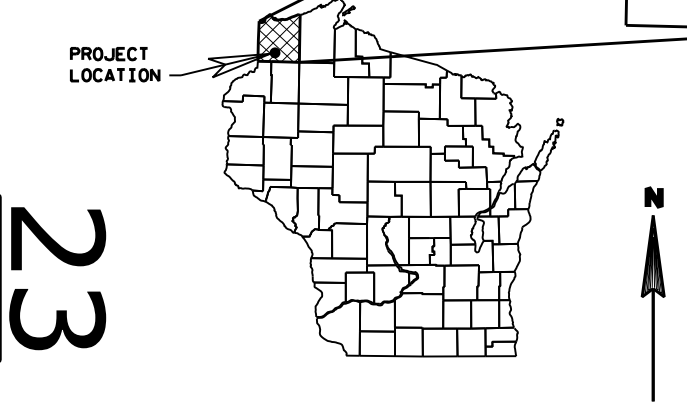


SUP
October 2025
PROJECT ID: 8386-00-72
WITH: N/A
COUNTY: DOUGLAS

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details (Includes Erosion Control Plans)
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 = 62



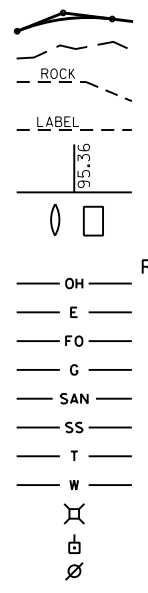
DESIGN DESIGNATION

A.A.D.T. (2025)	=	<100
A.A.D.T. (2045)	=	<100
D.H.V.	=	10
D.	=	50/50
T.	=	5%
DESIGN SPEED	=	40 MPH
ESALS	=	36,500

CONVENTIONAL SYMBOLS

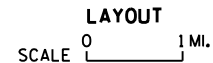
CORPORATE LIMITS	PL + 58.1
PROPERTY LINE	PL + 58.1
LOT LINE	---
LIMITED HIGHWAY EASEMENT	L---
EXISTING RIGHT OF WAY	---
PROPOSED OR NEW R/W LINE	---
SLOPE INTERCEPT	---
REFERENCE LINE	---
EXISTING CULVERT	---
PROPOSED CULVERT (Box or Pipe)	---
COMBUSTIBLE FLUIDS	CAUTION
HIGH VOLTAGE	CAUTION
MARSH AREA	---
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	OVERHEAD
	ELECTRIC
	FIBER OPTIC
	GAS
	SANITARY SEWER
	STORM SEWER
	TELEPHONE
	WATER
	UTILITY PEDESTAL
	POWER POLE
	TELEPHONE POLE

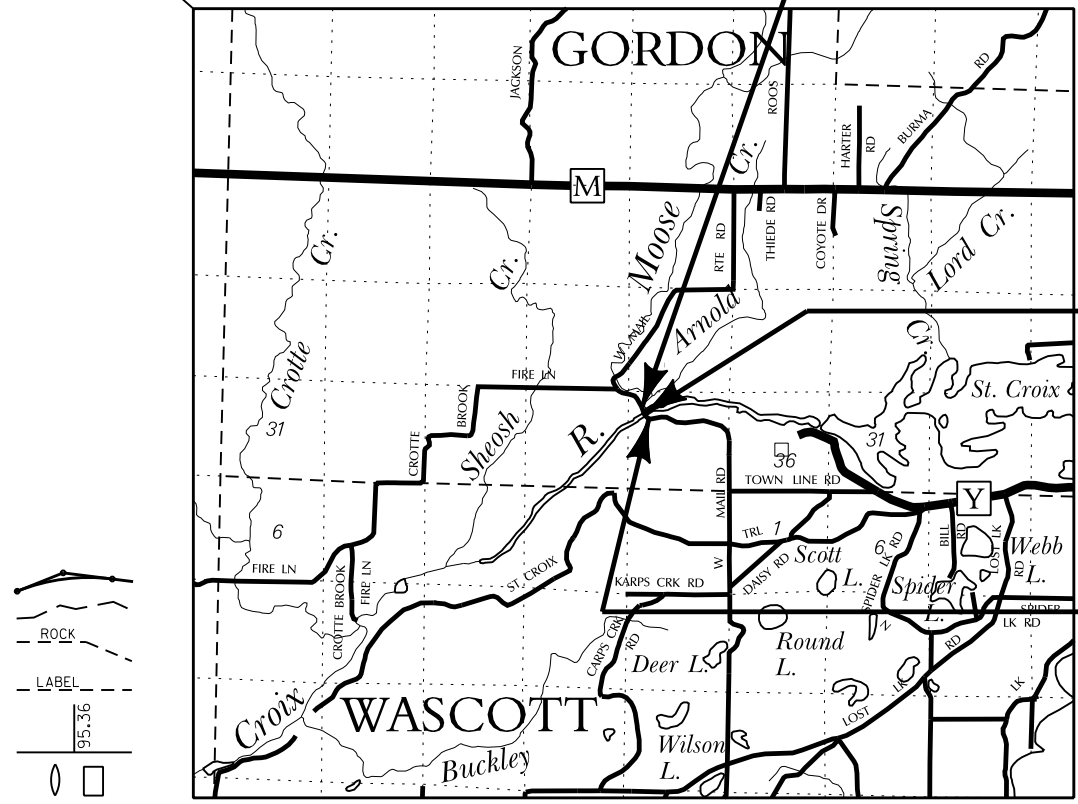


R-14-W | R-13-W

R-13-W | R-12-W



TOTAL NET LENGTH OF CENTERLINE = 0.085 MI.



STRUCTURE B-16-0147

T-44-N
T-43-N

BEGIN PROJECT

STA. 7+75
Y = 135335.45
X = 182259.19

END PROJECT

STA. 12+25
Y = 135685.26
X = 181980.08

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
T GORDON, WEST MAIL ROAD
ST CROIX RIVER BRIDGE B-16-0147
LOC STR
DOUGLAS COUNTY

STATE PROJECT NUMBER
8386-00-72

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8386-00-72	WISC 2026018	1

ACCEPTED FOR
Town of Gordon
6/17/25
Date
Town Chairman

ORIGINAL PLANS PREPARED BY
AYRES 3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

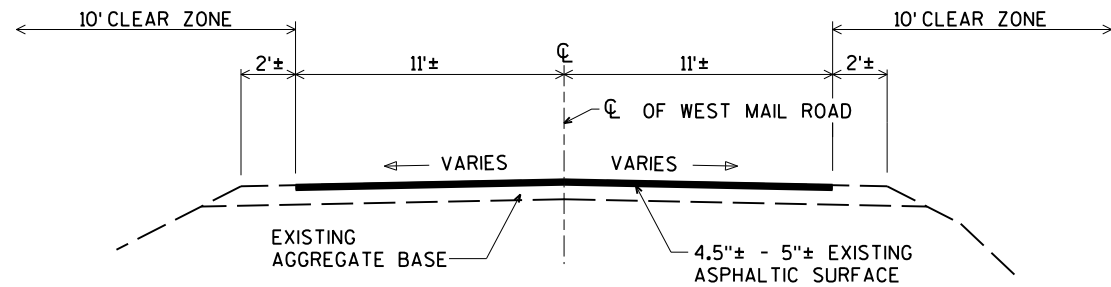
WISCONSIN
DANIEL N. SYDOW
E-38363
WI
PROFESSIONAL ENGINEER
06/17/2025
DATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor AYRES ASSOCIATES INC
Designer AYRES ASSOCIATES INC
PROJECT MANAGER TOU YANG, PE
Regional Examiner NW REGION
Regional Supervisor TOU YANG, PE

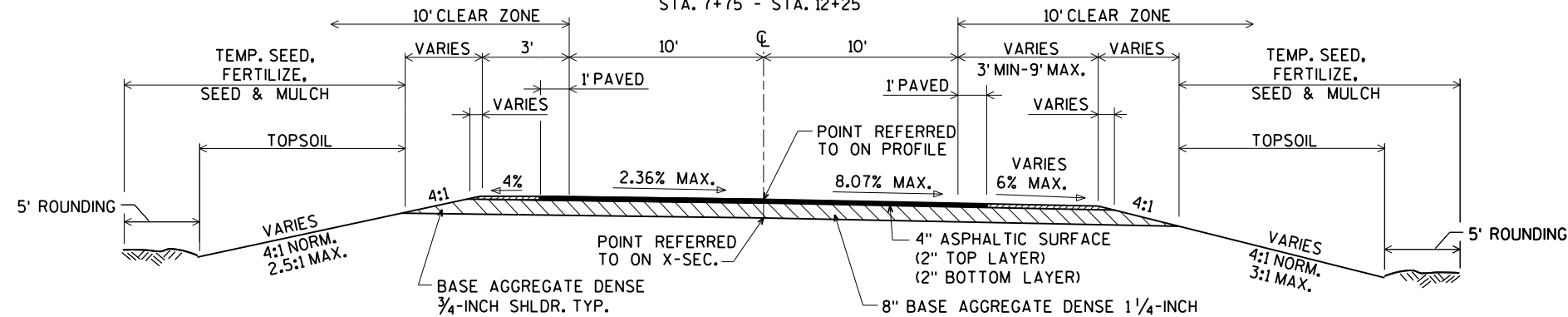
APPROVED FOR THE DEPARTMENT
DATE: 6/24/2025
(Signature)

E



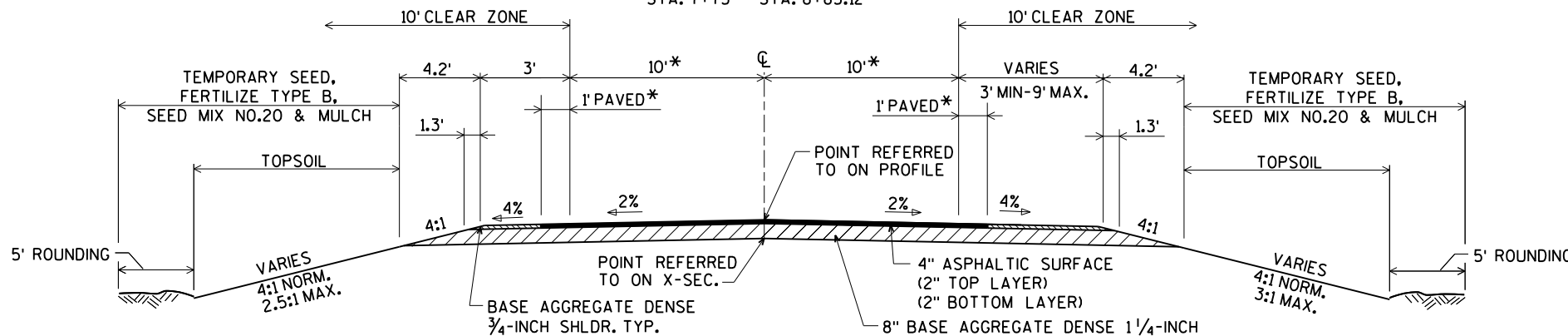
EXISTING TYPICAL SECTION

STA. 7+75 - STA. 12+25



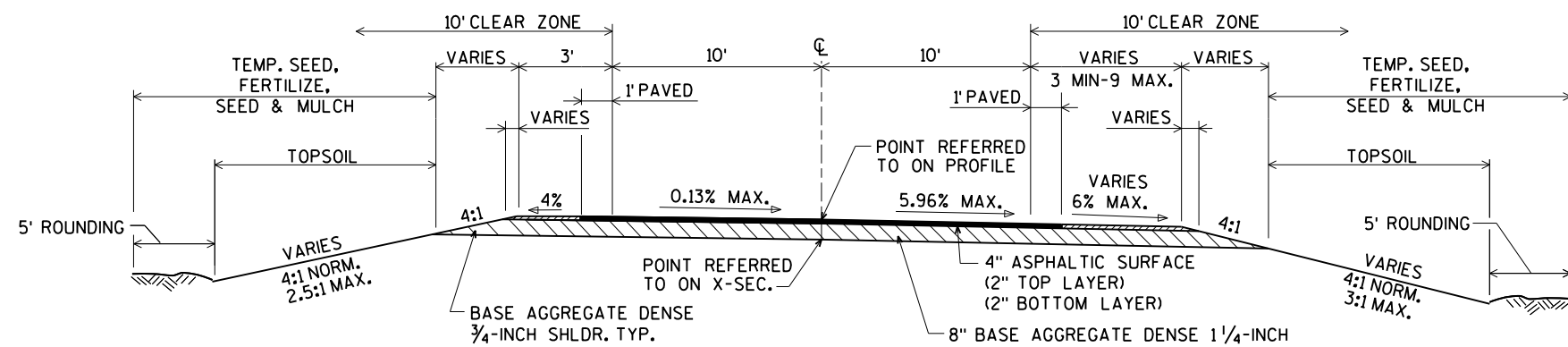
FINISHED SUPERELEVATED TYPICAL SECTION

STA. 7+75 - STA. 8+85.12



FINISHED TYPICAL SECTION

STA. 8+85.12 - STA. 9+40.25
STA. 10+62.75 - STA. 11+52.90



FINISHED SUPERELEVATED TYPICAL SECTION

STA. 11+52.90 - STA. 12+25

*THE ASPHALTIC SURFACE SHALL TAPER FROM 26.5-FOOT AT THE ENDS OF THE WINGS TO 22-FOOT WIDE AT 50-FOOT FROM THE ENDS OF THE BRIDGE.

GENERAL NOTES

EROSION CONTROL ITEMS TO BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER.

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

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.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCLUSIVE OF THE ROADBED, SHALL BE FERTILIZED, SEEDED, AND MULCHED AS DIRECTED BY THE ENGINEER.

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

TOPSOIL SHALL BE PLACED ON THE SLOPES, TO THE POINT OF INTERCEPT WITH THE ORIGINAL GROUND SHOWN ON THE CROSS SECTIONS.

THE DEPARTMENT OF TRANSPORTATION WILL FURNISH THE CONTRACTOR A MONUMENT WHICH SHALL BE SET IN THE STRUCTURE AS DIRECTED BY THE ENGINEER IN THE FIELD. INSTALLATION WILL BE INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY BRIDGES".

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM (NAVD 88).

UTILITIES

EAST CENTRAL ENERGY
412 MAIN AVENUE N
PO BOX 39
BRAHAM, MN 55006
ATTN: DAVID WALETSKI
763-691-2037
612-390-0762 (cell)
dave.waletski@ecemn.com

DIGGERS HOTLINE

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

WISCONSIN DEPARTMENT OF NATURAL RESOURCES CONTACT:

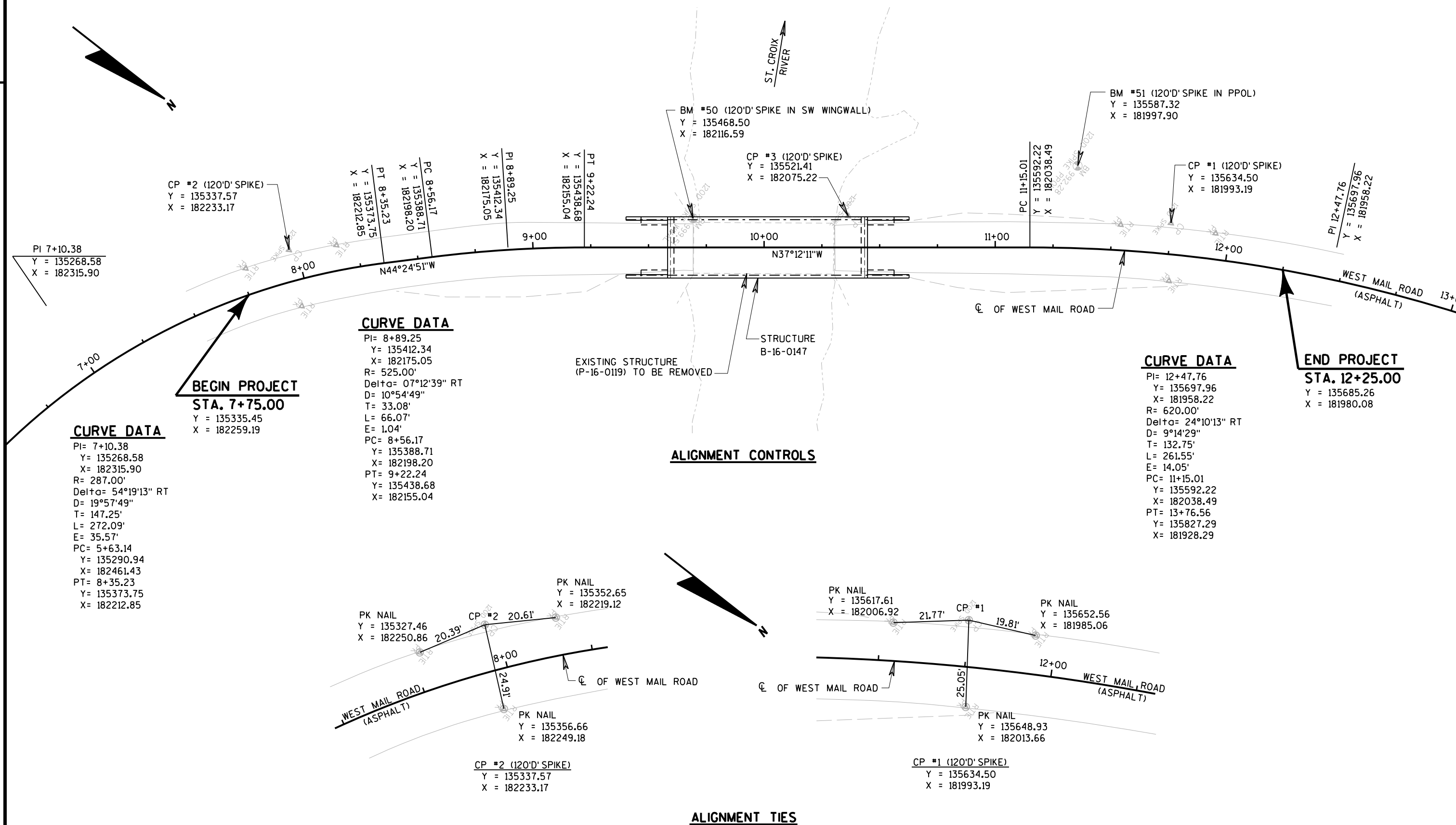
AMY CRONK
810 W MAPLE STREET
SPOONER, WI 54801
715-635-4229
715-520-3976
amy.cronk@wisconsin.gov

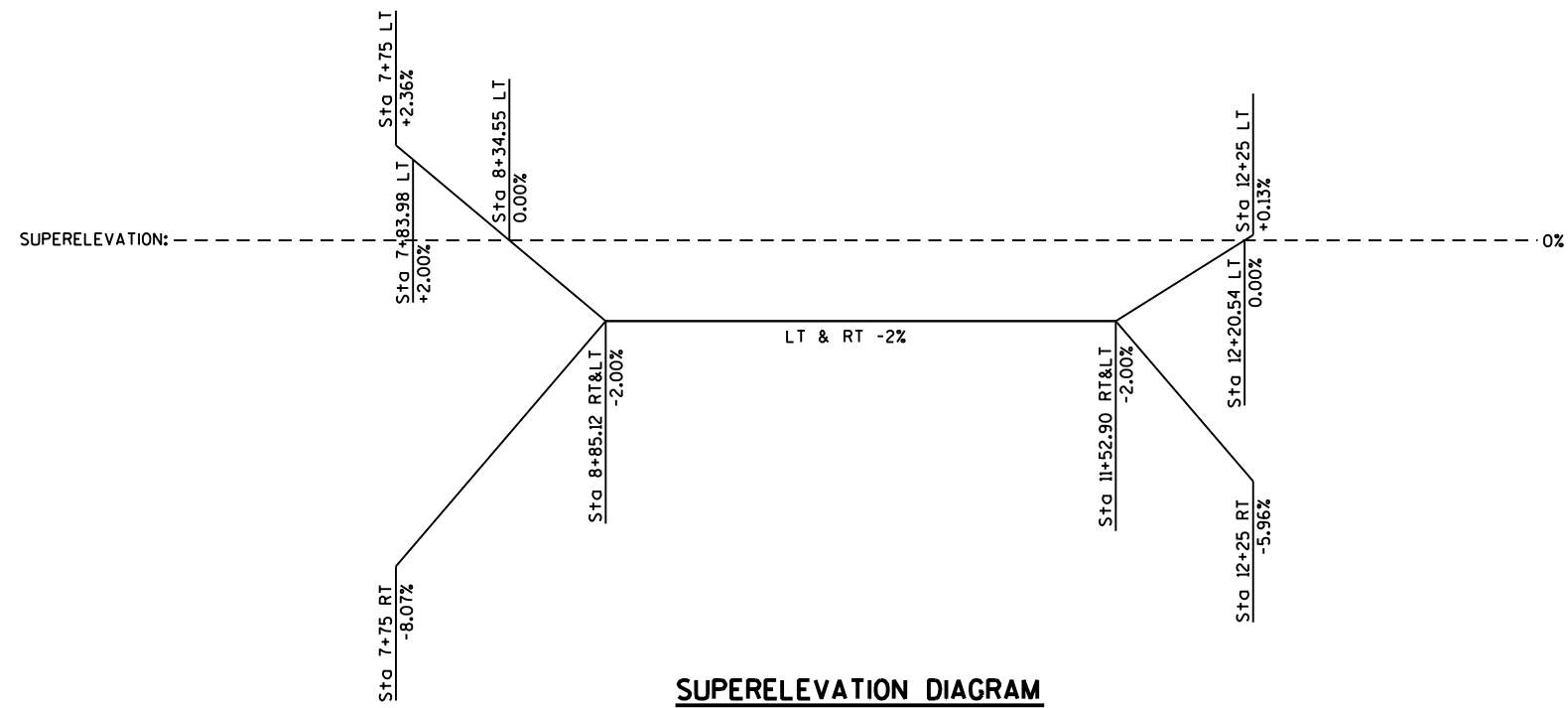
DESIGNER

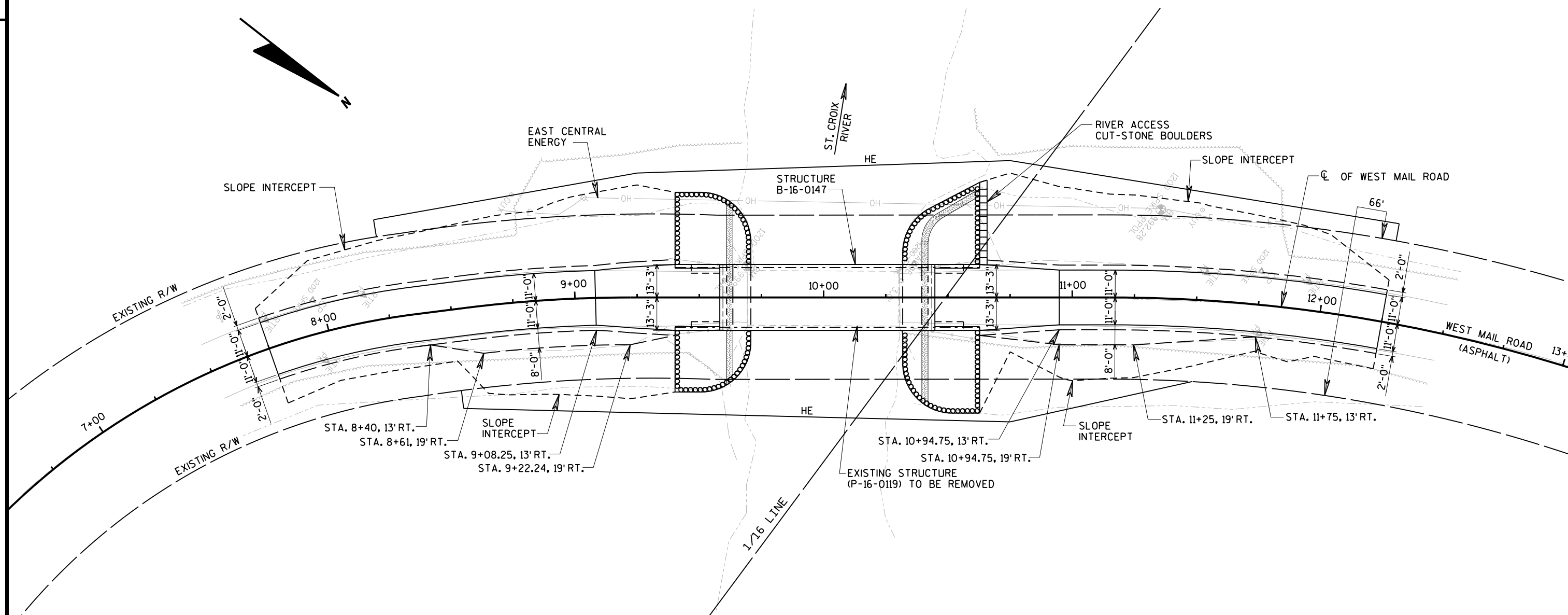
AYRES ASSOCIATES
3433 OAKWOOD HILLS PARKWAY
EAU CLAIRE, WI 54701
ATTN: DANIEL N. SYDOW
715-834-3161
sydowd@AyresAssociates.com

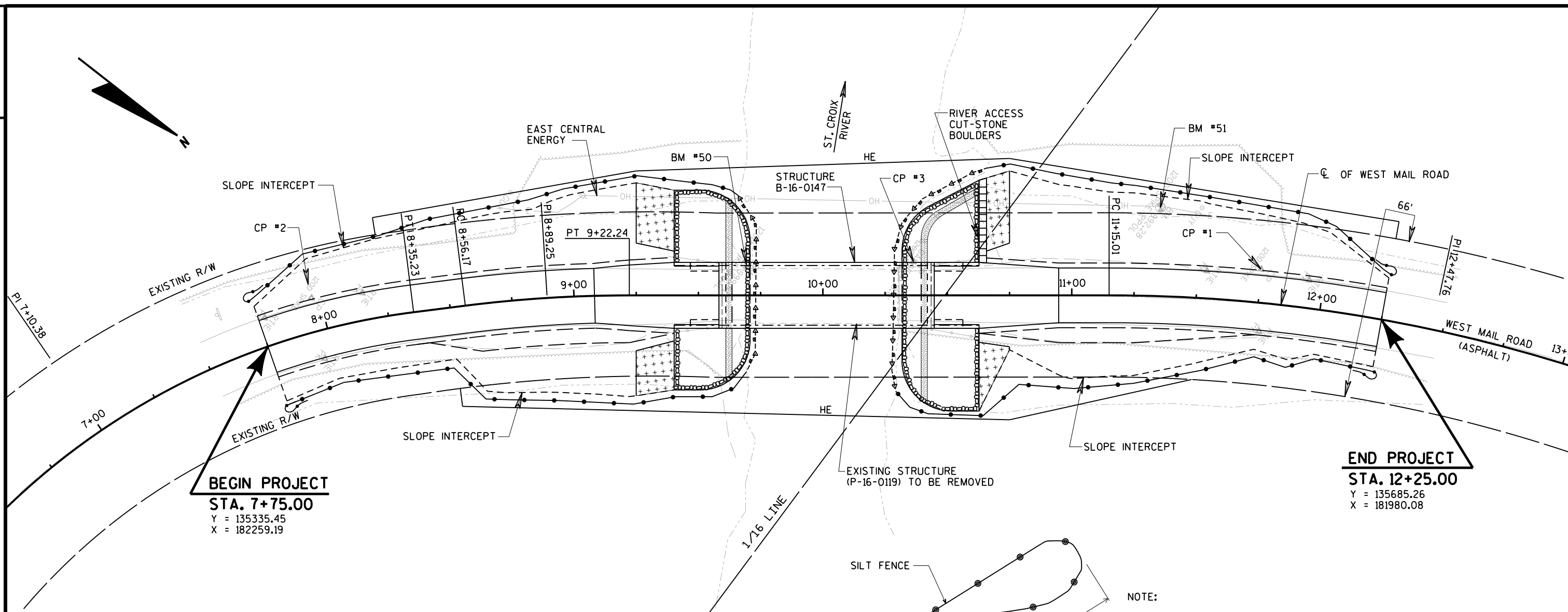
TOWN CONTACT:

TOWN OF GORDON, CHAIRMAN
9709E COUNTY ROAD Y
PO BOX 68
GORDON, WI 54838
ATTN: CRAIG GOLEMBIEWSKI
715-520-3716
townofgordonsupervisor1@gmail.com





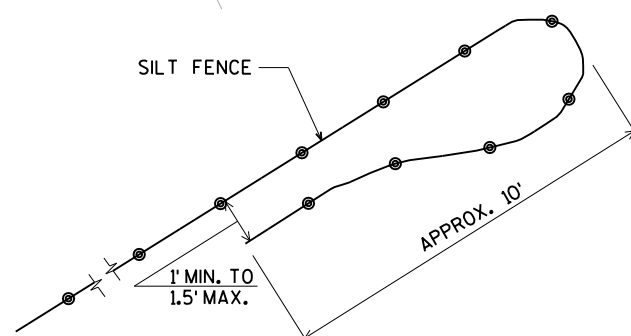


**BEGIN PROJECT****STA. 7+75.00**Y = 135335.45
X = 182259.19**END PROJECT****STA. 12+25.00**Y = 135685.26
X = 181980.08

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

TOTAL PROJECT AREA = 0.902 ACRES

TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.647 ACRES

**SILT FENCE END DETAIL**

(TURNAROUNDS - TO REDIRECT AMPHIBIANS AND REPTILES AWAY FROM CONSTRUCTION ZONE)

NOTE:

NO DISTURBANCE OR TOPSOIL STOCKPILING IS ALLOWED OUTSIDE OF THE SLOPE INTERCEPTS. WETLANDS EXIST IN THE PROJECT AREA.

A STATE ENDANGERED MUSSEL SPECIES AND A FEDERAL PROPOSED ENDANGERED MUSSEL SPECIES ARE KNOWN TO OCCUR IN THE PROJECT OR ITS VICINITY. TO AVOID IMPACTS TO THE SPECIES, CONSTRUCTION OF THE PROPOSED BRIDGE AND INSTALLATION OF RIPRAP AND TURBIDITY BARRIERS SHALL BE DONE AS SHOWN ON THE PLANS. AVOID ADDING EXTRA RIPRAP OR PLACING OTHER MATERIALS IN THE RIVER. IF ADDITIONAL MATERIALS ARE ADDED TO THE RIVER BEYOND WHAT IS SHOWN ON THE PLANS A MUSSEL SURVEY AND RELOCATION WILL BE NEEDED PRIOR TO CONSTRUCTION.

LEGEND

	EROSION MAT CLASS II TYPE C
	SILT FENCE
	TURBIDITY BARRIER
	RIPRAP HEAVY

Estimate Of Quantities

8386-00-72

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	6.000	6.000
0004	201.0205	Grubbing	STA	6.000	6.000
0006	203.0270	Removing Structure Over Waterway Debris Capture (structure) 01. P-16-0119	EACH	1.000	1.000
0008	204.0165	Removing Guardrail	LF	112.000	112.000
0010	205.0100	Excavation Common	CY	211.000	211.000
0012	205.0508.S	Excavation, Hauling, and Disposal of Potential Creosote Contaminated Soil	TON	94.000	94.000
0014	206.1001	Excavation for Structures Bridges (structure) 01. B-16-0147	EACH	1.000	1.000
0016	208.0100	Borrow	CY	474.000	474.000
0018	210.1500	Backfill Structure Type A	TON	500.000	500.000
0020	213.0100	Finishing Roadway (project) 01. 8386-00-72	EACH	1.000	1.000
0022	305.0110	Base Aggregate Dense 3/4-Inch	TON	40.000	40.000
0024	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	305.000	305.000
0026	455.0605	Tack Coat	GAL	64.000	64.000
0028	465.0105	Asphaltic Surface	TON	210.000	210.000
0030	502.0100	Concrete Masonry Bridges	CY	195.000	195.000
0032	502.3200	Protective Surface Treatment	SY	300.000	300.000
0034	503.0137	Prestressed Girder Type I 36W-Inch	LF	340.000	340.000
0036	505.0400	Bar Steel Reinforcement HS Structures	LB	4,880.000	4,880.000
0038	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	19,050.000	19,050.000
0040	506.2605	Bearing Pads Elastomeric Non-Laminated	EACH	8.000	8.000
0042	506.4000	Steel Diaphragms (structure) 01. B-16-0147	EACH	6.000	6.000
0044	513.4061	Railing Tubular Type M	LF	249.400	249.400
0046	516.0500	Rubberized Membrane Waterproofing	SY	18.000	18.000
0048	517.1015.S	Concrete Staining Multi-Color (structure) 01. B-16-0147	SF	680.000	680.000
0050	517.1050.S	Architectural Surface Treatment (structure) 01. B-16-0147	SF	680.000	680.000
0052	550.0020	Pre-Boring Rock or Consolidated Materials	LF	350.000	350.000
0054	550.1120	Piling Steel HP 12-Inch X 53 Lb	LF	420.000	420.000
0056	606.0300	Riprap Heavy	CY	310.000	310.000
0058	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	200.000	200.000
0060	618.0100	Maintenance and Repair of Haul Roads (project) 01. 8386-00-72	EACH	1.000	1.000
0062	619.1000	Mobilization	EACH	1.000	1.000
0064	624.0100	Water	MGAL	23.000	23.000
0066	625.0100	Topsoil	SY	1,215.000	1,215.000
0068	627.0200	Mulching	SY	1,545.000	1,545.000
0070	628.1504	Silt Fence	LF	1,030.000	1,030.000
0072	628.1520	Silt Fence Maintenance	LF	2,060.000	2,060.000
0074	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0076	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0078	628.2027	Erosion Mat Class II Type C	SY	155.000	155.000
0080	628.6005	Turbidity Barriers	SY	265.000	265.000
0082	628.7504	Temporary Ditch Checks	LF	50.000	50.000
0084	629.0210	Fertilizer Type B	CWT	1.000	1.000
0086	630.0120	Seeding Mixture No. 20	LB	76.000	76.000
0088	630.0200	Seeding Temporary	LB	46.000	46.000
0090	630.0300	Seeding Borrow Pit	LB	16.000	16.000
0092	630.0500	Seed Water	MGAL	38.000	38.000
0094	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	4.000	4.000
0096	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0098	638.2102	Moving Signs Type II	EACH	1.000	1.000

Estimate Of Quantities

8386-00-72

Line	Item	Item Description	Unit	Total	Qty
0100	638.2602	Removing Signs Type II	EACH	6.000	6.000
0102	638.3000	Removing Small Sign Supports	EACH	6.000	6.000
0104	638.4000	Moving Small Sign Supports	EACH	1.000	1.000
0106	642.5001	Field Office Type B	EACH	1.000	1.000
0108	643.0420	Traffic Control Barricades Type III	DAY	1,980.000	1,980.000
0110	643.0705	Traffic Control Warning Lights Type A	DAY	2,640.000	2,640.000
0112	643.0900	Traffic Control Signs	DAY	1,540.000	1,540.000
0114	643.5000	Traffic Control	EACH	1.000	1.000
0116	645.0111	Geotextile Type DF Schedule A	SY	100.000	100.000
0118	645.0120	Geotextile Type HR	SY	530.000	530.000
0120	646.1020	Marking Line Epoxy 4-Inch	LF	900.000	900.000
0122	650.4500	Construction Staking Subgrade	LF	363.000	363.000
0124	650.5000	Construction Staking Base	LF	363.000	363.000
0126	650.6501	Construction Staking Structure Layout (structure) 01. B-16-0147	EACH	1.000	1.000
0128	650.9911	Construction Staking Supplemental Control (project) 01. 8386-00-72	EACH	1.000	1.000
0130	650.9920	Construction Staking Slope Stakes	LF	363.000	363.000
0132	690.0150	Sawing Asphalt	LF	46.000	46.000
0134	715.0502	Incentive Strength Concrete Structures	DOL	1,170.000	1,170.000
0136	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. 10+00	EACH	1.000	1.000
0138	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	300.000	300.000
0140	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	300.000	300.000
0142	SPV.0165	Special 01. Cut-Stone Boulders	SF	140.000	140.000
0144	SPV.0195	Special 01. Select Crushed Material for Travel Corridor	TON	35.000	35.000

CLEARING & GRUBBING

				201.0105 CLEARING STA	201.0205 GRUBBING STA
STATION	TO	STATION	LOCATION		
7+00	-	13+00	MAINLINE	6	6
TOTAL 0010				6	6

NOTE: TREES TO BE CUT DOWN BY OTHERS PRIOR TO CONSTRUCTION. CLEAR CUT TREES.

REMOVING GUARDRAIL

				204.0165 REMOVING GUARDRAIL LF
STATION	TO	STATION	LOCATION	
9+38	-	9+65	LT	28
9+38	-	9+65	RT	28
10+35	-	10+63	LT	28
10+35	-	10+63	RT	28
TOTAL 0010				112

BASE AGGREGATE DENSE

				305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON
STATION	TO	STATION	LOCATION		
7+75	-	9+58.25	MAINLINE	20	155
10+44.75	-	12+25	MAINLINE	20	150
TOTAL 0010				40	305

EXCAVATION, HAULING, AND DISPOSAL OF POTENTIAL CREOSOTE CONTAMINATED SOIL

			205.0508.S EXCAVATION, HAULING, AND DISPOSAL OF POTENTIAL CREOSOTE CONTAMINATED SOIL
LOCATION	TON	REMARKS	
P-16-0147	94	TIMBER ABUTMENTS	
TOTAL 0010	94		

NOTE: EXCAVATE A 2' OFFSET AROUND EACH EXISTING BRIDGE TIMBER SUBSTRUCTURE AND 3' DEEP.

