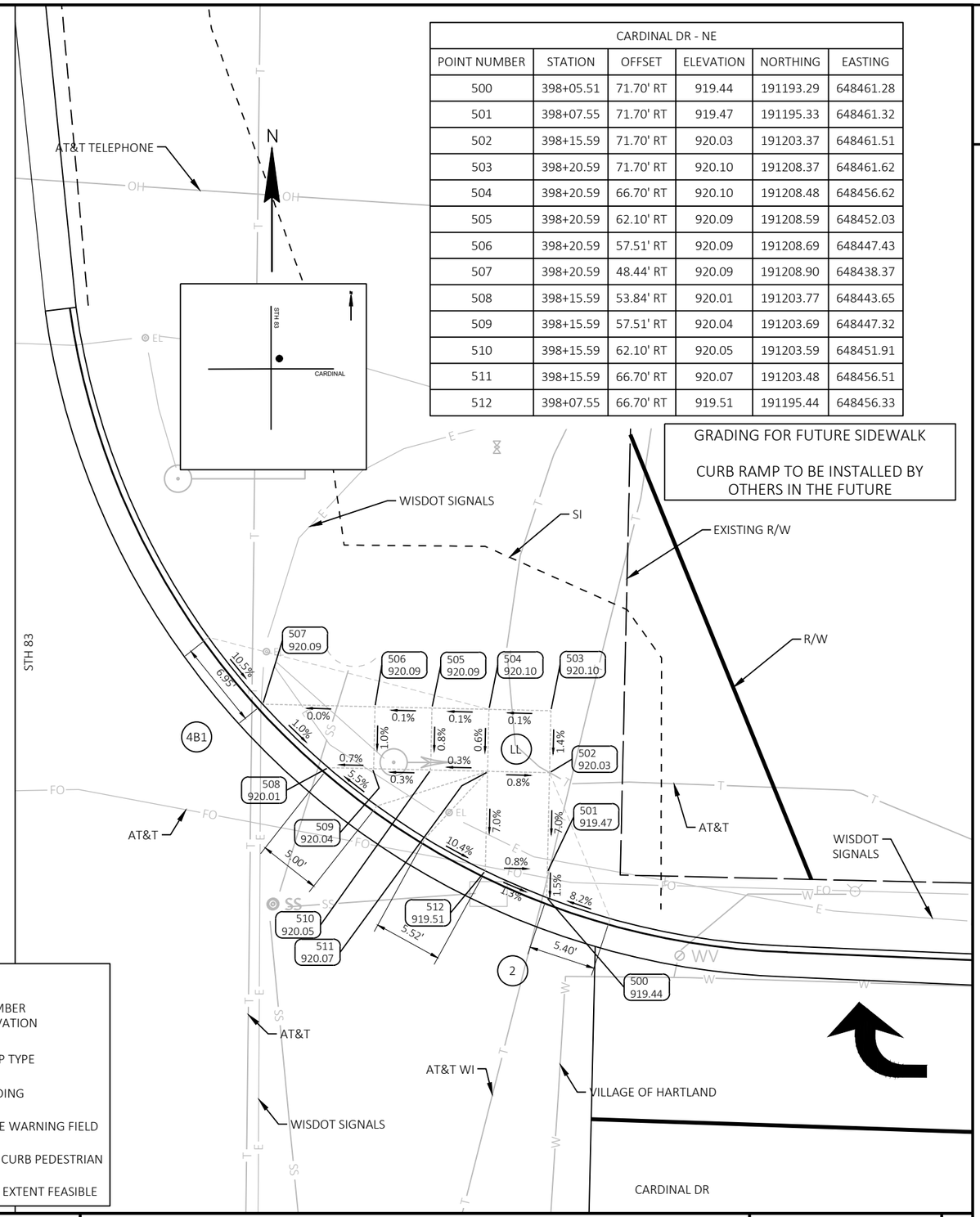


LEGEND	
### / ###.##	POINT NUMBER / POINT ELEVATION
#	CURB RAMP TYPE
LL	LEVEL LANDING
	DETECTABLE WARNING FIELD
PED	CONCRETE CURB PEDESTRIAN
MEF	MAXIMUM EXTENT FEASIBLE

CARDINAL DR - NE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
500	398+05.51	71.70' RT	919.44	191193.29	648461.28
501	398+07.55	71.70' RT	919.47	191195.33	648461.32
502	398+15.59	71.70' RT	920.03	191203.37	648461.51
503	398+20.59	71.70' RT	920.10	191208.37	648461.62
504	398+20.59	66.70' RT	920.10	191208.48	648456.62
505	398+20.59	62.10' RT	920.09	191208.59	648452.03
506	398+20.59	57.51' RT	920.09	191208.69	648447.43
507	398+20.59	48.44' RT	920.09	191208.90	648438.37
508	398+15.59	53.84' RT	920.01	191203.77	648443.65
509	398+15.59	57.51' RT	920.04	191203.69	648447.32
510	398+15.59	62.10' RT	920.05	191203.59	648451.91
511	398+15.59	66.70' RT	920.07	191203.48	648456.51
512	398+07.55	66.70' RT	919.51	191195.44	648456.33

GRADING FOR FUTURE SIDEWALK

CURB RAMP TO BE INSTALLED BY OTHERS IN THE FUTURE



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 75	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\023101_CR.DWG
LAYOUT NAME - 023107_cr

PLOT DATE : 3/19/2024 11:37 AM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:10 FT

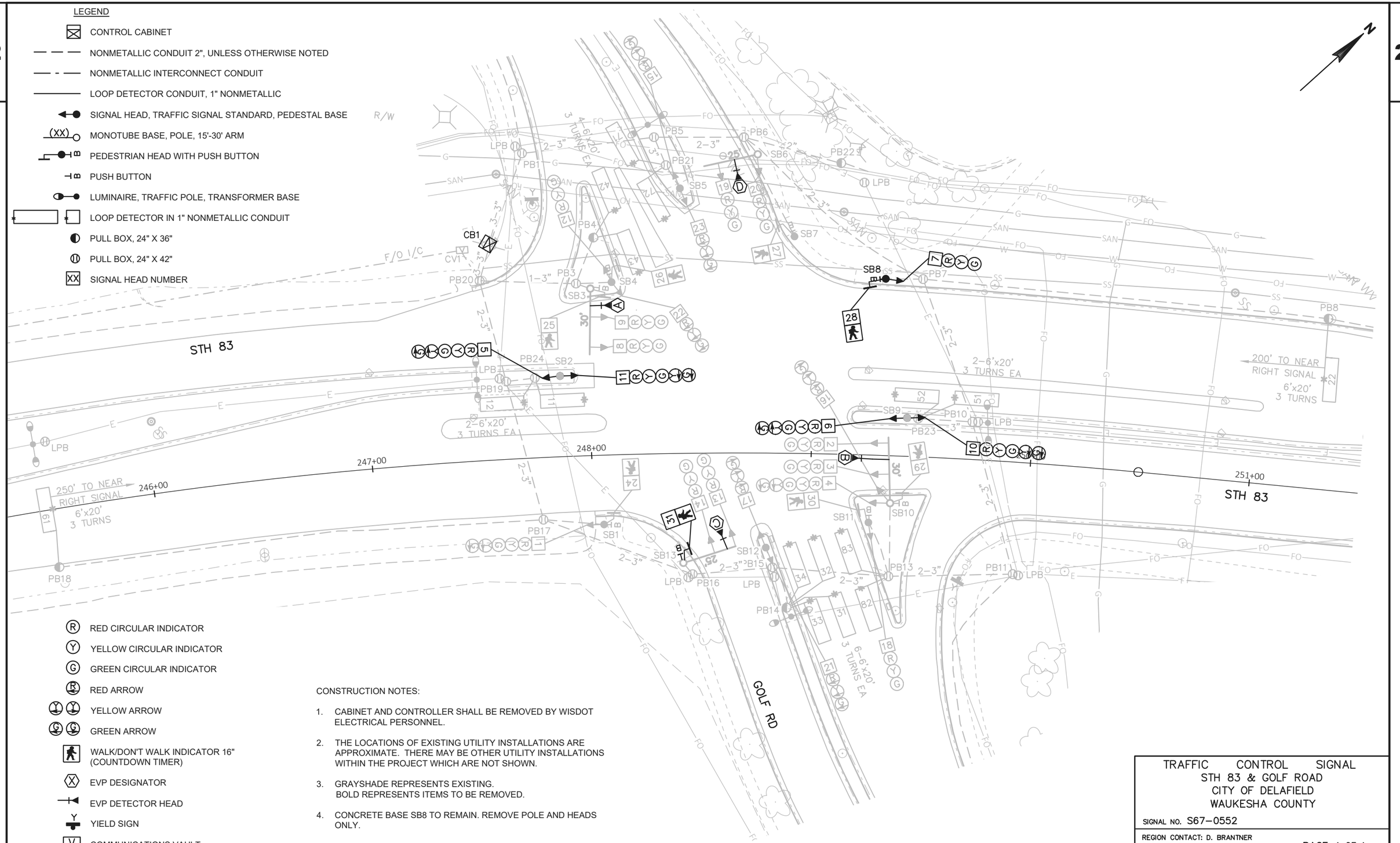
WISDOT/CADDS SHEET 42

2

2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT
- LOOP DETECTOR CONDUIT, 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- 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
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- Y YIELD SIGN
- V COMMUNICATIONS VAULT

CONSTRUCTION NOTES:

1. CABINET AND CONTROLLER SHALL BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.
4. CONCRETE BASE SB8 TO REMAIN. REMOVE POLE AND HEADS ONLY.

TRAFFIC CONTROL SIGNAL
STH 83 & GOLF ROAD
CITY OF DELAFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0552

REGION CONTACT: D. BRANTNER
DESIGNED BY:
REVISED BY: TADI

PAGE 1 OF 1

PROJECT NO:1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 76 E

2

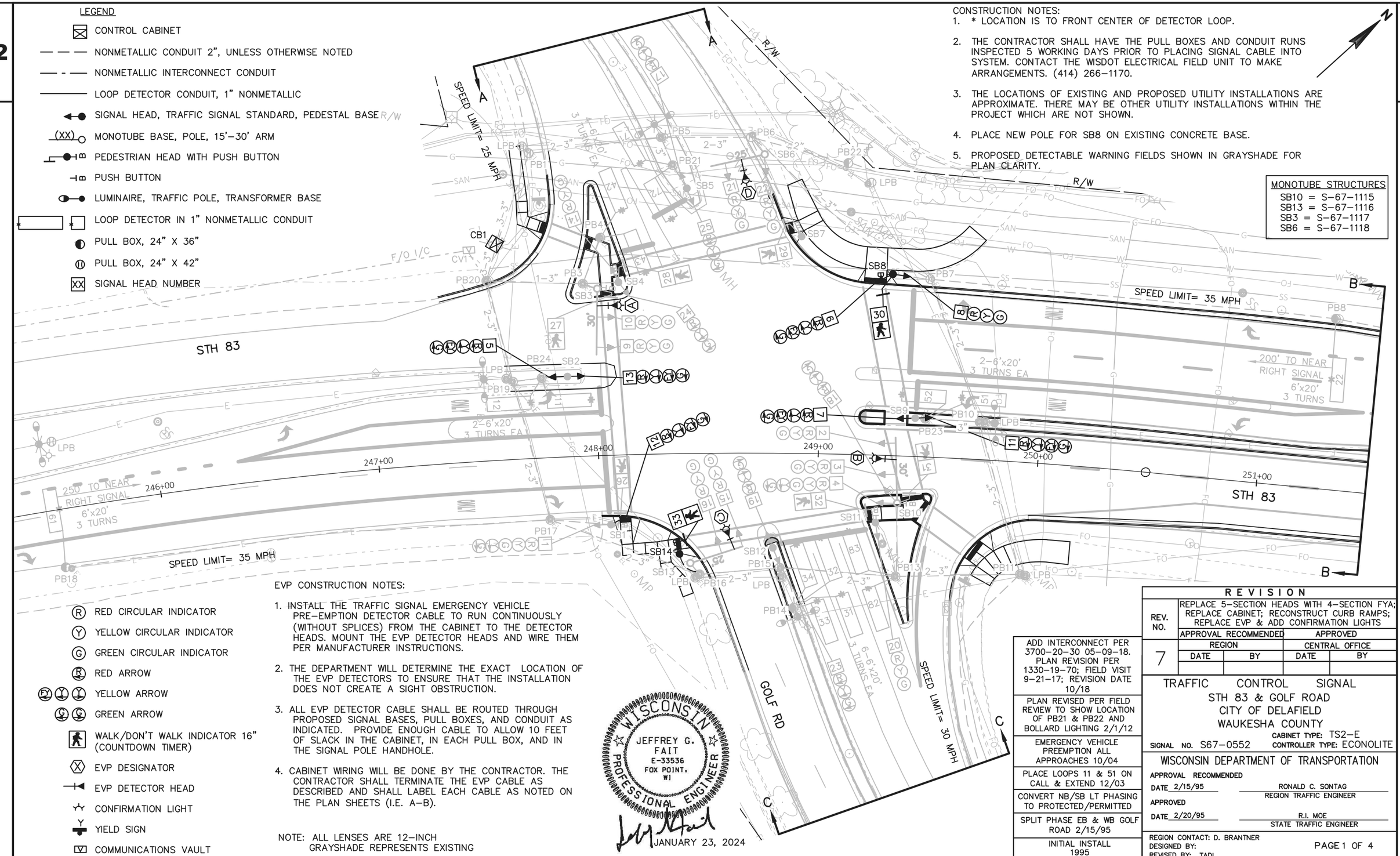
LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT
- LOOP DETECTOR CONDUIT, 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'–30' ARM
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- PUSH BUTTON
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- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER

CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (414) 266–1170.
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. PLACE NEW POLE FOR SB8 ON EXISTING CONCRETE BASE.
5. PROPOSED DETECTABLE WARNING FIELDS SHOWN IN GRAYSHADE FOR PLAN CLARITY.

MONOTUBE STRUCTURES
SB10 = S–67–1115
SB13 = S–67–1116
SB3 = S–67–1117
SB6 = S–67–1118



EVP CONSTRUCTION NOTES:

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE–EMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT THE EVP DETECTOR HEADS AND WIRE THEM PER MANUFACTURER INSTRUCTIONS.
2. THE DEPARTMENT WILL DETERMINE THE EXACT LOCATION OF THE EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ALL EVP DETECTOR CABLE SHALL BE ROUTED THROUGH PROPOSED SIGNAL BASES, PULL BOXES, AND CONDUIT AS INDICATED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. CABINET WIRING WILL BE DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED ON THE PLAN SHEETS (I.E. A–B).

NOTE: ALL LENSES ARE 12–INCH
GRAYSHADE REPRESENTS EXISTING

- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY Y YELLOW ARROW
- G G GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- CONFIRMATION LIGHT
- Y YIELD SIGN
- CV COMMUNICATIONS VAULT

WISCONSIN
JEFFREY G. FAIT
E-33536
FOX POINT, WI
PROFESSIONAL ENGINEER
JANUARY 23, 2024

REVISION				
REV. NO.	REPLACE 5–SECTION HEADS WITH 4–SECTION FYA; REPLACE CABINET; RECONSTRUCT CURB RAMPS; REPLACE EVP & ADD CONFIRMATION LIGHTS			
	APPROVAL RECOMMENDED		APPROVED	
7	REGION		CENTRAL OFFICE	
	DATE	BY	DATE	BY

ADD INTERCONNECT PER 3700–20–30 05–09–18. PLAN REVISION PER 1330–19–70; FIELD VISIT 9–21–17; REVISION DATE 10/18
PLAN REVISED PER FIELD REVIEW TO SHOW LOCATION OF PB21 & PB22 AND BOLLARD LIGHTING 2/1/12
EMERGENCY VEHICLE PREEMPTION ALL APPROACHES 10/04
PLACE LOOPS 11 & 51 ON CALL & EXTEND 12/03
CONVERT NB/SB LT PHASING TO PROTECTED/PERMITTED
SPLIT PHASE EB & WB GOLF ROAD 2/15/95
INITIAL INSTALL 1995

TRAFFIC CONTROL SIGNAL
STH 83 & GOLF ROAD
CITY OF DELAFIELD
WAUKESHA COUNTY

CABINET TYPE: TS2–E
SIGNAL NO. S67–0552 CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 2/15/95 RONALD C. SONTAG, REGION TRAFFIC ENGINEER

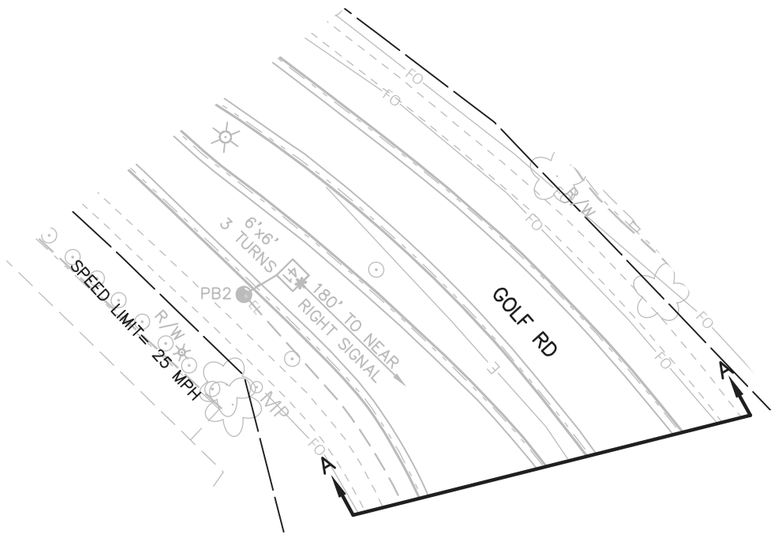
APPROVED
DATE 2/20/95 R.I. MOE, STATE TRAFFIC ENGINEER

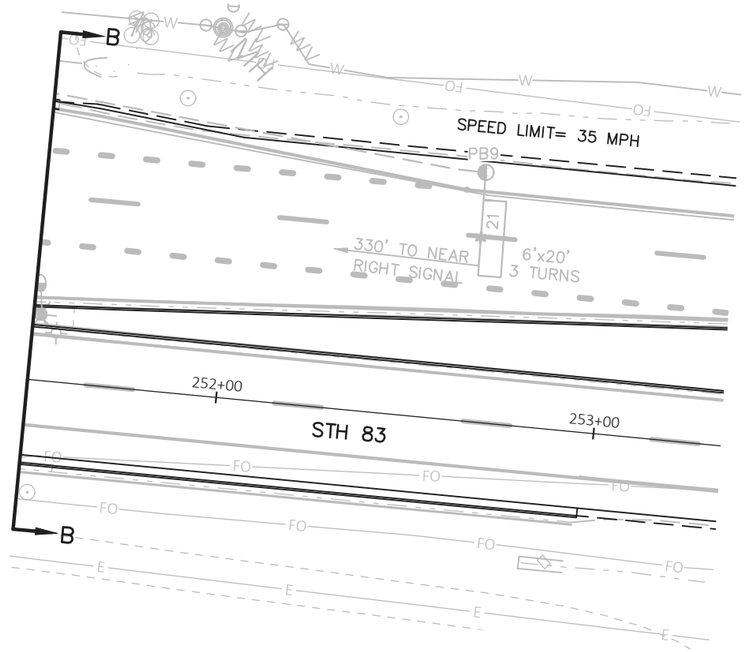
REGION CONTACT: D. BRANTNER
DESIGNED BY:
REVISED BY: TADI

PROJECT NO:1330–00–73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 77 E

FILE NAME : Z:\SHARED\WI\2827 STH 83 SIGNALS DELAFIELD\CAD\S67–0552_R7_STH83_GOLF.DWG
LAYOUT NAME – S67–0552_R7_pg1
PLOT DATE : 1/23/2024 9:21 AM PLOT BY : JEFF FAIT PLOT NAME : PLOT SCALE : .30000000 = 1'–0" _XREF
WISDOT/CADDS SHEET 42

2





TRAFFIC CONTROL SIGNAL
STH 83 & GOLF ROAD
CITY OF DELAFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0552

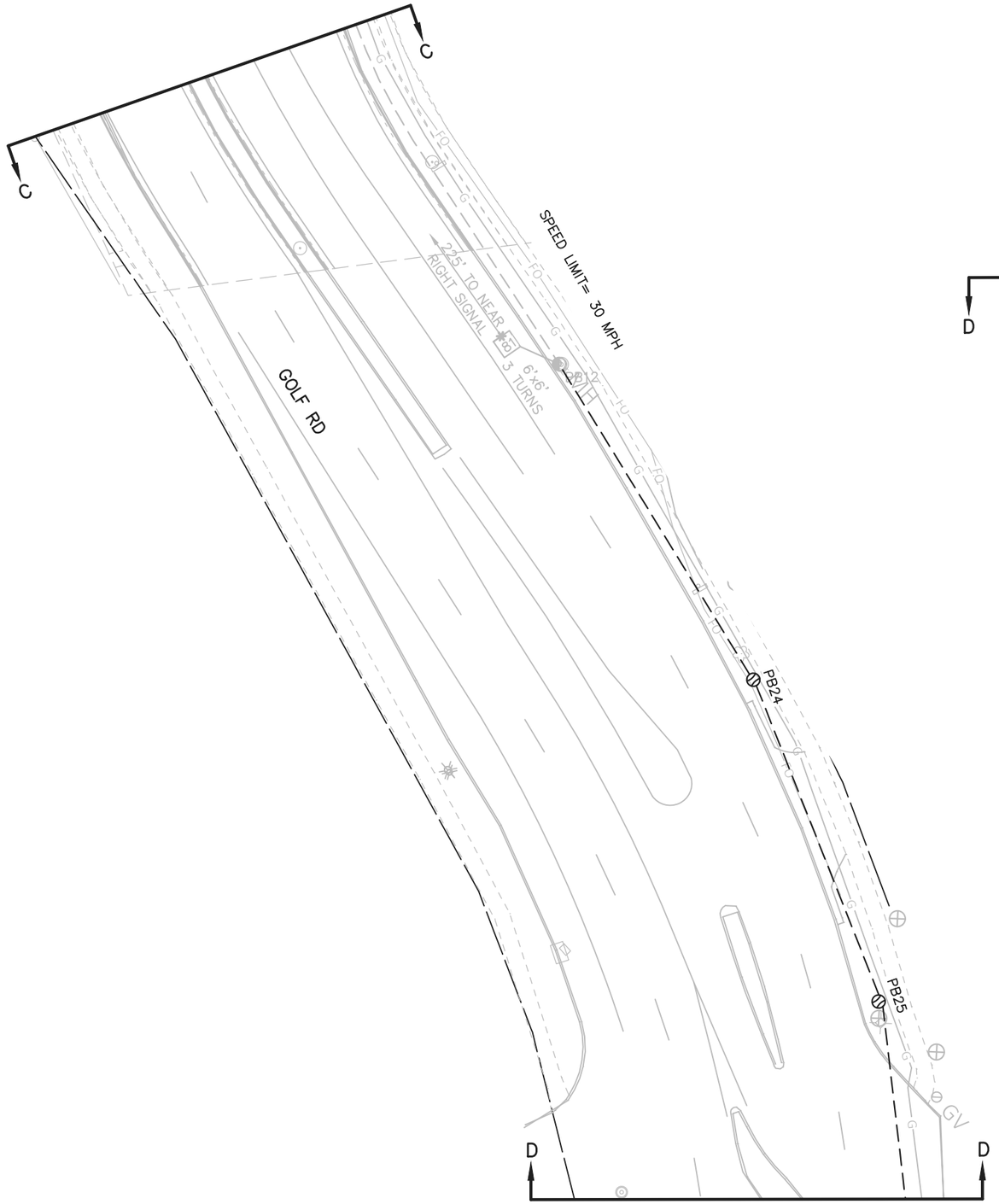
REGION CONTACT: D. BRANTNER
DESIGNED BY:
REVISED BY: TADI

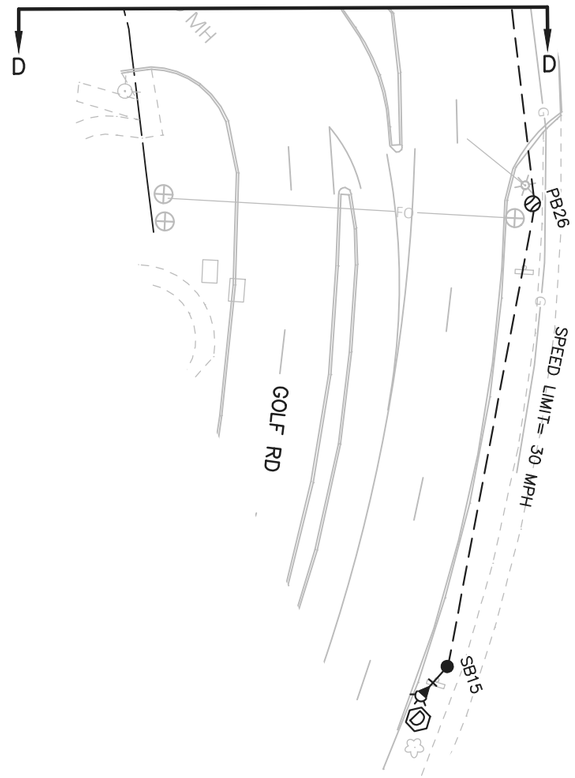
PAGE 2 OF 4

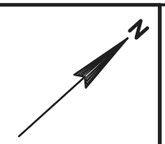
PROJECT NO:1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 78 E

FILE NAME : Z:\SHARED\WI\2827 STH 83 SIGNALS DELAFIELD\CAD\S67-0552_R7_STH83_GOLF.DWG
LAYOUT NAME - S67-0552_R7_pg2

PLOT DATE : 1/23/2024 9:21 AM PLOT BY : JEFF FAIT PLOT NAME : PLOT SCALE : .30000000 = 1'-0"_XREF







TRAFFIC CONTROL SIGNAL
STH 83 & GOLF ROAD
CITY OF DELAFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0552

REGION CONTACT: D. BRANTNER
DESIGNED BY:
REVISED BY: TADI

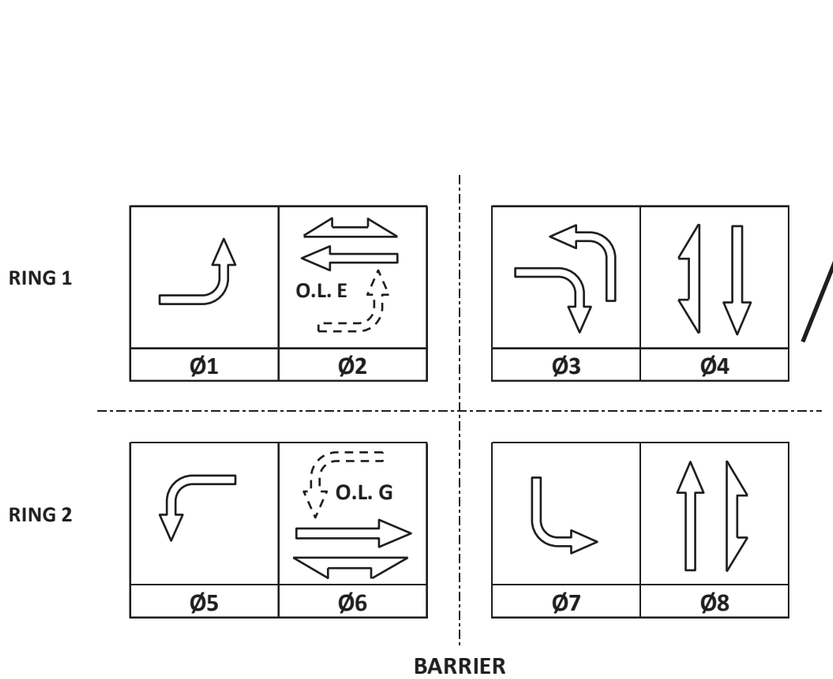
PAGE 3 OF 4

PROJECT NO:1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 79 E

FILE NAME : Z:\SHARED\WI\2827 STH 83 SIGNALS DELAFIELD\CAD\S67-0552_R7_STH83_GOLF.DWG
LAYOUT NAME - S67-0552_R7_pg3

PLOT DATE : 1/23/2024 9:21 AM PLOT BY : JEFF FAIT PLOT NAME : PLOT SCALE : .30000000 = 1'-0" _XREF

	HEAD NUMBERS	FLASH
Ø1	5,6,7	R
Ø2	8,9,10	R
Ø3	1,4,23,24,25	R
Ø4	14,15,16	R
Ø5	11,12,13	R
Ø6	1,2,3,4	R
Ø7	17,18,19	R
Ø8	20,21,22	R
Ø2P	28,29	
Ø4P	26,27	
Ø6P	32,33	
Ø8P	30,31	
OLE	5,6,7	-
OLF		
OLG	11,12,13	-
OLH		



CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE	2+5	6+1	4+7	8+3

AFTER PREEMPTION SEQUENCE 2+5, OR 6+1 CONTROLLER SHALL RETURN TO PHASES 2+6.

AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8

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

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO: S-	
SIGNAL SYSTEM NO: SS-	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

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

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	11	21	31	33	41	43	52	71	81	83							PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	3	3	4	4	5	7	8	8							CALLED PHASE
CALL OPTION	X	X	X	X		X	X	X		X							CALL OPTION
DELAY TIME																	DELAY TIME
EXTENTION OPTION	X	X	X	X	X	X	X	X	X	X							EXTENTION OPTION
EXTEND TIME					X				X								EXTEND TIME
USE ADDED INITIAL		X															USE ADDED INITIAL
CROSS SWITCH PHASE	2						6										CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	12	22	32	34	42	51	61	72	82								PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	3	3	4	5	6	7	8								CALLED PHASE
CALL OPTION	X	X	X	X	X	X	X	X	X								CALL OPTION
DELAY TIME																	DELAY TIME
EXTENTION OPTION	X	X	X	X	X	X	X	X	X								EXTENTION OPTION
EXTEND TIME																	EXTEND TIME
USE ADDED INITIAL		X					X										USE ADDED INITIAL
CROSS SWITCH PHASE	2					6											CROSS SWITCH PHASE

STH 83 & GOLF RD
CITY OF DELAFIELD
WAUKESHA COUNTY

SIGNAL NO: S67-0552 CABINET TYPE: TS2-E
CONTROLLER TYPE: ECONOLITE
DATE: 02/24 PAGE NUMBER: 4 OF 4

PROJECT ID:	1330-00-73
INTERSECTION:	STH 83 & GOLF RD

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

CB1 TO	JUMPER	# OF COND. AWG 14	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	PED BUTTON 2
				RED	YELLOW	GREEN	<RED	<YELLOW>	<FL YELLOW>	<GREEN>	D/WALK	WALK		
SB14		7	31								BLK	BLU		
			B										WHT/BLK	

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
SB9	SB15
SB15	SB11
SB13	SB14
SB14	SB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
SB15	PB12
SB15	PB24
SB15	PB25
SB15	PB26

EMERGENCY VEHICLE PREEMPTION CABLE	
FROM	TO
CB1	SB15 (HEAD D)

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART.
   CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.

2

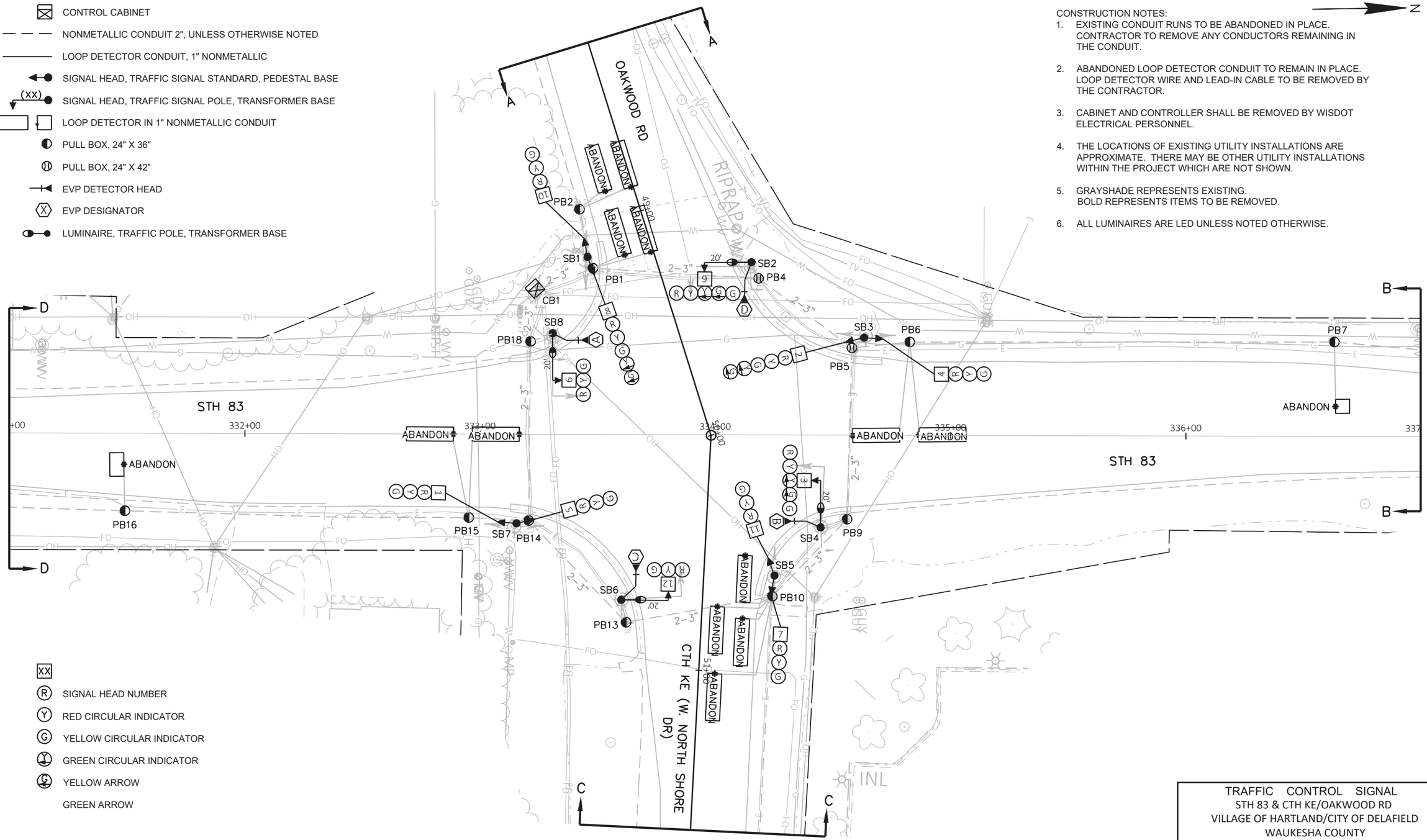
LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT, 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- EVP DETECTOR HEAD
- EVP DESIGNATOR
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE

CONSTRUCTION NOTES:

1. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRE AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.
3. CABINET AND CONTROLLER SHALL BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.
4. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
5. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.
6. ALL LUMINAIRES ARE LED UNLESS NOTED OTHERWISE.

N



XX

- (R) SIGNAL HEAD NUMBER
- (Y) RED CIRCULAR INDICATOR
- (G) YELLOW CIRCULAR INDICATOR
- (Y) GREEN CIRCULAR INDICATOR
- (G) YELLOW ARROW
- GREEN ARROW

TRAFFIC CONTROL SIGNAL
STH 83 & CTH KE/OAKWOOD RD
VILLAGE OF HARTLAND/CITY OF DELAFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0777

REGION CONTACT: D. BRANTNER
DESIGNED BY:
REVISED BY: TADI

PAGE 1 OF 3

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 82	E

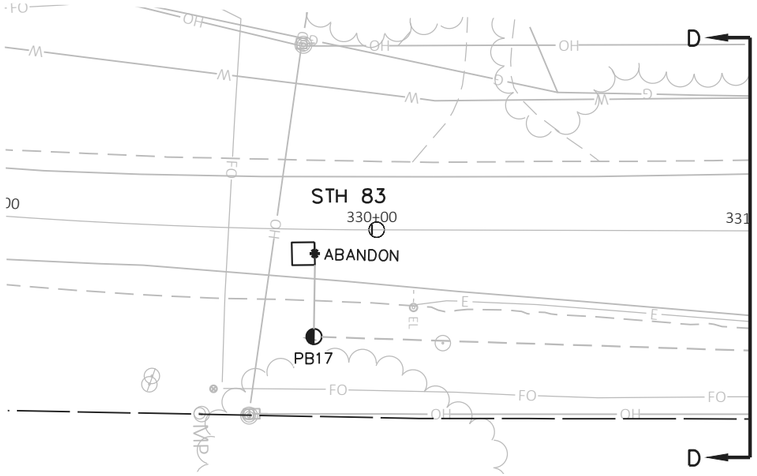
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LAYOUT NAME - S67-0777_REM_pg1

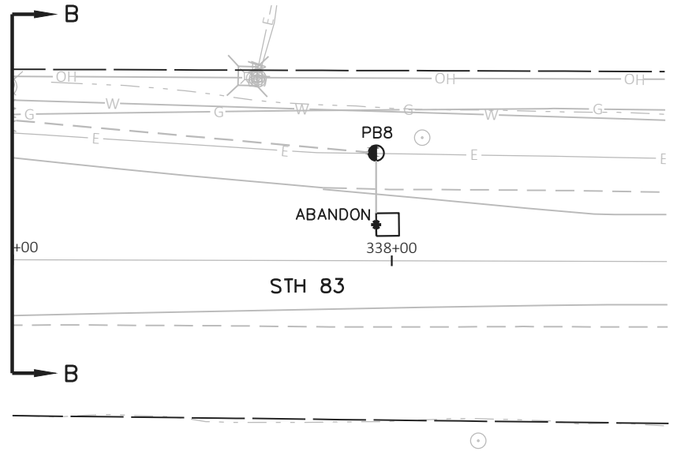
PLOT DATE : 1/22/2024 6:29 PM PLOT BY : JEFF FAIT PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

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TRAFFIC CONTROL SIGNAL
STH 83 & CTH KE/OAKWOOD RD
VILLAGE OF HARTLAND/CITY OF DELAFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0777

REGION CONTACT: D. BRANTNER
DESIGNED BY:
REVISED BY: TADI

PAGE 2 OF 3

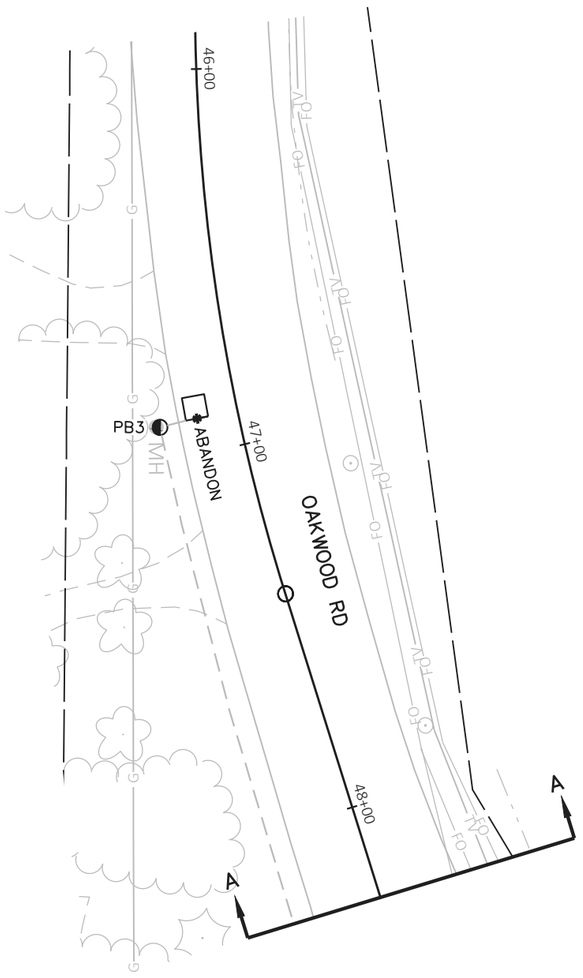
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 83	E

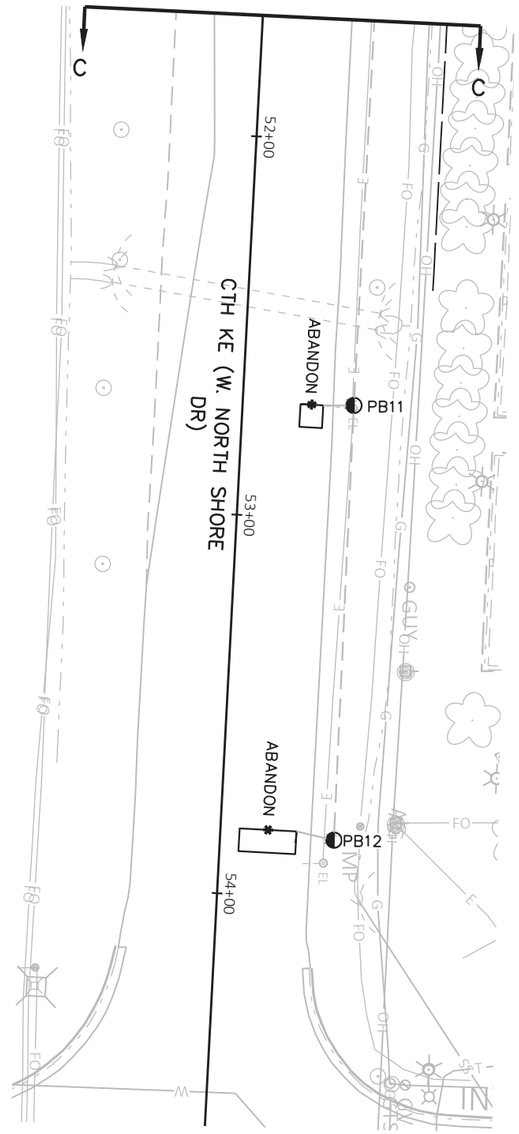
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LAYOUT NAME - S67-0777_REM_pg2

PLOT DATE : 1/22/2024 6:29 PM PLOT BY : JEFF FAIT PLOT NAME : PLOT SCALE : 1 IN:40 FT

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TRAFFIC CONTROL SIGNAL
STH 83 & CTH KE/OAKWOOD RD
VILLAGE OF HARTLAND/CITY OF DELAFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0777

REGION CONTACT: D. BRANTNER
DESIGNED BY:
REVISED BY: TADI

PAGE 3 OF 3

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 84	E

FILE NAME : Z:\SHARED\WI\2827 STH 83 SIGNALS DELAFIELD\CAD\S67-0777_STH83_OAKWOOD_REM.DWG
LAYOUT NAME - S67-0777_REM_pg3

PLOT DATE : 1/22/2024 6:29 PM PLOT BY : JEFF FAIT PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

LEGEND

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

MONOTUBE STRUCTURES
SB2 = S–67–1504–01
SB5 = S–67–1504–02
SB7 = S–67–1504–03
SB9 = S–67–1504–04

EVP CONSTRUCTION NOTES:

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE–EMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT THE EVP DETECTOR HEADS AND WIRE THEM PER MANUFACTURER INSTRUCTIONS.
2. THE DEPARTMENT WILL DETERMINE THE EXACT LOCATION OF THE EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ALL EVP DETECTOR CABLE SHALL BE ROUTED THROUGH PROPOSED SIGNAL BASES, PULL BOXES, AND CONDUIT AS INDICATED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. CABINET WIRING WILL BE DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED ON THE PLAN SHEETS (I.E. A–B).

CONSTRUCTION NOTES:

1. ALL UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER OF ANY CONFLICTS PRIOR TO CONSTRUCTION.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. INSTALL CABINET BASE 6" ABOVE ROADWAY ELEVATION.
4. THE CONTRACTOR SHALL HAVE THE PULLBOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING THE SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (414) 266–1170.
5. ALL LUMINAIRES ARE LED C UNLESS OTHERWISE NOTED.
6. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
7. PROPOSED DETECTABLE WARNING FIELDS SHOWN IN GRAYSHADE FOR PLAN CLARITY.

N

OAKWOOD RD
SPEED LIMIT = 30 MPH
STH 83
SPEED LIMIT = 45 MPH
CTH KE (W NORTH SHORE DR)
SPEED LIMIT = 45 MPH
4–6'x20' 3 TURNS EACH
2–6'x20' 3 TURNS EACH
6'x10' 3 TURNS
220' TO NEAR RIGHT SIGNAL
6'x10' 4 TURNS
PB1 PB2 PB4 PB5 PB6 PB7 PB8 PB9 PB10 PB11 PB14 PB15 PB16 PB17 PB19
SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB8 SB9 SB10
CB1
3–3" 2–3"
331+00 332+00 333+00 335+00 336+00

- (X) EVP DESIGNATOR
- EVP DETECTOR HEAD
- CONFIRMATION LIGHT
- XX SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)

NOTE: ALL LENSES ARE 12–INCH GRAYSHADE REPRESENTS EXISTING

WISCONSIN
JEFFREY G. FAIT
E–33536
FOX POINT, WI
PROFESSIONAL ENGINEER
JANUARY 23, 2024

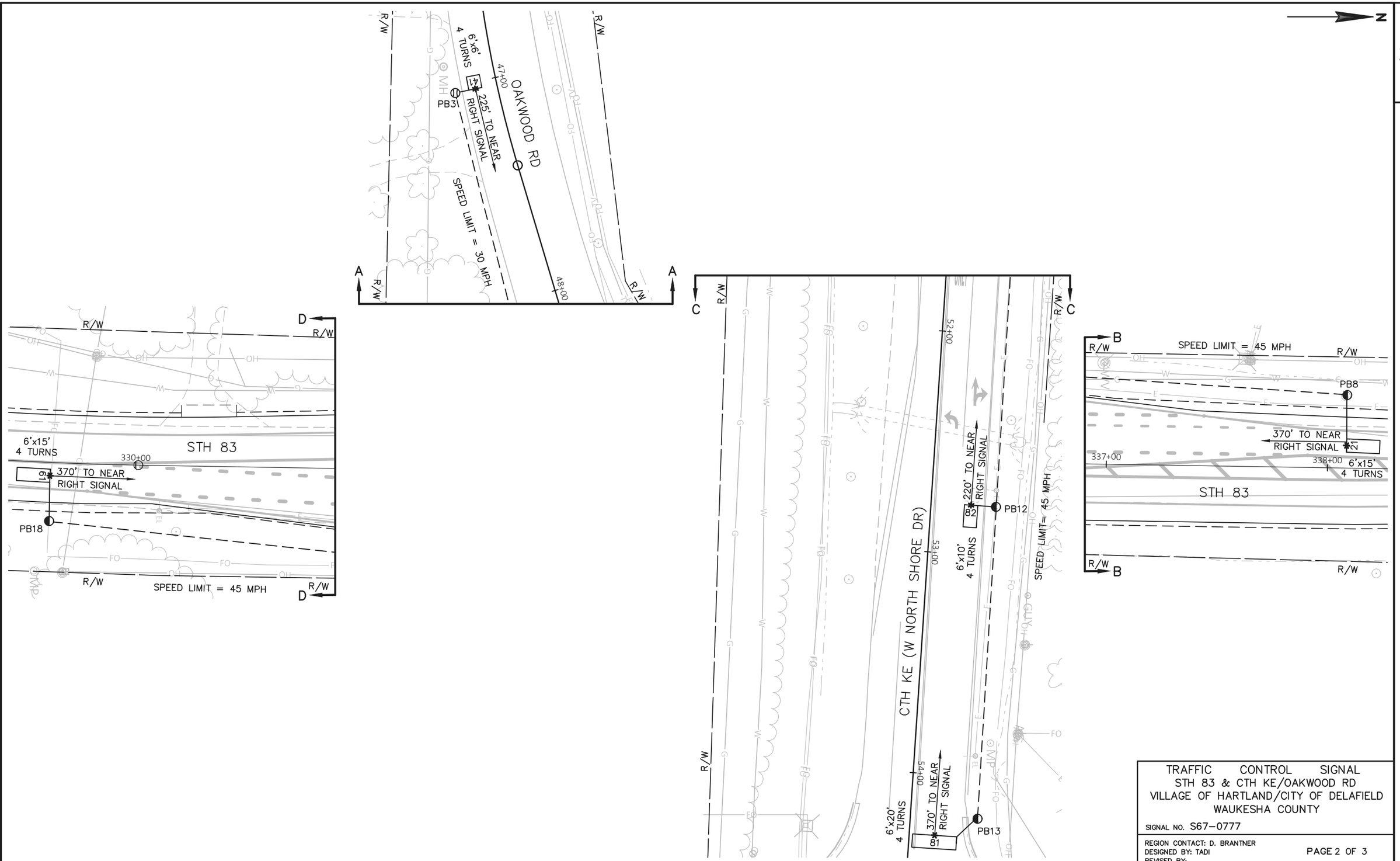
TRAFFIC CONTROL SIGNAL
STH 83 & CTH KE/OAKWOOD RD
VILLAGE OF HARTLAND/CITY OF DELAFIELD
WAUKESHA COUNTY
CABINET TYPE: TS2–E
SIGNAL NO. S67–0777 CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVAL RECOMMENDED
DATE_____ REGION TRAFFIC ENGINEER
APPROVED
DATE_____ STATE TRAFFIC ENGINEER

REGION CONTACT: D. BRANTNER
DESIGNED BY: TADI
REVISED BY:
PAGE 1 OF 3

PROJECT NO:1330–00–73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 85 E

FILE NAME : Z:\SHARED\WI\2827 STH 83 SIGNALS DELAFIELD\CAD\S67–0777_STH83_OAKWOOD.DWG
LAYOUT NAME – S67–0777_pg1
PLOT DATE : 1/23/2024 9:24 AM PLOT BY : JEFF FAIT PLOT NAME : PLOT SCALE : #########



TRAFFIC CONTROL SIGNAL
STH 83 & CTH KE/OAKWOOD RD
VILLAGE OF HARTLAND/CITY OF DELAFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0777

REGION CONTACT: D. BRANTNER
DESIGNED BY: TADI
REVISED BY:

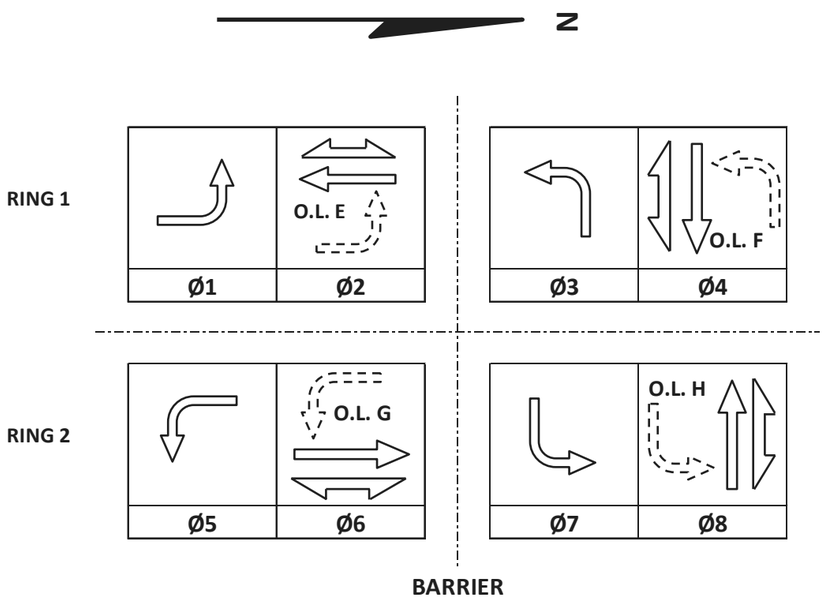
PAGE 2 OF 3

PROJECT NO:1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 86 E

FILE NAME : Z:\SHARED\WI\2827 STH 83 SIGNALS DELAFIELD\CAD\S67-0777_STH83_OAKWOOD.DWG
LAYOUT NAME – S67-0552_H_PG2

PLOT DATE : 1/23/2024 9:24 AM PLOT BY : JEFF FAIT PLOT NAME : PLOT SCALE : ##########

	HEAD NUMBERS	FLASH
Ø1	4,5	R ←
Ø2	6,7,8	R
Ø3	14,15	R ←
Ø4	16,17,18	R
Ø5	9,10	R ←
Ø6	1,2,3	R
Ø7	19,20	R ←
Ø8	11,12,13	R
Ø2P	21,22	
Ø4P	27,28	
Ø6P	25,26	
Ø8P	23,24	
OLE	4.5	-
OLF	14,15	-
OLG	9,10	-
OLH	19,20	-



CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE	2+5	6+1	4+7	8+3

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8

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

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	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	11	21	31	41	43	52	62	72
CALLED PHASE	1	2	3	4	4	6	6	8
CALL OPTION	X	X	X		X	X	X	X
DELAY TIME					X			
EXTENTION OPTION	X	X	X	X	X	X	X	X
EXTEND TIME				X				
USE ADDED INITIAL		X					X	
CROSS SWITCH PHASE	2		4					

19	17	23	21	27	25	31	29	DETECTOR INPUT
82	84							PLAN LOOP DETECTOR*(S)
8	8							CALLED PHASE
	X							CALL OPTION
	X							DELAY TIME
X	X							EXTENTION OPTION
X								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	12	22	32	42	51	61	71	81
CALLED PHASE	1	2	3	4	6	6	8	8
CALL OPTION	X	X	X	X	X	X	X	
DELAY TIME				X				
EXTENTION OPTION	X	X	X	X	X	X	X	X
EXTEND TIME								X
USE ADDED INITIAL		X				X		
CROSS SWITCH PHASE	2		4					

20	18	24	22	28	26	32	30	DETECTOR INPUT
83								PLAN LOOP DETECTOR*(S)
8								CALLED PHASE
X								CALL OPTION
X								DELAY TIME
X								EXTENTION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

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

GENERAL NOTES:

1. PHASES 5 AND 7 ARE OMITTED EXCEPT DURING PREEMPTION

STH 83 & CTH KE/OAKWOOD RD
VILLAGE OF HARTLAND/CITY OF DELAFIELD
WAUKESHA COUNTY

SIGNAL NO: S67-0777 CABINET TYPE: TS2-E
CONTROLLER TYPE: ECONOLITE
DATE: 02/24 PAGE NUMBER: 3 OF 3

PROJECT ID:	1330-00-73
INTERSECTION:	STH 83 & CTH KE/OAKWOOD RD

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

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

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
CB1	PB1
SB2	PB4
SB4	PB5
SB5	PB9
SB6	PB10
SB7	PB14
SB8	PB15
CB1	PB19

LIGHTING UF 12 AWG W/GROUND	
FROM	TO
CB1	SB2
SB2	SB5
CB1	SB9
SB9	SB7

EMERGENCY VEHICLE PREEMPTION CABLE	
FROM	TO
CB1	SB9 (HEAD A)
CB1	SB5 (HEAD B)
CB1	SB7 (HEAD C)
CB1	SB2 (HEAD D)

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE

CONSTRUCTION NOTES:

1. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRE AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.
3. CABINET AND CONTROLLER SHALL BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.
4. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
5. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.
6. ALL LUMINAIRES ARE LED UNLESS NOTED OTHERWISE.

TRAFFIC CONTROL SIGNAL
STH 83 & CARDINAL LANE
VILLAGE OF HARTLAND
WAUKESHA COUNTY

SIGNAL NO. S67-0614

REGION CONTACT: D. BRANTNER
DESIGNED BY:
REVISED BY: TADI

PAGE 1 OF 2

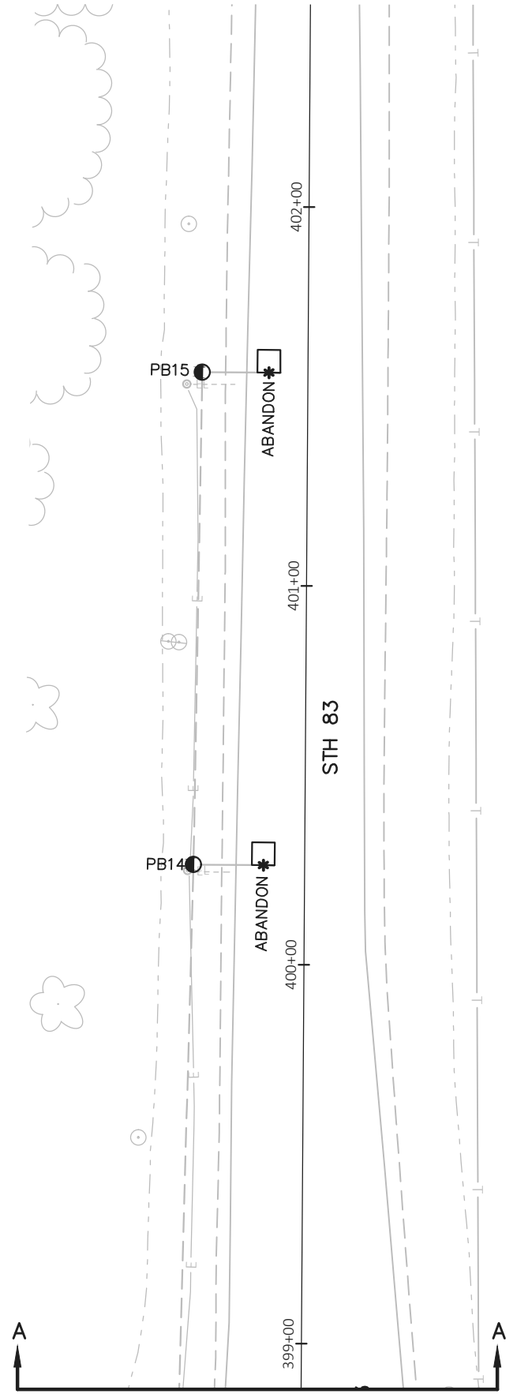
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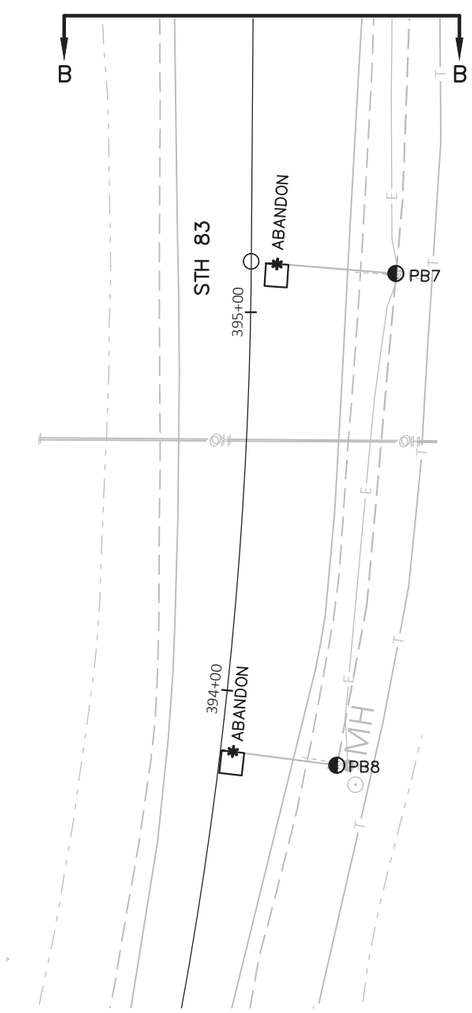
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LAYOUT NAME - S67-0614_REM_PG1

PLOT DATE : 1/22/2024 6:28 PM PLOT BY : JEFF FAIT PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

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TRAFFIC CONTROL SIGNAL
STH 83 & CARDINAL LANE
VILLAGE OF HARTLAND
WAUKESHA COUNTY

SIGNAL NO. S67-0614

REGION CONTACT: D. BRANTNER
DESIGNED BY:
REVISED BY: TADI

PAGE 2 OF 2

PROJECT NO:1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 90 E

FILE NAME : Z:\SHARED\WI\2827 STH 83 SIGNALS DELAFIELD\CAD\S67-0614_STH83_CARDINAL_REM.DWG
LAYOUT NAME - S67-0614_REM_PG2
PLOT DATE : 1/22/2024 6:28 PM PLOT BY : JEFF FAIT PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT, 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'–30' ARM
- (XX) MONOTUBE BASE, POLE, SPECIAL, 35'–45' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE, MONOTUBE POLE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- EVP DESIGNATOR
- EVP DETECTOR HEAD

MONOTUBE STRUCTURES

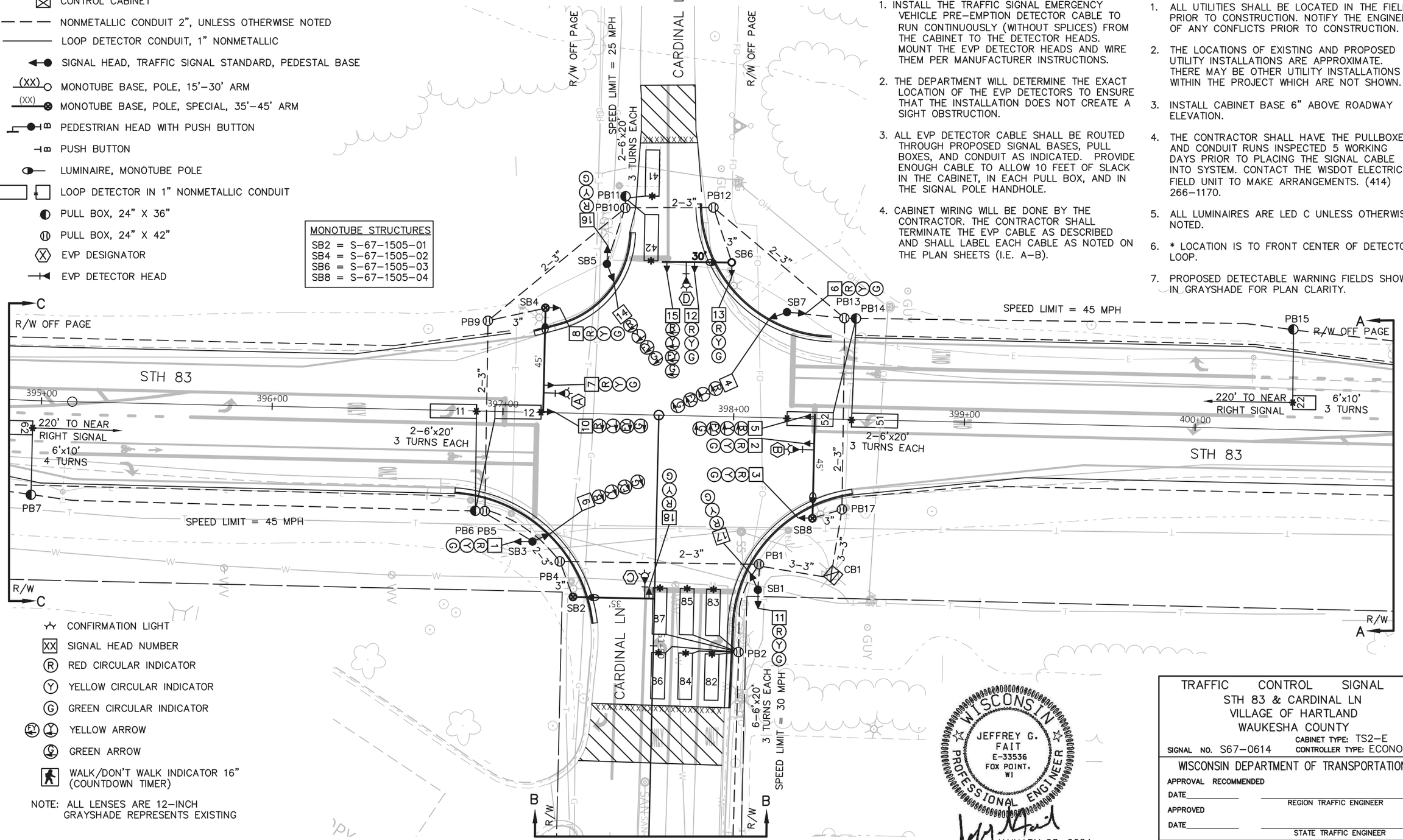
SB2 = S–67–1505–01
SB4 = S–67–1505–02
SB6 = S–67–1505–03
SB8 = S–67–1505–04

EVP CONSTRUCTION NOTES:

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE–EMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT THE EVP DETECTOR HEADS AND WIRE THEM PER MANUFACTURER INSTRUCTIONS.
2. THE DEPARTMENT WILL DETERMINE THE EXACT LOCATION OF THE EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ALL EVP DETECTOR CABLE SHALL BE ROUTED THROUGH PROPOSED SIGNAL BASES, PULL BOXES, AND CONDUIT AS INDICATED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. CABINET WIRING WILL BE DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED ON THE PLAN SHEETS (I.E. A–B).

CONSTRUCTION NOTES:

1. ALL UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER OF ANY CONFLICTS PRIOR TO CONSTRUCTION.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. INSTALL CABINET BASE 6" ABOVE ROADWAY ELEVATION.
4. THE CONTRACTOR SHALL HAVE THE PULLBOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING THE SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (414) 266–1170.
5. ALL LUMINAIRES ARE LED C UNLESS OTHERWISE NOTED.
6. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
7. PROPOSED DETECTABLE WARNING FIELDS SHOWN IN GRAYSHADE FOR PLAN CLARITY.



CONFIRMATION LIGHT
XX SIGNAL HEAD NUMBER
R RED CIRCULAR INDICATOR
Y YELLOW CIRCULAR INDICATOR
G GREEN CIRCULAR INDICATOR
FY YELLOW ARROW
G GREEN ARROW
WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)

NOTE: ALL LENSES ARE 12–INCH
GRAYSHADE REPRESENTS EXISTING

WISCONSIN
JEFFREY G. FAIT
E–33536
FOX POINT, WI
PROFESSIONAL ENGINEER
JANUARY 23, 2024

TRAFFIC CONTROL SIGNAL
STH 83 & CARDINAL LN
VILLAGE OF HARTLAND
WAUKESHA COUNTY
CABINET TYPE: TS2–E
SIGNAL NO. S67–0614 CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVAL RECOMMENDED
DATE _____ REGION TRAFFIC ENGINEER
APPROVED
DATE _____ STATE TRAFFIC ENGINEER

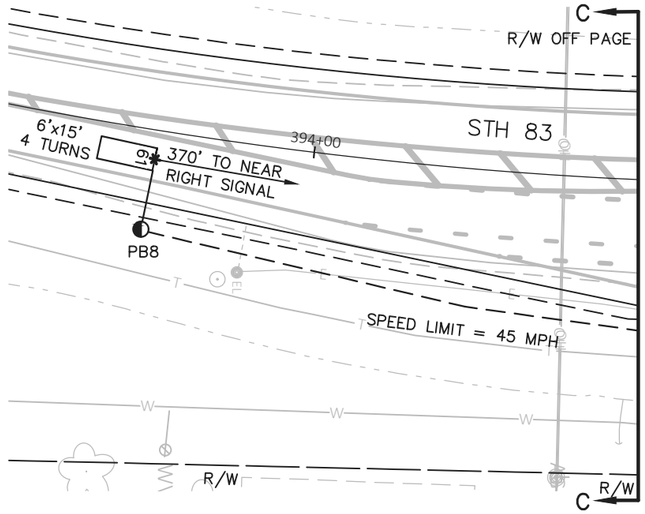
REGION CONTACT: D. BRANTNER
DESIGNED BY: TADI
REVISED BY:
PAGE 1 OF 3

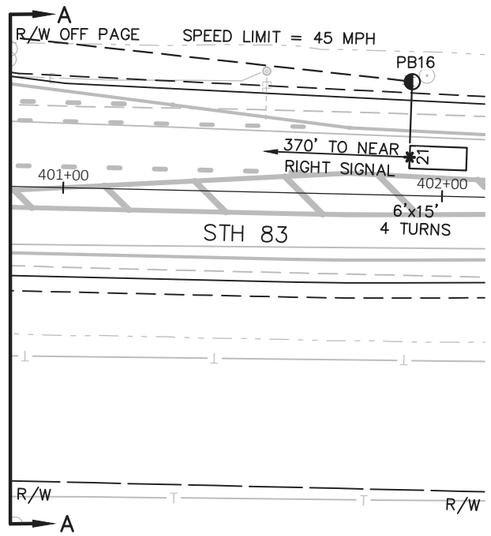
PROJECT NO:1330–00–73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 91 E

FILE NAME : Z:\SHARED\WI\2827 STH 83 SIGNALS DELAFIELD\CAD\S67–0614_STH83_CARDINAL.DWG
LAYOUT NAME – S67–0614_pg1
PLOT DATE : 1/23/2024 9:26 AM PLOT BY : JEFF FAIT PLOT NAME : PLOT SCALE : #########
WISDOT/CADDS SHEET 42

2

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TRAFFIC CONTROL SIGNAL
STH 83 & CARDINAL LN
VILLAGE OF HARTLAND
WAUKESHA COUNTY

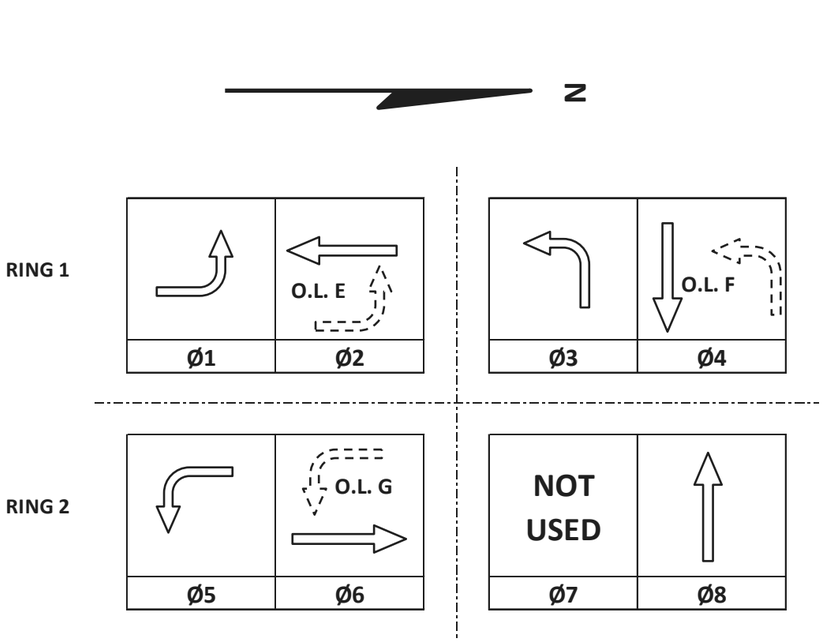
SIGNAL NO. S67-0614

REGION CONTACT: D. BRANTNER
DESIGNED BY: TADI
REVISED BY:

PAGE 2 OF 3

PROJECT NO:1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 92 E

	HEAD NUMBERS	FLASH
Ø1	4,5	R
Ø2	6,7,8	R
Ø3	14,15	R
Ø4	16,17,18	R
Ø5	9,10	R
Ø6	1,2,3	R
Ø7		
Ø8	11,12,13	R
Ø2P		
Ø4P		
Ø6P		
Ø8P		
OLE	4.5	-
OLF	14,15	-
OLG	9,10	-
OLH		



CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE	2+5	6+1	4+8	8+3

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+8 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8

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

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	

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

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	11	21	31	41	51	61	81	83
CALLED PHASE	2	2	4	4	5	6	8	8
CALL OPTION	X	X	X	X	X	X		X
DELAY TIME				X				X
EXTENTION OPTION	X	X	X	X	X	X	X	X
EXTEND TIME						X	X	
USE ADDED INITIAL		X						
CROSS SWITCH PHASE					6			

19	17	23	21	27	25	31	29	DETECTOR INPUT
85								PLAN LOOP DETECTOR*(S)
8								CALLED PHASE
X								CALL OPTION
								DELAY TIME
X								EXTENTION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	12	22	32	42	52	62	82	84
CALLED PHASE	2	2	4	4	5	6	8	8
CALL OPTION	X	X	X	X	X	X	X	X
DELAY TIME				X			X	
EXTENTION OPTION	X	X	X	X	X	X	X	X
EXTEND TIME								
USE ADDED INITIAL		X				X		
CROSS SWITCH PHASE					6			

20	18	24	22	28	26	32	30	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENTION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

GENERAL NOTES:

1. PHASES 1 AND 3 ARE OMITTED EXCEPT DURING PREEMPTION

STH 83 & CARDINAL LN
VILLAGE OF HARTLAND
WAUKESHA COUNTY

SIGNAL NO: S67-0614 CABINET TYPE: TS2-E
CONTROLLER TYPE: ECONOLITE
DATE: 02/24 PAGE NUMBER: 3 OF 3

PROJECT ID:	1330-00-73
INTERSECTION:	STH 83 & CARDINAL LN

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

CB1 TO	JUMPER	# OF COND. AWG 14	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	PED BUTTON 2
				RED	YELLOW	GREEN	<RED	<YELLOW>	<FL YELLOW>	<GREEN>	D/WALK	WALK		
SB1		12	17	RED	ORG	GRN								
			11	RED/BLK	ORG/BLK	GRN/BLK								
SB2		7	18	RED	ORG	GRN								
SB3		12	1	RED	ORG	GRN								
			9				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
SB4		12	7	RED	ORG	GRN								
			8	RED	ORG	GRN								
			10				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
SB5		12	16	RED	ORG	GRN								
			14				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
SB6		12	12	RED	ORG	GRN								
			13	RED	ORG	GRN								
			15				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
SB7		12	4				RED	ORG	BLK/WHT	GRN				
			6	RED/BLK	ORG/BLK	GRN/BLK								
SB8		12	2	RED	ORG	GRN								
			3	RED	ORG	GRN								
			5				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
CB1	PB1
SB2	PB4
SB3	PB5
SB4	PB9
SB5	PB10
SB6	PB12
SB7	PB13
CB1	PB17

LIGHTING UF 12 AWG W/GROUND	
FROM	TO
CB1	SB2
SB2	SB4
CB1	SB8
SB8	SB6

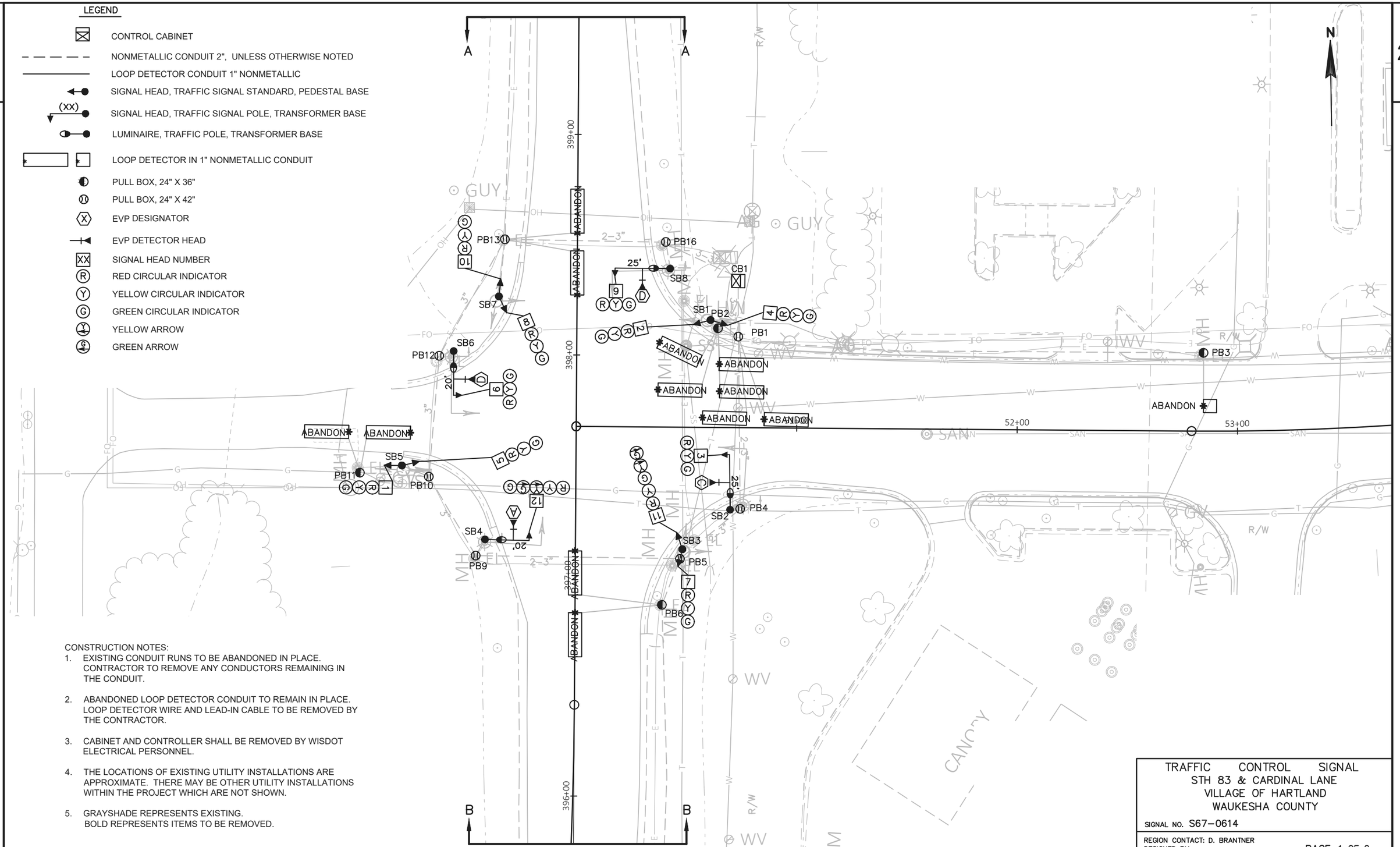
EMERGENCY VEHICLE PREEMPTION CABLE	
FROM	TO
CB1	SB4 (HEAD A)
CB1	SB8 (HEAD B)
CB1	SB2 (HEAD C)
CB1	SB6 (HEAD D)

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART.
   CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.

2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- Y YELLOW ARROW
- G GREEN ARROW



CONSTRUCTION NOTES:

1. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRE AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.
3. CABINET AND CONTROLLER SHALL BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.
4. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
5. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.

TRAFFIC CONTROL SIGNAL
STH 83 & CARDINAL LANE
VILLAGE OF HARTLAND
WAUKESHA COUNTY

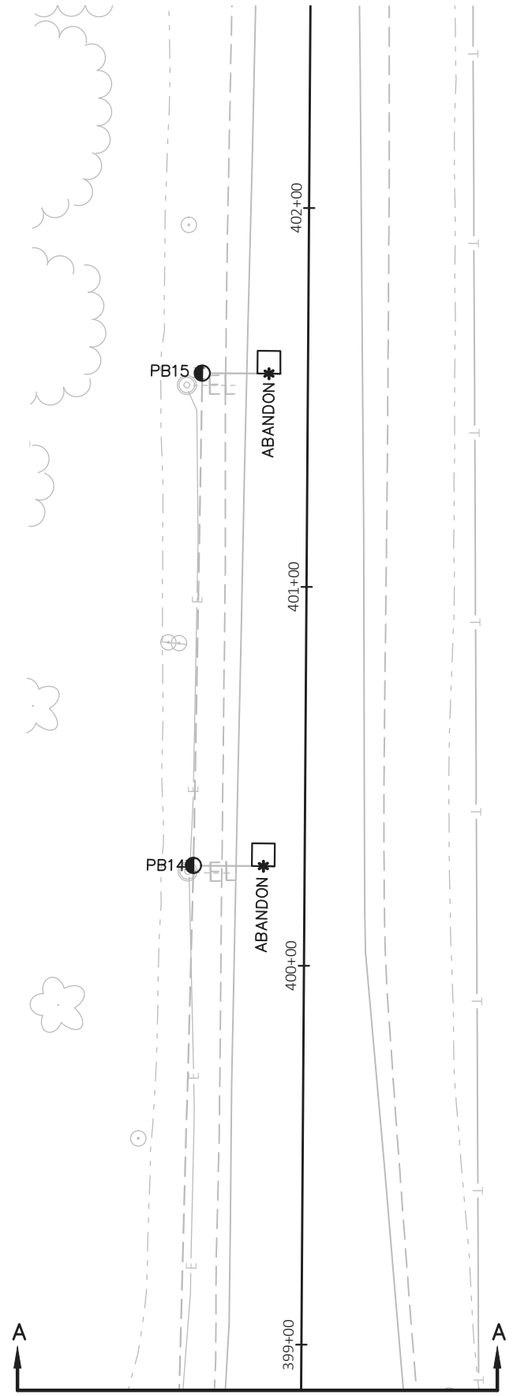
SIGNAL NO. S67-0614

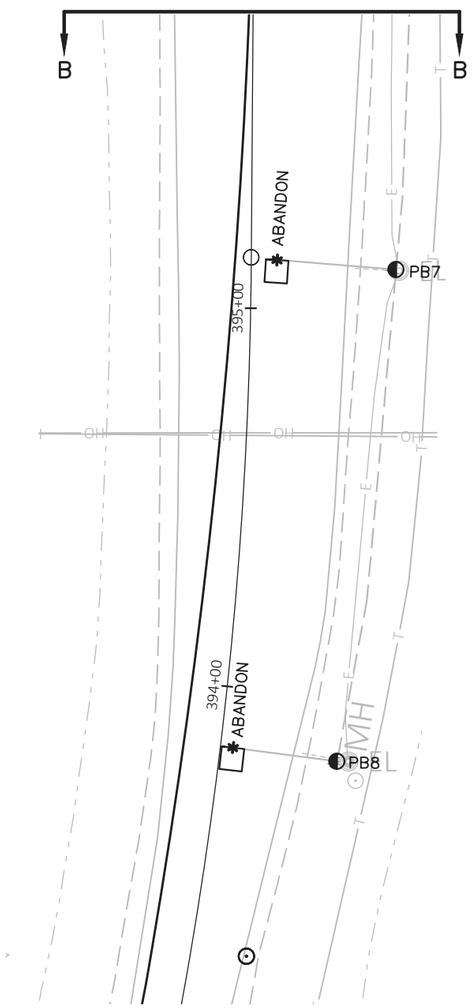
REGION CONTACT: D. BRANTNER
DESIGNED BY:
REVISED BY: TADI

PAGE 1 OF 2

PROJECT NO:1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 95 E

FILE NAME : Z:\SHARED\WI\2827 STH 83 SIGNALS DELAFIELD\CAD\S67-0614_STH83_CARDINAL_REM.DWG
LAYOUT NAME - S67-0614_D_PG1
PLOT DATE : 9/14/2023 2:20 PM PLOT BY : JEFF FAIT PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42





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TRAFFIC CONTROL SIGNAL
STH 83 & CARDINAL LANE
VILLAGE OF HARTLAND
WAUKESHA COUNTY

SIGNAL NO. S67–0614

REGION CONTACT: D. BRANTNER
DESIGNED BY:
REVISED BY: TADI

PAGE 2 OF 2

PROJECT NO:1330–00–73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 96 E

FILE NAME : Z:\SHARED\WI\2827 STH 83 SIGNALS DELAFIELD\CAD\S67–0614_STH83_CARDINAL_REM.DWG
LAYOUT NAME – S67–0614_D_PG2

PLOT DATE : 9/14/2023 2:20 PM PLOT BY : JEFF FAIT PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT, 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'–30' ARM
- (XX) MONOTUBE BASE, POLE, SPECIAL, 35'–45' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE, MONOTUBE POLE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- EVP DESIGNATOR
- EVP DETECTOR HEAD

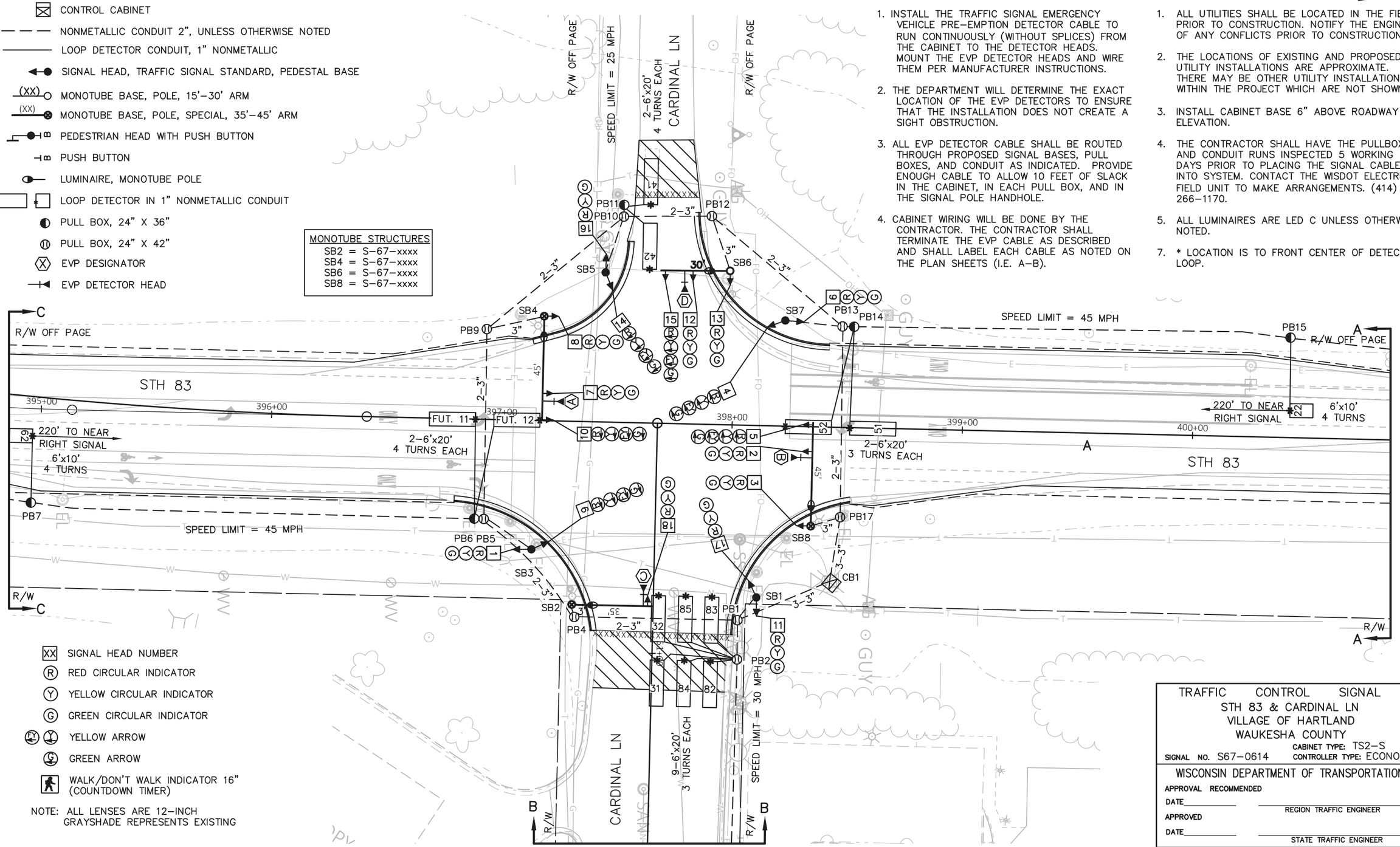
MONOTUBE STRUCTURES
SB2 = S–67–xxxx
SB4 = S–67–xxxx
SB6 = S–67–xxxx
SB8 = S–67–xxxx

EVP CONSTRUCTION NOTES:

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE–EMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT THE EVP DETECTOR HEADS AND WIRE THEM PER MANUFACTURER INSTRUCTIONS.
2. THE DEPARTMENT WILL DETERMINE THE EXACT LOCATION OF THE EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ALL EVP DETECTOR CABLE SHALL BE ROUTED THROUGH PROPOSED SIGNAL BASES, PULL BOXES, AND CONDUIT AS INDICATED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. CABINET WIRING WILL BE DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED ON THE PLAN SHEETS (I.E. A–B).

CONSTRUCTION NOTES:

1. ALL UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER OF ANY CONFLICTS PRIOR TO CONSTRUCTION.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. INSTALL CABINET BASE 6" ABOVE ROADWAY ELEVATION.
4. THE CONTRACTOR SHALL HAVE THE PULLBOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING THE SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (414) 266–1170.
5. ALL LUMINAIRES ARE LED C UNLESS OTHERWISE NOTED.
7. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.



XX SIGNAL HEAD NUMBER
R RED CIRCULAR INDICATOR
Y YELLOW CIRCULAR INDICATOR
G GREEN CIRCULAR INDICATOR
FY YELLOW ARROW
G GREEN ARROW
WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)

NOTE: ALL LENSES ARE 12–INCH GRAYSHADE REPRESENTS EXISTING

TRAFFIC CONTROL SIGNAL
STH 83 & CARDINAL LN
VILLAGE OF HARTLAND
WAUKESHA COUNTY
CABINET TYPE: TS2–S
SIGNAL NO. S67–0614 CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVAL RECOMMENDED
DATE _____ REGION TRAFFIC ENGINEER
APPROVED
DATE _____ STATE TRAFFIC ENGINEER

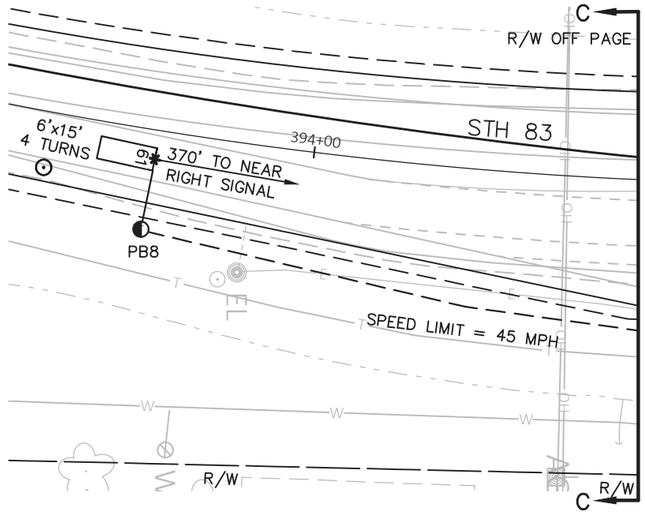
REGION CONTACT: D. BRANTNER
DESIGNED BY: TADI
REVISED BY:
PAGE 1 OF 3

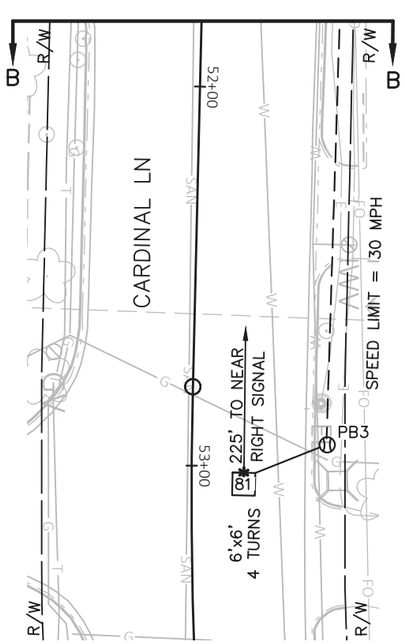
PROJECT NO:1330–00–73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 97 E

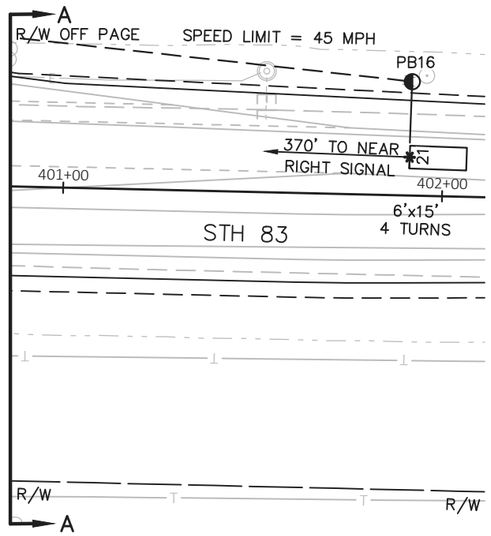
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LAYOUT NAME – S67–0552_H_PG1
PLOT DATE : 9/15/2023 10:18 AM PLOT BY : JEFF FAIT PLOT NAME : PLOT SCALE : #########
WISDOT/CADDS SHEET 42

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TRAFFIC CONTROL SIGNAL
STH 83 & CARDINAL LN
VILLAGE OF HARTLAND
WAUKESHA COUNTY

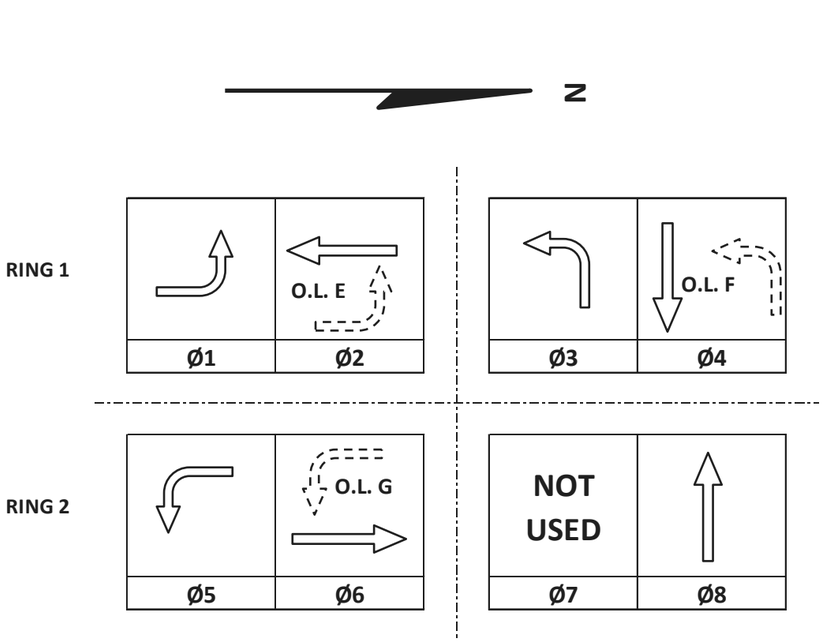
SIGNAL NO. S67-0614

REGION CONTACT: D. BRANTNER
DESIGNED BY: TADI
REVISED BY:

PAGE 2 OF 3

PROJECT NO:1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 98 E

	HEAD NUMBERS	FLASH
Ø1	4,5	R
Ø2	6,7,8	R
Ø3	14,15	R
Ø4	16,17,18	R
Ø5	9,10	R
Ø6	1,2,3	R
Ø7		
Ø8	11,12,13	R
Ø2P		
Ø4P		
Ø6P		
Ø8P		
OLE	4.5	-
OLF	14,15	-
OLG	9,10	-
OLH		



CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE	2+5	6+1	4+8	8+3

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+8 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8

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

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	

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

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	11	21	31	41	51	61	81	83
CALLED PHASE	6	2	8	4	5	6	8	8
CALL OPTION	X	X	X	X	X	X		X
DELAY TIME								
EXTENTION OPTION	X	X	X	X	X	X	X	X
EXTEND TIME						X	X	
USE ADDED INITIAL		X						
CROSS SWITCH PHASE								

DETECTOR INPUT	19	17	23	21	27	25	31	29
PLAN LOOP DETECTOR*(S)	85							
CALLED PHASE	8							
CALL OPTION	X							
DELAY TIME								
EXTENTION OPTION	X							
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	12	22	32	42	52	62	82	84
CALLED PHASE	6	2	8	4	5	6	8	8
CALL OPTION	X	X	X	X	X	X	X	X
DELAY TIME								
EXTENTION OPTION	X	X	X	X	X	X	X	X
EXTEND TIME								
USE ADDED INITIAL		X				X		
CROSS SWITCH PHASE								

DETECTOR INPUT	20	18	24	22	28	26	32	30
PLAN LOOP DETECTOR*(S)								
CALLED PHASE								
CALL OPTION								
DELAY TIME								
EXTENTION OPTION								
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

GENERAL NOTES:

1. PHASES 1 AND 3 ARE OMITTED EXCEPT DURING PREEMPTION

STH 83 & CARDINAL LN
VILLAGE OF HARTLAND
WAUKESHA COUNTY

SIGNAL NO: S67-0614 CABINET TYPE: TS2-E
CONTROLLER TYPE: ECONOLITE
DATE: 09/23 PAGE NUMBER: 3 OF 3

PROJECT ID:	1330-00-73
INTERSECTION:	STH 83 & CARDINAL LN

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

CB1 TO	JUMPER	# OF COND. AWG 14	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	PED BUTTON 2
				RED	YELLOW	GREEN	<RED	<YELLOW>	<FL YELLOW>	<GREEN>	D/WALK	WALK		
SB1		12	17	RED	ORG	GRN								
			11	RED/BLK	ORG/BLK	GRN/BLK								
SB2		12	18	RED	ORG	GRN								
SB3		12	1	RED	ORG	GRN								
			9				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
SB4		12	7	RED	ORG	GRN								
			8	RED	ORG	GRN								
			10				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
SB5		12	16	RED	ORG	GRN								
			14				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
SB6		12	12	RED	ORG	GRN								
			13	RED	ORG	GRN								
			15				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
SB7		12	4				RED	ORG	BLK/WHT	GRN				
			6	RED/BLK	ORG/BLK	GRN/BLK								
SB8		12	2	RED	ORG	GRN								
			3	RED	ORG	GRN								
			5				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	CB1

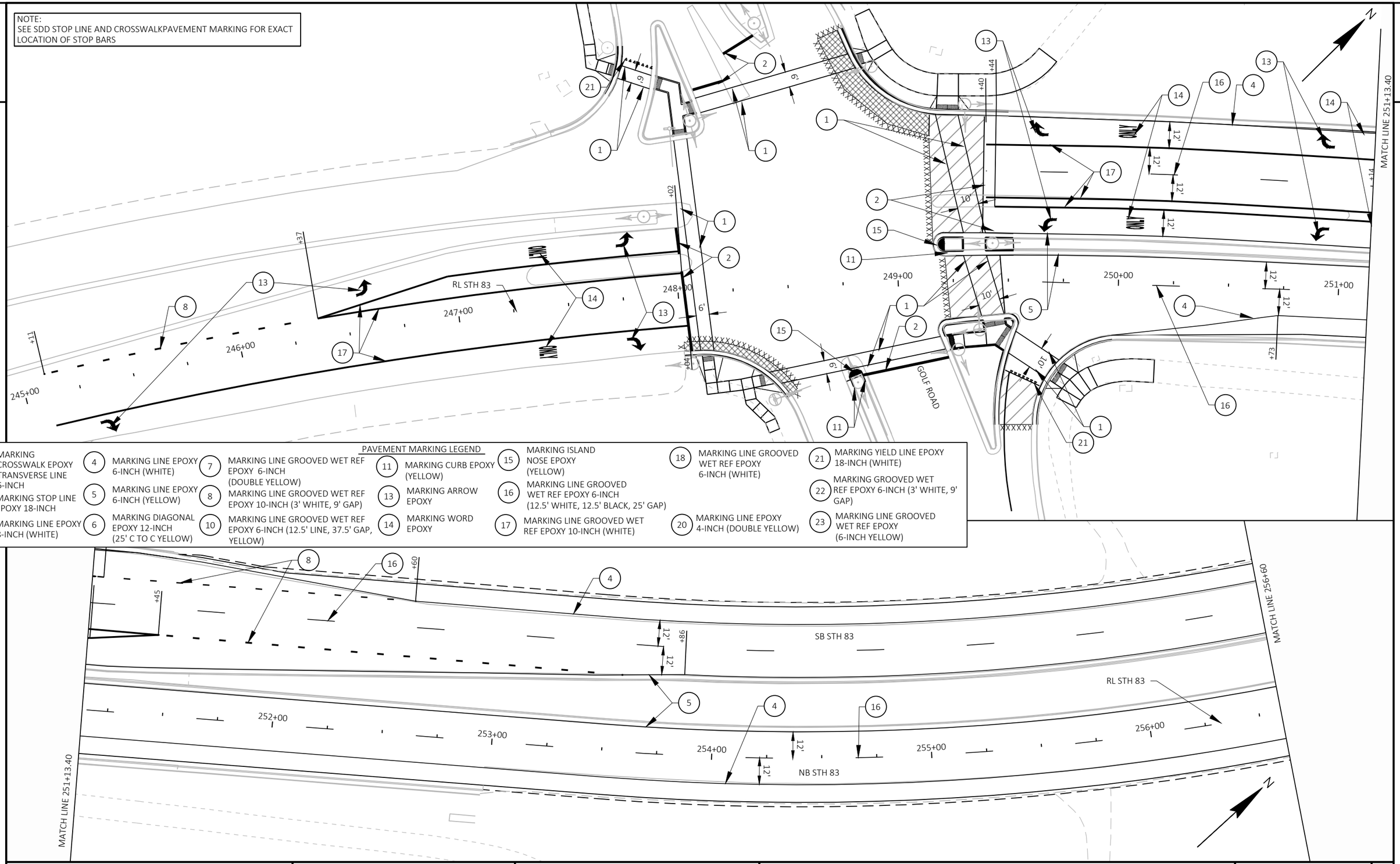
PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
CB1	PB1
SB2	PB4
SB3	PB5
SB4	PB9
SB5	PB10
SB6	PB12
SB7	PB13
CB1	PB17

LIGHTING UF 12 AWG W/GROUND	
FROM	TO
CB1	SB2
SB2	SB4
CB1	SB8
SB8	SB6

EMERGENCY VEHICLE PREEMPTION CABLE	
FROM	TO
CB1	SB4 (HEAD A)
CB1	SB8 (HEAD B)
CB1	SB2 (HEAD C)
CB1	SB6 (HEAD D)

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART.
   CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.

NOTE:
SEE SDD STOP LINE AND CROSSWALKPAVEMENT MARKING FOR EXACT LOCATION OF STOP BARS



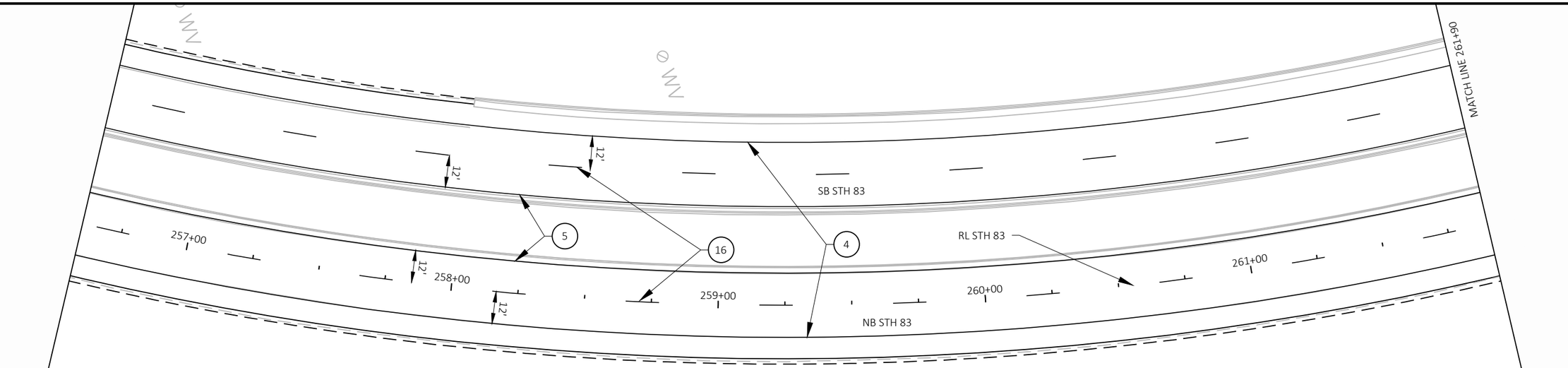
PAVEMENT MARKING LEGEND

1. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
2. MARKING STOP LINE EPOXY 18-INCH
3. MARKING LINE EPOXY 8-INCH (WHITE)
4. MARKING LINE EPOXY 6-INCH (WHITE)
5. MARKING LINE EPOXY 6-INCH (YELLOW)
6. MARKING DIAGONAL EPOXY 12-INCH (25' C TO C YELLOW)
7. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (3' WHITE, 9' GAP)
10. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, YELLOW)
11. MARKING CURB EPOXY (YELLOW)
13. MARKING ARROW EPOXY
14. MARKING WORD EPOXY
15. MARKING ISLAND NOSE EPOXY (YELLOW)
16. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' WHITE, 12.5' BLACK, 25' GAP)
17. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
18. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
20. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
21. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
22. MARKING GROOVED WET REF EPOXY 6-INCH (3' WHITE, 9' GAP)
23. MARKING LINE GROOVED WET REF EPOXY (6-INCH YELLOW)

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 101	E

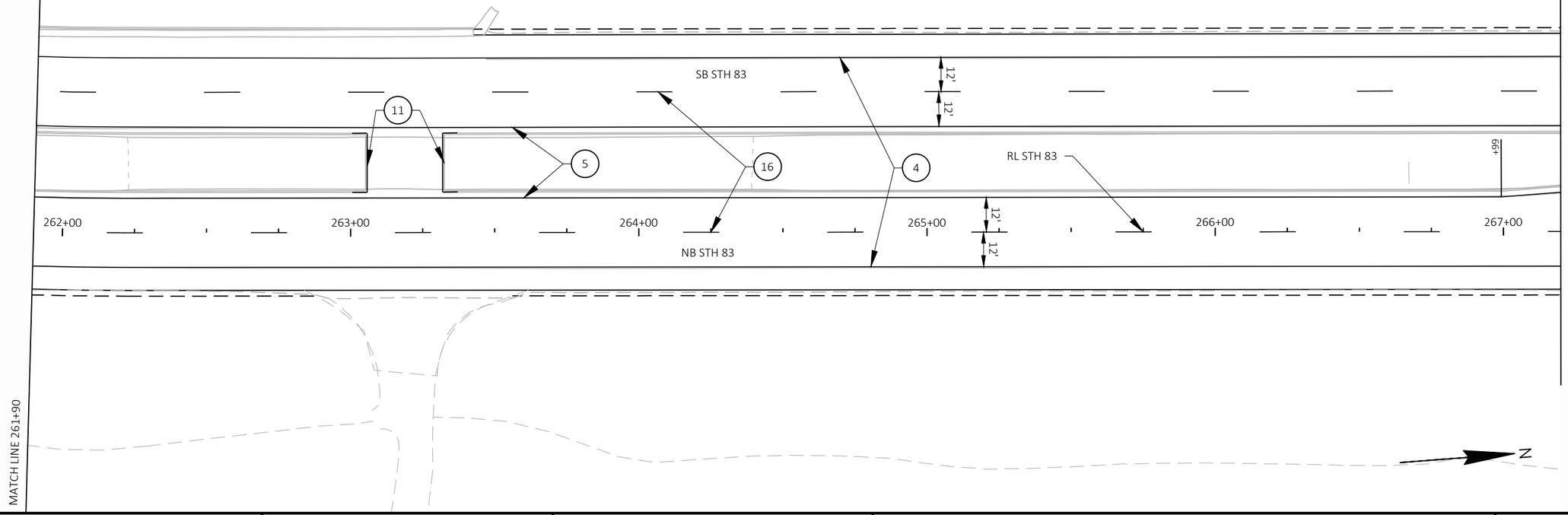
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LAYOUT NAME - 01
PLOT DATE : 3/15/2024 1:07 PM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2



PAVEMENT MARKING LEGEND

1. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
2. MARKING STOP LINE EPOXY 18-INCH
3. MARKING LINE EPOXY 8-INCH (WHITE)
4. MARKING LINE EPOXY 6-INCH (WHITE)
5. MARKING LINE EPOXY 6-INCH (YELLOW)
6. MARKING DIAGONAL EPOXY 12-INCH (25' C TO C YELLOW)
7. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (3' WHITE, 9' GAP)
10. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, YELLOW)
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13. MARKING ARROW EPOXY
14. MARKING WORD EPOXY
15. MARKING ISLAND NOSE EPOXY (YELLOW)
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17. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
18. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
20. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
21. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
22. MARKING GROOVED WET REF EPOXY 6-INCH (3' WHITE, 9' GAP)
23. MARKING LINE GROOVED WET REF EPOXY (6-INCH YELLOW)

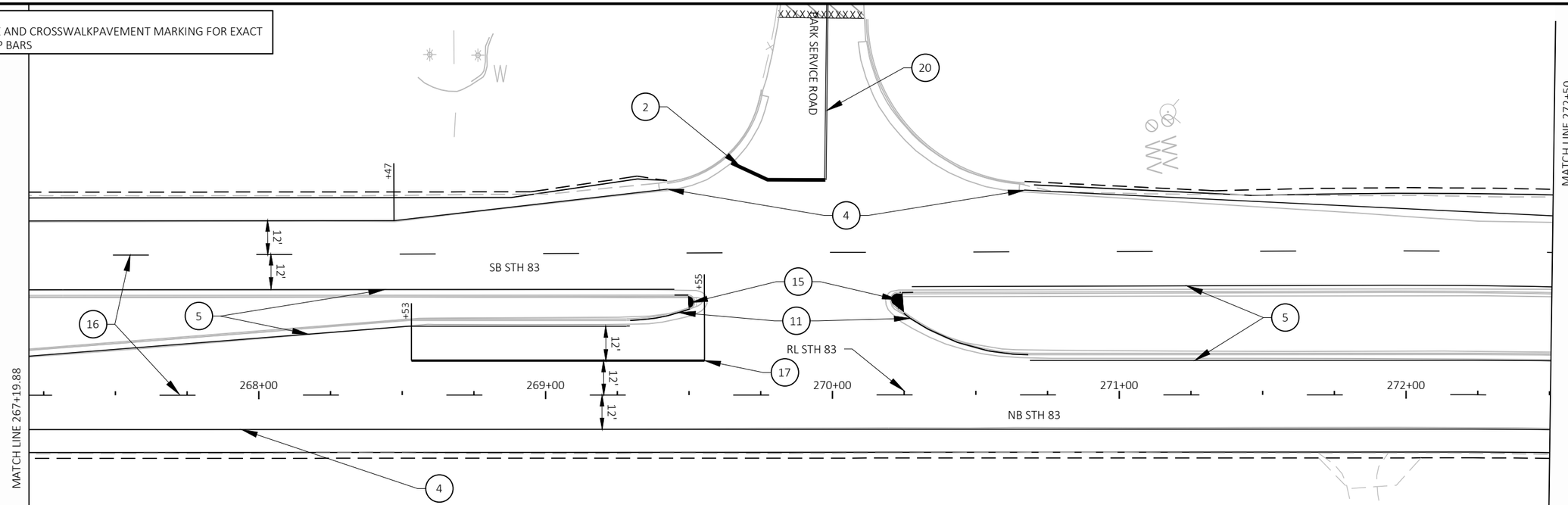


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 102	E

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LAYOUT NAME - 02

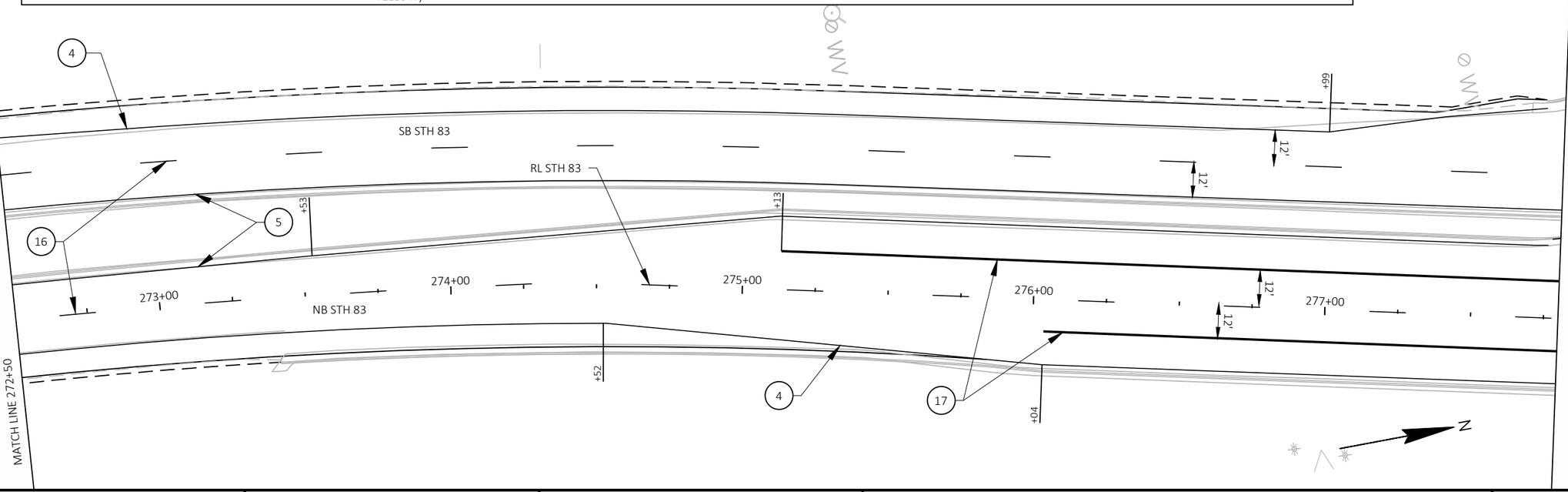
PLOT DATE : 3/15/2024 1:07 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTE:
SEE SDD STOP LINE AND CROSSWALKPAVEMENT MARKING FOR EXACT LOCATION OF STOP BARS



PAVEMENT MARKING LEGEND

1. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
2. MARKING STOP LINE EPOXY 18-INCH
3. MARKING LINE EPOXY 8-INCH (WHITE)
4. MARKING LINE EPOXY 6-INCH (WHITE)
5. MARKING LINE EPOXY 6-INCH (YELLOW)
6. MARKING DIAGONAL EPOXY 12-INCH (25' C TO C YELLOW)
7. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (3' WHITE, 9' GAP)
10. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, YELLOW)
11. MARKING CURB EPOXY (YELLOW)
13. MARKING ARROW EPOXY
14. MARKING WORD EPOXY
15. MARKING ISLAND NOSE EPOXY (YELLOW)
16. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' WHITE, 12.5' BLACK, 25' GAP)
17. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
18. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
20. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
21. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
22. MARKING GROOVED WET REF EPOXY 6-INCH (3' WHITE, 9' GAP)
23. MARKING LINE GROOVED WET REF EPOXY (6-INCH YELLOW)



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 103	E

PAVEMENT MARKING LEGEND

1. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
2. MARKING STOP LINE EPOXY 18-INCH
3. MARKING LINE EPOXY 8-INCH (WHITE)
4. MARKING LINE EPOXY 6-INCH (WHITE)
5. MARKING LINE EPOXY 6-INCH (YELLOW)
6. MARKING DIAGONAL EPOXY 12-INCH (25' C TO C YELLOW)
7. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (3' WHITE, 9' GAP)
10. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, YELLOW)
11. MARKING CURB EPOXY (YELLOW)
13. MARKING ARROW EPOXY
14. MARKING WORD EPOXY
15. MARKING ISLAND NOSE EPOXY (YELLOW)
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17. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
18. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
20. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
21. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
22. MARKING GROOVED WET REF EPOXY 6-INCH (3' WHITE, 9' GAP)
23. MARKING LINE GROOVED WET REF EPOXY (6-INCH YELLOW)

MATCH LINE 283+10

MARINER DRIVE

SB STH 83

NB STH 83

RL STH 83

LINK COURT

+07

+86

+41

278+00

279+00

280+00

281+00

282+00

283+00

MATCH LINE 277+80

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 104	E

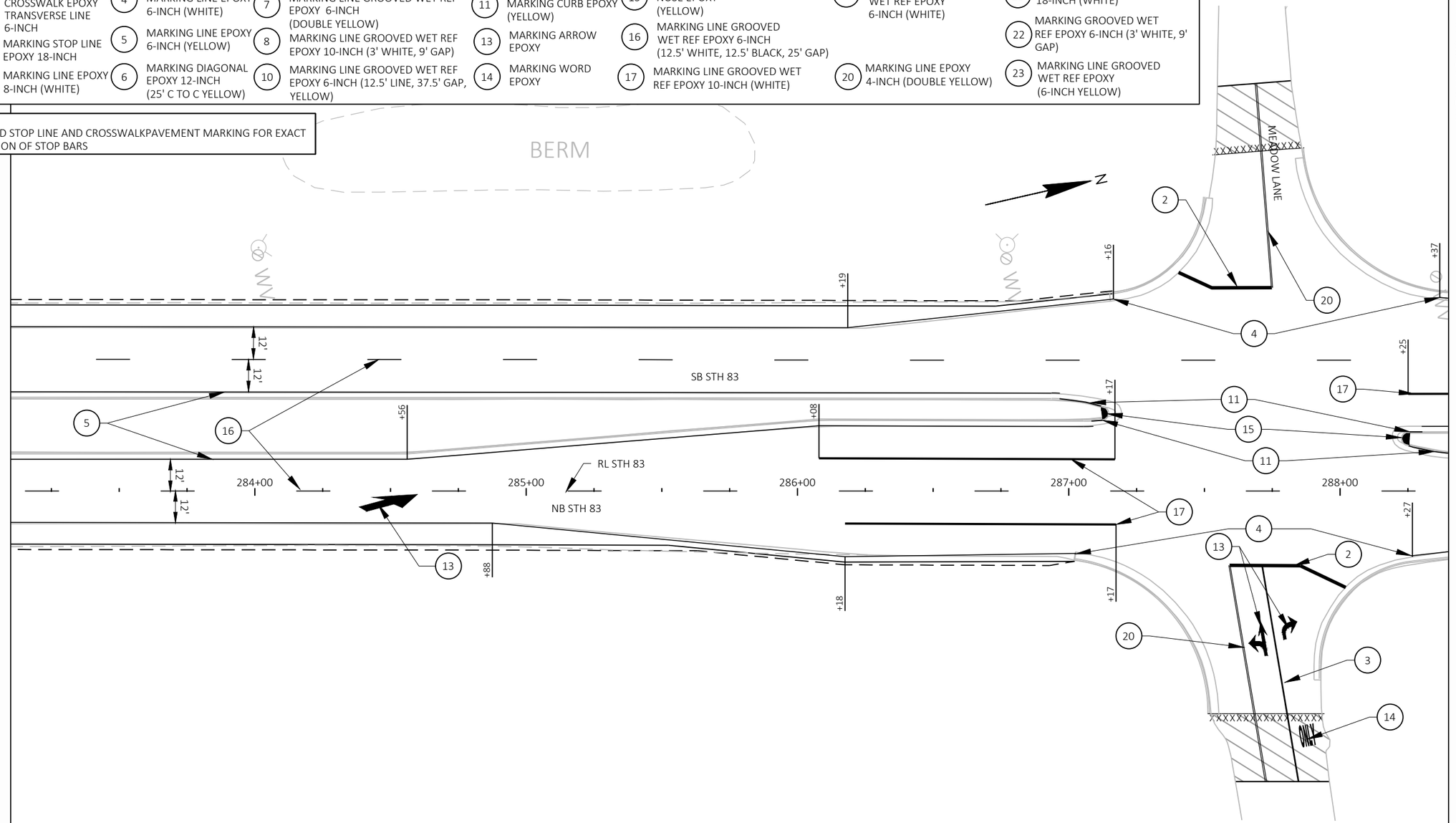
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LAYOUT NAME - 04

PLOT DATE : 3/15/2024 1:07 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

PAVEMENT MARKING LEGEND

1. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
2. MARKING STOP LINE EPOXY 18-INCH
3. MARKING LINE EPOXY 8-INCH (WHITE)
4. MARKING LINE EPOXY 6-INCH (WHITE)
5. MARKING LINE EPOXY 6-INCH (YELLOW)
6. MARKING DIAGONAL EPOXY 12-INCH (25' C TO C YELLOW)
7. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (3' WHITE, 9' GAP)
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11. MARKING CURB EPOXY (YELLOW)
13. MARKING ARROW EPOXY
14. MARKING WORD EPOXY
15. MARKING ISLAND NOSE EPOXY (YELLOW)
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20. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
21. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
22. MARKING GROOVED WET REF EPOXY 6-INCH (3' WHITE, 9' GAP)
23. MARKING LINE GROOVED WET REF EPOXY (6-INCH YELLOW)

NOTE:
SEE SDD STOP LINE AND CROSSWALKPAVEMENT MARKING FOR EXACT LOCATION OF STOP BARS

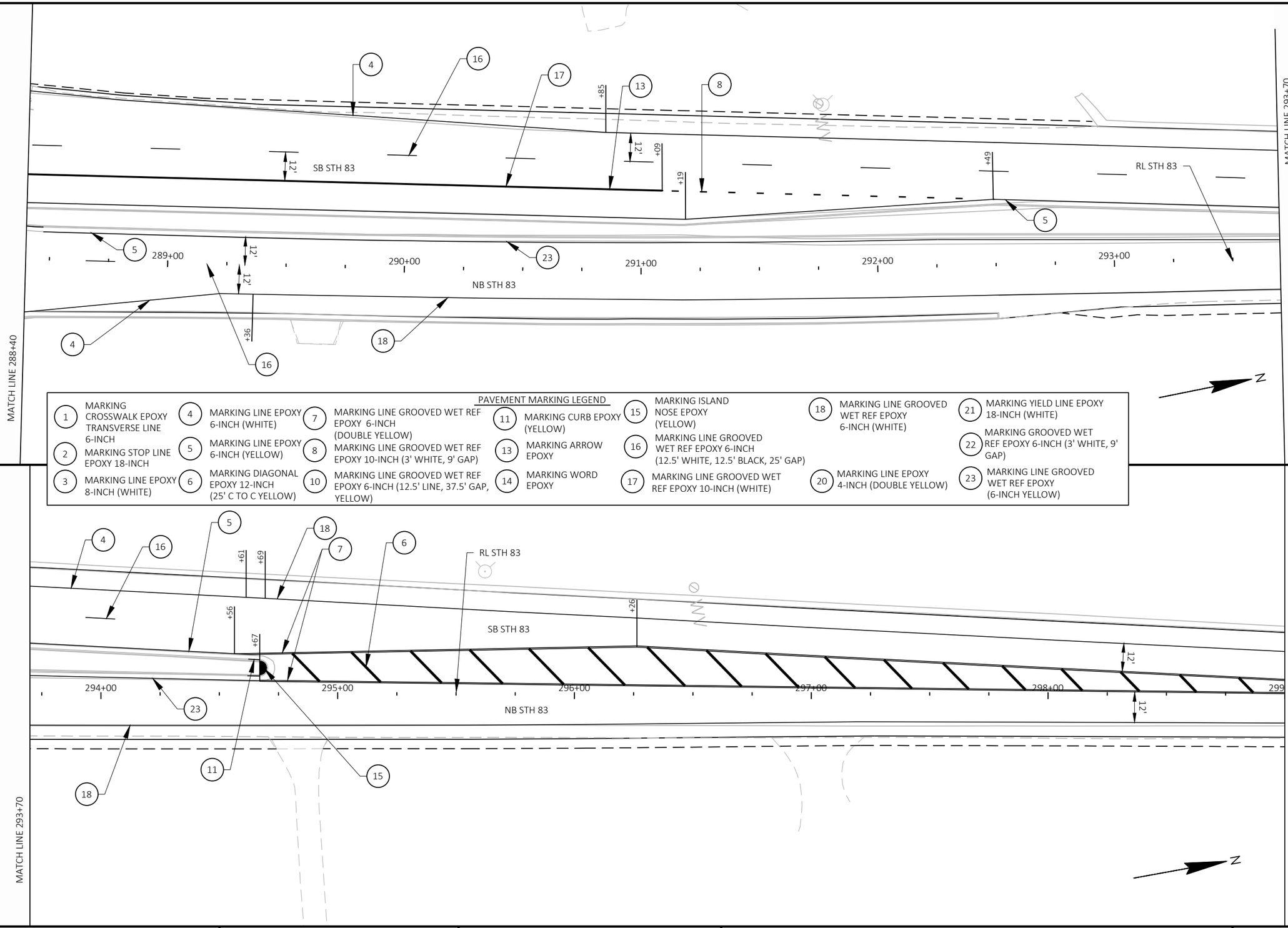


MATCH LINE 283+10

MATCH LINE 288+40

2

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 105	E



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 106	E

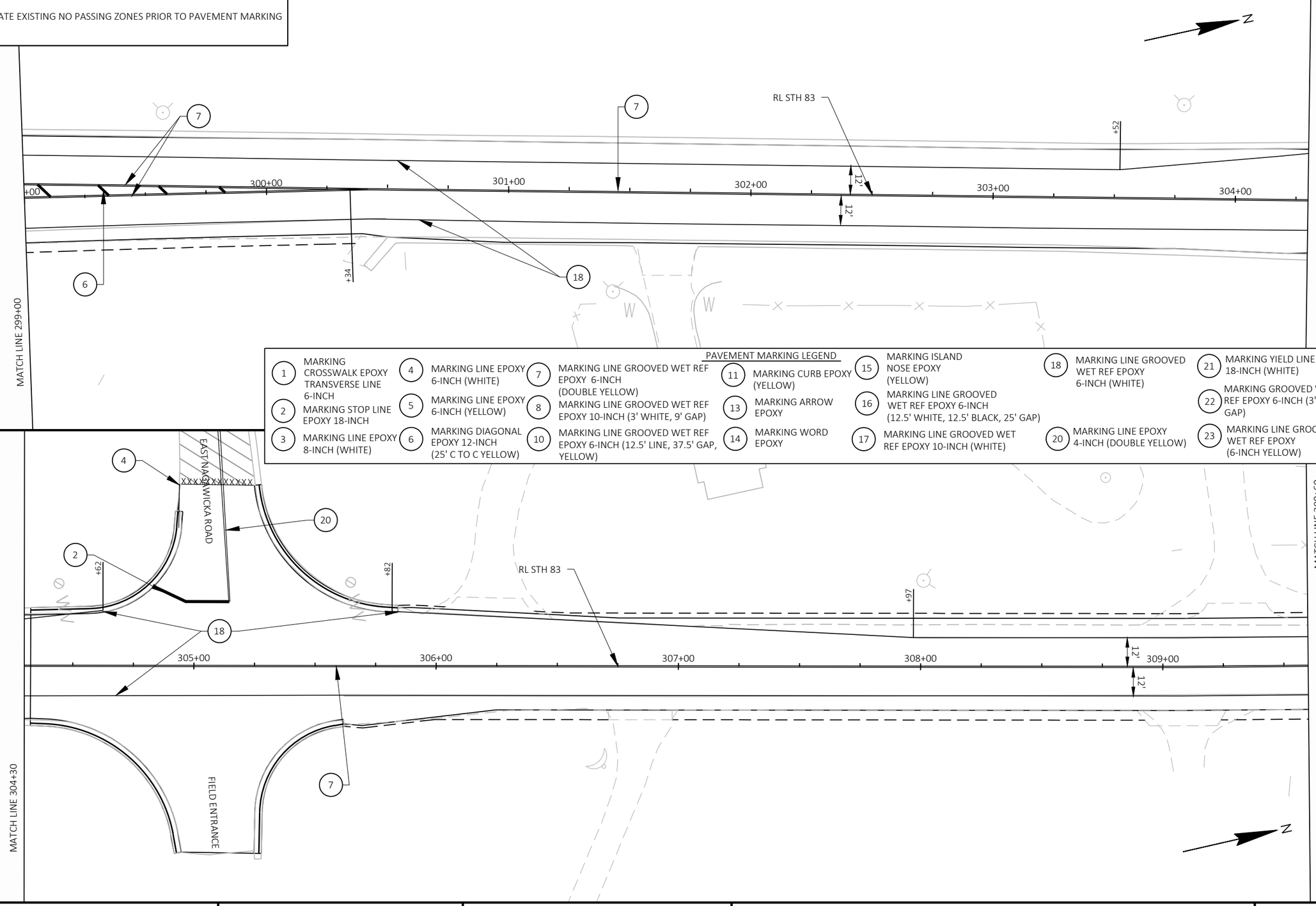
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LAYOUT NAME - 05

PLOT DATE : 3/15/2024 1:07 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

NOTE:
SEE SDD STOP LINE AND CROSSWALKPAVEMENT MARKING FOR EXACT LOCATION OF STOP BARS

FIELD VERIFY & LOCATE EXISTING NO PASSING ZONES PRIOR TO PAVEMENT MARKING REMOVAL



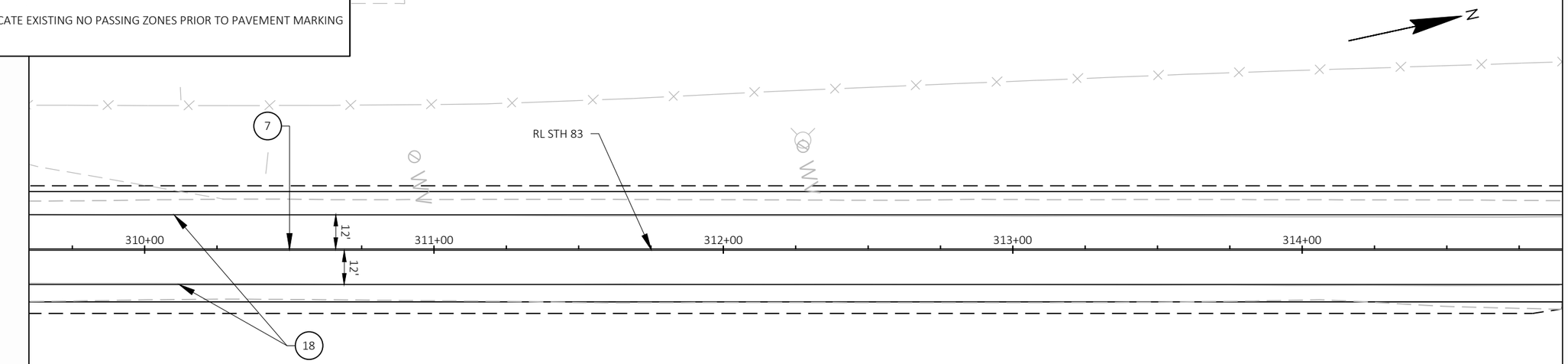
PAVEMENT MARKING LEGEND

1. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
2. MARKING STOP LINE EPOXY 18-INCH
3. MARKING LINE EPOXY 8-INCH (WHITE)
4. MARKING LINE EPOXY 6-INCH (WHITE)
5. MARKING LINE EPOXY 6-INCH (YELLOW)
6. MARKING DIAGONAL EPOXY 12-INCH (25' C TO C YELLOW)
7. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (3' WHITE, 9' GAP)
10. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, YELLOW)
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13. MARKING ARROW EPOXY
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18. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
20. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
21. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
22. MARKING GROOVED WET REF EPOXY 6-INCH (3' WHITE, 9' GAP)
23. MARKING LINE GROOVED WET REF EPOXY (6-INCH YELLOW)

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 107	E

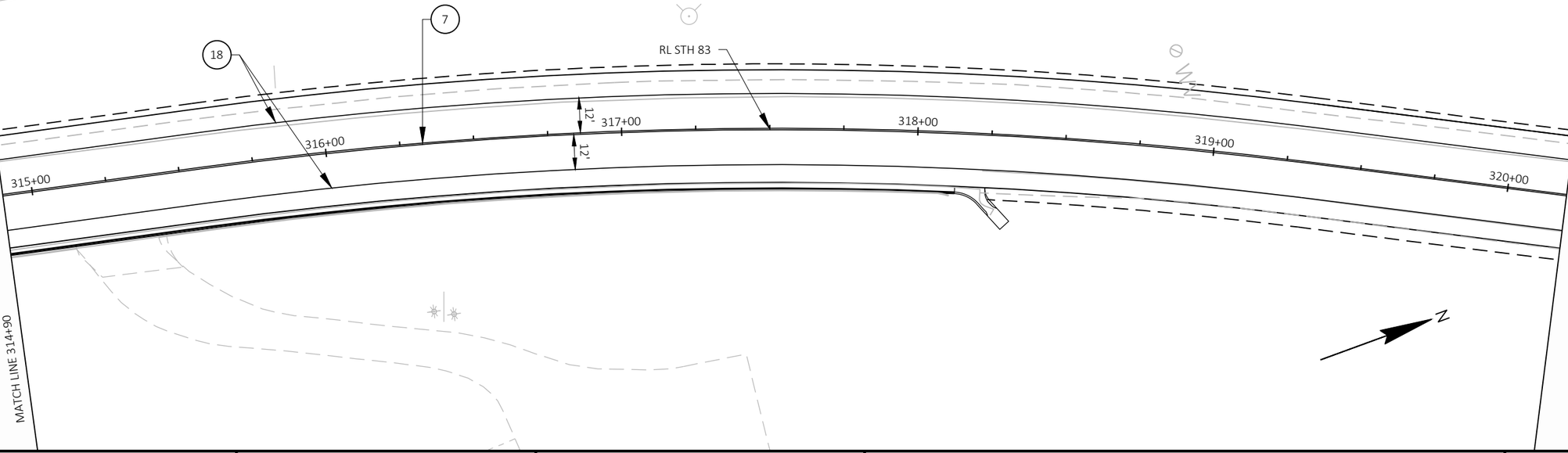
NOTE:

FIELD VERIFY & LOCATE EXISTING NO PASSING ZONES PRIOR TO PAVEMENT MARKING REMOVAL



PAVEMENT MARKING LEGEND

1. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
2. MARKING STOP LINE EPOXY 18-INCH
3. MARKING LINE EPOXY 8-INCH (WHITE)
4. MARKING LINE EPOXY 6-INCH (WHITE)
5. MARKING LINE EPOXY 6-INCH (YELLOW)
6. MARKING DIAGONAL EPOXY 12-INCH (25' C TO C YELLOW)
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20. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
21. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
22. MARKING GROOVED WET REF EPOXY 6-INCH (3' WHITE, 9' GAP)
23. MARKING LINE GROOVED WET REF EPOXY (6-INCH YELLOW)



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 108	E

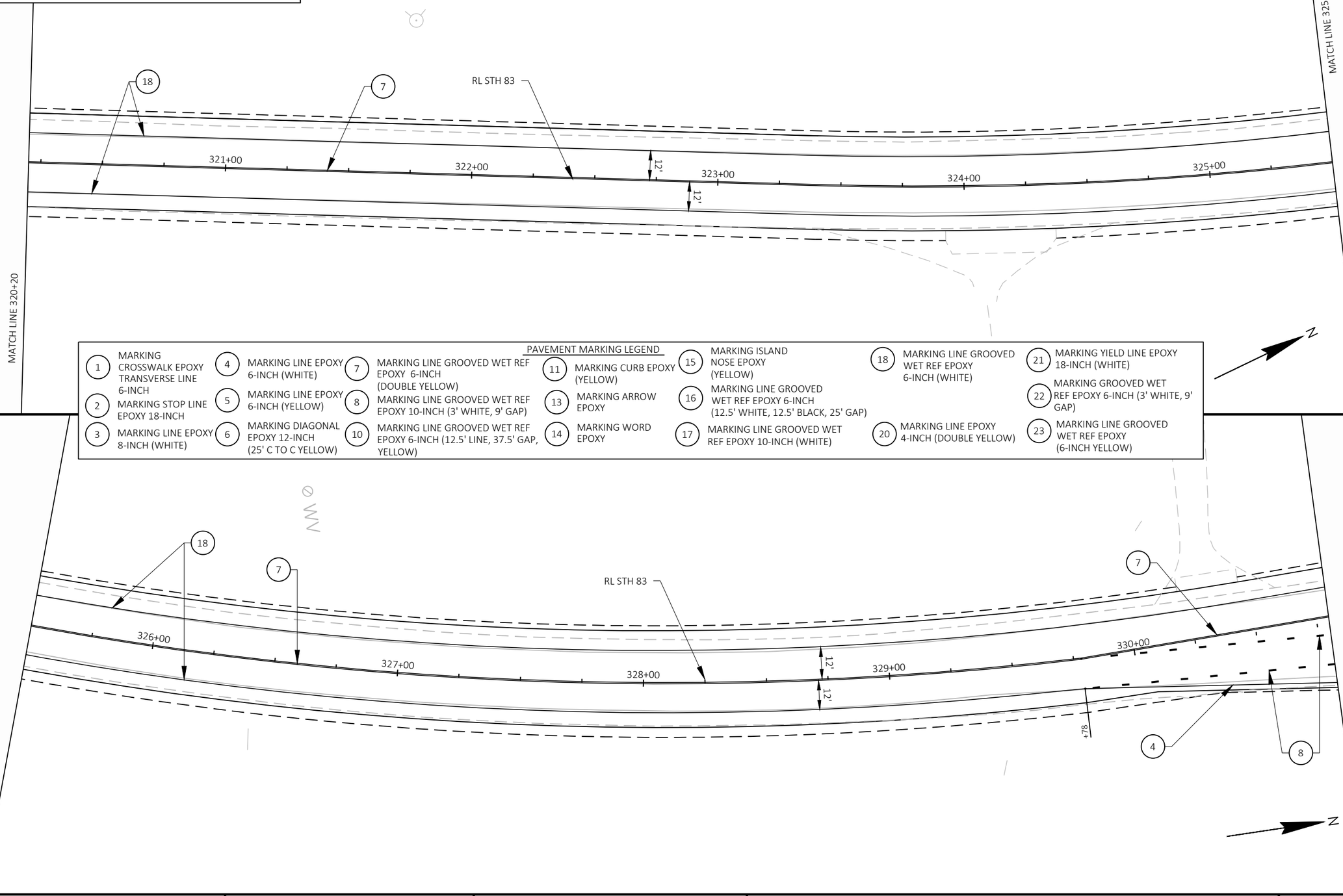
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LAYOUT NAME - 07

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WISDOT/CADDS SHEET 44

NOTE:

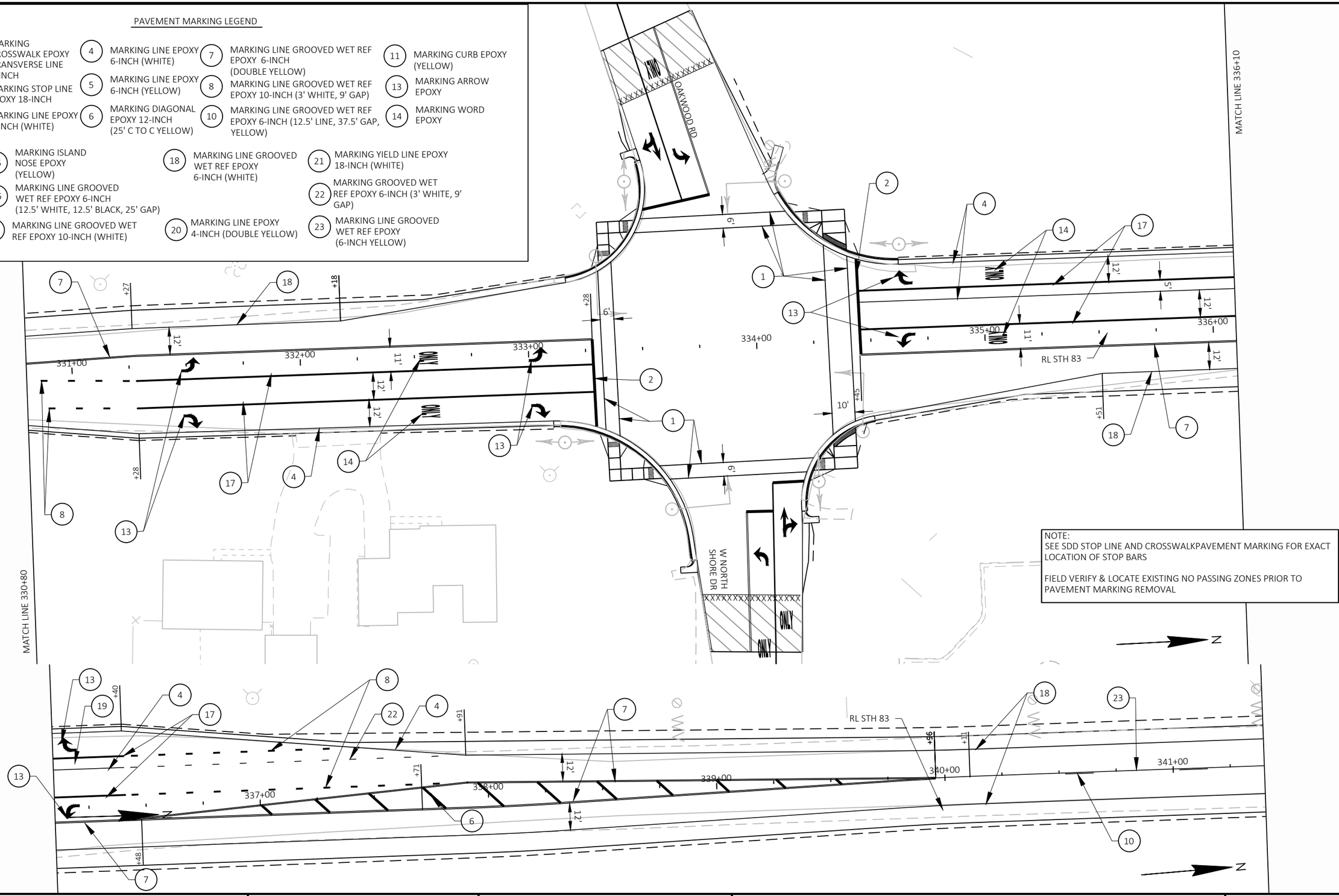
FIELD VERIFY & LOCATE EXISTING NO PASSING ZONES PRIOR TO PAVEMENT MARKING REMOVAL



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 109	E

PAVEMENT MARKING LEGEND

1. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
2. MARKING STOP LINE EPOXY 18-INCH
3. MARKING LINE EPOXY 8-INCH (WHITE)
4. MARKING LINE EPOXY 6-INCH (WHITE)
5. MARKING LINE EPOXY 6-INCH (YELLOW)
6. MARKING DIAGONAL EPOXY 12-INCH (25' C TO C YELLOW)
7. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (3' WHITE, 9' GAP)
10. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, YELLOW)
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13. MARKING ARROW EPOXY
14. MARKING WORD EPOXY
15. MARKING ISLAND NOSE EPOXY (YELLOW)
16. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' WHITE, 12.5' BLACK, 25' GAP)
17. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
18. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
20. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
21. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
22. MARKING GROOVED WET REF EPOXY 6-INCH (3' WHITE, 9' GAP)
23. MARKING LINE GROOVED WET REF EPOXY (6-INCH YELLOW)



PROJECT NO:	HWY:	COUNTY:		SHEET	
1330-00-73	STH 83	WAUKESHA	PAVEMENT MARKING	110	E

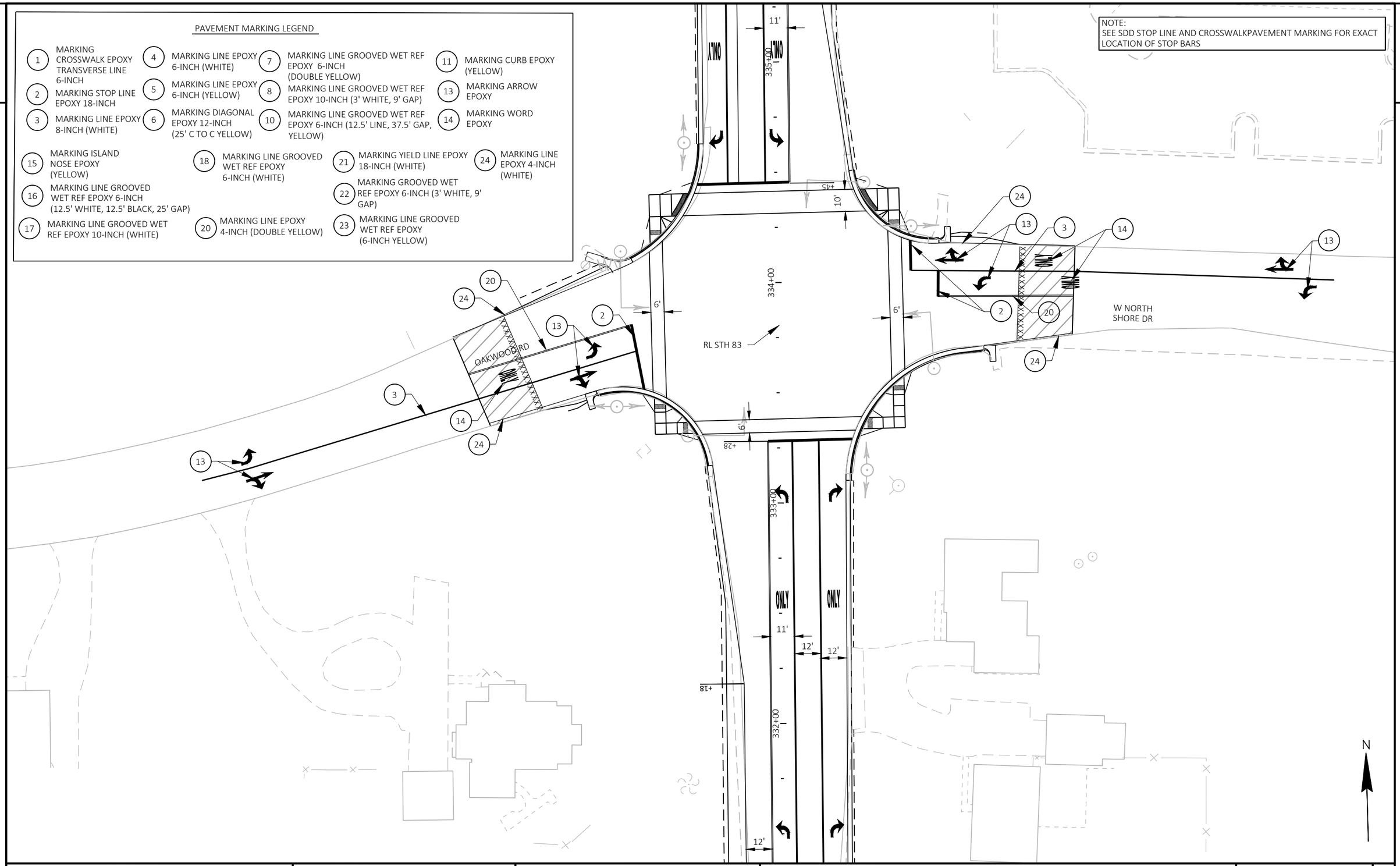
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LAYOUT NAME - 09
PLOT DATE : 3/15/2024 1:07 PM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2

PAVEMENT MARKING LEGEND

1. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
2. MARKING STOP LINE EPOXY 18-INCH
3. MARKING LINE EPOXY 8-INCH (WHITE)
4. MARKING LINE EPOXY 6-INCH (WHITE)
5. MARKING LINE EPOXY 6-INCH (YELLOW)
6. MARKING DIAGONAL EPOXY 12-INCH (25' C TO C YELLOW)
7. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (3' WHITE, 9' GAP)
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11. MARKING CURB EPOXY (YELLOW)
13. MARKING ARROW EPOXY
14. MARKING WORD EPOXY
15. MARKING ISLAND NOSE EPOXY (YELLOW)
16. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' WHITE, 12.5' BLACK, 25' GAP)
17. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
18. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
20. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
21. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
22. MARKING GROOVED WET REF EPOXY 6-INCH (3' WHITE, 9' GAP)
23. MARKING LINE GROOVED WET REF EPOXY (6-INCH YELLOW)
24. MARKING LINE EPOXY 4-INCH (WHITE)

NOTE:
SEE SDD STOP LINE AND CROSSWALKPAVEMENT MARKING FOR EXACT LOCATION OF STOP BARS



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 111	E

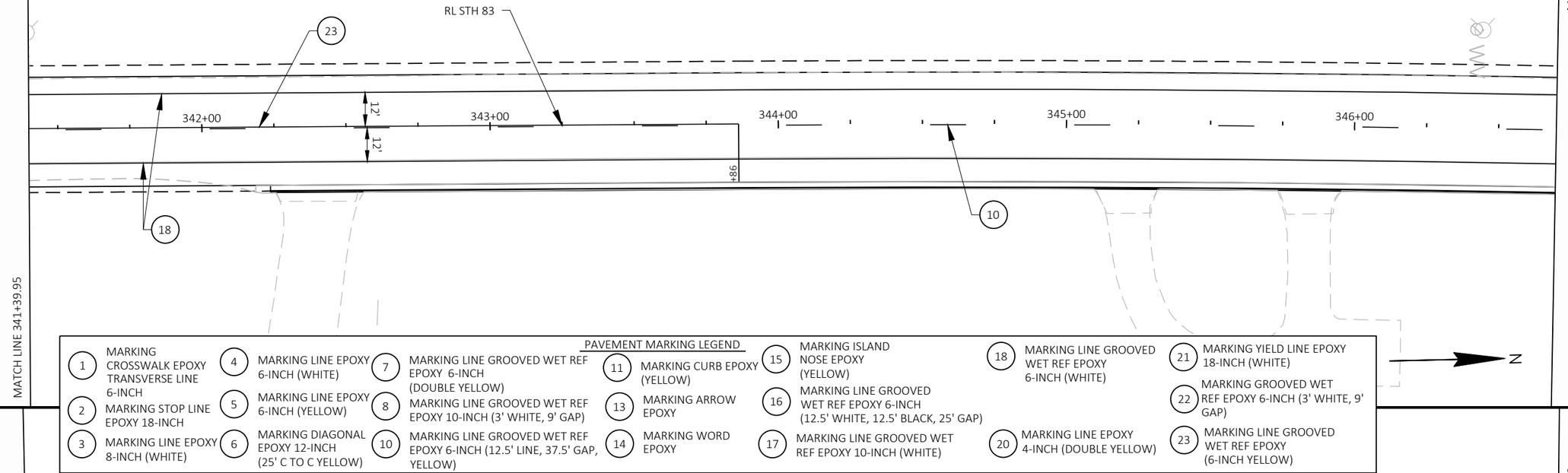
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LAYOUT NAME - OAKWOOD RD

PLOT DATE : 3/15/2024 1:07 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

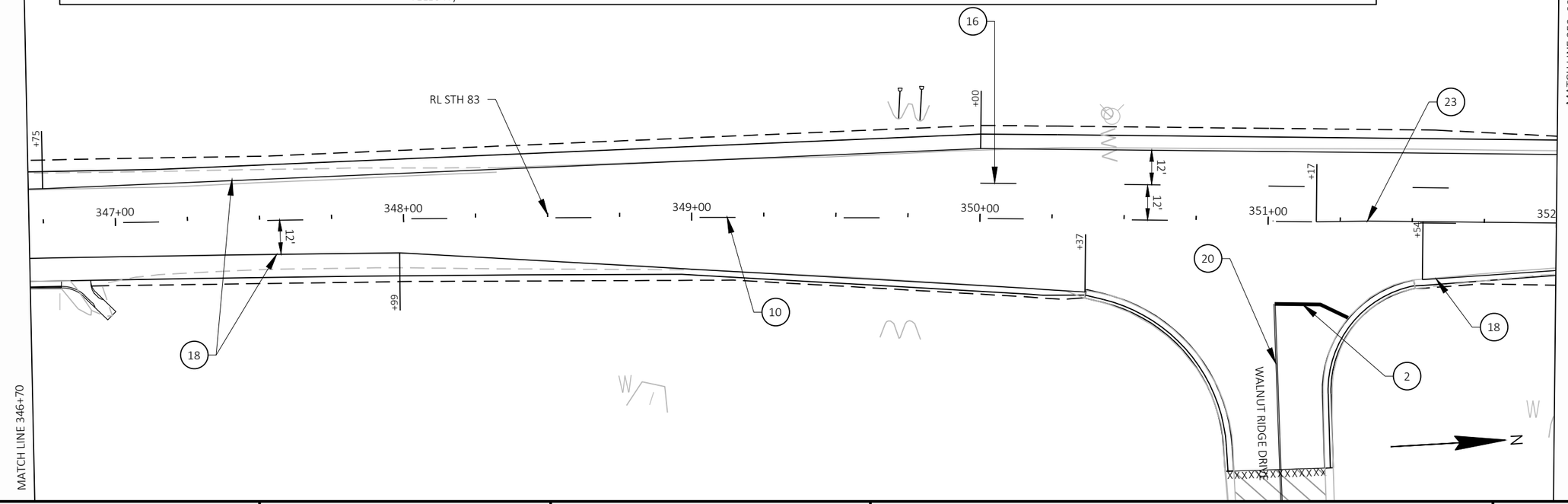
NOTE:
SEE SDD STOP LINE AND CROSSWALKPAVEMENT MARKING FOR EXACT LOCATION OF STOP BARS

FIELD VERIFY & LOCATE EXISTING NO PASSING ZONES PRIOR TO PAVEMENT MARKING REMOVAL



PAVEMENT MARKING LEGEND

1. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
2. MARKING STOP LINE EPOXY 18-INCH
3. MARKING LINE EPOXY 8-INCH (WHITE)
4. MARKING LINE EPOXY 6-INCH (WHITE)
5. MARKING LINE EPOXY 6-INCH (YELLOW)
6. MARKING DIAGONAL EPOXY 12-INCH (25' C TO C YELLOW)
7. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (3' WHITE, 9' GAP)
10. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, YELLOW)
11. MARKING CURB EPOXY (YELLOW)
13. MARKING ARROW EPOXY
14. MARKING WORD EPOXY
15. MARKING ISLAND NOSE EPOXY (YELLOW)
16. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' WHITE, 12.5' BLACK, 25' GAP)
17. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
18. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
20. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
21. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
22. MARKING GROOVED WET REF EPOXY 6-INCH (3' WHITE, 9' GAP)
23. MARKING LINE GROOVED WET REF EPOXY (6-INCH YELLOW)



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 112	E

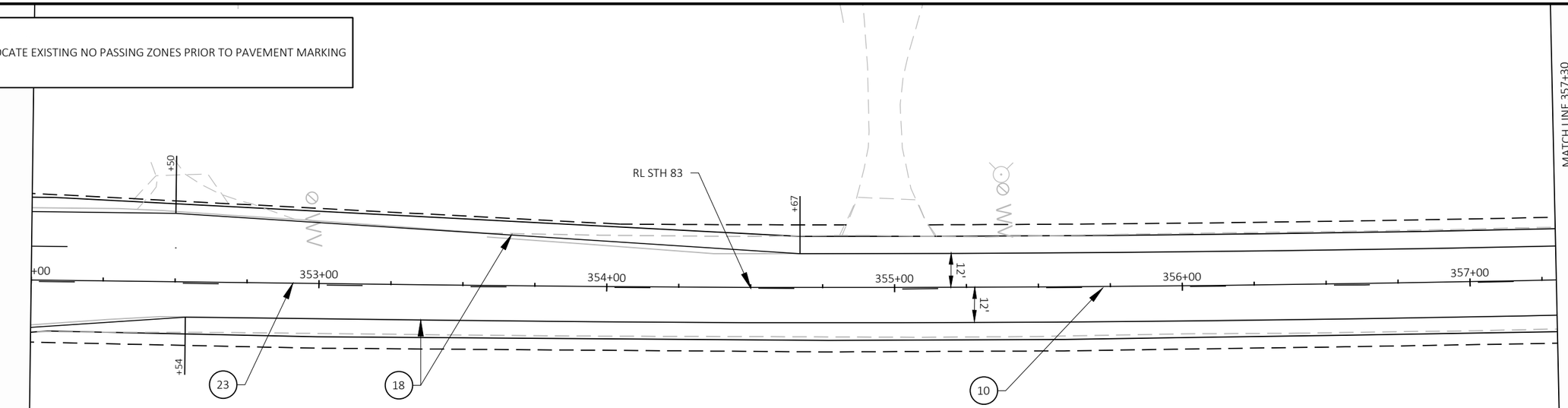
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LAYOUT NAME - 10

PLOT DATE : 3/15/2024 1:07 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

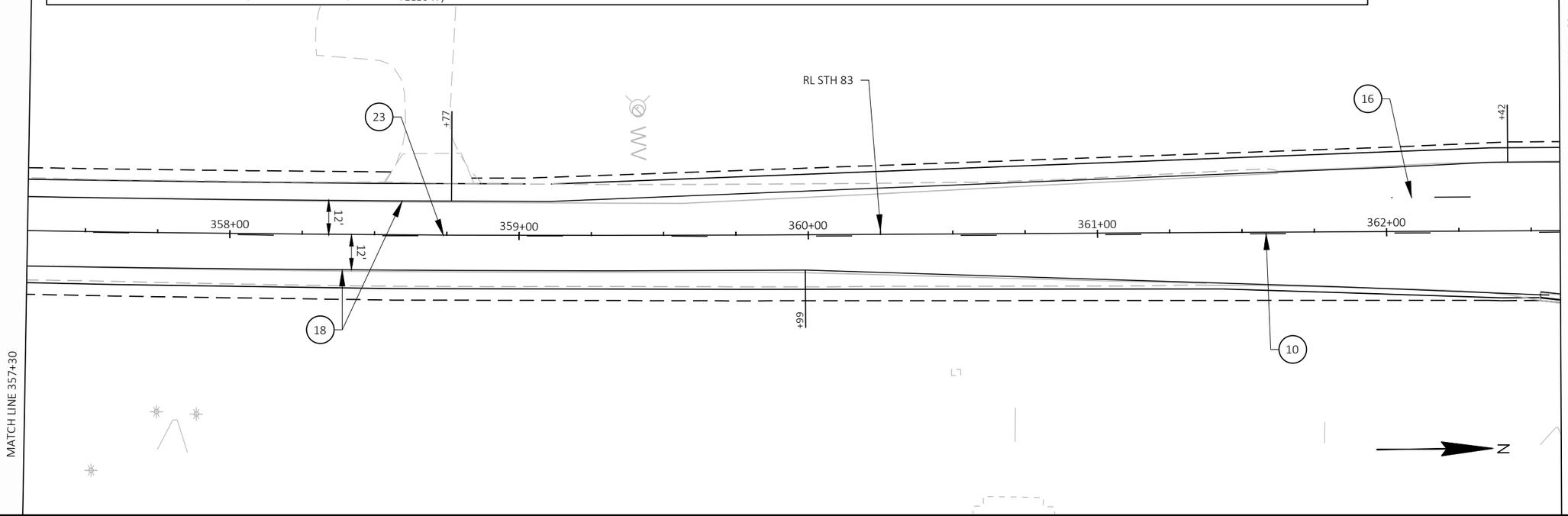
NOTE:

FIELD VERIFY & LOCATE EXISTING NO PASSING ZONES PRIOR TO PAVEMENT MARKING REMOVAL



PAVEMENT MARKING LEGEND

1. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
2. MARKING STOP LINE EPOXY 18-INCH
3. MARKING LINE EPOXY 8-INCH (WHITE)
4. MARKING LINE EPOXY 6-INCH (WHITE)
5. MARKING LINE EPOXY 6-INCH (YELLOW)
6. MARKING DIAGONAL EPOXY 12-INCH (25' C TO C YELLOW)
7. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (3' WHITE, 9' GAP)
10. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, YELLOW)
11. MARKING CURB EPOXY (YELLOW)
13. MARKING ARROW EPOXY
14. MARKING WORD EPOXY
15. MARKING ISLAND NOSE EPOXY (YELLOW)
16. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' WHITE, 12.5' BLACK, 25' GAP)
17. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
18. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
20. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
21. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
22. MARKING GROOVED WET REF EPOXY 6-INCH (3' WHITE, 9' GAP)
23. MARKING LINE GROOVED WET REF EPOXY (6-INCH YELLOW)



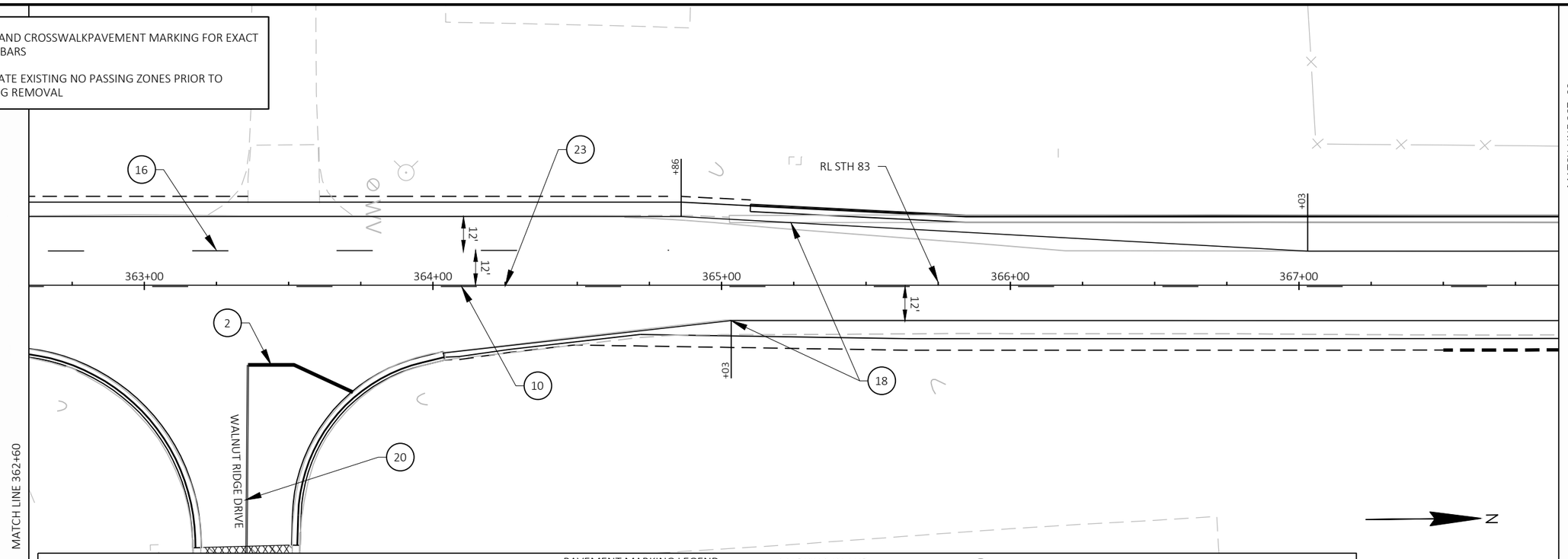
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 113	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 11

PLOT DATE : 3/15/2024 1:08 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

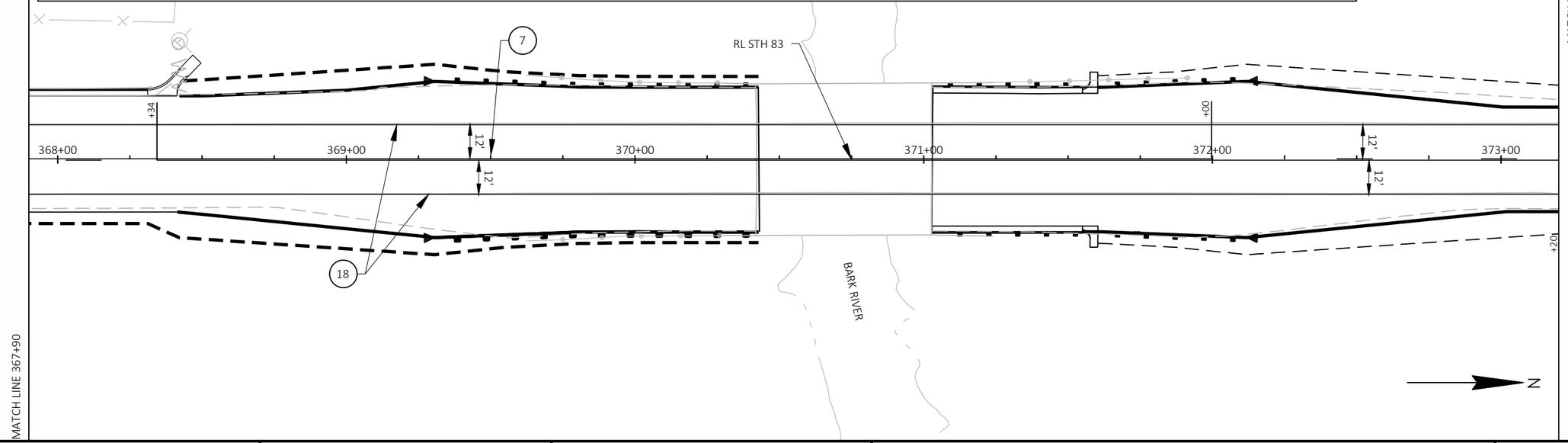
NOTE:
SEE SDD STOP LINE AND CROSSWALKPAVEMENT MARKING FOR EXACT LOCATION OF STOP BARS

FIELD VERIFY & LOCATE EXISTING NO PASSING ZONES PRIOR TO PAVEMENT MARKING REMOVAL



PAVEMENT MARKING LEGEND

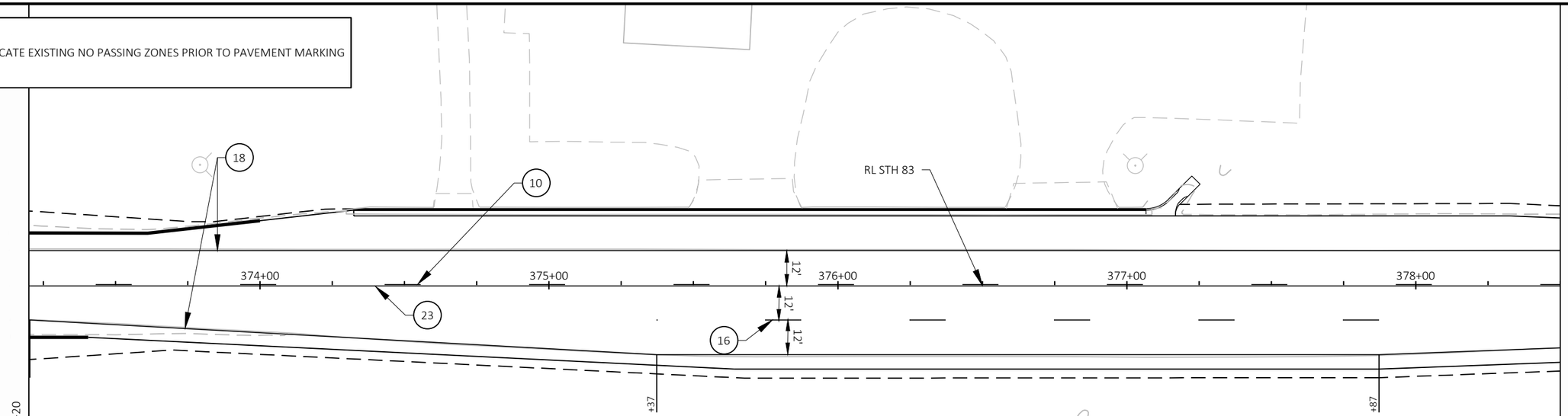
1. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
2. MARKING STOP LINE EPOXY 18-INCH
3. MARKING LINE EPOXY 8-INCH (WHITE)
4. MARKING LINE EPOXY 6-INCH (WHITE)
5. MARKING LINE EPOXY 6-INCH (YELLOW)
6. MARKING DIAGONAL EPOXY 12-INCH (25' C TO C YELLOW)
7. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (3' WHITE, 9' GAP)
10. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, YELLOW)
11. MARKING CURB EPOXY (YELLOW)
13. MARKING ARROW EPOXY
14. MARKING WORD EPOXY
15. MARKING ISLAND NOSE EPOXY (YELLOW)
16. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' WHITE, 12.5' BLACK, 25' GAP)
17. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
18. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
20. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
21. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
22. MARKING GROOVED WET REF EPOXY 6-INCH (3' WHITE, 9' GAP)
23. MARKING LINE GROOVED WET REF EPOXY (6-INCH YELLOW)



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 114	E

NOTE:

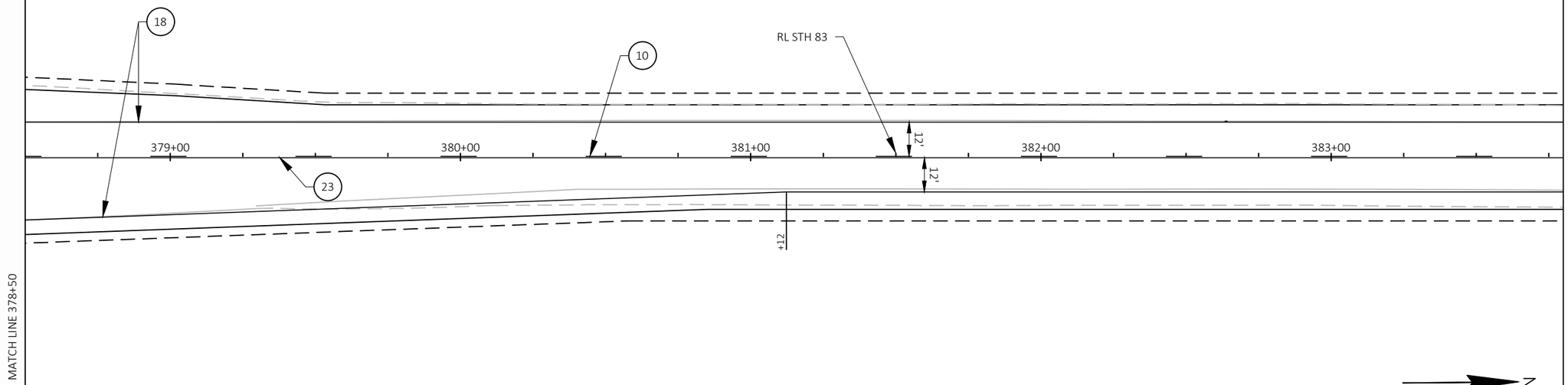
FIELD VERIFY & LOCATE EXISTING NO PASSING ZONES PRIOR TO PAVEMENT MARKING REMOVAL



PAVEMENT MARKING LEGEND

1. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
2. MARKING STOP LINE EPOXY 18-INCH
3. MARKING LINE EPOXY 8-INCH (WHITE)
4. MARKING LINE EPOXY 6-INCH (WHITE)
5. MARKING LINE EPOXY 6-INCH (YELLOW)
6. MARKING DIAGONAL EPOXY 12-INCH (25' C TO C YELLOW)
7. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (3' WHITE, 9' GAP)
10. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, YELLOW)
11. MARKING CURB EPOXY (YELLOW)
13. MARKING ARROW EPOXY
14. MARKING WORD EPOXY
15. MARKING ISLAND NOSE EPOXY (YELLOW)
16. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' WHITE, 12.5' BLACK, 25' GAP)
17. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
18. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
20. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
21. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
22. MARKING GROOVED WET REF EPOXY 6-INCH (3' WHITE, 9' GAP)
23. MARKING LINE GROOVED WET REF EPOXY (6-INCH YELLOW)

N



N

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 115	E

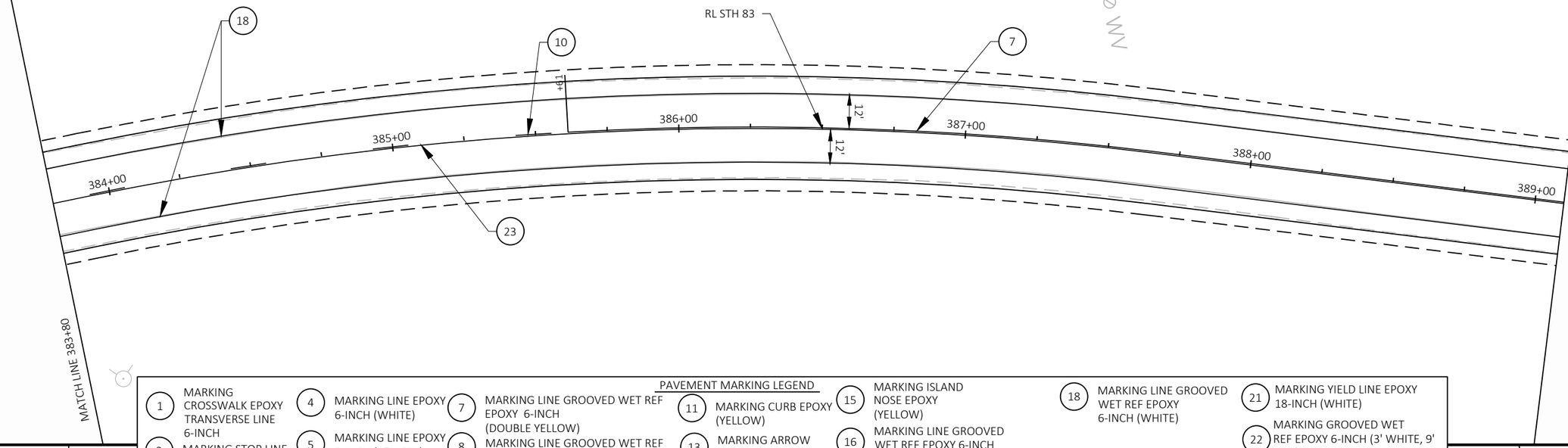
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LAYOUT NAME - 13

PLOT DATE : 3/15/2024 1:08 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

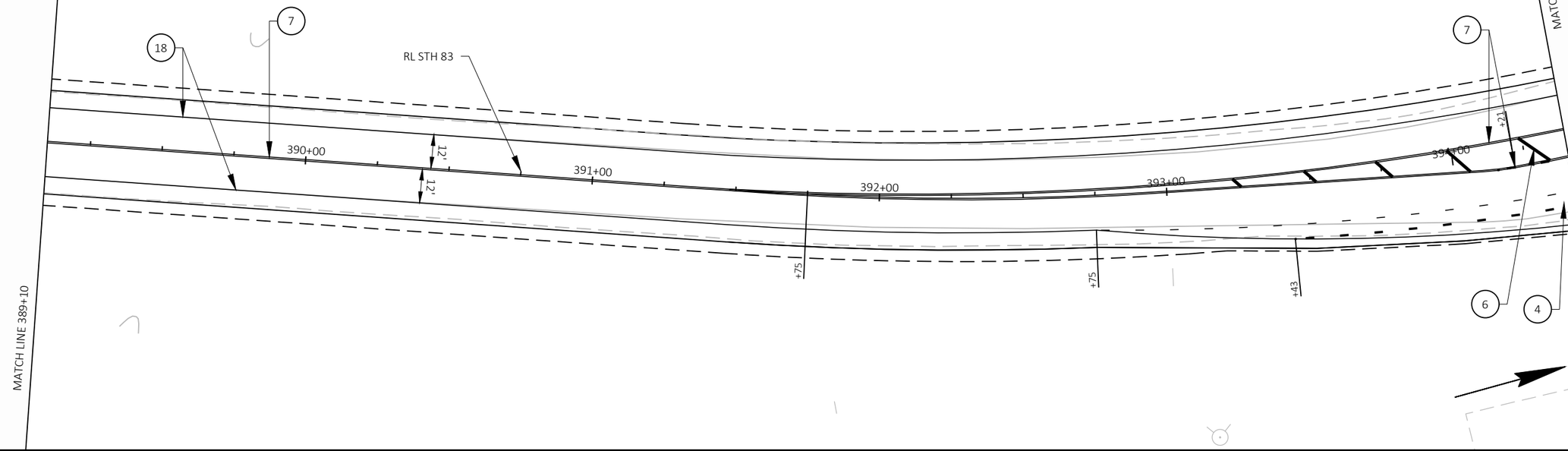
NOTE:

FIELD VERIFY & LOCATE EXISTING NO PASSING ZONES PRIOR TO PAVEMENT MARKING REMOVAL



PAVEMENT MARKING LEGEND

1	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH	4	MARKING LINE EPOXY 6-INCH (WHITE)	7	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)	11	MARKING CURB EPOXY (YELLOW)	15	MARKING ISLAND NOSE EPOXY (YELLOW)	18	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)	21	MARKING YIELD LINE EPOXY 18-INCH (WHITE)
2	MARKING STOP LINE EPOXY 18-INCH	5	MARKING LINE EPOXY 6-INCH (YELLOW)	8	MARKING LINE GROOVED WET REF EPOXY 10-INCH (3' WHITE, 9' GAP)	13	MARKING ARROW EPOXY	16	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' WHITE, 12.5' BLACK, 25' GAP)			22	MARKING GROOVED WET REF EPOXY 6-INCH (3' WHITE, 9' GAP)
3	MARKING LINE EPOXY 8-INCH (WHITE)	6	MARKING DIAGONAL EPOXY 12-INCH (25' C TO C YELLOW)	10	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, YELLOW)	14	MARKING WORD EPOXY	17	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)	20	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)	23	MARKING LINE GROOVED WET REF EPOXY (6-INCH YELLOW)



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 116	E

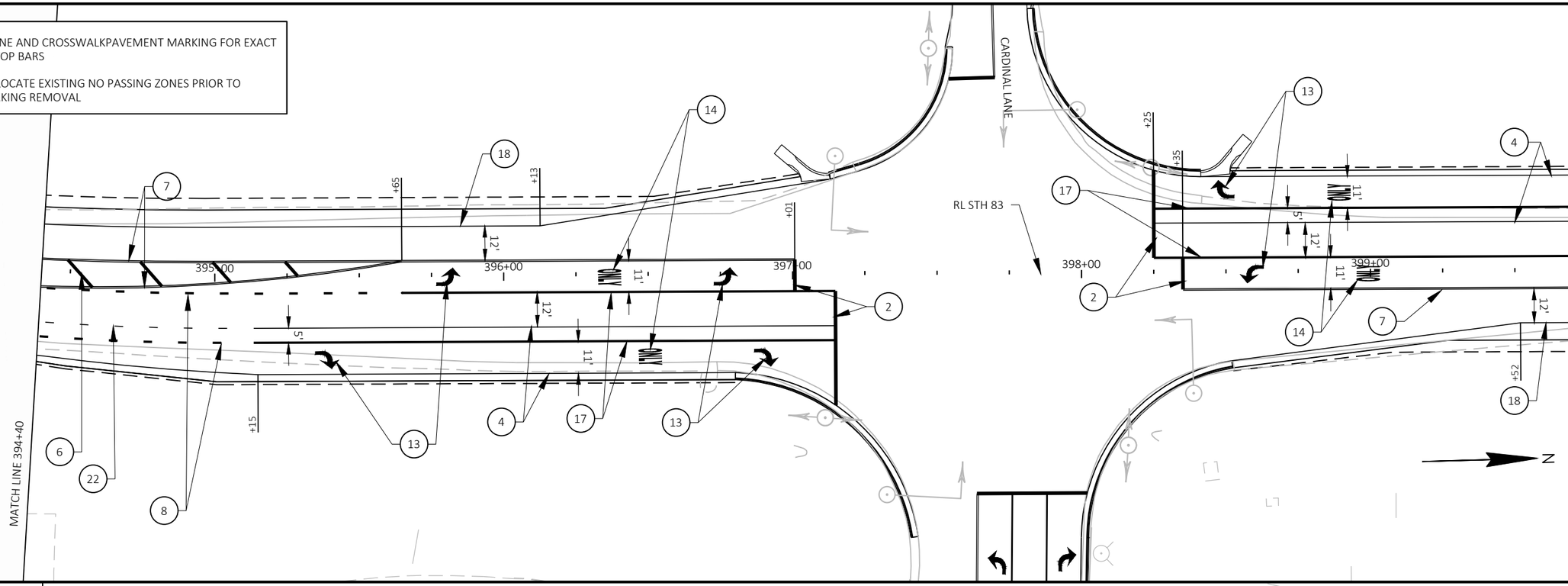
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LAYOUT NAME - 14

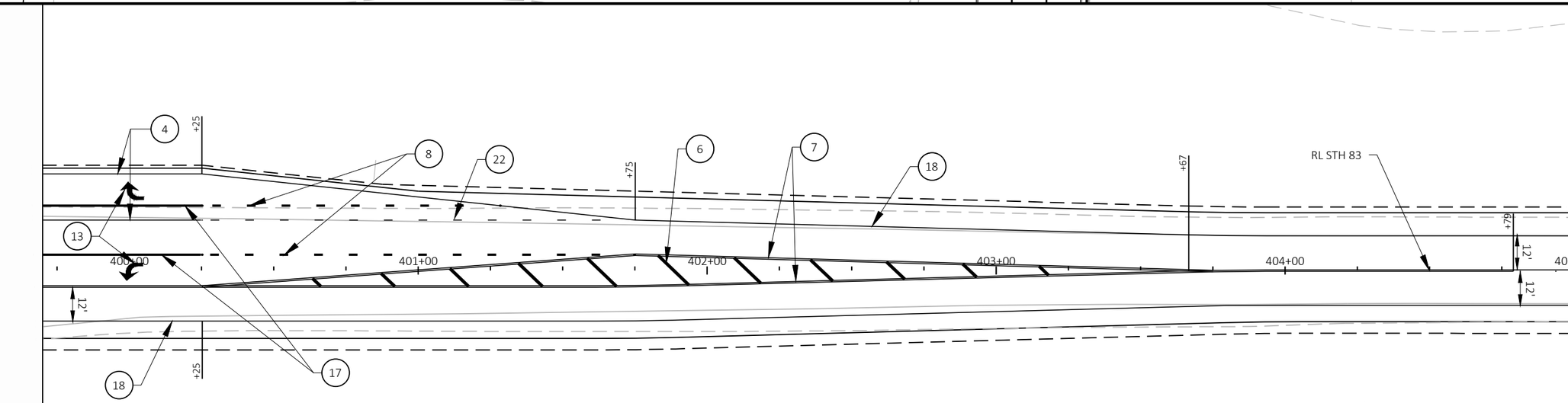
PLOT DATE : 3/15/2024 1:08 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

NOTE:
SEE SDD STOP LINE AND CROSSWALKPAVEMENT MARKING FOR EXACT LOCATION OF STOP BARS

FIELD VERIFY & LOCATE EXISTING NO PASSING ZONES PRIOR TO PAVEMENT MARKING REMOVAL



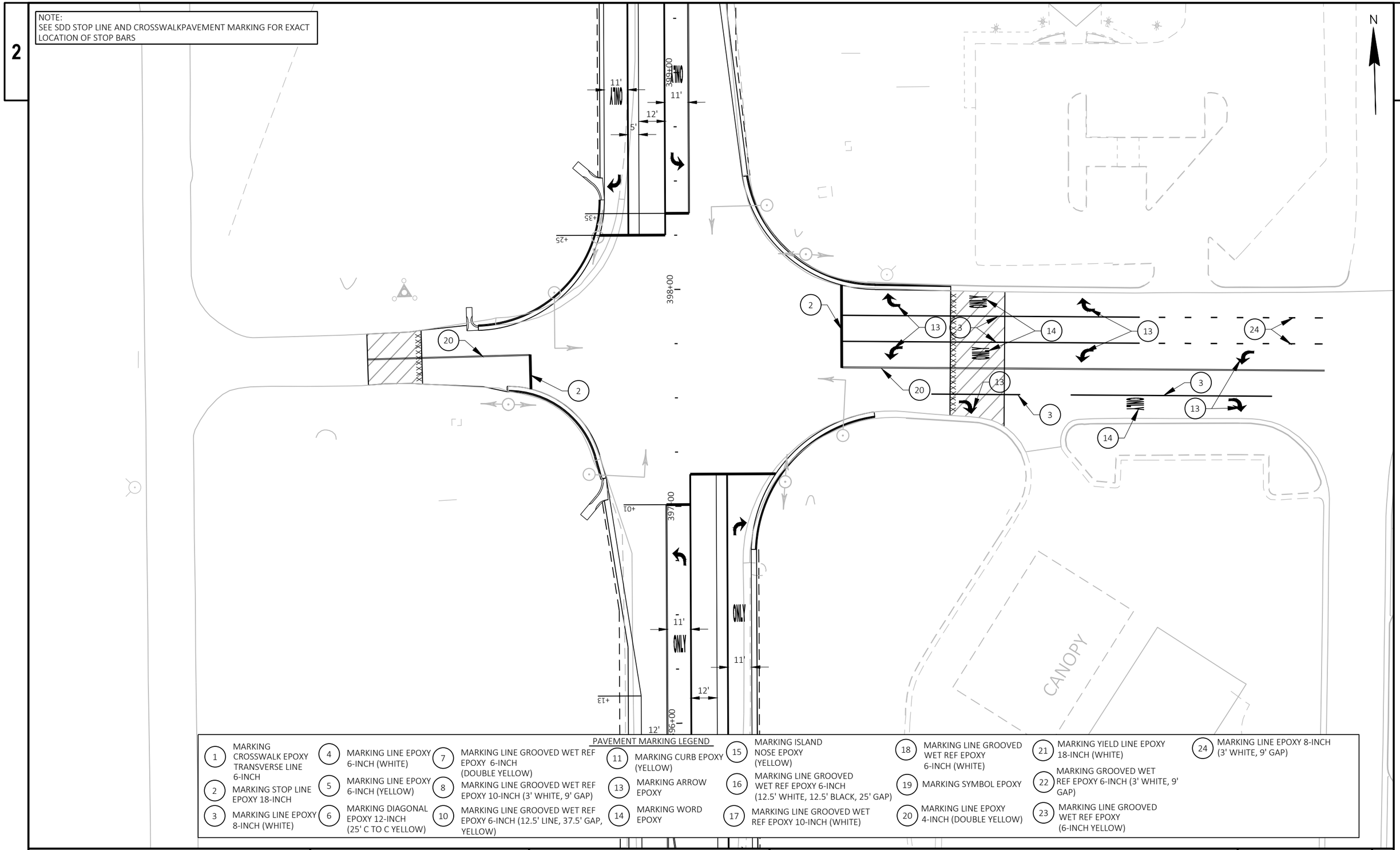


PAVEMENT MARKING LEGEND

1. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
2. MARKING STOP LINE EPOXY 18-INCH
3. MARKING LINE EPOXY 8-INCH (WHITE)
4. MARKING LINE EPOXY 6-INCH (WHITE)
5. MARKING LINE EPOXY 6-INCH (YELLOW)
6. MARKING DIAGONAL EPOXY 12-INCH (25' C TO C YELLOW)
7. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (3' WHITE, 9' GAP)
10. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, YELLOW)
11. MARKING CURB EPOXY (YELLOW)
13. MARKING ARROW EPOXY
14. MARKING WORD EPOXY
15. MARKING ISLAND NOSE EPOXY (YELLOW)
16. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' WHITE, 12.5' BLACK, 25' GAP)
17. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
18. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
20. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
21. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
22. MARKING GROOVED WET REF EPOXY 6-INCH (3' WHITE, 9' GAP)
23. MARKING LINE GROOVED WET REF EPOXY (6-INCH YELLOW)

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 117	E

NOTE:
SEE SDD STOP LINE AND CROSSWALKPAVEMENT MARKING FOR EXACT LOCATION OF STOP BARS



PAVEMENT MARKING LEGEND

1	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH	4	MARKING LINE EPOXY 6-INCH (WHITE)	7	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)	11	MARKING CURB EPOXY (YELLOW)	15	MARKING ISLAND NOSE EPOXY (YELLOW)	18	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
2	MARKING STOP LINE EPOXY 18-INCH	5	MARKING LINE EPOXY 6-INCH (YELLOW)	8	MARKING LINE GROOVED WET REF EPOXY 10-INCH (3' WHITE, 9' GAP)	13	MARKING ARROW EPOXY	16	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' WHITE, 12.5' BLACK, 25' GAP)	19	MARKING SYMBOL EPOXY
3	MARKING LINE EPOXY 8-INCH (WHITE)	6	MARKING DIAGONAL EPOXY 12-INCH (25' C TO C YELLOW)	10	MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, YELLOW)	14	MARKING WORD EPOXY	17	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)	20	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)

21	MARKING YIELD LINE EPOXY 18-INCH (WHITE)	22	MARKING GROOVED WET REF EPOXY 6-INCH (3' WHITE, 9' GAP)	23	MARKING LINE GROOVED WET REF EPOXY (6-INCH YELLOW)	24	MARKING LINE EPOXY 8-INCH (3' WHITE, 9' GAP)
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 118	E

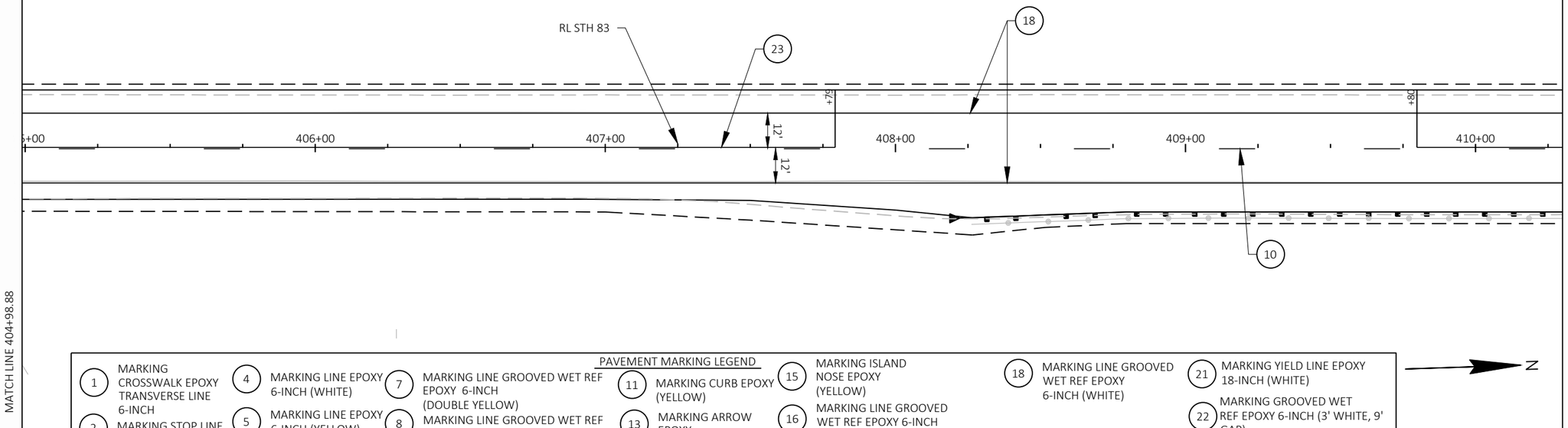
FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - Cardinal Detail

PLOT DATE : 3/15/2024 1:08 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

NOTE:

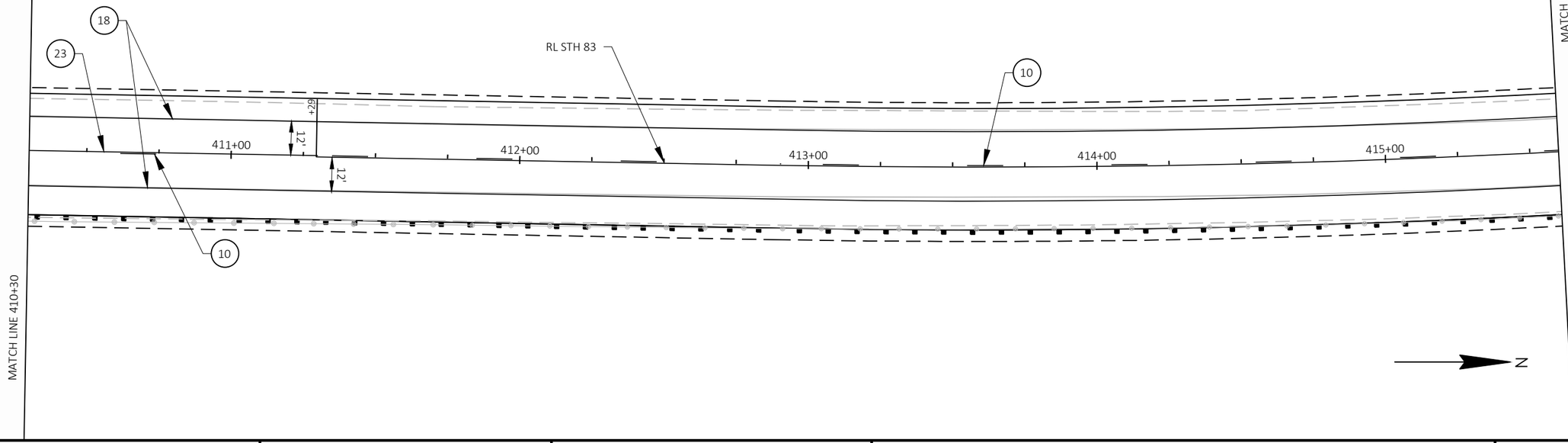
FIELD VERIFY & LOCATE EXISTING NO PASSING ZONES PRIOR TO PAVEMENT MARKING REMOVAL



PAVEMENT MARKING LEGEND

1. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
2. MARKING STOP LINE EPOXY 18-INCH
3. MARKING LINE EPOXY 8-INCH (WHITE)
4. MARKING LINE EPOXY 6-INCH (WHITE)
5. MARKING LINE EPOXY 6-INCH (YELLOW)
6. MARKING DIAGONAL EPOXY 12-INCH (25' C TO C YELLOW)
7. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (3' WHITE, 9' GAP)
10. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' LINE, 37.5' GAP, YELLOW)
11. MARKING CURB EPOXY (YELLOW)
13. MARKING ARROW EPOXY
14. MARKING WORD EPOXY
15. MARKING ISLAND NOSE EPOXY (YELLOW)
16. MARKING LINE GROOVED WET REF EPOXY 6-INCH (12.5' WHITE, 12.5' BLACK, 25' GAP)
17. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
18. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
20. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
21. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
22. MARKING GROOVED WET REF EPOXY 6-INCH (3' WHITE, 9' GAP)
23. MARKING LINE GROOVED WET REF EPOXY (6-INCH YELLOW)

N



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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 119	E

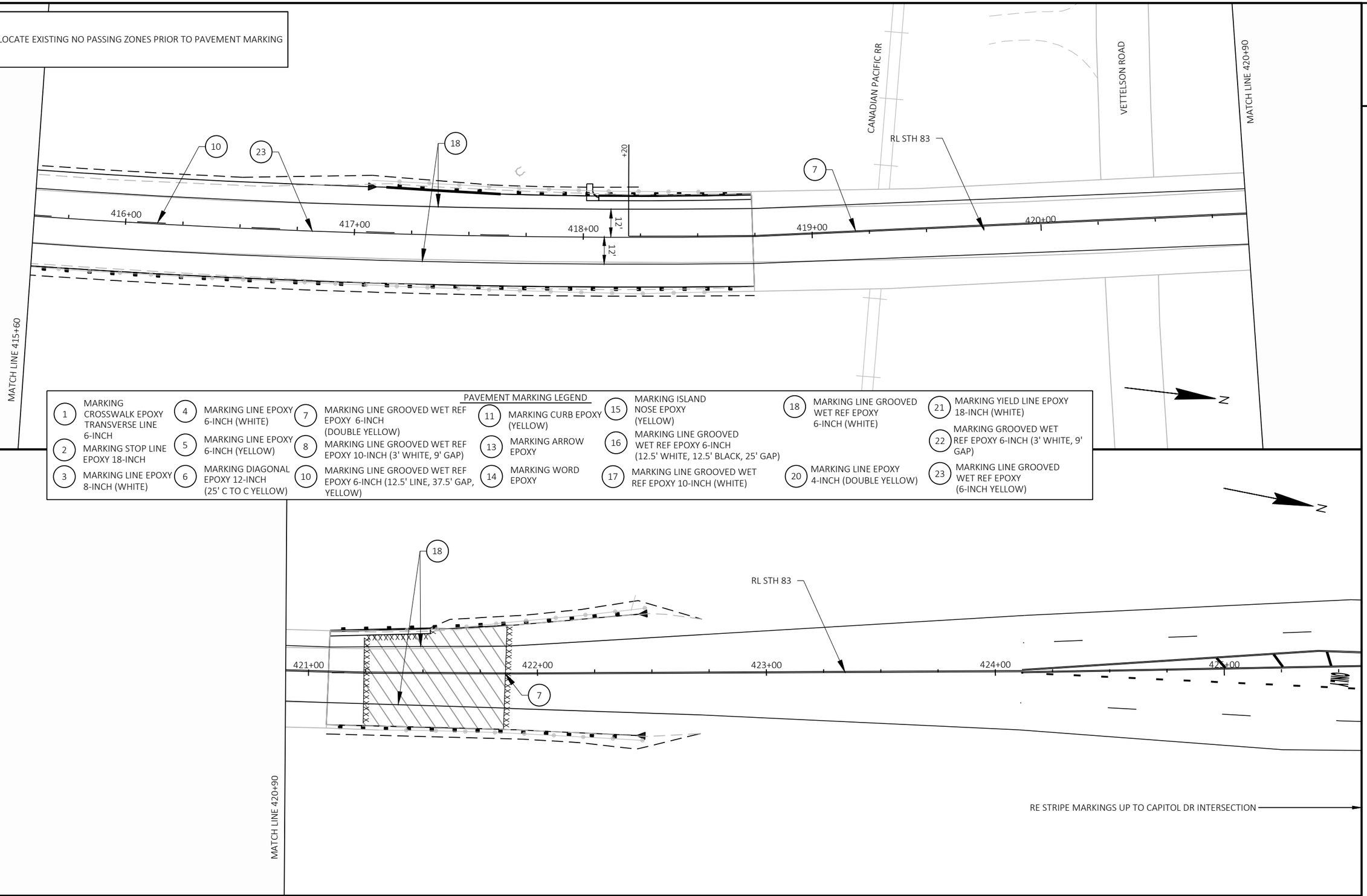
FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 16

PLOT DATE : 3/15/2024 1:08 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

NOTE:

FIELD VERIFY & LOCATE EXISTING NO PASSING ZONES PRIOR TO PAVEMENT MARKING REMOVAL



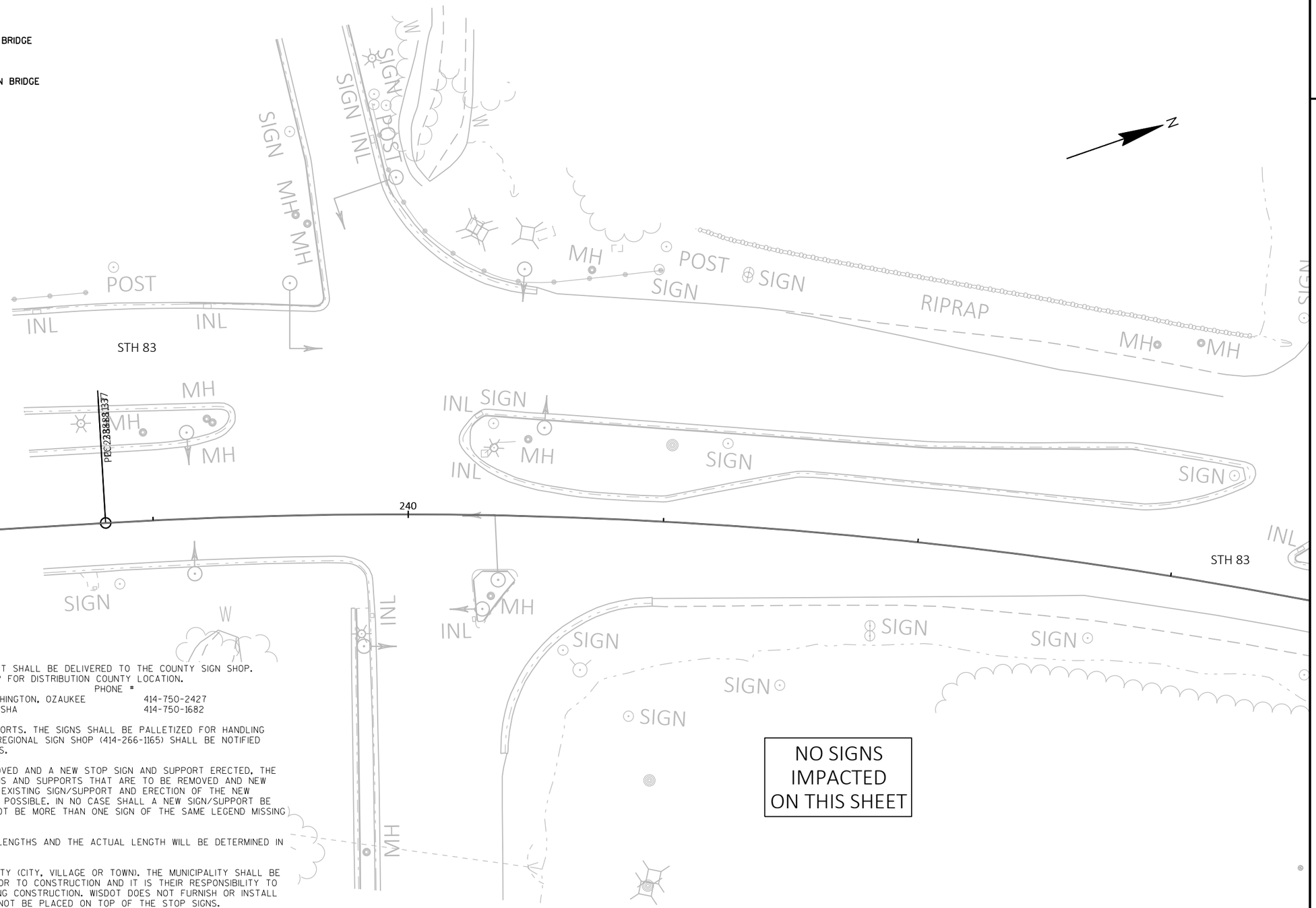
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 120	E

2

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE



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

NO SIGNS IMPACTED ON THIS SHEET

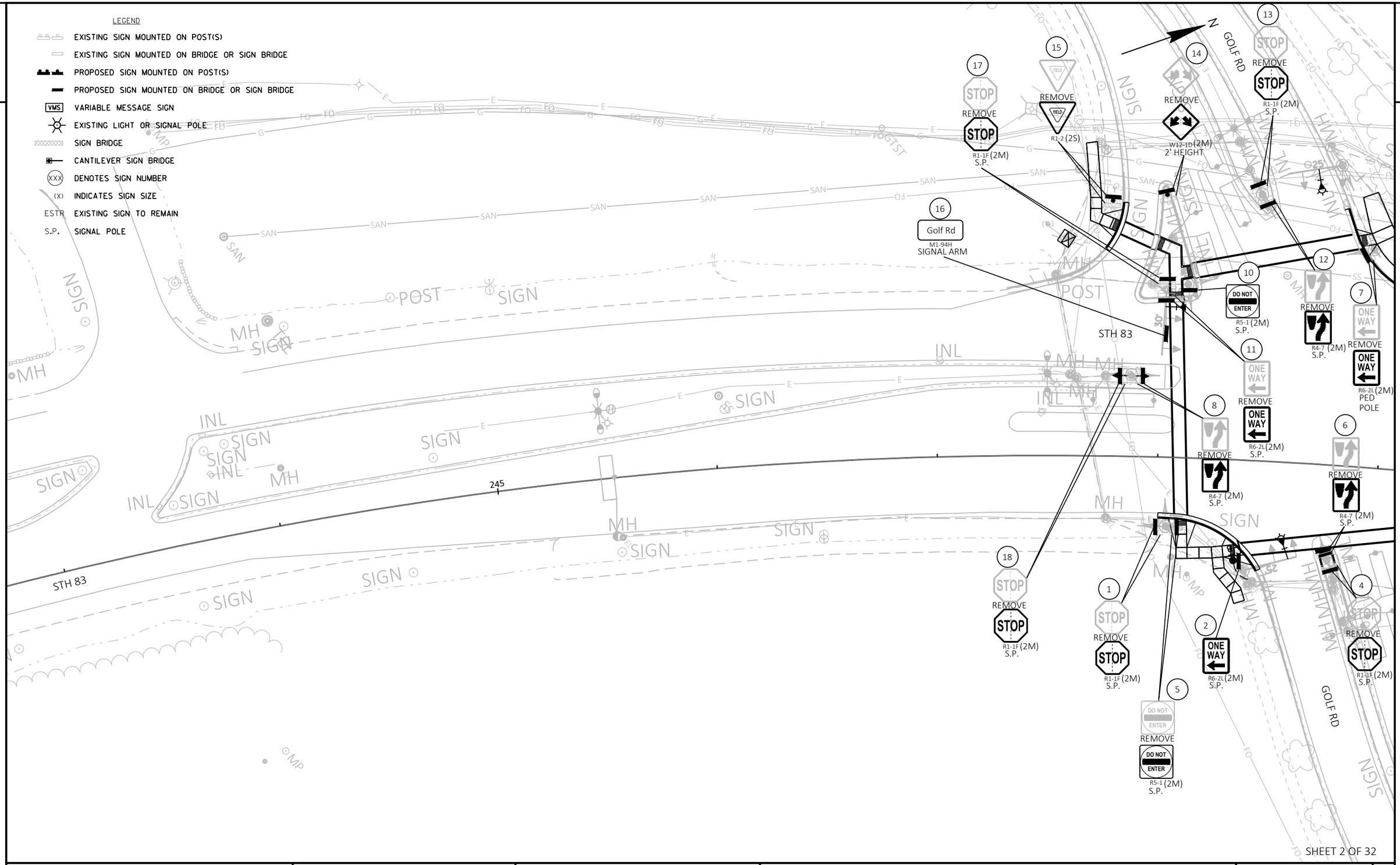
SHEET 1 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 121	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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE



SHEET 2 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 122	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 02

PLOT DATE : 8/24/2023 3:48 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

25 REMOVE STOP R1-1F (2M) S.P.

26 REMOVE DO NOT ENTER R5-1 (2M) S.P.

27 REMOVE STOP R1-1F (2M) S.P.

24 REMOVE R4-7 (2M) S.P.

19 Golf Rd M1-94H SIGNAL ARM

29

21 DO NOT ENTER R5-1 (2M) S.P.

20 REMOVE STOP R1-1F (2M) S.P.

23 REMOVE YIELD R1-2 (2S)

22 REMOVE ONE WAY R6-2L (2M) S.P.

250

STH 83

GOLF RD

SHEET 3 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 123	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 03

PLOT DATE : 8/24/2023 3:48 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

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
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

NO SIGNS IMPACTED ON THIS SHEET

N

STH 83

255

260

SHEET 4 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 124	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 04

PLOT DATE : 8/24/2023 3:48 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

NO SIGNS IMPACTED ON THIS SHEET

N

STH 83

265

GOLF COURSE

SHEET 5 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 125	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 05

PLOT DATE : 8/24/2023 3:48 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

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
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

N

NO SIGNS IMPACTED ON THIS SHEET

SIGN
SIGN
W
POST
FO
SIGN
SIGN
POST
T
POST
W
SIGN
SIGN
STH 83
INL
SIGN
SIGN
SIGN
SIGN
INL
SIGN
PEC 27+23.44
270
STH 83
SIGN
SIGN
HO
GOLF COURSE
GOLF COURSE

SHEET 6 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 126	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 06

PLOT DATE : 8/24/2023 3:48 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

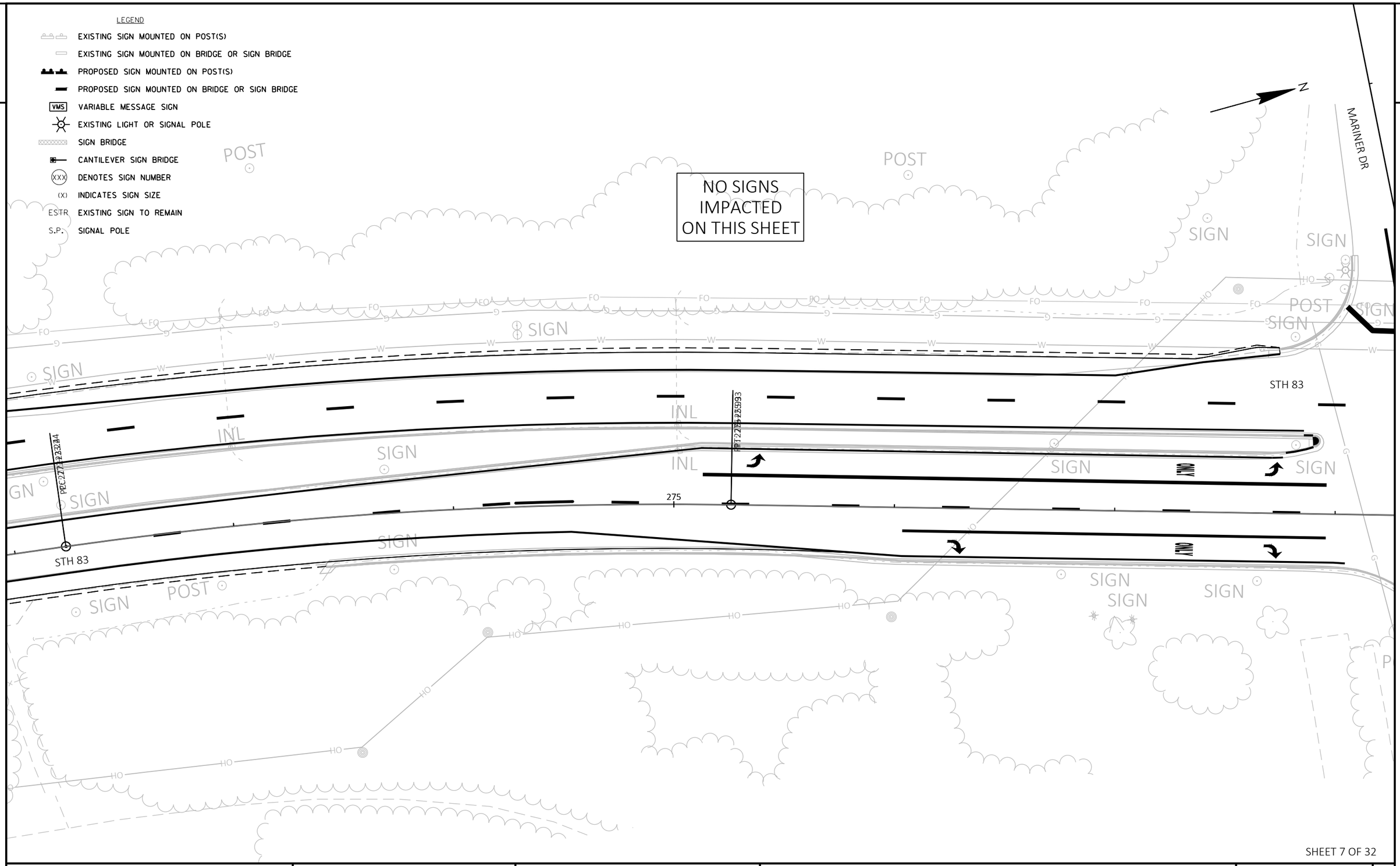
WISDOT/CADDS SHEET 42

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

NO SIGNS IMPACTED ON THIS SHEET



SHEET 7 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 127	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 07

PLOT DATE : 8/24/2023 3:49 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

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

VMS VARIABLE MESSAGE SIGN

EXISTING LIGHT OR SIGNAL POLE

SIGN BRIDGE

CANTILEVER SIGN BRIDGE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

ESTR EXISTING SIGN TO REMAIN

S.P. SIGNAL POLE

N

NO SIGNS IMPACTED ON THIS SHEET

MARINER DR

STH 83

EP: 50+00.00

280

SIGN

POST

INL

RIPRAP

SHEET 8 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 128	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 08

PLOT DATE : 8/24/2023 3:49 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

NO SIGNS IMPACTED ON THIS SHEET

MEADOW LN

PT: 48+18.13
PT: 18+55.75

N

BERM

SIGN

POST

STH 83

INL

285

20

PC: 28+37.86

EP: 30+02.80

MH

RIPRAP

MEADOW LN

2

SHEET 9 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 129	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 09

PLOT DATE : 8/24/2023 3:49 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

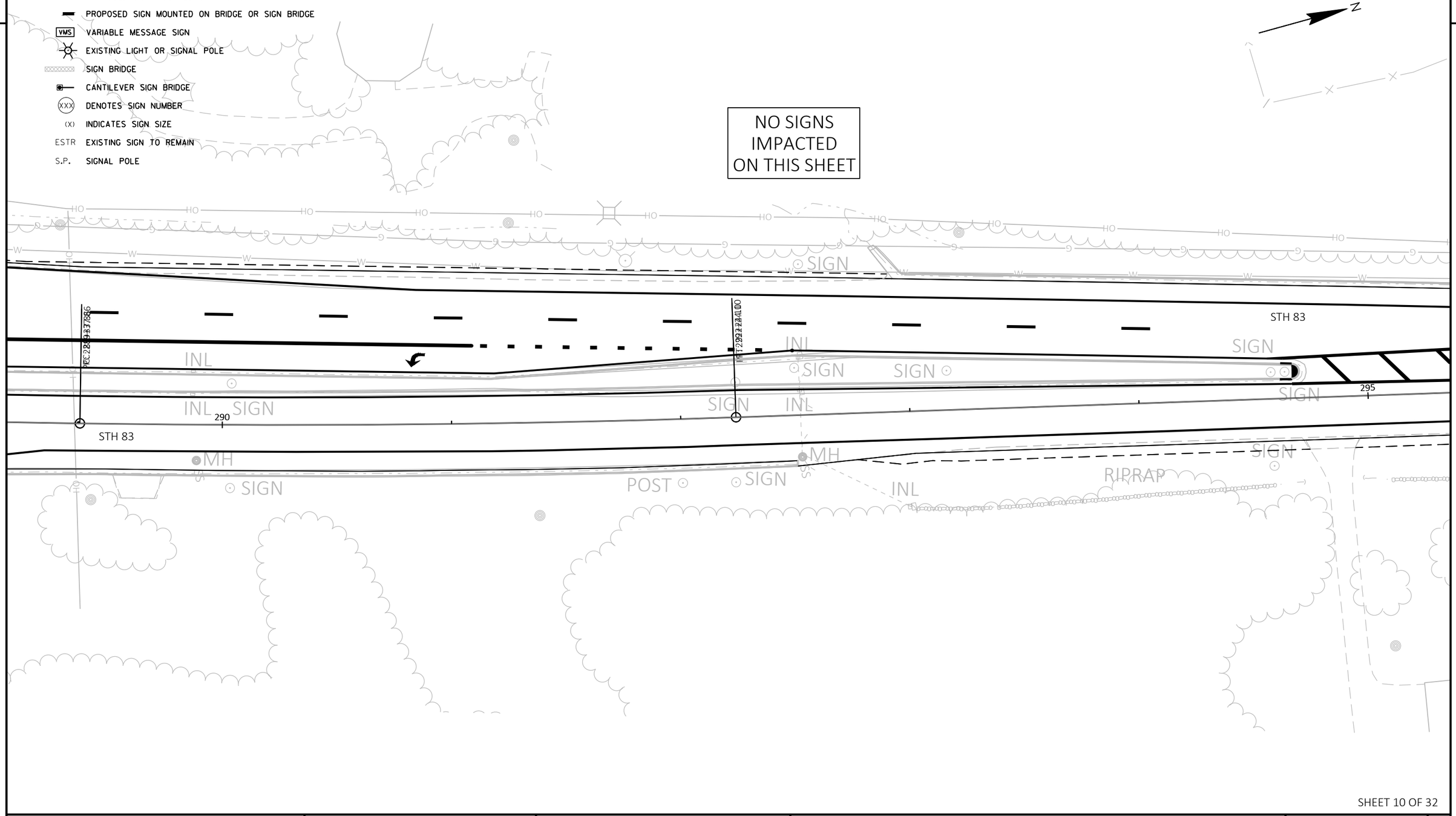
2

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

N

NO SIGNS IMPACTED ON THIS SHEET



SHEET 10 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 130	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 10

PLOT DATE : 8/24/2023 3:49 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

N

SEPC

NO SIGNS IMPACTED ON THIS SHEET

POST

HO G W

PP|330044221

295

STH 83

300

STH 83

RIPRAP

RIPRAP

SIGN

SIGN

SIGN

SHEET 11 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 131	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 11

PLOT DATE : 8/24/2023 3:49 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

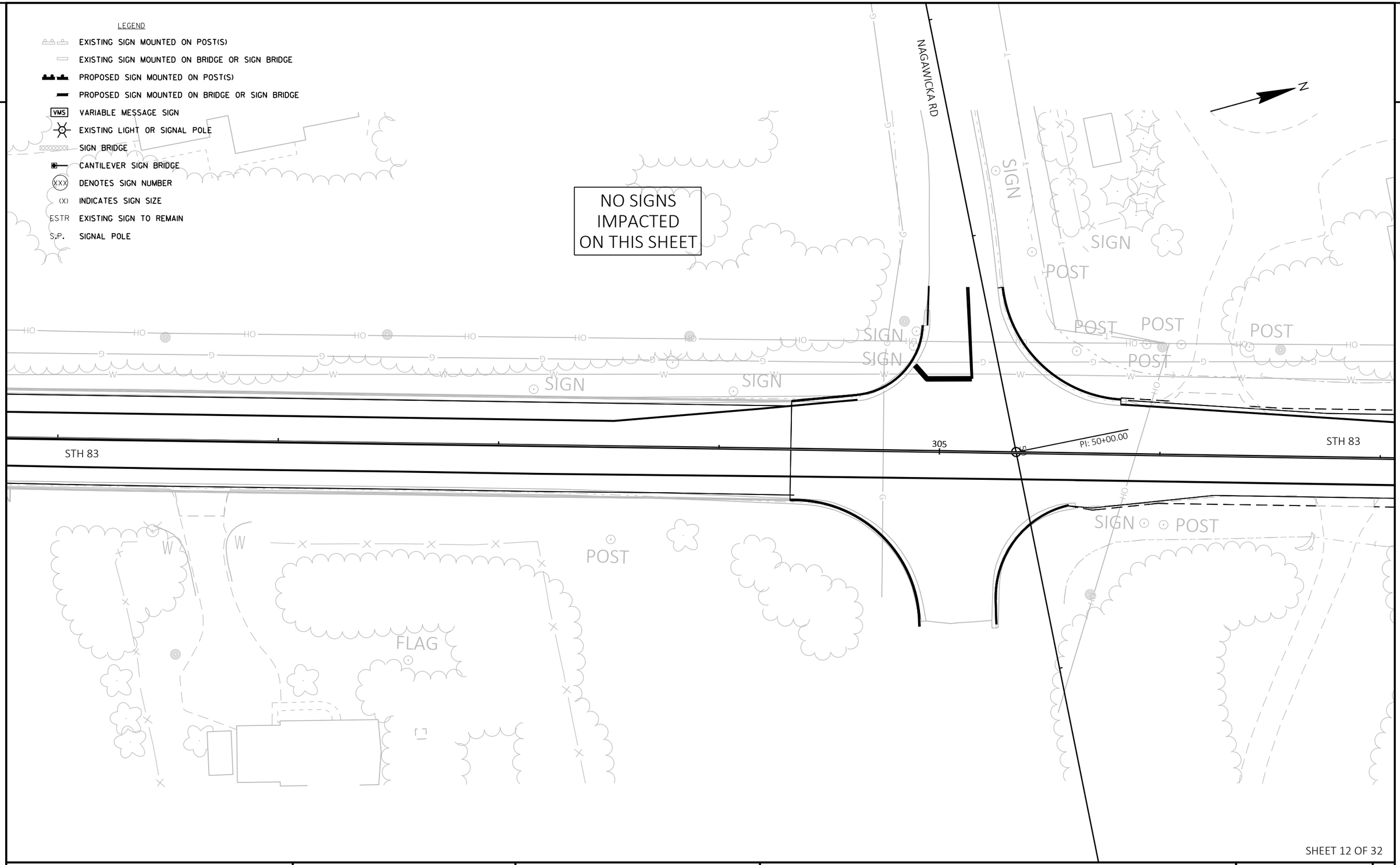
WISDOT/CADDS SHEET 42

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

NO SIGNS IMPACTED ON THIS SHEET



SHEET 12 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 132	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 12

PLOT DATE : 8/24/2023 3:49 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

N

NO SIGNS IMPACTED ON THIS SHEET

SEPV
SEPC
SEPC
POST
SEPV
SIGN
SIGN
SIGN
PPI 38090077.244
310
STH 83
STH 83
SIGN
SIGN
SIGN
SIGN

2

SHEET 13 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 133	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 13

PLOT DATE : 8/24/2023 3:49 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

N

FOUND

NO SIGNS IMPACTED ON THIS SHEET

RIPRAP

SIGN

PEC 315 57333

315

STH 83

SIGN

INL

RIPRAP

SIGN

SIGN

RIPRAP

SIGN

STH 83

SIGN

GUY

SHEET 14 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 134	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 14

