

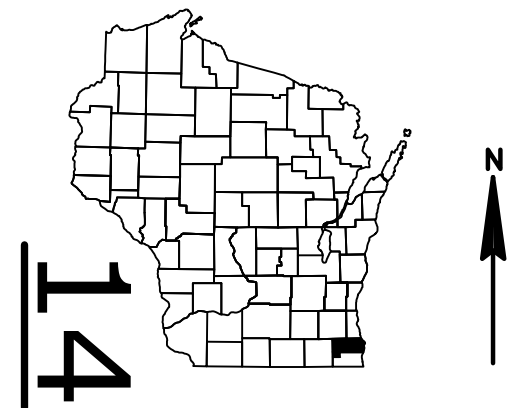
WKE
PROJECT ID: 2703-00-73
WITH: N/A
COUNTY: RACINE

DECEMBER 2019

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 = 78



DESIGN DESIGNATION 2703-00-03

A.A.D.T.	2016	=	115
A.A.D.T.	2036	=	115
D.H.V.	10%	=	12
D.D.		=	50/50
T.		=	3%
DESIGN SPEED		=	30 MPH
ESALS		=	8,900

CONVENTIONAL SYMBOLS

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

PROFILE	
GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE (To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
UTILITIES	
ELECTRIC	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

HOODS CREEK ROAD

BRIDGE OVER HOODS CREEK

LOCAL STREET

RACINE COUNTY

STATE PROJECT NUMBER
2703-00-73

R-22-E

R-23-E

BEGIN PROJECT
STA. 3+00.00

Y = 200,894.43
X = 617,642.12

B-51-153

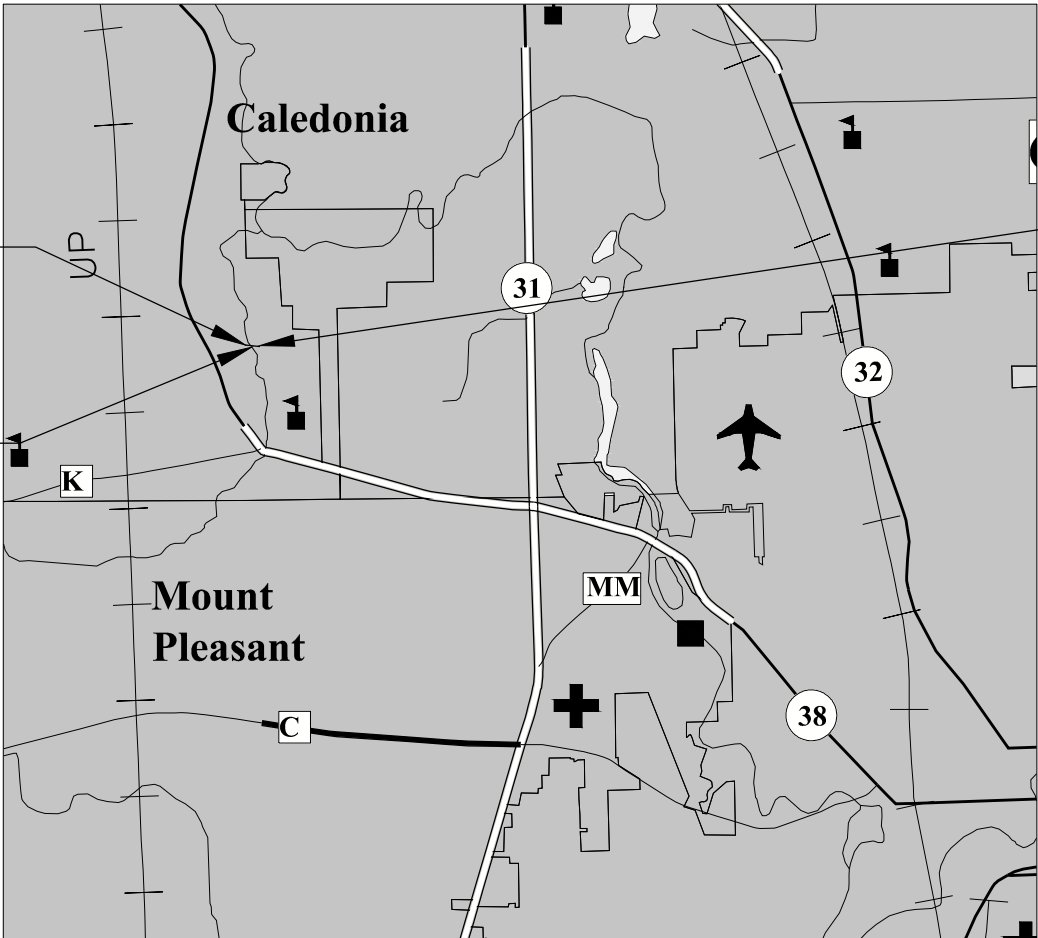
STA 4+34.59 TO STA 4+77.09

T-4-N

T-3-N

END PROJECT
STA. 6+42.50

Y = 200,872.02
X = 617,982.82



R-22-E

R-23-E

LAYOUT
SCALE 0 1.0 MI

TOTAL NET LENGTH OF CENTERLINE = 0.064 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, RACINE COUNTY, NAD83 (2016), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES. ELEVATIONS ON THE PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2703-00-73		

ACCEPTED FOR VILLAGE OF CALEDONIA	
DATE: 7-24-19	JC [Signature] (VILLAGE ADMINISTRATOR)
ORIGINAL PLAN PREPARED BY:	
Foth Foth Infrastructure & Environment, LLC 2014 E. 10th Street Suite 278, Lincoln Center II West Allis, WI 53227 Phone: 414-238-7800 Fax: 414-238-7801	
DATE: 7/24/19	[Signature] (CONSULTANT)
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	FOTH
Designer	FOTH
Project Manager	Kathleen Kramer
Regional Examiner	
Regional Supervisor	Jeff Bohan
APPROVED FOR THE DEPARTMENT	
DATE: 7/24/19	K Kramer [Signature] (Signature)
E	

GENERAL NOTES:

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER

THE LOCATIONS OF EXISTING & 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 CONTRACTORS 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.

WHEN THE QUANTITY OF BASE AGGREGATE DENSE 3/4 INCH, BASE AGGREGATE DENSE 1/4 INCH OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL DEPTH VARY DEPENDING ON THE ACTUAL DISTRIBUTION OF THE MATERIAL AS APPROVED BY THE ENGINEER IN THE FIELD.

RESHAPE AND SEED, MULCH AND FERTILIZE ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY CONTRACTOR OPERATIONS OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

PURSUANT TO CHAPTER 59 OF THE WISCONSIN STATUES, THE CONTRACTOR SHALL CAREFULLY MAKE A SEARCH FOR EVIDENCE OF ALL LANDMARKS, BENCHMARKS, AND OTHER CONTROL POINTS IN ALL AREAS WHERE SUCH LANDMARKS, BENCHMARKS, AND OTHER CONTROL POINTS MAY EXIST.

THE CONTRACTOR IS TO WORK WITH UTMOST CARE AND PROTECT ALL SURVEY MARKERS. REMOVAL OF ANY SURVEY MARKERS IS TO BE WITH THE APPROVAL OF THE ENGINEER.

ANY PROPOSED CHANGES BY THE CONTRACTOR TO TRAFFIC CONTROL DEVICES/STAGING SHALL BE PRESENTED TO THE ENGINEER IN WRITING A MINIMUM OF 48 HOURS PRIOR TO INSTALLATION FOR REVIEW AND APPROVAL.

PRIVATE AND COMMERCIAL ENTRANCES SHALL BE RESTORED IN KIND TO EXISTING CONDITIONS, AS SHOWN ON THE PLANS, OR AS DIRECTED BY THE ENGINEER. CONSTRUCTION LIMITS ON PRIVATE AND COMMERCIAL ENTRANCES SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

ALL COMMERCIAL AND RESIDENTIAL DRIVEWAYS ARE TO REMAIN OPEN DURING CONSTRUCTION. TEMPORARY CLOSINGS WILL BE NECESSARY AND ALLOWED AS APPROVED BY THE ENGINEER AND COORDINATED WITH PROPERTY OWNERS. 48 HOUR NOTICE TO THE PROPERTY OWNER IS REQUIRED PRIOR TO THE TEMPORARY CLOSING.

EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE AT APPROXIMATE LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S EROSION CONTROL IMPLEMENTATION PLAN AND APPROVED BY THE ENGINEER IN CONSULTATION WITH THE WDNR. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

MISCELLANEOUS REMOVAL ITEMS SHALL BE REMOVED TO AN EXISTING JOINT, SAWCUT WHERE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

ALL SIGN LOCATIONS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO INSTALLATION.

LOCATIONS OF EXISTING UTILITIES AND RIGHT OF WAY SHOWN ON THE CROSS SECTIONS ARE APPROXIMATE AND ARE TO BE USED FOR REFERENCE ONLY.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED AND MULCHED.

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS BUT IS MEASURED AND PAID FOR AS (COMMON, OR ROCK) EXCAVATION.

CONTRACTOR SHALL NOT DISTURB WETLANDS MARKED RESTRICTED NO-IMPACTS.

RESTORATION NOTES:

- 1. SOIL LAYERS WILL BE SEGREGATED DURING CONSTRUCTION ACTIVITIES, FOLLOWED BY REPLACEMENT OF SOILS IN KIND.
- 2. WETLANDS WILL BE GRADED TO RESTORE TO ORIGINAL CONDITIONS.

WETLAND SUBSOIL REQUIREMENTS:

- a. IN AREAS OF PERMIT-APPROVED WETLAND IMPACTS, THE WETLAND SUBSOIL (MINUS THE TOPSOIL WHICH CAN BE STOCKPILED WITH OTHER SITE TOPSOIL) MUST BE SEPARATED AND REPLACED ACCORDINGLY FOR THE TEMPORARILY DISTURBED WETLANDS AND RESTORE THEM TO THEIR PREVIOUS WETLAND HYDROLOGY, HYDROPHYTIC VEGETATION AND HYDRIC SOIL. SEE RESTORATION NOTE #1 . "SOIL LAYERS MUST BE SEGREGATED DURING CONSTRUCTION ACTIVITIES, FOLLOWED BY REPLACEMENT OF SOILS IN KIND".
- b. THE CONTRACTOR IS REQUIRED TO PROVIDE TEMPORARY STORAGE FOR WETLAND SUBSOIL IN AN UPLAND AREA OR PROVIDE A TOPICAL BARRIER IF SIDE-CASTING DURING EXCAVATION. THIS MATERIAL SHALL NOT MIX WITH OTHER SPOILS.

ORDER OF SECTION 2 SHEETS

- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- EROSION CONTROL
- SIGNING & PAVEMENT MARKINGS
- TRAFFIC CONTROL
- ALIGNMENT DIAGRAM

STANDARD ABBREVIATIONS

AC	ACRE
AGG	AGGREGATE
ASPH	ASPHALT
BM	BENCHMARK
CL	CENTER LINE
C/L	CENTER LINE
CONC	CONCRETE
CO	COUNTY
CTH	COUNTY TRUNK HIGHWAY
CULV	CULVERT
C&G	CURB & GUTTER
DIA	DIAMETER
X	EAST GRID COORDINATE
ELEV	ELEVATION
EXISTEXISTING	
FERT	FERTILIZE
FL	FLOW LINE
CWT	HUNDREDWEIGHT
HYD	HYDRANT
INV	INVERT
LF	LINEAR FOOT
LS	LUMP SUM
PAVT	PAVEMENT
PLE	PERMANENT LIMITED EASEMENT
REQD	REQUIRED
ROW	RIGHT OF WAY
SDD	STANDARD DETAIL DRAWINGS
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
STH	STATE TRUNK HIGHWAY
STA	STATION
TEL	TELEPHONE
TLE	TEMPORARY LIMITED EASEMENT
TYP	TYPICAL
Y	NORTH GRID COORDINATE

UTILITIES

Chris Degrave
We Energies - Gas/Petroleum
1815 Northwestern Avenue
Racine, WI 53406
(262) 886-7018
Chris.degrave@we-energies.com

Tony Bunkelman
Village of Caledonia Utility Director
5043 Chester Lane
Racine, WI 53402
(262) 835-6416
abunkelman@caledonia-wi.com

Tom Lazcano
Director of Public Works
5043 Chester Lane
Racine, WI 53402
(262) 835-6475
tlazcano@caledonia-wi.com

OTHER CONTACTS

Tony Bunkelman
Village of Caledonia Utility Director
5043 Chester Lane
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(262) 835-6416
abunkelman@caledonia-wi.com

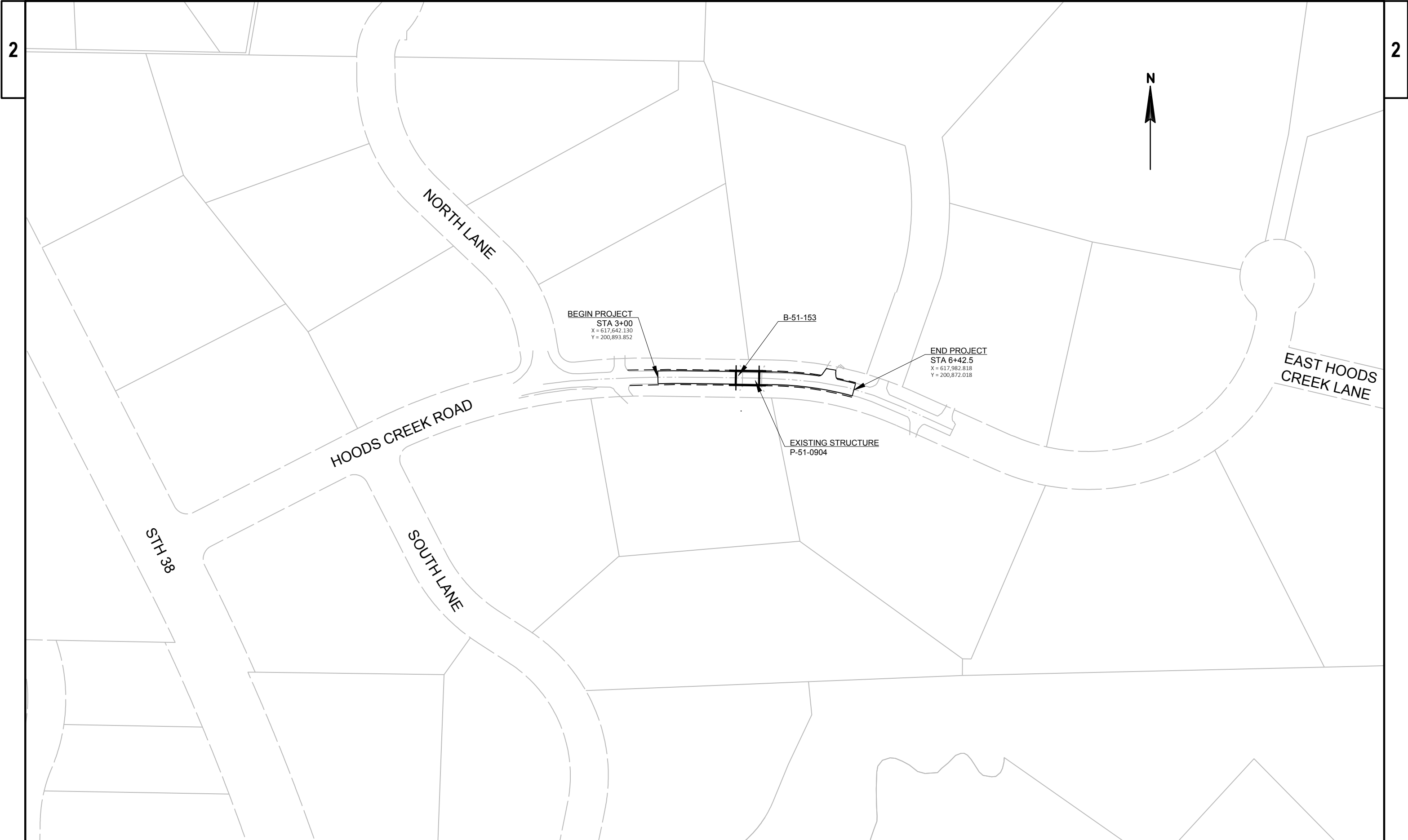
Tom Lazcano
Director of Public Works
5043 Chester Lane
Racine, WI 53402
(262) 835-6475
tlazcano@caledonia-wi.com

Designer Contact:
Foth Infrastructure & Environment, LLC
Chris Saxby, PE
5117 West Terrace Drive
Madison, WI 53718
(608) 242-5942
chris.saxby@foth.com

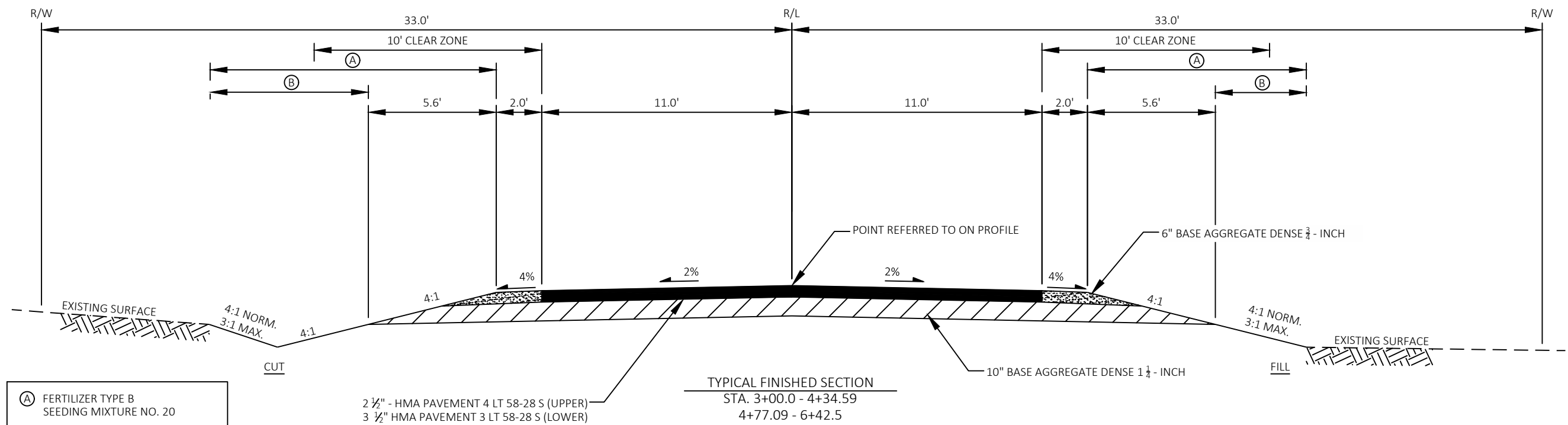
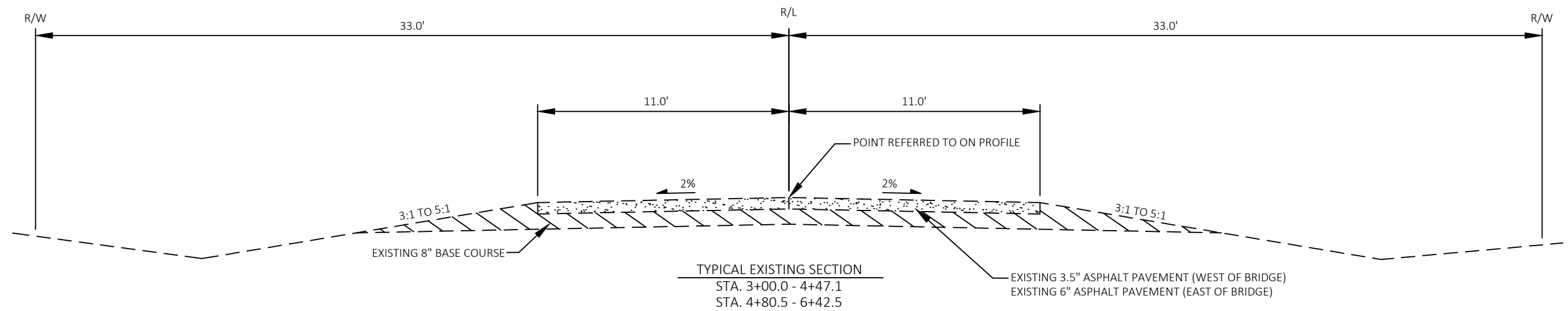
DNR Contact:
Kristina Betzold
DNR Service Center
2300 N. Martin Luther King Jr.
Milwaukee, WI 53212
(414) 507-4946
Kristina.Betzold@wisconsin.gov



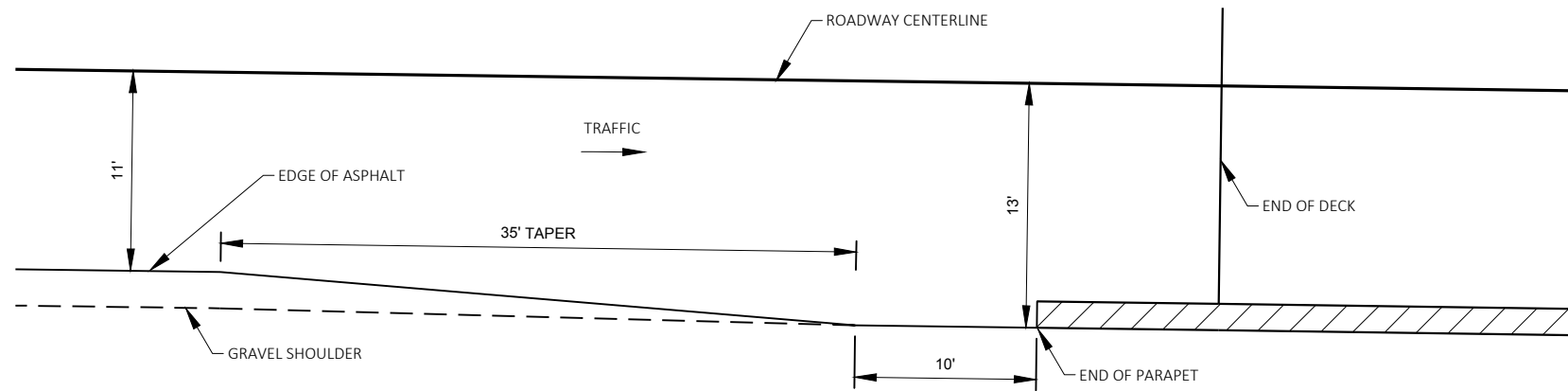
Dial 811 or (800)242-8511
www.DiggersHotline.com



PROJECT NO: 2703-00-73	HWY: HOODS CREEK ROAD	COUNTY: RACINE	PROJECT OVERVIEW	SHEET	E
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- (A) FERTILIZER TYPE B
 SEEDING MIXTURE NO. 20
- (B) SALVAGED TOPSOIL & MULCHING



PLAN VIEW

ASPHALT PAVING AT PARAPET DETAIL

PROJECT NO: 2703-00-73

HWY: HOODS CREEK ROAD

COUNTY: RACINE

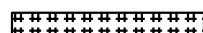
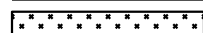
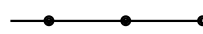
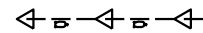
CONSTRUCTION DETAILS

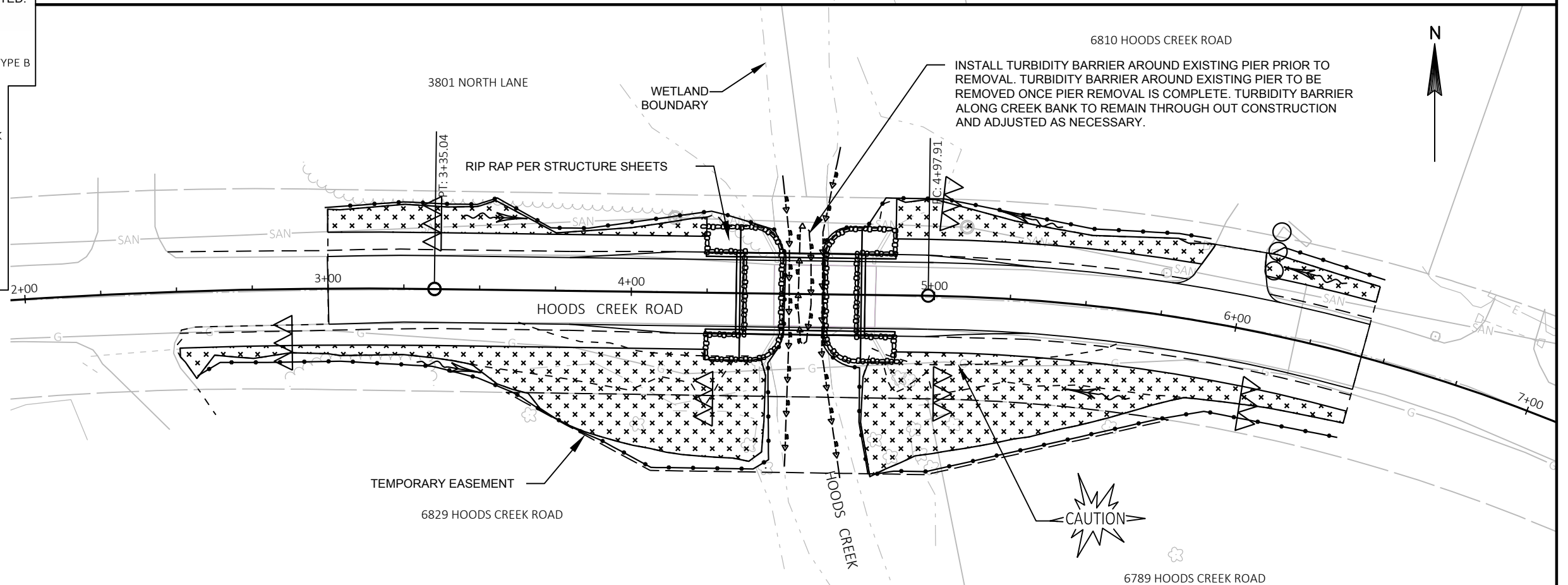
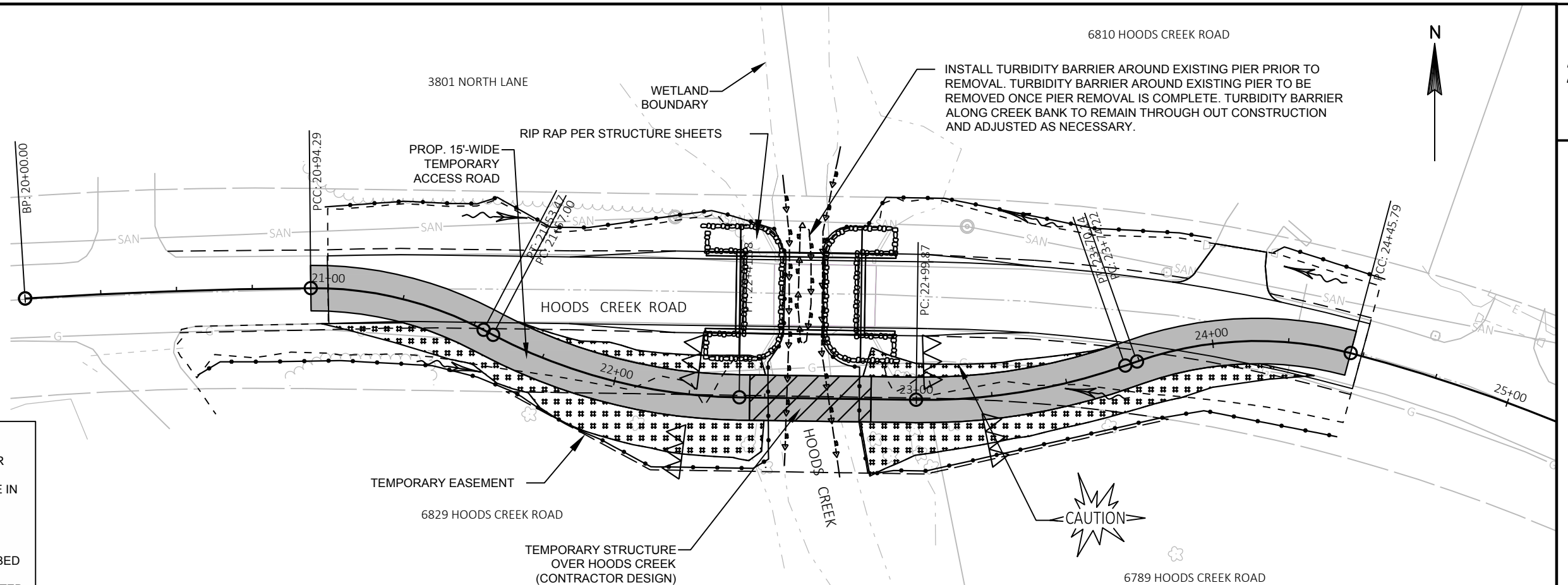
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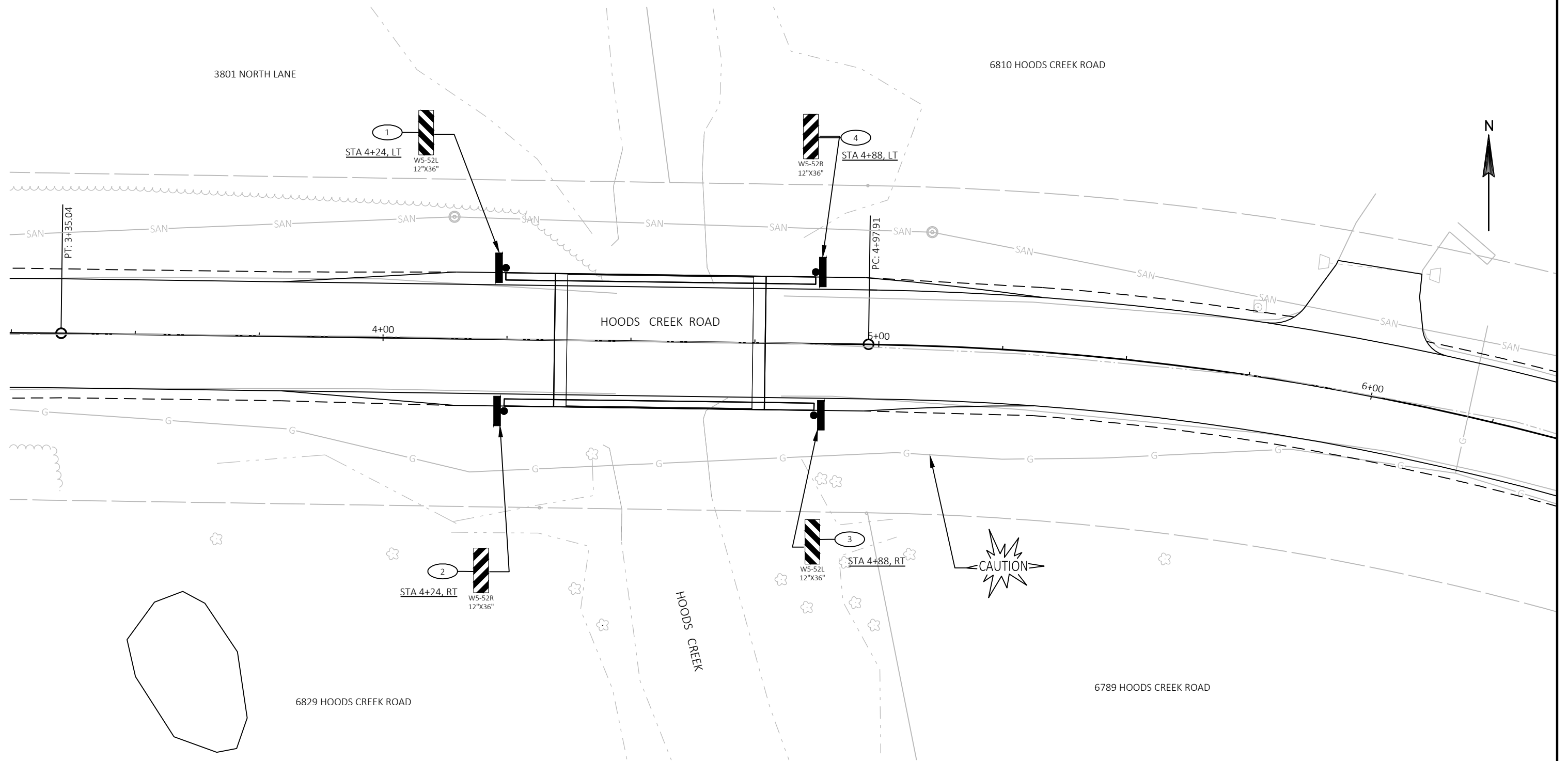
E

- NOTES:
1. SEE RESTORATION NOTES AND WETLAND SUBSOIL REQUIREMENT NOTES ON GENERAL NOTES SHEET FOR SPECIAL HANDLING INSTRUCTIONS.
 2. ALL NECESSARY EROSION CONTROL MEASURES TO BE IN PLACE AND APPROVED BY THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.
 3. PLACE EROSION MAT URBAN CLASS I, TYPE B ON ALL DISTURBED SLOPES OF TEMPORARY BYPASS.
 4. PLACE EROSION MAT CLASS II, TYPE C ON ALL DISTURBED SLOPES OF FINISHED ROADWAY AFTER REMOVAL OF TEMPORARY BYPASS ROAD AND FINISHING IS COMPLETED.

LEGEND

	EROSION MAT URBAN CLASS I, TYPE B
	EROSION MAT CLASS II, TYPE C
	SILT FENCE
	RIP RAP OR STONE DITCH CHECK
	SLOPE INTERCEPT
	TURBIDITY BARRIER
	TEMPORARY DITCH CHECK
	CULVERT PIPE DITCH CHECK
	SURFACE WATER FLOW





PROJECT NO: 2703-00-73

HWY: HOODS CREEK ROAD

COUNTY: RACINE

PLAN: PERMANENT SIGNING

SHEET

E

FILE NAME : C:\PW_WORKDIR\PW_I\MLH2\DM557984\023201-PS.DWG
LAYOUT NAME - 01

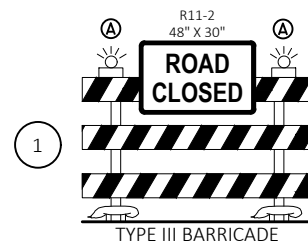
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PLOT BY : HEIN, MIKE

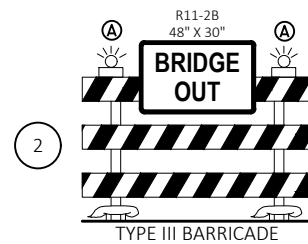
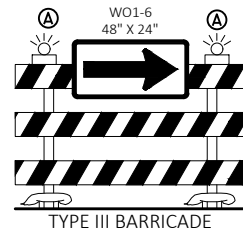
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PLOT SCALE :

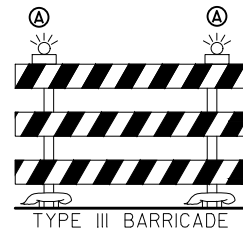
WISDOT/CADDs SHEET 42



3



4



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 EXISTING SIGNS THAT WILL REMAIN IN PLACE.

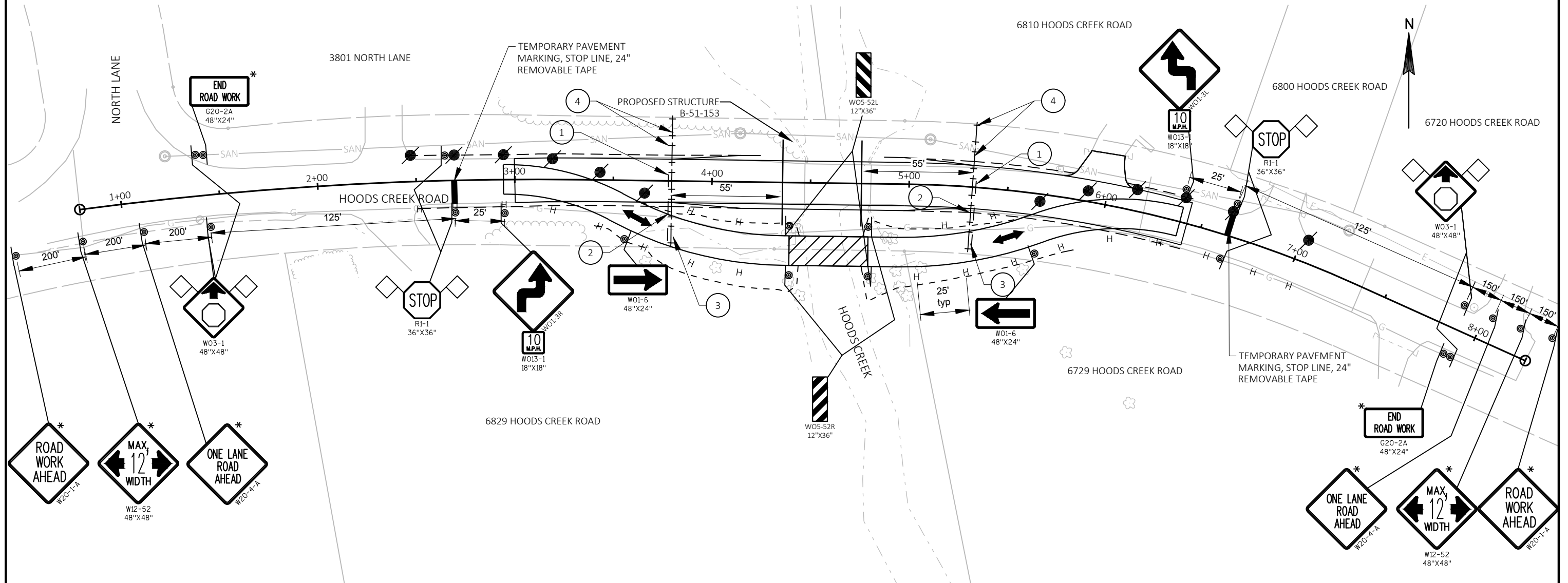
ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.

"W0" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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

LEGEND

- ↑ TYPE III BARRICADE
- ↑ TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- ▬ SIGN ON PERMANENT SUPPORT
- H TEMPORARY DELINEATOR, (WHITE) (SINGLE DELINEATOR ON EACH SIDE OF POST)
- Ⓐ TYPE A WARNING LIGHT (FLASHING)
- * SIGNS TO BE INSTALLED PRIOR TO BEGINNING WORK AND LEFT IN PLACE UNTIL CONSTRUCTION ENDS



PROJECT NO: 2703-00-73

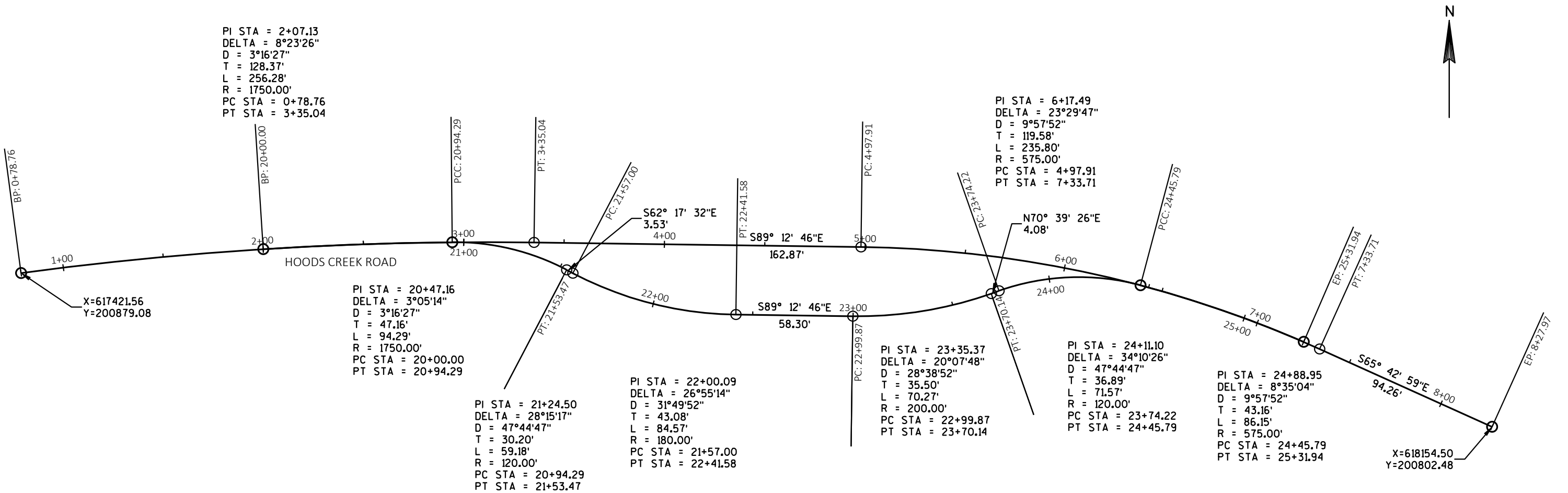
HWY: HOODS CREEK ROAD

COUNTY: RACINE

TEMPORARY TRAFFIC CONTROL

SHEET

E



Estimate Of Quantities

2703-00-73

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	2.000	2.000
0004	201.0205	Grubbing	STA	2.000	2.000
0006	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. STA 4+60	LS	1.000	1.000
0008	205.0100	Excavation Common	CY	838.000	838.000
0010	206.1000	Excavation for Structures Bridges (structure) 01. B-51-153	LS	1.000	1.000
0012	208.0100	Borrow	CY	397.000	397.000
0014	210.1500	Backfill Structure Type A	TON	90.000	90.000
0016	213.0100	Finishing Roadway (project) 01. 2703-00-73	EACH	1.000	1.000
0018	305.0110	Base Aggregate Dense 3/4-Inch	TON	65.000	65.000
0020	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	863.000	863.000
0022	455.0605	Tack Coat	GAL	42.000	42.000
0024	460.2000	Incentive Density HMA Pavement	DOL	180.000	180.000
0026	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	401.000	401.000
0028	460.5223	HMA Pavement 3 LT 58-28 S	TON	155.000	155.000
0030	460.5224	HMA Pavement 4 LT 58-28 S	TON	111.000	111.000
0032	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	13.000	13.000
0034	502.0100	Concrete Masonry Bridges	CY	150.000	150.000
0036	502.3200	Protective Surface Treatment	SY	113.000	113.000
0038	502.3210	Pigmented Surface Sealer	SY	56.000	56.000
0040	505.0400	Bar Steel Reinforcement HS Structures	LB	3,000.000	3,000.000
0042	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	21,950.000	21,950.000
0044	516.0500	Rubberized Membrane Waterproofing	SY	10.000	10.000
0046	526.0100	Temporary Structure (station) 01. STA 4+60	LS	1.000	1.000
0048	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	400.000	400.000
0050	606.0300	Riprap Heavy	CY	106.000	106.000
0052	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	20.000	20.000
0054	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	150.000	150.000
0056	618.0100	Maintenance And Repair of Haul Roads (project) 01. 2703-00-73	EACH	1.000	1.000
0058	619.1000	Mobilization	EACH	1.000	1.000
0060	623.0200	Dust Control Surface Treatment	SY	1,608.000	1,608.000
0062	624.0100	Water	MGAL	15.000	15.000
0064	625.0500	Salvaged Topsoil	SY	1,186.000	1,186.000
0066	627.0200	Mulching	SY	1,537.000	1,537.000
0068	628.1504	Silt Fence	LF	846.000	846.000
0070	628.1520	Silt Fence Maintenance	LF	846.000	846.000
0072	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0074	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000

Estimate Of Quantities

2703-00-73

Line	Item	Item Description	Unit	Total	Qty
0076	628.2008	Erosion Mat Urban Class I Type B	SY	336.000	336.000
0078	628.2027	Erosion Mat Class II Type C	SY	850.000	850.000
0080	628.6005	Turbidity Barriers	SY	135.000	135.000
0082	628.7504	Temporary Ditch Checks	LF	170.000	170.000
0084	628.7555	Culvert Pipe Checks	EACH	4.000	4.000
0086	629.0210	Fertilizer Type B	CWT	0.970	0.970
0088	630.0120	Seeding Mixture No. 20	LB	36.000	36.000
0090	630.0160	Seeding Mixture No. 60	LB	2.000	2.000
0092	630.0200	Seeding Temporary	LB	36.000	36.000
0094	630.0500	Seed Water	MGAL	39.000	39.000
0096	633.1100	Delineators Temporary	EACH	21.000	21.000
0098	634.0811	Posts Tubular Steel 2x2-Inch X 11-FT	EACH	4.000	4.000
0100	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0102	638.2602	Removing Signs Type II	EACH	4.000	4.000
0104	638.3000	Removing Small Sign Supports	EACH	4.000	4.000
0106	642.5001	Field Office Type B	EACH	1.000	1.000
0108	643.0300	Traffic Control Drums	DAY	1,308.000	1,308.000
0110	643.0420	Traffic Control Barricades Type III	DAY	1,090.000	1,090.000
0112	643.0705	Traffic Control Warning Lights Type A	DAY	2,180.000	2,180.000
0114	643.0715	Traffic Control Warning Lights Type C	DAY	1,308.000	1,308.000
0116	643.0900	Traffic Control Signs	DAY	4,468.000	4,468.000
0118	643.5000	Traffic Control	EACH	1.000	1.000
0120	645.0120	Geotextile Type HR	SY	160.000	160.000
0122	649.0850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	22.000	22.000
0124	650.4500	Construction Staking Subgrade	LF	652.000	652.000
0126	650.5000	Construction Staking Base	LF	652.000	652.000
0128	650.6500	Construction Staking Structure Layout (structure) 01. B-51-153	LS	1.000	1.000
0130	650.9910	Construction Staking Supplemental Control (project) 01. 2703-00-73	LS	1.000	1.000
0132	650.9920	Construction Staking Slope Stakes	LF	652.000	652.000
0134	690.0150	Sawing Asphalt	LF	61.000	61.000
0136	715.0502	Incentive Strength Concrete Structures	DOL	900.000	900.000

CLEARING AND GRUBBING					
CATEGORY	STA	STA	LOCATION	201.0105	201.0205
				CLEARING	GRUBBING
0010	3+30	4+30	RT	1	1
	4+77	5+77	RT	1	1
PROJECT TOTAL				2	2

EARTHWORK SUMMARY

CATEGORY	DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION	SALVAGED/UNUSABLE PAVEMENT MATERIAL	AVAILABLE MATERIAL	UNEXPANDED FILL	EXPANDED FILL	WASTE	208.0100 BORROW
				(1) (CUT) (2)						
0010	DIVISION 1	21+27 - 22+45	TEMP ROAD	6	0	6	177	221	0	216
		22+85 - 24+16	TEMP ROAD	7	0	7	150	188	0	181
		DIVISION 1 SUBTOTAL			13	0	13	328	409	0
0010	DIVISION 2	3+84.59 - 4+34.59	MAINLINE	33	7	26	30	38	-5	0
		4+77.09 - 5+27.09	MAINLINE	26	9	17	58	72	-46	0
		DIVISION 2 SUBTOTAL			59	16	43	88	110	-51
0010	DIVISION 3	21+27 - 22+45	TEMP ROAD REMOVAL (8)	281	0	281	0	0	281	0
		22+85 - 24+16	TEMP ROAD REMOVAL (8)	248	0	248	0	0	248	0
		DIVISION 3 SUBTOTAL			529	0	529	0	0	529
SUBTOTAL 0010				601					478	397
0030	DIVISION 2	2+52 - 3+84.59		112	10	102	14	17	95	0
		5+27.09 - 6+42.59		125	23	102	19	24	101	0
		DIVISION 2 SUBTOTAL			237	33	204	33	41	196
SUBTOTAL 0030				237					196	0
PROJECT TOTAL				838					674	397

NOTES:

- (1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION
- (2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT
- (3) SALVAGED/UNUSABLE PAVEMENT MATERIAL
- (4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL
- (5) EXPANDED FILL FACTOR = 1.25
- (6) THE NEGATIVE WASTE VOLUME FOR CATEGORY 0010 DIVISION 2 IS OFFSET BY THE POSITIVE WASTE VOLUME FOR CATEGORY 0030 DIVISION 2 RESULTING IN A NET WASTE FOR DIVISION 2
- (7) TEMPORARY ROAD REMOVAL QUANTITY IS THE SUM OF THE DIVISION 1 FILL VOLUME PLUS THE VOLUME OF BASE AGGREGATE DENSE 1 1/4 INCH USED TO BUILD THE TEMPORARY ROAD.

