

LAX
PROJECT ID: 7005-00-71
WITH: N/A

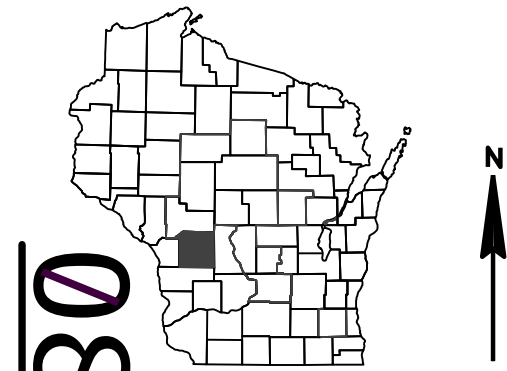
COUNTY: MONROE

AUGUST 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 = 42



DESIGN DESIGNATION 7005-00-01

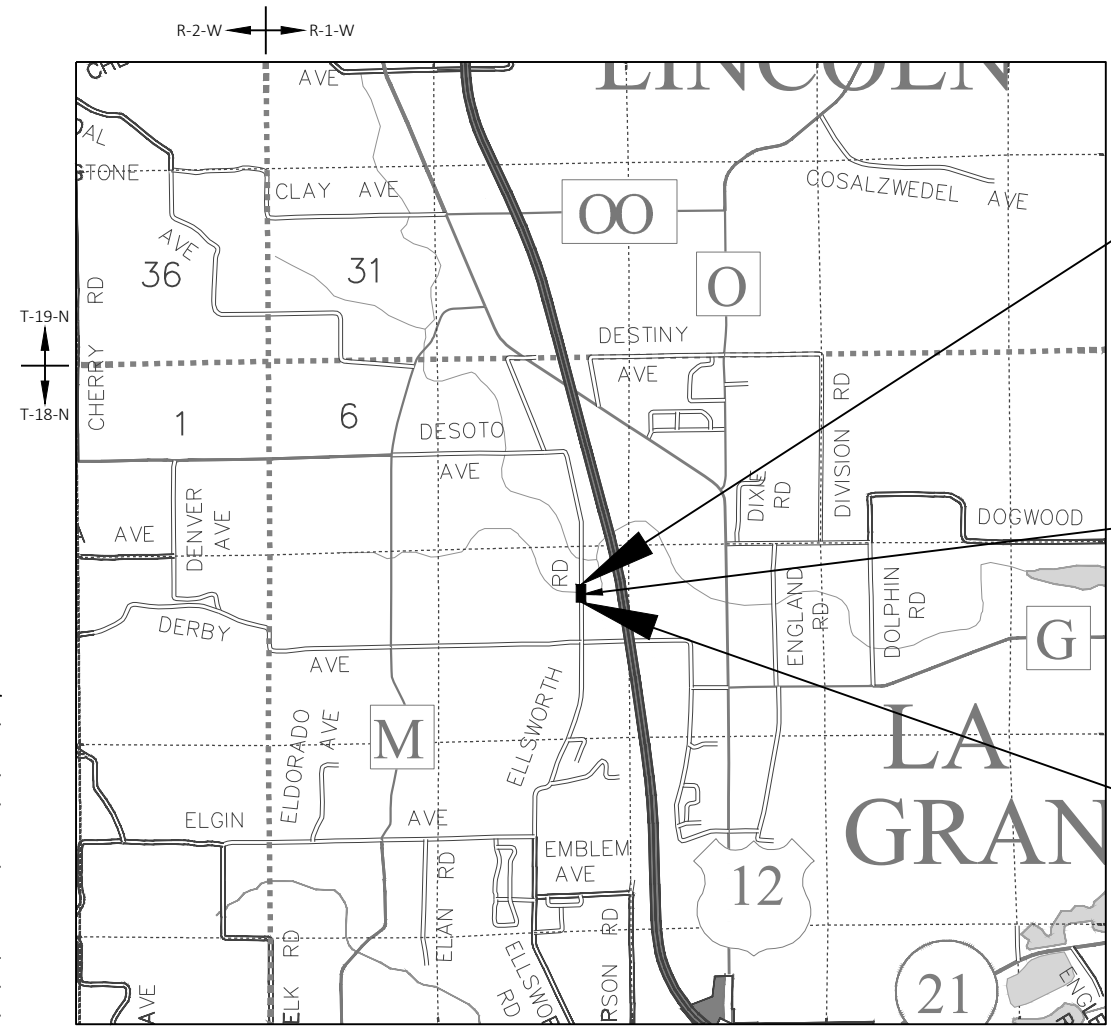
A.A.D.T.	2027	=	155
A.A.D.T.	2047	=	166
D.H.V.		=	25
D.D.		=	62/38
T.		=	7.7%
DESIGN SPEED		=	60 MPH
ESALS		=	30,000

CONVENTIONAL SYMBOLS

PLAN	PROFILE
CORPORATE LIMITS	GRADE LINE
PROPERTY LINE	ORIGINAL GROUND
LOT LINE	MARSH OR ROCK PROFILE (To be noted as such)
LIMITED HIGHWAY EASEMENT	SPECIAL DITCH
EXISTING RIGHT OF WAY	GRADE ELEVATION
PROPOSED OR NEW R/W LINE	CULVERT (Profile View)
SLOPE INTERCEPT	UTILITIES
REFERENCE LINE	ELECTRIC
EXISTING CULVERT	FIBER OPTIC
PROPOSED CULVERT (Box or Pipe)	GAS
COMBUSTIBLE FLUIDS	SANITARY SEWER
MARSH AREA	STORM SEWER
WOODED OR SHRUB AREA	TELEPHONE
	WATER
	UTILITY PEDESTAL
	POWER POLE
	TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
T LAGRANGE, ELLSWORTH ROAD
BR MILL CREEK BRIDGE, B-41-0338
LOC STR
MONROE COUNTY

STATE PROJECT NUMBER
7005-00-71



LAYOUT
SCALE 0 1 MI
TOTAL NET LENGTH OF CENTERLINE = 0.026 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), MONROE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.
ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18.

END PROJECT
STA 12+19.25

STRUCTURE B-41-0338
STA 11+50

BEGIN PROJECT
STA 10+80.75
Y = 420 187.869
X = 702 877.274

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7005-00-71	WISC 2026401	1

ACCEPTED FOR
TOWN OF LAGRANGE
Brendan Smith
Date: 29 Apr 2026
(Signature and Title of Official)

ORIGINAL PLANS PREPARED BY
WESTBROOK
Associated Engineers, Inc.
619 EAST HOXIE STREET
P.O. BOX 429
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PHONE (608) 588-7866
FAX (608) 588-7954

WISCONSIN PROFESSIONAL ENGINEER
AARON B. PALMER
E-35695
RICHLAND CENTER, WI
DATE: 4/27/26
(Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor WESTBROOK ASSOCIATED ENGINEERS, INC.
Designer WESTBROOK ASSOCIATED ENGINEERS, INC.
Project Manager DONALD CARPENTER, P.E.
Regional Examiner SOUTHWEST REGION
Regional Supervisor KYLE HEMP, P.E.

APPROVED FOR THE DEPARTMENT
DATE: 4/29/2026
(Signature)

E

STANDARD ABBREVIATIONS

ABUT	ABUTMENT	LS	LUMP SUM
AC	ACRE	MGAL	ONE THOUSAND GALLONS
AGG	AGGREGATE	ML OR M/L	MATCH LINE
AH	AHEAD	NOM	NOMINAL
∠	ANGLE	NC	NORMAL CROWN
AADT	ANNUAL AVERAGE DAILY TRAFFIC	NB	NORTHBOUND
ASPH	ASPHALTIC	NO	NUMBER
BK	BACK	PAVT	PAVEMENT
BAD	BASE AGGREGATE DENSE	PLE	PERMANENT LIMITED EASEMENT
BL OR B/L	BASE LINE	PC	POINT OF CURVATURE
BM	BENCH MARK	PI	POINT OF INTERSECTION
CL OR C/L	CENTER LINE	PT	POINT OF TANGENCY
Δ	CENTRAL ANGLE OR DELTA	PCC	PORTLAND CEMENT CONCRETE
CE	COMMERCIAL ENTRANCE	LB	POUND
CONC	CONCRETE	PSI	POUNDS PER SQUARE INCH
CONST	CONSTRUCTION	PE	PRIVATE ENTRANCE
CP	CONTROL POINT	PROJ	PROJECT
CO	COUNTY	PL	PROPERTY LINE
CTH	COUNTY TRUCK HIGHWAY	PRW	PROPOSED RIGHT OF WAY
CY	CUBIC YARD	R	RADIUS
CP	CULVERT PIPE	RL OR R/L	REFERENCE LINE
D	DEGREE OF CURVE	REQD	REQUIRED
DHV	DESIGN HOUR VOLUME	RT	RIGHT
DIA	DIAMETER	RHF	RIGHT HAND FORWARD
DD	DIRECTIONAL DISTRIBUTION	R/W	RIGHT OF WAY
DWY	DRIVEWAY	RD	ROAD
EA	EACH	RDWY	ROADWAY
EB	EASTBOUND	SHLDR	SHOULDER
EL OR ELEV	ELEVATION	SB	SOUTHBOUND
EMB	EMBANKMENT	SPECS	SPECIFICATIONS
EW	ENDWALL	SF	SQUARE FEET
EAT	ENERGY ABSORBING TERMINAL	SY	SQUARE YARD
ESALS	EQUIVALENT SINGLE AXLE LOADS	SDD	STANDARD DETAIL DRAWINGS
EXC	EXCAVATION	STH	STATE TRUNK HIGHWAY
EBS	EXCAVATION BELOW SUBGRADE	STA	STATION
EXIST	EXISTING	SE	SUPERELEVATION
FERT	FERTILIZER	SL OR S/L	SURVEY LINE
FE	FIELD ENTRANCE	TEMP	TEMPORARY
FL OR F/L	FLOW LINE	TI	TEMPORARY INTEREST
FT	FOOT	TLE	TEMPORARY LIMITED EASEMENT
HES	HIGH EARLY STRENGTH	T	TRUCKS (PERCENT OF)
HE	HIGHWAY EASEMENT	TYP	TYPICAL
CWT	HUNDRED WEIGHT	USH	UNITED STATES HIGHWAY
IN DIA	INCH DIAMETER	VAR	VARIABLE
JT	JOINT	VC	VERTICAL CURVE
LT	LEFT	VPC	VERTICAL POINT OF CURVATURE
LHF	LEFT HAND FORWARD	VPI	VERTICAL POINT OF INTERSECTION
L	LENGTH OF CURVE	VPT	VERTICAL POINT OF TANGENCY
LF	LINEAR FOOT	W	WEST
LC	LONG CHORD OF CURVE	WB	WESTBOUND

WISCONSIN DNR LIAISON

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TOWN OF LAGRANGE

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UTILITIES CONTACTS

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COMMUNICATIONS
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GENERAL NOTES

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

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LBS/SY/IN.

RIGHT OF WAY INFORMATION SHOWN ON THE PLANS IS APPROXIMATE.

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

SAWCUTS, AS SHOWN ON THE PLANS, ARE SUGGESTED LOCATIONS AND MAY BE ADJUSTED AT THE DISCRETION OF THE ENGINEER TO BETTER SUIT FIELD CONDITIONS.

THE EXACT LOCATION AND WIDTH OF DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. DRIVEWAYS SHALL BE REPLACED IN KIND. COMMERCIAL DRIVEWAYS SHALL BE A MINIMUM OF 30 FEET WIDE UNLESS SHOWN OTHERWISE IN THE PLANS. ALL RESIDENTIAL DRIVEWAYS SHALL BE A MAXIMUM OF 20 FEET WIDE.

THE PROPOSED SHOULDER WIDTH SHOWN IN THE TYPICAL SECTIONS ARE MINIMUM WIDTH. PERPETUATE EXISTING SHOULDERS THAT ARE WIDER THAN WHAT IS SHOWN IN THE TYPICAL SECTIONS.

CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN PAVING OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAYS SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER OPERATIONS ARE COMPLETED. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

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

RUNOFF COEFFICIENT TABLE

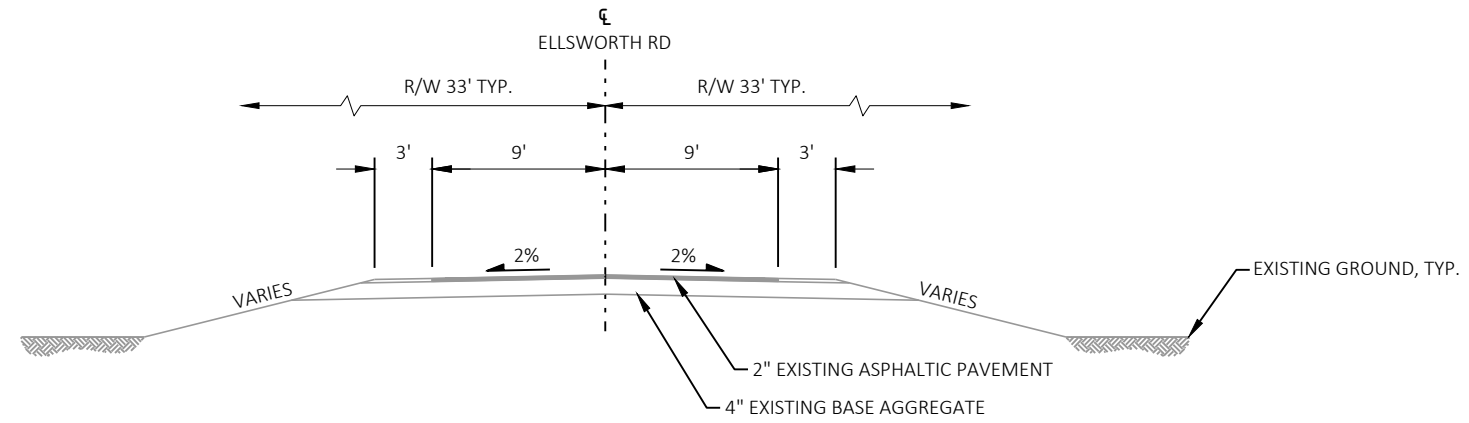
LAND USE:	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS:	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
MEDIAN STRIPTURF: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

TOTAL PROJECT AREA = 0.211 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.146 ACRES

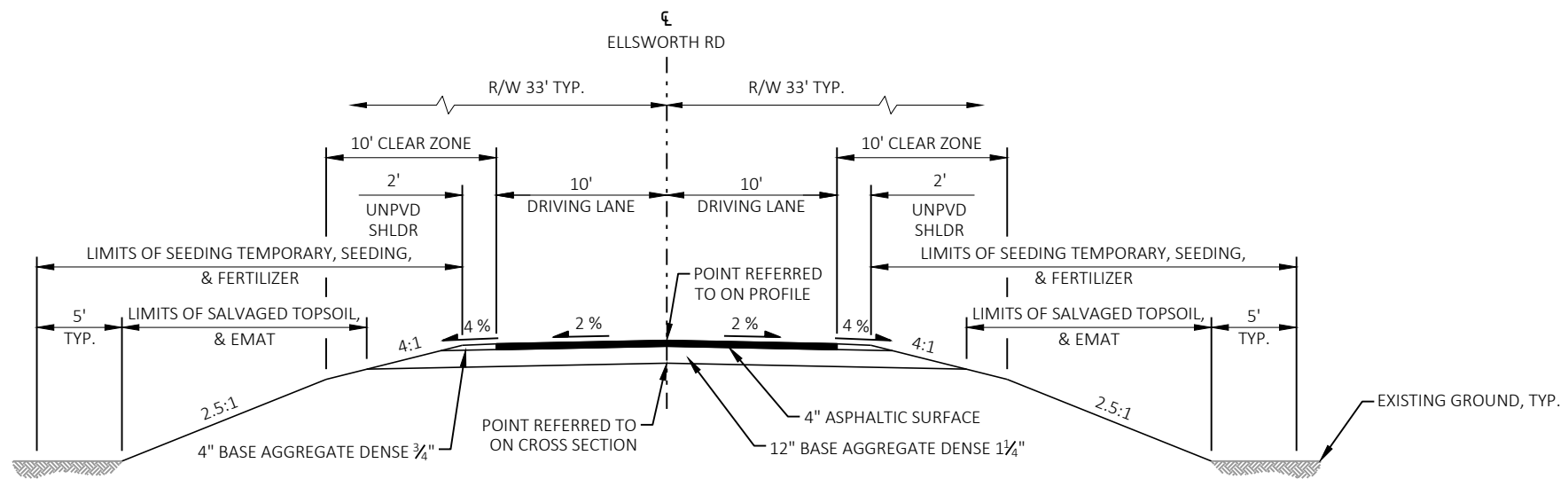


ORDER OF SECTION 2 DETAIL SHEETS

- GENERAL NOTES
- TYPICAL SECTIONS
- PERMANENT SIGNING
- ALIGNMENT DETAILS








EXISTING TYPICAL SECTION
STA 10+80.75 - 12+19.25



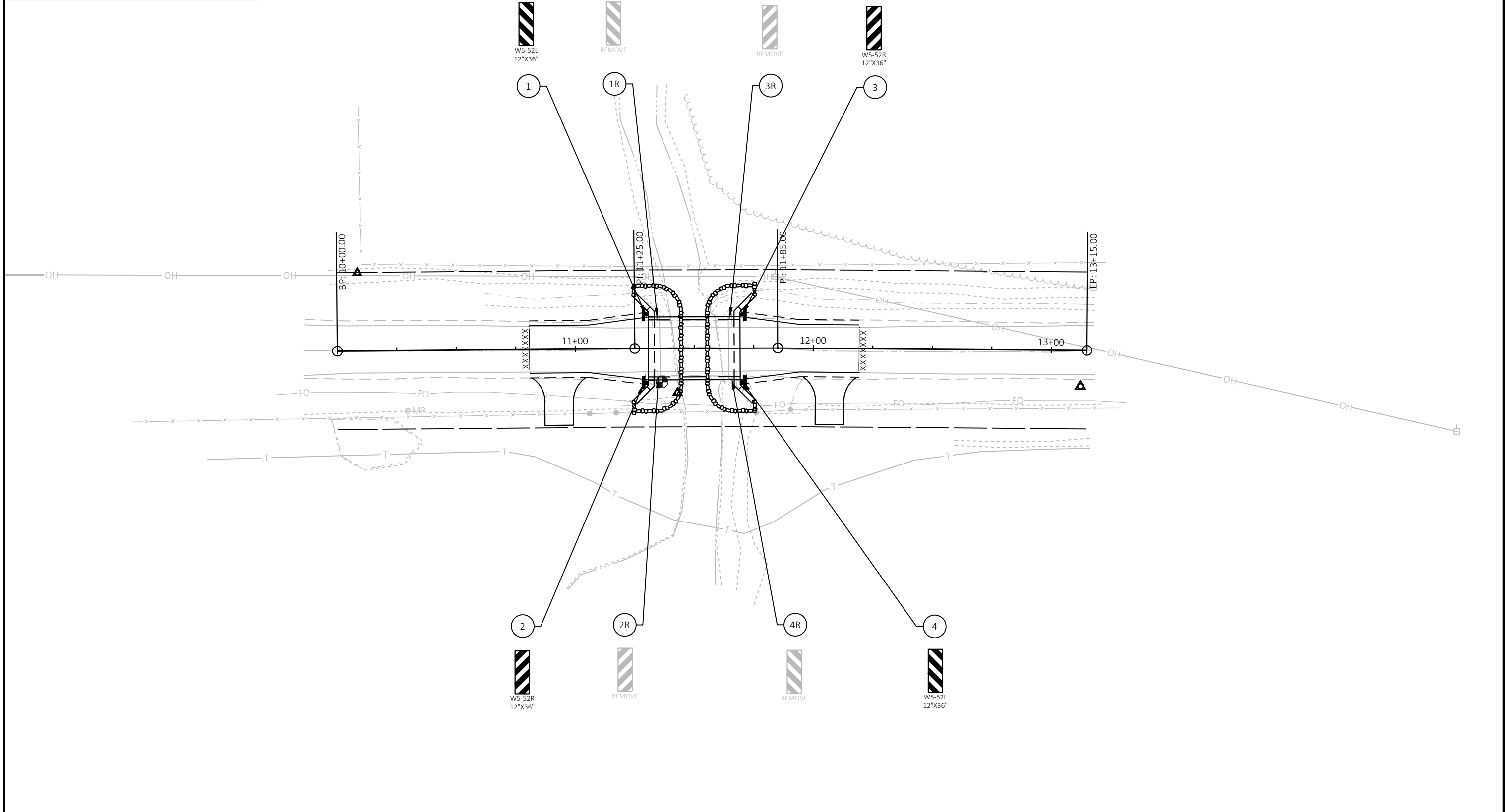
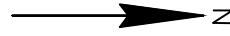
FINISHED TYPICAL SECTION
STA 10+80.75 - 12+19.25

LEGEND: PERMANENT SIGNING

-  EXISTING SIGN
-  PROPOSED SIGN
-  DENOTES SIGN NUMBER
-  WORK CODE: R=REMOVE
-  SIGN COUNT SEQUENCE

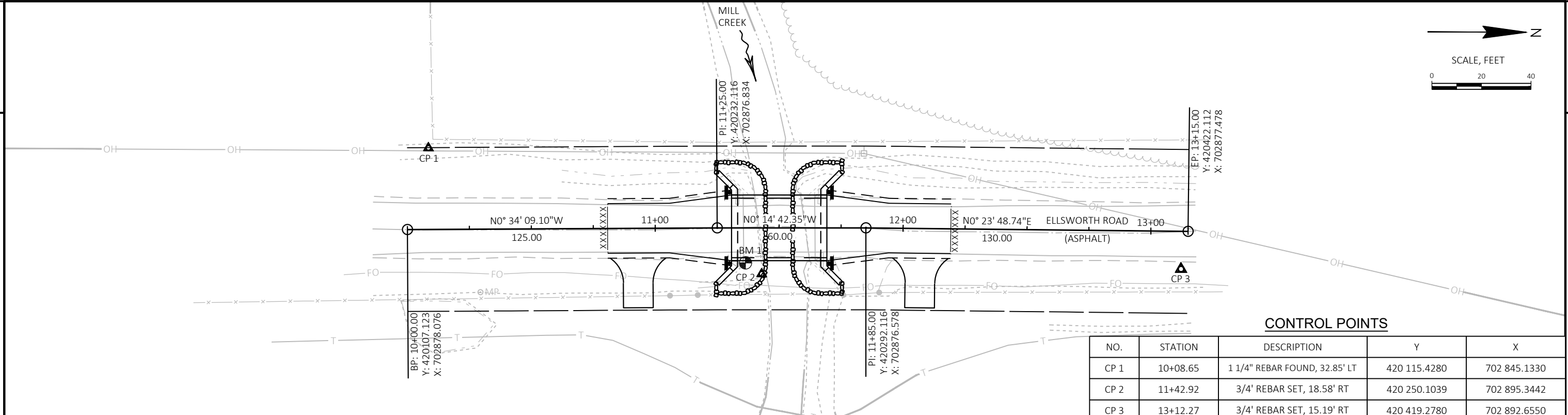
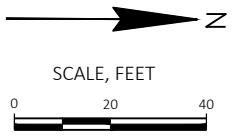
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2



PROJECT NO: 7005-00-71	HWY: ELLSWORTH ROAD	COUNTY: MONROE	PERMANENT SIGNING	SHEET
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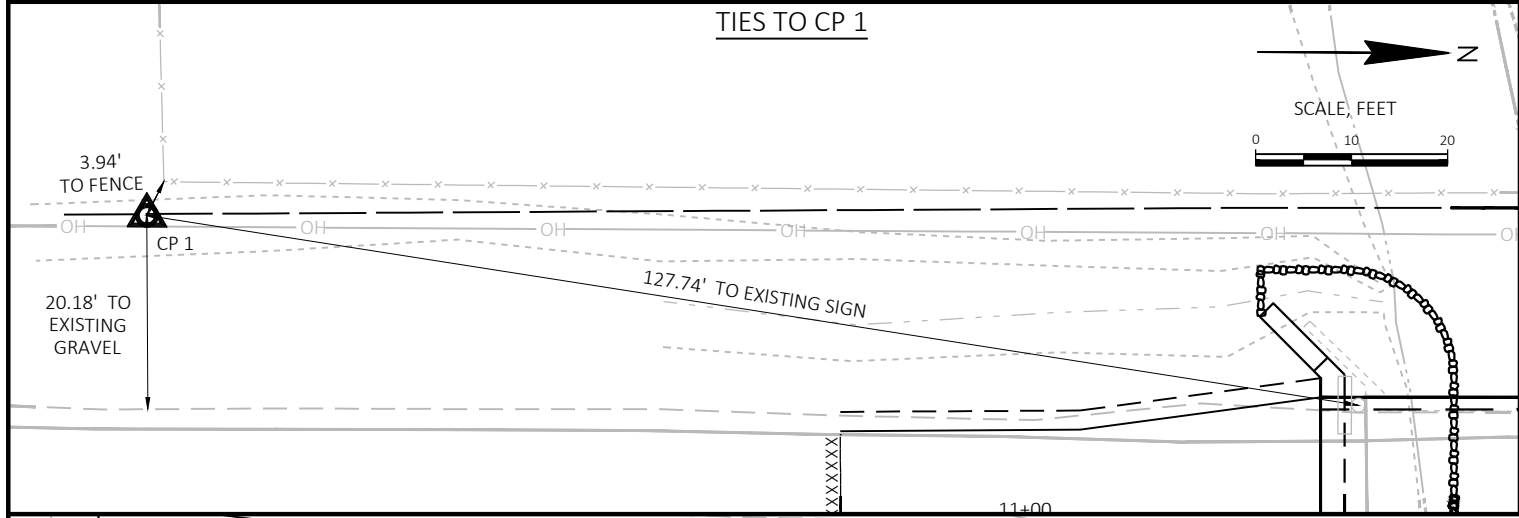
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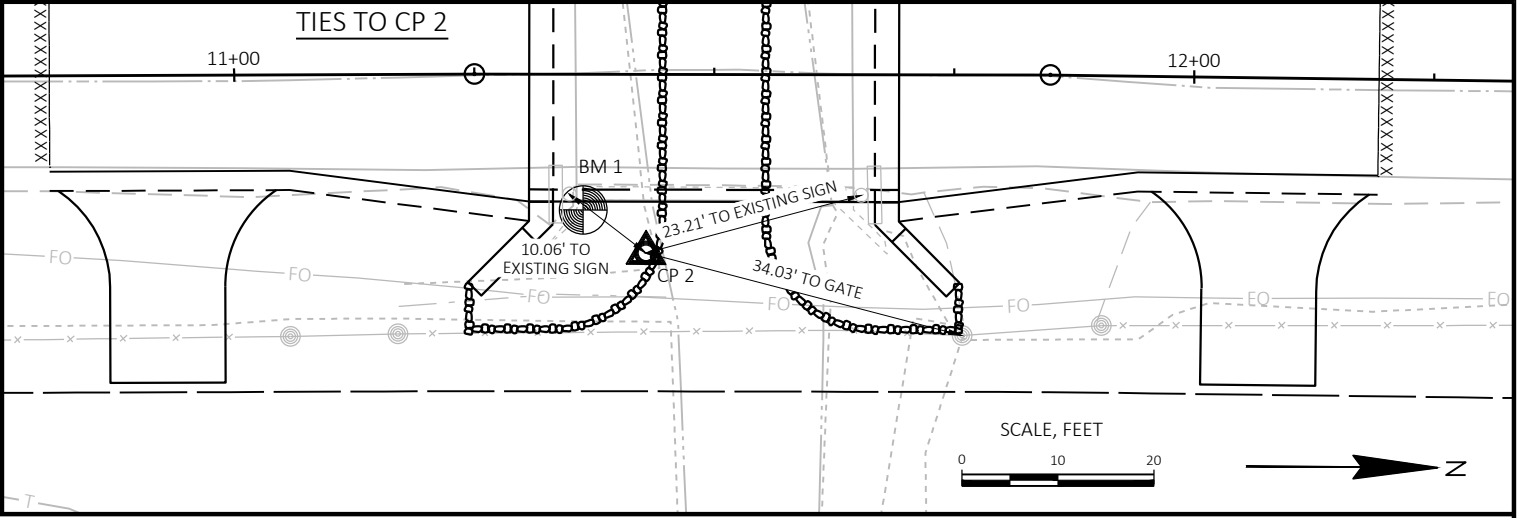
CONTROL POINTS

