

EAU
WITH: N/A

PROJECT ID:
7250-00-70

COUNTY:
JACKSON

FEBRUARY 2026
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 = 74

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

T HIXTON, CAIN ROAD

N BR TREMPPEALEAU RIVER BR B-27-0178

LOC STR
JACKSON COUNTY

STATE PROJECT NUMBER

7250-00-70

END PROJECT

STA. 14+50

STRUCTURE B-27-0178

BEGIN PROJECT

STA. 3+80.80

Y=137,119.14
X=48,080.47

DESIGN DESIGNATION 7250-00-00

A.A.D.T. (2026)	=	75
A.A.D.T. (2046)	=	83
D.H.V.	=	N/A
D.D.	=	60/40
T.	=	18%
DESIGN SPEED	=	40 M.P.H.
ESALS	=	37,000

CONVENTIONAL SYMBOLS

PLAN

CORPORATE LIMITS

PROPERTY LINE

LOT LINE

LIMITED HIGHWAY EASEMENT

EXISTING RIGHT OF WAY

PROPOSED OR NEW R/W LINE

SLOPE INTERCEPT

REFERENCE LINE

EXISTING CULVERT

PROPOSED CULVERT
(Box or Pipe)

COMBUSTIBLE FLUIDS

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

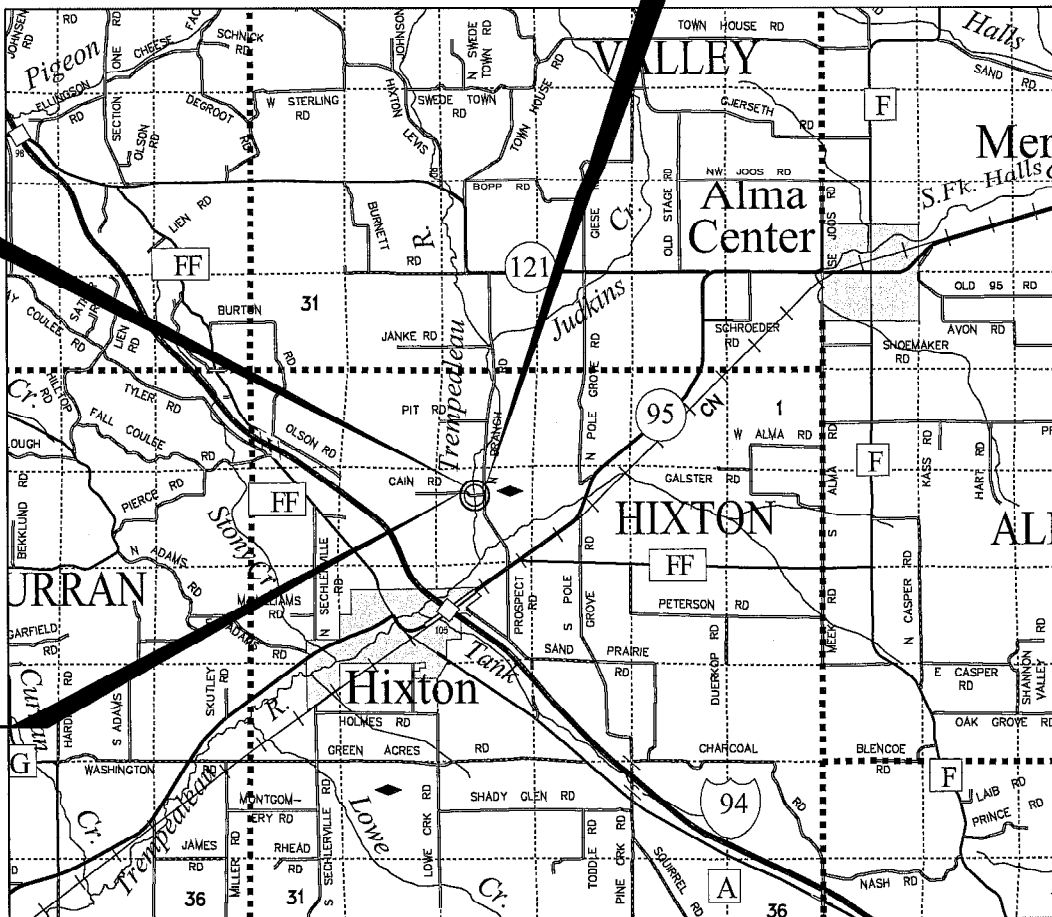
TELEPHONE

WATER

UTILITY PEDESTAL

POWER POLE

TELEPHONE POLE



SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 0.203 MI.

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, JACKSON COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCE MAY BE USED AS GROUND DISTANCES.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD (2012).

STATE PROJECT

7250-00-70

FEDERAL PROJECT

PROJECT

CONTRACT

ACCEPTED FOR

TOWN of HIXTON

10/22/2025

(Date)

(Town Chairman)

ORIGINAL PLANS PREPARED BY

JEWELL



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor

Designer

Project Manager

Regional Examiner

Regional Supervisor

JEWELL ASSOCIATES ENGINEERS, INC.

JEWELL ASSOCIATES ENGINEERS, INC.

TOU YANG, P.E.

NW REGION

TOU YANG, P.E.

APPROVED FOR THE DEPARTMENT

10/28/2025

DATE:

(Signature)

GENERAL NOTES

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

NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE FIRST BEEN INDICATED FOR REMOVAL BY THE ENGINEER IN THE FIELD.

DISTURBED AREAS SHOWN WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS ARE TO BE SEEDED (USE SEEDING NURSE CROP AND SEEDING MIXTURE NO. 75 UPDATED) AND MULCHED OR EROSION MAT AS DIRECTED BY THE ENGINEER.

WHEN THE QUANTITY OF THE ITEM OF BASE AGGREGATE DENSE OR ASPHALTIC SURFACE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT APPROXIMATE LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S EROSION CONTROL IMPLEMENTATION PLAN (ECIP) AND APPROVED BY THE ENGINEER. MAINTAIN EROSION CONTROL MEASURES UNTIL SUCH A TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

FILL EXPANSION IS VARIABLE AND IS ESTIMATES AT 25%.

REMOVAL OF ASPHALTIC SURFACES WHERE AN ABUTTING ASPHALTIC SURFACE IS TO REMAIN IN PLACE SHALL REQUIRE A SAWCUT MEETING THE APPROVAL OF THE ENGINEER IN THE FIELD.

DO NOT DRIVE OR STORE EQUIPMENT, OR STORE CONSTRUCTION MATERIALS, IN ENVIRONMENTALLY SENSITIVE AREAS, WETLANDS, OR WATERWAYS.

THE LOCATION OF ALL PERMANENT SIGNING SHALL BE VERIFIED BY THE ENGINEER IN THE FIELD PRIOR TO PLACEMENT.

ADJUST DITCH GRADING AS NECESSARY TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER IN THE FIELD.

ASPHALTIC SURFACE QUANTITIES WERE CALCULATED USING 112 LB/SY/IN.

CURVE DATA IS BASED ON THE ARC DEFINITIONS.

THE DEPARTMENT OF TRANSPORTATION WILL FURNISH THE CONTRACTOR WITH A MONUMENT TO BE INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.

CONTACTS

WISDOT:
WISCONSIN DEPARTMENT OF TRANSPORTATION
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DESIGN CONSULTANT:
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EAU CLAIRE, WI 54701
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EMAIL: daniel.gerling@jewellassoc.com

TOWNSHIP OF HIXTON:
TONY LIEN, TOWN CHAIRMAN
W13298 SAND PRAIRIE ROAD
HIXTON, WI 54635
PHONE: (715) 299-7788
EMAIL: tlienfarms@gmail.com

DNR LIAISON:
STATE OF WISCONSIN
DNR SERVICE CENTER AT BLACK RIVER FALLS
910 HWY 54 E
BLACK RIVER FALLS, WI 54615
ATTN: BRADLEY BETTHAUSER
PHONE: (715) 213-9064
EMAIL: Bradley.Betthausen@wisconsin.gov

UTILITIES

ELECTRIC
XCEL ENERGY
ATTN: JOHN KELSER
1414 W HAMILTON AVE
P.O. BOX 8
EAU CLAIRE, WI 54702
PHONE: (715) 737-6020
EMAIL: john.kelser@xcelenergy.com

COMMUNICATION
BRIGHTSPEED
ATTN: BRIAN STELPLUGH
333 N FRONT ST
LA CROSSE, WI 54601
CELL: (980) 376-1557
EMAIL: brian.stelplugh@brightspeed.com

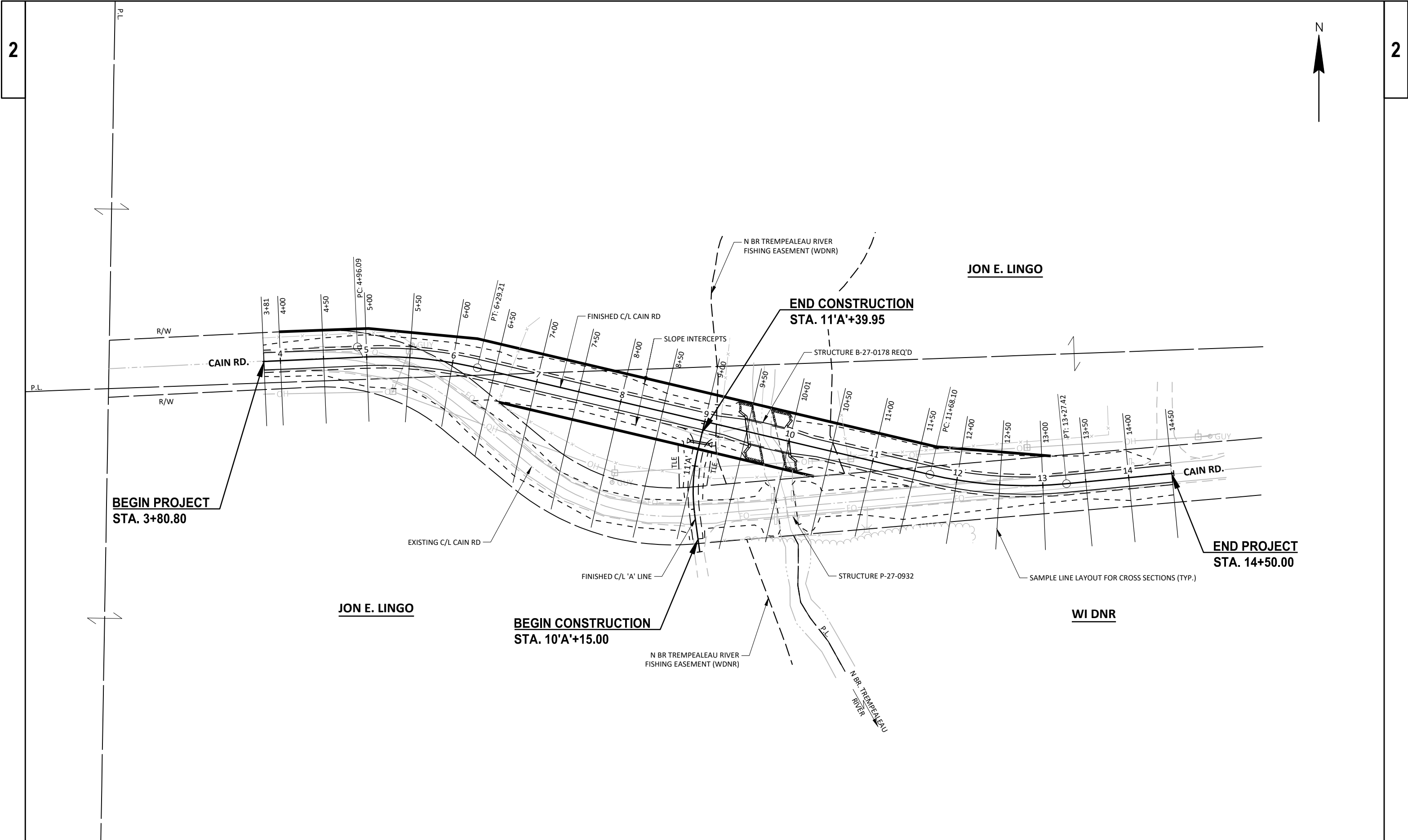
LIST OF STANDARD ABBREVIATIONS

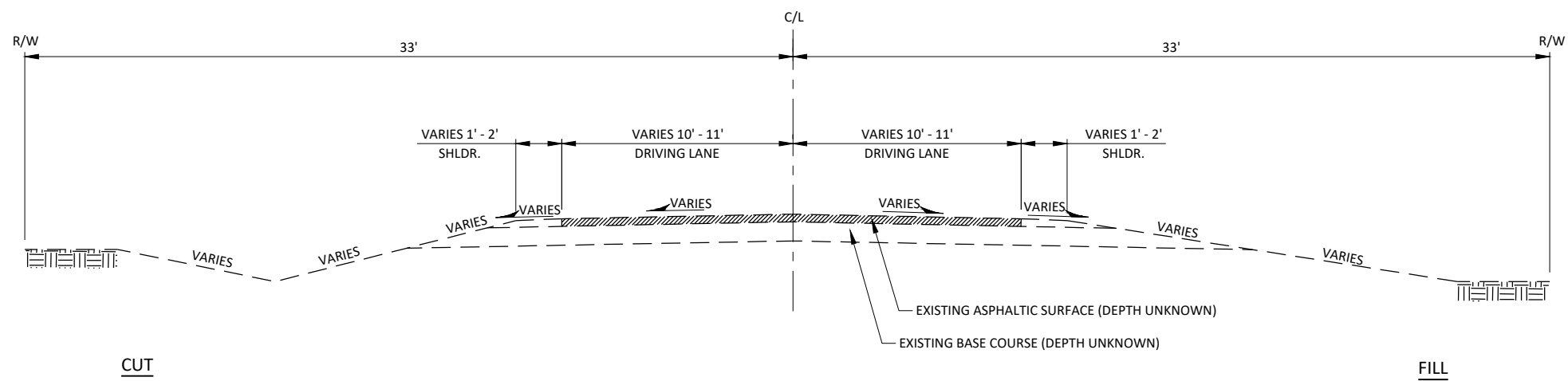
ABUT	Abutment	INV	Invert	SALV	Salvaged
AC	Acre	IP	Iron Pipe or Pin	SAN S	Sanitary Sewer
AGG	Aggregate	IRS	Iron Rod Set	SEC	Section
AH	Ahead	JT	Joint	SHLDR	Shoulder
<	Angle	JCT	Junction	SHR	Shrinkage
ASPH	Asphaltic	LHF	Left-Hand Forward	SW	Sidewalk
AVG	Average	L	Length of Curve	S	South
ADT	Average Daily Traffic	LIN FT or LF	Linear Foot	SQ	Square
BAD	Base Aggregate Dense	LC	Long Chord of Curve	SF or SQ FT	Square Feet
BK	Back	MH	Manhole	SY or SQ YD	Square Yard
BF	Back Face	MB	Mailbox	STD	Standard
BM	Bench Mark	ML or M/L	Match Line	SDD	Standard Detail Drawings
BR	Bridge	N	North	STH	State Trunk Highways
C or C/L	Center Line	Y	North Grid Coordinate	STA	Station
CC	Center to Center	O.A.L.	Overall Length	SS	Storm Sewer
CTH	County Trunk Highway	OD	Outside Diameter	SG	Subgrade
CR	Creek	PLE	Permanent Limited Easement	SE	Superelevation
CR	Crushed		Point	SL or S/L	Survey Line
CY or CU YD	Cubic Yard	PT	Point of Curvature	SV	Septic Vent
CP	Culvert Pipe	PC	Point of Intersection	T	Tangent
C & G	Curb and Gutter	PI	Point of Reverse Curvature	TEL	Telephone
D	Degree of Curve	PRC	Point of Tangency	TEMP	Temporary
DHV	Design Hour Volume	PT	Point On Curve	TI	Temporary Interest
DIA	Diameter	POC	Point on Tangent	TLE	Temporary Limited Easement
E	East	POT	Polyvinyl Chloride	t	Ton
X	East Grid Coordinate	PVC	Portland Cement Concrete	T or TN	Town
ELEC	Electric (al)	PCC	Pound	TRANS	Transition
EL or ELEV	Elevation	LB	Pounds Per Square Inch	TL or T/L	Transit Line
ESALS	Equivalent Single Axle Loads	PSI	Private Entrance	T	Trucks (percent of)
EBS	Excavation Below Subgrade	PE	Radius	TYP	Typical
ESTR	Existing Sign to Remain	R	Railroad	UNCL	Unclassified
FF	Face to Face	RR	Range	UG	Underground Cable
FE	Field Entrance	R	Reference Line	USH	United States Highway
F	Fill	RL or R/L	Reference Point	VAR	Variable
FG	Finished Grade	RP	Reinforced Concrete Culvert	V	Velocity or Design Speed
FL or F/L	Flow Line	RCCP	Pipe	VERT	Vertical
FT	Foot	REQ'D	Required	VC	Vertical Curve
FTG	Footing	RES	Residence or Residential	VOL	Volume
GN	Grid North	RW	Retaining Wall	WM	Water Main
HT	Height	RT	Right	WV	Water Valve
CWT	Hundredweight	RHF	Right-Hand Forward	W	West
HYD	Hydrant	R/W	Right-of-Way	WB	Westbound
INL	Inlet	R	River	YD	Yard
ID	Inside Diameter	RD	Road		
		RDWY	Roadway		



	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

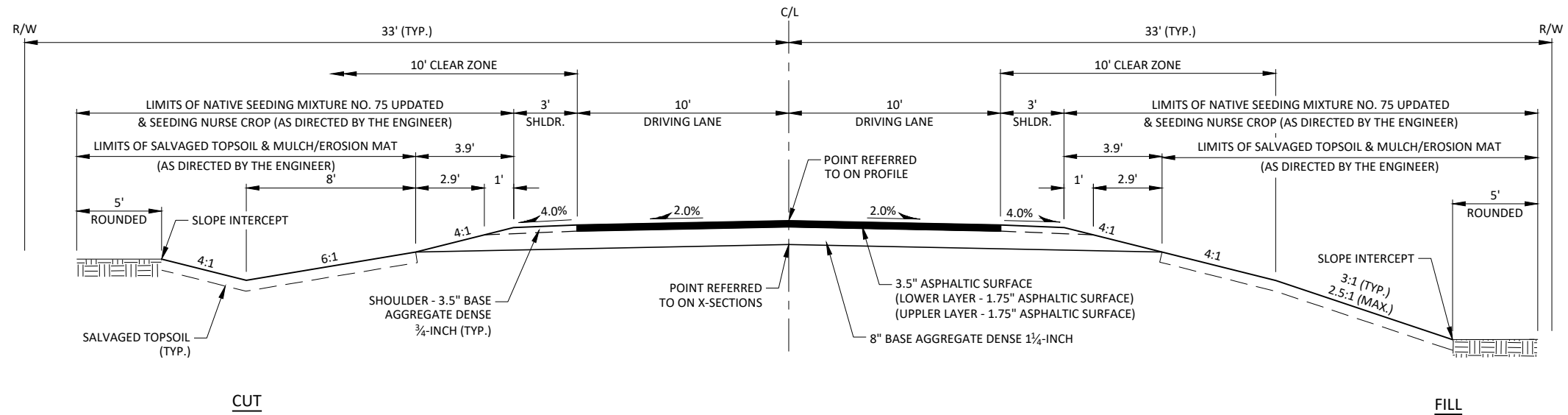
TOTAL PROJECT AREA= 2.58 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 1.81 ACRES





TYPICAL EXISTING SECTION

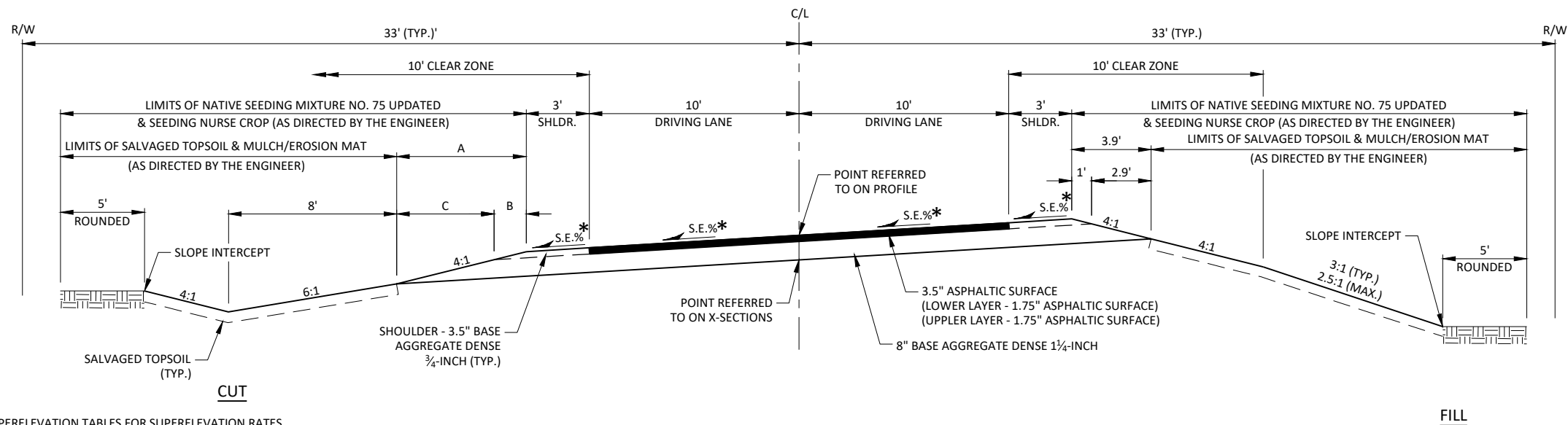
CAIN ROAD
STA. 3+80.80 - STA. 14+50

**TYPICAL FINISHED SECTION**CAIN ROAD
STA. 7+53 - STA. 10+44**SUPERELEVATION TABLE - CURVE 1**

STATION	LEFT(%)	RIGHT(%)	A (FT)	B (FT)	C (FT)
3+80	MATCH EXISTING	MATCH EXISTING	3.9	1.0	2.9
4+00	0.7	2.0	3.9	1.0	2.9
4+13	0.0	2.0	3.9	1.0	2.9
4+50	1.8	2.0	3.9	1.0	2.9
4+54	2.0	2.0	3.9	1.0	2.9
5+00	4.2	4.2	4.6	1.4	4.2
5+37	6.0	6.0	5.0	1.5	3.5
FULL SUPERELEVATION					
5+88	6.0	6.0	5.0	1.5	3.5
6+00	5.4	5.4	4.9	1.5	3.4
6+50	3.0	3.0	4.2	1.2	3.0
6+71	2.0	2.0	3.9	1.0	2.9
7+00	0.6	2.0	3.9	1.0	2.9
7+11	0.0	2.0	3.9	1.0	2.9
7+53	2.0	2.0	3.9	1.0	2.9

SUPERELEVATION TABLE - CURVE 2

STATION	LEFT(%)	RIGHT(%)	A (FT)	B (FT)	C (FT)
10+44	2.0	2.0	3.9	1.0	2.9
10+50	2.0	1.7	3.9	1.0	2.9
10+85	2.0	0.0	3.9	1.0	2.9
11+00	2.0	0.7	3.9	1.0	2.9
11+27	2.0	2.0	3.9	1.0	2.9
11+50	3.1	3.1	4.3	1.2	3.1
12+09	6.0	6.0	5.0	1.5	3.5
FULL SUPERELEVATION					
12+83	6.0	6.0	5.0	1.5	3.5
13+00	5.2	5.2	4.8	1.2	3.6
13+24	4.0	4.0	4.6	1.4	3.2
13+50	2.7	2.7	4.1	1.1	3.0
13+65	2.0	2.0	3.9	1.0	2.9
14+00	2.0	0.3	3.9	1.0	2.9
14+50	MATCH EXISTING	MATCH EXISTING	3.9	1.0	2.9

**TYPICAL FINISHED SUPERELEVATED SECTION**CAIN ROAD
STA. 3+80 - STA. 7+53
STA. 10+44 - STA. 14+50

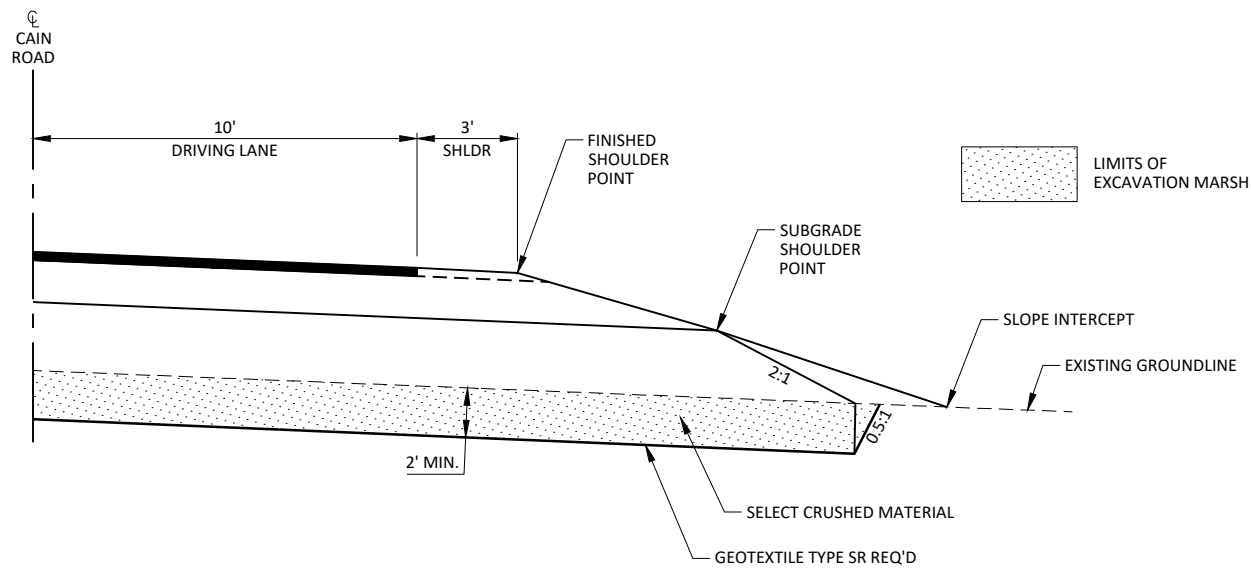
* S.E. - SEE SUPERELEVATION TABLES FOR SUPERELEVATION RATES.

A/B/C - SEE SUPERELEVATION TABLES FOR DIMENSIONS.

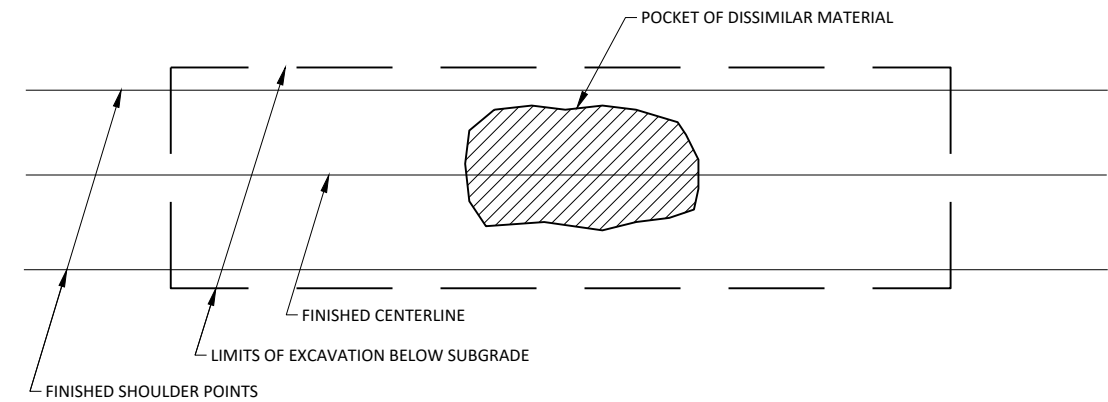
CURVE TO THE LEFT IS SHOWN. CURVE TO THE RIGHT IS MIRROR IMAGE.

THE LOW SIDE SHOULDER SLOPE ON THE SUPERELEVATED SECTIONS EQUALS THE SUPERELEVATION WHEN THE SUPERELEVATION IS GREATER THAN 0.04 FT./FT. IF THE SUPERELEVATION IS LESS THAN OR EQUALS 0.04 FT./FT., THEN THE LOW SIDE SHOULDER SLOPE IS 0.04 FT./FT. AND THE HIGH SIDE SHOULDER SLOPE ON THE SUPERELEVATED SECTIONS EQUALS THE SUPERELEVATION.

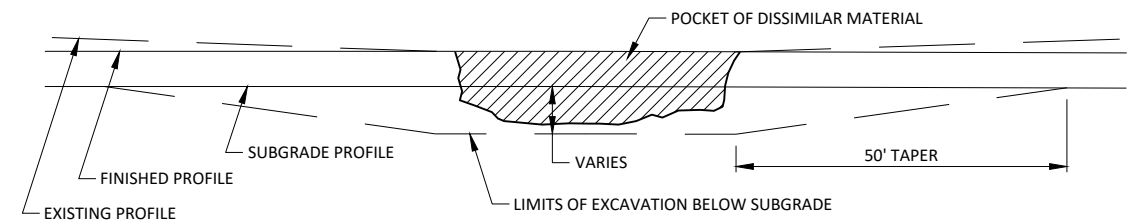
NOTE: CUT SECTION: 4:1 (FORESLOPE)/4:1 (BACKSLOPE):
STA. 10+50 - STA. 11+00, LT.



TYPICAL EXCAVATION MARSH
SEE CROSS SECTIONS FOR MORE INFORMATION

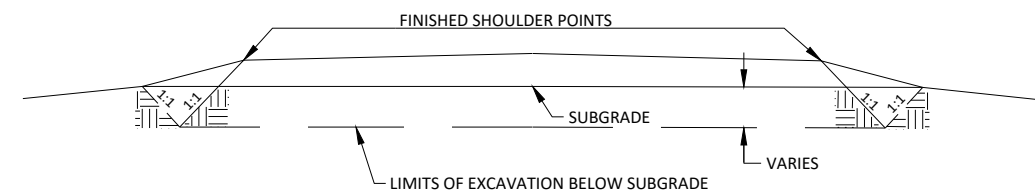


PLAN VIEW



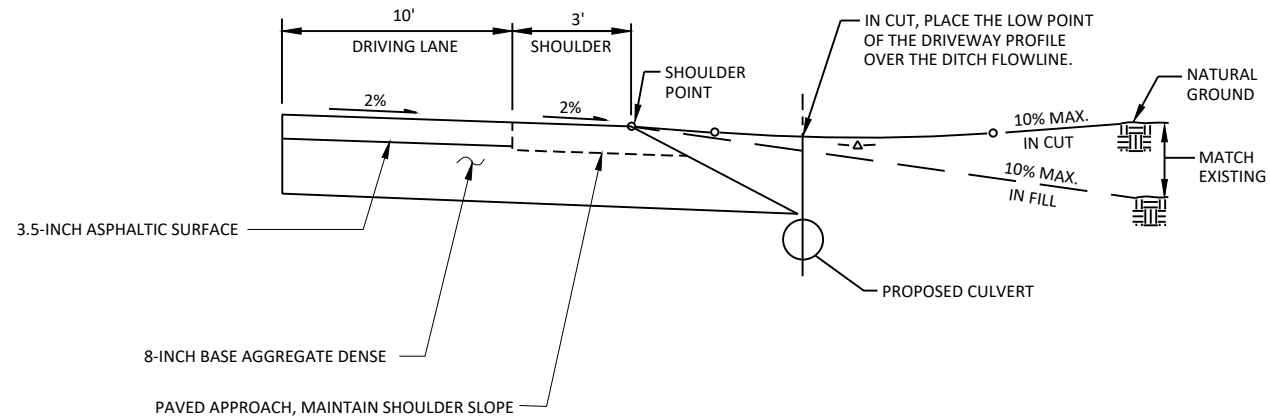
PROFILE VIEW

EXCAVATION BELOW SUBGRADE (E.B.S.) DETAIL

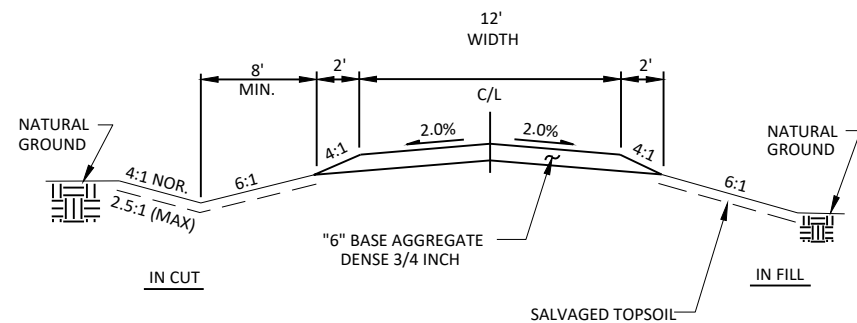


CROSS SECTION VIEW

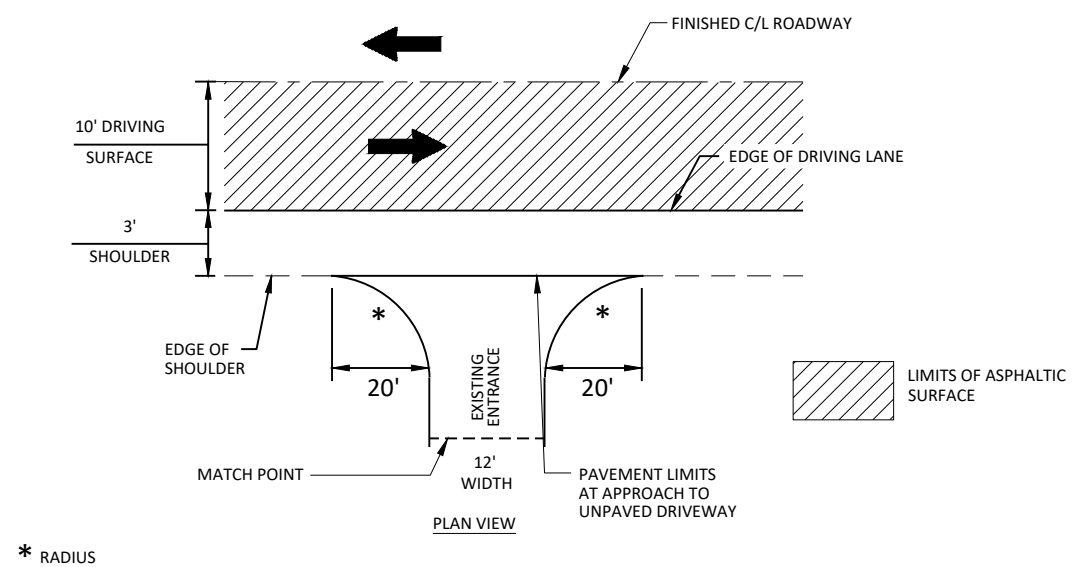
1. EXACT LOCATION OF E.B.S. (EXCAVATION BELOW SUBGRADE) SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. E.B.S. AREA TO BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE ENGINEER. BACKFILL MUST BE HOMOGENEOUS WITH ADJOINING FILL MATERIAL.
3. THE FILL SECTION WITHIN 100' OF THE MOUTH OF THE CUT MUST BE KEPT 2' BELOW SUBGRADE UNTIL E.B.S. IS COMPLETED. LATERAL LIMITS OF EXCAVATION SHALL BE THE SUBGRADE SHOULDER POINTS.



TYPICAL RURAL ENTRANCE PROFILES

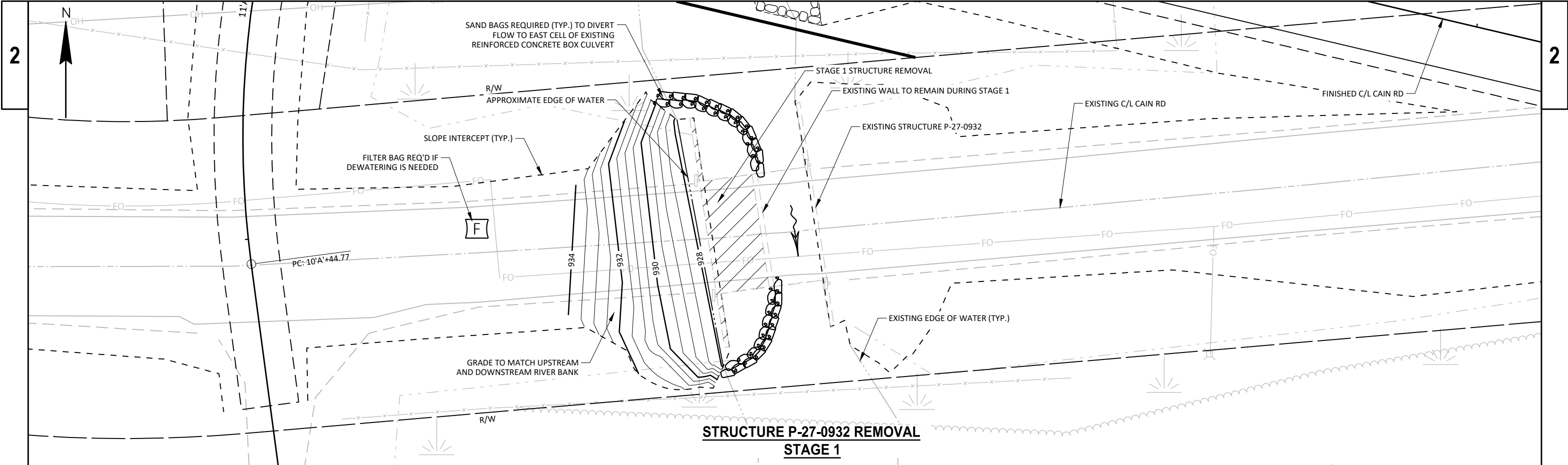


TYPICAL CROSS-SECTION FOR RURAL ENTRANCE

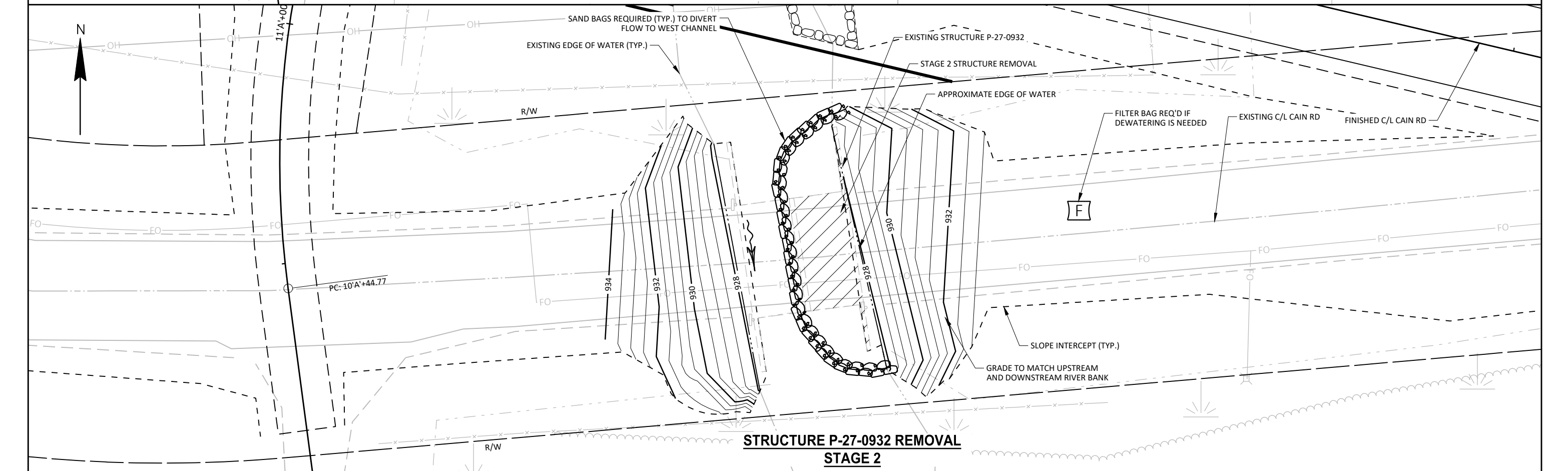


RURAL ENTRANCE DETAIL

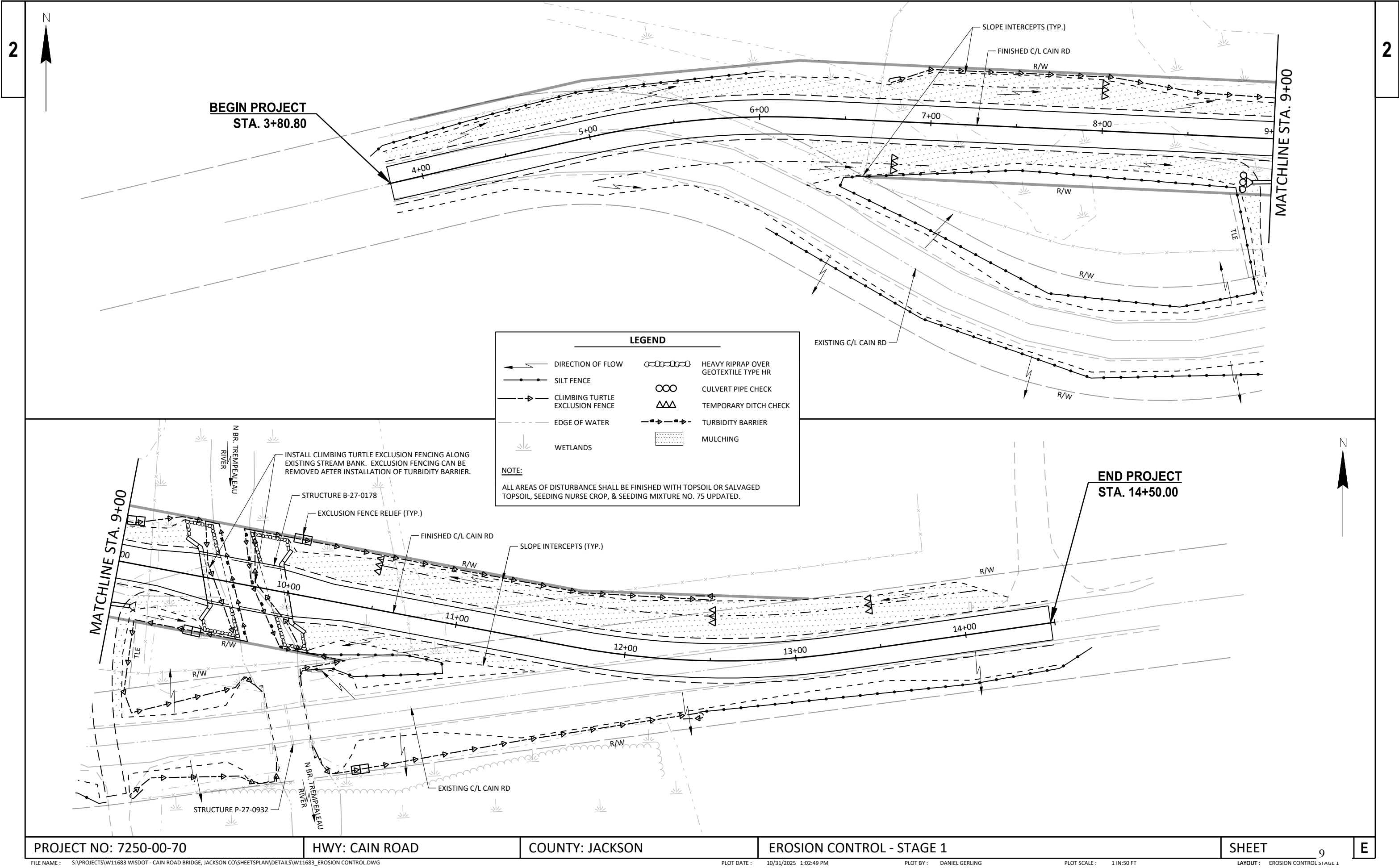
STA. 9+00
'A'-LINE

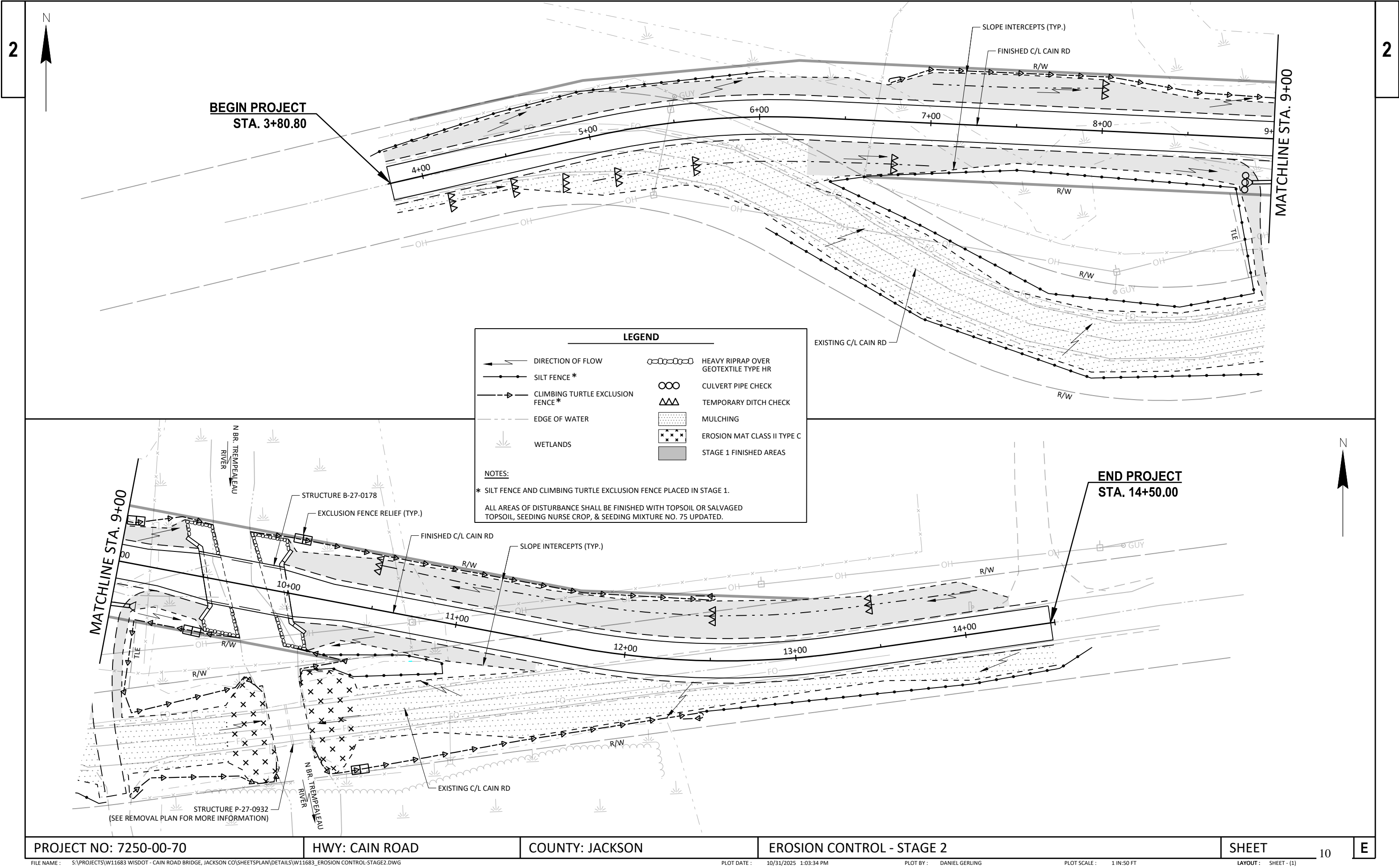


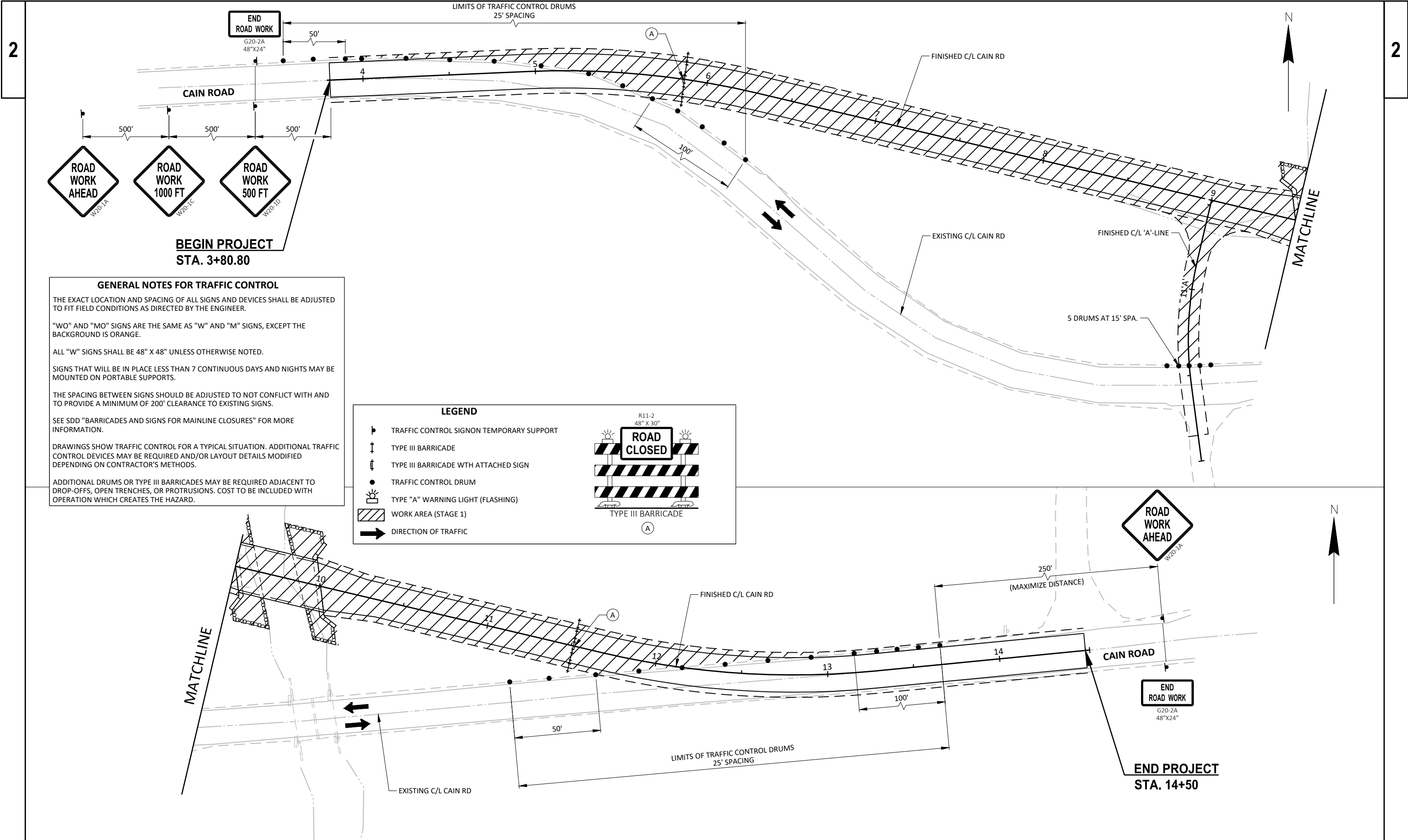
**STRUCTURE P-27-0932 REMOVAL
STAGE 1**



**STRUCTURE P-27-0932 REMOVAL
STAGE 2**







GENERAL NOTES FOR TRAFFIC CONTROL

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

"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS, EXCEPT THE BACKGROUND IS ORANGE.