FINISHING ROADWAY 2703-00-73		
		213.0100
CATEGORY	LOCATION	EACH
0010	PROJECT	0.5
SUBTOTAL 0010		0.5
0030	PROJECT	0.5
SUBTOTAL 0030		0.5
PROJECT TOTAL		1

BASE AGGREGATE DENSE						
				305.0110	305.0120	624.0100
				BASE AGGREGATE DENSE	BASE AGGREGATE DENSE	
CATEGORY	STA	STA	LOCATION	3/4-INCH TON	1 1/4-INCH TON	WATER MGAL
HOODS CREEK ROAD						
0010	3+84.59	4+35.59	MAINLINE	11	104	2
	4+77.09	5+27.09	MAINLINE	11	104	2
SUBTOTAL				22	208	4
TEMPORARY ACCESS ROAD						
	20+94.29	22+45.01	TEMP ROAD	---	115	2
	22+85.01	24+45.79	TEMP ROAD	---	124	2
SUBTOTAL				---	239	4
SUBTOTAL 0010				22	447	8
HOODS CREEK ROAD						
0030	3+00	3+84.59	MAINLINE	18	176	3
	5+27.09	6+42.59	MAINLINE	25	240	4
SUBTOTAL 0030				43	416	7
PROJECT TOTAL				65	863	14

HMA PAVEMENT							
				460.5223	460.5224	465.0120	455.0605
				HMA PAVEMENT	HMA PAVEMENT	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TACK COAT
				3 LT 58-28 S	4 LT 58-28 S		
CATEGORY	STA	STA	LOCATION	TON	TON	TON	GAL
0010	3+84.59	4+34.59	MAINLINE	28	20	---	7
	4+77.09	5+27.09	MAINLINE	28	20	---	7
SUBTOTAL 0010				56	40	0	14
0030	3+00	3+84.59	MAINLINE	42	30	---	11
	5+27.09	6+42.59	MAINLINE	57	41	---	15
	5+95		LT	---	---	13	2
SUBTOTAL 0030				99	71	13	28
PROJECT TOTAL				155	111	13	42

MAINTENANCE AND REPAIR OF HAUL ROADS (2703-00-73)		
		618.1000
CATEGORY	LOCATION	EACH
0030	PROJECT	1.0
SUBTOTAL 0030		1.0
PROJECT TOTAL		1.0

MOBILIZATION (2703-00-73)		
		619.1000
CATEGORY	LOCATION	EACH
0010	PROJECT	0.9
SUBTOTAL 0010		0.9
0030	PROJECT	0.1
SUBTOTAL 0030		0.1
PROJECT TOTAL		1.0

DUST CONTROL SURFACE TREATMENT				
CATEGORY	STA	STA	LOCATION	623.0200 SY
HOODS CREEK ROAD				
0010	3+84.59	4+34.59	LT/RT	192
	4+77.09	5+27.09	LT/RT	192
SUBTOTAL				384
TEMPORARY ACCESS ROAD				
0010	20+94.29	22+45.01	LT/RT	198
	22+85.01	24+45.79	LT/RT	198
SUBTOTAL				396
SUBTOTAL 0010				780
HOODS CREEK ROAD				
0030	3+00	3+84.59	LT/RT	350
	5+27.09	6+42.59	LT/RT	478
SUBTOTAL 0030				828
PROJECT TOTAL				1,608

LANDSCAPING												
CATEGORY	STA	STA	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.2027 EROSION MAT CLASS II TYPE C SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0160 SEEDING MIXTURE NO. 60 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL
HOODS CREEK ROAD												
0010	3+85	4+47	LT	16	51	---	16	0.03	1	---	1	2
	4+76	5+27	LT	49	89	---	49	0.06	2	---	2	2
	3+85	4+47	RT	214	212	---	214	0.13	4	1	4	5
	4+76	5+27	RT	177	208	---	177	0.13	4	1	4	5
SUBTOTAL				456	560	---	456	0.35	12	2	12	14
TEMPORARY ACCESS ROAD												
0010	20+98	22+50	RT	138	126	138	---	0.08	3	---	3	3
	21+63	22+50	LT	37	34	37	---	0.02	1	---	1	1
	22+82	24+35	RT	129	131	129	---	0.08	4	---	4	3
	22+82	23+70	LT	32	31	32	---	0.02	1	---	1	1
SUBTOTAL				336	322	336	---	0.20	9	---	9	8
SUBTOTAL 0010				792	882	336	456	0.56	21	2	21	22
HOODS CREEK ROAD												
0030	3+00	3+85	LT	66	120	---	66	0.08	3	---	3	3
	5+27	5+89	LT	40	77	---	40	0.05	2	---	2	2
	6+05	6+43	LT	27	49	---	27	0.03	1	---	1	2
	2+51	3+85	RT	111	189	---	111	0.12	4	---	4	5
	5+27	6+43	RT	150	220	---	150	0.14	4	---	4	5
SUBTOTAL 0030				394	655	---	394	0.41	15	---	15	17
PROJECT TOTAL				1,186	1,537	336	850	0.97	35	2	35	39

SILT FENCE

SILT FENCE					
CATEGORY	STA	STA	LOCATION	SILT FENCE 628.1504 LF	SILT FENCE MAINTENANCE 628.1520 LF
0010	3+85	4+50	LT/RT	207	207
	4+63	5+27	LT/RT	203	203
SUBTOTAL 0010				410	410
0030	2+51	3+85	LT/RT	222	222
	5+27	6+42	LT/RT	175	175
	6+07	6+44	LT	39	39
SUBTOTAL 0030				436	436
PROJECT TOTAL				846	846

MOBILIZATION EROSION CONTROL		
628.1905 MOBILIZATIONS EROSION CONTROL EACH		628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
CATEGORY		
HOODS CREEK ROAD		
0010	0.5	0.5
SUBTOTAL	0.5	0.5
TEMPORARY ACCESS ROAD		
0010	1	1
SUBTOTAL	1	1
SUBTOTAL 0010	1.5	1.5
HOODS CREEK ROAD		
0030	0.5	0.5
SUBTOTAL 0030	0.5	0.5
PROJECT TOTAL	2	2

				<u>EROSION CONTROL</u>		
				628.6005	628.7504	628.2008
				TURBIDITY	TEMPORARY	CULVERT PIPE
				BARRIERS	DITCH CHECKS	CHECKS
CATEGORY	STA	STA	LOCATION	SY	LF	EACH
HOODS CREEK ROAD						
0010	4+52	4+59	LT/RT	53	-	-
	4+55		LT/RT	21	-	-
	4+63		LT/RT	61	-	-
	4+26		RT	-	17	-
	5+02		RT	-	17	-
	5+03		LT	-	17	-
SUBTOTAL				135	51	-
TEMPORARY ACCESS ROAD						
0010	22+24		RT	-	17	-
	22+26		LT	-	17	-
	23+05		LT	-	17	-
	23+24		RT	-	17	-
SUBTOTAL				-	68	-
SUBTOTAL 0010				135	119	-
HOODS CREEK ROAD						
0030	2+86		RT	-	17	-
	3+35		LT	-	17	-
	6+08		RT	-	17	-
	6+08		LT	-	-	4
SUBTOTAL 0030				-	51	4
PROJECT TOTAL				135	170	4

DELINEATORS			
CATEGORY	STATION	OFFSET	633.1100 DELINEATOR TEMPORARY EACH
HOODS CREEK ROAD			
0010	2+51	13.9	1
	2+69	13.9	1
	2+94	12.5	1
	3+20	15.4	1
	3+43	23.5	1
	3+66	33.9	1
	3+89	15.0	1
	3+90	41.5	1
	4+14	20.5	1
	4+15	45.9	1
	5+05	46.8	1
	5+19	20.0	1
	5+32	43.3	1
	5+44	14.0	1
	5+58	35.9	1
	5+81	24.9	1
	6+06	16.6	1
	6+31	12.8	1
	6+57	12.9	1
	6+82	13.4	1
	7+02	13.8	1
SUBTOTAL 0010			21
PROJECT TOTAL			21

SIGNING						
			634.0811 POSTS TUBULAR STEEL 2 x 2INCH x 11 FT EACH	637.2230 SIGNS TYPE II REFLECTIVE F SF	SIGN CODE	
CATEGORY	SIGN NO.	STA	LOCATION			
0010	1	4+24	LT	1	3	W5-52L
	2	4+24	RT	1	3	W5-52R
	4	4+88	LT	1	3	W5-52R
	3	4+88	RT	1	3	W5-52L
SUBTOTAL 0010				4	12	
PROJECT TOTAL				4	12	

SIGNING REMOVALS				
		638.2602	638.3000	
		REMOVING SIGNS	REMOVING SMALL	
		TYPE II	SIGN SUPPORTS	
CATEGORY	STA	LOCATION	EACH	EACH
0010	4+46	RT	1	1
	4+47	LT	1	1
	4+81	LT	1	1
	4+81	RT	1	1
SUBTOTAL 0010			4	4
PROJECT TOTAL			4	4

FIELD OFFICE TYPE B		
CATEGORY	LOCATION	642.5001 EACH
0010	PROJECT	1
SUBTOTAL 0010		1
PROJECT TOTAL		1

CONSTRUCTION STAKING						
		650.4500	650.5000	650.6500	650.9910	650.9920
		SUBGRADE	BASE	STRUCTURE LAYOUT	SUPPLEMENTAL	SLOPE STAKES
		LF	LF	(B-51-153)	CONTROL	
CATEGORY	STA	STA		LS	LS	LF
HOODS CREEK ROAD						
0010	3+85	4+35	50	50	---	50
	4+35	4+77	---	---	1	---
	4+77	5+27	50	50	---	50
	3+00	6+42	---	---	1	---
SUBTOTAL			100	100	1	100
TEMPORARY ACCESS ROAD						
0010	20+94	24+46	352	352	---	352
SUBTOTAL			352	352	---	352
SUBTOTAL 0010			452	452	1	452
HOODS CREEK ROAD						
0010	3+00	3+85	85	85	---	85
	5+27	6+42	115	115	---	115
SUBTOTAL 0030			200	200	---	200
PROJECT TOTAL			652	652	1	652

TRAFFIC CONTROL																				
643.0300					643.0420			643.0705			643.0715			643.0900			643.5000		649.0850	
TRAFFIC CONTROL DRUMS					BARRICADES TYPE III			TRAFFIC CONTROL WARNING LIGHTS TYPE A			TRAFFIC CONTROL WARNING LIGHTS TYPE C			TRAFFIC CONTROL SIGNS			TRAFFIC CONTROL		TEMPORARY MARKING STOP LINE REMOVEABLE TAPE 18-INCH	
CATEGORY	DESCRIPTION	NUMBER	DAY	TOTAL	NUMBER	DAY	TOTAL	NUMBER	DAY	TOTAL	NUMBER	DAY	TOTAL	NUMBER	DAY	TOTAL	EACH	LF		
0010	CONSTRUCT TEMP. ROAD & TEMP. STRUCTURE	---	---	---	---	---	---	---	---	---	---	---	---	10	61	610	0.33	---		
	CONSTRUCT BRIDGE	12	109	1,308	10	109	1,090	20	109	2,180	12	109	1,308	32	109	3,488	0.33	---		
	REMOVE TEMP. STRUCTURE & FINISH ROADWAY	---	---	---	---	---	---	---	---	---	---	---	---	10	37	370	0.33	22		
SUBTOTAL 0010		12		1,308	10		1,090	20		2,180	12		1,308	52		4,468	1	22		
TOTAL PROJECT				1,308	1,090			2,180			1,308			4,468			1	22		

				690.0150
				SAWING
				ASPHALT
CATEGORY	STA	STA	LOCATION	LF
HOODS CREEK ROAD				
0010	3+00	3+00	LT/RT	22
	6+42	6+42	LT/RT	22
SUBTOTAL 0010				44
HOODS CREEK ROAD				
	5+89	6+05	LT/RT	17
SUBTOTAL 0030				17
PROJECT TOTAL				17

CONVENTIONAL SYMBOLS

SECTION LINE	---	SECTION CORNER SYMBOL		R/W MONUMENT (TO BE SET)	•
QUARTER LINE	---	SECTION CORNER MONUMENT		NON-MONUMENTED R/W POINT	○
SIXTEENTH LINE	---	GEODETIC SURVEY MONUMENT		FOUND IRON PIN (1-INCH UNLESS NOTED)	IP
NEW REFERENCE LINE	---	SIXTEENTH CORNER MONUMENT			
NEW R/W LINE	---	SIGN		OFF-PREMISE SIGN	
EXISTING R/W OR HE LINE	---				
PROPERTY LINE	---				
LOT, TIE & OTHER MINOR LINES	---				
SLOPE INTERCEPT	---				
CORPORATE LIMITS	---	ELECTRIC POLE		COMPENSABLE	
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)	---	TELEPHONE POLE		NON-COMPENSABLE	
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)	---	PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)			
TEMPORARY LIMITED EASEMENT AREA	---	ACCESS RESTRICTED BY ACQUISITION			
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)	---	NO ACCESS (BY STATUTORY AUTHORITY)			
TRANSMISSION STRUCTURES	---	ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)			
BUILDING TO BE REMOVED	---	NO ACCESS (NEW HIGHWAY)			
BRIDGE	---	PARCEL NUMBER (25)		UTILITY NUMBER (40)	
		PARALLEL OFFSETS			

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF INTERSECTION	PI
ACRES	AC	PROPERTY LINE	PL
AHEAD	AH	RECORDED AS	(100')
ALUMINUM	ALUM	REEL / IMAGE	R/I
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RESTRICTIVE DEVELOPMENT	RDE
CENTERLINE	C/L	EASEMENT	
CERTIFIED SURVEY MAP	CSM	RIGHT	RT
CONCRETE	CONC	RIGHT OF WAY	R/W
COUNTY	CO	SECTION	SEC
COUNTY TRUNK HIGHWAY	CTH	SEPTIC VENT	SEPV
DISTANCE	DIST	SQUARE FEET	SF
CORNER	COR	STATE TRUNK HIGHWAY	STH
DOCUMENT NUMBER	DOC	STATION	STA
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
GAS VALVE	GV	TRANSPORTATION PROJECT	TPP
GRID NORTH	GN	PLAT	
HIGHWAY EASEMENT	HE	UNITED STATES HIGHWAY	USH
IDENTIFICATION	ID	VOLUME	V
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		
POINT OF COMPOUND CURVE	PCC		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), RACINE COUNTY, NAD 83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT OF WAY MONUMENTS ARE REBAR AND ARE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

SCHEDULE OF LANDS AND INTERESTS

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	TLE S.F.
1	4.1	RANDALL H. & DANA L. JOHNSON	TLE	1006
2	4.1	RANDY G. & SANDRA J. ADAMS	TLE	3306

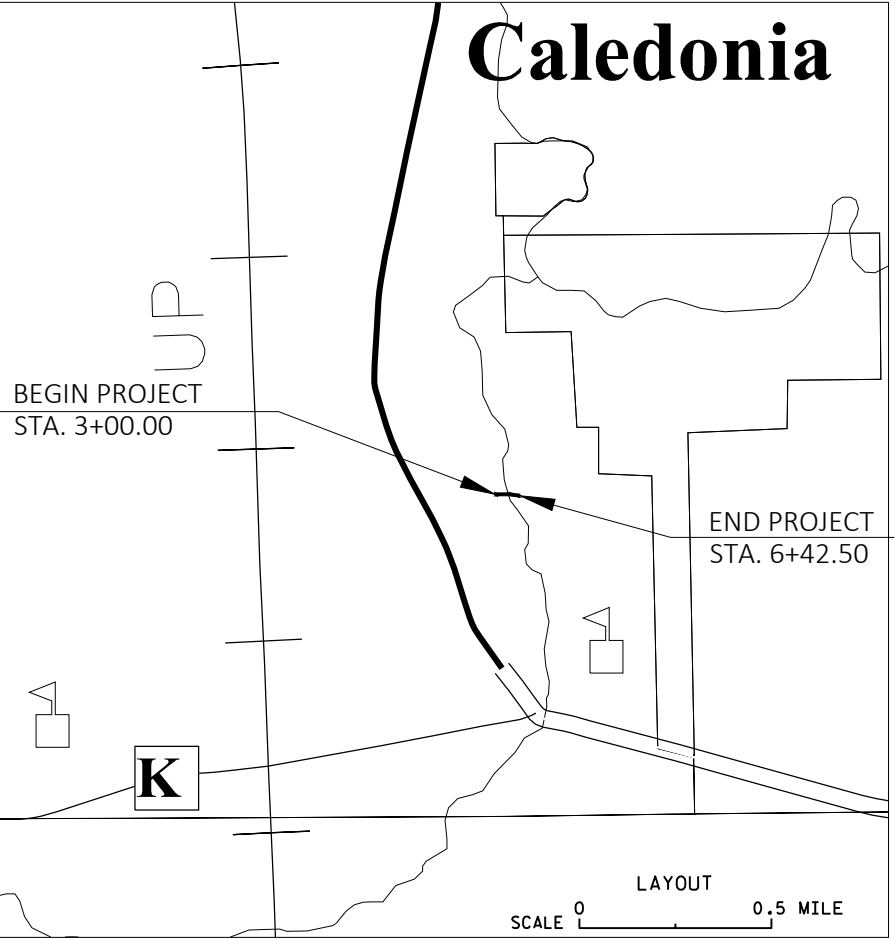
OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

CAUTION
THIS PLAT IS FOR ILLUSTRATIVE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES.

BASIS OF BEARINGS:

BEARINGS ARE BASED ON THE BEARING OF THE WEST LINE OF THE NE ¼ OF SEC 35, T4N, R22E

BEGIN RELOCATION ORDER
PROJECT 2703-00-73
STA. 3+00
89.67 W. AND 845.89 S. OF
N COR, SEC 35, T4N, R22E



LOCATION MAP

TOTAL NET LENGTH OF CENTERLINE = 0.077 MI

SURVEYOR' CERTIFICATE:

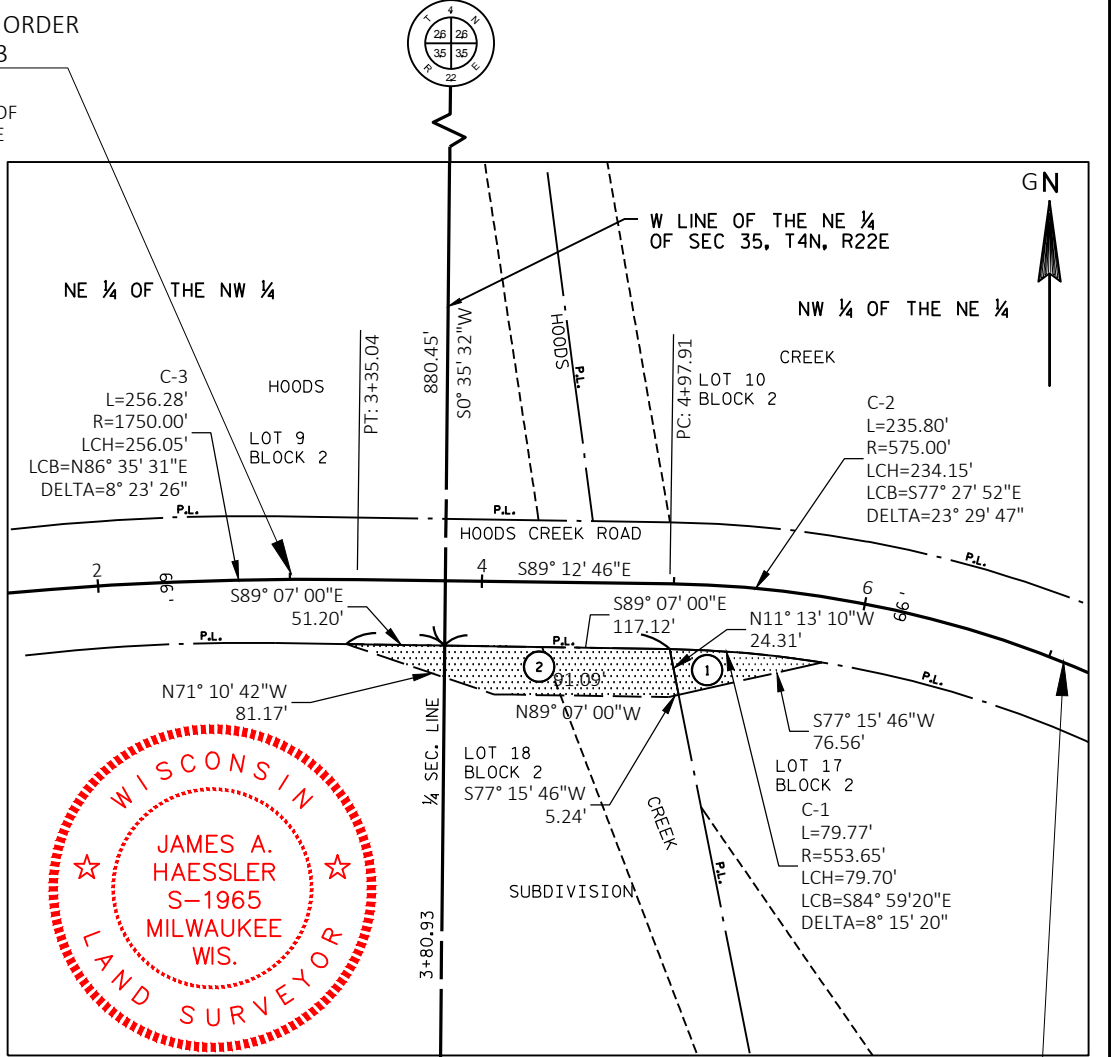
I, JAMES A. HAESSLER, WISCONSIN PROFESSIONAL LAND SURVEYOR * 1965, DO HEREBY CERTIFY THAT I HAVE SURVEYED AND MAPPED THE LANDS AS DESCRIBED HEREIN, UNDER THE DIRECTION OF RACINE COUNTY, AND THAT THIS SURVEY COMPLIES WITH CHAPTER AE-7 OF THE WISCONSIN ADMINISTRATIVE CODE AND THAT THIS MAP IS A REPRESENTATION THEREOF TO BEST OF MY KNOWLEDGE AND BELIEF.

James A. Haessler

JAMES A. HAESSLER PLS-1965
FOTH INFRASTRUCTURE & ENVIRONMENT, LLC
2514 SOUTH 102nd STREET STREET
SUITE 278, LINCOLN CENTER II
WEST ALLIS, WI 53227

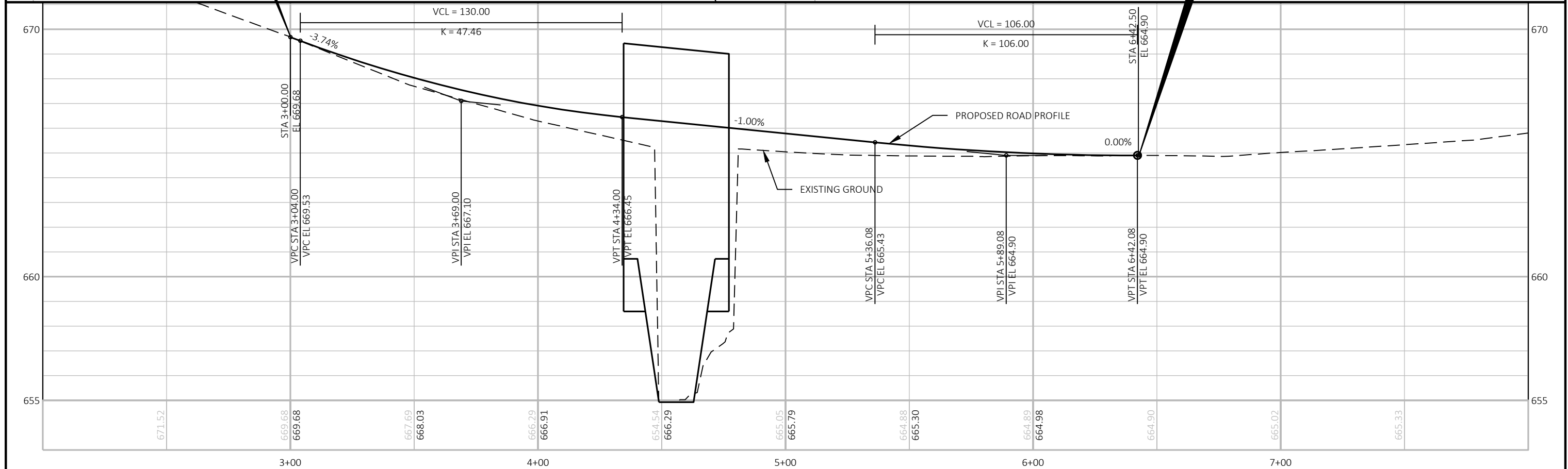
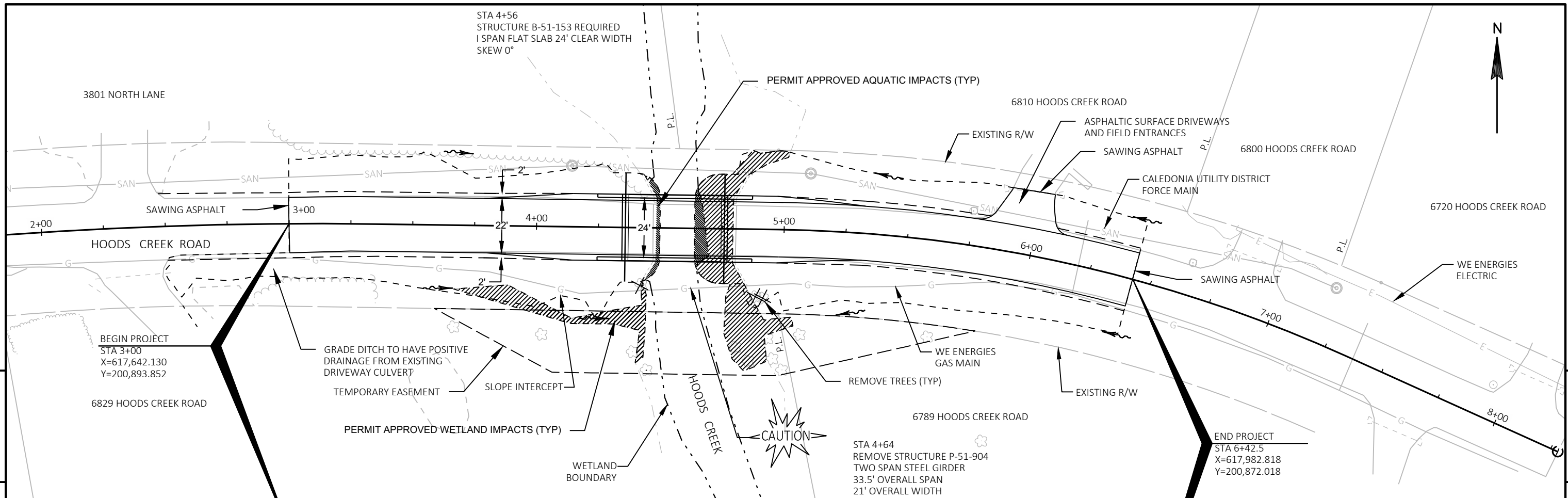
DATED: MARCH 7, 2019.

R/W PROJECT NUMBER 2703-00-03	SHEET NUMBER 4.1	TOTAL SHEETS 1
PLAT OF RIGHT OF WAY REQUIRED FOR HOODS CREEK ROAD VILLAGE OF CALEDONIA		
HOODS CREEK ROAD RACINE COUNTY		



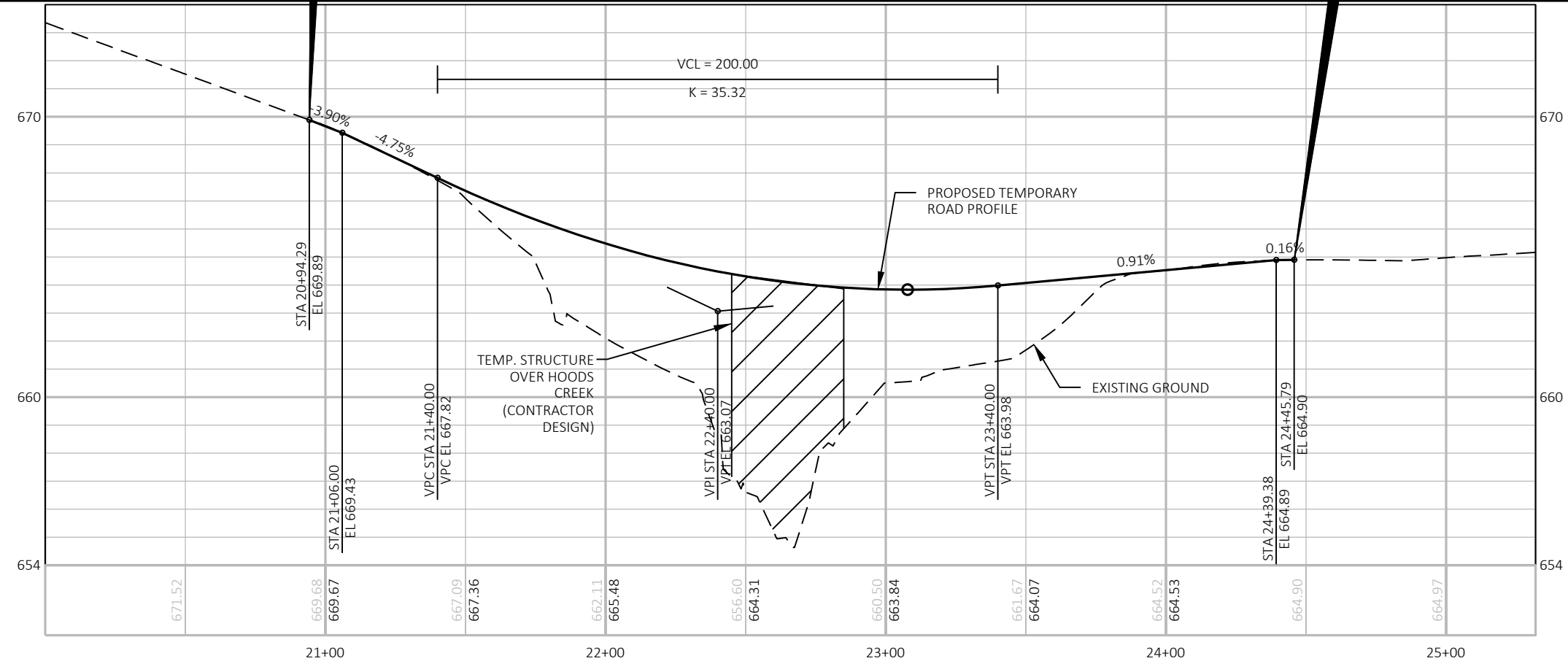
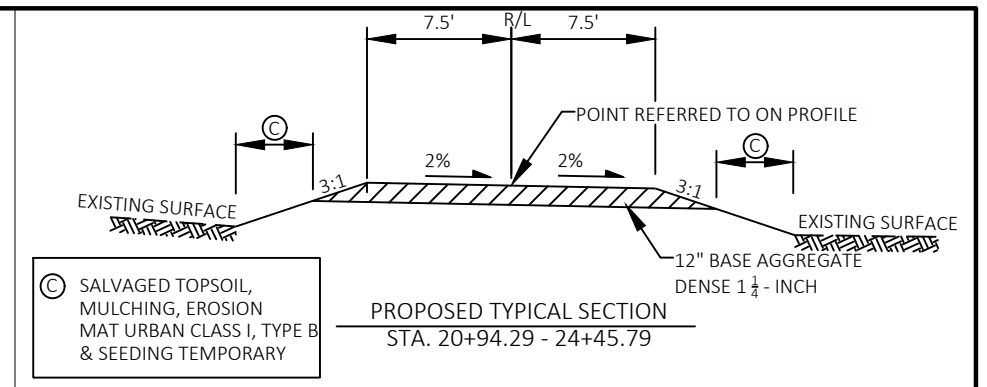
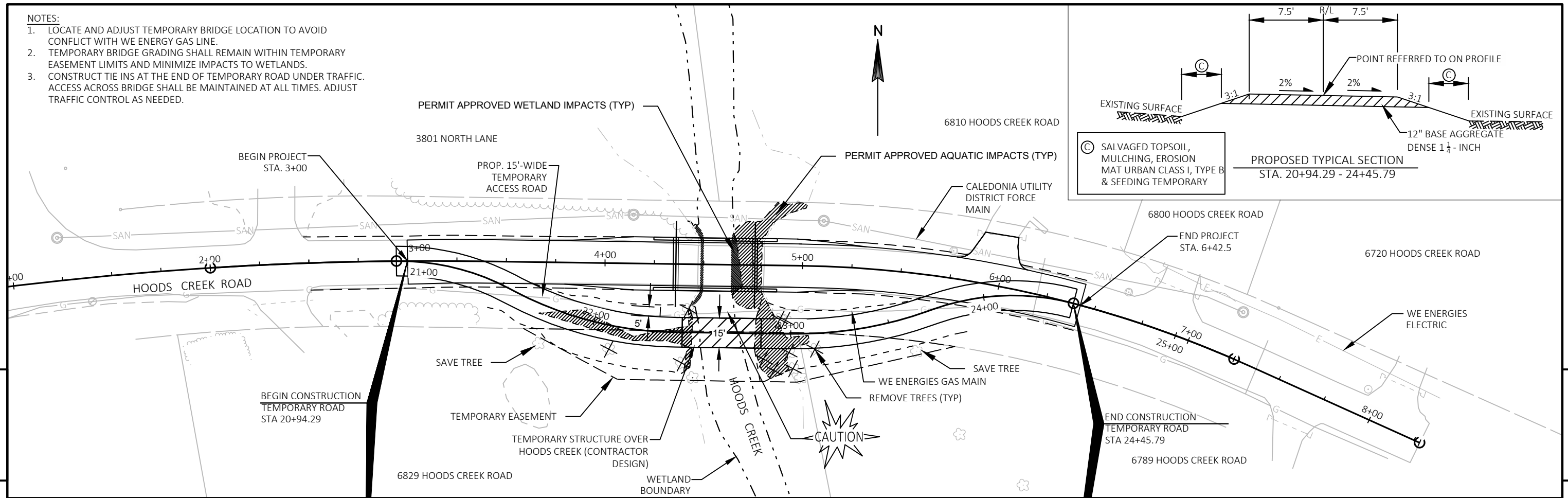
END RELOCATION ORDER
PROJECT 2703-00-73
STA. 7+05
251.03 E. AND 868.30 S. OF
N COR, SEC 35, T4N, R22E

REVISION DATE	VILLAGE OF CALEDONIA
APPROVED FOR THE VILLAGE	
DATE: _____ (Signature)	



PROJECT NO: 2703-00-73	HWY: HOODS CREEK ROAD	COUNTY: RACINE	PLAN AND PROFILE: BRIDGE OVER HOODS CREEK	SHEET E
------------------------	-----------------------	----------------	---	---------

- NOTES:
1. LOCATE AND ADJUST TEMPORARY BRIDGE LOCATION TO AVOID CONFLICT WITH WE ENERGY GAS LINE.
 2. TEMPORARY BRIDGE GRADING SHALL REMAIN WITHIN TEMPORARY EASEMENT LIMITS AND MINIMIZE IMPACTS TO WETLANDS.
 3. CONSTRUCT TIE INS AT THE END OF TEMPORARY ROAD UNDER TRAFFIC. ACCESS ACROSS BRIDGE SHALL BE MAINTAINED AT ALL TIMES. ADJUST TRAFFIC CONTROL AS NEEDED.



PROJECT NO: 2703-00-73

HWY: HOODS CREEK ROAD

COUNTY: RACINE

PLAN AND PROFILE: TEMPORARY ROAD & STRUCTURE

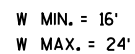
SHEET

E

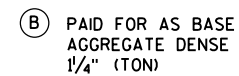
Standard Detail Drawing List

08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
08E15-01	CULVERT PIPE CHECK
12A03-10	NAME PLATE (STRUCTURES)
13C19-01	HMA LONGITUDINAL JOINTS
15A04-04A	FLEXIBLE DELINEATOR POST
15A04-04B	DELINEATOR BRACKET WITH REFLECTIVE SHEETING
15A04-04C	DELINEATOR POST WITH REFLECTIVE SHEETING
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS

① DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.

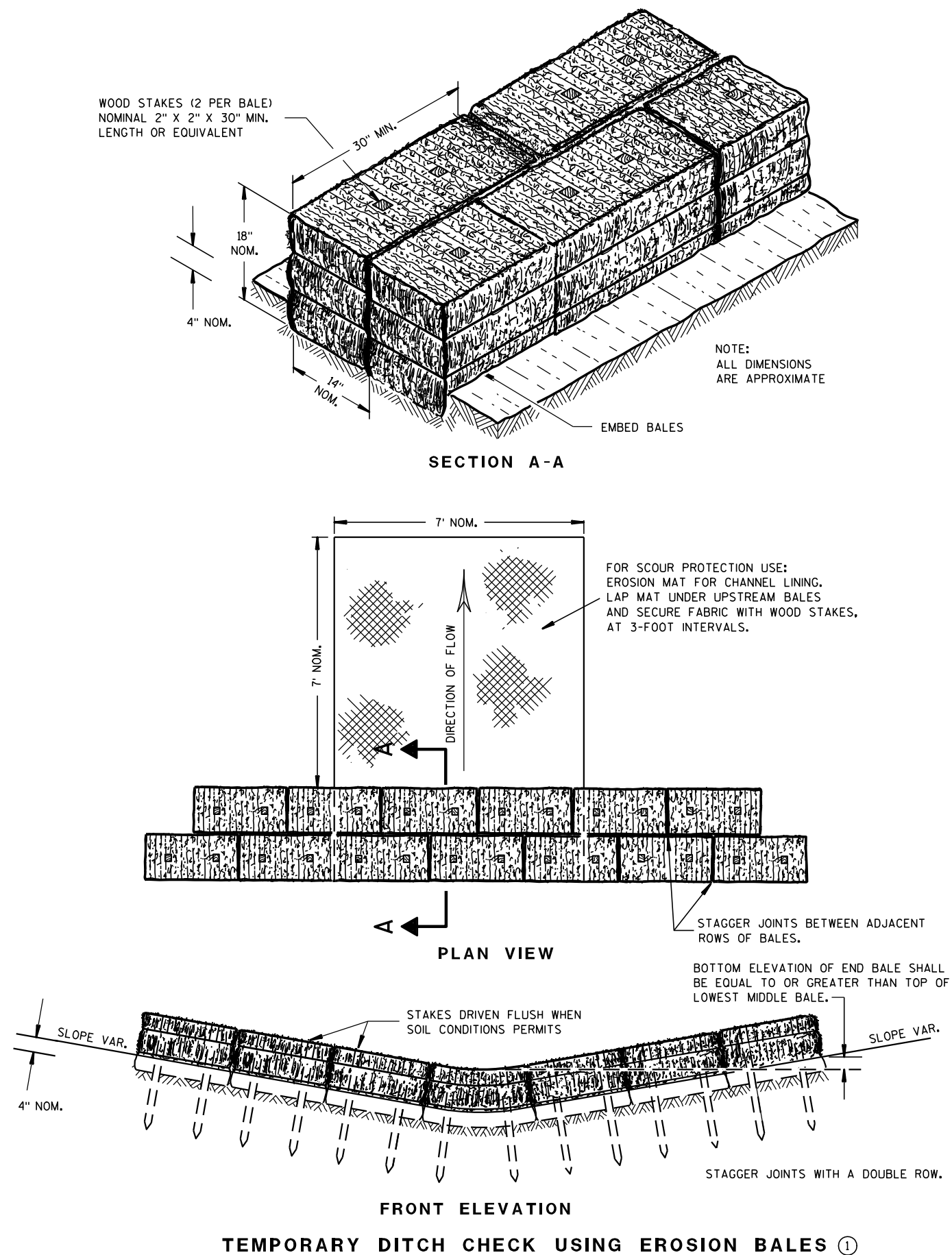


PLAN VIEW
HALF SECTION



PLAN VIEW
HALF SECTION

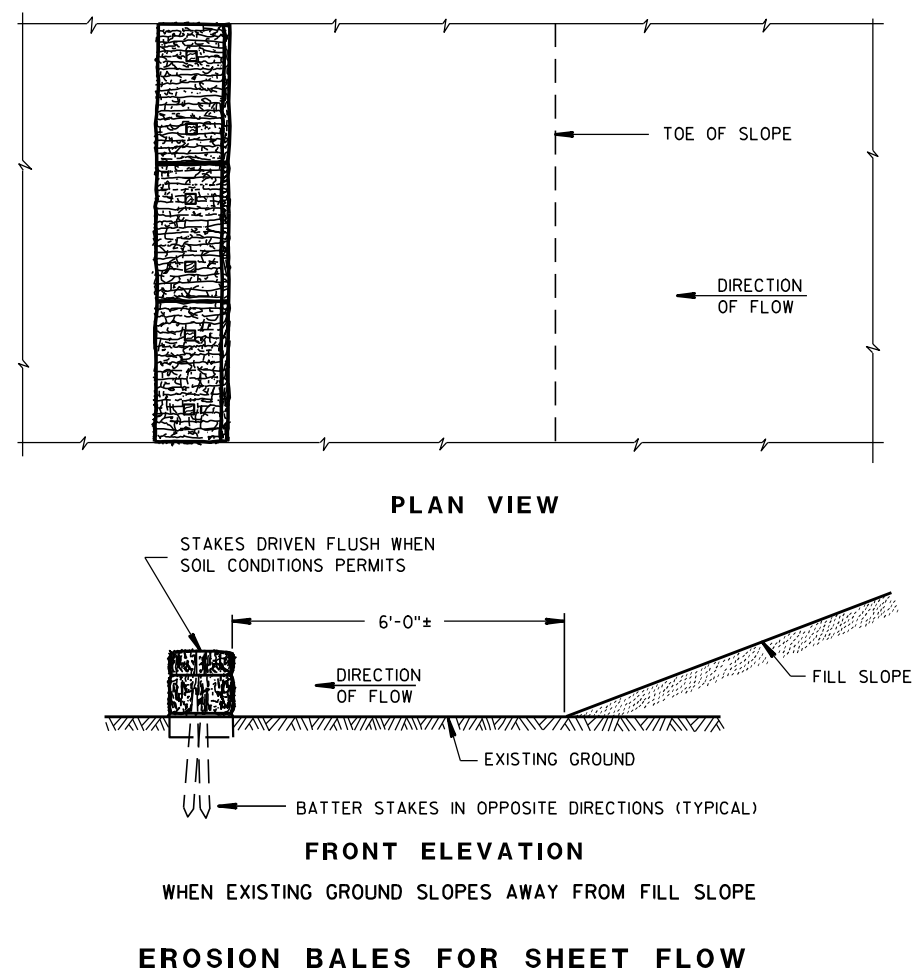
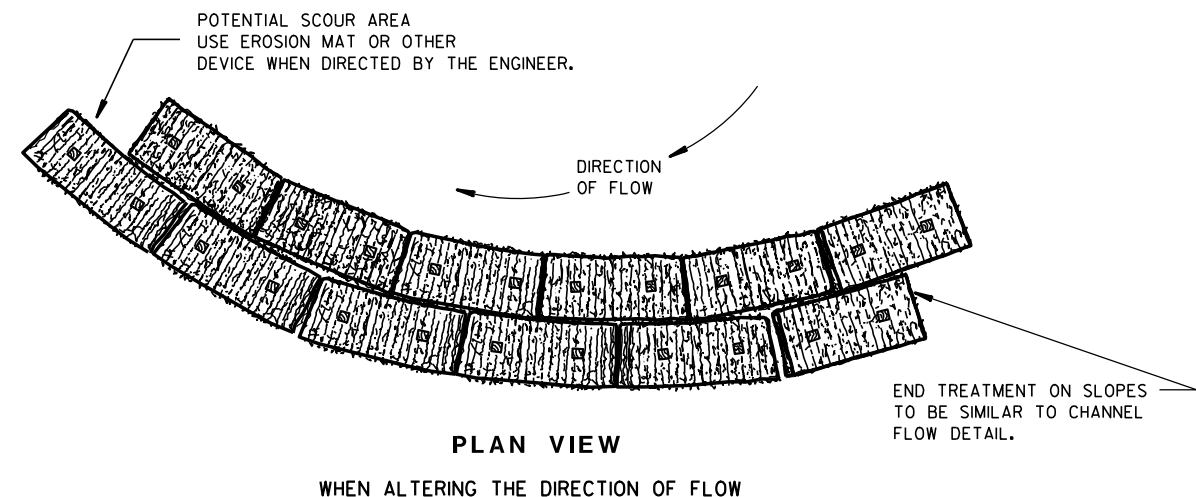




GENERAL NOTES

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.

