GENERAL NOTES

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

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

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS. IF EBS IS REQUIRED, IT SHALL BE MEASURED AND PAID FOR AS EXCAVATION COMMON. LOCATION FOR EBS WILL BE DETERMINED BY THE ENGINEER.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE RESTORED WITH FERTILIZER, SEED, AND EROSION MAT.

EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 WITH ADJUSTMENT NAVD88 2011.

DISTANCES SHOWN ON THIS PLAN ARE GROUND DISTANCES.

WETLANDS ARE PRESENT WITHIN THE PROJECT LIMITS. DO NOT OPERATE EQUIPMENT OUTSIDE THE SLOPE INTERCEPTS. DO NOT STORE EQUIPMENT OR MATERIALS OUTSIDE THE SLOPE INTERCEPTS.

THE WISCONSIN DEPARTMENT OF TRANSPORTATION WILL FURNISH THE CONTRACTOR AN ALUMINUM MONUMENT TO SET IN THE STRUCTURE AS DESIGNATED BY THE ENGINEER.

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL C (MAINLINE CLOSURE, NO POSTED DETOUR) FOR TRAFFIC CONTROL.

RUNOFF COEFFICIENT TABLE

		HYDROLOGIC SOIL GROUP											
	А				В		С			D			
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		SLOPE RANGE (PERCENT)		SLOPE RANGE (PERCENT)		(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	.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						.7095							
CONCRETE	CONCRETE .8095												
BRICK	BRICK .7080												
DRIVES, WALKS	DRIVES, WALKS .7585												
ROOFS						.7595							
GRAVEL ROADS, SHO	ULDERS					.4060				·	·		

HWY: STAADT AVENUE

TOTAL PROJECT AREA = 0.303 ACRES TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.196 ACRES

UTILITY CONTACTS

TRUDI BAKKEN ALLIANT ENERGY - ELECTRICITY 2710 JEFFERSON ST WISCONSIN RAPIDS, WI 54495

PHONE: 715-424-7048 EMAIL: trudibakken@allianenergy.com

LARRY KOCH WE ENERGIES - GAS 1921 8TH STREET S WISCONSIN RAPIDS, WI 54495 PHONE: 715-421-7249

EMAIL: larry.koch@we-energies.com

CAL KLADE

FRONTIER COMMUNICATIONS - COMMUNICATIONS 521 4TH ST

WAUSAU, WI 54403

PHONE: 715-573-2110 EMAIL: calvin.klade@ftr.com

WDNR CONTACT

CASEY JONES 473 GRIFFITH AVE

WISCONSIN RAPIDS, WI 54494 PHONE: 715-213-6571

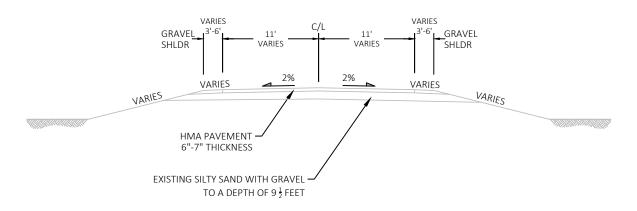
EMAIL: Casey.Jones@wisconsin.gov www.DiggersHotline.com

GENERAL NOTES SHEET Ε

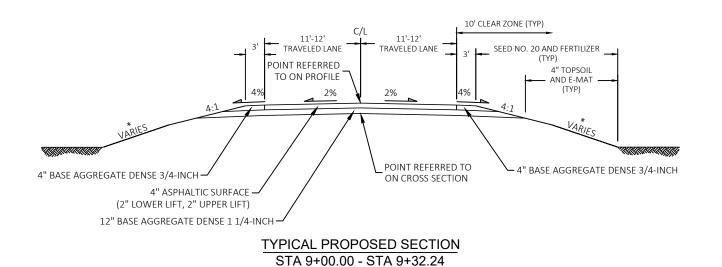
COUNTY: MARATHON

6686-00-70

PROJECT NO:



TYPICAL EXISTING SECTION
STA 9+00.00 - STA 9+57.68
STA 10+42.36 - STA 11+00.00



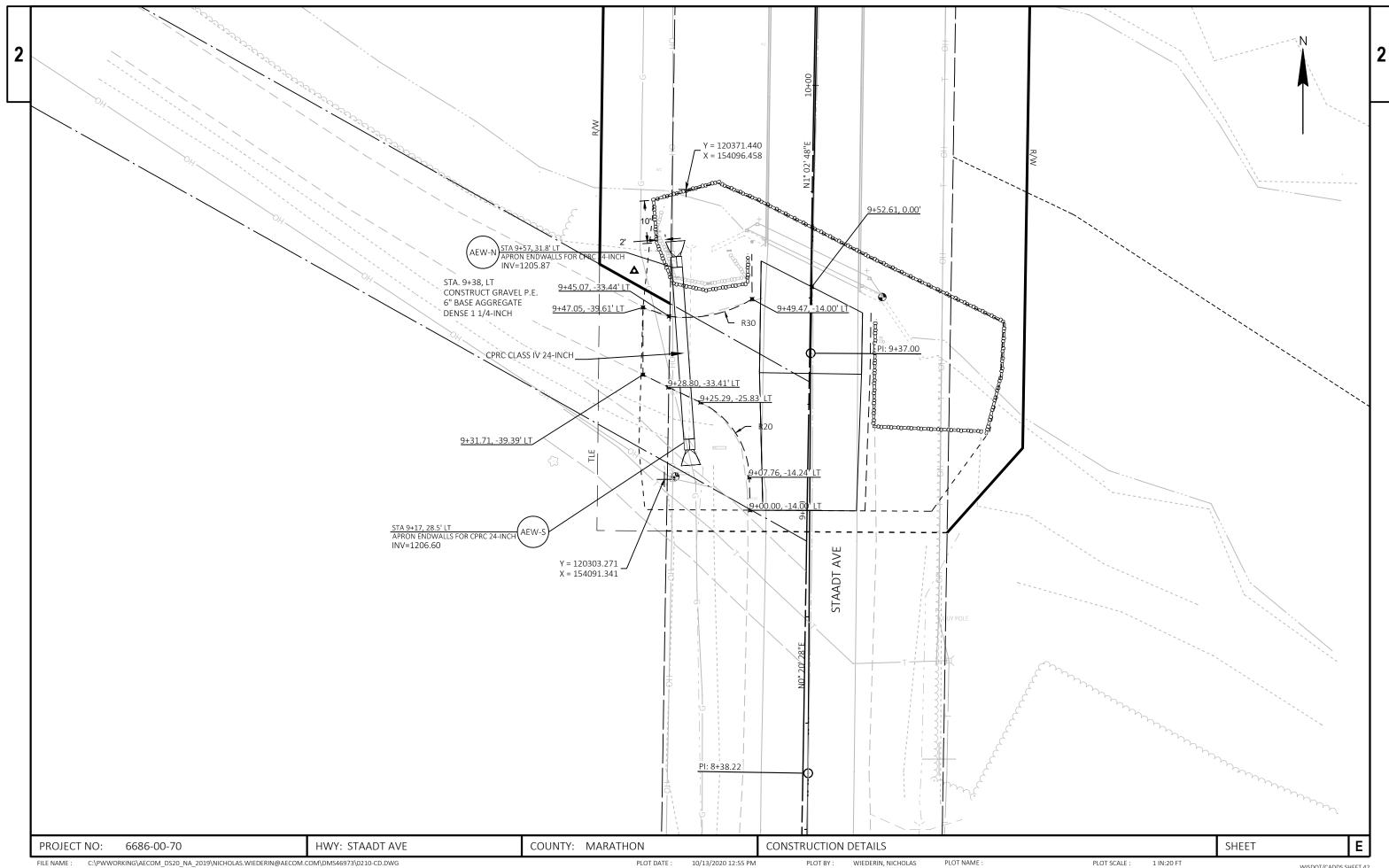
STA 10+67.89 - STA 11+00.00

* VARIES TO MATCH EXISTING DITCH SLOPE OUTSIDE OF CLEAR ZONE

PROJECT NO: 6686-00-70 HWY: STAADT AVE COUNTY: MARATHON PLAN: TYPICAL SECTIONS SHEET **E**

PLOT NAME :

1 IN:10 FT



628.1910 Mobilizations Emergency Erosion Control

EACH

3.000

3.000

					6686-00-70
Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	2.000	2.000
0004	201.0205	Grubbing	STA	2.000	2.000
0006	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000
0008	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. 10+00	LS	1.000	1.000
0010	205.0100	Excavation Common	CY	137.000	137.000
0010	206.1000	Excavation for Structures Bridges (structure) 01. B-37-458	LS	1.000	1.000
0014	206.5000	Cofferdams (structure) 01. B-37-458	LS	1.000	1.000
0014	210.1500	,	TON	800.000	800.000
0018	213.0100	Backfill Structure Type A	EACH	1.000	1.000
		Finishing Roadway (project) 01. 6686-00-70			
0020	305.0110	Base Aggregate Dense 3/4-Inch	TON	45.000	45.000
0022	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	225.000	225.000
0024	415.0410	Concrete Pavement Approach Slab	SY	110.000	110.000
0026	455.0605	Tack Coat	GAL	12.000	12.000
0028	465.0105	Asphaltic Surface	TON	40.000	40.000
0030	502.0100	Concrete Masonry Bridges	CY	328.000	328.000
0032	502.3200	Protective Surface Treatment	SY	460.000	460.000
0034	502.9000.S	Underwater Substructure Inspection (Structure) 01. B-37-458	EACH	1.000	1.000
0036	505.0400	Bar Steel Reinforcement HS Structures	LB	6,840.000	6,840.000
0038	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	42,380.000	42,380.000
0040	513.4061	Railing Tubular Type M	LF	194.000	194.000
0042	516.0500	Rubberized Membrane Waterproofing	SY	14.000	14.000
0044	522.0424	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	40.000	40.000
0046	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	2.000	2.000
0048	550.0020	Pre-Boring Rock or Consolidated Materials	LF	133.000	133.000
0050	550.0500	Pile Points	EACH	7.000	7.000
0052	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	490.000	490.000
0054	606.0300	Riprap Heavy	CY	290.000	290.000
0054	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	150.000	150.000
0058	618.0100		EACH	1.000	1.000
		Maintenance And Repair of Haul Roads (project) 01. 6686-00-70			
0060	619.1000	Mobilization	EACH	1.000	1.000
0062	624.0100	Water	MGAL	3.600	3.600
0064	625.0100	Topsoil	SY	285.000	285.000
0066	628.1504	Silt Fence	LF	250.000	250.000
0068	628.1520	Silt Fence Maintenance	LF	250.000	250.000
0070	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0070			E 4 6 1 1	0.000	2.200