PLOT DATE : 8/24/2023 3:49 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

N

NO SIGNS IMPACTED ON THIS SHEET

AP POST

PPT 43+09 31+45

PPC 32+33 40+21

SIGN

SIGN

SIGN

320

STH 83

STH 83

RIPRAP

SHEET 15 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 135	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 15

PLOT DATE : 8/24/2023 3:49 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

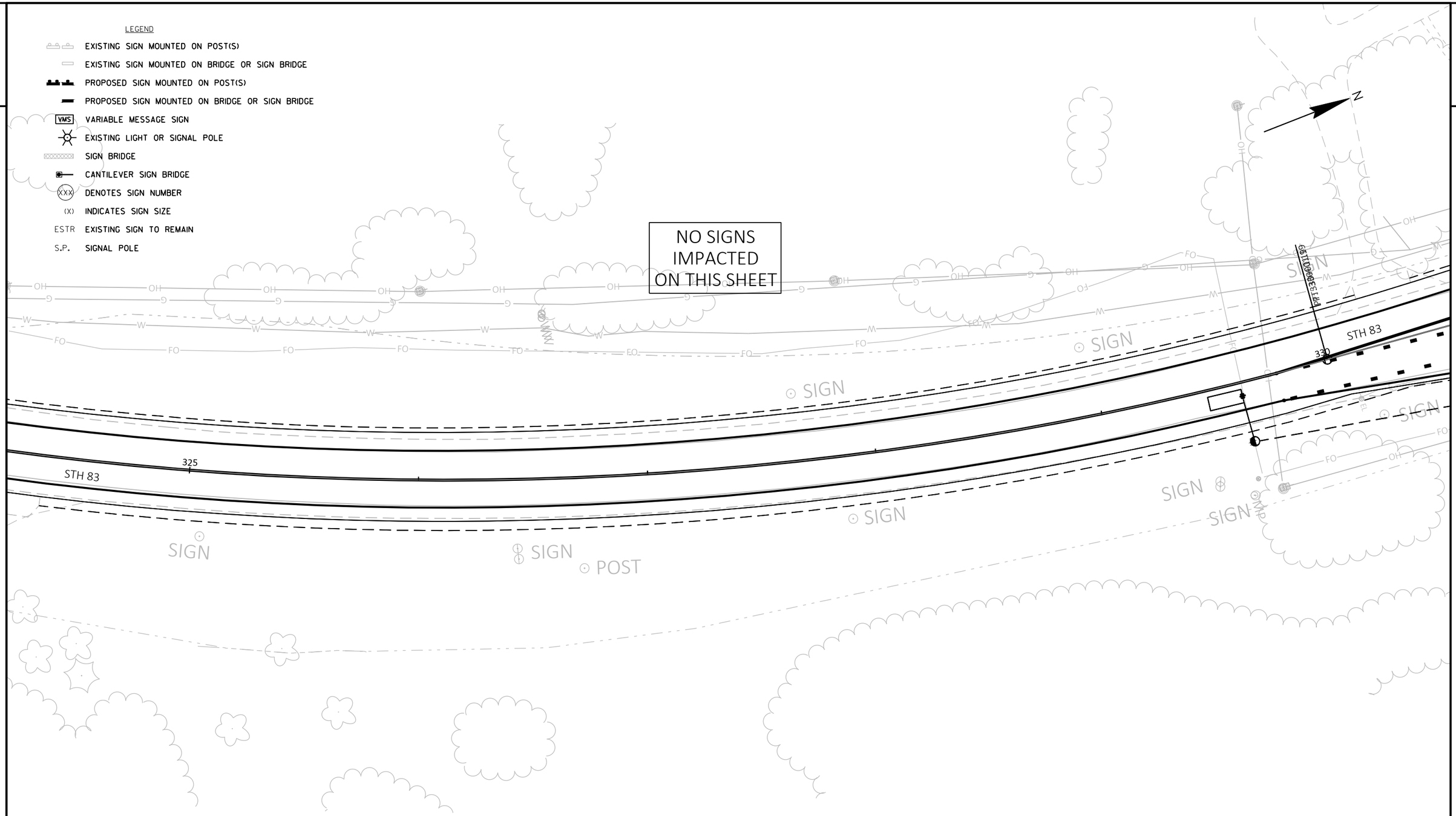
WISDOT/CADDS SHEET 42

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

NO SIGNS IMPACTED ON THIS SHEET


N
STH 83
325
330
SIGN
SIGN
SIGN
SIGN
SIGN
SIGN
POST
SIGN
SIGN
SIGN
SIGN
SIGN
SIGN

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
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

38
NORTH SOUTH
83 83
REMOVE
NORTH SOUTH
83 83
J3-2(2S)

37
STOP
REMOVE
STOP
R1-1F (2S)
S.P.

39
KE W. North Shore Dr
Oakwood Rd
M1-94S
SIGNAL ARM

OAKWOOD RD

RIPRAP

STREET NAME SIGN (BY OTHERS CITY)

36
COUNTY KE
REMOVE
COUNTY KE
J3-1(2S)

35
STOP
REMOVE
STOP
R1-1F (2S)
S.P.

25'

45'

PI 50+00.00

335'

STH 83

33
Oakwood Rd
KE W. North Shore Dr
M1-94S
SIGNAL ARM

34
SOUTH NORTH
83 83
REMOVE
SOUTH NORTH
83 83
J3-2(2S)

28
COUNTY KE
REMOVE
COUNTY KE
J3-1(2S)

29
STOP
REMOVE
STOP
R1-1F (2S)
S.P.

32
STOP
REMOVE
STOP
R1-1F (2S)
S.P.

W NORTH SHORE DR

SEPC

SIGN

POST

INL

SHEET 17 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 137	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 17

PLOT DATE : 8/24/2023 3:49 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

N

NO SIGNS IMPACTED ON THIS SHEET

SIGN

SIGN

SIGN

SIGN

340

STH 83

STH 83

SIGN

POST

SIGN

SIGN

POST

MH

RIPRAP

SIGN

SIGN

SIGN

SHEET 18 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 138	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 18

PLOT DATE : 8/24/2023 3:49 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

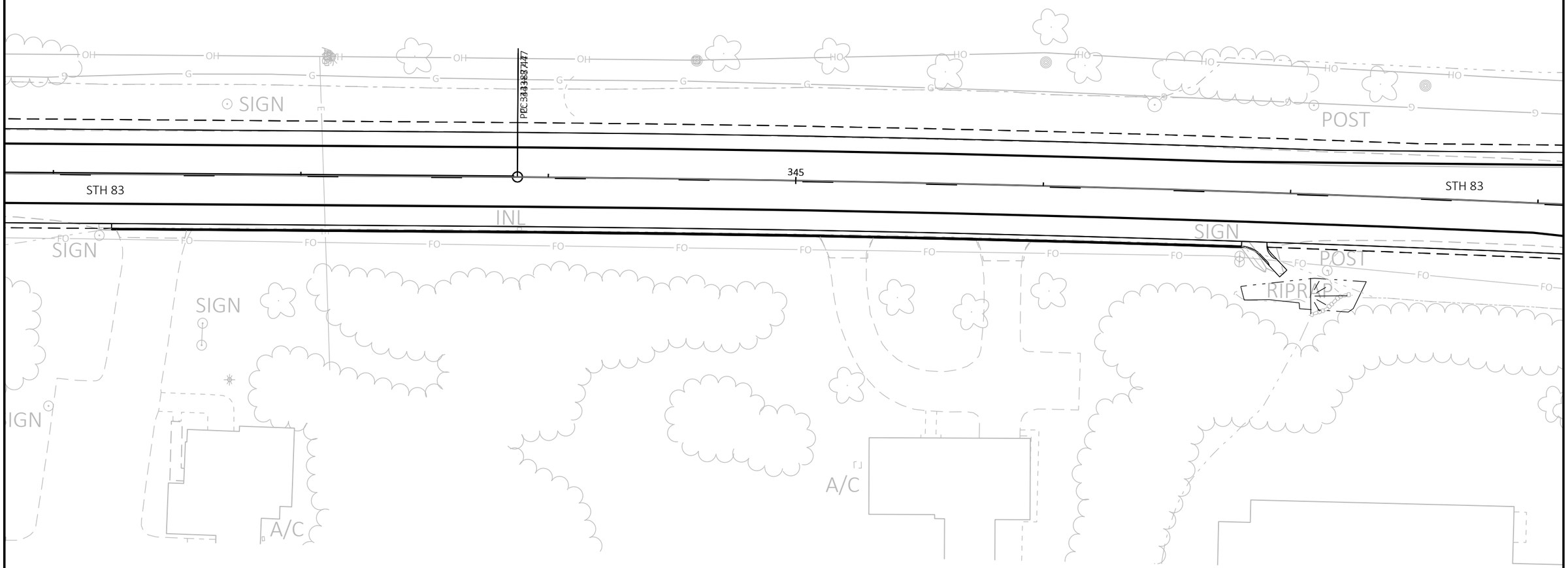
2

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

N

NO SIGNS IMPACTED ON THIS SHEET



SHEET 19 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 139	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 19

PLOT DATE : 8/24/2023 3:50 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

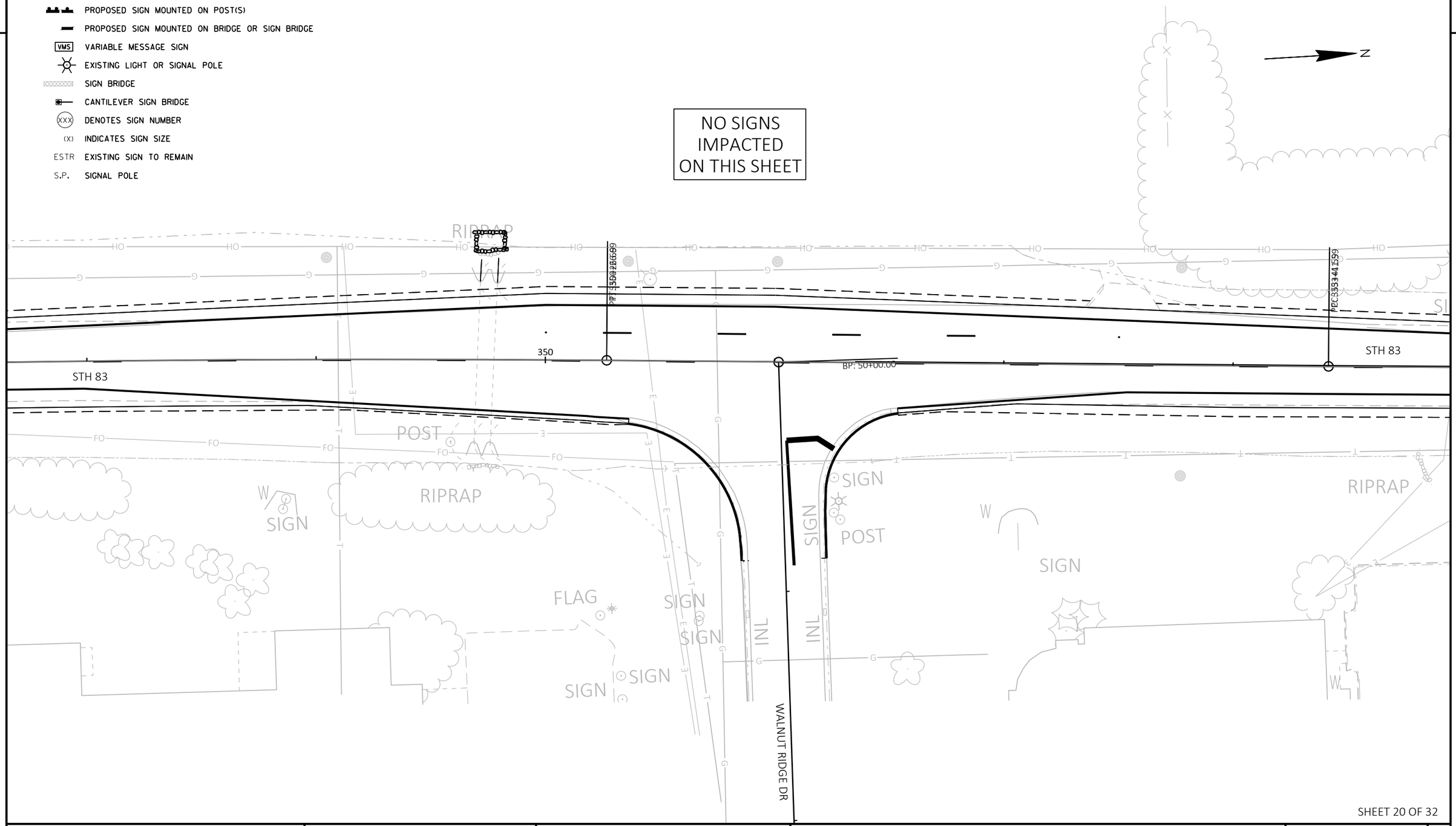
WISDOT/CADDS SHEET 42

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

NO SIGNS IMPACTED ON THIS SHEET



SHEET 20 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 140	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 20

PLOT DATE : 8/24/2023 3:50 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

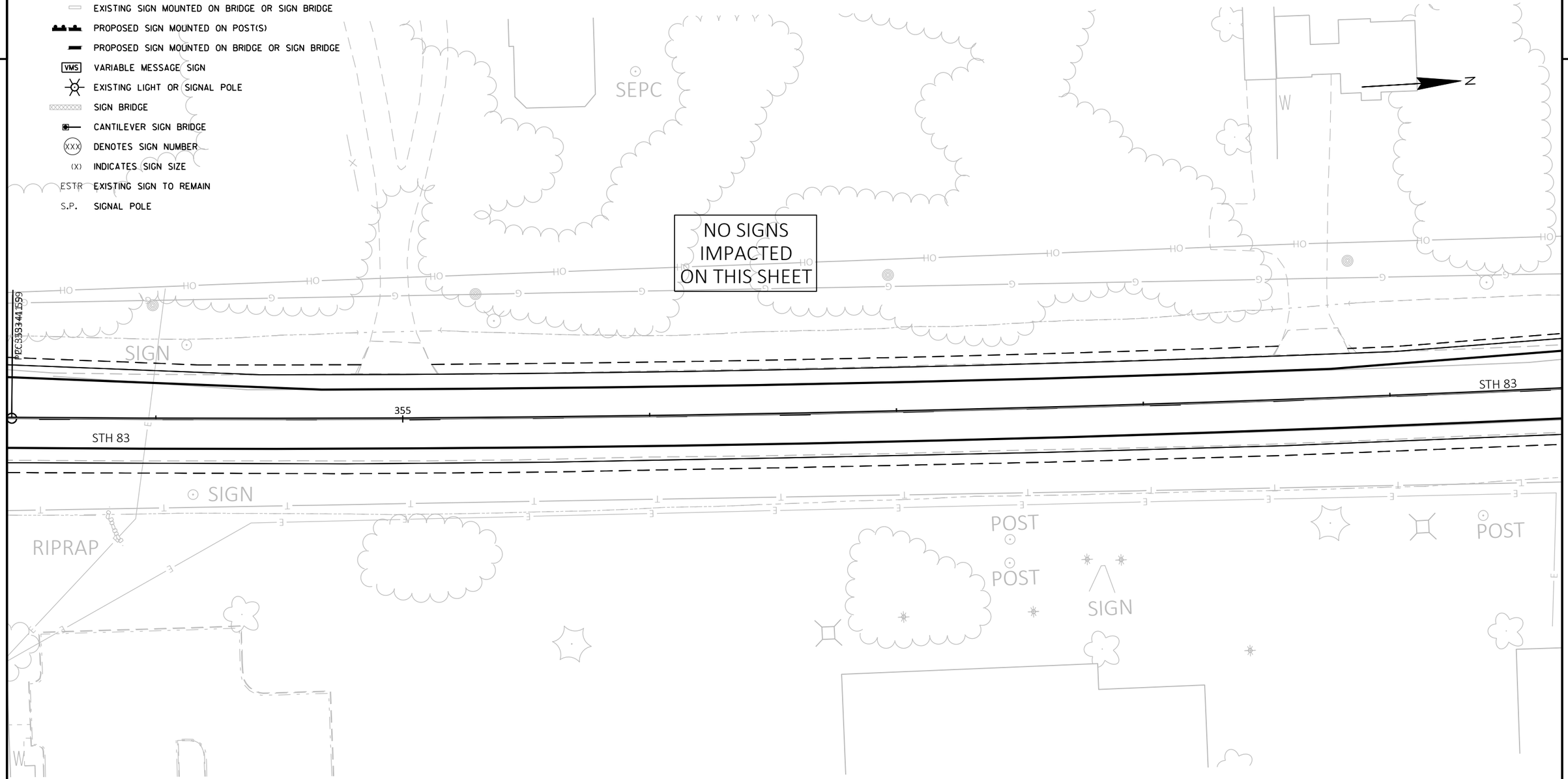
WISDOT/CADDS SHEET 42

2

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE



SHEET 21 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 141	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 21

PLOT DATE : 8/24/2023 3:50 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

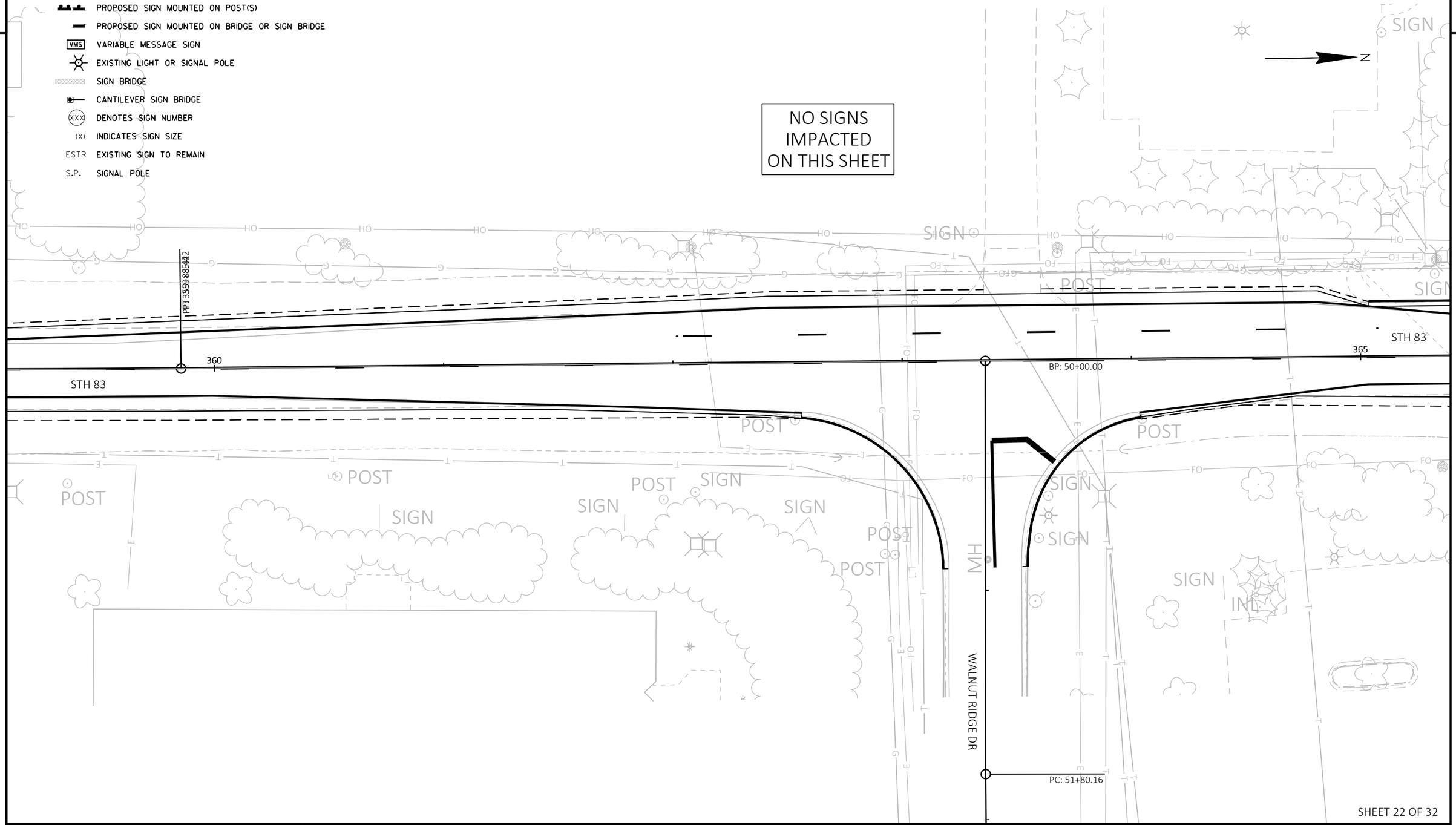
WISDOT/CADDS SHEET 42

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

NO SIGNS IMPACTED ON THIS SHEET



SHEET 22 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 142	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 22

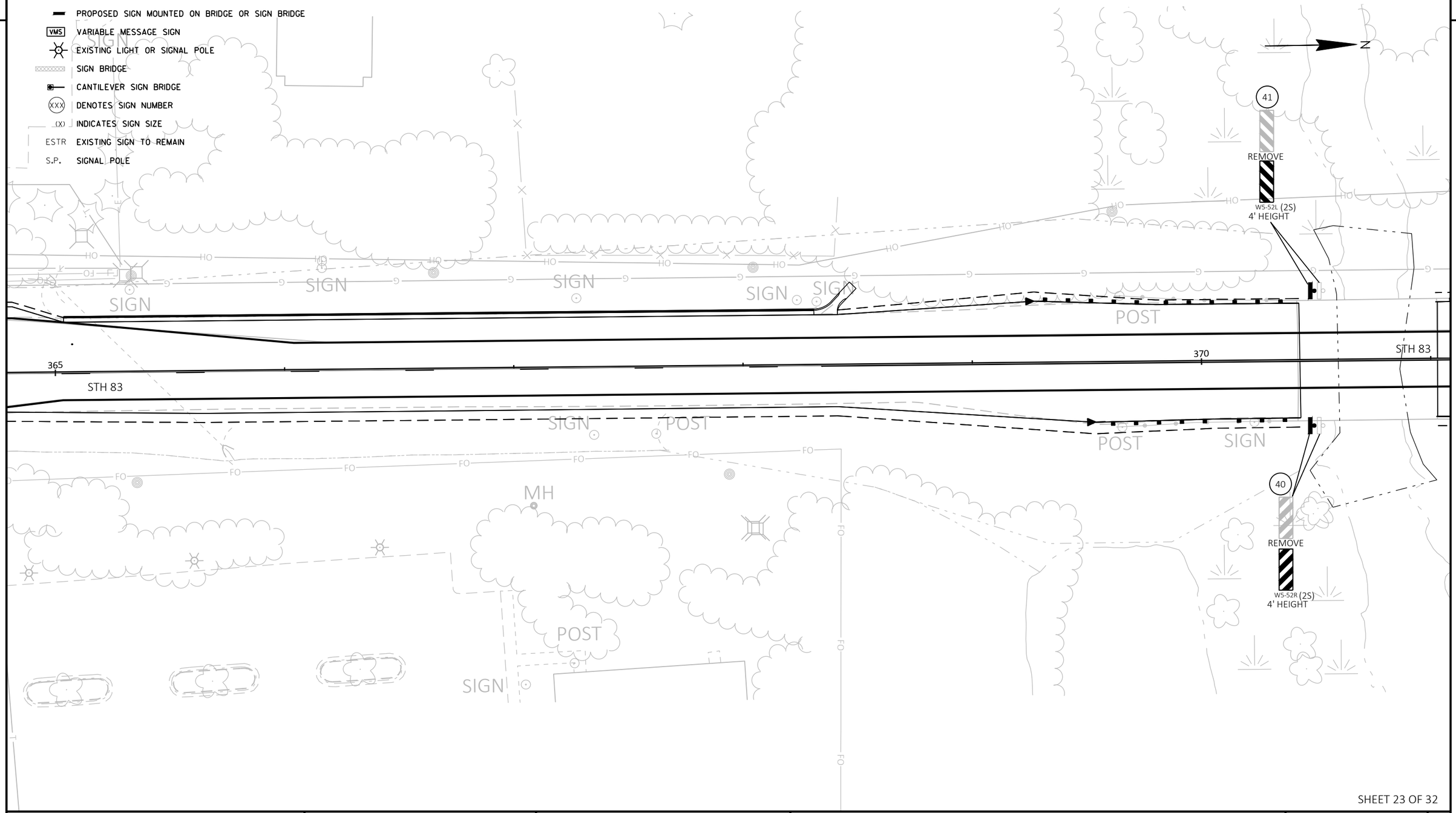
PLOT DATE : 8/24/2023 3:50 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE



SHEET 23 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 143	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 23

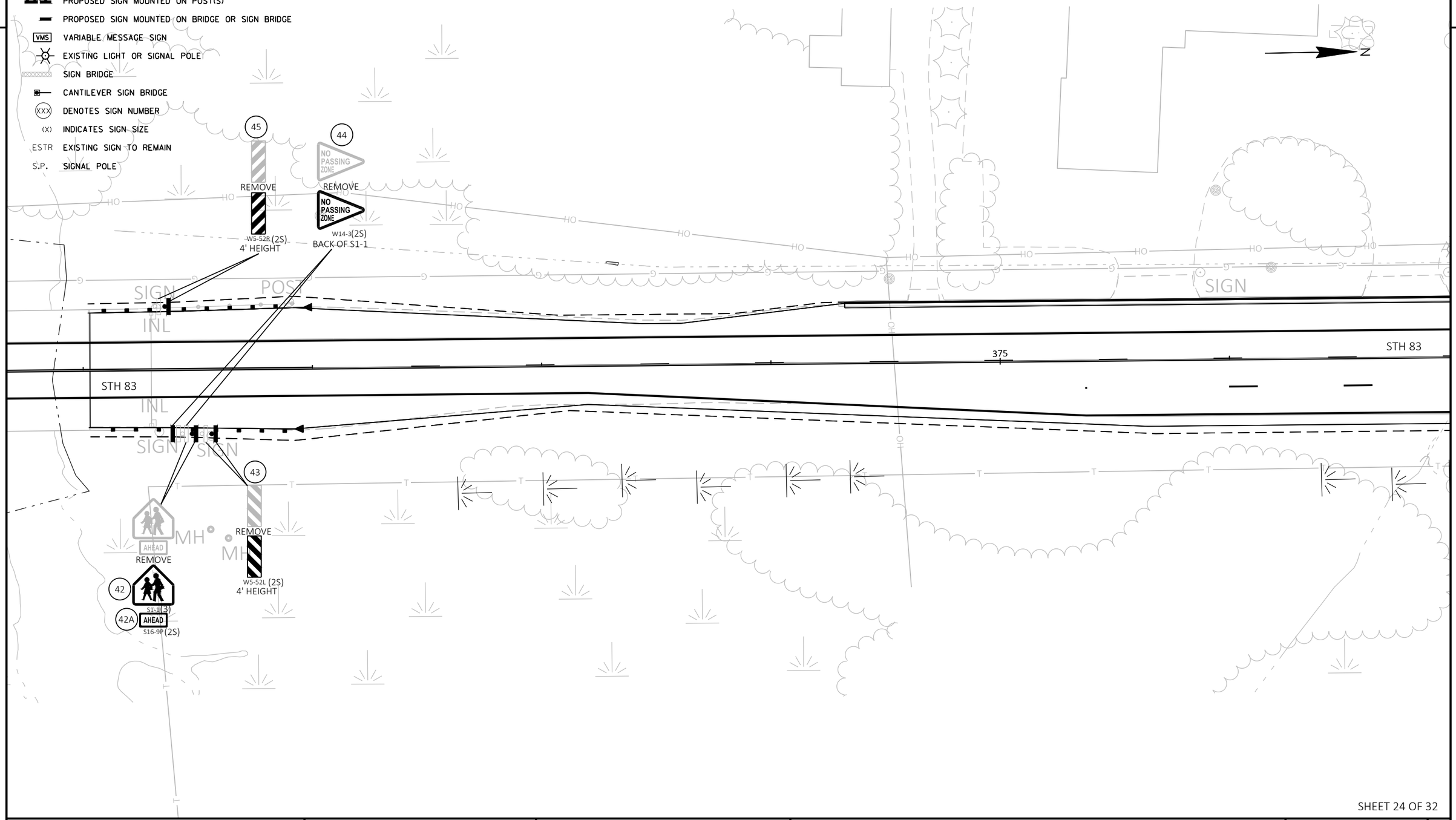
PLOT DATE : 8/24/2023 3:50 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE



SHEET 24 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 144	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 24

PLOT DATE : 8/24/2023 3:50 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

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
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

N

NO SIGNS IMPACTED ON THIS SHEET

SIGN

SIGN

STH 83

380

STH 83

SIGN

SIGN

POST

MH

MH

SHEET 25 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 145	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023201_PS.DWG
LAYOUT NAME - 25

PLOT DATE : 8/24/2023 3:50 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

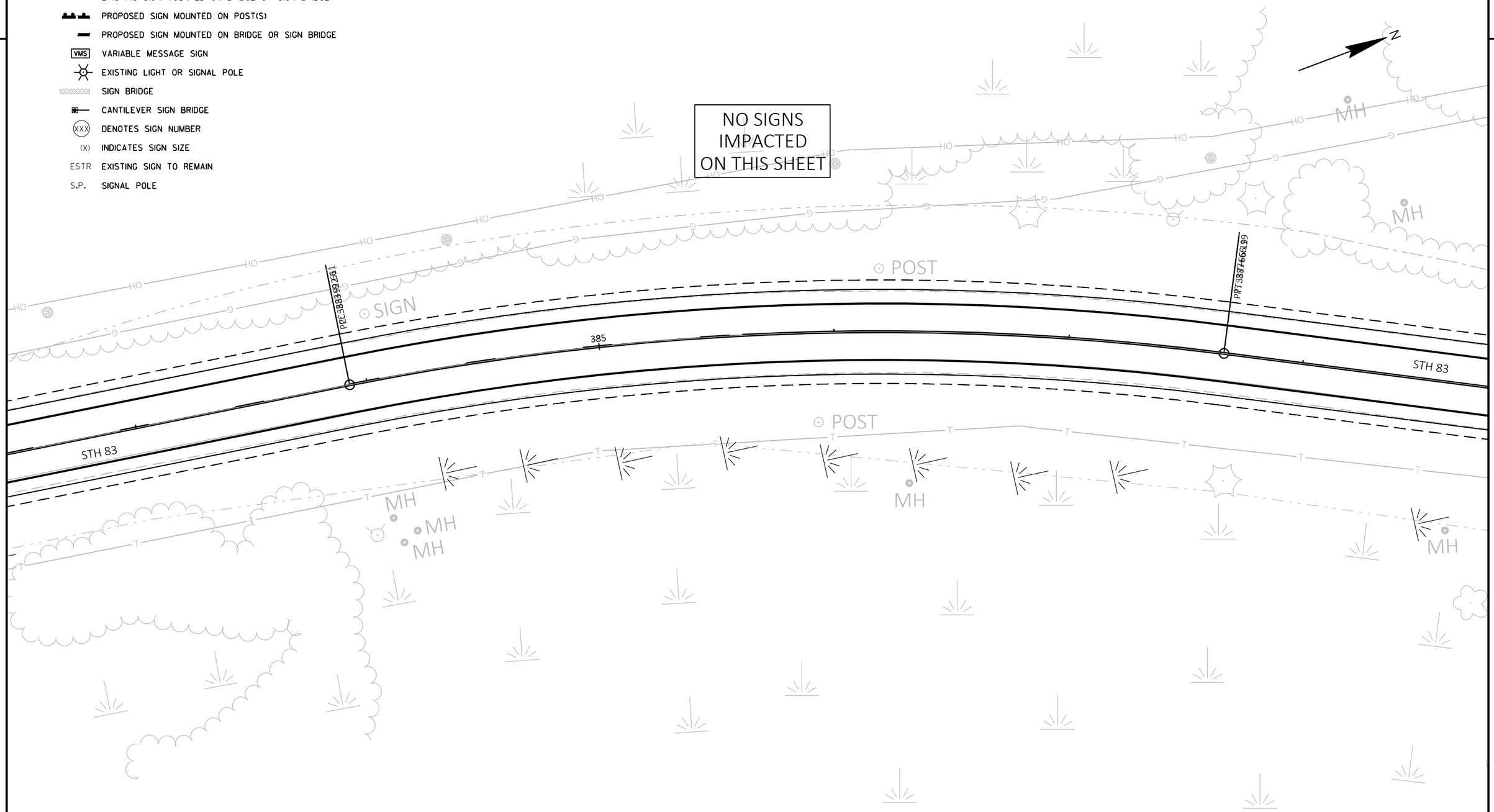
2

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

NO SIGNS IMPACTED ON THIS SHEET



SHEET 26 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 146	E

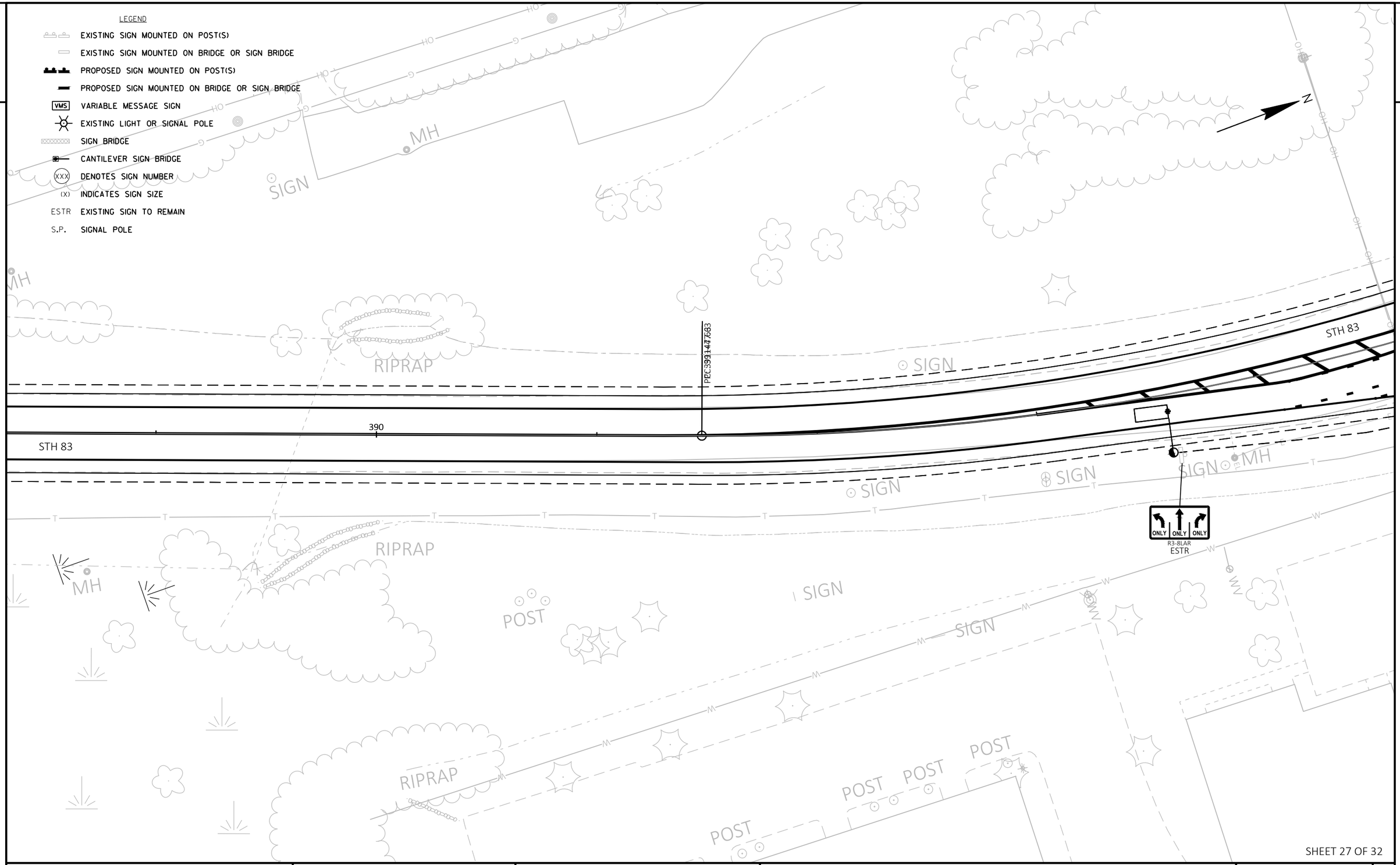
FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023226_PS.DWG
LAYOUT NAME - 26

PLOT DATE : 8/24/2023 3:52 PM PLOT BY : WAGNER, SCOTT H 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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE



SHEET 27 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 147	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023226_PS.DWG
LAYOUT NAME - 27

PLOT DATE : 8/24/2023 3:52 PM PLOT BY : WAGNER, SCOTT H 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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

58 — REMOVE NORTH 83 / SOUTH 83; J3-2(2S)

57 — REMOVE STOP; R1-1F(2S) S.P.

54 — REMOVE STOP; R1-1F(2S) S.P.

53 — REMOVE NO PARKING ANY TIME; R7-1R(2S)

48 49 — Cardinal Ln; M1-94H SIGNAL ARM

46 — REMOVE NO PARKING ANY TIME; R7-1R(2S)

47 — REMOVE STOP; R1-1F(2S) S.P.

50 — REMOVE STOP; R1-1F(2S) S.P.

52 — REMOVE SOUTH 83 / NORTH 83; J3-2(2S)

51 — REMOVE NO PARKING ANY TIME; R7-1D(2S)

NORTH 83 — J4-1 ESTR

CARDINAL LN

STH 83

BP: 50+00.00

30'

45'

35'

SHEET 28 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 148 E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023226_PS.DWG
LAYOUT NAME - 28

PLOT DATE : 8/24/2023 3:52 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

N

59

ONLY

REMOVE

ONLY ONLY ONLY

R3-8LAR (2S)

SIGN

SIGN

INL

SIGN

SIGN

400

405

STH 83

STH 83

SIGN

SIGN

SIGN

SIGN

POST POST POST

W

SHEET 29 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 149	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023226_PS.DWG
LAYOUT NAME - 29

PLOT DATE : 8/24/2023 3:53 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

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

VMS VARIABLE MESSAGE SIGN

EXISTING LIGHT OR SIGNAL POLE

SIGN BRIDGE

CANTILEVER SIGN BRIDGE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

ESTR EXISTING SIGN TO REMAIN

S.P. SIGNAL POLE

N

SIGN

SIGN

SIGN

SIGN

INL

STH 83

410

STH 83

STH 83

SIGN

SIGN

SIGN

SIGN

SIGN

NO PARKING ANY TIME
R7-1D
ESTR

NO PASSING ZONE
W14-3
ESTR

60

NO PARKING ANY TIME
REMOVE

NO PARKING ANY TIME
R7-1D (2M)

W

FLAG

FLAG

FLAG

FLAG

POST

A/C

POST

W

A/C

W

A/C

W

W

SHEET 30 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 150	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023226_PS.DWG
LAYOUT NAME - 30

PLOT DATE : 8/24/2023 3:53 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

N

SIGN

SIGN

SIGN

SIGN

SIGN

PEC 44+21 90024

STH 83

415

STH 83

61 62

REMOVE

NO PARKING ANY TIME

R7-1D (2M)

SPEED LIMIT 45

REMOVE

63

64

SPEED LIMIT 45

R2-1 (2M)

W A/C

SHEET 31 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 151	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023226_PS.DWG
LAYOUT NAME - 31

PLOT DATE : 8/24/2023 3:53 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

N

66
REMOVE
W5-52L (2S)
4' HEIGHT

65
REMOVE
W5-52R (2S)
4' HEIGHT

72
REMOVE
R7-1D (2M)

71
REMOVE
W5-52R (2S)
4' HEIGHT

70
Wales	8
Mukwonago	19

D2-2
MOVE

W6-3
ESTR

67
W5-52L (2S)
4' HEIGHT

68
REMOVE
R2-1 (2M)

69
REMOVE
W3-3 (2S)

VETTLESON RD

STH 83

420

SIGN
INL
OH
POST

SHEET 32 OF 32

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 152	E

FILE NAME : N:\PDS\C3D\CAD\13300003\SIGN\023226_PS.DWG
LAYOUT NAME - 32

PLOT DATE : 8/24/2023 3:53 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

FIXED MESSAGE SIGN
FOR HWY 83 NORTH CLOSURE
SEE TRAFFIC CONTROL - DETAIL SHEET
FMS

NAGAWICKA LAKE

BEGIN PROJECT
BEGIN RESURFACE
STA 249+16

LAKE COUNTY TRAIL

NAGAWICKA RD E

CITY OF DELAFIELD

STRUCTURE B-67-220
STA 370+43 - STA 371+03

STRUCTURE B-67-168
STA 418+75 - STA 421+08

FIXED MESSAGE SIGN
FOR HWY 83 SOUTH CLOSURE
SEE TRAFFIC CONTROL - DETAIL SHEET
FMS

VILLAGE OF CHENEQUA

FMS

FIXED MESSAGE SIGN
FOR ACCESS TO LAKE COUNTY
INDUSTRIAL PARK SEE TRAFFIC
CONTROL - DETAIL SHEET

N

A
B
B
B
A
B
B
A

240
250
260
270
280
290
300
310
320
330
340
350
360
370
380
390
400
410
420
430
440

END PROJECT
END PAVEMENT REPLACEMENT
STA 421+86

STH 83

GOLF RD

END RESURFACE
BEGIN PAVEMENT REPLACEMENT
STA 304+33

VILLAGE OF HARTLAND

CARDINAL LN

CANADIAN PACIFIC RAILWAY

VETTELSON RD

OAKWOOD RD (CTH KE)

STH 16

HI 94

CTH E

FIXED MESSAGE SIGN
FOR HWY 83 NORTH CLOSURE
SEE TRAFFIC CONTROL - DETAIL SHEET
FMS

PEWAUKEE LAKE

FIXED MESSAGE SIGN
FOR HWY 83 SOUTH CLOSURE
SEE TRAFFIC CONTROL - DETAIL SHEET
FMS

CTH KE

FIXED MESSAGE SIGN
FOR ACCESS TO LAKE COUNTY
INDUSTRIAL PARK SEE TRAFFIC
CONTROL - DETAIL SHEET
FMS

LEGEND

A — TRAFFIC CONTROL:
SDD BARRICADES AND SIGNS FOR SIDEROAD
CLOSURES DETAIL 1 (NO ACCESS TO PROJECT)

B — TRAFFIC CONTROL:
SDD BARRICADES AND SIGNS FOR SIDEROAD
CLOSURES DETAIL 2 (CONTRACTOR, LOCAL
BUSINESS, AND RESIDENT ACCESS TO PROJECT)

CONSTRUCTION SEGMENT 1
TRAFFIC CONTROL:
SINGLE LANE CLOSURE IN 4-LANE
SECTION FOR INLET ADJUSTMENTS.
DETOUR FOR MILLING AND PAVING

CONSTRUCTION SEGMENT 2
TRAFFIC CONTROL:
DETOUR

CONSTRUCTION SEGMENT 3
TRAFFIC CONTROL:
DETOUR

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC CONTROL - OVERVIEW	SHEET 153	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\025001_TC.DWG
LAYOUT NAME - 01

PLOT DATE : 1/26/2024 11:18 AM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:2000 FT

TRAFFIC CONTROL OVERVIEW NOTES:

1. CONSTRUCTION SEGMENT 1A - REMOVE SECTIONS OF MEDIAN CURB & GUTTER, ADJUST MEDIAN INLETS AND INSTALL CURB & GUTTER BETWEEN GOLF RD AND NAGAWICKA RD. WORK TO BE COMPLETED UNDER SINGLE LANE CLOSURES UTILIZING SDD TRAFFIC CONTROL LANE CLOSURE AND TRAFFIC CONTROL, SHOULDER CLOSURES ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H. SEE TYPICAL SECTION BELOW FOR TC LAYOUT UNDER SINGLE LANE CLOSURE.

2. CONSTRUCTION SEGMENT 1B - MILL & OVERLAY 4-LANE SECTION AND 4 TO 2-LANE TRANSITION BETWEEN GOLF RD AND NAGAWICKA RD. WORK TO BE COMPLETED UNDER FULL ROADWAY CLOSURE. SEE SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES AND BARRICADES AND SIGNS FOR MAINLINE CLOSURES. TRAFFIC WILL UTILIZE THE DETOUR DURING FULL CLOSURE. MAINTAIN ACCESS TO LOCAL TRAFFIC AND EMERGENCY VEHICLES.

3. COMPLETE WORK FOR SEGMENT 2 AND SEGMENT 3 UNDER FULL ROADWAY CLOSURE. SEE SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES AND BARRICADES AND SIGNS FOR MAINLINE CLOSURES. TRAFFIC WILL UTILIZE DETOUR DURING FULL CLOSURE. MAINTAIN ACCESS TO LOCAL TRAFFIC AND EMERGENCY VEHICLES.

4. SEGMENT 1A & 1B & MUST BE COMPLETED PRIOR TO CONSTRUCTION OF SEGMENT 2 OR SEGMENT 3. SEGMENT 2 MUST BE COMPLETED PRIOR TO CONSTRUCTION OF SEGMENT 3. MAINTAIN ACCESS TO LOCAL TRAFFIC AND EMERGENCY VEHICLES.

5. PLACE PCMS SIGNS NOTIFYING TRAFFIC OF UPCOMING ROAD WORK AT LEAST 7 DAYS PRIOR TO WORK BEGINNING.

   PCMS MESSAGES

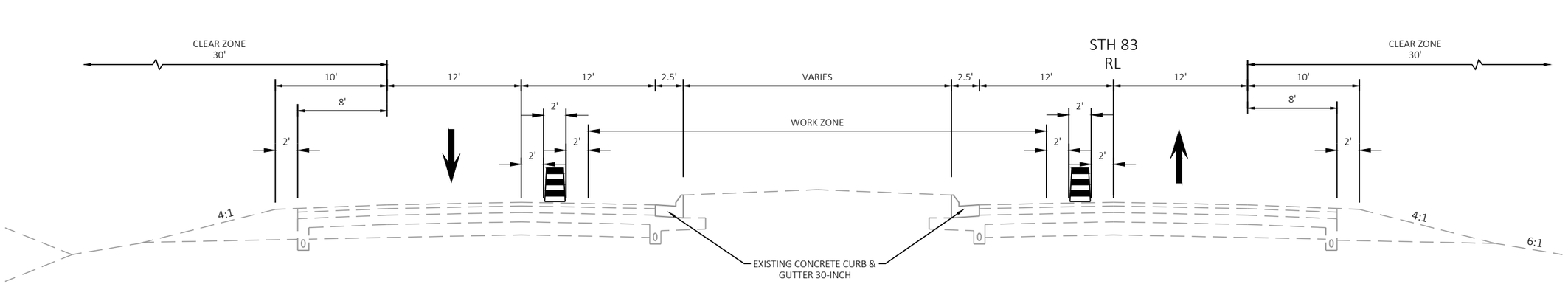
   UPCOMING ROAD WORK
   FRAME 1: ROAD WORK BEGINS

   FRAME 2: XXXDAY XX/XX

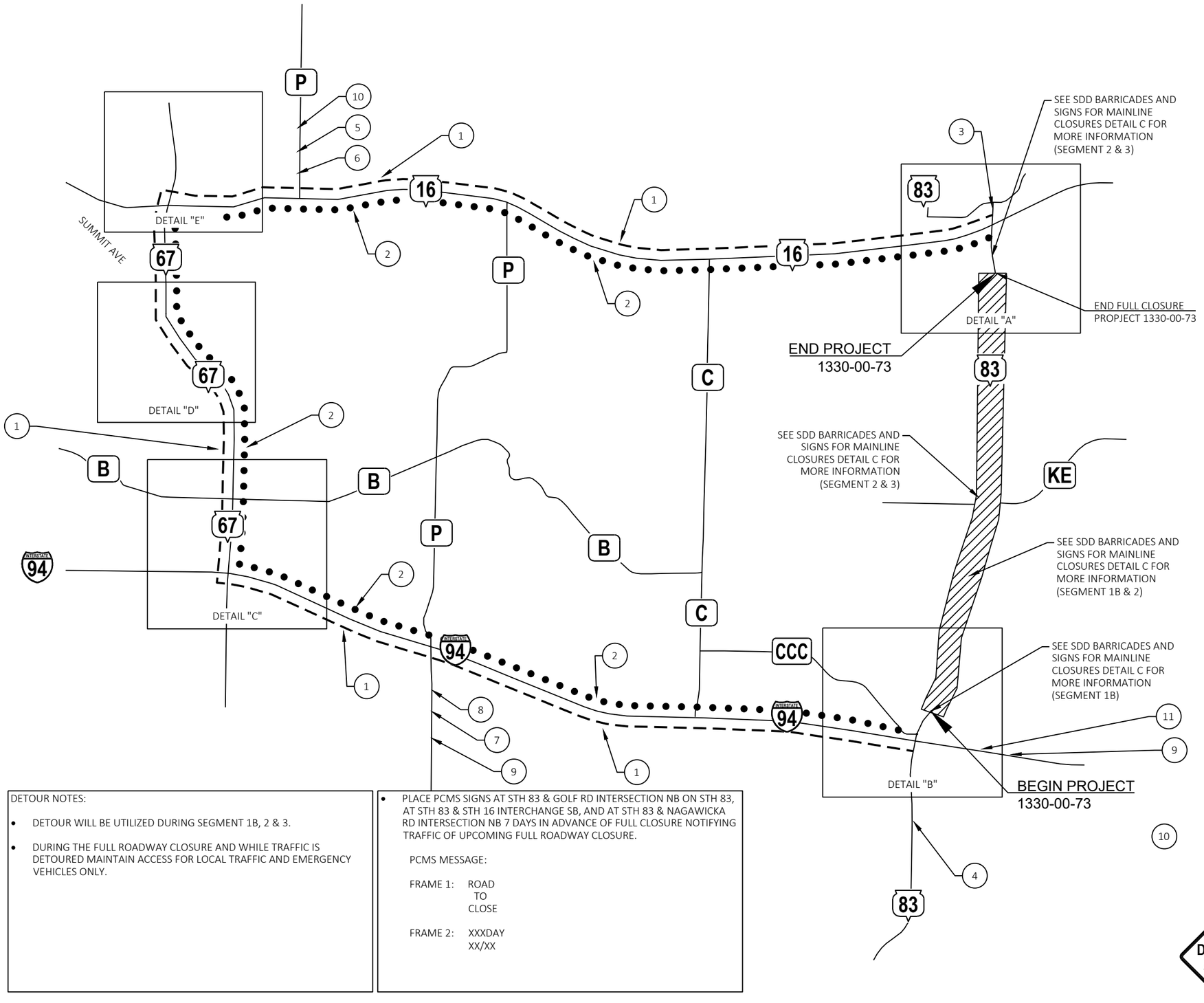
6. FIXED MESSAGE SIGNS SHOWN ON TRAFFIC CONTROL - OVERVIEW SHEET 1

   MESSAGES:

ACCESS TO LAKE COUNTRY INDUSTRIAL PARK USE HWY KE	HWY 83 SOUTH CLOSED FOLLOW DETOUR	HWY 83 NORTH CLOSED FOLLOW DETOUR



SEGMENT 1A TYPICAL SECTION
WORK ON INLETS SHOWN



N

1 DETOUR M4-8 36"X18" / SOUTH M3-3 36"X18" / 83 M1-6 36"X36"

2 DETOUR M4-8 36"X18" / NORTH M3-1 36"X18" / 83 M1-6 36"X36"

3 ROAD CLOSED TO THRU TRAFFIC 1/2 MILES AHEAD R11-3 60"X30"

4 ROAD CLOSED TO THRU TRAFFIC 1 MILES AHEAD R11-3 60"X30"

5 DETOUR M4-8 24"X12" / SOUTH M3-3 24"X12" / 83 M1-6 24"X24" / MO5-1R 21"X21"

6 DETOUR M4-8 24"X12" / SOUTH M3-3 24"X12" / 83 M1-6 24"X24" / MO6-1 21"X21"

7 DETOUR M4-8 24"X12" / NORTH M3-1 24"X12" / 83 M1-6 24"X24" / MO5-1L 21"X21"

8 DETOUR M4-8 24"X12" / NORTH M3-1 24"X12" / 83 M1-6 24"X24" / MO6-1 21"X21"

9 NORTH M3-1 24"X12" / 83 M1-6 24"X24" / DETOUR AHEAD W20-2A

10 SOUTH M3-3 24"X12" / 83 M1-6 24"X24" / DETOUR AHEAD W20-2A

11 DETOUR M4-8 24"X12" / NORTH M3-1 24"X12" / 83 M1-6 24"X24" / MO6-1 21"X21"

DETOUR NOTES:

- DETOUR WILL BE UTILIZED DURING SEGMENT 1B, 2 & 3.
- DURING THE FULL ROADWAY CLOSURE AND WHILE TRAFFIC IS DETOURED MAINTAIN ACCESS FOR LOCAL TRAFFIC AND EMERGENCY VEHICLES ONLY.

- PLACE PCMS SIGNS AT STH 83 & GOLF RD INTERSECTION NB ON STH 83, AT STH 83 & STH 16 INTERCHANGE SB, AND AT STH 83 & NAGAWICKA RD INTERSECTION NB 7 DAYS IN ADVANCE OF FULL CLOSURE NOTIFYING TRAFFIC OF UPCOMING FULL ROADWAY CLOSURE.

PCMS MESSAGE:

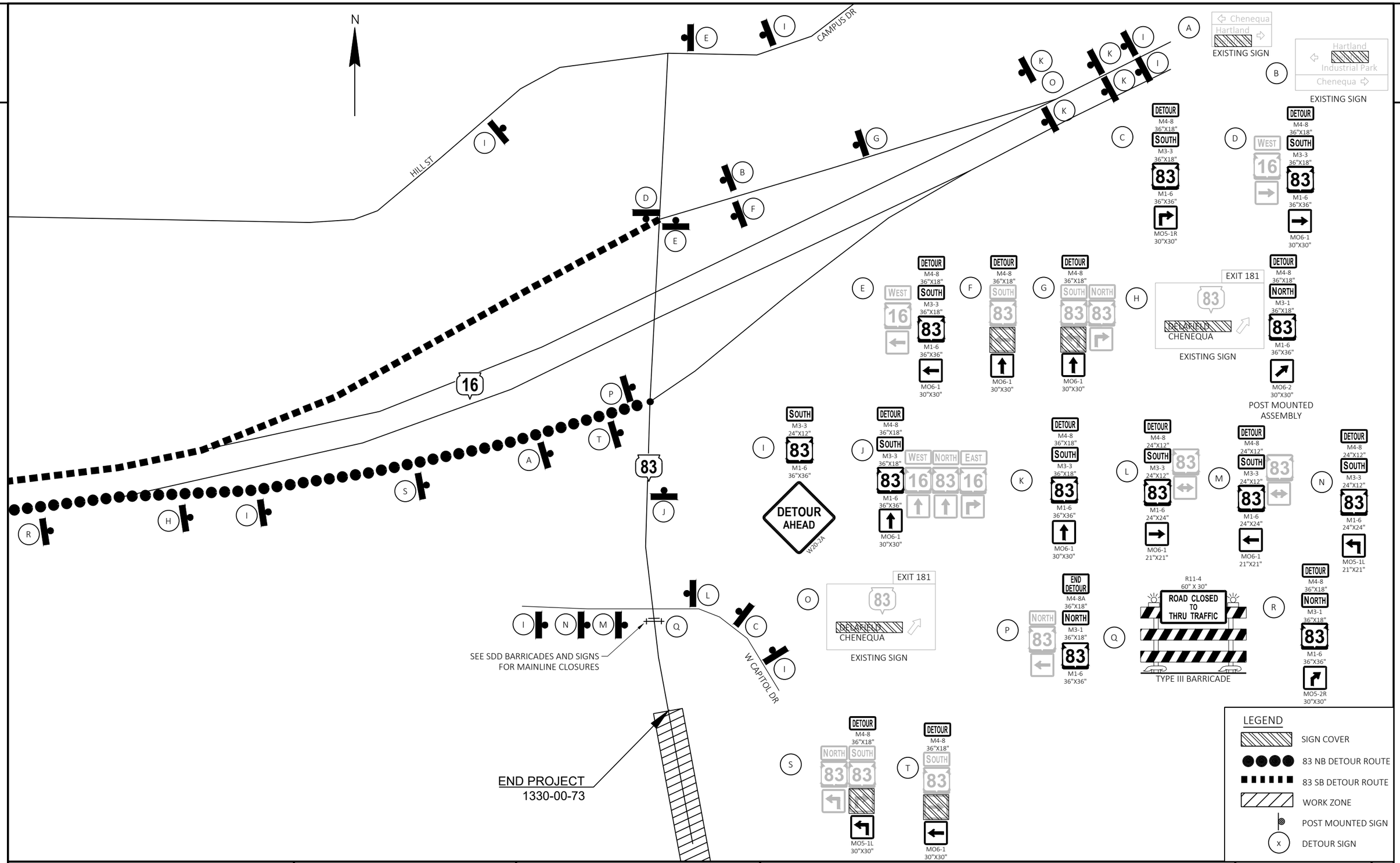
FRAME 1: ROAD TO CLOSE

FRAME 2: XXXDAY XX/XX

LEGEND

- SIGN COVER
- 83 NB DETOUR ROUTE
- 83 SB DETOUR ROUTE
- WORK ZONE
- POST MOUNTED SIGN
- (x) DETOUR SIGN

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	STH 83 - OVERVIEW	SHEET 155	E

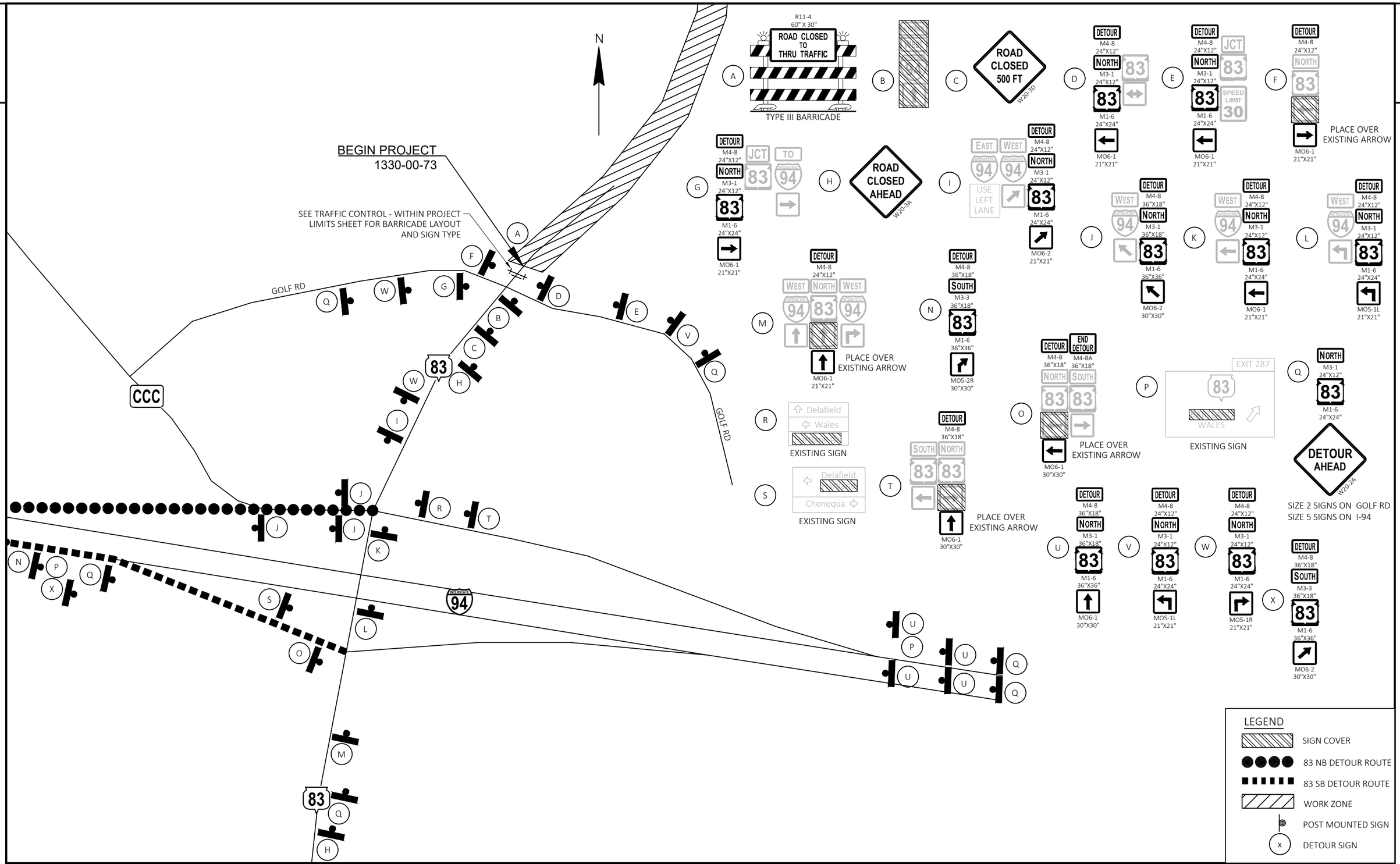


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	STH 83 - DETAIL "A"	SHEET 156	E

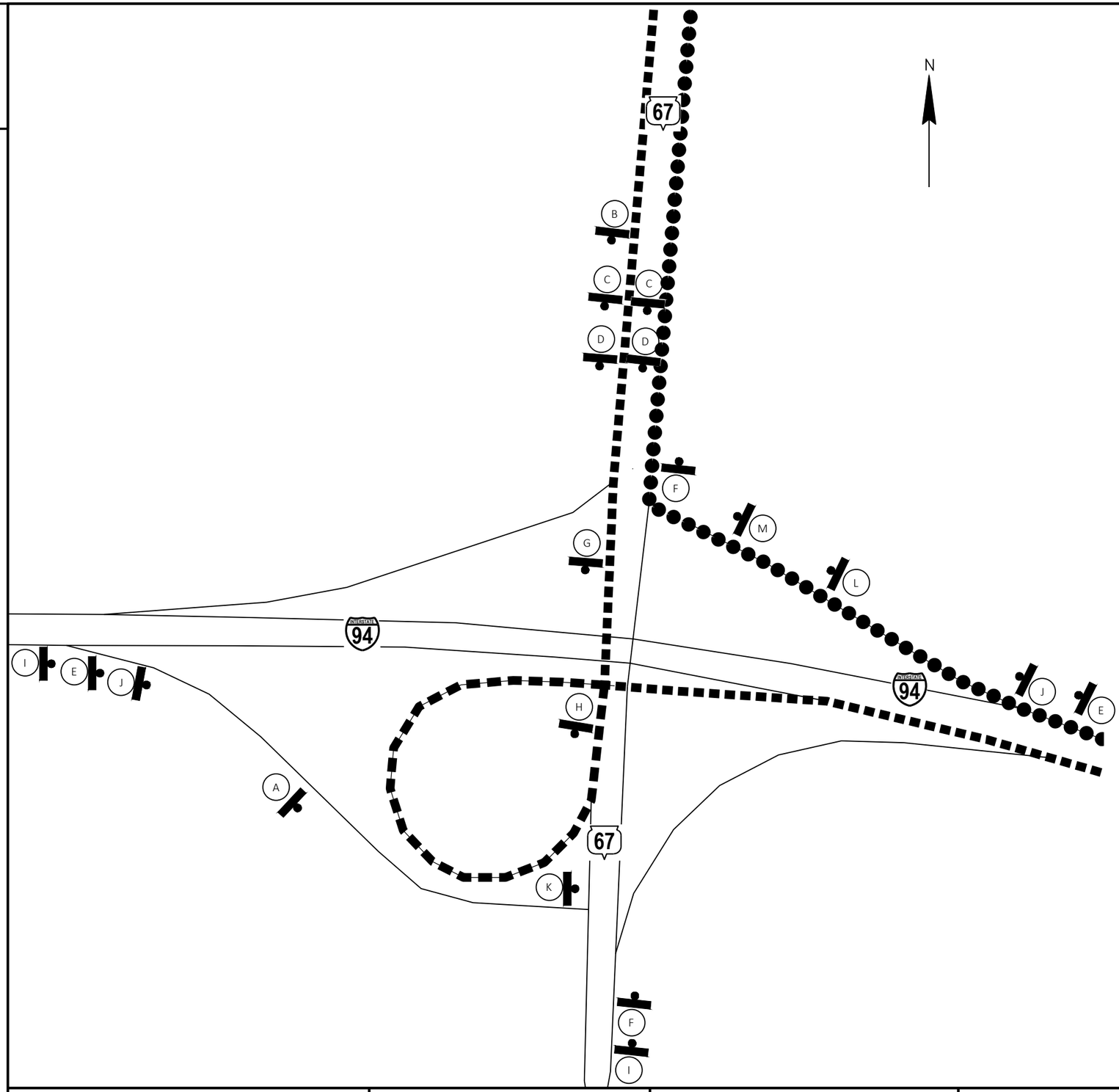
FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\027002-DT.DWG
LAYOUT NAME - 02

PLOT DATE : 1/29/2024 11:17 AM PLOT BY : MINSKY, MICHAEL PLOT NAME : PLOT SCALE : 1 IN:300 FT

WISDOT/CADDS SHEET 42



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	STH 83 - DETAIL "B"	SHEET 157	E



A

DETOUR M4-8 36"X18"
NORTH M3-1 36"X18"
83 M1-6 36"X36"
MO5-1L 30"X30"

B

DETOUR M4-8 36"X18"
SOUTH M3-3 36"X18"
83 M1-6 36"X36"

C

EXISTING SIGN

DETOUR M4-8 36"X18"
SOUTH M3-3 36"X18"
83 M1-6 36"X36"
USE RIGHT LANE MO4-20R 36"X36"
POST MOUNTED ASSEMBLY

D

DETOUR M4-8 36"X18"
SOUTH M3-3 36"X18"
83 M1-6 36"X36"
SECOND RIGHT MO4-22R 36"X30"

E

DETOUR M4-8 36"X18"
NORTH M3-1 36"X18"
83 M1-6 36"X36"
MO5-2R 30"X30"

F

DETOUR M4-8 24"X12"
NORTH M3-1 36"X18"
83 M1-6 36"X36"
MO6-1 30"X30"

G

DETOUR M4-8 36"X18"
SOUTH M3-3 36"X18"
83 M1-6 36"X36"
MO5-1R 30"X30"

H

EXISTING SIGN

DETOUR M4-8 36"X18"
SOUTH M3-3 36"X18"
83 M1-6 36"X36"
MO6-2 30"X30"
POST MOUNTED ASSEMBLY

I

NORTH M3-1 36"X18"
83 M1-6 36"X36"
DETOUR AHEAD W20-2A

J

EXISTING SIGN

DETOUR M4-8 36"X18"
NORTH M3-1 36"X18"
83 M1-6 36"X36"
MO6-2 30"X30"
POST MOUNTED ASSEMBLY

K

DETOUR M4-8 36"X18"
NORTH M3-1 36"X18"
83 M1-6 36"X36"
MO6-1 30"X30"

L

DETOUR M4-8 36"X18"
NORTH M3-1 36"X18"
83 M1-6 36"X36"
MO5-1R 30"X30"

M

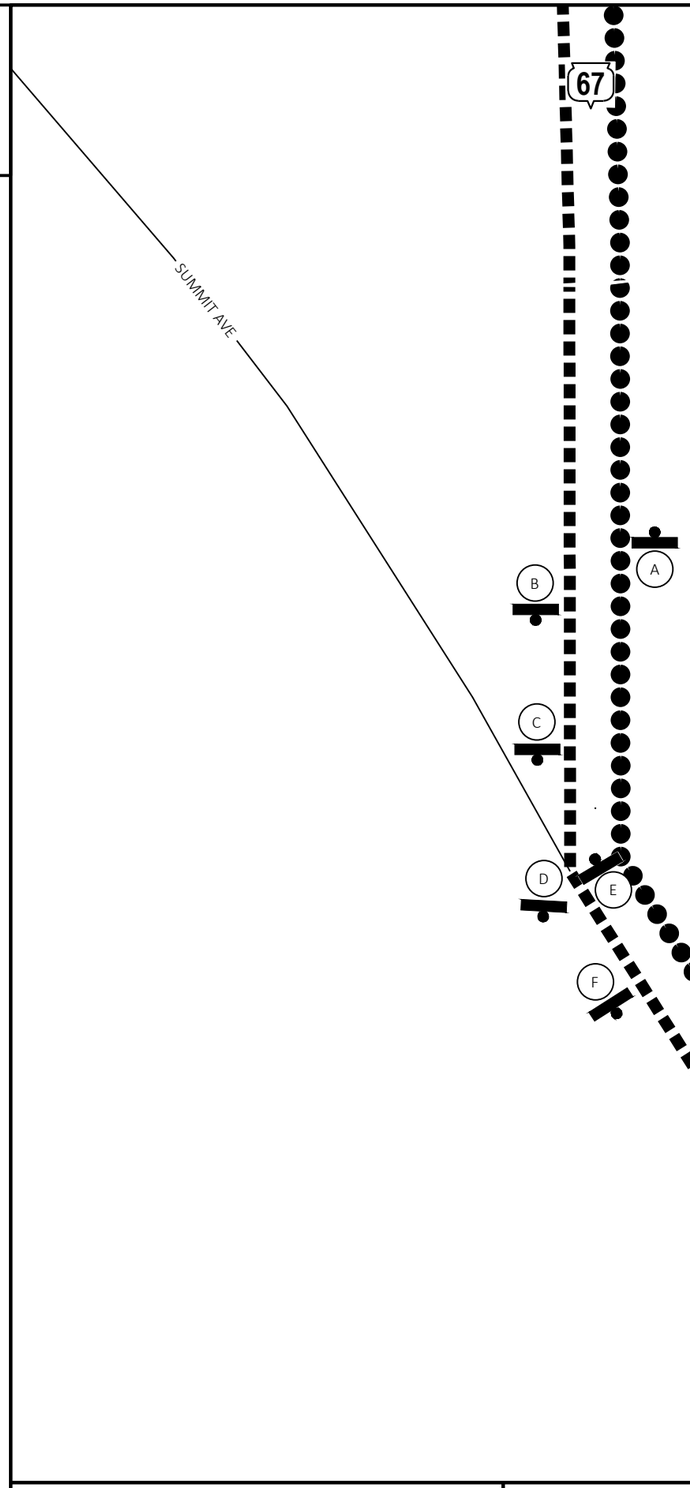
DETOUR M4-8 36"X18"
NORTH M3-1 36"X18"
83 M1-6 36"X36"
MO6-1 30"X30"

LEGEND

- SIGN COVER
- 83 NB DETOUR ROUTE
- 83 SB DETOUR ROUTE
- WORK ZONE
- POST MOUNTED SIGN
- (X) DETOUR SIGN

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	STH 83 - DETAIL "C"	SHEET 158	E

2

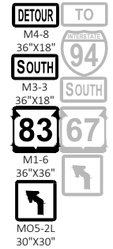


N

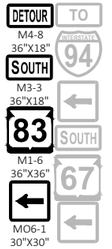
A



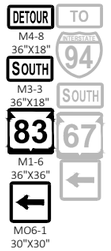
B



C



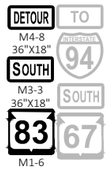
D



E



F



G



POST MOUNTED
ASSEMBLY

H

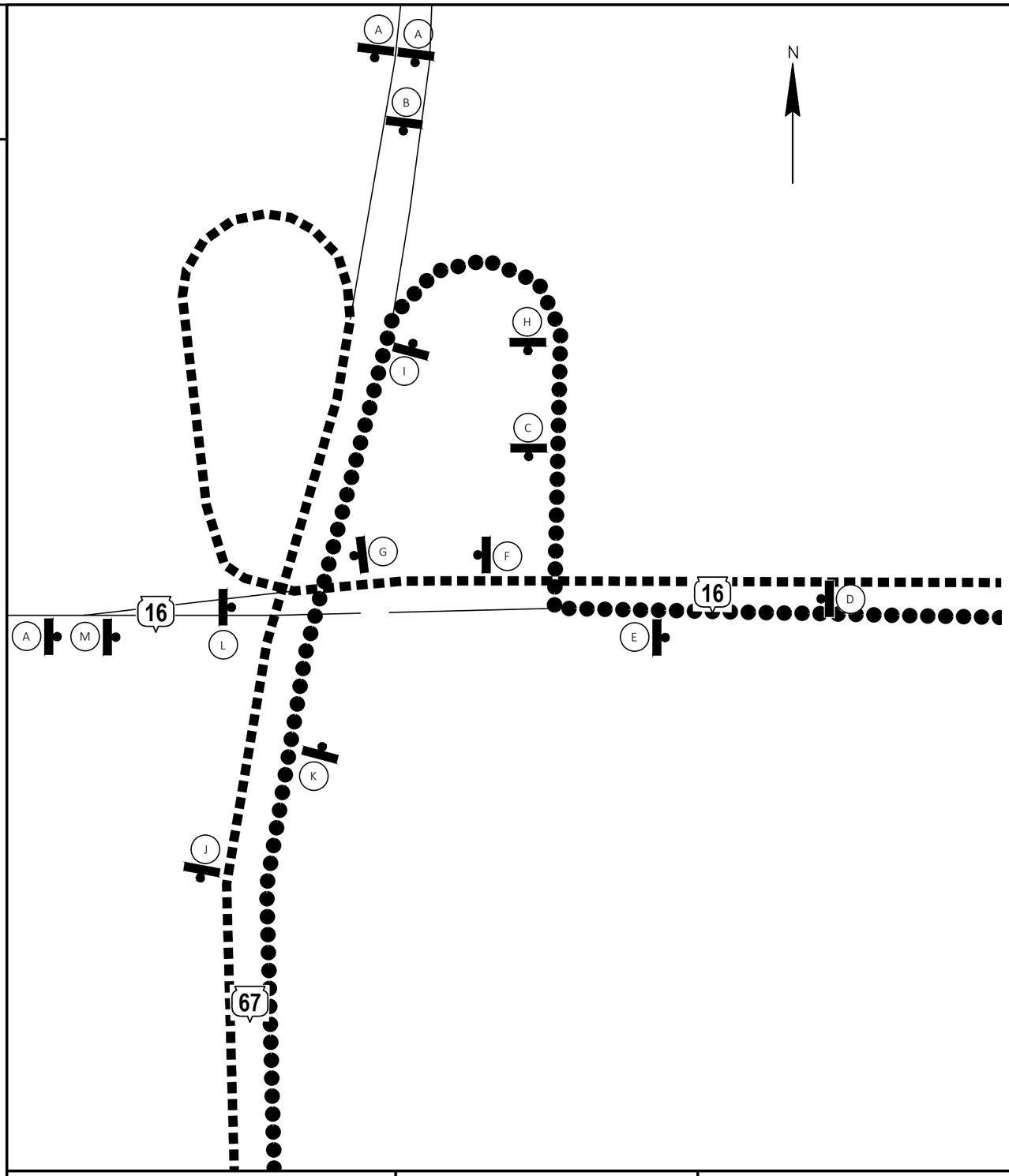


LEGEND

- SIGN COVER
- 83 NB DETOUR ROUTE
- 83 SB DETOUR ROUTE
- WORK ZONE
- POST MOUNTED SIGN
- (X) DETOUR SIGN

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	STH 83 - DETAIL "D"	SHEET 159	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\027002-DT.DWG
LAYOUT NAME - 05
PLOT DATE : 1/29/2024 11:17 AM
PLOT BY : MINSKY, MICHAEL
PLOT NAME :
PLOT SCALE : 1 IN:300 FT
WISDOT/CADDS SHEET 42



A
SOUTH
M3-3
36"X18"
83
M1-6
36"X36"
DETOUR AHEAD
W20-2A

B
67
SOUTH
TO
INTERSTATE
94
EXISTING SIGN
DETOUR
M4-8
36"X18"
SOUTH
M3-3
36"X18"
83
M1-6
36"X36"
MO6-1
30"X30"
POST MOUNTED ASSEMBLY

C
DETOUR
M4-8
36"X18"
NORTH
M3-1
36"X18"
83
M1-6
36"X36"
MO6-1
30"X30"
EAST
ALTERNATE
16
INTERSTATE
94

D
DETOUR
M4-8
36"X18"
SOUTH
M3-3
36"X18"
83
M1-6
36"X36"
MO6-1
30"X30"
SOUTH
WEST
NORTH
67
16
67

E
DETOUR
M4-8
36"X18"
NORTH
M3-1
36"X18"
83
M1-6
36"X36"
EAST
16

F
DETOUR
M4-8
36"X18"
SOUTH
M3-3
36"X18"
83
M1-6
36"X36"
MO5-1R
30"X30"
SOUTH
TO
67
INTERSTATE
94

G
DETOUR
M4-8
36"X18"
SOUTH
M3-3
36"X18"
83
M1-6
36"X36"
MO6-2
30"X30"
SOUTH
TO
67
INTERSTATE
94

H
DETOUR
M4-8
36"X18"
NORTH
M3-1
36"X18"
83
M1-6
36"X36"
MO5-1L
30"X30"

I
DETOUR
M4-8
36"X18"
NORTH
M3-1
36"X18"
83
M1-6
36"X36"
MO6-2
30"X30"
NORTH
TO
ALTERNATE
67
16
INTERSTATE
94

J
DETOUR
M4-8
36"X18"
SOUTH
M3-3
36"X18"
83
M1-6
36"X36"
SOUTH
67

K
DETOUR
M4-8
36"X18"
NORTH
M3-1
36"X18"
83
M1-6
36"X36"
MO5-2R
30"X30"

L
DETOUR
M4-8
36"X18"
SOUTH
M3-3
36"X18"
83
M1-6
36"X36"
MO6-1
30"X30"
TO
INTERSTATE
94
SOUTH
67

M
DETOUR
M4-8
36"X18"
SOUTH
M3-3
36"X18"
83
M1-6
36"X36"
MO5-1L
30"X30"
SOUTH
EAST
WEST
NORTH
67
16
16
67

LEGEND
- SIGN COVER
- 83 NB DETOUR ROUTE
- 83 SB DETOUR ROUTE
- WORK ZONE
- POST MOUNTED SIGN
- (x) DETOUR SIGN

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	STH 83 - DETAIL "E"	SHEET 160	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\027002-DT.DWG
LAYOUT NAME - 06
PLOT DATE : 1/29/2024 11:17 AM
PLOT BY : MINSKY, MICHAEL
PLOT NAME :
PLOT SCALE : 1 IN:300 FT
WISDOT/CADDS SHEET 42

2

2

NAGA-WAUKEE ICE ARENA

N

END
ROAD WORK
G20-2A
48"X24"

R3-2
24"X24"

WB GOLF RD

EB GOLF RD

COVER EXISTING
LEFT ARROW SIGN

NORTH
M3-1
24"X12"
83
M1-6
24"X24"
DETOUR
AHEAD
W20-2A

DETOUR
M4-8
24"X12"
NORTH
M3-1
24"X12"
83
M1-6
24"X24"
MO5-1R
21"X21"

DETOUR
M4-8
24"X12"
JCT
83
TO
INTERSTATE
94
NORTH
M3-1
24"X12"
83
M1-6
24"X24"
MO6-1
21"X21"

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TEMPORARY PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE MAT
- TEMPORARY PEDESTRIAN BARRICADE
- WORK AREA

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC CONTROL - STH 83 GOLF RD INTERSECTION STAGE 1A	SHEET 161	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSOTHER\INT-GOLF_TC-S1A.DWG
LAYOUT NAME - 01
PLOT DATE : 7/12/2024 10:37 AM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2

2

DETOUR
M4-8
24"X12"
NORTH
83
PLACE OVER EXISTING ARROW
MO6-1
21"X21"

SIDEWALK CLOSED
R9-9
24"X12"
M4-60D
30"X24"

TEMPORARY DETECTABLE WARNING FIELD

SIDEWALK CLOSED
R9-9
24"X12"
M4-60D
30"X24"

SIDEWALK CLOSED
R9-9
24"X12"
M4-60D
30"X24"

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

SIDEWALK CLOSED
R9-9
24"X12"
DETOUR
M4-9BR
30"X24"

ONLY ONLY
COVER EXISTING SIGNS

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

SIDEWALK CLOSED
R9-9
24"X12"
M4-60D
30"X24"

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

DETOUR
M4-8
24"X12"
NORTH
M3-1
24"X12"
83
83
M1-6
24"X24"
MO6-1
21"X21"

SIDEWALK CLOSED
R9-9
24"X12"

DETOUR
M4-9BR
30"X24"

WB GOLF RD
EB GOLF RD
WB GOLF RD
EB GOLF RD
RL STH 83
SB STH 83
NB STH 83
ONLY
ONLY
ONLY
ONLY
PT: 252+29.26
251+00
250+00
249+00
248+00
247+00

LEGEND
- PEDESTRIAN DETOUR ROUTE
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TEMPORARY PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE MAT
- TEMPORARY PEDESTRIAN BARRICADE
- WORK AREA

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC CONTROL - STH 83 GOLF RD INTERSECTION STAGE 1A	SHEET 162	E

2

DETOUR
M4-8
24"X12"
NORTH
M3-1
24"X12"
83
M1-6
24"X24"
MO5-1L
21"X21"

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

NORTH
M3-1
24"X12"
83
M1-6
24"X24"
DETOUR AHEAD
W20-2A

DETOUR
M4-8
24"X12"
NORTH
M3-1
24"X12"
JCT
83
SPEED LIMIT
30
83
M1-6
24"X24"
MO6-1
21"X21"

R3-1
24"X24"

DETOUR
M4-9BR
30"X24"

END
ROAD WORK
G20-2A
48"X24"

WALGREENS

KOHL'S

WB GOLF RD

EB GOLF RD

WB GOLF RD

EB GOLF RD

LEGEND

- PEDESTRIAN DETOUR ROUTE
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TEMPORARY PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE MAT
- TEMPORARY PEDESTRIAN BARRICADE
- WORK AREA

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC CONTROL - STH 83 GOLF RD INTERSECTION STAGE 1A	SHEET 163	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSOTHER\INT-GOLF_TC-S1A.DWG
LAYOUT NAME - 03

PLOT DATE : 7/12/2024 10:37 AM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

ROAD WORK AHEAD
W20-1A

DETOUR
M4-9BL
30"X24"

DETOUR
M4-9BR
30"X24"

WB GOLF RD

EB GOLF RD

SIDEWALK CLOSED AHEAD
R9-9A
30"X18"

DETOUR
M4-9BR
30"X24"

DETOUR
M4-9BR
30"X24"

DETOUR
M4-9BL
30"X24"

LEGEND

- PEDESTRIAN DETOUR ROUTE
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TEMPORARY PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE MAT
- TEMPORARY PEDESTRIAN BARRICADE
- WORK AREA

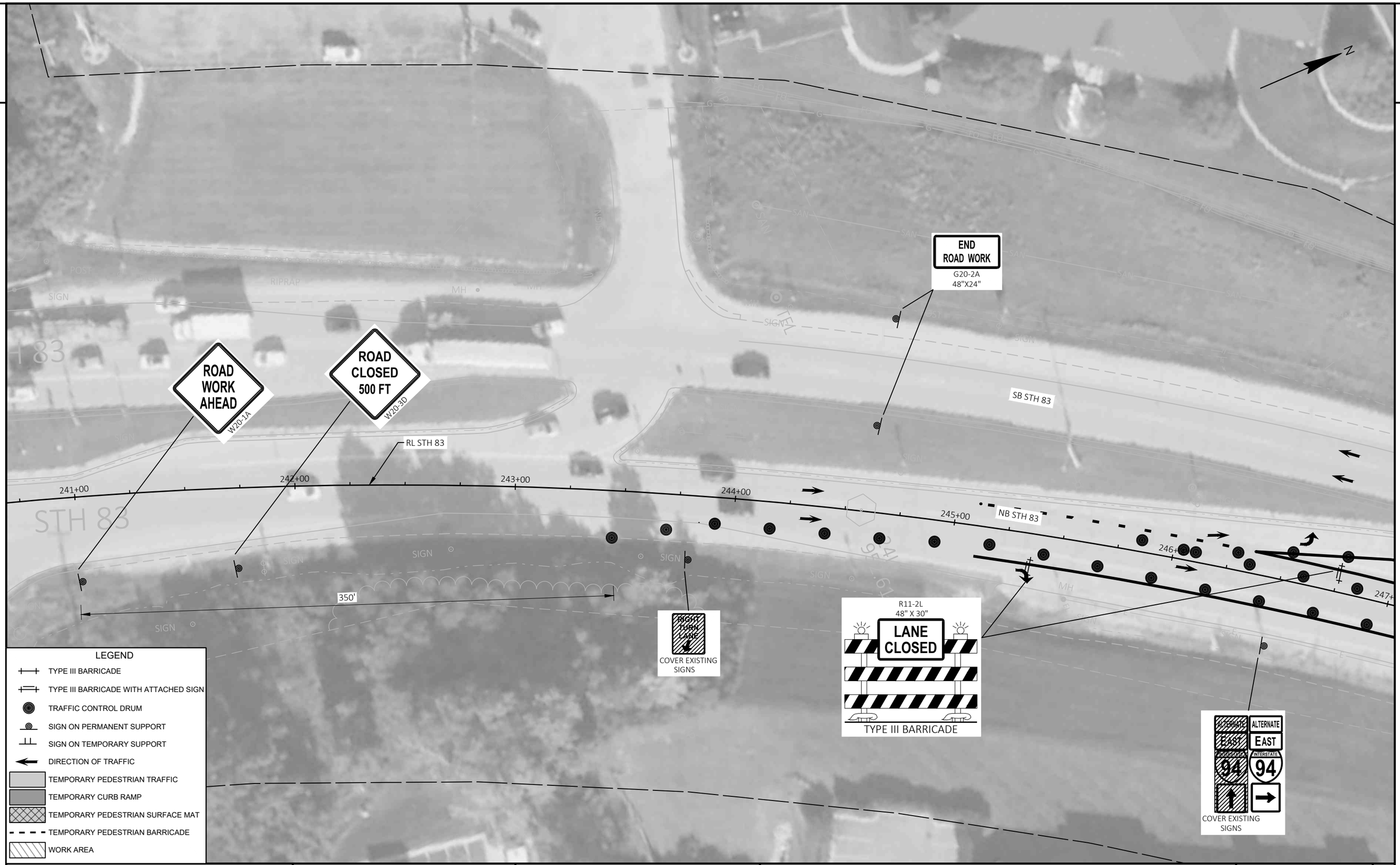
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC CONTROL - STH 83 GOLF RD INTERSECTION STAGE 1A	SHEET 164	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSOTHER\INT-GOLF_TC-S1A.DWG
LAYOUT NAME - 04

PLOT DATE : 7/12/2024 10:37 AM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

2



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC CONTROL - STH 83 GOLF RD INTERSECTION STAGE 1A	SHEET 165	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSOTHER\INT-GOLF_TC-S1A.DWG
LAYOUT NAME - 05

PLOT DATE : 7/12/2024 10:37 AM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

NAGA-WAUKEE ICE ARENA

N

WB GOLF RD

EB GOLF RD

END
ROAD WORK
G20-2A
48"X24"

R3-2
24"X24"

ONLY
COVER EXISTING
LEFT ARROW SIGN

NORTH
M3-1
24"X12"
83
M1-6
24"X24"
DETOUR
AHEAD
W20-2A

DETOUR
M4-8
24"X12"
NORTH
M3-1
24"X12"
83
M1-6
24"X24"
MO5-1R
21"X21"

DETOUR
M4-8
24"X12"
JCT
83
TO
INTERSTATE
94
NORTH
M3-1
24"X12"
83
M1-6
24"X24"
MO6-1
21"X21"

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TEMPORARY PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE MAT
- TEMPORARY PEDESTRIAN BARRICADE
- WORK AREA

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC CONTROL - STH 83 GOLF RD INTERSECTION STAGE 1B	SHEET 166	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSOTHER\INT-GOLF_TC-S1B.DWG
LAYOUT NAME - 01

PLOT DATE : 7/12/2024 10:38 AM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

DETOUR
M4-8
24"X12"
NORTH
83
PLACE OVER EXISTING ARROW
MO6-1
21"X21"

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

SIDEWALK CLOSED
R9-9
24"X12"

ONLY ONLY
COVER EXISTING SIGNS

WB GOLF RD

EB GOLF RD

RL STH 83

SB STH 83

NB STH 83

ONLY

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

SIDEWALK CLOSED
R9-9
24"X12"

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

DETOUR
M4-8
24"X12"
NORTH
M3-1
24"X12"
83
M1-6
24"X24"
MO6-1
21"X21"

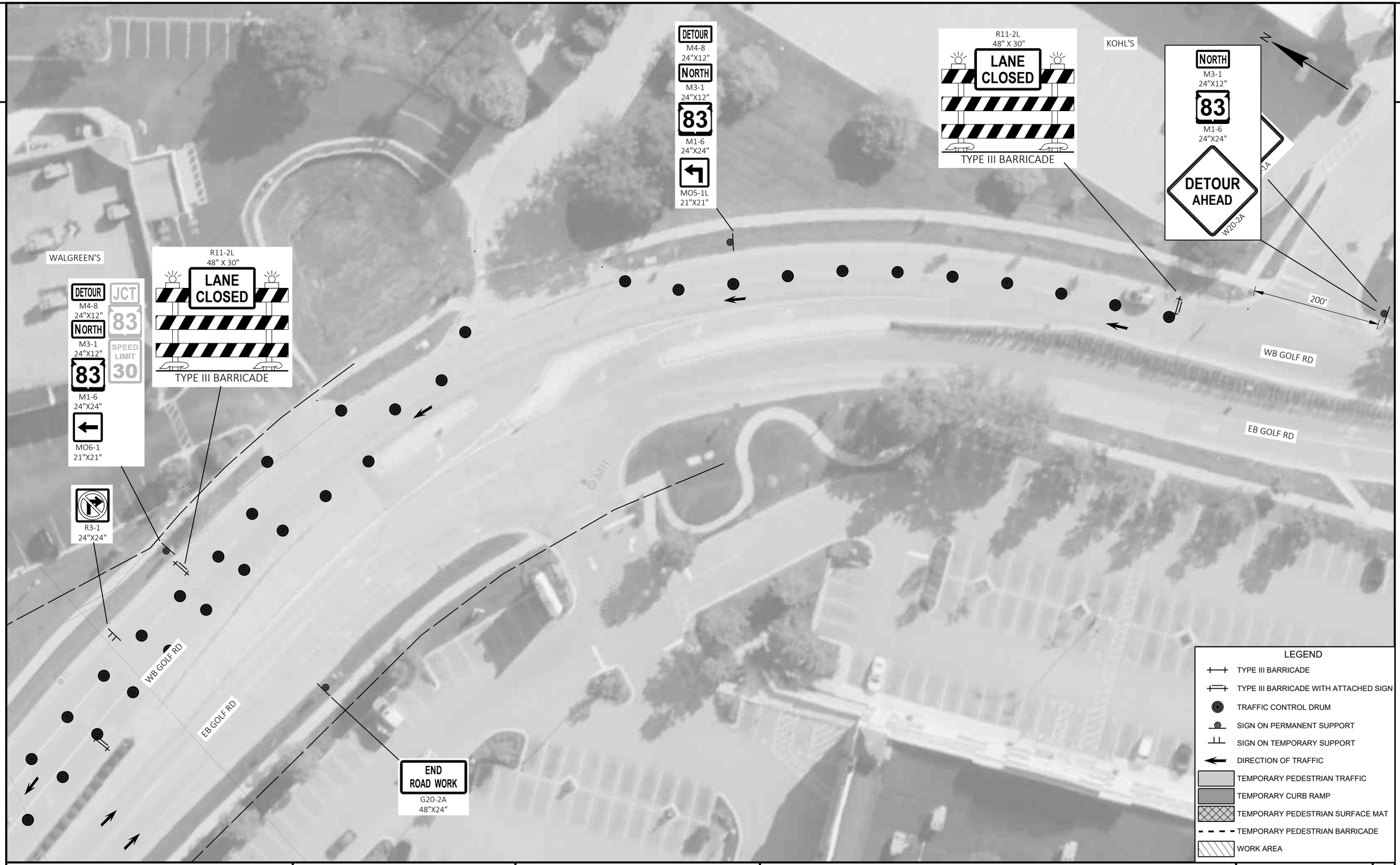
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TEMPORARY PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE MAT
- TEMPORARY PEDESTRIAN BARRICADE
- WORK AREA

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC CONTROL - STH 83 GOLF RD INTERSECTION STAGE 1B	SHEET 167	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSOTHER\INT-GOLF_TC-S1B.DWG
LAYOUT NAME - 02
PLOT DATE : 7/12/2024 10:38 AM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2



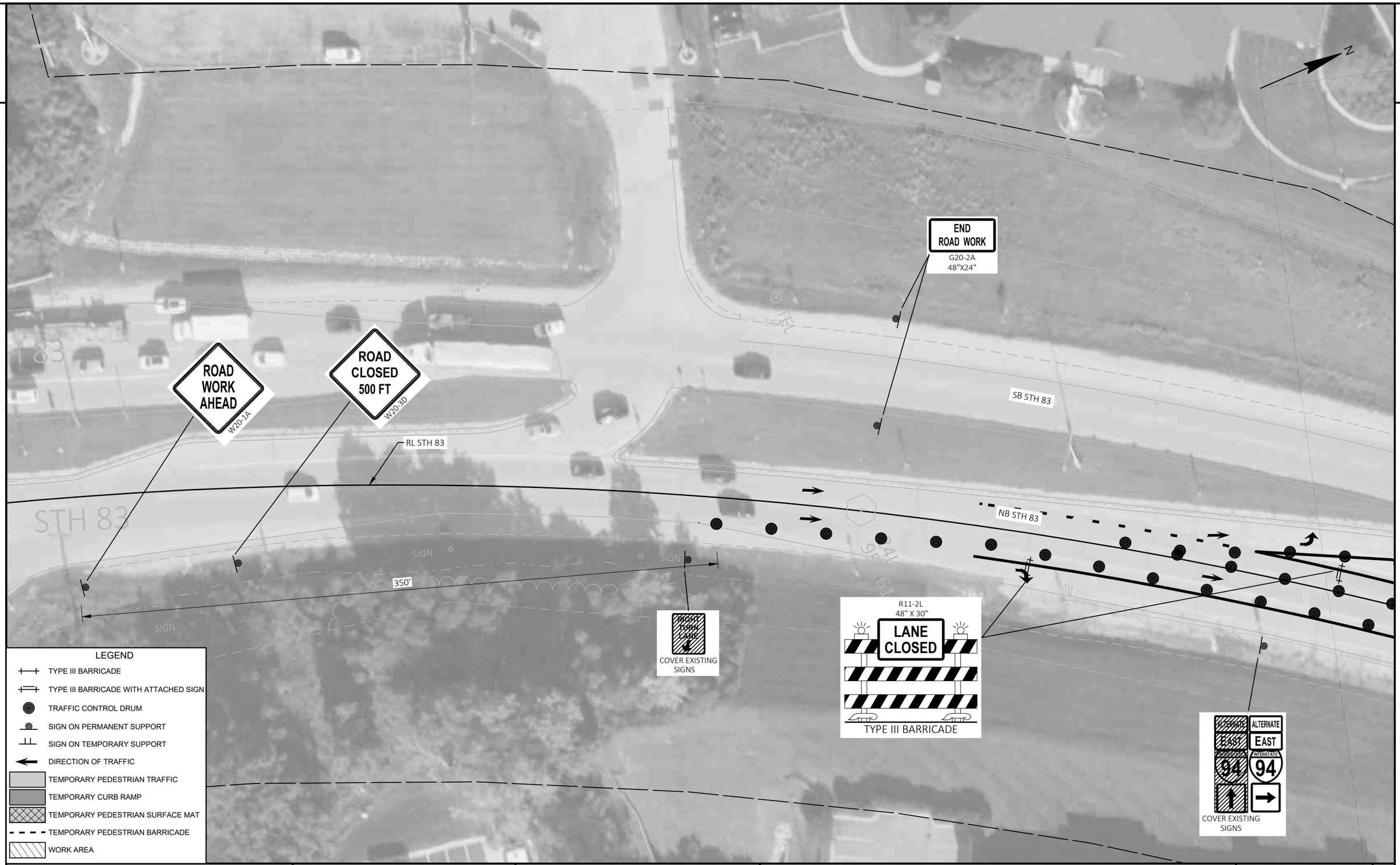
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC CONTROL - STH 83 GOLF RD INTERSECTION STAGE 1B	SHEET 168	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSOTHER\INT-GOLF_TC-S1B.DWG
LAYOUT NAME - 03

PLOT DATE : 7/12/2024 10:38 AM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

2



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC CONTROL - STH 83 GOLF RD INTERSECTION STAGE 1B	SHEET 169	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSOTHER\INT-GOLF_TC-S1B.DWG
LAYOUT NAME - 04

PLOT DATE : 7/12/2024 10:38 AM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

NAGA-WAUKEE ICE ARENA

N

END
ROAD WORK
G20-2A
48"X24"

TEMPORARY PEDESTRIAN TRAFFIC

TEMPORARY MARKING CROSSWALK
REMOVABLE TAPE 6-INCH

R3-2
24"X24"

NORTH
M3-1
24"X12"
83
M1-6
24"X24"
DETOUR
AHEAD
W20-2A

DETOUR
M4-8
24"X12"
NORTH
M3-1
24"X12"
83
M1-6
24"X24"
MO5-1R
21"X21"

R3-1
24"X24"

DETOUR
M4-8
24"X12"
JCT
83
TO
INTERSTATE
94
NORTH
M3-1
24"X12"
83
M1-6
24"X24"
MO6-1
21"X21"

COVER EXISTING
SIGNS

LEGEND
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TEMPORARY PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE MAT
- TEMPORARY PEDESTRIAN BARRICADE
- WORK AREA

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC CONTROL - STH 83 GOLF RD INTERSECTION STAGE 2	SHEET 170	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSOTHER\INT-GOLF_TC-S2.DWG
LAYOUT NAME - 01

PLOT DATE : 7/12/2024 10:38 AM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

2

2

DETOUR
M4-8
24"X12"
NORTH
83
PLACE OVER EXISTING ARROW
MO6-1
21"X21"

SIDEWALK CLOSED
R9-9
24"X12"

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

ONLY
ONLY
COVER EXISTING SIGNS

WB GOLF RD
EB GOLF RD
RL STH 83
SB STH 83
NB STH 83
ONLY
ONLY
ONLY
251+00
250+00
249+00
248+00
247+00

SIDEWALK CLOSED
R9-9
24"X12"
TEMPORARY DETECTABLE WARNING FIELD

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

DETOUR
M4-8
24"X12"
NORTH
M3-1
24"X12"
83
83
M1-6
24"X24"
MO6-1
21"X21"

LEGEND
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TEMPORARY PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE MAT
- TEMPORARY PEDESTRIAN BARRICADE
- WORK AREA

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC CONTROL - STH 83 GOLF RD INTERSECTION STAGE 2	SHEET 171	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSOTHER\INT-GOLF_TC-S2.DWG
LAYOUT NAME - 02

PLOT DATE : 7/12/2024 10:38 AM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

2

2

DETOUR
M4-8
24"X12"
NORTH
M3-1
24"X12"
83
M1-6
24"X24"
MO5-1L
21"X21"

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

KOHL'S

NORTH
M3-1
24"X12"
83
M1-6
24"X24"
DETOUR AHEAD
W20-2A

N

WB GOLF RD

EB GOLF RD

WALGREEN'S

DETOUR
M4-8
24"X12"
NORTH
M3-1
24"X12"
83
M1-6
24"X24"
MO6-1
21"X21"
JCT
83
SPEED LIMIT
30

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R3-1
24"X24"

WB GOLF RD

EB GOLF RD

END ROAD WORK
G20-2A
48"X24"

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TEMPORARY PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE MAT
- TEMPORARY PEDESTRIAN BARRICADE
- WORK AREA

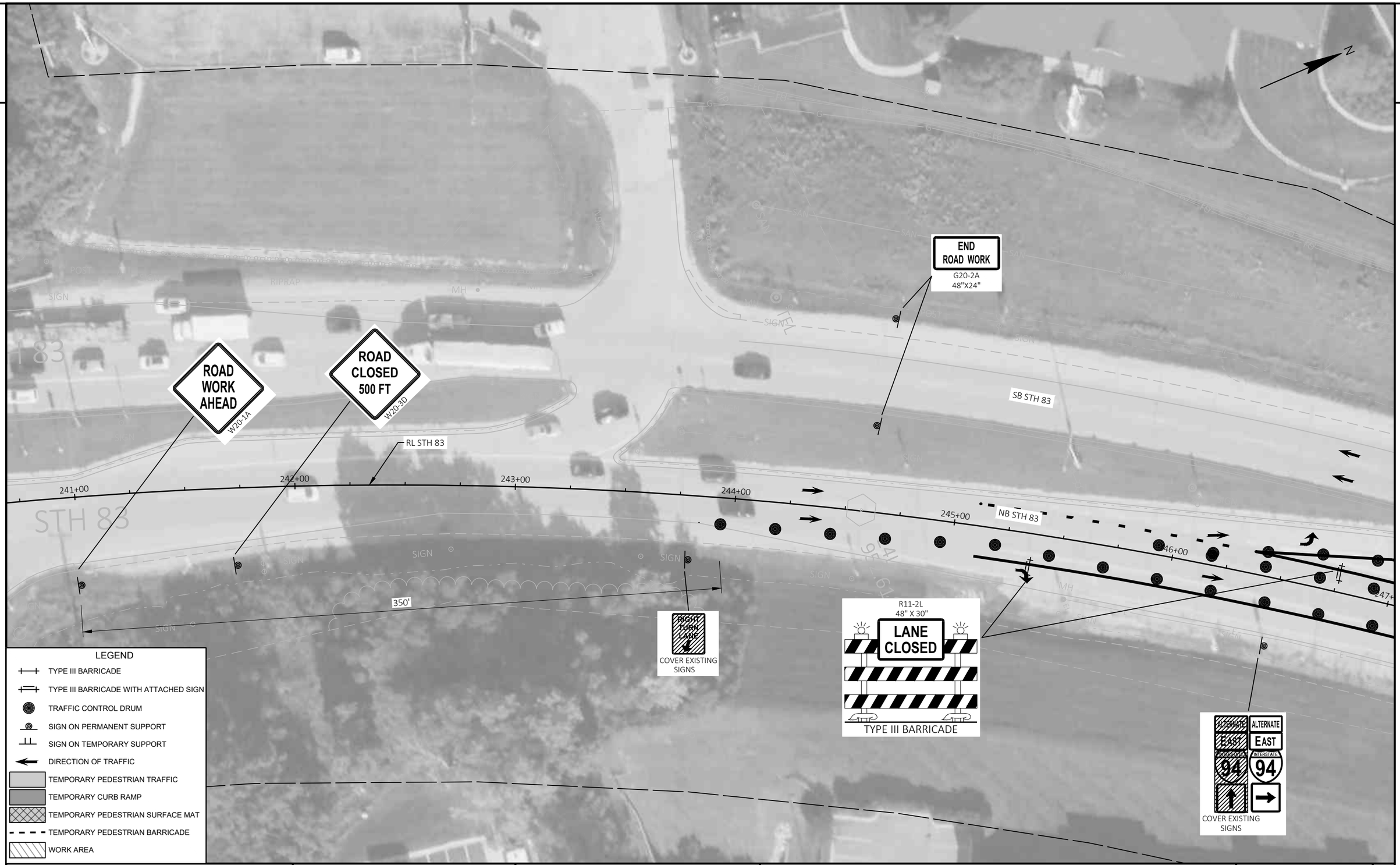
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC CONTROL - STH 83 GOLF RD INTERSECTION STAGE 2	SHEET 172	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSOTHER\INT-GOLF_TC-S2.DWG
LAYOUT NAME - 03

PLOT DATE : 7/12/2024 10:38 AM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

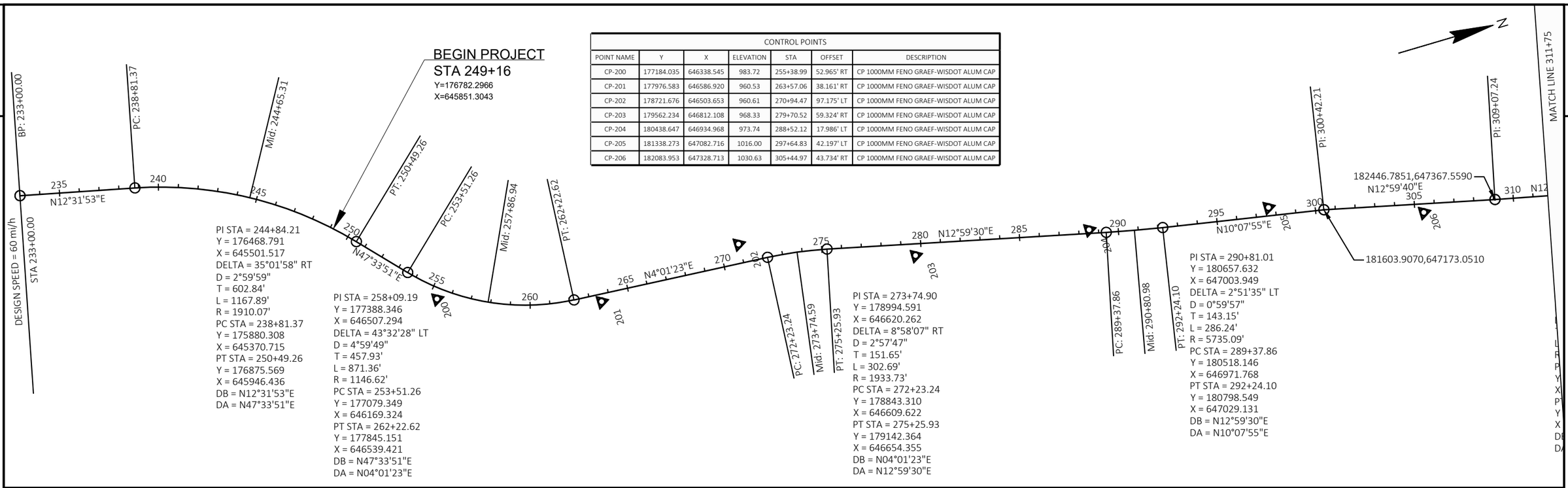
2



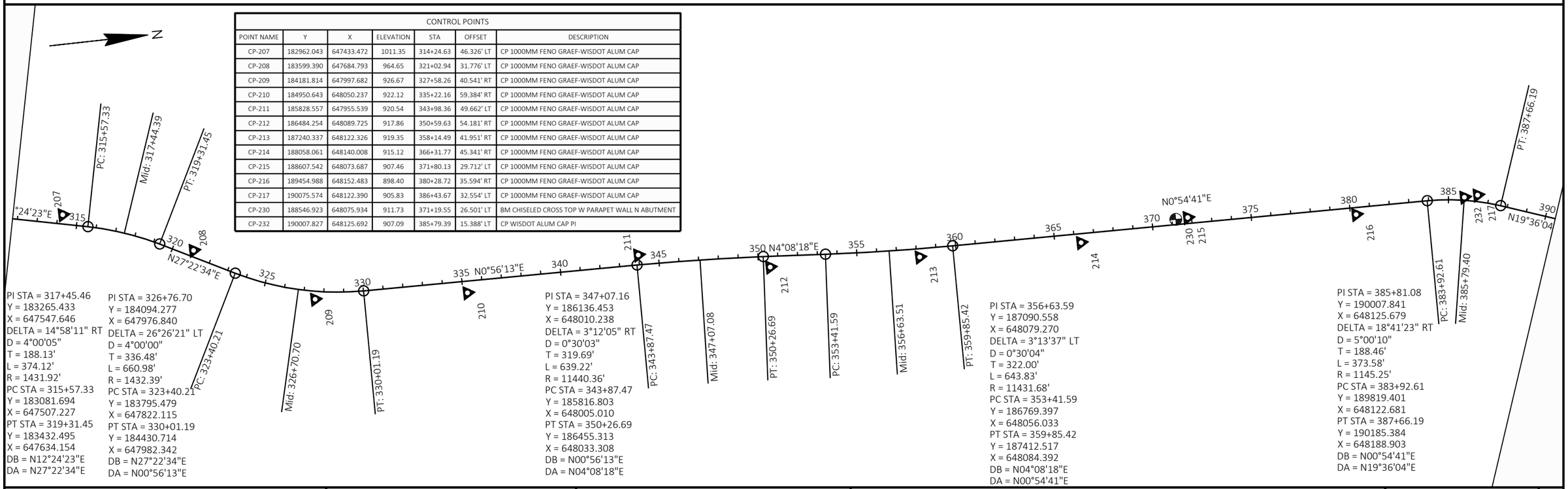
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC CONTROL - STH 83 GOLF RD INTERSECTION STAGE 2	SHEET 173	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSOTHER\INT-GOLF_TC-S2.DWG
LAYOUT NAME - 04

PLOT DATE : 7/12/2024 10:38 AM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT



CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-200	177184.035	646338.545	983.72	255+38.99	52.965' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-201	177976.583	646586.920	960.53	263+57.06	38.161' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-202	178721.676	646503.653	960.61	270+94.47	97.175' LT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-203	179562.234	646812.108	968.33	279+70.52	59.324' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-204	180438.647	646934.968	973.74	288+52.12	17.986' LT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-205	181338.273	647082.716	1016.00	297+64.83	42.197' LT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-206	182083.953	647328.713	1030.63	305+44.97	43.734' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP



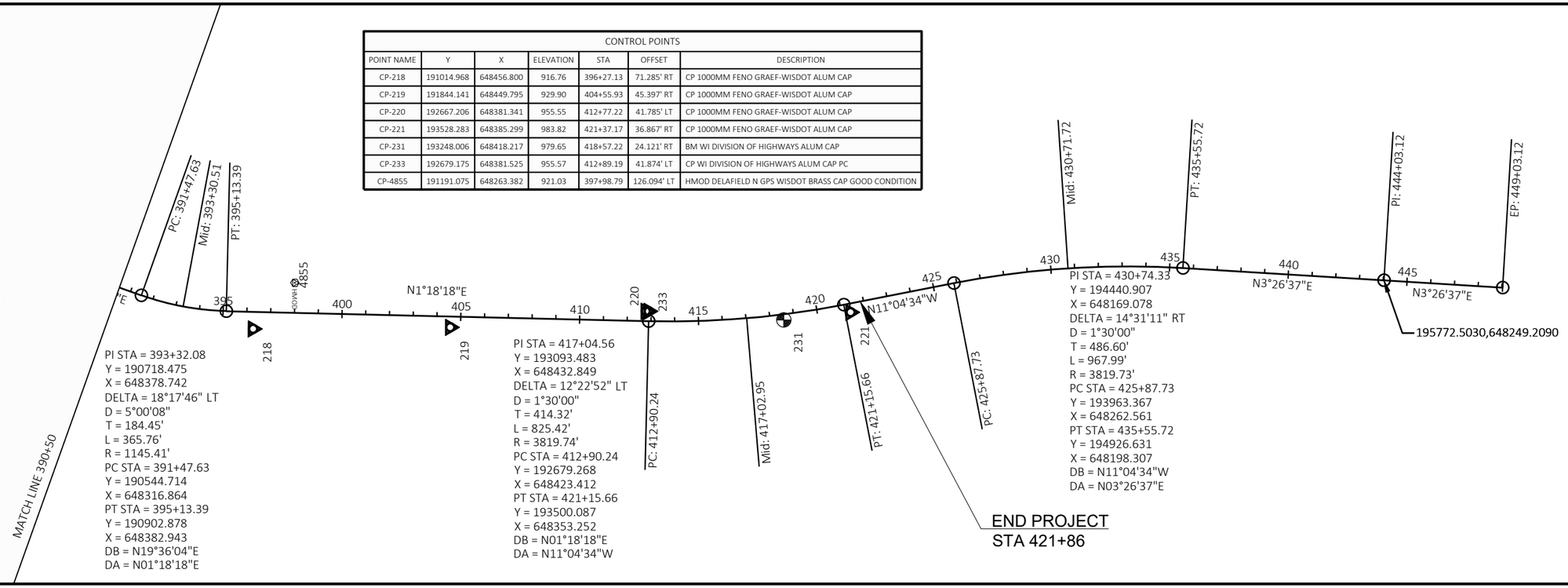
CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-207	182962.043	647433.472	1011.35	314+24.63	46.326' LT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-208	183599.390	647684.793	964.65	321+02.94	31.776' LT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-209	184181.814	647997.682	926.67	327+58.26	40.541' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-210	184950.643	648050.237	922.12	335+22.16	59.384' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-211	185828.557	647955.539	920.54	343+98.36	49.662' LT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-212	186484.254	648089.725	917.86	350+59.63	54.181' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-213	187240.337	648122.326	919.35	358+14.49	41.951' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-214	188058.061	648140.008	915.12	366+31.77	45.341' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-215	188607.542	648073.687	907.46	371+80.13	29.712' LT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-216	189454.988	648152.483	898.40	380+28.72	35.594' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-217	190075.574	648122.390	905.83	386+43.67	32.554' LT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-230	188546.923	648075.934	911.73	371+19.55	26.501' LT	BM CHISELED CROSS TOP W PARAPET WALL N ABUTMENT
CP-232	190007.827	648125.692	907.09	385+79.39	15.388' LT	CP WISDOT ALUM CAP PI

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	ALIGNMENT DETAIL	SHEET 174	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 01
PLOT DATE : 10/18/2023 1:17 PM
PLOT BY : WATT, TIMOTHY
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 44

2

CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-218	191014.968	648456.800	916.76	396+27.13	71.285' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-219	191844.141	648449.795	929.90	404+55.93	45.397' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-220	192667.206	648381.341	955.55	412+77.22	41.785' LT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-221	193528.283	648385.299	983.82	421+37.17	36.867' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-231	193248.006	648418.217	979.65	418+57.22	24.121' RT	BM WI DIVISION OF HIGHWAYS ALUM CAP
CP-233	192679.175	648381.525	955.57	412+89.19	41.874' LT	CP WI DIVISION OF HIGHWAYS ALUM CAP PC
CP-4855	191191.075	648263.382	921.03	397+98.79	126.094' LT	HMOD DELAFIELD N GPS WISDOT BRASS CAP GOOD CONDITION



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	ALIGNMENT DETAIL	SHEET 175	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 02
PLOT DATE : 10/18/2023 1:17 PM
PLOT BY : WATT, TIMOTHY
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 44

Estimate Of Quantities

1330-00-73

Line	Item	Item Description	Unit	Total	Qty
0002	201.0110	Clearing	SY	610.000	610.000
0004	201.0120	Clearing	ID	25.000	25.000
0006	201.0210	Grubbing	SY	610.000	610.000
0008	201.0220	Grubbing	ID	25.000	25.000
0010	203.0100	Removing Small Pipe Culverts	EACH	9.000	9.000
0012	204.0110	Removing Asphaltic Surface	SY	4,600.000	4,600.000
0014	204.0115	Removing Asphaltic Surface Butt Joints	SY	2,030.000	2,030.000
0016	204.0120	Removing Asphaltic Surface Milling	SY	43,200.000	43,200.000
0018	204.0150	Removing Curb & Gutter	LF	3,400.000	3,400.000
0020	204.0155	Removing Concrete Sidewalk	SY	310.000	310.000
0022	204.0165	Removing Guardrail	LF	1,841.000	1,841.000
0024	204.0195	Removing Concrete Bases	EACH	18.000	18.000
0026	204.0220	Removing Inlets	EACH	3.000	3.000
0028	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	17.000	17.000
0030	204.9060.S	Removing (item description) 01. Removing Traffic Signals STH 83 & Golf Rd	EACH	1.000	1.000
0032	204.9060.S	Removing (item description) 02. Removing Traffic Singals STH 83 & CTH KE / Oakwood Rd	EACH	1.000	1.000
0034	204.9060.S	Removing (item description) 03. Removing Traffic Signals STH 83 & Cardinal Ln	EACH	1.000	1.000
0036	204.9060.S	Removing (item description) 04. Removing Loop Detector Wire and Lead-In Cable STH 83 & CTH KE / Oakwood Rd	EACH	1.000	1.000
0038	204.9060.S	Removing (item description) 05. Removing Loos Detector Wire and Lead-In Cable STH 83 & Cardinal Ln	EACH	1.000	1.000
0040	204.9060.S	Removing (item description) 06. Removing Reinforced Concrete Arpon Endwall 24-Inch	EACH	1.000	1.000
0042	205.0100	Excavation Common	CY	50,474.000	50,474.000
0044	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 1330-00-73	EACH	1.000	1.000
0046	213.0100	Finishing Roadway (project) 01. 1330-00-73	EACH	1.000	1.000
0048	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,590.000	2,590.000
0050	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	29,300.000	29,300.000
0052	312.0115	Select Crushed Material	CY	250.000	250.000
0054	313.0115	Pit Run	CY	28,100.000	28,100.000
0056	415.0080	Concrete Pavement 8-Inch	SY	48.000	48.000
0058	415.0410	Concrete Pavement Approach Slab	SY	133.000	133.000
0060	455.0605	Tack Coat	GAL	13,260.000	13,260.000
0062	460.2000	Incentive Density HMA Pavement	DOL	21,960.000	21,960.000
0064	460.6223	HMA Pavement 3 MT 58-28 S	TON	25,410.000	25,410.000
0066	460.6425	HMA Pavement 5 MT 58-28 H	TON	8,900.000	8,900.000
0068	465.0105	Asphaltic Surface	TON	20.000	20.000
0070	465.0110	Asphaltic Surface Patching	TON	1,100.000	1,100.000
0072	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	120.000	120.000
0074	465.0510	Asphaltic Rumble Strips, Shoulder Divided Roadway	LF	9,550.000	9,550.000
0076	465.0520	Asphaltic Rumble Strips, Shoulder	LF	23,600.000	23,600.000
0078	465.0560	Asphaltic Rumble Strips, Centerline	LF	7,750.000	7,750.000
0080	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	2.000	2.000
0082	520.1036	Apron Endwalls for Culvert Pipe 36-Inch	EACH	2.000	2.000
0084	520.3336	Culvert Pipe Class III-A 36-Inch	LF	97.000	97.000
0086	520.4124	Culvert Pipe Class IV 24-Inch	LF	64.000	64.000
0088	520.8700	Cleaning Culvert Pipes	EACH	4.000	4.000
0090	521.1518	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 18-Inch 6 to 1	EACH	4.000	4.000
0092	521.3118	Culvert Pipe Corrugated Steel 18-Inch	LF	100.000	100.000
0094	522.0424	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	8.000	8.000

1330-00-73

Line	Item	Item Description	Unit	Total	Qty
0096	522.0430	Culvert Pipe Reinforced Concrete Class IV 30-Inch	LF	90.000	90.000
0098	522.0436	Culvert Pipe Reinforced Concrete Class IV 36-Inch	LF	16.000	16.000
0100	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	2.000	2.000
0102	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	2.000	2.000
0104	524.0636	Apron Endwalls for Culvert Pipe Salvaged 36-Inch	EACH	2.000	2.000
0106	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	473.000	473.000
0108	601.0415	Concrete Curb & Gutter 6-Inch Sloped 30-Inch Type J	LF	1,760.000	1,760.000
0110	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	1,335.000	1,335.000
0112	601.0584	Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type TBT	LF	59.000	59.000
0114	601.0586	Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type TBTT	LF	30.000	30.000
0116	601.0600	Concrete Curb Pedestrian	LF	114.000	114.000
0118	602.0405	Concrete Sidewalk 4-Inch	SF	3,760.000	3,760.000
0120	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	190.000	190.000
0122	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	48.000	48.000
0124	602.3010	Concrete Surface Drains	CY	42.000	42.000
0126	606.0100	Riprap Light	CY	26.000	26.000
0128	606.0200	Riprap Medium	CY	58.000	58.000
0130	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	24.000	24.000
0132	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	8.000	8.000
0134	611.0610	Inlet Covers Type BW	EACH	1.000	1.000
0136	611.0630	Inlet Covers Type HM-GJ	EACH	2.000	2.000
0138	611.3004	Inlets 4-FT Diameter	EACH	1.000	1.000
0140	611.8110	Adjusting Manhole Covers	EACH	7.000	7.000
0142	611.8115	Adjusting Inlet Covers	EACH	27.000	27.000
0144	612.0106	Pipe Underdrain 6-Inch	LF	1,400.000	1,400.000
0146	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	40.000	40.000
0148	612.0806	Apron Endwalls for Underdrain Reinforced Concrete 6-Inch	EACH	5.000	5.000
0150	614.0397	Guardrail Mow Strip Emulsified Asphalt	SY	773.000	773.000
0152	614.2300	MGS Guardrail 3	LF	1,162.500	1,162.500
0154	614.2330	MGS Guardrail 3 K	LF	12.500	12.500
0156	614.2500	MGS Thrie Beam Transition	LF	320.000	320.000
0158	614.2610	MGS Guardrail Terminal EAT	EACH	8.000	8.000
0160	618.0100	Maintenance and Repair of Haul Roads (project) 01. 1330-00-73	EACH	1.000	1.000
0162	619.1000	Mobilization	EACH	1.000	1.000
0164	620.0300	Concrete Median Sloped Nose	SF	136.000	136.000
0166	625.0100	Topsoil	SY	4,900.000	4,900.000
0168	625.0500	Salvaged Topsoil	SY	19,700.000	19,700.000
0170	627.0200	Mulching	SY	300.000	300.000
0172	628.1504	Silt Fence	LF	20,000.000	20,000.000
0174	628.1520	Silt Fence Maintenance	LF	20,000.000	20,000.000
0176	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0178	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0180	628.2006	Erosion Mat Urban Class I Type A	SY	18,700.000	18,700.000
0182	628.2008	Erosion Mat Urban Class I Type B	SY	5,850.000	5,850.000
0184	628.6510	Soil Stabilizer Type B	ACRE	0.100	0.100
0186	628.7005	Inlet Protection Type A	EACH	5.000	5.000
0188	628.7015	Inlet Protection Type C	EACH	30.000	30.000
0190	628.7020	Inlet Protection Type D	EACH	3.000	3.000
0192	628.7504	Temporary Ditch Checks	LF	600.000	600.000

1330-00-73

Line	Item	Item Description	Unit	Total	Qty
0194	628.7555	Culvert Pipe Checks	EACH	70.000	70.000
0196	628.7560	Tracking Pads	EACH	4.000	4.000
0198	628.7570	Rock Bags	EACH	580.000	580.000
0200	629.0210	Fertilizer Type B	CWT	10.000	10.000
0202	630.0130	Seeding Mixture No. 30	LB	450.000	450.000
0204	630.0160	Seeding Mixture No. 60	LB	45.000	45.000
0206	630.0200	Seeding Temporary	LB	260.000	260.000
0208	630.0500	Seed Water	MGAL	560.000	560.000
0210	633.5200	Markers Culvert End	EACH	16.000	16.000
0212	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	33.000	33.000
0214	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	4.000	4.000
0216	637.2210	Signs Type II Reflective H	SF	328.510	328.510
0218	637.2215	Signs Type II Reflective H Folding	SF	101.120	101.120
0220	637.2230	Signs Type II Reflective F	SF	53.500	53.500
0222	638.2102	Moving Signs Type II	EACH	5.000	5.000
0224	638.2602	Removing Signs Type II	EACH	56.000	56.000
0226	638.3000	Removing Small Sign Supports	EACH	33.000	33.000
0228	643.0300	Traffic Control Drums	DAY	5,990.000	5,990.000
0230	643.0420	Traffic Control Barricades Type III	DAY	8,220.000	8,220.000
0232	643.0705	Traffic Control Warning Lights Type A	DAY	9,170.000	9,170.000
0234	643.0715	Traffic Control Warning Lights Type C	DAY	360.000	360.000
0236	643.0800	Traffic Control Arrow Boards	DAY	60.000	60.000
0238	643.0900	Traffic Control Signs	DAY	80,740.000	80,740.000
0240	643.0920	Traffic Control Covering Signs Type II	EACH	20.000	20.000
0242	643.1000	Traffic Control Signs Fixed Message	SF	342.000	342.000
0244	643.1050	Traffic Control Signs PCMS	DAY	63.000	63.000
0246	643.3350	Temporary Marking Crosswalk Removable Tape 6-inch	LF	130.000	130.000
0248	643.5000	Traffic Control	EACH	1.000	1.000
0250	644.1440	Temporary Pedestrian Surface Matting	SF	1,320.000	1,320.000
0252	644.1601	Temporary Pedestrian Curb Ramp	DAY	6.000	6.000
0254	644.1605	Temporary Pedestrian Detectable Warning Field	SF	20.000	20.000
0256	644.1810	Temporary Pedestrian Barricade	LF	410.000	410.000
0258	645.0120	Geotextile Type HR	SY	109.000	109.000
0260	645.0130	Geotextile Type R	SY	76.000	76.000
0262	645.0220	Geogrid Type SR	SY	76,300.000	76,300.000
0264	646.1020	Marking Line Epoxy 4-Inch	LF	2,280.000	2,280.000
0266	646.2020	Marking Line Epoxy 6-Inch	LF	18,860.000	18,860.000
0268	646.2025	Marking Line Grooved Black Epoxy 6-Inch	LF	3,300.000	3,300.000
0270	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	53,400.000	53,400.000
0272	646.3020	Marking Line Epoxy 8-Inch	LF	880.000	880.000
0274	646.3040	Marking Line Grooved Wet Ref Epoxy 8-Inch	LF	600.000	600.000
0276	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	4,980.000	4,980.000
0278	646.5020	Marking Arrow Epoxy	EACH	49.000	49.000
0280	646.5120	Marking Word Epoxy	EACH	22.000	22.000
0282	646.5520	Marking Outfall Epoxy	EACH	4.000	4.000
0284	646.6120	Marking Stop Line Epoxy 18-Inch	LF	780.000	780.000
0286	646.6220	Marking Yield Line Epoxy 18-Inch	EACH	30.000	30.000
0288	646.7120	Marking Diagonal Epoxy 12-Inch	LF	730.000	730.000
0290	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	1,300.000	1,300.000

1330-00-73

Line	Item	Item Description	Unit	Total	Qty
0292	646.8120	Marking Curb Epoxy	LF	260.000	260.000
0294	646.8220	Marking Island Nose Epoxy	EACH	9.000	9.000
0296	650.4000	Construction Staking Storm Sewer	EACH	15.000	15.000
0298	650.4500	Construction Staking Subgrade	LF	11,500.000	11,500.000
0300	650.5000	Construction Staking Base	LF	11,500.000	11,500.000
0302	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	3,540.000	3,540.000
0304	650.6000	Construction Staking Pipe Culverts	EACH	2.000	2.000
0306	650.8000	Construction Staking Resurfacing Reference	LF	5,510.000	5,510.000
0308	650.8501	Construction Staking Electrical Installations (project) 01. 1330-00-73	EACH	1.000	1.000
0310	650.9000	Construction Staking Curb Ramps	EACH	22.000	22.000
0312	650.9500	Construction Staking Sidewalk (project) 01. 1330-00-73	EACH	1.000	1.000
0314	650.9911	Construction Staking Supplemental Control (project) 01. 1330-00-73	EACH	1.000	1.000
0316	650.9920	Construction Staking Slope Stakes	LF	11,500.000	11,500.000
0318	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	2,010.000	2,010.000
0320	652.0325	Conduit Rigid Nonmetallic Schedule 80 2-Inch	LF	1,035.000	1,035.000
0322	652.0605	Conduit Special 2-Inch	LF	820.000	820.000
0324	652.0615	Conduit Special 3-Inch	LF	1,150.000	1,150.000
0326	652.0800	Conduit Loop Detector	LF	3,142.000	3,142.000
0328	653.0135	Pull Boxes Steel 24x36-Inch	EACH	14.000	14.000
0330	653.0140	Pull Boxes Steel 24x42-Inch	EACH	25.000	25.000
0332	653.0905	Removing Pull Boxes	EACH	34.000	34.000
0334	654.0101	Concrete Bases Type 1	EACH	12.000	12.000
0336	654.0110	Concrete Bases Type 10	EACH	2.000	2.000
0338	654.0113	Concrete Bases Type 13	EACH	1.000	1.000
0340	654.0120	Concrete Bases Type 10-Special	EACH	5.000	5.000
0342	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	2.000	2.000
0344	655.0230	Cable Traffic Signal 5-14 AWG	LF	1,014.000	1,014.000
0346	655.0240	Cable Traffic Signal 7-14 AWG	LF	1,369.000	1,369.000
0348	655.0260	Cable Traffic Signal 12-14 AWG	LF	2,915.000	2,915.000
0350	655.0305	Cable Type UF 2-12 AWG Grounded	LF	1,460.000	1,460.000
0352	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	5,655.000	5,655.000
0354	655.0610	Electrical Wire Lighting 12 AWG	LF	1,152.000	1,152.000
0356	655.0700	Loop Detector Lead In Cable	LF	8,440.000	8,440.000
0358	655.0800	Loop Detector Wire	LF	10,586.000	10,586.000
0360	655.0900	Traffic Signal EVP Detector Cable	LF	2,705.000	2,705.000
0362	656.0201	Electrical Service Meter Breaker Pedestal (location) 01. STH 83 & CTH KE / Oakwood Rd	EACH	1.000	1.000
0364	656.0201	Electrical Service Meter Breaker Pedestal (location) 02. STH 83 & Cardinal Ln	EACH	1.000	1.000
0366	657.0100	Pedestal Bases	EACH	13.000	13.000
0368	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	1.000	1.000
0370	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	9.000	9.000
0372	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	3.000	3.000
0374	658.0173	Traffic Signal Face 3S 12-Inch	EACH	25.000	25.000
0376	658.0174	Traffic Signal Face 4S 12-Inch	EACH	20.000	20.000
0378	658.0416	Pedestrian Signal Face 16-Inch	EACH	10.000	10.000
0380	658.0500	Pedestrian Push Buttons	EACH	10.000	10.000
0382	658.5070	Signal Mounting Hardware (location) 01. STH 83 & Gold Rd	EACH	1.000	1.000
0384	658.5070	Signal Mounting Hardware (location) 02. STH 83 & CTH KE / Oakwood Rd	EACH	1.000	1.000
0386	658.5070	Signal Mounting Hardware (location) 03. STH 83 & Cardinal Ln	EACH	1.000	1.000

1330-00-73

Line	Item	Item Description	Unit	Total	Qty
0388	659.1125	Luminaires Utility LED C	EACH	8.000	8.000
0390	659.5000.S	Lamp, Ballast, LED, Switch Disposal by Contractor	EACH	42.000	42.000
0392	690.0150	Sawing Asphalt	LF	6,850.000	6,850.000
0394	690.0250	Sawing Concrete	LF	350.000	350.000
0396	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	500.000	500.000
0398	740.0440	Incentive IRI Ride	DOL	16,700.000	16,700.000
0400	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	3,000.000	3,000.000
0402	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	7,200.000	7,200.000
0404	SPV.0035	Special 01. Backfill Slurry	CY	19.000	19.000
0406	SPV.0060	Special 01. Install Type 10 Pole	EACH	2.000	2.000
0408	SPV.0060	Special 02. Install Type 10 Special Pole	EACH	5.000	5.000
0410	SPV.0060	Special 03. Install Monotube Arms 25-FT	EACH	1.000	1.000
0412	SPV.0060	Special 04. Install Monotube Arms 30-FT	EACH	1.000	1.000
0414	SPV.0060	Special 05. Install Monotube Arms 35-FT Special	EACH	1.000	1.000
0416	SPV.0060	Special 06. Install Monotube Arms 45-FT Special	EACH	4.000	4.000
0418	SPV.0060	Special 07. Install Luminaire Arms Steel 15-FT	EACH	8.000	8.000
0420	SPV.0060	Special 08. Transport and Install State Furnished EVP Detector Heads Golf Rd	EACH	1.000	1.000
0422	SPV.0060	Special 09. Transport and Install State Furnished EVP Detector Heads CTH KE / Oakwood Rd	EACH	1.000	1.000
0424	SPV.0060	Special 10. Transport and Install State Furnished EVP Detector Heads Cardinal Ln	EACH	1.000	1.000
0426	SPV.0060	Special 11. Transport and Install State Furnished Traffic Signal Cabinet Golf Rd	EACH	1.000	1.000
0428	SPV.0060	Special 12. Transport and Install State Furnished Traffic Signal Cabinet Oakwood Rd	EACH	1.000	1.000
0430	SPV.0060	Special 13. Transport and Install State Furnished Traffic Signal Cabinet Cardinal Ln	EACH	1.000	1.000
0432	SPV.0060	Special 14. Transport Traffic Signal and Intersection Lighting Materials Oakwood Rd	EACH	1.000	1.000
0434	SPV.0060	Special 15. Transport Traffic Signal and Intersection Lighting Materials Cardinal Ln	EACH	1.000	1.000
0436	SPV.0060	Special 16. Install Type 13 Pole	EACH	1.000	1.000
0438	SPV.0060	Special 17. Install Monotube Arms 50-FT	EACH	1.000	1.000
0440	SPV.0060	Special 20. Section Corner Monuments	EACH	1.000	1.000
0442	SPV.0060	Special 30. Utility Line Opening (ULO)	EACH	6.000	6.000
0444	SPV.0060	Special 31. Inlet Covers Type H with Curb Plate	EACH	1.000	1.000
0446	SPV.0090	Special 01. Ditching and Shaping	LF	127.000	127.000

3

3

STH 83 EARTHWORK SUMMARY

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)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.15	MASS ORDINATE +/- (14)	WASTE	COMMENT
DIVISION 1											
STH 83 PAVEMENT REPLACEMENT	305+85.26 TO 422+44.36	NET EXCEPTION STRUCTURES B-67-220 & B-67-168	50,474	0	6,992	43,482	1,305	1,501	41,981	41,981	
SUBTOTAL			50,474	0	6,992	43,482	1,305	1,501	41,981	41,981	
GRAND TOTAL			50,474	0	6,992	43,482	1,305	1,501	41,981	41,981	
TOTAL COMMON EXC			50,474								

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.
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(13) EXPANDED FILL FACTOR = 1.15
DEPENDING ON SELECTIONS: **EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR**
(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

REMOVALS - BUTT JOINTS

CATEGORY	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY
0010	BEGIN & END PROJECT	320
0010	SIDEROADS	1,710
	TOTAL 0010	2,030

REMOVALS - MILLING

CATEGORY	STATION	TO	STATION	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY
0010	249+16	-	270+00	15,600
0010	270+00	-	278+50	7,200
0010	278+50	-	287+75	8,400
0010	287+75	-	305+00	12,000
			TOTAL 0010	43,200

REMOVALS - STORM SEWER

CATEGORY	STATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.0220 REMOVING INLETS EACH	204.0245.01 REMOVING STORM SEWER (01. 12-INCH) LF	204.9060.S.06 REMOVING (ITEM DESCRIPTION) (06. REMOVING REINFORCED CONCRETE ARPON ENDWALL 24-INCH) EACH
0010	308+62	1	-	-	-
0010	309+35	1			
0010	315+50	1	-	-	-
0010	334+00	1	-	-	-
0010	363+50	1	-	-	-
0010	371+30	2	2	-	-
0010	377+00	1	-	-	-
0010	389+80	1	-	-	-
0010	398+00	-	1	17	-
0010	398+20	-	-	-	1
	TOTAL 0010	9	3	17	1

CLEARING & GRUBBING

CATEGORY	STATION	TO	STATION	LOCATION	201.0110 CLEARING SY	201.0120 CLEARING ID	201.0210 GRUBBING SY	201.0220 GRUBBING ID
0010	331+40	-	332+11	STH 83 LT	50	-	50	-
0010	331+72			STH 83 +48.3 LT	-	25	-	25
0010	361+66	-	362+35	STH 83 LT	40	-	40	-
0010	368+51	-	370+09	STH 83 LT	330	-	330	-
0010	372+64	-	373+26	STH 83 RT	100	-	100	-
0010	373+06	-	373+45	STH 83 LT	30	-	30	-
0010	378+26	-	379+18	STH 83 LT	60	-	60	-
				TOTAL 0010	610	25	610	25

REMOVALS - CONCRETE

CATEGORY	LOCATION	204.0150 REMOVING CURB & GUTTER LF	204.0155 REMOVING CONCRETE SIDEWALK SY
0010	GOLF RD INT	305	310
0010	NAGAWICKA INT	343	-
0010	STA 314+89 TO 318+13 RT	325	-
0010	OAKWOOD RD INT	328	-
0010	STA 342+25 TO 347+00	458	-
0010	WALNUT INT (SOUTH)	171	-
0010	WALNUT INT (NORTH)	196	-
0010	STA 365+00 TO 368+50 LT	332	-
0010	STA 374+25 TO 377+25 LT	275	-
0010	CARDINAL INT	389	-
0010	INLET ADJUSTMENTS	278	-
	TOTAL 0010	3,400	310

3

3

AGGREGATE ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	312.0115 SELECT CRUSHED MATERIAL CY	313.0115 PIT RUN CY	628.7560 TRACKING PADS EACH
0010	251+54	-	277+75		130	-	-	-	-
0010	277+75	-	287+15		40	-	-	-	-
0010	287+15	-	300+35		150	-	-	-	-
0010	304+32	-	333+01		520	6780	-	6170	-
0010	333+01	-	350+20		280	4690	-	6360	-
0010	350+20	-	362+56		270	3010	-	2510	-
0010	362+56	-	370+40		130	2210	-	1800	-
0010	371+02	-	396+35		630	6330	-	5770	-
0010	396+35	-	418+73		440	6110	-	5490	-
0010	421+10	-	421+86		-	170	-	-	-
0010		-		PROJECT LIMITS	-	-	250	-	4
		-							
				TOTAL 0010	2,590	29,300	250	28,100	4

PAVEMENT ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	211.0101.01 PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) (01. 1330-00-73) EACH	213.0100.01 FINISHING ROADWAY (PROJECT) (01. 1330-00-73) EACH	415.0080 CONCRETE PAVEMENT 8-INCH SY	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY	455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6425 HMA PAVEMENT 5 MT 58-28 H TON
0010	249+24	-	269+51		-	-	-	-	2310	2020	1440
0010	269+51	-	277+92		-	-	-	-	1060	930	660
0010	277+92	-	287+06		-	-	-	-	1230	1090	770
0010	287+06	-	304+42		-	-	-	-	1710	1550	1060
0010	316+50	-	333+01		-	-	-	-	720	2070	510
0010	333+01	-	343+23		-	-	-	-	890	2560	660
0010	343+23	-	350+20		-	-	-	-	790	2270	540
0010	350+20	-	362+56		-	-	-	-	380	1090	280
0010	362+56	-	370+40		-	-	-	-	750	2140	520
0010	371+02	-	384+85		-	-	-	-	540	1540	390
0010	384+85	-	396+35		-	-	-	-	780	2250	590
0010	396+35	-	410+28		-	-	-	-	570	1620	380
0010	410+28	-	418+30		-	-	-	-	1060	3050	730
0010					-	-	-	-	430	1230	340
0010	421+24	-	421+86		-	-	-	-	40	-	30
0010		-		PROJECT LIMITS	1	1	-	-	-	-	-
0010				STRUCTURE B-67-168	-	-	48	-			
0100		-		STRUCTURE B-67-168	-	-	-	133	-	-	-
		-									
				TOTAL 0010	1	1	48	-	13,260	25,410	8,900
				TOTAL 0100	-	-	-	133	-	-	-
				TOTAL	1	1	48	133	13,260	25,410	8,900

SURFACE DRAINS

CATEGORY	STATION	LOCATION	606.0100 RIPRAP LIGHT CY	* 606.0200 RIPRAP MEDIUM CY	* 645.0120 GEOTEXTILE TYPE HR SY	645.0130 GEOTEXTILE TYPE R SY	602.3010 CONCRETE SURFACE DRAINS CY
0010	318+15	RT	-	4	9	-	3
0010	333+50	LT	-	-	-	-	3
0010	333+65	RT	-	-	-	-	3
0010	334+10	LT	4	-	-	11	3
0010	334+25	RT	-	-	-	-	3
0010	346+80	RT	-	4	9	-	3
0010	368+31	LT	-	4	9	-	3
0010	371+59	LT	7	-	-	21	3
0010	371+59	RT	7	-	-	21	3
0010	377+06	LT	-	-	-	-	3
0010	397+10	LT	3	-	-	9	3
0010	397+80	LT	2	-	-	5	3
0010	398+50	LT	3	-	-	9	3
0010	418+29	LT	-	3	5	-	3
		TOTAL 0010	26	15	32	76	42

GEOGRID

CATEGORY	STATION	TO	STATION	645.0220 GEOGRID TYPE SR SY
0010	304+32	-	421+86	66,500
0010	372+60	-	391+00	9,800
		-		
			TOTAL 0010	76,300

3

PAVEMENT ITEMS CONT.

CATEGORY	LOCATION	465.0105 ASPHALTIC SURFACE TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0510 ASPHALTIC RUMBLE STRIPS, SHOULDER DIVIDED ROADWAY LF	465.0520 ASPHALTIC RUMBLE STRIPS, SHOULDER LF	465.0560 ASPHALTIC RUMBLE STRIPS, CENTERLINE LF
0010	PROJECT WIDE	20	120	9,550	23,600	7,750
	TOTAL 0010	20	120	9,550	23,600	7,750

PATCHING

CATEGORY	LOCATION	465.0110 ASPHALTIC SURFACE PATCHING TON	204.0110 REMOVING ASPHALTIC SURFACE SY	REMARKS
0010	SIGNAL LOOP INSTALLATION OAKWOOD EAST APPROACH	55	117	ASSUMED EX PAVEMENT DEPTH 8"
0010	SIGNAL LOOP INSTALLATION OAKWOOD WEST APPROACH	19	40	ASSUMED EX PAVEMENT DEPTH 8"
0010	SIGNAL LOOP INSTALLATION CARDINAL EAST APPROACH	18	50	ASSUMED EX PAVEMENT DEPTH 6"
0010				
0010	UNDISTRIBUTED	1,008	4,393	ASSUMED EX PAVEMENT DEPTH 5.5"
	TOTAL 0010	1,100	4,600	

DRAINAGE ITEMS

CATEGORY	LOCATION	520.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH EACH	520.3336 CULVERT PIPE CLASS III-A 36-INCH LF	520.4124 CULVERT PIPE CLASS IV 24-INCH LF	521.1518 APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 18-INCH 6 TO 1 EACH	521.3118 CULVERT PIPE CORRUGATED STEEL 18-INCH LF	522.0424 CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	522.0430 CULVERT PIPE REINFORCED CONCRETE CLASS IV 30-INCH LF	522.0436 CULVERT PIPE REINFORCED CONCRETE CLASS IV 36-INCH LF	* 522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	522.1030 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	524.0636 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 36-INCH EACH	633.5200 MARKERS CULVERT END EACH	REMARKS
0010	309+40 LT	-	-	-	2	35	-	-	-	-	-	-	-	MIN THICKNESS - 0.064
0010	315+50	-	-	-	-	-	8	-	-	1	-	-	2	
0010	334+00	2	-	64	-	-	-	-	-	-	-	-	2	MIN THICKNESS OF STEEL OPTION - 0.064
0010	349+70.42	-	-	-	-	-	-	-	8	-	-	1	2	TWIN 36-INCH CULVERT PIPES
0010	349+77.62	-	-	-	-	-	-	-	8	-	-	1	2	TWIN 36-INCH CULVERT PIPES
0010	363+50 LT	-	-	-	2	65	-	-	-	-	-	-	-	MIN THICKNESS - 0.064
0010	365+50	-	-	-	-	-	-	-	-	-	-	-	2	
0010	377+00	-	-	-	-	-	-	90	-	-	2	-	2	
0010	389+80	-	97	-	-	-	-	-	-	-	-	-	2	MIN THICKNESS OF STEEL OPTION - 0.079
0010	398+20	-	-	-	-	-	-	-	-	-	-	-	2	
	TOTAL 0010	2	97	64	4	100	8	90	16	1	2	2	16	

RESTORATION

CATEGORY	STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	628.6510 SOIL STABILIZER TYPE B ACRE	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0160 SEEDING MIXTURE NO. 60 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL	REMARKS
				UNDISTRIBUTED	94	493	300	0.1	2.3	16	3	43	20.5	
0010	246+00	-	305+10	R/L STH 83	40	152	-	-	0.1	4	-	2	4.4	
0010	305+10	-	333+80	R/L STH 83	1,110	4,439	-	-	1.8	100	-	50	124.7	
0010	333+80	-	397+80	R/L STH 83	2,772	11,084	-	-	4.4	250	42	125	311.2	
0010	397+80	-	422+50	R/L STH 83	884	3,532	-	-	1.4	80	-	40	99.2	
				TOTAL 0010	4,900	19,700	300	0.1	10	450	45	260	560	

EROSION CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.7005 INLET PROTECTION TYPE A EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH
0010	-		-	UNDISTRIBUTED	5694	5694	2	3	385	152	-	-	-	50	8	30
0010	246+00	-	305+10	R/L STH 83	401	401	-	-	192	-	1	30	3	126	-	66
0010	305+10	-	333+80	R/L STH 83	4,504	4,504	-	-	4,810	739	-	-	-	82	9	110
0010	333+80	-	397+80	R/L STH 83	8,526	8,526	-	-	9,013	4,843	-	-	-	133	50	352
0010	397+80	-	422+50	R/L STH 83	875	875	-	-	4,300	116	4	-	-	209	3	22
				TOTAL 0010	20,000	20,000	2	3	18,700	5,850	5	30	3	600	70	580

CULVERT MAINTENANCE

CATEGORY	STATION	TO	STATION	520.8700 CLEANING CULVERT PIPES EACH	* 606.0200 RIPRAP MEDIUM CY	* 645.0120 GEOTEXTILE TYPE HR SY	SPV.0090.01 SPECIAL (01. DITCHING AND SHAPING) LF
0010	315+50	-		1	24	48	107
0010	334+00	-		-	1	2	-
0010	349+80	-	349+90	-	9	10	-
0010	365+60	-		1	-	-	-
0010	377+00	-		1	4	9	-
0010	389+80	-		-	3	5	
0010	397+00	-		1	-	-	20
0010	398+20	-		-	2	3	-
			TOTAL 0000	4	43	77	127

SIDEWALK & CURB RAMPS

CATEGORY	LOCATION	601.0600 CONCRETE CURB PEDESTRIAN LF	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW SF	650.9000 CONSTRUCTION STAKING CURB RAMPS EACH
0010	GOLF INT	114	2915	130	-	14
0010	OAKWOOD INT	-	845	60	48	8
0010	PROJECT TOTAL 0010	114	3,760	190	48	22

CURB & GUTTER

CATEGORY	STATION	TO	STATION	LOCATION	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0415 CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	601.0584 CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT LF	601.0586 CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBTT LF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF
0010				GOLF INT	408	-	-	-	-	136
0010				NAGAWICKA INT	-	-	332	-	-	-
0010	314+90	-	318+13	RT	-	323	-	-	-	-
0010				OAKWOOD INT	15	-	294	-	-	-
0010	342+24	-	346+81	RT & LT	-	457	-	-	-	-
0010				WALNUT SOUTH INT	-	-	171	-	-	-
0010				WALNUT NORTH INT	-	-	196	-	-	-
0010	365+04	-	368+32	LT	-	328	-	-	-	-
0010	371+03	-	371+59	NORTH SIDE OF BARK RIVER	-	104	-	-	-	-
0010	374+32	-	377+07	LT	-	275	-	-	-	-
0010				CARDINAL INT	50	-	342	-	-	-
0010	418+29	-	418+74	Lt	-	-	-	30	15	-
0010	421+09	-	421+53	Lt	-	-	-	29	15	-
0010				INLET ADJUSTMENTS	-	273	-	-	-	-
				TOTAL 0010	473	1,760	1,335	59	30	136

STORM SEWER

CATEGORY	STATION	FROM STR	TO STR	RIM ELEV	INVERT ELEV	DISCHARGE ELEV	SLOPE	* 522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0424 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	611.0610 INLET COVERS TYPE BW EACH	611.0630 INLET COVERS TYPE HM-GJ EACH	611.3004 INLETS 4-FT DIAMETER EACH	SPV.0060.31 SPECIAL (INLET COVERS TYPE H WITH CURB PLATE) EACH	REMARKS
0010	248+92							-	-	-	-	-	-	1	GOLF ROAD MEDIAN INLET
0010	398+04	INLETS 4-FT DIAMETER	EX MH	919.43	916.24	916.00	1.00%	-	24	-	1	-	1	-	CARDINAL LN INTERSECTION SS WORK
0010	398+20	PROPOSED APRON ENDWALL	EX MH	-	918.55	-	-	1	-	8	-	-	-	-	CARDINAL LN INTERSECTION SS WORK
0010	UNDISTRIBUTED	-	-	-	-	-	-	-	-	-	-	2	-	-	INLET ADJUSTMENTS
			TOTAL 0010					1	24	8	1	2	1	1	

STORM SEWER ADJUSTMENTS

CATEGORY	LOCATION	611.8110 ADJUSTING MANHOLE COVERS EACH	611.8115 ADJUSTING INLET COVERS EACH
0010	PROJECT WIDE	7	27
	TOTAL 0010	7	27

GUARDRAIL

CATEGORY	LOCATION	204.0165 REMOVING GUARDRAIL LF	614.0397 GUARDRAIL MOW STRIP EMULSIFIED ASPHALT SY	614.2300 MGS GUARDRAIL 3 LF	614.2330 MGS GUARDRAIL 3 K LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	SPV.0035.01 SPECIAL (01. BACKFILL SLURRY) CY	REMARKS
0010	B-67-220 - SW	80	52	12.5	-	40	1	1	
0010	B-67-220 - SE	80	51	12.5	12.5	40	1	1	
0010	B-67-220 - NE	90	27	50.0	-	40	1	1	
0010	B-67-220 -NW	90	27	50.0	-	40	1	1	
0010	B-67-168 -SW	167	39	50.0	-	40	1	2	
0010	B-67-168 -SE	1,050	471	937.5	-	40	1	9	BEGIN RUN NEAR STA 408+28 - RT
0010	B-67-168 -NW	142	42	25.0	-	40	1	2	
0010	B-67-168 -NE	142	64	25.0	-	40	1	2	
	TOTAL 0010	1,841	773	1,162.5	12.5	320	8	19	

UNDERDRAIN

CATEGORY	LOCATION	612.0106 PIPE UNDERDRAIN 6-INCH LF	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF	612.0806 APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 6-INCH EACH	646.5520 MARKING OUTFALL EPOXY EACH
0010	314+90 TO 318+13 - RT	330	10	1	1
0010	342+24 TO 346+81 - RT	460	10	2	1
0010	365+04 TO 368+32 - LT	330	10	1	1
0010	374+32 TO 377+07 - LT	280	10	1	1
	TOTAL 0000	1,400	40	5	4

TRAFFIC CONTROL

CATEGORY	DURATION	LOCATION	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0800 TRAFFIC CONTROL ARROW BOARDS DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	643.3350 TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH LF	643.5000 TRAFFIC CONTROL EACH	644.1440 TEMPORARY PEDESTRIAN SURFACE MATTING SF	644.1601 TEMPORARY PEDESTRIAN CURB RAMP DAY	644.1605 TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD SF	644.1810 TEMPORARY PEDESTRIAN BARRICADE LF	NOTES
0010	30	STAGE 1A LANE SHIFT	2,490	150	300	360	60	390	-	-	-	-	-	-	-	-	-	
0010	30	STAGE 1B	-	660	1,200	-	-	12,480	10	-	21	-	-	-	-	-	-	COVER SIGNS FOR 1 CYCLE. STAYS IN PLACE THROUGHOUT DETOUR
0010	35	STAGE 2	-	490	700	-	-	14,420	-	-	21	-	-	-	-	-	-	
0010	105	STAGE 3	-	2,640	4,320	-	-	49,920	-	-	21	-	-	-	-	-	-	
0010	60	SIDEROAD: NAGA WAUKEE PARK *	-	300	120	-	-	180	-	-	-	-	-	-	-	-	-	TRAFFIC CONTROL ON WEST SIDE ONLY.
0010	60	SIDEROAD: MARINER DR *	-	600	240	-	-	240	-	-	-	-	-	-	-	-	-	OMIT "ROAD CLOSED 500 FT." SIGNS
0010	60	SIDEROAD: MEADOW LN **	-	120	120	-	-	120	-	-	-	-	-	-	-	-	-	TRAFFIC CONTROL ON WEST SIDE ONLY. OMIT "ROAD CLOSED 500 FT." SIGN.
0010	95	SIDEROAD: NAGAWICKA RD E **	-	190	190	-	-	190	-	-	-	-	-	-	-	-	-	TRAFFIC CONTROL ON WEST SIDE ONLY. OMIT "ROAD CLOSED 500 FT." SIGN.
0010	140	SIDEROAD: OAKWOOD RD / W N SHORE DR **	-	560	560	-	-	700	-	-	-	-	-	-	-	-	-	OMIT "ROAD CLOSED 500 FT." SIGN ON EAST SIDE ONLY.
0010	105	SIDEROAD: WALNUT RIDGE DR (SOUTH) *	-	530	210	-	-	210	-	-	-	-	-	-	-	-	-	TRAFFIC CONTROL ON EAST SIDE ONLY. OMIT "ROAD CLOSED 500 FT." SIGN.
0010	105	SIDEROAD: WALNUT RIDGE DR (NORTH) *	-	210	210	-	-	210	-	-	-	-	-	-	-	-	-	TRAFFIC CONTROL ON EAST SIDE ONLY. OMIT "ROAD CLOSED 500 FT." SIGN.
0010	105	SIDEROAD: CARDINAL LANE **	-	210	210	-	-	210	-	-	-	-	-	-	-	-	-	TRAFFIC CONTROL ON EAST SIDE ONLY. OMIT "ROAD CLOSED 500 FT." SIGN.
0010	105	SIDEROAD: VETTELSON RD *	-	1,050	420	-	-	630	-	-	-	-	-	-	-	-	-	
0010	14	PEDESTRIAN INTERSECTION STAGE 1A	1,330	200	140	-	-	450	4	-	-	-	-	990	5	10	290	COVER SIGNS FOR 1 CYCLE THROUGHOUT ALL PEDESTRIAN STAGES.
0010	7	PEDESTRIAN INTERSECTION STAGE 1B	810	110	90	-	-	130	2	-	-	-	-	-	-	-	20	COVER SIGNS FOR 1 CYCLE.
0010	14	PEDESTRIAN INTERSECTION STAGE 2	1,360	200	140	-	-	260	-	-	-	130	-	330	1	10	100	
		PROJECT	-	-	-	-	-	-	4	342	-	-	1	-	-	-	-	
		TOTAL 0010	5,990	8,220	9,170	360	60	80,740	20	342	63	130	1	1,320	6	20	410	

* SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES DETAIL 1 (NO ACCESS TO PROJECT)

** SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES DETAIL 2 (CONTRACTOR, LOCAL BUSINESS, AND RESIDENT ACCESS TO PROJECT)

PERMANENT PAVEMENT MARKINGS

CATEGORY	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH LF	646.5020 MARKING ARROW EPOXY EACH	646.5120 MARKING WORD EPOXY EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.6220 MARKING YIELD LINE EPOXY 18-INCH EACH	646.7120 MARKING DIAGONAL EPOXY 12-INCH LF	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH LF	646.8120 MARKING CURB EPOXY LF	646.8220 MARKING ISLAND NOSE EPOXY EACH	646.4040 MARKING LINE GROOVED WET REF EPOXY 10-INCH LF	646.3020 MARKING LINE EPOXY 8-INCH LF	646.3040 MARKING LINE GROOVED WET REF EPOXY 8-INCH LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH LF	646.2025 MARKING LINE GROOVED BLACK EPOXY 6-INCH LF	646.2020 MARKING LINE EPOXY 6-INCH LF	REMARKS
0010	PROJECT WIDE	2,280	45	19	700	30	620	1,300	260	9	4,390	880	600	52,400	2,320	15,900	MARKING LOCATIONS NOT SHOWN ON PLAN DETAIL SHEETS. RESTRIPE MARKINGS TO MATCH CURRENT STANDARDS.
0010	N LIMIT TO W CAPITOL DR	-	4	3	80	-	110	-	-	-	590	-	-	1000	980	2,960	
	TOTAL 0010	2,280	49	22	780	30	730	1,300	260	9	4,980	880	600	53,400	3,300	18,860	

3

CONSTRUCTION STAKING

CATEGORY	STATION	TO	STATION	LOCATION	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	SPV.0060.20 SPECIAL (20. SECTION CORNER MONUMENTS) EACH
				332+93.28, 4.86' RT	-	-	-	-	-	-	-	1
0010	249+24	-	304+32		-	-	-	690	-	5,510	-	-
0010	304+32	-	421+86		-	11,500	11,500	2,850	-	-	11,500	-
			PROJECT		15	-	-	-	2	-	-	-
				TOTAL 0010	15	11,500	11,500	3,540	2	5,510	11,500	1

ULO

CATEGORY	LOCATION	SPV.0060.30 SPECIAL (UTILITY LINE OPENING (ULO)) EACH
0010	GOLF	2
0010	OAKWOOD	2
0010	CARDINAL	2
	TOTAL 0010	6

SAWING

CATEGORY	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
0010	GOLF RD - SW	-	85
0010	GOLF RD - SE	70	-
0010	GOLF RD - NE	10	85
0010	GOLF RD - NW	90	-
0010	PARK SERVICE RD	30	-
0010	MARINER DR	40	-
0010	LINK CT	50	-
0010	MEADOW LN	80	-
0010	NAGAWICKA RD	80	-
0010	OAKWOOD RD	100	-
0010	WALNUT RIDGE SOUTH	40	-
0010	WALNUT RIDGE NORTH	40	-
0010	BARK RIVER STRUCTURE	110	-
0010	CARDINAL RD	90	-
0010	END PROJECT	-	-
0010	LOOP INSTALLATION OAKWOOD	210	3
0010	LOOP INSTALLATION CARDINAL	90	12
0010	REMOVING PAVEMENT FOR PATCHING	5720	-
0010	INLET ADJUSTMENTS	-	165
	TOTAL 0010	6,850	350

3

STATE FURNISHED MATERIALS SUMMARY - FOR INFORMATION ONLY

EACH	DESCRIPTION
1	TRAFFIC SIGNAL CONTROLLER AND CABINET
5	EVP DETECTOR HEADS WITH CONFIRMATION LIGHTS

REMOVING TRAFFIC SIGNALS

LOCATION	204.9060.S.01 REMOVING TRAFFIC SIGNALS EACH
STH 83 & GOLF RD	1
TOTAL	1

CONDUIT

FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0605* CONDUIT SPECIAL 2-INCH L.F.
PB16	SB14	15	--
PB12	PB24	115	--
PB24	PB25	--	110
PB25	PB26	--	115
PB26	SB15	125	--
	TOTAL	255	225

* QUANTITY SHOWN ELSEWHERE ON PLAN

PULL BOXES

PULL BOX NO.	LOCATION STA	LOCATION OFFSET	653.0140* PULL BOXES STEEL 24x42-INCH EACH
PB24	FIELD	LOCATE	1
PB25	FIELD	LOCATE	1
PB26	FIELD	LOCATE	1
TOTAL		TOTAL	3

* QUANTITY SHOWN ELSEWHERE ON PLAN

CONCRETE BASES

SIGNAL BASE NO.	LOCATION STA	LOCATION OFFSET	654.0101* CONCRETE BASES TYPE 1 EACH
SB14	348+36.2	45.6 RT	1
SB15	FIELD	LOCATE	1
TOTAL		TOTAL	2

* QUANTITY SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0240* CABLE TRAFFIC SIGNAL 7-14 AWG L.F.
CB1	SB14	275
	TOTAL	275

* QUANTITY SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0515* ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.
SB9	SB15	790
SB15	SB11	830
SB13	SB14	45
SB14	SB1	185
SB15	PB12	480
SB15	PB24	370
SB15	PB25	265
SB15	PB26	150
	TOTAL	3115

* QUANTITY SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO SIGNAL HEAD NUMBER	655.0230* CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240* CABLE TRAFFIC SIGNAL 7-14 AWG L.F.
SB1	12	22	--
SB2	5	--	22
SB2	13	--	22
SB8	6	--	22
SB8	8	22	--
SB8	30	22	--
SB9	7	--	22
SB9	11	--	22
SB14	33	22	--
	TOTAL	66	110

* QUANTITY SHOWN ELSEWHERE ON PLAN

POLES

SIGNAL BASE NO.	657.0100* PEDESTAL BASES EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH	657.0425* TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.0430* TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT EACH	658.0500* PEDESTRIAN PUSH BUTTONS EACH
SB8	1	--	1	--	1
SB14	1	--	--	1	1
SB15	1	1	--	--	--
TOTAL	3	1	1	1	2

3

FACES

SIGNAL BASE NO.	SIGNAL HEAD NO.	658.0173* TRAFFIC SIGNAL FACE 3S-12 INCH EACH	658.0174* TRAFFIC SIGNAL FACE 4S-12 INCH EACH	658.0416* PEDESTRIAN SIGNAL FACE 16-INCH EACH
SB1	12	--	1	--
SB2	5	--	1	--
SB2	13	--	1	--
SB8	6	--	1	--
SB8	8	1	--	--
SB8	30	--	--	1
SB9	7	--	1	--
SB9	11	--	1	--
SB14	33	--	--	1
	TOTAL	1	6	2

* QUANTITY SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL MOUNTING HARDWARE

LOCATION	658.5070.01 SIGNAL MOUNTING HARDWARE EACH
STH 83 & GOLF RD	1
TOTAL	1

EMERGENCY VEHICLE PREEMPTION

LOCATION	SPV.0060.08 TRANSPORT AND INSTALL STATE FURNISHED EVP DETECTOR HEADS AND CONFIRMATION LIGHTS EACH
STH 83 & GOLF RD	1
TOTAL	1

LAMP, BALLAST, LED, SWITCH DISPOSAL

FIXTURE TYPE	659.5000.S* LAMP, BALLAST, SWITCH DISPOSAL BY CONTRACTOR EACH
TRAFFIC SIGNAL, THREE SECTION	1
TRAFFIC SIGNAL, FIVE SECTION	4
TRAFFIC SIGNAL, PEDESTRIAN	2
MERCURY SWITCHES	1
TOTAL	8

* QUANTITY SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL EVP DETECTOR CABLE

FROM	TO	655.0900* TRAFFIC SIGNAL EVP DETECTOR CABLE L.F.
CB1	SB15 (HEAD D)	1155
	TOTAL	1155

* QUANTITY SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL CABINET

LOCATION	SPV.0060.11 TRANSPORT AND INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET EACH
STH 83 & GOLF RD	1
TOTAL	1

LAMP, BALLAST, LED, SWITCH DISPOSAL (FOR INFORMATION ONLY)

LOCATION	TRAFFIC SIGNAL THREE SECTION EACH	TRAFFIC SIGNAL FIVE SECTION EACH	TRAFFIC SIGNAL PEDESTRIAN EACH	MERCURY SWITCHES EACH
CB1	--	--	--	1
SB2	--	2	--	--
SB8	1	--	1	--
SB9	--	2	--	--
SB13	--	--	1	--
	1	4	2	1

3

3

STATE FURNISHED MATERIALS SUMMARY - FOR INFORMATION ONLY

EACH	DESCRIPTION
1	TRAFFIC SIGNAL CONTROLLER AND CABINET
1	POLES TYPE 10
3	POLES TYPE 10 SPECIAL
1	MONOTUBE ARMS 25-FT
3	MONOTUBE ARMS 45-FT SPECIAL
4	LUMINAIRE ARMS STEEL 15-FT
4	EVP DETECTOR HEADS WITH CONFIRMATION LIGHTS
1	CELL MODEM

LAMP, BALLAST, LED, SWITCH DISPOSAL (FOR INFORMATION ONLY)

LOCATION	TRAFFIC SIGNAL THREE SECTION EACH	TRAFFIC SIGNAL FIVE SECTION EACH	LED LAMP EACH	MERCURY SWITCHES EACH
CB1	--	--	--	1
SB1	1	1	--	--
SB2	--	1	1	--
SB3	1	1	--	--
SB4	--	1	1	--
SB5	2	--	--	--
SB6	1	--	1	--
SB7	2	--	--	--
SB8	1	--	1	--
	8	4	4	1

LAMP, BALLAST, LED, SWITCH DISPOSAL

FIXTURE TYPE	659.5000.S* LAMP, BALLAST, SWITCH DISPOSAL BY CONTRACTOR EACH
TRAFFIC SIGNAL, THREE SECTION	8
TRAFFIC SIGNAL, FIVE SECTION	4
LED LAMP	4
MERCURY SWITCHES	1
TOTAL	17

* QUANTITY SHOWN ELSEWHERE ON PLAN

REMOVING TRAFFIC SIGNALS

LOCATION	204.9060.S.02 REMOVING TRAFFIC SIGNALS EACH
STH 83 & OAKWOOD RD	1
TOTAL	1

REMOVE PULL BOXES

PULL BOX NO.	653.0905* REMOVING PULL BOXES EACH
PB1	1
PB2	1
PB3	1
PB4	1
PB5	1
PB6	1
PB7	1
PB8	1
PB9	1
PB10	1
PB11	1
PB12	1
PB13	1
PB14	1
PB15	1
PB16	1
PB17	1
PB18	1
TOTAL	18

PULL BOXES

PULL BOX NO.	LOCATION STA	LOCATION OFFSET	653.0135* PULL BOXES STEEL 24x36-INCH EACH	653.0140* PULL BOXES STEEL 24x42-INCH EACH
PB1	333+47.8	65.7 LT	--	1
PB2	333+44.7	83.2 LT	--	1
PB3	47+03.0	19.1 RT	--	1
PB4	334+20.1	66.9 LT	--	1
PB5	334+50.0	44.0 LT	--	1
PB6	334+61.5	43.9 LT	1	--
PB7	336+58.9	41.1 LT	1	--
PB8	338+08.5	33.0 LT	1	--
PB9	334+50.8	39.1 RT	--	1
PB10	334+23.2	69.6 RT	--	1
PB11	334+22.8	83.9 RT	1	--
PB12	52+77.7	29.5 LT	1	--
PB13	54+18.9	30.4 LT	1	--
PB14	333+60.8	71.2 RT	--	1
PB15	333+21.8	37.2 RT	--	1
PB16	333+07.4	37.4 RT	--	1
PB17	331+10.3	39.5 RT	--	1
PB18	329+62.0	26.5 RT	1	--
PB19	333+20.8	37.6 LT	--	1
TOTAL		TOTAL	7	12

* QUANTITY SHOWN ELSEWHERE ON PLAN

REMOVING CONCRETE BASES

SIGNAL BASE NO.	204.0195* REMOVING CONCRETE BASES EACH
SB1	1
SB2	1
SB3	1
SB4	1
SB5	1
SB6	1
SB7	1
SB8	1
CB1	1
TOTAL	9

* QUANTITY SHOWN ELSEWHERE ON PLAN

REMOVING WIRE

LOCATION	204.9060.S.04 REMOVING LOOP DETECTOR WIRE AND LEAD-IN CABLE EACH
STH 83 & OAKWOOD RD	1
TOTAL	1

3

CONDUIT

FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0235* CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.	652.0605* CONDUIT SPECIAL 2-INCH L.F.	652.0615* CONDUIT SPECIAL 3-INCH L.F.
CB1	PB1	--	60	--	--
PB1	SB1	10	--	--	--
PB1	PB2	15	--	--	--
PB2	PB3	--	--	200	--
PB1	PB4	--	--	--	140
PB4	SB2	--	5	--	--
PB4	SB3	10	--	--	--
PB4	PB5	--	80	--	--
PB5	SB4	10	--	--	--
PB5	PB6	10	--	--	--
PB6	PB7	200	--	--	--
PB7	PB8	150	--	--	--
PB5	PB9	--	--	--	170
PB9	SB5	--	5	--	--
PB9	PB10	--	80	--	--
PB10	SB6	15	--	--	--
PB10	PB11	10	--	--	--
PB11	PB12	195	--	--	--
PB12	PB13	140	--	--	--
PB10	PB14	--	--	--	130
PB14	SB7	--	15	--	--
PB14	PB15	--	100	--	--
PB15	SB8	10	--	--	--
PB15	PB16	10	--	--	--
PB16	PB17	--	--	200	--
PB17	PB18	150	--	--	--
PB15	PB19	--	--	--	150
PB19	SB9	--	10	--	--
PB19	SB10	10	--	--	--
PB19	CB1	--	60	--	--
	TOTAL	945	415	400	590

* QUANTITY SHOWN ELSEWHERE ON PLAN

CONCRETE BASES

SIGNAL BASE NO.	LOCATION STA	LOCATION OFFSET	654.0101* CONCRETE BASES TYPE 1 EACH	654.0110* CONCRETE BASES TYPE 10 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
CB1	333+23.8	61.4 LT	--	--	--	--	1
SB1	333+41.9	57.7 LT	1	--	--	--	--
SB2	334+14.5	71.5 LT	--	1	--	--	--
SB3	334+28.8	60.3 LT	1	--	--	--	--
SB4	334+41.9	52.1 LT	1	--	--	--	--
SB5	334+43.6	45.7 RT	--	--	1	--	--
SB6	334+29.8	56.7 RT	1	--	--	--	--
SB7	333+49.5	58.7 RT	--	--	--	1	--
SB8	333+31.4	45.8 RT	1	--	--	--	--
SB9	333+07.0	41.4 LT	--	--	--	1	--
SB10	333+30.3	47.7 LT	1	--	--	--	--
TOTAL		TOTAL	6	1	1	2	1

* QUANTITY SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0240* CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260* CABLE TRAFFIC SIGNAL 12-14 AWG L.F.
CB1	SB1	--	70
CB1	SB2	--	145
CB1	SB3	150	--
CB1	SB4	--	200
CB1	SB5	--	290
CB1	SB6	--	295
CB1	SB7	--	220
CB1	SB8	--	155
CB1	SB9	--	70
CB1	SB10	70	--
	TOTAL	220	1445

* QUANTITY SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0305* CABLE TYPE UF 2-12 AWG GROUNDED L.F.	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG L.F.
CB1	SB2	145	--
SB2	LUMINAIRE 1	--	144
SB2	SB5	210	--
SB5	LUMINAIRE 1	--	144
CB1	SB9	70	--
SB9	LUMINAIRE 1	--	144
SB9	SB7	225	--
SB7	LUMINAIRE 1	--	144
	TOTAL	650	576

* QUANTITY SHOWN ELSEWHERE ON PLAN

3

TRAFFIC DETECTOR LOOPS

LOOP NO.	HOME RUN PB	LOCATION** STA	LOCATION** OFFSET	SIZE (FT) X (FT)	NO. OF TURNS	PAVEMENT TYPE	SDD INSTALLATION REFERENCE	652.0800* CONDUIT LOOP DETECTOR L.F.	655.0700* LOOP DETECTOR LEAD IN CABLE L.F.	655.0800* LOOP DETECTOR WIRE L.F.
11	PB16	333+01.9	0.0LT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	118	135	372
12	PB16	333+29.9	0.1LT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	118	135	372
21	PB8	338+08.5	10.2LT	6 X 15	4	ASPHALT	9F15-4B OPTION 2	76	510	319
22	PB7	336+58.8	11.4LT	6 X 10	4	ASPHALT	9F15-4B OPTION 2	80	360	336
31	PB11	333+99.3	87.2RT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	88	250	277
32	PB11	333+99.9	59.2RT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	88	250	277
41	PB3	47+03.1	9.9 RT	6 X 6	4	ASPHALT	9F15-4B OPTION 2	34	250	143
42	PB2	333+56.5	90.0LT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	70	65	221
43	PB2	333+64.6	63.2LT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	70	65	221
51	PB6	334+66.7	0.2LT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	128	170	403
52	PB6	334+38.7	0.4LT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	128	170	403
61	PB18	329+61.5	6.0RT	6 X 15	4	ASPHALT	9F15-4B OPTION 2	72	485	302
62	PB17	331+10.2	11.5RT	6 X 10	3	ASPHALT	9F15-4B OPTION 2	68	335	214
71	PB2	333+68.8	90.1LT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	92	65	290
72	PB2	333+76.9	63.3LT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	104	65	328
81	PB13	54+27.6	11.5 LT	6 X 20	4	ASPHALT	9F15-4B OPTION 2	72	585	302
82	PB12	52+77.6	18.1 LT	6 X 10	4	ASPHALT	9F15-4B OPTION 2	44	445	185
83	PB11	334+10.7	87.6RT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	68	250	214
84	PB11	334+11.4	59.6RT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	68	250	214
							TOTAL	1586	4840	5393

** LOCATION IS TO FRONT CENTER OF DETECTOR LOOP

* QUANTITY SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0515* ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.
CB1	SB1	55
SB1	SB2	110
SB2	SB3	40
SB3	SB4	115
SB4	SB5	125
SB5	SB6	85
SB6	SB7	120
SB7	SB8	100
SB8	SB9	120
SB9	SB10	45
SB10	CB1	55
CB1	PB1	35
SB2	PB4	20
SB4	PB5	25
SB5	PB9	20
SB6	PB10	30
SB7	PB14	30
SB8	PB15	25
CB1	PB19	35
	TOTAL	1190

* QUANTITY SHOWN ELSEWHERE ON PLAN

3

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO SIGNAL HEAD NUMBER	655.0230* CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240* CABLE TRAFFIC SIGNAL 7-14 AWG L.F.
SB1	14	--	22
SB1	16	22	--
SB1	21	22	--
SB2	12	35	--
SB2	13	22	--
SB2	15	--	50
SB3	22	22	--
SB4	4	--	22
SB4	6	22	--
SB4	23	22	--
SB5	2	55	--
SB5	3	22	--
SB5	5	--	70
SB5	24	22	--
SB6	11	22	--
SB6	19	--	22
SB6	25	22	--
SB7	17	55	--
SB7	18	22	--
SB7	20	--	70
SB7	26	22	--
SB8	1	22	--
SB8	9	--	22
SB8	27	22	--
SB9	7	55	--
SB9	8	22	--
SB9	10	--	70
SB10	28	22	--
TOTAL		552	348

* QUANTITY SHOWN ELSEWHERE ON PLAN

FACES

SIGNAL BASE NO.	SIGNAL HEAD NO.	658.0173* TRAFFIC SIGNAL FACE 3S-12 INCH EACH	658.0174* TRAFFIC SIGNAL FACE 4S-12 INCH EACH	658.0416* PEDESTRIAN SIGNAL FACE 16-INCH EACH
SB1	14	--	1	--
SB1	16	1	--	--
SB1	21	--	--	1
SB2	12	1	--	--
SB2	13	1	--	--
SB2	15	--	1	--
SB3	22	--	--	1
SB4	4	--	1	--
SB4	6	1	--	--
SB4	23	--	--	1
SB5	2	1	--	--
SB5	3	1	--	--
SB5	5	--	1	--
SB5	24	--	--	1
SB6	11	1	--	--
SB6	19	--	1	--
SB6	25	--	--	1
SB7	17	1	--	--
SB7	18	1	--	--
SB7	20	--	1	--
SB7	26	--	--	1
SB8	1	1	--	--
SB8	9	--	1	--
SB8	27	--	--	1
SB9	7	1	--	--
SB9	8	1	--	--
SB9	10	--	1	--
SB10	28	--	--	1
TOTAL		12	8	8

* QUANTITY SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL MOUNTING HARDWARE

LOCATION	658.5070.02 SIGNAL MOUNTING HARDWARE EACH
STH 83 & OAKWOOD RD	1
TOTAL	1

EMERGENCY VEHICLE PREEMPTION

LOCATION	SPV.0060.09 TRANSPORT AND INSTALL STATE FURNISHED EVP DETECTOR HEADS AND CONFIRMATION LIGHTS EACH
STH 83 & OAKWOOD RD	1
TOTAL	1

TRAFFIC SIGNAL EVP DETECTOR CABLE

FROM	TO	655.0900* TRAFFIC SIGNAL EVP DETECTOR CABLE L.F.
CB1	SB9 (HEAD A)	70
CB1	SB5 (HEAD B)	290
CB1	SB7 (HEADC)	220
CB1	SB2 (HEAD D)	145
TOTAL		725

* QUANTITY SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL CABINET

LOCATION	SPV.0060.12 TRANSPORT AND INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET EACH
STH 83 & OAKWOOD RD	1
TOTAL	1

3

3

	POLES											
	657.0100*	657.0425*	657.0430*	SPV.0060.01*	SPV.0060.02*	SPV.0060.16	SPV.0060.03	SPV.0060.06*	SPV.0060.17	SPV.0060.07*	658.0500*	659.1125*
		TRAFFIC SIGNAL	TRAFFIC SIGNAL									
		STANDARDS	STANDARDS	INSTALL	INSTALL	INSTALL	INSTALL	INSTALL	INSTALL	INSTALL	PEDESTRIAN	LUMINAIRES
	PEDESTAL	ALUMINUM	ALUMINUM	TYPE 10	TYPE 10 SPECIAL	TYPE 13	MONOTUBE ARMS	MONOTUBE ARMS	MONOTUBE ARMS	LUMINAIRE ARMS	PUSH	UTILITY
SIGNAL	BASES	15-FT	10-FT	POLE	POLE	POLE	25-FT	45-FT SPECIAL	50-FT	STEEL 15-FT	BUTTONS	LED C
BASE NO.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
SB1	1	1	--	--	--	--	--	--	--	--	1	--
SB2	--	--	--	1	--	--	1	--	--	1	--	1
SB3	1	--	1	--	--	--	--	--	--	--	1	--
SB4	1	1	--	--	--	--	--	--	--	--	1	--
SB5	--	--	--	--	--	1	--	--	1	1	1	1
SB6	1	1	--	--	--	--	--	--	--	--	1	--
SB7	--	--	--	--	1	--	--	1	--	1	1	1
SB8	1	1	--	--	--	--	--	--	--	--	1	--
SB9	--	--	--	--	1	--	--	1	--	1	--	1
SB10	1	--	1	--	--	--	--	--	--	--	1	--
TOTAL	6	4	2	1	2	1	1	2	1	4	8	4

* QUANTITY SHOWN ELSEWHERE ON PLAN

ELECTRICAL SERVICE METER BREAKER PEDESTAL

LOCATION	656.0201.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL EACH
STH 83 & OAKWOOD RD	1
TOTAL	1

TRANSPORTING MATERIALS

LOCATION	SPV.0060.14 TRANSPORT TRAFFIC SIGNAL AND INTERSECTION LIGHTING MATERIALS EACH
STH 83 & OAKWOOD RD	1
TOTAL	1

3

3

STATE FURNISHED MATERIALS SUMMARY - FOR INFORMATION ONLY

EACH	DESCRIPTION
1	TRAFFIC SIGNAL CONTROLLER AND CABINET
1	POLES TYPE 10
3	POLES TYPE 10 SPECIAL
1	MONOTUBE ARMS 30-FT
1	MONOTUBE ARMS 35-FT SPECIAL
2	MONOTUBE ARMS 45-FT SPECIAL
4	EVP DETECTOR HEADS WITH CONFIRMATION LIGHTS
1	CELL MODEM

LAMP, BALLAST, LED, SWITCH DISPOSAL

FIXTURE TYPE	659.5000.S* LAMP, BALLAST, SWITCH DISPOSAL BY CONTRACTOR EACH
TRAFFIC SIGNAL, THREE SECTION	10
TRAFFIC SIGNAL, FIVE SECTION	2
LED LAMP	4
MERCURY SWITCHES	1
TOTAL	17

* QUANTITY SHOWN ELSEWHERE ON PLAN

REMOVING CONCRETE BASES

SIGNAL BASE NO.	204.0195* REMOVING CONCRETE BASES EACH
SB1	1
SB2	1
SB3	1
SB4	1
SB5	1
SB6	1
SB7	1
SB8	1
CB1	1
TOTAL	9

* QUANTITY SHOWN ELSEWHERE ON PLAN

LAMP, BALLAST, LED, SWITCH DISPOSAL (FOR INFORMATION ONLY)

LOCATION	TRAFFIC SIGNAL THREE SECTION EACH	TRAFFIC SIGNAL FIVE SECTION EACH	LED LAMP EACH	MERCURY SWITCHES EACH
CB1	--	--	--	1
SB1	2	--	--	--
SB2	1	--	1	--
SB3	1	1	--	--
SB4	--	1	1	--
SB5	2	--	--	--
SB6	1	--	1	--
SB7	2	--	--	--
SB8	1	--	1	--
	10	2	4	1

REMOVING TRAFFIC SIGNALS

LOCATION	204.9060.S.03 REMOVING TRAFFIC SIGNALS EACH
STH 83 & CARDINAL LN	1
TOTAL	1

REMOVING WIRE

LOCATION	204.9060.S.05 REMOVING LOOP DETECTOR WIRE AND LEAD-IN CABLE EACH
STH 83 & CARDINAL LN	1
TOTAL	1

REMOVE PULL BOXES

PULL BOX NO.	653.0905* REMOVING PULL BOXES EACH
PB1	1
PB2	1
PB3	1
PB4	1
PB5	1
PB6	1
PB7	1
PB8	1
PB9	1
PB10	1
PB11	1
PB12	1
PB13	1
PB14	1
PB15	1
PB16	1
TOTAL	16

* QUANTITY SHOWN ELSEWHERE ON PLAN

PULL BOXES

PULL BOX NO.	LOCATION STA	LOCATION OFFSET	653.0135* PULL BOXES STEEL 24x36-INCH EACH	653.0140* PULL BOXES STEEL 24x42-INCH EACH
PB1	398+12.4	63.6 RT	--	1
PB2	398+4.4	101.9 RT	--	1
PB3	52+94.1	35.7 LT	--	1
PB4	397+26.0	64.4 RT	--	1
PB5	396+93.2	43.3 RT	--	1
PB6	396+89.0	43.3 RT	1	--
PB7	394+96.9	40.9 RT	1	--
PB8	393+58.0	26.5 RT	1	--
PB9	396+92.6	39.2 LT	--	1
PB10	397+51.0	89.4 LT	--	1
PB11	397+51.0	94.5 LT	1	--
PB12	397+89.2	90.5 LT	--	1
PB13	398+47.0	43.8 LT	--	1
PB14	398+52.1	43.8 LT	1	--
PB15	400+41.6	43.4 LT	1	--
PB16	401+91.5	30.0 LT	1	--
PB17	398+47.8	39.1 RT	--	1
TOTAL		TOTAL	7	10

* QUANTITY SHOWN ELSEWHERE ON PLAN

3

3

CONDUIT

FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0235* CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.	652.0605* CONDUIT SPECIAL 2-INCH L.F.	652.0615* CONDUIT SPECIAL 3-INCH L.F.
CB1	PB1	--	90	--	--
PB1	SB1	10	--	--	--
PB1	PB2	40	--	--	--
PB2	PB3	--	--	195	--
PB1	PB4	--	--	--	170
PB4	SB2	--	15	--	--
PB4	PB5	--	80	--	--
PB5	SB3	25	--	--	--
PB5	PB6	5	--	--	--
PB6	PB7	190	--	--	--
PB7	PB8	150	--	--	--
PB5	PB9	--	--	--	160
PB9	SB4	--	25	--	--
PB9	PB10	--	160	--	--
PB10	SB5	20	--	--	--
PB10	PB11	5	--	--	--
PB10	PB12	--	--	--	70
PB12	SB6	--	25	--	--
PB12	PB13	--	140	--	--
PB13	SB7	20	--	--	--
PB13	PB14	5	--	--	--
PB14	PB15	190	--	--	--
PB15	PB16	150	--	--	--
PB13	PB17	--	--	--	160
PB17	SB8	--	10	--	--
PB17	CB1	--	75	--	--
	TOTAL	810	620	195	560

* QUANTITY SHOWN ELSEWHERE ON PLAN

CONCRETE BASES

SIGNAL BASE NO.	LOCATION STA	LOCATION OFFSET	654.0101* CONCRETE BASES TYPE 1 EACH	654.0110* CONCRETE BASES TYPE 10 EACH	654.0120* CONCRETE BASES TYPE 10 SPECIAL EACH	654.0217* CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
CB1	398+43.9	67.0 RT	--	--	--	1
SB1	398+12.2	74.7 RT	1	--	--	--
SB2	397+32.2	79.6 RT	--	--	1	--
SB3	397+14.1	56.0 RT	1	--	--	--
SB4	397+17.4	45.4 LT	--	--	1	--
SB5	397+43.6	64.9LT	1	--	--	--
SB6	397+97.7	66.8 LT	--	1	--	--
SB7	398+22.1	45.9 LT	1	--	--	--
SB8	398+35.1	43.2 RT	--	--	1	--
TOTAL		TOTAL	4	1	3	1

* QUANTITY SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0240* CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260* CABLE TRAFFIC SIGNAL 12-14 AWG L.F.
CB1	SB1	--	80
CB1	SB2	155	--
CB1	SB3	--	245
CB1	SB4	--	335
CB1	SB5	--	300
CB1	SB6	--	260
CB1	SB7	--	175
CB1	SB8	--	75
	TOTAL	155	1470

* QUANTITY SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0305* CABLE TYPE UF 2-12 AWG GROUNDED L.F.	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG L.F.
CB1	SB2	155	--
SB2	LUMINAIRE 1	--	144
SB2	SB4	215	--
SB4	LUMINAIRE 1	--	144
CB1	SB8	75	--
SB8	LUMINAIRE 1	--	144
SB8	SB6	365	--
SB6	LUMINAIRE 1	--	144
	TOTAL	810	576

* QUANTITY SHOWN ELSEWHERE ON PLAN

TRAFFIC DETECTOR LOOPS

LOOP NO.	HOME RUN PB	LOCATION** STA	LOCATION** OFFSET	SIZE (FT) X (FT)	NO. OF TURNS	PAVEMENT TYPE	SDD INSTALLATION REFERENCE	652.0800* CONDUIT LOOP DETECTOR L.F.	655.0700* LOOP DETECTOR LEAD IN CABLE L.F.	655.0800* LOOP DETECTOR WIRE L.F.
11	PB6	396+88.5	0.2 RT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	128	195	403
12	PB6	397+16.5	0.1 LT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	132	195	416
21	PB16	401+91.2	10.1 LT	6 X 15	4	ASPHALT	9F15-4B OPTION 2	70	475	294
22	PB15	400+42.0	11.7 LT	6 X 10	3	ASPHALT	9F15-4B OPTION 2	84	325	265
31	PB2	51+02.9	2.3 LT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	112	75	353
32	PB2	50+74.9	2.3 LT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	112	75	353
41	PB11	397+62.5	94.8 LT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	66	245	208
42	PB11	397+62.7	66.8 LT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	72	245	227
51	PB14	398+51.1	0.2 RT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	130	140	410
52	PB14	398+23.1	0.2 RT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	132	140	416
61	PB8	393+58.7	7.7 RT	6 X 15	4	ASPHALT	9F15-4B OPTION 2	68	535	286
62	PB7	394+96.6	11.8 RT	6 X 10	4	ASPHALT	9F15-4B OPTION 2	80	385	336
81	PB3	53+01.7	13.8 LT	6 X 6	4	ASPHALT	9F15-4B OPTION 2	60	270	252
82	PB2	51+02.9	25.5 LT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	64	75	202
83	PB2	50+74.9	25.5 LT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	70	75	221
84	PB2	51+02.9	14.1 LT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	88	75	277
85	PB2	50+74.9	14.1 LT	6 X 20	3	ASPHALT	9F15-4B OPTION 2	88	75	277
							TOTAL	1556	3600	5193

** LOCATION IS TO FRONT CENTER OF DETECTOR LOOP

* QUANTITY SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0515* ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.
CB1	SB1	65
SB1	SB2	130
SB2	SB3	115
SB3	SB4	155
SB4	SB5	150
SB5	SB6	105
SB6	SB7	140
SB7	SB8	135
SB8	CB1	60
CB1	PB1	45
SB2	PB4	20
SB3	PB5	40
SB4	PB9	40
SB5	PB10	35
SB6	PB12	40
SB7	PB13	35
CB1	PB17	40
	TOTAL	1350

* QUANTITY SHOWN ELSEWHERE ON PLAN

3

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO SIGNAL HEAD NUMBER	655.0230* CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240* CABLE TRAFFIC SIGNAL 7-14 AWG L.F.
SB1	11	22	--
SB1	17	22	--
SB2	18	60	--
SB3	1	22	--
SB3	9	--	22
SB4	7	55	--
SB4	8	22	--
SB4	10	--	70
SB5	14	--	22
SB5	16	22	--
SB6	12	45	--
SB6	13	22	--
SB6	15	--	55
SB7	4	--	22
SB7	6	22	--
SB8	2	60	--
SB8	3	22	--
SB8	5	--	70
	TOTAL	396	261

* QUANTITY SHOWN ELSEWHERE ON PLAN

FACES

SIGNAL BASE NO.	SIGNAL HEAD NO.	658.0173* TRAFFIC SIGNAL FACE 3S-12 INCH EACH	658.0174* TRAFFIC SIGNAL FACE 4S-12 INCH EACH
SB1	11	1	--
SB1	17	1	--
SB2	18	1	--
SB3	1	1	--
SB3	9	--	1
SB4	7	1	--
SB4	8	1	--
SB4	10	--	1
SB5	14	--	1
SB5	16	1	--
SB6	12	1	--
SB6	13	1	--
SB6	15	--	1
SB7	4	--	1
SB7	6	1	--
SB8	2	1	--
SB8	3	1	--
SB8	5	--	1
	TOTAL	12	6

* QUANTITY SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL MOUNTING HARDWARE

LOCATION	658.5070.03 SIGNAL MOUNTING HARDWARE EACH
STH 83 & CARDINAL LN	1
TOTAL	1

EMERGENCY VEHICLE PREEMPTION

LOCATION	SPV.0060.10 TRANSPORT AND INSTALL STATE FURNISHED EVP DETECTOR HEADS AND CONFIRMATION LIGHTS EACH
STH 83 & CARDINAL LN	1
TOTAL	1

TRAFFIC SIGNAL CABINET

LOCATION	SPV.0060.13 TRANSPORT AND INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET EACH
STH 83 & CARDINAL LN	1
TOTAL	1

TRAFFIC SIGNAL EVP DETECTOR CABLE

FROM	TO	655.0900* TRAFFIC SIGNAL EVP DETECTOR CABLE L.F.
CB1	SB4 (HEAD A)	335
CB1	SB8 (HEAD B)	75
CB1	SB2 (HEADC)	155
CB1	SB6 (HEAD D)	260
	TOTAL	825

* QUANTITY SHOWN ELSEWHERE ON PLAN

3

3

	POLES								
	657.0100*	657.0425*	SPV.0060.01*	SPV.0060.02*	SPV.0060.04	SPV.0060.05	SPV.0060.06*	SPV.0060.07*	659.1125*
		TRAFFIC SIGNAL STANDARDS							
	PEDESTAL	ALUMINUM	INSTALL	INSTALL	INSTALL	INSTALL	INSTALL	INSTALL	LUMINAIRES
	BASES	15-FT	TYPE 10	TYPE 10 SPECIAL	MONOTUBE ARMS	MONOTUBE ARMS	MONOTUBE ARMS	LUMINAIRE ARMS	UTILITY
SIGNAL			POLE	POLE	30-FT	35-FT SPECIAL	45-FT SPECIAL	STEEL 15-FT	LED C
BASE NO.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
SB1	1	1	--	--	--	--	--	--	--
SB2	--	--	--	1	--	1	--	1	1
SB3	1	1	--	--	--	--	--	--	--
SB4	--	--	--	1	--	--	1	1	1
SB5	1	1	--	--	--	--	--	--	--
SB6	--	--	1	--	1	--	--	1	1
SB7	1	1	--	--	--	--	--	--	--
SB8	--	--	--	1	--	--	1	1	1
TOTAL	4	4	1	3	1	1	2	4	4

* QUANTITY SHOWN ELSEWHERE ON PLAN

ELECTRICAL SERVICE METER BREAKER PEDESTAL

LOCATION	656.0201.02 ELECTRICAL SERVICE METER BREAKER PEDESTAL EACH
STH 83 & CARDINAL LN	1
TOTAL	1

TRANSPORTING MATERIALS

LOCATION	SPV.0060.15 TRANSPORT TRAFFIC SIGNAL AND INTERSECTION LIGHTING MATERIALS EACH
STH 83 & CARDINAL LN	1
TOTAL	1

TYPE II PERMANENT SIGNING 1330-00-73 sth 83

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	638.2102 MOVING SIGNS TYPE II [EA]	638.2602 REMOVING SIGNS TYPE II (EA)	638.3000 REM SMALL SIGN SUP [EA]	634.0618 POSTS WOOD 4" X 6" X 18' [EA]	634.0814 POSTS TUBULAR STEEL 2 X 2 INCH X 14 FT (EA)	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
1	R1-1F(2M)		36	X	36		7.460			1					MOUNT ON SIGNAL POLE
2	R6-2L(2M)		30	X	36	7.500									MOUNT ON SIGNAL POLE
3	NOT USED														
4	R1-1F(2M)		36	X	36		7.460			1					MOUNT ON SIGNAL POLE
5	R5-1(2M)		36	X	36	9.000				1					MOUNT ON SIGNAL POLE
6	R4-7(2M)		24	X	30	5.000				1					MOUNT ON SIGNAL POLE
7	R6-2L(2M)		30	X	36	7.500				1					MOUNT ON PED POLE
8	R4-7(2M)		24	X	30	5.000				1					MOUNT ON SIGNAL POLE
9	NOT USED														
10	R5-1(2M)		36	X	36	9.000									MOUNT ON SIGNAL POLE
11	R6-2L(2M)		30	X	36	7.500				1					MOUNT ON SIGNAL POLE
12	R4-7(2M)		24	X	30	5.000				1					MOUNT ON SIGNAL POLE
13	R1-1F(2M)		36	X	36		7.460			1					MOUNT ON SIGNAL POLE
14	W12-1D(2M)		24	X	24			4.000		1	1	1			2 FOOT MOUNTING HEIGHT
15	R1-2(2S)		36	X	31	3.880				1	1	1			
16	M1-94H	GOLF RD	54	X	18	6.750									MOUNT ON SIGNAL ARM
17	R1-1F(2M)		36	X	36		7.460			1					MOUNT ON SIGNAL POLE
18	R1-1F(2M)		36	X	36		7.460			1					MOUNT ON SIGNAL POLE
19	M1-94H	GOLF RD	54	X	18	6.750									MOUNT ON SIGNAL ARM
20	R1-1F(2M)		36	X	36		7.460			1					MOUNT ON SIGNAL POLE
21	R5-1(2M)		36	X	36	9.000									MOUNT ON SIGNAL POLE
22	R6-2L(2M)		30	X	36	7.500				1					MOUNT ON SIGNAL POLE
23	R1-2(2S)		36	X	31	3.880				1	1	1			
24	R4-7(2M)		24	X	30	5.000				1					MOUNT ON SIGNAL POLE
25	R1-1F(2M)		36	X	36		7.460			1					MOUNT ON SIGNAL POLE
26	R5-1(2M)		36	X	36	9.000				1					MOUNT ON SIGNAL POLE
27	R1-1F(2M)		36	X	36		7.460			1					MOUNT ON SIGNAL POLE
28	J3-1(2S)		24	X	45	7.500				1	1	1			
	M1-5A	CTH KE	24	X	24										
	M6-1		21	X	21										
29	R1-1F(2S)		30	X	30		5.180			1					MOUNT ON SIGNAL POLE
30	NOT USED														

SHEET: 1 OF 3

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	SIGN SIZE H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	638.2102 MOVING SIGNS TYPE II [EA]	638.2602 REMOVING SIGNS TYPE II (EA)	638.3000 REM SMALL SIGN SUP [EA]	634.0618 POSTS WOOD 4" X 6" X 18' [EA]	634.0814 POSTS TUBULAR STEEL 2 X 2 INCH X 14 FT (EA)	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
31	NOT USED					X									
32	R1-1F(2S)		30	X	30		5.180			1					MOUNT ON SIGNAL POLE
33	M1-94S	OAKWOOD RD (ARROW LEFT) KE W. NORTH SHORE DR (ARROW RIGHT)	108	X	30	22.500									MOUNT ON SIGNAL ARM
34	J3-2(2S)		48	X	57	19.000				1	1	1			
	M3-3		24	X	12										
	M1-6	STH 83	24	X	24										
	M6-1		21	X	21										
	M3-1		24	X	12										
	M1-6	STH 83	24	X	24										
	M6-1		21	X	21										
35	R1-1F(2S)		30	X	30		5.180			1					MOUNT ON SIGNAL POLE
36	J3-1(2S)		24	X	45	7.500				1	1	1			
	M1-5A	CTH KE	24	X	24										
	M6-1		21	X	21										
37	R1-1F(2S)		30	X	30		5.180			1					MOUNT ON SIGNAL POLE
38	J3-2(2S)		48	X	57	19.000				1	1	1			
	M3-1		24	X	12										
	M1-6	STH 83	24	X	24										
	M6-1		21	X	21										
	M3-3		24	X	12										
	M1-6	STH 83	24	X	24										
	M6-1		21	X	21										
39	M1-94S	KE W. NORTH SHORE DR (ARROW LEFT) OAKWOOD RD (ARROW RIGHT)	108	X	30	22.500									MOUNT ON SIGNAL ARM
40	W5-52R(2S)		12	X	36			3.000		1	1	1			4 FOOT HEIGHT
41	W5-52L(2S)		12	X	36			3.000		1	1	1			4 FOOT HEIGHT
42	S1-1(2S)		36	X	36			6.750		1	1	1			
42A	S16-9P(2S)		30	X	18			3.750						42	MOUNT UNDER SIGN # 42 REMOVAL PART OF SIGN # 42
43	W5-52L(2S)		12	X	36			3.000		1	1	1			4 FOOT HEIGHT
44	W14-3(2S)		48	X	36			6.000		1	1	1			
45	WR-52R(2S)		12	X	36			3.000		1	1	1			4 FOOT HEIGHT
46	R7-1R(2S)		18	X	24	3.000				1	1	1			
47	R1-1F(2S)		30	X	30		5.180			1					MOUNT ON SIGNAL POLE
48	M1-94H	CARDINAL LN	90	X	18	11.250									MOUNT ON SIGNAL ARM
49	M1-94H	CARDINAL LN	90	X	18	11.250									MOUNT ON SIGNAL ARM
50	R1-1F(2S)		30	X	30		5.180			1					MOUNT ON SIGNA POLE
51	R7-1D(2S)		18	X	24	3.000				1	1	1			
52	J3-2(2S)		48	X	57	19.000				1	1	1			
	M3-3		24	X	12										
	M1-6	STH 83	24	X	24										
	M6-1		21	X	21										
	M3-1		24	X	12										
	M1-6	STH 83	24	X	24										
	M6-1		21	X	21										
53	R7-1R(2S)		18	X	24	3.000				1	1	1			
54	R1-1F(2S)		30	X	30		5.180			1					MOUNT ON SIGNAL POLE
55	NOT USED														
56	M1-94S	83 HARTLAND RD	X	X	X	X									MOUNT ON SIGNAL ARM
57	R1-1F(2S)		30	X	30		5.180			1					MOUNT ON SIGNAL POLE
58	J3-2(2S)		48	X	57	19.000				1	1	1			
	M3-1		24	X	12										
	M1-6	STH 83	24	X	24										
	M6-1		21	X	21										
	M3-3		24	X	12										
	M1-6	STH 83	24	X	24										
	M6-1		21	X	21										
59	R3-8LAR		54	X	30	11.250				1	1	1			
60	R7-1D(2M)		24	X	30	5.000				1	1	1			

TYPE II PERMANENT SIGNING 1330-00-73 sth 83

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	SIGN SIZE H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	638.2102 MOVING SIGNS TYPE II [EA]	638.2602 REMOVING SIGNS TYPE II (EA)	638.3000 REM SMALL SIGN SUP [EA]	634.0618 POSTS WOOD 4" X 6" X 18' [EA]	634.0814 POSTS TUBULAR STEEL 2 X 2 INCH X 14 FT (EA)	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
61	R7-1D(2M)		24	X	30	5.000				1	1	1			
62	R7-1D(2M)		24	X	30	5.000				1	1	1			
63	R2-1(2M)	SPEED LIMIT 45	30	X	36	7.500				1	1	1			
64	R2-1(2M)	SPEED LIMIT 45	30	X	36	7.500				1	1	1			
65	W5-52R(2S)		12	X	36			3.000		1	1	1			4 FOOT HEIGHT
66	W5-52L(2S)		12	X	36			3.000		1	1	1			4 FOOT HEIGHT
67	W5-52L(2S)		12	X	36			3.000		1	1	1			4 FOOT HEIGHT
68	R2-1(2M)	SPEED LIMIT 35	30	X	36	7.500				1	1	1			
69	W3-3(2S)		36	X	36			9.000		1	1	1			
70	D2-2								1		2	2			
71	W5-52R(2S)		12	X	36			3.000		1	1	1			4 FOOT HEIGHT
72	R7-1D(2M)		24	X	30	5.000				1	1	1			
UNDISTRIBUTED									4				4		
TOTALS						328.510	101.120	53.500	5	56	33	33	4	--	--

NOTES:
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THIS MAP PREPARED BY THE SIGMA GROUP FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SURVEY BASIS: COORDINATES AND BEARINGS ON THIS EXHIBIT ARE REFERENCED TO WISCONSIN COUNTY COORDINATE SYSTEM, WAUKESHA COUNTY ZONE, NAD 83 (2011) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS EXHIBIT.

R/W PROJECT NUMBER: 1330-00-23 | SHEET NUMBER: 4.01

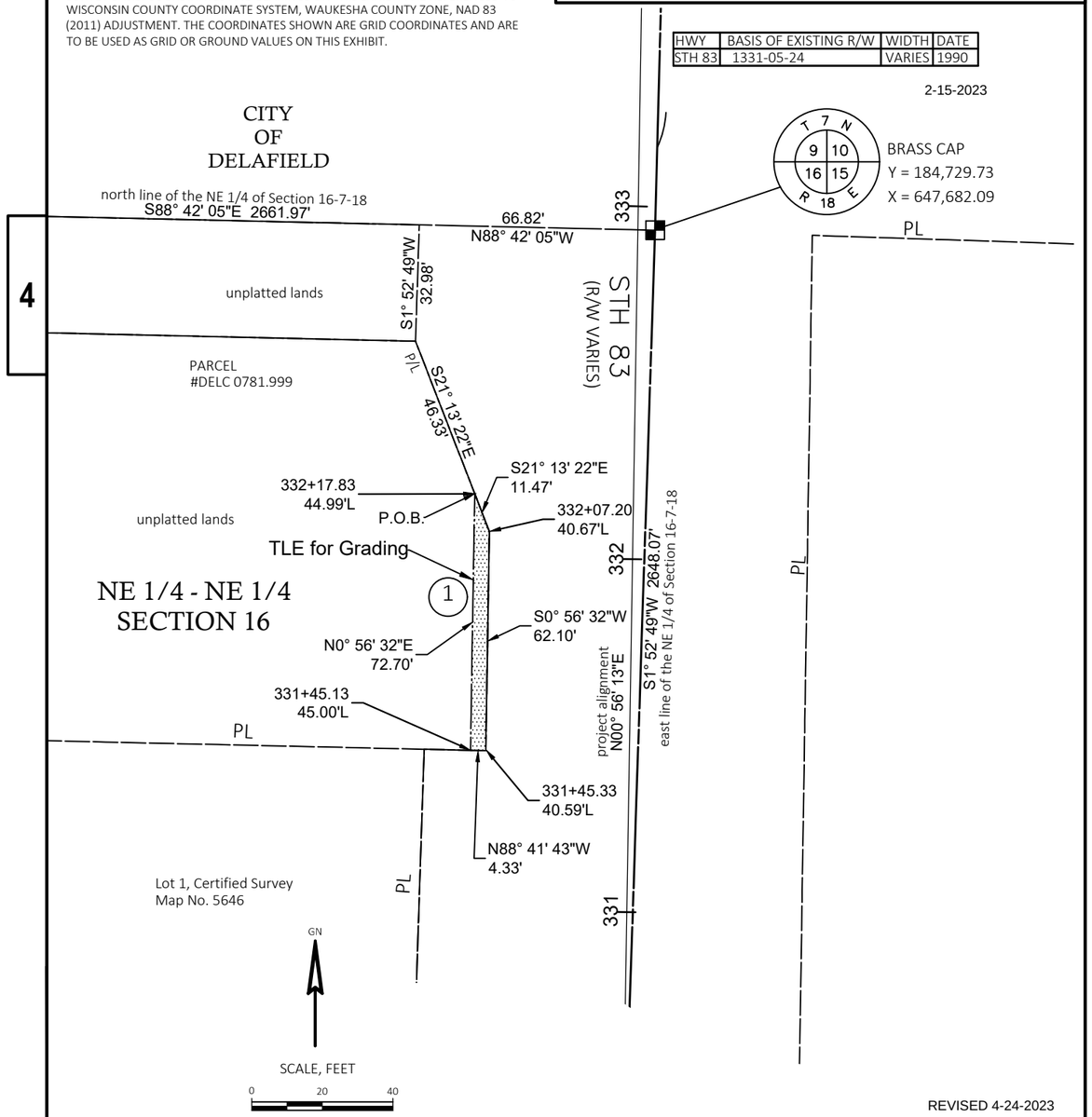
ROW ACQUISITION EXHIBIT
DELAFIELD TO HARTLAND
GOLF RD TO VETTLESON RD

S.T.H. 83 — WAUKESHA COUNTY

NE 1/4 - NE 1/4 SEC 16, T7N, R18E, CITY OF DELAFIELD, WAUKESHA CO, WI

HWY	BASIS OF EXISTING R/W	WIDTH	DATE
STH 83	1331-05-24	VARIES	1990

2-15-2023



REVISED 4-24-2023

PREPARED BY: K. SLOTTKE

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	S.F.
1	Grant A. Lemke Trustee and Christina Lemke, Trustee of the Grant and Christina Lemke Trust	TLE	292

THIS MAP IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION
SOUTHEAST REGION OFFICE

SIGNATURE: Robert L Duffield DATE: 2-15-2023

PRINT NAME:

FILE NAME : TLE EXHIBITS.DWG PLOT DATE : 4/21/2023 11:52 AM R/W PROJECT: R/W PROJ NO

4

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

THIS MAP PREPARED BY THE SIGMA GROUP FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SURVEY BASIS: COORDINATES AND BEARINGS ON THIS EXHIBIT ARE REFERENCED TO WISCONSIN COUNTY COORDINATE SYSTEM, WAUKESHA COUNTY ZONE, NAD 83 (2011) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS EXHIBIT.

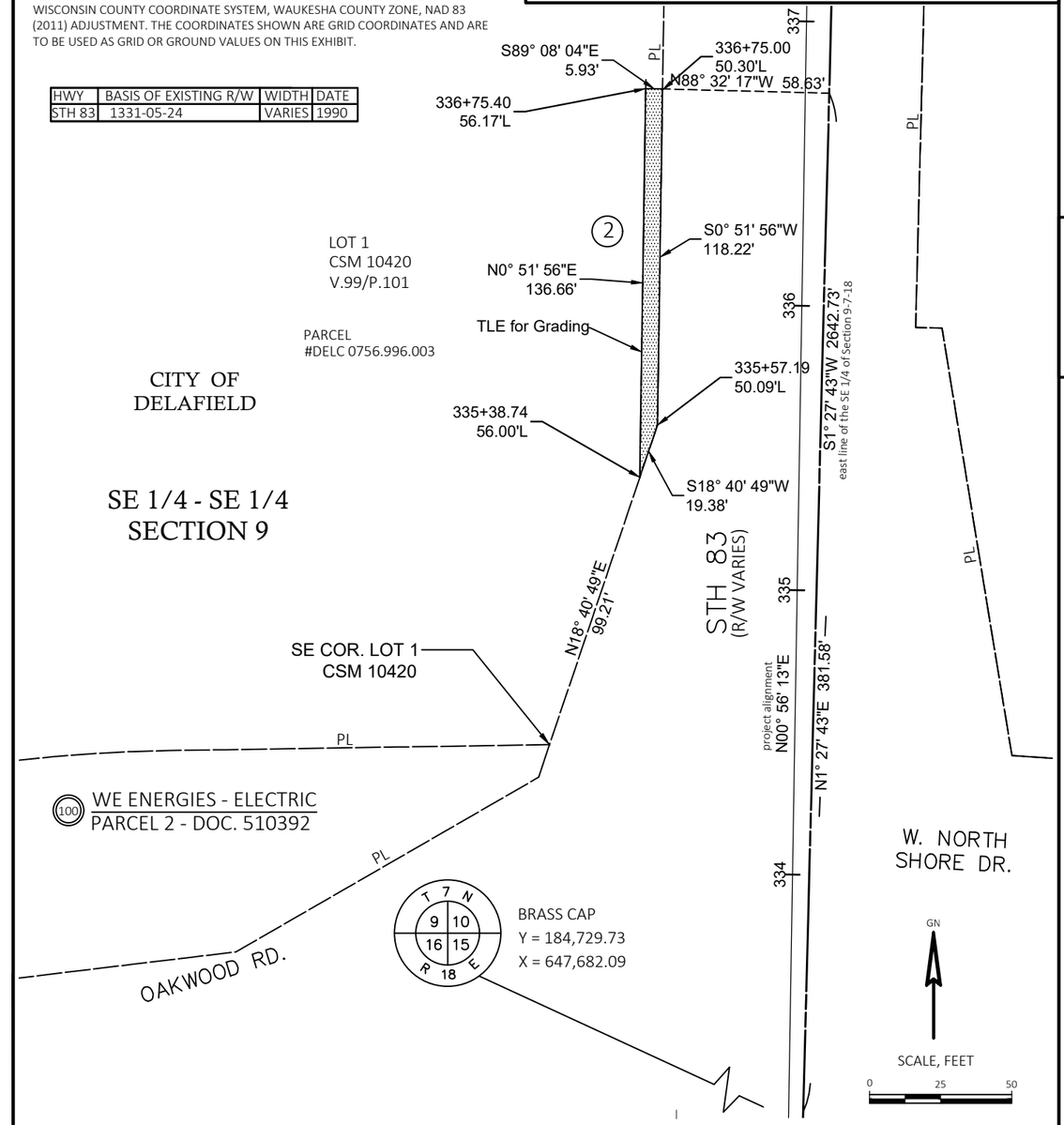
R/W PROJECT NUMBER: 1330-00-23 | SHEET NUMBER: 4.02

ROW ACQUISITION EXHIBIT
DELAFIELD TO HARTLAND
GOLF RD TO VETTLESON RD

S.T.H. 83 — WAUKESHA COUNTY

SE1/4 - SE1/4 SEC 9, T7N, R18E, CITY OF DELAFIELD, WAUKESHA CO, WI

HWY	BASIS OF EXISTING R/W	WIDTH	DATE
STH 83	1331-05-24	VARIES	1990



PREPARED BY: K. SLOTTKE

REVISED 4-24-2023

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	S.F.
2	Oakwood Church f/k/a Kettle Moraine Evangelical Free Church	TLE	755

FILE NAME : TLE EXHIBITS.DWG PLOT DATE : 4/21/2023 11:52 AM R/W PROJECT: R/W PROJ NO

4

NOTES:
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THIS MAP PREPARED BY THE SIGMA GROUP FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SURVEY BASIS: COORDINATES AND BEARINGS ON THIS EXHIBIT ARE REFERENCED TO WISCONSIN COUNTY COORDINATE SYSTEM, WAUKESHA COUNTY ZONE, NAD 83 (2011) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS EXHIBIT.

HWY	BASIS OF EXISTING R/W	WIDTH	DATE
STH 83	1331-05-24	VARIES	1990

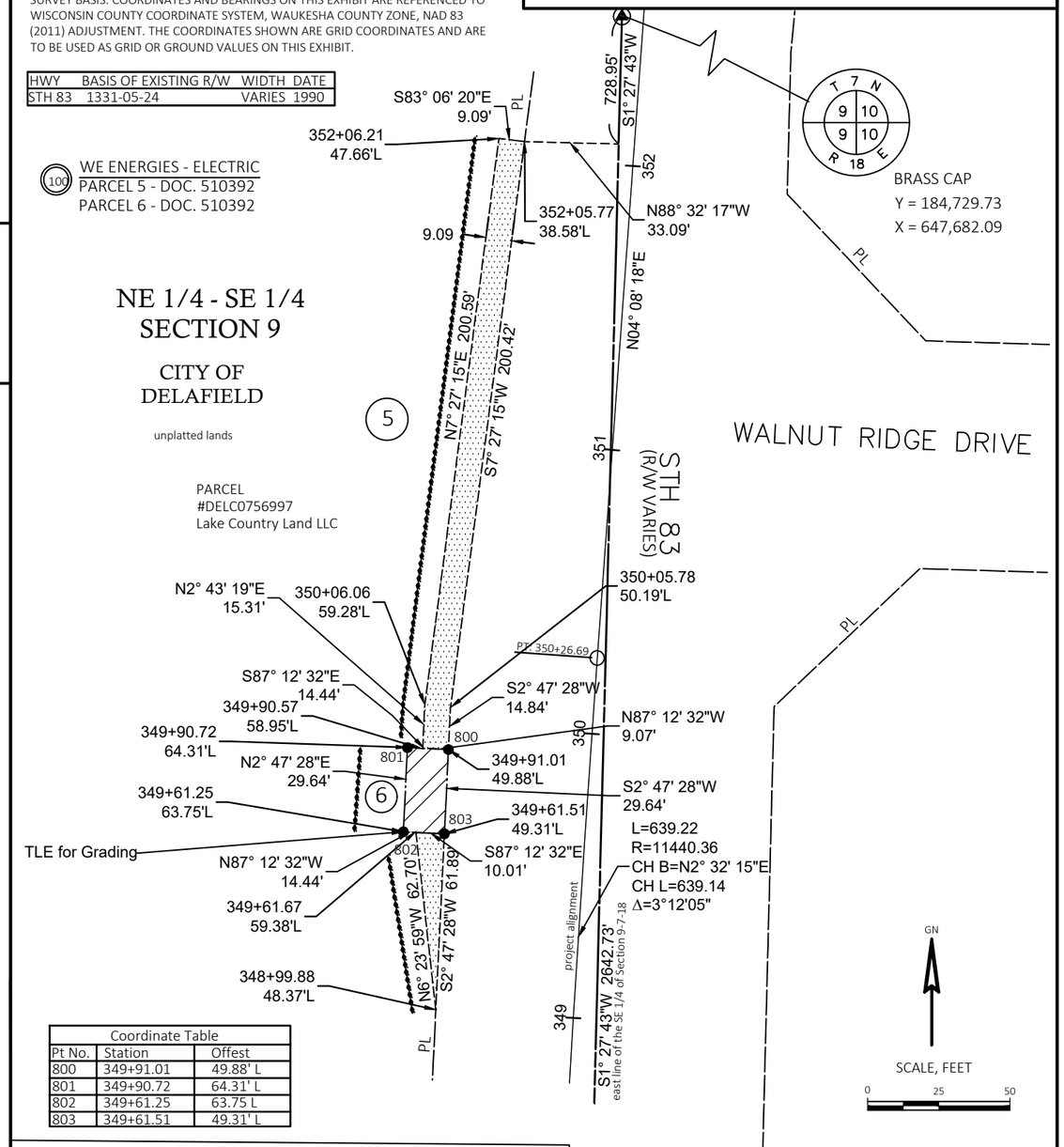
R/W PROJECT NUMBER: 1330-00-23 | SHEET NUMBER: 4.04

ROW ACQUISITION EXHIBIT
DELAFIELD TO HARTLAND
GOLF RD TO VETTLESON RD

S.T.H. 83 — WAUKESHA COUNTY

NE 1/4 - SE 1/4 SEC 9, T7N, R18E, CITY OF DELAFIELD, WAUKESHA CO, WI

4



Coordinate Table		
Pt No.	Station	Offset
800	349+91.01	49.88' L
801	349+90.72	64.31' L
802	349+61.25	63.75 L
803	349+61.51	49.31' L

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	S.F.
5	LAKE COUNTRY LAND LLC	TLE	2270
6	LAKE COUNTRY LAND LLC	FEE	428

PREPARED BY: K. SLOTTKE
REVISED 4-24-2023

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

THIS MAP PREPARED BY THE SIGMA GROUP FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SURVEY BASIS: COORDINATES AND BEARINGS ON THIS EXHIBIT ARE REFERENCED TO WISCONSIN COUNTY COORDINATE SYSTEM, WAUKESHA COUNTY ZONE, NAD 83 (2011) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS EXHIBIT.