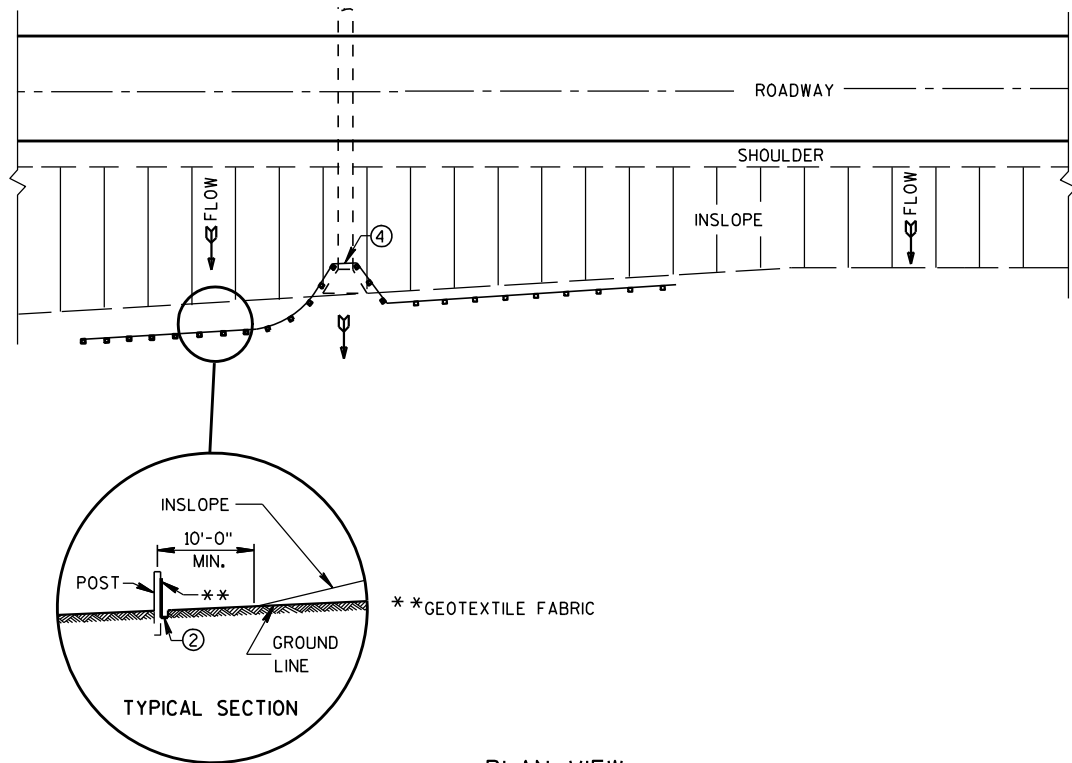
TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

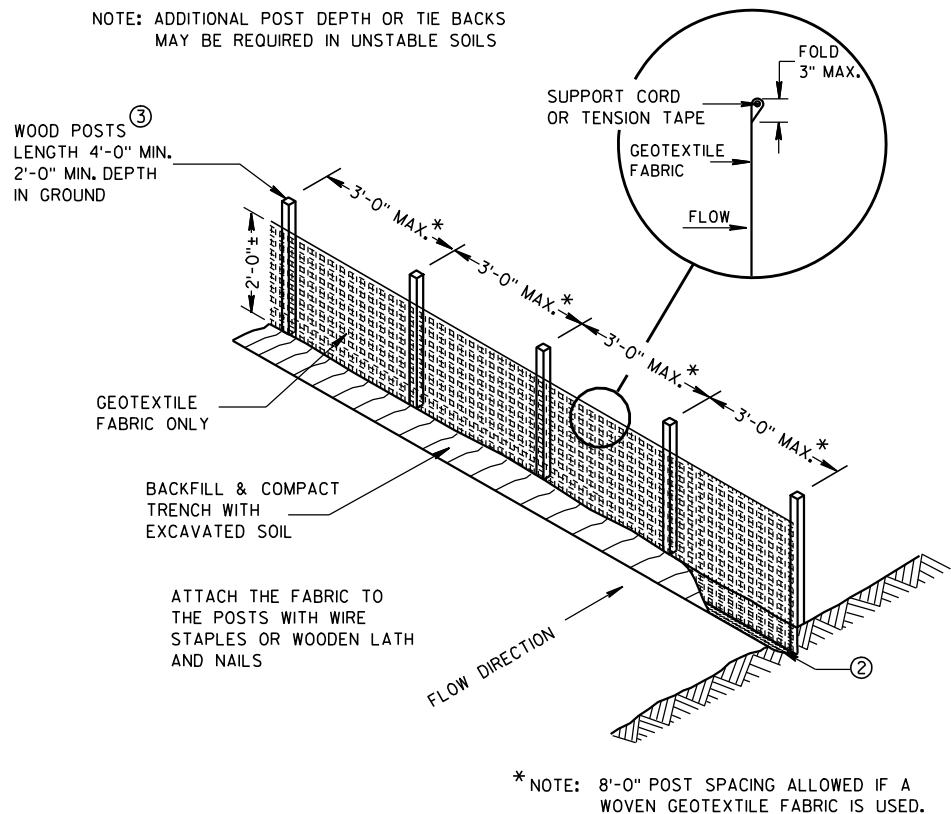
APPROVED

6/04/02
DATE/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

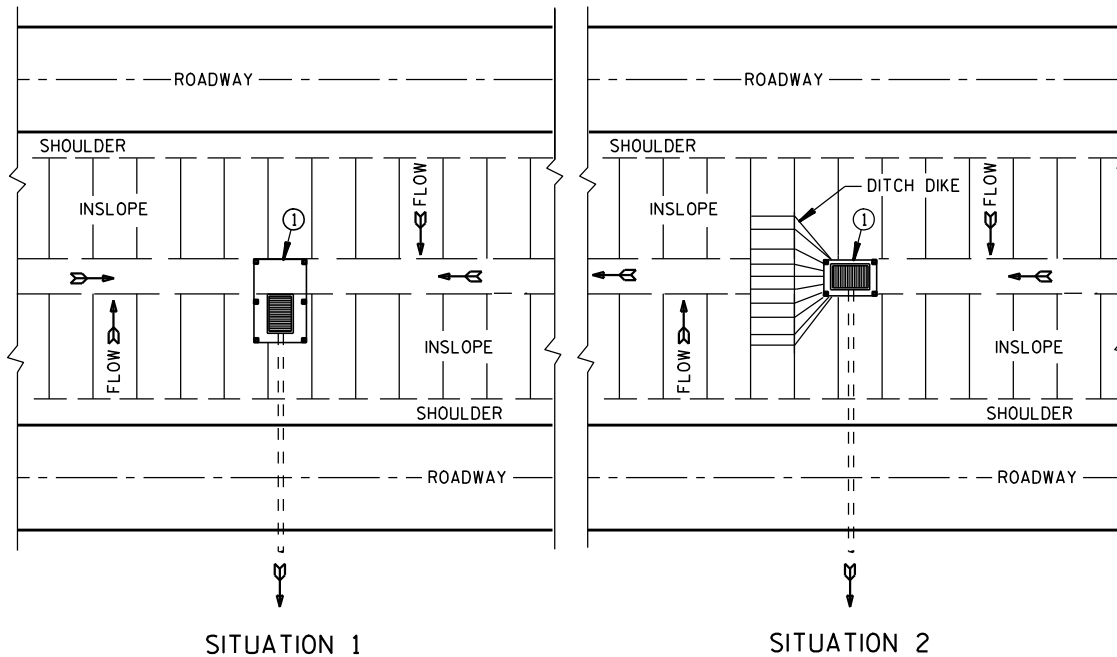
FHWA



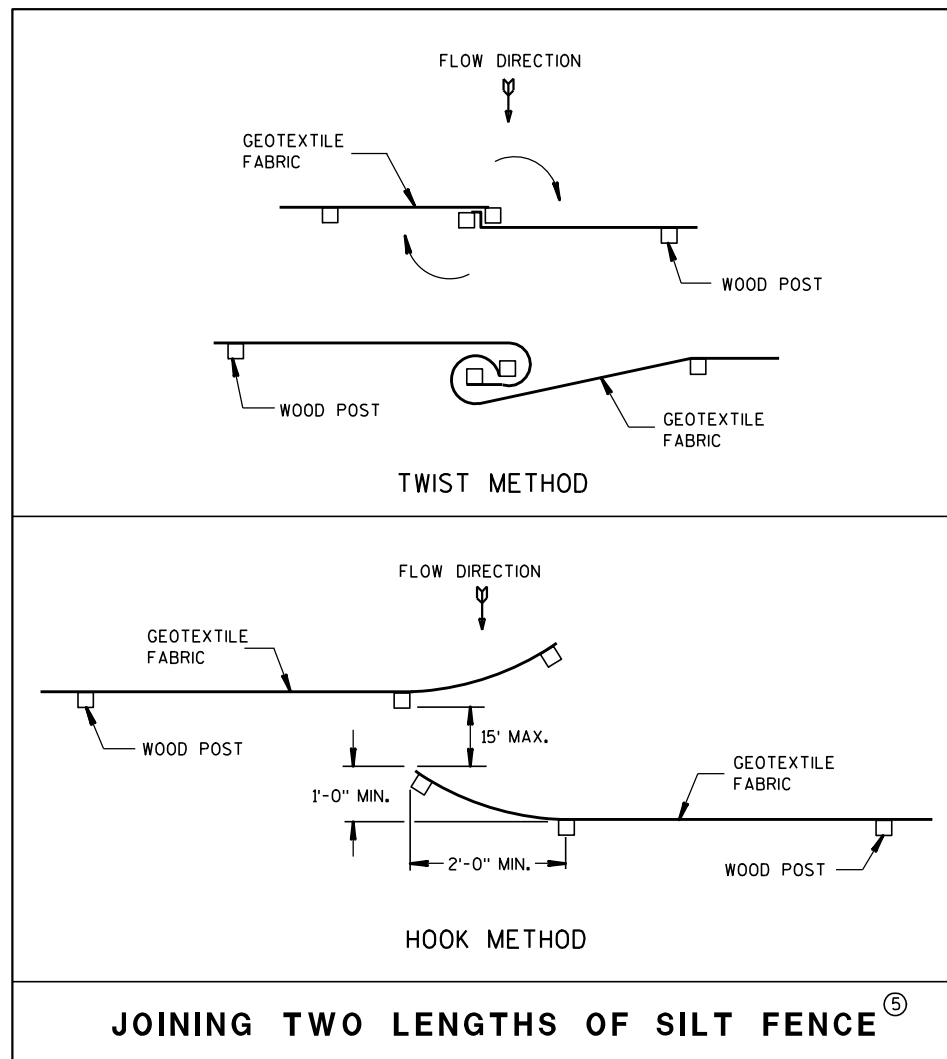
PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE



SILT FENCE



PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

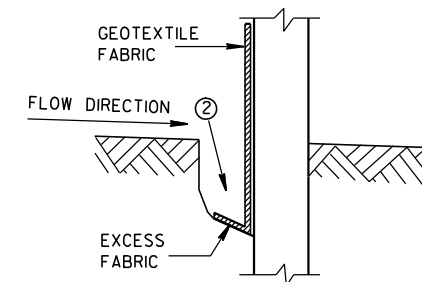


JOINING TWO LENGTHS OF SILT FENCE^⑤

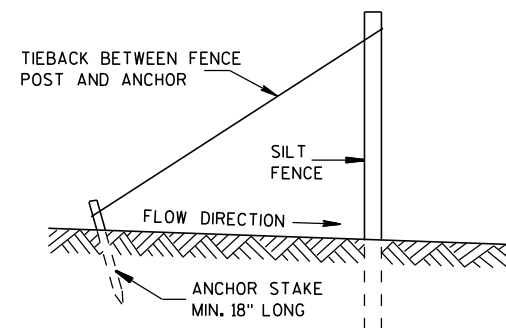
GENERAL NOTES

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 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

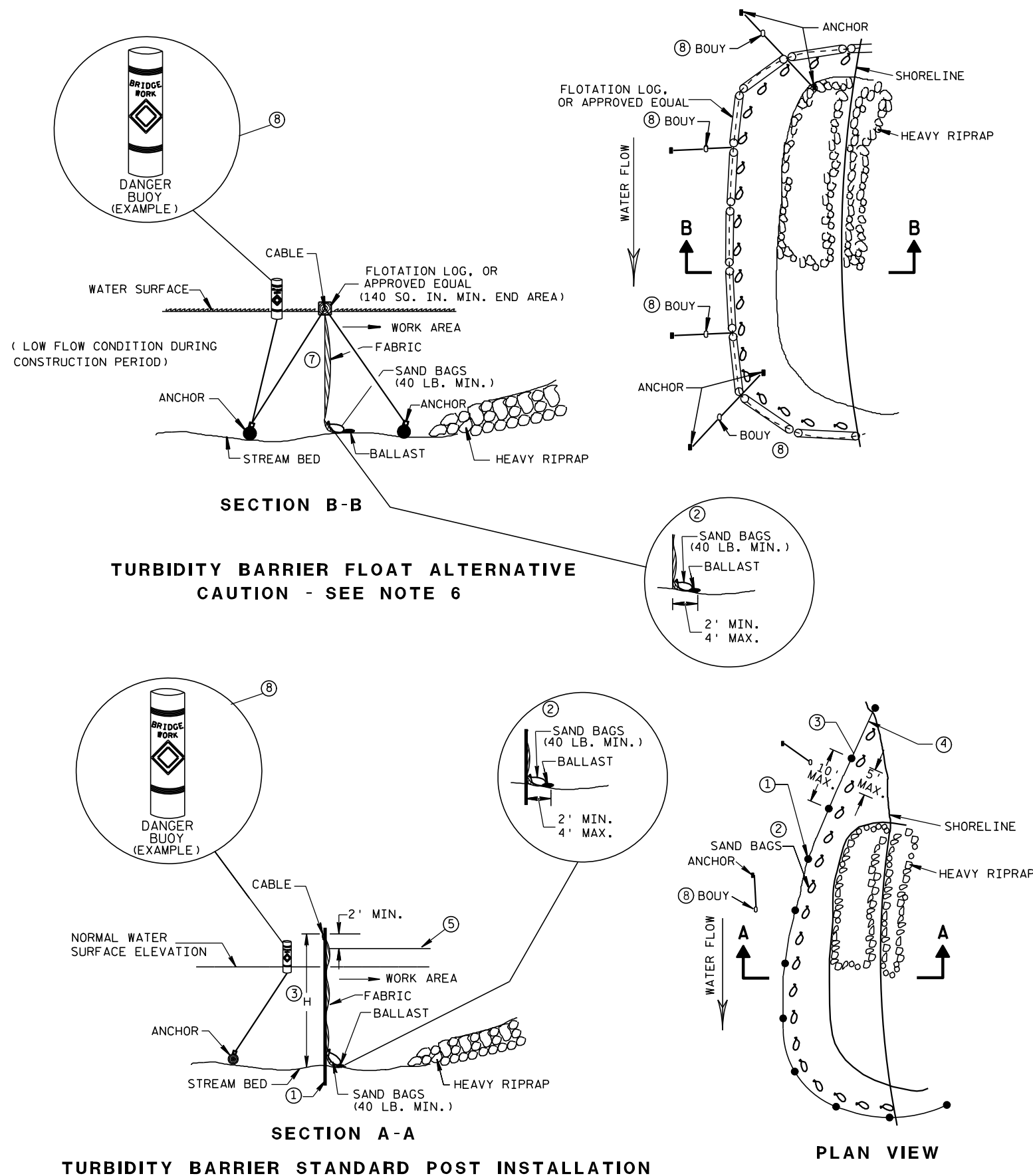


TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-29-05 DATE	/S/ Beth Canestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

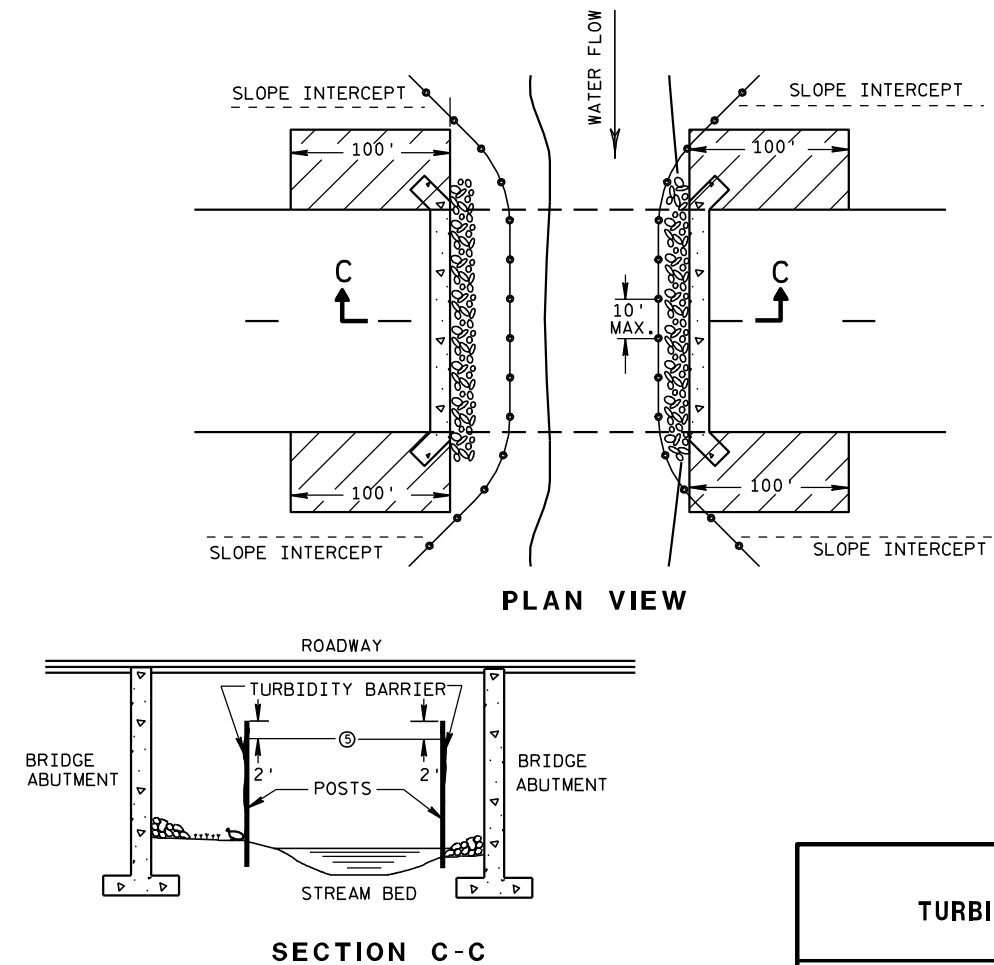


GENERAL NOTES

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.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

- ① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.
- ② SANDBAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.
- ③ WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.
- ④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.
- ⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE 02 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.
- ⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.
- ⑦ ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.
- ⑧ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

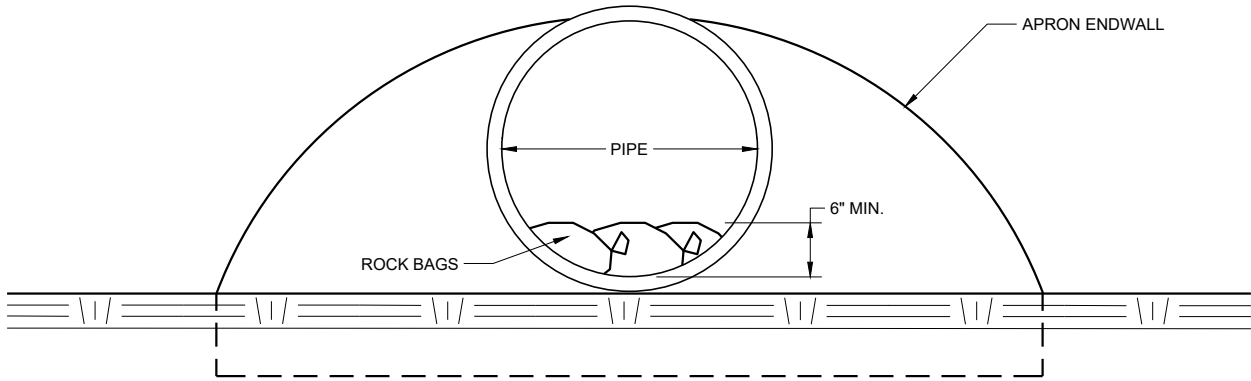
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

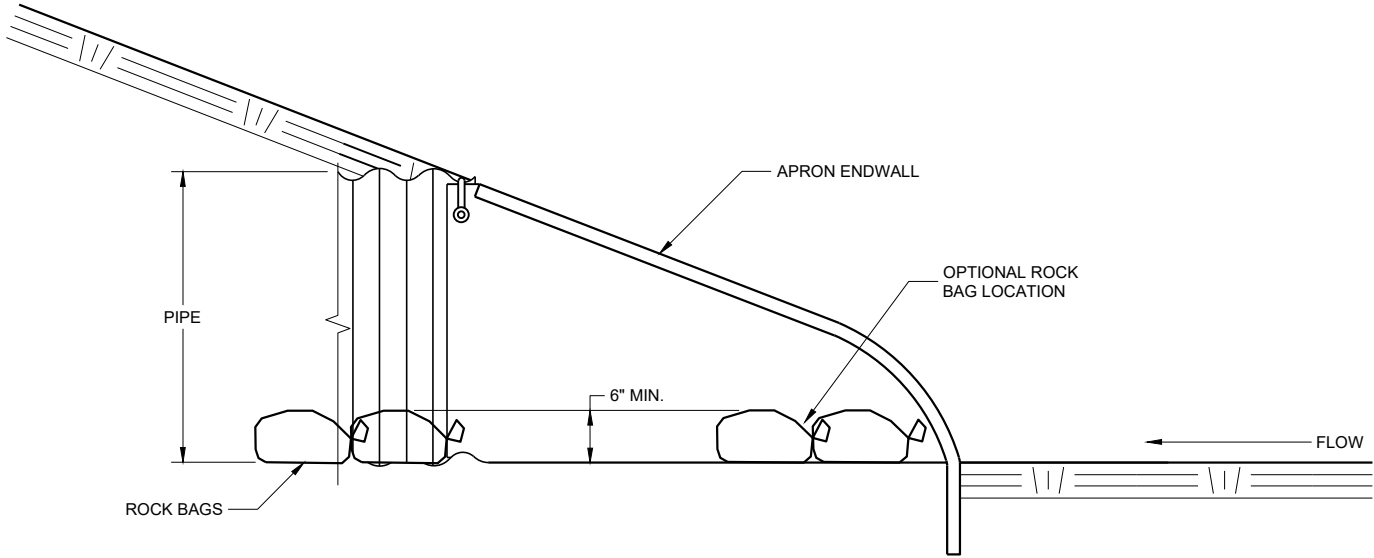
6/04/02
DATE

FHWA

/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER



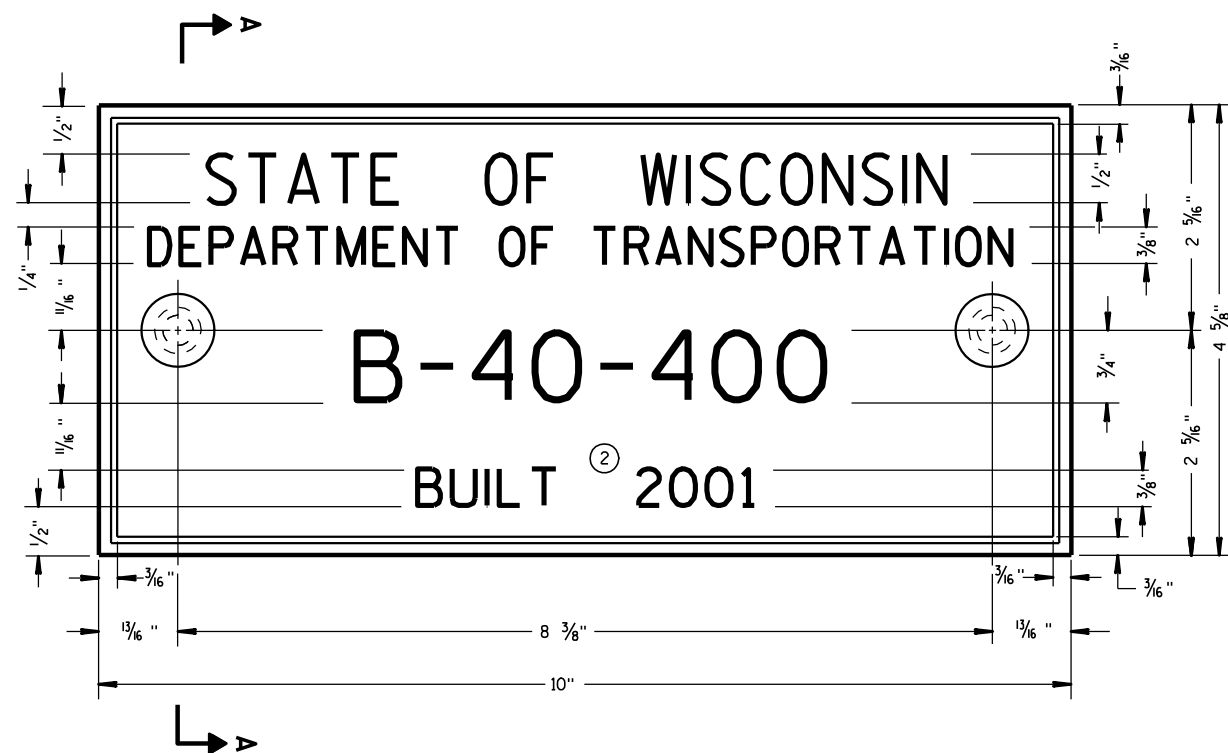
END VIEW



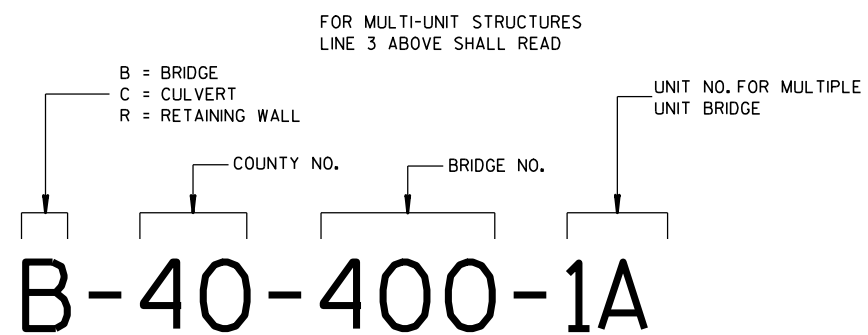
SIDE VIEW

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 ENGINEER
FHWA	



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)



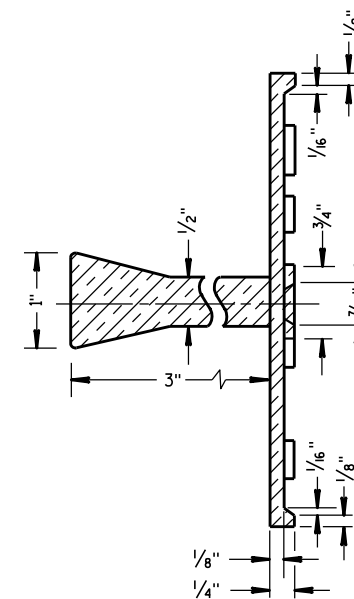
**NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES**

GENERAL NOTES

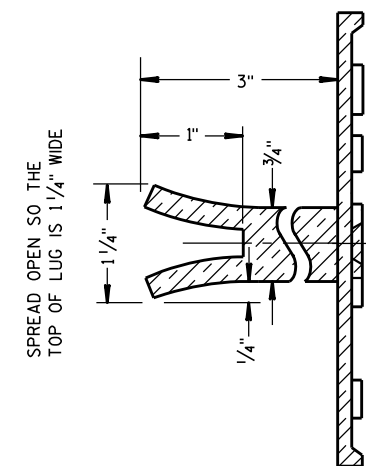
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

- ① EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ② REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.

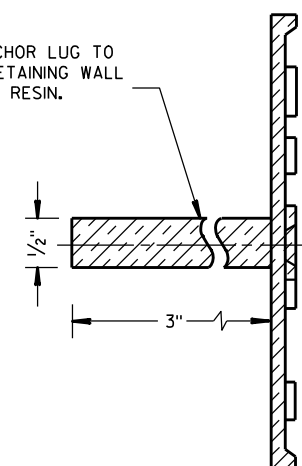


SECTION A-A



ALTERNATE LUG

- ① ADHERE ANCHOR LUG TO PRECAST RETAINING WALL WITH EPOXY RESIN.



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

**NAME PLATE
(STRUCTURES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

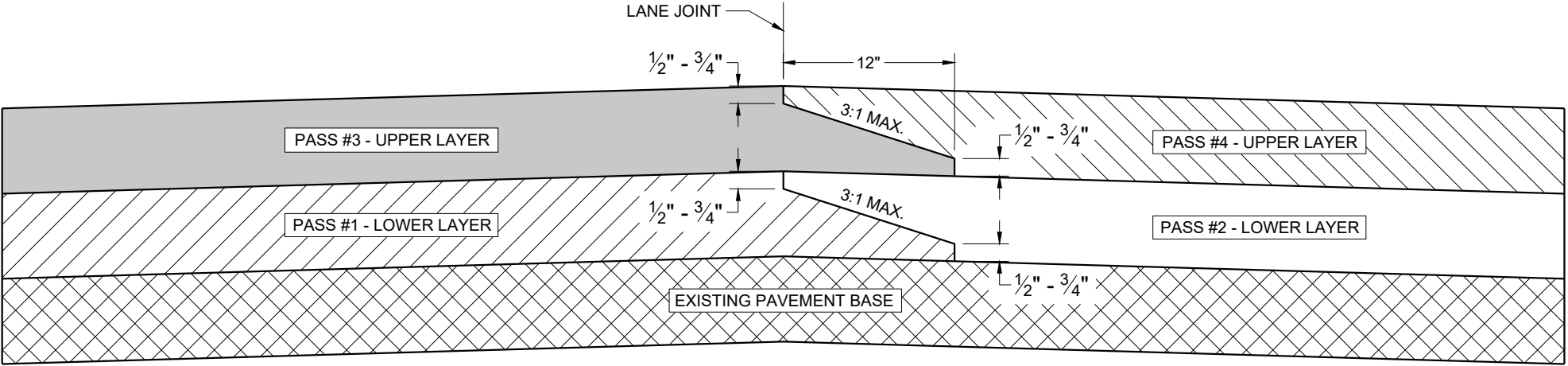
3/26/10
DATE

FHWA

/S/ Scot Becker
CHIEF STRUCTURAL DEVELOPMENT ENGINEER

GENERAL NOTES

CONFORM TO STANDARD SPECIFICATION 450.3.2.8



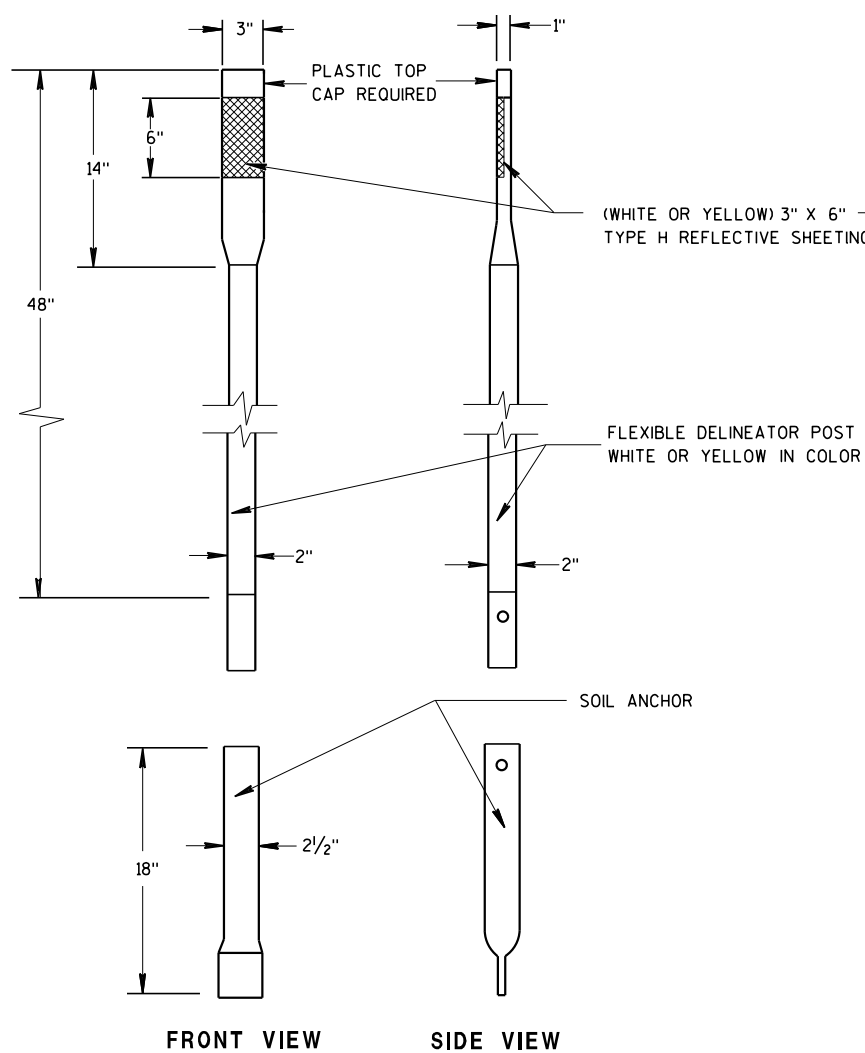
TYPICAL PAVEMENT CROSS SECTION
OF NOTCHED WEDGE LONGITUDINAL JOINTS

HMA LONGITUDINAL JOINTS

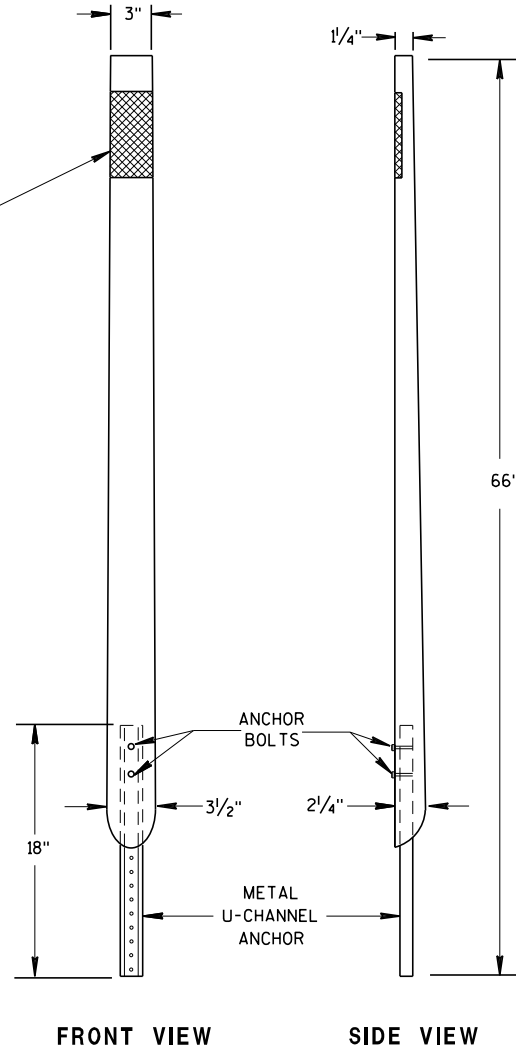
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 /S/ Steven Hefel
DATE HMA PAVEMENT ENGINEER

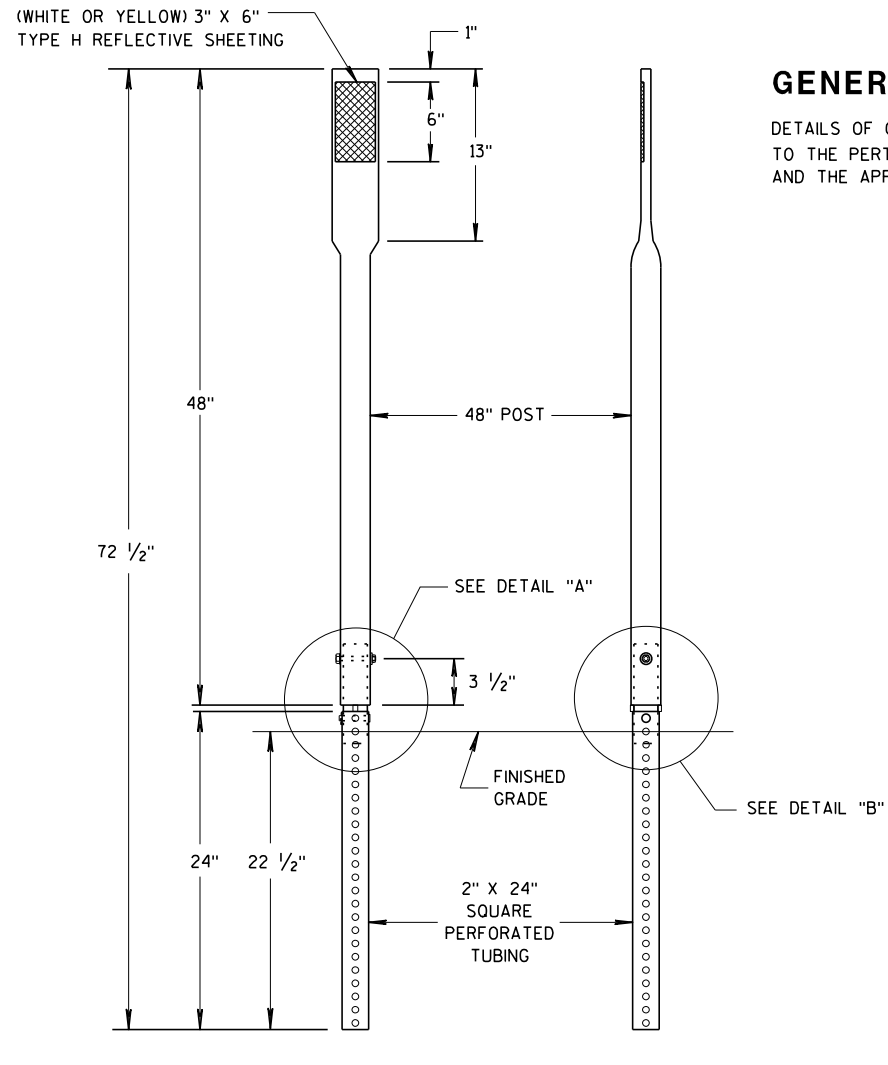
FHWA



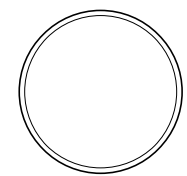
ALTERNATE 1



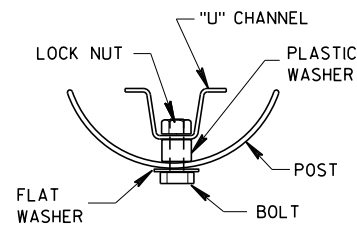
ALTERNATE 2
FLEXIBLE DELINEATOR POSTS



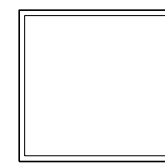
ALTERNATE 3



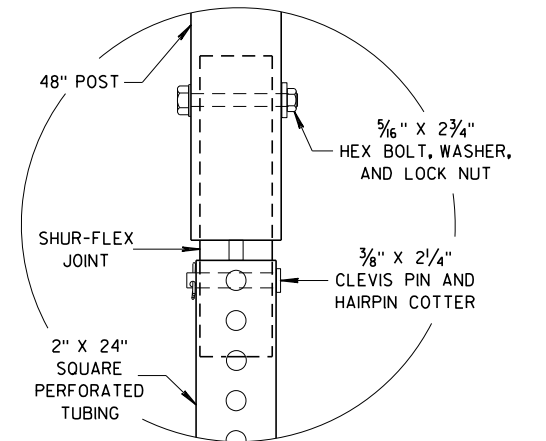
SECTION A-A



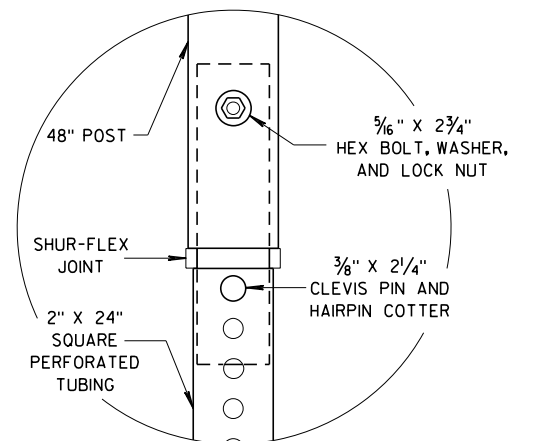
SECTION B-B



SECTION C-C



DETAIL A



DETAIL B

REFLECTOR SPACING TABLE

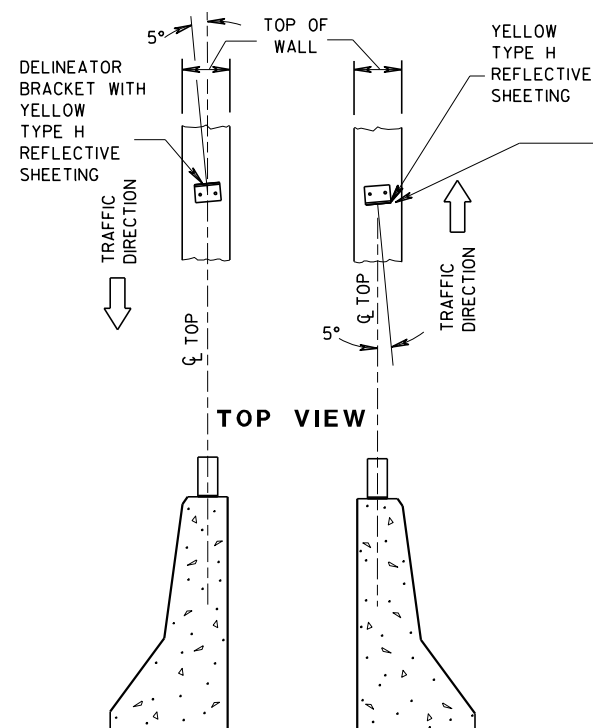
REFLECTOR SPACING	LOCATION
*100' C-C	RAMPS
400' C-C	MAINLINE

*START AT BEGINNING OF RAMP TAPER AND END AT END OF RAMP TAPER

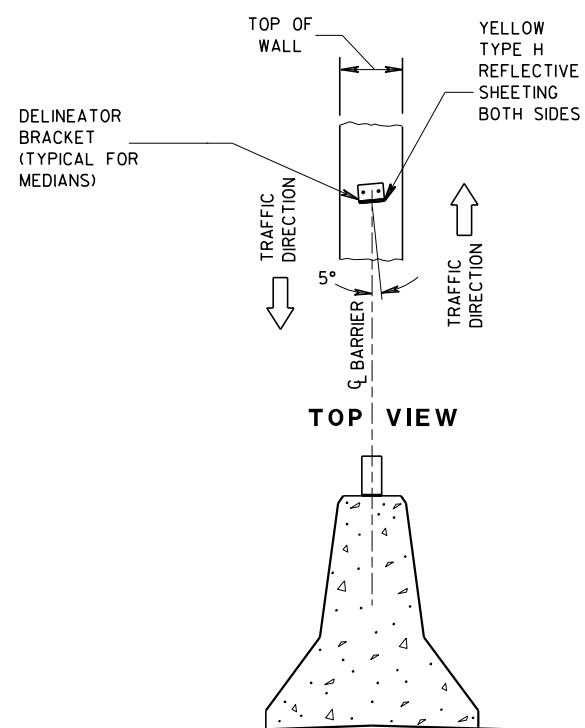
FLEXIBLE DELINEATOR POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

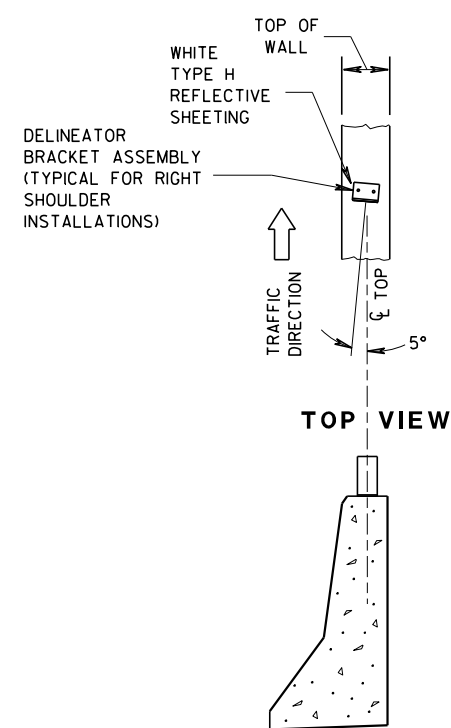
APPROVED
March 2018 /S/ Matt Rauch
DATE STATE SIGNING AND MARKING ENGINEER
FHWA



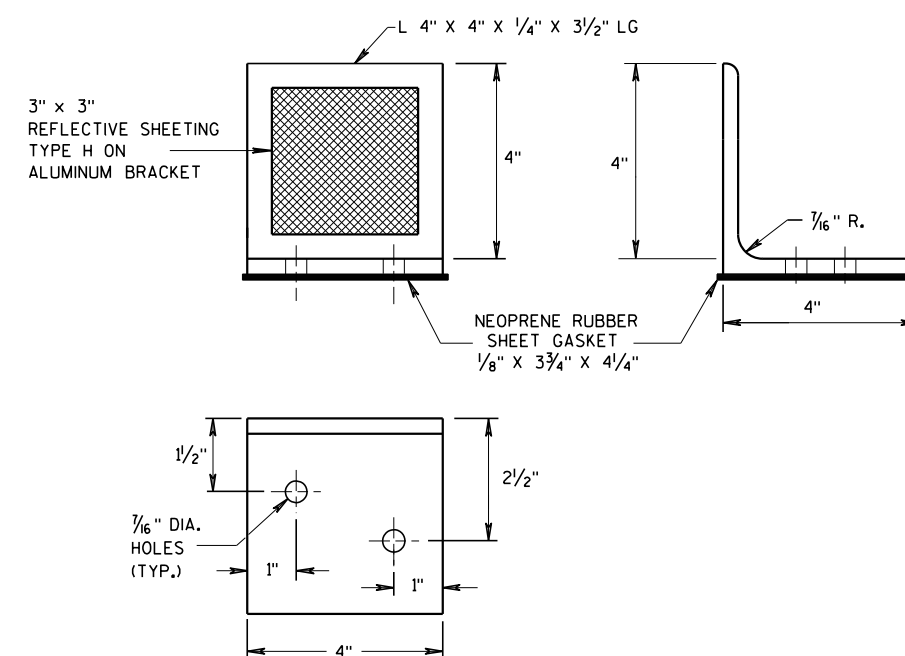
DOUBLE BARRIERS IN MEDIAN



MEDIAN BARRIER



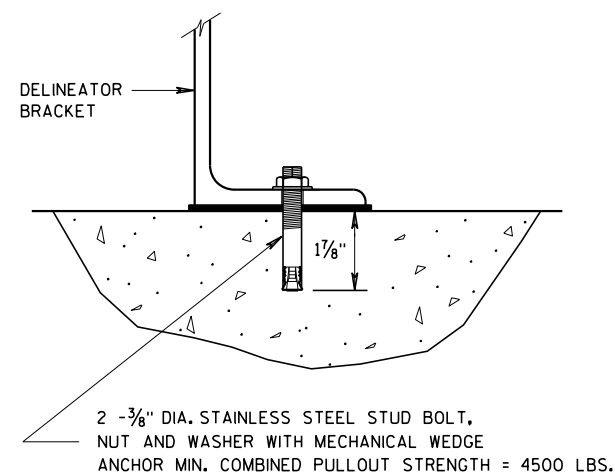
BARRIER LOCATED TO RT. OF TRAFFIC FLOW



DELINEATOR BRACKET

REFLECTOR SPACING TABLE

REFLECTOR SPACING	MINIMUM NUMBER OF REFLECTORS
100' C-C	3

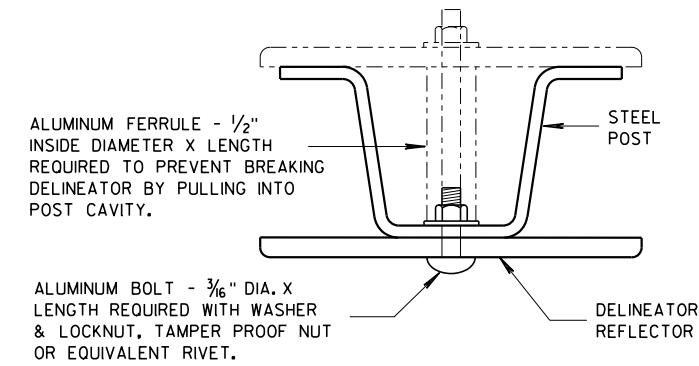


DELINEATOR BRACKET MOUNTING DETAIL

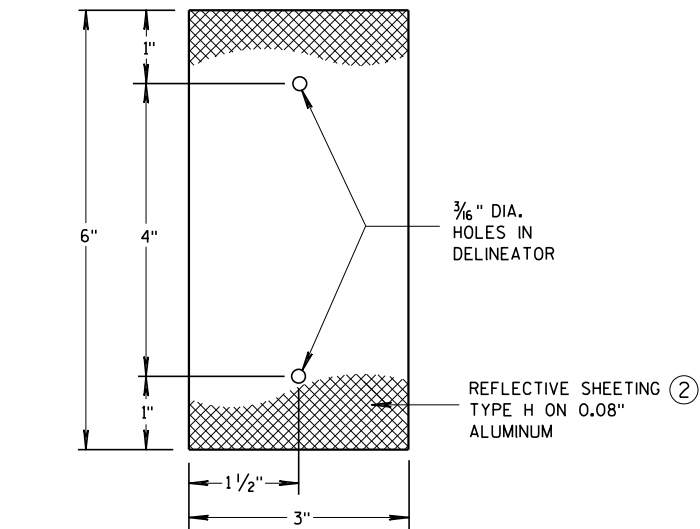
DELINEATOR BRACKET WITH REFLECTIVE SHEETING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

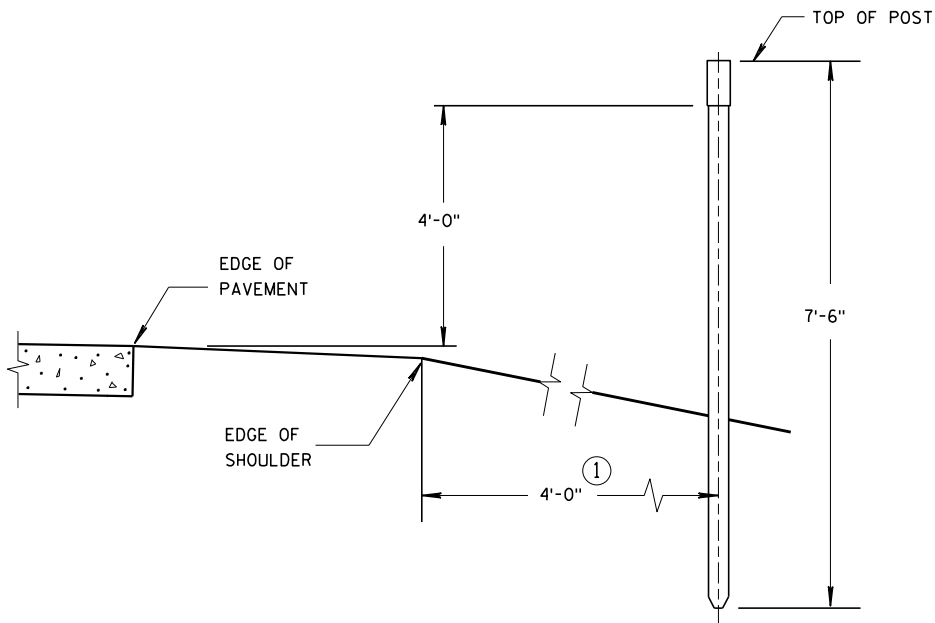
APPROVED
March 2018 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MARKING ENGINEER
FHWA



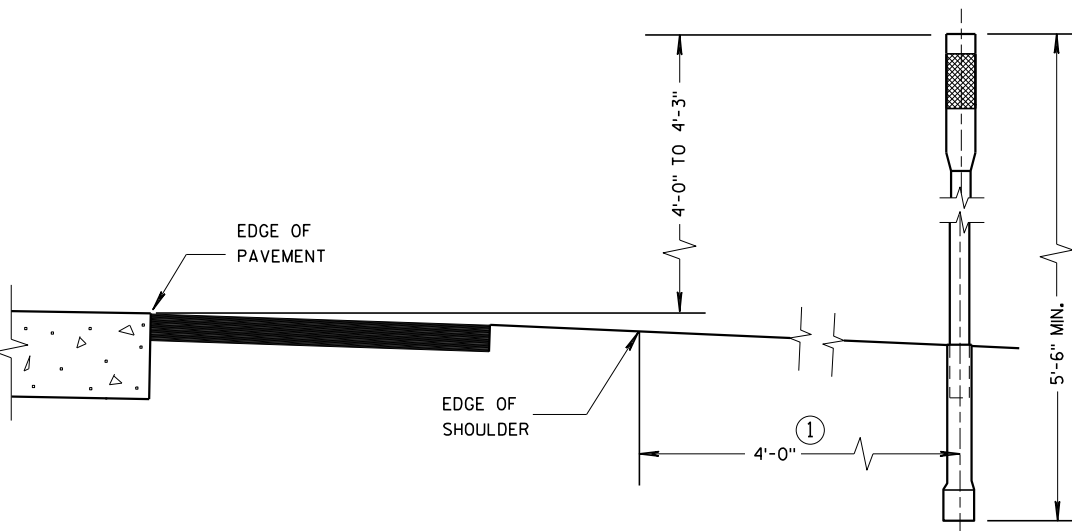
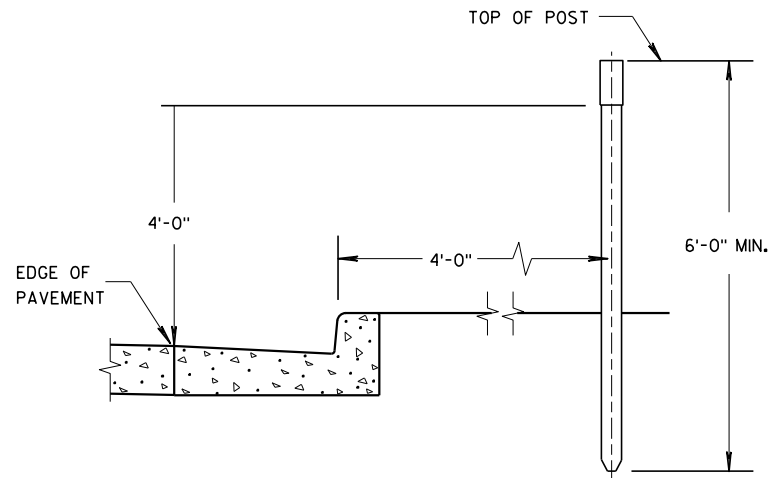
MOUNTING DETAIL FOR DELINEATOR REFLECTOR



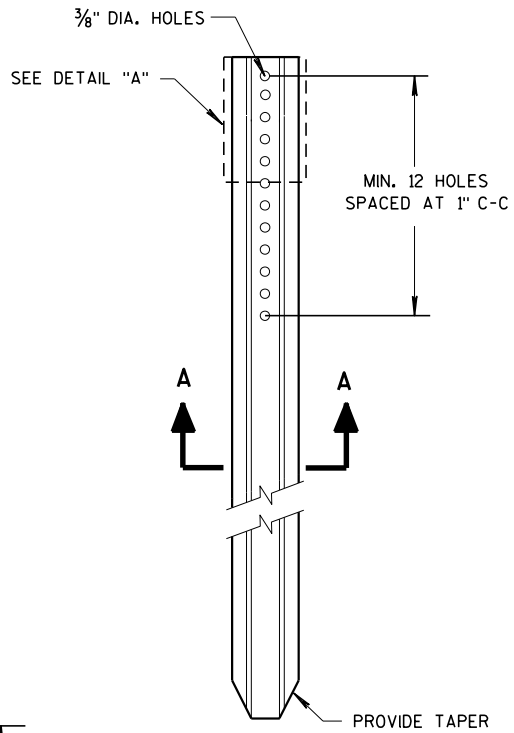
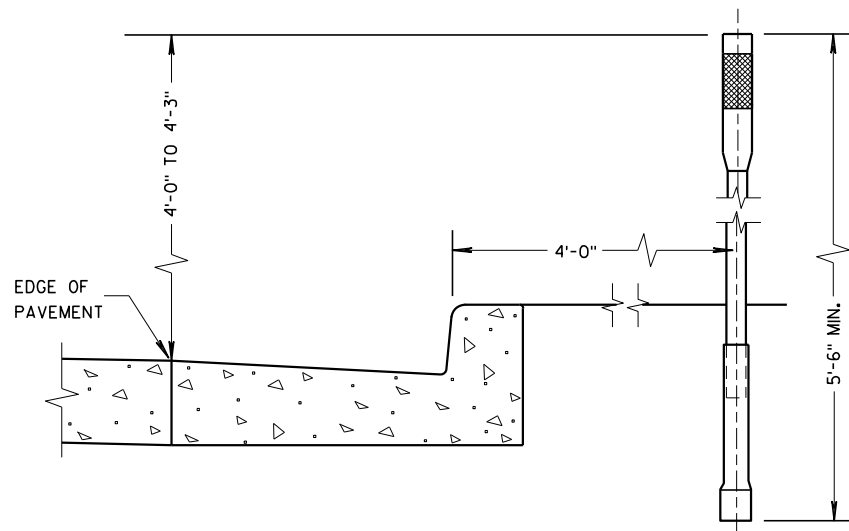
DETAIL "A" 3" X 6" DELINEATOR REFLECTOR



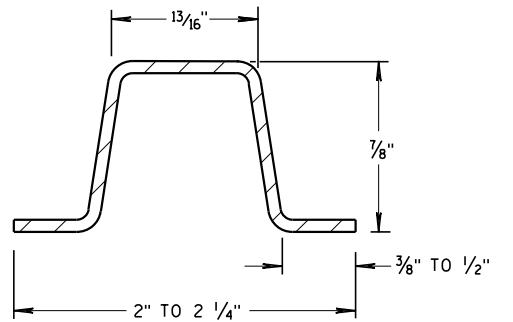
TYPICAL INSTALLATIONS OF DELINEATOR POSTS



TYPICAL INSTALLATIONS OF FLEXIBLE DELINEATOR POSTS



DELINEATOR POST



SECTION A-A

WEIGHT 1.12 LBS PER FT. ± 0.1 LB.

