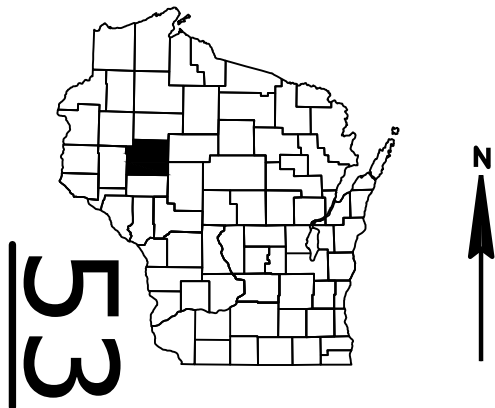


JANUARY 2026

## 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 = 58



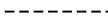


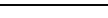

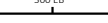
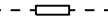
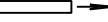


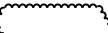


DESIGN DESIGNATION 8907-00-03

A.A.D.T.	2026	=	74
A.A.D.T.	2046	=	74
D.H.V.		=	15
D.D.		=	50/50
T.		=	10%
DESIGN SPEED		=	60 MPH
ESALS		=	15,000

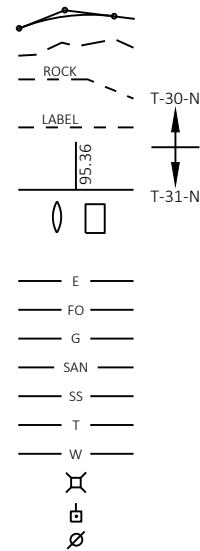
## CONVENTIONAL SYMBOLS

## 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



STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

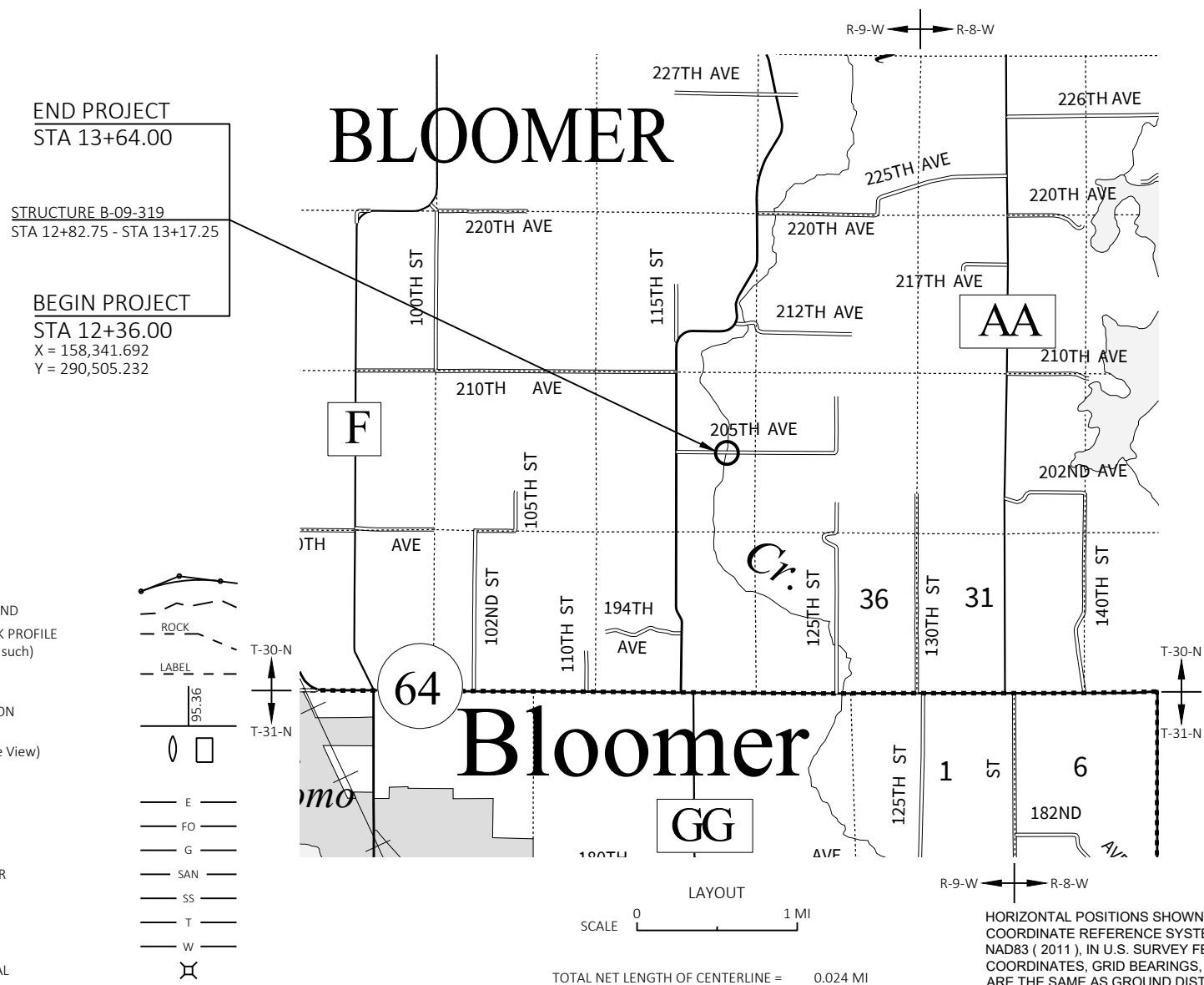
## PLAN OF PROPOSED IMPROVEMENT

**T BLOOMER, 205TH AVENUE**

**MCCANN CREEK BRIDGE, B-09-0319**

**LOCAL STREET  
CHIPPEWA COUNTY**

STATE PROJECT NUMBER
<b>8907-00-73</b>



HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN  
COORDINATE REFERENCE SYSTEM (WISCRS), CHIPPEWA 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.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8907-00-73		

ACCEPTED FOR  
CHIPPEWA COUNTY  
HIGHWAY DEPARTMENT

Date 7/23/25 Ch Eto  
(Signature)  
Highway Commissioner  
(Title of Official)

ORIGINAL PLANS PREPARED BY



STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	<u>JT ENGINEERING, INC.</u>
Designer	<u>SRF CONSULTING GROUP, INC.</u>
Project Manager	<u>MATTHEW BERG</u>
Regional Examiner	<u>REGIONAL EXAMINER</u>
Regional Supervisor	<u>REGIONAL SUPERVISOR</u>

APPROVED FOR THE DEPARTMENT

DATE: 7/29/2025   
(Signature)

E

UTILITIES CONTACTS

BLOOMER BROADBAND  
COMMUNICATIONS  
CRAIG JISKRA  
1120 15TH AVE  
BLOOMER, WI 54724  
OFFICE: 715-568-4830  
CELL: 715-568-9920  
EMAIL: craig.jiskra@bloomerbroadband.com

CHIPPEWA VALLEY ELECTRIC COOPERATIVE  
ELECTRIC  
NIC ALBERSON  
317 S 8TH STREET  
CORNELL, WI 54732  
OFFICE: 715-239-6800  
CELL: 715-415-5400  
EMAIL: nalberson@cve.coop

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES  
TYPICAL SECTIONS

WISCONSIN DNR LIAISON

LEAH NICOL  
NW REGION  
1300 WEST CLAIREMONT AVENUE  
EAU CLAIRE, WI 54701  
PHONE: 715-934-9014  
EMAIL: LEAH.NICOL@WISCONSIN.GOV

CHIPPEWA COUNTY HIGHWAY DEPT.

FRED ANDERSON  
PROJECT MANAGER  
801 EAST GRAND AVENUE  
CHIPPEWA FALLS, WI 54729  
PHONE: 715-738-2610  
EMAIL: FANDERSON@CHIPPEWACOUNTYWI.GOV

DESIGN CONTACT

DAN SCHRUM  
SRF CONSULTING GROUP, INC.  
1600 ASPEN COMMONS, SUITE 650  
MIDDLETON, WI 53562  
PHONE: 608-298-5424  
EMAIL: DSCHRUM@SRFCONSULTING.COM

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.

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS THAT ARE DISTURBED BY OPERATIONS OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

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

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

STUMPS ARE NOT TO BE GRUBBED IN THE TEMPORARY BYPASS AREA.

RIGHT OF WAY INFORMATION SHOWN ON THE PLANS IS APPROXIMATE.

WHEN THE QUANTITY OF THE ITEMS OF BASE AGGREGATE, SUBBASE, OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYERS SHOWN ON THE PLAN IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

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.

THE CONTRACTOR'S PAVING OPERATION SHALL BE CONSISTENT WITH THE TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING, OR PARKING LANE.

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

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.

WISDOT BRIDGE BENCHMARK MONUMENT TO BE FURNISHED BY THE STATE AND PLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.

RUNOFF COEFFICIENT TABLE

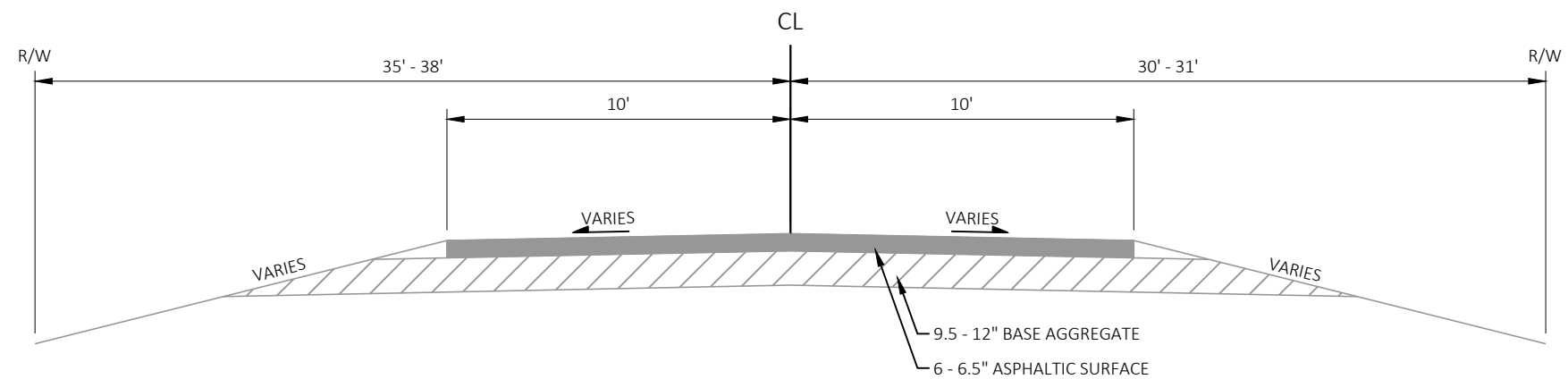
LAND USE:	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS:	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIPTURF:	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
	.24	.26	.30	.25	.28	.33	.26	.30	.37	.27	.32	.40
SIDE SLOPETURF:			.25			.27			.28			.30
			.32			.34			.36			.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 = 1.116 ACRES  
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.540 ACRES

DIGGERSHOTLINE

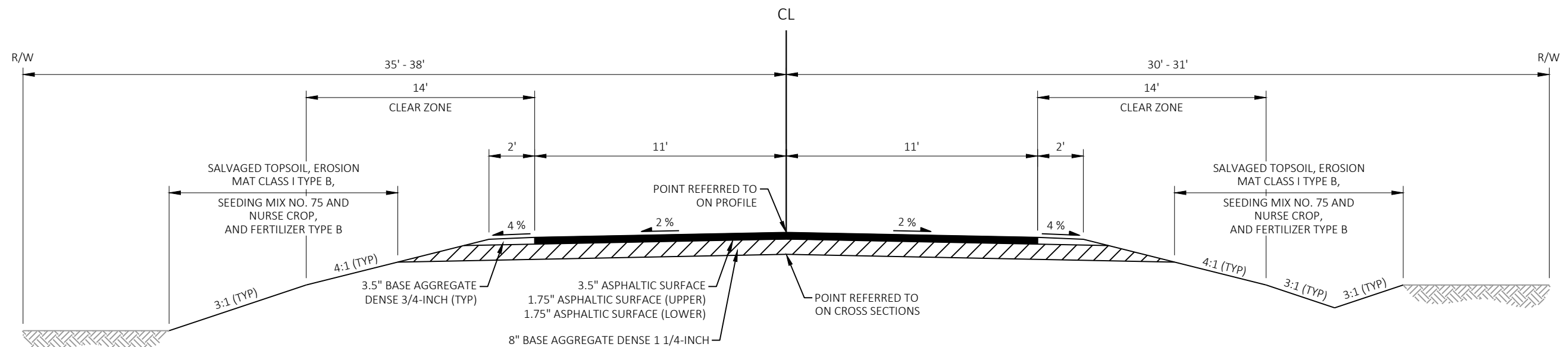
Dial 811 or (800)242-8511

www.DiggersHotline.com



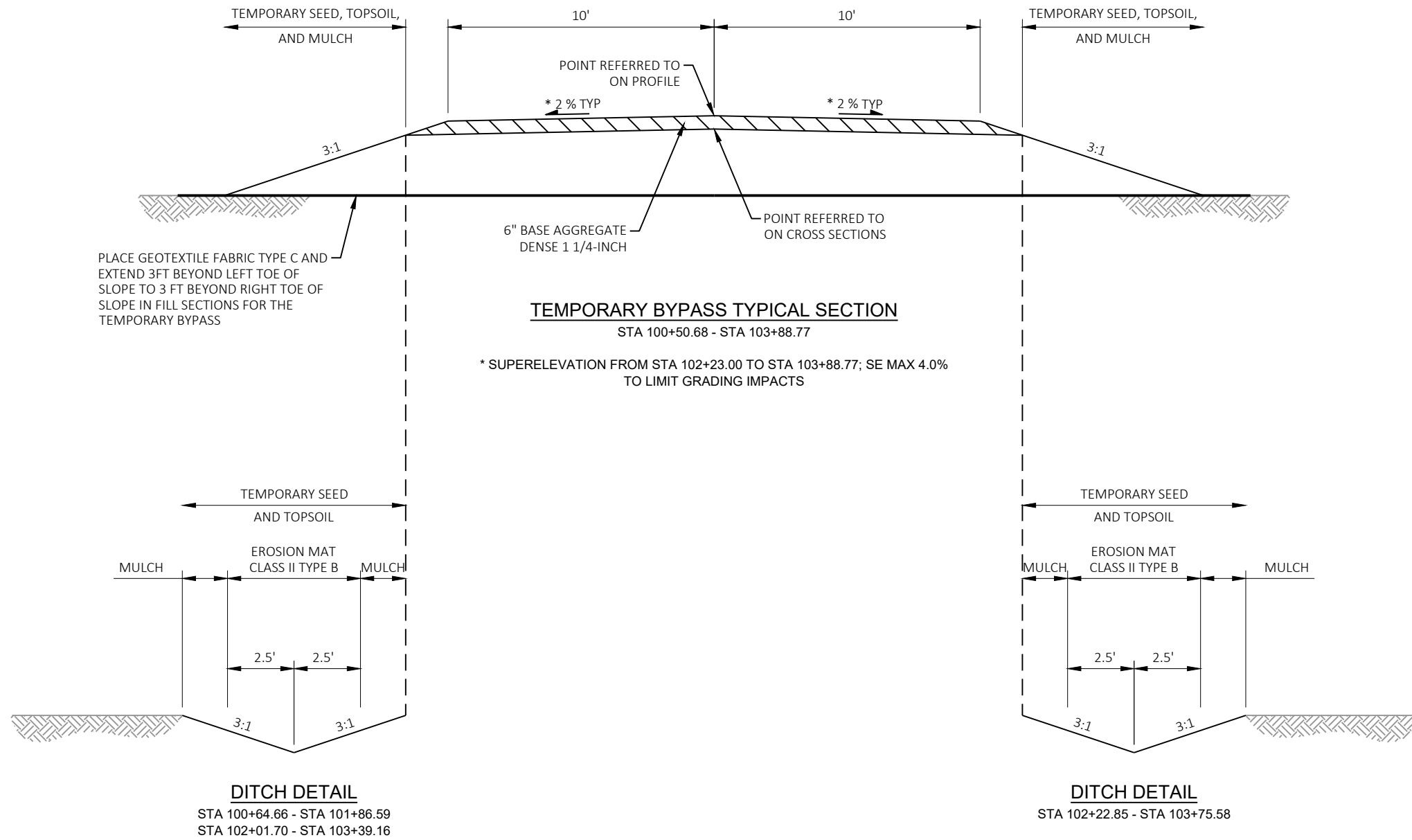
### EXISTING TYPICAL SECTION

205TH AVENUE  
STA 12+36.00 - STA 12+86.75  
STA 13+13.25 - STA 13+64.00



### FINISHED TYPICAL SECTION

205TH AVENUE  
STA 12+36.00 - STA 12+82.75  
STA 13+17.25 - STA 13+64.00



Estimate Of Quantities

8907-00-73

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	6.000	6.000
0004	201.0205	Grubbing	STA	2.000	2.000
0006	203.0260	Removing Structure Over Waterway Minimal Debris (structure) 01. P-09-107	EACH	1.000	1.000
0008	204.0170	Removing Fence	LF	403.000	403.000
0010	205.0100	Excavation Common	CY	1,655.000	1,655.000
0012	205.0506.S	Excavation, Hauling, and Disposal of Creosote Contaminated Soil	TON	30.000	30.000
0014	206.1001	Excavation for Structures Bridges (structure) 01. B-09-139	EACH	1.000	1.000
0016	208.0100	Borrow	CY	1,562.000	1,562.000
0018	210.1500	Backfill Structure Type A	TON	270.000	270.000
0020	213.0100	Finishing Roadway (project) 01. 8907-00-73	EACH	1.000	1.000
0022	305.0110	Base Aggregate Dense 3/4-Inch	TON	12.000	12.000
0024	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	385.000	385.000
0026	455.0605	Tack Coat	GAL	12.000	12.000
0028	465.0105	Asphaltic Surface	TON	46.000	46.000
0030	502.0100	Concrete Masonry Bridges	CY	103.000	103.000
0032	502.3200	Protective Surface Treatment	SY	146.000	146.000
0034	505.0400	Bar Steel Reinforcement HS Structures	LB	3,960.000	3,960.000
0036	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	14,540.000	14,540.000
0038	506.0105	Structural Steel Carbon	LB	540.000	540.000
0040	513.4061	Railing Tubular Type M	LF	74.000	74.000
0042	516.0500	Rubberized Membrane Waterproofing	SY	10.000	10.000
0044	520.2012	Culvert Pipe Temporary 12-Inch	LF	54.000	54.000
0046	526.0101	Temporary Structure (station) 01. 102+00	EACH	1.000	1.000
0048	550.2104	Piling CIP Concrete 10 3/4 X 0.25-Inch	LF	490.000	490.000
0050	606.0200	Riprap Medium	CY	2.000	2.000
0052	606.0300	Riprap Heavy	CY	123.000	123.000
0054	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	138.000	138.000
0056	616.0100	Fence Woven Wire (height) 01. 4-Foot	LF	403.000	403.000
0058	618.0100	Maintenance and Repair of Haul Roads (project) 01. 8907-00-73	EACH	1.000	1.000
0060	619.1000	Mobilization	EACH	1.000	1.000
0062	624.0100	Water	MGAL	6.100	6.100
0064	625.0100	Topsoil	SY	1,912.000	1,912.000
0066	625.0500	Salvaged Topsoil	SY	223.000	223.000
0068	627.0200	Mulching	SY	935.000	935.000
0070	628.1504	Silt Fence	LF	621.000	621.000
0072	628.1520	Silt Fence Maintenance	LF	621.000	621.000
0074	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0076	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0078	628.2008	Erosion Mat Urban Class I Type B	SY	202.000	202.000
0080	628.2023	Erosion Mat Class II Type B	SY	226.000	226.000
0082	628.6005	Turbidity Barriers	SY	320.000	320.000
0084	628.7504	Temporary Ditch Checks	LF	60.000	60.000
0086	628.7555	Culvert Pipe Checks	EACH	8.000	8.000
0088	629.0210	Fertilizer Type B	CWT	0.300	0.300
0090	630.0175	Seeding Mixture No. 75	LB	1.700	1.700
0092	630.0200	Seeding Temporary	LB	6.600	6.600
0094	630.0300	Seeding Borrow Pit	LB	5.000	5.000
0096	630.0400	Seeding Nurse Crop	LB	1.900	1.900
0098	630.0500	Seed Water	MGAL	95.000	95.000

Estimate Of Quantities

8907-00-73

Line	Item	Item Description	Unit	Total	Qty
0100	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	4.000	4.000
0102	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0104	638.2602	Removing Signs Type II	EACH	4.000	4.000
0106	638.3000	Removing Small Sign Supports	EACH	4.000	4.000
0108	642.5001	Field Office Type B	EACH	1.000	1.000
0110	643.0300	Traffic Control Drums	DAY	1,660.000	1,660.000
0112	643.0420	Traffic Control Barricades Type III	DAY	1,320.000	1,320.000
0114	643.0705	Traffic Control Warning Lights Type A	DAY	2,640.000	2,640.000
0116	643.0715	Traffic Control Warning Lights Type C	DAY	858.000	858.000
0118	643.0900	Traffic Control Signs	DAY	2,152.000	2,152.000
0120	643.1070	Traffic Control Cones 42-Inch	DAY	1,188.000	1,188.000
0122	645.0105	Geotextile Type C	SY	1,334.000	1,334.000
0124	645.0111	Geotextile Type DF Schedule A	SY	84.000	84.000
0126	645.0120	Geotextile Type HR	SY	185.000	185.000
0128	650.4500	Construction Staking Subgrade	LF	388.000	388.000
0130	650.5000	Construction Staking Base	LF	388.000	388.000
0132	650.6000	Construction Staking Pipe Culverts	EACH	1.000	1.000
0134	650.6501	Construction Staking Structure Layout (structure) 01. B-09-319	EACH	1.000	1.000
0136	650.9911	Construction Staking Supplemental Control (project) 01. 8907-00-73	EACH	1.000	1.000
0138	650.9920	Construction Staking Slope Stakes	LF	388.000	388.000
0140	690.0150	Sawing Asphalt	LF	40.000	40.000
0142	715.0502	Incentive Strength Concrete Structures	DOL	618.000	618.000
0144	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. STA 13+00	EACH	1.000	1.000
0146	SPV.0060	Special 01. Salvage and Reinstall Signs	EACH	1.000	1.000
0148	SPV.0090	Special 01. Flashing Stainless Steel	LF	59.000	59.000

3

CLEARING & GRUBBING			
STATION - STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
205TH AVENUE			
12+36 - 13+64	RT & LT	2	2
TEMP BYPASS			
100+51 - 103+89	RT & LT	4	--
ITEM TOTALS		6	2

FENCE			
STATION - STATION	LOCATION	204.0170 REMOVING FENCE LF	616.0100 FENCE WOVEN WIRE 4-FOOT LF
11+25 - 14+75	RT	403	403
ITEM TOTALS		403	403

PROJECT	205.0506.S EXCAVATION, HAULING, AND DISPOSAL OF CREOSOTE CONTAMINATED SOIL TON
8907-00-73	30
30	

3

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (3)	AVAILABLE MATERIAL (4)	UNEXPANDED FILL	EXPANDED FILL (5)	MASS ORDINATE +/- (6)	WASTE	208.0100 BORROW	COMMENT
			CUT (2)				FACTOR 1.25				
DIVISION 1											
205TH AVE	12+36.00/13+64.00		87	40	47	10	8	35	35	0	
DIVISION 1 SUBTOTAL			87	40	47	10	8	35	35	0	
DIVISION 2											
TEMPORARY BYPASS	100+50.68/103+88.77		138	0	138	1,361	1,701	-1,562	0	1,562	
DIVISION 2 SUBTOTAL			138	0	138	1,361	1,701	-1,562	0	1,562	
DIVISION 3											
TEMPORARY BYPASS REMOVAL	100+50.68/103+88.77		1,430	0	1,430	155	194	1,236	1,236	0	
DIVISION 3 SUBTOTAL			1,430	0	1,430	155	194	1,236	1,236	0	
GRAND TOTAL			1,655	40	1,615	1,526	1,903	-292	1,271	1,562	
TOTAL COMMON EXC			1,655								

NOTES:  
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100  
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.  
(3) SALVAGED/UNUSABLE PAVEMENT MATERIAL  
(4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL  
(5) EXPANDED FILL FACTOR = 1.25  
(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.

<div>BASE AGGREGATE DENSE</div> <table><tr><th>STATION - STATION</th><th>305.0110 3/4-INCH TON</th><th>305.0120 1 1/4-INCH TON</th><th>624.0100 WATER MGAL</th></tr><tr><td colspan="4">205TH AVENUE</td></tr><tr><td>12+36 - 12+83</td><td>6</td><td>72</td><td>1.2</td></tr><tr><td>13+17 - 13+64</td><td>6</td><td>73</td><td>1.2</td></tr><tr><td colspan="4">TEMP BYPASS</td></tr><tr><td>100+51 - 101+79</td><td>--</td><td>105</td><td>1.6</td></tr><tr><td>102+23 - 103+89</td><td>--</td><td>135</td><td>2.1</td></tr><tr><td colspan="2">ITEM TOTALS</td><td>12</td><td>385</td></tr><tr><td colspan="2"></td><td>385</td><td>6.1</td></tr></table>				STATION - STATION	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON	624.0100 WATER MGAL	205TH AVENUE				12+36 - 12+83	6	72	1.2	13+17 - 13+64	6	73	1.2	TEMP BYPASS				100+51 - 101+79	--	105	1.6	102+23 - 103+89	--	135	2.1	ITEM TOTALS		12	385			385	6.1	<div>ASPHALTIC SURFACE ITEMS</div> <table><tr><th>STATION - STATION</th><th>455.0605 * TACK COAT GAL</th><th>465.0105 ASPHALTIC SURFACE TON</th></tr><tr><td>12+36 - 12+83</td><td>6</td><td>23</td></tr><tr><td>13+17 - 13+64</td><td>6</td><td>23</td></tr><tr><td colspan="2">ITEM TOTAL</td><td>12</td></tr><tr><td colspan="2"></td><td>46</td></tr></table> <div>* CALCULATED AT AN APPLICATION RATE OF 0.05 GAL/SY</div>			STATION - STATION	455.0605 * TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON	12+36 - 12+83	6	23	13+17 - 13+64	6	23	ITEM TOTAL		12			46	<div>CULVERT PIPE TEMPORARY</div> <table><tr><th>LOCATION</th><th>520.2012 12-INCH LF</th></tr><tr><td>103+68</td><td>54</td></tr><tr><td colspan="2">ITEM TOTALS</td><td>54</td></tr></table>		LOCATION	520.2012 12-INCH LF	103+68	54	ITEM TOTALS		54	<div>RIRPAP</div> <table><tr><th>LOCATION</th><th>606.0200 MEDIUM CY</th><th>REMARKS</th></tr><tr><td>103+68</td><td>1</td><td>FOR TEMPORARY CULVERT PIPE</td></tr><tr><td>UNDISTRIBUTED</td><td>1</td><td>FOR ADDITIONAL DITCH CHECKS</td></tr><tr><td colspan="2">ITEM TOTAL</td><td>2</td></tr></table>		LOCATION	606.0200 MEDIUM CY	REMARKS	103+68	1	FOR TEMPORARY CULVERT PIPE	UNDISTRIBUTED	1	FOR ADDITIONAL DITCH CHECKS	ITEM TOTAL		2
STATION - STATION	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON	624.0100 WATER MGAL																																																																													
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ITEM TOTALS		12	385																																																																													
		385	6.1																																																																													
STATION - STATION	455.0605 * TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON																																																																														
12+36 - 12+83	6	23																																																																														
13+17 - 13+64	6	23																																																																														
ITEM TOTAL		12																																																																														
		46																																																																														
LOCATION	520.2012 12-INCH LF																																																																															
103+68	54																																																																															
ITEM TOTALS		54																																																																														
LOCATION	606.0200 MEDIUM CY	REMARKS																																																																														
103+68	1	FOR TEMPORARY CULVERT PIPE																																																																														
UNDISTRIBUTED	1	FOR ADDITIONAL DITCH CHECKS																																																																														
ITEM TOTAL		2																																																																														

3

SALVAGED TOPSOIL, MULCHING, FERTILIZER, AND SEEDING									
STATION - STATION	625.0100 TOPSOIL SY	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0175 SEEDING MIXTURE NO. 75 LB	630.0200 SEEDING TEMPORARY LB	630.0300 SEEDING BORROW PIT LB	630.0400 SEEDING NURSE CROP LB	630.0500 SEED WATER MGAL
205TH AVENUE									
12+36 - 12+83	--	90	--	0.1	0.1	--	--	0.1	3
13+17 - 13+64	--	112	--	0.1	0.1	--	--	0.1	3
TEMP BYPASS									
100+51 - 101+79	825	--	480	--	0.6	3.0	2.0	0.7	38
102+23 - 103+89	913	--	370	--	0.7	3.0	2.0	0.8	42
UNDISTRIBUTED	174	21	85	0.1	0.2	0.6	1.0	0.2	.
ITEM TOTALS	112	223	35	0.3	1.	6.6	5.0	1.	5

EROSION CONTROL ITEMS							
STATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.2023 EROSION MAT CLASS II TYPE B SY	628.6005 TURBIDITY BARRIER SY	628.504 TEMPORARY DITCH CHECKS LF	628.555 CULVERT PIPE CHECKS EA
205TH AVENUE							
12+36 - 12+83	141	141	0	--	6	--	--
13+1 - 13+64	150	150	112	--	86	--	--
TEMP BYPASS							
100+51 - 101+	236	236	--	55	5	5	--
102+23 - 103+8	4	4	--	11	2	35	8
UNDISTRIBUTED	--	--	--	--	--	20	--
ITEM TOTALS	621	621	202	226	320	60	8

3

MOBILIZATIONS		
PROJECT	628.1905 MOBILIZATION EROSION CONTROL EACH	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL EACH
8907-00-73	6	3
	6	3

PERMANENT SIGNING										
STATION	OFFSET	LOCATION	SIGN CODE	SIGN SIZE (W H) IN IN	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	63.2230 SIGNS TYPE II REFLECTIVE F SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	SPV.0060.01 SALVAGE AND REINSTALL SIGNS EACH	REMARKS
12+8	24 RT	SW BRIDGE CORNER	W5-52L	12X36	1	3	1	1	--	
		SE BRIDGE CORNER	W5-52R	12X36	1	3	1	1	--	
		NW BRIDGE CORNER	W5-52R	12X36	1	3	1	1	--	
		NE BRIDGE CORNER	W5-52L	12X36	1	3	1	1	--	
			N/A	N/A	--	--	--	--	1	DNR TROUT ANGLER SIGN
ITEM TOTAL					4	12	4	4	1	

TRAFFIC CONTROL														
LOCATION	APPROX. SERVICE PERIOD DAYS	643.0300 DRUMS		643.0420 BARRICADES TYPE III		643.0705 WARNING LIGHTS TYPE A		643.0715 WARNING LIGHTS TYPE C		643.0900 SIGNS		643.1070 42-INCH CONES		REMARKS
	NO.	DAYS	NO.	DAYS	NO.	DAYS	NO.	DAYS	NO.	DAYS	NO.	DAYS		
PROJECT 8907-00-73	66 2	25 5	1650 10	20 --	1320 --	40 --	2640 --	13 --	858 --	32 20	2112 40	18 --	1188 --	TEMPORARY BYPASS TEMPORARY BYPASS CONSTRUCTION AND REMOVAL
ITEM TOTALS		1660		1320		2640		858		2152		1188		

GEOTEXTILE TYPE C	
STATION	645.0105 SY
TEMP BYPASS	
100+51 - 101+79	858
102+23 - 103+89	474
103+68	2
	1334



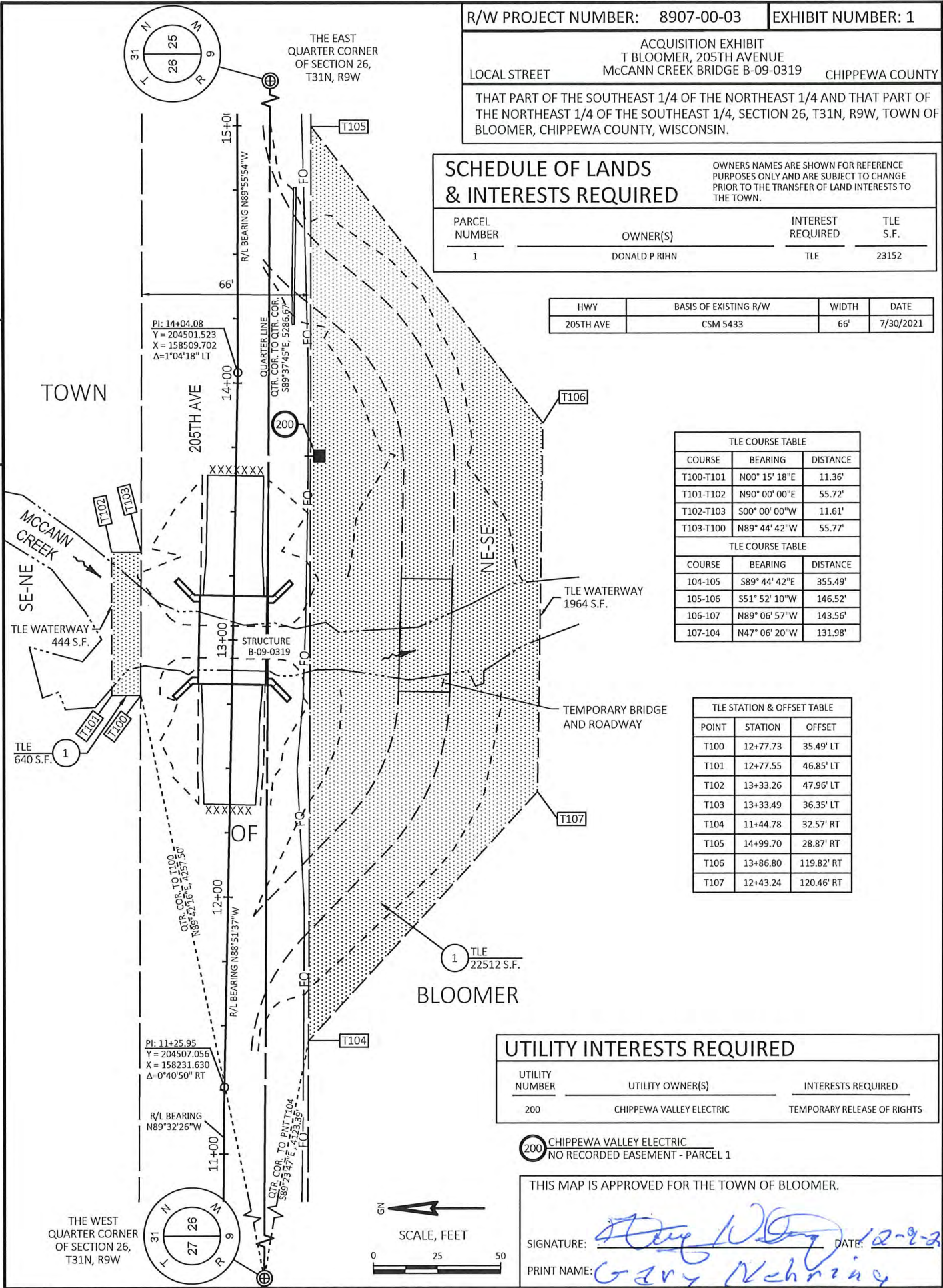
3

CONSTRUCTION STAKING						
STATION - STATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.6000 PIPE CULVERTS EA	650.6501 STRUCTURE LAYOUT (B-0- 31) EACH	650.11 SUPPLEMENTAL CONTROL (80- 00-3) EACH	650.20 SLOPE STAKES LF
205TH AVENUE						
12+36 - 12+83	4	4	--	--	--	4
13+1 - 13+64	4	4	--	--	--	4
TEMP BYPASS						
100+51 - 101+	128	128	--	--	--	128
102+23 - 103+8	166	166	1	--	--	166
PROECT 83-00- 0		--	--	1	1	--
ITEM TOTALS	388	388	1	1	1	388

SAWING	
STATION	60.0150 ASPHALT LF
12+36	20
13+64	20
ITEM TOTAL	40

ADDITIONAL SPECIAL ITEMS	
.2000. S INSTALLING AND MAINTAINING BIRD DETERRANT SYSTEM STATION 13+00	
STATION	EA
13+00	1
ITEM TOTAL	1

3



R/W PROJECT NUMBER: 8907-00-03 EXHIBIT NUMBER: 1

ACQUISITION EXHIBIT  
T BLOOMER, 205TH AVENUE  
LOCAL STREET McCANN CREEK BRIDGE B-09-0319 CHIPPEWA COUNTY

THAT PART OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 AND THAT PART OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4, SECTION 26, T31N, R9W, TOWN OF BLOOMER, CHIPPEWA COUNTY, WISCONSIN.