HWY	BASIS OF EXISTING R/W	WIDTH	DATE
STH 83	1331-05-24	VARIES	1990

R/W PROJECT NUMBER: 1330-00-23 | SHEET NUMBER: 4.03

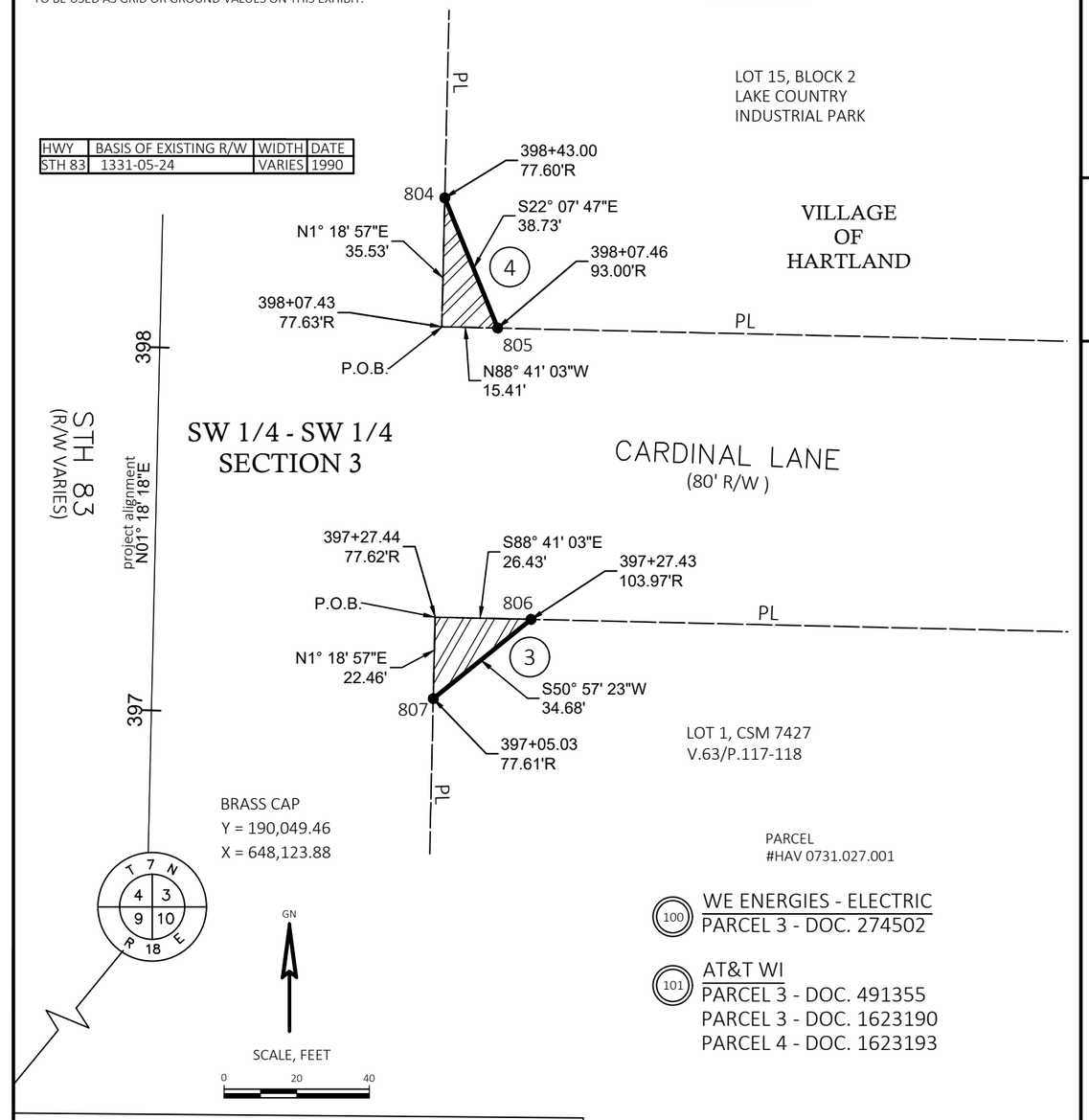
ROW ACQUISITION EXHIBIT
DELAFIELD TO HARTLAND
GOLF RD TO VETTLESON RD

S.T.H. 83 — WAUKESHA COUNTY

SW 1/4-SW 1/4 SEC 3, T7N, R18E, VILLAGE OF HARTLAND, WAUKESHA CO, WI

#HAV 0731.026

4

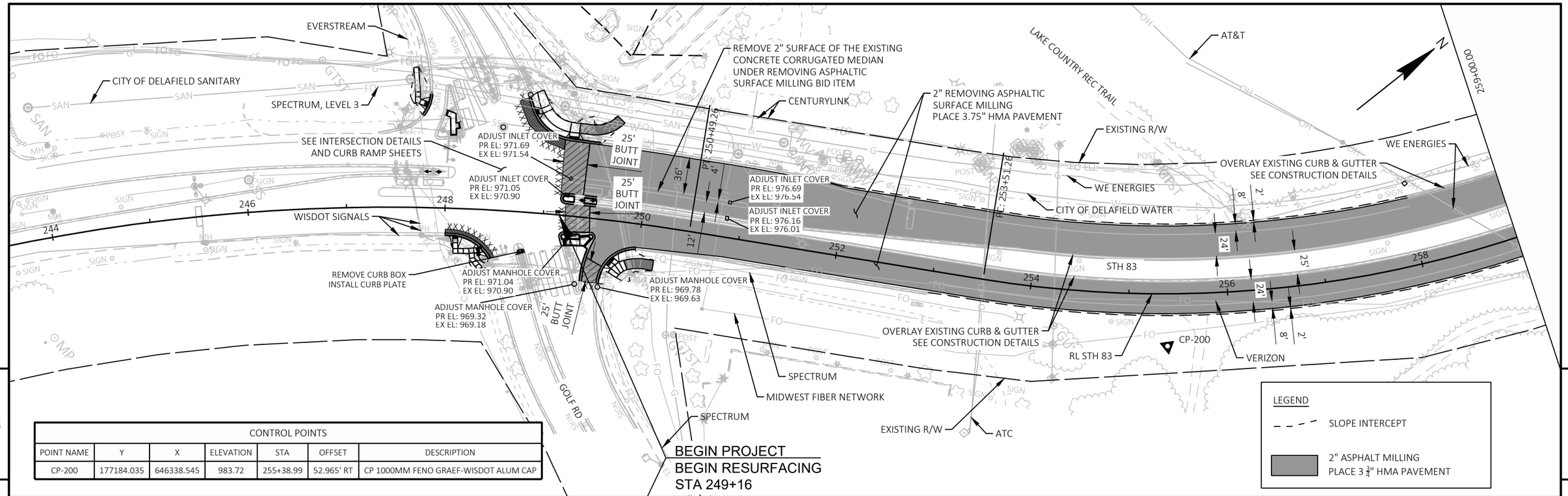


SCHEDULE OF LANDS & INTERESTS REQUIRED

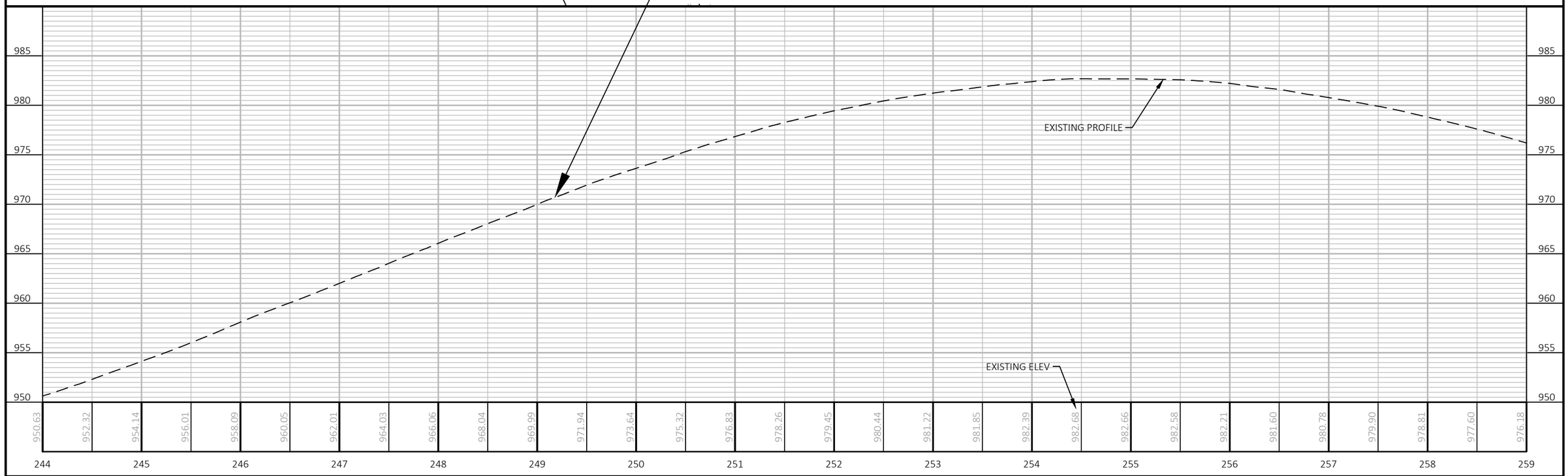
OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	S.F.
3	CBS PROPERTIES, LLC	FEE	297
4	W225N3131 DUPLAINVILLE ROAD, LLC	FEE	274

PREPARED BY: K. SLOTTKE
REVISED 4-24-2023



CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-200	177184.035	646338.545	983.72	255+38.99	52.965' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP



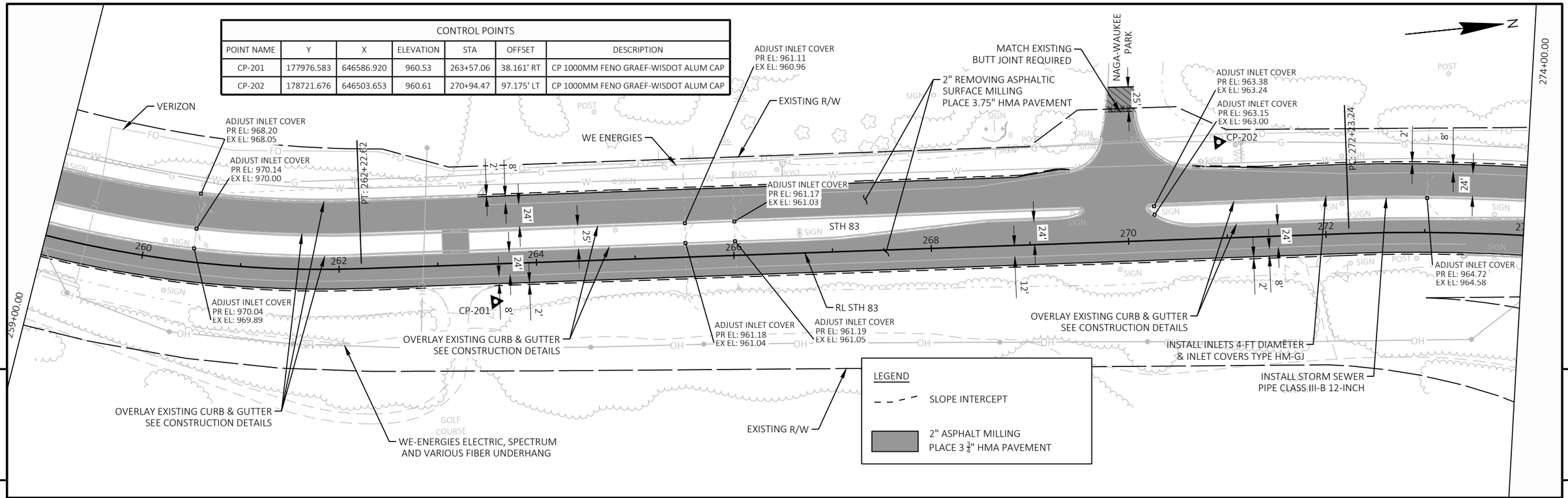
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PLAN AND PROFILE: STH 83	SHEET 207	E

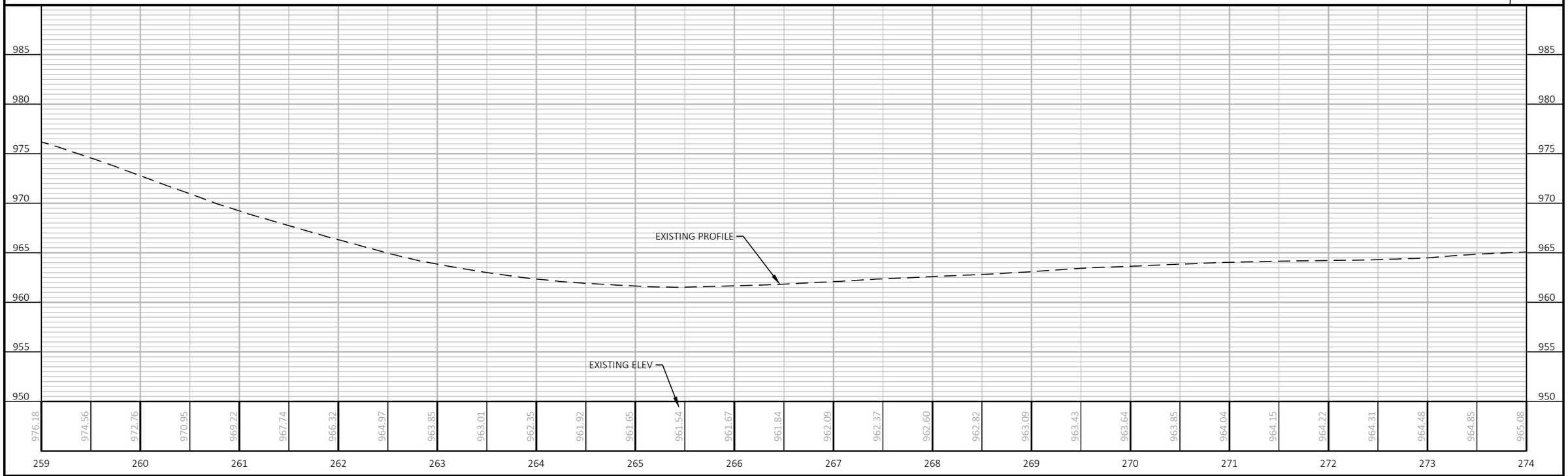
FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - PP01

PLOT DATE : 3/21/2024 8:17 AM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

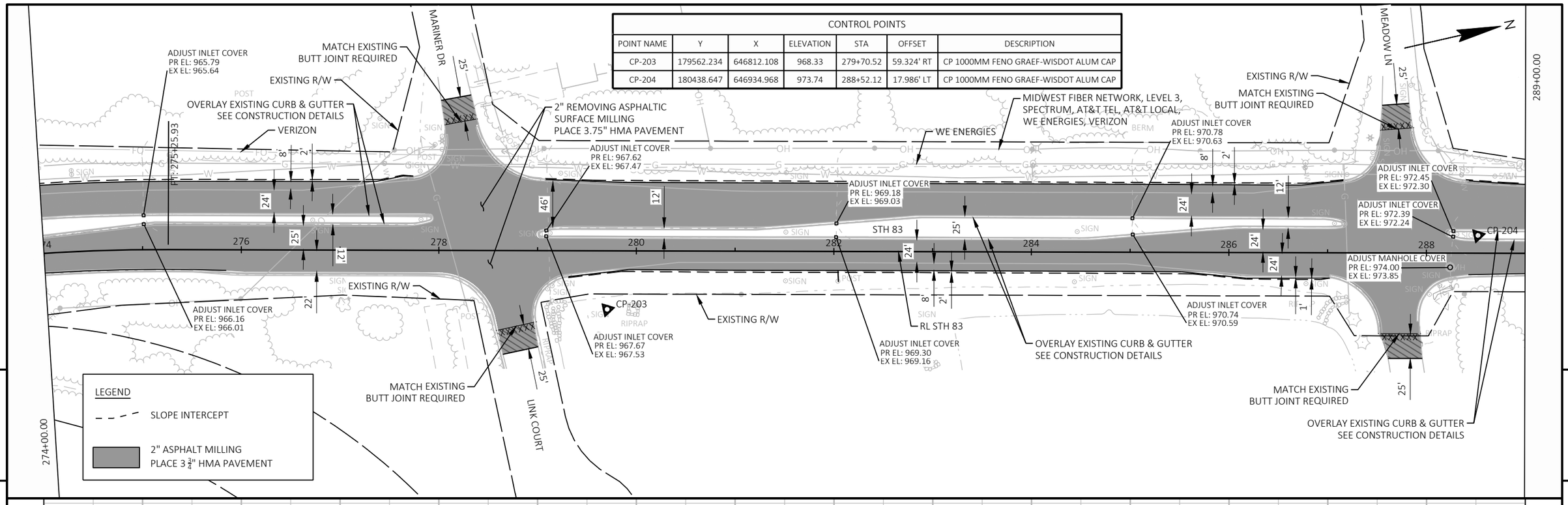
CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-201	177976.583	646586.920	960.53	263+57.06	38.161' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-202	178721.676	646503.653	960.61	270+94.47	97.175' LT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP

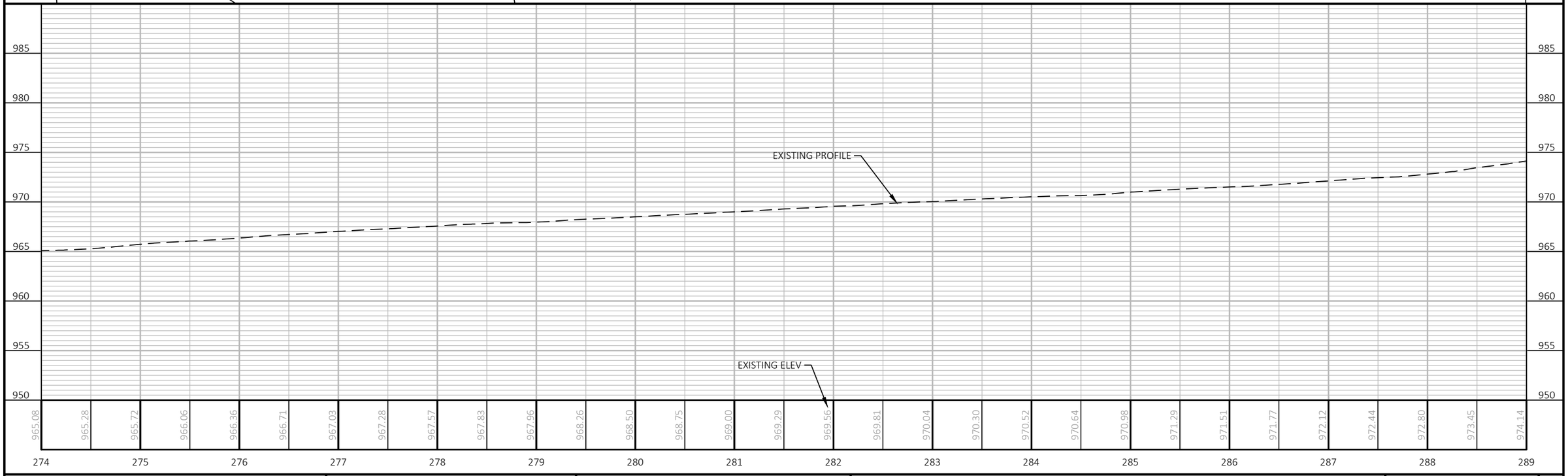




PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PLAN AND PROFILE: STH 83	SHEET 208	E

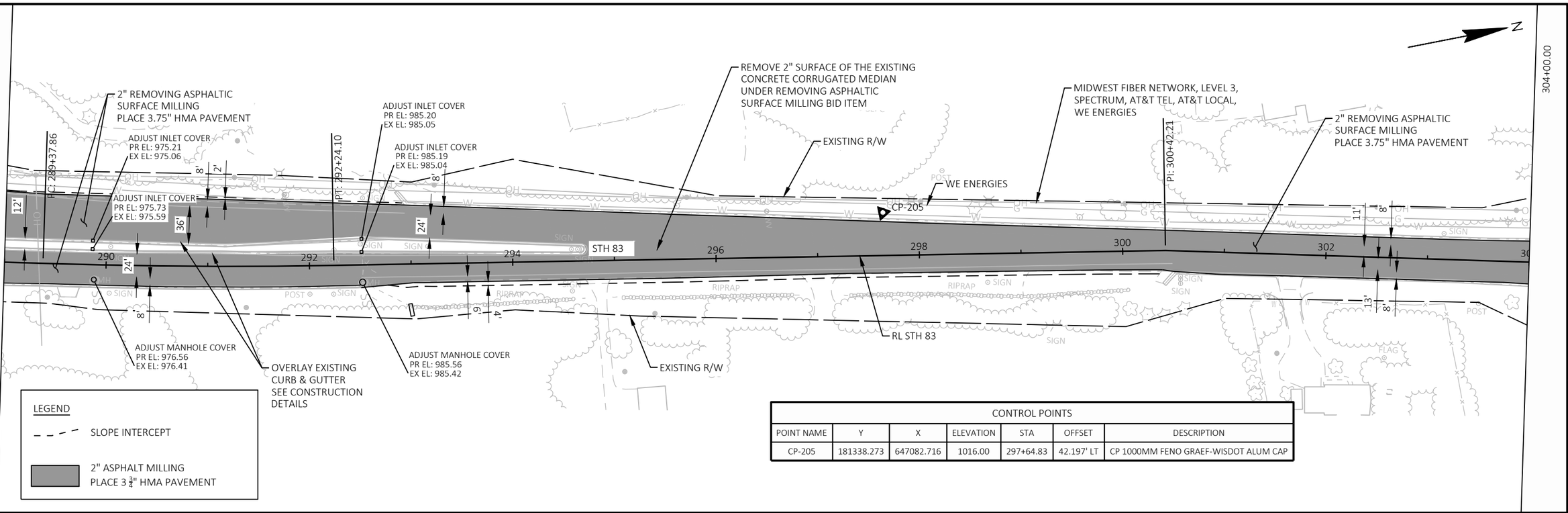
CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-203	179562.234	646812.108	968.33	279+70.52	59.324' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-204	180438.647	646934.968	973.74	288+52.12	17.986' LT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP



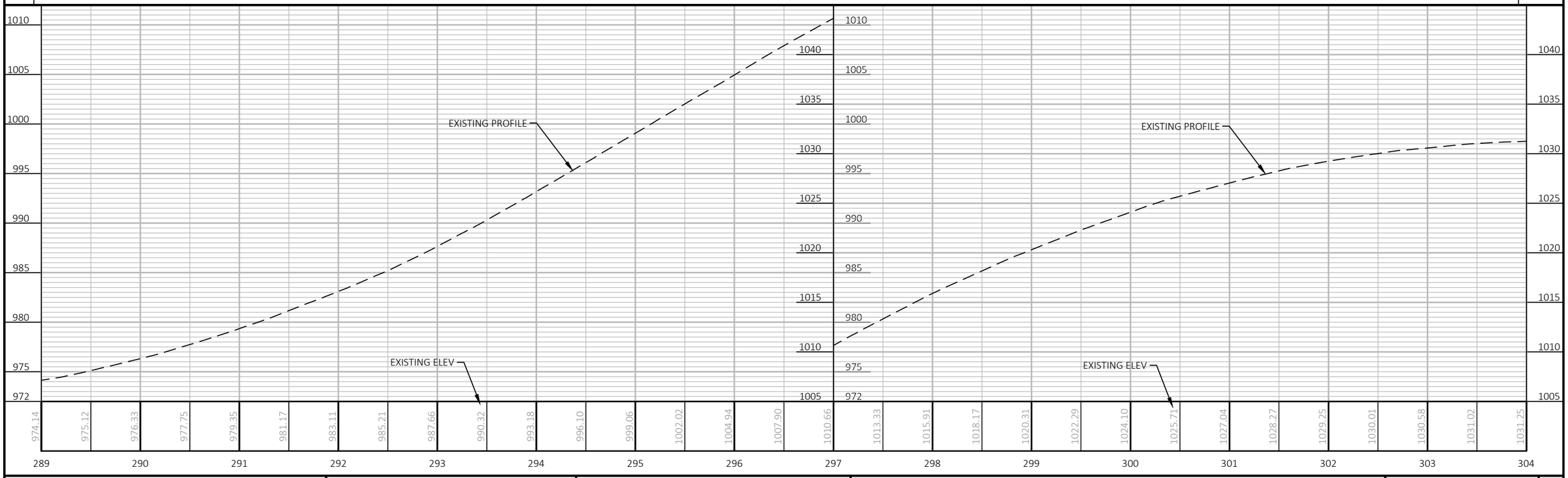


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PLAN AND PROFILE: STH 83	SHEET 209	E

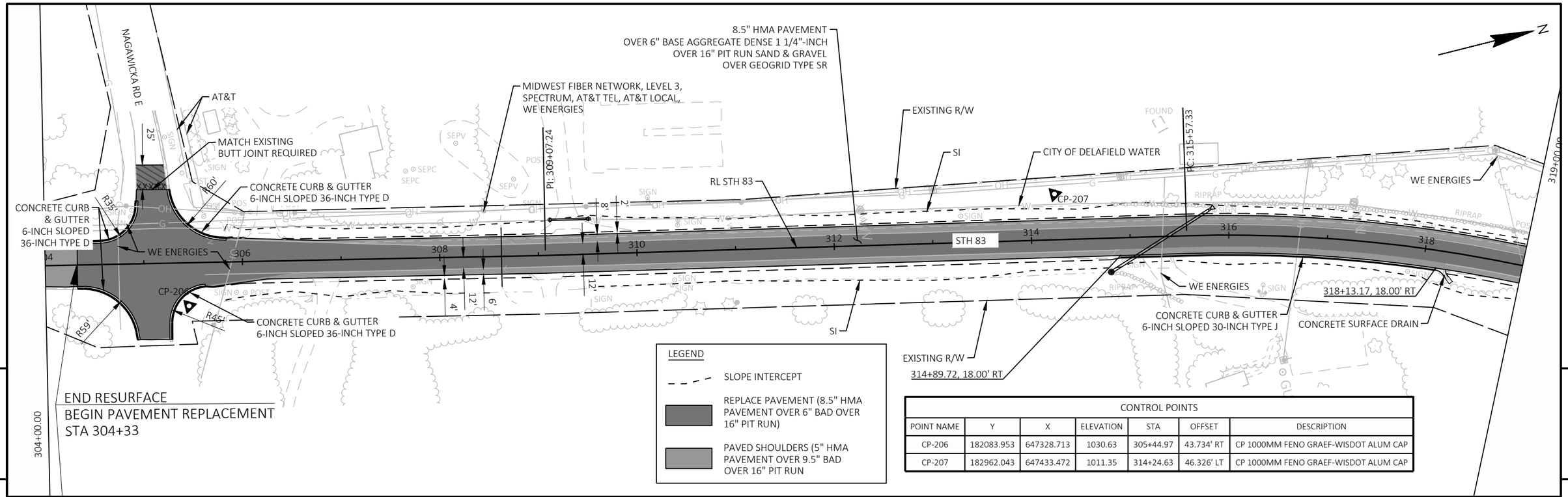
FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - PP03
PLOT DATE : 3/21/2024 8:18 AM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



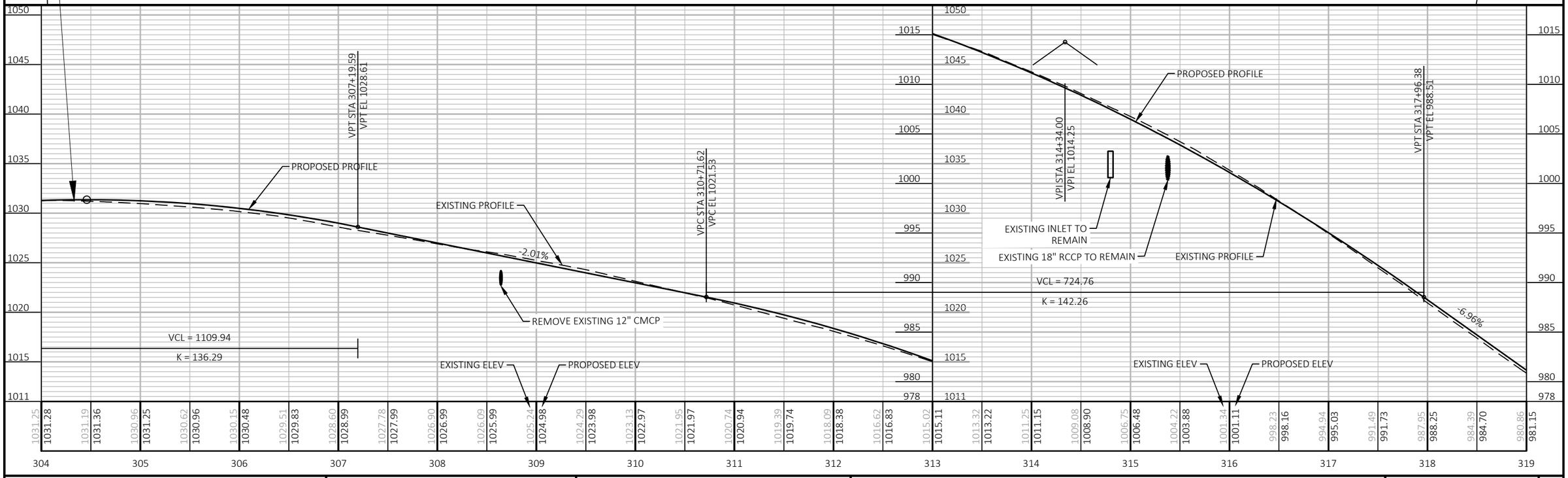
CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-205	181338.273	647082.716	1016.00	297+64.83	42.197' LT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PLAN AND PROFILE: STH 83	SHEET 210 E

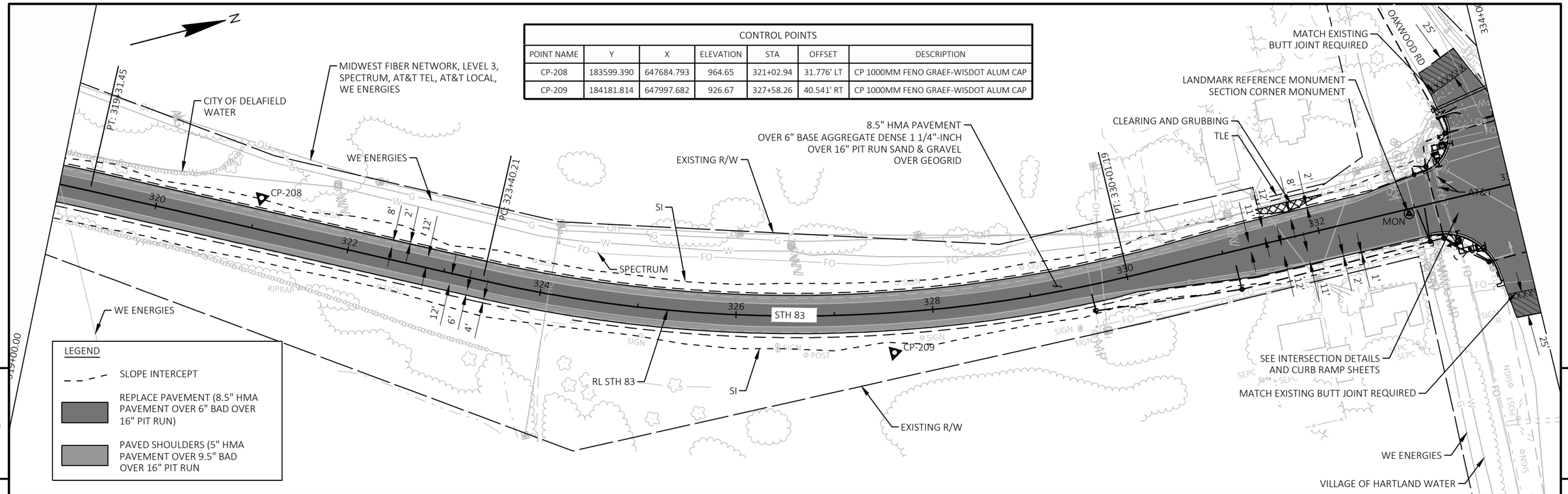


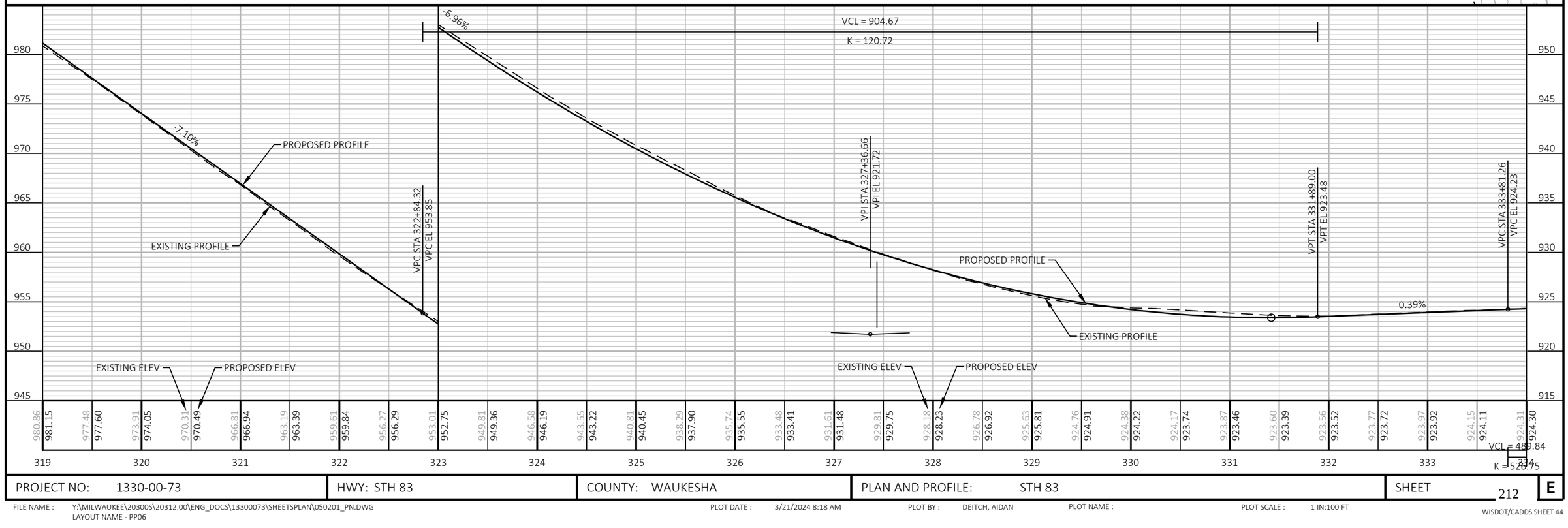
CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-206	182083.953	647328.713	1030.63	305+44.97	43.734' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-207	182962.043	647433.472	1011.35	314+24.63	46.326' LT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PLAN AND PROFILE: STH 83	SHEET 211 E

CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-208	183599.390	647684.793	964.65	321+02.94	31.776' LT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-209	184181.814	647997.682	926.67	327+58.26	40.541' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP

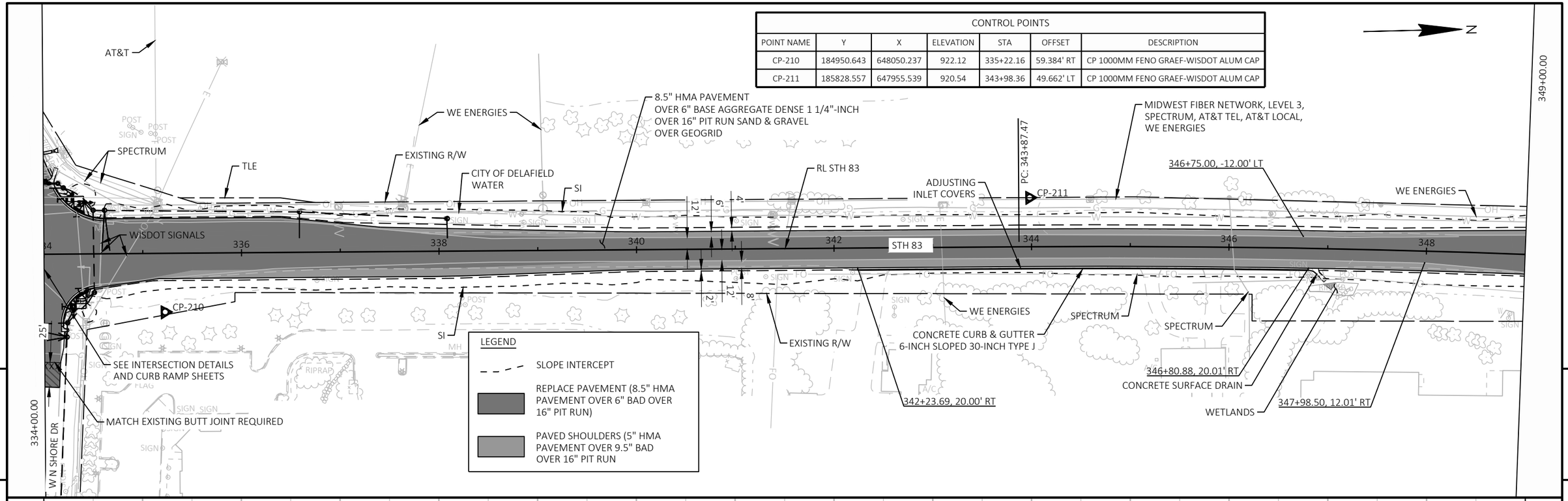


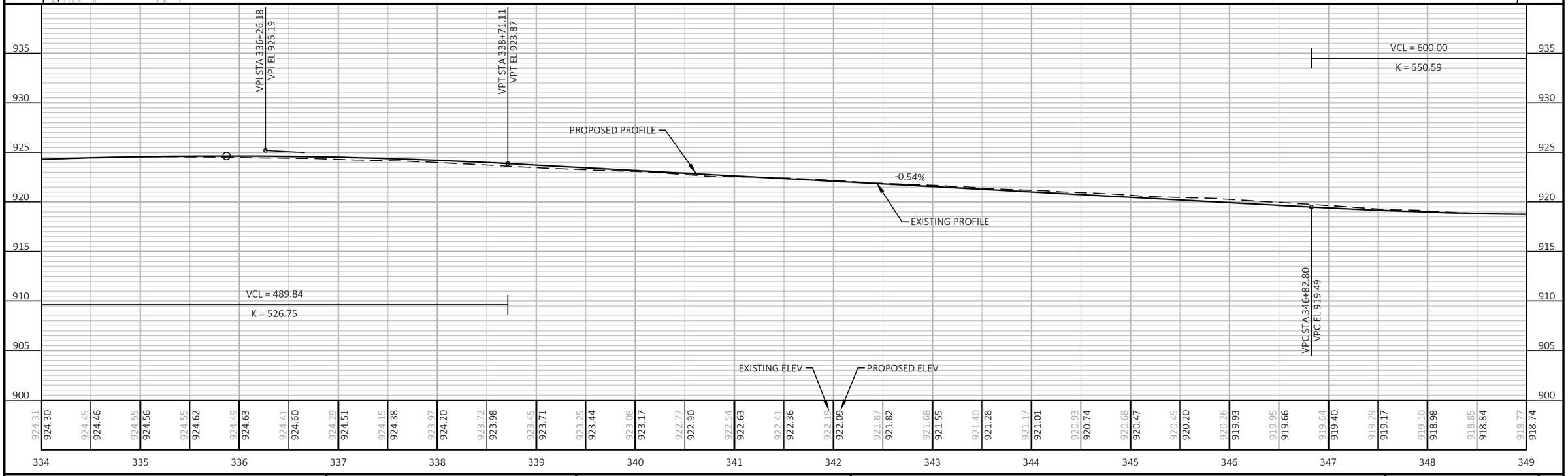


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PLAN AND PROFILE: STH 83	SHEET 212 E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - PP06
PLOT DATE : 3/21/2024 8:18 AM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-210	184950.643	648050.237	922.12	335+22.16	59.384' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-211	185828.557	647955.539	920.54	343+98.36	49.662' LT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP





PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PLAN AND PROFILE: STH 83	SHEET 213 E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - PP07
PLOT DATE : 3/21/2024 8:18 AM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

LEGEND

- SLOPE INTERCEPT
- REPLACE PAVEMENT (8.5" HMA PAVEMENT OVER 6" BAD OVER 16" PIT RUN)
- PAVED SHOULDERS (5" HMA PAVEMENT OVER 9.5" BAD OVER 16" PIT RUN

CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-212	186484.254	648089.725	917.86	350+59.63	54.181' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-213	187240.337	648122.326	919.35	358+14.49	41.951' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP

PROPOSED R/W
PROPOSED TLE
350+00.00, -24.00' LT
PT: 350+26.69
352+50.00, -24.00' LT
TLE
PC: 353+41.59
SI
354+67.00, -12.00' LT
EXISTING R/W
MIDWEST FIBER NETWORK, LEVEL 3, SPECTRUM, AT&T TEL, AT&T LOCAL, WE ENERGIES
PT: 359+85.42
359+11.00, -12.00' LT
WE ENERGIES
MON
CLEARING AND GRUBBING
362+36.00, -24.00' LT
363+89.84, -24.00' LT
SPECTRUM
AT&T
LEVEL 3
WE ENERGIES
CP-212
CP-213
RL STH 83
STH 83
R58'
R38'
R59'
AT&T
SPECTRUM
CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
SPECTRUM
MIDWEST FIBER NETWORK
MATCH EXISTING BUTT JOINT REQUIRED
SI
EXISTING R/W
SPECTRUM
8.5" HMA PAVEMENT OVER 6" BASE AGGREGATE DENSE 1 1/4"-INCH OVER 16" PIT RUN SAND & GRAVEL OVER GEOGRID
AT&T
WE ENERGIES
SPECTRUM
CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
MATCH EXISTING BUTT JOINT REQUIRED
AT&T
MIDWEST FIBER NETWORK
WALNUT RIDGE DR
WALNUT RIDGE DR
349+00.00
364+00.00
N

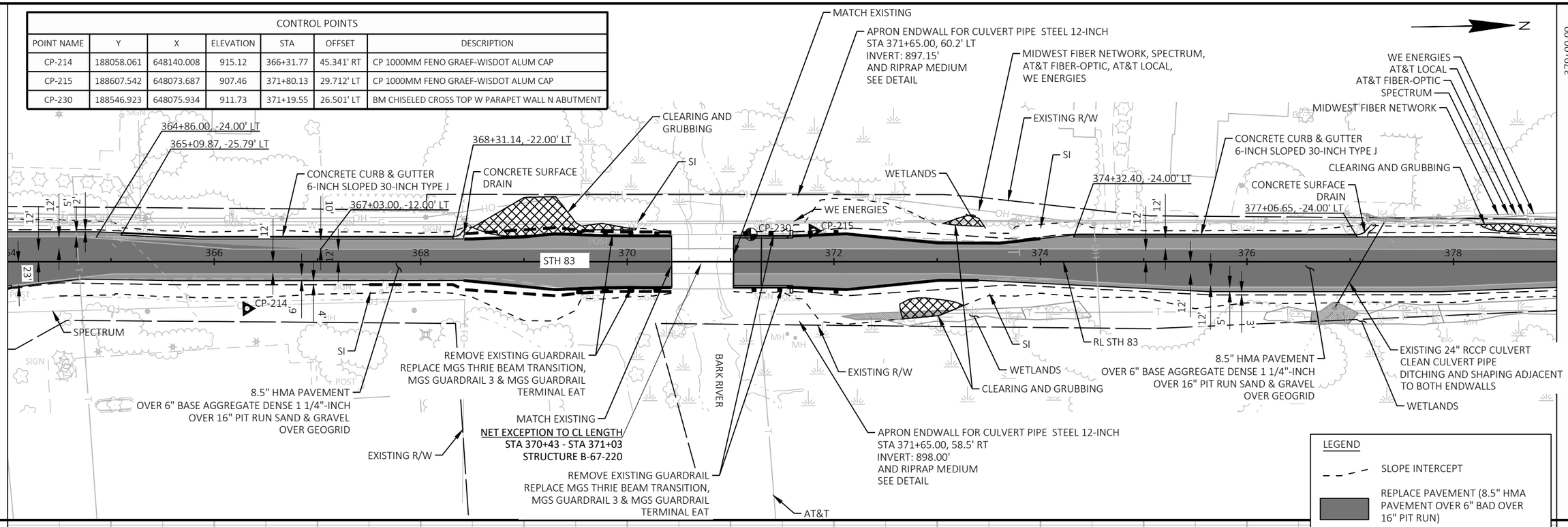
VCL = 600.00
K = 550.59
VPC STA 354+55.24
VPC EL 920.47
VPI STA 357+28.37
VPI EL 921.97
VPT STA 360+01.51
VPT EL 920.73
STA 361+37.56
EL 920.12
VPC STA 363+71.44
VPC EL 919.35
PROPOSED PROFILE
0.55%
-0.45%
-0.33%
EXISTING PROFILE
VCL = 457.92
K = 307.42
VPI STA 349+82.80
VPI EL 917.87
EXISTING 2X36" RCCP TO REMAIN
VPT STA 352+82.80
VPT EL 919.52
VCL = 546.27
K = 544.81
EXISTING ELEV
PROPOSED ELEV

349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364
918.77	918.74	918.72	918.69	918.68	918.69	918.67	918.73	918.70	918.82	918.84	918.95	919.06	919.13	919.29	919.35
919.55	919.61	919.81	919.89	920.05	920.16	920.26	920.44	920.49	920.70	920.77	920.91	920.94	921.07	921.13	921.19
921.21	921.26	921.22	921.29	921.09	921.27	920.93	921.21	920.83	921.10	920.77	920.94	920.65	920.74	920.41	920.52
920.18	920.29	920.02	920.08	919.82	919.91	919.66	919.75	919.44	919.58	919.26	919.42	918.98	919.24		

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PLAN AND PROFILE: STH 83	SHEET 214	E

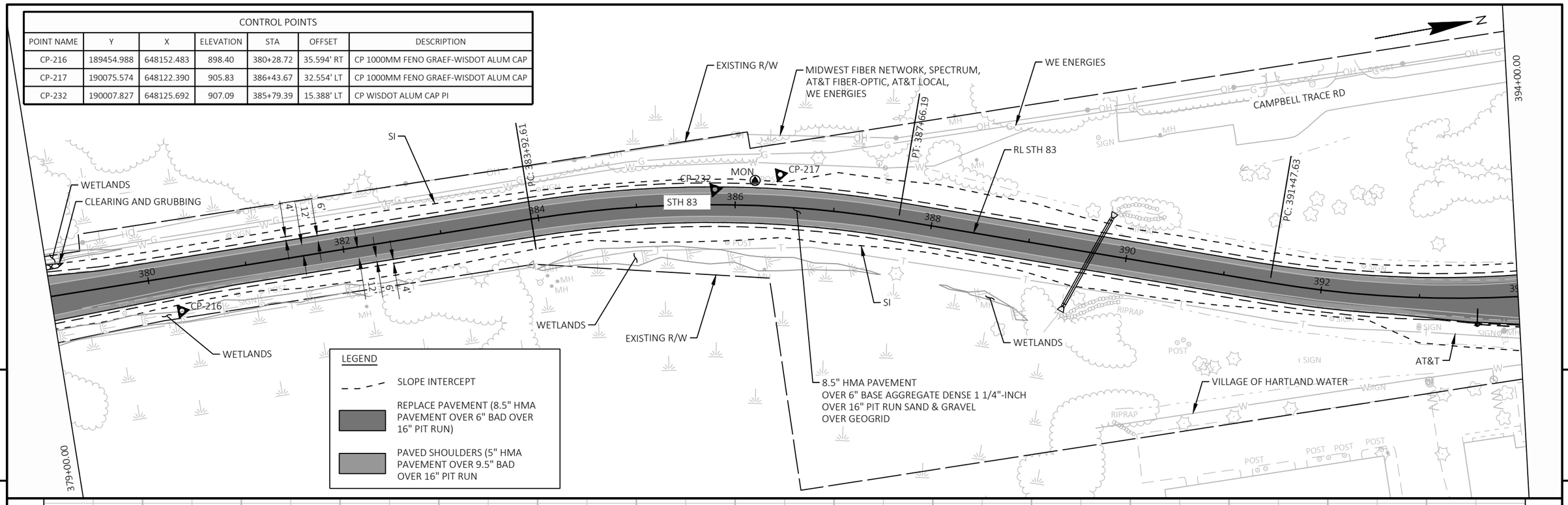
FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - PP08
PLOT DATE : 3/21/2024 8:18 AM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

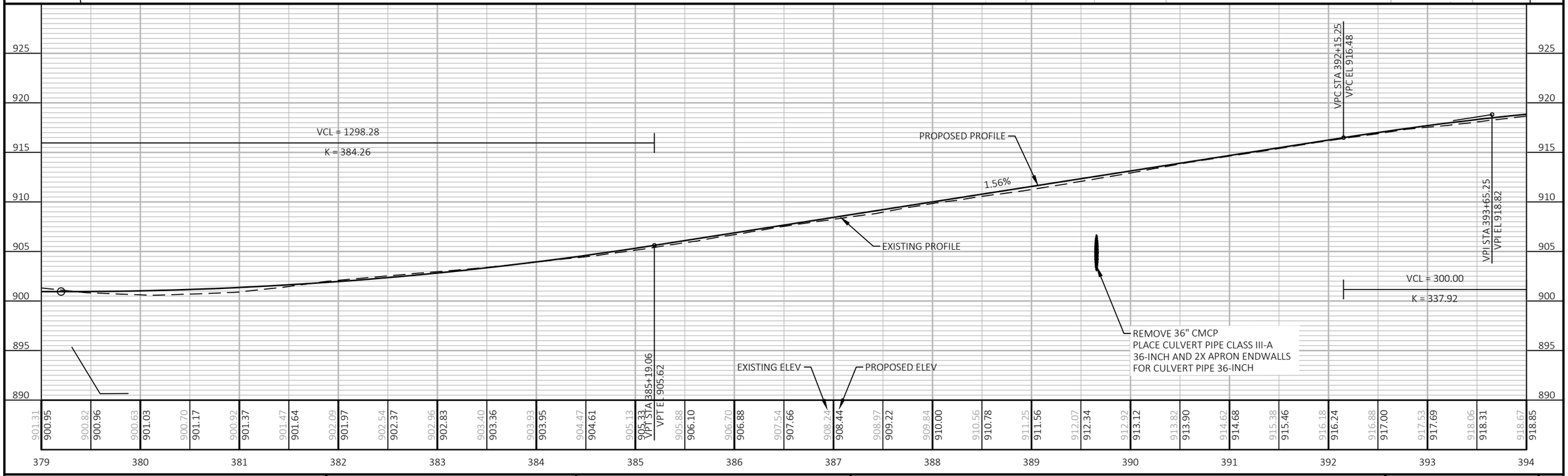
CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-214	188058.061	648140.008	915.12	366+31.77	45.341' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-215	188607.542	648073.687	907.46	371+80.13	29.712' LT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-230	188546.923	648075.934	911.73	371+19.55	26.501' LT	BM CHISELED CROSS TOP W PARAPET WALL N ABUTMENT



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PLAN AND PROFILE: STH 83	SHEET 215	E

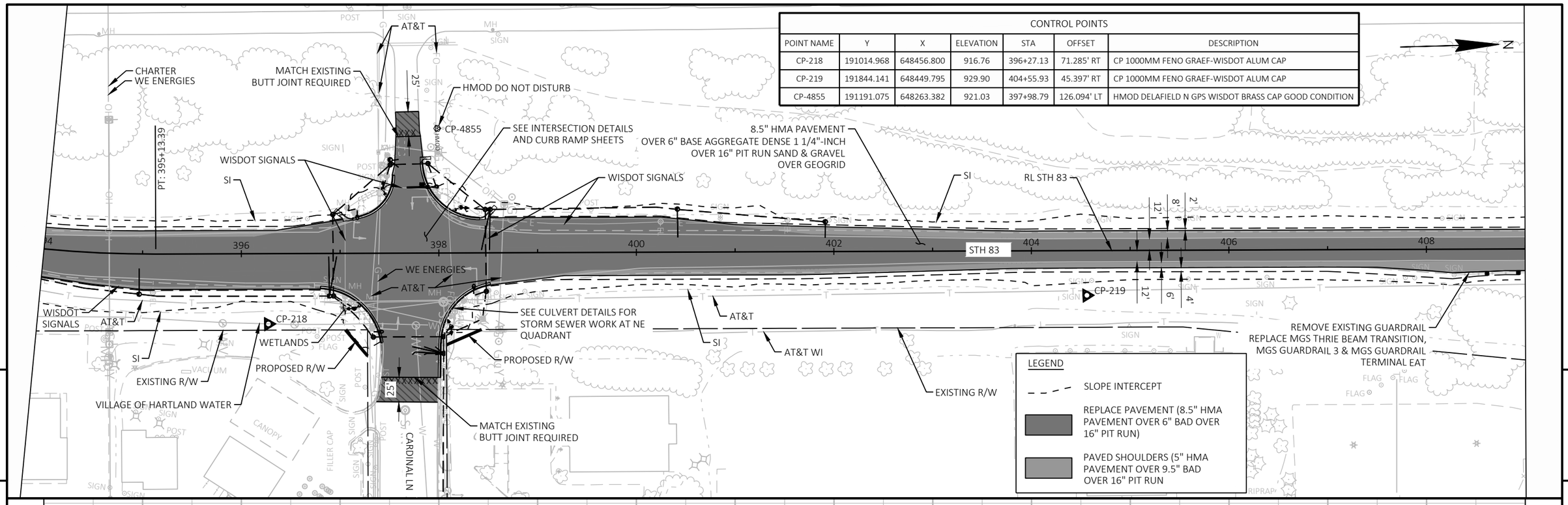
CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-216	189454.988	648152.483	898.40	380+28.72	35.594' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-217	190075.574	648122.390	905.83	386+43.67	32.554' LT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-232	190007.827	648125.692	907.09	385+79.39	15.388' LT	CP WISDOT ALUM CAP PI

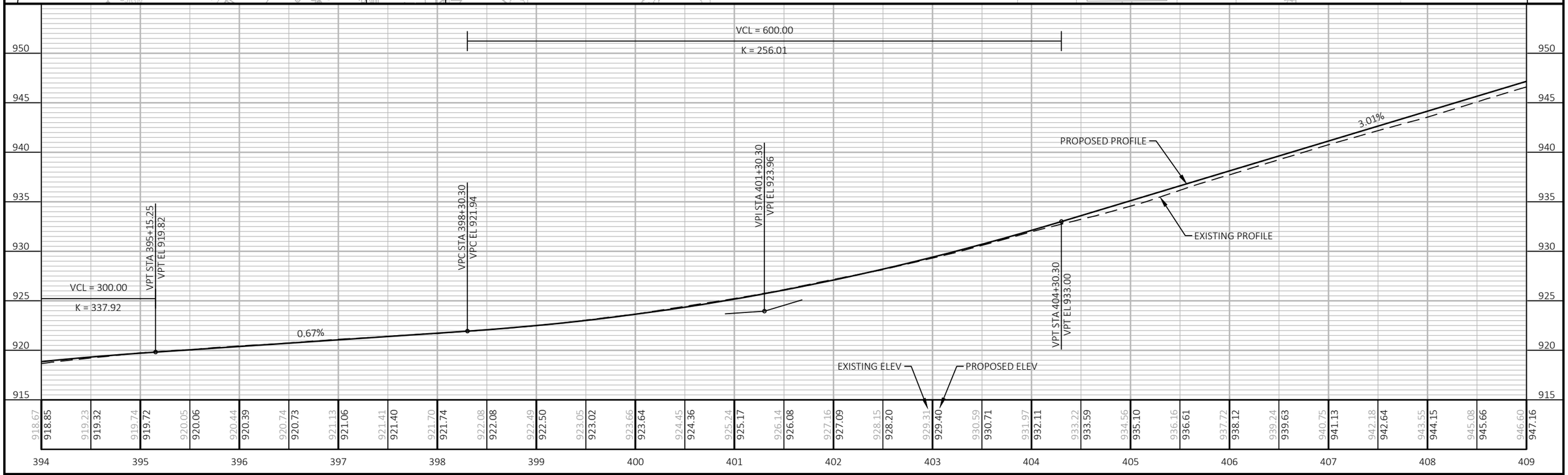




PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PLAN AND PROFILE: STH 83	SHEET 216 E

CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-218	191014.968	648456.800	916.76	396+27.13	71.285' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-219	191844.141	648449.795	929.90	404+55.93	45.397' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-4855	191191.075	648263.382	921.03	397+98.79	126.094' LT	HMOD DELAFIELD N GPS WISDOT BRASS CAP GOOD CONDITION





PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PLAN AND PROFILE: STH 83	SHEET 217	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - PP11

PLOT DATE : 3/21/2024 8:19 AM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

LEGEND

- SLOPE INTERCEPT
- REPLACE PAVEMENT (8.5" HMA PAVEMENT OVER 6" BAD OVER 16" PIT RUN)
- PAVED SHOULDERS (5" HMA PAVEMENT OVER 9.5" BAD OVER 16" PIT RUN

8.5" HMA PAVEMENT
OVER 6" BASE AGGREGATE DENSE 1 1/4"-INCH
OVER 16" PIT RUN SAND & GRAVEL
OVER GEOGRID

MON

CAMPBELL TRACE RD

MIDWEST FIBER NETWORK, SPECTRUM, AT&T FIBER-OPTIC, AT&T LOCAL, WE ENERGIES

ATC

AT&T

CANADIAN PACIFIC RAILWAY

REMOVE EXISTING GUARDRAIL
REPLACE MGS THRIE BEAM TRANSITION,
MGS GUARDRAIL 3 & MGS GUARDRAIL
TERMINAL EAT

CONCRETE PAVEMENT APPROACH SLAB

WE ENERGIES

MATCH EXISTING

2" REMOVING
ASPHALTIC SURFACE
MILLING
PLACE 2" HMA
PAVEMENT

PC: 412+90.24

RL STH 83

CP-220

CP-233

SI

CP-221

CP-231

STH 83

410 412 414 416 418 420 422

12' 8' 2' 12' 10' 4'

409+00.00

EXISTING R/W

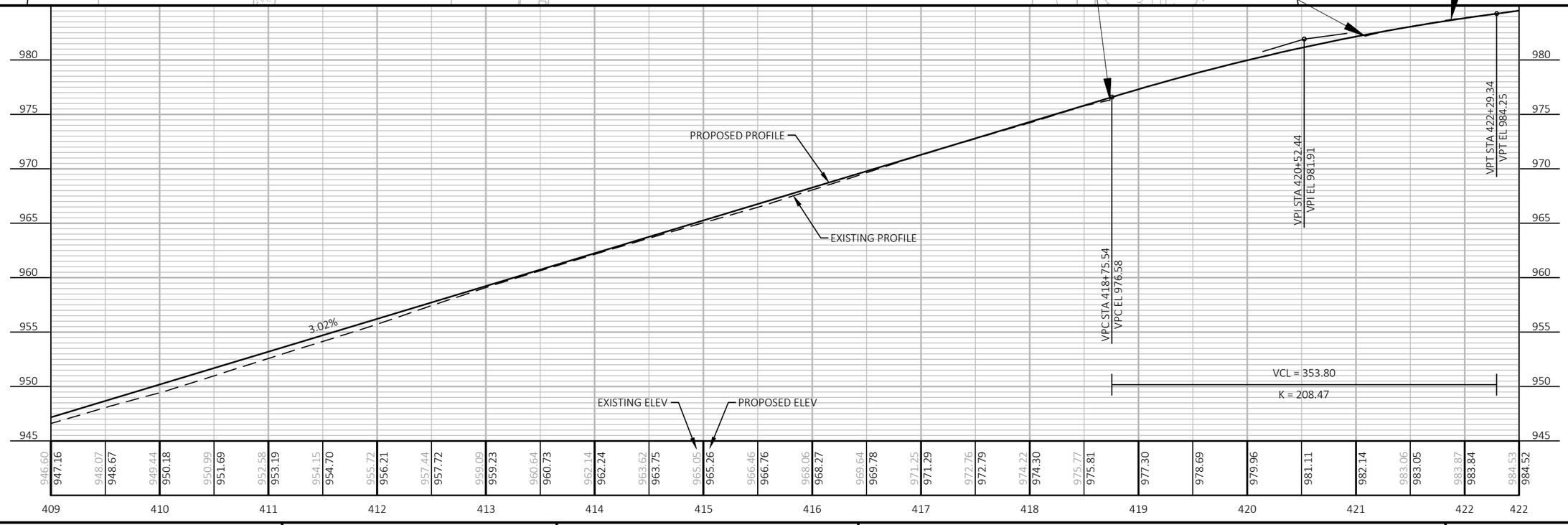
NET EXCEPTION TO CL LENGTH
STA 418+75 - STA 421+08
STRUCTURE B-67-168

END PROJECT
END PAVEMENT
REPLACEMENT
STA 421+86

VETTELSON RD

CONTROL POINTS

POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-220	192667.206	648381.341	955.55	412+77.22	41.785' LT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-221	193528.283	648385.299	983.82	421+37.17	36.867' RT	CP 1000MM FENO GRAEF-WISDOT ALUM CAP
CP-231	193248.006	648418.217	979.65	418+57.22	24.121' RT	BM WI DIVISION OF HIGHWAYS ALUM CAP
CP-233	192679.175	648381.525	955.57	412+89.19	41.874' LT	CP WI DIVISION OF HIGHWAYS ALUM CAP PC



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PLAN AND PROFILE: STH 83	SHEET 218 E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - PP12

PLOT DATE : 3/21/2024 8:19 AM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

Standard Detail Drawing List

08A05-20D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A05-21A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-21C	INLET COVERS TYPE F, HM, HM-S, S, T, HM-GJ & HM-GJ-S
08C06-03	INLETS 3-FT AND 4-FT DIAMETER
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D02-08A	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08B	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08C	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-21A	CURB RAMPS TYPES 1 AND 1-A
08D05-21B	CURB RAMPS TYPES 2 AND 3
08D05-21C	CURB RAMPS TYPES 4A AND 4A1
08D05-21D	CURB RAMPS TYPE 4B AND 4B1
08D05-21E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-21F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-21G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D15-05A	EDGEDRAIN OUTLET AND OUTFALL MARKERS
08D15-05B	EDGEDRAIN AND BASE AGGREGATE OPEN GRADED
08D15-05C	EDGEDRAIN AND BASE AGGREGATE OPEN GRADED
08D20-01	DRIVEWAYS WITH CURB & GUTTER RETURNS
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F06-04	REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN
08F07-05	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS
09A01-14A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-14B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
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
09C11-10	CONCRETE BASE TYPE 10
09C12-09A	CONCRETE BASE TYPE 13
09C12-09B	CONCRETE BASE TYPE 13
09C13-03	CONCRETE BASE TYPE 10 & TYPE 13 EXTENSION
09C15-01	CONCRETE BASE TYPE 10 SPECIAL
09C16-01	CONCRETE BASE TYPE 10 SPECIAL EXTENSION
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09E03-06	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-06	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09E08-09E	TYPE 10 POLE 15'-30' MONOTUBE ARM
09E08-09F	TYPE 10 SPECIAL POLE 35' MONOTUBE ARM
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
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
11B02-02	CONCRETE MEDIAN NOSE
13A05-06A	SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY
13A05-06B	SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY
13A10-03A	SHOULDER RUMBLE STRIPS - ASPHALT
13A10-03G	SHOULDER AND EDGE LINE RUMBLE STRIPS - CROSSINGS, INTERSECTIONS, BRIDGES, DRIVEWAYS
13A10-03H	SHOULDER AND EDGE LINE RUMBLE STRIPS - RAILROAD, PASSING, CLIMBING AND BYPASS LANES
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13A11-04D	CENTERLINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAILROADS
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13C19-03	HMA LONGITUDINAL JOINTS
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6

Standard Detail Drawing List

14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C07-15E	PAVEMENT MARKING FOR BIKE LANES
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-23C	PAVEMENT MARKING (TURN LANES)
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C18-08A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C18-08B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15C19-08B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C19-08C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C20-02	YIELD MARKING
15C21-11	SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS
15C29-08A	BICYCLE LANE MARKING
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15C35-06B	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15C35-06C	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15D12-12A	TRAFFIC CONTROL, LANE CLOSURE, WITH TEMPORARY RUMBLE STRIPS
15D20-07A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D30-09A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09L	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS

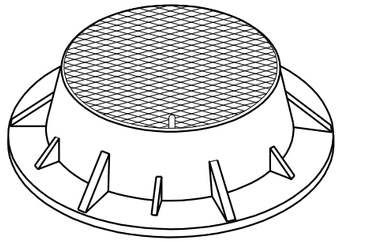
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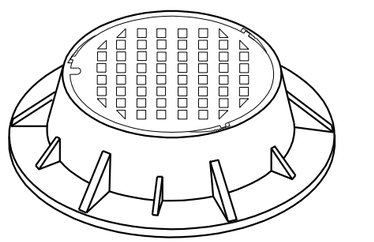
GENERAL NOTES

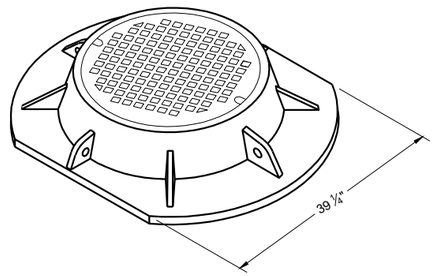
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

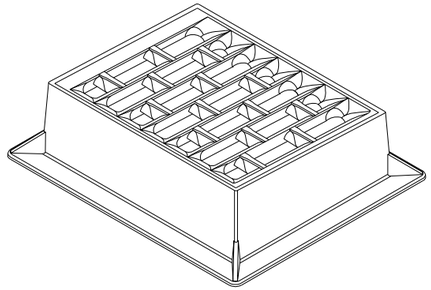
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

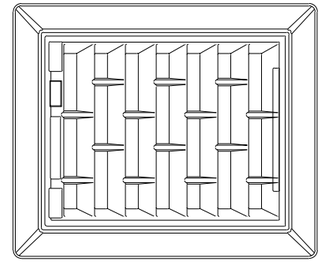


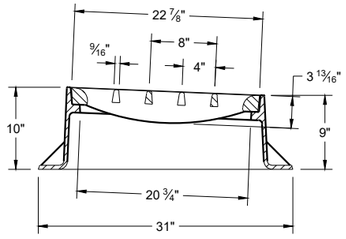


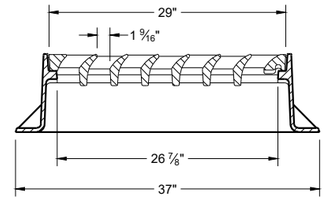


TYPE "K"

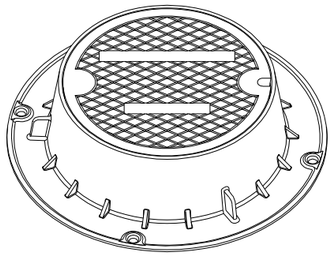


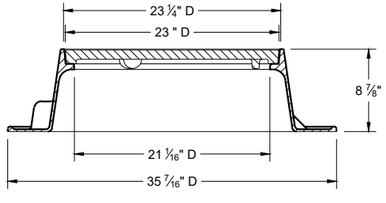






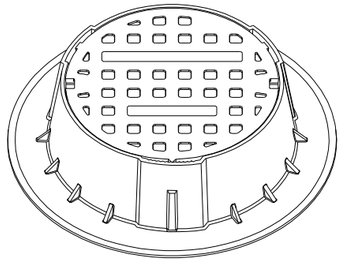
INLET COVER TYPE "BW"

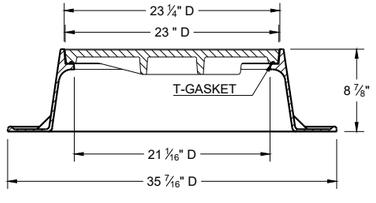




TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

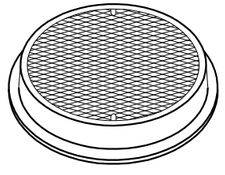


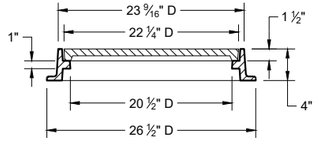


TYPE "J" SPECIAL

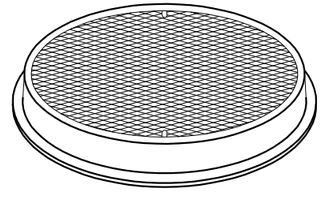
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

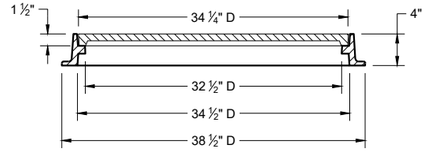
NOTE: EITHER CASTING IS ACCEPTABLE





TYPE "L"





TYPE "M"

INLET COVERS TYPES BW
MANHOLE COVERS TYPES K, J, J-S, L, AND M

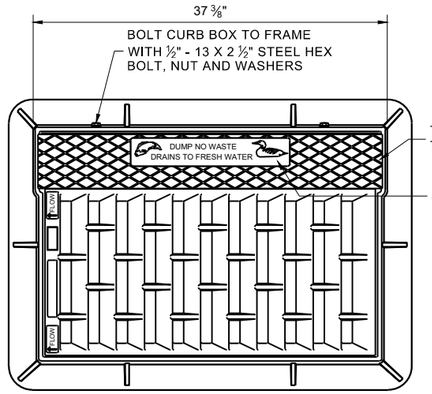
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

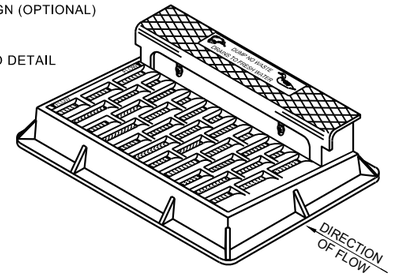
FHWA

6

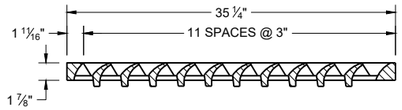
SDD 08A05-20d

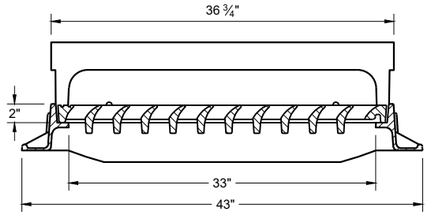


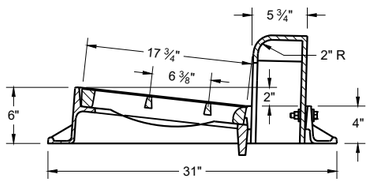
NOTE: EITHER CASTING IS ACCEPTABLE

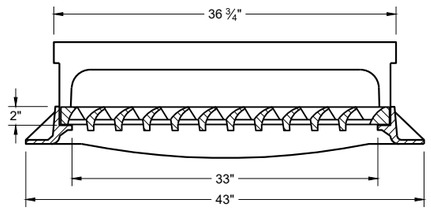


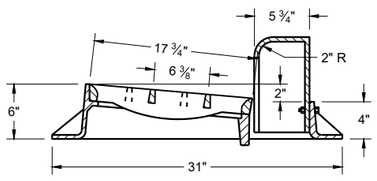
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"







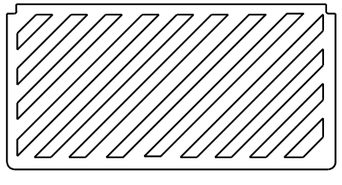




TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE

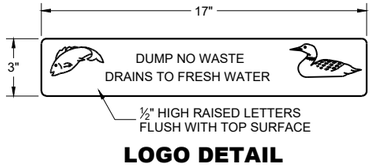
1 1/8" DIAGONAL BARS WITH 1 5/8" OPENINGS



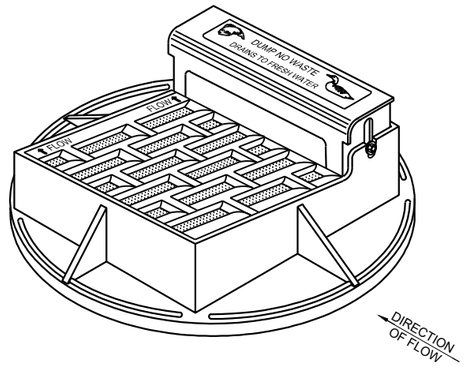
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

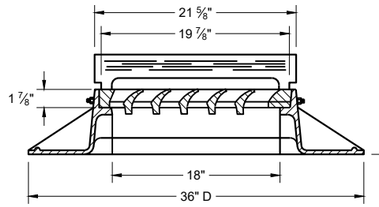


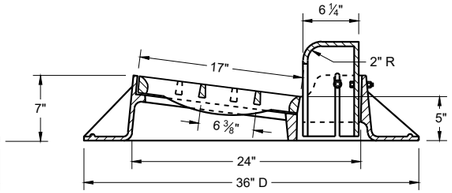
LOGO DETAIL



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

NOTE: EITHER CASTING IS ACCEPTABLE





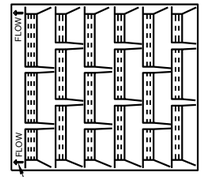
TYPE "A"

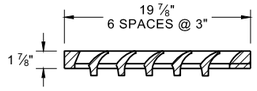
GENERAL NOTES

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

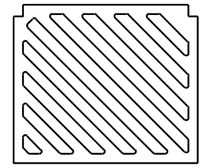
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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





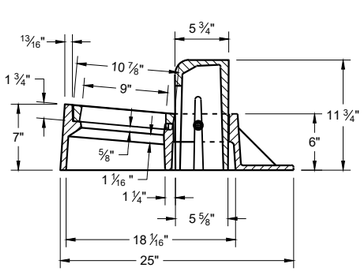
1" DIAGONAL BARS WITH 1 1/2" OPENINGS



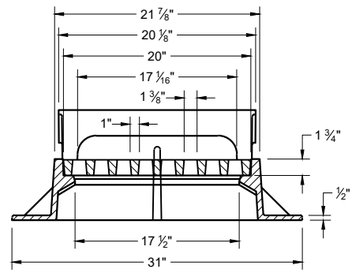
SPECIAL GRATE FOR TYPE "A" COVER

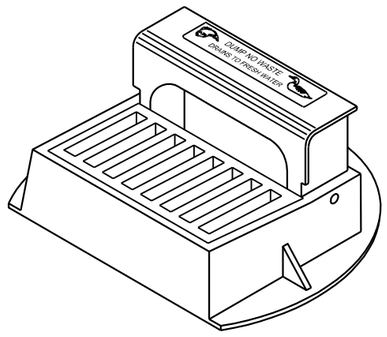
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "Z"





INLET COVERS
TYPES A, H, A-S, H-S AND Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023
DATE

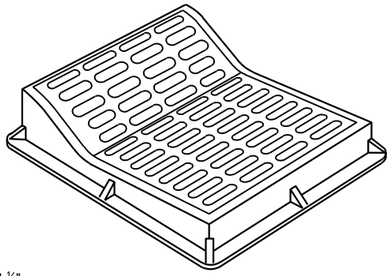
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

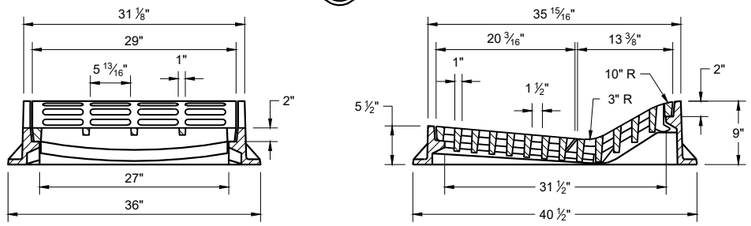
FHWA

GENERAL NOTES

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

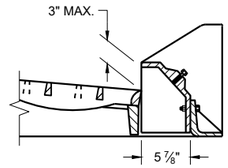
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.





TYPE "F"

USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"

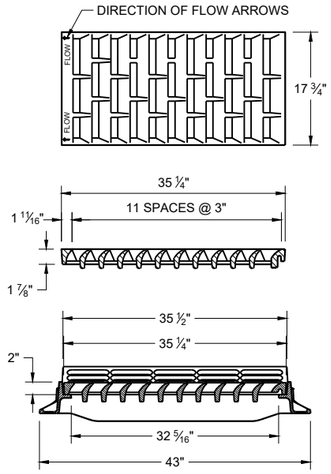


ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

USE WITH TYPES "G" AND "J" CONCRETE CURB AND GUTTER, 30 INCH
NOTED AS TYP "HM-GJ" ON DRAINAGE TABLE

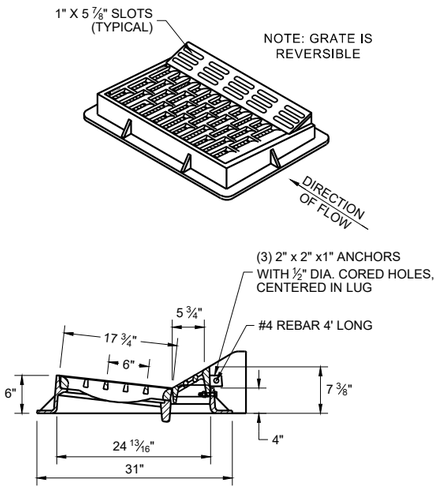
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.



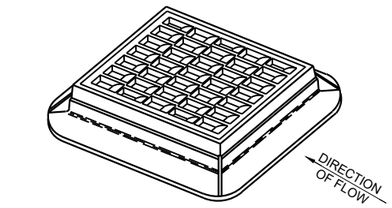
TYPE "HM"

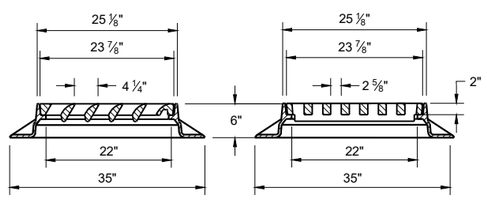
USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"



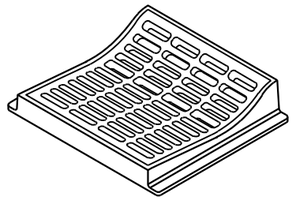
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

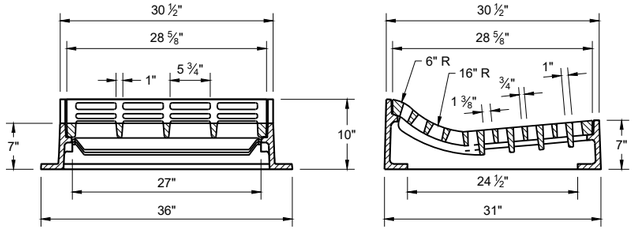
NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.





TYPE "S"





TYPE "T"

USE WITH TYPES "R" AND "T" CONCRETE CURB AND GUTTER, 36"

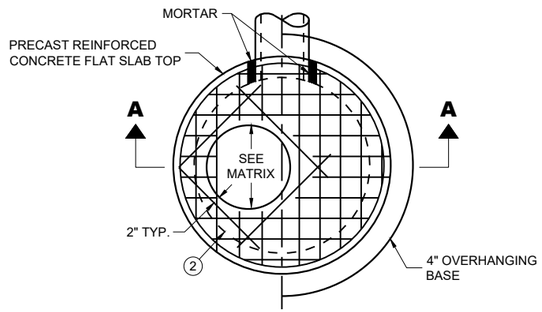
INLET COVERS
TYPES F, HM, HM-S, S, T, HM-GJ AND HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

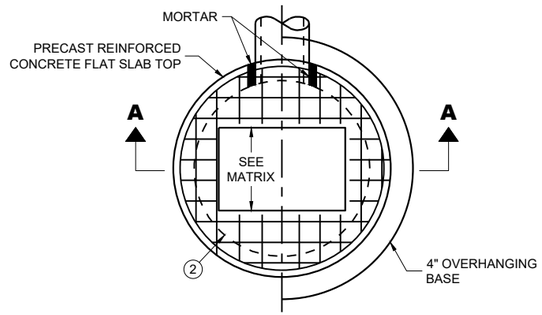
APPROVED
December 2023 — DATE
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FHWA

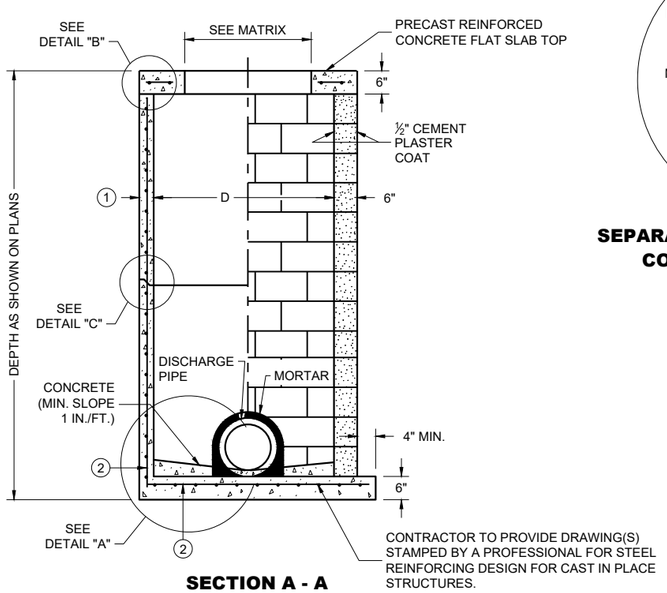
6
SDD 08A05-21c



PLAN VIEW CIRCULAR OPENING



PLAN VIEW RECTANGULAR OPENING



SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (2)

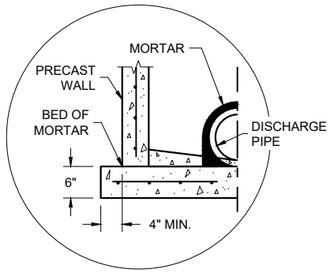
CIRCULAR INLETS WITH FLAT TOP

CATCH BASIN COVER OPENING MATRIX

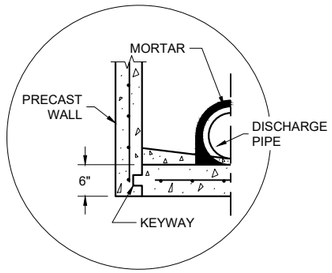
INLET SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT.)											
3-FT	2 DIA.				X							X
	2 X 2	X	X					X		X		
4-FT	2 DIA.				X							X
	2 X 2	X	X					X		X		
	2 X 2.5			X				X	X	X	X	
	2 X 3						X					
	2.5 X 3					X						

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

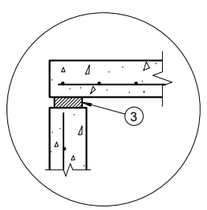


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

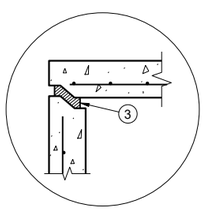


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

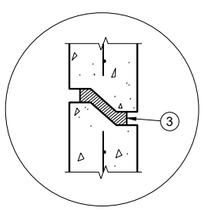
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

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

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

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

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

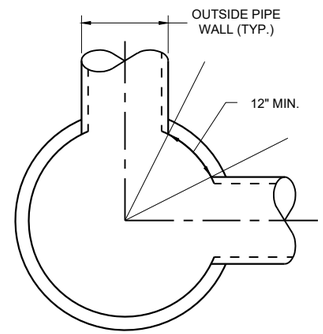
4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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

(1) MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT DIAMETER AND 5 INCHES FOR 4-FT DIAMTER PRECAST INLETS.

(2) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(3) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

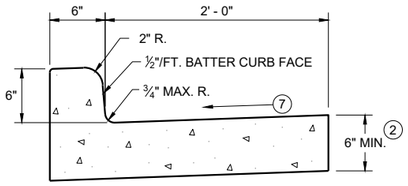
INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

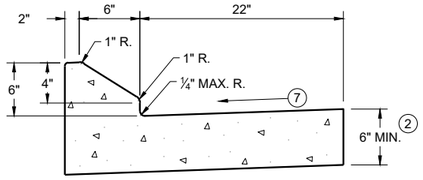
APPROVED
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/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

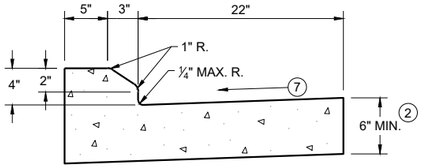
6
SDD 08C06-03



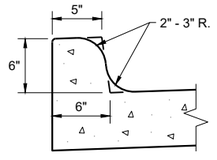
TYPES A (1) & D



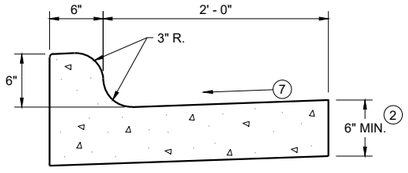
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

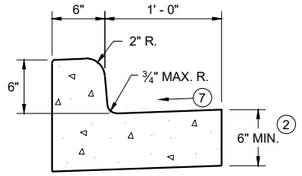


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



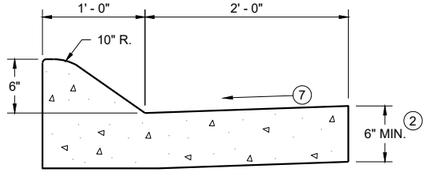
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

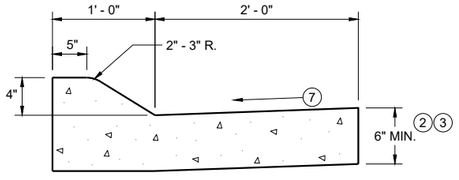


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

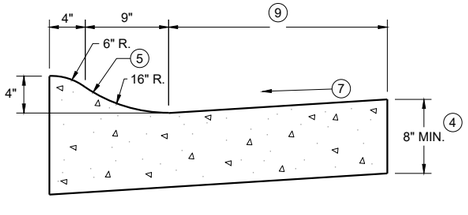


6" SLOPED CURB TYPES A (1) & D



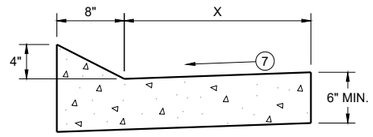
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

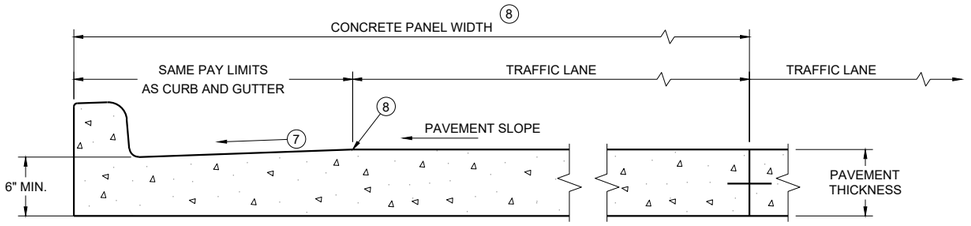


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

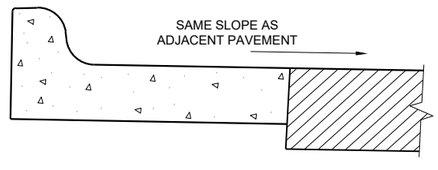
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER *

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

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

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

INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

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

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

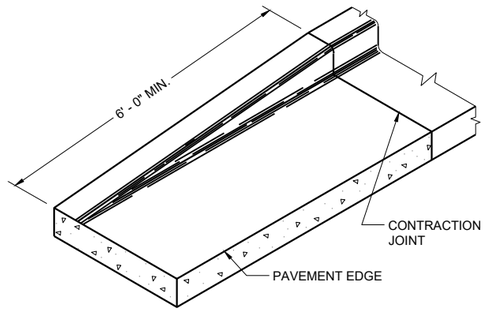
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

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

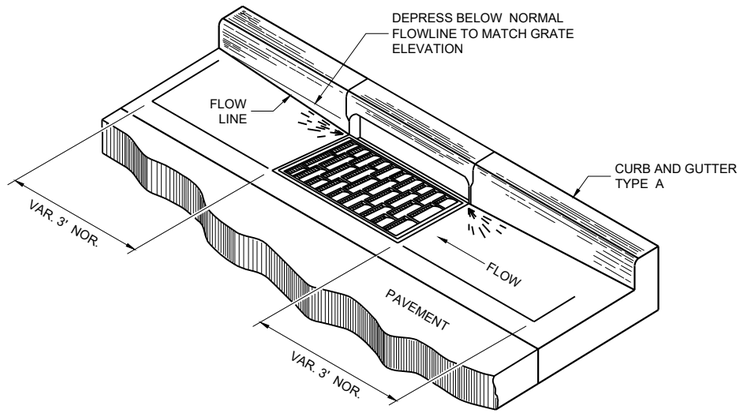
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01-23a



END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

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

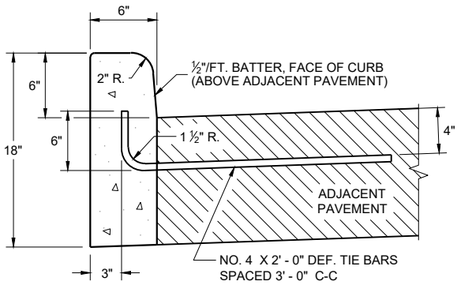
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

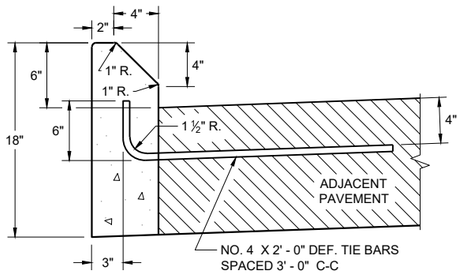
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

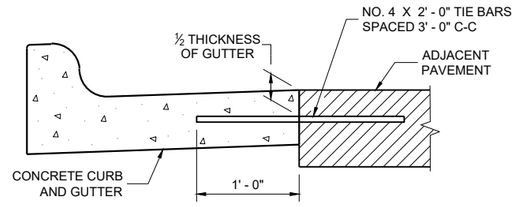


TYPES A (1) & D

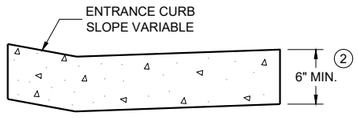


TYPES G (1) & J

CONCRETE CURB

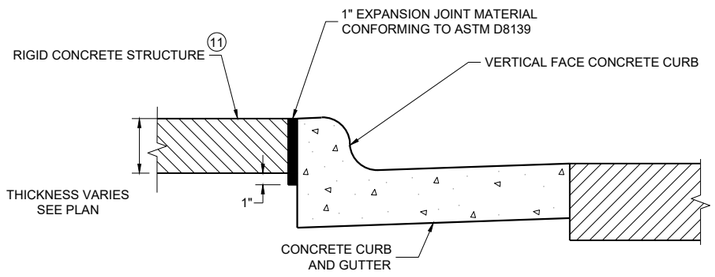


TYPICAL TIE BAR LOCATION (1)

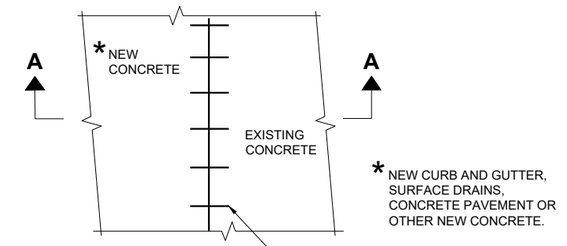


DRIVEWAY ENTRANCE CURB (10)

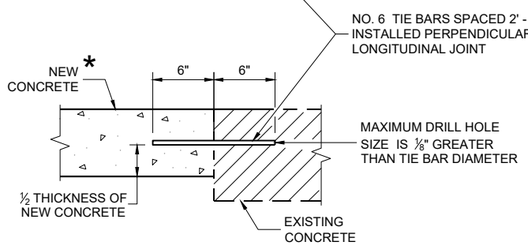
(WHEN DIRECTED BY THE ENGINEER)



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



PLAN VIEW



SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6

SDD 08D01-23b

6

SDD 08D01-23b

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.

ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

(1) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

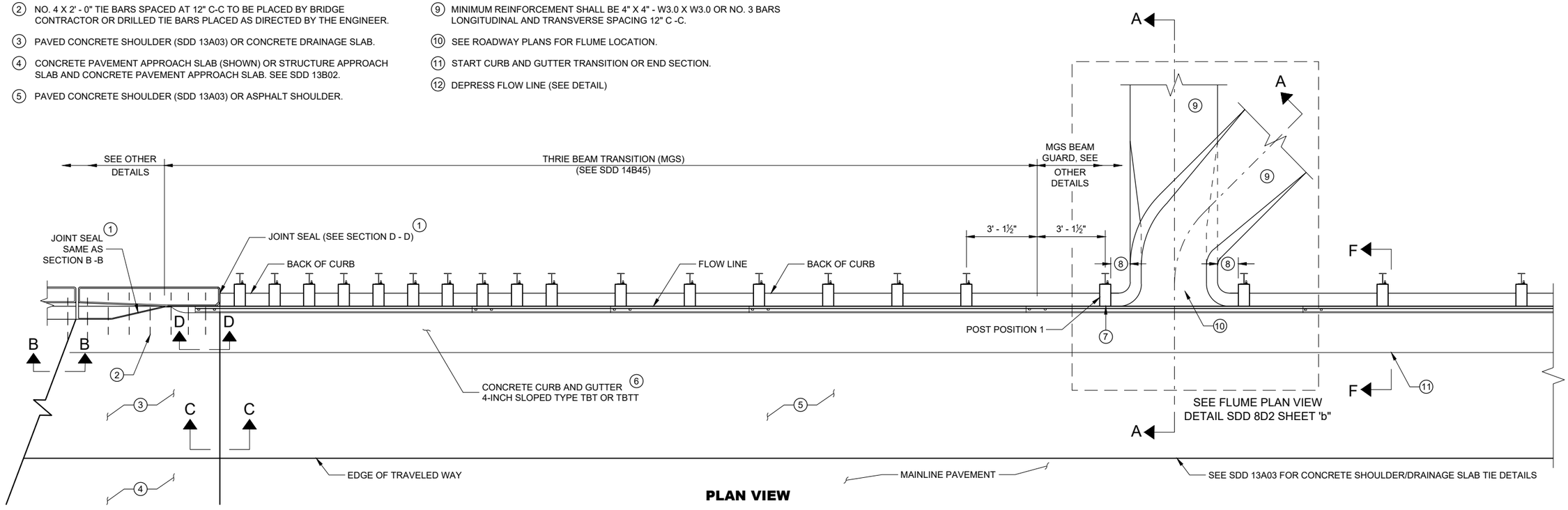
(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

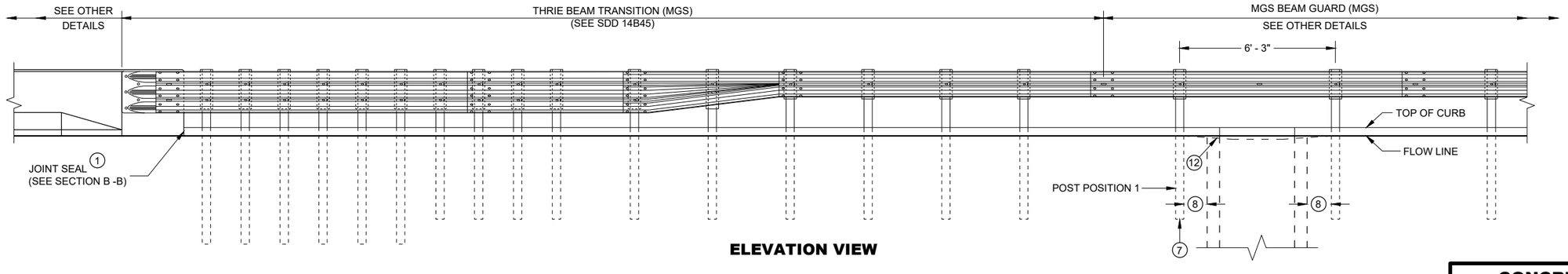
(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)



PLAN VIEW



ELEVATION VIEW

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

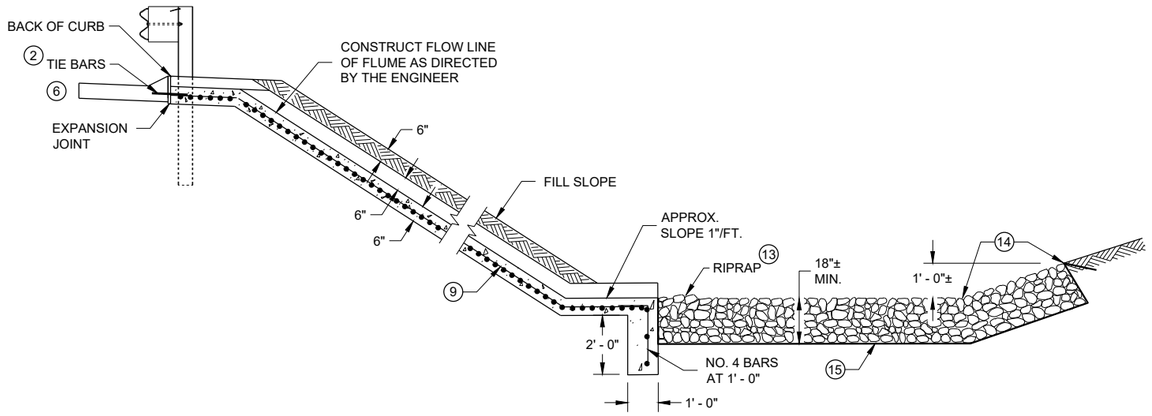
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

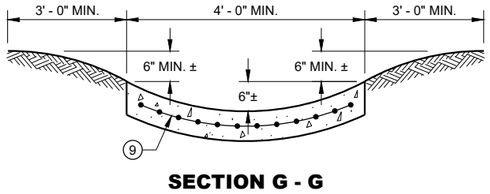
SDD 08D02 - 08a

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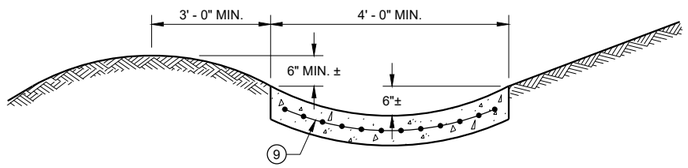
SDD 08D02 - 08a



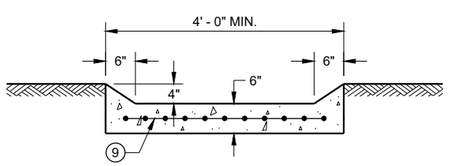
SECTION A - A



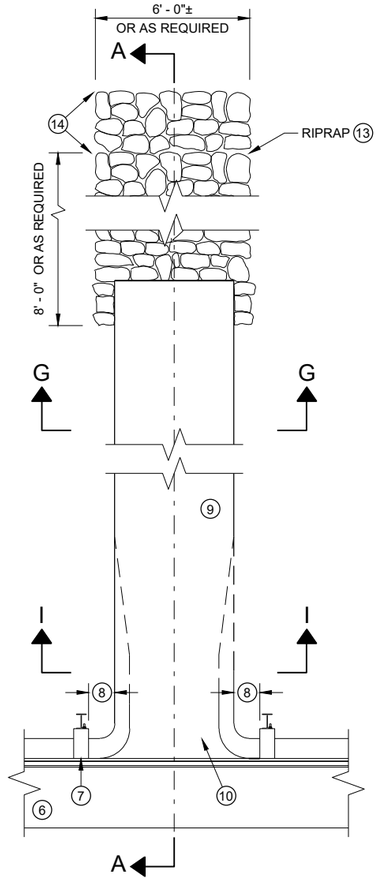
SECTION G - G



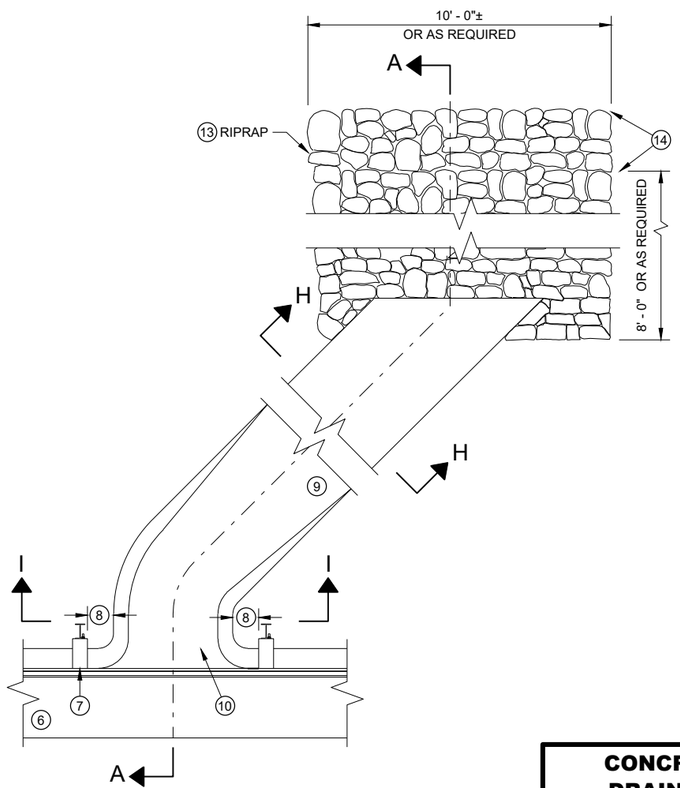
SECTION H - H



SECTION I - I



PLAN VIEW PERPENDICULAR FLUME



PLAN VIEW SKEWED FLUME

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.

ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

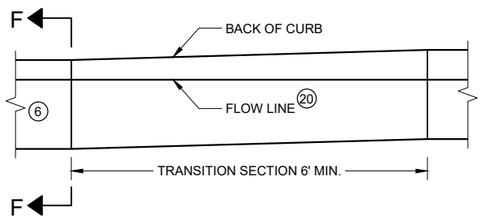
1. USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.
2. NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.
3. PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.
4. CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.
5. PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.
6. CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.
7. PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)
8. CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.
9. MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.
10. SEE ROADWAY PLANS FOR FLUME LOCATION.
11. START CURB AND GUTTER TRANSITION OR END SECTION.
12. DEPRESS FLOW LINE (SEE DETAIL)
13. MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.
14. LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH AS REQUIRED.
15. GEOTEXTILE TYPE HR.

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

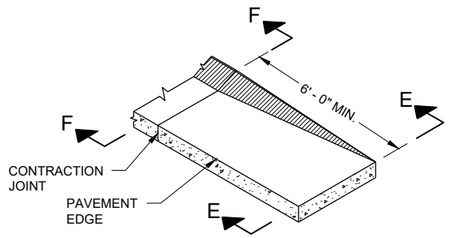
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

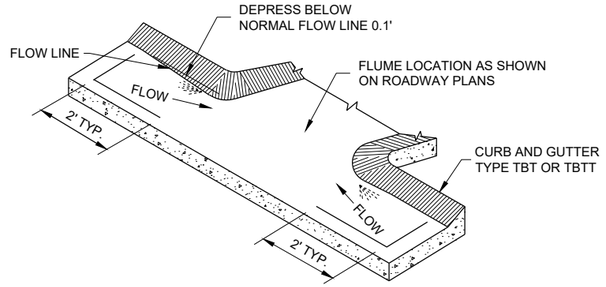
SDD 08D02 - 08b



CURB AND GUTTER TRANSITION SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED
36 INCH TYPE TBT OR TBTT



CURB AND GUTTER END SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED
36 INCH TYPE TBT OR TBTT



CURB AND GUTTER FLOW LINE DEPRESSION
AT FLUMES CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE TBT OR TBTT

GENERAL NOTES

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(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)

(13) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

(14) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

(15) GEOTEXTILE TYPE HR.

(16) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C - C.

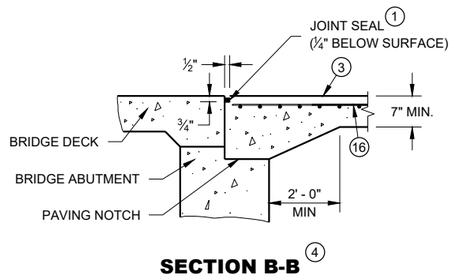
(17) MSG THRIE BEAM TRANSITION POST 1. SEE SDD 14B45 FOR ADDITIONAL CONSTRUCTION DETAILS AND ACCEPTABLE MATERIALS.

(18) MAINTAIN WIDTH, THICKNESS AND CROSS SLOPE OF ADJACENT TYPE TBT OR TBTT CURB. SEE NOTE 6 FOR TIE BAR SPACING.

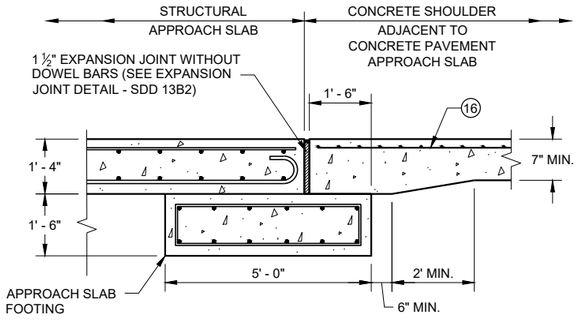
(19) ALIGN FACE OF POST BLOCK WITH FLOW LINE.

(20) MAINTAIN FLOW LINE AT EDGE OF PAVEMENT/FACE OF BEAM GUARD AS APPLICABLE.

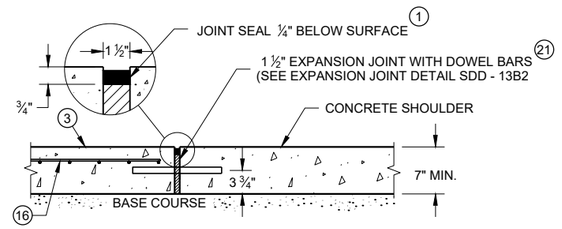
(21) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



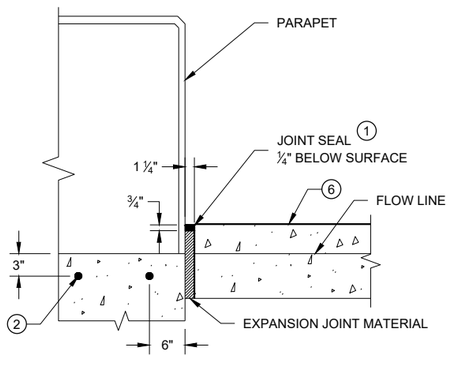
SECTION B-B (4)



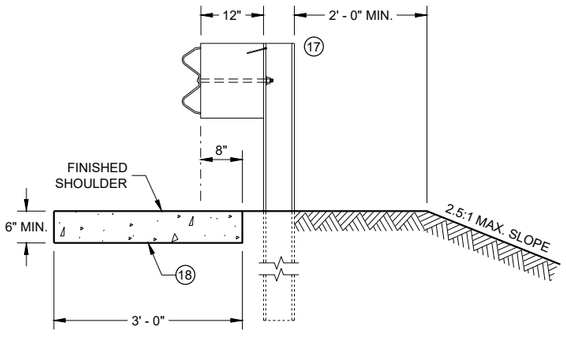
SECTION C - C
JOINT DETAIL FOR BRIDGE WITH STRUCTURAL APPROACH SLAB AND CONCRETE APPROACH SLAB



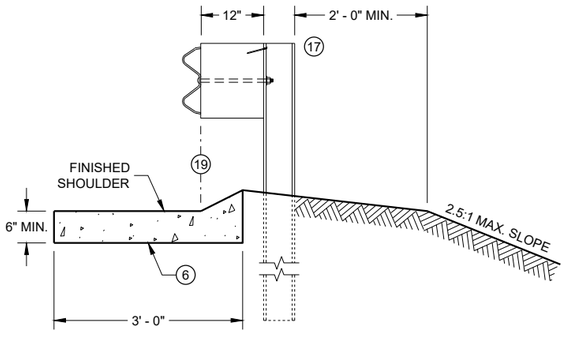
SECTION C - C
JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS



SECTION D - D



SECTION E - E



SECTION F - F

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

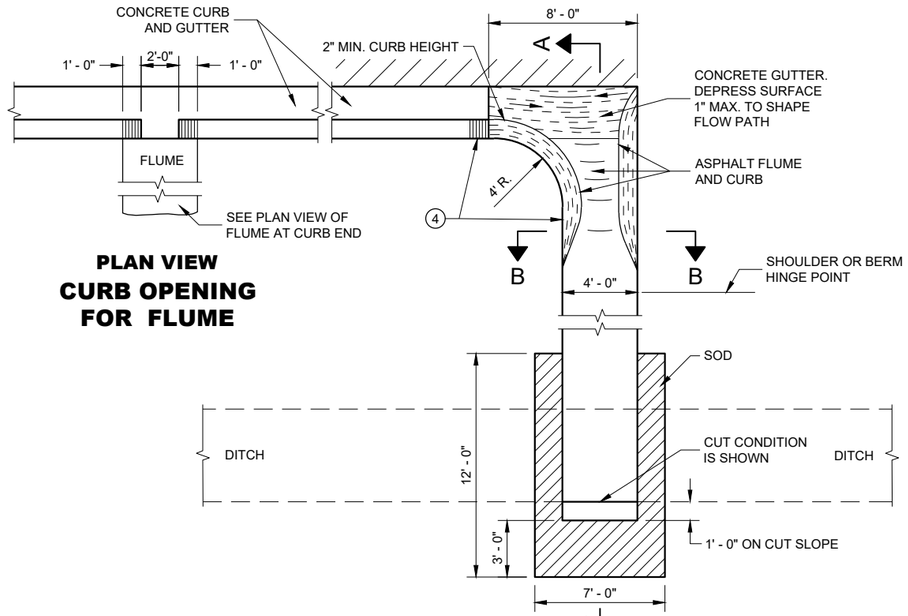
FHWA

SDD 08D02 - 08c

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

ASPHALTIC FLUME

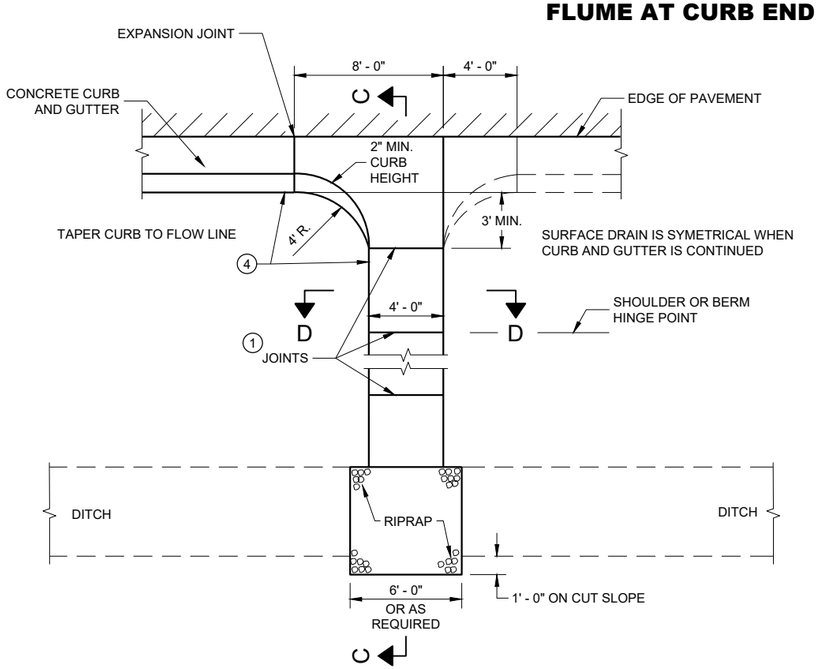


PLAN VIEW

CURB OPENING FOR FLUME

PLAN VIEW

FLUME AT CURB END



PLAN VIEW

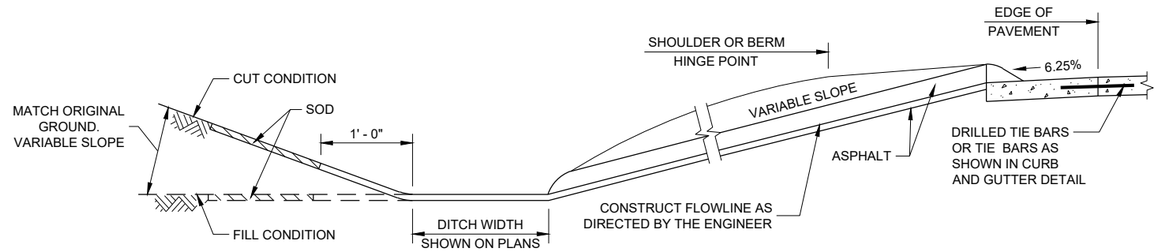
CONCRETE SURFACE DRAIN

GENERAL NOTES

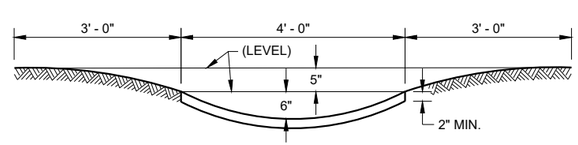
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

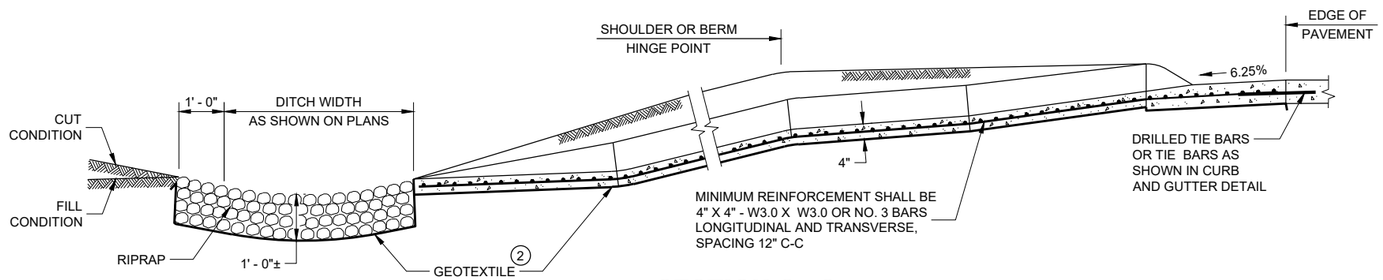
1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4.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



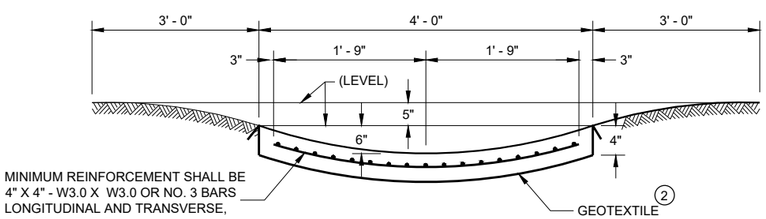
SECTION A - A



SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

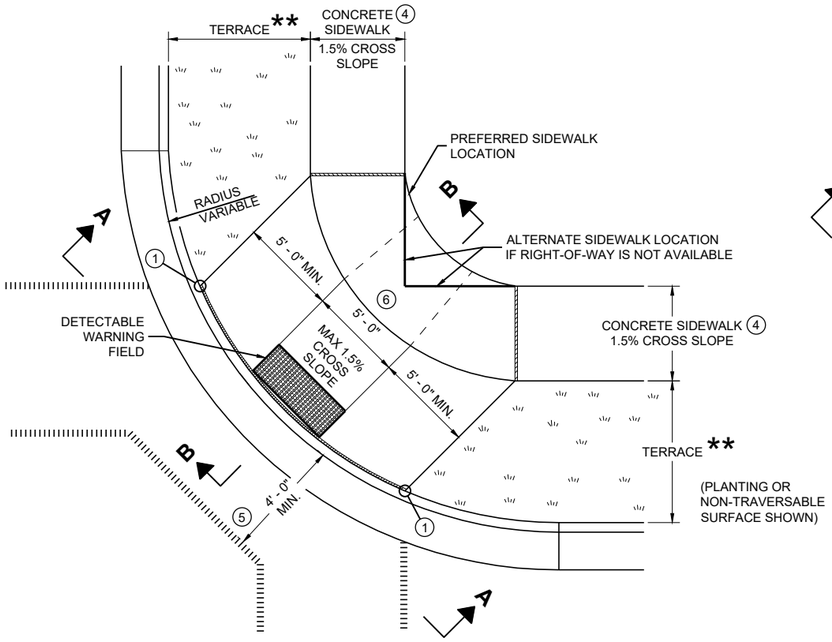
FHWA

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SDD 08D04 - 07

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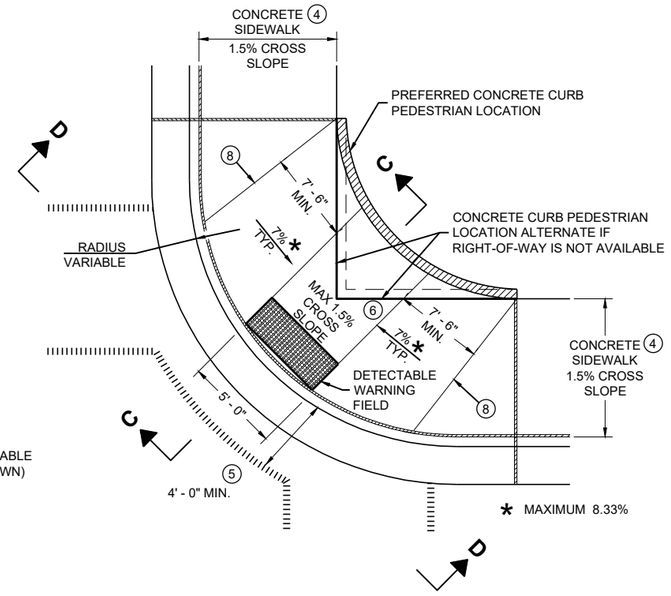
SDD 08D04 - 07



PLAN VIEW

CURB RAMP TYPE 1

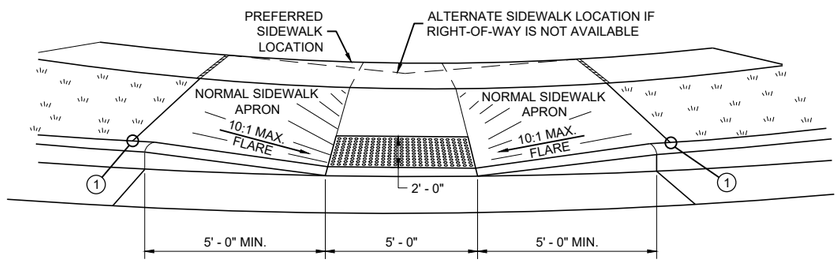
(CENTER OF CORNER RADIUS)



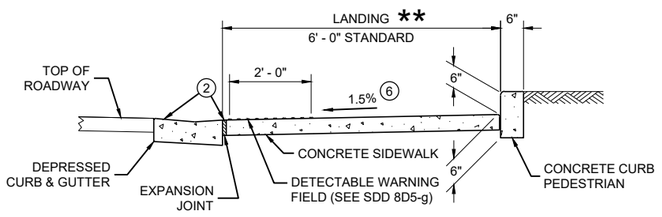
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

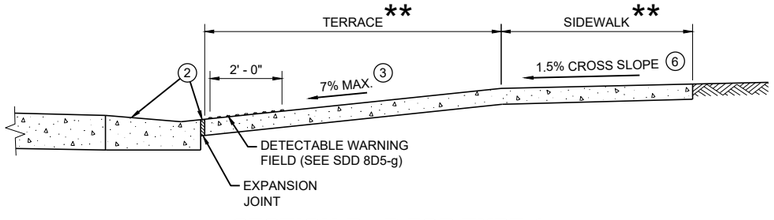


VIEW A - A FOR TYPE 1

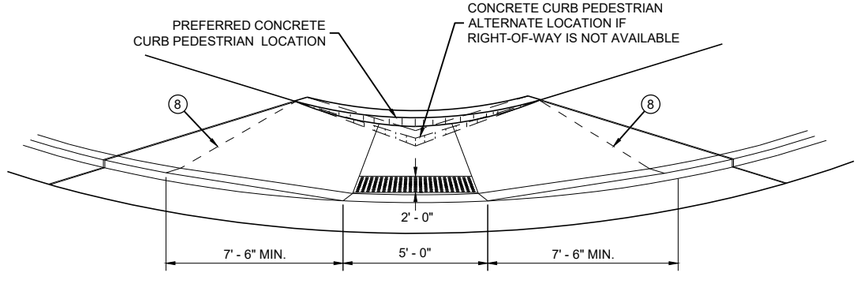


SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FILED SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

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

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

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

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

(3) 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. 4 FOOT WIDTH IS MEASURED FROM THE FLANGE LINE

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

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

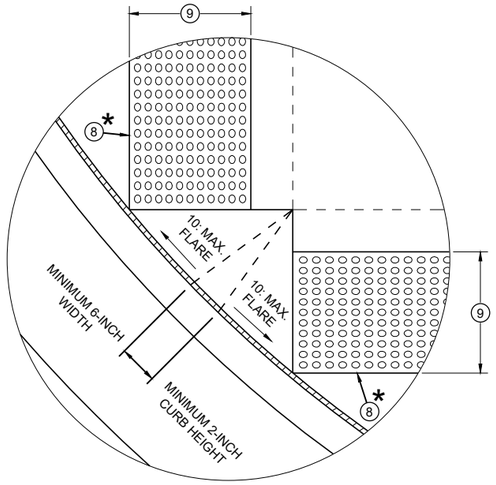
LEGEND

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

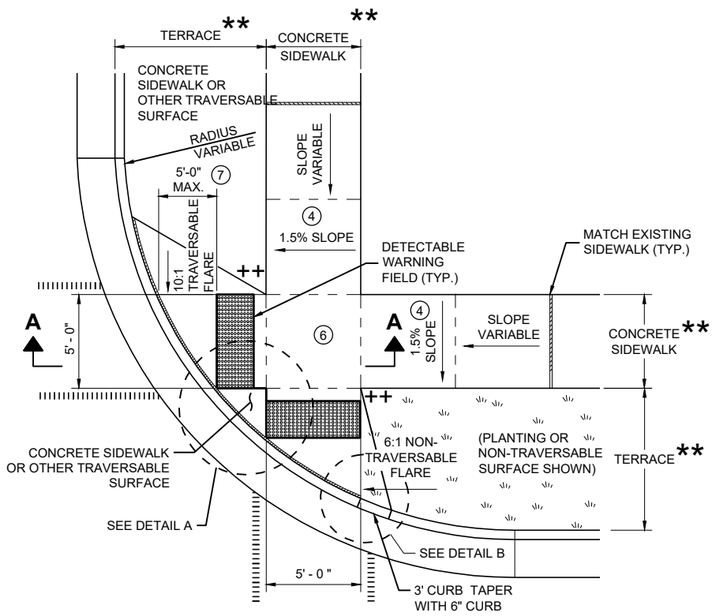
CURB RAMPS TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

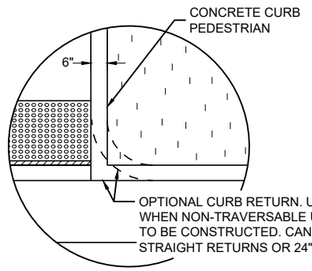
6
SDD 08D05-21a



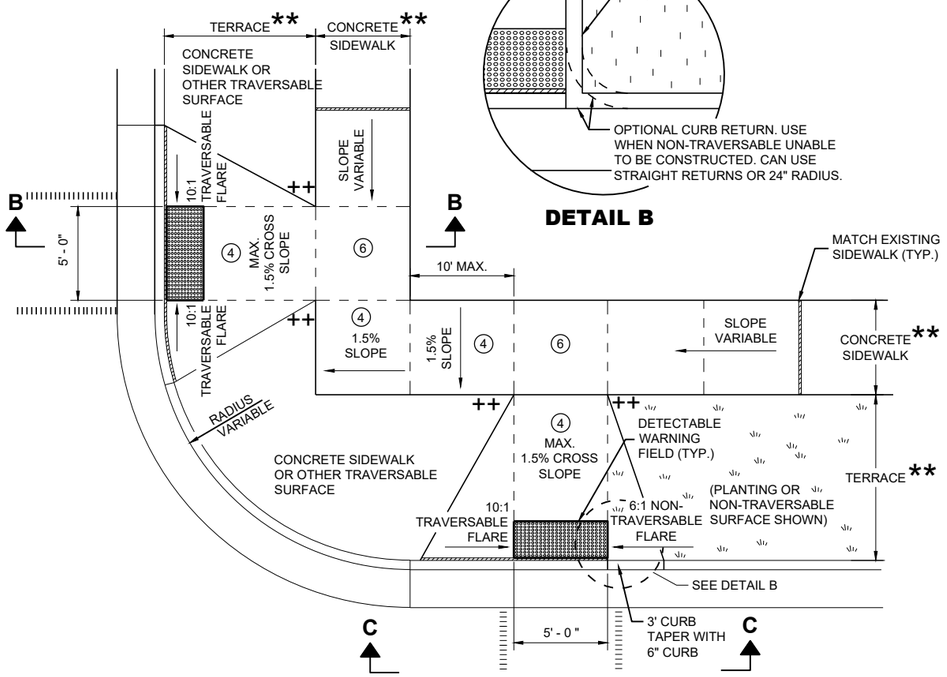
DETAIL A



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.

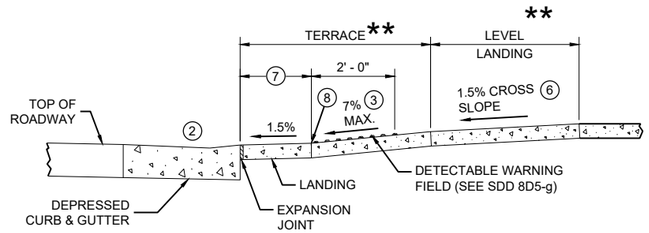
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(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.

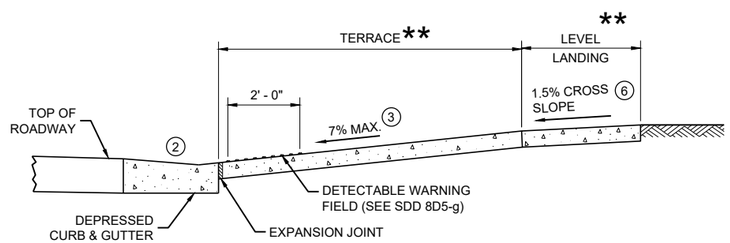


SECTION A - A FOR TYPE 2

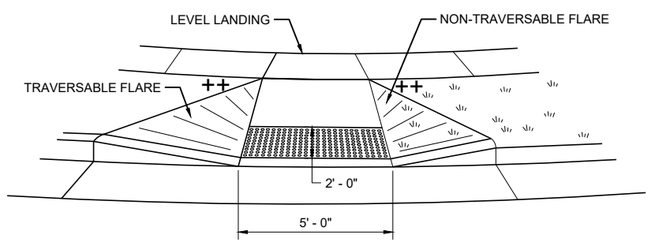
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



SECTION B - B FOR TYPE 3



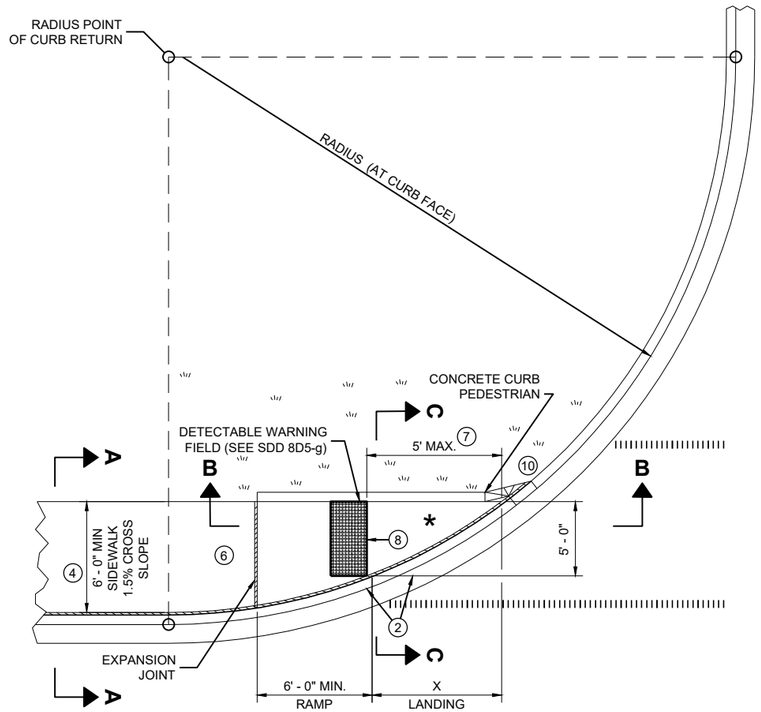
VIEW C - C FOR TYPE 3

LEGEND

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

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

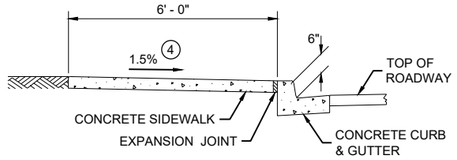


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

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

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

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

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

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

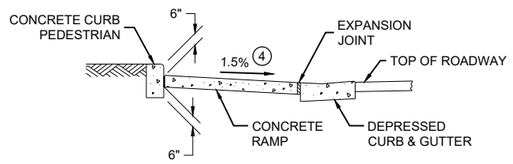
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

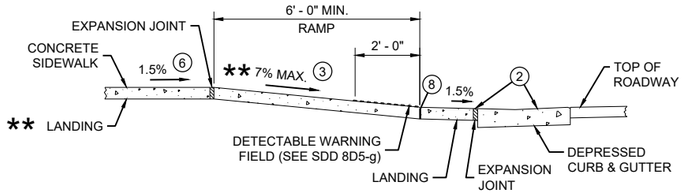
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)

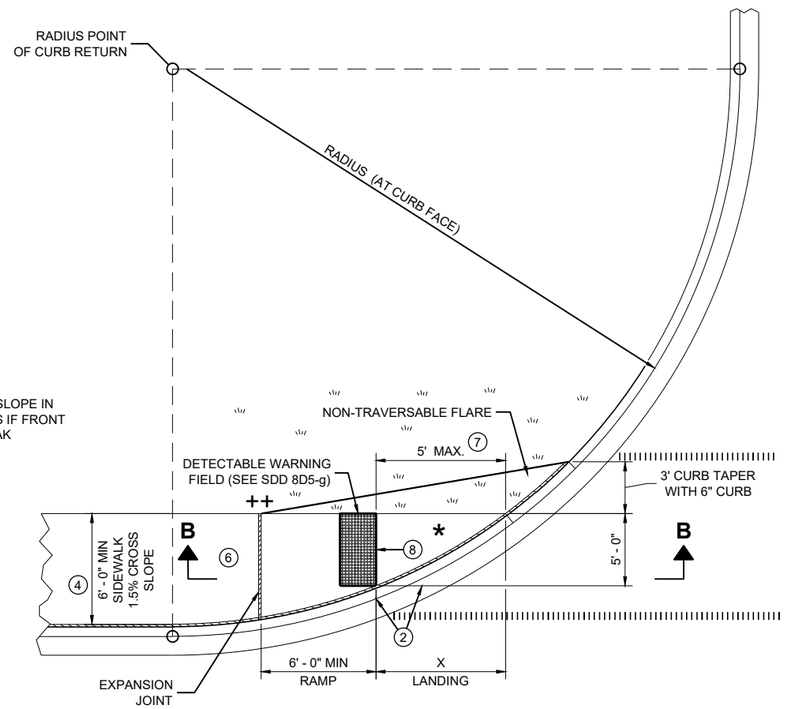


SECTION C - C FOR TYPE 4A



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

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

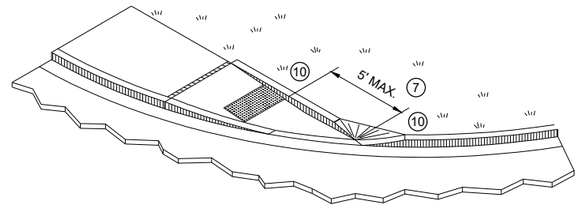


* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

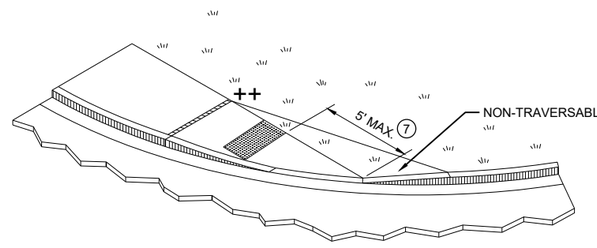
PLAN VIEW

CURB RAMP TYPE 4A1

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



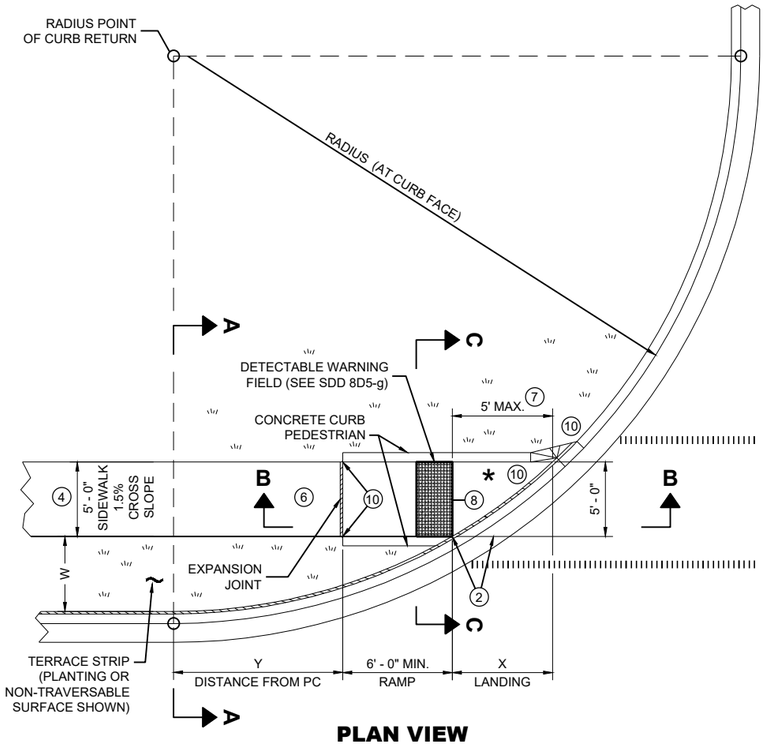
ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



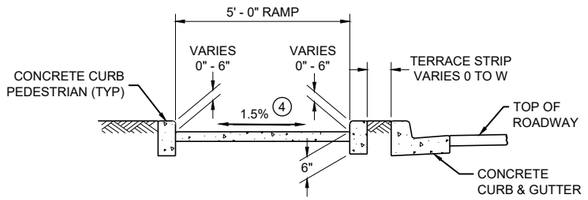
PLAN VIEW
CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 1/4"	0' - 5"	2' - 1"	1' - 4 1/2"	1' - 5"	2' - 1"	0' - 10"	2' - 7 1/2"	0' - 3 1/4"	3' - 0 1/4"						
15 FEET	4' - 6 3/4"	2' - 1 3/4"	3' - 9"	3' - 5 3/4"	3' - 1 1/4"	4' - 6"	2' - 6 3/4"	5' - 4 1/2"	2' - 1"	6' - 1"	1' - 8"	6' - 8 1/2"	1' - 3 1/4"	7' - 2 1/2"	0' - 10 3/4"	7' - 7 1/4"
20 FEET			4' - 11 1/2"	5' - 1 3/4"	4' - 3 1/4"	6' - 5 1/2"	3' - 8 3/4"	7' - 7"	3' - 3"	8' - 6 1/2"	2' - 10"	9' - 4 1/2"	2' - 5 1/2"	10' - 1 1/4"	2' - 1 1/4"	10' - 9"
30 FEET									4' - 10 3/4"	12' - 5 3/4"	4' - 5 1/2"	13' - 7 3/4"	4' - 0 3/4"	14' - 8 1/2"	3' - 8 1/2"	15' - 8 1/4"
40 FEET															4' - 10 3/4"	19' - 8 1/4"

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)



SECTION C - C FOR TYPE 4B

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.

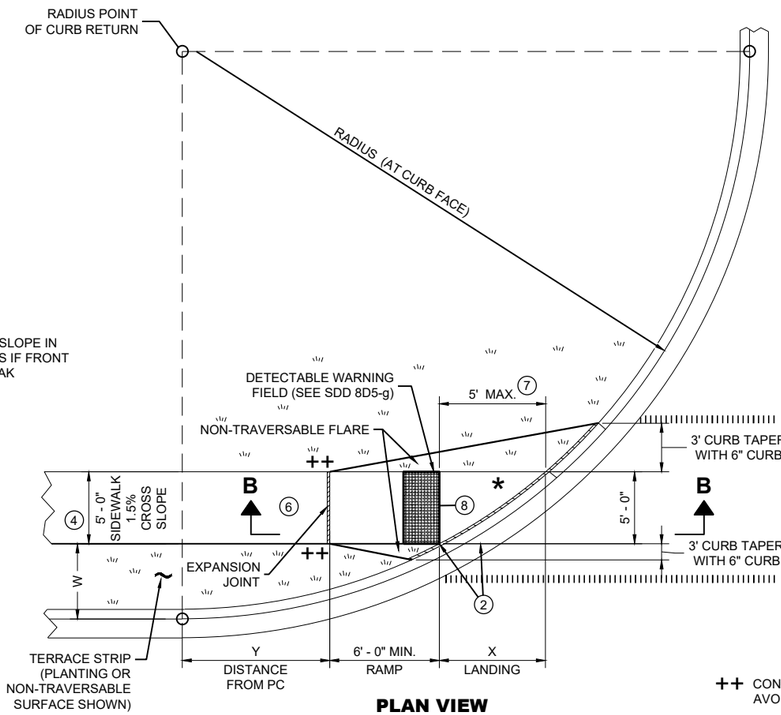
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(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.

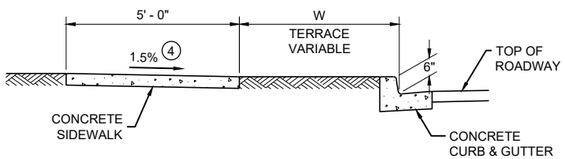
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



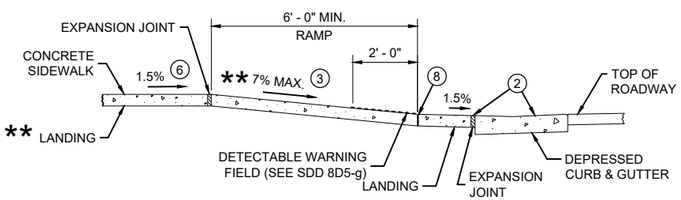
PLAN VIEW
CURB RAMP TYPE 4B1

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

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

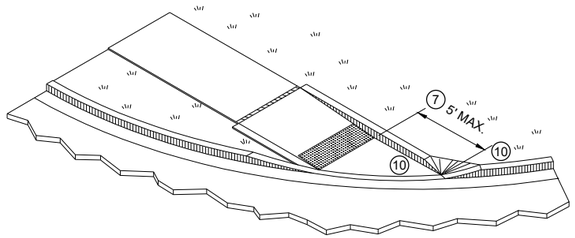


SECTION A - A FOR TYPE 4B

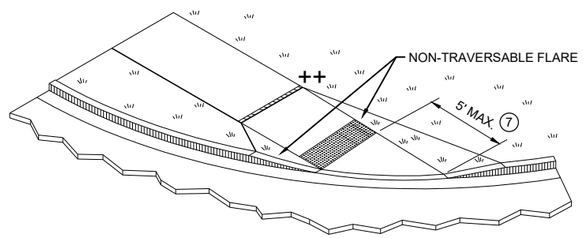


SECTION B - B FOR TYPE 4B AND TYPE 4B1

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



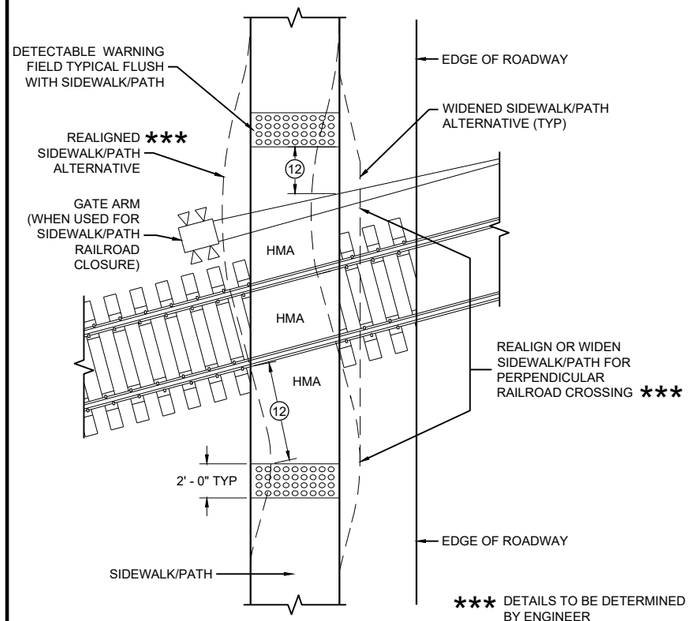
ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

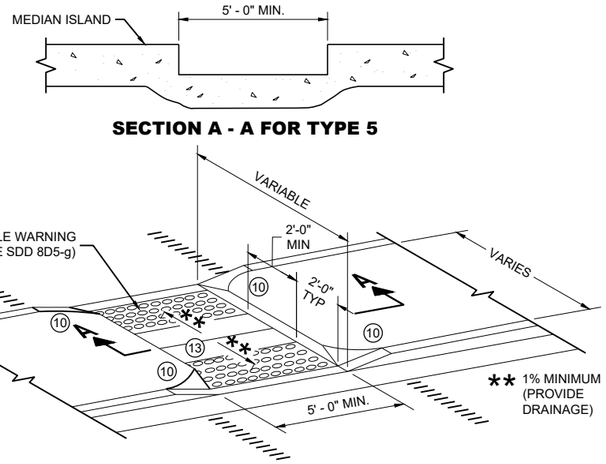
CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 8

DETECTABLE WARNINGS FOR SIDEWALKS OR SHARED USE PATHS AT RAILROAD CROSSINGS



SECTION A - A FOR TYPE 5

CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF 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.

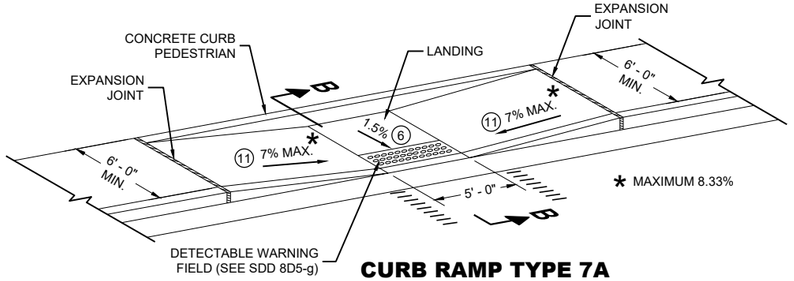
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(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/PATH. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD TRACK IS 15 FEET MAXIMUM AND 12 FEET MINIMUM, 15 FEET TYPICAL FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

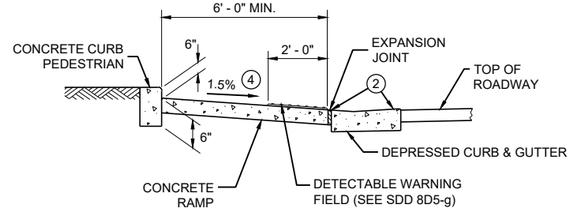
LEGEND

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

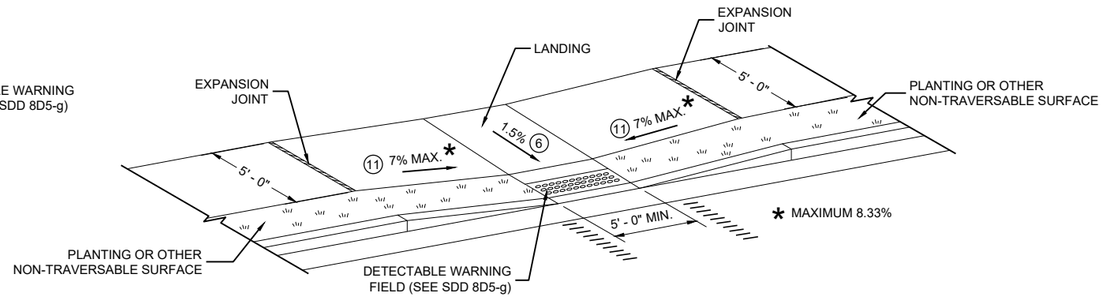


CURB RAMP TYPE 7A

FOR INTERSECTIONS AND MID BLOCK CROSSINGS

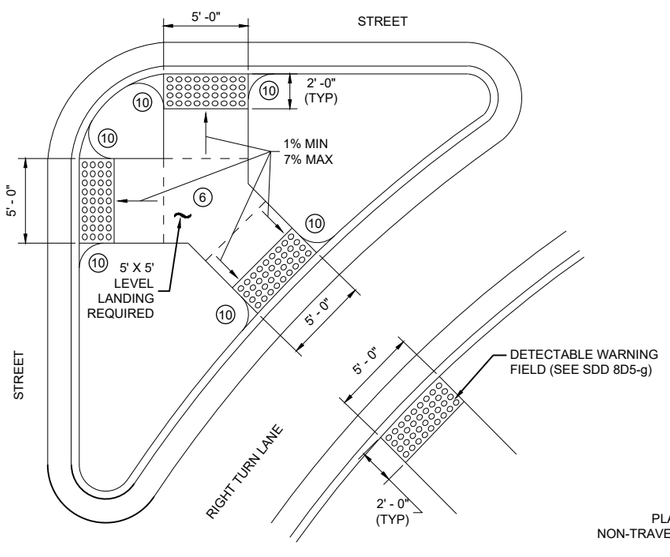


SECTION B - B FOR TYPE 7A



CURB RAMP TYPE 7B

FOR INTERSECTIONS AND MID BLOCK CROSSINGS



CURB RAMP TYPE 6

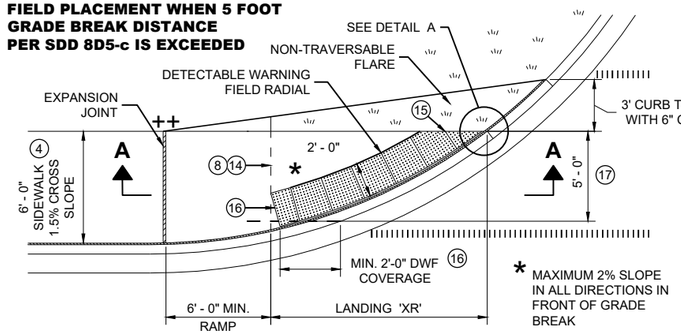
DETECTABLE WARNING AT ISLANDS

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

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

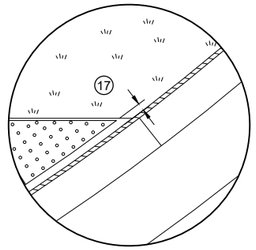
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

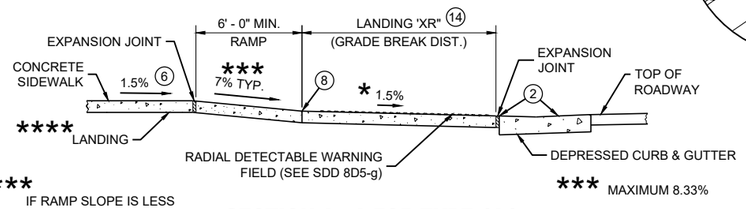


PLAN VIEW

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

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.

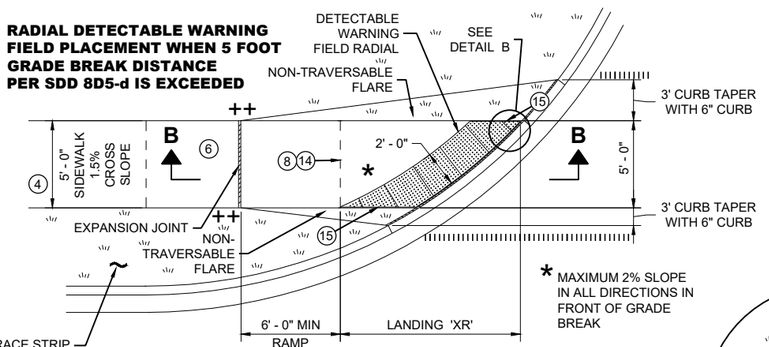
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(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.

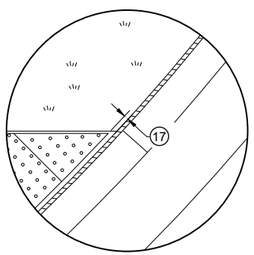
(17) A MAXIMUM 3 INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

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

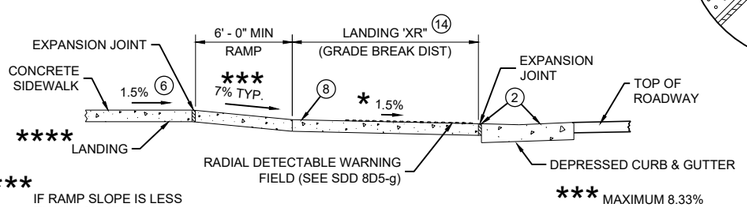


PLAN VIEW

CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B

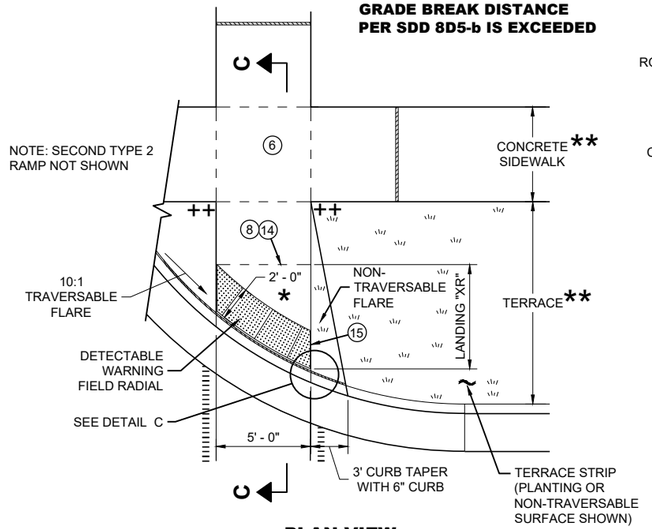


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

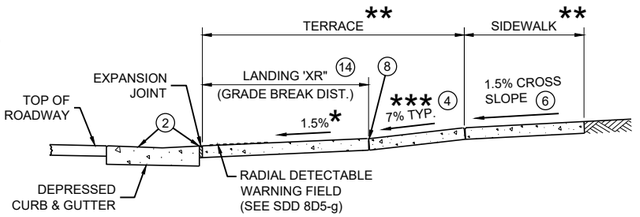
SECTION B - B FOR TYPE 4B1

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

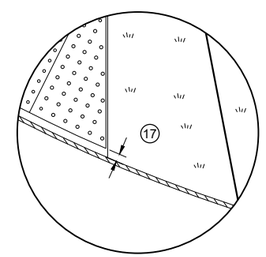


PLAN VIEW

CURB RAMP TYPE 2
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)



SECTION C - C FOR TYPE 2



DETAIL C

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

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

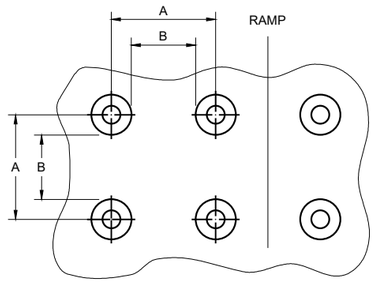
CURB RAMPS
RADIAL DETECTABLE WARNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

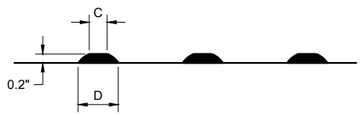
SDD 08D05-21f

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

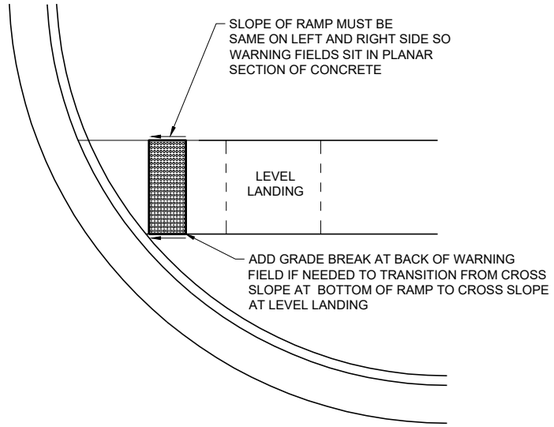
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW



DETECTABLE WARNING FIELD
PLANAR INSTALLATION

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

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

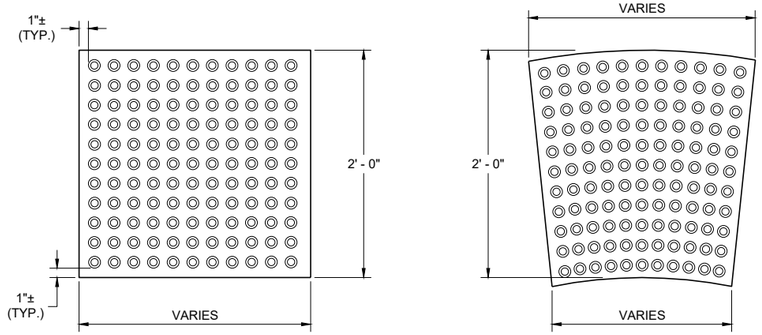
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

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

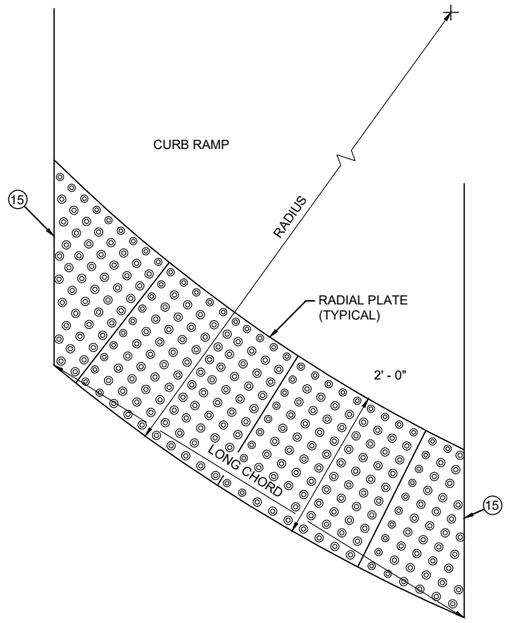
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



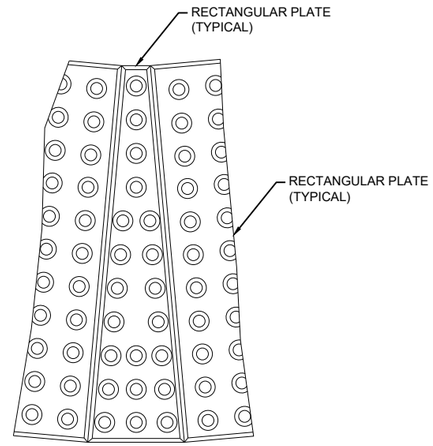
RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

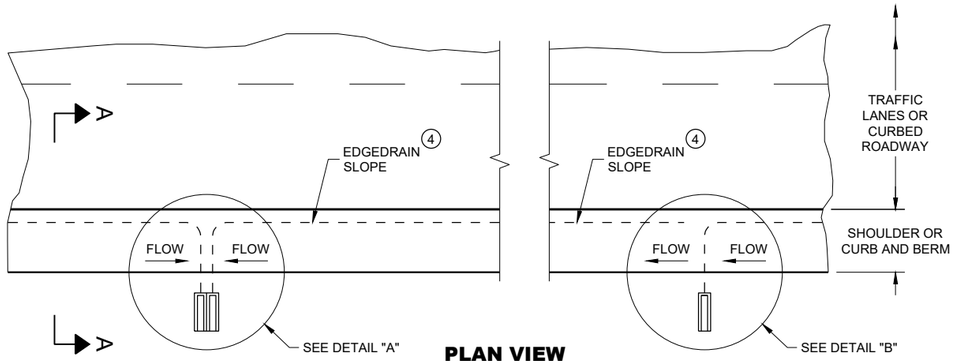
CURB RAMPS
RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

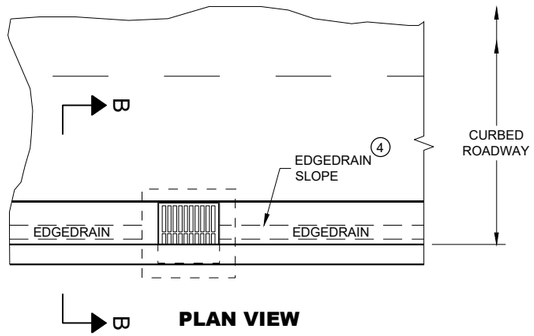
FHWA

6
SDD 08D05-21g



PLAN VIEW

ROADWAY WITH SHOULDERS OR CURBS
(EDGEDRAIN CONNECTS TO ROADSIDE) (2)



PLAN VIEW

ROADWAY WITH CURBS
(EDGEDRAIN CONNECTS INTO INLET STRUCTURE)

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) UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

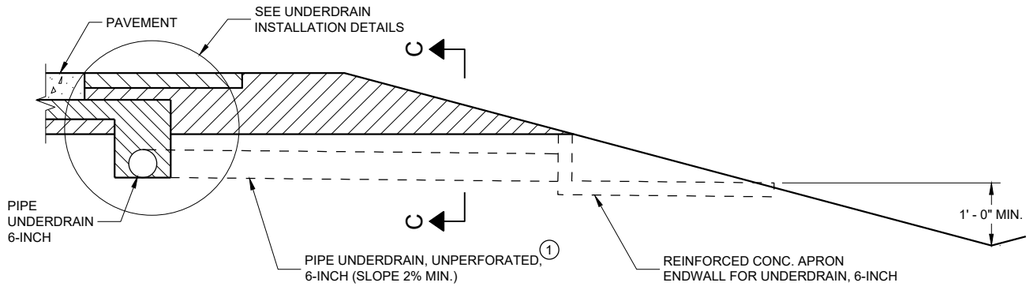
POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.

TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.

(2) MAXIMUM SPACING OF EDGEDRAIN OUTLETS SHALL BE 250 FEET UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

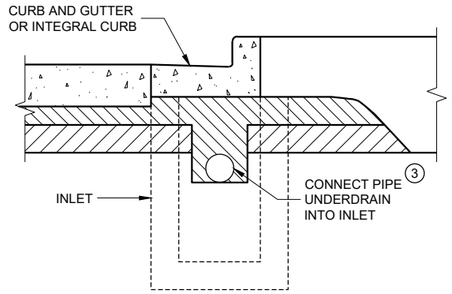
(3) EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.

(4) EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.



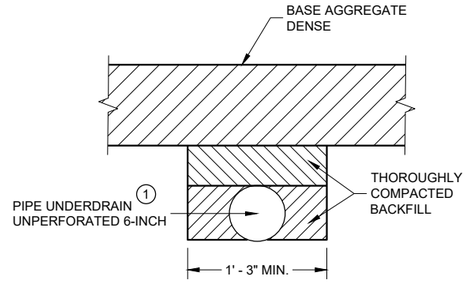
SECTION A - A

RURAL CROSS SECTION



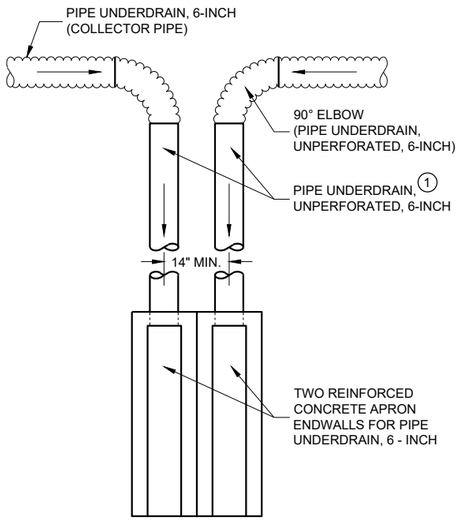
SECTION B - B

URBAN CROSS SECTION

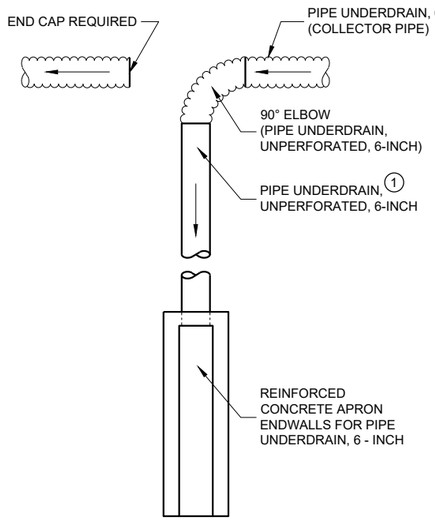


SECTION C - C

TRENCH FOR OUTFALL PIPE

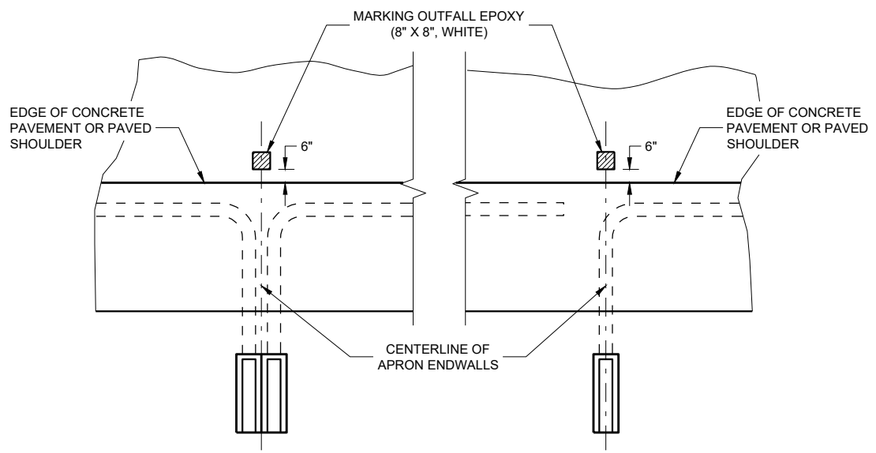


DETAIL "A"
TO BE USED AT LOW POINT LOCATIONS



DETAIL "B"
TO BE USED AT INTERMEDIATE LOCATIONS

TYPICAL DRAIN OUT DETAILS



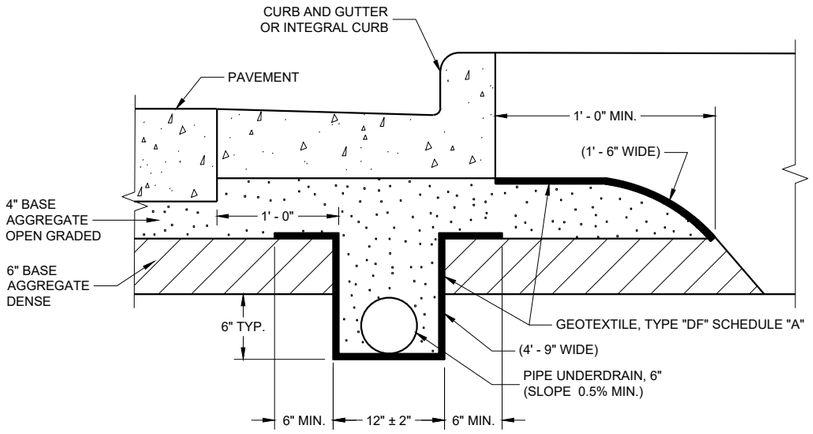
LOW POINT LOCATIONS — INTERMEDIATE LOCATIONS

PAVEMENT MARKINGS FOR OUTFALL MARKERS

EDGEDRAIN OUTLET AND OUTFALL MARKERS

6

SDD08D15 - 05a



EDGEDRAIN IN URBAN ROADWAY

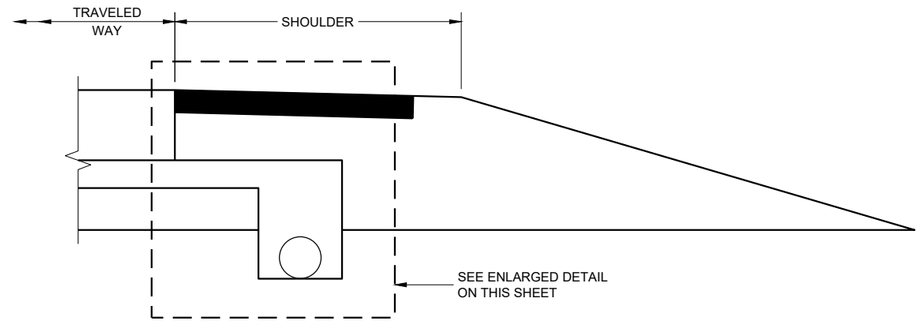
GENERAL NOTES

THE DIMENSIONS SHOWN ON THE TYPICAL CROSS SECTIONS WILL GOVERN IN THE EVENT THERE IS A CONFLICT WITH THE DETAILS SHOWN ON THIS DRAWING.

PIPE UNDERDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF THE ROADWAY.

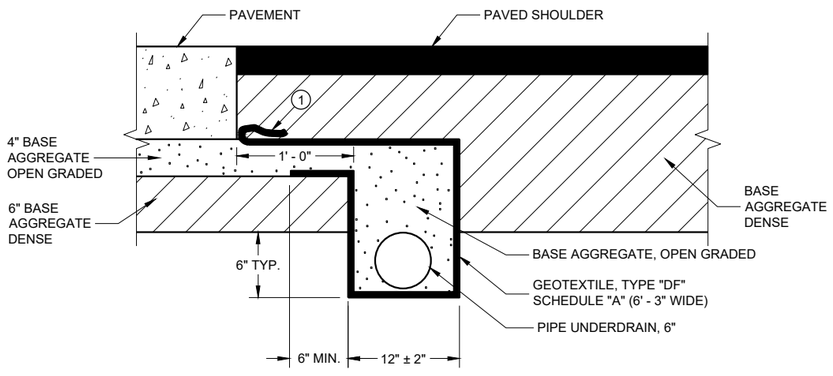
(1) FOLD OVER EXCESS GEOTEXTILE AT THIS LOCATION.

(2) TOTAL GEOTEXTILE WIDTH IS 6'-3" FOR PAYMENT.



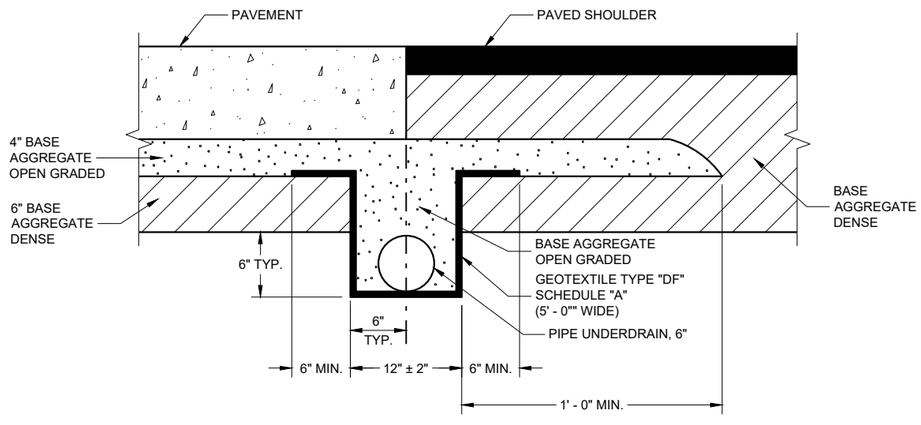
RURAL CROSS SECTION

6



POST PAVING INSTALLATION

(QUANTITIES ARE BASED ON THIS DETAIL)



PRE-PAVING INSTALLATION ALTERNATIVE

EDGEDRAIN IN RURAL ROADWAY

6

SDD 08D15 - 05b

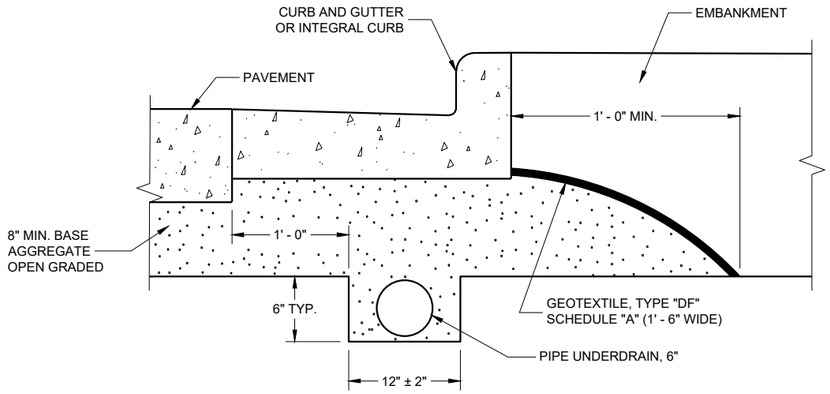
EGEDRAIN AND BASE AGGREGATE OPEN GRADED

SDD 08D15 - 05b

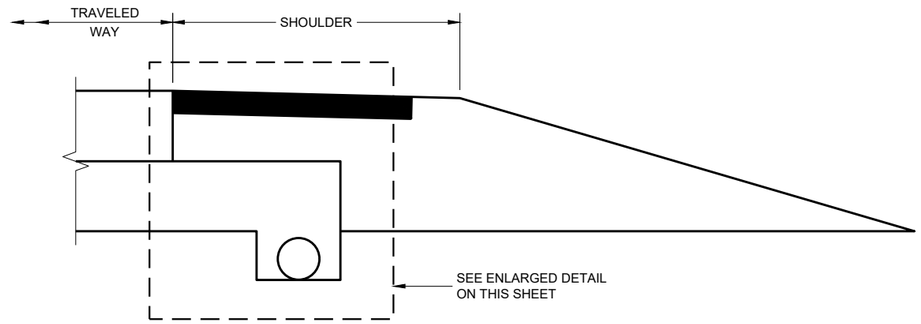
GENERAL NOTES

THE DIMENSIONS SHOWN ON THE TYPICAL CROSS SECTIONS WILL GOVERN IN THE EVENT THERE IS A CONFLICT WITH THE DETAILS SHOWN ON THIS DRAWING.

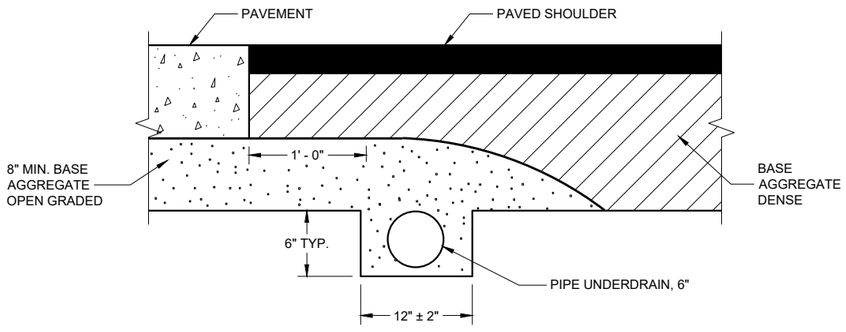
PIPE UNDERDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF THE ROADWAY.



EDGEDRAIN IN URBAN ROADWAY

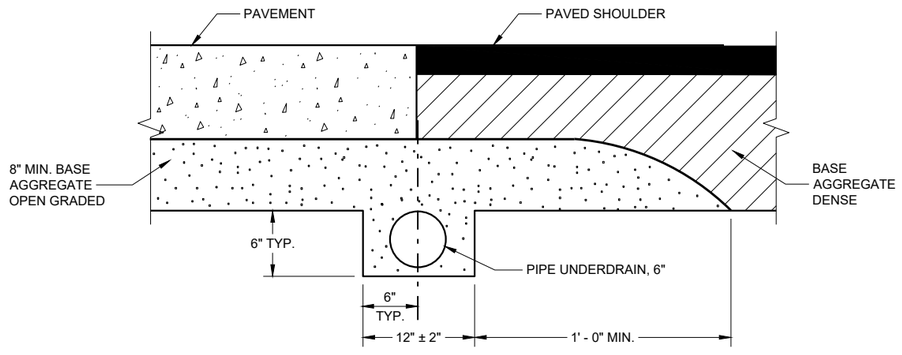


RURAL CROSS SECTION



POST PAVING INSTALLATION

(QUANTITIES ARE BASED ON THIS DETAIL)



PRE-PAVING INSTALLATION ALTERNATIVE

EDGEDRAIN IN RURAL ROADWAY

EDGEDRAIN AND BASE AGGREGATE OPEN GRADED

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2015
DATE
/S/ Peter Kemp, P.E.
PAVEMENT SUPERVIS

FHWA

6

SDD 08D15 - 05c

6

SDD 08D15 - 05c

GENERAL NOTES

A MAXIMUM RADIUS OF 10 FEET SHALL BE USED FOR NON-COMMERCIAL PRIVATE ENTRANCES. RADII FOR COMMERCIAL DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER BASED ON TRAFFIC AND DRIVEWAY PERMIT RESTRICTIONS.

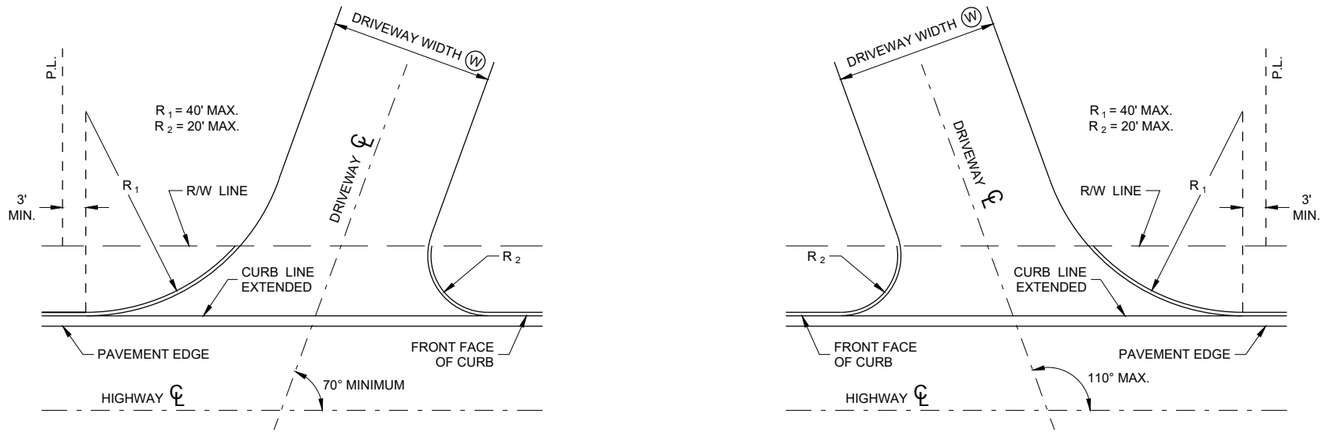
THE MINIMUM ANGLE OF INTERSECTION BETWEEN THE DRIVEWAY AND HIGHWAY CENTERLINES SHALL BE 70°.

ALL CURVILINEAR PRIVATE ENTRANCE OUTLINES SHALL BE CONTAINED WITHIN THE HIGHWAY R/W.

NO DRIVEWAY SHALL BE BUILT WITHIN 3 FEET OF THE PROPERTY LINE EXCEPT FOR EXISTING JOINT DRIVEWAY SHARED BY TWO OWNERS.

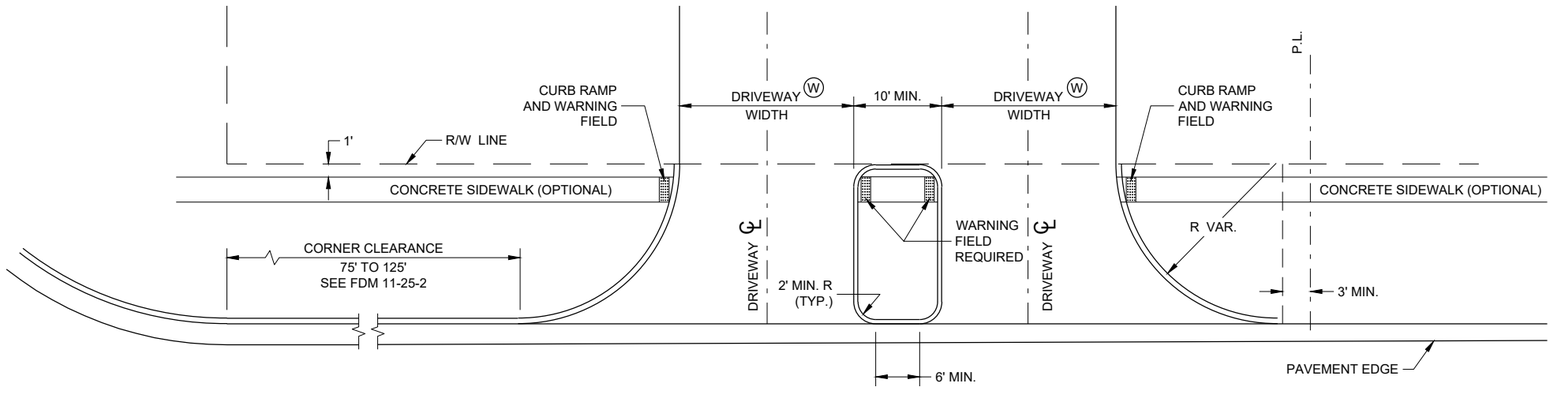
Ⓦ: 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

16' MIN. - 35' MAX. COMMERCIAL (CE)



SKEWED DRIVEWAY DETAILS (COMMERCIAL AND NON-COMMERCIAL)

SIDEWALK NOT SHOWN



DRIVEWAY LOCATION AND SPACING DETAILS

SIDEWALK SHOWN

DRIVEWAYS WITH CURB AND GUTTER RETURNS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

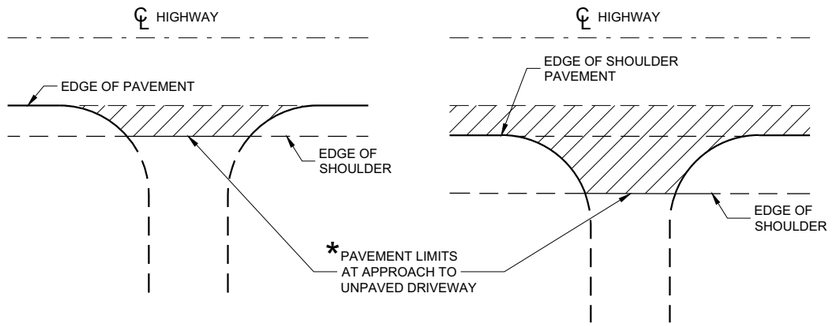
00-00-00 — DATE

/S/ <AUTHOR> — ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 08D20 - 01

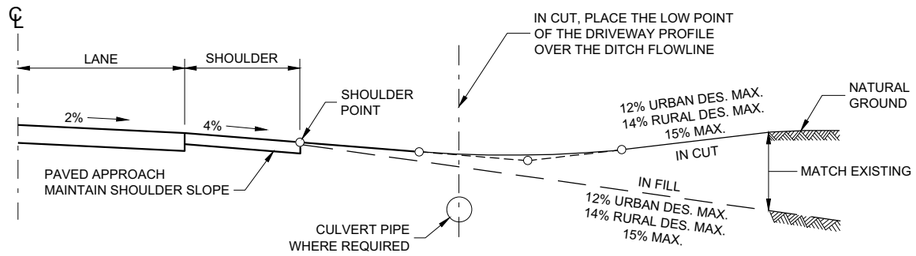
SDD 08D20 - 01



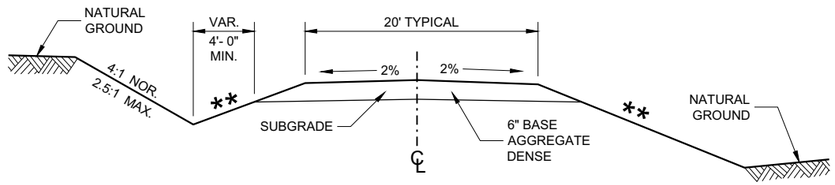
PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)



TYPICAL DRIVEWAY PROFILES

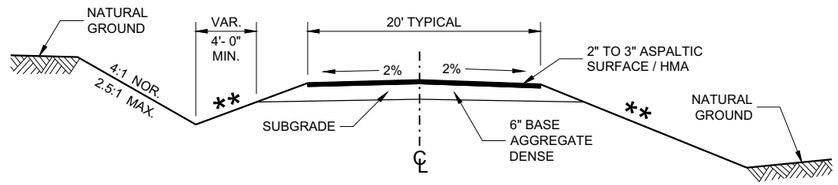


IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

** SLOPE CAN VARY WITH SPEED. SEE 11-45-30.6.2

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥ 35 TO < 60	6:1
≥60	10:1



IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

6

6

SDD 08D21 - 01

SDD 08D21 - 01

DRIVEWAYS WITHOUT CURB AND GUTTER

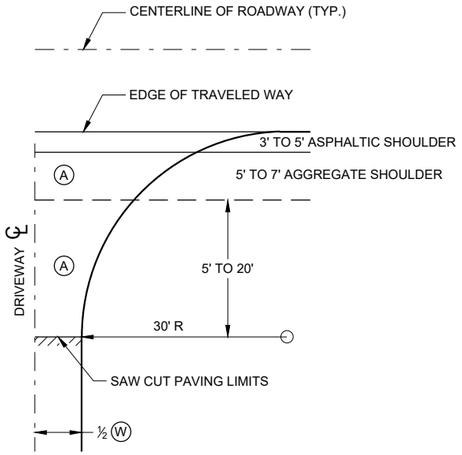
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2017
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

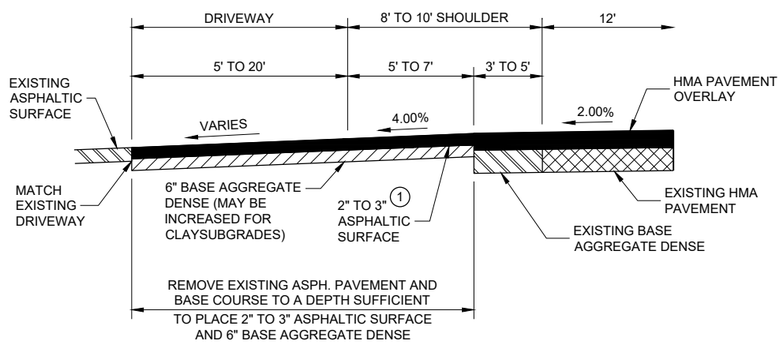
GENERAL NOTES

(1) DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.



PLAN VIEW

HALF SECTION



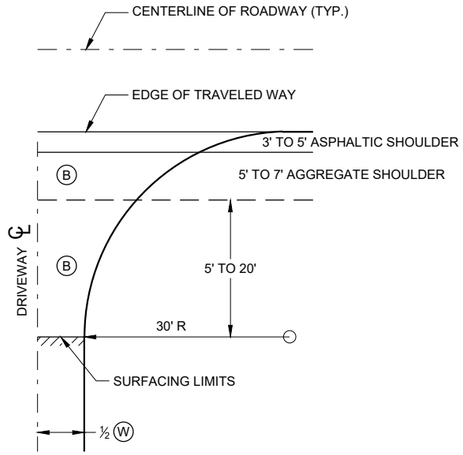
PROFILE VIEW

RURAL ENTRANCE
WITH ASPHALTIC SURFACE
RESURFACING PROJECTS

(A) : PAID FOR AS ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES. (TON)

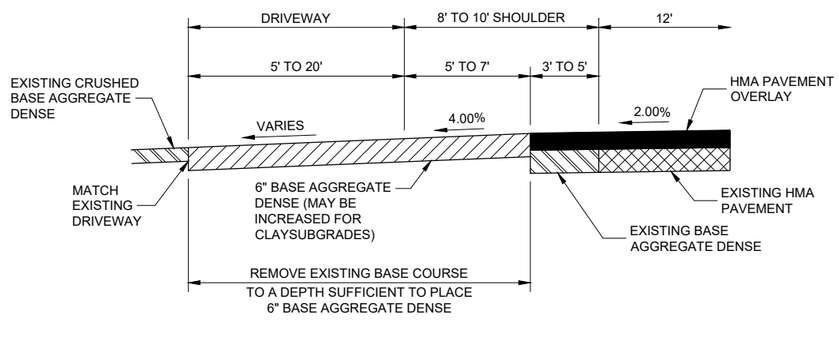
(B) : PAID FOR AS BASE AGGREGATE DENSE 1 ¼" (TON)

(W) : DRIVEWAY WIDTH 16' MIN. - 24' MAX.



PLAN VIEW

HALF SECTION



PROFILE VIEW

RURAL ENTRANCE
WITH AGGREGATE SURFACE
6" BASE AGGREGATE DENSE
RESURFACING PROJECTS

DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

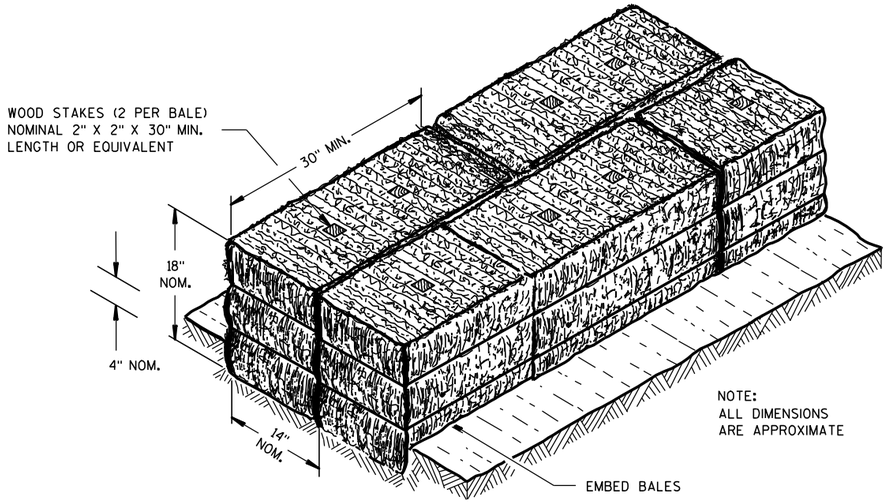
APPROVED
December 2016
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

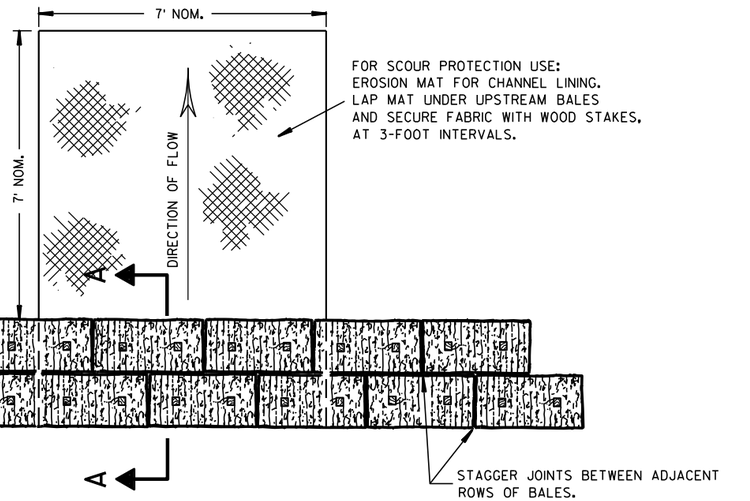
FHWA

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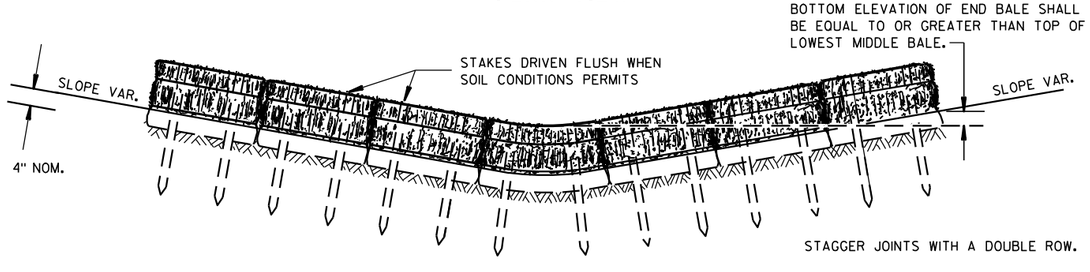
SDD 08D22 - 01



SECTION A-A



PLAN VIEW



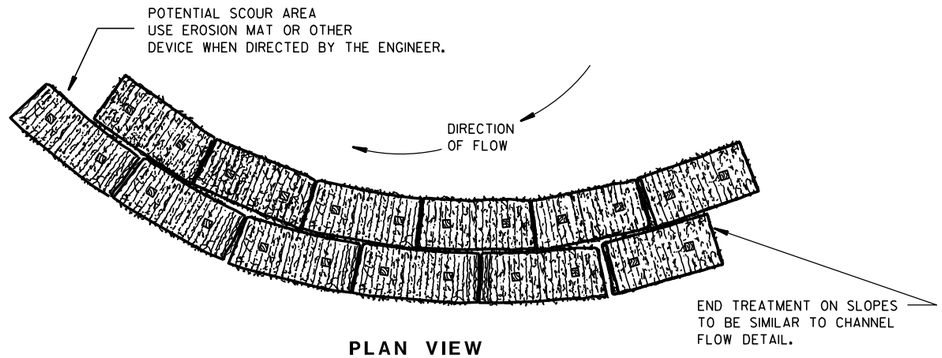
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

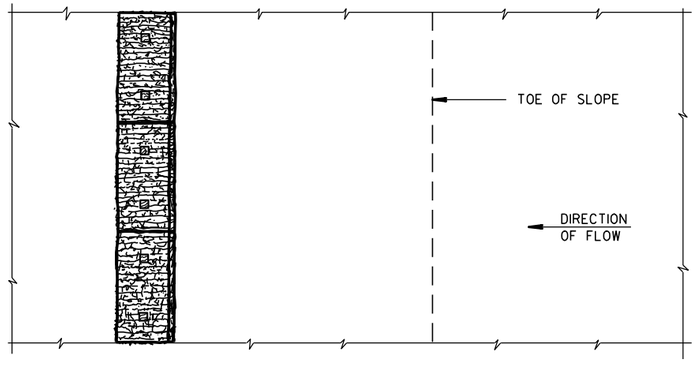
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

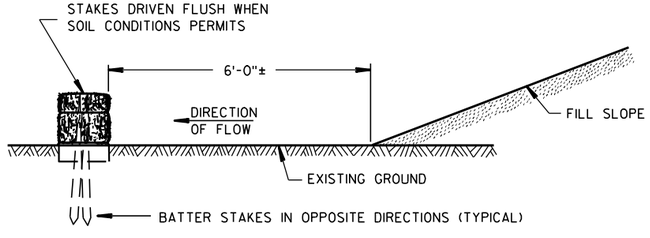


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

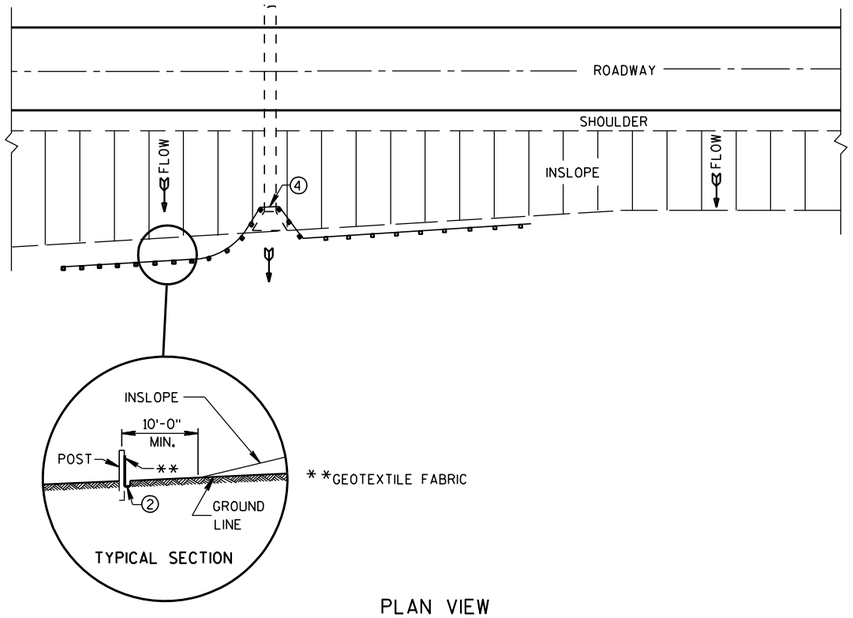
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

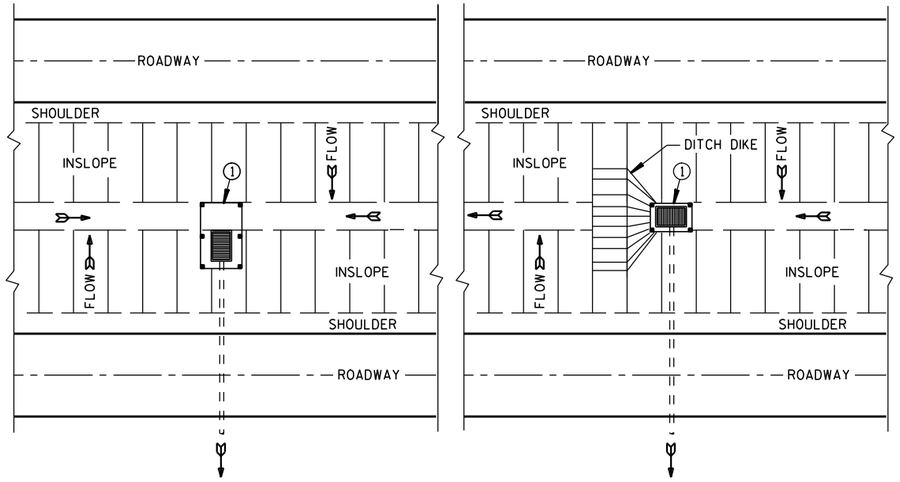
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



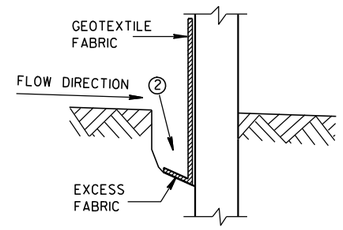
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

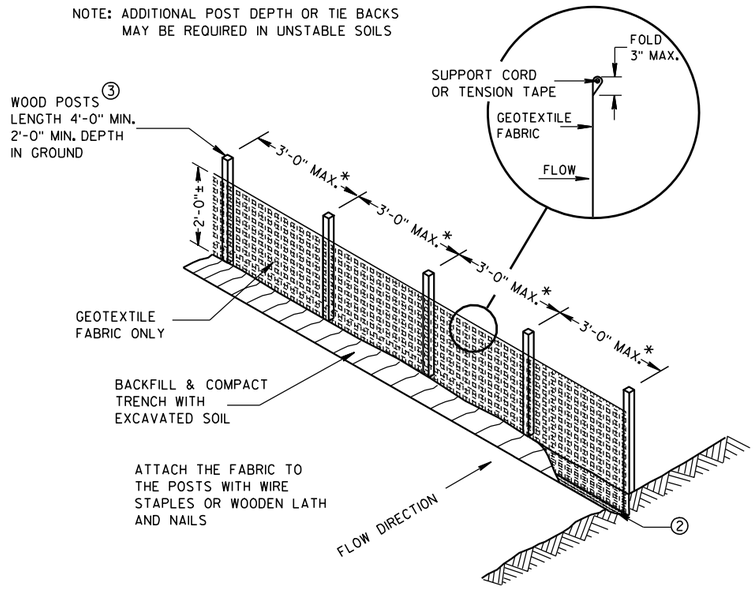
GENERAL NOTES

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

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

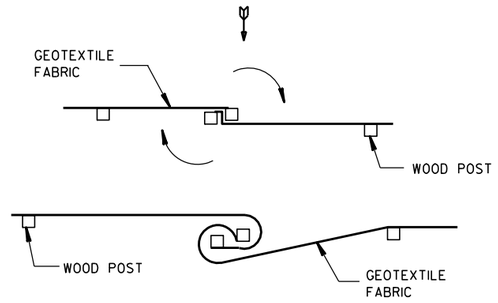


TRENCH DETAIL

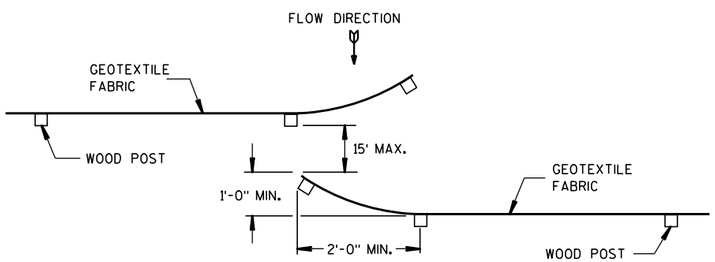


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

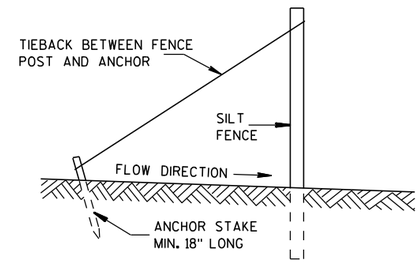


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

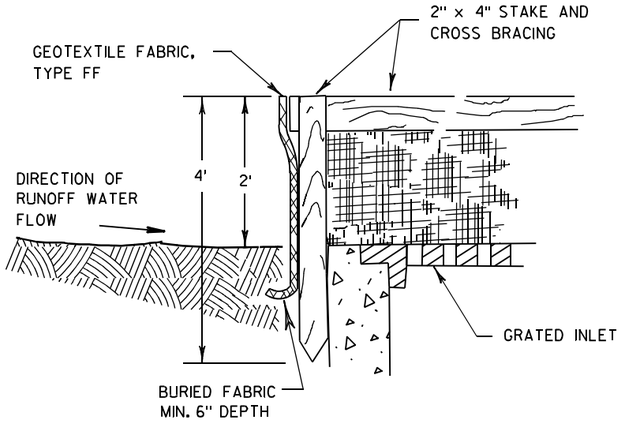
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

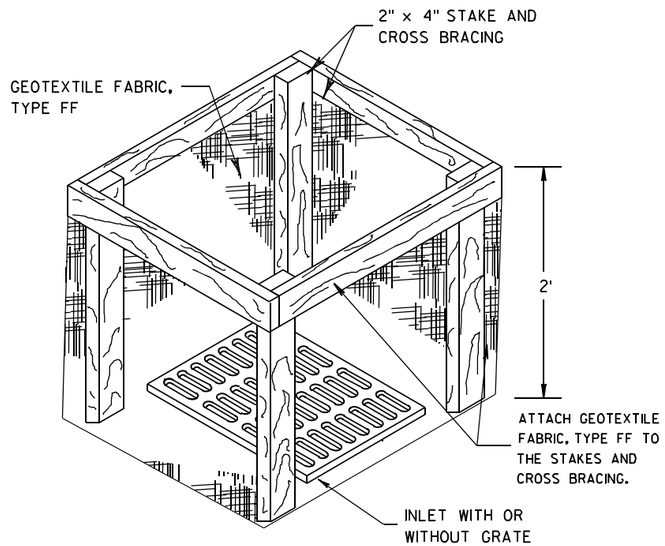
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S.D.D. 8 E 9-6

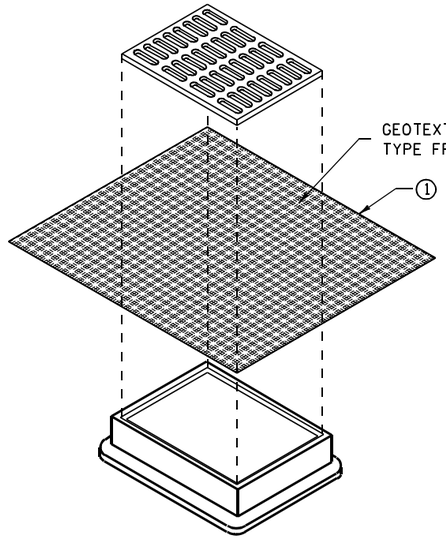
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S.D.D. 8 E 9-6



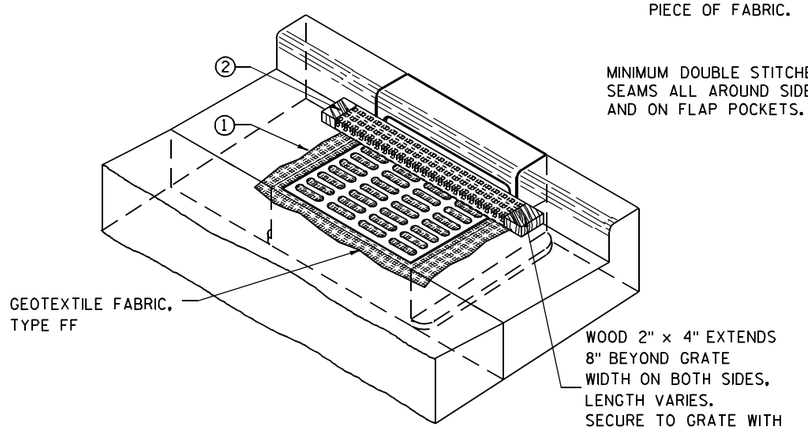


INLET PROTECTION, TYPE A

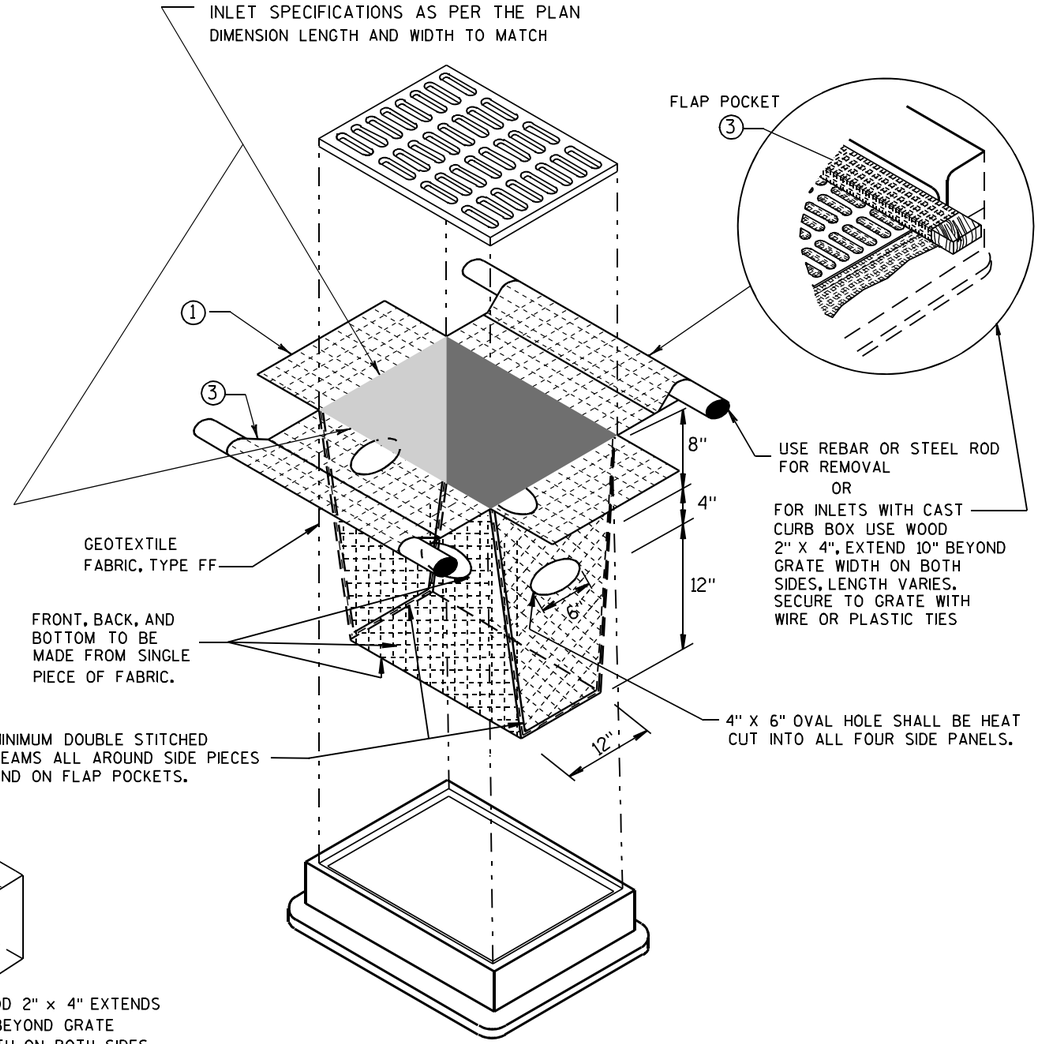


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

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

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

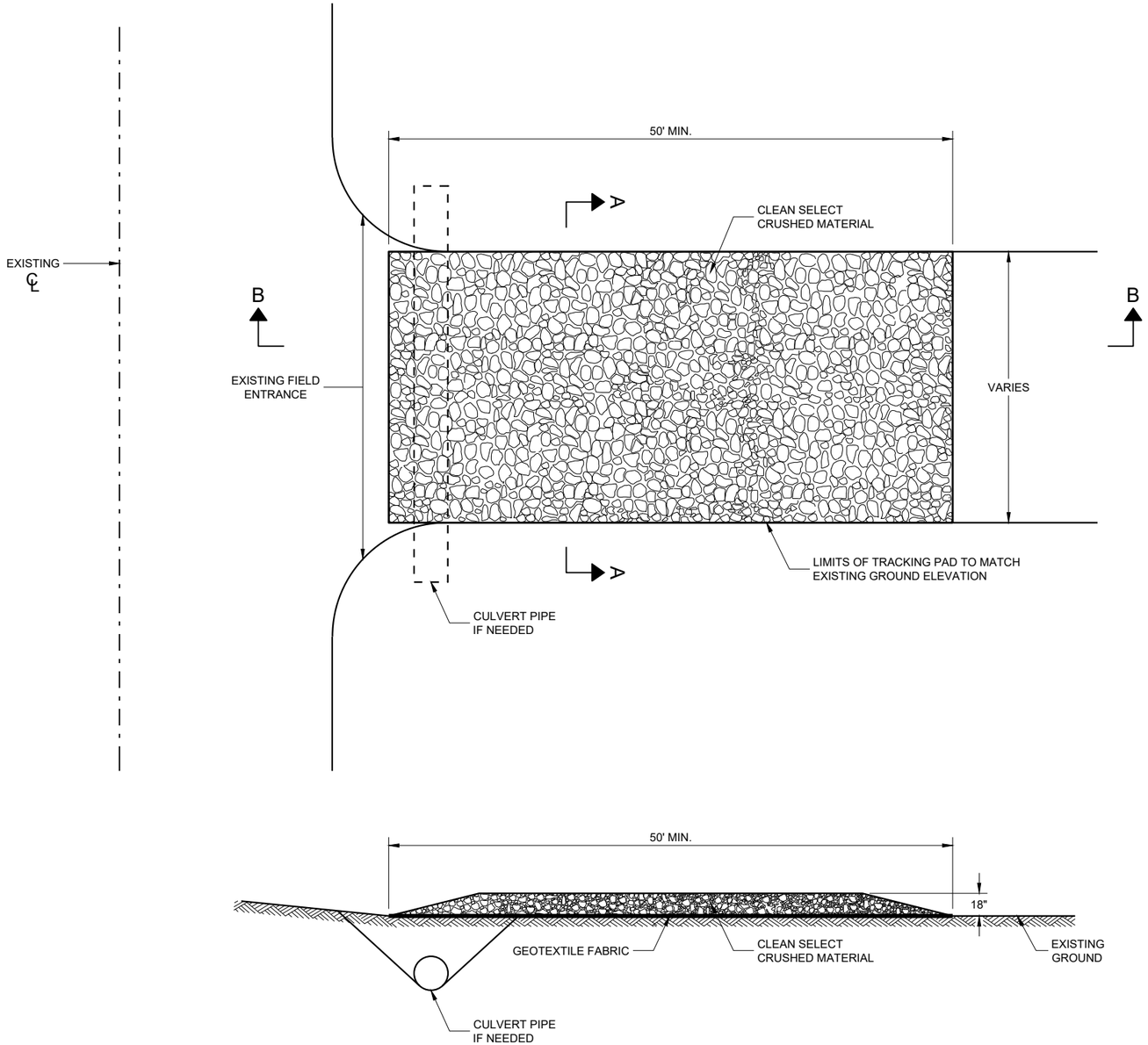
FHWA

6

S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



SECTION B - B

GENERAL NOTES

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

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

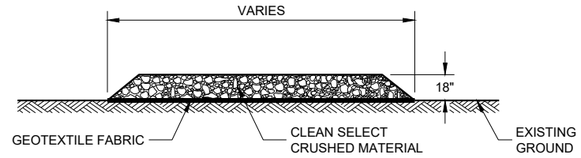
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A - A

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

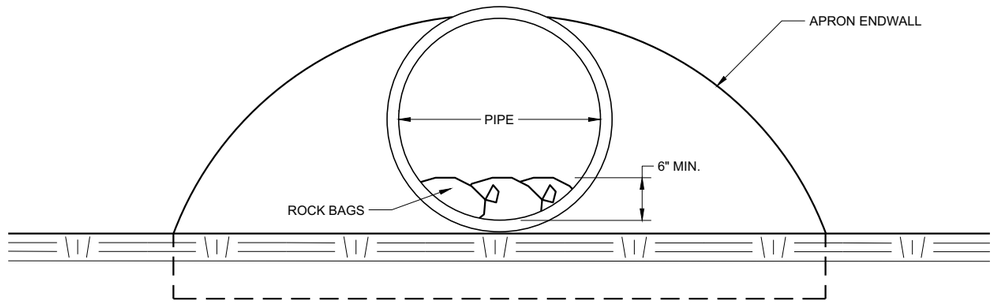
3/24/2011
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVE ENGINEER

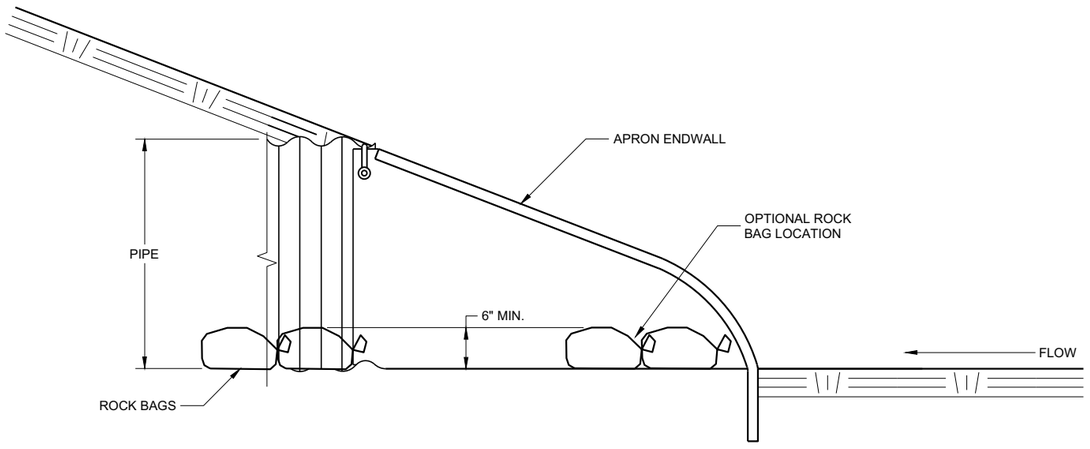
FHWA

6

SDD 08E14 - 01



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Daniel Schave EROSION CONTROL ENGI
FHWA	

6
SDD 08E15 - 01

METAL APRON ENDWALLS

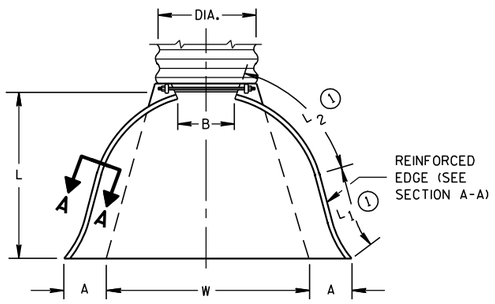
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

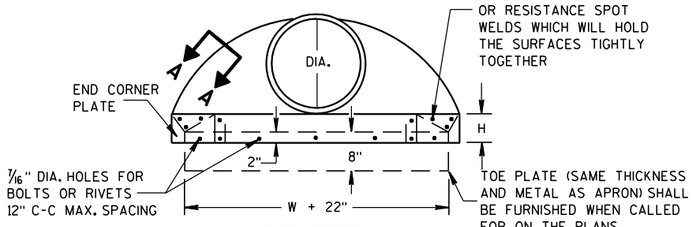
REINFORCED CONCRETE APRON ENDWALLS

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

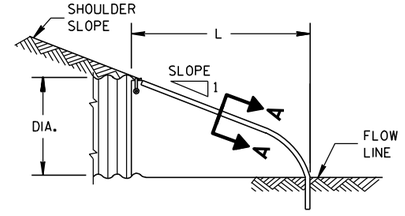
*MINIMUM
**MAXIMUM



PLAN VIEW

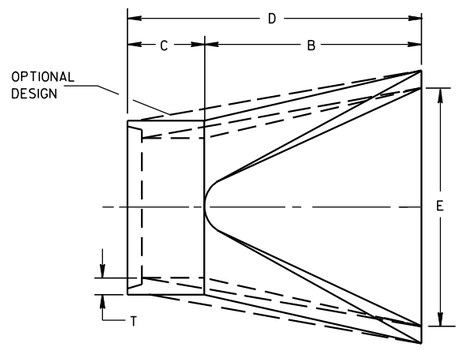


END VIEW

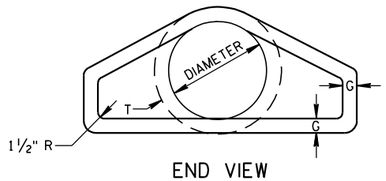


SIDE ELEVATION

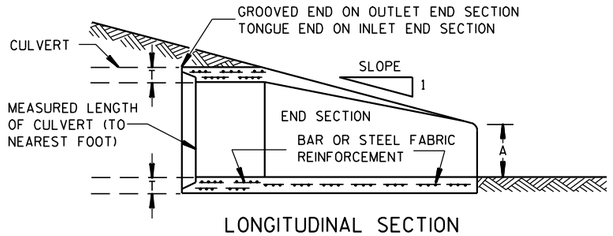
METAL ENDWALLS



PLAN

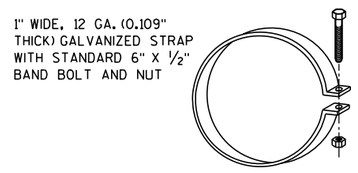


END VIEW



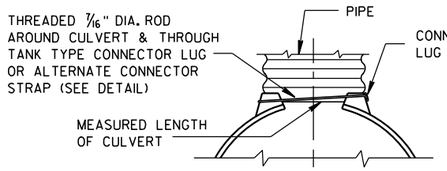
LONGITUDINAL SECTION

CONCRETE ENDWALLS

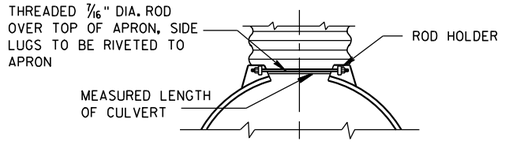


ALTERNATE FOR TYPE 1 CONNECTION

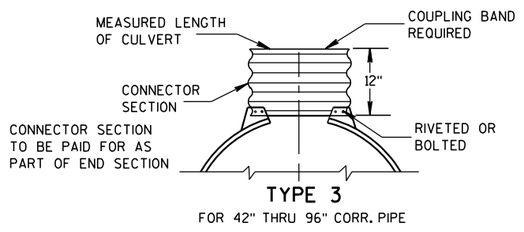
END SECTION CONNECTOR STRAP



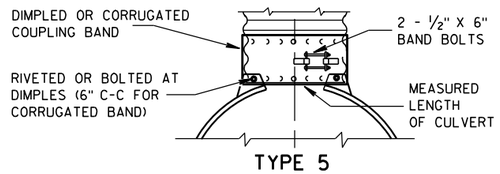
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

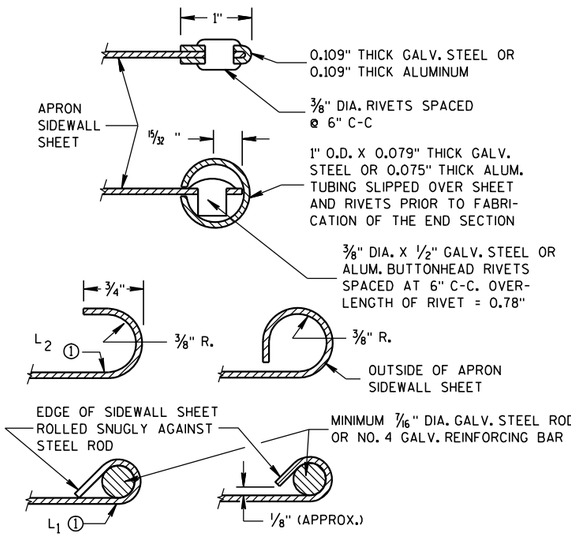
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

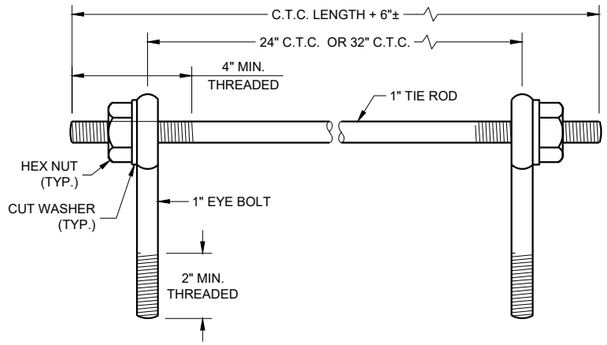
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

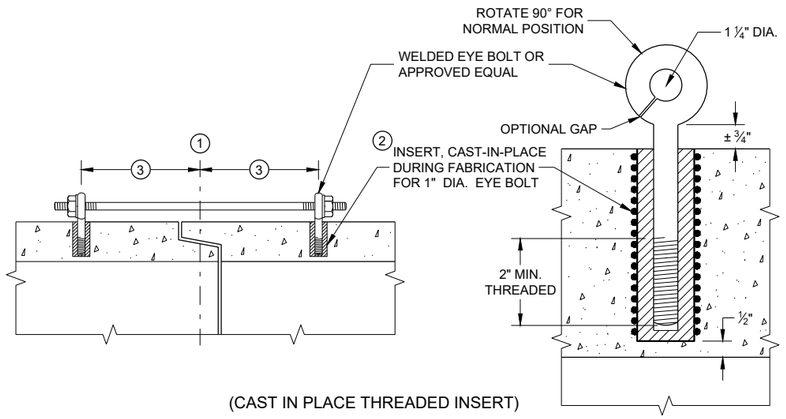
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

(1) CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

(2) THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

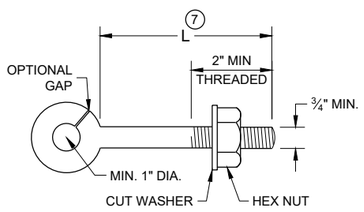
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

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

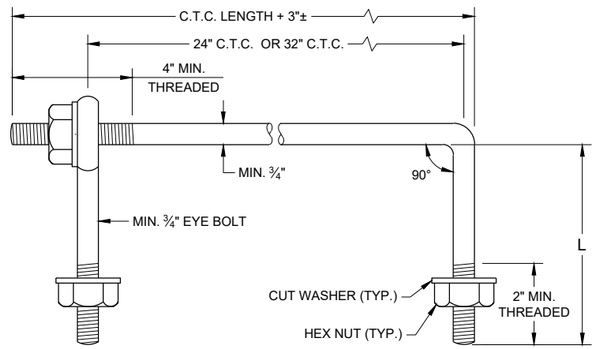
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

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

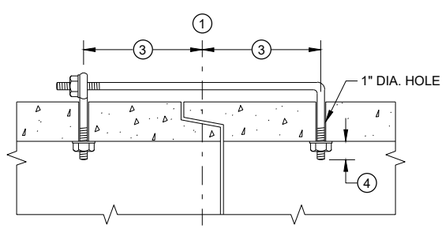


EYE BOLT (7)

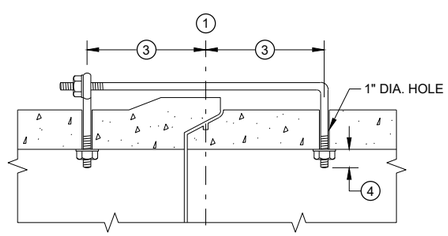
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

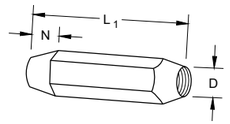
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

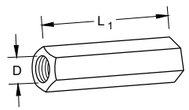
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



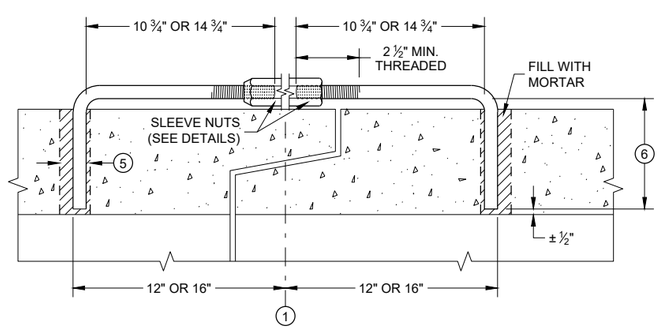
TAPERED



PLAIN

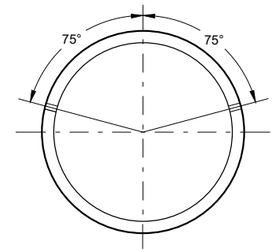
RIGHT AND LEFT THREADS

SLEEVE NUTS



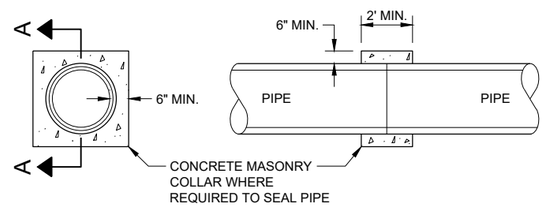
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

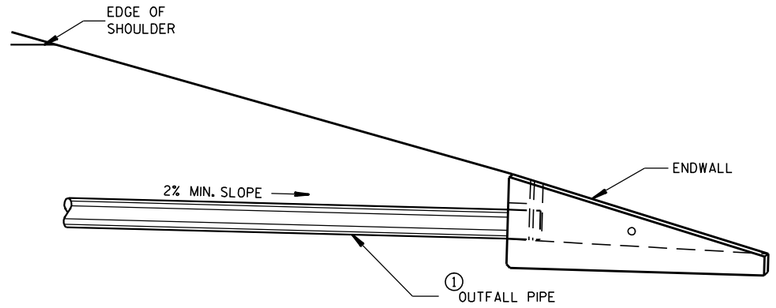
APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

SDD 08F04 - 08

SDD 08F04 - 08

DIMENSIONS IN INCHES											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	Z
**4	6	12	5 1/4	9	8	32	36	11	2 3/8	6 1/2	4
6	8	14	7 1/4	11	10	42	44	13	3 5/8	8 1/2	6

**APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)



INSTALLATION 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.