REFLECTOR SPACING TABLE

REFLECTOR SPACING	LOCATION
400'	MAINLINE
100'	RAMPS *

* START AT BEGINNING OF RAMP TAPER AND END AT END OF RAMP TAPER.

GENERAL NOTES

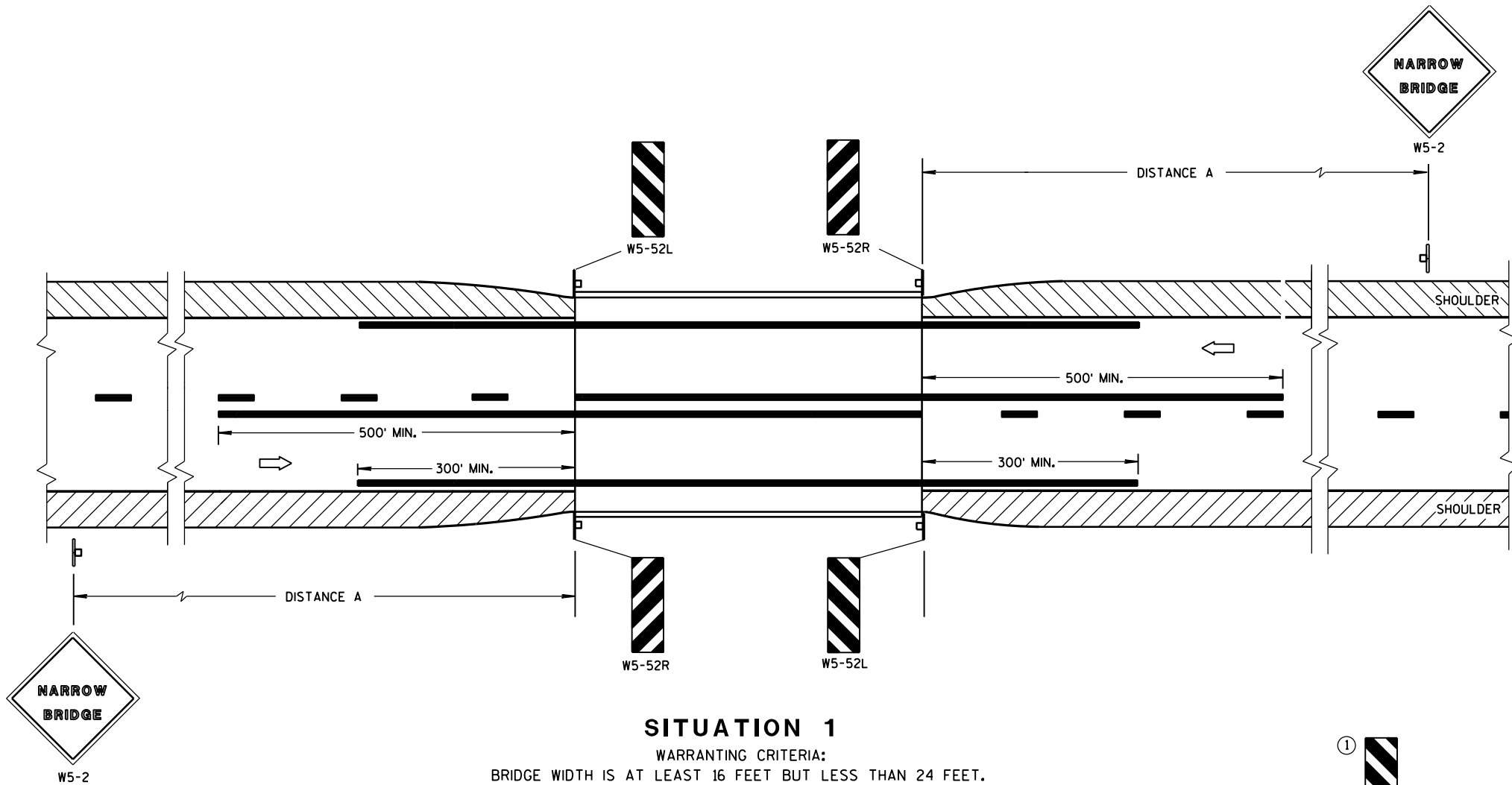
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

- ① DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.
- ② FURNISH TYPE H SHEETING FROM THE APPROVED PRODUCTS LIST.

DELINEATOR POST WITH REFLECTIVE SHEETING

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED March 2018 /S/ Matthew R. Rauch DATE STATE SIGNING AND MARKING ENGINEER FHWA



SITUATION 1

WARRANTING CRITERIA:
BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET.

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A "
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	750'

GENERAL NOTES

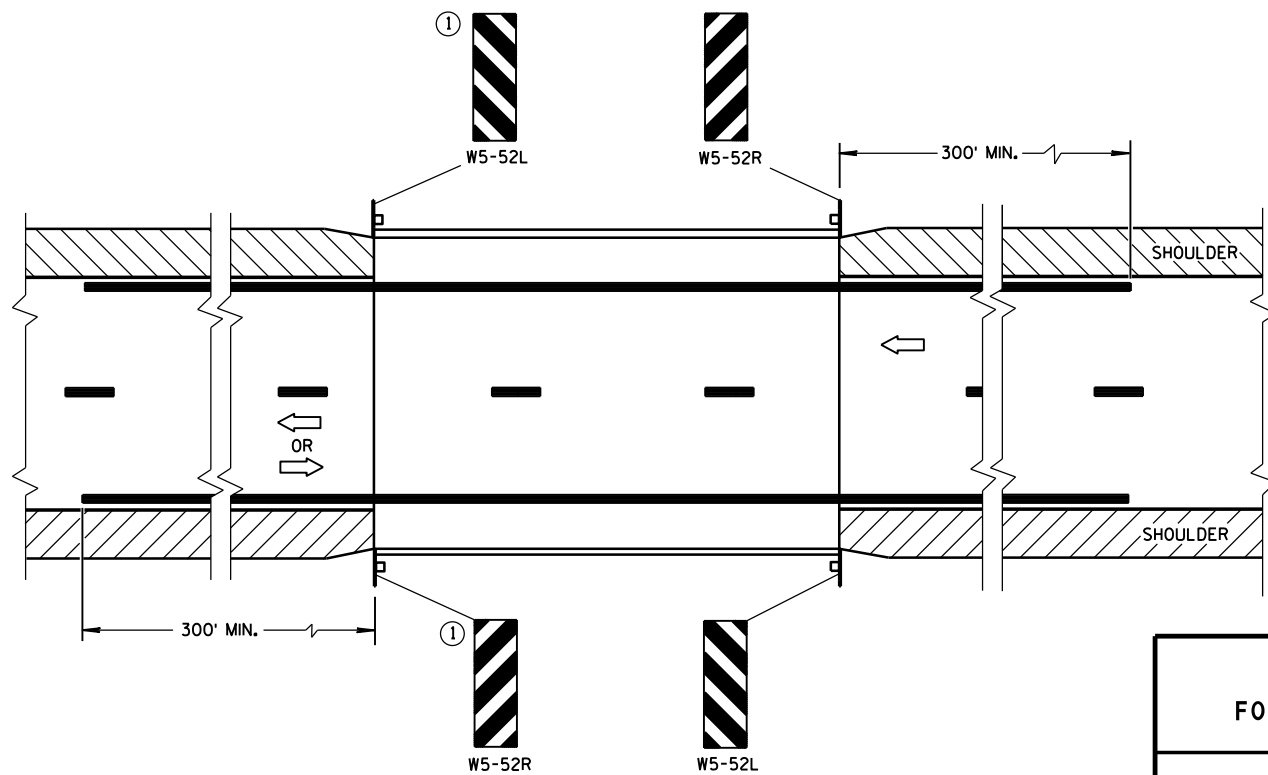
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

LOCATE W5-52 SIGN POST(S) BEHIND GUARDRAIL WHEN PRESENT.

PLACE THE EDGE OF THE W5-52 SIGN IN LINE WITH FACE OF CURB OR PARAPET.

① OMIT ON ONE-WAY TRAVELLED WAYS.

➡ DIRECTION OF TRAFFIC



SITUATION 2

WARRANTING CRITERIA:
1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE SHOULDER WIDTH IS LESS THAN 6 FEET.

SIGNING & MARKING FOR TWO LANE BRIDGES

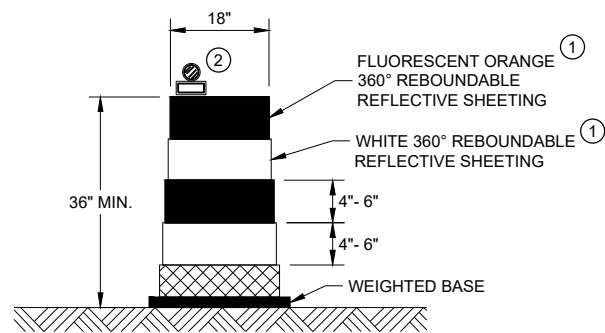
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

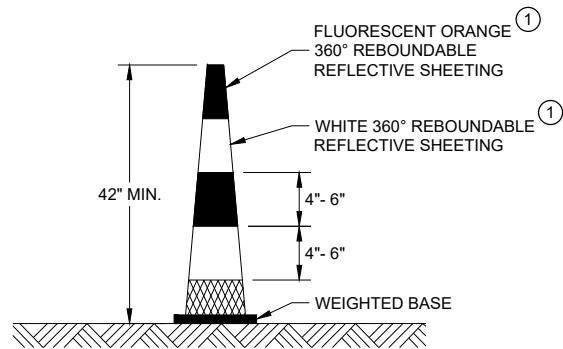
June 2017
DATE

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

FHWA

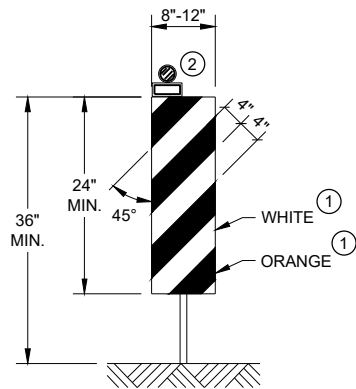


DRUM



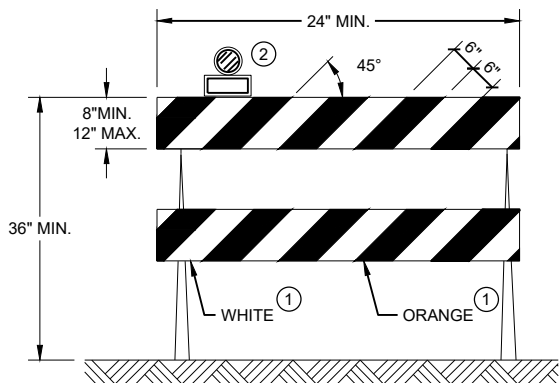
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



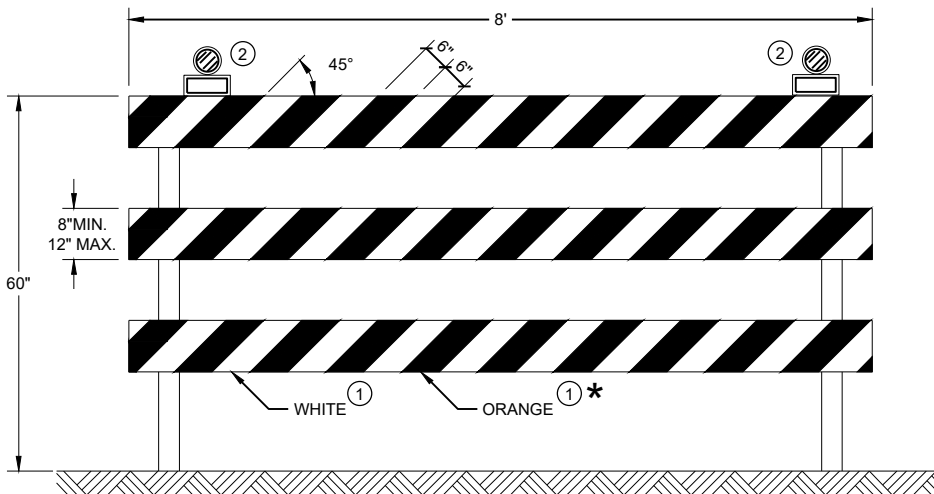
VERTICAL PANEL

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



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

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.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

LEGEND

-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  TEMPORARY PORTABLE RUMBLE STRIP ARRAY
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

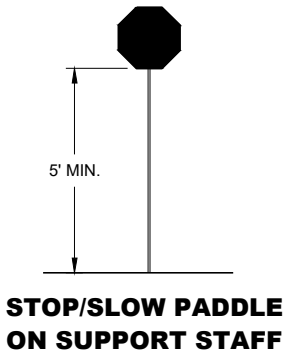
WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

- FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.
- FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
 - SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.
- WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

- UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.
- EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.
- ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FOR THE APPROVED PRODUCTS LIST.
- INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.
- PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.
- DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

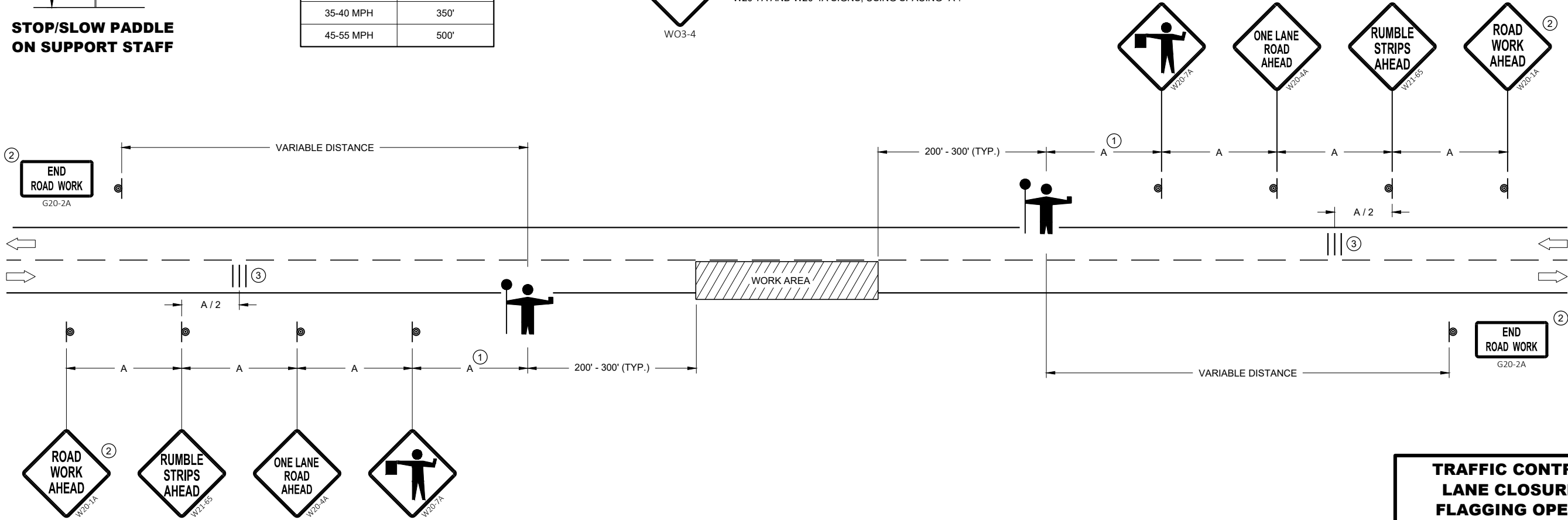


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

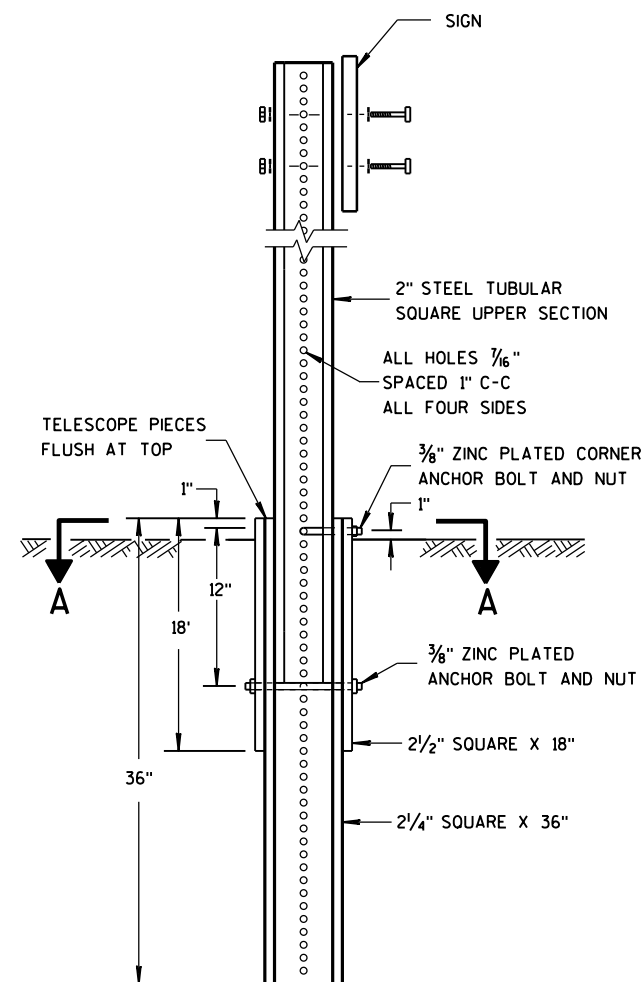


USE OF W03-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

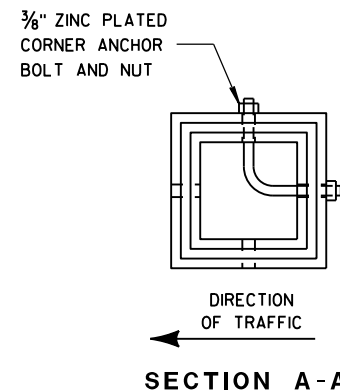


DETAIL OF TUBULAR
STEEL SIGN POST

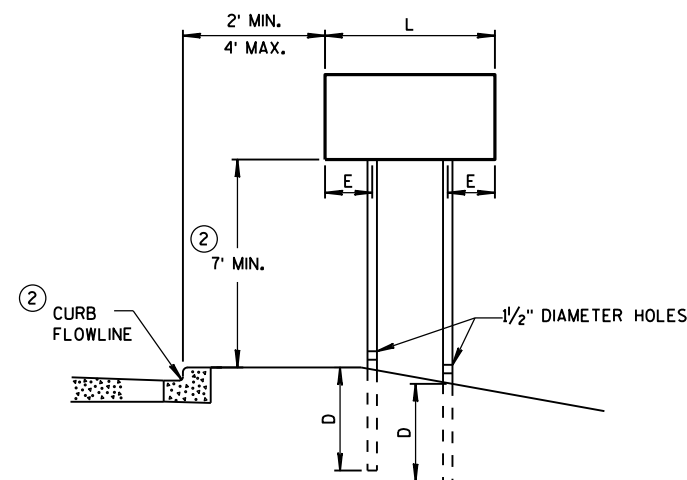
TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL 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).
SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED
ON TUBULAR STEEL POSTS.



SECTION A-A

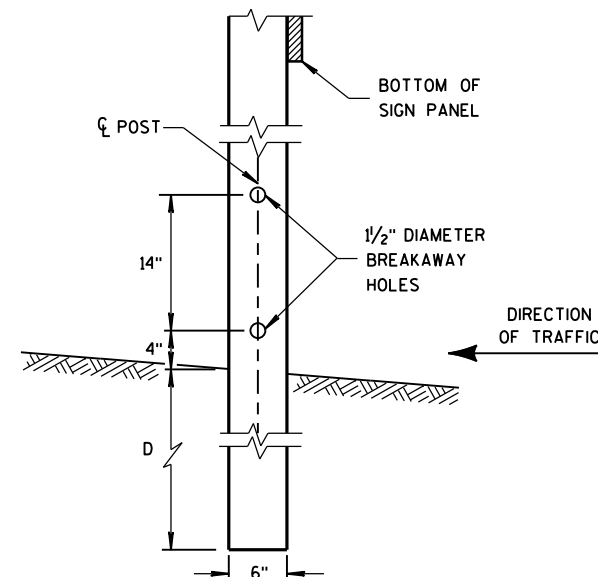


URBAN AREA

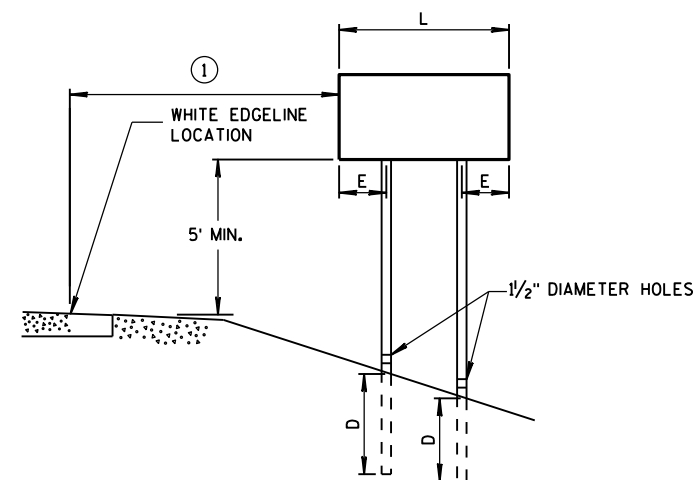
POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST
EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'



4 "x6 " WOOD POST
MODIFICATION



RURAL AREA

4 " X 6 " WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

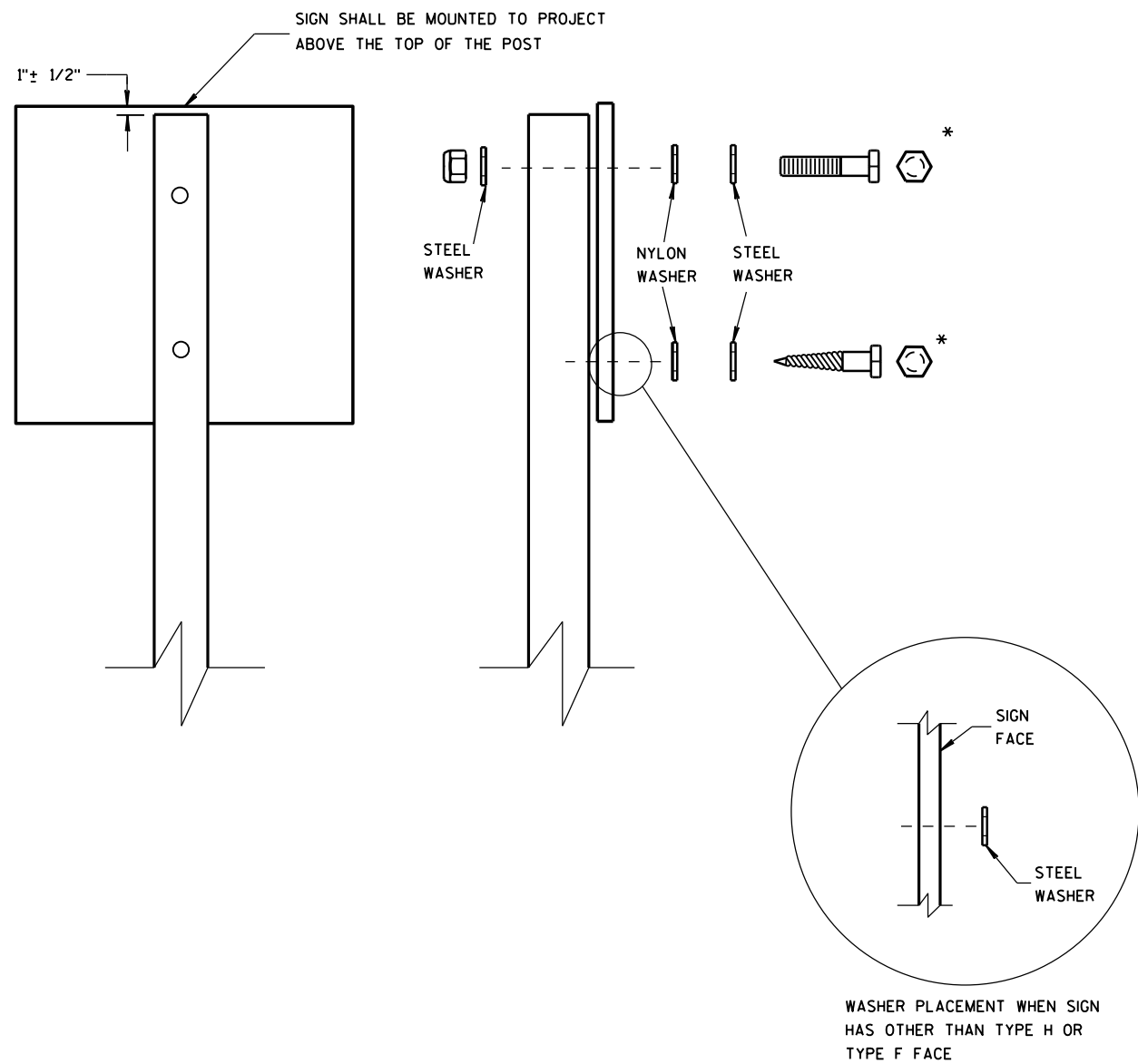
SEE NOTE ③

GENERAL NOTES

- ① 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.
- 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. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.
- ③ FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.

TEMPORARY TRAFFIC CONTROL
SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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.

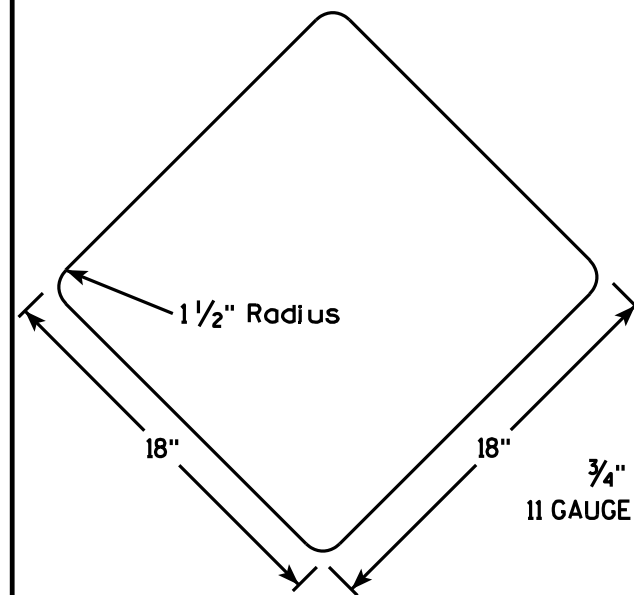
- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" x 3"
 - MACHINE BOLTS - 5/16" x 6-1/2" OR 7" LENGTH W/ NUTS

- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - 3/8" x 3-1/4" LENGTH W/ NUTS
 - RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

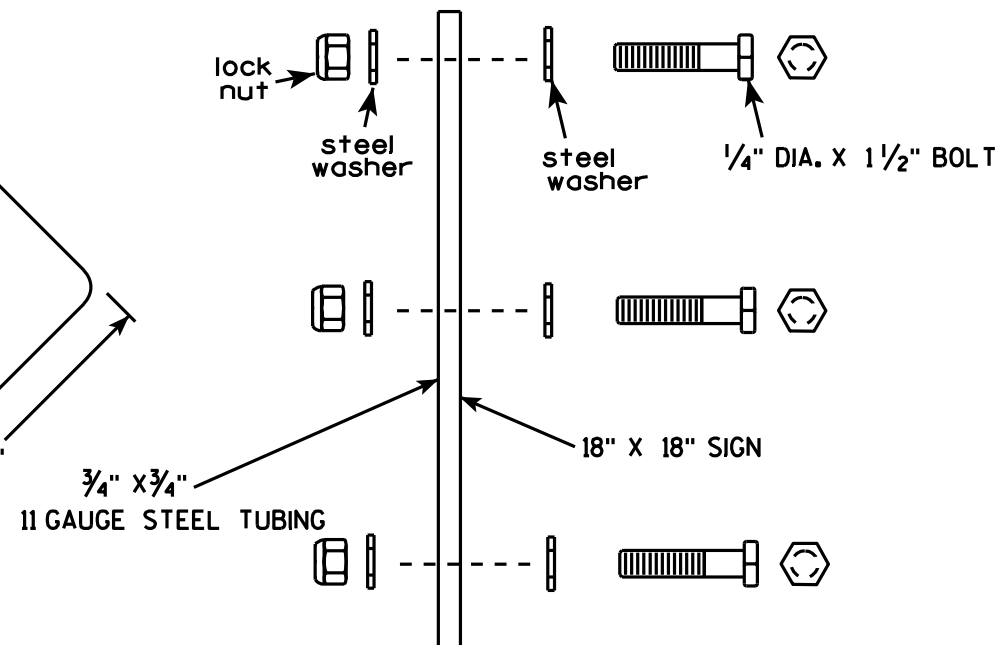
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. x 3/8" I.D. x 1/16" STEEL
 - 1-1/4" O.D. x 3/8" I.D. x .080 NYLON FOR ALL TYPE H SIGNS

* 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

ATTACHMENT OF SIGNS TO POSTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Andrew Heldtke WORK ZONE ENGINEER
FHWA	



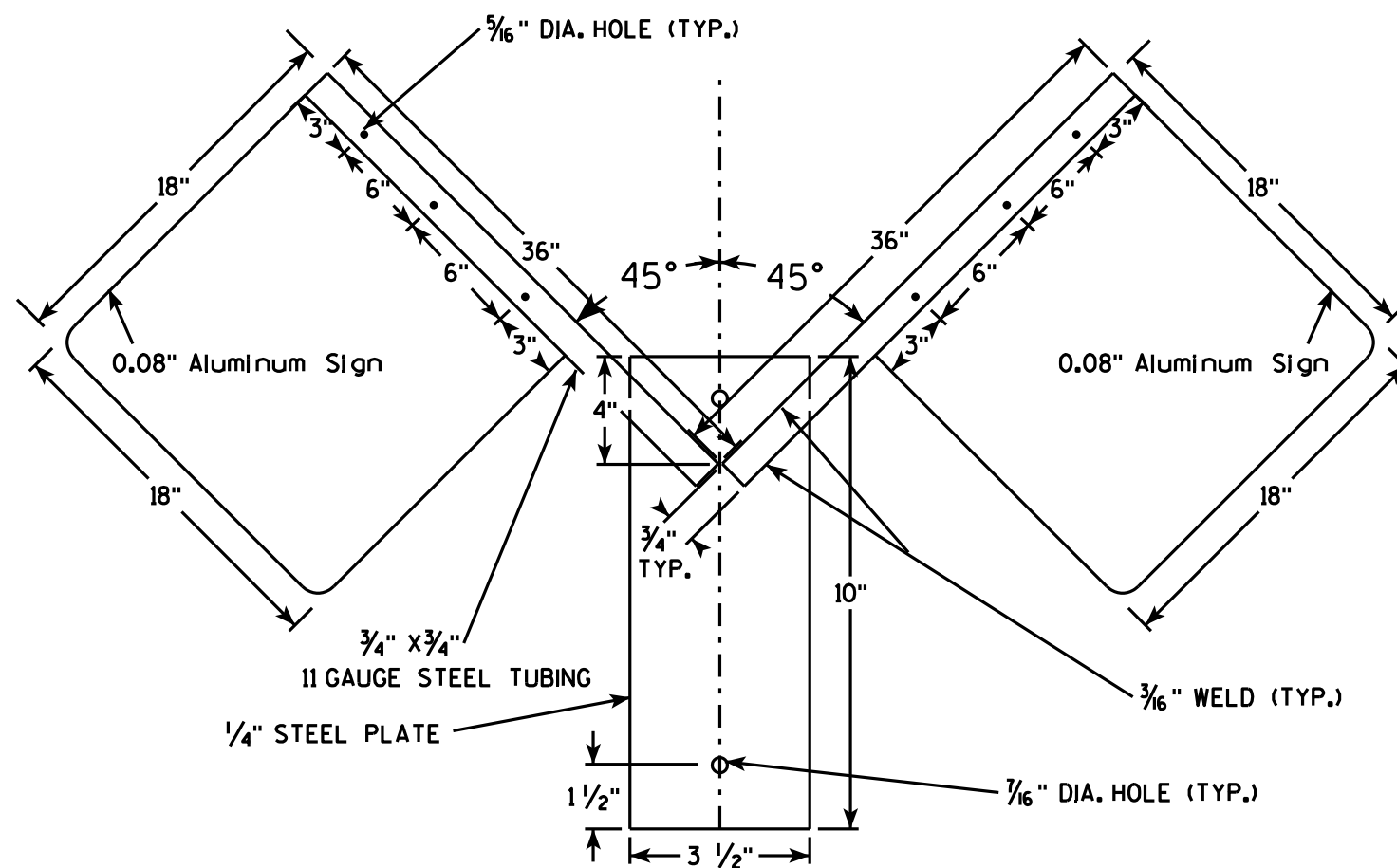
SIGN DETAIL



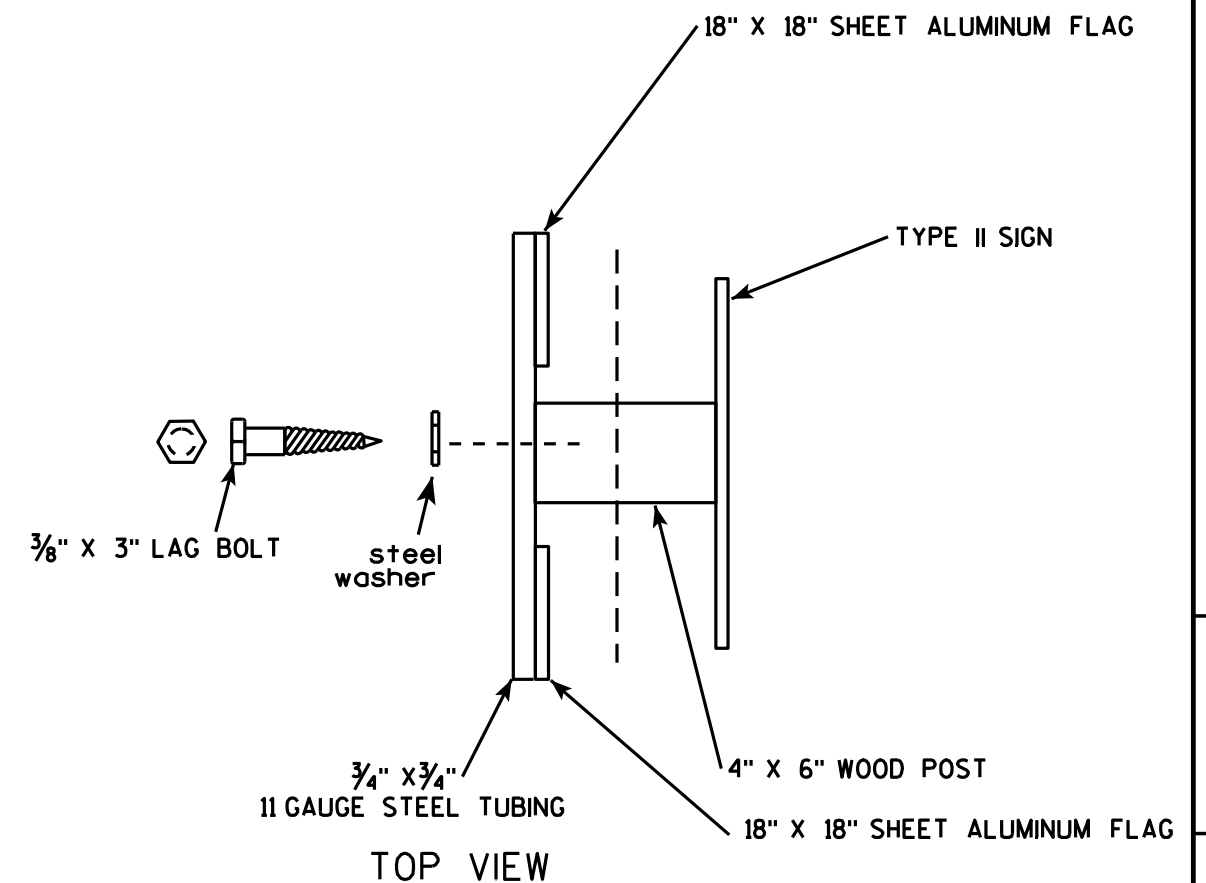
FLAG BOLTING PROCEDURE

GENERAL NOTES

1. ALL MATERIAL TO BE APPROVED BY ENGINEER BEFORE INSTALLATION.
2. SEE SIGN PLATE A4-8 FOR HARDWARE REQUIREMENTS.
3. SIGN IS TYPE II, TYPE F REFLECTIVE- REFERENCE WISDOT STANDARD SPECIFICATION FOR HIGHWAY AND STRUCTURE CONSTRUCTION LATEST EDITION.
4. SIGN COLOR - ORANGE
5. SIGN CORNERS SHALL BE ROUNDED
6. BRACKET SHALL BE ENTIRELY PRIMED AND PAINTED WITH TWO COATS OF A BLACK POWDER COATED ENAMEL PAINT.



BACK VIEW



TOP VIEW

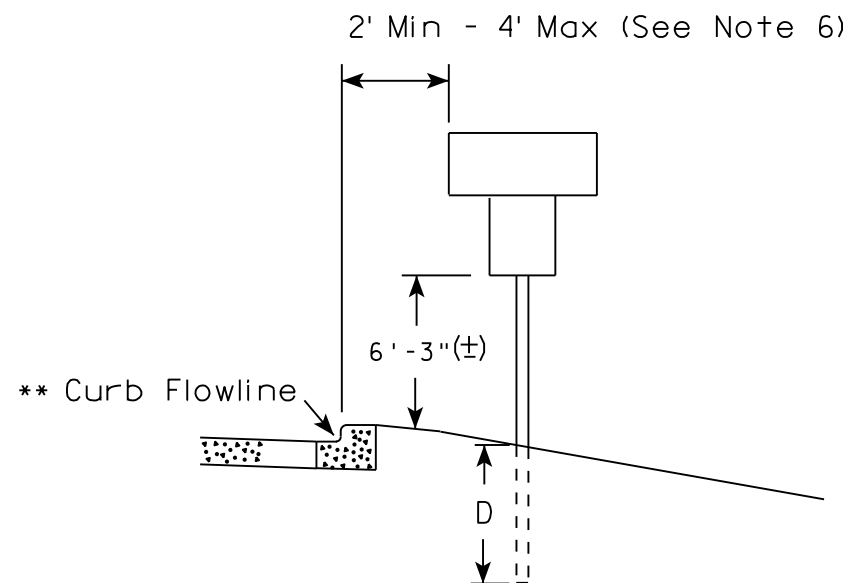
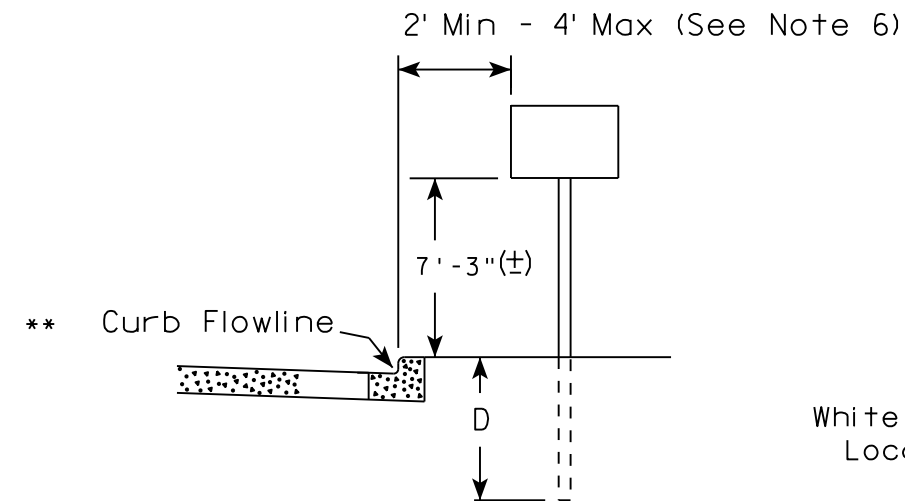
TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGN FLAGS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

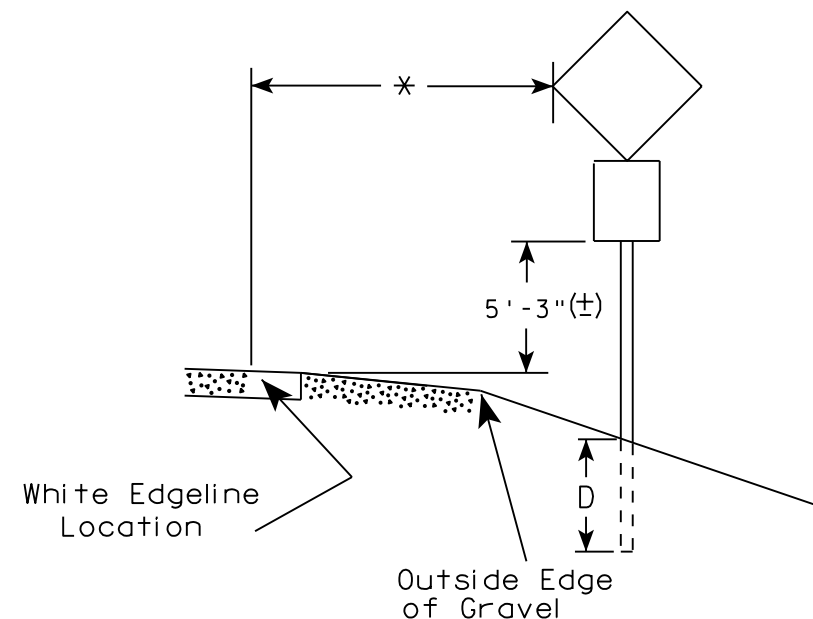
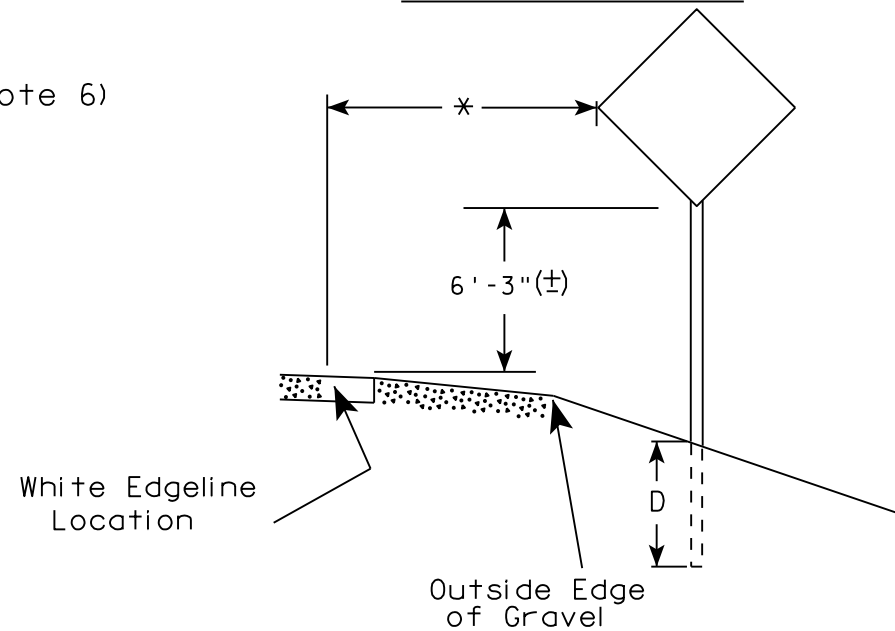
DATE 5/15/13 PLATE NO. A4-15.3

URBAN AREA



✱✱ 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.

RURAL AREA (See Note 2)



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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies are considered to be one sign for mounting height.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'-3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), 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" (±).