WEST MAIL ROAD EARTHWORK SUMMARY

From/To Station	Location	Excavation Common (1) 205.0100	Salvaged / Unuseable Pavement Material (5)	Unexpanded Fill	Expanded Fill (2)	Mass Ordinate +/- (3)	Waste	Borrow
		Cut			Factor 1.30			
7+75 - 9+58.25	WEST MAIL ROAD	120	46	276	359	-285	0	285
10+44.75 - 12+25	WEST MAIL ROAD	91	44	181	236	-189	0	189
TOTAL		211		458	595			474

- 1) Excavation Common is the Cut. Item number 205.0100.
2) Expanded Fill. Factor = 1.30; Expanded Fill = Unexpanded Fill * Fill Factor
3) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material on the project.
4) All quantities shown in CY.
5) Salvaged/unuseable pavement material

ASPHALTIC SURFACE

				455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON
STATION	TO	STATION	LOCATION		
7+75	-	9+58.25	MAINLINE	32	105
10+44.75	-	12+25	MAINLINE	32	105
TOTAL 0010				64	210

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

WATER

LOCATION	624.0100 WATER MGAL
COMPACTION	5
DUST CONTROL	18
TOTAL 0010	23

RESTORATION ITEMS

STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0200 SEEDING TEMPORARY LB	630.0300 SEEDING BORROW PIT LB	630.0500 SEED WATER MGAL
7+75	-	9+58.25	MAINLINE	495	615	0.4	31	19	8	15
10+44.75	-	12+25	MAINLINE	475	620	0.4	30	18	5	15
			UNDISTRIBUTED	245	310	0.2	15	9	3	8
TOTAL 0010				1,215	1,545	1.0	76	46	16	38

EROSION CONTROL ITEMS

STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2027 EROSION MAT CLASS II TYPE C SY	628.6005 TURBIDITY BARRIERS SY	628.7504 TEMPORARY DITCH CHECKS LF
7+75	-	9+75	MAINLINE	425	850	75	85	--
10+25	-	12+25	MAINLINE	400	800	50	125	--
			UNDISTRIBUTED	205	410	30	55	50
TOTAL 0010				1,030	2,060	155	265	50

MOBILIZATIONS EROSION CONTROL

LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
PROJECT LIMITS	4	4
TOTAL 0010	4	4

SIGNS TYPE II

STATION	LOCATION	SIGN CODE	SIGN SIZE (INCHES)	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	REMARKS
9+37	RT	R12-1		--	--	--	1	1	--	10 TON WEIGHT LIMIT SIGN
9+39	LT	W5-52L	12x36	1	3	--	--	--	--	OBJECT MARKER SIGN
9+39	RT	W5-52R	12x36	1	3	--	--	--	--	OBJECT MARKER SIGN
9+50	LT			--	--	1	--	--	1	ST CROIX RIVER SIGN
9+68	LT	W5-52L		--	--	--	1	1	--	OBJECT MARKER SIGN
9+68	RT	W5-52R		--	--	--	1	1	--	OBJECT MARKER SIGN
10+31	LT	W5-52R		--	--	--	1	1	--	OBJECT MARKER SIGN
10+31	RT	W5-52L		--	--	--	1	1	--	OBJECT MARKER SIGN
10+63	LT	R12-1		--	--	--	1	1	--	10 TON WEIGHT LIMIT SIGN
10+64	LT	W5-52R	12x36	1	3	--	--	--	--	OBJECT MARKER SIGN
10+64	RT	W5-52L	12x36	1	3	--	--	--	--	OBJECT MARKER SIGN
TOTAL 0010				4	12	1	6	6	1	

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

TRAFFIC CONTROL							
		643.0420 TRAFFIC CONTROL BARRICADES TYPE III		643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A		643.0900 TRAFFIC CONTROL SIGNS	
LOCATION	DURATION DAYS	EACH	DAY	EACH	DAY	EACH	DAY
PER SDD 15D UNDISTRIBUTED	95	18	1,710	24	2,280	14	1,330
		--	270	--	360	--	210
TOTAL 0010			1,980		2,640		1,540

MARKING LINE EPOXY 4-INCH						
STATION	TO	STATION	LOCATION	COLOR/DESCRIPTION	646.1020 MARKING LINE EPOXY 4-INCH LF	
7+75	-	12+25	MAINLINE	DBL YELLOW/CENTERLINE	900	
TOTAL 0010					900	

SAWING ASPHALT			
STATION	LOCATION	690.0150 SAWING ASPHALT LF	
7+75	MAINLINE	23	
12+25	MAINLINE	23	
TOTAL 0010		46	

CONSTRUCTION STAKING STRUCTURE LAYOUT			
CATEGORY	STATION	LOCATION	650.6501.01 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) (01. B-16-0147) EACH
0020	10+00	MAINLINE	1
TOTAL 0020			1

CONSTRUCTION STAKING						
STATION	TO	STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
7+75	-	9+58.25	MAINLINE	183	183	183
10+44.75	-	12+25	MAINLINE	180	180	180
TOTAL 0010				363	363	363

INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM		
STATION	LOCATION	999.2000.S.01 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM (STATION) (01. 10+00) EACH
10+00	MAINLINE	1
TOTAL 0010		1

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

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

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DOUGLAS COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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

ALL NEW RIGHT-OF-WAY AND PERMANENT EASEMENT MONUMENTS ARE TYPE 2 MONUMENTS (3/4"x24" CAPPED IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

AN EASEMENT FOR HIGHWAY PURPOSES (HE), AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

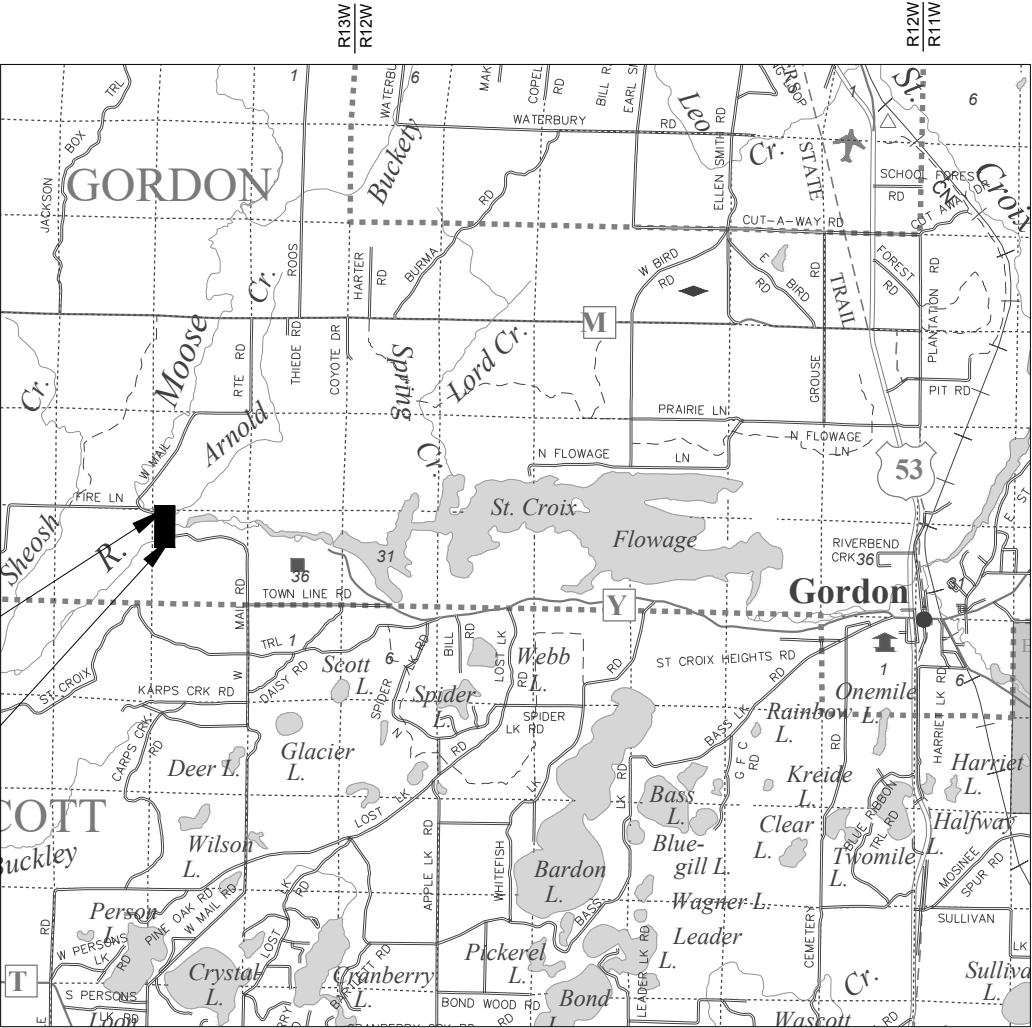
PROPERTY LINES SHOWN ON THIS PLAT FOR PROPERTIES BEING IMPACTED ARE DRAWN FROM DATA DERIVED FROM FILED/RECORDED MAPS AND DOCUMENTS OF PUBLIC RECORD. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD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

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

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINT OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR WEST MAIL ROAD SHOWN HEREIN IS PRESUMED TO BE 66 FEET IN WIDTH CENTERED ON THE EXISTING CENTERLINE OF THE TRAVELED WAY PER STATE STATUTE 82.31(2).



CONVENTIONAL UTILITY SYMBOLS

WATER	---
GAS	---
TELEPHONE	---
OVERHEAD TRANSMISSION LINES	---
ELECTRIC	---
CABLE TELEVISION	---
FIBER OPTIC	---
SANITARY SEWER	---
STORM SEWER	---
ELECTRIC TOWER	---

CURVE DATA ABBREVIATIONS

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

R/W PROJECT NUMBER	8386-00-02	SHEET NUMBER	4.01	TOTAL SHEETS	2
CONSTRUCTION PROJECT NUMBER	8386-00-72				
PLAT OF RIGHT OF WAY REQUIRED FOR T GORDON, WEST MAIL ROAD ST CROIX RIVER BRIDGE B-16-0147					
LOC STR			DOUGLAS COUNTY		

CONVENTIONAL ABBREVIATIONS

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

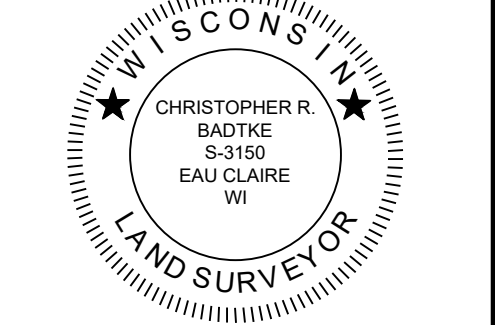
APPROVED
FOR
TOWN OF GORDON
4/11/25
DATE
TOWN OF GORDON

PLAT PREPARED BY
AYRES

THE SURVEY IS PREPARED AT THE REQUEST OF THE TOWN OF GORDON.

THE FIELD SURVEY WAS PERFORMED IN AUGUST 2021.

THIS SURVEY IS ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.



01/09/2024
CHRISTOPHER R. BADTKE, P.L.S. DATE
S-3150

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED	EASEMENTS
50	EAST CENTRAL ENERGY	RELEASE OF RIGHTS	NO EASEMENT OF RECORD - PARCEL 1

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NO.	OWNER(S)	INTEREST REQUIRED	R/W (ACRES)			
			NEW	EXISTING	TOTAL	HE
1	UNITED STATES OF AMERICA C/O US DEPARTMENT OF INTERIOR	HE	----	----	----	0.220

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE TOWN.

R/W CURVE TABLE

CURVE #	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
103-104	71.01'	588.00'	S30°24'12"E	70.97'
108-109	52.24'	249.50'	S50°15'03"E	52.15'
110-111	55.78'	315.50'	N51°13'27"W	55.71'

R/W STATION & OFFSET TABLE

POINT	STATION	OFFSET
100	10+88.28	52.85' LT
101	12+25.00	40.00' LT
102	12+25.00	32.99' LT
103	12+25.00	33.01' RT
104	11+50.00	32.88' RT
105	10+75.00	50.00' RT
106	8+50.00	40.00' RT
107	8+50.00	32.74' RT
108	8+33.99	33.00' RT
109	7+75.00	32.72' RT
110	7+75.00	33.28' LT
111	8+25.00	33.06' LT
112	8+25.00	40.00' LT
113	9+25.00	50.00' LT
114	10+75.00	55.00' LT

BEGIN RELOCATION ORDER
STA 12+85.00
Y = 553545.788
X = 864001.281
LOCATED 114.57 FEET NORTH AND 3.16 FEET EAST OF THE SOUTHWEST CORNER OF SECTION 8, TOWNSHIP 34 NORTH, RANGE 4 WEST.

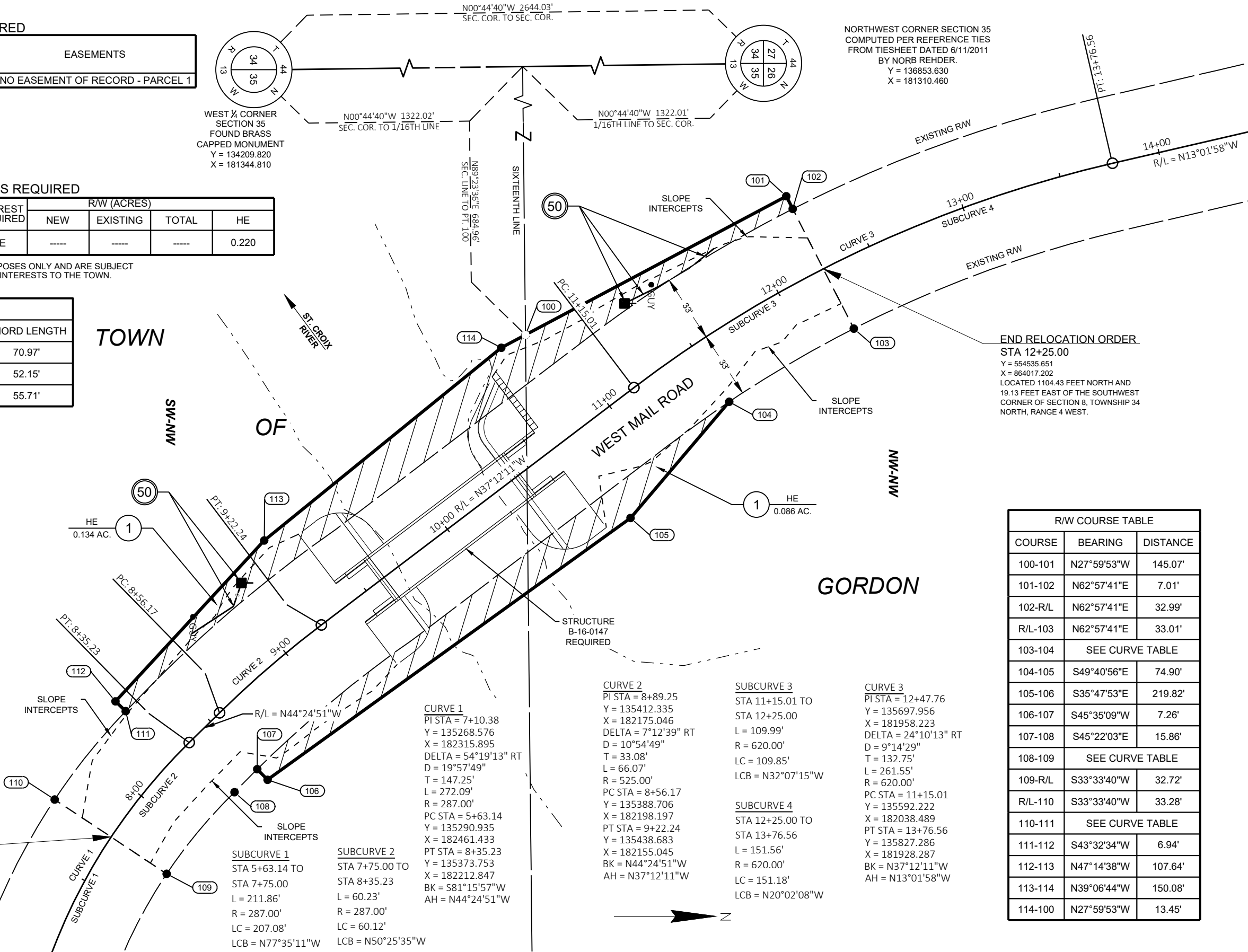
TOWN

SW-NW

OF

GORDON

NW-NW

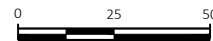


REVISION DATE				

DATE 01/09/2024

GRID FACTOR

SCALE, FEET



HWY: WEST MAIL ROAD

COUNTY: DOUGLAS

STATE R/W PROJECT NUMBER

8386-00-02

CONSTRUCTION PROJECT NUMBER

8386-00-73

PLAT SHEET 4.02

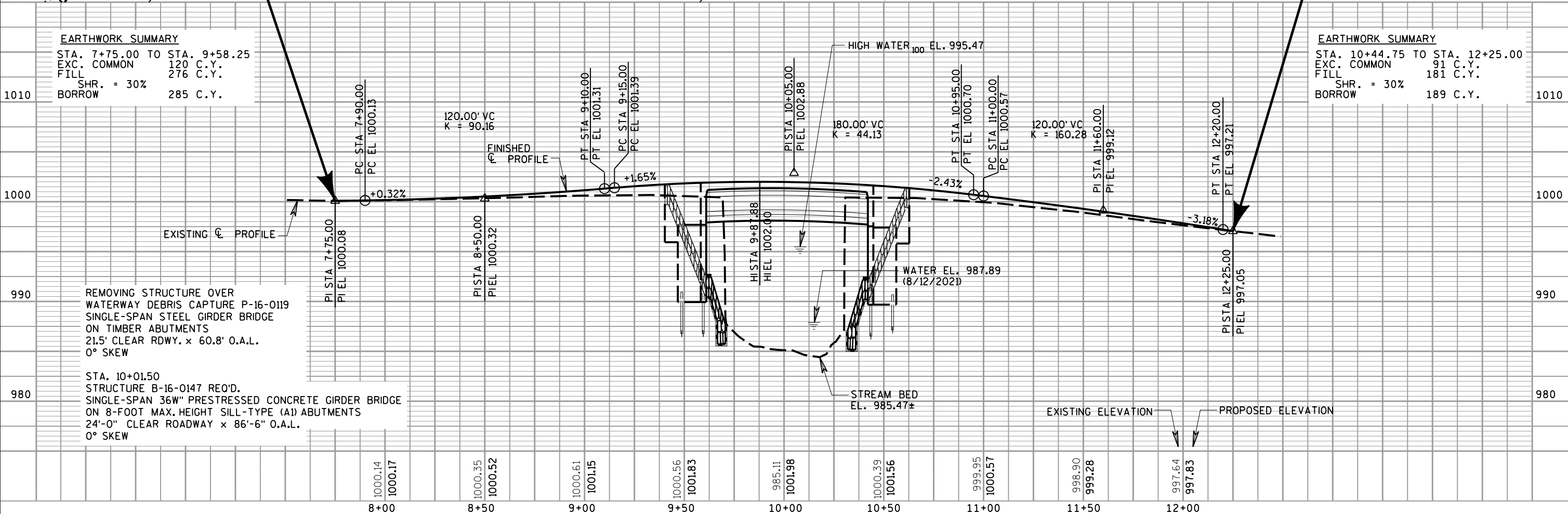
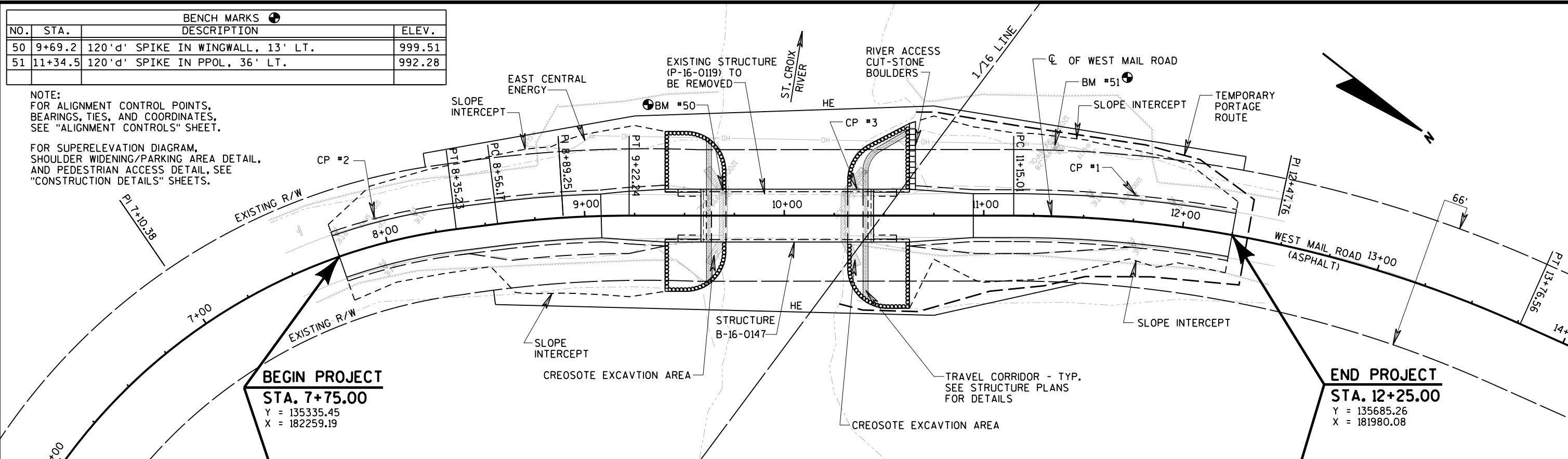
PS&E SHEET

E

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
50	9+69.2	120'd SPIKE IN WINGWALL, 13' LT.	999.51
51	11+34.5	120'd SPIKE IN PPOL, 36' LT.	992.28

NOTE:
FOR ALIGNMENT CONTROL POINTS,
BEARINGS, TIES, AND COORDINATES,
SEE "ALIGNMENT CONTROLS" SHEET.

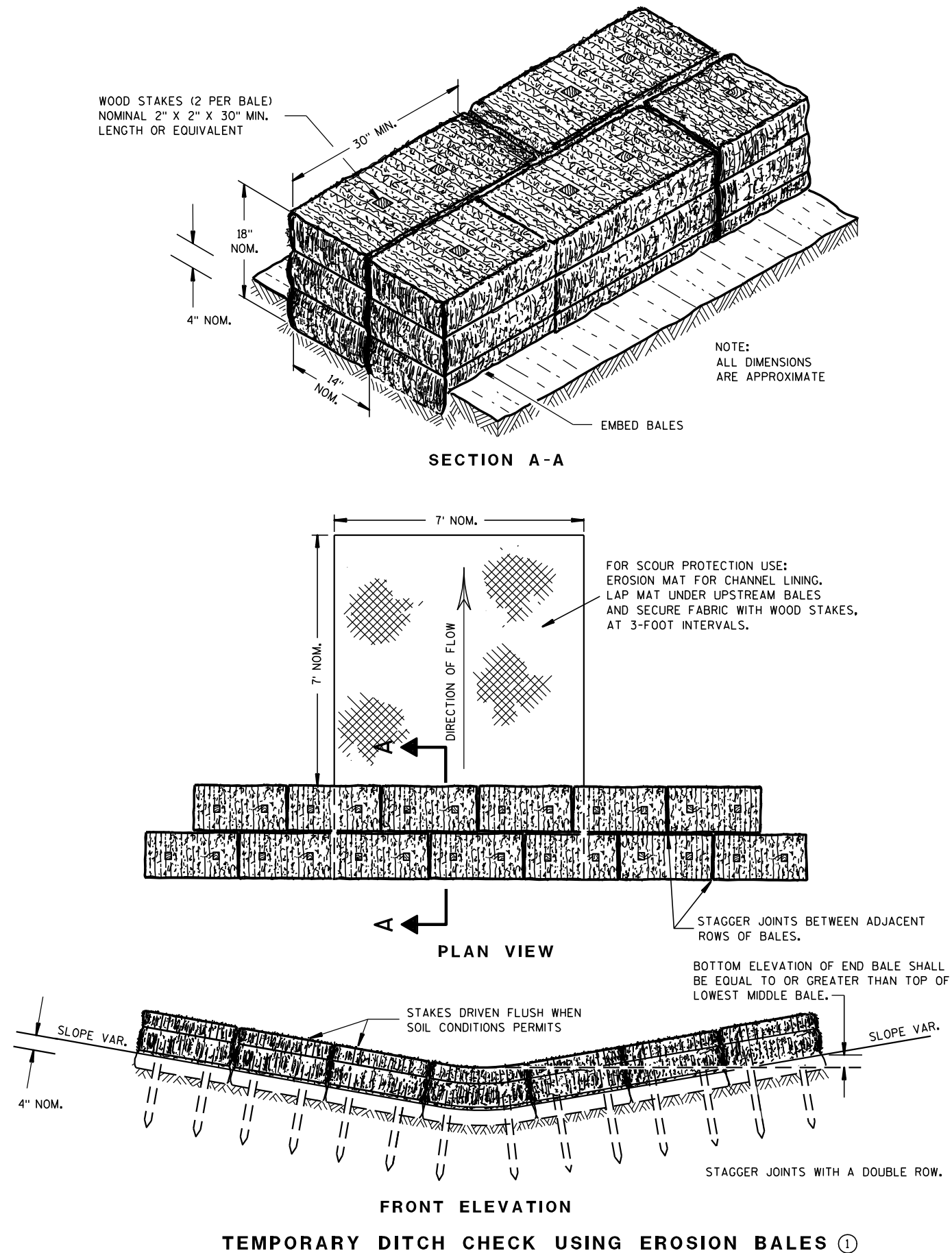
FOR SUPERELEVATION DIAGRAM,
SHOULDER WIDENING/PARKING AREA DETAIL,
AND PEDESTRIAN ACCESS DETAIL, SEE
"CONSTRUCTION DETAILS" SHEETS.



PROJECT NO: 8386-00-72	HWY: WEST MAIL ROAD	COUNTY: DOUGLAS	PLAN AND PROFILE	SCALE, FEET 0 25 50	SHEET	E
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Standard Detail Drawing List

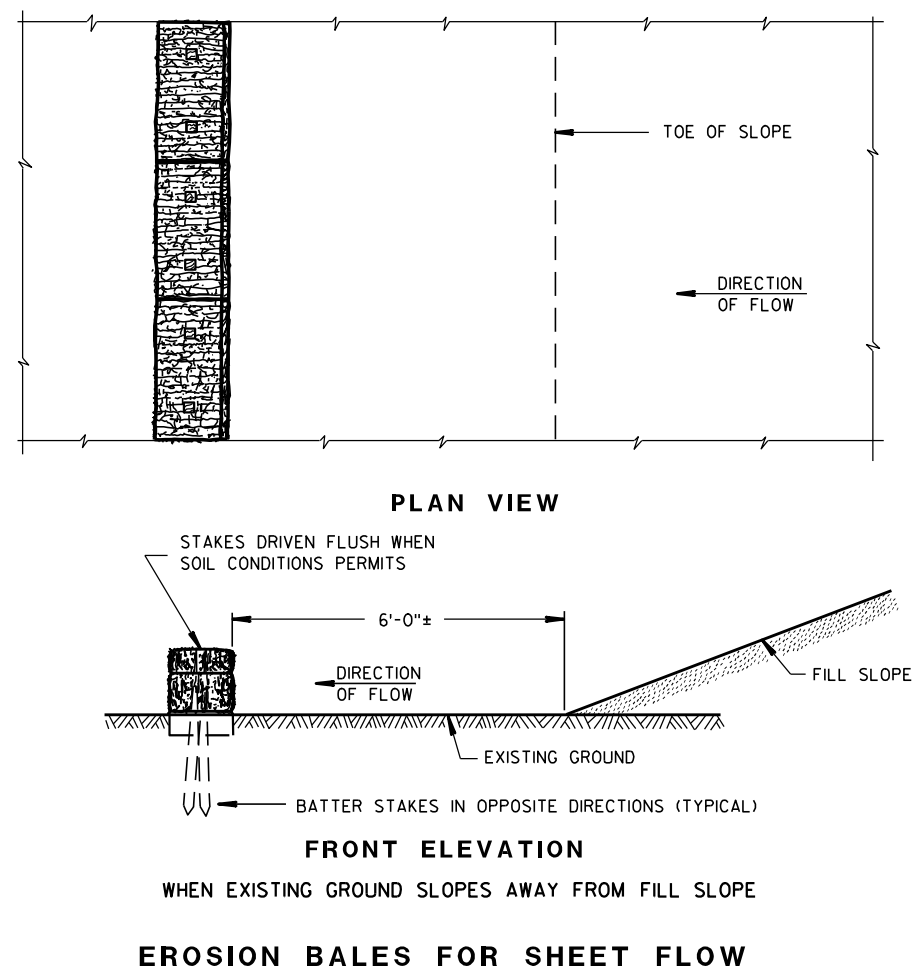
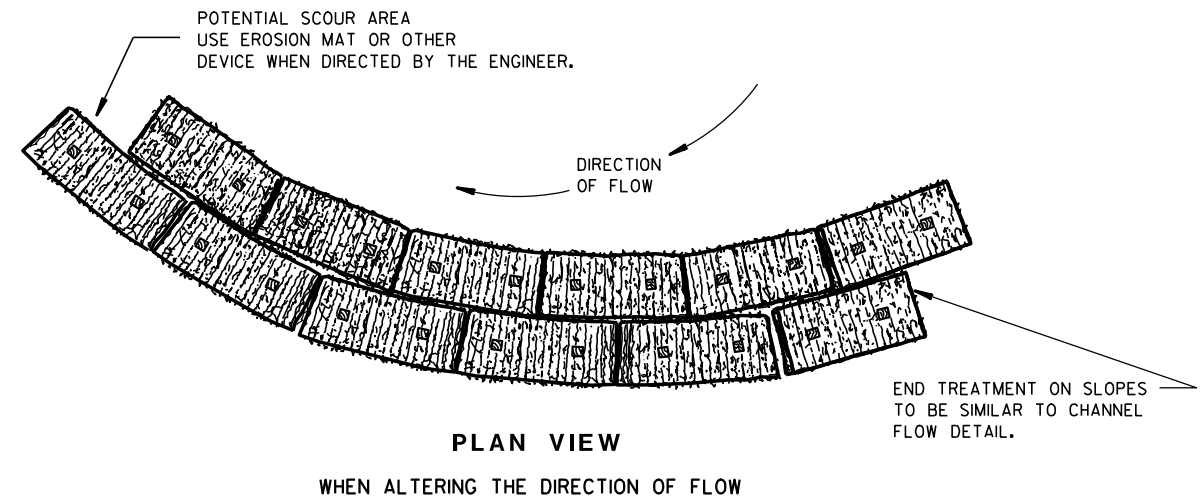
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
13C19-03	HMA LONGITUDINAL JOINTS
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C06-12	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS



GENERAL NOTES

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

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

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

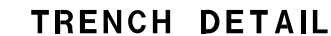
APPROVED

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

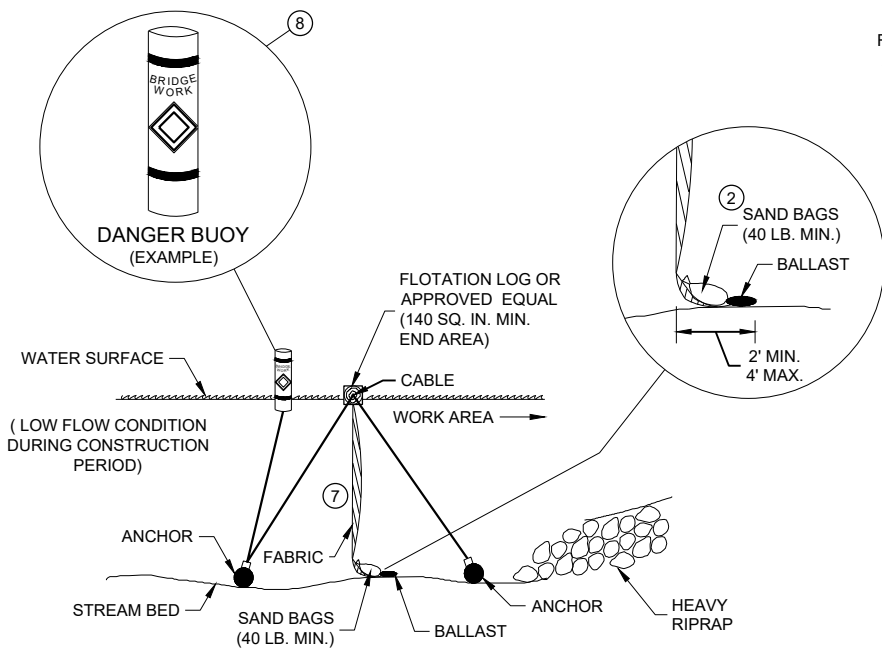
FHWA



- 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.

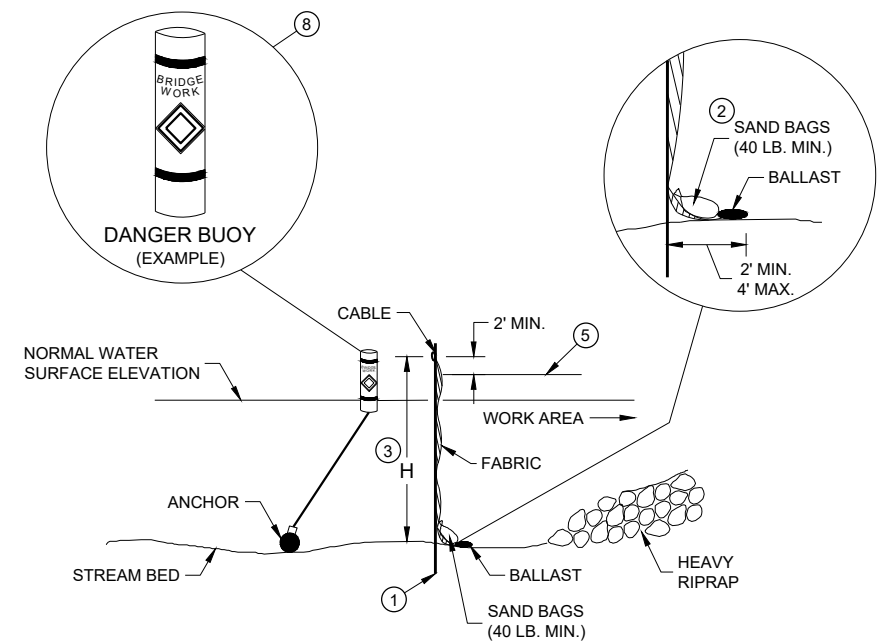


SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED <u>4-29-05</u> DATE	<u>/S/ Beth Canestra</u> CHIEF ROADWAY DEVELOPMENT ENGINEER



SECTION B - B

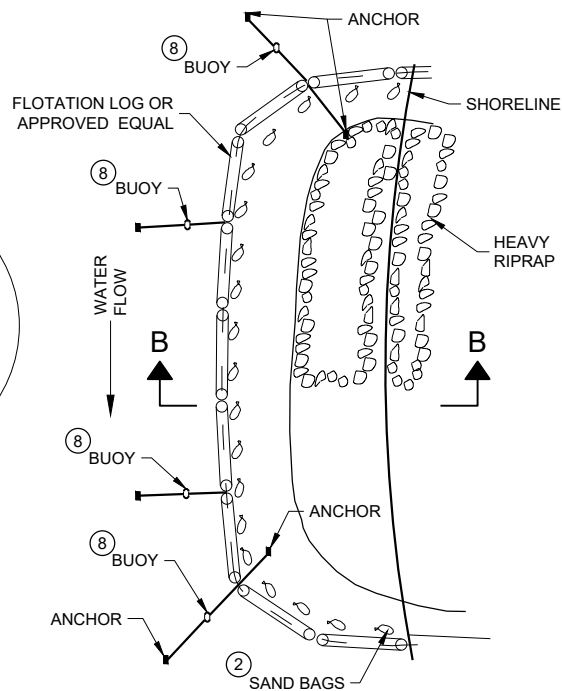
TURBIDITY BARRIER - FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



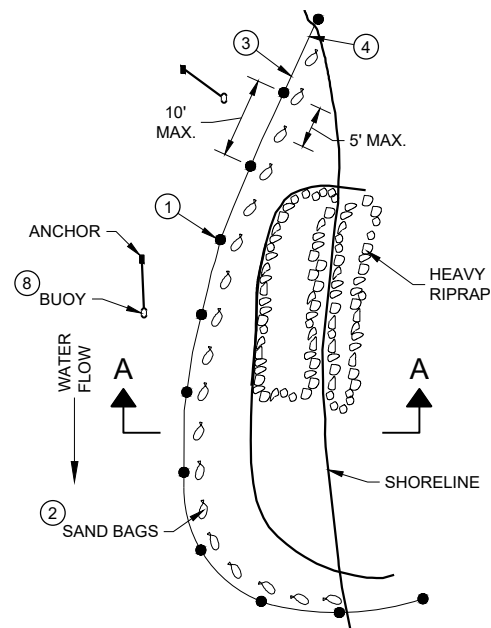
SECTION A - A

TURBIDITY BARRIER - STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT DETAILS



PLAN VIEW



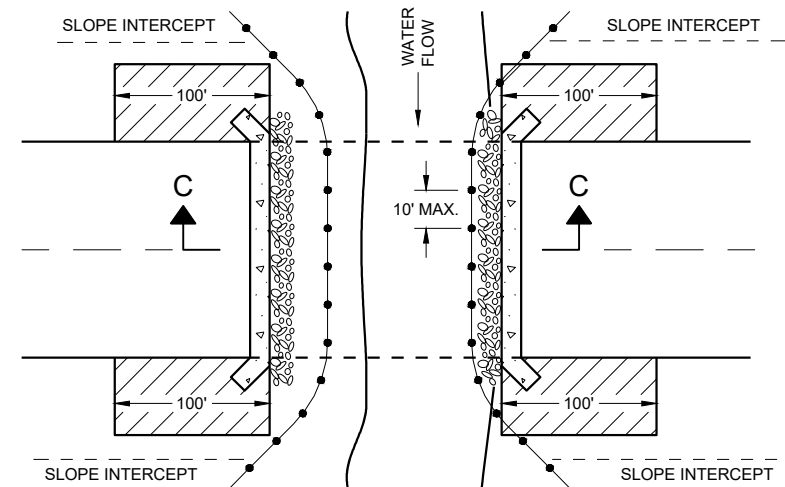
PLAN VIEW

GENERAL NOTES

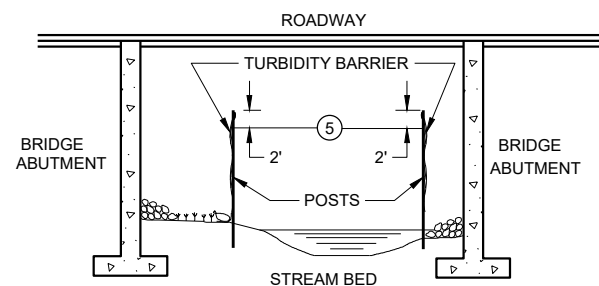
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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