ALL "W" SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED.

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200' CLEARANCE TO EXISTING SIGNS.

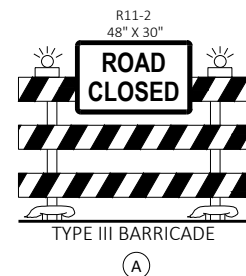
SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR MORE INFORMATION.

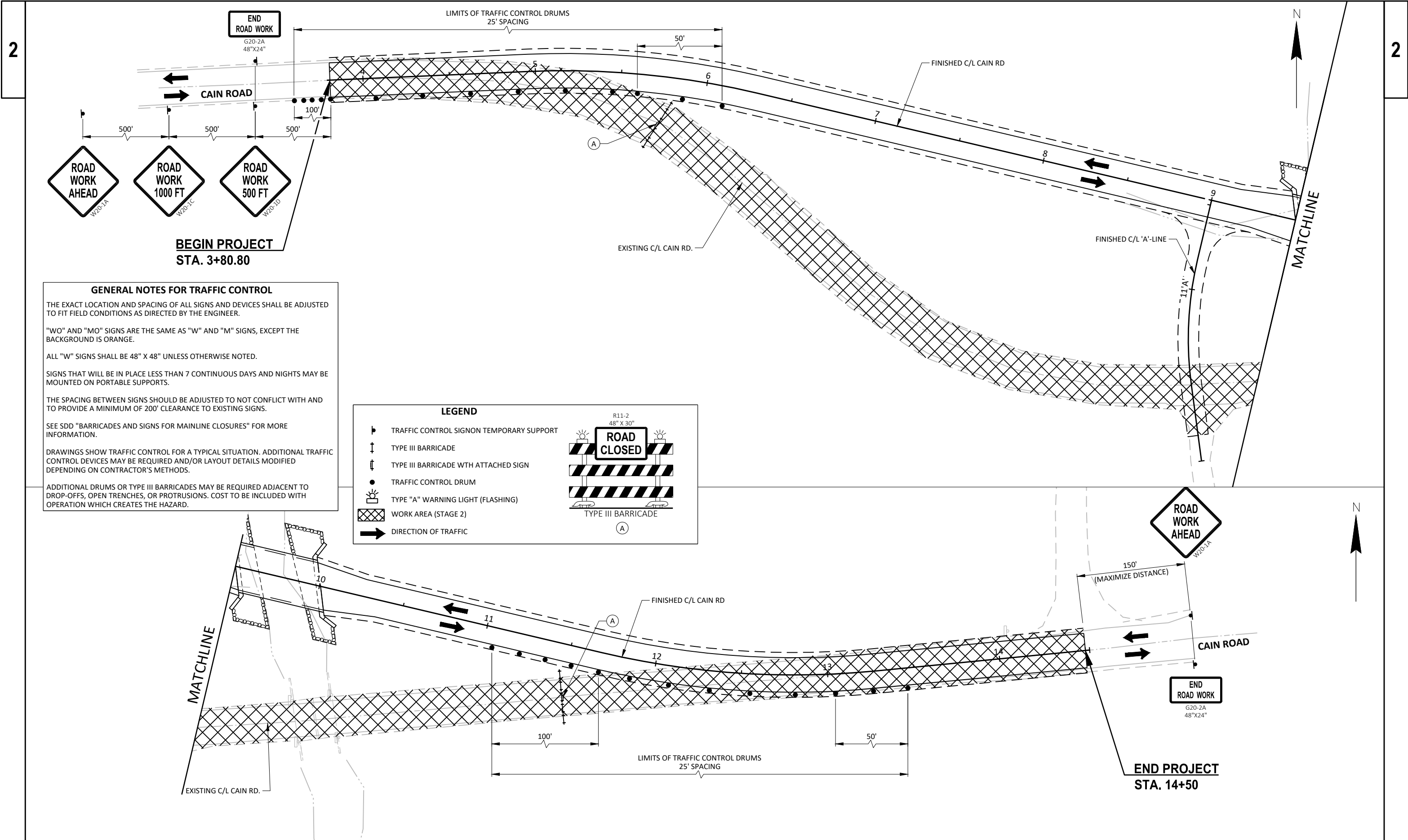
DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON CONTRACTOR'S METHODS.

ADDITIONAL DRUMS OR TYPE III BARRICADES MAY BE REQUIRED ADJACENT TO DROP-OFFS, OPEN TRENCHES, OR PROTRUSIONS. COST TO BE INCLUDED WITH OPERATION WHICH CREATES THE HAZARD.

LEGEND

- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA (STAGE 1)
- DIRECTION OF TRAFFIC





GENERAL NOTES FOR TRAFFIC CONTROL

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LEGEND

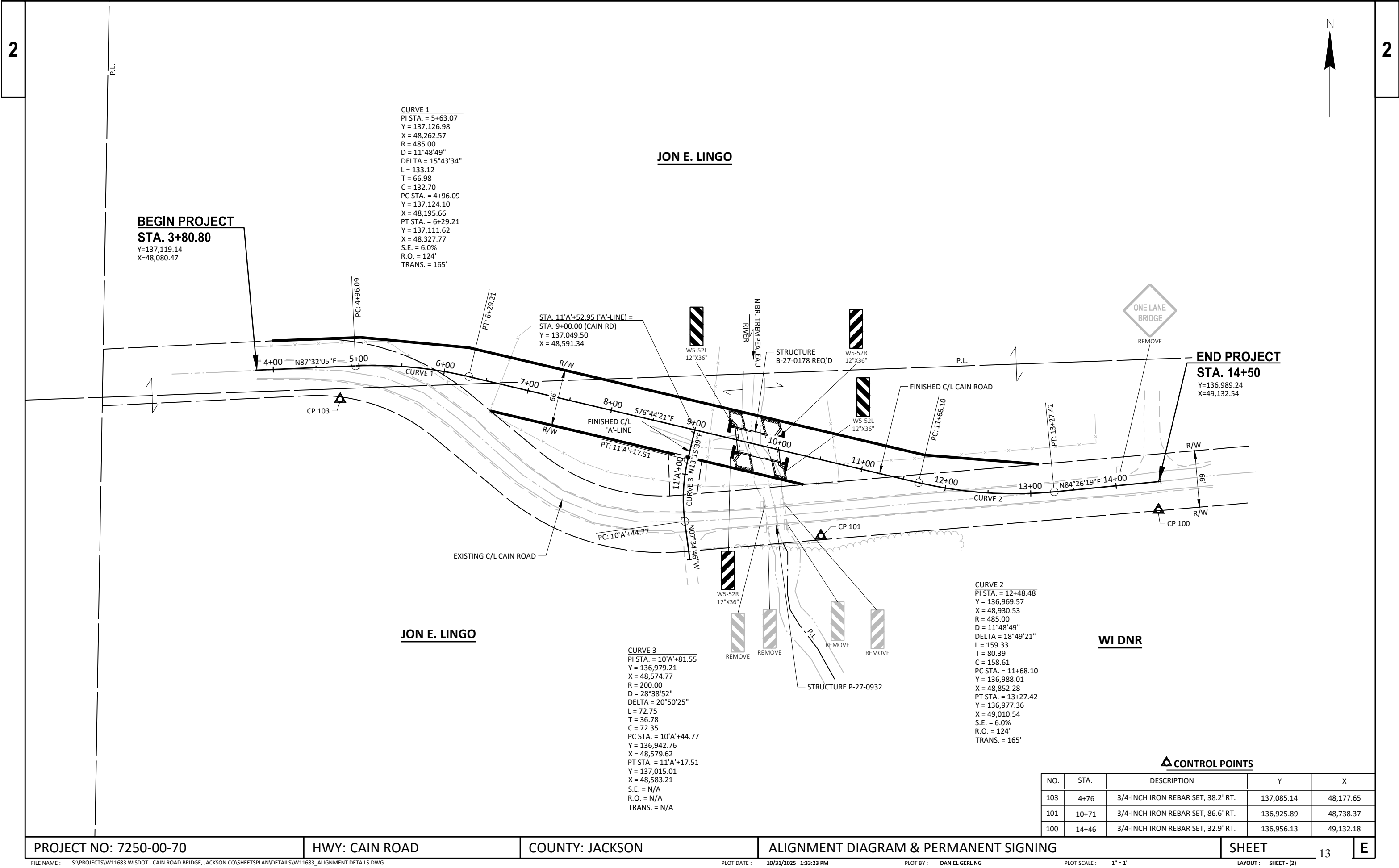
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA (STAGE 2)
- DIRECTION OF TRAFFIC

ROAD CLOSED

R11-2
48" X 30"

TYPE III BARRICADE

(A)



CURVE 1
PI STA. = 5+63.07
Y = 137,126.98
X = 48,262.57
R = 485.00
D = 11°48'49"
DELTA = 15°43'34"
L = 133.12
T = 66.98
C = 132.70
PC STA. = 4+96.09
Y = 137,124.10
X = 48,195.66
PT STA. = 6+29.21
Y = 137,111.62
X = 48,327.77
S.E. = 6.0%
R.O. = 124'
TRANS. = 165'

BEGIN PROJECT
STA. 3+80.80
Y=137,119.14
X=48,080.47

JON E. LINGO

STA. 11'A'+52.95 ('A'-LINE) =
STA. 9+00.00 (CAIN RD)
Y = 137,049.50
X = 48,591.34

CURVE 2
PI STA. = 12+48.48
Y = 136,969.57
X = 48,930.53
R = 485.00
D = 11°48'49"
DELTA = 18°49'21"
L = 159.33
T = 80.39
C = 158.61
PC STA. = 11+68.10
Y = 136,988.01
X = 48,852.28
PT STA. = 13+27.42
Y = 136,977.36
X = 49,010.54
S.E. = 6.0%
R.O. = 124'
TRANS. = 165'

CURVE 3
PI STA. = 10'A'+81.55
Y = 136,979.21
X = 48,574.77
R = 200.00
D = 28°38'52"
DELTA = 20°50'25"
L = 72.75
T = 36.78
C = 72.35
PC STA. = 10'A'+44.77
Y = 136,942.76
X = 48,579.62
PT STA. = 11'A'+17.51
Y = 137,015.01
X = 48,583.21
S.E. = N/A
R.O. = N/A
TRANS. = N/A

CONTROL POINTS

NO.	STA.	DESCRIPTION	Y	X
103	4+76	3/4-INCH IRON REBAR SET, 38.2' RT.	137,085.14	48,177.65
101	10+71	3/4-INCH IRON REBAR SET, 86.6' RT.	136,925.89	48,738.37
100	14+46	3/4-INCH IRON REBAR SET, 32.9' RT.	136,956.13	49,132.18

PROJECT NO: 7250-00-70

HWY: CAIN ROAD

COUNTY: JACKSON

ALIGNMENT DIAGRAM & PERMANENT SIGNING

SHEET

E

Estimate Of Quantities

7250-00-70					
Line	Item	Item Description	Unit	Total	Qty
0002	201.0205	Grubbing	STA	2.000	2.000
0004	203.0250	Removing Structure Over Waterway Remove Debris (structure) 01. P-27-0932	EACH	1.000	1.000
0006	204.0170	Removing Fence	LF	100.000	100.000
0008	205.0100	Excavation Common	CY	1,600.000	1,600.000
0010	205.0400	Excavation Marsh	CY	790.000	790.000
0012	206.1001	Excavation for Structures Bridges (structure) 01. B-27-0178	EACH	1.000	1.000
0014	208.1100	Select Borrow	CY	1,550.000	1,550.000
0016	210.1500	Backfill Structure Type A	TON	332.000	332.000
0018	213.0100	Finishing Roadway (project) 01. 7250-00-70	EACH	1.000	1.000
0020	305.0110	Base Aggregate Dense 3/4-Inch	TON	250.000	250.000
0022	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	1,610.000	1,610.000
0024	312.0110	Select Crushed Material	TON	2,245.000	2,245.000
0026	455.0605	Tack Coat	GAL	115.000	115.000
0028	465.0105	Asphaltic Surface	TON	475.000	475.000
0030	502.0100	Concrete Masonry Bridges	CY	163.000	163.000
0032	502.3200	Protective Surface Treatment	SY	220.000	220.000
0034	505.0400	Bar Steel Reinforcement HS Structures	LB	4,420.000	4,420.000
0036	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	27,360.000	27,360.000
0038	513.4061	Railing Tubular Type M	LF	106.000	106.000
0040	516.0500	Rubberized Membrane Waterproofing	SY	12.000	12.000
0042	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	2.000	2.000
0044	521.3124	Culvert Pipe Corrugated Steel 24-Inch	LF	22.000	22.000
0046	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	1,120.000	1,120.000
0048	606.0300	Riprap Heavy	CY	150.000	150.000
0050	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	144.000	144.000
0052	618.0100	Maintenance and Repair of Haul Roads (project) 01. 7250-00-70	EACH	1.000	1.000
0054	619.1000	Mobilization	EACH	1.000	1.000
0056	624.0100	Water	MGAL	28.000	28.000
0058	625.0100	Topsoil	SY	2,405.000	2,405.000
0060	625.0500	Salvaged Topsoil	SY	3,380.000	3,380.000
0062	627.0200	Mulching	SY	5,435.000	5,435.000
0064	628.1504	Silt Fence	LF	1,780.000	1,780.000
0066	628.1520	Silt Fence Maintenance	LF	3,560.000	3,560.000
0068	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0070	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0072	628.2027	Erosion Mat Class II Type C	SY	350.000	350.000
0074	628.6005	Turbidity Barriers	SY	220.000	220.000
0076	628.7504	Temporary Ditch Checks	LF	125.000	125.000
0078	628.7555	Culvert Pipe Checks	EACH	3.000	3.000
0080	630.0400	Seeding Nurse Crop	LB	44.000	44.000
0082	630.0500	Seed Water	MGAL	130.000	130.000
0084	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	4.000	4.000
0086	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0088	638.2602	Removing Signs Type II	EACH	5.000	5.000
0090	638.3000	Removing Small Sign Supports	EACH	5.000	5.000
0092	642.5001	Field Office Type B	EACH	1.000	1.000
0094	643.0300	Traffic Control Drums	DAY	3,305.000	3,305.000
0096	643.0420	Traffic Control Barricades Type III	DAY	1,130.000	1,130.000
0098	643.0705	Traffic Control Warning Lights Type A	DAY	2,260.000	2,260.000

Estimate Of Quantities

7250-00-70					
Line	Item	Item Description	Unit	Total	Qty
0100	643.0900	Traffic Control Signs	DAY	904.000	904.000
0102	643.5000	Traffic Control	EACH	1.000	1.000
0104	645.0111	Geotextile Type DF Schedule A	SY	92.000	92.000
0106	645.0120	Geotextile Type HR	SY	280.000	280.000
0108	645.0220	Geogrid Type SR	SY	960.000	960.000
0110	650.4500	Construction Staking Subgrade	LF	1,145.000	1,145.000
0112	650.5000	Construction Staking Base	LF	1,145.000	1,145.000
0114	650.6501	Construction Staking Structure Layout (structure) 01. B-27-0178	EACH	1.000	1.000
0116	650.9911	Construction Staking Supplemental Control (project) 01. 7250-00-70	EACH	1.000	1.000
0118	650.9920	Construction Staking Slope Stakes	LF	1,145.000	1,145.000
0120	690.0150	Sawing Asphalt	LF	44.000	44.000
0122	715.0502	Incentive Strength Concrete Structures	DOL	978.000	978.000
0124	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. Sta. 10+20	EACH	1.000	1.000
0126	999.2100.S	Installing and Maintaining Climbing Turtle Exclusion Fence	LF	1,360.000	1,360.000
0128	SPV.0085	Special 01. Seeding Mixture No. 75 Updated	LB	17.000	17.000
0130	SPV.0195	Special 01. Select Crushed Material for Travel Corridor	TON	65.000	65.000

3

3

EARTHWORK SUMMARY

CATEGORY	STAGE	STATION - STATION	LOCATION	205.0100 COMMON EXCAVATION CUT (1) (CY)	AVAILABLE MATERIAL (2) (CY)	205.0400 MARSH EXCAVATION (3) (CY)	UNEXPANDED FILL (CY)	EXPANDED FILL (4) (CY) FACTOR (1.25)	MASS ORDINATE +/- (CY) (5)	208.1100 SELECT BORROW (CY)	WASTE (CY)
10	1	7+00 - 12+50	MAINLINE	90	90	649	1,043	1,304	-1,214	1,214	649
10	1	7+00 - 12+50	MAINLINE (UNDISTRIBUTED)	0	0	100	0	0	0	0	100
10	1	10'A'+15 - 11'A'+40	'A'-LINE	0	0	0	120	150	-150	150	0
10	2	7+00 - 12+50	MAINLINE	545	545	0	0	0	545	0	545
10	2	9+75 - 10+50	EXISTING STRUCTURE REMOVAL (6)	275	275	0	0	0	275	0	275
CATEGORY 0010 SUBTOTALS =				910	910	749	1,163	1,454		1,364	1,569
30	1	3+80 - 7+00	MAINLINE	70	70	41	205	256	-186	186	41
30	1	12+50 - 14+50	MAINLINE	0	0	0	0	0	0	0	0
30	2	3+80 - 7+00	MAINLINE	380	380	0	0	0	380	0	380
30	2	12+50 - 14+50	MAINLINE	240	240	0	19	24	216	0	216
CATEGORY 0030 SUBTOTALS =				690	690	41	224	280		186	637
PROJECT TOTALS =				1,600	1,600	790	1,387	1,734		1,550	2,206

NOTES:

- 1.) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
- 2.) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL.
- 3.) MARSH EXCAVATION. ITEM NUMBER 205.0400. TO BE BACKFILLED WITH ITEM 312.0100.
- 4.) EXPANDED FILL FACTOR 1.25: EXPANDED FILL = (UNEXPANDED FILL)*1.25
- 5.) THE MASS ORDINATE+ OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISON. MINUS QUANTITY INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION
- 6.) EXISTING STRUCTURE REMOVAL GRADING IS NOT SHOWN ON THE CROSS SECTIONS OR EARTHWORK TABLES. SEE STRUCTURE REMOVAL PLAN FOR MORE INFORMATION.

GRUBBING				REMOVING FENCE			
CATEGORY	STATION - STATION	LOCATION	201.0205 (STA)	CATEGORY	STATION - STATION	LOCATION	204.0170 (LF)
10	9+00 - 11+00	MAINLINE	2	30	9+15 - 10+75	MAINLINE	100
CATEGORY 0010 SUBTOTAL =			2	CATEGORY 0030 SUBTOTAL =			100
PROJECT TOTAL =			2	PROJECT TOTAL =			100

BASE AGGREGATE DENSE							
CATEGORY	STATION - STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4- (TON)	305.0120 BASE AGGREGATE DENSE 1 1/4- (TON)	312.0110 SELECT CRUSHED MATERIAL (TON)	624.0100 WATER (MGAL)	645.0220 GEOGRID TYPE SR (SY)
10	7+00 - 9+50	MAINLINE	40	385	975	6	520
10	10+00 - 12+50	MAINLINE	40	390	870	7	370
10	7+00 - 12+50	UNDISTRIBUTED	-	-	285	-	-
10	10'A'+15 - 11'A'+40	'A'-LINE	80	-	-	1	-
CATEGORY 0010 SUBTOTALS =			160	775	2,130	14	890
30	3+80 - 7+00	MAINLINE	55	505	115	8	70
30	12+50 - 14+50	MAINLINE	35	330	-	6	-
CATEGORY 0030 SUBTOTALS =			90	835	115	14	70
PROJECT TOTALS =			250	1,610	2,245	28	960

ASPHALTIC SURFACE				
CATEGORY	STATION - STATION	LOCATION	455.0605 TACK COAT (GAL)	465.0105 ASPHALTIC SURFACE (TON)
10	7+00 - 9+50	MAINLINE	30	115
10	10+00 - 12+50	MAINLINE	30	120
10	PROJECT	BEHIND WINGWALLS	-	5
CATEGORY 0010 SUBTOTALS =			60	240
30	3+80 - 7+00	MAINLINE	35	145
30	12+50 - 14+50	MAINLINE	20	90
CATEGORY 0030 SUBTOTALS =			55	235
PROJECT TOTALS =			115	475

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CATEGORY	STATION - STATION	LOCATION	521.1024 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH (EACH)	521.3124 CULVERT PIPE CORRUGATED STEEL 24-INCH (LF)
10	11'A'+28	F.E.	2	22
CATEGORY 0010 SUBTOTAL =			2	22
PROJECT TOTAL =			2	22

CATEGORY	STATION - STATION	LOCATION	628.1504	628.1520	628.6005	628.7504	628.7555
			SILT FENCE (LF)	SILT FENCE (LF)	TURBIDITY BARRIERS (SY)	TEMPORARY DITCH CHECKS (LF)	CULVERT PIPE CHECKS (EACH)
10	7+00 - 12+50	MAINLINE STAGE 1	1,070	2,140	195	20	3
10	7+00 - 12+50	MAINLINE STAGE 2	-	-	-	-	-
10	-	UNDISTRIBUTED	160	320	25	5	-
CATEGORY 0010 SUBTOTALS =			1,230	2,460	220	25	3
30	3+80 - 7+00	MAINLINE STAGE 1	475	950	-	10	-
30	12+50 - 14+50	MAINLINE STAGE 1	-	-	-	20	-
30	3+80 - 7+00	MAINLINE STAGE 2	-	-	-	50	-
30	12+50 - 14+50	MAINLINE STAGE 2	-	-	-	-	-
30	-	UNDISTRIBUTED	75	150	-	20	-
CATEGORY 0030 SUBTOTALS =			550	1,100	-	100	-
PROJECT TOTALS =			1,780	3,560	220	125	3

3

CATEGORY	STATION - STATION	LOCATION	625.0100	625.0500	627.0200	628.2027	630.0400	630.0500	SPV.0085
			TOPSOIL (SY)	SALVAGED TOPSOIL (SY)	MULCHING (SY)	EROSION MAT CLASS II TYPE C (SY)	SEEDING NURSE CROP (LB)	SEED WATER (MGAL)	SEEDING MIX TYPE 75 UPDATED (LB)
10	7+00 - 12+50	MAINLINE STAGE 1	1,310	-	1,310	-	10	30	4
10	7+00 - 12+50	MAINLINE STAGE 2	-	1,990	1,670	320	15	38	6
10	-	UNDISTRIBUTED	130	200	300	30	2	12	1
CATEGORY 0010 SUBTOTALS =			1,440	2,190	3,280	350	27	80	11
30	3+80 - 7+00	MAINLINE STAGE 1	520	-	520	-	5	10	1
30	12+50 - 14+50	MAINLINE STAGE 1	355	-	355	-	2	10	1
30	3+80 - 7+00	MAINLINE STAGE 2	-	850	850	-	6	20	2
30	12+50 - 14+50	MAINLINE STAGE 2	-	230	230	-	2	5	1
30		UNDISTRIBUTED	90	110	200	-	2	5	1
CATEGORY 0030 SUBTOTALS =			965	1,190	2,155	0	17	50	6
PROJECT TOTALS =			2,405	3,380	5,435	350	44	130	17

		628.1905	628.1910
		MOBILIZATION	MOBILIZATION
		EROSION	EROSION
		CONTROL	CONTROL
CATEGORY	PROJECT	(EACH)	(EACH)
10	7250-00-70	4	3
CATEGORY 0010 SUBTOTALS =		4	3
PROJECT TOTALS =		4	3

SHEET: 17

E

3

3

PERMANENT SIGNING

CATEGORY	SIGN NUMBER	APPROX. STATION	LOCATION	POSITION	SIGN CODE	SIGN DESCRIPTION	SIZE (INCH X INCH)	634.0614	637.2230	638.2602	638.3000
								POSTS WOOD 4X6- INCH X 14-FT (EACH)	SIGNS TYPE II REFLECTIVE F (SF)	REMOVING SIGNS TYPE II (EACH)	REMOVING SMALL SIGN SUPPORTS (EACH)
10	1-00	9+42	MAINLINE	LEFT	W5-52L	BRIDGE HASH MARKS	12X36	1	3.00	-	-
10	1-01	9+53	MAINLINE	RIGHT	W5-52R	BRIDGE HASH MARKS	12X36	1	3.00	-	-
10	1-02	9+98	MAINLINE	LEFT	W5-52R	BRIDGE HASH MARKS	12X36	1	3.00	-	-
10	1-03R	10+00	68', RT.	RIGHT	W5-52L	BRIDGE HASH MARKS	-	-	-	1	1
10	1-04R	10+09	91', RT.	RIGHT	W5-52R	BRIDGE HASH MARKS	-	-	-	1	1
10	1-05	10+09	MAINLINE	RIGHT	W5-52L	BRIDGE HASH MARKS	12X36	1	3.00	-	-
10	1-06R	10+21	60', RT.	RIGHT	W5-52R	BRIDGE HASH MARKS	-	-	-	1	1
10	1-07R	10+31	83', RT.	RIGHT	W5-52L	BRIDGE HASH MARKS	-	-	-	1	1
10	1-08R	14+06	MAINLINE	LEFT	W5-3	ONE LANE BRIDGE	-	-	-	1	1
CATEGORY 0010 SUBTOTALS =								4	12.00	5	5
PROJECT TOTALS =								4	12.00	5	5

TRAFFIC CONTROL

CATEGORY	LOCATION	STAGE	CALENDAR DAY DURATION	643.0300 TRAFFIC CONTROL DRUMS		643.0420 TRAFFIC CONTROL BARRICADES TYPE III		643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A		643.0900 TRAFFIC CONTROL SIGNS		643.5000 TRAFFIC CONTROL (EACH)
				(COUNT)	(DAY)	(COUNT)	(DAY)	(COUNT)	(DAY)	(COUNT)	(DAY)	
10	MAINLINE	1	96	30	2,880	10	960	20	1,920	8	768	-
10	MAINLINE	2	17	25	425	10	170	20	340	8	136	-
10	PROJECT	-	-	-	-	-	-	-	-	-	-	1
CATEGORY 0010 TOTALS =					3,305	1,130		2,260		904		1
PROJECT TOTALS =					3,305	1,130		2,260		904		1

CONSTRUCTION STAKING

CATEGORY	STATION - STATION	LOCATION	650.4500 SUBGRADE (LF)	650.5000 BASE (LF)	650.6501 STRUCTURE LAYOUT (01. B-27-0178) (EACH)	650.9911 SUPPLEMENTAL CONTROL (EACH)	650.9920 SLOPE STAKES (LF)
10	7+00 - 9+50	MAINLINE	250	250	-	-	250
10	10+00 - 12+50	MAINLINE	250	250	-	-	250
10	10'A'+15 - 11'A'+40	A'-LINE	125	125	-	-	125
10	PROJECT	-	-	-	-	1	-
CATEGORY 0010 SUBTOTALS =			625	625	-	1	625
20	9+75	MAINLINE	-	-	1	-	-
CATEGORY 0020 SUBTOTALS =			-	-	1	-	-
30	3+80 - 7+00	MAINLINE	320	320	-	-	320
30	12+50 - 14+50	MAINLINE	200	200	-	-	200
CATEGORY 0030 SUBTOTALS =			520	520	-	-	520
PROJECT TOTALS =			1,145	1,145	1	1	1,145

SAWING ASPHALT

CATEGORY	STATION - STATION	LOCATION	690.0150 SAWING ASPHALT (LF)
10	3+80	MAINLINE	22
10	14+50	MAINLINE	22
CATEGORY 0010 SUBTOTAL =			44
PROJECT TOTAL =			44

INSTALLING AND MAINTAINING CLIMBING TURTLE
EXCLUSION FENCE

CATEGORY	STATION - STATION	LOCATION	999.2100.S (LF)
10	6+75 - 10+00	MAINLINE	675
10	9+75 - 14+50	MAINLINE	685
CATEGORY 0010 SUBTOTAL =			1,360
PROJECT TOTAL =			1,360

PROJECT NO: 7250-00-70

HWY: CAIN ROAD

COUNTY: JACKSON

MISCELLANEOUS QUANTITIES

SHEET: 18

E

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)	
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	NON-COMPENSABLE
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)		TELEPHONE POLE			
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		NO ACCESS (NEW HIGHWAY)			
TO BE REMOVED		PARCEL NUMBER		UTILITY NUMBER	
BRIDGE		PARALLEL OFFSETS			
CULVERT					

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

WATER	_____	W
GAS	_____	G
TELEPHONE	_____	T
OVERHEAD TRANSMISSION LINES	_____	OH
ELECTRIC	_____	E
CABLE TELEVISION	_____	TV
FIBER OPTIC	_____	FO
SANITARY SEWER	_____	SAN
STORM SEWER	_____	SS
ELECTRIC TOWER	_____	<input checked="" type="checkbox"/>

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, JACKSON 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.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 MONUMENTS (TYPICALLY 3/4 X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE TOWN OF HIXTON.

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

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

THIS PLAT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSE ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES AND ACCESS RIGHTS.

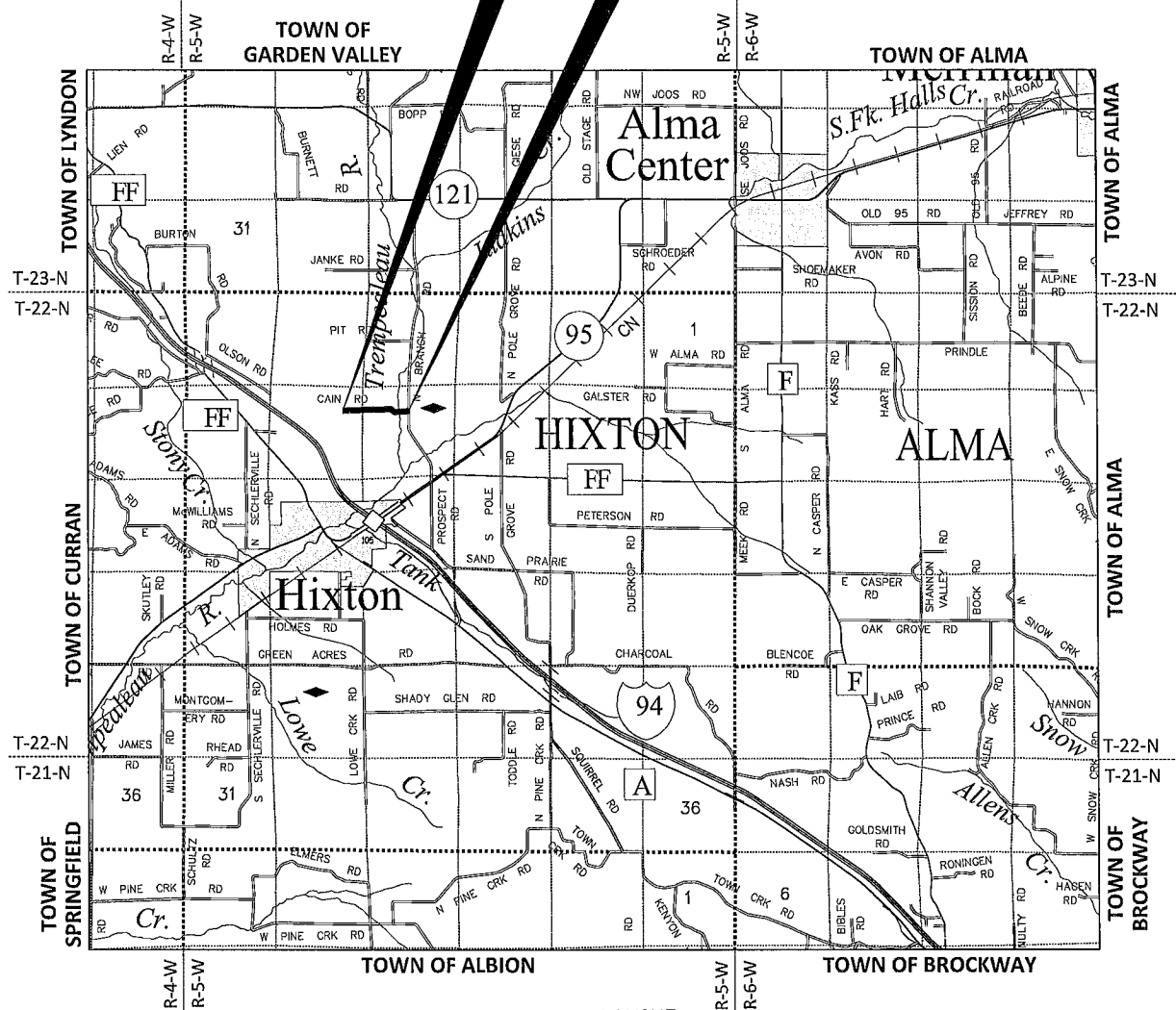
A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

1314.92' SOUTH AND 1155.97' WEST OF THE
N1/4 CORNER OF SECTION 9, T.22N., R.5W.,
TOWN OF HIXTON, JACKSON COUNTY, WI
Y=137119.969
X=48099.653

1450.50' SOUTH AND 172.85' WEST OF THE
N1/4 CORNER OF SECTION 9, T.22N., R.5W.,
TOWN OF HIXTON, JACKSON COUNTY, WI
Y=136984.391
X=49082.774



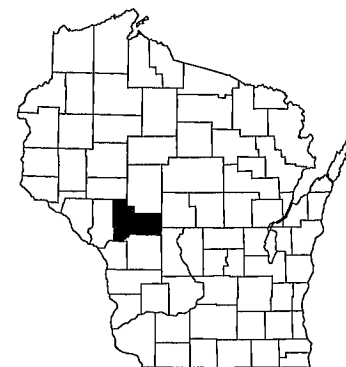
LAYOUT

SCALE 0 2 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.189 MI.

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

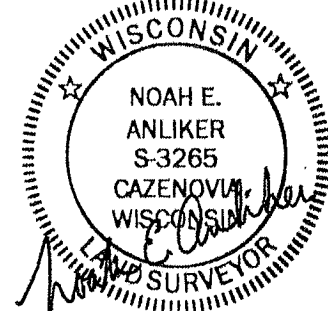
R/W PROJECT NUMBER 7250-00-00	SHEET NUMBER	TOTAL SHEETS
FEDERAL PROJECT NUMBER	4.01	2
PLAT OF RIGHT-OF-WAY REQUIRED FOR T HIXTON, CAIN ROAD (N BRANCH TREMPLEAU RIVER BRIDGE B-27-0178)		
CAIN ROAD		JACKSON COUNTY
CONSTRUCTION PROJECT NUMBER 7250-00-70		



JEWELL
associates engineers, inc.
Engineers - Architects - Surveyors

560 SUNRISE DRIVE
SPRING GREEN, WI 53588
PHONE : 608.588.7484
www.jewellssoc.com

I HEREBY CERTIFY THAT THIS PLAT WAS
MADE FOR TOWN OF HIXTON, JACKSON
COUNTY, WISCONSIN AND IS CORRECT TO
THE BEST OF MY KNOWLEDGE AND BELIEF.



DATE: 8/19/2025

APPROVED FOR TOWN OF HIXTON

DATE: 8-20-25 Tommy Chevar
(NAME/TITLE)

19

[illegible]

R/W POINT TABLE				
POINT NUMBER	STATION	OFFSET	Y	X
1	4+00.00	33.511'LT	137153.450	48098.211
2	5+03.17	33.055'LT	137157.397	48201.790
3	6+22.13	33.055'LT	137145.473	48327.981
4	11+68.10	33.000'LT	137020.127	48859.854
5	13+10.76	33.567'LT	137009.529	48991.826
6	14+00.00	32.702'LT	137016.938	49079.601
7	14+00.00	33.298'RT	136951.249	49085.997
8	13+07.00	32.550'RT	136943.305	48991.964
9	11+72.78	33.024'RT	136954.739	48849.584
10	6+25.97	32.990'RT	137080.192	48317.256
11	4+99.34	32.990'RT	137091.263	48200.097
12	4+00.00	32.490'RT	137087.509	48101.050

TLE POINT TABLE				
POINT NUMBER	STATION	OFFSET	Y	X
500	8+75.99	33.000'RT	137022.890	48560.402
501	9+16.29	33.000'RT	137013.646	48599.626
502	9+19.45	71.891'RT	136975.069	48593.778
503	8+89.22	81.557'RT	136972.594	48562.139

CURVE 1
PI STA = 5+63.07
Y = 137126.983
X = 48262.575
DELTA = 15°43'34" RT
D = 11°48'49"
T = 66.98'
L = 133.12'
R = 485.00'
PC STA = 4+96.09
PT STA = 6+29.21
DB = N87°32'05"E
DA = S76°44'21"E

N1/4 CORNER TO POINT
1 S42°05'20"W, 1726.76'

CONSERVATION EASEMENT
(66' WIDE EACH BANK OF RIVER)
(SEE DOC. 180678, V.165, P.409-410)

TOWN
OF
HIXTON

CURVE 2
PI STA = 12+48.48
Y = 136969.567
X = 48930.530
DELTA = 18°49'21" LT
D = 11°48'49"
T = 80.39'
L = 159.33'
R = 485.00'
PC STA = 11+68.10
PT STA = 13+27.42
DB = S76°44'21"E
DA = N84°26'19"E

N1/4 CORNER TO S1/4
CORNER S0°44'59", 2597.62'

END RELOCATION ORDER

14+00.00
1450.50' SOUTH AND 172.85' WEST OF THE
N1/4 CORNER OF SECTION 9, T.22N., R.5W.,
TOWN OF HIXTON, JACKSON COUNTY, WI
Y=136984.391
X=49082.774

BEGIN RELOCATION ORDER
4+00.00

1314.92' SOUTH AND 1155.97' WEST OF THE
N1/4 CORNER OF SECTION 9, T.22N., R.5W.,
TOWN OF HIXTON, JACKSON COUNTY, WI
Y=137119.969
X=48099.653

R/W COURSE TABLE		
POINT TO POINT	COURSE BEARING	DISTANCE
1 TO 2	N87° 49' 03"E	103.65'
2 TO 3	S84° 36' 08"E	126.75'
3 TO 4	S76° 44' 21"E	546.44'
4 TO 5	S85° 24' 32"E	132.40'
5 TO 6	N85° 10' 29"E	88.09'
6 TO 7	S05° 33' 41"E	66.00'
7 TO 8	S85° 10' 17"W	94.37'
8 TO 9	N85° 24' 32"W	142.84'
9 TO 10	N76° 44' 21"W	546.91'
10 TO 11	N84° 36' 08"W	117.68'
11 TO 12	S87° 49' 47"W	99.12'
12 TO 1	N02° 27' 55"W	66.00'

JON E. LINGO AND VICKIE
L. LINGO, HUSBAND AND
WIFE AS SURVIVORSHIP
MARITAL PROPERTY
TAX ID:
024-0136.0000

JON E. LINGO AND VICKIE
L. LINGO, HUSBAND AND
WIFE AS SURVIVORSHIP
MARITAL PROPERTY
TAX ID:
024-0136.0000

STATE OF WISCONSIN
(DEPARTMENT OF
NATURAL RESOURCES)
TAX ID:
024-0136.0005

CONSERVATION EASEMENT
(66' WIDE EACH BANK OF RIVER)
(SEE DOC. 180678, V.165, P.409-410)

NOTE: EXISTING C/L OF CAIN ROAD, BASED
ON CENTERLINE OF EXISTING PAVEMENT.


EXISTING RIGHT-OF-WAY FOR CAIN ROAD,
BASED ON THE EAST QUARTERLINE OF
WEST HALF SECTION 9, AND WIS. STATUTE
82.31(2).