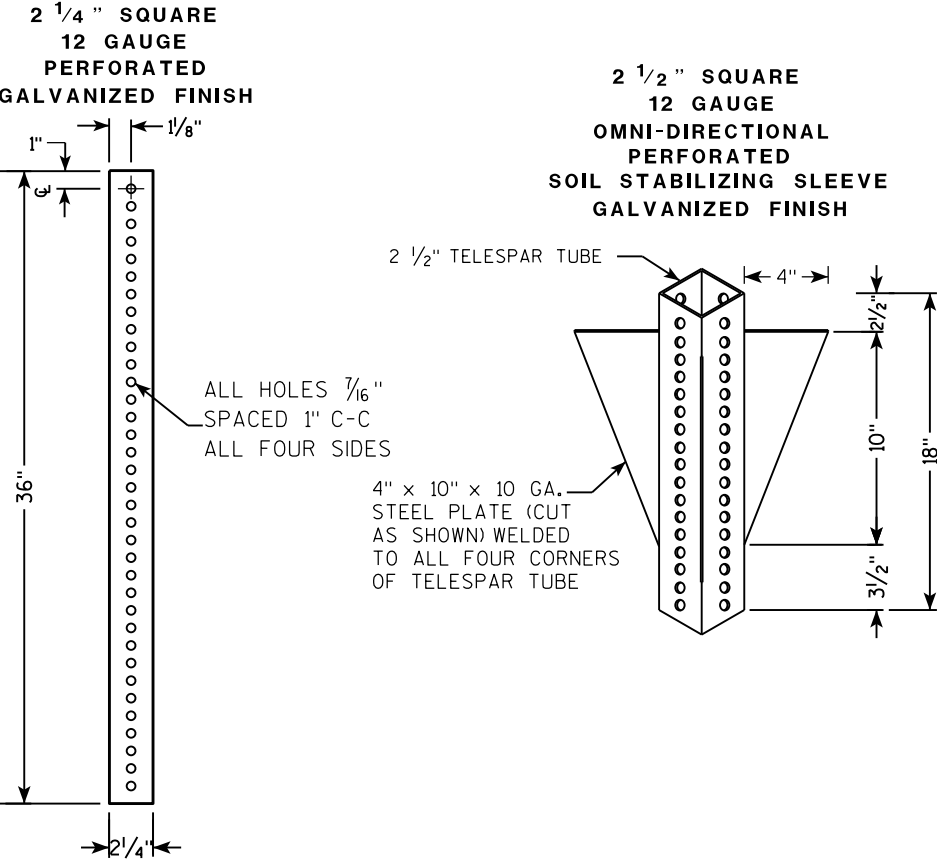
TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

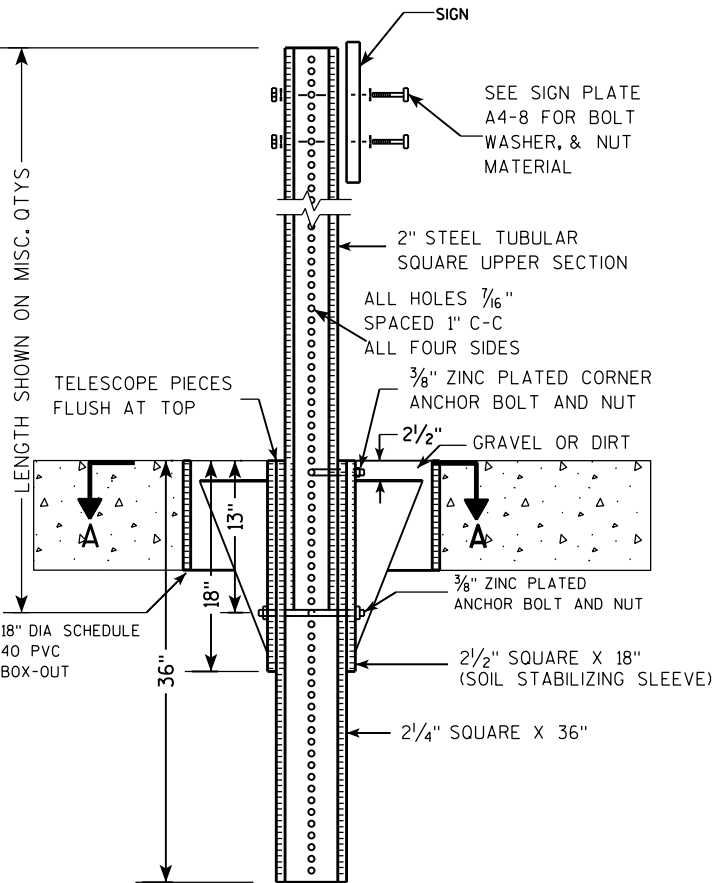
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

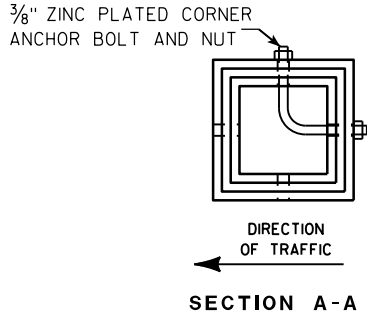
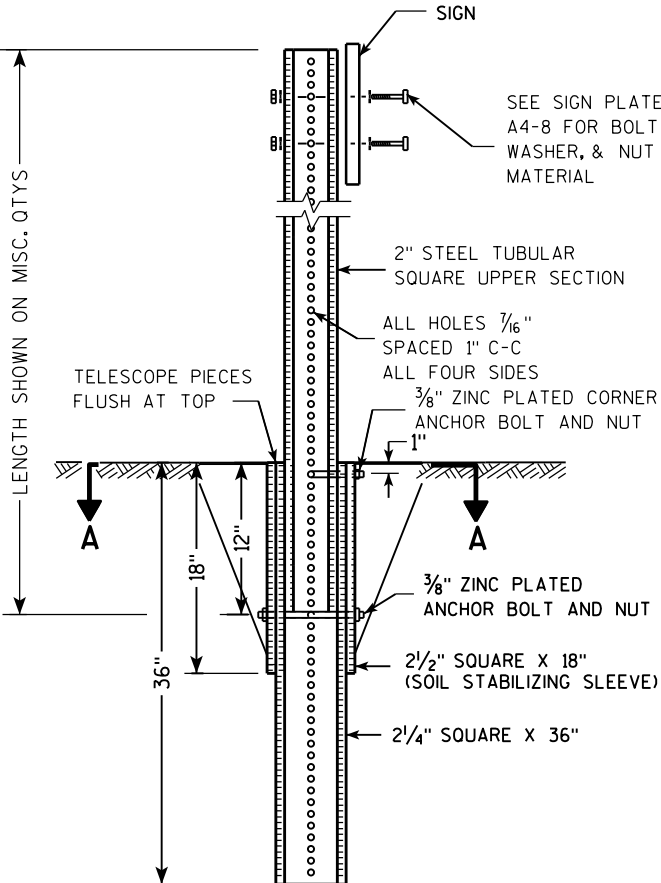
TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



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



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



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

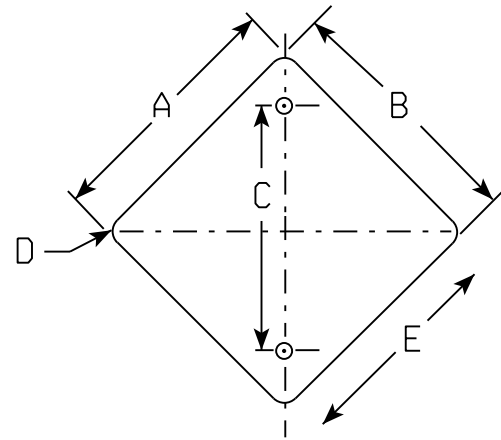
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

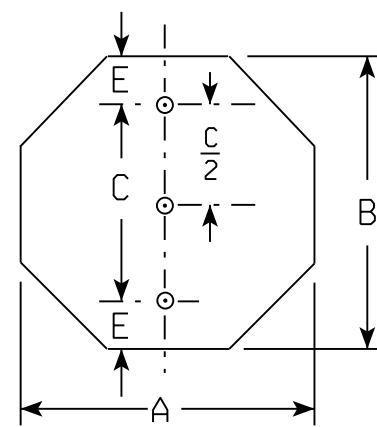
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

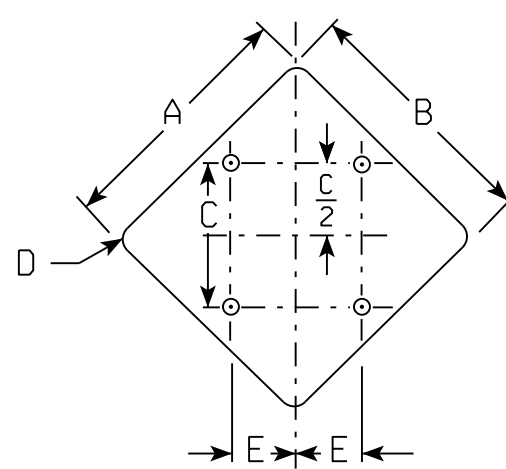
DATE 2/05/15 PLATE NO. A4-9.9



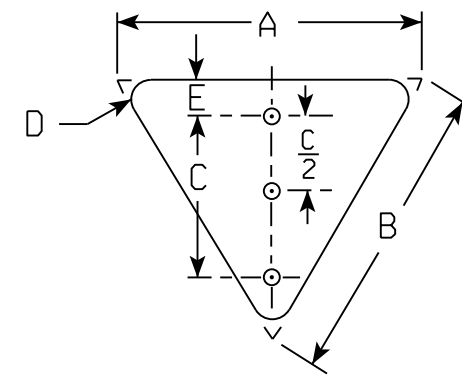
1



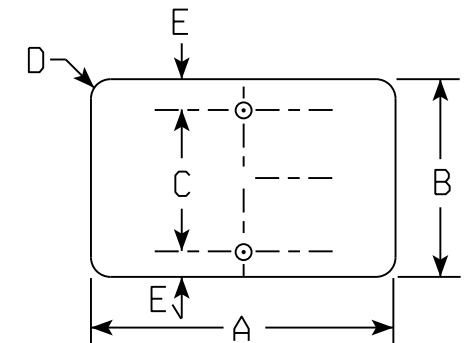
2



3



4



5

NOTES

1. All sign blanks shall have $\frac{7}{16}$ " Diameter mounting hole.

ALUMINUM THICKNESS

SIGN WIDTH	NOMINAL THICKNESS
30 inches and under	0.080 inch
Greater than 30-36 inches	0.100 inch
Over 36 inches	0.125 inch

STOP SIGN THICKNESS

SIGN WIDTH	NOMINAL THICKNESS
30 inches	0.100 inch
36-48 inches	0.125 inch

TYPE 1						
A	B	C	D	E	Area Sq. Ft.	Mounting Holes
18	18	18	1½	14	2.25	2
24	24	24	1½	20	4.0	2
30	30	30	1⅞	22	6.25	2
36	36	36	2¼	26	9.0	2

TYPE 2					
A	B	C	E	Area Sq. Ft.	Mounting Holes
24	24	20	2	3.31	2
30	30	24	3	5.18	2
36	36	28	4	7.46	2
48	48	36	6	13.25	3

TYPE 3						
A	B	C	D	E	Area Sq. Ft.	Mounting Holes
48	48	26	3	13	16.0	4

TYPE 4						
A	B	C	D	E	Area Sq. Ft.	Mounting Holes
18	18	14	1	2	1.95	2
36	36	24	2	2	3.9	2
48	48	32	3	3	7.0	2

TYPE 5						
A	B	C	D	E	Area Sq. Ft.	Mounting Holes
8	8	6	1½	1	0.44	2
12	12	9	1½	1½	1.00	2
18	18	14	1½	2	2.25	2
21	15	11	1½	2	2.19	2
21	21	17	1½	2	3.06	2
24	12	8	1½	2	2.0	2
24	18	14	1½	2	3.0	2
24	24	20	1½	2	4.0	2
30	12	8	1½	2	2.5	2
30	15	11	1½	2	3.13	2
30	18	14	1½	2	3.75	2
30	21	17	1½	2	4.37	2
30	24	20	1½	2	5.0	2

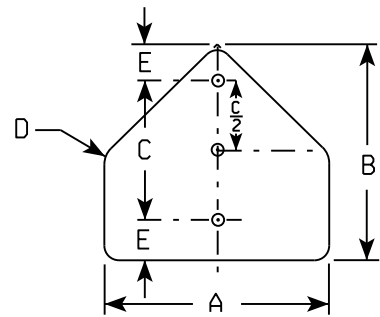
TYPE 5 CONT'D.						
A	B	C	D	E	Area Sq. Ft.	Mounting Holes
30	30	22	1 ⁷ / ₈	4	6.25	2
36	12	8	1 ¹ / ₂	2	3.0	2
36	18	14	1 ¹ / ₂	2	4.5	2
36	24	20	1 ¹ / ₂	2	6.0	2
36	36	26	2 ¹ / ₄	5	9.0	2
40	18	14	1 ¹ / ₂	2	5.00	2
42	21	17	1 ⁷ / ₈	2	6.125	2
42	30	22	1 ⁷ / ₈	4	8.75	2
48	24	20	1 ⁷ / ₈	2	8.0	2

STANDARD LAYOUT OF ALUMINUM SIGN BLANKS SHEET 1 OF 3

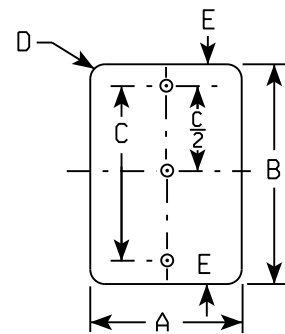
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

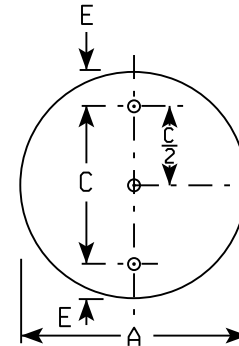
DATE 3/19/18 PLATE NO. A5-3.24



6



7



8

NOTES

1. All sign blanks shall have $\frac{7}{16}$ " Diameter mounting holes.

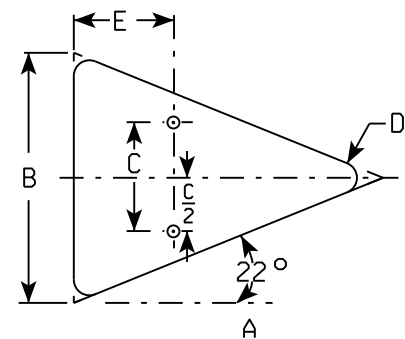
TYPE 6						
A	B	C	D	E	Area Sq. Ft.	Mounting Holes
30	30	24	$1\frac{3}{8}$	3	4.68	2
36	36	26	$1\frac{5}{8}$	5	6.75	2
48	48	32	$1\frac{7}{8}$	8	12.0	3

TYPE 7 *						
A	B	C	D	E	Area Sq. Ft.	Mounting Holes
12	18	15	$1\frac{1}{2}$	$1\frac{1}{2}$	1.5	2
12	24	20	$1\frac{1}{2}$	2	2.0	2
12	36	24	$1\frac{1}{2}$	6	3.0	2
12	48	32	$1\frac{1}{2}$	8	4.0	3
15	21	18	$1\frac{1}{2}$	$1\frac{1}{2}$	2.19	2
18	24	20	$1\frac{1}{2}$	2	3.0	2
18	36	24	$1\frac{1}{2}$	6	4.5	2
18	54	36	$2\frac{1}{2}$	9	6.75	3
21	60	40	$1\frac{1}{2}$	10	8.75	3
21	72	52	$1\frac{1}{2}$	10	10.5	3
24	30	22	$1\frac{1}{2}$	4	5.0	2
24	36	24	$1\frac{1}{2}$	6	6.0	2
24	39	27	$1\frac{1}{2}$	6	6.5	3
24	45	32	$1\frac{7}{8}$	6	7.5	3
24	48	32	$1\frac{7}{8}$	8	8.0	3
24	57	37	$1\frac{7}{8}$	10	9.5	3
36	48	32	$1\frac{7}{8}$	8	12.0	3
30	36	24	$1\frac{7}{8}$	6	7.5	2
36	54	36	$2\frac{1}{4}$	9	12.75	3
36	57	37	$1\frac{7}{8}$	10	14.25	3
48	39	27	$1\frac{7}{8}$	10	13.0	3
48	45	32	$1\frac{7}{8}$	10	14.0	3
48	57	37	3	10	19.0	3

TYPE 8					
A	B	C	E	Area Sq. Ft.	Mounting Holes
30	—	24	3	4.91	2
36	—	26	5	7.07	2
48	—	32	8	12.5	3

* FOR SIGNS OVER 57" IN HEIGHT, PROVIDE 3 MOUNTING HOLES AT 10" FROM THE TOP AND BOTTOM OF SIGN AND IN THE CENTER OF SIGN.

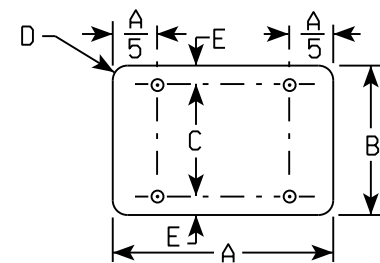
STANDARD LAYOUT OF ALUMINUM SIGN BLANKS	
SHEET 2 OF 3	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/19/18	PLATE NO. A5-3.24



10

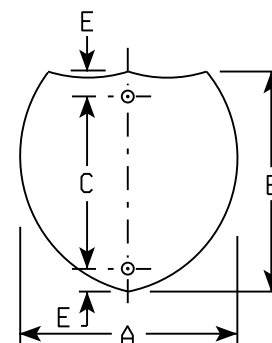
TYPE 10 (NOTE 1)						
A	B	C	D	E	Area Sq. Ft.	Mounting Holes
48	36	14	2 1/4	16	6.0	2

TYPE 11						
A	B	C	D	E	Area Sq. Ft.	Mounting Holes
66	12	8	3	2	5.5	4
66	18	14	3	2	8.25	4
66	24	20	3	2	11.0	4
66	30	22	3	4	13.75	4
66	36	28	3	4	16.5	4
66	42	34	3	4	19.25	4
66	48	40	3	4	22.0	4
72	12	8	3	2	6.0	4
72	18	14	3	2	9.0	4
72	24	20	3	2	12.0	4
72	30	22	3	4	15.0	4
72	36	28	3	4	18.0	4
72	42	34	3	4	21.0	4
72	48	40	3	4	24.0	4



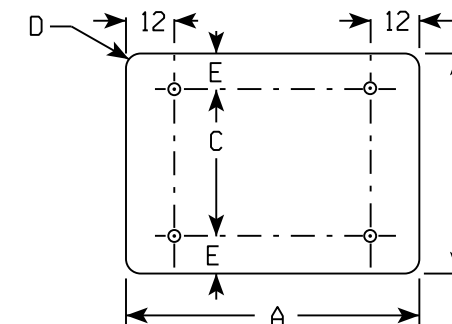
11

TYPE 12 (NOTE 2)					
A	B	C	E	Area Sq. Ft.	Mounting Holes
24	24	18	3	3.13	2
30	24	18	3	3.91	2
36	36	28	4	7.03	2
45	36	28	4	8.79	2



12

TYPE 13						
A	B	C	D	E	Area Sq. Ft.	Mounting Holes
48	60	40	3	10	20.0	4
54	12	8	1 1/2	2	4.5	4
54	15	11	1 1/2	2	5.63	4
54	18	14	1 1/2	2	6.75	4
54	21	17	1 1/2	2	7.88	4
54	24	20	1 7/8	2	9.0	4
54	36	28	1 7/8	4	13.5	4
54	48	40	1 7/8	4	18.0	4
60	12	8	1 1/2	2	5.0	4
60	18	14	1 1/2	2	7.5	4
60	24	20	1 7/8	2	10.0	4
60	30	22	1 7/8	4	12.5	4
60	36	28	1 7/8	4	15.0	4
60	42	34	1 7/8	4	17.5	4
60	48	40	3	4	20.0	4



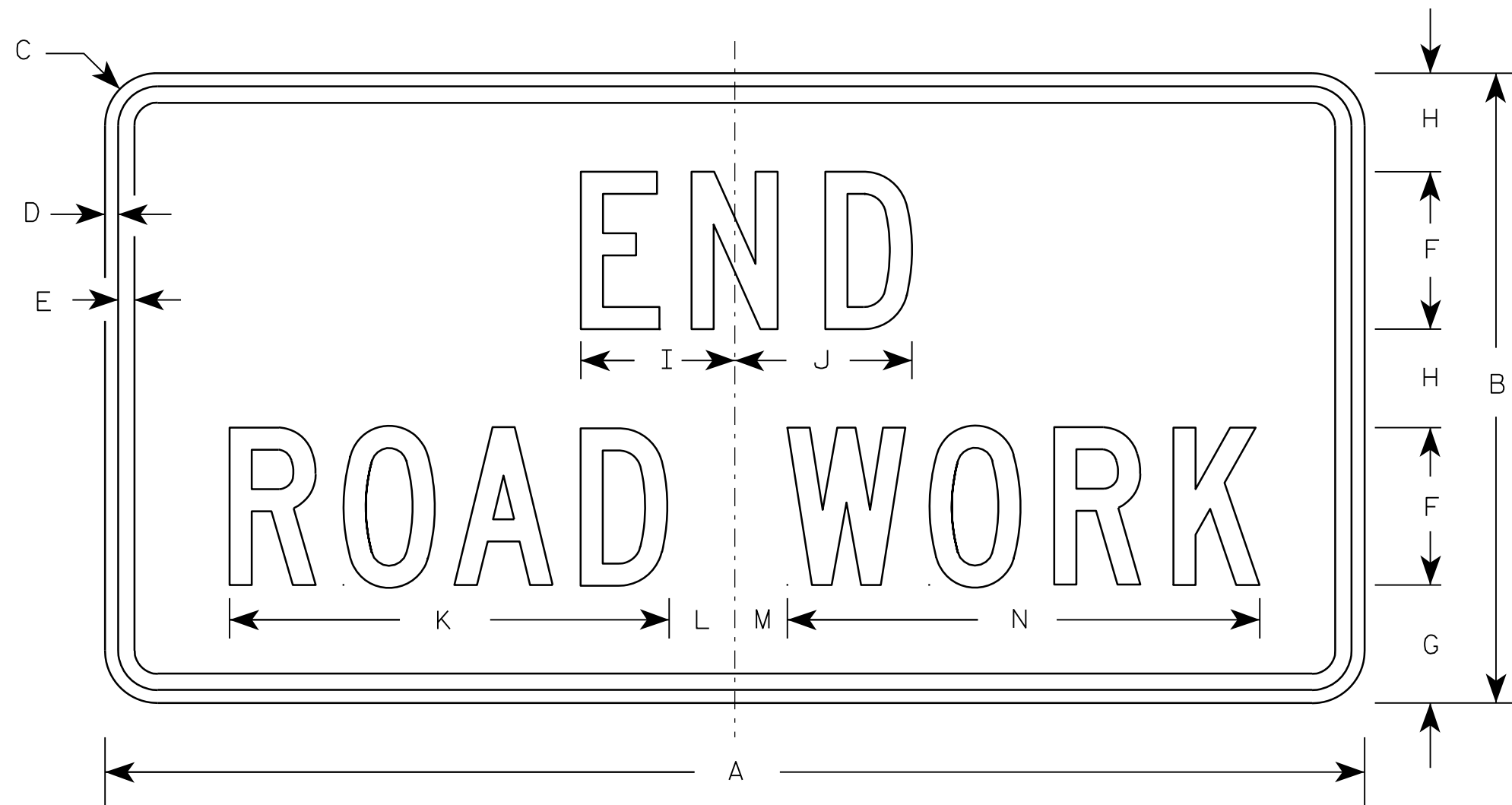
13

NOTES

1. Dimension A on type #10 is measured to the theoretical intersections of the edges.
2. Shape of type #12 shall conform to FHWA standard for Interstate route markers.
3. All signs over 60" in width shall have 3" radius on the outside corners of the aluminum blank.
4. For signs over 60" in width see sign plate A4-18 for hole placement.

STANDARD LAYOUT OF ALUMINUM SIGN BLANKS SHEET 3 OF 3	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE <u>3/19/18</u>	PLATE NO. <u>A5.3.24</u>

7



G20-2A

Metric equivalent
for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

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

NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Orange
Message - Black
- Message Series - C
- 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.

7

PROJECT NO: 2703-00-73

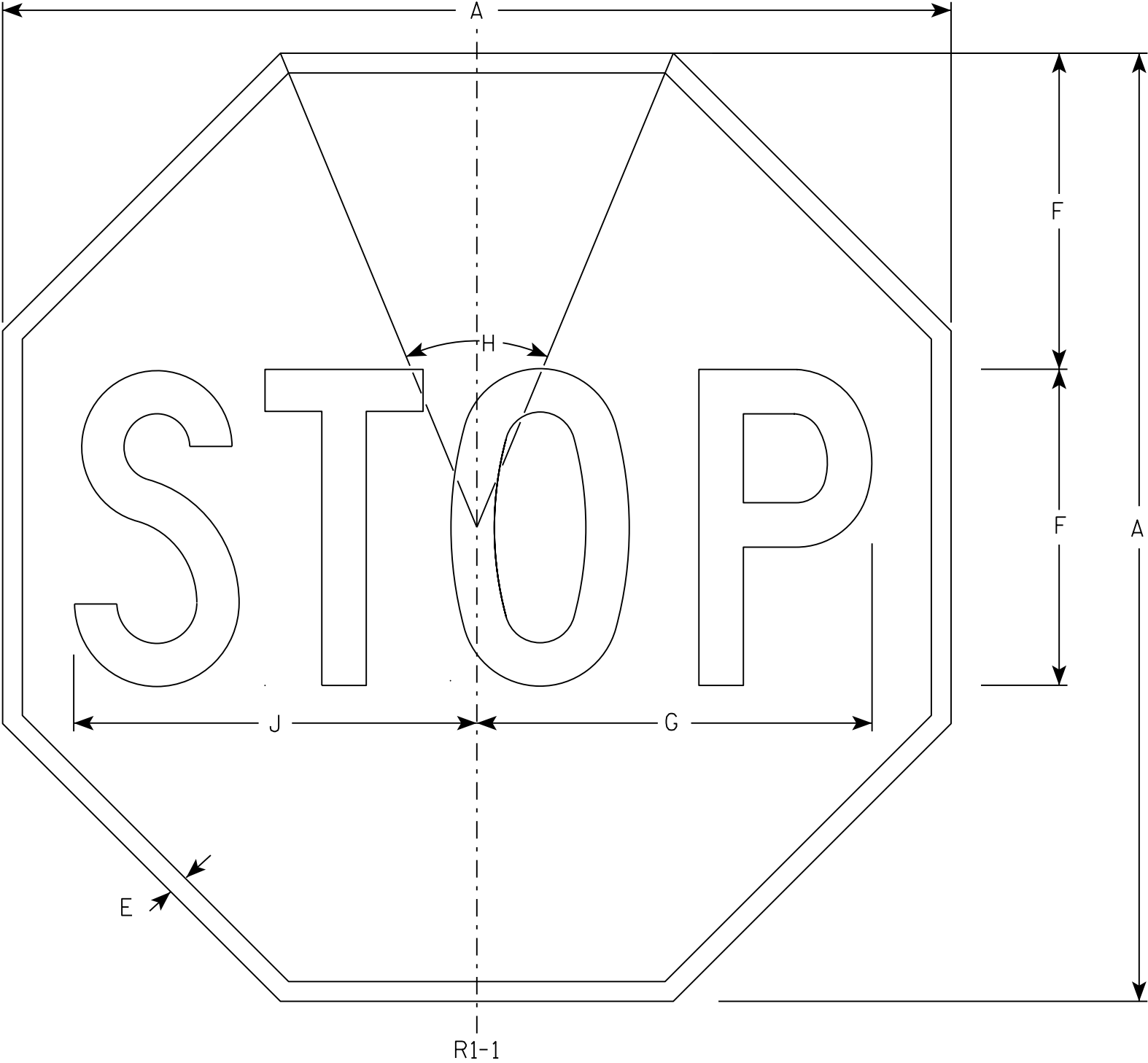
HWY: HOODS CREEK ROAD

COUNTY: RACINE

SHEET NO:

E

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

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

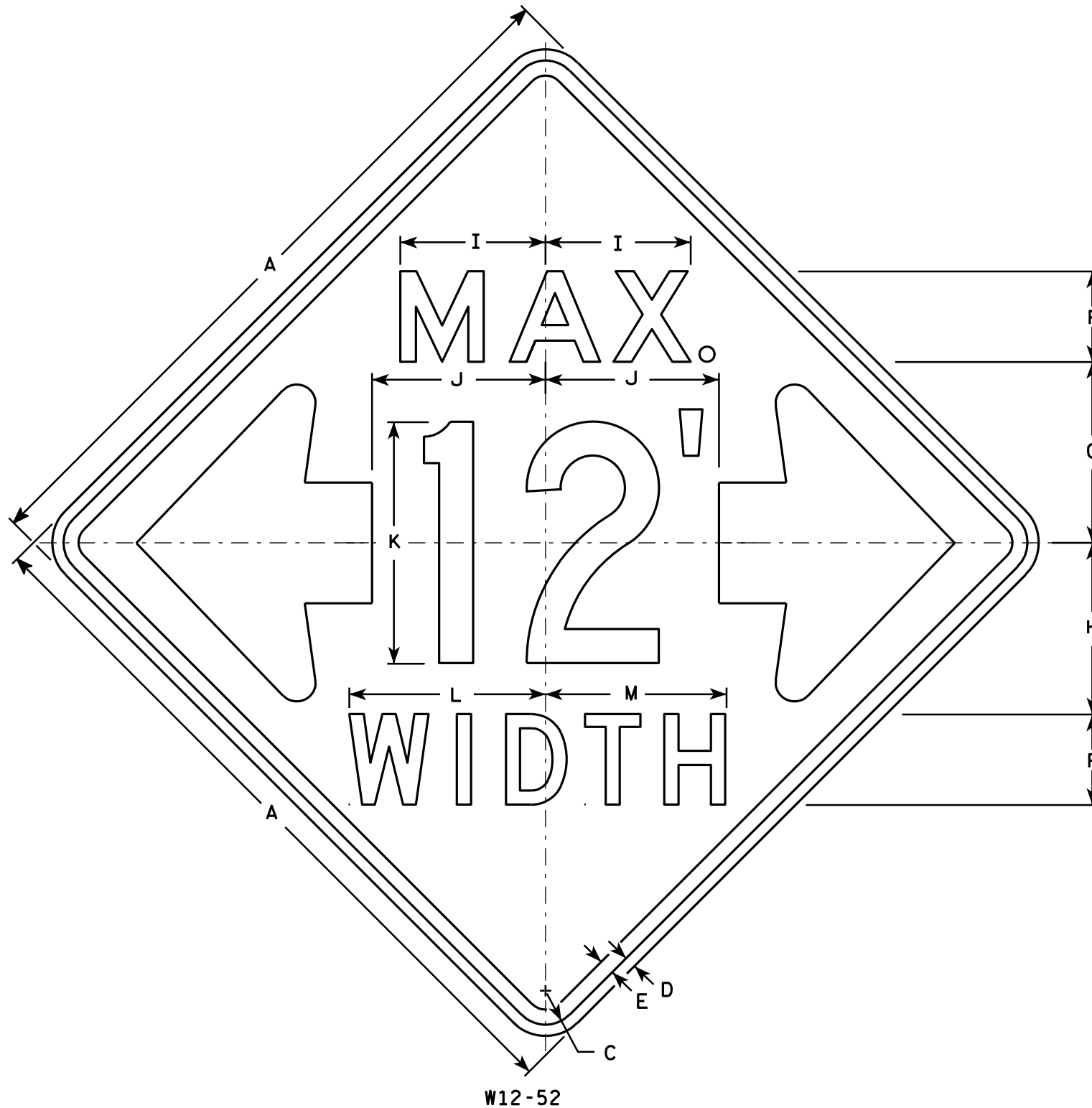
STANDARD SIGN

R1 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

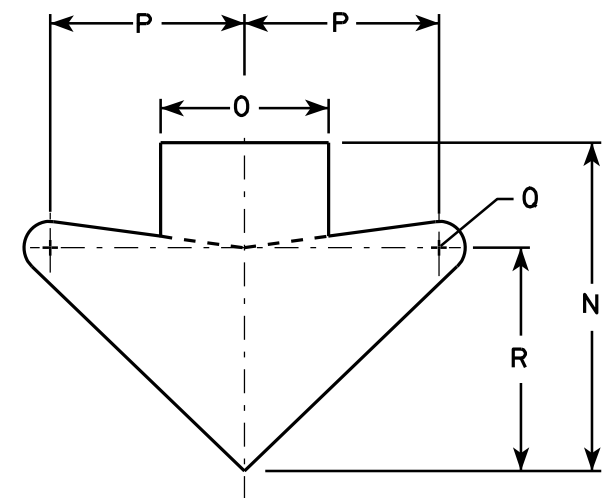
DATE 11/12/15 PLATE NO. R1-1.13



W12-52

NOTES

1. Sign Is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The top line is series E, the numerals are series C, and the bottom line is series D.
6. Substitute appropriate numerals and adjust spacing as required.



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	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
2M	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
3																											
4																											
5																											

STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-52.7

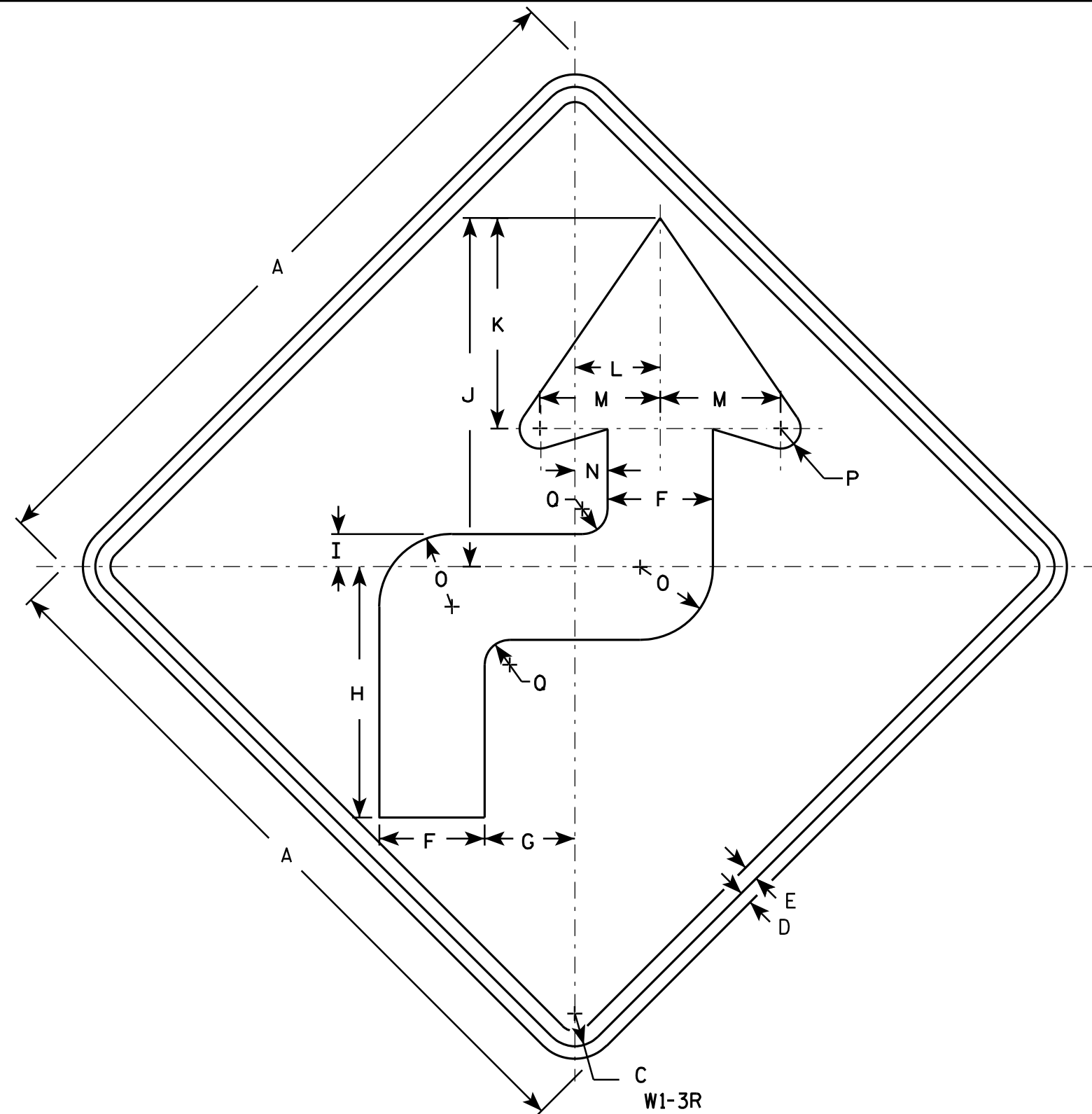
PROJECT NO: 2703-00-73

HWY: HOODS CREEK ROAD

COUNTY: RACINE

SHEET NO:

E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-3L is the same as W1-3R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	3 1/2	3	8 3/8	1 1/8	11 5/8	7	2 3/4	4	1 1/8	2 1/2	5/8	7/8										4.0
2S	36		1 5/8	5/8	3/4	5 1/4	4 1/2	12 1/2	1 5/8	17 3/8	10 1/2	4 1/4	6	1 5/8	3 5/8	1	1 1/4										9.0
2M	36		1 5/8	5/8	3/4	5 1/4	4 1/2	12 1/2	1 5/8	17 3/8	10 1/2	4 1/4	6	1 5/8	3 5/8	1	1 1/4										9.0
3	36		1 5/8	5/8	3/4	5 1/4	4 1/2	12 1/2	1 5/8	17 3/8	10 1/2	4 1/4	6	1 5/8	3 5/8	1	1 1/4										9.0
4	36		1 5/8	5/8	3/4	5 1/4	6	12 1/2	1 5/8	17 3/8	10 1/2	4 1/4	6	1 5/8	3 5/8	1	1 1/4										9.0
5	48		2 1/4	3/4	1	7	6	16 5/8	2 1/4	23 1/4	14	5 5/8	8	2 1/8	4 7/8	1 1/4	1 5/8										16.0

STANDARD SIGN W1-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 5/17/12 PLATE NO. W1-3.8

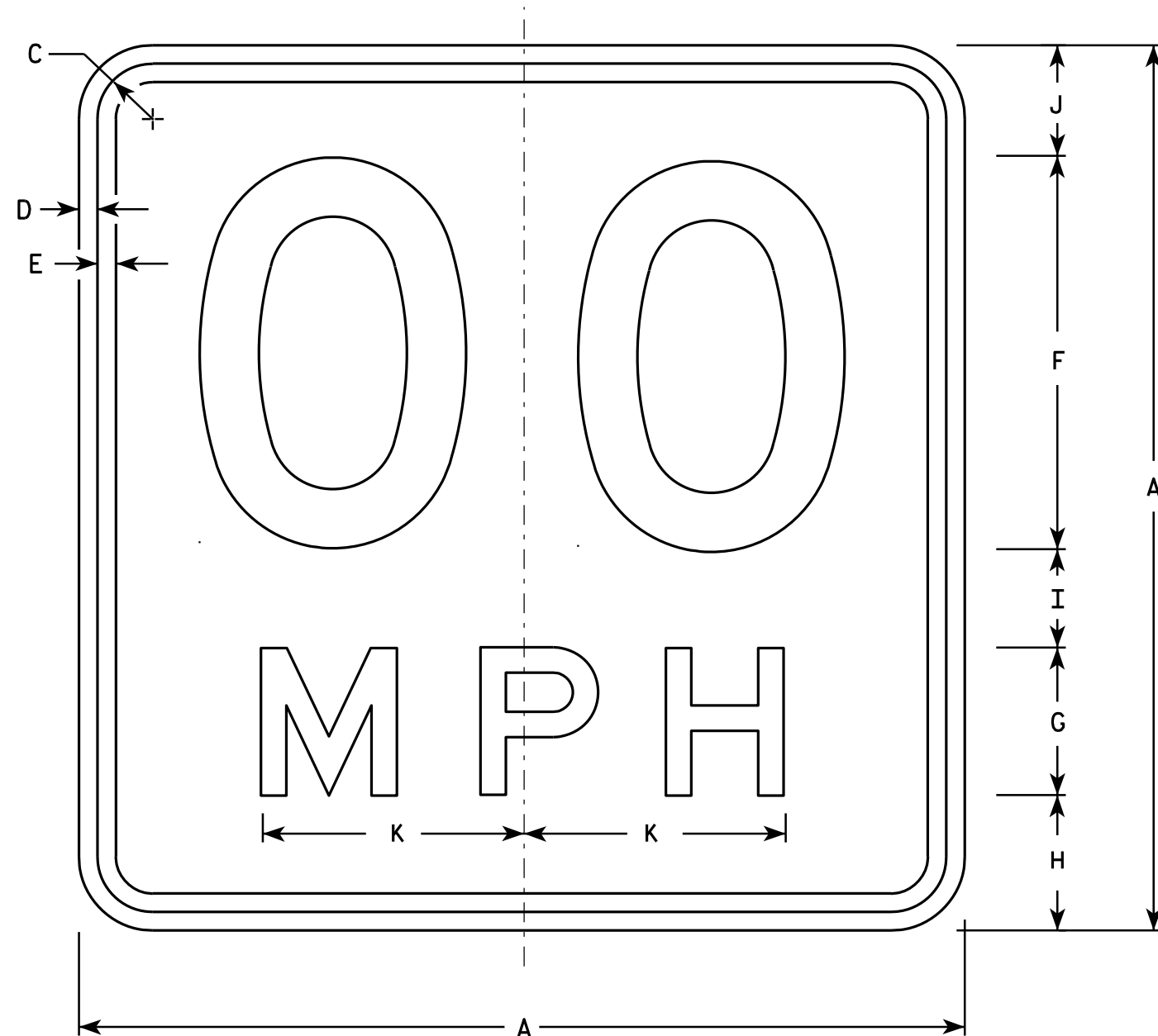
PROJECT NO: 2703-00-73

HWY: HOODS CREEK ROAD

COUNTY: RACINE

SHEET NO:

E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
Line 2 is Series E

W13-1

- * For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area Sq. Ft.
1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN

W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO: 2703-00-73

HWY: HOODS CREEK ROAD

COUNTY: RACINE

SHEET NO:

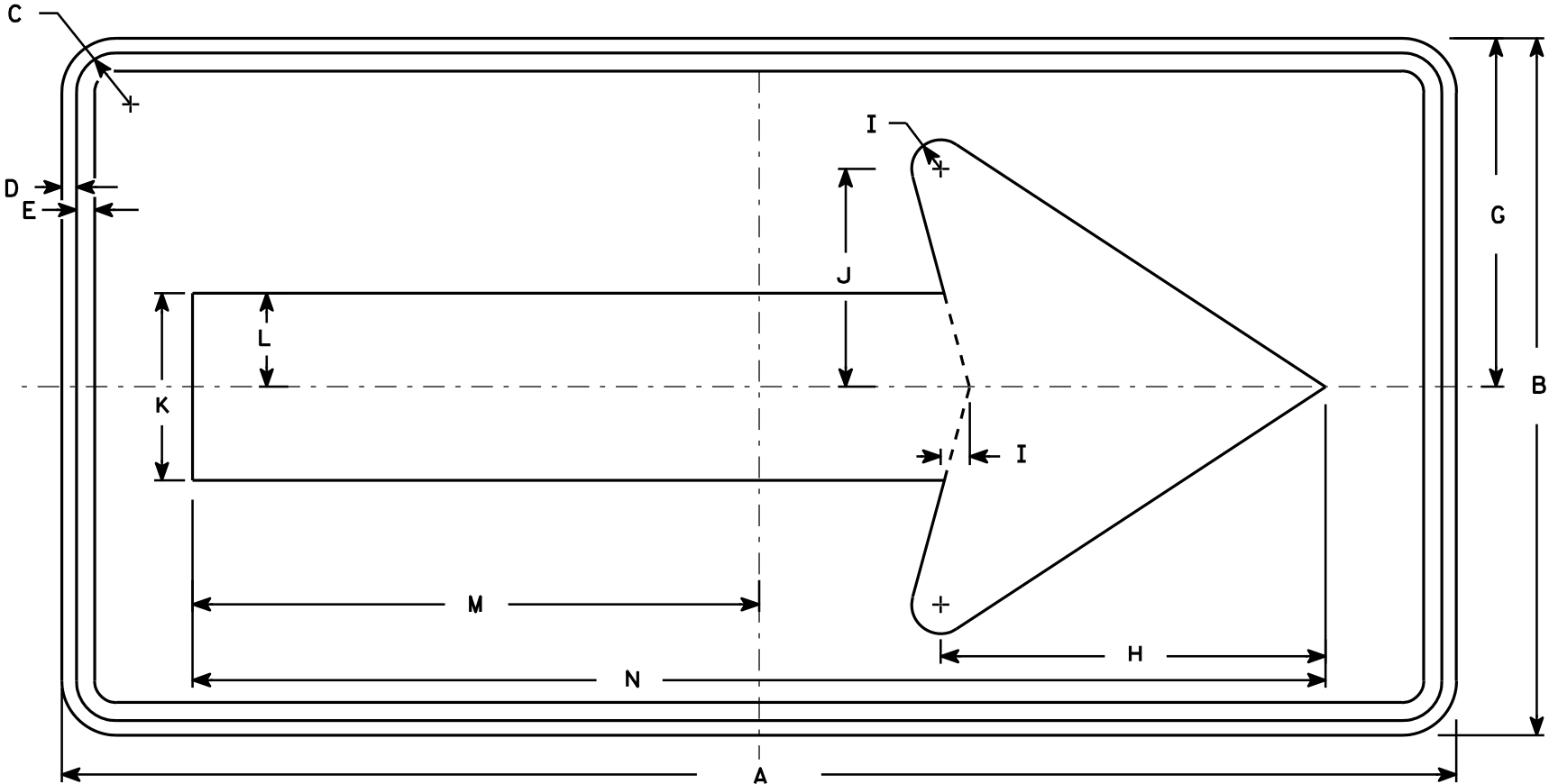
E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:

Background - Yellow

Message - 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.