SCHEDULE OF LANDS & INTERESTS REQUIRED			
OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE TOWN.			
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
1	DONALD P RIHN	TLE	23152

HWY	BASIS OF EXISTING R/W	WIDTH	DATE
205TH AVE	CSM 5433	66'	7/30/2021

TLE COURSE TABLE		
COURSE	BEARING	DISTANCE
T100-T101	N00° 15' 18"E	11.36'
T101-T102	N90° 00' 00"E	55.72'
T102-T103	S00° 00' 00"W	11.61'
T103-T100	N89° 44' 42"W	55.77'

TLE COURSE TABLE		
COURSE	BEARING	DISTANCE
104-105	S89° 44' 42"E	355.49'
105-106	S51° 52' 10"W	146.52'
106-107	N89° 06' 57"W	143.56'
107-104	N47° 06' 20"W	131.98'

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
T100	12+77.73	35.49' LT
T101	12+77.55	46.85' LT
T102	13+33.26	47.96' LT
T103	13+33.49	36.35' LT
T104	11+44.78	32.57' RT
T105	14+99.70	28.87' RT
T106	13+86.80	119.82' RT
T107	12+43.24	120.46' RT

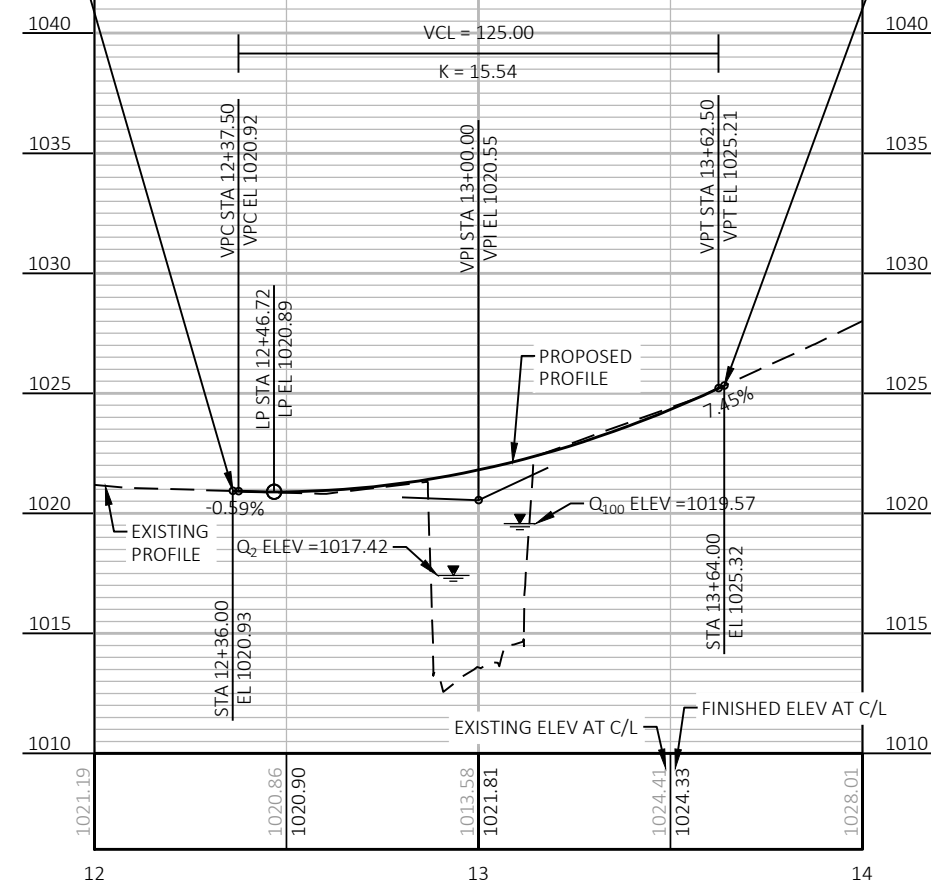
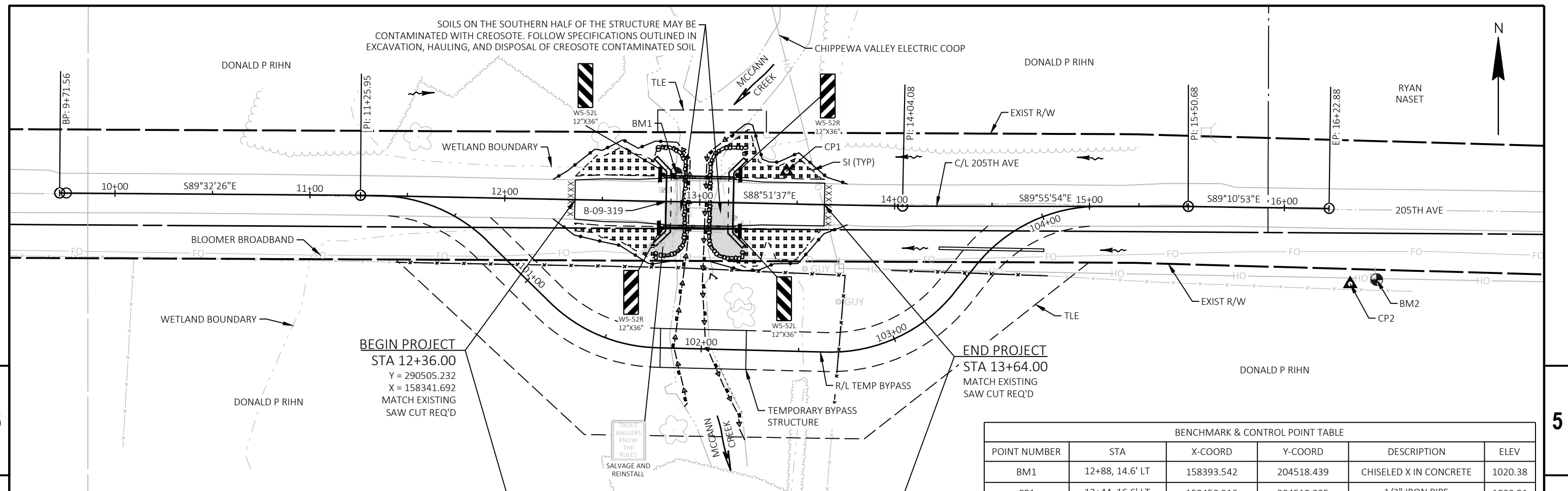
UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	UTILITY OWNER(S)	INTERESTS REQUIRED
200	CHIPPEWA VALLEY ELECTRIC	TEMPORARY RELEASE OF RIGHTS











200 CHIPPEWA VALLEY ELECTRIC  
NO RECORDED EASEMENT - PARCEL 1

THIS MAP IS APPROVED FOR THE TOWN OF BLOOMER.

SIGNATURE: *[Signature]* DATE: 12-8-24  
PRINT NAME: Gary Nehring

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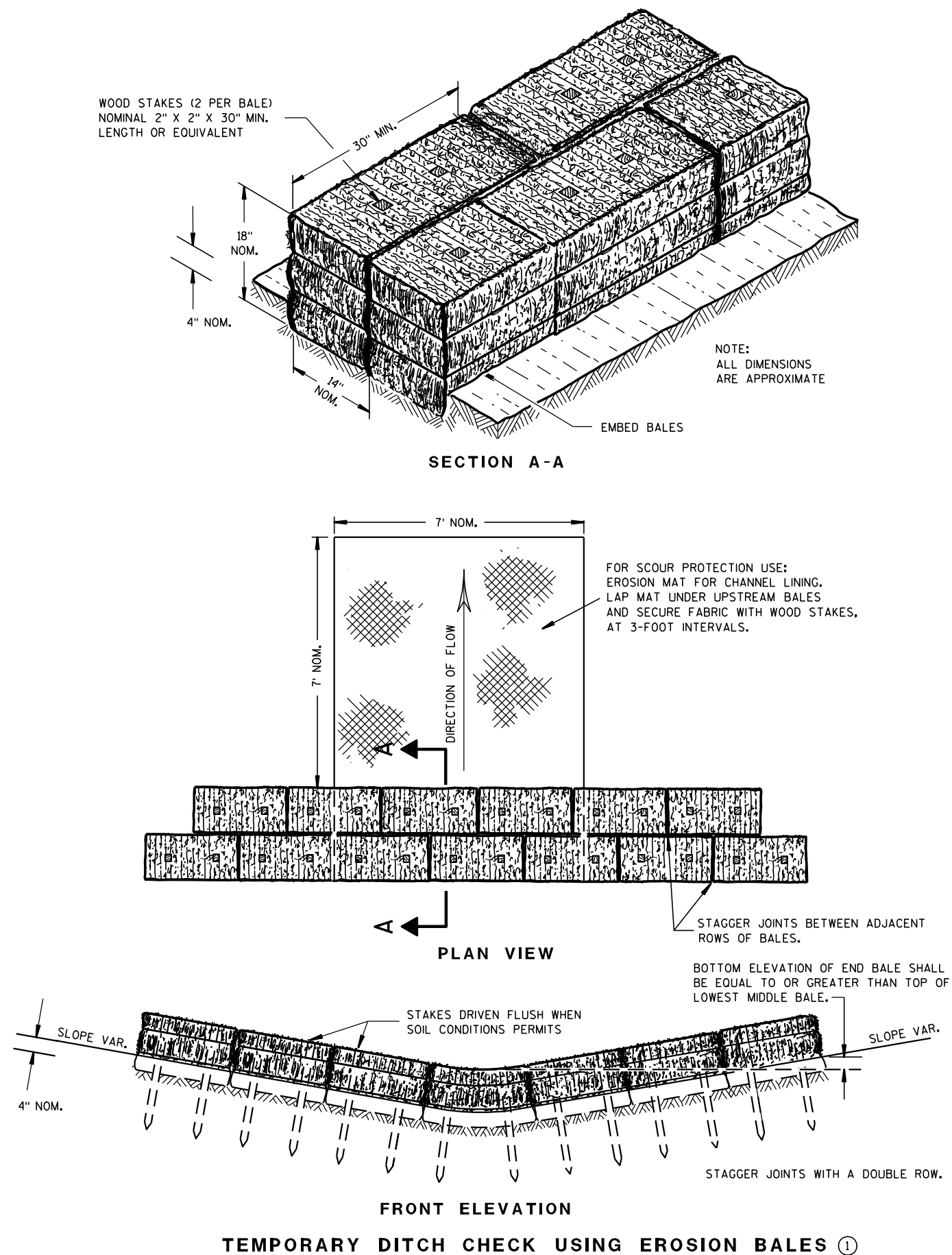
	<u>LEGEND</u>
	MULCHING
	EROSION MAT URBAN CLASS I TYPE B
	EROSION MAT CLASS II TYPE B
	RIPRAP HEAVY
	SILT FENCE
	TURBIDITY BARRIER
	TEMPORARY DITCH CHECK
	CULVERT PIPE CHECK
	SURFACE WATER FLOW



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
15B01-08A	FENCE WOVEN WIRE
15B01-08B	FENCE WOVEN WIRE
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
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
15D31-05	TRAFFIC CONTROL, TEMPORARY BYPASS ROADWAY

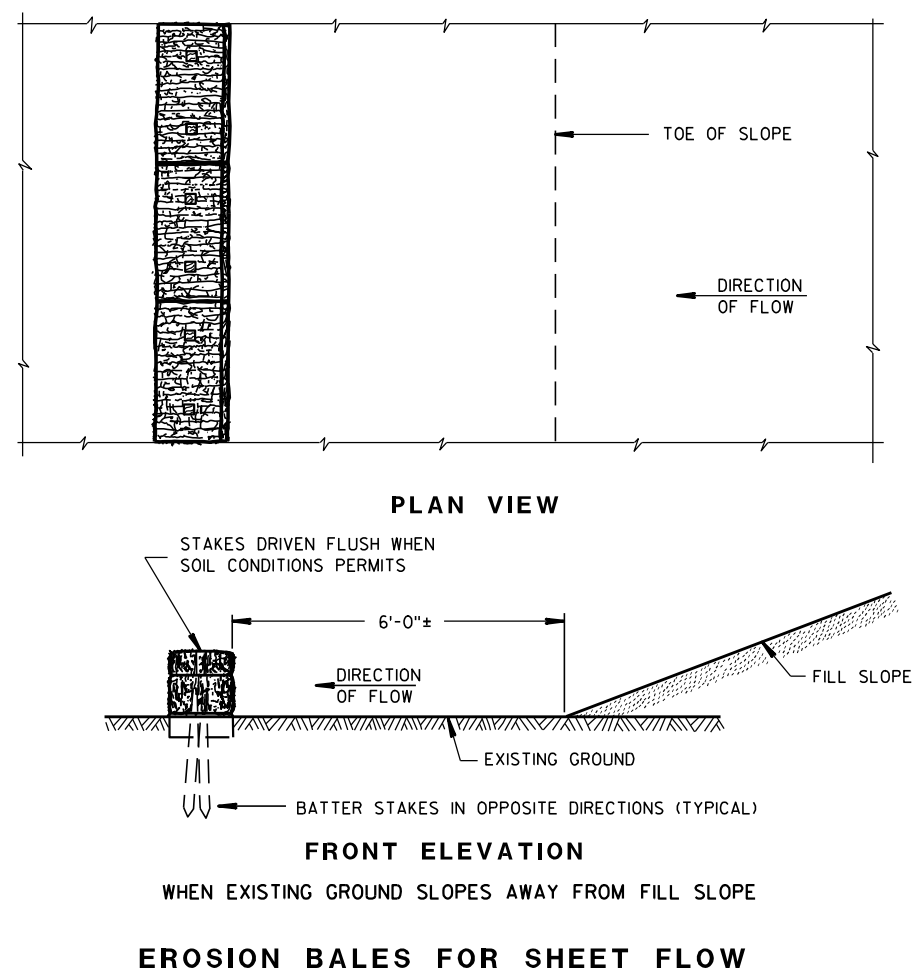
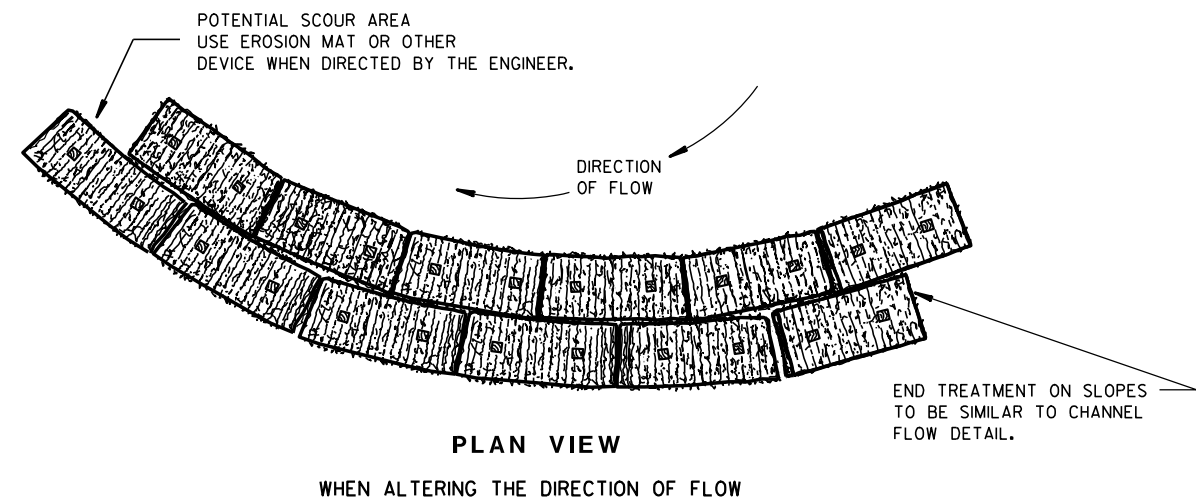




## GENERAL NOTES

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

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

TYPICAL INSTALLATIONS OF  
EROSION BALES / TEMPORARY  
DITCH CHECKS

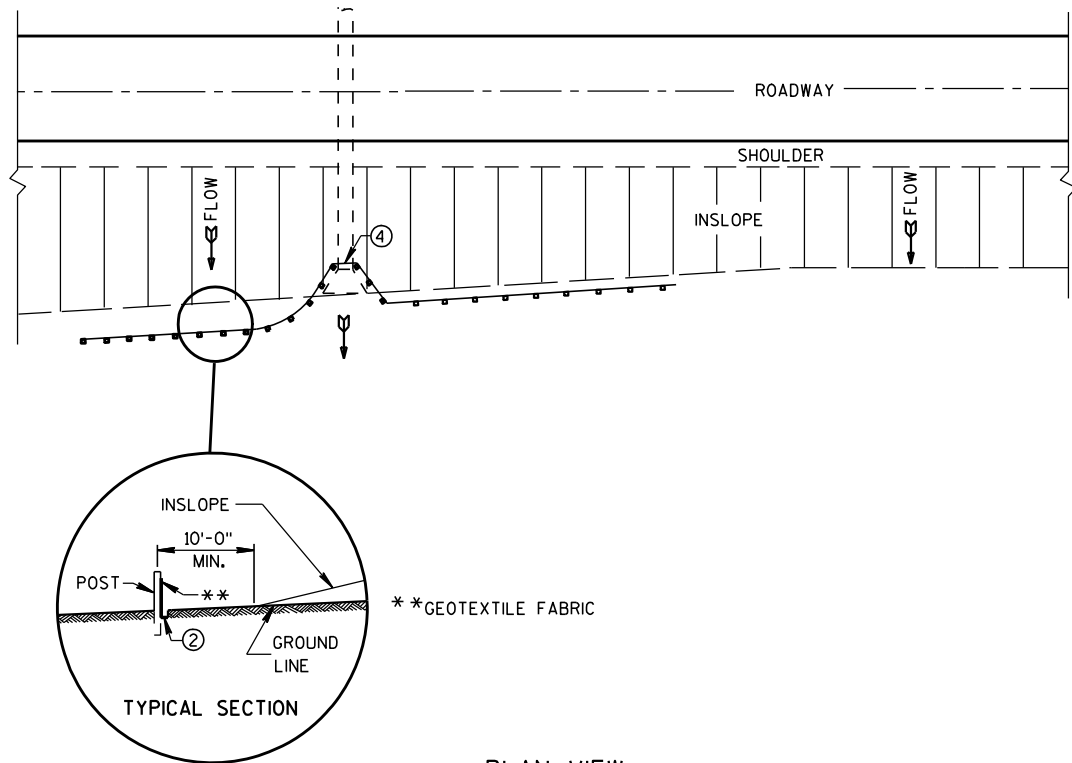
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

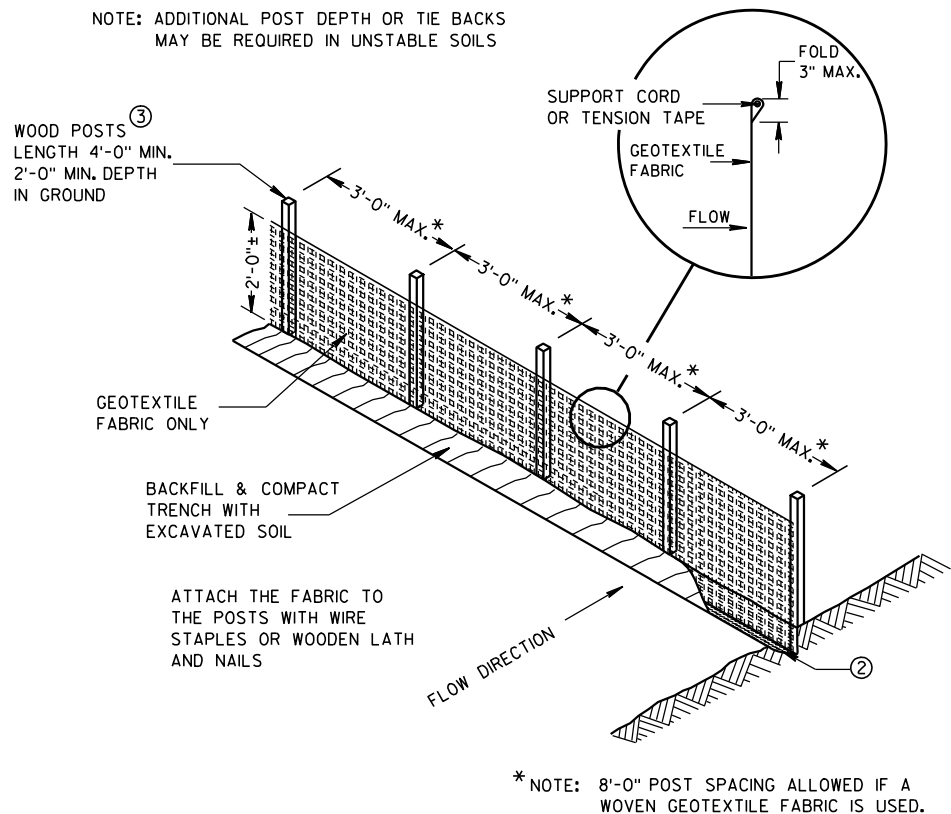
6/04/02  
DATE

/S/ Beth Conn-----  
CHIEF ROADWAY DEVELOPMENT ENGINEER

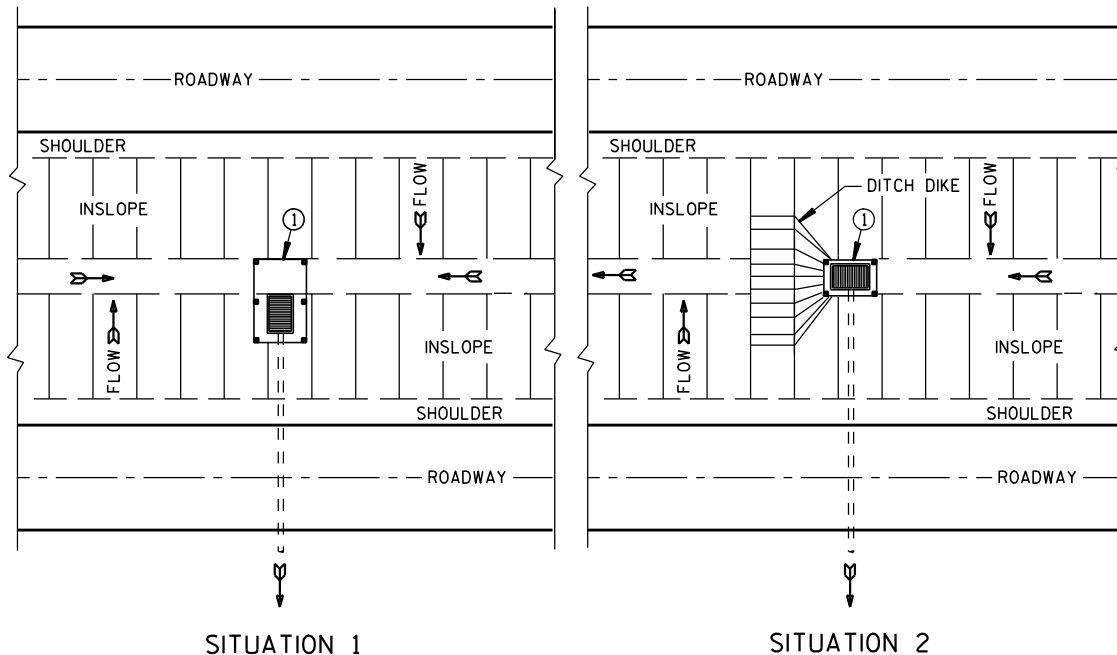
FHWA



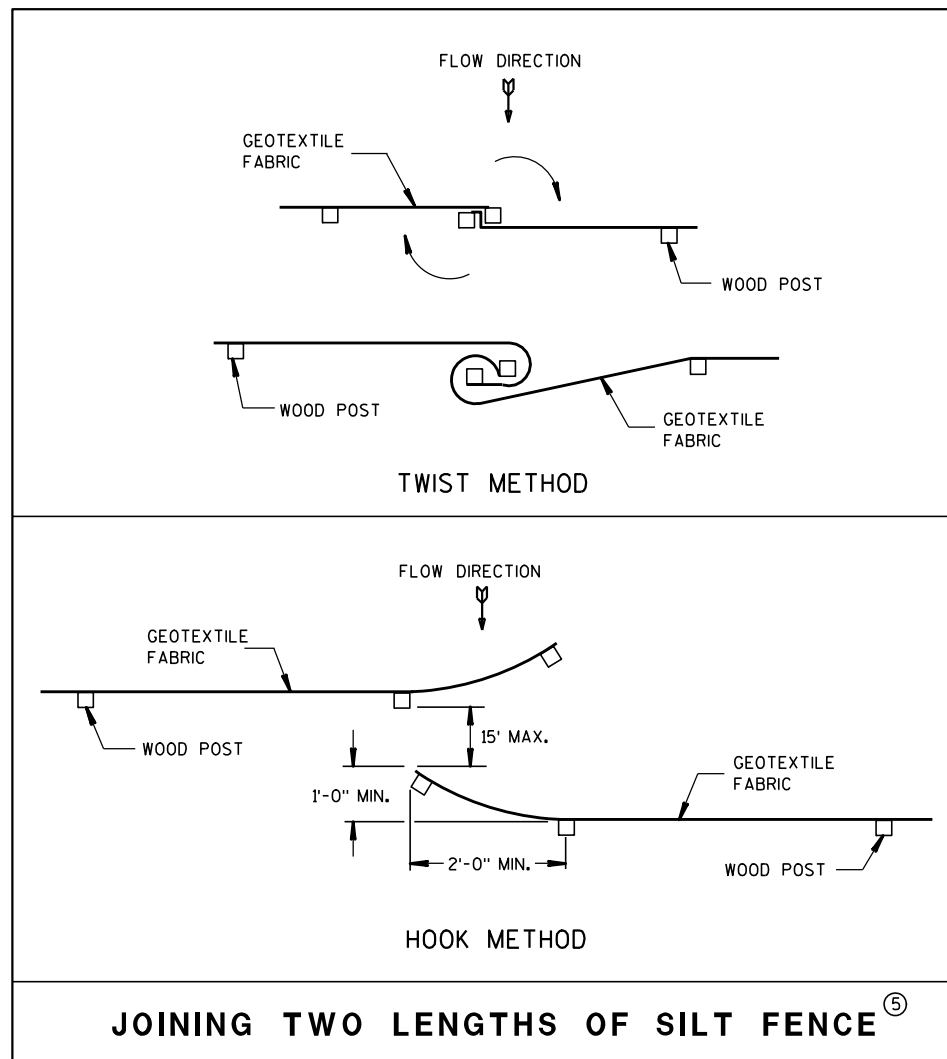
PLAN VIEW  
TYPICAL APPLICATION OF SILT FENCE



SILT FENCE



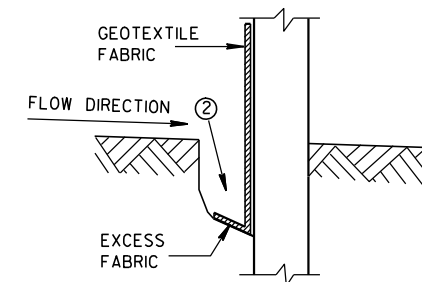
PLAN VIEW  
SILT FENCE AT MEDIAN SURFACE DRAINS



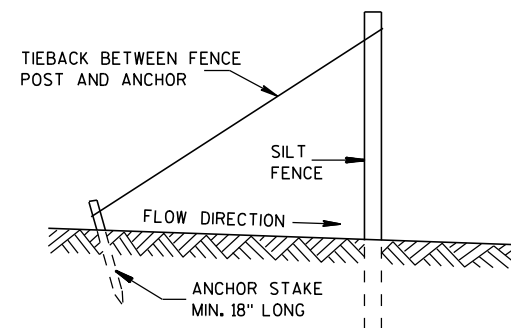
## GENERAL NOTES

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

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



TRENCH DETAIL

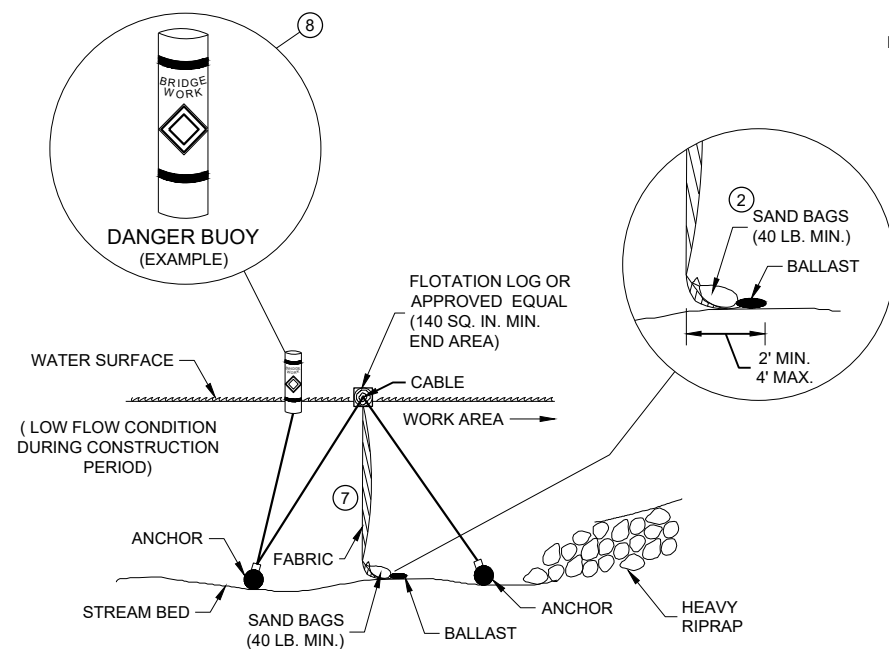


SILT FENCE TIE BACK  
(WHEN REQUIRED BY THE ENGINEER)

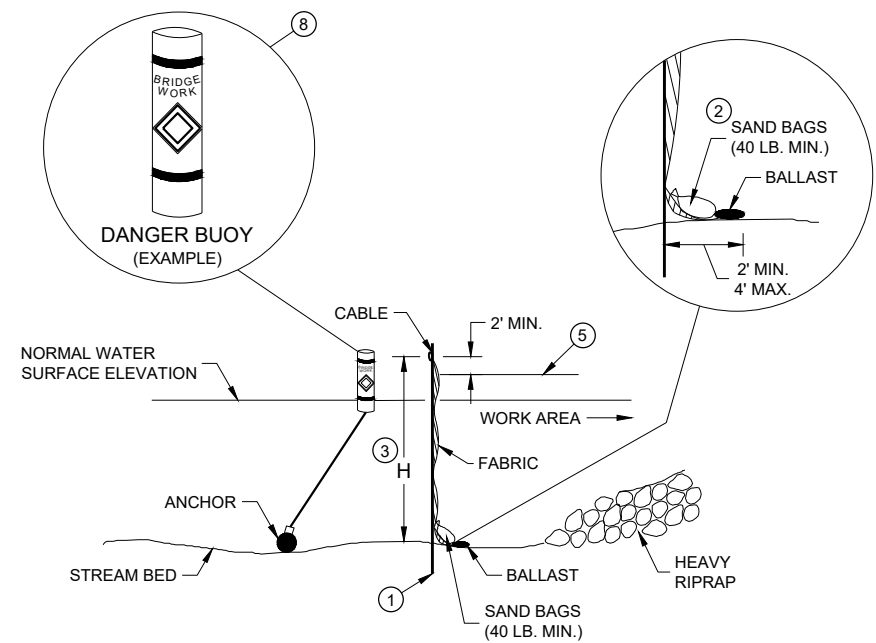
## SILT FENCE

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

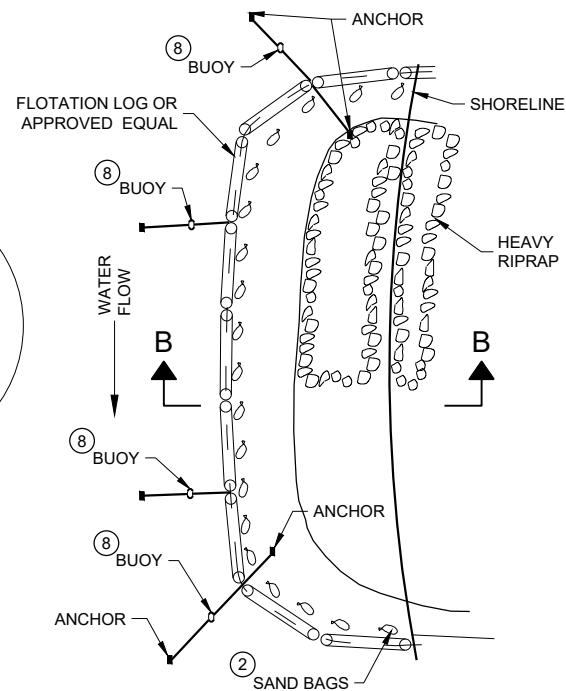
APPROVED  
4-29-05 /S/ Beth Conn  
DATE CHIEF ROADWAY DEVELOP 15 INEER  
FHWA



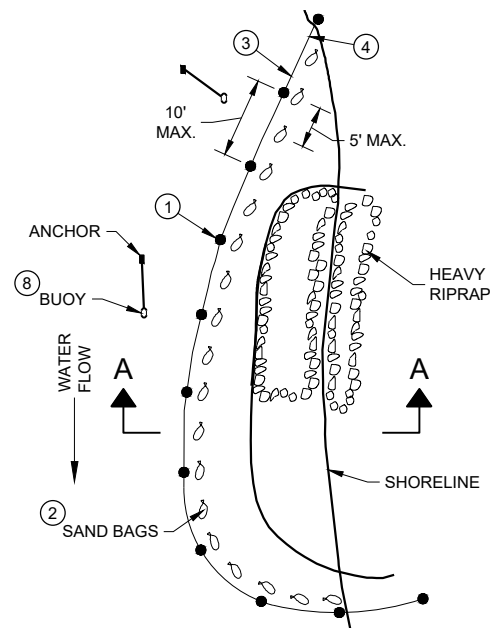
SECTION B - B

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

SECTION A - A

**TURBIDITY BARRIER - STANDARD POST INSTALLATION****TURBIDITY BARRIER PLACEMENT DETAILS**

PLAN VIEW



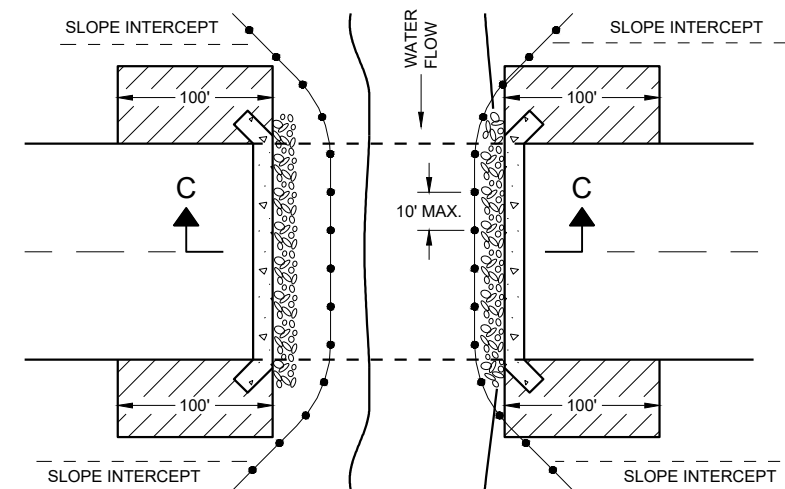
PLAN VIEW

**GENERAL NOTES**

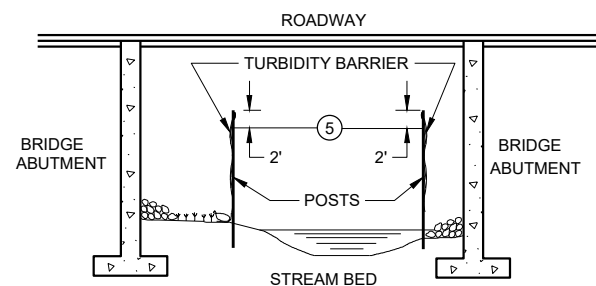
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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