0130

ASP.1T0G On-the-Job Training Graduate at \$5.00/HR

HRS

600.000

				6686-00-70
Item	Item Description	Unit	Total	Qty
628.2027	Erosion Mat Class II Type C	SY	285.000	285.000
628.6005	Turbidity Barriers	SY	90.000	90.000
628.7504	Temporary Ditch Checks	LF	15.000	15.000
628.7555	Culvert Pipe Checks	EACH	4.000	4.000
629.0210	Fertilizer Type B	CWT	0.200	0.200
630.0120	Seeding Mixture No. 20	LB	6.000	6.000
630.0500	Seed Water	MGAL	6.000	6.000
633.5100	Markers Row	EACH	8.000	8.000
634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	4.000	4.000
637.2230	Signs Type II Reflective F	SF	12.000	12.000
642.5001	Field Office Type B	EACH	1.000	1.000
643.0420	Traffic Control Barricades Type III	DAY	1,404.000	1,404.000
643.0705	Traffic Control Warning Lights Type A	DAY	2,808.000	2,808.000
643.0900	Traffic Control Signs	DAY	1,092.000	1,092.000
643.5000	Traffic Control	EACH	1.000	1.000
645.0111	Geotextile Type DF Schedule A	SY	120.000	120.000
645.0120	Geotextile Type HR	SY	640.000	640.000
646.1020	Marking Line Epoxy 4-Inch	LF	2,800.000	2,800.000
650.4500	Construction Staking Subgrade	LF	105.000	105.000
650.5000	Construction Staking Base	LF	105.000	105.000
650.6000	Construction Staking Pipe Culverts	EACH	1.000	1.000
650.6500	Construction Staking Structure Layout (structure) 01. B-37-458	LS	1.000	1.000
650.9910	Construction Staking Supplemental Control (project) 01. 6686-00-70	LS	1.000	1.000
650.9920	Construction Staking Slope Stakes	LF	105.000	105.000
690.0150	Sawing Asphalt	LF	44.000	44.000
715.0415	Incentive Strength Concrete Pavement	DOL	500.000	500.000
715.0502	Incentive Strength Concrete Structures	DOL	1,926.000	1,926.000
ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,200.000	1,200.000
	628.2027 628.6005 628.7504 628.7555 629.0210 630.0120 630.0500 633.5100 634.0614 637.2230 642.5001 643.0420 643.0705 643.0900 643.5000 645.0111 645.0120 646.1020 650.4500 650.6500 650.6500 650.9910 650.9920 690.0150 715.0415 715.0502	628.2027 Erosion Mat Class II Type C 628.6005 Turbidity Barriers 628.7504 Temporary Ditch Checks 628.7555 Culvert Pipe Checks 629.0210 Fertilizer Type B 630.0120 Seeding Mixture No. 20 630.0500 Seed Water 633.5100 Markers Row 634.0614 Posts Wood 4x6-Inch X 14-FT 637.2230 Signs Type II Reflective F 642.5001 Field Office Type B 643.0420 Traffic Control Barricades Type III 643.0705 Traffic Control Warning Lights Type A 643.0900 Traffic Control Signs 643.5000 Traffic Control 645.0111 Geotextile Type DF Schedule A 645.0120 Geotextile Type DF Schedule A 646.1020 Marking Line Epoxy 4-Inch 650.4500 Construction Staking Subgrade 650.5000 Construction Staking Base 650.6000 Construction Staking Structure Layout (structure) 01. B- 37-458 650.9910 Construction Staking Supplemental Control (project) 01. 6686-00-70 650.9920 Construction Staking Slope Stakes 690.0150 Sawing Asphalt 715.0415 Incentive Strength Concrete Pavement	628.2027 Erosion Mat Class II Type C SY 628.6005 Turbidity Barriers SY 628.7504 Temporary Ditch Checks LF 628.7555 Culvert Pipe Checks EACH 629.0210 Fertilizer Type B CWT 630.0120 Seeding Mixture No. 20 LB 630.0500 Seed Water MGAL 633.5100 Markers Row EACH 634.0614 Posts Wood 4x6-Inch X 14-FT EACH 637.2230 Signs Type II Reflective F SF 642.5001 Field Office Type B EACH 643.0420 Traffic Control Barricades Type III DAY 643.0900 Traffic Control Warning Lights Type A DAY 643.0900 Traffic Control Signs DAY 643.5000 Traffic Control Signs DAY 645.0111 Geotextile Type DF Schedule A SY 645.0120 Geotextile Type HR SY 646.1020 Marking Line Epoxy 4-Inch LF 650.4500 Construction Staking Subgrade LF <t< td=""><td>628.2027 Erosion Mat Class II Type C SY 285.000 628.6005 Turbidity Barriers SY 90.000 628.7504 Temporary Ditch Checks LF 15.000 628.7555 Culvert Pipe Checks EACH 4.000 629.0210 Fertilizer Type B CWT 0.200 630.0120 Seeding Mixture No. 20 LB 6.000 630.0500 Seed Water MGAL 6.000 633.5100 Markers Row EACH 8.000 634.0614 Posts Wood 4x6-Inch X 14-FT EACH 4.000 637.2230 Signs Type II Reflective F SF 12.000 642.5001 Field Office Type B EACH 1.000 643.0420 Traffic Control Barricades Type III DAY 1,404.000 643.0705 Traffic Control Warning Lights Type A DAY 2,808.000 643.0900 Traffic Control Warning Lights Type A DAY 1,092.000 645.0111 Geotextile Type DF Schedule A SY 120.000 645.0120 Geotextile Type DF</td></t<>	628.2027 Erosion Mat Class II Type C SY 285.000 628.6005 Turbidity Barriers SY 90.000 628.7504 Temporary Ditch Checks LF 15.000 628.7555 Culvert Pipe Checks EACH 4.000 629.0210 Fertilizer Type B CWT 0.200 630.0120 Seeding Mixture No. 20 LB 6.000 630.0500 Seed Water MGAL 6.000 633.5100 Markers Row EACH 8.000 634.0614 Posts Wood 4x6-Inch X 14-FT EACH 4.000 637.2230 Signs Type II Reflective F SF 12.000 642.5001 Field Office Type B EACH 1.000 643.0420 Traffic Control Barricades Type III DAY 1,404.000 643.0705 Traffic Control Warning Lights Type A DAY 2,808.000 643.0900 Traffic Control Warning Lights Type A DAY 1,092.000 645.0111 Geotextile Type DF Schedule A SY 120.000 645.0120 Geotextile Type DF

600.000

			COMMON E	0100 XCAVATION 1)	SALVAGED/ UNUSABLE PAVEMENT	AVAILABLE		EXPANDED FILL (6)				
	FROM/TO		CUT	EBS	MATERIAL	MATERIAL	UNEXPANDED	FACTOR	MASS ORDINATE +/-		208.0100	
DIVISION	STATION	LOCATION	(2)	EXCAVATION	(4)	(5)	FILL	1.25	(7)	WASTE	BORROW	COMMENT
MAINLINE												
	9+00 to 11+00	Mainline	137	0	36	101	30	38	64	64		
						0		0	0			
						0		0	0			
						0		0	0			
DIVISION 1 SUBTOTAL			137	0	36	101	30	38	64			
GRAND TOTAL			137	0	36	101	30	38	64	64	0	
	TOTAL CO	OMMON EXC	1	37								

NOTES:

- (1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
- (2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
- (3) EBS EXCAVATION TO BE BACKFILLED WITH SELECT BORROW MATERIAL. NOTE: THIS IS DESIGNERS CHOICE, CAN BE BACKFILLED WITH BORROW, OR CUT AS WELL.
- (4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
- 5) AVAILABLE MATERIAL = CUT SALVAGED/UNUSUABLE PAVEMENT MATERIAL
- (6) EXPANDED FILL FACTOR = 1.25
- DEPENDING ON SELECTIONS:

EXPANDED FILL = (UNEXPANDED FILL) * FILL FACTOR

- (7) THE MASS ORDINATE + OR QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
- (8) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE SPECIFIED.