NO.	STATION	DESCRIPTION	Y	X
CP 1	10+08.65	1 1/4" REBAR FOUND, 32.85' LT	420 115.4280	702 845.1330
CP 2	11+42.92	3/4" REBAR SET, 18.58' RT	420 250.1039	702 895.3442
CP 3	13+12.27	3/4" REBAR SET, 15.19' RT	420 419.2780	702 892.6550

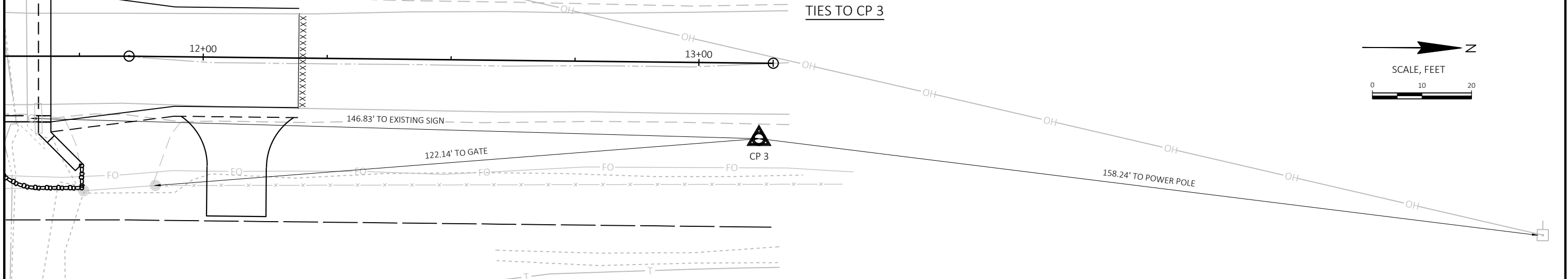
TIES TO CP 1



TIES TO CP 2



TIES TO CP 3



Estimate Of Quantities

7005-00-71

Line	Item	Item Description	Unit	Total	Qty
0002	203.0270	Removing Structure Over Waterway Debris Capture (structure) 01. P-41-0156	EACH	1.000	1.000
0004	205.0100	Excavation Common	CY	124.000	124.000
0006	206.1001	Excavation for Structures Bridges (structure) 01. B-41-0338	EACH	1.000	1.000
0008	206.5001	Cofferdams (structure) 01. B-41-0338	EACH	1.000	1.000
0010	210.1500	Backfill Structure Type A	TON	240.000	240.000
0012	213.0100	Finishing Roadway (project) 01. 7005-00-71	EACH	1.000	1.000
0014	305.0110	Base Aggregate Dense 3/4-Inch	TON	36.000	36.000
0016	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	242.000	242.000
0018	455.0605	Tack Coat	GAL	14.000	14.000
0020	465.0105	Asphaltic Surface	TON	54.000	54.000
0022	502.0100	Concrete Masonry Bridges	CY	118.000	118.000
0024	502.3200	Protective Surface Treatment	SY	164.000	164.000
0026	505.0400	Bar Steel Reinforcement HS Structures	LB	4,000.000	4,000.000
0028	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	15,600.000	15,600.000
0030	513.4061	Railing Tubular Type M	LF	82.000	82.000
0032	516.0500	Rubberized Membrane Waterproofing	SY	12.000	12.000
0034	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	490.000	490.000
0036	606.0300	Riprap Heavy	CY	85.000	85.000
0038	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	150.000	150.000
0040	618.0100	Maintenance and Repair of Haul Roads (project) 01. 7005-00-71	EACH	1.000	1.000
0042	619.1000	Mobilization	EACH	1.000	1.000
0044	624.0100	Water	MGAL	3.000	3.000
0046	625.0500	Salvaged Topsoil	SY	155.000	155.000
0048	628.1504	Silt Fence	LF	320.000	320.000
0050	628.1520	Silt Fence Maintenance	LF	502.000	502.000
0052	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0054	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0056	628.2008	Erosion Mat Urban Class I Type B	SY	155.000	155.000
0058	628.6005	Turbidity Barriers	SY	138.000	138.000
0060	629.0210	Fertilizer Type B	CWT	0.500	0.500
0062	630.0130	Seeding Mixture No. 30	LB	20.000	20.000
0064	630.0200	Seeding Temporary	LB	15.000	15.000
0066	630.0500	Seed Water	MGAL	9.000	9.000
0068	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000
0070	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0072	638.2602	Removing Signs Type II	EACH	4.000	4.000
0074	638.3000	Removing Small Sign Supports	EACH	4.000	4.000
0076	642.5001	Field Office Type B	EACH	1.000	1.000
0078	643.0420	Traffic Control Barricades Type III	DAY	1,794.000	1,794.000
0080	643.0705	Traffic Control Warning Lights Type A	DAY	3,588.000	3,588.000
0082	643.0900	Traffic Control Signs	DAY	1,404.000	1,404.000
0084	643.5000	Traffic Control	EACH	1.000	1.000
0086	645.0111	Geotextile Type DF Schedule A	SY	60.000	60.000
0088	645.0120	Geotextile Type HR	SY	180.000	180.000
0090	650.4500	Construction Staking Subgrade	LF	100.000	100.000
0092	650.5000	Construction Staking Base	LF	100.000	100.000
0094	650.6501	Construction Staking Structure Layout (structure) 01. B-41-0338	EACH	1.000	1.000
0096	650.9911	Construction Staking Supplemental Control (project) 01. 7005-00-71	EACH	1.000	1.000
0098	650.9920	Construction Staking Slope Stakes	LF	100.000	100.000

Estimate Of Quantities

7005-00-71

Line	Item	Item Description	Unit	Total	Qty
0100	690.0150	Sawing Asphalt	LF	40.000	40.000
0102	715.0502	Incentive Strength Concrete Structures	DOL	708.000	708.000
0104	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. 11+50	EACH	1.000	1.000
0106	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,200.000	1,200.000
0108	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	600.000	600.000

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

DIVISION	FROM/TO STATION	205.0100 EXCAVATION COMMON (CY) (1)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (CY) (3)	AVAILABLE MATERIAL (CY) (4)	UNEXPANDED FILL (CY) (5)	EXPANDED FILL (CY) (5)	MASS ORDINATE +/- (CY) (6)	WASTE (CY) (7)
		CUT (2)				FACTOR 1.25		
SOUTH APPROACH	10+80.75 / 11+30.75	59	6	53	29	36	17	17
NORTH APPROACH	11+69.25 / 12+19.25	65	6	59	12	15	44	44
GRAND TOTAL		124	12	112	41	51	61	61

NOTES:
 (1) EXCAVATION COMMON IS THE SUM OF THE CUT COLUMN. ITEM NUMBER 205.0100
 (2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
 (3) SALVAGED/UNUSABLE PAVEMENT MATERIAL INCLUDES EXISTING ASPHALT.
 (4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL
 (5) EXPANDED FILL FACTOR = 1.25
 EXPANDED FILL = (UNEXPANDED FILL) * FILL FACTOR
 (6) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
 (7) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

BASE AGGREGATE DENSE

STATION TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH	624.0100 WATER MGAL	
			TON	TON		
10+81	-	11+31	SOUTH APPROACH	7	121	1.3
11+69	-	12+19	NORTH APPROACH	7	121	1.3
		10+93	FIELD ENTRANCE, RT	11	---	0.2
		12+06	FIELD ENTRANCE, RT	11	---	0.2
TOTAL				36	242	3.0

ASPHALTIC SURFACE

STATION TO	STATION	LOCATION	455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON	
10+81	-	11+31	SOUTH APPROACH	7	27
11+69	-	12+19	NORTH APPROACH	7	27
TOTAL			14	54	

FINISHING ITEMS

STATION TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL	
10+72	-	11+31	SOUTH APPROACH, RT	30	30	0.1	4	3	1.7
10+81	-	11+31	SOUTH APPROACH, LT	32	32	0.1	4	3	1.9
11+69	-	12+26	NORTH APPROACH, RT	31	31	0.1	4	2	1.6
11+69	-	12+19	NORTH APPROACH, LT	30	30	0.1	4	3	1.9
		UNDISTRIBUTED		32	32	0.1	4	4	1.9
TOTAL			155	155	0.5	20	15	9.0	

SILT FENCE

STATION TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	
10+72	-	11+46	SOUTH APPROACH, RT	65	130
10+79	-	11+37	SOUTH APPROACH, LT	61	122
11+52	-	12+22	NORTH APPROACH, LT	76	152
11+61	-	12+27	NORTH APPROACH, RT	49	98
UNDISTRIBUTED			69	---	
TOTAL			320	502	

PERMANENT SIGNING

STATION	LOCATION	SIGN NUMBER	SIGN CODE	SIGN DESCRIPTION	634.0612 POSTS WOOD 4X6-INCH X 12-FT EACH	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
11+30	SOUTH APPROACH, LT	1	W5-52L	BRIDGE HASH MARK	1	3	---	---
11+30	SOUTH APPROACH, RT	2	W5-52R	BRIDGE HASH MARK	1	3	---	---
11+35	SOUTH APPROACH, LT	1R	W5-52L	BRIDGE HASH MARK	---	---	1	1
11+35	SOUTH APPROACH, RT	2R	W5-52R	BRIDGE HASH MARK	---	---	1	1
11+65	NORTH APPROACH, LT	3R	W5-52R	BRIDGE HASH MARK	---	---	1	1
11+66	NORTH APPROACH, RT	4R	W5-52L	BRIDGE HASH MARK	---	---	1	1
11+70	NORTH APPROACH, LT	3	W5-52R	BRIDGE HASH MARK	1	3	---	---
11+70	NORTH APPROACH, RT	4	W5-52L	BRIDGE HASH MARK	1	3	---	---
TOTAL					4	12	4	4

TURBIDITY BARRIER

LOCATION	628.6005 SY
SOUTH ABUTMENT	59
NORTH ABUTMENT	51
UNDISTRIBUTED	28
TOTAL	138

MOBILIZATIONS EROSION CONTROL

LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
PROJECT	4	3
TOTAL	4	3

PROJECT NO: 7005-00-71

HWY: ELLSWORTH ROAD

COUNTY: MONROE

MISCELLANEOUS QUANTITIES

SHEET

E

TRAFFIC CONTROL

LOCATION	DURATION DAY	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
		NO.	DAY	NO.	DAY	NO.	DAY	
SOUTH APPROACH	78	9	702	18	1404	7	546	---
NORTH APPROACH	78	9	702	18	1404	7	546	---
UNDISTRIBUTED	78	5	390	10	780	4	312	---
PROJECT	---	---	---	---	---	---	---	1
TOTAL		23	1794	46	3588	18	1404	1

PLACE TRAFFIC CONTROL IN ACCORDANCE WITH SDD 15C2 "BARRICADES AND SIGNS FOR MAINLINE, DETOUR, ON RAMP, OFF RAMP CLOSURES AND ADVANCED WIDTH RESTRICTION".
PLACEMENT SUBJECT TO ENGINEER APPROVAL.

CONSTRUCTION STAKING

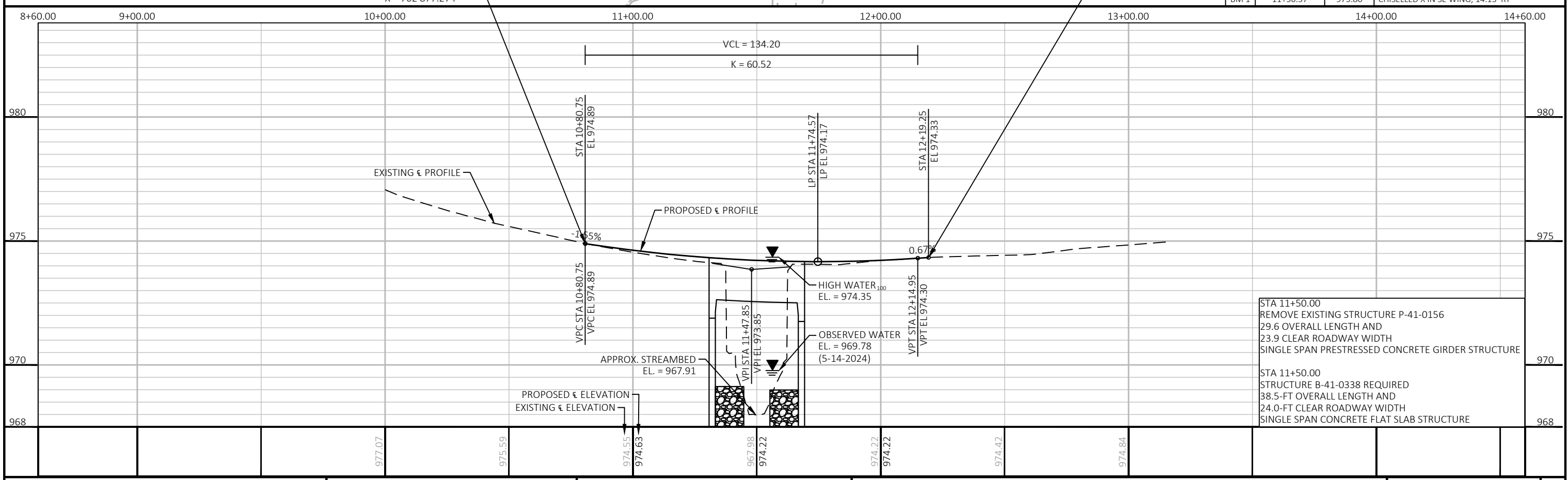
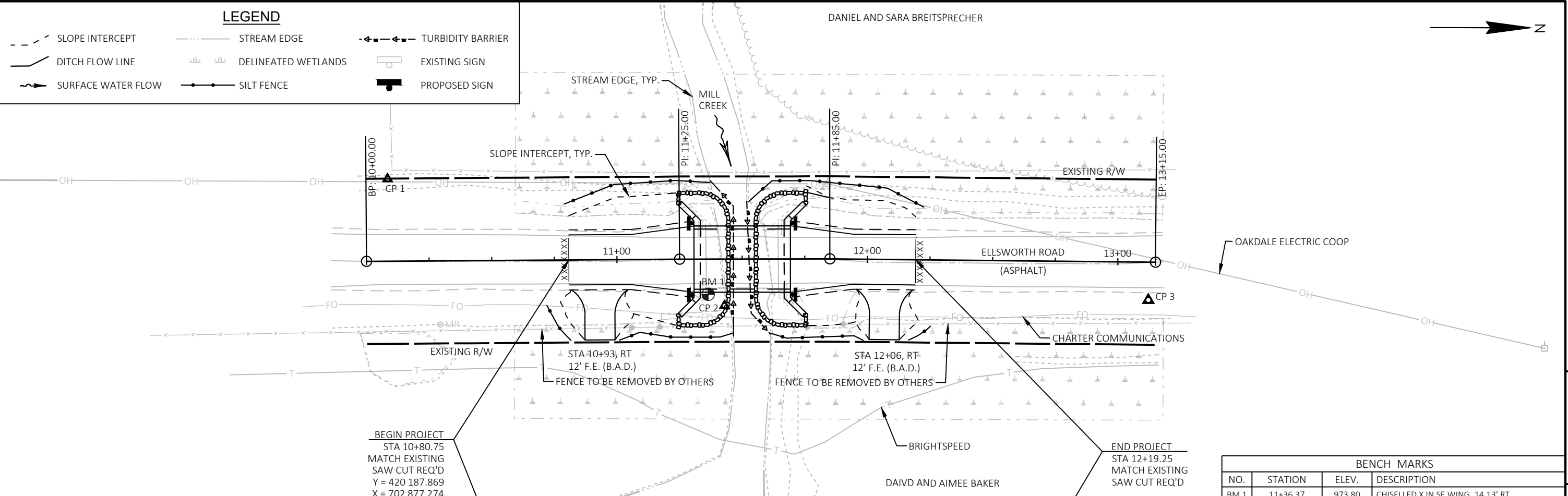
STATION	TO	STATION	LOCATION	650.4500	650.5000	650.6501.01	650.9911.01	650.9920
				CONSTRUCTION STAKING SUBGRADE LF	CONSTRUCTION STAKING BASE LF	CONSTRUCTION STAKING STRUCTURE LAYOUT 01. B-41-0338 EACH	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL 01. 7005-00-71 EACH	CONSTRUCTION STAKING SLOPE STAKES LF
10+81	-	11+31	SOUTH APPROACH	50	50	---	---	50
11+69	-	12+19	NORTH APPROACH	50	50	---	---	50
			PROJECT	---	---	1	1	---
			TOTAL	100	100	1*	1	100

* CATEGORY 0020

SAWING ASPHALT

STATION	LOCATION	LF
10+81	SOUTH APPROACH	20
11+69	NORTH APPROACH	20
	TOTAL	40

* CATEGORY 0020

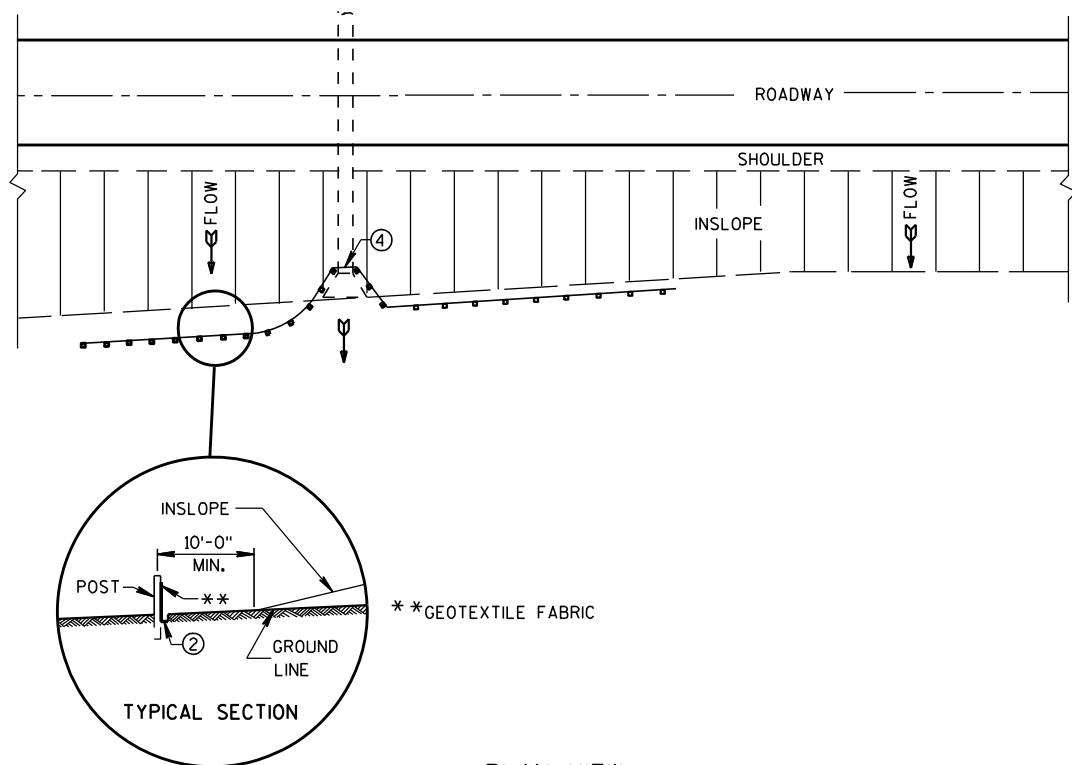


STA 11+50.00
 REMOVE EXISTING STRUCTURE P-41-0156
 29.6 OVERALL LENGTH AND
 23.9 CLEAR ROADWAY WIDTH
 SINGLE SPAN PRESTRESSED CONCRETE GIRDER STRUCTURE

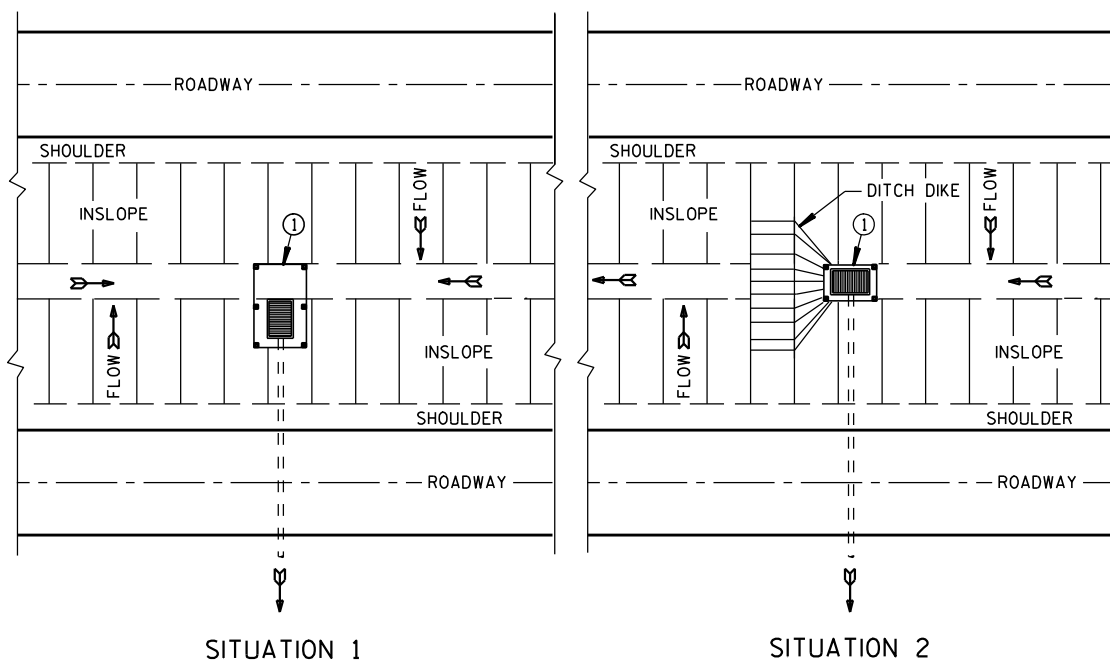
STA 11+50.00
 STRUCTURE B-41-0338 REQUIRED
 38.5-FT OVERALL LENGTH AND
 24.0-FT CLEAR ROADWAY WIDTH
 SINGLE SPAN CONCRETE FLAT SLAB STRUCTURE

Standard Detail Drawing List

08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
09A14-01	DRIVEWAYS WITHOUT CURB AND GUTTER
12A03-10	NAME PLATE (STRUCTURES)
13C19-03	HMA LONGITUDINAL JOINTS
15C02-10A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-10B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C06-12	SIGNING & MARKING FOR TWO LANE BRIDGES
15C11-11B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS



PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE

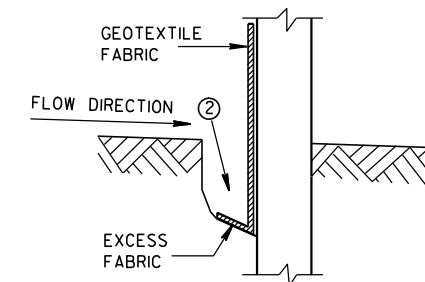


SITUATION 1 SITUATION 2
PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

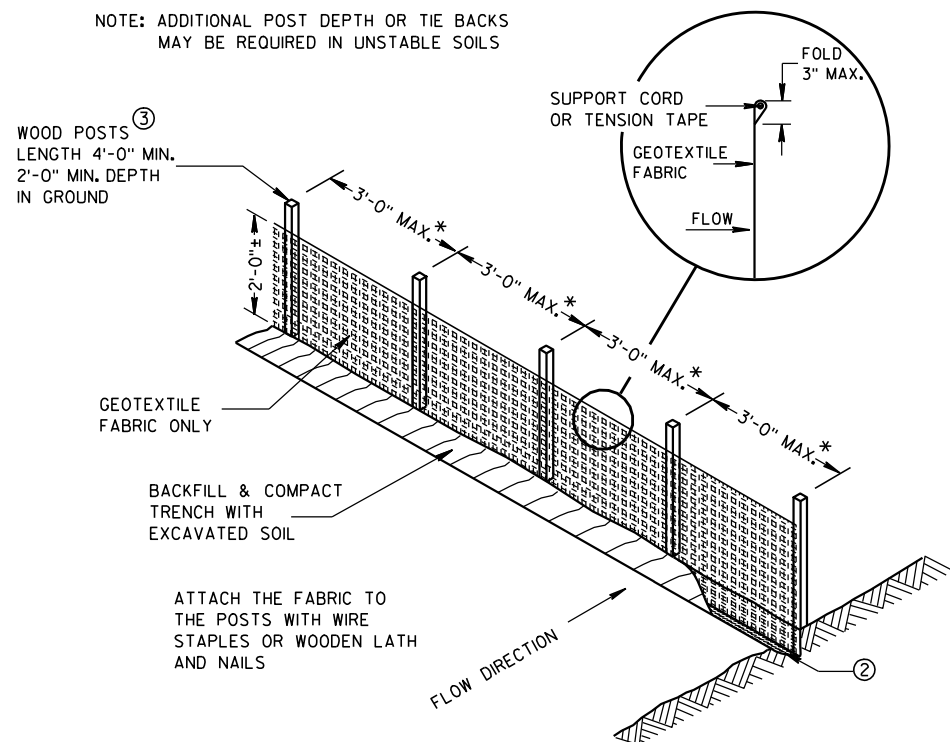
GENERAL NOTES

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

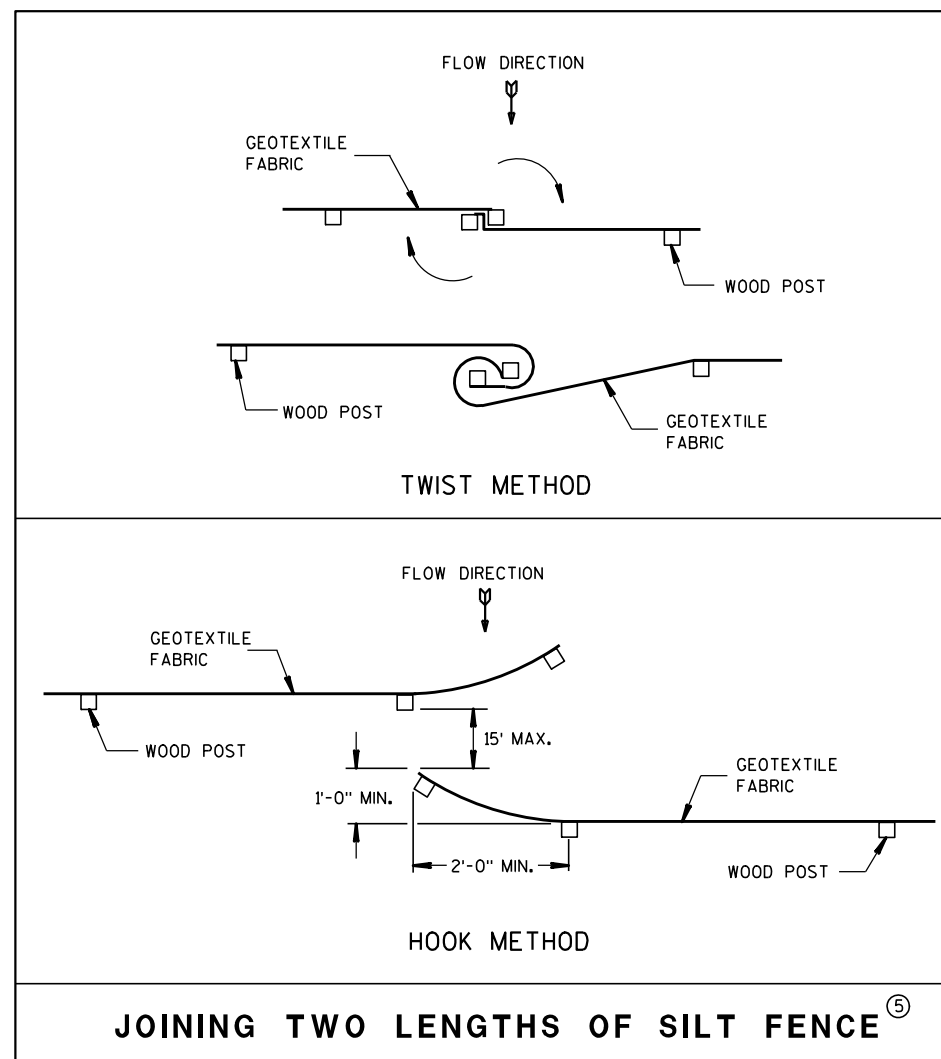
- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