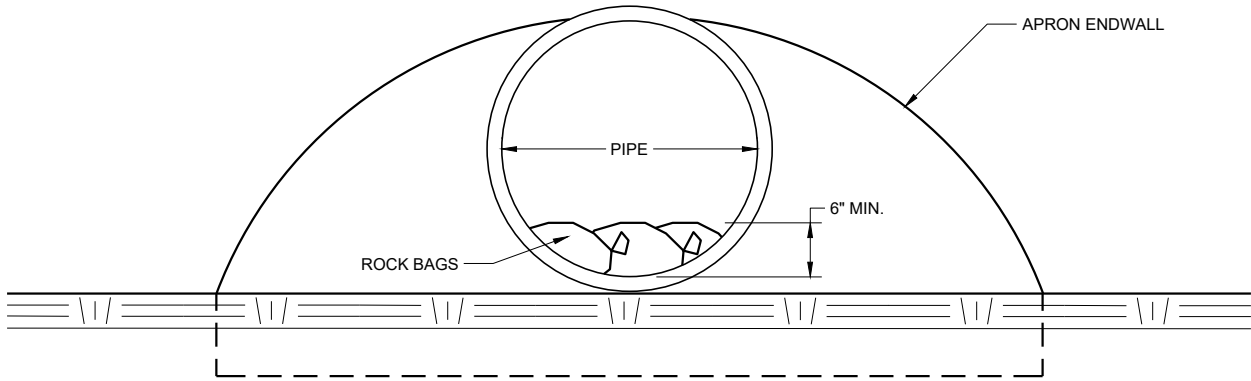
SECTION C - C

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

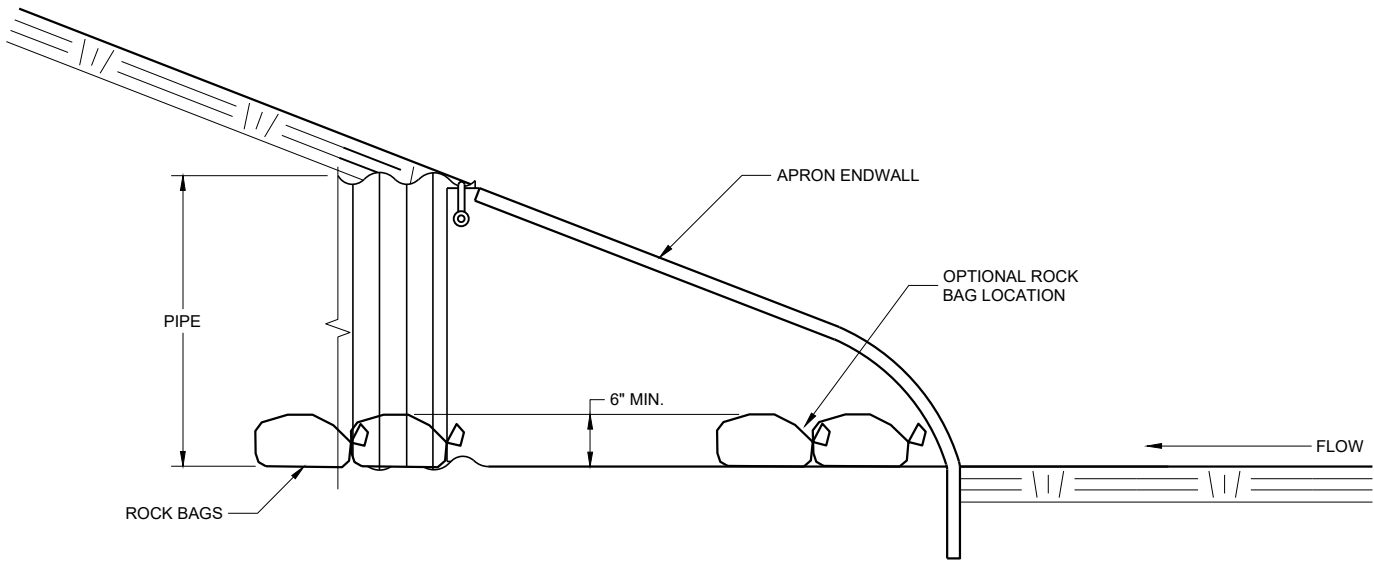
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
6/4/02 DATE /S/ Beth Canestra  
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER 16  
FHWA





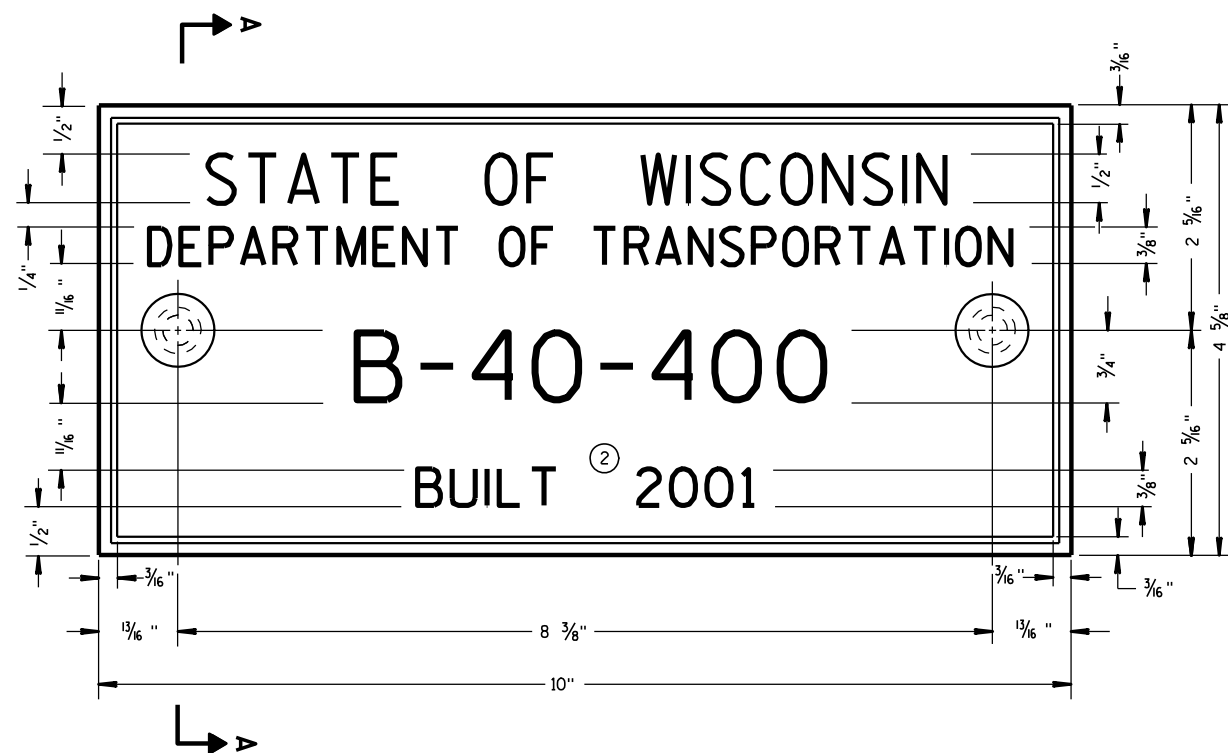
END VIEW



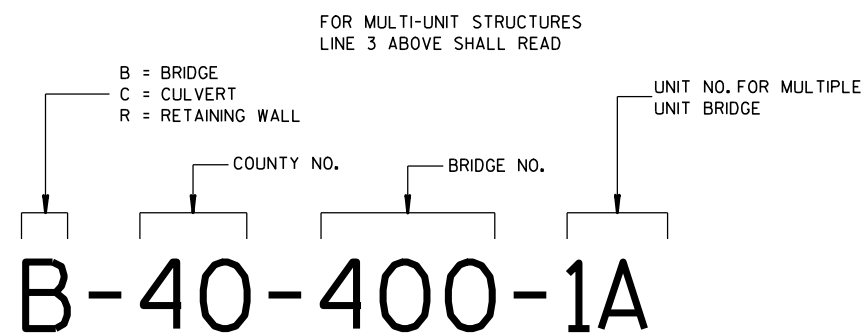
SIDE VIEW

**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	17



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



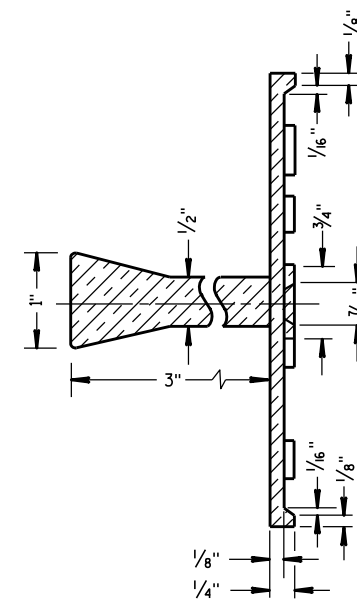
**NUMBERING DESIGNATION  
MULTI-UNIT STRUCTURES**

## GENERAL NOTES

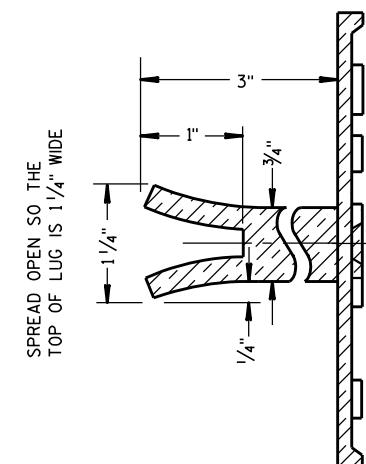
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

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

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

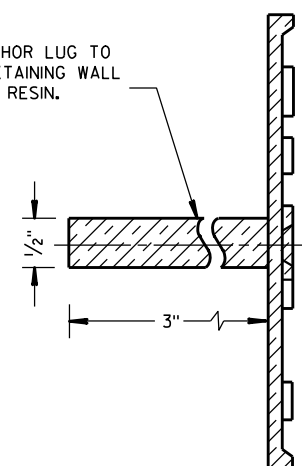


**SECTION A-A**



**ALTERNATE LUG**

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



**ALTERNATE LUG**  
(FOR ATTACHMENT TO PRECAST STRUCTURES)

**NAME PLATE  
(STRUCTURES)**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

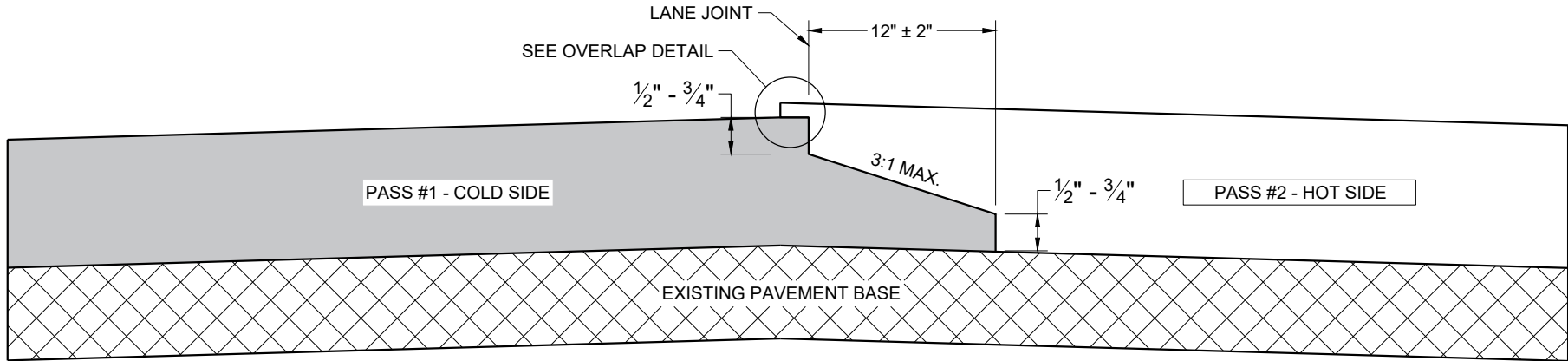
APPROVED

3/26/10  
DATE

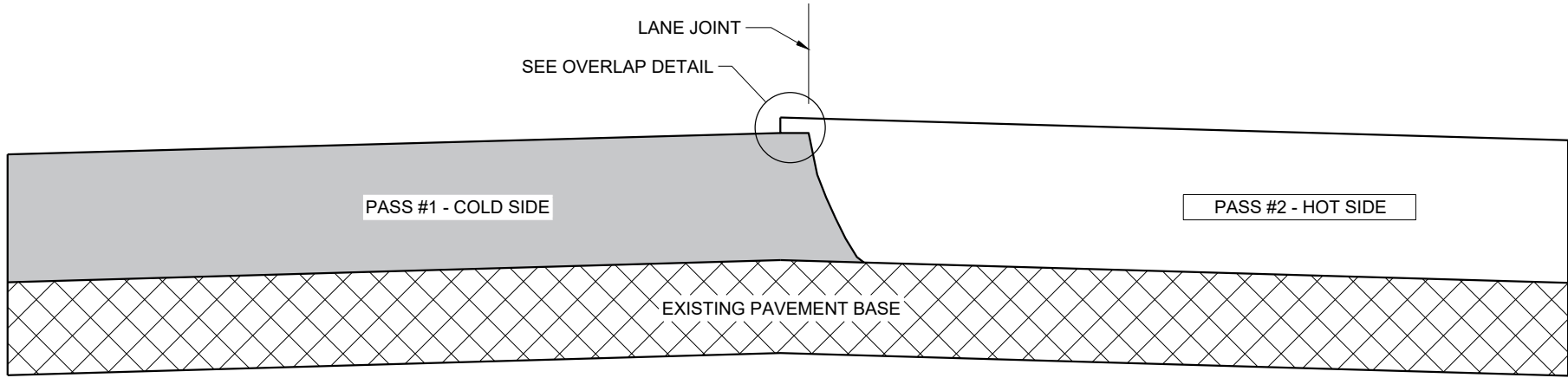
FHWA

/S/ Scot Beck  
CHIEF STRUCTURAL DEVELOPER

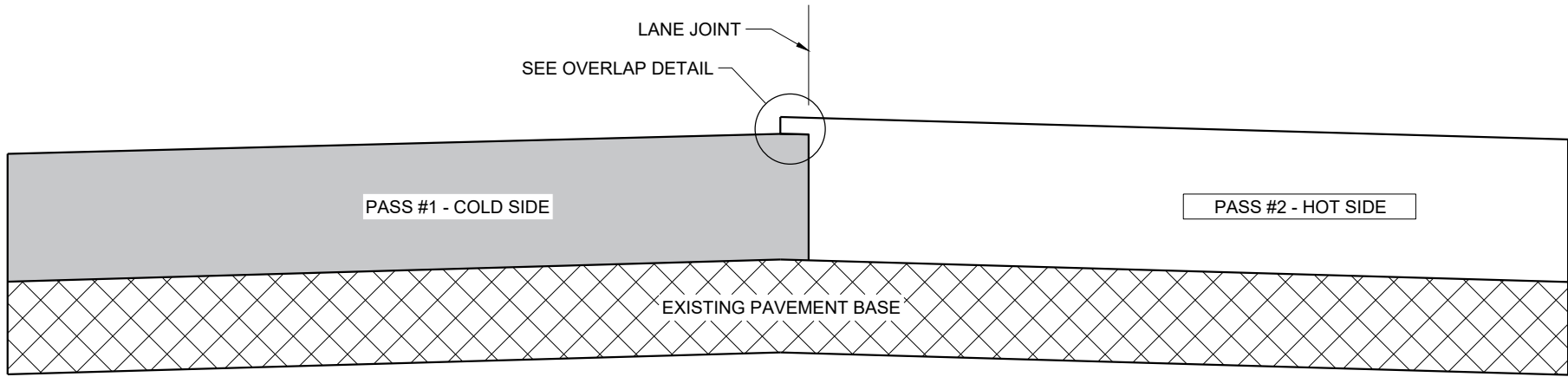
18  
JEER



TYPICAL PAVEMENT CROSS SECTION  
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION  
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION  
VERTICAL JOINT (MILLED)

GENERAL NOTES

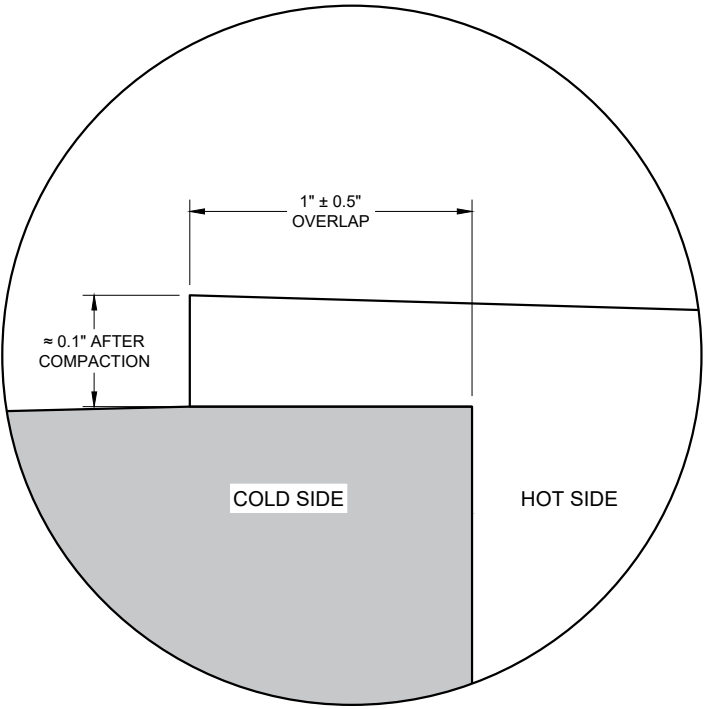
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 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.



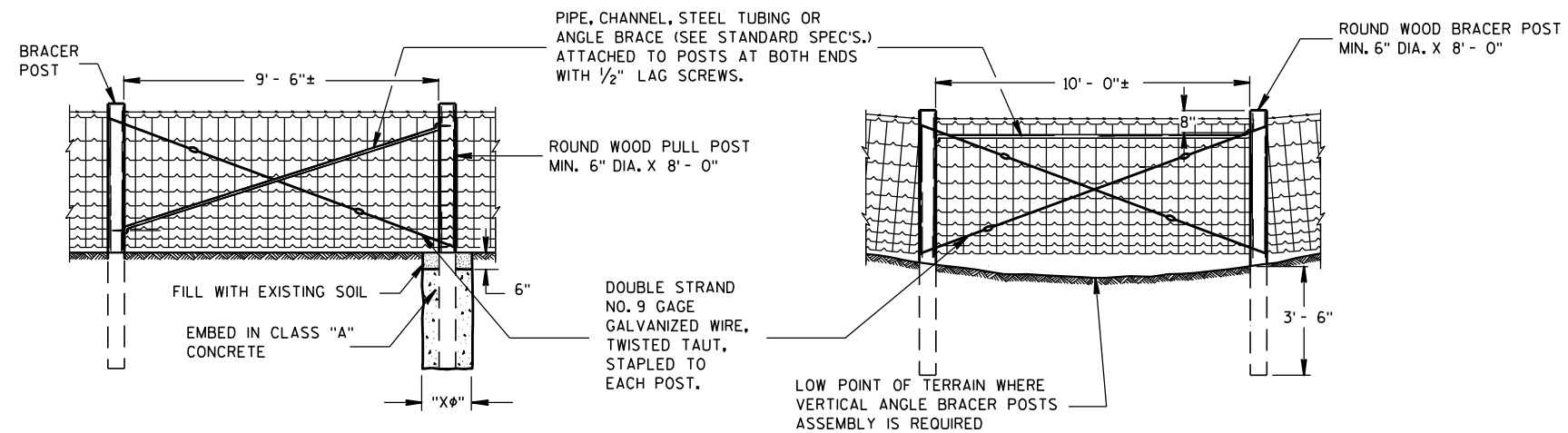
OVERLAP DETAIL (TYPICAL)

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
November 2020 /S/ Steven Hefel  
DATE HMA PAVEMENT ENGIN 19  
FHWA

ILLUSTRATION SHOWS POSITION OF STANDARD STEEL BRACE, DOUBLE STRAND GALVANIZED WIRE, AND THE POST TO BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM LEFT TO RIGHT. THE BRACES SHALL BE POSITIONED ON THE OPPOSITE DIAGONALS AND THE OPPOSITE POST SHALL BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM RIGHT TO LEFT.



## PULL OR STRETCHER POSTS ASSEMBLY

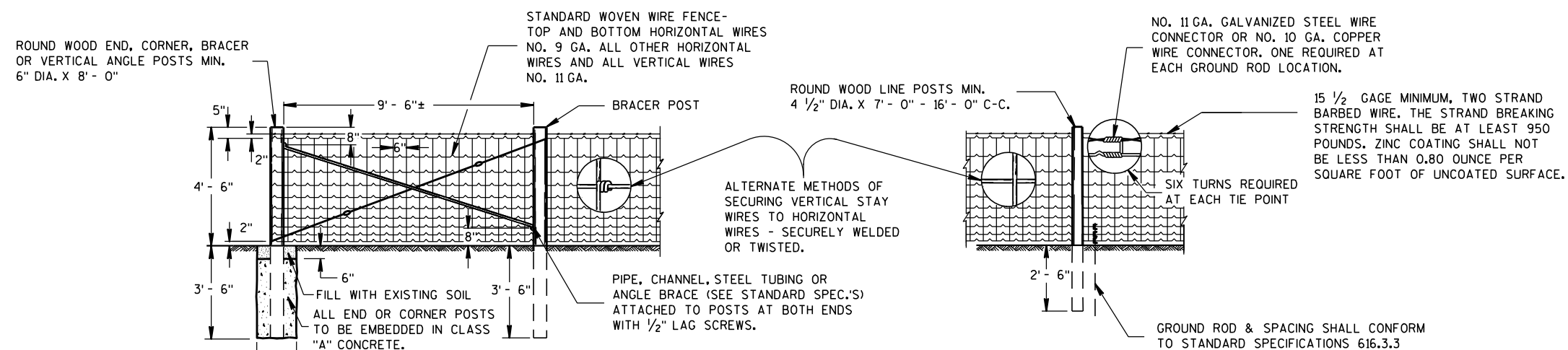
## VERTICAL ANGLE BRACER POSTS ASSEMBLY

"X $\phi$ " = DIAMETER OF THE POST PLUS 12".

FENCE STAPLES SHOULD NEVER BE DRIVEN VERTICALLY INTO WOOD POSTS (WITH BOTH LEGS PARALLEL WITH THE WOOD GRAIN). DOING SO CAN SEPARATE THE GRAIN AND SIGNIFICANTLY REDUCE THE HOLDING POWER. ROTATING THE STAPLES SLIGHTLY OFF VERTICAL STRADDLES THE GRAIN AND PROVIDES MORE RESISTANCE TO PULL-OUT.

DO NOT STAPLE WIRE TIGHT TO THE LINE POSTS. ALLOW MOVEMENT OF WIRE FOR EXPANSION AND CONTRACTION. STAPLE ARRANGEMENT SHALL BE THE SAME FOR ALL OTHER POSTS EXCEPT THAT THEY SHALL BE DRIVEN TIGHT TO POSTS. ALL STAPLES SHALL BE 2" X 9 GAGE AND SHALL BE MANUFACTURED FROM GALVANIZED WIRE OR HOT DIP GALVANIZED AFTER FORMING. STAPLES SHALL HAVE SLASH-CUT POINTS.

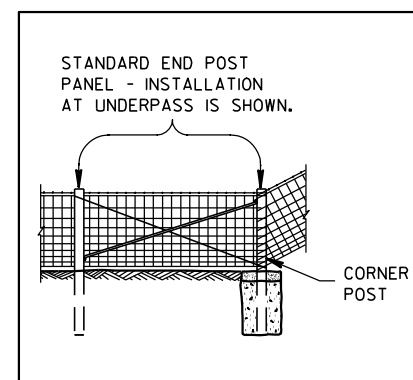
FENCE SHALL BE LOCATED 3'-0" INSIDE  
THE RIGHT OF WAY LINE UNLESS  
OTHERWISE INDICATED ON THE PLANS.



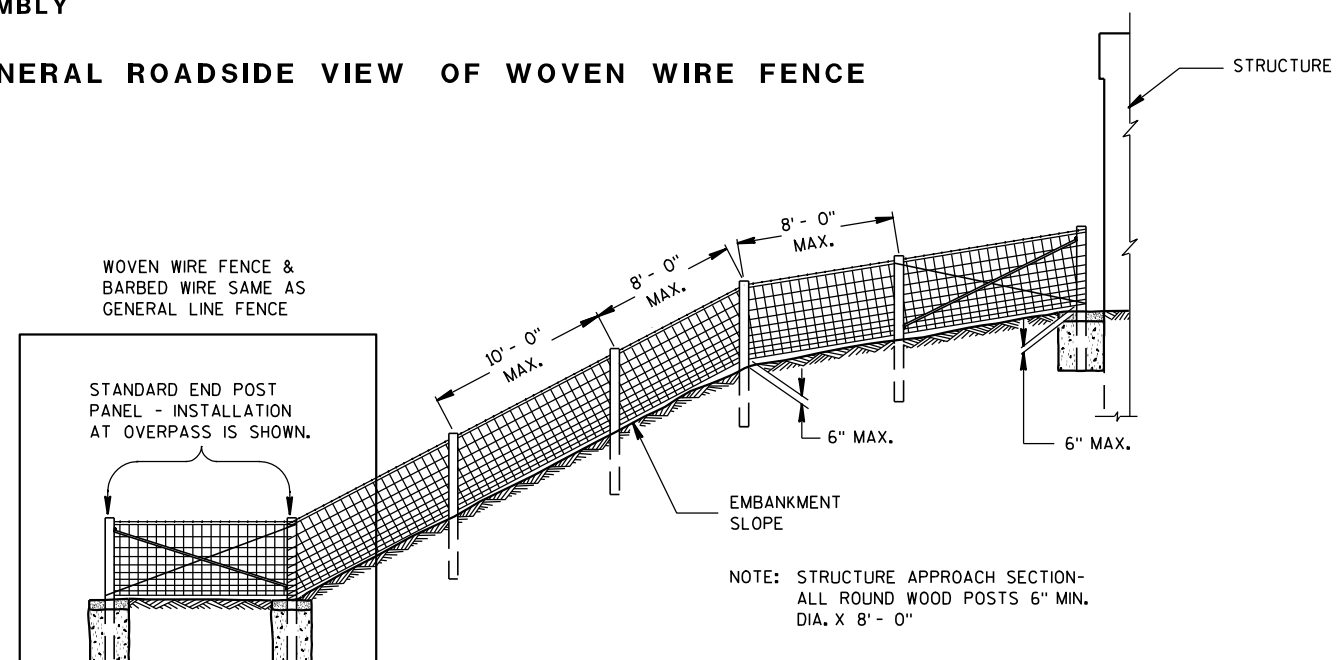
## LINE FENCE CONSTRUCTION

## END OR CORNER POSTS ASSEMBLY

### GENERAL ROADSIDE VIEW OF WOVEN WIRE FENCE



### ALTERNATE FENCE DESIGN AT STRUCTURE



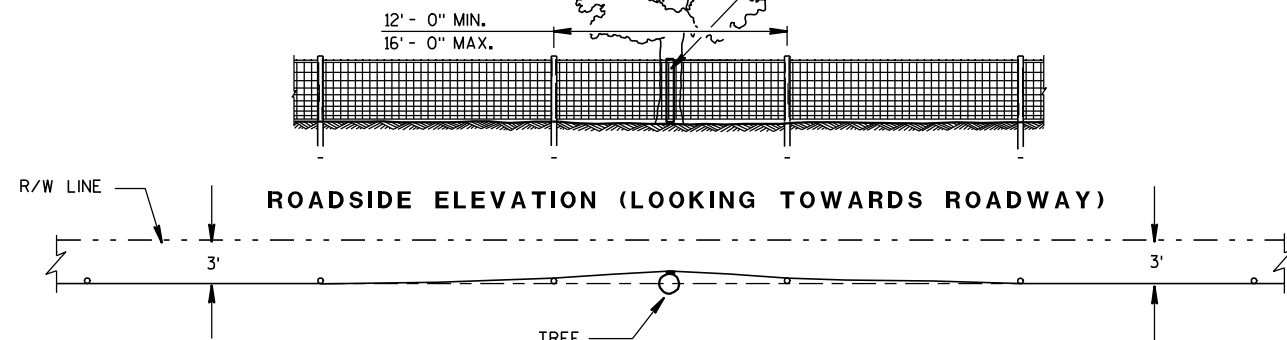
### FENCE DESIGN AT STRUCTURE APPROACH

## FENCE WOVEN WIRE

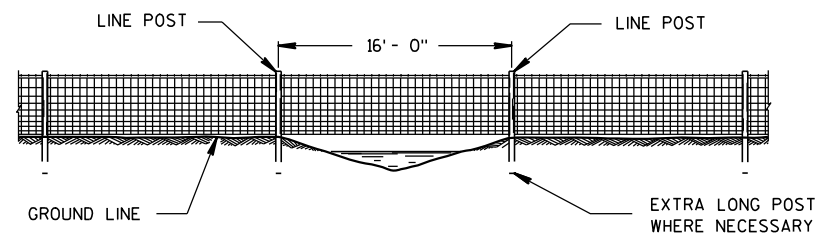
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

NOTE: TREE IN NORMAL FENCE LINE SPECIFICALLY ORDERED BY ENGINEER TO REMAIN IN PLACE.

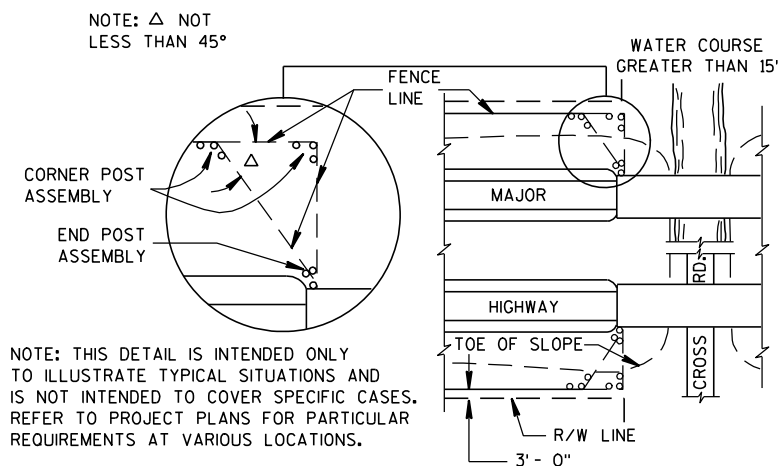
2" X 6" DOUGLAS FIR OR SO. YELLOW PINE PLACED BETWEEN TREE AND WOVEN WIRE FENCE. WOVEN WIRE FENCE AND BARBED WIRE TO BE STAPLED TO 2" X 6" LIKE AS TO LINE POST. 2" X 6" NOT FASTENED TO TREE.



PLAN VIEW  
FENCE DESIGN AT TREES REMAINING  
IN NORMAL FENCE LINE

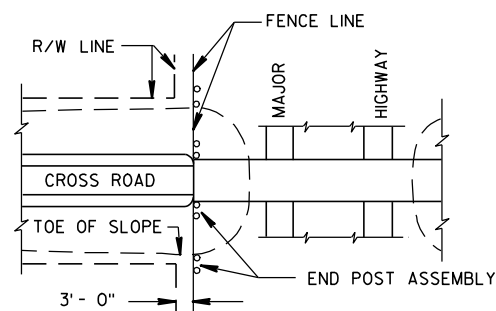


FENCE CONSTRUCTION OVER STREAM  
COURSES OF 15 FT. OR LESS IN WIDTH

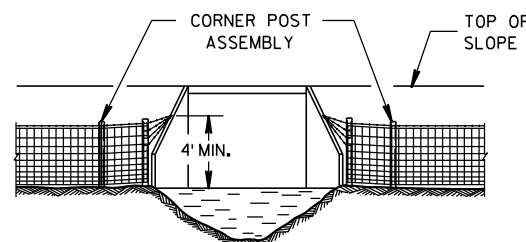


PLAN VIEW  
MAJOR HIGHWAY OVERPASS OR STREAM COURSE  
CROSSING OF GREATER THAN 15 FT. IN WIDTH

FENCE LOCATION AT STRUCTURES

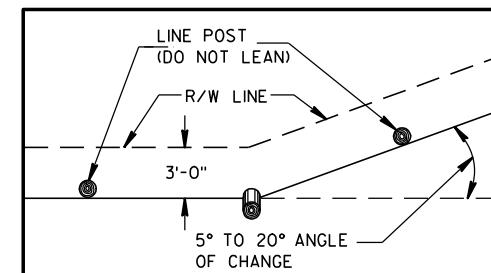
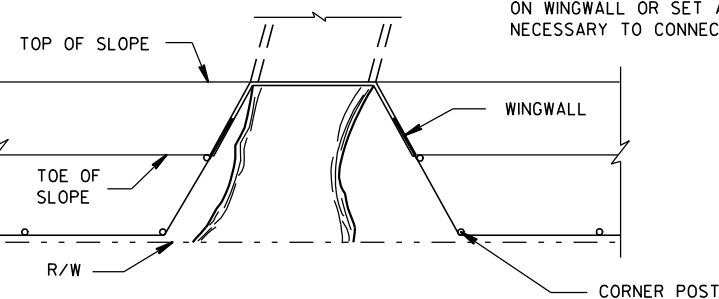


PLAN VIEW  
MAJOR HIGHWAY UNDERPASS

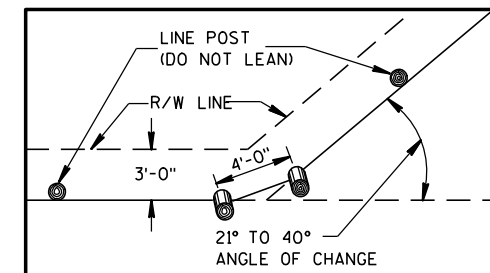


FENCE INSTALLATION TO WINGWALLS

NOTE: PLACE A MINIMUM OF 4 STRANDS OF BARBED WIRE, 6" MAXIMUM CENTERS IN FAN SHAPE CONNECTED TO AN EYE BOLT ON WINGWALL OR SET A LONE POST WHEN NECESSARY TO CONNECT BARBED WIRE.



PLAN VIEW  
SINGLE POST CORNER

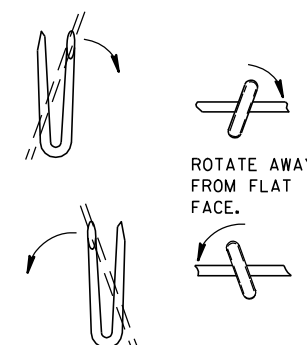


PLAN VIEW  
DOUBLE POST CORNER

## RIGHT OF WAY LINE CHANGE 40° AND LESS

NOTE: SINGLE AND DOUBLE POSTS SHALL BE A MIN. 6" DIA. X 8'-0" WITH A LEAN OF 4" TOWARD THE OUTSIDE OF THE CURVE.

WHEN THE RIGHT OF WAY LINE CHANGE IS MORE THAN 40° USE THE CORNER OR STRETCHER POSTS ASSEMBLY.



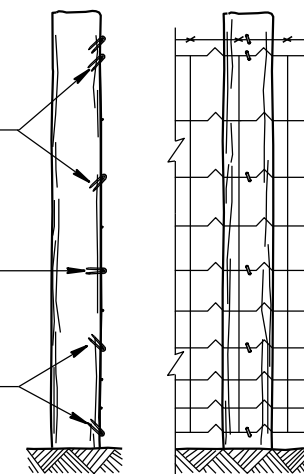
LINE POST

NOTE: WHEN POSTS ARE DRIVEN THE SMALL END SHALL BE DOWN.

STAPLES SLOPED DOWNWARD FOR SUSTAINED GRADES AND OVER KNOLLS.

STAPLES LEVEL FOR LEVEL GROUND.

SLOPE UPWARDS WHEN FENCE TENDS TO LIFT.