HWY: STAADT AVE COUNTY: MARATHON SHEET PROJECT NO: 6686-00-70 MISCELLANEOUS QUANTITIES PLOT DATE: 10/30/2020 1:38 PM PLOT BY: WIEDERIN, NICHOLAS PLOT SCALE: PLOT NAME: WISDOT / CADDS SHEET 41 STATION - STATION

9+00

10+30

REMOVING PIPE

203.0100 REMOVING SMALL PIPE CULVERTS

EACH

FINISHING ROADWAY

213.0100
FINISHING
DOADWAY

ROADWAY EACH

PROJECT 6686-00-70

PROJECT 6686-00-70 TOTAL

PROJECT 6686-00-70 TOTAL

STA

201.0150 201.0205

CLEARING GRUBBING

STA

PROJECT 6686-00-70 TOTAL

OFFSET

28' LT

STATION - STATION

9+36

10+64

LOCATION

RT

RT

SIZE (IN)

24

TYPE

CMCP

				455.0605 TACK COAT	465.0105 ASPHALTIC SURFACE
STATION		STATION	LOCATION	GAL	TON
9+00	-	9+32	STAADT AVE, MAINLINE	6	20
10+67	-	11+00	STAADT AVE, MAINLINE	6	20
PROJECT 66	86-00-	70 TOTAL		12	40

			305.0110 3/4-INCH	305.0120 1 1/4-INCH	624.0100 WATER
STATION -	STATION	LOCATION	TON	TON	MGAL
9+00 -	9+32	RT SHLDR	2		0.1
9+00 -	9+58	DRIVEWAY & LT SHLDR	18		0.2
9+00 -	9+58	MAINLINE		92	1.0
10+41 -	11+00	MAINLINE		92	1.0
10+52 -	11+00	LT SHLDR	3		0.1
10+41 -	11+00	DRIVEWAY & RT SHLDR	12		0.2
6686-0	00-70	UNDISTRIBUTED	10	41	1.0
ROJECT 66	86-00-70 TOTAL		45	225	3.6

CONCRETE ITEMS

415.0410 CONCRETE **PAVEMENT** APPROACH SLAB

STATION	-	STATION	LOCATION	SY	NOTES
9+32	-	9+52	STAADT AVE	55	FULL WIDTH
10+47	-	10+68	STAADT AVE	55	FULL WIDTH

PROJECT 6686-00-70 TOTAL 110 **CULVERT PIPES**

522.1024 522.0424 APRON ENDWALLS **CULVERT PIPE** FOR CULVERT PIPE REINFORCED CONCRETE REINFORCED CONCRETE **CLASS IV** 24-INCH 24-INCH STATION LOCATION EACH LF 9+17 - 9+57 DRIVEWAY, LT 40 PROJECT 6686-00-70 TOTAL

MAINTENANCE AND REPAIR OF HAUL ROADS (CAT 0030)

618.0100 MAINTENANCE AND REPAIR OF HAUL ROADS **EACH PROJECT** 6686-00-70 PROJECT 6686-00-70 TOTAL

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE SPECIFIED.

HWY: STAADT AVE COUNTY: MARATHON MISCELLANEOUS QUANTITIES SHEET PROJECT NO: 6686-00-70

FILE NAME: \\P:\60548152\900_Work\910_CAD\60548152\SheetsPlan\0302-MQ.pptx

PLOT DATE: 10/30/2020 1:38 PM

PLOT BY: WIEDERIN, NICHOLAS

PLOT NAME:

PLOT SCALE:

WISDOT / CADDS SHEET 41

MOBILIZATION

619.1000 **MOBILIZATION EACH PROJECT CATEGORY** 6686-00-70 0010 PROJECT 6686-00-70 TOTAL

EROSION CONTROL MOBILIZATION

	628.1905	628.1910
	MOBILIZATIONS	MOBILIZATION
	EROSION	EMERGENCY
	CONTROL	EROSION CONTROL
PROJECT	EACH	EACH
6686-00-70	2	2
UNDISTRIBUTED	1	1
PROJECT 6686-00-70 TOTAL	3	3

LANDSCAPING

9+30 9+55	LOCATION LT LT	SY 68 16	SY 68	0.04	LB 1.9	MGAL 1.5
9+55	LT LT					_
	LT	16	16	0.04		
		. •	16	0.01	0.5	0.4
9+20	RT	49	49	0.03	1.3	1.1
11+00	RT	59	59	0.04	0.1	1.3
11+00	LT	27	27	0.02	0.8	0.6
70 L	JNDISTRIBUTED	66	66	0.06	1.4	1.1
7(11+00) (11+00 LT	11+00 LT 27 O UNDISTRIBUTED 66	11+00 LT 27 27 O UNDISTRIBUTED 66 66	11+00 LT 27 27 0.02 D UNDISTRIBUTED 66 66 0.06	11+00 LT 27 27 0.02 0.8 0 UNDISTRIBUTED 66 66 0.06 1.4

637.2230

EROSION CONTROL

			628.1504 SILT FENCE	628.1520 SILT FENCE MAINTENANCE	628.6005 TURBIDITY BARRIERS	628.7555 CULVERT PIPE CHECKS	628.7504 TEMPORARY DITCH CHECKS
STATION	- STATION	OFFSET	LF	LF	SY	EACH	LF
9+00	- 9+75	LT	34	34			
	9+00	LT					10
	9+17	LT				3	
9+00	- 9+25	RT	51	51			
10+25	- 11+00	RT	96	96			
10+87	- 11+00	LT	43	43			
SOUTH	1 APPROACH				41		
NORTH	I APPROACH				42		
UNDIS	STRIBUTED		26	26	7	1	5
PROJECT	6686-00-70 TOTA	L	250	250	90	4	15

PERMANENT SIGNING

	STATION	OFFSET	SIGN CODE	POSTS WOOD 4X6-INCH 14-FT EACH	SIGNS TYPE II REFLECTIVE F SF	REMARKS
	9+47	RT	W5-52R	1	3.00	BRIDGE HASH MARKS
	9+60	LT	W5-52L	1	3.00	BRIDGE HASH MARKS
	10+40	RT	W5-52R	1	3.00	BRIDGE HASH MARKS
	10+53	LT	W5-52L	1	3.00	BRIDGE HASH MARKS
P	ROJECT 6686-0	00-70 TOTAL		4	12.00	

634.0614

TRAFFIC CONTROL

643.5000 TRAFFIC CONTROL EACH **PROJECT** 6686-00-70 PROJECT 6686-00-70 TOTAL

PROJECT 6686-00-70 TOTAL

FIELD OFFICE

642.5001 TYPE B **PROJECT** EACH 6686-00-70

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE SPECIFIED.