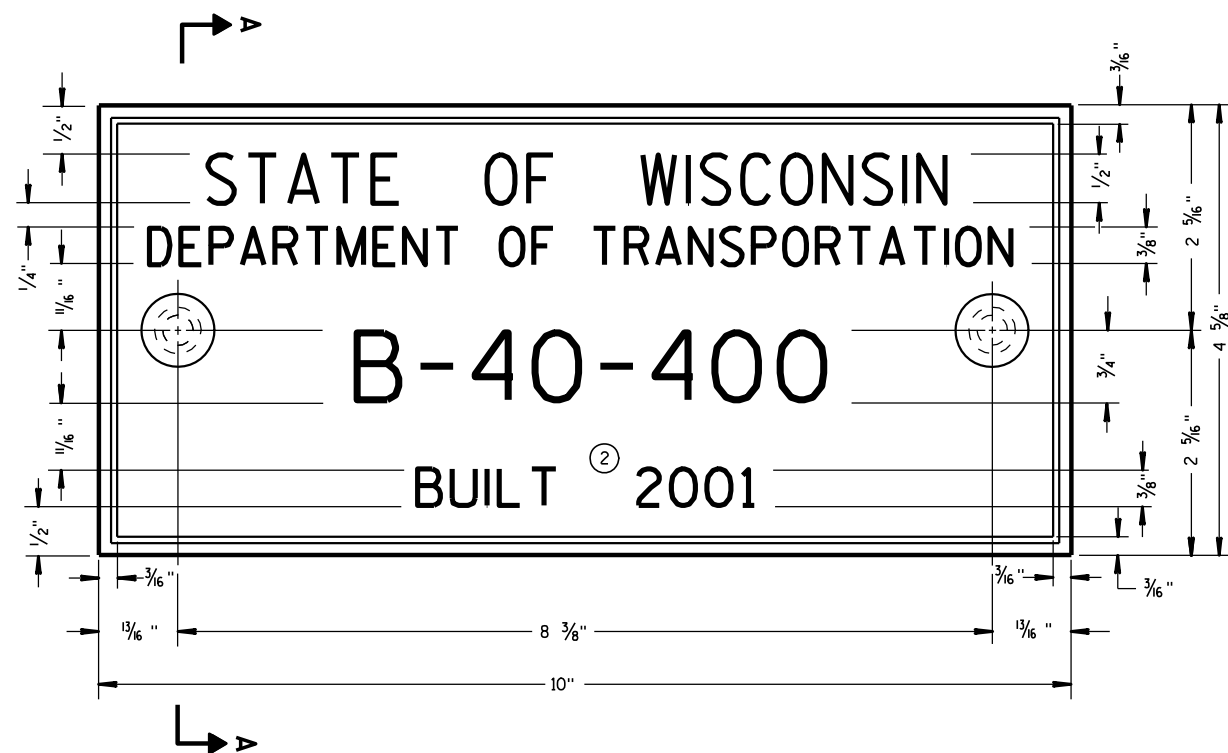
SECTION C - C

TURBIDITY BARRIER DETAIL SHOWING
TYPICAL PLACEMENT AT STRUCTURES

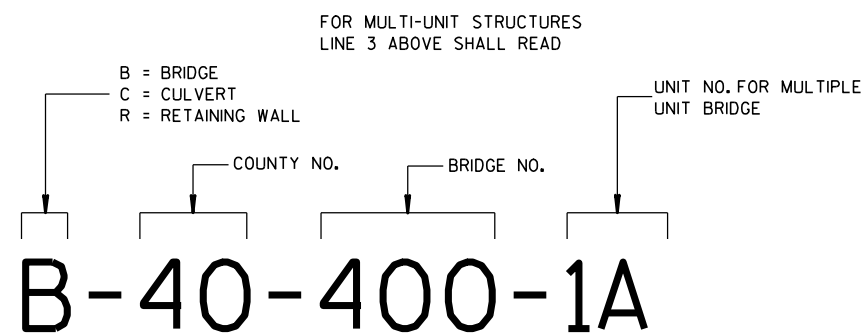
TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



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



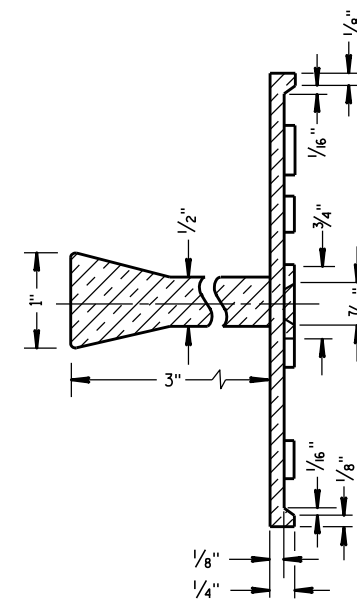
**NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES**

GENERAL NOTES

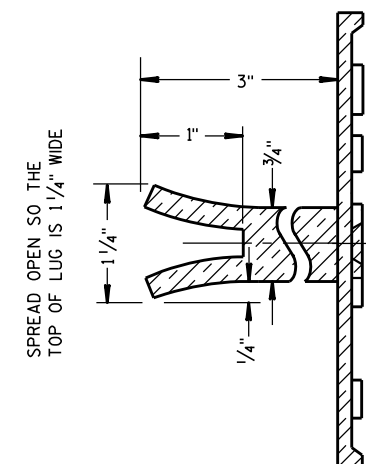
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

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

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

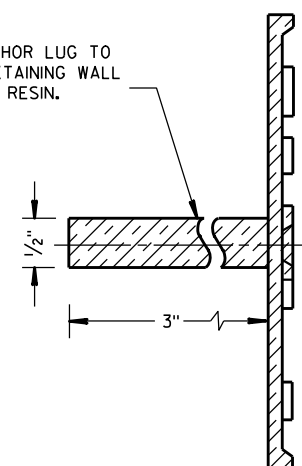


SECTION A-A



ALTERNATE LUG

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



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

**NAME PLATE
(STRUCTURES)**

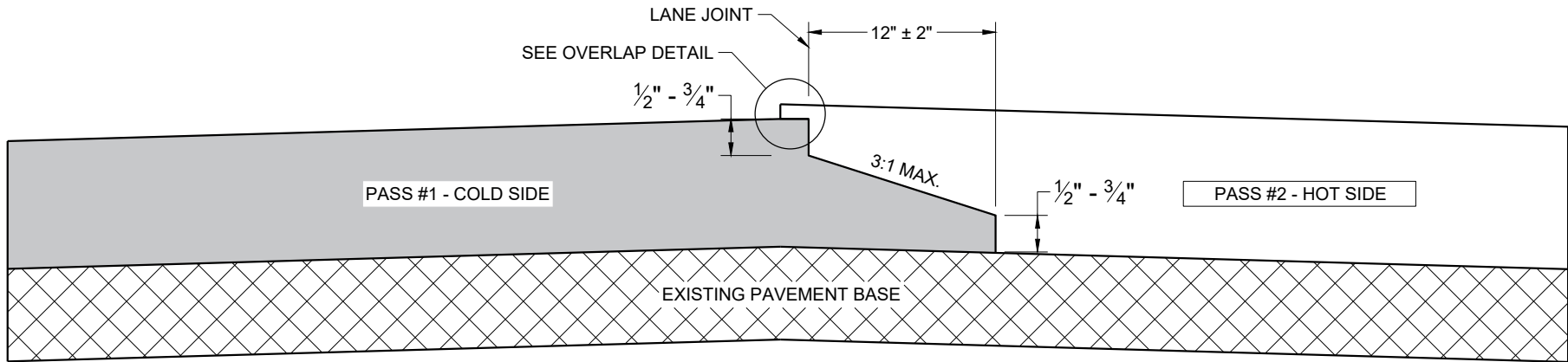
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

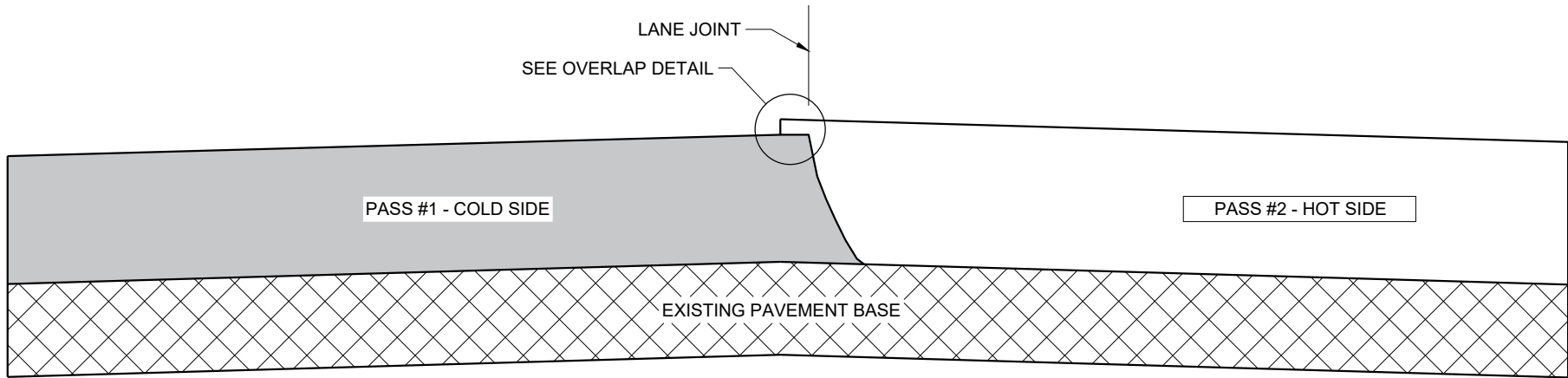
3/26/10
DATE

FHWA

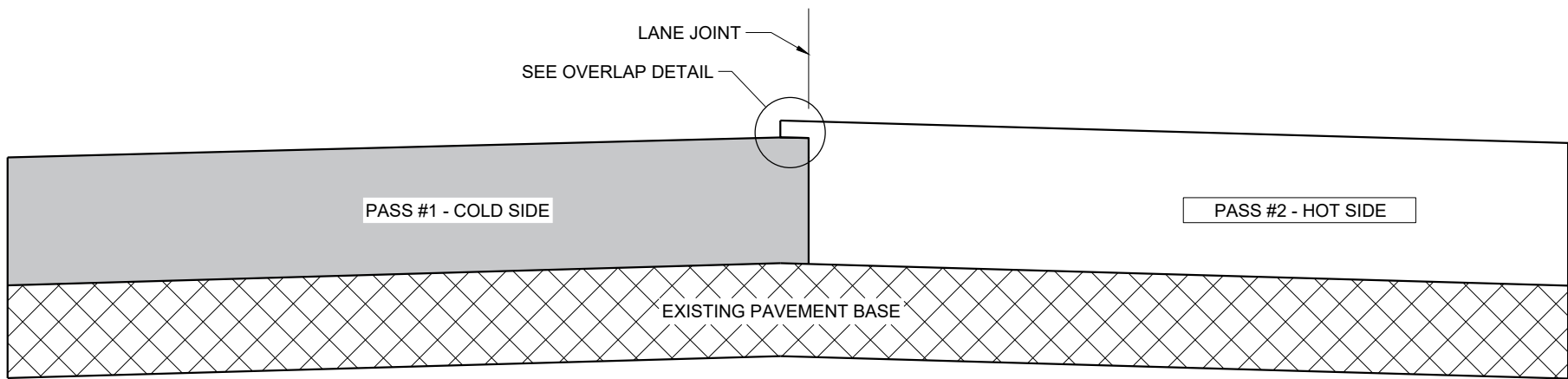
/S/ Scot Becker
CHIEF STRUCTURAL DEVELOPMENT ENGINEER



**TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)**

GENERAL NOTES

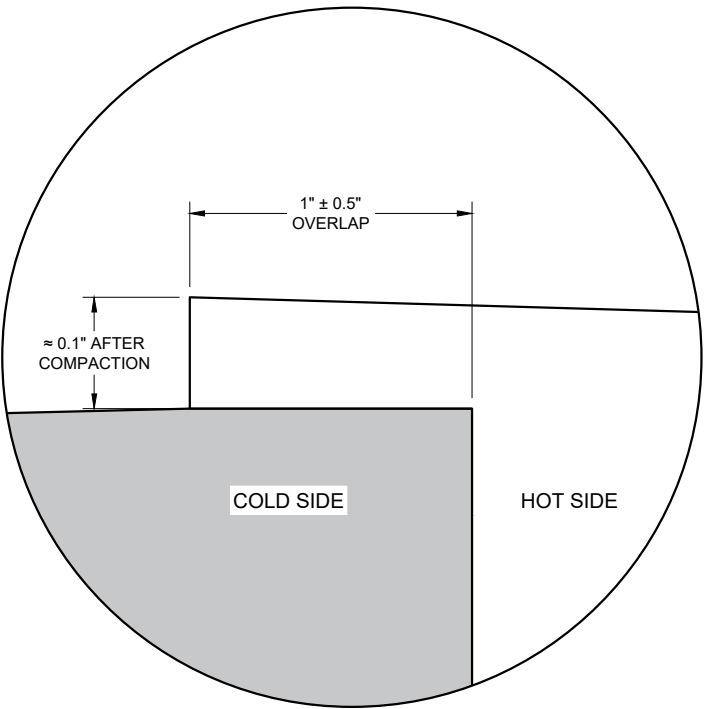
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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.

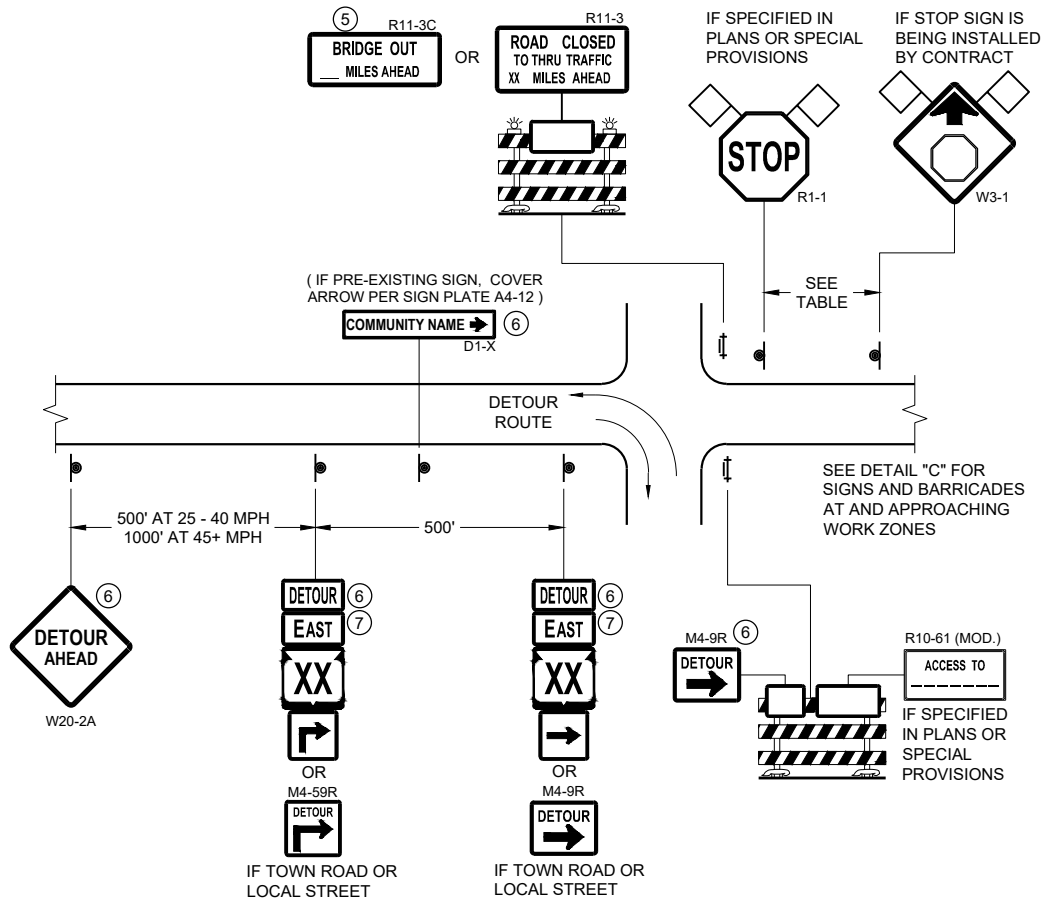


OVERLAP DETAIL (TYPICAL)

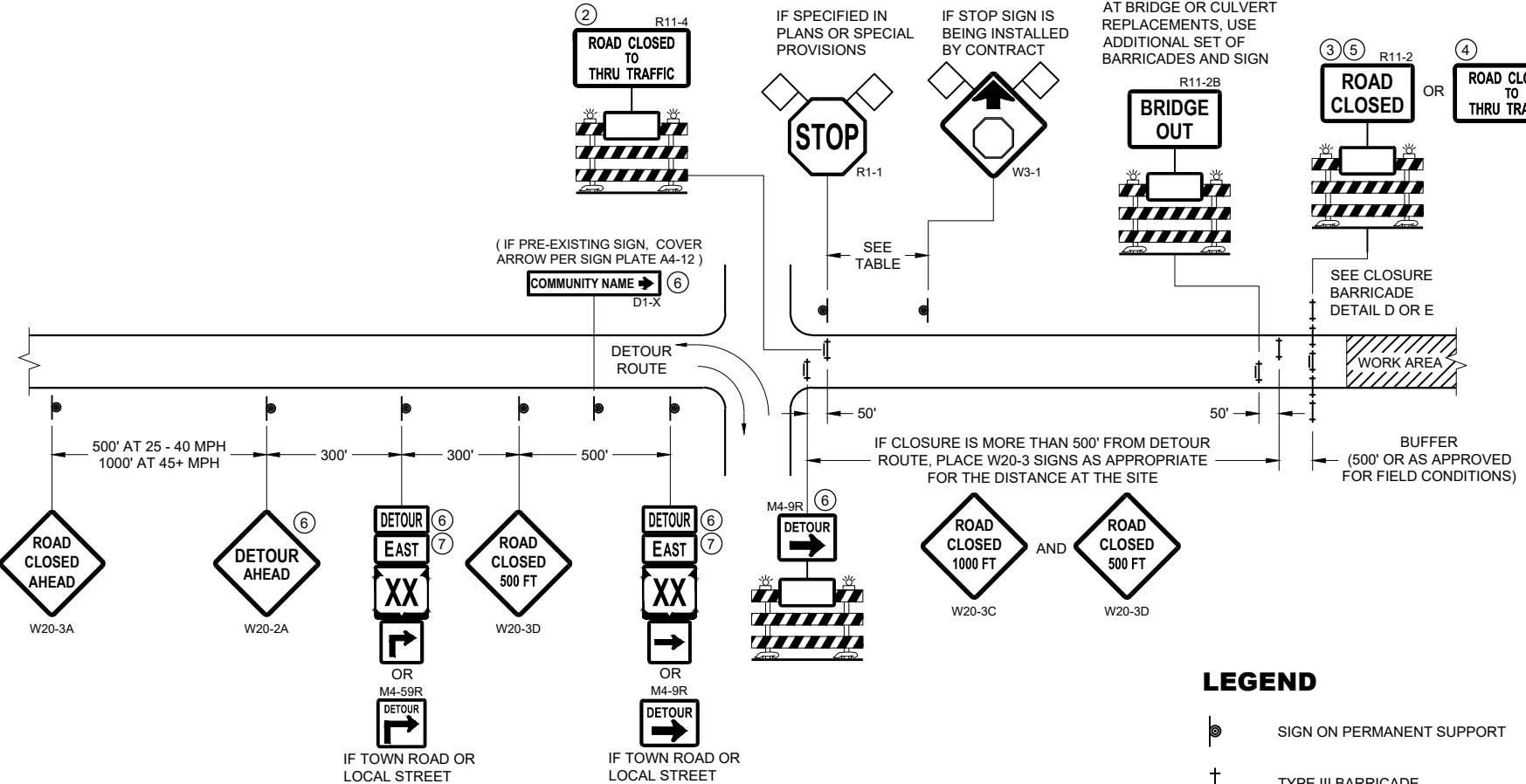
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020 /S/ Steven Hefel
DATE HMA PAVEMENT ENGINEER
FHWA



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



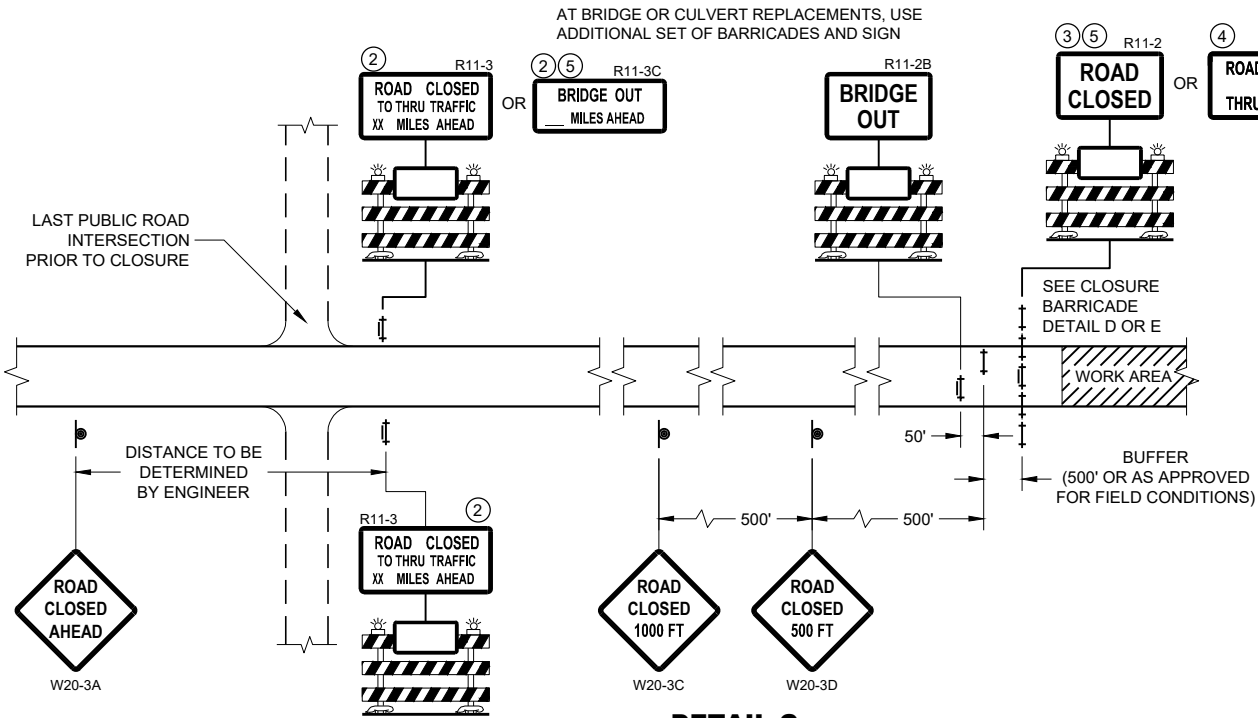
DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

- 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

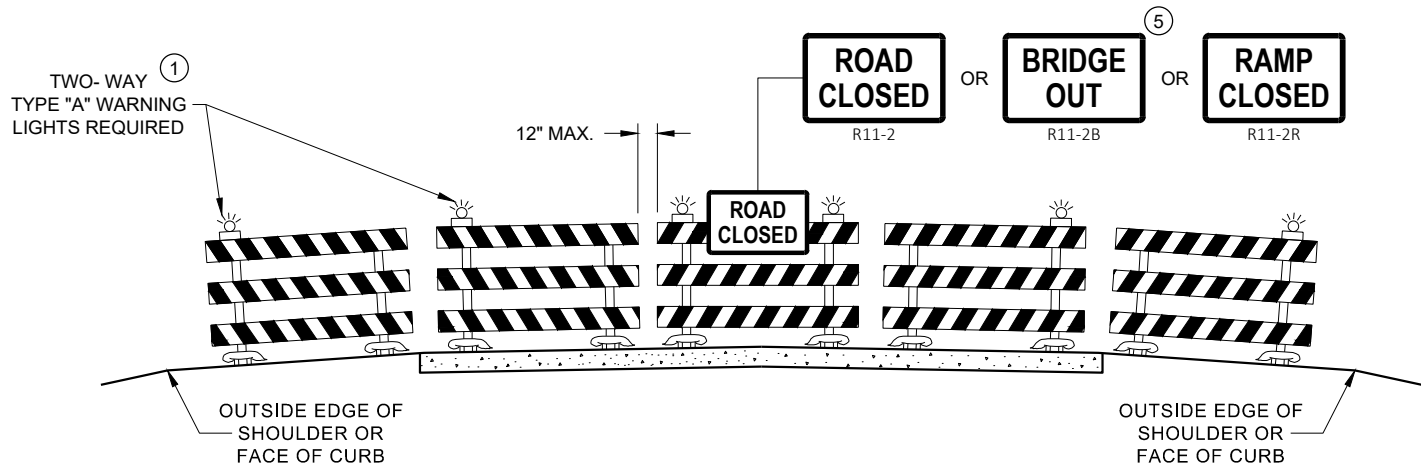


DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

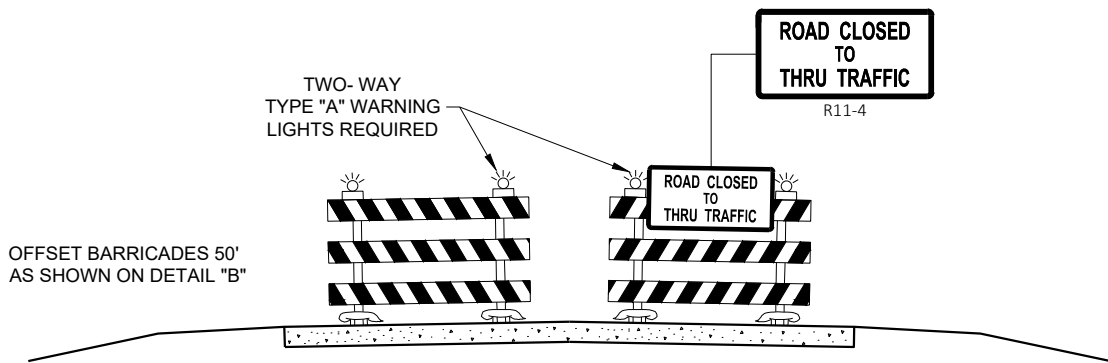
**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

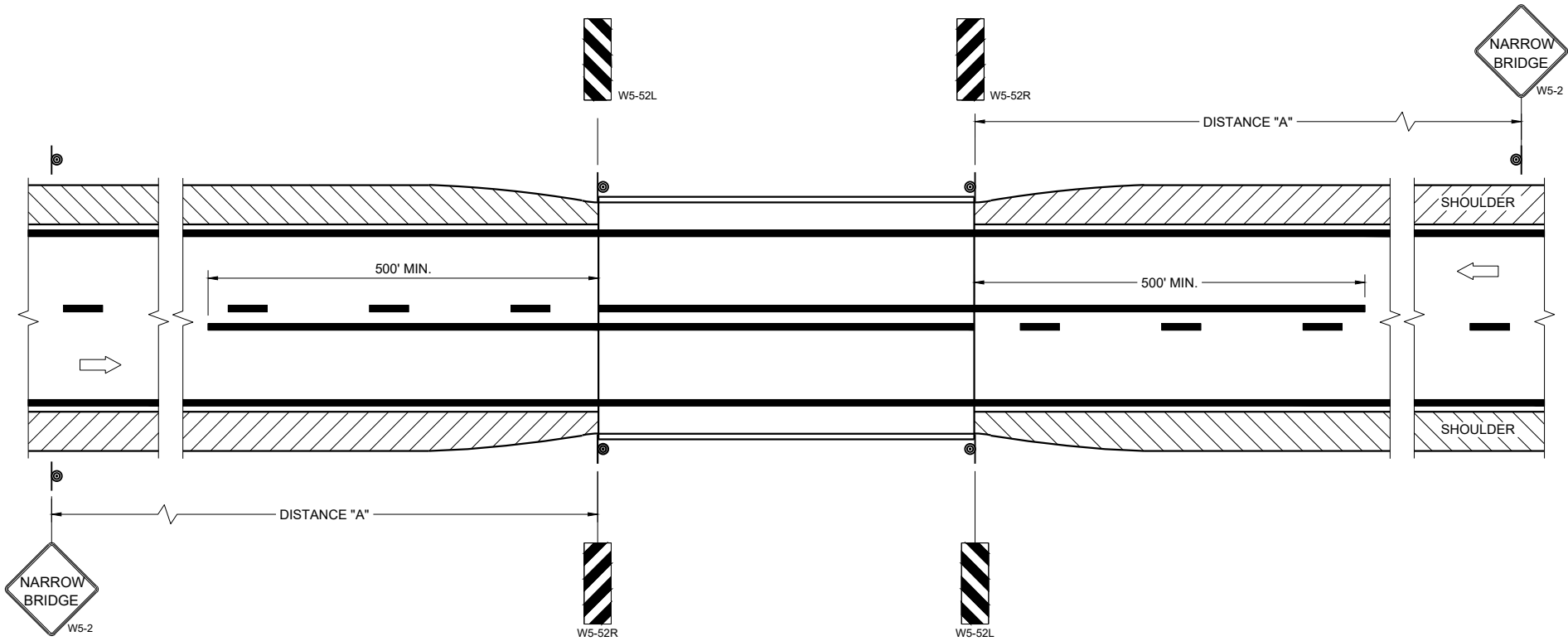
- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- 2 THESE SIGNS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

BARRICADES AND SIGNS
FOR
VARIOUS CLOSURES

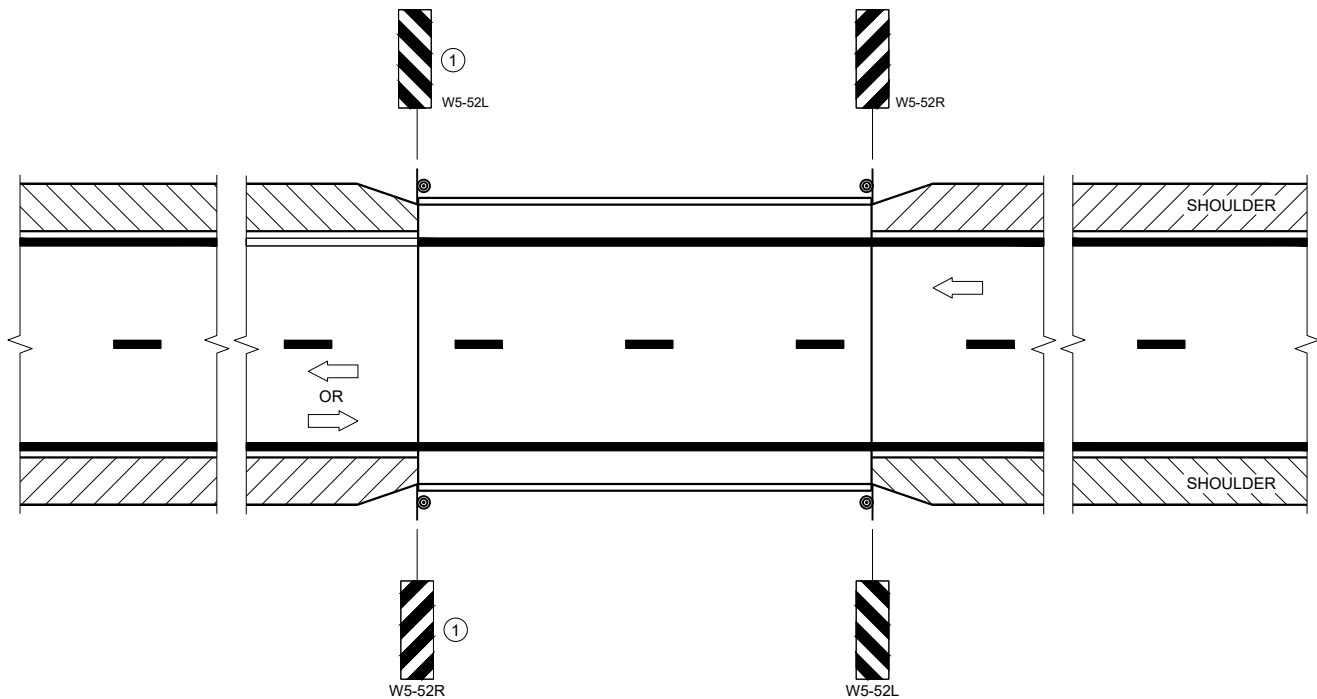
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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'

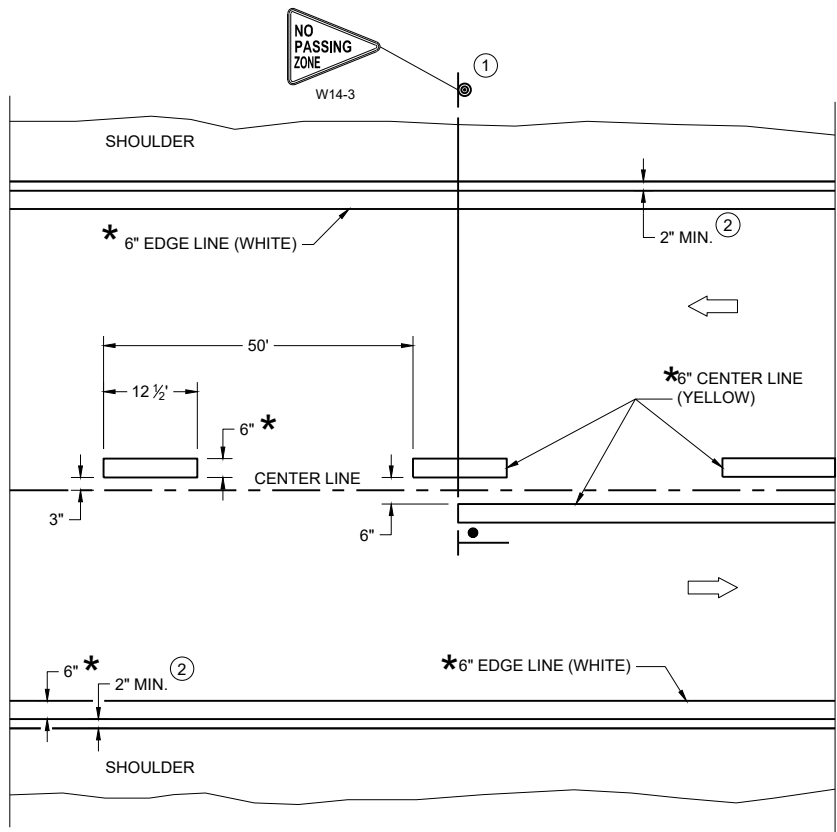
**SIGNING AND MARKING
FOR TWO LANE BRIDGES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

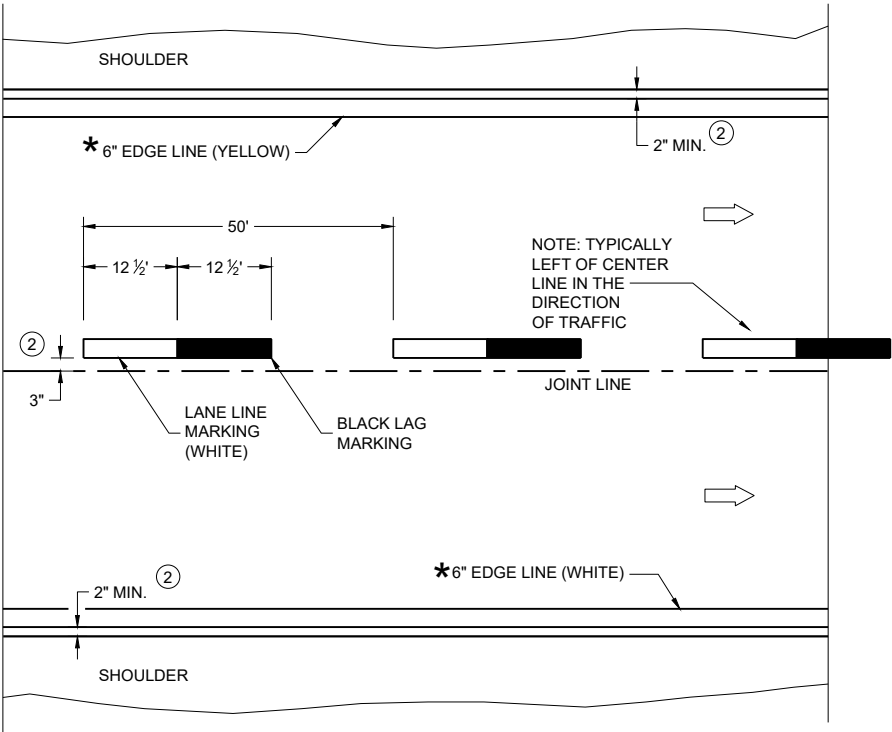
APPROVED
May 2023
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

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

- ① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
- ② MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

- "T" MARKING
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC

PERMANENT LONGITUDINAL PAVEMENT MARKINGS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ Jeannie Silver Statewide Pavement Marking Engineer



BALLAST WIDTHS
RANGE FROM 24"-36"



DO NOT USE IN TAPERS
 $\frac{1}{2}$ SPACING OF DRUMS
 BALLAST WIDTHS
 RANGE FROM 14"-20"



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



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



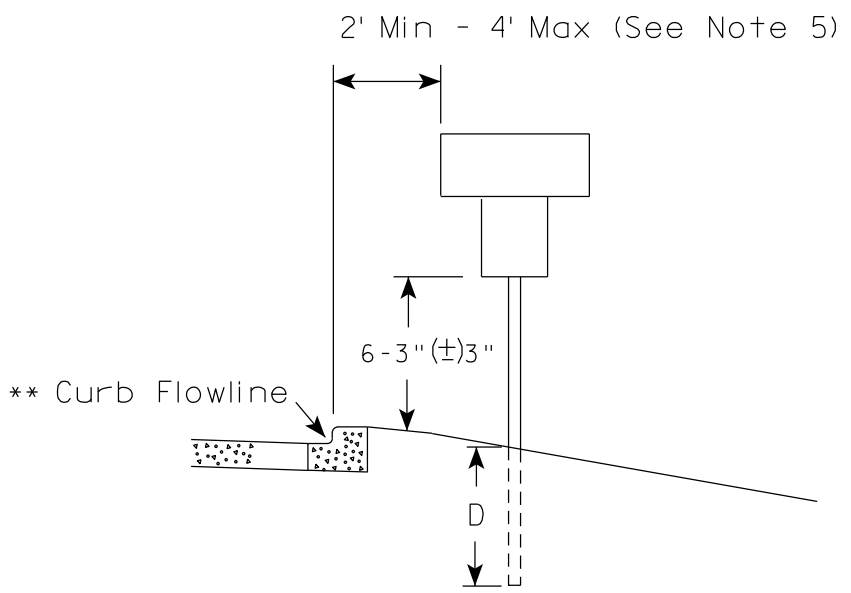
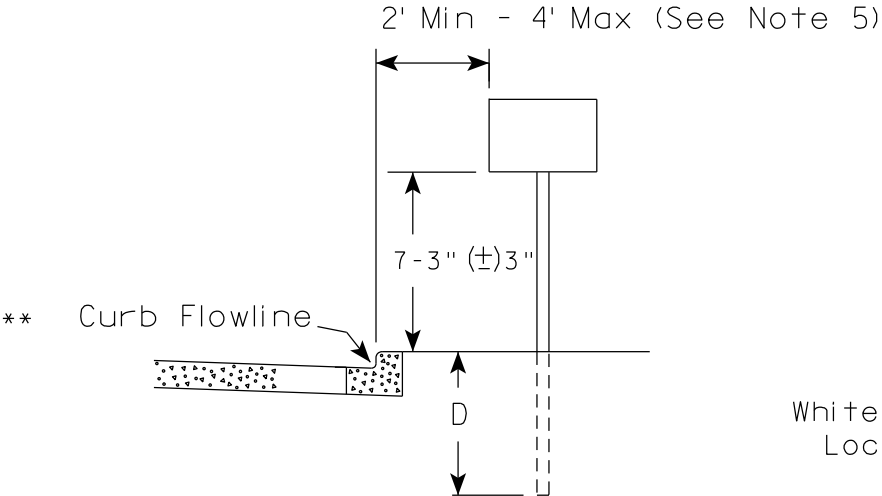
IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

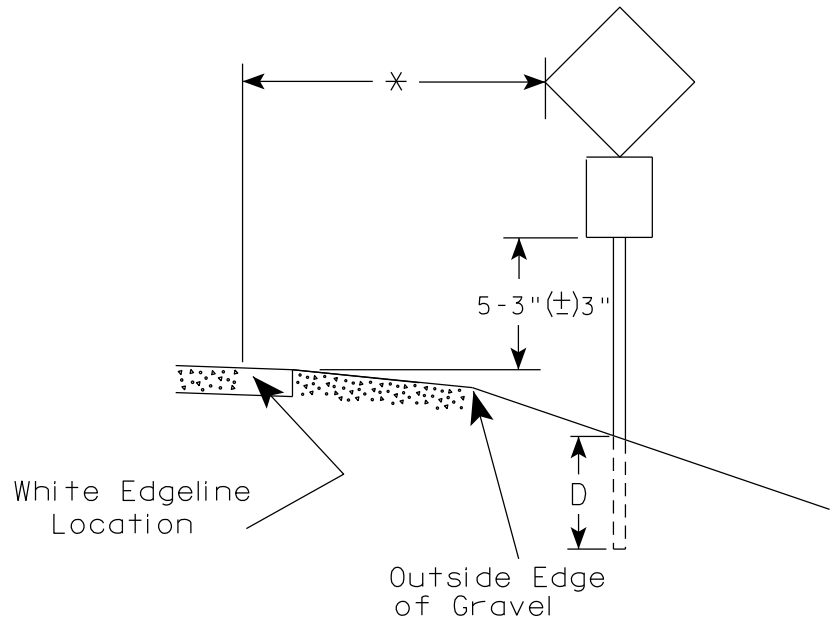
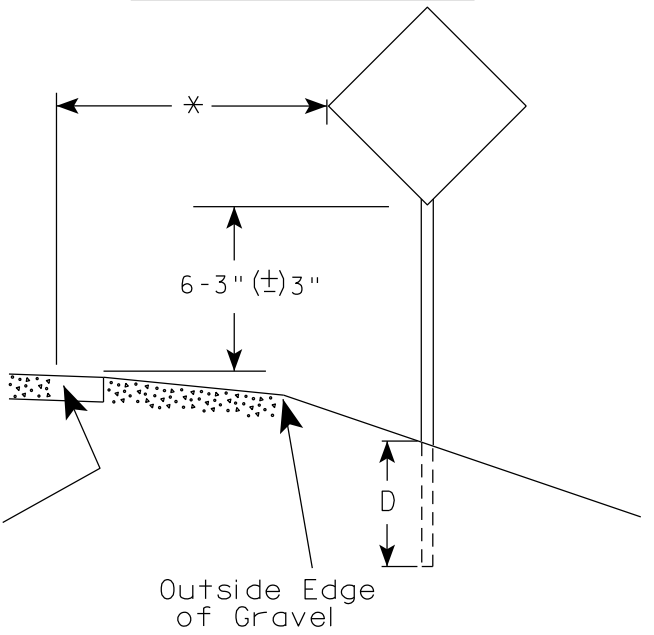
GENERAL NOTES

- 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.