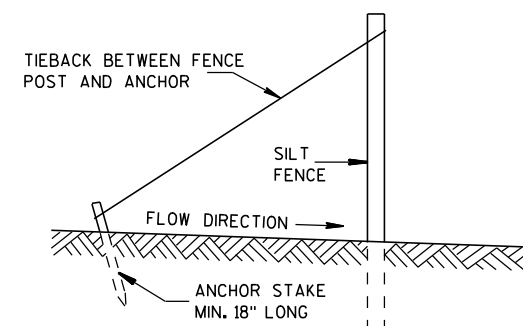
TRENCH DETAIL



SILT FENCE



JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

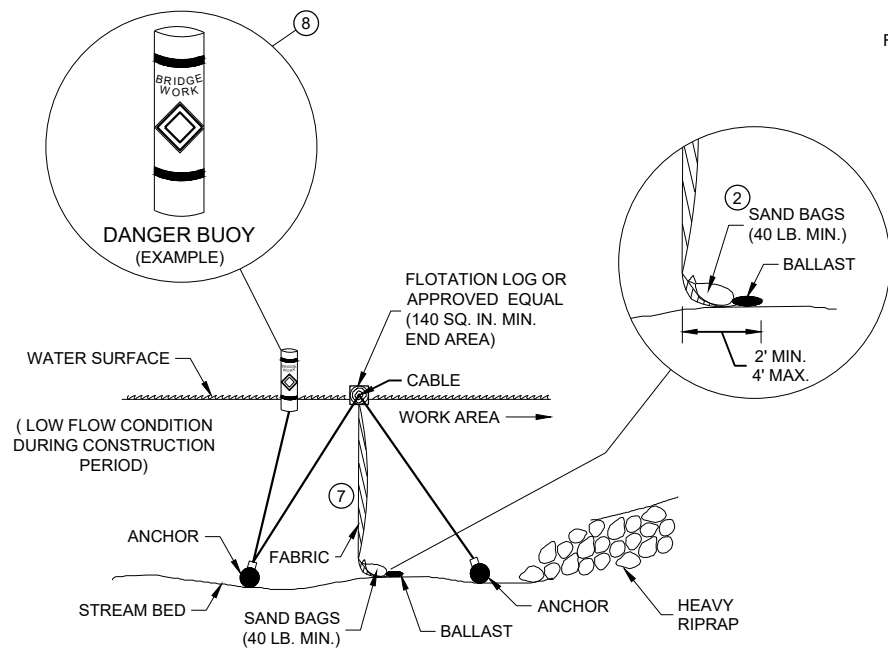
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-29-05
DATE

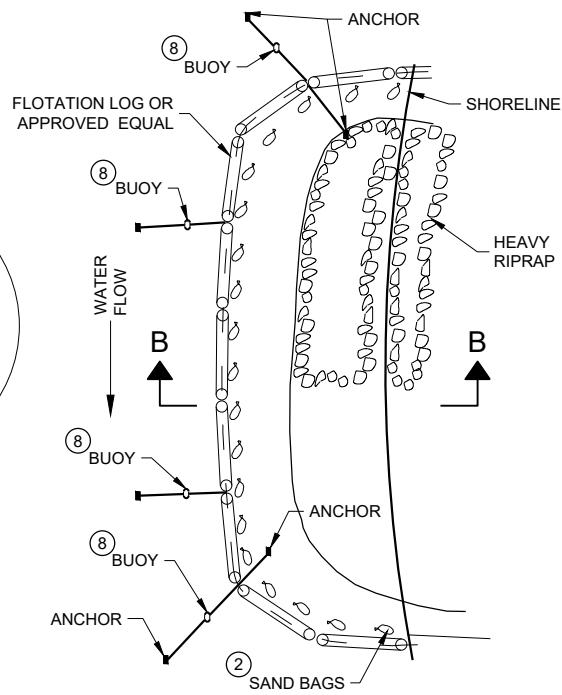
FHWA

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

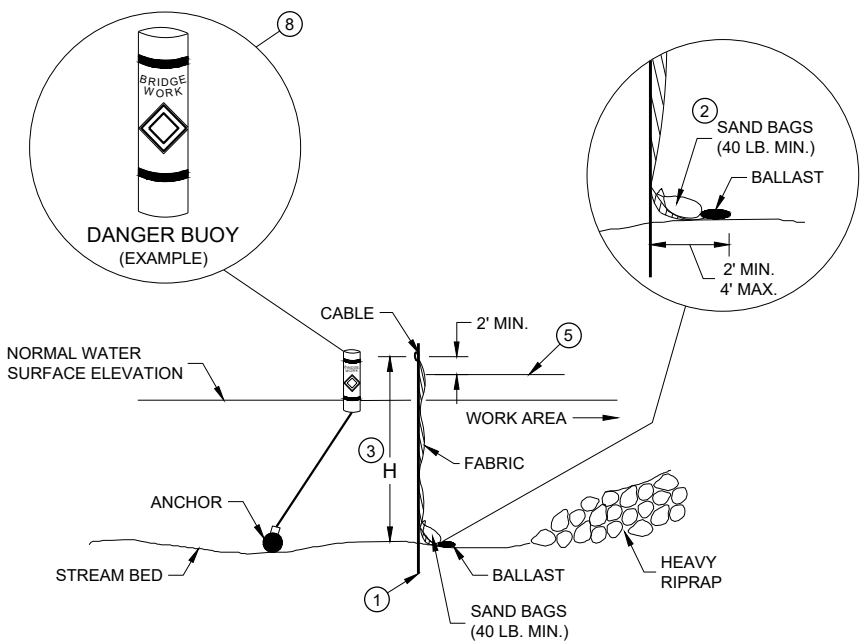


SECTION B - B

**TURBIDITY BARRIER - FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6**

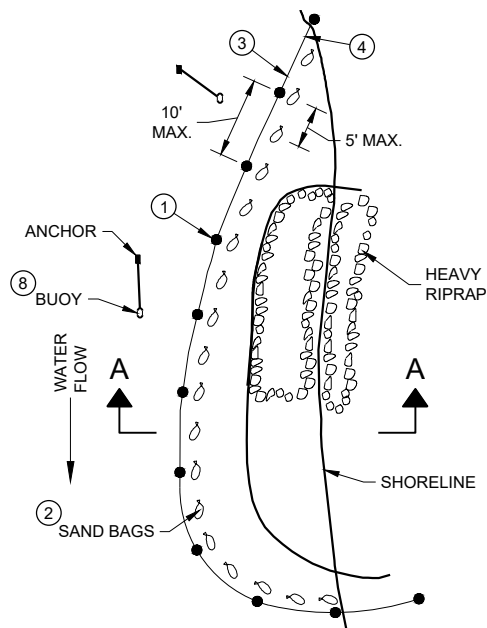


PLAN VIEW



SECTION A - A

TURBIDITY BARRIER - STANDARD POST INSTALLATION



PLAN VIEW

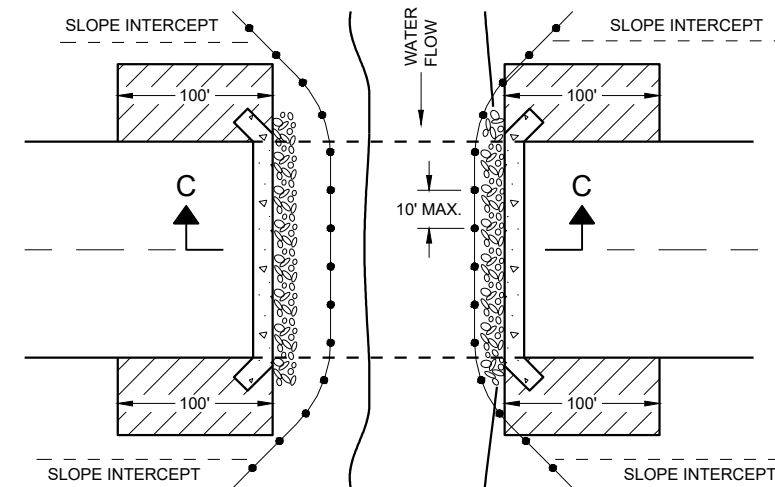
TURBIDITY BARRIER PLACEMENT DETAILS

GENERAL NOTES

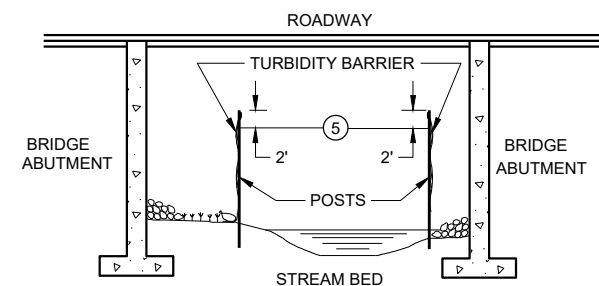
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

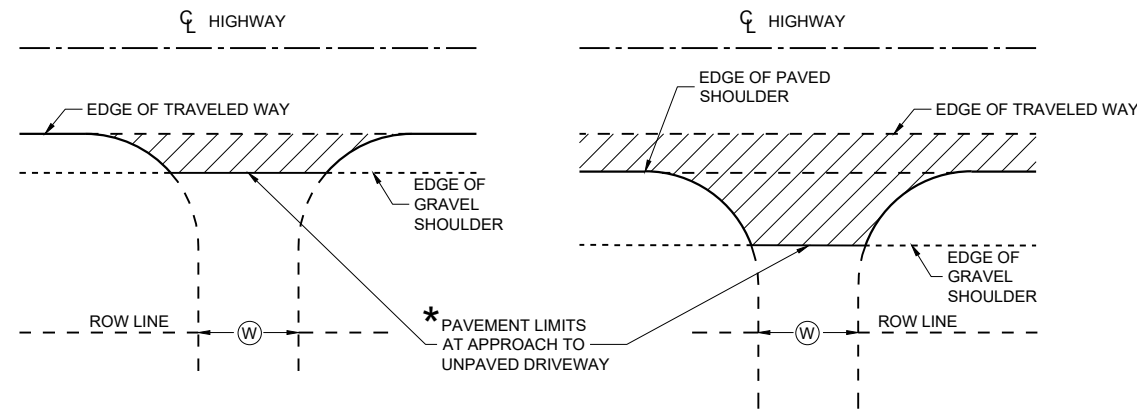
**TURBIDITY BARRIER DETAIL SHOWING
TYPICAL PLACEMENT AT STRUCTURES**

TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



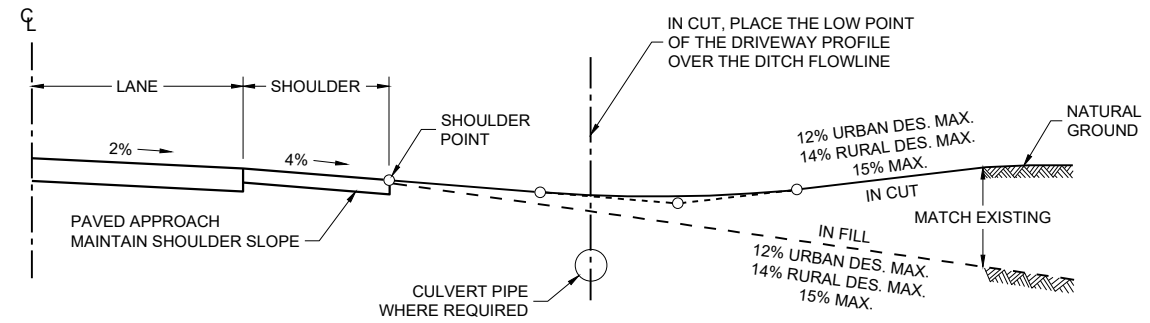
* WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED TO MATCH DRIVEWAY PAVEMENT.

PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

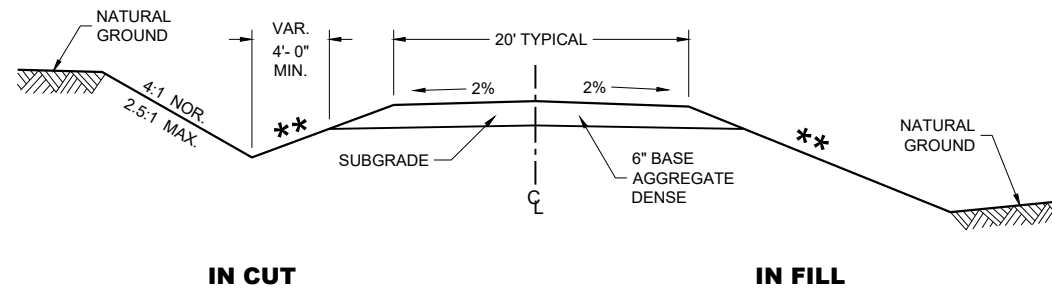
PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

**RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)**

Ⓜ : DRIVEWAY WIDTHS (MEASURED AT ROW LINE)
 ~ COMMERCIAL & INDUSTRIAL 16' MIN. - 35' MAX.
 ~ RESIDENTIAL & AGRICULTURAL 16' MIN. - 24' MAX.
 (NONCOMMERCIAL)



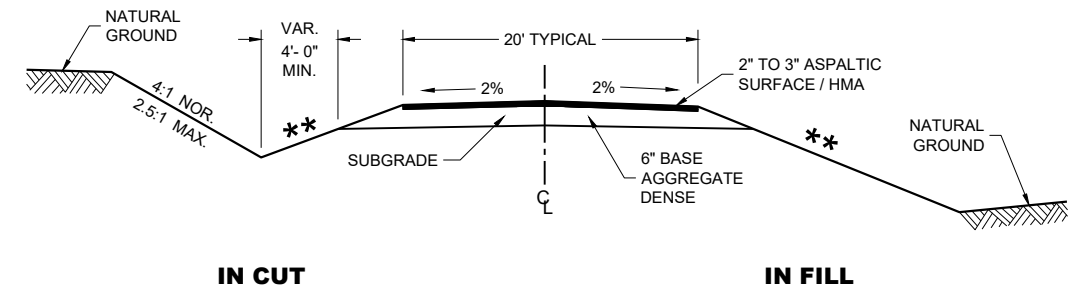
TYPICAL DRIVEWAY PROFILES



**TYPICAL CROSS SECTION FOR
PRIVATE DRIVE OR FIELD ENTRANCE
AGGREGATE SURFACE**

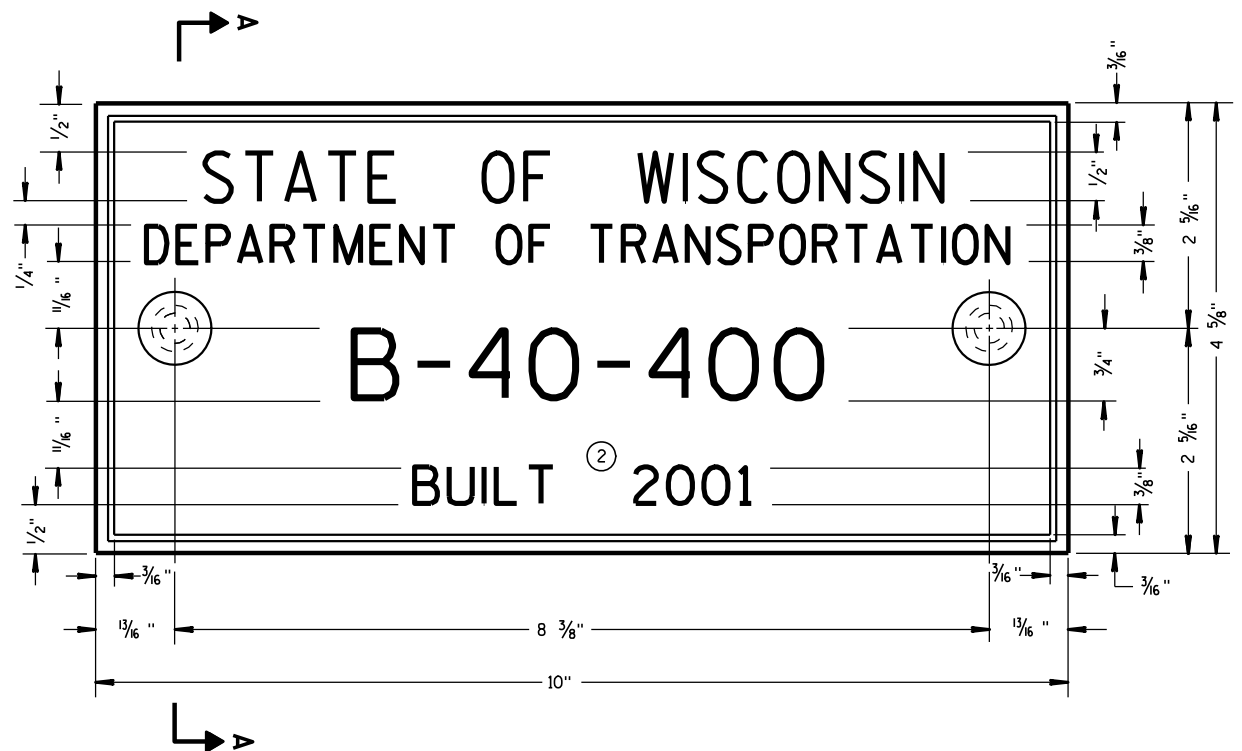
**
SLOPE CAN VARY WITH SPEED. SEE 11-45-30.6.2

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥ 35 TO < 60	6:1
≥60	10:1



**TYPICAL CROSS SECTION FOR
PRIVATE DRIVE OR FIELD ENTRANCE
ASPHALTIC SURFACE**

DRIVEWAYS WITHOUT CURB AND GUTTER	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2025 DATE	/S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA	



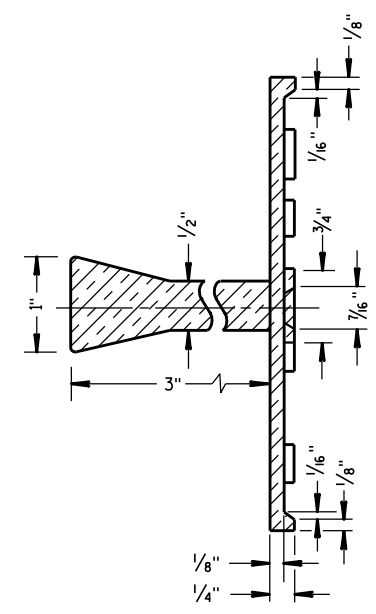
TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)

GENERAL NOTES

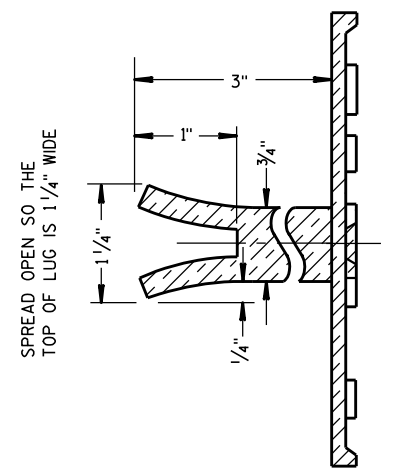
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

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

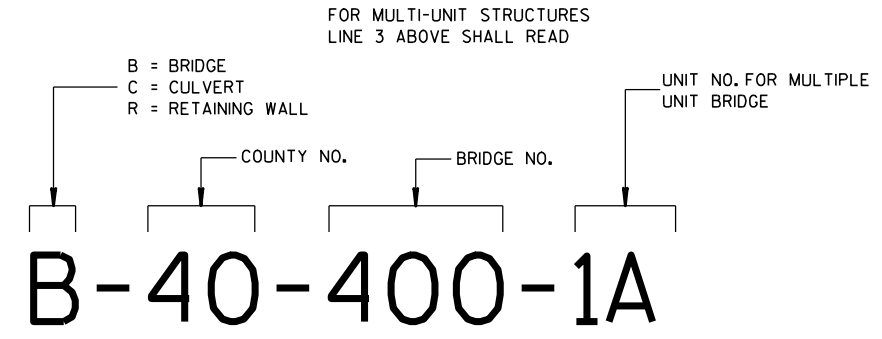
- ① EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ② REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A

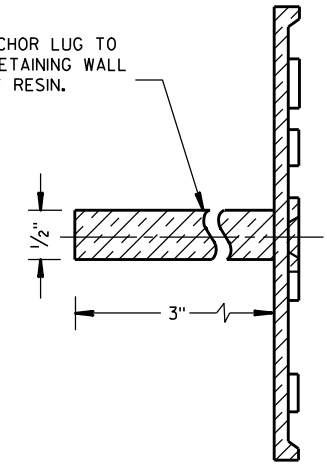


ALTERNATE LUG



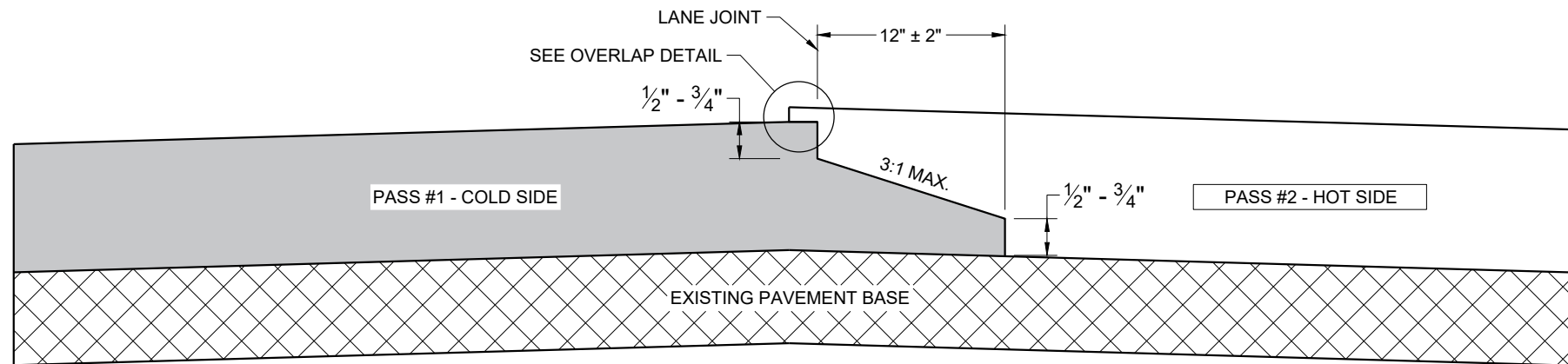
**NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES**

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

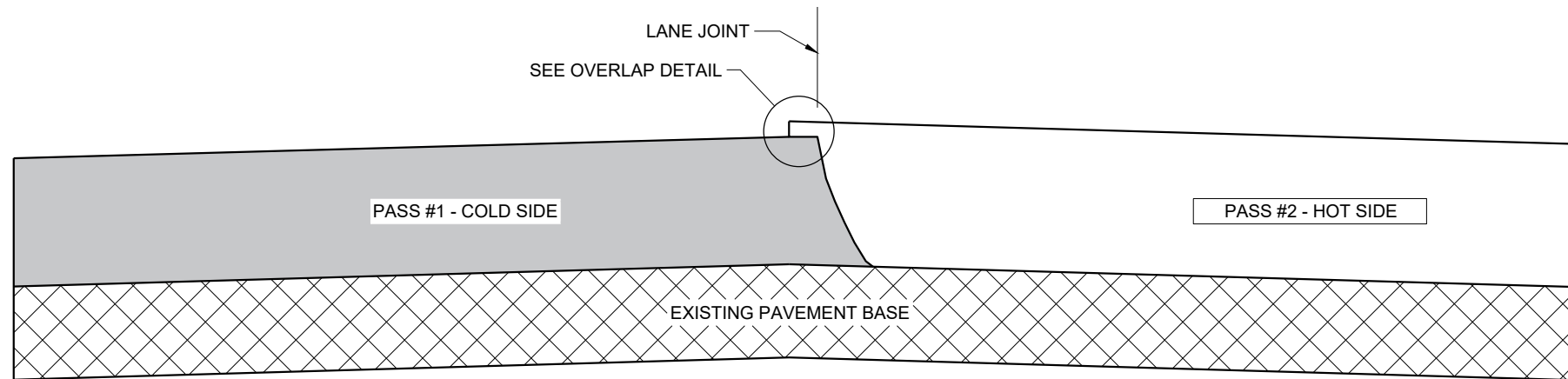


ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

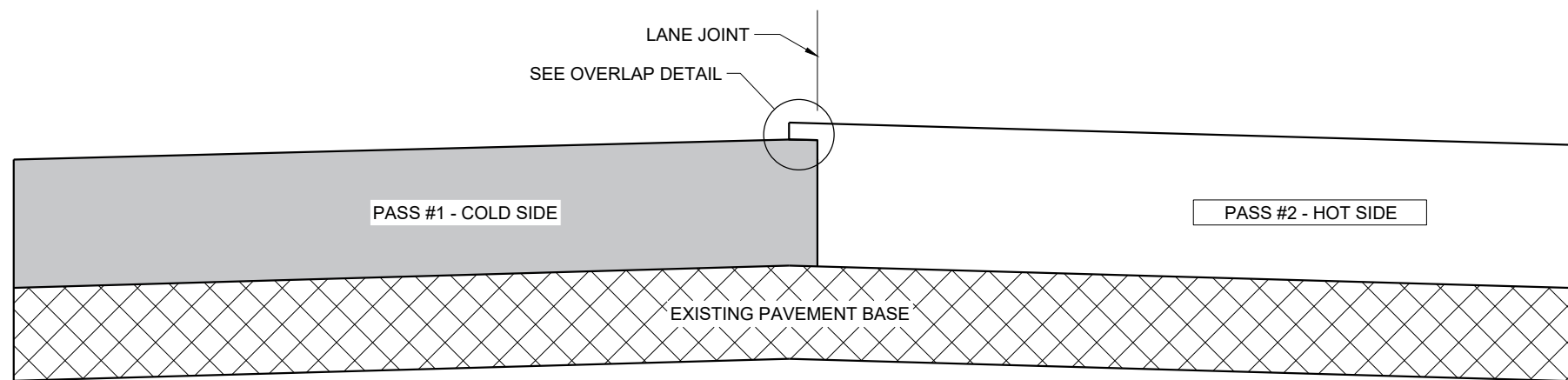
NAME PLATE (STRUCTURES)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE 3/26/10	/S/ Scot Becker CHIEF STRUCTURAL DEVELOPMENT ENGINEER
FHWA	