COUNTY: MARATHON HWY: STAADT AVE MISCELLANEOUS QUANTITIES SHEET E PROJECT NO: 6686-00-70

FILE NAME: \\P:\60548152\900_Work\910_CAD\60548152\SheetsPlan\0302-MQ.pptx PLOT DATE: 10/30/2020 1:38 PM PLOT BY: WIEDERIN, NICHOLAS PLOT SCALE: PLOT NAME: WISDOT / CADDS SHEET 41

TRAFFIC CONTROL

643.0420 643.0705 643.0900 TRAFFIC CONTROL TRAFFIC CONTROL TRAFFIC CONTROL **BARRICADES WARNING LIGHTS** SIGNS DAYS IN TYPE III TYPE A SERVICE NO. DAY LOCATION NO. NO. DAY DAY 6686-00-70 18 1,404 36 2,808 14 1,092 78 PROJECT 6686-00-70 TOTAL 1,092 1,404 2,808

MARKERS ROW

633.5100 **MARKERS** ROW **EACH** STATION LOCATION 9+48.06 33.25' LT 9+57.06 50.00' LT 1 10+95.00 50.00' LT 11+05.00 33.41' LT 32.35' RT 8+95.00 9+15.00 50.00' RT 10+55.00 50.00' RT 10+70.00 32.73' RT

8

PAVEMENT MARKING ITEMS

646.1020 MARKING LINE **EPOXY** 4-INCH

YELLOW WHITE

2,800

LF STATION - STATION TYPE EDGELINE, LT (WHITE) 700 6+50 - 13+50 - 13+50 CENTERLINE (DOUBLE YELOW) 1,400 6+50 ---6+50 - 13+50 EDGELINE, RT (WHITE) 700

PROJECT 6686-00-70 TOTAL

PROJECT 6686-00-70 TOTAL

CONSTRUCTION STAKING

(CAT 0020) 650.4500 650.5000 650.6000 650.6500 650.9910 650.9920 CONSTRUCTION CONSTRUCTION CONSTRUCTION CONSTRUCTION CONSTRUCTION CONSTRUCTION STAKING STAKING **STAKING** STAKING STAKING STAKING SUBGRADE BASE PIPE STRUCTURE SUPPLEMENTAL SLOPE **CULVERTS** LAYOUT CONTROL STAKES B-37-458 6686-00-70 STATION - STATION LF LF **EACH** LS LS LF 11+00 105 105 105 ---9+37 1 ---------10+00 0 ---PROJECT 6686-00-70 TOTAL 105 105 105

SAWING ASPHALT

690.0150 SAWING **ASPHALT** STATION - STATION LOCATION LF 22 9+00 STAADT, BEGIN PROJECT 11+00 STAADT, END PROJECT 22 PROJECT 6686-00-70 TOTAL

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE SPECIFIED.