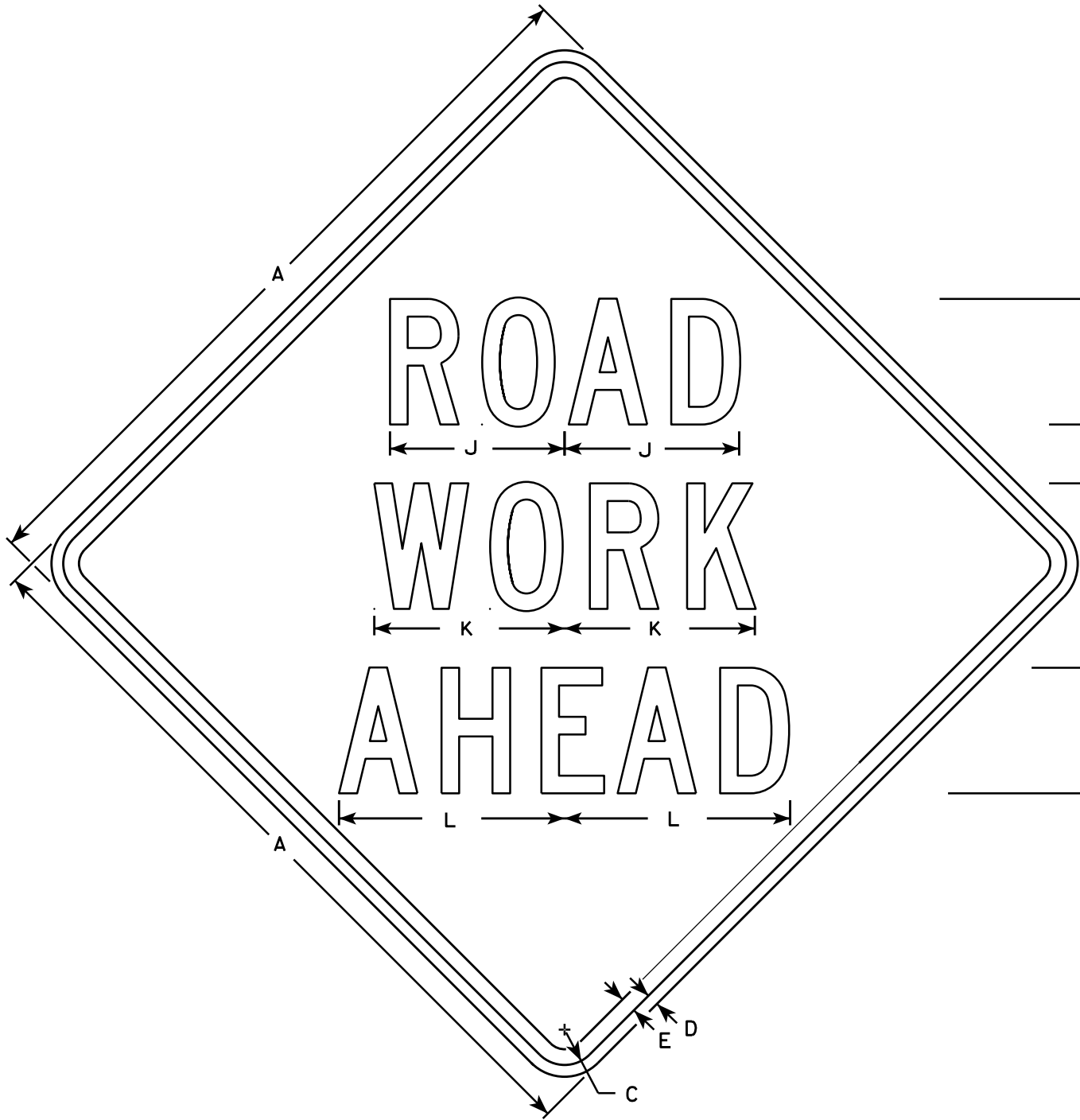
W1-6

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 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

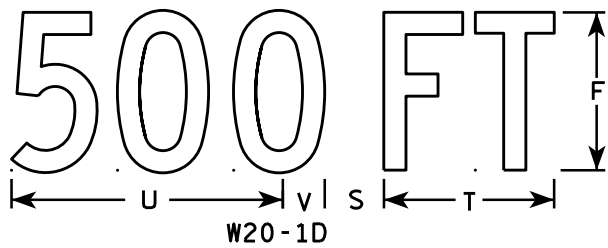
STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

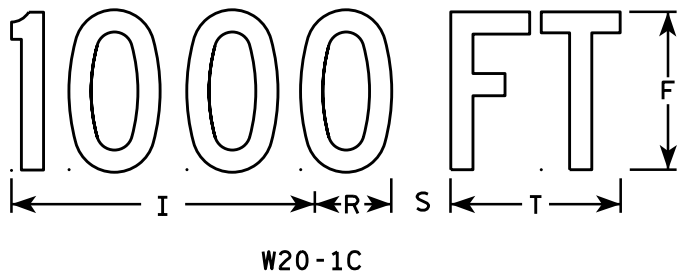
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/7/10 PLATE NO. W1-6.8



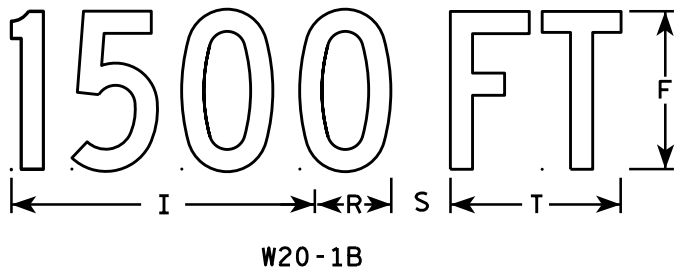
W20-1A



W20-1D



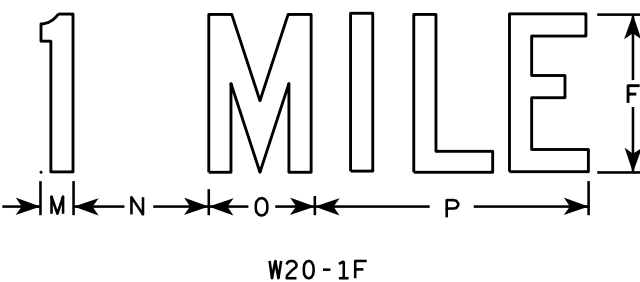
W20-1C



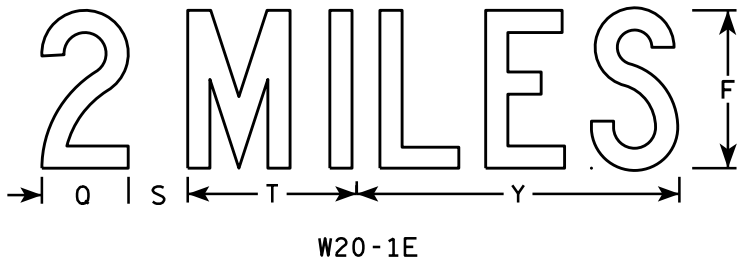
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

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

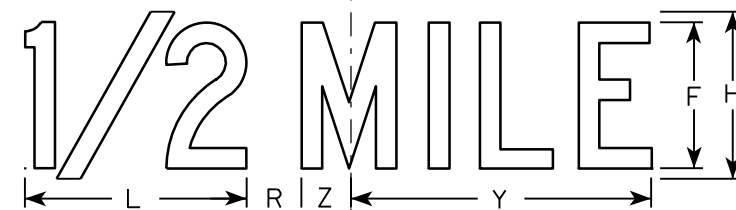
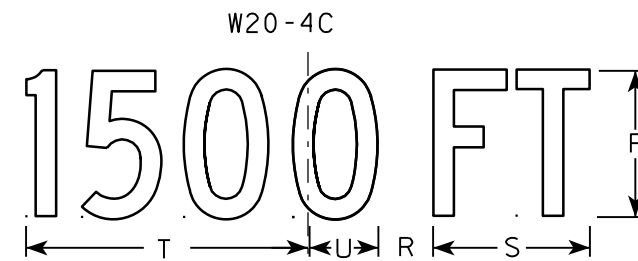
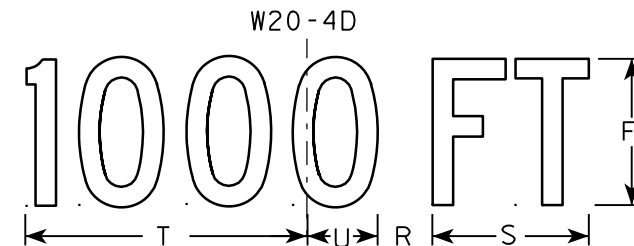
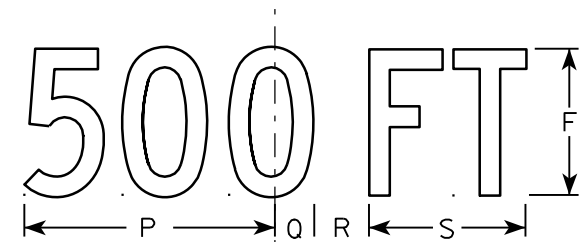
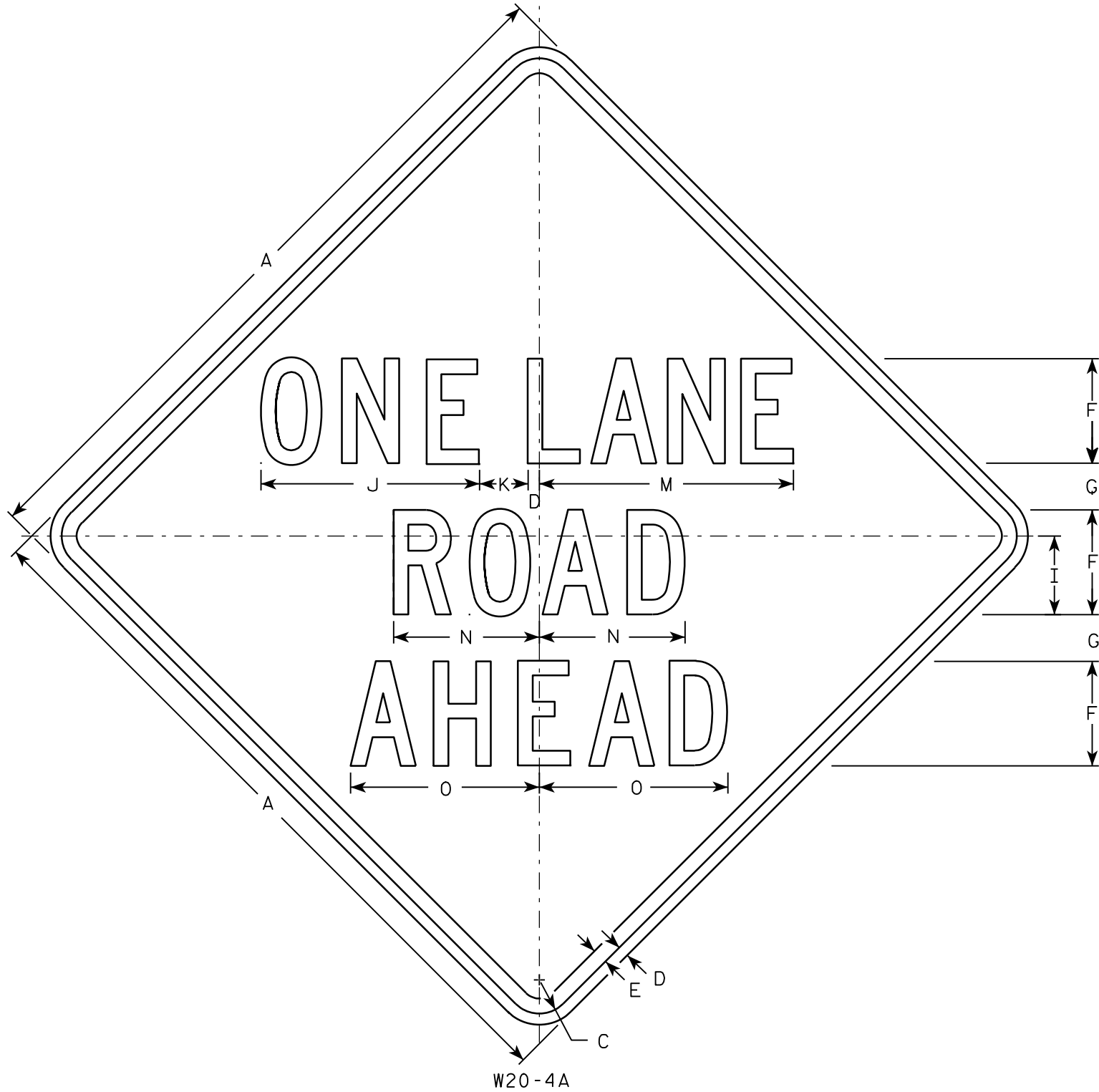
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13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

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

WISCONSIN DEPT OF TRANSPORTATION

APPROVED _____
State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

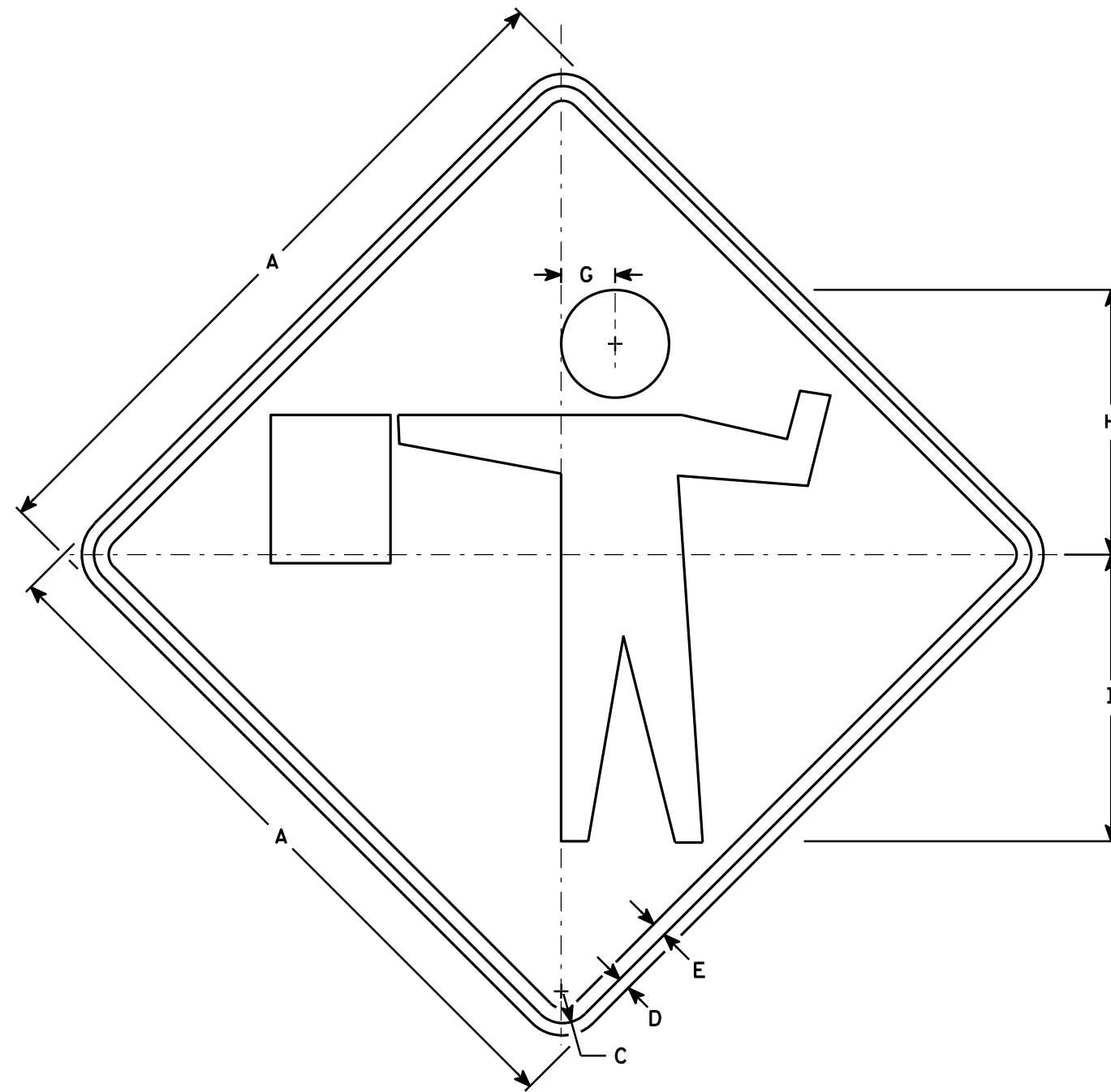


NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	2 3/8	6	3 3/4	10 3/8	2 3/8	8	13 1/2	7	8 7/8	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	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN	
W20-4A, B, C, D, F & G	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 3/18/11	PLATE NO. W20-4.9



W20-7A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4		2 3/4	13 1/2	14 5/8																		9.00
2S	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
2M	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
3	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
4	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
5	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00

STANDARD SIGN
W20-7A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-7A.5

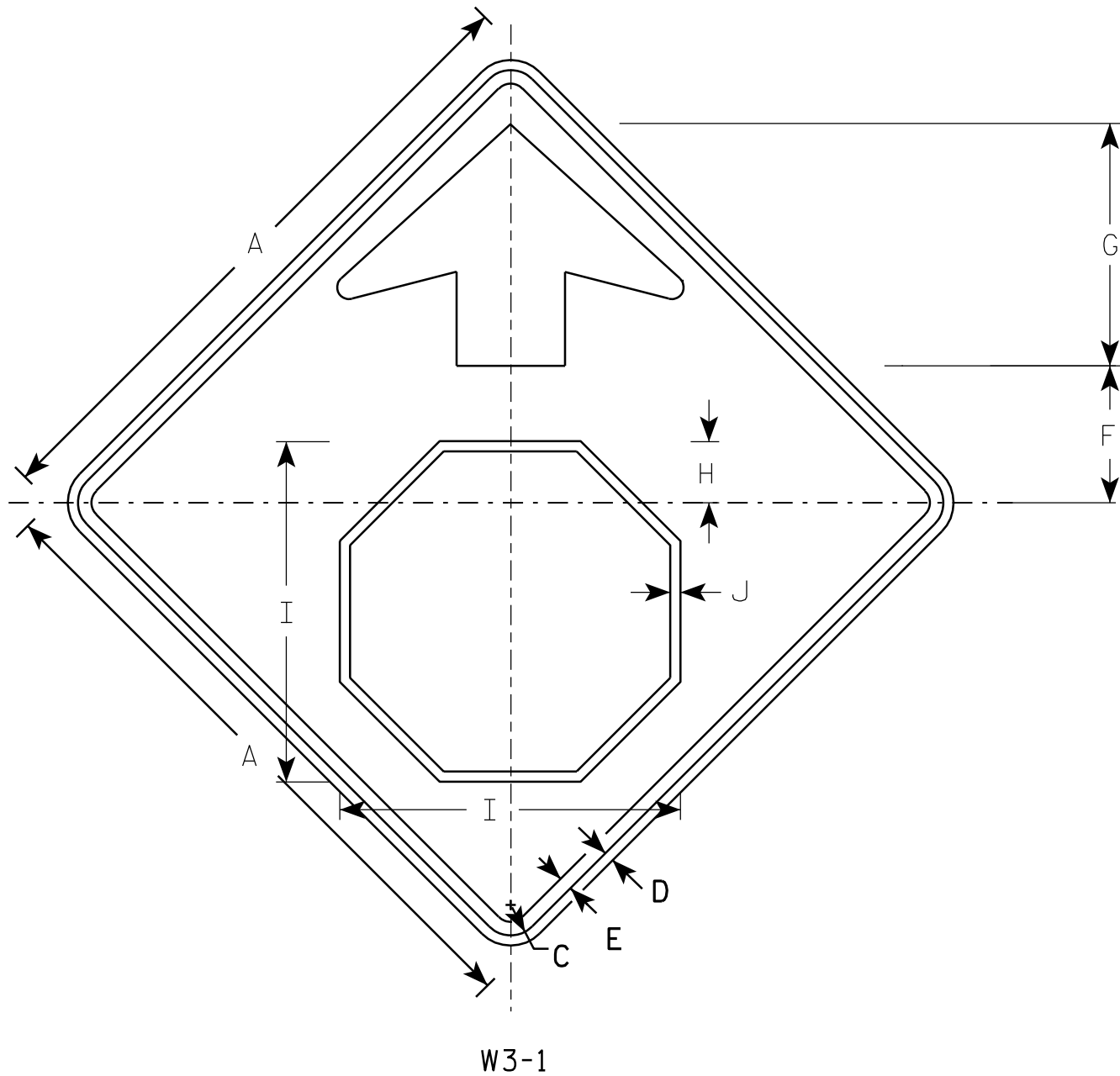
PROJECT NO: 2703-00-73

HWY: HOODS CREEK ROAD

COUNTY: RACINE

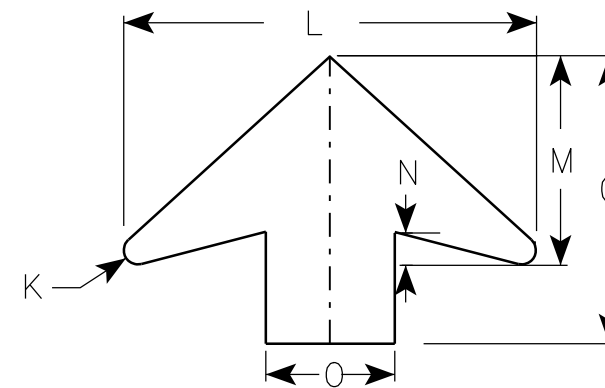
SHEET NO:

E



NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - YELLOW
Arrow & Border - BLACK
Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN W3-1

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/7/10 PLATE NO. W3-1.12

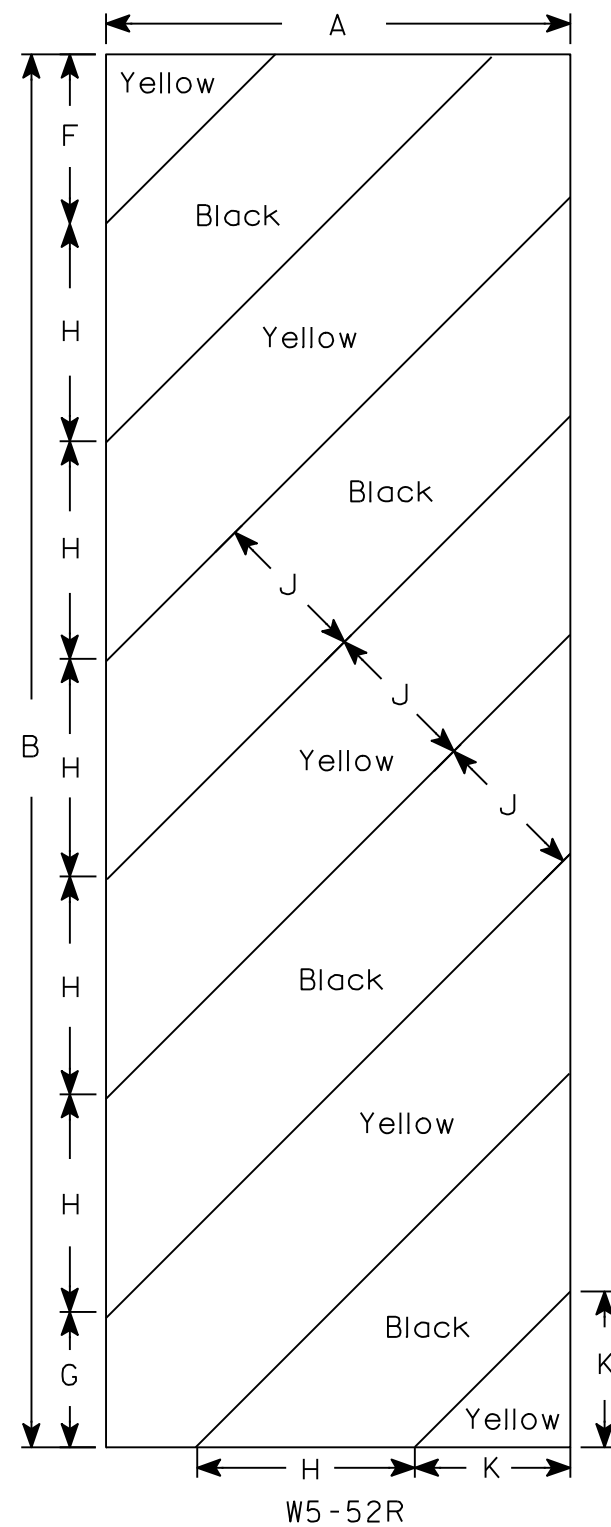
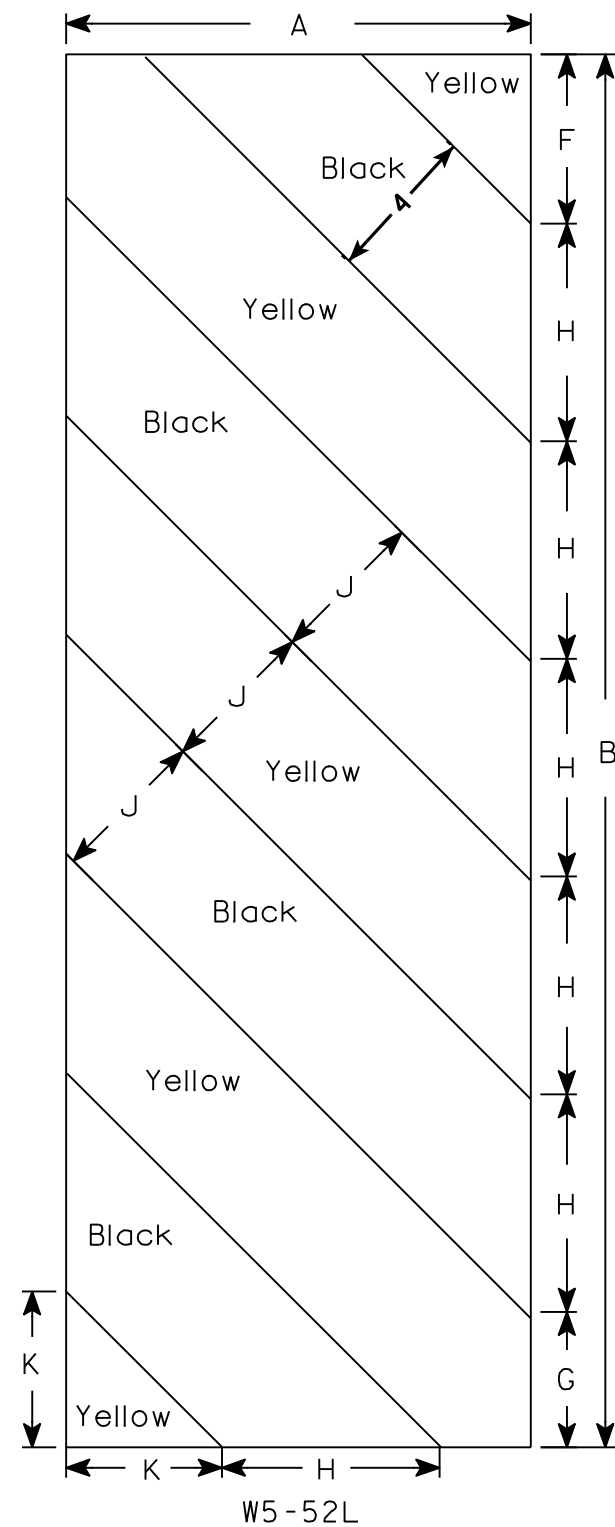
PROJECT NO: 2703-00-73

HWY: HOODS CREEK ROAD

COUNTY: RACINE

SHEET NO:

E



NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Yellow
Message - Black
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. 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				4 3⁄8	3 1⁄2	5 5⁄8	45°	4	4																3.0
2M	12	36				4 3⁄8	3 1⁄2	5 5⁄8	45°	4	4																3.0
3	18	54				6	5 1⁄2	8 1⁄2	45°	6	6 5⁄16																6.75
4																											
5																											

STANDARD SIGN

W5-52L & W5-52R

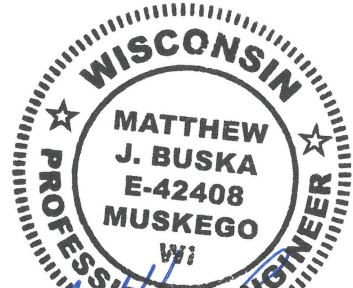
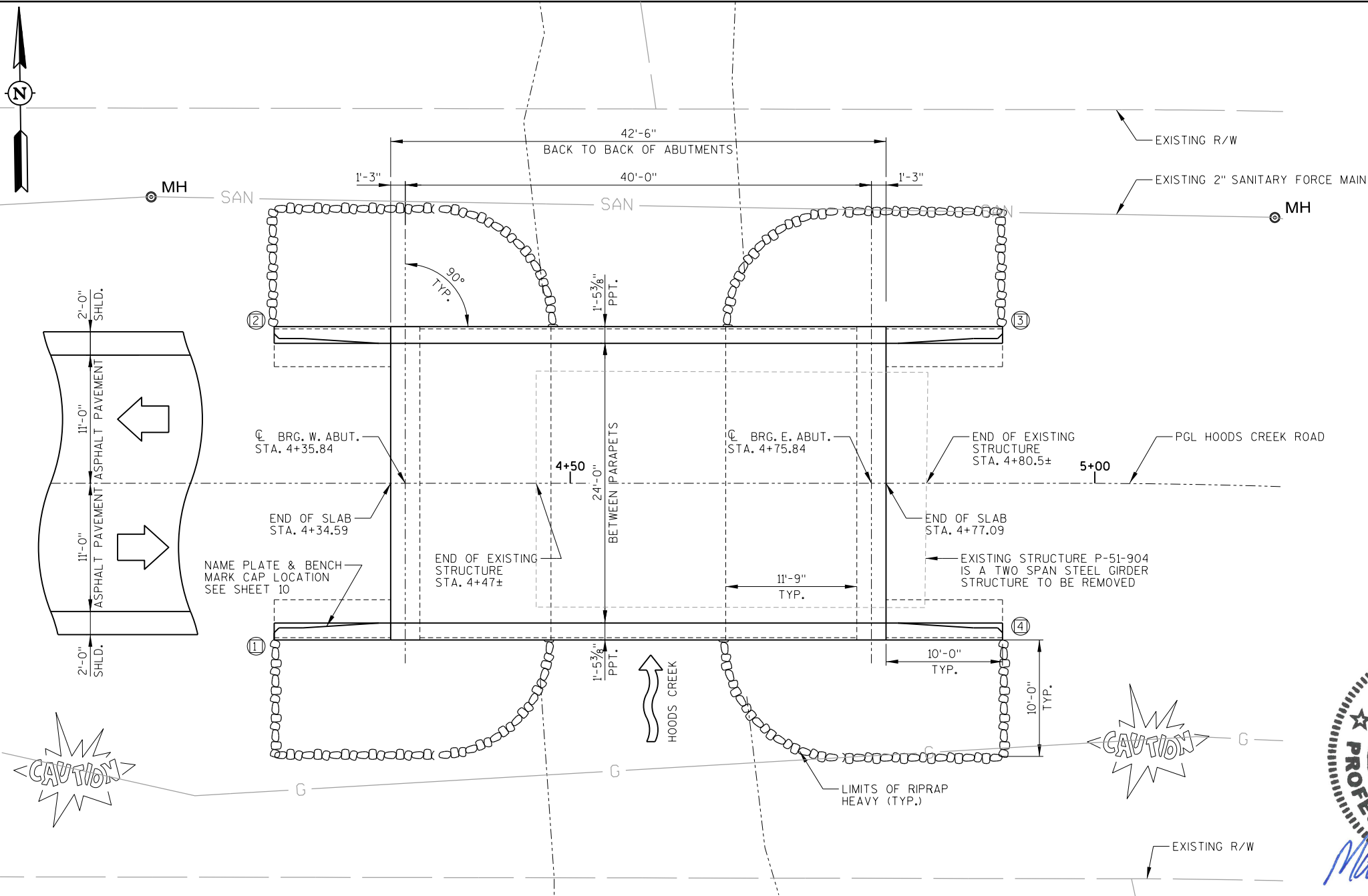
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W5-52.9

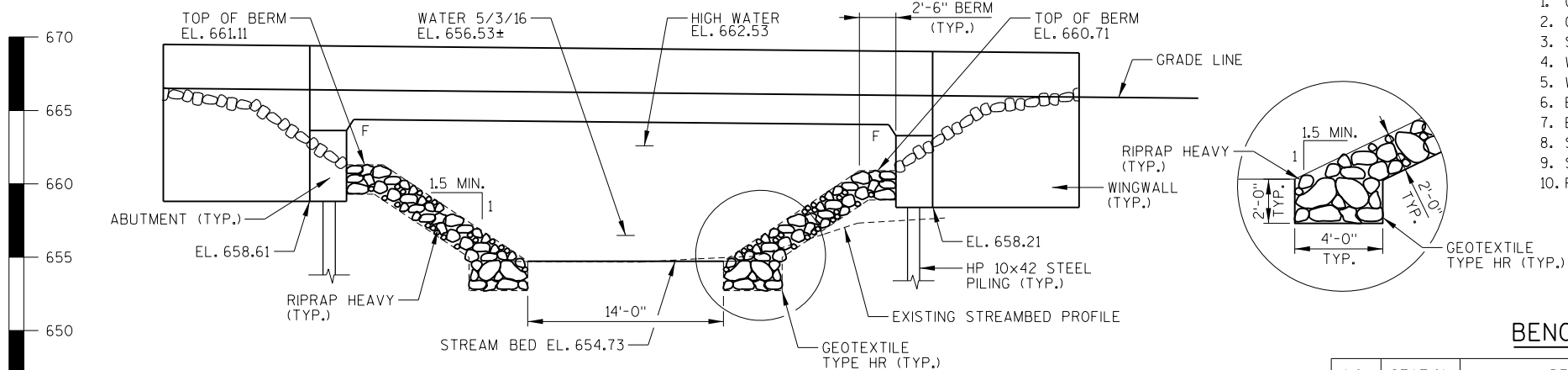
NO.	STATION	DESCRIPTION	ELEVATION
#1	4+80	CHISELED SQUARE ON SOUTHEAST WING WALL	664.20

⊖ - INDICATES WING NUMBER



7/11/2019

(SINGLE SPAN FLAT SLAB)



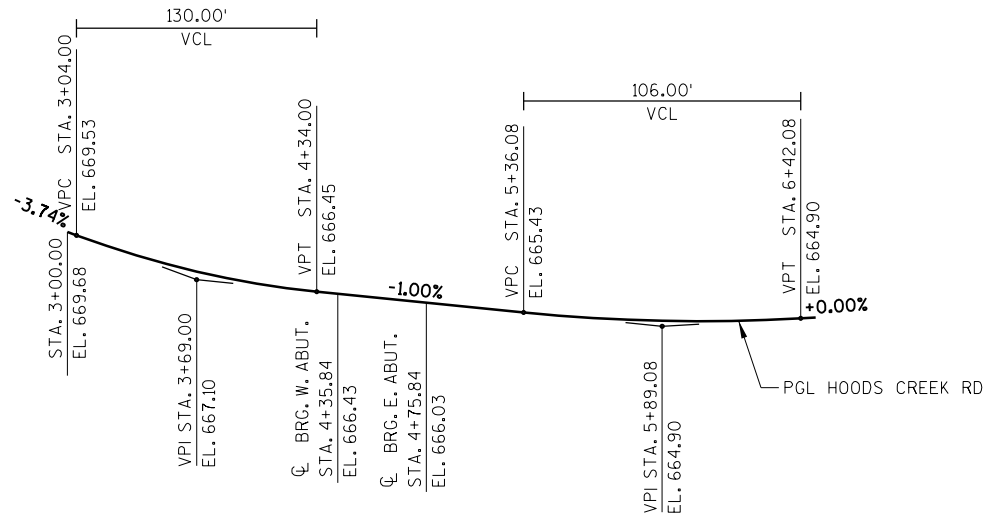
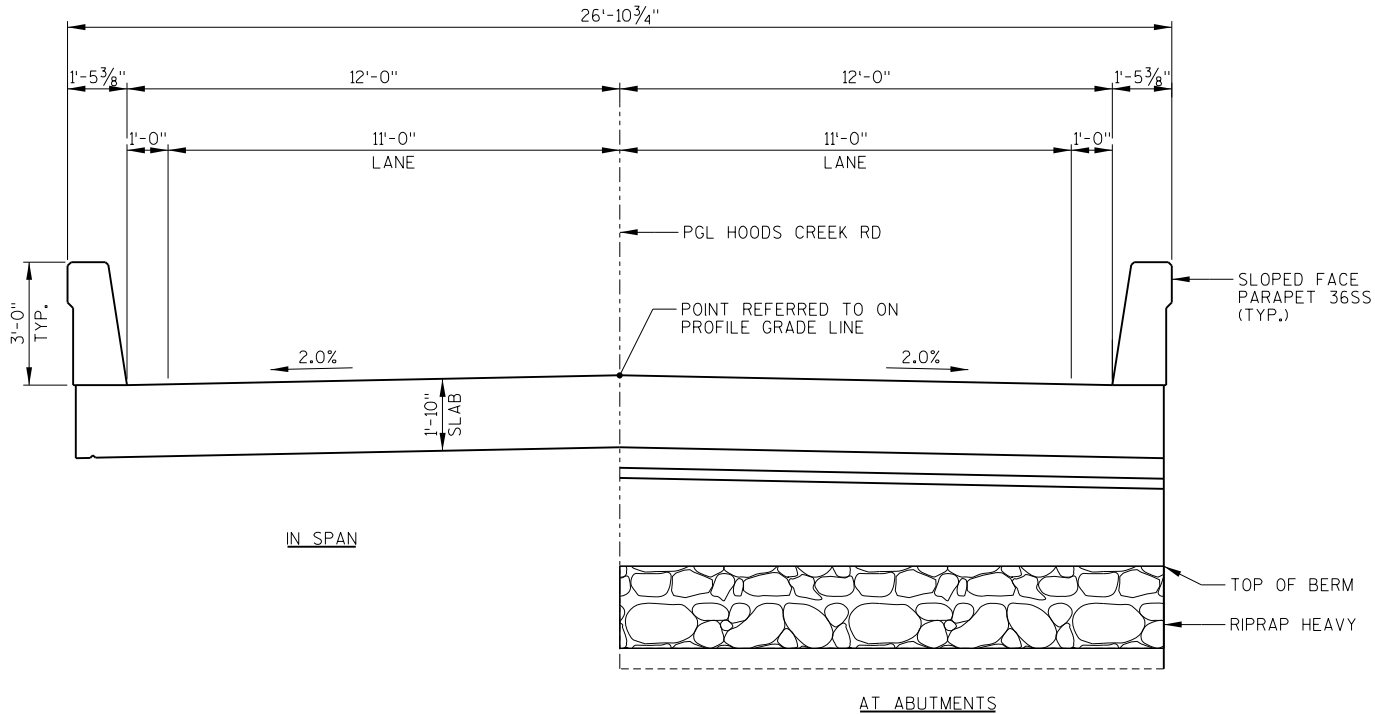
ELEVATION
LOOKING NORTH

PLOT TIME : 11:51:46 AM
PLOT DATE : 7/11/2019
FILE NAME : c:\pw_workdir\pw_ie\mj9\dms57984\01 General Plan.DGN

8

8

PLOT BY : MJB9
PLOT TIME : 11:55:31 AM
PLOT DATE : 7/11/2019
FILE NAME : c:\pwworkdir\pwworkdir\dms57984\02 Cross Section & Quantities.DGN



TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	WEST ABUT.	EAST ABUT.	TOTALS
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS (STA. 4+60)	L.S.	—	—	—	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES (B-51-153)	L.S.	—	—	—	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	—	45	45	90
502.0100	CONCRETE MASONRY BRIDGES	C.Y.	96	27	27	150
502.3200	PROTECTIVE SURFACE TREATMENT	S.Y.	113	—	—	113
502.3210	PIGMENTED SURFACE SEALER	S.Y.	56	—	—	56
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB.	—	1,500	1,500	3,000
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB.	19,410	1,270	1,270	21,950
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	S.Y.	—	5	5	10
526.0100	TEMPORARY STRUCTURE (STA. 4+60)	L.S.	—	—	—	1
550.1100	PIILING STEEL HP 10-INCH X 42LB	L.F.	—	200	200	400
606.0300	RIPRAP HEAVY	C.Y.	—	53	53	106
612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	L.F.	—	10	10	20
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	L.F.	—	75	75	150
645.0120	GEOTEXTILE TYPE HR	S.Y.	—	80	80	160
	NON-BID ITEMS					
	FILLER	SIZE				1/2" & 3/4"

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.

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

THE STREAM BED IN FRONT OF THE ABUTMENT SHALL BE COVERED WITH RIPRAP AS SHOWN ON THIS SHEET, THE GENERAL PLAN AND THE ABUTMENT DETAILS.

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

THE QUANTITY FOR BACKFILL STRUCTURE, BID ITEM 210.0100, IS CALCULATED BASED ON THE APPLICABLE FIGURES 12.6-1 AND 12.6-2 IN THE WISCONSIN DEPARTMENT OF TRANSPORATION BRIDGE MANUAL.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF SLAB.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE INSIDE AND TOP FACE OF PARAPETS.

THE EXISTING STRUCTURE (P-51-904) IS TWO SPAN STEEL GIRDER STRUCTURE WITH AN OVERALL LENGTH OF 33.5' AND AN OUT TO OUT WIDTH OF 20.7' ON SPREAD FOOTINGS, TO BE REMOVED. ALL UNDERGROUND CONFLICTS WITHIN THE LIMITS OF THE PROPOSED STRUCTURE SHALL BE REMOVED.

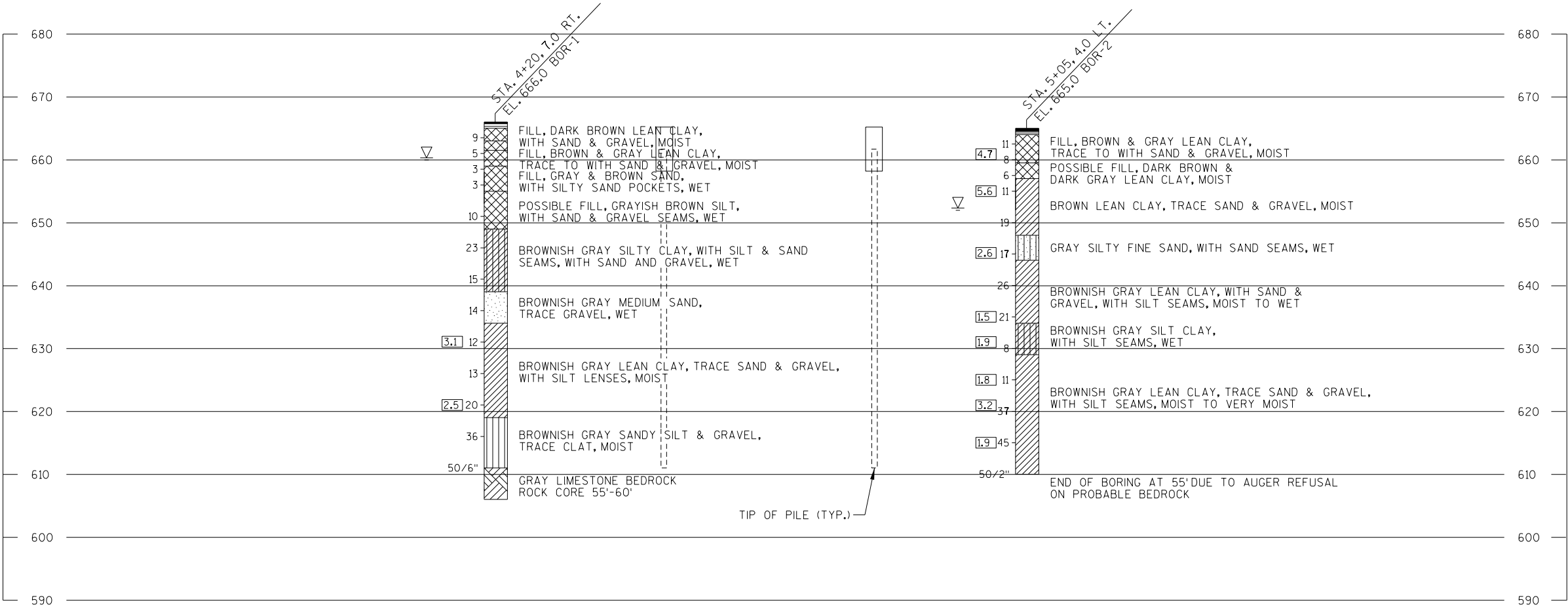
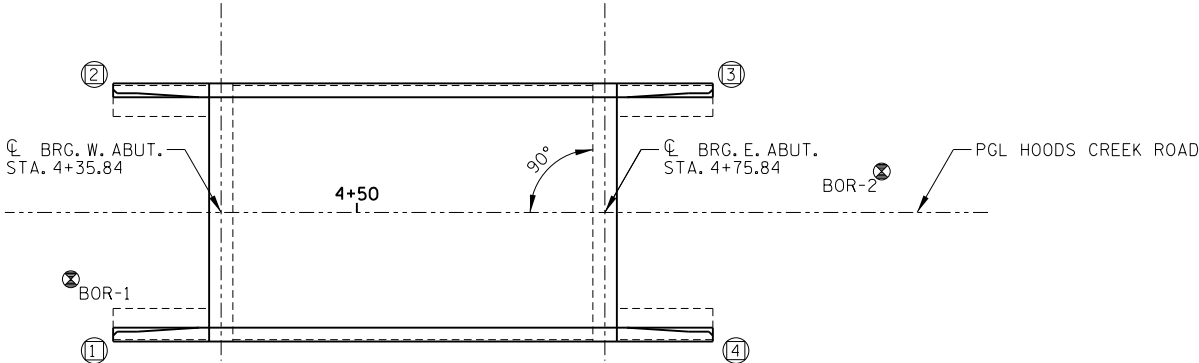
EXISTING ABUTMENT FOOTING SHALL BE REMOVED TO ALLOW FOR CONSTRUCTION OF NEW ABUTMENTS. WORK SHALL BE PAID FOR AS "REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS (STA. 4+60)". BOTTOM OF EXISTING PILE CAP EL. 653.50±. CONTRACTOR TO PROVIDE FILL FOR VOID BETWEEN EXISTING AND NEW STRUCTURE. WORK SHALL BE PAID FOR AS "BACKFILL STRUCTURE".

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-51-153			
		DRAWN BY	PLANS CK'D.
		MJB	KMA
CROSS SECTION & QUANTITIES			SHEET 2 OF 10

PLOT BY : MJB9
PLOT TIME : 11:55:37 AM
PLOT DATE : 7/11/2019
FILE NAME : c:\pwworkdir\pwworkdir\dms57984\03 Subsurface Exploration.dgn

8

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	5/20/16	200886.2	617762.2
2	5/19/16	200896.3	617846.8
BORINGS COMPLETED BY: PSI, INC.			
REPORT COMPLETED BY: PSI, INC.			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) RACINE COUNTY			



STATE PROJECT NUMBER		
2703-00-73		
MATERIAL SYMBOLS		
ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/META

LEGEND OF BORING	
BORING # EL. STA./OFF-SET	
ST 17	
0.25	
F-C	COBBLE OR BOULDER
	WEATHERED LIMESTONE
	CORE RUN #1 - 24'-29' REC=80%, ROD=72%
(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)	
(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.	
GROUND WATER ELEVATION	
▽	AT TIME OF DRILLING
▽	END OF DRILLING
▽	AFTER DRILLING
ABBREVIATIONS	
F-FINE	M-MEDIUM
C-COARSE	ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

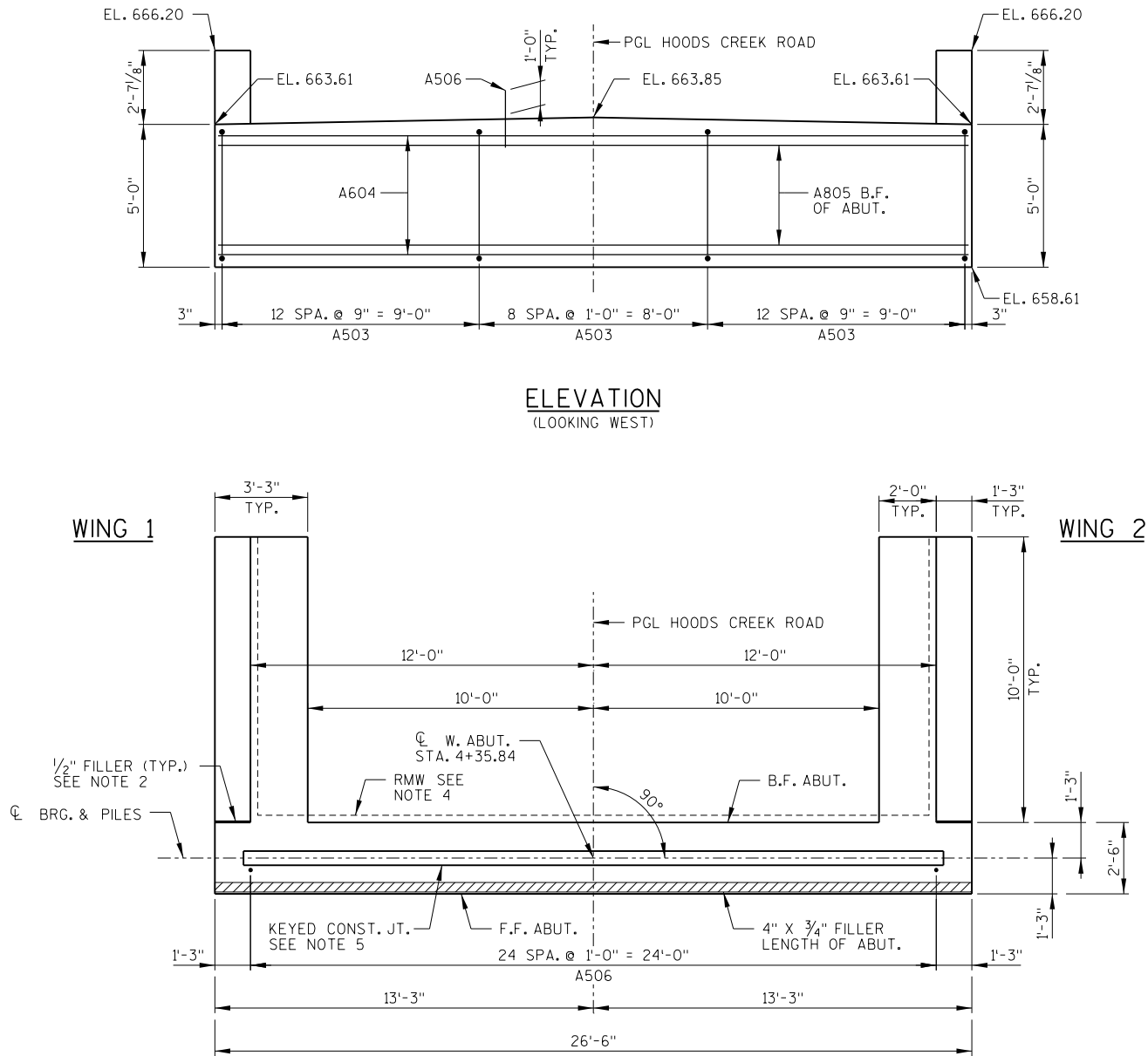
BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-51-153			
DRAWN BY		MJB	PLANS CK'D. KMA
SUBSURFACE EXPLORATION		SHEET 3 OF 10	

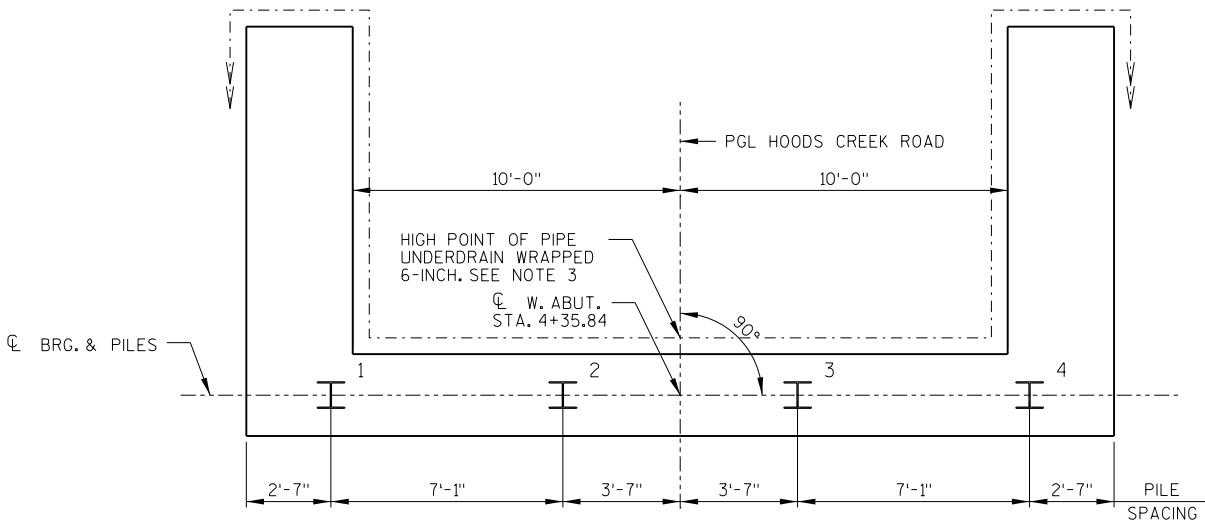
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PLOT BY : MJB9
PLOT TIME : 11:55:47 AM
PLOT DATE : 7/11/2019
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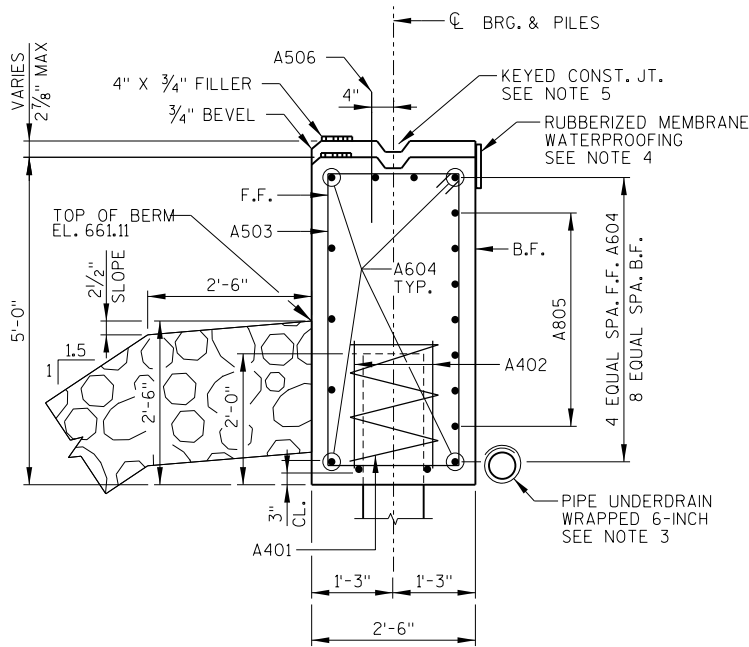
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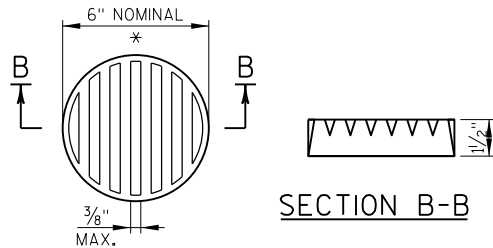
PLAN



PILE PLAN



SECTION THRU BODY



SECTION B-B

RODENT SCREEN DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SCREEN SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SCREEN TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO.10 X 1-INCH SHEET METAL SCREWS.