TYPICAL PAVEMENT CROSS SECTION NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION VERTICAL JOINT (MILLED)

GENERAL NOTES

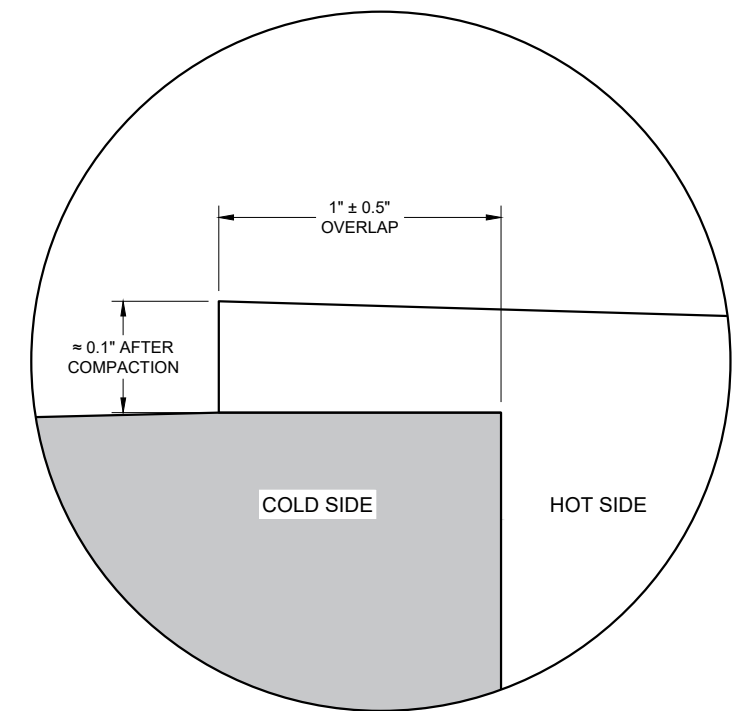
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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)

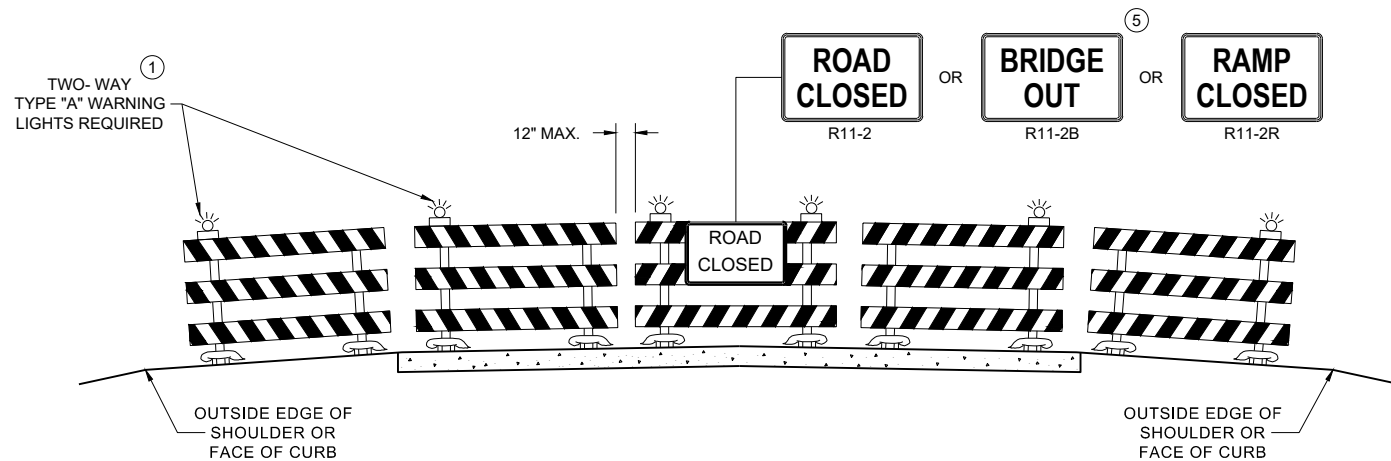
6

6

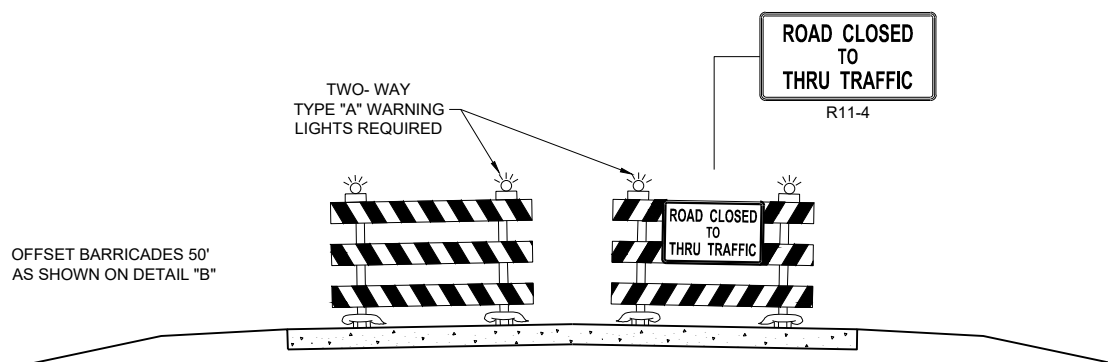
SDD 13C19 - 03

SDD 13C19 - 03

HMA LONGITUDINAL JOINTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2020 DATE	/S/ Steven Hefel HMA PAVEMENT ENGINEER
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.

PARTIAL NUMBERS ON SIGNS SHALL BE DISPLAYED AS A WHOLE NUMBER (AS NEEDED) FOLLOWED BY A FRACTION. SIGNS SHALL NOT DISPLAY NUMBERS IN DECIMAL FORM.

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

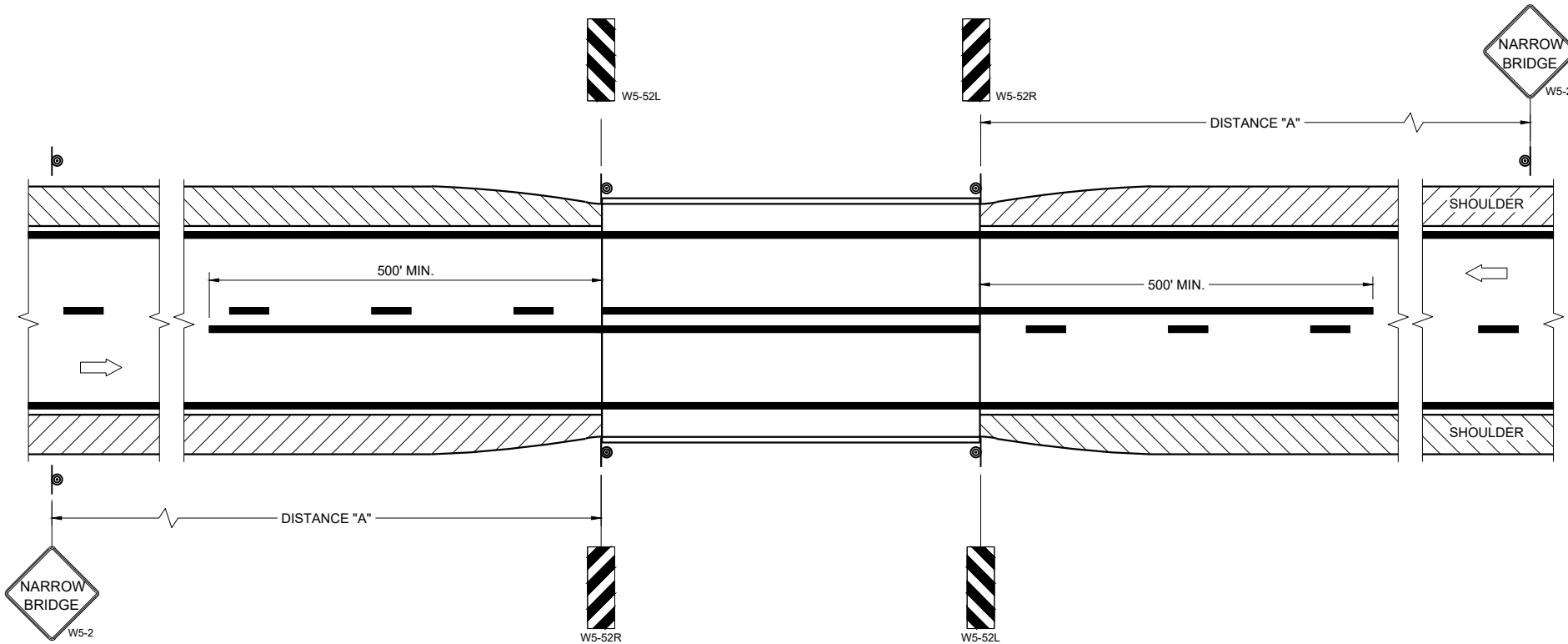
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

- 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"

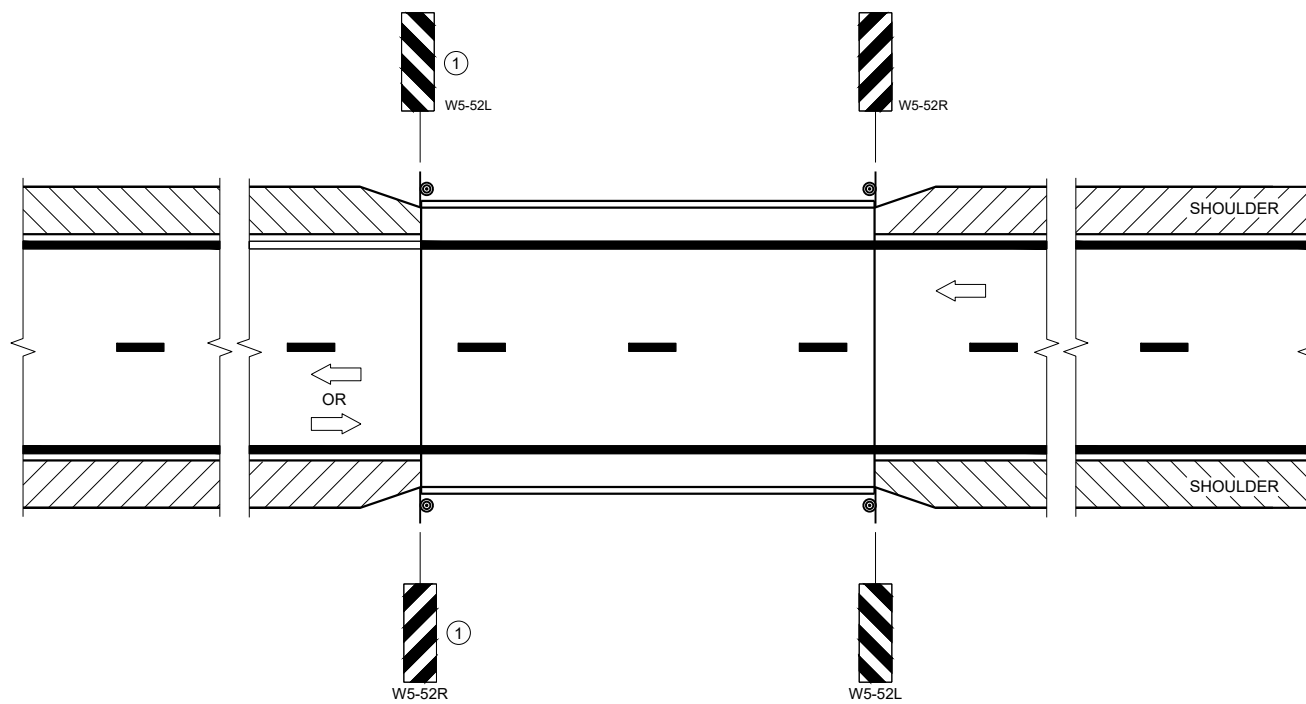
SIGNS PLACED ON TYPE III BARRICADES THAT ARE SIZES OTHER THAN 48"X30" SHALL HAVE A CORRUGATED POLYPROPYLENE OR POLYETHYLENE PLASTIC SIGN BASE.

- 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 November 2025 DATE	/s/ Andrew Heidtke WORK ZONE ENGINEER
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

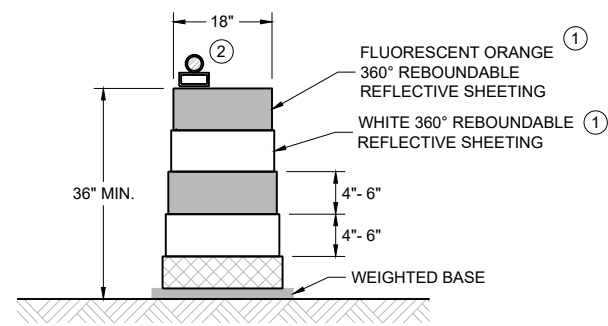
POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	700'

SIGNING AND MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

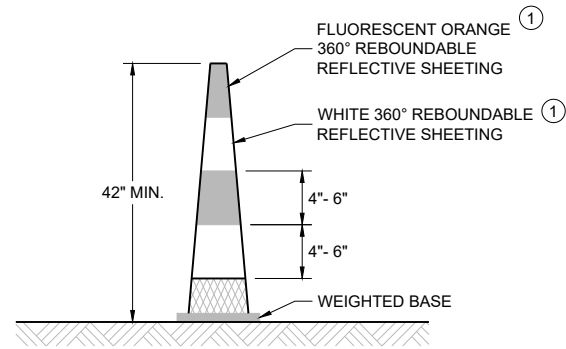
APPROVED
 May 2023 /S/ Jeannie Silver
 DATE Statewide Pavement Marking Engineer

FHWA



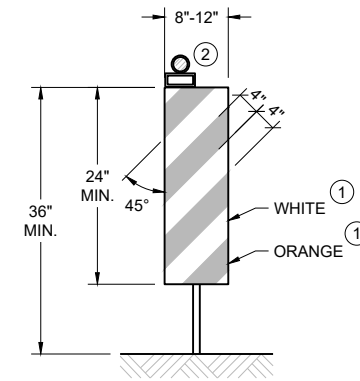
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS
BALLAST WIDTHS
RANGE FROM 14"-20"

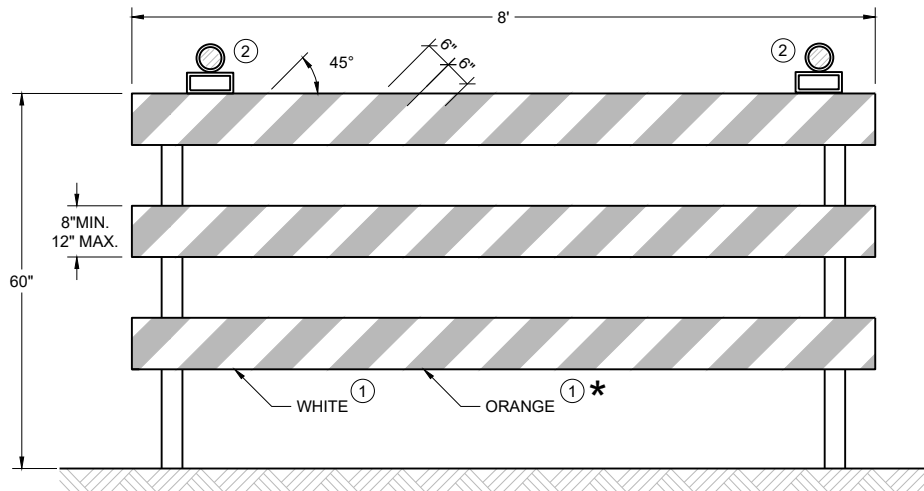


VERTICAL PANEL

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

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.



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

**CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS**

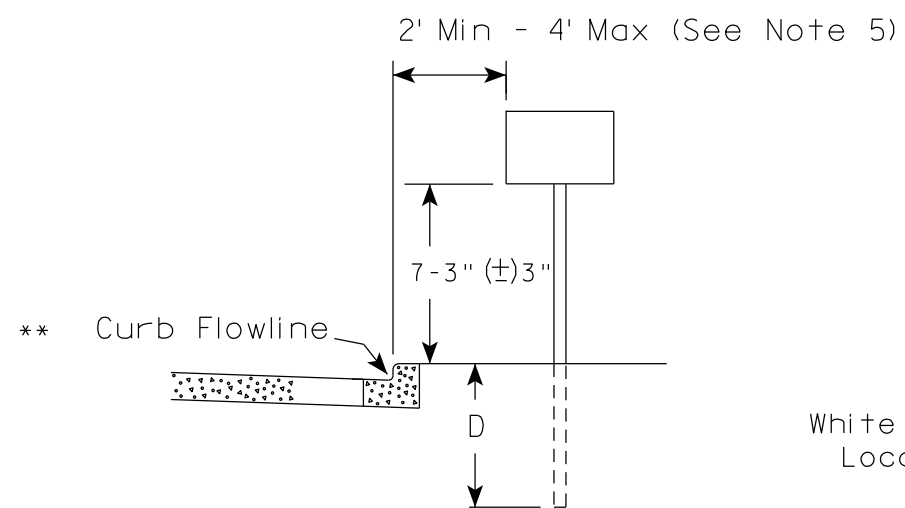
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2026 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

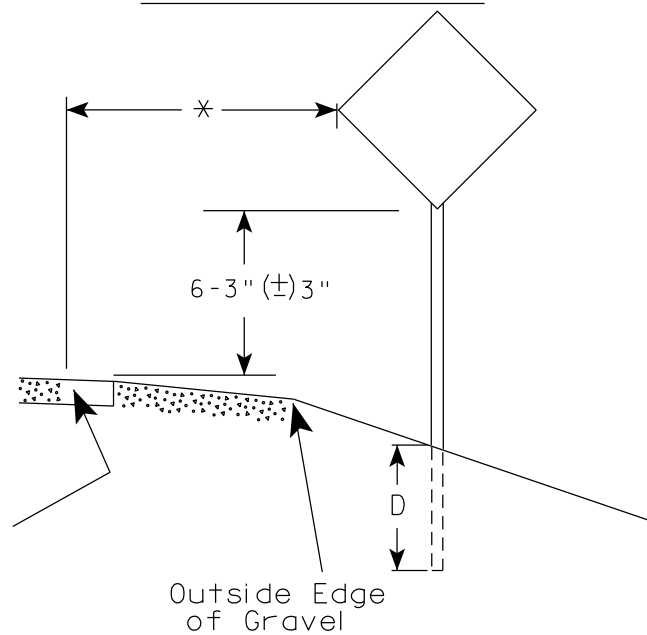
FHWA

URBAN AREA

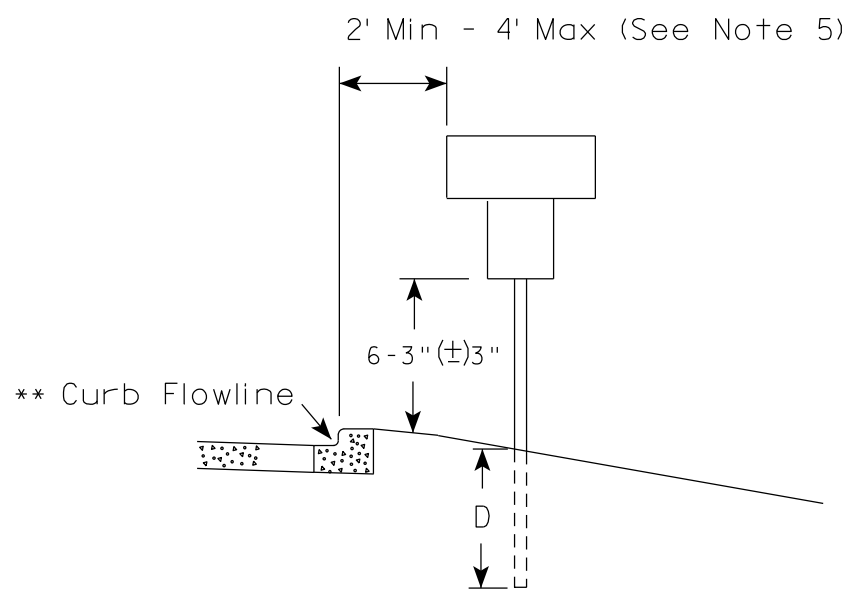
RURAL AREA (See Note 2)



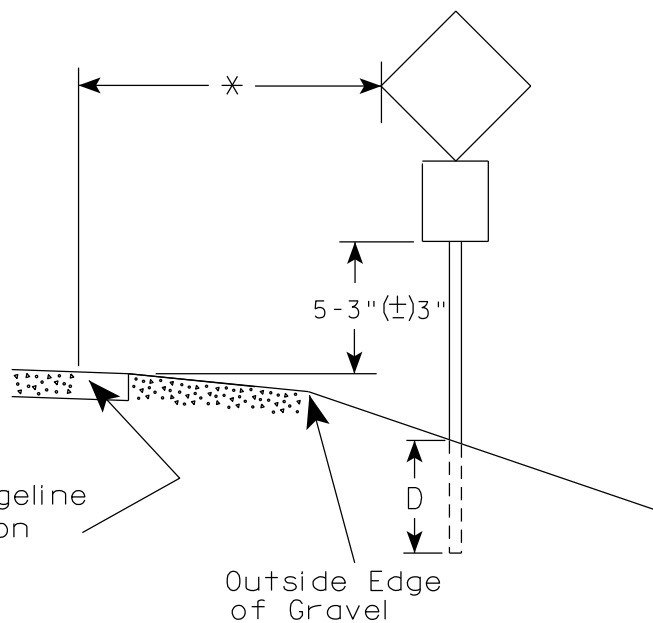
White Edgeline Location



Outside Edge of Gravel



White Edgeline Location



Outside Edge of Gravel

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.

POST EMBEDMENT DEPTH

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

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

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

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Raub
for State Traffic Engineer

DATE 12/6/23

PLATE NO. A4-3.23

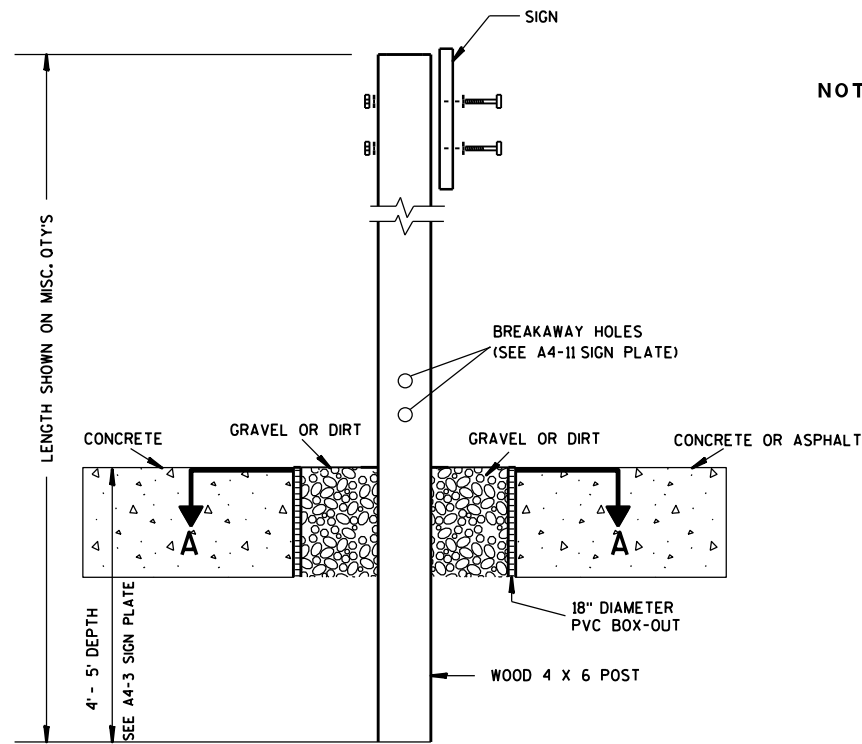
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

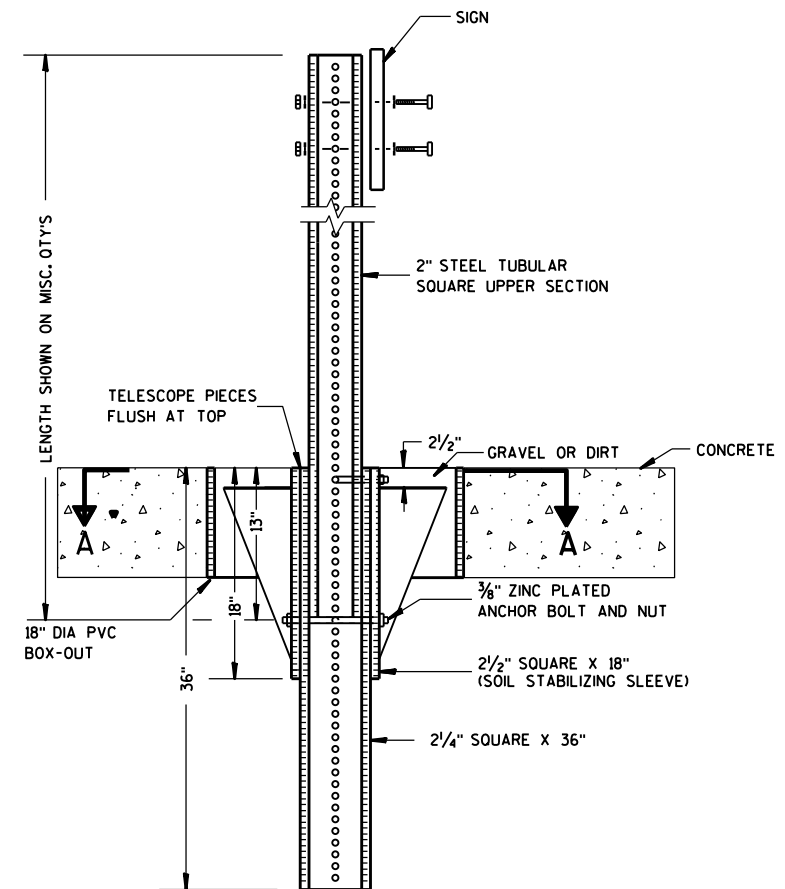
E



ELEVATION VIEW

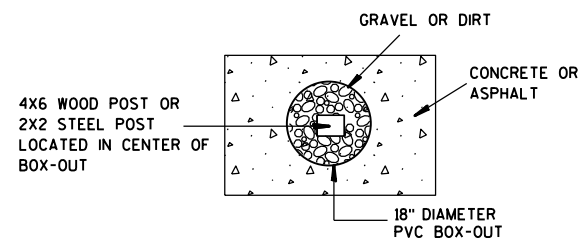
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B	
<small>WISCONSIN DEPT OF TRANSPORTATION</small>	
APPROVED <i>Matthew R. Rauch</i> <small>for State Traffic Engineer</small>	
<small>DATE 1/27/14</small>	<small>PLATE NO. A4-3B.1</small>

GENERAL NOTES

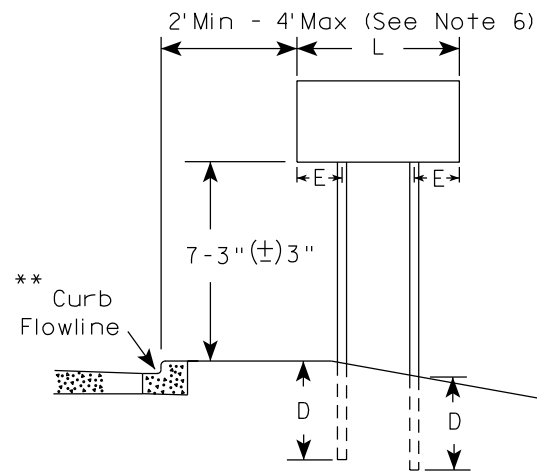
- For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
- See tables below for required number of posts.
- For expressways and freeways, mounting height is 7'-3" (\pm 3") or 6'-3" (\pm 3") depending upon existence of sub-sign.
- The (\pm) tolerance for mounting height is 3 inches.
- J-Assemblies are considered to be one sign for mounting height.
- Offset distance shall be consistent with existing signs or consistent throughout length of project.
- Folding signs shall be mounted at a height of 5'-3" (\pm 3") or as directed by the engineer.
- The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (\pm 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" (\pm 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.