PROJECT NO: 6686-00-70

HWY: STAADT AVE

COUNTY: MARATHON

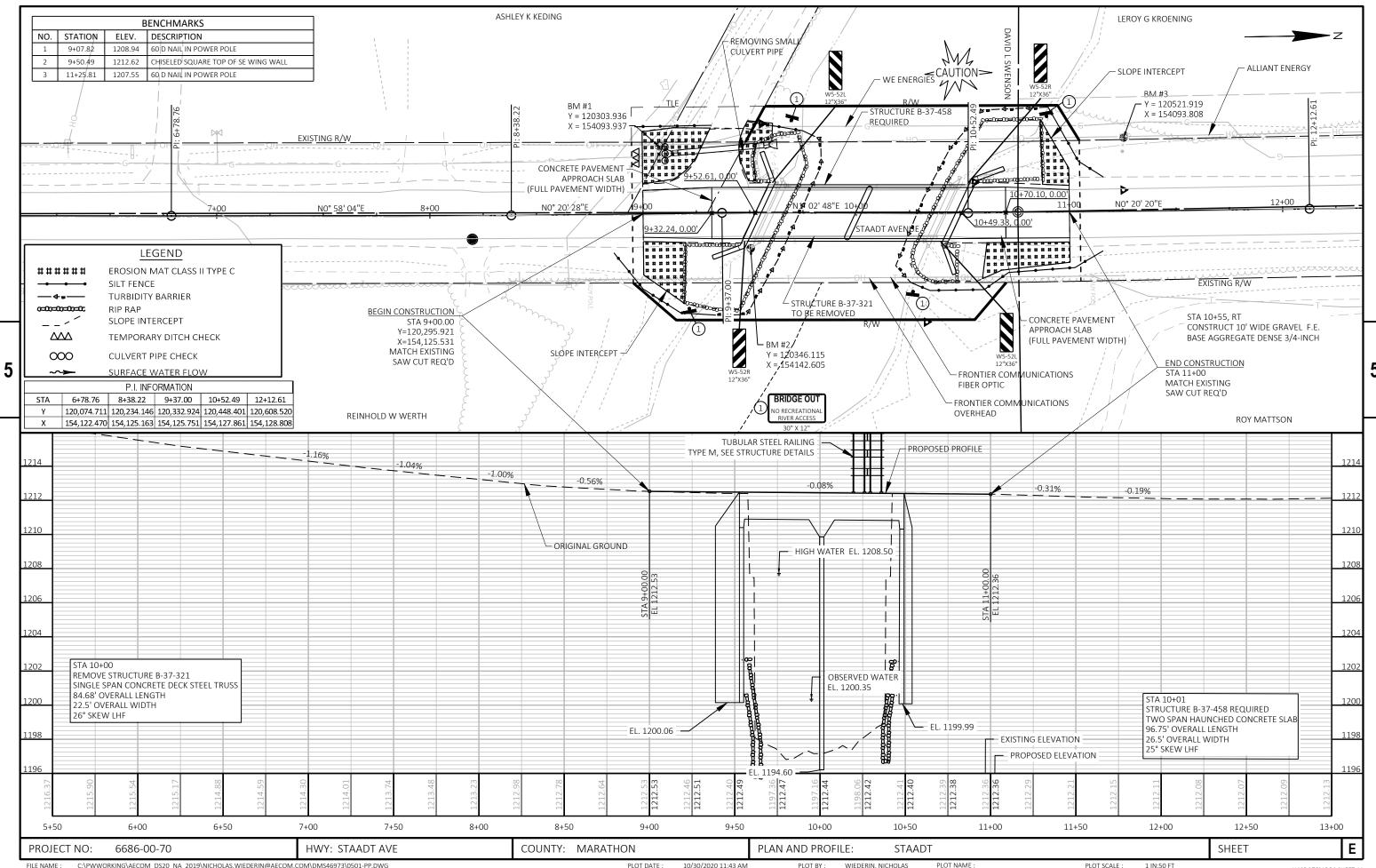
MISCELLANEOUS QUANTITIES

PLOT NAME:

SHEET PLOT SCALE:

WISDOT / CADDS SHEET 41

PLOT DATE: 1/4/2021 2:38 PM



Standard Detail Drawing List

08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
12A03-10	NAME PLATE (STRUCTURES)
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
15A01-13A	MARKER POST FOR RIGHT-OF-WAY
15A01-13B	FLEXIBLE MARKER POST FOR RIGHT-OF-WAY
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15С02-08В	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15С11-07В	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS

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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.

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.



WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF **EROSION BALES / TEMPORARY** DITCH CHECKS

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 /S/ Beth Connestro
CHIEF ROADWAY DEVELOPMENT ENGINEER

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TYPICAL APPLICATION OF SILT FENCE

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PLAN VIEW SILT FENCE AT MEDIAN SURFACE DRAINS



GENERAL NOTES

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

- \bigcirc 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 11/8" X 11/8" OF OAK OR HICKORY.
- 4) SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- (5) CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 /S/ Beth Cannestra

29-05 /S/ Beth Cannestra
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER

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GENERAL NOTES

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

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

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





SECTION C-C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

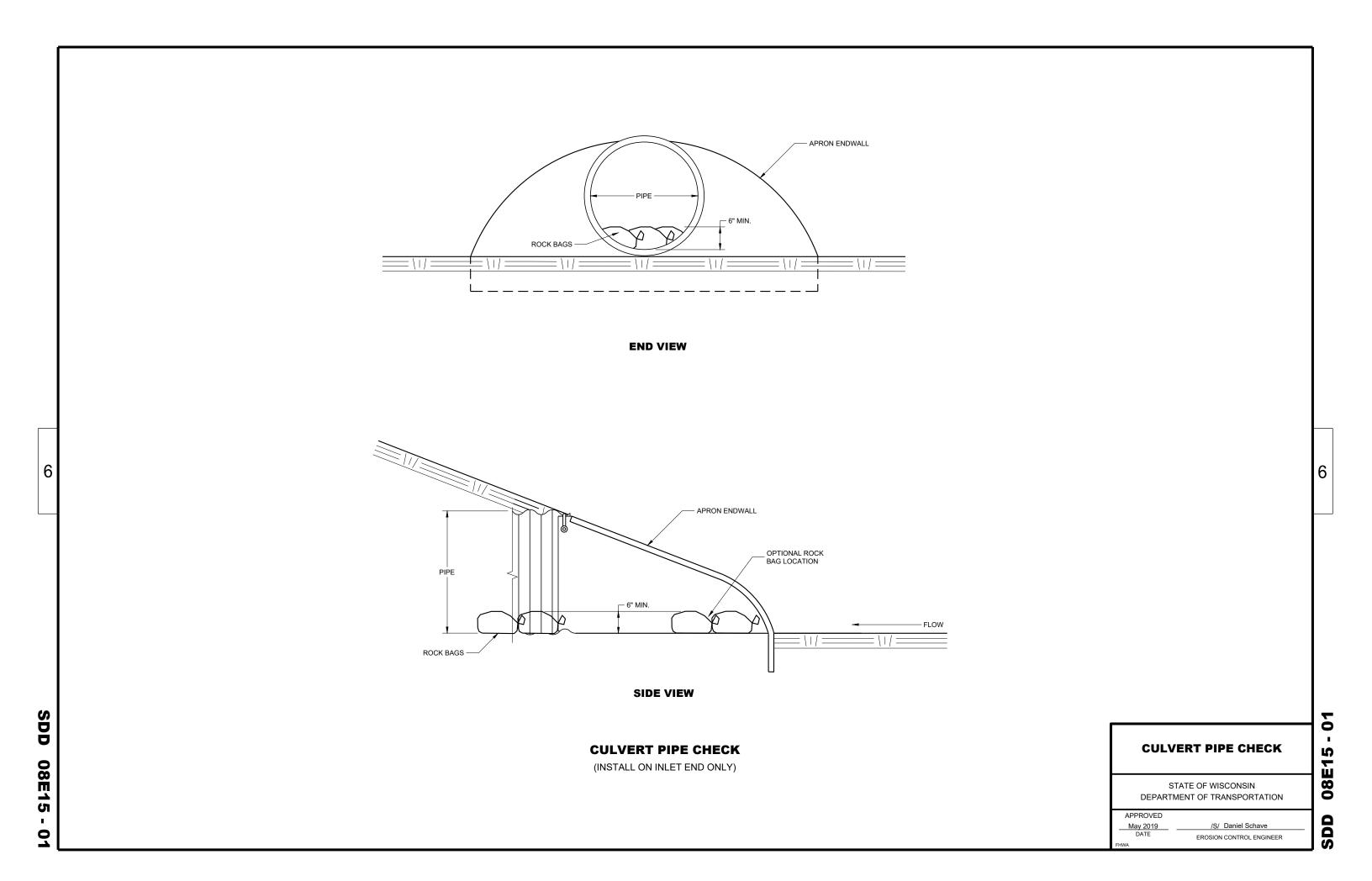
TURBIDITY BARRIER

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 /S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER ∞