END ELEVATION  
FARM SIDE ELEVATION  
FENCE MOUNTING DETAIL

## FENCE WOVEN WIRE

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

4/4/2008

DATE

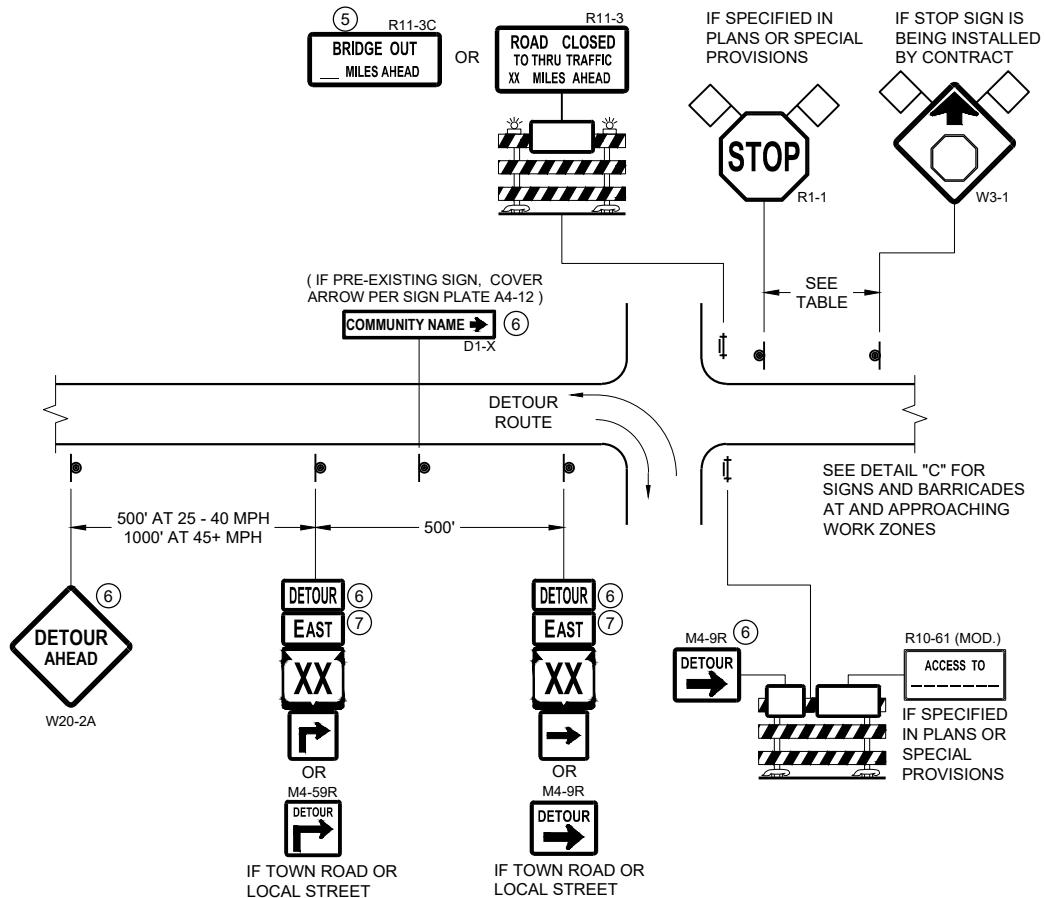
FHWA

/S/ Jerry H. 7----

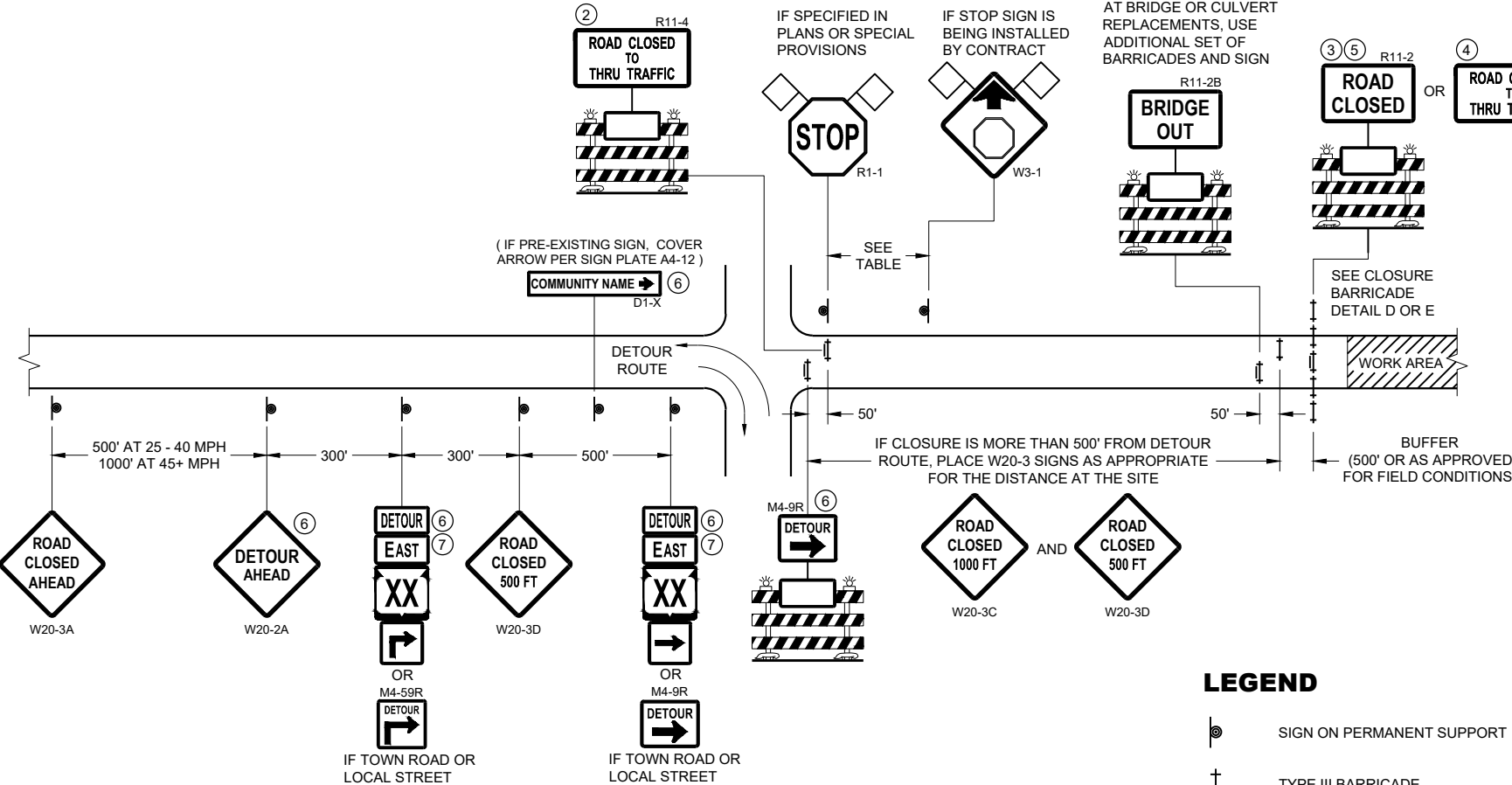
ROADWAY STANDARDS (21

ENGINEER

ENT



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



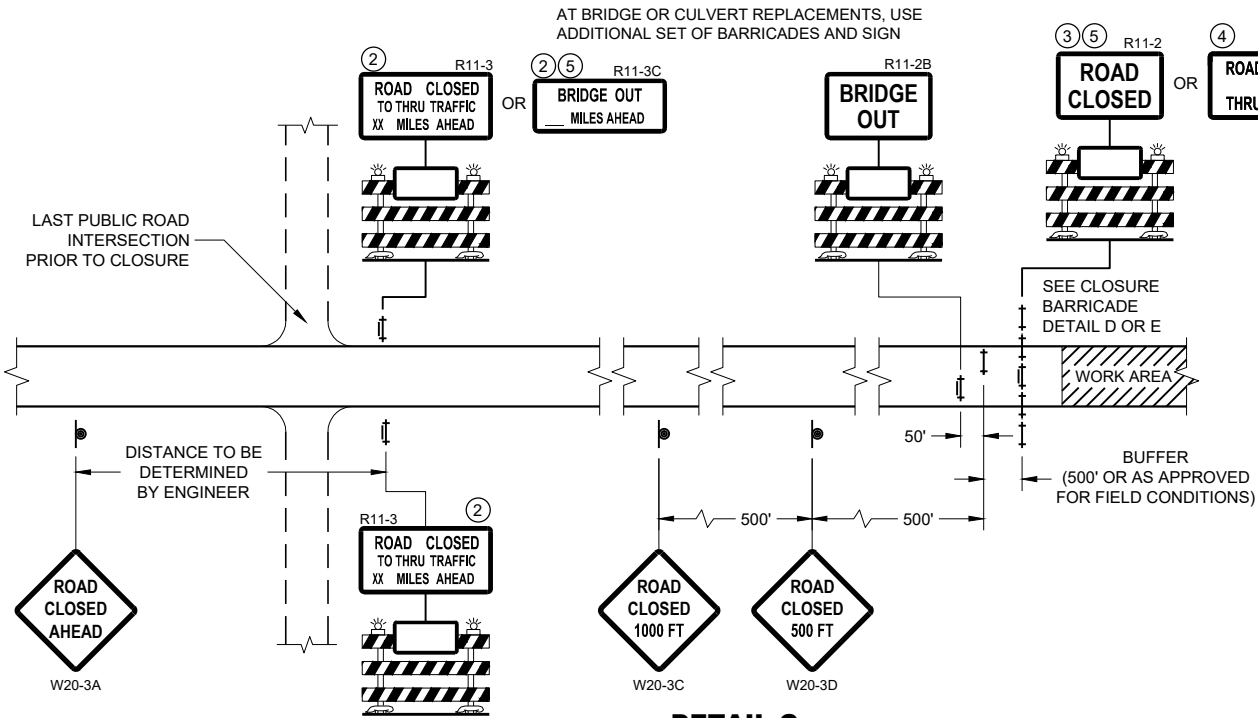
**DETAIL B**  
**MAINLINE CLOSURE WITH POSTED DETOUR**  
WORK ZONE LESS THAN ½ MILE FROM  
DETOUR ROUTE ( 1000 FEET IF URBAN )

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

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

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**

**BARRICADES AND SIGNS  
FOR MAINLINE CLOSURES**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
May 2023 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER 22  
FHWA



SEE SDD 15C2 - SHEET "a" FOR LEGEND

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:

LESS 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.

GENERAL NOTES

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

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




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

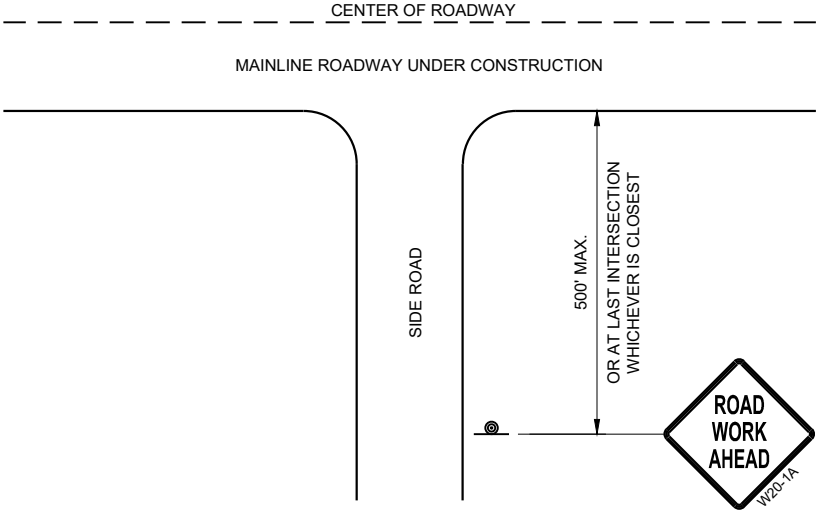
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

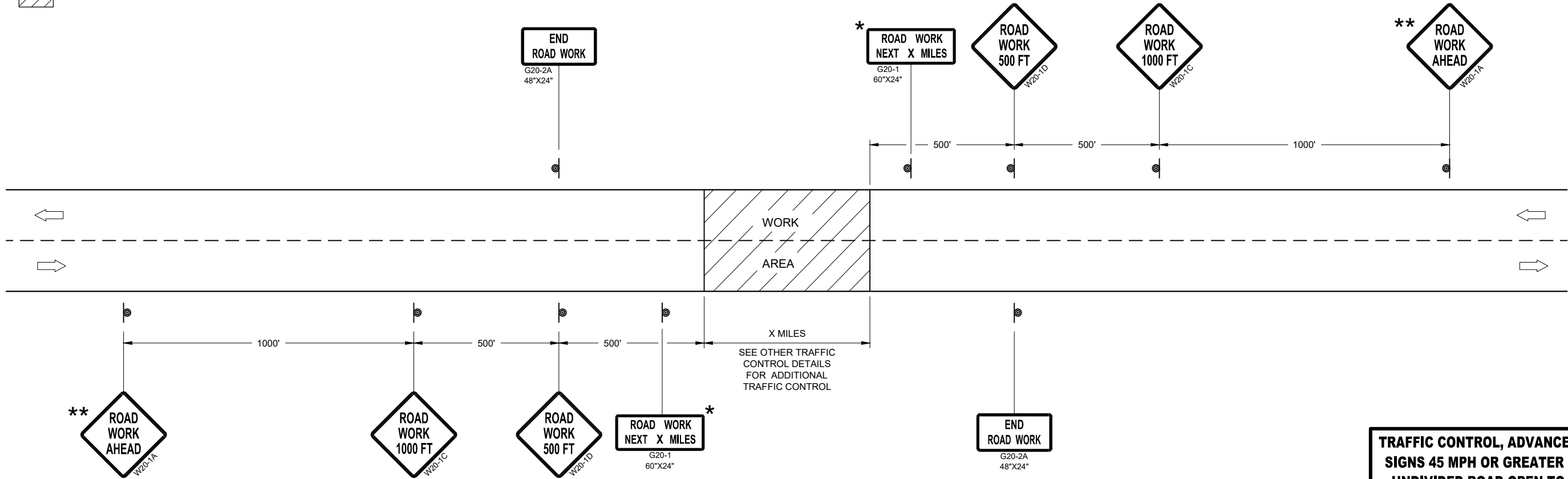
- \* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- \*\* PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA



TYPICAL SIDE ROAD APPROACH  
WARNING SIGN DETAIL



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

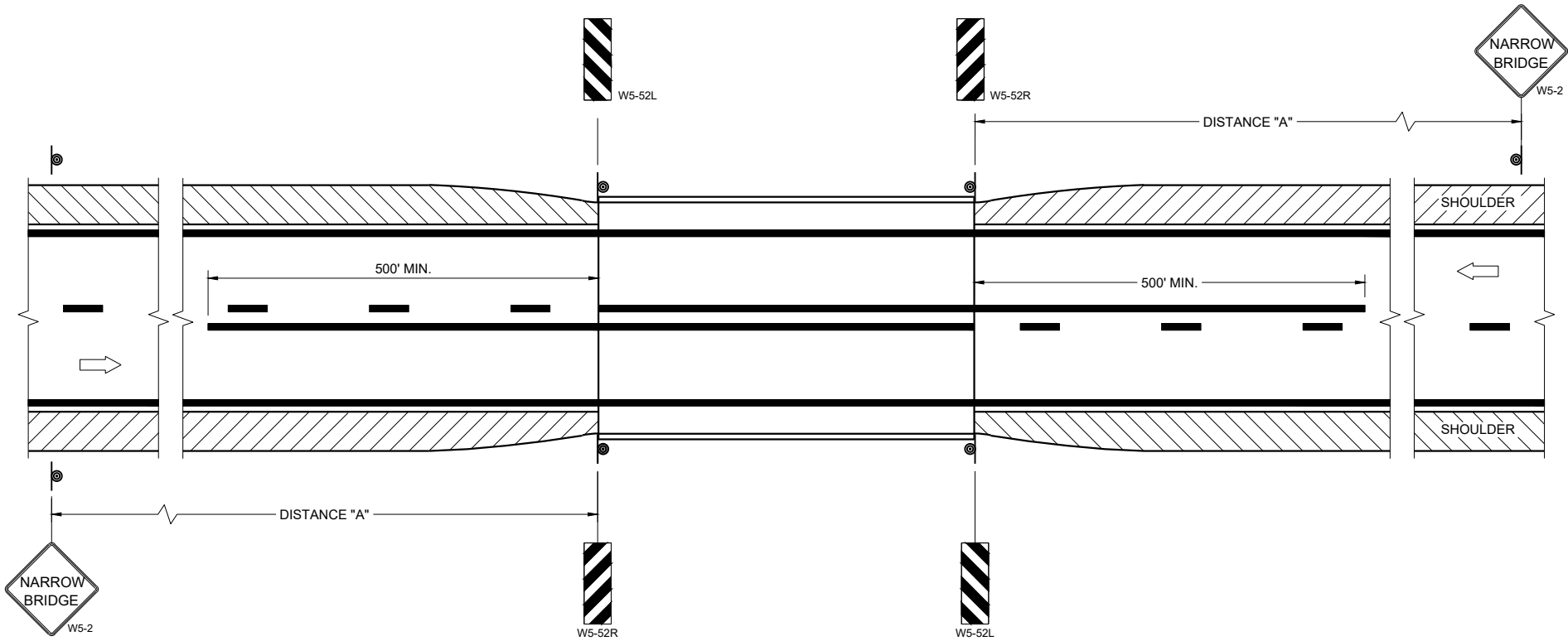
TRAFFIC CONTROL, ADVANCE WARNING  
SIGNS 45 MPH OR GREATER TWO-WAY  
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

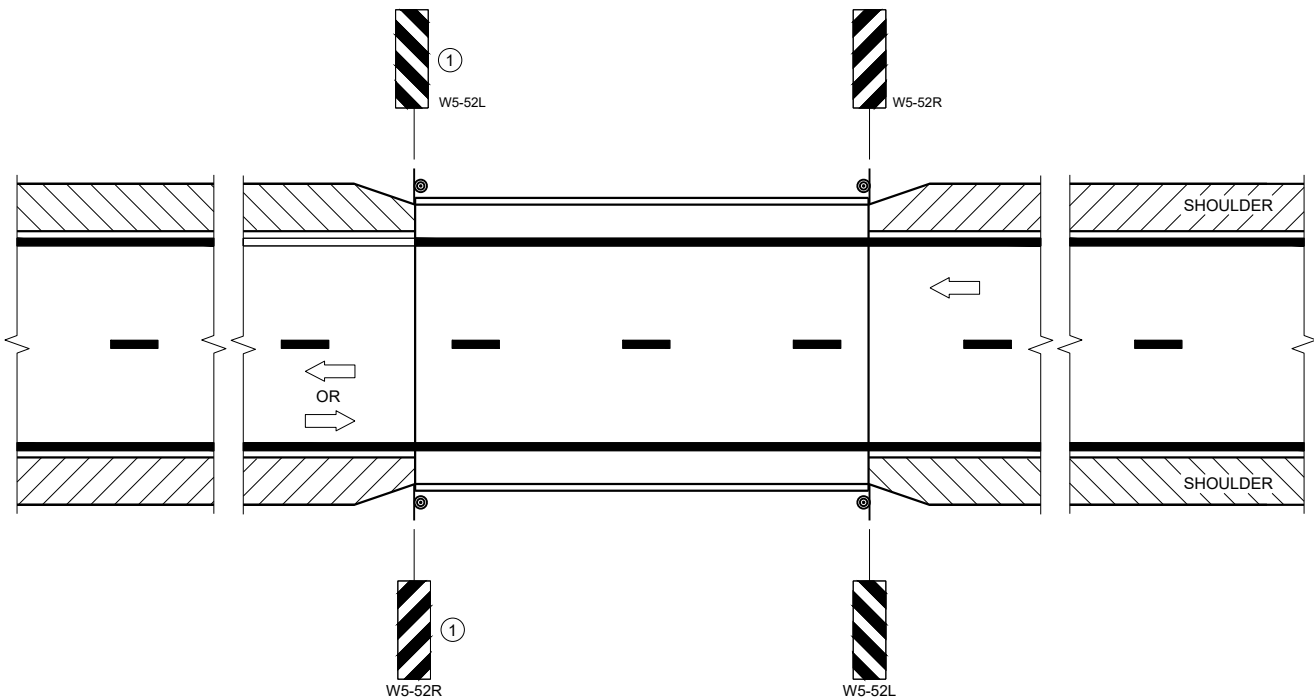
APPROVED  
July 2018 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER 24

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'

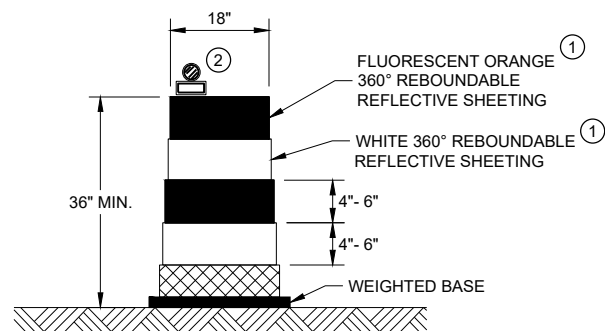
**SIGNING AND MARKING  
FOR TWO LANE BRIDGES**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
May 2023  
DATE

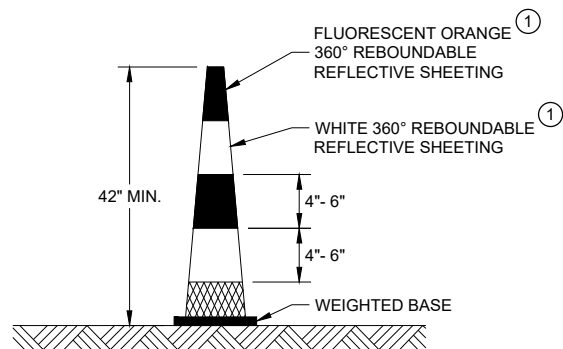
/S/ Jeannie Silver  
Statewide Pavement Marking Engineer

FHWA 25



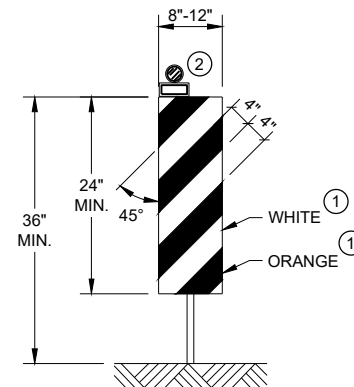
**DRUM**

BALLAST WIDTHS  
RANGE FROM 24"-36"



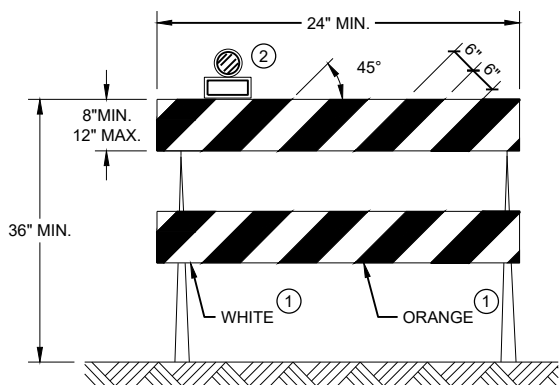
**42" CONE**

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



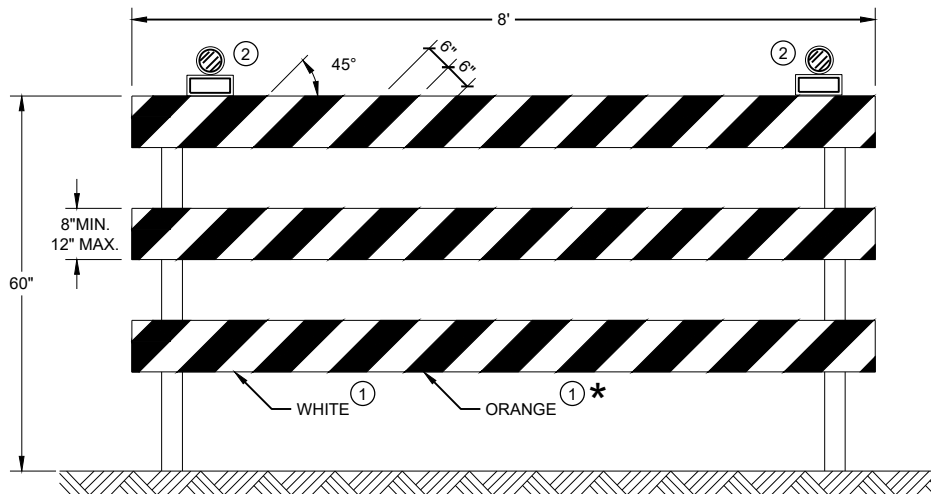
**VERTICAL PANEL**

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.

<b>CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER 26
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

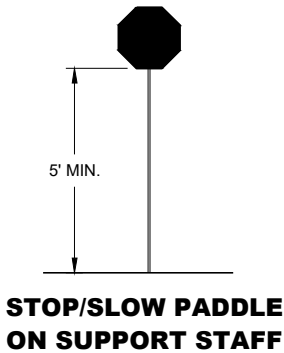
FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

- 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.

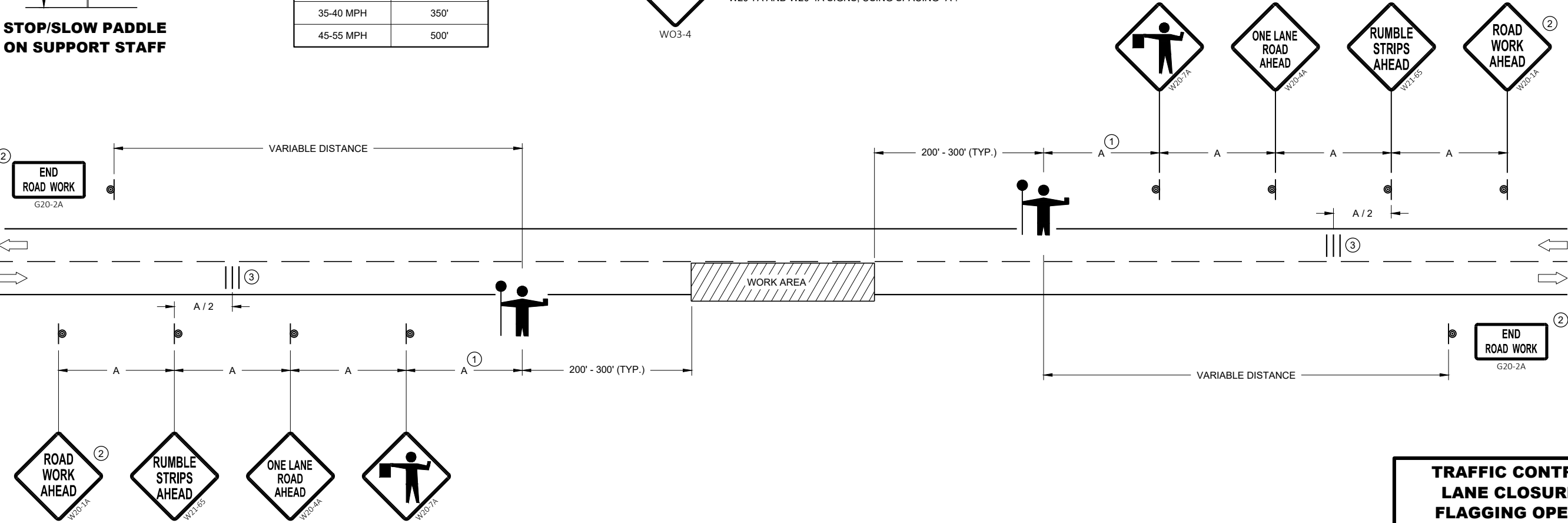


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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".



<b>TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER 27
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.

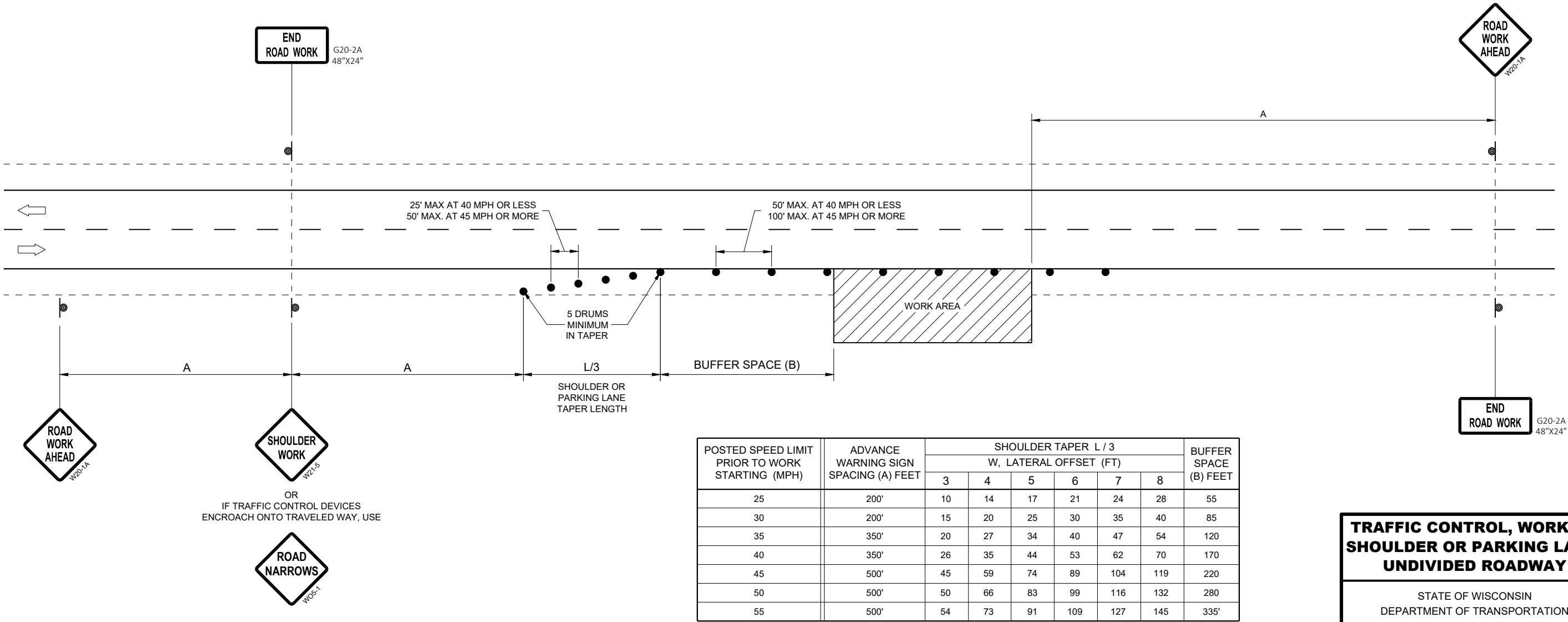
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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.















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 28  
FHWA

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
-  TEMPORARY DELINEATOR (WHITE, SINGLE DELINEATOR)
-  TYPE III BARRICADE
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  TYPE "A" WARNING LIGHT (FLASHING)
-  TEMPORARY RAISED PAVEMENT MARKERS (TWO WAY YELLOW)
-  TEMPORARY STEEL PLATE BEAM GUARD AND END TREATMENT
-  DIRECTION OF TRAFFIC
-  REMOVE PAVEMENT MARKINGS
-  WORK AREA

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" 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.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

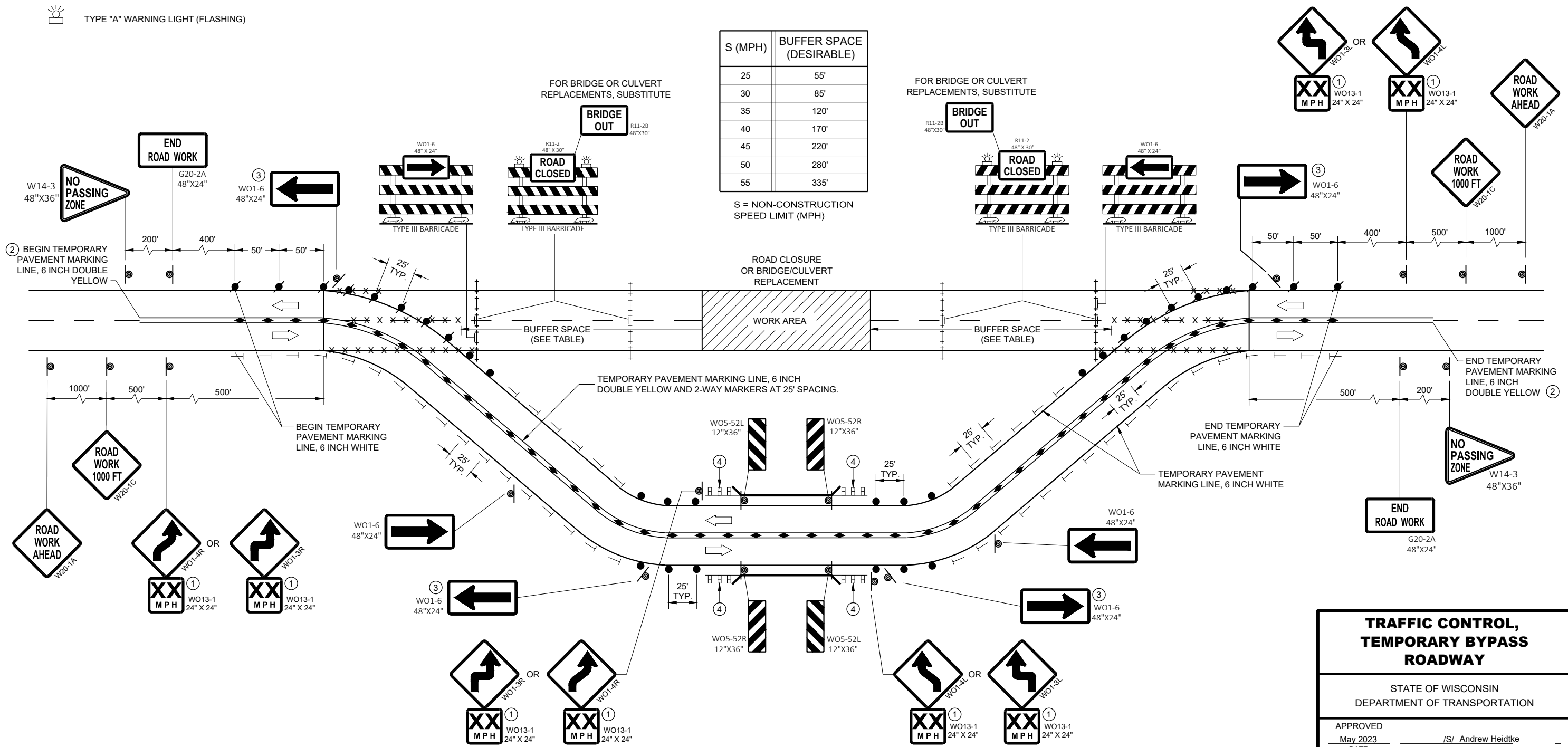
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL ON STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

EQUIPMENT, VEHICLES, OR MATERIAL SHOULD NOT BE STORED IN BUFFER SPACE.

- ① IF ADVISORY SPEED IS GREATER THAN 30 MPH, USE THE WO1-4 SIGN. IF ADVISORY SPEED IS 30 MPH OR LESS, USE THE WO1-3 SIGN.
- ② WHEN THE DISTANCE TO / FROM THE NEXT CLOSEST NO-PASSING ZONE IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES AS INDICATED IN THE SPECIFICATIONS, THE TWO ZONES SHALL BE CONNECTED.
- ③ OMIT THESE WO1-6 SIGNS IF THE ADVISORY SPEED OF THE CURVE IS GREATER THAN 30 MPH.
- ④ TEMPORARY STEEL PLATE BEAM GUARD AND END TREATMENT WHEN INCLUDED IN THE CONTRACT. FOR LAYOUT, SEE DETAILS ELSEWHERE IN THE PLAN.