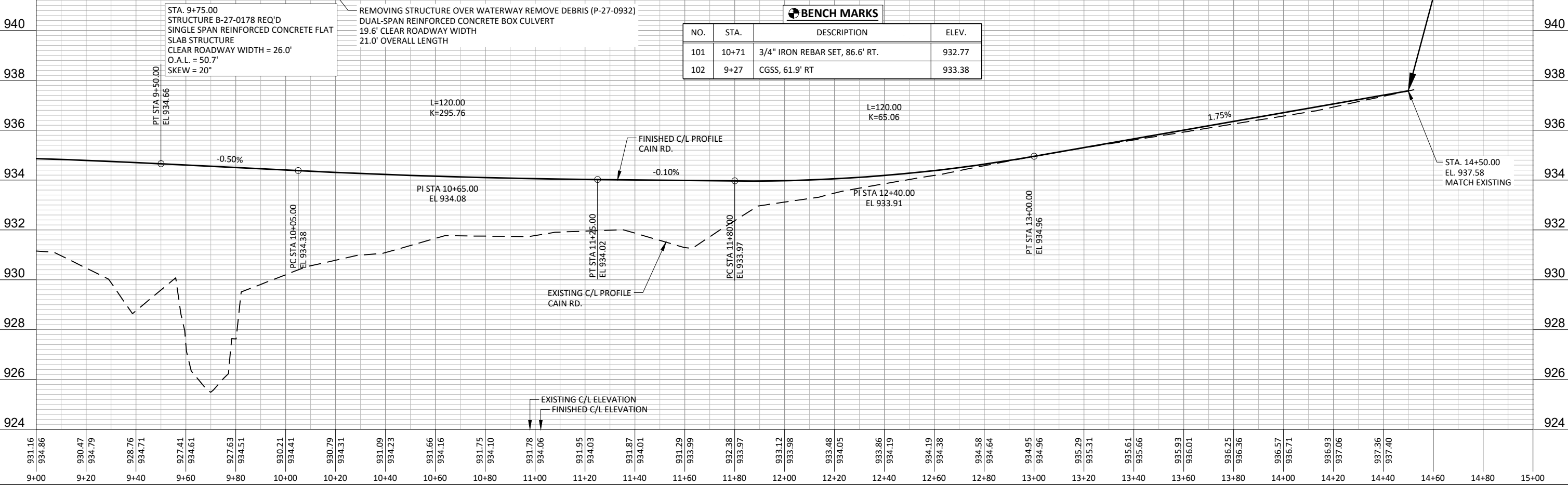
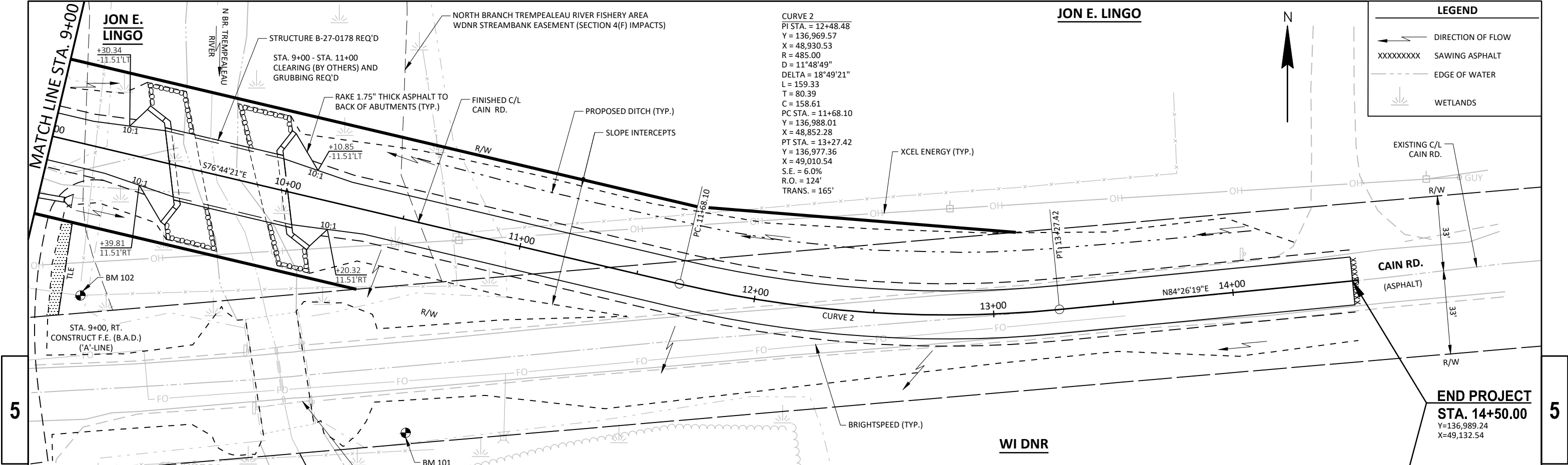
UTILITY EASEMENT TABLE				
UTILITY NUMBER	OWNER	RECORDING INFORMATION	DESCRIPTION	LOCATED IN R/W PARCEL #
200	WISCONSIN - MINNESOTA LIGHT AND POWER COMPANY, A WISCONSIN CORPORATION	DOC.940049, V.91, P.416	BLANKET EASEMENT	1

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER	INTEREST REQUIRED
200	XCEL ENERGY	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER (S)	INTERESTS REQUIRED	R/W ACRES REQUIRED			TLE ACRES REQ'D.
			NEW	EXISTING	TOTAL	
1	JON E. LINGO AND VICKIE L. LINGO, HUSBAND AND WIFE AS SURVIVORSHIP MARITAL PROPERTY	FEE	0.85	0.52	1.37	0.04

NOTE: AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM THE TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED. OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO TOWN OF HIXTON, JACKSON COUNTY.

REVISION DATE				DATE 8/20/2025		SCALE, FEET		HWY: CAIN ROAD		STATE R/W PROJECT NUMBER 7250-00-00		PLAT SHEET 4.02		E
				GRID FACTOR				COUNTY: JACKSON		CONSTRUCTION PROJECT NUMBER 7250-00-70		PS&E SHEET —20		



LEGEND

DIRECTION OF FLOW

XXXXXXXXXX

SAWING ASPHALT

EDGE OF WATER

WETLANDS

JON E. LINGO

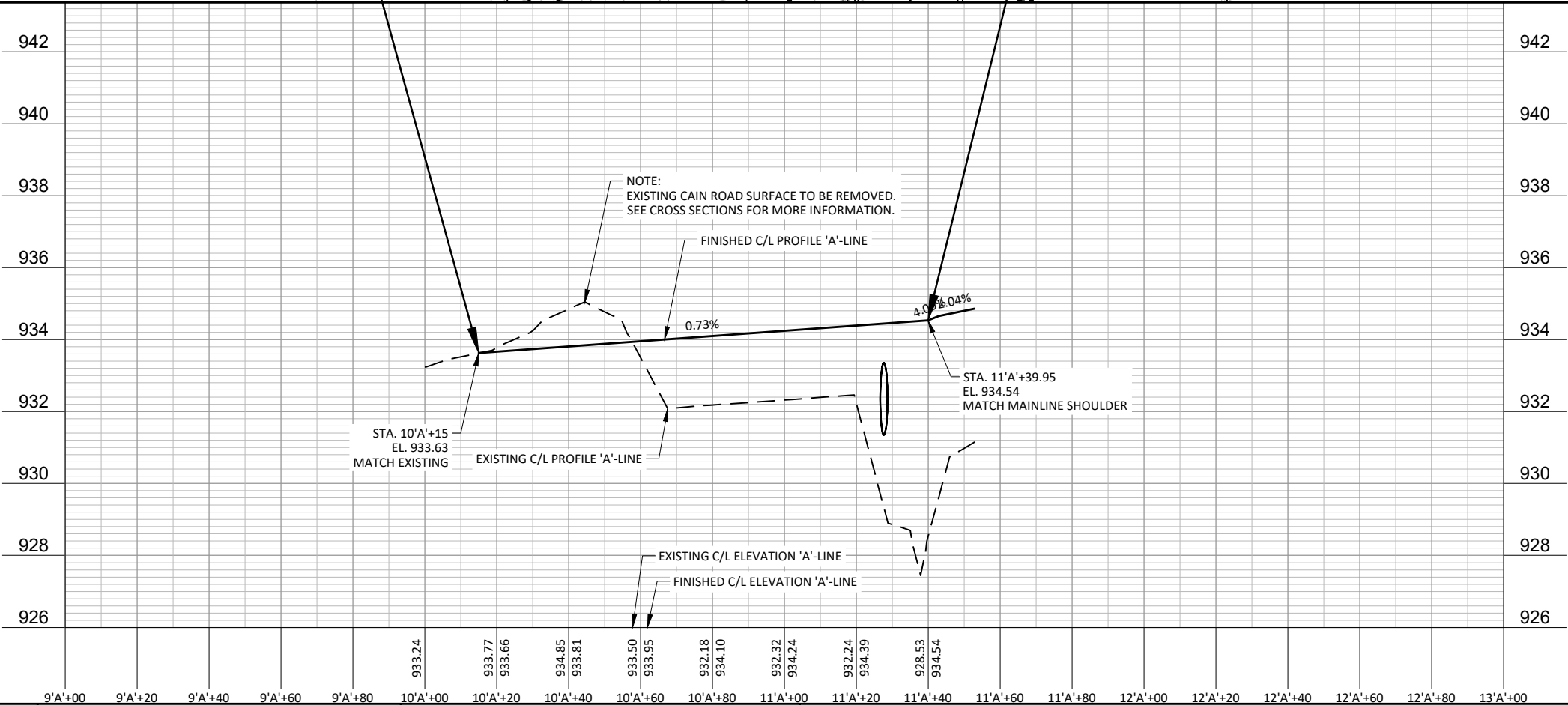
CURVE 3
PI STA. = 10'A'+81.55
Y = 136,979.21
X = 48,574.77
R = 200.00
D = 28°38'52"
DELTA = 20°50'25"
L = 72.75
T = 36.78
C = 72.35
PC STA. = 10'A'+44.77
Y = 136,942.76
X = 48,579.62
PT STA. = 11'A'+17.51
Y = 137,015.01
X = 48,583.21

JON E. LINGO



BEGIN CONSTRUCTION
STA. 10'A'+15.00
Y=136,913.25
X=48,583.55

END CONSTRUCTION
STA. 11'A'+39.95
Y=137,036.85
X=48,588.36



PROJECT NO: 7250-00-70

HWY: CAIN ROAD

COUNTY: JACKSON

PLAN AND PROFILE: 'A'-LINE

SHEET

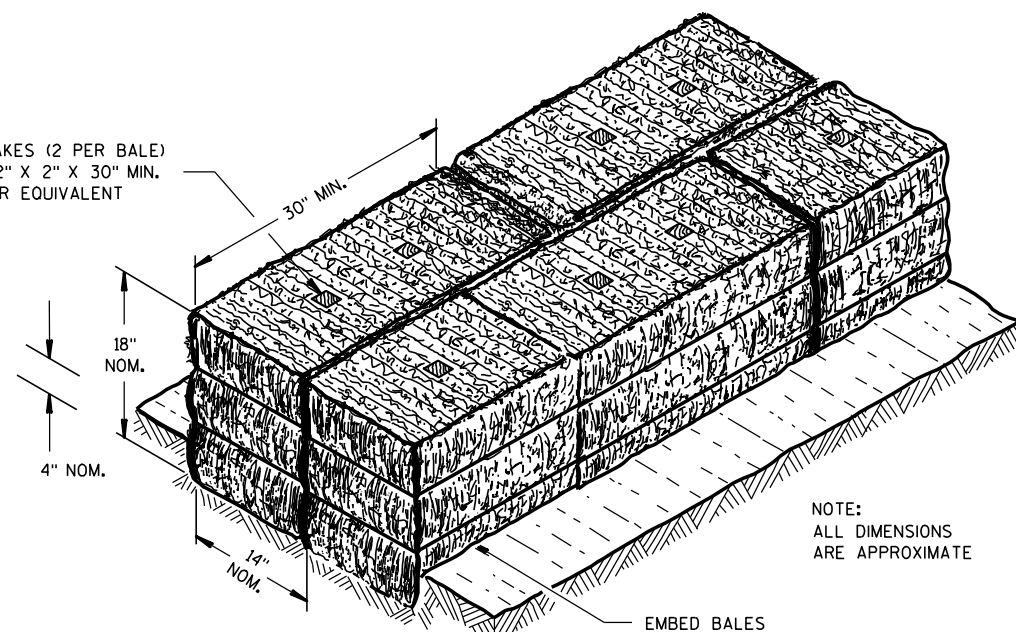
23

E

Standard Detail Drawing List

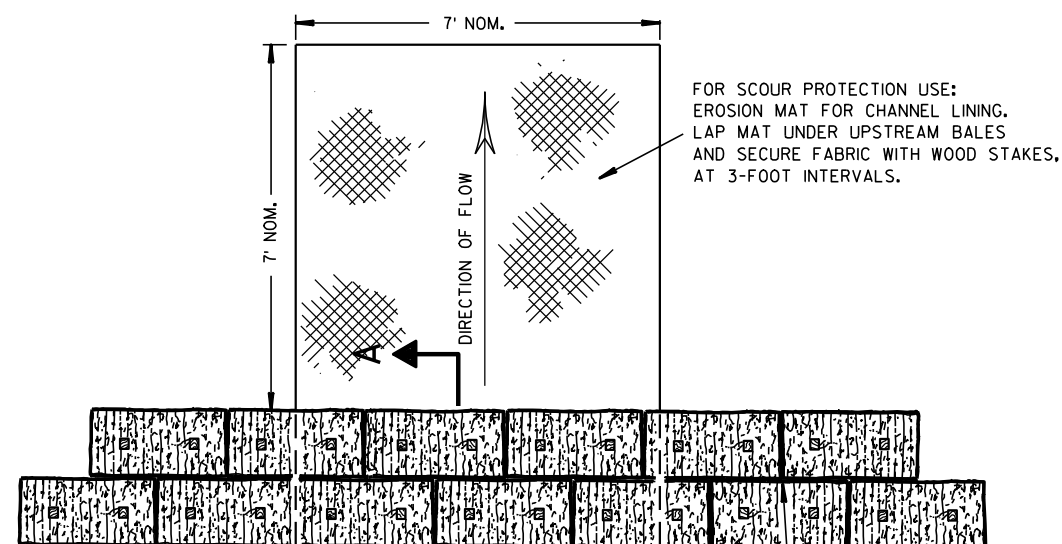
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
08E15-01	CULVERT PIPE CHECK
12A03-10	NAME PLATE (STRUCTURES)
13C19-03	HMA LONGITUDINAL JOINTS
14D01-01	TURTLE EXCLUSION FENCE CLIMBING TURTLE
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C06-12	SIGNING & MARKING FOR TWO LANE BRIDGES
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

WOOD STAKES (2 PER BALE)
NOMINAL 2" X 2" X 30" MIN.
LENGTH OR EQUIVALENT



SECTION A-A

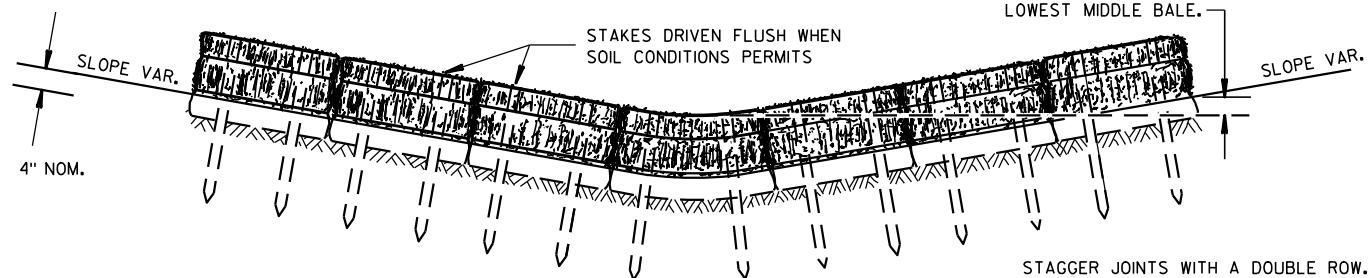
NOTE:
ALL DIMENSIONS
ARE APPROXIMATE



PLAN VIEW

STAGGER JOINTS BETWEEN ADJACENT
ROWS OF BALES.

BOTTOM ELEVATION OF END BALE SHALL
BE EQUAL TO OR GREATER THAN TOP OF
LOWEST MIDDLE BALE.



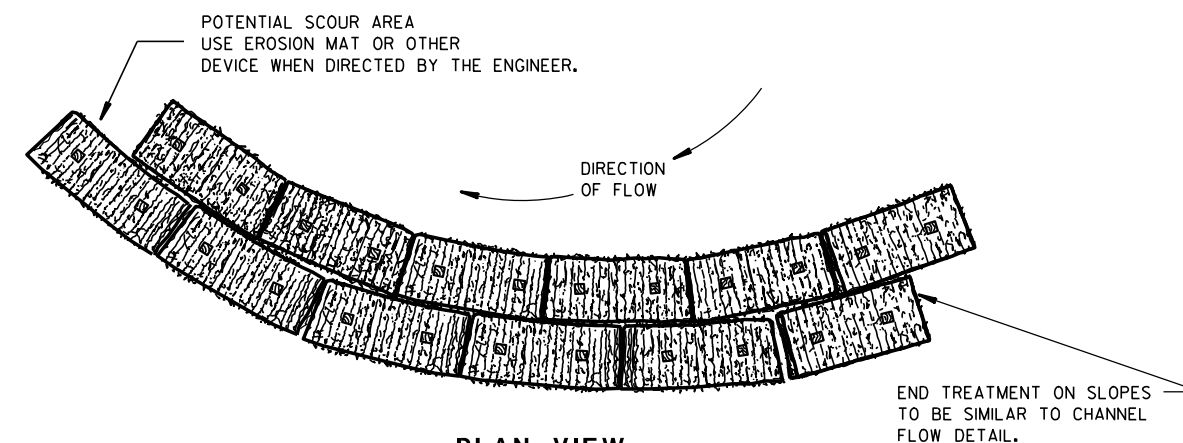
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

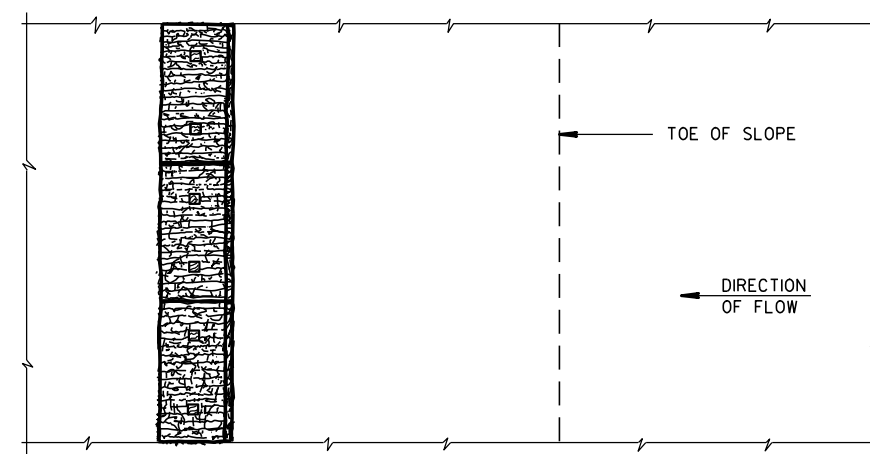
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

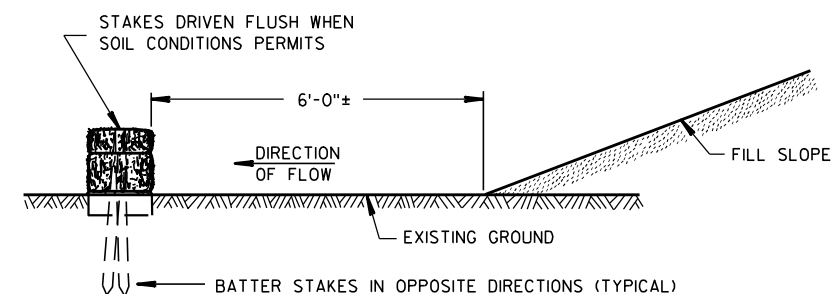


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02
DATE

/S/ Beth Connors
CHIEF ROADWAY DEVELOPER

FHWA



- 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 1½" X 1½" 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.

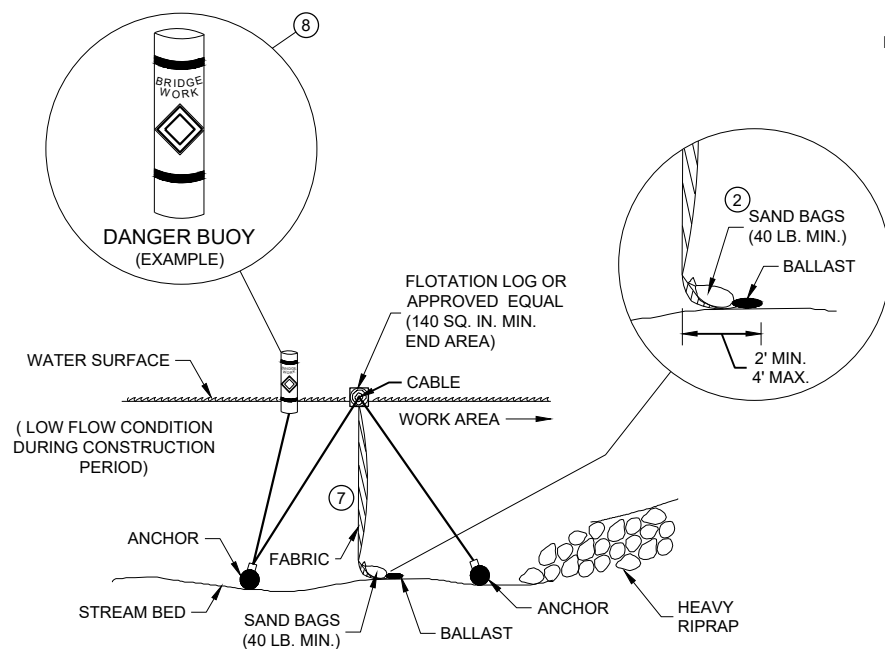


SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

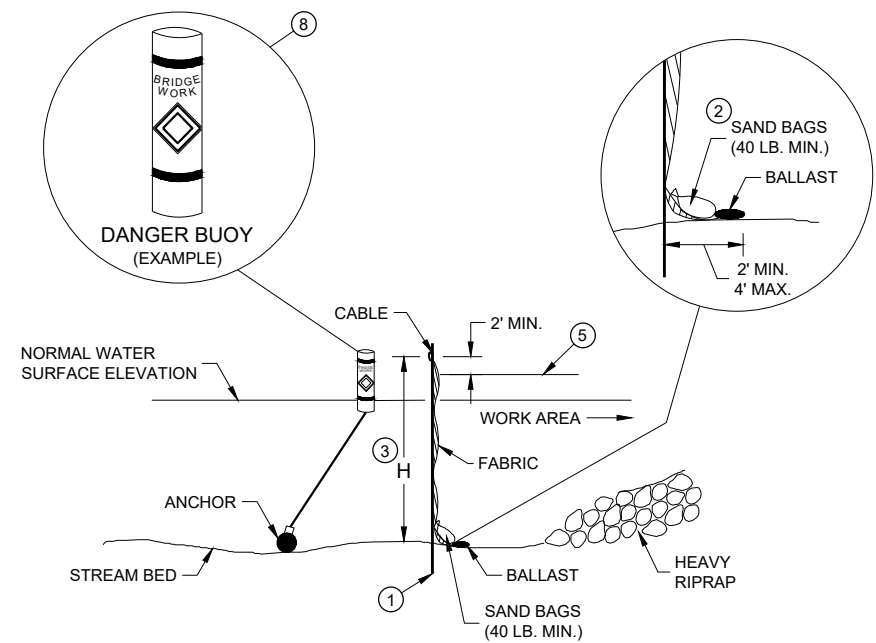
APPROVED
4-29-05
DATE /S/ Beth Cannata
CHIEF ROADWAY DEVELOPMENT 26 INCHES

FHWA



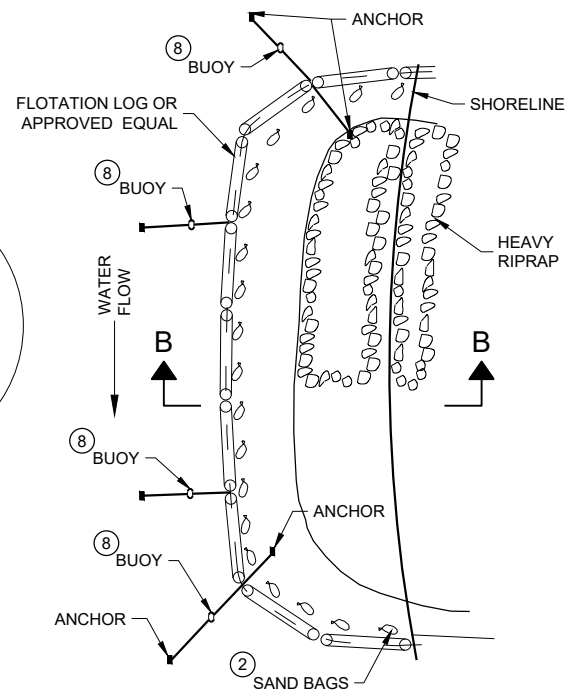
SECTION B - B

TURBIDITY BARRIER - FLOAT ALTERNATIVE CAUTION - SEE NOTE 6

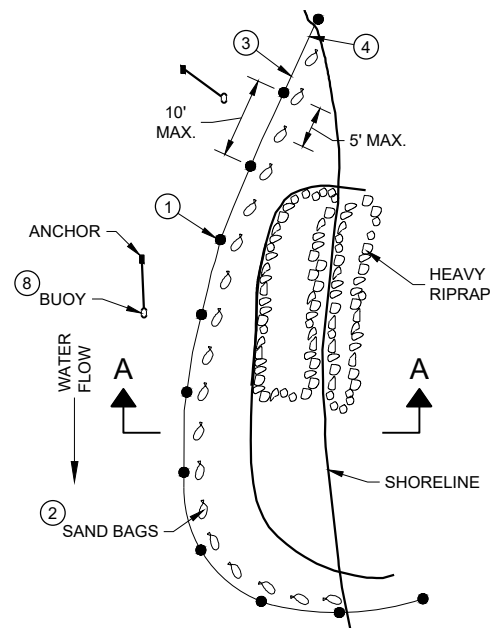


SECTION A - A

TURBIDITY BARRIER - STANDARD POST INSTALLATION



PLAN VIEW



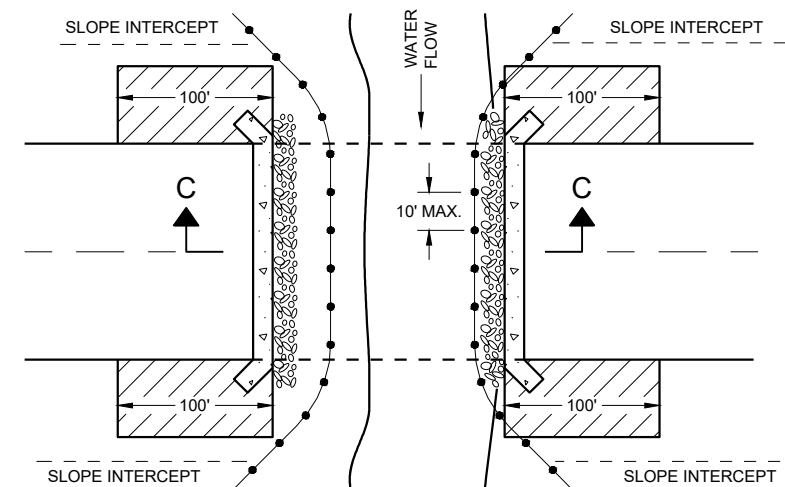
PLAN VIEW

GENERAL NOTES

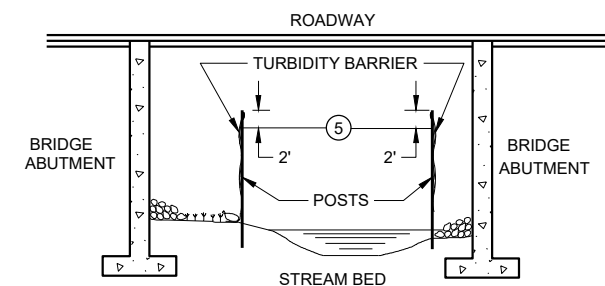
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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 SAND BAGS 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 FEET, 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 Q2 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 BEDROCK 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.



PLAN VIEW



SECTION C - C

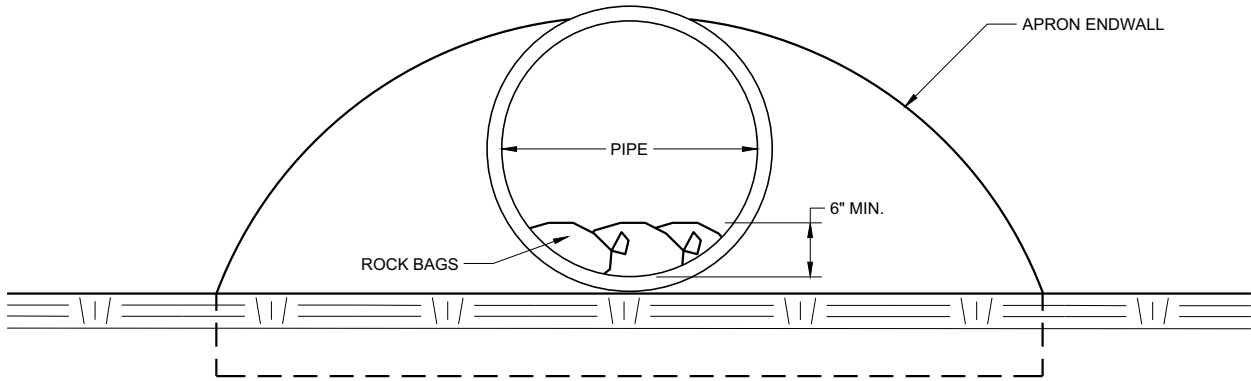
TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

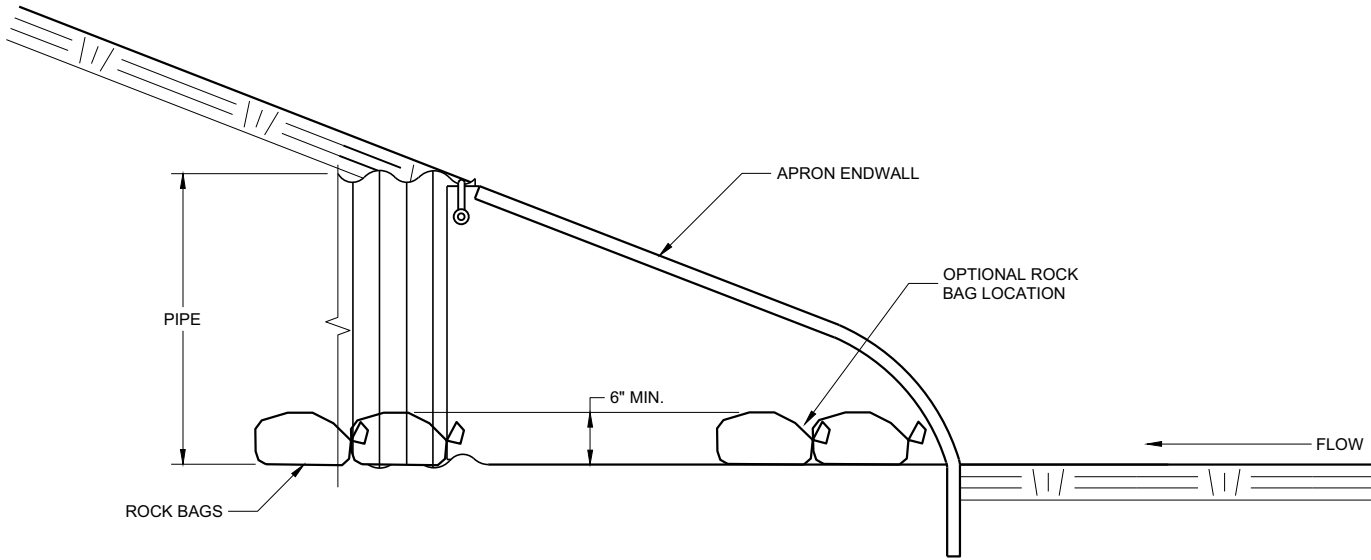
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/4/02 DATE /S/ Beth Cannestra
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER 27

FHWA



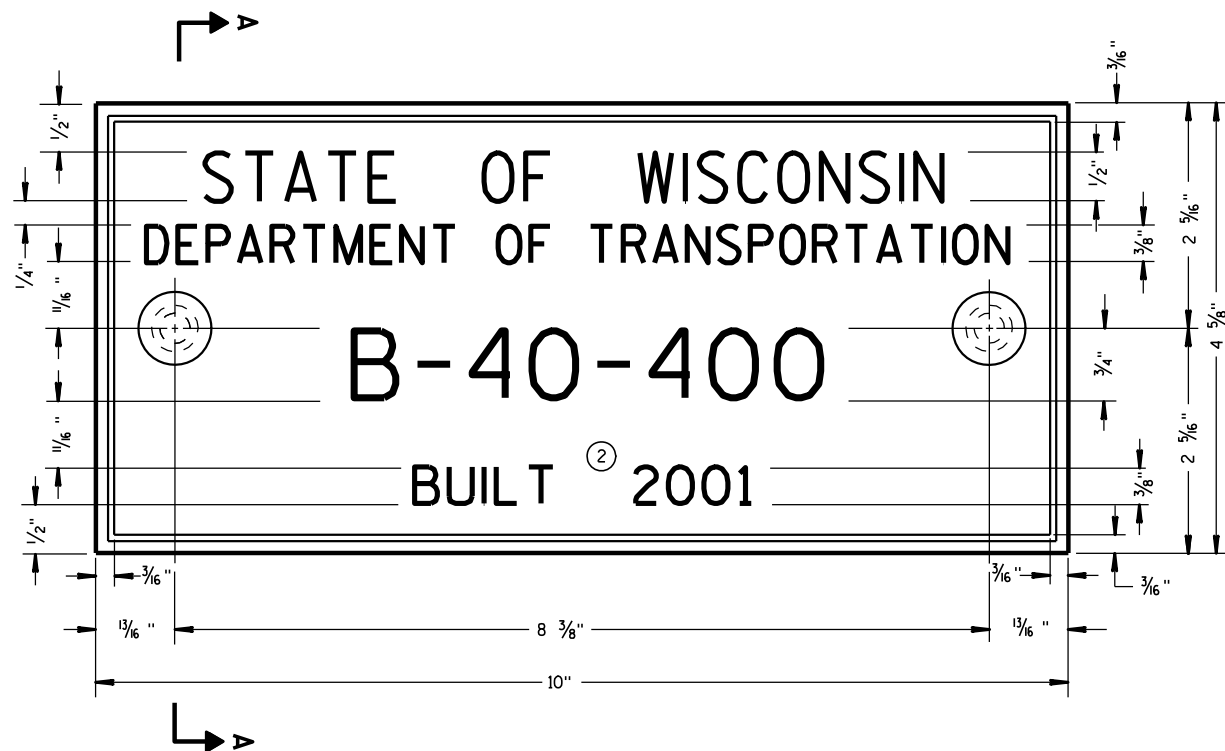
END VIEW



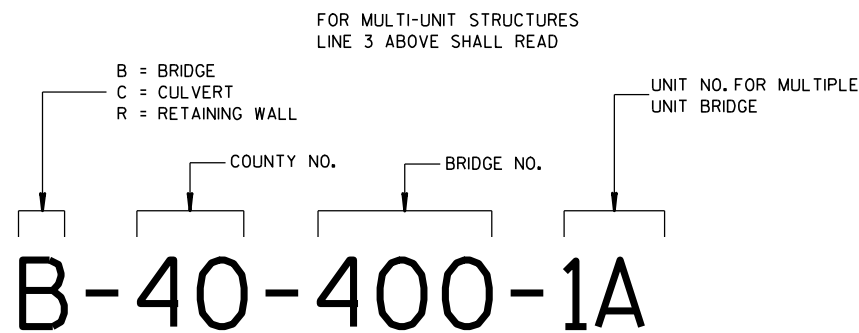
SIDE VIEW

CULVERT PIPE CHECK
(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Daniel Schave EROSION CONTROL ENGI 28
FHWA	



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



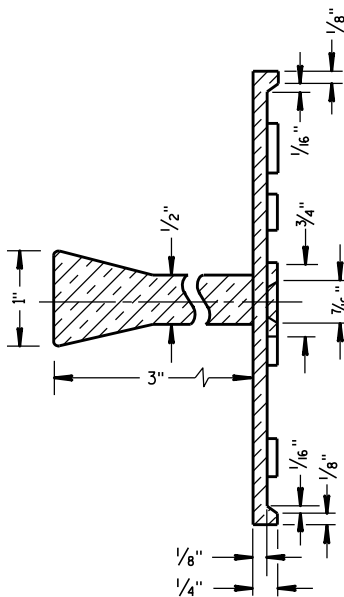
NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

GENERAL NOTES

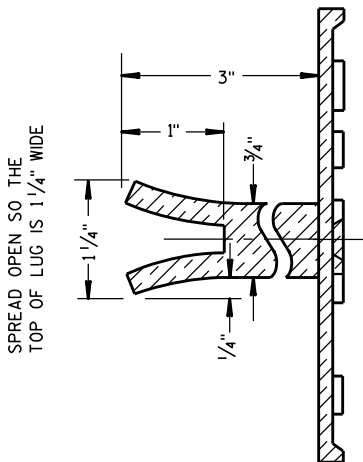
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

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.

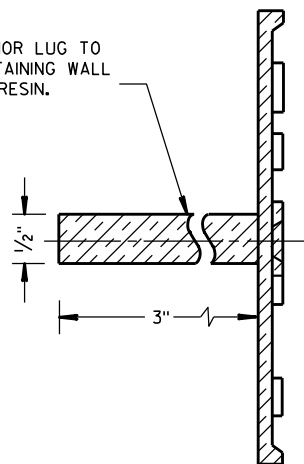


SECTION A-A



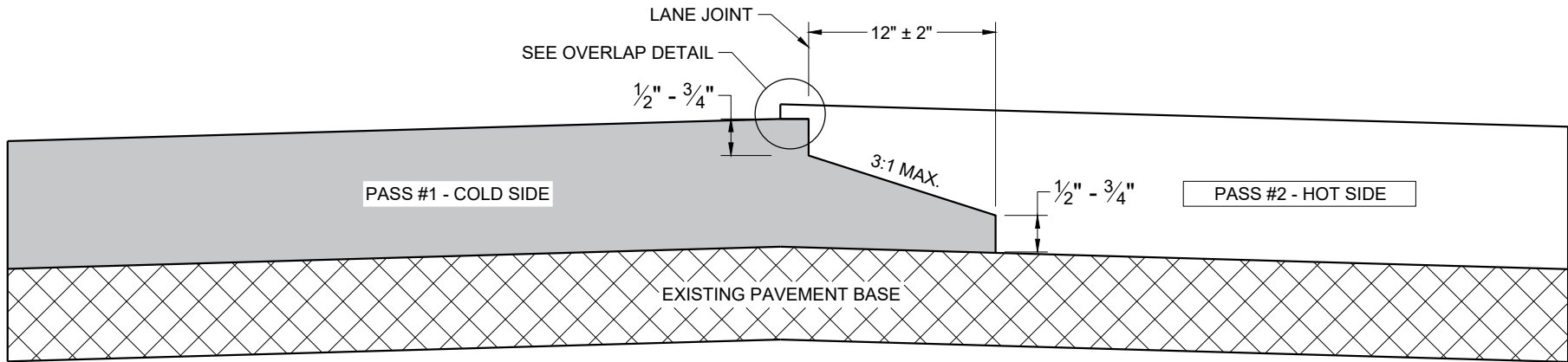
ALTERNATE LUG

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

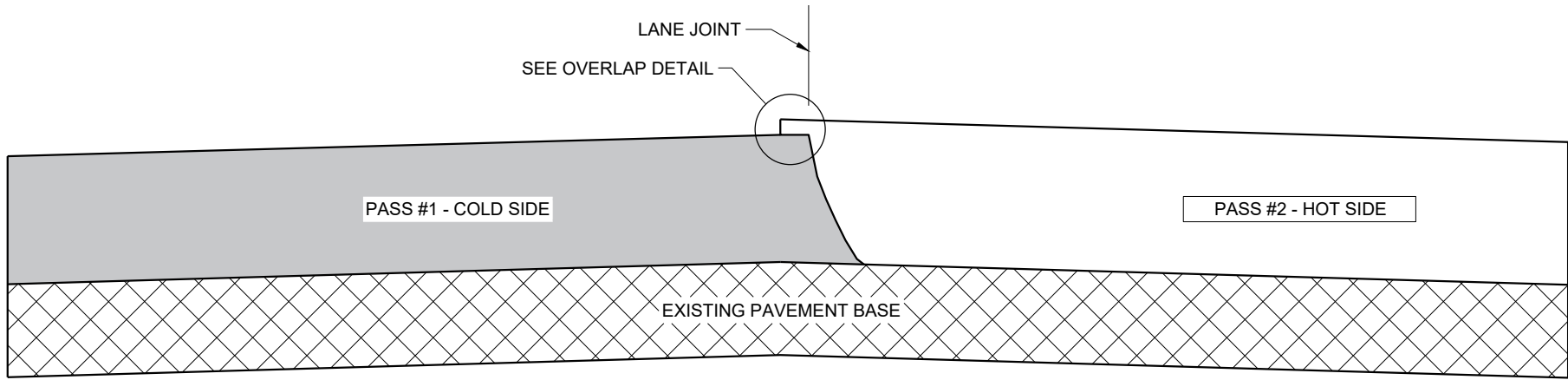


ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

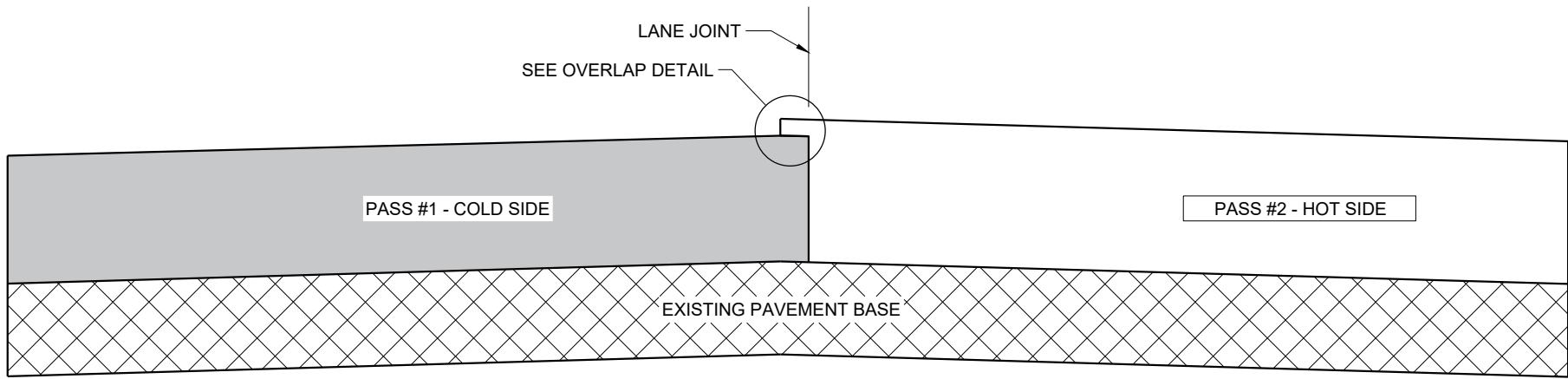
NAME PLATE (STRUCTURES)		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED DATE 3/26/10 FHWA	/S/ Scot Beck CHIEF STRUCTURAL DEVELOPER 29	JEER



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

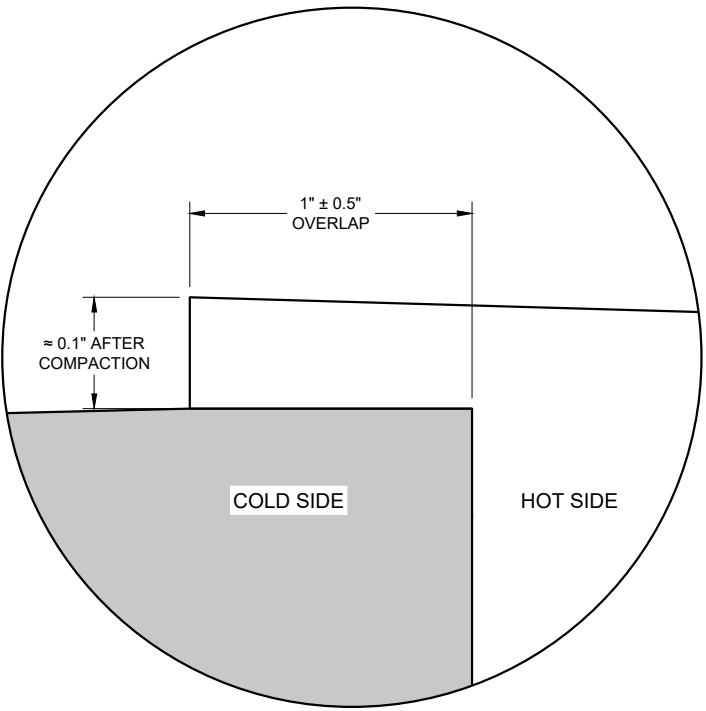
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY $1" \pm 0.5"$ AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY $0.1"$ AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO $2"$ FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

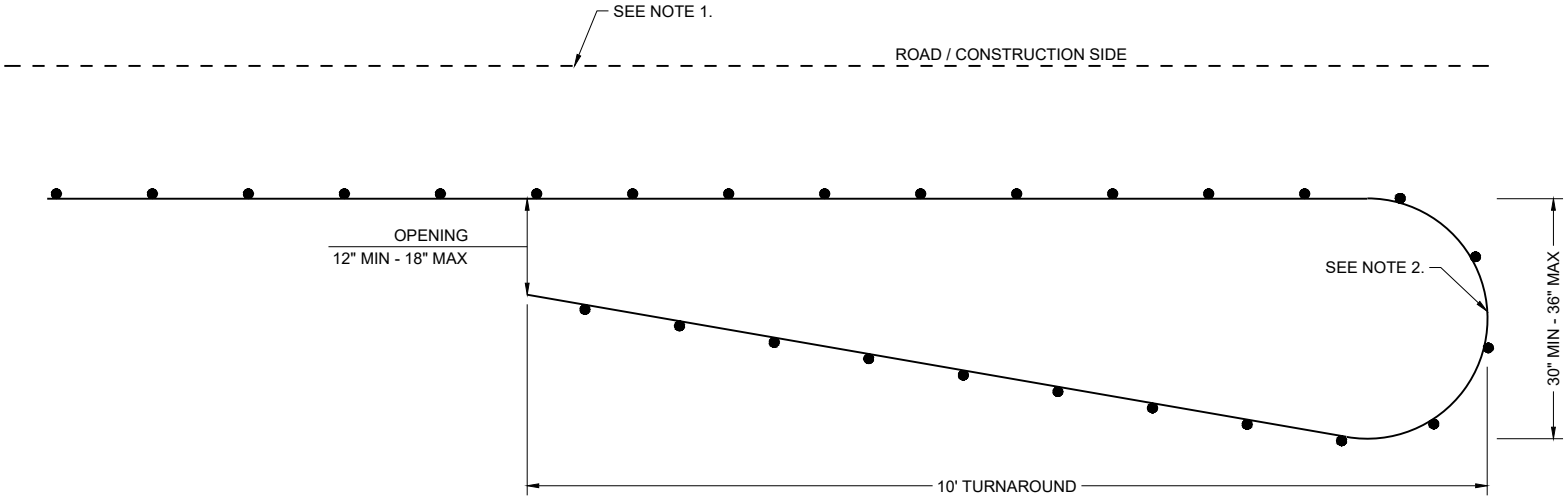
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020 /S/ Steven Hefel
DATE HMA PAVEMENT ENGIN 30
FHWA

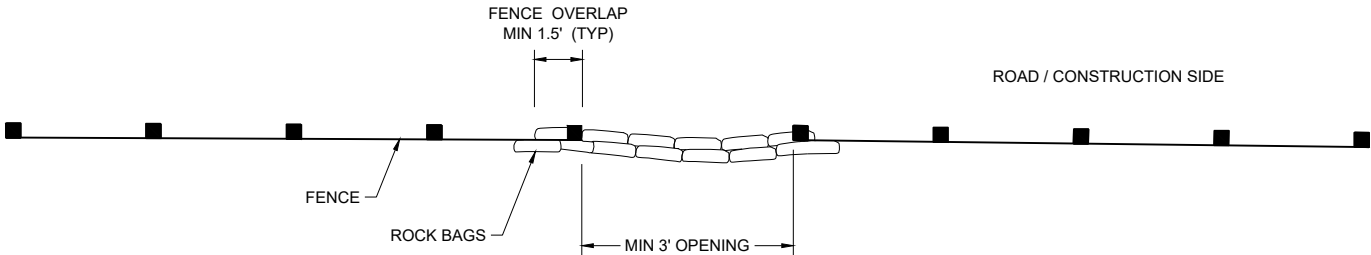
GENERAL NOTES:

- 1. WHERE SILT FENCE IS REQUIRED, IT SHALL BE PLACED ON THE CONSTRUCTION SIDE OF THE EXCLUSION FENCING, OR COMBINED WITH THE EXCLUSION FENCING AS ALLOWED IN THE SPECIFICATIONS. STAKES ON THIS DETAIL ARE OPPOSITE OF STANDARD SILT FENCE FOR SEDIMENT CONTROL.
 - 2. PLACE TURNAROUNDS AT ALL TERMINI ENDS OF THE EXCLUSION FENCING.
 - 3. IF TEMPORARY ACCESS POINTS ARE NEEDED DURING CONSTRUCTION THAT REQUIRE OPENINGS IN THE EXCLUSION FENCING, ACCESS OPENINGS SHOULD BE TIGHTLY SECURED WITH BALES OF HAY OR STRAW WHENEVER CONSTRUCTION RELATED ACTIVITIES ARE NOT OCCURRING. REINSTALL EXCLUSION FENCING WHEN THE WORK REQUIRING THE TEMPORARY ACCESS OPENING IS COMPLETED.
 - 4. THE FENCE CAP MAY BE A 6" UNDER DRAIN PIPE, SLIT DOWN THE CENTER AND PLACED OVER THE FENCE. COMMERCIALY AVAILABLE SAFETY CAPS WITH A LIP MAY BE USED. OTHER DNR APPROVED METHODS TO PREVENT TURTLES FROM PASSING OVER THE TOP OF THE FENCE MAY BE USED.
- SECURELY FASTEN THE CAP TO PREVENT IT FROM BEING DISLODGED.