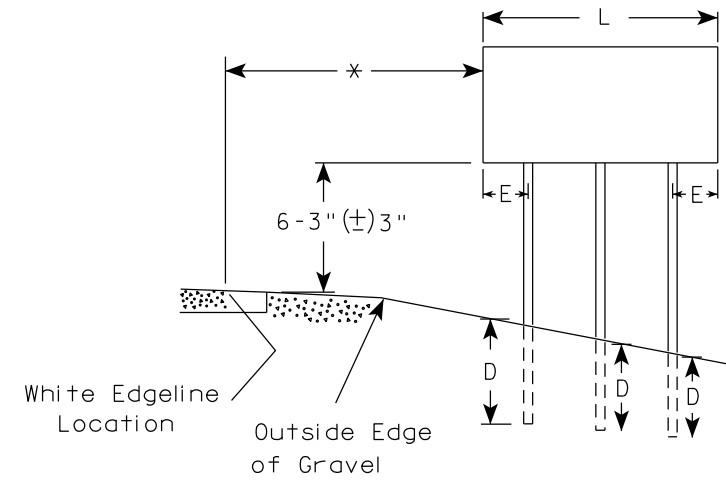
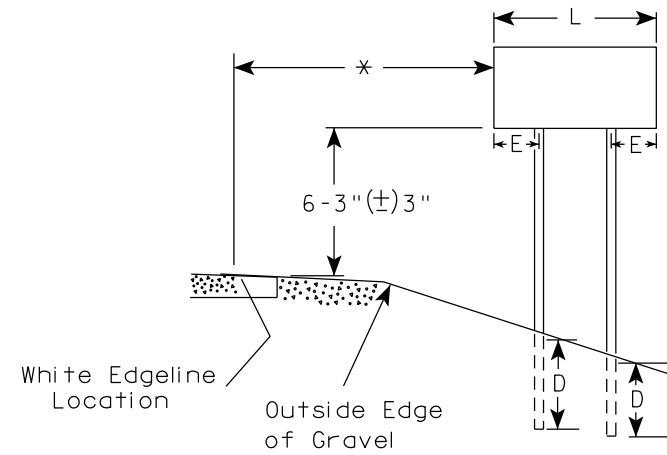
** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs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

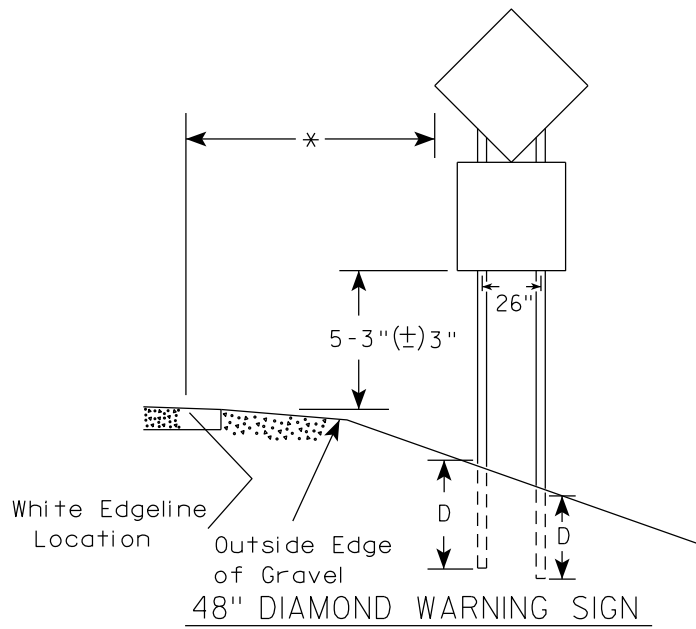
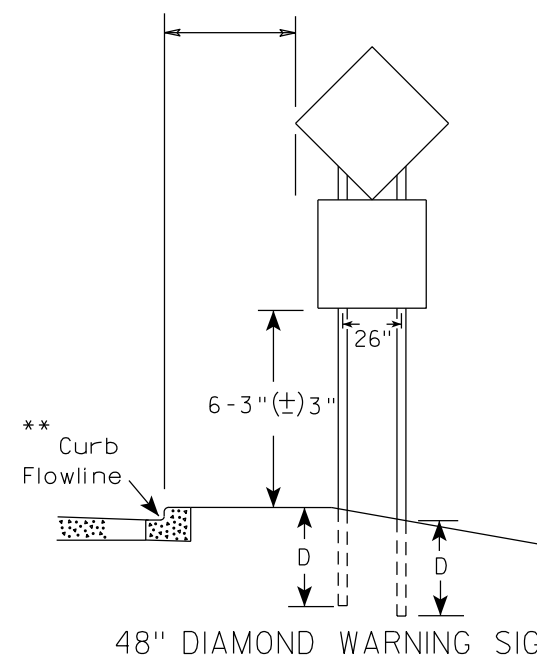
URBAN AREA



RURAL AREA (See Note 3)



URBAN AREA



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

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

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

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

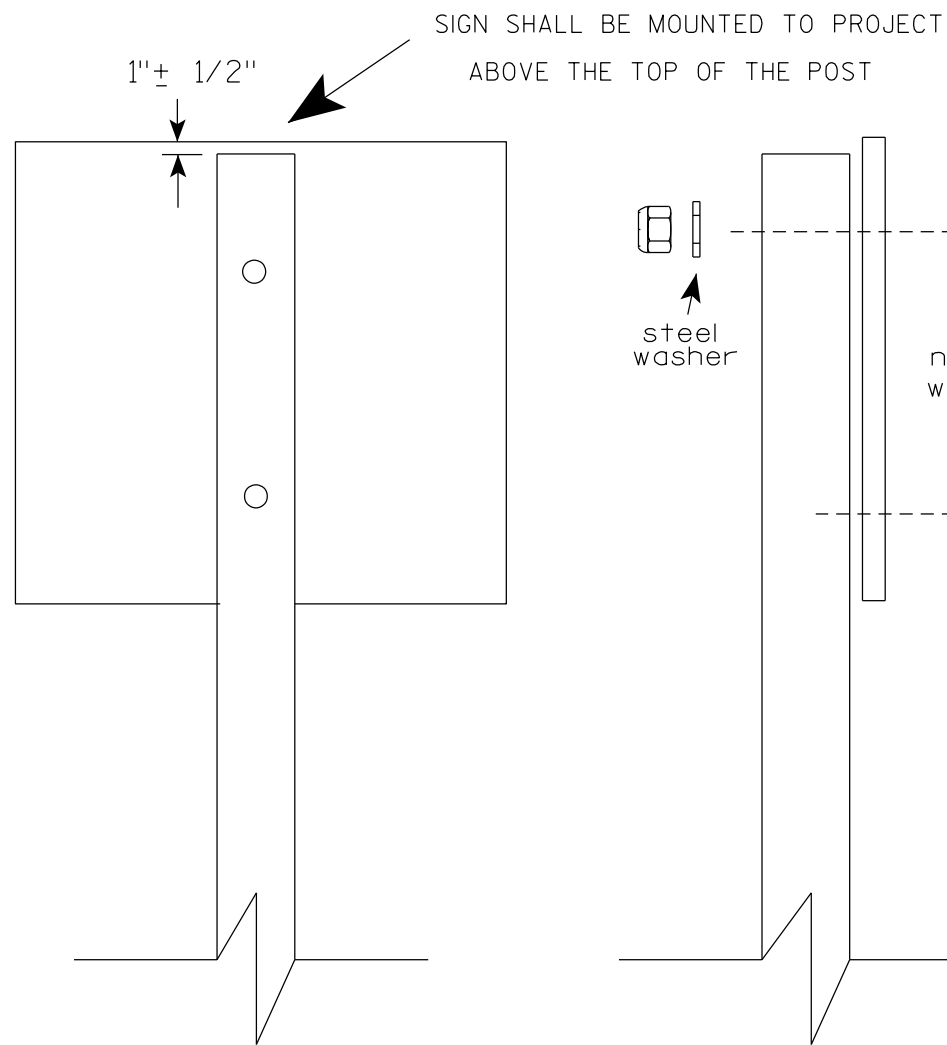
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



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

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

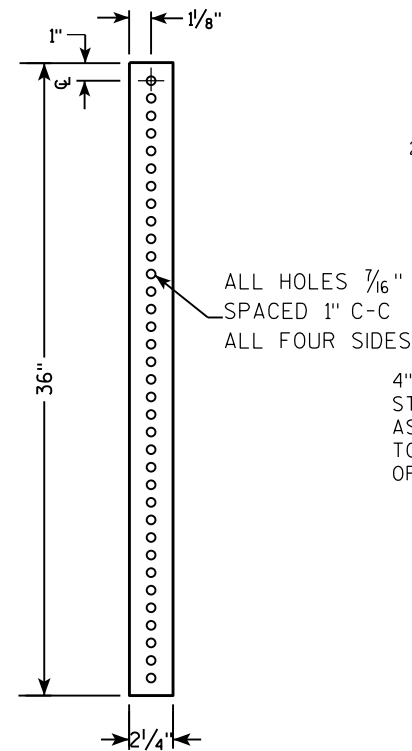
- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 - $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE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

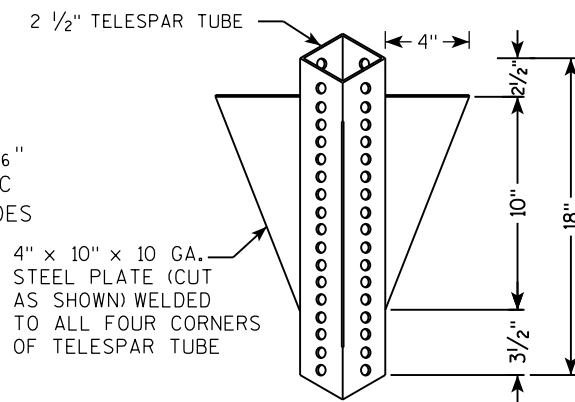
ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R Rauch</i> For State Traffic Engineer
DATE 4/1/2020	PLATE NO. A4-8.9

**TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM**

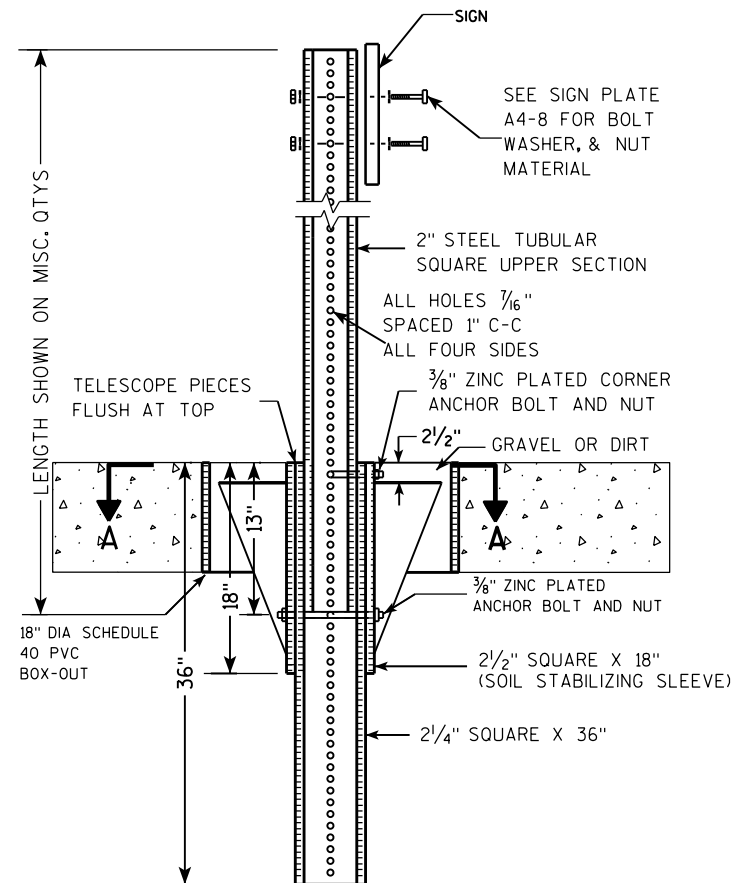
2 1/4" SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



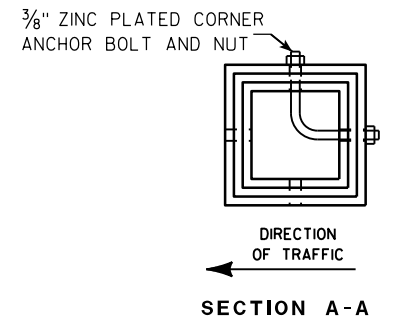
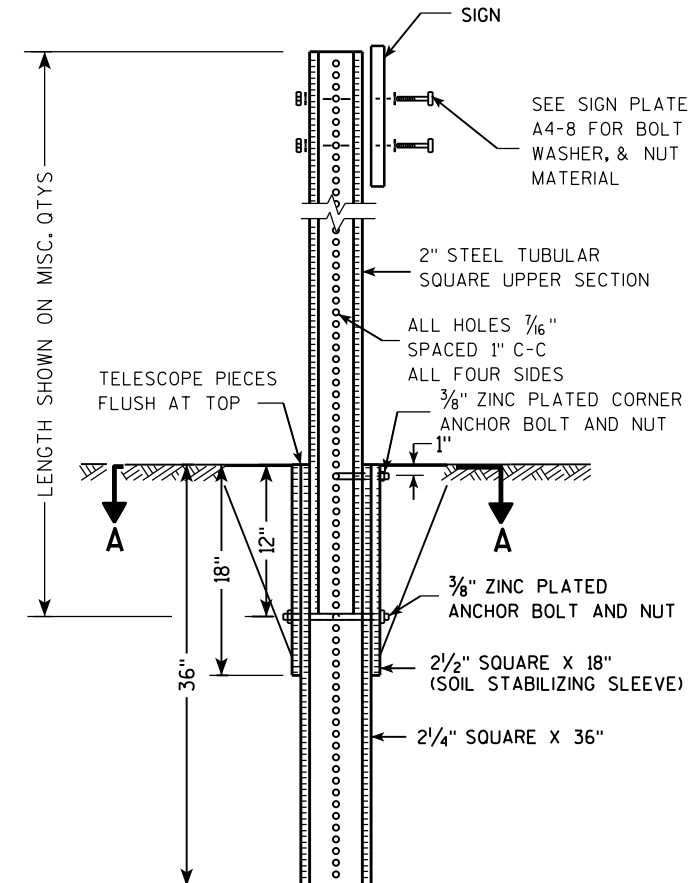
2 1/2" SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH



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



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



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

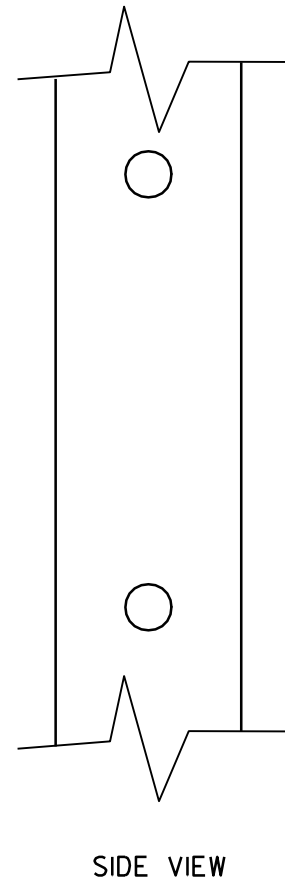
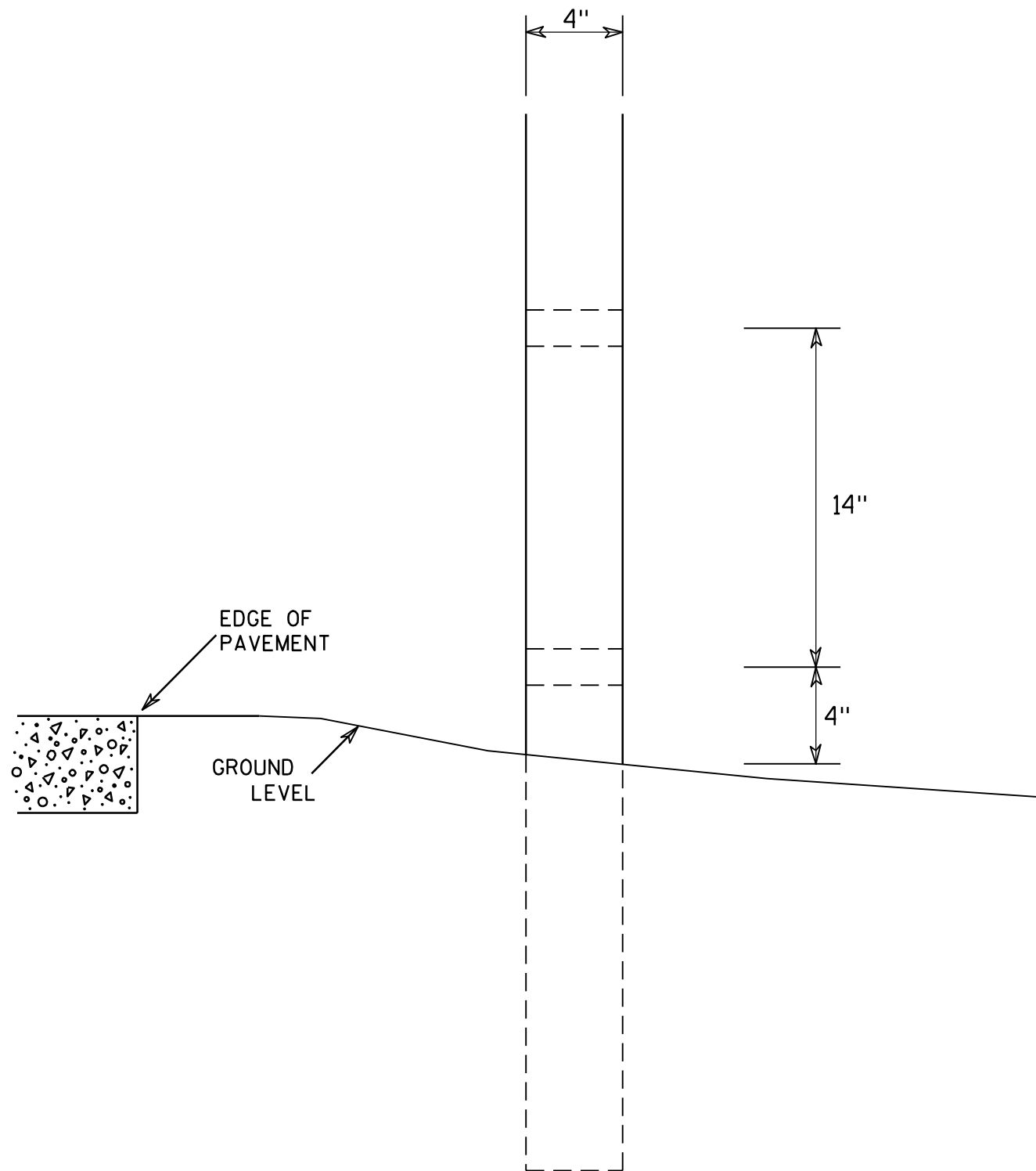
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

**TUBULAR STEEL
SIGN POST
A4-9**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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



GENERAL NOTES

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

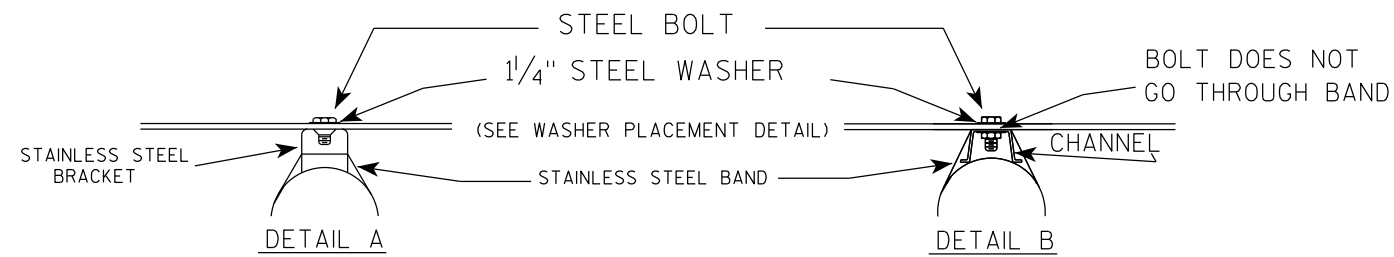
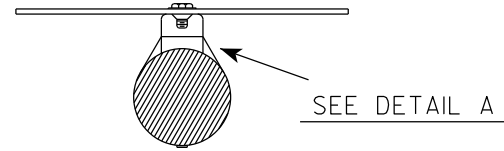
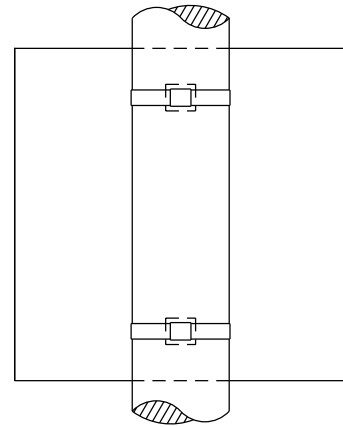
7

7

4 X 6 WOOD POST MODIFICATIONS	
<i>WISCONSIN DEPT OF TRANSPORTATION</i>	
APPROVED	<i>Chester J Spang</i> for State Traffic Engineer
DATE 3/27/97	PLATE NO. A4-11.2

BANDING

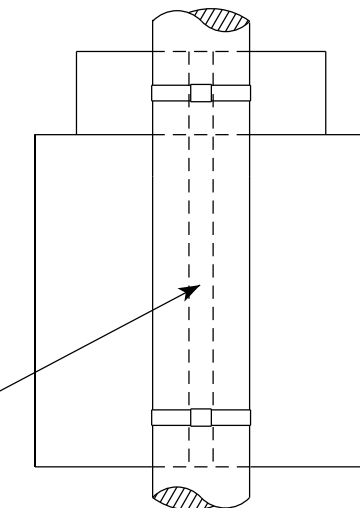
SINGLE SIGN



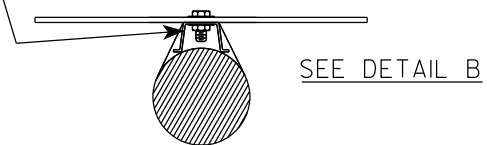
GENERAL NOTES

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

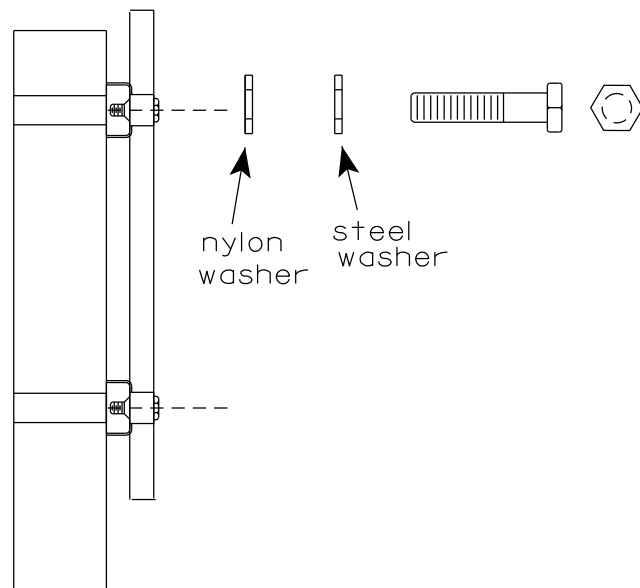
"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



WASHER PLACEMENT



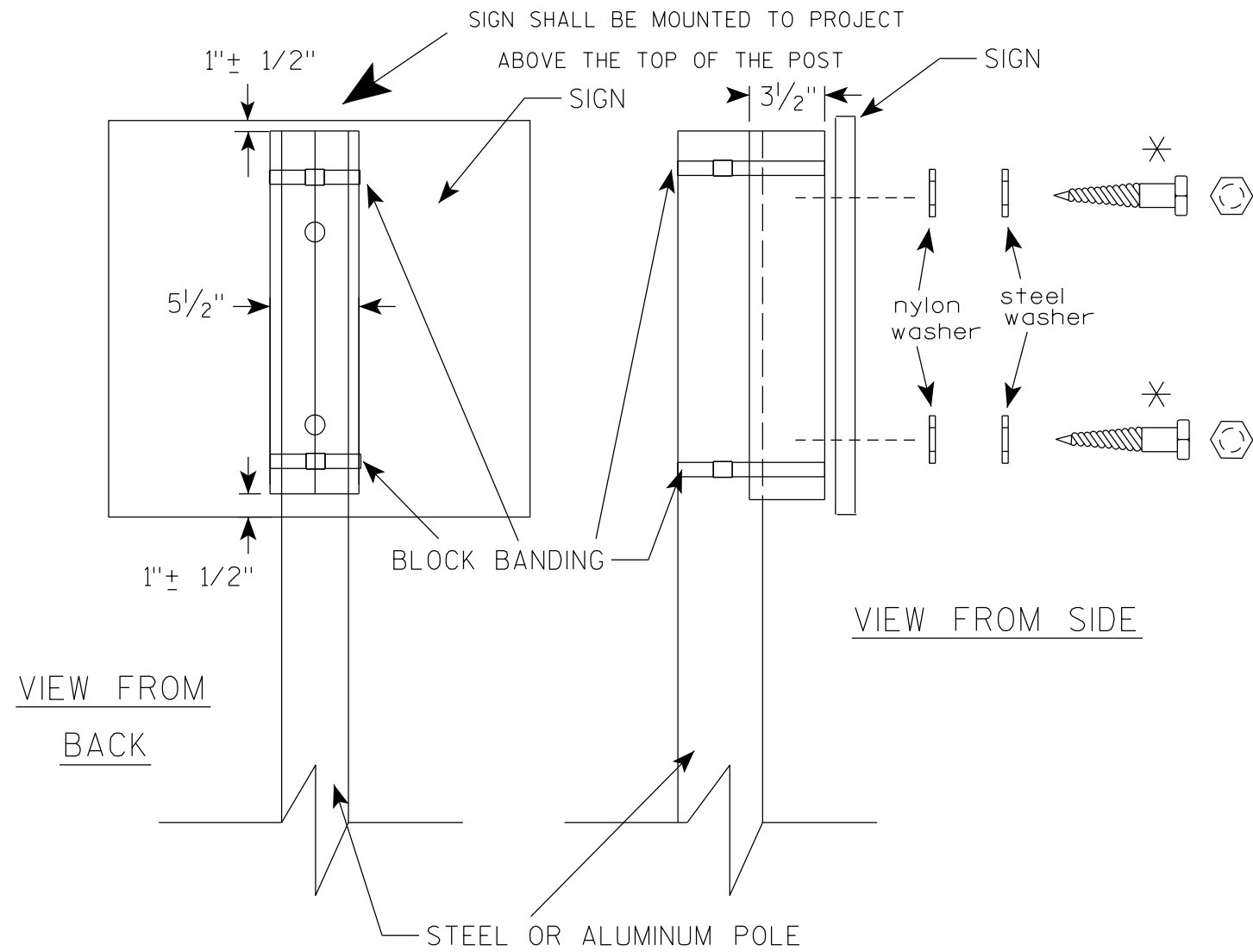
WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