NOTES

1. SUPPORTED ABUTMENT ON HP 10 x 42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE AS DETERMINED BY THE MODIFIED GATE DYNAMIC FORMULA. ESTIMATED 50'-0" LONG.
2. 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
3. PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.
4. 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS on BACKFACE.
5. KEYED CONST. JOINT FORMED BY A BEVELED 2 X 6.
6. SEE SHEET 6 FOR PILE SPLICE DETAILS.

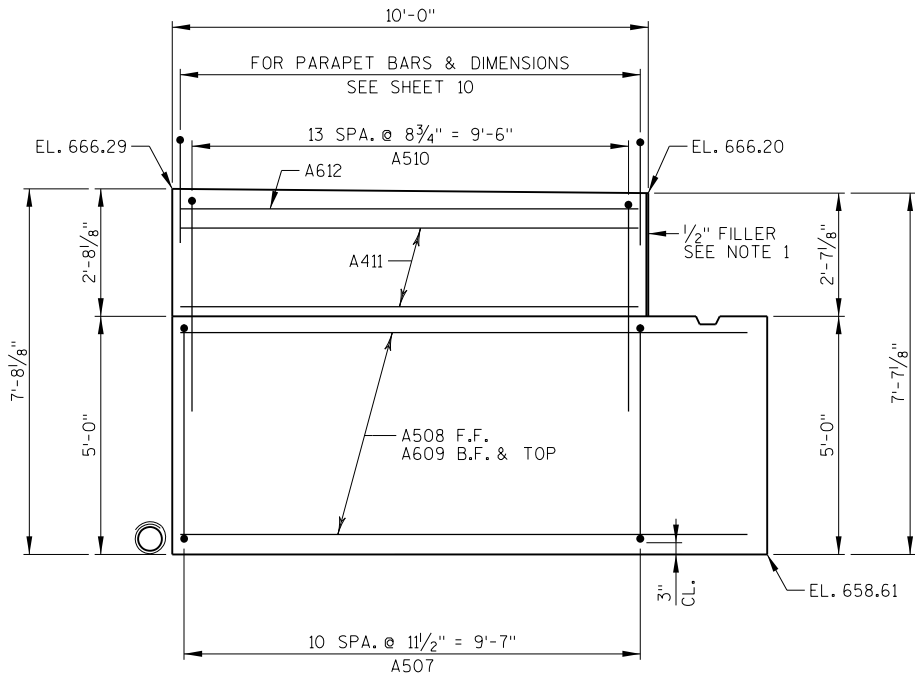
STATE PROJECT NUMBER

2703-00-73

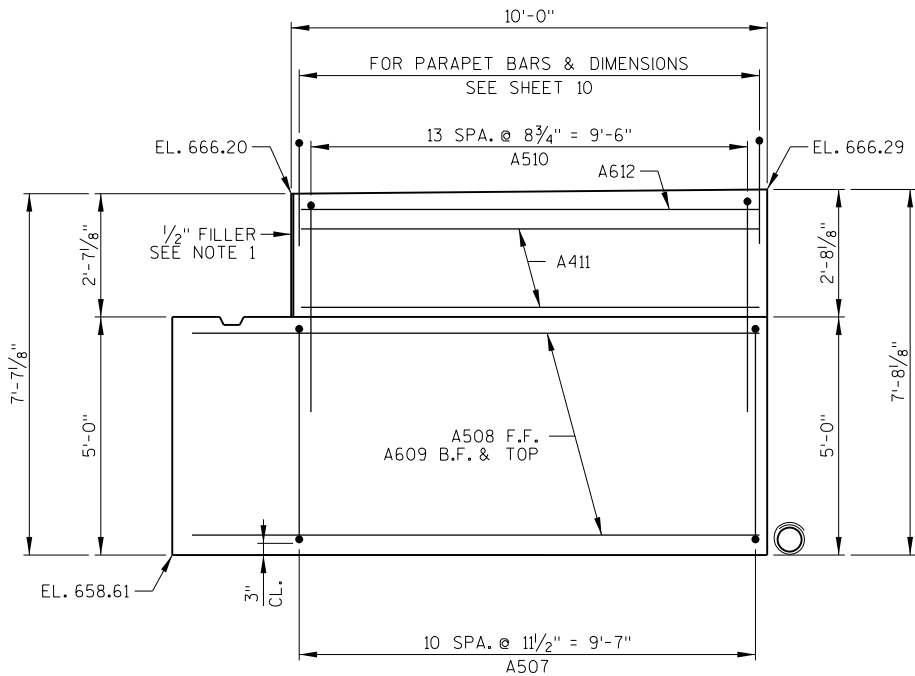
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-51-153			
DRAWN BY		MJB	PLANS CK'D. KMA
WEST ABUTMENT			SHEET 4 OF 10

8

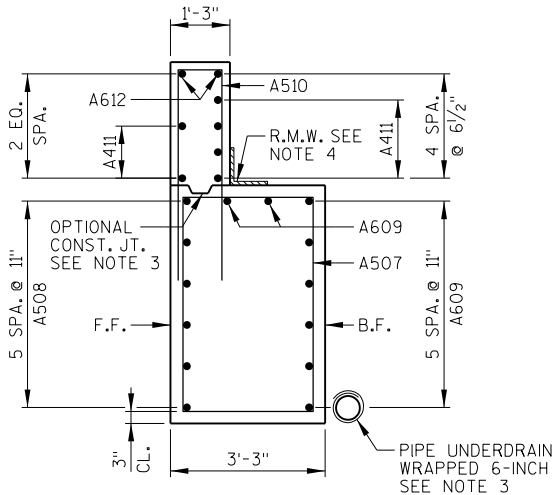
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PLOT TIME : 11:55:57 AM
PLOT DATE : 7/11/2019
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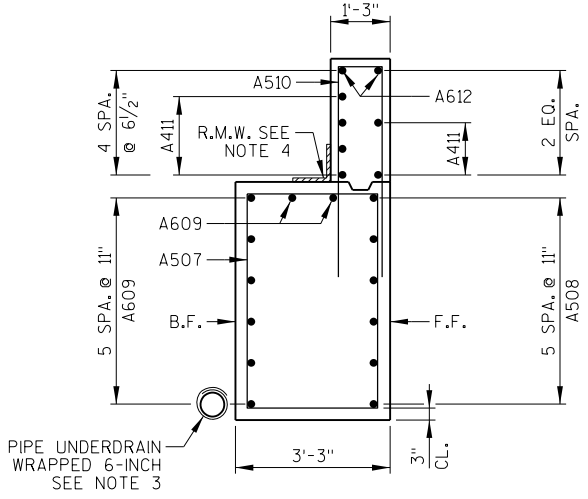
WING 1 ELEVATION
(LOOKING @ F.F.)



WING 2 ELEVATION
(LOOKING @ F.F.)

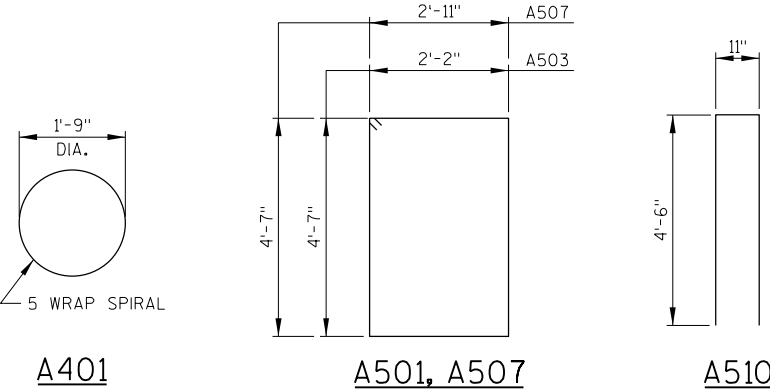


WING 1 SECTION



WING 2 SECTION

BILL OF BARS				NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.		
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A401		4	28-0	X		PILES - 1 PER BODY PILE
A402		8	2-3			PILES - 2 PER BODY PILE
A503		33	14-2	X		BODY - STIRRUP
A604		11	26-2			BODY - HORIZONTAL
A805		7	26-2			BODY - HORIZONTAL B.F.
A506	X	25	2-0			BODY - DOWEL
A507	X	22	15-8	X		WINGS BODY - STIRRUP
A508	X	12	11-7			WINGS BODY - HORIZONTAL F.F.
A609	X	16	11-11			WINGS BODY - HORIZONTAL B.F. & TOP
A510	X	28	9-8	X		WINGS - VERTICAL
A411	X	12	9-8			WINGS - HORIZONTAL
A612	X	4	9-8			WINGS - HORIZONTAL



- NOTES
- 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
 - PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.
 - OPTIONAL CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 X 6. 18" RMW @ BACKFACE & 3/4" "V" GROOVE @ FRONT FACE IF JOINT IS USED.
 - 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

STATE PROJECT NUMBER			
2703-00-73			
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-51-153			
DRAWN BY		MJB	PLANS CK'D. KMA
WEST ABUTMENT DETAILS		SHEET 5 OF 10	

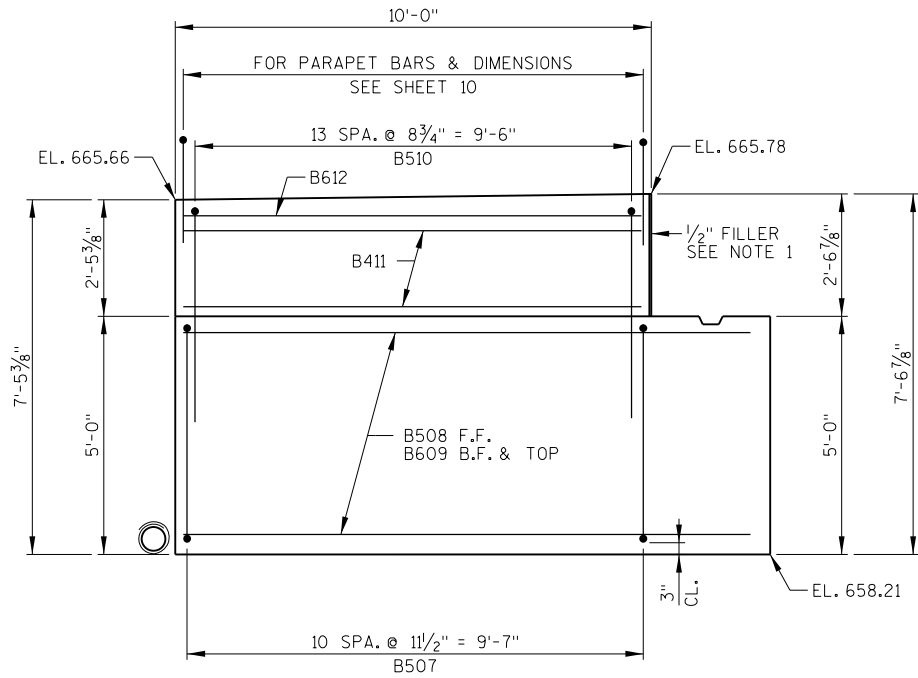


1. SUPPORTED ABUTMENT ON HP 10 x 42 STEEL PILING DRIVEN TO REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE AS DETERMINED BY THE MODIFIED GATE DYNAMIC FORMULA, ESTIMATED 50'-0" LONG.
2. 1/2" FILLER INCLUDED IN WING LENGTH; SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
3. PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.
4. 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS on BACKFACE.
5. KEYED CONST. JOINT FORMED BY A BEVELED 2 X 6.
6. SEE SHEET 4 FOR RODENT SCREEN DETAIL.

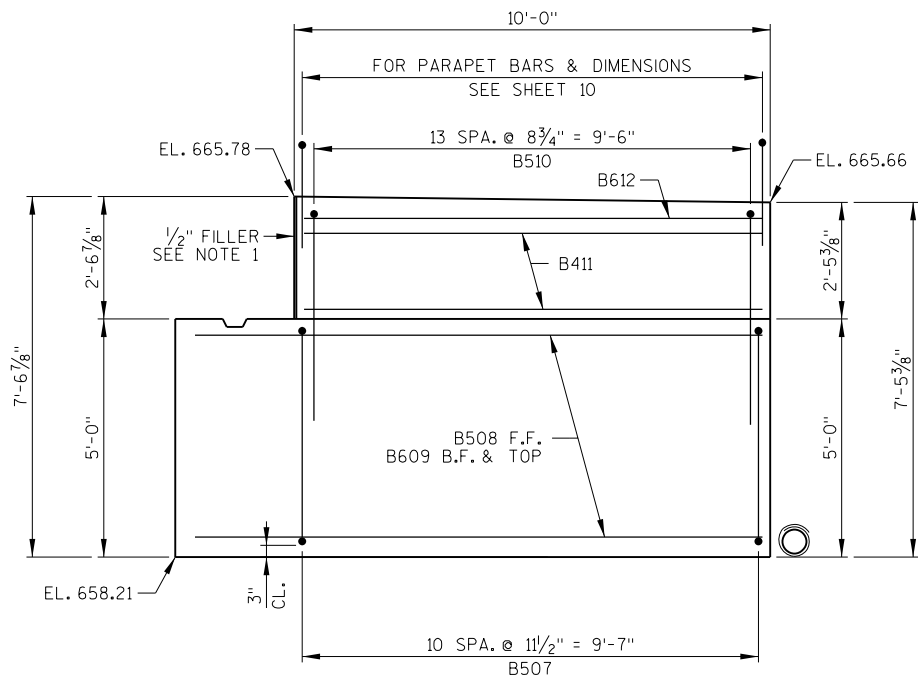
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-51-153			
DRAWN BY		MJB	PLANS CK'D. KMA
EAST ABUTMENT		SHEET 6 OF 10	

PLOT BY : MJB9
PLOT TIME : 11:56:12 AM
PLOT DATE : 7/11/2019
FILE NAME : c:\pwworkdir\pwworkdir\dms57984\07 East Abutment Details.dgn

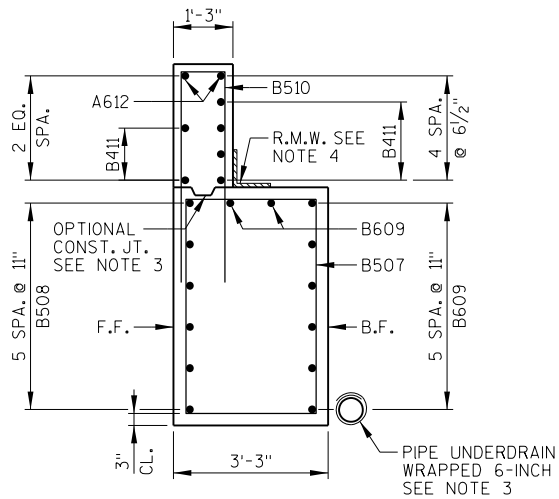
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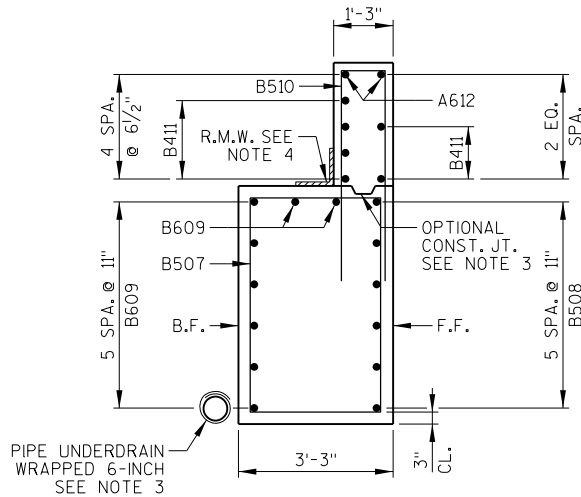
WING 3 ELEVATION
(LOOKING @ F.F.)



WING 4 ELEVATION
(LOOKING @ F.F.)



WING 3 SECTION



WING 4 SECTION

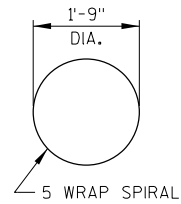
STATE PROJECT NUMBER

2703-00-73

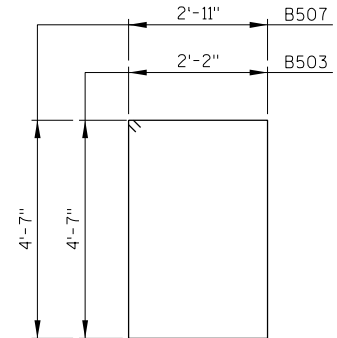
BILL OF BARS

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

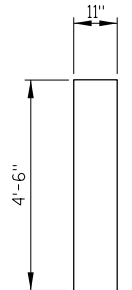
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B401		4	28-0	X		PILES - 1 PER BODY PILE
B402		8	2-3			PILES - 2 PER BODY PILE
B503		33	14-2	X		BODY - STIRRUP
B604		11	26-2			BODY - HORIZONTAL
B805		7	26-2			BODY - HORIZONTAL B.F.
B506	X	25	2-0			BODY - DOWEL
B507	X	22	15-8	X		WINGS BODY - STIRRUP
B508	X	12	11-7			WINGS BODY - HORIZONTAL F.F.
B609	X	16	11-11			WINGS BODY - HORIZONTAL B.F. & TOP
B510	X	28	9-8	X		WINGS - VERTICAL
B411	X	12	9-8			WINGS - HORIZONTAL
B612	X	4	9-8			WINGS - HORIZONTAL



B401



B501, B507



B510

NOTES

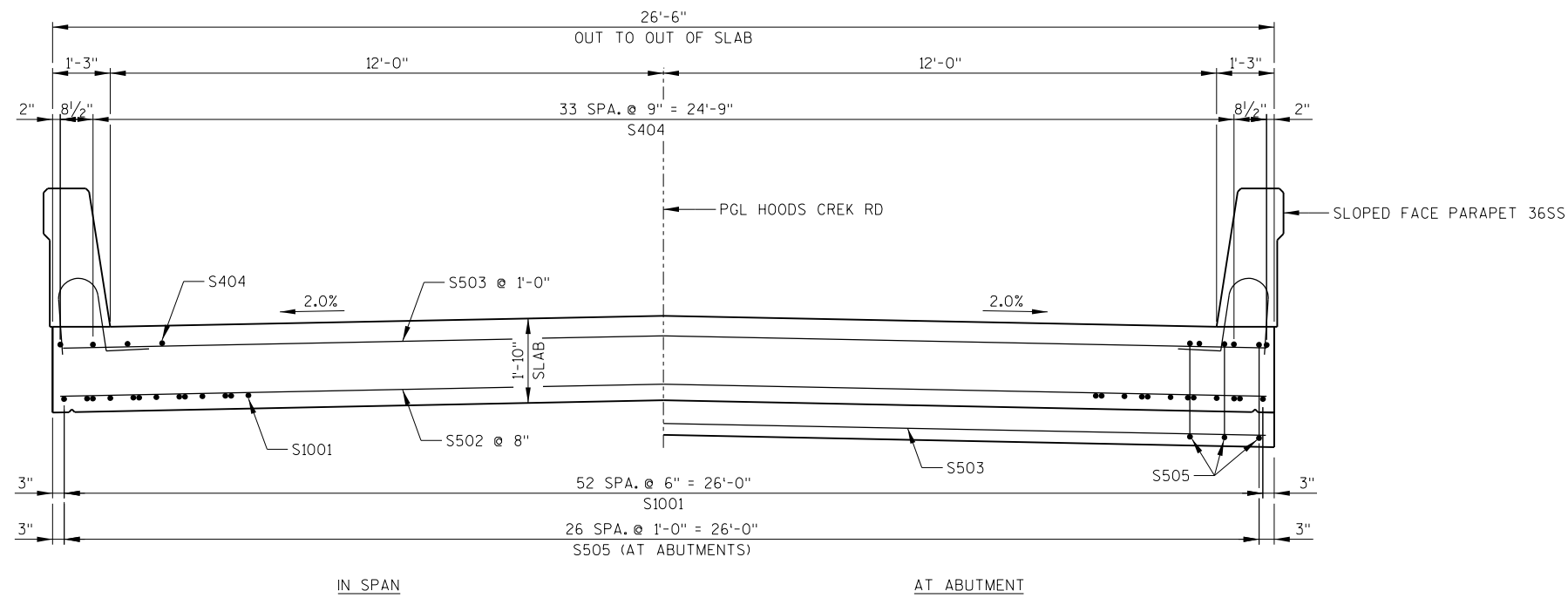
- 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER, (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- PIPE UNDERDRAIN WRAPPED 6-INCH, SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.
- OPTIONAL CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 X 6, 18" RMW @ BACKFACE & 3/4" "V" GROOVE @ FRONT FACE IF JOINT IS USED.
- 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-51-153			
DRAWN BY		MJB	PLANS CK'D. KMA
EAST ABUTMENT DETAILS		SHEET 7 OF 10	

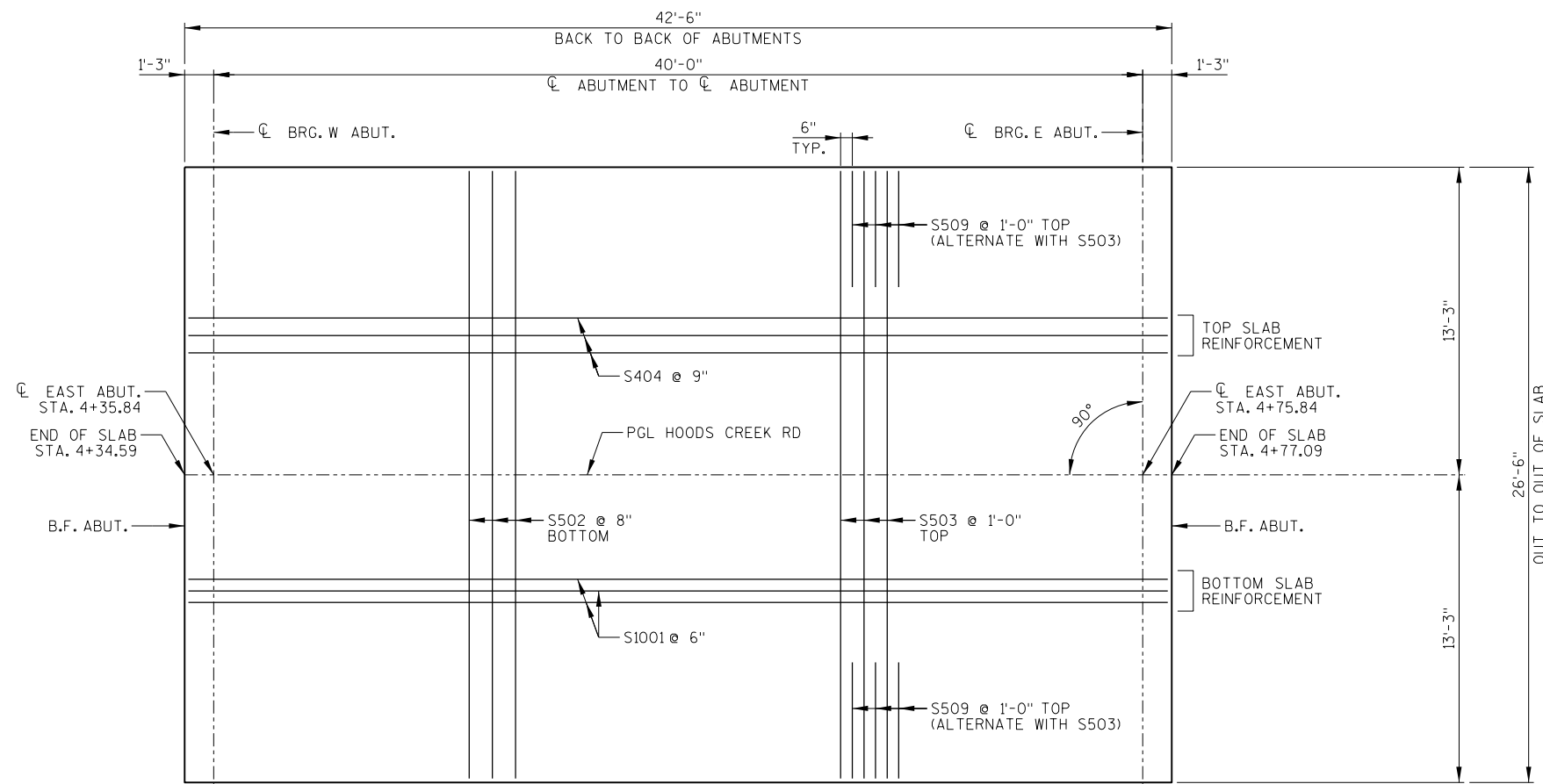
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PLOT TIME : 11:56:18 AM
PLOT DATE : 7/11/2019
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8



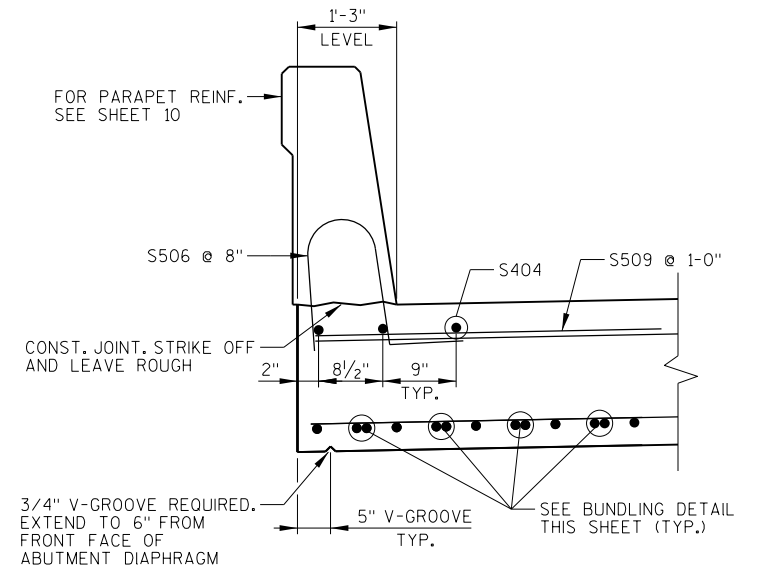
CROSS SECTION THRU ROADWAY
(LOOKING EAST)



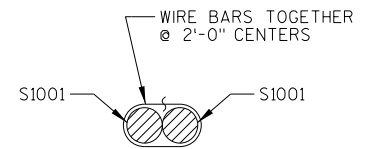
PLAN

STATE PROJECT NUMBER

2703-00-73



OVERHANG DETAILS



BUNDLING DETAIL
4 BUNDLES EACH SIDE OF SLAB, EVERY THIRD BAR, STARTING WITH THE SECOND BAR.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-51-153			
DRAWN BY		MJB	PLANS CK'D. KMA
SUPERSTRUCTURE			SHEET 8 OF 10

8

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

TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF
SLAB ELEVATIONS AT THE $\mathcal{C}$ OF ABUTMENTS AND
AT $1/2$ PTS. TO VERIFY CAMBER. TAKE THE ELEVATIONS
ALONG GUTTER LINES AND AT $\mathcal{C}$.

Diagram illustrating the cross-section of a bridge deck with reinforcement details. The diagram shows the bridge span (20'-0" total length) and the deck width (20'-8" total width). The reinforcement bars are labeled S503, S404, S502, and S1001. The bridge abutments are labeled B.R.G. ABUTS. and F.F. ABUT. The centerline (CL.) of the span is indicated. The slab thickness is 1'-10".

CL. BRG. ABUTS.

S505 @ 1'-0"

S503

18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND BETWEEN INSIDE FACES OF ABUTMENT WINGS

ABUT. DOWEL FOR PLACEMENT DETAILS SEE SHEETS 4 & 6

2 1/2" CL.

1'-10" SLAB THK.

1 1/2" CL.

6"

3"

3/4" BEVEL

4" X 3/4" FILLER OUT TO OUT OF SLAB

6"

1'-3"

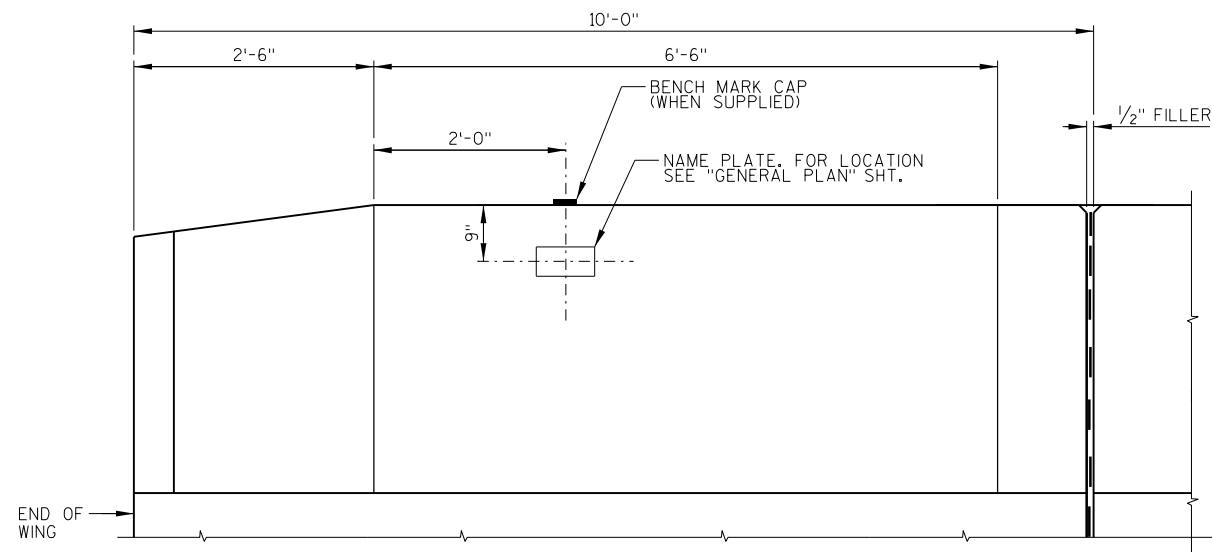
1'-3"

CAMBER SPAN AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

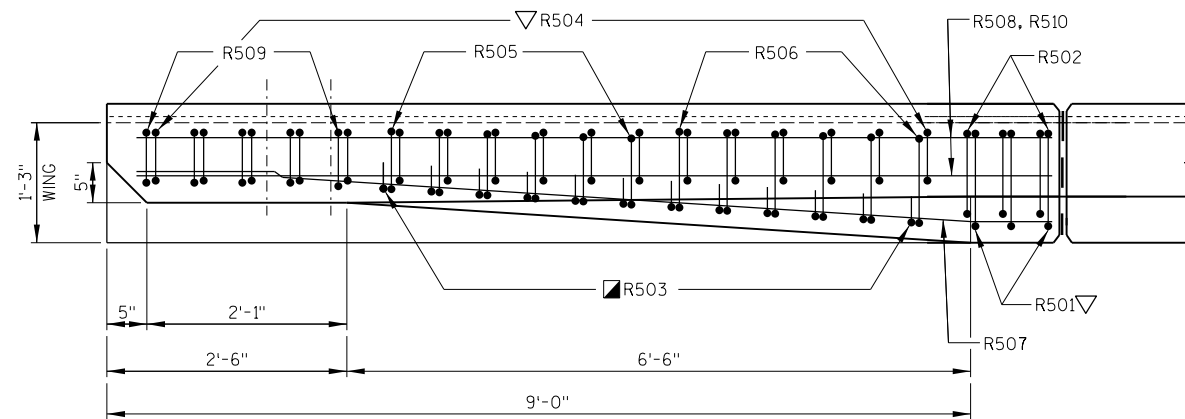
	W. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	E. ABUT.
N. EDGE OF STRUCTURE	666.19	666.15	666.11	666.07	666.03	665.99	665.95	665.91	665.87	665.83	665.79
R. OF STRUCTURE	666.43	666.39	666.35	666.31	666.27	666.23	666.19	666.15	666.11	666.07	666.03
S. EDGE OF STRUCTURE	666.19	666.15	666.11	666.07	666.03	665.99	665.95	665.91	665.87	665.83	665.79

PLOT BY : MJB9
PLOT TIME : 7:11:56:29 AM
PLOT DATE : 7/11/2019
FILE NAME : c:\pwworkdir\pwworking\msd57984\10 Parapet SS36.dgn

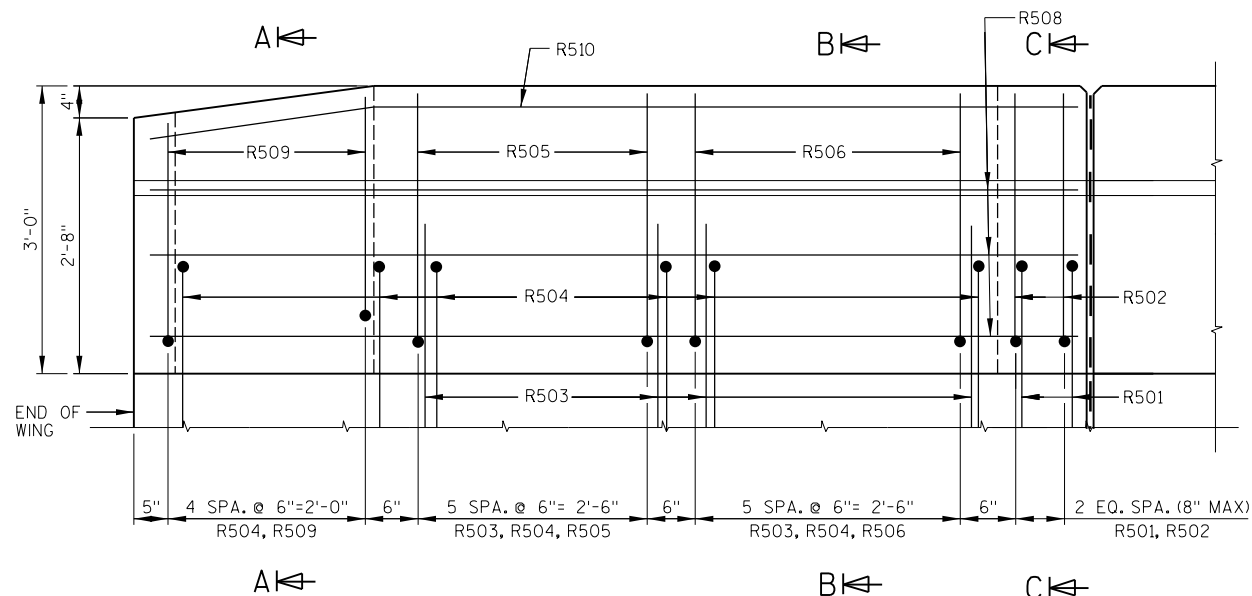
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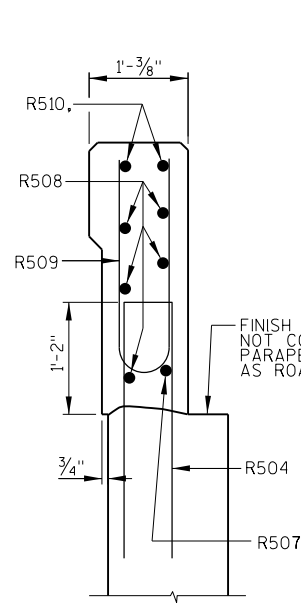
INSIDE ELEVATION



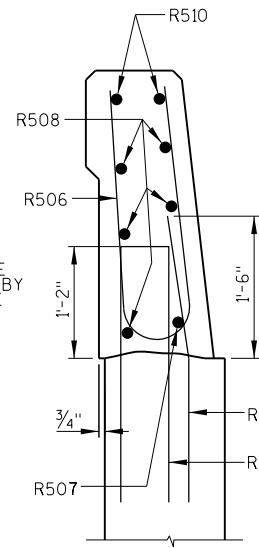
PLAN



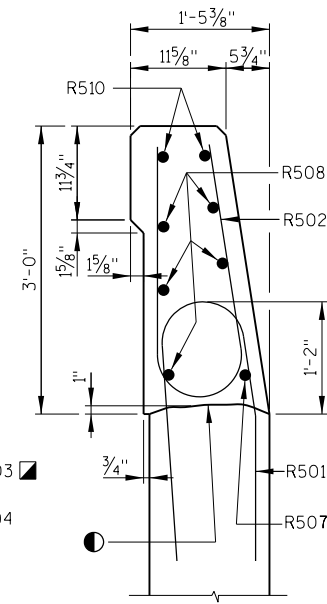
OUTSIDE ELEVATION



SECTION A

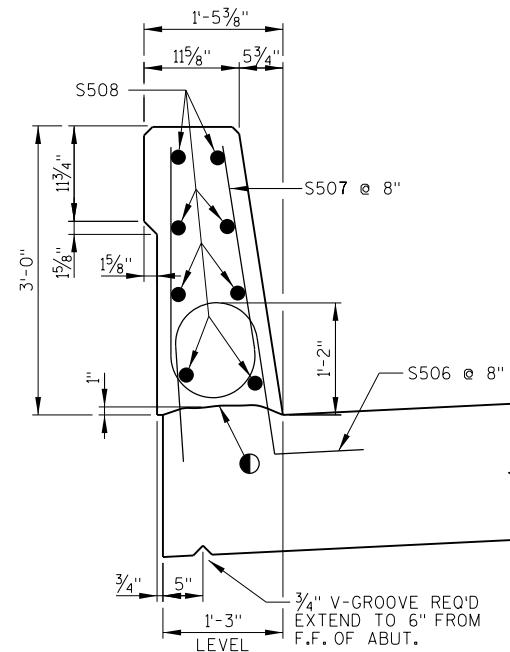


SECTION B



SECTION C

OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9". MIN. JOINT SPACING OF 80'-0". DEFINE CONST. JOINT WITH A 3/4" - 'V' GROOVE.



SECTION THRU PARAPET ON BRIDGE

● CONST. JOINT - STRIKE OFF AS SHOWN.

■ R503 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R503 OR S503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

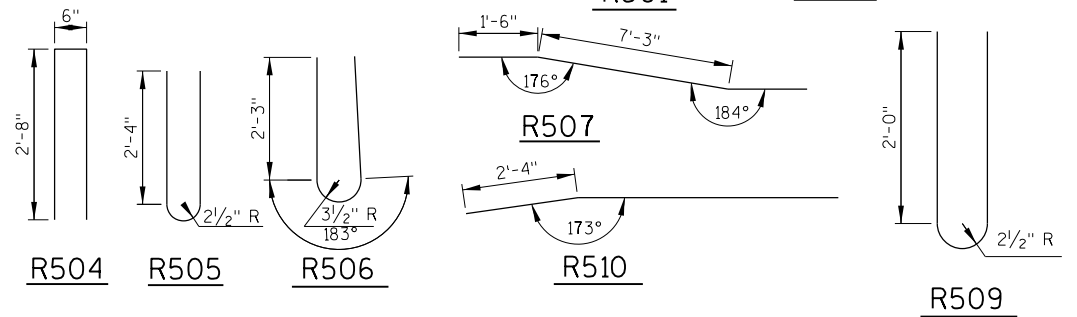
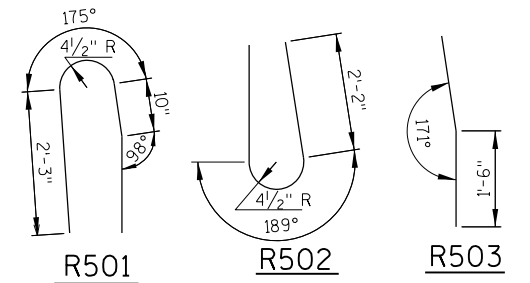
▽ R501 AND R504 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.

STATE PROJECT NUMBER

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BILL OF BARS
FOR ABUTMENT PARAPETS

BAR MARK	COAT	WEST ABUT.	EAST ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	6	6	5-10	X		PARAPET VERT.
R502	X	6	6	5-8	X		PARAPET VERT.
R503	X	24	24	3-0	X		PARAPET VERT.
R504	X	34	34	5-7	X		PARAPET VERT.
R505	X	12	12	5-5	X		PARAPET VERT.
R506	X	12	12	5-6	X		PARAPET VERT.
R507	X	2	2	9-5	X		PARAPET HORIZ.
R508	X	10	10	9-8			PARAPET HORIZ.
R509	X	10	10	4-9	X		PARAPET VERT.
R510	X	4	4	9-7	X		PARAPET HORIZ.