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	METAL APRON ENDWALLS										
PIPE	MIN. 1	THICK.			DIMENS	SIONS (I	nches)			APPROX.	
DIA.	(Incl		A	В	Н	L	Γį	L ₂	W	SLOPE	BODY
(IN.)	STEEL	ALUM.	(±1")	(MAX.)	(±1")	(±1 ½")	①	0	(±2")	320.2	
12	.064	.060	6	6	6	21	12	171/2	24	2½+o 1	1Pc.
15	.064	.060	7	8	6	26	14	213/4	30	2½to 1	1Pc.
18	.064	.060	8	10	6	31	15	281/4	36	21/2+o 1	1Pc.
21	.064	.060	9	12	6	36	18	295/8	42	21/2+o 1	1Pc.
24	.064	.075	10	13	6	41	18	371/4	48	21/2+o 1	1Pc.
30	.079	.075	12	16	8	51	18	521/4	60	21/2+0 1	1Pc.
36	.079	. 105	14	19	9	60	24	59¾	72	21/2+o 1	2 Pc.
42	.109	.105	16	22	11	69	24	75%	84	21/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 ¹ / ₄ +o 1	3 Pc.
54	.109	.105	18	30	12	84	30	851/2	102	2 ¹ / ₄ †o 1	3 Pc.
60	.109×	.105×	18	33	12	87	_	_	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	_	_	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	_	_	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	_	_	132	11/2+0 1	3 Pc.
84	.109×	.105×	18	45	12	87	_	_	138	11/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	_	_	144	11/2+0 1	3 Pc.
96	.109×	.105×	18	35	12	87	_	_	150	1/2+0 1	3 Pc.

	REINFORCED CONCRETE APRON ENDWALLS							
PIPE			DIM	ENSIONS	(Inches)			APPROX.
DIA.	T	A	В	С	D	Ε	G	SLOPE
12	2	4	24	48 1/8	721/8	24	2	3 to 1
15	21/4	6	27	46	73	30	21/4	3 to 1
18	21/2	9	27	46	73	36	21/2	3 to 1
21	23/4	9	36	371/2	731/2	42	23/4	3 to 1
24	3	91/2	431/2	30	731/2	48	3	3 to 1
27	31/4	101/2	491/2	24	731/2	54	31/4	3 to 1
30	$3\frac{1}{2}$	12	54	193/4	731/2	60	31/2	3 to 1
36	4	15	63	34¾	97¾	72	4	3 to 1
42	$4\frac{1}{2}$	21	63	35	98	78	41/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	51/2		65	**************************************	8 ¹ / ₄ - 100	90	51/2	2% to 1
60	6	* * * 30-35	60	39	99	96	5	2 to 1
66	61/2	* * * 24-30	* * * 72-78	* * * 21-27	99	102	51/2	2 to 1
72	7	* ** 24-36	78	21	99	108	6	2 to 1
78	71/2	* ** 24-36	78	21	99	114	61/2	2 to 1
84	8	36	901/2	21	1111/2	120	61/2	1½+o 1
90	81/2	41	871/2	24	1111/2	132	61/2	11/2+0 1

THREADED %6" DIA. ROD CONNECTOR AROUND CULVERT & THROUGH TANK TYPE CONNECTOR LUG LUG OR ALTERNATE CONNECTOR STRAP (SEE DETAIL) MEASURED LENGTH OF CULVERT TYPE 1 FOR 12" THRU 24" CORR. PIPE







NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL.

CORRUGATED PIPE. FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5

DIMPLED BAND MAY BE USED WITH HELICALLY

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT ALTERNATE FOR TYPE 1 CONNECTION END SECTION CONNECTOR STRAP

* EXCEPT CENTER PANEL SEE GENERAL NOTES





SHOULDER

SLOPE



SIDE ELEVATION METAL ENDWALLS



**MAXIMUM





CONCRETE ENDWALLS

CONNECTION DETAILS



SECTION A-A

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.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA, GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE

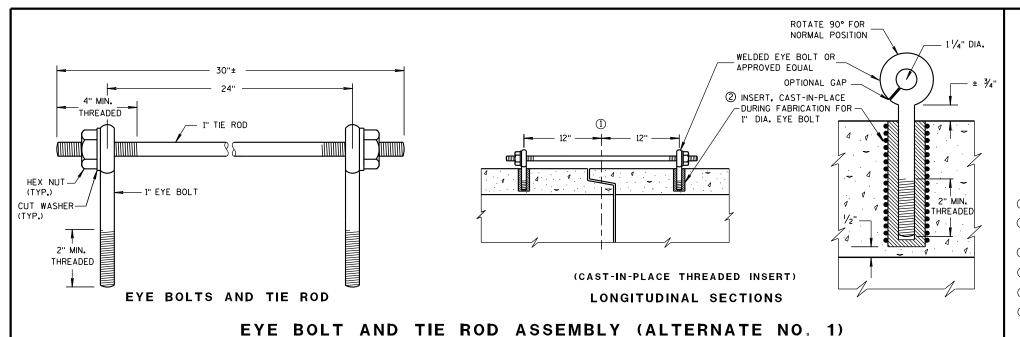
LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES. THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

(1) FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.



11/30/94 /S/ Rory L. Rhinesmith CHIEF ROADWAY DEVELOPMENT ENGINEER



GENERAL NOTES

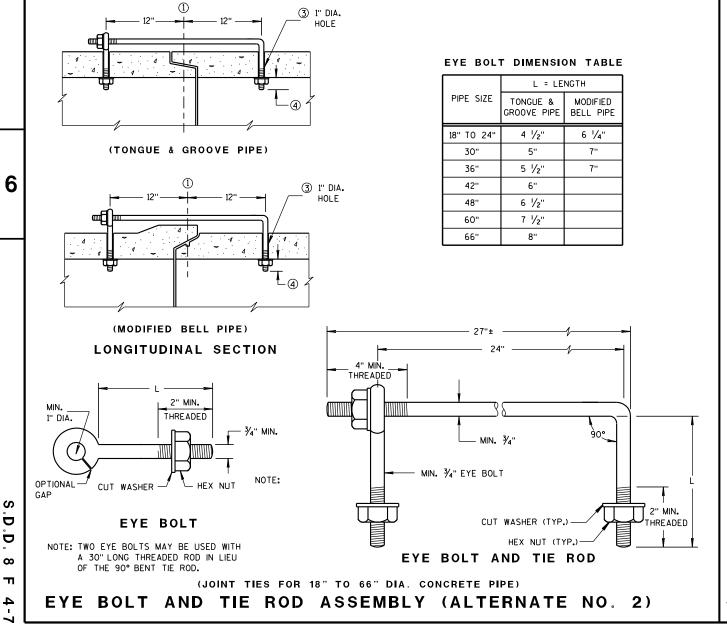
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES, ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