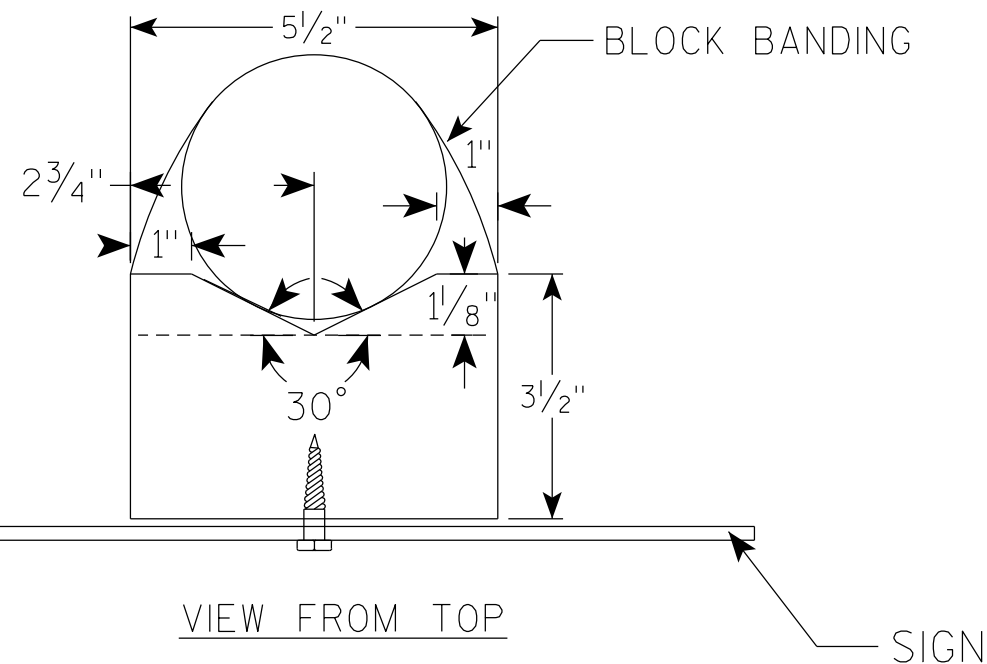
DATE 6/10/19 PLATE NO. A5-9.4



VIEW FROM
BACK

VIEW FROM SIDE

STEEL OR ALUMINUM POLE



VIEW FROM TOP

SIGN

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 1/4" O.D. X 3/8" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 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

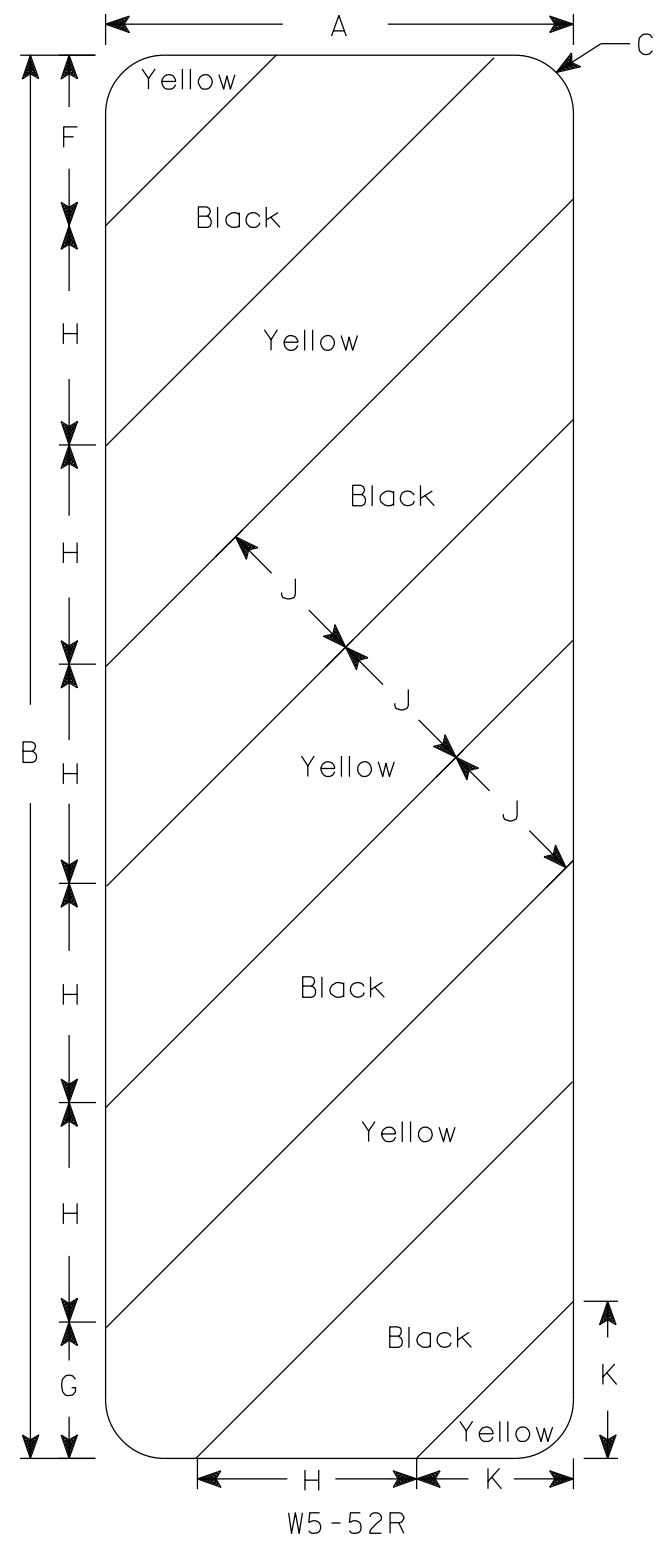
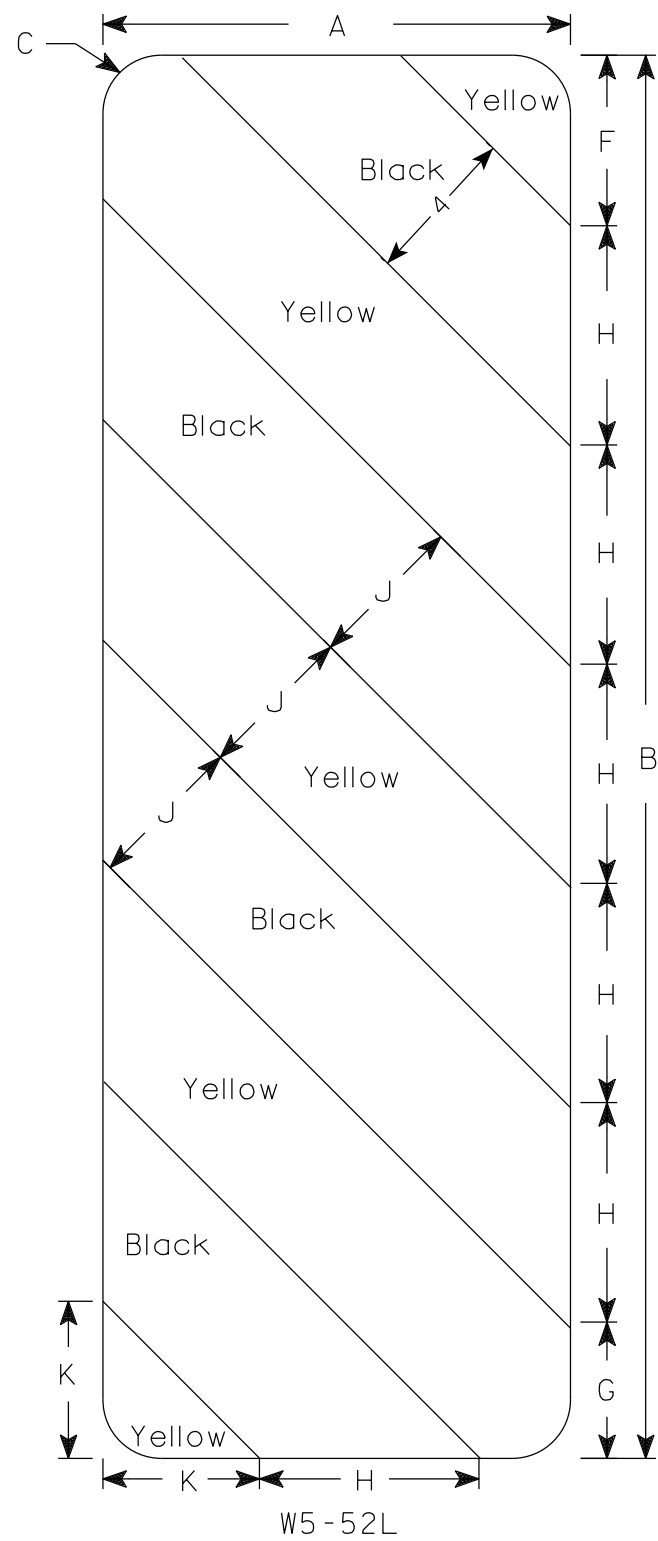
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

PROJECT NO:

SHEET NO:

E



NOTES

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

7

7

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

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 3/4" UNLESS OTHERWISE NOTED.

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 THE "GENERAL PLAN" SHEET AND THE ABUTMENT SHEETS.

THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND ABUTMENT WING FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCLUDED WITH "EXCAVATION FOR STRUCTURES BRIDGES B-41-338".

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 UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-41-338" SHALL BE THE EXISTING GROUND LINE.

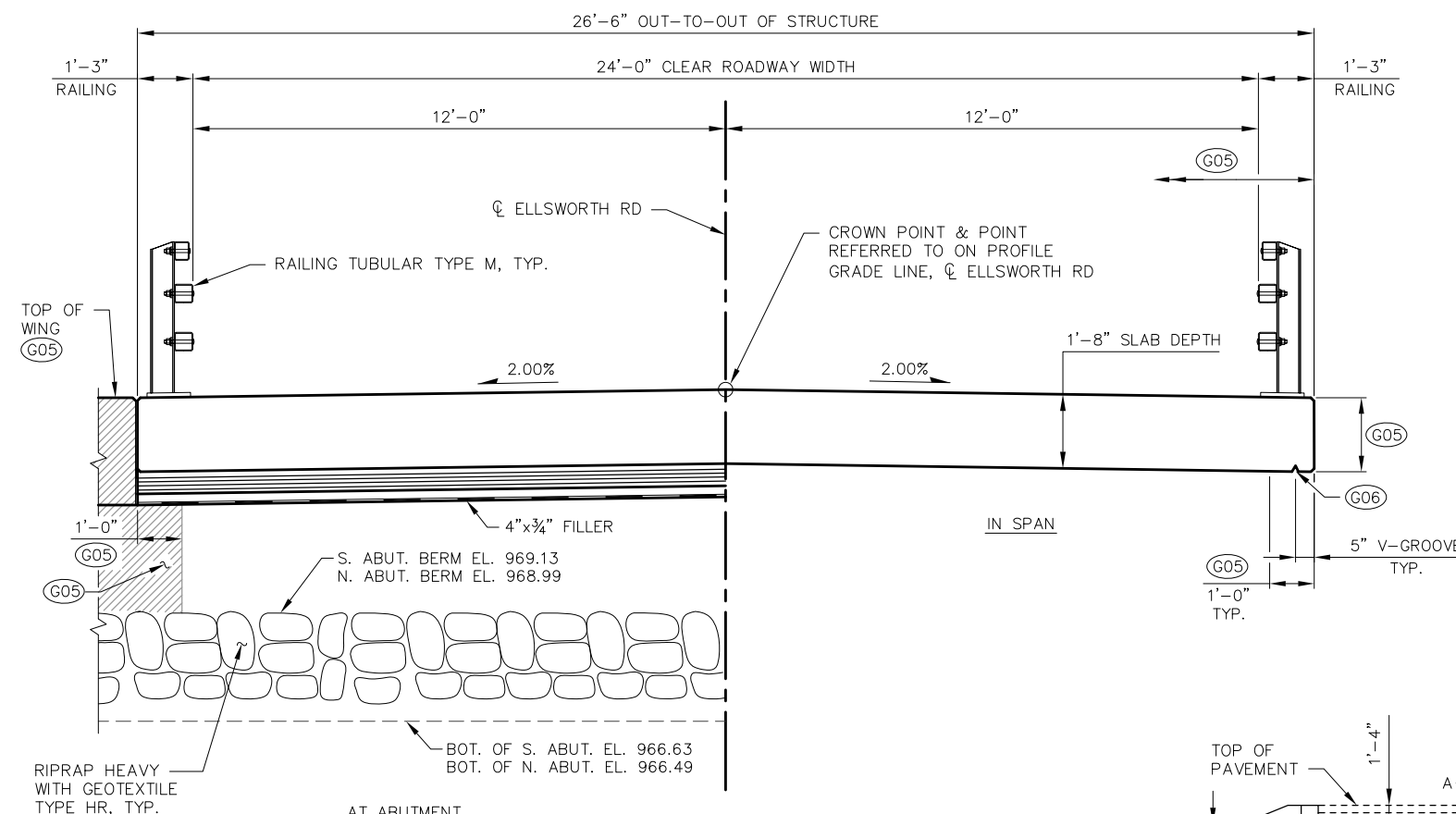
AT ABUTMENTS, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.

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

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

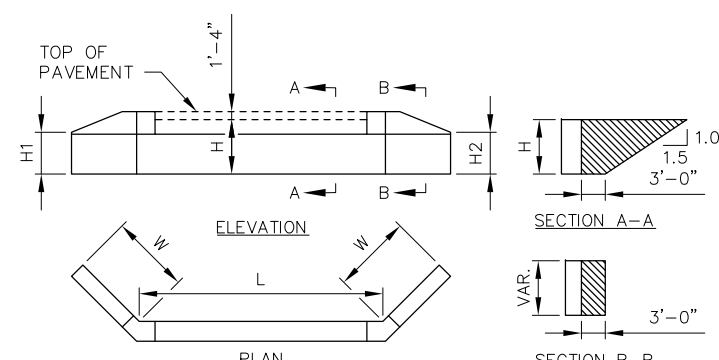
DO NOT PLACE FILL ABOVE 3'-0" FROM BOTTOM OF ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.

THE EXISTING STRUCTURE (P-41-156) IS A SINGLE SPAN CONCRETE DECK GIRDER WITH AN OVERALL LENGTH OF 29-FT AND OVERALL WIDTH OF 26-FT AND IS TO BE REMOVED PER BID ITEM "REMOVING STRUCTURE OVER WATERWAY DEBRIS CAPTURE P-41-0156".



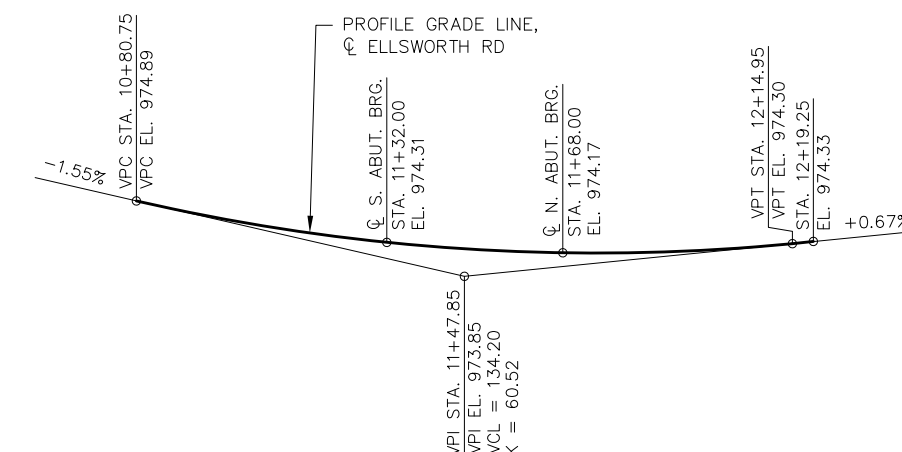
CROSS SECTION THRU ROADWAY

(LOOKING NORTH)



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)
- $V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H) + (3')(0.5)(H1+H2+H+H)(W)$
- $V_{CY} = V_{CF}(EF)/27$
- $V_{TON} = V_{CY}(2.0)$



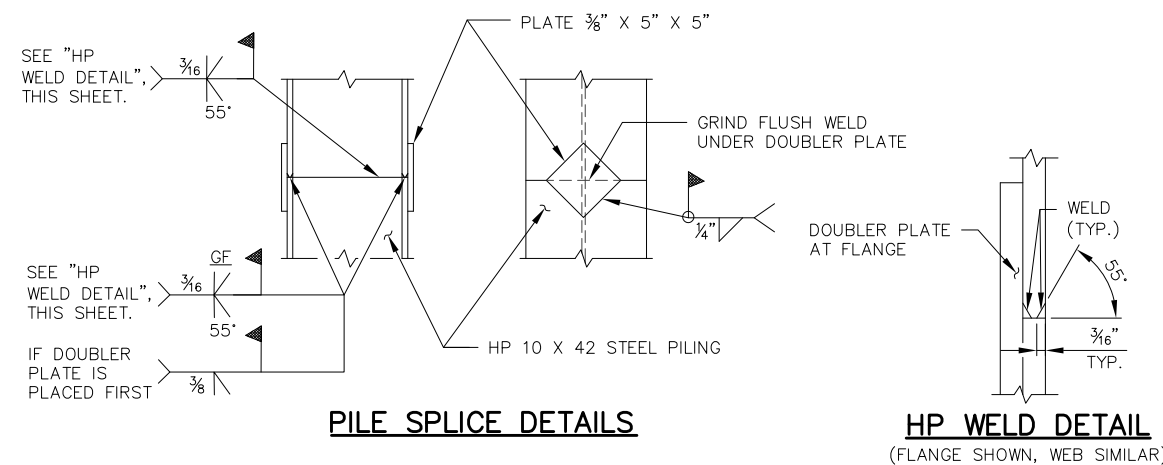
PROFILE GRADE LINE, ELLSWORTH RD

NOTES

- G05 COAT WITH "PROTECTIVE SURFACE TREATMENT" AS PER THE STANDARD SPECIFICATIONS. PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO ENTIRE EXPOSED TOP OF SLAB, INCLUDING THE SLAB EDGES AND 1'-0" UNDER THE SLAB, THE TOP AND EXTERIOR EXPOSED FACE OF WINGS, AND THE FRONT FACE OF THE ABUTMENTS TO 1'-0" PAST THE EDGE OF SLAB.
- G06 3/4" V-GROOVE REQ'D. EXTEND V-GROOVE TO 6" FROM FRONT FACE OF ABUTMENT.

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	S. ABUT.	N. ABUT.	SUPER.	TOTALS
203.0270	REMOVING STRUCTURE OVER WATERWAY DEBRIS CAPTURE P-41-0156	EACH	---	---	---	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-41-338	EACH	---	---	---	1
206.5001	COFFERDAMS B-41-338	EACH	---	---	---	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	120	120	---	240
502.0100	CONCRETE MASONRY BRIDGES	CY	25.1	25.1	67.1	118
502.3200	PROTECTIVE SURFACE TREATMENT	SY	15	15	134	164
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	2000	2000	---	4000
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1395	1395	12810	15600
513.4061	RAILING TUBULAR TYPE M	LF	---	---	82	82
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	6	6	---	12
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	245	245	---	490
606.0300	RIPRAP HEAVY	CY	45	40	---	85
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	75	75	---	150
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	30	30	---	60
645.0120	GEOTEXTILE TYPE HR	SY	94	86	---	180
(NON-BID ITEM)	FILLER	SIZE				1/2" & 3/4"



NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-41-338

DRAWN BY: JDO PLANS OK'D: ACK

CROSS SECTION, GENERAL NOTES & QUANTITIES

SHEET 2 OF 8

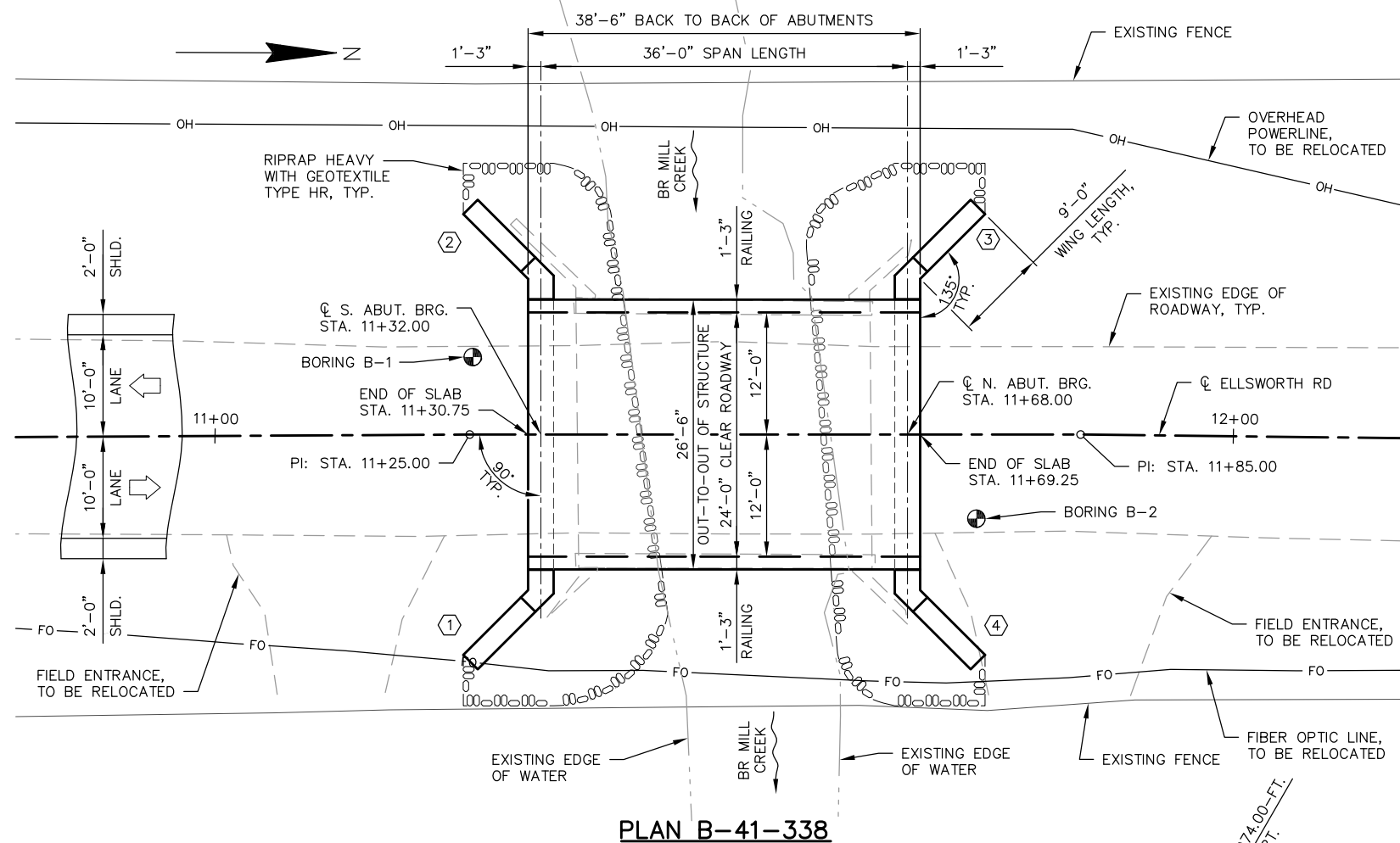
B-41-338 BORINGS

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
BORING B-1	7/22/2024	420232.4	702869.2
BORING B-2	7/22/2024	420281.9	702884.9

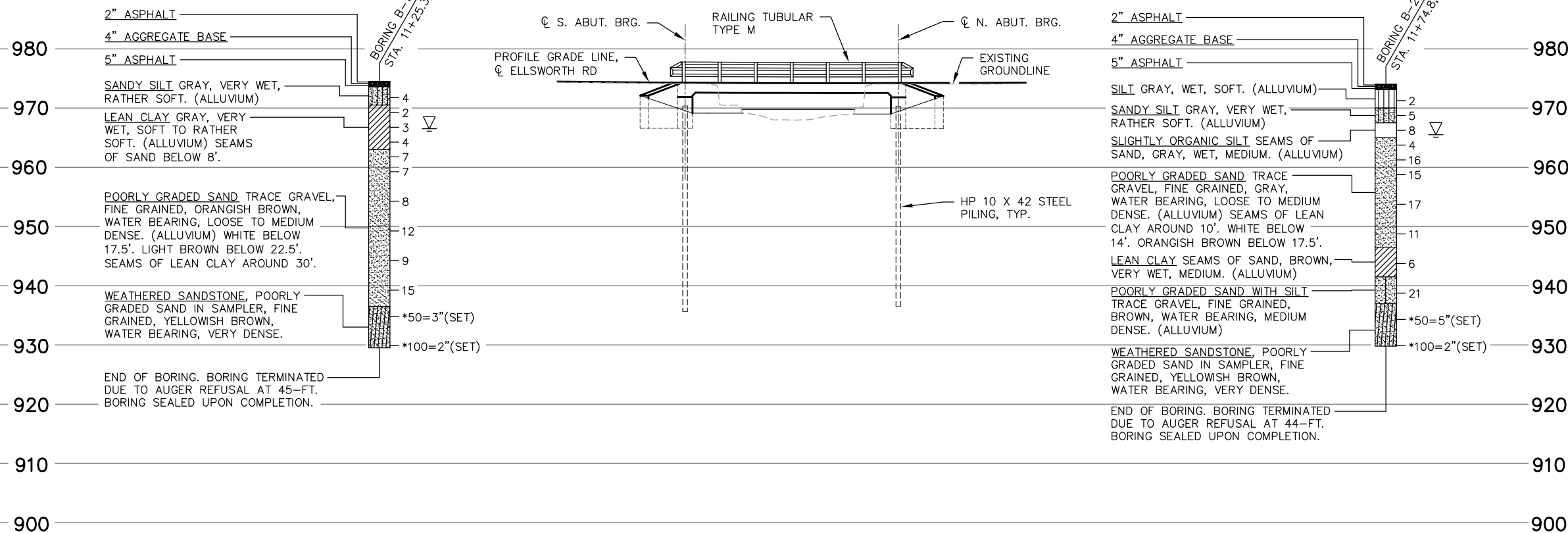
BORINGS COMPLETED BY: CHOSEN VALLEY TESTING
 SUBSURFACE INVESTIGATION REPORT: CHOSEN VALLEY TESTING
 ALL COORDINATES REFERENCED TO WISCRS, MONROE COUNTY