S (MPH)	BUFFER SPACE (DESIRABLE)
25	55'
30	85'
35	120'
40	170'
45	220'
50	280'
55	335'

S = NON-CONSTRUCTION SPEED LIMIT (MPH)



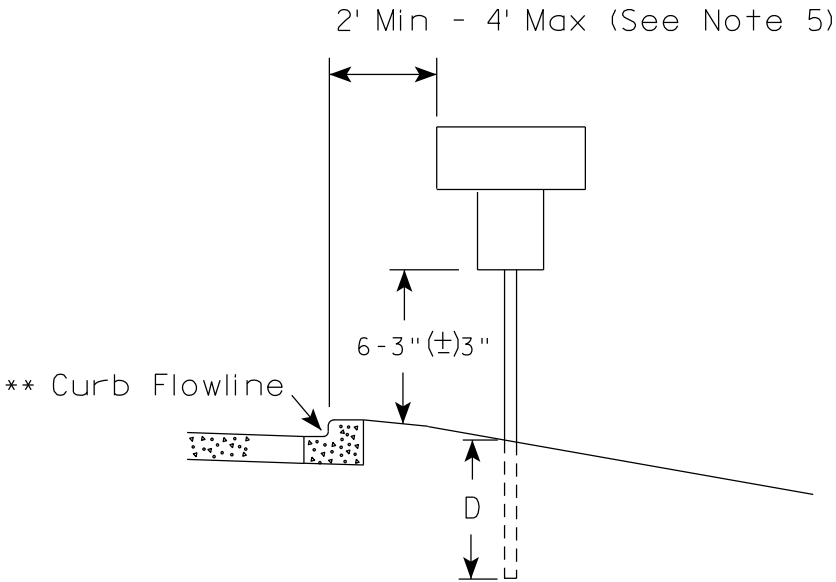
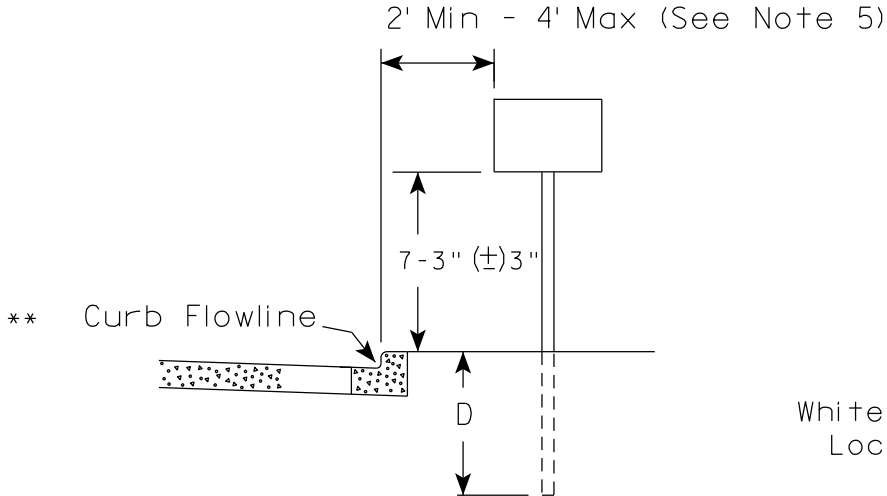
**TRAFFIC CONTROL,  
TEMPORARY BYPASS  
ROADWAY**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

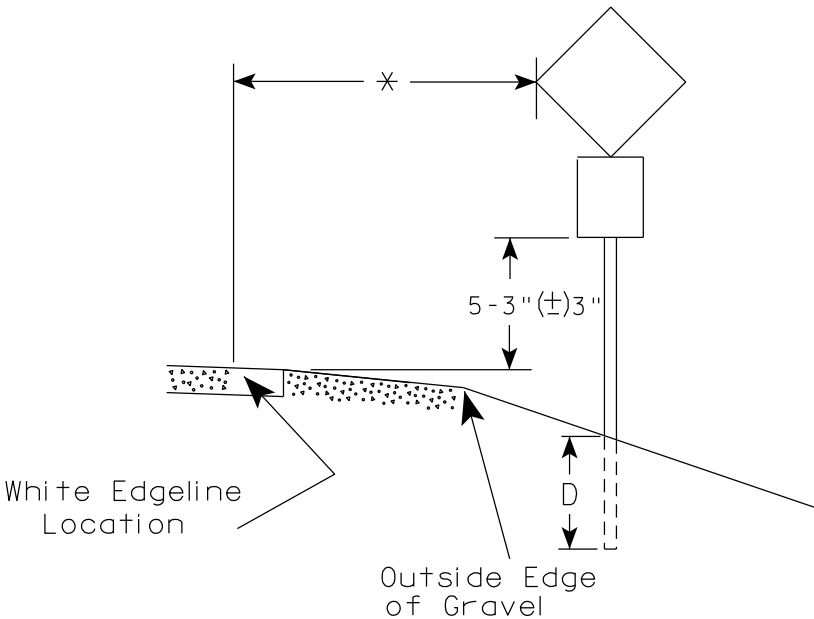
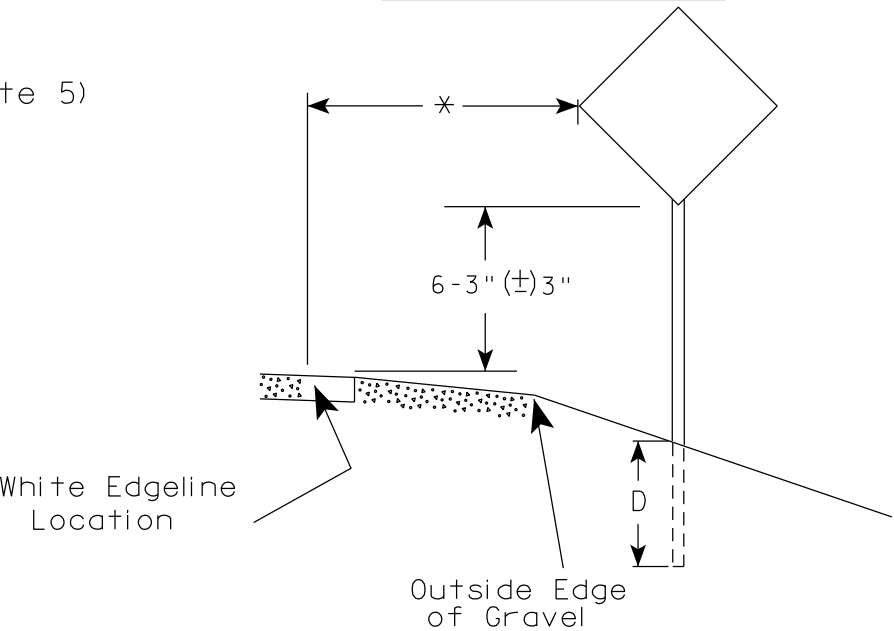
APPROVED  
May 2023 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER 29

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.

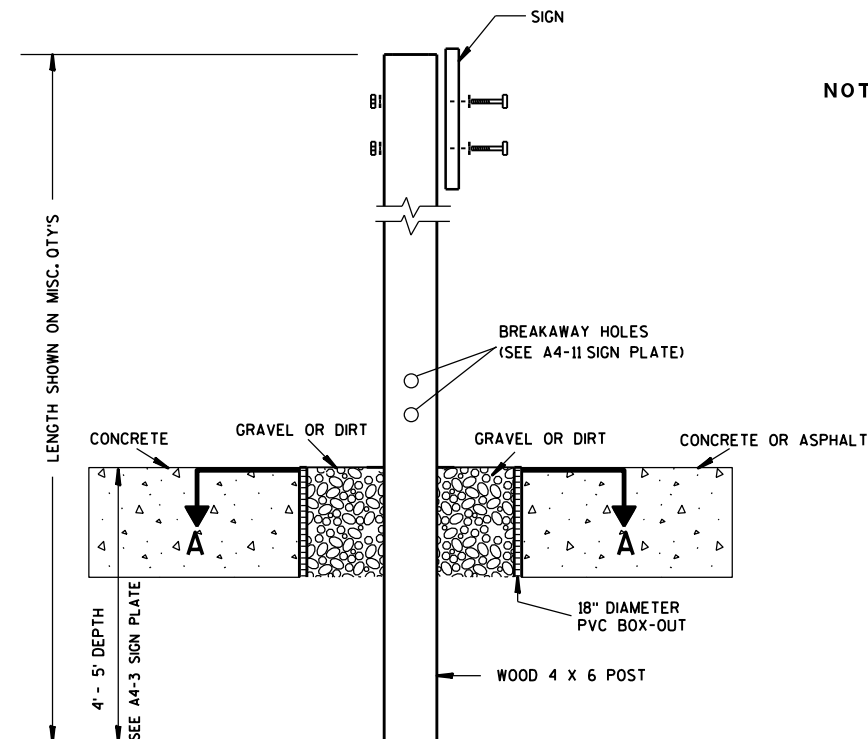
\* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION  
OF PERMANENT TYPE II  
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

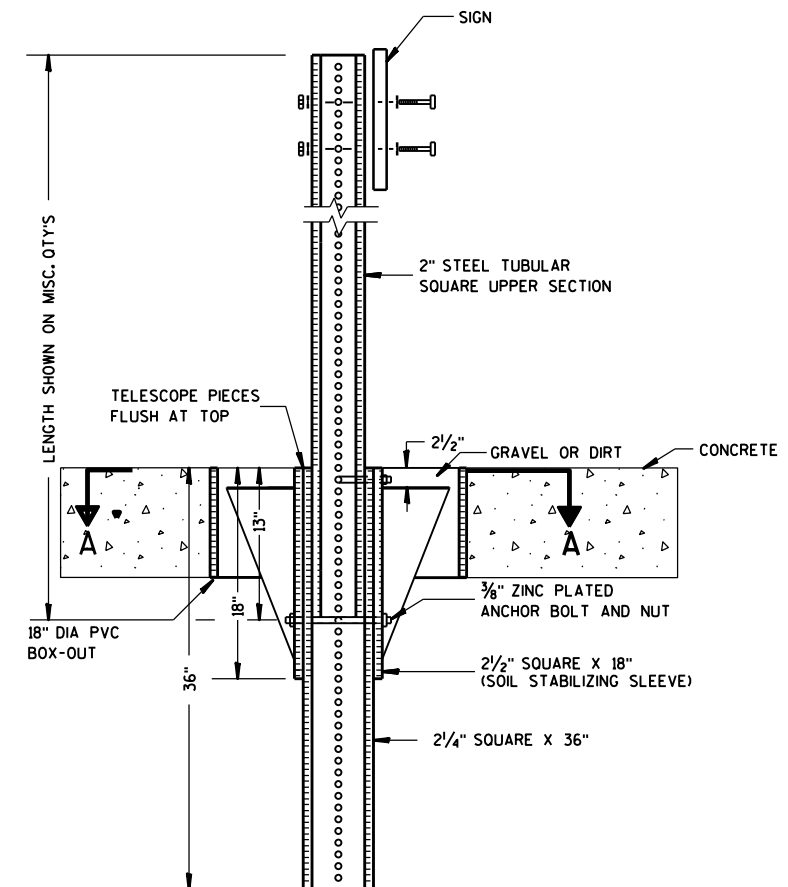
APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

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

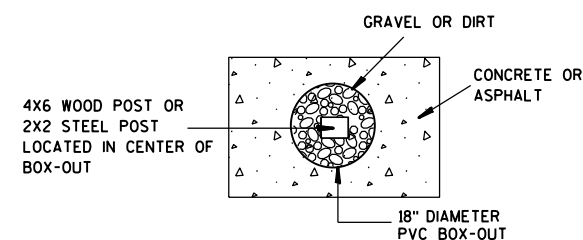


**ELEVATION VIEW**  
**DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT**

- 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 31 A4-3B.1

PROJECT NO:

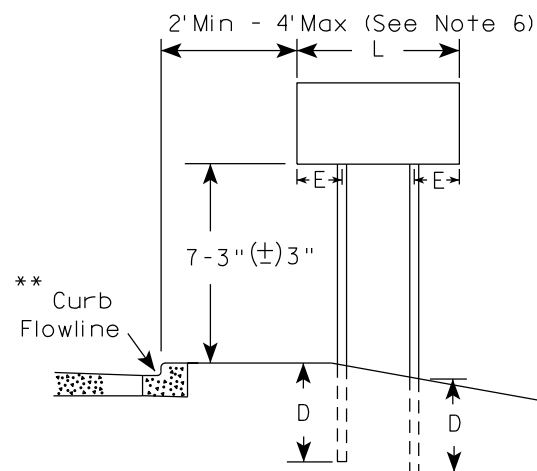
HWY:

COUNTY:

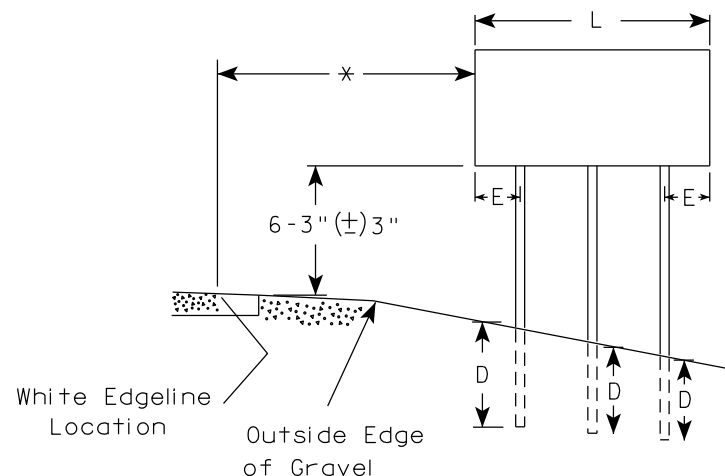
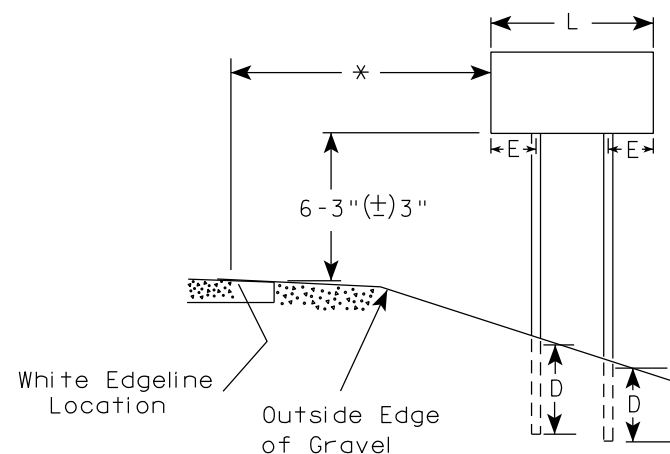
SHEET NO:

E

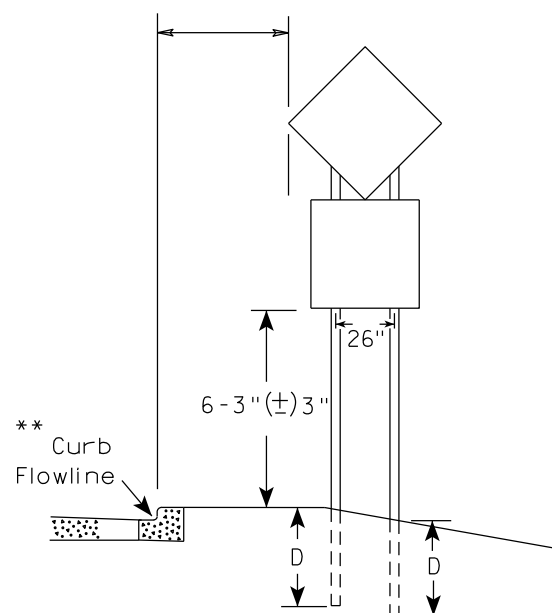
URBAN AREA



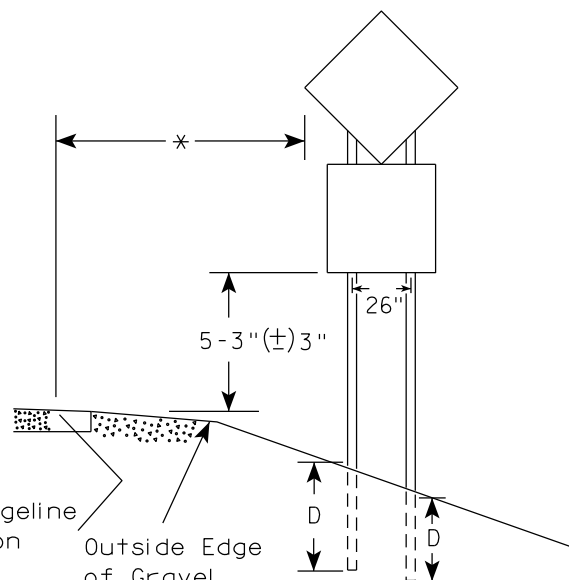
RURAL AREA (See Note 3)



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

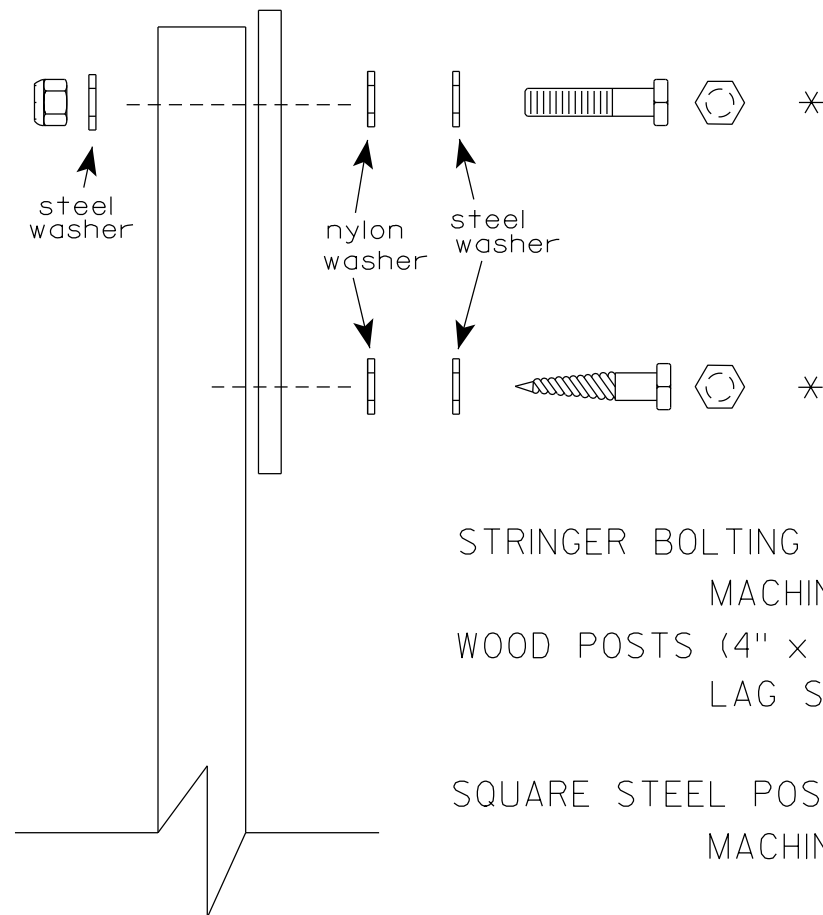
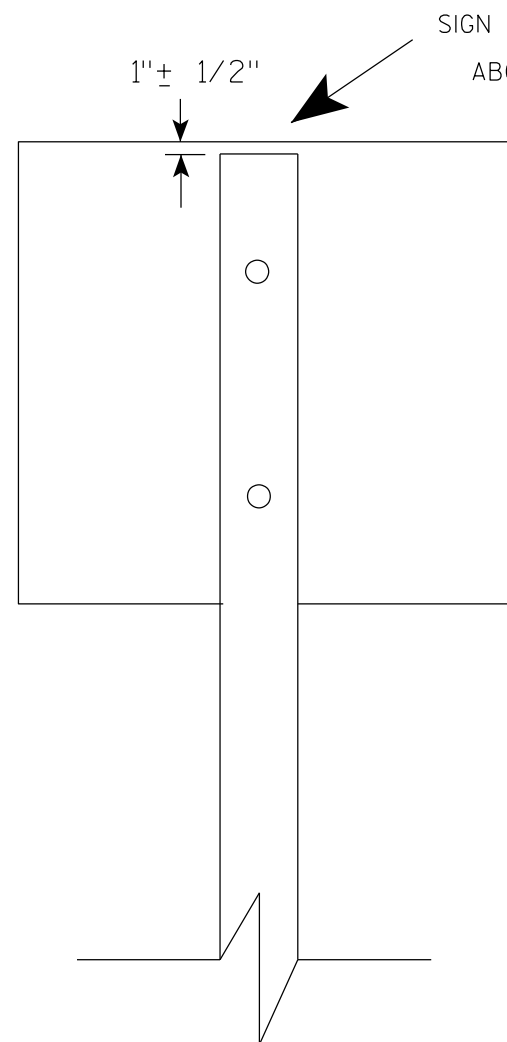
- GENERAL NOTES
- For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
  - See tables below for required number of posts.
  - For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
  - The (±) tolerance for mounting 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" (±) 3" or as directed by the engineer.
  - 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.

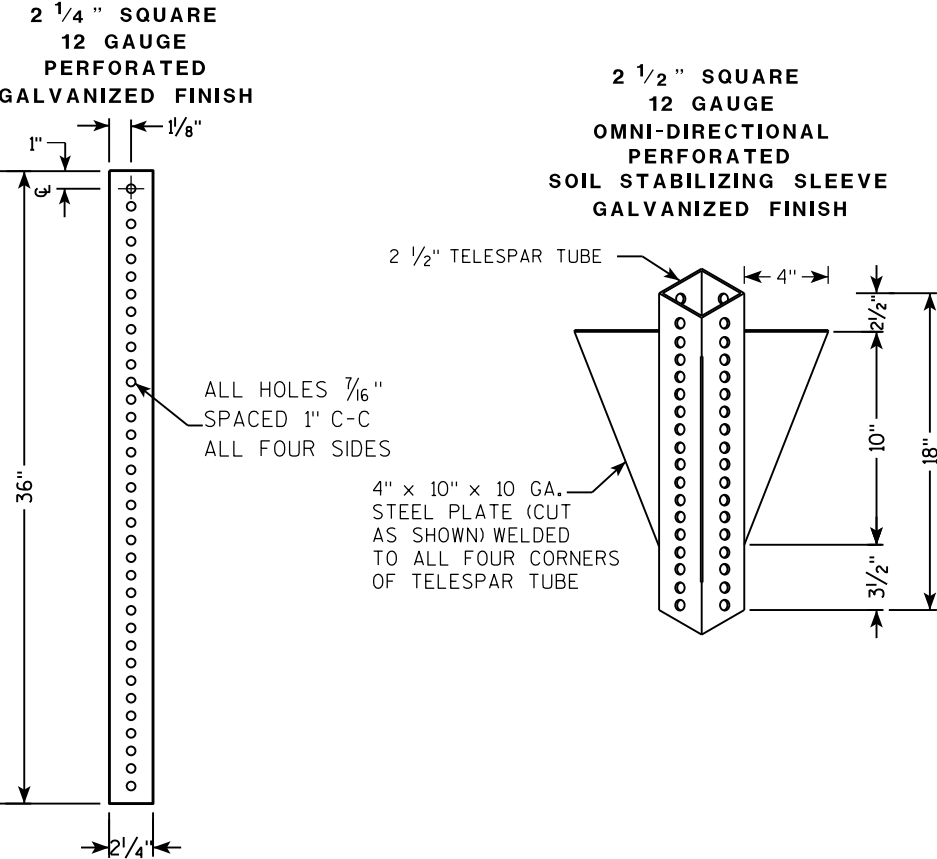
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- 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

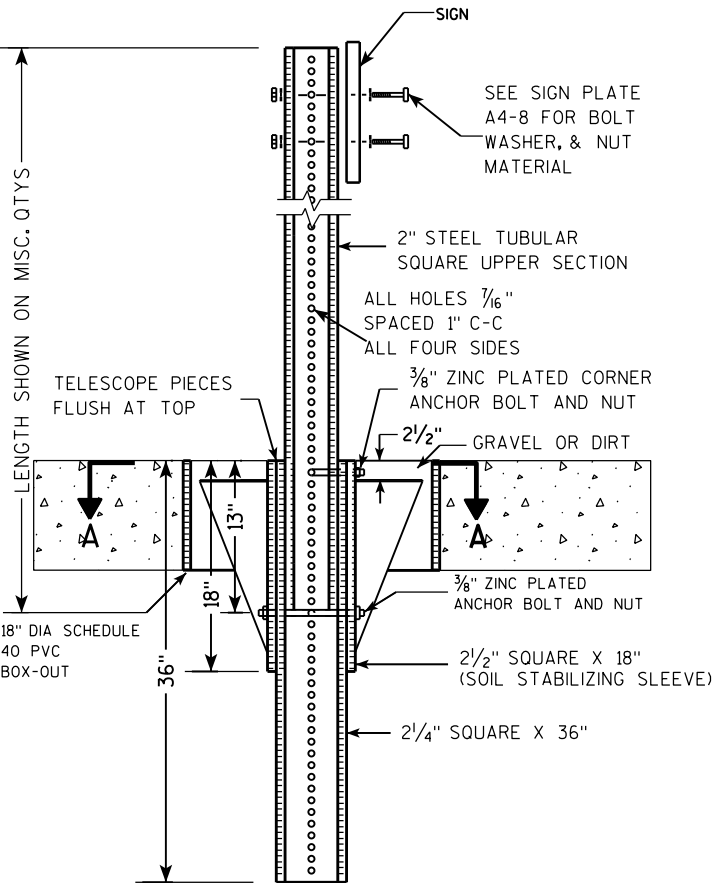
\* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

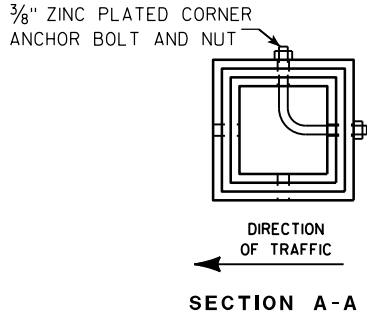
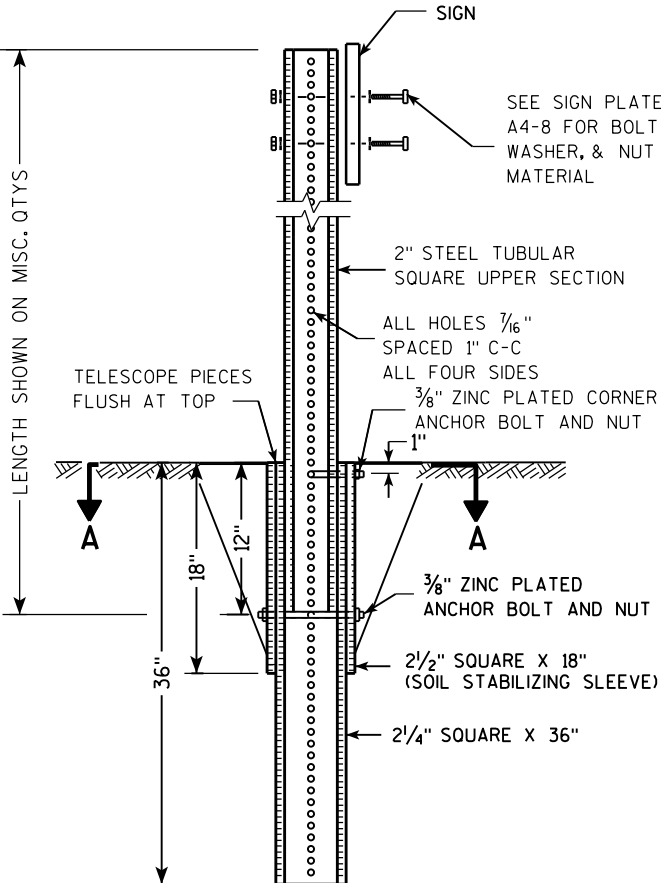
TELESCOPIC TUBING ANCHORS  
TWO PIECE SYSTEM



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



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



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

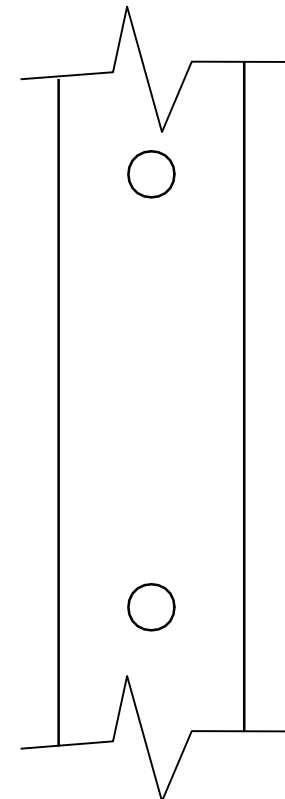
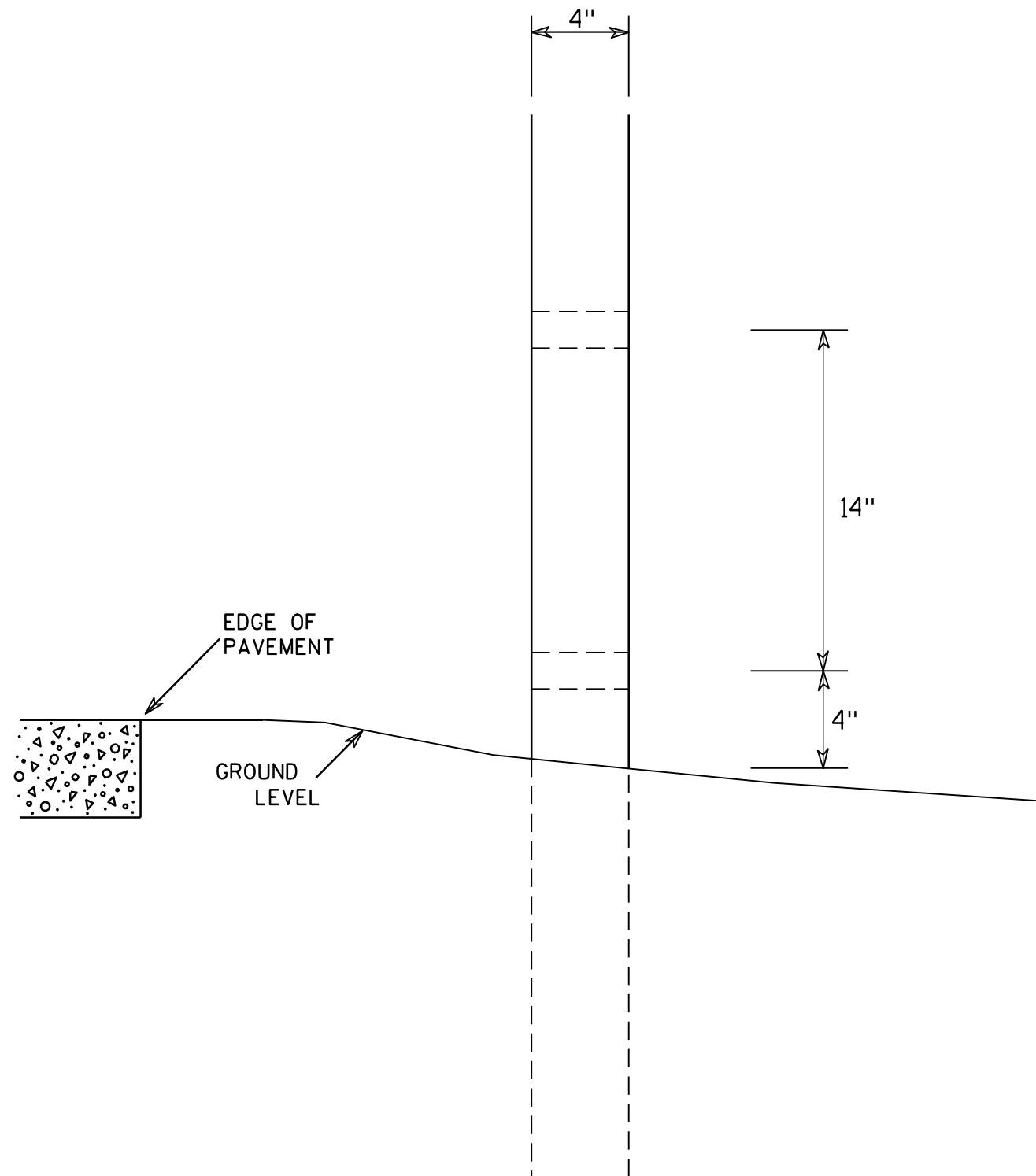
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL  
SIGN POST  
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 2/05/15 PLAT 34 14-9.9



SIDE VIEW

# GENERAL NOTES

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

## 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:

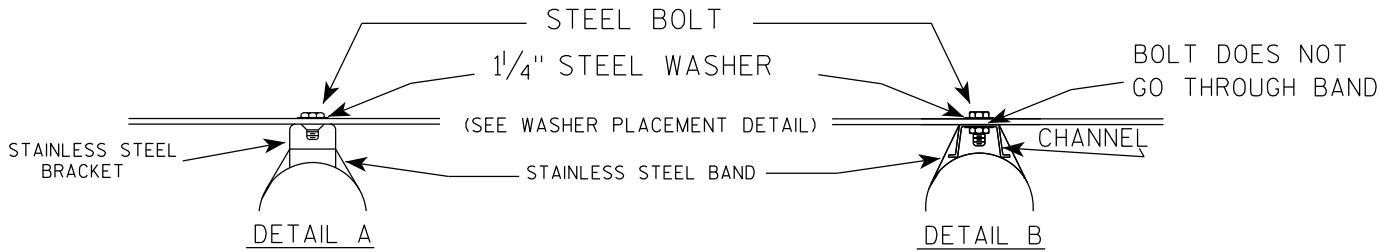
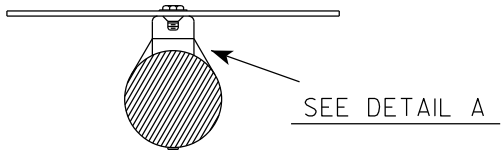
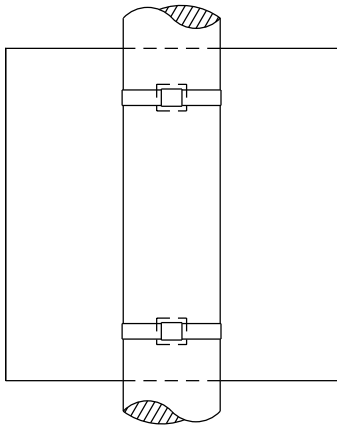
COUNTY:

SHEET NO: 35

E

BANDING

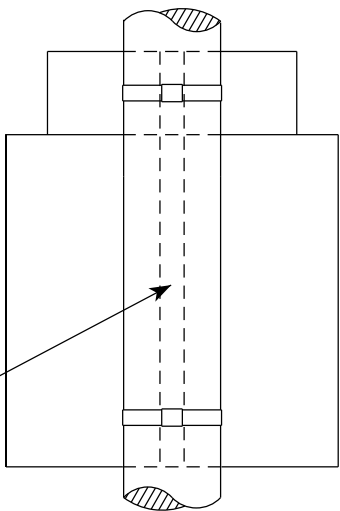
SINGLE SIGN



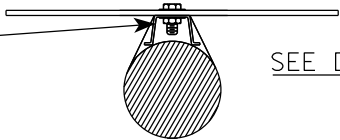
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be  $\frac{3}{4}$ " 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

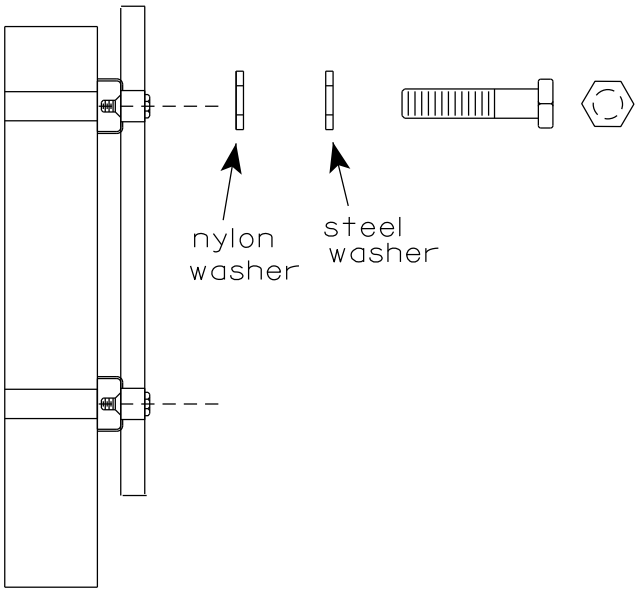
"J" ASSEMBLY



CHANNEL  
SEE TYPICAL PANEL  
INSTALLATION SHEET



WASHER PLACEMENT



WASHERS (ALL POSTS) -  
1-1/4" O.D. X  $\frac{3}{8}$ " I.D. X  $\frac{1}{16}$ " STEEL  
1-1/4" O.D. X  $\frac{3}{8}$ " 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

7

PROJECT NO:

SHEET NO: 37

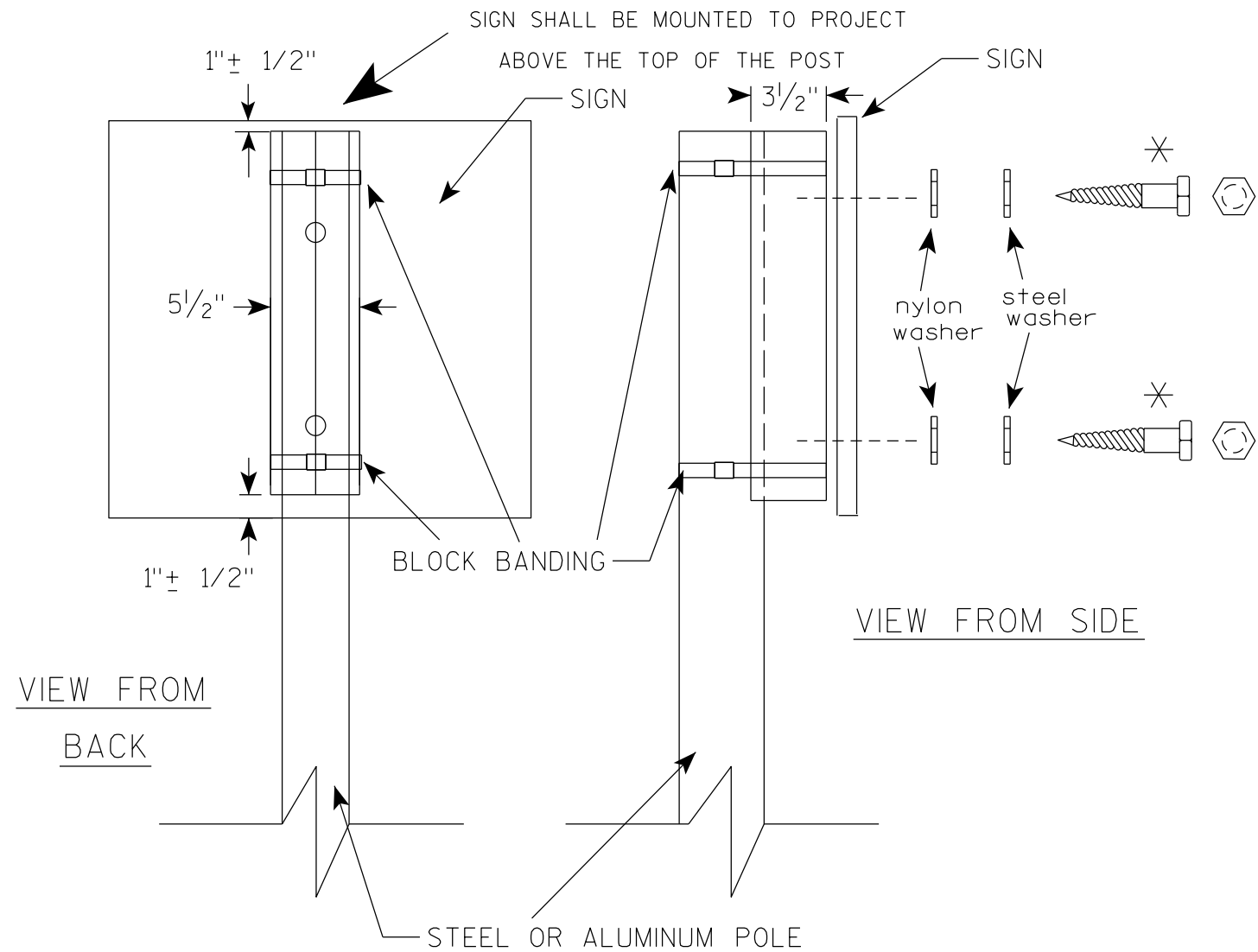
E

FILE NAME : C:\CAEfiles\Projects\tr\_stdplate\A510.dgn

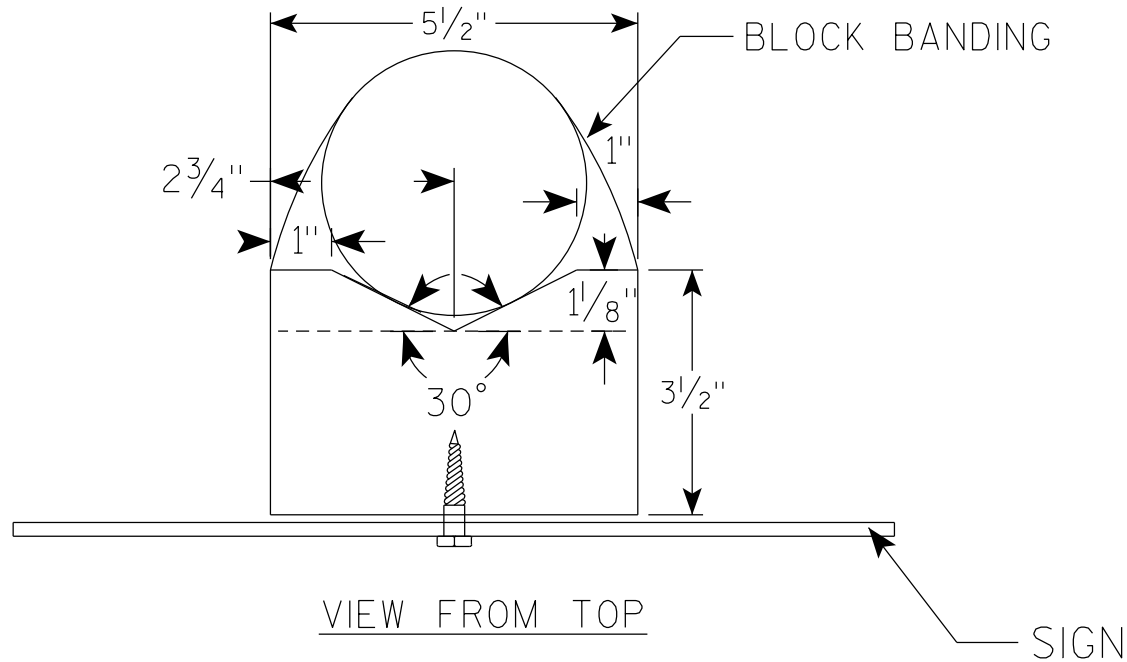
PLOT DATE : 19-APRIL 2022 11:55

PLOT BY : dotc4c

WISDOT/CADDs SHEET 42



VIEW FROM SIDE



VIEW FROM TOP

## 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,  $\frac{3}{4}$ " 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  $\frac{1}{4}$ " O.D. X  $\frac{3}{8}$ " I.D. X  $\frac{1}{16}$ "
8. NYLON WASHERS SHALL BE  $\frac{1}{4}$ " O.D. X  $\frac{3}{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

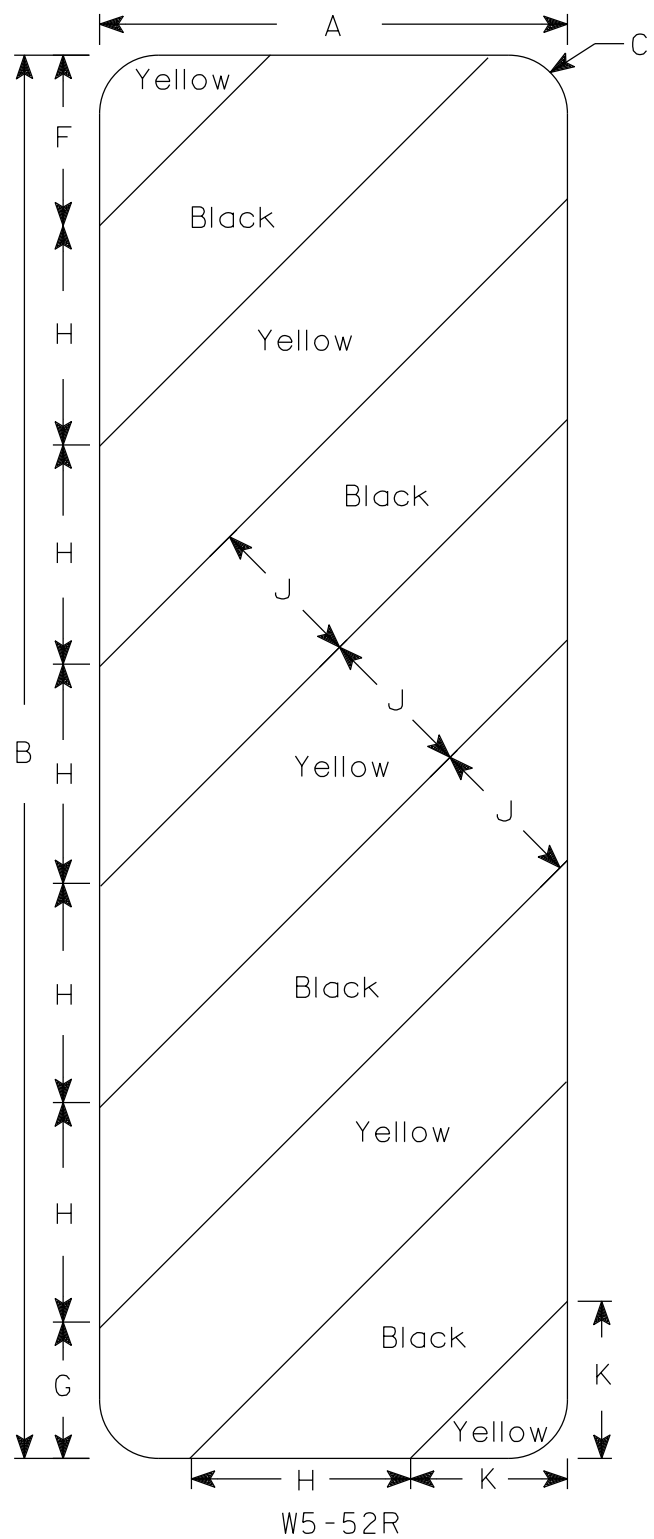
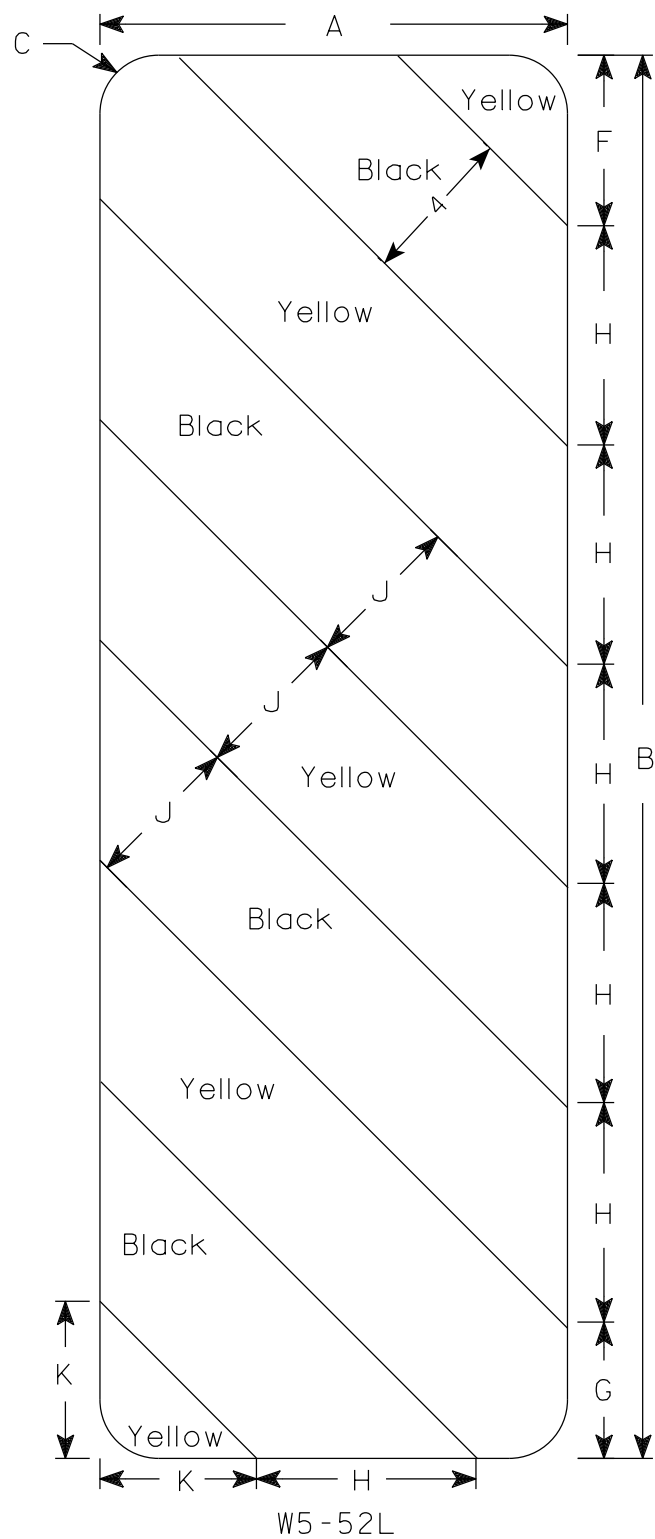
✱ LAG BOLTS SHALL BE  $\frac{3}{8}$ " X  $2\frac{1}{2}$ "

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



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

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93  
INVENTORY RATING FACTOR: RF = 1.11  
OPERATING RATING FACTOR: RF = 1.44  
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY:  
SUPERSTRUCTURE \_\_\_\_\_ f'c = 4,000 P.S.I.  
ALL OTHER \_\_\_\_\_ f'c = 3,500 P.S.I.  
BAR STEEL REINFORCEMENT:  
GRADE 60 \_\_\_\_\_ fy = 60,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON CIP 10% X 0.25 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 130 TONS ++ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 35 FEET LONG.

++ 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.

TRAFFIC VOLUME

FEATURE ON 205TH AVE.  
ADT = 74 (2046)  
R.D.S. = 60 M.P.H.

HYDRAULIC DATA

100 YEAR FREQUENCY

Q<sub>100</sub> = 830 C.F.S.  
VEL. = 7.4 F.P.S.  
HW<sub>100</sub> = EL. 1019.27  
WATERWAY AREA = 112 SQ. FT.  
DRAINAGE AREA = 17.2 SQ. MI.  
ROADWAY OVERTOPPING = NA  
SCOUR CRITICAL CODE = 5

2 YEAR FREQUENCY

Q<sub>2</sub> = 300 C.F.S.  
VEL. = 3.7 F.P.S.  
HW<sub>2</sub> = EL. 1017.25

TEMPORARY STRUCTURE

Q<sub>s</sub> = 450 C.F.S.  
HW<sub>s</sub> = EL. 1018.15  
WATER AREA = 95 SQ. FT.

LIST OF DRAWINGS

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'

STRUCTURE DESIGN CONTACTS:

TIM BOROWSKI 608-298-5410  
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.



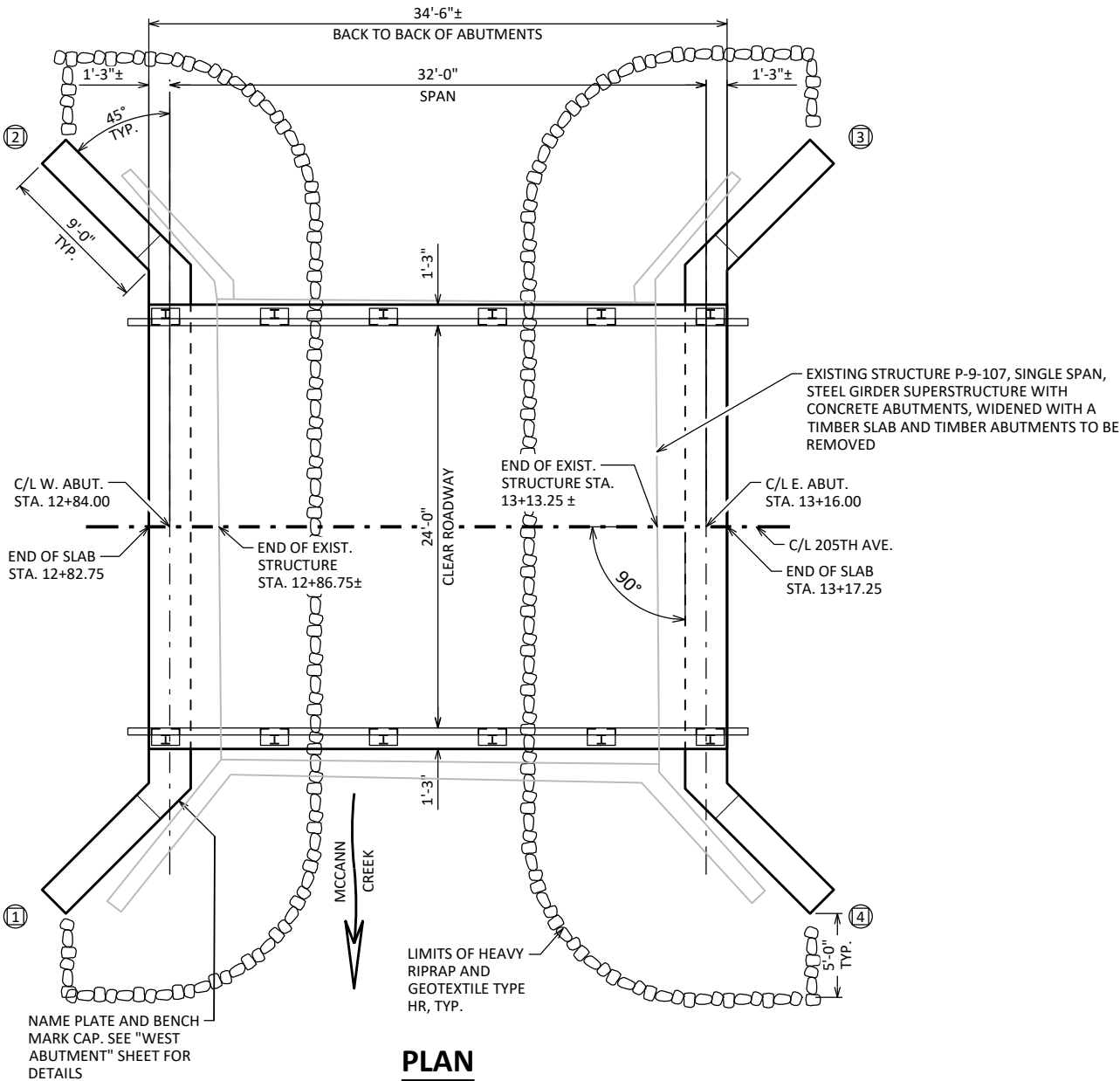
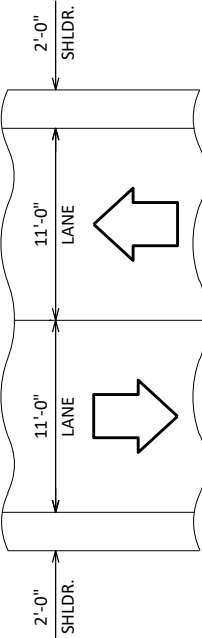
5/1/25

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED		08/14/25	DATE
CHIEF STRUCTURES DESIGN ENGINEER			
STRUCTURE B-9-319			
205TH AVE. OVER MCCANN CREEK			
COUNTY	CHIPPEWA	TOWN	BLOOMER
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATION			
DESIGNED BY	DESIGNED CK'D	DRAWN SMN	PLANS VCH CK'D TAB
GENERAL PLAN			SHEET 1 OF 10 39

I.D.

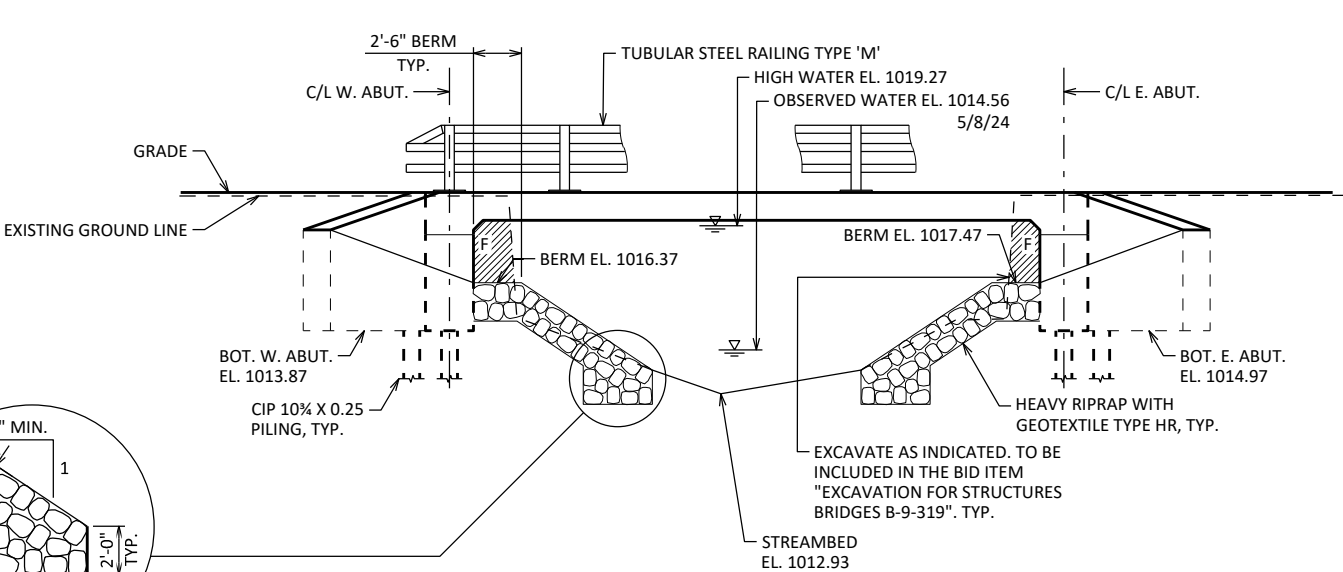
DATE:

INDICATES WING NUMBER



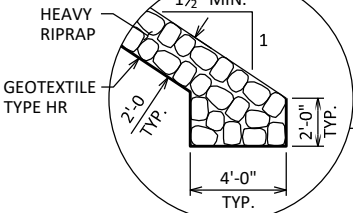
PLAN

SINGLE SPAN FLAT SLAB



ELEVATION

NORMAL TO WATERWAY



## 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  $\frac{3}{4}$ " UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES B-9-319" 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.

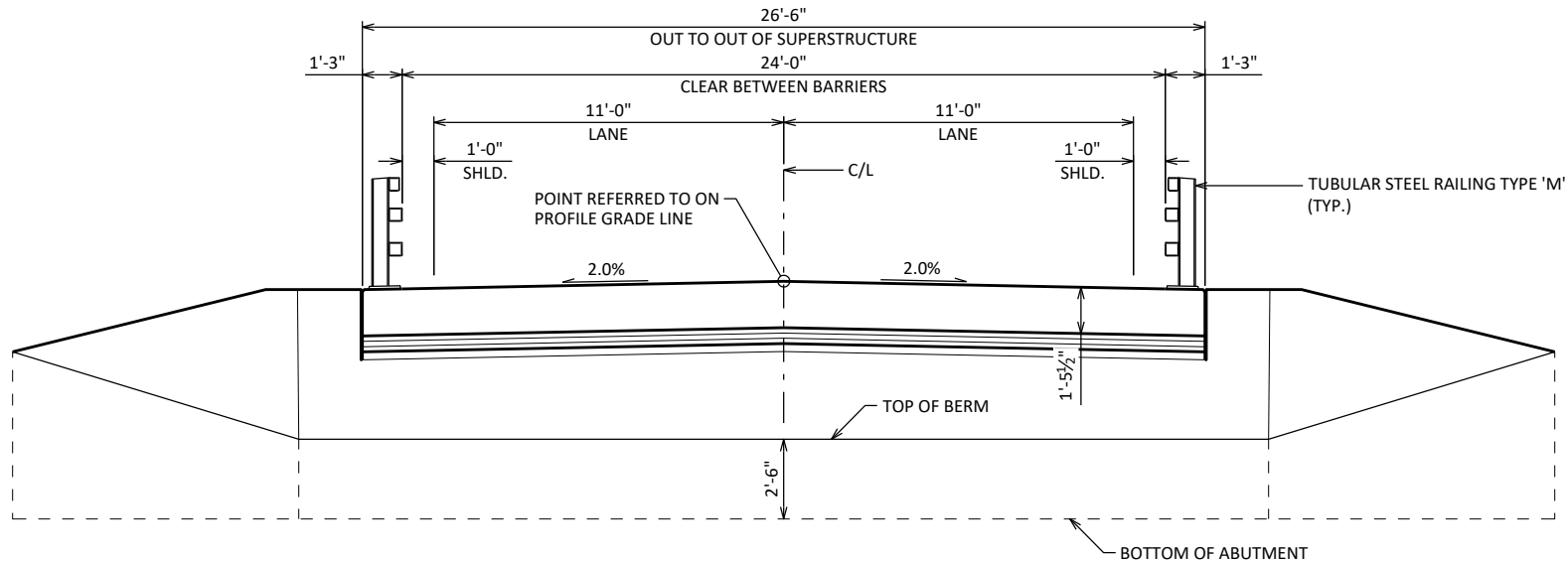
THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

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.

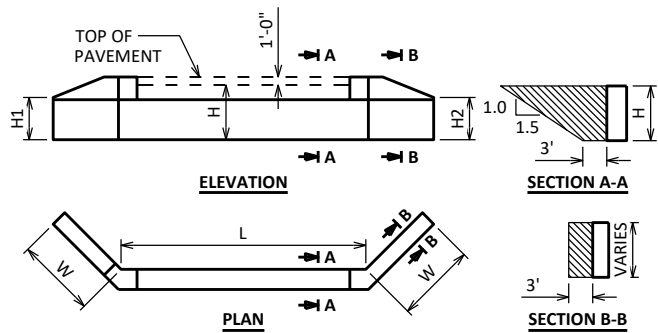
AT ABUTMENTS, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.

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.



## CROSS SECTION THRU ROADWAY

LOOKING UPSTATION  
(PILING NOT SHOWN FOR CLARITY)

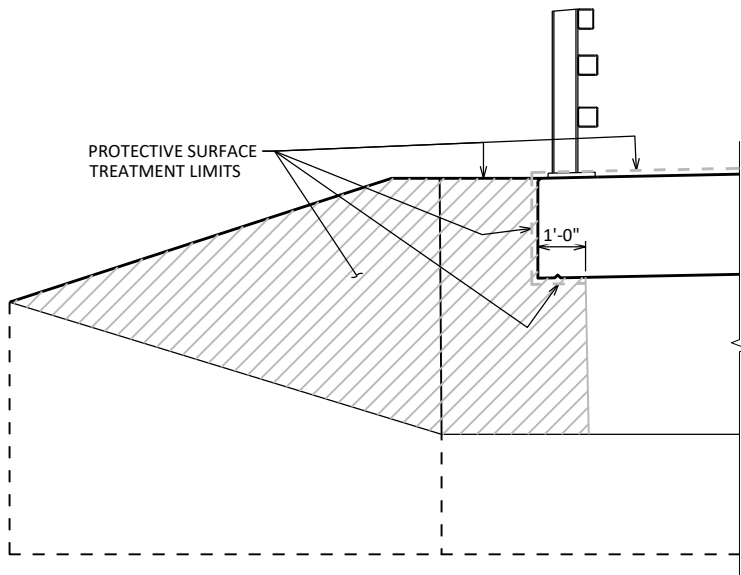
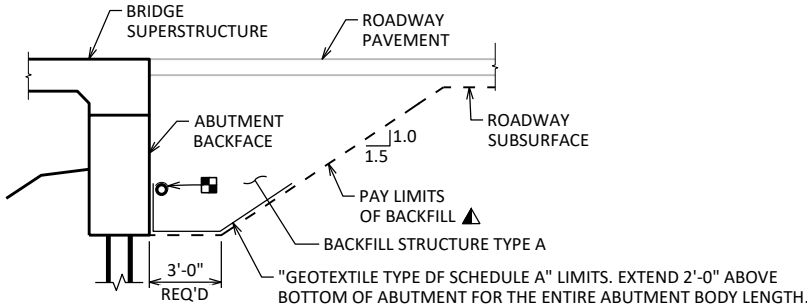
## ABUTMENT BACKFILL DIAGRAM

- 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	WEST ABUT.	EAST ABUT.	TOTALS
203.0260	REMOVING STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS P-9-107	EACH	---	---	---	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-9-319	EACH	---	---	---	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	---	135	135	270
502.0100	CONCRETE MASONRY BRIDGES	CY	53	25	25	103
502.3200	PROTECTIVE SURFACE TREATMENT	SY	118	14	14	146
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	---	1,980	1,980	3,960
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	11,580	1,480	1,480	14,540
506.0105	STRUCTURAL STEEL CARBON	LB	540	---	---	540
513.4061	RAILING TUBULAR TYPE M	LF	74	---	---	74
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	---	5	5	10
526.0101	TEMPORARY STRUCTURE 101+60	EACH	---	---	---	1
550.2104	PILING CIP CONCRETE 10 3/4 X 0.25-INCH	LF	---	245	245	490
606.0300	RIPRAP HEAVY	CY	---	57	66	123
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	---	69	69	138
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	---	42	42	84
645.0120	GEOTEXTILE TYPE HR	SY	---	85	100	185
SPV.0090	FLASHING STAINLESS STEEL	LF	59	---	---	59
NON-BID ITEMS						
	FILLER	SIZE	---	---	---	1/2", 3/4"

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

PROTECTIVE SURFACE  
TREATMENT DETAILS

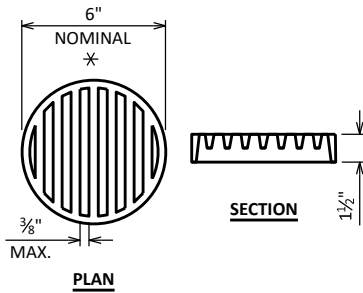
## TYPICAL SECTION THRU ABUTMENT

▲ 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. PLACE DISCHARGE AT EL. 1015.6+/-

## BENCH MARK

NO.	STATION	DESCRIPTION	ELEV.
BM1	12+88, 14.6'LT	CHISELED X IN CONCRETE	1020.38
CP2	13+44, 16.6'LT	1/2" IRON PIPE	1022.91



## 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".

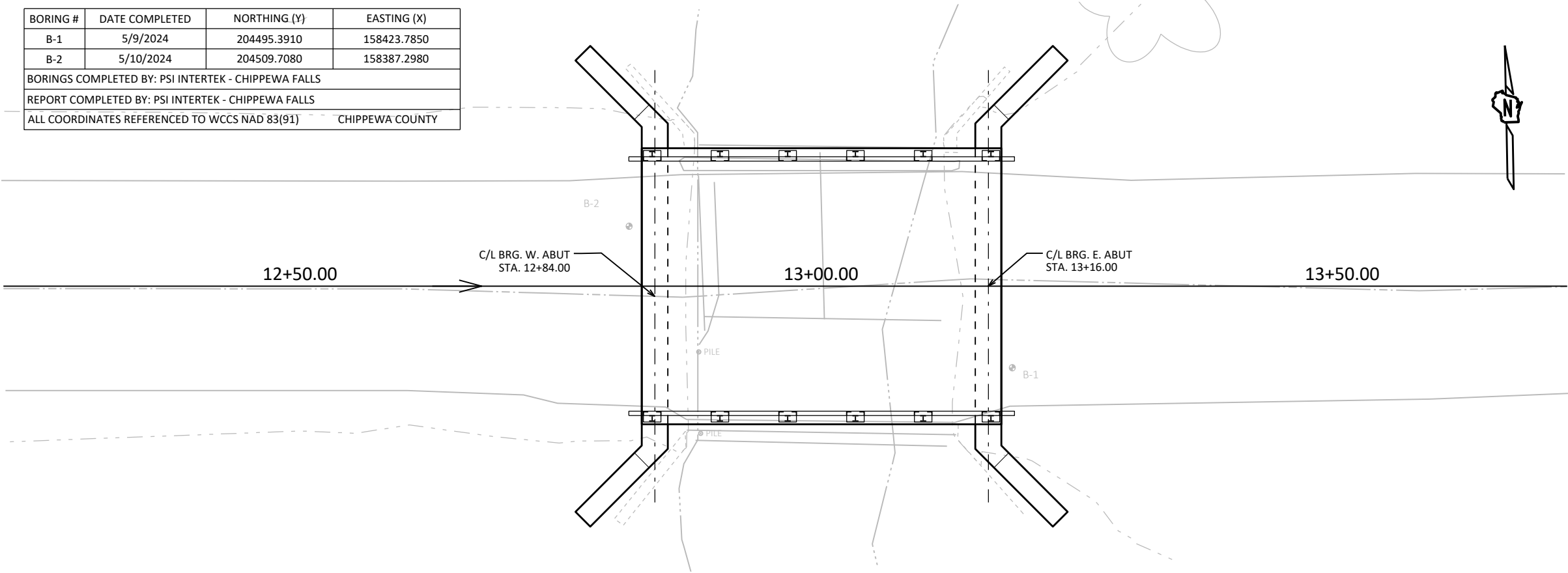
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH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
















NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-9-319			
DRAWN BY		VCH	PLANS CK'D TAB
CROSS SECTION & QUANTITIES		SHEET 2 40	

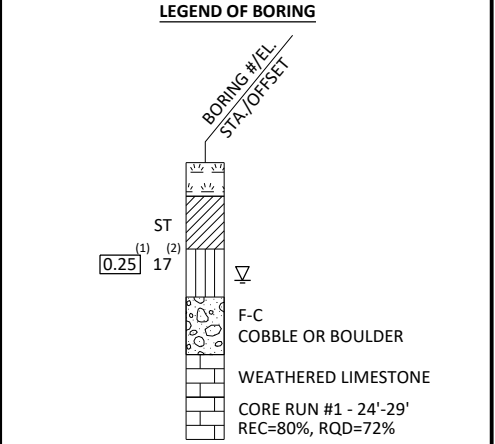
SCALE = 6:0



BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-1	5/9/2024	204495.3910	158423.7850
B-2	5/10/2024	204509.7080	158387.2980
BORINGS COMPLETED BY: PSI INTERTEK - CHIPPEWA FALLS			
REPORT COMPLETED BY: PSI INTERTEK - CHIPPEWA FALLS			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91)      CHIPPEWA COUNTY			



STATE PROJECT NUMBER					
8907-00-73					
MATERIAL SYMBOLS					
	ASPHALT		TOPSOIL		PEAT
	CONCRETE		FILL		GRAVEL
	SAND		CLAY		SILT
	BOULDERS OR COBBLES		LIMESTONE		BEDROCK (UNKNOWN)
	SHALE		SANDSTONE		IGNEOUS/ META



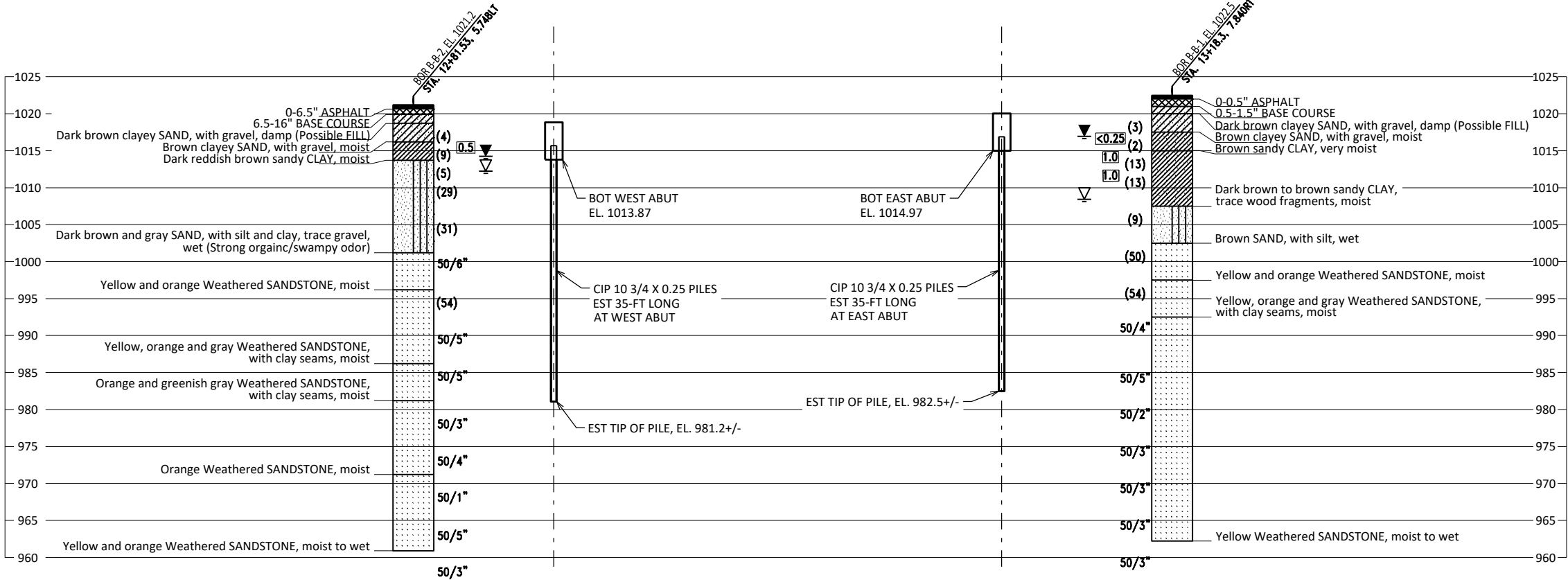
- (1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)
- (2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION			
	AT TIME OF DRILLING		
	END OF DRILLING		
	AFTER DRILLING		
ABBREVIATIONS			
F-FINE	M-MEDIUM	C-COARSE	ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-9-319			
DRAWN BY		VCH	PLANS CK'D TAB
03-GEOTECH - 03-GEOTECH		SHEET 3 41	