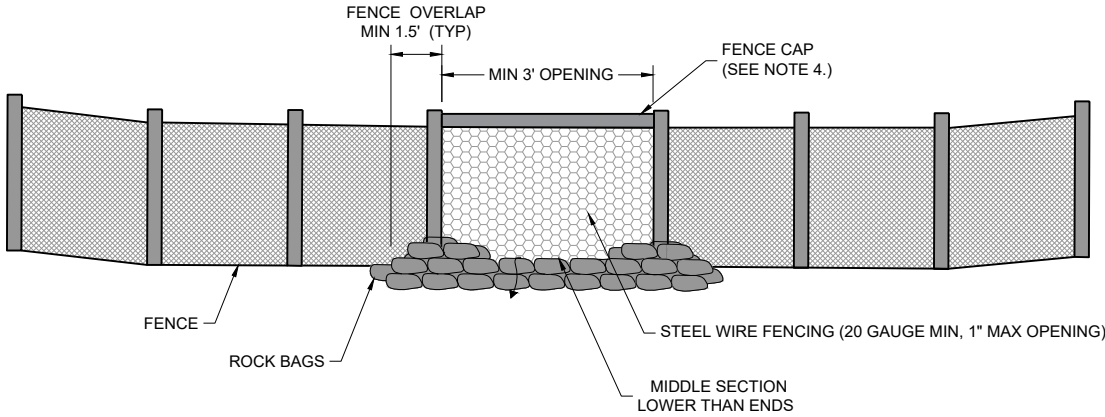


PLAN VIEW

CLIMBING TURTLE EXCLUSION FENCE DETAIL



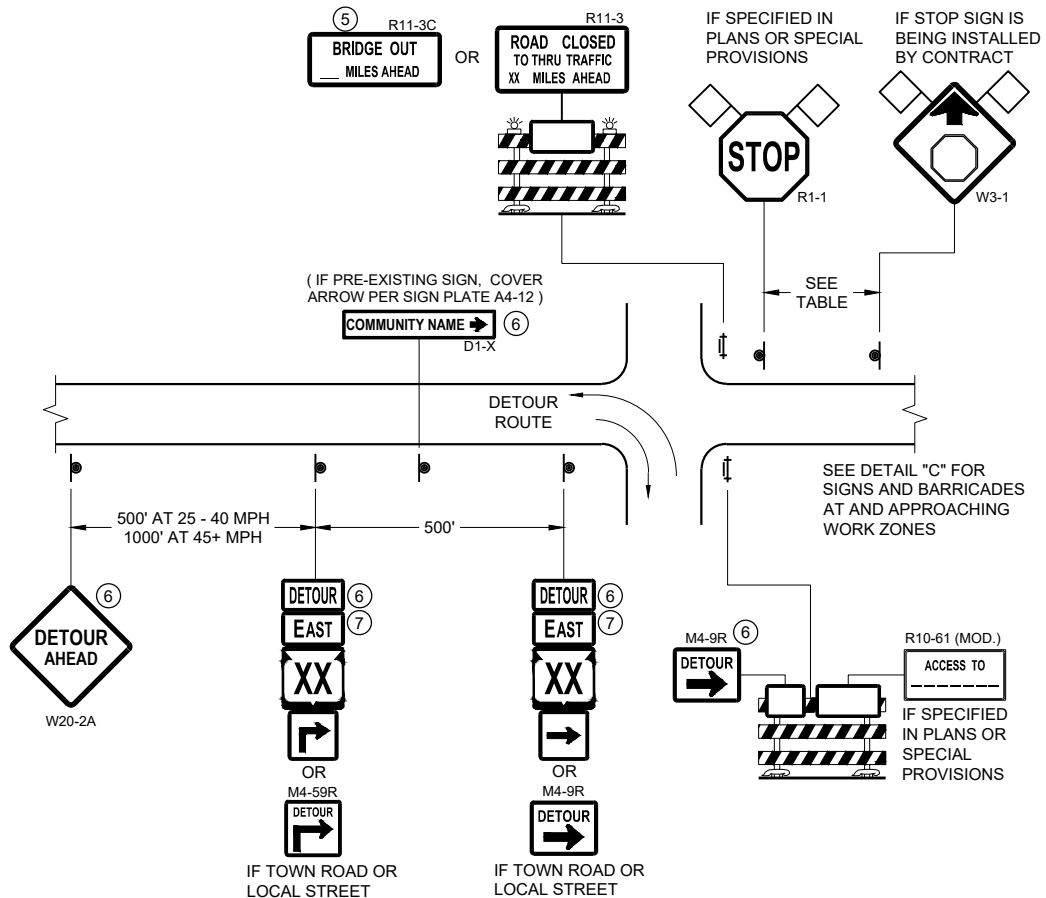
PLAN VIEW



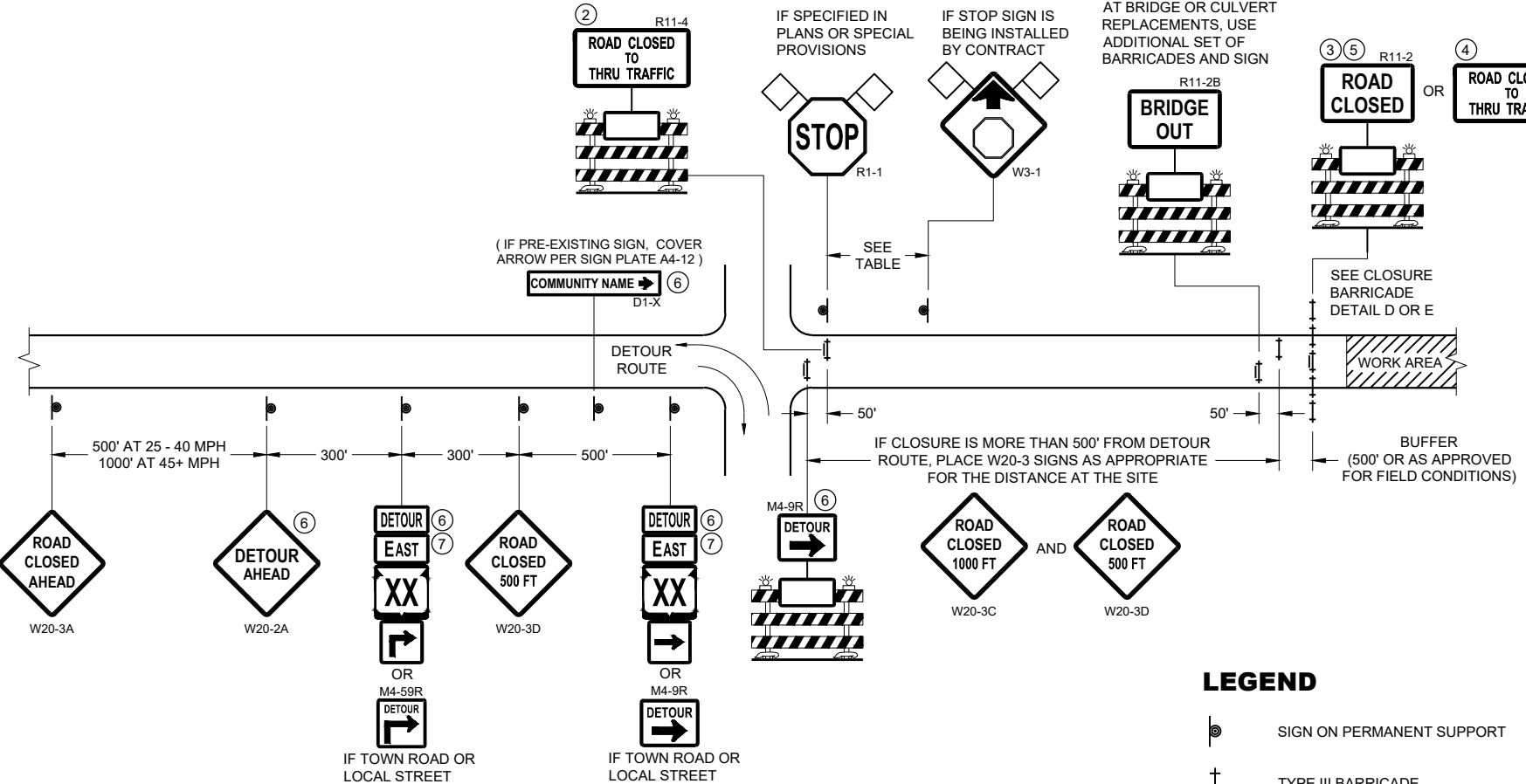
FRONT VIEW

CLIMBING TURTLE FENCE RELIEF DETAIL

TURTLE EXCLUSION FENCE CLIMBING TURTLE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED AUGUST 2025 DATE	/S/ ALYSSA BARRETTE CHIEF STATEWIDE ENVIRONMENTAL SERVICES BUREAU OF TECHNICAL SER
FHWA 31	



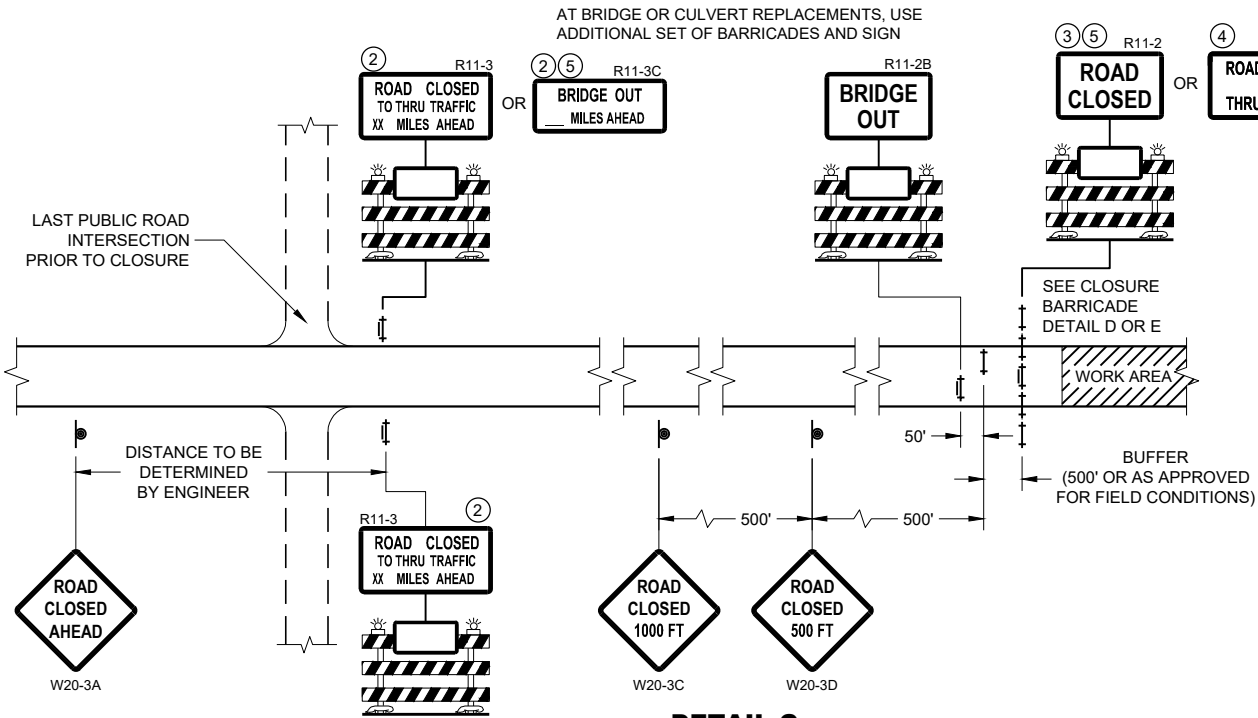
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

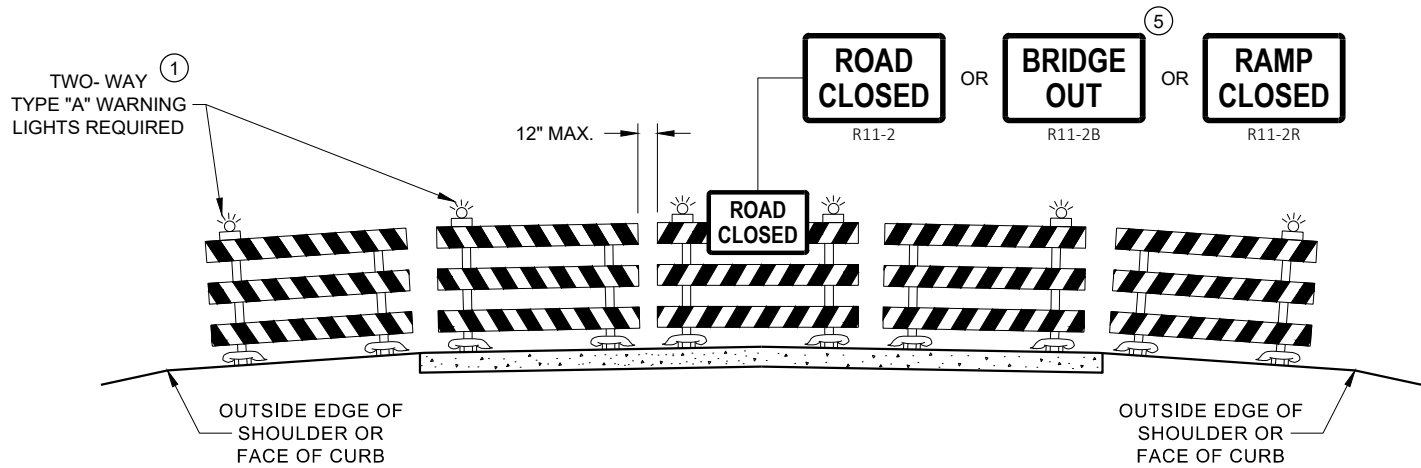
DETOUR M4 - 8
EAST M3 - X
XX OR **XX** OR **COUNTY X**
M1 - 4 M1 - 6 M1 - 5A
→ OR **→**
M05 - 1 M06 - 1

**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

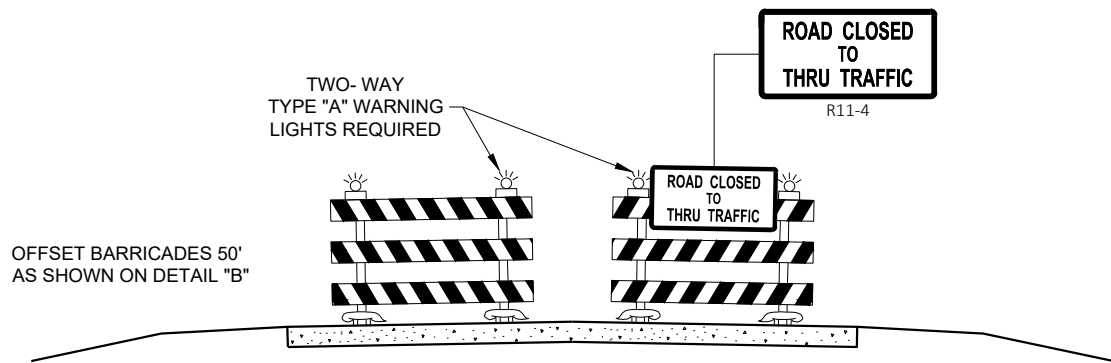
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 32

FHWA



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

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

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

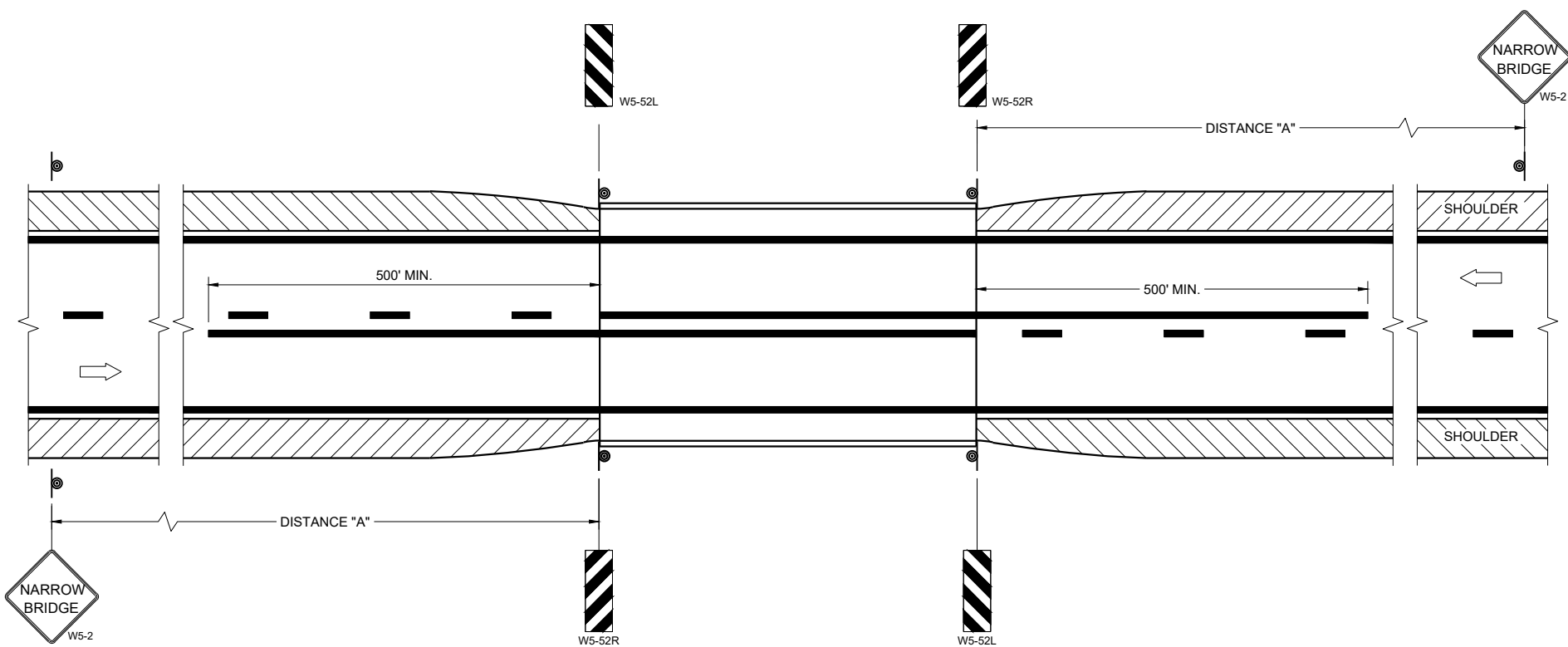
- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- 2 THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.
- 3 FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".
- 4 FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".
- 5 FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.
- 6 INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- 7 "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS
FOR
VARIOUS CLOSURES

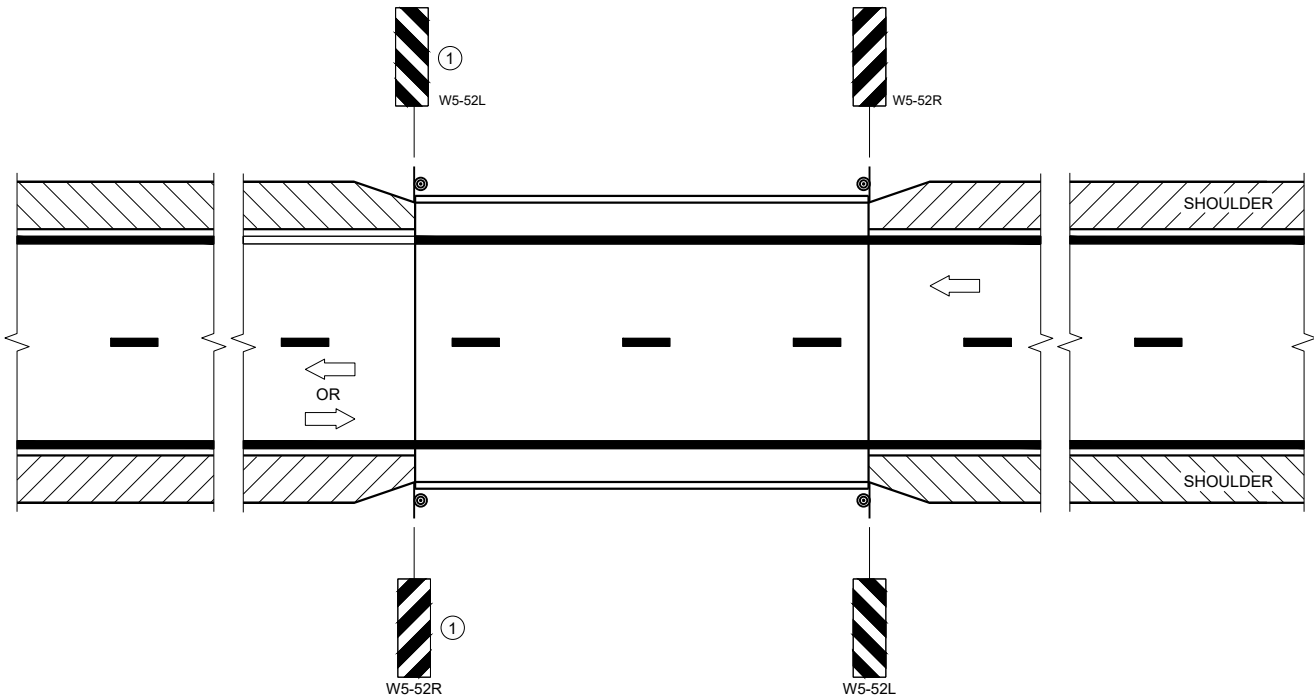
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 33

FHWA



SITUATION 1
WARRANTING CRITERIA:
BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET.



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

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THE 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.

ON BRIDGE ONLY PROJECTS, PLACE 300 FEET OF EDGELINE.

OMIT EDGELINES ON ROADWAYS WITHOUT EXISTING EDGELINES.

① OMIT ON ONE-WAY TRAVELED WAYS.

LEGEND

⊙ SIGN ON PERMANENT SUPPORT

➡ DIRECTION OF TRAFFIC

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	700'

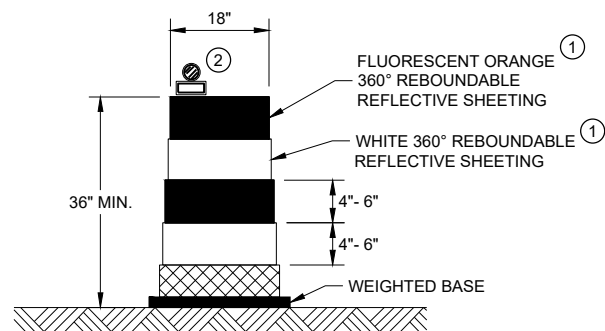
**SIGNING AND MARKING
FOR TWO LANE BRIDGES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

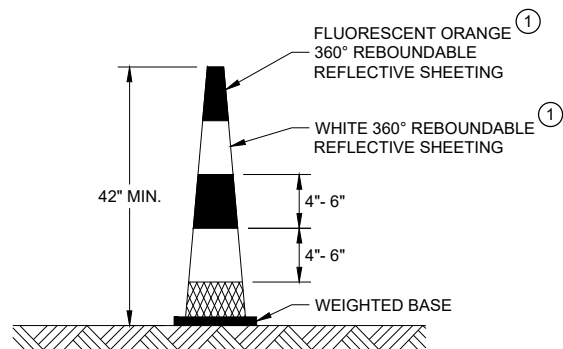
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA



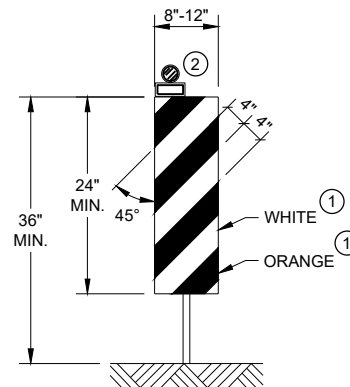
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



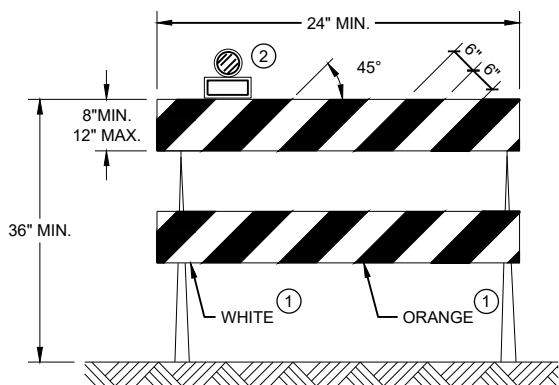
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS
BALLAST WIDTHS
RANGE FROM 14"-20"



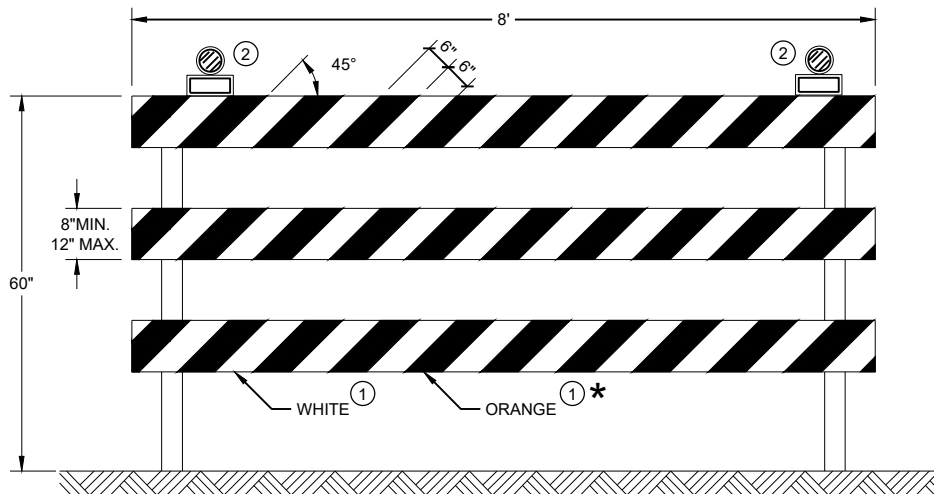
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

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
November 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 35
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.

- ① 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.
- ② 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.

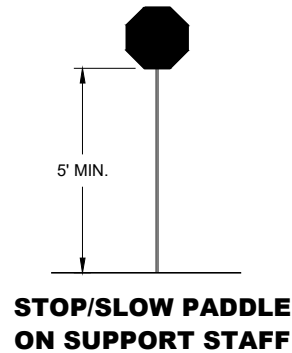
- ③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM 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.

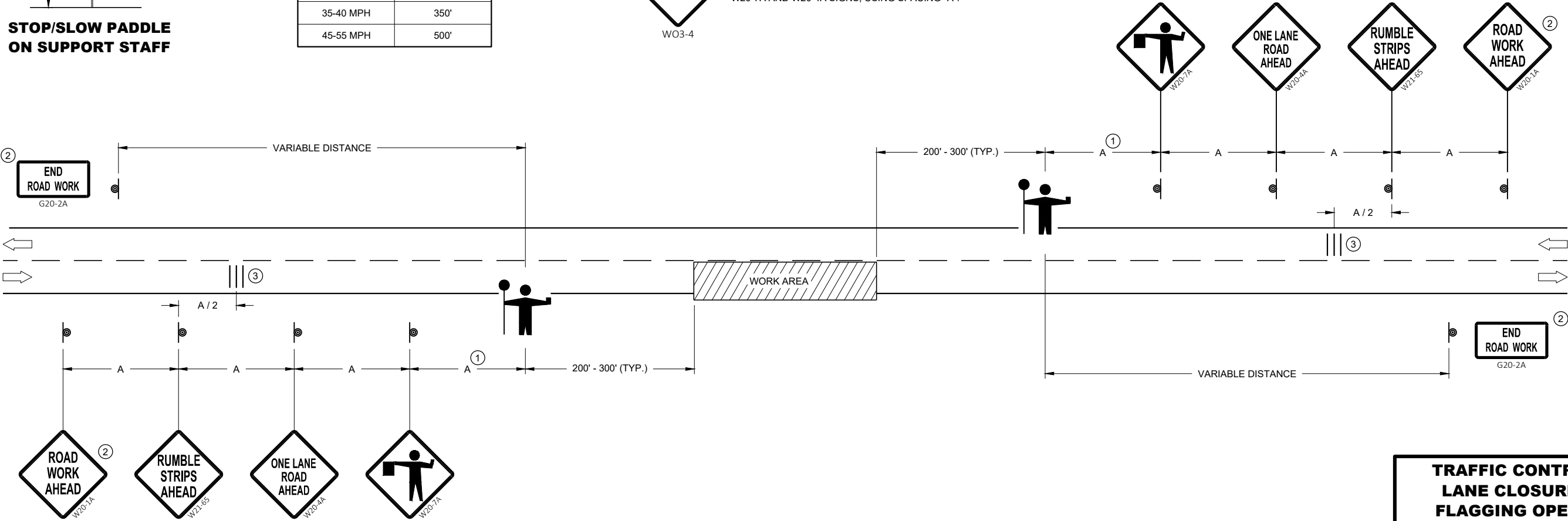


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER 36
FHWA	

LEGEND

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

GENERAL NOTES

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

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

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

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

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

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

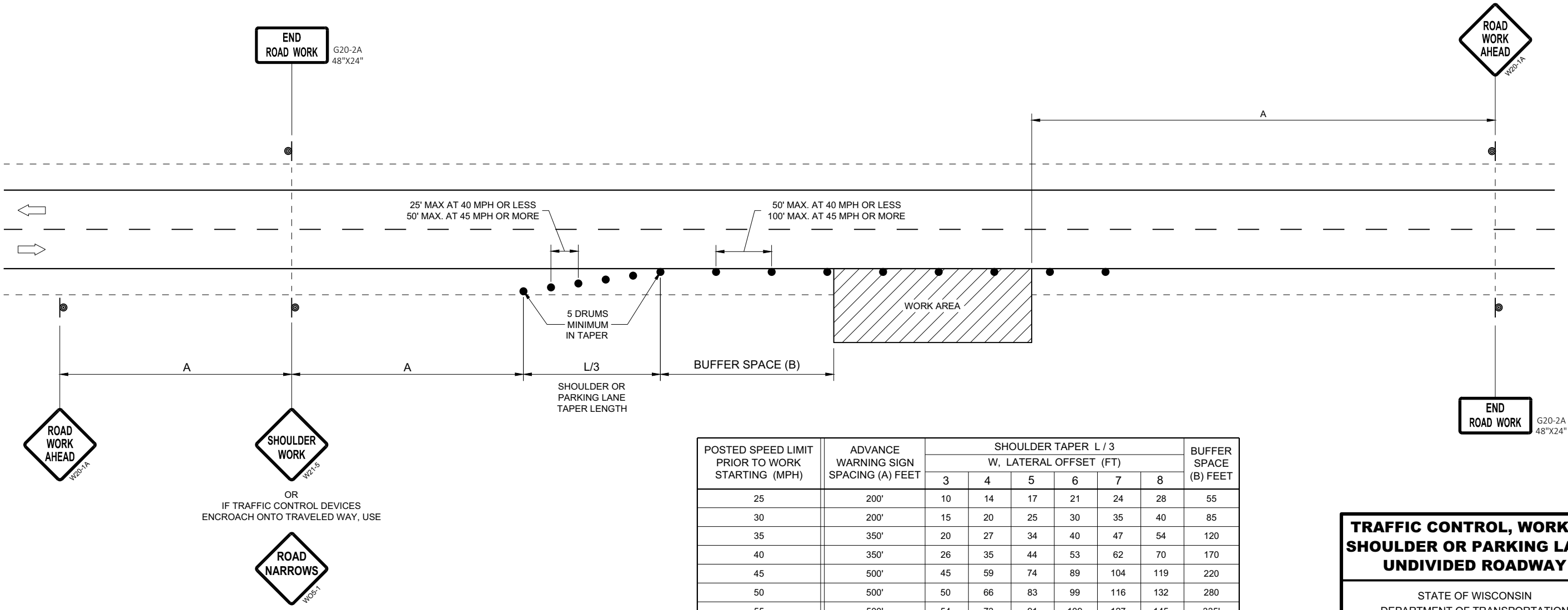
W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

6

6

SDD 15D28 - 04

SDD 15D28 - 04



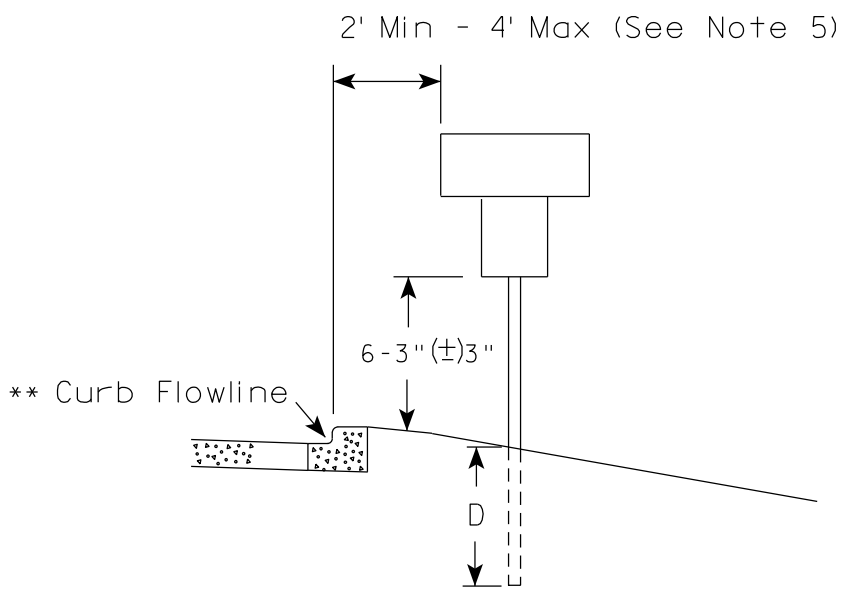
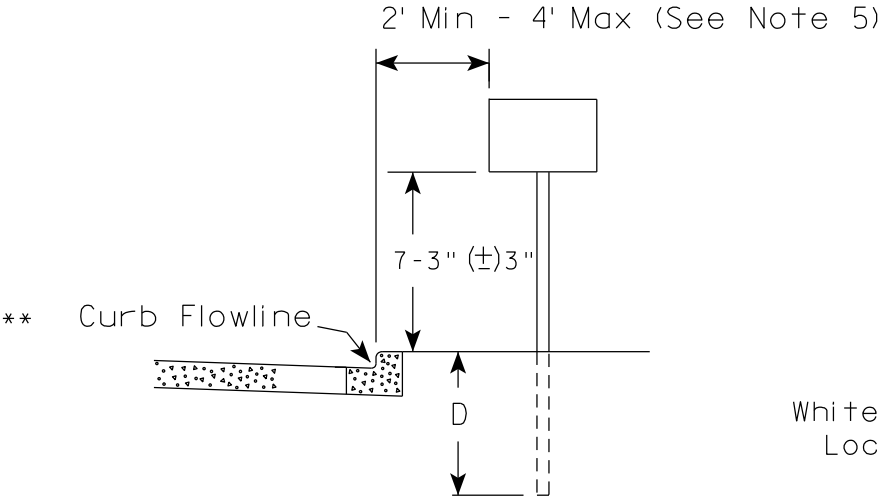
POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

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

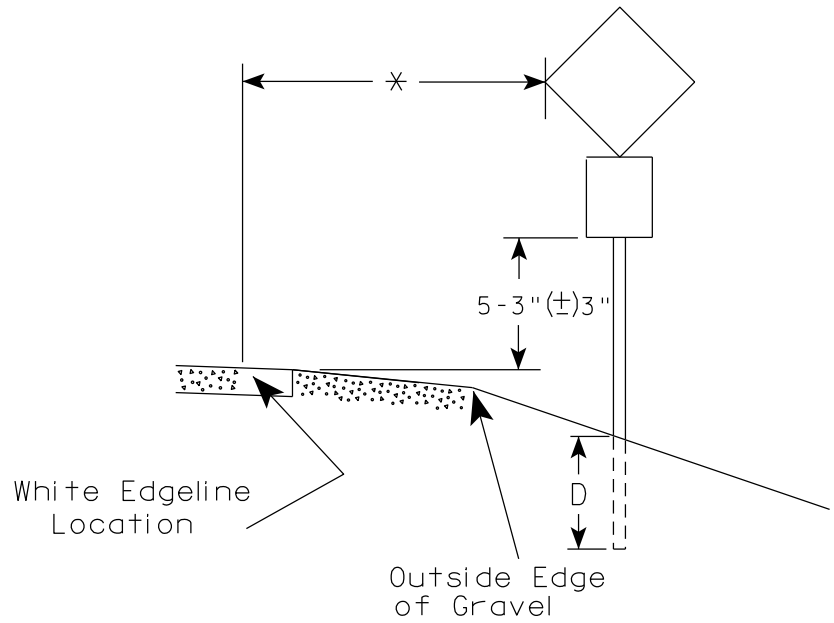
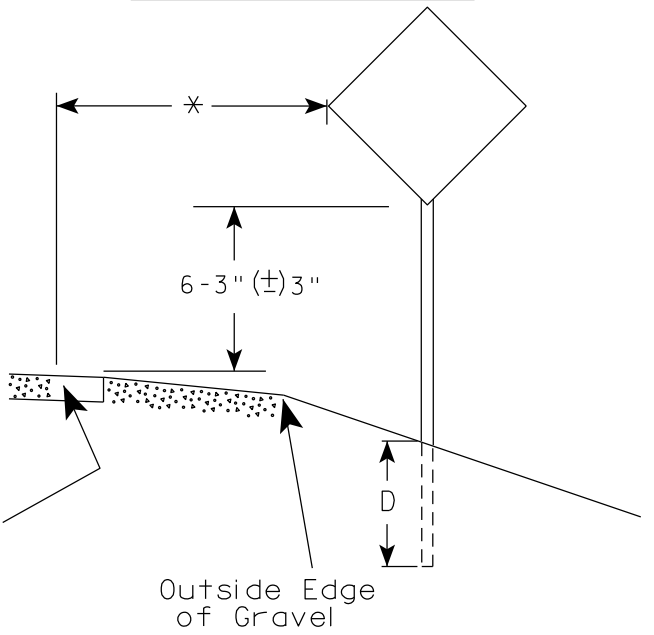
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020 /S/ Andrew Heidtke
DATE STATEWIDE WORK ZONE T SAFETY ENGINEER 37
FHWA

URBAN AREA



RURAL AREA (See Note 2)



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

GENERAL NOTES


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

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

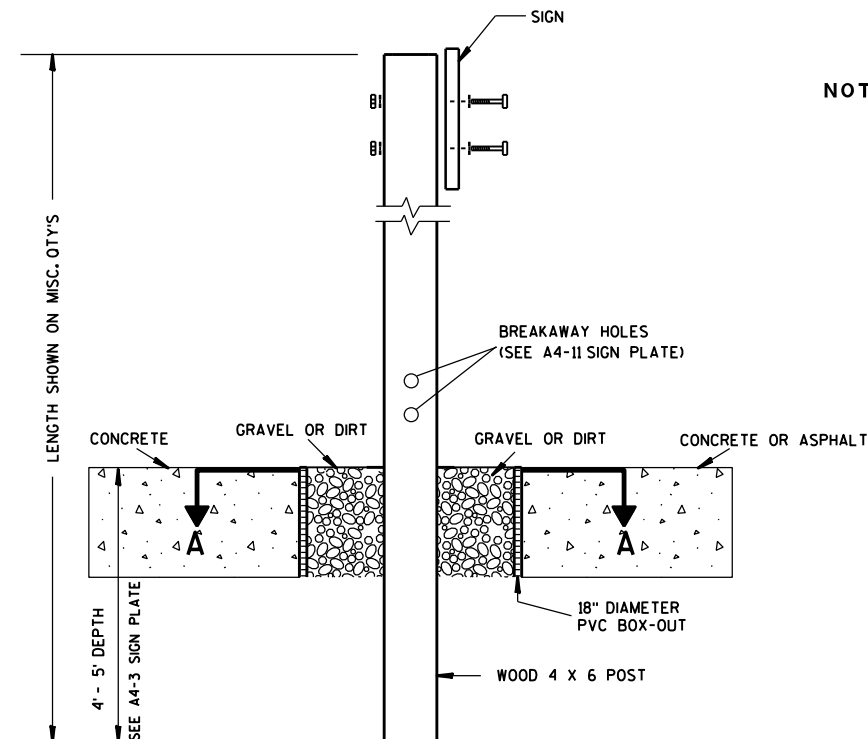
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED 
for State Traffic Engineer

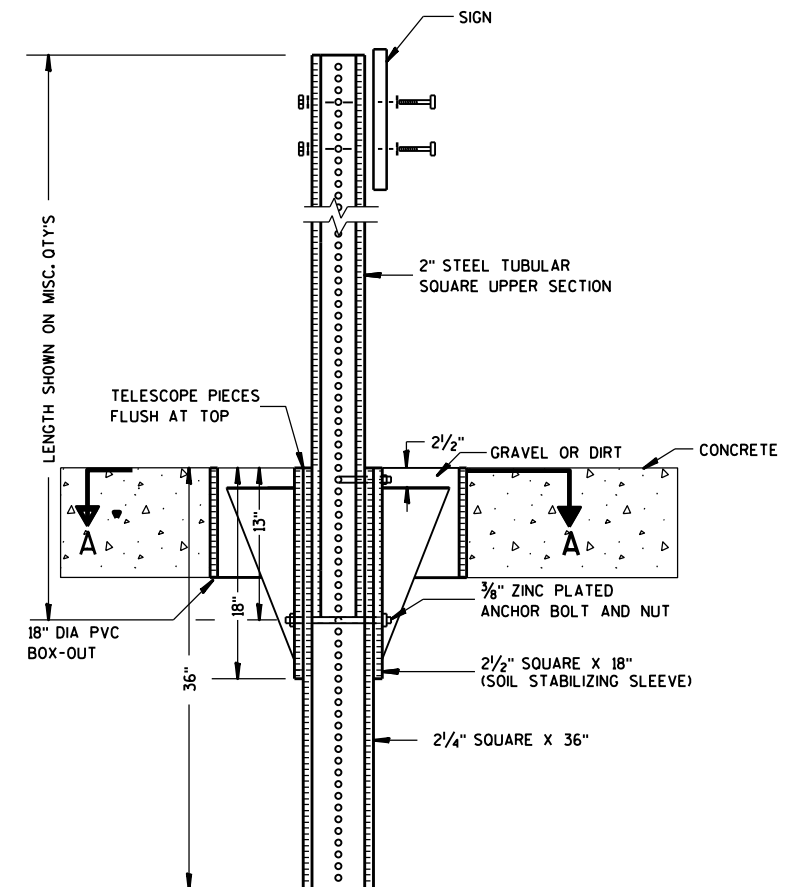
DATE 12/6/23 PLATE NO. A4-3.23



ELEVATION VIEW

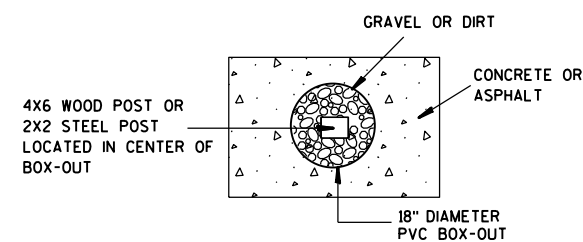
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/27/14 PLAT 39 A4-3B.1

PROJECT NO:

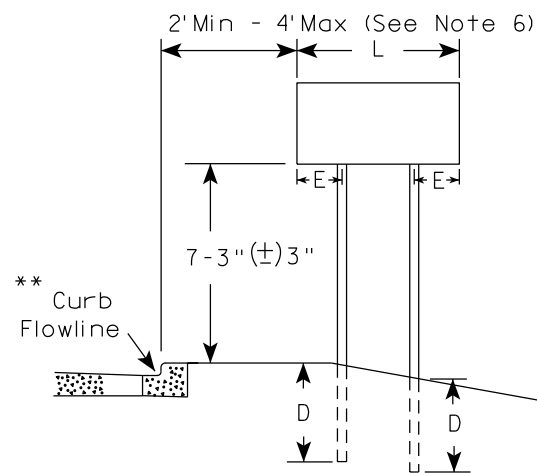
HWY:

COUNTY:

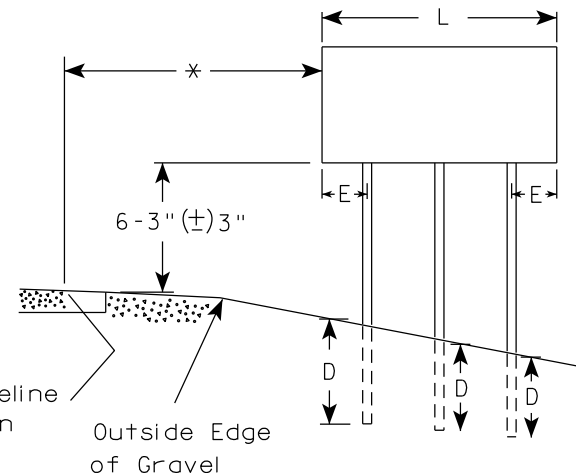
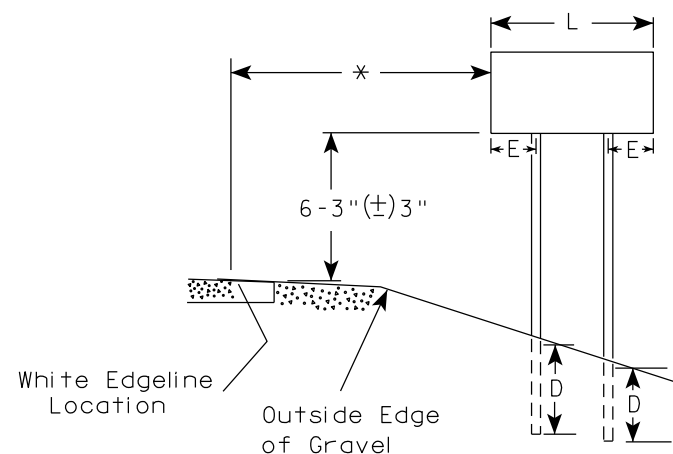
SHEET NO:

E

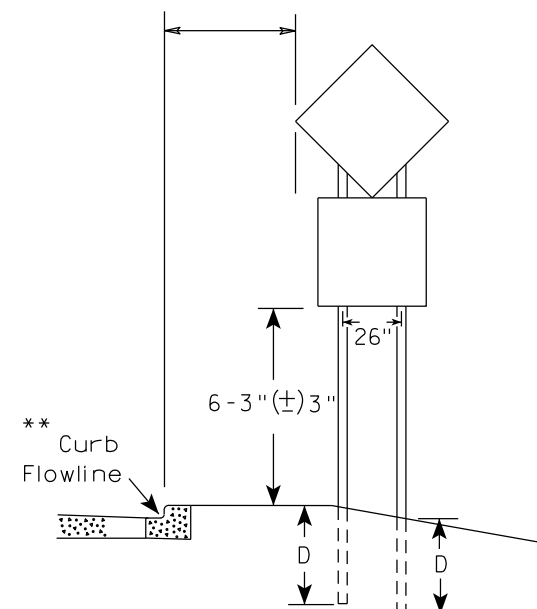
URBAN AREA



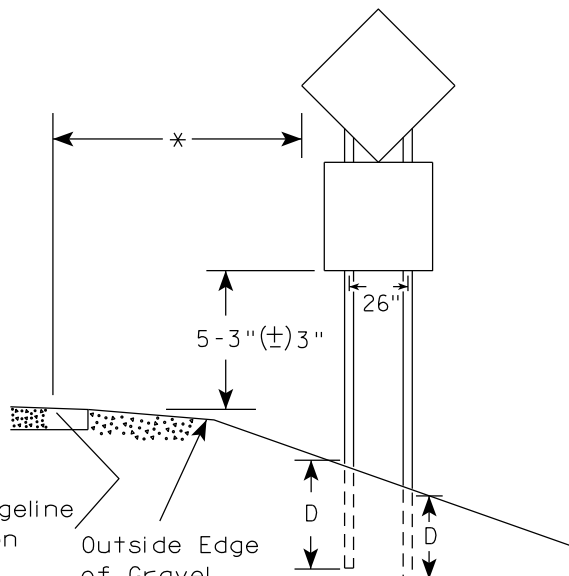
RURAL AREA (See Note 3)



2' Min - 4' Max (See Note 6)



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

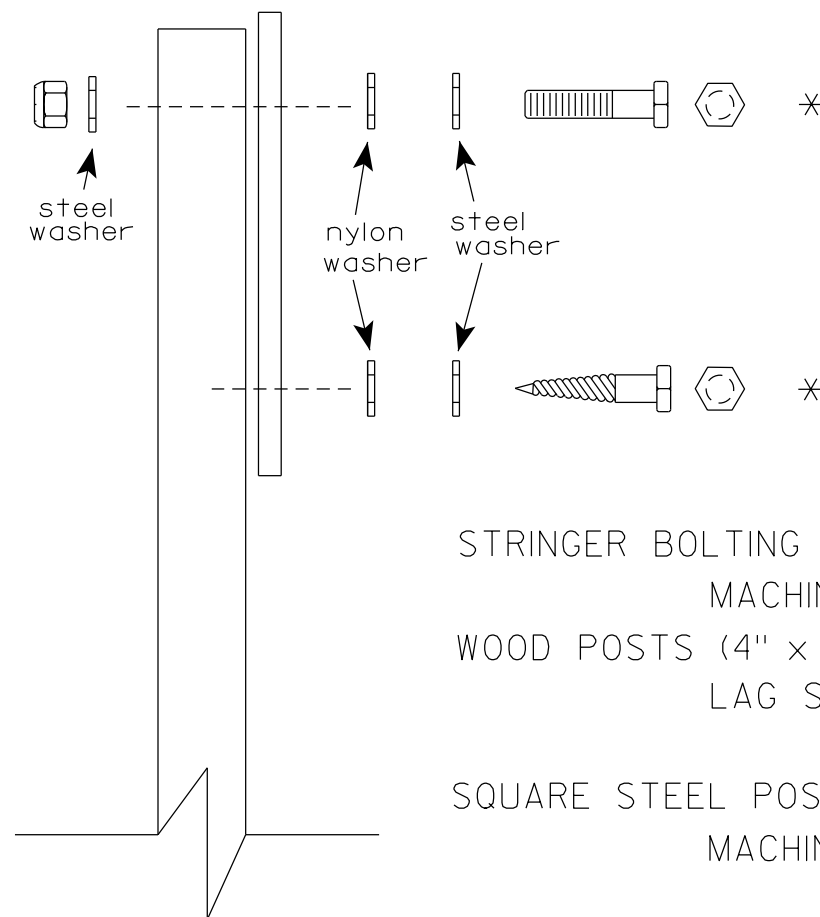
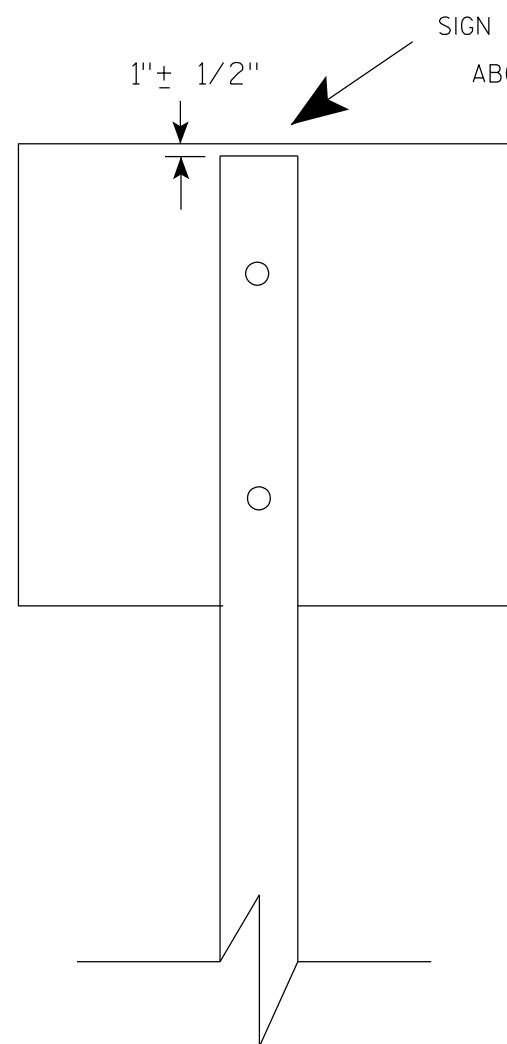
GENERAL NOTES

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

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

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

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



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

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

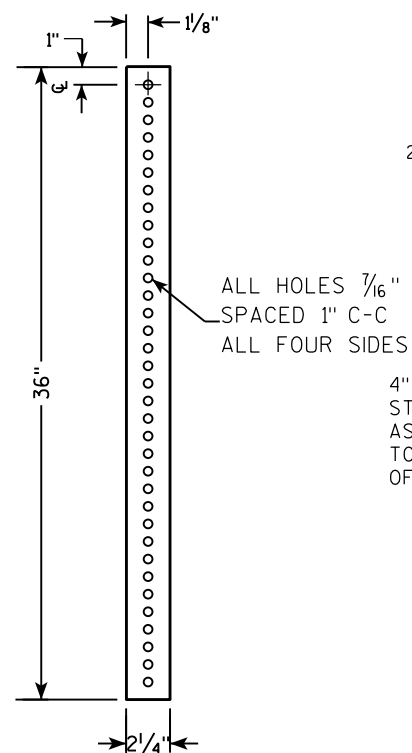
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - $\frac{9}{32}$ " (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 $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
 - 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON

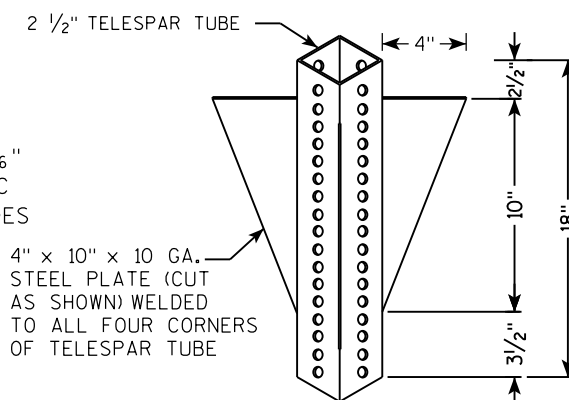
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 4/1/2020	PLATE NO. A4-8.9

**2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH**



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



LENGTH SHOWN ON MISC. QTY'S

SIGN

SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL

2" STEEL TUBULAR SQUARE UPPER SECTION

ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C ALL FOUR SIDES

TELESCOPE PIECES FLUSH AT TOP

$\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT

2 1/2" GRAVEL OR DIRT

18" DIA SCHEDULE 40 PVC BOX-OUT

36"

18"

13"

$\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT

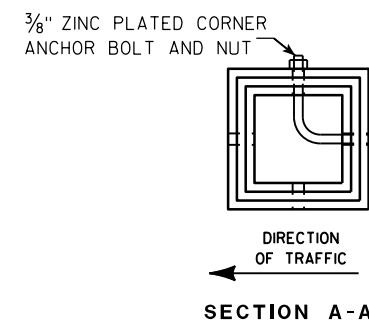
2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)

2 1/4" SQUARE X 36"

TECHNICAL DRAWING OF A SIGNPOST ASSEMBLY.

Labels and Dimensions:

- TELESCOPE PIECES FLUSH AT TOP** (indicated by a bracket on the left side view)
- 2" STEEL TUBULAR SQUARE UPPER SECTION** (pointing to the top section of the post in the side view)
- ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C ALL FOUR SIDES** (pointing to the perforations on the post in the side view)
- $\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT** (pointing to the bolt in the end view)
- $\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT** (pointing to the bolt in the side view)
- $2\frac{1}{2}$ " SQUARE X 18" (SOIL STABILIZING SLEEVE)** (pointing to the sleeve in the side view)
- $2\frac{1}{4}$ " SQUARE X 36"** (pointing to the main post in the side view)
- SIGN** (pointing to the sign plate in the end view)
- SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL** (pointing to the bolt in the end view)
- LENGTH SHOWN ON MISC. QTY'S** (vertical dimension line on the far left)
- 36"** (vertical dimension line on the left side view)
- 18"** (vertical dimension line on the left side view)
- 12"** (vertical dimension line on the left side view)
- 1"** (horizontal dimension line in the end view)
- A** (downward arrow indicating force or weight in the end view)
- B** (upward arrow indicating force or weight in the end view)



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 PLAT 12 14-9.9

SHEET NO:

E

PROJECT NO:

HWY:

COUNTY:

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN

PLOT DATE : 05-FEB-2015 17:09

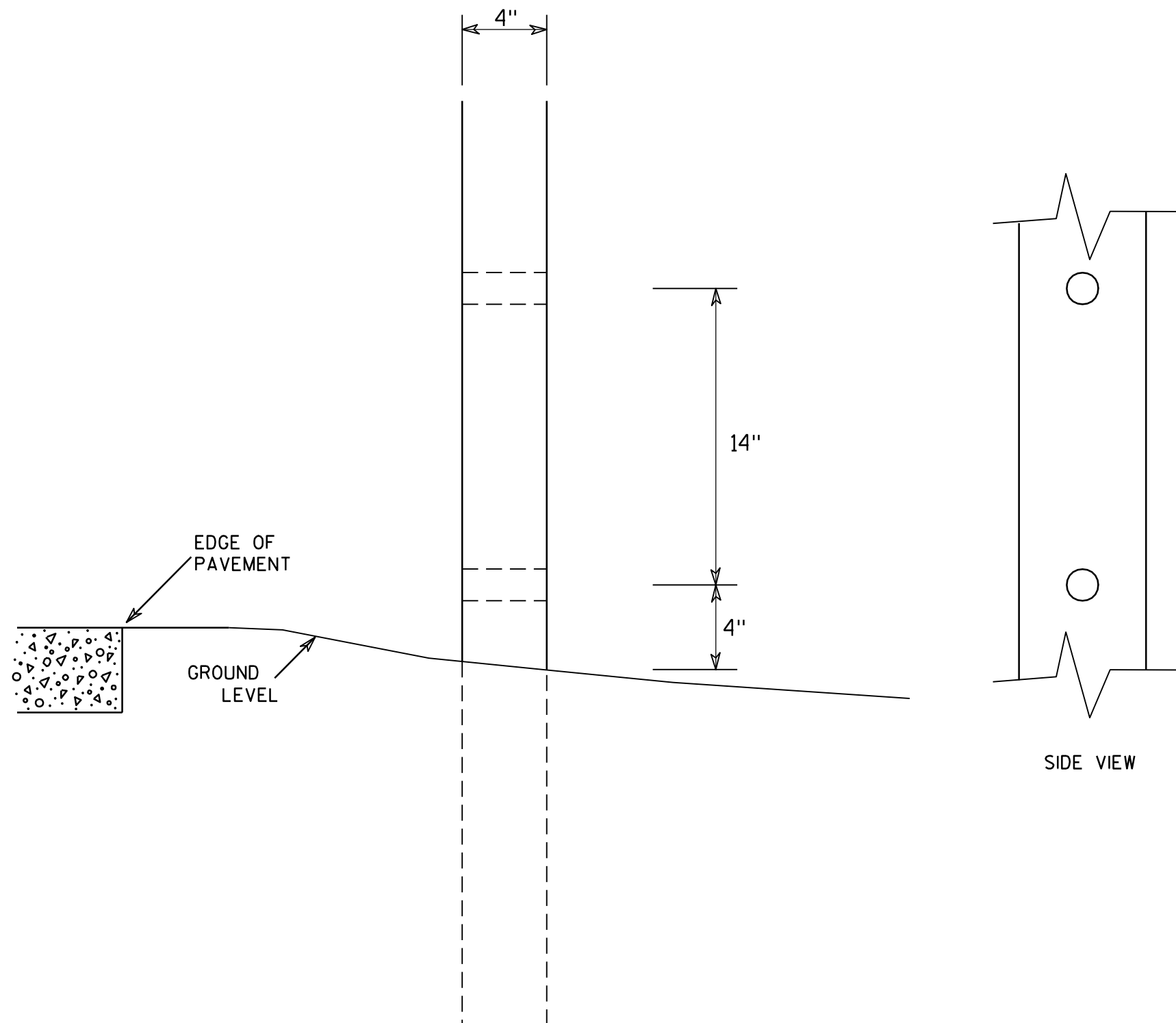
PLOT BY : mscs_ja

PLOT NAME :

PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42

7



GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

HWY:

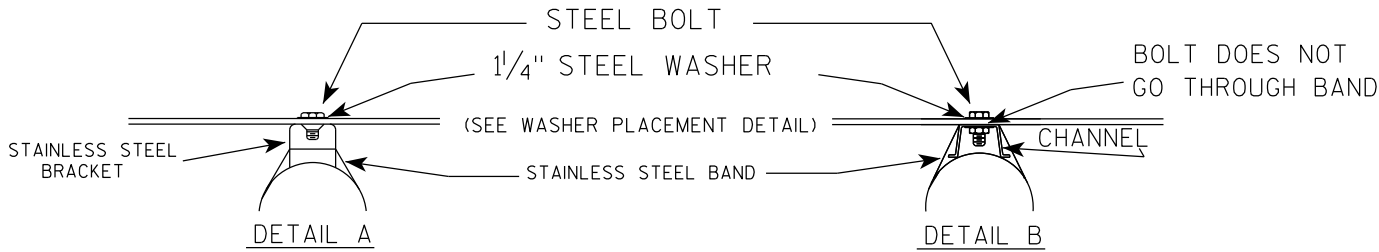
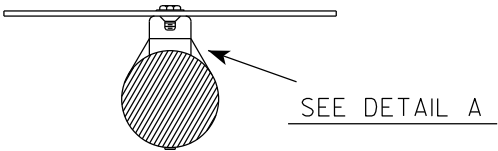
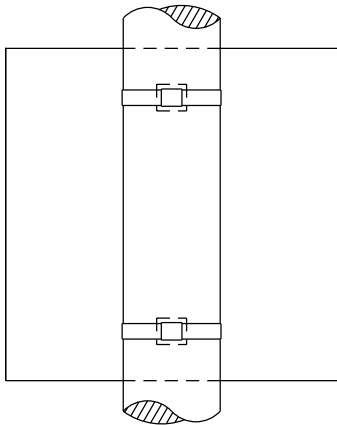
COUNTY:

SHEET NO: 43

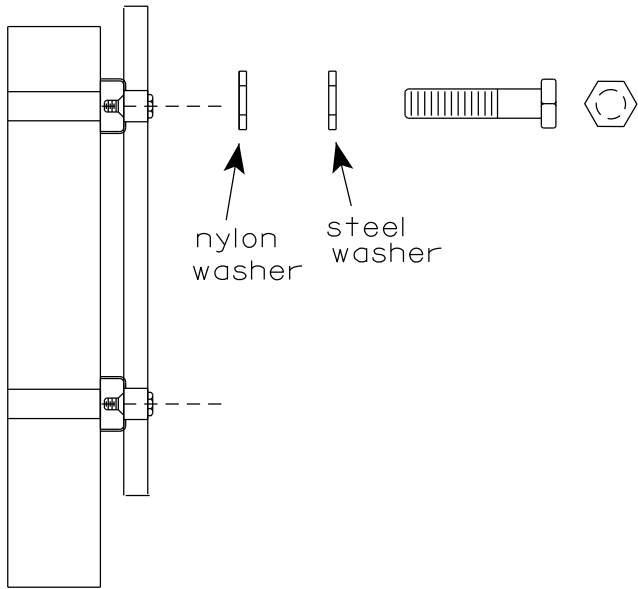
E

BANDING

SINGLE SIGN



WASHER PLACEMENT

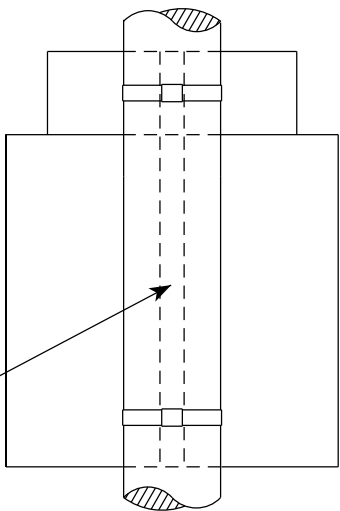


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

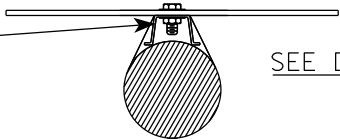
GENERAL NOTES

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

"J" ASSEMBLY



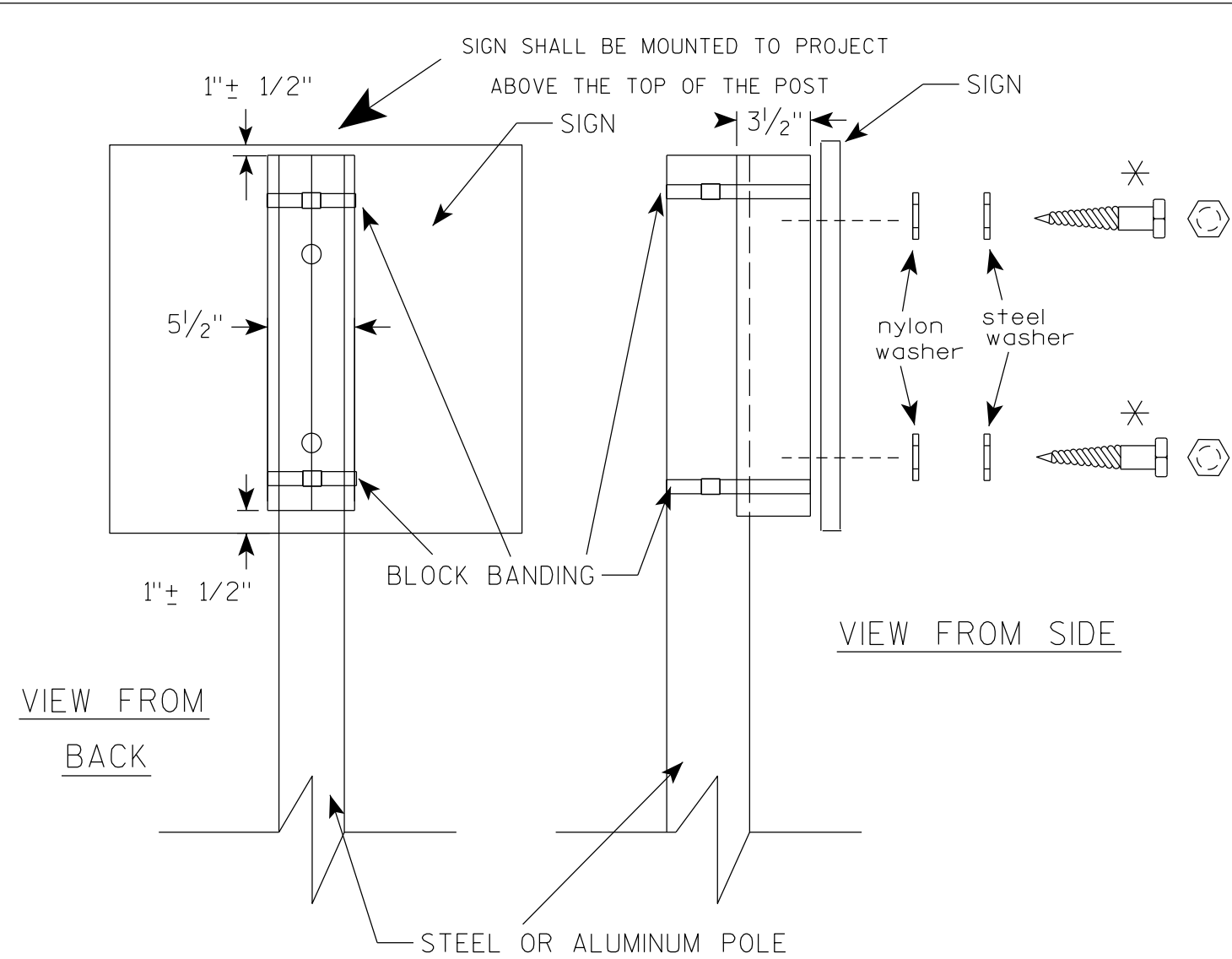
CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



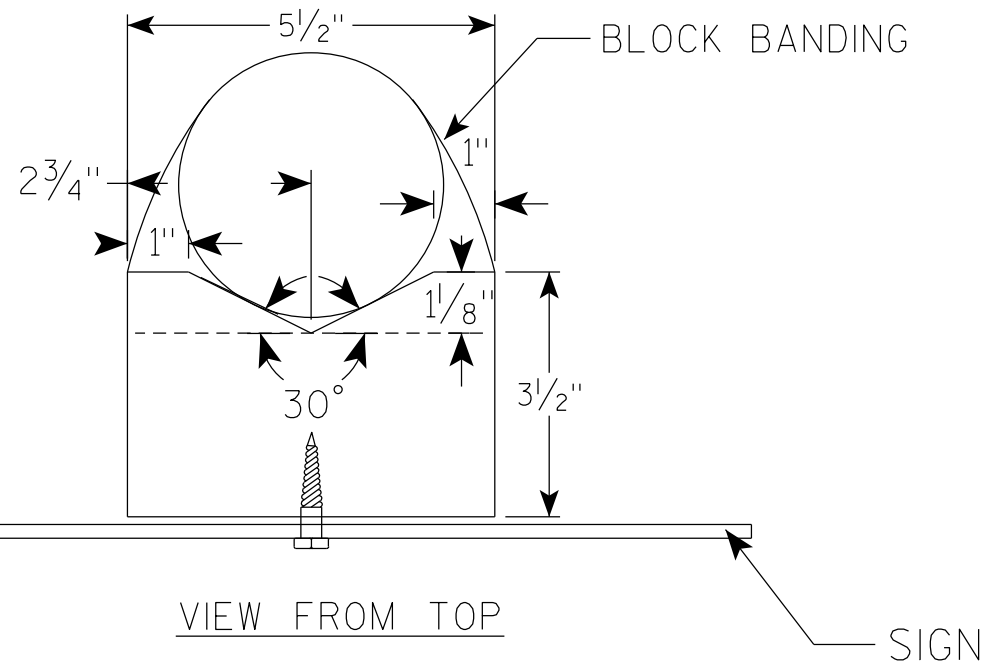
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/10/19 PLATE NO. A5-9.4



VIEW FROM
BACK



GENERAL NOTES

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

✱ LAG BOLTS SHALL BE 3/8" X 2 1/2"

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 45

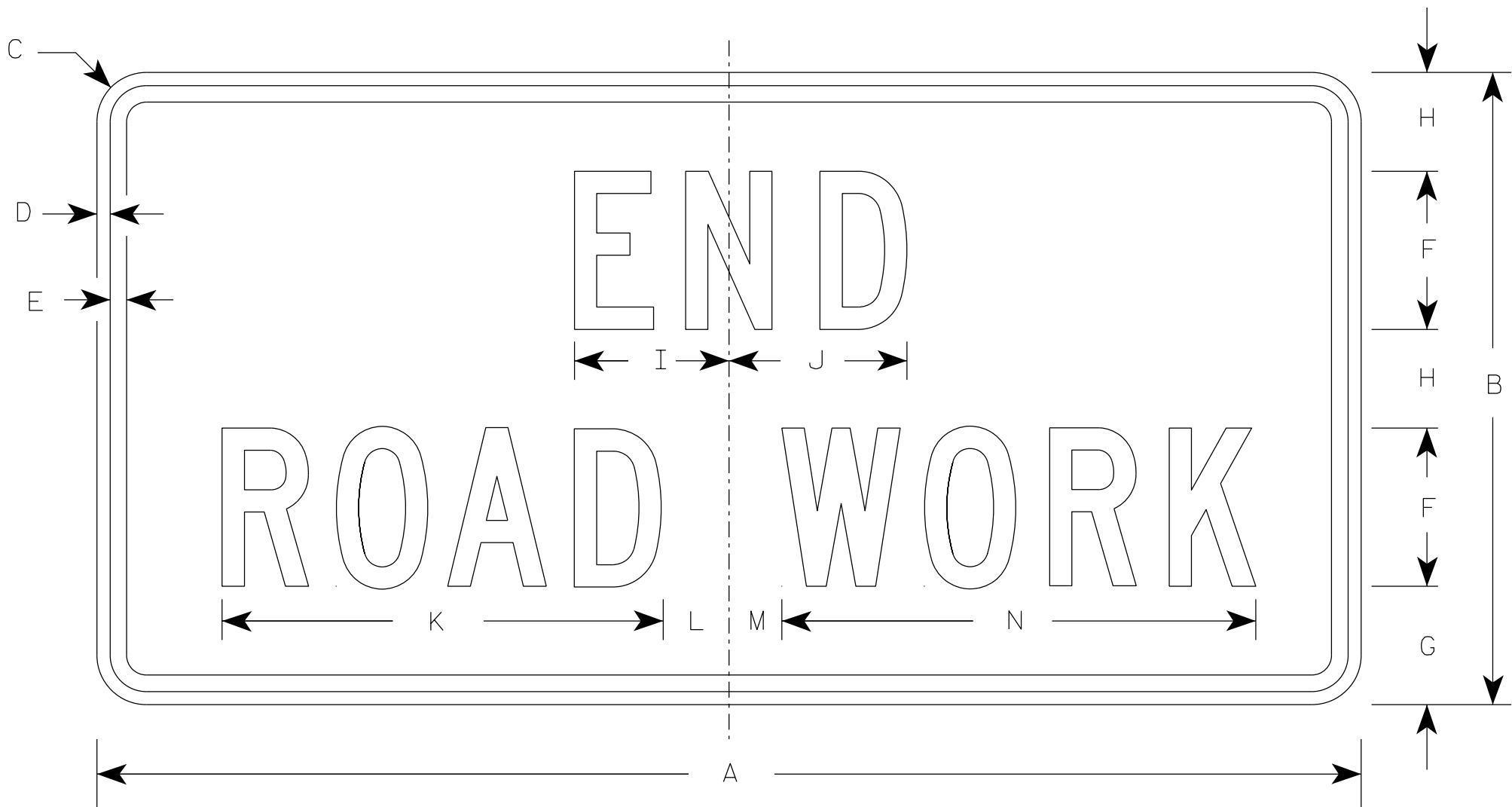
E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:

Background - Orange

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



G20-2A

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

STANDARD SIGN

G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

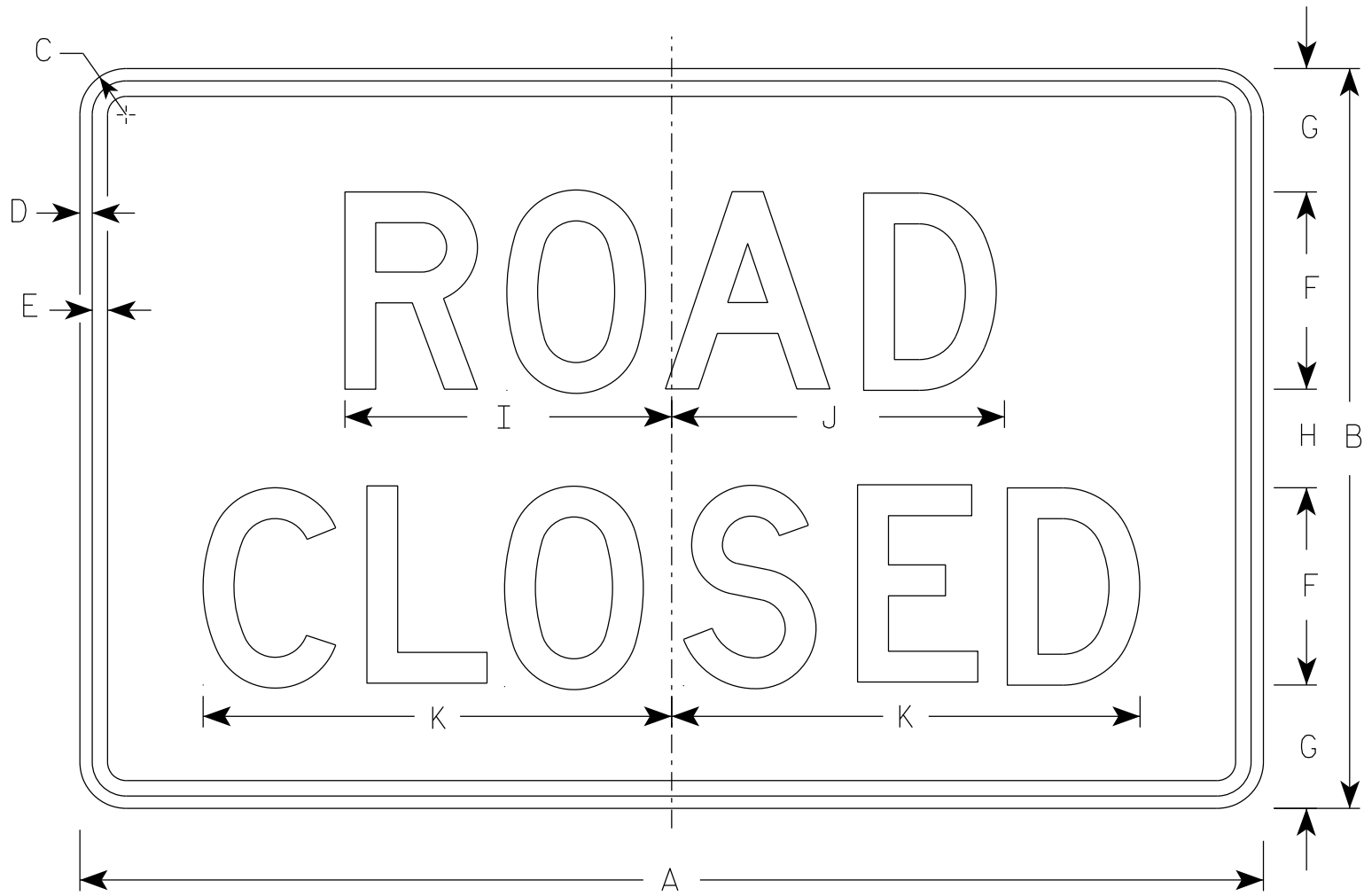
PROJECT NO:

HWY:

COUNTY:

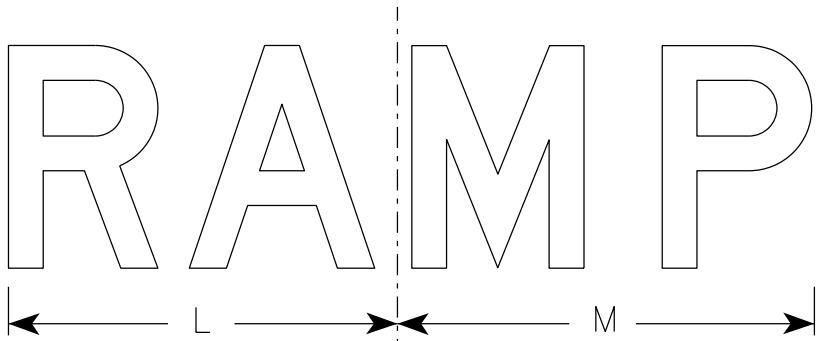
SHEET NO: 46

E

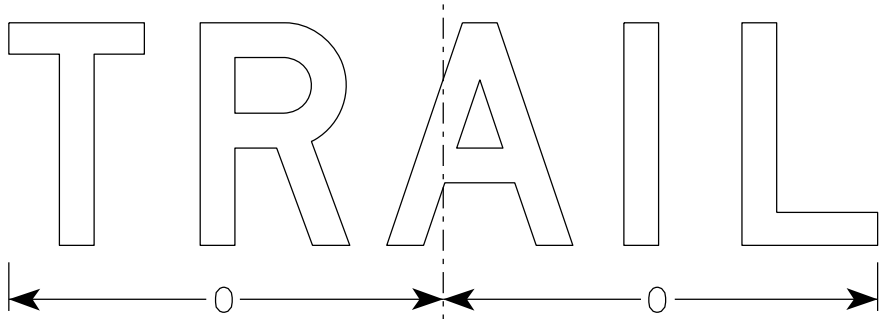


R11-2

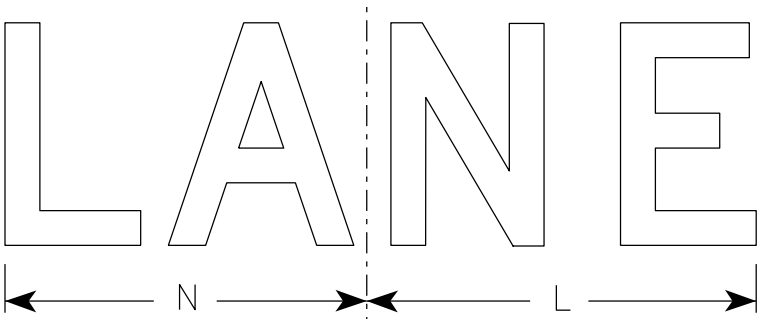
- NOTES
1. Sign is Type II - Type H Reflective
 2. Color:
Background - White
Message - Black
 3. Message Series - D
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
 5. Modify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



R11-2R



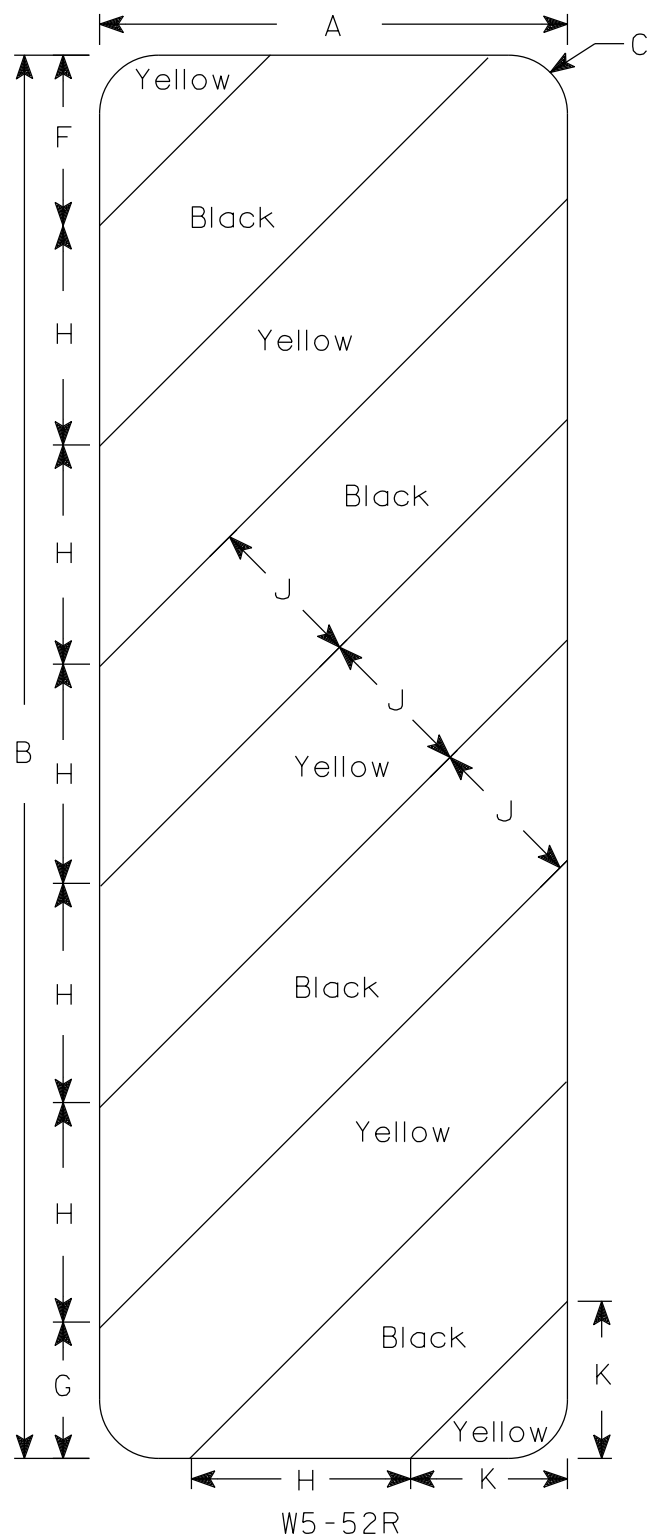
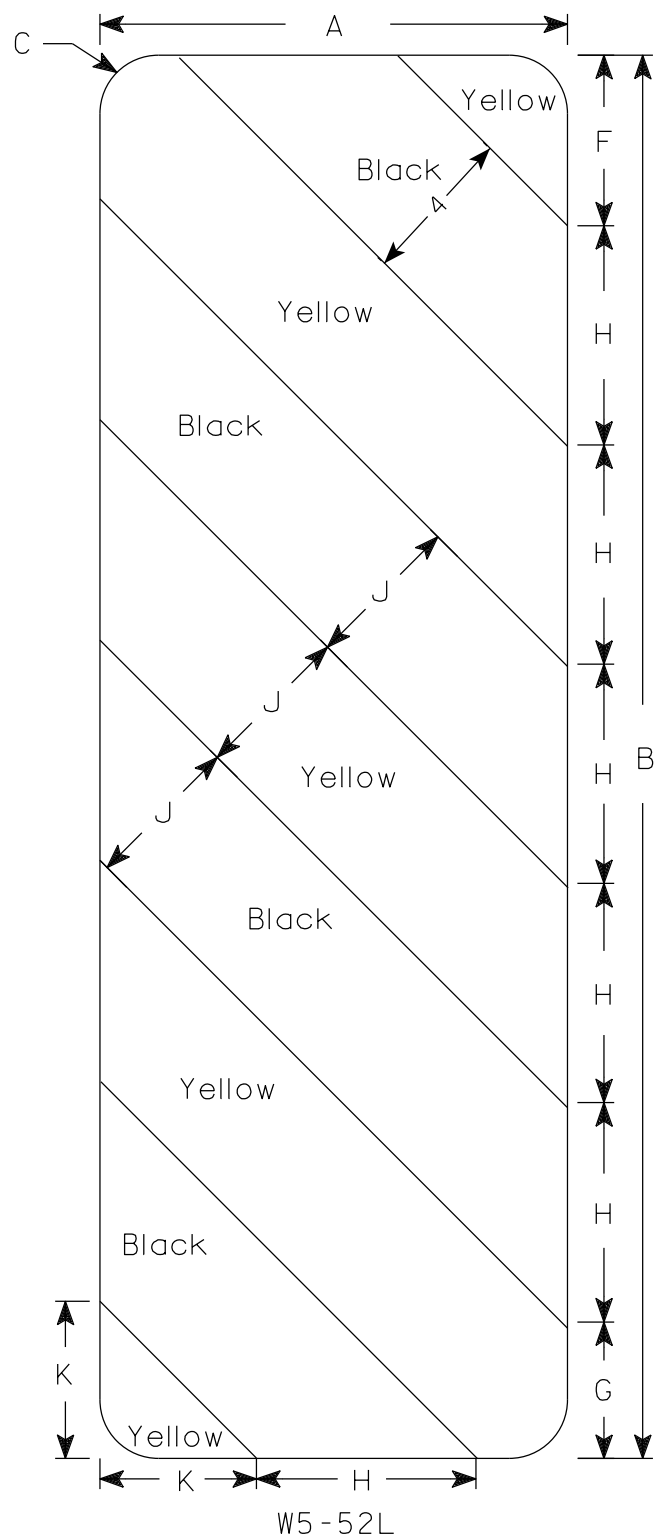
R11-2T



R11-2L

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

STANDARD SIGN R11-2	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 2/5/24	PLATE NO. R11-2.12



NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
 - Background - Yellow
 - Message - Black
- 3. Alternate colors of stripes as shown.