URBAN AREA



RURAL AREA (See Note 2)



GENERAL NOTES

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

POST EMBEDMENT DEPTH

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

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

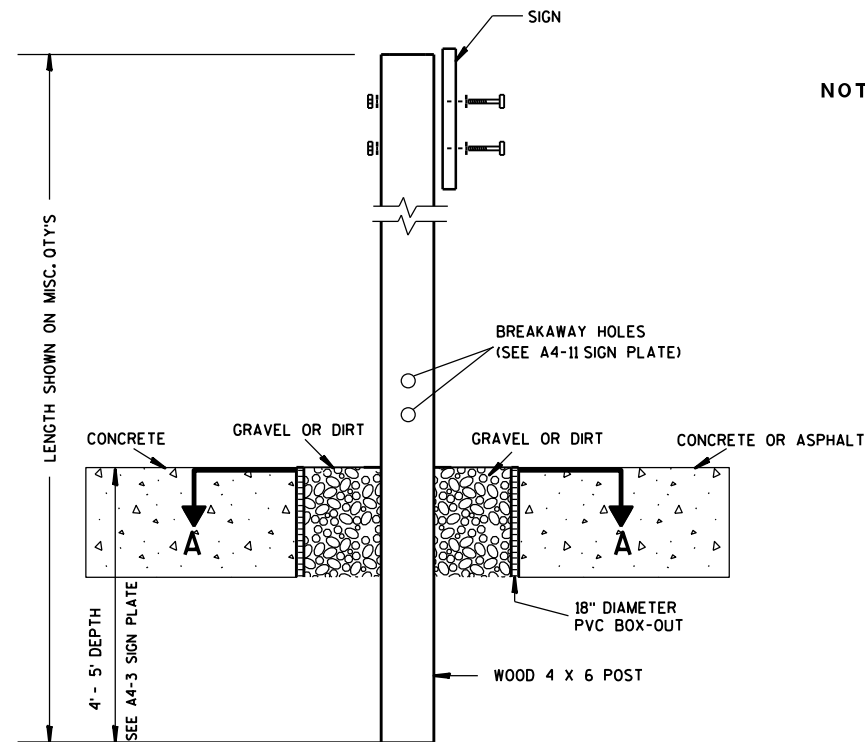
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

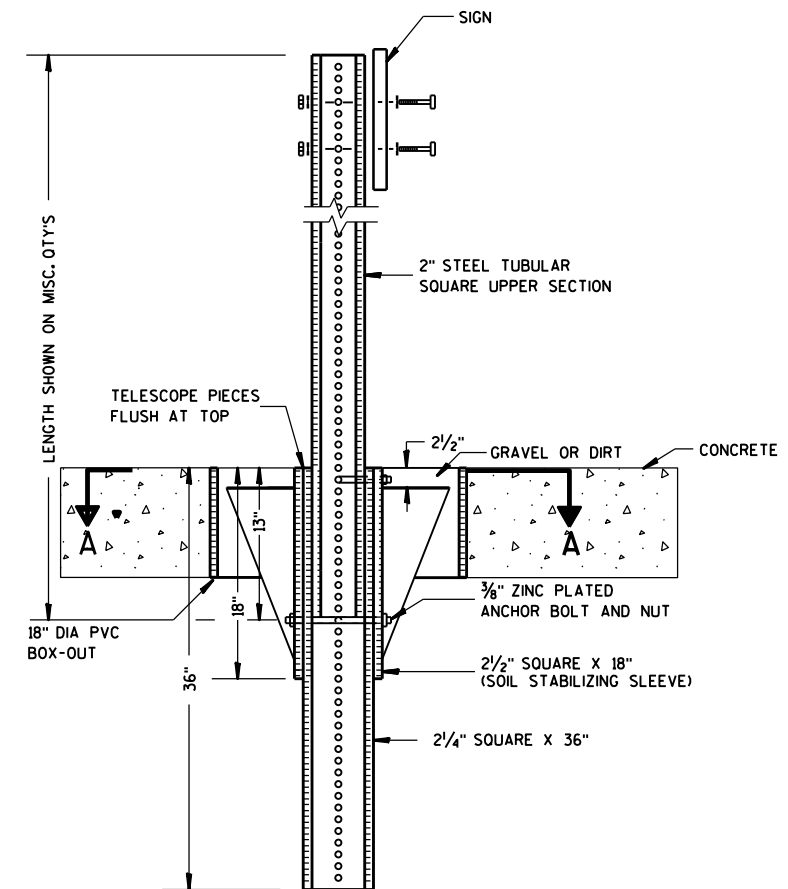
DATE 12/6/23 PLATE NO. A4-3.23



ELEVATION VIEW

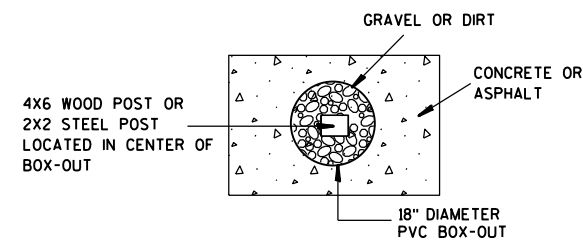
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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 PLATE NO. A4-3B.1

PROJECT NO:

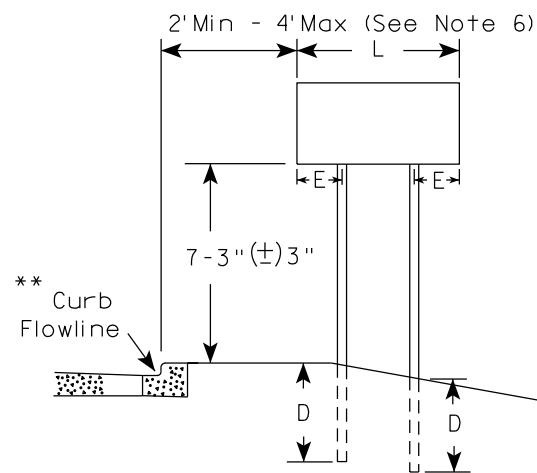
HWY:

COUNTY:

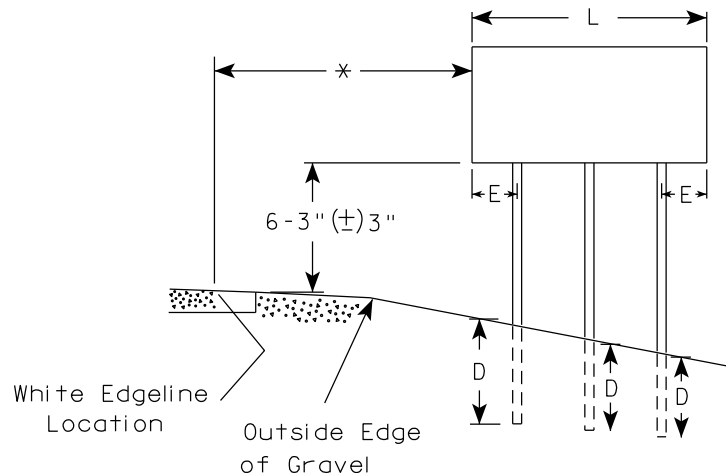
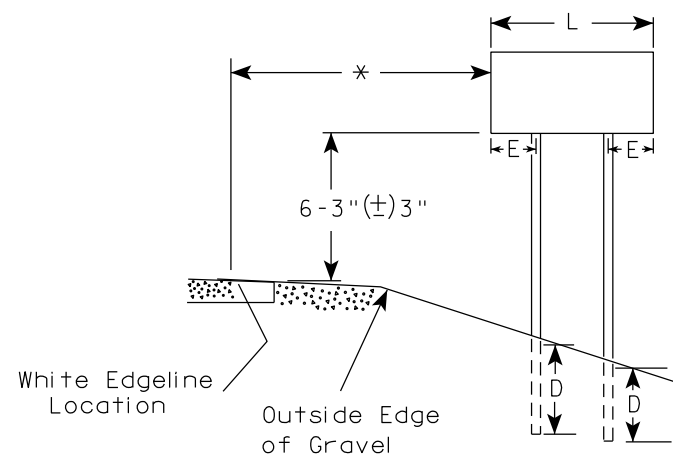
SHEET NO:

E

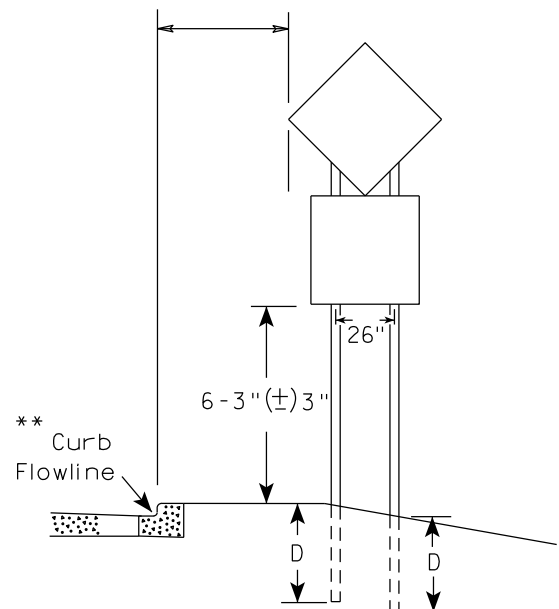
URBAN AREA



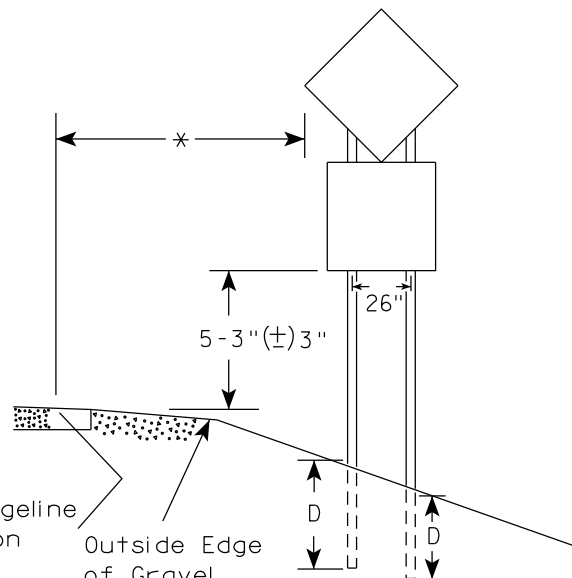
RURAL AREA (See Note 3)



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

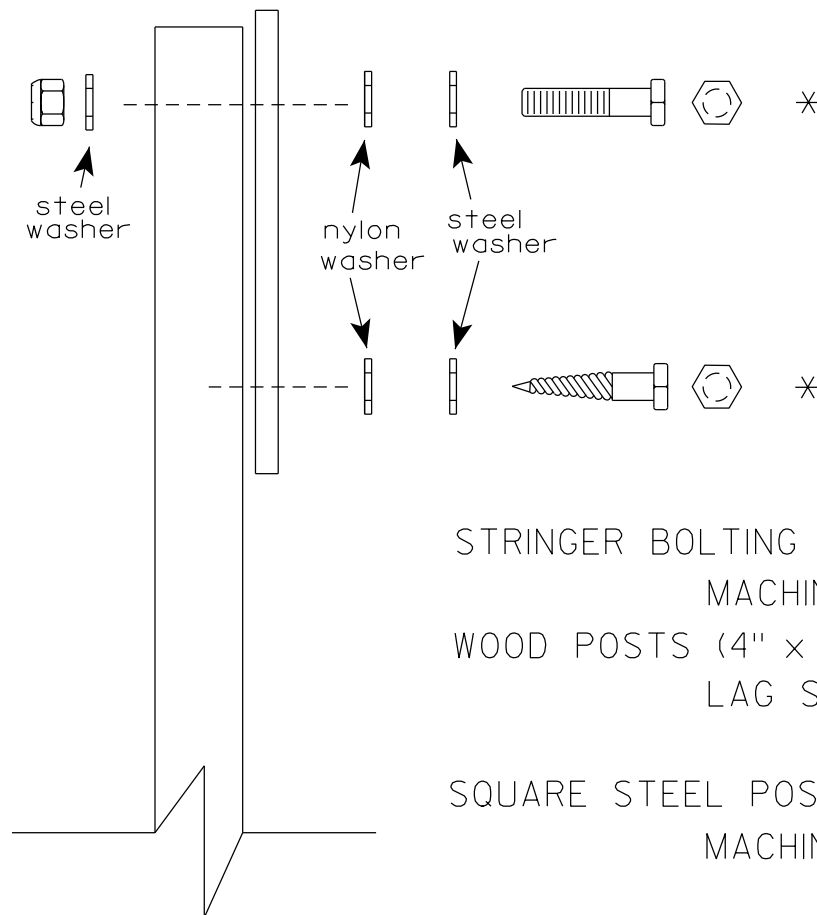
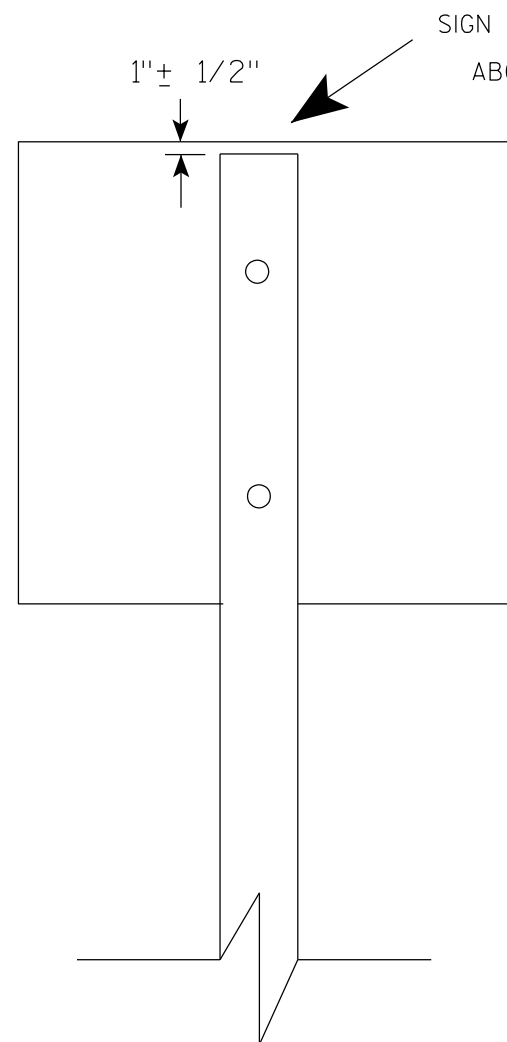
Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

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



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

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

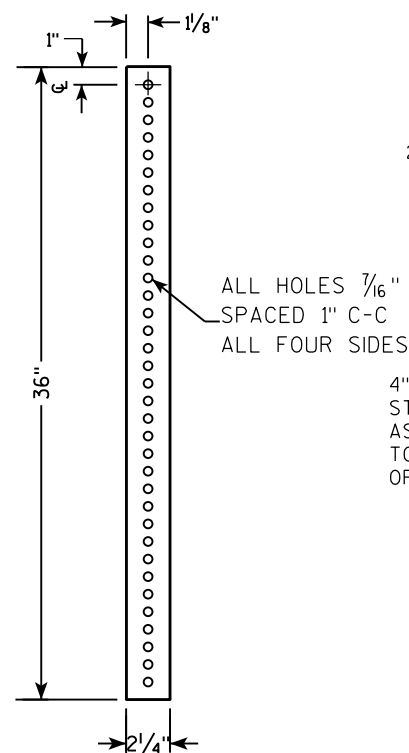
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - $\frac{9}{32}$ " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
 - 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON

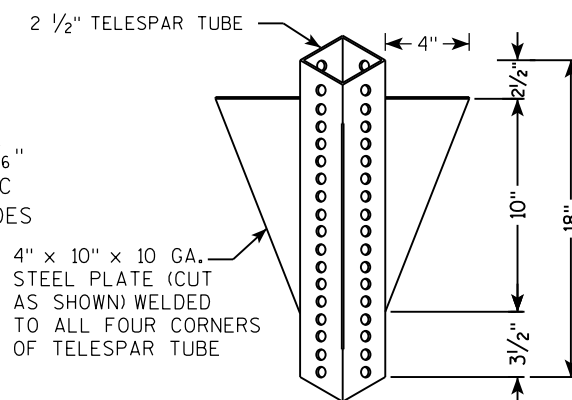
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

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

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



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



TELESCOPE PIECES FLUSH AT TOP

18" DIA SCHEDULE 40 PVC BOX-OUT

36"

18"

13"

2 1/2" GRAVEL OR DIRT

3/8" ZINC PLATED CORNER ANCHOR BOLT AND NUT

3/16" ZINC PLATED ANCHOR BOLT AND NUT

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

2 1/4" SQUARE X 36"

2" STEEL TUBULAR SQUARE UPPER SECTION

ALL HOLES 7/16" SPACED 1" C-C ALL FOUR SIDES

SIGN

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

TECHNICAL DRAWING OF A SIGNPOST ASSEMBLY.

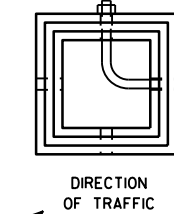
Side View Dimensions:

- Overall height: LENGTH SHOWN ON MISC. QTYS
- Top section: 2" STEEL TUBULAR SQUARE UPPER SECTION
- Telescope pieces: TELESCOPE PIECES FLUSH AT TOP
- Vertical dimensions from ground line: 36", 18", 12"
- Ground level: Indicated by a horizontal line with hatching below it.

End View Details:

- Top: SIGN
- Fasteners: SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL
- Upper section: 2" STEEL TUBULAR SQUARE UPPER SECTION
- Holes: ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C
- Material: ALL FOUR SIDES $\frac{3}{8}$ " ZINC PLATED CORNER
- Fasteners: $\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT
- Anchor spacing: 1"
- Fasteners: $\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT
- Soil stabilizing sleeve: 2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)
- Post section: 2 1/4" SQUARE X 36"

3/8" ZINC PLATED CORNER
ANCHOR BOLT AND NUT



SECTION A-A

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

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

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthaeus R. Rauch

for State Traffic Engineer

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

PROJECT NO:

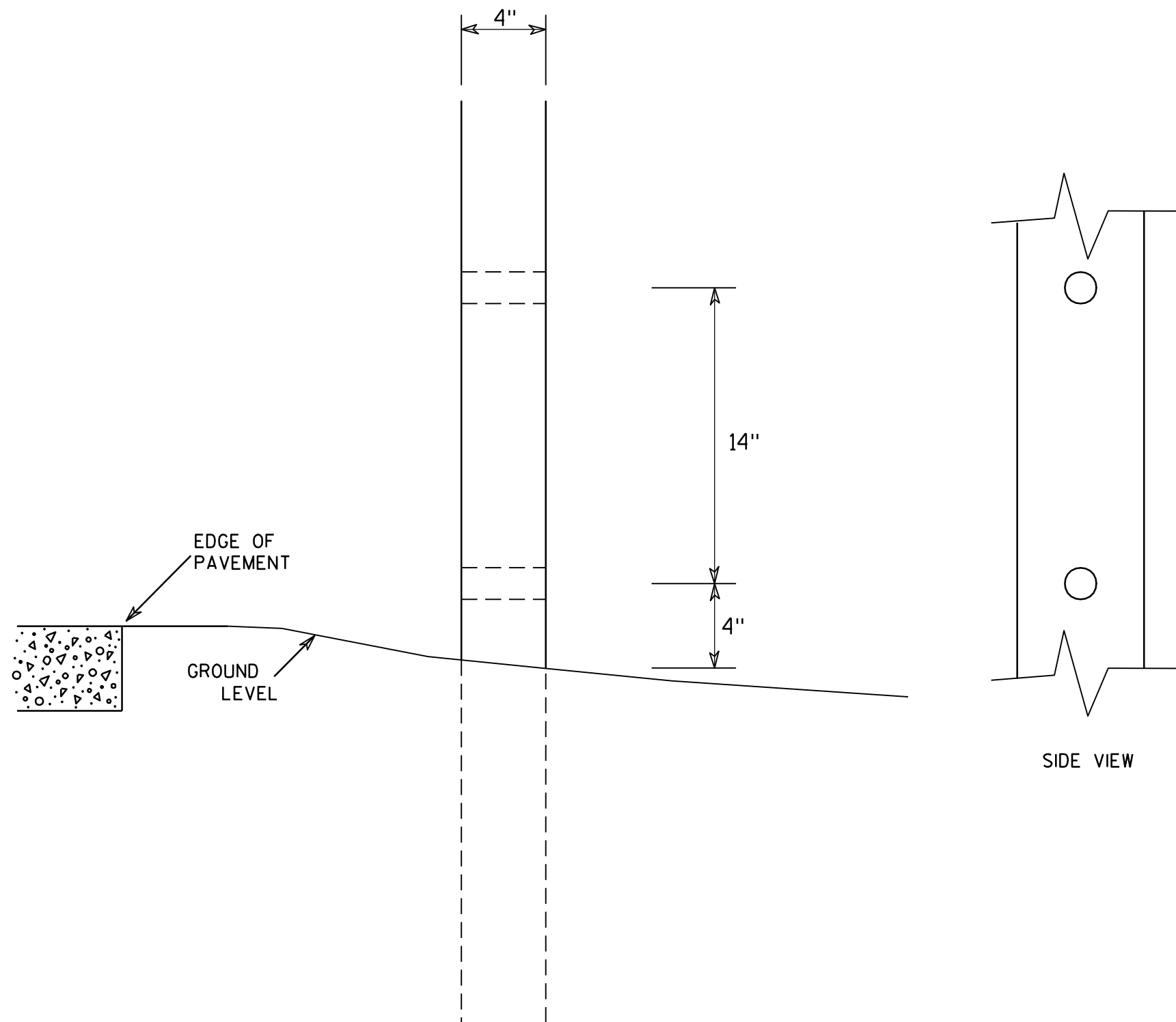
HWY:

COUNTY:

SHEET NO:

T

7

GENERAL NOTES

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

7

**4 X 6 WOOD POST
MODIFICATIONS**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

HWY:

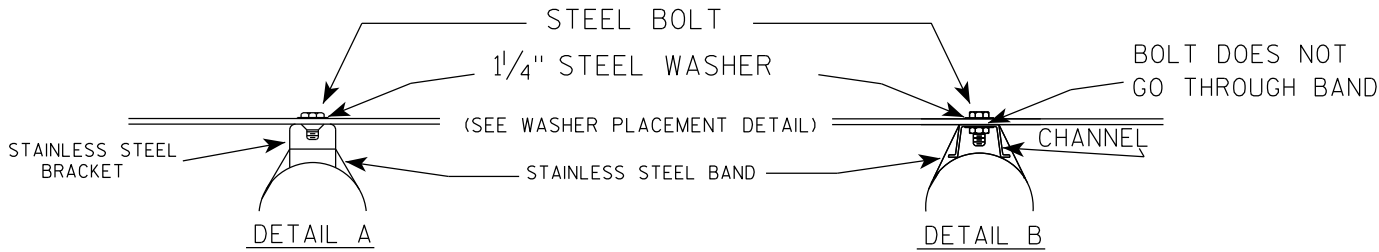
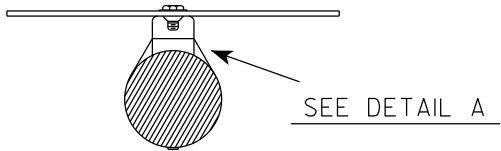
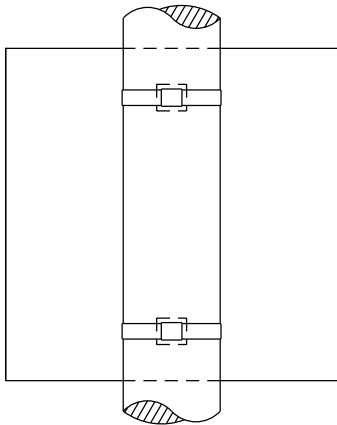
COUNTY:

SHEET NO:

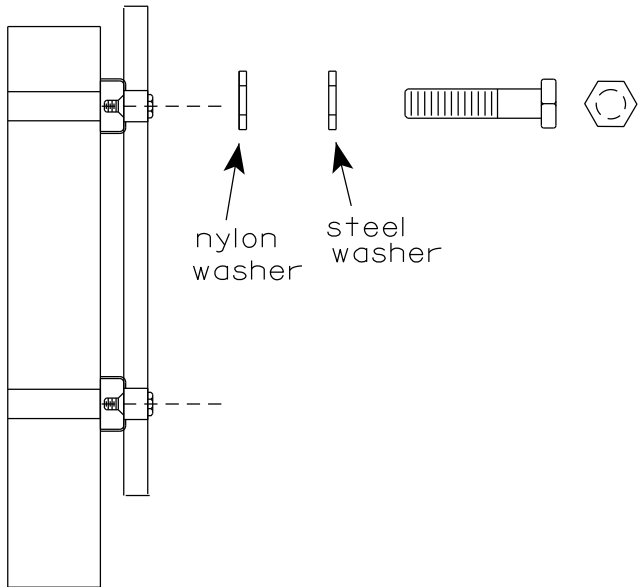
E

BANDING

SINGLE SIGN



WASHER PLACEMENT

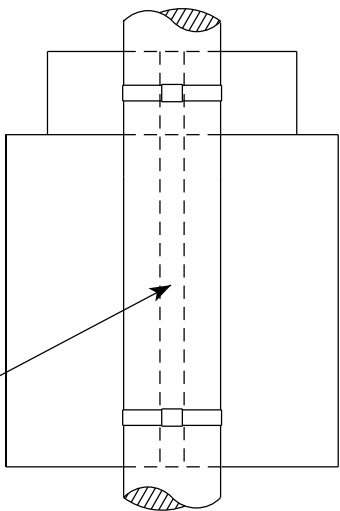


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

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

"J" ASSEMBLY



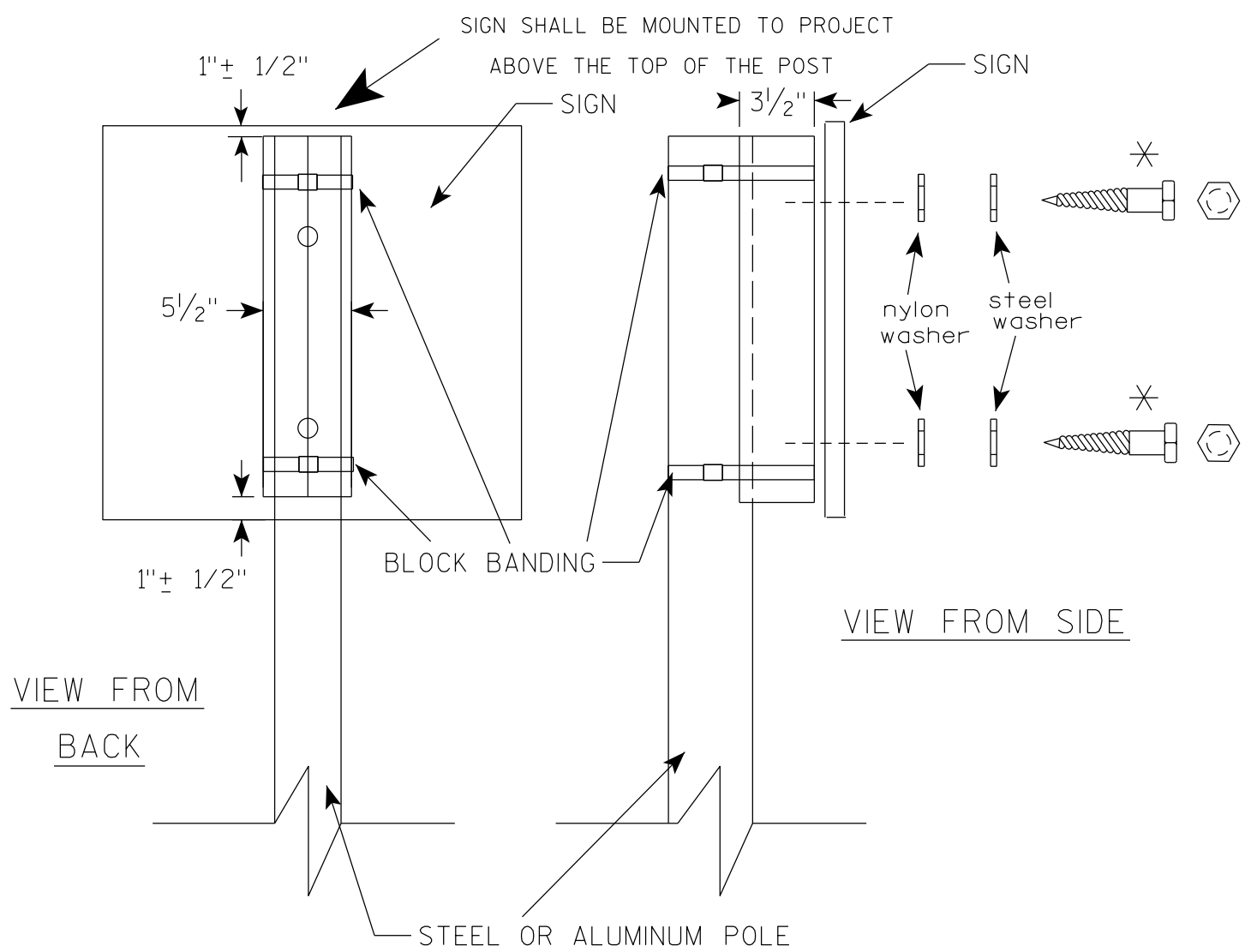
SEE DETAIL B

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

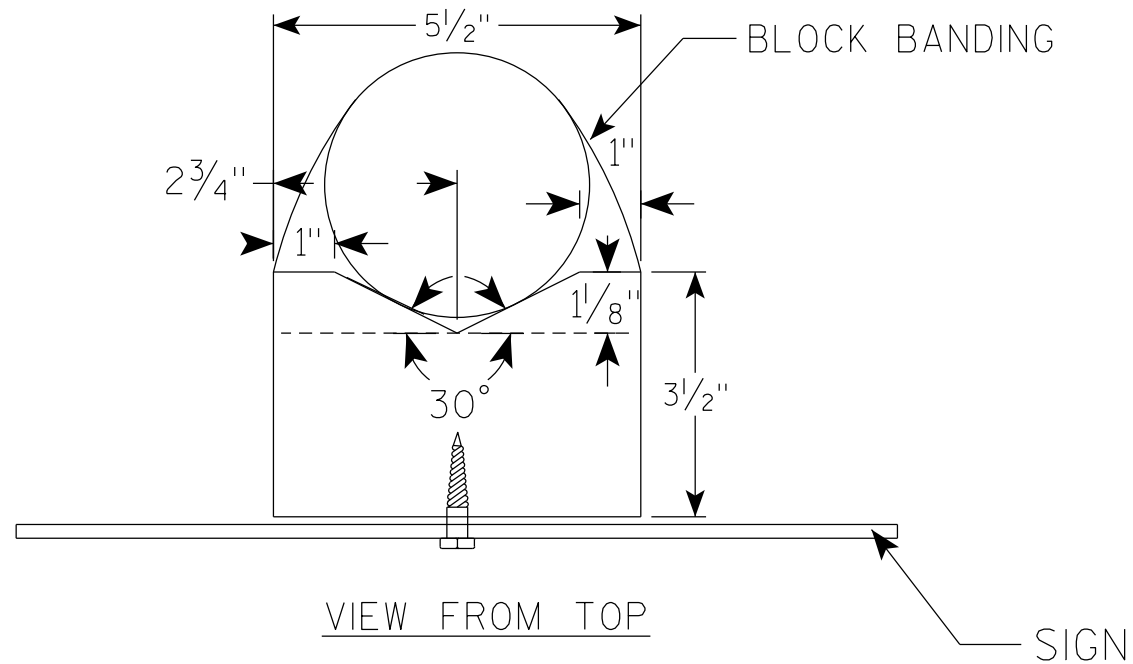
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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



VIEW FROM
BACK

VIEW FROM SIDE



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

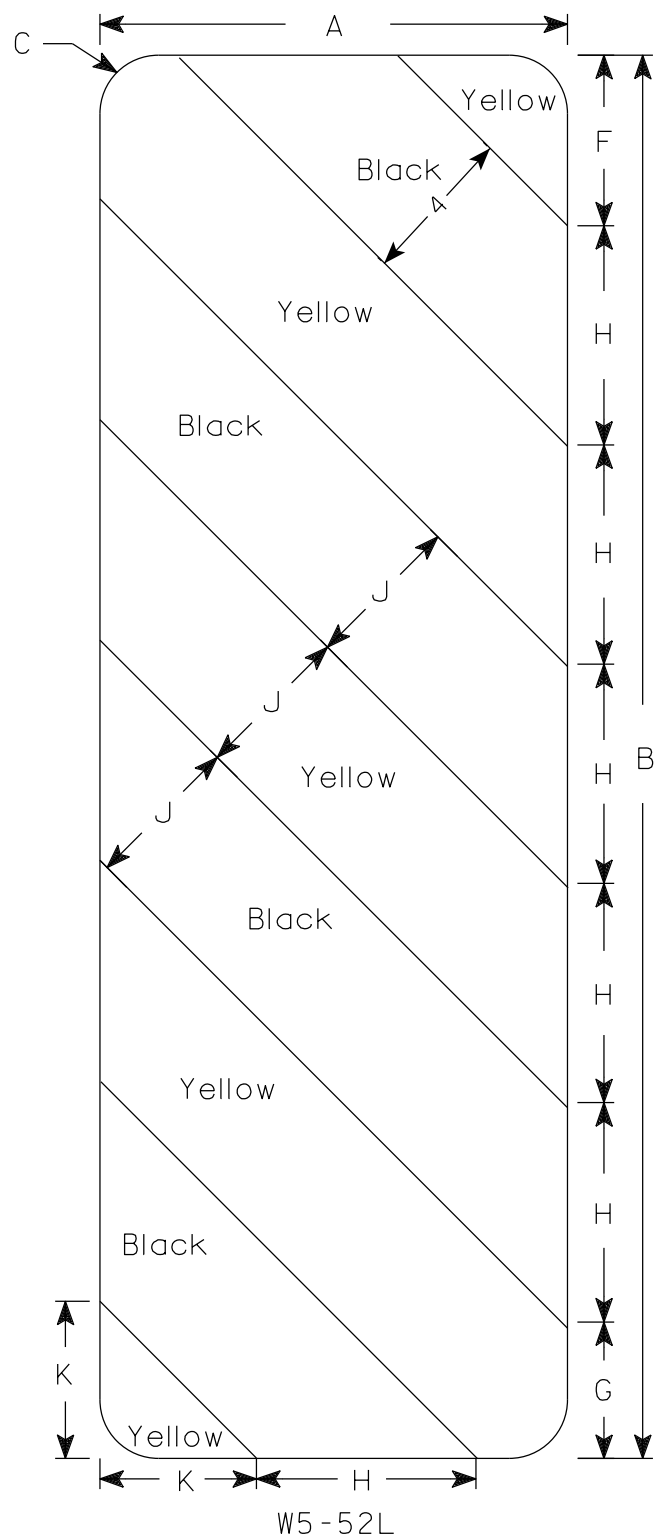
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