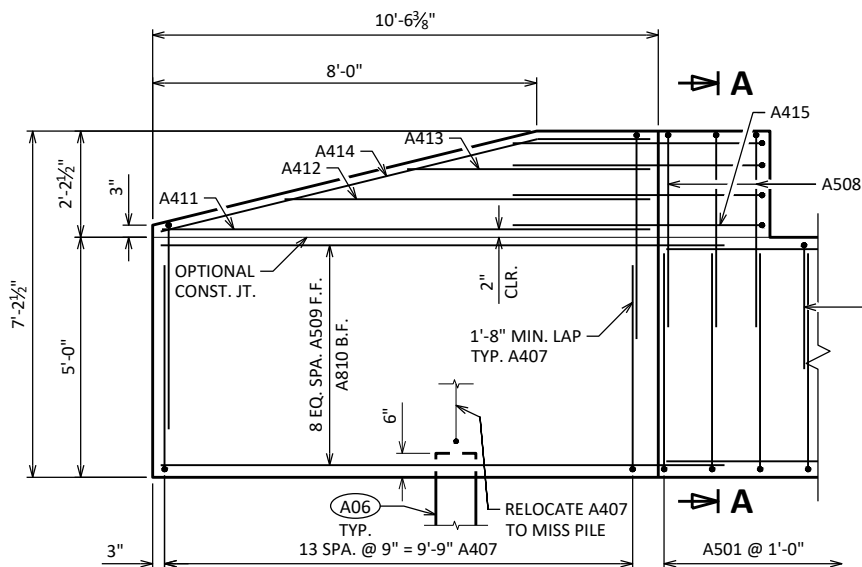


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|----------------------------------------------------|------|----------------|---------------|
| NO.                                                | DATE | REVISION       |               |
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION |      |                |               |
| <b>STRUCTURE</b>                                   |      | <b>B-9-319</b> |               |
| DRAWN<br>BY                                        |      | VCH            | PLANS<br>CK'D |
| <b>WEST<br/>ABUTMENT</b>                           |      | SHEET 4        |               |
|                                                    |      | 42             |               |

BILL OF BARS

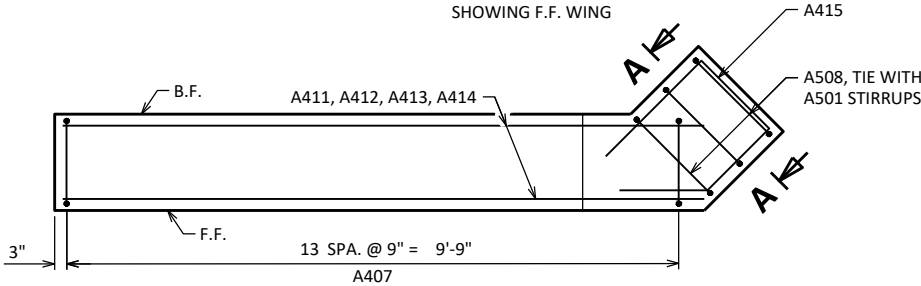
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		64	6'-0"	X		ABUT BODY STIRRUPS
A502		26	7'-1"	X		ABUT BODY STIRRUPS - TOP U-BAR
A503		9	31'-3"			ABUT BODY HORIZ. - F.F.
A804		18	21'-7"	X		ABUT BODY HORIZ. - B.F.
A405		27	3'-0"	X		ABUT BODY TIE BARS
A506	X	25	2'-0"			ABUT BODY DOWEL BARS
A407	X	56	10'-0"	X		WING STIRRUPS
A508	X	6	9'-11"	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'-1"			WING UPPER HORIZ.
A412	X	4	7'-6"			WING UPPER HORIZ.
A413	X	4	5'-0"			WING UPPER HORIZ.
A414	X	4	9'-7"	X		WING TOP HORIZ.
A415	X	4	8'-3"	X		WING 1 UPPER HORIZ. CORNER
A416	X	4	8'-4"	X		WING 2 UPPER HORIZ. CORNER



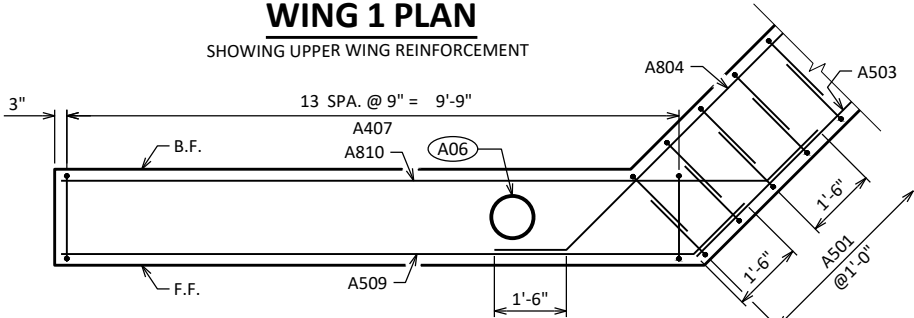
WING 1 ELEVATION

SHOWING F.F. WING



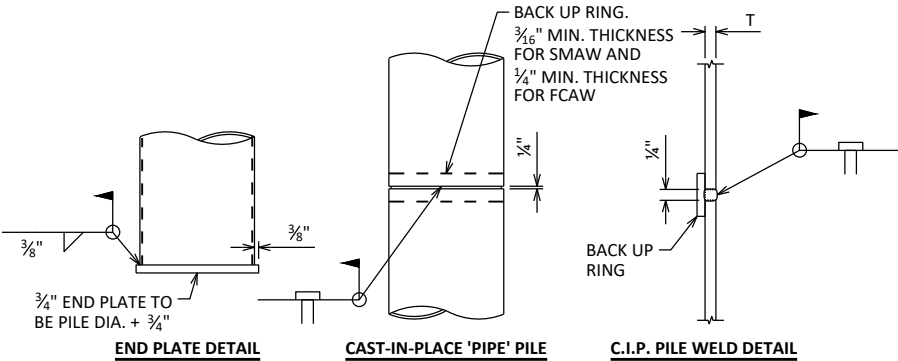
WING 1 PLAN

SHOWING UPPER WING REINFORCEMENT



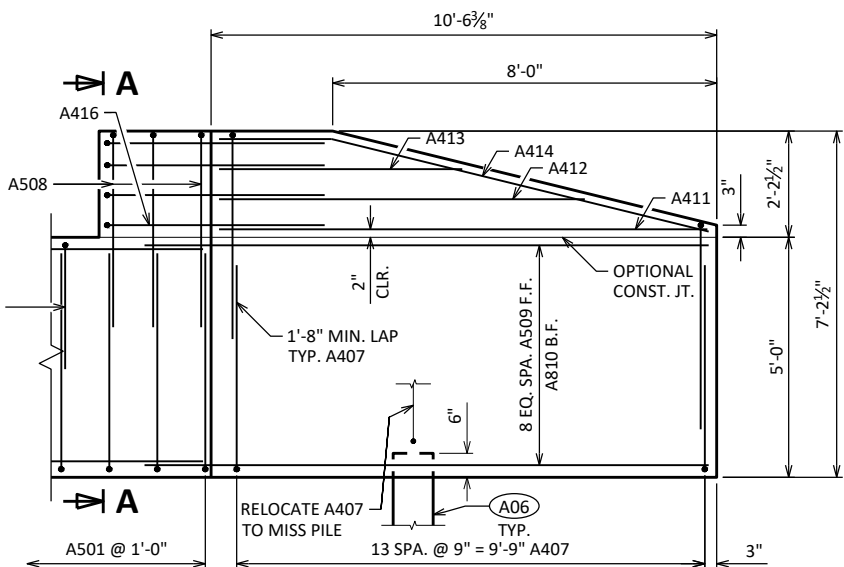
WING 1 PLAN

SHOWING LOWER WING REINFORCEMENT  
WING 2 SIMILAR



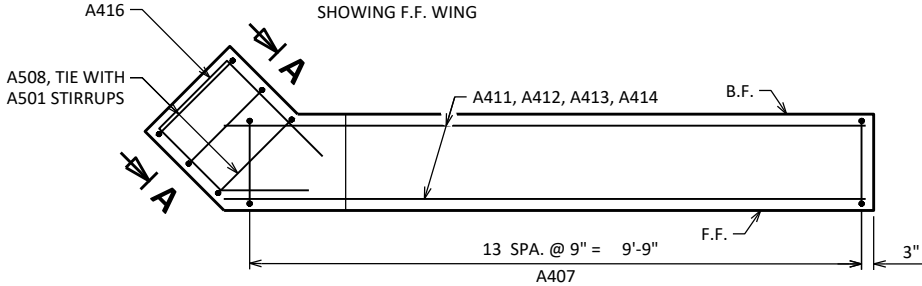
CIP PILE DETAILS

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



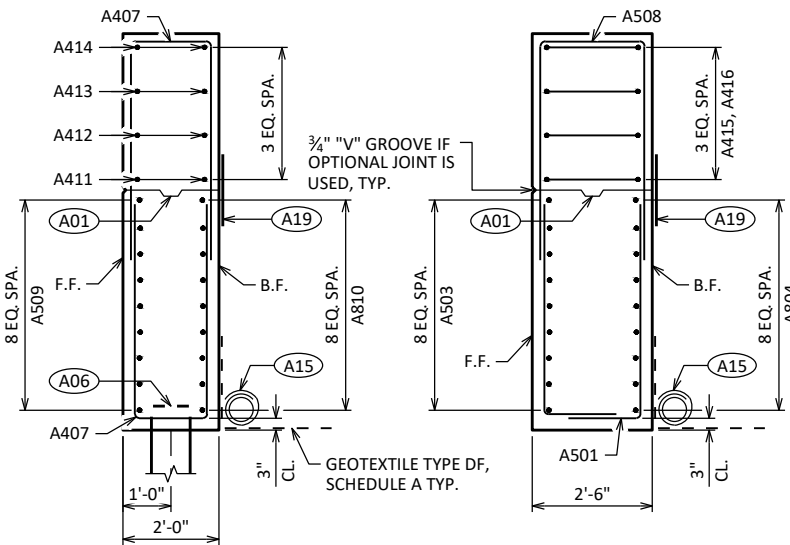
WING 2 ELEVATION

SHOWING F.F. WING



WING 2 PLAN

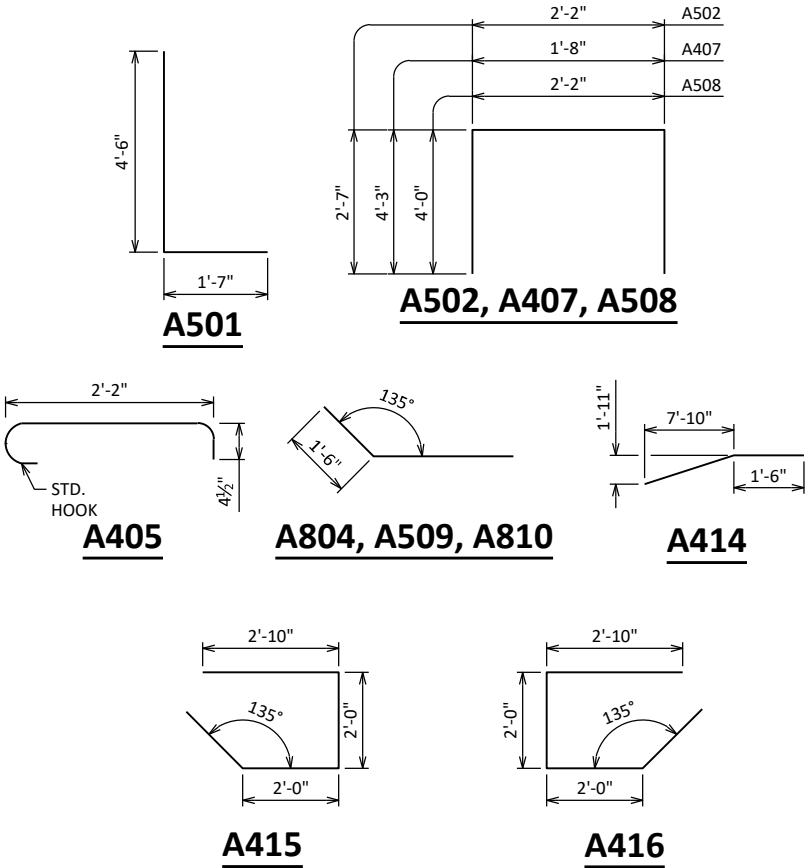
SHOWING UPPER WING REINFORCEMENT



SECTION THRU WING 1

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 CIP 10% X 0.25 PILING, ESTIMATED 35' LONG WITH A REQUIRED DRIVING RESISTANCE OF 130TONS 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-9-319			
DRAWN BY		VCH	PLANS CK'D TAB
WEST ABUTMENT DETAILS		SHEET 5 43	

SCALE =

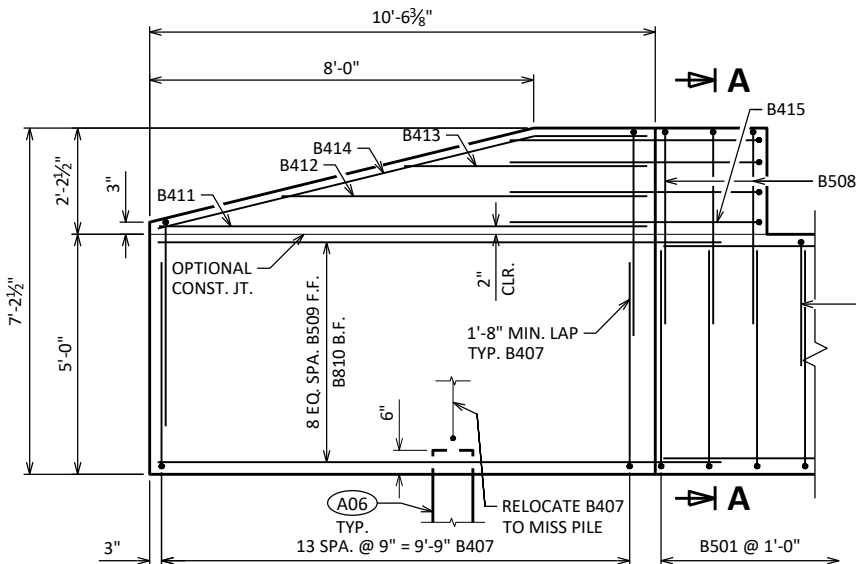


- |                                                    |      |                |               |
|----------------------------------------------------|------|----------------|---------------|
| NO.                                                | DATE | REVISION       | B             |
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION |      |                |               |
| <b>STRUCTURE</b>                                   |      | <b>B-9-319</b> |               |
| DRAWN<br>BY                                        |      | VCH            | PLANS<br>CK'D |
| TAL                                                |      |                |               |
| <b>EAST<br/>ABUTMENT</b>                           |      | SHEET 6<br>44  |               |

BILL OF BARS

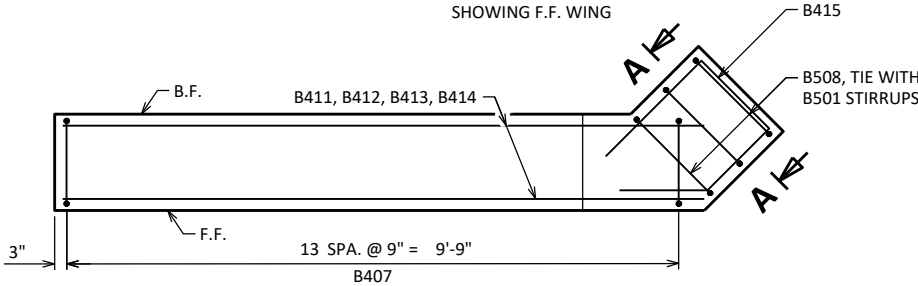
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

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B501		64	6'-0"	X		ABUT BODY STIRRUPS
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B414	X	4	9'-7"	X		WING TOP HORIZ.
B415	X	4	8'-3"	X		WING 3 UPPER HORIZ. CORNER
B416	X	4	8'-4"	X		WING 4 UPPER HORIZ. CORNER



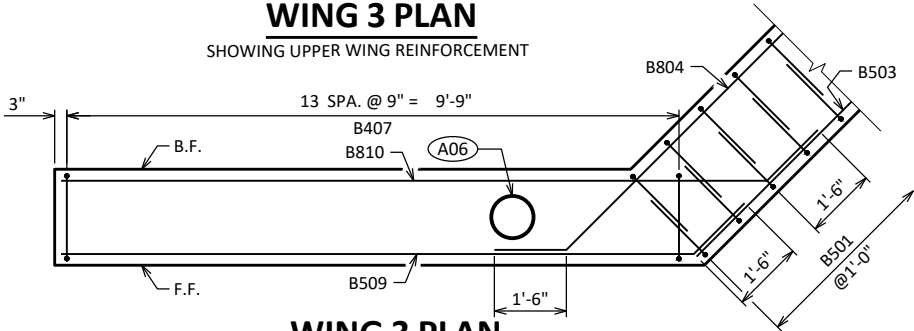
WING 3 ELEVATION

SHOWING F.F. WING



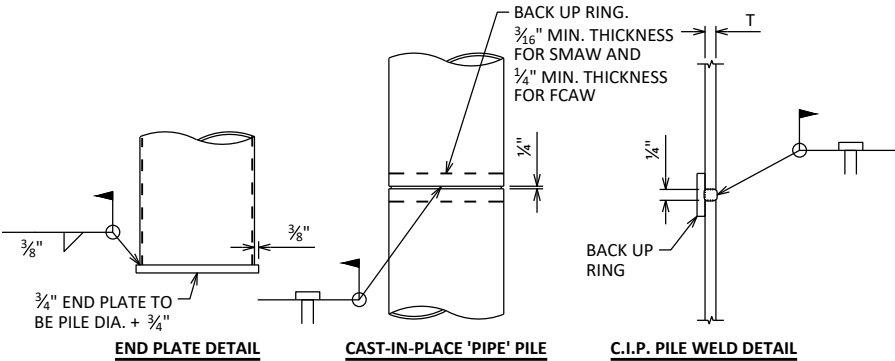
WING 3 PLAN

SHOWING UPPER WING REINFORCEMENT

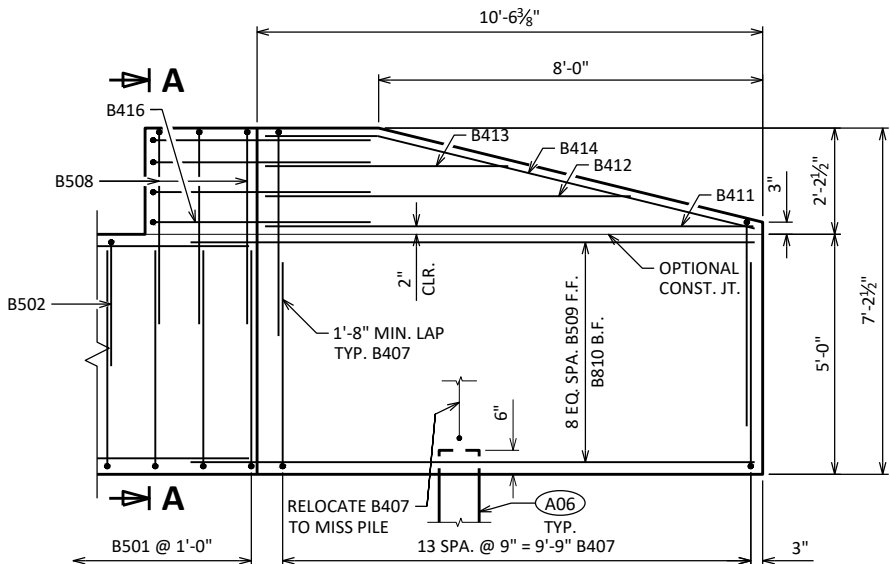


WING 3 PLAN

SHOWING LOWER WING REINFORCEMENT  
WING 4 SIMILAR

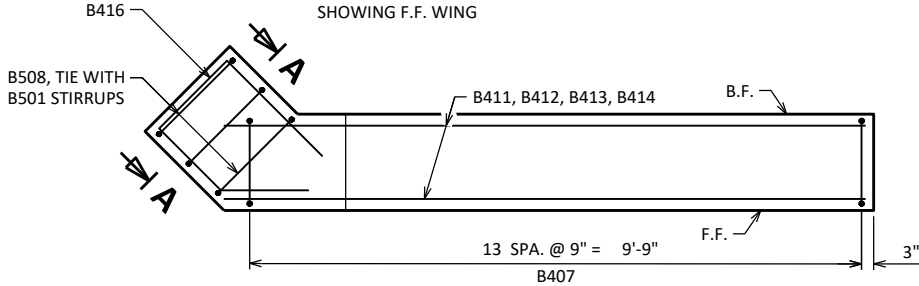


CIP PILE DETAILS



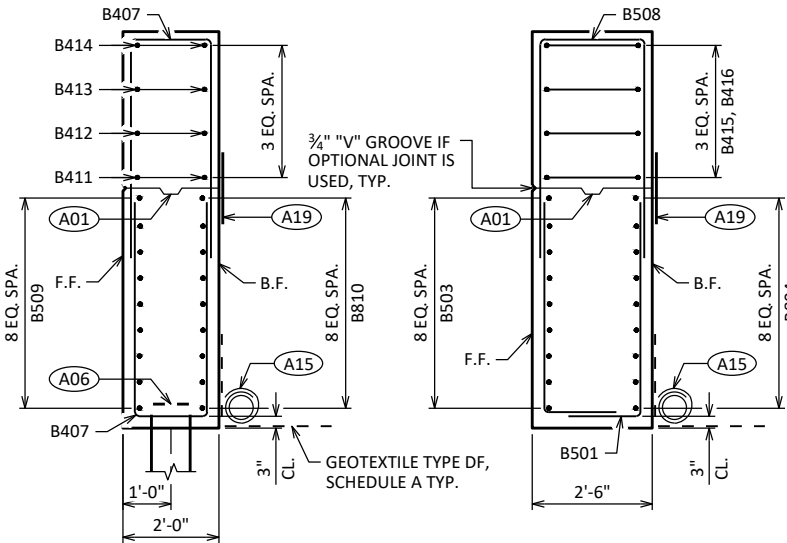
WING 4 ELEVATION

SHOWING F.F. WING



WING 4 PLAN

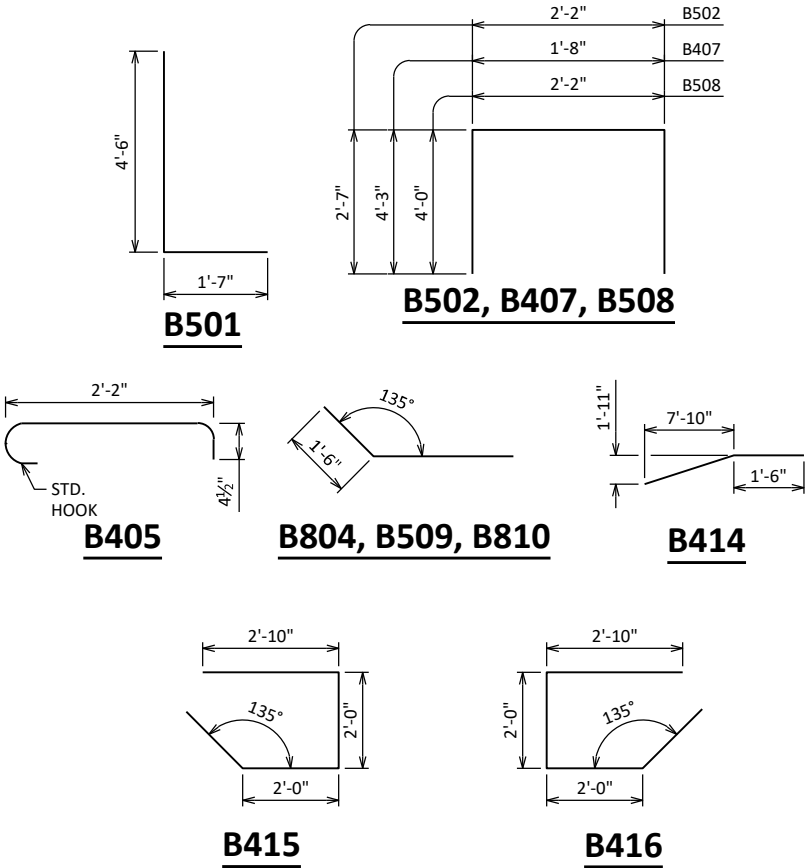
SHOWING UPPER WING REINFORCEMENT



SECTION THRU WING 3

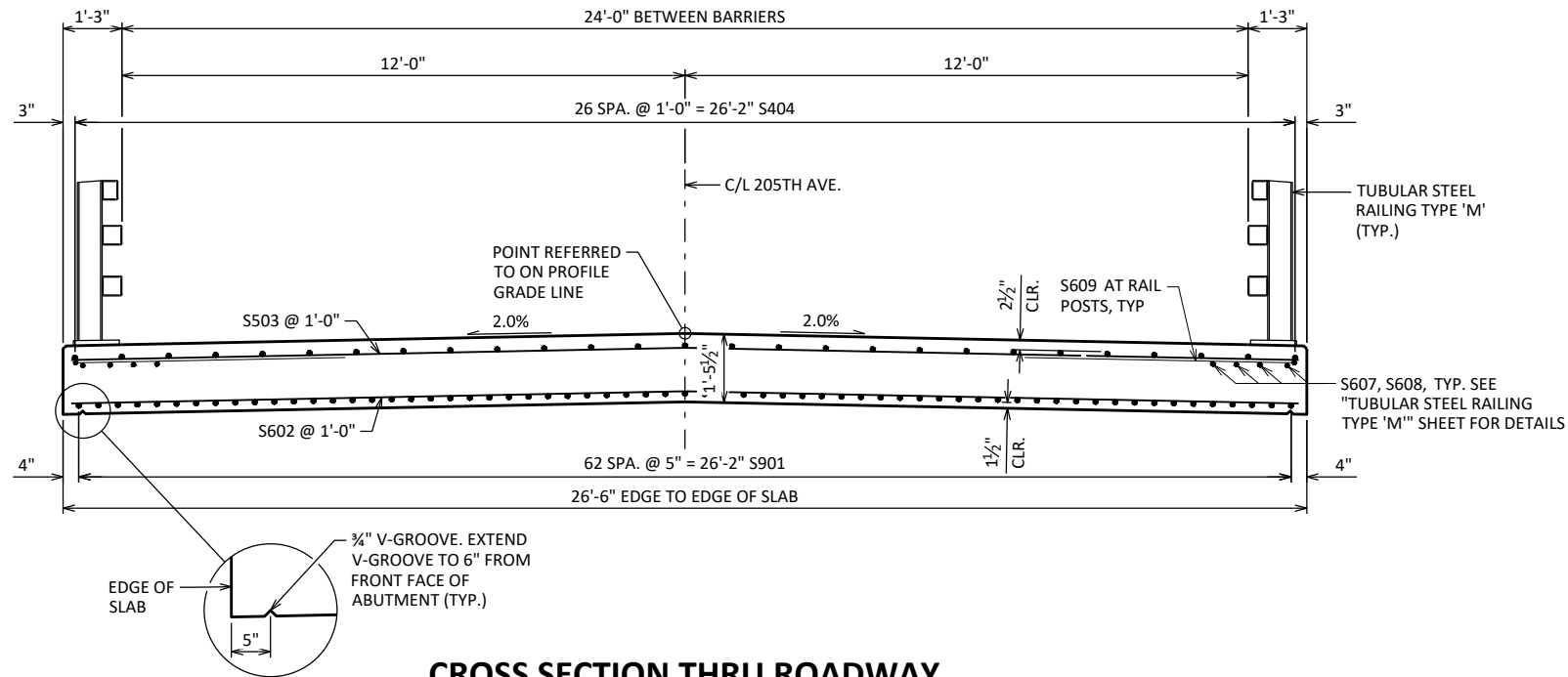
TYPICAL BOTH WINGS

SECTION A-A

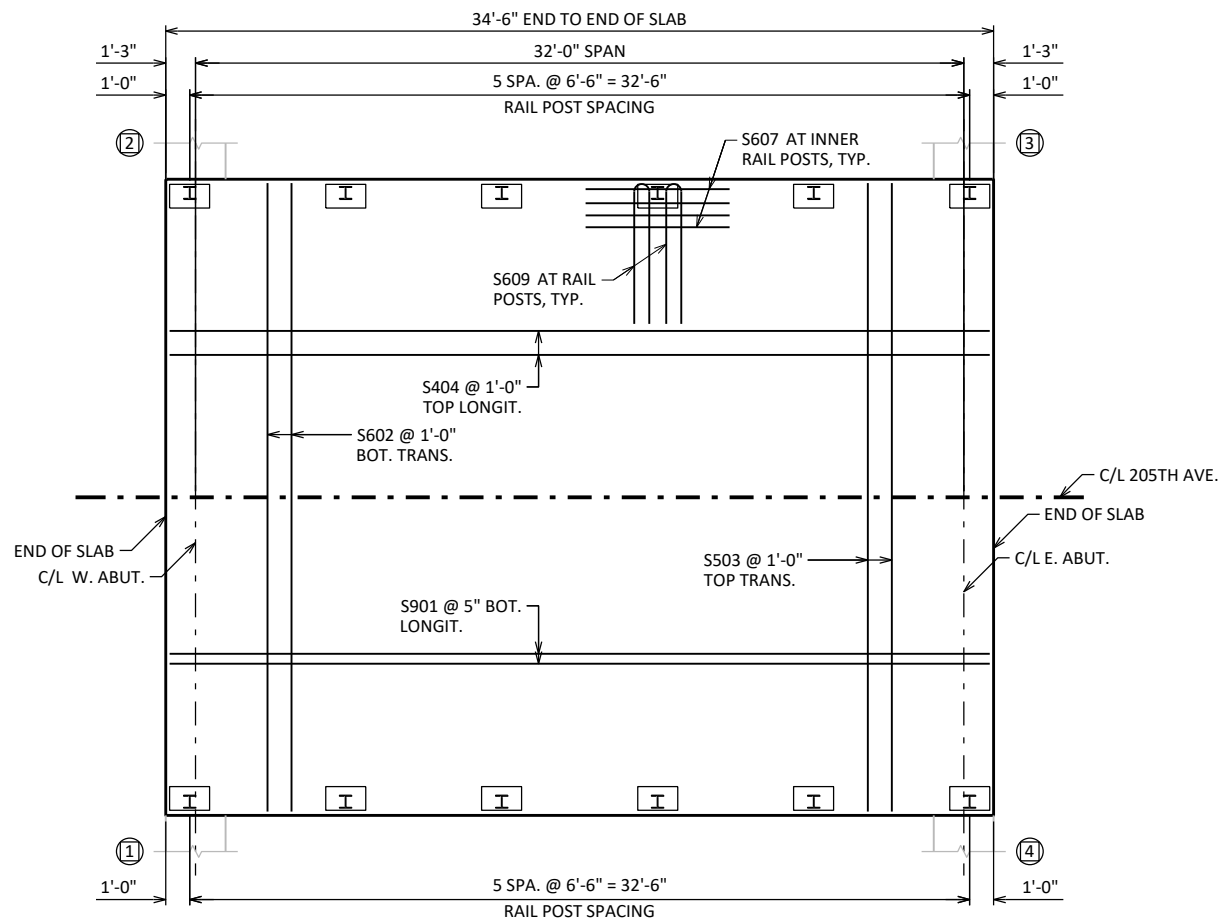


- A01 OPTIONAL CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6. PROVIDE 3/4" "V" GROOVE ON F.F. OF WINGWALL IF JOINT IS USED.
- A06 SUPPORT ABUTMENT ON CIP 10% X 0.25 PILING, ESTIMATED 35' LONG WITH A REQUIRED DRIVING RESISTANCE OF 130TONS PER PILE.
- A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. 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".

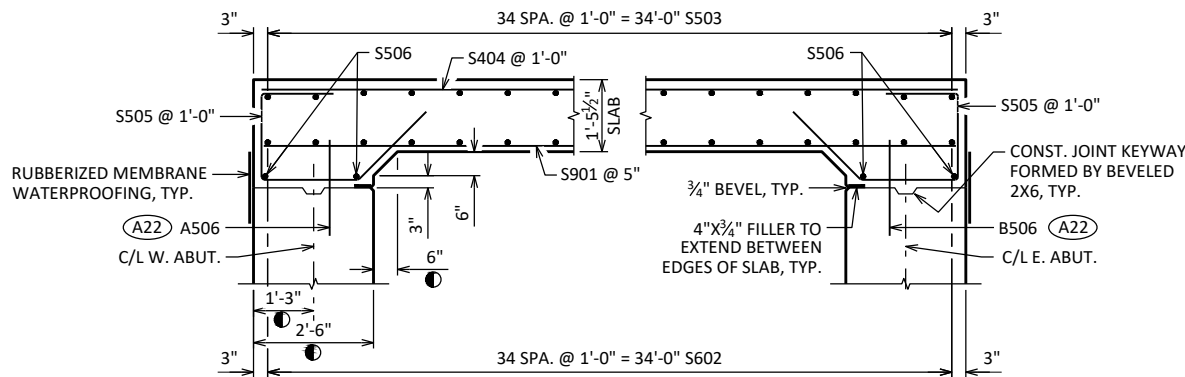
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-9-319			
DRAWN BY		VCH	PLANS CK'D TAB
EAST ABUTMENT DETAILS		SHEET 7	45



CROSS SECTION THRU ROADWAY



PLAN

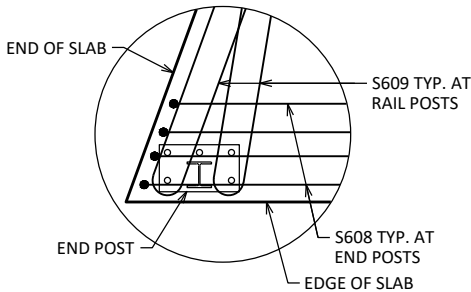


LONGITUDINAL SECTION

DIMENSIONS ARE GIVEN PARALLEL TO € ROADWAY UNLESS OTHERWISE NOTED.

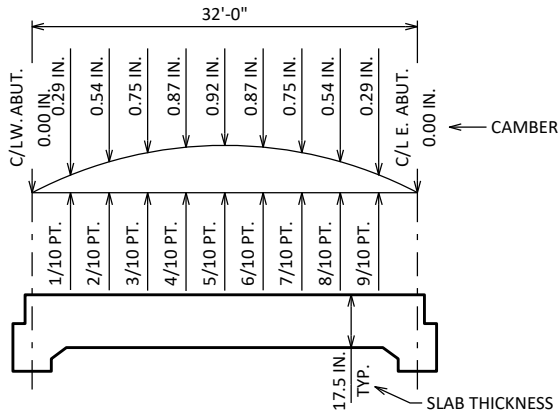
MEASURED NORMAL TO THE € OF ABUTMENT. DIMENSIONS ARE TYPICAL FOR BOTH ABUTMENTS.

A22 A506, 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.)



END POST DETAILS

NO.	DATE	REVISION	BY
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STRUCTURE B-9-319			
DRAWN BY		VCH	PLANS CK'D TAB
SUPERSTRUCTURE		SHEET 8 46	



CAMBER AND SLAB THICKNESS DIAGRAM

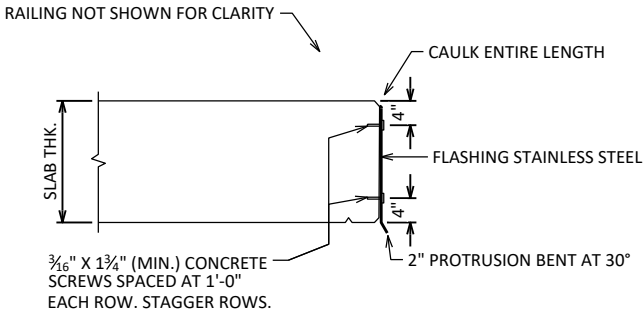
CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT. PARAPETS PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED, EXCEPT FOR STAGED CONSTRUCTION.

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

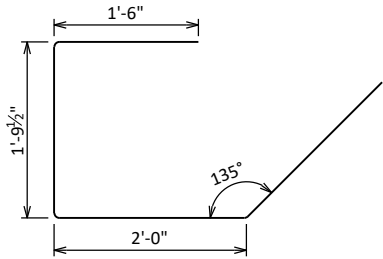
TOP OF SLAB ELEVATIONS

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 SLAB	1021.08	1021.16	1021.24	1021.34	1021.44	1021.54	1021.66	1021.78	1021.90	1022.04	1022.18
CROWN OR R/L	1021.34	1021.42	1021.51	1021.60	1021.70	1021.81	1021.92	1022.04	1022.17	1022.30	1022.44
S. EDGE OF SLAB	1021.08	1021.16	1021.24	1021.34	1021.44	1021.54	1021.66	1021.78	1021.90	1022.04	1022.18

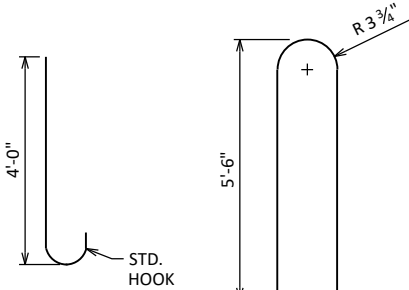


FLASHING DETAIL FOR NEW BRIDGES WITH OPEN RAILING

THIS BID ITEM "FLASHING STAINLESS STEEL" SHALL INCLUDE PROVIDING AND INSTALLING THE STAINLESS STEEL FLASHING, CAULK, 3/16" CONCRETE SCREWS AND CLEANING THE EDGE OF THE DECK PRIOR TO ATTACHMENT OF THE FLASHING.