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

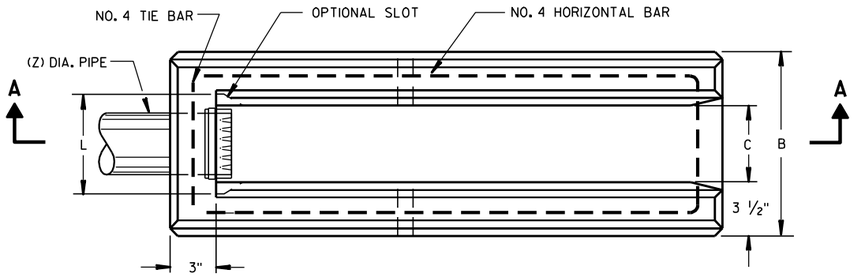
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

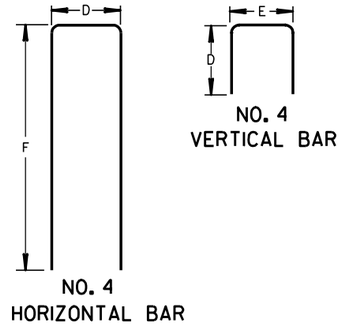
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

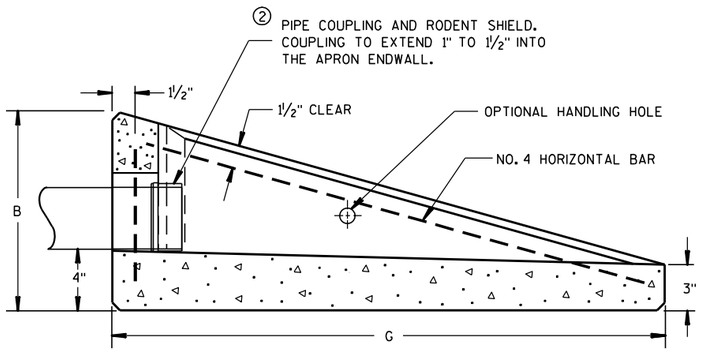
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



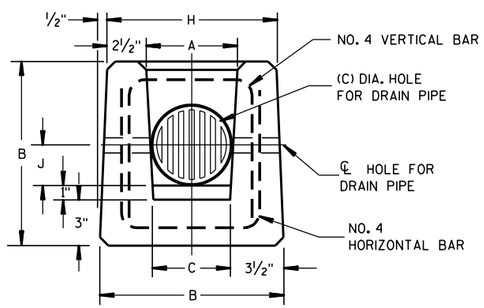
PLAN VIEW



BAR STEEL REINFORCEMENT DETAILS

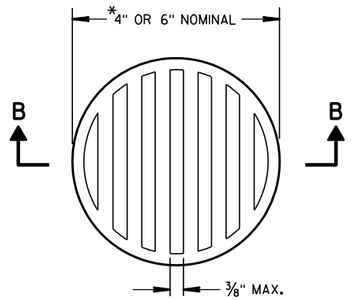


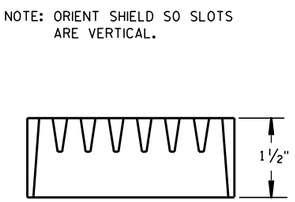
SECTION A-A



END VIEW

CONCRETE APRON ENDWALL FOR UNDERDRAIN





SECTION B-B

② RODENT SHIELD

*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

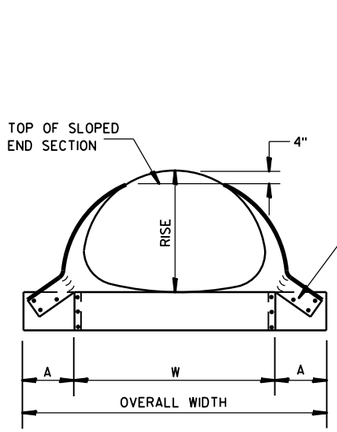
APPROVED
3/10/98 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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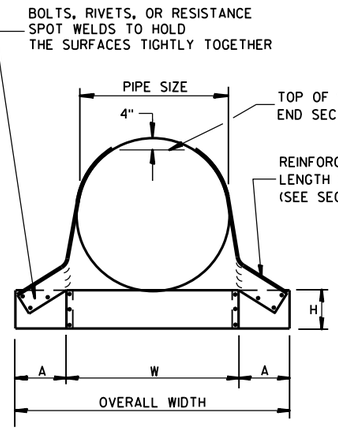
S.D.D. 8 F 6-4

6

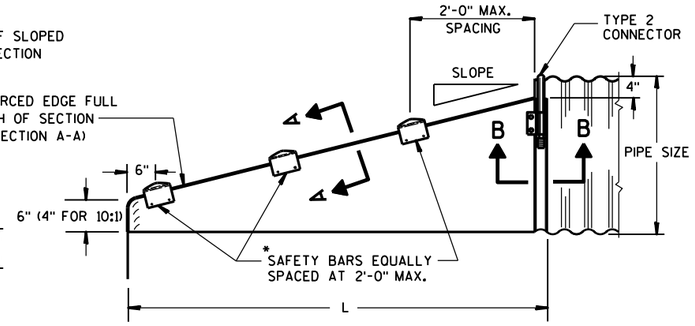
S.D.D. 8 F 6-4



FRONT VIEW



FRONT VIEW



SIDE VIEW

GENERAL NOTES

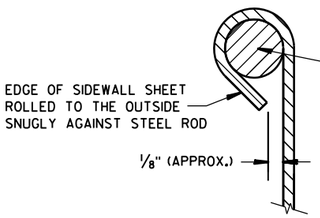
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SLOPED END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 521 FOR STEEL APRON ENDWALLS.

SAFETY BARS SHALL BE FABRICATED FROM GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL.

STEEL APRON ENDWALLS FOR CULVERT PIPE
SLOPED SIDE DRAINS

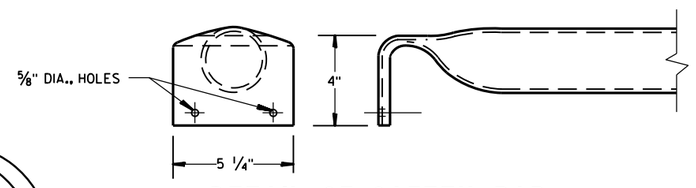
PIPE DIA. (IN.)	MIN. THICK. (Inches)	DIMENSIONS (Inches)				L DIMENSIONS					
		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	.064	8	6	21	37	4:1	20	6:1	30	10:1	70
18	.064	8	6	24	40	4:1	32	6:1	48	10:1	100
21	.064	8	6	27	43	4:1	44	6:1	66	10:1	130
24	.064	8	6	30	46	4:1	56	6:1	84	10:1	160
30	.109	12	9	36	60	4:1	80	6:1	120	10:1	220
36	.109	12	9	42	66	4:1	104	6:1	156	10:1	280
42	.109	16	12	48	80	4:1	128	6:1	192	——	——
48	.109	16	12	54	86	4:1	152	6:1	228	——	——
54	.109	16	12	60	92	4:1	176	6:1	264	——	——
60	.109	16	12	66	98	4:1	200	6:1	300	——	——



SECTION A-A

*NOTE:
THREE SAFETY BARS ARE SHOWN. ACTUAL NUMBER OF BARS REQUIRED AT A 2'-0" C-C MAX. SPACING WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

3" GALVANIZED PIPE. FLATTEN ENDS, THEN BEND OUTSIDE 4" TO MATCH END SECTION SIDES.

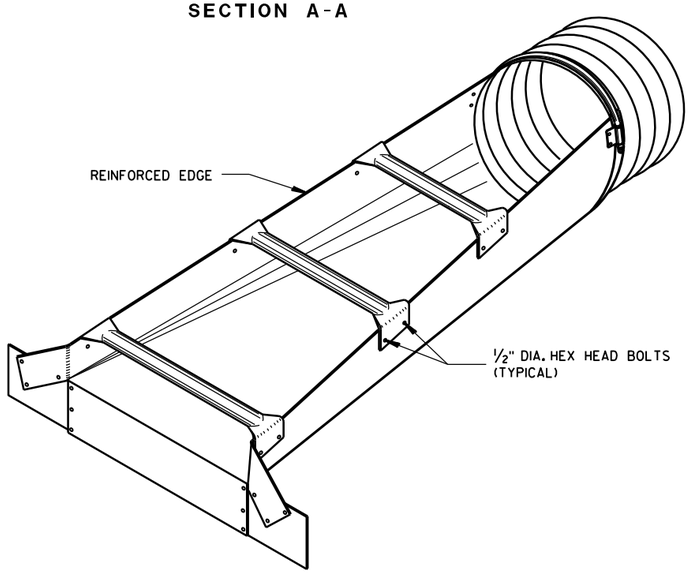


DETAIL OF SAFETY BAR

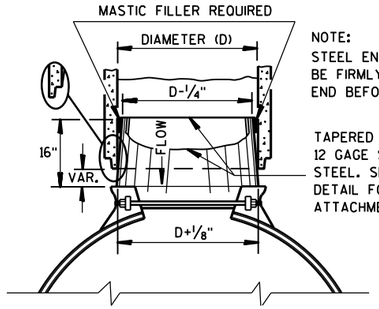
STEEL APRON ENDWALLS FOR PIPE ARCH
SLOPED SIDE DRAINS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) ①	DIMENSIONS (Inches) A	H	W	OVERALL WIDTH	L DIMENSIONS SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	17	13	.064 *	7	6	30	44	4:1	19	6:1	30	10:1 ②	70
18	21	15	.064 *	8	6	27	43	4:1	20	6:1	30	10:1	70
21	24	18	.064 *	8	6	30	46	4:1	32	6:1	48	10:1	100
24	28	20	.064 *	8	6	34	50	4:1	40	6:1	60	10:1	120
30	35	24	.079 *	12	9	41	65	4:1	56	6:1	84	10:1	160
36	42	29	.109 *	12	9	48	72	4:1	76	6:1	114	10:1	210
42	49	33	.109	16	12	55	87	4:1	92	6:1	138	——	——
48	57	38	.109	16	12	63	95	4:1	112	6:1	168	——	——
54	64	43	.109	16	12	70	102	4:1	132	6:1	198	——	——

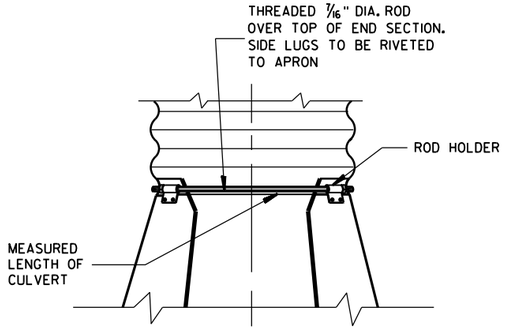
① * MINIMUM THICKNESS OF ALL 10:1 SLOPED SIDE DRAINS IS 0.109".
② ACTUAL SLOPE GREATER THAN 10:1.



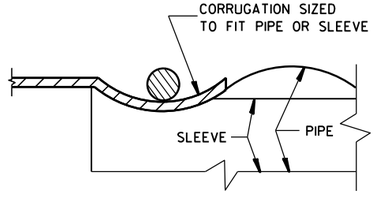
ISOMETRIC VIEW



STEEL ADAPTER SLEEVE FOR CONCRETE PIPE



TYPE 2
CONNECTION DETAIL



SECTION B-B

STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

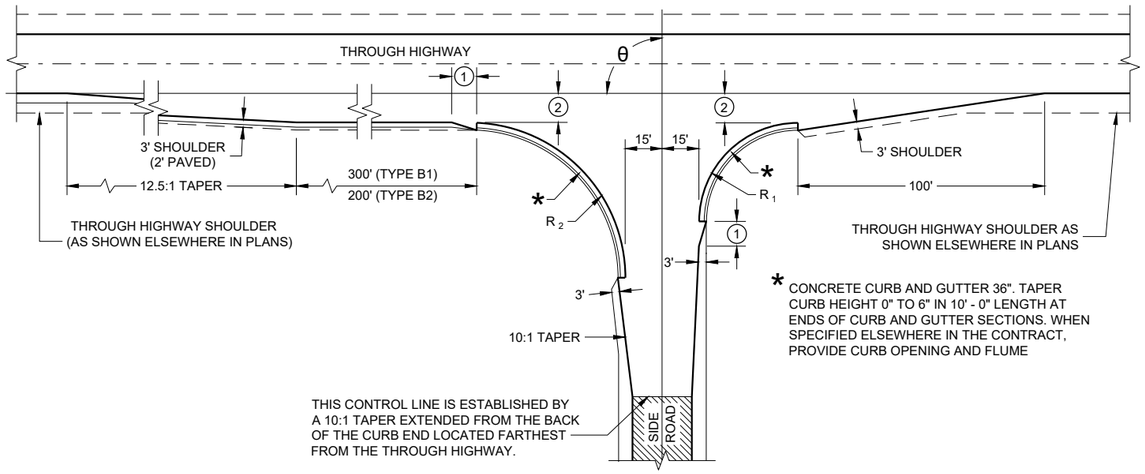
APPROVED
9/14/2012 DATE
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 F 7-5

6

S.D.D. 8 F 7-5



* CONCRETE CURB AND GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10' - 0" LENGTH AT ENDS OF CURB AND GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME

TYPE "B1" AND "B2"

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65 - 70	35	70
71 - 80	40	70
81 - 90	40	60
91 - 100	50	55
101 - 110	60	45

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

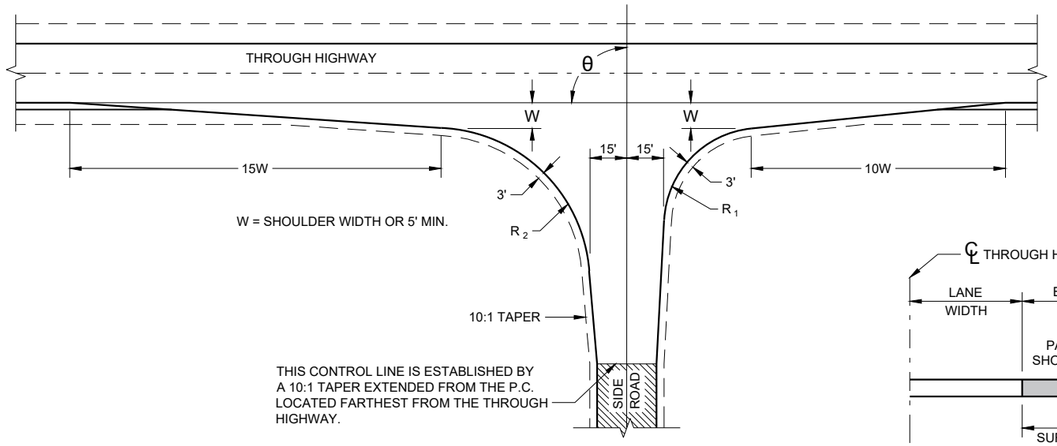
(1) 10-FT TYPICAL.

(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

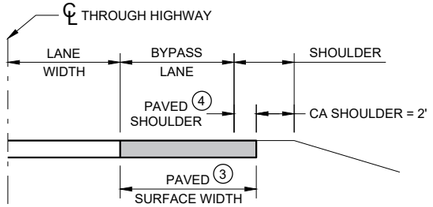
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
- ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH
- PC CONCRETE = 13-FT PLUS PAVED SHOULDER WIDTH

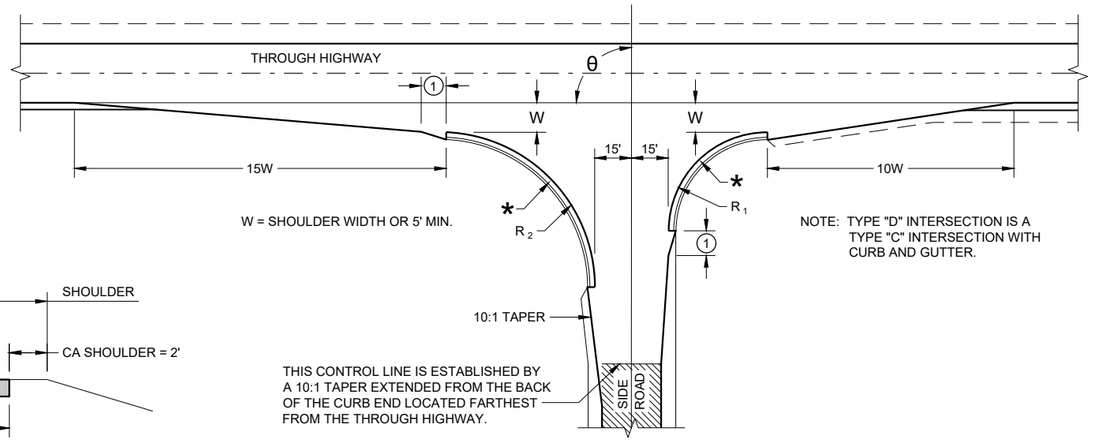
(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



TYPE "C"

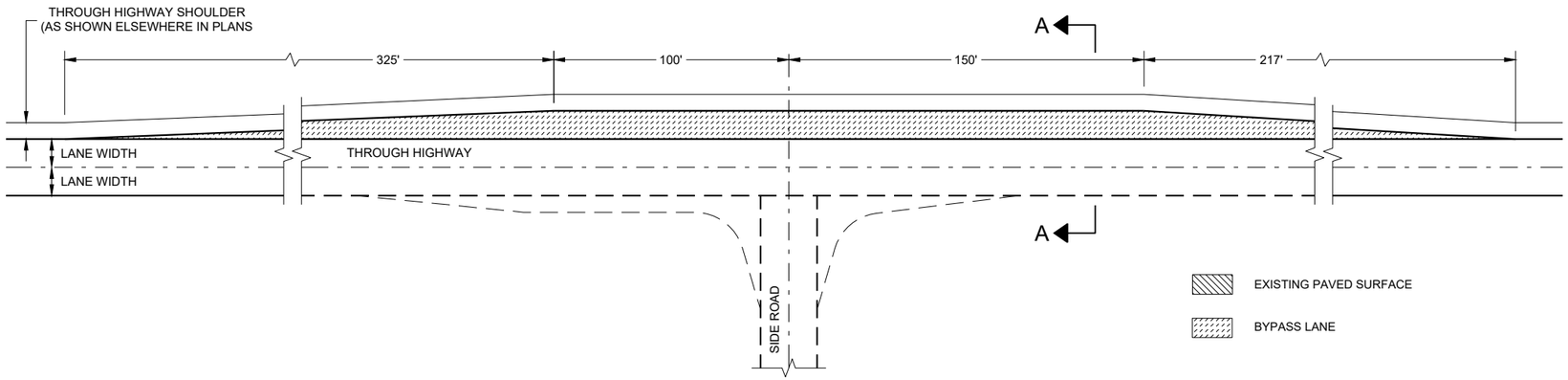


SECTION A - A
(SHOWING BYPASS LANE AND SHOULDER)



NOTE: TYPE "D" INTERSECTION IS A TYPE "C" INTERSECTION WITH CURB AND GUTTER.

TYPE "D"



TEE INTERSECTION BYPASS LANE DETAIL

AT GRADE SIDE ROAD INTERSECTION TYPES "B1", "B2", "C", "D" AND TEE INTERSECTION BYPASS LANE

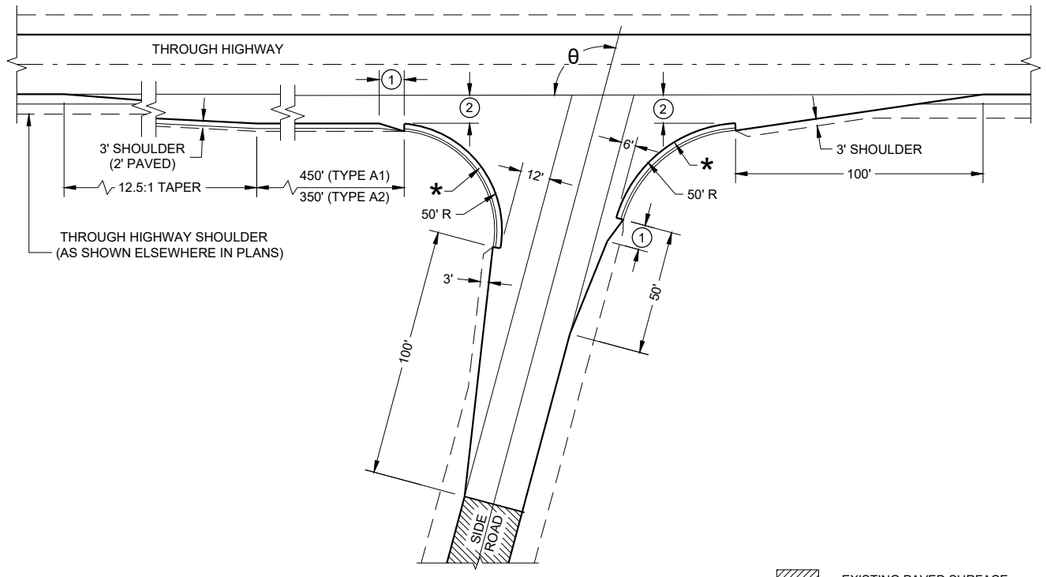
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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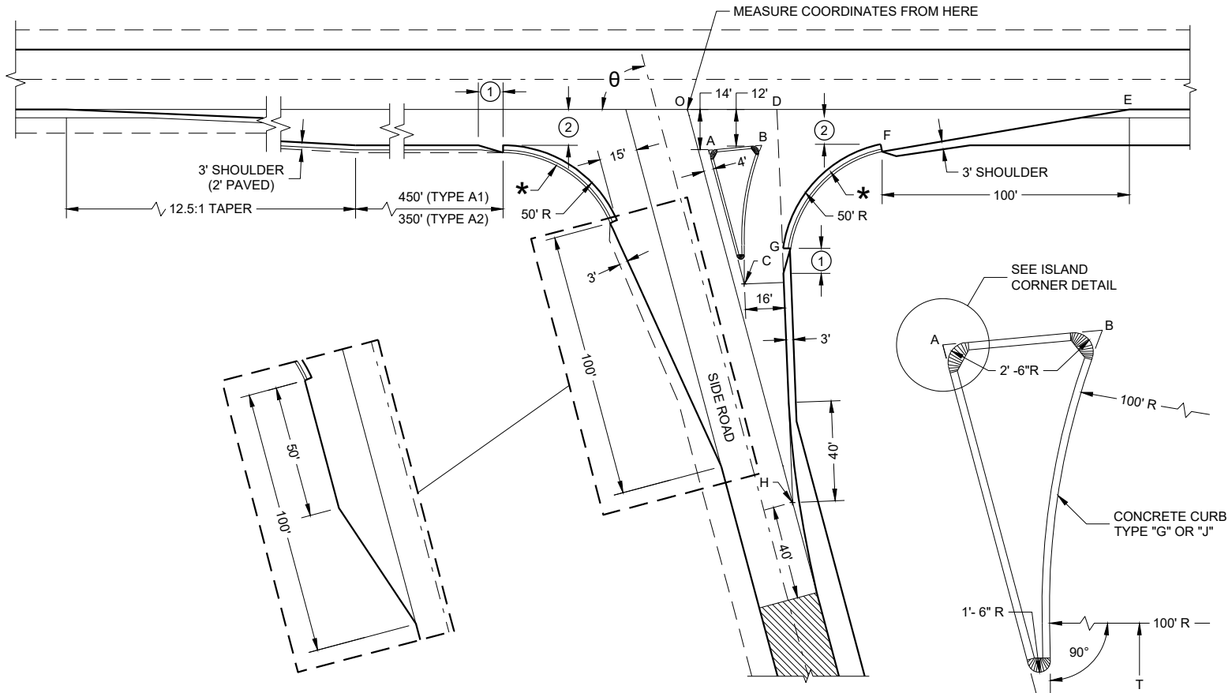
SDD 09A01 - 14a

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SDD 09A01 - 14a

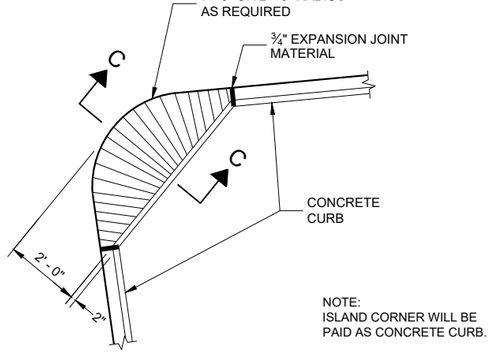


θ = MORE THAN 80°



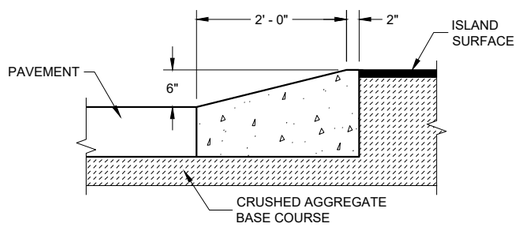
SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS

θ = ACUTE ANGLES 80° OR LESS



PLAN VIEW

NOTE:
ISLAND CORNER WILL BE
PAID AS CONCRETE CURB.



SECTION C - C

ISLAND CORNER DETAIL

(TO BE CONSTUCTED AT ALL ISLAND CORNERS)

TABLE OF DIMENSIONS FOR VARIABLE SIDE ROAD INTERSECTION ANGLES

(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT 'O') X / Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.9 / -12.0	46.4 / -72.4	41.9 / 0.0	205.0 / 0.0	104.6 / -12.0	64.0 / -75.5	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	39.0 / -12.0	37.8 / -71.6	39.4 / 0.0	196.1 / 0.0	95.7 / -12.0	54.1 / -71.5	70.5 / -151.3	28.2	63.6	8.5	80.9	166.9
70	9.4 / -14.0	33.9 / -12.0	29.8 / -70.1	37.4 / 0.0	188.3 / 0.0	87.8 / -12.0	45.6 / -67.5	56.1 / -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 / -14.0	29.3 / -12.0	22.3 / -67.9	35.7 / 0.0	181.2 / 0.0	80.7 / -12.0	38.2 / -63.4	41.8 / -155.9	21.5	55.8	13.8	71.4	161.4
80	6.5 / -14.0	25.4 / -12.0	15.6 / -65.2	34.4 / 0.0	174.8 / 0.0	74.4 / -12.0	31.8 / -59.3	27.6 / -156.5	18.9	52.0	15.6	66.9	158.9

TYPE 'A1" AND "A2" SIDE ROAD INTERSECTION DETAILS

AT GRADE SIDE ROAD INTERSECTIONS
TYPES "A1" AND "A2"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

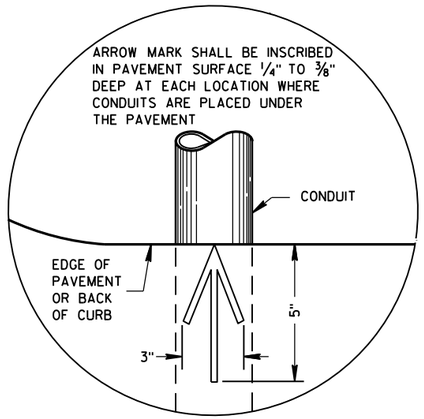
APPROVED
November 2022 — DATE
/S/ John Jenkins — ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 09A01 - 14b

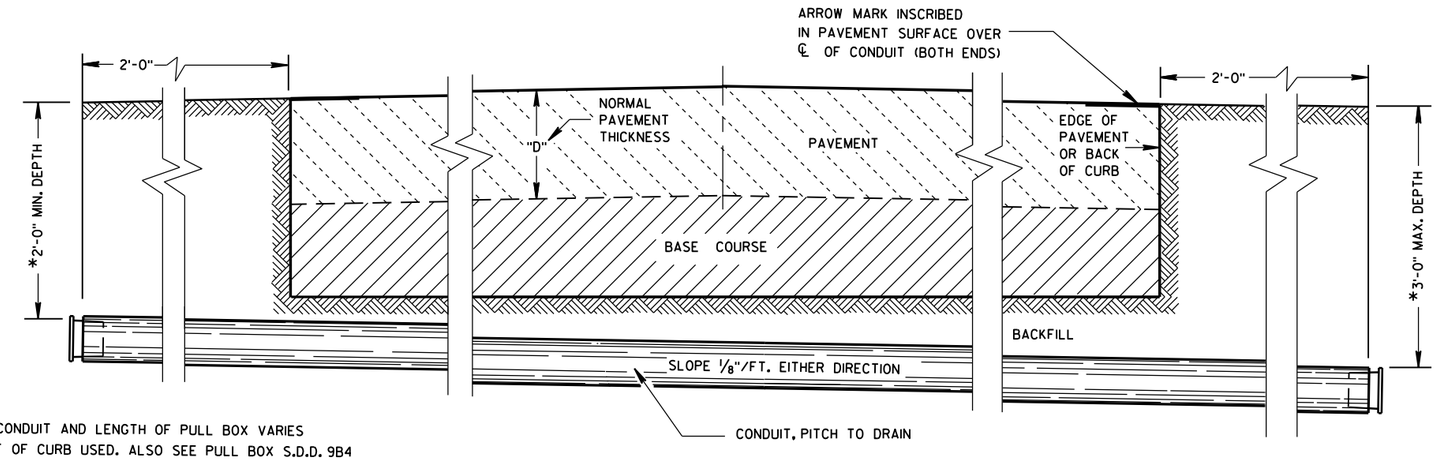
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SDD 09A01 - 14b



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

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

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

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

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

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

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

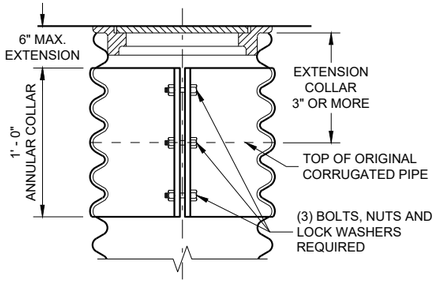
CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

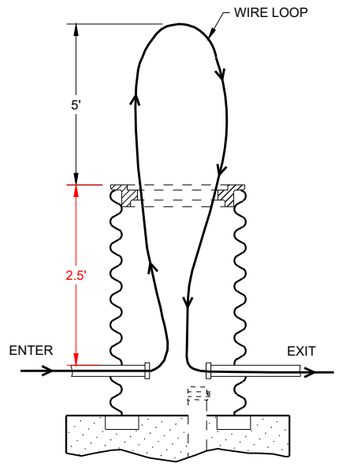
APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 255
FHWA

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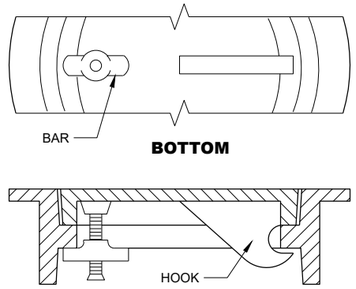
S.D.D. 9 B 2-10



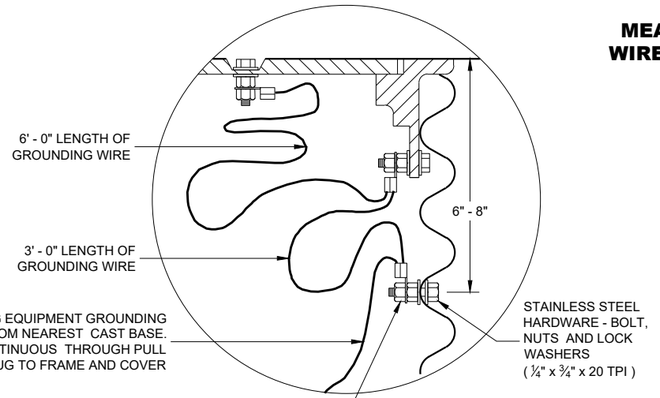
CORRUGATED PIPE EXTENDER



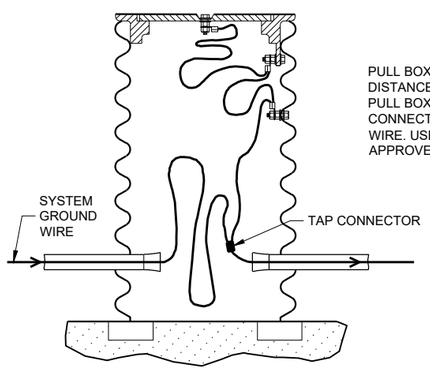
MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



ALTERNATE COVER (LOCKING)
TIGHTENING BAR TYPE

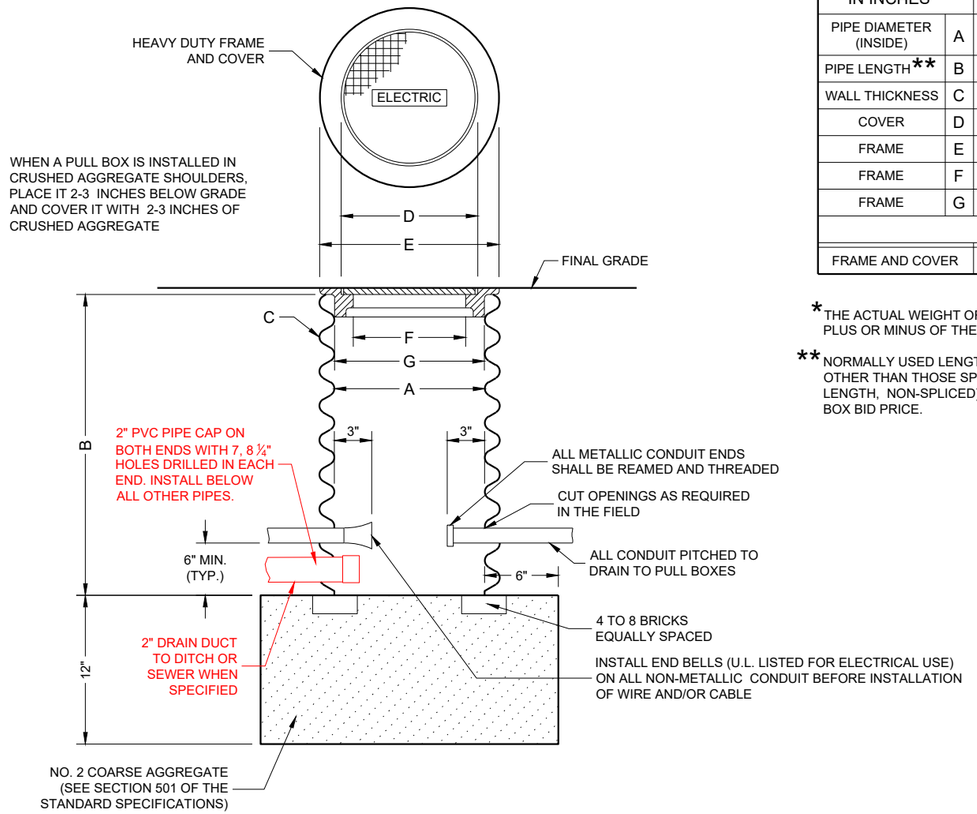


EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

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.

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

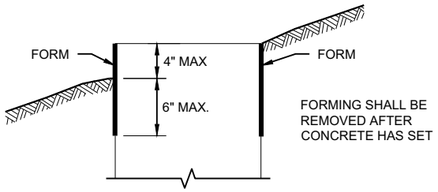
APPROVED
May 2022
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 256

FHWA

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SDD 09B04-12

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

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

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

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

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

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

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

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

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

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

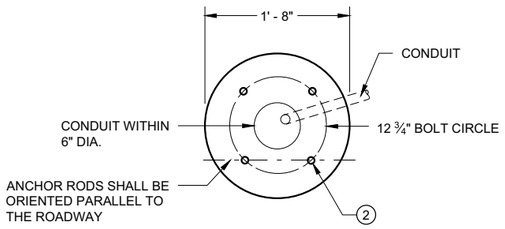
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

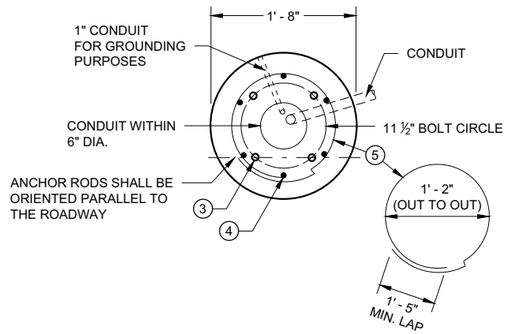
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

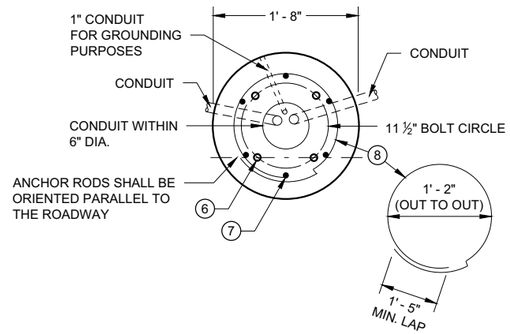
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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

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







1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.

4 (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.

5 (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.

6 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

7 (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.

8 (5) NO. 4 X 5' - 1" BAR STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

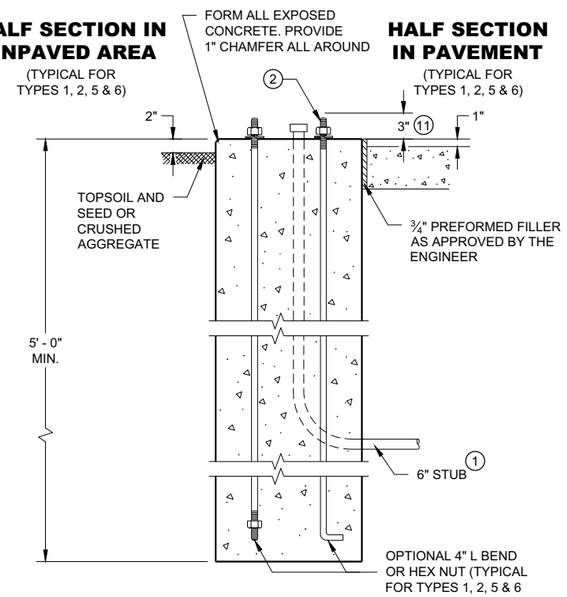
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

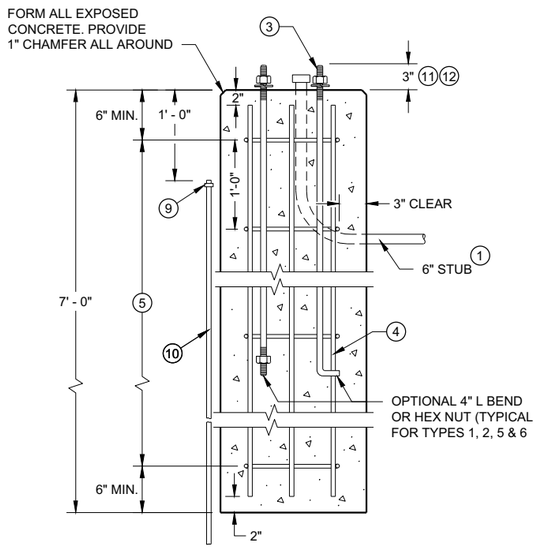
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

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

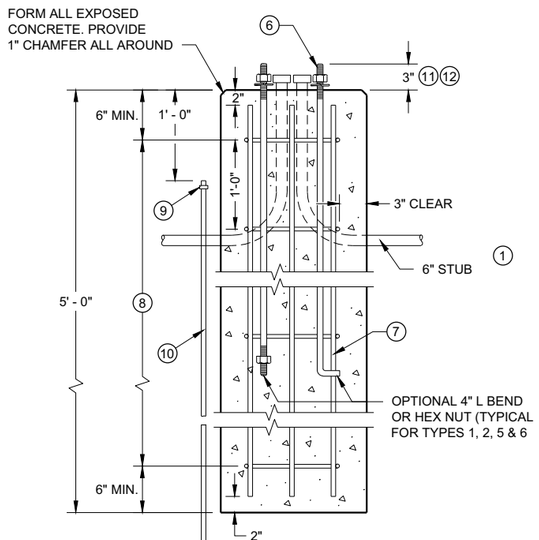
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 257

FHWA

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

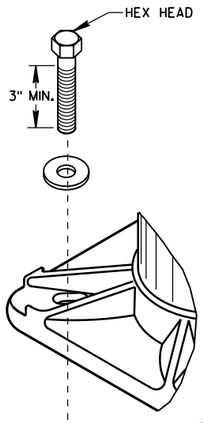
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

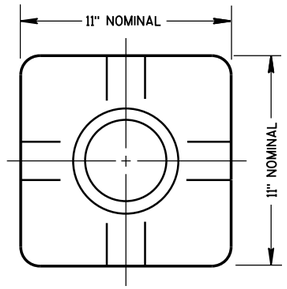
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

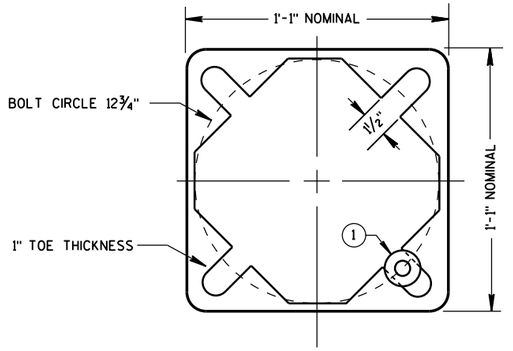
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

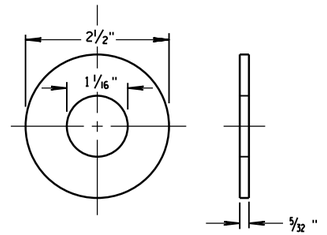




TOP VIEW
(PEDESTAL BASE)

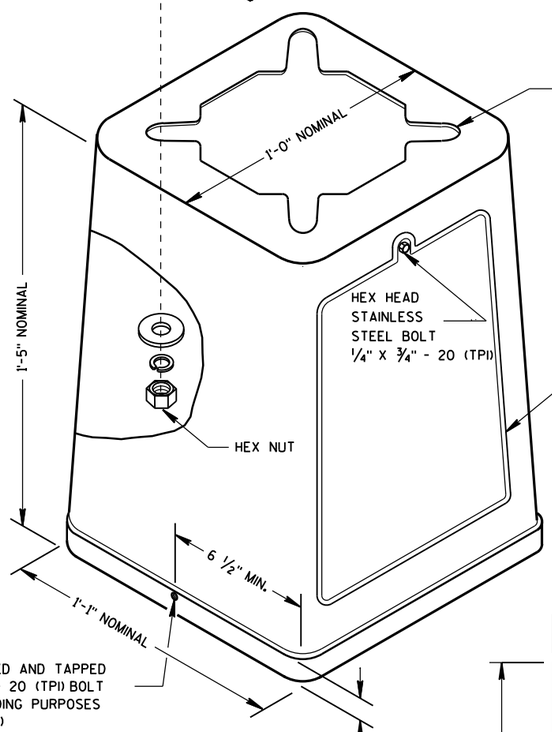


BOTTOM VIEW
(PEDESTAL BASE)

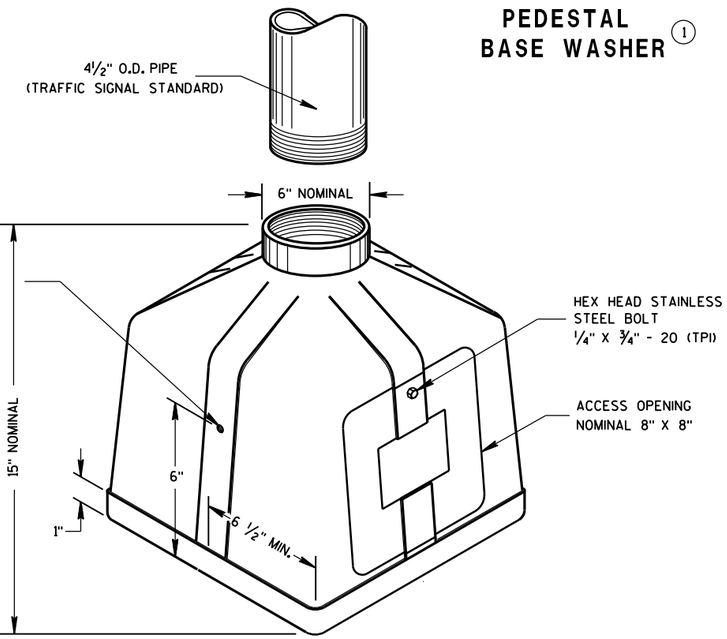


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

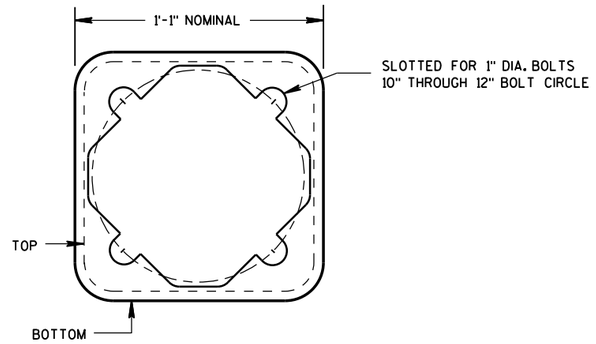


ISOMETRIC VIEW

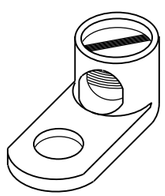


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

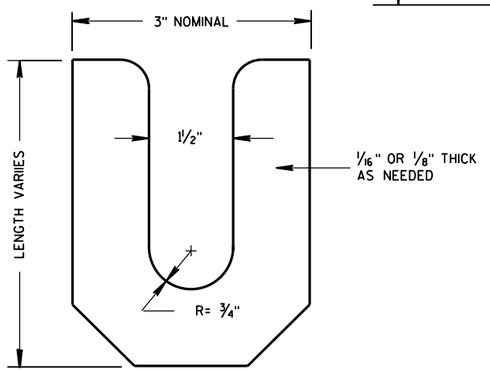


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

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



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

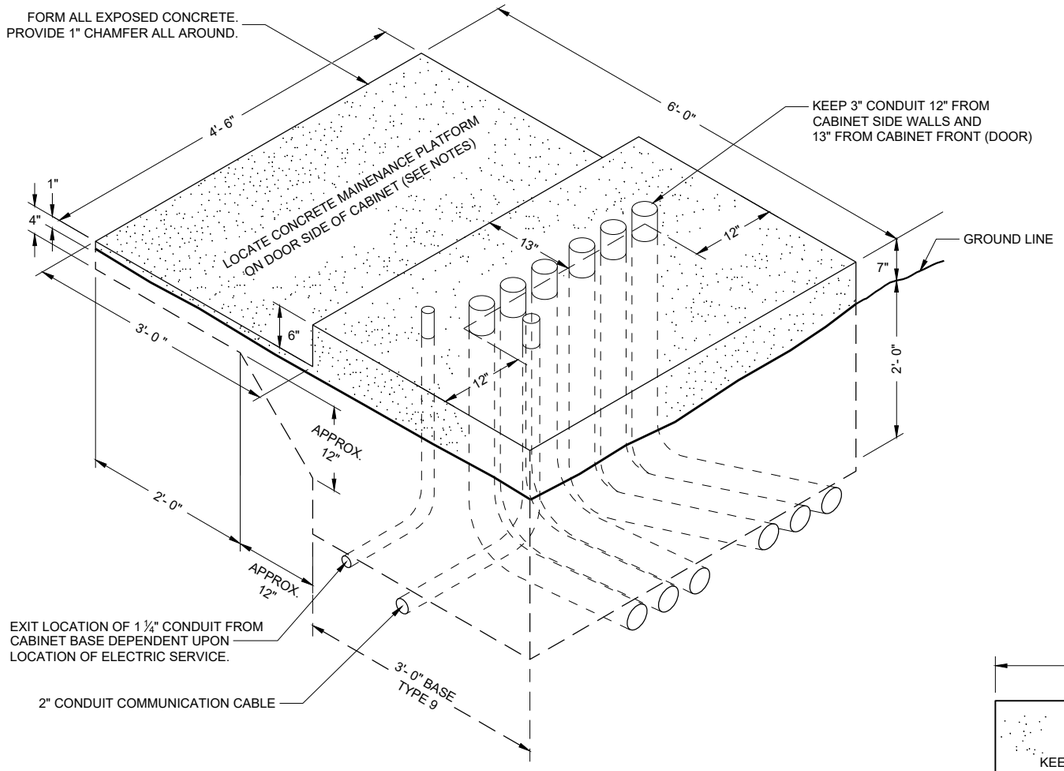
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 9 C 3-4

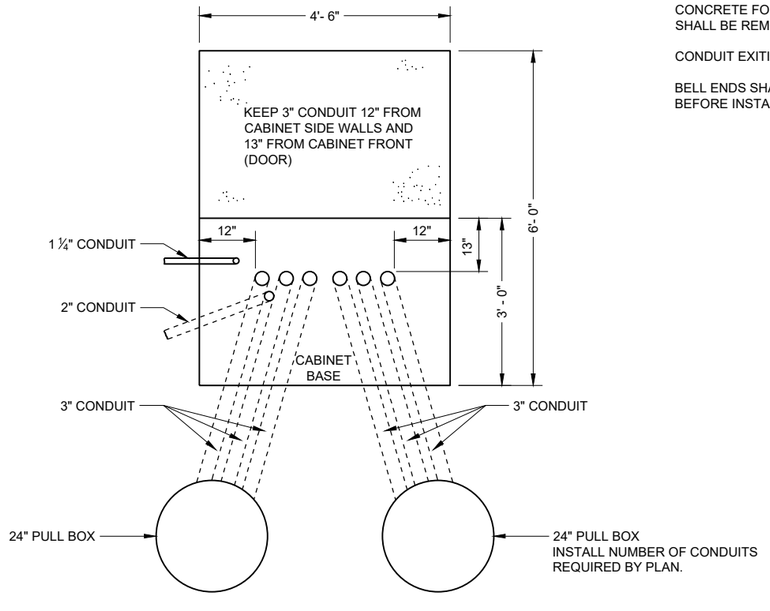
SDD 09C06 Concrete Control Cabinet Base, Type 9, Special



ISOMETRIC VIEW

TYPE 9 SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9 SPECIAL

GENERAL NOTES

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

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

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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

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

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

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

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND LEVEL.

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

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

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

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

CONCRETE CONTROL CABINET BASE TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE

/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI

FHWA

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SDD 09C06 - 07

GENERAL NOTES

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

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

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

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

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

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

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

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

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

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

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

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

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

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

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

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

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

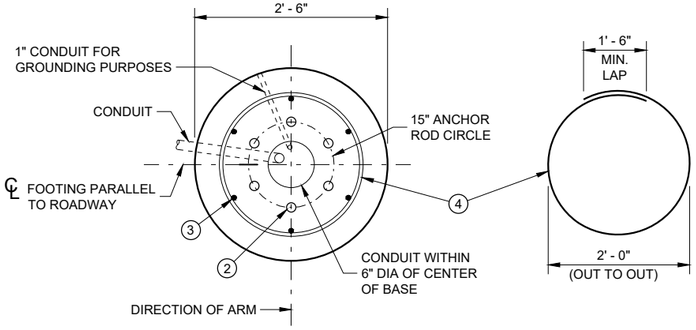
(2) (6) 1 ½ DIA. X 4' - 4" ANCHOR RODS

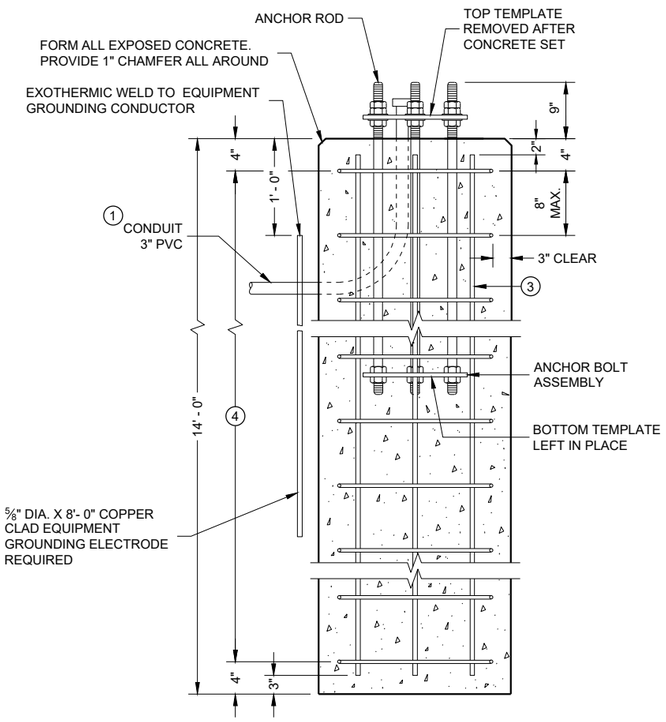
(3) (6) NO. 6 X 13' - 7" BAR STEEL REINFORCEMENT.

(4) (21) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

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

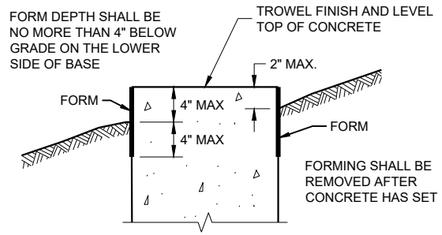
QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	172
LBS. OF VERTICAL BAR STEEL	122



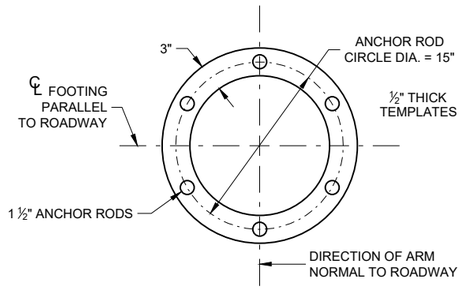


CONCRETE BASE, TYPE 10
(FOR TYPE 9, TYPE 10 AND OVER HEIGHT (OH) POLES)

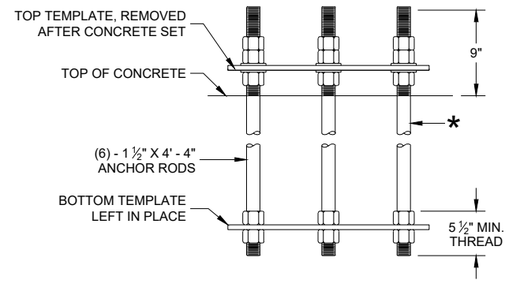
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE SDD 9C13 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

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

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demerbilek — WIND LOADED STRUCTU PROGRAM LEADER
FHWA

6

SDD 09C11 - 10

GENERAL NOTES

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

BASES (SHAFT), BELOW THE WING, SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

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

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

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

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

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

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

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

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

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4 ½ INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

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

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

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTOR FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

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

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

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

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

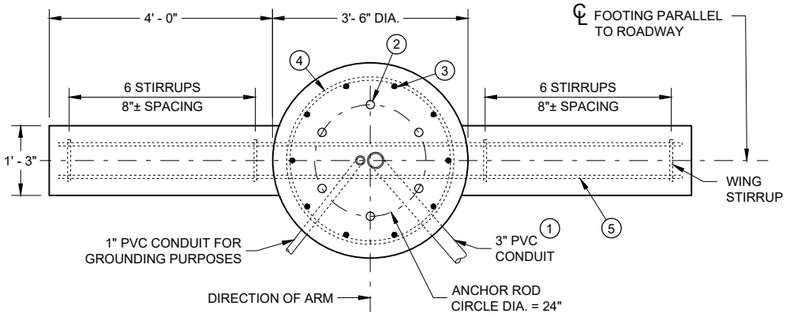
(2) (6) 1 ¾" DIA. X 7' - 2" ANCHOR RODS

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

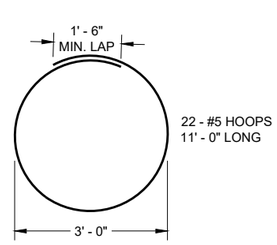
(4) (22) NO. 5 X 11'- 0" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

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

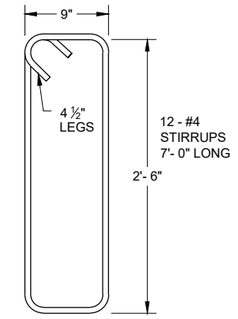
CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE .....fy = 55,000 p.s.i.
WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.



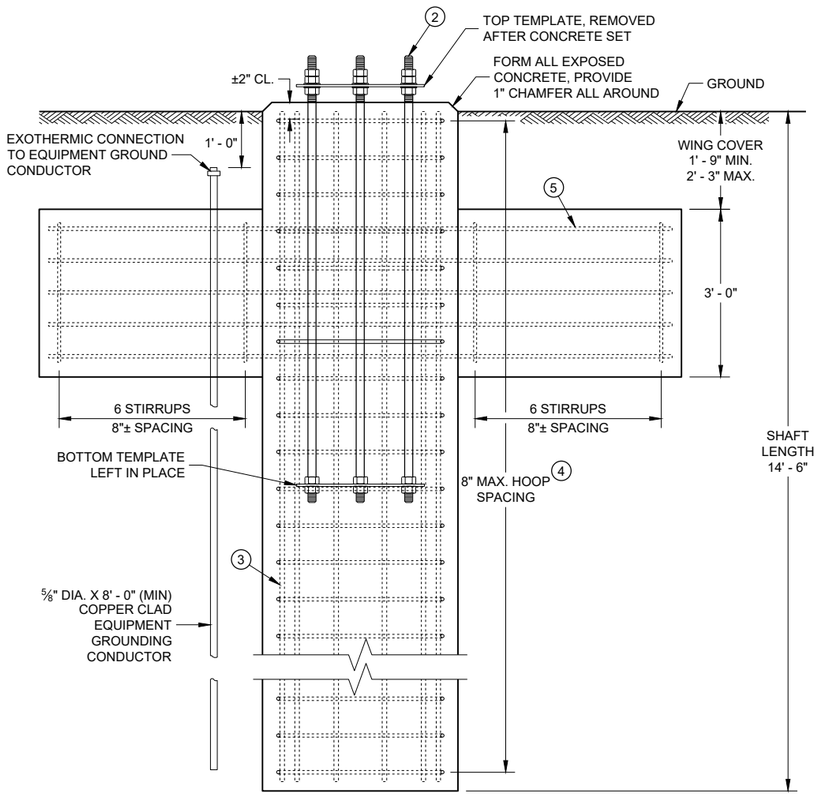
PLAN VIEW



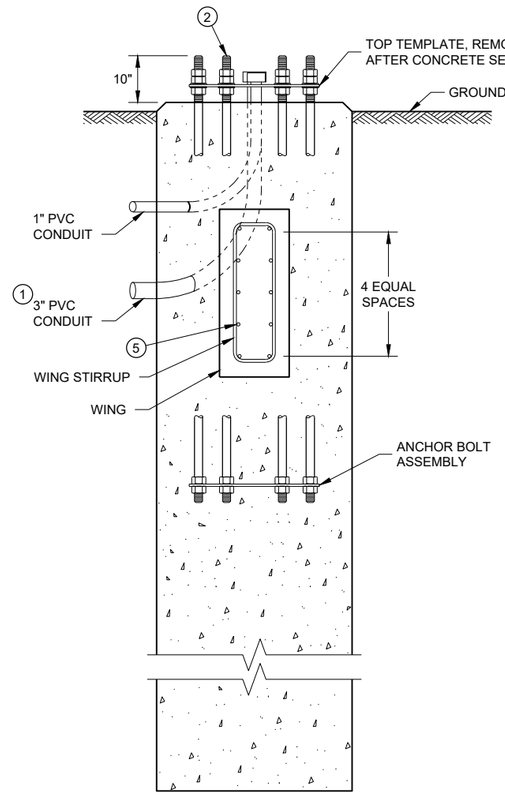
HOOP DETAIL



WING STIRRUP DETAIL



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



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

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

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

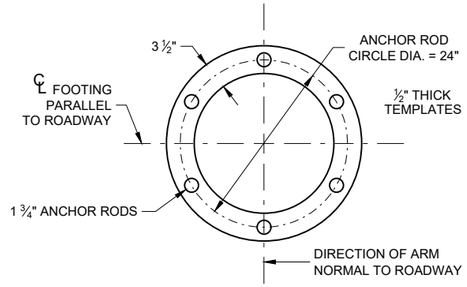
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE 9C13 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION

CONCRETE BASE TYPE 13

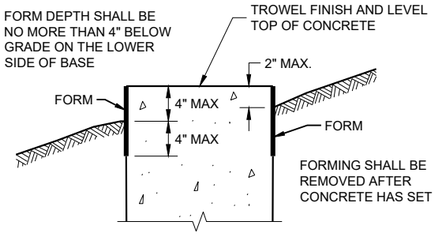
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

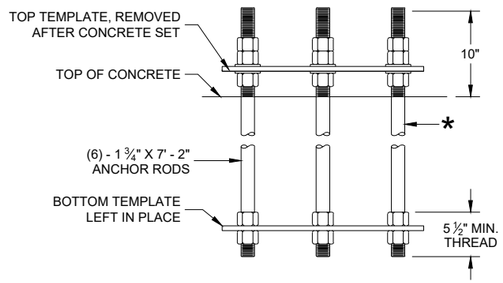
SDD 09C12 - 09a



TOP AND BOTTOM TEMPLATE



FORMING DETAIL



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 11" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2017
DATE

/S/ Ahmet Demirbilek
WIND LOADED STRUCTU
PROGRAM LEADER

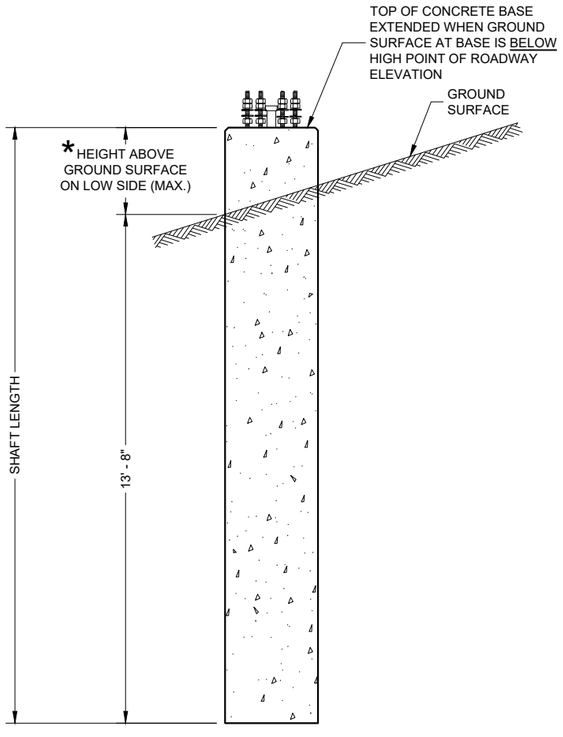
FHWA

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SDD 09C12 - 09b

REINFORCEMENT AND CONCRETE QUANTITIES ADJUSTED FOR EXTENDED TYPE 10 CONCRETE BASE

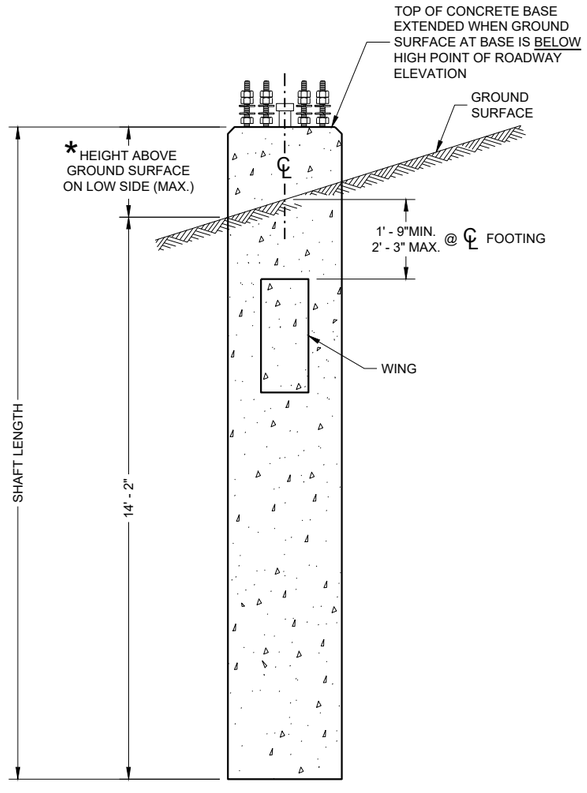
HEIGHT INCREASE REQUIRED	*HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAX.)	SHAFT LENGTH	LENGTH OF #6 VERTICAL REINF.	NO. OF #5 HOOPS	CU. YD. OF CONCRETE	LBS. OF HOOP BAR STEEL	LBS. OF VERTICAL STEEL
>0" TO 6"	10"	14' - 6"	14' - 1"	22	2.6	180	127
>6" TO 1' - 0"	1' - 4"	15' - 0"	14' - 7"	23	2.7	188	131
>1' - 0" TO 1' - 6"	1' - 10"	15' - 6"	15' - 1"	24	2.8	196	136
>1' - 6" TO 2 - 0"	2' - 4"	16' - 0"	15' - 7"	24	2.9	196	141



CONCRETE BASE TYPE 10 (EXTENDED)

REINFORCEMENT AND CONCRETE QUANTITIES ADJUSTED FOR EXTENDED TYPE 13 CONCRETE BASE

HEIGHT INCREASE REQUIRED	*HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAX.)	SHAFT LENGTH	LENGTH OF #6 VERTICAL REINF.	NO. OF #5 HOOPS	CU. YD. OF CONCRETE	LBS. OF H.S. BAR STEEL
>0" TO 6"	10"	15' - 0"	14' - 7"	23	6.5	654
>6" TO 1' - 0"	1' - 4"	15' - 6"	15' - 1"	24	6.6	673
>1' - 0" TO 1' - 6"	1' - 10"	16' - 0"	15' - 7"	24	6.8	680
>1' - 6" TO 2 - 0"	2' - 4"	16' - 6"	16' - 1"	25	7.0	699



CONCRETE BASE TYPE 13 (EXTENDED)

CONCRETE BASE TYPE 10 AND TYPE13 EXTENSION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023 DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

SDD 09C13 - 03

SDD 09C13 - 03

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.

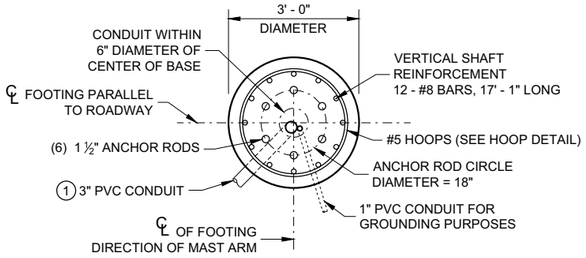
A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

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.

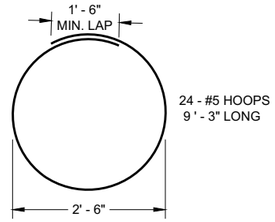
THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

(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.

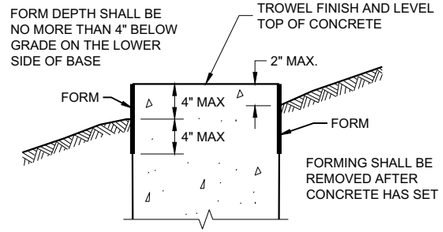
CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION).....fy = 55,000 p.s.i.
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.



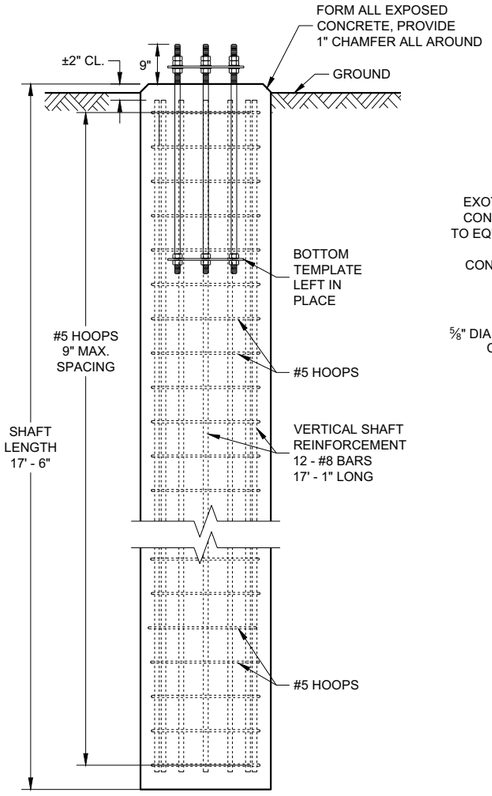
PLAN VIEW



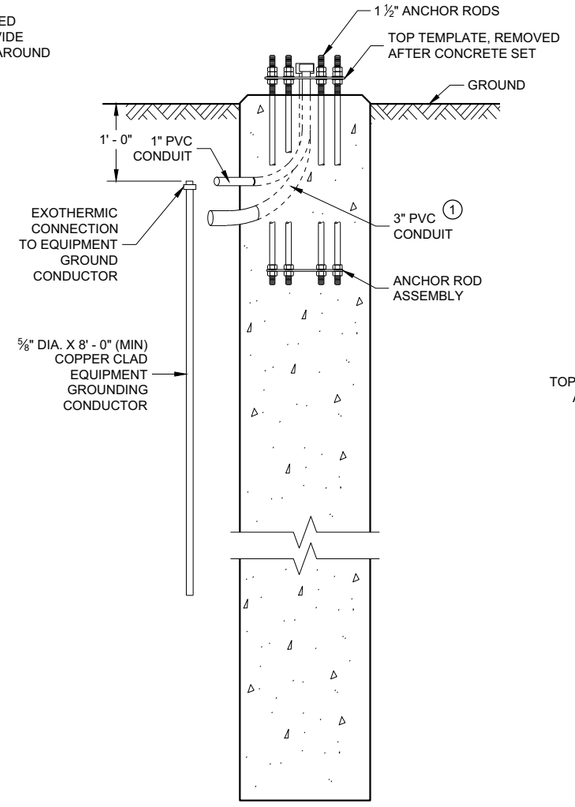
HOOP DETAIL



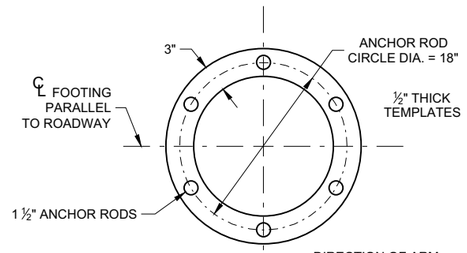
FORMING DETAIL



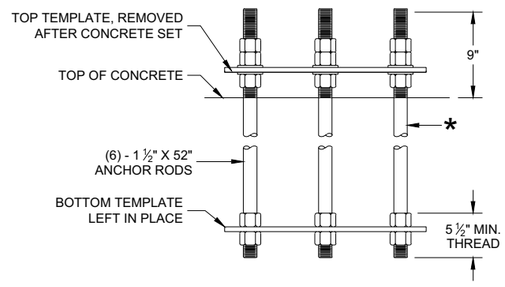
ELEVATION VIEW
(CONDUITS NOT SHOWN ON THIS VIEW FOR CLARITY)



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

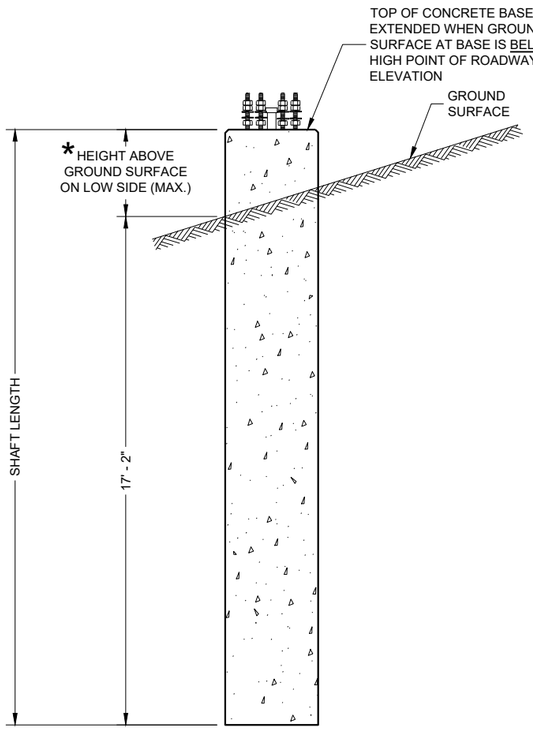
APPROVED
August 2020 — DATE
/S/ Alex Crabtree — WIND LOADED STRUCTU PROGRAM LEADER
FHWA

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SDD 09C15 - 01

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

HEIGHT INCREASE REQUIRED	*HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAX.)	SHAFT LENGTH	LENGTH OF #8 VERTICAL REINF.	NO. OF #5 HOOPS	CU. YD. OF CONCRETE	LBS. OF HOOP BAR STEEL	LBS. OF VERTICAL STEEL
>0" TO 6"	10"	18' - 0"	17' - 7"	25	4.7	241	563
>6" TO 1' - 0"	1' - 4"	18' - 6"	18' - 1"	25	4.8	241	579
>1' - 0" TO 1' - 6"	1' - 10"	19' - 0"	18' - 7"	26	5.0	251	595
>1' - 6" TO 2 - 0"	2' - 4"	19' - 6"	19' - 1"	27	5.1	260	611



CONCRETE BASE TYPE 10 SPECIAL (EXTENDED)

CONCRETE BASE TYPE 10 SPECIAL EXTENSION

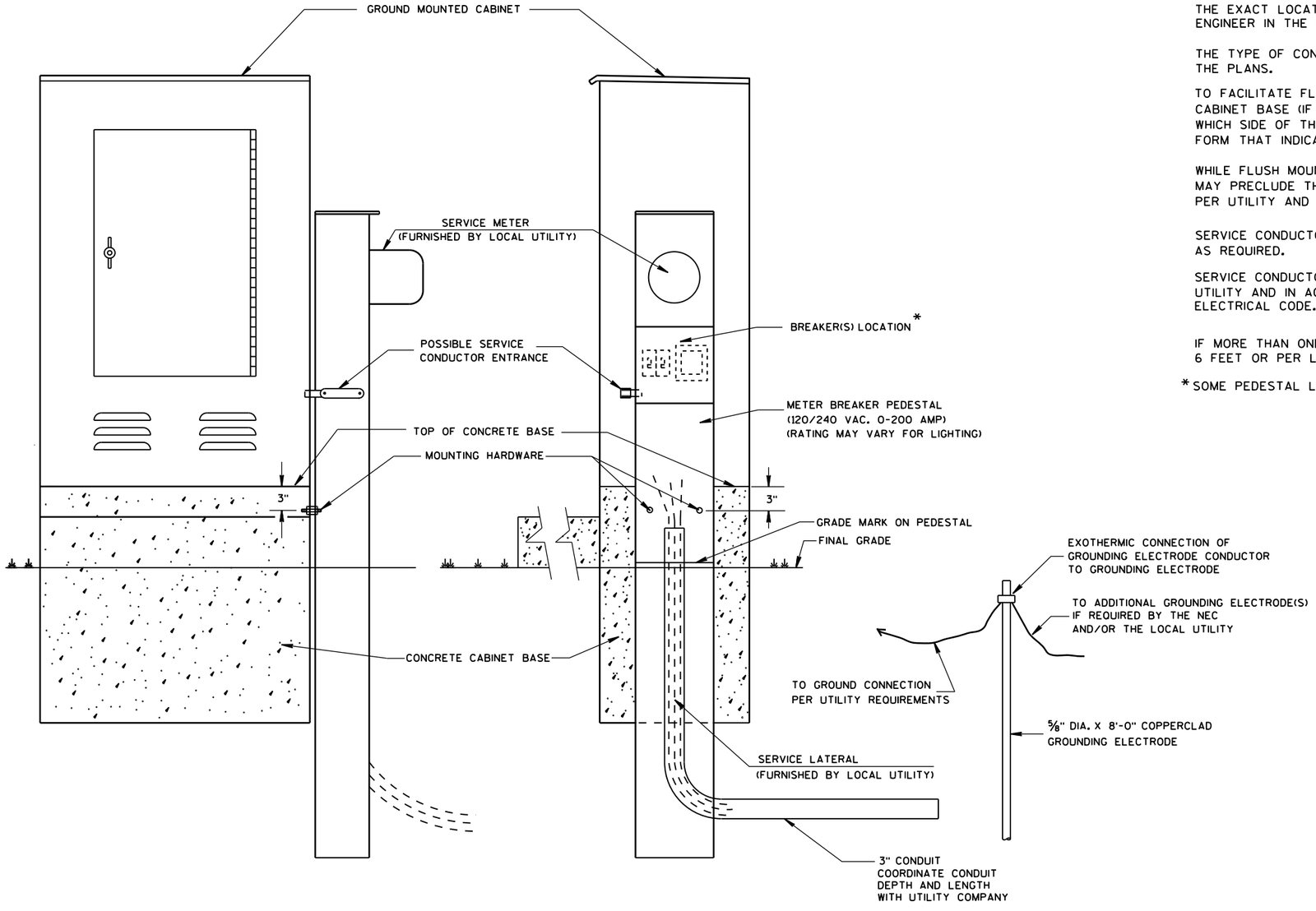
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 265

FHWA

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SDD 09C16-01



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

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

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

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S.D.D. 9 D 1-5

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S.D.D. 9 D 1-5

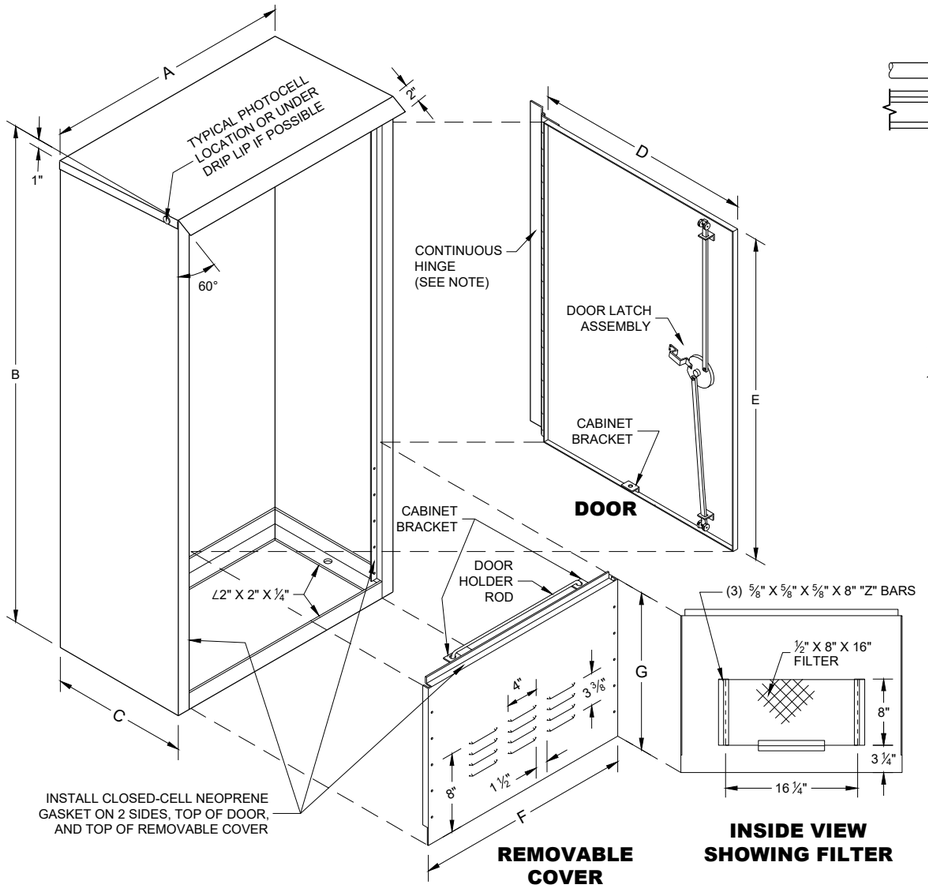
CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

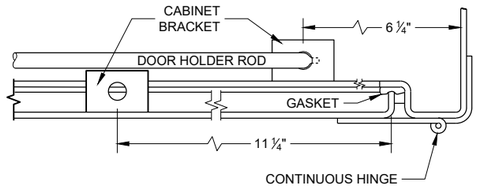
/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA

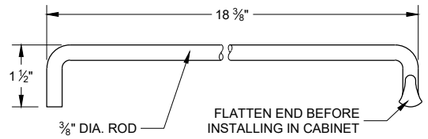


REMOVABLE COVER

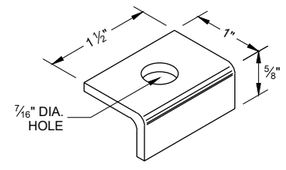
INSIDE VIEW SHOWING FILTER



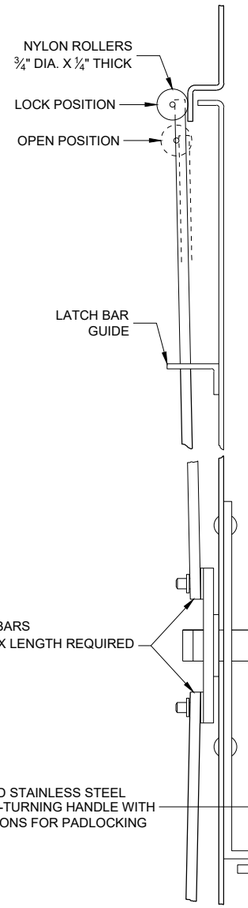
HINGE AND DOOR HOLDER



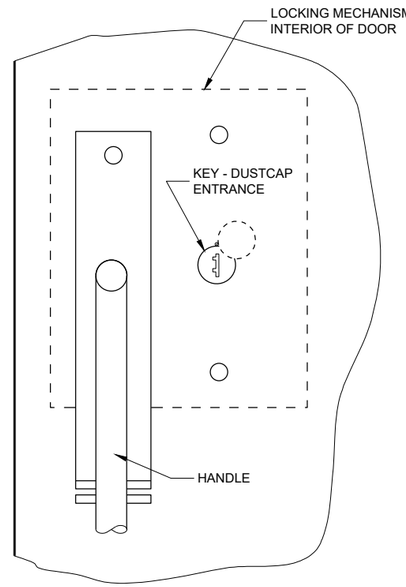
HOLDER ROD



CABINET BRACKET



SIDE VIEW



FRONT VIEW

LATCH ASSEMBLY

GENERAL NOTES

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

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

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

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

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

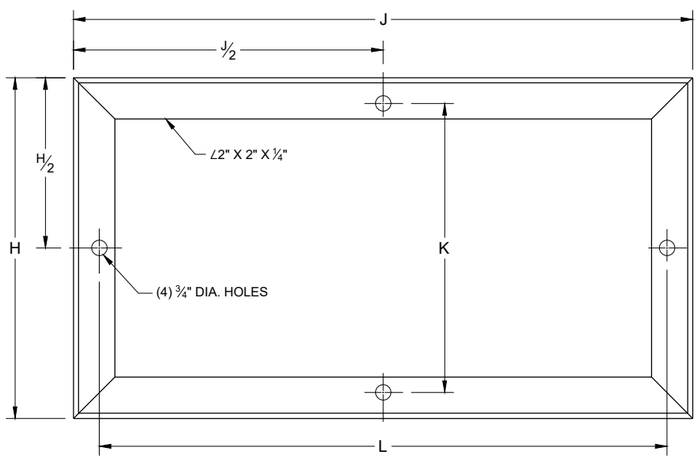
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

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

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

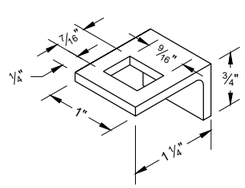
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 ½	16 ½	24
D	26 ½	34 ¾	33 ¾
E	38 ¾	38 ¾	38 ¾
F	26 ½	34 ¾	33 ¾
G	19	19	25
H	16 ½	16 ½	24
H/2	8 ¼	8 ¼	12
J	30	38	38
J/2	15	19	19
K	13 ¾	13 ¾	21 ¼
L	27 ½	35 ½	35 ½



LATCH BAR GUIDE

SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE

/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI

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SDD 09D02 - 03

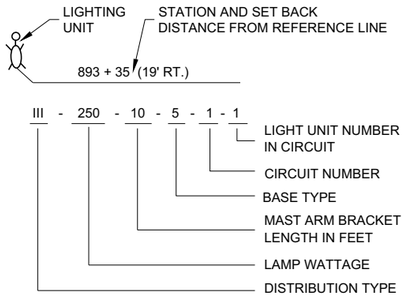
6

GENERAL NOTES

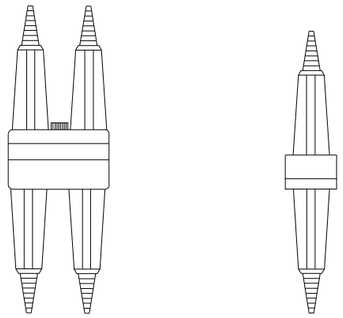
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

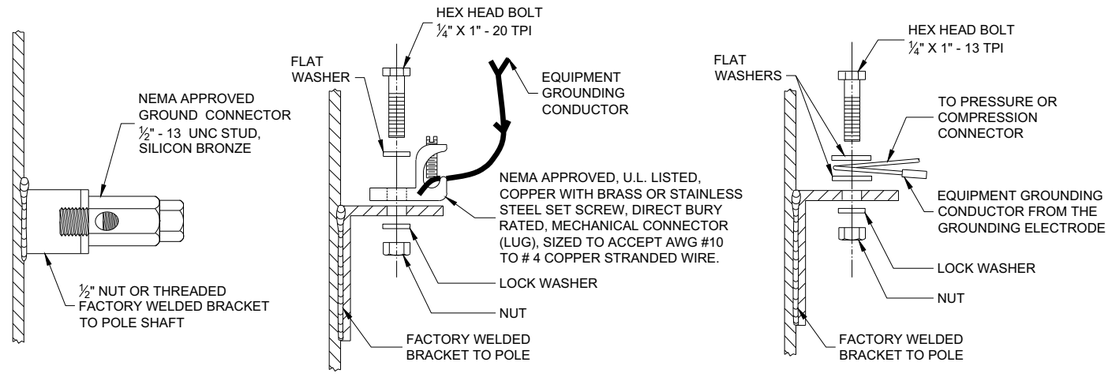


LIGHTING UNIT CODE
(TYPICAL)

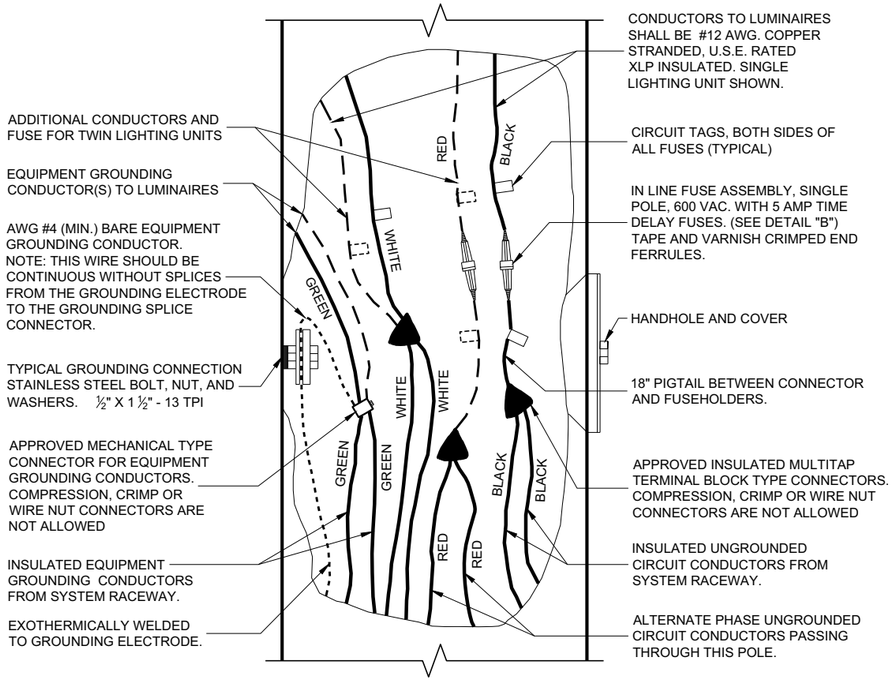


DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT

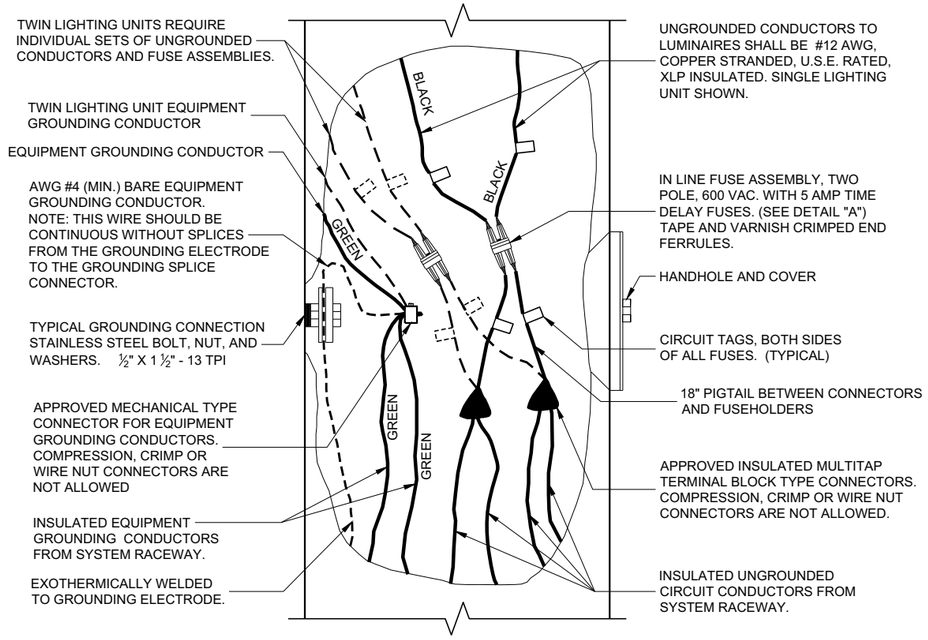
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH GROUNDING CONDUCTOR AND EQUIPMENT GROUNDING CONDUCTOR



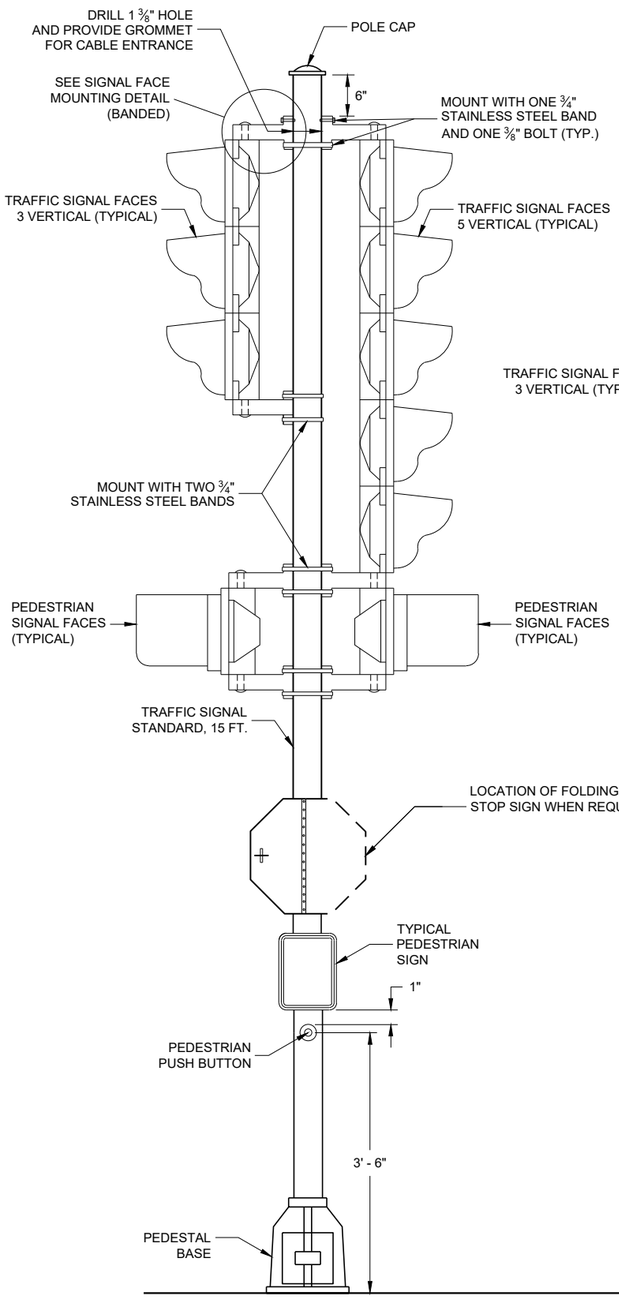
2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

NON - FREEWAY LIGHTING UNIT POLE WIRING

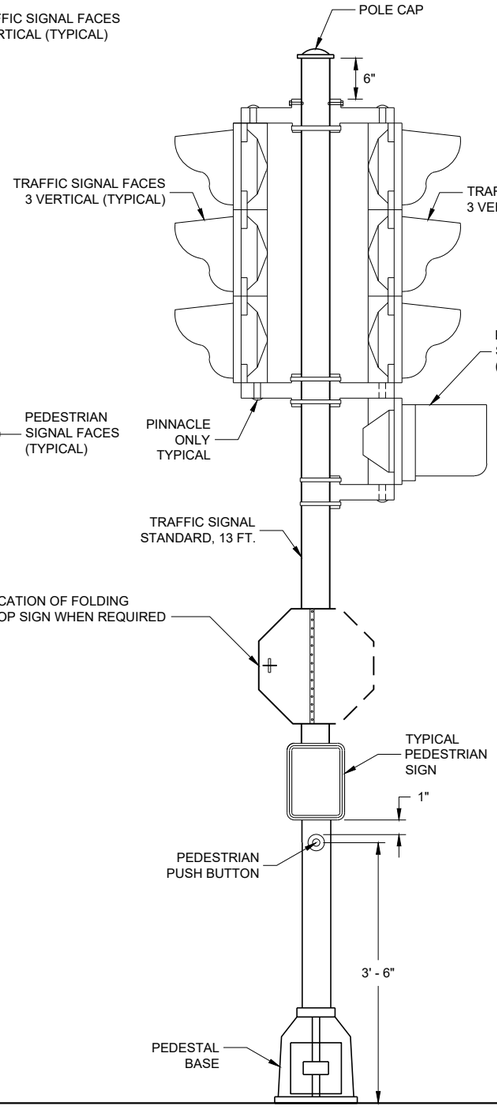
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 268

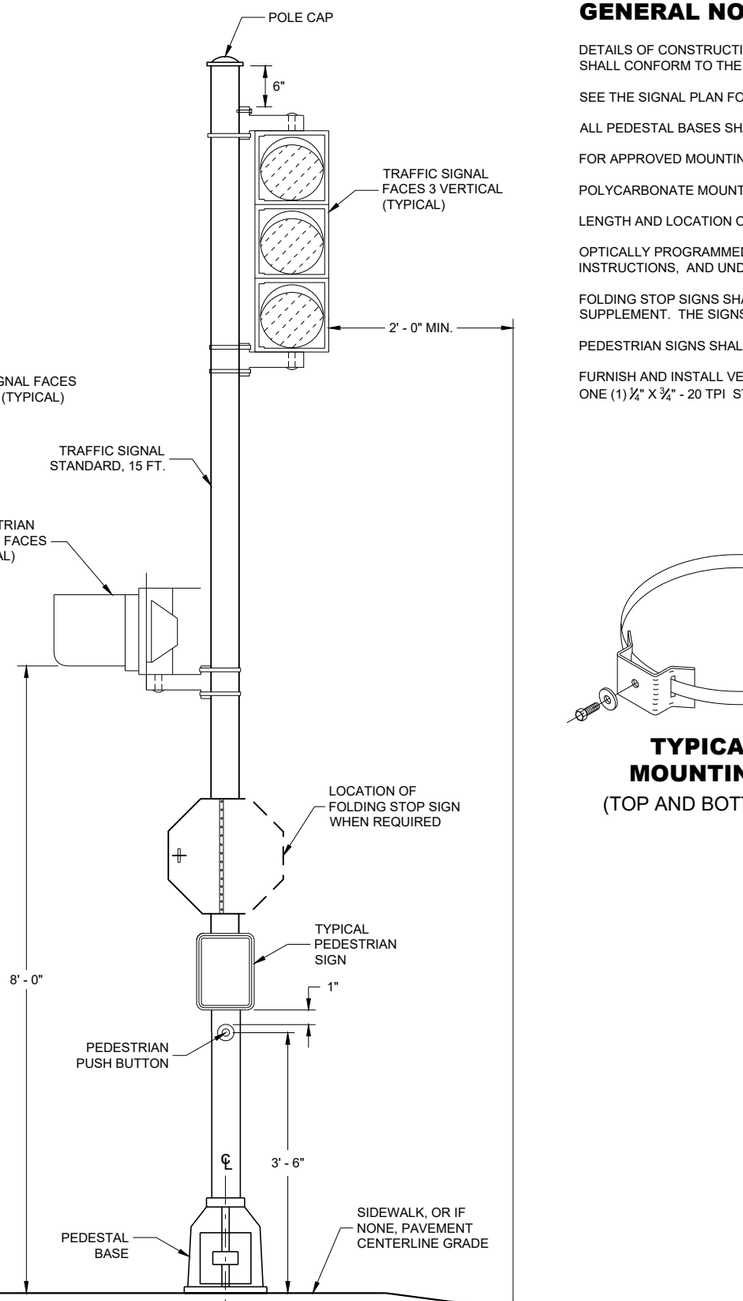
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TRAFFIC SIGNAL STANDARD - 15 FT.



TRAFFIC SIGNAL STANDARD - 13 FT.



TRAFFIC SIGNAL TANDARD - 15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

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

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

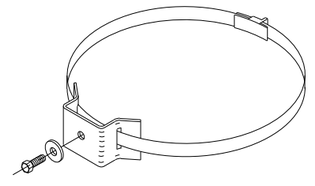
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

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

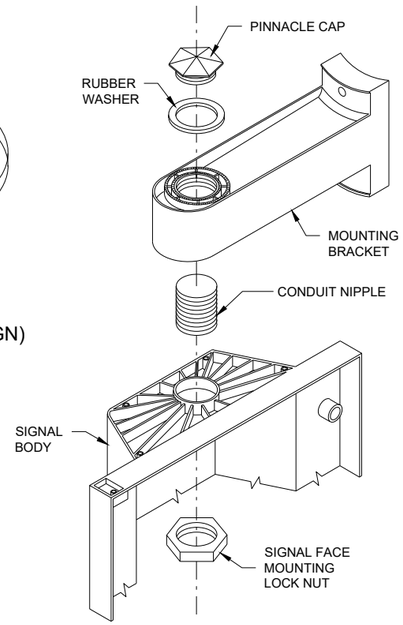
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

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



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



SIGNAL FACE MOUNTING DETAIL (BANDED)

TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

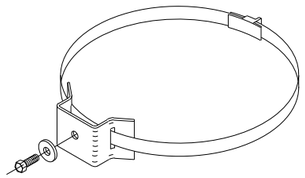
APPROVED
2/28/2013
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

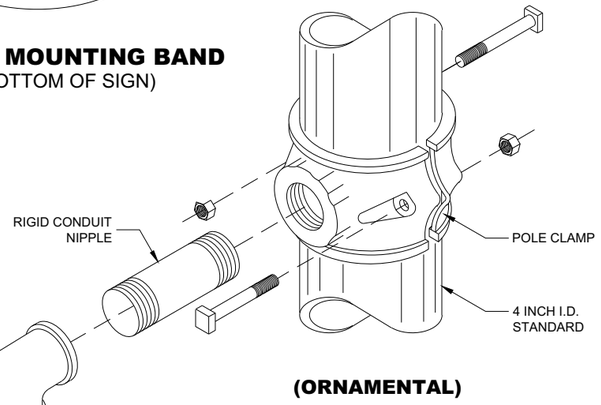
FHWA

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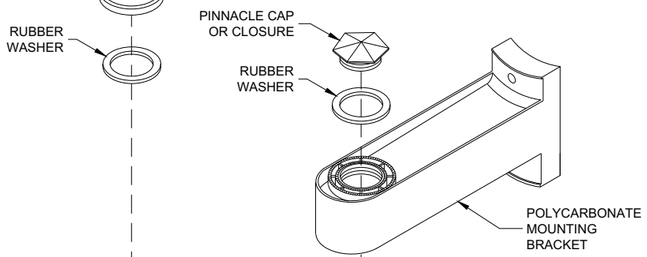
SDD 09E06 - 05



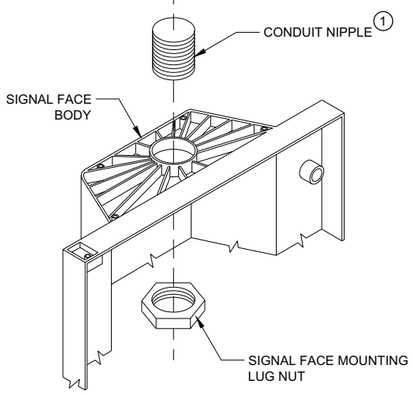
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



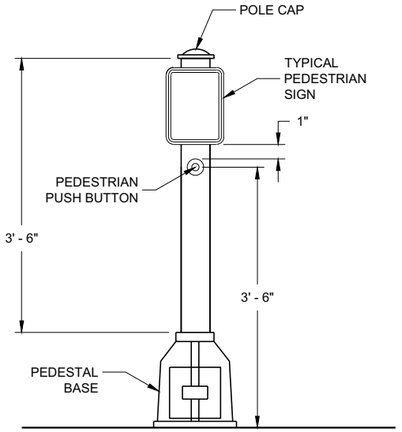
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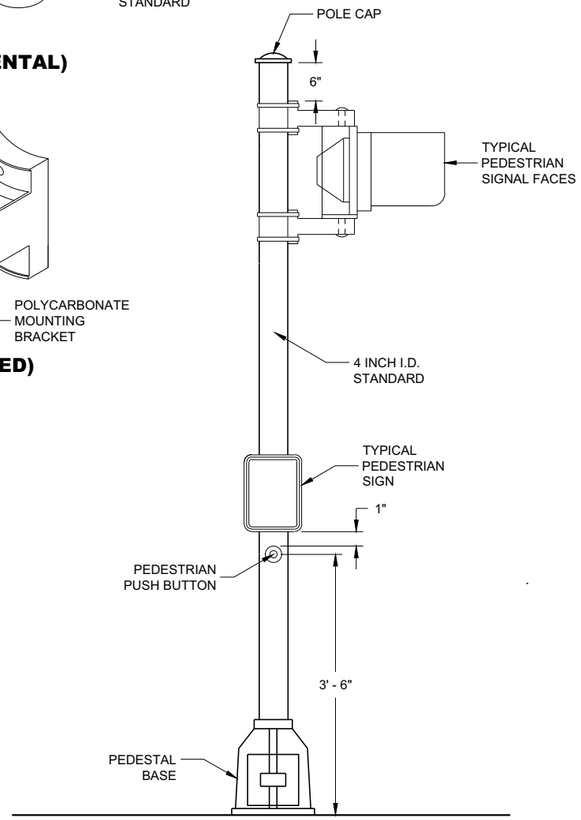
(BANDED)



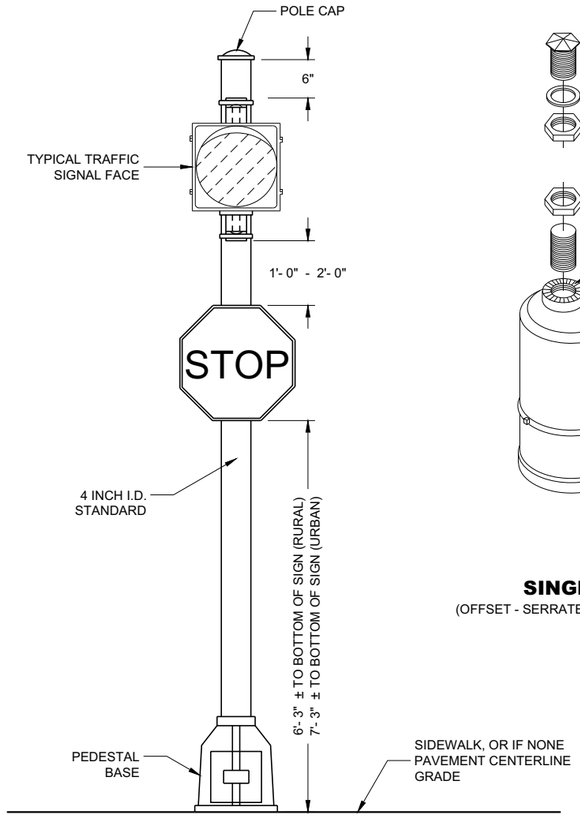
SIGNAL FACE MOUNTING DETAILS



PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING



PEDESTRIAN FACE STANDARD - 10 FT.
(WALK - DON'T WALK)



STANDARD FLASHER
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS, UNLESS APPROVED BY THE ENGINEER IN THE FIELD.

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

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

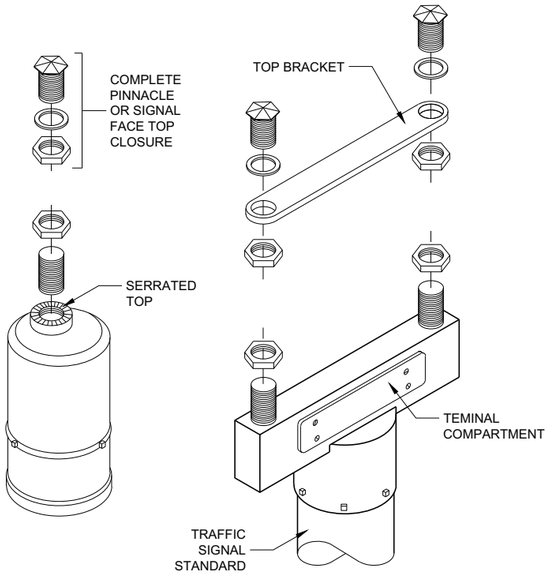
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE REGION TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

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

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



SINGLE
(OFFSET - SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

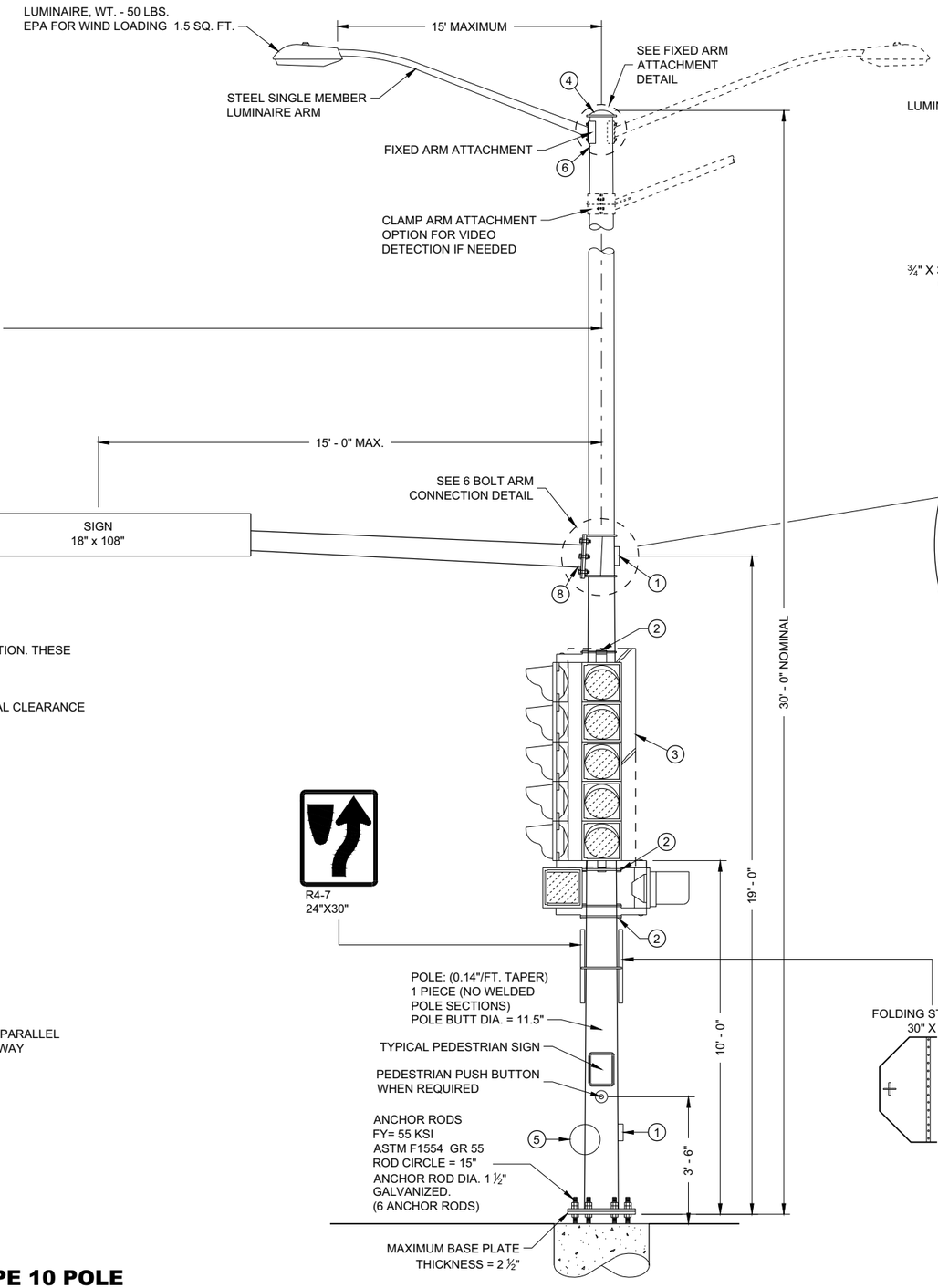
APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 270

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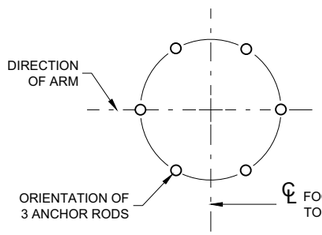
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SDD 09E07 - 06

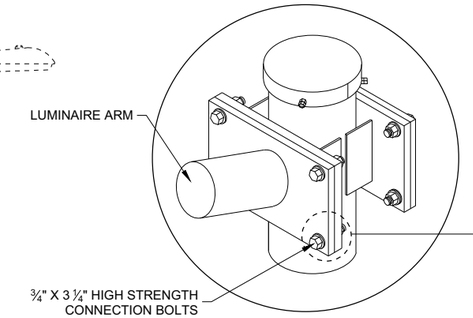


* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

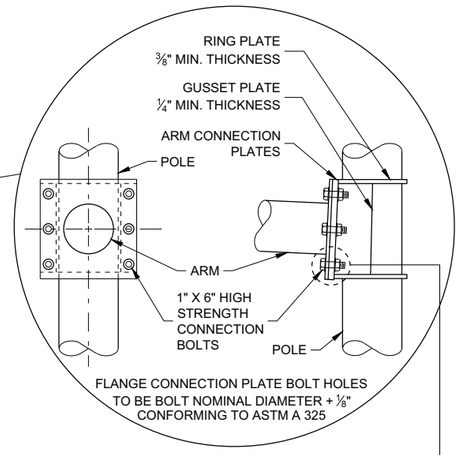
** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE



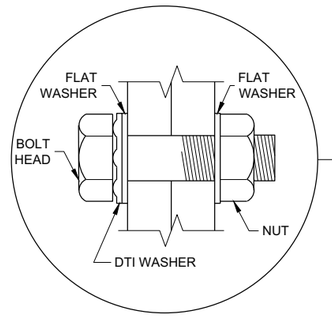
ANCHOR ROD LOCATION



FIXED ARM ATTACHMENT DETAIL



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 POLE
15' - 30' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 10 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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August 2020
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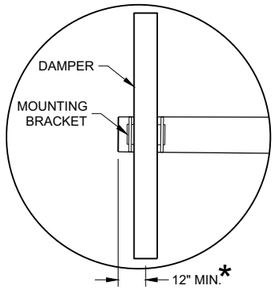
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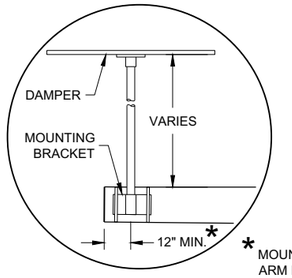
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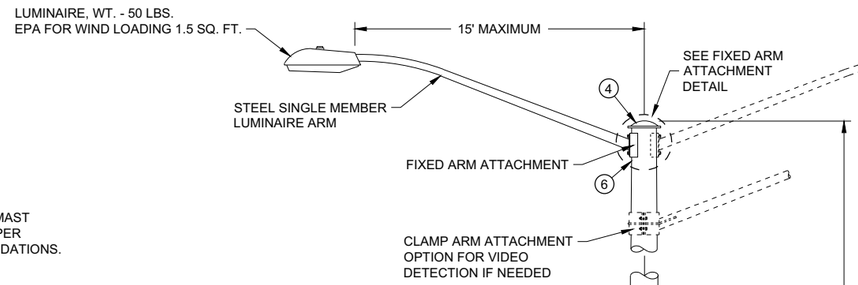


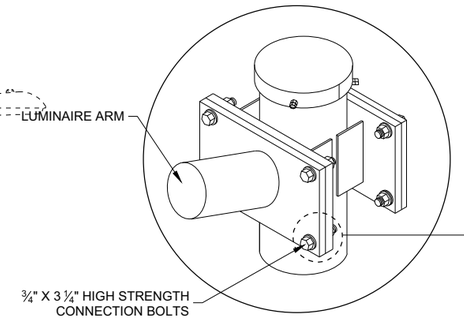
DUMBBELL VIBRATION DAMPER



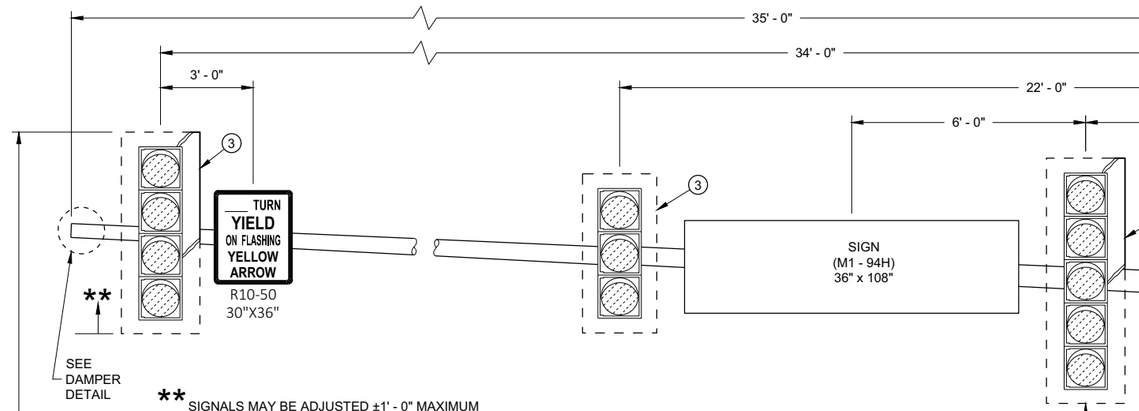
FLAT VIBRATION DAMPER

* MOUNT AS CLOSE TO END OF MAST ARM FOR MAXIMUM DAMPING PER MANUFACTURER'S RECOMMENDATIONS.

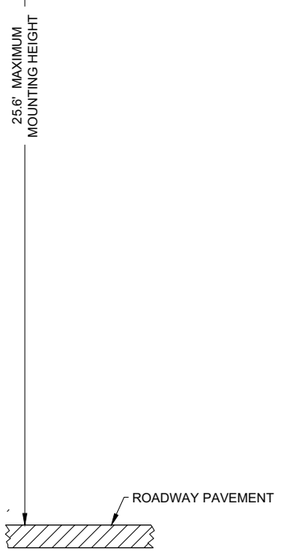


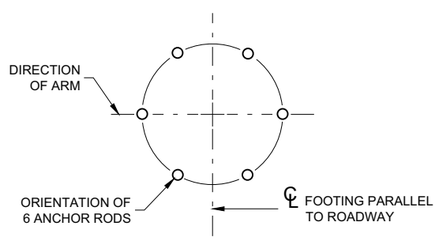


FIXED ARM ATTACHMENT DETAIL



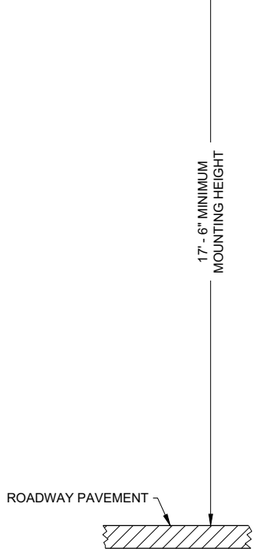
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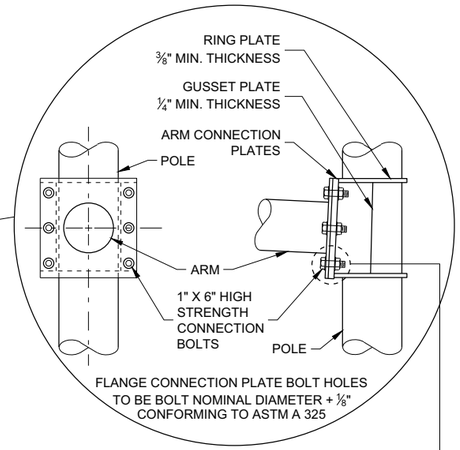




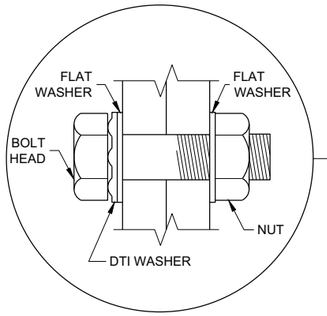
ANCHOR ROD LOCATION

TYPE 10 SPECIAL POLE
35' MONOTUBE ARM
(MAXIMUM LOAD)





6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 SPECIAL POLE
35' MONOTUBE ARM

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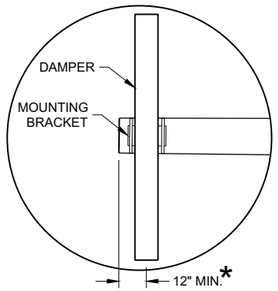
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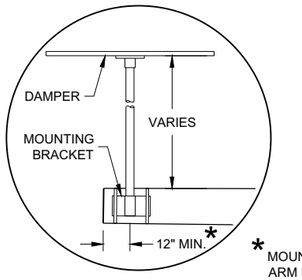
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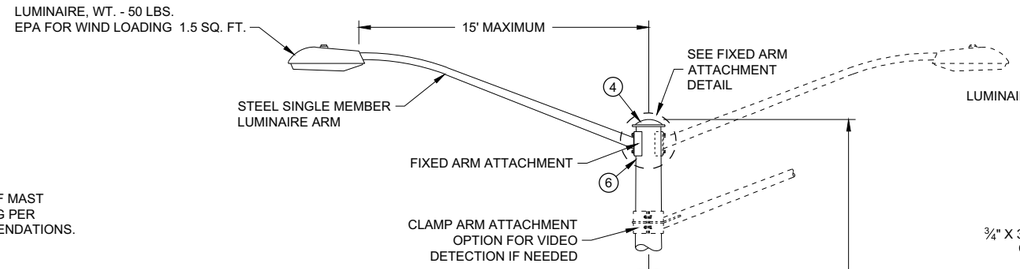


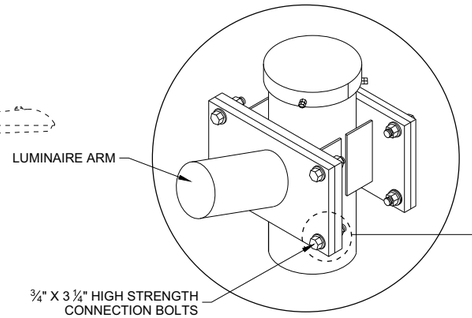
DUMBBELL VIBRATION DAMPER



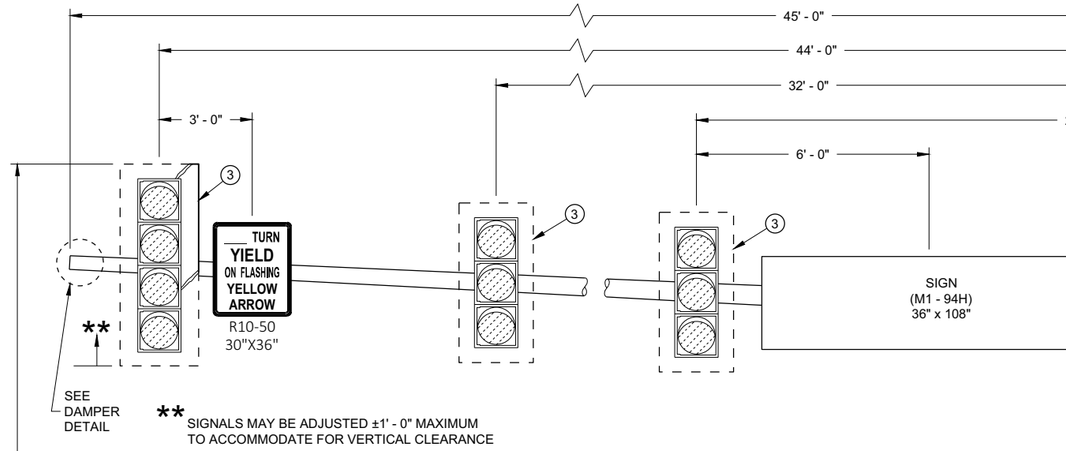
FLAT VIBRATION DAMPER

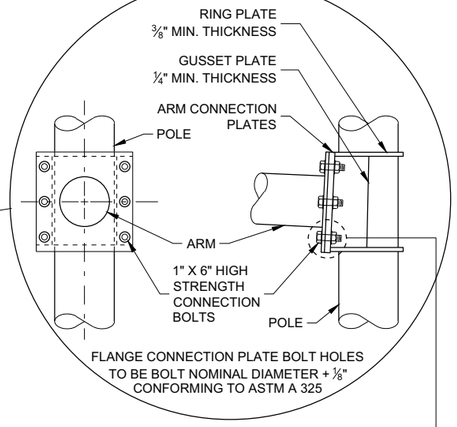
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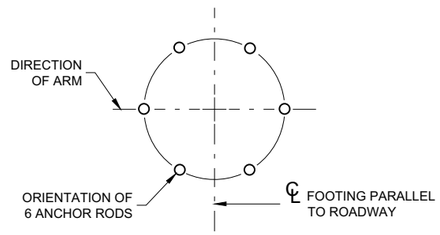


FIXED ARM ATTACHMENT DETAIL

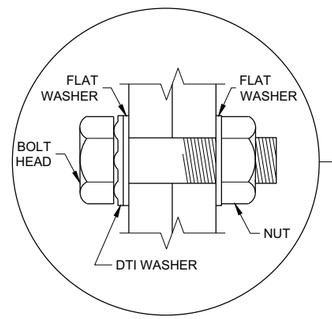




6 BOLT ARM CONNECTION DETAIL



ANCHOR ROD LOCATION



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 SPECIAL POLE
45' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 10 SPECIAL POLE
45' MONTUBE ARM

STATE OF WISCONSIN
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LUMINAIRE, WT. - 50 LBS.
EPA FOR WIND LOADING 1.5 SQ. FT.

15' MAXIMUM

SEE FIXED ARM ATTACHMENT DETAIL

STEEL SINGLE MEMBER LUMINAIRE ARM

FIXED ARM ATTACHMENT

CLAMP ARM ATTACHMENT OPTION FOR VIDEO DETECTION IF NEEDED

55' - 0" MAX.

8' - 0" * | 8' - 0" * | 8' - 0" * | 8' - 0" *

3' - 0" | 3' - 0" | 3' - 0"

SIGN 24" x 30" | SIGN 24" x 30" | SIGN 24" x 30"

**

SIGN 18" x 108"

15' - 0" MAX.

SEE 8 BOLT ARM CONNECTION DETAIL

30' - 0" NOMINAL

19' - 0"

10' - 0"

3' - 6"

25.6' MAXIMUM MOUNTING HEIGHT

17' - 6" MINIMUM MOUNTING HEIGHT

R4-7
24"X30"

POLE: (0.14"/FT. TAPER) - 1 PIECE
(NO WELDED POLE SECTIONS)
POLE BUTT DIA. = 19.5"

TYPICAL PEDESTRIAN SIGN

PEDESTRIAN PUSH BUTTON WHEN REQUIRED

ANCHOR RODS
FY= 55 KSI
ASTM F1554 GR 55
ROD CIRCLE = 24"
ANCHOR ROD DIA. 1 ¾"
GALVANIZED.
(6 ANCHOR RODS)

MAXIMUM BASE PLATE THICKNESS = 2 ½"

ROADWAY PAVEMENT

ROADWAY PAVEMENT

FOLDING STOP SIGN
30" X 30"

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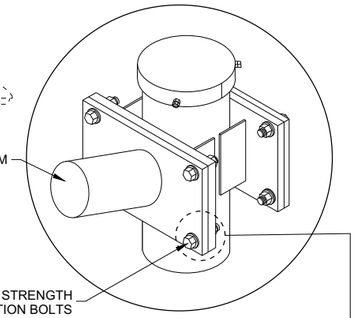
DIRECTION OF ARM

ORIENTATION OF 3 ANCHOR RODS

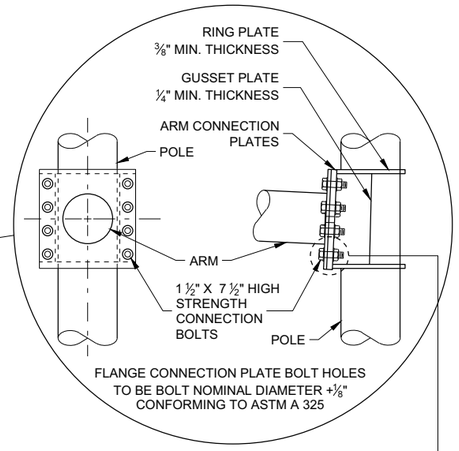
℄ FOOTING PARALLEL TO ROADWAY

ANCHOR ROD LOCATION

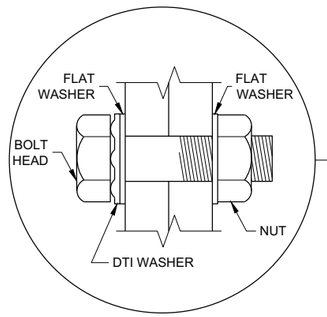
TYPE 13 POLE
35' - 55' MONOTUBE ARM
(MAXIMUM LOAD)



FIXED ARM ATTACHMENT DETAIL



8 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 13 POLE
35' - 55' MONOTUBE ARM

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GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15 FOOT TO 30 FOOT.

POLE TYPES 9 SPECIAL AND 10 SPECIAL ARE FOR ARM LENGTHS 35 FOOT, 40 FOOT, AND 45 FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35 FOOT TO 55 FOOT.

MONOTUBE POLES AND ARMS SHALL BE GALVANIZED STEEL.

RING STIFFENED BUILT UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3% ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATION SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNAL 2015 1ST EDITION (INCLUDING INTERIM REVISIONS)" AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR THE LIGHTING STRUCTURES AS FOLLOWS:

CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.

CATEGORY II FATIGUE LOADS OF TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 SPECIAL AND TYPE 10 SPECIAL STRUCTURES. IN LIEU OF DESIGNING FOR GALLOPING, A VIBRATION DAMPER MITIGATION DEVICE IS REQUIRED TO BE SUPPLIED AND INSTALLED AT THE END OF THE MAST ARM.

CATEGORY II FATIGUE FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE12 AND TYPE 13 STRUCTURES.

115 MPH (700 YEAR MRI BASIC WIND SPEED).

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" STAINLESS STEEL BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

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

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

(1) DESIGN FOR MAXIMUM ALLOWABLE HAND HOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING (SEE SPECIFICATION SECTION 658).

(3) SECURELY MOUNT BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HAND HOLD, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

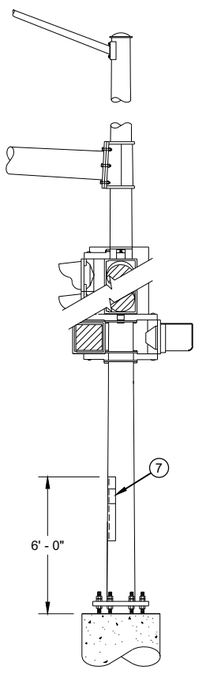
(6) FACTORY WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

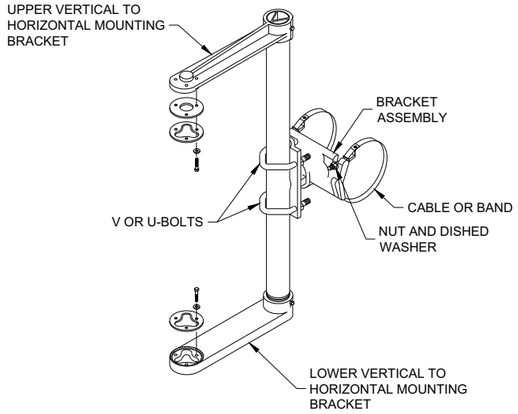
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 6' - 0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

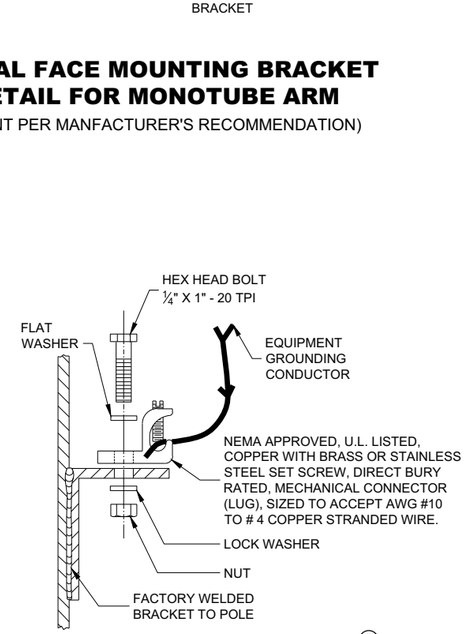


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



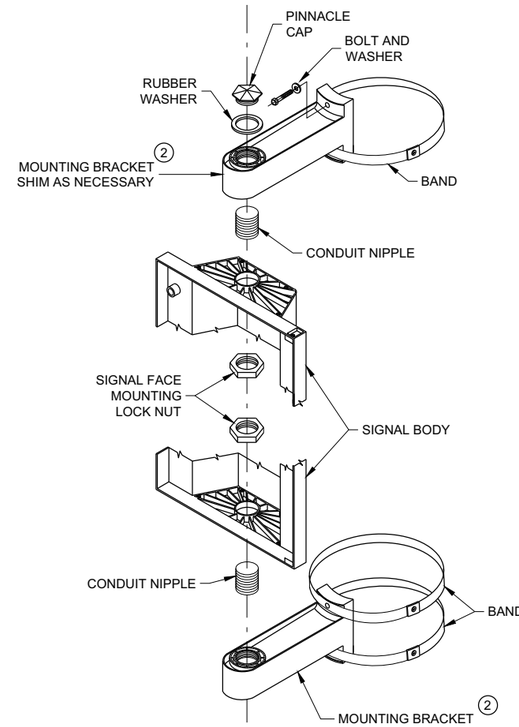
SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANFACTURER'S RECOMMENDATION)

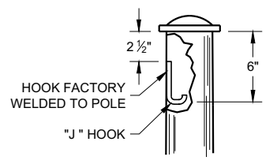


TYPICAL GROUNDING (5) CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



TYPICAL "J" HOOK (6) WIRE SUPPORT

GENERAL NOTES AND HARDWARE FOR TYPES 9,10, 9/10 SPECIAL, 12 AND 13 POLES WITH MONOTUBE ARMS

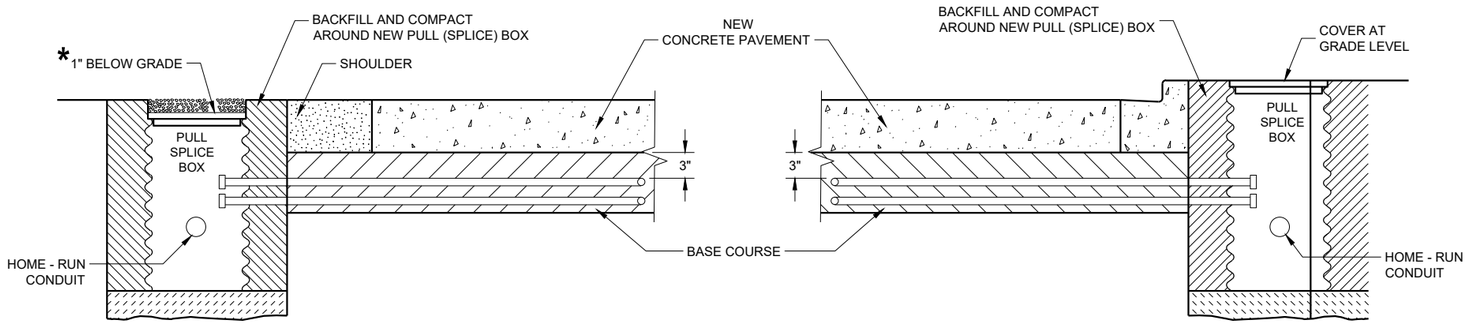
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August 2020 — DATE
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SECTION A - A
NO CURB AND GUTTER

SECTION B - B
CURB AND GUTTER

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READING TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

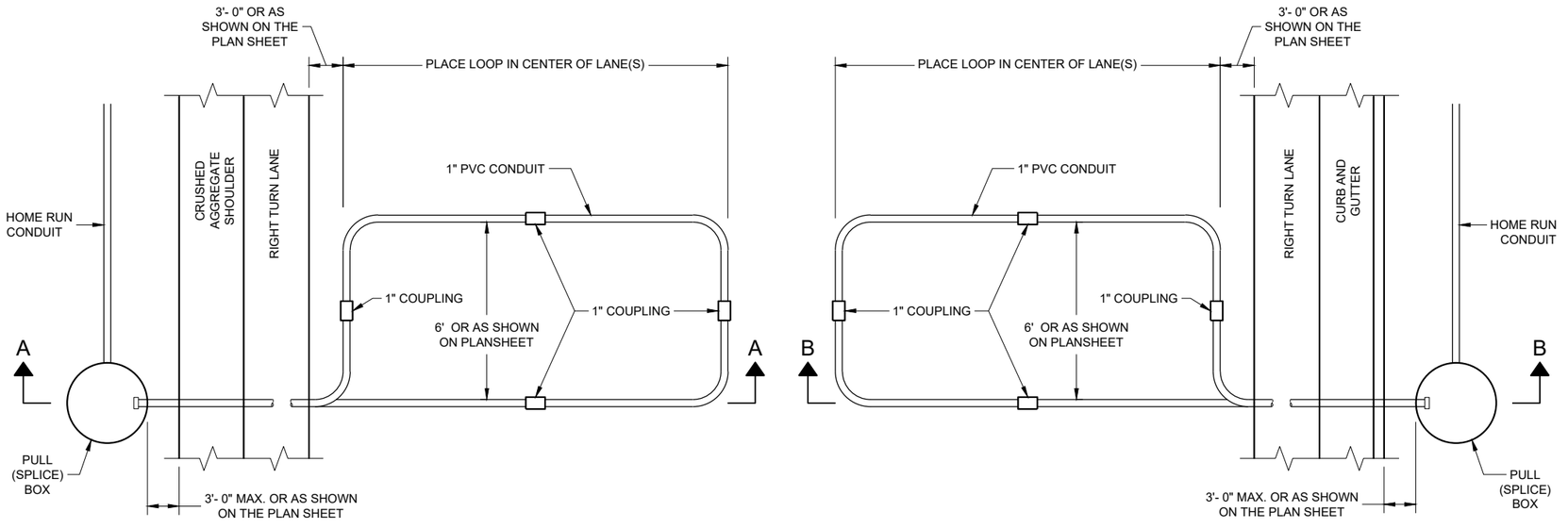
THE #12 AWG LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

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

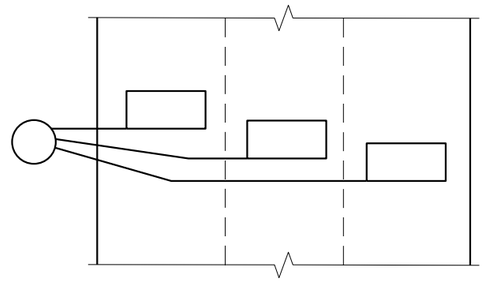
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN LOOP DETECTOR
WITH 24" PULL (SPLICE) BOX



MULTI-LANE
INSTALLATION

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

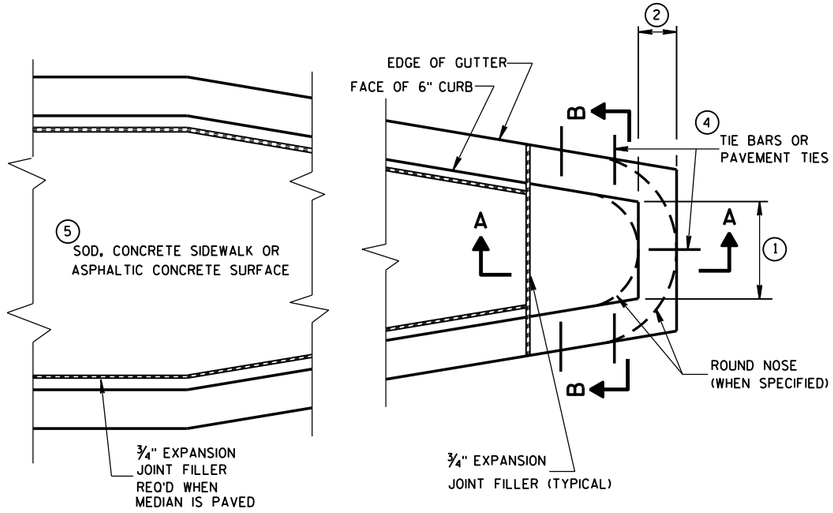
FHWA

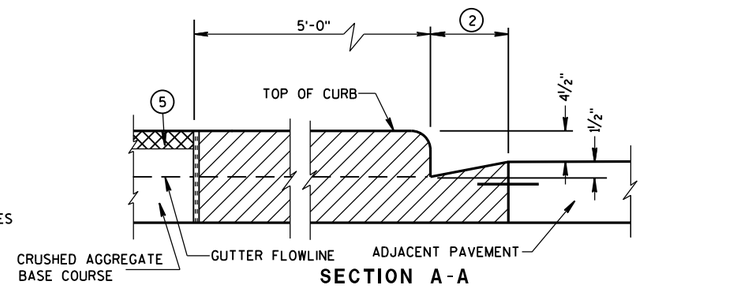
6

SDD 09F15 - 04b

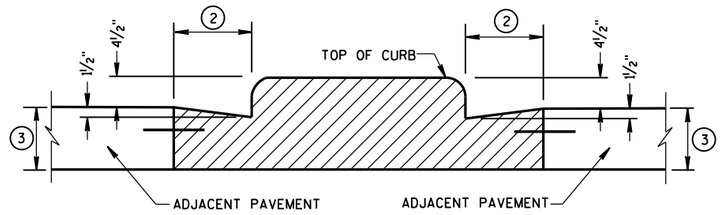
6

SDD 09F15 - 04b





SECTION A-A



SECTION B-B

CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

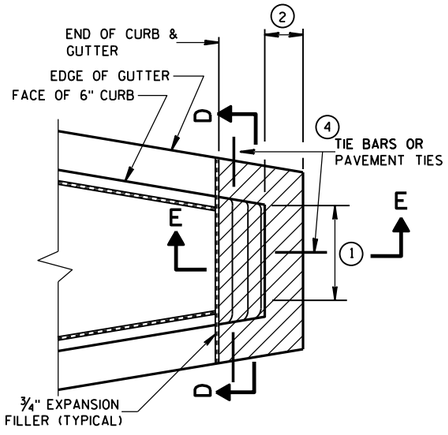
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

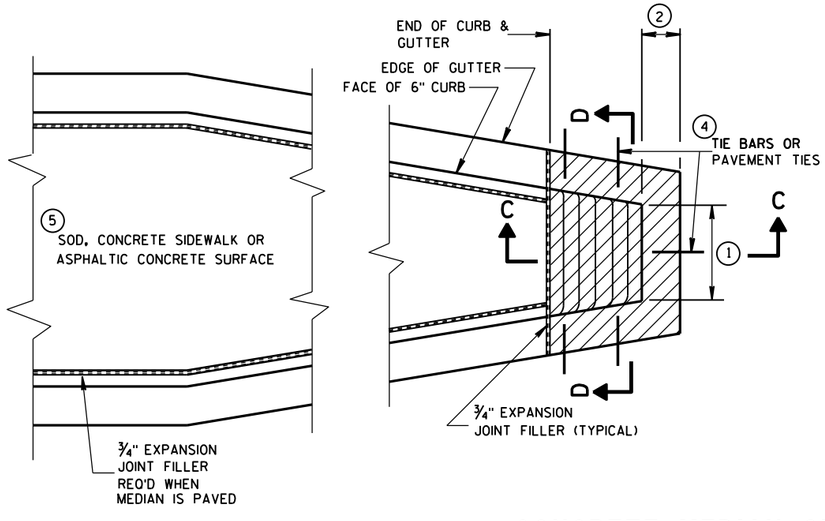
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

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

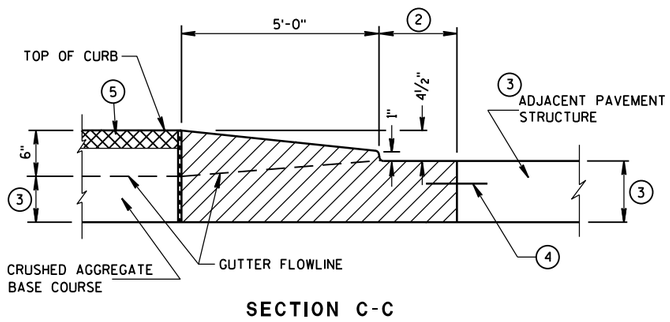
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

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

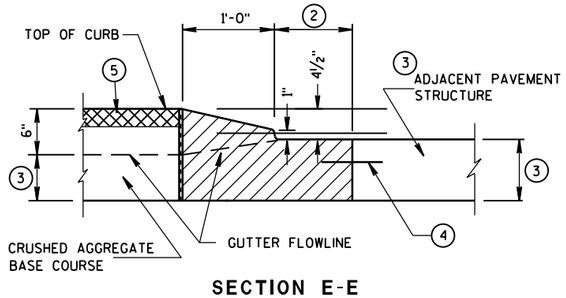




CONCRETE MEDIAN SLOPED NOSE TYPE 1

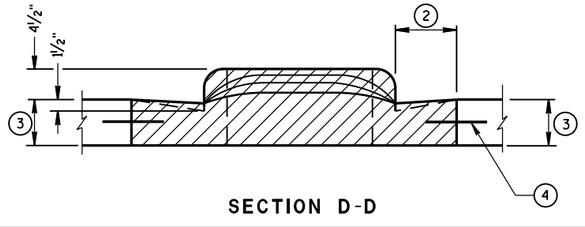


SECTION C-C



SECTION E-E

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

277

6

S.D.D. 11 B 2-2

6

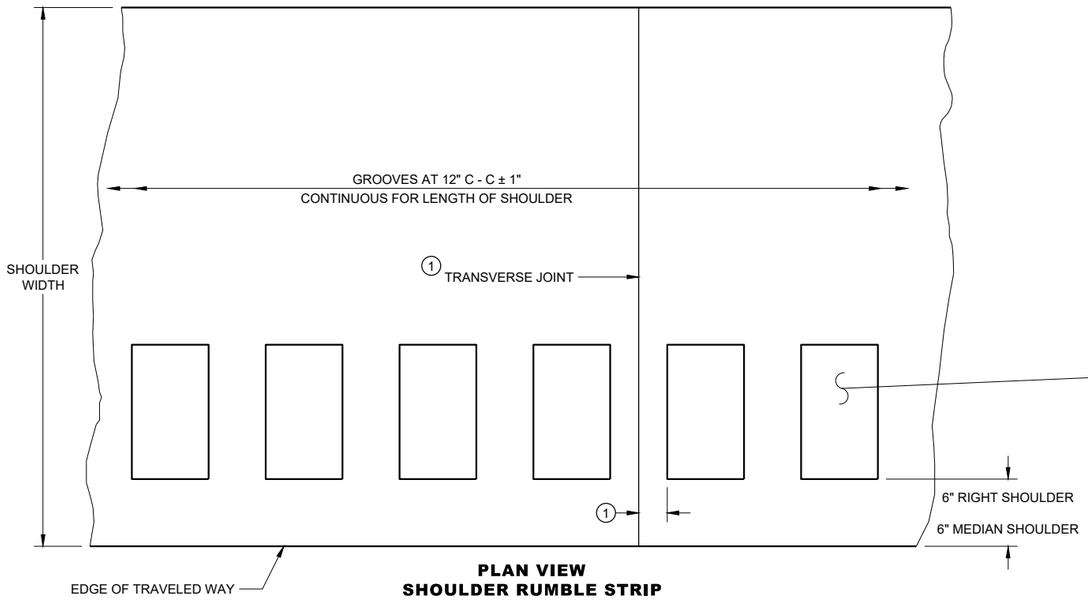
S.D.D. 11 B 2-2

GENERAL NOTES

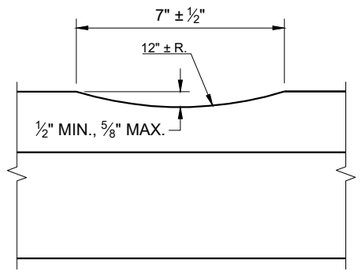
SDD 13A5, SHEET "b" SHOWS THE LOCATION OF THE RUMBLE STRIPS AT RAMP AND GORE LOCATIONS.

RUMBLE STRIPS ON EXPRESSWAYS:
DO NOT INSTALL SHOULDER RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL AND PRIVATE DRIVEWAYS, ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, 25' IN ADVANCE OF BRIDGE DECKS, 25' IN ADVANCE OF BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSINGS.

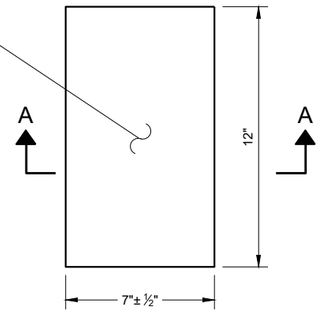
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6 INCHES AWAY FROM TRANSVERSE JOINTS.



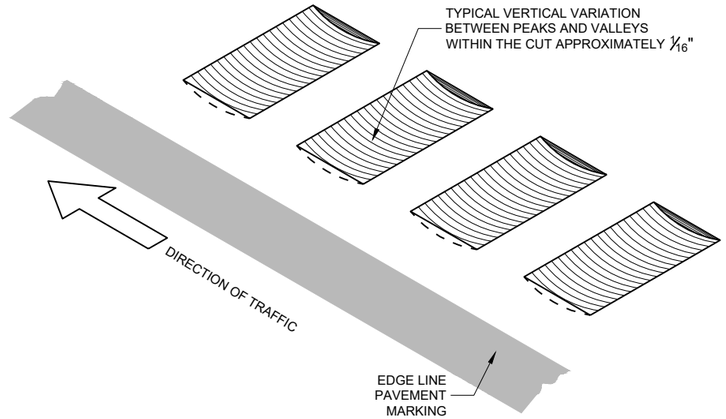
PLAN VIEW
SHOULDER RUMBLE STRIP



SECTION A - A

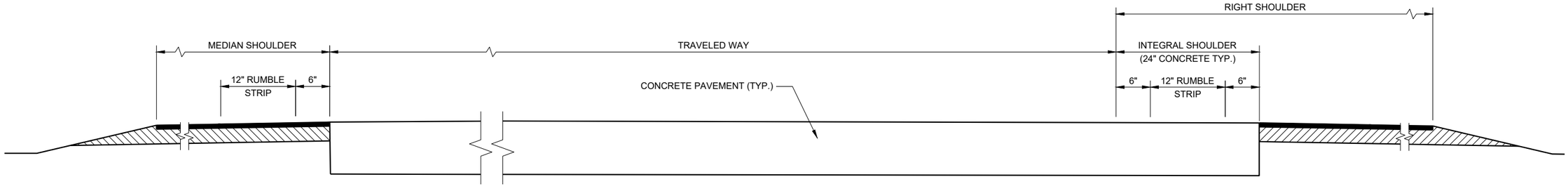


PLAN VIEW
(SINGLE GROOVE)



ISOMETRIC

PLACEMENT DETAIL FOR RUMBLE STRIP



SECTION VIEW

TYPICAL SHOULDER RUMBLE STRIPS
(ONE ROADWAY IS SHOWN)

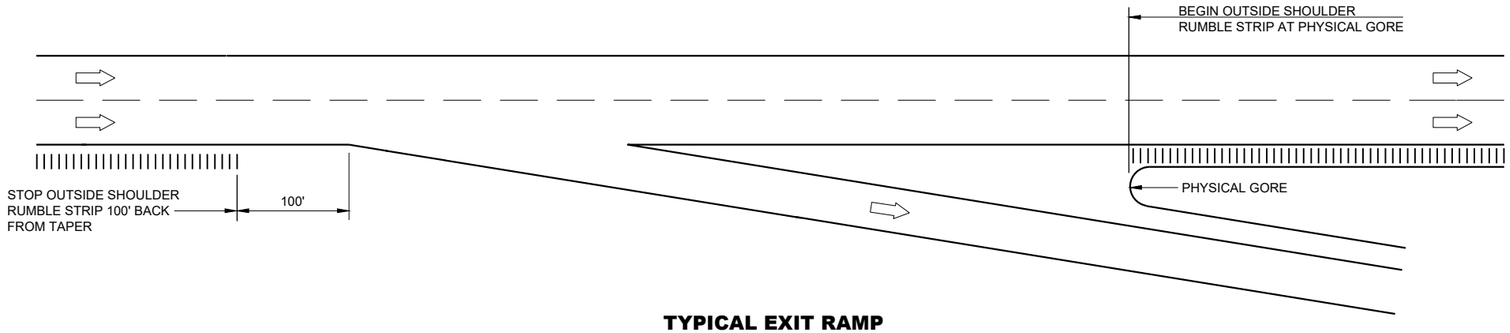
SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

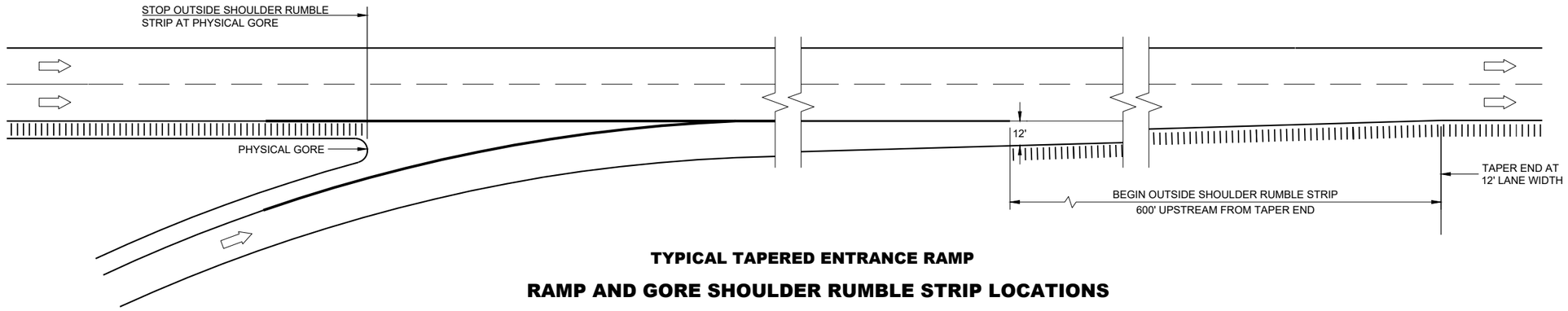
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SDD 13A05-06a

SDD 13A05-06a

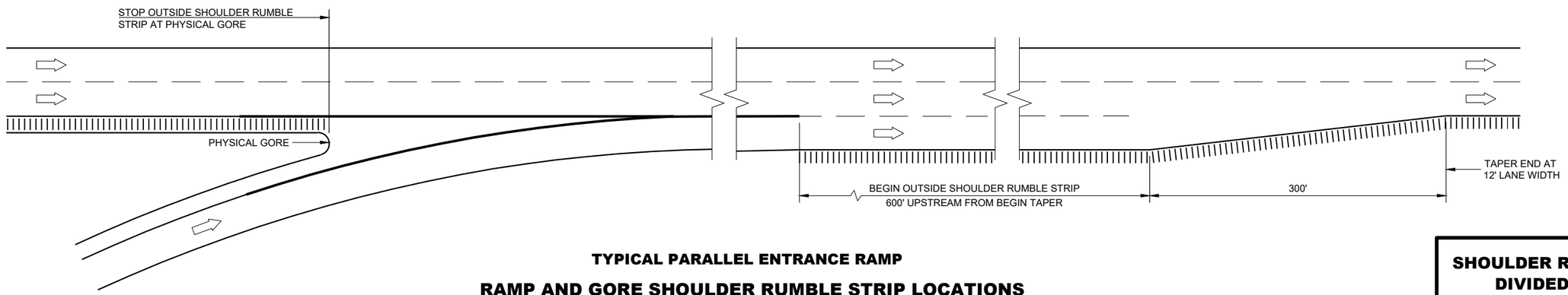


TYPICAL EXIT RAMP



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE SHOULDER RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE SHOULDER RUMBLE STRIP LOCATIONS

GENERAL NOTES

NO RUMBLE STRIP ON EXIT, DIRECTIONAL OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

RUMBLE STRIPS ON EXPRESSWAYS:
DO NOT INSTALL SHOULDER RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIALAND PRIVATE DRIVEWAYS, ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, 25' IN ADVANCE OF BRIDGE DECKS, 25' IN ADVANCE OF BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSINGS.

LEGEND

DIRECTION OF TRAFFIC

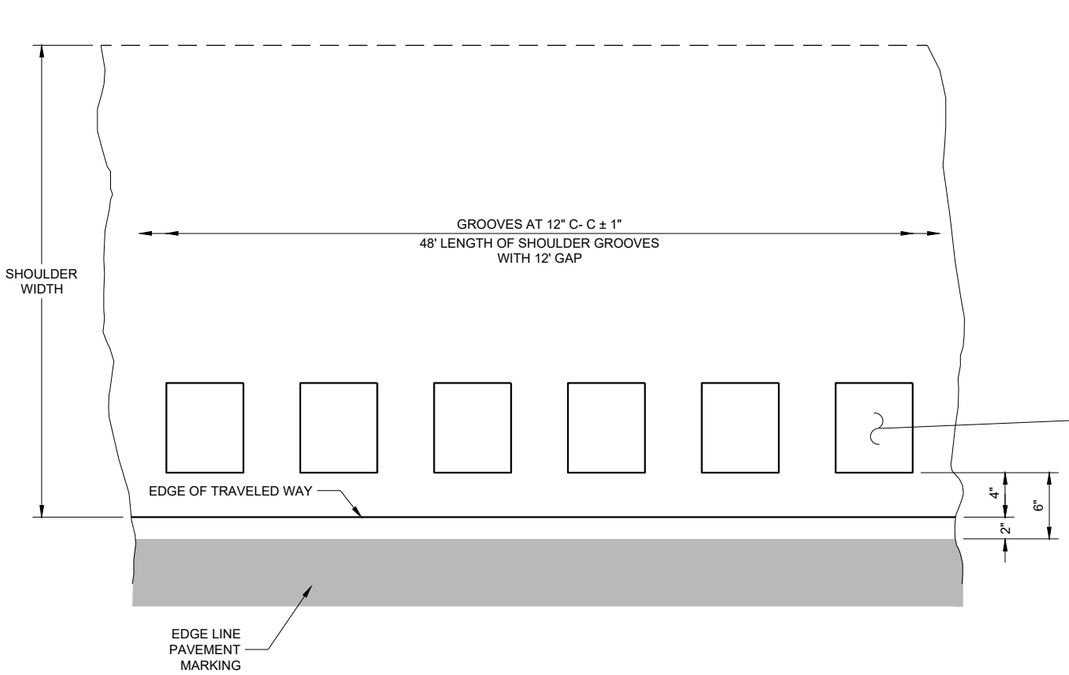
SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

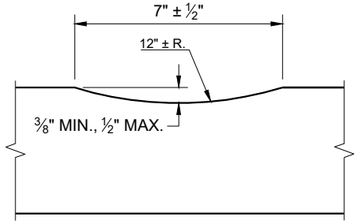
APPROVED
May 2023 — DATE
/S/ Rodney Taylor — ROADWAY DESIGN STANDARDS UNIT SUPERVISOR
FHWA

6

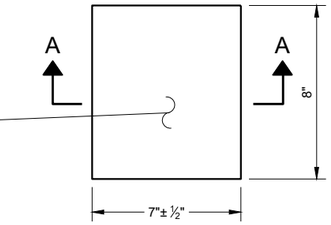
SDD 13A05-06b



PLAN DETAIL VIEW
SHOULDER WITH GROOVES



SECTION A - A

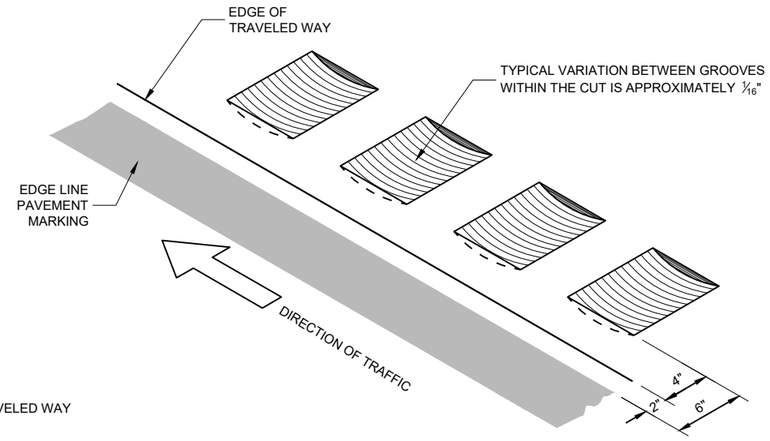


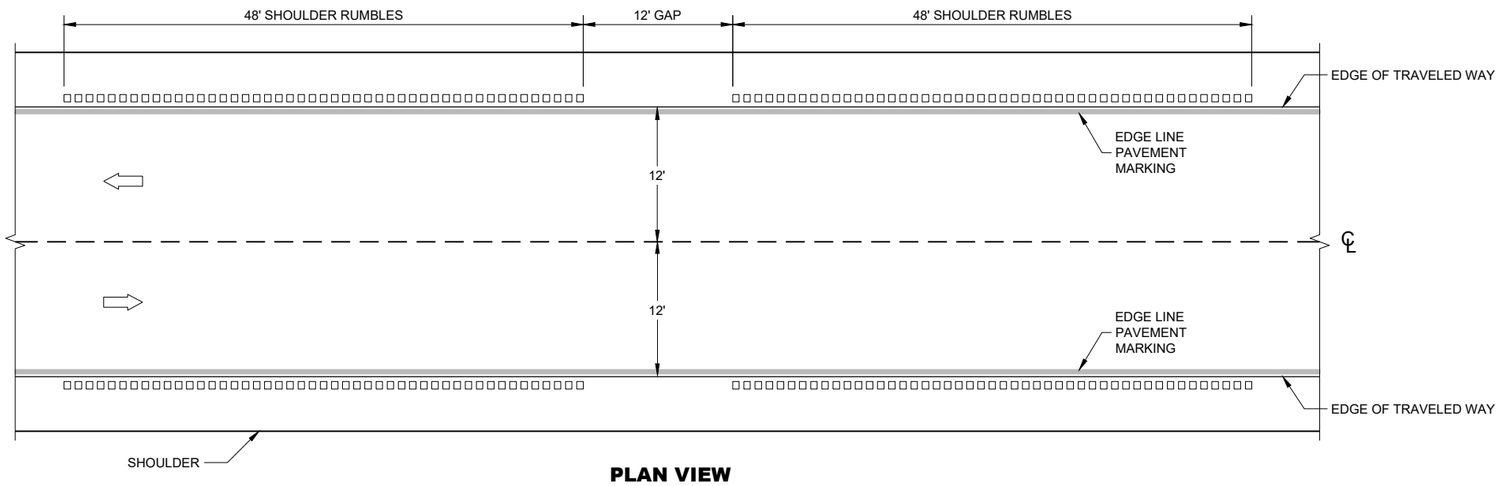
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A10 SHEETS "g" AND "h".

SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.





PLAN VIEW

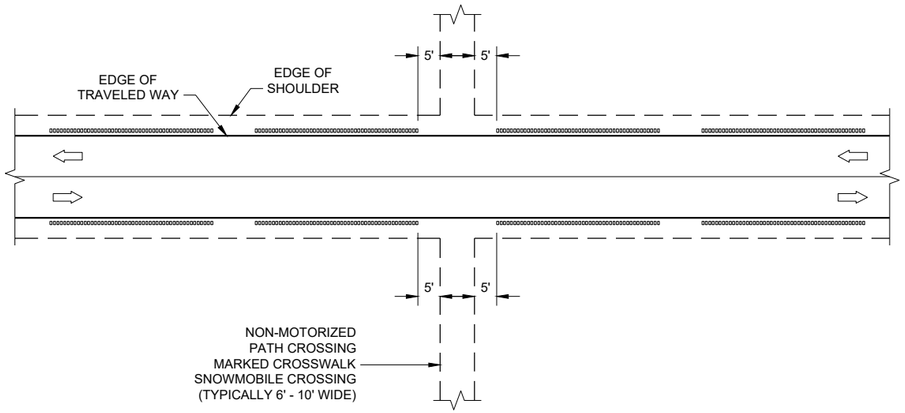
SHOULDER RUMBLE STRIPS - ASPHALT

SHOULDER RUMBLE STRIPS ASPHALT

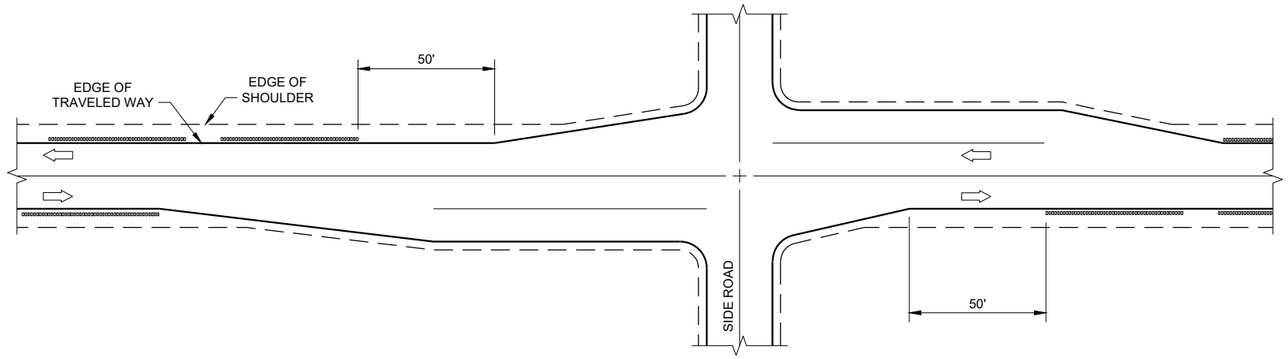
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

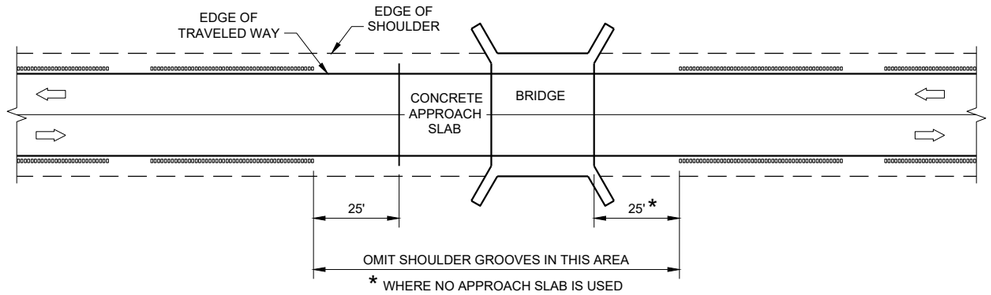
SDD 13A10 - 03a



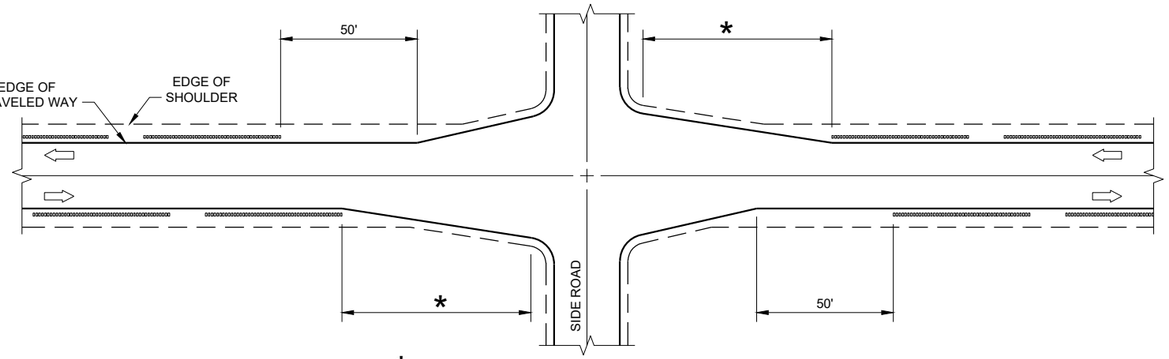
GROOVES AT MISCELLANEOUS CROSSINGS



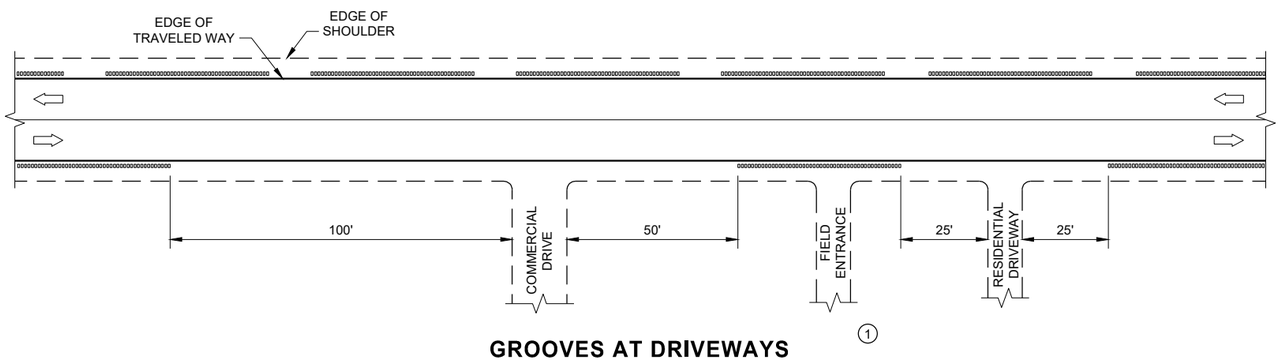
GROOVES AT RIGHT TURN LANE



GROOVES AT BRIDGES



GROOVES AT INTERSECTIONS WITH APPROACH TAPER



GROOVES AT DRIVEWAYS ①

GENERAL NOTES

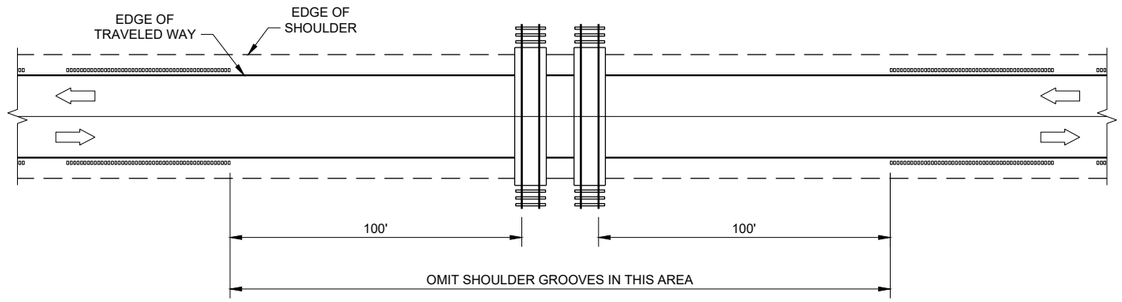
① SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

SHOULDER AND EDGE LINE RUMBLE STRIPS CROSSINGS, INTERSECTIONS, BRIDGES, DRIVEWAYS

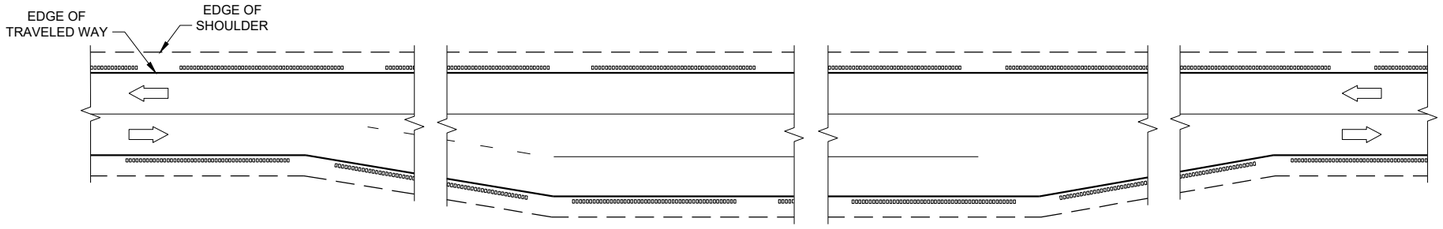
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

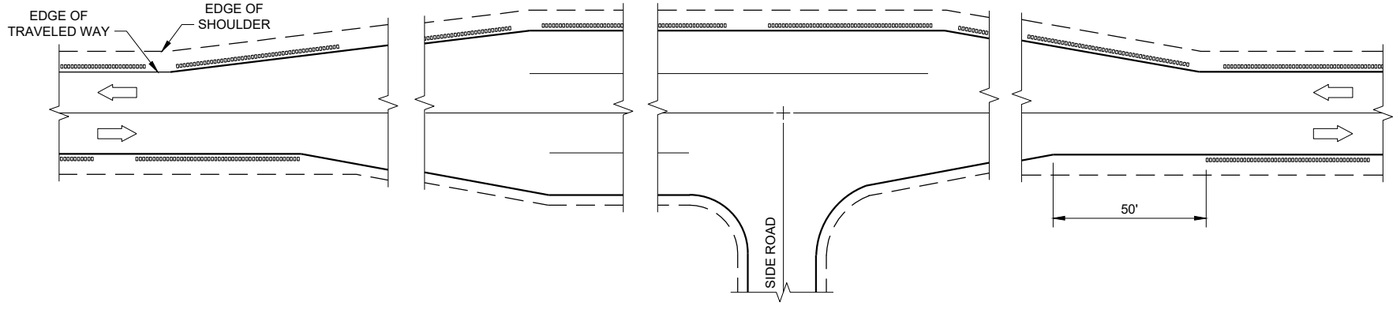
SDD 13A10 - 03g



GROOVES AT RAILROADS



GROOVES AT PASSING AND CLIMBING LANES



GROOVES AT BYPASS LANES

6

SDD 13A10 - 03h

6

SDD13A10 - 03h

SHOULDER AND EDGE LINE RUMBLE STRIPS - RAILROAD, PASSING, CLIMBING AND BYPASS LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

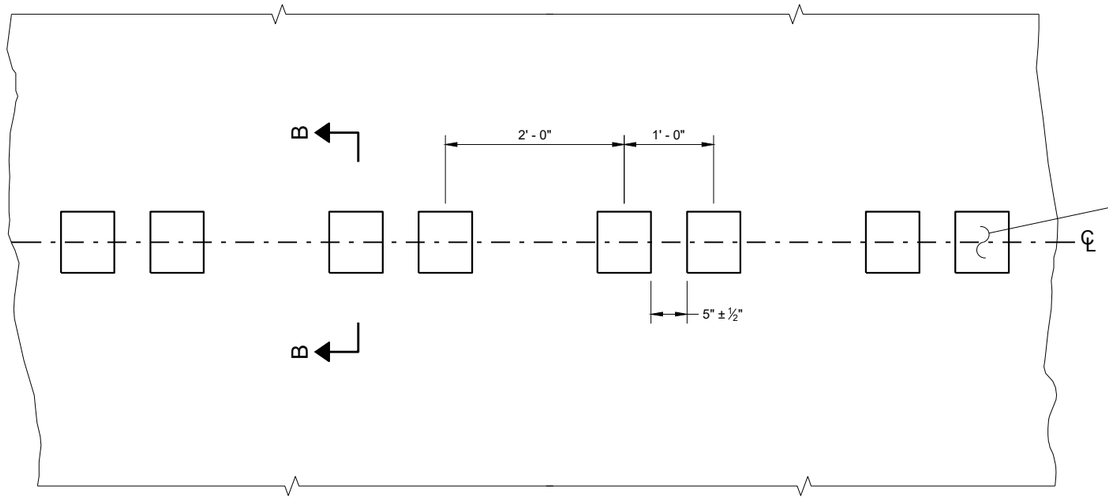
/S/ John Jenkins
ROADWAY STANDARDS DEVE ENGINEER

FHWA

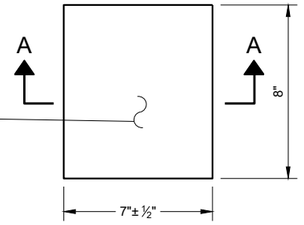
GENERAL NOTES

DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A11 SHEETS "d" AND "e".

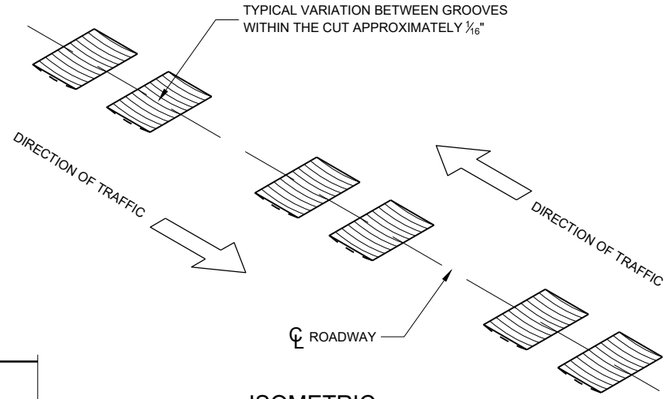
CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



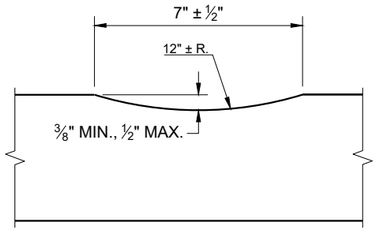
PLAN DETAIL VIEW



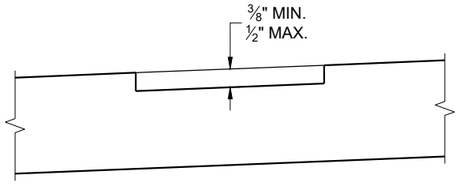
PLAN VIEW
(SINGLE GROOVE)



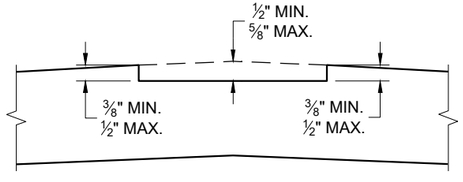
ISOMETRIC



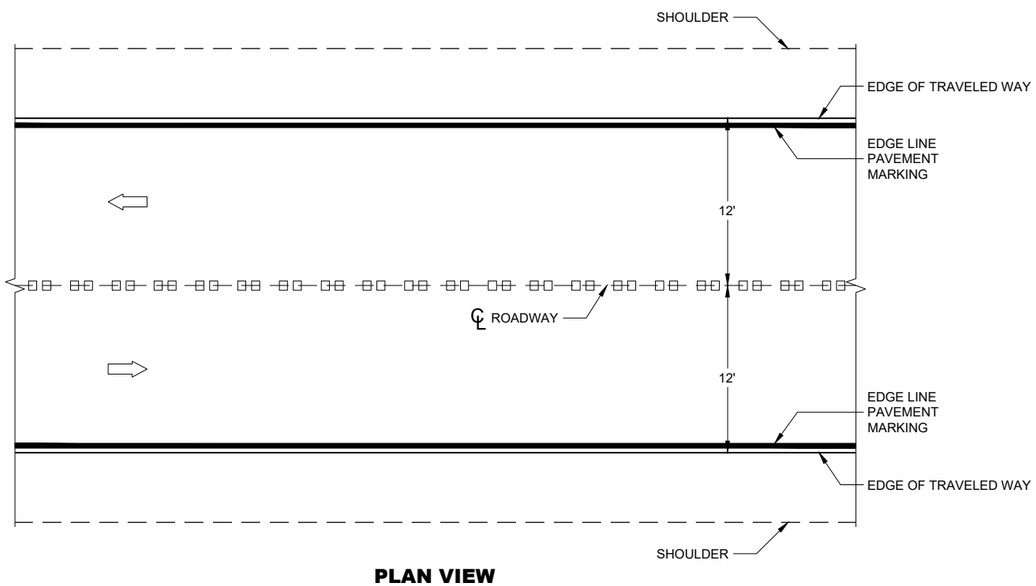
SECTION A - A



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



PLAN VIEW

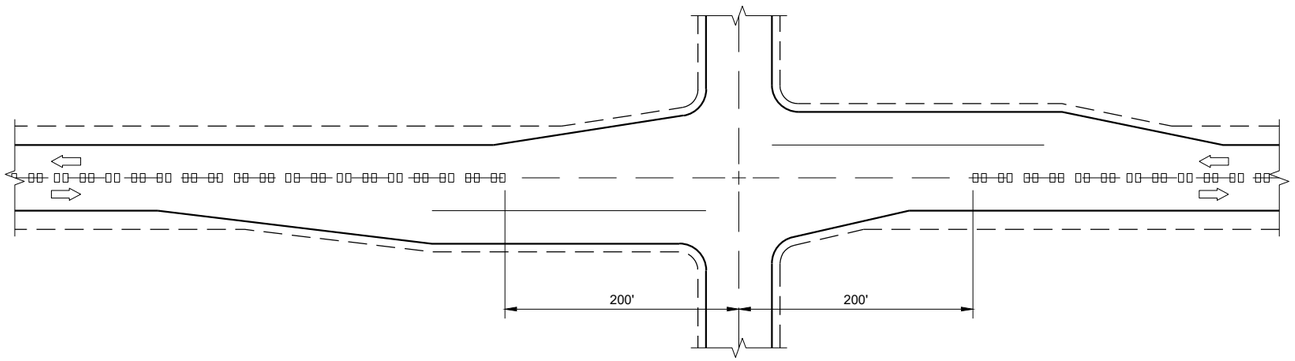
CENTERLINE RUMBLE STRIPS - ASPHALT

CENTERLINE RUMBLE STRIPS - ASPHALT

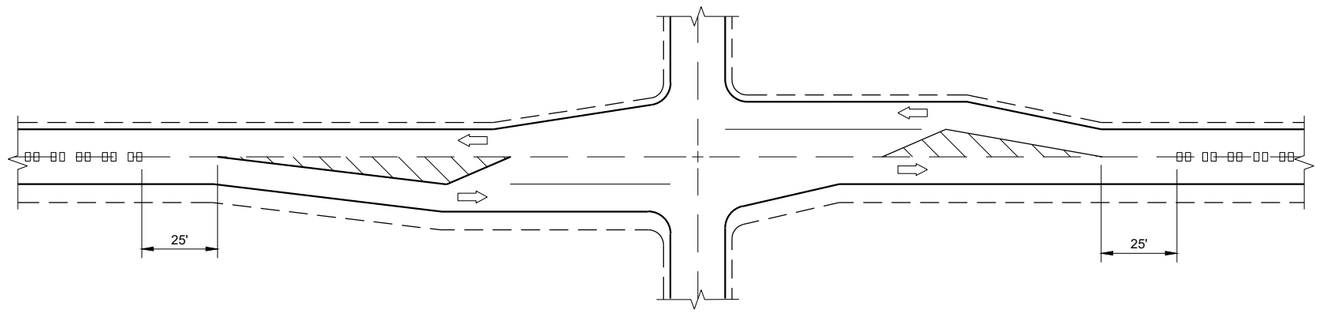
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

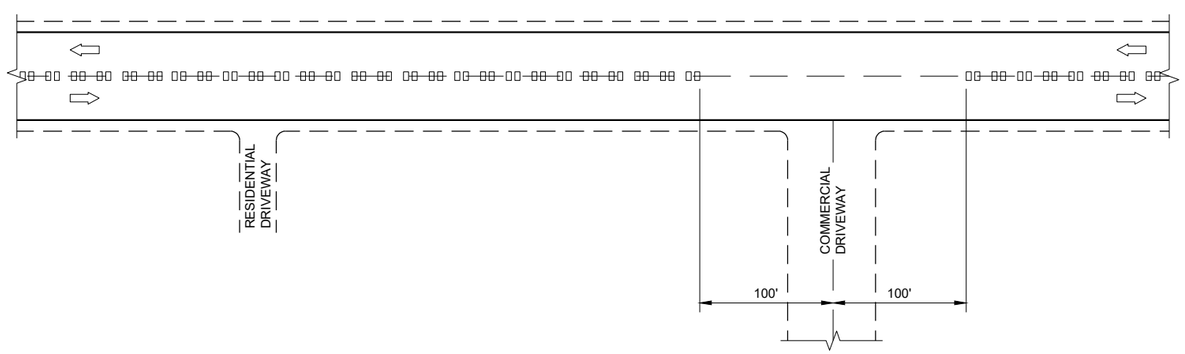
SDD13A11 - 04a



CENTERLINE GROOVES AT INTERSECTIONS



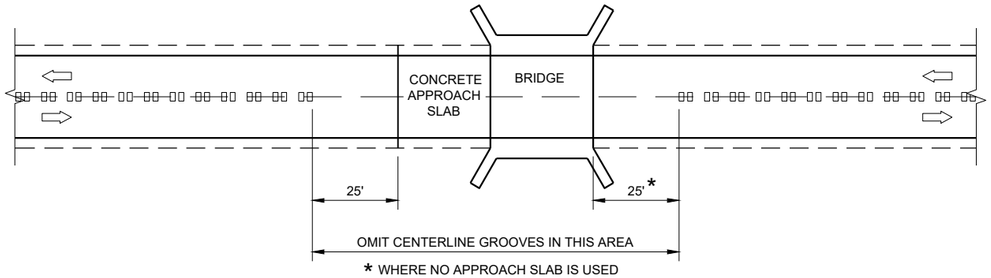
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



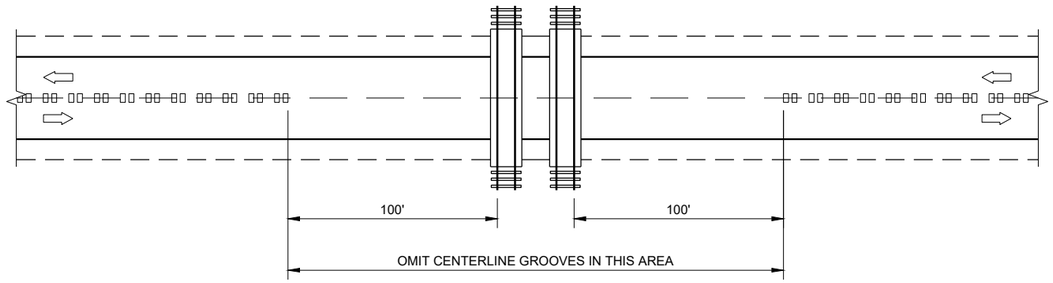
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

CENTER LINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAIL ROADS

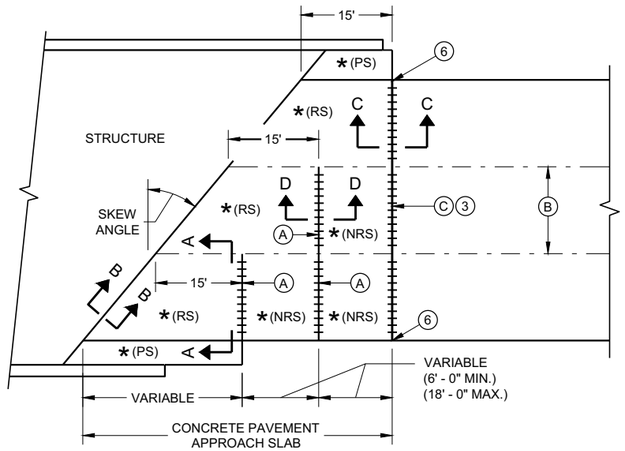
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ John Jenkins — ROADWAY STANDARDS DEVE ENGINEER

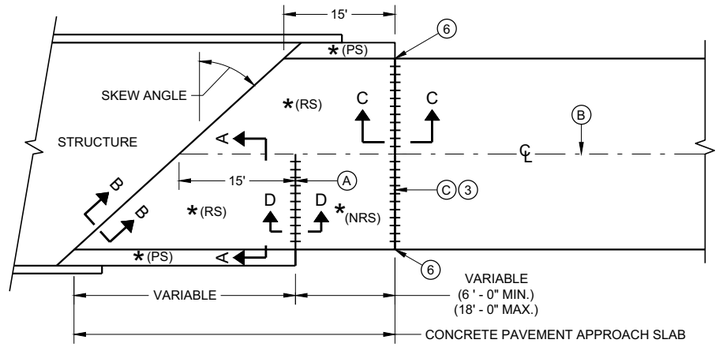
FHWA

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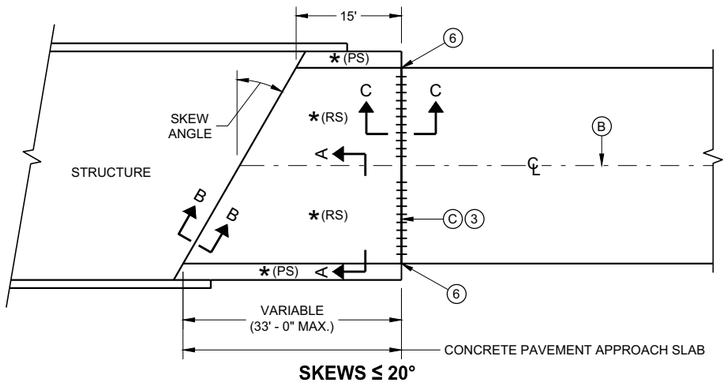
SDD 13A11 - 04d



SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)



SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

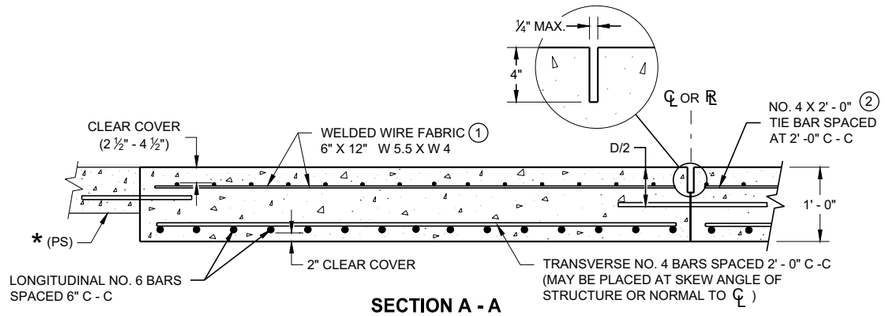
APPROACH SLAB AND ADJACENT PAVEMENT

* (RS) = REINFORCED CONCRETE SLAB

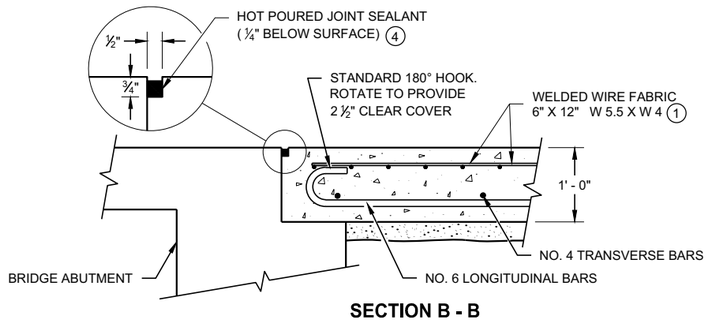
* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

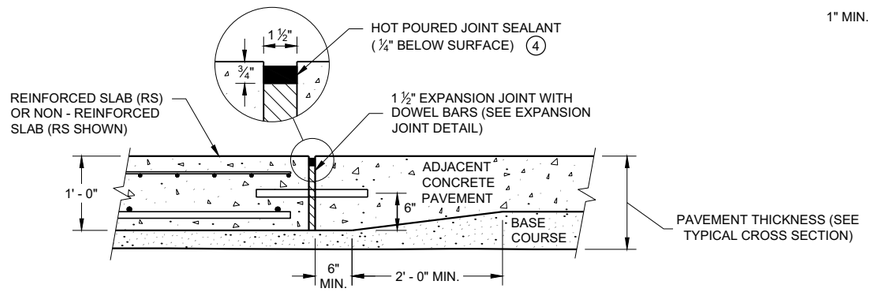
*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



SECTION A - A
REINFORCEMENT POSITIONING DETAIL



SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT



SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

GENERAL NOTES

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

(1) THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2' - 0 " C - C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

(2) THE CONTRACTOR MAY OMIT THE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

(3) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

(4) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

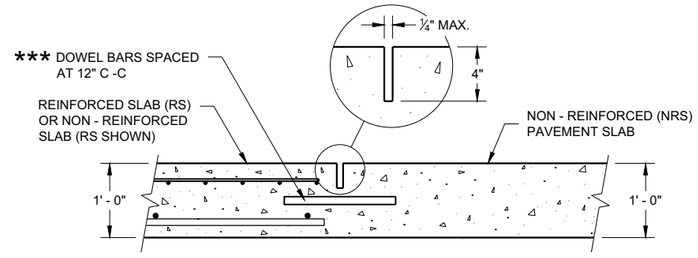
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

(6) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

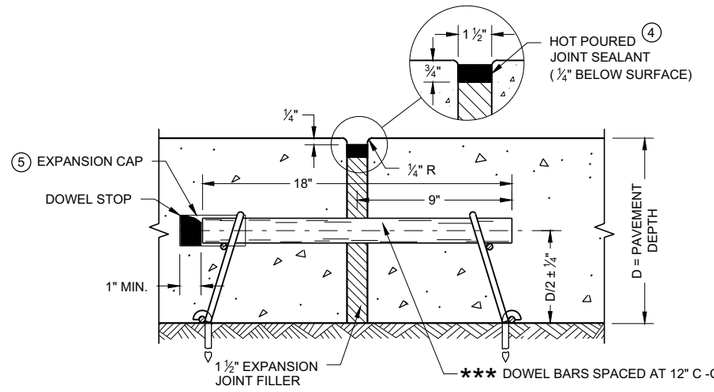
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.

(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞ .