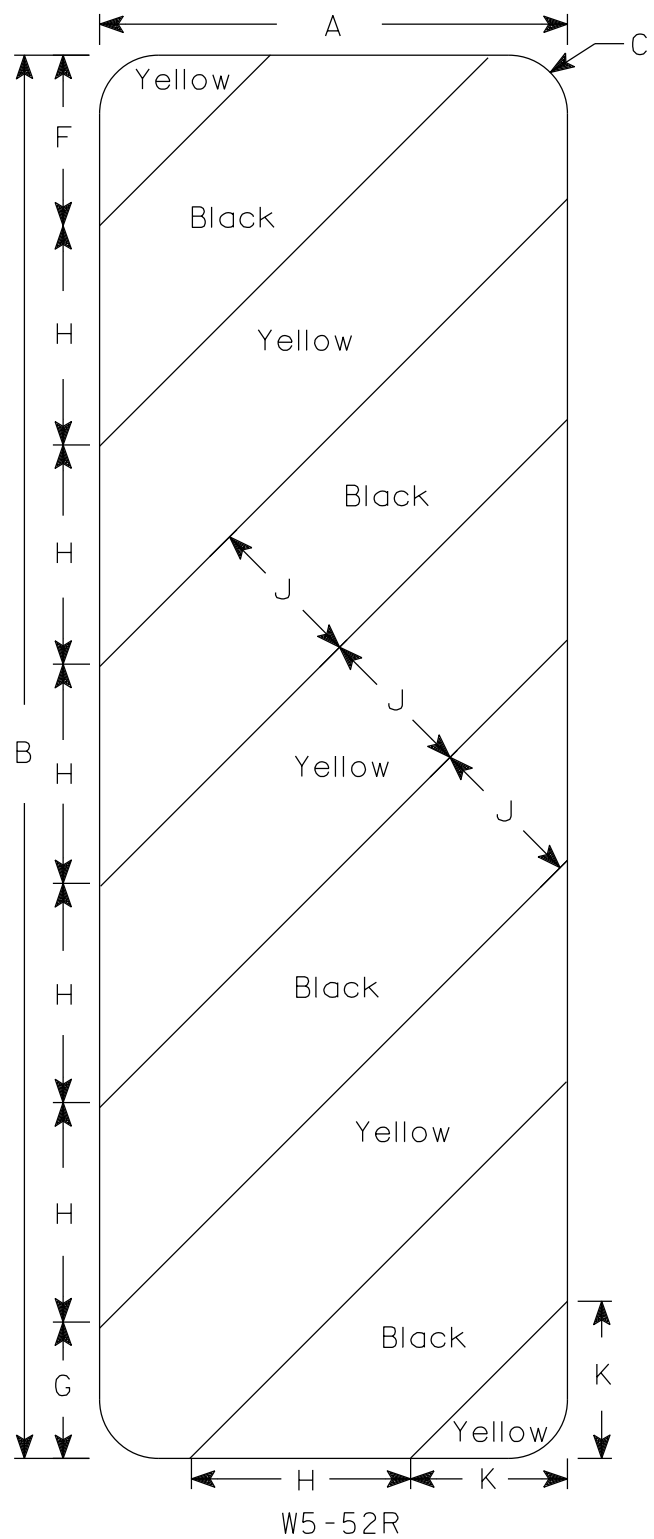
PROJECT NO:

SHEET NO:

E



W5-52L



W5-52R

NOTES

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

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

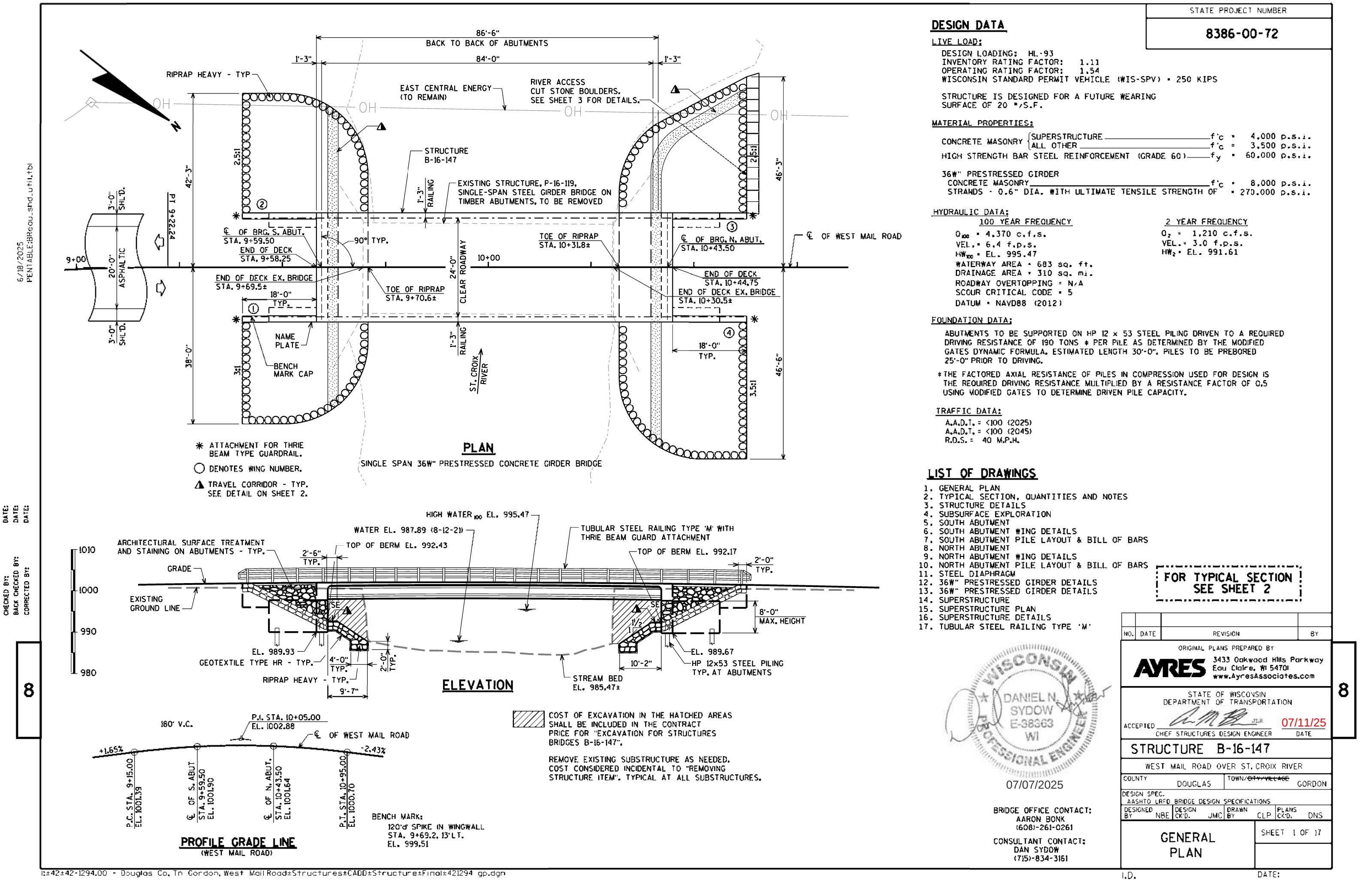
STANDARD SIGN

W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

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



7/7/2025
PENTABLE:Breou_shd_util.tbl

TOTAL ESTIMATED QUANTITIES

STATE PROJECT NUMBER

8386-00-72

BID ITEM NUMBER	BID ITEMS	UNIT	S. ABUT.	N. ABUT.	SUPER.	TOTAL
203.0270	REMOVING STRUCTURE OVER WATERWAY DEBRIS CAPTURE P-16-119	EACH	-----	-----	-----	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-16-147	EACH	-----	-----	-----	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	250	250	-----	500
502.0100	CONCRETE MASONRY BRIDGES	CY	56.9	56.9	81.1	195
502.3200	PROTECTIVE SURFACE TREATMENT	SY	5	5	290	300
503.0137	PRESTRESSED GIRDER TYPE I 36W-INCH	LF	-----	-----	340	340
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	2,440	2,440	-----	4,880
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	2,820	2,820	13,410	19,050
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	-----	-----	8	8
506.4000	STEEL DIAPHRAGMS B-16-147	EACH	-----	-----	6	6
513.4061	RAILING TUBULAR TYPE M	LF	38.2	38.2	173	249.4
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	9	9	-----	18
517.1015.S	CONCRETE STAINING MULTI-COLOR B-16-147	SF	340	340	-----	680
517.1050.S	ARCHITECTURAL SURFACE TREATMENT B-16-147	SF	340	340	-----	680
550.0020	PRE-BORING ROCK OR CONSOLIDATED MATERIALS	LF	175	175	-----	350
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	210	210	-----	420
606.0300	RIPRAP HEAVY	CY	150	160	-----	310
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	100	100	-----	200
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	50	50	-----	100
645.0120	GEOTEXTILE TYPE HR	SY	250	280	-----	530
SPV.0165.01	CUT STONE BOULDERS	SF	-----	140	-----	140
SPV.0195.01	SELECT CRUSHED MATERIAL FOR TRAVEL CORRIDOR	TON	15	20	-----	35
NON-BID ITEMS						
FILLER						
		SIZE	-----	-----	-----	1/2" & 3/4"

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE FIRST DIGIT OF A THREE DIGIT BAR NO. AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF

A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR

A.A.S.H.T.O. DESIGNATION M 213.

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

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-16-147" SHALL BE THE EXISTING GROUNDLINE.

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

PROTECTIVE SURFACE TREATMENT IS TO BE APPLIED AS SHOWN IN DETAIL ON THIS SHEET AND THE TOP OF THE WINGWALLS.

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.

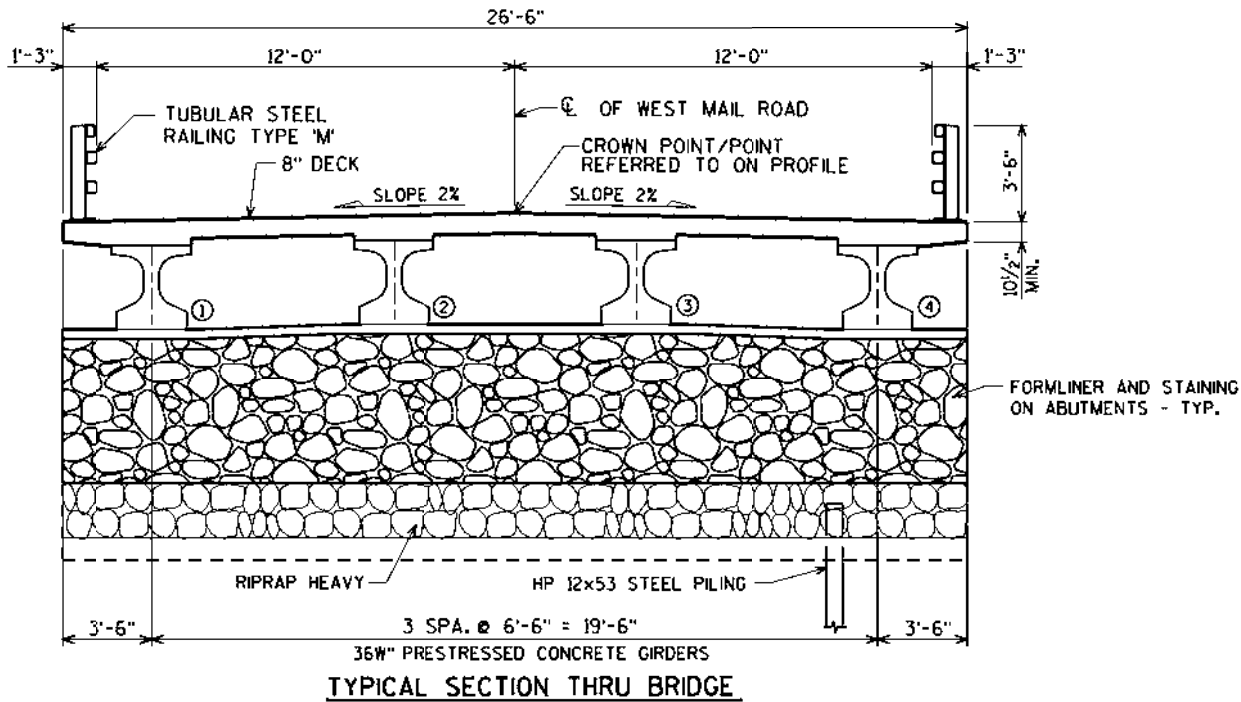
THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND ABUTMENT WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE PRESTRESSED GIRDER DETAILS SHEET, WHICH IS THE MAXIMUM HAUNCH QUANTITY FOR WHICH THE CONTRACTOR WILL BE PAID.

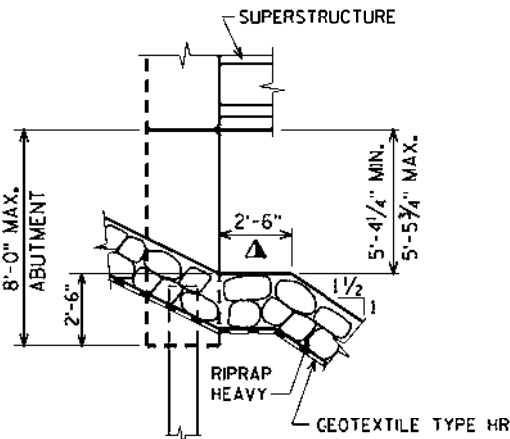
BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.

EXTENT OF BELOW GRADE SUBSTRUCTURES ARE NOT KNOWN. REMOVE EXISTING SUBSTRUCTURES AS NEEDED TO BUILD NEW SUBSTRUCTURES. COST OF SUBSTRUCTURE REMOVAL IS CONSIDERED INCIDENTAL TO "REMOVING STRUCTURE" BID ITEM.

CONCRETE POURED UNDERWATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.

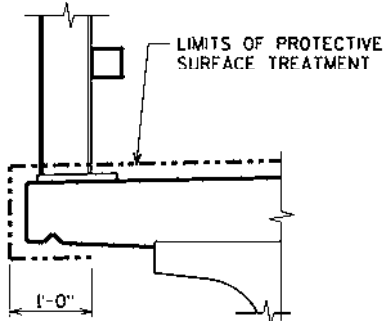


TYPICAL SECTION THRU BRIDGE



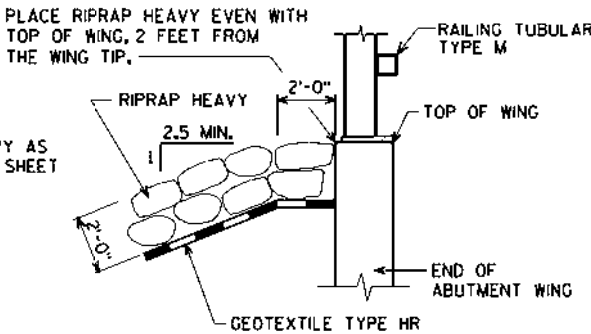
TRAVEL CORRIDOR DETAIL

▲ TRAVEL CORRIDOR.
FILL VOIDS IN RIPRAP HEAVY WITH "SELECT CRUSHED MATERIAL FOR TRAVEL CORRIDOR".



PROTECTIVE SURFACE TREATMENT

NOTE: PLACE RIPRAP HEAVY AS SHOWN ON GENERAL PLAN SHEET



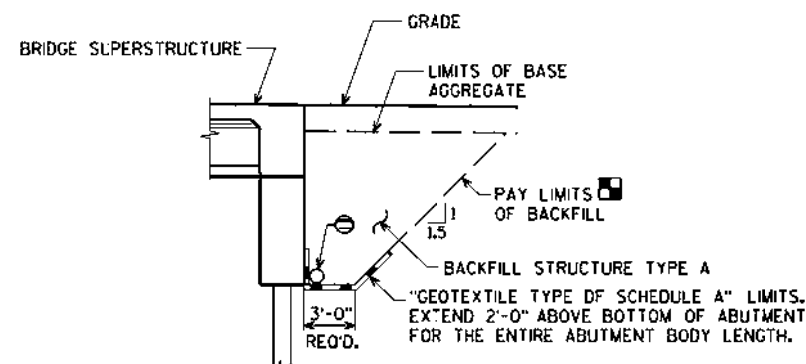
TYPICAL FILL SECTION AT WING TIPS

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-16-147			
DRAWN BY		CLP	PLANS CKD. DNS
TYPICAL SECTION, QUANTITIES AND NOTES		SHEET 2 OF 17	

\$PRNAME\$
I:\42-42-1294.00 - Douglas Co. In Gordon, West Mill Road\Structure\CADD\Structure\Final\421294 gp.dgn

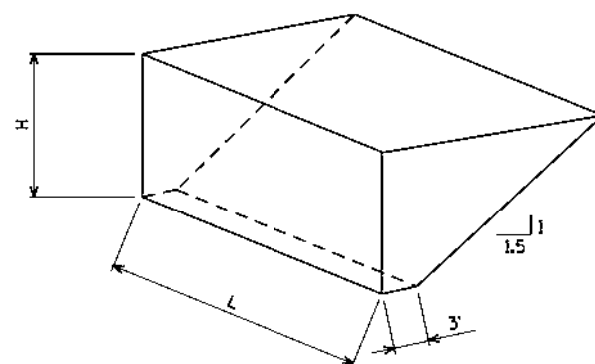
STATE PROJECT NUMBER

8386-00-72



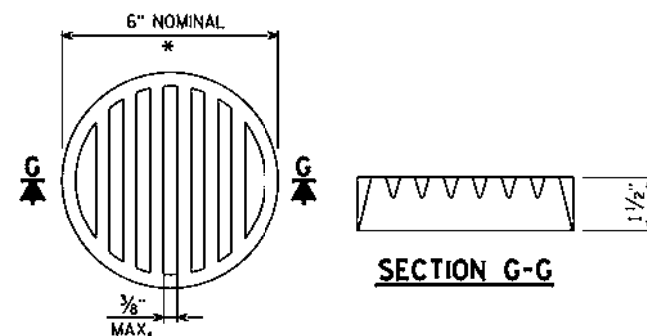
BACKFILL STRUCTURE LIMITS

- BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL 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 AS DETAILED ON THIS SHEET.



ABUTMENT BACKFILL DIAGRAM

L = OUT TO OUT OF ABUTMENT BODY INCLUDING WINGS (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
 $V_{CF} = (L)(3.0)(H) + (L)(0.5)(1.5H)(H)$
 $V_{CY} = V_{CF} (EF)/27$
 $V_{TON} = V_{CY} (2.0)$

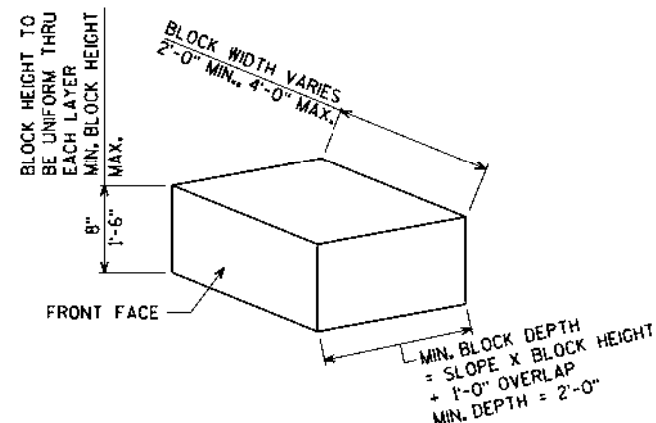


* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

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

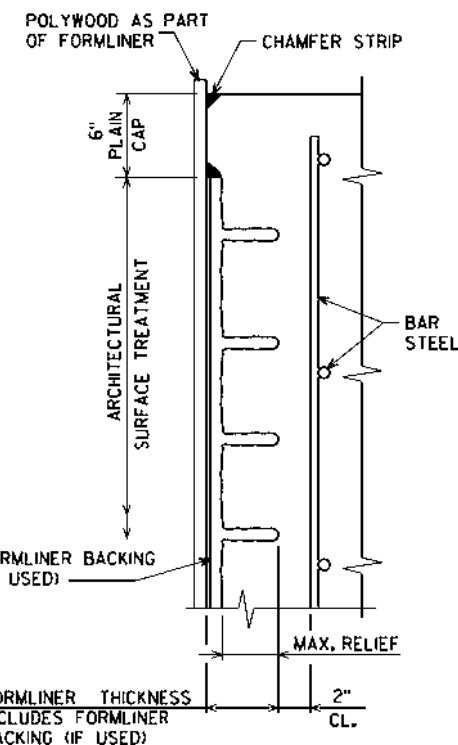
THE RODENT SHIELD SHALL BE PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 x 1-INCH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

RODENT SHIELD DETAIL



CUT-STONE BOULDER DETAIL

UNDERLAY CUT-STONE BOULDERS AT WING 3 WITH GEOTEXTILE TYPE HR. FOLD GEOTEXTILE SHEET ALONG BOTTOM & BACK OF WALL STEPS.



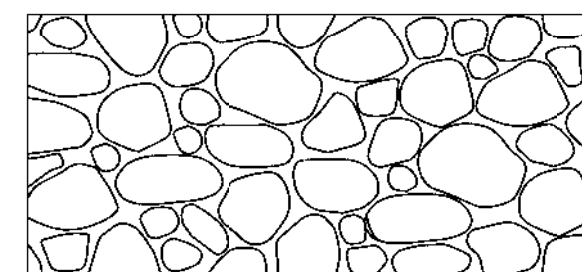
SECTION THRU FORMLINER

FORMLINER COURSING ON ABUTMENTS AND WINGS SHALL BE LEVEL.

THE FORMLINER COURSING ON THE WINGS SHALL BE VERTICALLY ALIGNED WITH THE FORMLINER COURSING ON THE FRONT OF THE ABUTMENT.

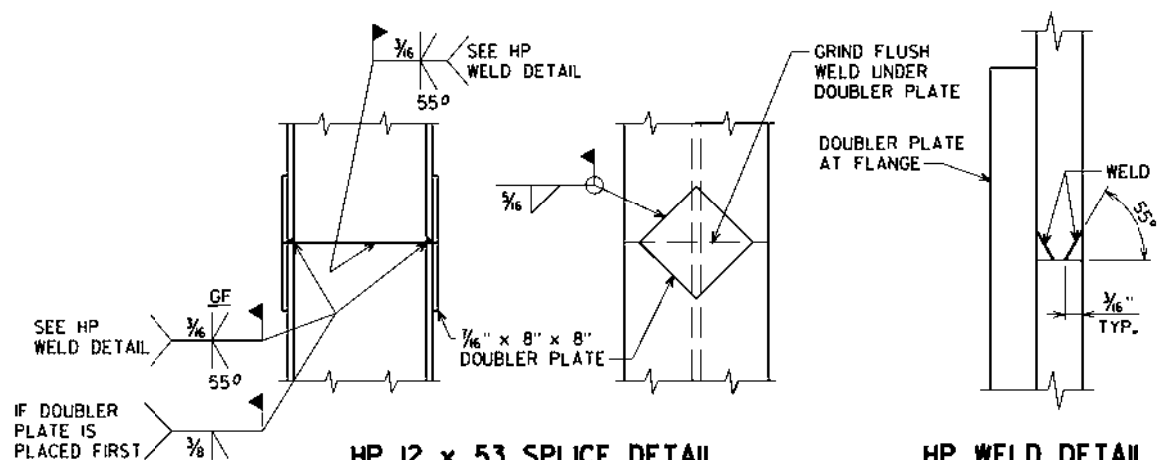
THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS CONSTRUCTION JOINTS.

WRAPAROUND/MATCH FORMLINER PATTERN AT CORNERS.



FIELD STONE - RANDOM

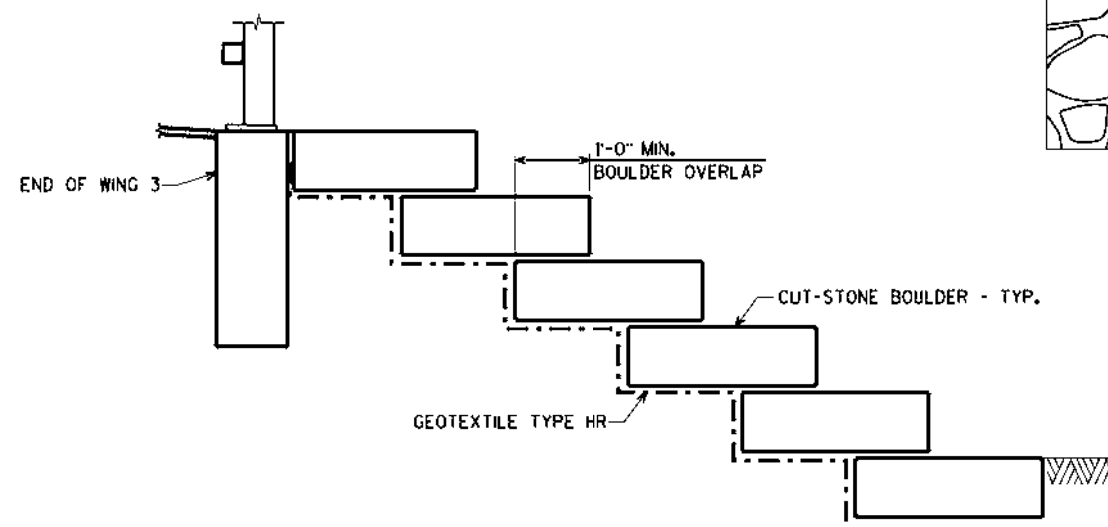
FORMLINER THICKNESS = 3/2"
SIZES BETWEEN 6" & 24"
MAX. RELIEF = 2 1/2"



HP 12 x 53 SPLICE DETAIL

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR



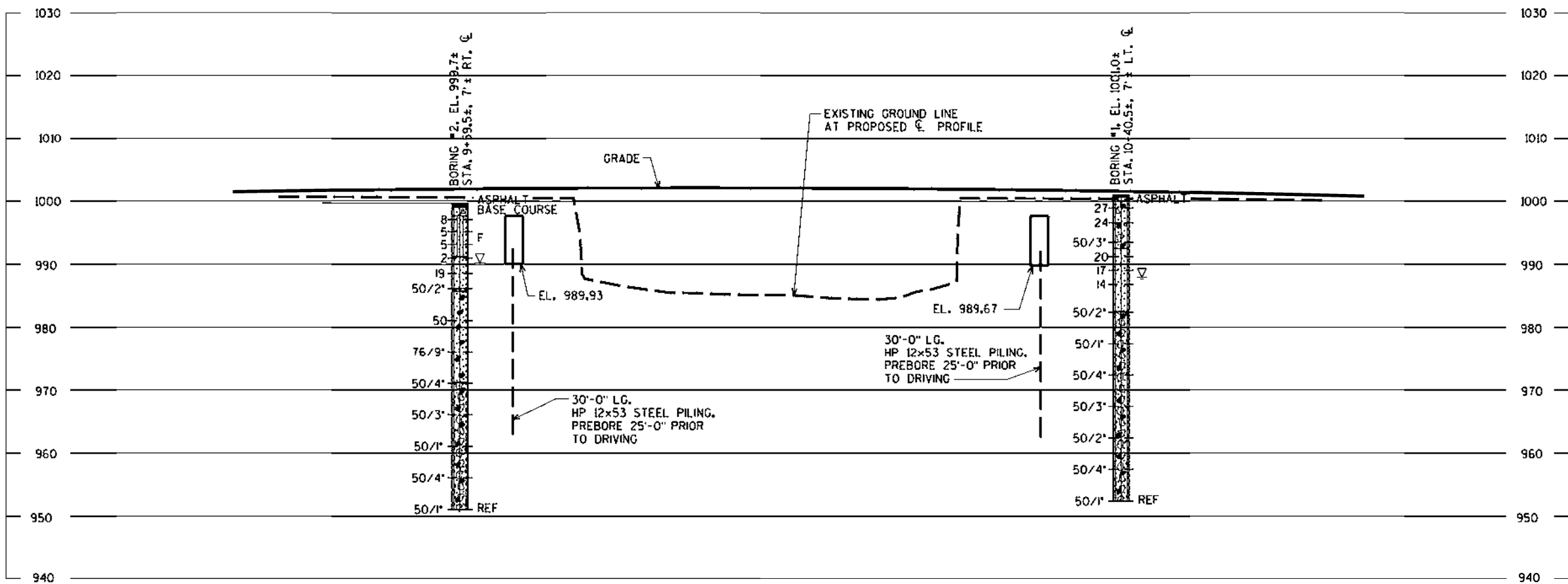
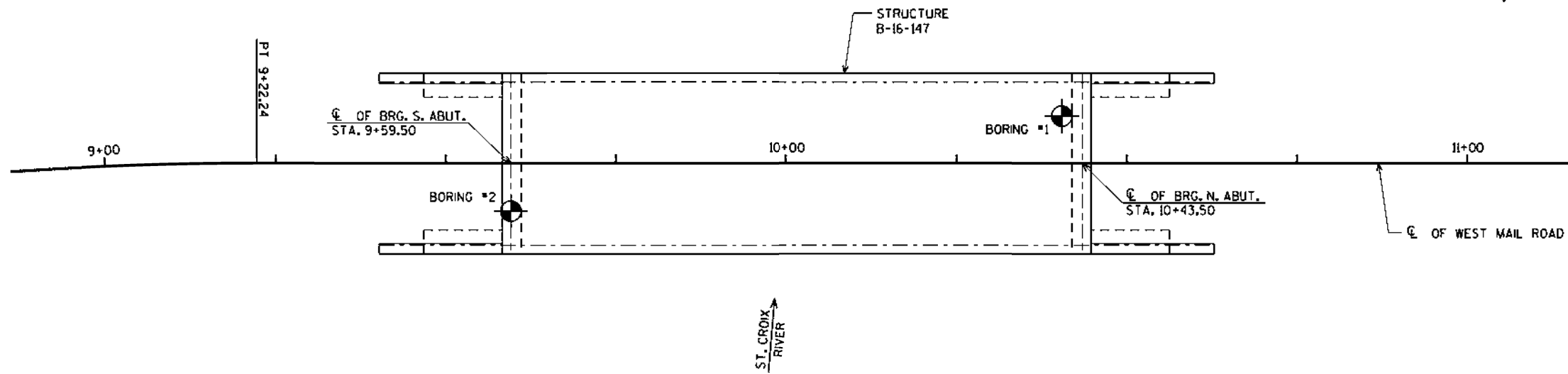
CUT-STONE BOULDER SECTION

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-16-147			
DRAWN BY		CLP	PLANS OK'D. DNS
STRUCTURE DETAILS		SHEET 3 OF 17	

6/18/2025
PENTABLE:BReou_shd_util.tbl

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	9-27-2022	135528.63	182077.98
2	9-27-2022	135472.61	182138.08

BORINGS COMPLETED BY: GEOTECHNICAL DRILLING CONTRACTORS, LLC
REPORT COMPLETED BY: ECS MIDWEST, LLC
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) DOUGLAS COUNTY



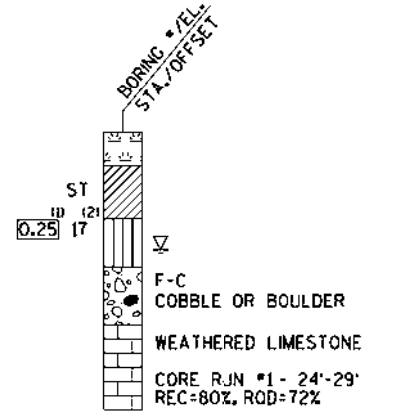
STATE PROJECT NUMBER

8386-00-72

MATERIAL SYMBOLS

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

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

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

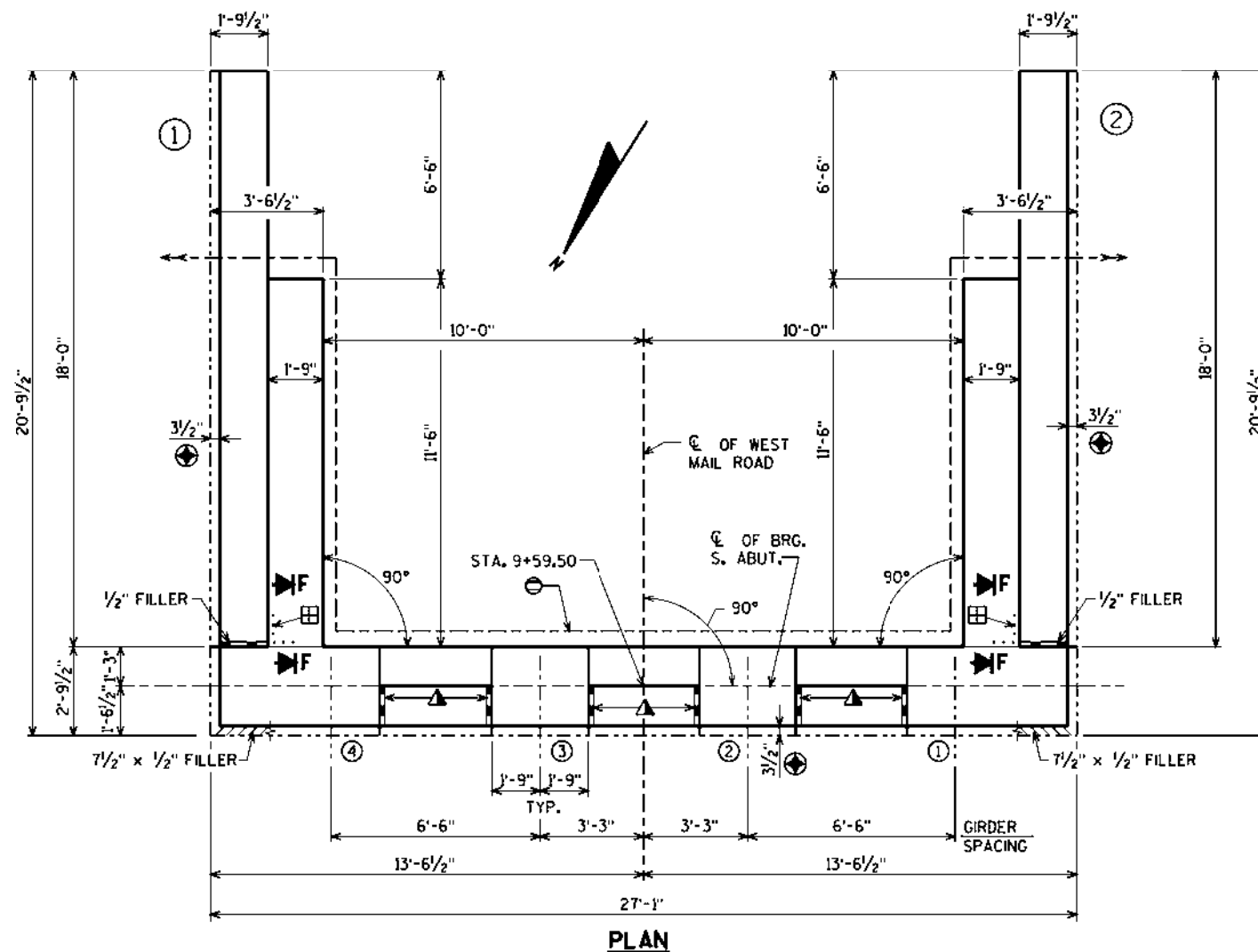
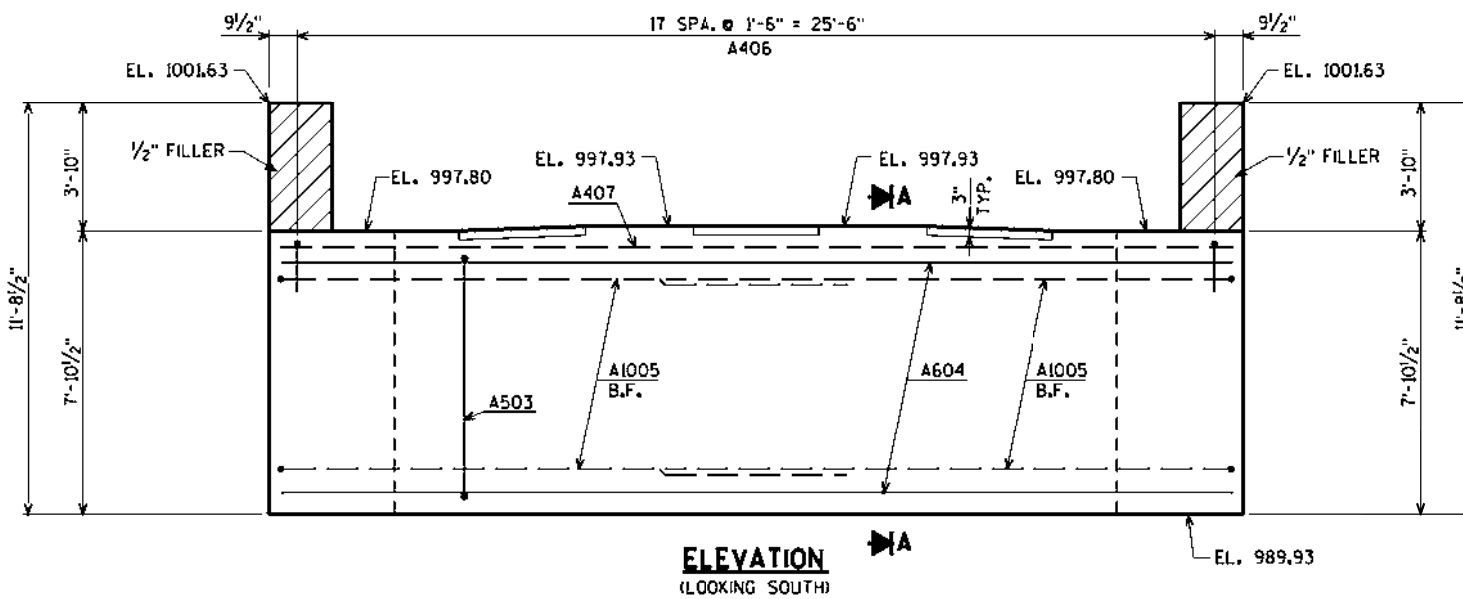
ABBREVIATIONS

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

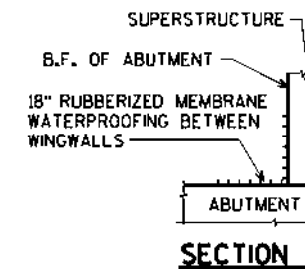
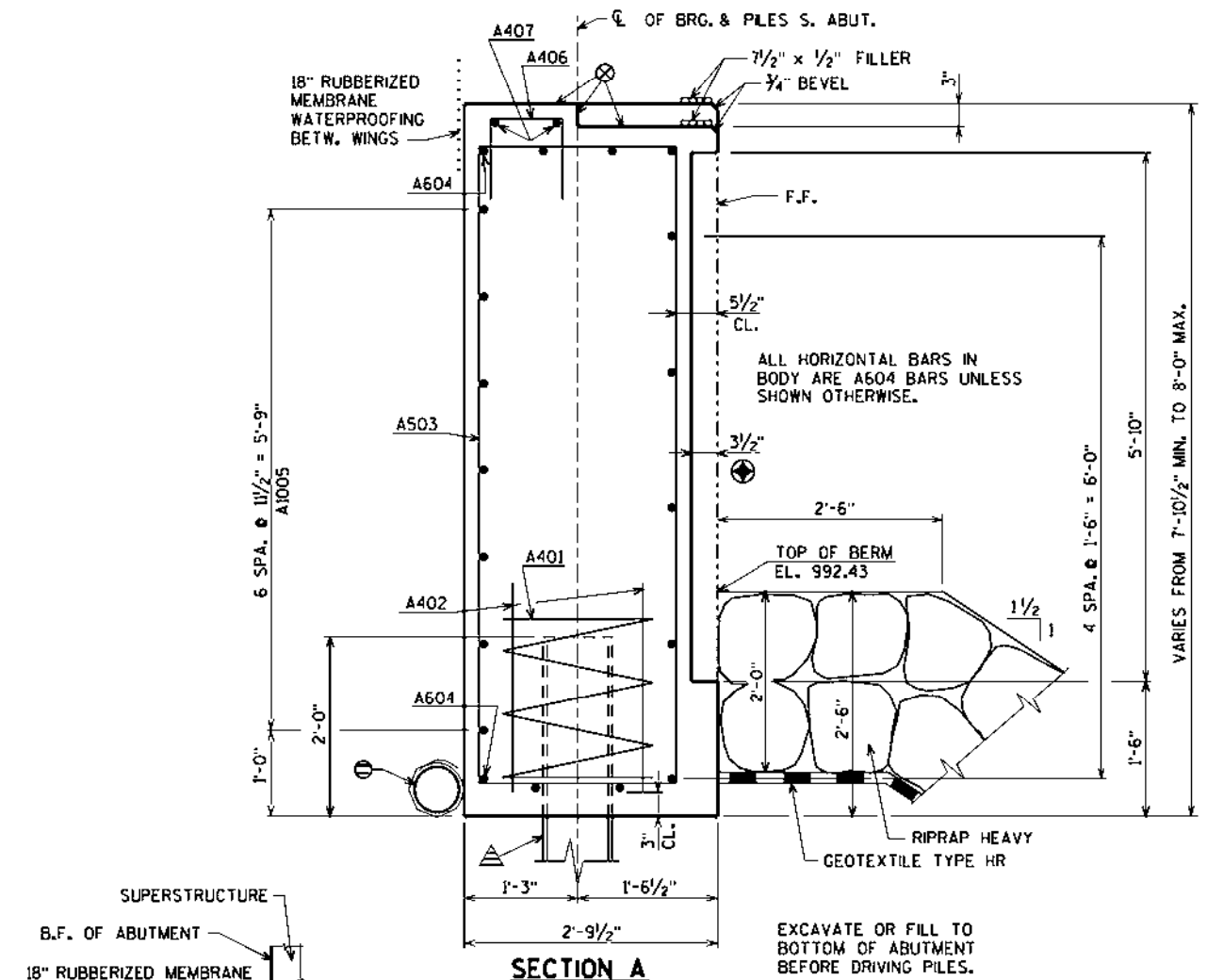
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-16-147			
DRAWN BY		CLP	PLANS CKD. DNS
SUBSURFACE EXPLORATION		SHEET 4 OF 17	



NOTE: SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER, 0" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE.