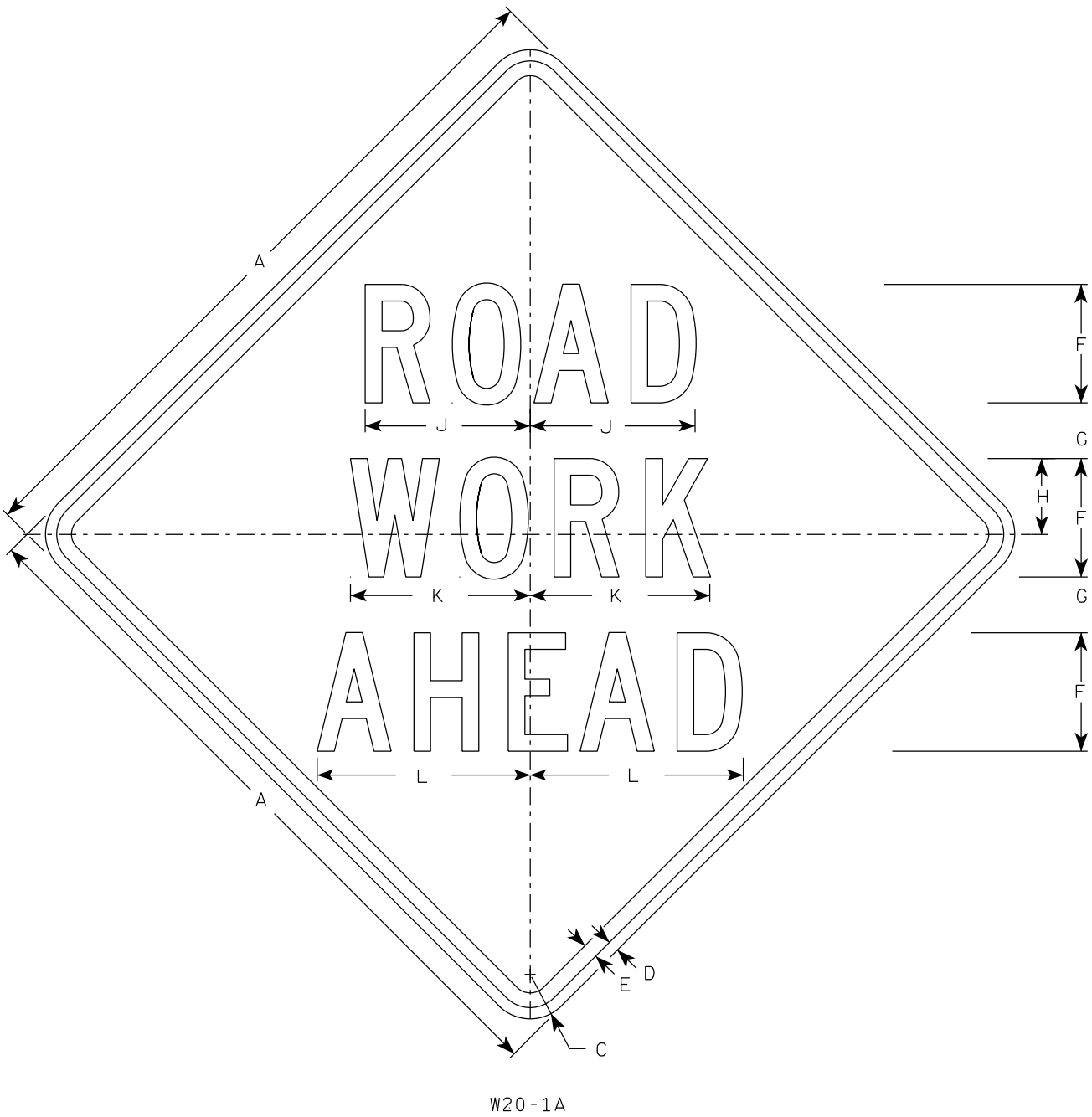
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54	1 1/2			6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN
W5-52L & W5-52R

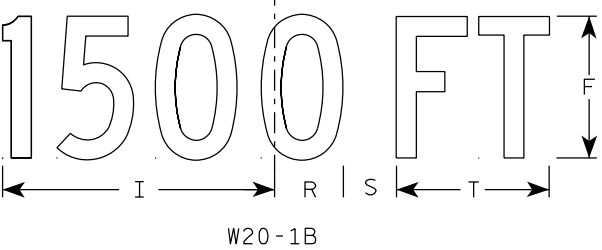
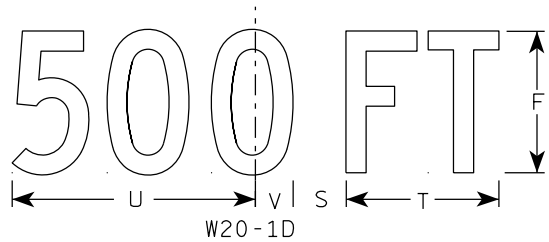
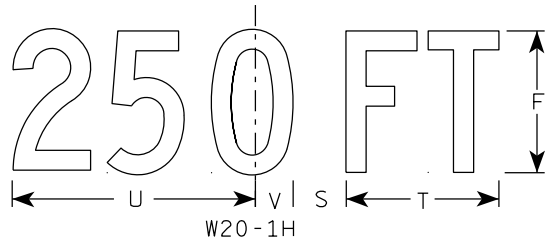
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/4/2024 PLATE NO. W5-52.10

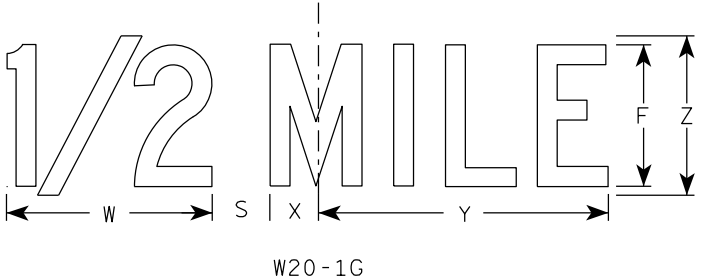


W20-1A

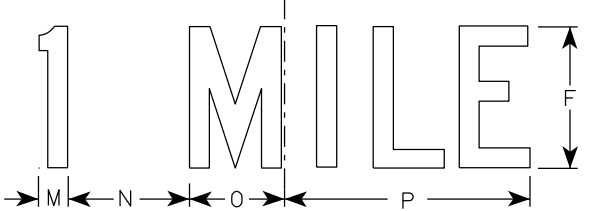


W20-1B

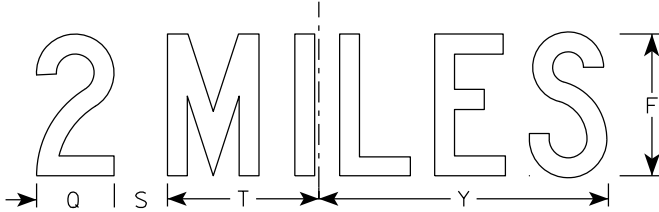
- NOTES
- 1. Sign is Type II - Type F Reflective
 - 2. Color:
 - Background - Orange
 - Message - Black
 - 3. Message Series - C
 - 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G



W20-1F



W20-1E

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

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.07
OPERATING RATING FACTOR: RF = 1.39
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250 (KIPS)

CONCRETE MASONRY: _____
SUPERSTRUCTURE _____ $f'_c = 4,000$ P.S.I.
ALL OTHER _____ $f'_c = 3,500$ P.S.I.

BAR STEEL REINFORCEMENT: _____ $f_y = 60,000$ P.S.I.

†† THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

CAIN ROAD
ADT = 83 (2046)
R.D.S. = 40 M.P.H.

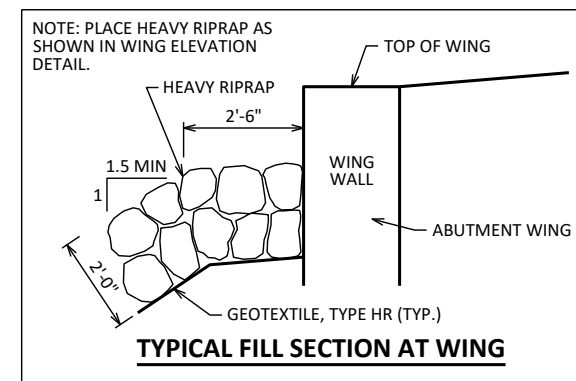
$Q_{100} = 2,030 \text{ C.F.S.}$
 $VEL. = 6.1 \text{ F.P.S.}$
 $HW_{100} = EL. 935.24$
 $\text{WATERWAY AREA} = 189.0 \text{ SQ. FT.}$
 $\text{DRAINAGE AREA} = 21.3 \text{ SQ. MI.}$
 $\text{ROADWAY OVERTOPPING} = 880 \text{ C.F.S.}$
 $\text{SCOUR CRITICAL CODE} = 5$

Q₂ = 380 C.F.S.
VEL. = 4.2 F.P.S.
HW₂ = EL. 930.01

Q₁₇ = 1,184 C.F.S
HW₁₇ = EL. 934.80

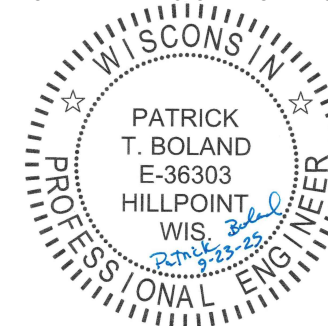
1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT
5. WEST ABUTMENT DETAILS
6. EAST ABUTMENT
7. EAST ABUTMENT DETAILS
8. SUPERSTRUCTURE
9. SUPERSTRUCTURE DETAILS
10. TUBULAR STEEL RAILING TYPE 'M'

POINT	STATION	OFFSET
A	9+33	31' LT.
B	9+50	31' LT.
C	9+72	31' LT.
D	9+95	31' LT.
E	10+17	31' RT.
F	10+03	31' RT.
G	9+78	31' RT.
H	9+56	31' RT.



PATRICK BOLAND	608-588-7484
AARON BONK	608-261-0261

THESE PLANS ARE BASED UPON STANDARD BRIDGE PLANS DEVELOPED AND MAINTAINED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION THROUGH THE USE OF THE WISDOT STANDARD BRIDGE DESIGN TOOL. THE UNDERSIGNED DESIGNER CERTIFIES THE ACCURACY OF THE BRIDGE TYPE, SIZE AND LOCATION, HYDRAULICS AND FOUNDATION SUPPORT, AND INFORMATION IN THE PLANS THAT IS NOT PART OF THE STANDARD PLANS SUPPLIED BY THE DEPARTMENT. THE DESIGNER FURTHER CERTIFIES THAT USE OF THE STANDARD BRIDGE DESIGN TOOL FOR DEVELOPMENT OF THIS PLAN IS CONSISTENT WITH THE GUIDANCE PROVIDED IN THE WISDOT BRIDGE MANUAL.



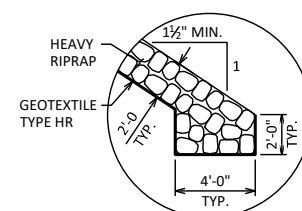
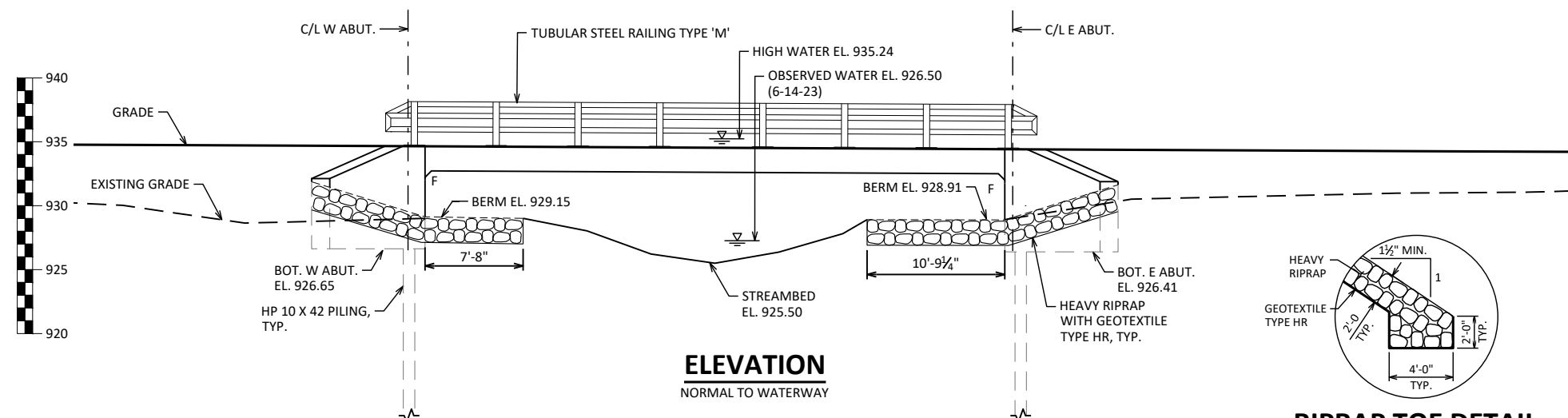
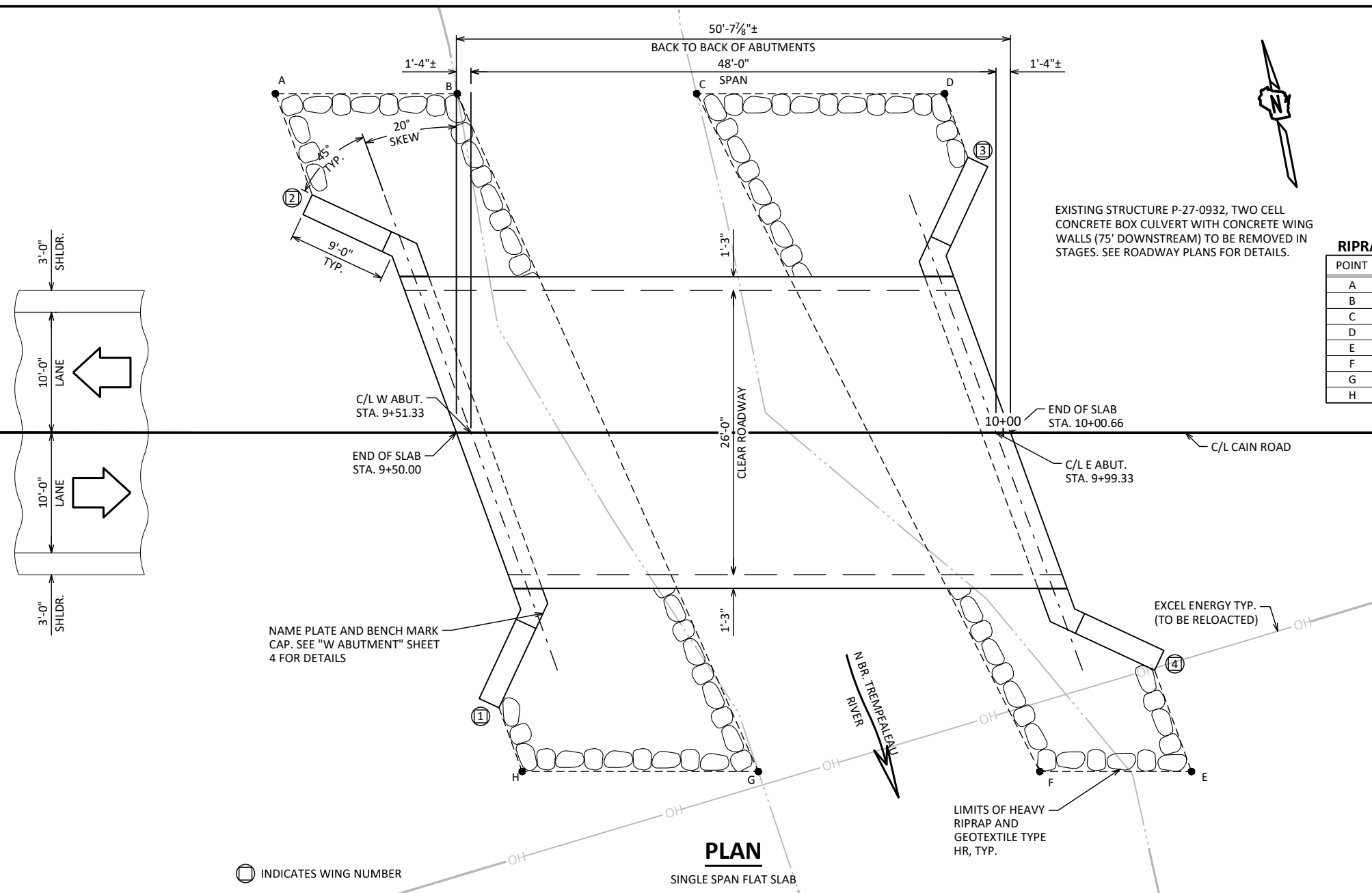
JEWELL 560 SUNRISE DRIVE
SPRING GREEN, WI 53588
OFFICE: (608) 588-7484
www.JewellAssoc.com

ACCEPTED  JLR 11/10/25
CHIEF STRUCTURES DESIGN ENGINEER DATE

DESIGN SPEC.	
AASHTO LRFD BRIDGE DESIGN SPECIFICATION	

SHEET 1 OF 10

DATE: _____



RIPRAP TOE DETAIL

THIS SHEET WAS CREATED BY THE WISDOT BUREAU OF STRUCTURES STANDARD BRIDGE DESIGN TOOL VERSION 1.1.0.0

SCALE - 13

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

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

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES B-27-0178" SHALL BE THE EXISTING GROUNDLINE.

AT THE BACK FACE 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 TYPE A.

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE HR TO THE EXTENT SHOWN ON SHEET 1 AND THE ABUTMENT DETAILS.

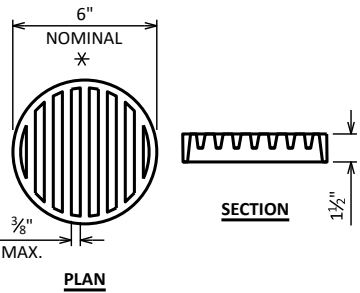
AT ABUTMENTS, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.

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

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO ENTIRE EXPOSED TOP OF SLAB, INCLUDING THE SLAB EDGE AND 1'-0" UNDER THE SLAB, THE TOP AND EXTERIOR EXPOSED FACE OF WINGS AND FRONT FACE OF ABUTMENT TO 1'-0" PAST THE EDGE OF SLAB.

BENCH MARK

NO.	STA.	DESCRIPTION	ELEV.
101	11+24	3/4" IRON REBAR SET, 29.0' RT.	932.77
102	9+94	CGSS, 39.2' LT.	933.38
103	5+18	3/4" IRON REBAR SET, 35.5' RT.	942.46



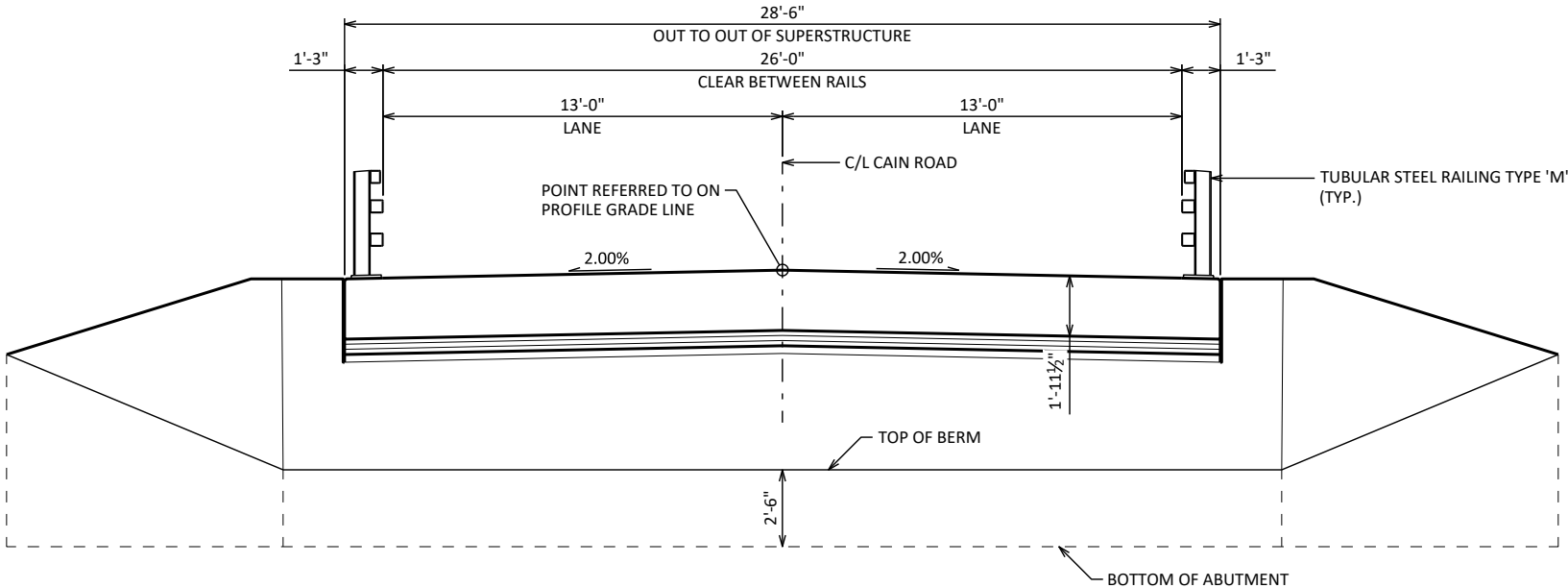
RODENT SHIELD DETAIL

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

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

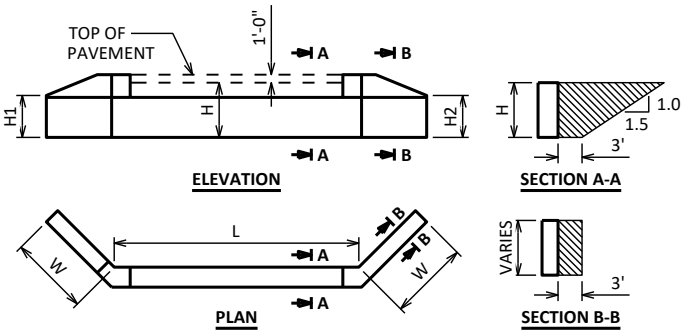
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH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

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-27-178			
DRAWN BY		ZMF	PLANS CK'D PTB
CROSS SECTION & QUANTITIES		SHEET 2 OF 10 51	



CROSS SECTION THRU ROADWAY

LOOKING UPSTATION
(PILING NOT SHOWN FOR CLARITY)

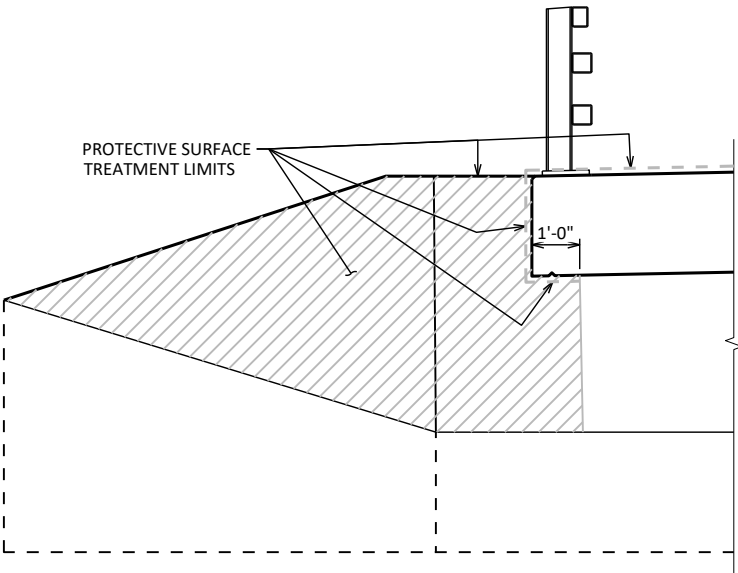


ABUTMENT BACKFILL DIAGRAM

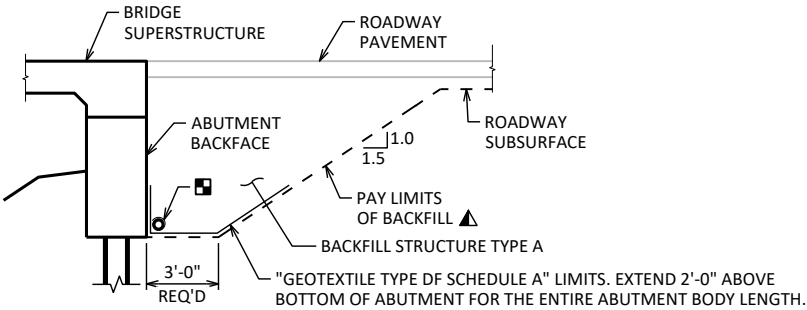
- L = ABUTMENT BODY LENGTH AT BACKFACE (FT)
- H = AVERAGE ABUTMENT FILL HEIGHT (FT)
- H1 = WING 1 HEIGHT AT TIP (FT)
- H2 = WING 2 HEIGHT AT TIP (FT)
- W = WING LENGTH (FT)
- EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
- $V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H) + (3')(0.5)(H1+H2+H+H)(W)$
- $V_{CY} = V_{CF}(EF)/27$
- $V_{TON} = V_{CY}(2.0)$

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER	W ABUT.	E ABUT.	TOTALS
203.0250	REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS (P-27-0932)	EACH	---	---	---	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES (B-27-0178)	EACH	---	---	---	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	---	166	166	332
502.0100	CONCRETE MASONRY BRIDGES	CY	109	27	27	163
502.3200	PROTECTIVE SURFACE TREATMENT	SY	190	15	15	220
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	---	2,210	2,210	4,420
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	24,280	1,540	1,540	27,360
513.4061	RAILING TUBULAR TYPE M	LF	106	---	---	106
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	---	6	6	12
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	---	560	560	1,120
606.0300	RIPRAP HEAVY	CY	---	75	75	150
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	---	72	72	144
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	---	46	46	92
645.0120	GEOTEXTILE TYPE HR	SY	---	145	135	280
SPV.0195	SELECT CRUSHED MATERIAL FOR TRAVEL CORRIDOR	TON	---	33	32	65
NON-BID ITEMS						
	FILLER	SIZE	---	---	---	½", ¾"
	NAME PLATE					



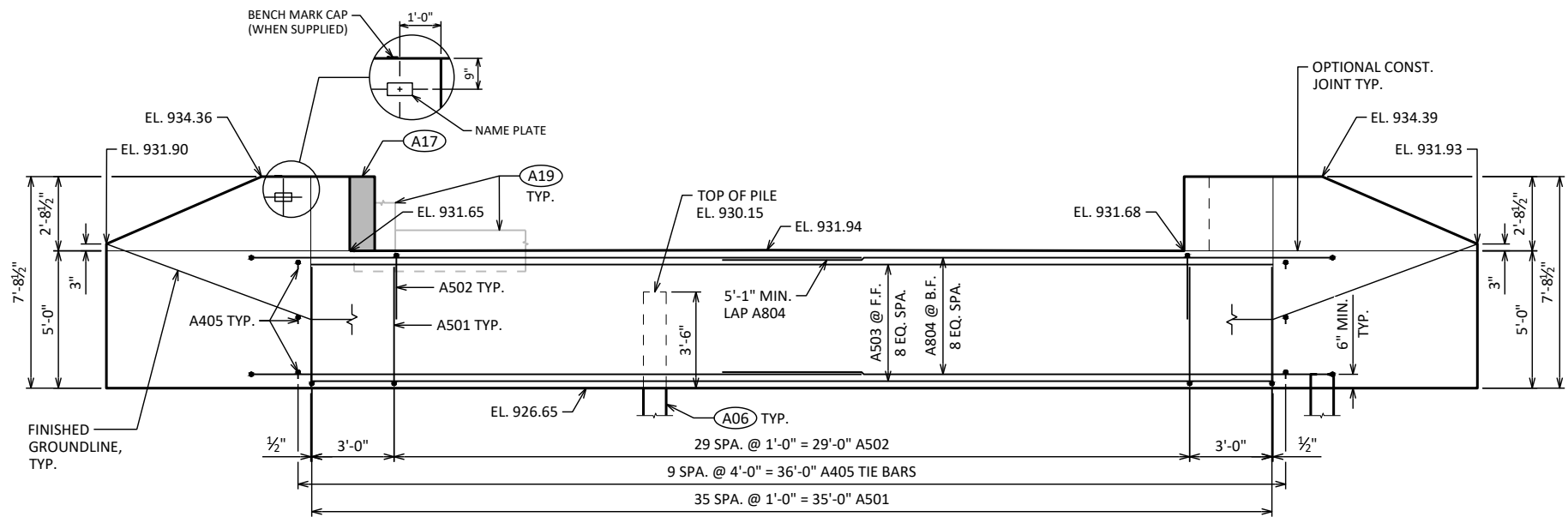
PROTECTIVE SURFACE TREATMENT DETAILS



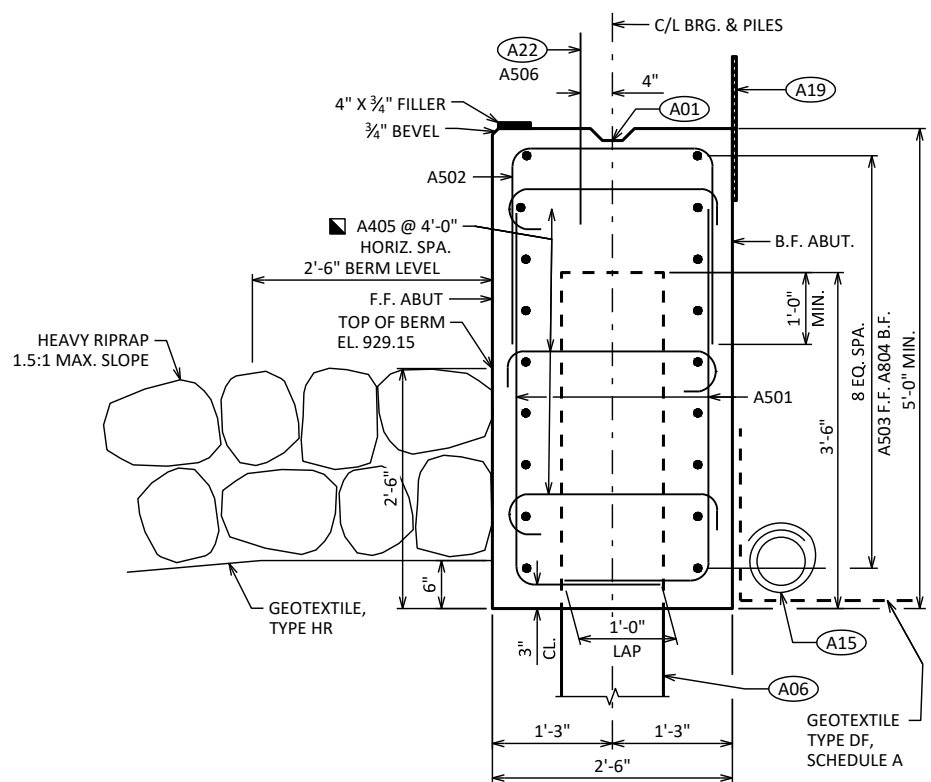
TYPICAL SECTION THRU ABUTMENT

▲ BACKFILL PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

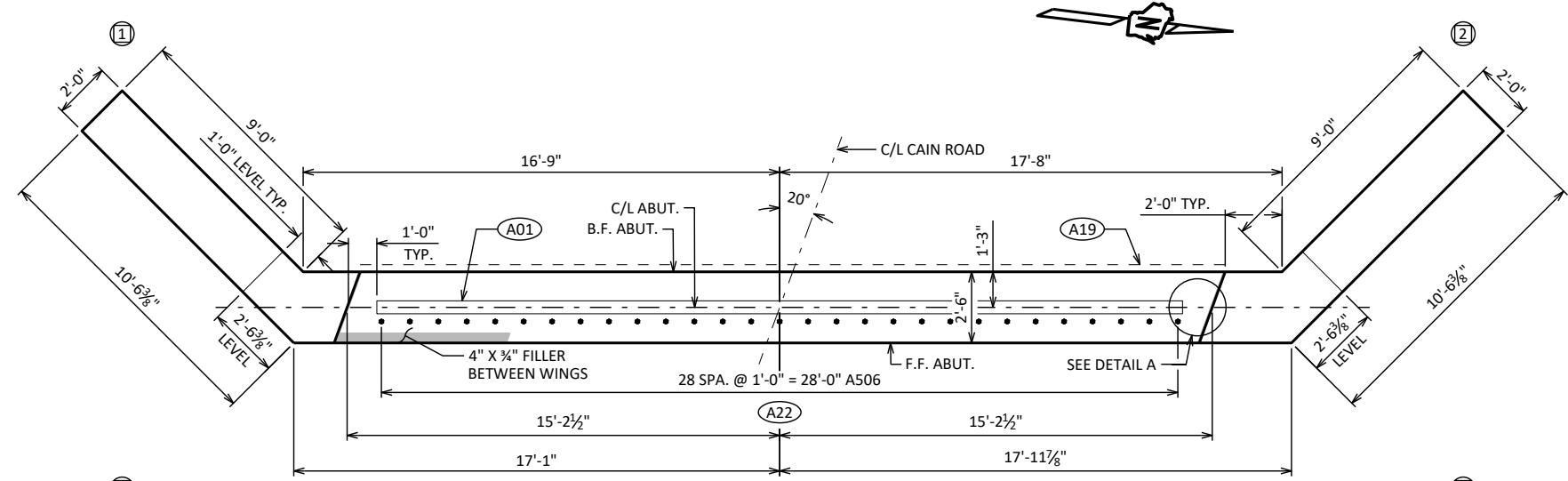
■ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.



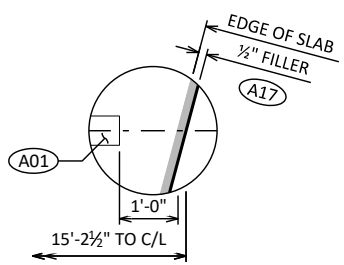
ELEVATION
LOOKING DOWNSTATION



SECTION THRU BODY

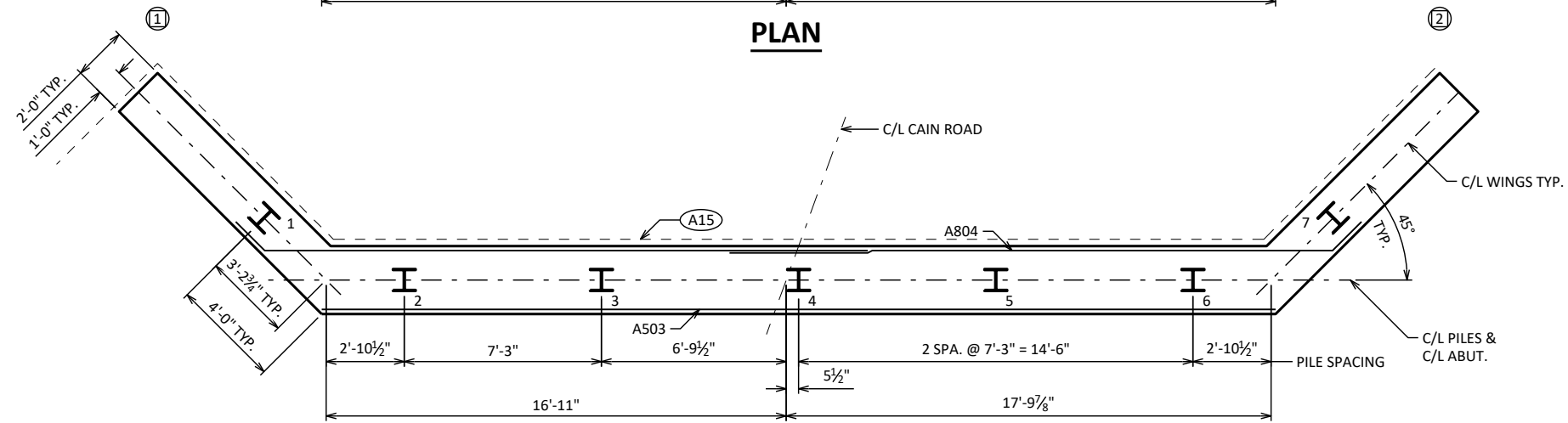


PLAN



DETAIL A

- A01** CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6.
- A06** SUPPORT ABUTMENT ON HP 10 x 42 PILING, ESTIMATED 80 FT LONG WITH A REQUIRED DRIVING RESISTANCE OF 140 TONS PER PILE.
- A15** PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- A17** 1/2" FILLER: SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 3/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- A19** 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- A22** A506 BARS SPACED @ 1'-0" CNTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES.

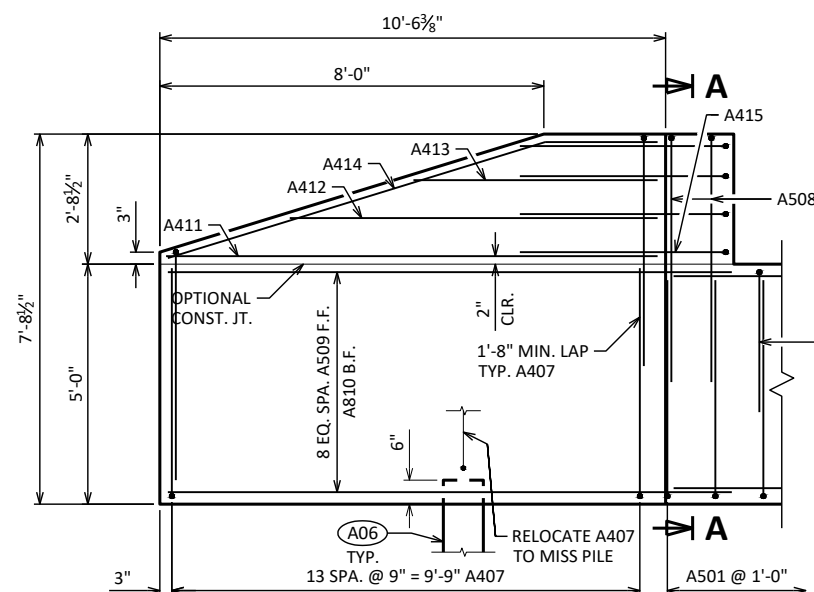


PILE PLAN

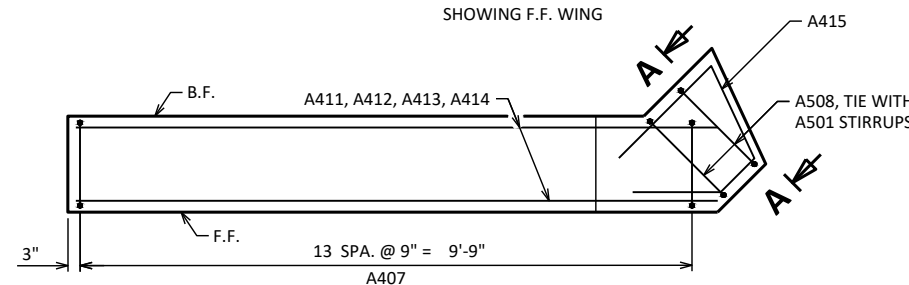
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-27-178			
DRAWN BY		ZMF	PLANS CK'D PTB
WEST ABUTMENT		SHEET 4 OF 10 53	

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

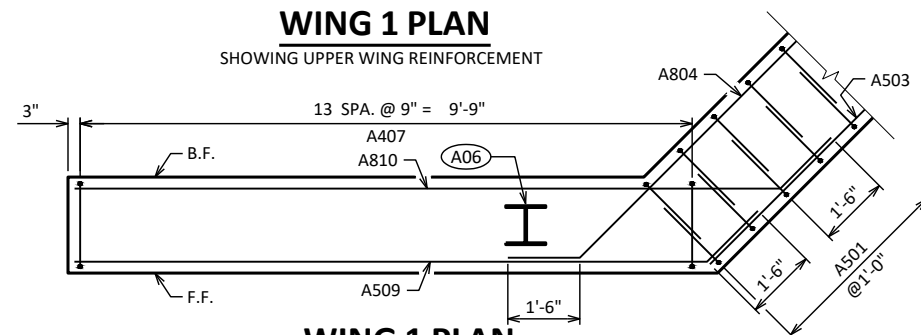
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		72	6'-0"	X		ABUT BODY STIRRUPS
A502		30	7'-9"	X		ABUT BODY STIRRUPS - TOP U-BAR
A503		9	35'-1"			ABUT BODY HORIZ. - F.F.
A804		18	23'-6"	X		ABUT BODY HORIZ. - B.F.
A405		30	3'-0"	X		ABUT BODY TIE BARS
A506	X	29	2'-0"			ABUT BODY DOWEL BARS
A407	X	56	11'-0"	X		WING STIRRUPS
A508	X	6	12'-1"	X		WING CORNER STIRRUPS
A509	X	18	11'-9"	X		WING LOWER HORIZ - F.F.
A810	X	18	13'-3"	X		WING LOWER HORIZ. - B.F.
A411	X	4	10'-2"			WING UPPER HORIZ.
A412	X	4	7'-7"			WING UPPER HORIZ.
A413	X	4	5'-0"			WING UPPER HORIZ.
A414	X	4	9'-9"	X		WING TOP HORIZ.
A415	X	4	7'-6"	X		WING 1 UPPER HORIZ. CORNER
A416	X	4	9'-5"	X		WING 2 UPPER HORIZ. CORNER



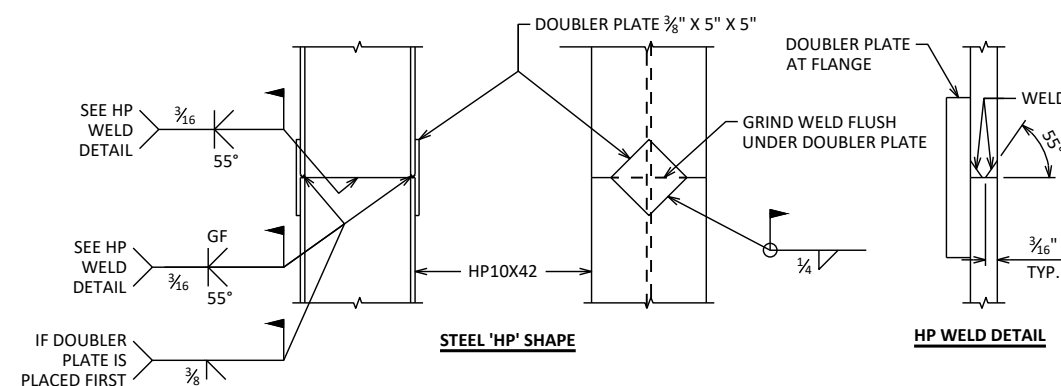
SHOWING F.F. WING



SHOWING UPPER WING REINFORCEMENT

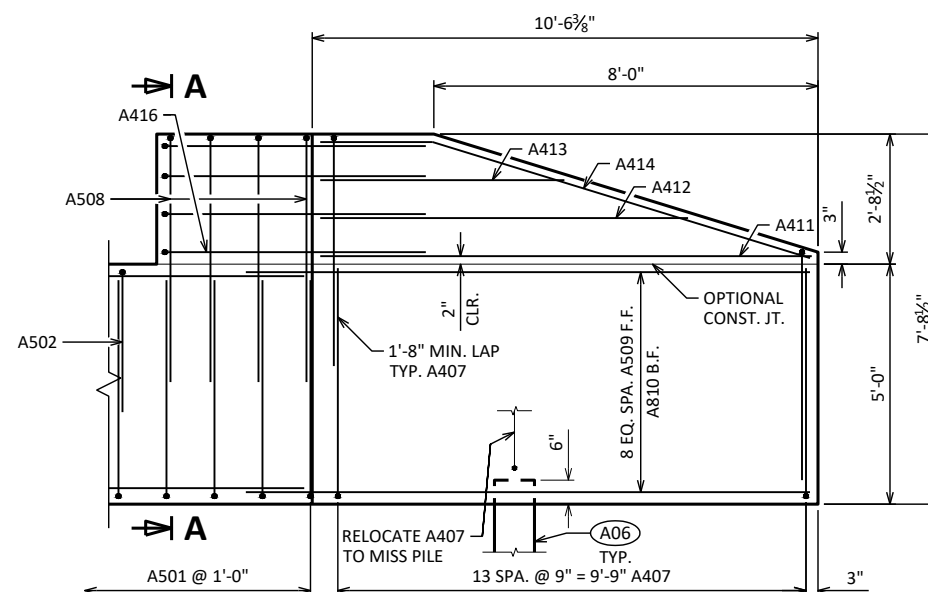


SHOWING LOWER WING REINFORCEMENT
WING 2 SIMILAR

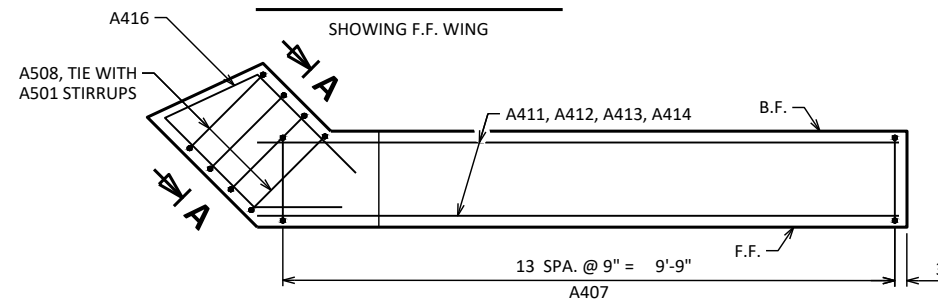


'HP' PILE DETAILS

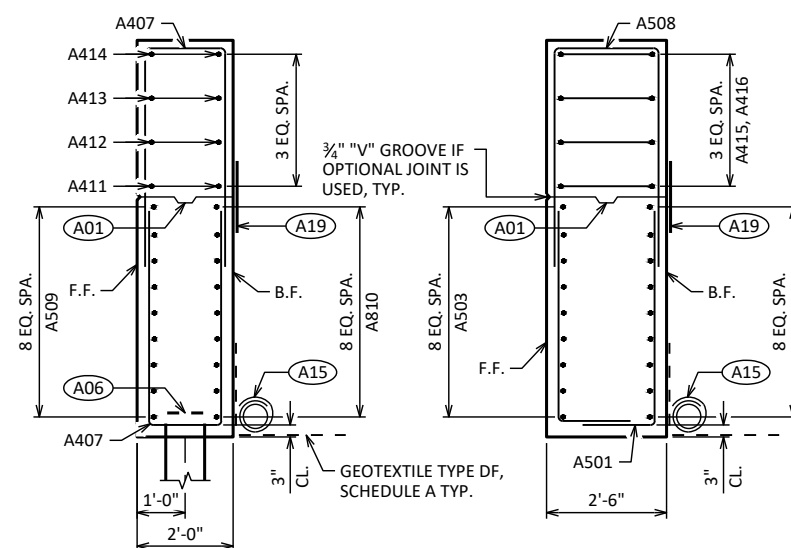
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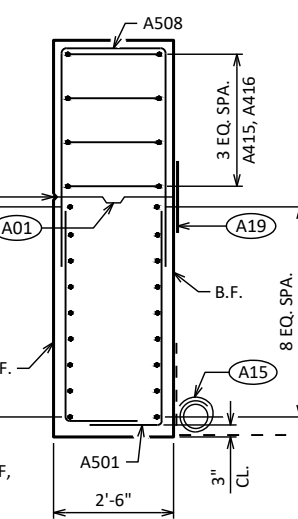
SHOWING F.F. WING



SHOWING UPPER WING REINFORCEMENT

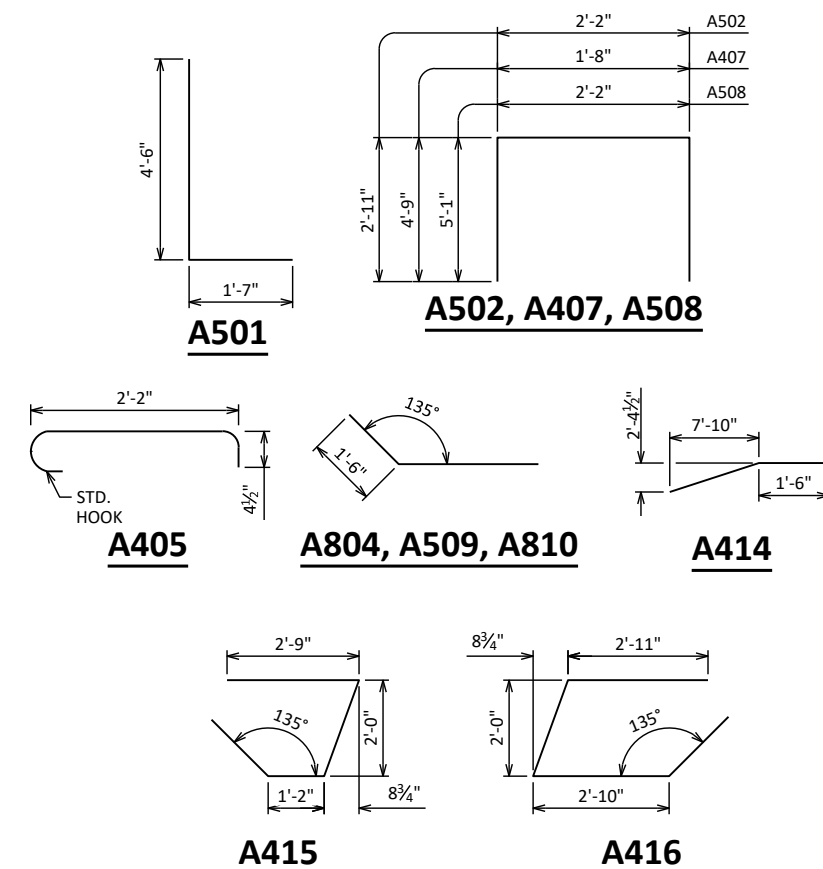


TYPICAL BOTH WINGS



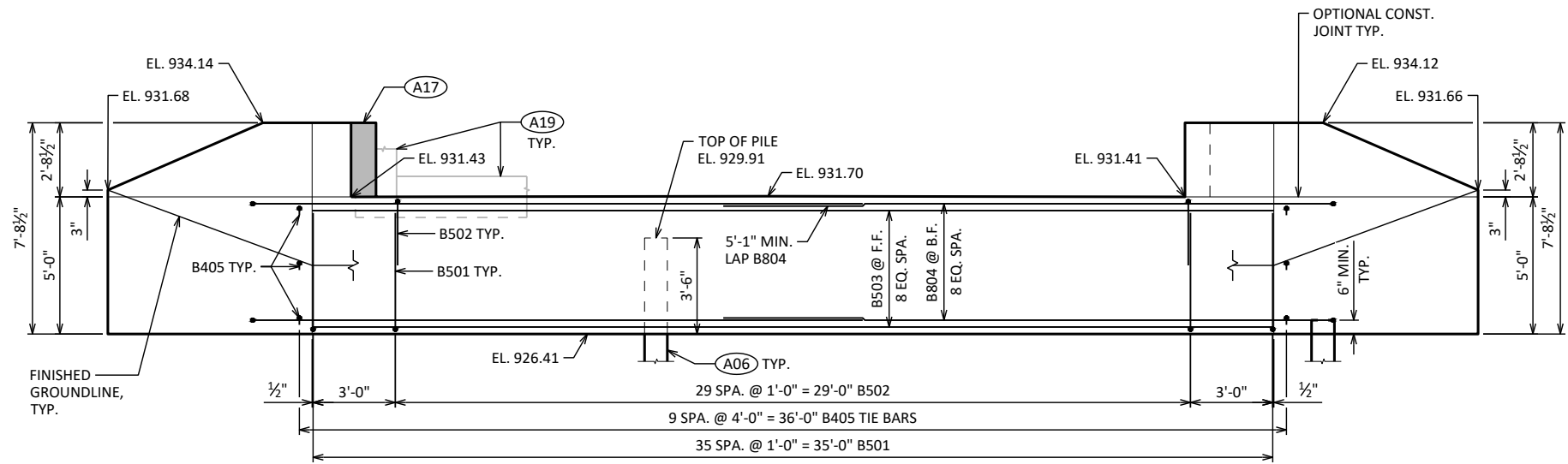
SECTION A-A

- A01** OPTIONAL CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6. PROVIDE 3/4" "V" GROOVE ON F.F. OF WINGWALL IF JOINT IS GROUED.
- A06** SUPPORT ABUTMENT ON HP 10 x 42 PILING, ESTIMATED 80 FT LONG WITH A REQUIRED DRIVING RESISTANCE OF 140TONS PER PILE.
- A15** PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- A19** 18" RUBBERIZED MEMBRANE WATERPROOFING, ONLY IF OPTIONAL CONSTRUCTION JOINT IS USED. COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY STRUCTURES".