NOTE

⊙ INDICATES WING NUMBER



PLAN B-41-338



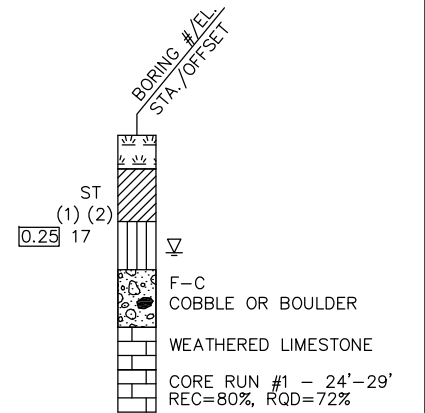
STATE PROJECT NUMBER

7005-00-71

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/META

LEGEND OF BORING



- (1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)
- (2) UNLESS OTHERWISE SPECIFIED, THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- ▽ AT TIME OF DRILLING
- ▼ END OF DRILLING
- ▼ AFTER DRILLING

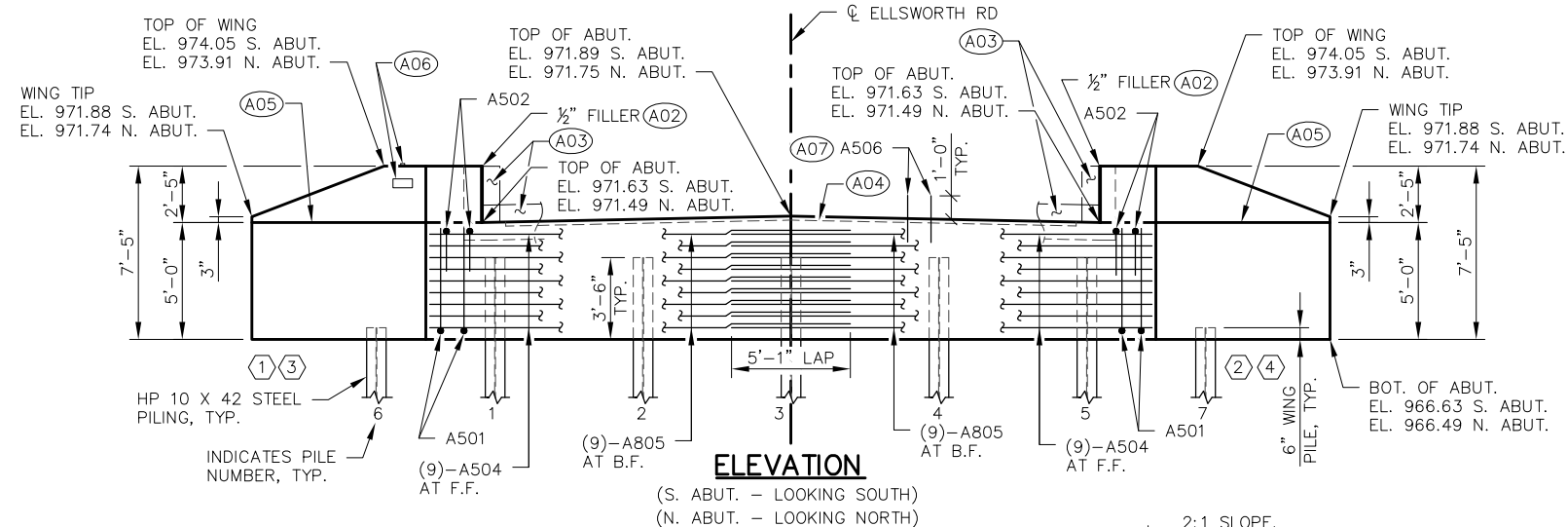
ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

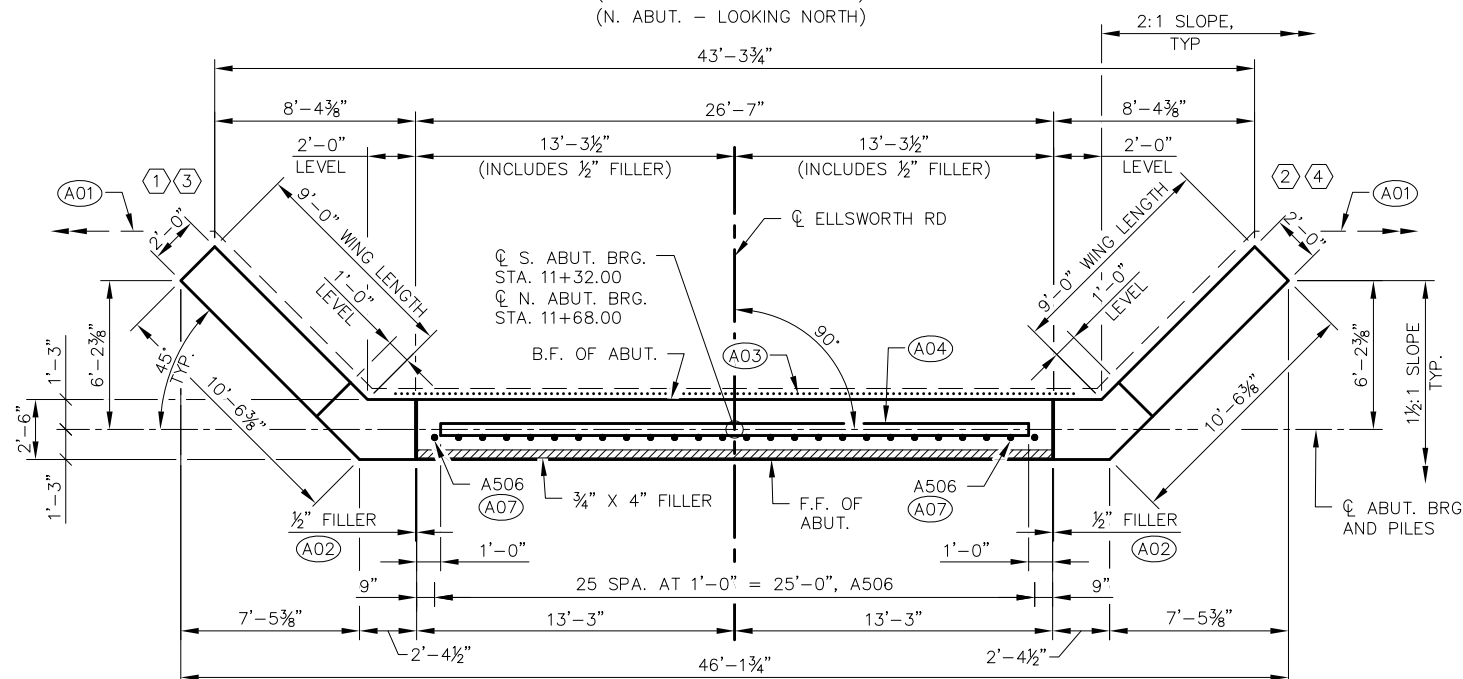
BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT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

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-41-338			
DRAWN BY JDO		PLANS OK'D ACK	
SUBSURFACE EXPLORATION			SHEET 3 OF 8

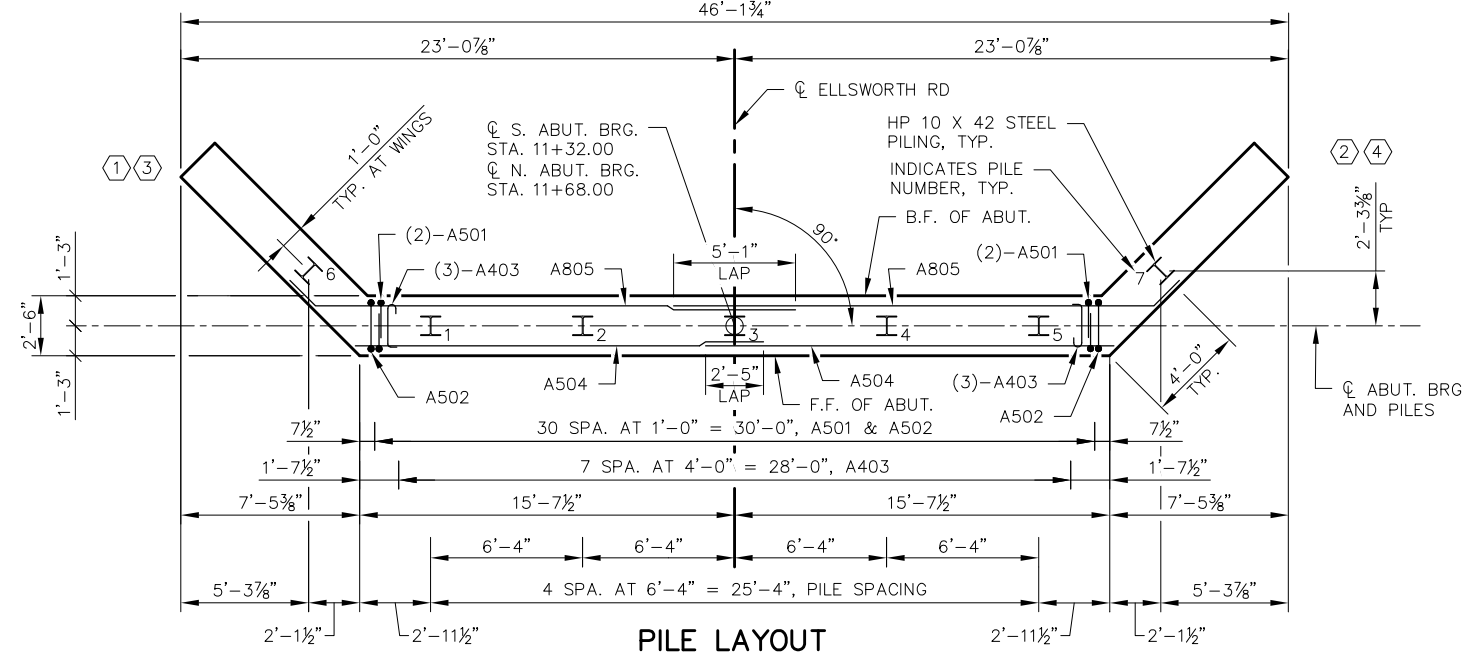


ELEVATION

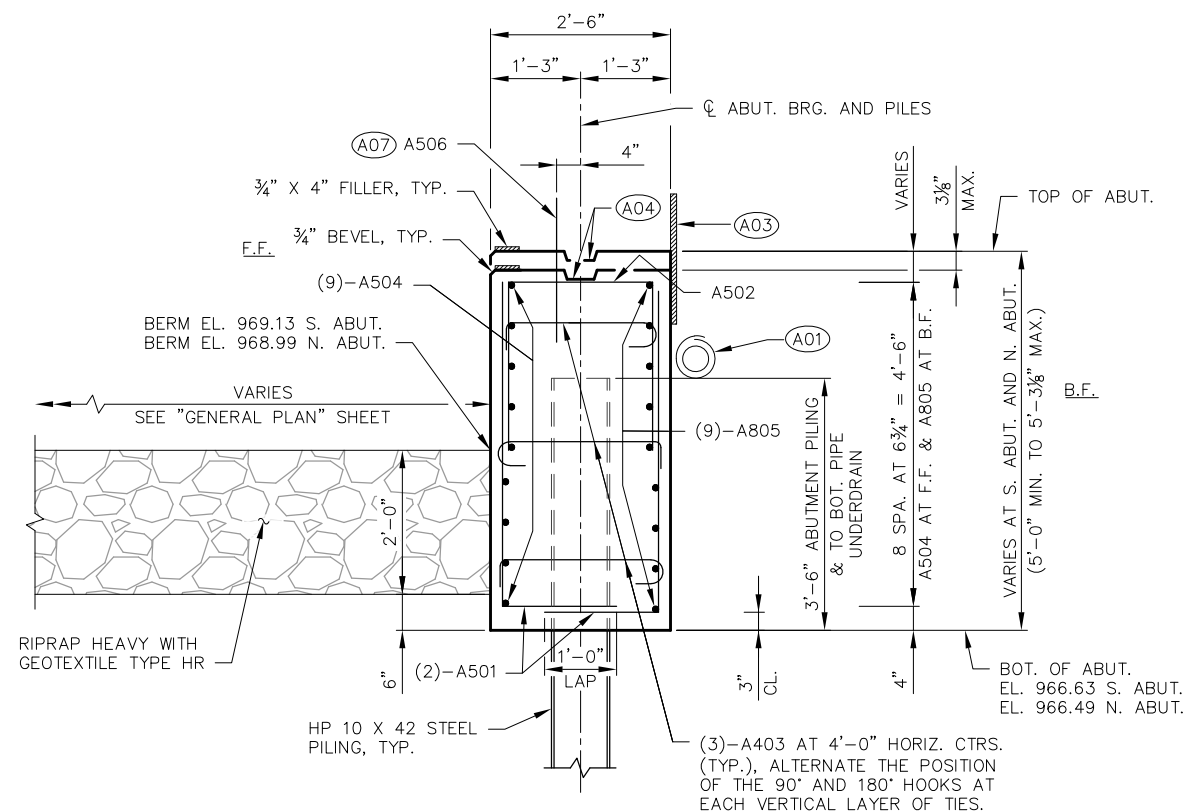
(S. ABUT. - LOOKING SOUTH)
(N. ABUT. - LOOKING NORTH)



PLAN



PILE LAYOUT



TYPICAL SECTION THRU ABUTMENT

NOTES

DO NOT PLACE FILL ABOVE 3'-0" FROM THE BOTTOM OF THE ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.

SOUTH AND NORTH ABUTMENT TO BE SUPPORTED ON HP 10 X 42 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 120 TONS PER PILE AT THE SOUTH ABUTMENT AND 130 TONS PER PILE AT THE NORTH ABUTMENT AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 35 FT PILE LENGTHS AT THE SOUTH ABUTMENT AND 35 FT PILE LENGTHS AT THE NORTH ABUTMENT.

SEE "CROSS SECTION, GENERAL NOTES & QUANTITIES" SHEET FOR HP 10 X 42 PILE SPLICE DETAILS.

(A01) PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON "ABUTMENT DETAILS" SHEET. RODENT SHIELD SHALL BE INCLUDED WITH THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

(A02) SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/2" BELOW SURFACE OF CONCRETE). 1/2" FILLER TO EXTEND FROM BRIDGE SEAT TO TOP OF WING.

(A03) 18" RUBBERIZED MEMBRANE WATERPROOFING (R.M.W.), SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

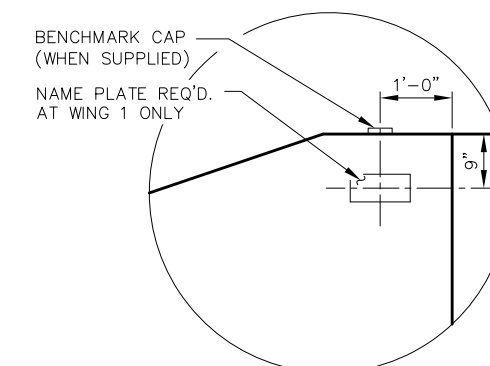
(A04) KEYED CONST. JT. FORMED BY BEVELED 2 X 6

(A05) OPTIONAL KEYED CONST. JT. FORMED BY BEVELED 2 X 6, TYP.

(A06) NAME PLATE & BENCHMARK CAP (WHEN SUPPLIED) AT WING 1 ONLY. SEE "NAME PLATE & BENCHMARK CAP DETAIL", THIS SHEET.

(A07) A506 BARS MAY BE PLACED AFTER CONCRETE HAS BEEN POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. EMBED 1'-0" INTO ABUTMENT BODY.

INDICATES WING NUMBER



NAME PLATE & BENCHMARK CAP DETAIL

F.F. - FRONT FACE
B.F. - BACK FACE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-41-338			
DRAWN BY JDO		PLANS OK'D ACK	
ABUTMENTS			SHEET 4 OF 8

COATED = 2,790 LBS.
UNCOATED = 4,000 LBS.

**BILL OF BARS
BOTH ABUTMENTS**

MARK	COATED	NUMBER		LENGTH	BENT	BAR SERIES	LOCATION
		N. ABUT.	S. ABUT.				
A501		62	62	5'-11"	X		BODY - STIRRUP - F.F. & B.F.
A502		31	31	6'-5"	X		BODY - STIRRUP - TOP
A403		24	24	3'-1"	X		BODY - TIES
A504		18	18	16'-11"			BODY - F.F.
A805		18	18	21'-8"	X		BODY - B.F.
A506	X	26	26	2'-0"			BODY - TOP DOWELS
A407	X	48	48	8'-5"	X	▲	WINGS 1 THRU 4 - STIRRUP - F.F. & B.F.
A408	X	16	16	7'-0"			WINGS 1 THRU 4 - F.F. & B.F.
A509	X	18	18	11'-9"	X		WINGS 1 THRU 4 - F.F.
A410	X	2	2	9'-7"			WINGS 1 THRU 4 - F.F.
A411	X	2	2	7'-4"			WINGS 1 THRU 4 - F.F.
A412	X	2	2	5'-0"			WINGS 1 THRU 4 - F.F.
A413	X	2	2	10'-5"	X		WINGS 1 THRU 4 - F.F. - TOP
A814	X	18	18	13'-3"	X		WINGS 1 THRU 4 - B.F.
A415	X	2	2	8'-1"			WINGS 1 THRU 4 - B.F.
A416	X	2	2	5'-9"			WINGS 1 THRU 4 - B.F.
A417	X	2	2	3'-6"			WINGS 1 THRU 4 - B.F.
A418	X	2	2	8'-10"	X		WINGS 1 THRU 4 - B.F. - TOP
A419	X	8	8	4'-2"	X		WINGS 1 THRU 4 - F.F. CORNER
A420	X	8	8	2'-9"	X		WINGS 1 THRU 4 - B.F. CORNER
A421	X	8	8	3'-11"	X		WINGS 1 THRU 4 - TOP CORNER

THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.

BUNDLE EACH ABUTMENT BARS SEPARATELY.

▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE "BAR SERIES TABLE" FOR ACTUAL LENGTHS.

NOTES

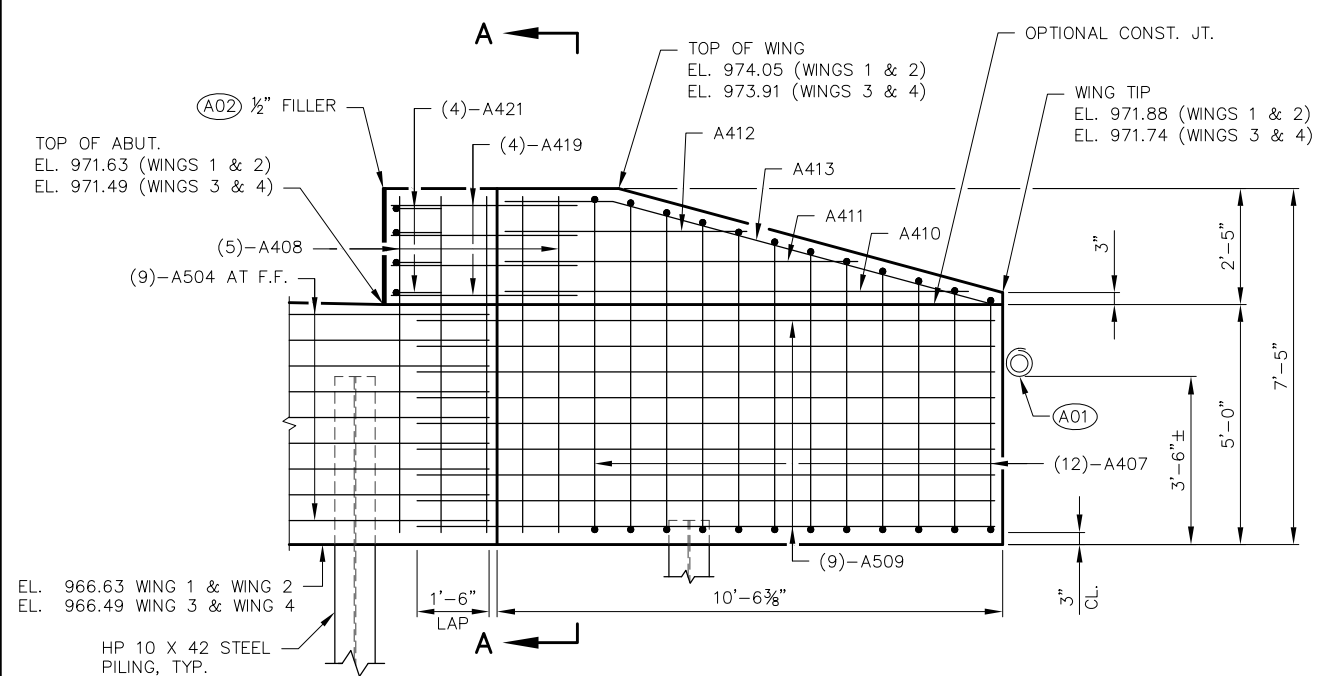
DO NOT PLACE FILL ABOVE 3'-0" FROM THE BOTTOM OF THE ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.

SOUTH AND NORTH ABUTMENT TO BE SUPPORTED ON HP 10 X 42 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 120 TONS PER PILE AT THE SOUTH ABUTMENT AND 130 TONS PER PILE AT THE NORTH ABUTMENT AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 35 FT PILE LENGTHS AT THE SOUTH ABUTMENT AND 35 FT PILE LENGTHS AT THE NORTH ABUTMENT.

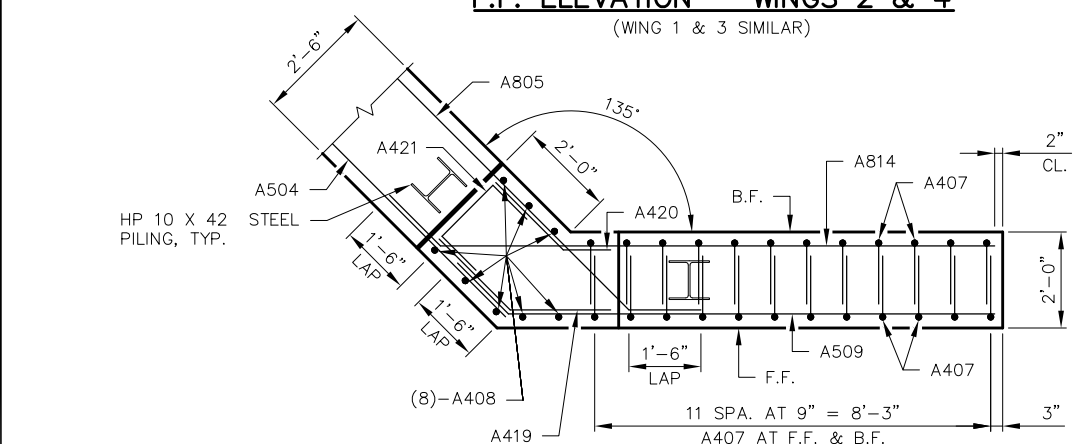
SEE "CROSS SECTION, GENERAL NOTES & QUANTITIES" SHEET FOR HP 10 X 42 PILE SPLICE DETAILS.

(A01) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON THIS SHEET. RODENT SHIELD SHALL BE INCLUDED WITH THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

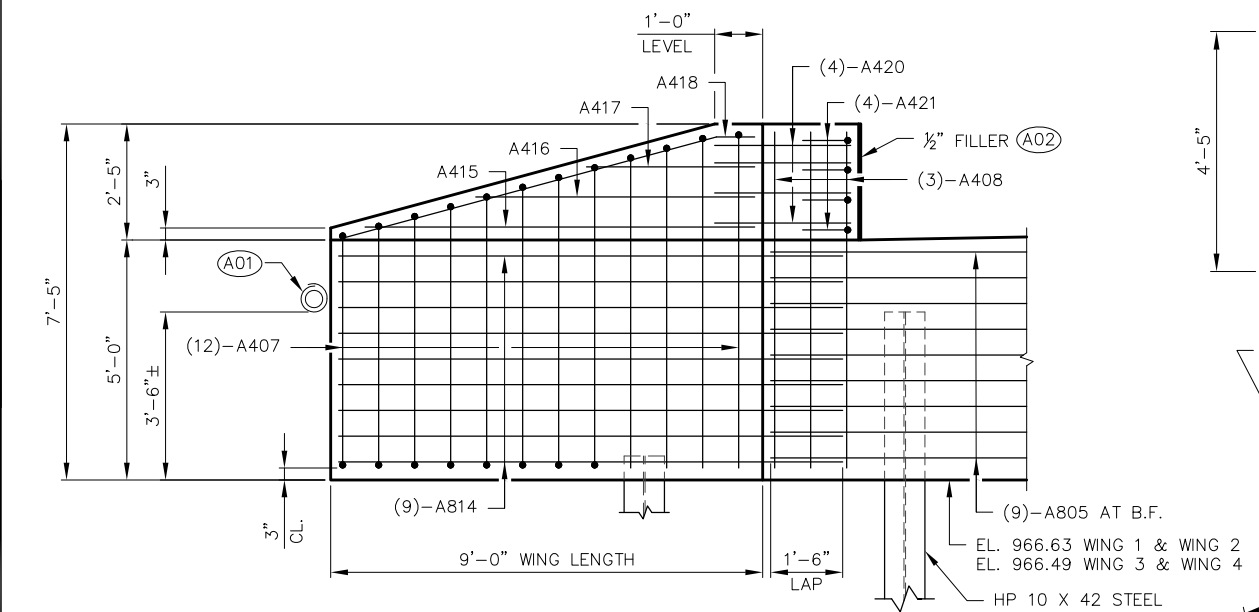
(A02) SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE.) 1/2" FILLER TO EXTEND FROM BRIDGE SEAT TO TOP OF WING.