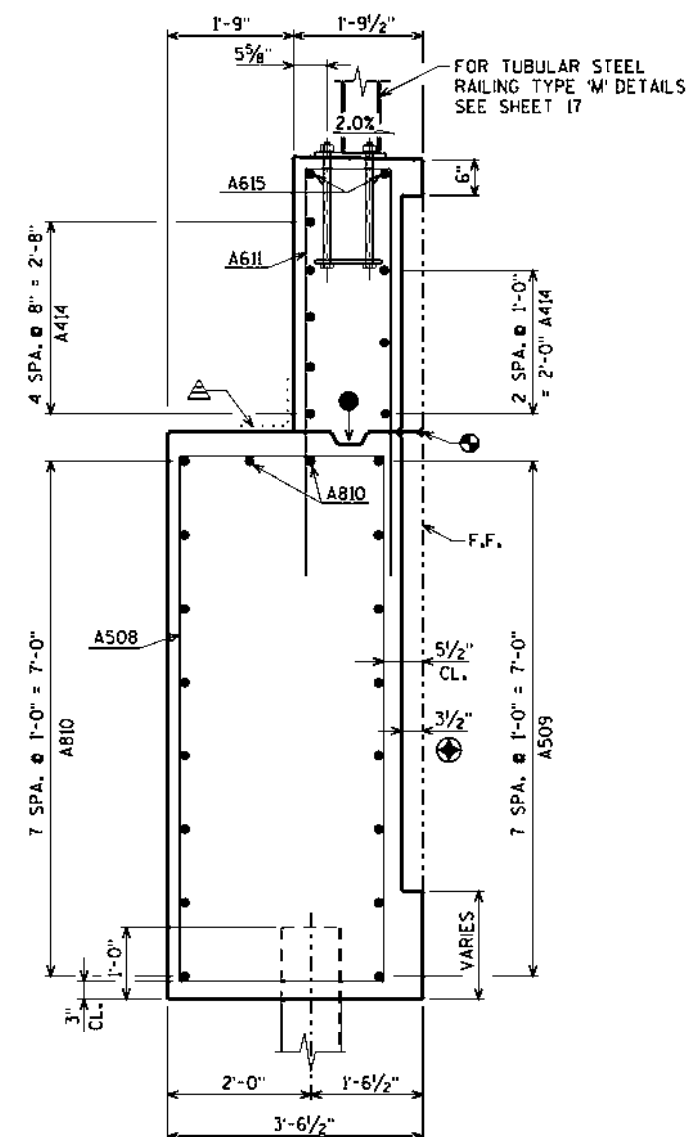
STATE PROJECT NUMBER

8386-00-72



- ⊕ FORMLINER
SEE DETAILS ON SHEET 3.
- ▲ 3/4" CORK FILLER ON VERTICAL
FACE ONLY.
- ⊗ STEEL TROWEL TOP SURFACE OF ABUTMENT.
PLACE MULTIPLE LAYERS OF POLYETHYLENE
SHEETS OVER ENTIRE ABUTMENT TOP BEFORE
PLACING FILLER AND SUPERSTRUCTURE.
TOTAL THICKNESS OF SHEETS SHALL BE
AT LEAST 0.03".
- ⊖ PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5%
MIN. TO SUITABLE DRAINAGE. ATTACH RODENT
SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED
ON SHEET 3. RODENT SHIELD TO BE INCIDENTAL TO
BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".
- ⊞ VERTICAL 18" RUBBERIZED MEMBRANE
WATERPROOFING TO EXTEND FROM
BRIDGE SEAT TO TOP OF WINGWALL.
FOR PILE SPlice DETAIL SEE SHEET 3.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-16-147			
DRAWN BY		CLP	PLANS CKD. DNS
SOUTH ABUTMENT		SHEET 5 OF 17	



SECTION B

-
- 1'-9 1/2" (Total width)
 5 5/8" (Top flange width)
 2.0% (Top flange thickness)
 FOR TUBULAR STEEL RAILING TYPE 'W' DETAILS SEE SHEET 17
 6" (Clearance from top flange)
 A615 (Top reinforcement bar)
 3/2" (Clearance from top reinforcement bar)
 F.F. (Finish Face)
 2 SPA. @ 8" = 2'-8" (Left side length)
 A414 (Left side reinforcement bar)
 2 SPA. @ 1'-0" = 2'-0" (Right side length)
 A414 (Right side reinforcement bar)
 5 1/2" CL. (Clearance from centerline)
 1'-0" (Bottom width)
 A413 (Bottom reinforcement bar)
 4" (Bottom flange width)

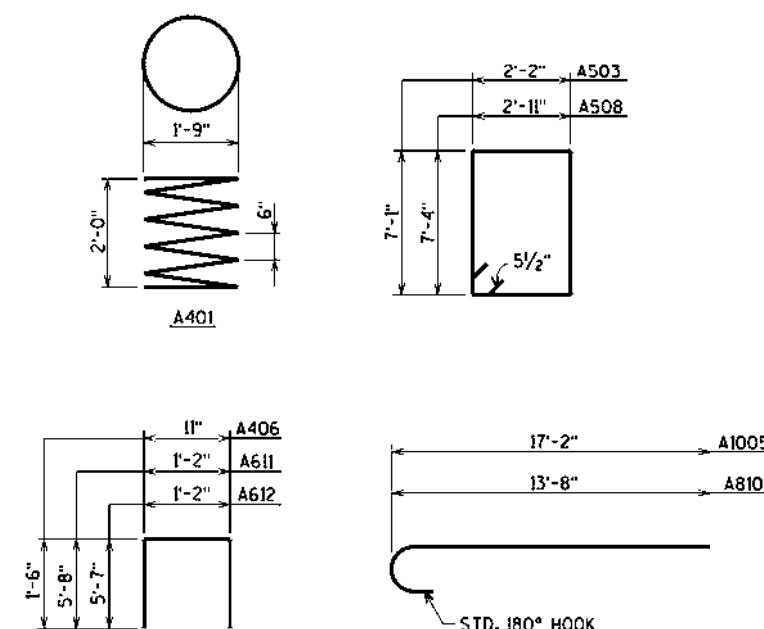
SECTION C

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-16-147			
DRAWN BY		CLP	PLANS CK'D. DNS
SOUTH ABUTMENT WING DETAILS		SHEET 6 OF 1	

BAR NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED	BAR SERIES	2,820* COATED 2,440* UNCOATED
							LOCATION
A401		5	28-0	X			BODY @ PILES
A402		10	2-3				BODY @ PILES
A503		33	19-2	X			BODY VERT.
A604		12	26-2				BODY HORIZ.
A1005		14	18-7	X			BODY HORIZ. B.F.
A406		18	3-9	X			BODY VERT. TOP
A407		2	26-2				BODY HORIZ. TOP
A508	X	24	21-2	X			WINGS 1 & 2 VERT.
A509	X	16	13-8				WINGS 1 & 2 HORIZ. F.F.
A810	X	20	14-7	X			WINGS 1 & 2 HORIZ. B.F. & TOP
A611	X	32	12-2	X			WINGS 1 & 2 VERT.
A612	X	18	12-0	X			WINGS 1 & 2 VERT.
A413	X	10	7-9				WINGS 1 & 2 HORIZ. E.F.
A414	X	16	17-7				WINGS 1 & 2 HORIZ. E.F.
A615	X	4	17-7				WINGS 1 & 2 HORIZ. E.F.
A416	X	6	7-5				BODY VERT. END @ WINGS 1 & 2

[illegible]

ABUTMENT TO BE SUPPORTED ON
HP 12 x 53 STEEL PILING DRIVEN TO A REQ'D.
DRIVING RESISTANCE OF 190 TONS PER PILE.
ESTIMATED LENGTH 30'-0".
PILES TO BE PREBORED 25'-0" PRIOR TO DRIVING.



ELEVATION
(LOOKING NORTH)

17 SPA. @ 1'-6" = 25'-6" B406

9 1/2" 9 1/2"

EL. 1001.37 EL. 1001.37

1/2" FILLER 1/2" FILLER

3'-10" 3'-10"

EL. 997.54 EL. 997.67 EL. 997.67 EL. 997.54

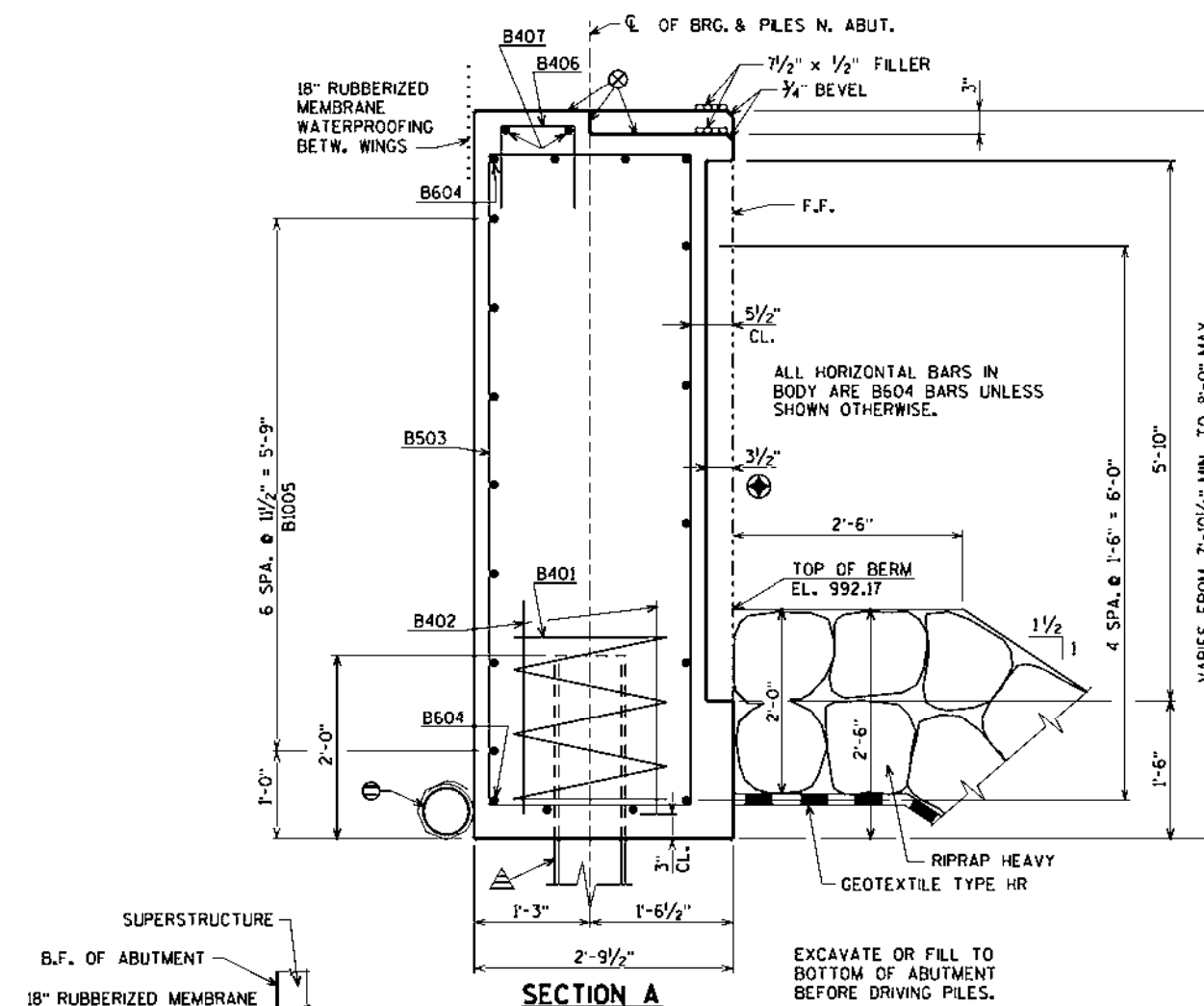
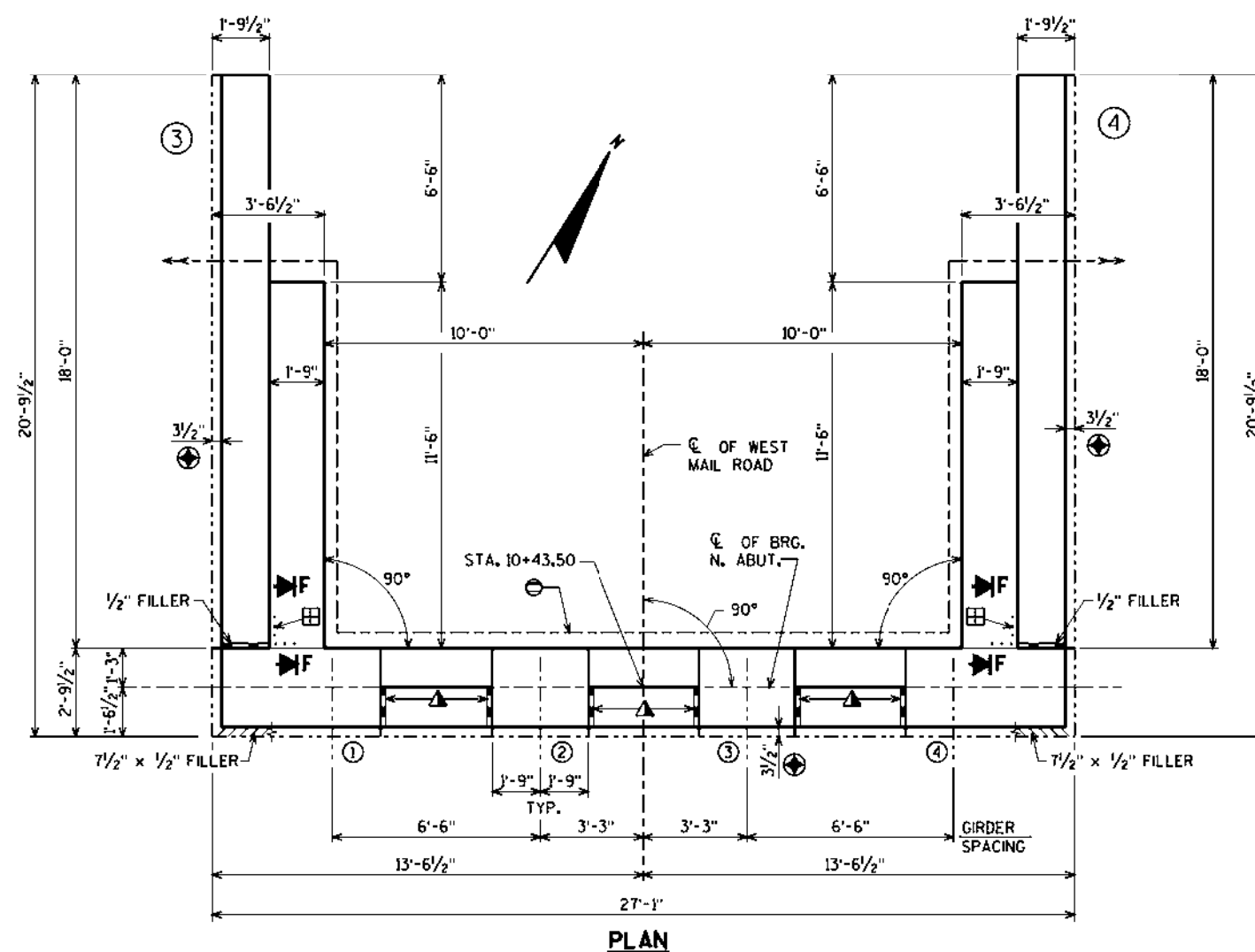
B407

3" TYP.

B503 B1005 B.F. B604 B1005 B.F.

11'-8 1/2" 7'-10 1/2" 7'-10 1/2"

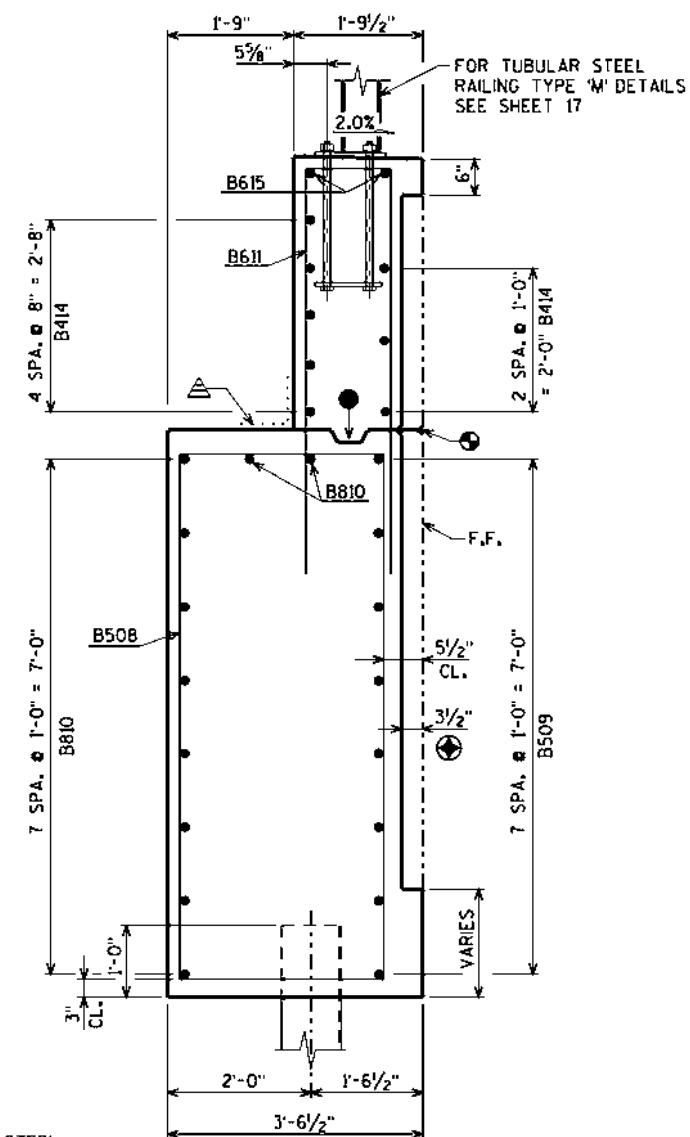
EL. 989.67



△ ABUTMENT TO BE SUPPORTED ON
HP 12 x 53 STEEL PILING DRIVEN TO A REQ'D.
DRIVING RESISTANCE OF 190 TONS PER PILE.
ESTIMATED LENGTH 30'-0".
PILES TO BE PREBORED 25'-0" PRIOR TO DRIVING.

- FORMLINER
SEE DETAILS ON SHEET 3.
 - 3/4" CORK FILLER ON VERTICAL
FACE ONLY.
 - STEEL TROWEL TOP SURFACE OF ABUTMENT.
PLACE MULTIPLE LAYERS OF POLYETHYLENE
SHEETS OVER ENTIRE ABUTMENT TOP BEFORE
PLACING FILLER AND SUPERSTRUCTURE.
TOTAL THICKNESS OF SHEETS SHALL BE
AT LEAST 0.03".
 - PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5%
MIN. TO SUITABLE DRAINAGE. ATTACH RODENT
SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED
ON SHEET 3. RODENT SHIELD TO BE INCIDENTAL TO
BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".
 - VERTICAL 18" RUBBERIZED MEMBRANE
WATERPROOFING TO EXTEND FROM
BRIDGE SEAT TO TOP OF WINGWALL.
- FOR PILE SPLICE DETAIL SEE SHEET 3.

NO.	DATE	REVISION		BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION				
STRUCTURE B-16-147				
DRAWN BY		CLP	PLANS CK'D.	DNS
NORTH ABUTMENT			SHEET 8 OF	



SECTION B

- [illegible]

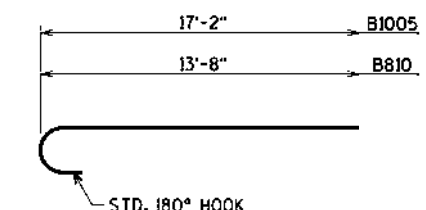
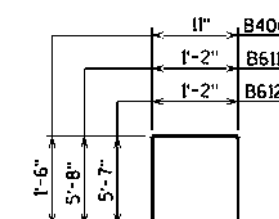
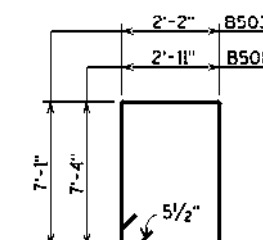
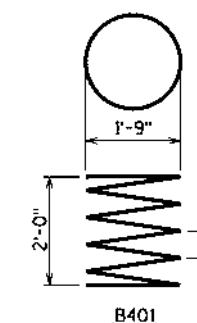
SECTION C

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-16-147			
DRAWN BY		CLP	PLANS CKD. DNS
NORTH ABUTMENT WING DETAILS		SHEET 9 OF 17	

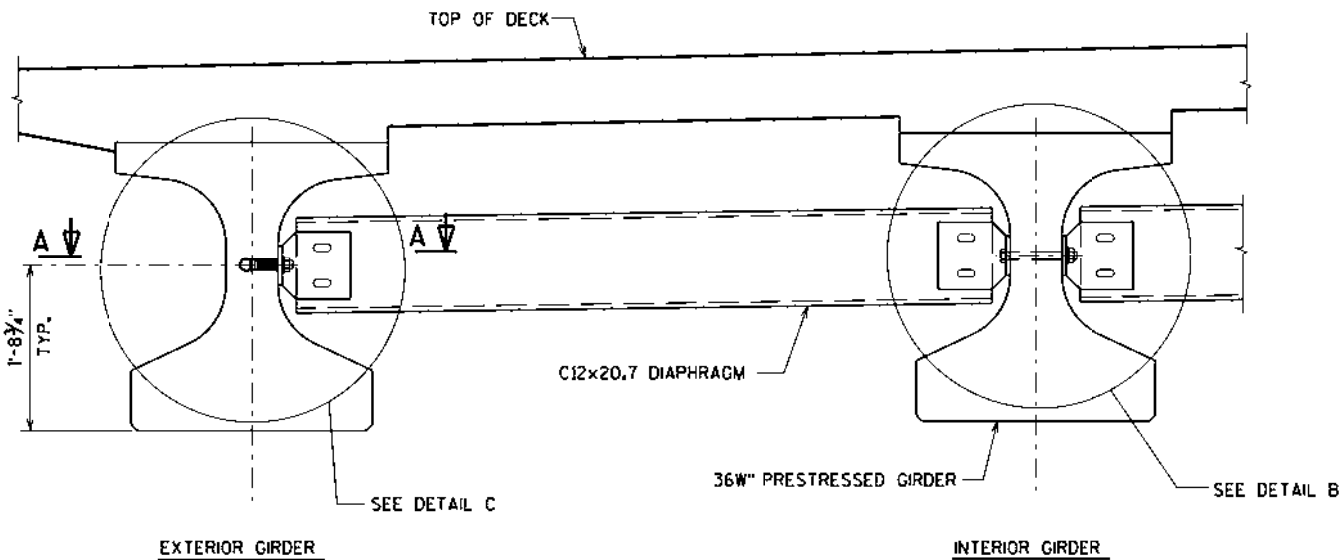
BAR NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED	BAR SERIES	2,820* COATED 2,440* UNCOATED
							LOCATION
B401		5	28-0	X			BODY @ PILES
B402		10	2-3				BODY @ PILES
B503		33	19-2	X			BODY VERT.
B604		12	26-2				BODY HORIZ.
B1005		14	18-7	X			BODY HORIZ. B.F.
B406		18	3-9	X			BODY VERT. TOP
B407		2	26-2				BODY HORIZ. TOP
B508	X	24	21-2	X			WINGS 3 & 4 VERT.
B509	X	16	13-8				WINGS 3 & 4 HORIZ. F.F.
B810	X	20	14-7	X			WINGS 3 & 4 HORIZ. B.F. & TOP
B611	X	32	12-2	X			WINGS 3 & 4 VERT.
B612	X	18	12-0	X			WINGS 3 & 4 VERT.
B413	X	10	7-9				WINGS 3 & 4 HORIZ. E.F.
B414	X	16	17-7				WINGS 3 & 4 HORIZ. E.F.
B615	X	4	17-7				WINGS 3 & 4 HORIZ. E.F.
B416	X	6	7-5				BODY VERT. END @ WINGS 3 & 4

[illegible]

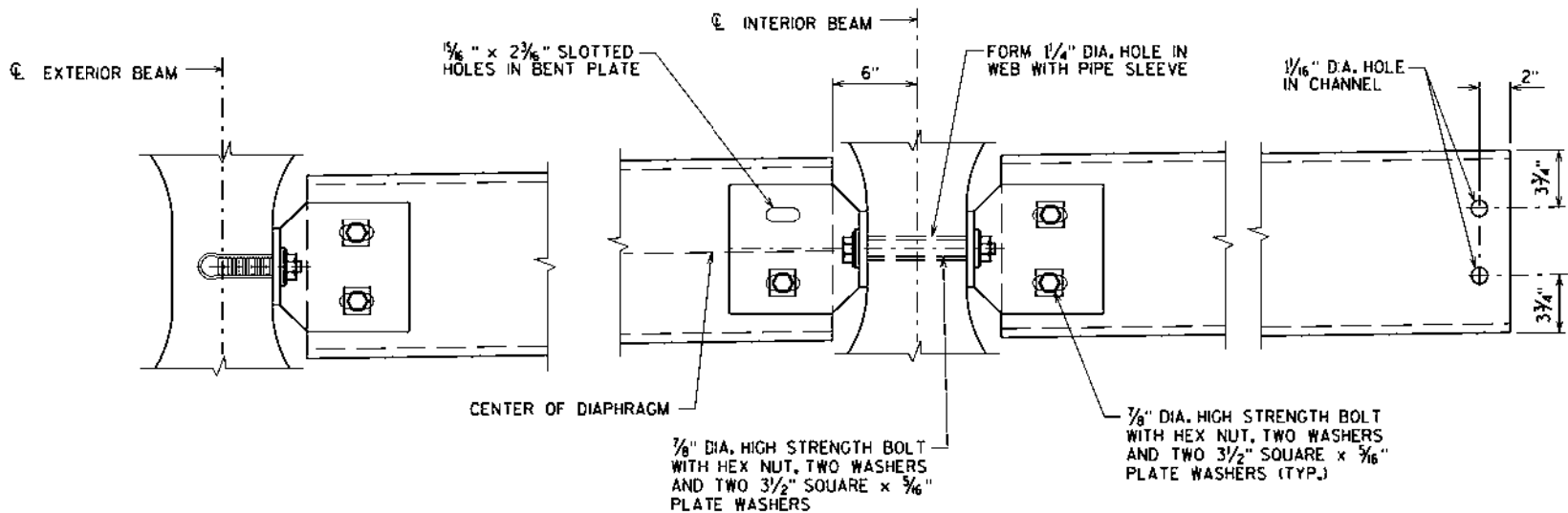
ABUTMENT TO BE SUPPORTED ON
HP 12 x 53 STEEL PILING DRIVEN TO A RECD.
DRIVING RESISTANCE OF 190 TONS PER PILE.
ESTIMATED LENGTH 30'-0".
PILES TO BE PREBORED 25'-0" PRIOR TO DRIVING.



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-16-147			
DRAWN BY		CLP	PLANS CKD. DNS
NORTH ABUTMENT PILE LAYOUT & BILL OF BARS		SHEET 10 OF 1	

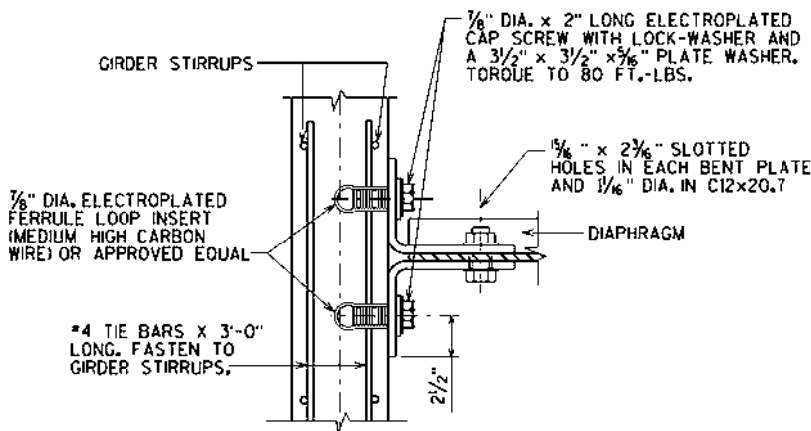


PART TRANSVERSE SECTION AT DIAPHRAGM

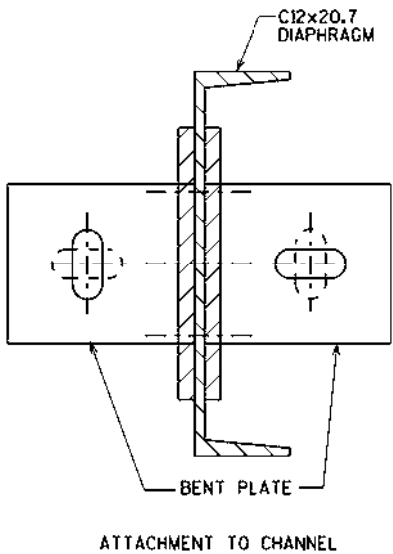
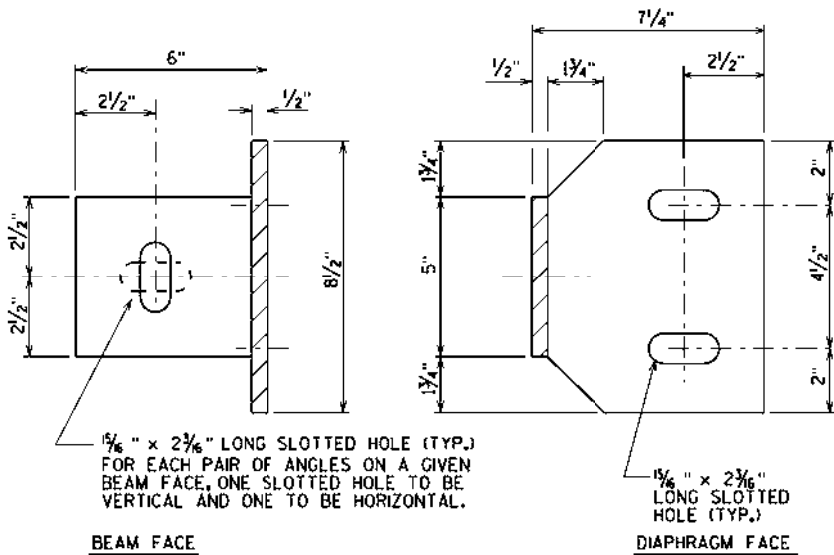


DETAIL C

DETAIL B



SECTION A-A
(FOR EXTERIOR ATTACHMENT)



NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-16-147", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS 1/4 TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.

FOR DIAPHRAGM SPACING SEE SHEET 15.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-16-147			
DRAWN BY		CLP	PLANS CKD. DNS
STEEL DIAPHRAGM		SHEET 11 OF 17	

NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER OR EPOXY TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS. SEE SECT. 503.3.4 OF STANDARD SPECIFICATIONS FOR GUIDANCE.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER.

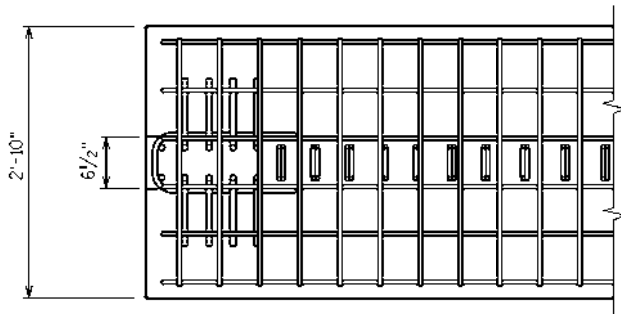
ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

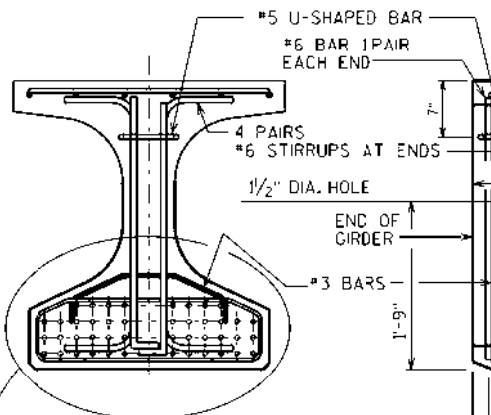
AN EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A1064 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DESIGN SECTION. IF USED, WWF SUBSTITUTION DETAILS SHALL BE SUBMITTED ELECTRONICALLY TO THE WISDOT FABRICATION LIBRARY AND ACCEPTED PRIOR TO SHOP DRAWING SUBMITTAL.

PRESTRESSING STRANDS SHALL BE 0.6" DIA. - 7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

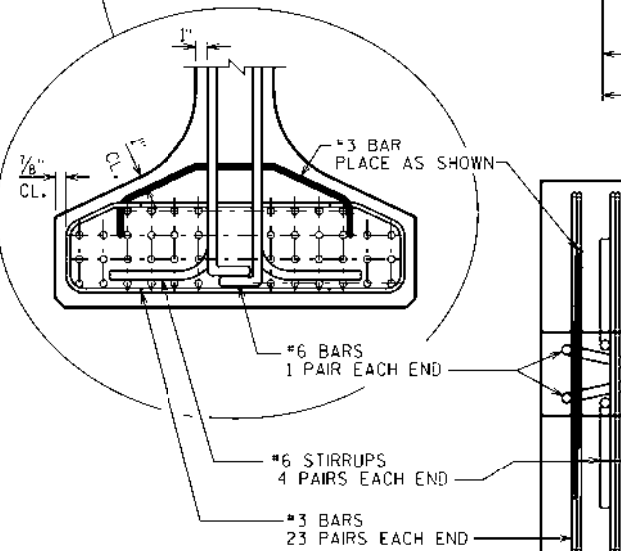
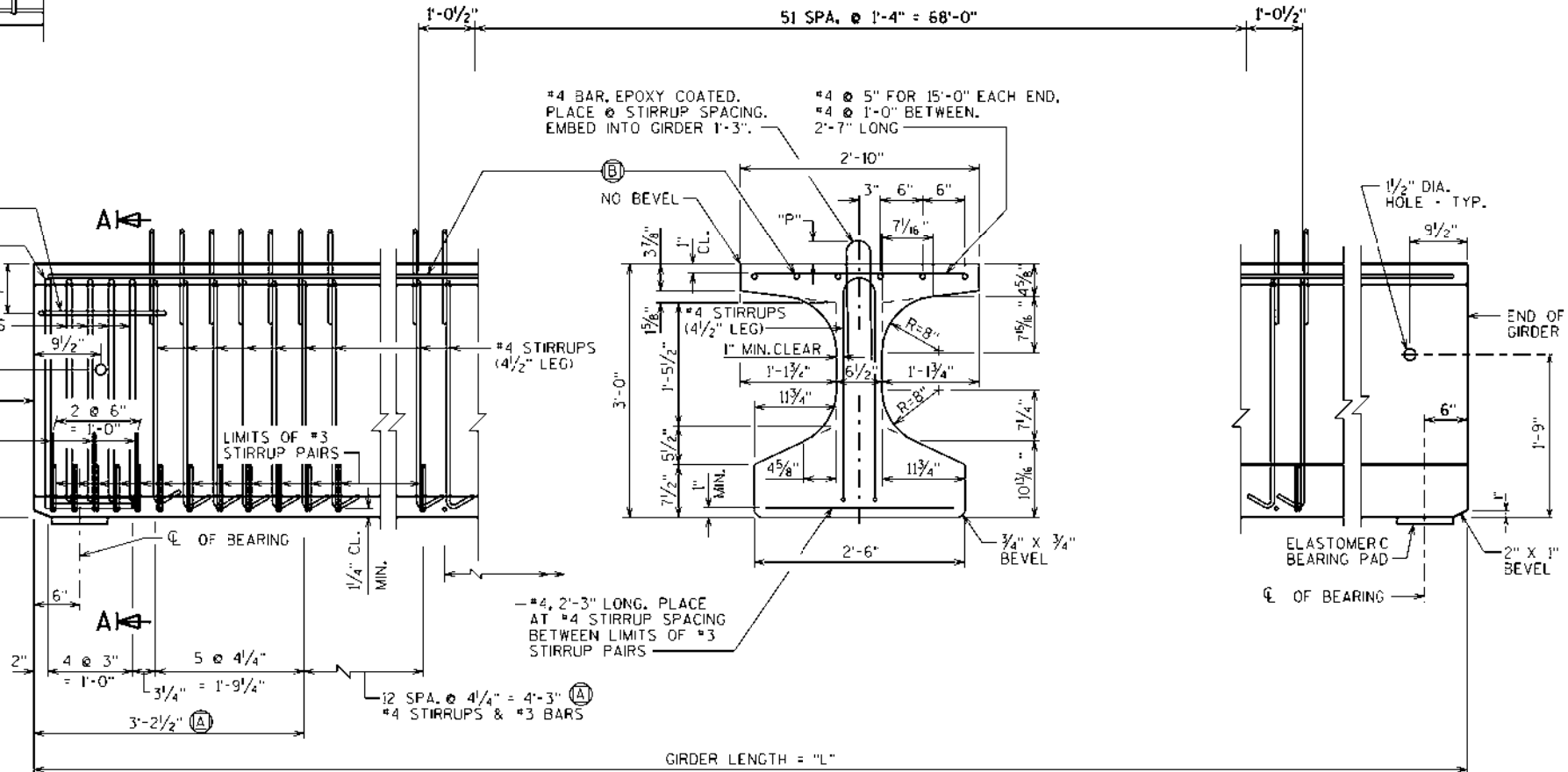
FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.