S505



S608

S609

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
S901	X	63	34'-2"			SLAB BOTTOM LONGITUDINAL
S602	X	35	26'-2"			SLAB BOTTOM TRANSVERSE
S503	X	35	26'-2"			SLAB TOP TRANSVERSE
S404	X	27	34'-2"			SLAB TOP LONGITUDINAL
S505	X	54	7'-1"	X		ABUTMENT DIAPHRAGM STIRRUPS
S506	X	4	26'-2"			ABUTMENT DIAPHRAGM LONGITUDINAL
S607	X	32	6'-0"			SLAB TOP LONGIT. UNDER RAIL POSTS
S608	X	16	4'-8"	X		SLAB TOP LONGIT. UNDER RAIL END POSTS
S609	X	24	11'-3"	X		SLAB TOP HOOKS UNDER RAIL POSTS

SURVEY TOP OF SLAB ELEVATIONS

LOCATION	ABUTMENT	5/10 PT.	ABUTMENT
N. EDGE OF SLAB			
CROWN OR R/L			
S. EDGE OF SLAB			

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 EDGE OF SLAB 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 (+).

THE BID ITEM "FLASHING STAINLESS STEEL" SHALL INCLUDE PROVIDING AND INSTALLING THE STAINLESS STEEL FLASHING, SILICONE CAULK AND 3/16" CONCRETE SCREWS.

FLASHING TO BE INSTALLED AFTER PROTECTIVE SURFACE TREATMENT APPLICATION.

CONCRETE SCREWS SHALL BE 410 STAINLESS STEEL.

EXTEND FLASHING TO F.F. OF ABUTMENT.

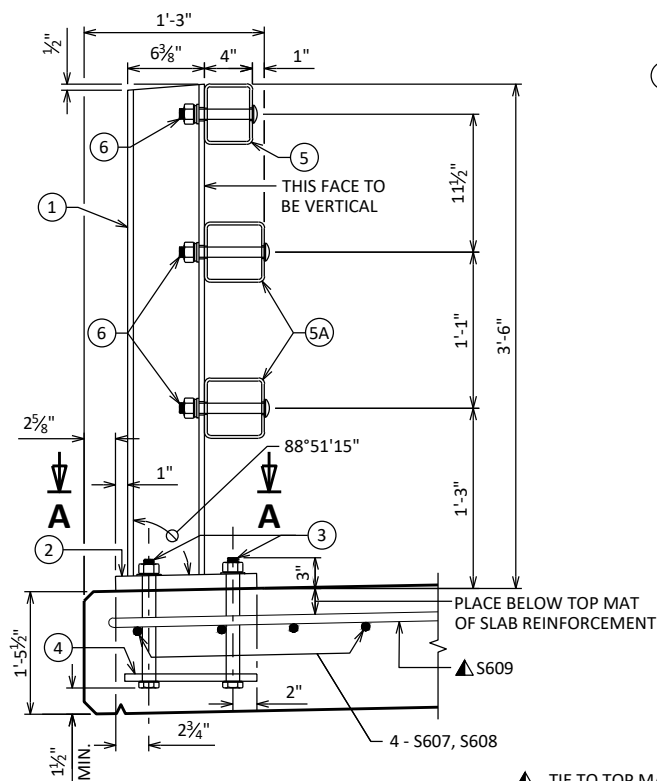
TOP OF FLASHING TO BEGIN APPROX. 1-INCH BELOW TOP OF DECK/SLAB SURFACE.

THE FLASHING IS TO BE A CONSTANT HEIGHT BASED ON THE THINNEST SLAB DEPTH OVER THE BRIDGE LENGTH.

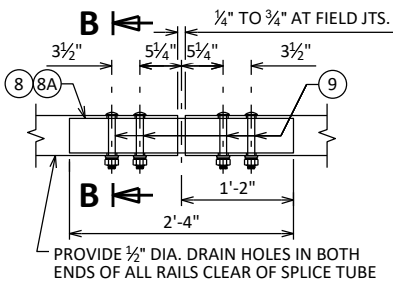
PROVIDE 2" MINIMUM FLASHING OVERLAP, FASTEN WITH 3/16"X2" (MIN.) CONCRETE SCREWS.

CAULK SHALL BE NON-STAINING, GRAY NON-BITUMINOUS JOINT SEALER.

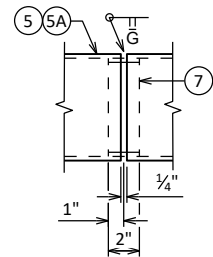
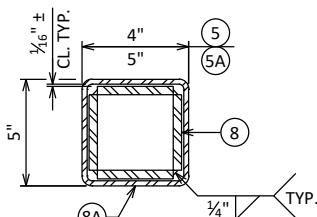
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-9-319			
		DRAWN BY	PLANS CK'D TAB
SUPERSTRUCTURE DETAILS		SHEET 9	47



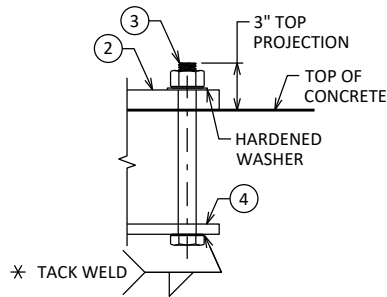
SECTION THRU RAILING ON DECK



FIELD ERECTION JOINT DETAIL

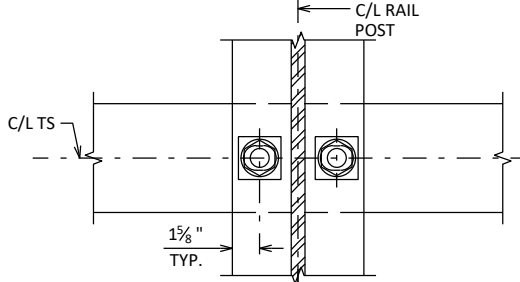
SHOP RAIL SPLICE DETAIL  
LOCATION MUST BE SHOWN ON SHOP DRAWINGS

SECTION B-B

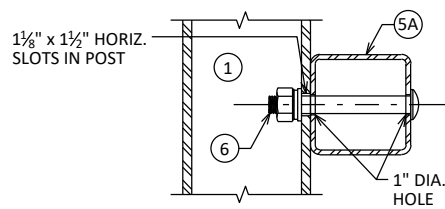


ANCHOR BOLTS

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



SECTION THRU POST WEB



SECTION THRU RAIL

NOTE: CONNECTIONS AT LOWER RAILS SHOWN. CONNECTIONS AT TOP RAIL SIMILAR.

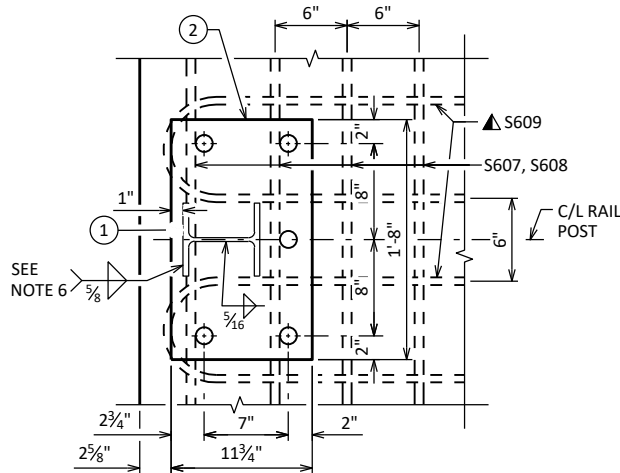
TYPICAL RAIL TO POST CONNECTIONS

## LEGEND

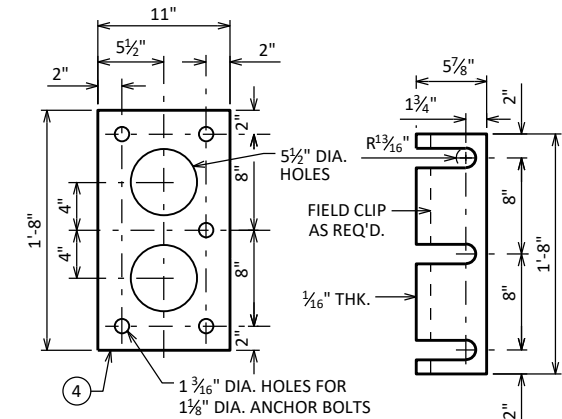
- W6 x 25 WITH 1 1/8" x 1 1/2" HORIZ. SLOTS ON EACH SIDE OF POST FOR BOLT NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.
- PLATE 1 1/4" x 11 3/4" x 1'-8" WITH 1 7/16" OVERSIZED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN.
- ASTM 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.)
- 5/8" x 11" x 1'-8" ANCHOR PLATE (GALVANIZED) WITH 1 3/16" DIA. HOLES FOR ANCHOR BOLTS NO. 3.
- 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.
- 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).
- SPLICE SLEEVE FABRICATED FROM 1/4" PLATE. PROVIDE "SLIDING FIT".
- 3/8" x 3 3/8" x 2'-4" PLATE. 2 PER RAIL. USED IN NO. 5 & 5A.
- 3/8" x 2 5/8" x 2'-4" PLATE USED IN NO. 5, 3/8" x 3 3/8" x 2'-4" PLATE USED IN NO. 5A. 2 PER RAIL.
- 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 3/4" MIN. LONGIT. SLOTTED HOLES AT EXP. JOINTS IN PLATE NO. 8A. PROVIDE 1 3/16" DIA. ROUND HOLES IN TUBES NO. 5 AND NO. 5A.

## GENERAL NOTES

- BID ITEM SHALL BE "RAILING TUBULAR TYPE M" WHICH INCLUDES ALL ITEMS SHOWN.
- 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.
- THE NUT SECURING THE POST BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/8 TURN.
- RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF THREE (3) POSTS WITHOUT SPLICES WHERE POSSIBLE.
- ENDS OF TUBE SECTIONS SHALL BE SAWED. GRIND SMOOTH EXPOSED EDGES. ALL CUT ENDS SHALL BE TRUE AND SMOOTH.
- WELD IS THE SAME ON BOTH FLANGES. FLANGE WELD DOES NOT REQUIRE MAGNETIC PARTICLE TESTING.
- 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.
- 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.
- 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.



SECTION A-A

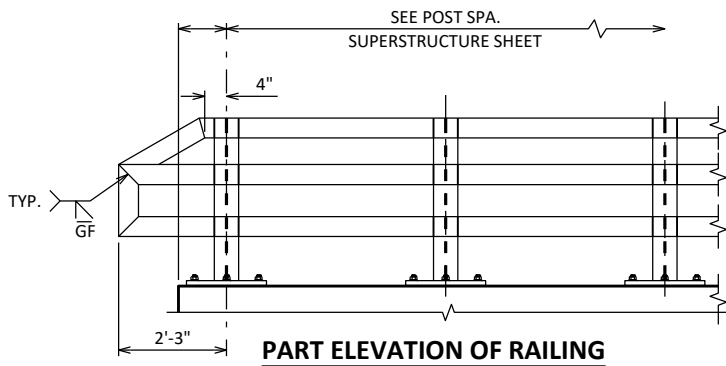


ANCHOR PLATE

AT RAIL TO DECK CONNECTION

POST SHIM

DETAIL



PART ELEVATION OF RAILING

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-9-319			
DRAWN BY		VCH	PLANS CK'D TAB
TUBULAR STEEL RAILING TYPE 'M'		SHEET 10 48	



DIVISION 1 - LCL-205TH AVE											
STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDNATE
12+36.00	1236.00	0.00	25.02	13.00	0.00	0	0	0	0	0	0
12+50.00	1250.00	14	28.10	13.00	0.09	14	7	0	14	0	7
12+76.39	1276.39	26.39	25.47	14.00	8.52	26	13	4	40	5	15
BRIDGE B-9-319											
13+23.61	1323.61	0	26.71	14.00	38.08	0	0	0	40	0	15
13+30.00	1330.00	6.39	29.09	13.00	2.97	7	3	5	47	6	13
13+50.00	1350.00	20	35.37	13.00	0.00	24	10	1	71	8	26
13+64.00	1364.00	14	24.72	13.00	0.00	16	7	0	87	8	35

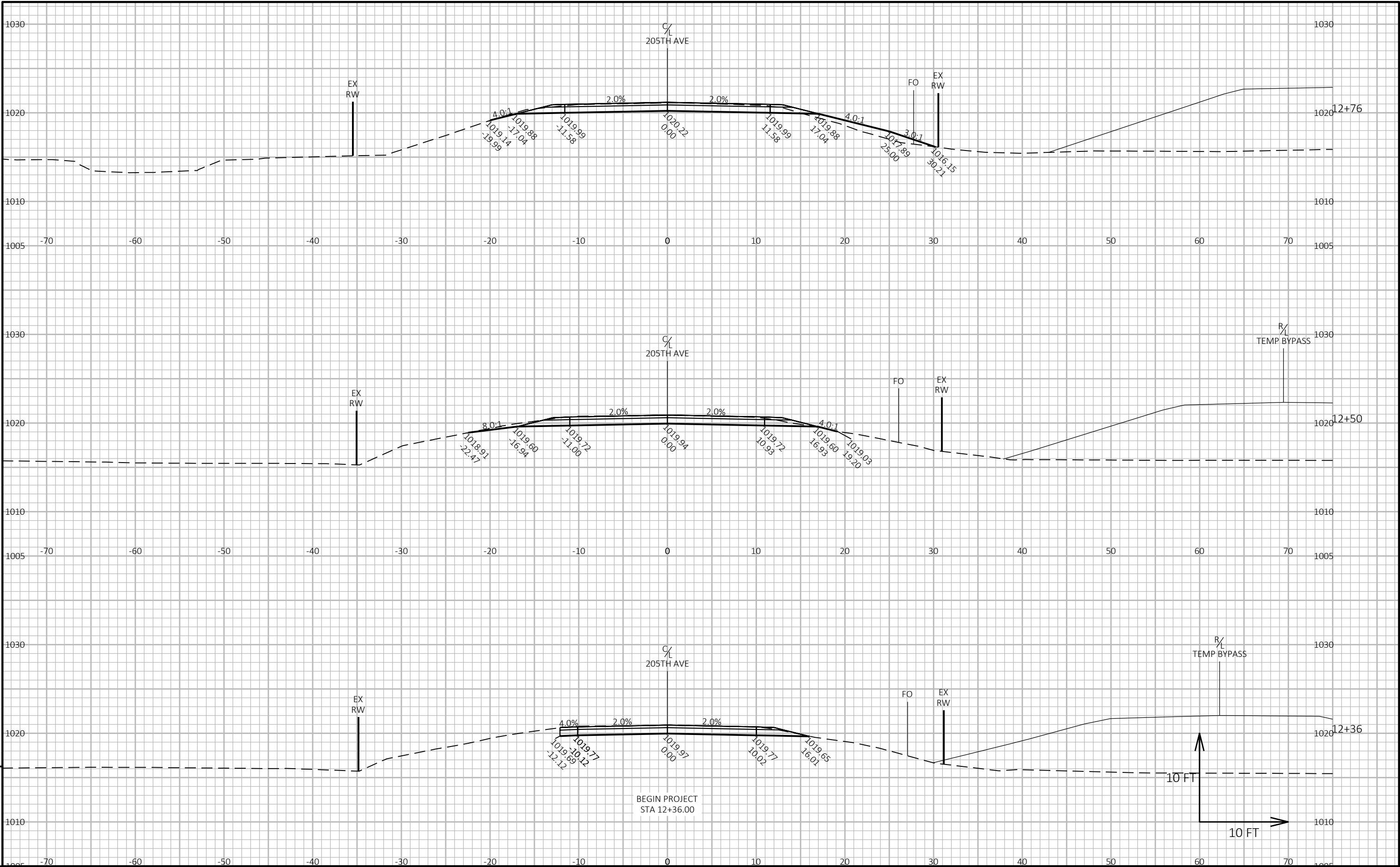
DIVISION 2 - 205TH-BYPASS									
STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDNATE
100+50.68	10050.68	0.00	1.34	13.96	0	0	0	0	0
101+00.00	10100.00	49.32	0.00	196.66	1	192	1	240	-239
101+50.00	10150.00	50	0.00	247.85	0	412	1	755	-754
101+79.00	10179.00	29	0.00	298.63	0	293	1	1121	-1120
TEMPORARY STRUCTURE									
102+23.00	10223.00	0	0.00	317.01	0	0	0	1121	-1120
102+50.00	10250.00	27	0.00	203.92	0	260	0	1446	-1445
103+00.00	10300.00	50	54.68	0.00	51	189	51	1683	-1631
103+50.00	10350.00	50	20.91	7.80	70	7	121	1691	-1569
103+88.77	10388.77	38.77	2.64	2.72	17	8	138	1701	-1562

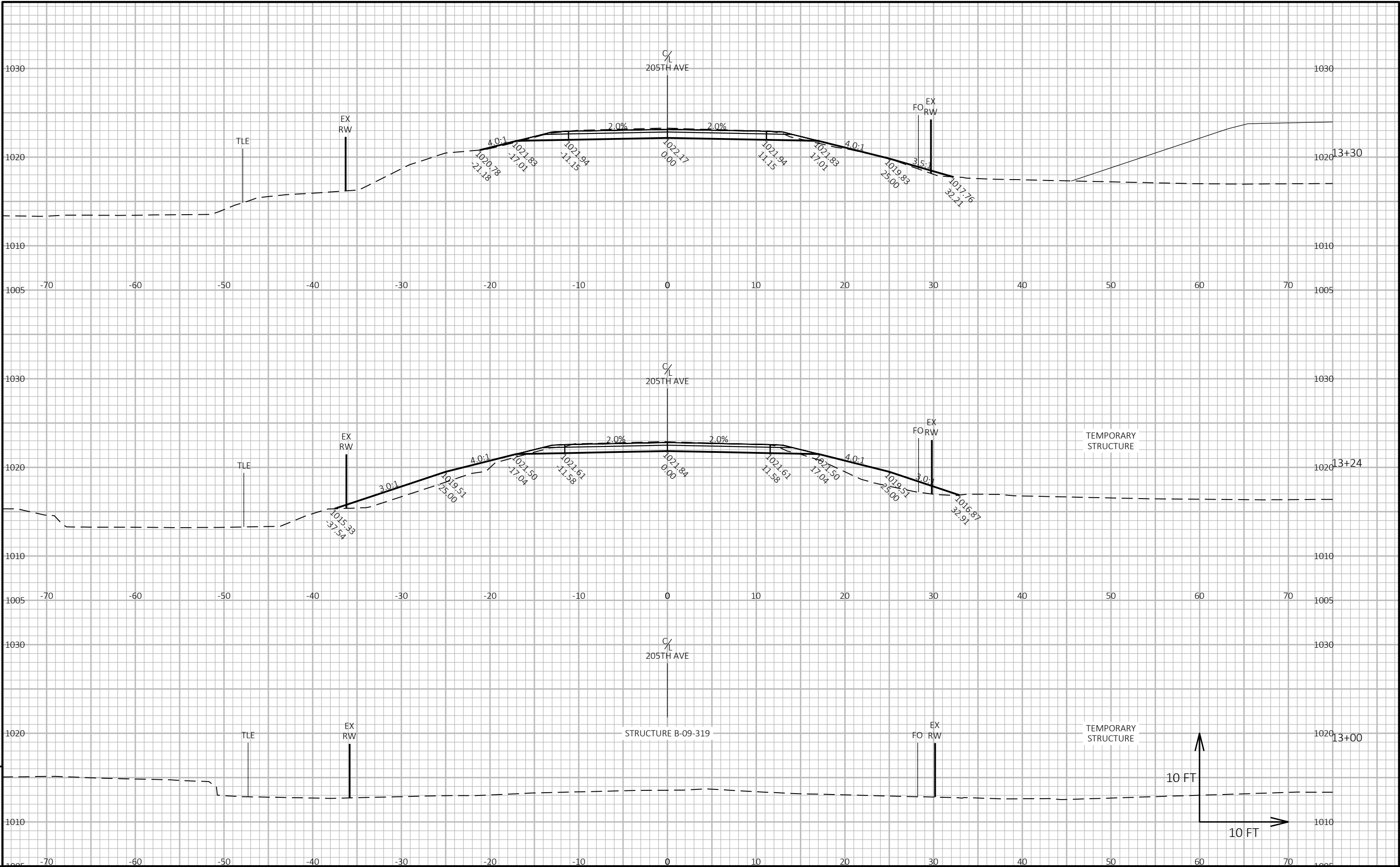
DIVISION 3 - 205TH-BYPASS REMOVAL									
STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDNATE
100+50.68	10050.68	0.00	18.14	1.34	0	0	0	0	0
101+00.00	10100.00	49.32	207.74	0.00	206	1	206	1	205
101+50.00	10150.00	50	258.94	0.00	432	0	638	1	637
101+79.00	10179.00	29	309.72	0.00	305	0	943	1	942
TEMPORARY STRUCTURE									
102+23.00	10223.00	0	328.10	0.00	0	0	943	1	942
102+50.00	10250.00	27	214.95	0.00	272	0	1,215	1	1,214
103+00.00	10300.00	50	0.00	54.68	199	51	1,414	65	1,349
103+50.00	10350.00	50	7.14	30.41	7	79	1,421	164	1,257
103+88.77	10388.77	38.77	5.56	2.64	9	24	1,430	194	1,236

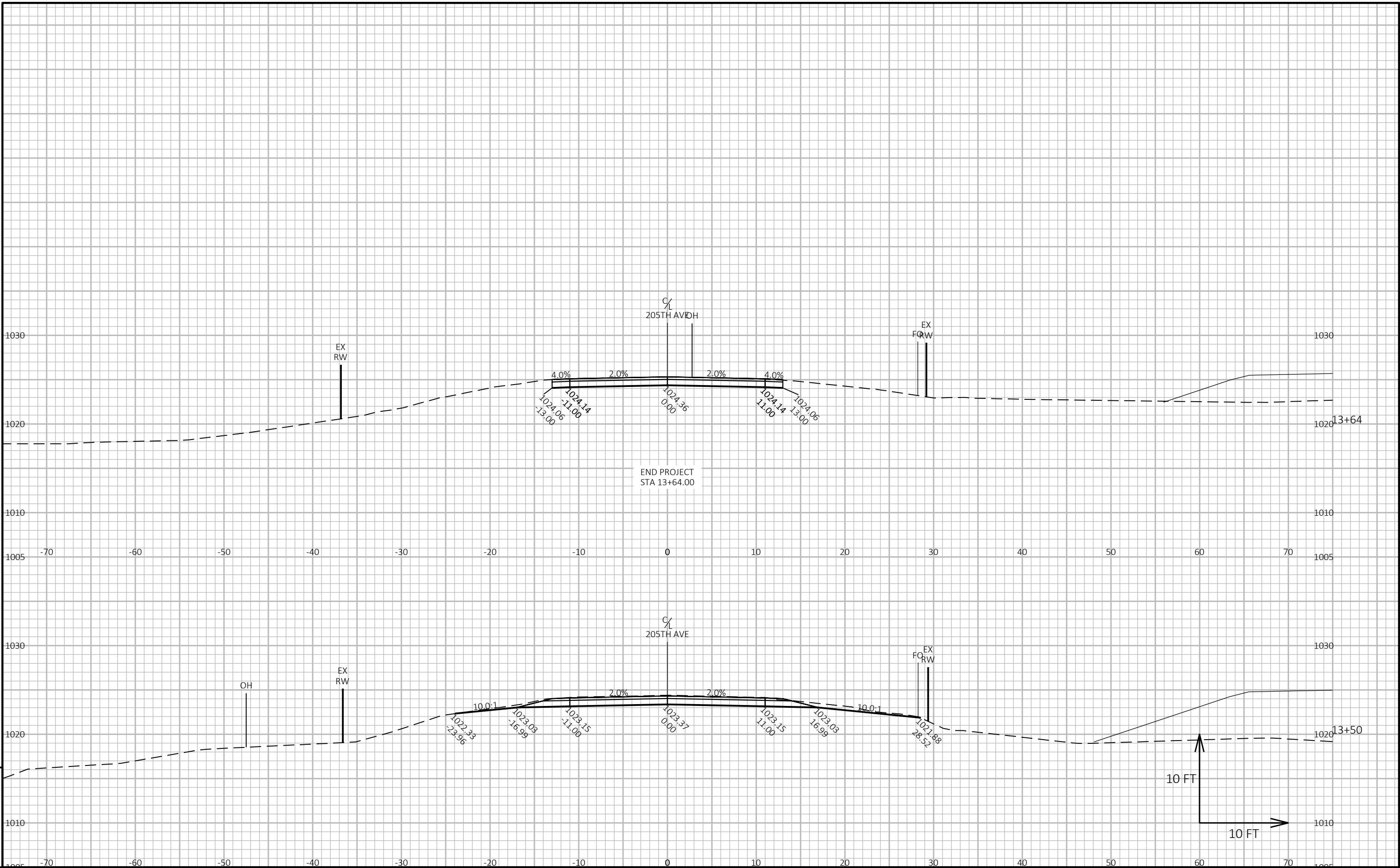
NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

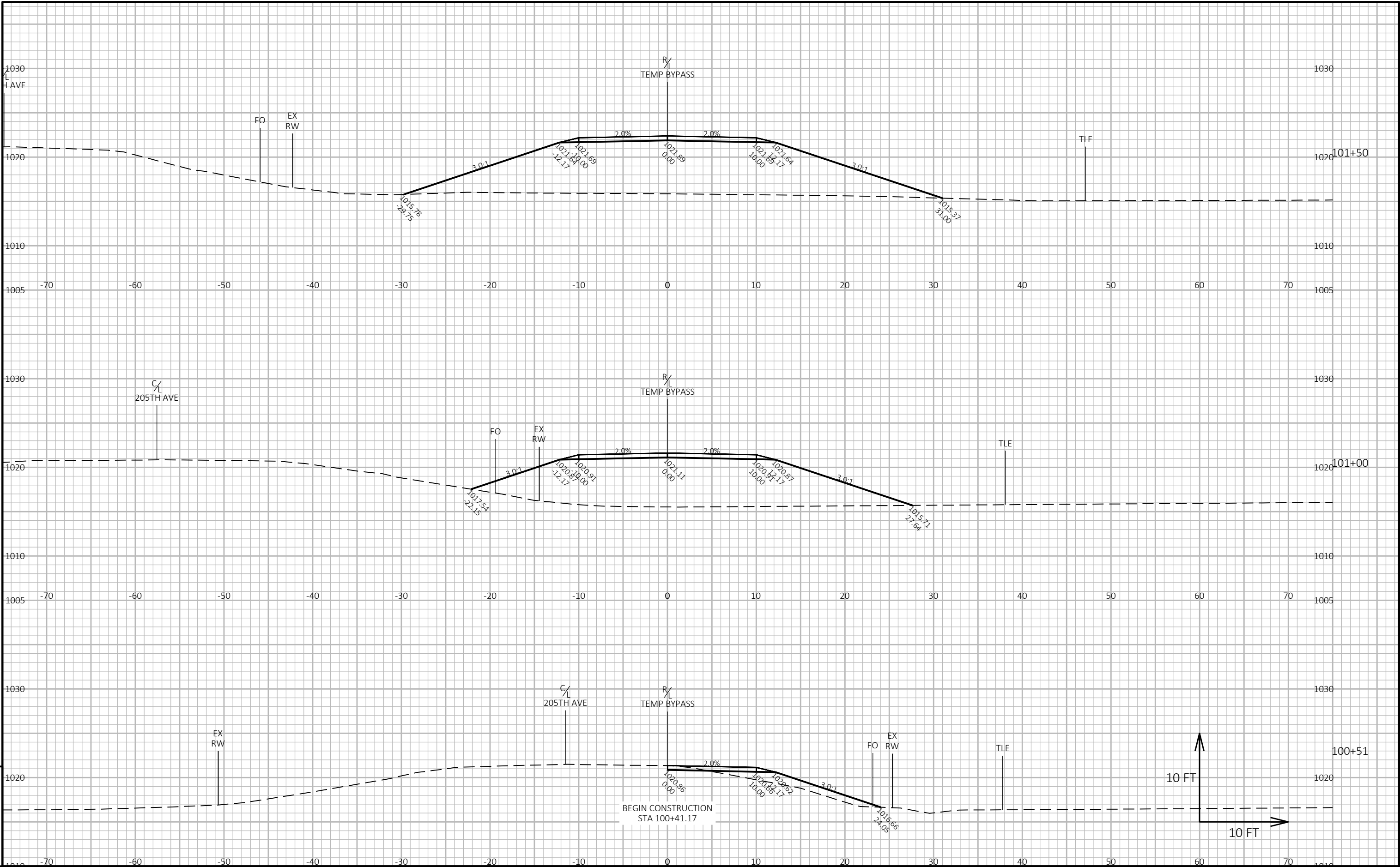
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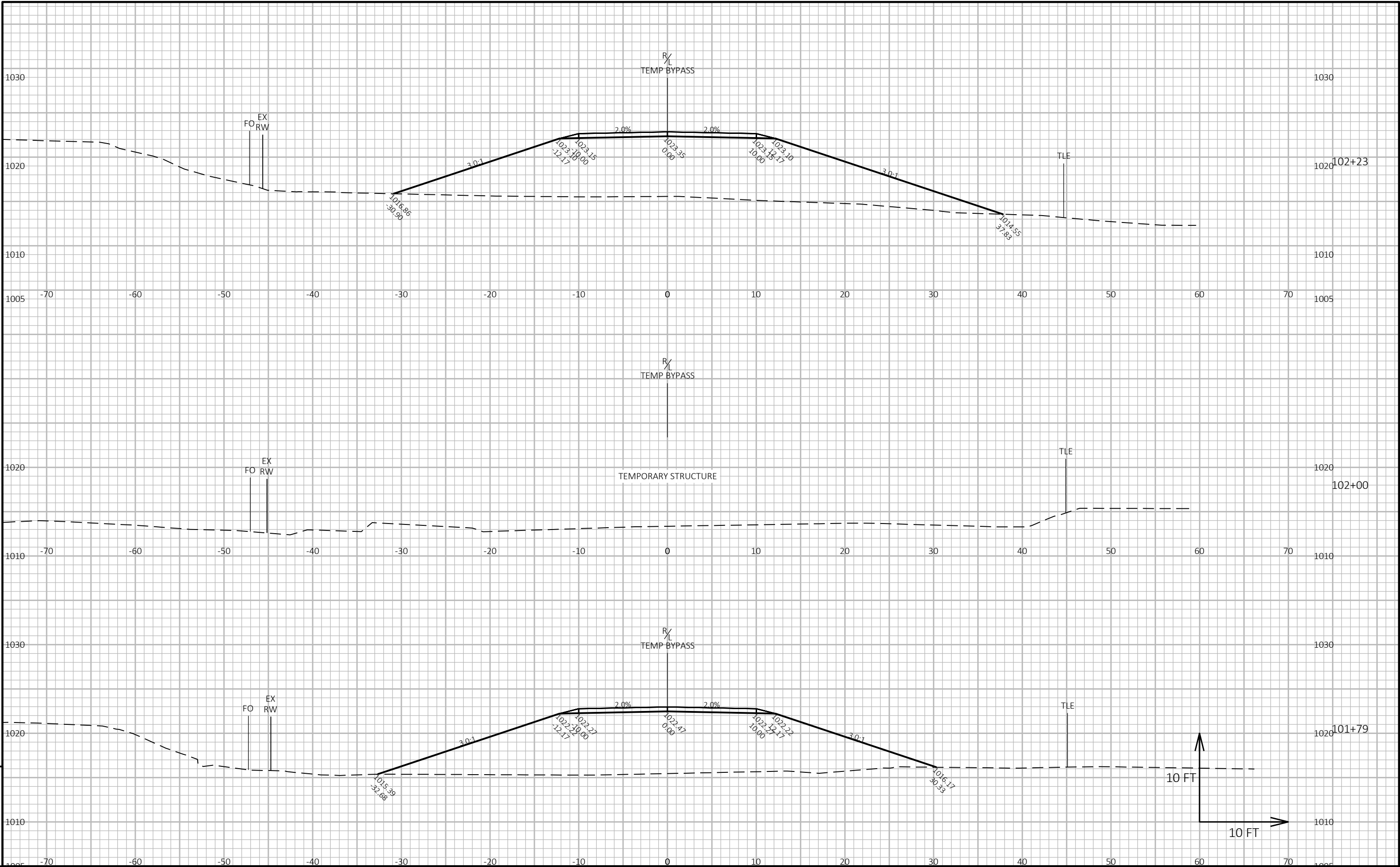
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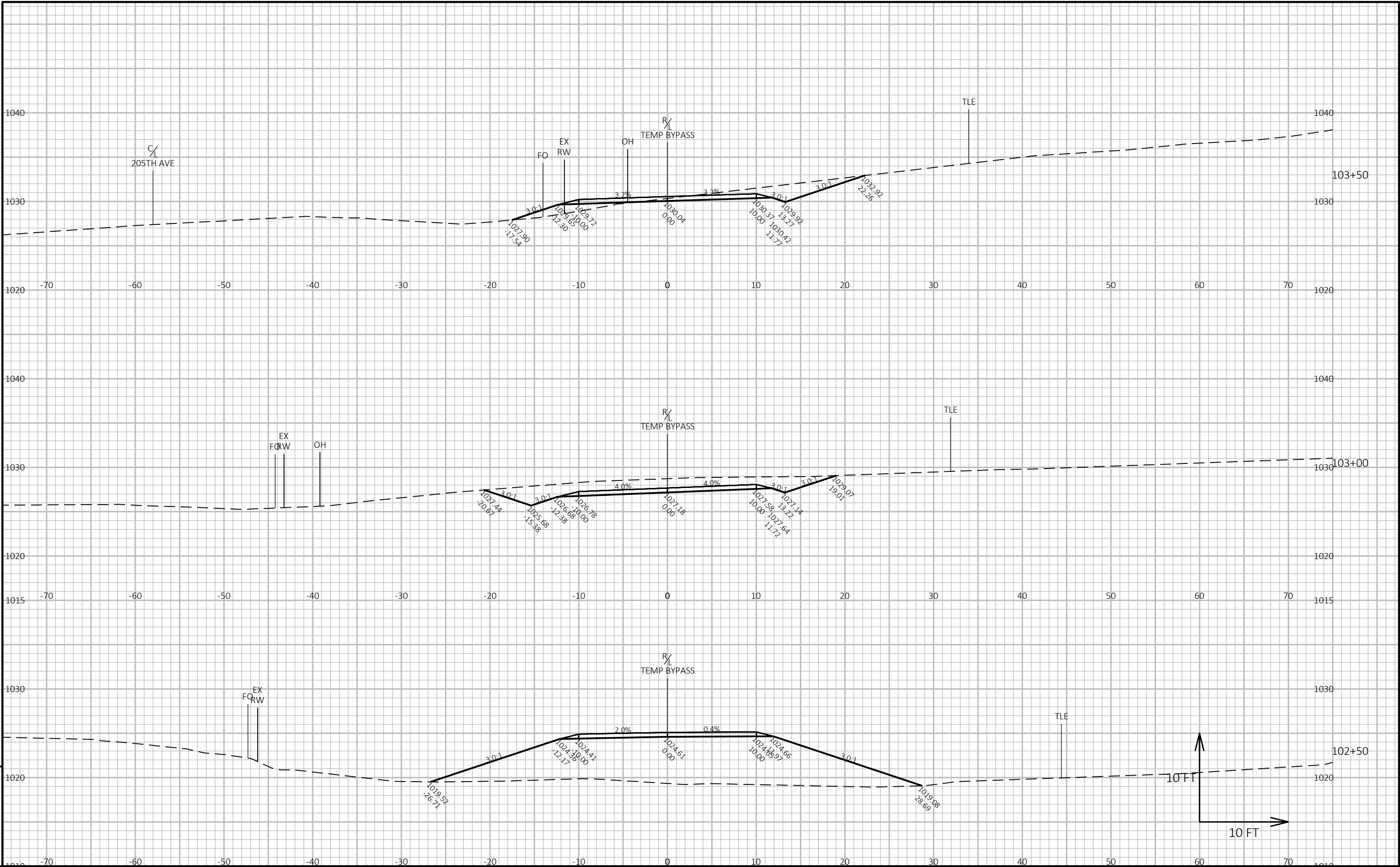
















## Notes



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