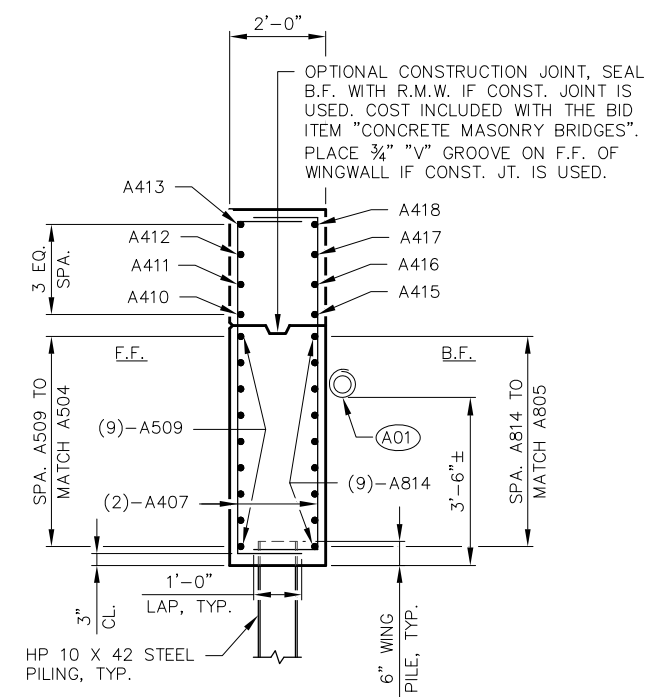
F.F. ELEVATION - WINGS 2 & 4
(WING 1 & 3 SIMILAR)



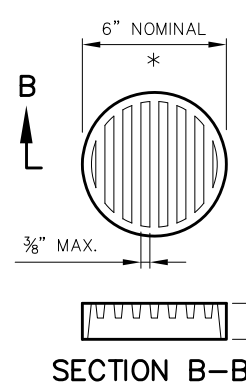
PLAN - WINGS 2 & 4
(WING 1 & 3 SIMILAR)



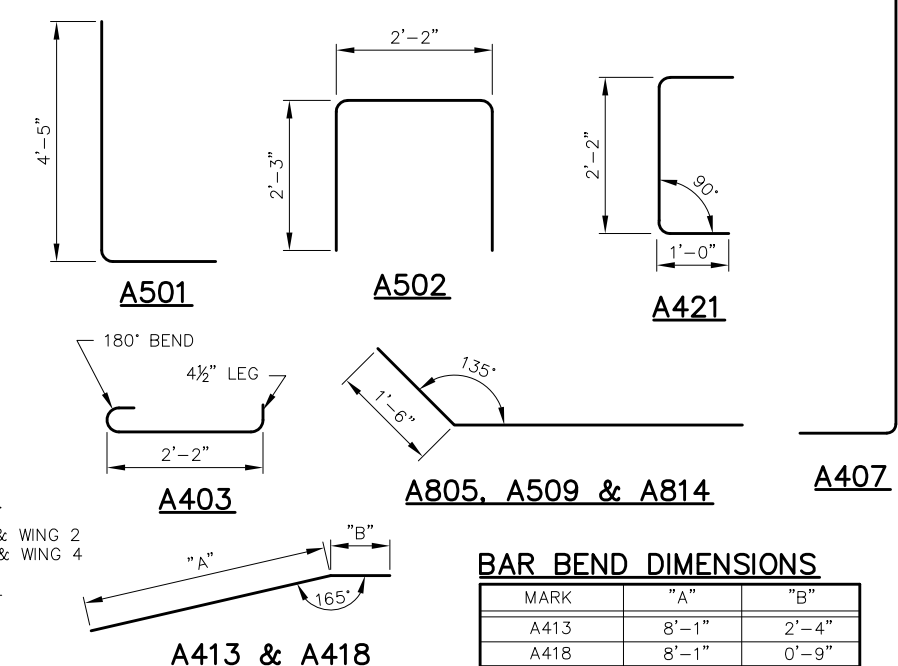
B.F. ELEVATION - WINGS 2 & 4
(WING 1 & 3 SIMILAR)



SECTION A-A

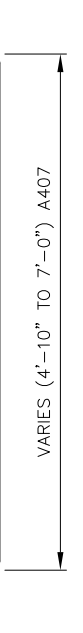


RODENT SHIELD DETAIL

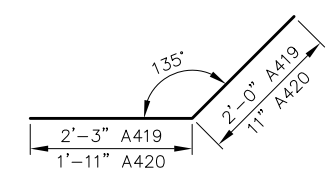


BAR BEND DIMENSIONS

MARK	"A"	"B"
A413	8'-1"	2'-4"
A418	8'-1"	0'-9"



A407



A419 & A420

BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
A407	8 SERIES OF 12	7'-4" TO 9'-6"

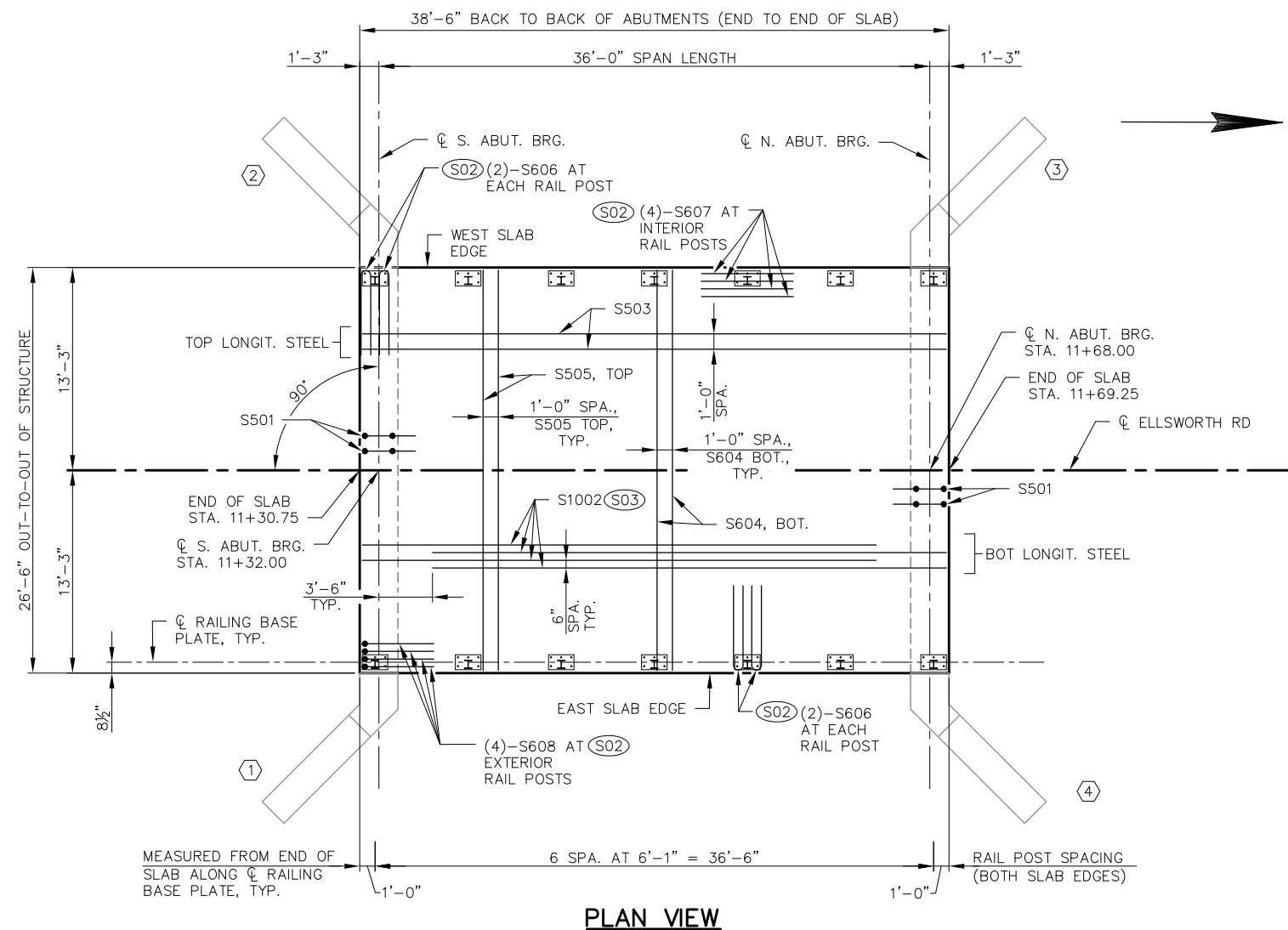
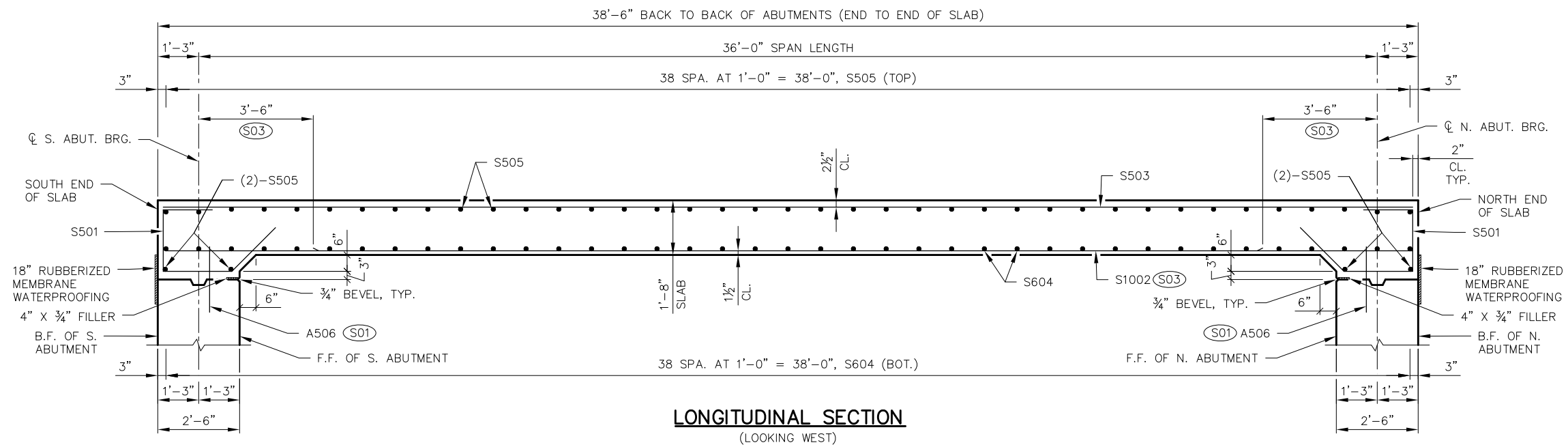
BUNDLE AND TAG EACH SERIES SEPARATELY.

F.F. - FRONT FACE
B.F. - BACK FACE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-41-338			
DRAWN BY: JDO		PLANS OK'D: ACK	
ABUTMENT DETAILS			SHEET 5 OF 8

8

8



NOTES

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 (+).

RAILING TO BE INSTALLED ON THE SLAB AFTER FALSEWORK HAS BEEN RELEASED.

(S01) SEE "ABUTMENTS" SHEET FOR PLACEMENT OF A506 BARS

(S02) SEE "RAILING TUBULAR TYPE M" SHEET FOR PLACEMENT OF RAIL POST REINFORCEMENT.

(S03) EXTEND ONE END OF THE S1002 BAR TO 2" CLEAR OF ONE BACK FACE OF ABUTMENT. ALTERNATE BETWEEN SOUTH AND NORTH ABUTMENTS ACROSS ENTIRE SLAB.

⬡ INDICATES WING NUMBER

F.F. - FRONT FACE
B.F. - BACK FACE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-41-338			
DRAWN BY JDO		PLANS OK'D ACK	
SUPERSTRUCTURE			SHEET 6 OF 8

8

8

FILE: B410338_06_07_super.dwg
PLOT SCALE:

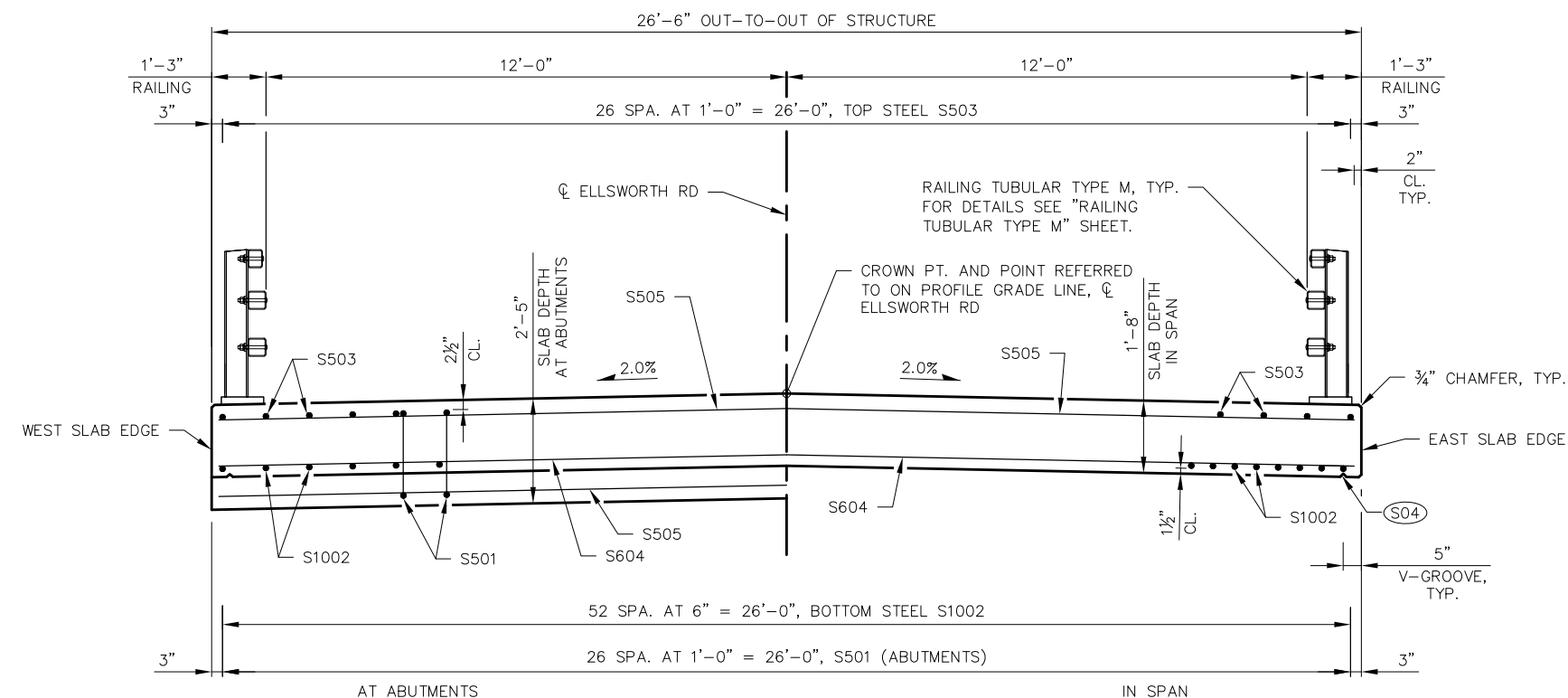
**BILL OF BARS
SUPERSTRUCTURE**

COATED = 12,810 LBS.

MARK	NUMBER		LENGTH	BENT	BAR SERIES	LOCATION
	COATED	UNCOATED				
S501	54		7'-3"	X		SLAB AT ABUTMENT - TIES LONGIT.
S1002	53		33'-7"			SLAB - BOTTOM LONGIT.
S503	27		38'-2"			SLAB - TOP LONGIT.
S604	39		26'-2"			SLAB - BOTTOM TRANS.
S505	43		26'-2"			SLAB - TOP & OVER ABUTMENTS TRANS.
S606	28		11'-6"	X		SLAB - TOP AT RAIL POSTS TRANS.
S607	40		6'-0"			SLAB - TOP AT INTERIOR RAIL POSTS LONGIT.
S608	16		4'-8"	X		SLAB - TOP AT EXTERIOR RAIL POSTS LONGIT.

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

ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.



CROSS SECTION THRU ROADWAY

(LOOKING NORTH)

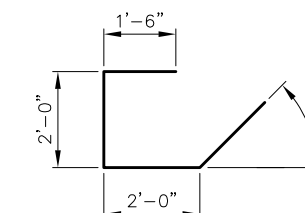
SURVEY TOP OF SLAB ELEVATIONS

	☉ S. ABUT. BRG.	5/10 PT.	☉ N. ABUT. BRG.
WEST SLAB EDGE			
☉ STOUT RD			
EAST SLAB EDGE			

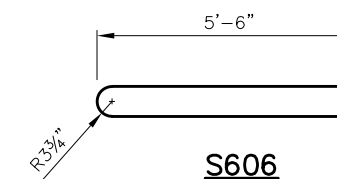
PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE ☉ OF ABUTMENTS AND AT 5/10 POINTS TO VERIFY CAMBER. TAKE ELEVATIONS ALONG EDGE OF SLAB AND REFERENCE LINE. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

TOP OF SLAB ELEVATIONS

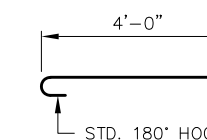
SPAN PT	WEST SLAB EDGE	☉ ELLSWORTH RD	EAST SLAB EDGE
☉ S. ABUT. BRG.	974.05	974.31	974.05
0.1	974.03	974.29	974.03
0.2	974.01	974.27	974.01
0.3	973.99	974.25	973.99
0.4	973.97	974.23	973.97
0.5	973.95	974.21	973.95
0.6	973.94	974.20	973.94
0.7	973.93	974.19	973.93
0.8	973.92	974.18	973.92
0.9	973.91	974.17	973.91
☉ N. ABUT. BRG.	973.91	974.17	973.91



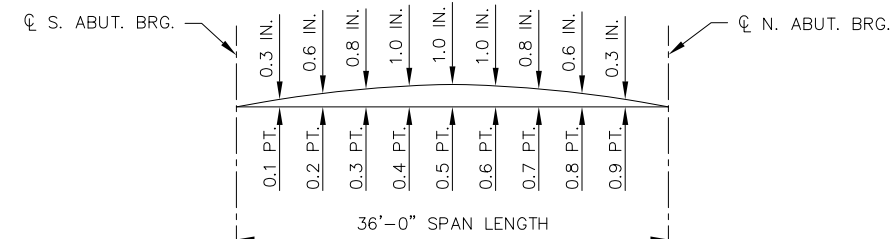
S501



S606



S608



SLAB CAMBER DIAGRAM

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.

NOTES

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

(S04) 3/4" V-GROOVE. EXTEND V-GROOVE TO 6" FROM FRONT FACE OF ABUTMENT BODY. V-GROOVES ARE REQUIRED.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-41-338			
DRAWN BY JDO		PLANS OK'D ACK	
SUPERSTRUCTURE DETAILS			SHEET 7 OF 8

8

8

FILE: B410338_06_07_super.dwg
PLOT SCALE:

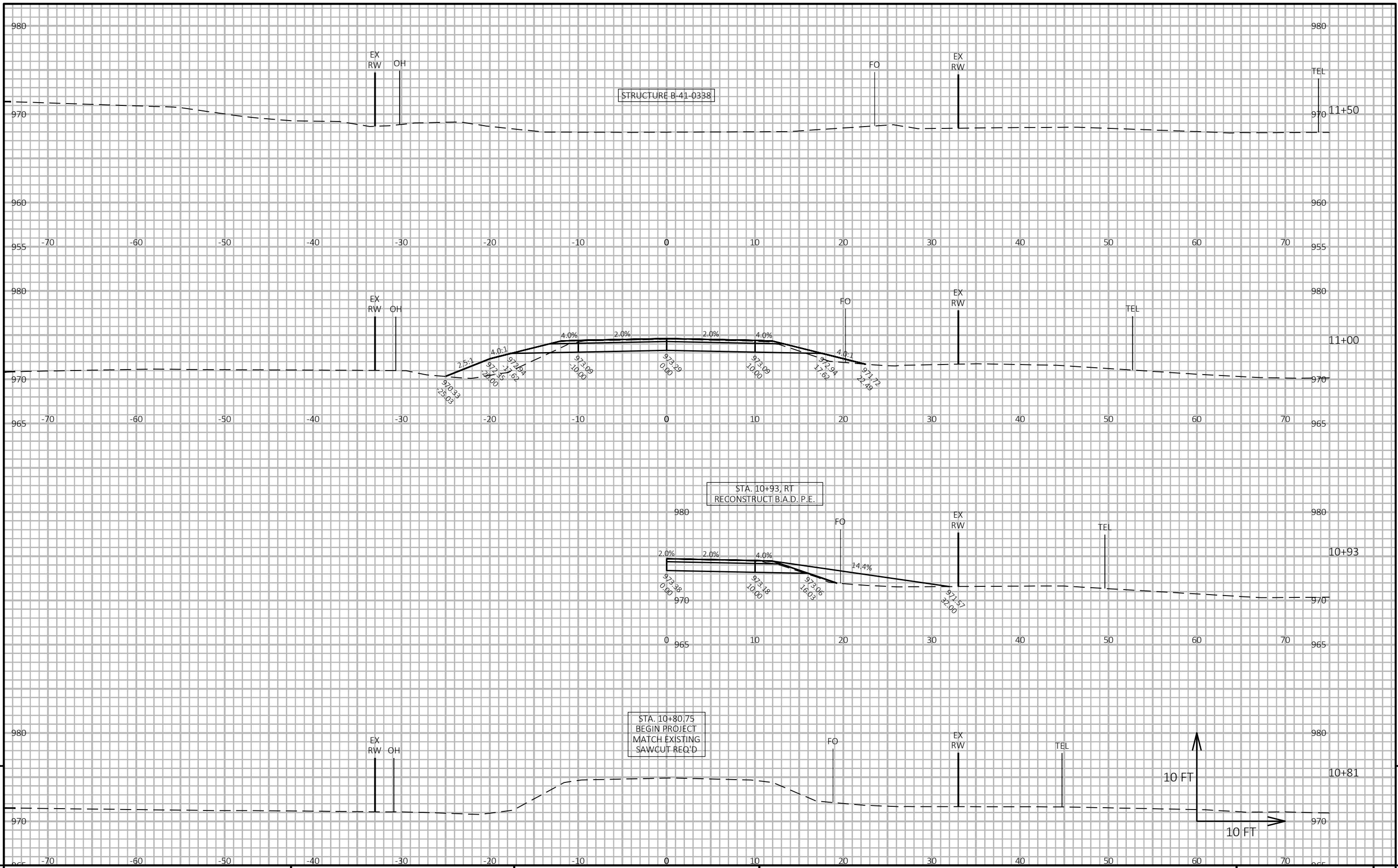
SOUT APPROAC

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
100.5	0.00	33.25	3.00	0.3	0	0	0	0	0	0
103.00	12.25	32.54	3.00	.2	15	1	2	15	3	12
1100.00	.00	31.3	3.00	1.23	8	1	3	23	6	15
1125.00	25.00	30.53	3.00	2.	2	3	21	52	33	15
1130.5	5.5	31.4	3.00	0.00	7	1	3	5	3	1
STRUCTURE B41033										
SOUT APPROAC TOTALS					5	6	2			

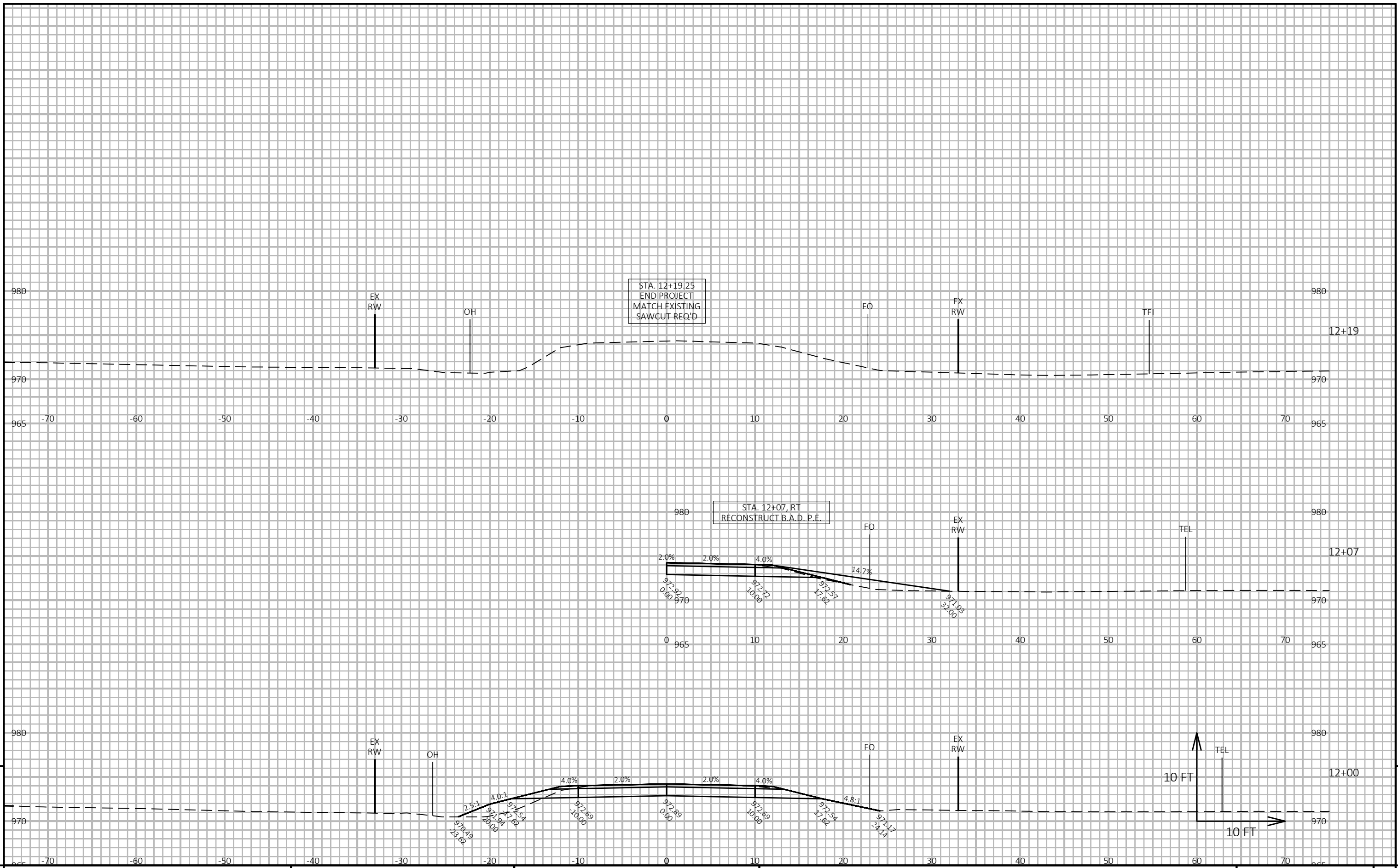
NORT APPROAC

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
STRUCTURE B-41-0338										
11+69.25	0.00	34.70	3.00	0.00	0	0	0	0	0	0
11+85.00	15.75	36.52	3.00	7.78	21	2	2	21	3	17
12+00.00	15.00	34.88	3.00	8.56	20	2	5	41	.	2
120.00	.00	33.5	3.00	.43	9	1	2	50	11	34
121.25	12.25	34.00	3.00	2.20	15	1	3	5	15	44
NORT APPROAC TOTALS					5	6	12			
PROJECT TOTAL					124	12	41			

NOTES	
1 CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 SALVAGED/UNUSABLE PAVEMENT MATERIAL	TIS DOES NOT SO UP IN CROSS SECTIONS
3 FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 MASS ORDINATE	(CUT) (FILLFILL FACTOR) SALVAGED/UNUSABLE PAVEMENT MATERIAL) PLUS UANTITY INDICATES AN EXCESS OF MATERIAL ITIN TE DIVISION. MINUS INDICATES A SORTAGE OF MATERIAL ITIN TE DIVISION.

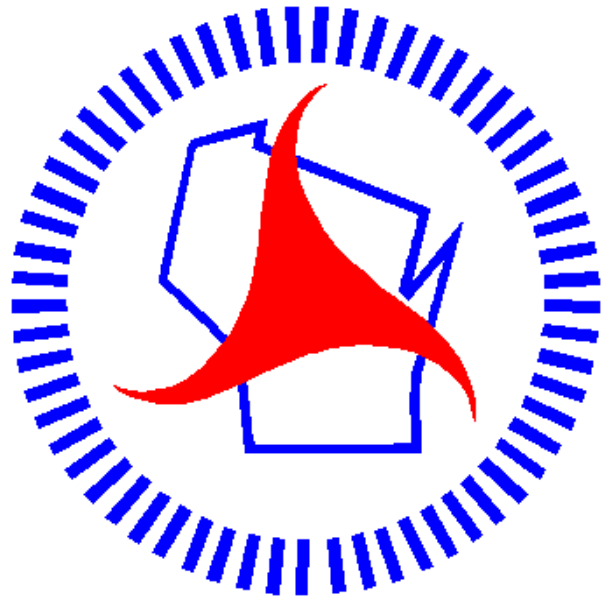


PROJECT NO: 7005-00-71 HWY: ELLSWORTH ROAD COUNTY: MONROE CROSS SECTIONS: SHEET E



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Notes



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