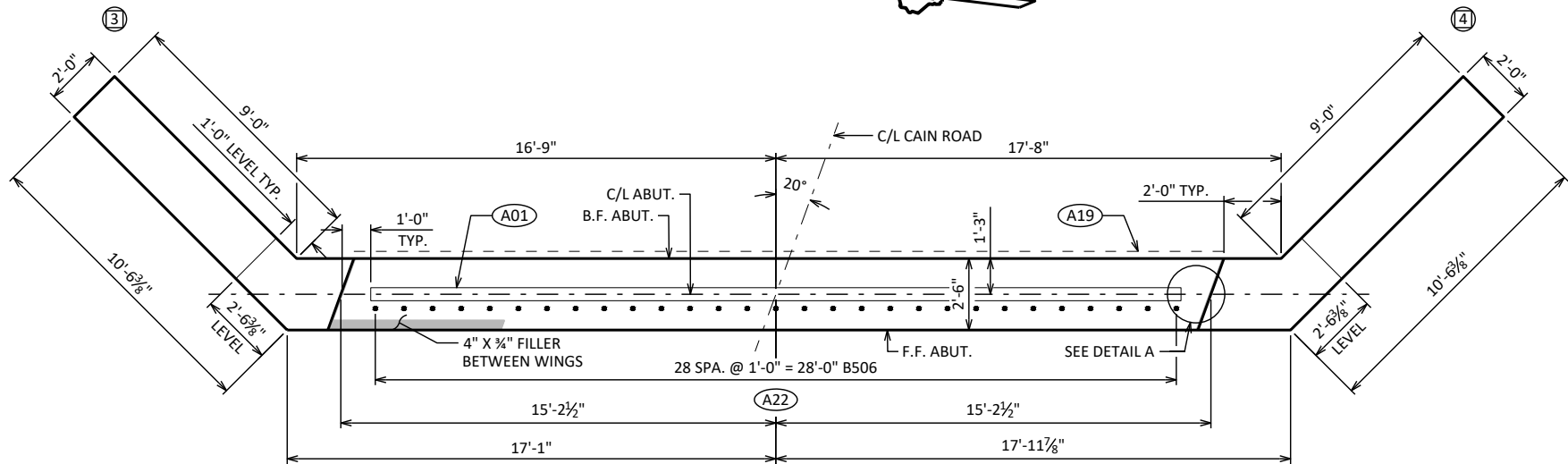


NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		B-27-178	
	DRAWN BY	ZMF	PLANS CK'D PTE
WEST ABUTMENT DETAILS		SHEET 5 OF 10	
		54	

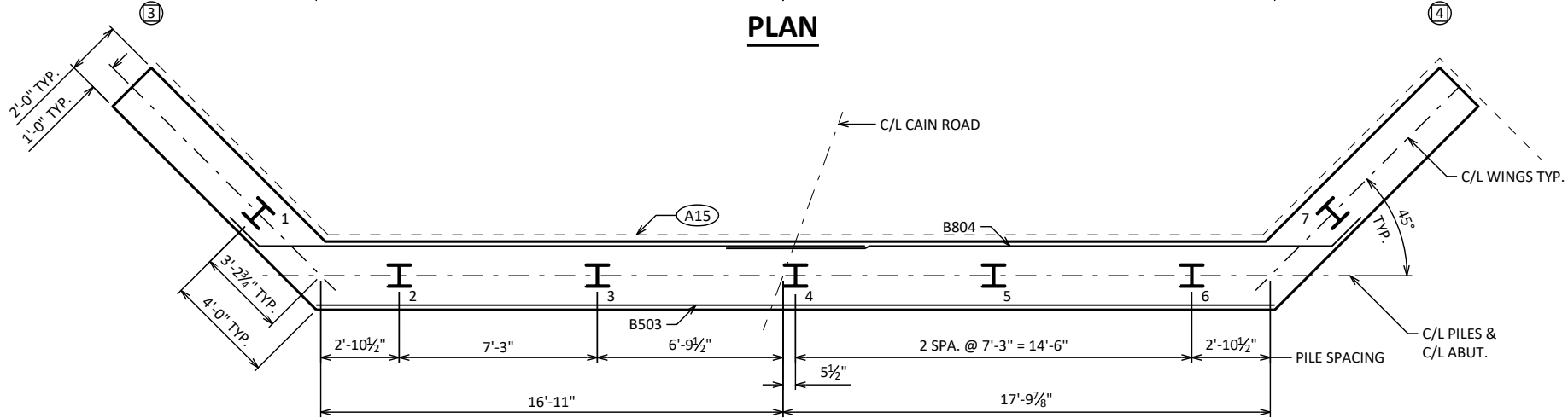
SCALE -



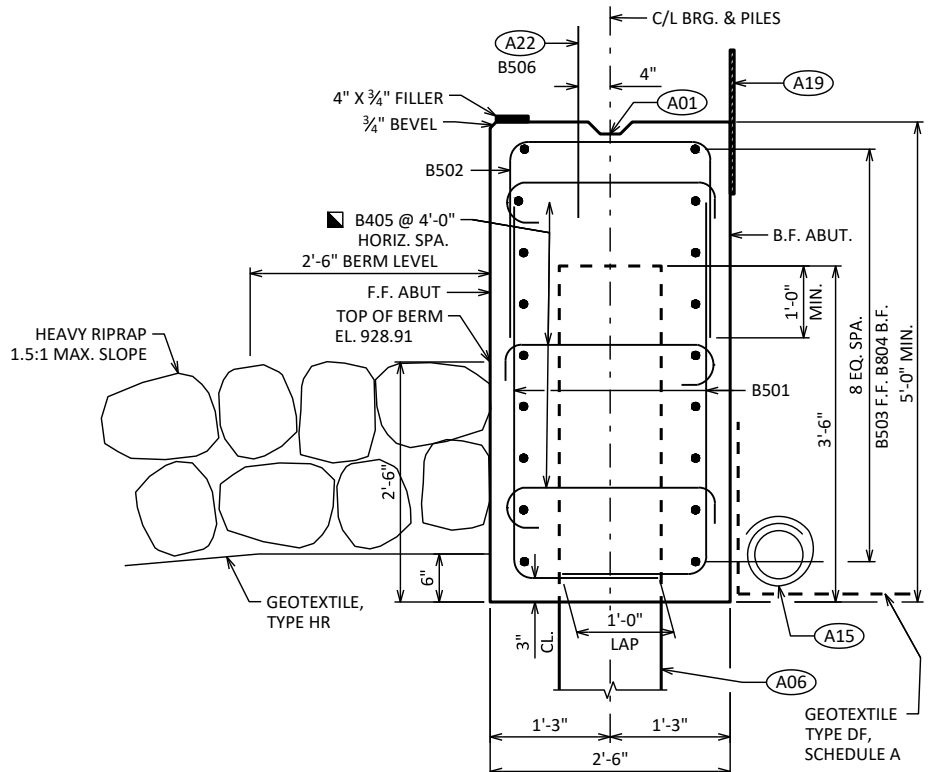
ELEVATION
LOOKING UPSTATION



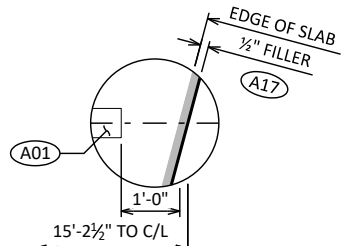
PLAN



PILE PLAN



SECTION THRU BODY



DETAIL A

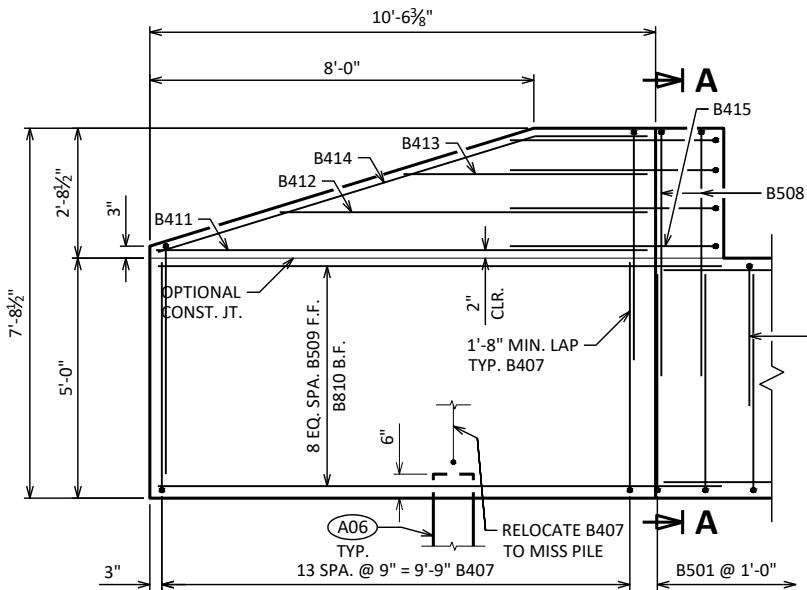
- (A01) CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6.
- (A06) SUPPORT ABUTMENT ON HP 10 x 42 PILING, ESTIMATED 80 FT LONG WITH A REQUIRED DRIVING RESISTANCE OF 140TONS PER PILE.
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- (A17) 1/2" FILLER: SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 3/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- (A19) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- (A22) B506 BARS SPACED @ 1'-0" CNTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-27-178			
DRAWN BY ZMF		PLANS CK'D PTB	
EAST ABUTMENT		SHEET 6 OF 10	55

BILL OF BARS

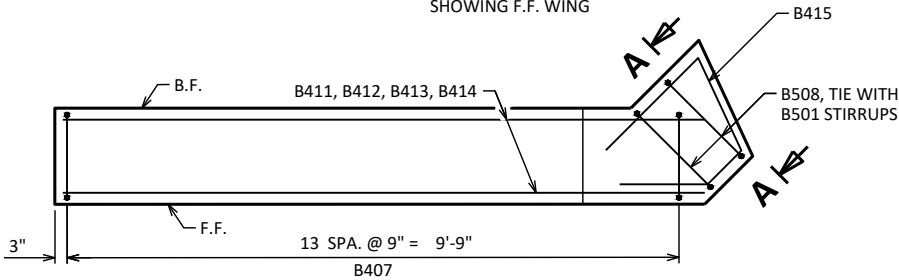
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B501		72	6'-0"	X		ABUT BODY STIRRUPS
B502		30	7'-9"	X		ABUT BODY STIRRUPS - TOP U-BAR
B503		9	35'-1"			ABUT BODY HORIZ. - F.F.
B804		18	23'-6"	X		ABUT BODY HORIZ. - B.F.
B405		30	3'-0"	X		ABUT BODY TIE BARS
B506	X	29	2'-0"			ABUT BODY DOWEL BARS
B407	X	56	11'-0"	X		WING STIRRUPS
B508	X	6	12'-1"	X		WING CORNER STIRRUPS
B509	X	18	11'-9"	X		WING LOWER HORIZ. - F.F.
B810	X	18	13'-3"	X		WING LOWER HORIZ. - B.F.
B411	X	4	10'-2"			WING UPPER HORIZ.
B412	X	4	7'-7"			WING UPPER HORIZ.
B413	X	4	5'-0"			WING UPPER HORIZ.
B414	X	4	9'-9"	X		WING TOP HORIZ.
B415	X	4	7'-6"	X		WING 3 UPPER HORIZ. CORNER
B416	X	4	9'-5"	X		WING 4 UPPER HORIZ. CORNER



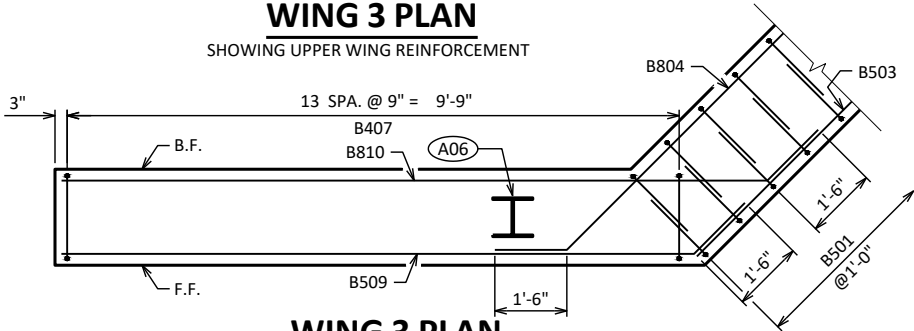
WING 3 ELEVATION

SHOWING F.F. WING



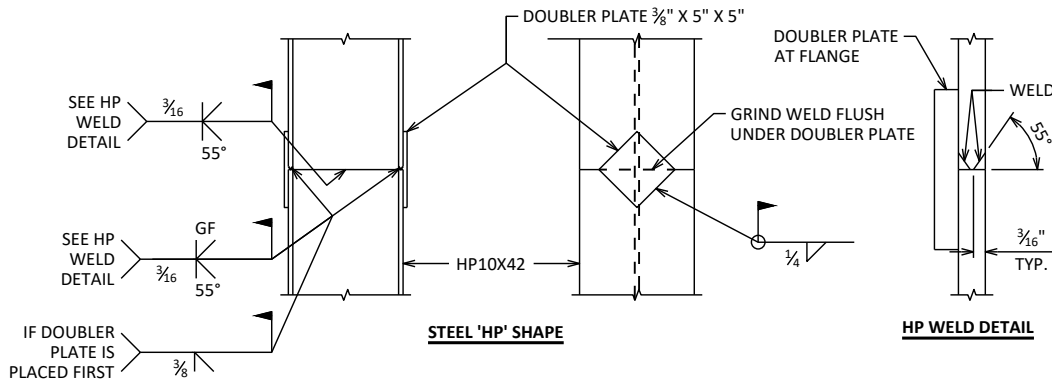
WING 3 PLAN

SHOWING UPPER WING REINFORCEMENT



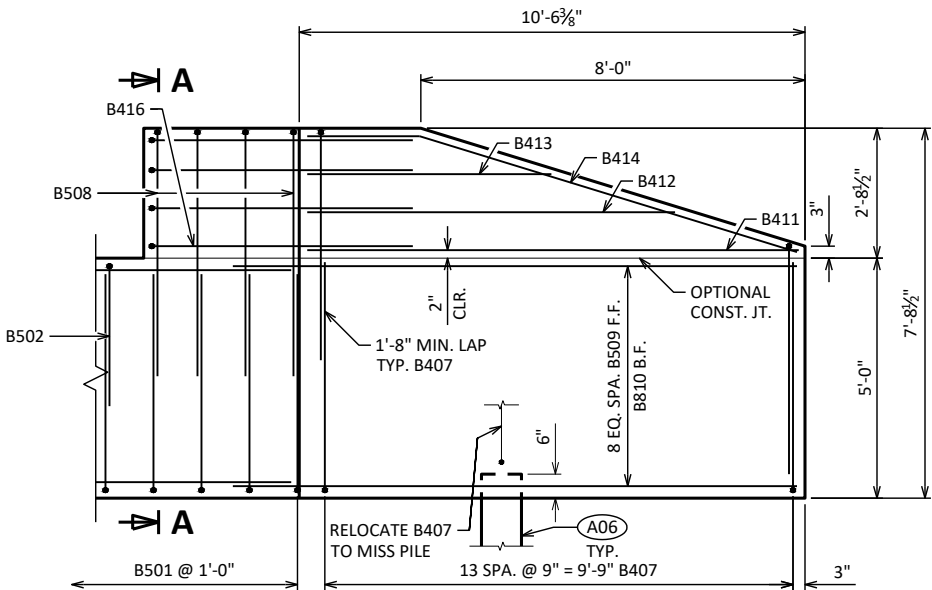
WING 3 PLAN

SHOWING LOWER WING REINFORCEMENT
WING 4 SIMILAR



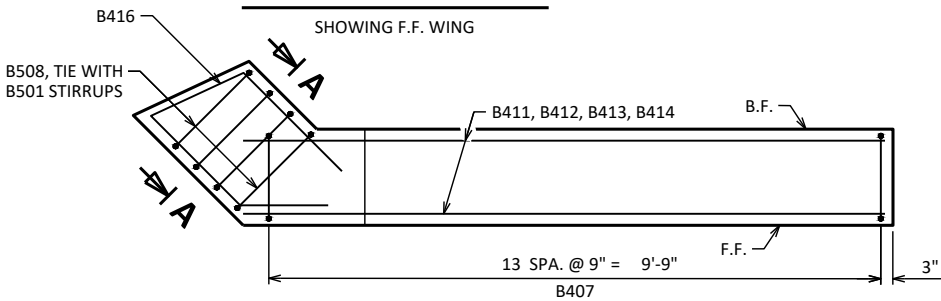
'HP' PILE DETAILS

THIS SHEET WAS CREATED BY THE WISDOT BUREAU OF STRUCTURES STANDARD BRIDGE DESIGN TOOL VERSION 1.1.0.0



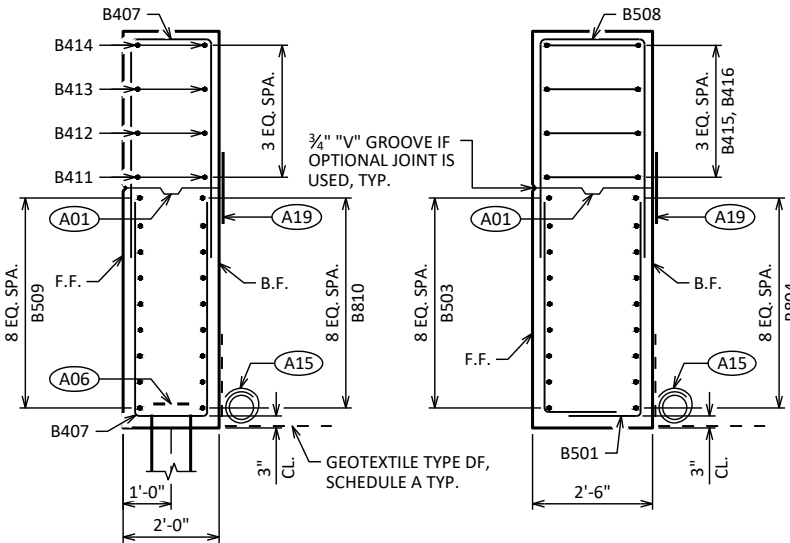
WING 4 ELEVATION

SHOWING F.F. WING



WING 4 PLAN

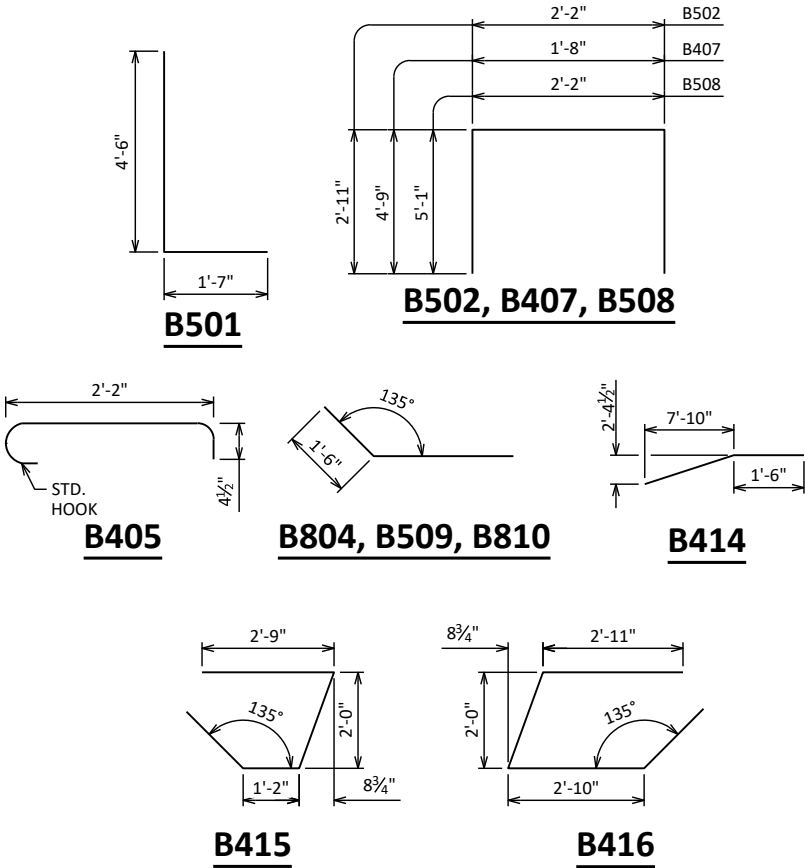
SHOWING UPPER WING REINFORCEMENT



SECTION THRU WING 3

TYPICAL BOTH WINGS

SECTION A-A



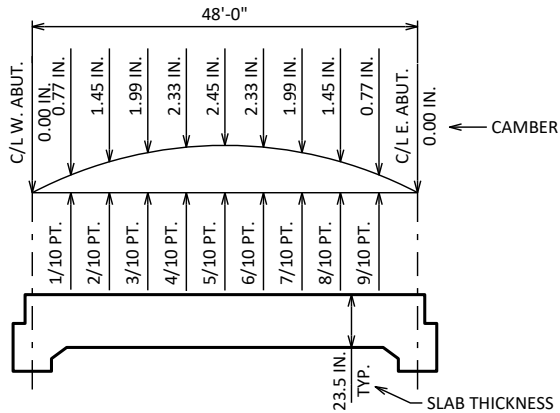
- A01 OPTIONAL CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6. PROVIDE 3/4" "V" GROOVE ON F.F. OF WINGWALL IF JOINT IS USED.
- A06 SUPPORT ABUTMENT ON HP 10 x 42 PILING, ESTIMATED 80 FT LONG WITH A REQUIRED DRIVING RESISTANCE OF 140TONS PER PILE.
- A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- A19 18" RUBBERIZED MEMBRANE WATERPROOFING, ONLY IF OPTIONAL CONSTRUCTION JOINT IS USED. COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY STRUCTURES".

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-27-178			
DRAWN BY ZMF		PLANS CK'D PTB	
EAST ABUTMENT DETAILS		SHEET 7 OF 10 56	

SCALE =



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		B-27-178	
	DRAWN BY	ZMF	PLANS CK'D PTB
SUPERSTRUCTURE		SHEET 8 OF 10	
		— 57 —	



CAMBER AND SLAB THICKNESS DIAGRAM

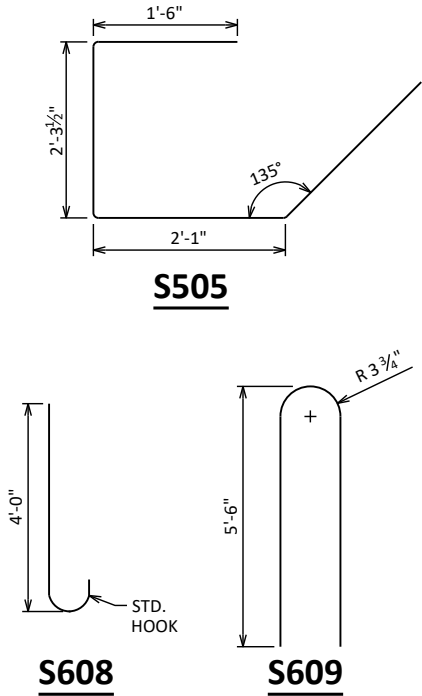
CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT. PARAPETS PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED, EXCEPT FOR STAGED CONSTRUCTION.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR REFERENCE LINE FOLLOW THIS PROCEDURE:

LESS	TOP OF SLAB ELEVATION AT FINAL GRADE
PLUS	SLAB THICKNESS
PLUS	CAMBER
PLUS	FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)
EQUALS	TOP OF SLAB FALSEWORK ELEVATION

TOP OF SLAB ELEVATIONS

LOCATION	C/L BRG. W. ABUT.	1/10 PT.	2/10 PT.	3/10 PT.	4/10 PT.	5/10 PT.	6/10 PT.	7/10 PT.	8/10 PT.	9/10 PT.	C/L BRG. E. ABUT.
N. EDGE OF DECK	934.39	934.37	934.34	934.32	934.30	934.27	934.25	934.22	934.20	934.18	934.15
CROWN OR R/L	934.65	934.63	934.60	934.58	934.56	934.53	934.51	934.48	934.46	934.43	934.41
S. EDGE OF DECK	934.34	934.32	934.29	934.27	934.24	934.22	934.20	934.17	934.15	934.12	934.10



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
S1101	X	62	50'-3"			SLAB BOTTOM LONGITUDINAL
S702	X	51	29'-11"			SLAB BOTTOM TRANSVERSE
S503	X	51	29'-11"			SLAB TOP TRANSVERSE
S504	X	23	50'-3"			SLAB TOP LONGITUDINAL
S505	X	58	7'-8"	X		ABUTMENT DIAPHRAGM STIRRUPS
S506	X	4	29'-11"			ABUTMENT DIAPHRAGM LONGITUDINAL
S607	X	56	6'-0"			SLAB TOP LONGIT. UNDER RAIL POSTS
S608	X	16	4'-8"	X		SLAB TOP LONGIT. UNDER RAIL END POSTS
S609	X	36	11'-3"	X		SLAB TOP HOOKS UNDER RAIL POSTS

SURVEY TOP OF SLAB ELEVATIONS

LOCATION	W. ABUTMENT	5/10 PT.	E. ABUTMENT
N. EDGE OF DECK			
CROWN OR R/L			
S. EDGE OF DECK			

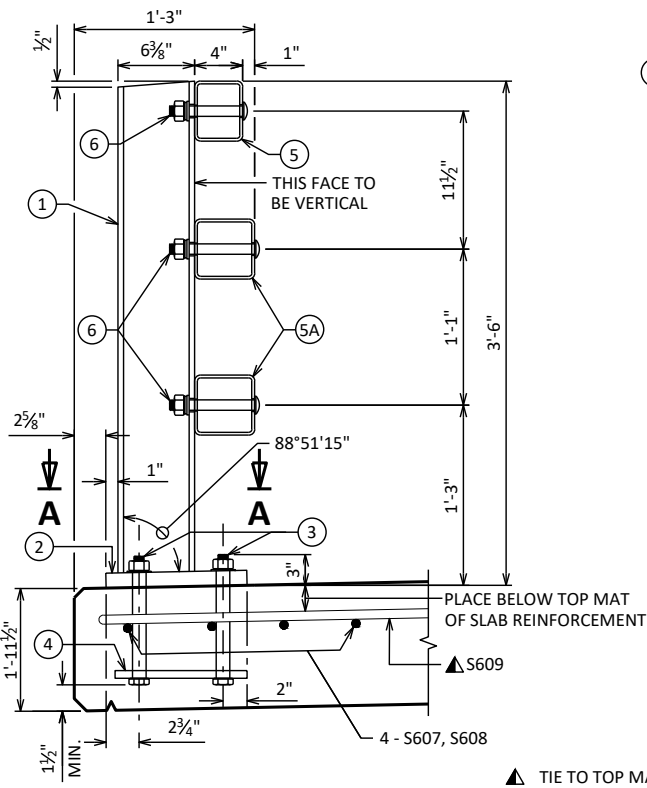
PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE C/L OF ABUTMENTS, THE C/L OF PIERS AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG GUTTER LINES AND CROWN OR R/L. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

NOTES

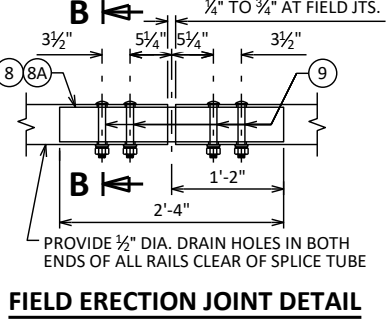
FILL IN THE TABLE OF "SURVEY TOP OF SLAB ELEVATIONS" FOR EACH SPAN ON AS BUILT PLANS.

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.

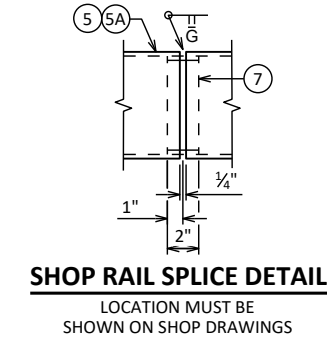
ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).



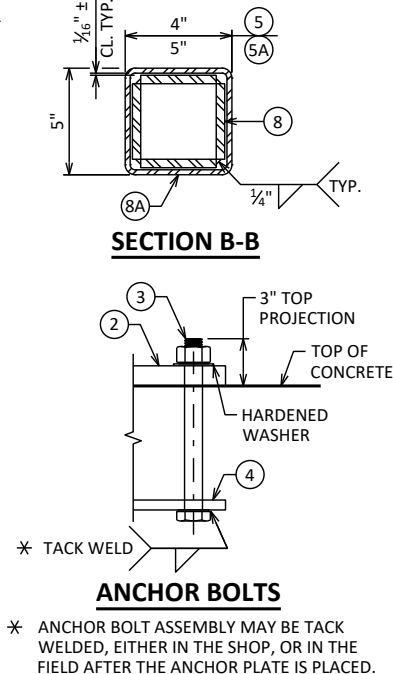
SECTION THRU RAILING ON DECK



FIELD ERECTION JOINT DETAIL

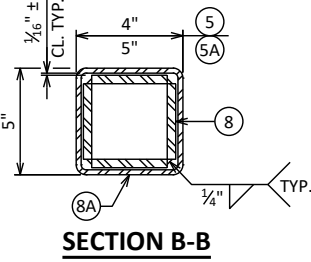


SHOP RAIL SPLICE DETAIL
LOCATION MUST BE SHOWN ON SHOP DRAWINGS

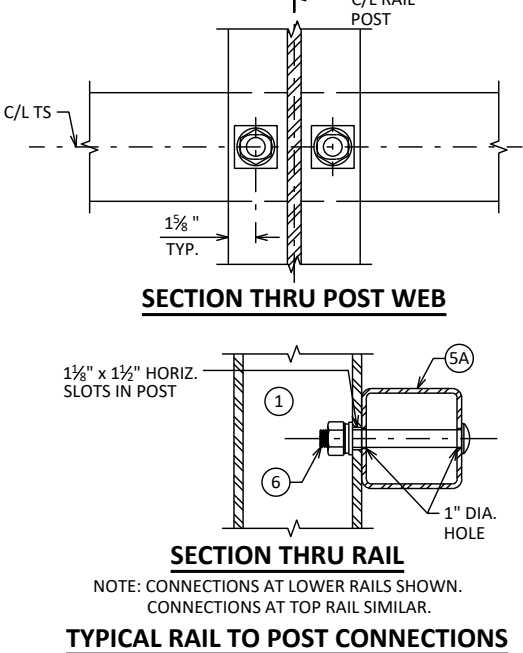


ANCHOR BOLTS

* ANCHOR BOLT ASSEMBLY MAY BE TACK WELDED, EITHER IN THE SHOP, OR IN THE FIELD AFTER THE ANCHOR PLATE IS PLACED.



SECTION B-B

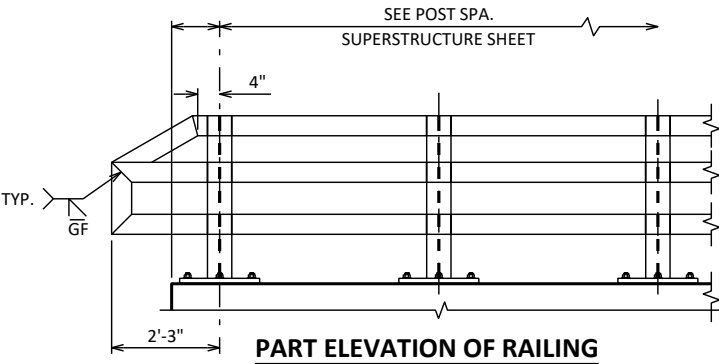


TYPICAL RAIL TO POST CONNECTIONS

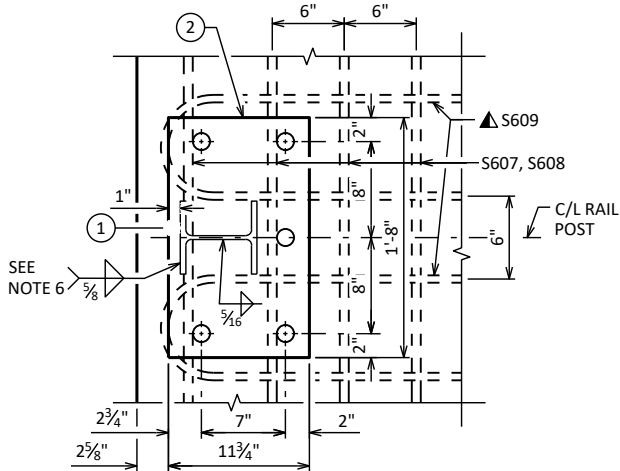
- LEGEND**
- 1 W6 x 25 WITH 1 1/8" x 1 1/2" HORIZ. SLOTS ON EACH SIDE OF POST FOR BOLT NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POSTS NORMAL TO GRADE LINE.
 - 2 PLATE 1 1/4" x 11 3/4" x 1'-8" WITH 1 7/16" OVERSIZED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN.
 - 3 ASTM A449 - 1 1/8" DIA. ANCHOR BOLTS WITH NUT AND HARDENED WASHER (ALL GALVANIZED). 5 REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 2. CHAMFER TOP OF BOLTS BEFORE THREADING. USE 1'-9" LONG IN ABUTMENT WINGS. AT POSTS ON CONCRETE SLAB SUPERSTRUCTURES WHERE THE SLAB THICKNESS IS > 16" USE 1'-3" LONG. USE 10 3/4" LONG AT ALL OTHER LOCATIONS. (AN EQUIVALENT THREADED ROD WITH NUTS AND HARDENED WASHERS MAY BE SUBSTITUTED FOR ANCHOR BOLTS IN WINGS IF REQ'D. FOR CONSTRUCTIBILITY.)
 - 4 5/8" x 11" x 1'-8" ANCHOR PLATE (GALVANIZED) WITH 1 3/16" DIA. HOLES FOR ANCHOR BOLTS NO. 3.
 - 5 TS 5 x 4 x 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
 - 5A TS 5 x 5 x 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
 - 6 7/8" DIA. A325 SLOTTED ROUND HEAD BOLT WITH NUT, 3/16" x 1 5/8" x 1 5/8" MIN. WASHER, AND LOCK WASHER (2 REQ'D. AT EACH RAIL TO POST LOCATION).
 - 7 SPLICE SLEEVE FABRICATED FROM 1/4" PLATE. PROVIDE "SLIDING FIT".
 - 8 3/8" x 3 5/8" x 2'-4" PLATE. 2 PER RAIL. USED IN NO. 5 & 5A.
 - 8A 3/8" x 2 5/8" x 2'-4" PLATE USED IN NO. 5, 3/8" x 3 5/8" x 2'-4" PLATE USED IN NO. 5A. 2 PER RAIL.
 - 9 7/8" DIA. A325 ROUND HEAD BOLT WITH NUT, WASHER, AND LOCK WASHER. USE 1 5/16" x 1 1/4" LONGIT. SLOTTED HOLES IN PLATE NO. 10A AT FIELD JOINTS AND 1 5/16" x 2 1/4" MIN. LONGIT. SLOTTED HOLES AT EXP. JOINTS IN PLATE NO. 8A. PROVIDE 1 5/16" DIA. ROUND HOLES IN TUBES NO. 5 AND NO. 5A.

GENERAL NOTES

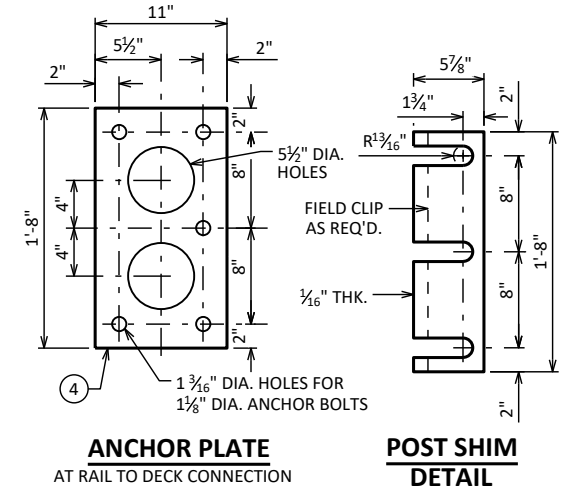
- 1. BID ITEM SHALL BE "RAILING TUBULAR TYPE M" WHICH INCLUDES ALL ITEMS SHOWN.
- 2. RAIL POST AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50. HOLLOW RAILING STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B OR C WITH A CERTIFIED FY = 50 KSI. ANCHOR PLATES, AND SPLICE TUBE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 36.
- 3. THE NUT SECURING THE POST BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/2 TURN.
- 4. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF THREE (3) POSTS WITHOUT SPLICES WHERE POSSIBLE.
- 5. ENDS OF TUBE SECTIONS SHALL BE SAWED. GRIND SMOOTH EXPOSED EDGES. ALL CUT ENDS SHALL BE TRUE AND SMOOTH.
- 6. WELD IS THE SAME ON BOTH FLANGES. FLANGE WELD DOES NOT REQUIRE MAGNETIC PARTICLE TESTING.
- 7. FILL BOLT SLOT OPENINGS IN POST SHIMS AND PLATE NO. 2 AND CAULK AROUND PERIMETER OF PLATE NO. 2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.
- 8. POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.
- 9. ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS & STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY SSPC SPECIFICATIONS.