SECTION D - D
CONTRACTION JOINT



EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

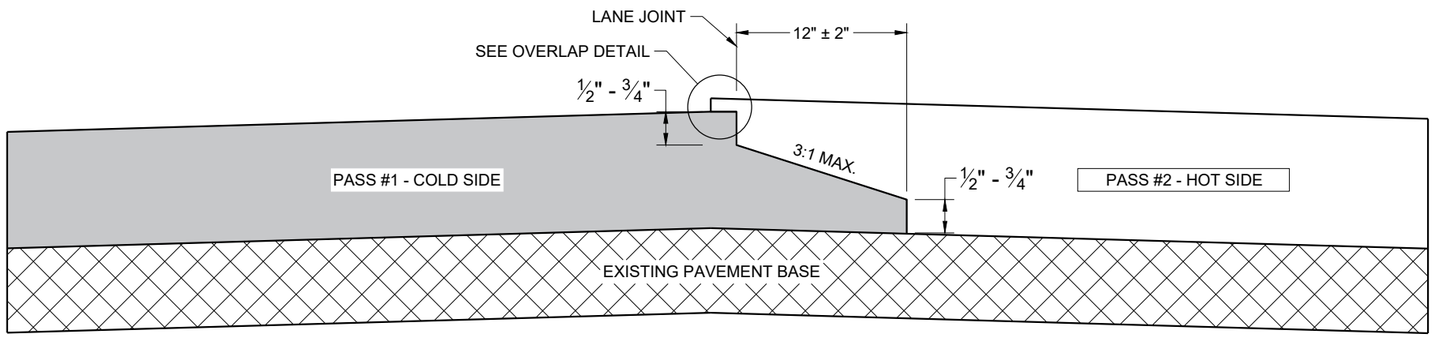
APPROVED
November 2018
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVISO

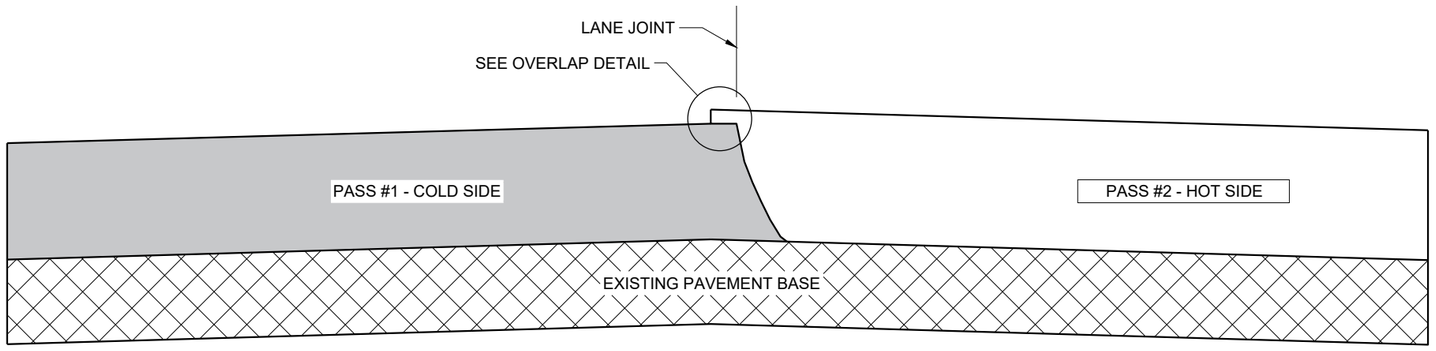
FHWA

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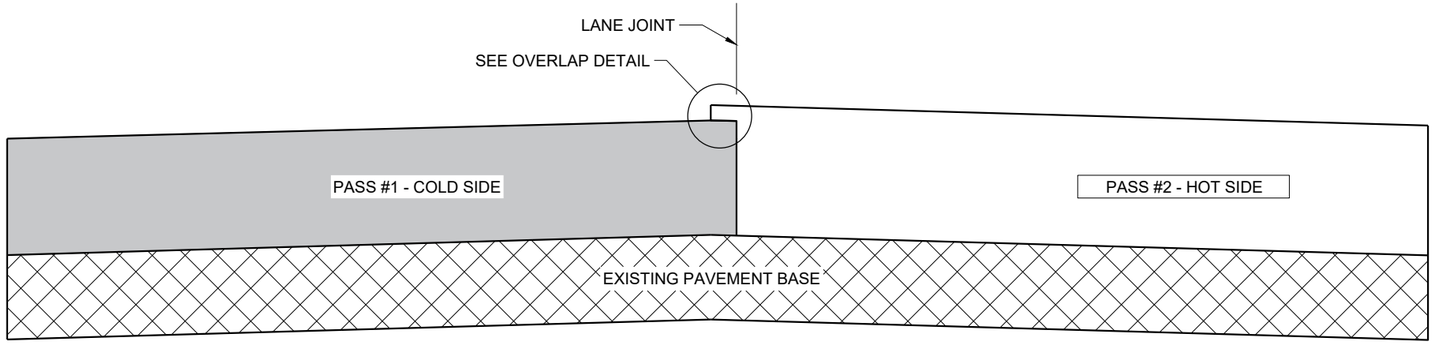
SDD 13B02 - 09a



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

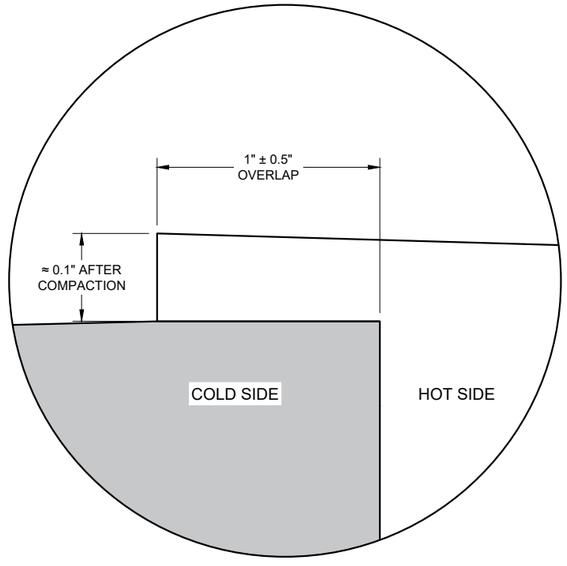
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

6

6

SDD 13C19 - 03

SDD 13C19 - 03

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

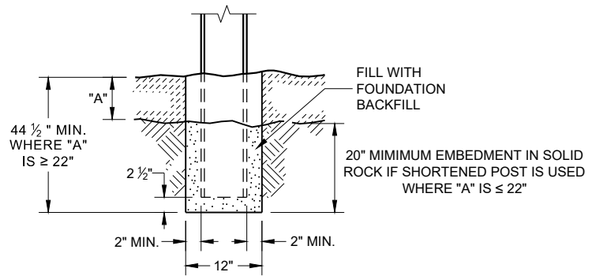
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

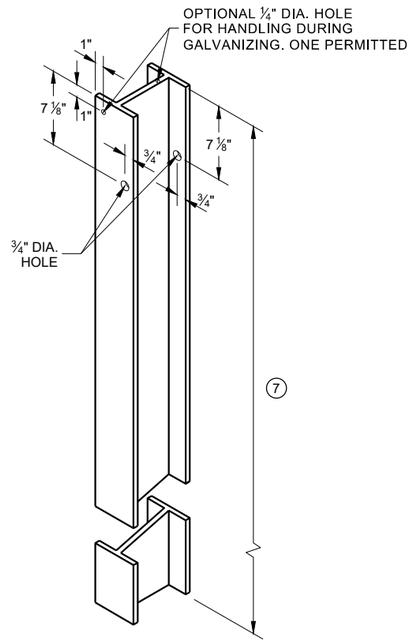
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

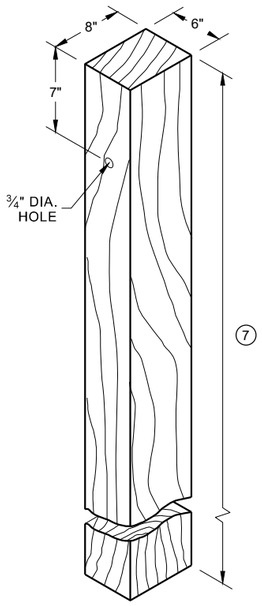
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



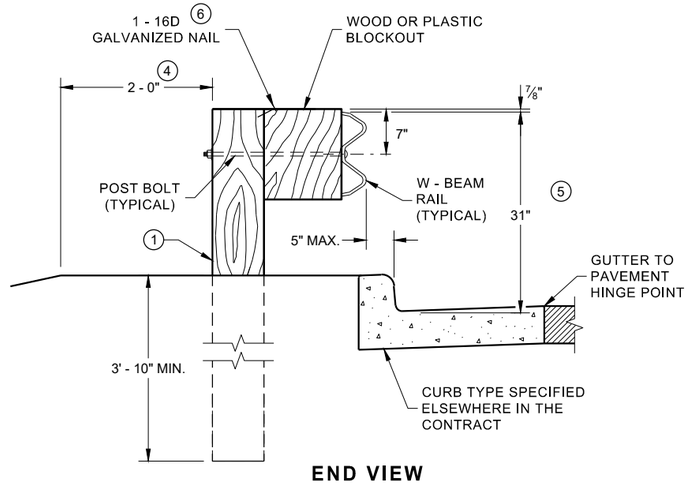
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



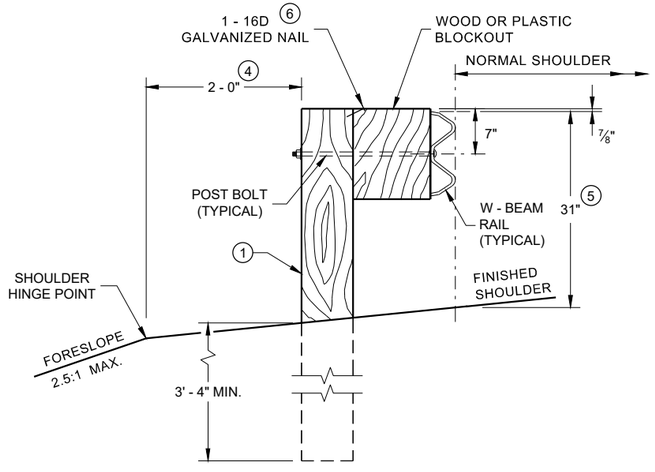
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



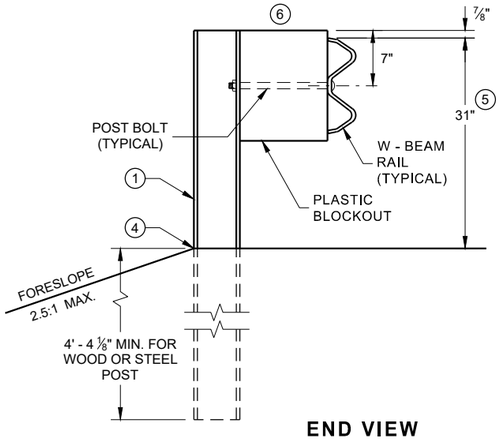
WOOD POST (6" X 8") NOMINAL (1)



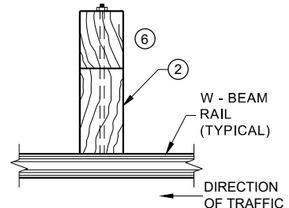
END VIEW
LOCATED ALONG A CURBED ROADWAY



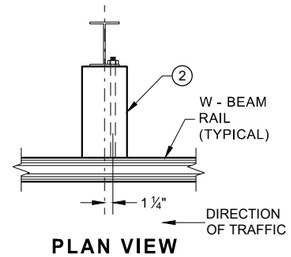
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



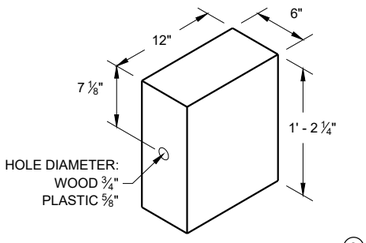
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

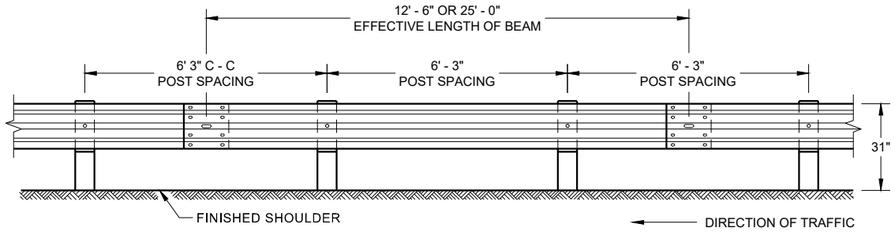
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

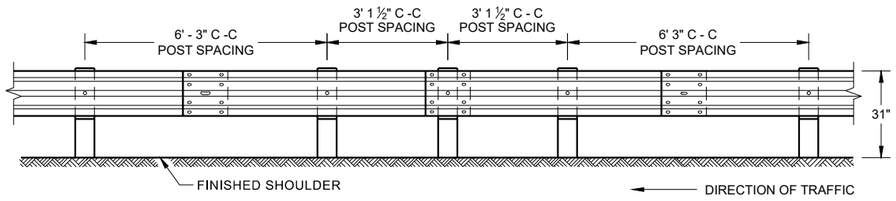
SDD 14B42 - 07a

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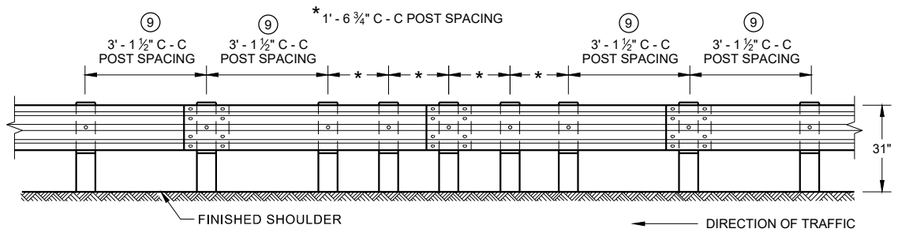
SDD 14B42 - 07a



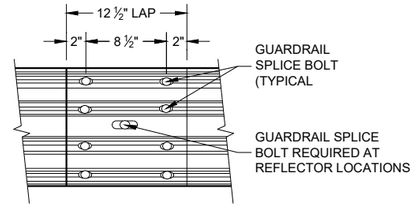
FRONT VIEW
POST SPACING STANDARD INSTALLATION



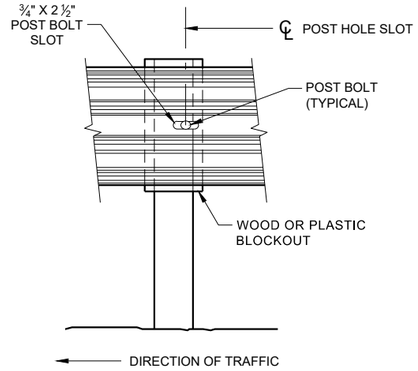
FRONT VIEW
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



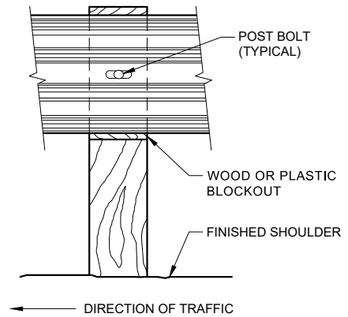
FRONT VIEW
QUARTER POST SPACING (QS)



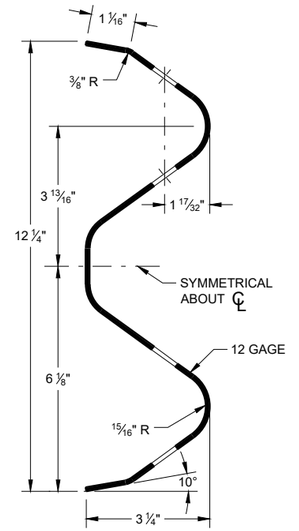
FRONT VIEW
MID-SPAN BEAM SPLICE



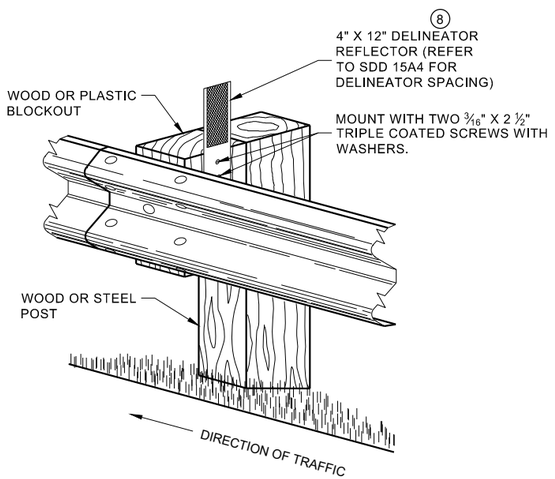
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

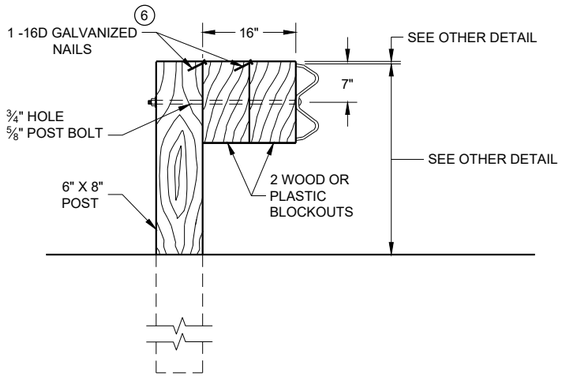
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07b
SDD 14B42 - 07b

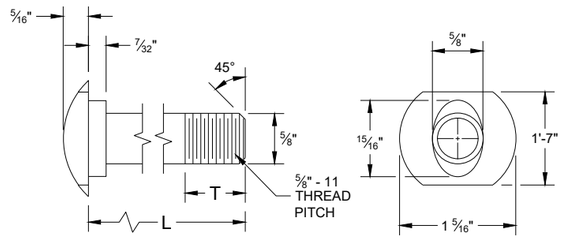


DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

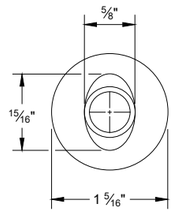
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3⁄16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

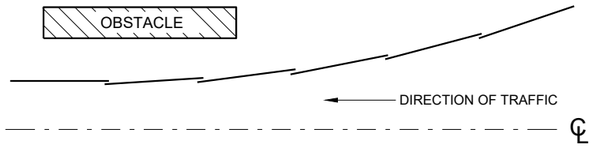


POST BOLT TABLE

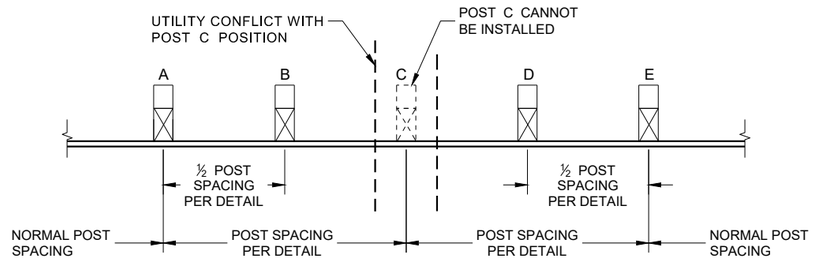
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



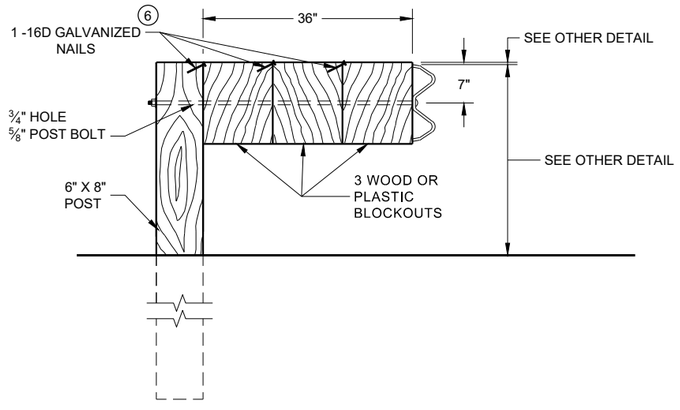
ALTERNATE BOLT HEAD



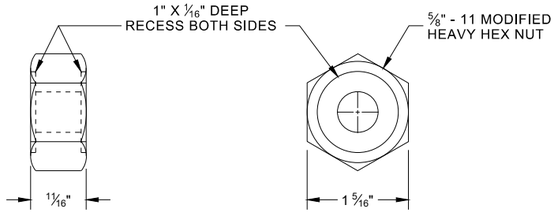
PLAN VIEW
BEAM LAPPING DETAIL



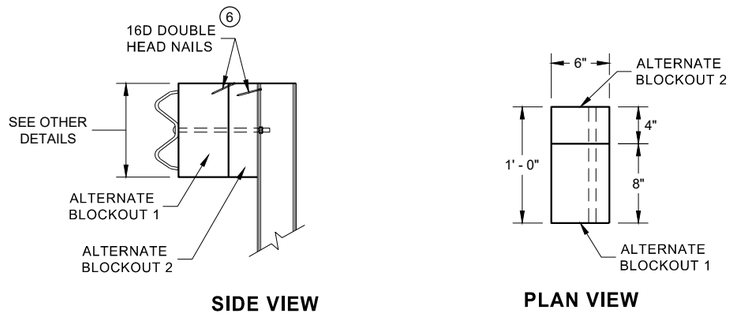
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

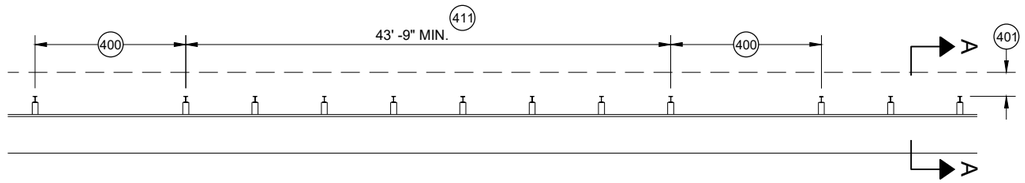
NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

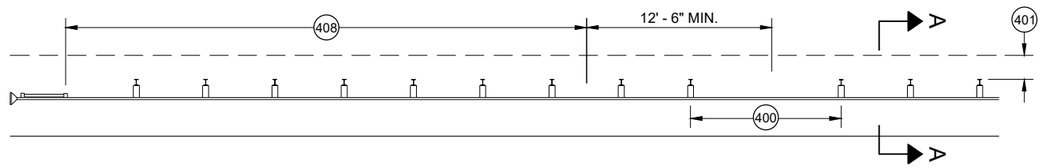
(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

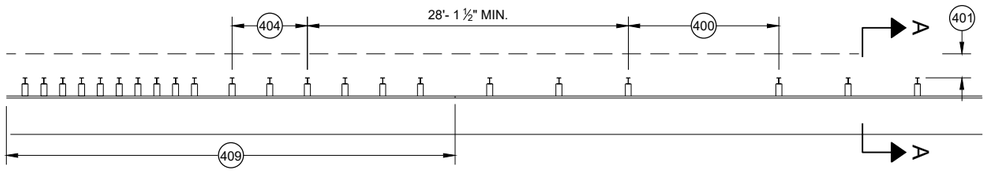
6
SDD 14B42 - 07c



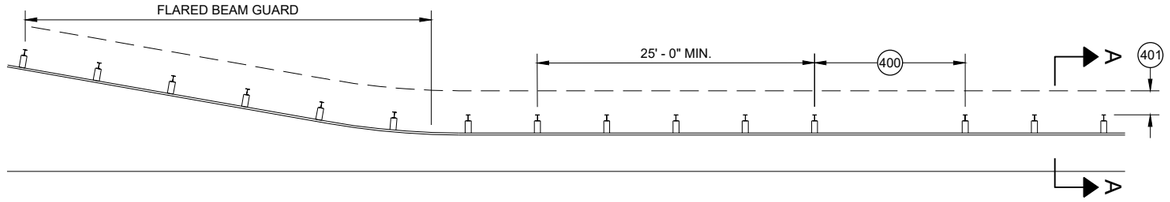
MISSING POST IN MGS GUARDRAIL



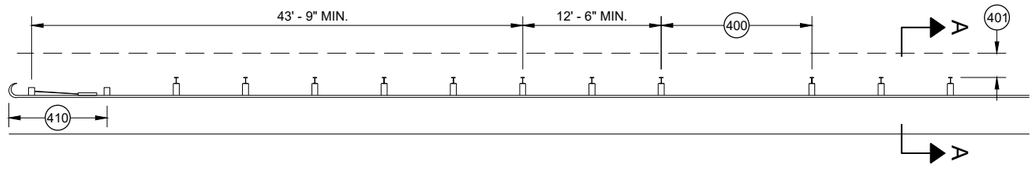
MISSING POST IN MGS GUARDRAIL NEAR EAT



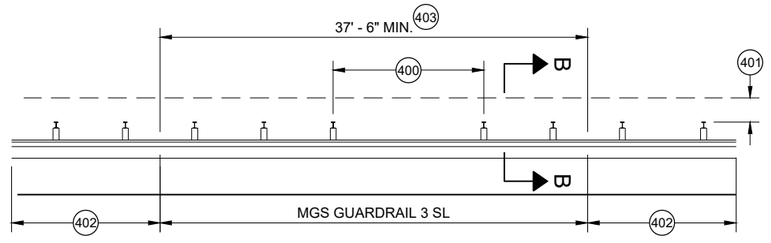
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

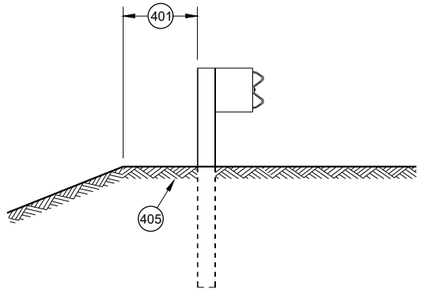


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

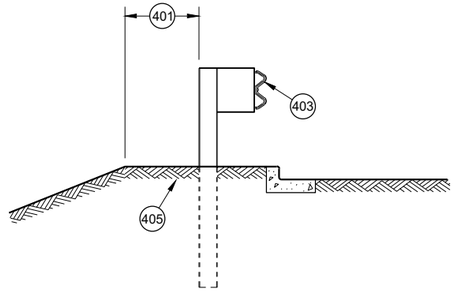


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(400) MAX SPAN 12' - 6"
(401) 2' MIN.
(402) MGS GUARDRAIL 3
(403) NESTING BEAM GUARD
(404) ASYMMETRIC TRANSITION
(405) SOIL WELL DRAINED AND COMPACTED
(406) SEE OTHER DRAWINGS IN THIS SDD
(407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
(408) SEE SDD 14B44
(409) SEE SDD 14B45
(410) SEE SDD 14B47
(411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

6

SDD 14B42 - 07d

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

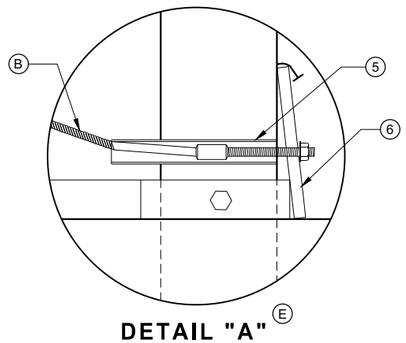
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

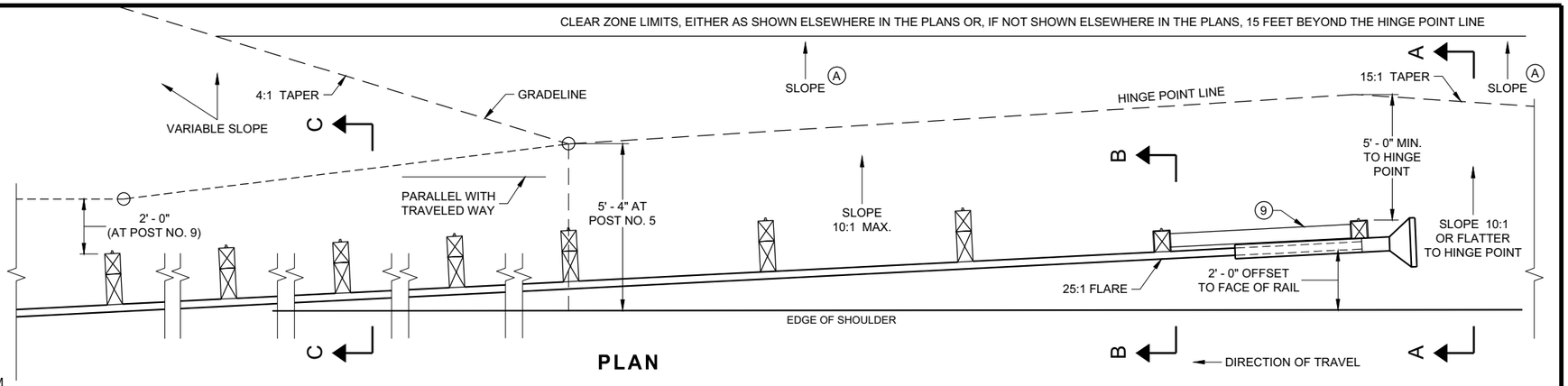
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

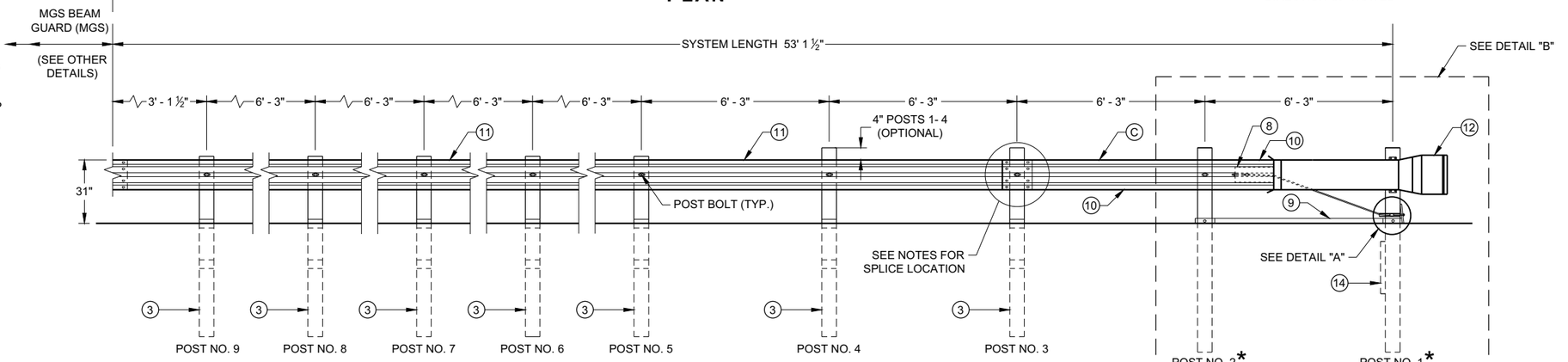
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



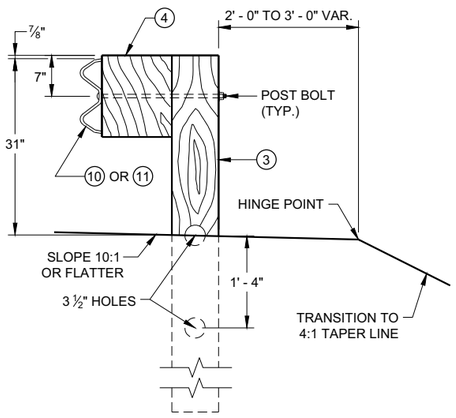
DETAIL "A" (E)



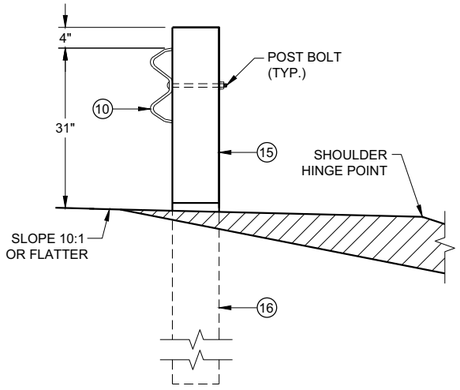
PLAN



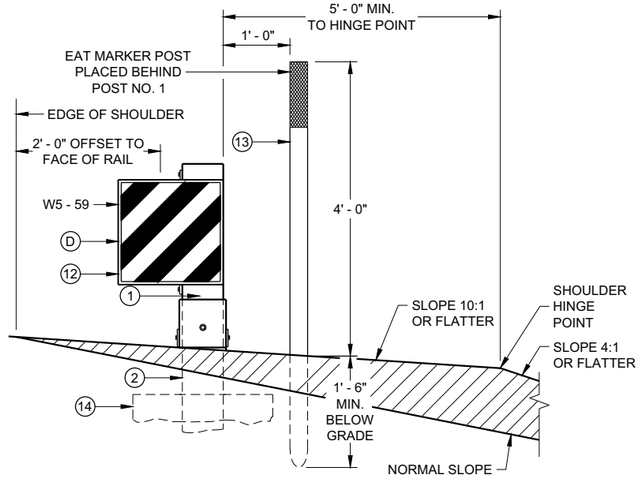
ELEVATION



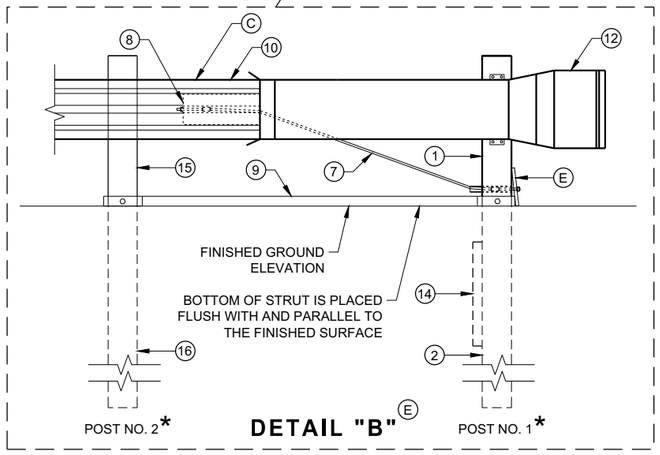
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



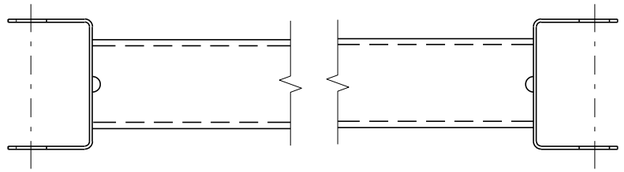
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

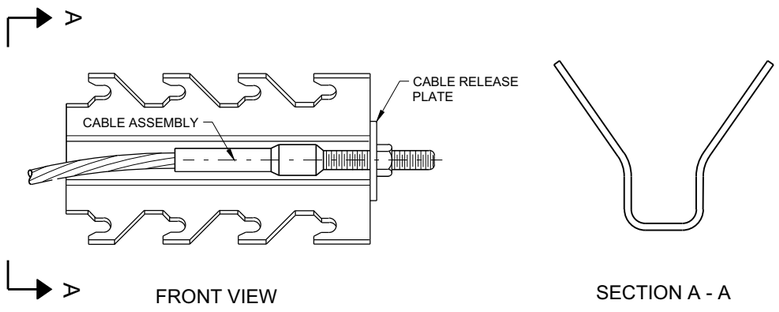
SDD 14B44 - 04a



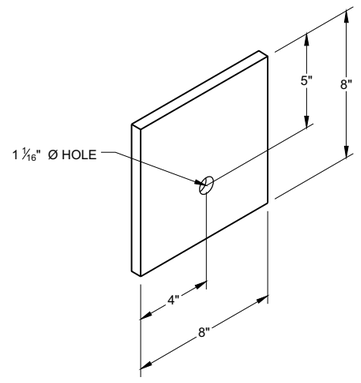
GENERIC GROUND STRUT (9) (E)

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
(1)	UPPER POST NO. 1 6" X 6" TUBE
(2)	LOWER POST NO. 1
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	IMPACT HEAD
(13)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
(14)	SOIL PLATE
(15)	UPPER POST NO. 2
(16)	LOWER POST NO. 2



GENERIC ANCHOR CABLE BOX (9) (E)



BEARING PLATE (6) (E)

6

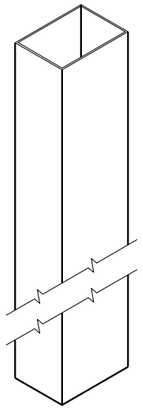
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SDD 14B44 - 04b

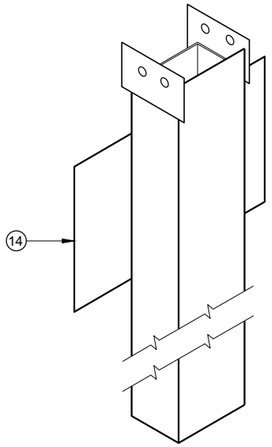
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

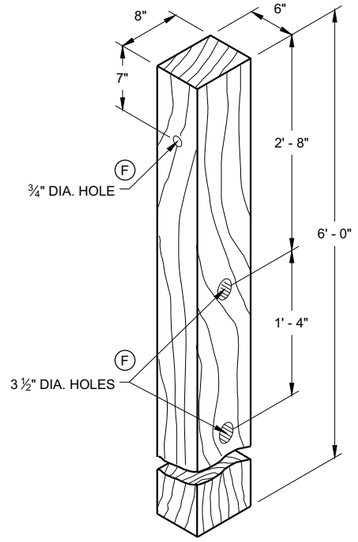
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



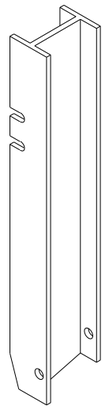
UPPER POST NO. 1 (1) (E)



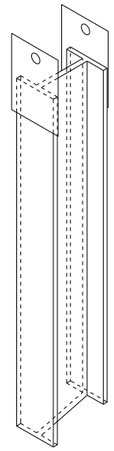
LOWER POST NO. 1 (2) (E)



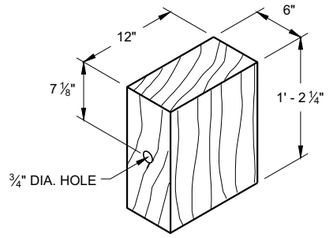
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



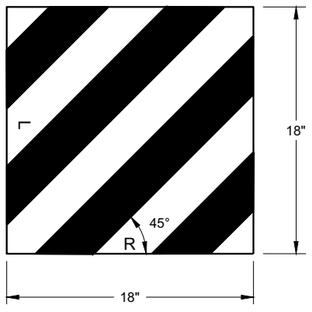
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

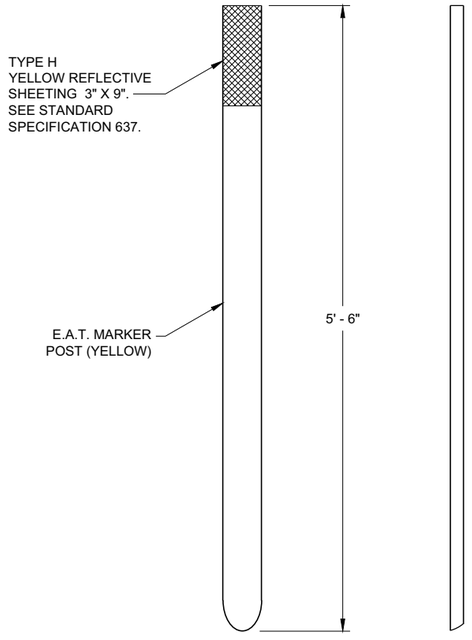


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



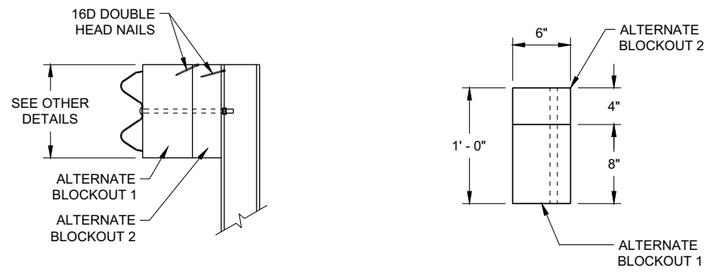
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

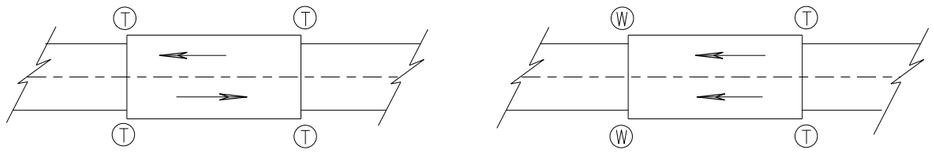
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

6

SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

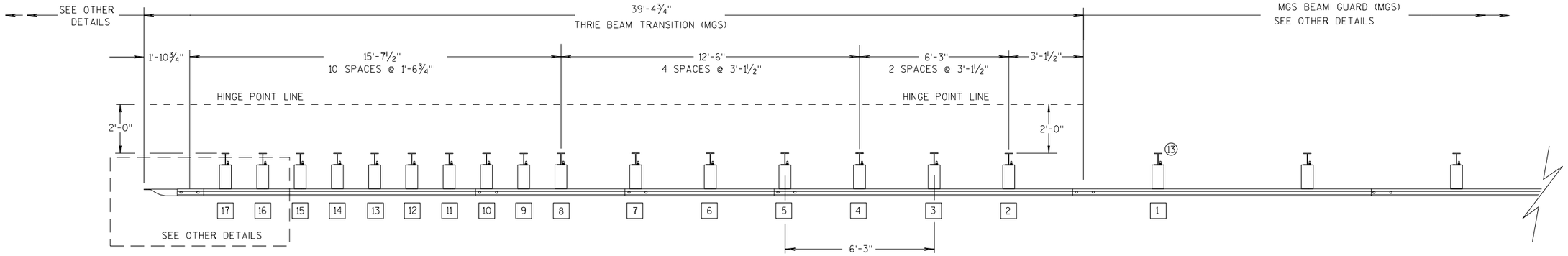
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

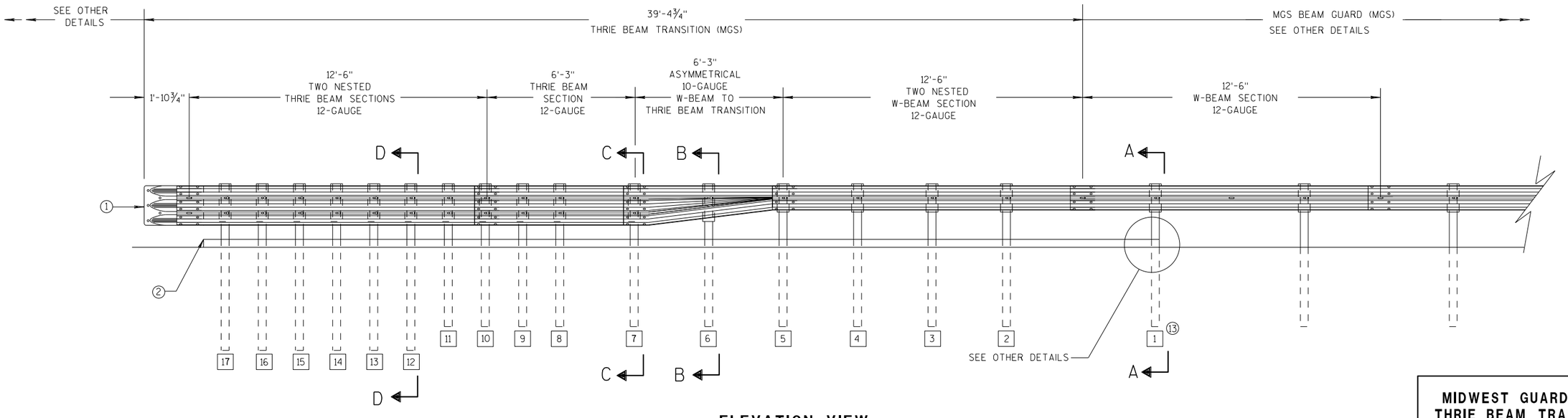
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD14B42



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-5a

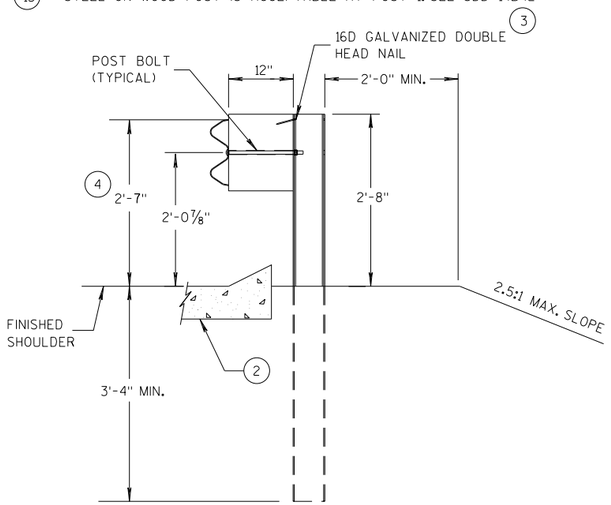
GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

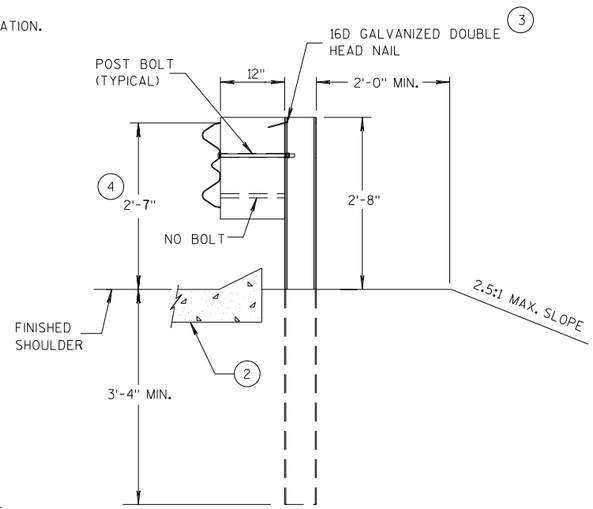
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42



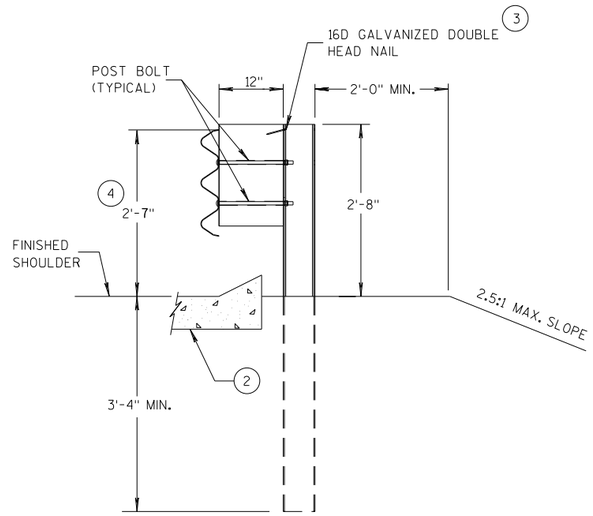
SECTION A-A (13)

POSTS 1-5



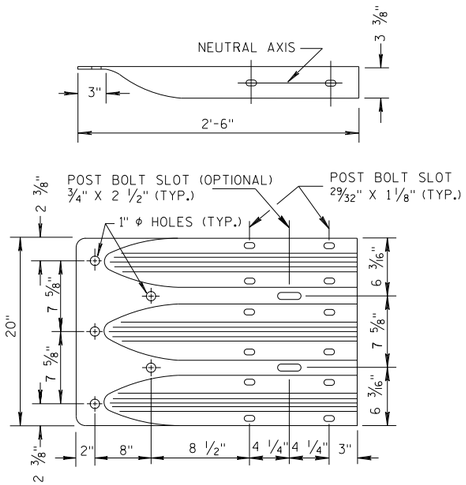
SECTION B-B

POST 6

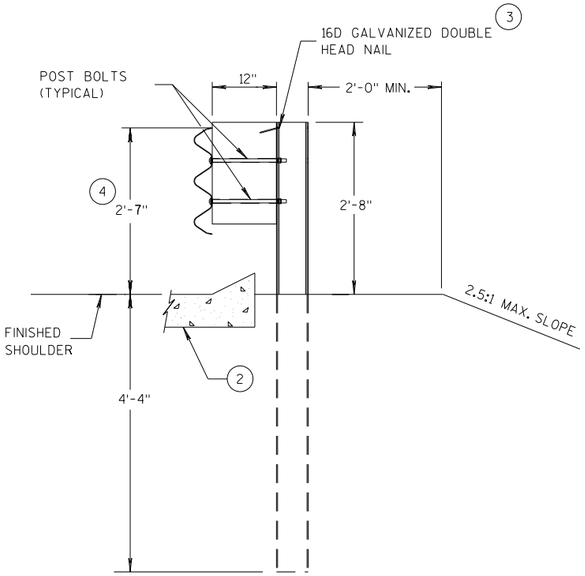


SECTION C-C

POSTS 7-11

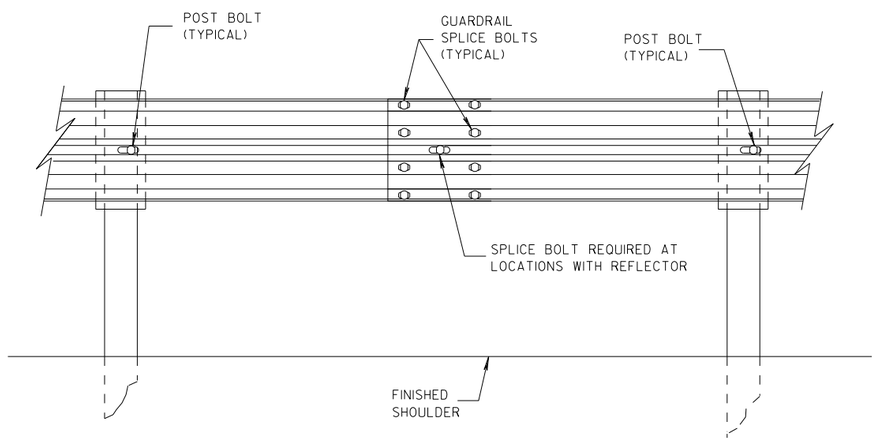


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

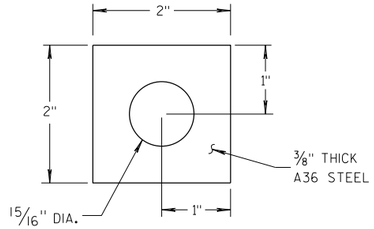
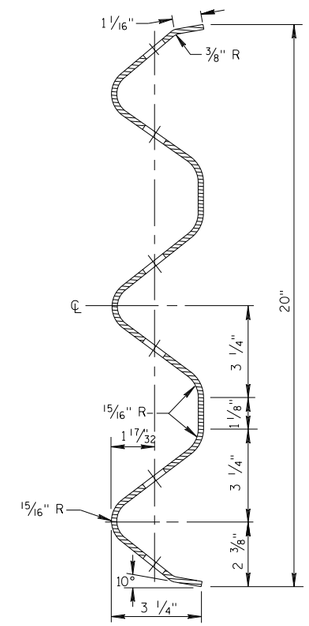


PLATE WASHER DETAIL



SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

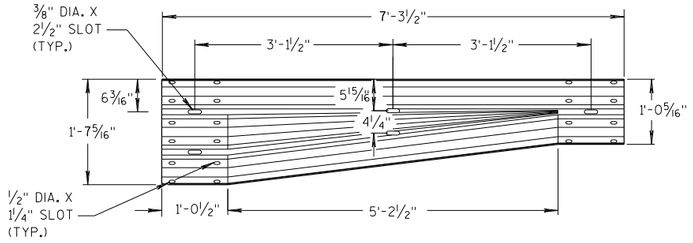
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 295

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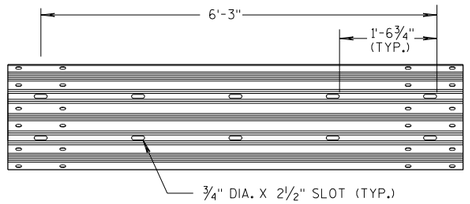
S.D.D. 14 B 45-5b

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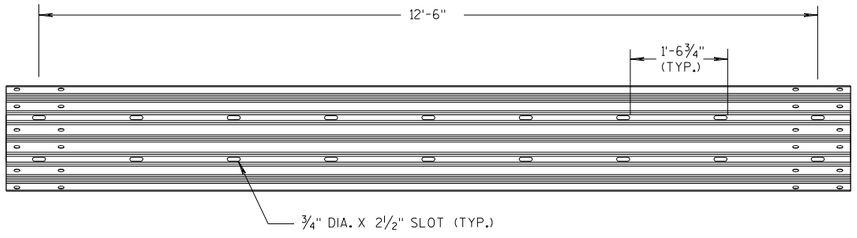
S.D.D. 14 B 45-5b



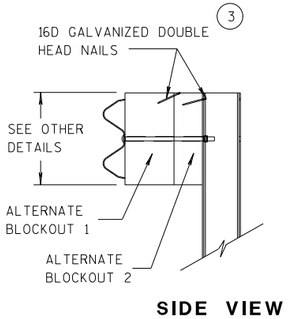
W-BEAM TO THRIE BEAM TRANSITION SECTION



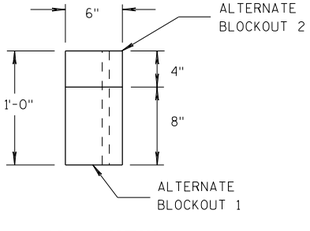
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

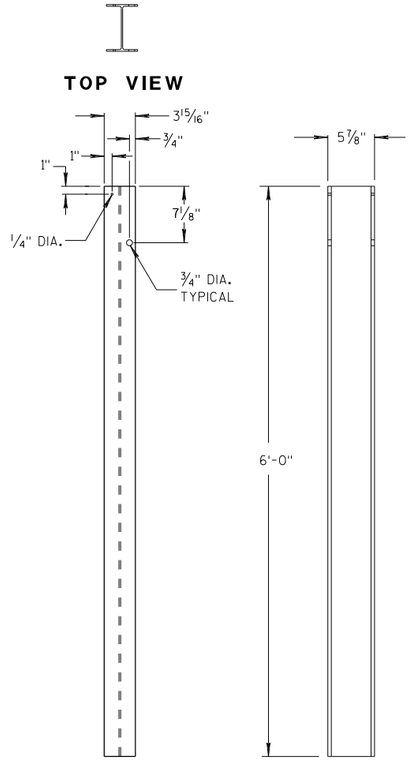


SIDE VIEW



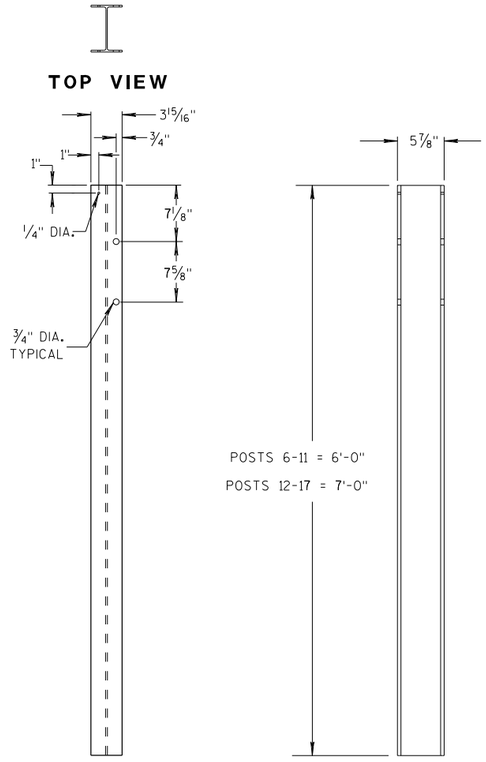
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



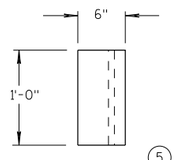
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

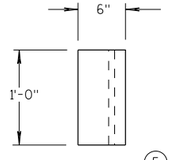


FRONT VIEW SIDE VIEW

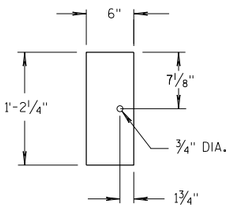
STEEL POSTS 6-17



TOP VIEW (5)

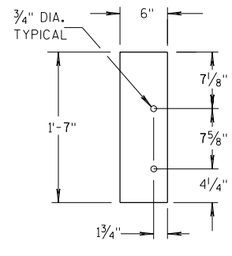


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

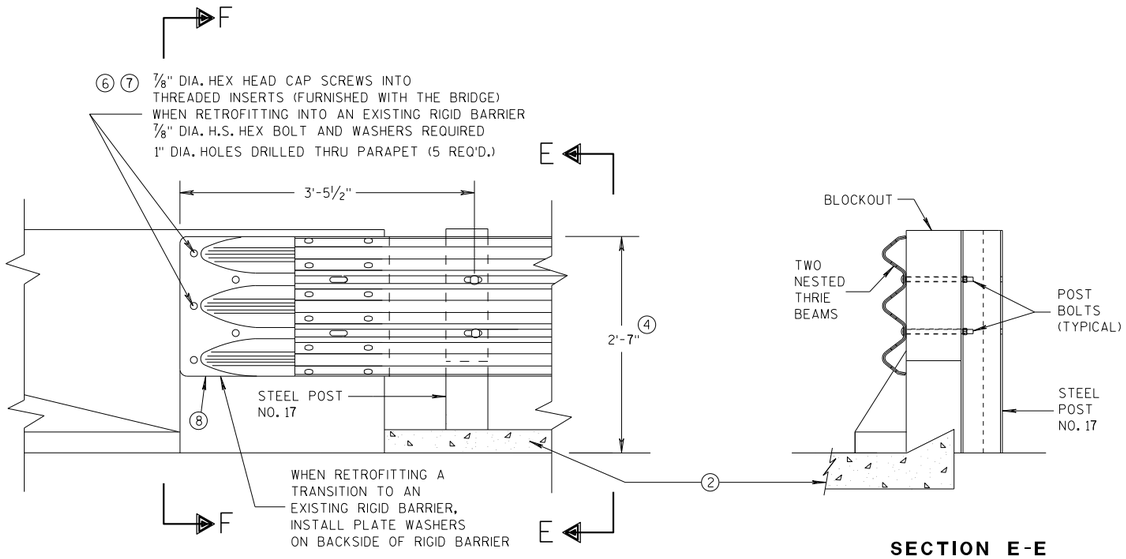
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-5c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

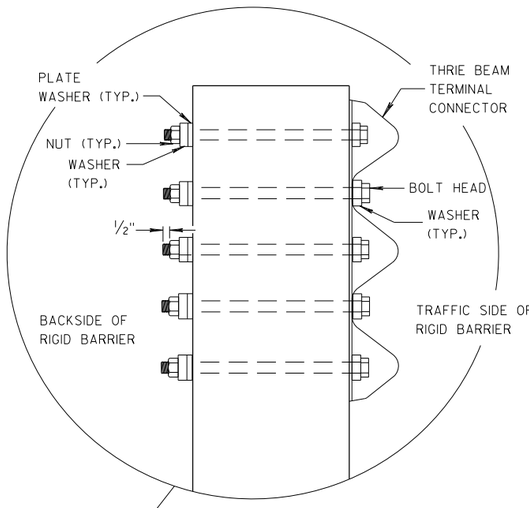
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

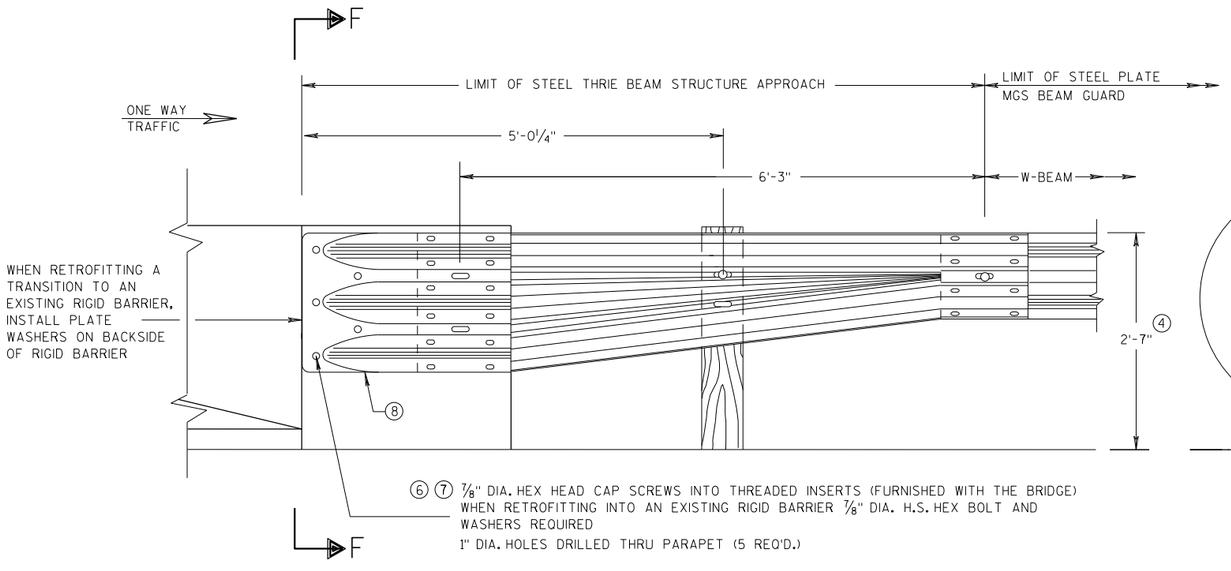
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

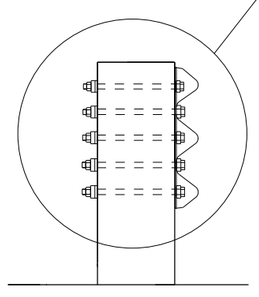
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

⑧ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

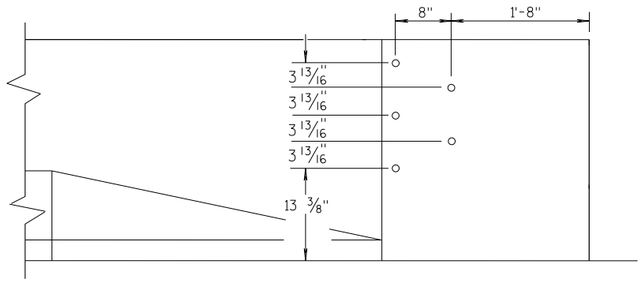




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS D UNIT SUPERVIS NT
FHWA

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S.D.D. 14 B 45-5d

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S.D.D. 14 B 45-5d

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

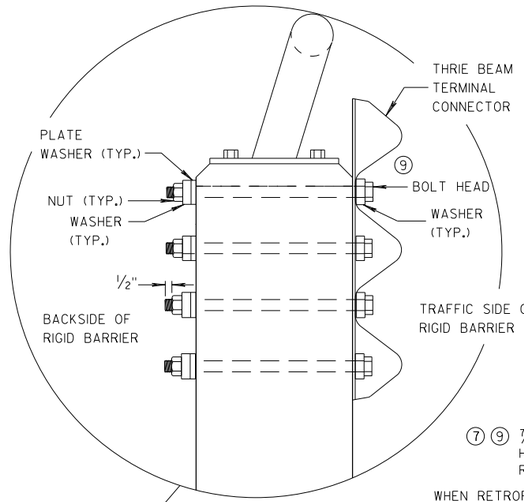
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

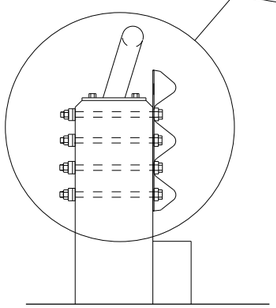
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

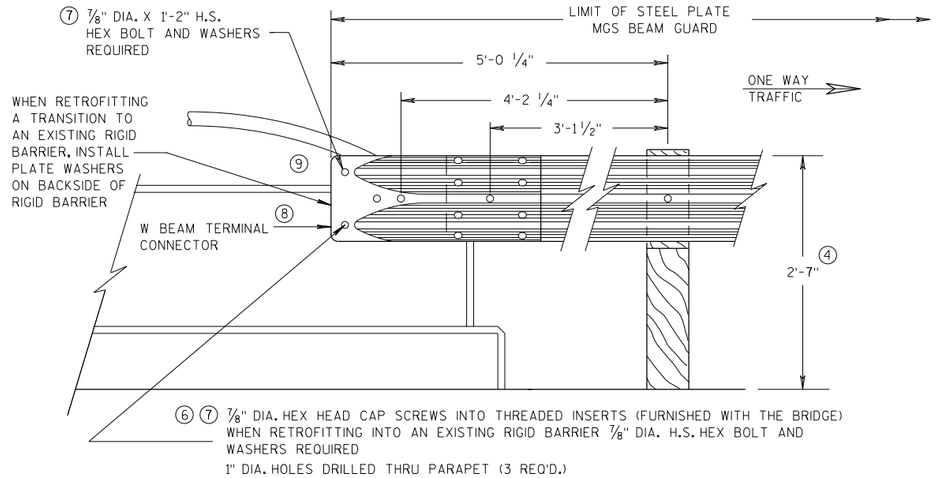
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(9) BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.





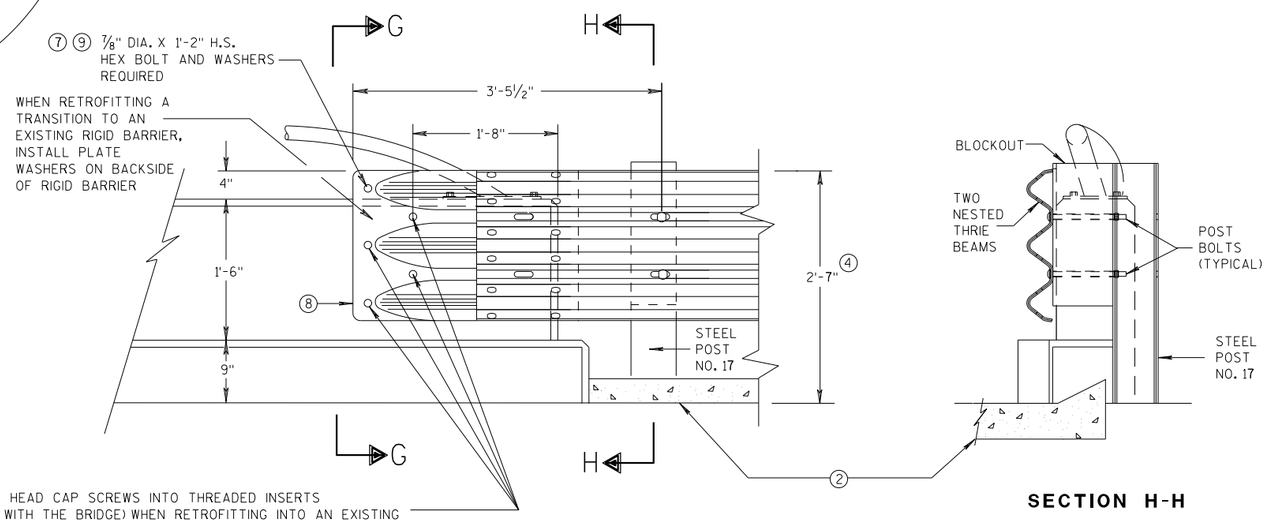
SECTION G-G



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

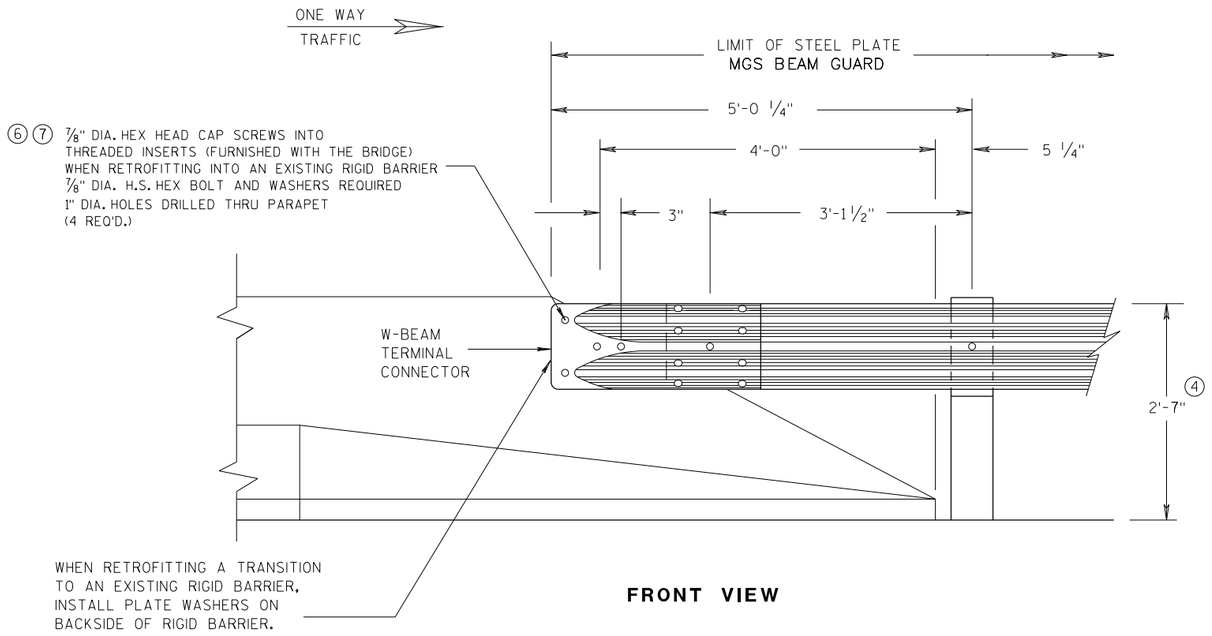
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07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS D UNIT SUPERVIS
FHWA

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S.D.D. 14 B 45-5e

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S.D.D. 14 B 45-5e



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

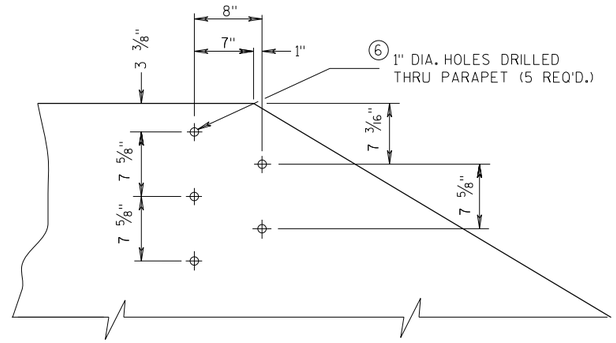
GENERAL NOTES

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

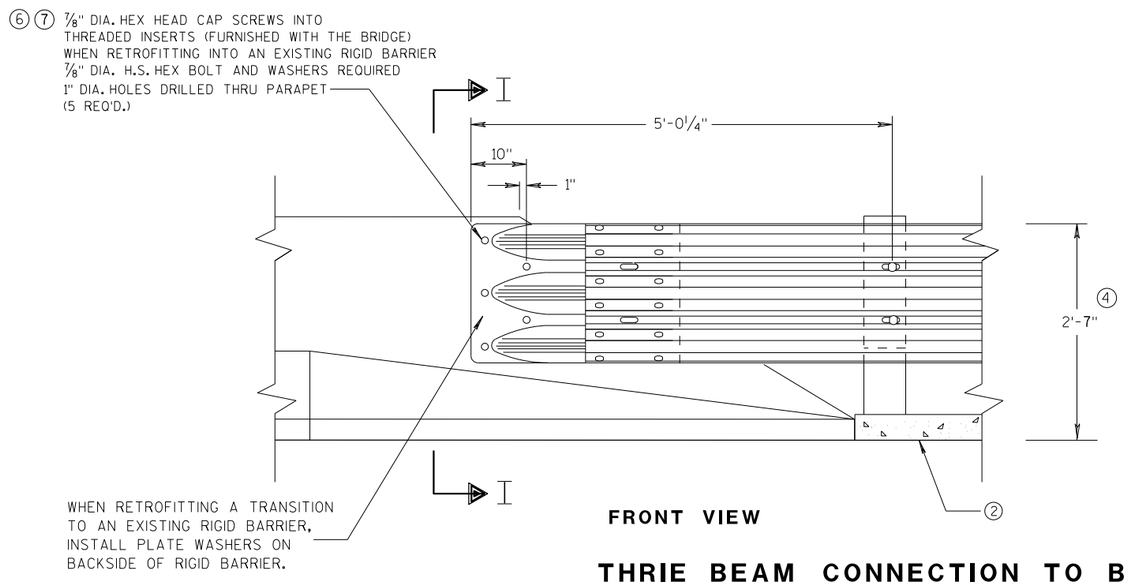
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

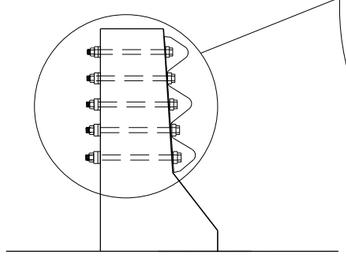
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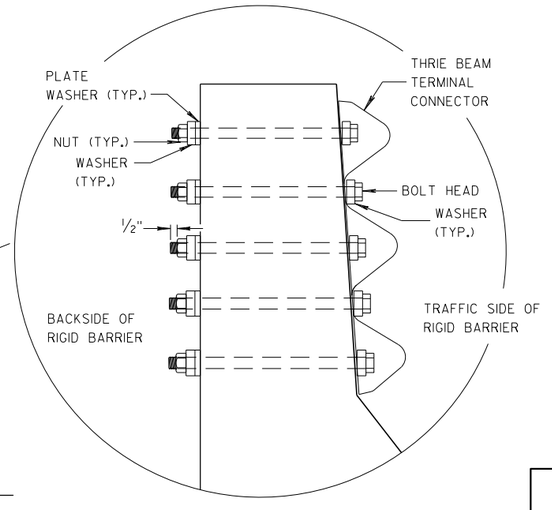
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

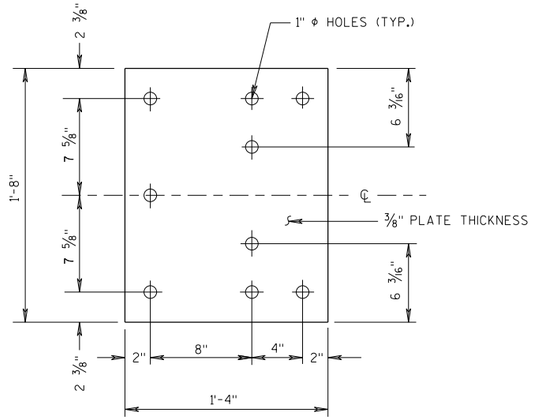
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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UNIT SUPERVISOR

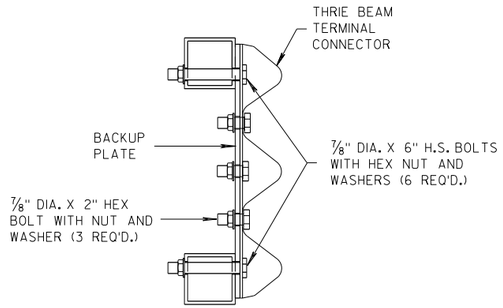
FHWA

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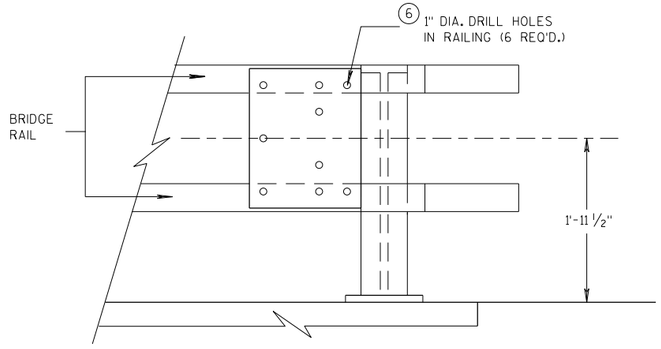
S.D.D. 14 B 45-5f



BACK-UP PLATE DETAIL



SECTION J-J

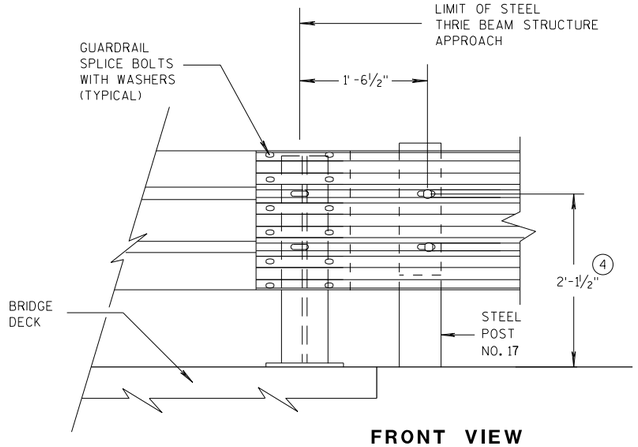


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

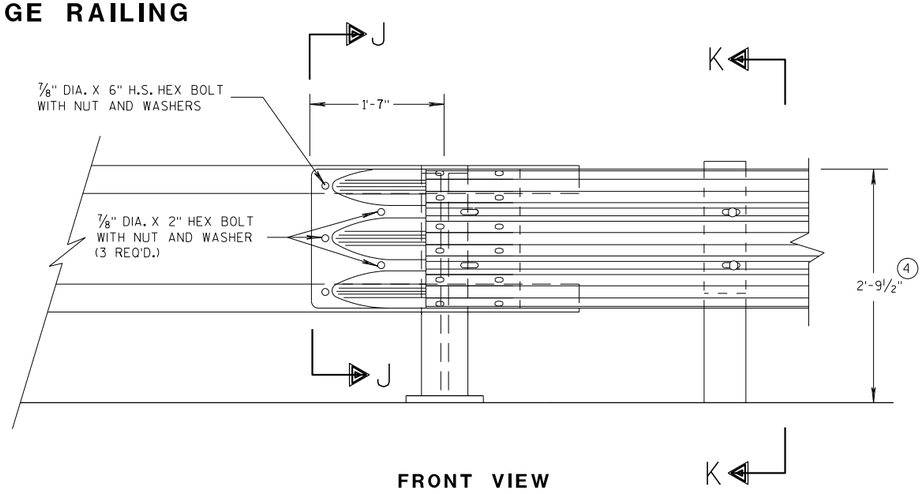
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING HOLES THROUGH THE PAPRPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

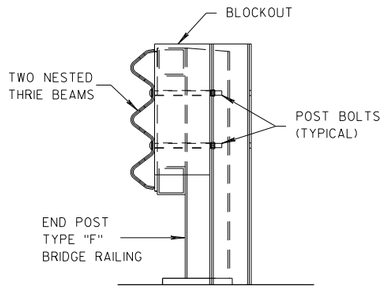


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 07/2018 — DATE
FHWA

/S/ Rodney Taylor 300
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

6

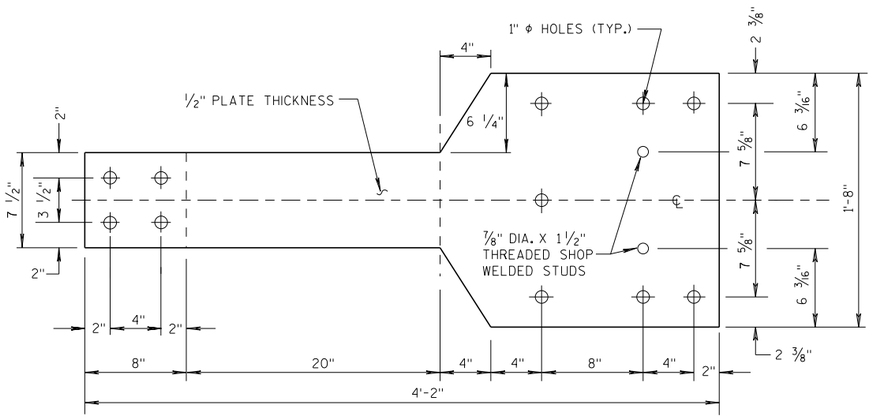
S.D.D. 14 B 45-5g

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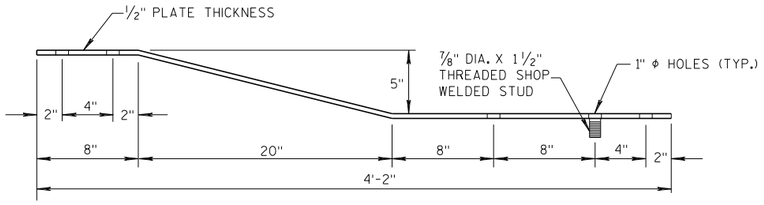
S.D.D. 14 B 45-5g

GENERAL NOTES

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

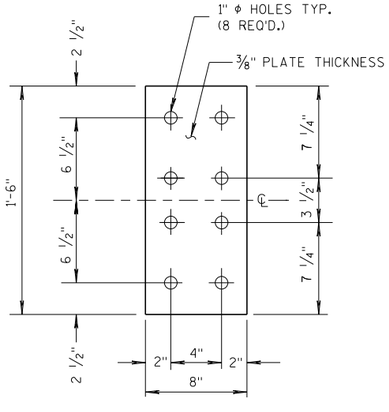


FRONT VIEW



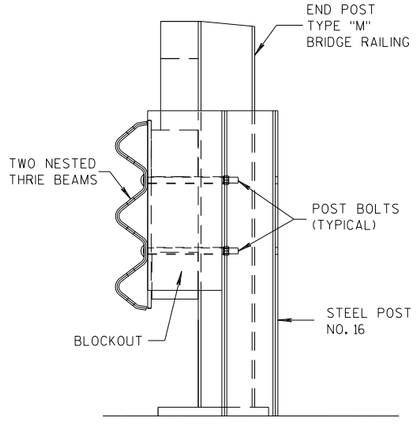
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

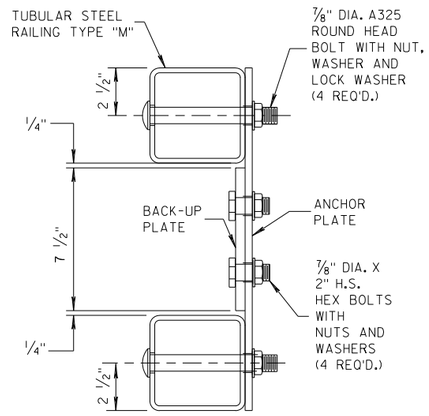


FRONT VIEW

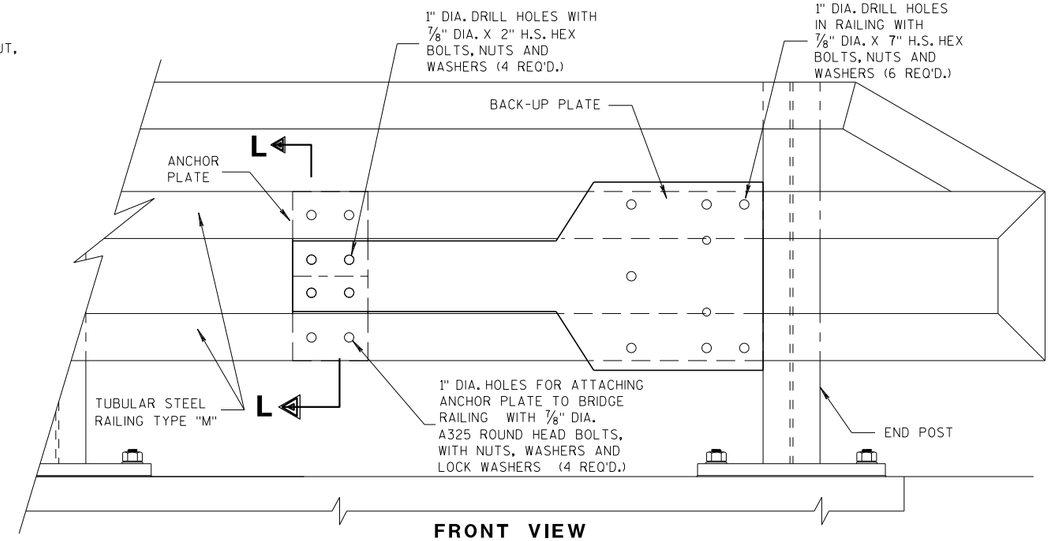
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

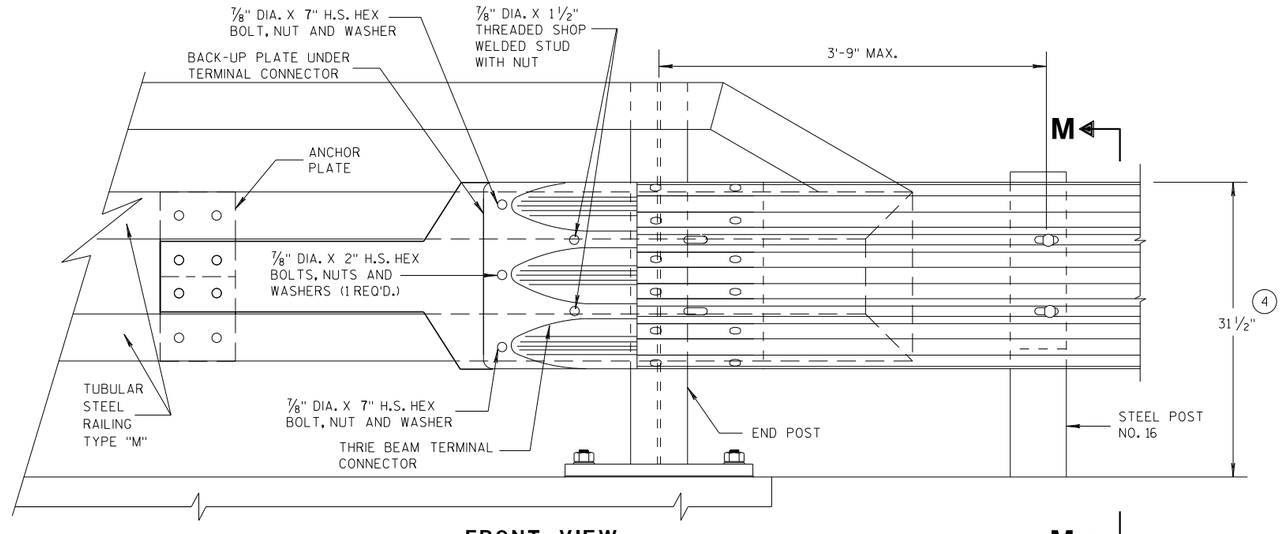


SECTION L-L

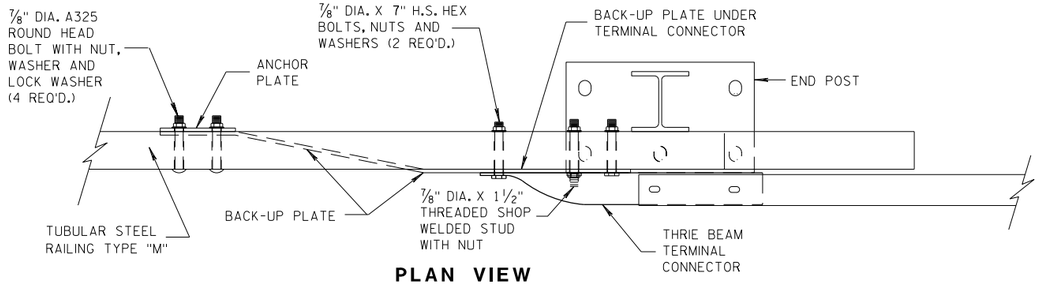


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

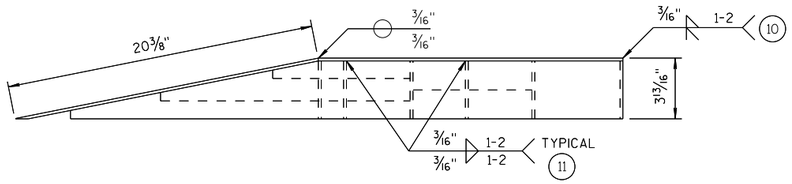
APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

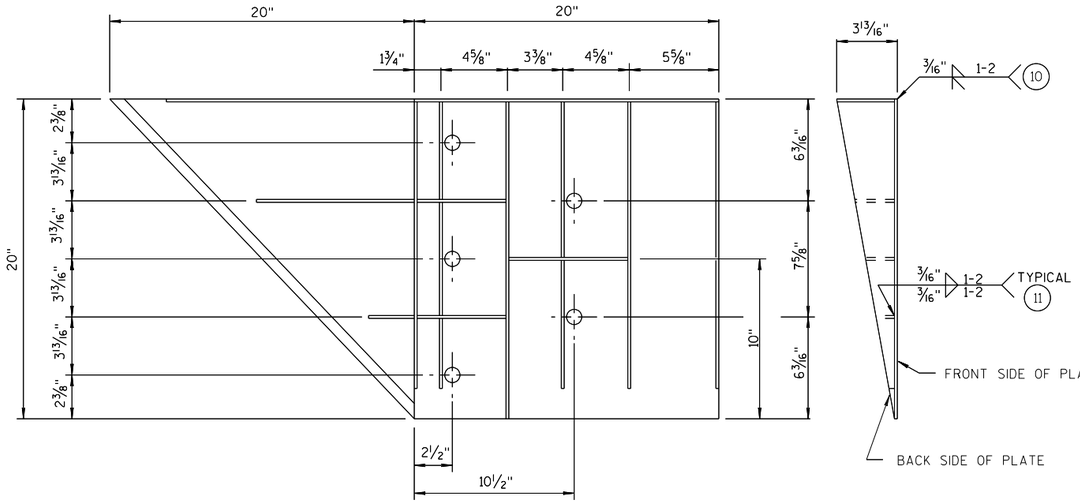
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S.D.D. 14 B 45-5h

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S.D.D. 14 B 45-5h





WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

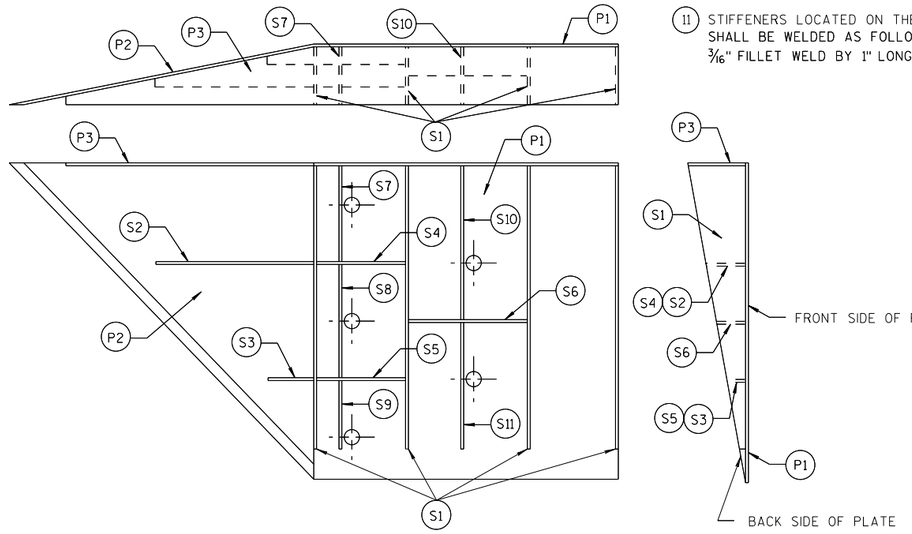


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(10) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

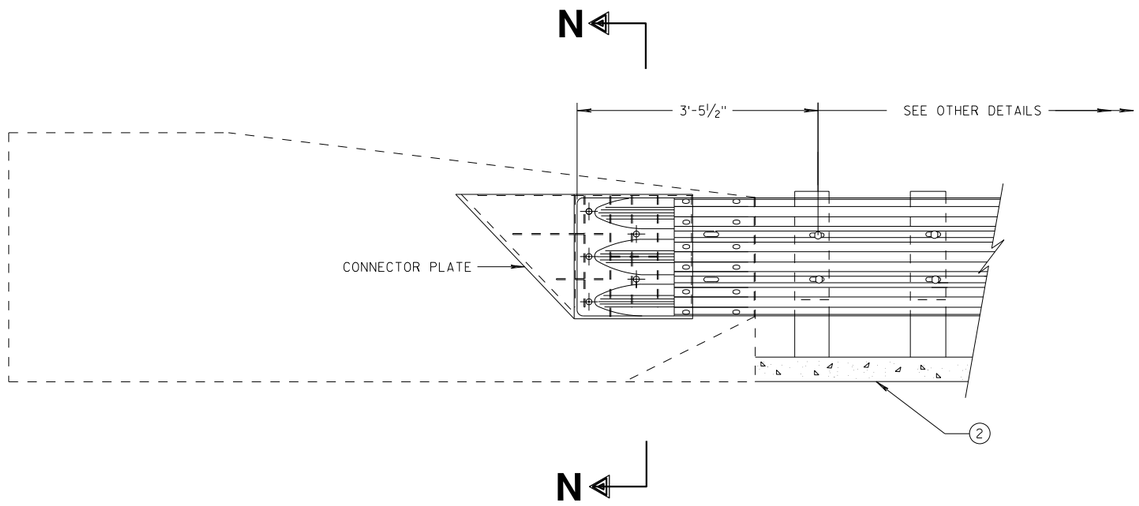
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

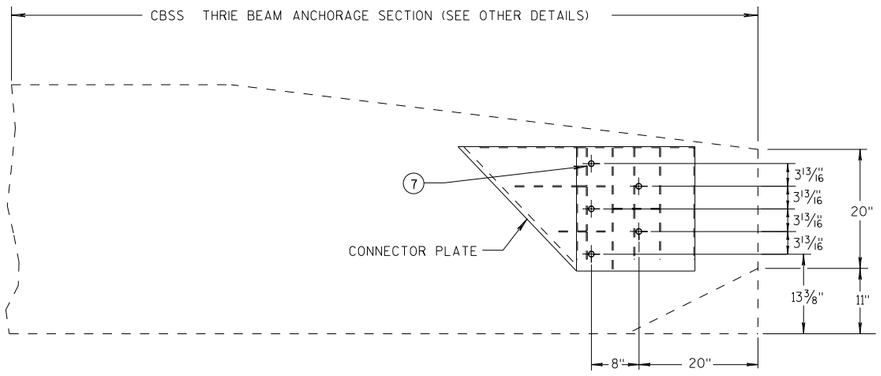
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7/2018
DATE
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UNIT SUPERVI

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S.D.D. 14 B 45-5i



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



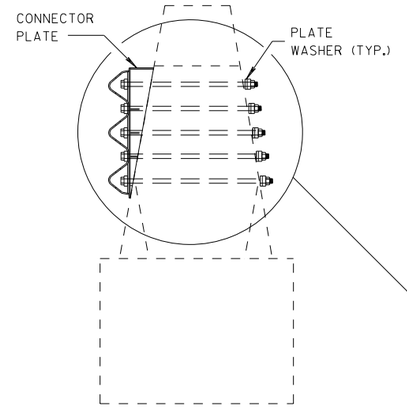
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

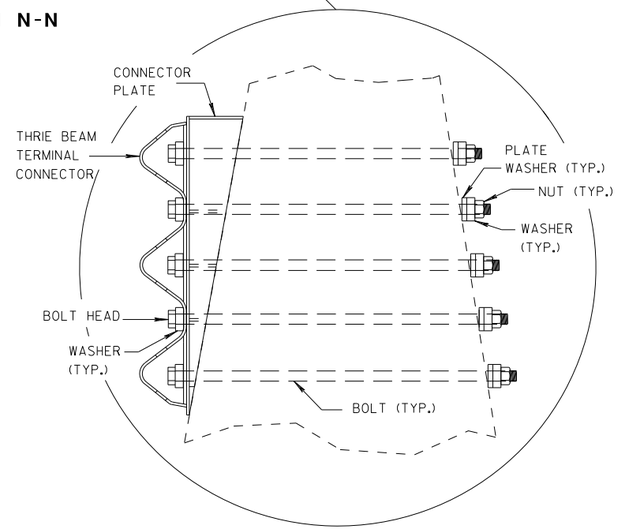
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

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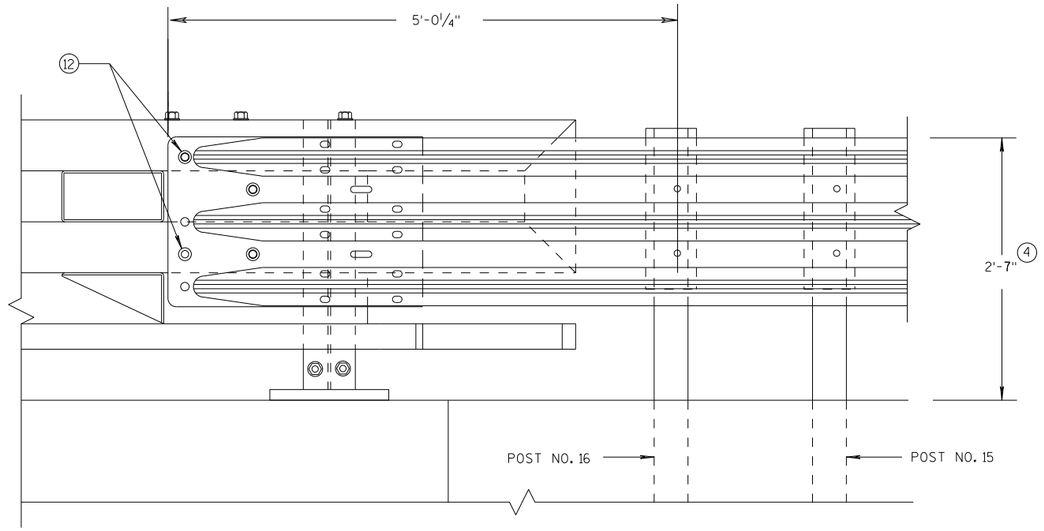
/S/ Rodney Taylor
ROADWAY STANDARDS DI[illegible]NT
UNIT SUPERVIS

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S.D.D. 14 B 45-5j

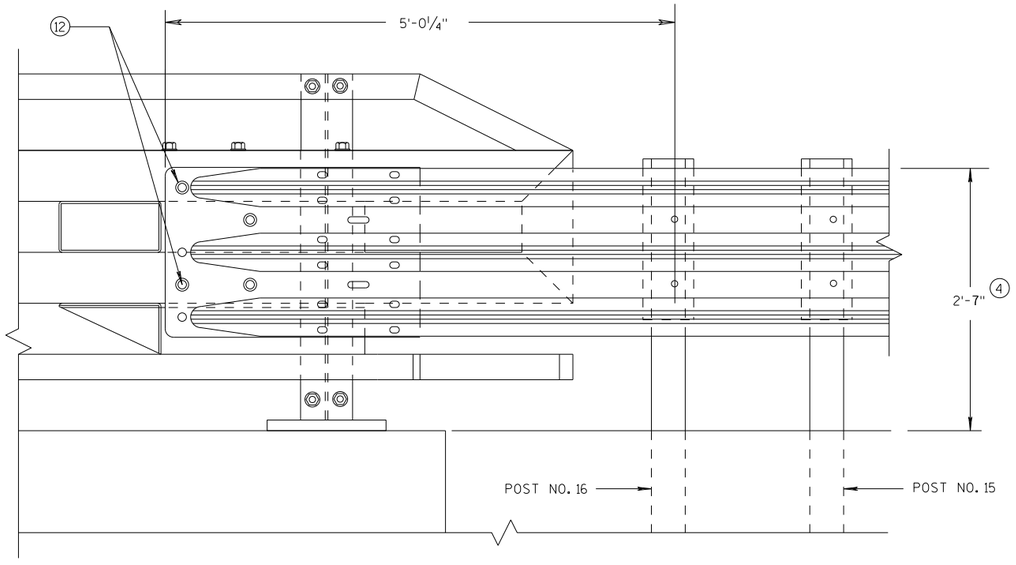
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S.D.D. 14 B 45-5j



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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7/2018
DATE

/S/ Rodney Taylor
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UNIT SUPERVIS

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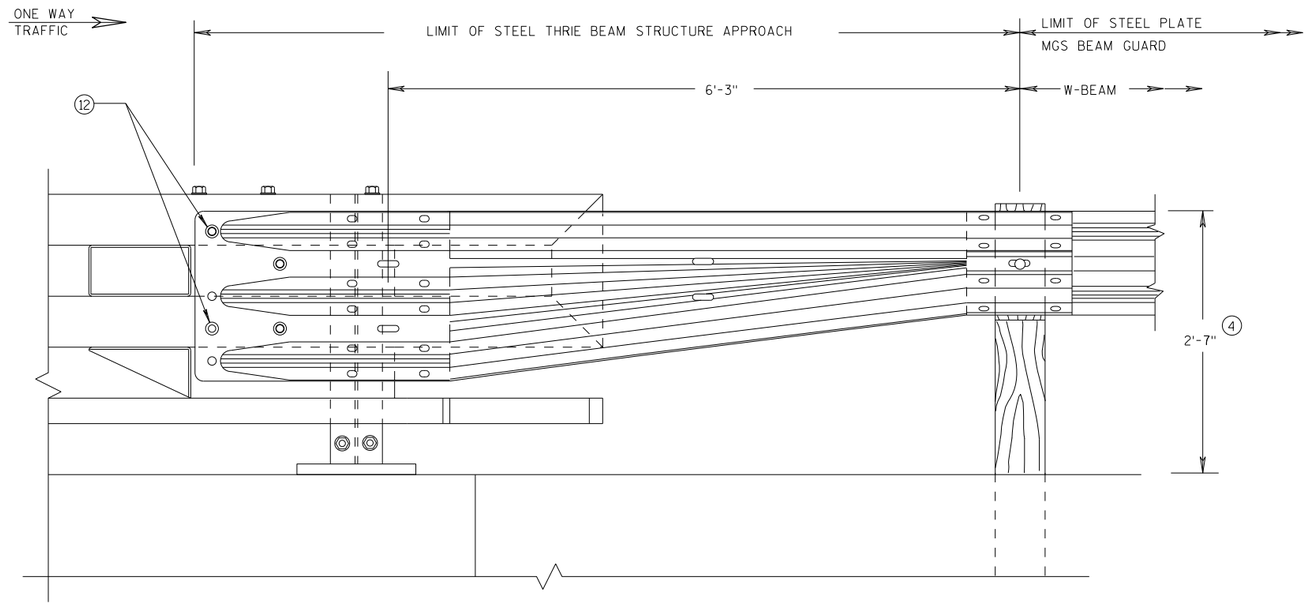
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S.D.D. 14 B 45-5k

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S.D.D. 14 B 45-5k



FRONT VIEW

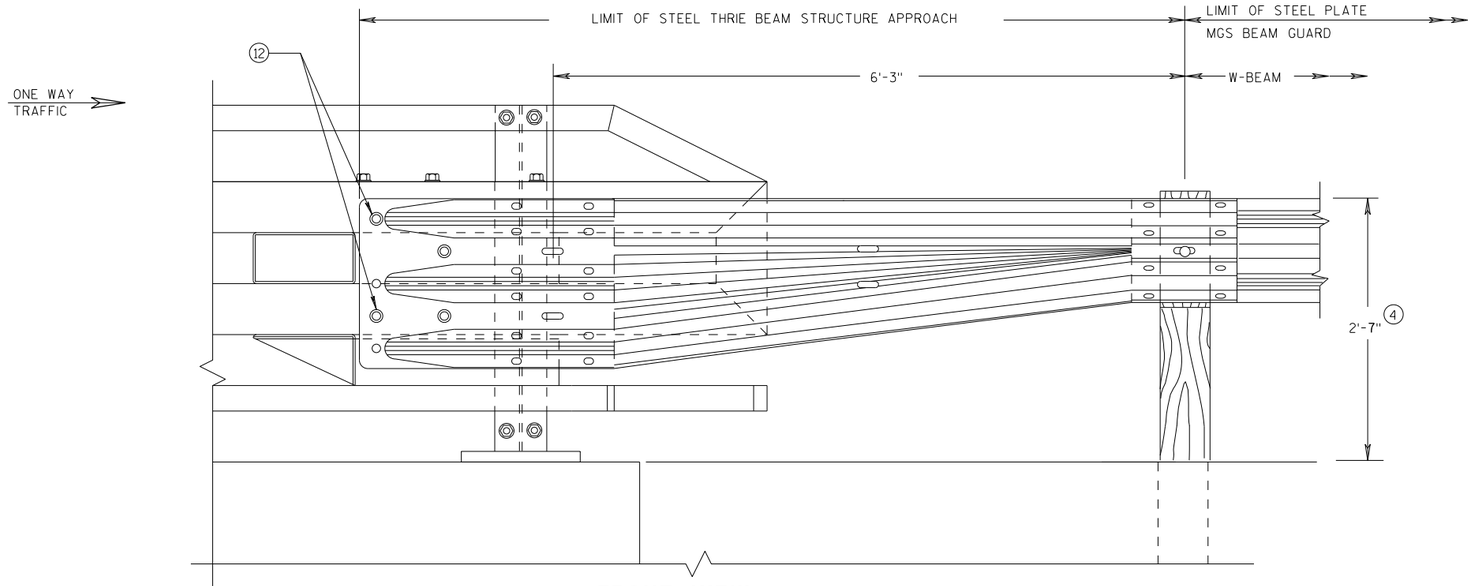
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVIS

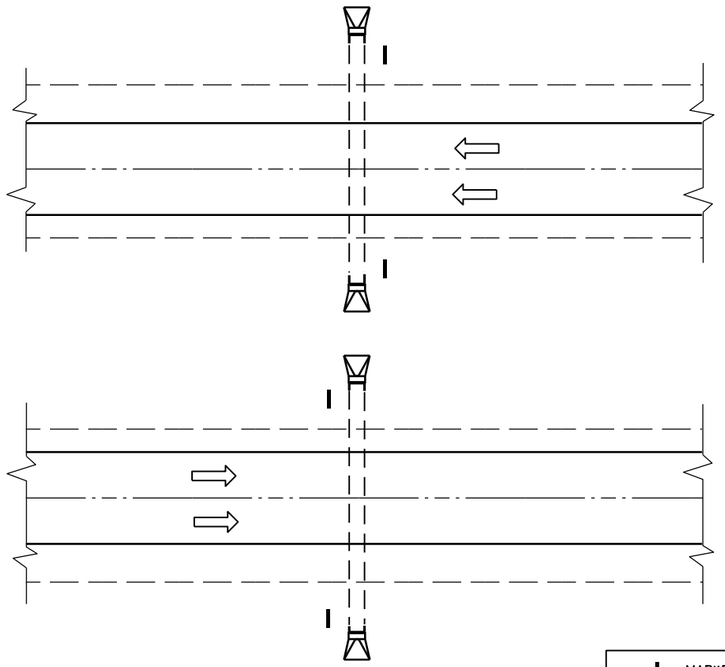
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S.D.D. 14 B 45-5L

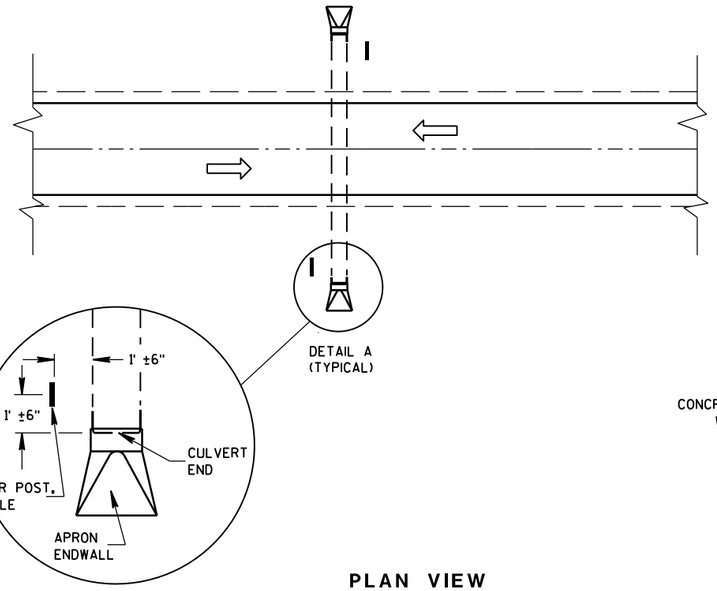
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S.D.D. 14 B 45-5L



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

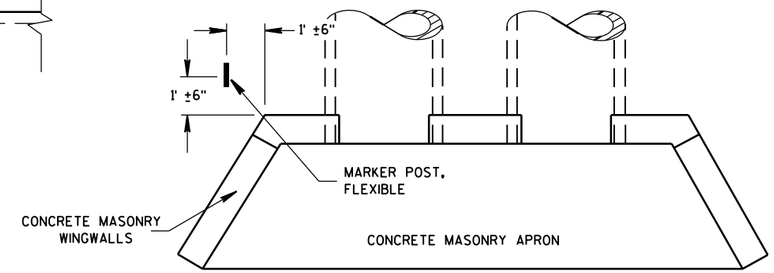
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

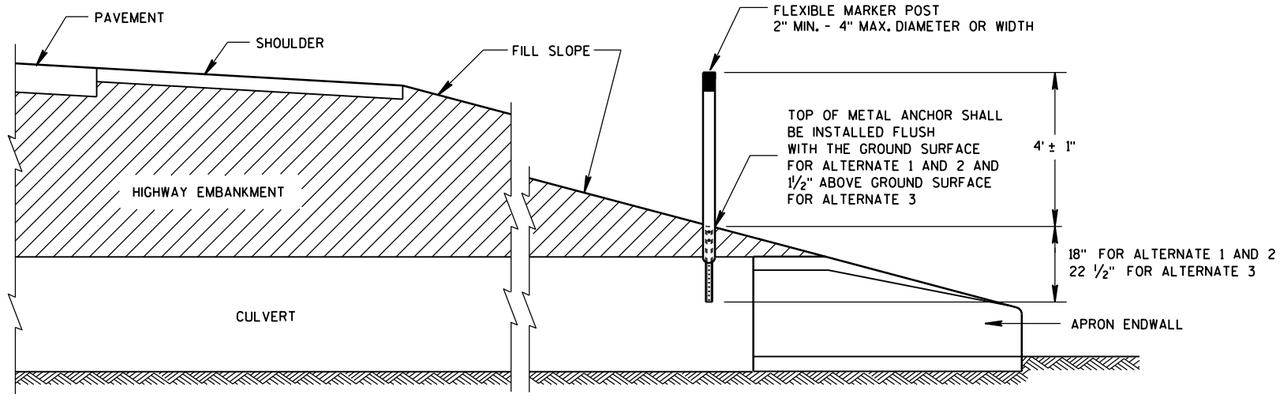
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

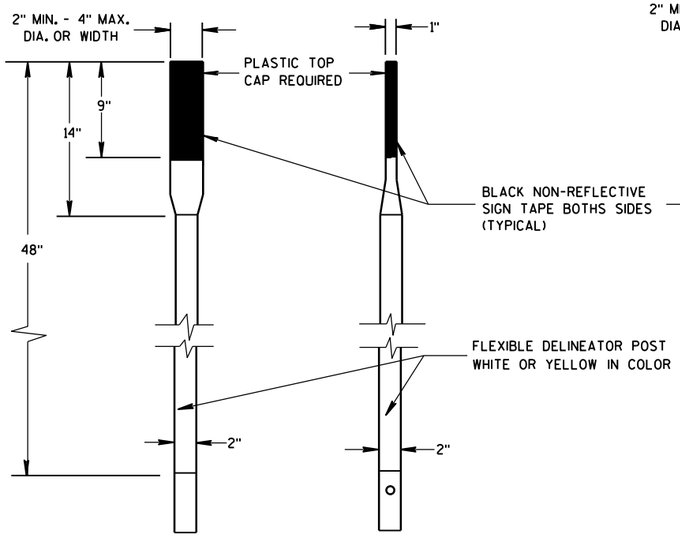
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

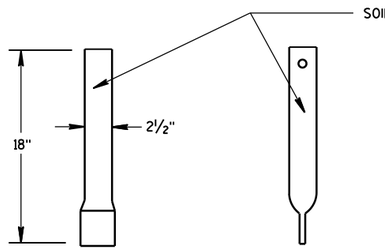
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S.D.D. 15 A 3-2a

6

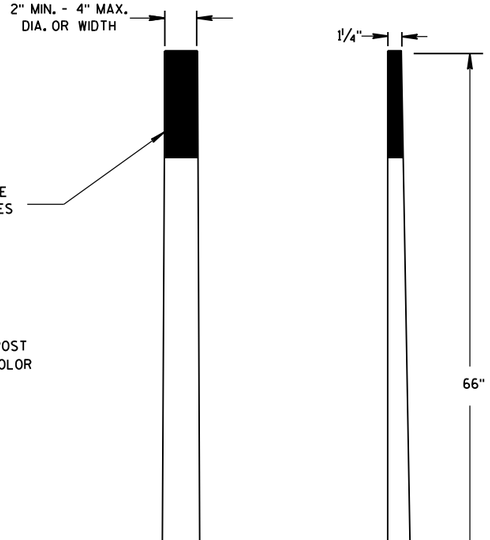
S.D.D. 15 A 3-2a





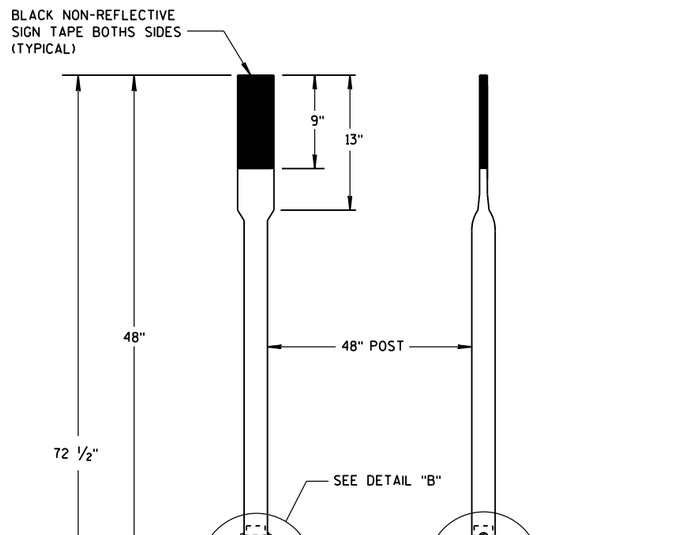
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

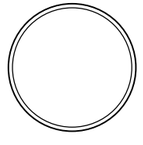
ALTERNATE 2



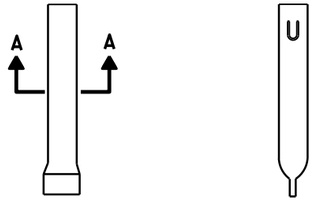
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

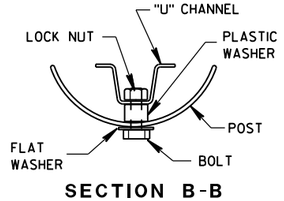


SECTION A-A

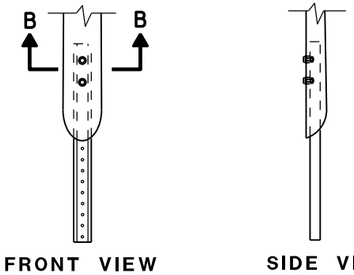


FRONT VIEW SIDE VIEW

ALTERNATE 1

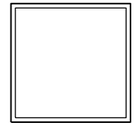


SECTION B-B

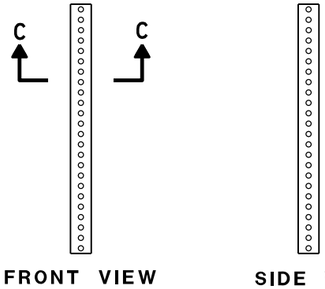


FRONT VIEW SIDE VIEW

ALTERNATE 2



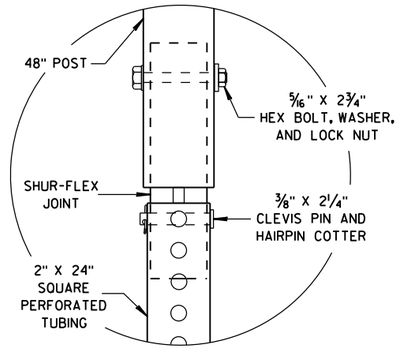
SECTION C-C



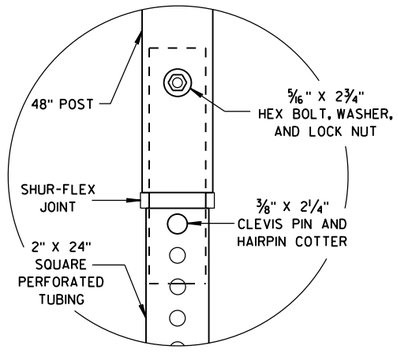
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

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DEPARTMENT OF TRANSPORTATION

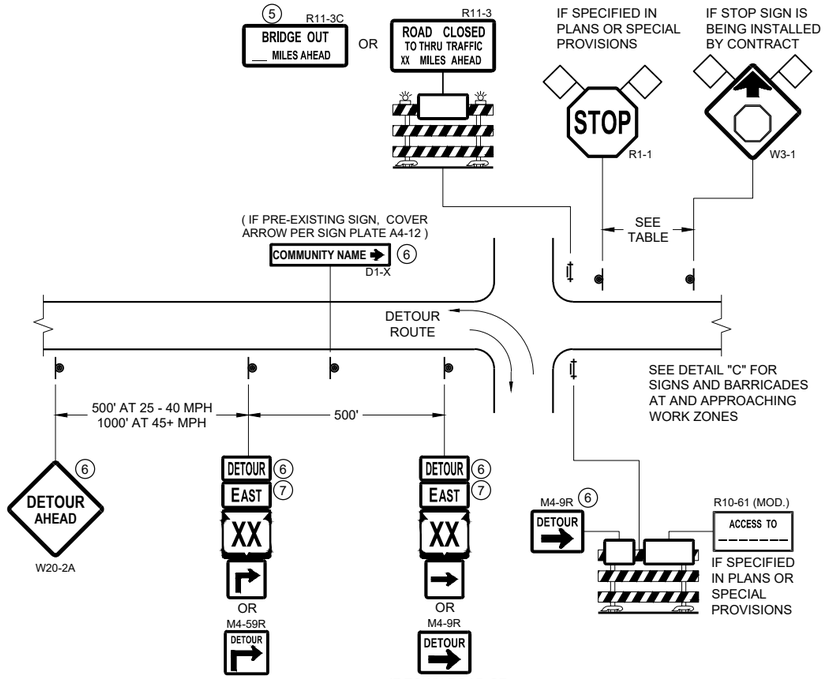
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

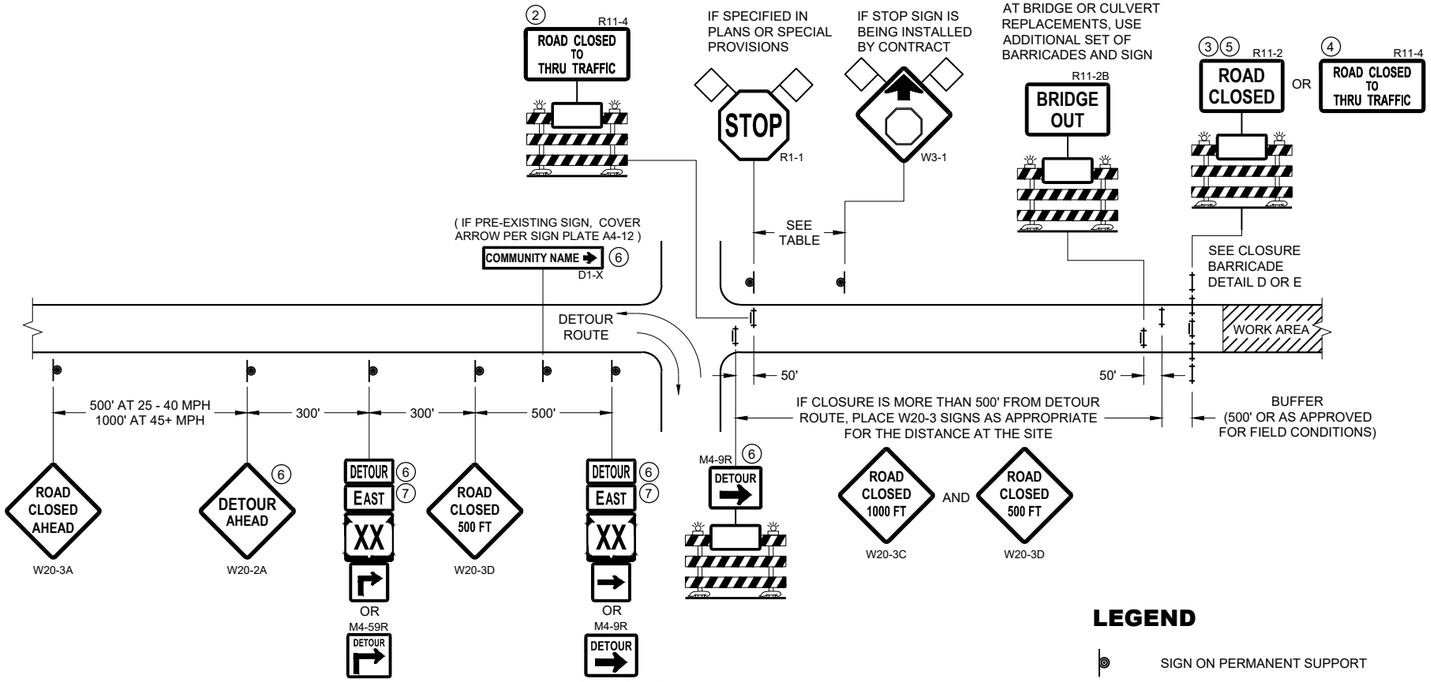
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S.D.D. 15 A 3-2b

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S.D.D. 15 A 3-2b



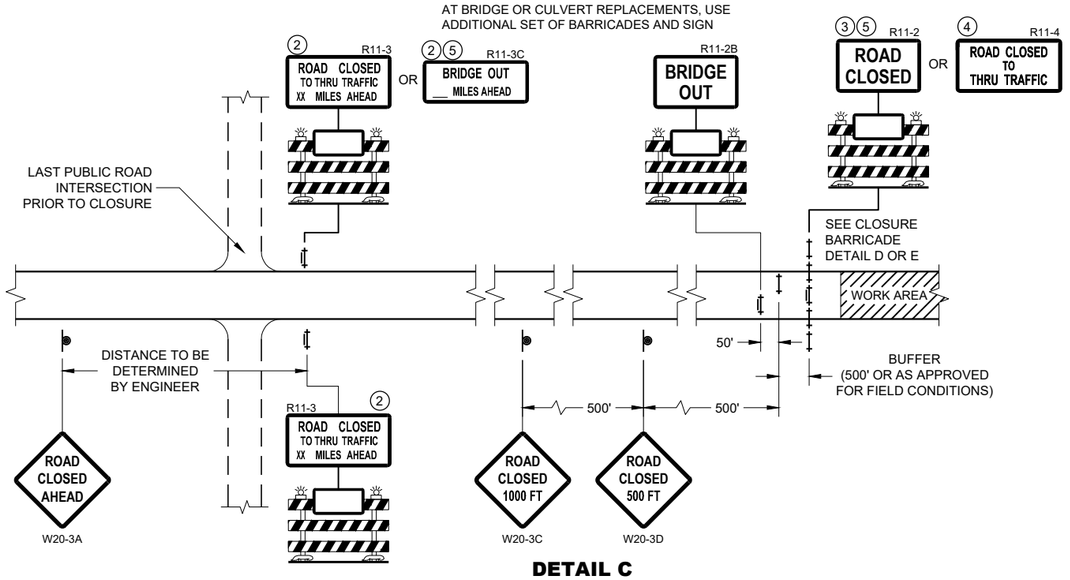


DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

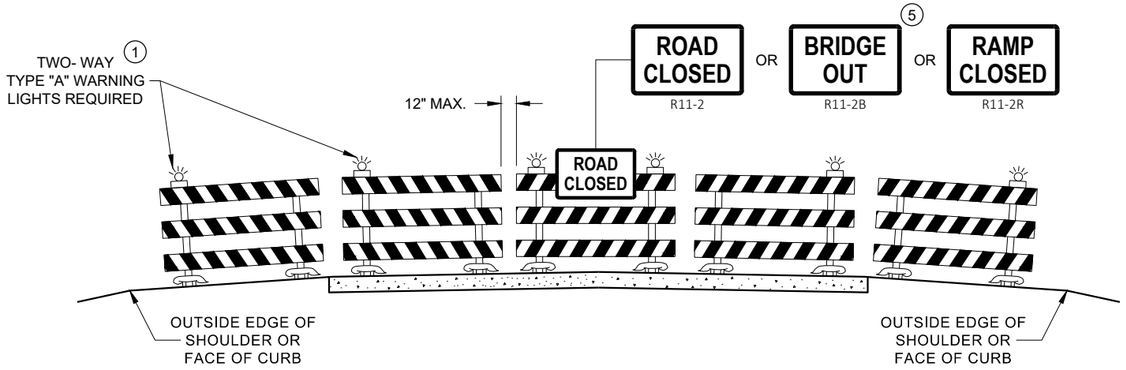
APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

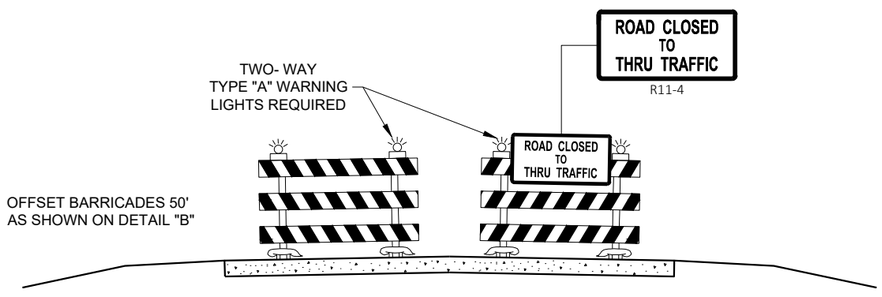
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SDD 15C02 - 09a

SDD 15C02 - 09a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

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

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15C02 - 09b

6

SDD 15C02 - 09b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

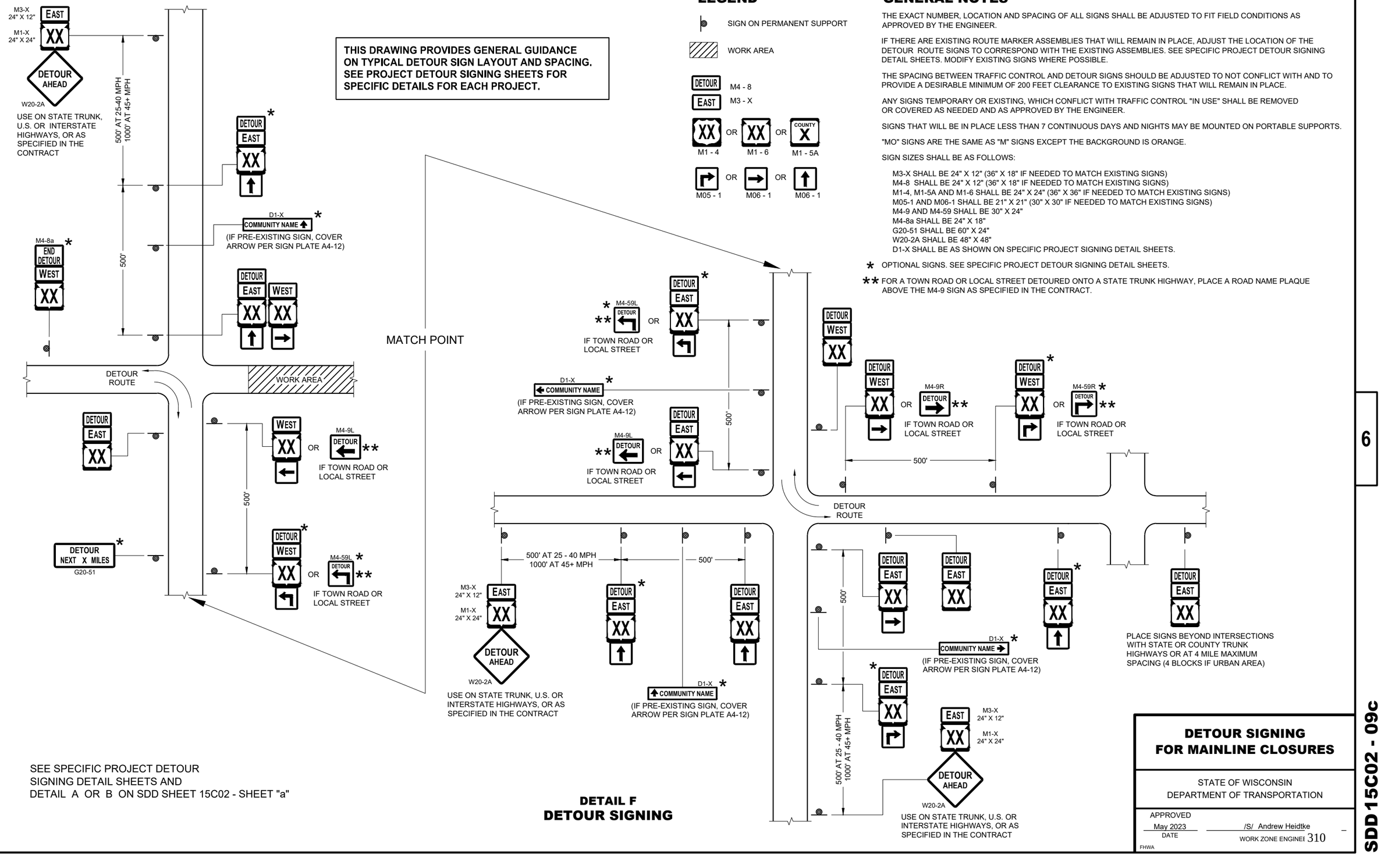
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

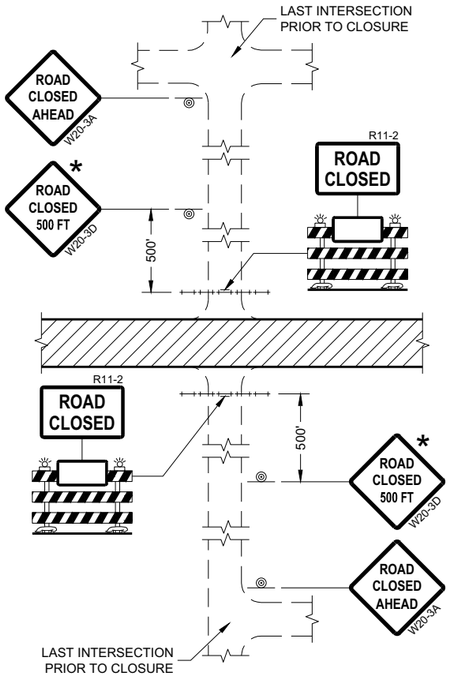
APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

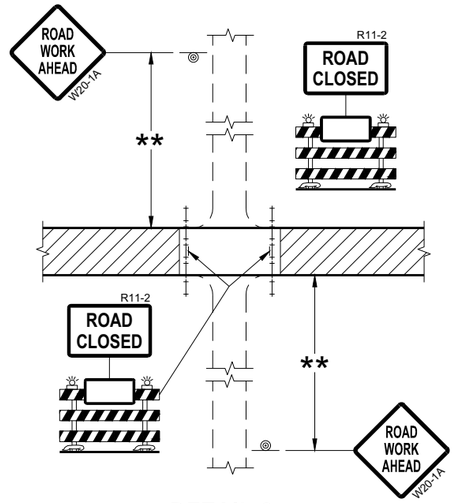
FHWA

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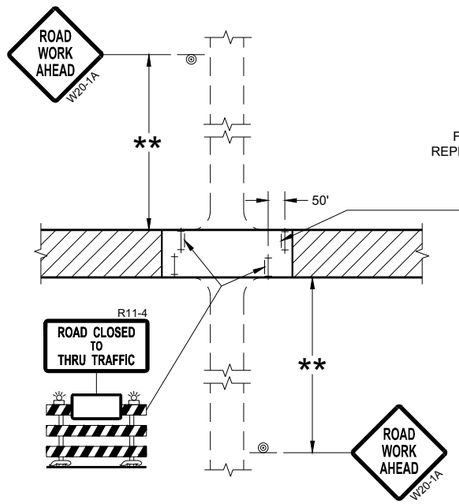
SDD 15C02 - 09c



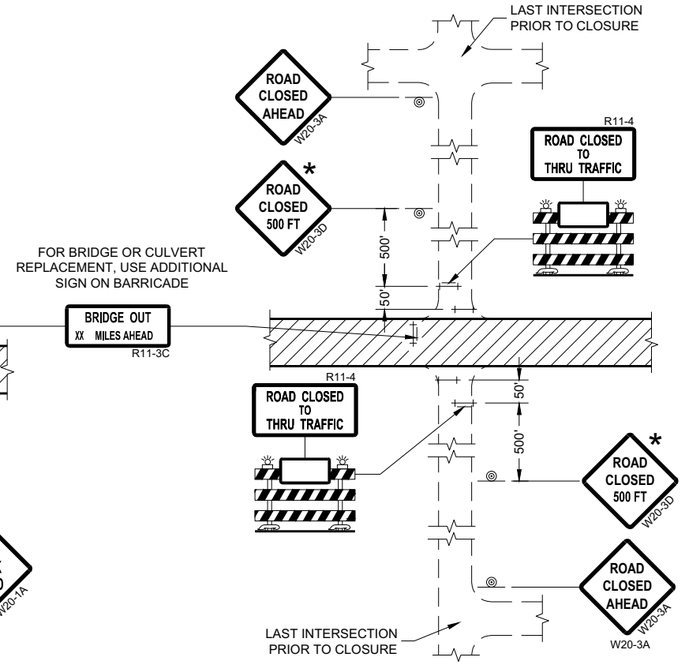
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

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

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

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

THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C03 - 05

6

SDD 15C03 - 05

GENERAL NOTES

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

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

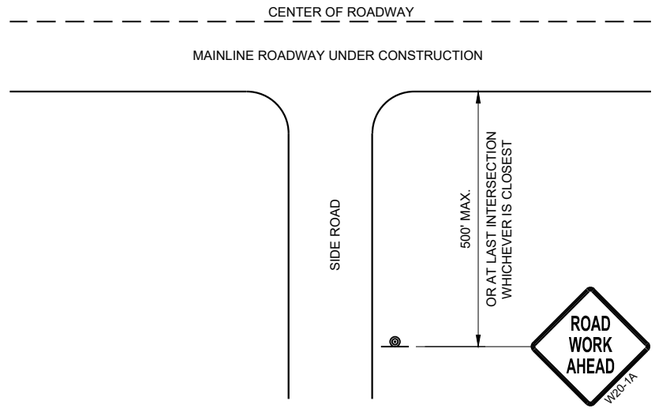
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS

** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



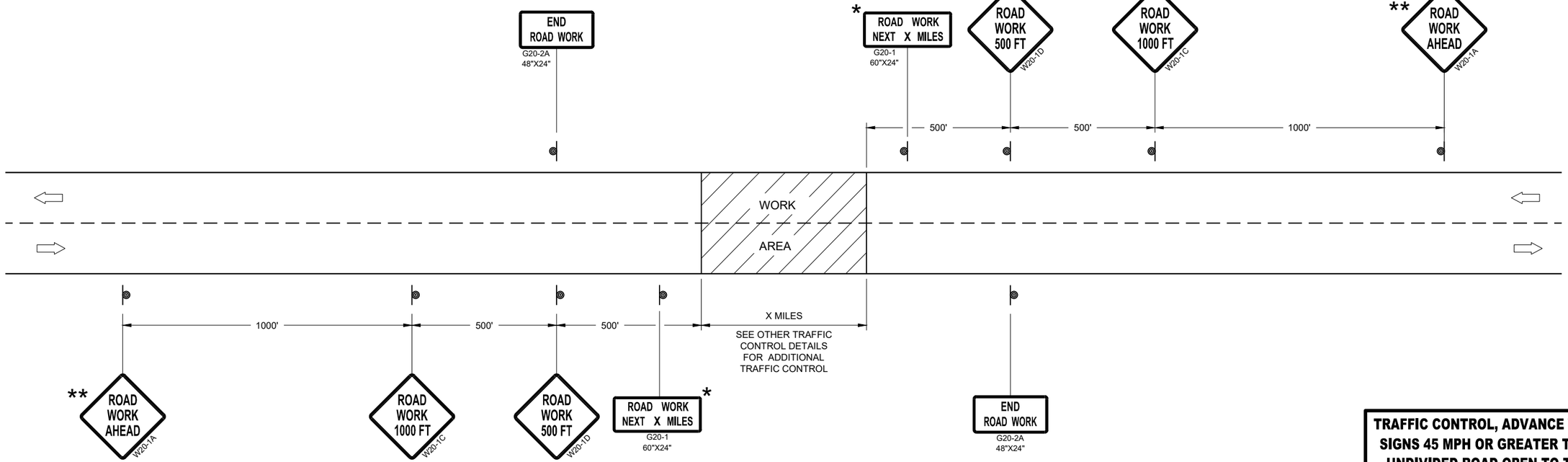
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

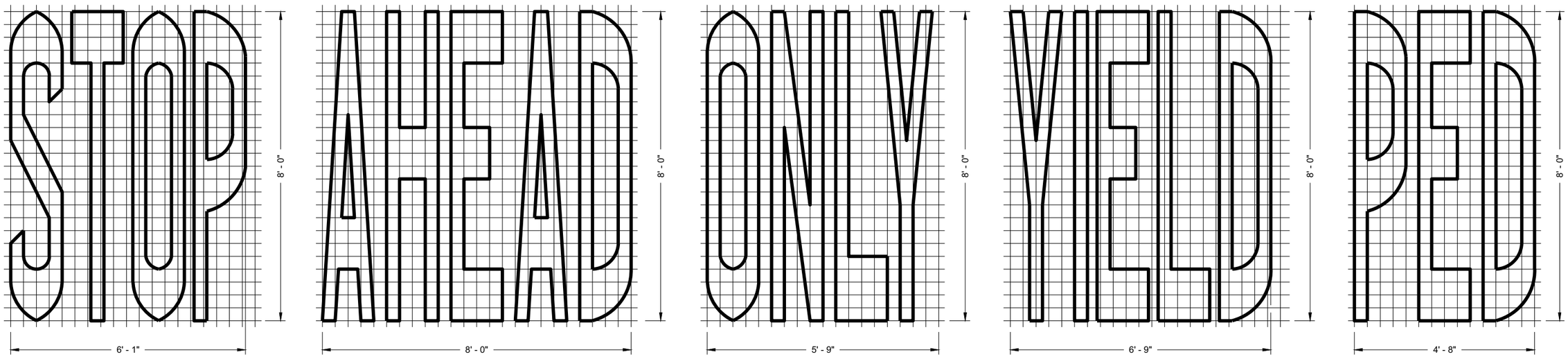
APPROVED
July 2018
DATE

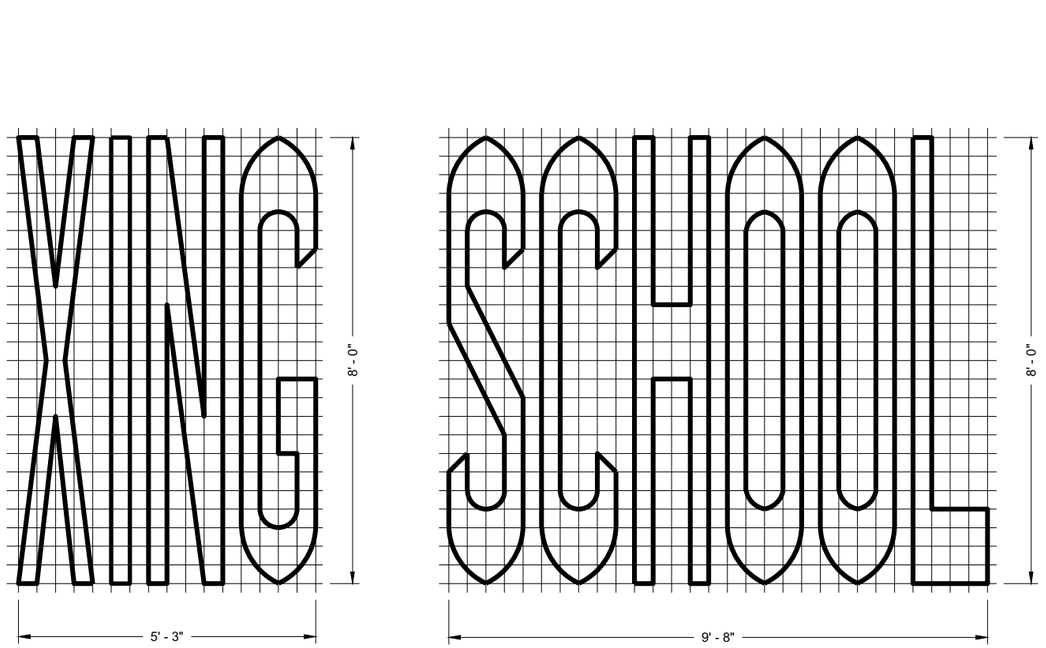
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

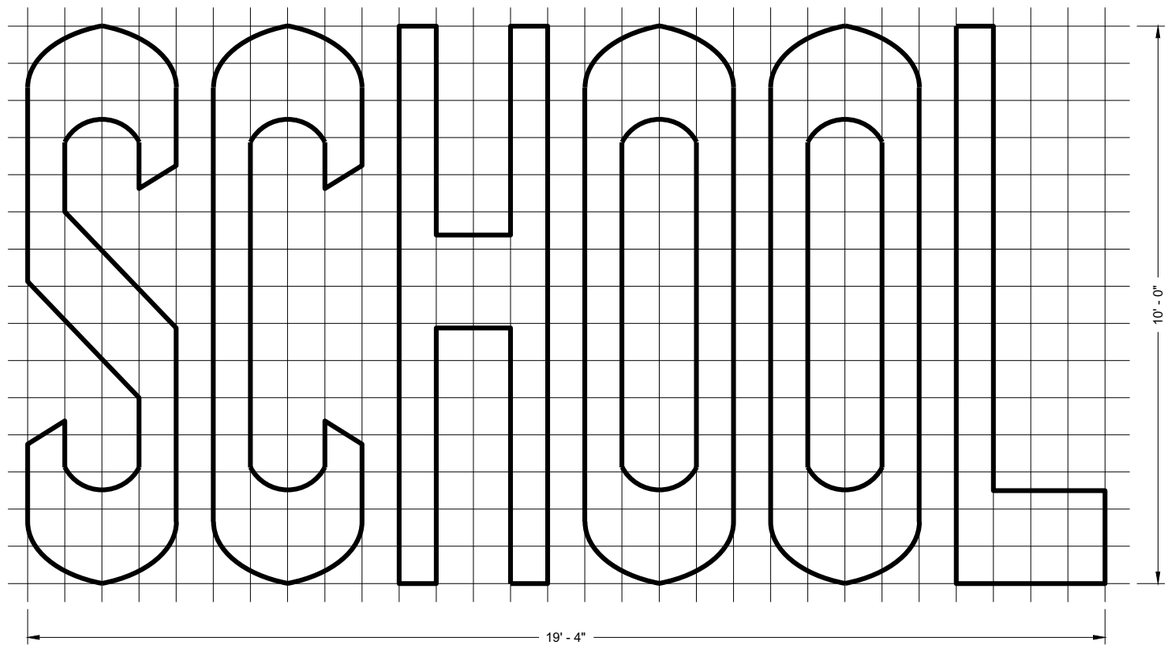
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SDD 15C04 - 05





SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

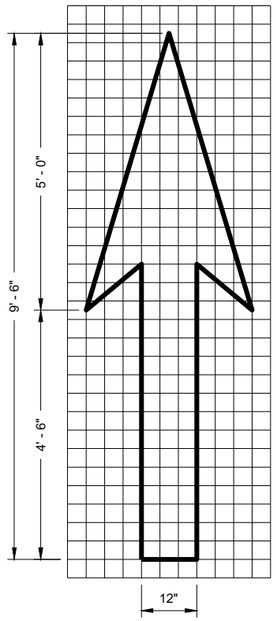
APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

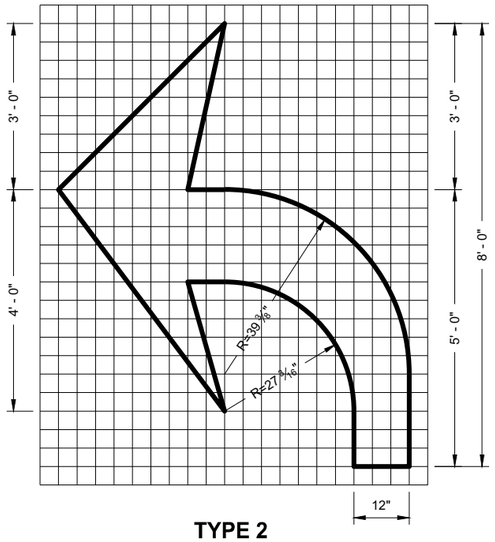
FHWA

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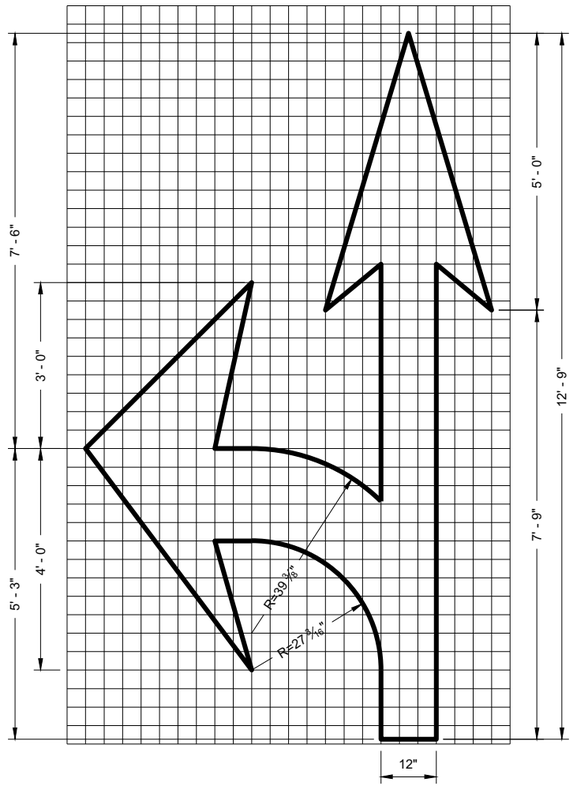
SDD 15C07 - 15b



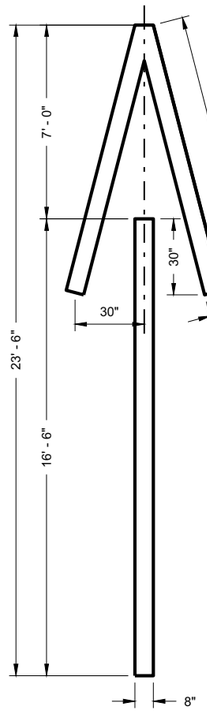
TYPE 1



TYPE 2



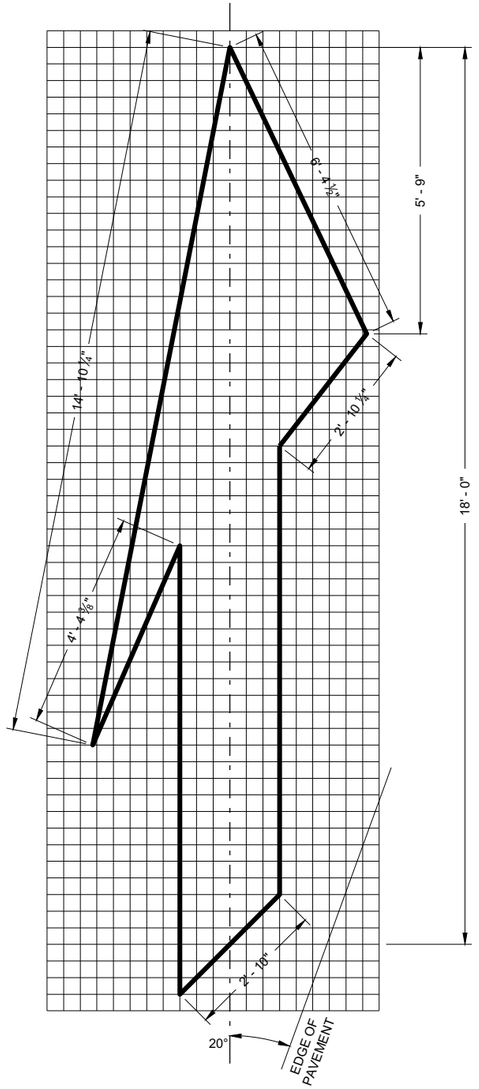
TYPE 3



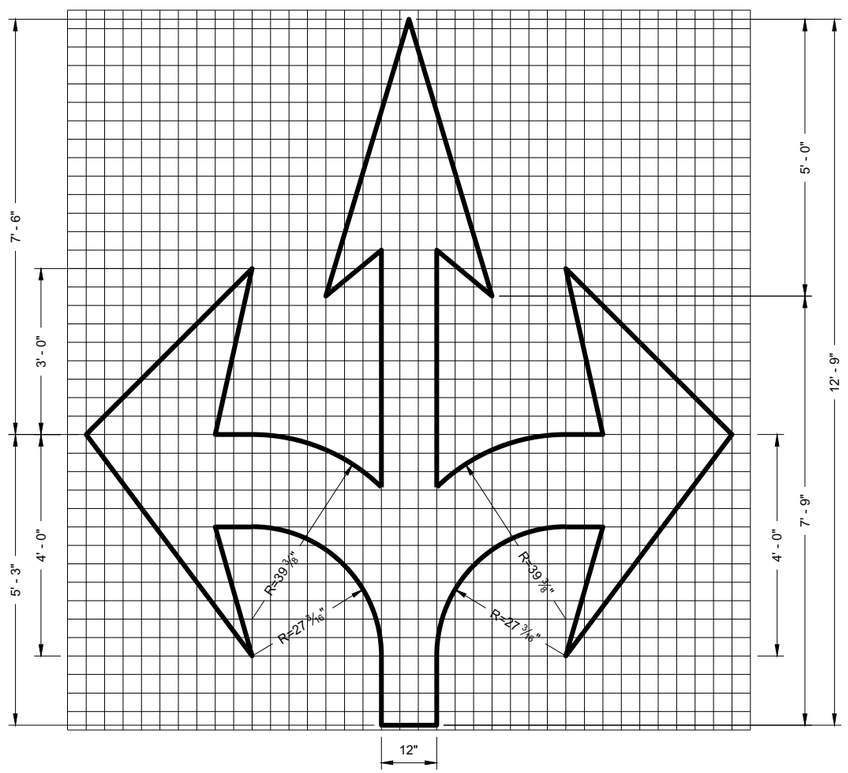
TYPE 4

GENERAL NOTES

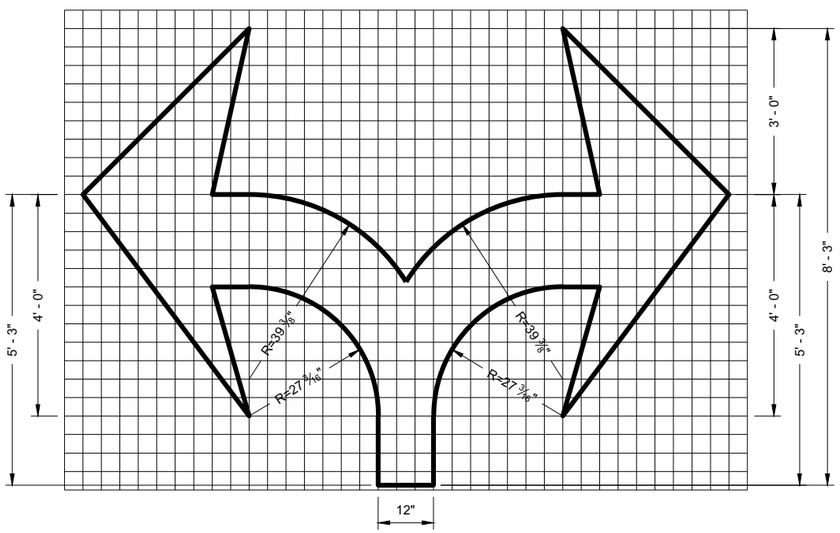
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

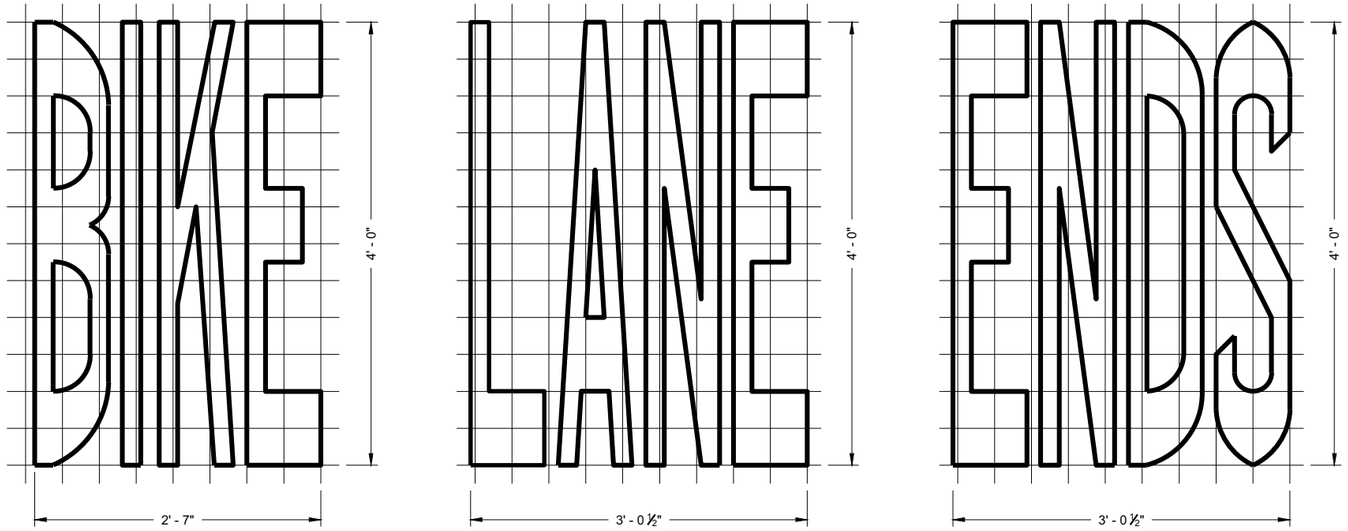
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SDD 15C07 - 15c

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SDD 15C07 - 15c

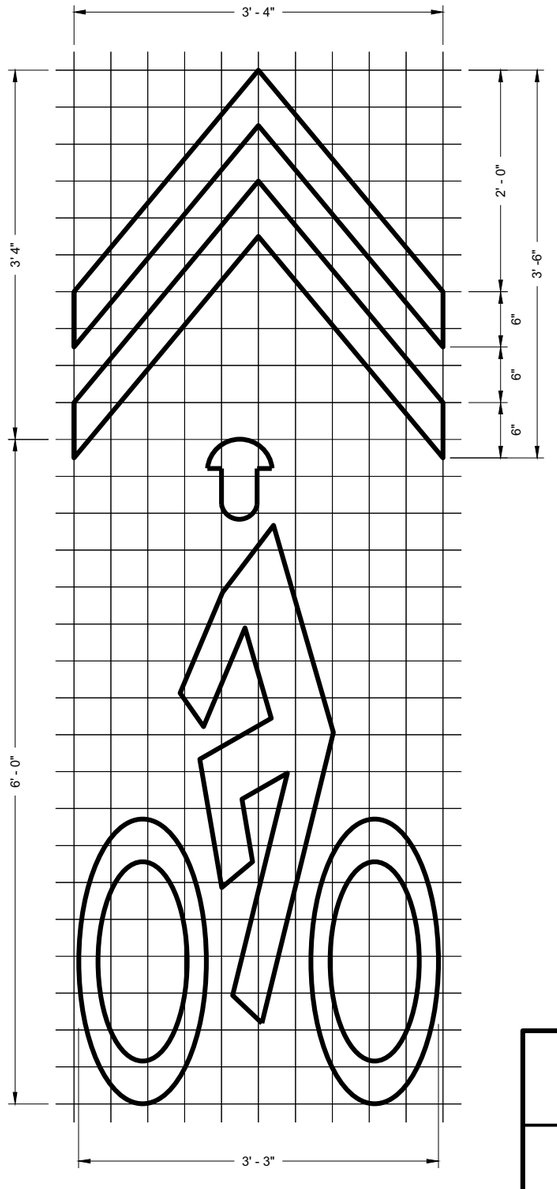
SDD 15C7-e Pavement Marking For Bike Lanes



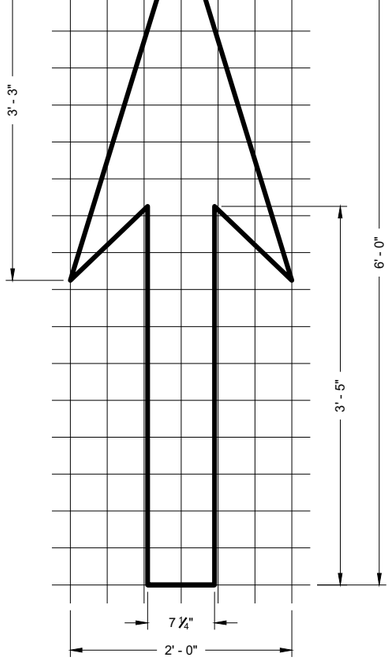
BIKE LANE WORDS

GENERAL NOTES

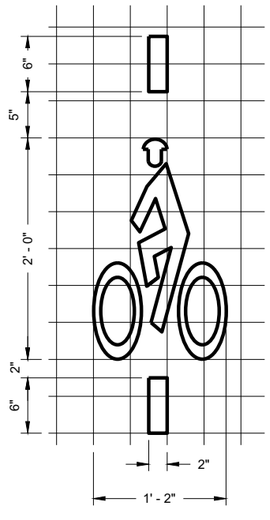
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



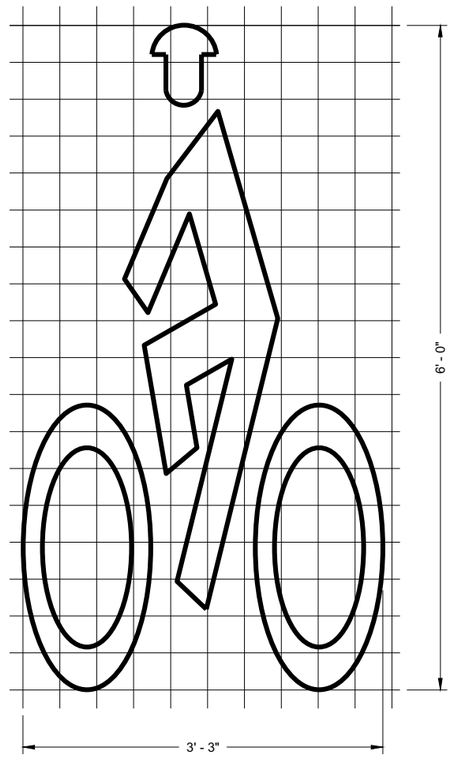
BIKE LANE SYMBOL FOR SHARED LANE



BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING



BIKE LANE SYMBOL

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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SDD 15C07 - 15e

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.

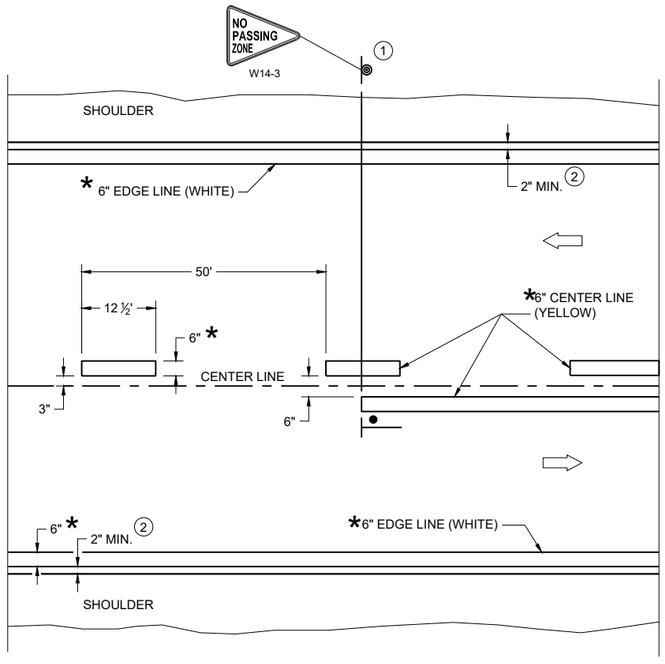
LEGEND

"T" MARKING

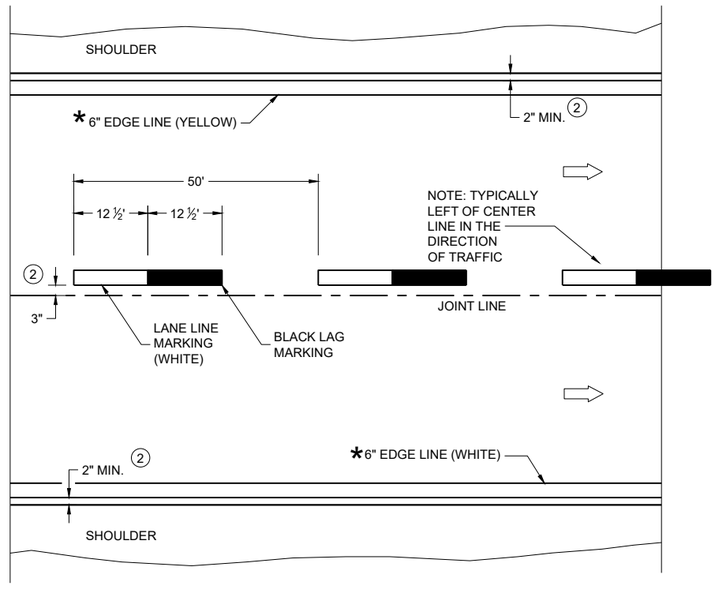
SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

6

SDD 15C08-23a

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

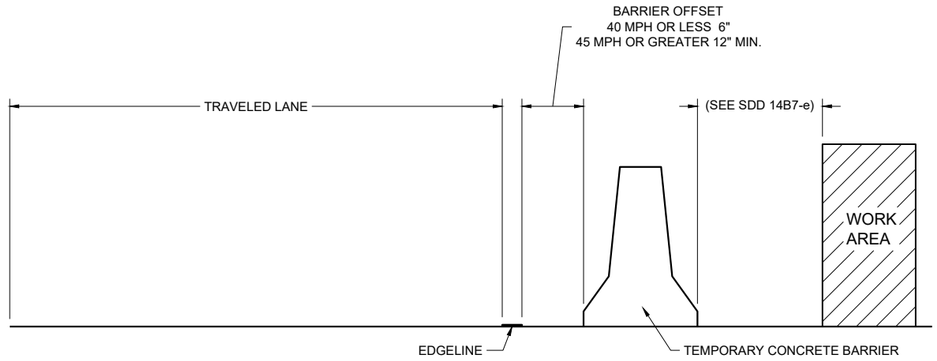
May 2023
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

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SDD 15C08-23a



TEMPORARY BARRIER OFFSET FROM EDGELINE

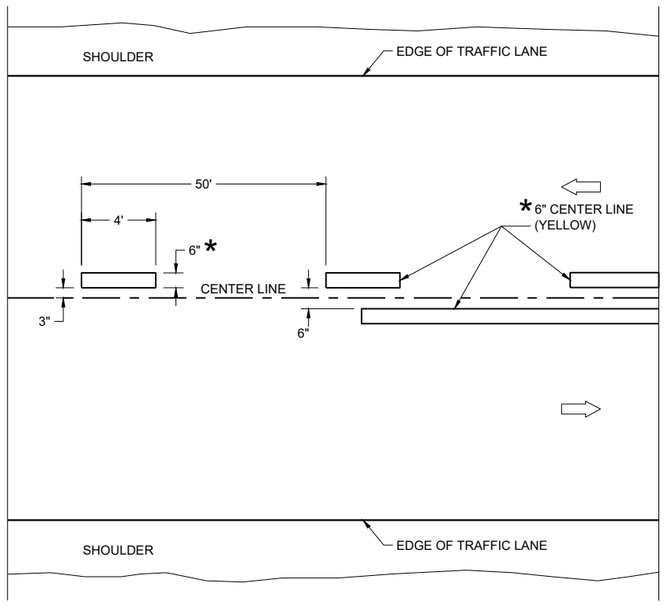
GENERAL NOTES

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

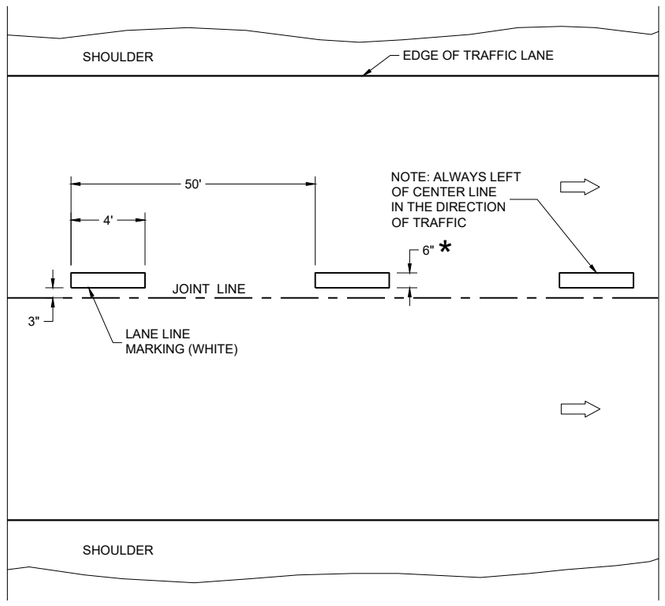
LEGEND

DIRECTION OF TRAFFIC

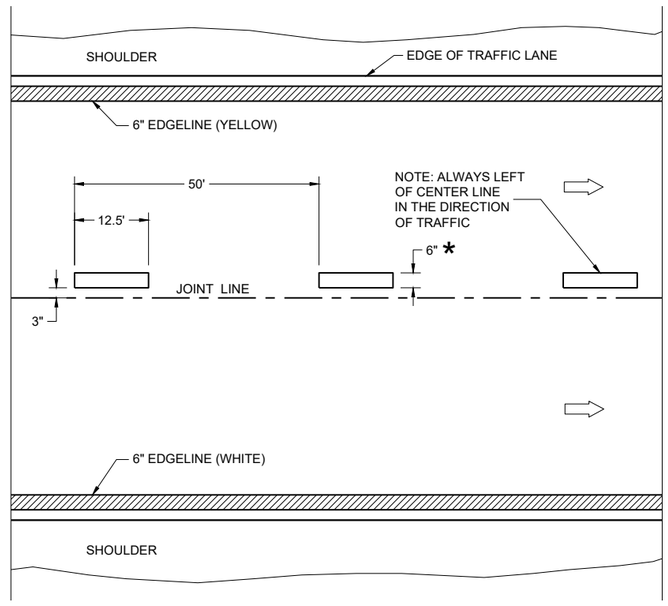
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer
FHWA

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SDD 15C08-23b

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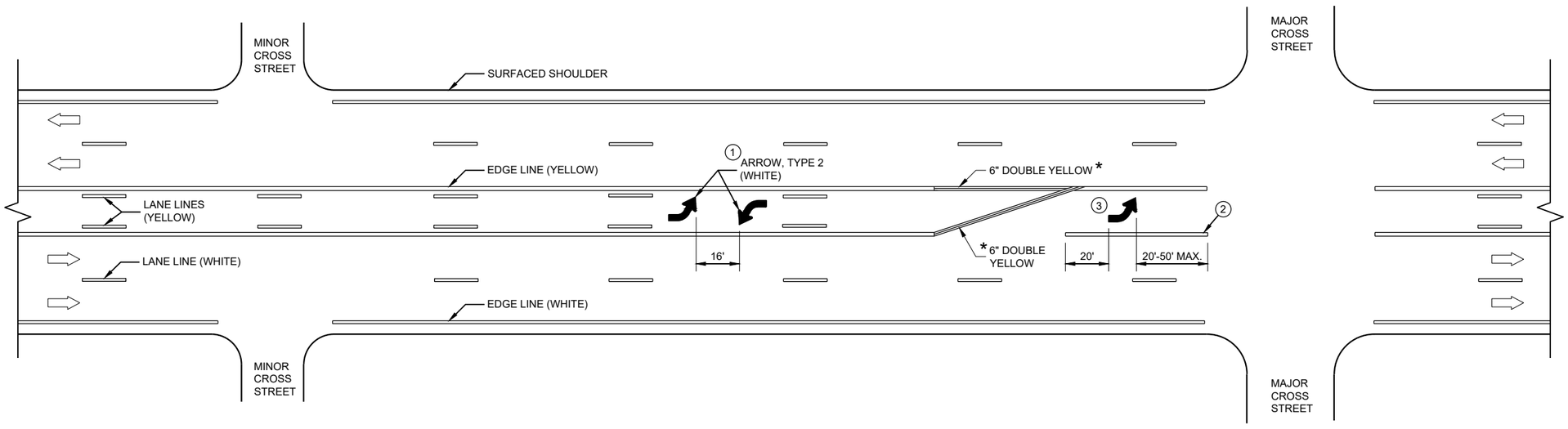
SDD 15C08-23b

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 10" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

⇨ DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



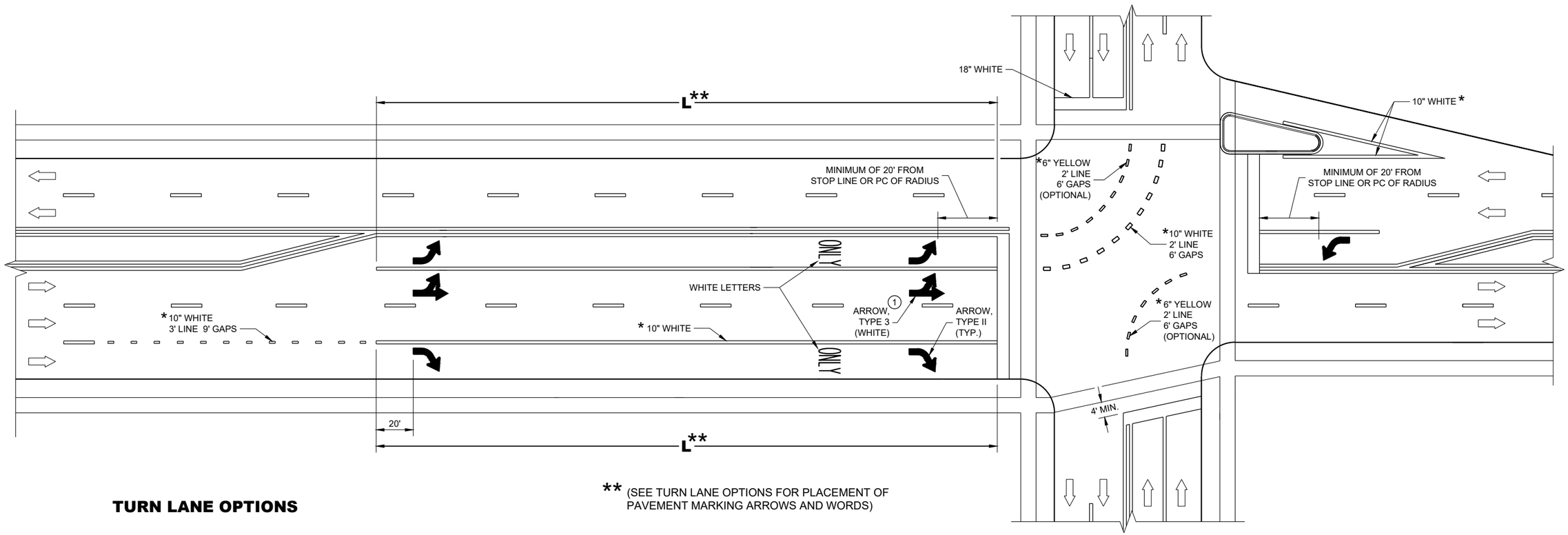
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA· 318

SDD 15C08-23c

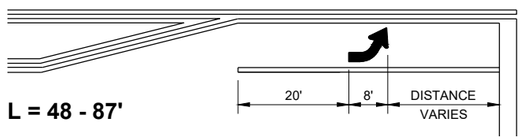
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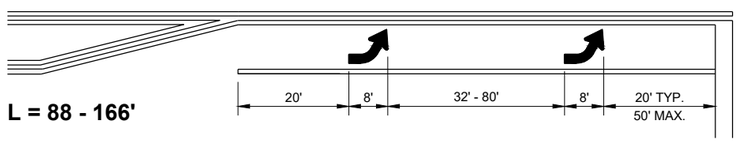
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

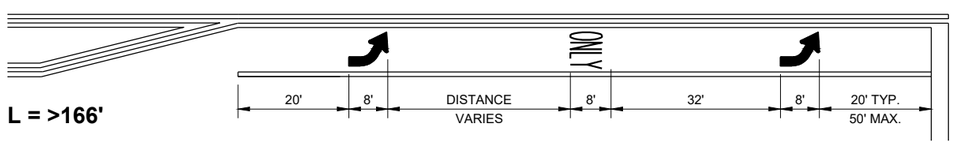
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

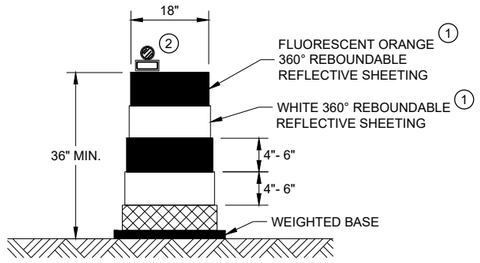
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SDD 15C08-23d

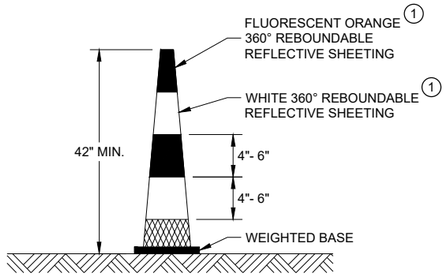
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

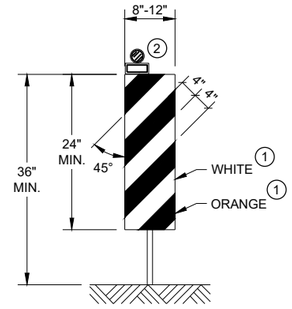
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

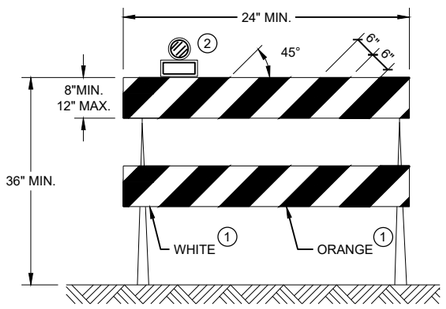
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



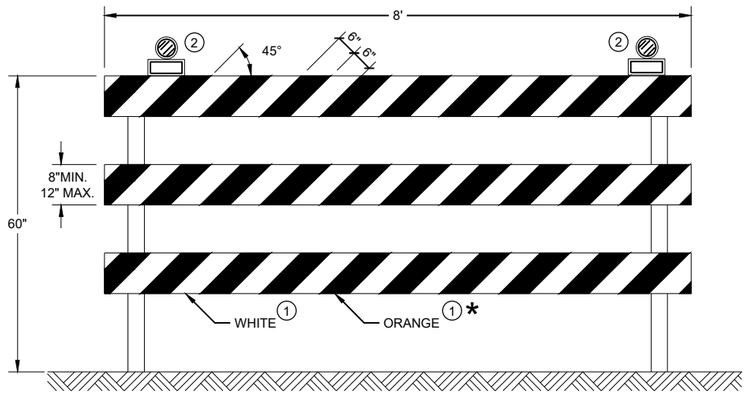
VERTICAL PANEL

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



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

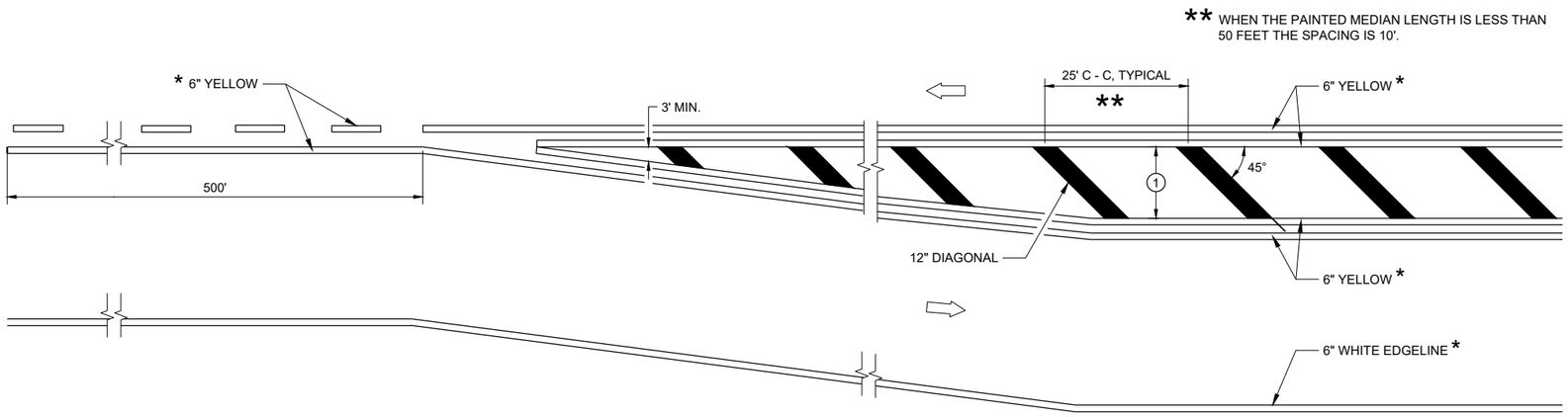
APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C11 - 10b



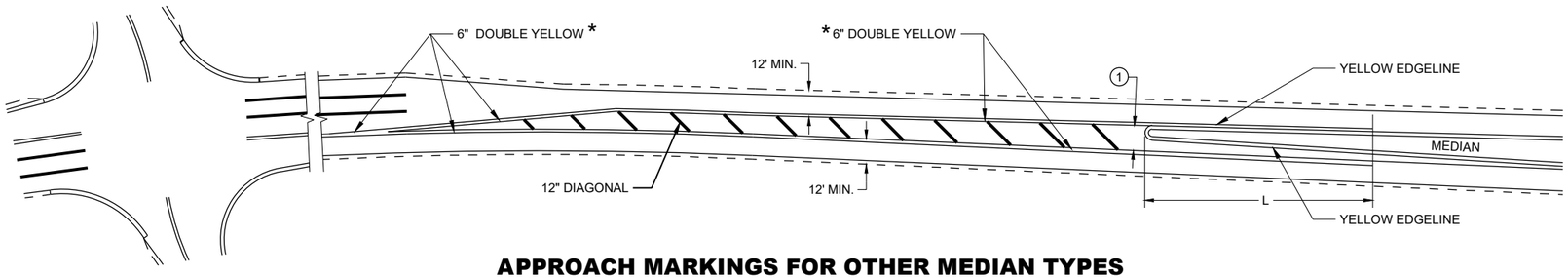
MEDIAN ISLAND DETAIL

GENERAL NOTES

1. DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

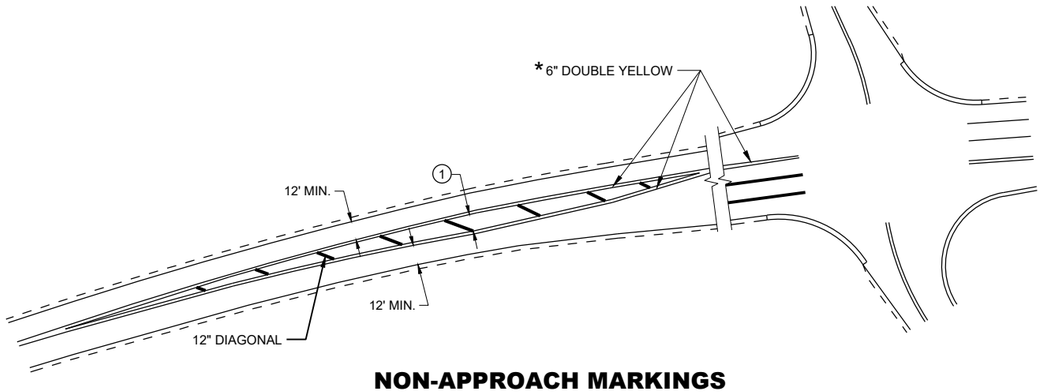
DIRECTION OF TRAVEL

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



APPROACH MARKINGS FOR OTHER MEDIAN TYPES

SPEED LIMIT	L
<35 MPH	5'
35> MPH	50'



NON-APPROACH MARKINGS

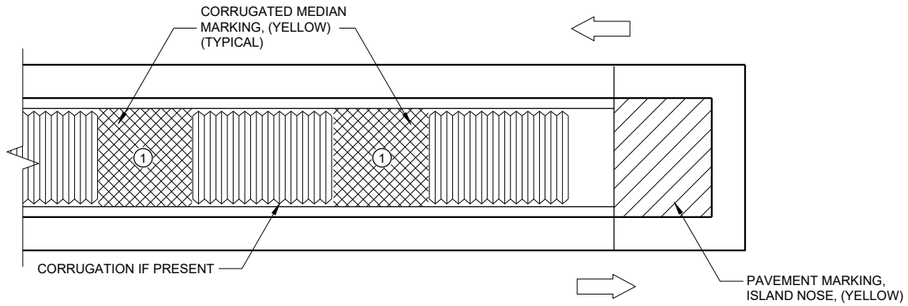
MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

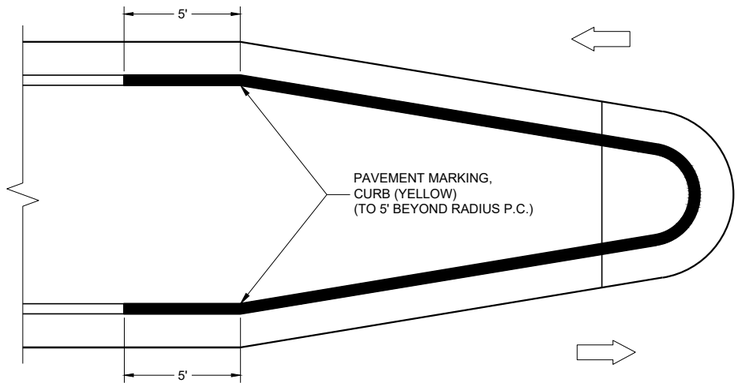
APPROVED
May 2023 — DATE
/S/ Jeannie Silver — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

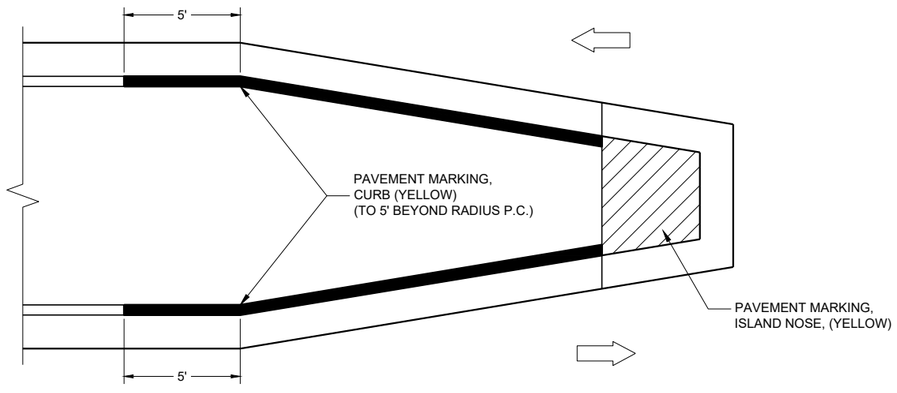
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MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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May 2023 — DATE
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LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (MERGE)

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

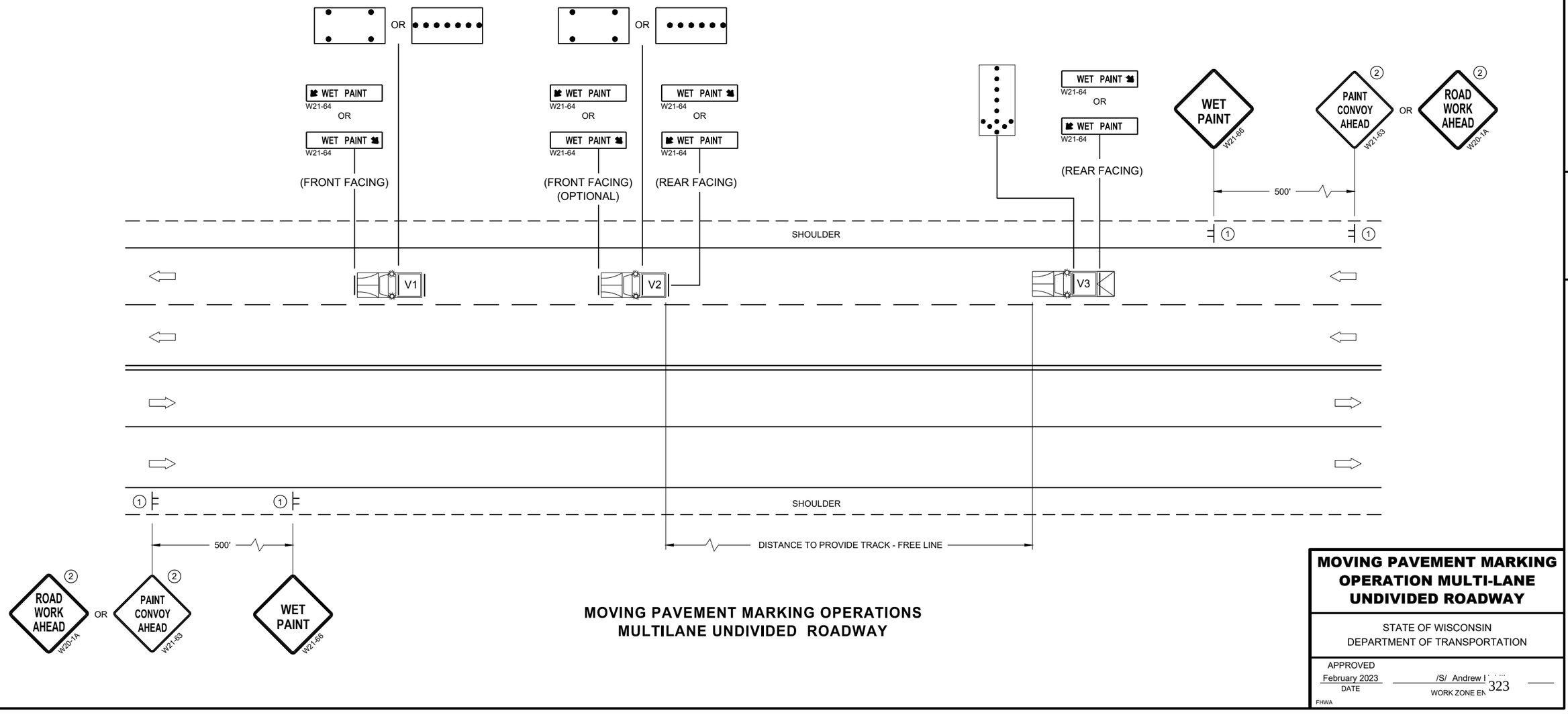
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLES AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL HAVE A MINIMUM HEIGHT OF 28" FOR WET PAVEMENT MARKINGS.

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS
MULTILANE UNDIVIDED ROADWAY

MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE

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LEGEND

V1 MARKING VEHICLE

V2 SHADOW VEHICLE

V3 TRAIL VEHICLE

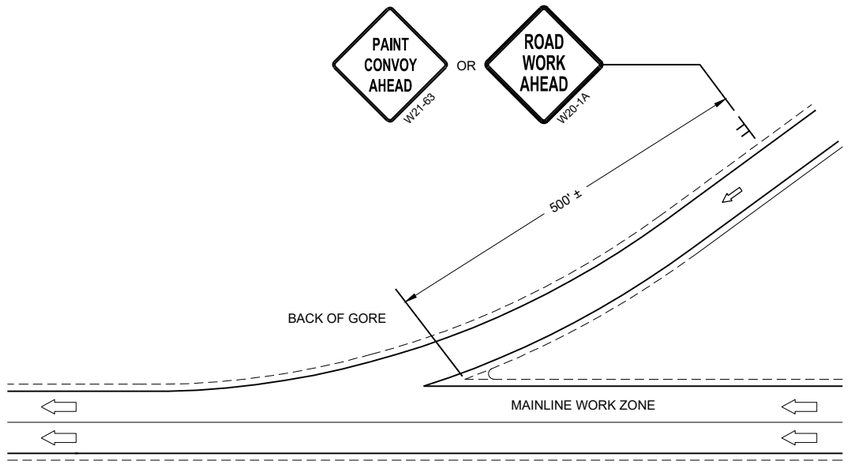
TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (MERGE)

FLASHING ARROW PANEL (CAUTION)



GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

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ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

IF THE SHOULDER IS TOO NARROW TO ACCOMMODATE THE LAST TRAILING VEHICLE, THE VEHICLE SHOULD STRADDLE THE EDGE LINE.

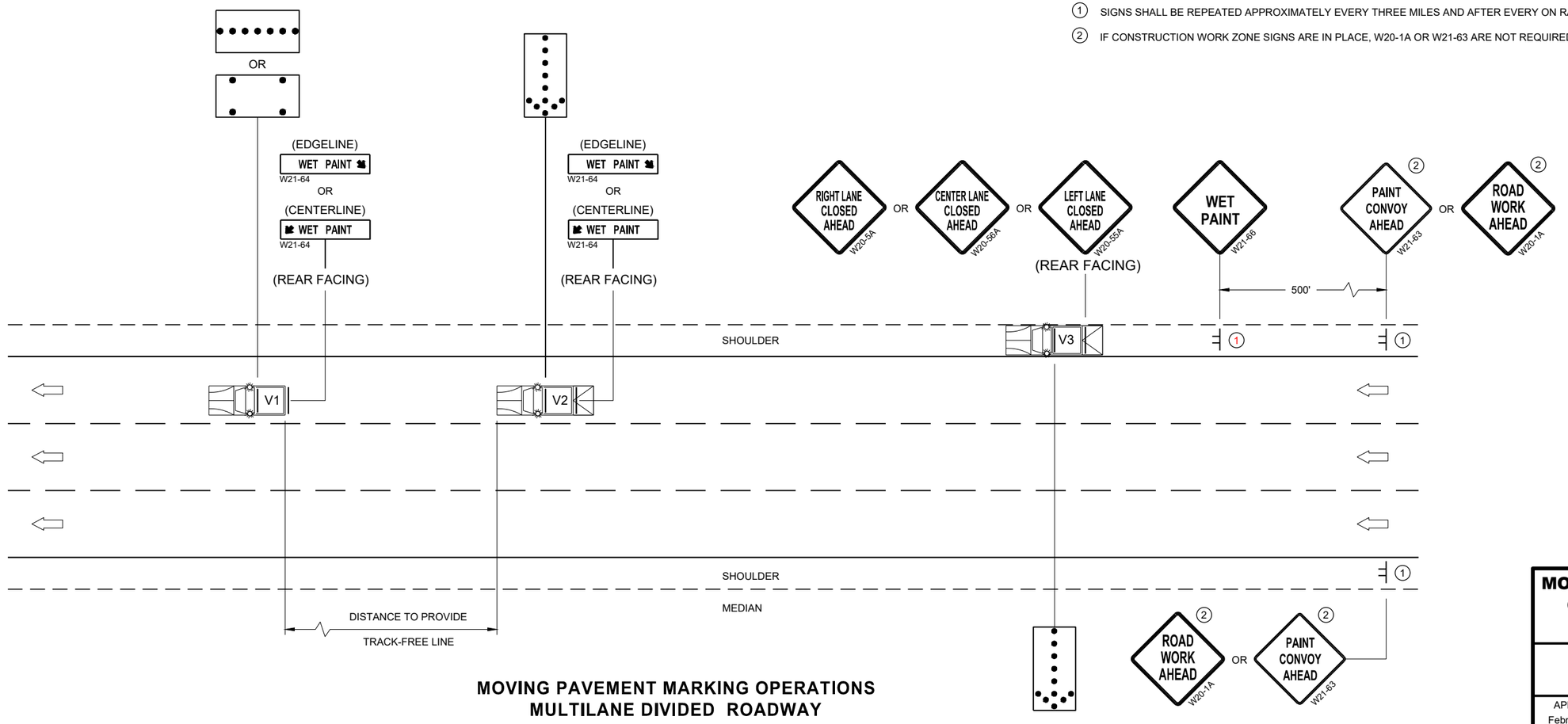
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM HEIGHT OF 28" FOR WET PAVEMENT MARKINGS

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY ON RAMP.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS
MULTILANE DIVIDED ROADWAY

MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE

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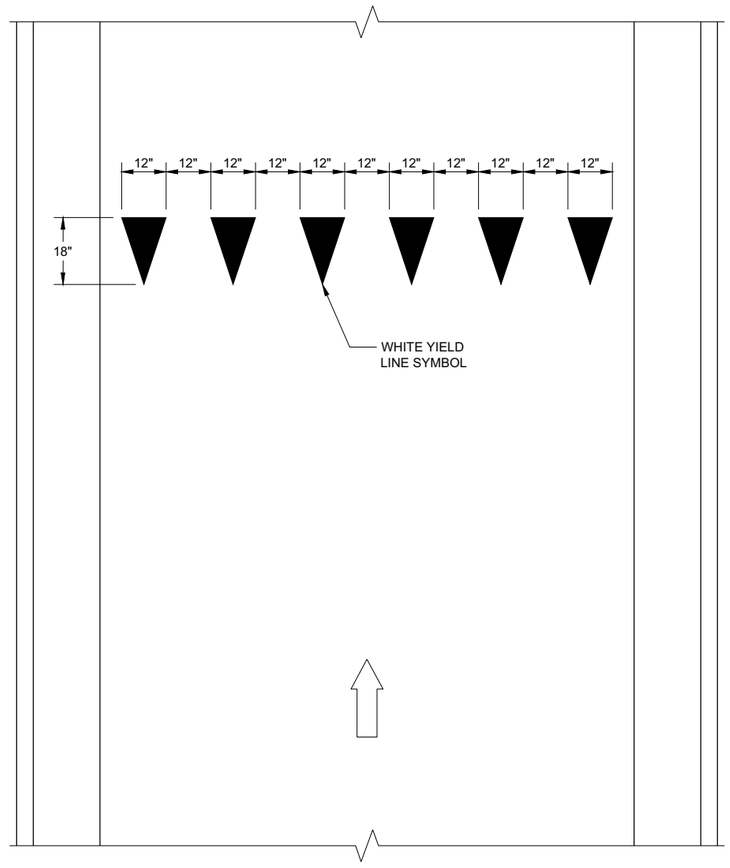
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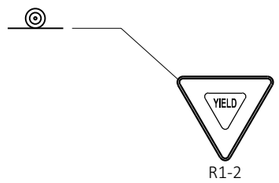


YIELD LINE

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL



R1-2

YIELD MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-81-2016
DATE

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

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SDD 15C20 - 02

GENERAL NOTES

SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

(1) USED ONLY WHEN APPROVED BY REGION TRAFFIC ENGINEER.

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

** SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT PLACEMENT.

*** IF POSTED SPEED IS 45 MPH OR GREATER, PLACE W5-54 SIGN UNDER R4-7 SIGN. MOUNT W5-54 SIGN AT 4' MOUNTING HEIGHT (TOP OF ROADWAY TO BOTTOM OF SIGN).

LEGEND

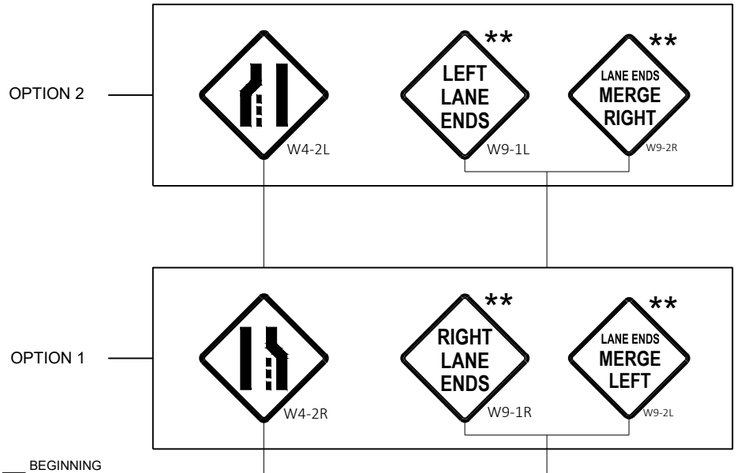
A DISTANCE DEPENDENT ON SPEED (SEE TABLE)

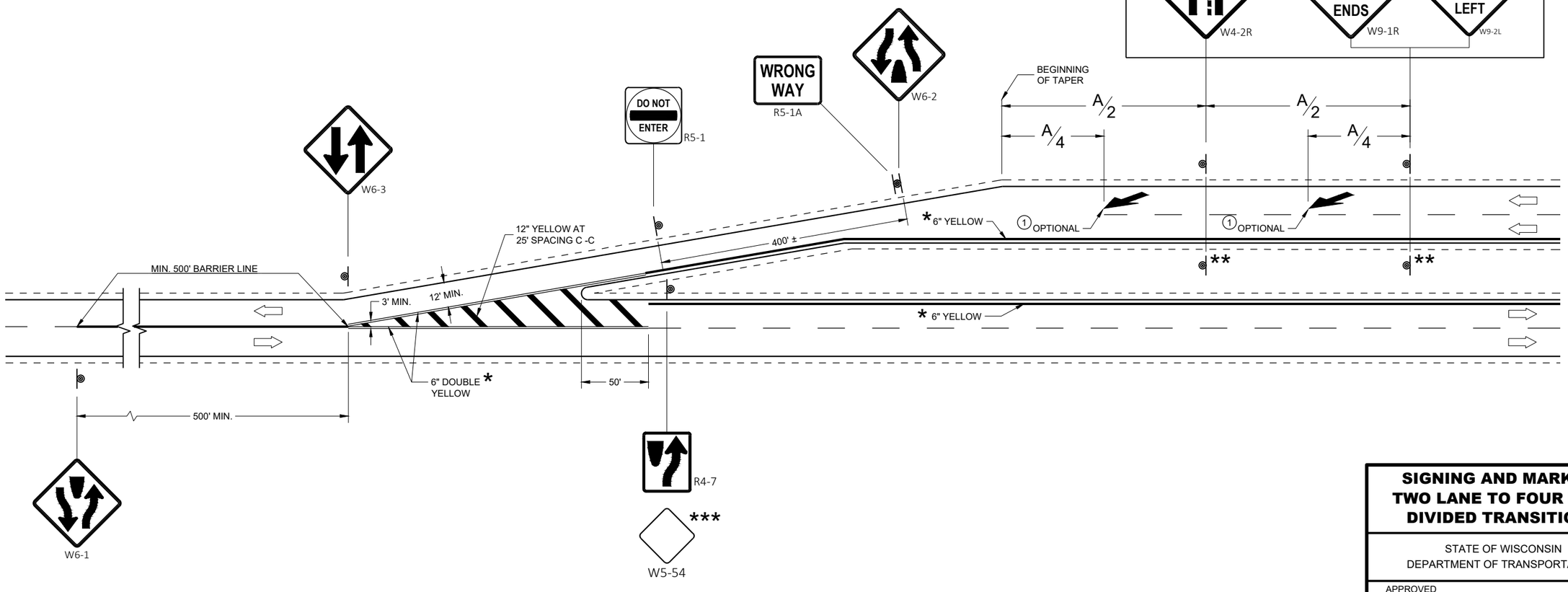
SIGN MOUNTED ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
25	325'
30	460'
35	565'
40	670'
45	775'
50	885'
55	990'
65	1200'
70	1250'





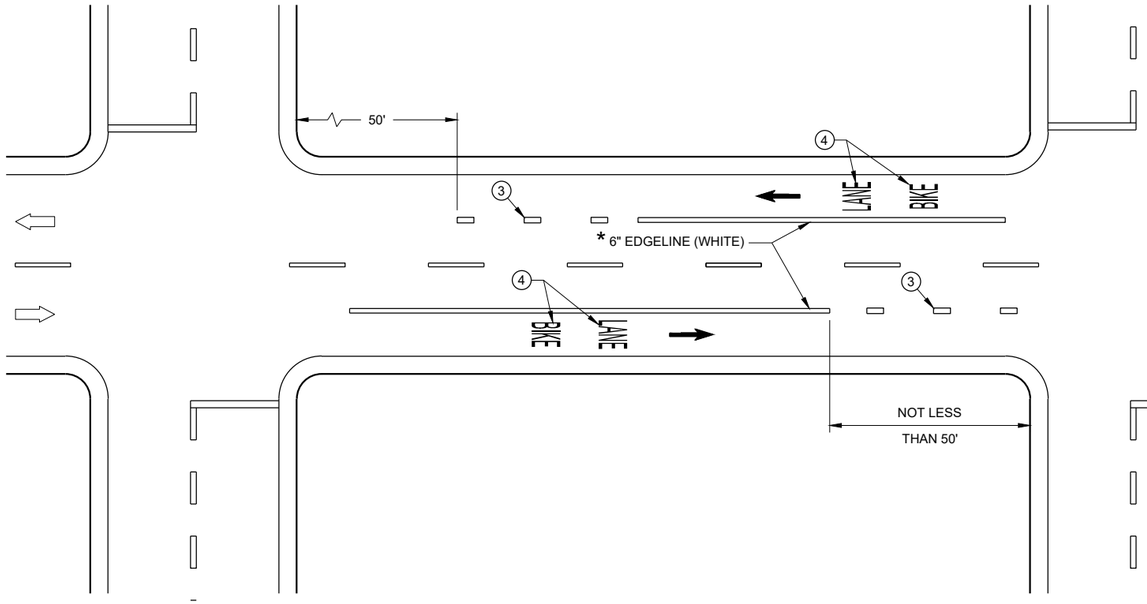
SIGNING AND MARKING TWO LANE TO FOUR LANE DIVIDED TRANSITIONS

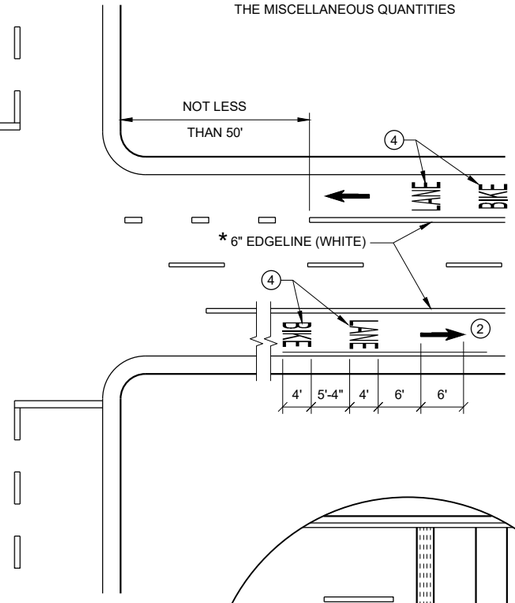
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAR ENGINEER

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SDD 15C21-11



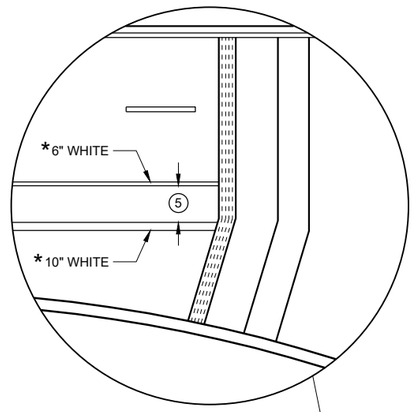


GENERAL NOTES

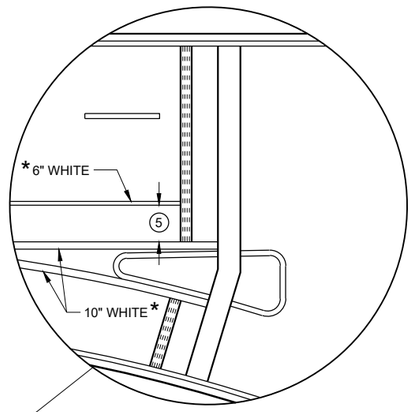
1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. MINIMUM OF ONE PER BLOCK. MAXIMUM OF 250 FEET.
3. DOTTED LINES (3' LINE, 9' GAP) SHOULD BE USED 50 FEET TO 200 FEET IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. BIKE SYMBOLS OR WORDS MAY BE USED.
5. BIKE ACCOMMODATION IS TYPICAL 5 FEET WIDE AND MINIMUM OF 4 FEET FROM A LONGITUDINAL JOINT. USE 5 FEET AT ≥ 45 MPH.
6. OMIT THESE MARKINGS FOR WIDER TURN LANE APPLICATIONS (MINIMUM OF 15 FOOT WIDE TURN LANE).
7. REFER TO CONTRACT PLANS FOR LANE WIDTH.

DIRECTION OF TRAVEL

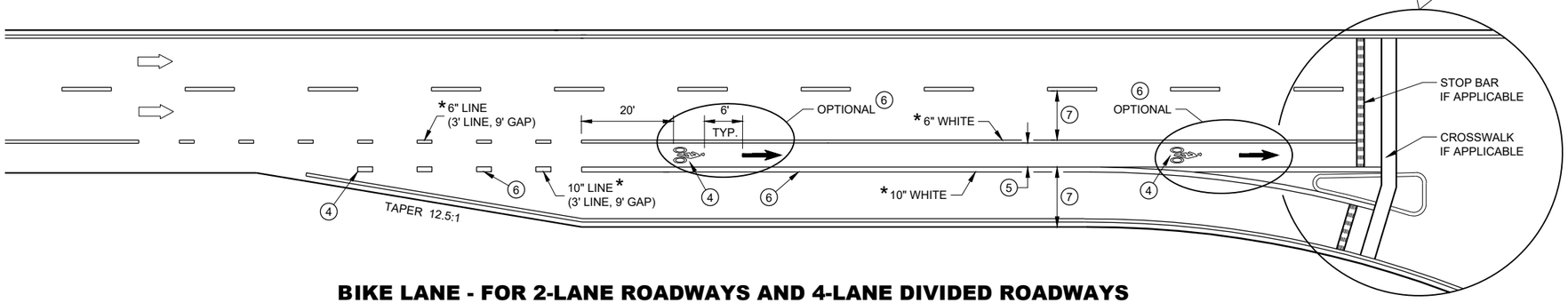
DESIGNATED BIKE LANE - NO PARKING



4 LANE DIVIDED WITHOUT ISLAND



4 LANE DIVIDED WITH ISLAND



BIKE LANE - FOR 2-LANE ROADWAYS AND 4-LANE DIVIDED ROADWAYS
(4-LANE DIVIDED WITH RIGHT TURN LANE SHOWN)

BIKE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER
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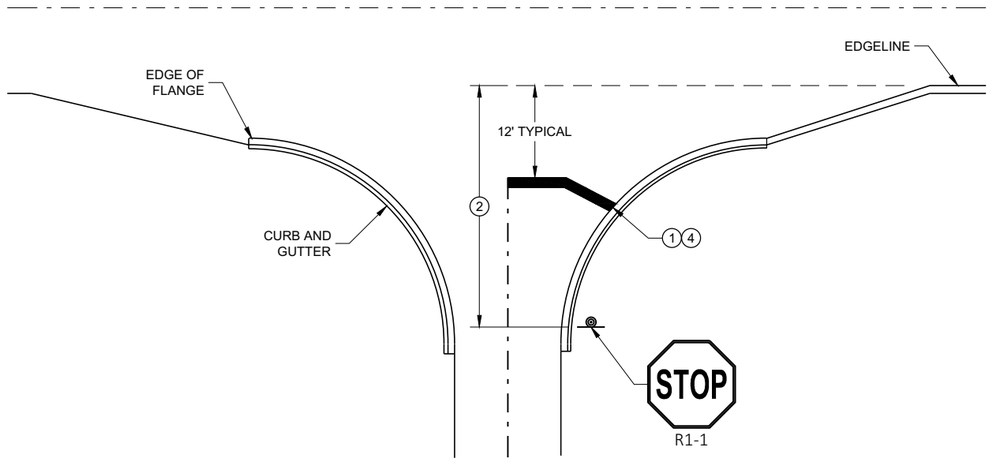
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SDD 15C29-08a

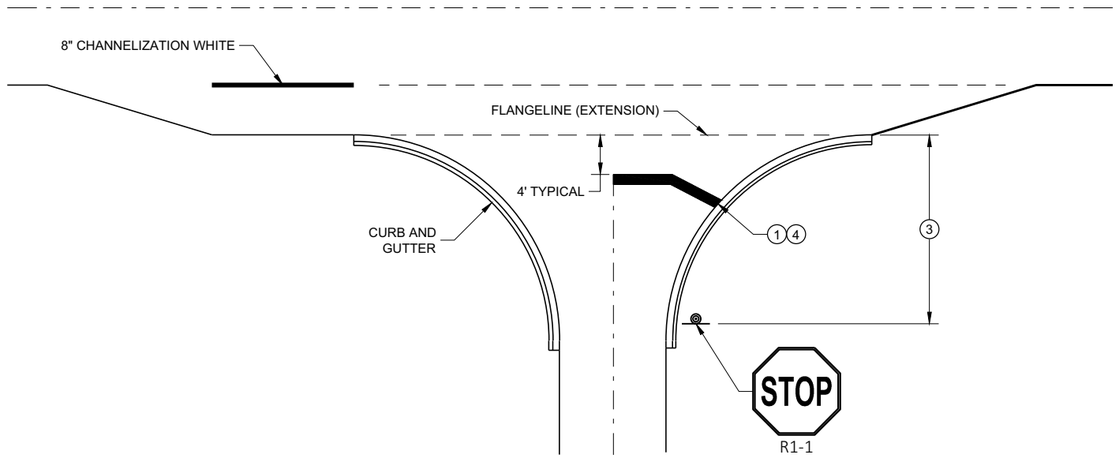
GENERAL NOTES

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

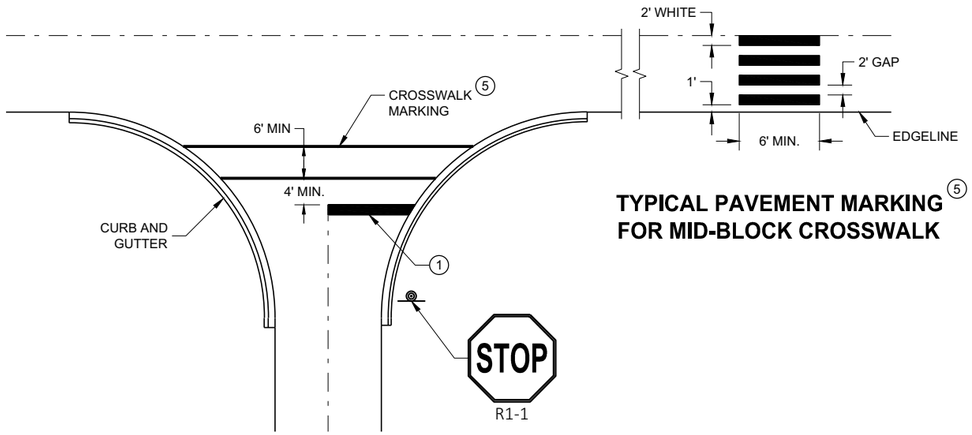
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE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

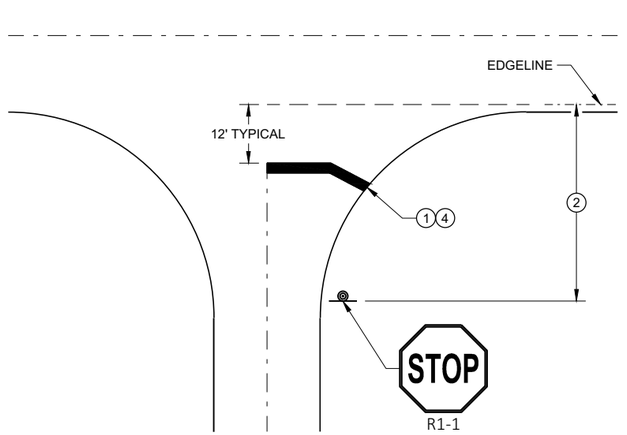


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING

TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

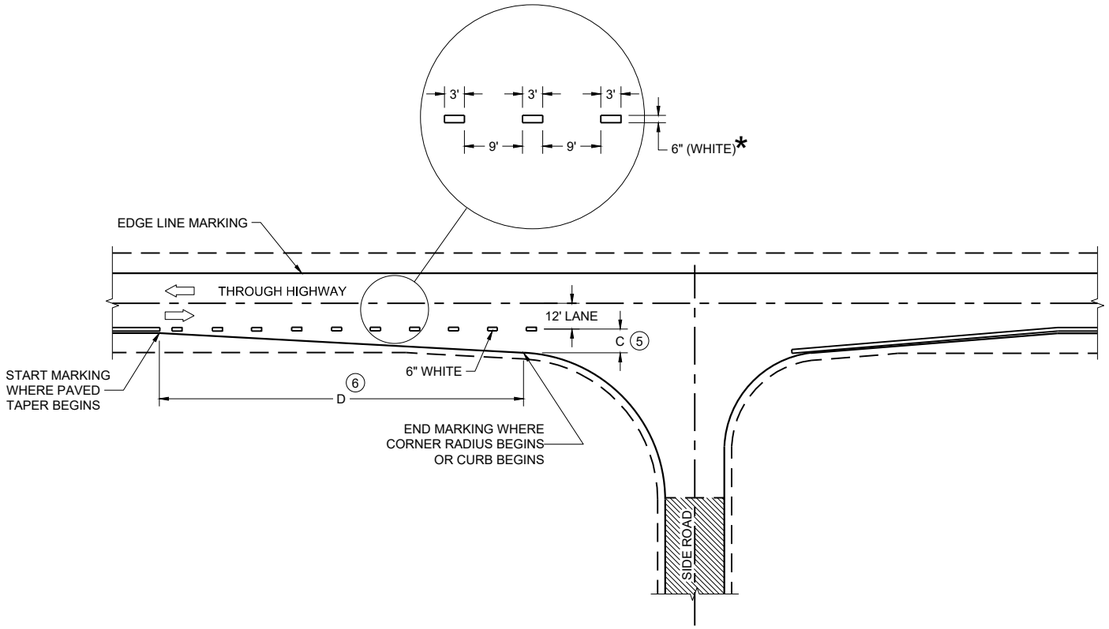
FHWA

6

SDD 15C33 - 04

6

SDD 15C33 - 04



MINOR INTERSECTION

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

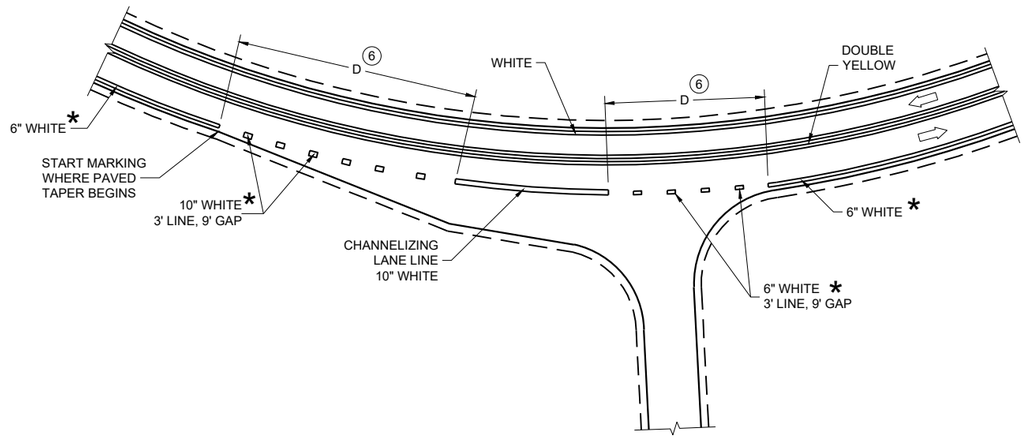
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

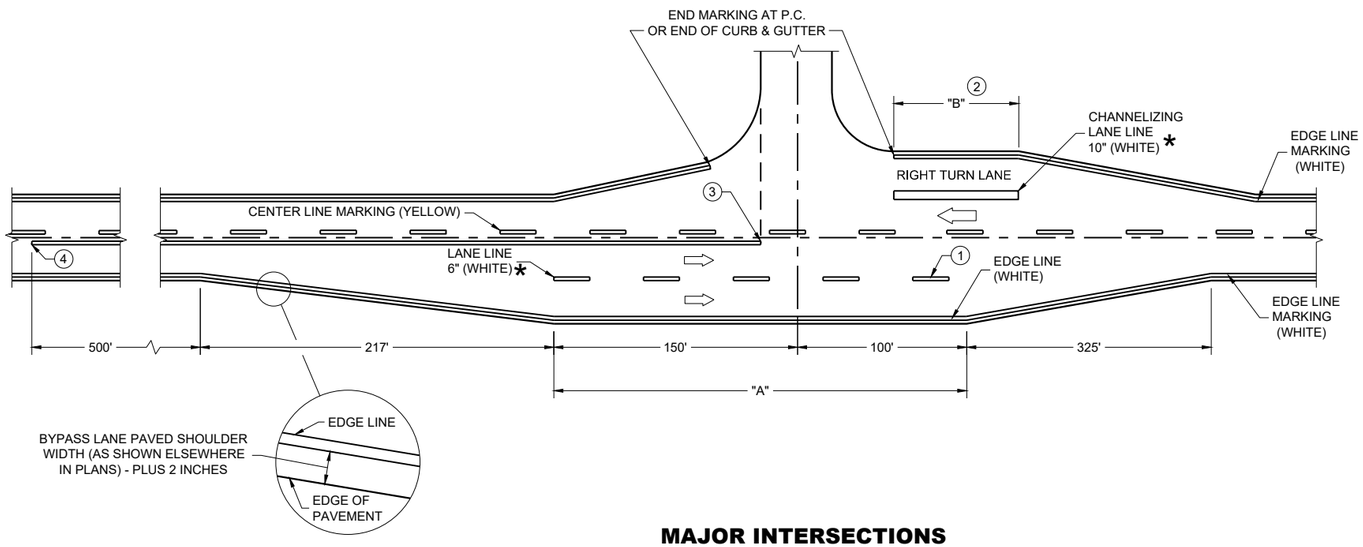
1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
6. WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

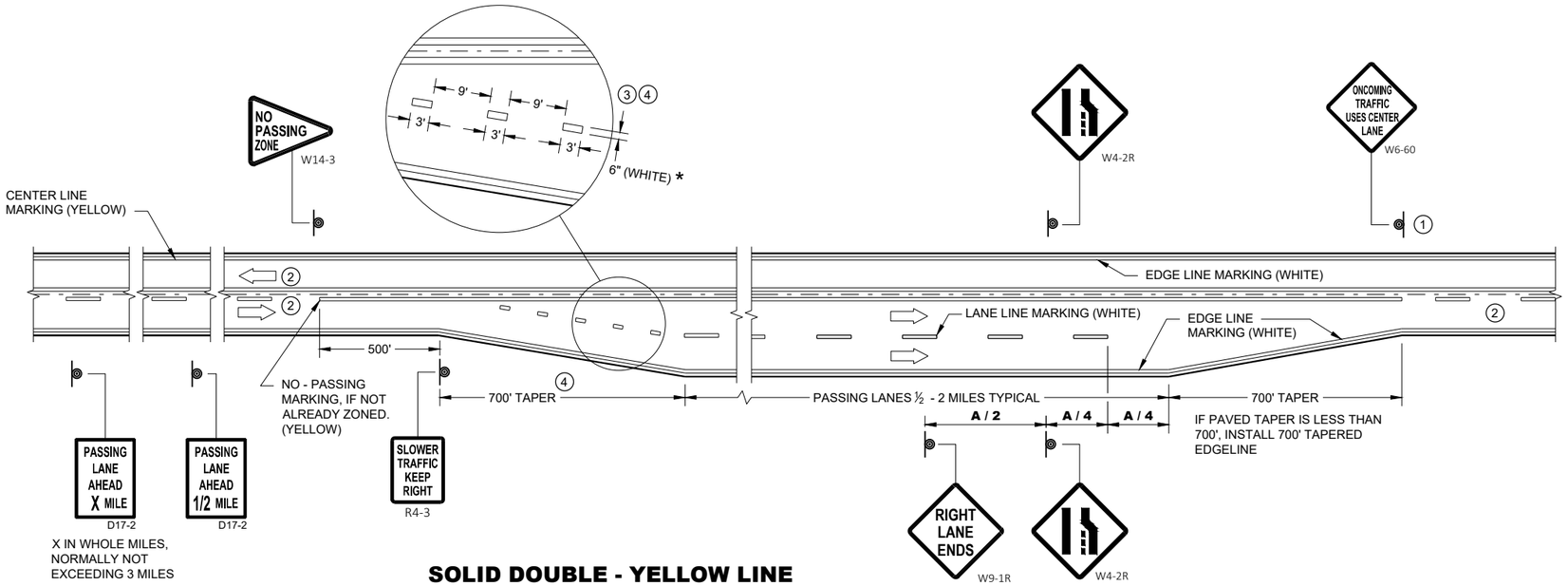


MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



SOLID DOUBLE - YELLOW LINE
(THROUGHOUT ENTIRE PASSING / CLIMBING LANE)

GENERAL NOTES

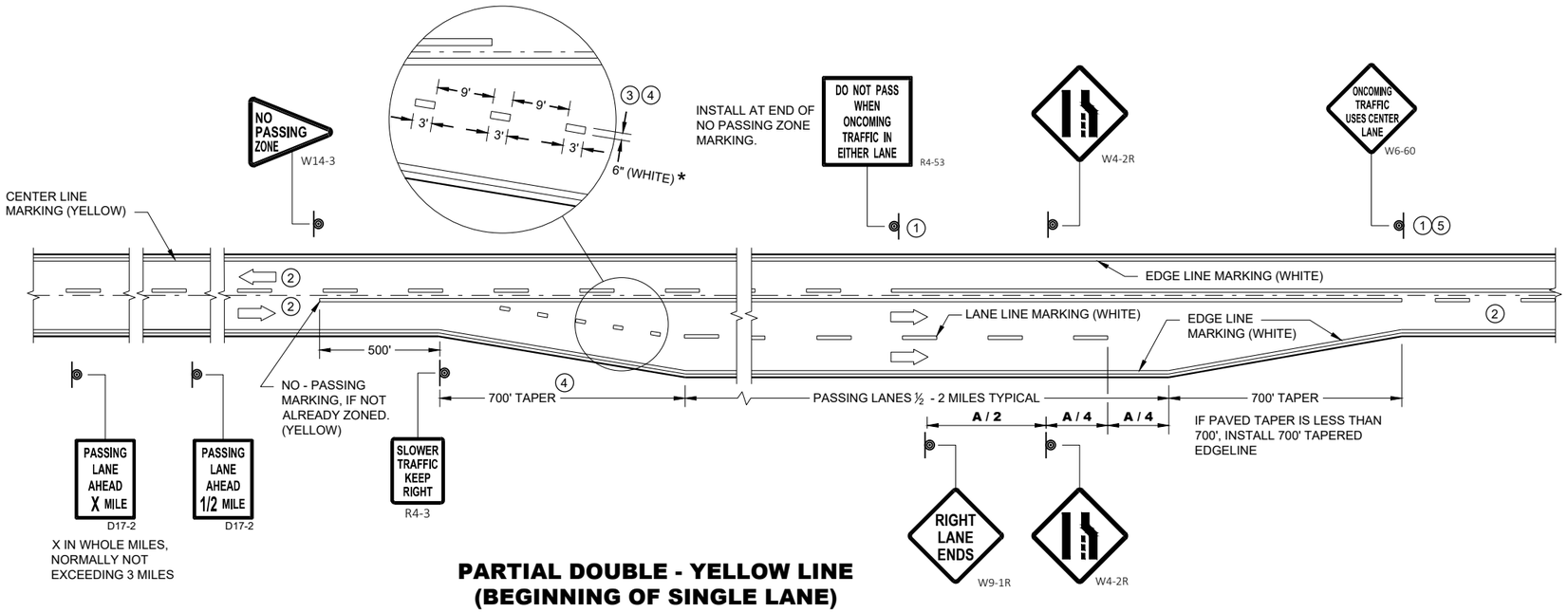
1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
5. REPEAT EVERY 1 MILE UP UNTIL R4-53.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



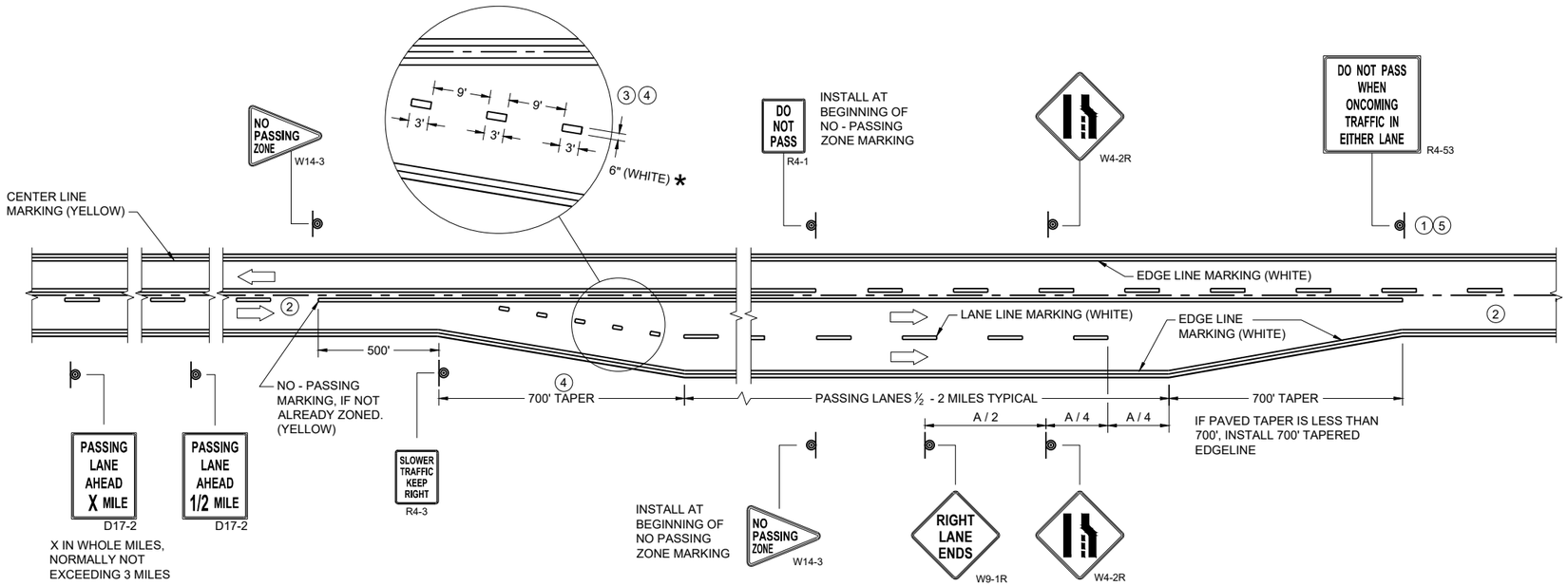
PARTIAL DOUBLE - YELLOW LINE
(BEGINNING OF SINGLE LANE)

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35-06b
SDD 15C35-06b



SOLID DOUBLE - YELLOW LINE
(END OF SINGLE LANE)

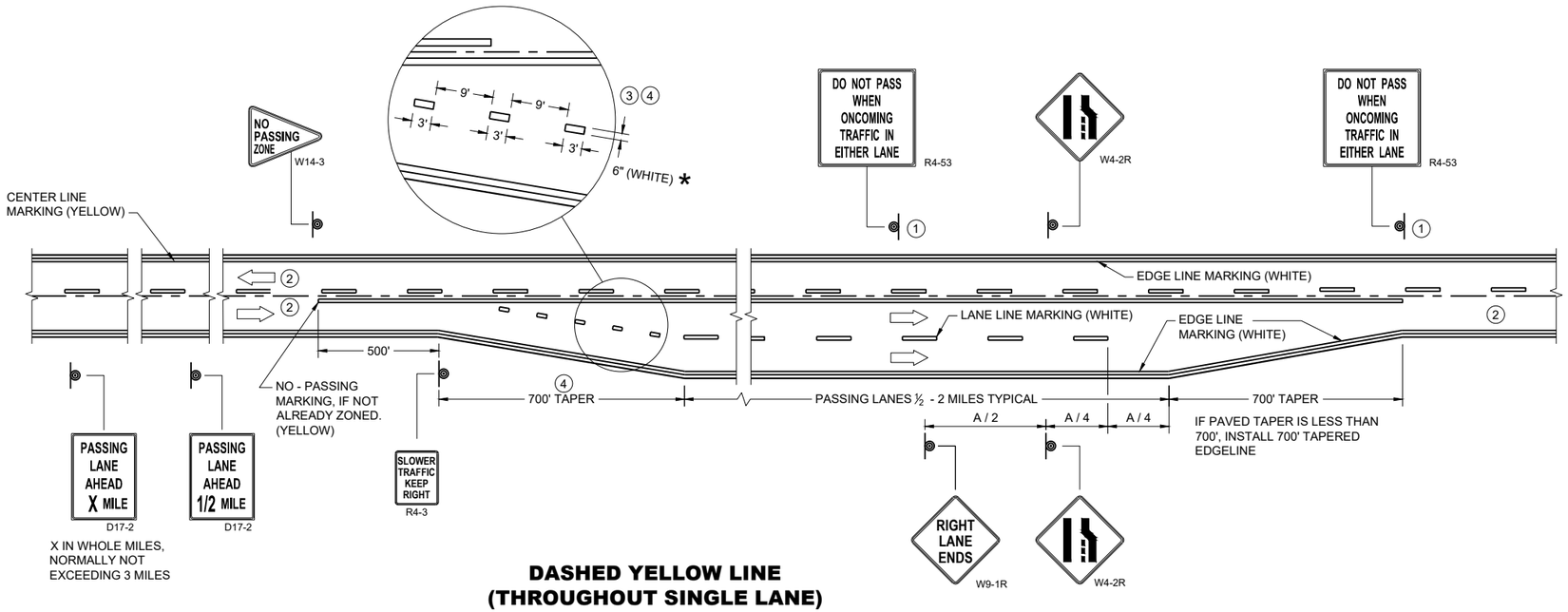
GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
5. REPEAT EVERY ONE MILE UP UNTIL NO PASSING ZONE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990



DASHED YELLOW LINE
(THROUGHOUT SINGLE LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — Statewide Pavement Marking Engineer
FHWA

6
SDD 15C35-06c

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

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

ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.

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

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

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

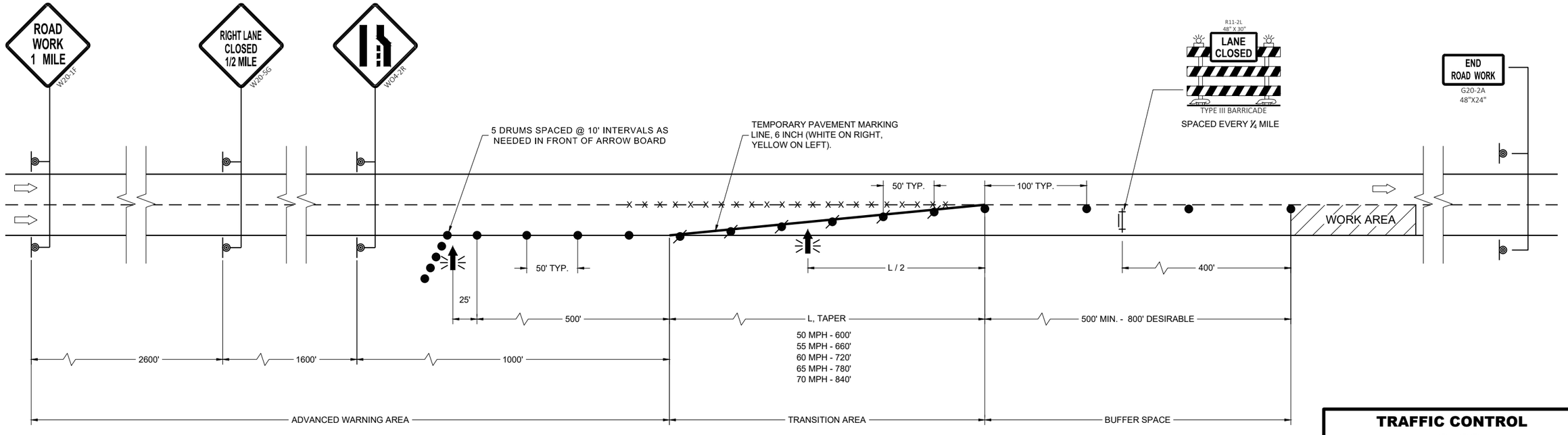
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

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

LEGEND

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



TRAFFIC CONTROL
LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2023
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6

SDD 15D12-12a

6

SDD 15D12-12a

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

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

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

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

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

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

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

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

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

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

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

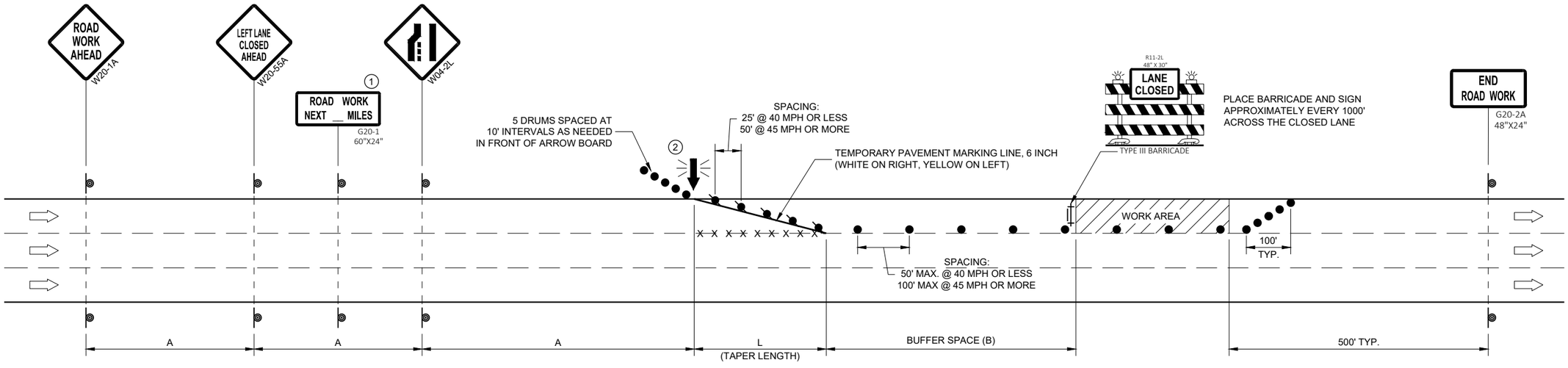
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

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

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

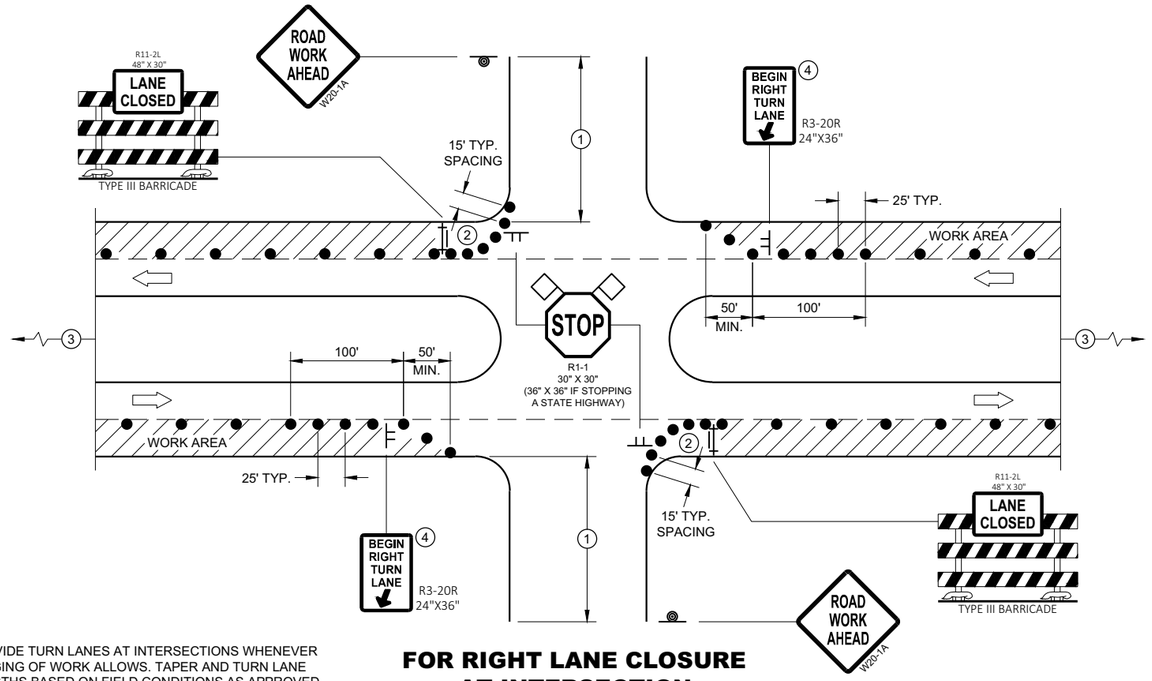
APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

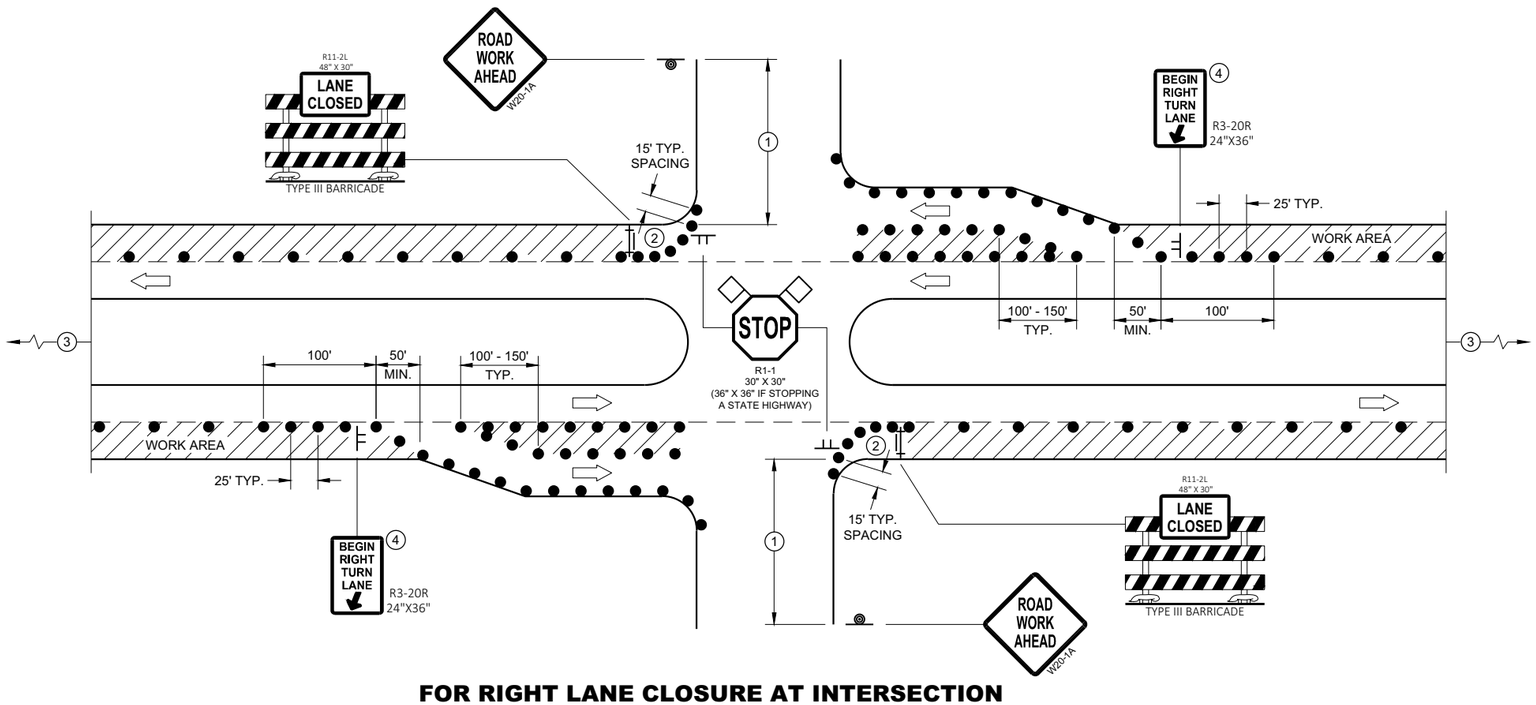
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SDD 15D20-07a



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 RIGHT LANE CLOSURE AT INTERSECTION



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

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

LEGEND

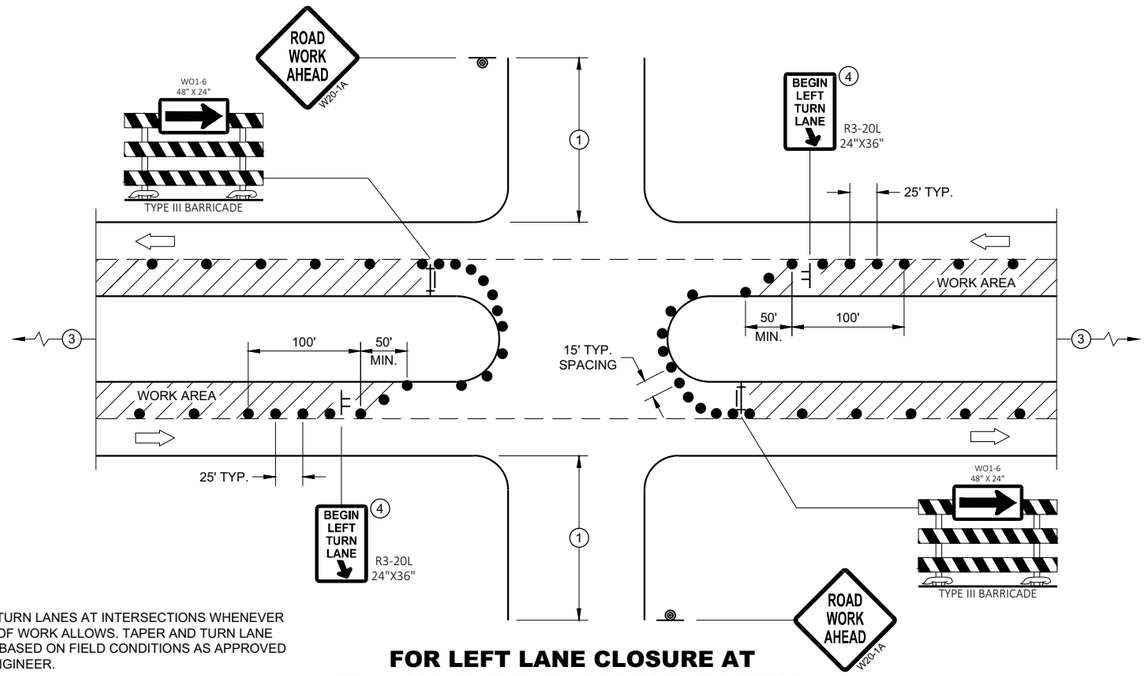
- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D21 - 07a
SDD15D21 - 07a



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

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

GENERAL NOTES

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

"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.