TOP FLANGE

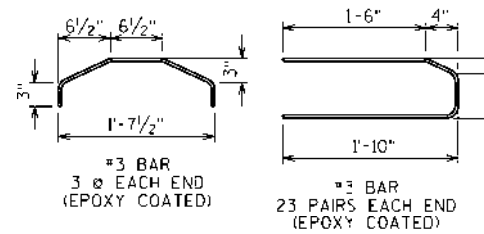
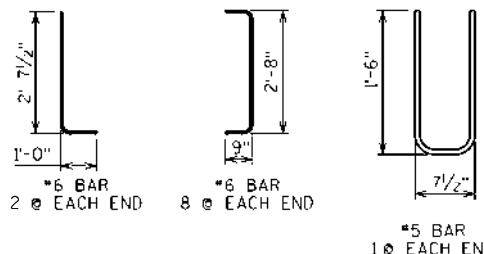


SECTION A-A

DETAIL A
BOTTOM FLANGE

SIDE VIEW & TYPICAL SECTION IN SPAN

- (A) DETAIL TYP. AT EACH END
(B) 6 #4 BARS, FULL LENGTH, MIN. LAP = 2'-4"



* MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA																						
SPAN	GIRDER	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.)									CONC. STRENGTH f'c (P.S.I.)	"P" 1ST 1/3 OF GIRDER	"P" MID 1/3 OF GIRDER	"P" END 1/3 OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN					
			1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10						TOTAL NO. OF STRANDS	f'ci (P.S.I.) *	(IN.)			
																		"A"	"B" MIN.	"B" MAX.	"C"	
1	1 & 4	85'-0"	0.5	1.0	1.3	1.5	1.6	1.5	1.3	1.0	0.5	8,000	7"	6"	7"	0.60	30	6,400	32	11	14	4
1	2 & 3	85'-0"	0.5	0.8	1.2	1.3	1.4	1.3	1.2	0.8	0.5	8,000	7"	6"	7"	0.60	30	6,400	32	11	14	4

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-16-147			
DRAWN BY		CLP	PLANS CKD. DNS
36W" PRESTRESSED GIRDER DETAILS		SHEET 12 OF 17	

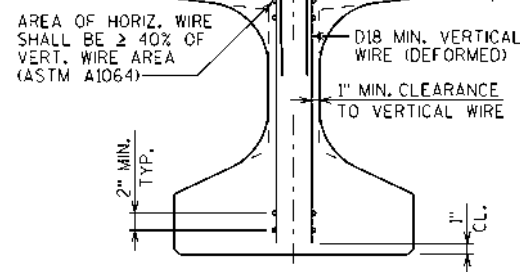
\$PRNAME\$
I:\42-42-1294.00 - Douglas Co, In Gordon, West Moll Road\Structure\CADD\Structure\Final\421294 36W.dgn

STATE PROJECT NUMBER

8386-00-72

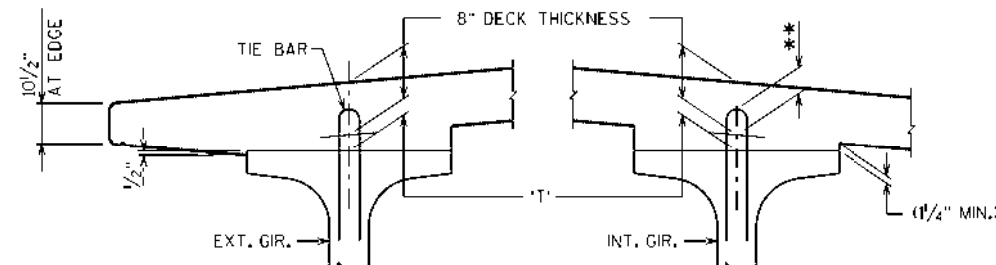
*4 BAR, EPOXY COATED. PLACE
STIRRUP SPACING REQUIRED
FOR NON WWF STIRRUPS.
EMBED INTO GIRDER 1'-3".

HORIZ. WIRES SHALL
BE LOCATED IN TOP
AND BOT. FLANGES
AND NOT IN THE WEB.



SECTION THRU GIRDER

SHOWING WELDED WIRE FABRIC (WWF) STIRRUPS
ASTM A1064 (FY = 70 KSI)



DECK HAUNCH DETAIL

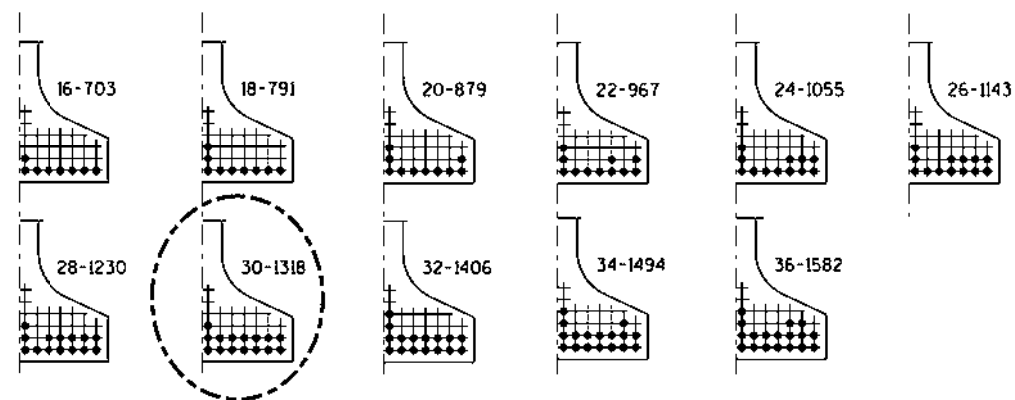
IF 1/4" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN 1/2" OR.

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

TO DETERMINE 'T', ELEV. OF TOP OF GIR. AT C OF SUBSTRUCTURE UNITS
& AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS
PROCESS:

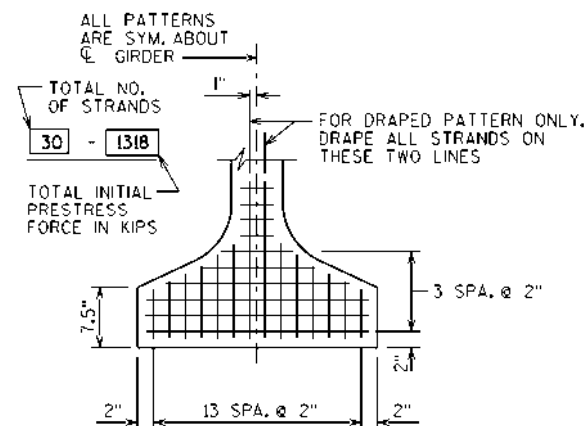
- TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
- + DEAD LOAD DEFLECTION
- DECK THICKNESS
- = HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 2/4" WAS USED IN THE QUANTITY
"CONCRETE MASONRY BRIDGES".

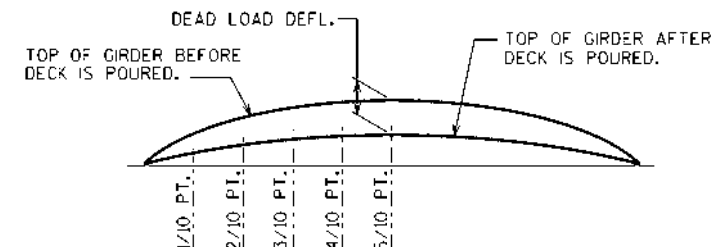


ARRANGEMENT AT C SPAN - FOR GIRDERS WITH DRAPED STRANDS

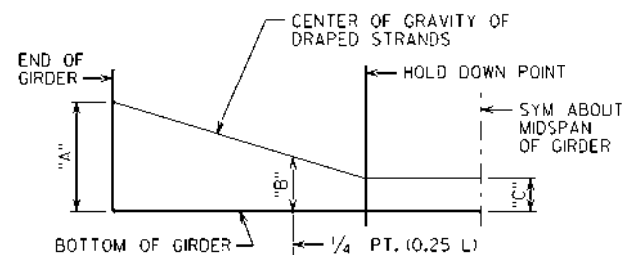
0.6" STRANDS



TYP. STRAND PATTERN



DEAD LOAD DEFLECTION DIAGRAM



DRAPED STRAND PROFILE

* THE THEORETICAL INITIAL CAMBER VALUE AT THE
TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED
BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER
GROWTH FROM THE TIME OF STRAND RELEASE
TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) *
1	3.4

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T'.
USE ACTUAL GIRDER SHOTS.
THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

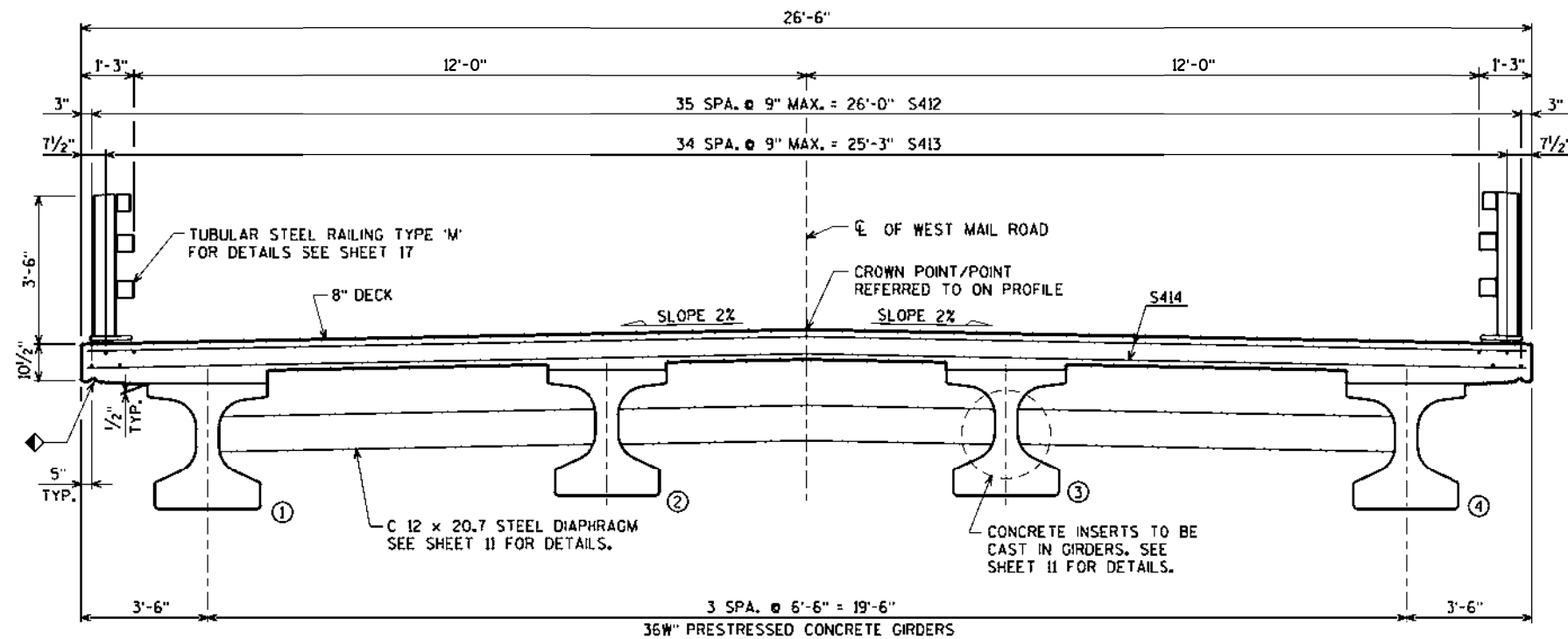
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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-16-147			
DRAWN BY		CLP	PLANS CKD. DNS
36W" PRESTRESSED GIRDER DETAILS		SHEET 13 OF 17	

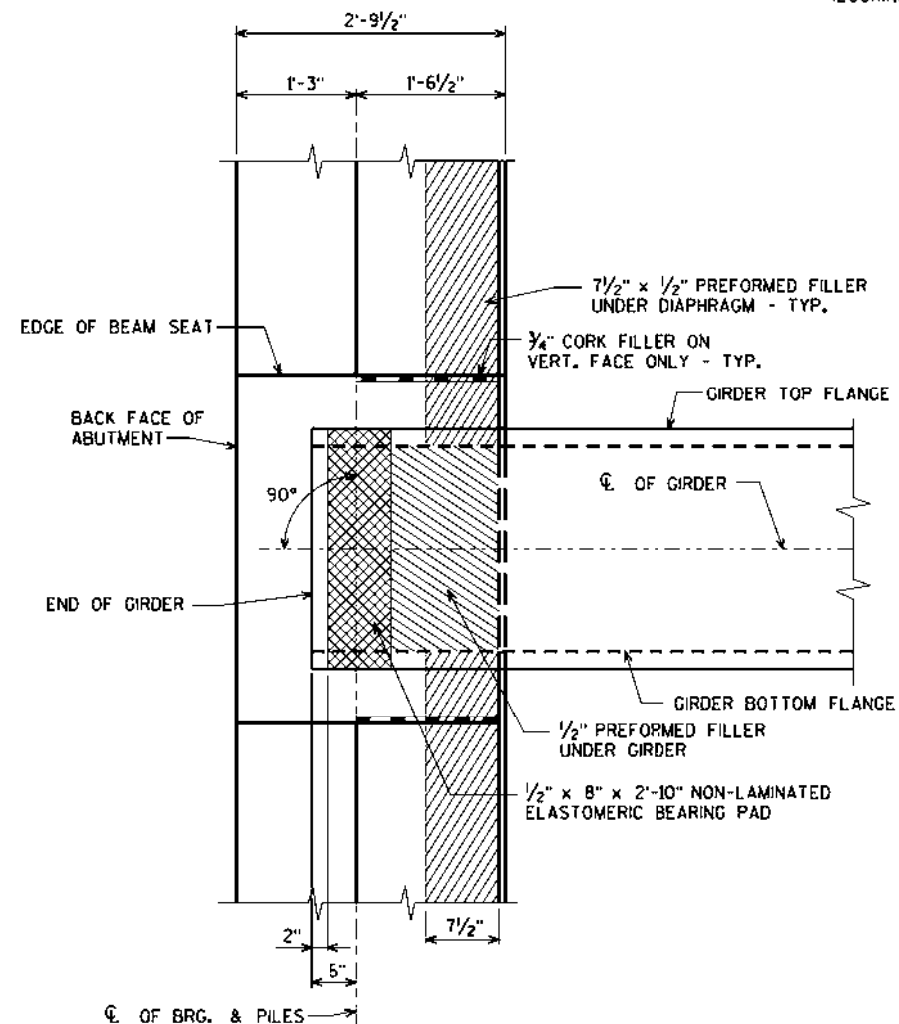
7/7/2025
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8



TYPICAL SECTION THRU BRIDGE
(LOOKING NORTH)

3/4" V - GROOVE. EXTEND V - GROOVE TO 6" FROM FRONT FACE OF ABUTMENT DIAPHRAGMS - TYP.



BEARING PAD DETAIL

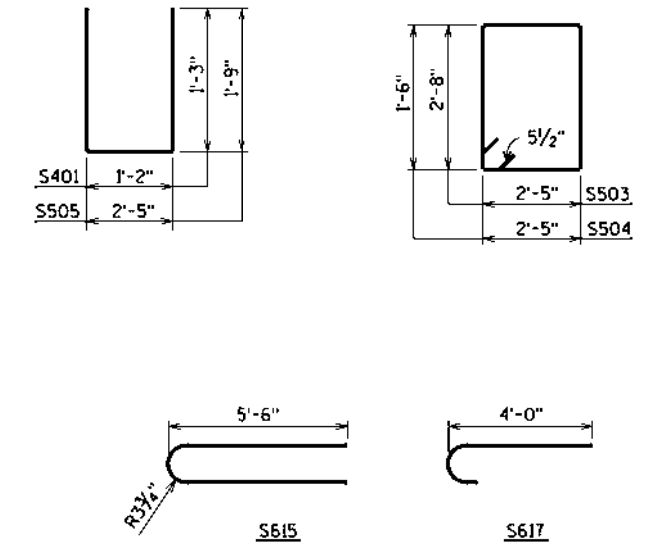
STATE PROJECT NUMBER

8386-00-72

BILL OF BARS

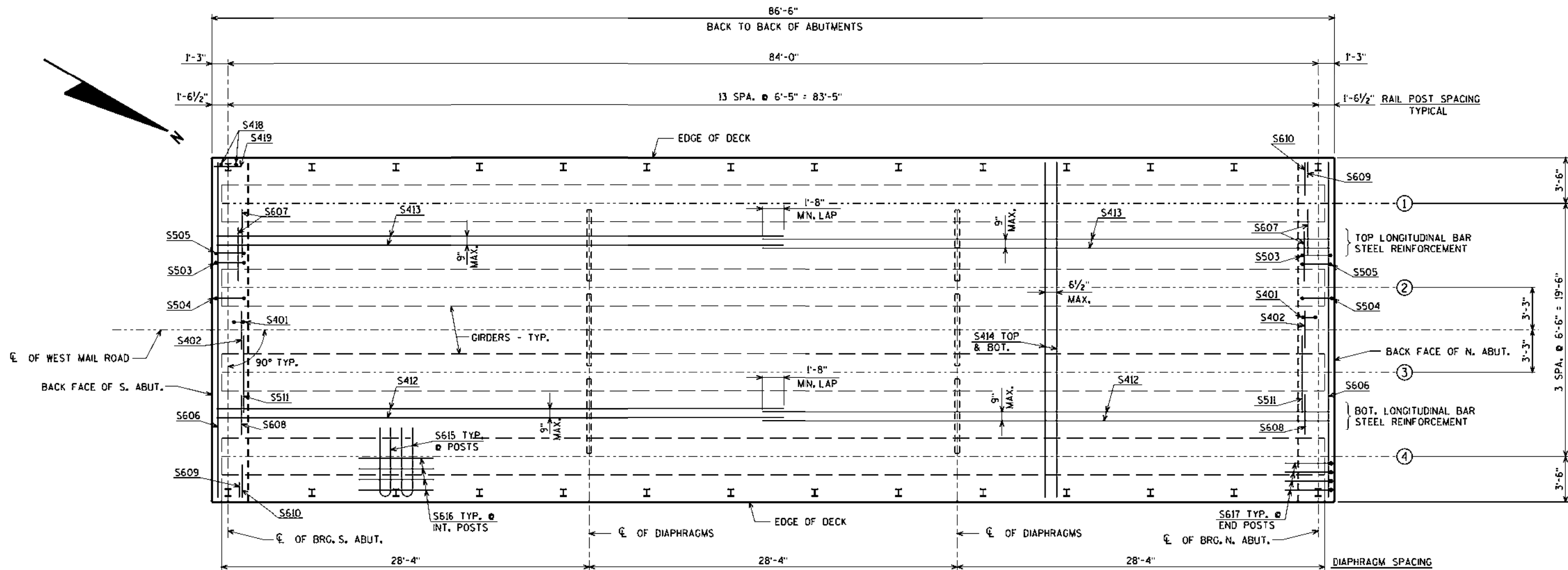
BAR NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLE	BAR SERIES	13.410" COATED
							LOCATION
S401	X	24	3-6	X			DIAPH. @ ABUT. VERT. @ NOTCH
S402	X	12	2-7				DIAPH. @ ABUT. HORIZ. @ NOTCH
S503	X	42	10-10	X			DIAPH. @ ABUT. VERT.
S504	X	16	8-6	X			DIAPH. @ ABUT. VERT. @ GIRDERS
S505	X	42	5-8	X			DIAPH. @ ABUT. VERT.
S606	X	10	26-2				DIAPH. @ ABUT. HORIZ.
S607	X	24	3-10				DIAPH. @ ABUT. HORIZ. BETW. GDRS.
S608	X	6	3-8				DIAPH. @ ABUT. HORIZ. BETW. GDRS.
S609	X	4	1-11				DIAPH. @ ABUT. HORIZ. @ EXT. GDRS.
S610	X	8	2-10				DIAPH. @ ABUT. HORIZ. @ EXT. GDRS.
S511	X	16	6-0				DIAPH. @ ABUT. HORIZ. THRU GDRS.
S412	X	72	43-11				DECK LONG. BOT.
S413	X	70	43-11				DECK LONG. TOP
S414	X	319	26-2				DECK TRANS. TOP & BOTTOM
S615	X	56	12-0	X			DECK @ RAIL POSTS
S616	X	96	6-0				DECK @ INT. RAIL POSTS
S617	X	16	4-8	X			DECK @ END RAIL POSTS
S418	X	8	3-5				DIAPH. @ ABUT. VERT. @ ENDS
S419	X	8	2-5				DIAPH. @ ABUT. HORIZ. @ ENDS

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-16-147			
DRAWN BY		CLP	PLANS CKD. DNS
SUPERSTRUCTURE		SHEET 14 OF 17	



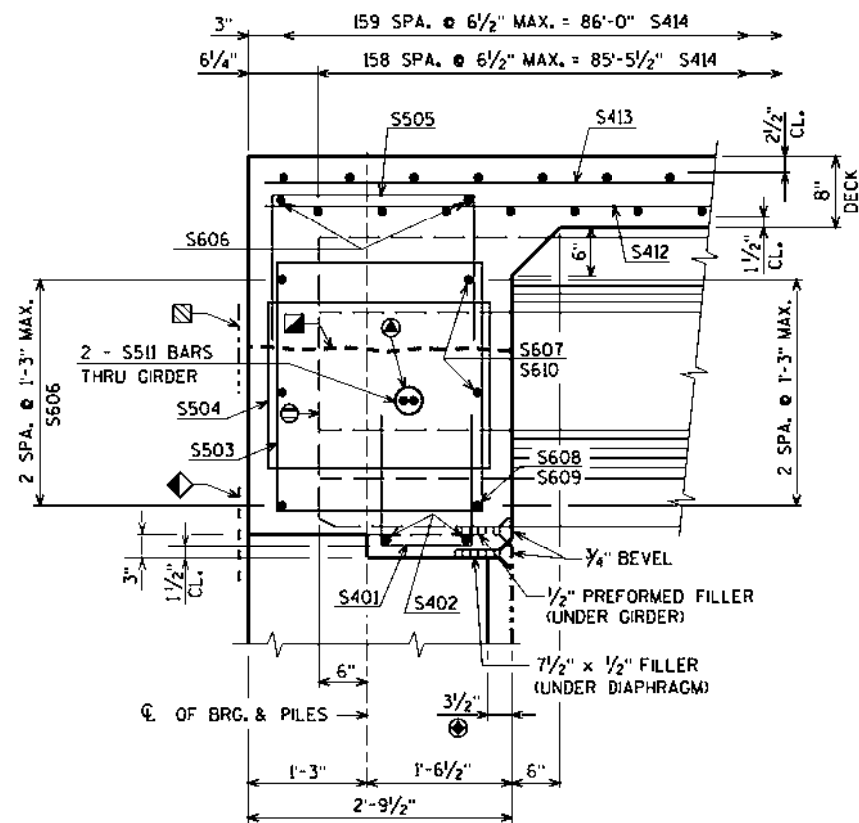
PLAN

TOP OF DECK ELEVATIONS

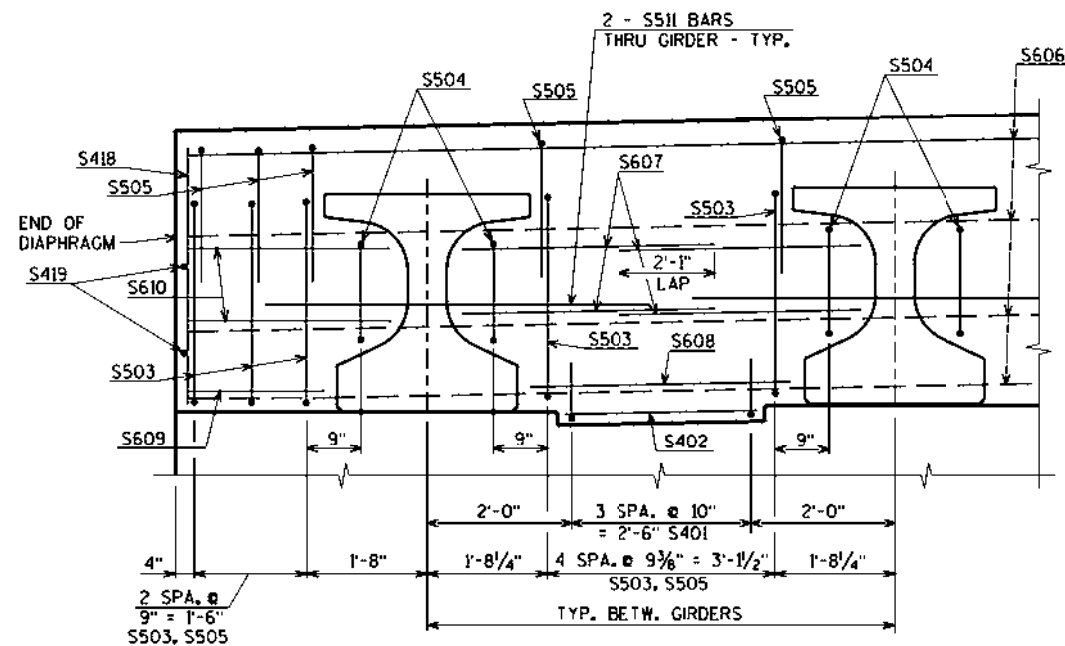
LOCATION	CL OF BRG. S. ABUT.	0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	CL OF BRG. N. ABUT.
WEST EDGE OF DECK	1001.64	1001.68	1001.71	1001.73	1001.73	1001.71	1001.68	1001.63	1001.56	1001.48	1001.38
GIRDER 1	1001.71	1001.75	1001.78	1001.80	1001.80	1001.78	1001.75	1001.70	1001.63	1001.55	1001.45
GIRDER 2	1001.84	1001.88	1001.91	1001.93	1001.93	1001.91	1001.88	1001.83	1001.76	1001.68	1001.58
CL OF WEST MAIL ROAD	1001.90	1001.95	1001.98	1001.99	1001.99	1001.98	1001.94	1001.89	1001.83	1001.75	1001.65
GIRDER 3	1001.84	1001.88	1001.91	1001.93	1001.93	1001.91	1001.88	1001.83	1001.76	1001.68	1001.58
GIRDER 4	1001.71	1001.75	1001.78	1001.80	1001.80	1001.78	1001.75	1001.70	1001.63	1001.55	1001.45
EAST EDGE OF DECK	1001.64	1001.68	1001.71	1001.73	1001.73	1001.71	1001.68	1001.63	1001.56	1001.48	1001.38

ELEVATIONS SHOWN ARE FINISHED DECK AND DO NOT INCLUDE ALLOWANCES FOR DEAD LOAD DEFLECTION.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-16-147			
DRAWN BY		CLP	PLANS CKD. DNS
SUPERSTRUCTURE PLAN		SHEET 15 OF 17	



PART LONGITUDINAL SECTION



PART TRANSVERSE SECTION AT ABUTMENT DIAPHRAGM

- ⊕ FORMLINER AND STAINING.
FOR DETAILS SEE SHEET 3.
- ⊖ END OF GIRDER
- ◊ 18" RUBBERIZED MEMBRANE WATERPROOFING
- ▣ OPTIONAL CONSTRUCTION JOINT 1'-2"
BELOW TOP OF GIRDER, IF USED, DECK
POUR MUST BE WITHIN 2 WEEKS FROM
THE TIME OF THE DIAPHRAGM POUR.
- ▤ 18" RUBBERIZED MEMBRANE WATERPROOFING
IF CONST. JT. IS USED, COST INCIDENTAL
TO BID ITEM "CONCRETE MASONRY BRIDGES"
- ⊙ 1/2" DIA. HOLE IN WEB FOR
S511 BARS. PLACE S511 BARS SYM.
ABOUT C. OF GIRDERS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-16-147			
DRAWN BY		CLP	PLANS CKD. DNS
SUPERSTRUCTURE DETAILS		SHEET 16 OF 17	

LEGEND

- ① W6 x 25 WITH $1/8"$ x $1/2"$ 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.
- ② PLATE $1/4"$ x $11 3/4"$ x $1'-8"$ WITH $1 1/8"$ DIA. OVERSIZED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN.
- ③ ASTM A449 - $1/8"$ 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. 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 CONSTRUCTABILITY.)
- ④ $3/8"$ x $11"$ x $1'-8"$ ANCHOR PLATE (GALVANIZED) WITH $1 1/8"$ DIA. HOLES FOR ANCHOR BOLTS NO. 3
- ⑤ TS 5 x 4 x 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
- ⑤A TS 5 x 5 x 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
- ⑥ $7/8"$ DIA. A325 SLOTTED ROUND HEAD BOLT WITH NUT, $3/16"$ x $1 1/2"$ x $1 1/8"$ MIN. WASHER, AND LOCK WASHER (2 REQ'D. AT EACH RAIL TO POST LOCATION.)
- ⑦ $1/2"$ THK. BACK-UP PLATE WITH 2 - $7/8"$ x $1 1/2"$ THREADED SHOP WELDED STUDS (NO. 12). BOLT TO RAIL AS SHOWN IN DETAIL. REQUIRED AT THREE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYMMETRICALLY ABOUT TUBES NO. 5A.
- ⑧ $1"$ DIA. HOLES IN PLATE NO. 7 & TUBES NO. 5A FOR $3/8"$ DIA. A325 BOLTS WITH HEX NUTS AND WASHERS. 6 HOLES IN TUBES AND PLATE NO. 7.
- ⑨ SPLICE SLEEVE FABRICATED FROM $1/4"$ PLATE. PROVIDE "SLIDING FIT".
- ⑩ $3/8"$ x $3 5/8"$ x $2'-4"$ PLATE. 2 PER RAIL. USED IN NO. 5 & 5A.
- ⑩A $3/8"$ x $2 5/8"$ x $2'-4"$ PLATE USED IN NO. 5. $3/8"$ x $3 5/8"$ x $2'-4"$ PLATE USED IN NO. 5A. 2 PER RAIL.
- ⑪ $7/8"$ DIA. A325 ROUND HEAD BOLT WITH NUT, WASHER, AND LOCK WASHER. USE $10 3/4"$ x $1 1/2"$ LONGIT. SLOTTED HOLES AT FIELD JOINTS IN PLATE NO. 10A. PROVIDE $1/4"$ DIA. ROUND HOLES IN TUBES NO. 5 AND NO. 5A.
- ⑫ $7/8"$ DIA. x $1 1/2"$ LONG THREADED SHOP WELDED STUDS (2 REQ'D.)
- ⑬ $3/8"$ x $8"$ x $1'-6"$ PLATE. BOLT TO RAIL AS SHOWN IN DETAIL. REQ'D. AT THREE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYM. ABOUT TUBES NO. 5A.
- ⑭ $7/8"$ DIA. x $2"$ LONG A325 HEX BOLT WITH NUT AND WASHER (5 REQ'D.)
- ⑭A $1"$ DIA. HOLES IN TUBES NO. 5A FOR $7/8"$ DIA. A325 ROUND HEAD BOLT WITH NUT, WASHER AND LOCK WASHER (4 REQ'D.). 4 HOLES IN TUBES.

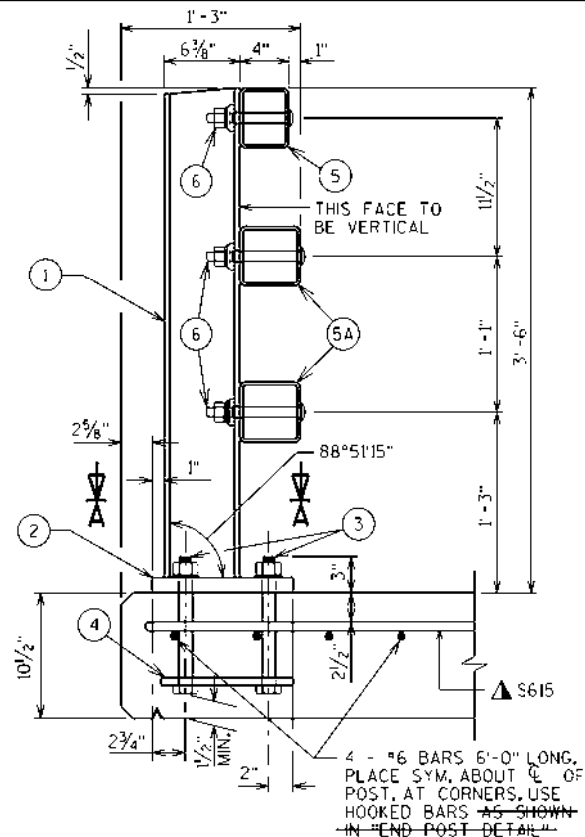
GENERAL NOTES

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

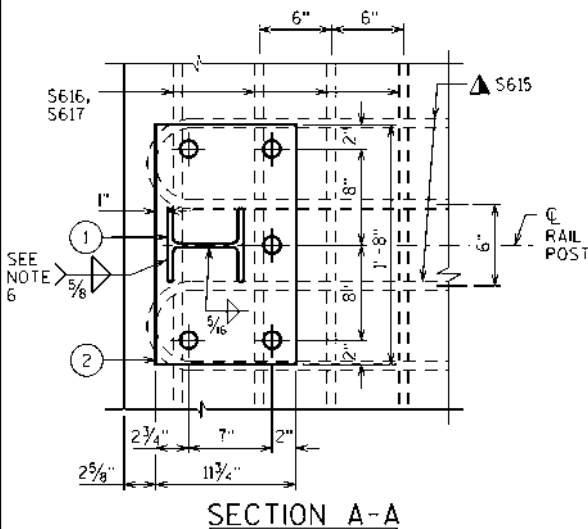
▲ TIE TO TOP MAT OF STEEL.

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

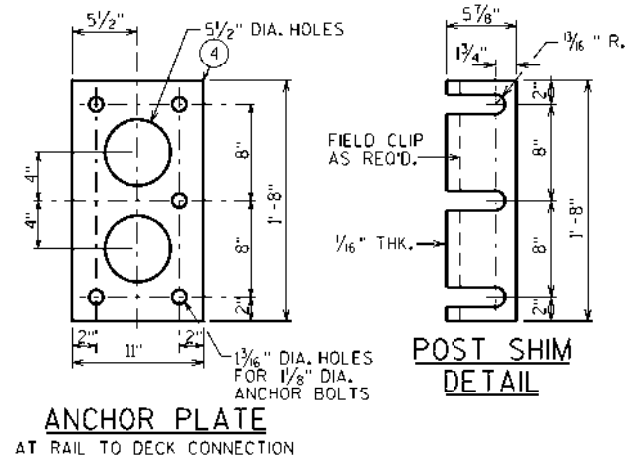
■ $1/4"$ TO $3/4"$ OPENING AT ABUTMENTS.



SECTION THRU RAILING ON DECK

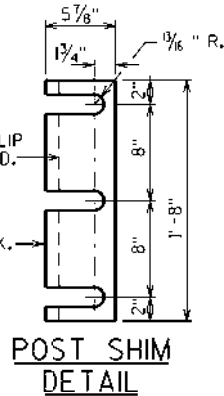


SECTION A-A

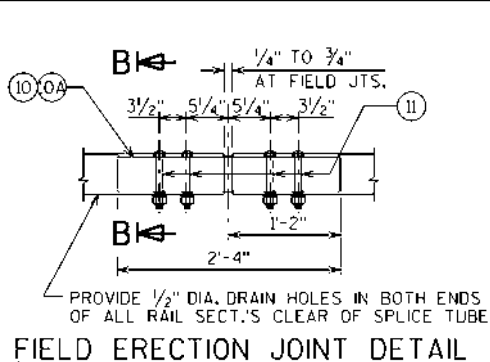


ANCHOR PLATE

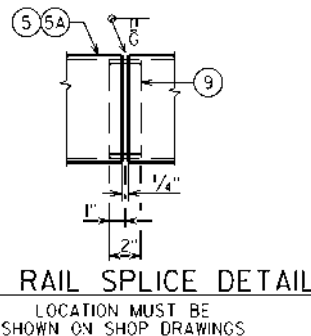
AT RAIL TO DECK CONNECTION



POST SHIM DETAIL

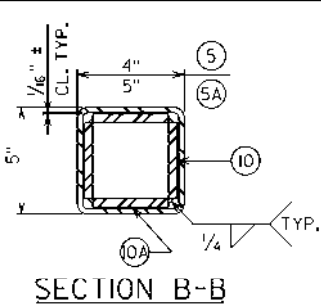


FIELD ERECTION JOINT DETAIL

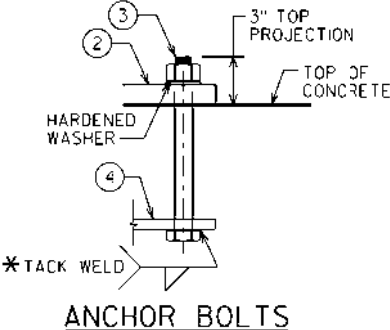


SHOP RAIL SPLICE DETAIL

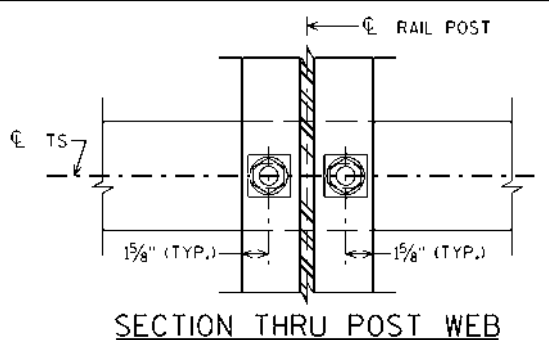
LOCATION MUST BE SHOWN ON SHOP DRAWINGS



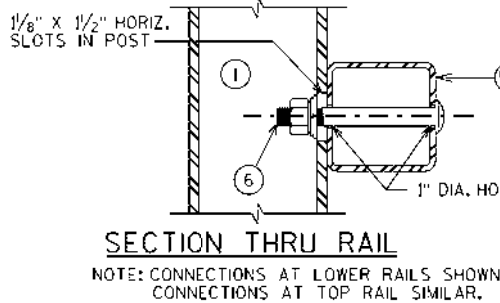
SECTION B-B



ANCHOR BOLTS



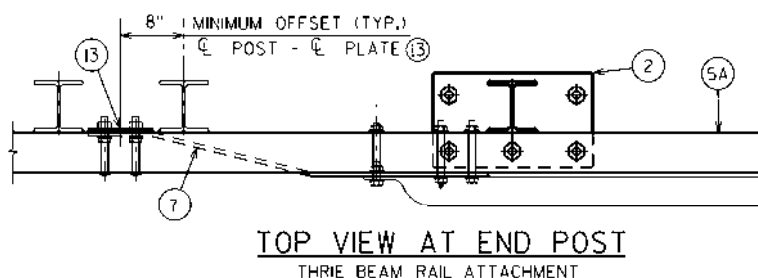
SECTION THRU POST WEB



SECTION THRU RAIL

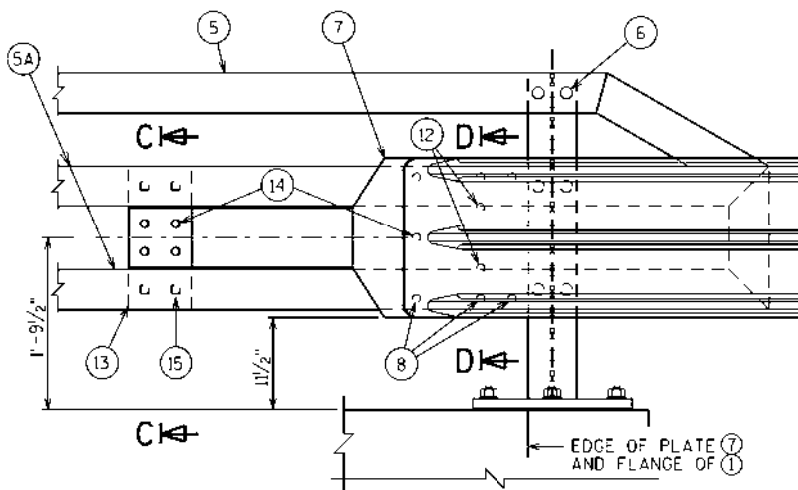
NOTE: CONNECTIONS AT LOWER RAILS SHOWN. CONNECTIONS AT TOP RAIL SIMILAR.