PART ELEVATION OF RAILING



SECTION A-A



ANCHOR PLATE

AT RAIL TO DECK CONNECTION

POST SHIM

DETAIL

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-27-178			
DRAWN BY ZMF		PLANS CK'D PTB	
TUBULAR STEEL RAILING TYPE 'M'		SHEET 10 OF 10 59	

EARTHWORK - CAIN RD (STAGE 1)													
STATION	DISTANCE (LF)	AREA (SF)			INCREMENTAL VOLUME (CY)				CUMULATIVE VOLUME (CY)				
		CUT	MARSH EXCAVATION	FILL	CUT NOTE 1	MARSH EXCAVATION NOTE 2	FILL NOTE 3	FILL (1.25) NOTE 4	CUT (1.00) NOTE 1	MARSH EXCAVATION NOTE 2	FILL NOTE 3	FILL (1.25) NOTE 4	MASS ORDINATE NOTE 5
03+81	0	0	0	0	0	0	0	0	0	0	0	0	0
04+00	19	0	0	5	0	0	2	3	0	0	2	3	-3
04+50	50	0	0	14	0	0	18	23	0	0	20	25	-25
05+00	50	0	0	25	0	0	36	45	0	0	56	70	-70
05+50	50	0	0	16	0	0	38	48	0	0	94	118	-118
06+00	50	10	0	26	9	0	39	49	9	0	133	166	-157
06+50	50	23	2	17	31	2	40	50	40	2	173	216	-176
07+00	50	11	40	17	31	39	31	39	71	41	204	255	-184
07+50	50	7	7	33	17	44	46	58	88	85	250	313	-225
08+00	50	6	45	73	12	48	98	123	100	133	348	435	-335
08+50	50	0	24	96	6	64	156	195	106	197	504	630	-524
09+00	50	0	26	143	0	46	221	276	106	243	725	906	-800
09+50	50	0	125	65	0	141	193	241	106	384	918	1148	-1042
10+01	0	0	124	62	0	0	0	0	106	384	918	1148	-1042
10+50	49	3	211	65	3	306	116	145	109	690	1034	1293	-1184
11+00	50	7	0	46	9	0	103	129	118	690	1137	1421	-1303
11+50	50	6	0	36	12	0	76	95	130	690	1213	1516	-1386
12+00	50	13	0	1	18	0	34	43	148	690	1247	1559	-1411
12+50	50	0	0	0	12	0	1	1	160	690	1248	1560	-1400
13+00	50	0	0	0	0	0	0	0	160	690	1248	1560	-1400
13+50	50	0	0	0	0	0	0	0	160	690	1248	1560	-1400
14+00	50	0	0	0	0	0	0	0	160	690	1248	1560	-1400
14+50	50	0	0	0	0	0	0	0	160	690	1248	1560	-1400
COLUMN SUBTOTALS =					160	690	1248	1560	160	690	1248	1560	-1400

NOTES: 1 - CUT 2 - MARSH EXCAVATION 3 - FILL 4 - FILL (1.25) 5 - MASS ORDINATE	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL MARSH EXCAVATION NOT TO BE USED IN ROADWAY FILL DOES NOT INCLUDE UNUSABLE PAVEMENT EXCAVATION VOLUME (UNEXPANDED FILL - REDUCED MARSH IN FILL)*1.25 CUT - FILL (1.25)
---	--

EARTHWORK - CAIN RD (STAGE 2)										
STATION	DISTANCE (LF)	AREA (SF)		INCREMENTAL VOLUME (CY)			CUMULATIVE VOLUME (CY)			
		CUT	FILL	CUT NOTE 1	FILL NOTE 2	FILL (1.25) NOTE 3	CUT (1.00) NOTE 1	FILL NOTE 2	FILL (1.25) NOTE 3	MASS ORDINATE NOTE 4
03+81	0	0	0	0	0	0	0	0	0	0
04+00	19	16	0	6	0	0	6	0	0	6
04+50	50	10	0	24	0	0	30	0	0	30
05+00	50	35	0	42	0	0	72	0	0	72
05+50	50	60	0	88	0	0	160	0	0	160
06+00	50	48	0	100	0	0	260	0	0	260
06+50	50	22	0	65	0	0	325	0	0	325
07+00	50	39	0	56	0	0	381	0	0	381
07+50	50	20	0	55	0	0	436	0	0	436
08+00	50	32	0	48	0	0	484	0	0	484
08+50	50	33	0	60	0	0	544	0	0	544
09+00	50	37	0	65	0	0	609	0	0	609
09+50	50	28	0	60	0	0	669	0	0	669
10+01	0	29	0	0	0	0	669	0	0	669
10+50	49	22	0	47	0	0	716	0	0	716
11+00	50	26	0	44	0	0	760	0	0	760
11+50	50	30	0	52	0	0	812	0	0	812
12+00	50	22	0	48	0	0	860	0	0	860
12+50	50	48	1	65	1	1	925	1	1	924
13+00	50	43	5	84	6	8	1009	7	9	1000
13+50	50	28	4	66	8	10	1075	15	19	1056
14+00	50	35	0	58	4	5	1133	19	24	1109
14+50	50	0	0	32	0	0	1165	19	24	1141
COLUMN SUBTOTALS =				1165	19	24	1165	19	24	1141

EARTHWORK - 'A'-LINE										
STATION	DISTANCE (LF)	AREA (SF)		INCREMENTAL VOLUME (CY)			CUMULATIVE VOLUME (CY)			MASS ORDINATE NOTE 4
		CUT	FILL	CUT NOTE 1	FILL NOTE 2	FILL (1.25) NOTE 3	CUT (1.00) NOTE 1	FILL NOTE 2	FILL (1.25) NOTE 3	
10'A'+15	0	0	0	0	0	0	0	0	0	0
10'A'+50	35	0	0	0	0	0	0	0	0	0
11'A'+00	50	0	24	0	22	28	0	22	28	-28
11'A'+25	25	0	82	0	98	123	0	120	150	-150
COLUMN SUBTOTALS =				0	120	150	0	120	150	-150

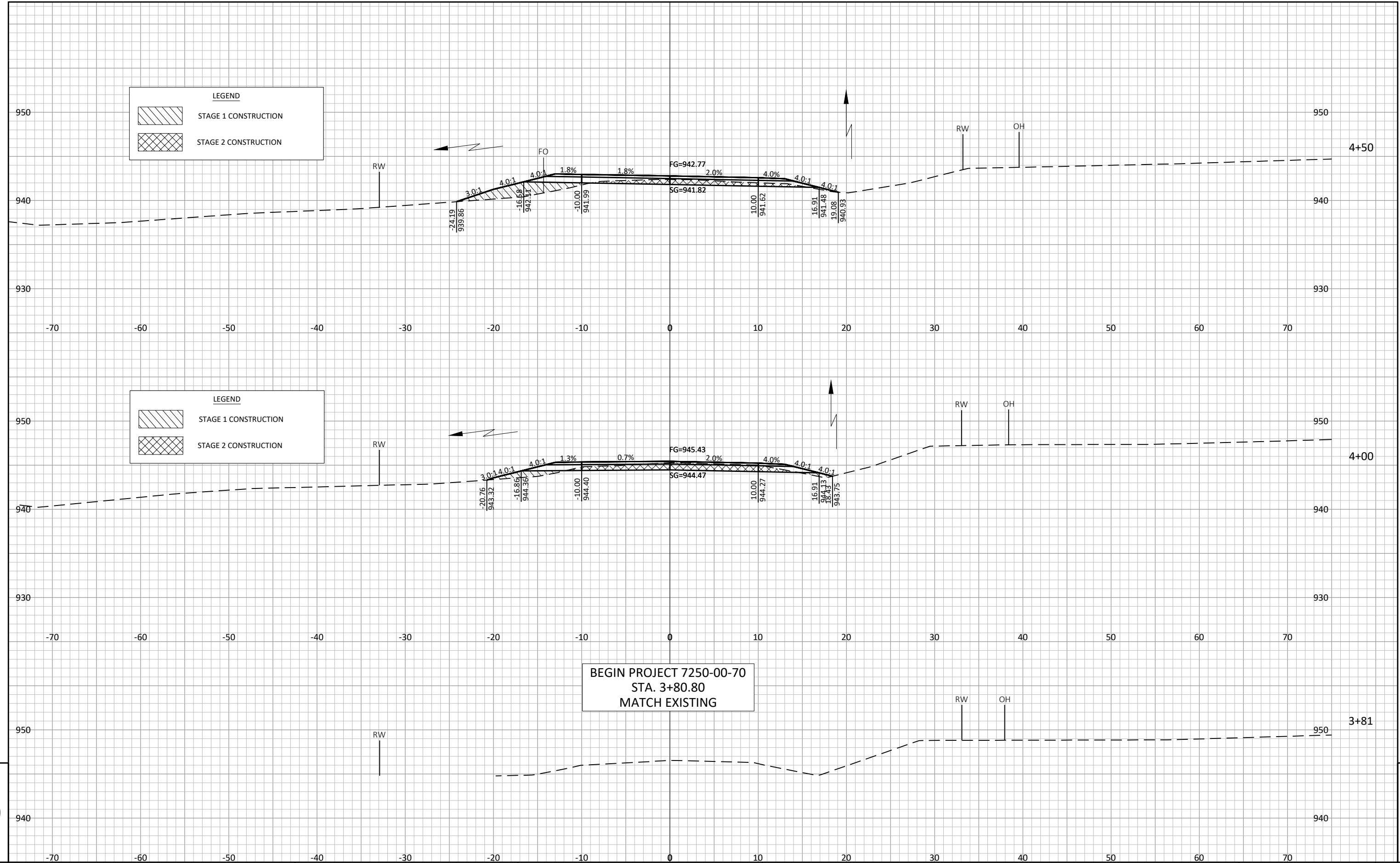
NOTES:
1 - CUT
2 - FILL
3 - FILL (1.25)
4 - MASS ORDINATE

CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
DOES NOT INCLUDE UNUSABLE PAVEMENT EXCAVATION VOLUME
(UNEXPANDED FILL - REDUCED MARSH IN FILL)*1.25
CUT - FILL (1.25)

LEGEND

STAGE 1 CONSTRUCTION

STAGE 2 CONSTRUCTION



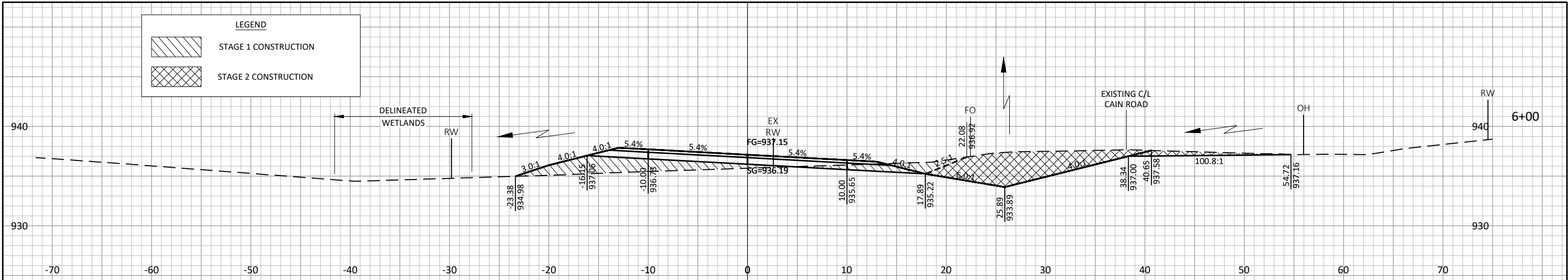
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9

LEGEND

STAGE 1 CONSTRUCTION

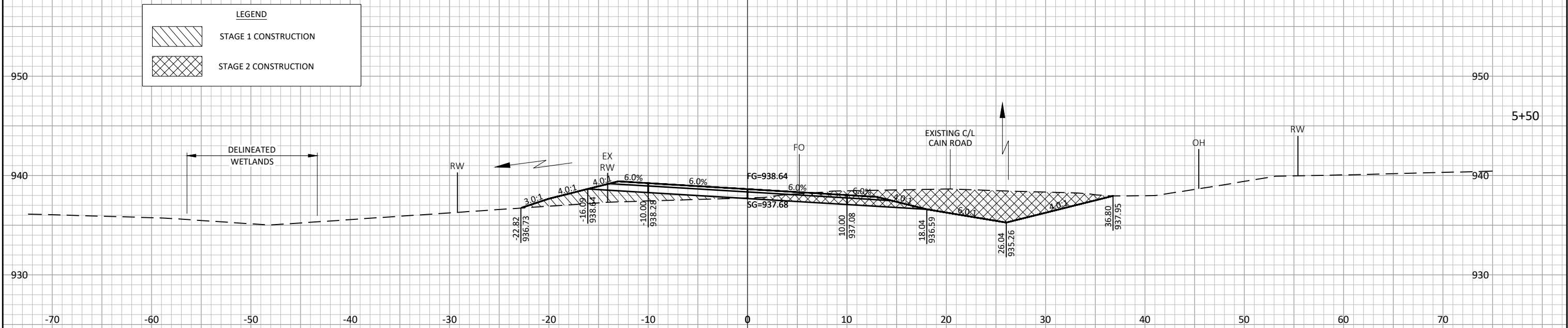
STAGE 2 CONSTRUCTION



LEGEND

STAGE 1 CONSTRUCTION

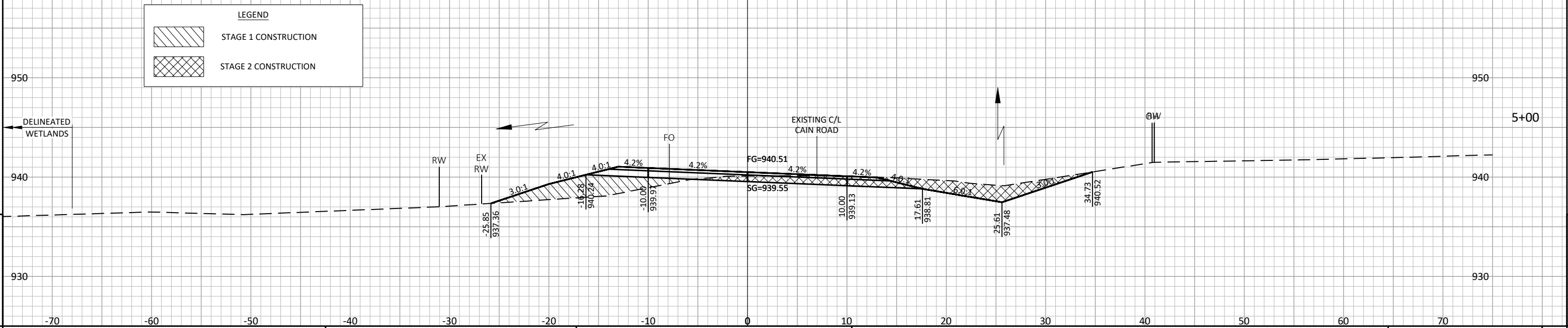
STAGE 2 CONSTRUCTION



LEGEND

STAGE 1 CONSTRUCTION

STAGE 2 CONSTRUCTION

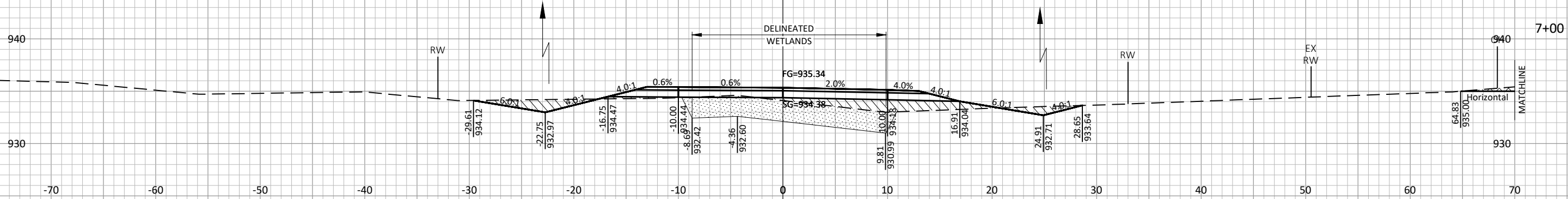
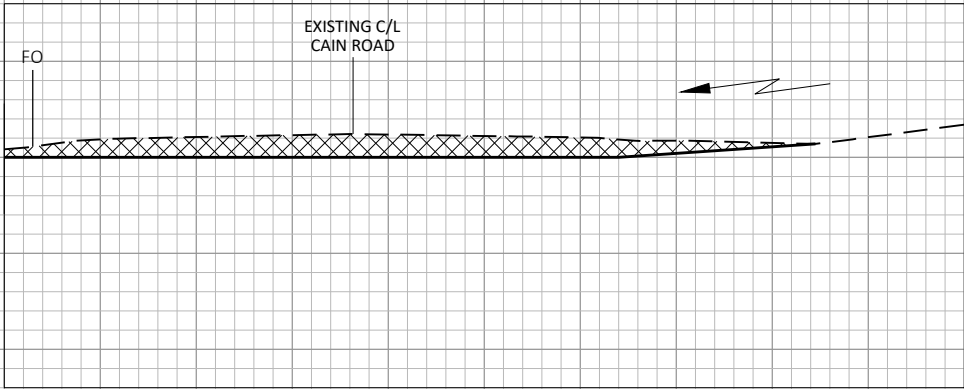


LEGEND

STAGE 1 CONSTRUCTION

STAGE 2 CONSTRUCTION

LIMITS OF EXCAVATION MARSH

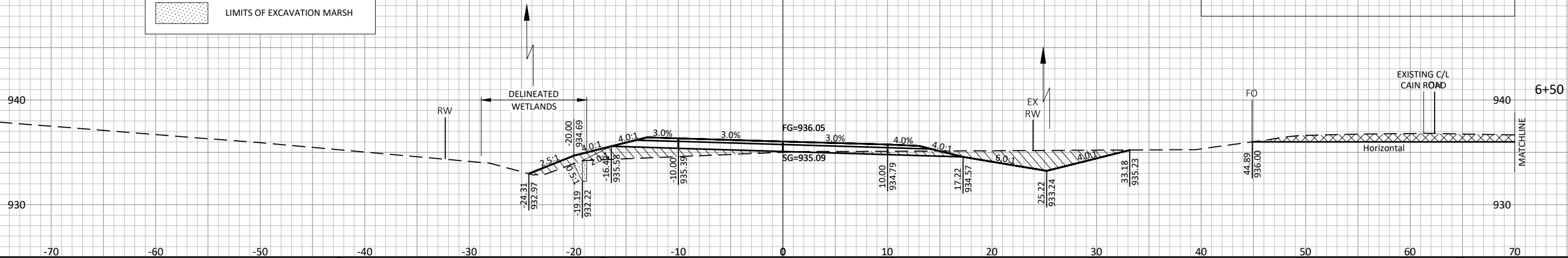
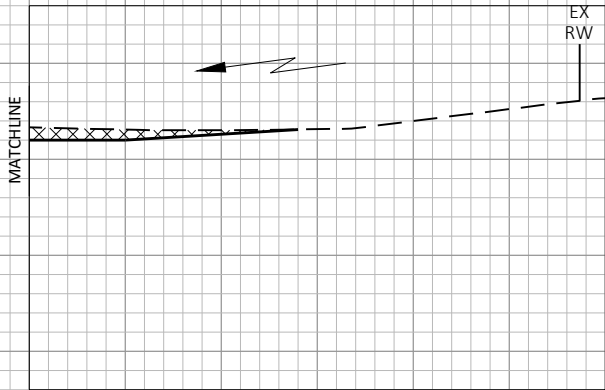


LEGEND

STAGE 1 CONSTRUCTION

STAGE 2 CONSTRUCTION

LIMITS OF EXCAVATION MARSH



9

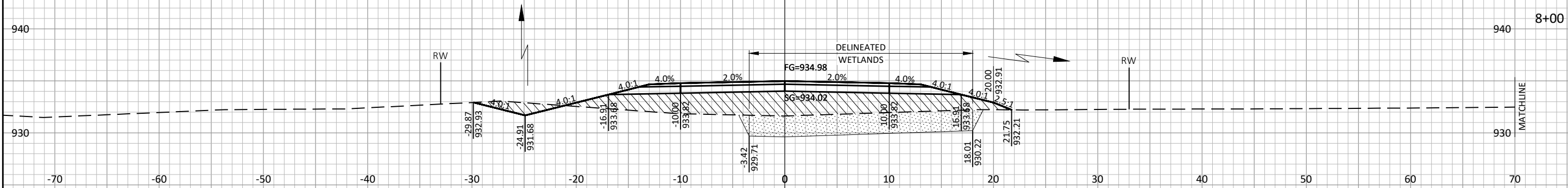
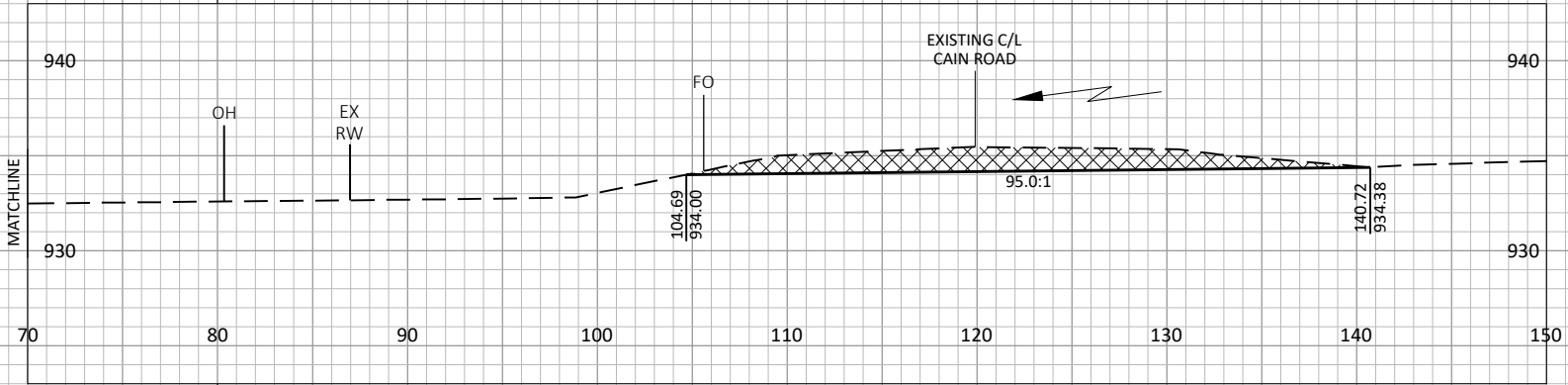
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LEGEND

STAGE 1 CONSTRUCTION

STAGE 2 CONSTRUCTION

LIMITS OF EXCAVATION MARSH

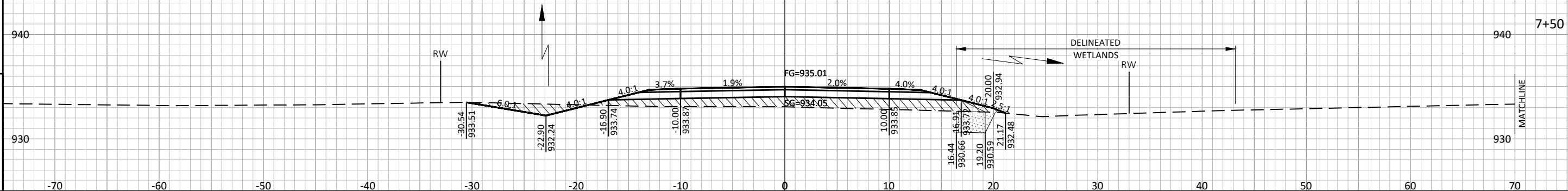
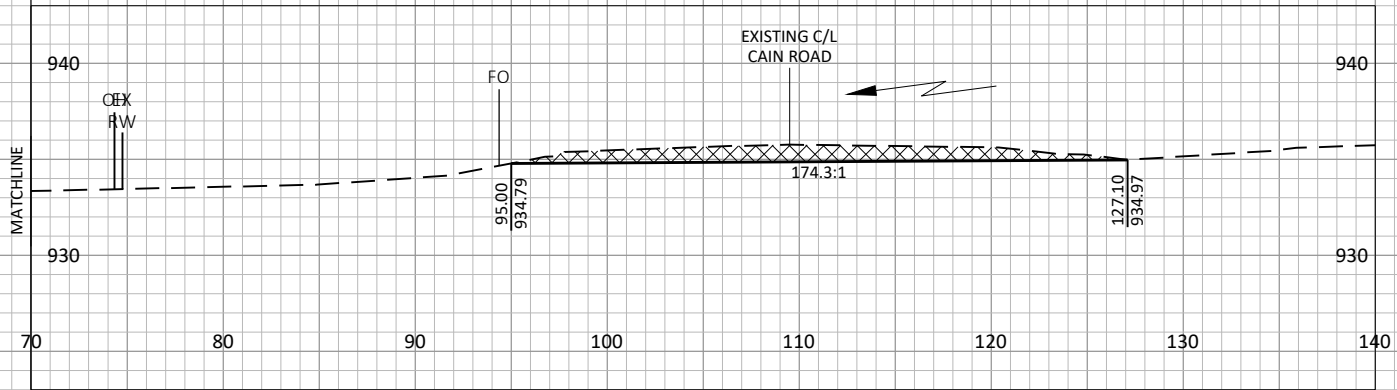


LEGEND

STAGE 1 CONSTRUCTION

STAGE 2 CONSTRUCTION

LIMITS OF EXCAVATION MARSH



PROJECT NO: 7250-00-70

HWY: CAIN ROAD

COUNTY: JACKSON

CROSS SECTIONS: MAINLINE

SHEET

65

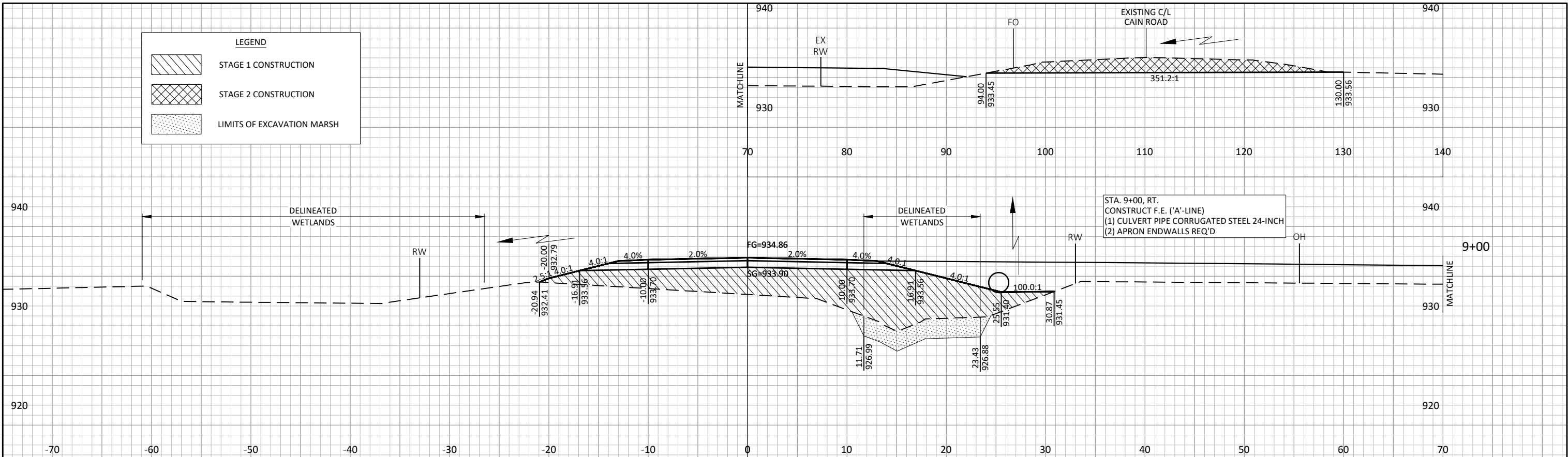
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LEGEND

STAGE 1 CONSTRUCTION

STAGE 2 CONSTRUCTION

LIMITS OF EXCAVATION MARSH

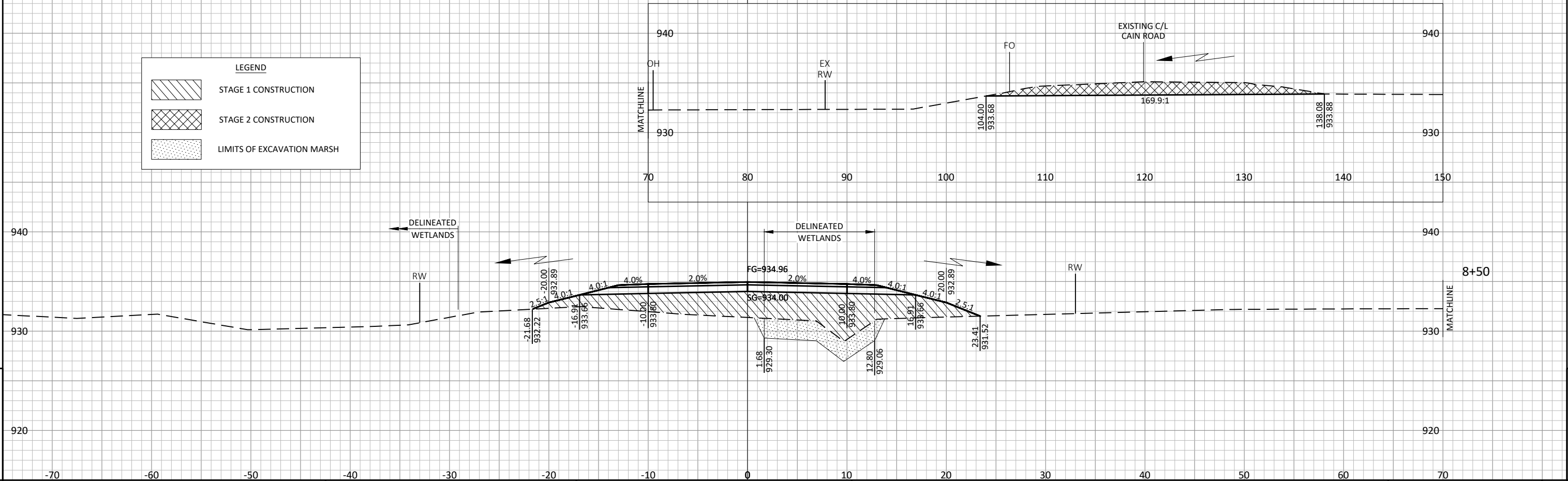


LEGEND

STAGE 1 CONSTRUCTION

STAGE 2 CONSTRUCTION

LIMITS OF EXCAVATION MARSH



PROJECT NO: 7250-00-70

HWY: CAIN ROAD

COUNTY: JACKSON

CROSS SECTIONS: MAINLINE

SHEET

66

E

FILE NAME: S:\PROJECTS\W11683 WISDOT - CAIN ROAD BRIDGE, JACKSON CO\DESIGN\CORRIDORS\CAIN ROAD_CORRIDORS.DWG

PLOT DATE: 10/31/2025 1:07:50 PM

PLOT BY: DANIEL GERLING

PLOT SCALE: 1" = 1'

LAYOUT: 05

LEGEND

STAGE 1 CONSTRUCTION

STAGE 2 CONSTRUCTION

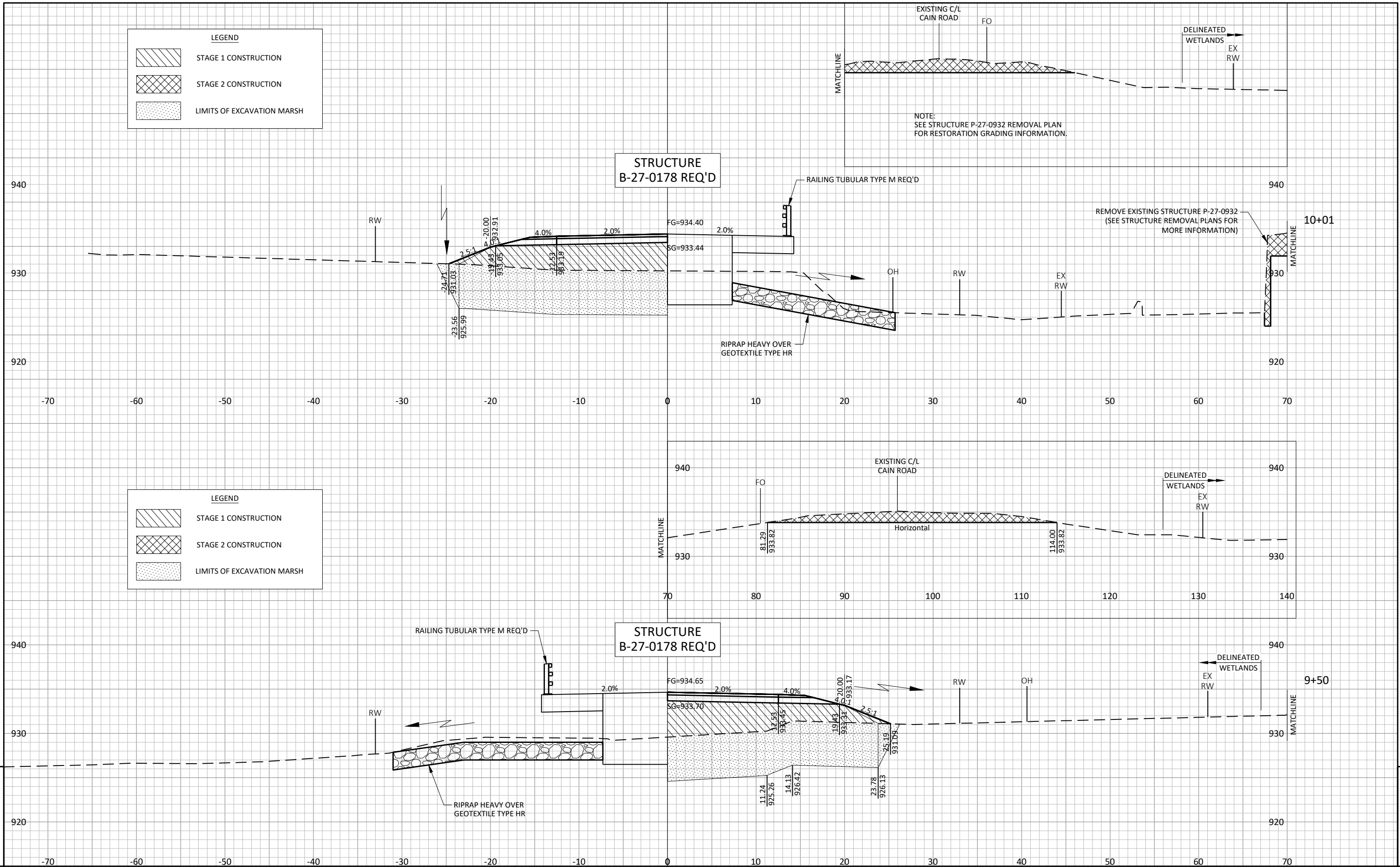
LIMITS OF EXCAVATION MARSH

LEGEND

STAGE 1 CONSTRUCTION

STAGE 2 CONSTRUCTION

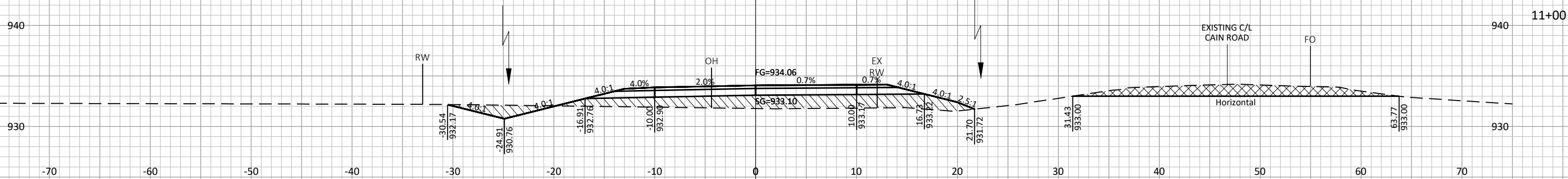
LIMITS OF EXCAVATION MARSH



LEGEND

STAGE 1 CONSTRUCTION

STAGE 2 CONSTRUCTION

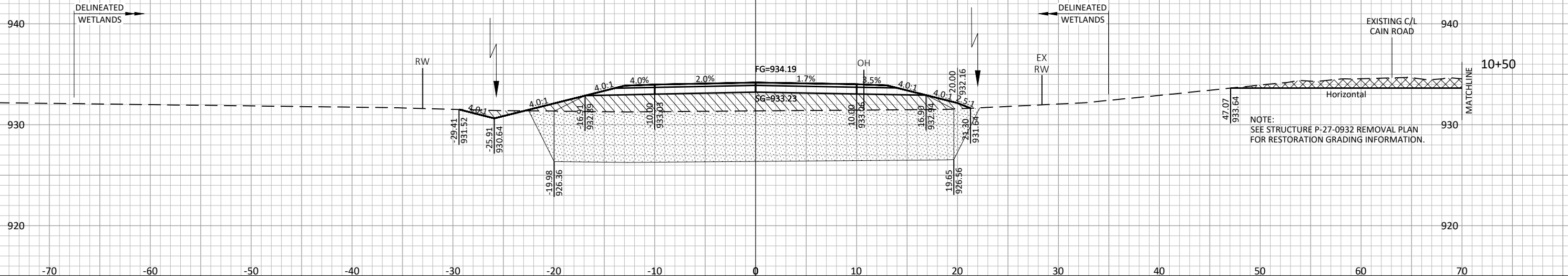


LEGEND

STAGE 1 CONSTRUCTION

STAGE 2 CONSTRUCTION

LIMITS OF EXCAVATION MARSH



NOTE:
SEE STRUCTURE P-27-0932 REMOVAL PLAN
FOR RESTORATION GRADING INFORMATION.

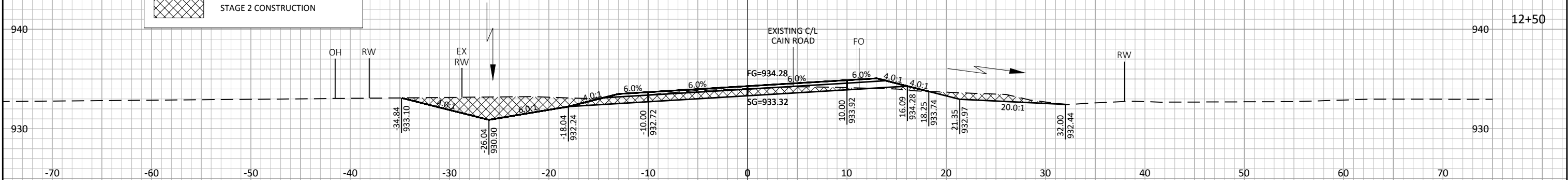
DELINEATED WETLANDS EX RW

NOTE:
SEE STRUCTURE P-27-0932 REMOVAL PLAN
FOR RESTORATION GRADING INFORMATION.

LEGEND

STAGE 1 CONSTRUCTION

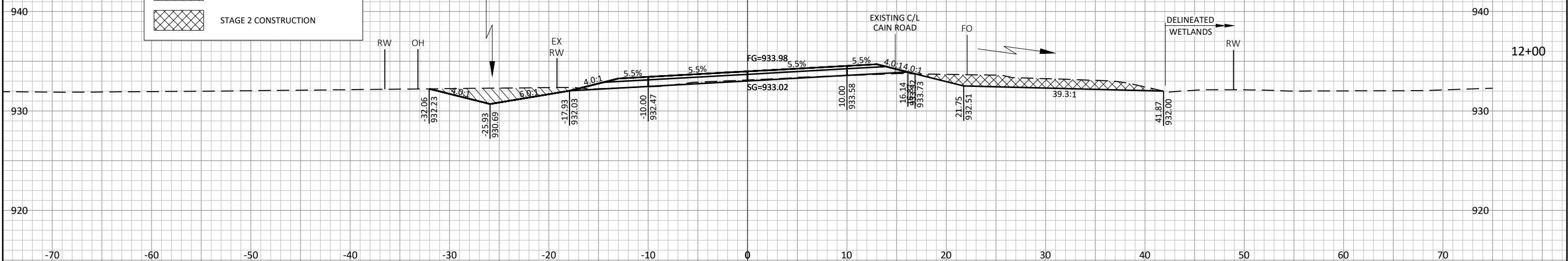
STAGE 2 CONSTRUCTION



LEGEND

STAGE 1 CONSTRUCTION

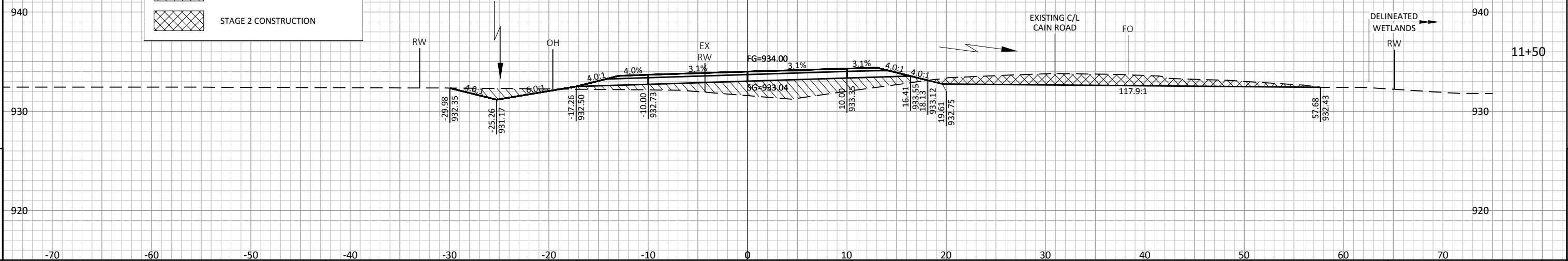
STAGE 2 CONSTRUCTION

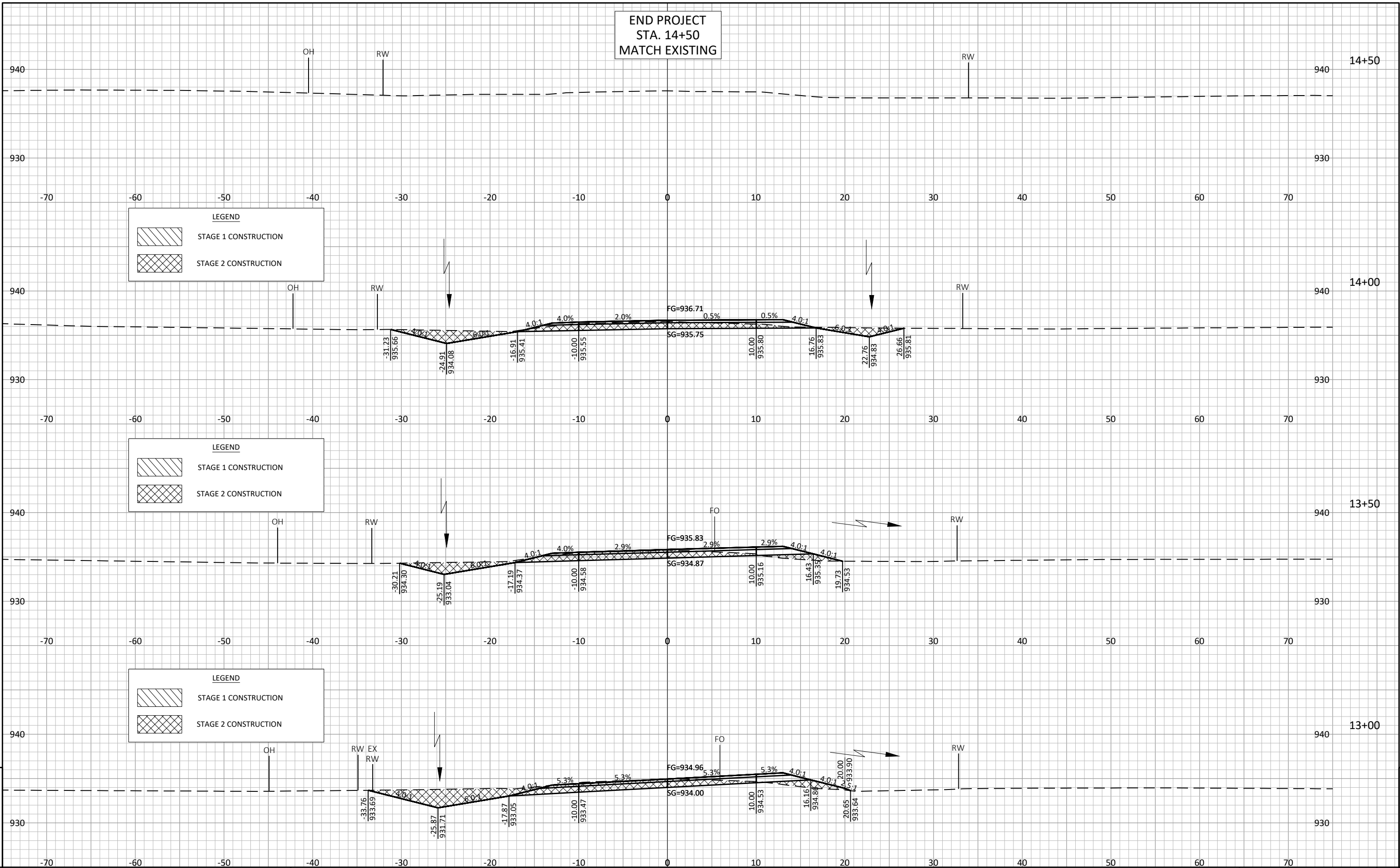


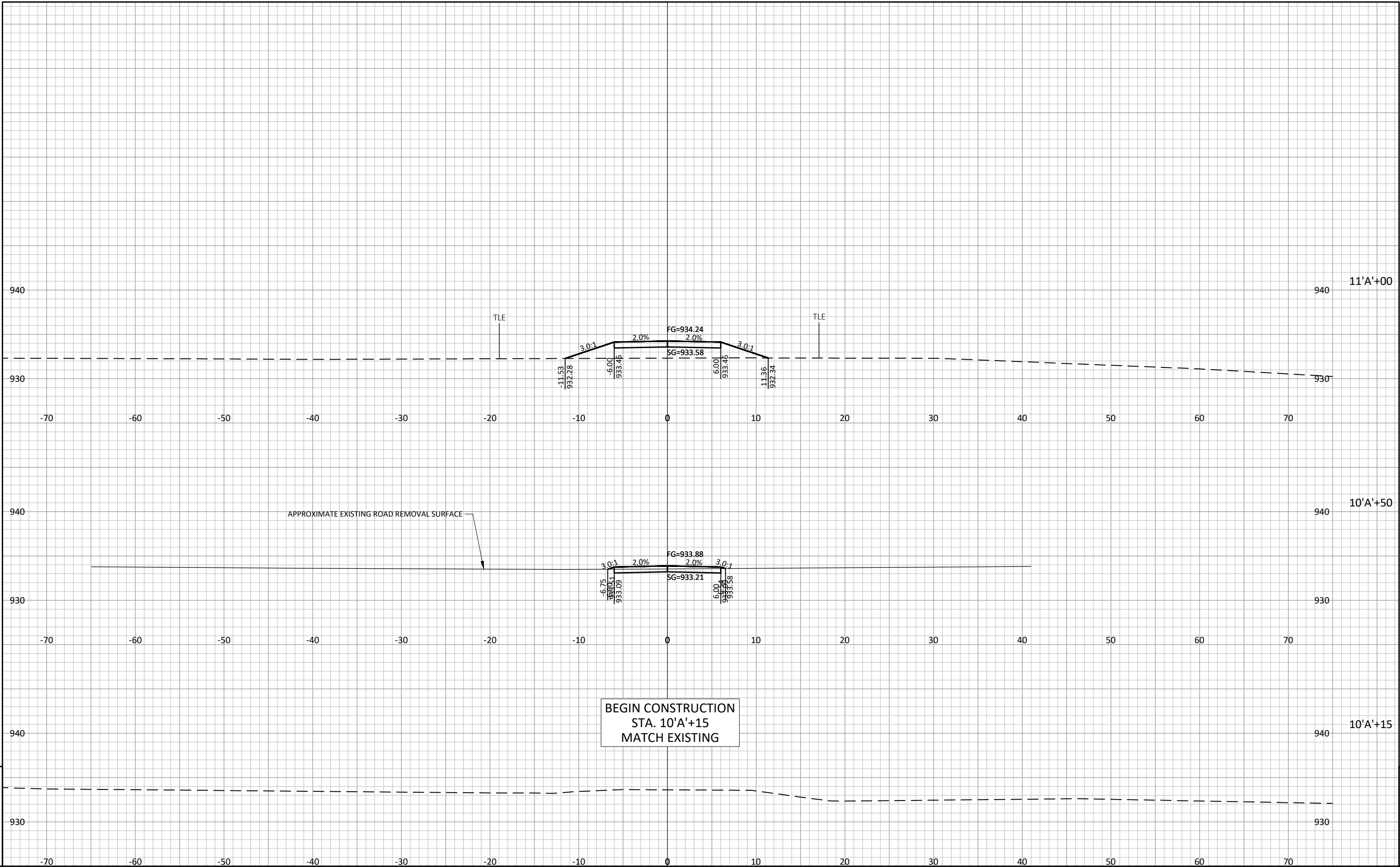
LEGEND

STAGE 1 CONSTRUCTION

STAGE 2 CONSTRUCTION



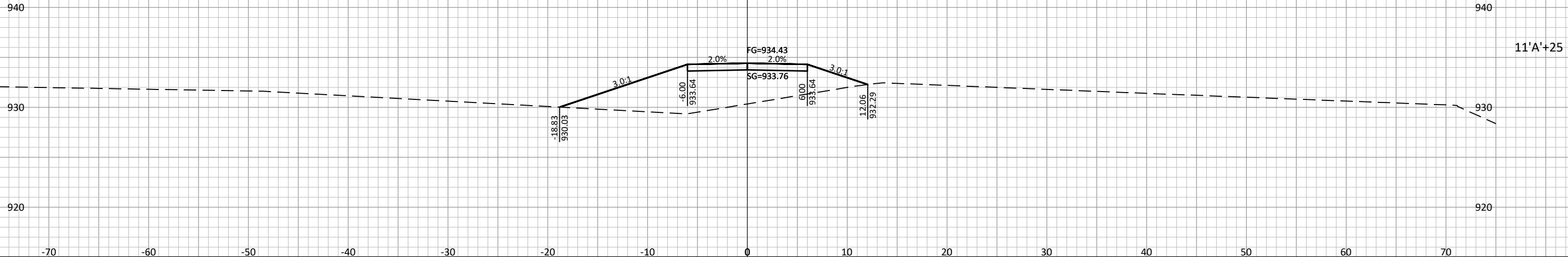
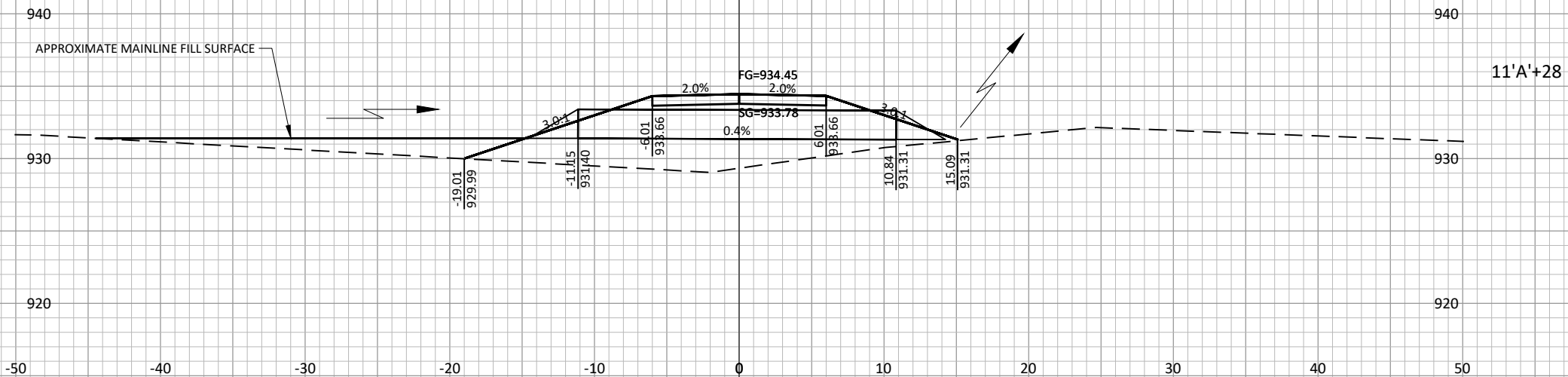




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STA. 11'A'+28
(1) CULVERT PIPE CORRUGATED STEEL 24-INCH
(2) APRON ENDWALLS REQ'D
SKEW = 4° RHF
NOTE: SECTION DRAWN NORMAL TO PIPE



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Notes



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