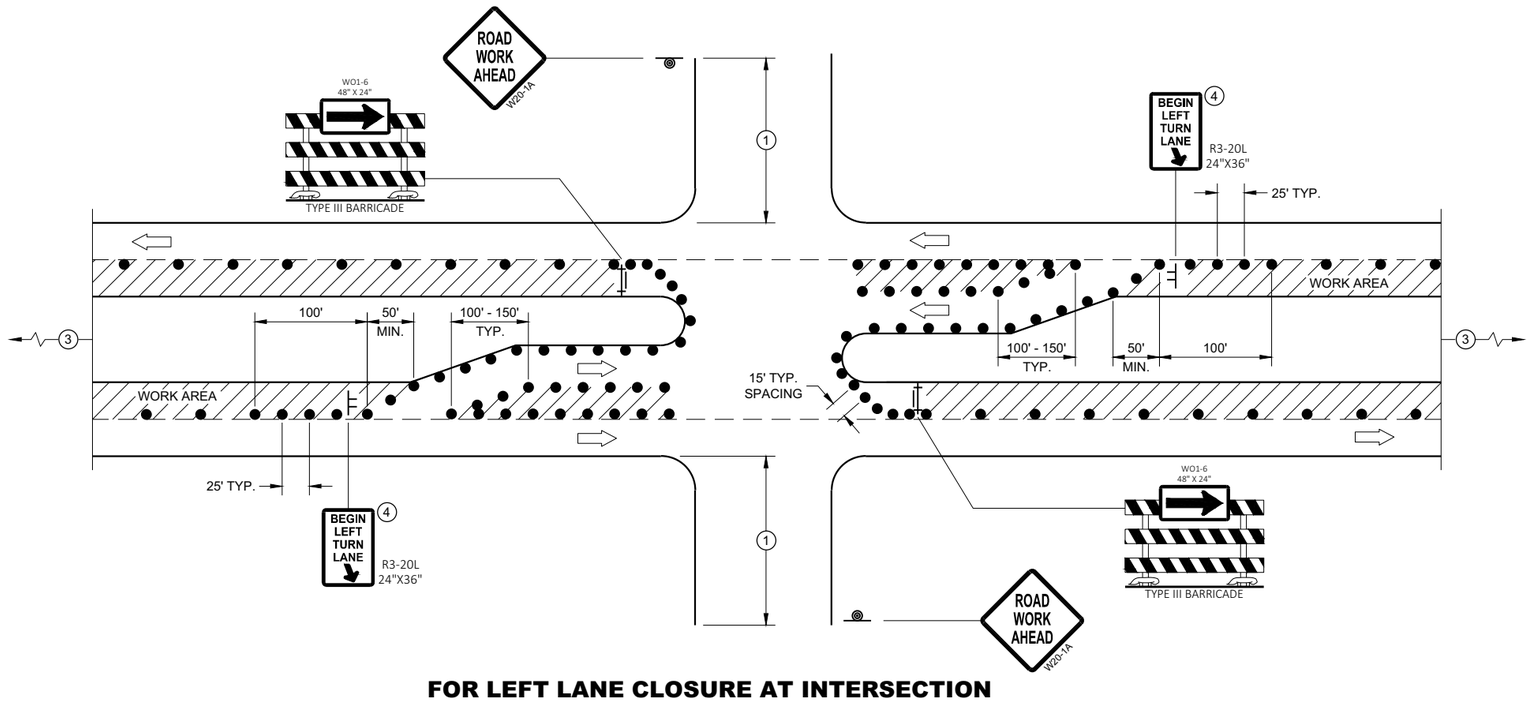
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(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.



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

LEGEND

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

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D21 - 07b

6

SDD 15D21 - 07b

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

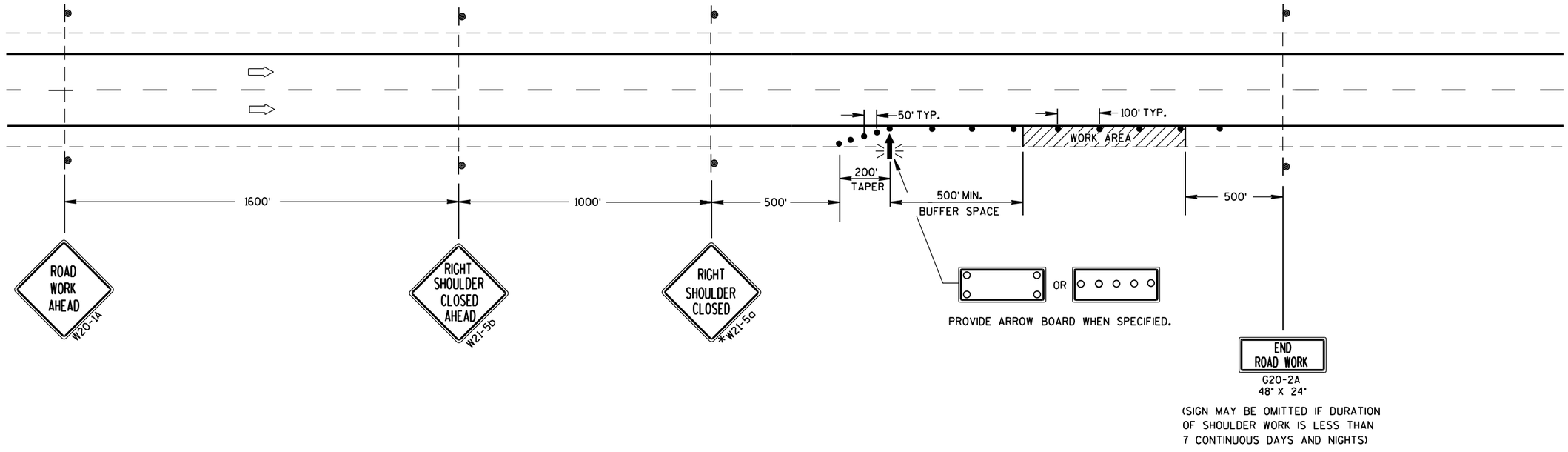
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

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

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

FHWA

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S.D.D. 15 D 27-3

GENERAL NOTES

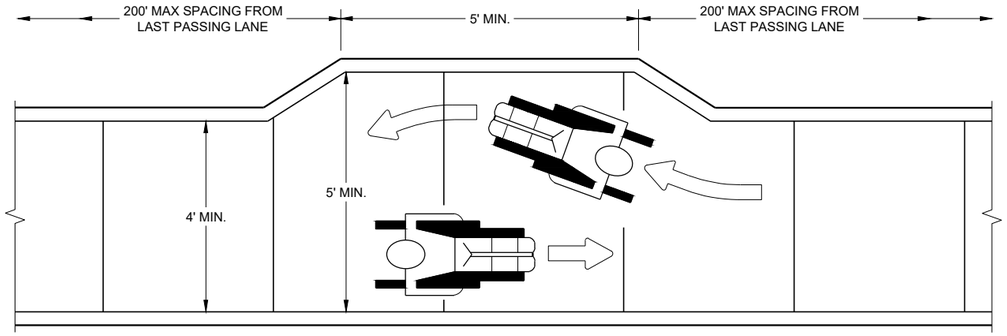
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

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

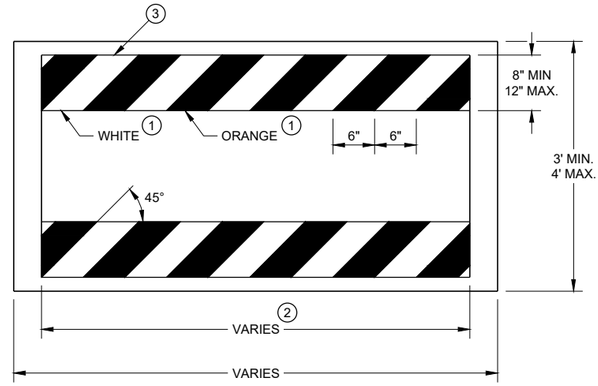
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

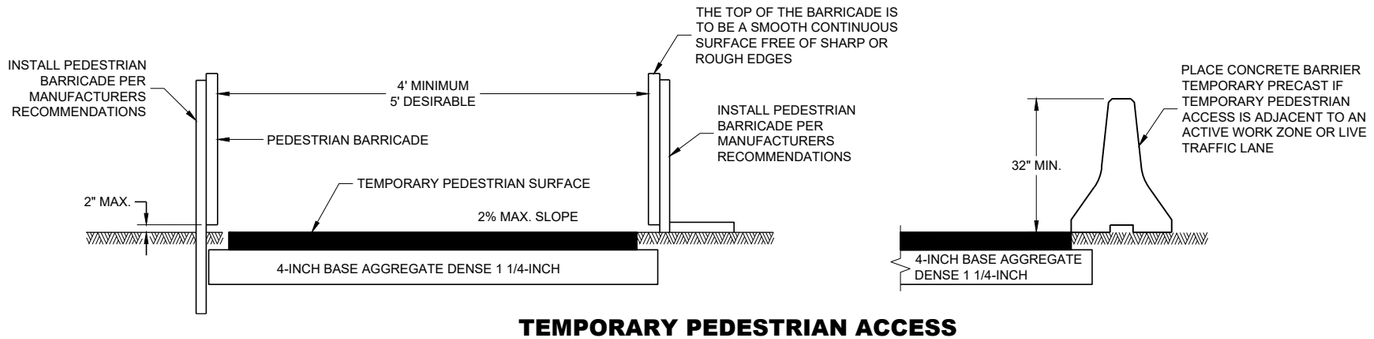
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



NARROW SIDEWALK PASSING DETAIL



TEMPORARY PEDESTRIAN BARRICADE*



TEMPORARY PEDESTRIAN ACCESS

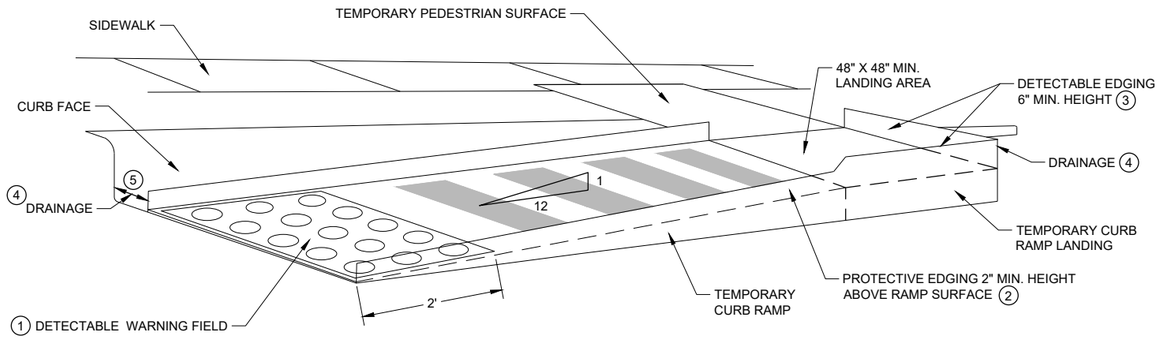
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SDD 15D30 - 09a

SDD 15D30 - 09a

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



PERSPECTIVE VIEW

GENERAL NOTES

CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.

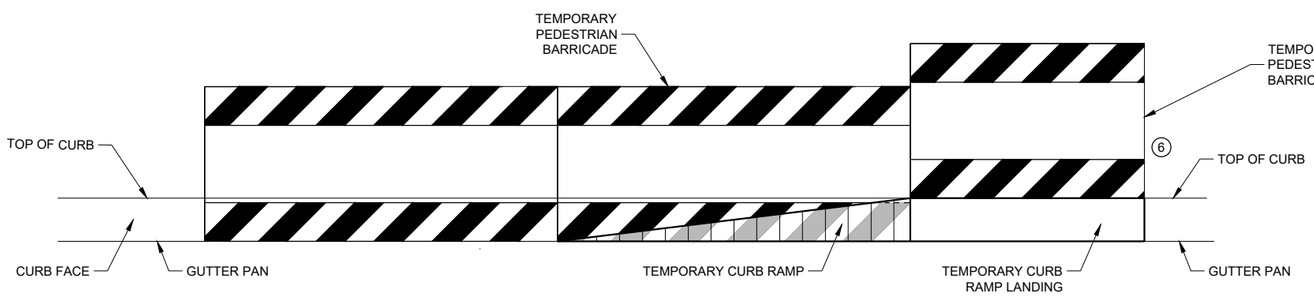
(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

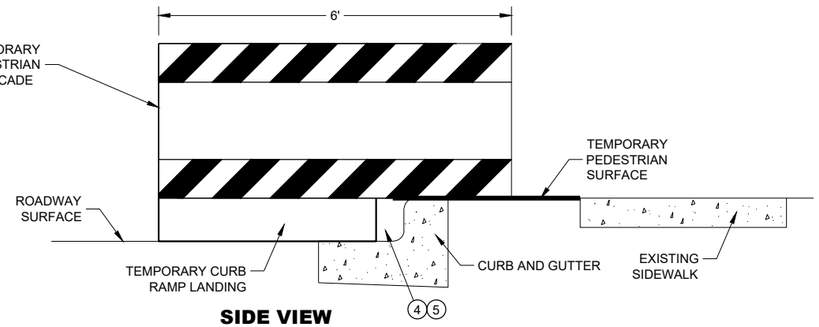
(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.

(6) IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



FRONT VIEW



SIDE VIEW

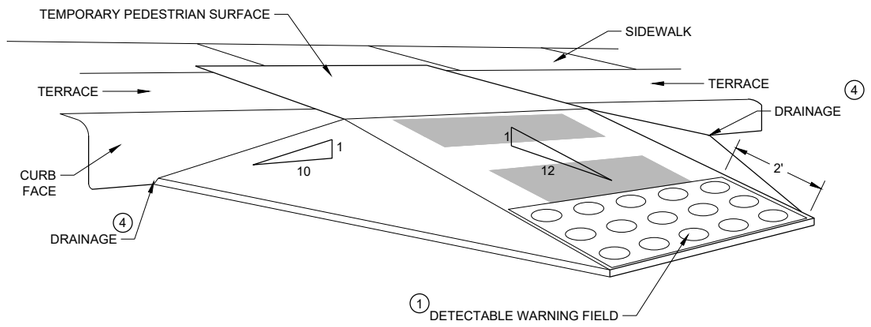
TEMPORARY CURB RAMP PARALLEL TO CURB

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

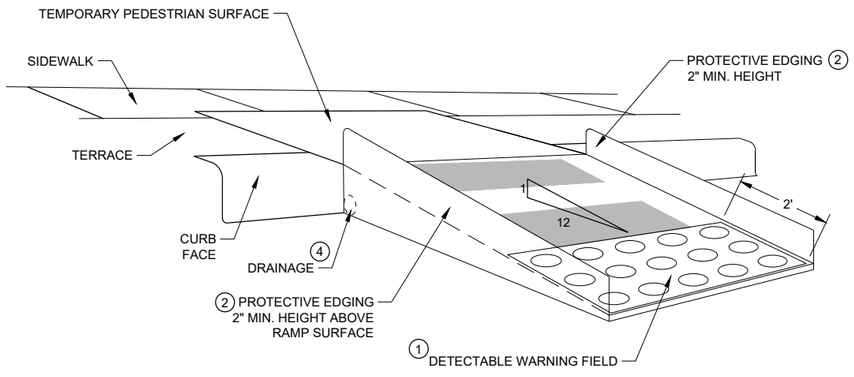
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30 - 09b
SDD 15D30 - 09b



WITH SIDE APRON (5)



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

GENERAL NOTES

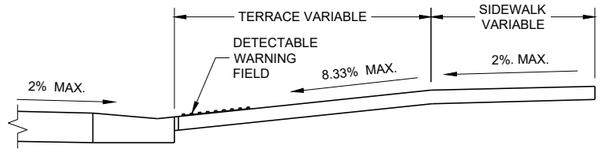
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

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

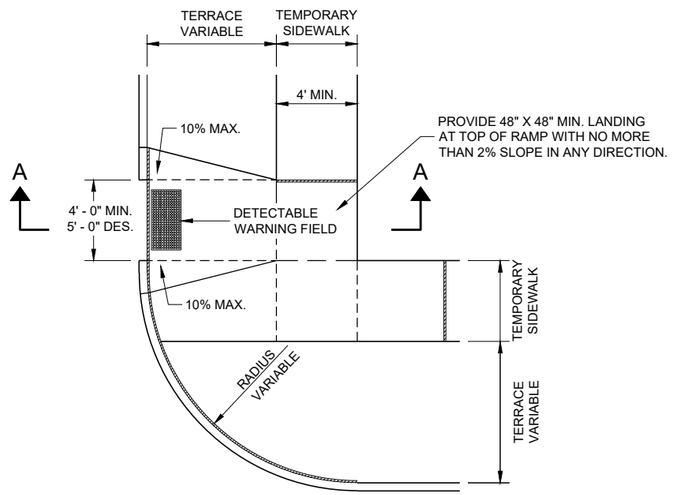
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



SECTION A - A



PLAN VIEW

TEMPORARY TYPE 3 RAMP

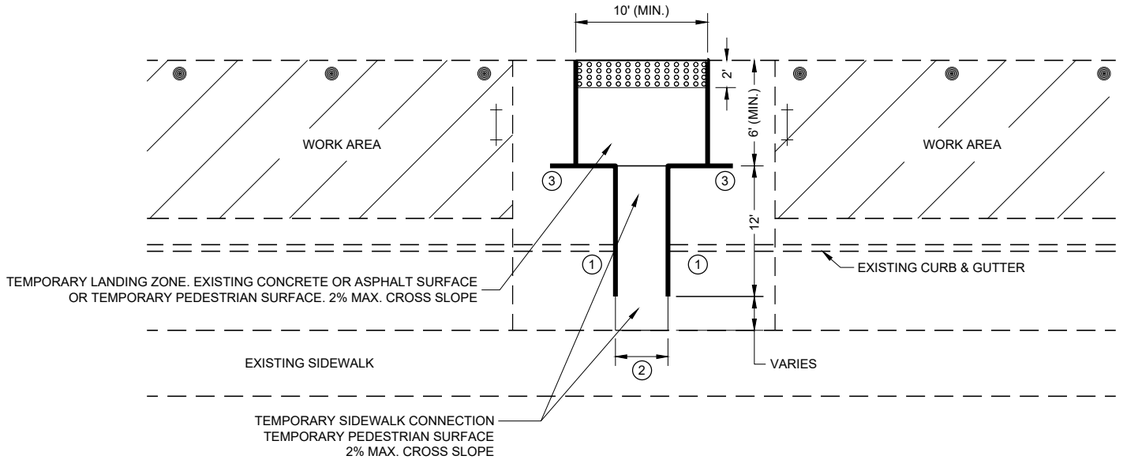
(OUTSIDE OF CROSSWALK AREA)

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

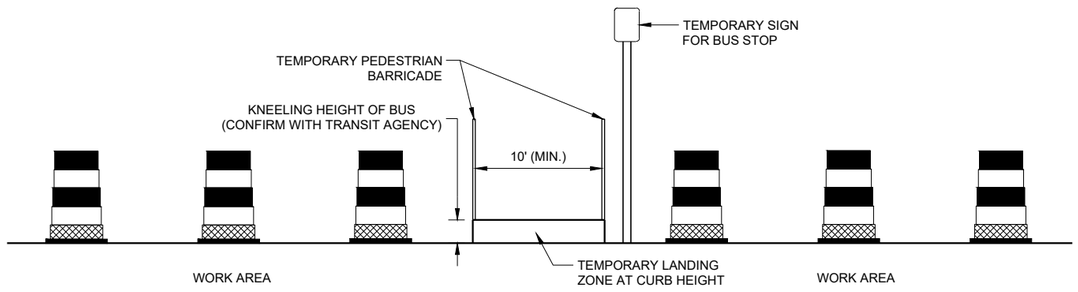
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6
SDD 15D30-09d



PLAN VIEW



PROFILE VIEW

TEMPORARY BUS STOP PAD

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

(1) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(2) 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.

(3) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- WORK AREA

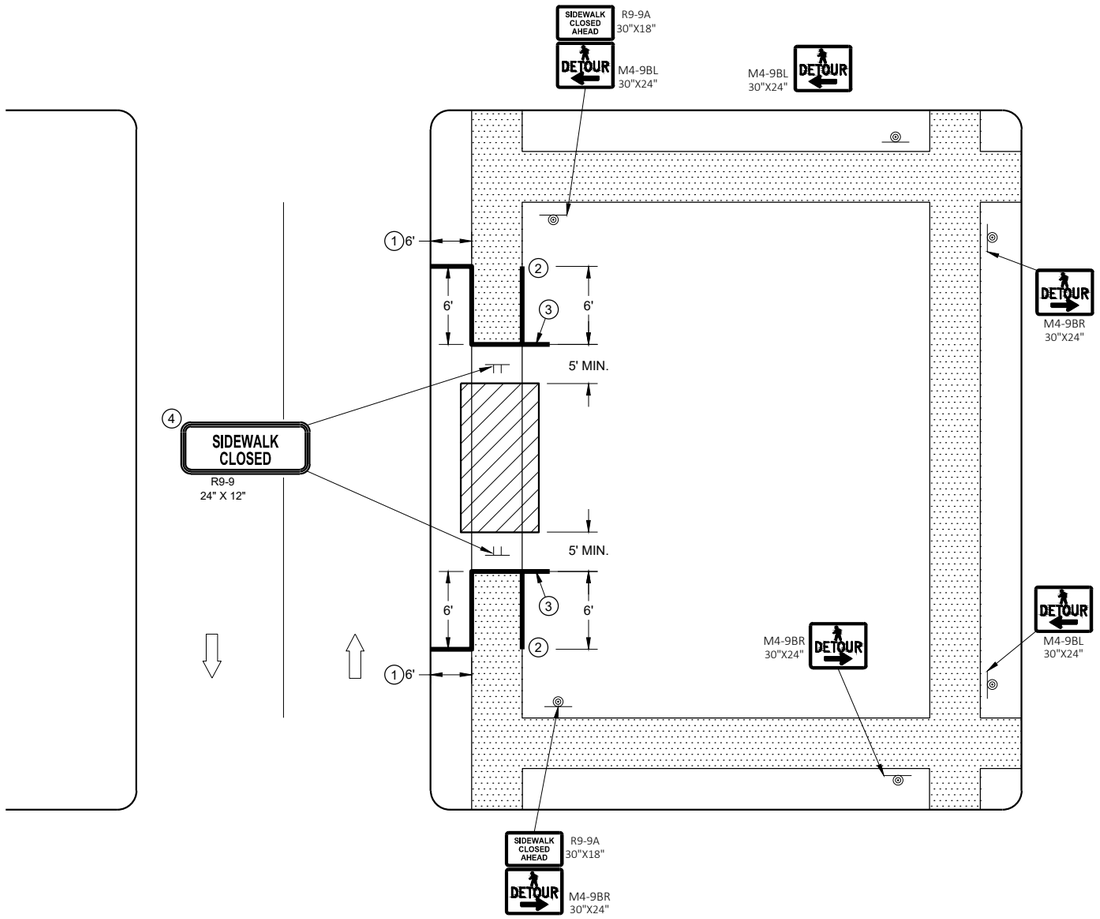
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SDD 15D30 - 09e

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC



GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

6

SDD 15D30 - 09f

LEGEND

- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

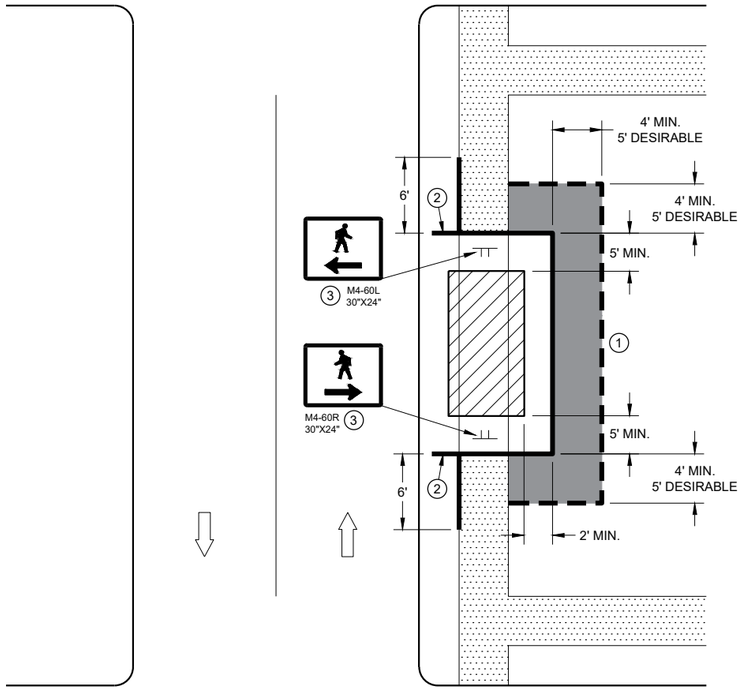
TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

1. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
2. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



SIDEWALK DIVERSION
SINGLE SIDE

6

SDD 15D30 - 09g

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SDD15D30 - 09g

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

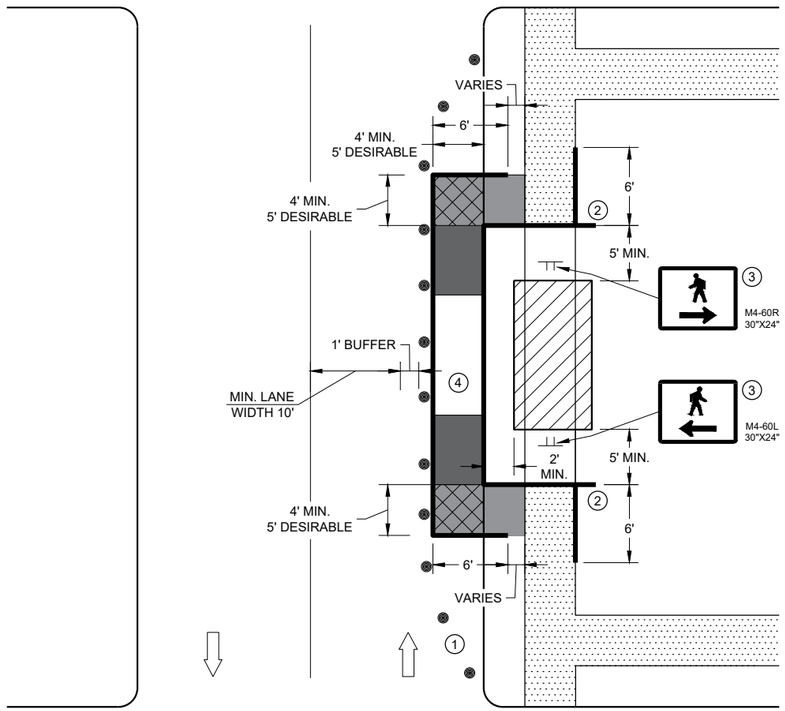
GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.
2. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.
4. USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE.



SIDEWALK DIVERSION, SINGLE SIDE

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

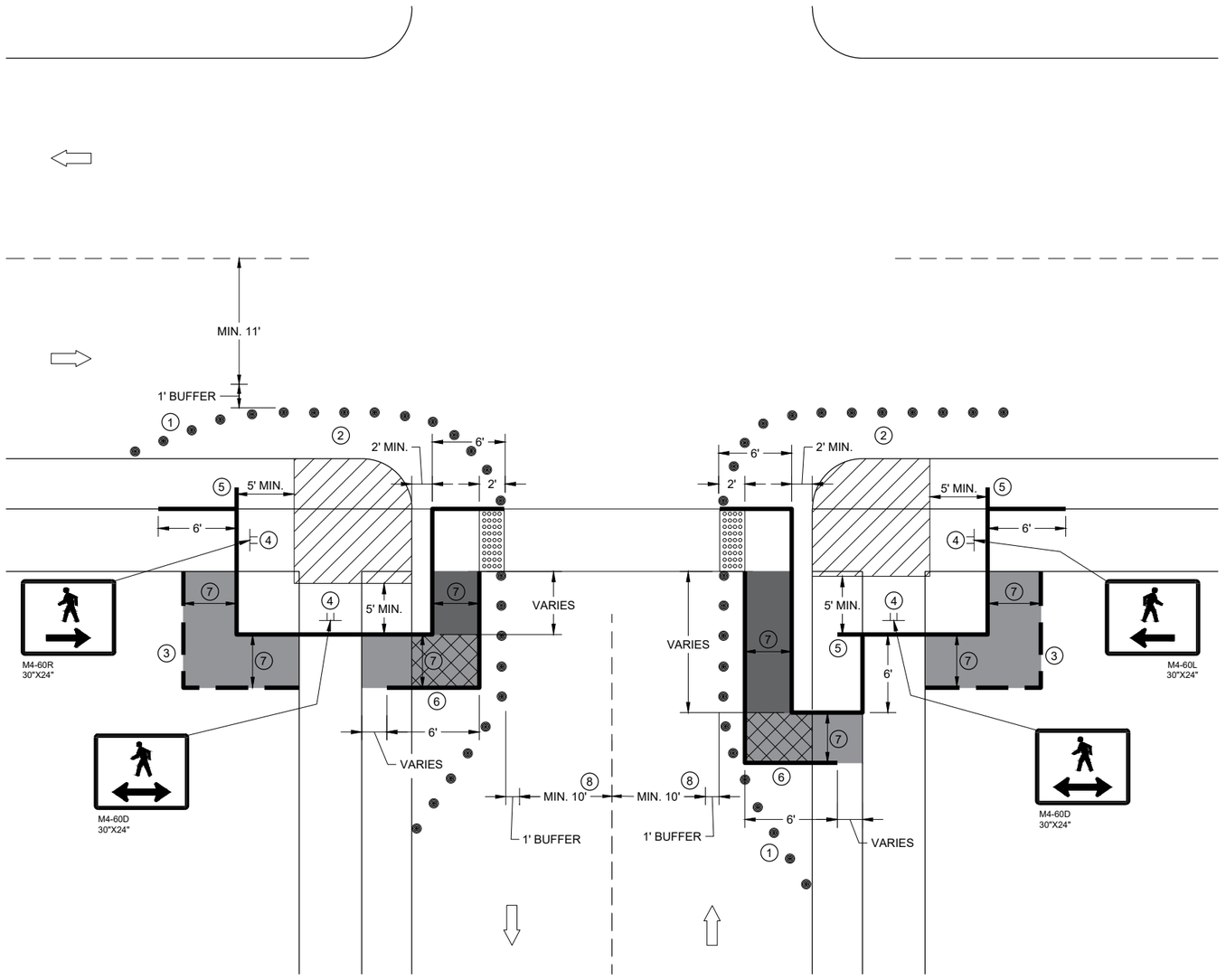
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30 - 09h

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SDD 15D30 - 09h



CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

(1) SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.

(2) PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS

(3) USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.

(4) MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.

(5) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.

(6) IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.

(7) 4 FEET MINIMUM, 5 FEET DESIRABLE

(8) IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

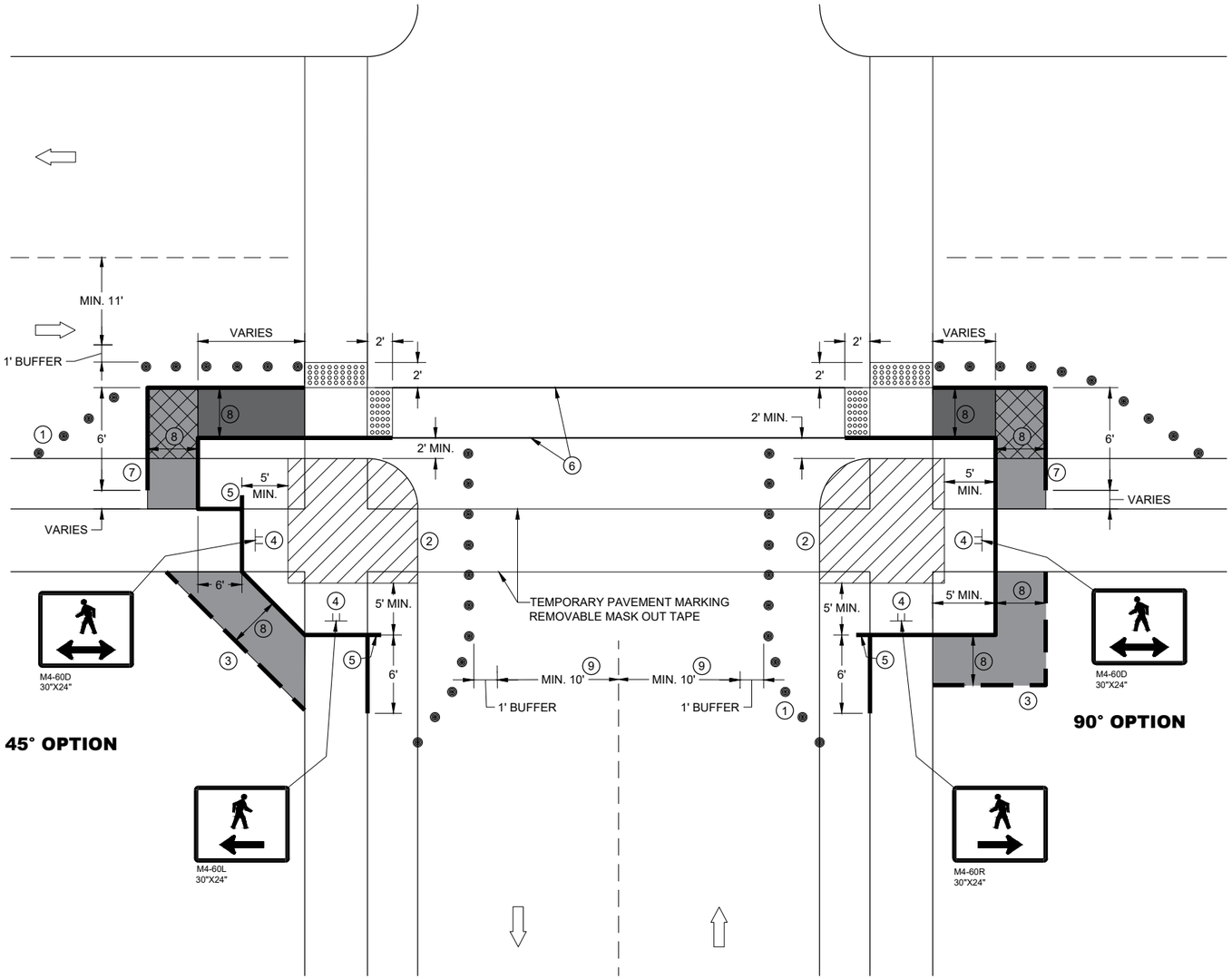
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

SDD 15D30 - 09i

6



CURB RAMP PEDESTRIAN TRAFFIC CONTROL

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. WHITE 6" TEMPORARY PAVEMENT MARKING
7. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
8. 4 FEET MINIMUM, 5 FEET DESIRABLE
9. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

SDD 15D30 - 09j

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LEGEND

SIGN ON PERMANENT SUPPORT

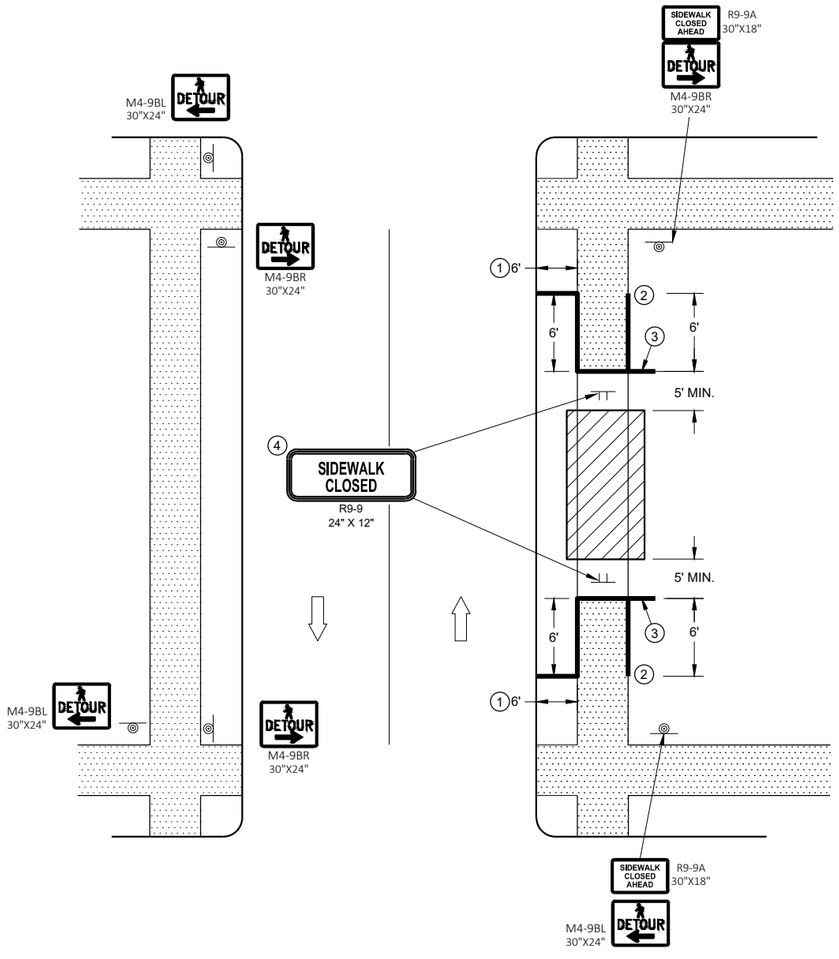
SIGN ON TEMPORARY SUPPORT

UNDER PEDESTRIAN TRAFFIC

WORK AREA

TEMPORARY PEDESTRIAN BARRICADE

DIRECTION OF TRAFFIC



GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

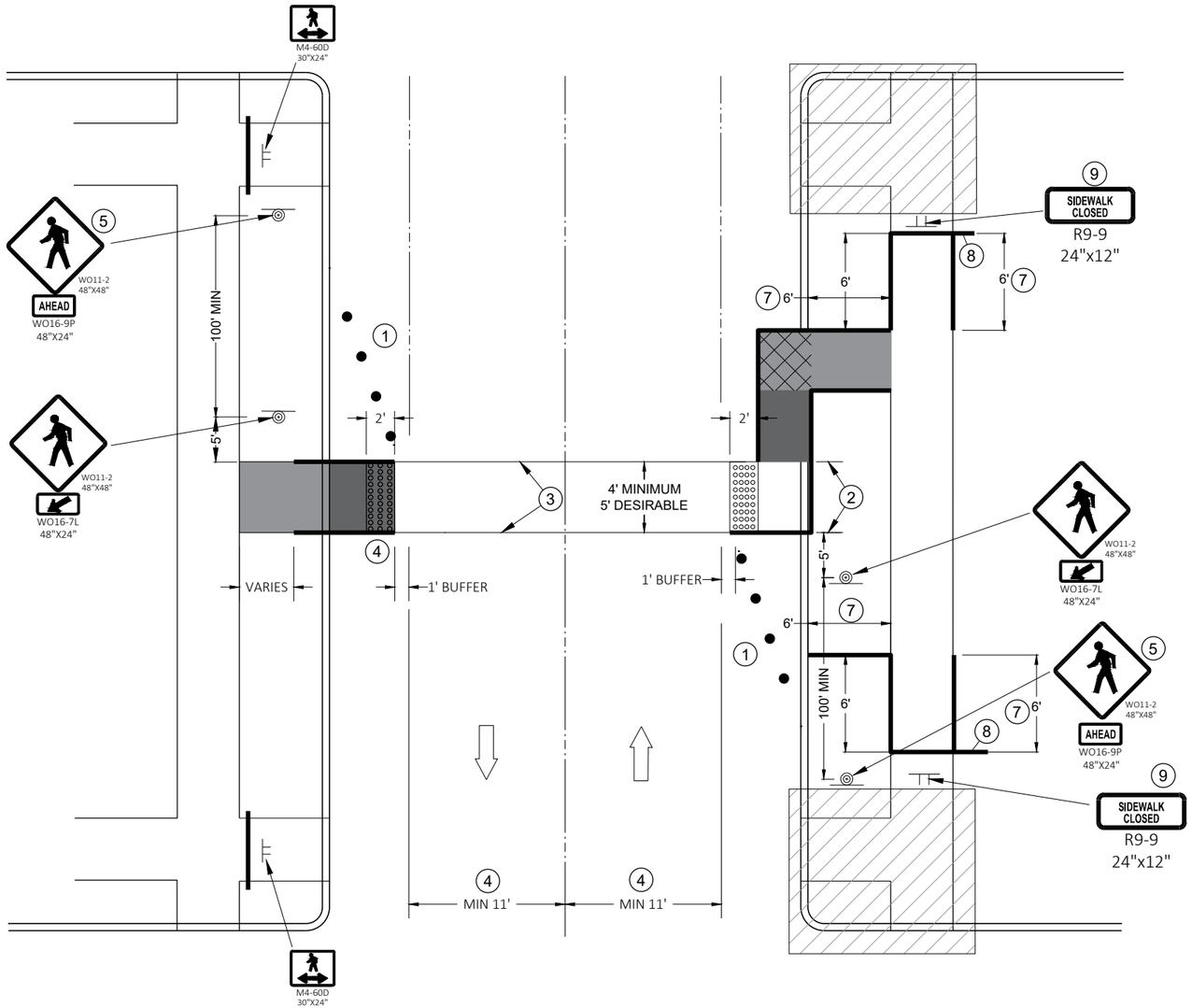
1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES

6

SDD 15D30 - 09k

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



TEMPORARY PEDESTRIAN CROSSING

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

SEE OTHER PEDESTRIAN ACCOMMODATION DETAILS FOR SIGNING AND DEVICES FOR DIFFERENT PEDESTRIAN FACILITIES CLOSURES.

(1) SHOULDER OR LANE CLOSURE ADVANCED WARNING AND PROPER BUFFER SPACE REQUIRED.

(2) 4 FEET MINIMUM, 5 FEET DESIRABLE.

(3) WHITE 6" TEMPORARY PAVEMENT MARKING.

(4) IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, PERPENDICULAR CURB RAMPS MAY NEED TO BE UTILIZED.

(5) IF MINIMUM 100' SPACING FROM THE MID-BLOCK CROSSING CANNOT BE ATTAINED BEFORE THE INTERSECTION, REMOVE THIS SIGN ASSEMBLY.

(6) IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.

(7) PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.

(8) IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF THE EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.

(9) MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF THE SIGN.

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

LEGEND

V1 WORK VEHICLE

V2 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

FLASHING ARROW PANEL (CAUTION)

WORK AREA

DIRECTION OF TRAFFIC

POSTED SPEED PRIOR TO WORK STARTING (MPH)	DECISION SIGHT DISTANCE (D)
0 - 25	550'
30	550'
35	700'
40	700'
45	900'
50	900'
55	1200'

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

MOBILE IS WORK THAT MOVES CONTINUOUSLY OR MOVES AT LEAST THE DECISION SIGHT DISTANCE EVERY 15 MINUTES.

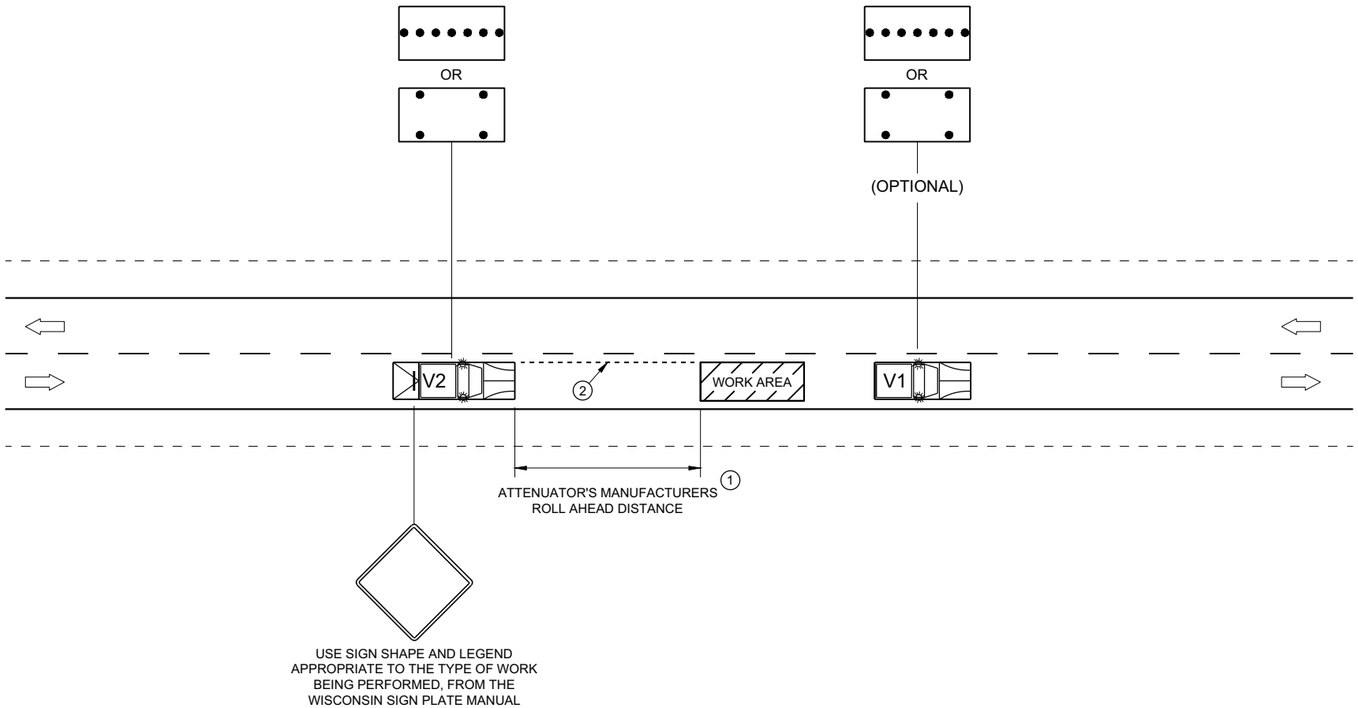
ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL ARROW PANELS SHALL BE REAR FACING, TYPE "B" OR "C", AND DISPLAYING THE FLASHING CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

(1) DISTANCE BETWEEN VEHICLES MAY INCREASE FROM THE ATTENUATOR'S ROLL AHEAD BASED ON TERRAIN, SIGHT DISTANCE, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

(2) ALIGN LEFT SIDE OF SHADOW VEHICLE WITH EDGE OF WORK AREA.

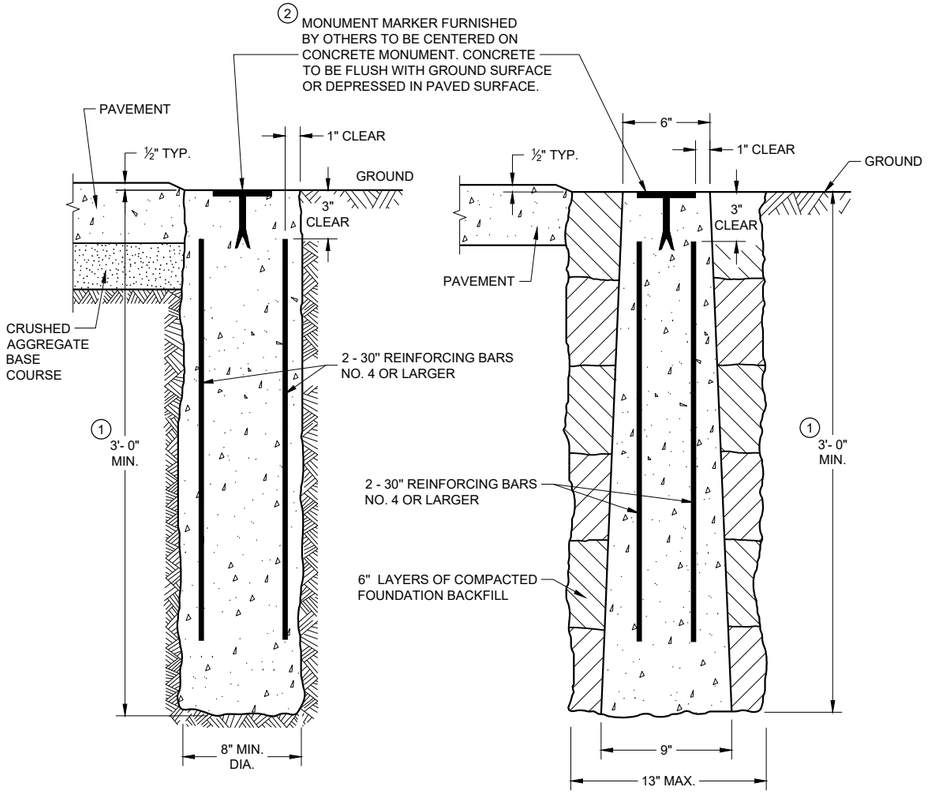


TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

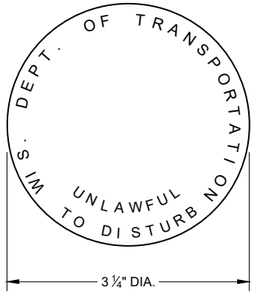
APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER
FHWA

6
SDD 15D51 - 01



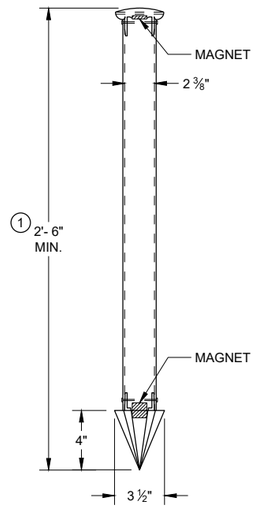
CAST-IN-PLACE **PRECAST**

CONCRETE MONUMENTS
TYPE A

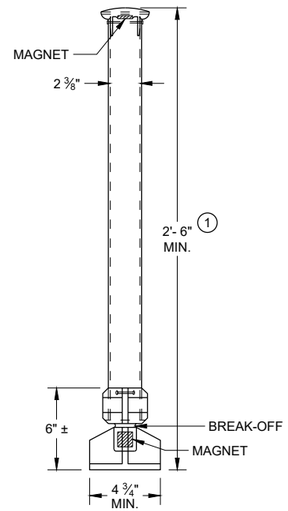


② **WIS DOT MONUMENT MARKER LOGO**

FOR TYPES "A", "C" & "D"

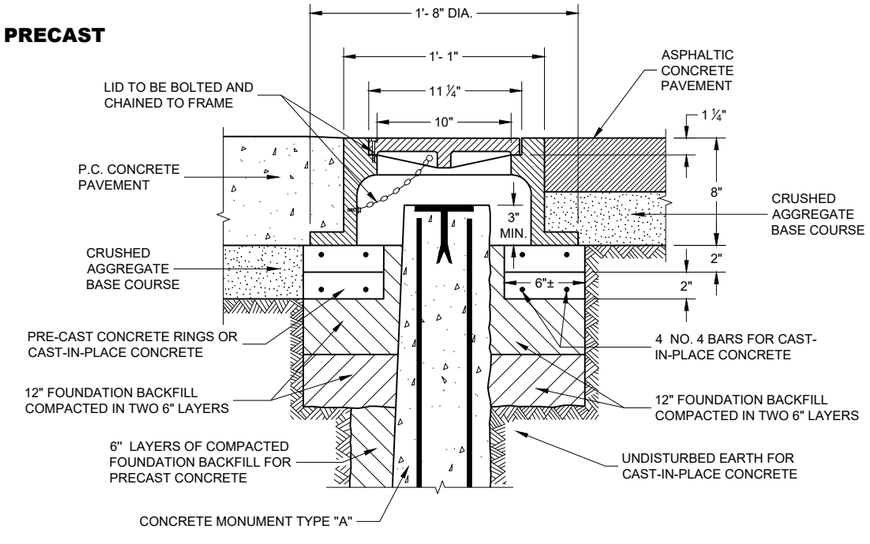


TYPE C
DRIVEN MONUMENT



TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS
(INCLUDES MARKER)



CAST IRON MONUMENT COVER
(APPROXIMATE WEIGHT 95 LBS)

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.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

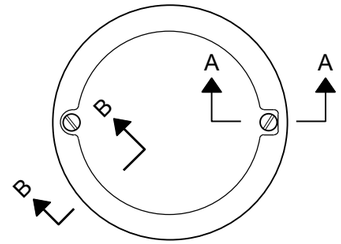
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

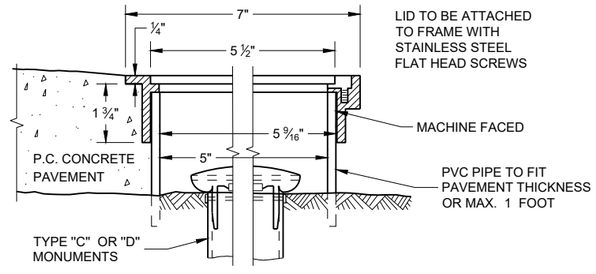
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WISDOT MARKER.



TOP VIEW



SECTION B-B **SECTION A-A**

ALUMINUM MONUMENT COVER
(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

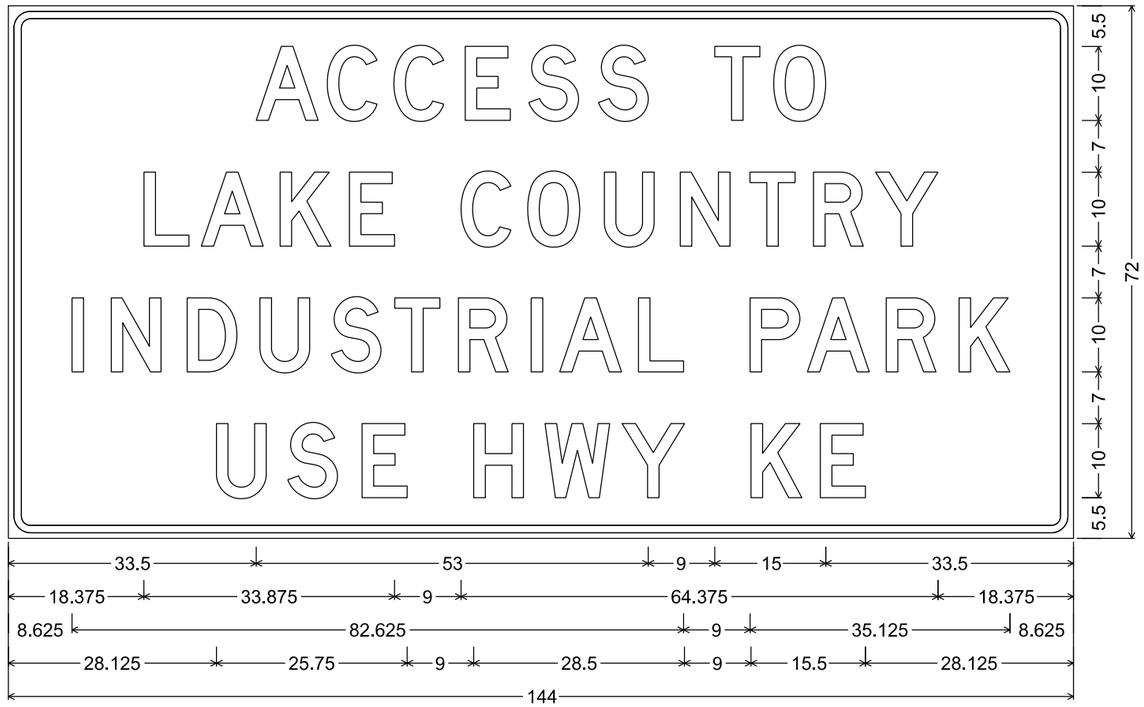
APPROVED
March 2018
DATE

/S/ Raymond A. Kumapayii
CHIEF SURVEYING AND MA
ENGINEER

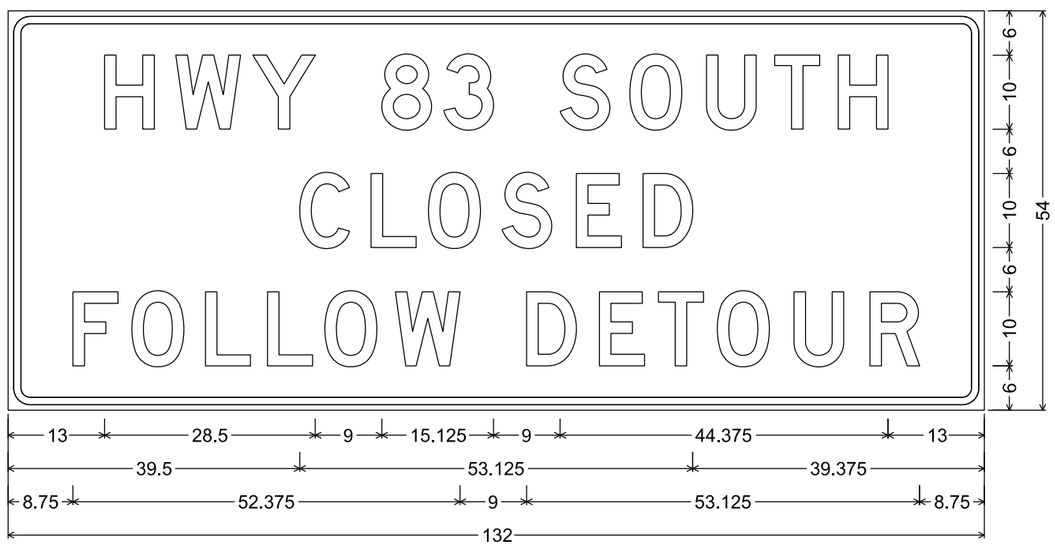
FHWA

6

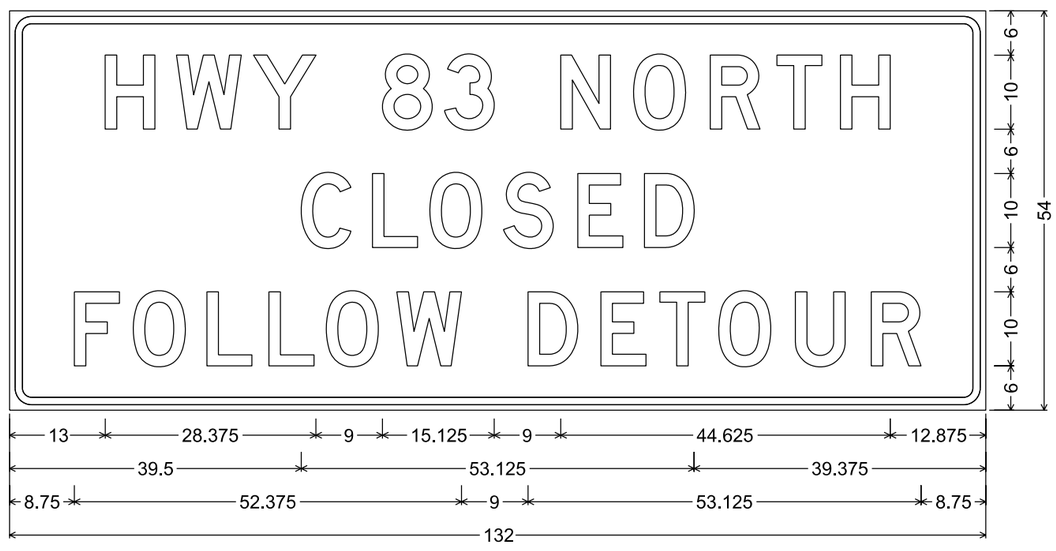
SDD 16A01 - 07



3.000" Radius, 1.000" Border, 0.750" Indent



3.000" Radius, 1.000" Border, 0.750" Indent



3.000" Radius, 1.000" Border, 0.750" Indent

NOTES

1. Fixed Message Signs are Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D

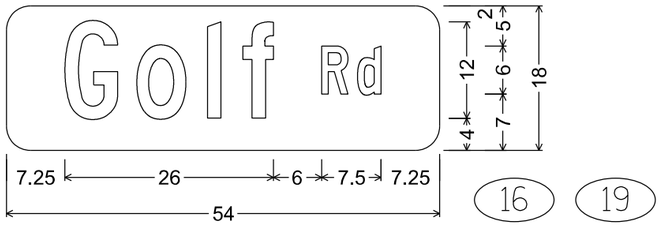
7

7

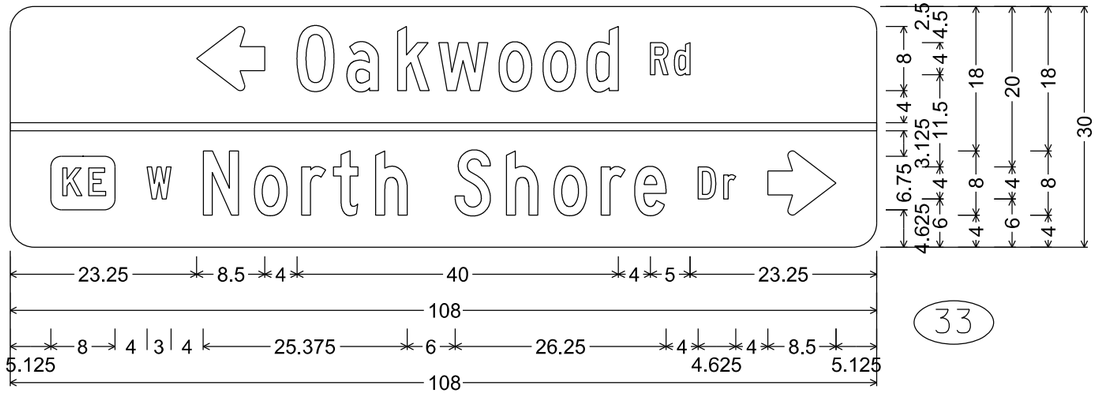
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	TEMPORARY SIGNING	SHEET NO: 351	E

NOTES

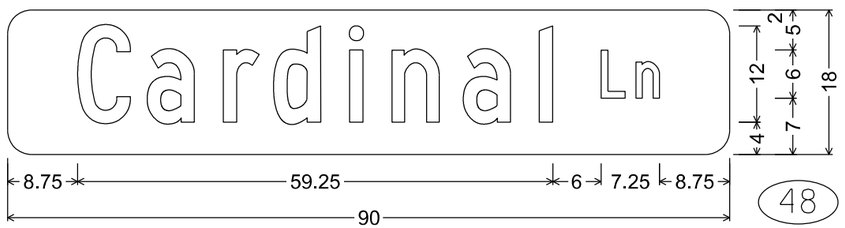
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - C



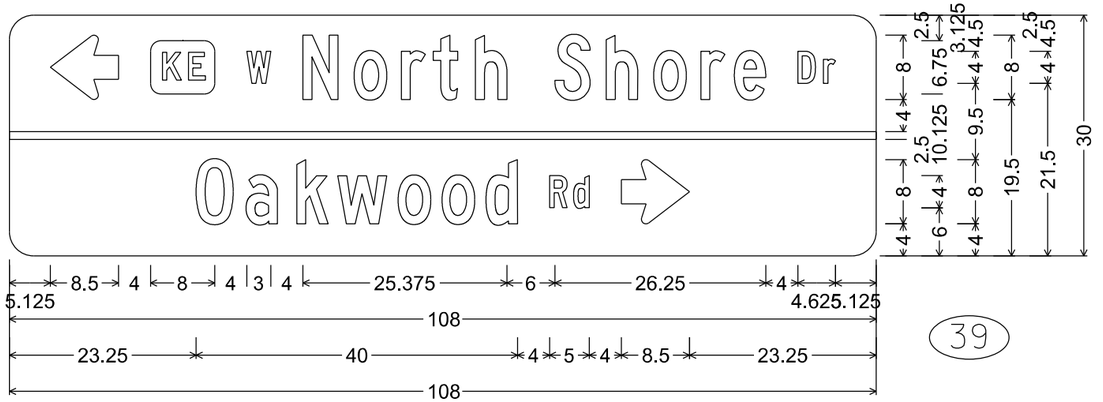
M1-94H; 3.000" Radius, No border



M1-94S; 3.000" Radius, No border



M1-94H; 3.000" Radius, No border



M1-94S; 3.000" Radius, No border

7

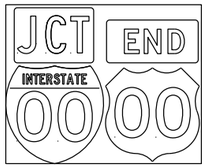
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET NO: 352	E

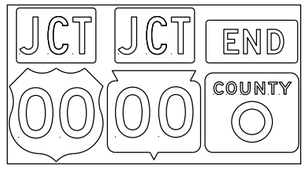
TYPICAL ASSEMBLIES



J1-1



J1-2



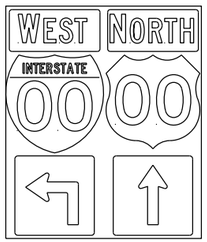
J1-3



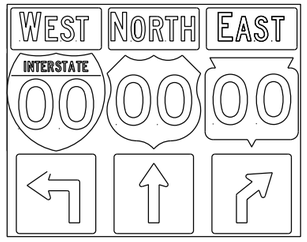
JR1-1



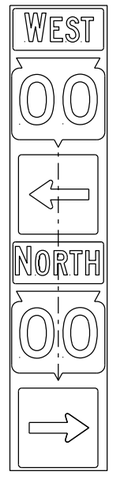
J2-1



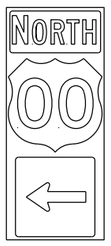
J2-2



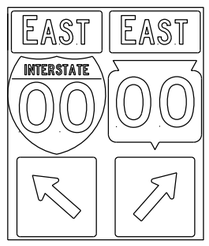
J2-3



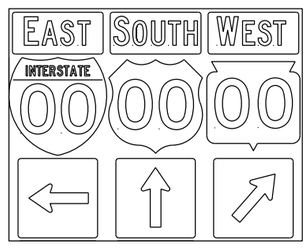
JV
(Typical Vertical J-Assembly
See Note 10 and 11)



J3-1



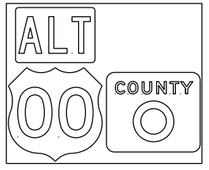
J3-2



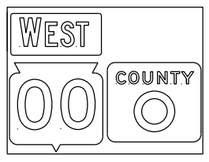
J3-3



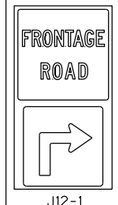
J4-1



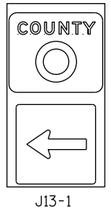
J4-2



J4-2



J12-1



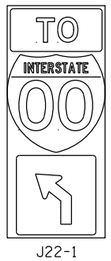
J13-1



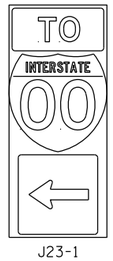
J32-1



J33-1



J22-1



J23-1



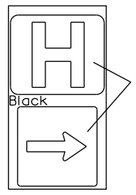
JR13-1



JR23-1



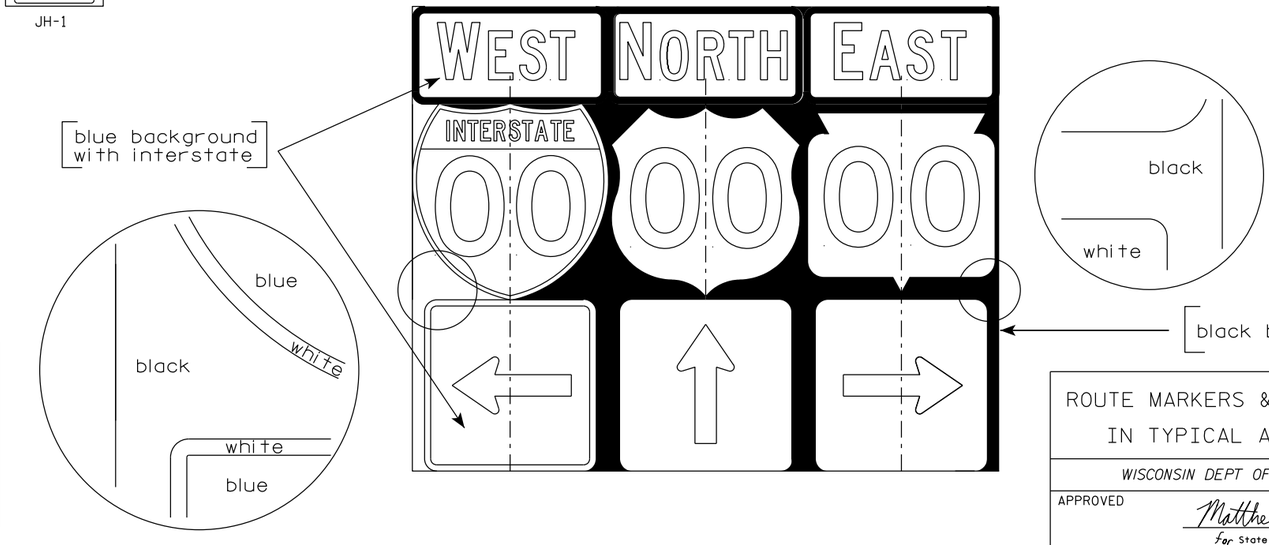
JR99-1



JH-1

NOTES

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



ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

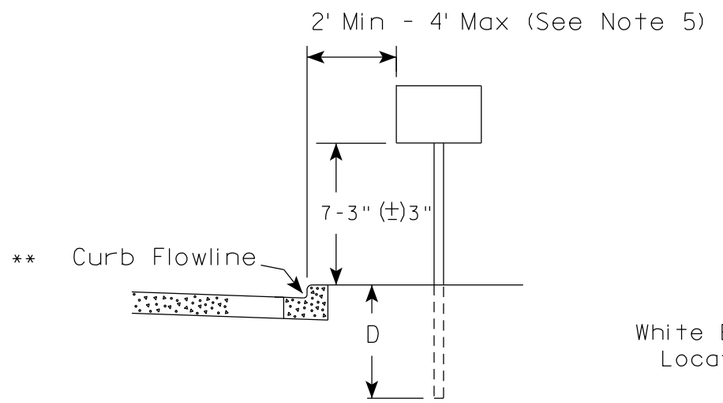
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/23 PLATE NO. A2-1S.10

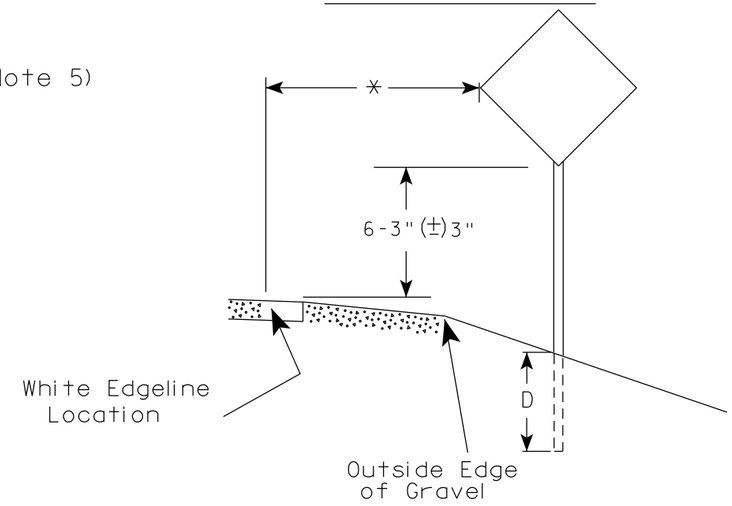
PROJECT NO:

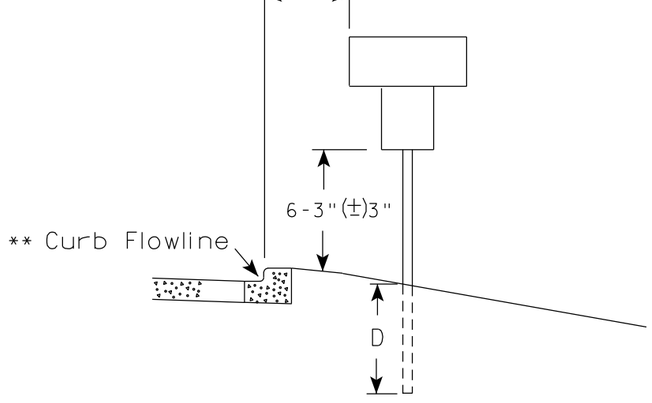
SHEET NO: 353 E

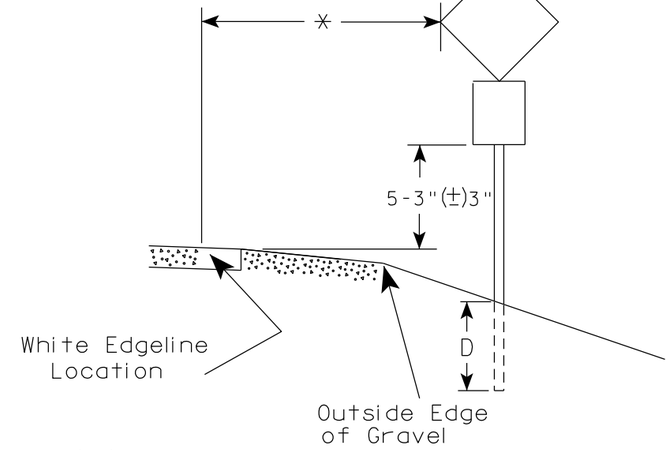
URBAN AREA



RURAL AREA (See Note 2)







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

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

GENERAL NOTES

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

POST EMBEDMENT DEPTH

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

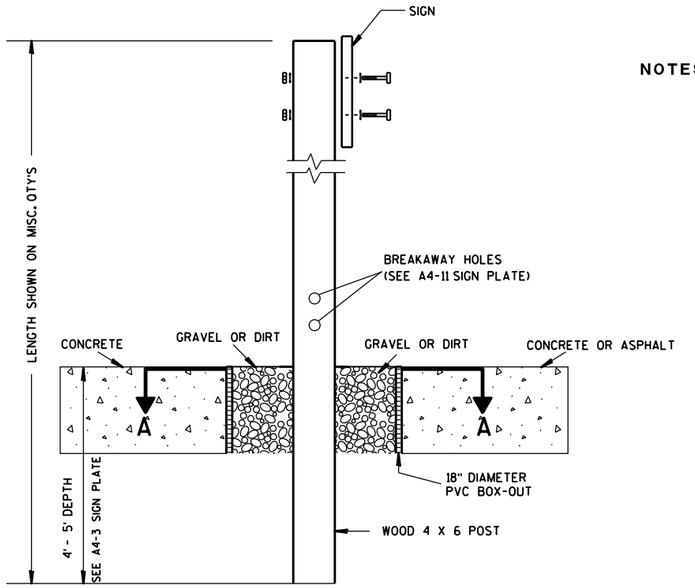
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

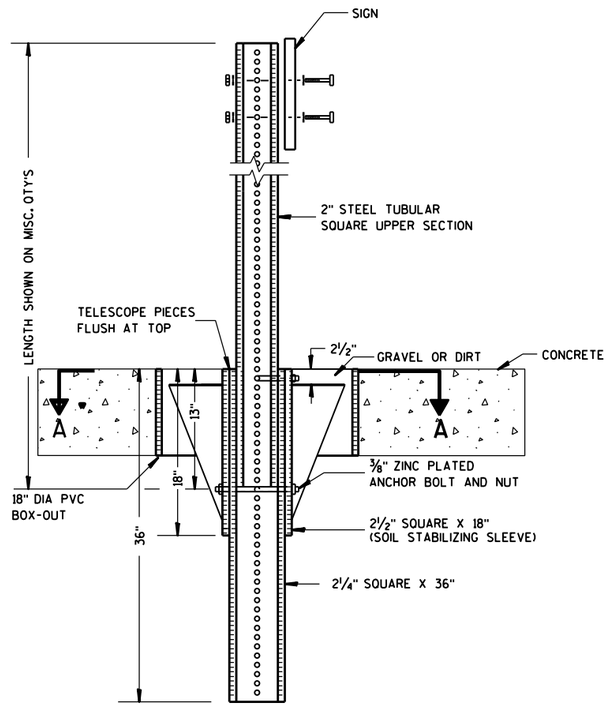
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 354	E



ELEVATION VIEW

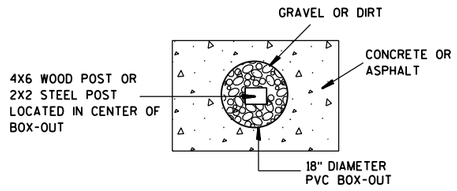
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

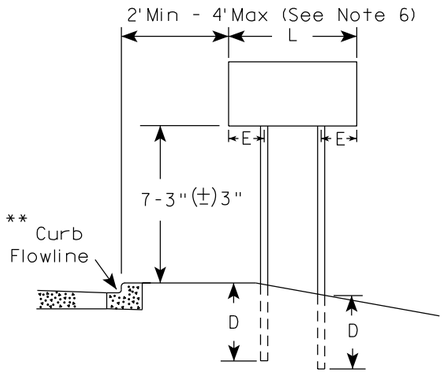
APPROVED Matthew R Rauch
for State Traffic Engineer

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

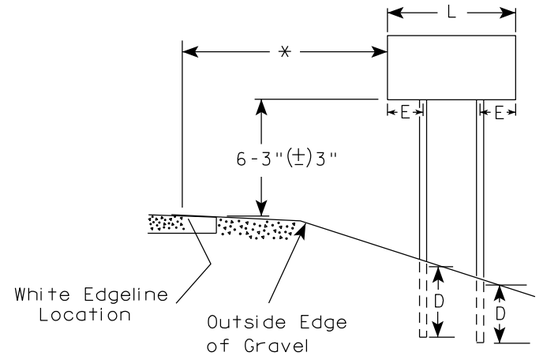
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

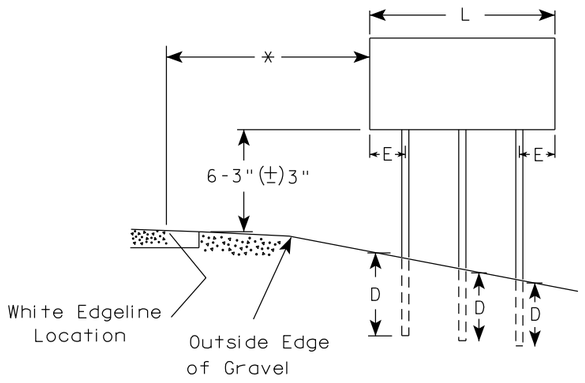
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

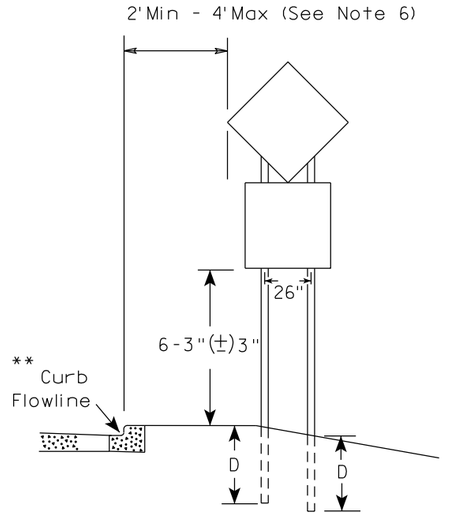
URBAN AREA



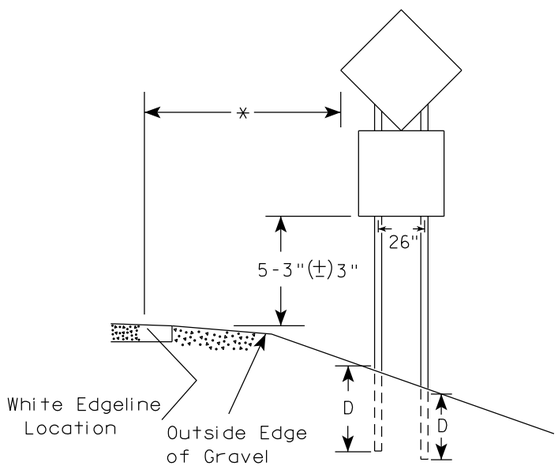
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

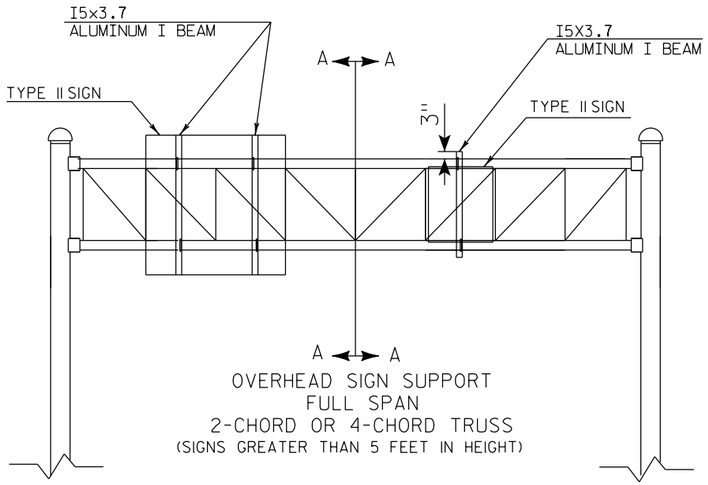
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

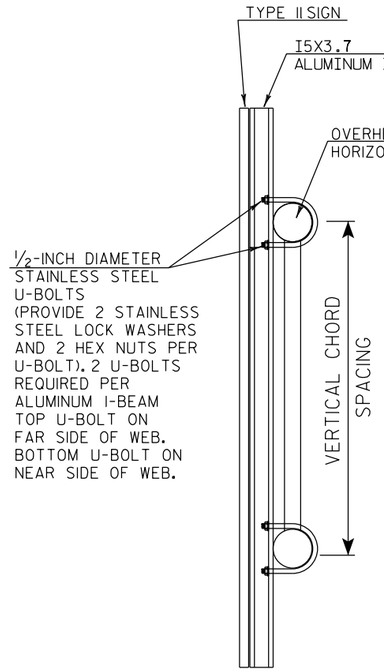
APPROVED Matthew R Rauch
for State Traffic Engineer

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

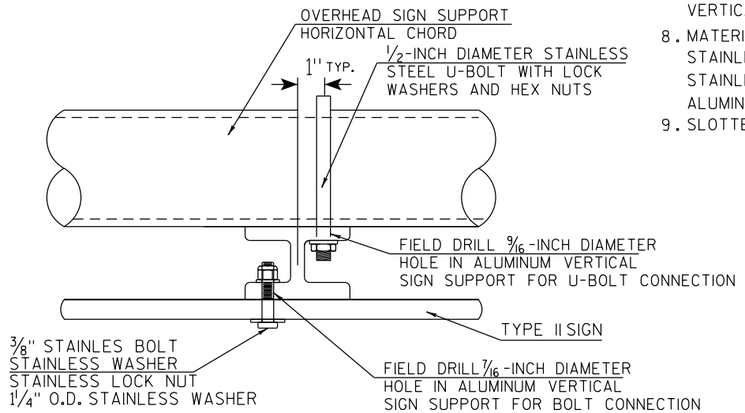
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 356	E



OVERHEAD SIGN SUPPORT
FULL SPAN
2-CHORD OR 4-CHORD TRUSS
(SIGNS GREATER THAN 5 FEET IN HEIGHT)



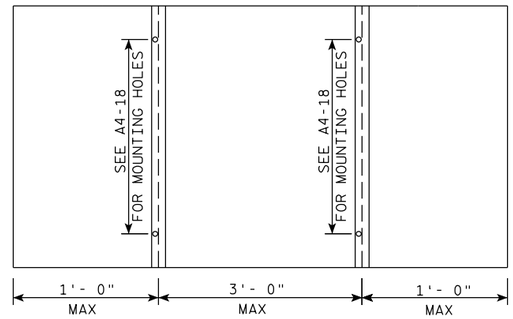
CUT SECTION A-A



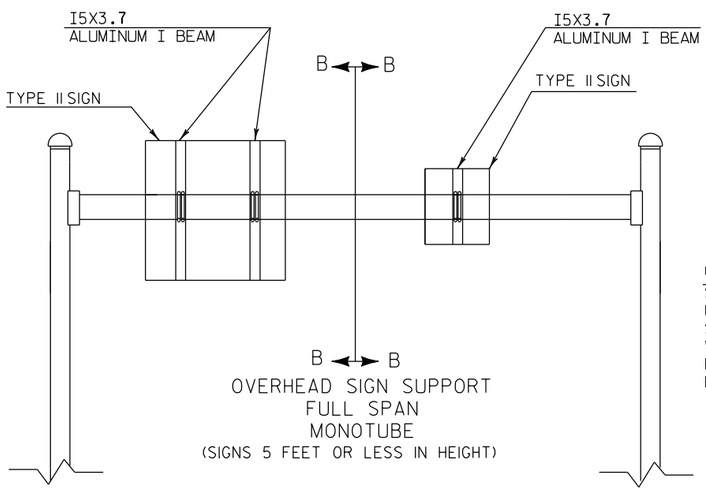
TYPICAL SIGN CONNECTION FOR
2-CHORD OR 4-CHORD TRUSS
PLAN VIEW

GENERAL NOTES

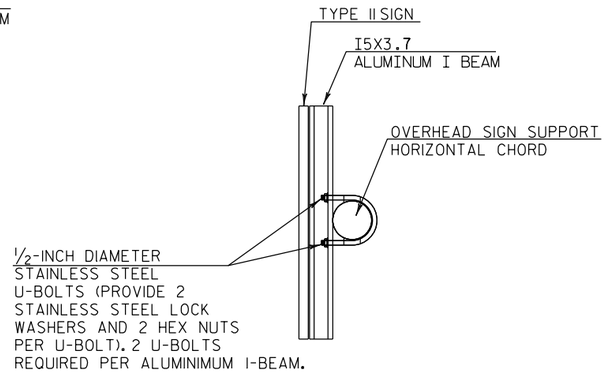
1. USE STAINLESS STEEL U-BOLTS, WASHERS, AND NUTS.
2. USE STAINLESS BOLTS AT BOLT HOLES IN SIGN PANEL PER SIGN PLATE A4-18.
3. USE ALUMINUM VERTICAL SIGN SUPPORT BEAMS HAVING A 5 INCH BEAM DEPTH AND WEIGHT OF 3.7 LBS PER FOOT.
4. U-BOLTS SHALL BE STAINLESS STEEL AND MANUFACTURED TO THE PROPER SIZE TO FIT THE CHORDS OF THE OVERHEAD SIGN STRUCTURE.
5. DIAMETER OF U-BOLTS SHALL BE AS SHOWN.
6. THE LENGTH OF THE ALUMINUM VERTICAL SIGN SUPPORT BEAMS SHALL BE THE SAME AS THE HEIGHT OF THE SIGN THEY ARE SUPPORTING. BEAM LENGTHS MAY BE LONGER FOR PROPER ATTACHMENT TO CHORDS.
7. SEE DETAIL BELOW FOR SPACING OF ALUMINUM VERTICAL SIGN SUPPORTS
8. MATERIAL NOTES:
   STAINLESS STEEL U-BOLTS, BOLTS, AND LOCKWASHERS ASTM 304.
   STAINLESS STEEL HEX NUTS ASTM A276.
   ALUMINUM I-BEAMS ARE 6061-T6.
9. SLOTTED HOLES IN I-BEAMS ARE NOT ALLOWED



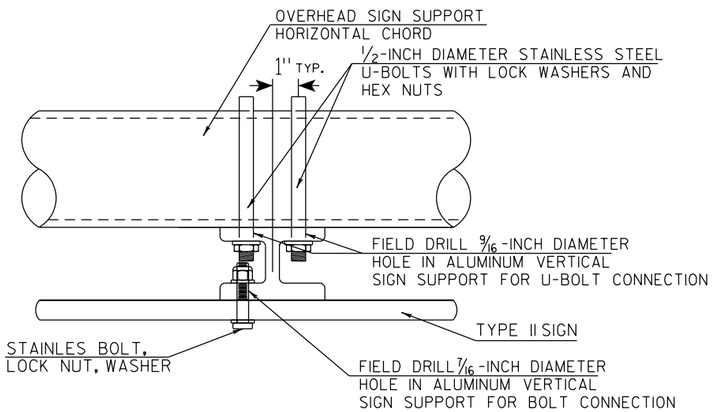
SPACING OF I5X3.7 ALUMINUM
MULTIPLE VERTICAL SIGN SUPPORTS



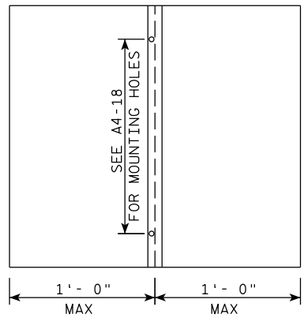
OVERHEAD SIGN SUPPORT
FULL SPAN
MONOTUBE
(SIGNS 5 FEET OR LESS IN HEIGHT)



CUT SECTION B-B



TYPICAL SIGN CONNECTION FOR
MONOTUBE
PLAN VIEW



SPACING OF I5X3.7 ALUMINUM
SINGLE VERTICAL SIGN SUPPORT

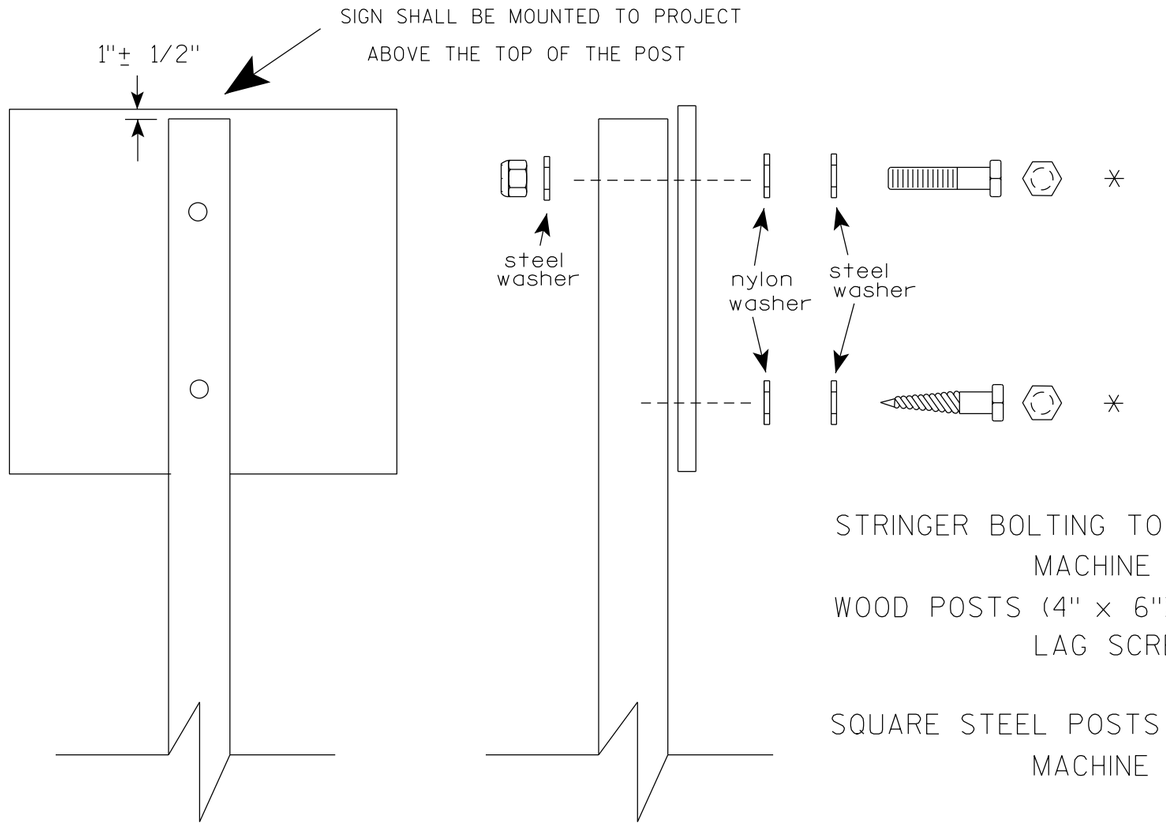
TYPE II SIGN CONNECTION
TO OVERHEAD SIGN SUPPORT

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/07/20 PLATE NO. A4-7B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 357	E



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

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

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

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

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

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

WOOD POSTS (4" x 6")

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

SQUARE STEEL POSTS (2" x 2")

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

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

WASHERS (ALL POSTS) -

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

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

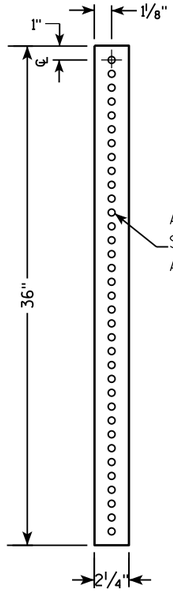
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

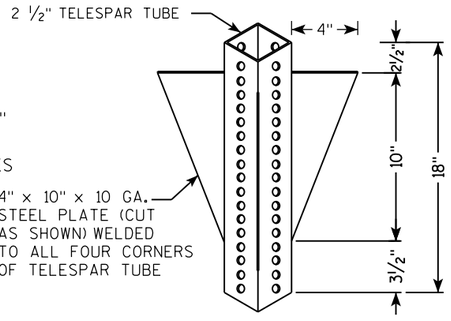
SHEET NO: 358 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

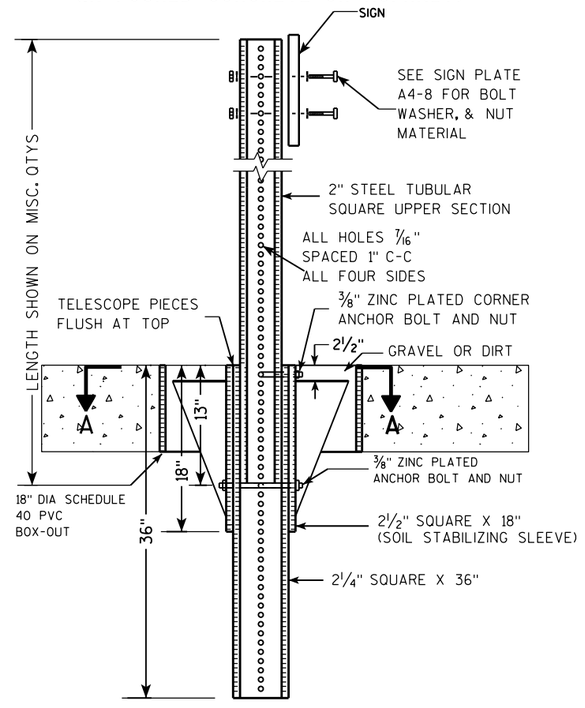
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



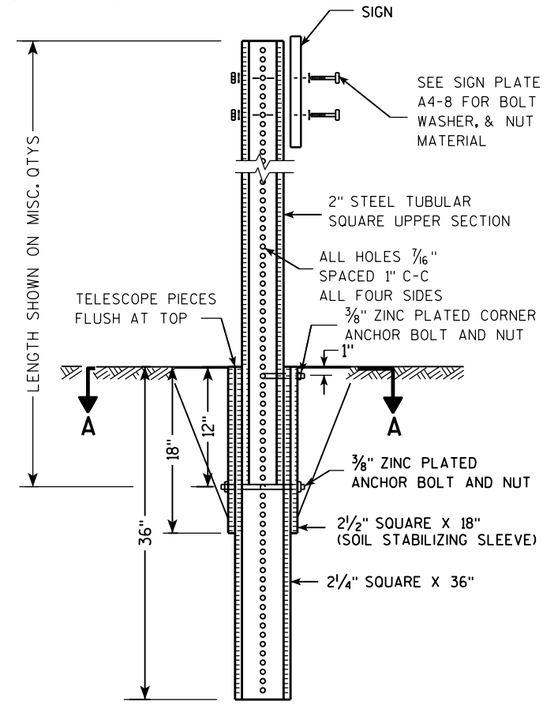
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

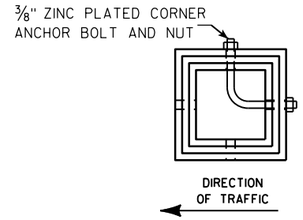


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

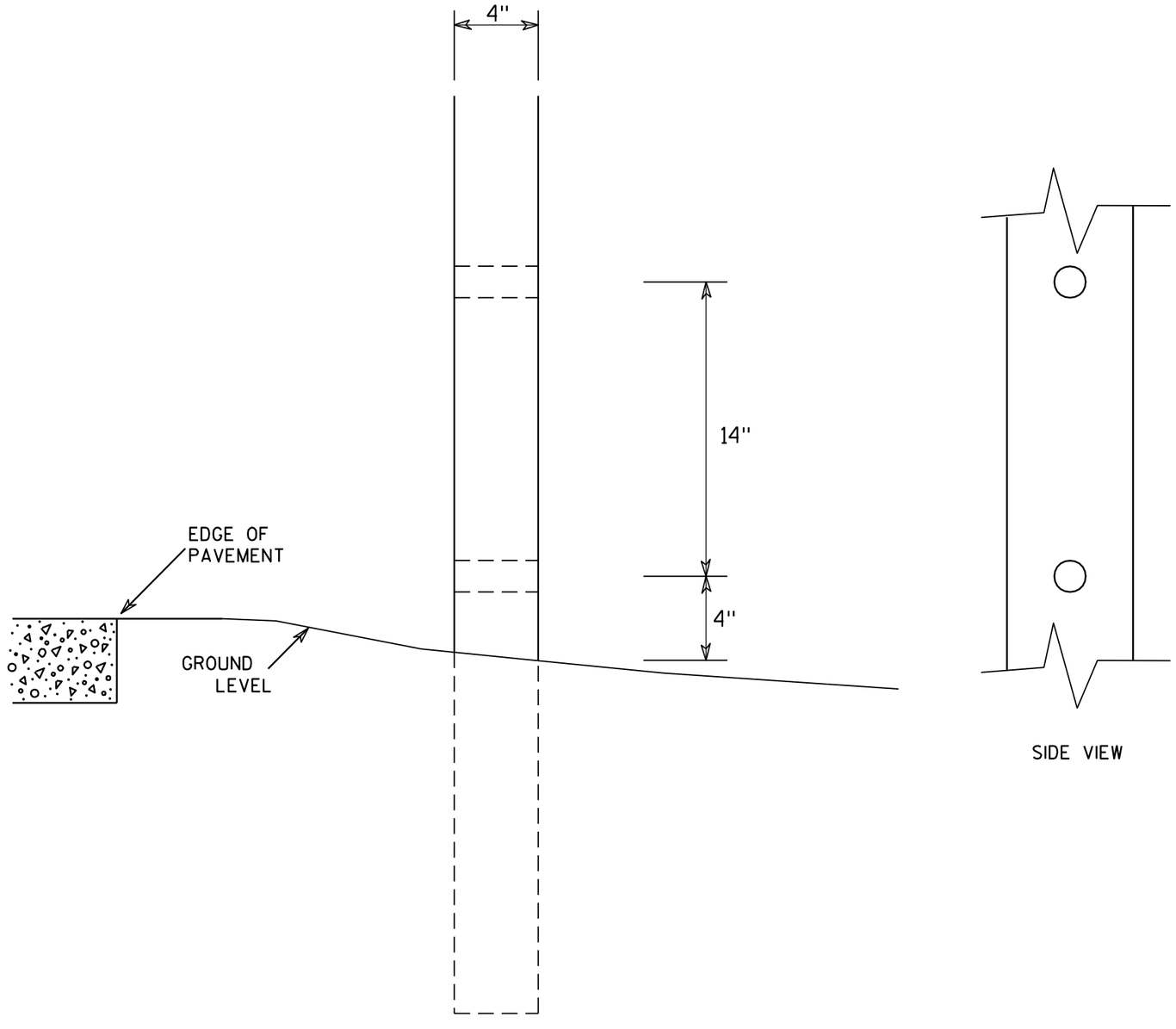
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 359 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

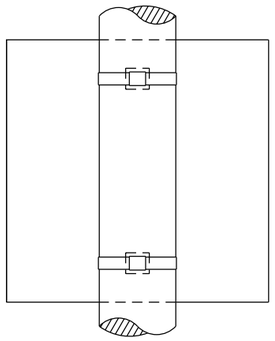
APPROVED Chester J Spang for State Traffic Engineer

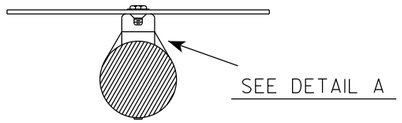
DATE 3/27/97 PLATE NO. A4-11.2

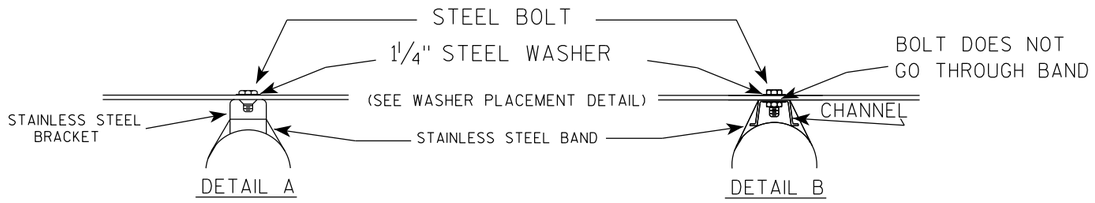
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 360	E

BANDING

SINGLE SIGN



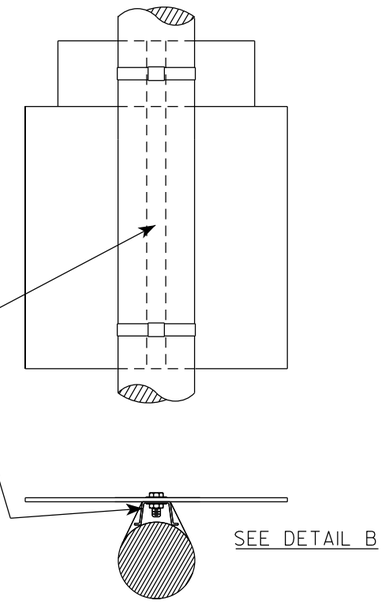




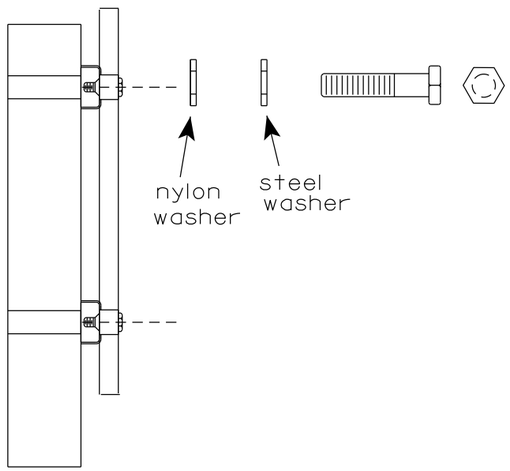
GENERAL NOTES

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

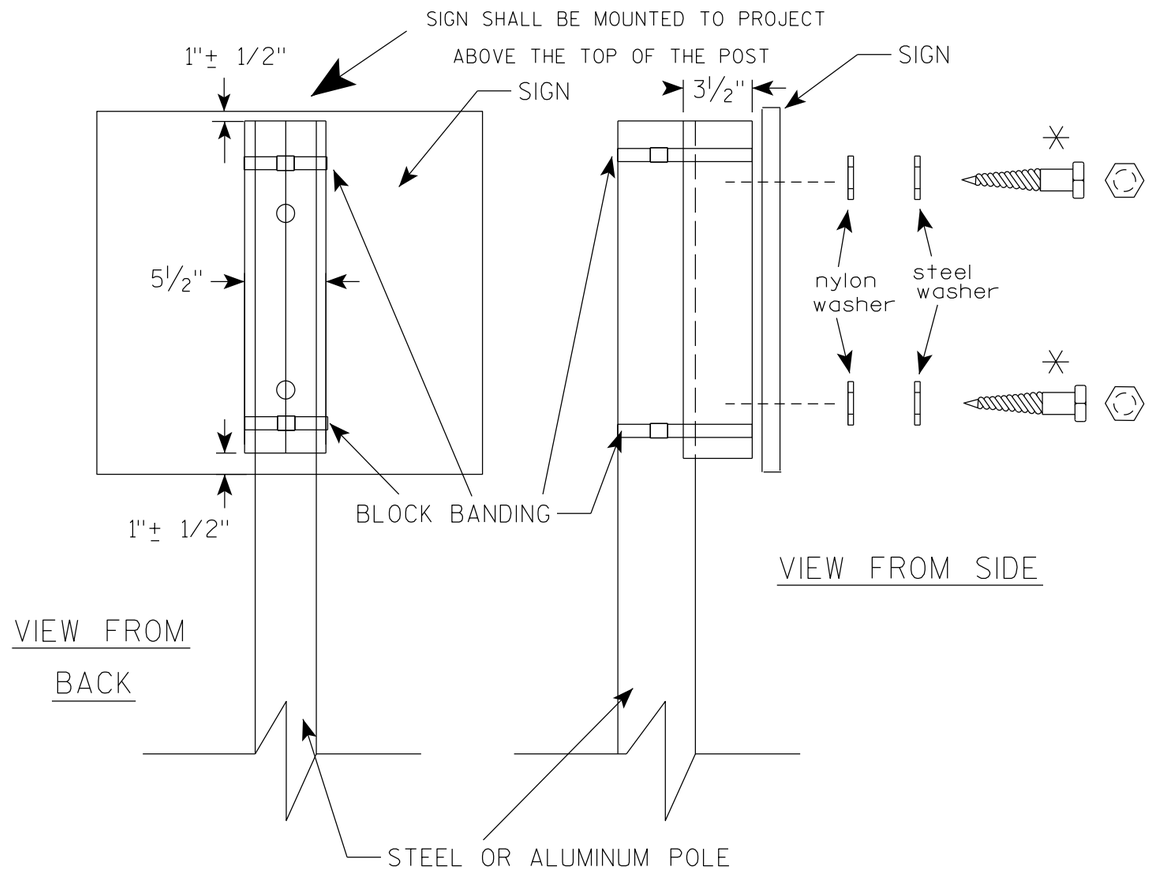
WISCONSIN DEPT OF TRANSPORTATION

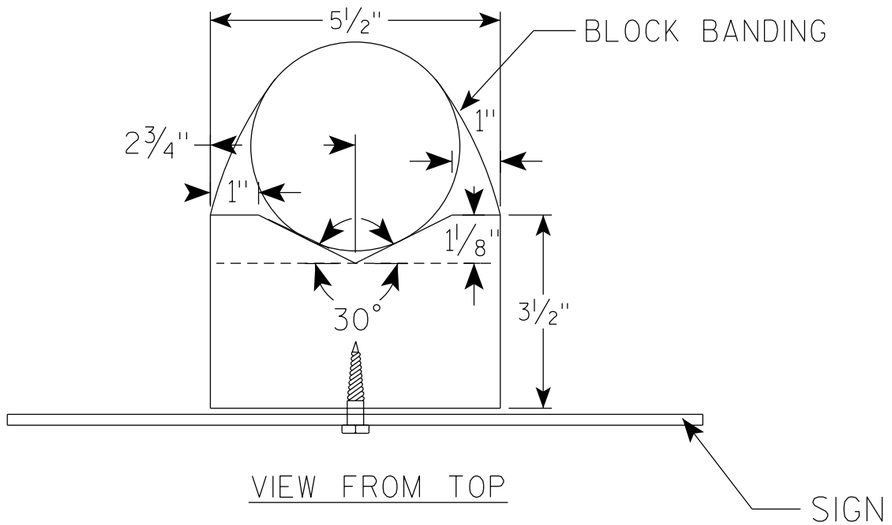
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 361	E

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





GENERAL NOTES

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

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

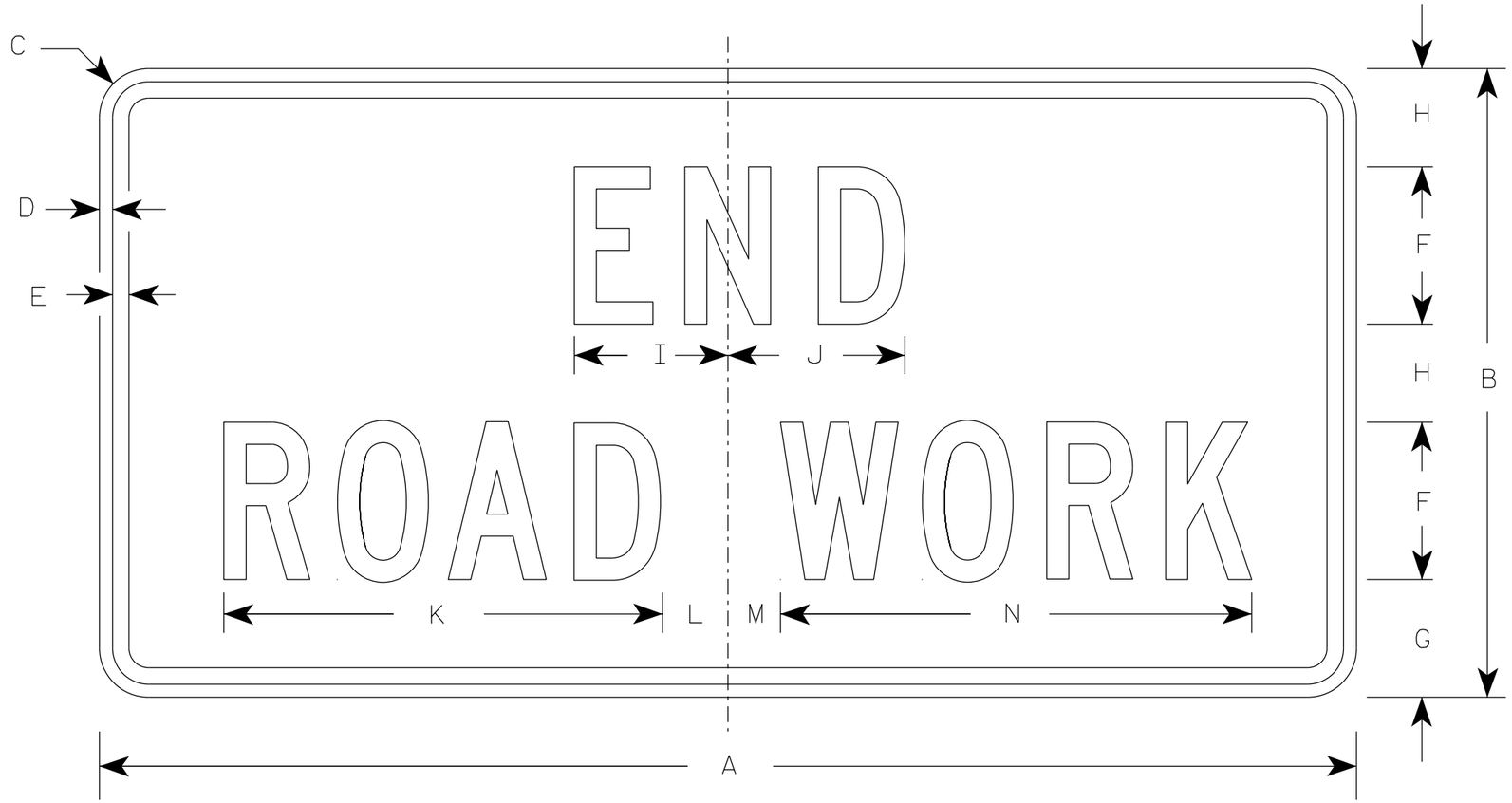
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 362 E



G20-2A

NOTES

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

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

STANDARD SIGN

G20-2A

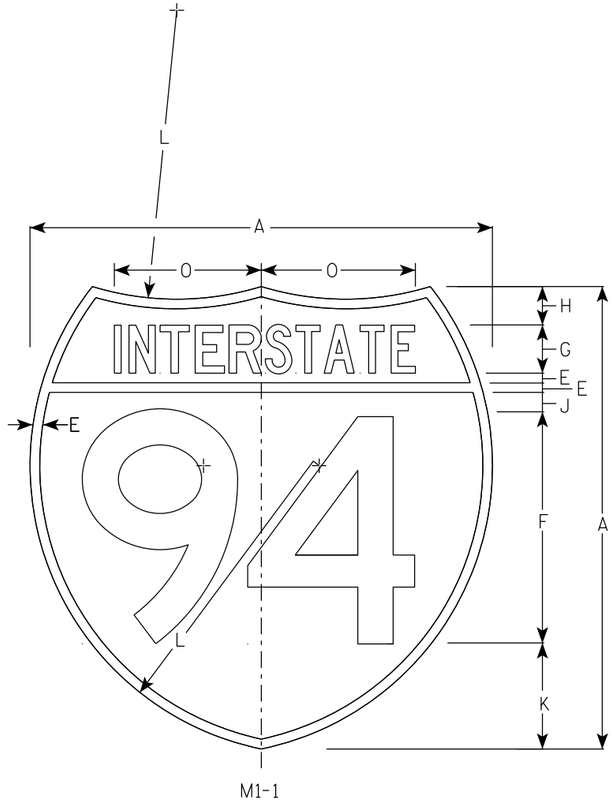
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

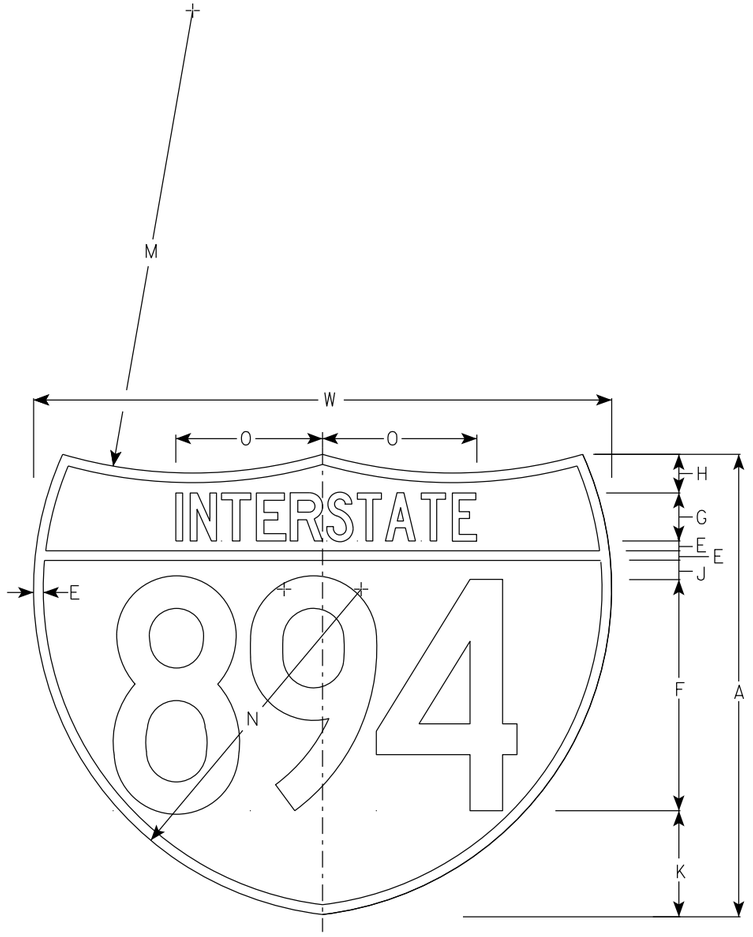
DATE 1/26/2023 PLATE NO. G20-2A.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 363 E

7



M1-1



M1-1A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Top Red - Bottom Blue
   Message - White
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	M1-1 Area sq. ft.	M1-1A Area sq. ft.
1																											
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91
2M	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79

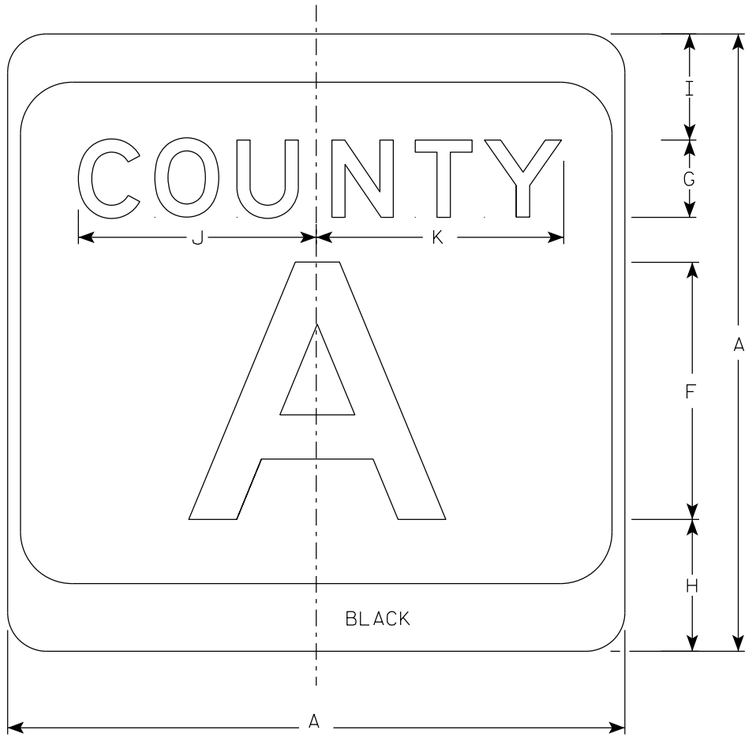
INTERSTATE ROUTE MARKER M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

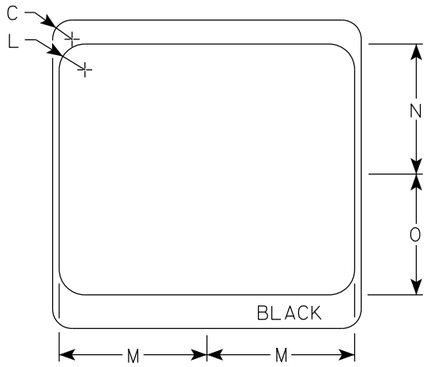
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 11/7/2022 PLATE NO. M1-1.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 364 | E

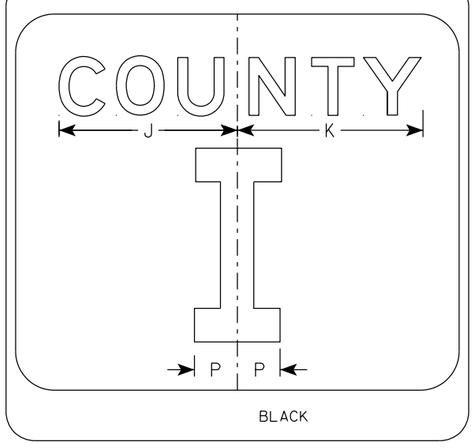


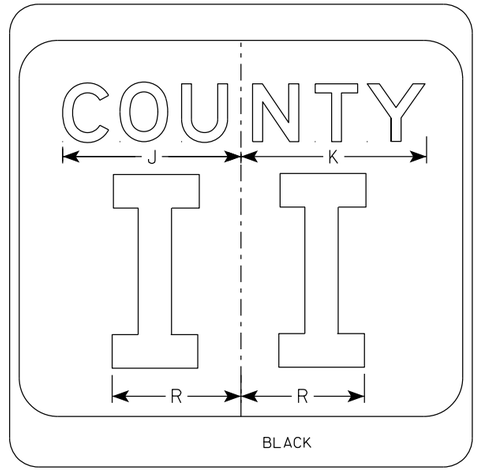
M1-5A



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White & Black
   Message - Black
3. Message Series - see Note 4
4. 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.
5. Substitute appropriate letters & optically center to achieve proper balance.





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

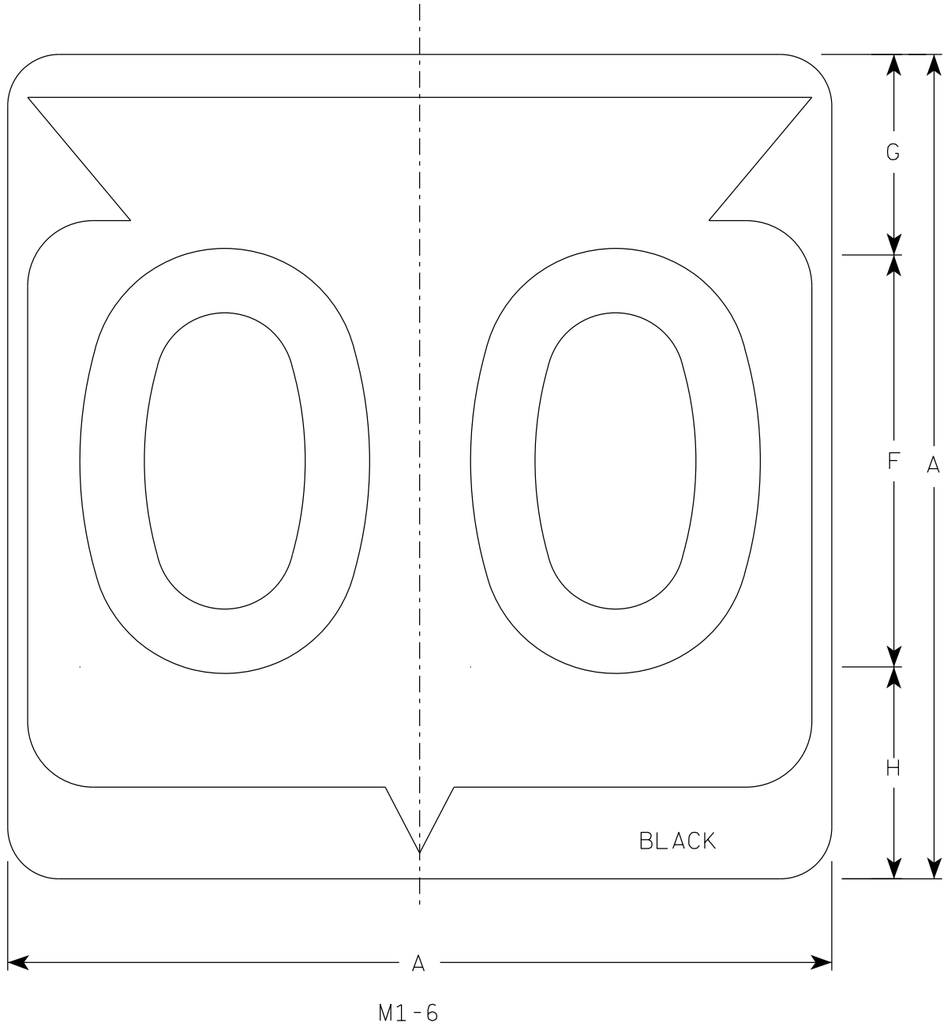
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-5A.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M15A.dgn PLOT DATE : 8-NOV 2022 8:26 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

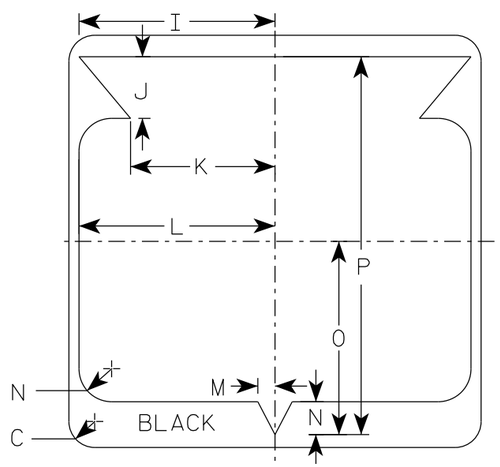
7



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



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

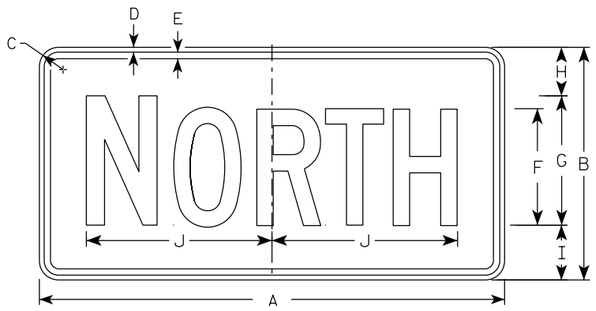
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

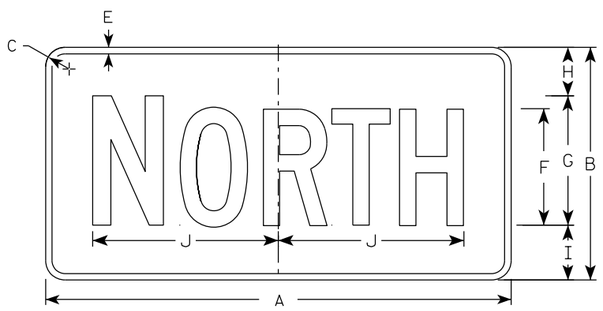
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-6.11

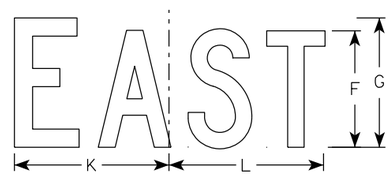
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 366	E



M3-1
MM3-1
MP3-1



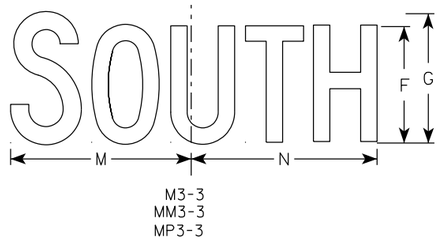
MB3-1
MK3-1
MN3-1



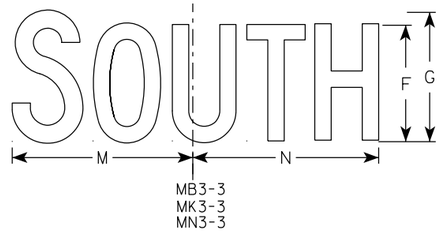
M3-2
MM3-2
MP3-2



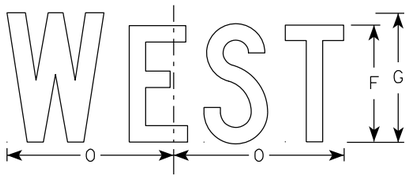
MB3-2
MK3-2
MN3-2



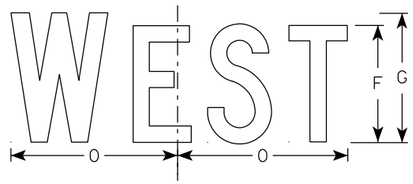
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
2M	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
3	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
4	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
5	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5

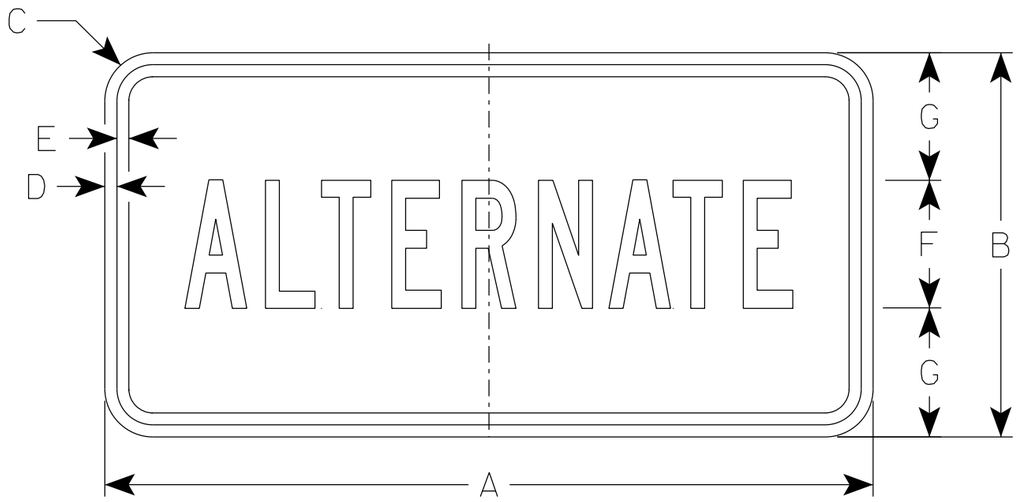
STANDARD SIGNS
M3-1 THRU M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/8/2023 PLATE NO. M3-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 367 | E



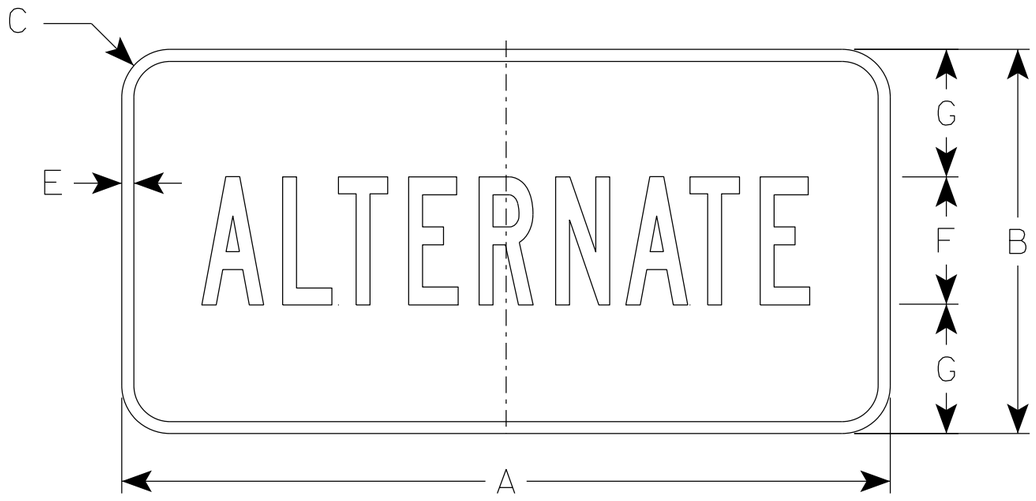
M4-1
MO4-1

NOTES

1. Sign is Type II - Type H Reflective except as Shown
2. Color:
   Background - See Note 5
   Message - See note 5
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.
5. M4-1 Background - White
   Message - Black

   MB4-1 Background - Blue
   Message - White

   MO4-1 Background - Orange - Type F Reflective
   Message - Black



MB4-1

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	24	12	1 1/2	3/8	3/8	4	4	9 3/4	9 1/2																		2.00
2M	24	12	1 1/2	3/8	3/8	4	4	9 3/4	9 1/2																		2.00
3	36	18	1 1/2	3/8	1/2	7	5 1/2	16 3/8	16 1/2																		4.5
4	36	18	1 1/2	3/8	1/2	7	5 1/2	16 3/8	16 1/2																		4.5
5	36	18	1 1/2	3/8	1/2	7	5 1/2	16 3/8	16 1/2																		4.5

STANDARD SIGN
M4-1

WISCONSIN DEPT OF TRANSPORTATION

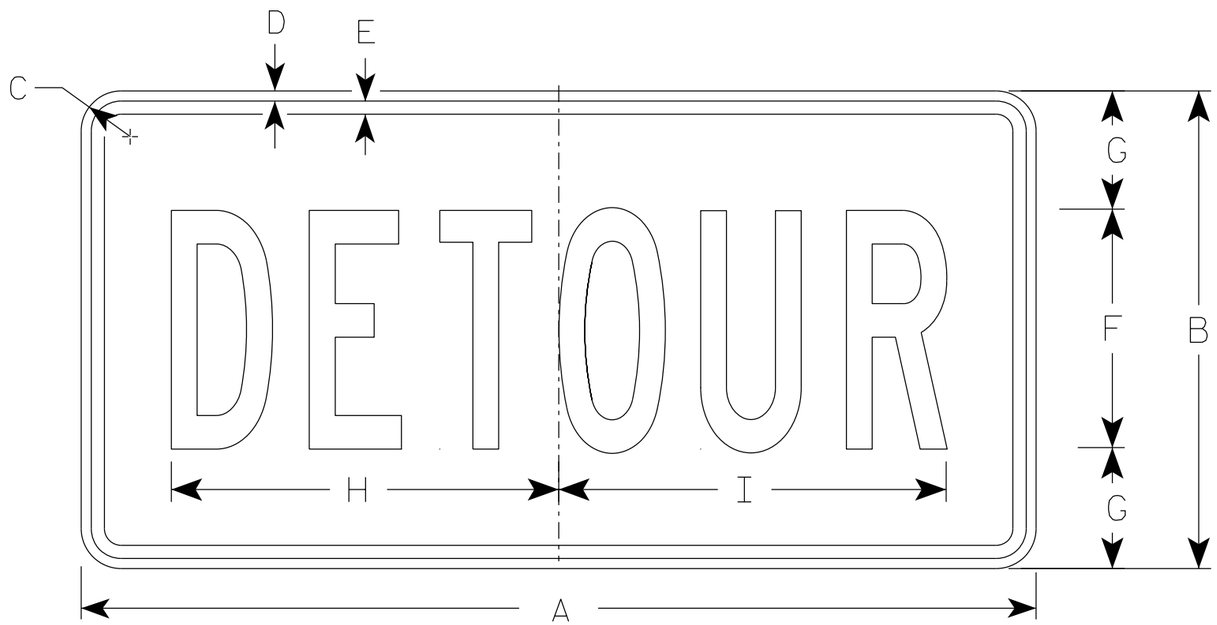
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/8/2023 PLATE NO. M4-1.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 368 | E

NOTES

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



M4-8

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

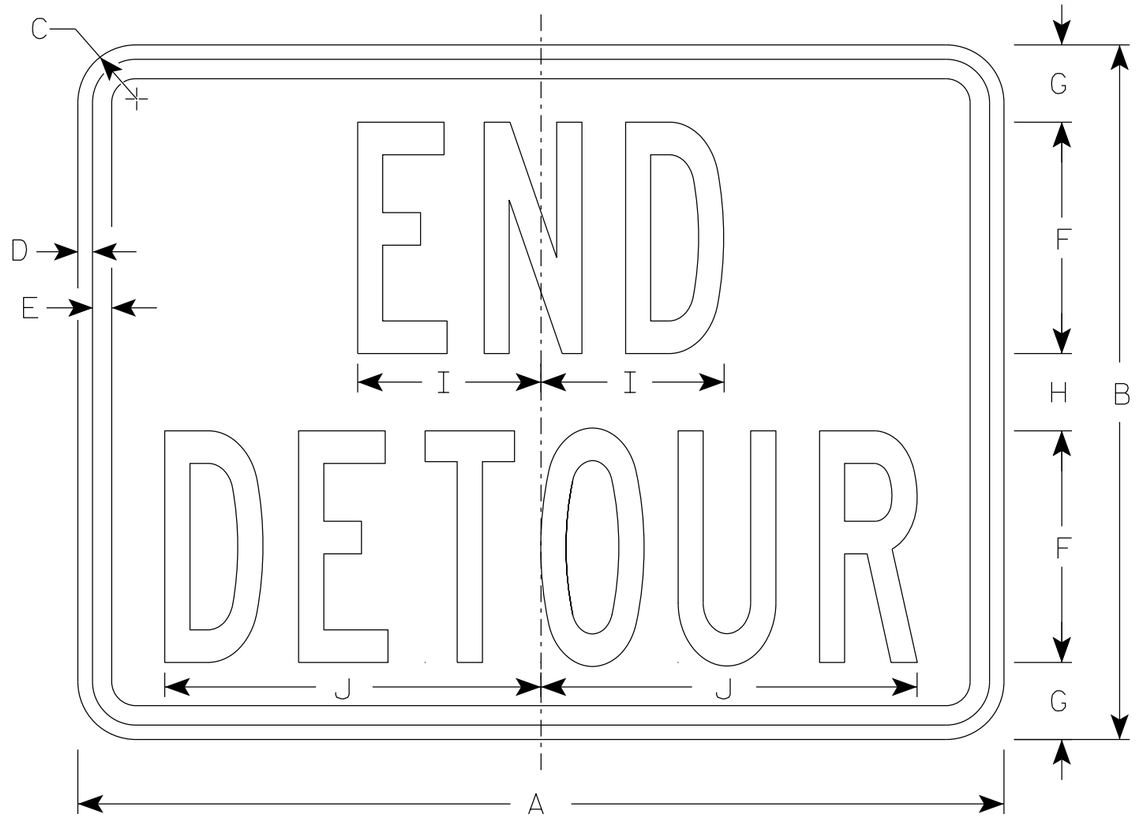
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 369	E



M4-8A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
2M	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
3	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
4	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
5	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0

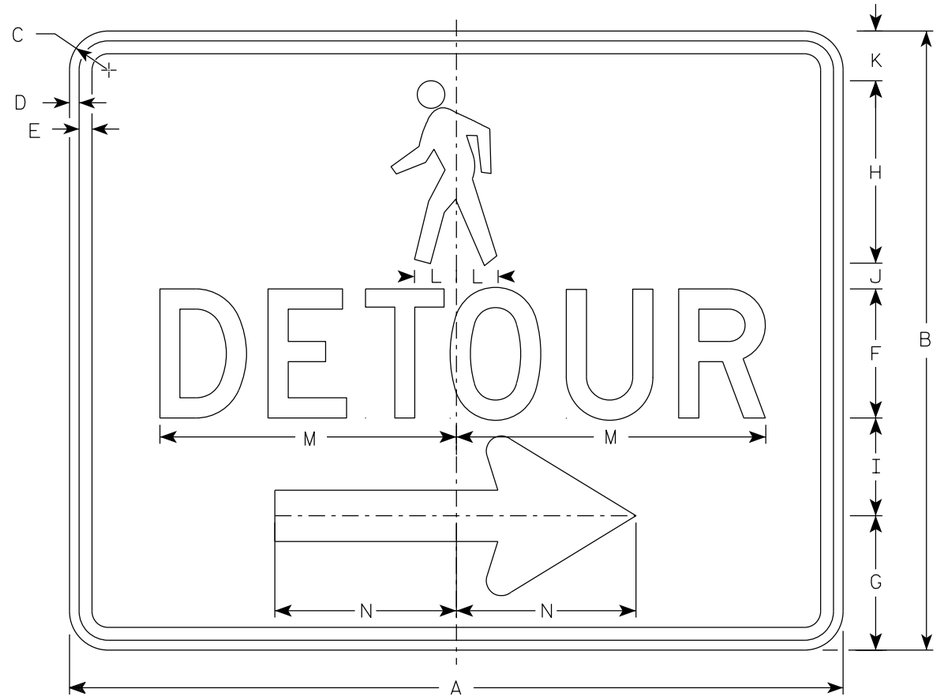
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8A.4

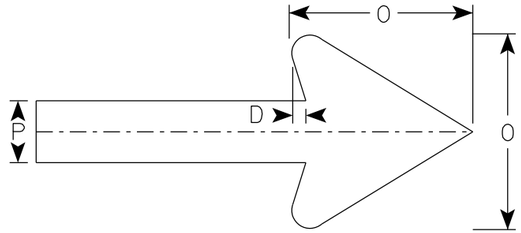
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 370 | E



M4-9BR

NOTES

1. Sign is Type II-Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9BL is the same as M4-9BR except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.0
2M	30	24	1 1/2	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.0
3																											
4																											
5																											

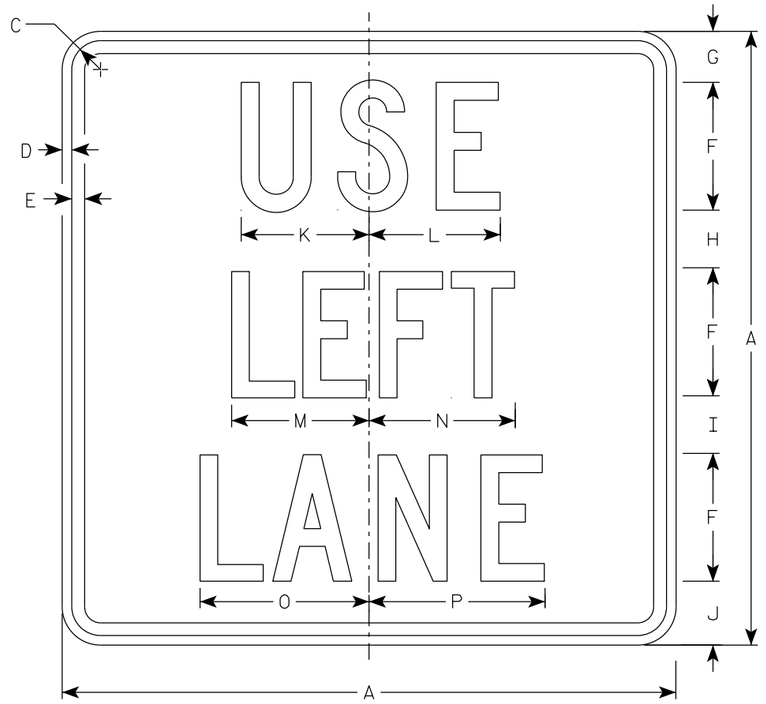
STANDARD SIGN
M4-9B L&R

WISCONSIN DEPT OF TRANSPORTATION

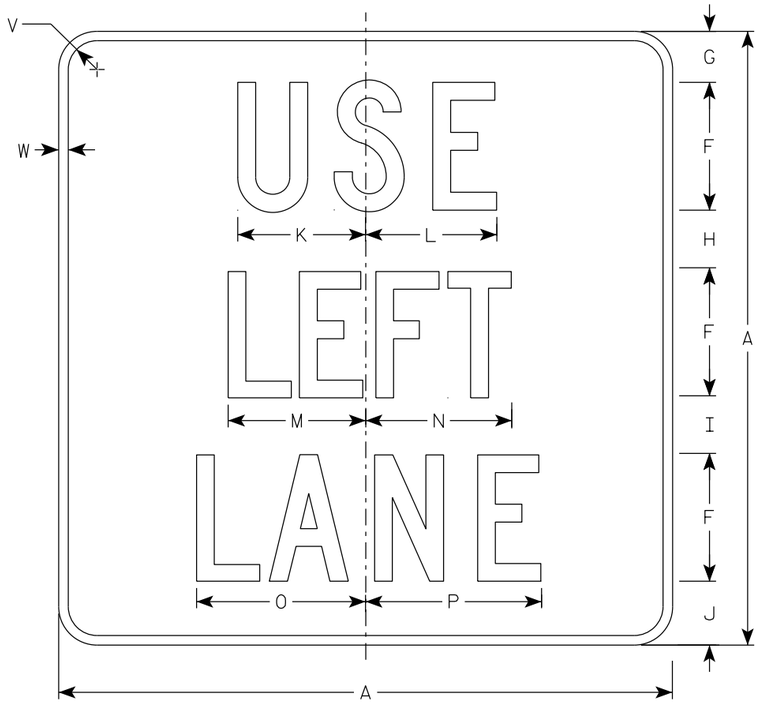
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-9B.4

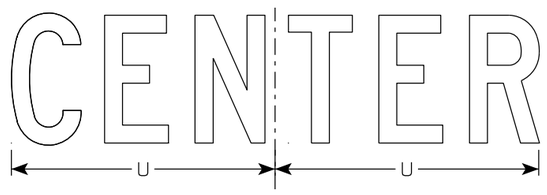
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 371 | E



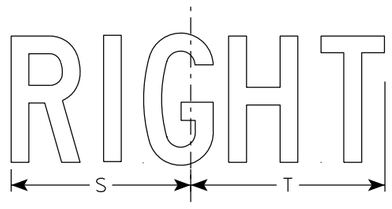
M4-20L
MM4-20L
MO4-20L
MP4-20L



MB4-20L
MK4-20L
MN4-20L
MR4-20L



M4-20C
MB4-20C
MK4-20C
MM4-20C
MN4-20C
MO4-20C
MP4-20C
MR4-20C



M4-20R
MB4-20R
MK4-20R
MM4-20R
MN4-20R
MO4-20R
MP4-20R
MR4-20R

NOTES

1. Sign is Type II - Type H except as Shown
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-20 Background - White
   Message - Black
   MB4-20 Background - Blue
   Message - White
   MK4-20 Background - Green
   Message - White
   MM4-20 Background - White
   Message - Green
   MN4-20 Background - Brown
   Message - White
   MO4-20 Background - Orange - Type F Reflective
   Message - Black
   MP4-20 Background - White
   Message - Blue
   MR4-20 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/2	3/8	1/2	5	2	2 1/4	2 1/4	2 1/2	5	5 1/8	5 3/8	5 3/4	6 5/8	6 7/8			7	7 5/8	10 1/4	1 1/2	1/2				4.0
2M	24		1 1/2	3/8	1/2	5	2	2 1/4	2 1/4	2 1/2	5	5 1/8	5 3/8	5 3/4	6 5/8	6 7/8			7	7 5/8	10 1/4	1 1/2	1/2				4.0
3	36		2 1/4	5/8	3/4	7	4	3	3 1/2	4 1/2	7 1/2	7 3/4	8	8 5/8	9 7/8	10 1/4			10 3/8	11 3/8	14 3/8	1 7/8	1/2				9.0
4	36		2 1/4	5/8	3/4	7	4	3	3 1/2	4 1/2	7 1/2	7 3/4	8	8 5/8	9 7/8	10 1/4			10 3/8	11 3/8	14 3/8	1 7/8	1/2				9.0
5	36		2 1/4	5/8	3/4	7	4	3	3 1/2	4 1/2	7 1/2	7 3/4	8	8 5/8	9 7/8	10 1/4			10 3/8	11 3/8	14 3/8	1 7/8	1/2				9.0

STANDARD SIGN
M4-20

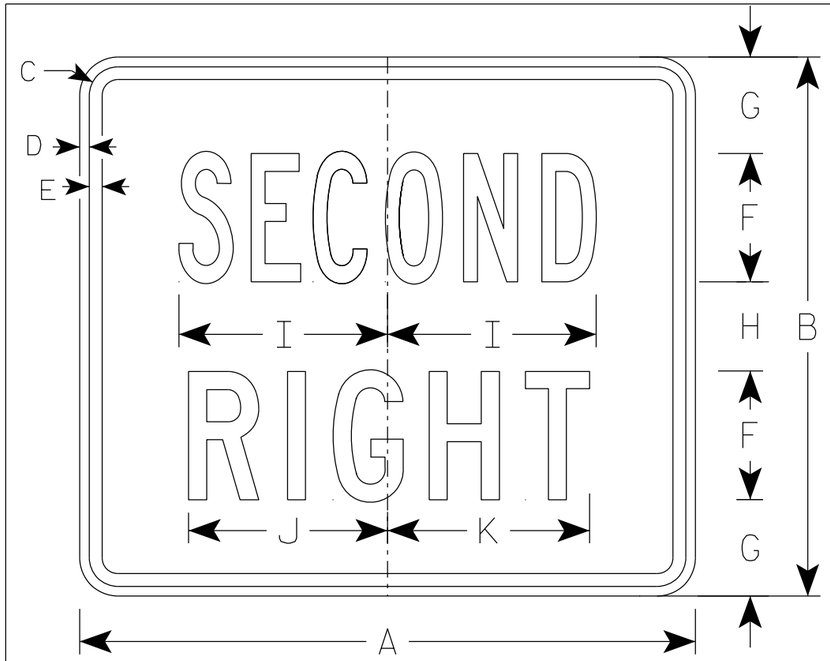
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

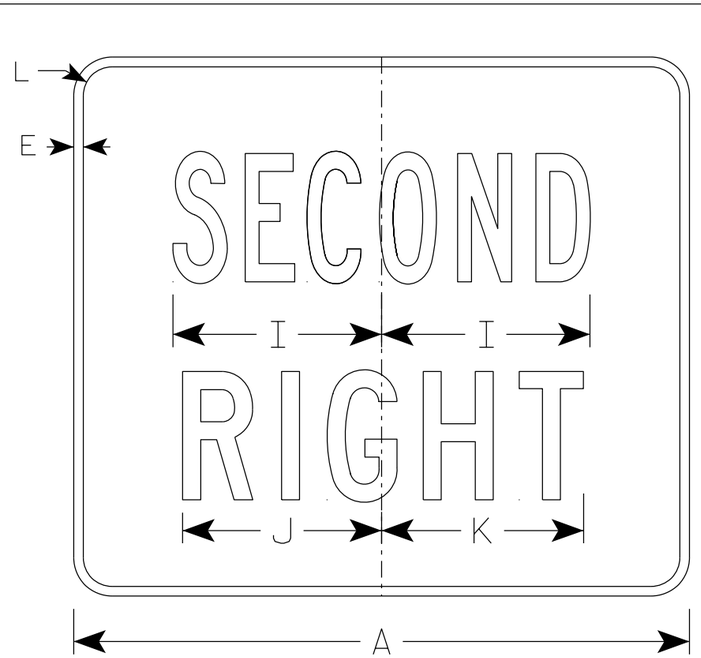
DATE 2/13/2023 PLATE NO. M4-20.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

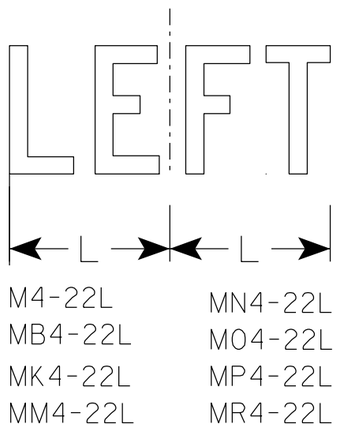
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M420.dgn PLOT DATE : 13-FEB 2023 8:25 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



M4-22R
MM4-22R
M04-22R
MP4-22R



MB4-22R
MK4-22R
MN4-22R
MR4-22R



M4-22L
MB4-22L
MK4-22L
MM4-22L
MN4-22L
M04-22L
MP4-22L
MR4-22L

NOTES

1. Sign is Type II - Type H except as Shown
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-22 Background - White
   Message - Black
   MB4-22 Background - Blue
   Message - White
   MK4-22 Background - Green
   Message - White
   MM4-22 Background - White
   Message - Green
   MN4-22 Background - Brown
   Message - White
   M04-22 Background - Orange - Type F Reflective
   Message - Black
   MP4-22 Background - White
   Message - Blue
   MR4-22 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	21	1 1/8	3/8	1/2	5	3 3/4	3 1/2	8 1/8	7 3/4	7 7/8	1 1/2															3.5
2M	24	21	1 1/8	3/8	1/2	5	3 3/4	3 1/2	8 1/8	7 3/4	7 7/8	1 1/2															3.5
3	36	30	1 5/8	5/8	3/4	8	4 3/4	4 1/2	13 1/8	12 5/8	12 1/2	1 7/8															7.5
4	36	30	1 5/8	5/8	3/4	8	4 3/4	4 1/2	13 1/8	12 5/8	12 1/2	1 7/8															7.5
5																											

STANDARD SIGN
M4-22

WISCONSIN DEPT OF TRANSPORTATION

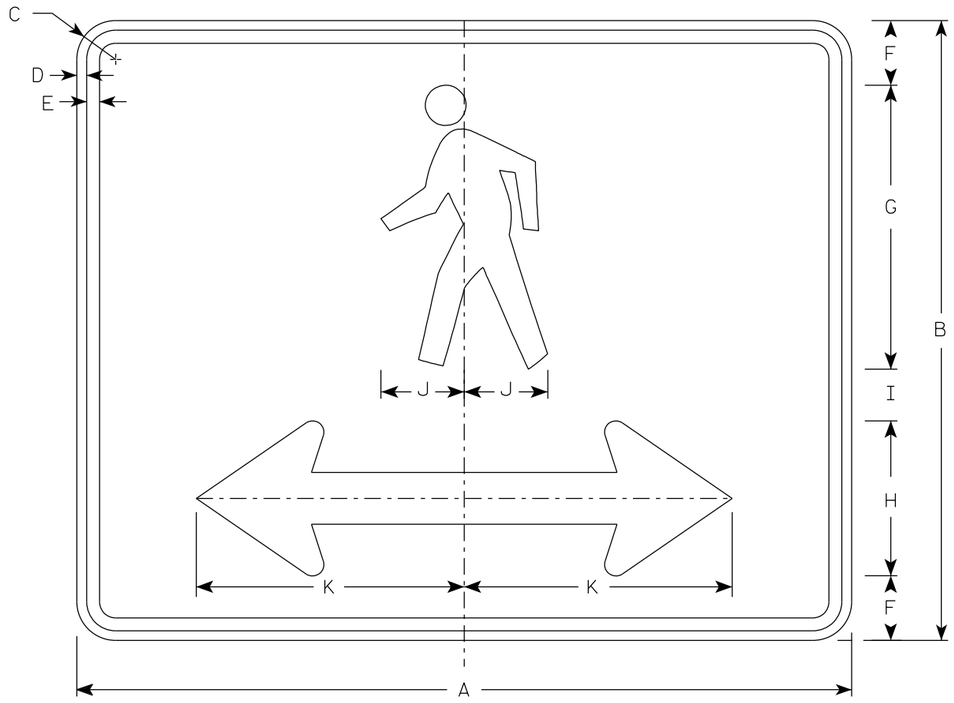
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/2022 PLATE NO. M4-22.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 373 E

7

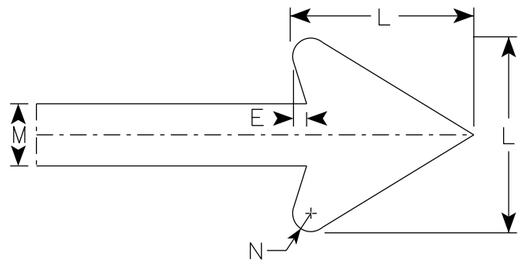
7



M4-60D

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																											
2S	30	24	1 1/2	3/8	1/2	2 1/2	11	6	2	3 1/4	10 3/8	6	2	3/8													5.00
2M	30	24	1 1/2	3/8	1/2	2 1/2	11	6	2	3 1/4	10 3/8	6	2	3/8													5.00
3																											
4																											
5																											

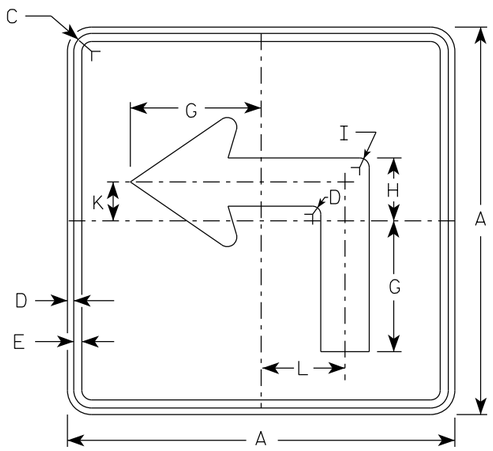
STANDARD SIGN
M4-60D

WISCONSIN DEPT OF TRANSPORTATION

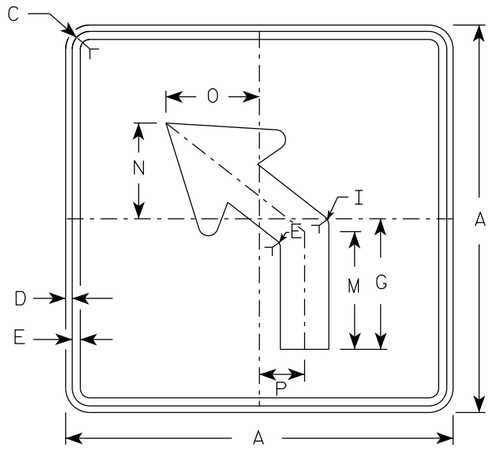
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/14/2023 PLATE NO. M4-60D.2

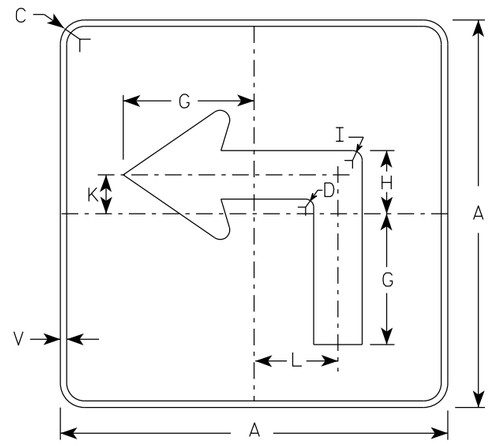
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 374 | E



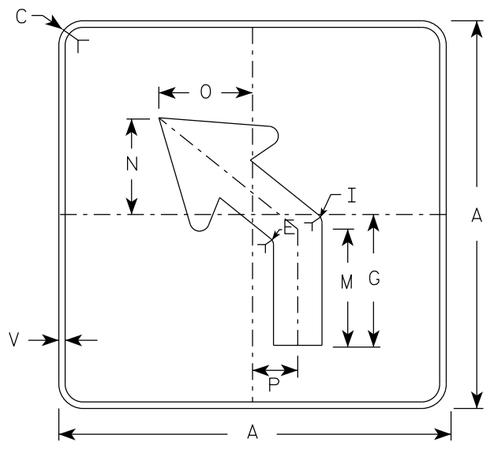
M5-1L
MM5-1L
MO5-1L
MP5-1L



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



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

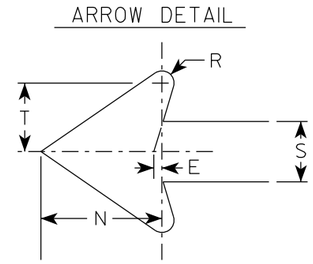


MB5-2L
MK5-2L
MN5-2L
MR5-2L

NOTES

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

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
2M	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
3	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
4	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
5	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25

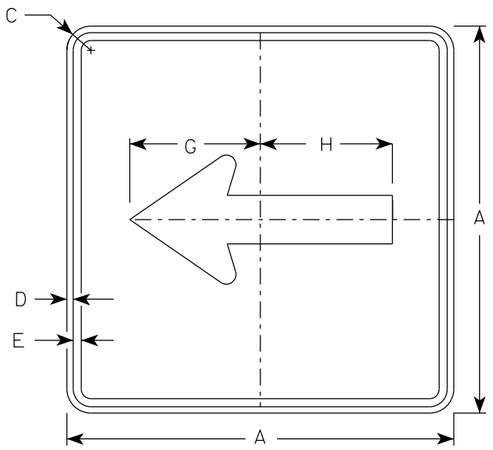
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

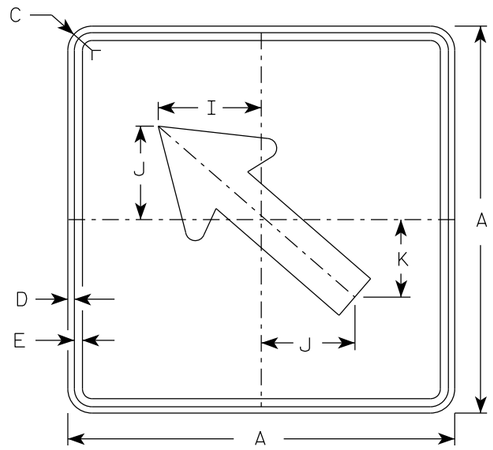
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15

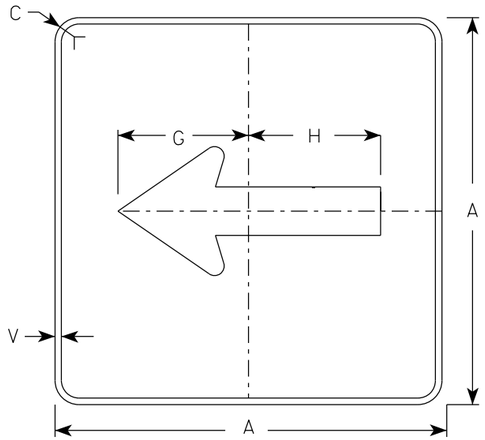
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 375 | E



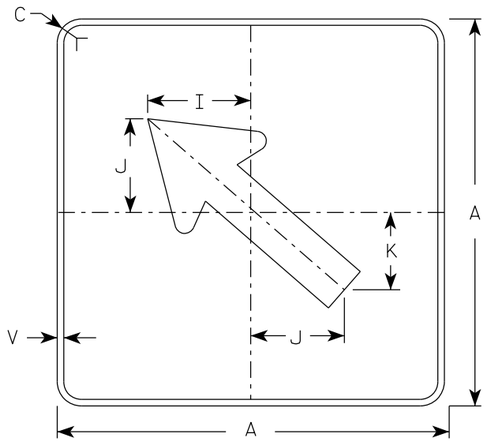
M6-1
MM6-1
MO6-1
MP6-1



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



MB6-1
MK6-1
MN6-1
MR6-1

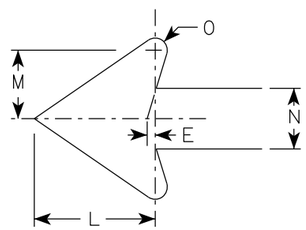


MB6-2
MK6-2
MN6-2
MR6-2

NOTES

1. Signs are Type II - Type H Reflective except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
2M	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
3	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
4	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
5	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

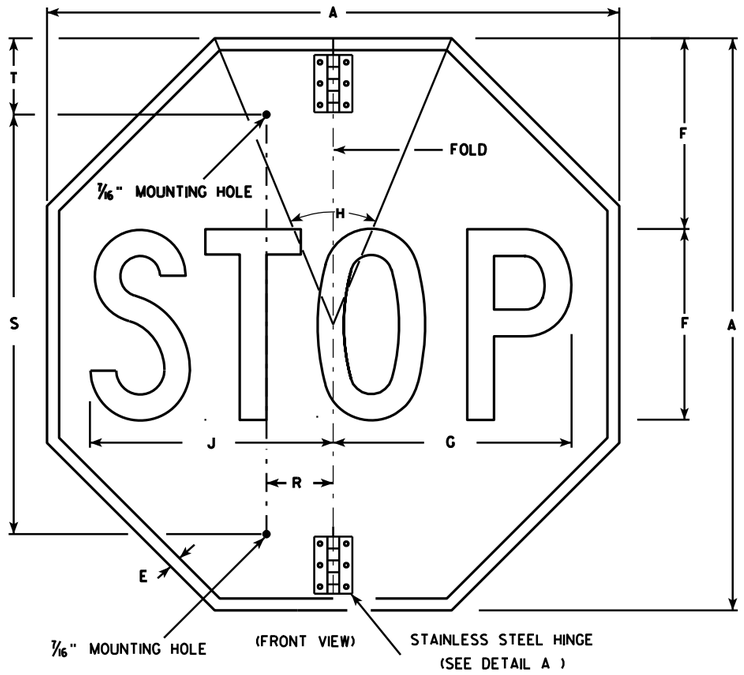
APPROVED Matthew R Rauch
For State Traffic Engineer

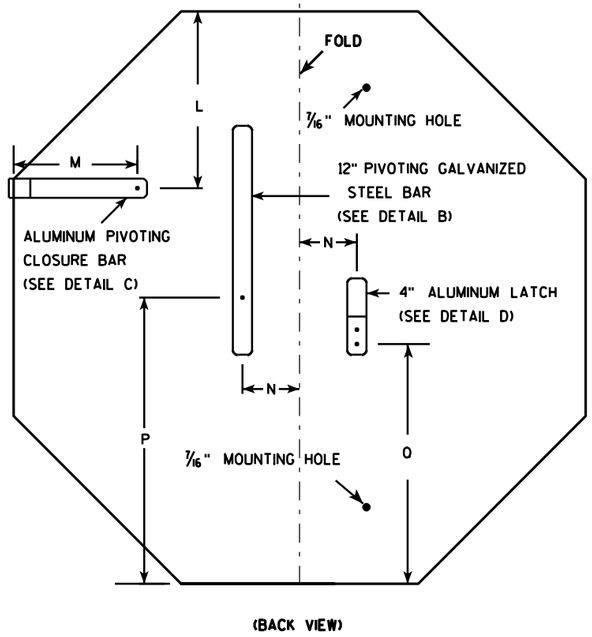
DATE 2/13/2023 PLATE NO. M6-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 376 | E

7

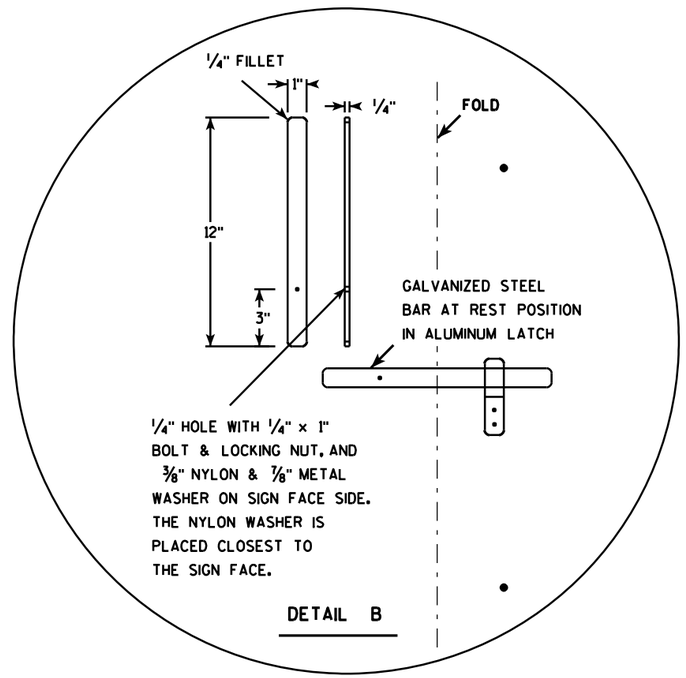
7



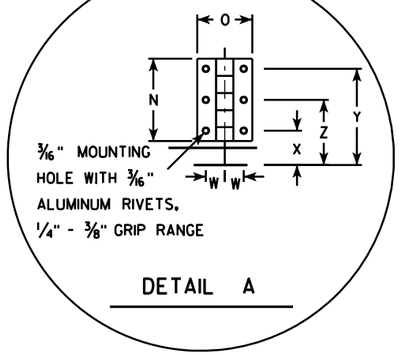


NOTES

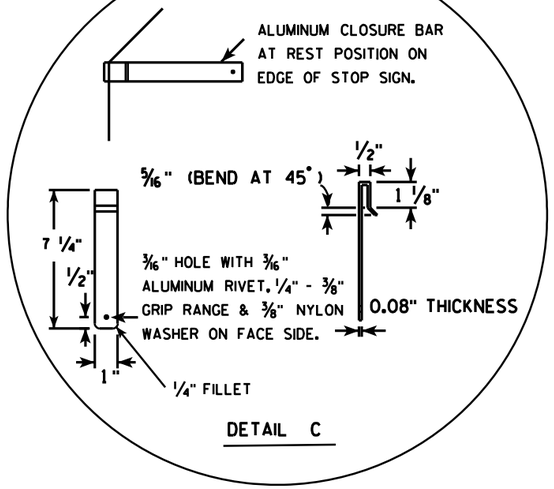
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



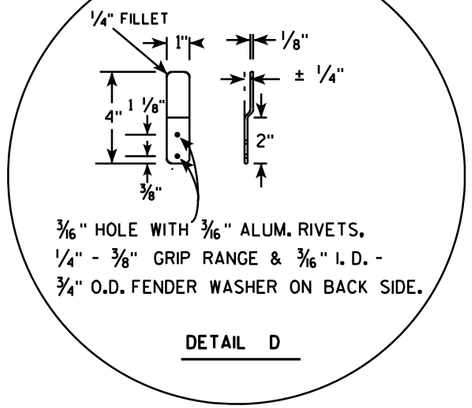
DETAIL B



DETAIL A



DETAIL C



DETAIL D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

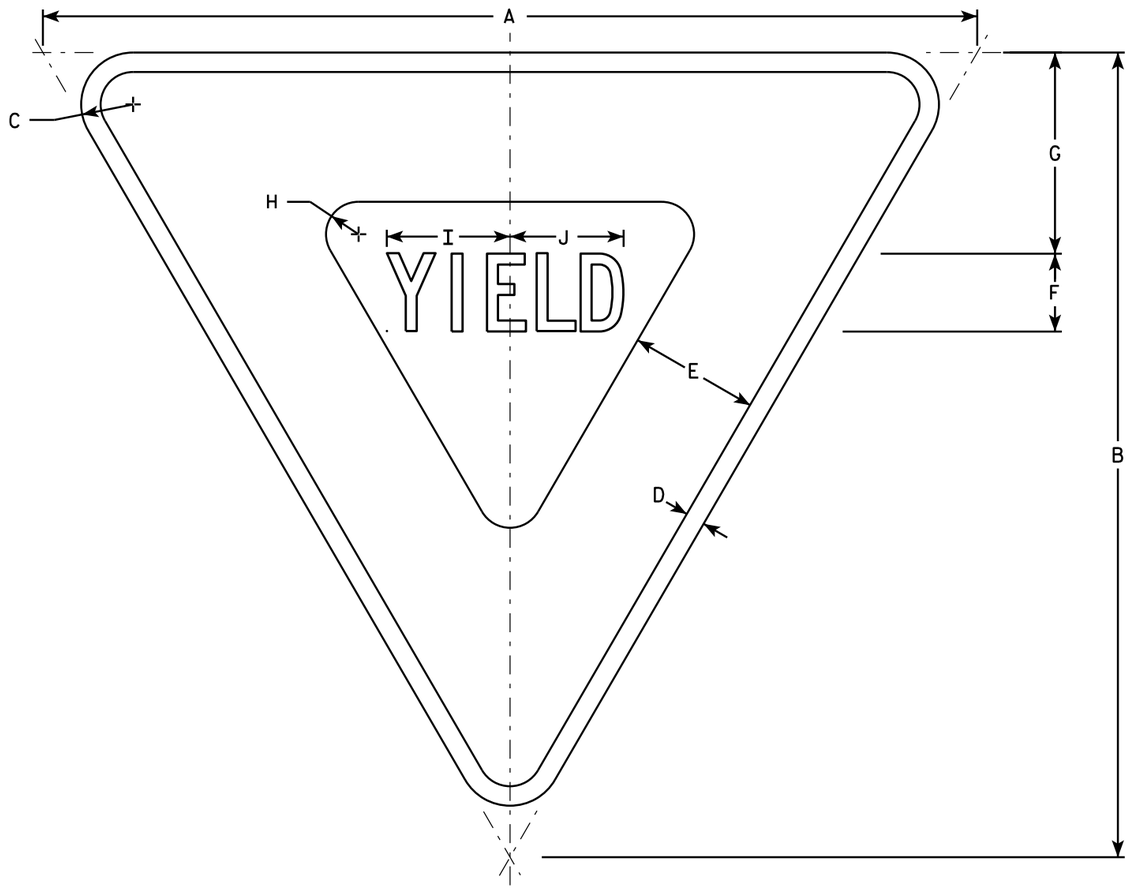
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 377	E



R1-2

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 - 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. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

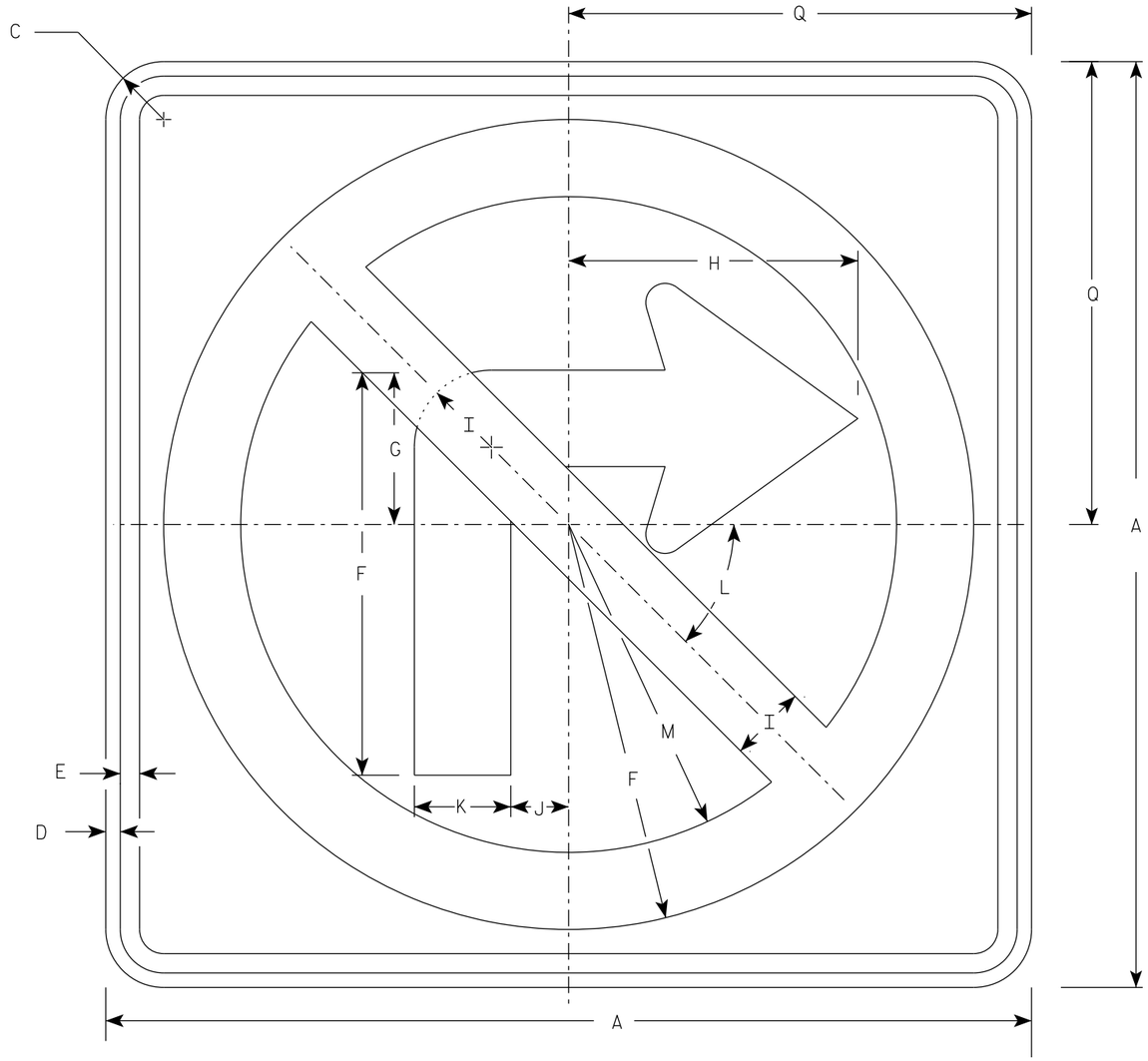
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE R1-2.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

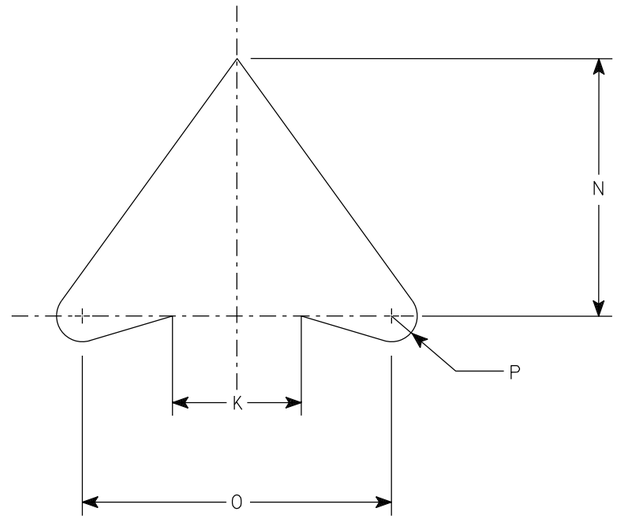
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



R3-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See note 3
3. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 ½	⅜	½	10 ½	4	7 ½	2	1 ½	2 ½	45	8 ½	5	6	½	12										4.0
2S	24		1 ½	⅜	½	10 ½	4	7 ½	2	1 ½	2 ½	45°	8 ½	5	6	½	12										4.0
2M	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45	12 ¾	7 ½	9	¾	18										9.0
3	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45	12 ¾	7 ½	9	¾	18										9.0
4	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45°	12 ¾	7 ½	9	¾	18										9.0
5	48		2 ¼	¾	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

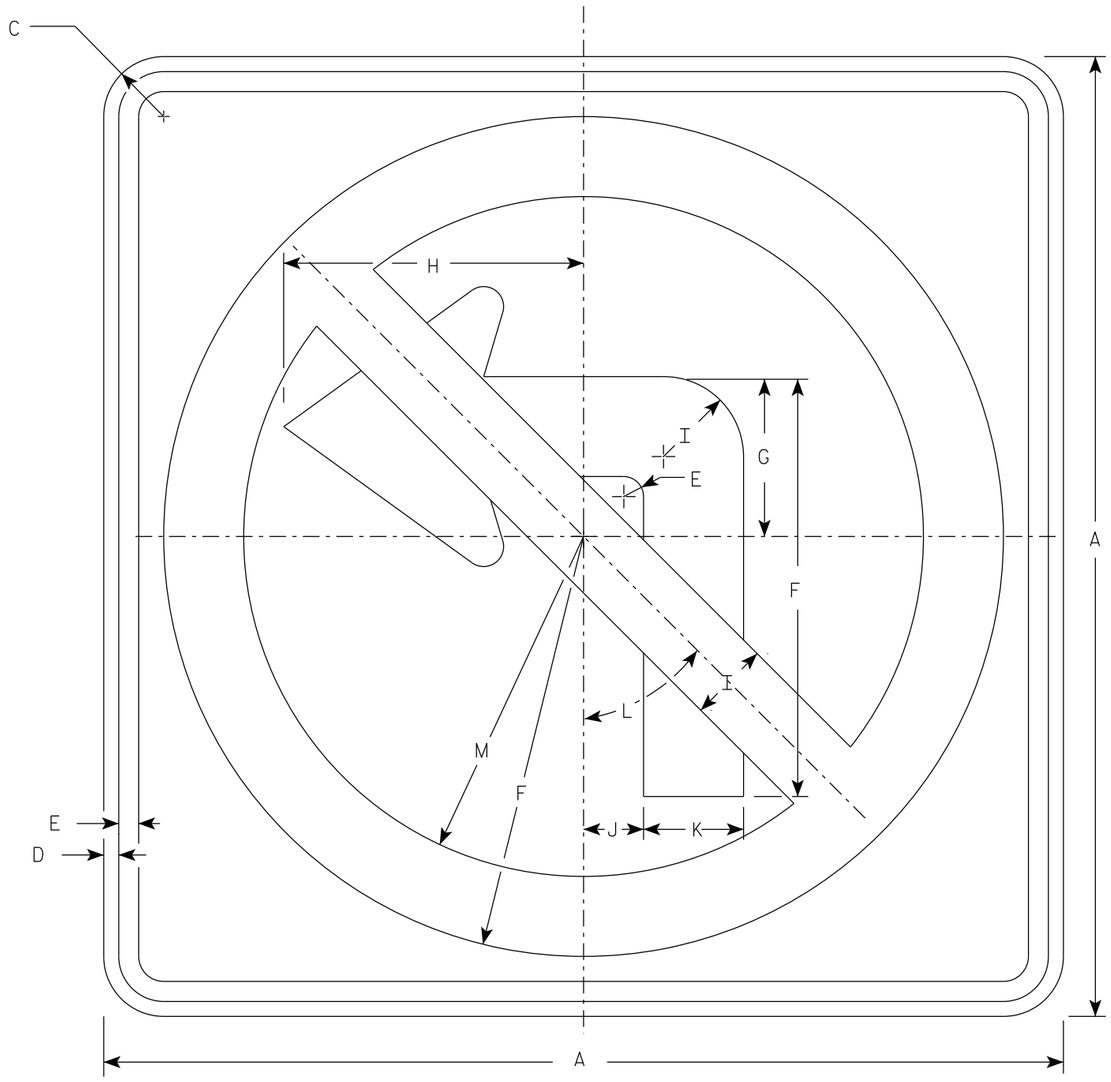
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/2/23 PLATE NO. R3-1.6

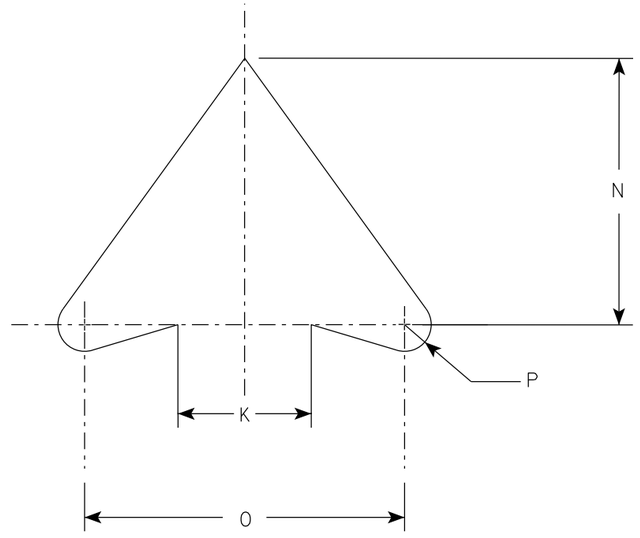
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 379 | E



R3-2

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See note 3
3. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/2	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											4.0
2S	24		1 1/2	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											4.0
2M	36		2 1/4	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											9.0
3	36		2 1/4	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											9.0
4	36		2 1/4	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											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

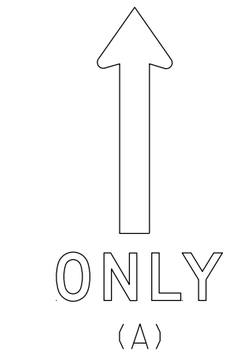
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/2/23 PLATE NO. R3-2.11

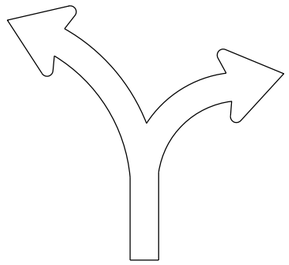
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 380 | E

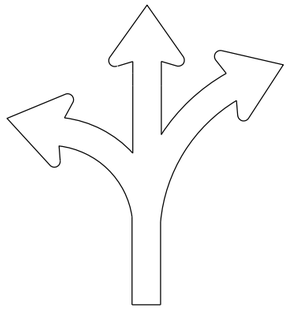


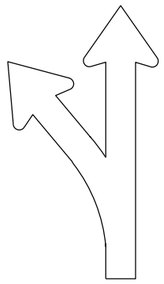
(A)

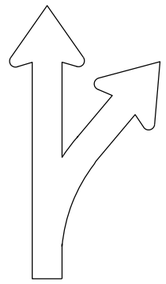


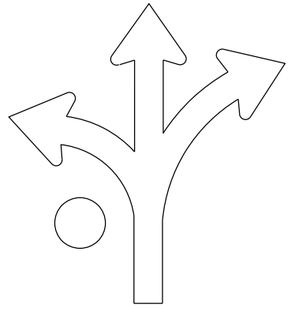
(B)

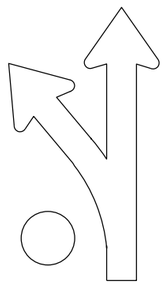

(C)

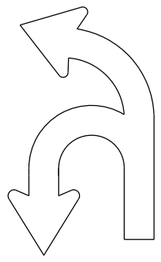

(D)

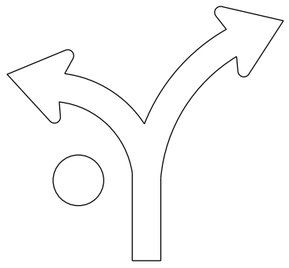

(E)

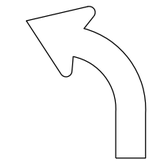

(F)


(G)

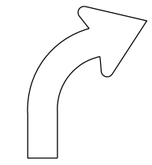

(H)


(I)


(J)



(L)



(R)

NOTES

1. Sigs are Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Use appropriate Letter for Sign Code
   Each letter added makes sign wider. Example R3-8EAR
5. Square footage of sign varies by letters

1 Letter =	3.75 sq ft	for Size 2
	6.0 sq ft	for Size 3
	10.0 sq ft	for Size 4 or 5
2 Letters =	7.5 sq ft	for Size 2
	12.0 sq ft	for Size 3
	20.0 sq ft	for Size 4 or 5
3 Letters =	11.25 sq ft	for Size 2
	18.0 sq ft	for Size 3
	30.0 sq ft	for Size 4 or 5
4 Letters =	15.0 sq ft	for Size 2
	24.0 sq ft	for Size 3
	40.0 sq ft	for Size 4 or 5
5 Letters =	18.75 sq ft	for Size 2
	30.0 sq ft	for Size 3
	50.0 sq ft	for Size 4 or 5
6 Letters =	22.5 sq ft	for Size 2
	36.0 sq ft	for Size 3
	60.0 sq ft	for Size 4 or 5

6. When letters C,D,G,J are used on the Left or Right end of the sign the Sq. Ft. changes.
   Add the amounts when these letters are used:
   1.25 sq ft for Size 2
   1.5 sq ft for Size 3
   2.0 sq ft for Size 4 or 5

STANDARD SIGN
R3-8 Series

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

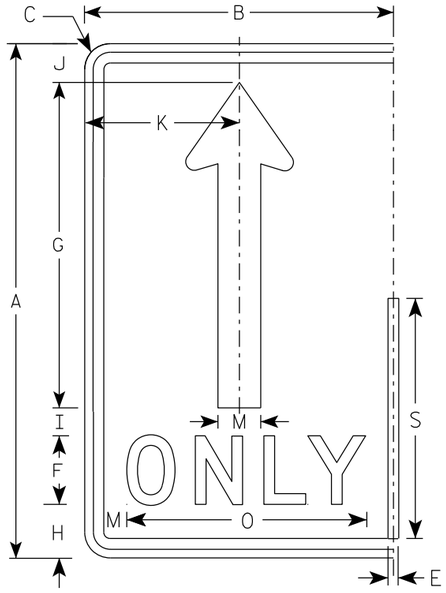
PROJECT NO:

SHEET NO: 381 E

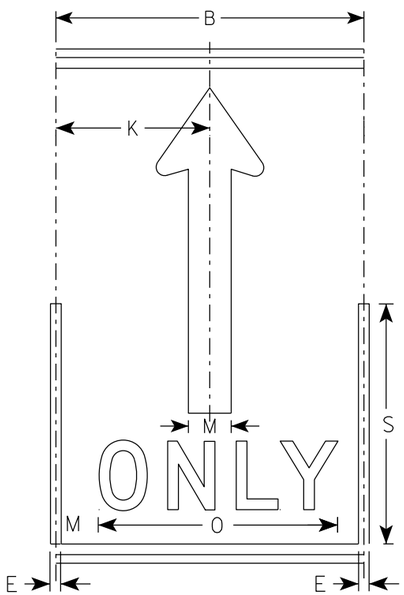
7

NOTES

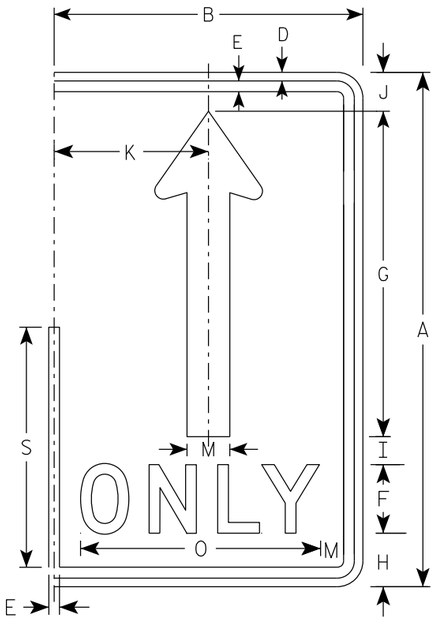
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



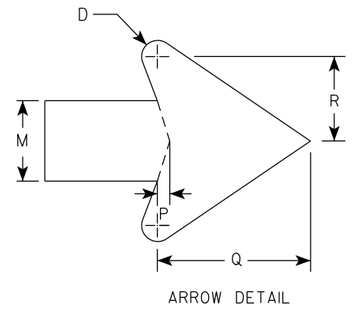
(A)



(A)



(A)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8	5	22 3/4	3 3/4	1 3/4	2 3/4	12		3		17 5/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (A) Arrow

WISCONSIN DEPT OF TRANSPORTATION

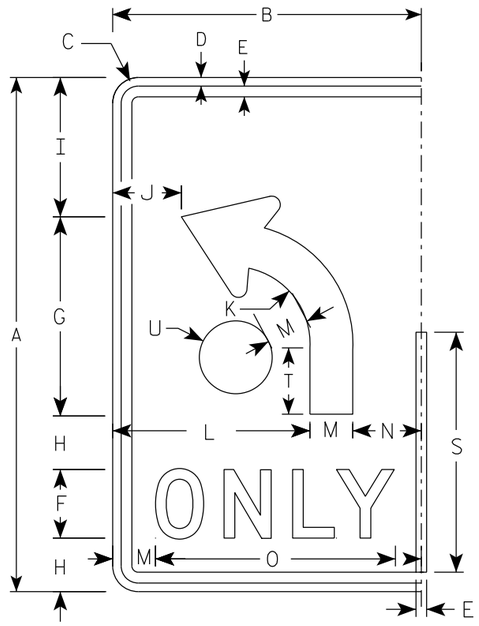
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

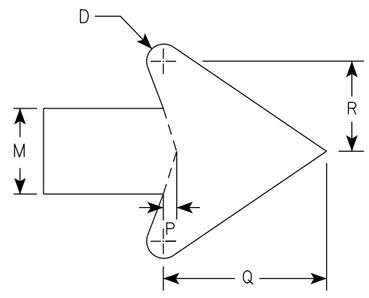
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 382 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
   Message Series - D



(B)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
2M	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
3	36	24	1 1/2	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8	2 1/2						6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0

STANDARD SIGN

R3-8 (B) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

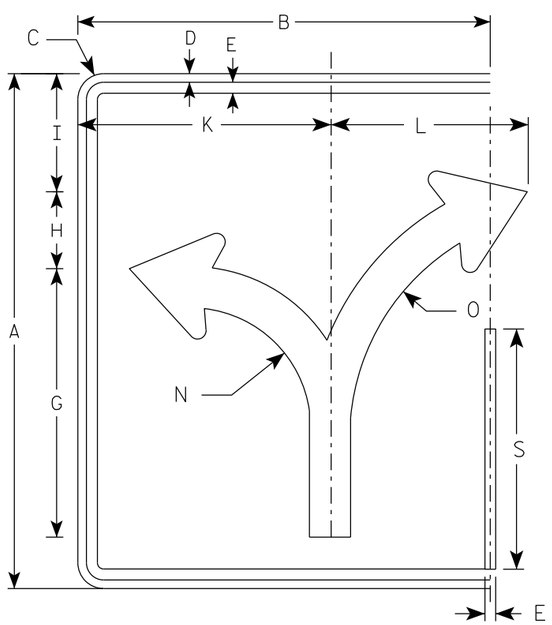
DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

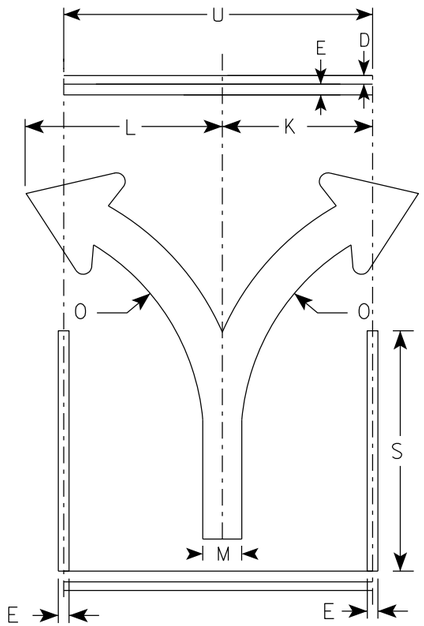
SHEET NO: 383 E

NOTES

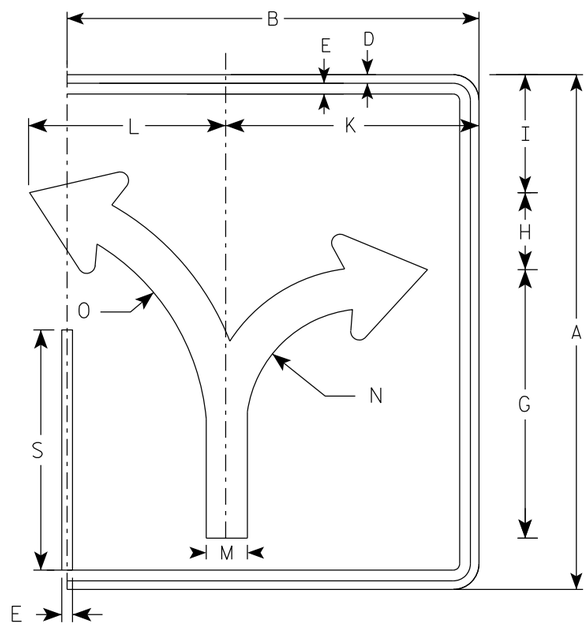
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



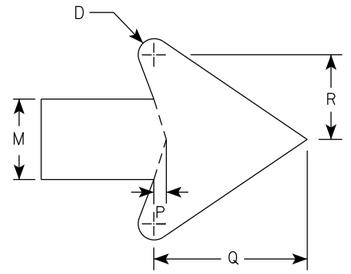
(C)



(C)



(C)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (C) Arrow

WISCONSIN DEPT OF TRANSPORTATION

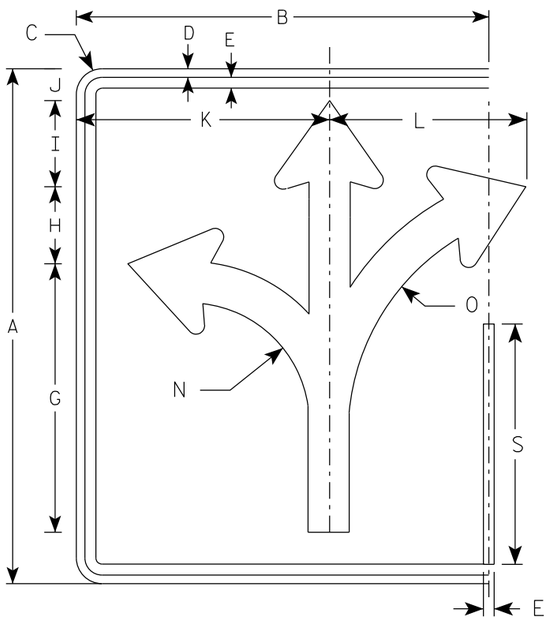
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

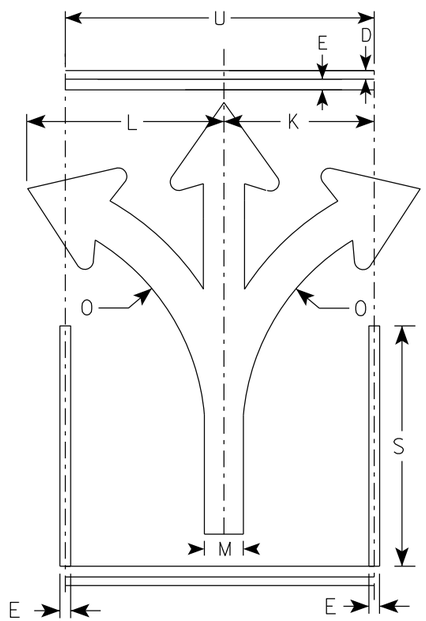
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 384 E

NOTES

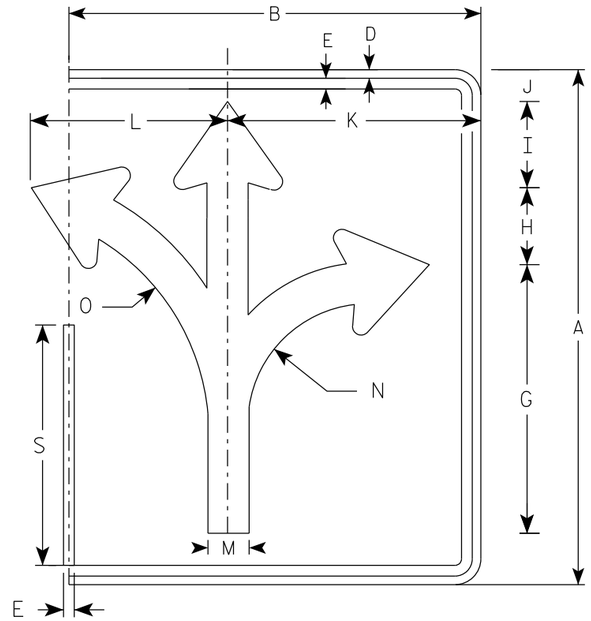
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



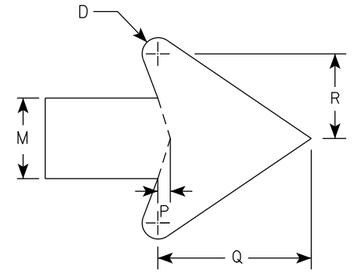
(D)



(D)



(D)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	6	2 1/4	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (D) Arrow

WISCONSIN DEPT OF TRANSPORTATION

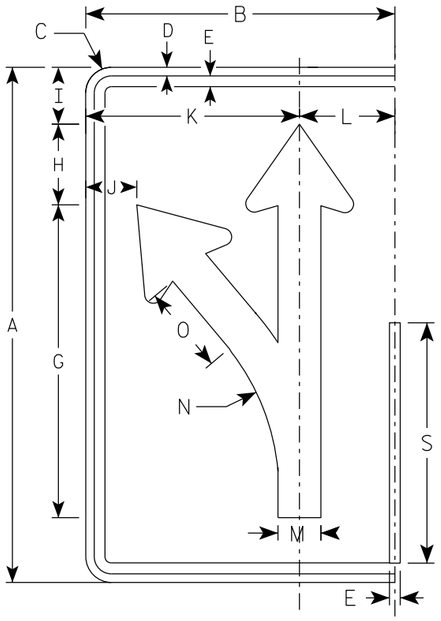
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

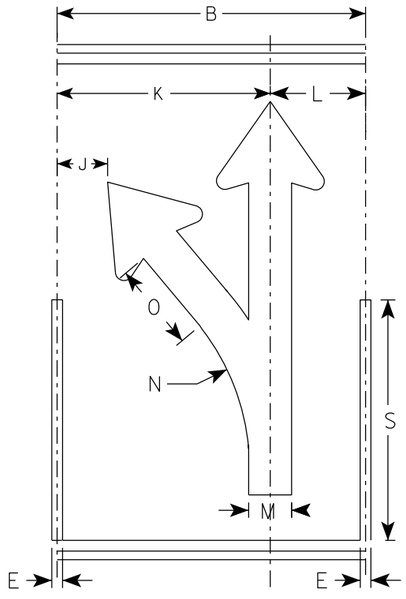
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 385 | E

NOTES

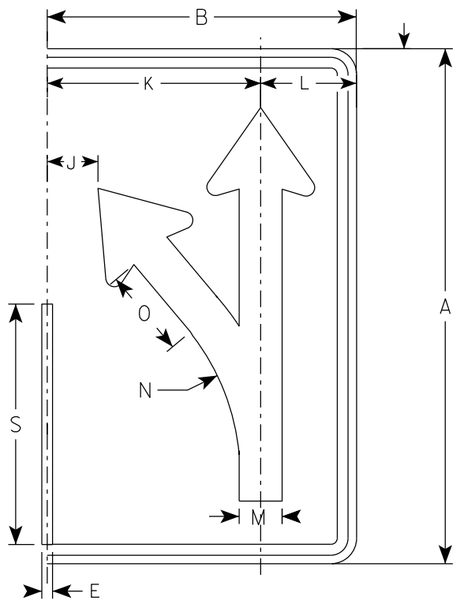
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



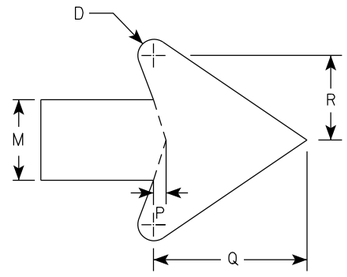
(E)



(E)



(E)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (E) Arrow

WISCONSIN DEPT OF TRANSPORTATION

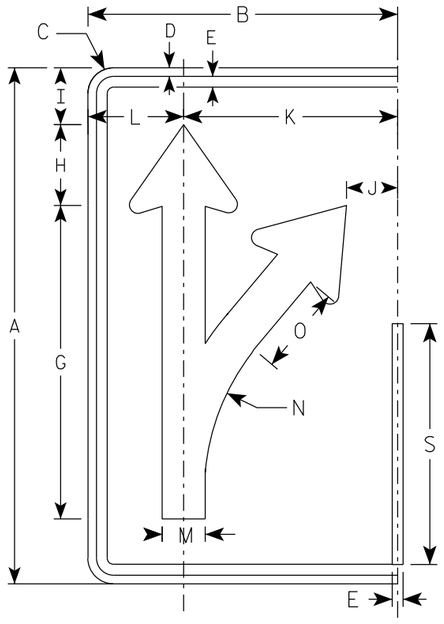
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

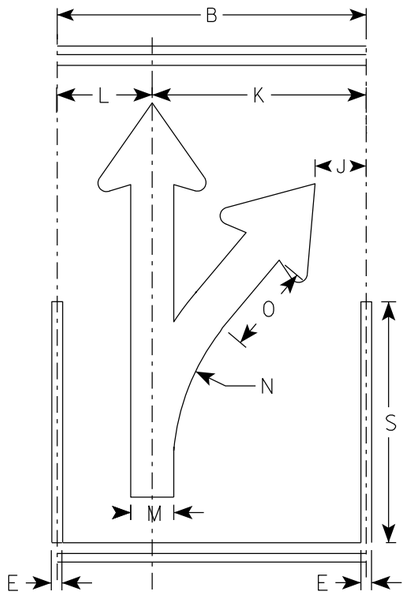
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 386 | E

NOTES

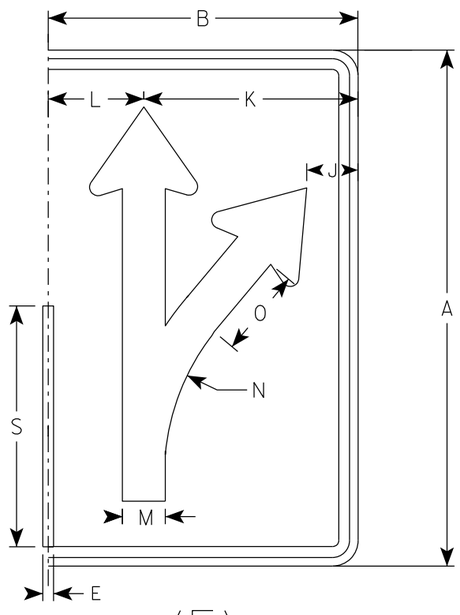
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



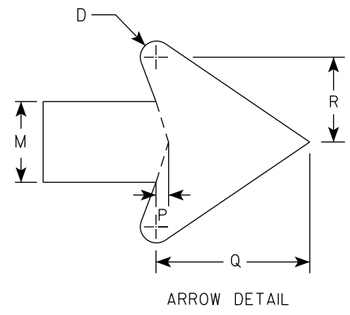
(F)



(F)



(F)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (F) Arrow

WISCONSIN DEPT OF TRANSPORTATION

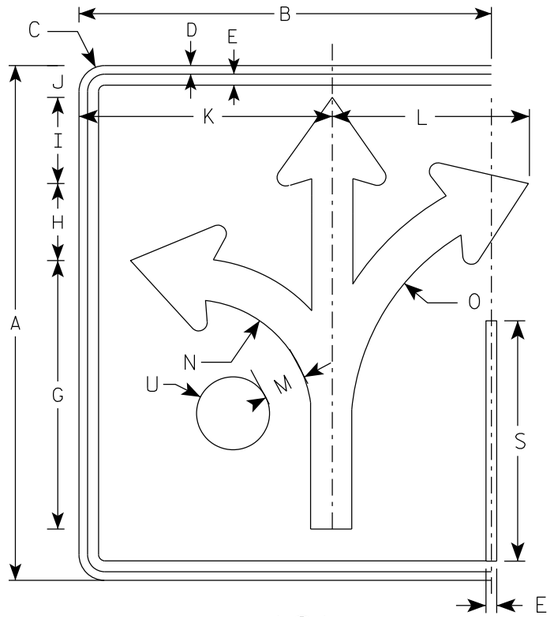
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

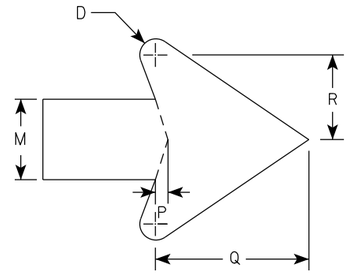
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 387 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(G)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	6	3 1/8	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (G) Arrow

WISCONSIN DEPT OF TRANSPORTATION

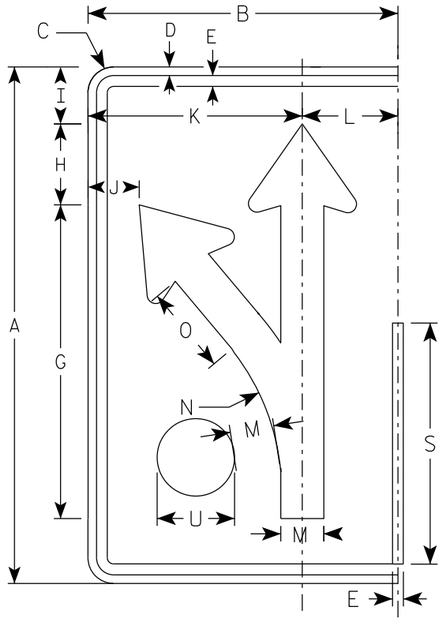
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

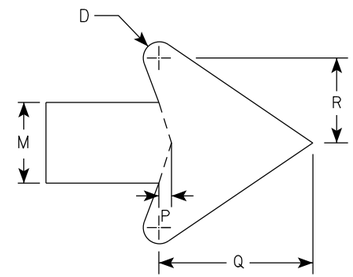
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 388	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(H)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4		2 1/2						6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0

STANDARD SIGN
R3-8 (H) Arrow

WISCONSIN DEPT OF TRANSPORTATION

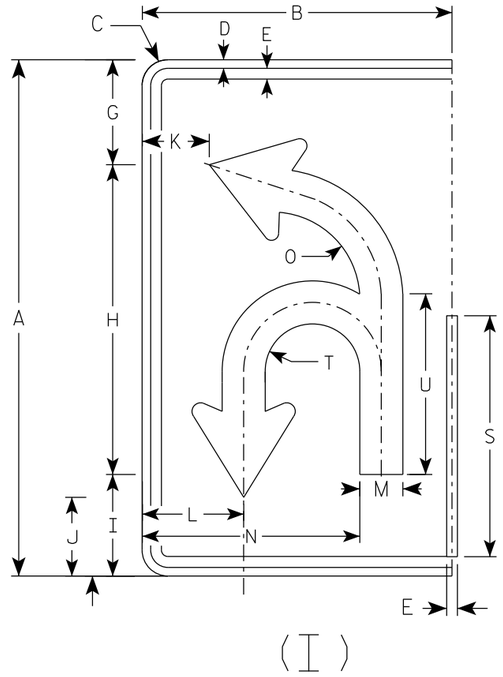
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

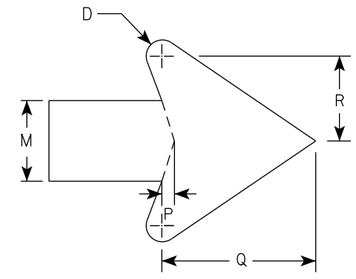
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 389 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(I)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
2M	30	18	1 1/2	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	21 5/8	7 1/8	5 1/2	5 7/8	8 1/4	3	16 3/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4	3 1/4	12 5/8						6.0
4	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0
5	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0

STANDARD SIGN
R3-8 (I) Arrow

WISCONSIN DEPT OF TRANSPORTATION

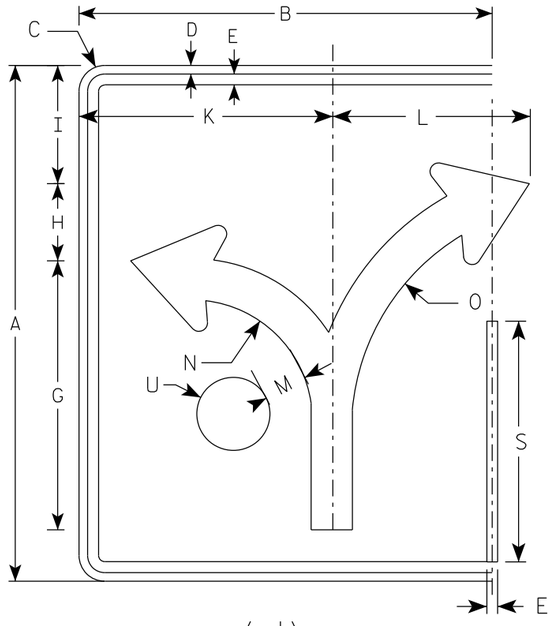
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

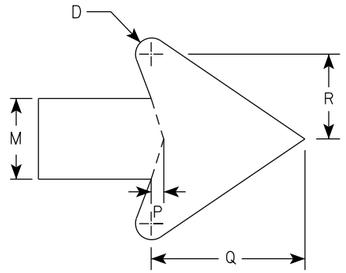
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 390 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(J)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (J) Arrow

WISCONSIN DEPT OF TRANSPORTATION

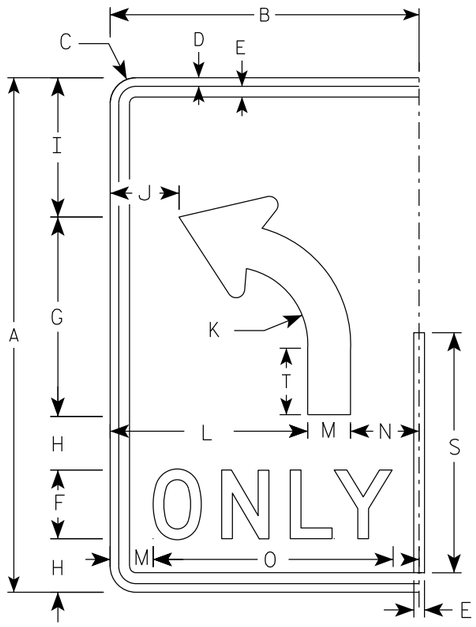
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

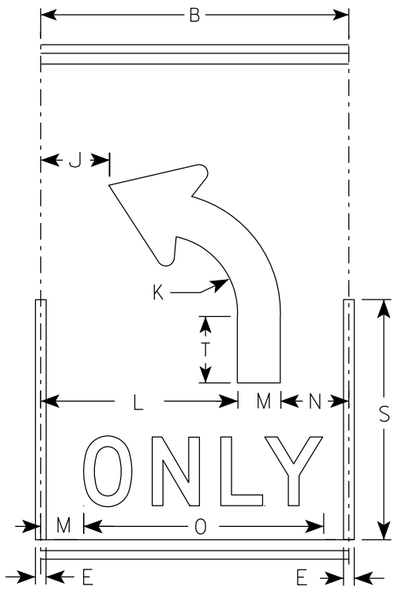
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 391 | E

NOTES

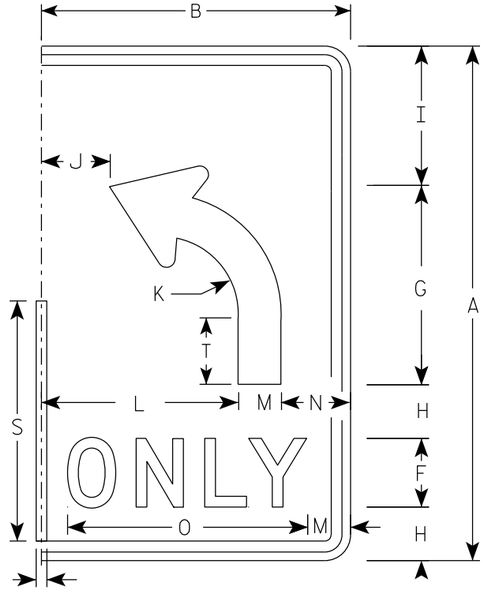
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



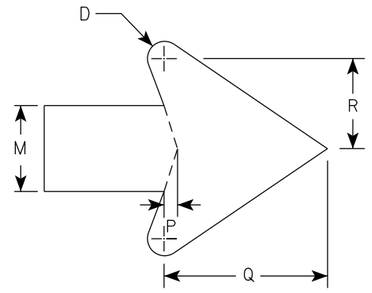
(L)



(L)



(L)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 ½	½	⅝	4	11 ⅝	3 ⅛	8 ⅛	4	4 ½	11 ½	2 ½	4	14	⅜	4 ¾	2 ⅝	14	3 ⅞							3.75
2M	30	18	1 ½	½	⅝	4	11 ⅝	3 ⅛	8 ⅛	4	4 ½	11 ½	2 ½	4	14	⅜	4 ¾	2 ⅝	14	3 ⅞							3.75
3	36	24	1 ½	½	⅝	5	14	3 ½	9 ¾	6	5 ⅜	15	3	6	17 ⅝	½	5 ¾	3 ⅛	16 ¾	4 ⅝							6.0
4	48	30	2 ¼	¾	1	6	18 ⅝	5 ⅛	13 ⅛	6 ⅛	7 ¼	18	4	8	21 ¾	⅝	7 ⅝	4 ¼	22 ⅜	6 ¼							10.0
5	48	30	2 ¼	¾	1	6	18 ⅝	5 ⅛	13 ⅛	6 ⅛	7 ¼	18	4	8	21 ¾	⅝	7 ⅝	4 ¼	22 ⅜	6 ¼							10.0

STANDARD SIGN

R3-8 (L) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

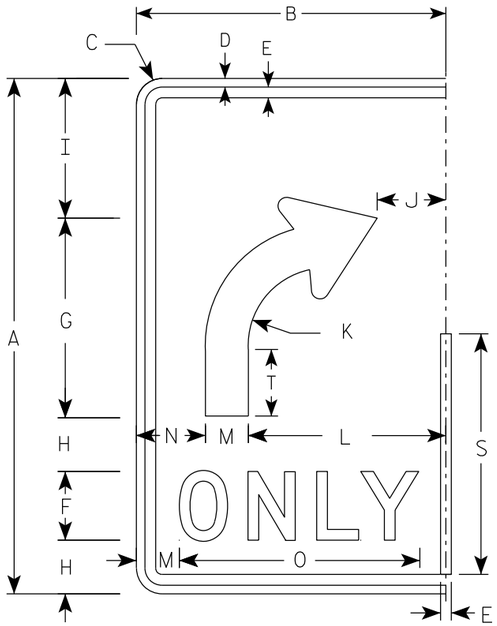
DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

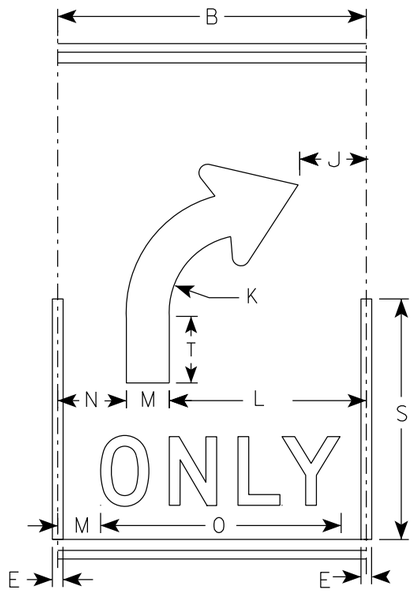
SHEET NO: 392 E

NOTES

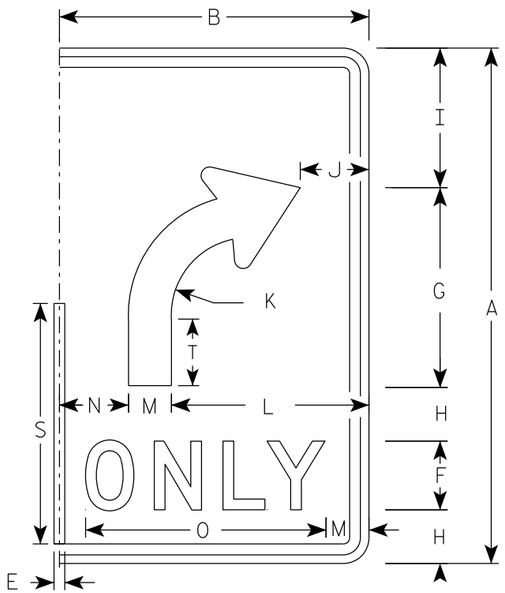
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



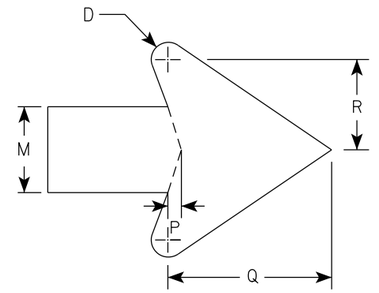
(R)



(R)



(R)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
2M	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
3	36	24	1 1/2	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8							6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0

STANDARD SIGN

R3-8 (R) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

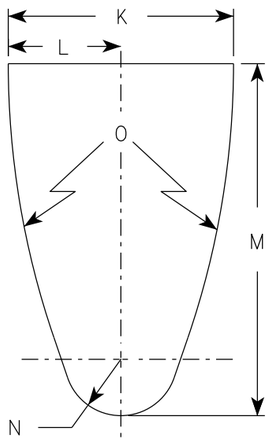
PROJECT NO:

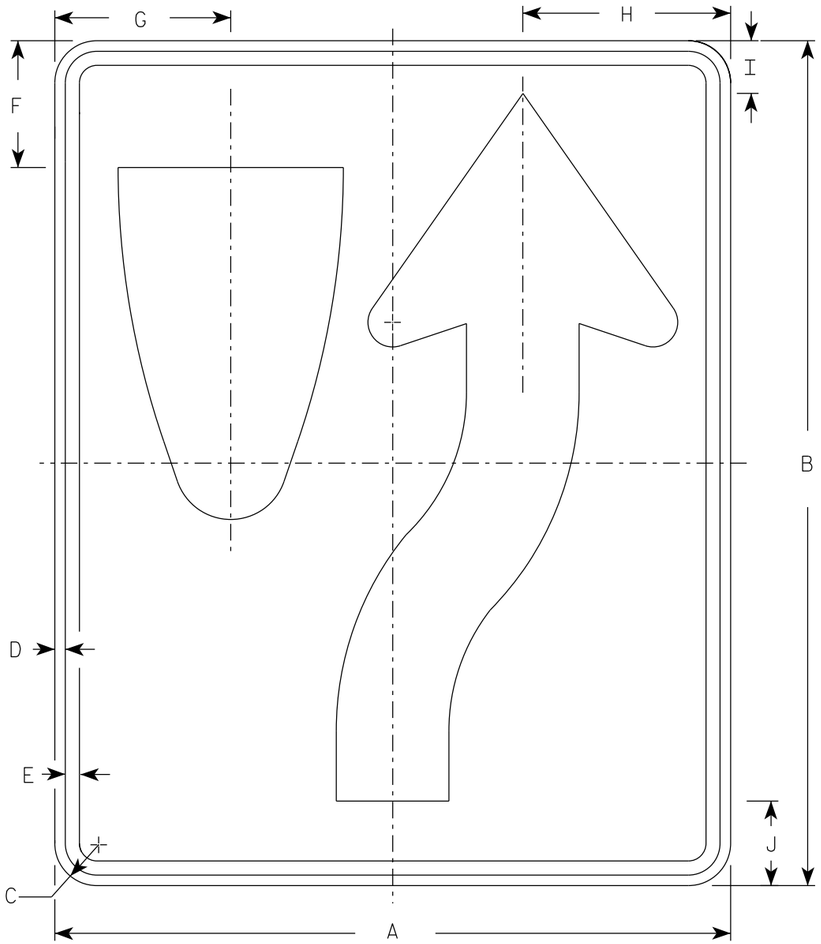
SHEET NO: 393 **E**

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. R4-8 is the same as R4-7 except Legend is reversed.