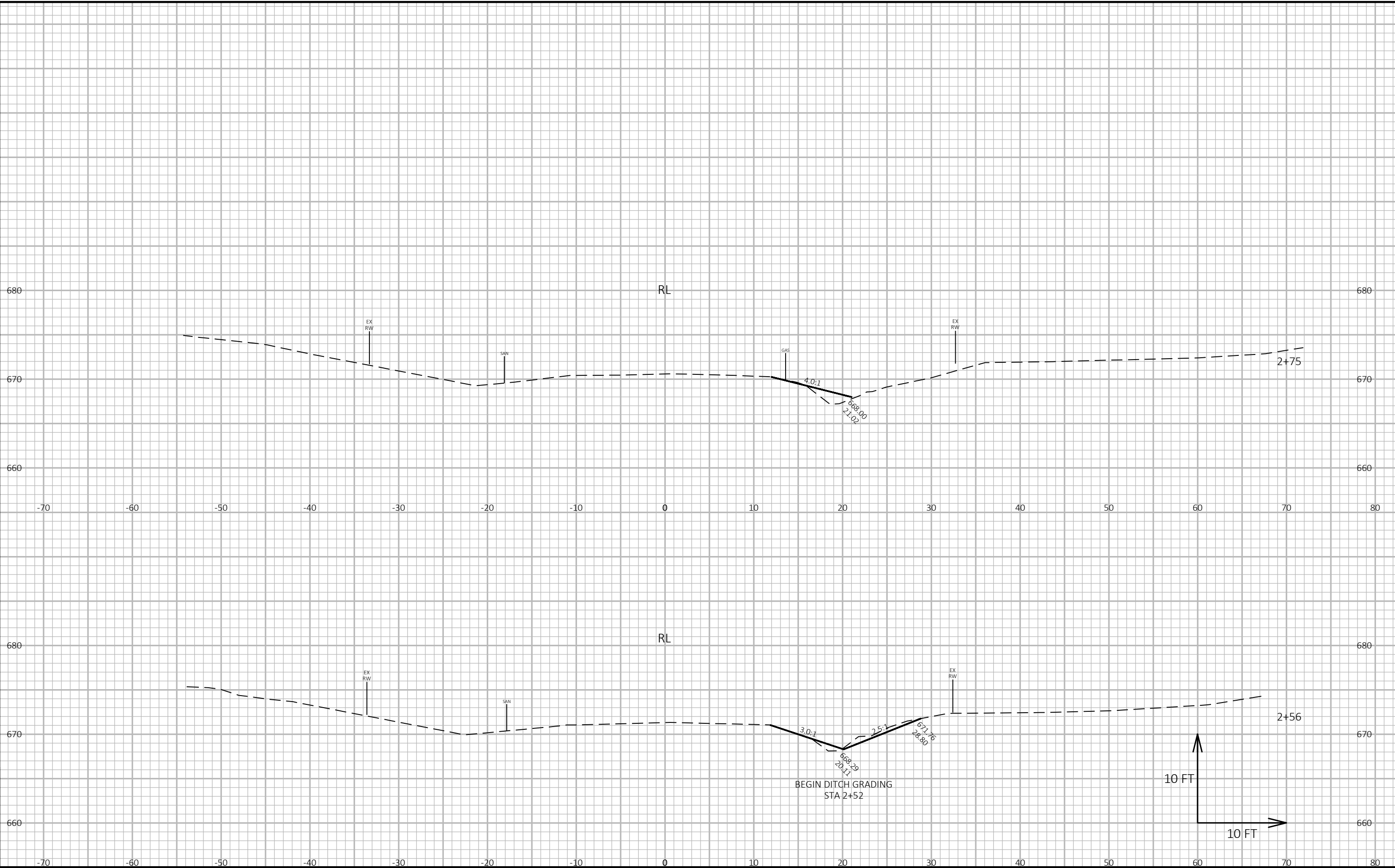


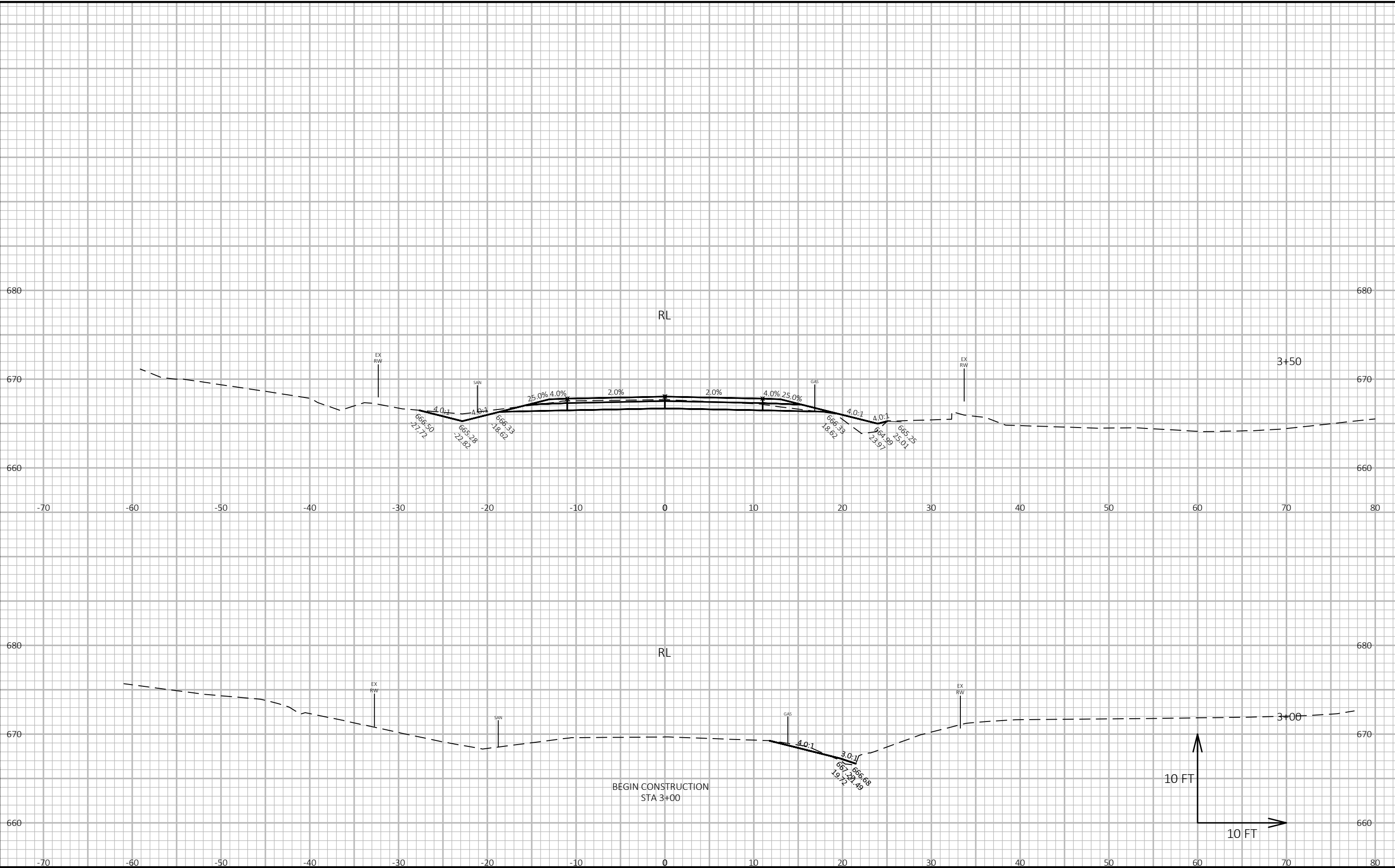
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-51-153			
		DRAWN BY	MJB
		PLANS CK'D.	KMA
PARAPET 36SS		SHEET 10 OF 10	

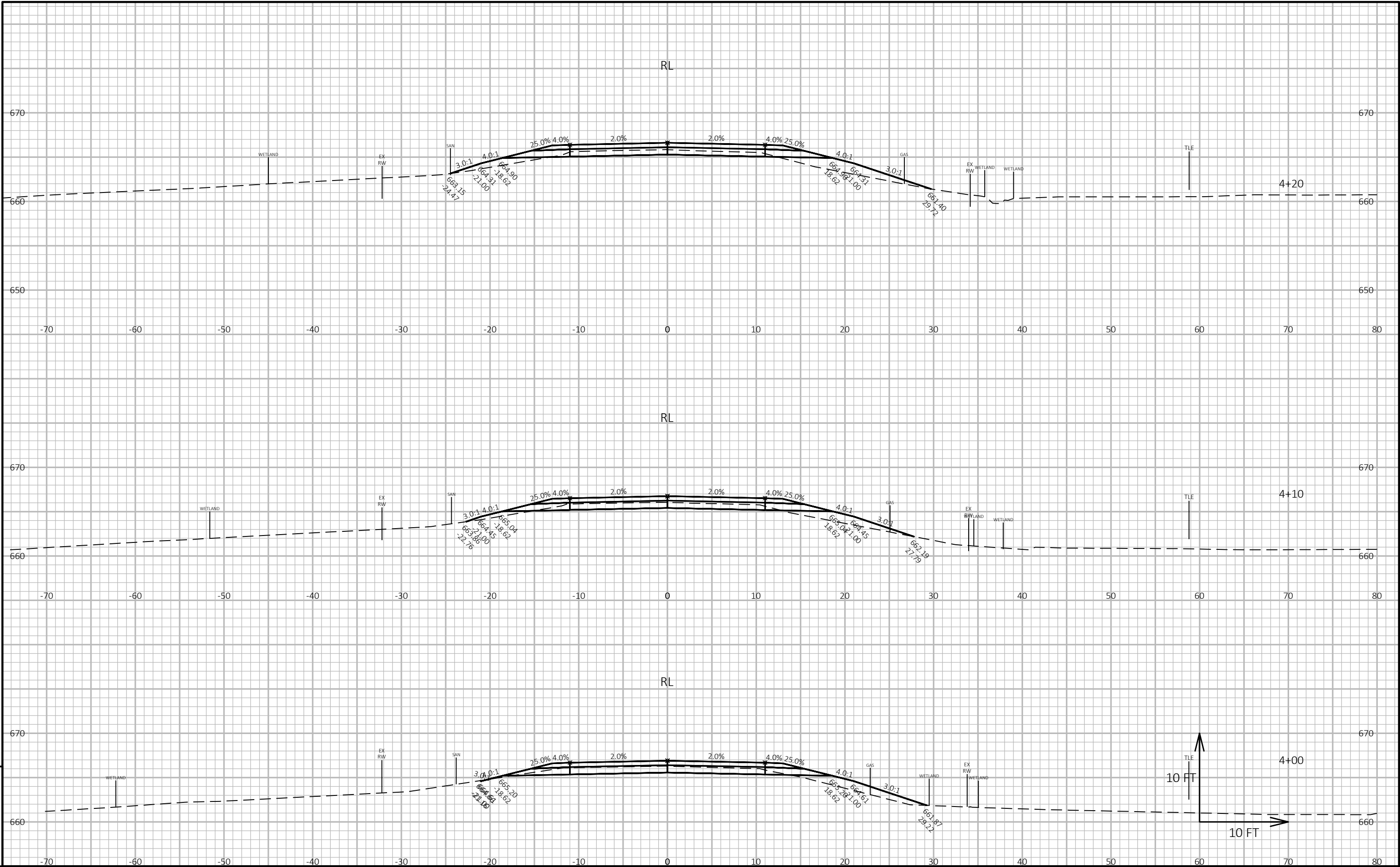
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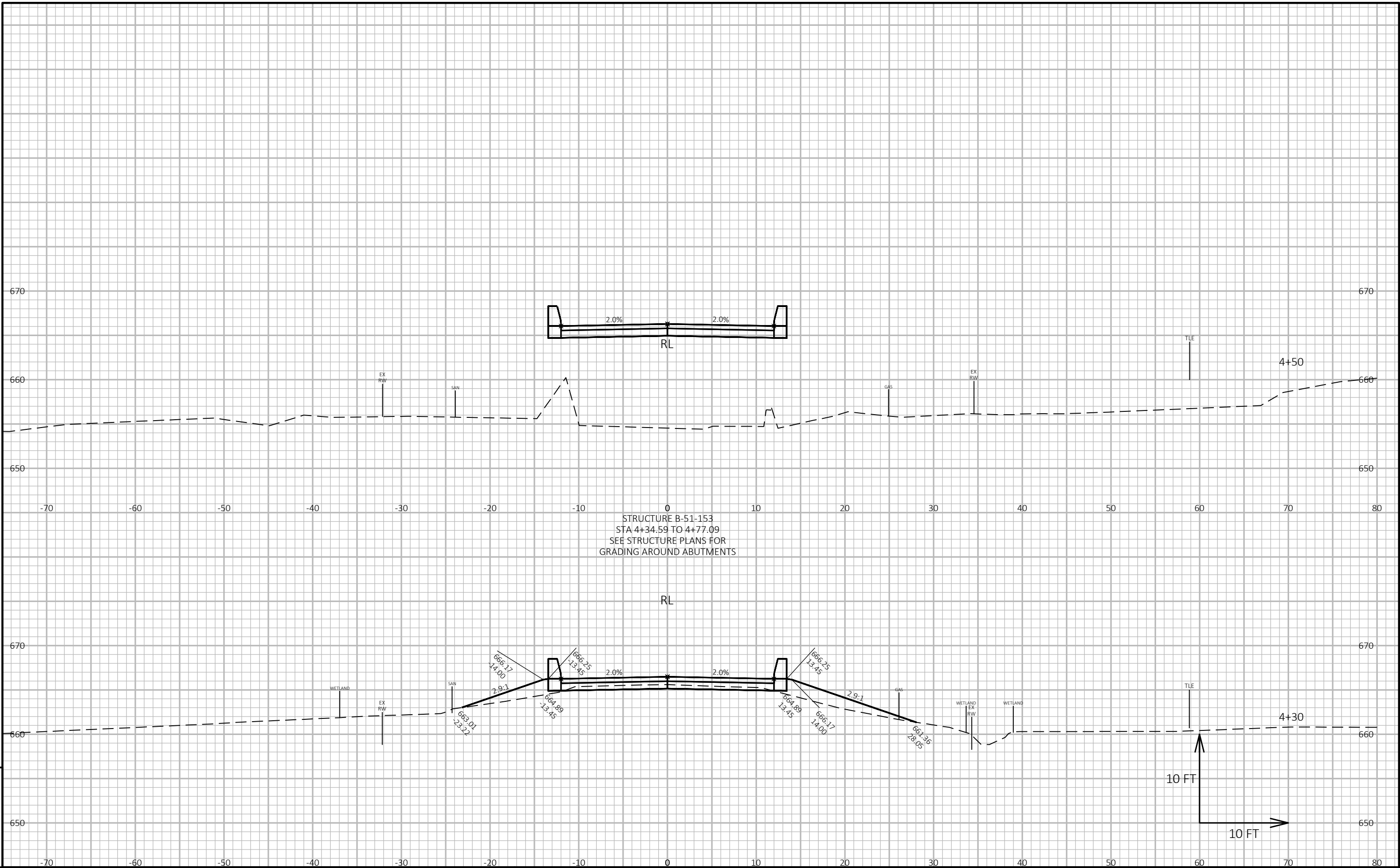
STATION	Distance	AREA (SF)			Incremental Vol (CY)				Cumulative Vol (CY)				
		Cut	Salvaged/Unusable	Fill	Cut	Salvaged/Unusable	Fill	Expanded	Cut	Salvaged/Unusable	Fill	Expanded	Mass Ordinate
			Pavement Material			Pavement Material		Fill 1.25		Pavement Material		Fill 1.25	
02+51.61	0.00	0.32	0.00	0.70	0	0	0	0	0	0	0	0	0
02+60	8.39	0.82	0.00	1.59	0	0	0	0	0	0	0	0	0
02+70	10.00	0.43	0.00	3.14	0	0	1	1	0	0	1	2	-1
02+80	10.00	0.29	0.00	4.36	0	0	1	2	1	0	3	3	-3
02+90	10.00	0.35	0.00	2.23	0	0	1	2	1	0	4	5	-4
03+00	10.00	41.51	3.20	1.82	8	1	1	1	8	1	5	6	3
03+10	10.00	43.93	3.20	2.86	16	1	1	1	24	2	5	7	17
03+20	10.00	41.85	3.20	4.20	16	1	1	2	40	3	7	8	32
03+30	10.00	39.13	3.20	4.05	15	1	2	2	55	4	8	10	45
03+35.04	5.04	38.34	3.20	4.36	7	1	1	1	62	5	9	11	51
03+40	4.96	36.42	3.20	4.65	7	1	1	1	69	5	10	12	57
03+50	10.00	32.14	3.20	0.00	13	1	1	1	82	7	11	13	68
03+60	10.00	26.84	3.20	0.76	11	1	0	0	93	8	11	14	79
03+70	10.00	26.07	3.20	2.57	10	1	1	1	103	9	12	14	88
03+80	10.00	24.38	3.20	8.11	9	1	2	2	112	10	14	17	95
03+90	10.00	21.84	3.20	15.45	9	1	4	5	121	11	18	22	98
04+00	10.00	19.02	3.20	10.72	8	1	5	6	128	12	23	28	100
04+10	10.00	15.52	3.20	11.34	6	1	4	5	134	14	27	33	101
04+20	10.00	12.34	3.20	18.30	5	1	5	7	140	15	32	40	99
04+30	10.00	9.13	3.20	25.62	4	1	8	10	144	16	40	51	93
04+34.59	4.59	7.59	3.20	15.84	1	1	4	4	145	17	44	55	90
04+77.09	0.00	2.04	0.00	173.98	0	0	0	0	0	0	0	0	0
04+80	2.91	5.16	0.00	61.69	0	0	13	16	0	0	13	16	-15
04+90	10.00	10.79	5.50	46.10	3	1	20	25	3	1	33	41	-37
04+97.91	7.91	12.31	5.50	26.58	3	2	11	13	7	3	43	54	-47
05+00	2.09	12.70	5.50	22.40	1	0	2	2	8	3	45	56	-49
05+10	10.00	16.69	5.50	9.49	5	2	6	7	13	5	51	64	-51
05+20	10.00	17.48	5.50	7.93	6	2	3	4	19	7	54	68	-48
05+30	10.00	18.68	5.50	10.14	7	2	3	4	26	9	58	72	-46
05+40	10.00	21.11	5.50	8.98	7	2	4	4	34	11	61	77	-43
05+50	10.00	23.64	5.50	6.66	8	2	3	4	42	13	64	80	-38
05+60	10.00	25.70	5.50	4.28	9	2	2	3	51	15	66	83	-32
05+70	10.00	28.18	5.50	2.34	10	2	1	2	61	17	67	84	-23
05+80	10.00	25.85	5.50	6.29	10	2	2	2	71	19	69	86	-15
05+90	10.00	27.30	5.50	3.32	10	2	2	2	81	21	71	88	-8
06+00	10.00	28.84	5.50	3.07	10	2	1	1	91	23	72	90	1
06+10	10.00	32.95	5.50	2.75	11	2	1	1	103	25	73	91	11
06+15.81	5.81	40.54	5.50	3.05	8	1	1	1	111	27	74	92	19
06+20	4.19	40.75	5.50	3.28	6	1	0	1	117	28	74	93	24
06+30	10.00	41.09	5.50	3.63	15	2	1	2	132	30	75	94	38
06+40	10.00	41.85	5.50	2.17	15	2	1	1	147	32	76	96	52
06+42.5	2.50	42.01	5.50	1.91	4	1	0	0	151	32	77	96	55

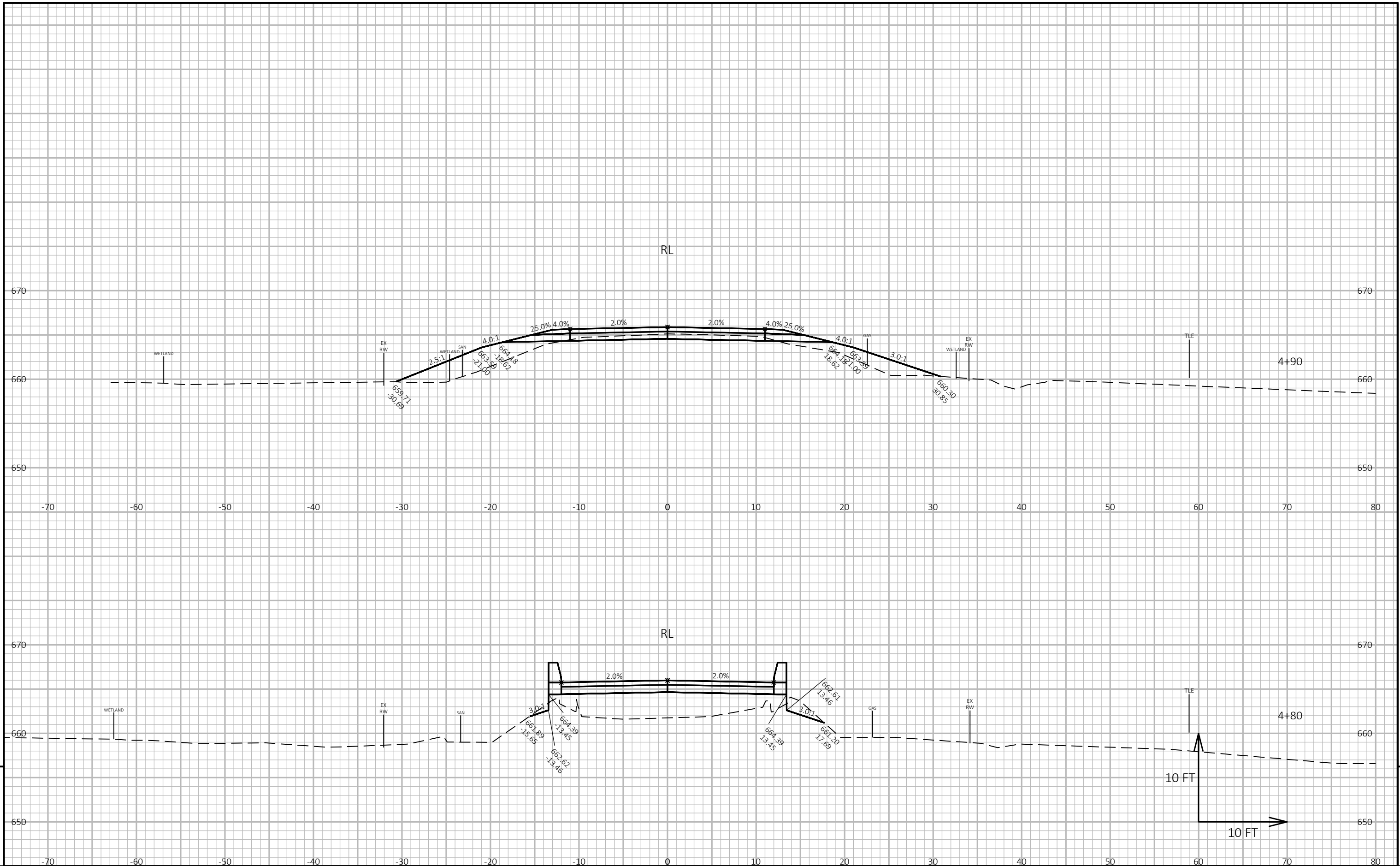
STATION	Distance	AREA (SF)			Incremental Vol (CY)				Cumulative Vol (CY)				
		Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Expanded Fill 1.25	Cut	Salvaged/Unusable Pavement Material	Fill	Expanded	
												Fill	Mass Ordinate
21+27.18	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0
21+30	2.82	0.76	0.00	0.02	0	0	0	0	0	0	0	0	0
21+35	5.00	2.07	0.00	0.12	0	0	0	0	0	0	0	0	0
21+40	5.00	3.46	0.00	0.20	1	0	0	0	1	0	0	0	1
21+45	5.00	4.67	0.00	4.92	1	0	0	1	2	0	1	1	1
21+50	5.00	4.54	0.00	7.47	1	0	1	1	2	0	2	2	0
21+53.47	3.47	4.35	0.00	8.66	1	0	1	1	3	0	3	3	0
21+57	3.53	4.26	0.00	9.04	1	0	1	1	4	0	4	5	-1
21+60	3.00	4.25	0.00	9.89	0	0	1	1	4	0	5	6	-2
21+65	5.00	3.23	0.00	12.56	1	0	2	3	5	0	7	9	-4
21+70	5.00	1.83	0.00	16.14	0	0	3	3	5	0	10	12	-7
21+75	5.00	0.88	0.00	19.94	0	0	3	4	5	0	13	16	-11
21+80	5.00	0.31	0.00	27.42	0	0	4	5	6	0	17	22	-16
21+85	5.00	0.00	0.00	38.06	0	0	6	8	6	0	23	29	-24
21+90	5.00	0.00	0.00	49.30	0	0	8	10	6	0	32	39	-34
21+95	5.00	0.00	0.00	57.55	0	0	10	12	6	0	41	52	-46
21+99.29	4.29	0.00	0.00	60.05	0	0	9	12	6	0	51	63	-58
22+00	0.71	0.00	0.00	60.29	0	0	2	2	6	0	52	65	-60
22+05	5.00	0.00	0.00	61.31	0	0	11	14	6	0	64	79	-74
22+10	5.00	0.00	0.00	62.28	0	0	11	14	6	0	75	94	-88
22+15	5.00	0.00	0.00	66.75	0	0	12	15	6	0	87	109	-103
22+20	5.00	0.00	0.00	72.76	0	0	13	16	6	0	100	125	-119
22+25	5.00	0.00	0.00	77.63	0	0	14	17	6	0	114	142	-137
22+30	5.00	0.00	0.00	80.48	0	0	15	18	6	0	128	161	-155
22+35	5.00	0.00	0.00	83.95	0	0	15	19	6	0	144	180	-174
22+40	5.00	0.00	0.00	86.94	0	0	16	20	6	0	160	199	-194
22+41.58	1.58	0.00	0.00	91.54	0	0	5	7	6	0	165	206	-200
22+45	3.42	0.00	0.00	105.08	0	0	12	16	6	0	177	221	-216
22+85.01	0.00	0.00	0.00	131.41	0	0	0	0	0	0	0	0	0
22+90	4.99	0.00	0.00	105.14	0	0	22	27	0	0	22	27	-27
22+95	5.00	0.00	0.00	82.71	0	0	17	22	0	0	39	49	-49
22+99.87	4.87	0.00	0.00	65.69	0	0	13	17	0	0	53	66	-66
23+00	0.13	0.00	0.00	65.44	0	0	0	0	0	0	53	66	-66
23+05	5.00	0.00	0.00	56.34	0	0	11	14	0	0	64	80	-80
23+10	5.00	0.00	0.00	48.37	0	0	10	12	0	0	74	92	-92
23+15	5.00	0.00	0.00	42.74	0	0	8	11	0	0	82	103	-103
23+20	5.00	0.00	0.00	38.17	0	0	7	9	0	0	90	112	-112
23+25	5.00	0.00	0.00	35.34	0	0	7	9	0	0	97	121	-121
23+30	5.00	0.00	0.00	35.20	0	0	7	8	0	0	103	129	-129
23+35	5.00	0.00	0.00	35.08	0	0	7	8	0	0	110	137	-137
23+35.01	0.01	0.00	0.00	35.08	0	0	0	0	0	0	110	137	-137
23+40	4.99	0.00	0.00	32.28	0	0	6	8	0	0	116	145	-145
23+45	5.00	0.00	0.00	30.05	0	0	6	7	0	0	122	152	-152
23+50	5.00	0.00	0.00	27.51	0	0	5	7	0	0	127	159	-159
23+55	5.00	0.25	0.00	24.61	0	0	5	6	0	0	132	165	-165
23+60	5.00	1.15	0.00	21.63	0	0	4	5	0	0	136	170	-170
23+65	5.00	2.78	0.00	18.62	0	0	4	5	1	0	140	175	-174
23+70	5.00	4.55	0.00	15.36	1	0	3	4	1	0	143	179	-178
23+70.14	0.14	4.56	0.00	15.26	0	0	0	0	1	0	143	179	-178
23+74.22	4.08	4.63	0.00	12.48	1	0	2	3	2	0	145	181	-180
23+75	0.78	4.62	0.00	11.97	0	0	0	0	2	0	146	182	-180
23+80	5.00	4.53	0.00	8.96	1	0	2	2	3	0	147	184	-181
23+85	5.00	4.38	0.00	6.12	1	0	1	2	4	0	149	186	-182
23+90	5.00	4.27	0.00	3.40	1	0	1	1	5	0	150	187	-183
23+95	5.00	3.80	0.00	1.34	1	0	0	1	5	0	150	188	-182
24+00	5.00	2.90	0.00	0.19	1	0	0	0	6	0	150	188	-182
24+05	5.00	1.98	0.00	0.08	0	0	0	0	6	0	150	188	-182
24+10	5.00	1.14	0.00	0.03	0	0	0	0	7	0	150	188	-181
24+10	0.00	1.14	0.00	0.03	0	0	0	0	7	0	150	188	-181
24+15	5.00	0.14	0.00	0.00	0	0	0	0	7	0	150	188	-181
24+15.7	0.70	0.00	0.00	0.00	0	0	0	0	7	0	150	188	-181

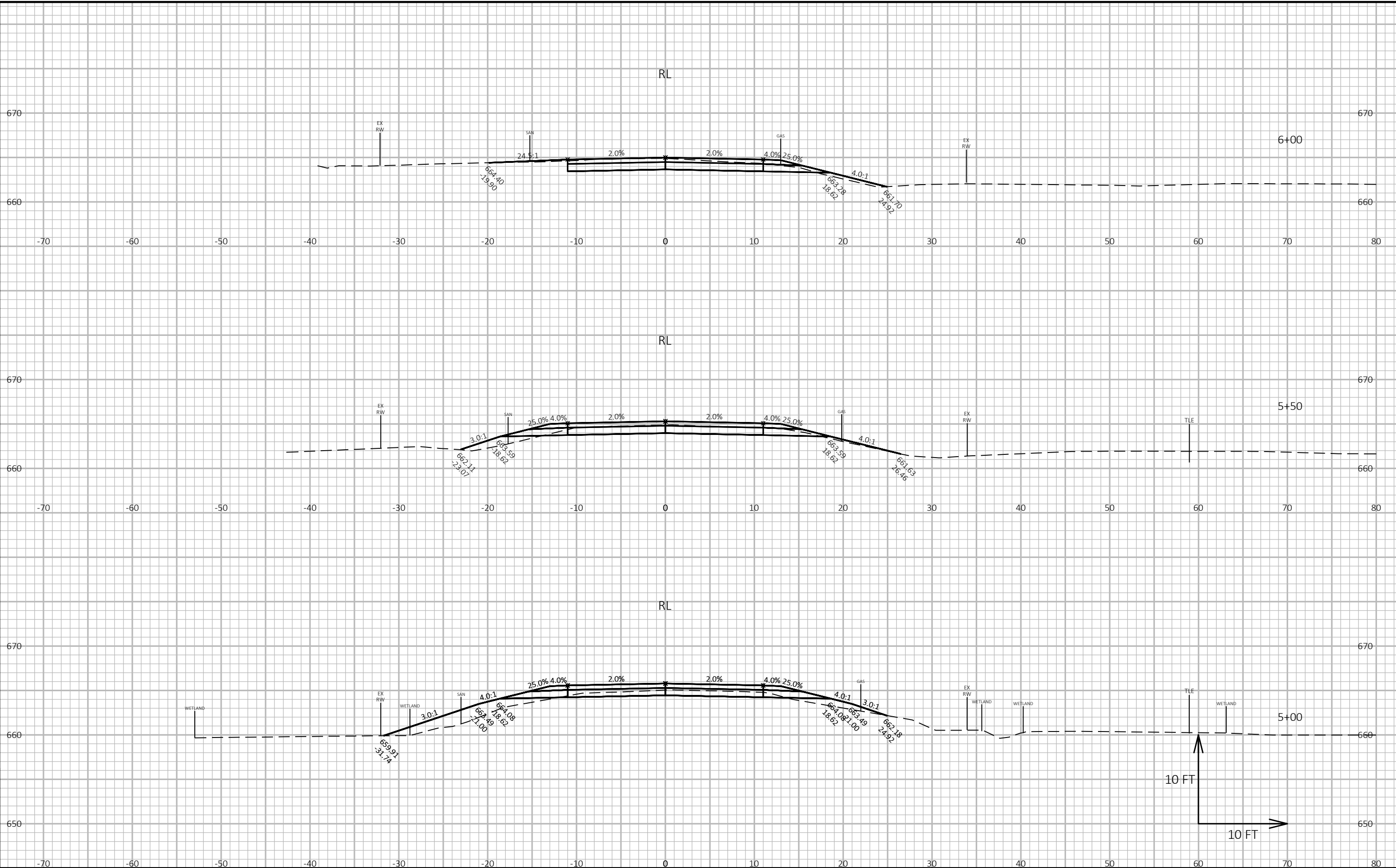


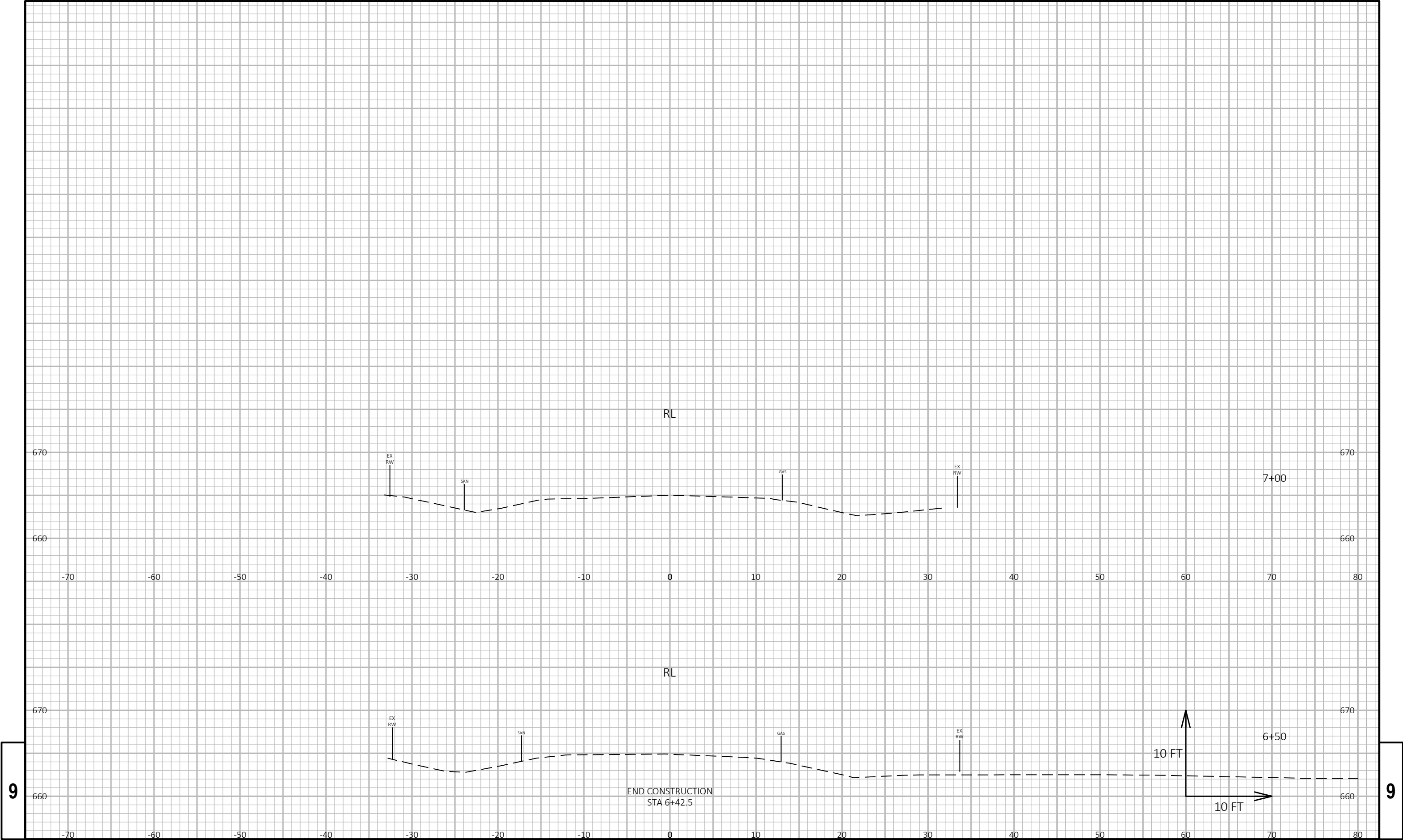








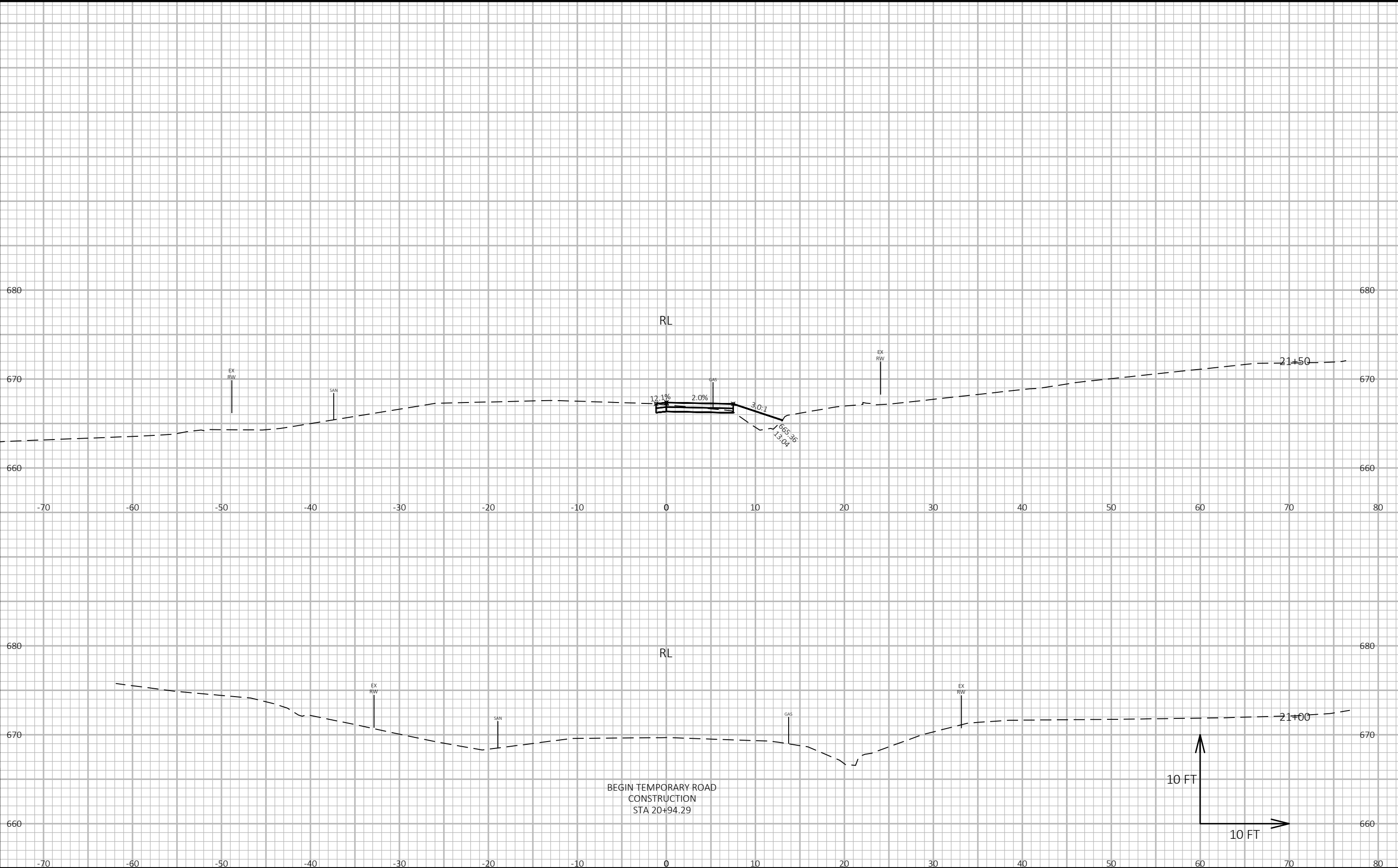




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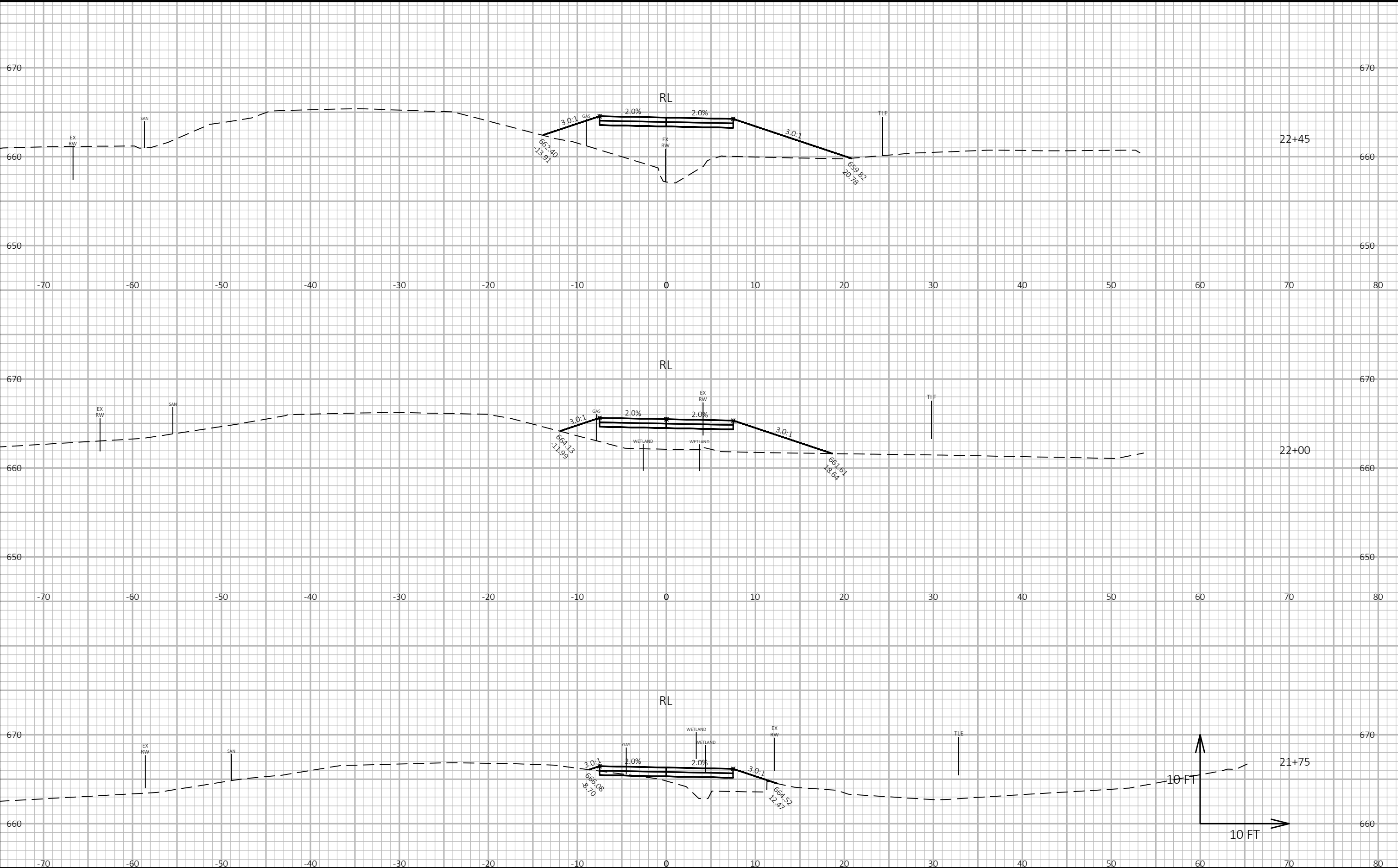
PROJECT NO: 2703-00-73	HWY: HOODS CREEK ROAD	COUNTY: RACINE	CROSS SECTIONS: PROPOSED HOODS CREEK ROAD	SHEET	E
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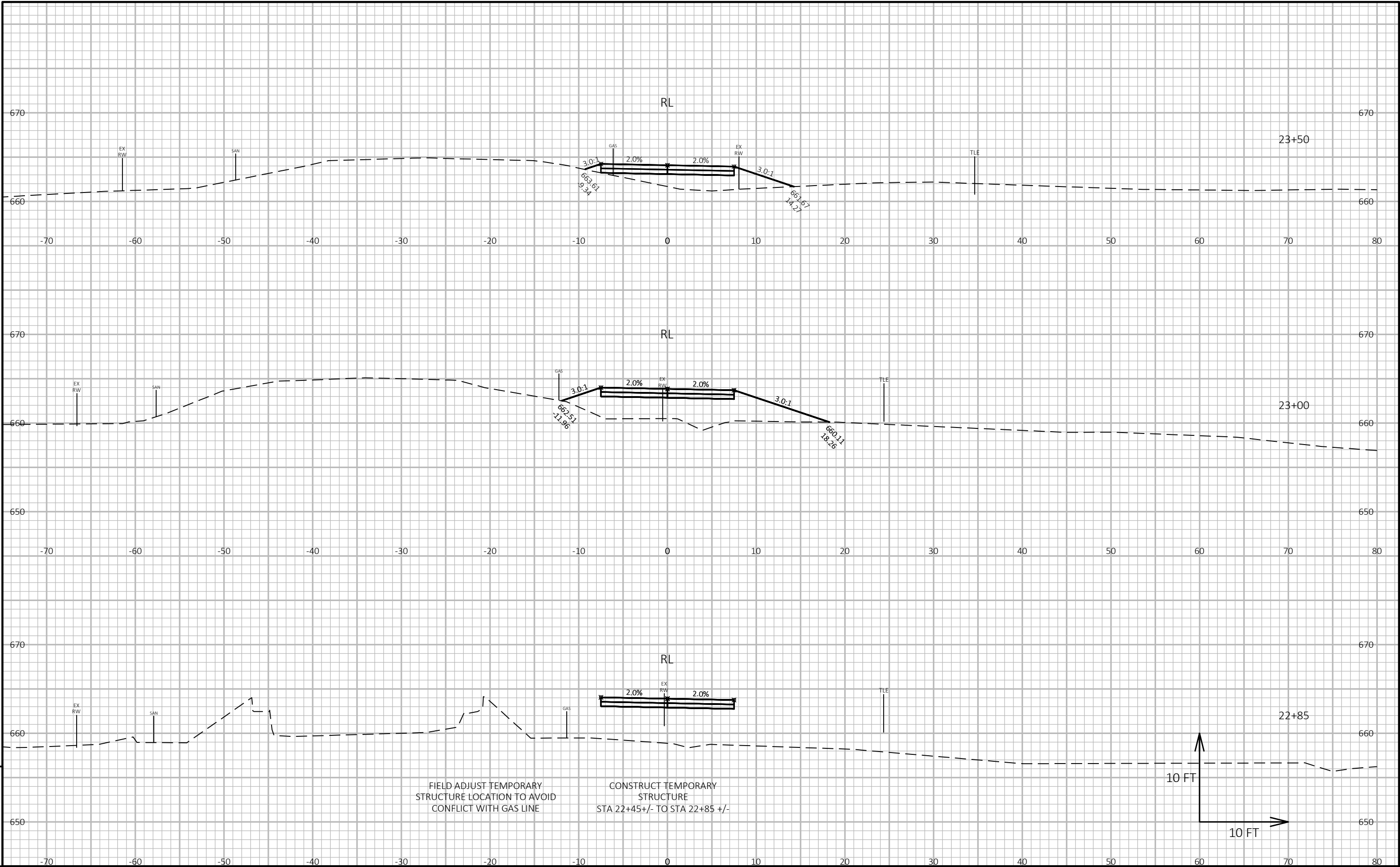


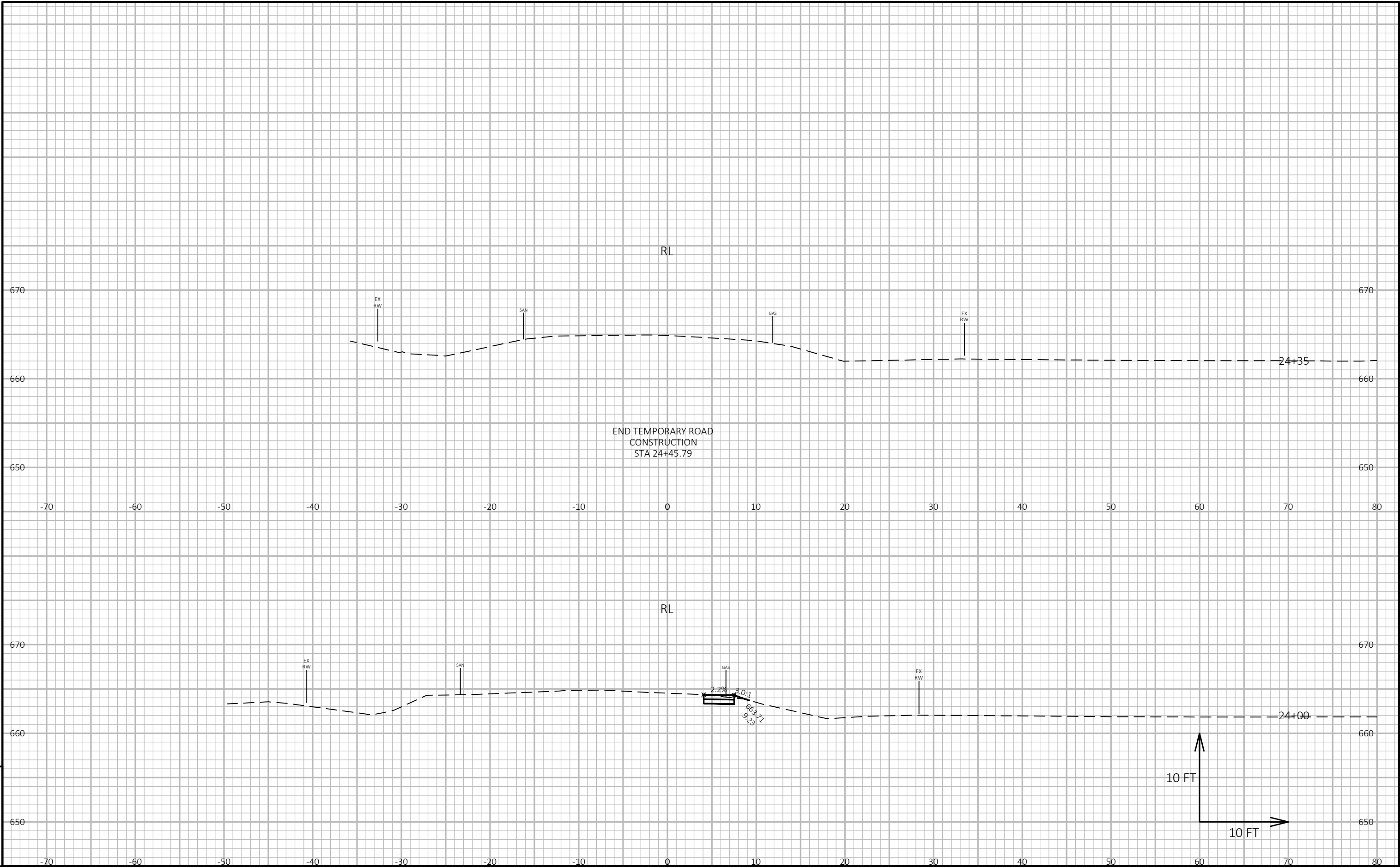
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PROJECT NO: 2703-00-73	HWY: HOODS CREEK ROAD	COUNTY: RACINE	CROSS SECTIONS: TEMPORARY ACCESS ROAD	SHEET	E
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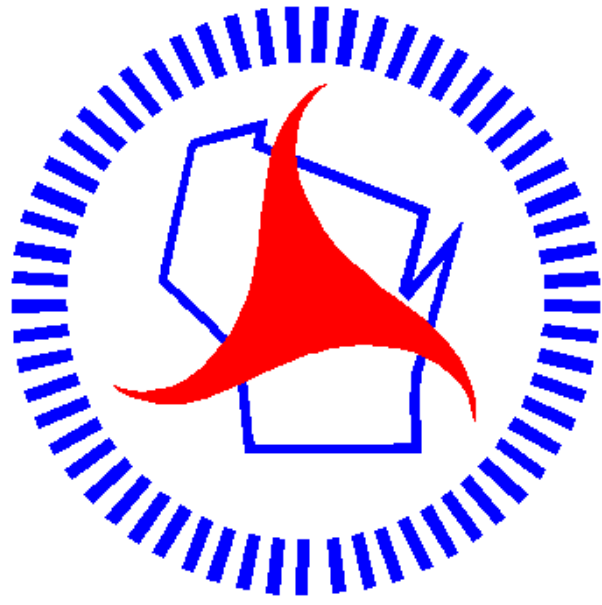


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PROJECT NO: 2703-00-73	HWY: HOODS CREEK ROAD	COUNTY: RACINE	CROSS SECTIONS: TEMPORARY ACCESS ROAD	SHEET	E
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Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

<http://www.dot.wisconsin.gov>