TYPICAL RAIL TO POST CONNECTIONS



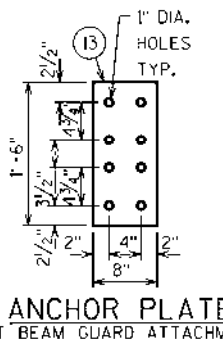
TOP VIEW AT END POST

THREE BEAM RAIL ATTACHMENT



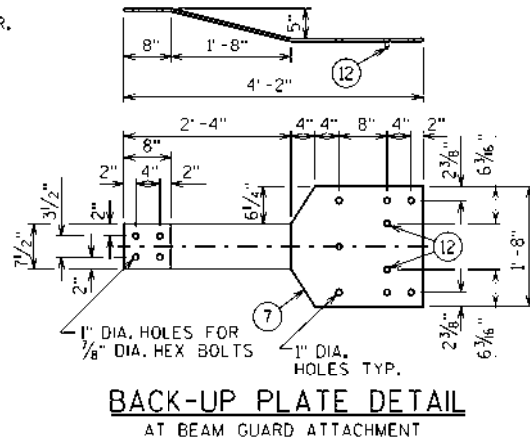
DETAIL AT END POST

THREE BEAM RAIL ATTACHMENT



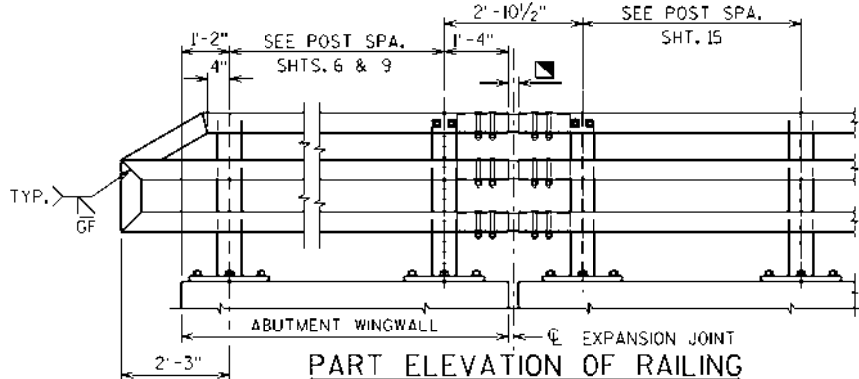
ANCHOR PLATE

AT BEAM GUARD ATTACHMENT



BACK-UP PLATE DETAIL

AT BEAM GUARD ATTACHMENT

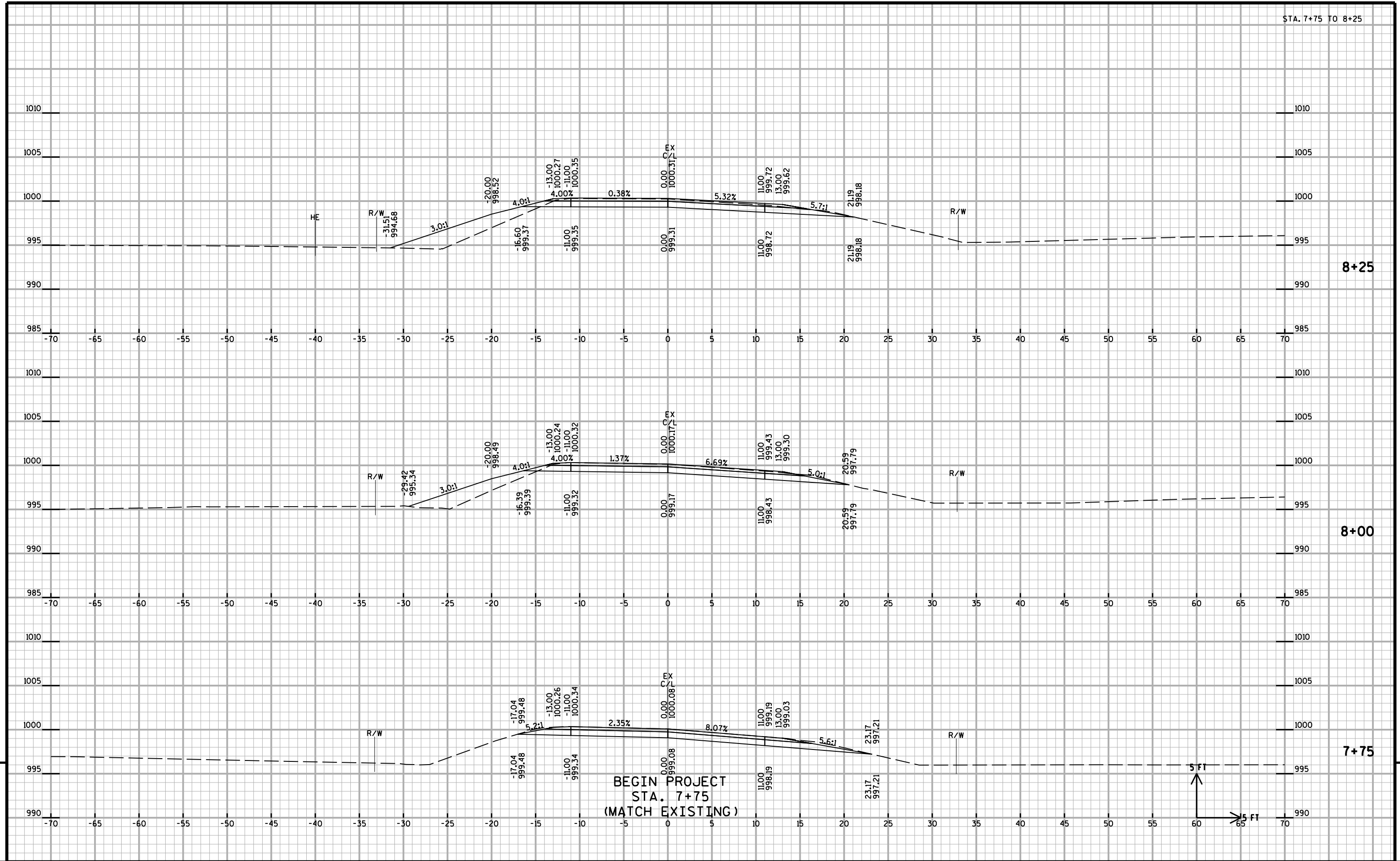


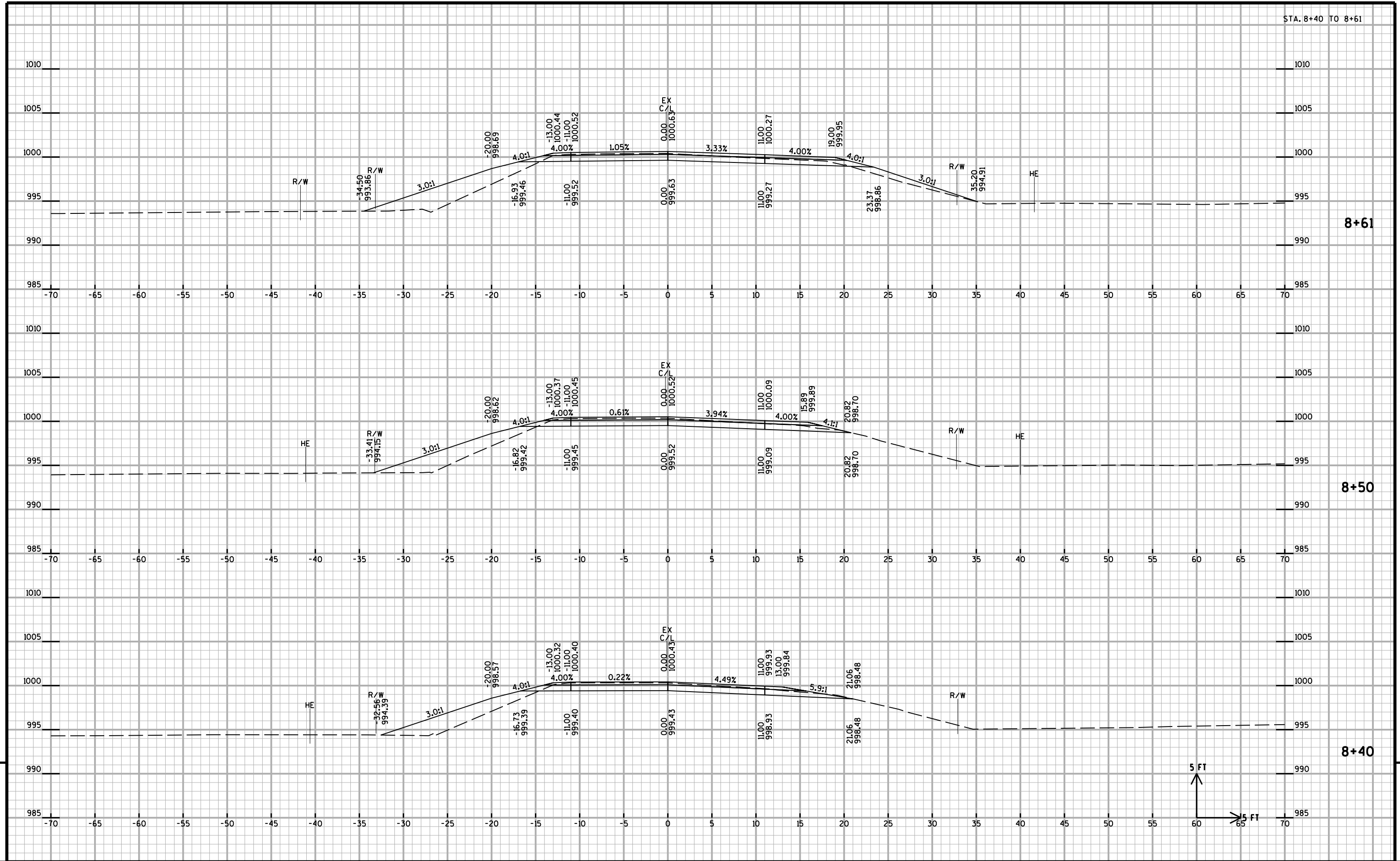
PART ELEVATION OF RAILING

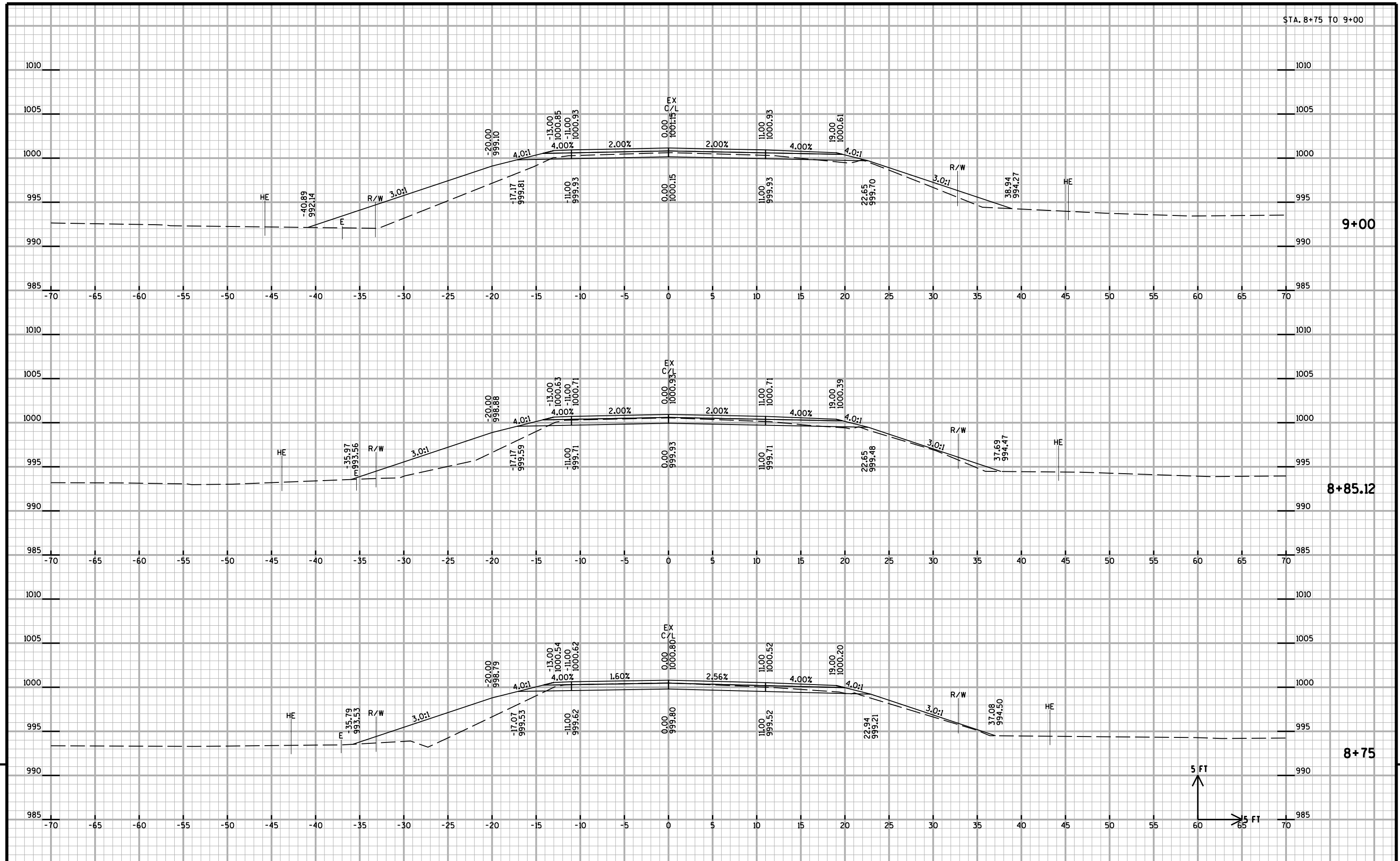
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-16-147			
DRAWN BY		CLP	PLANS CKD. DNS
TUBULAR STEEL RAILING TYPE 'M'			SHEET 17 OF 17

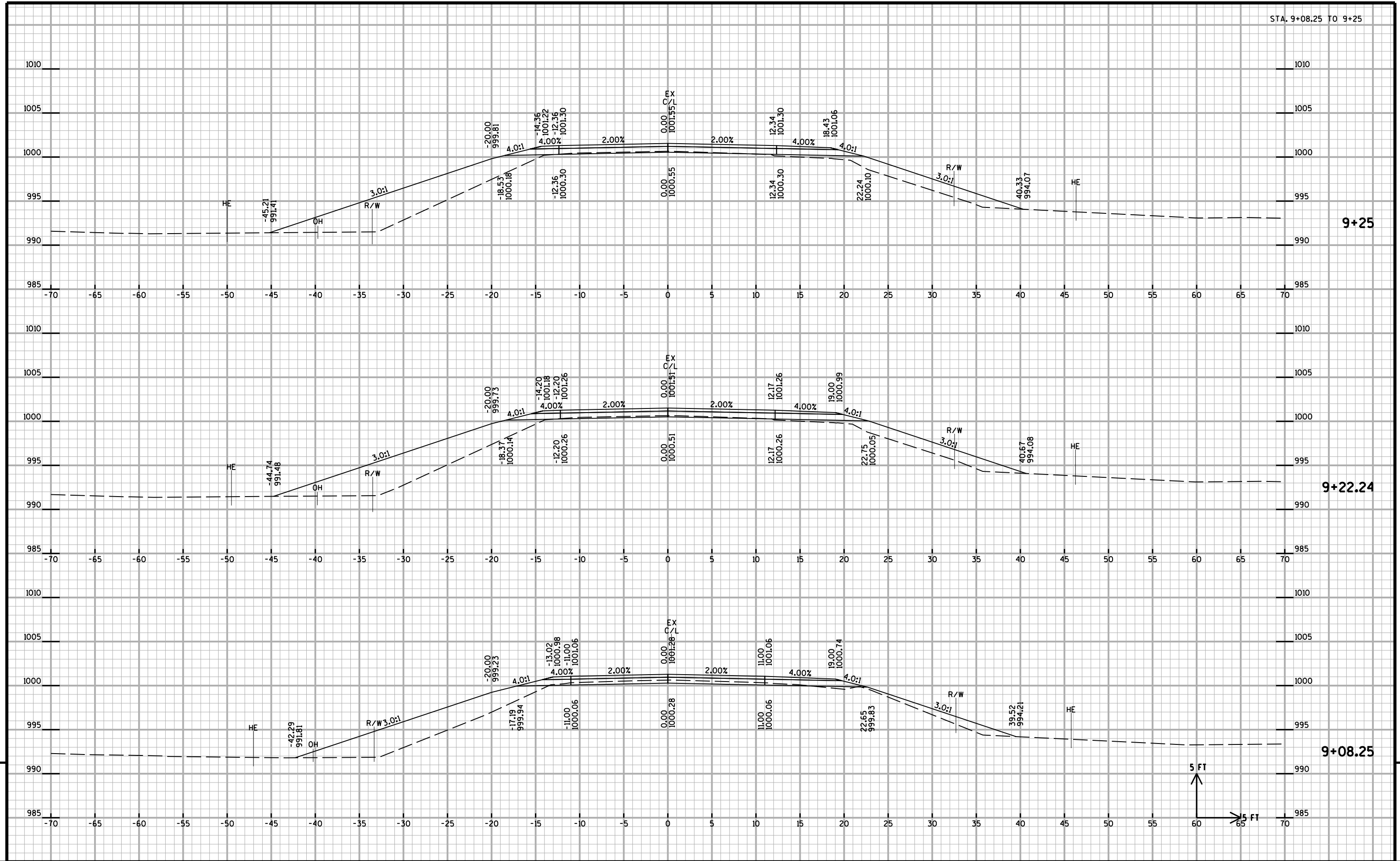
WEST MAIL ROAD COMPUTER EARTHWORK										
Station	Distance	Area (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
		Cut	Unuseable Pavement Material	Fill	Cut	Unuseable Pavement Material	Fill	Expanded		
								1.00	1.30	
Note 1	Note 4	Note 2	Note 5	Note 3						
7+75	--	34.9	8.7	0.0						
8+00	25.00	30.0	8.7	16.2	30	8	8	22	10	12
8+25	25.00	27.6	8.7	21.6	27	8	17	41	33	8
8+40	15.00	25.5	8.7	22.8	15	5	12	51	49	2
8+50	10.00	24.1	8.7	23.8	9	3	9	56	60	-3
8+61	11.00	22.4	8.7	36.2	9	4	12	62	76	-13
8+75	14.00	18.2	8.7	41.8	11	5	20	68	102	-33
8+85.12	10.12	14.7	8.7	39.2	6	3	15	71	122	-50
9+00	14.88	11.1	8.7	58.7	7	5	27	74	157	-83
9+08.25	8.25	8.1	7.0	69.1	3	2	20	74	182	-108
9+22.24	13.99	2.7	2.6	95.6	3	2	43	75	238	-163
9+25	2.76	1.9	1.8	98.1	0	0	10	75	250	-176
9+40.25	15.25	0.0	0.0	59.1	1	1	44	75	308	-234
9+58.25	18.00	0.0	0.0	59.1	0	0	39	75	359	-285
BRIDGE	--	--	--	--	--	--	--	--	--	--
10+44.75	--	2.4	0.3	32.4	--	--	--	--	--	--
10+62.75	18.00	2.4	0.3	32.4	2	0	22	76	387	-311
10+75	12.25	2.6	2.2	48.2	1	1	18	77	411	-335
10+94.75	19.75	7.5	5.9	22.9	4	3	26	77	445	-368
11+00	5.25	8.8	7.1	27.0	2	1	5	78	451	-374
11+25	25.00	11.8	8.4	44.2	10	7	33	80	494	-414
11+50	25.00	15.2	8.6	30.8	12	8	35	85	539	-455
11+52.9	2.90	15.3	8.6	29.2	2	1	3	85	543	-458
11+75	22.10	18.3	8.7	19.5	14	7	20	92	569	-477
12+00	25.00	23.6	8.7	11.5	19	8	14	103	588	-485
12+25	25.00	32.1	8.7	0.0	26	8	5	121	595	-474
					211	90	458			

Note 1 - Cut	Cut includes existing asphalt pavement.
Note 2 - Fill	Volume needed to be filled.
Note 3 - Mass Ordinate	(Cut) - (Fill * 1.30)
Note 4 - Salvaged / Unuseable Pavement Material	Existing asphalt pavement to be removed from Cut.
Note 5 - Cut	Cut reduced by salvaged/unuseable asphalt pavement.

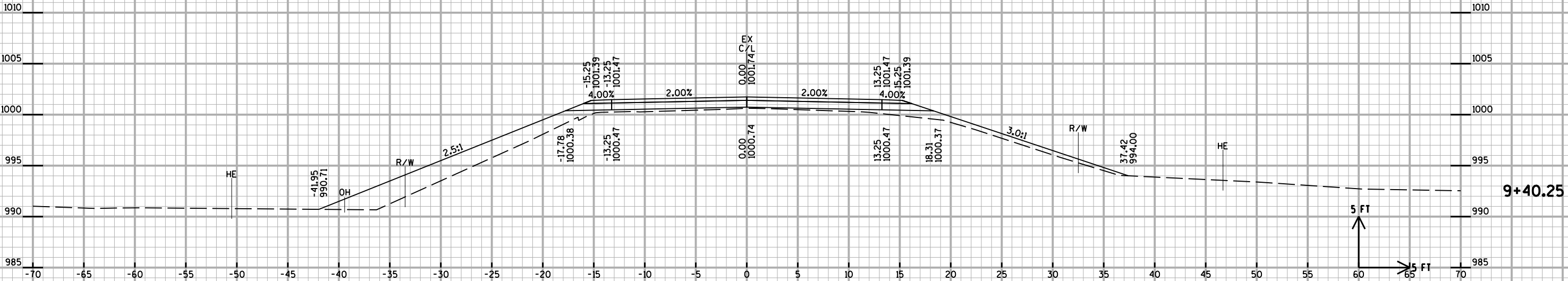


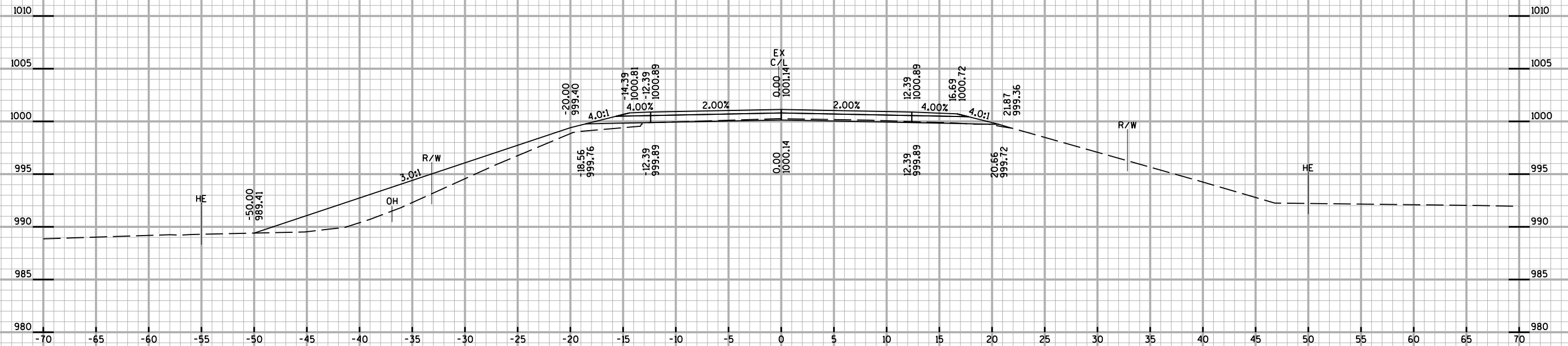




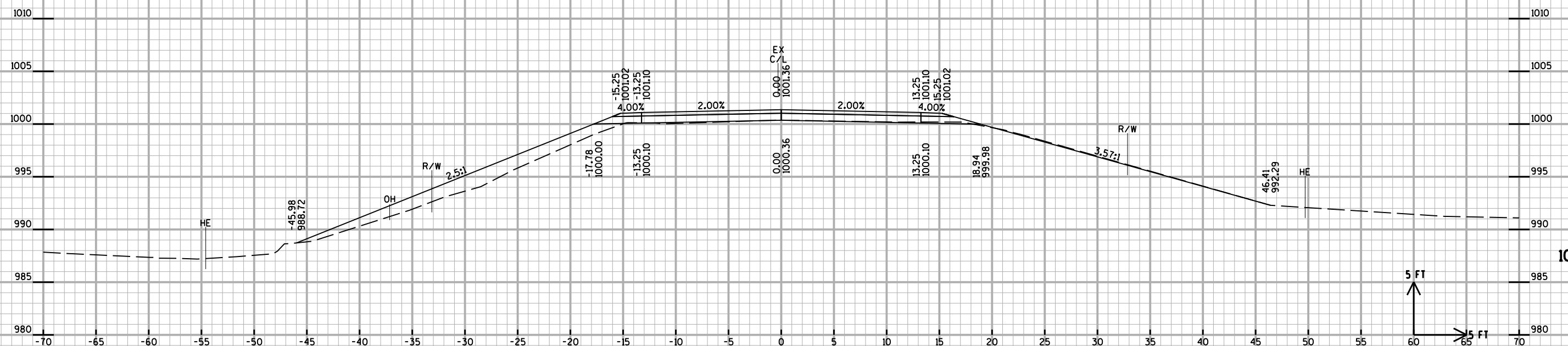


STRUCTURE B-16-0147





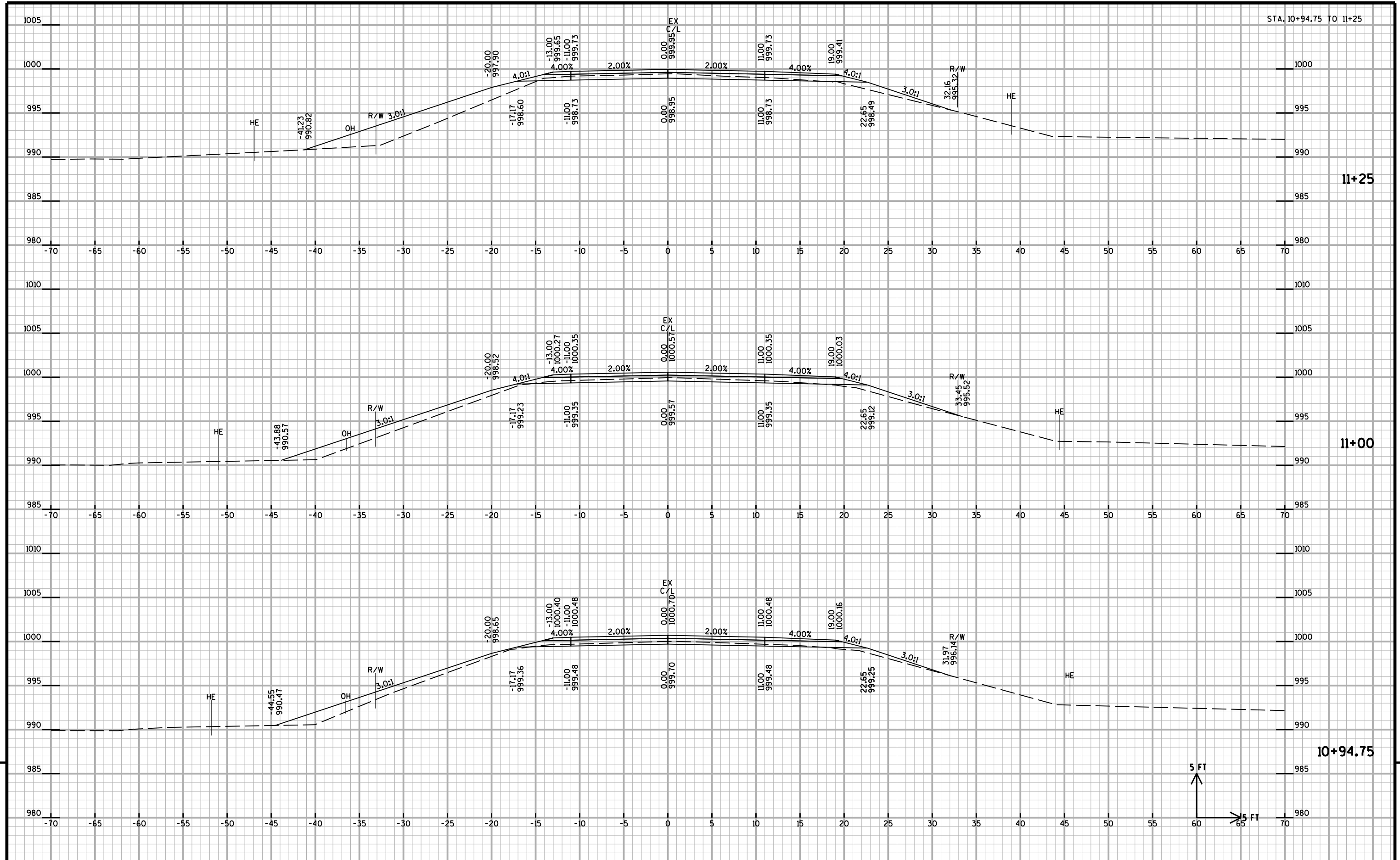
10+75

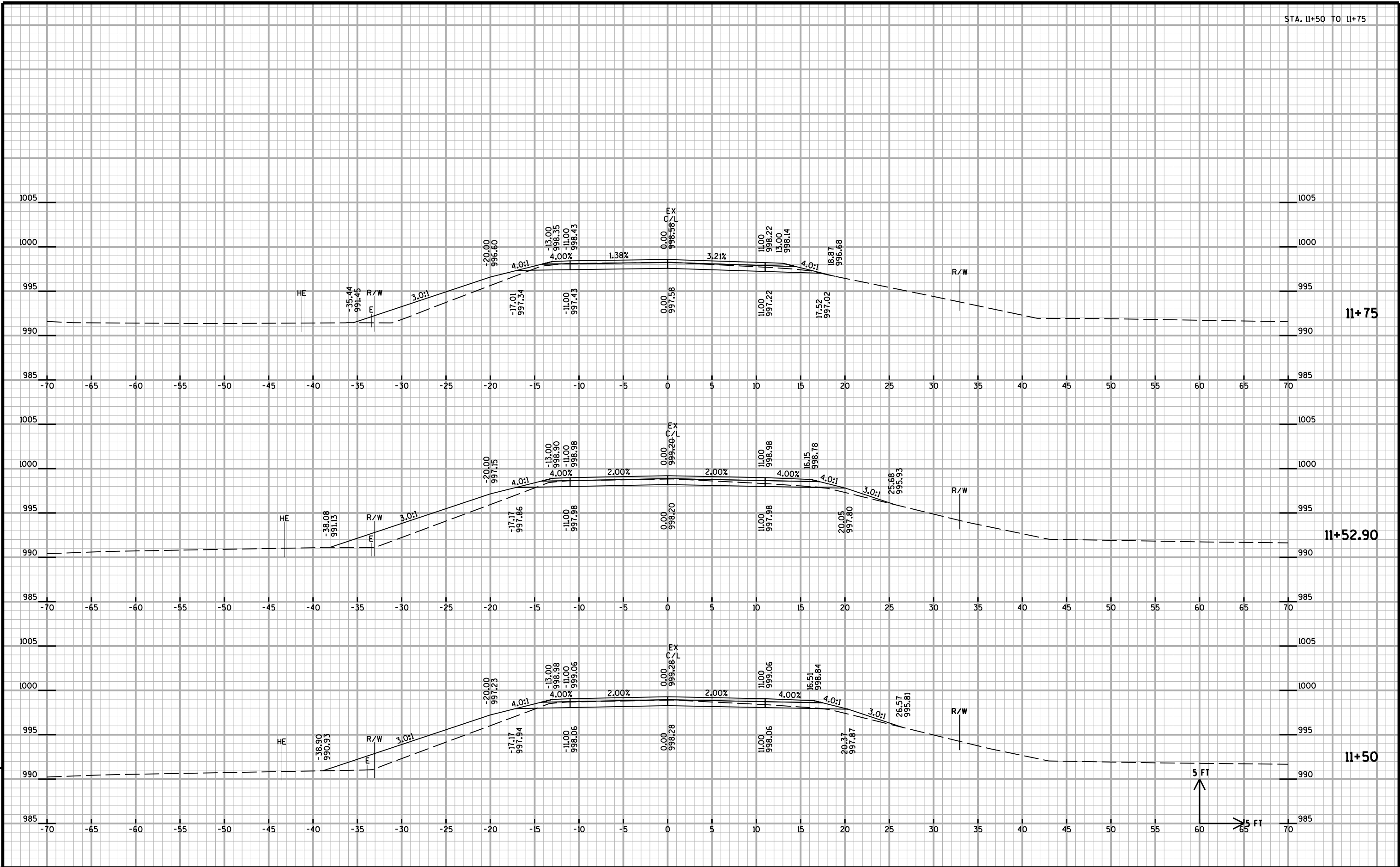


10+62.75

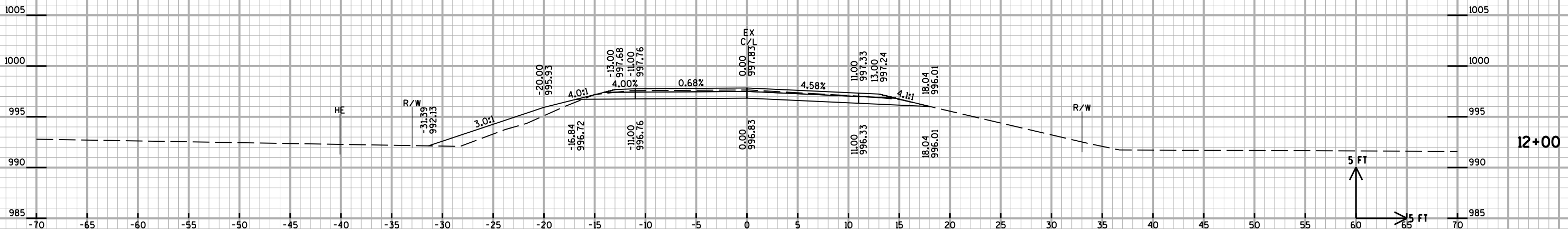
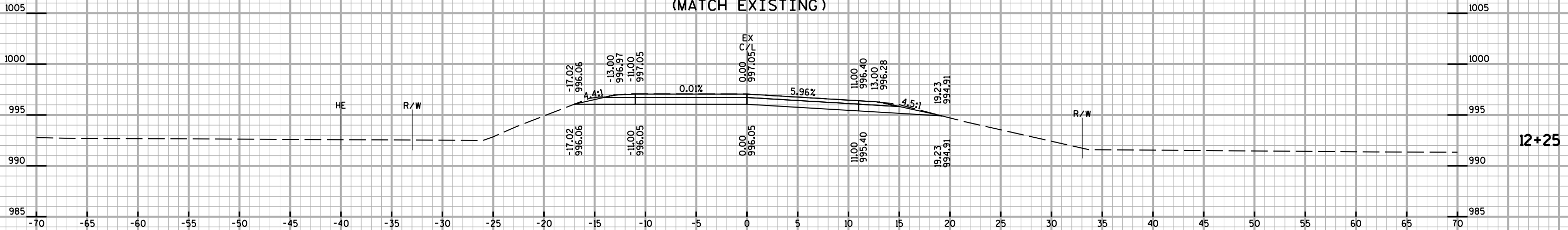
5 FT

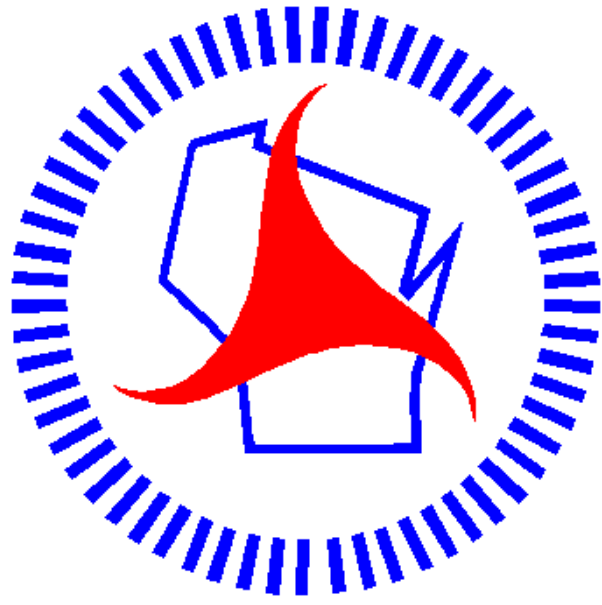
5 FT





END PROJECT
STA. 12+25
(MATCH EXISTING)





Wisconsin Department of Transportation

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