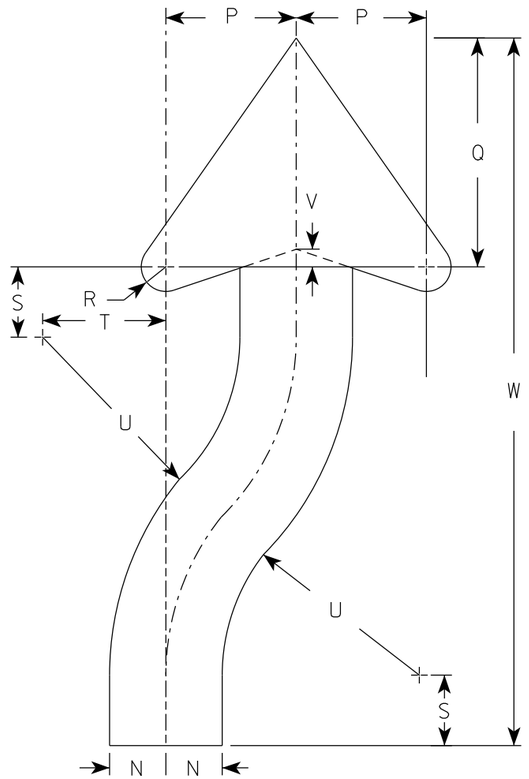
DIVIDER DETAIL





R4-7

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/2	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/2	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/2	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 7/8	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 7/8	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	3	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

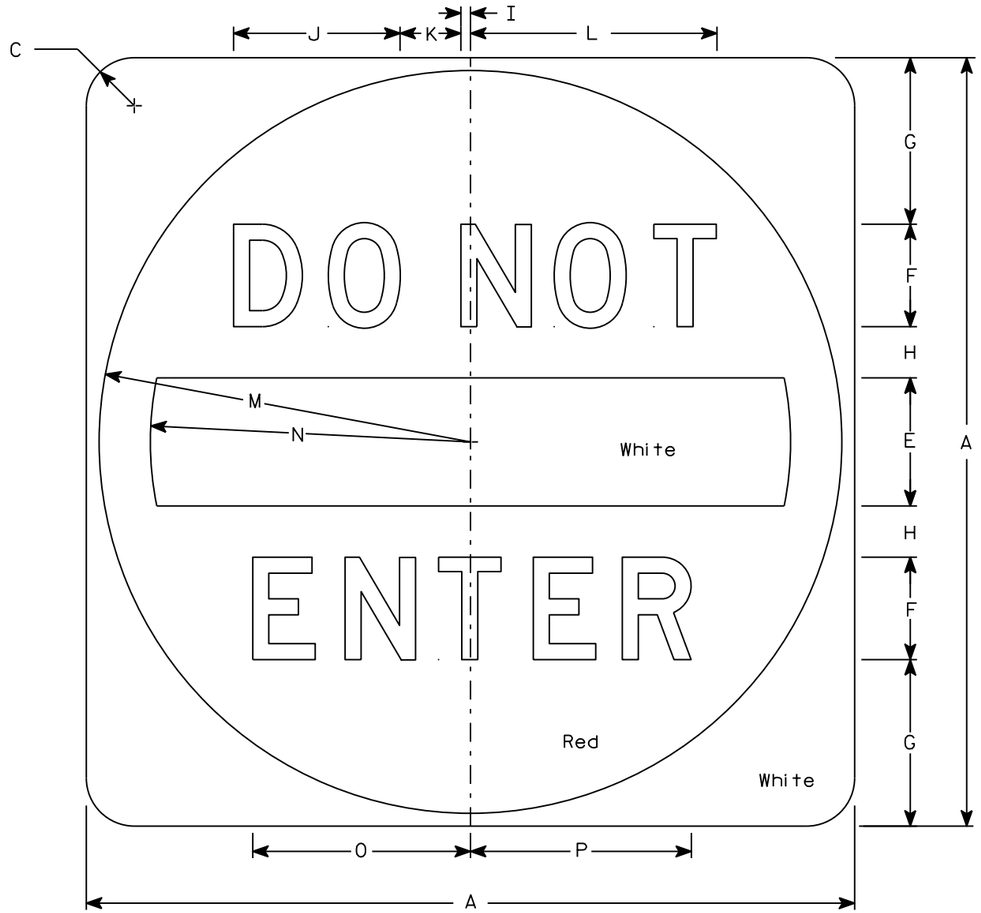
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 8/17/23 PLATE NO. R4-7.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 394	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See detail
   Message - White
3. Message Series - D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.25
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

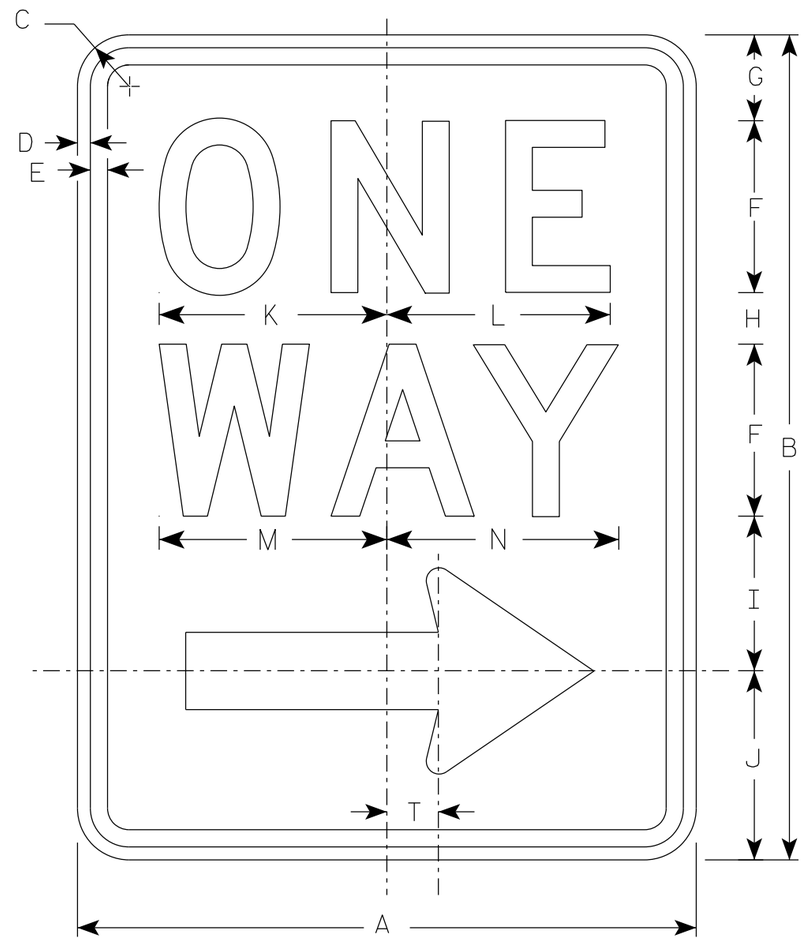
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 395 | E

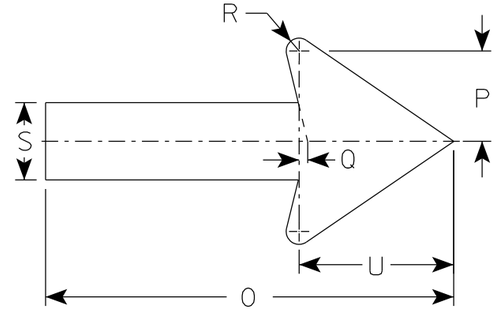
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. R6-2L same as R6-2R except arrow points to the left.



R6-2R

Arrow Detail



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/2	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	1 1/2	1 1/2	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 7/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

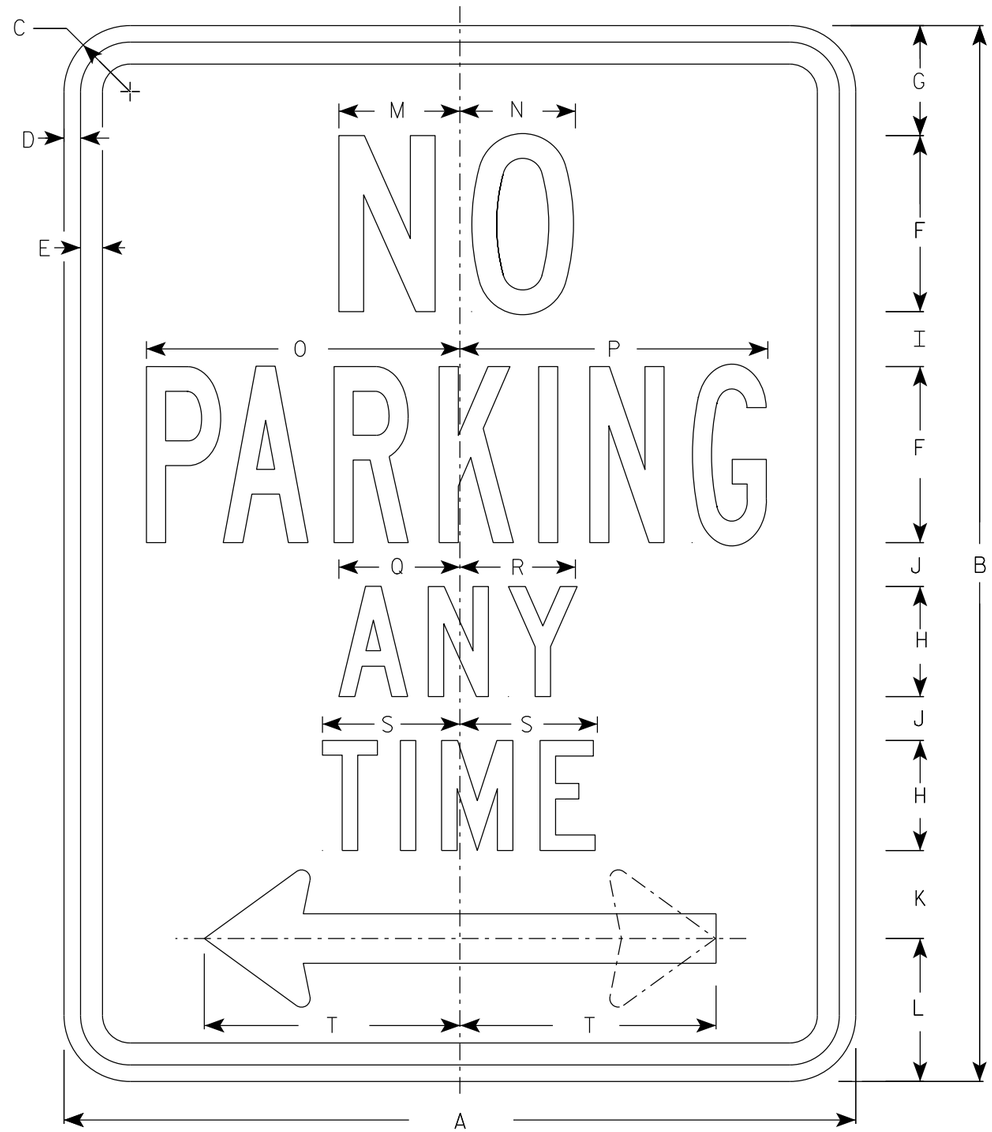
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 396 | E

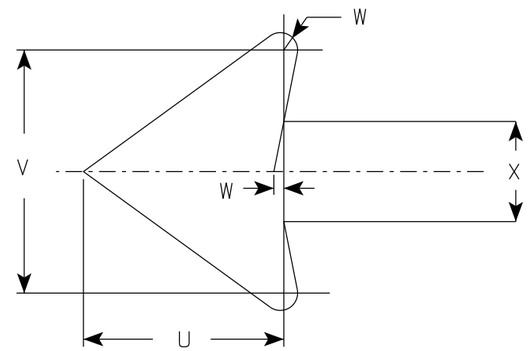


R7-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 4
4. Lines 1, 3 and 4 are series C, line 2 is series B.
5. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 ½	⅜	⅜	3	1 ⅞	2	⅞	⅝	1 ½	2 ½	2	2	4 ⅞	4 ⅞	2 ¼	2 ⅛	2 ½	3 ⅞	1 ½	1 ¾	⅛	¾			1.5
2S	18	24	1 ½	⅜	½	4	2 ½	2 ½	1 ¼	1	2	3 ¼	2 ¾	2 ⅝	7 ⅛	7	2 ¾	2 ⅝	3 ⅛	5 ⅞	2 ¼	2 ⅝	¼	1 ⅛			3.0
2M	24	30	1 ½	⅜	½	5	3	3	2	1 ¼	2 ½	4	3 ¼	3 ⅜	9 ¼	9 ¼	3 ¼	3 ¼	3 ¾	7 ¾	3	3 ½	¼	1 ½			5.0
3	24	30	1 ½	⅜	½	5	3	3	2	1 ¼	2 ½	4	3 ¼	3 ⅜	9 ¼	9 ¼	3 ¼	3 ¼	3 ¾	7 ¾	3	3 ½	¼	1 ½			5.0
4																											
5																											

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

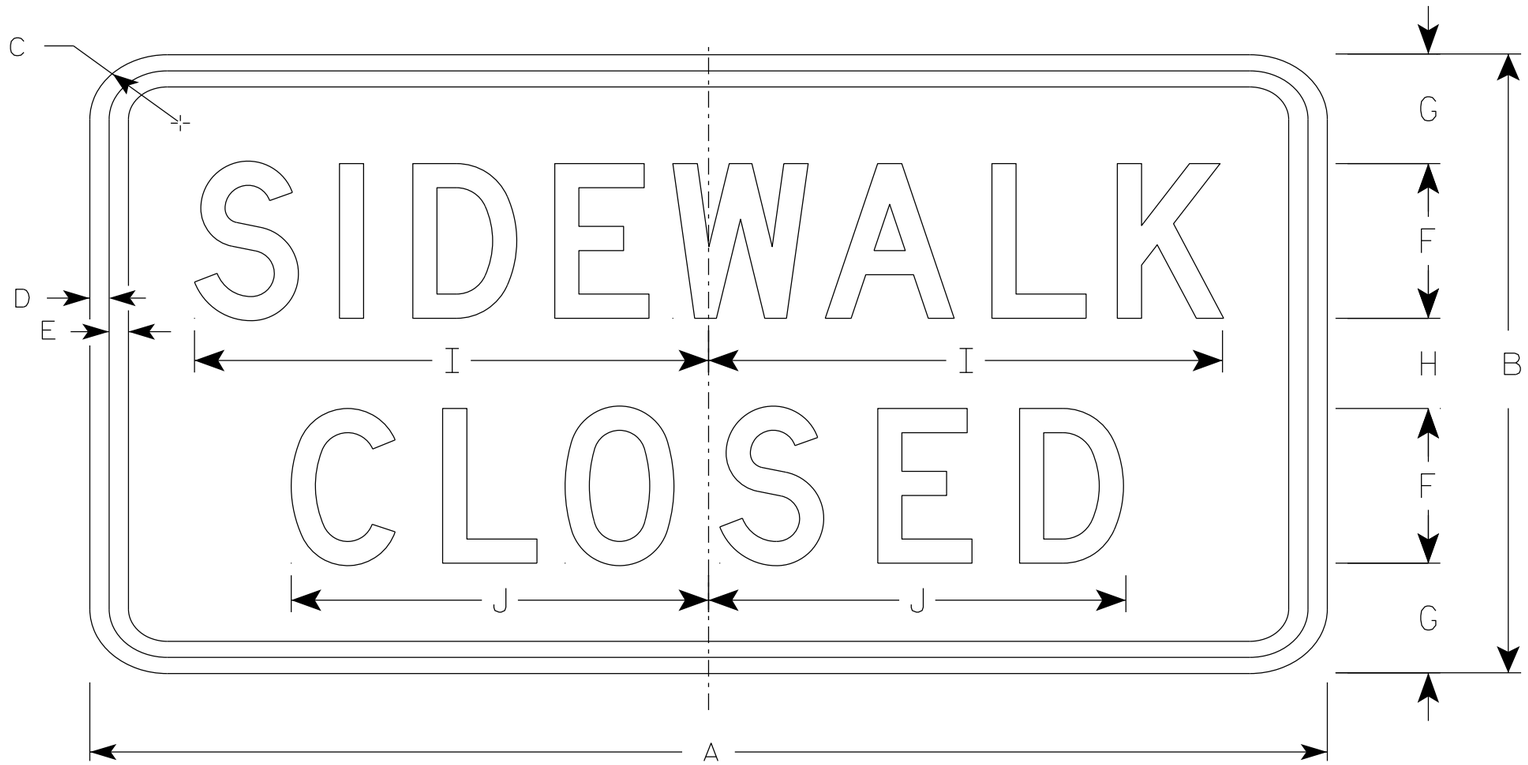
DATE 10/26/23 PLATE NO. R7-1.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 397 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R71.dgn PLOT DATE : 26-OCT 2023 2:48 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7



R9-9

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 ½	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
2M	24	12	1 ½	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
3	30	18	1 ½	½	½	4	3 ½	3	12 ½	10 ¼																	3.75
4																											
5																											

STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

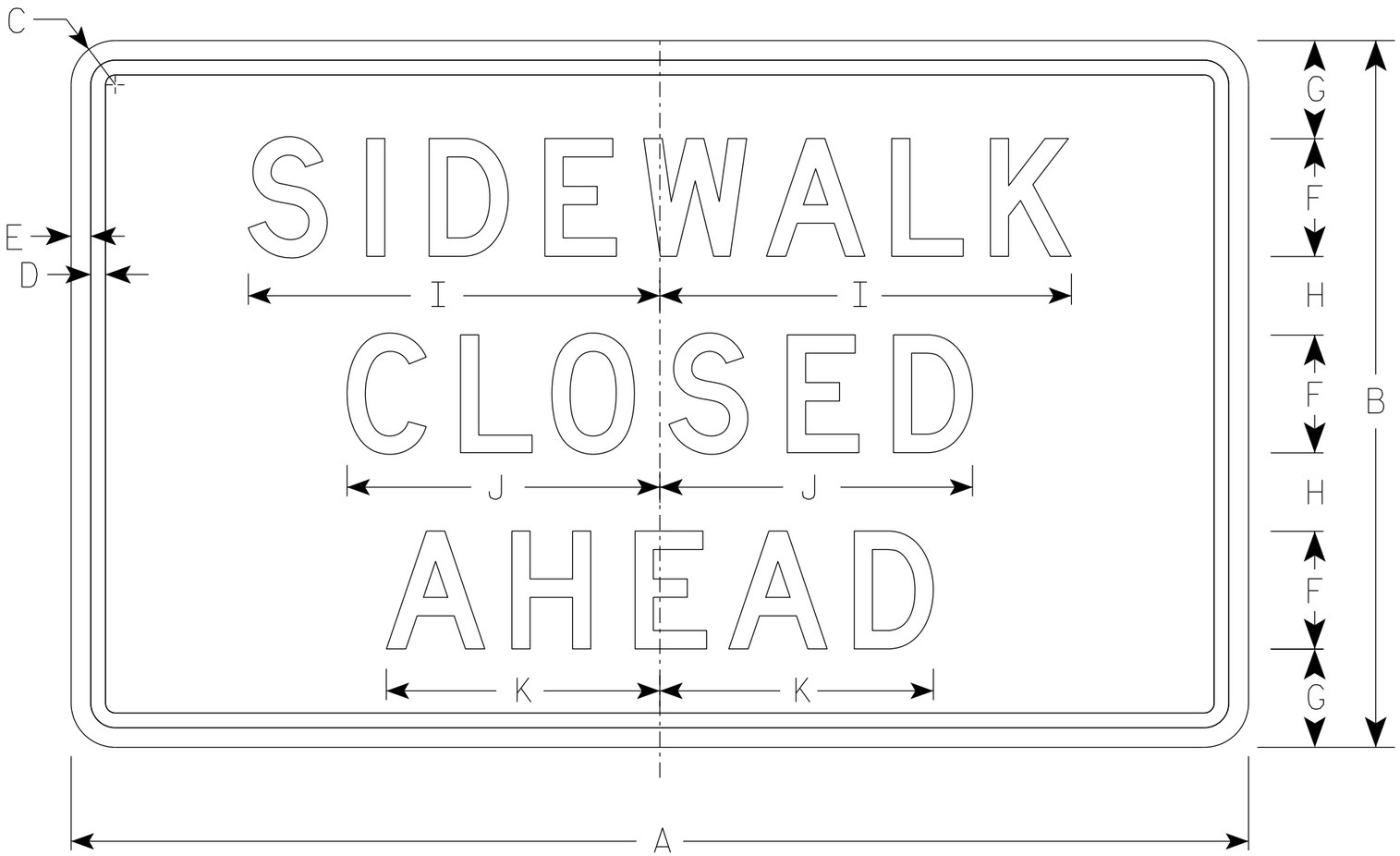
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 398 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



R9-9A

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 ½	⅜	½	3	2 ½	2	10 ½	8	7																3.75
2M	30	18	1 ½	⅜	½	3	2 ½	2	10 ½	8	7																3.75
3																											
4																											
5																											

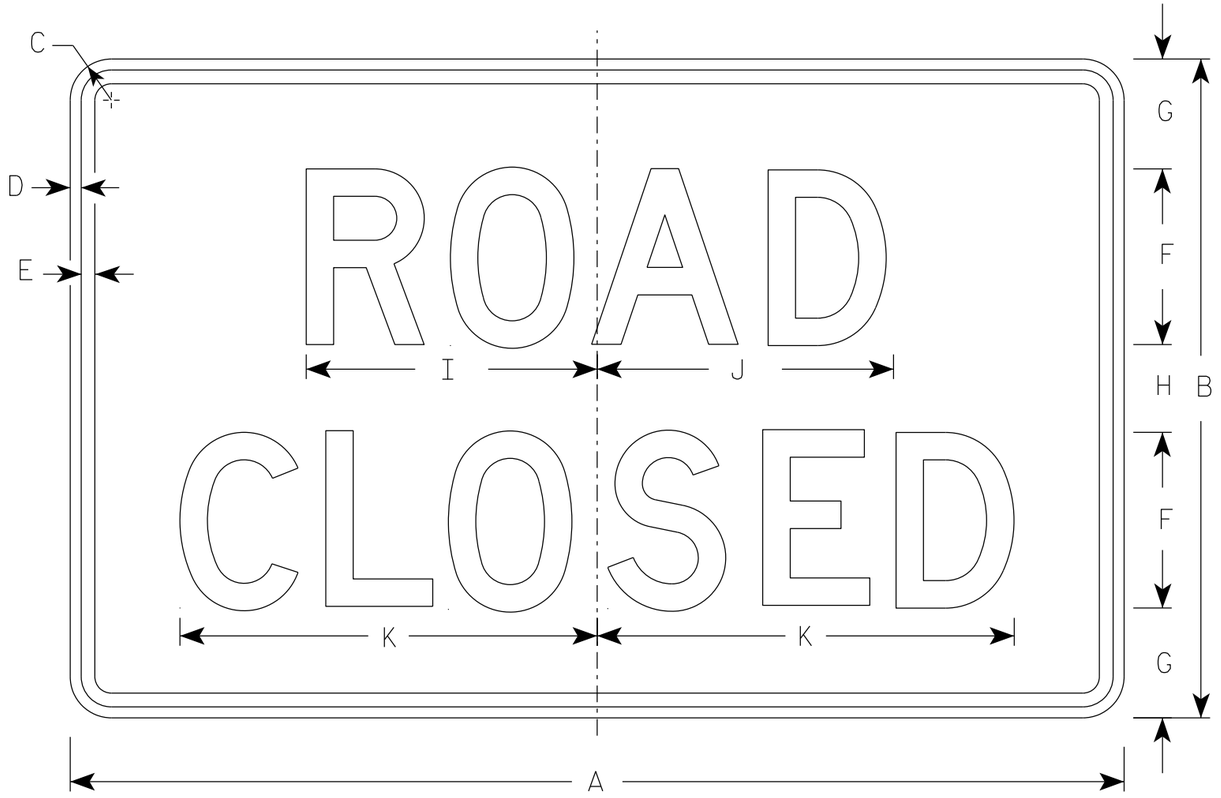
STANDARD SIGN
R9-9A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9A.2

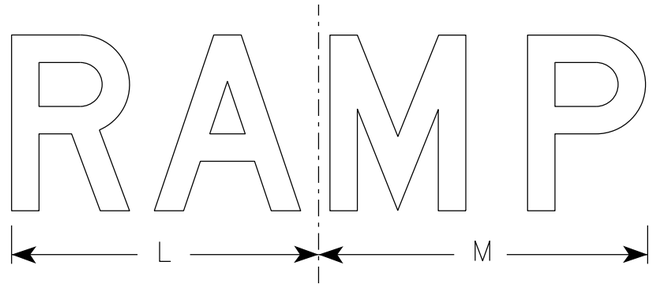
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 399 | E



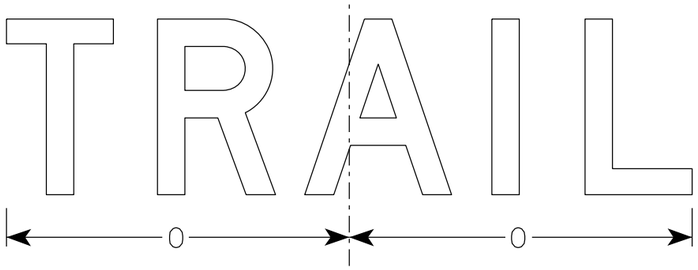
R11-2

NOTES

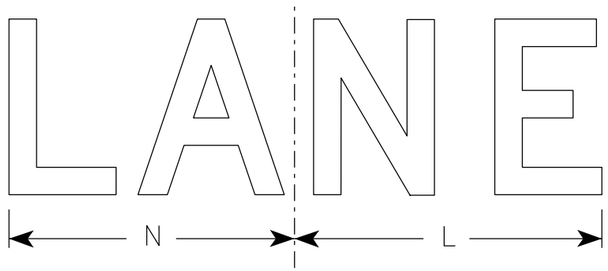
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the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



R11-2R



R11-2T



R11-2L

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

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

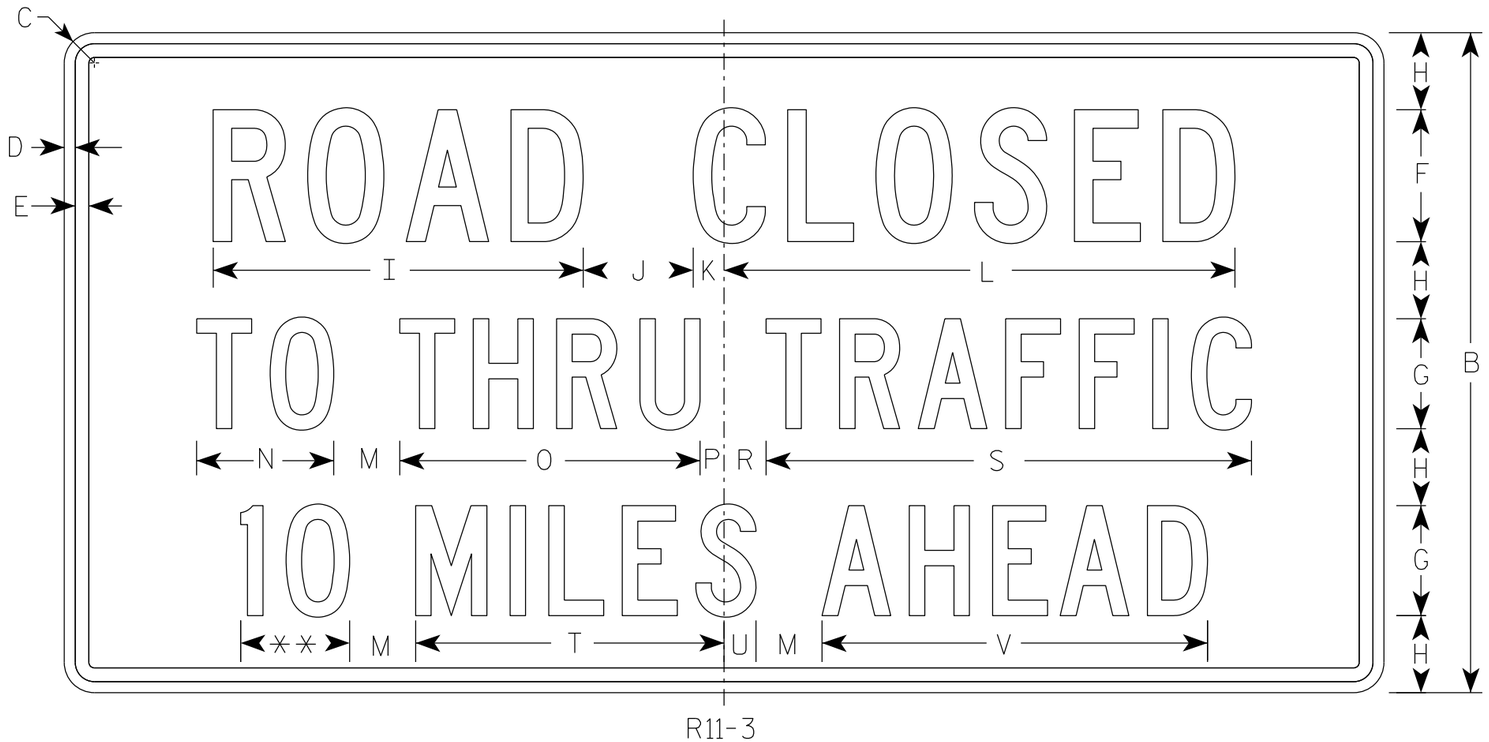
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-2.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 400 | E

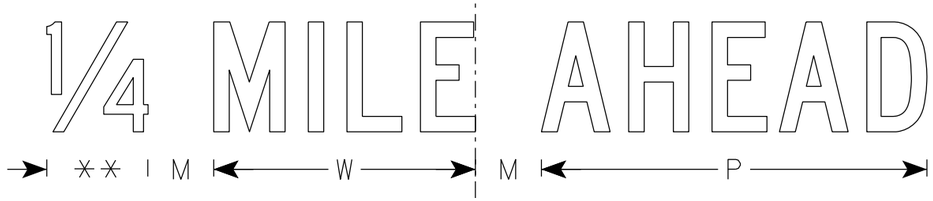
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/2	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 7/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 7/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

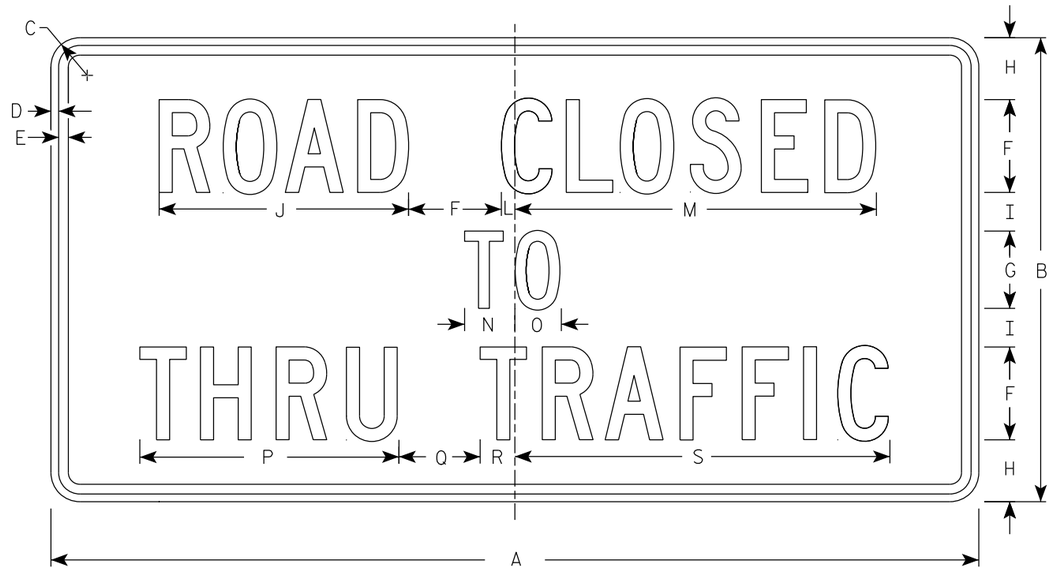
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-3.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 401 | E



R11-4

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 7/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 7/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

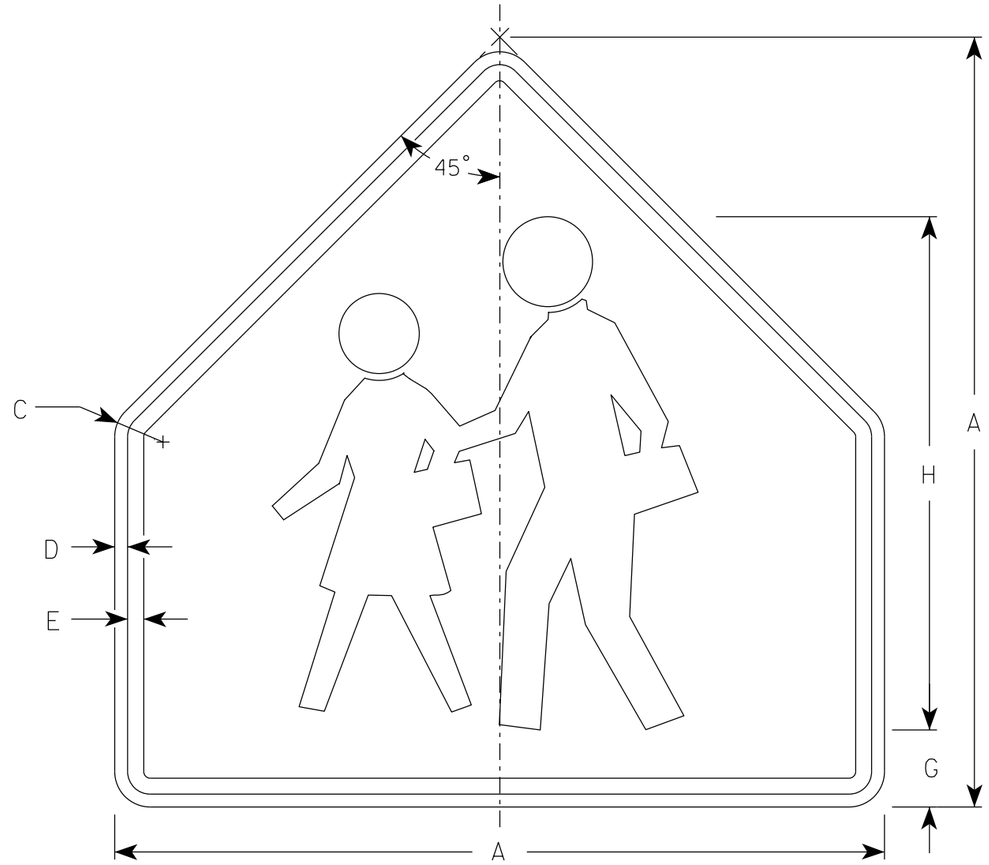
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-4.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 402 | E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow-Green
   Message - Black



S1-1

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	30		1 3/8	1/2	5/8		3	20																			4.69
2S	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
2M	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		1 7/8	3/4	1		4 3/4	32																			12
5																											

STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

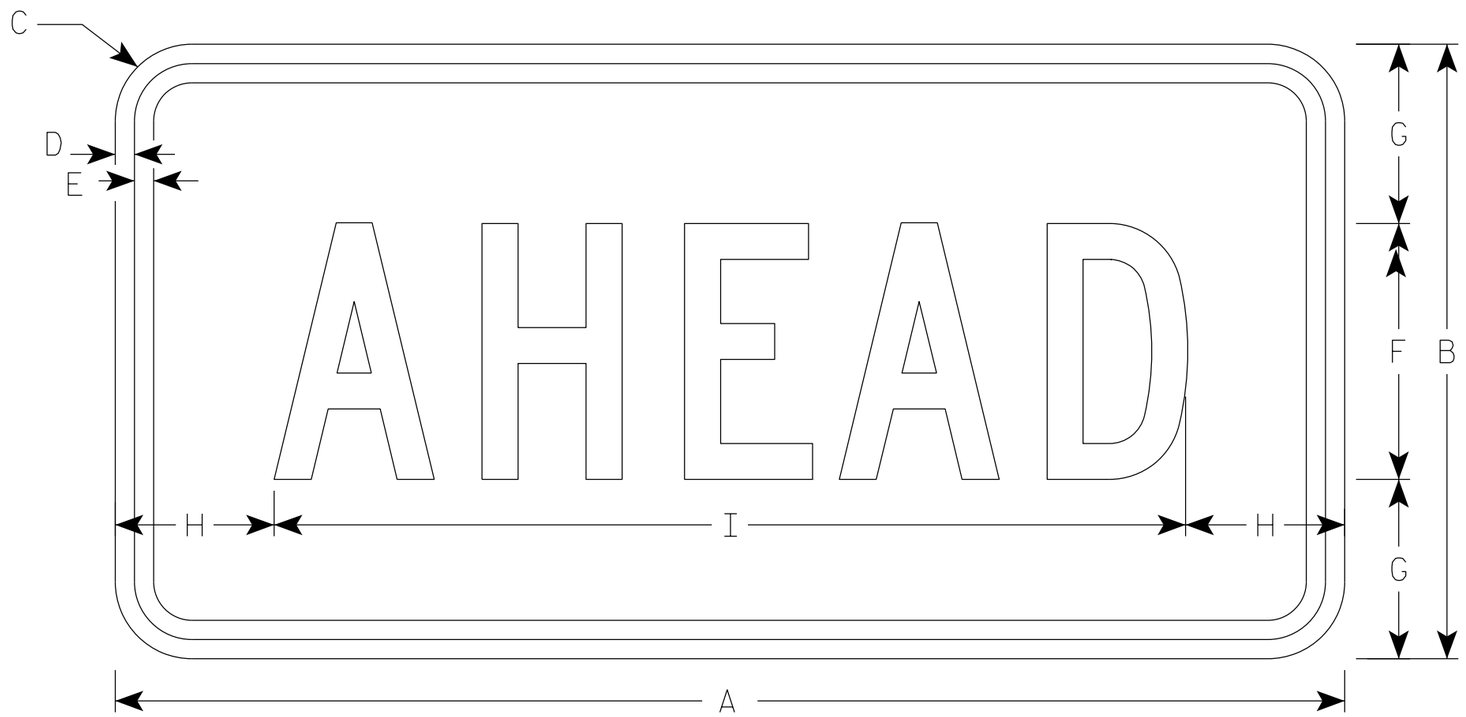
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/16/2023 PLATE NO. S1-1.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 403 E

NOTES

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



S16-9P

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	12	1 1/2	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2S	30	18	1 1/2	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2M	30	18	1 1/2	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/2	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

STANDARD SIGN
S16-9P

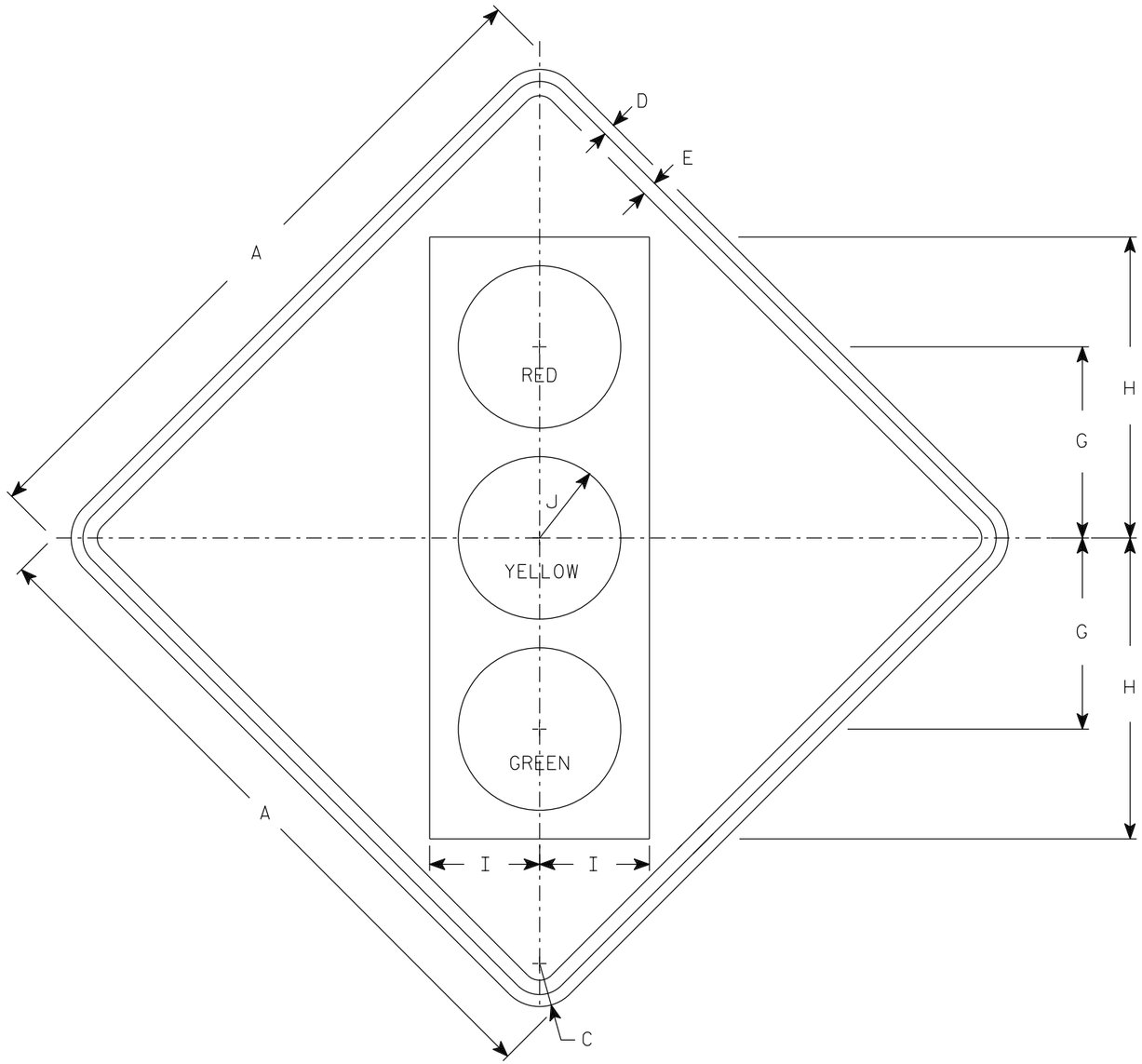
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/23/2023 PLATE NO. S16-9P.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\S169P.dgn PLOT DATE : 23-FEB 2023 10:32 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W3-3

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - See Note 3
3. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 7/8	1/2	5/8		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		2 1/4	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		2 1/4	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		2 1/4	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		3	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		3	3/4	1		12 1/2	20	7 1/2	5																	16.0

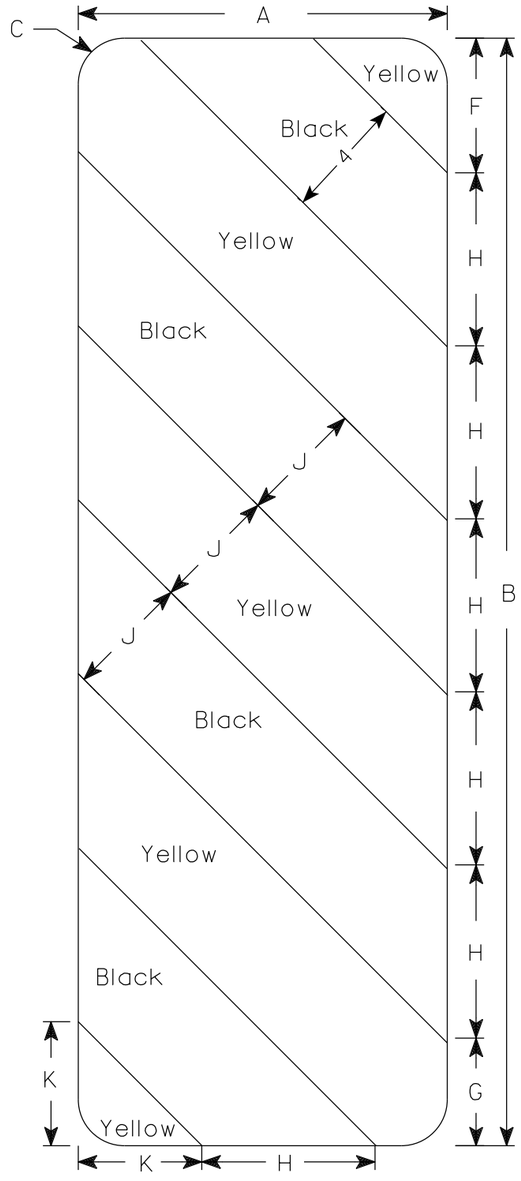
STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

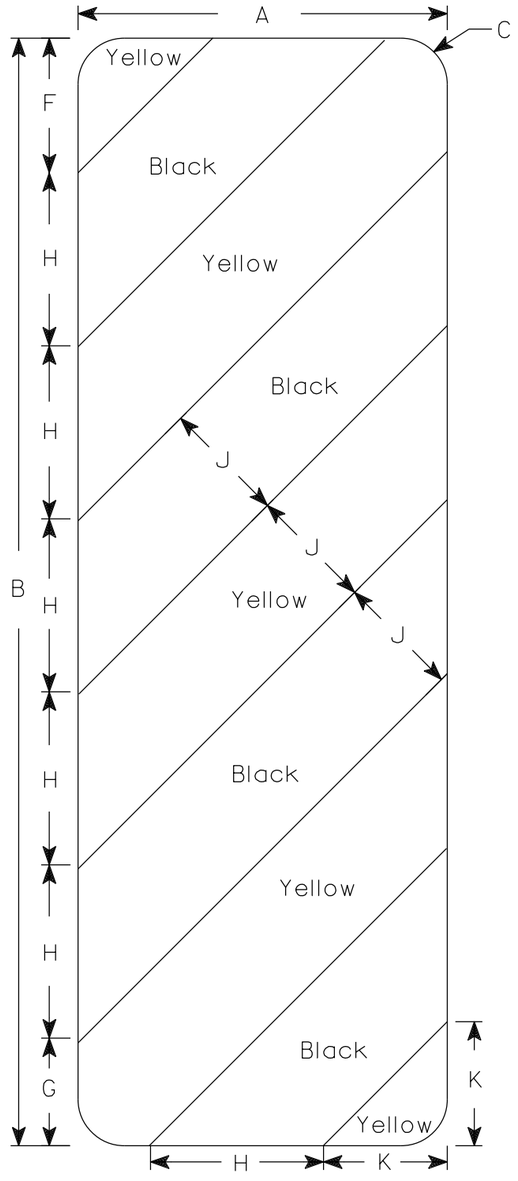
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/2023 PLATE NO. W3-3.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 405	E



W5-52L



W5-52R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Alternate colors of stripes as shown.

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	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54	1 1/2			6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

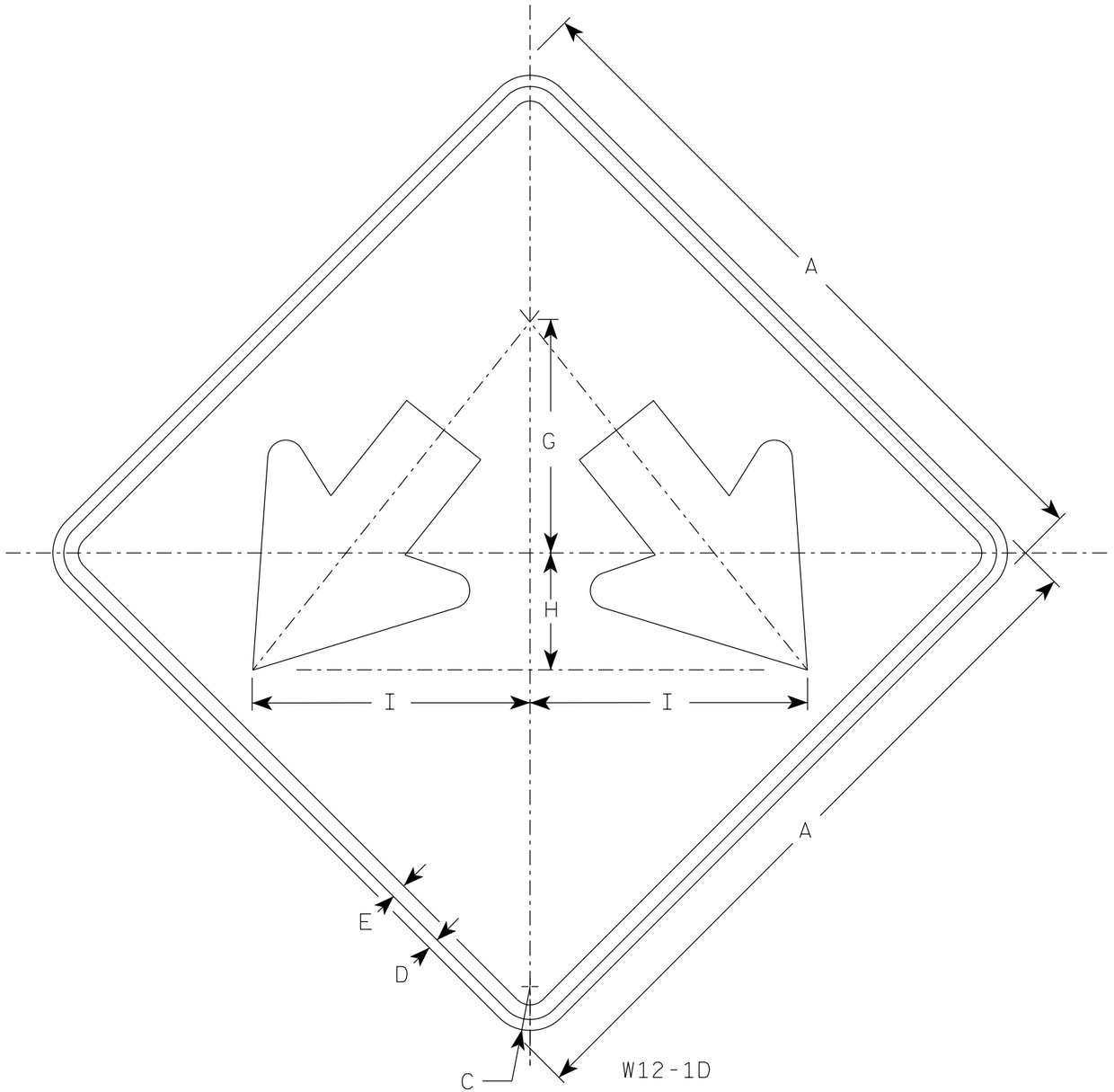
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 3/4/2024 PLATE NO. W5-52.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 406 E

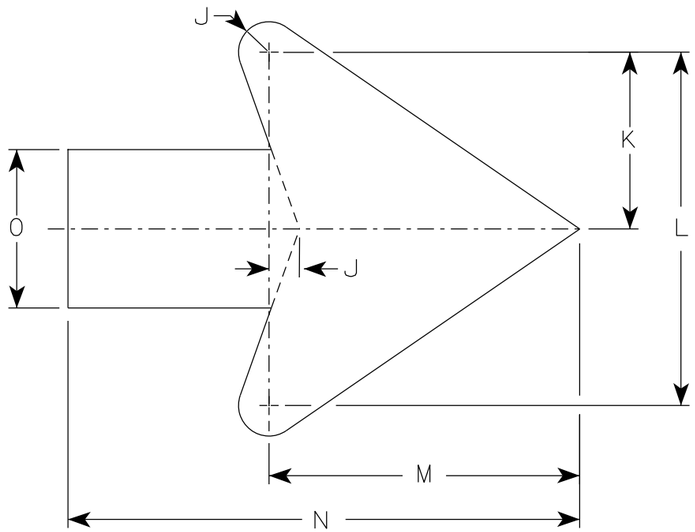
7

7



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Areq. sq. ft.
1																											
2S	24		1 ½	½	⅜		8	4	9 ½	⅜	3 ⅜	7 ¼	6 ⅜	10 ⅜	3 ¼												4.0
2M	24		1 ½	½	⅜		8	4	9 ½	⅜	3 ⅜	7 ¼	6 ⅜	10 ⅜	3 ¼												4.0
3	30		1 ⅞	½	⅝		10	5	11 ⅞	¾	4 ½	9	7 ⅞	13	4												6.25
4	36		2 ¼	½	⅝		12	6	14 ¼	1	5 ½	10 ⅞	9 ⅝	15 ¾	4 ¾												9.0
5	48		3	¾	1		16	8	19	1 ¼	7 ¼	14 ½	12 ¾	21	6 ¼												16.0

STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

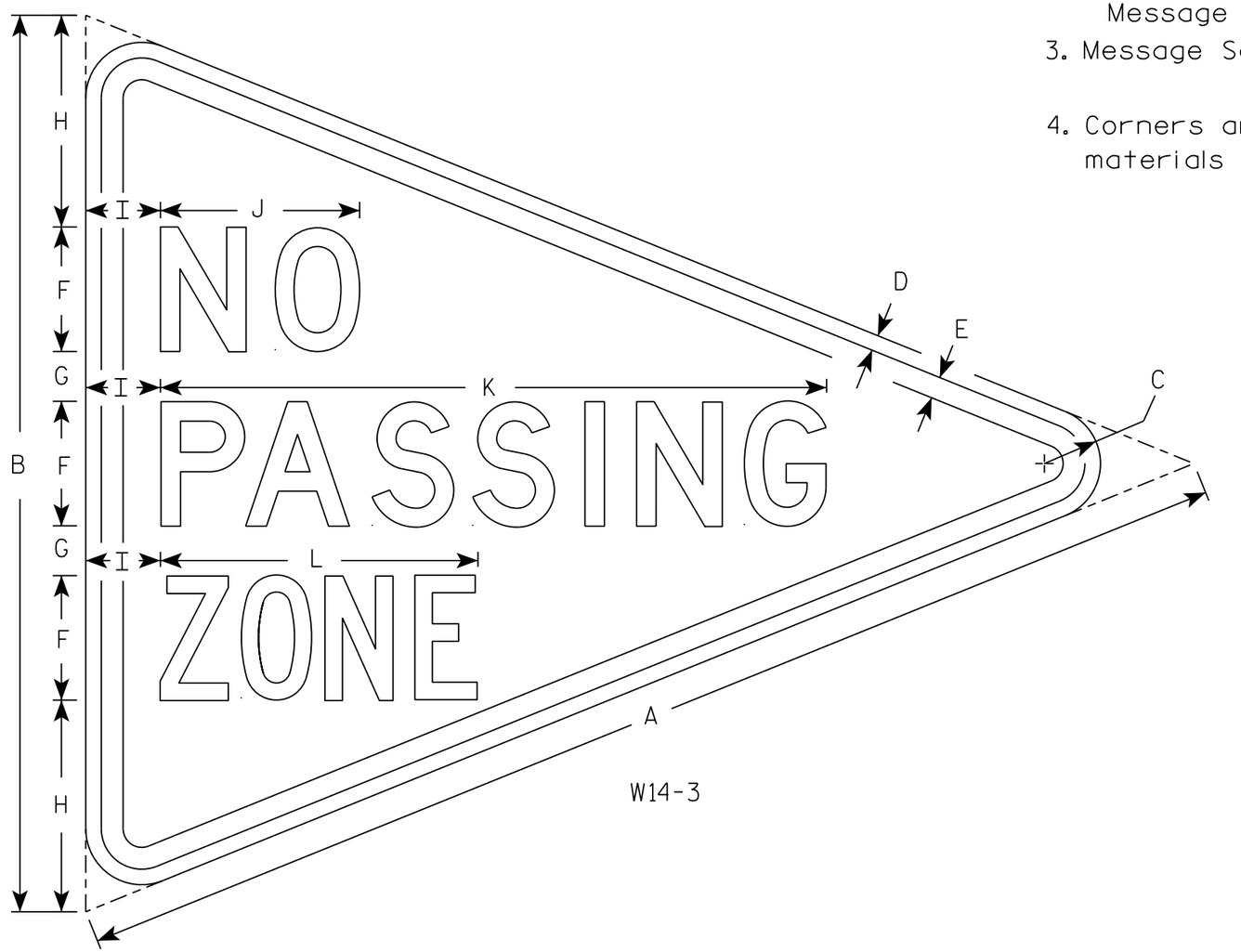
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/30/2023 PLATE NO. W12-1D.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 407	E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - Lines 1 and 2 are Series D.
   Line 3 is series C.
4. Corners and borders shall be rounded on all base materials for this sign.



W14-3

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	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															5.56
2M																											
3																											
4																											
5																											

STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

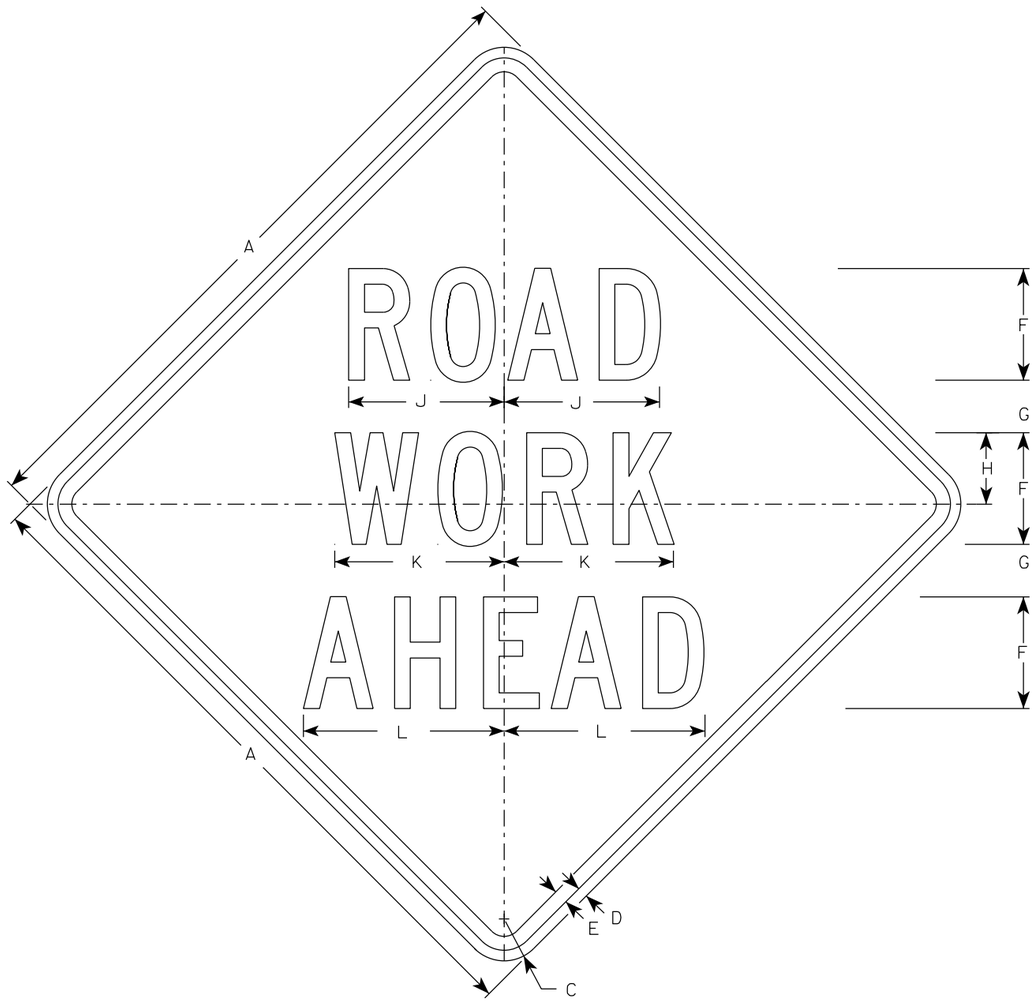
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W14-3.10

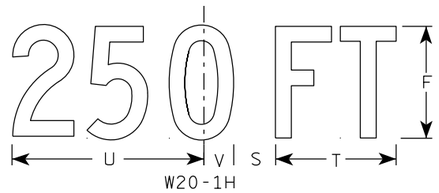
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 408	E

NOTES

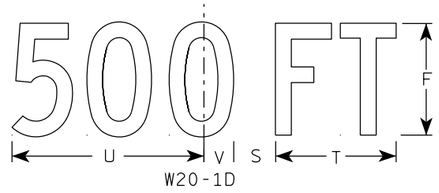
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1A



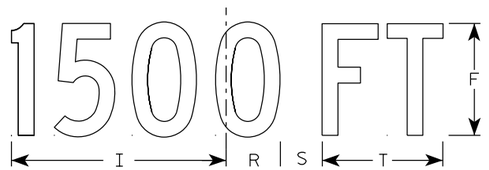
W20-1H



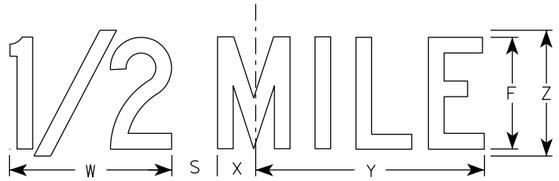
W20-1D



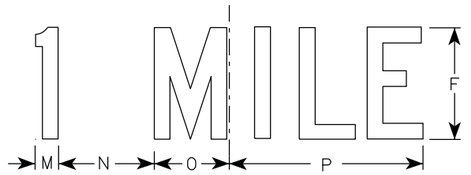
W20-1C



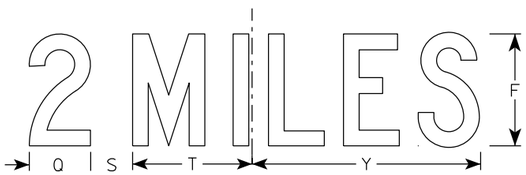
W20-1B



W20-1G



W20-1F



W20-1E

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

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

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO:

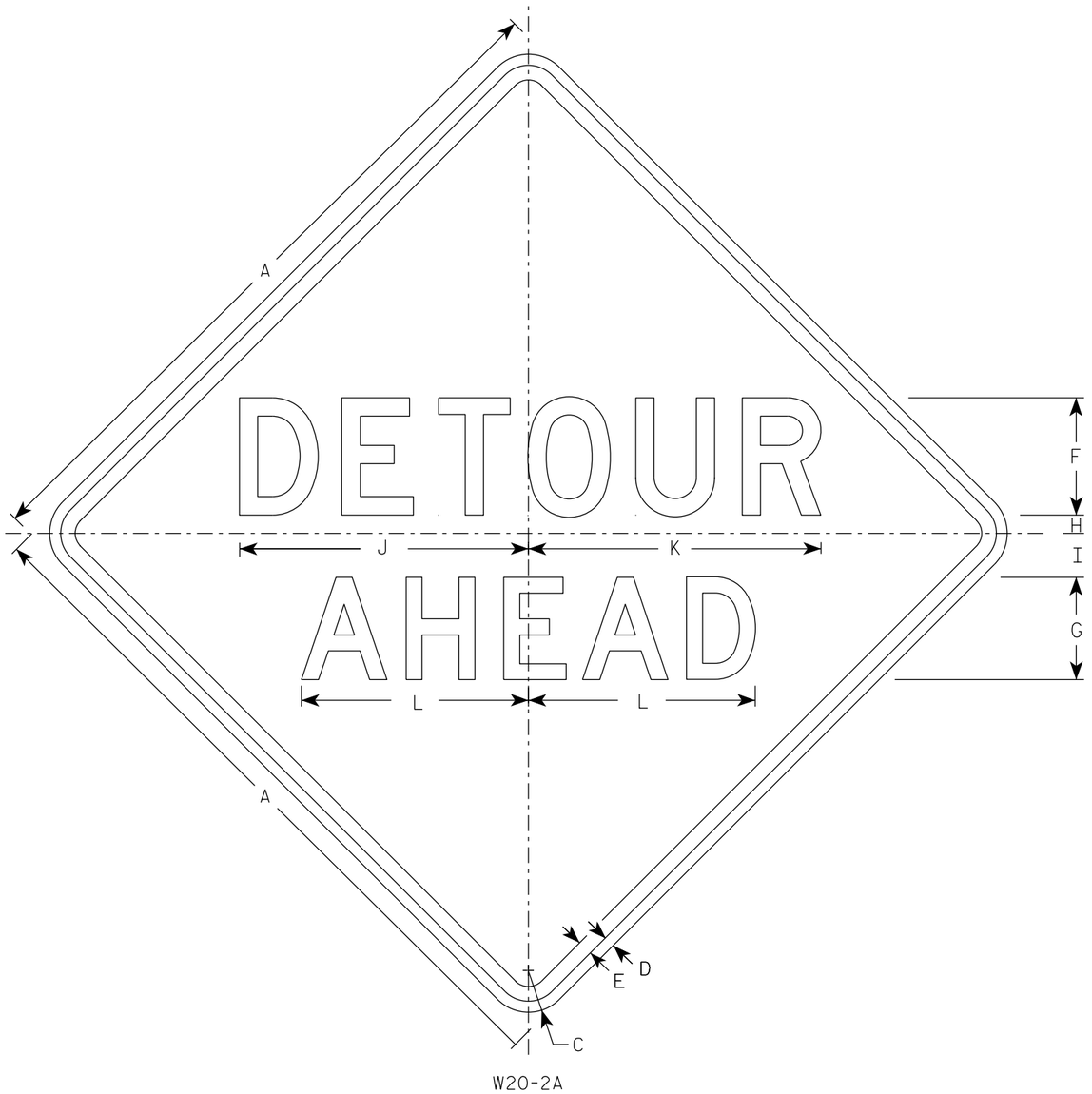
SHEET NO: 409 E

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

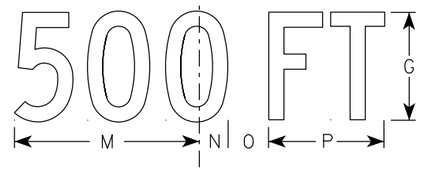
WISDOT/CADDS SHEET 42

7

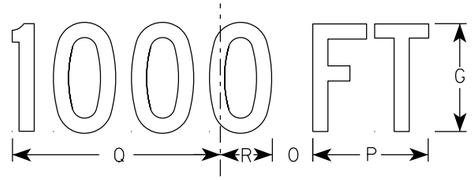
7



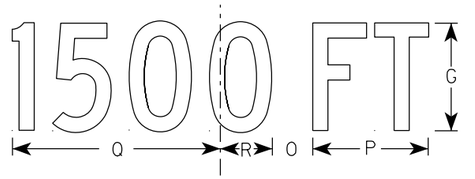
W20-2A



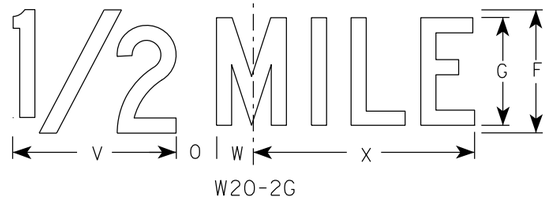
W20-2D



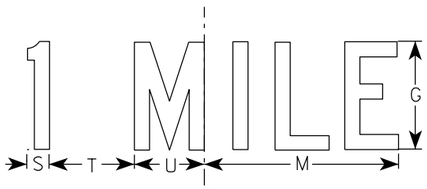
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

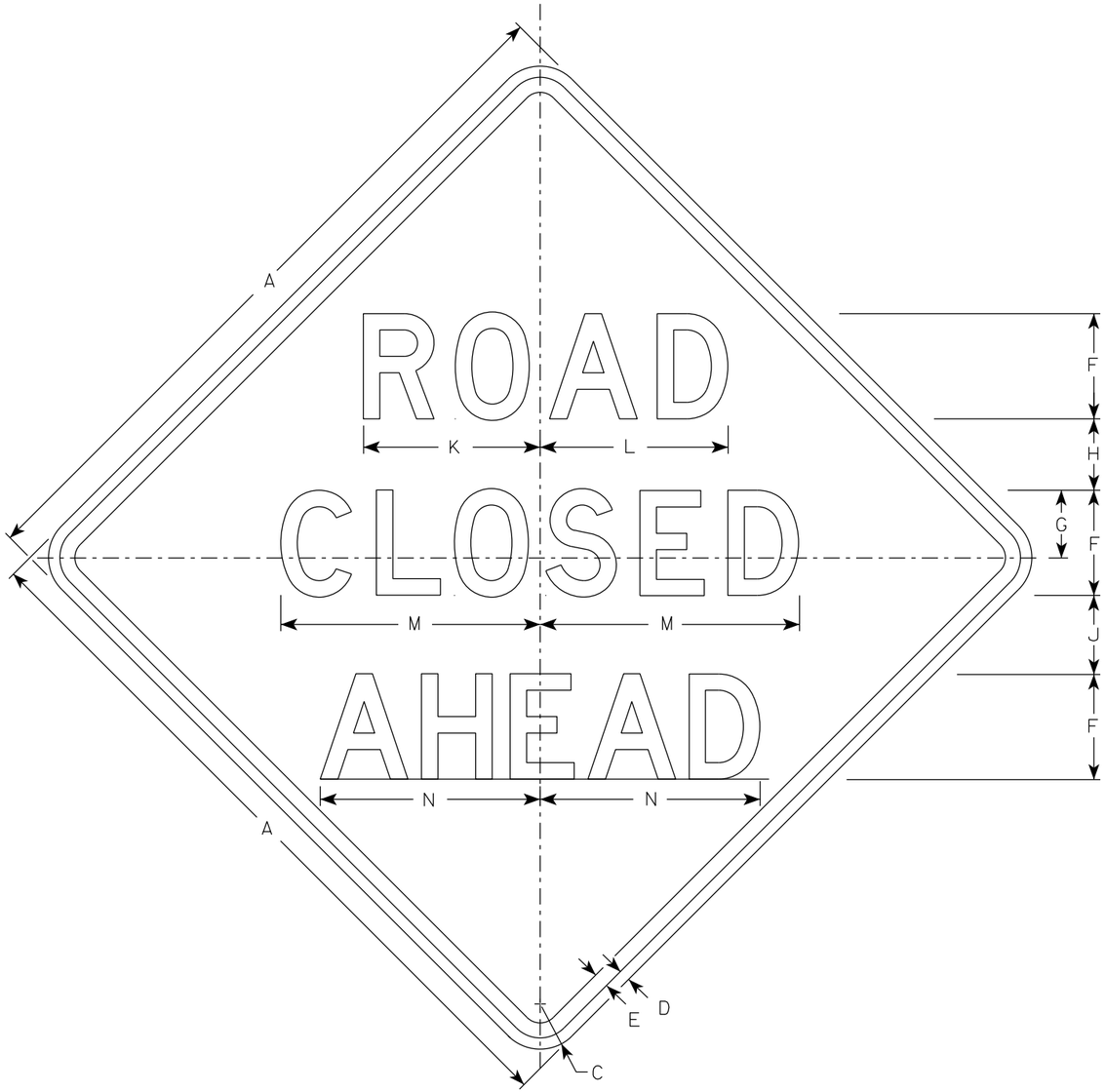
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

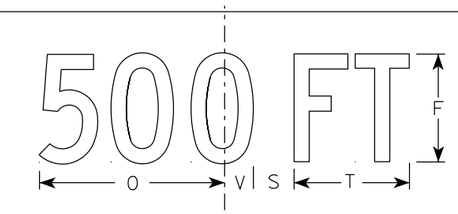
DATE 1/10/2024 PLATE NO. W20-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

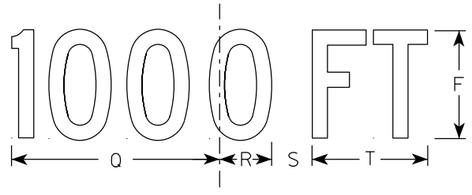
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W202.DGN PLOT DATE : 10-JAN 2024 11:36 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



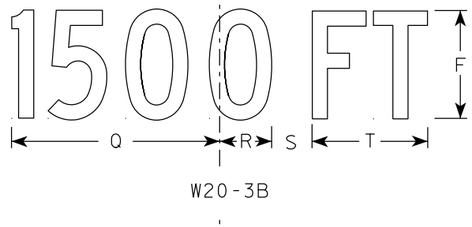
W20-3A



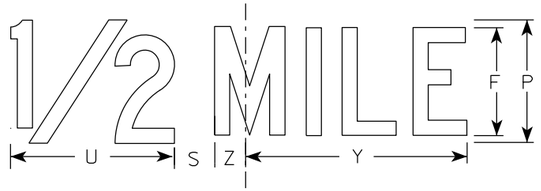
W20-3D



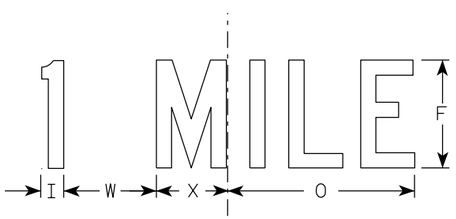
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-3.8

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W203.DGN PLOT DATE : 10-JAN 2024 12:02 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

STH 83 EARTHWORK TABLE

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.15	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
305+85.26	30585.26	0.00	131.25	16.50	2.33	0	0	0	0	0	0
306+00.00	30600.00	14.74	115.67	16.50	0.00	67	9	1	67	1	57
306+50.00	30650.00	50.00	105.08	16.50	0.00	204	31	0	271	1	230
307+00.00	30700.00	50.00	100.24	16.50	0.00	190	31	0	461	1	389
307+50.00	30750.00	50.00	99.44	16.50	0.00	185	31	0	646	1	543
308+00.00	30800.00	50.00	111.39	16.50	0.00	195	31	0	841	1	707
308+50.00	30850.00	50.00	126.44	16.50	0.00	220	31	0	1,061	1	896
309+00.00	30900.00	50.00	140.02	16.50	0.00	247	31	0	1,308	1	1,112
309+50.00	30950.00	50.00	142.39	16.50	0.00	261	31	0	1,569	1	1,342
310+00.00	31000.00	50.00	125.92	16.50	0.00	248	31	0	1,817	1	1,559
310+50.00	31050.00	50.00	115.22	16.50	0.00	223	31	0	2,040	1	1,751
311+00.00	31100.00	50.00	101.35	16.50	0.00	201	31	0	2,241	1	1,921
311+50.00	31150.00	50.00	100.89	16.50	1.62	187	31	2	2,428	3	2,075
312+00.00	31200.00	50.00	98.11	16.50	1.59	184	31	3	2,612	7	2,224
312+50.00	31250.00	50.00	102.01	16.50	1.11	185	31	3	2,797	10	2,375
313+00.00	31300.00	50.00	106.95	16.50	3.85	193	31	5	2,990	16	2,531
313+50.00	31350.00	50.00	118.02	16.50	0.73	208	31	4	3,198	21	2,703
314+00.00	31400.00	50.00	118.95	16.50	0.00	219	31	1	3,417	22	2,890
314+50.00	31450.00	50.00	121.52	16.50	0.00	223	31	0	3,640	22	3,082
315+00.00	31500.00	50.00	133.46	16.50	0.28	236	31	0	3,876	22	3,287
315+50.00	31550.00	50.00	132.22	16.50	0.00	246	31	0	4,122	22	3,502
316+00.00	31600.00	50.00	124.06	16.50	0.85	237	31	1	4,359	23	3,707
316+50.00	31650.00	50.00	116.94	16.50	0.00	223	31	1	4,582	24	3,898
317+00.00	31700.00	50.00	108.68	16.50	0.04	209	31	0	4,791	24	4,076
317+50.00	31750.00	50.00	100.47	16.50	0.42	194	31	0	4,985	24	4,239
318+00.00	31800.00	50.00	96.98	16.50	1.56	183	31	2	5,168	26	4,389
318+50.00	31850.00	50.00	103.70	16.50	0.00	186	31	1	5,354	28	4,542
319+00.00	31900.00	50.00	91.41	16.50	0.47	181	31	0	5,535	0+28	4,692
319+50.00	31950.00	50.00	94.22	16.50	1.66	172	31	2	5,707	30	4,831
320+00.00	32000.00	50.00	95.92	16.50	0.44	176	31	2	5,883	32	4,974
320+50.00	32050.00	50.00	99.90	16.50	0.34	181	31	1	6,064	33	5,123
321+00.00	32100.00	50.00	101.71	16.50	0.00	187	31	0	6,251	33	5,279
321+50.00	32150.00	50.00	101.80	16.50	0.19	188	31	0	6,439	33	5,436
322+00.00	32200.00	50.00	96.91	16.50	4.15	184	31	4	6,623	38	5,584
322+50.00	32250.00	50.00	101.59	16.50	5.25	184	31	9	6,807	48	5,727

STH 83 EARTHWORK TABLE CONTINUED

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.15	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
323+00.00	32300.00	50.00	112.63	16.50	1.13	198	31	6	7,005	55	5,887
323+50.00	32350.00	50.00	124.49	16.50	0.32	220	31	1	7,225	56	6,075
324+00.00	32400.00	50.00	129.90	16.50	0.00	236	31	0	7,461	56	6,280
324+50.00	32450.00	50.00	125.86	16.50	0.00	237	31	0	7,698	56	6,486
325+00.00	32500.00	50.00	121.91	16.50	0.00	229	31	0	7,927	56	6,684
325+50.00	32550.00	50.00	122.31	16.50	0.00	226	31	0	8,153	56	6,879
326+00.00	32600.00	50.00	112.65	16.50	0.00	218	31	0	8,371	56	7,066
326+50.00	32650.00	50.00	111.52	16.50	0.00	208	31	0	8,579	56	7,243
327+00.00	32700.00	50.00	112.44	16.50	0.00	207	31	0	8,786	56	7,419
327+50.00	32750.00	50.00	107.84	16.50	0.19	204	31	0	8,990	56	7,592
328+00.00	32800.00	50.00	101.77	16.50	0.83	194	31	1	9,184	58	7,754
328+50.00	32850.00	50.00	96.83	16.50	0.36	184	31	1	9,368	59	7,905
329+00.00	32900.00	50.00	92.50	16.50	1.73	175	31	2	9,543	61	8,047
329+50.00	32950.00	50.00	95.83	16.50	2.80	174	31	4	9,717	66	8,185
330+00.00	33000.00	50.00	114.11	16.50	0.00	194	31	3	9,911	69	8,345
330+50.00	33050.00	50.00	136.99	16.50	0.26	233	31	0	10,144	69	8,547
331+00.00	33100.00	50.00	152.77	16.50	0.16	268	31	0	10,412	69	8,784
331+50.00	33150.00	50.00	165.61	16.50	1.40	295	31	1	10,707	70	9,047
332+00.00	33200.00	50.00	161.44	16.50	0.19	303	31	1	11,010	71	9,318
332+50.00	33250.00	50.00	165.13	16.50	0.00	302	31	0	11,312	71	9,589
333+00.00	33300.00	50.00	187.06	16.50	0.00	326	31	0	11,638	71	9,884
333+09.93	33309.93	9.93	201.65	16.50	0.00	71	6	0	11,709	71	9,949
334+00.00	33400.00	90.07	228.75	16.50	0.00	718	55	0	12,427	71	10,612
334+63.19	33463.19	63.19	181.50	16.50	3.62	480	39	4	12,907	76	11,048
335+00.00	33500.00	36.81	164.66	16.50	0.55	236	22	3	13,143	79	11,259
335+50.00	33550.00	50.00	155.77	16.50	0.01	297	31	1	13,440	81	11,524
336+00.00	33600.00	50.00	144.32	16.50	3.16	278	31	3	13,718	84	11,767
336+50.00	33650.00	50.00	136.88	16.50	7.97	260	31	10	13,978	95	11,985
337+00.00	33700.00	50.00	131.96	16.50	2.38	249	31	10	14,227	107	12,191
337+50.00	33750.00	50.00	121.91	16.50	3.89	235	31	6	14,462	114	12,388
338+00.00	33800.00	50.00	109.40	16.50	19.84	214	31	22	14,676	139	12,546
338+50.00	33850.00	50.00	104.10	16.50	16.09	198	31	33	14,874	177	12,675
339+00.00	33900.00	50.00	101.57	16.50	13.92	190	31	28	15,064	209	12,802
339+50.00	33950.00	50.00	104.55	16.50	5.89	191	31	18	15,255	230	12,941
340+00.00	34000.00	50.00	111.70	16.50	0.19	200	31	6	15,455	237	13,103

STH 83 EARTHWORK TABLE CONTINUED

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.15	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
340+50.00	34050.00	50.00	100.93	16.50	1.19	197	31	1	15,652	238	13,268
341+00.00	34100.00	50.00	107.20	16.50	0.68	193	31	2	15,845	240	13,428
341+50.00	34150.00	50.00	117.65	16.50	0.28	208	31	1	16,053	242	13,604
342+00.00	34200.00	50.00	119.56	16.50	0.17	220	31	0	16,273	242	13,793
342+50.00	34250.00	50.00	121.97	16.50	0.46	224	31	1	16,497	243	13,984
343+00.00	34300.00	50.00	126.74	16.50	0.02	230	31	0	16,727	243	14,183
343+50.00	34350.00	50.00	127.43	16.50	0.00	235	31	0	16,962	243	14,387
344+00.00	34400.00	50.00	127.40	16.50	0.00	236	31	0	17,198	243	14,592
344+50.00	34450.00	50.00	132.84	16.50	0.00	241	31	0	17,439	243	14,802
345+00.00	34500.00	50.00	133.14	16.50	0.00	246	31	0	17,685	243	15,017
345+50.00	34550.00	50.00	136.68	16.50	0.00	250	31	0	17,935	243	15,236
346+00.00	34600.00	50.00	135.14	16.50	0.00	252	31	0	18,187	243	15,457
346+50.00	34650.00	50.00	133.87	16.50	0.00	249	31	0	18,436	243	15,675
347+00.00	34700.00	50.00	124.17	16.50	0.00	239	31	0	18,675	243	15,883
347+50.00	34750.00	50.00	123.71	16.50	0.00	230	31	0	18,905	243	16,082
348+00.00	34800.00	50.00	121.90	16.50	0.00	227	31	0	19,132	243	16,278
348+50.00	34850.00	50.00	116.66	16.50	0.25	221	31	0	19,353	243	16,468
349+00.00	34900.00	50.00	121.98	16.50	3.61	221	31	4	19,574	247	16,654
349+50.00	34950.00	50.00	129.68	16.50	20.69	233	31	22	19,807	273	16,830
350+00.00	35000.00	50.00	137.29	16.50	31.78	247	31	49	20,054	329	16,990
350+50.00	35050.00	50.00	122.57	16.50	16.72	241	31	45	20,295	381	17,148
351+00.00	35100.00	50.00	245.60	16.50	13.31	341	31	28	20,636	413	17,426
351+50.00	35150.00	50.00	112.59	16.50	13.59	332	31	25	20,968	442	17,698
352+00.00	35200.00	50.00	123.45	16.50	0.53	219	31	13	21,187	457	17,871
352+50.00	35250.00	50.00	127.41	16.50	0.00	232	31	0	21,419	457	18,072
353+00.00	35300.00	50.00	123.89	16.50	1.88	233	31	2	21,652	459	18,272
353+50.00	35350.00	50.00	116.87	16.50	2.05	223	31	4	21,875	463	18,460
354+00.00	35400.00	50.00	107.34	16.50	2.08	208	31	4	22,083	468	18,632
354+50.00	35450.00	50.00	102.71	16.50	2.44	194	31	4	22,277	473	18,790
355+00.00	35500.00	50.00	104.86	16.50	0.00	192	31	2	22,469	475	18,949
355+50.00	35550.00	50.00	103.08	16.50	2.40	193	31	2	22,662	477	19,109
356+00.00	35600.00	50.00	99.70	16.50	3.00	188	31	5	22,850	483	19,260
356+50.00	35650.00	50.00	101.06	16.50	1.32	186	31	4	23,036	488	19,410
357+00.00	35700.00	50.00	101.19	16.50	0.12	187	31	1	23,223	489	19,565
357+50.00	35750.00	50.00	100.56	16.50	0.07	187	31	0	23,410	489	19,721

STH 83 EARTHWORK TABLE CONTINUED

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.15	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
358+00.00	35800.00	50.00	95.27	16.50	0.19	181	31	0	23,591	489	19,871
358+50.00	35850.00	50.00	96.86	16.50	0.13	178	31	0	23,769	489	20,018
359+00.00	35900.00	50.00	93.97	16.50	0.13	177	31	0	23,946	489	20,164
359+50.00	35950.00	50.00	97.48	16.50	0.36	177	31	0	24,123	489	20,310
360+00.00	36000.00	50.00	104.48	16.50	0.06	187	31	0	24,310	489	20,466
360+50.00	36050.00	50.00	106.87	16.50	1.57	196	31	2	24,506	491	20,629
361+00.00	36100.00	50.00	107.65	16.50	2.12	199	31	3	24,705	495	20,794
361+50.00	36150.00	50.00	121.68	16.50	0.46	212	31	2	24,917	497	20,972
362+00.00	36200.00	50.00	124.53	16.50	3.31	228	31	3	25,145	500	21,166
362+50.00	36250.00	50.00	136.37	16.50	1.01	242	31	4	25,387	505	21,372
363+00.00	36300.00	50.00	124.41	16.50	3.41	241	31	4	25,628	509	21,578
363+50.00	36350.00	50.00	228.65	16.50	0.00	327	31	3	25,955	513	21,870
364+00.00	36400.00	50.00	98.61	16.50	8.49	303	31	8	26,258	522	22,133
364+50.00	36450.00	50.00	120.69	16.50	6.11	203	31	14	26,461	538	22,289
365+00.00	36500.00	50.00	125.96	16.50	0.00	228	31	6	26,689	545	22,479
365+50.00	36550.00	50.00	129.38	16.50	0.61	236	31	1	26,925	546	22,683
366+00.00	36600.00	50.00	126.76	16.50	0.60	237	31	1	27,162	547	22,888
366+50.00	36650.00	50.00	131.17	16.50	0.12	239	31	1	27,401	549	23,094
367+00.00	36700.00	50.00	133.53	16.50	0.00	245	31	0	27,646	549	23,308
367+50.00	36750.00	50.00	131.40	16.50	0.00	245	31	0	27,891	549	23,522
368+00.00	36800.00	50.00	126.43	16.50	0.00	239	31	0	28,130	549	23,730
368+50.00	36850.00	50.00	120.06	16.50	1.09	228	31	1	28,358	550	23,926
369+00.00	36900.00	50.00	131.61	16.50	60.85	233	31	57	28,591	615	24,063
369+30.57	36930.57	30.57	143.22	16.50	51.73	156	19	64	28,747	689	24,126
369+50.00	36950.00	19.43	147.84	16.50	5.25	105	12	21	28,852	713	24,195
369+55.55	36955.55	5.55	149.76	16.50	0.00	31	3	1	28,883	714	24,222
369+80.53	36980.53	24.98	147.28	16.50	0.00	137	15	0	29,020	714	24,344
370+00.00	37000.00	19.47	145.72	16.50	0.00	106	12	0	29,126	714	24,438
370+25.00	37025.00	25.00	142.94	16.50	0.08	134	15	0	29,260	714	24,557
STRUCTURE B-67-220											
371+25.09	37125.09	0.00	140.05	16.50	0.26	0	0	0	29,260	714	24,557
371+50.00	37150.00	24.91	142.82	16.50	0.23	130	15	0	29,390	714	24,672
371+61.98	37161.98	11.98	150.87	16.50	0.00	65	7	0	29,455	714	24,730
371+86.96	37186.96	24.98	162.97	16.50	28.87	145	15	13	29,600	729	24,845
372+00.00	37200.00	13.04	161.23	16.50	61.66	78	8	22	29,678	754	24,890
372+11.94	37211.94	11.94	155.98	16.50	94.17	70	7	34	29,748	794	24,914
372+50.00	37250.00	38.06	119.18	16.50	75.46	194	23	120	29,942	932	24,947
373+00.00	37300.00	50.00	85.20	16.50	31.99	189	31	99	30,131	1,045	24,991
373+50.00	37350.00	50.00	97.45	16.50	1.11	169	31	31	30,300	1,081	25,093
374+00.00	37400.00	50.00	117.94	16.50	0.49	199	31	1	30,499	1,082	25,260
374+50.00	37450.00	50.00	134.08	16.50	2.14	233	31	2	30,732	1,084	25,460

STH 83 EARTHWORK TABLE CONTINUED

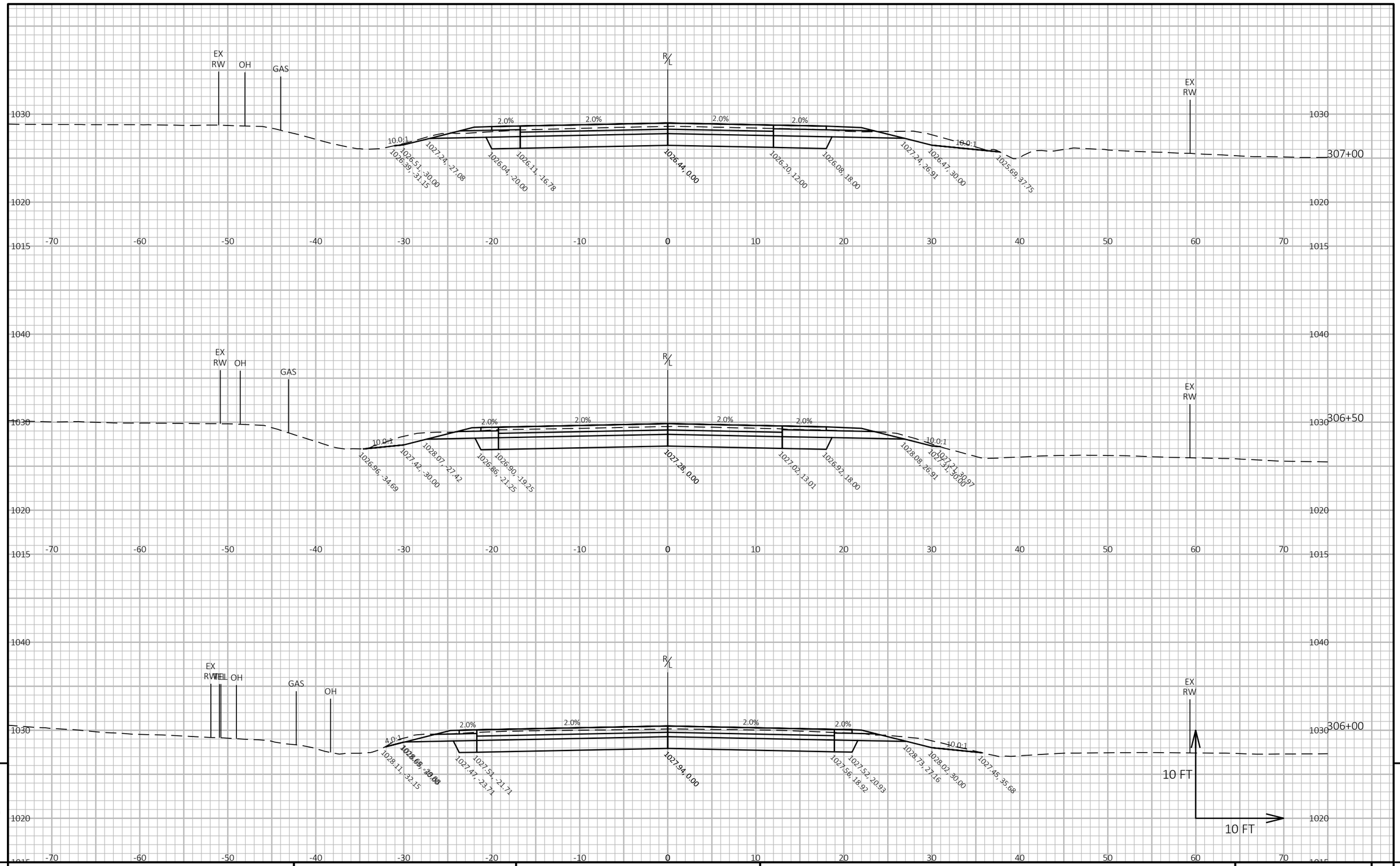
STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.15	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
375+00.00	37500.00	50.00	150.09	16.50	0.00	263	31	2	30,995	1,087	25,689
375+50.00	37550.00	50.00	170.45	16.50	0.03	297	31	0	31,292	1,087	25,955
376+00.00	37600.00	50.00	162.78	16.50	0.37	309	31	0	31,601	1,087	26,233
376+50.00	37650.00	50.00	152.59	16.50	0.55	292	31	1	31,893	1,088	26,493
377+00.00	37700.00	50.00	146.26	16.50	1.50	277	31	2	32,170	1,090	26,737
377+50.00	37750.00	50.00	154.76	16.50	0.45	279	31	2	32,449	1,093	26,983
378+00.00	37800.00	50.00	174.87	16.50	0.28	305	31	1	32,754	1,094	27,255
378+50.00	37850.00	50.00	179.02	16.50	0.00	328	31	0	33,082	1,094	27,552
379+00.00	37900.00	50.00	149.40	16.50	0.02	304	31	0	33,386	1,094	27,825
379+50.00	37950.00	50.00	110.20	16.50	0.81	240	31	1	33,626	1,095	28,033
380+00.00	38000.00	50.00	90.44	16.50	0.18	186	31	1	33,812	1,096	28,187
380+50.00	38050.00	50.00	86.58	16.50	0.00	164	31	0	33,976	1,096	28,320
381+00.00	38100.00	50.00	85.91	16.50	0.00	160	31	0	34,136	1,096	28,449
381+50.00	38150.00	50.00	101.79	16.50	0.00	174	31	0	34,310	1,096	28,592
382+00.00	38200.00	50.00	120.28	16.50	0.00	206	31	0	34,516	1,096	28,767
382+50.00	38250.00	50.00	124.48	16.50	0.00	227	31	0	34,743	1,096	28,963
383+00.00	38300.00	50.00	117.23	16.50	0.00	224	31	0	34,967	1,096	29,156
383+50.00	38350.00	50.00	108.16	16.50	0.00	209	31	0	35,176	1,096	29,334
384+00.00	38400.00	50.00	101.53	16.50	0.00	194	31	0	35,370	1,096	29,497
384+50.00	38450.00	50.00	97.14	16.50	0.00	184	31	0	35,554	1,096	29,650
385+00.00	38500.00	50.00	90.47	16.50	1.19	174	31	1	35,728	1,097	29,792
385+50.00	38550.00	50.00	88.61	16.50	1.72	166	31	3	35,894	1,101	29,923
386+00.00	38600.00	50.00	92.06	16.50	0.46	167	31	2	36,061	1,103	30,057
386+50.00	38650.00	50.00	95.25	16.50	0.00	173	31	0	36,234	1,103	30,199
387+00.00	38700.00	50.00	94.86	16.50	7.52	176	31	7	36,410	1,111	30,336
387+50.00	38750.00	50.00	90.06	16.50	7.03	171	31	13	36,581	1,126	30,461
388+00.00	38800.00	50.00	91.90	16.50	7.10	168	31	13	36,749	1,141	30,583
388+50.00	38850.00	50.00	90.31	16.50	8.86	169	31	15	36,918	1,158	30,704
389+00.00	38900.00	50.00	90.03	16.50	5.65	167	31	13	37,085	1,173	30,825
389+50.00	38950.00	50.00	99.52	16.50	2.57	176	31	8	37,261	1,182	30,961
390+00.00	39000.00	50.00	102.41	16.50	0.11	187	31	2	37,448	1,185	31,115
390+50.00	39050.00	50.00	102.53	16.50	0.58	190	31	1	37,638	1,186	31,272
391+00.00	39100.00	50.00	100.93	16.50	0.82	188	31	1	37,826	1,187	31,428
391+50.00	39150.00	50.00	100.16	16.50	0.06	186	31	1	38,012	1,188	31,582
392+00.00	39200.00	50.00	104.41	16.50	0.01	189	31	0	38,201	1,188	31,740

STH 83 EARTHWORK TABLE CONTINUED

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.15	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
392+50.00	39250.00	50.00	101.31	16.50	0.05	190	31	0	38,391	1,188	31,899
393+00.00	39300.00	50.00	98.04	16.50	6.75	185	31	6	38,576	1,195	32,046
393+50.00	39350.00	50.00	103.23	16.50	20.13	186	31	25	38,762	1,224	32,172
394+00.00	39400.00	50.00	116.52	16.50	20.93	203	31	38	38,965	1,267	32,301
394+50.00	39450.00	50.00	132.69	16.50	36.91	231	31	54	39,196	1,329	32,439
395+00.00	39500.00	50.00	147.24	16.50	23.97	259	31	56	39,455	1,394	32,602
395+50.00	39550.00	50.00	150.90	16.50	5.75	276	31	28	39,731	1,426	32,815
396+00.00	39600.00	50.00	163.69	16.50	0.00	291	31	5	40,022	1,432	33,069
396+50.00	39650.00	50.00	174.64	16.50	0.00	313	31	0	40,335	1,432	33,351
396+75.00	39675.00	25.00	188.81	16.50	0.35	168	15	0	40,503	1,432	33,504
397+50.00	39750.00	75.00	228.75	16.50	0.00	580	46	0	41,083	1,432	34,038
398+00.00	39800.00	50.00	203.33	16.50	0.00	400	31	0	41,483	1,432	34,407
398+51.89	39851.89	51.89	211.68	16.50	0.00	399	32	0	41,882	1,432	34,774
399+00.00	39900.00	48.11	174.30	16.50	1.22	344	29	1	42,226	1,433	35,088
399+50.00	39950.00	50.00	162.85	16.50	1.31	312	31	2	42,538	1,435	35,367
400+00.00	40000.00	50.00	157.93	16.50	2.65	297	31	4	42,835	1,440	35,628
400+50.00	40050.00	50.00	154.99	16.50	3.31	290	31	6	43,125	1,447	35,880
401+00.00	40100.00	50.00	144.17	16.50	3.97	277	31	7	43,402	1,455	36,118
401+50.00	40150.00	50.00	145.55	16.50	0.00	268	31	4	43,670	1,459	36,351
402+00.00	40200.00	50.00	138.64	16.50	0.14	263	31	0	43,933	1,459	36,583
402+50.00	40250.00	50.00	129.21	16.50	0.00	248	31	0	44,181	1,459	36,800
403+00.00	40300.00	50.00	117.58	16.50	0.00	229	31	0	44,410	1,459	36,998
403+50.00	40350.00	50.00	112.91	16.50	0.00	213	31	0	44,623	1,459	37,180
404+00.00	40400.00	50.00	110.82	16.50	0.00	207	31	0	44,830	1,459	37,356
404+50.00	40450.00	50.00	103.12	16.50	0.00	198	31	0	45,028	1,459	37,523
405+00.00	40500.00	50.00	90.90	16.50	0.00	180	31	0	45,208	1,459	37,672
405+50.00	40550.00	50.00	97.71	16.50	0.00	175	31	0	45,383	1,459	37,816
406+00.00	40600.00	50.00	98.20	16.50	0.00	181	31	0	45,564	1,459	37,966
406+50.00	40650.00	50.00	97.63	16.50	0.00	181	31	0	45,745	1,459	38,116
407+00.00	40700.00	50.00	98.34	16.50	0.00	181	31	0	45,926	1,459	38,266
407+50.00	40750.00	50.00	97.13	16.50	0.00	181	31	0	46,107	1,459	38,416
408+00.00	40800.00	50.00	93.56	16.50	0.15	177	31	0	46,284	1,459	38,562
408+26.54	40826.54	26.54	98.13	16.50	0.00	94	16	0	46,378	1,459	38,640
408+50.00	40850.00	23.46	95.83	16.50	0.00	84	14	0	46,462	1,459	38,710
408+51.52	40851.52	1.52	95.68	16.50	0.00	5	1	0	46,467	1,459	38,714
408+76.50	40876.50	24.98	95.02	16.50	0.00	88	15	0	46,555	1,459	38,787
409+00.00	40900.00	23.50	95.67	16.50	0.01	83	14	0	46,638	1,459	38,856
409+50.00	40950.00	50.00	92.18	16.50	0.06	174	31	0	46,812	1,459	38,999
410+00.00	41000.00	50.00	85.09	16.50	0.23	164	31	0	46,976	1,459	39,132
410+50.00	41050.00	50.00	86.29	16.50	0.00	159	31	0	47,135	1,459	39,260

STH 83 EARTHWORK TABLE CONTINUED

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.15	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
411+00.00	41100.00	50.00	95.65	16.50	0.00	168	31	0	47,303	1,459	39,397
411+50.00	41150.00	50.00	100.02	16.50	0.00	181	31	0	47,484	1,459	39,547
412+00.00	41200.00	50.00	99.40	16.50	0.00	185	31	0	47,669	1,459	39,701
412+50.00	41250.00	50.00	104.56	16.50	0.00	189	31	0	47,858	1,459	39,859
413+00.00	41300.00	50.00	112.10	16.50	0.00	201	31	0	48,059	1,459	40,029
413+50.00	41350.00	50.00	119.78	16.50	0.00	215	31	0	48,274	1,459	40,213
414+00.00	41400.00	50.00	123.09	16.50	0.00	225	31	0	48,499	1,459	40,407
414+50.00	41450.00	50.00	121.48	16.50	0.00	226	31	0	48,725	1,459	40,602
415+00.00	41500.00	50.00	115.50	16.50	0.00	219	31	0	48,944	1,459	40,790
415+50.00	41550.00	50.00	107.50	16.50	0.00	206	31	0	49,150	1,459	40,965
416+00.00	41600.00	50.00	113.56	16.50	0.00	205	31	0	49,355	1,459	41,139
416+50.00	41650.00	50.00	114.92	16.50	0.00	212	31	0	49,567	1,459	41,320
417+00.00	41700.00	50.00	119.78	16.50	0.00	217	31	0	49,784	1,459	41,506
417+13.39	41713.39	13.39	119.37	16.50	0.00	59	8	0	49,843	1,459	41,557
417+38.50	41738.50	25.11	114.97	16.50	0.00	109	15	0	49,952	1,459	41,651
417+50.00	41750.00	11.50	112.39	16.50	0.04	48	7	0	50,000	1,459	41,692
417+63.60	41763.60	13.60	108.60	16.50	0.25	56	8	0	50,056	1,459	41,740
418+00.00	41800.00	36.40	106.17	16.50	1.35	145	22	1	50,201	1,461	41,862
418+50.00	41850.00	50.00	113.22	16.50	0.46	203	31	2	50,404	1,463	42,031
STRUCTURE B-67-168											
421+10.00	42110.00	0.00	0.00	16.50	0.00	0	0	0	50,404	1,463	42,031
421+25.00	42125.00	15.00	10.85	16.50	41.14	3	9	11	50,407	1,475	42,013
421+50.00	42150.00	25.00	13.00	16.50	1.37	11	15	20	50,418	1,498	41,986
421+70.00	42170.00	20.00	15.45	16.50	0.00	11	12	1	50,429	1,500	41,983
421+93.39	42193.39	23.39	13.74	16.50	0.00	13	14	0	50,442	1,500	41,982
421+94.46	42194.46	1.07	14.02	16.50	0.00	1	1	0	50,443	1,500	41,982
422+00.00	42200.00	5.54	14.78	16.50	0.00	3	3	0	50,446	1,500	41,982
422+18.37	42218.37	18.37	13.09	16.50	0.99	9	11	0	50,455	1,500	41,980
422+19.41	42219.41	1.04	13.32	16.50	1.26	1	1	0	50,456	1,500	41,980
422+43.35	42243.35	23.94	25.30	16.50	1.25	17	15	1	50,473	1,501	41,981
422+44.36	42244.36	1.01	26.86	16.50	0.89	1	1	0	50,474	1,501	41,981



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9

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 419	E

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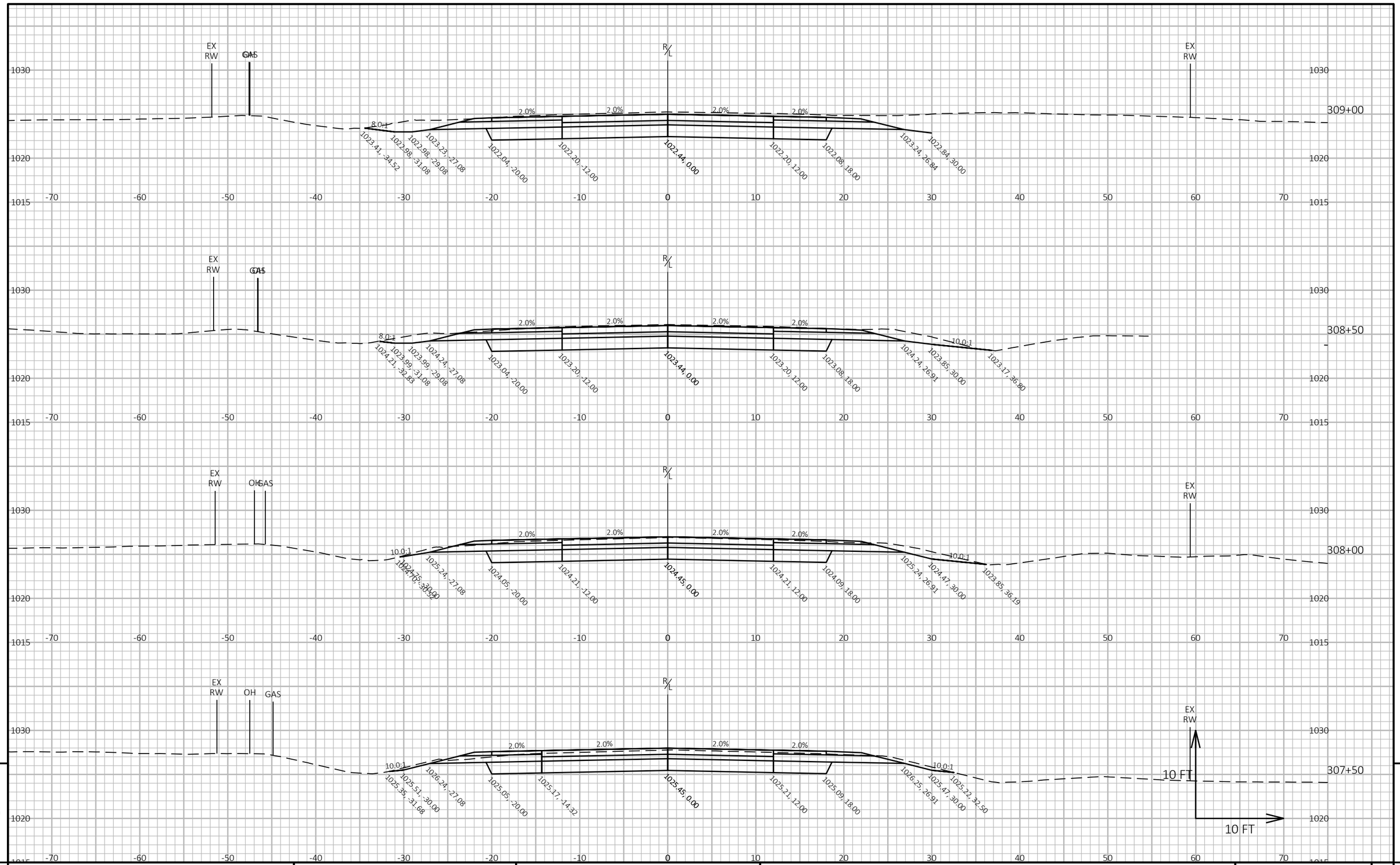
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PLOT BY : BAILEY, RYAN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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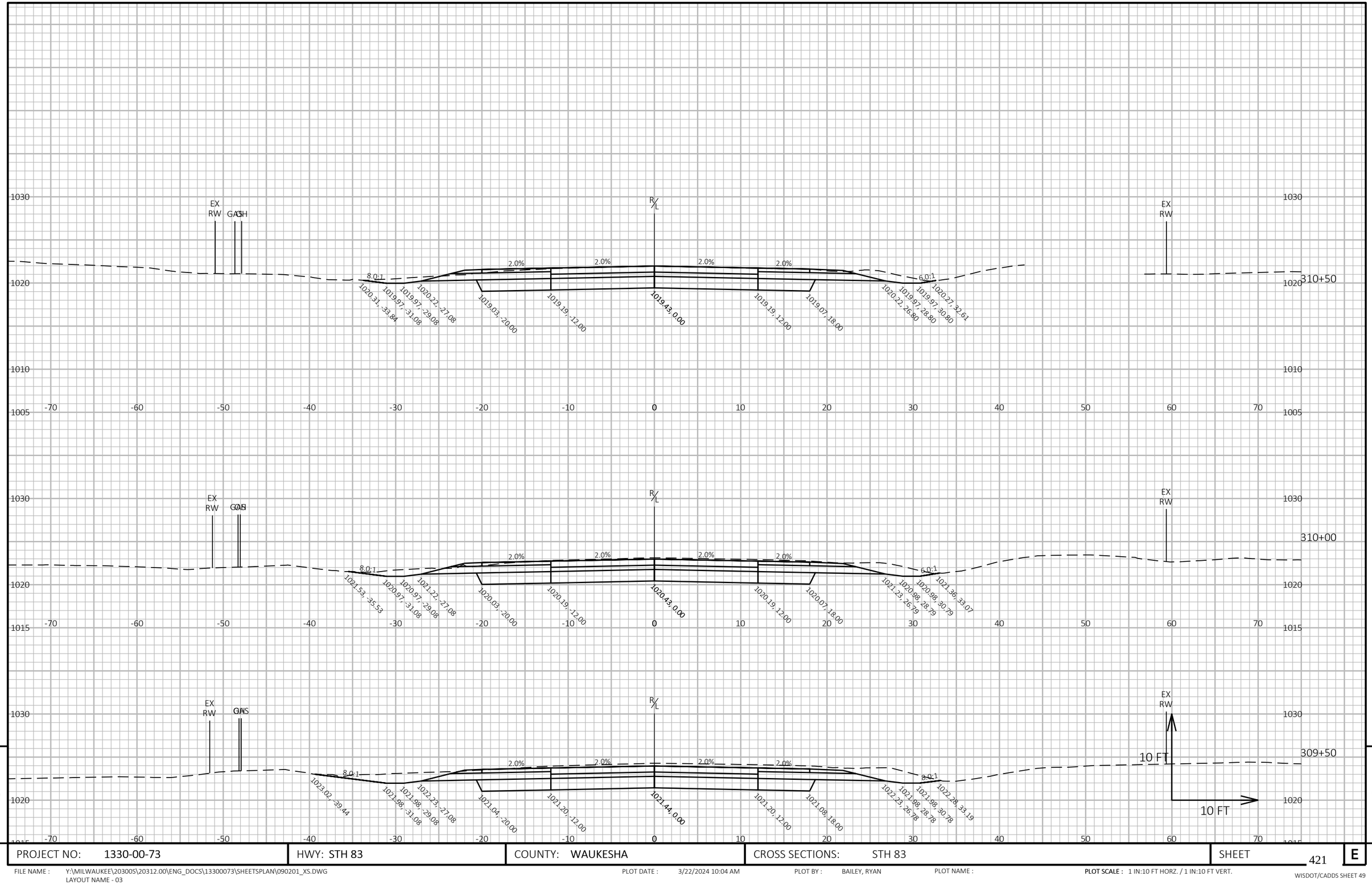
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LAYOUT NAME - 02

PLOT DATE : 3/22/2024 10:03 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

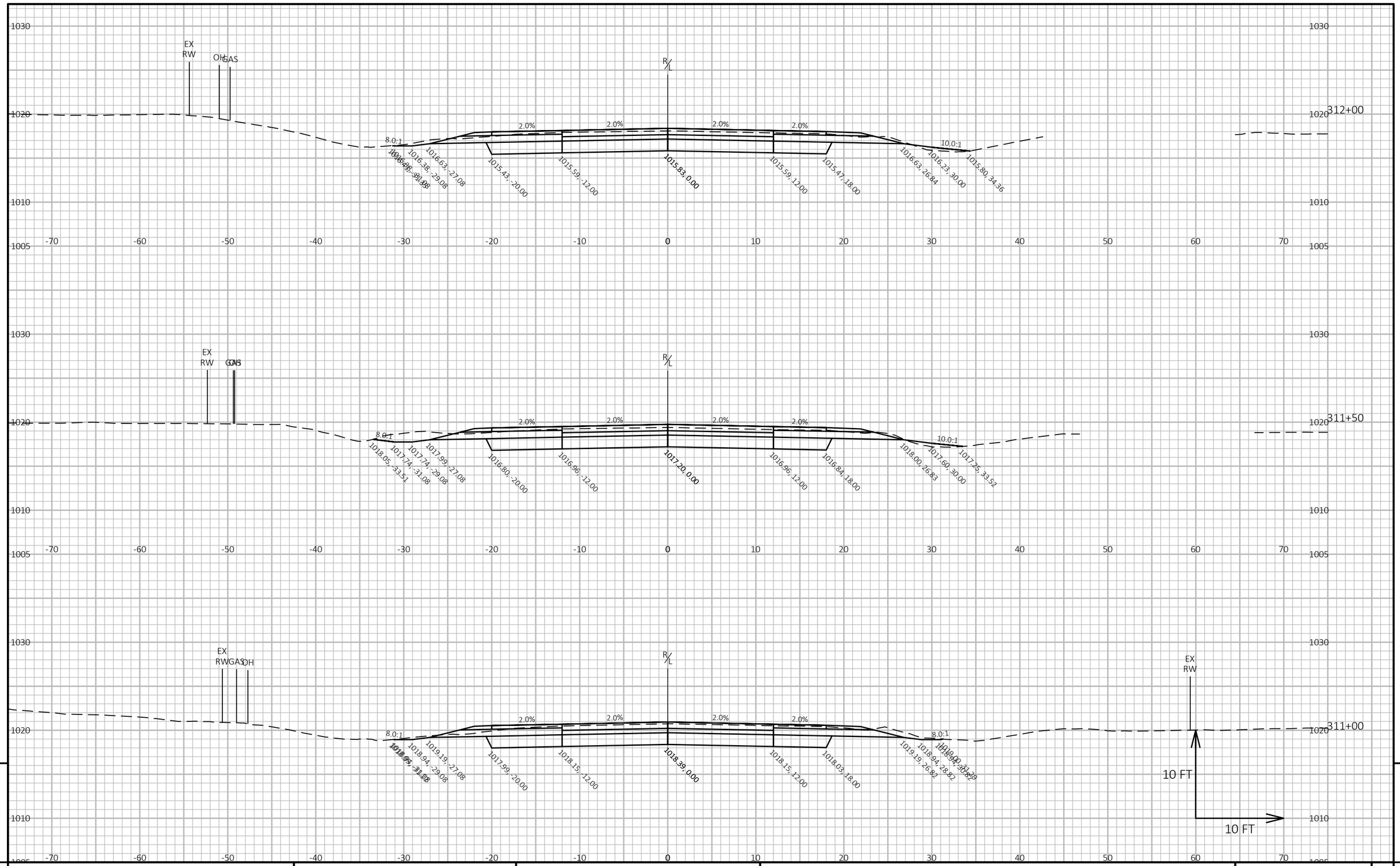


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LAYOUT NAME - 03

PLOT DATE : 3/22/2024 10:04 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

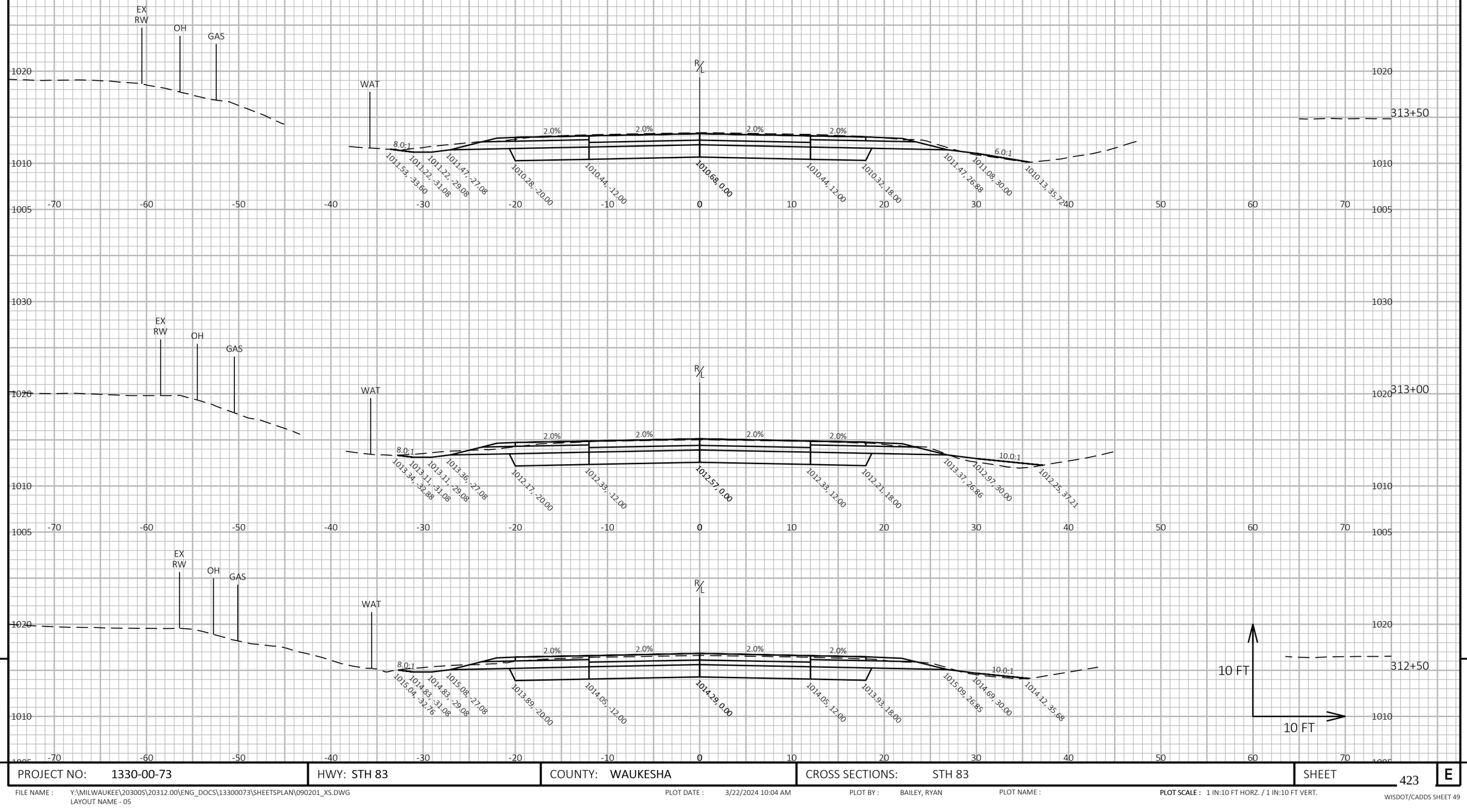
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 422	E

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LAYOUT NAME - 04

PLOT DATE : 3/22/2024 10:04 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 423	E

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LAYOUT NAME - 05

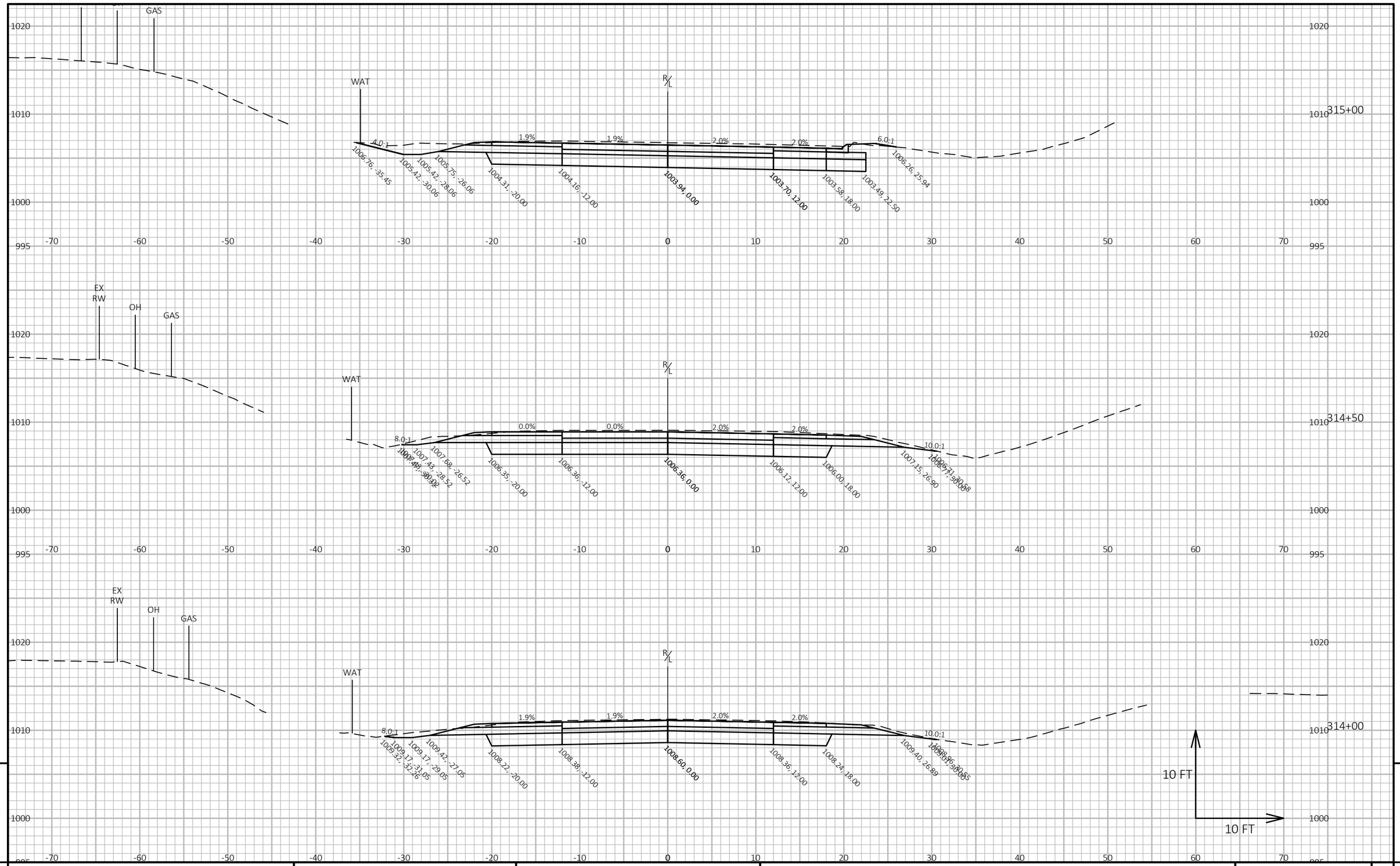
PLOT DATE : 3/22/2024 10:04 AM

PLOT BY : BAILEY, RYAN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 424	E

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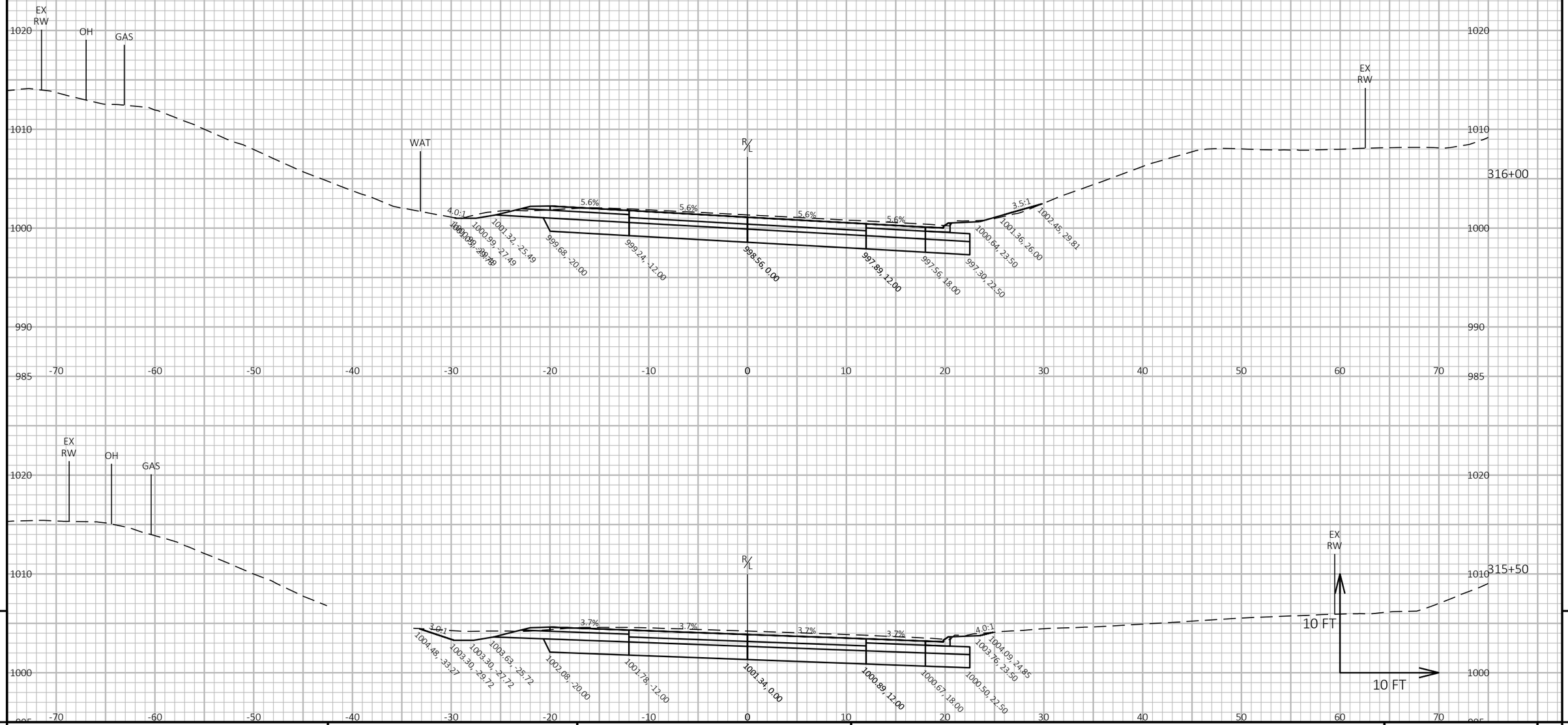
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PLOT BY : BAILEY, RYAN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 425	E

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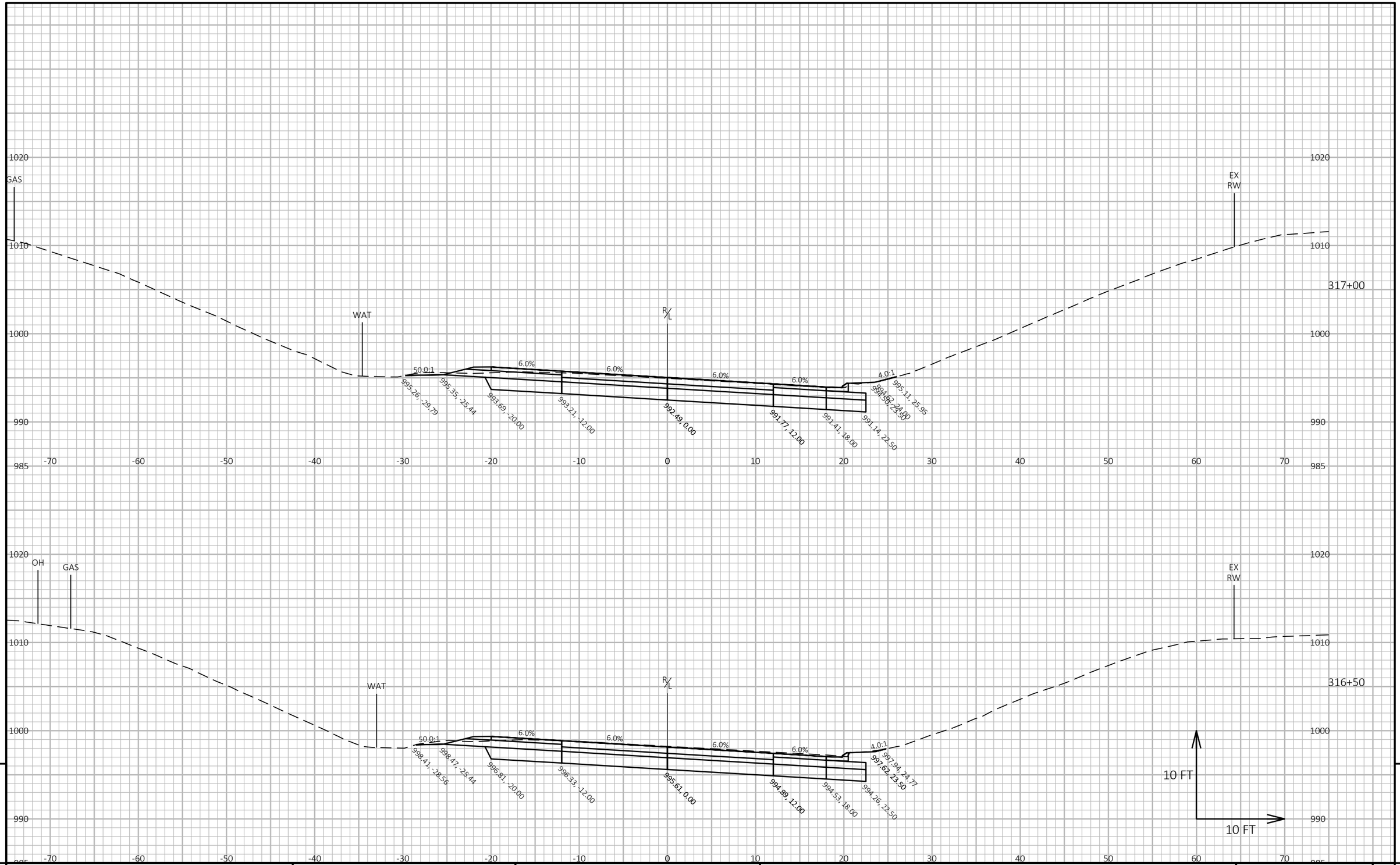
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PLOT BY : BAILEY, RYAN

PLOT NAME :

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WISDOT/CADDS SHEET 49



9

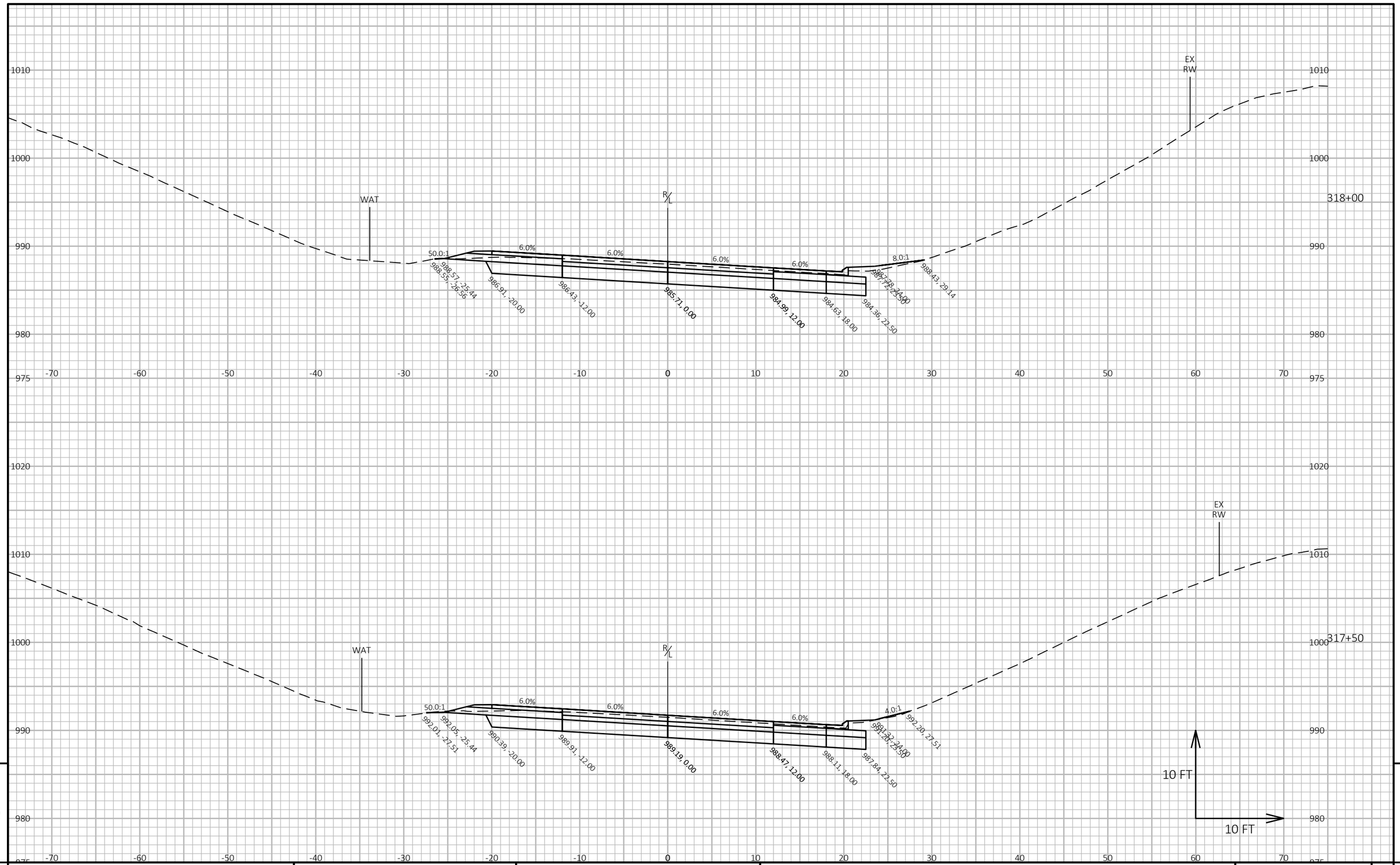
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 426	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 08

PLOT DATE : 3/22/2024 10:05 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

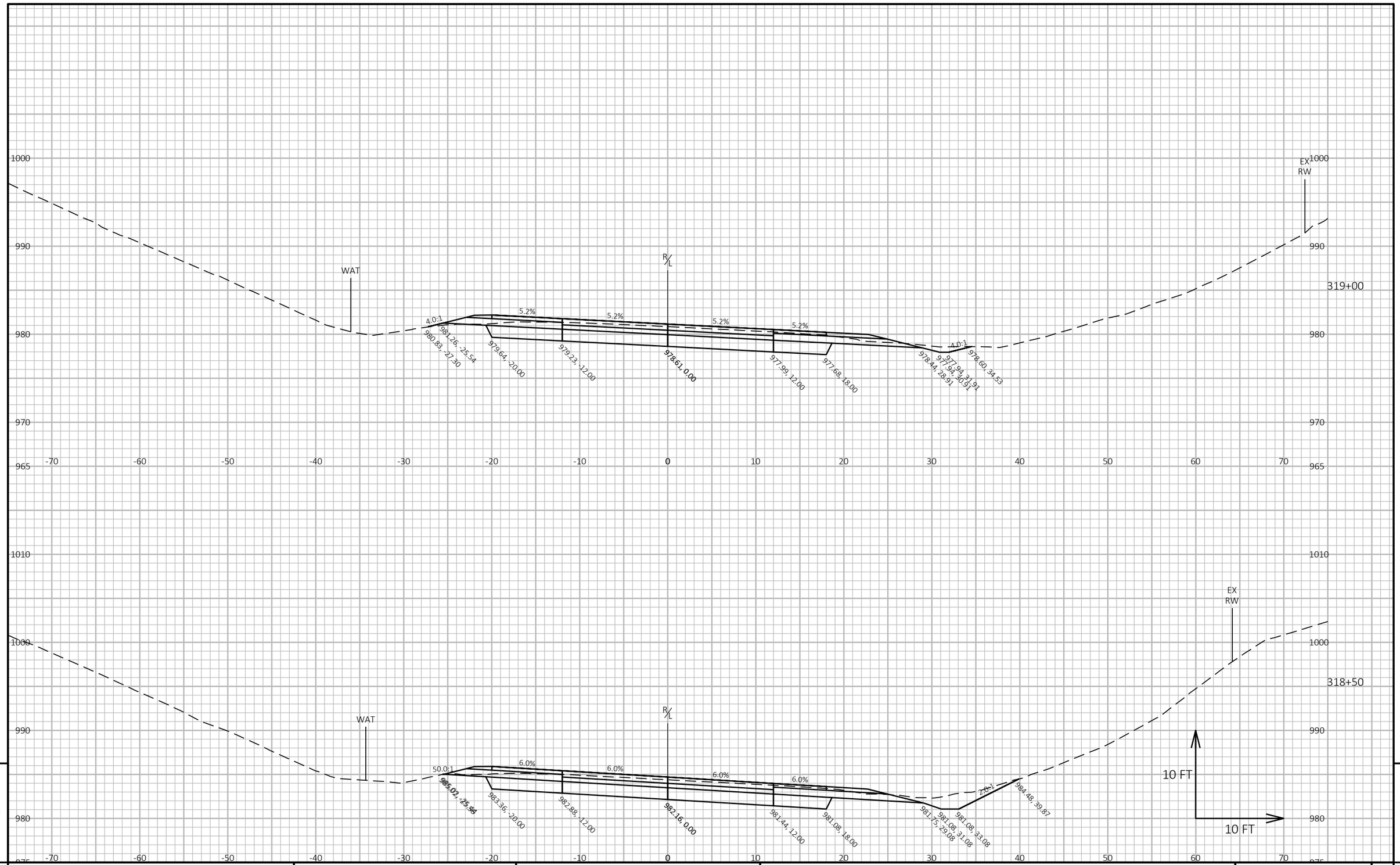


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 427	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 09

PLOT DATE : 3/22/2024 10:06 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

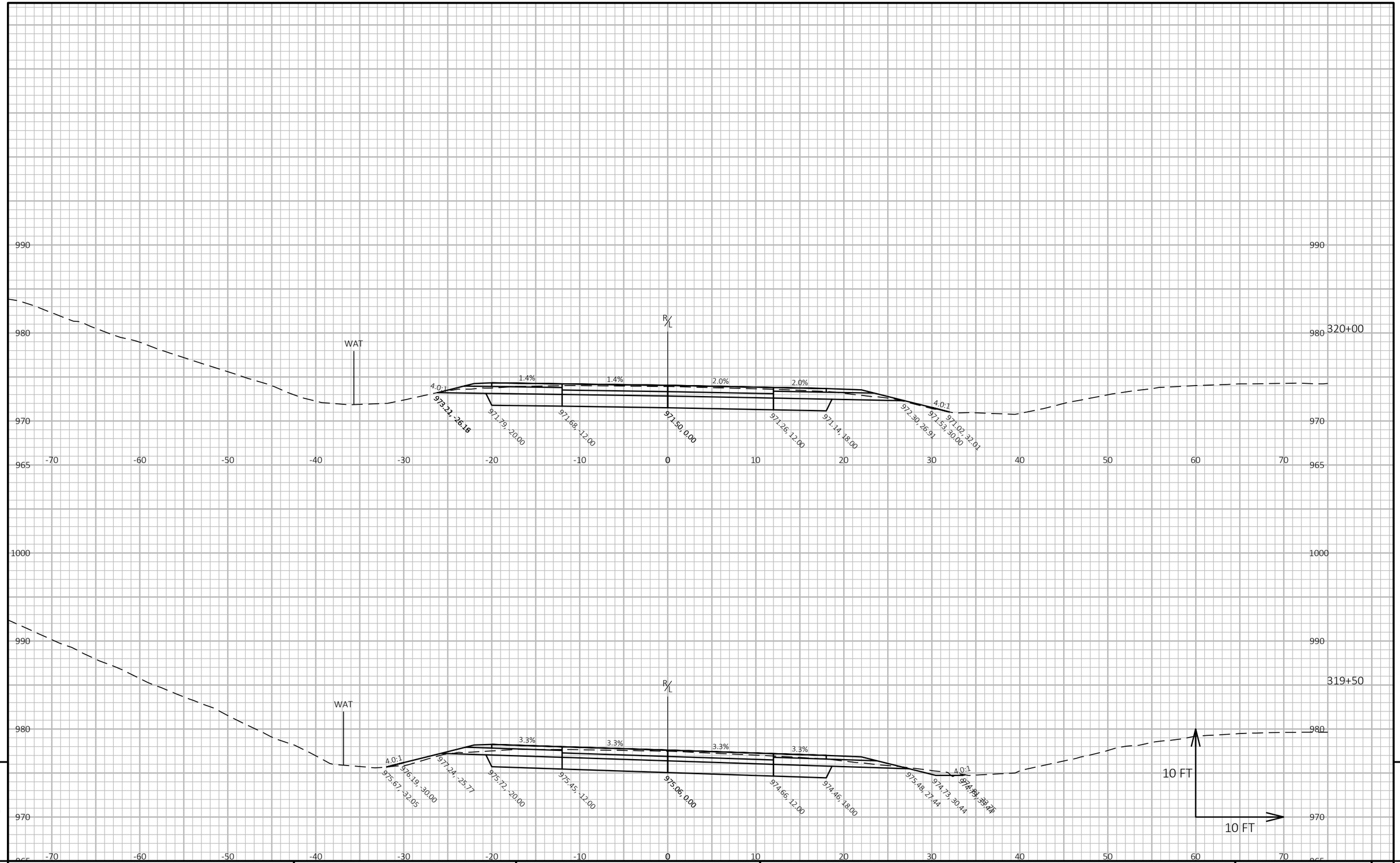
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 428	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 10

PLOT DATE : 3/22/2024 10:06 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

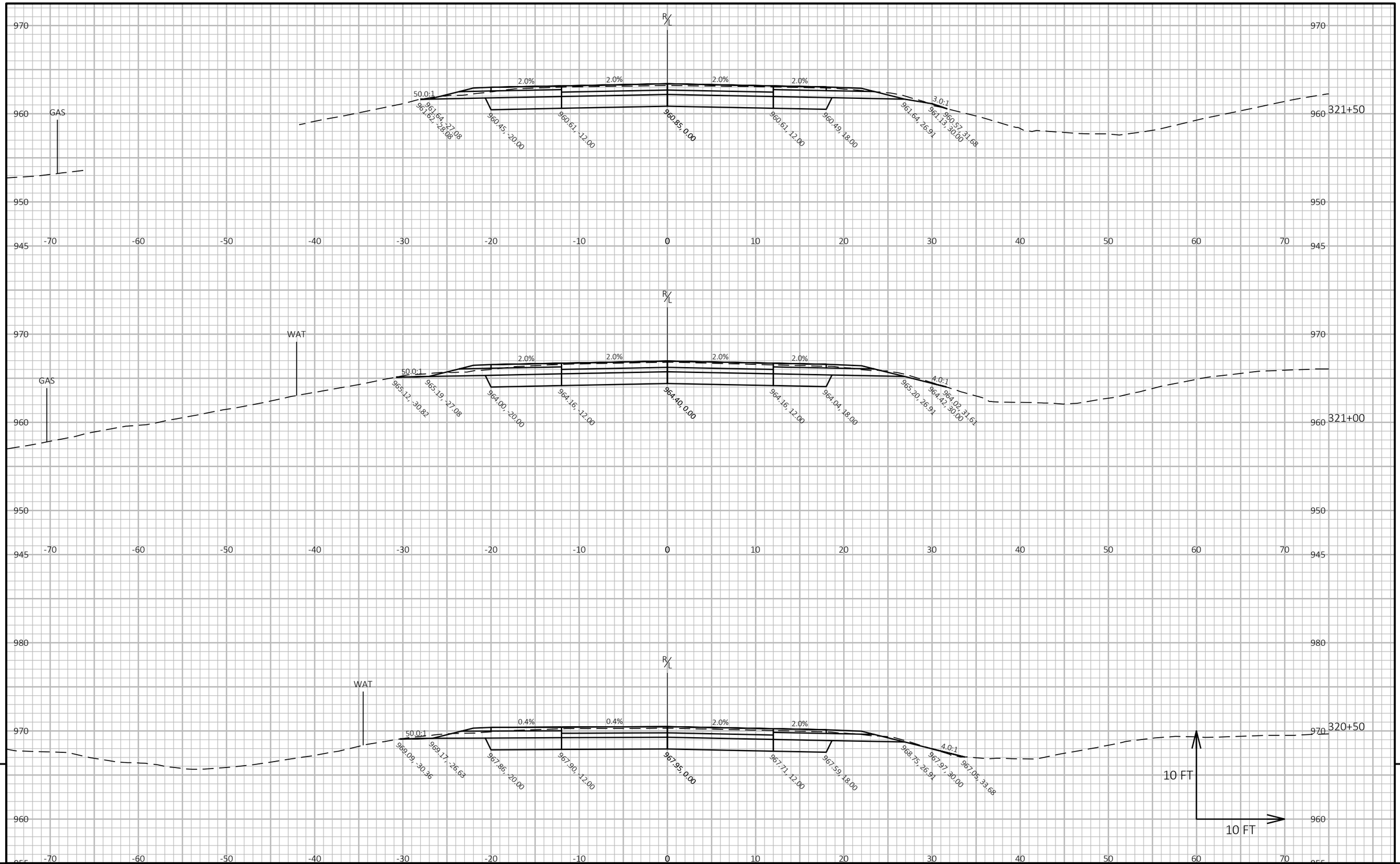
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 429	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 11

PLOT DATE : 3/22/2024 10:07 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

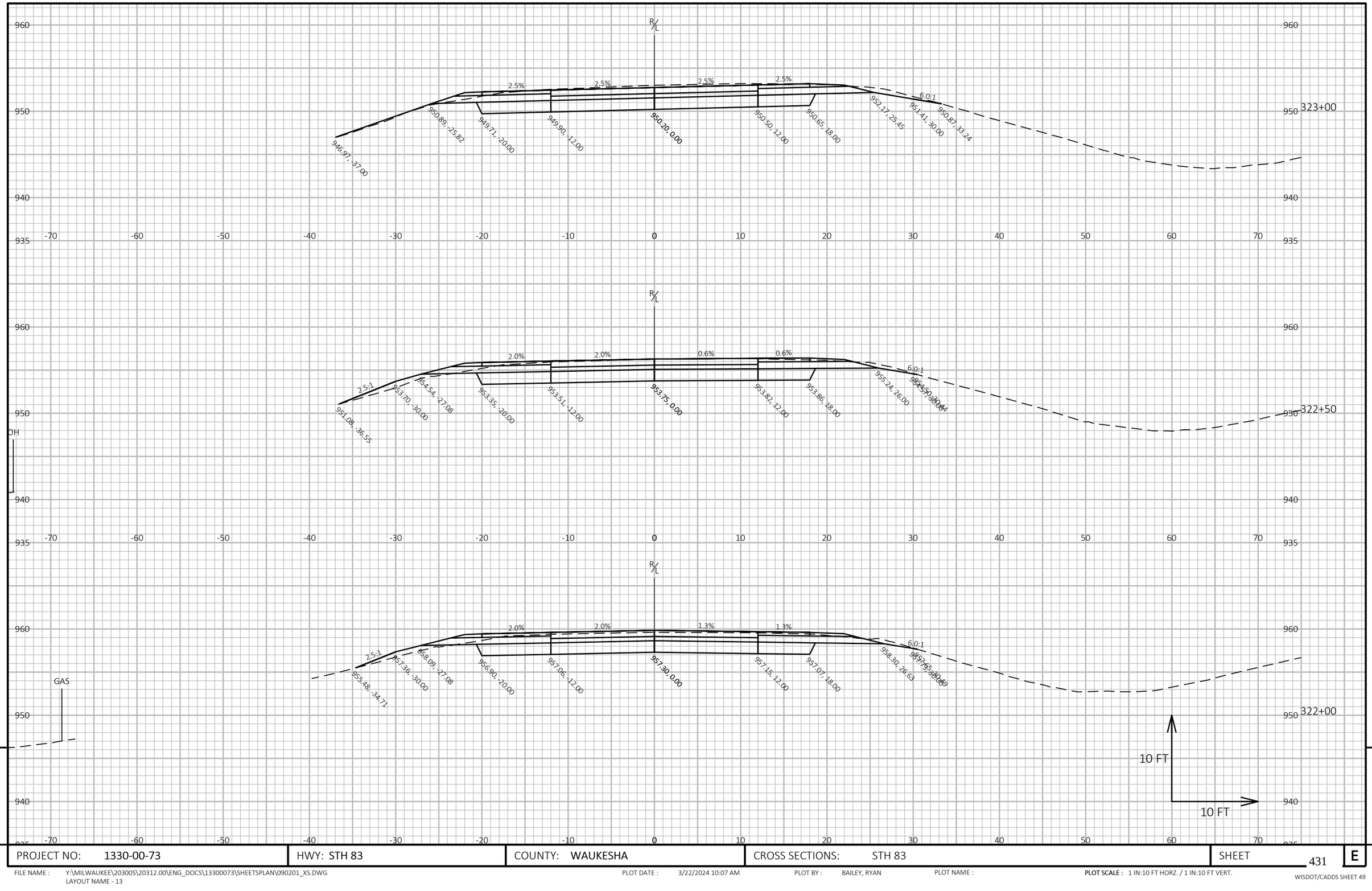


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 430	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 12

PLOT DATE : 3/22/2024 10:07 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

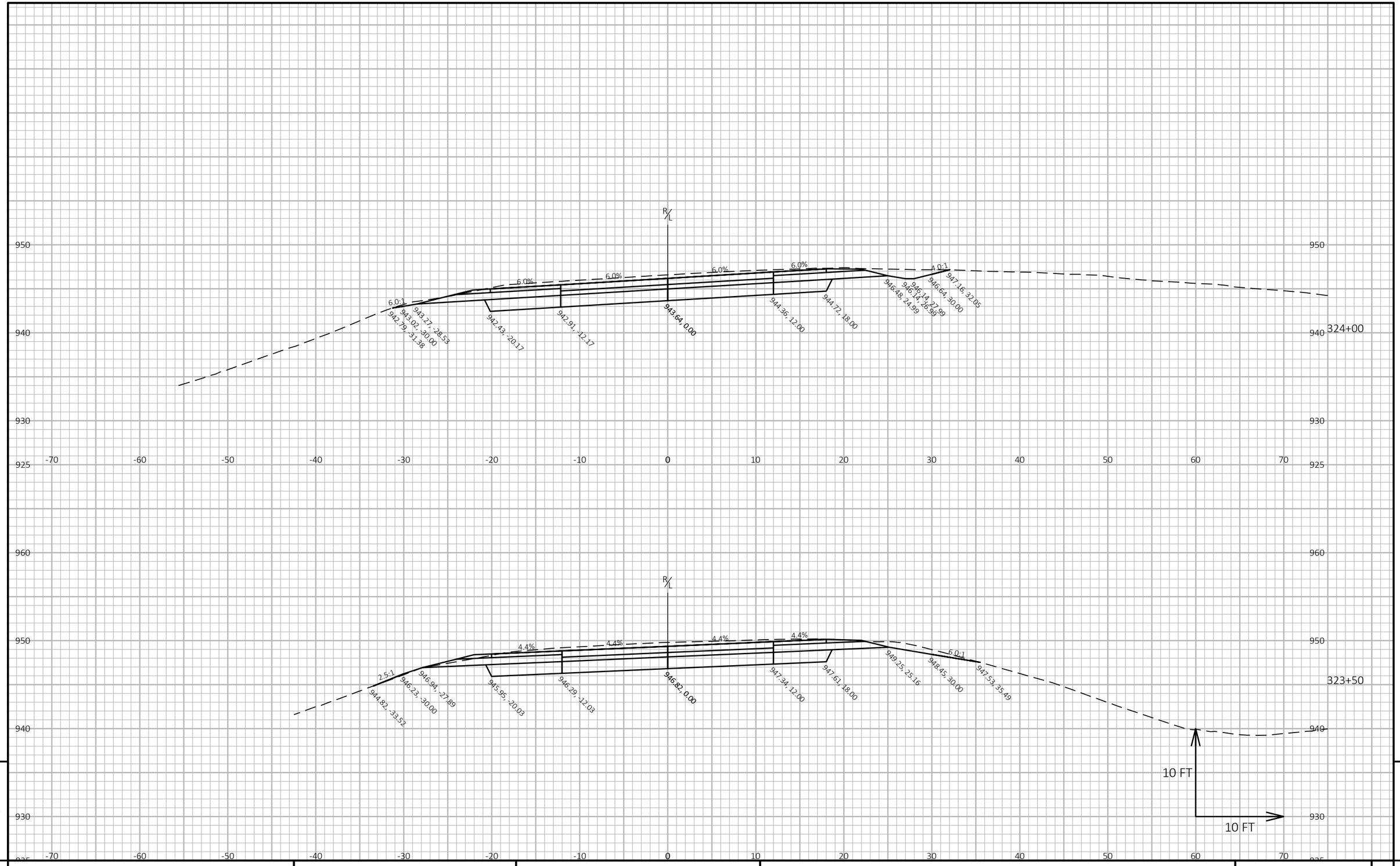


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 431	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 13

PLOT DATE : 3/22/2024 10:07 AM PLOT BY : BAILEY, RYAN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

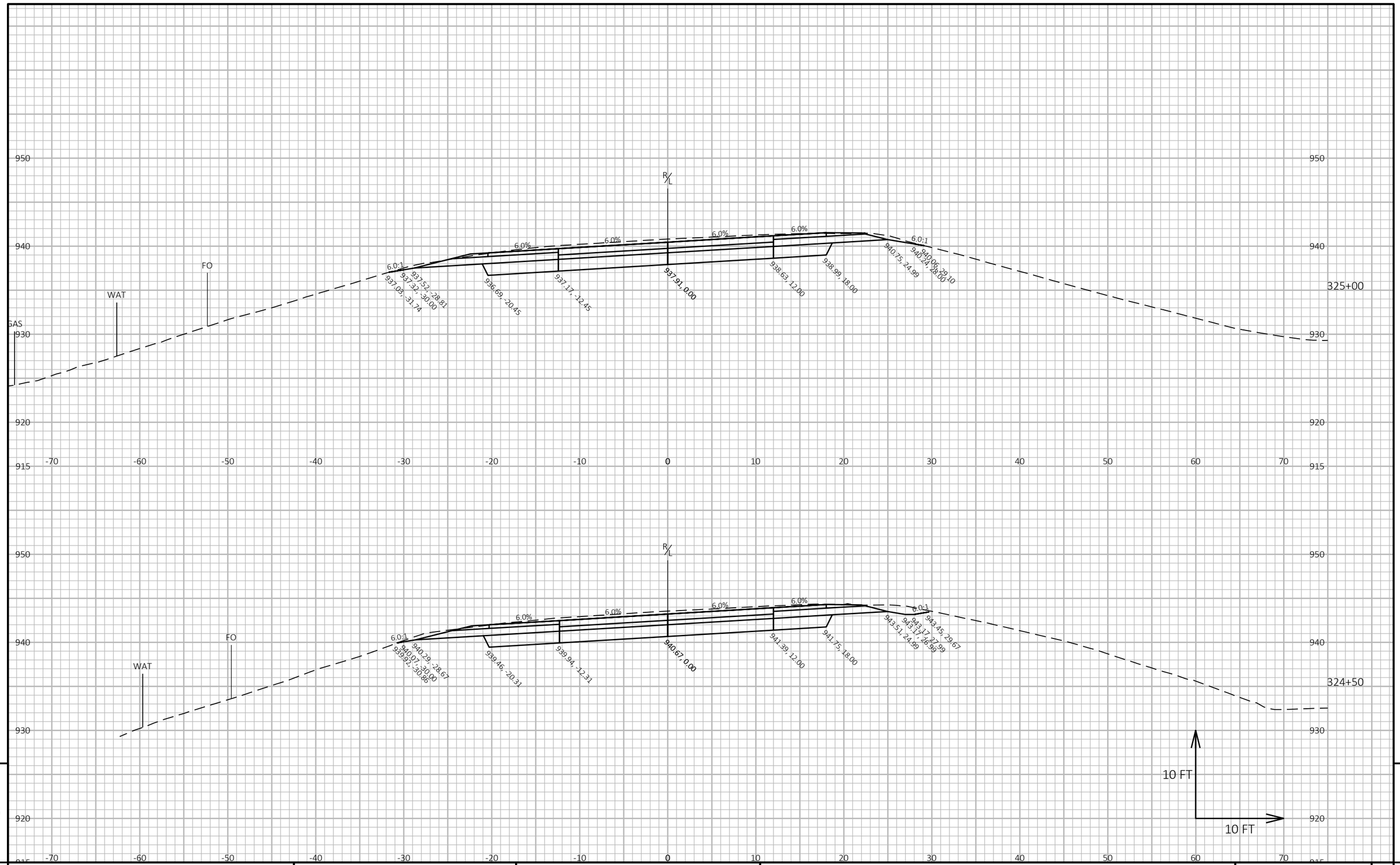
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 432	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 14

PLOT DATE : 3/22/2024 10:08 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

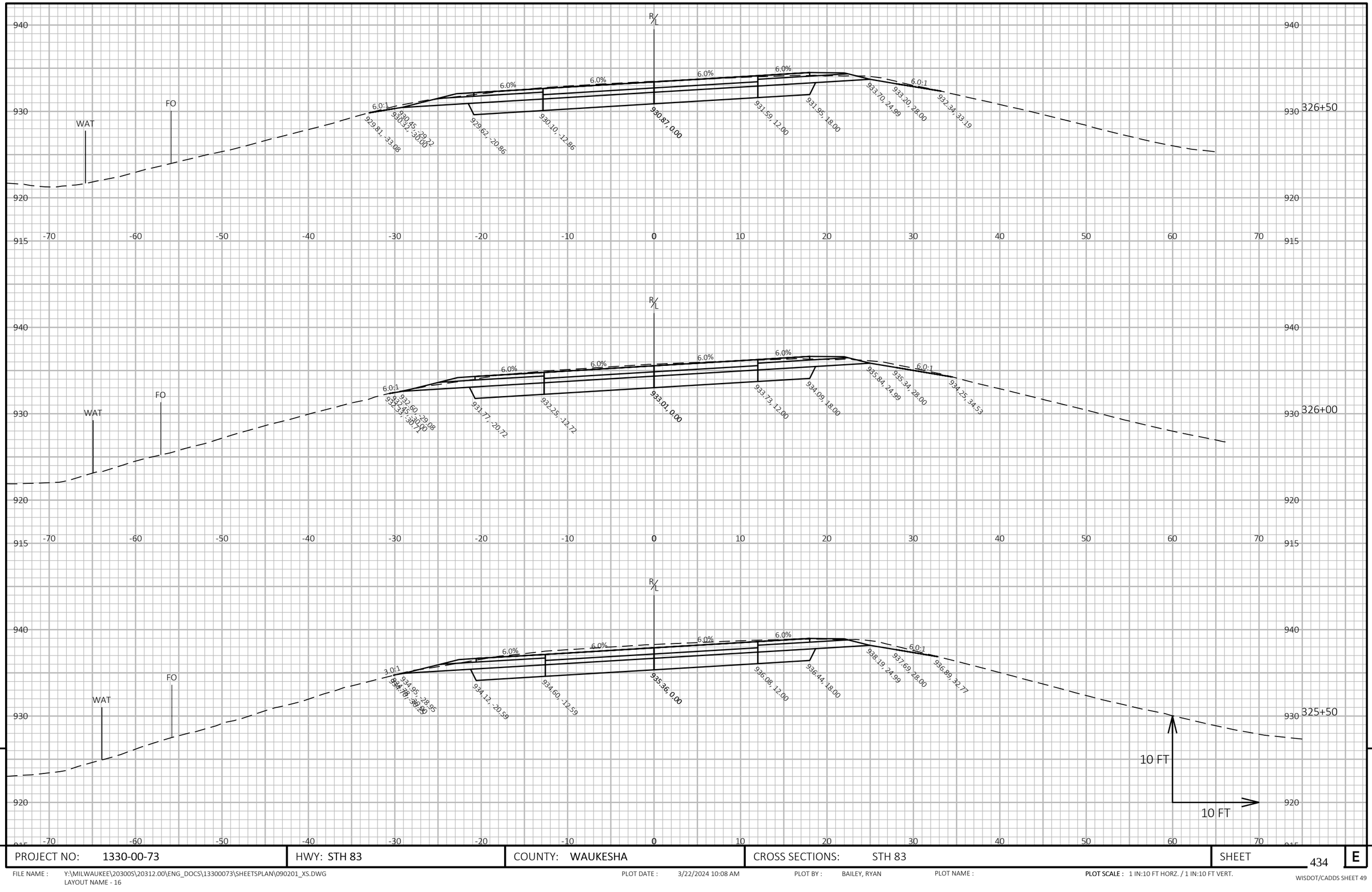


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 433 E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 15

PLOT DATE : 3/22/2024 10:08 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

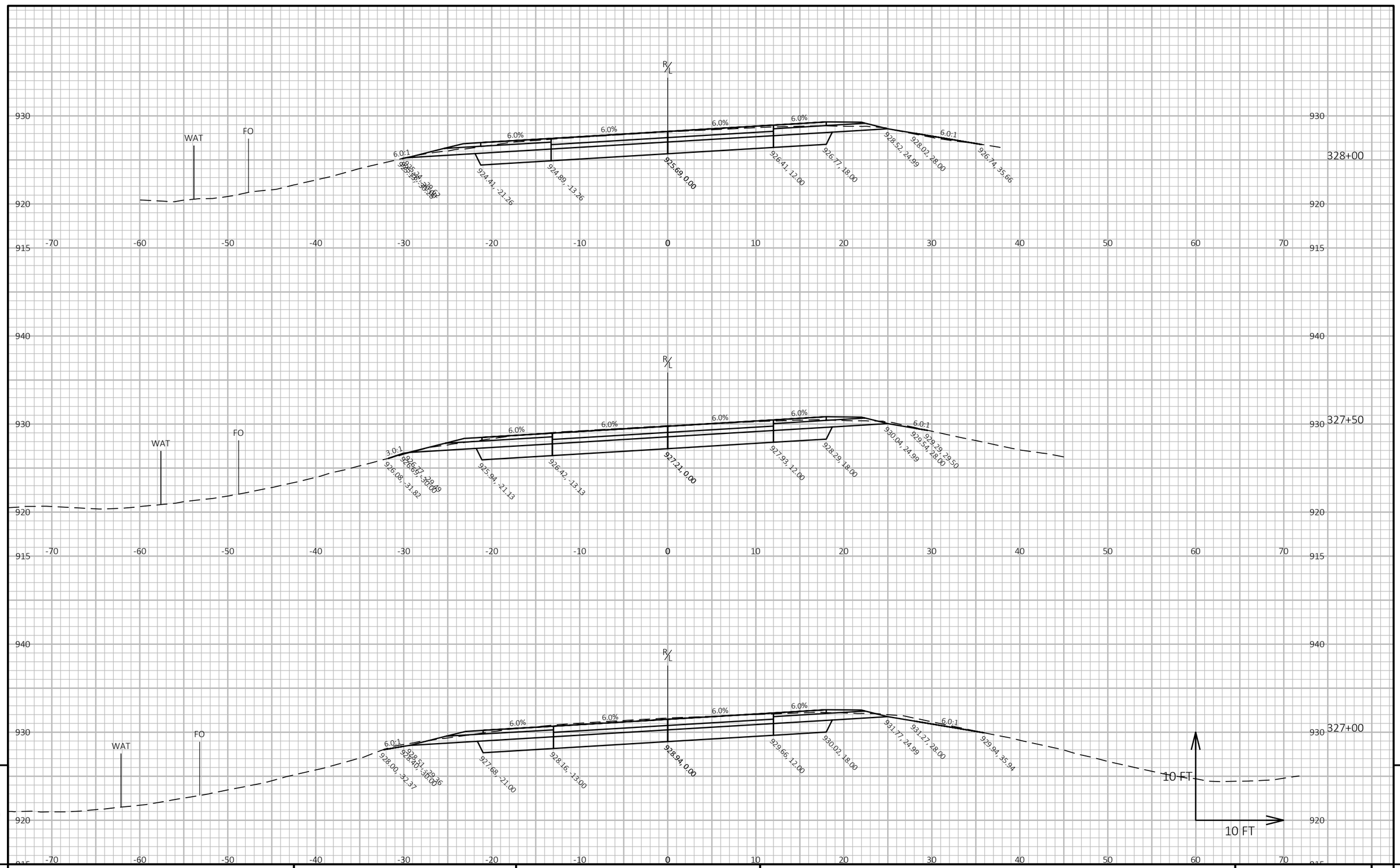


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 434 E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 16

PLOT DATE : 3/22/2024 10:08 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



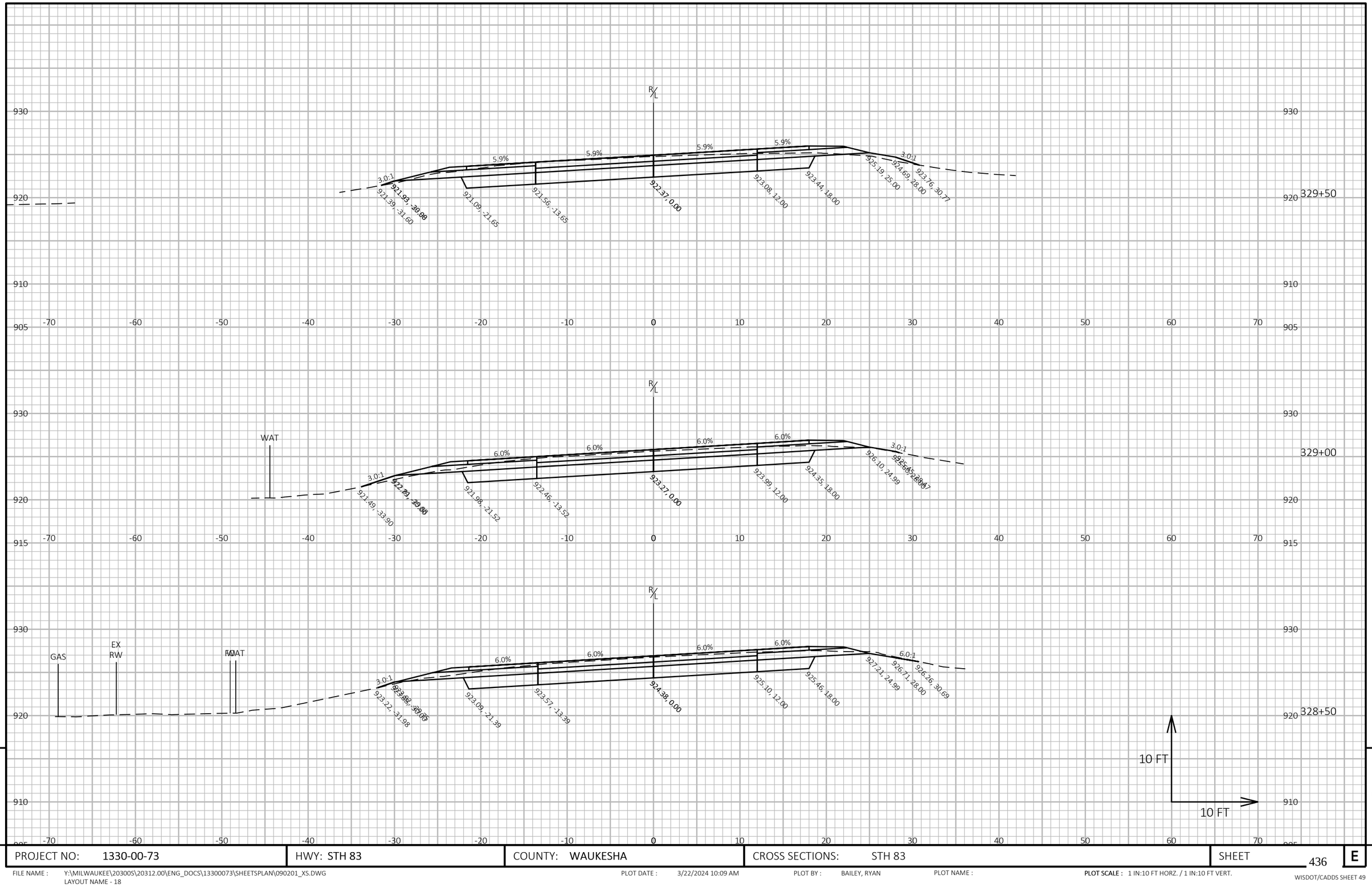
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 435	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 17

PLOT DATE : 3/22/2024 10:09 AM PLOT BY : BAILEY, RYAN PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

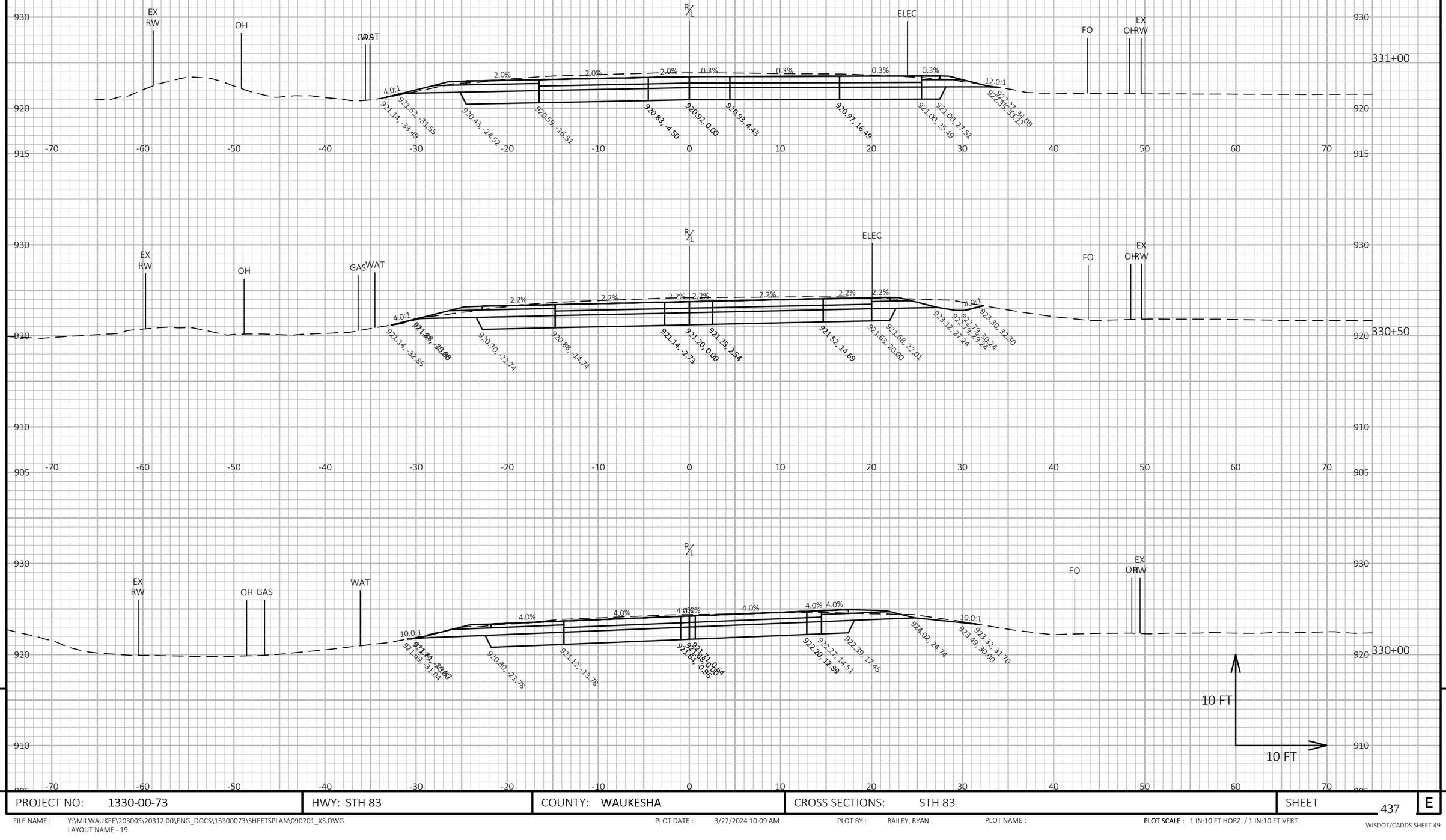


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 436 E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 18

PLOT DATE : 3/22/2024 10:09 AM PLOT BY : BAILEY, RYAN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

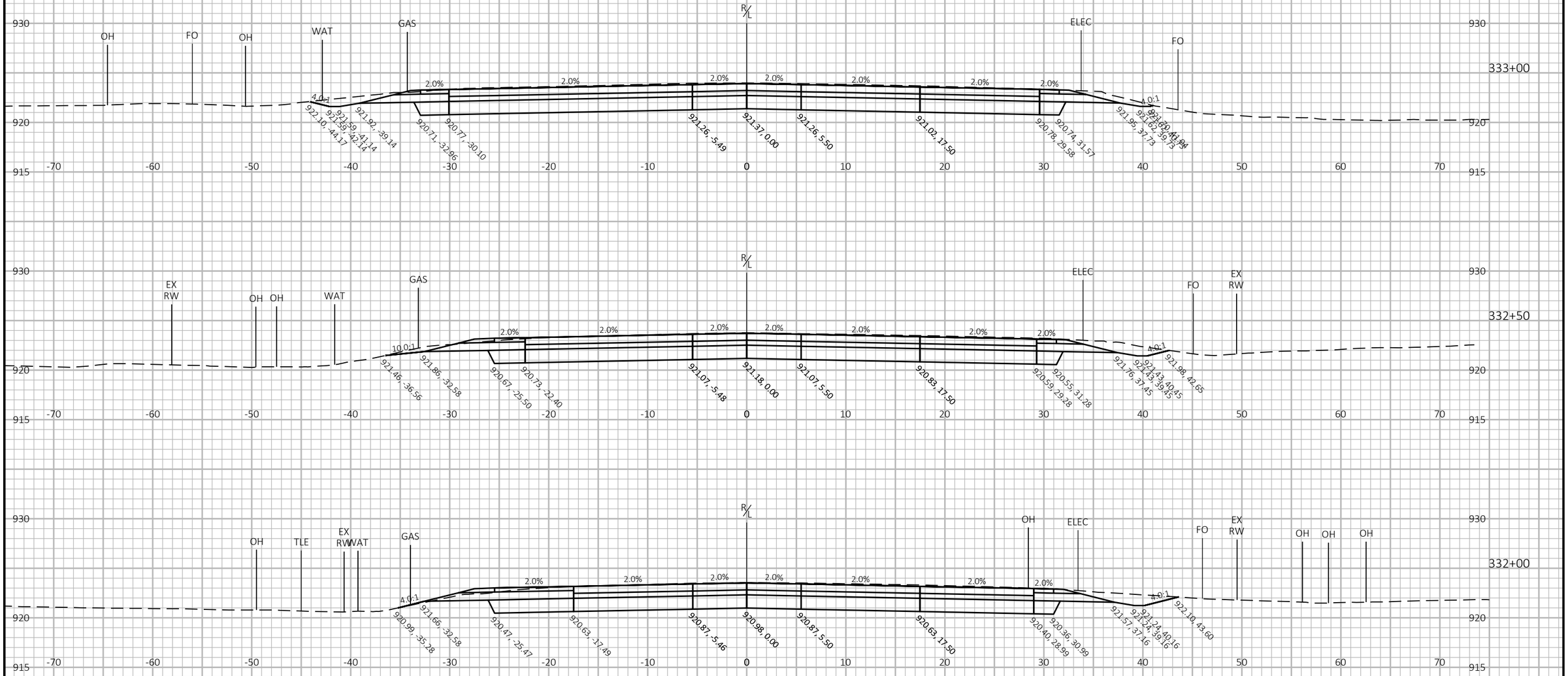


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 437	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 19

PLOT DATE : 3/22/2024 10:09 AM PLOT BY : BAILEY, RYAN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 438	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 20

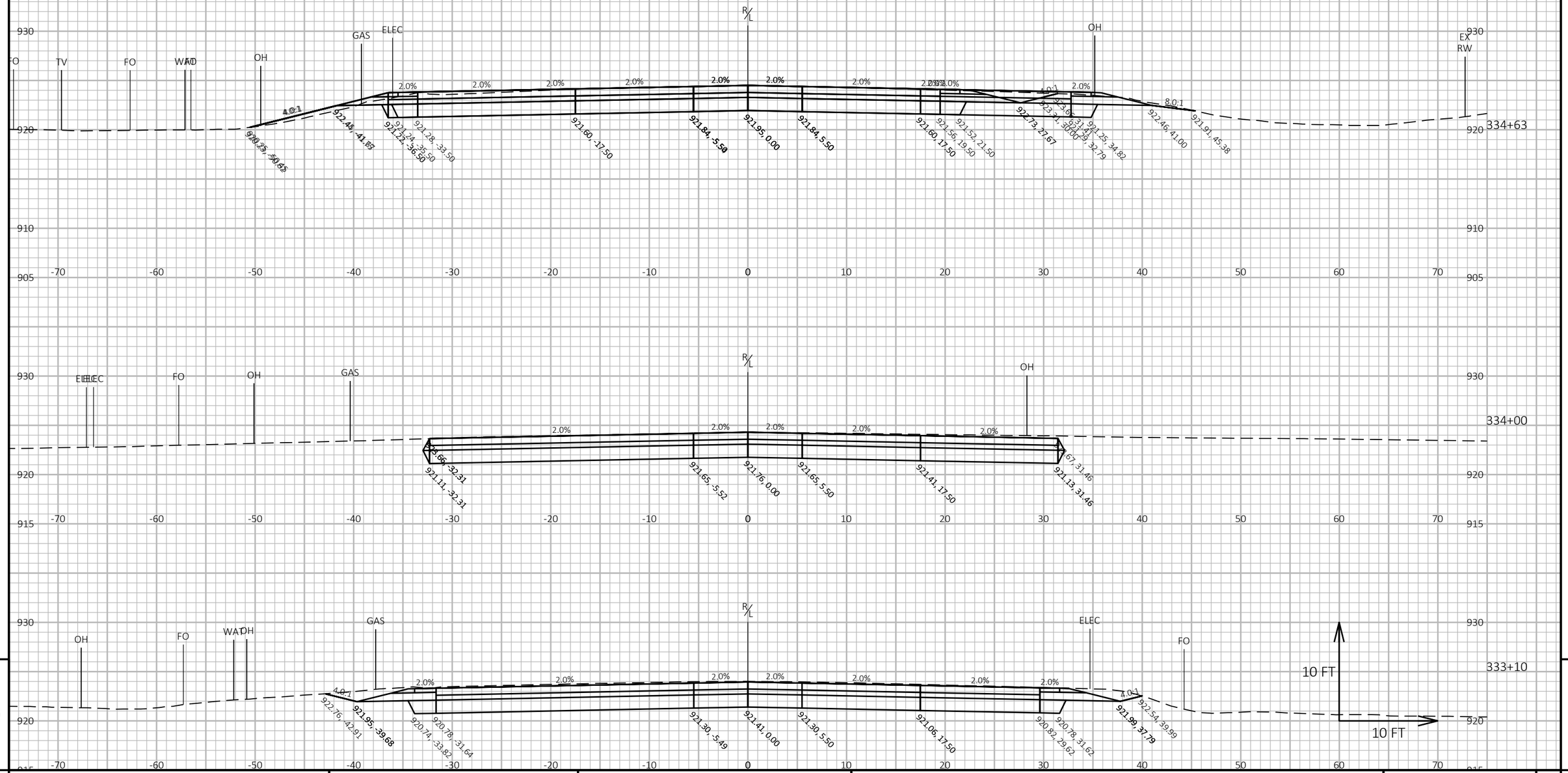
PLOT DATE : 3/22/2024 10:10 AM

PLOT BY : BAILEY, RYAN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

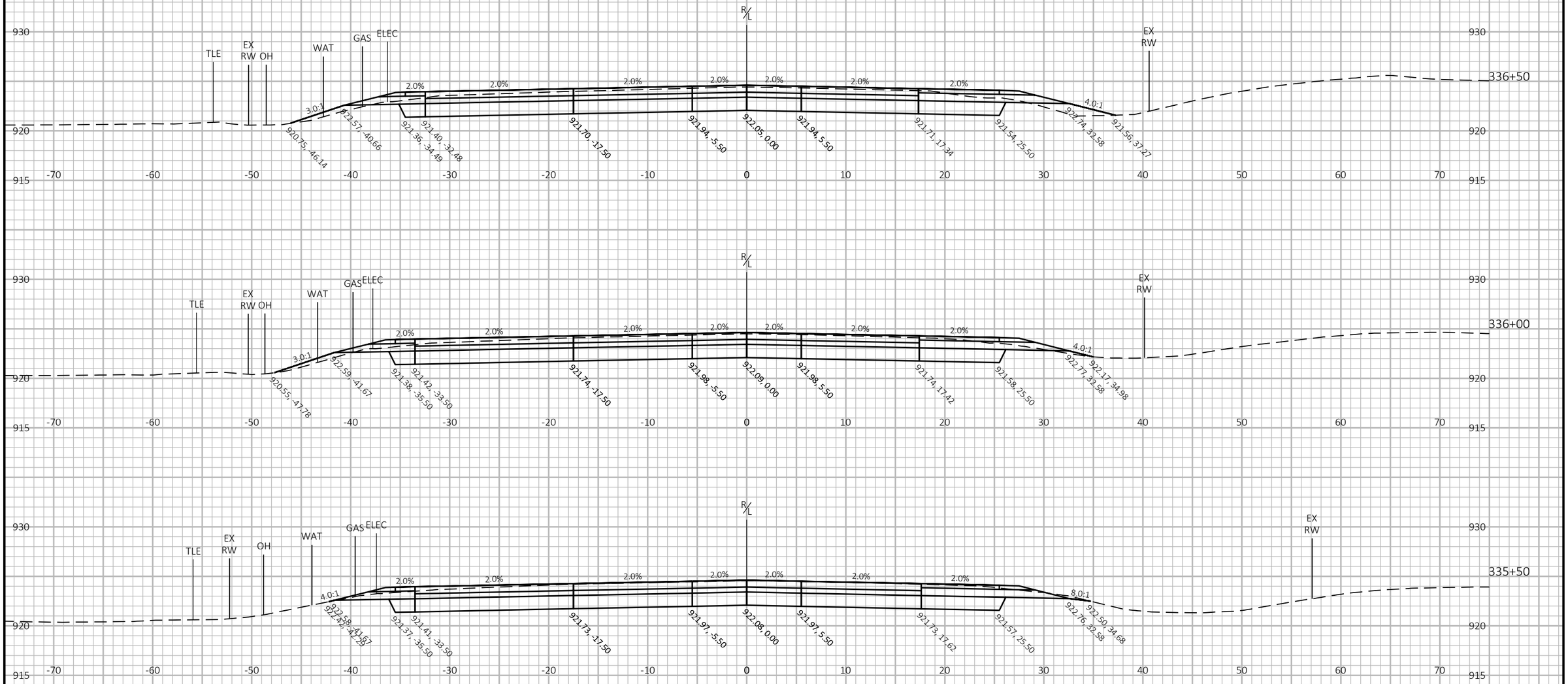


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 439 E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 21

PLOT DATE : 3/22/2024 10:10 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

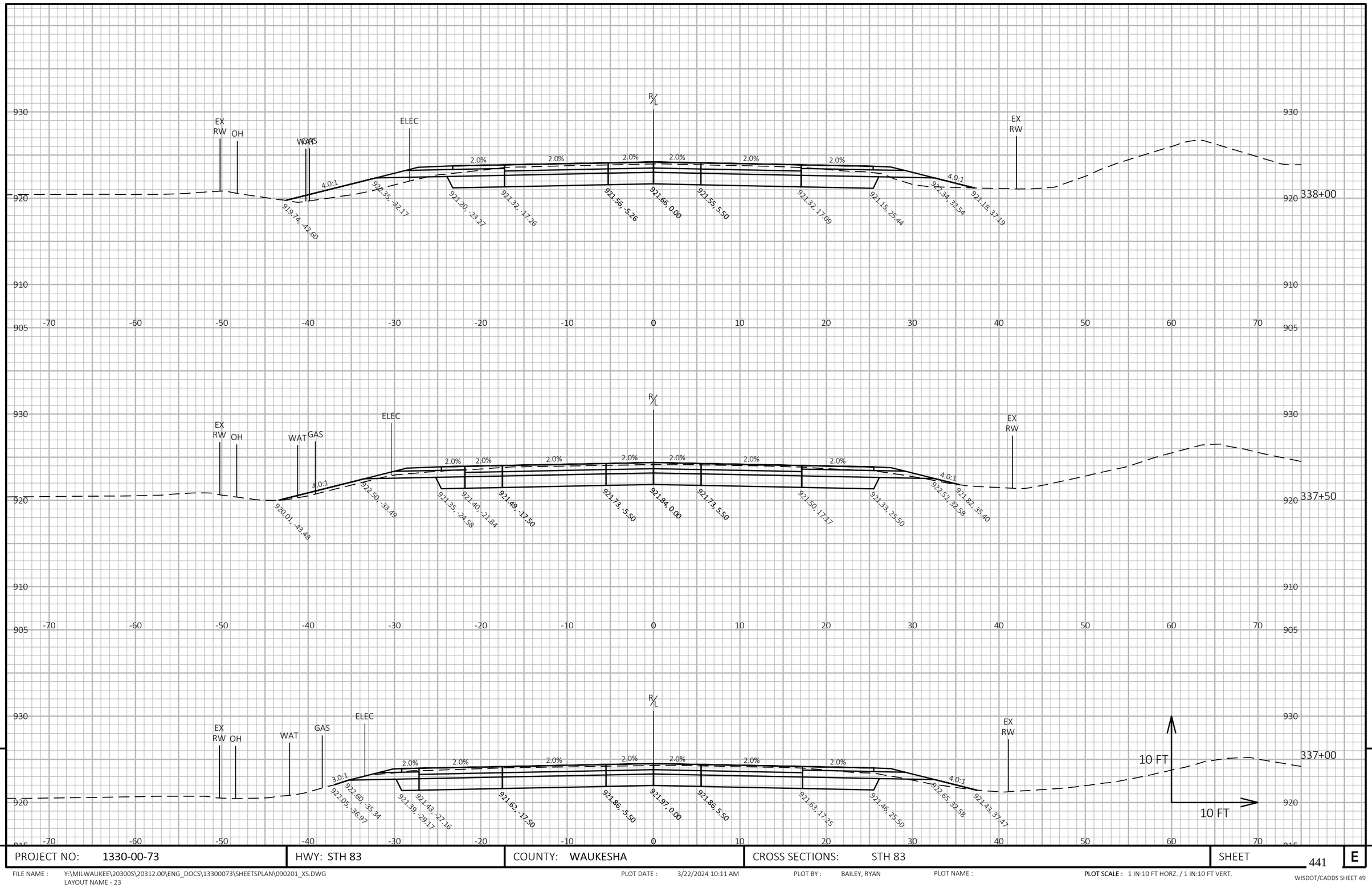
9

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 440	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 22

PLOT DATE : 3/22/2024 10:10 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

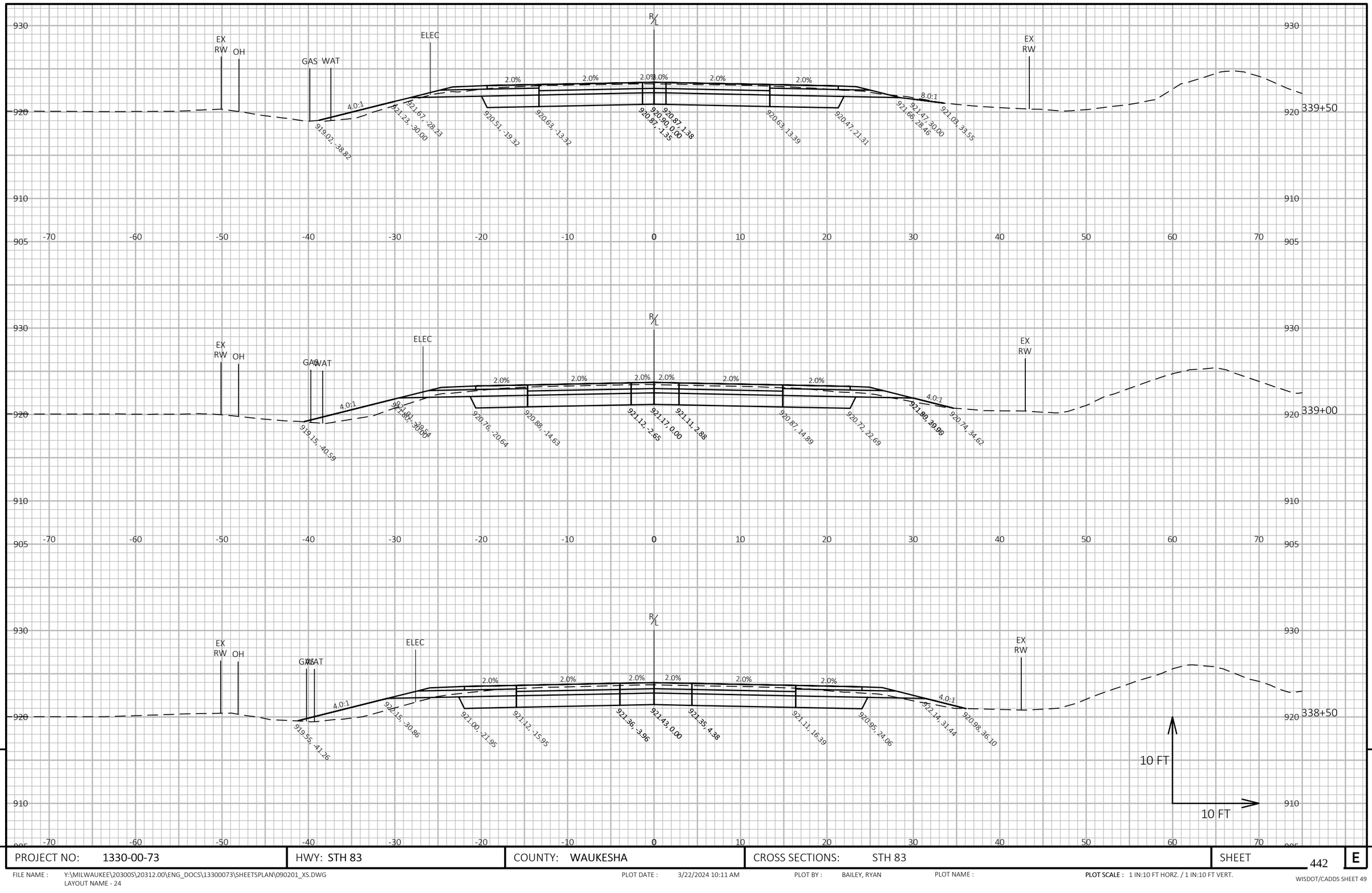
9

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 441	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 23

PLOT DATE : 3/22/2024 10:11 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



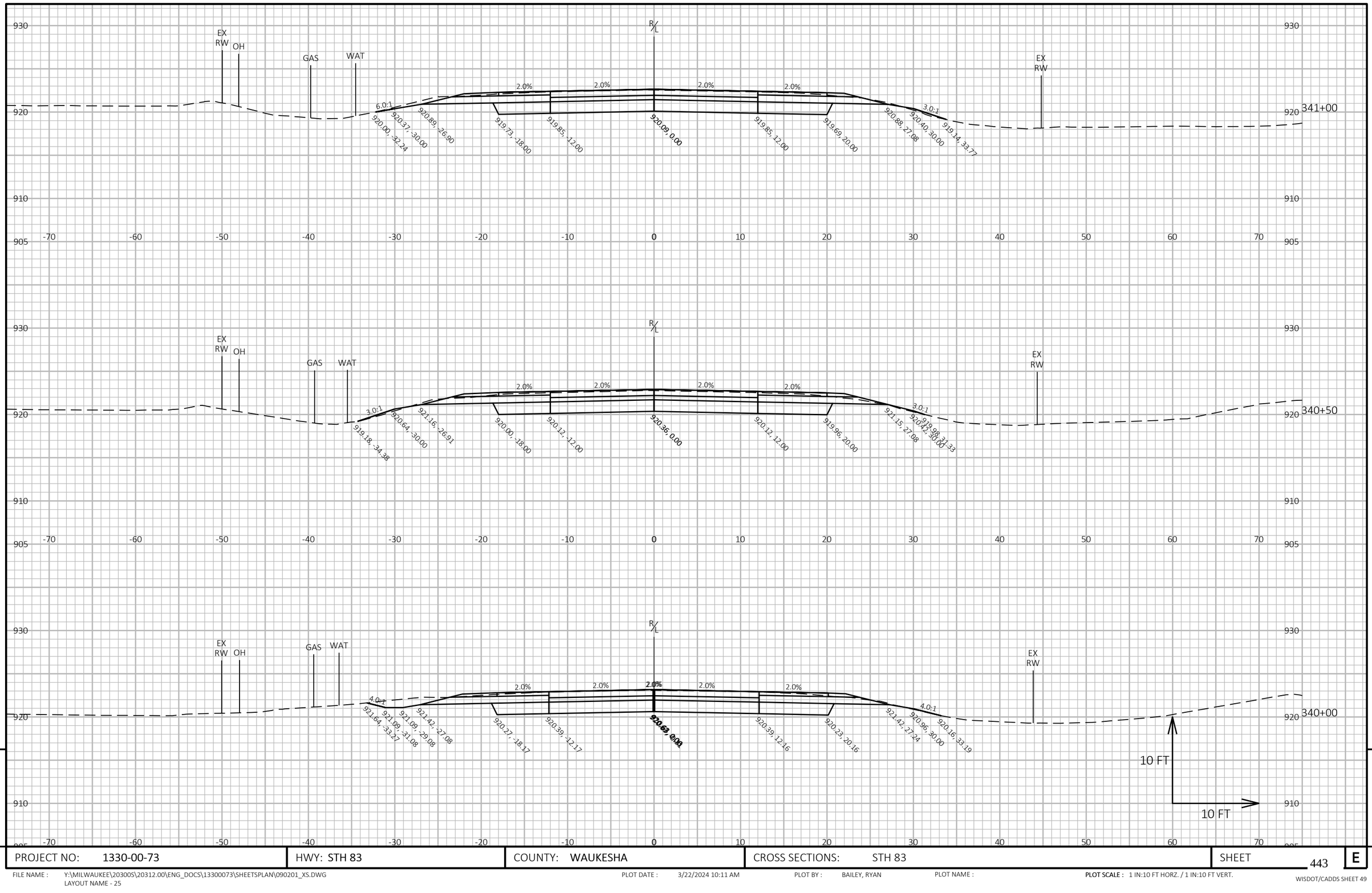
9

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 442	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 24

PLOT DATE : 3/22/2024 10:11 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

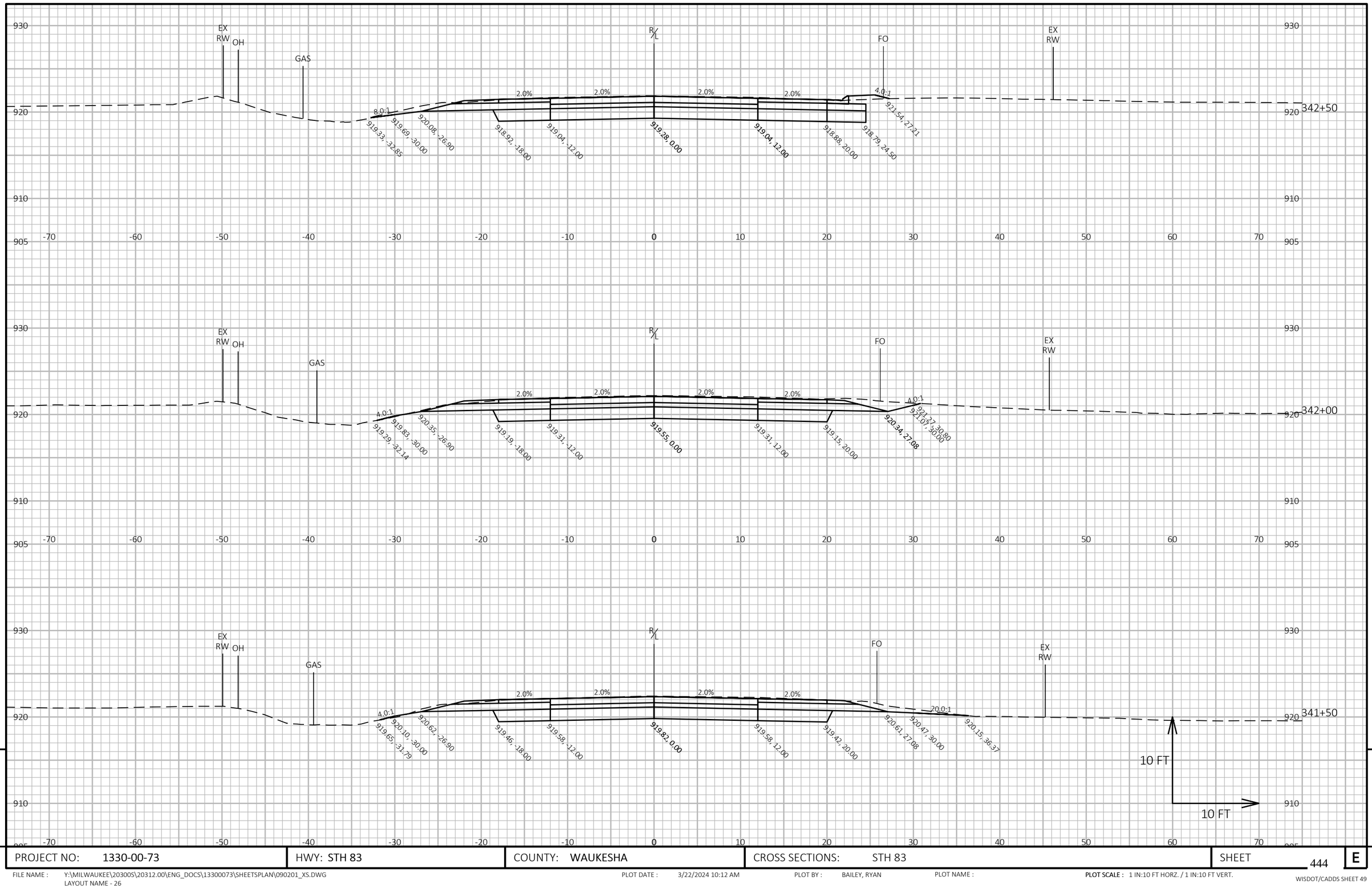
9

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 443	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 25

PLOT DATE : 3/22/2024 10:11 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



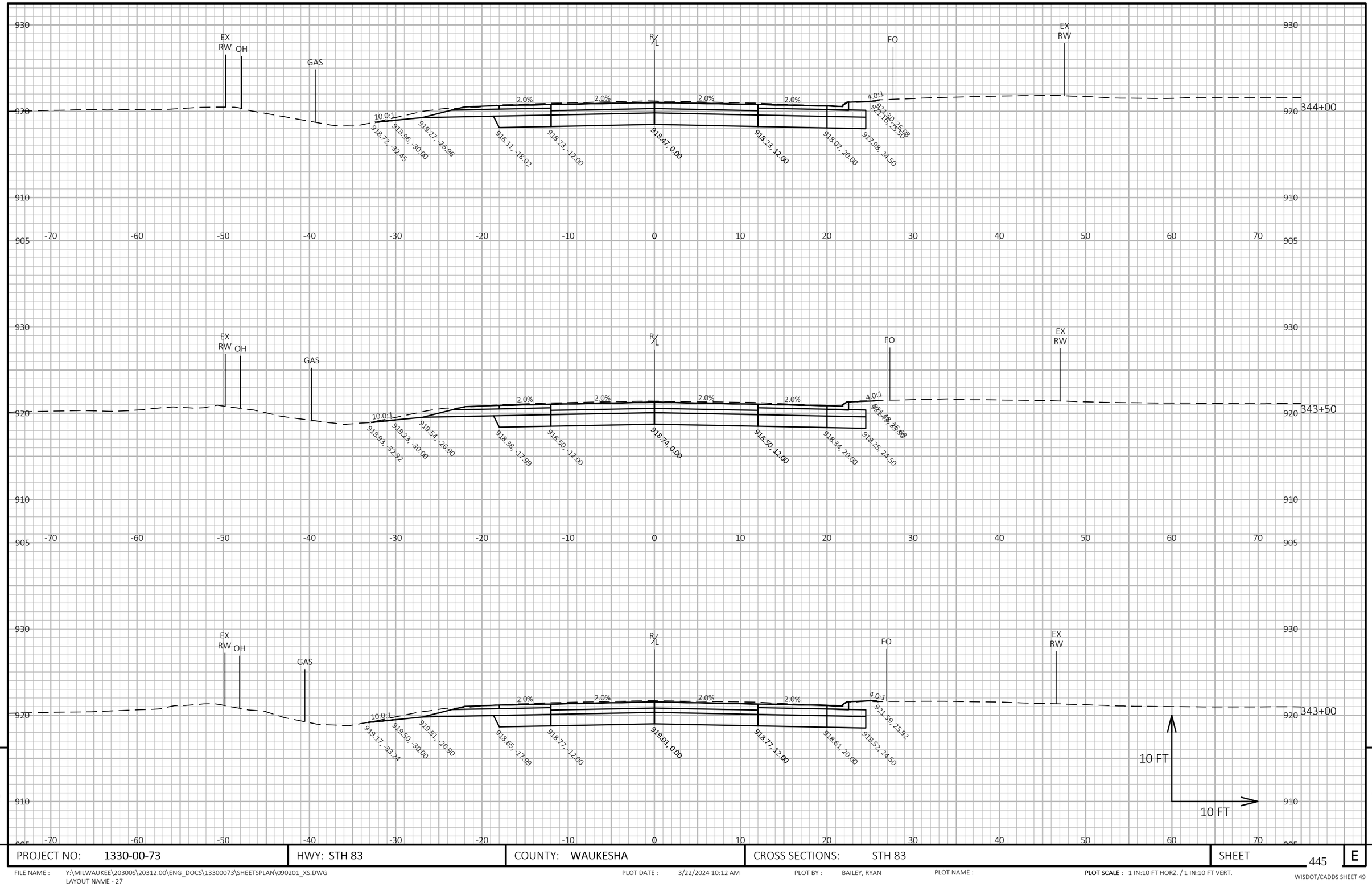
9

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 444	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 26

PLOT DATE : 3/22/2024 10:12 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

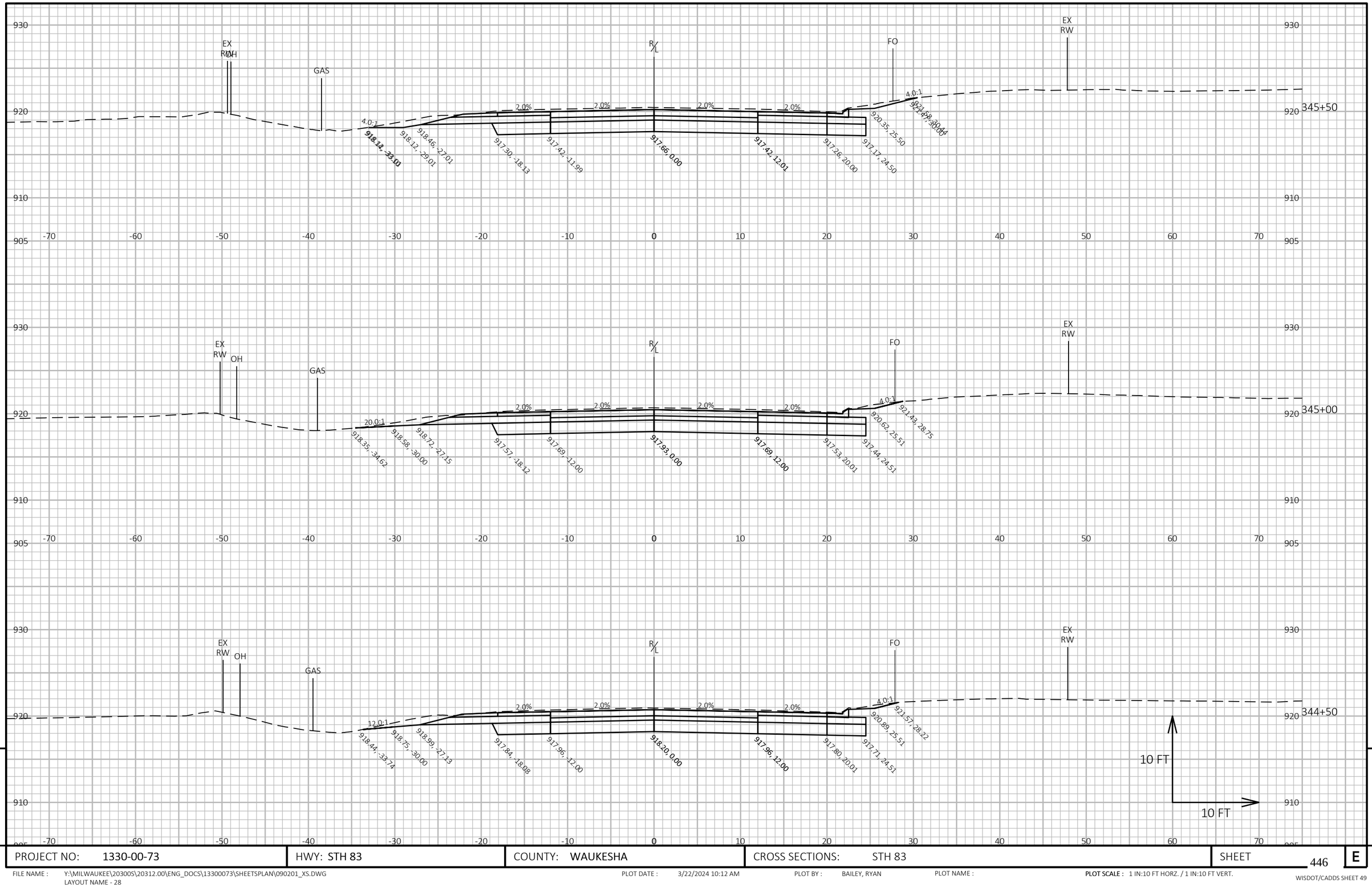
9

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 445	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 27

PLOT DATE : 3/22/2024 10:12 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

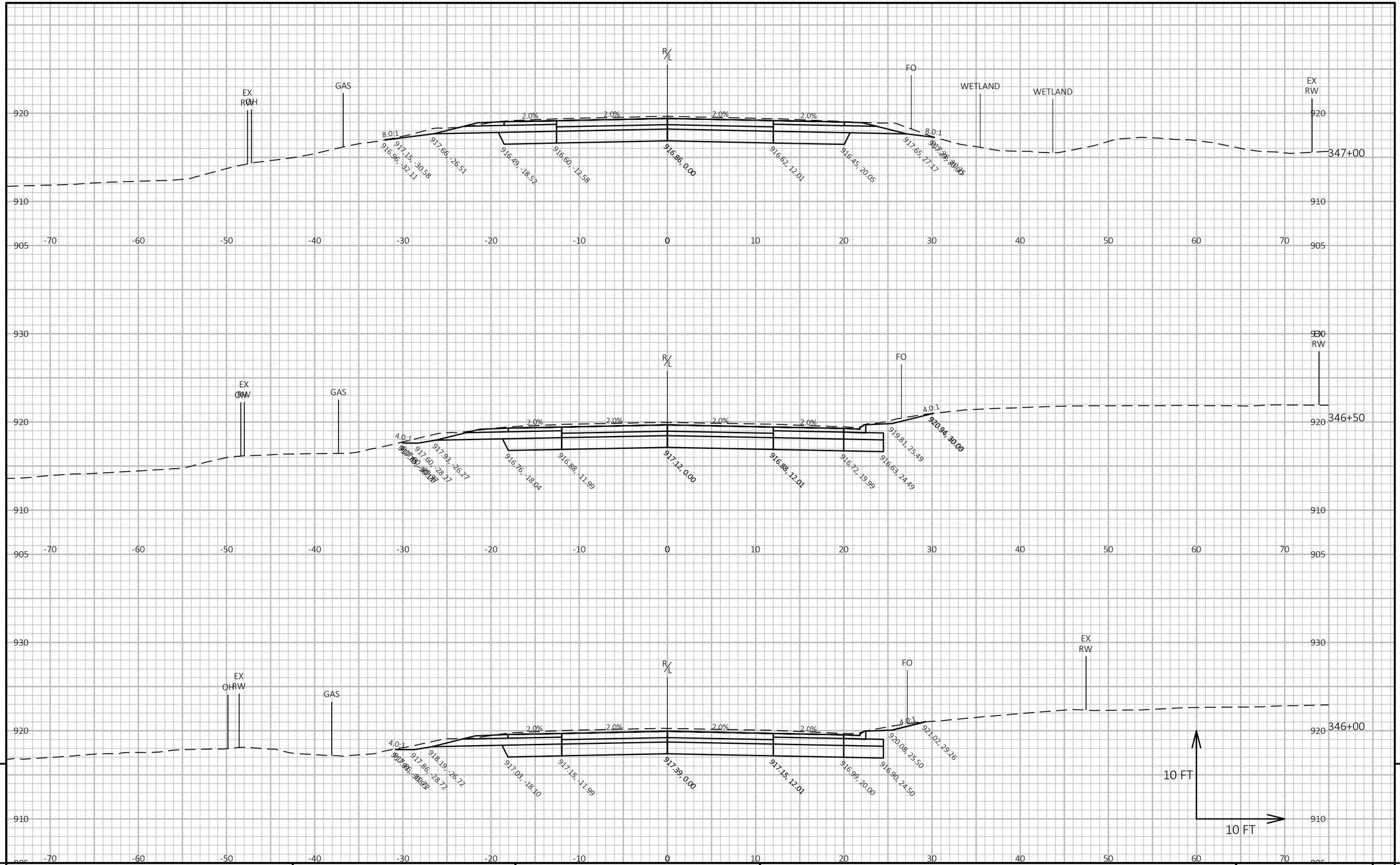


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 446	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 28

PLOT DATE : 3/22/2024 10:12 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 447	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 29

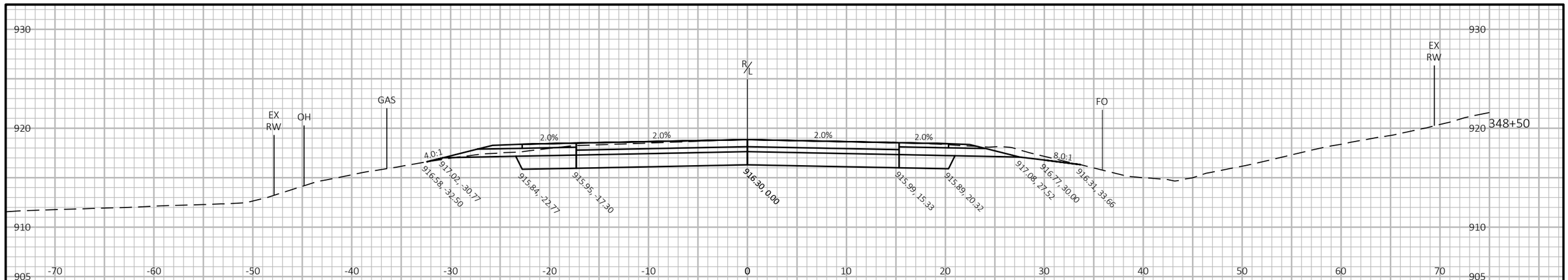
PLOT DATE : 3/22/2024 10:13 AM

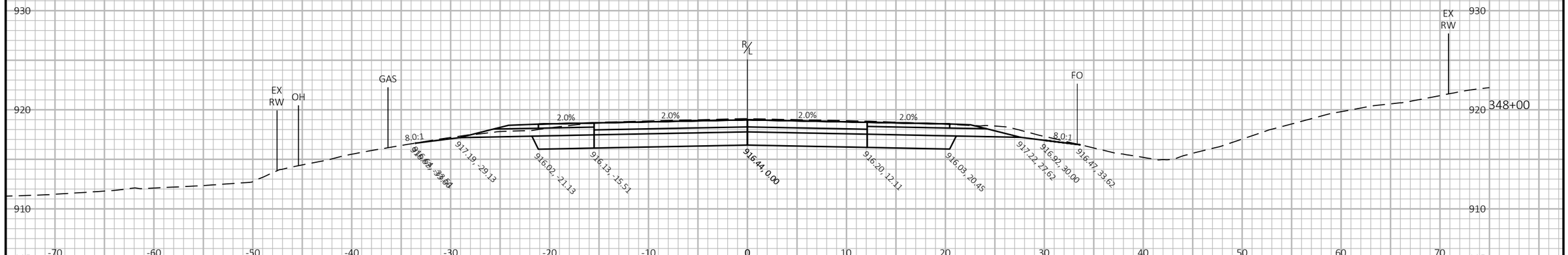
PLOT BY : BAILEY, RYAN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







9

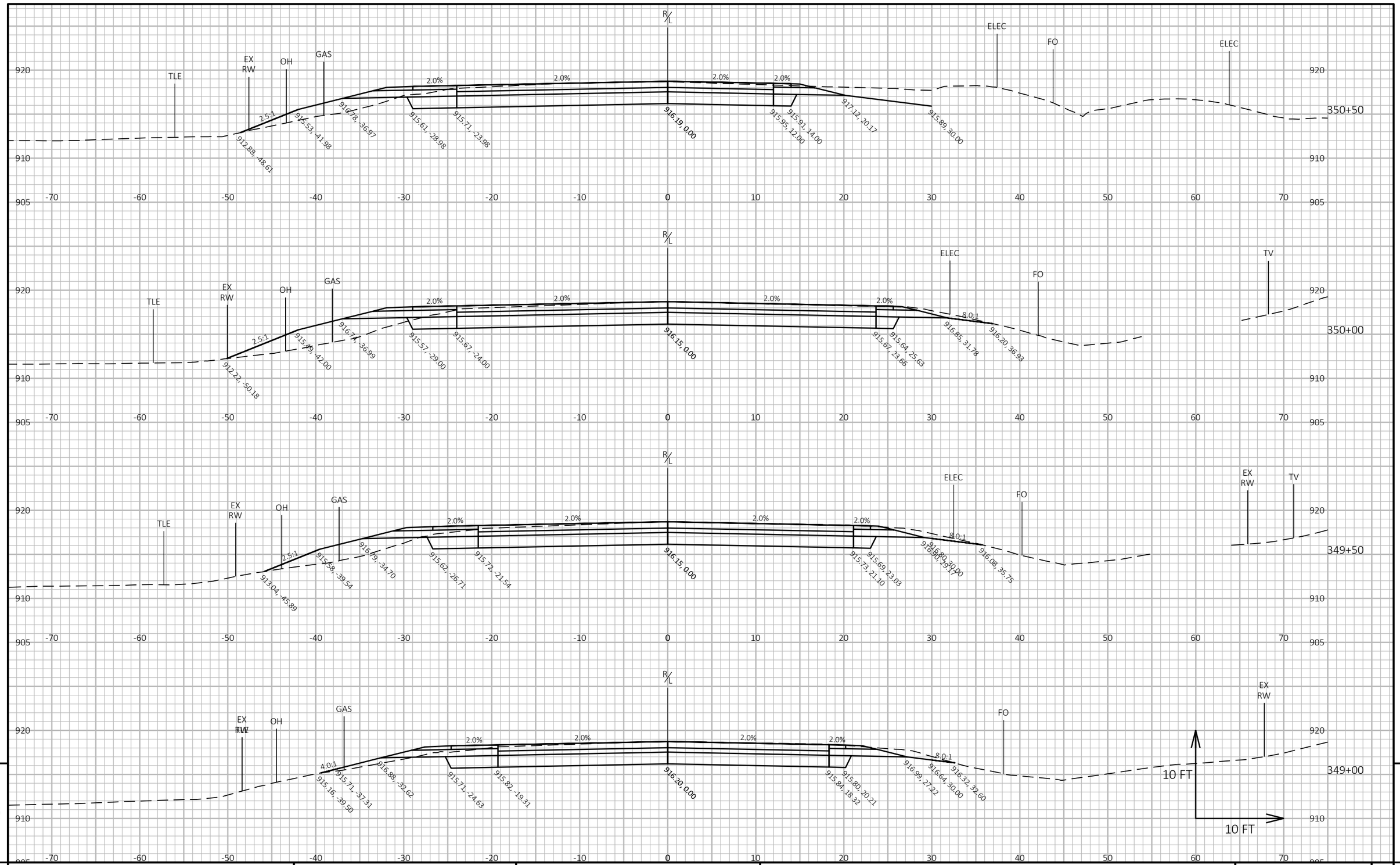
9

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 448	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 30

PLOT DATE : 3/22/2024 10:13 AM PLOT BY : BAILEY, RYAN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

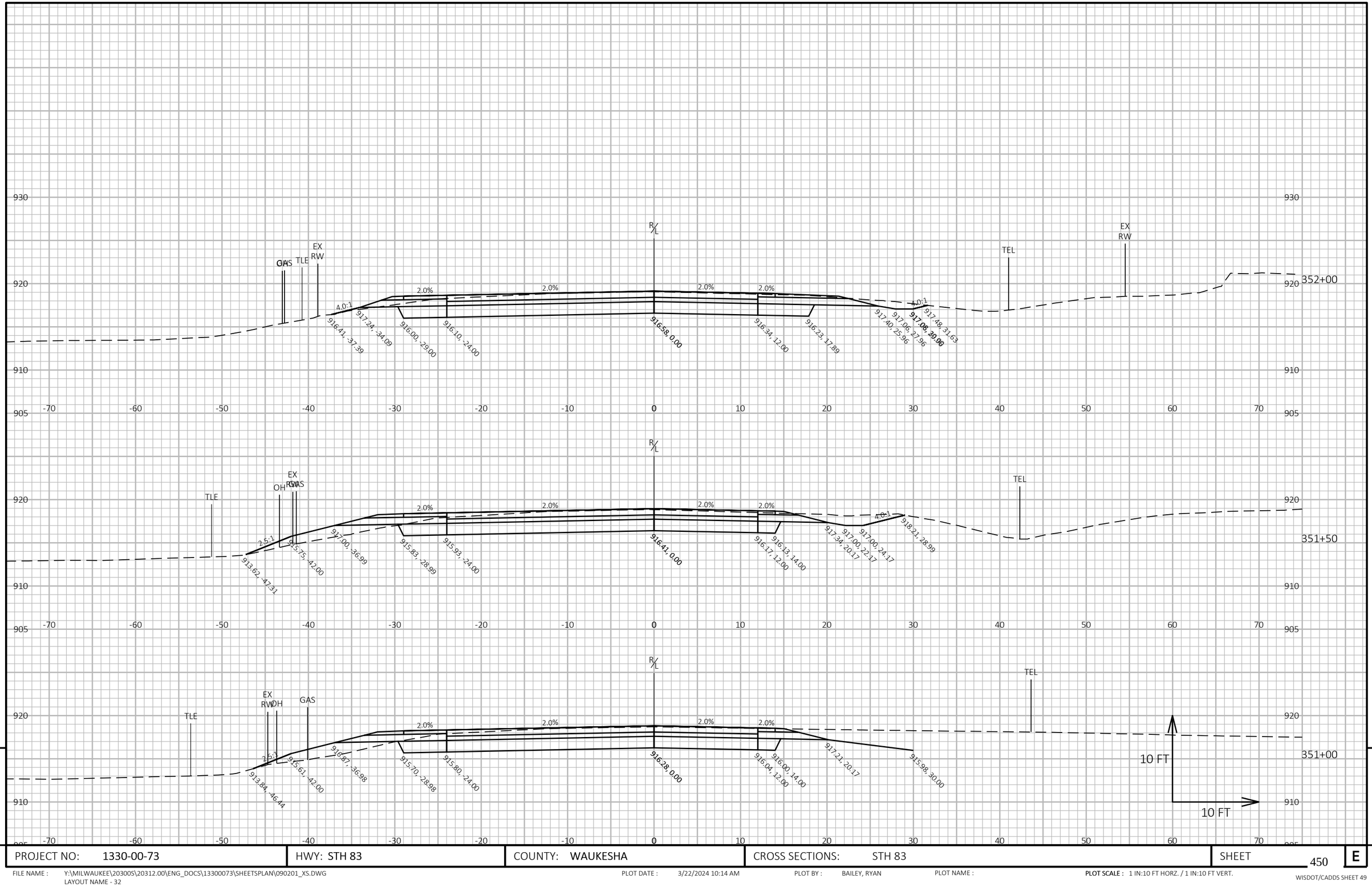
9

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 449	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 31

PLOT DATE : 3/22/2024 10:13 AM PLOT BY : BAILEY, RYAN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

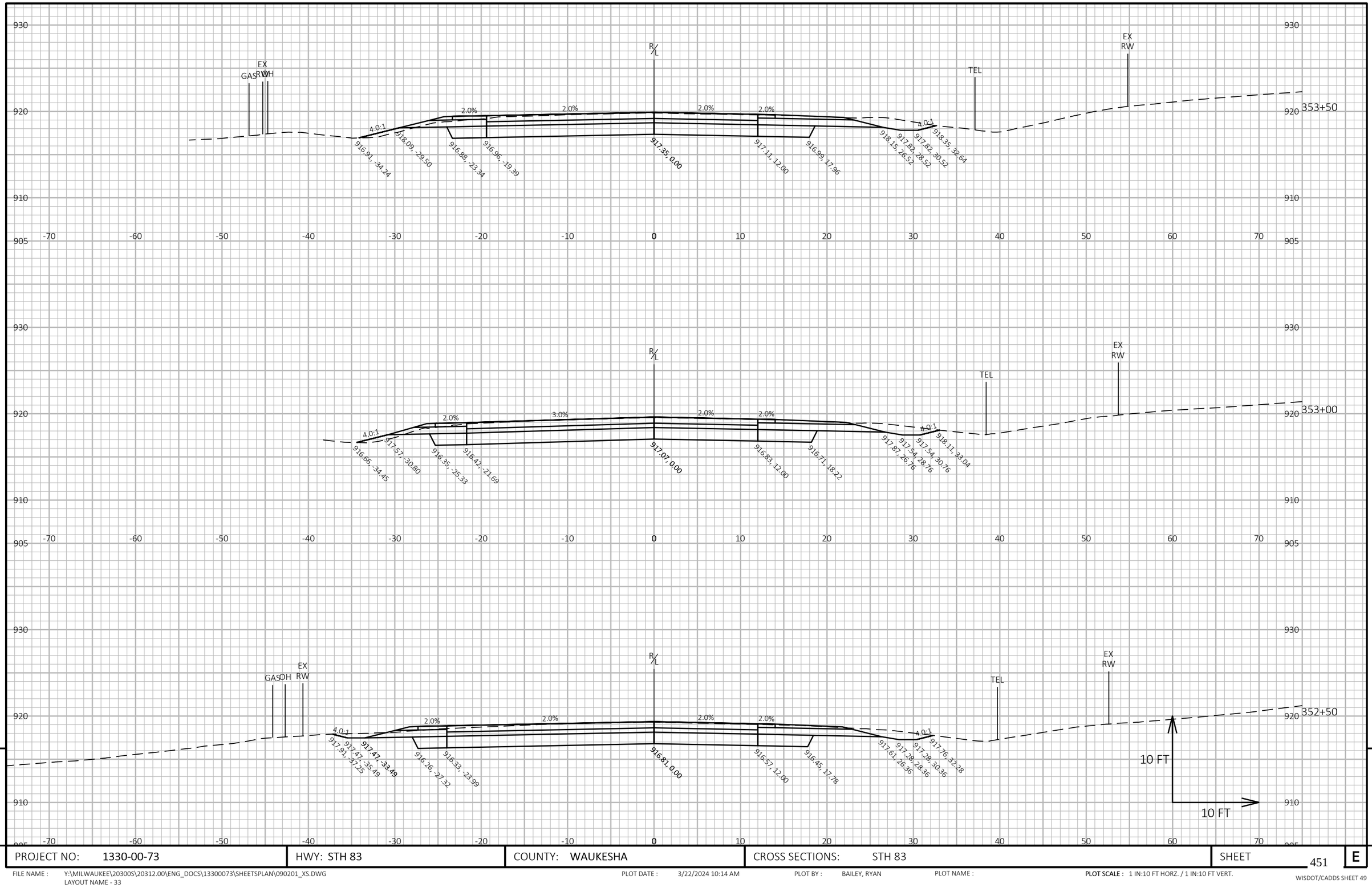


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 450	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 32

PLOT DATE : 3/22/2024 10:14 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 451 E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 33

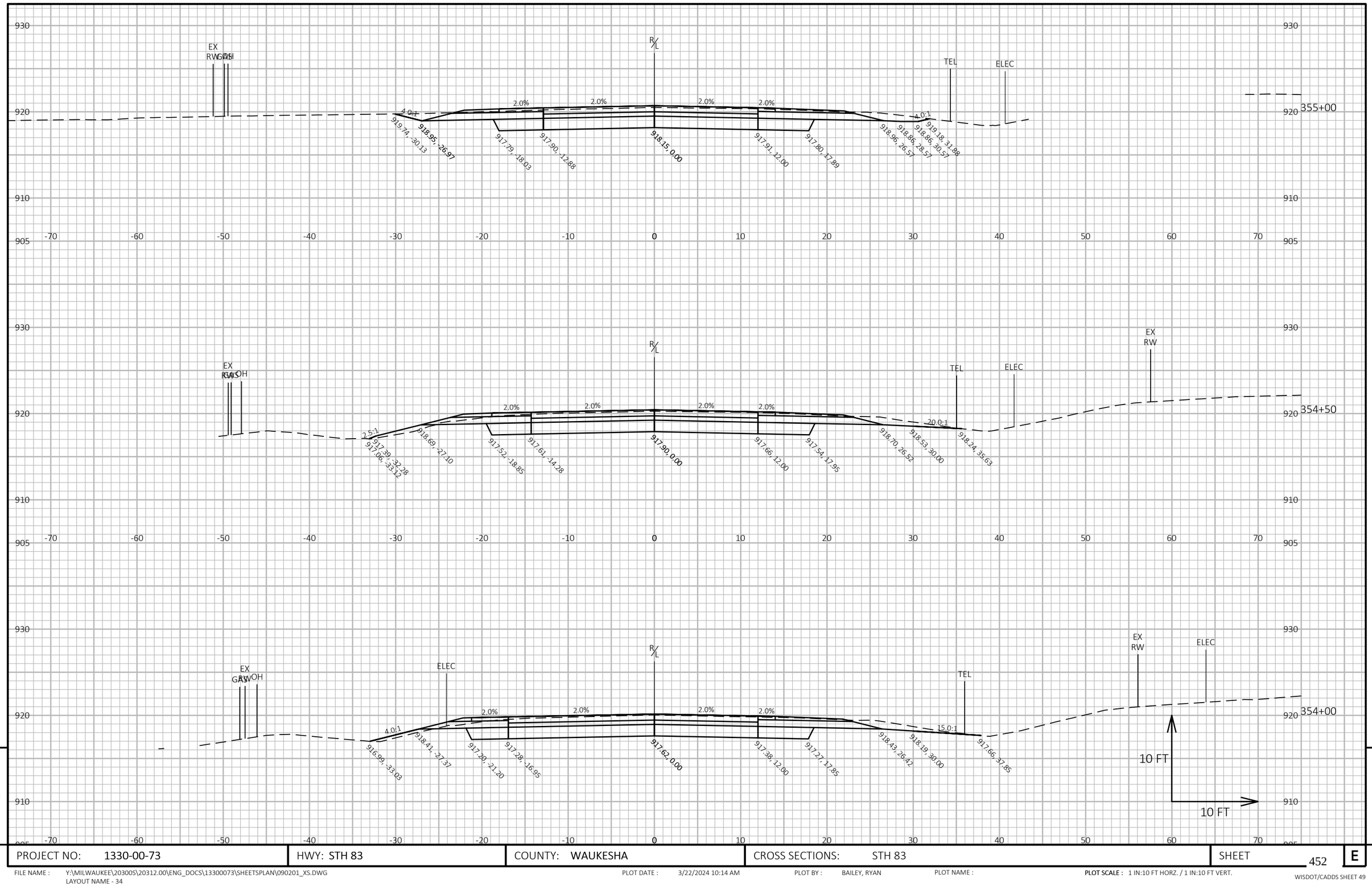
PLOT DATE : 3/22/2024 10:14 AM

PLOT BY : BAILEY, RYAN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

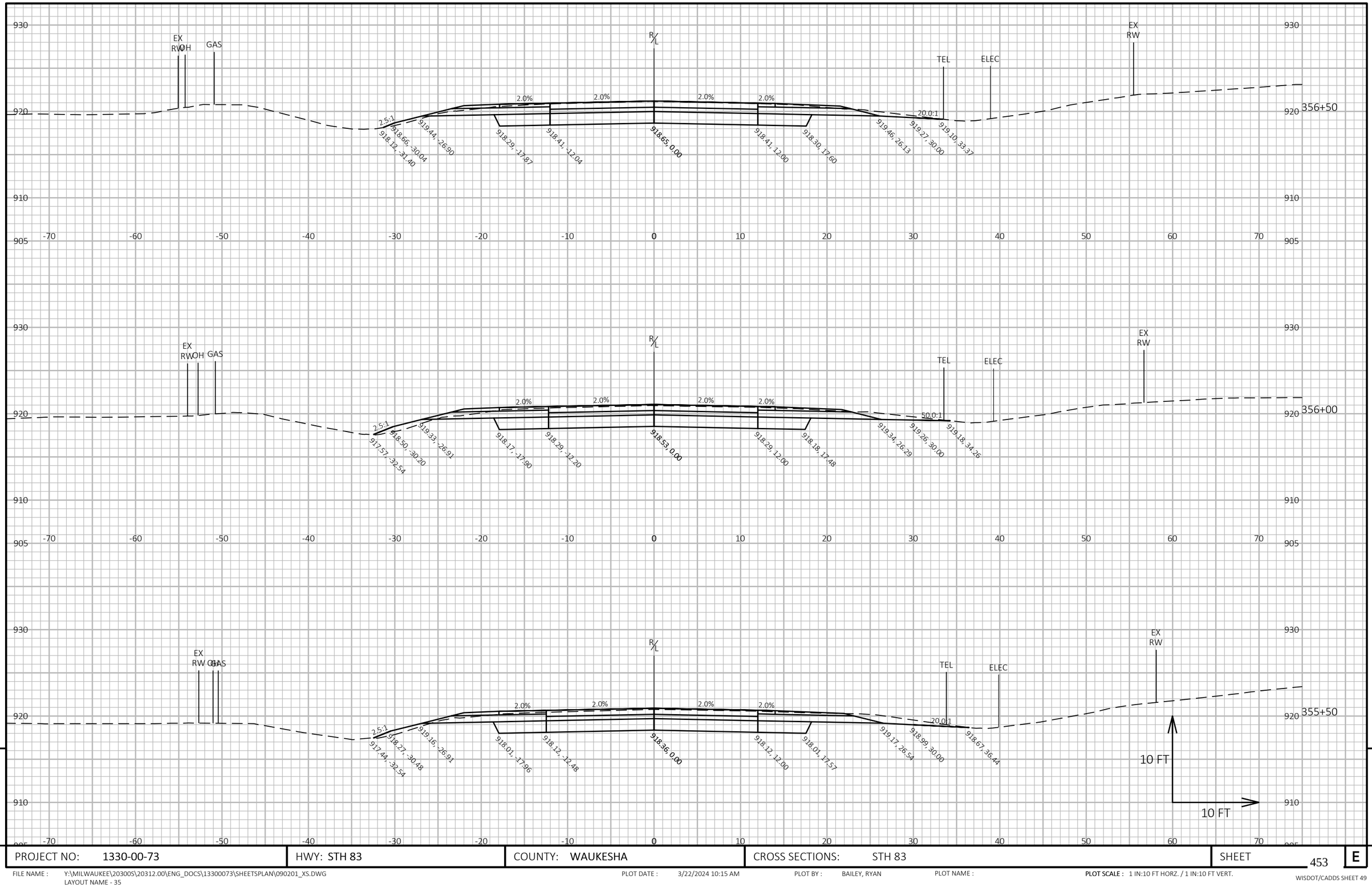


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 452	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 34

PLOT DATE : 3/22/2024 10:14 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

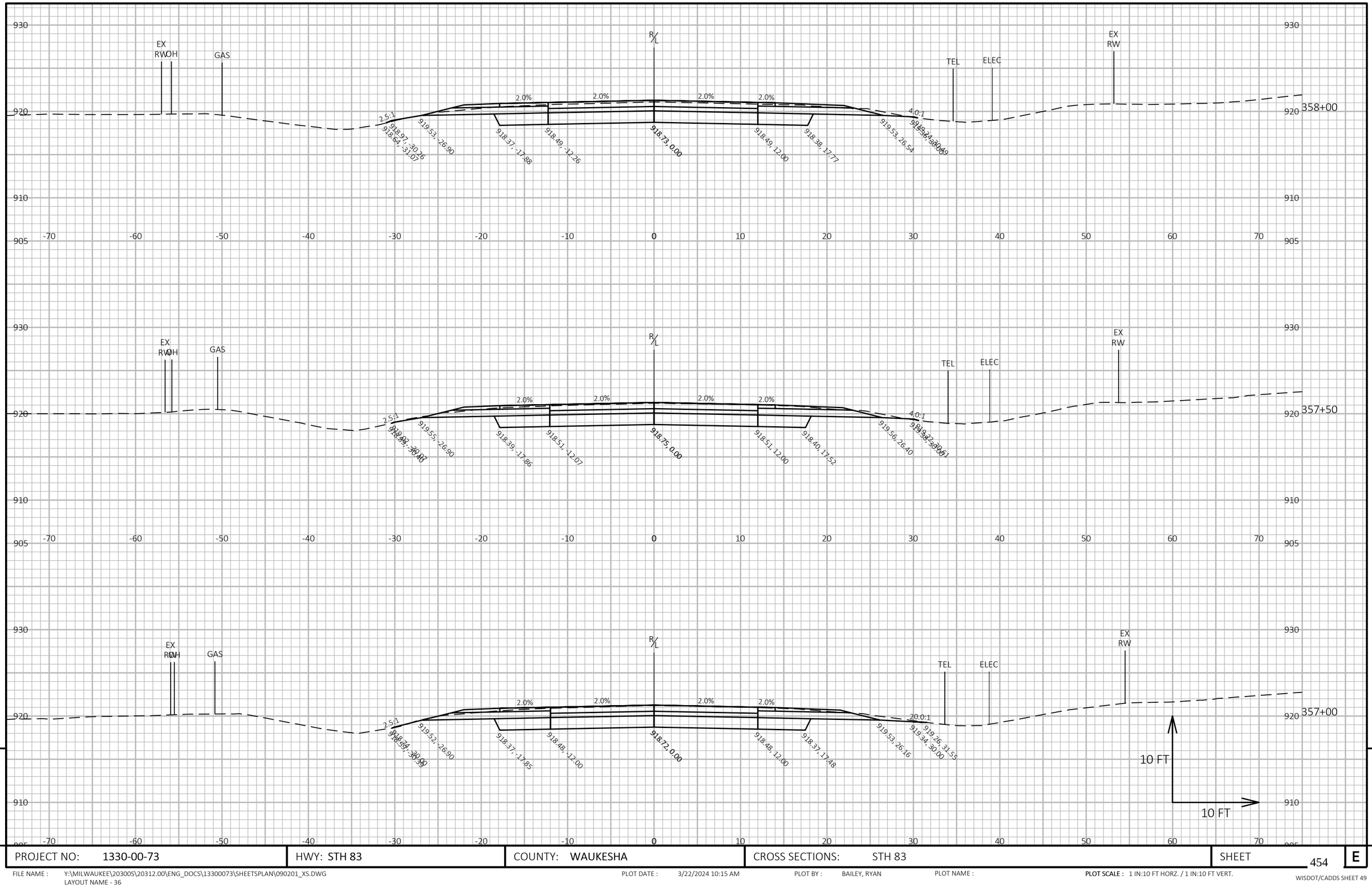
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 453	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 35

PLOT DATE : 3/22/2024 10:15 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 454	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 36

PLOT DATE : 3/22/2024 10:15 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

9

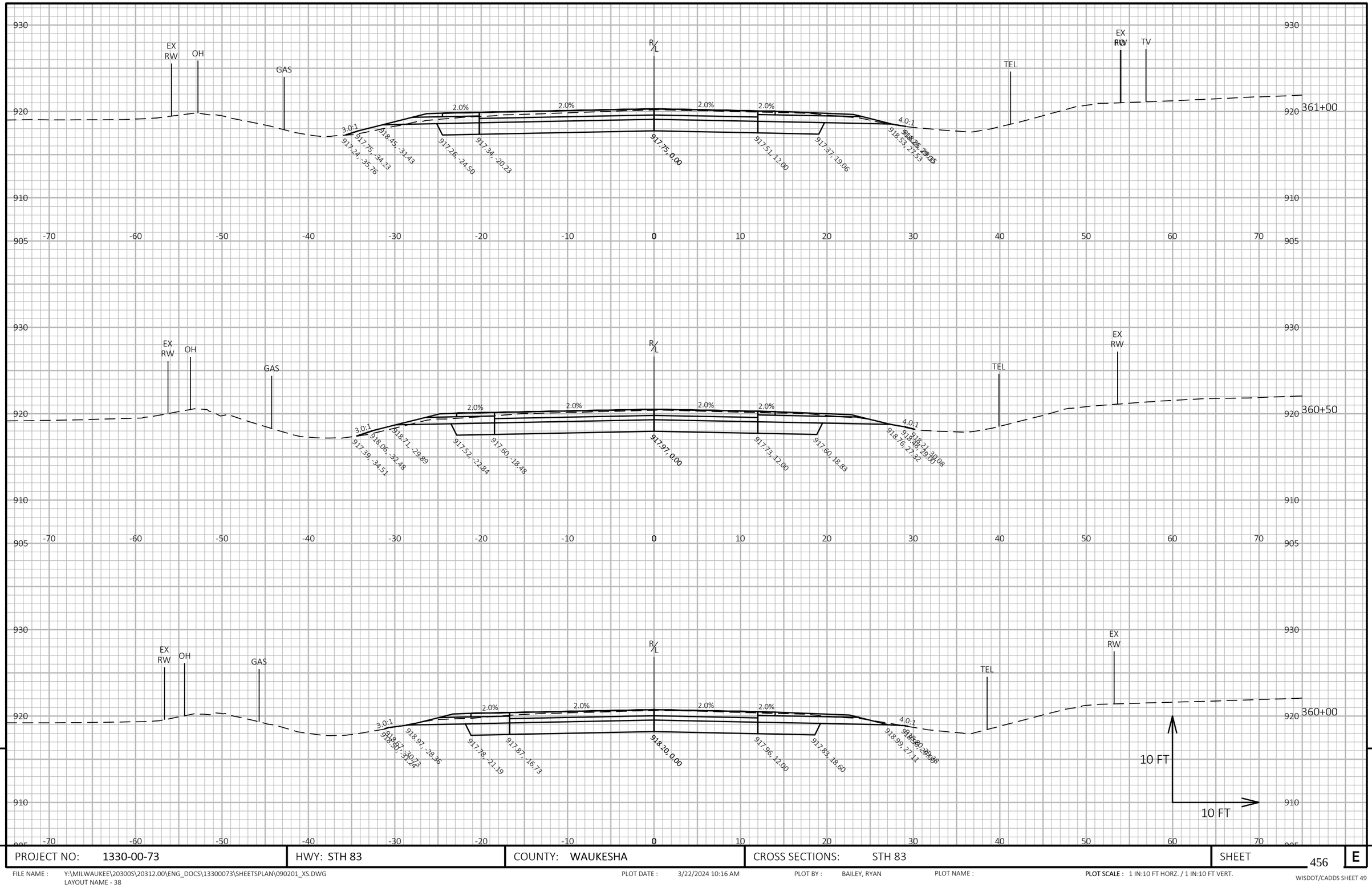
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 455	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 37

PLOT DATE : 3/22/2024 10:15 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



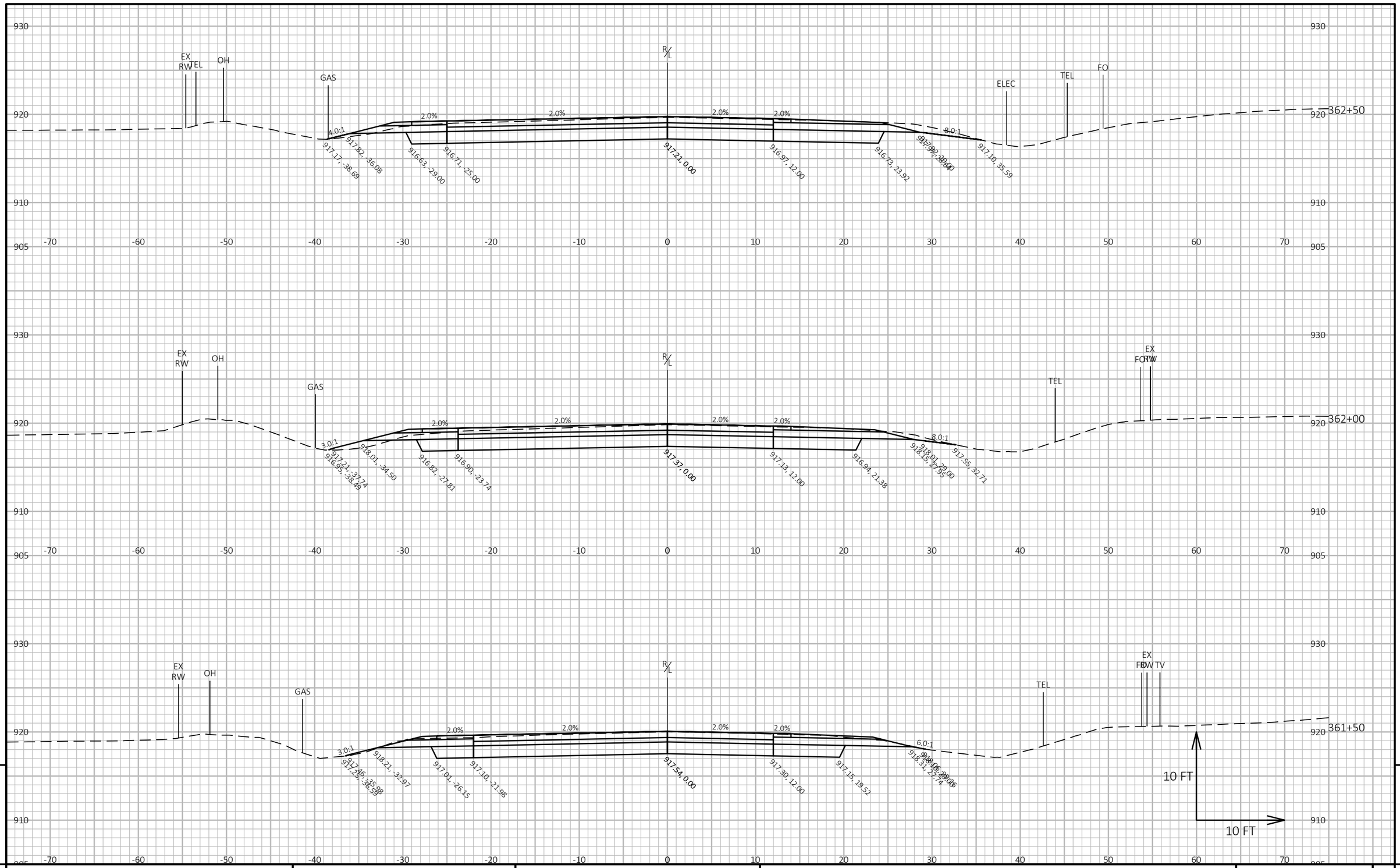
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 456	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 38

PLOT DATE : 3/22/2024 10:16 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 457	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 39

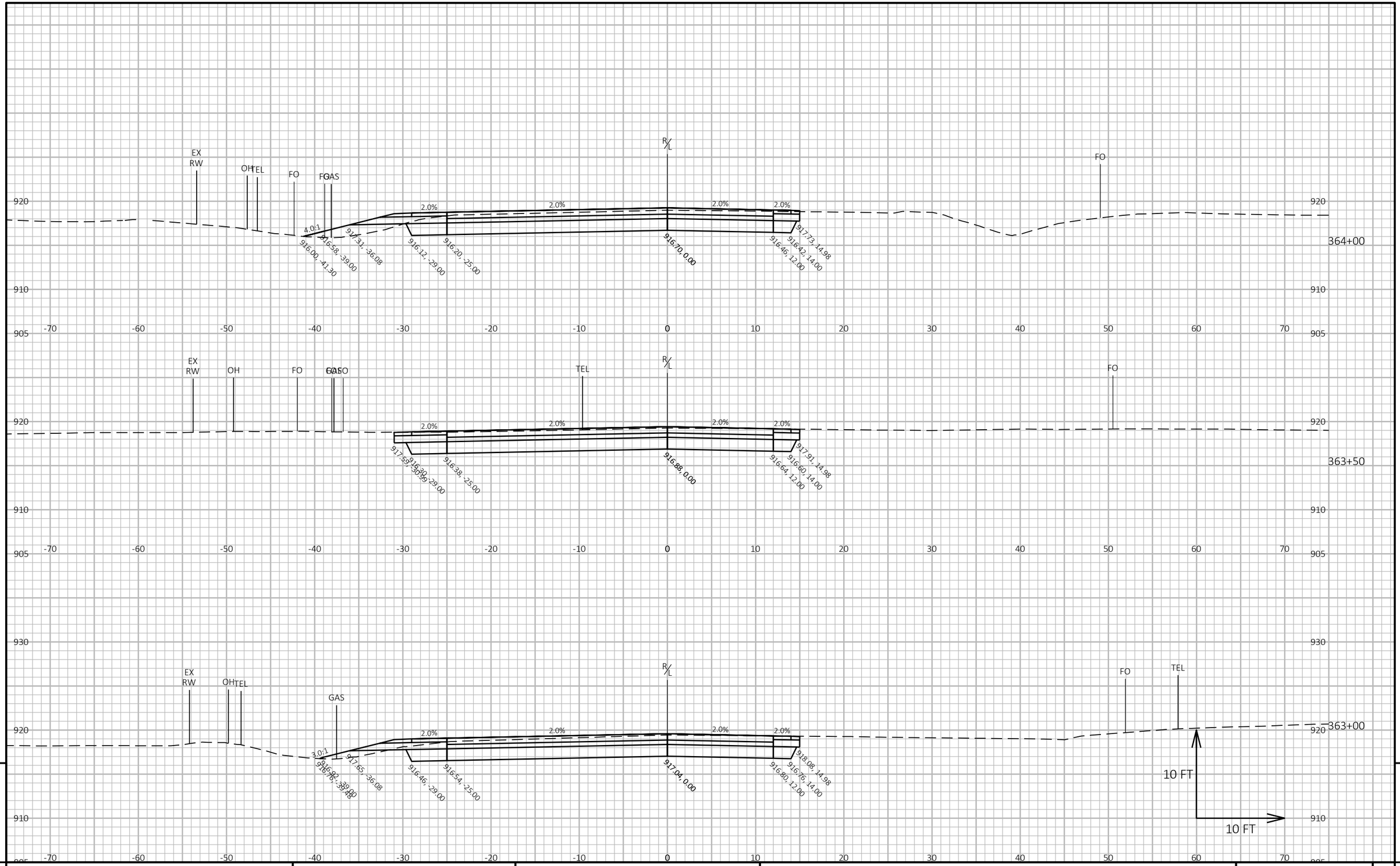
PLOT DATE : 3/22/2024 10:16 AM

PLOT BY : BAILEY, RYAN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

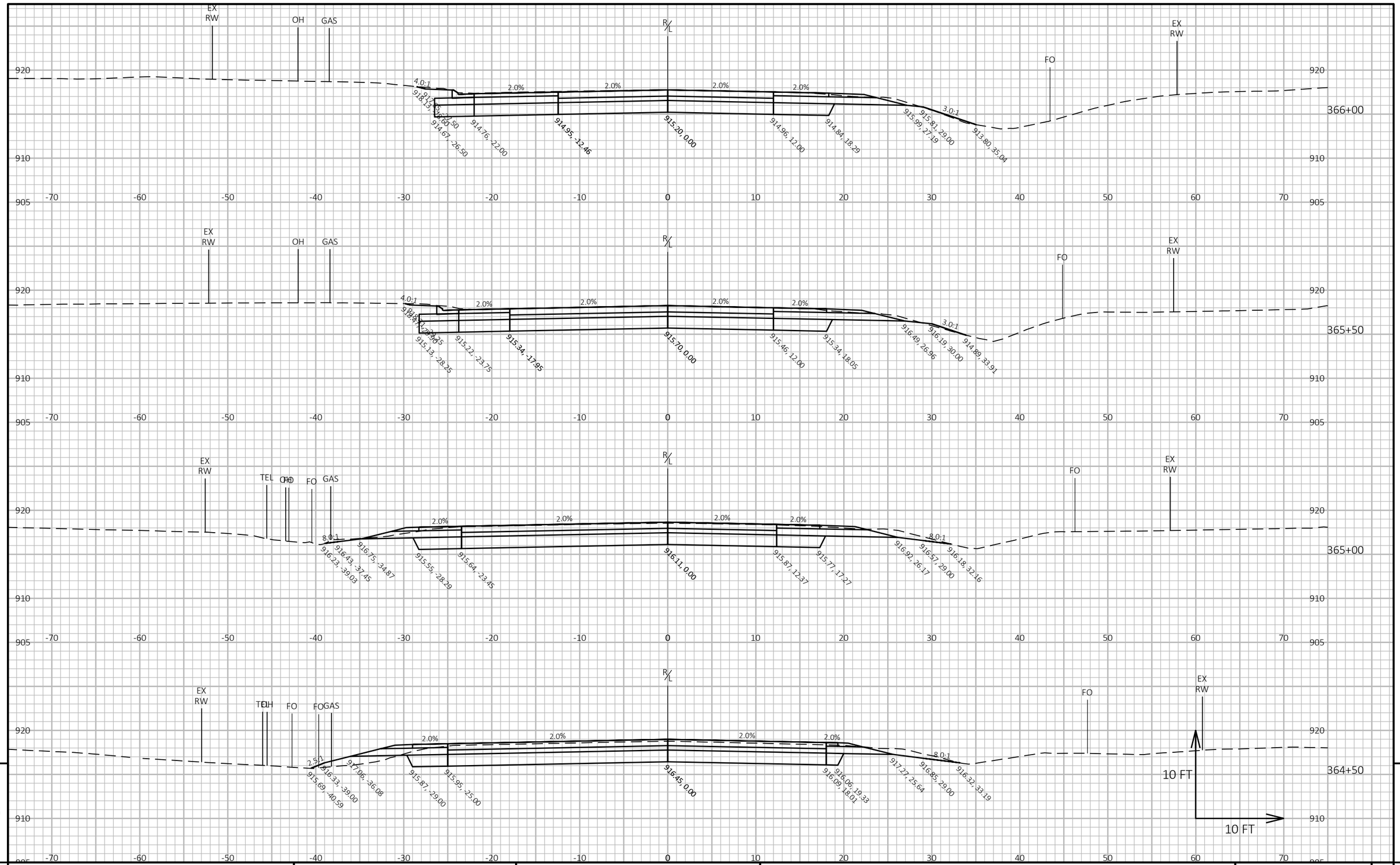
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 458	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 40

PLOT DATE : 3/22/2024 10:16 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

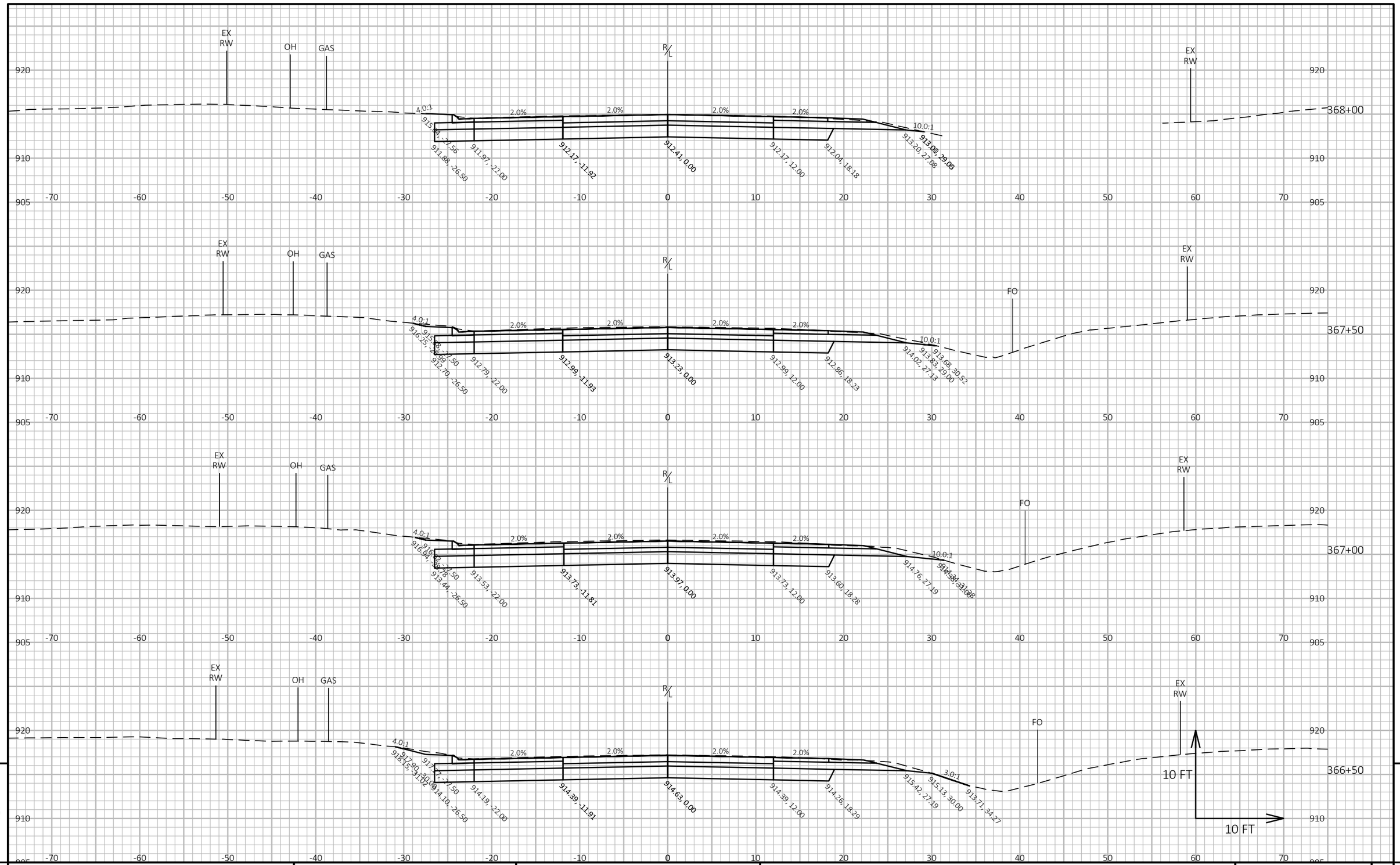


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 459	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 41

PLOT DATE : 3/22/2024 10:17 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

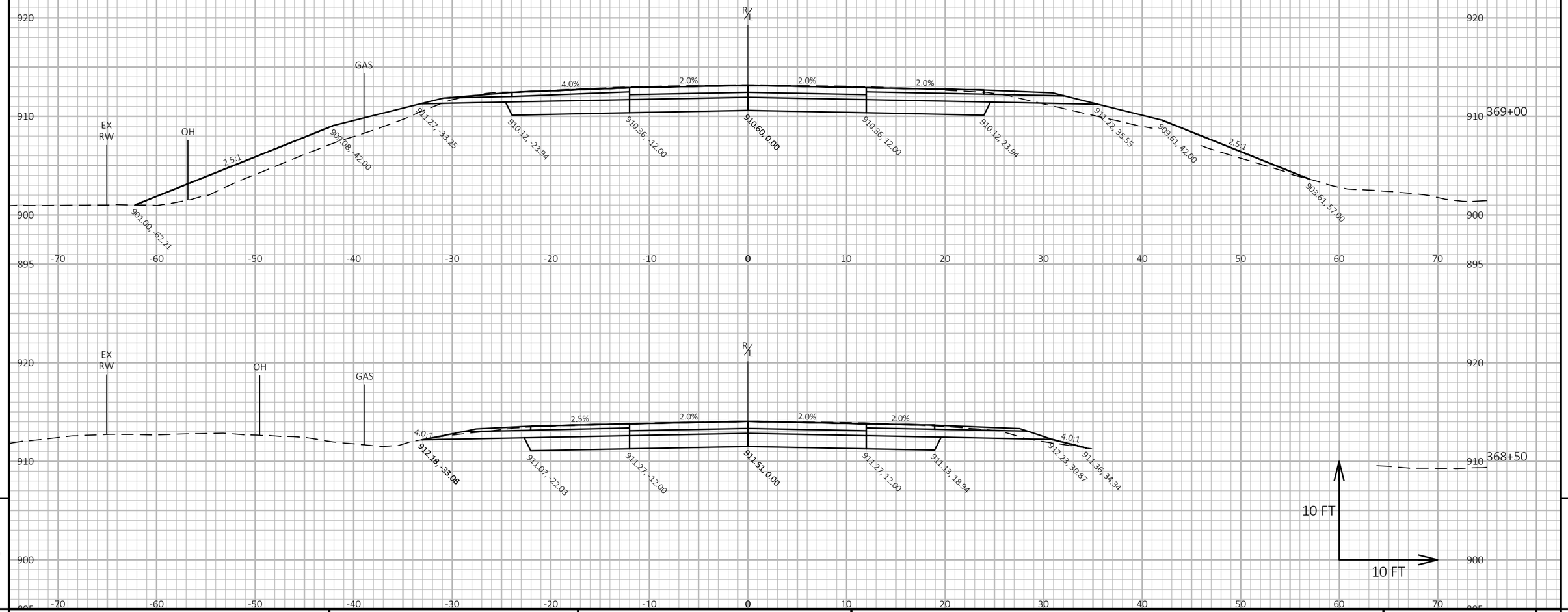
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 460	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 42

PLOT DATE : 3/22/2024 10:17 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



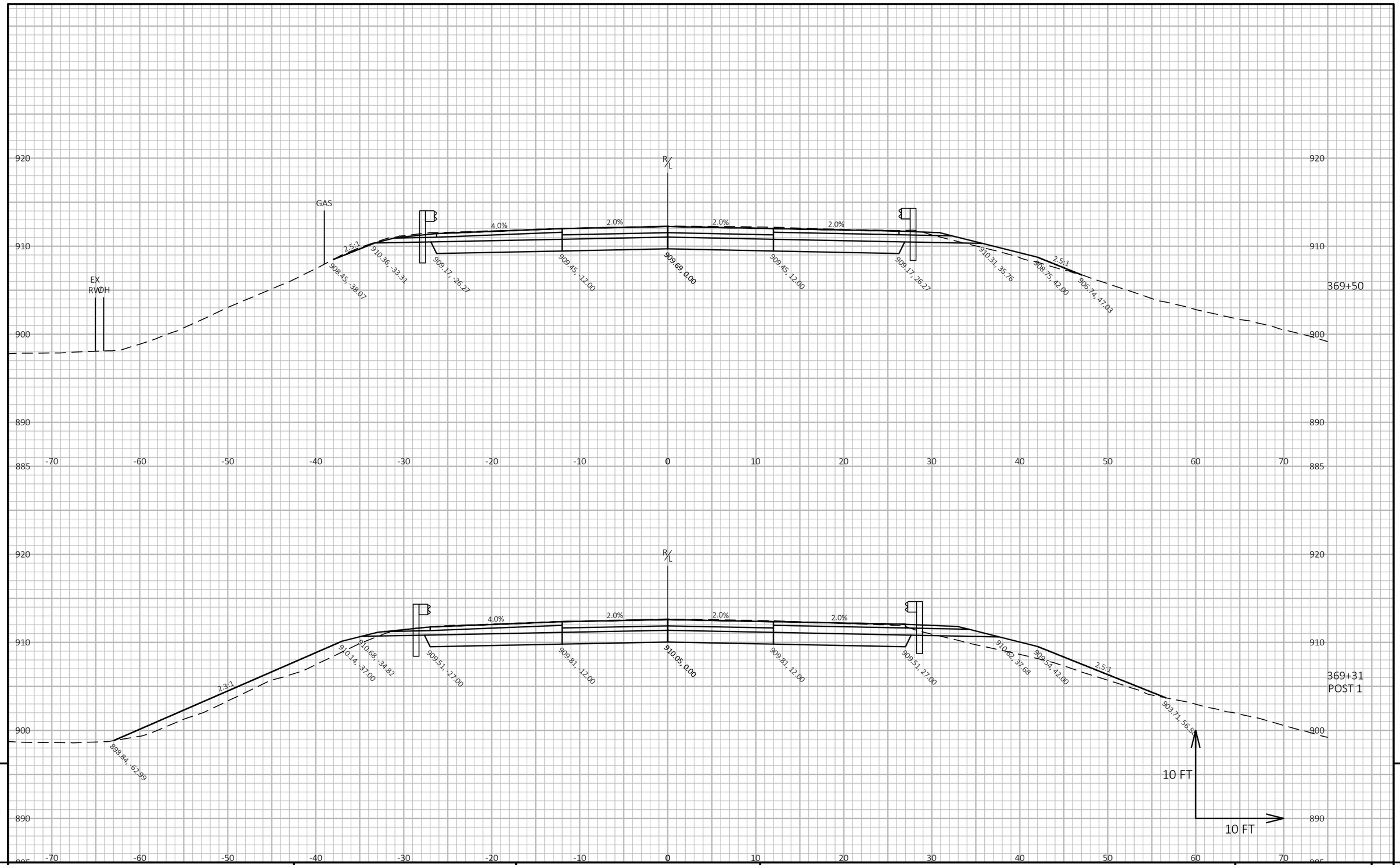
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 461	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 43

PLOT DATE : 3/22/2024 10:17 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



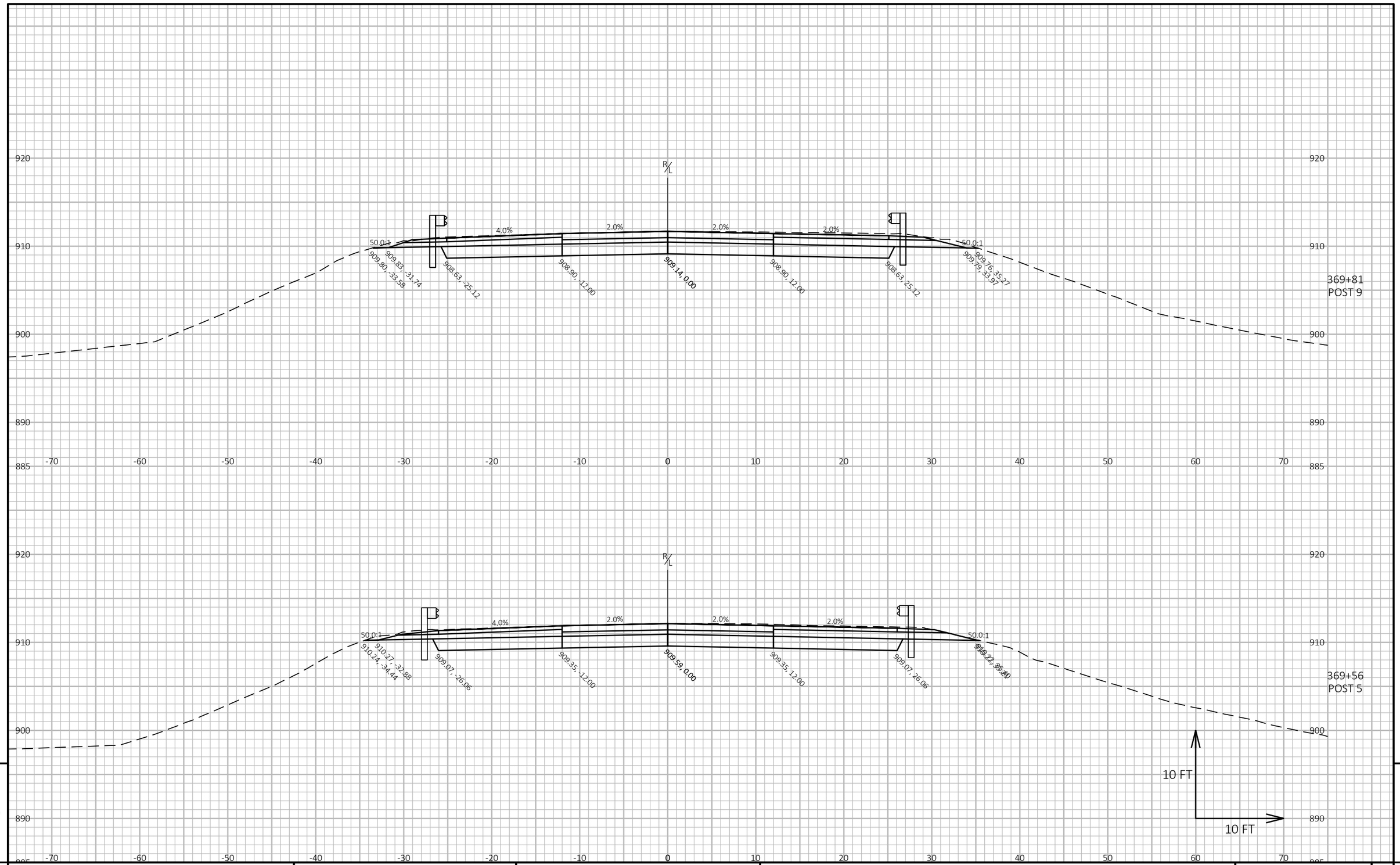
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 462	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 44

PLOT DATE : 3/22/2024 10:17 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

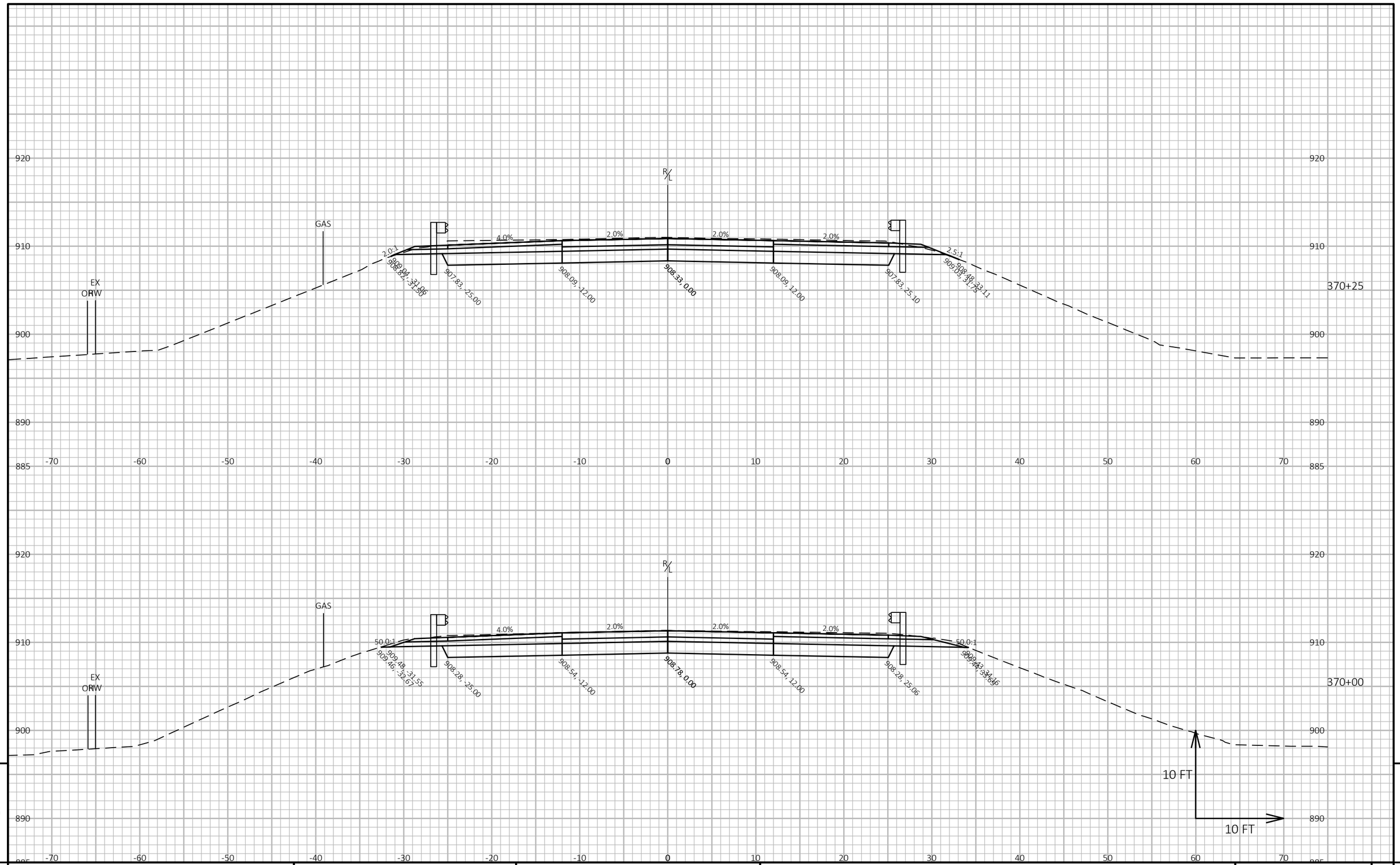


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 463 E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 45

PLOT DATE : 3/22/2024 10:18 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

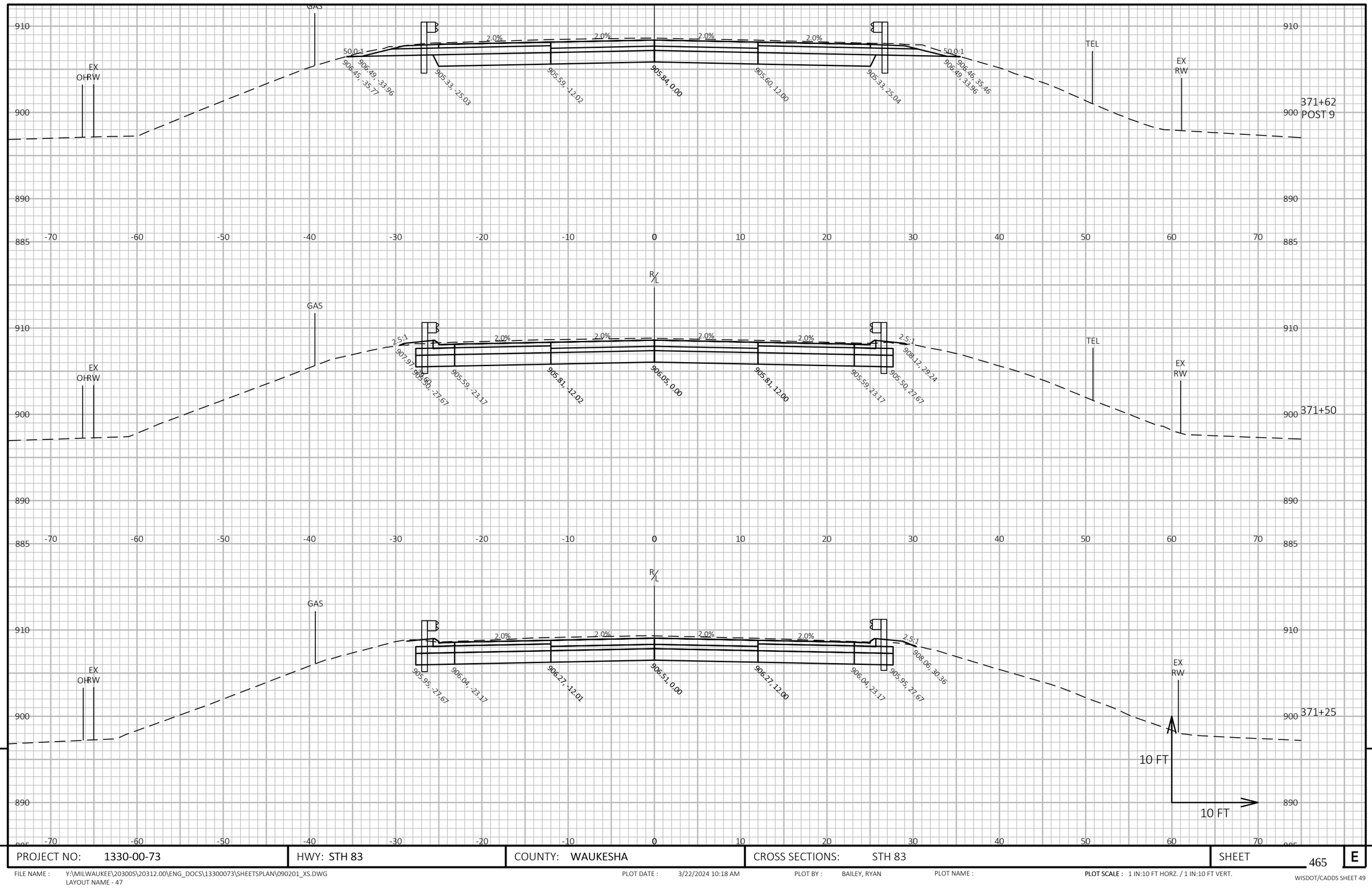
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 464	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 46

PLOT DATE : 3/22/2024 10:18 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 465	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 47

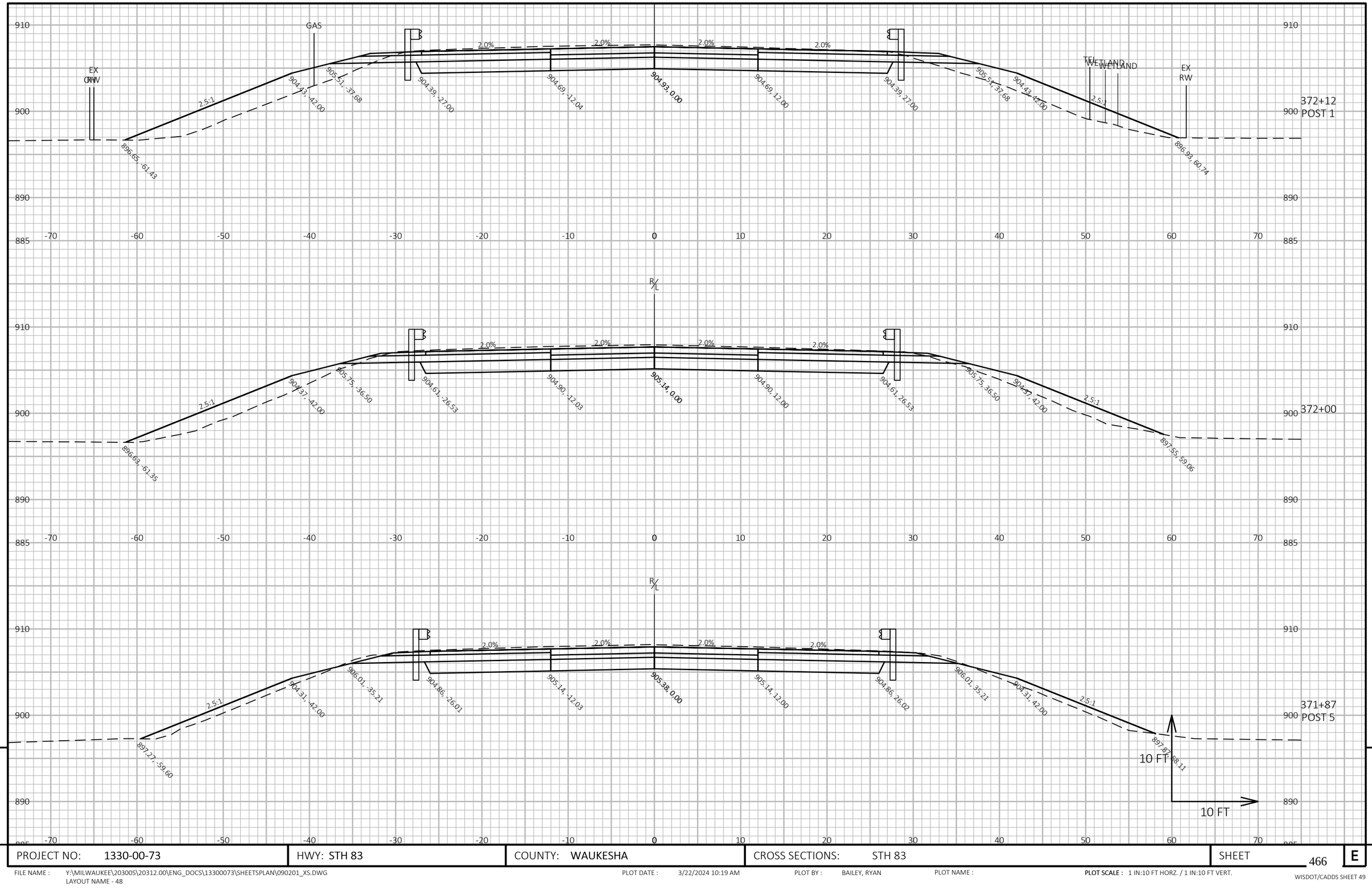
PLOT DATE : 3/22/2024 10:18 AM

PLOT BY : BAILEY, RYAN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

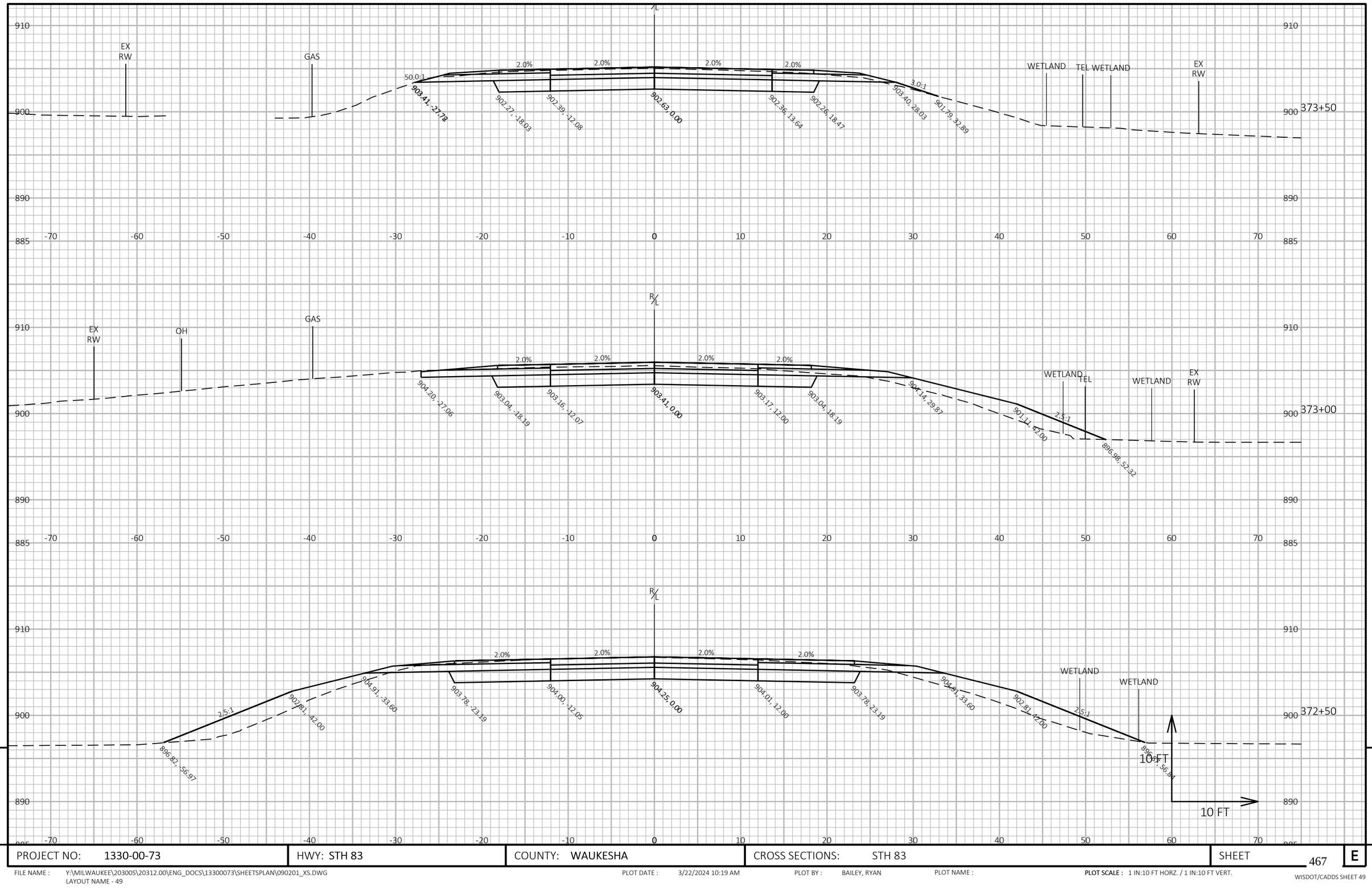
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 466	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 48

PLOT DATE : 3/22/2024 10:19 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9



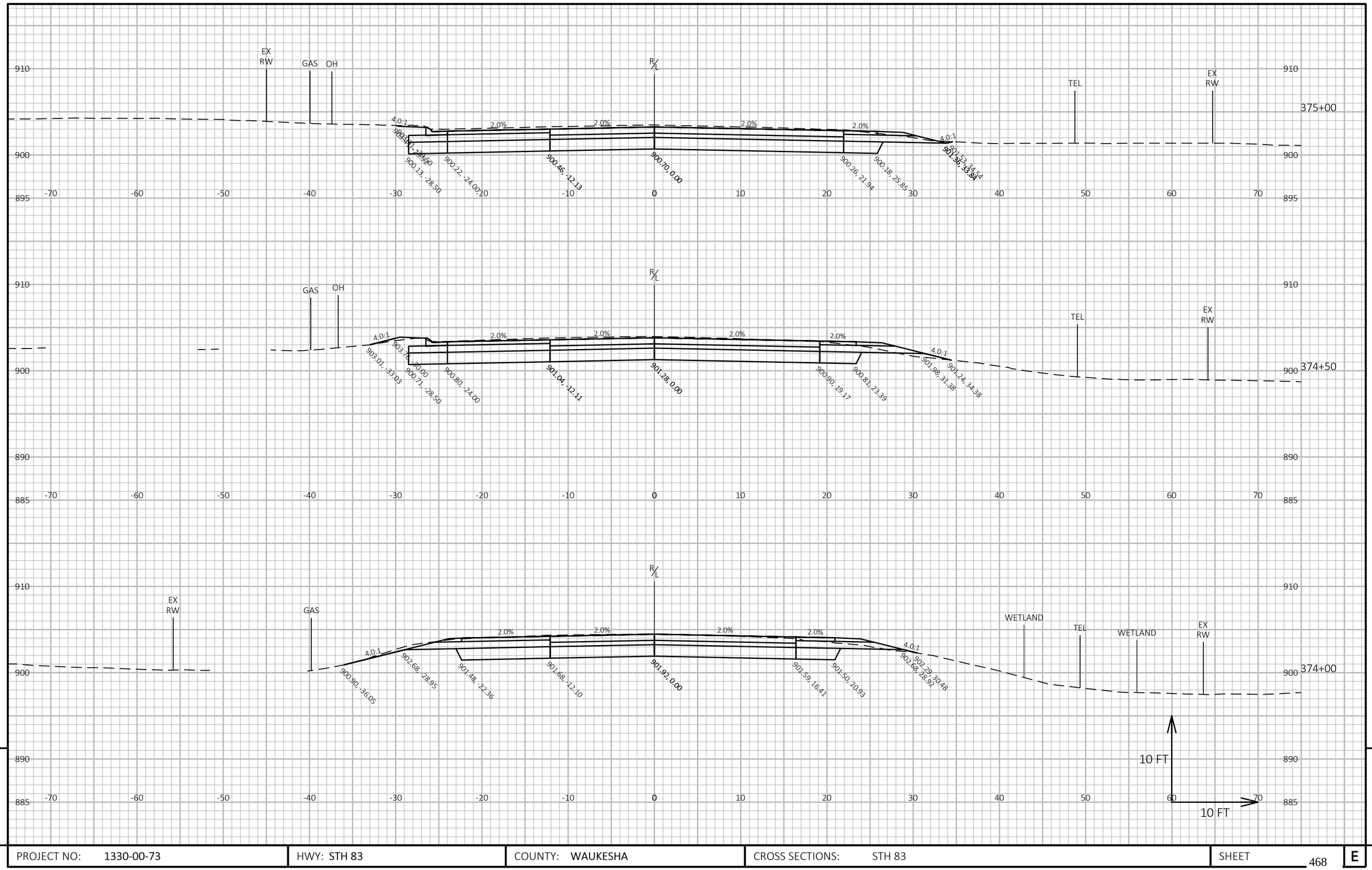
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 467	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 49

PLOT DATE : 3/22/2024 10:19 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

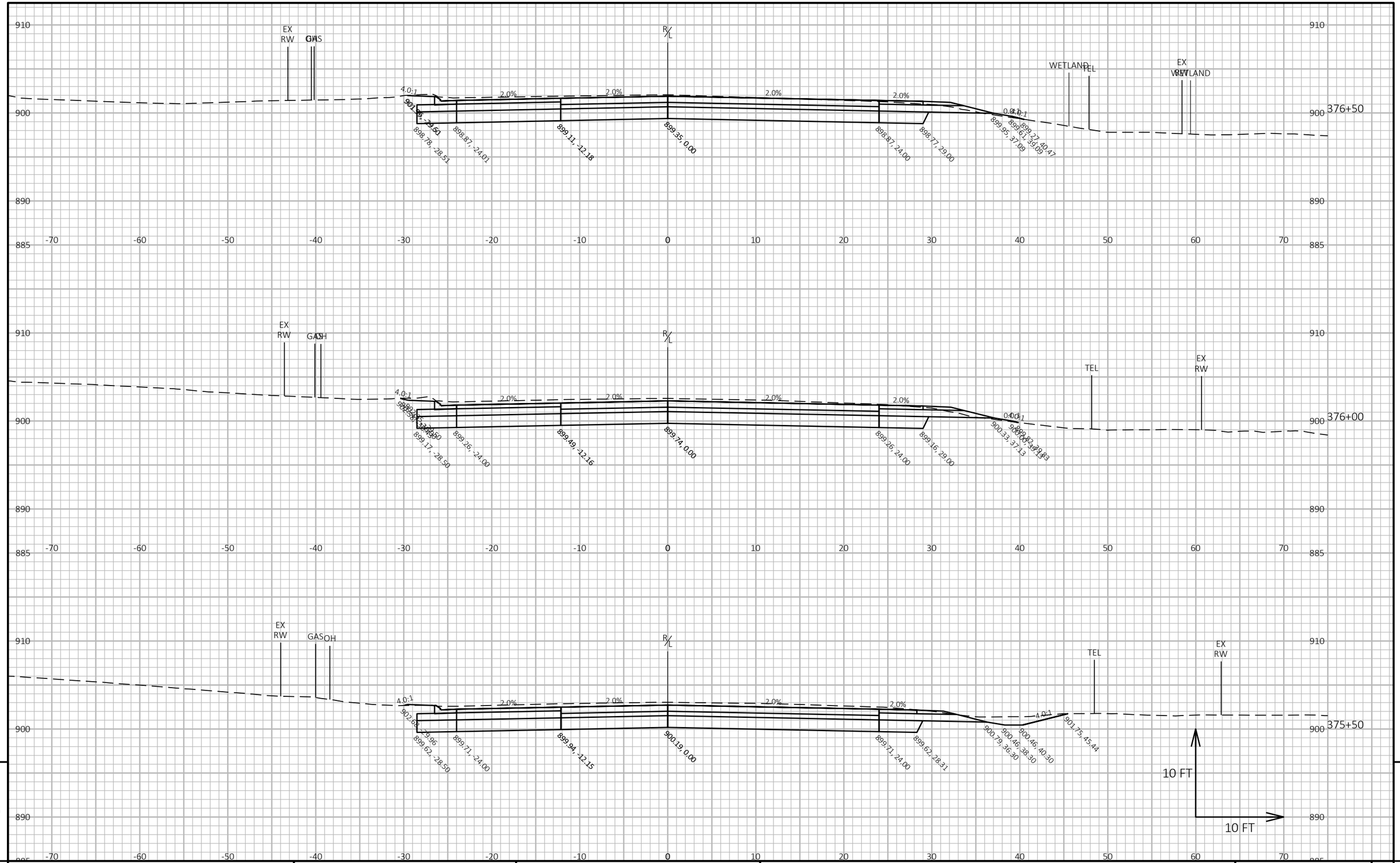


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 468	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 50

PLOT DATE : 3/22/2024 10:19 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

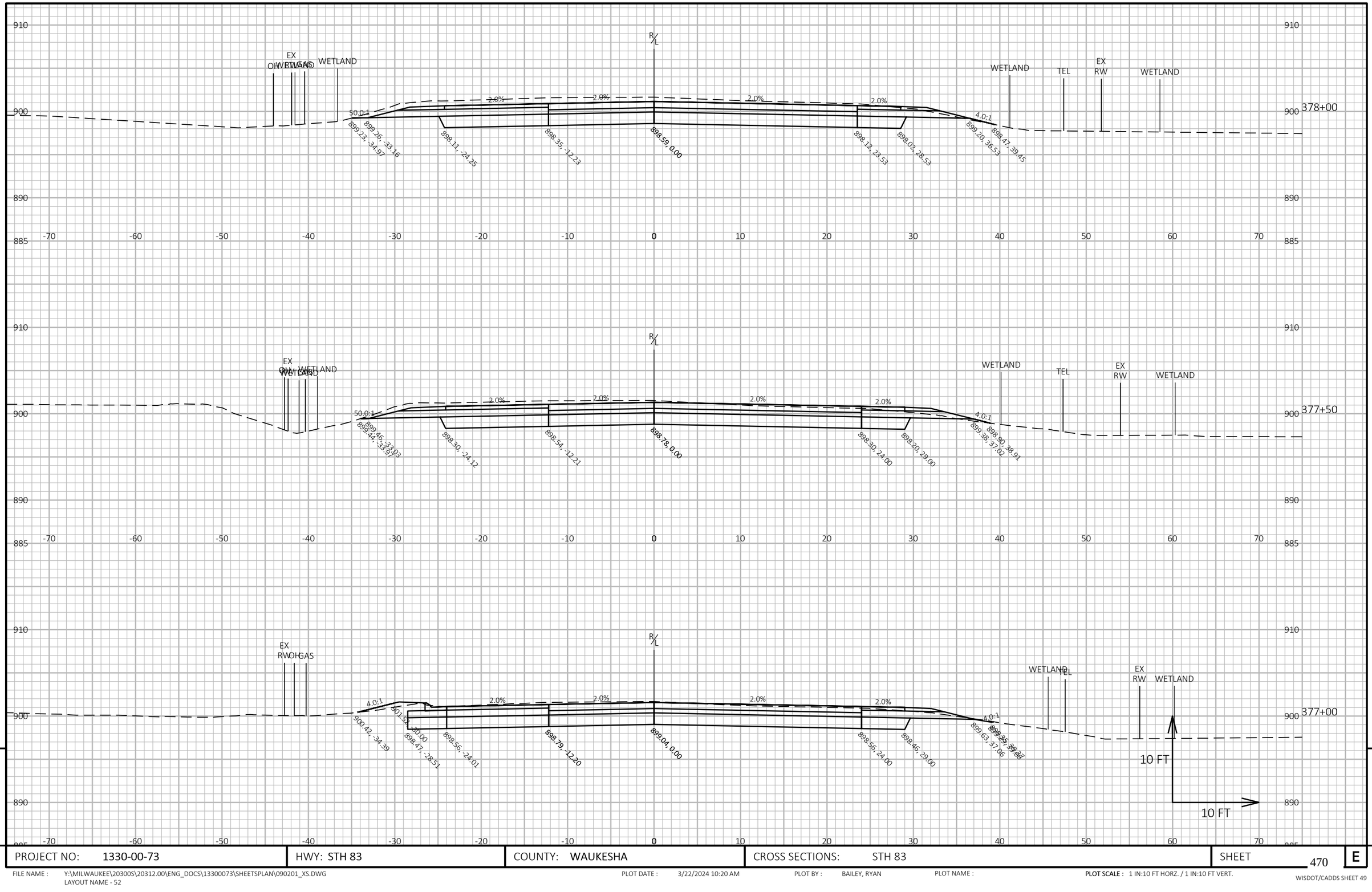
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 469	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 51

PLOT DATE : 3/22/2024 10:20 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 470 E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 52

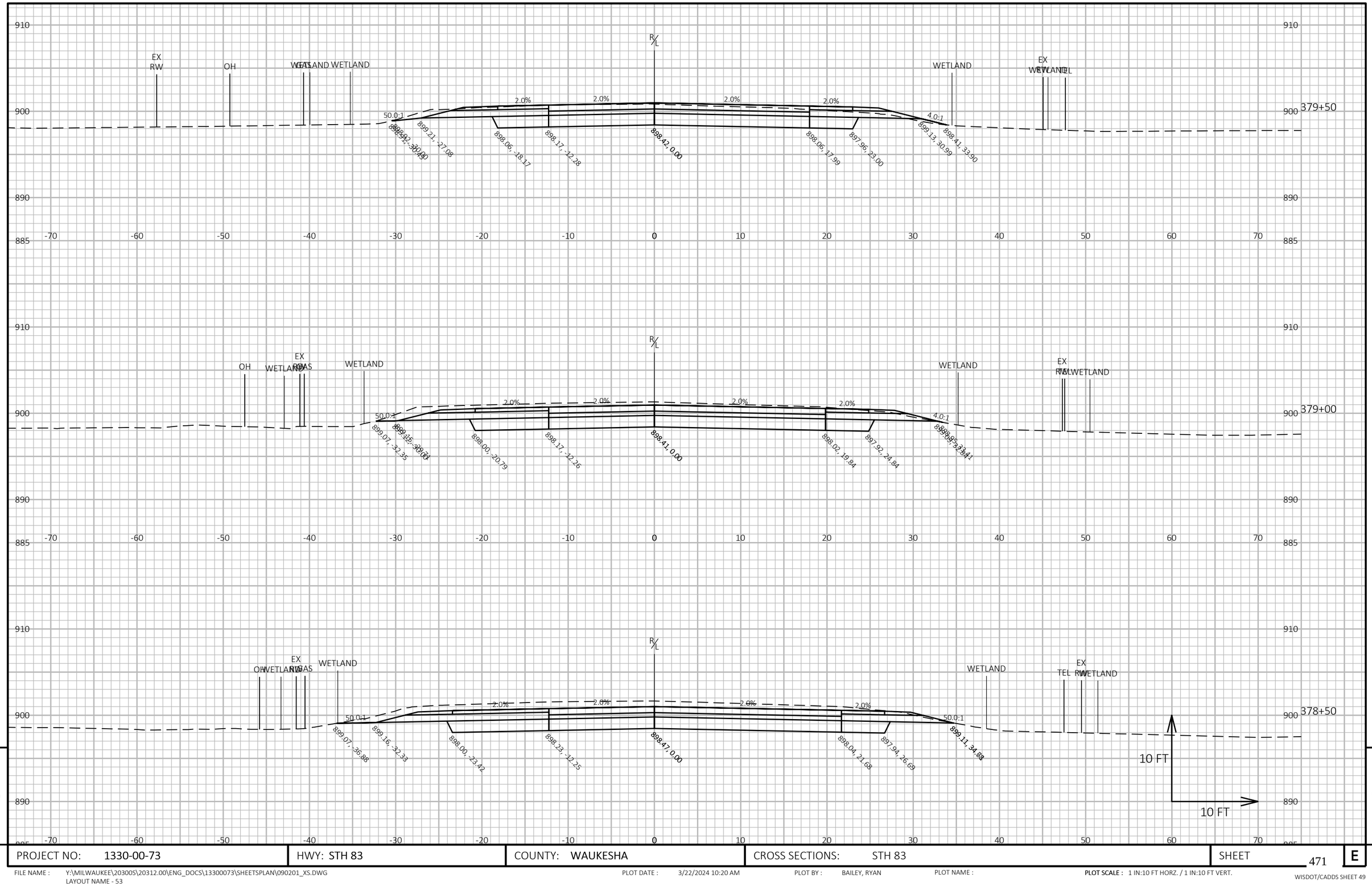
PLOT DATE : 3/22/2024 10:20 AM

PLOT BY : BAILEY, RYAN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

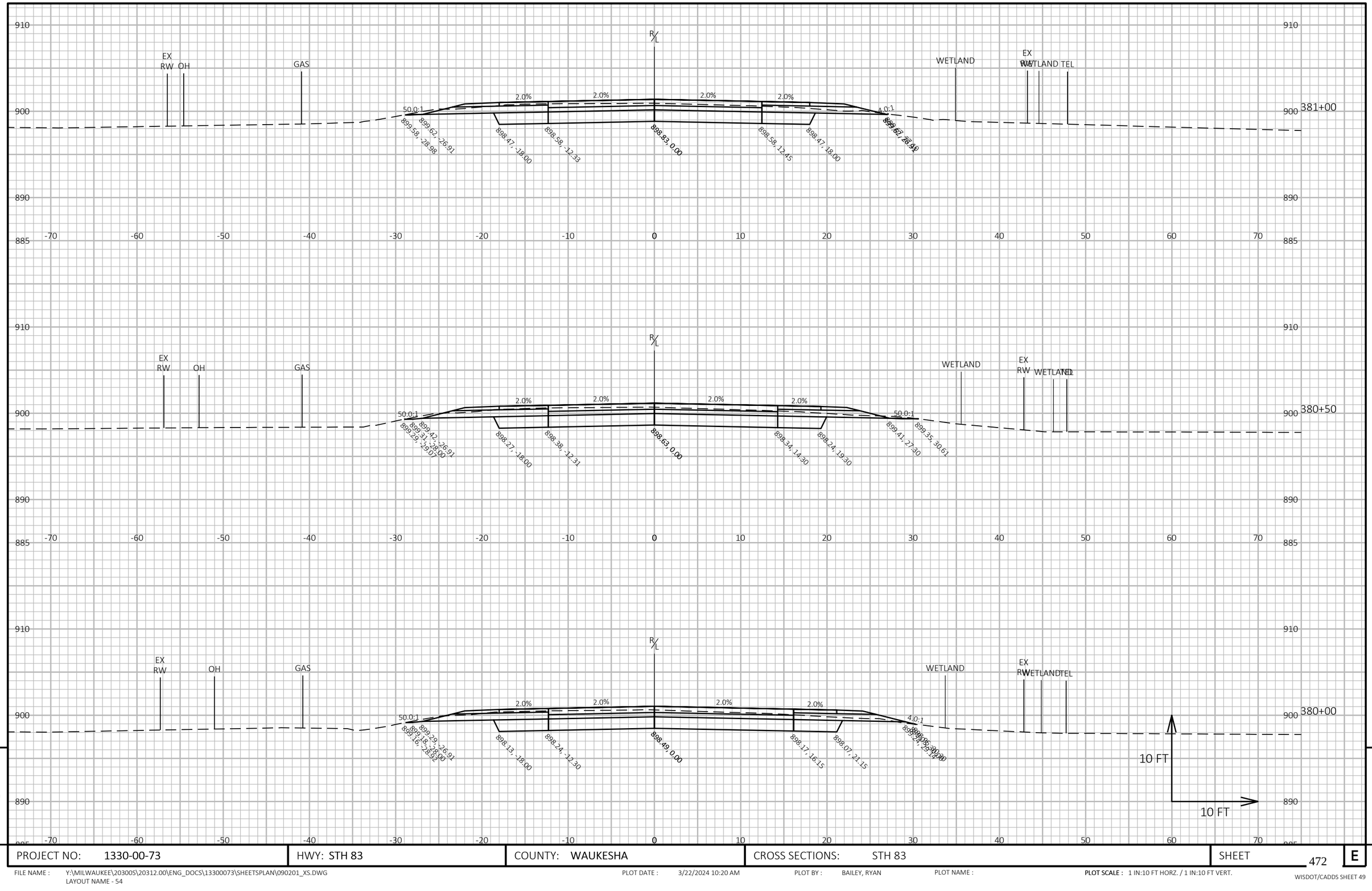
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 471	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 53

PLOT DATE : 3/22/2024 10:20 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

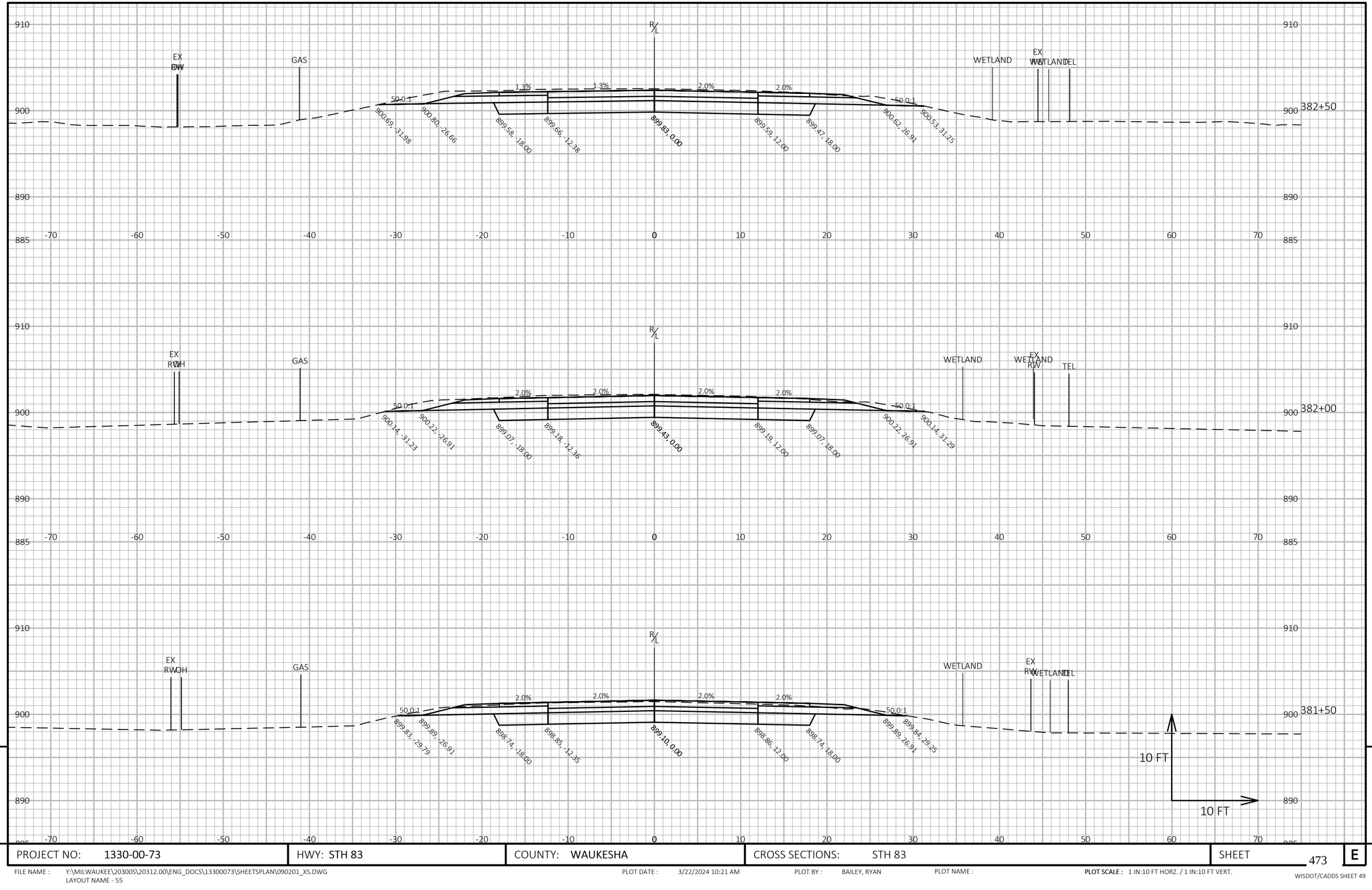


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 472	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 54

PLOT DATE : 3/22/2024 10:20 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

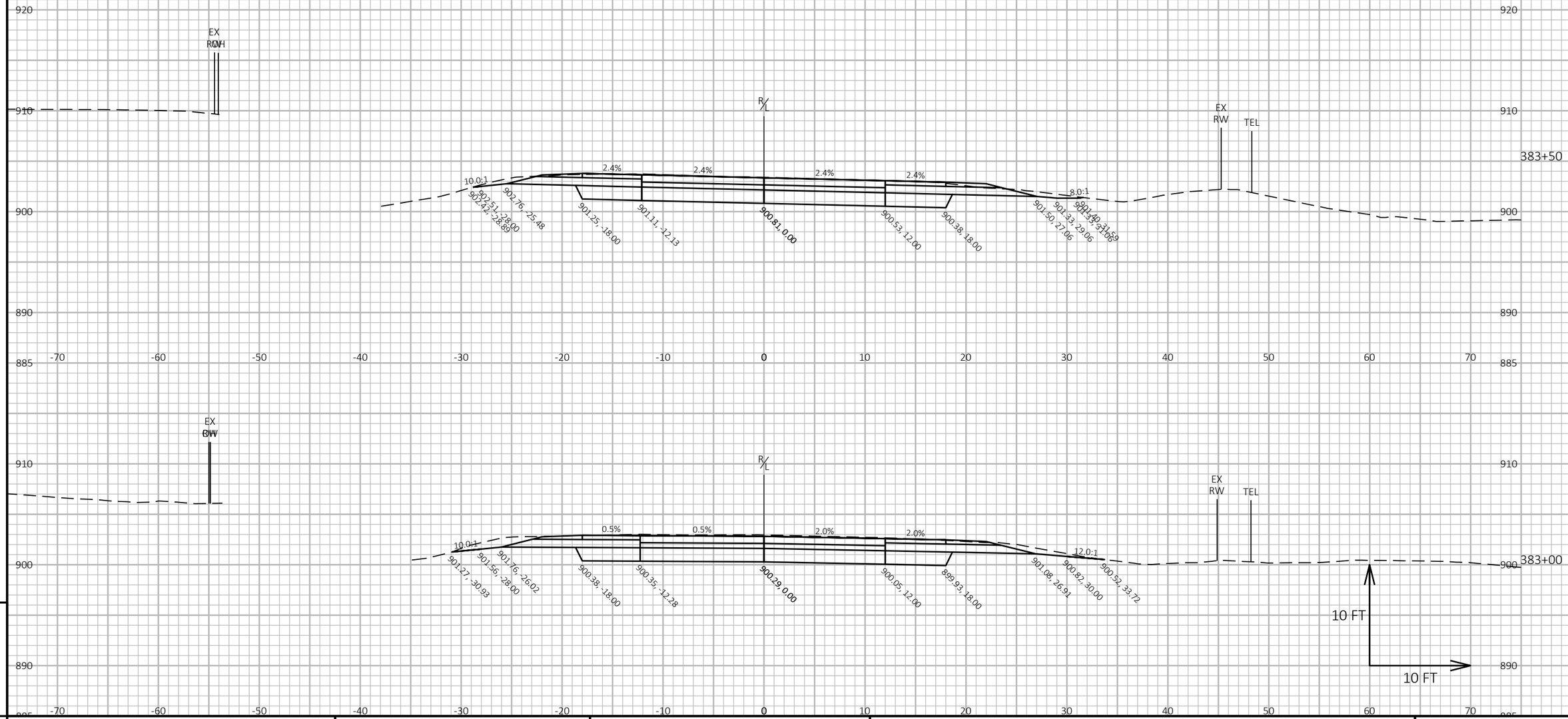


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 473	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 55

PLOT DATE : 3/22/2024 10:21 AM PLOT BY : BAILEY, RYAN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

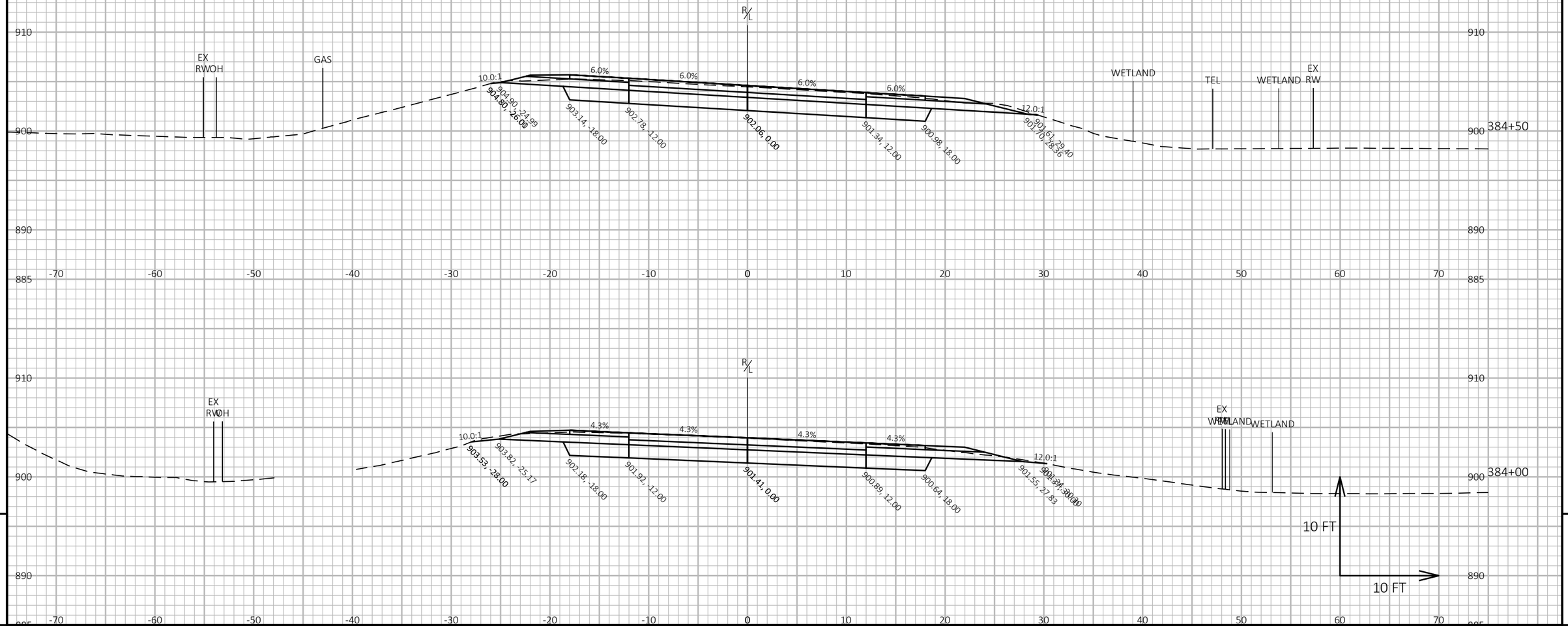
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 474	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 56

PLOT DATE : 3/22/2024 10:21 AM PLOT BY : BAILEY, RYAN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



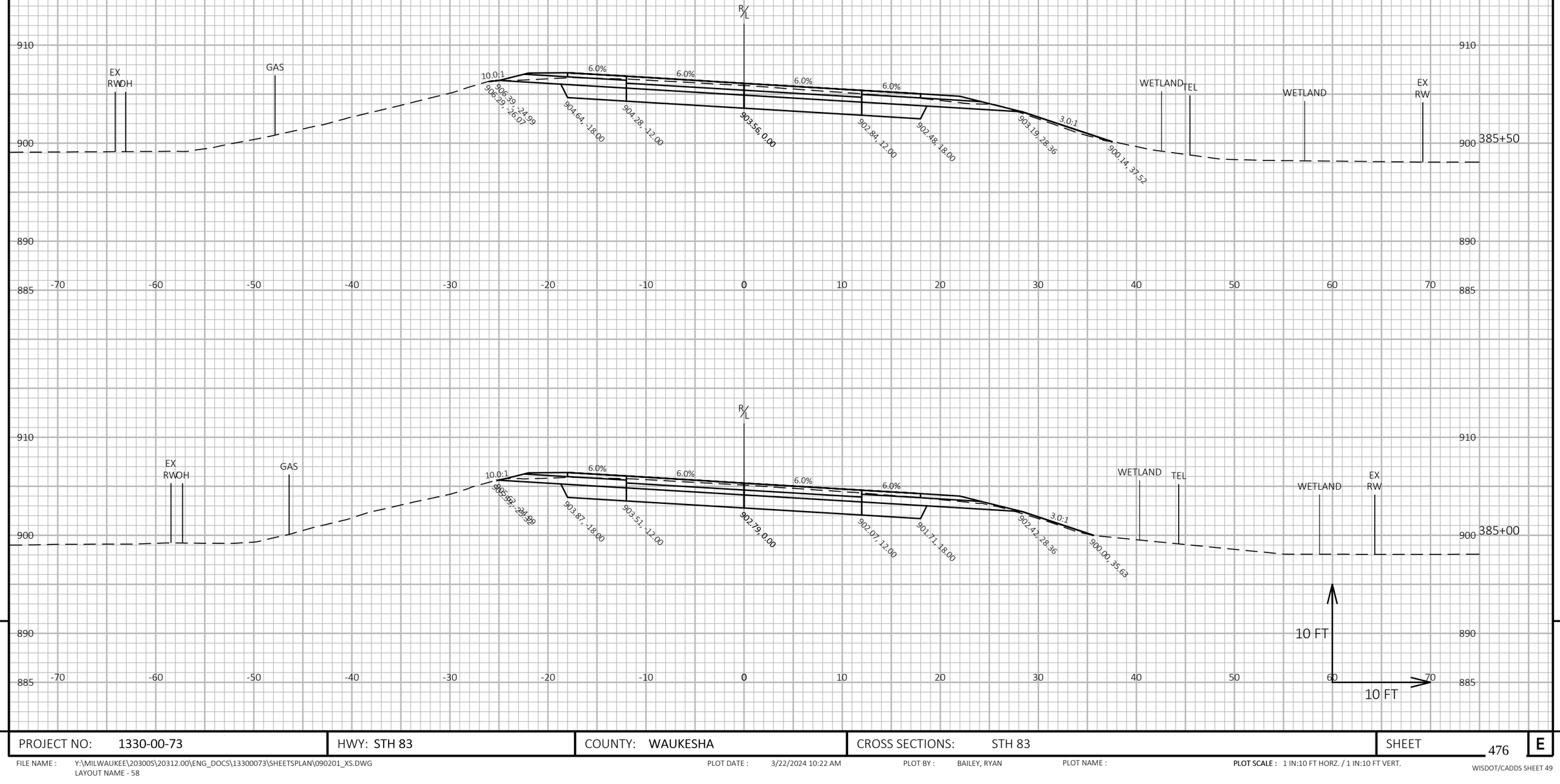
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 475	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 57

PLOT DATE : 3/22/2024 10:21 AM PLOT BY : BAILEY, RYAN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

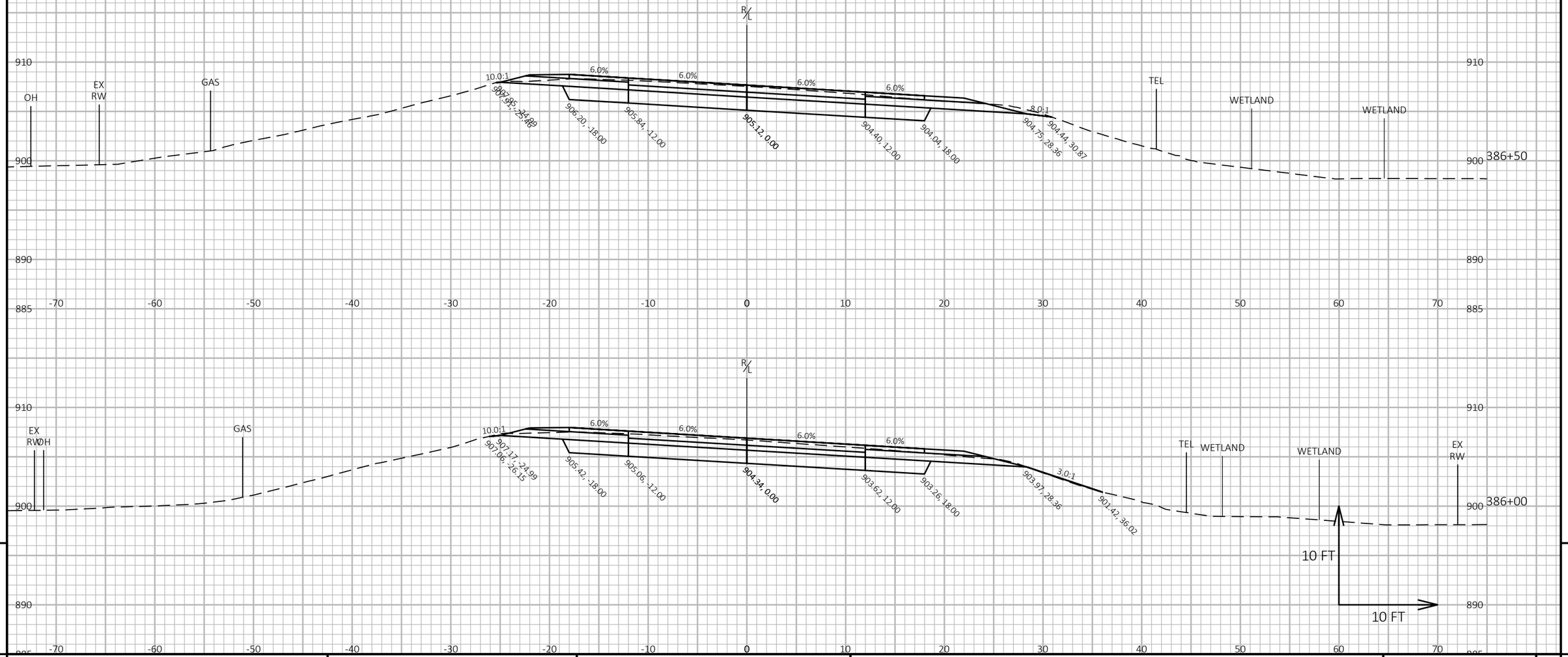
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 476	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 58

PLOT DATE : 3/22/2024 10:22 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

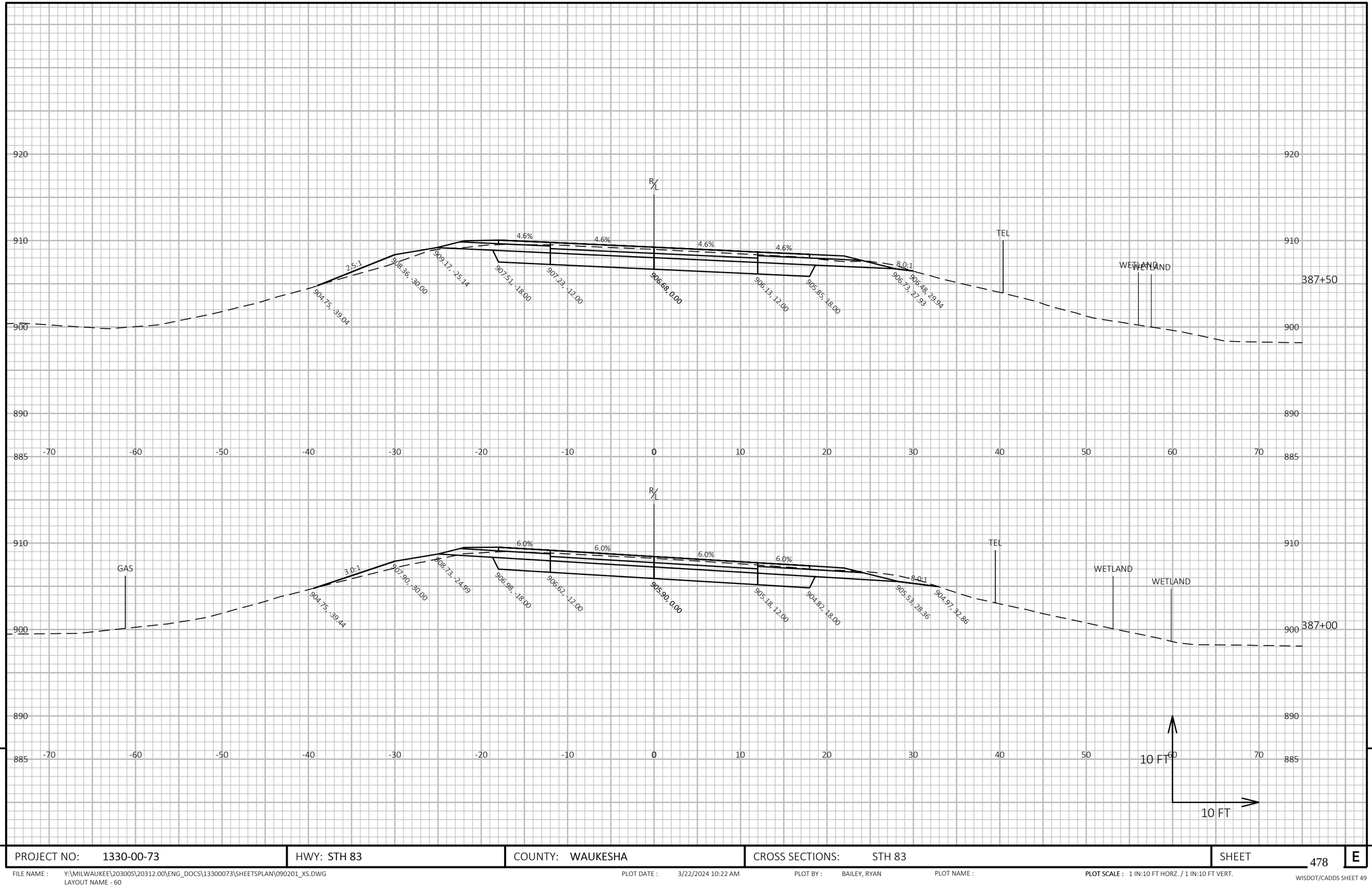
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 477	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 59

PLOT DATE : 3/22/2024 10:22 AM PLOT BY : BAILEY, RYAN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

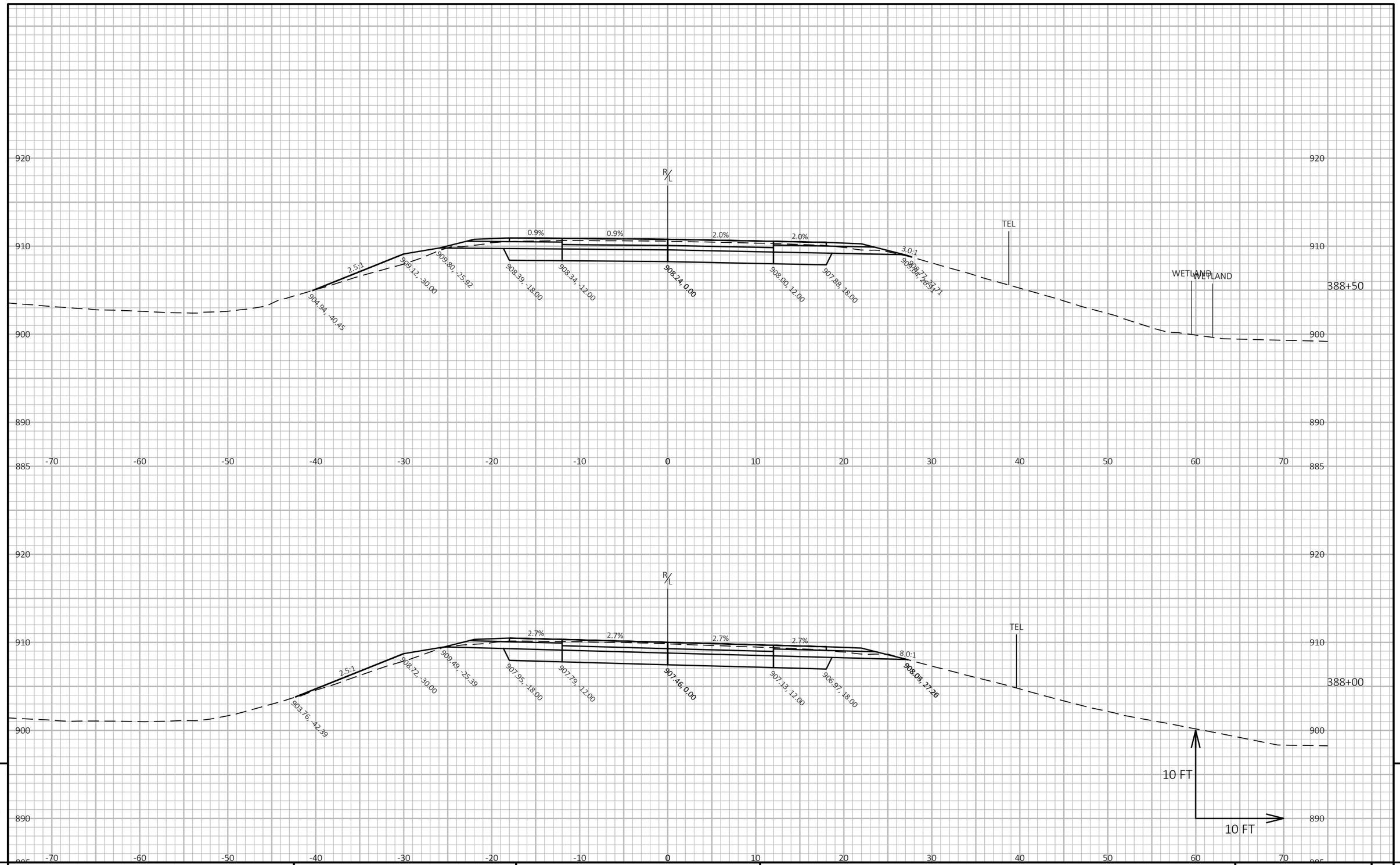


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 478	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 60

PLOT DATE : 3/22/2024 10:22 AM PLOT BY : BAILEY, RYAN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



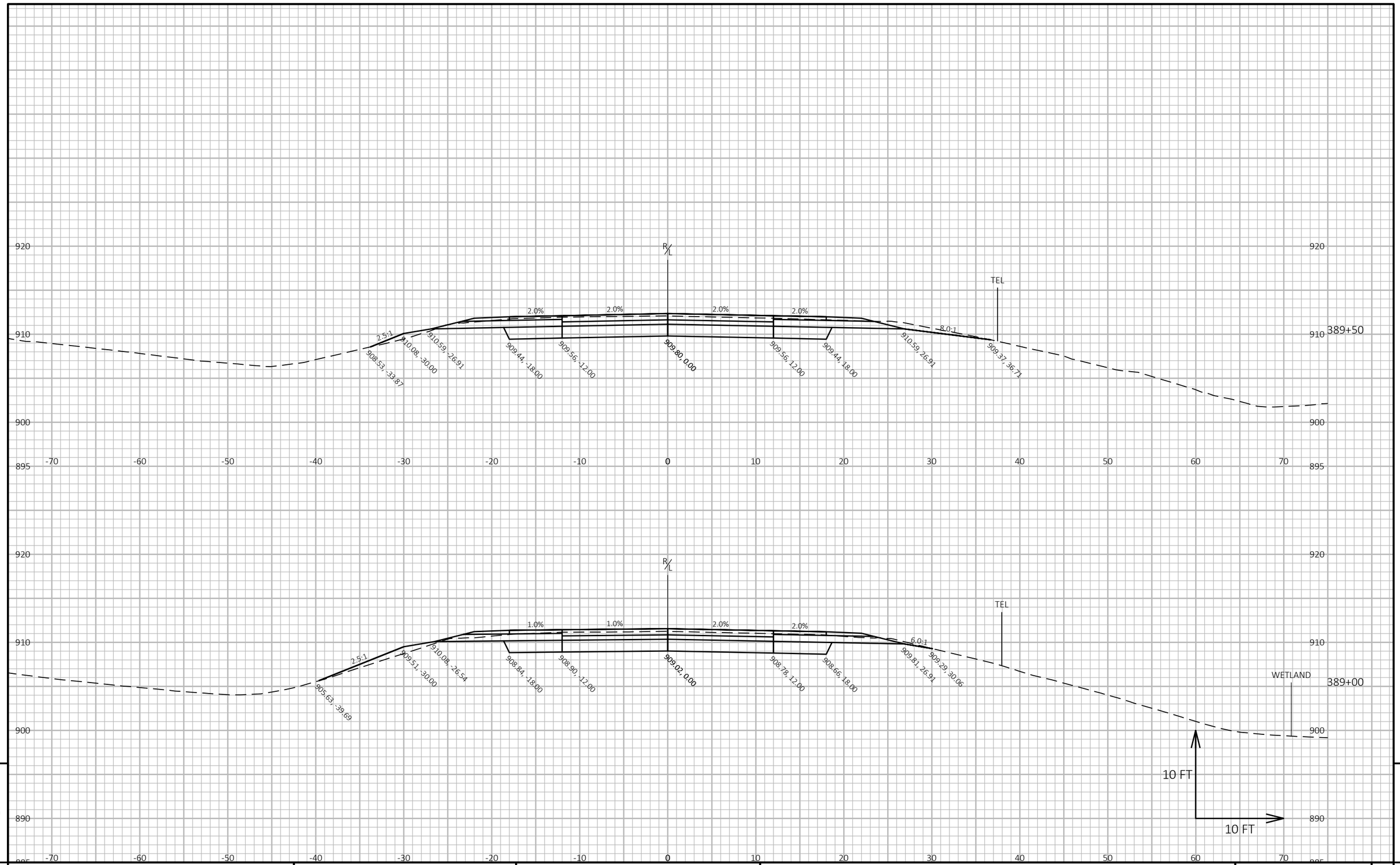
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 479	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 61

PLOT DATE : 3/22/2024 10:22 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

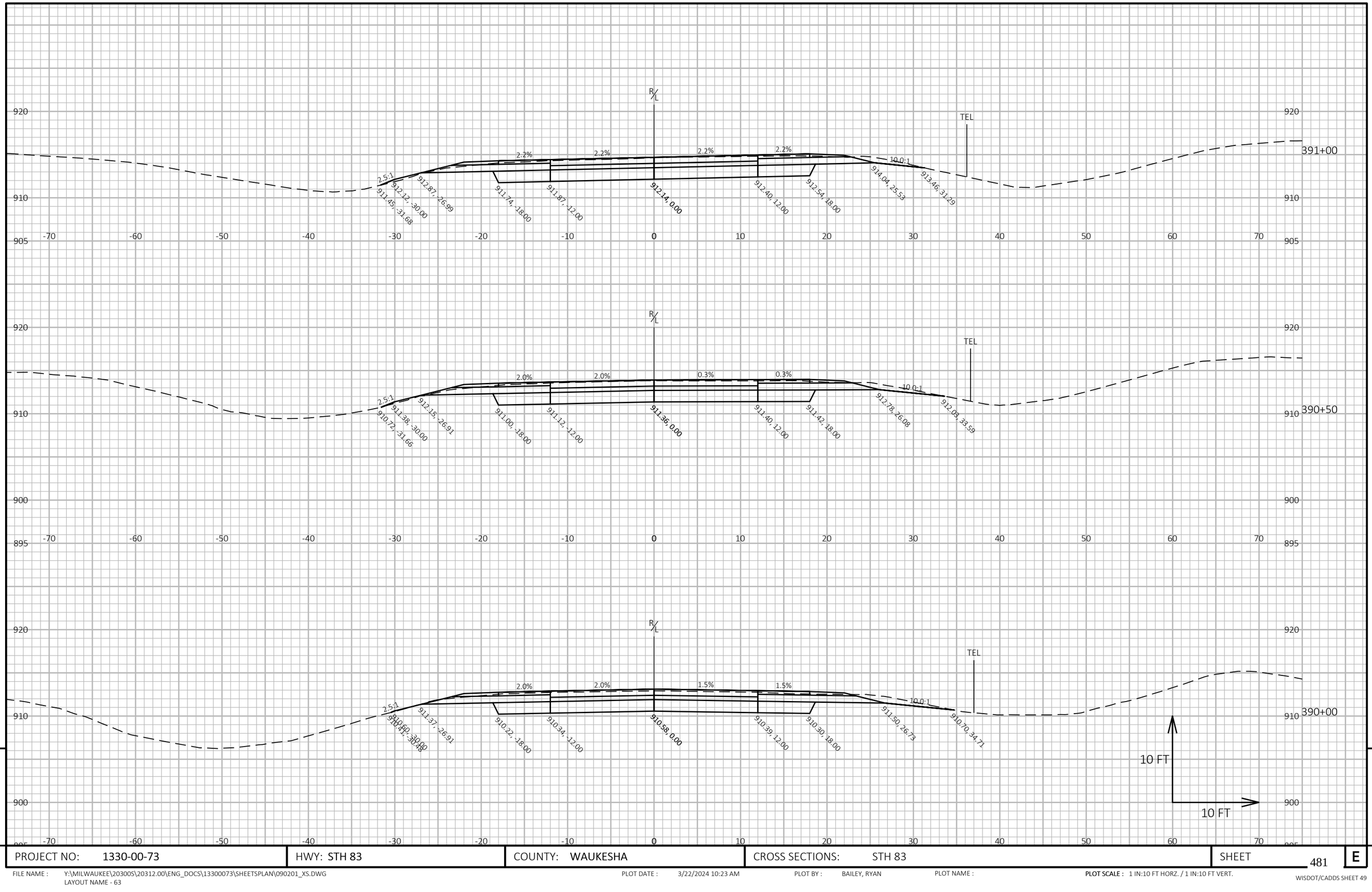


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 480	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 62

PLOT DATE : 3/22/2024 10:23 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

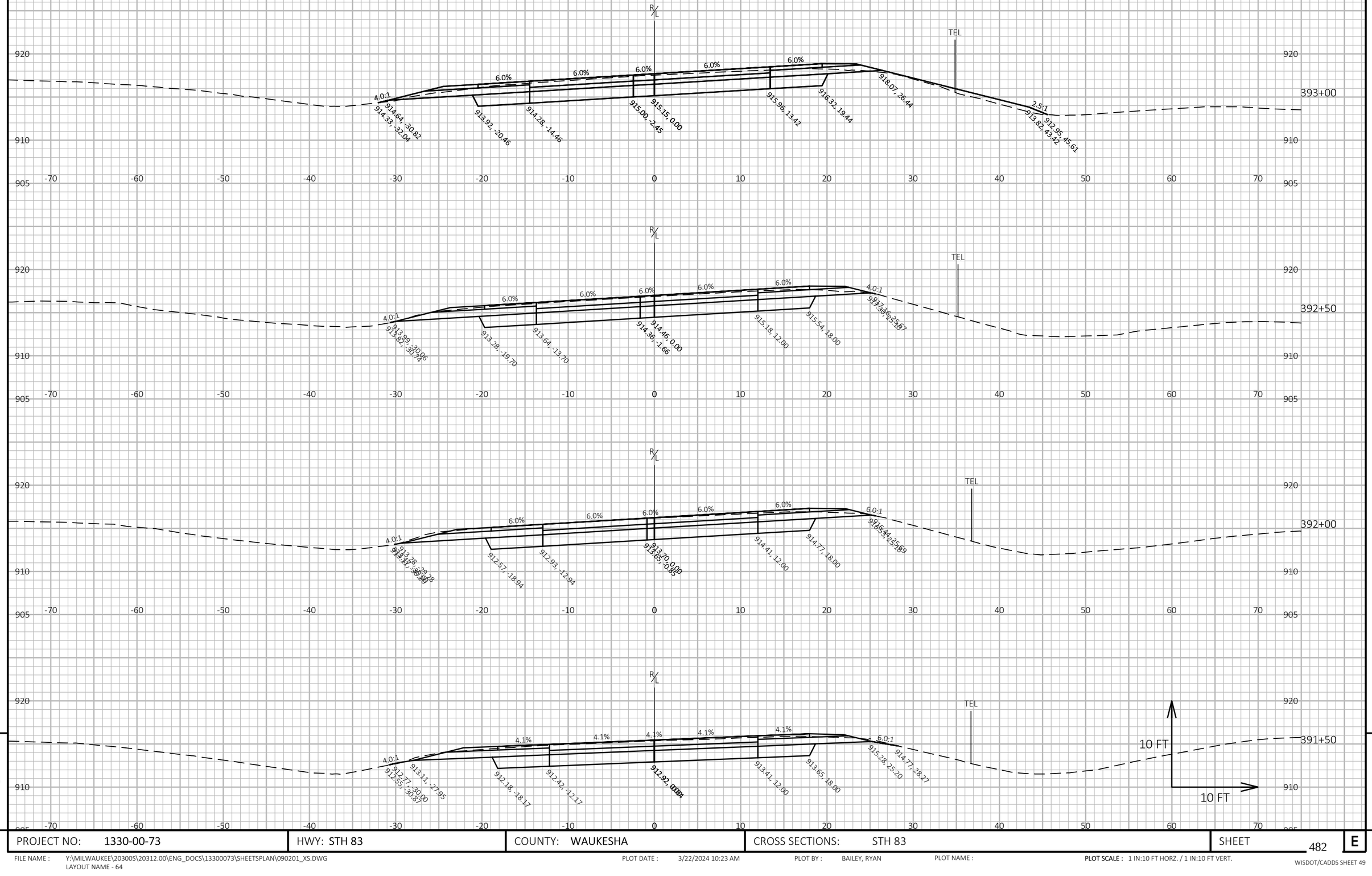


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 481	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 63

PLOT DATE : 3/22/2024 10:23 AM PLOT BY : BAILEY, RYAN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

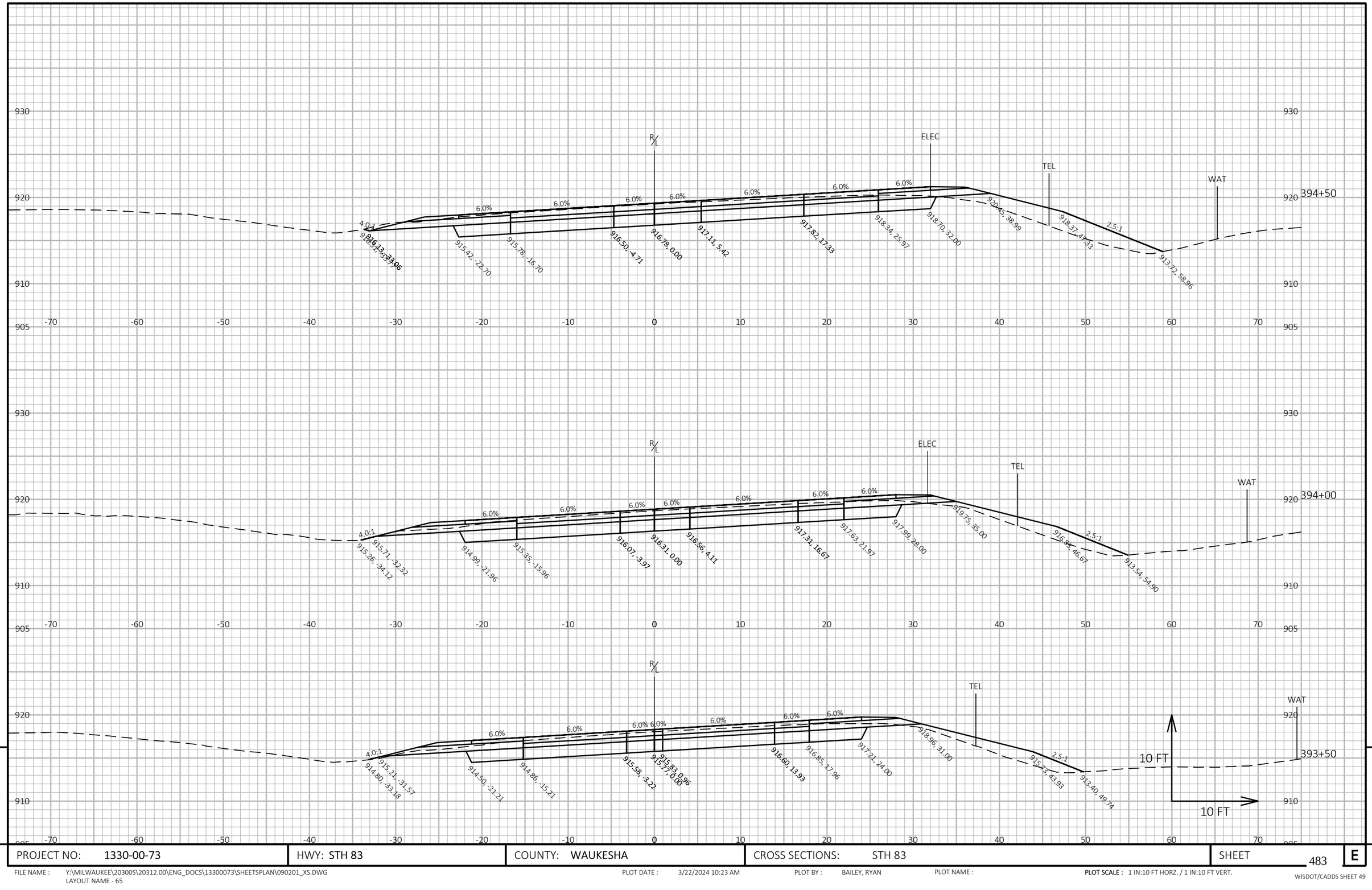
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 482	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 64

PLOT DATE : 3/22/2024 10:23 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

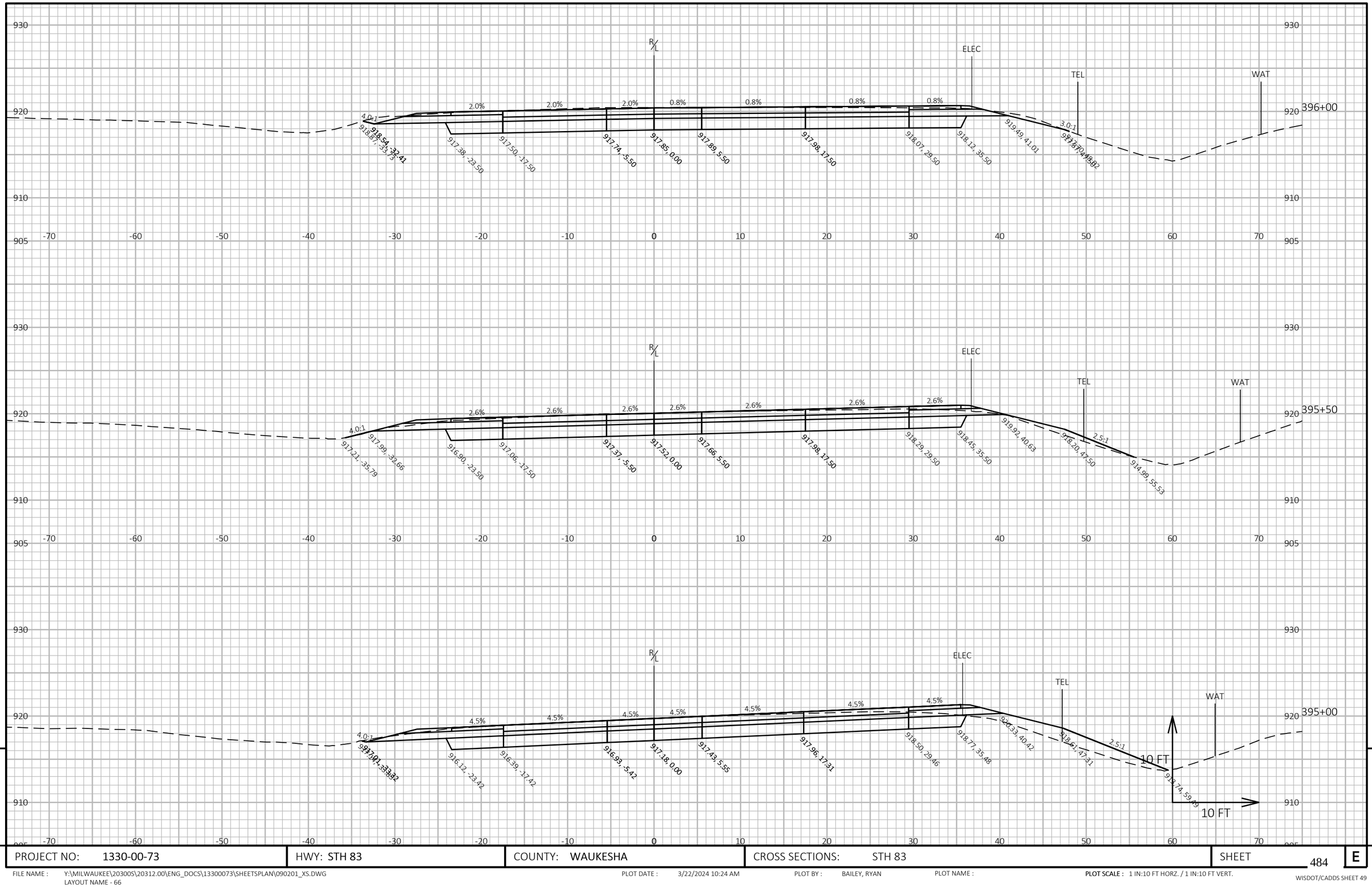


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 483 E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 65

PLOT DATE : 3/22/2024 10:23 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

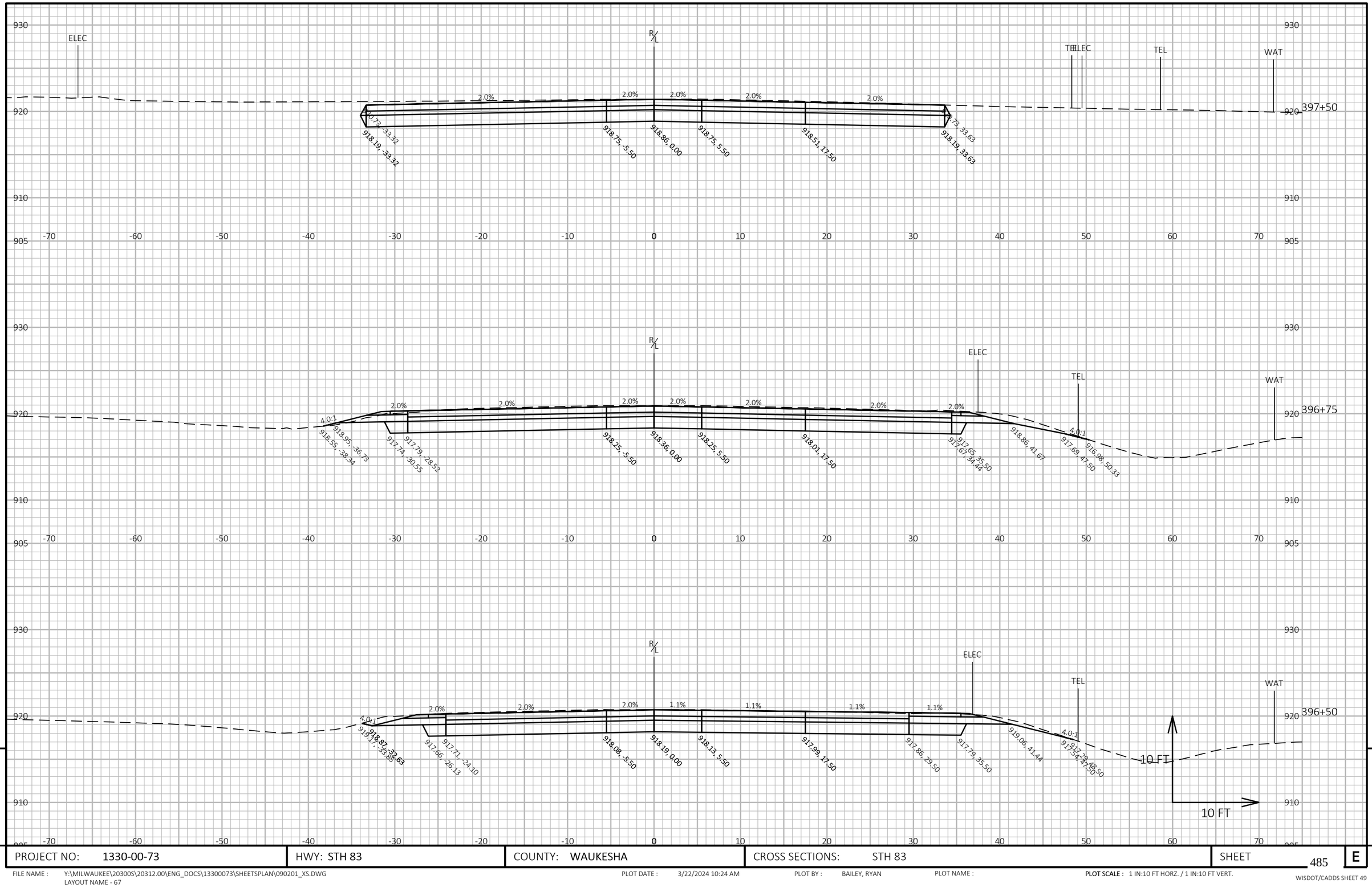
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 484	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 66

PLOT DATE : 3/22/2024 10:24 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

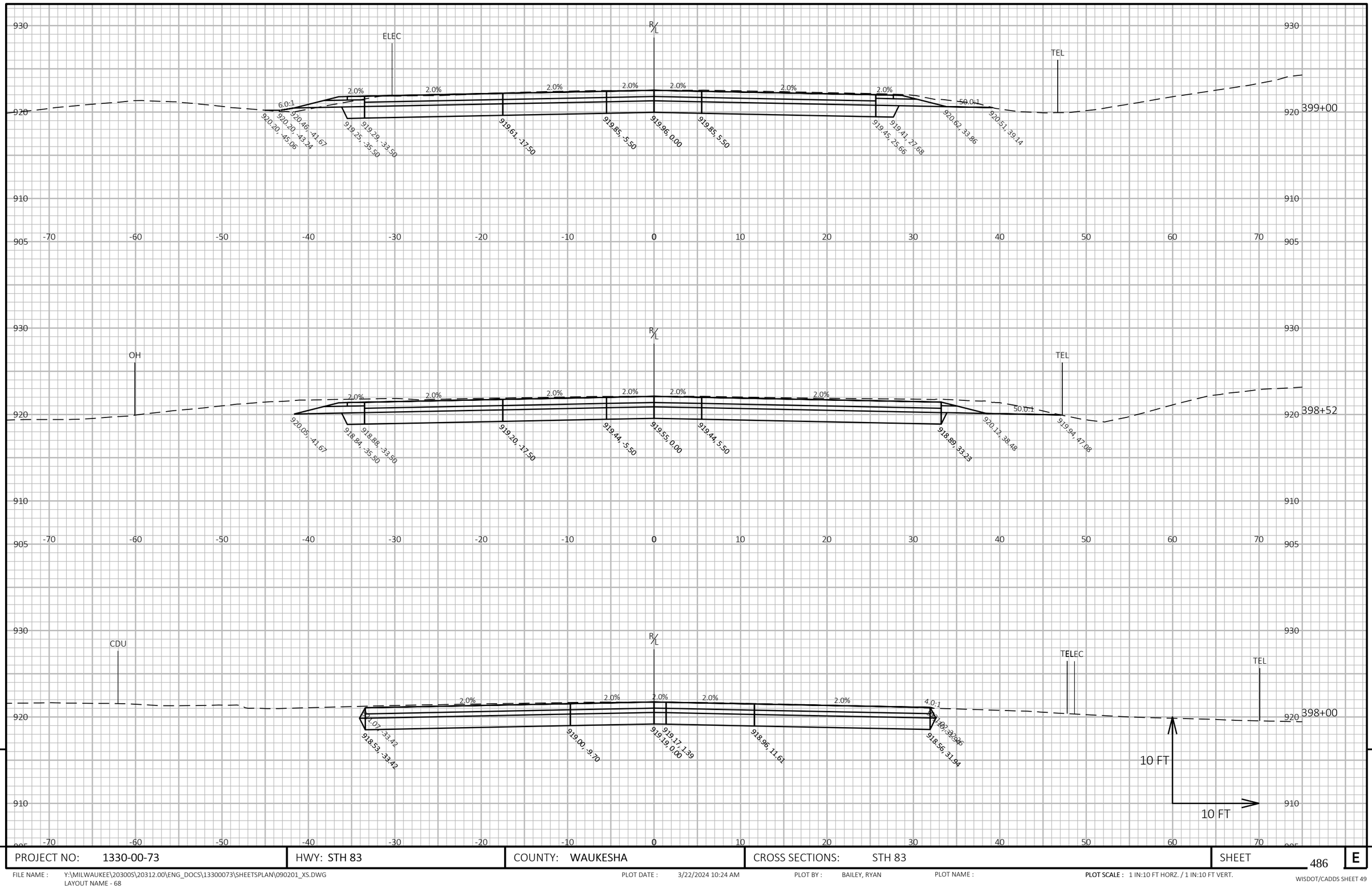


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 485	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 67

PLOT DATE : 3/22/2024 10:24 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

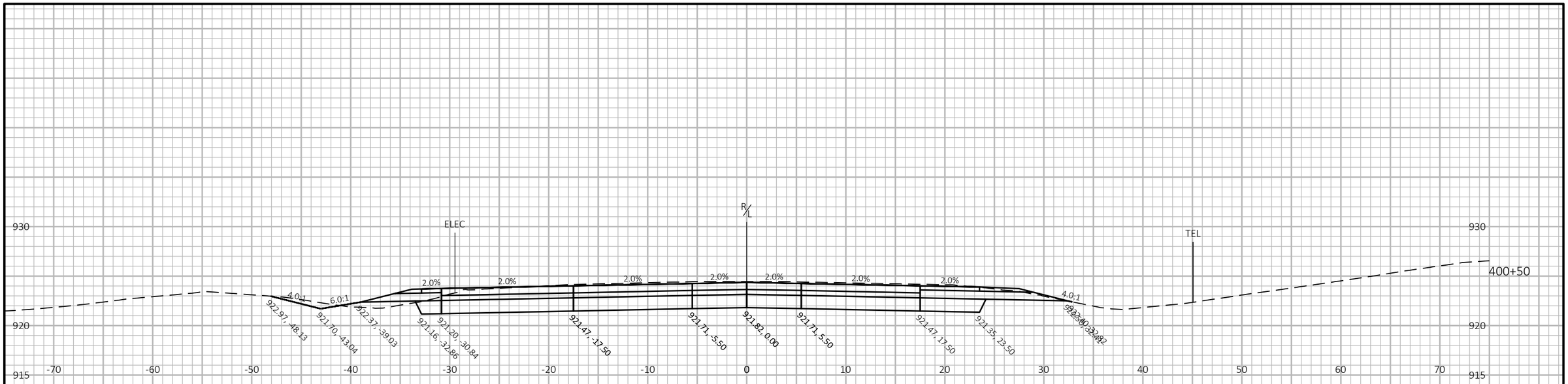


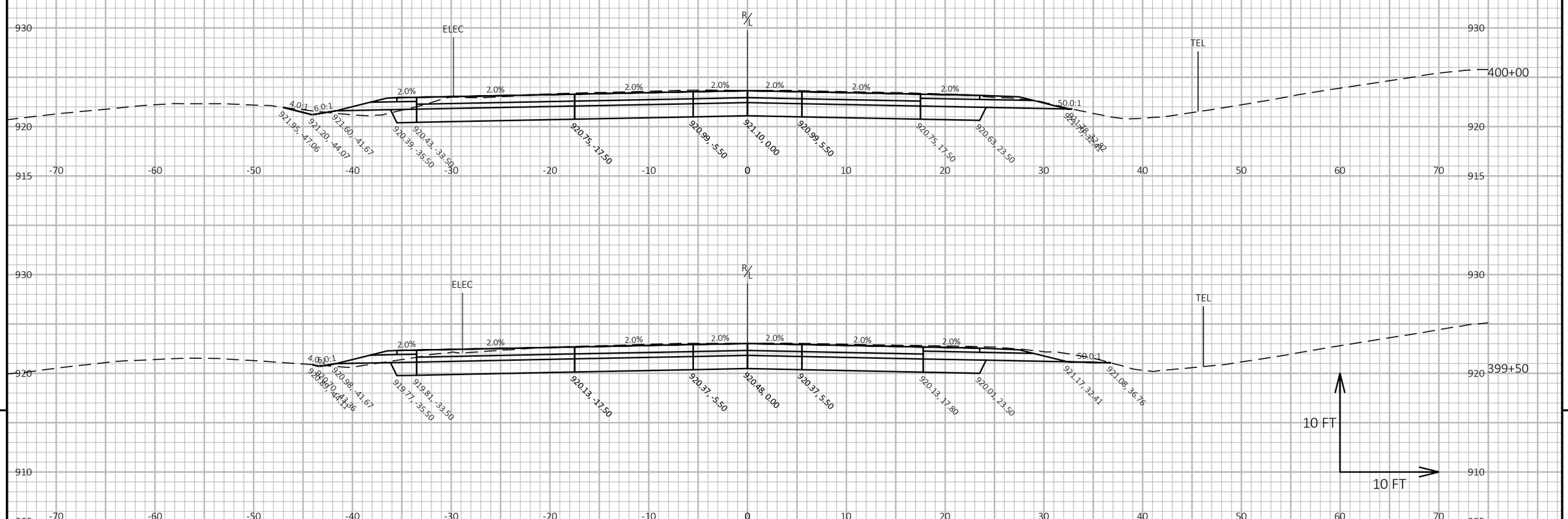
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 486	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 68

PLOT DATE : 3/22/2024 10:24 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 487	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 69

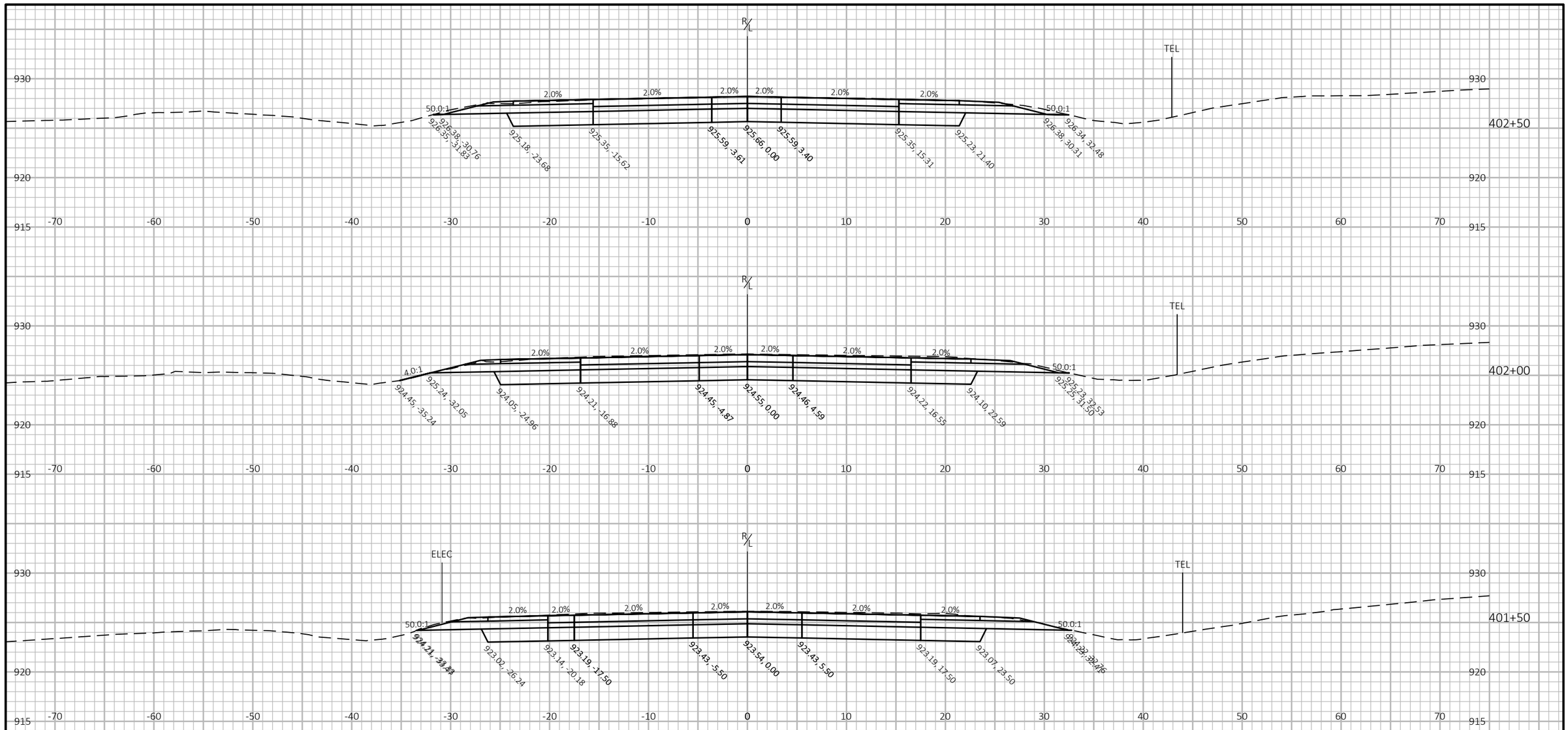
PLOT DATE : 3/22/2024 10:24 AM

PLOT BY : BAILEY, RYAN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

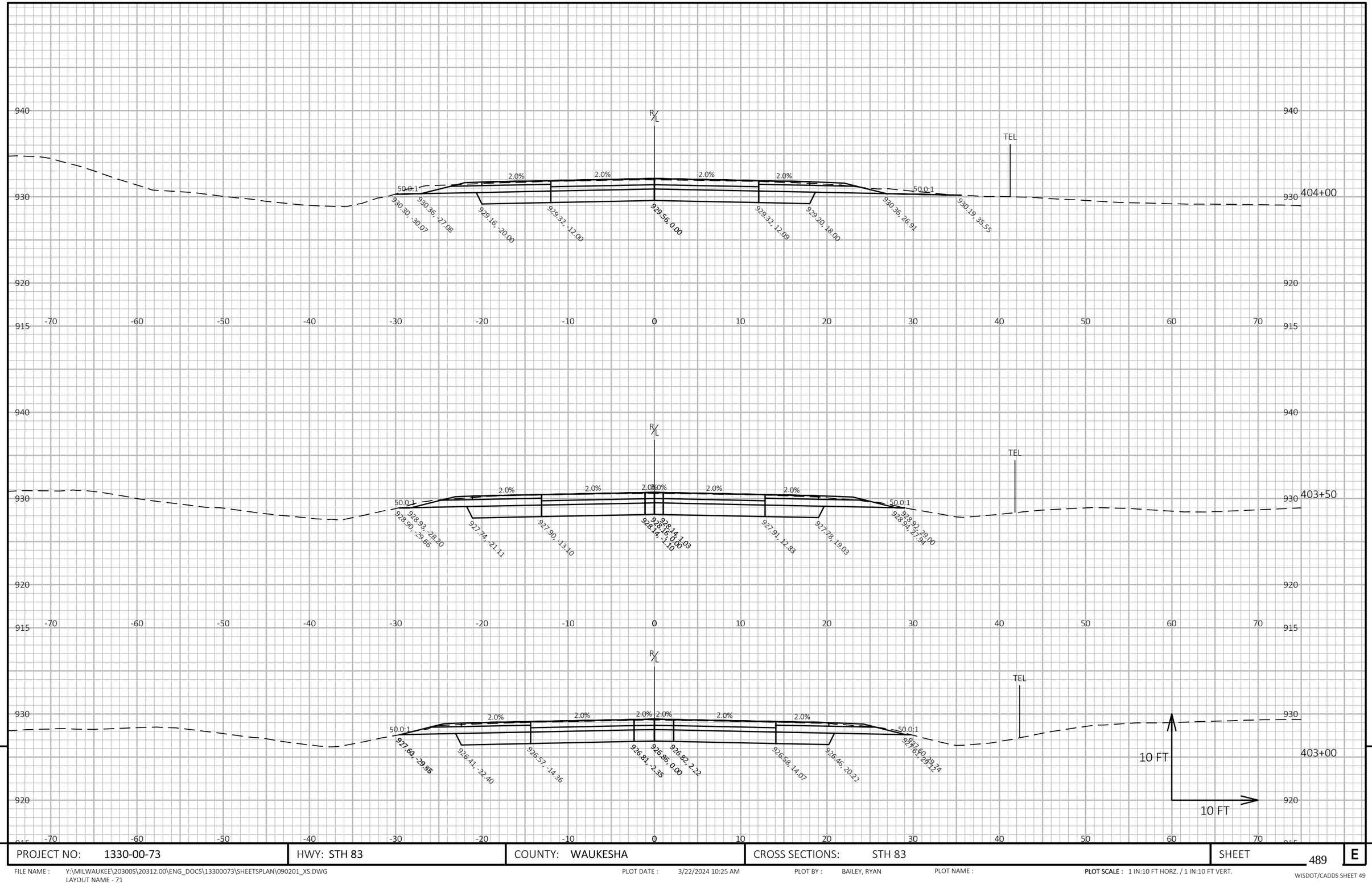
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 488	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 70

PLOT DATE : 3/22/2024 10:25 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

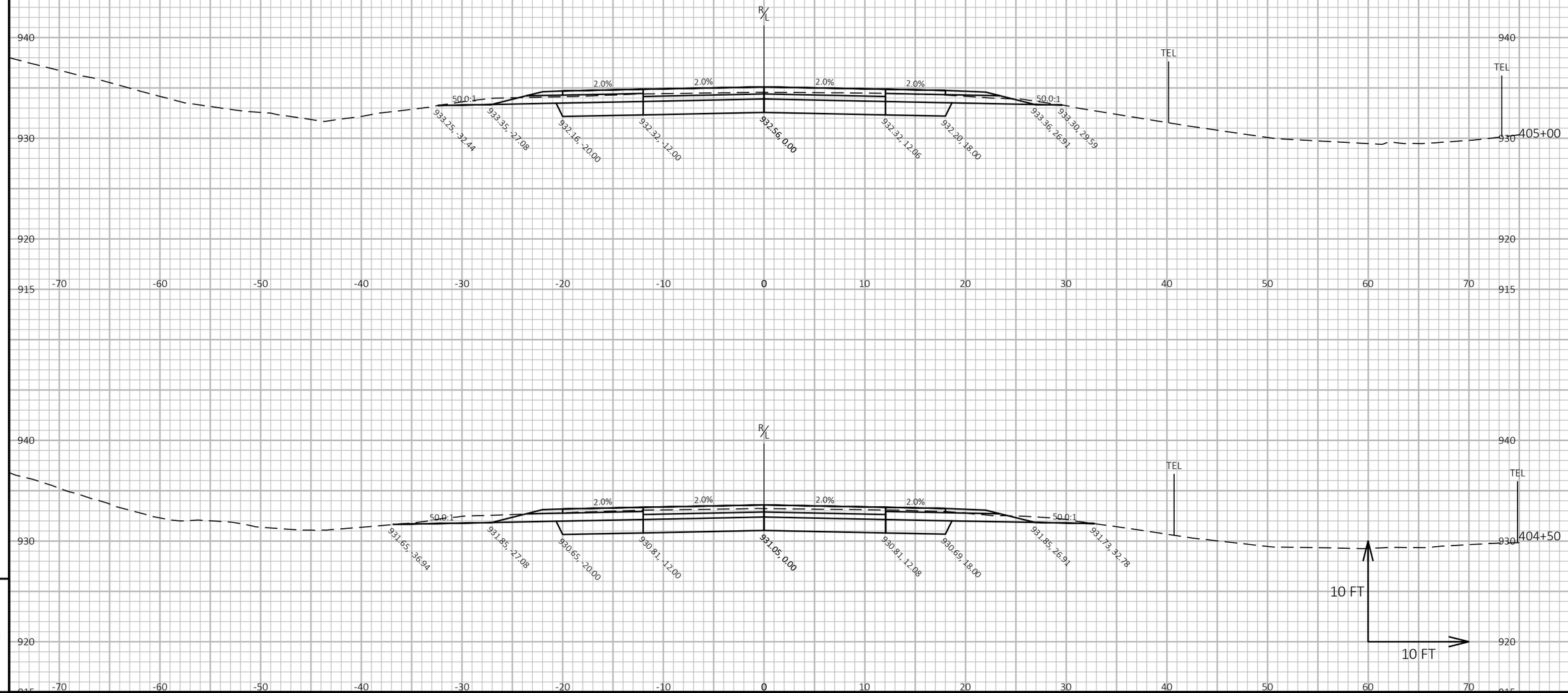
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 489	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 71

PLOT DATE : 3/22/2024 10:25 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

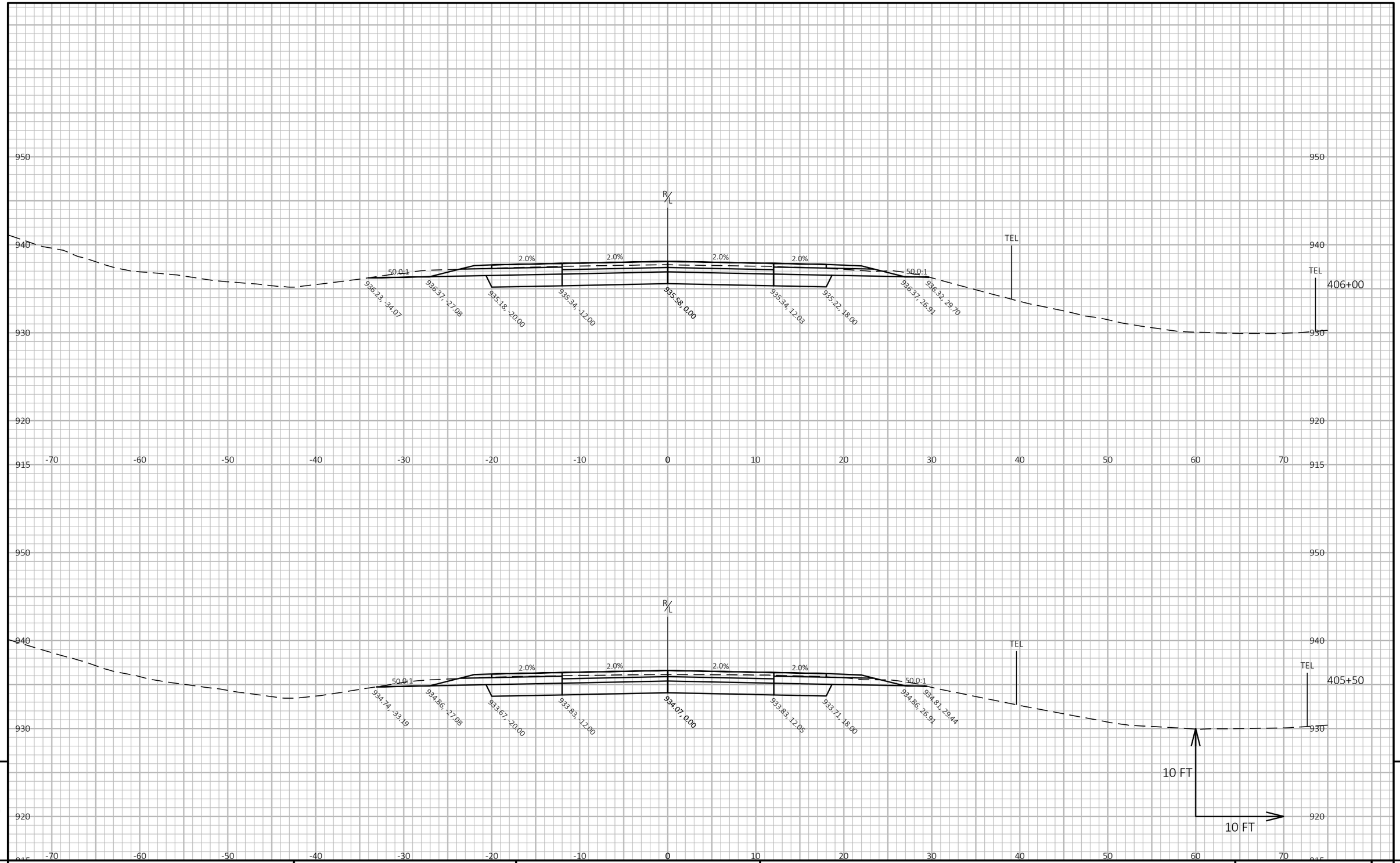
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 490	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 72

PLOT DATE : 3/22/2024 10:25 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



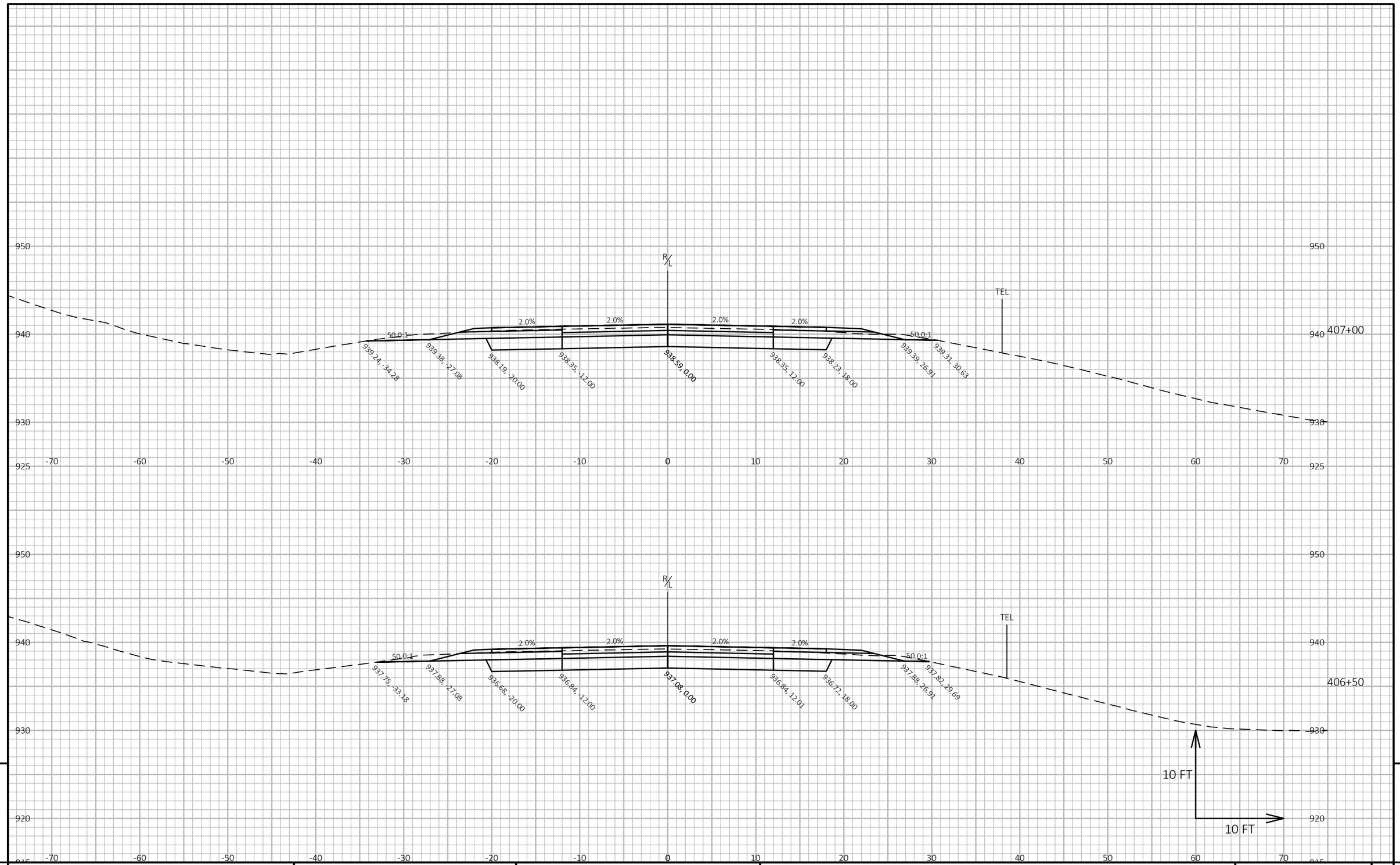
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 491	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 73

PLOT DATE : 3/22/2024 10:26 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

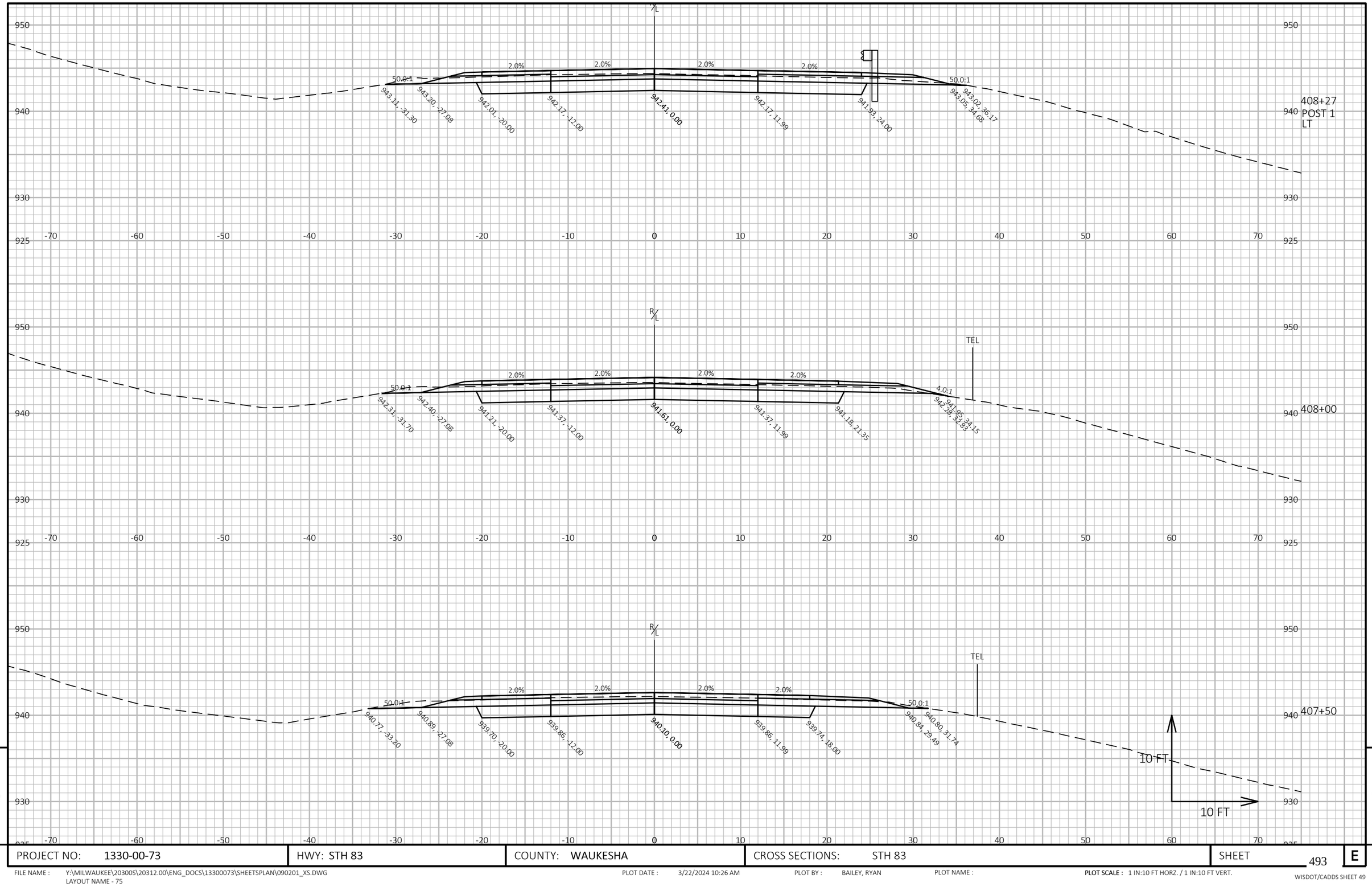
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 492	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 74

PLOT DATE : 3/22/2024 10:26 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



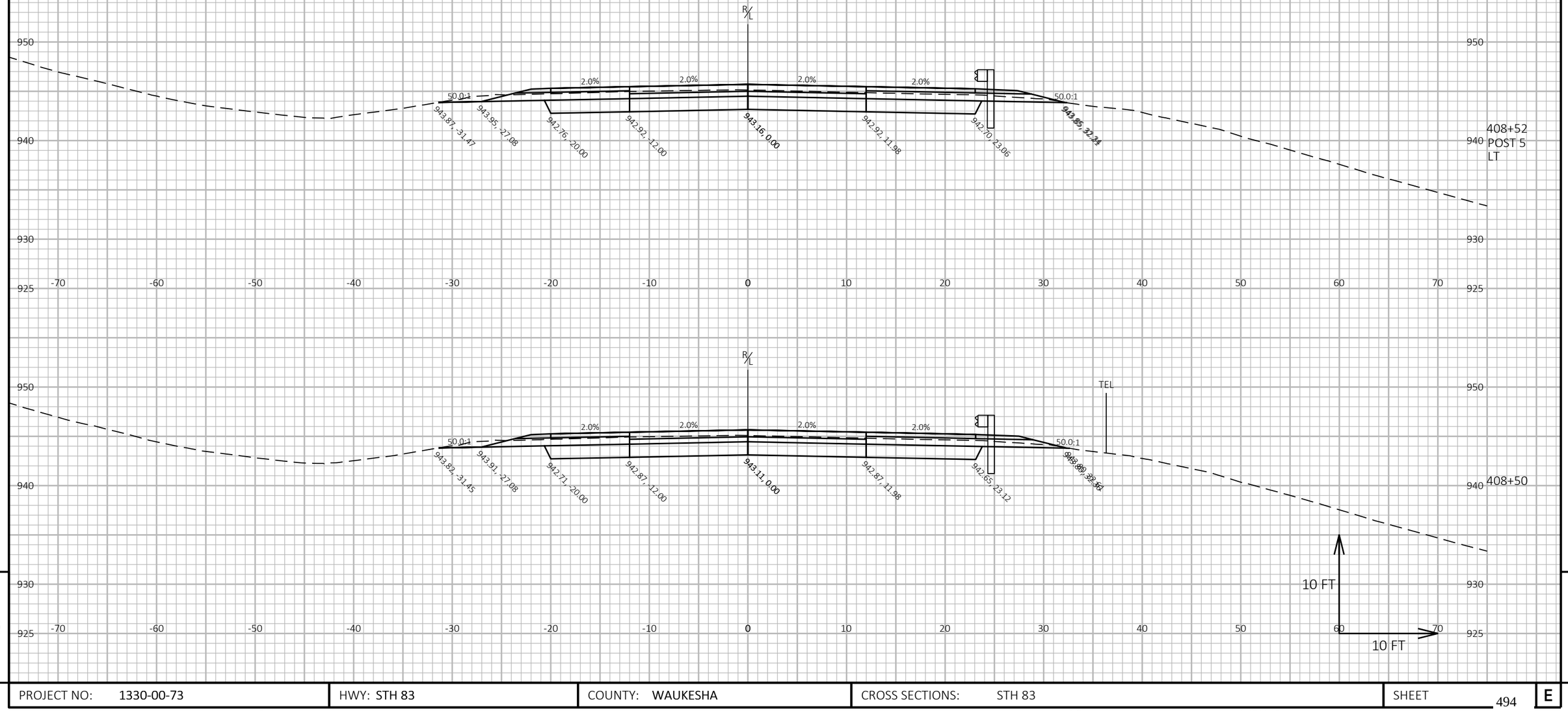
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 493	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 75

PLOT DATE : 3/22/2024 10:26 AM PLOT BY : BAILEY, RYAN PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

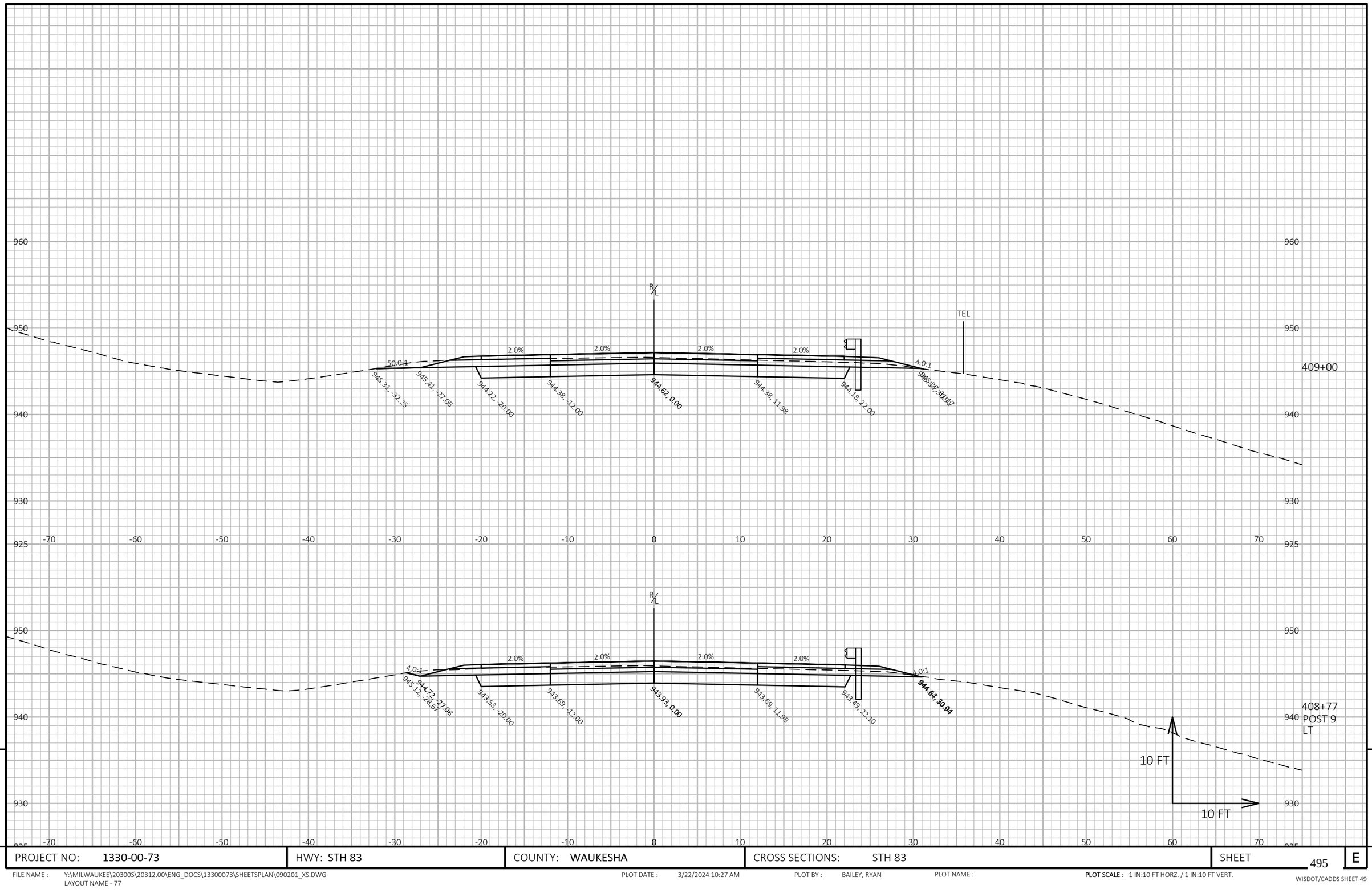


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 494	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 76

PLOT DATE : 3/22/2024 10:26 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

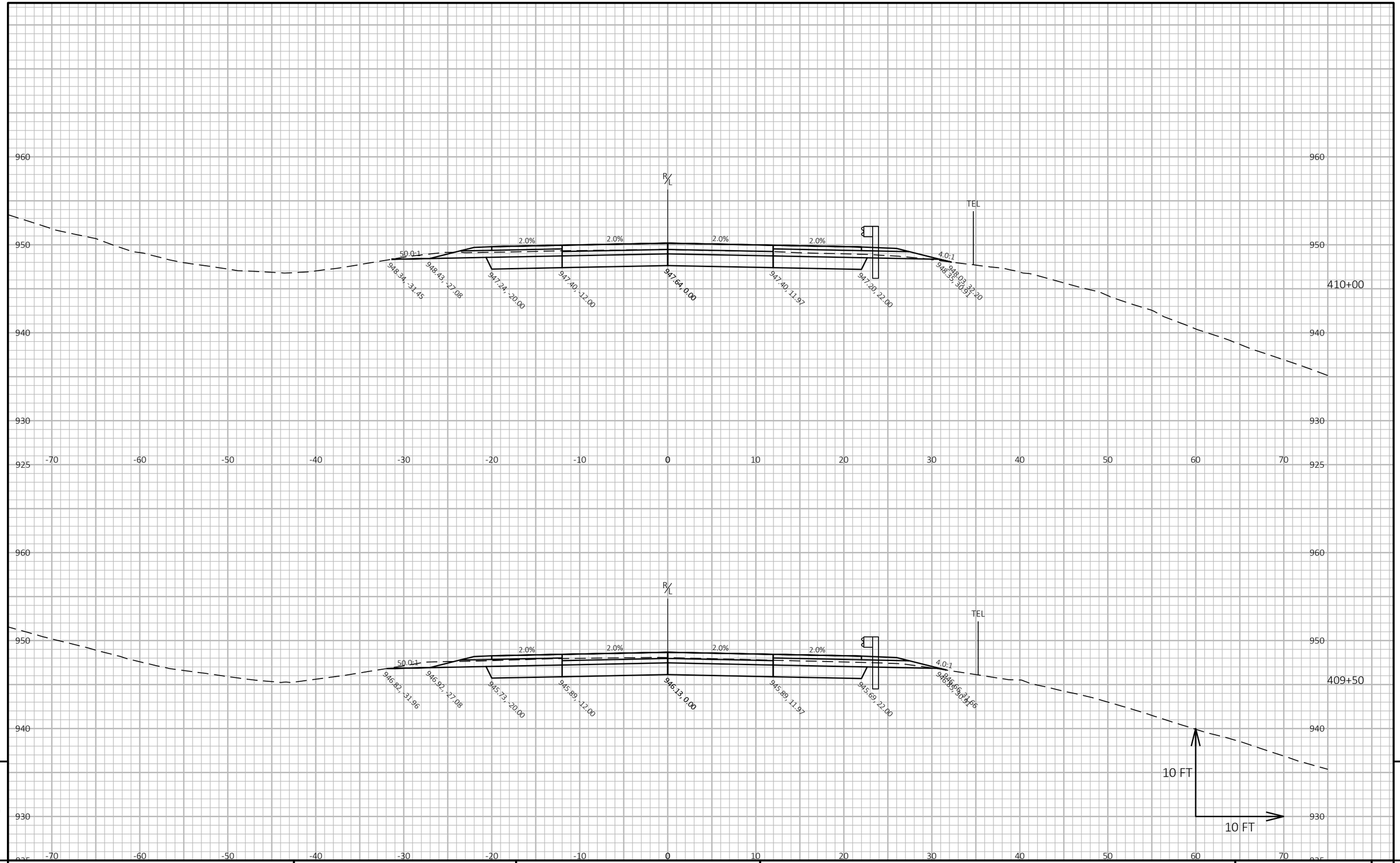
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 495	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 77

PLOT DATE : 3/22/2024 10:27 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

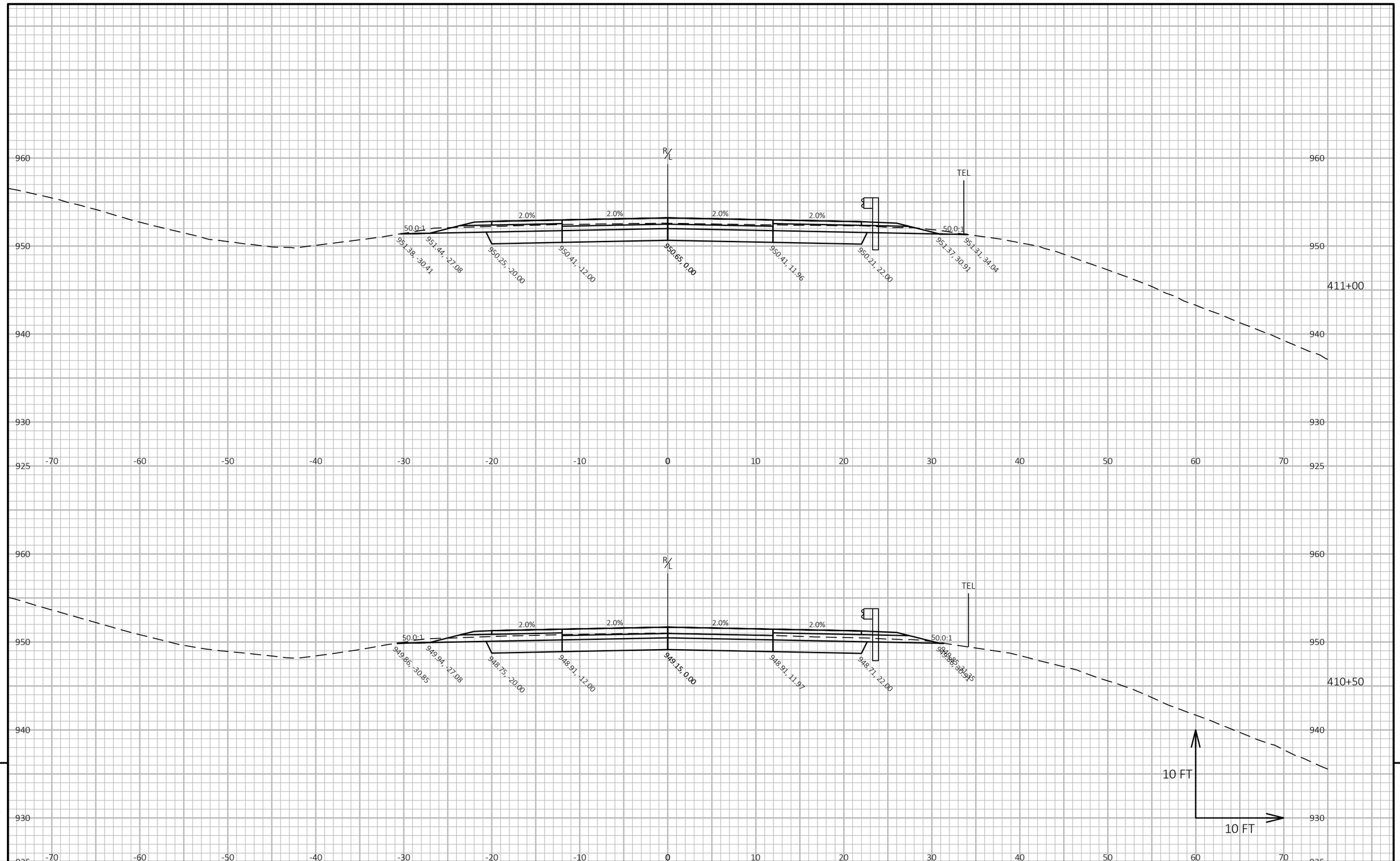


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 496	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 78

PLOT DATE : 3/22/2024 10:27 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



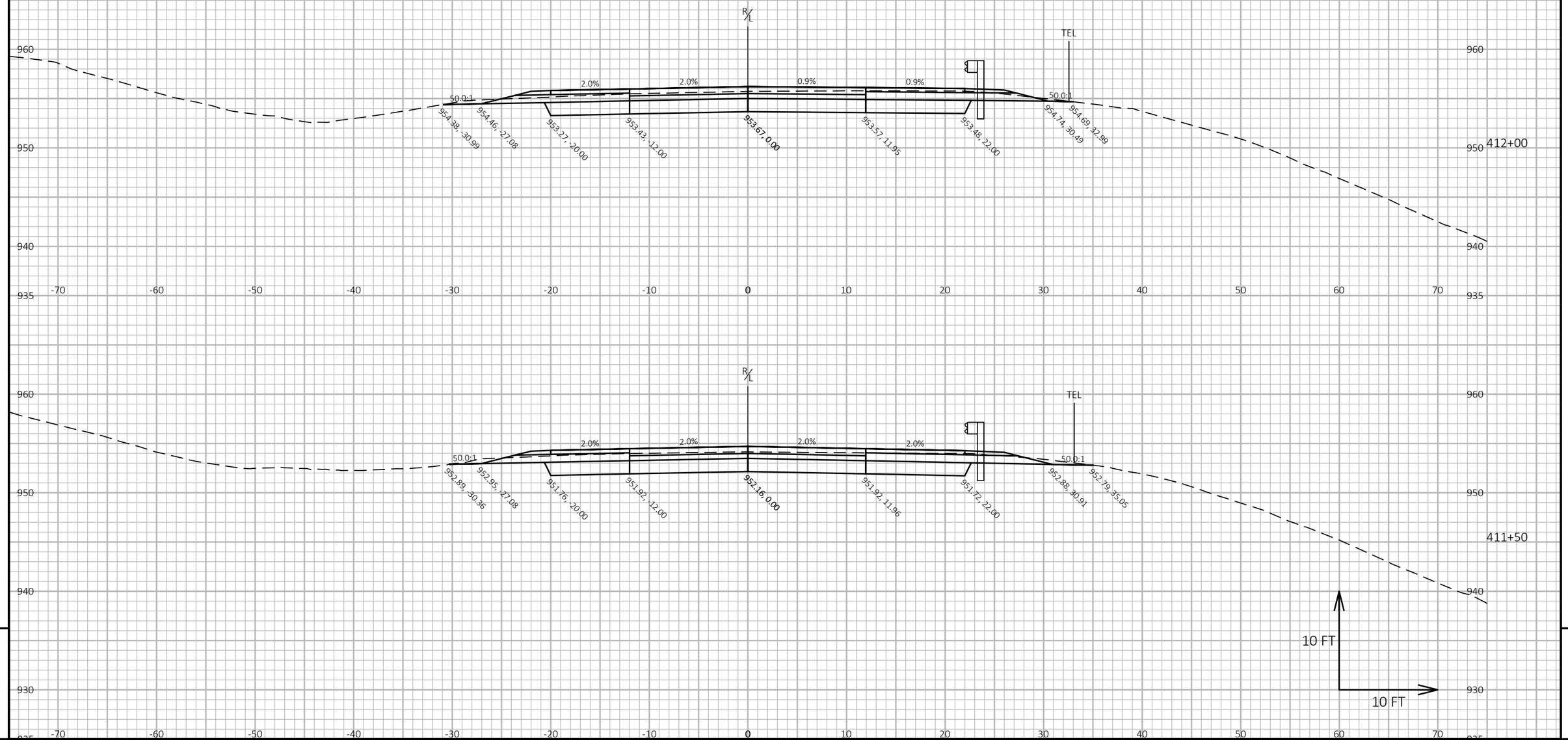
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 497	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 79

PLOT DATE : 3/22/2024 10:27 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

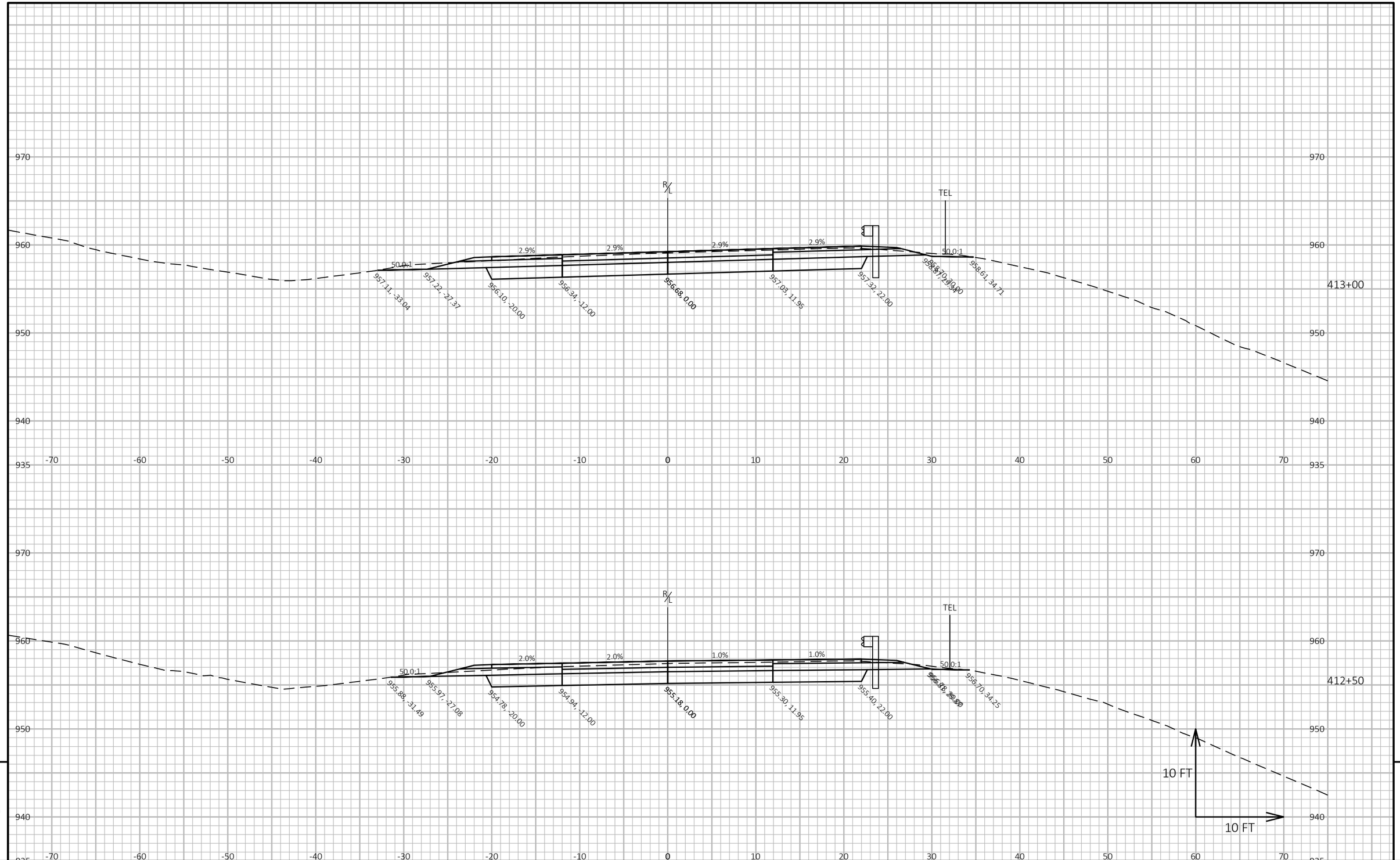


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 498	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 80

PLOT DATE : 3/22/2024 10:27 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

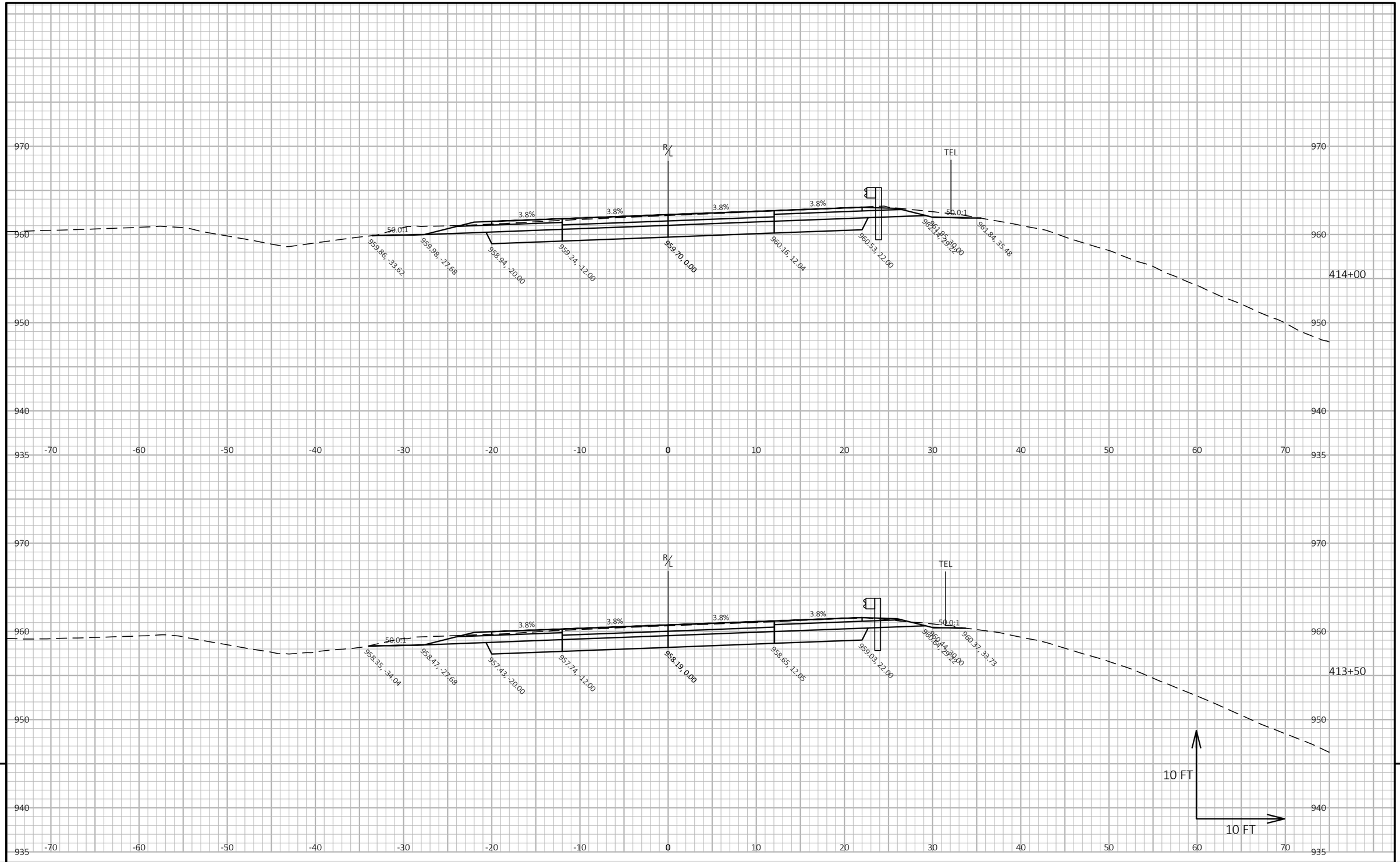


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 499 E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 81

PLOT DATE : 3/22/2024 10:28 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

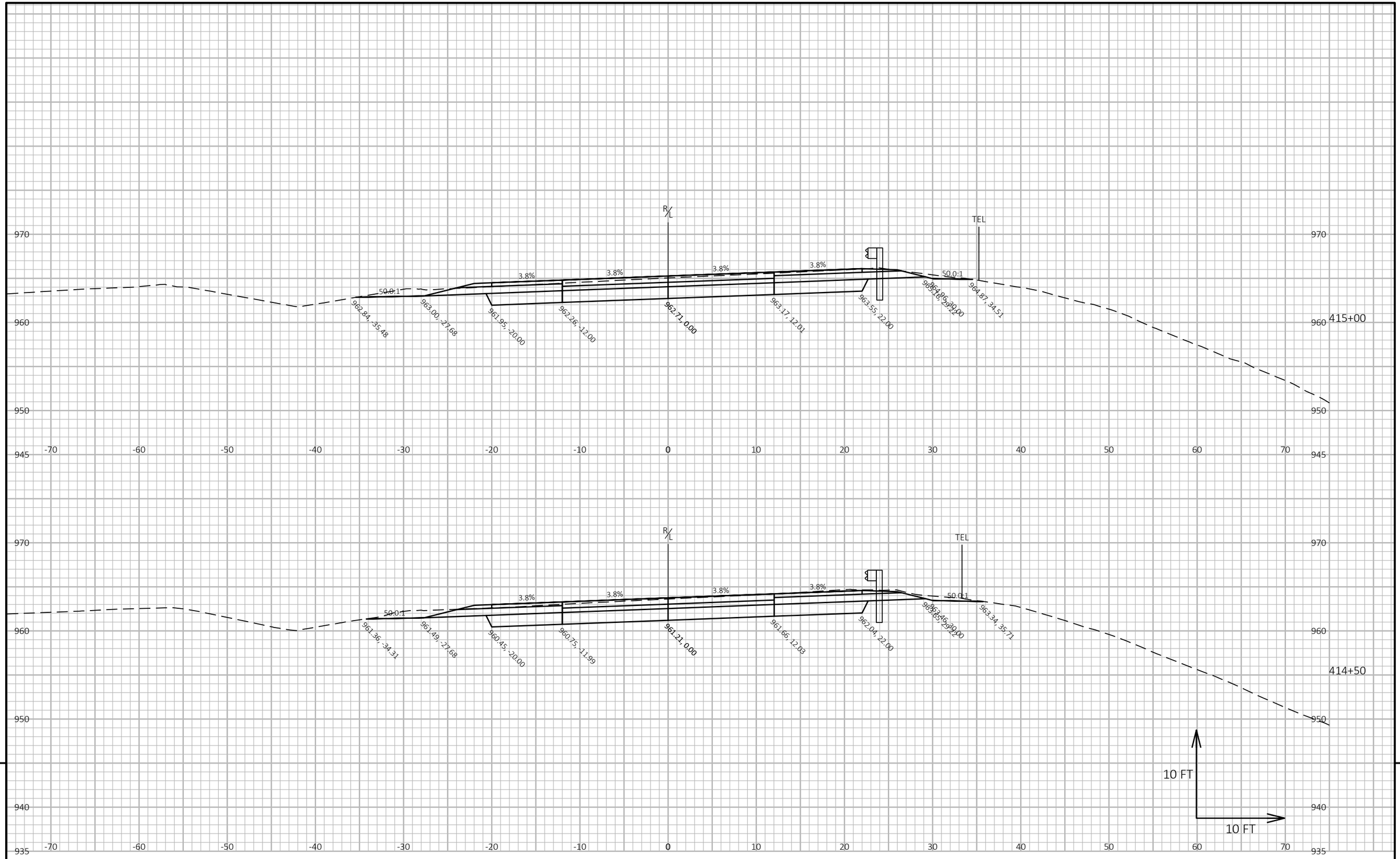
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 500	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 82

PLOT DATE : 3/22/2024 10:28 AM PLOT BY : BAILEY, RYAN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

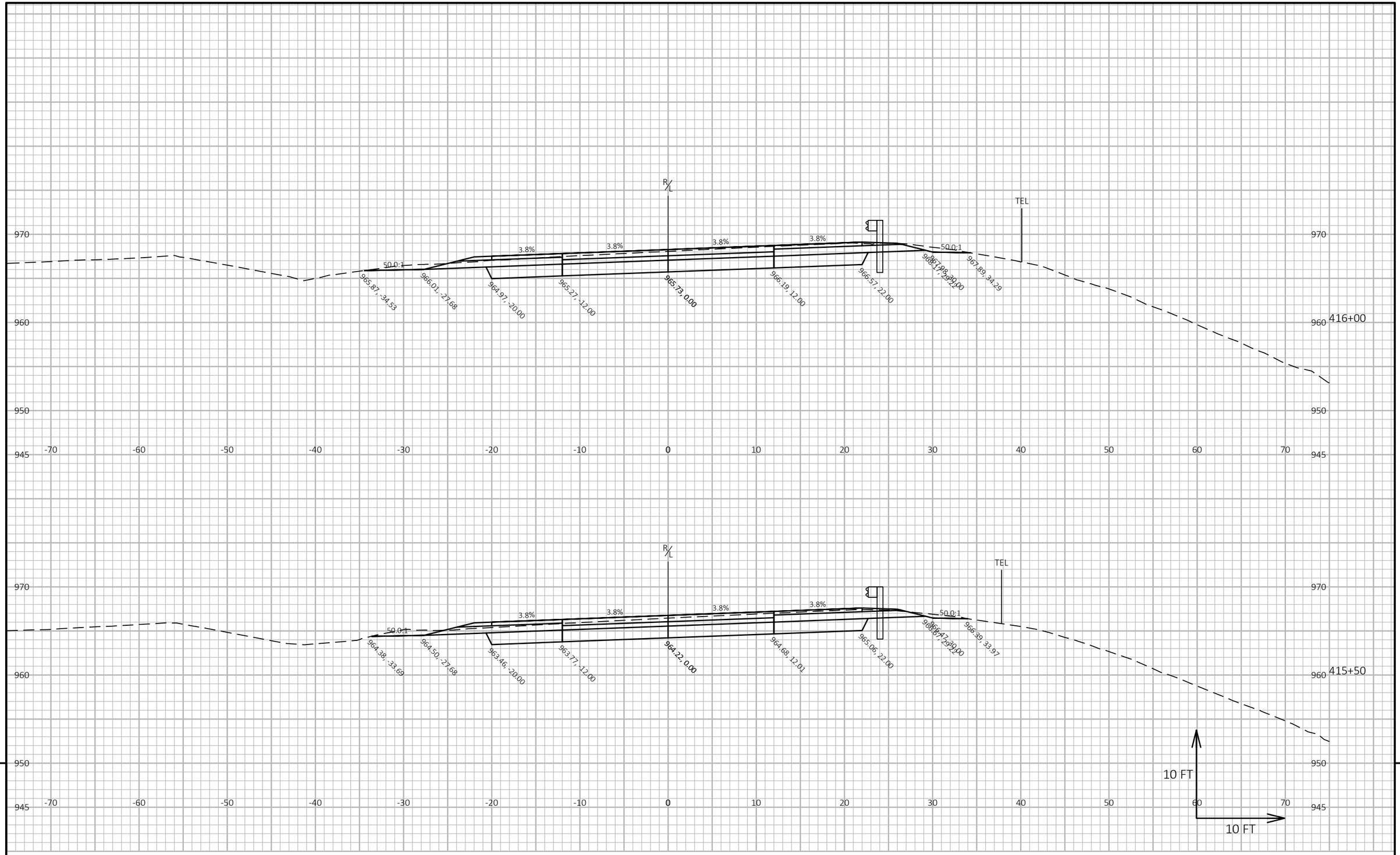
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 501	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 83

PLOT DATE : 3/22/2024 10:28 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

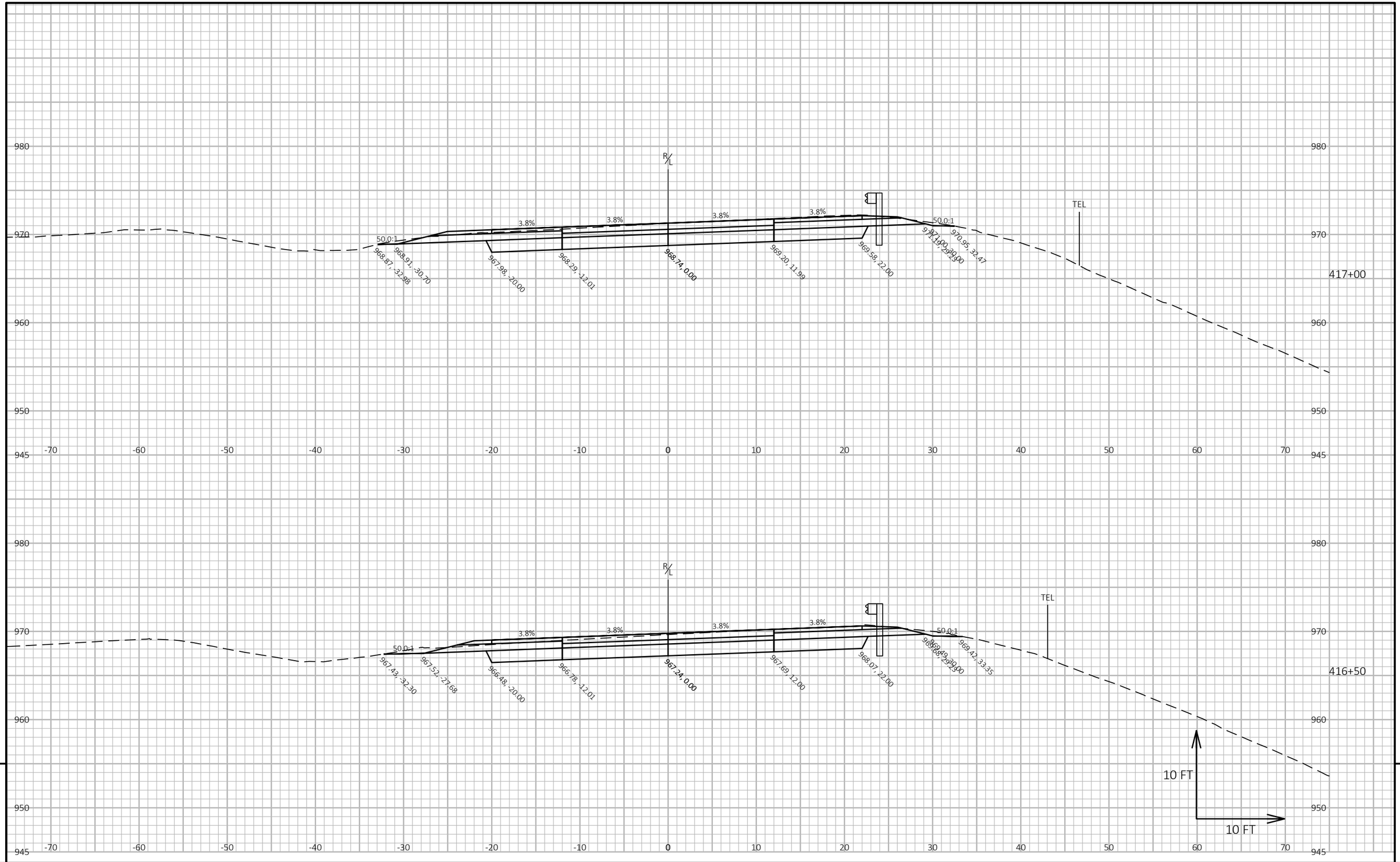


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 502	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 84

PLOT DATE : 3/22/2024 10:28 AM PLOT BY : BAILEY, RYAN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

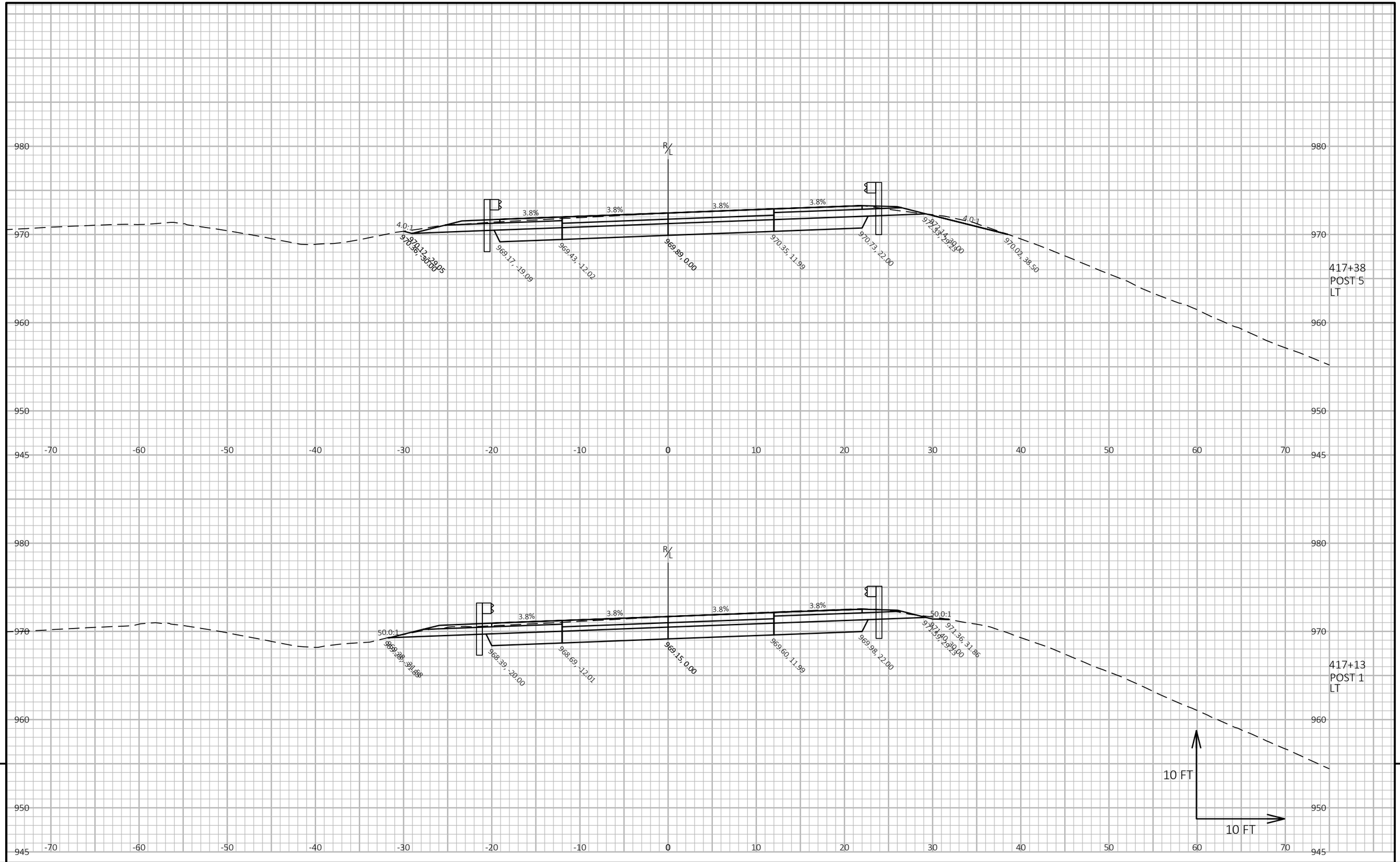
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 503	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 85

PLOT DATE : 3/22/2024 10:29 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

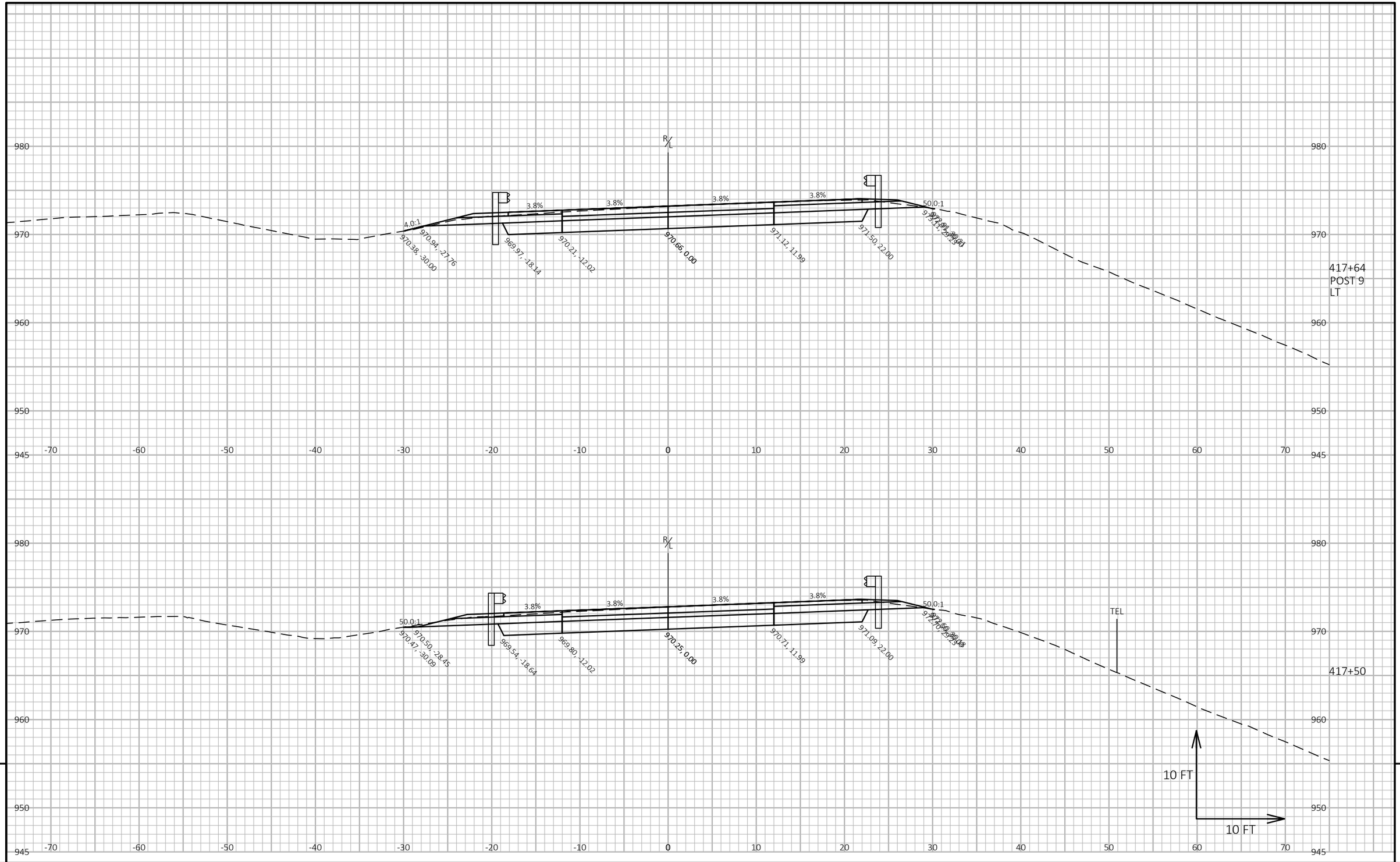


PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 504	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 86

PLOT DATE : 3/22/2024 10:29 AM PLOT BY : BAILEY, RYAN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

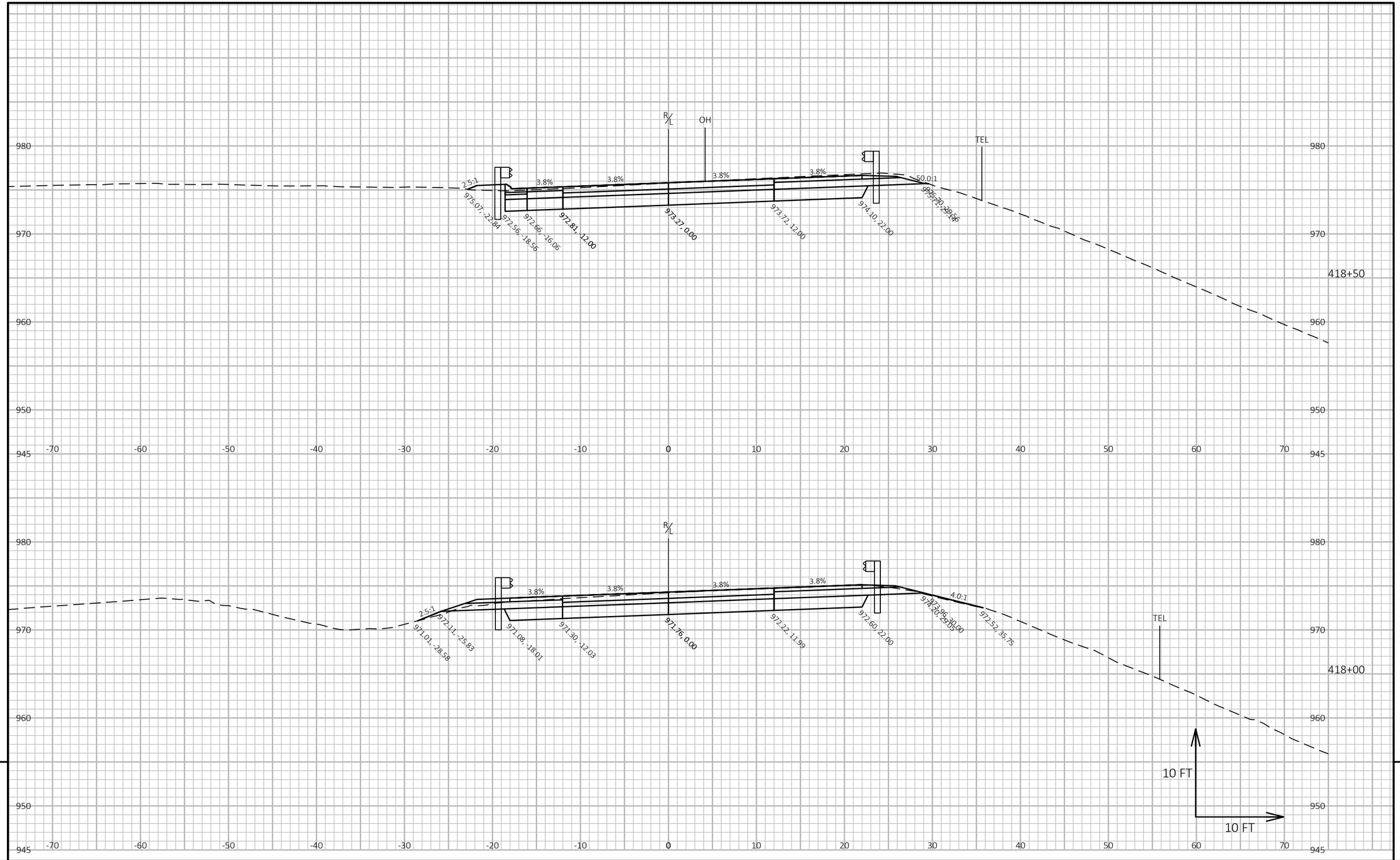
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 505	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 87

PLOT DATE : 3/22/2024 10:29 AM PLOT BY : BAILEY, RYAN PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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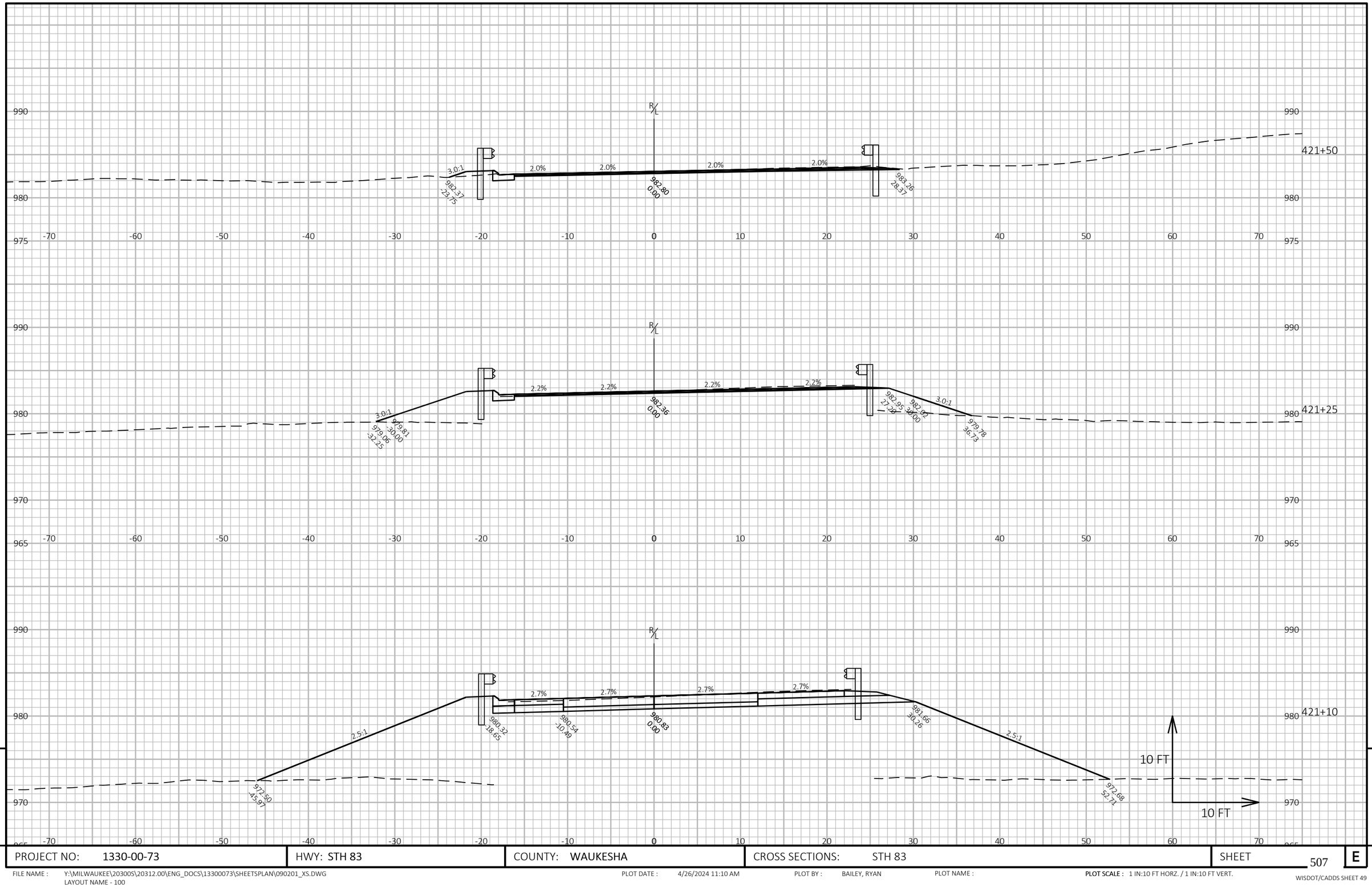
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 506	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 88

PLOT DATE : 3/22/2024 10:29 AM PLOT BY : BAILEY, RYAN PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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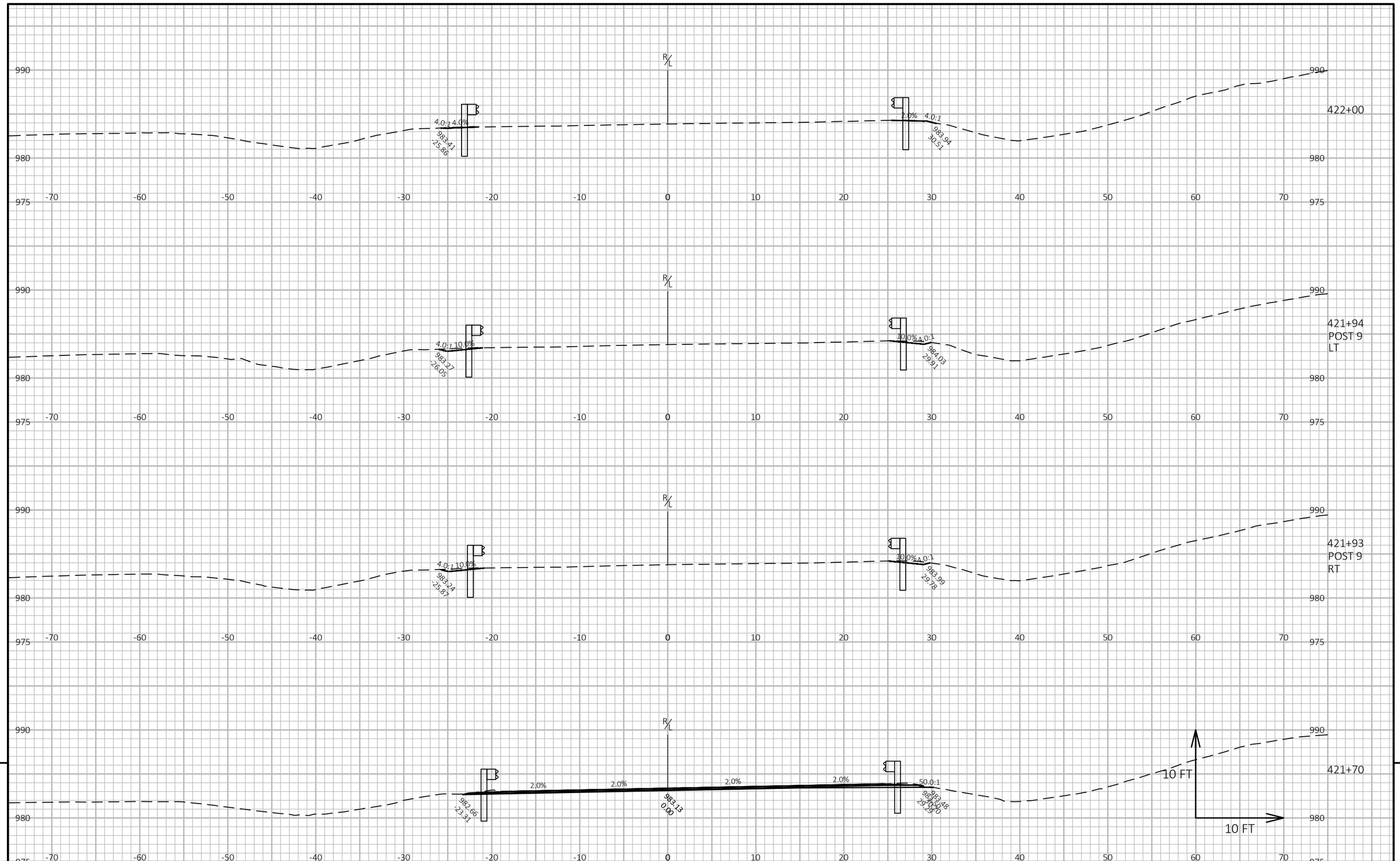
PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 507	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 100

PLOT DATE : 4/26/2024 11:10 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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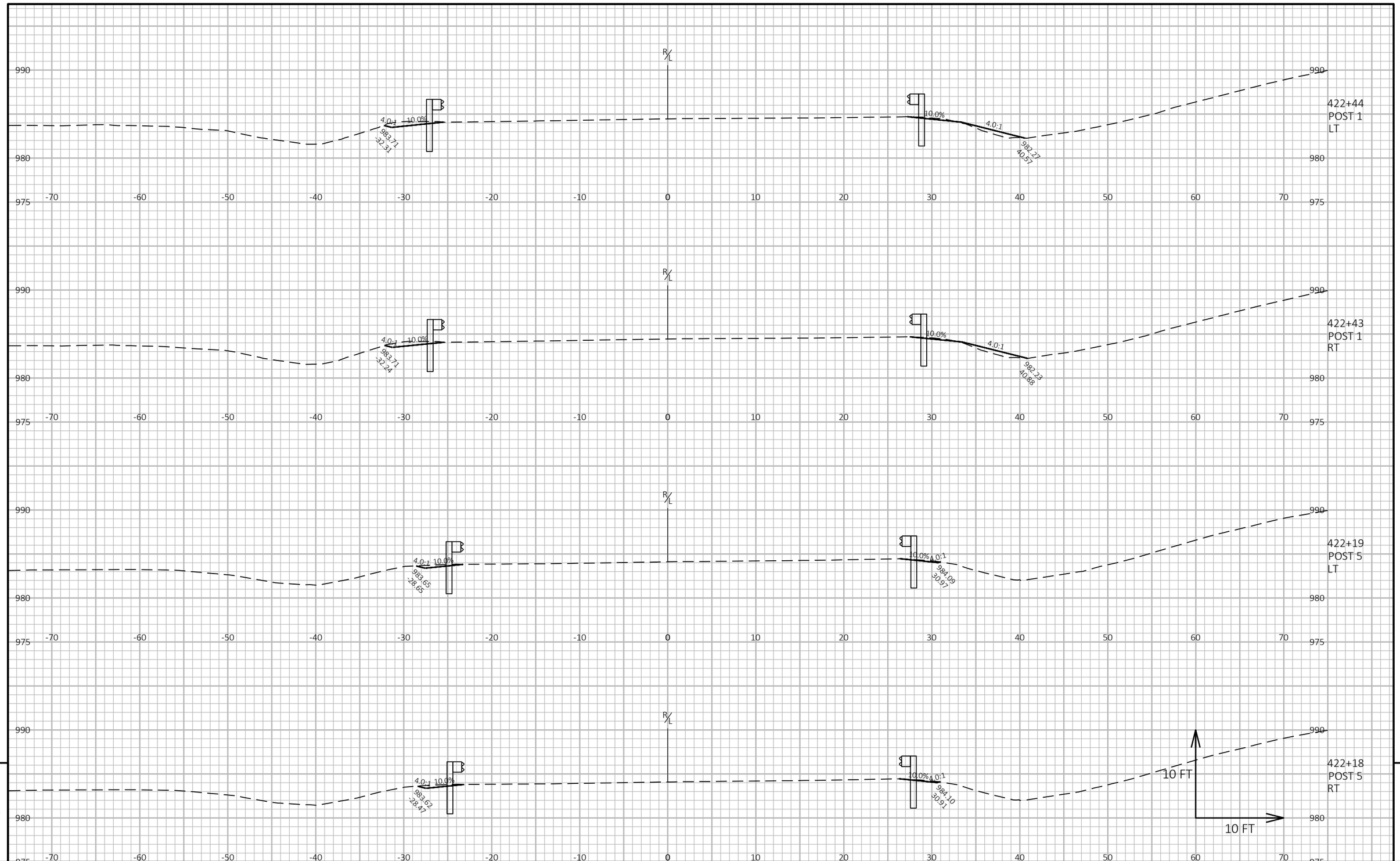
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PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 508	E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 101

PLOT DATE : 4/26/2024 11:10 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1330-00-73	HWY: STH 83	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83	SHEET 509 E

FILE NAME : Y:\MILWAUKEE\20300S\20312.00\ENG_DOCS\13300073\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 102

PLOT DATE : 4/26/2024 11:10 AM PLOT BY : BAILEY, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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