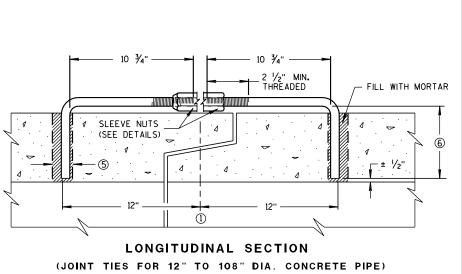
DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

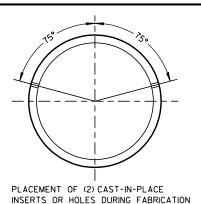
- (1) & OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.
- THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE
- ${\mathfrak S}$ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ${\mathfrak L}$ OF TONGUE AND GROOVE.
- 4 BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.
- (5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.
- ⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN $rac{1}{2}$ INCH OF THE INNER SURFACE OF THE PIPE.



ADJUSTABLE TIE ROD TABLE 5/8 5 12-60 3/4 5 1/2 3/4 90-108 DIMENSIONS SHOWN ARE IN INCHES **TAPERED** PLAIN RIGHT AND LEFT THREADS **SLEEVE NUTS** 2 1/2" MIN. THREADED

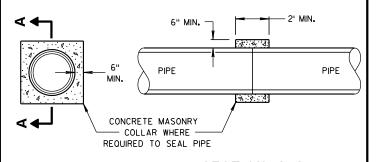


ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

6/5/2012 /S/ Jerry H. Zogg DATE ROADWAY STANDARDS DEVELOPMENT ENGINEER

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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.



SPREAD OPEN SO THE TOP OF LUG IS 11/4" WIDE

SECTION A-A

ALTERNATE LUG



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

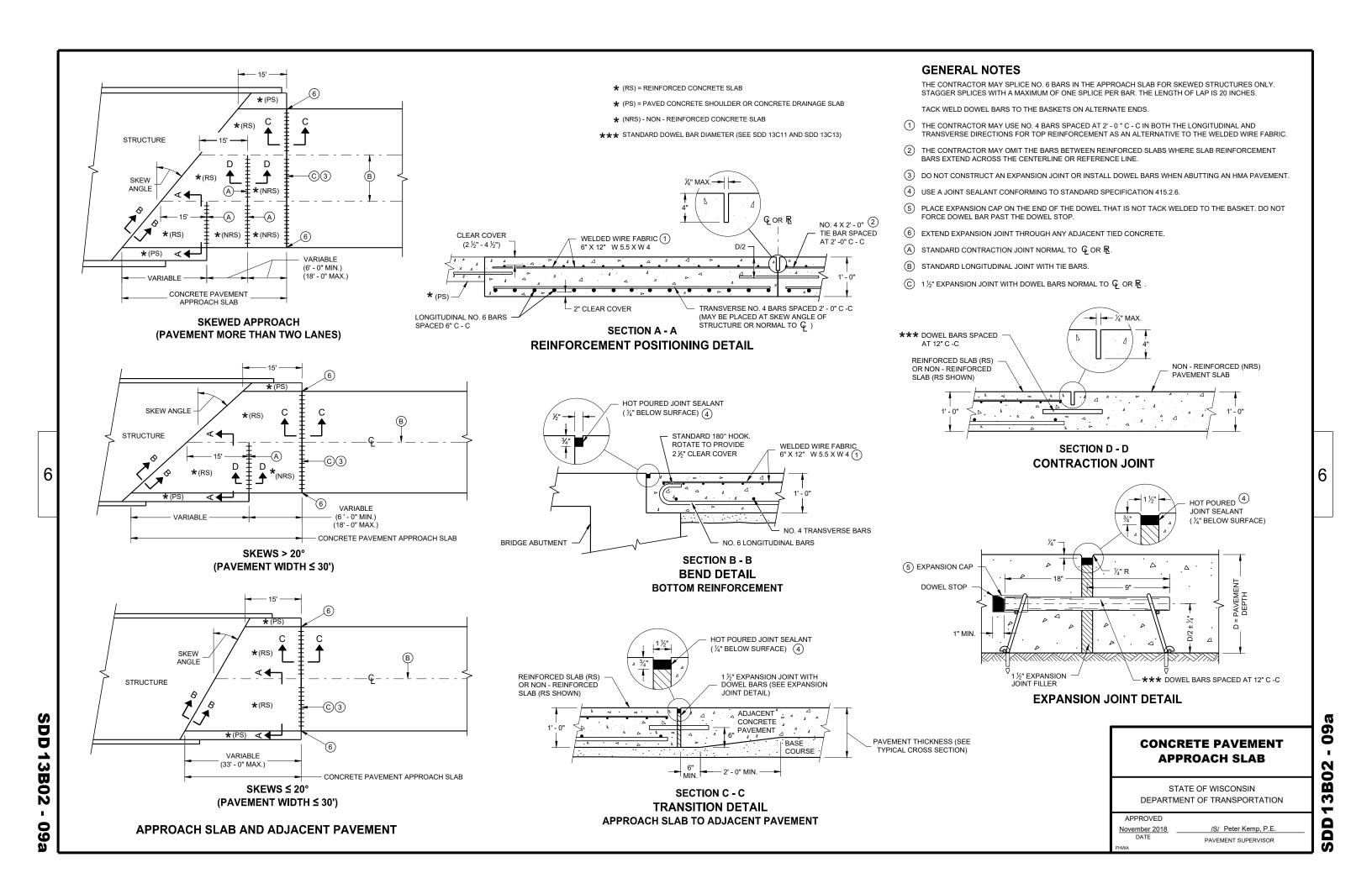
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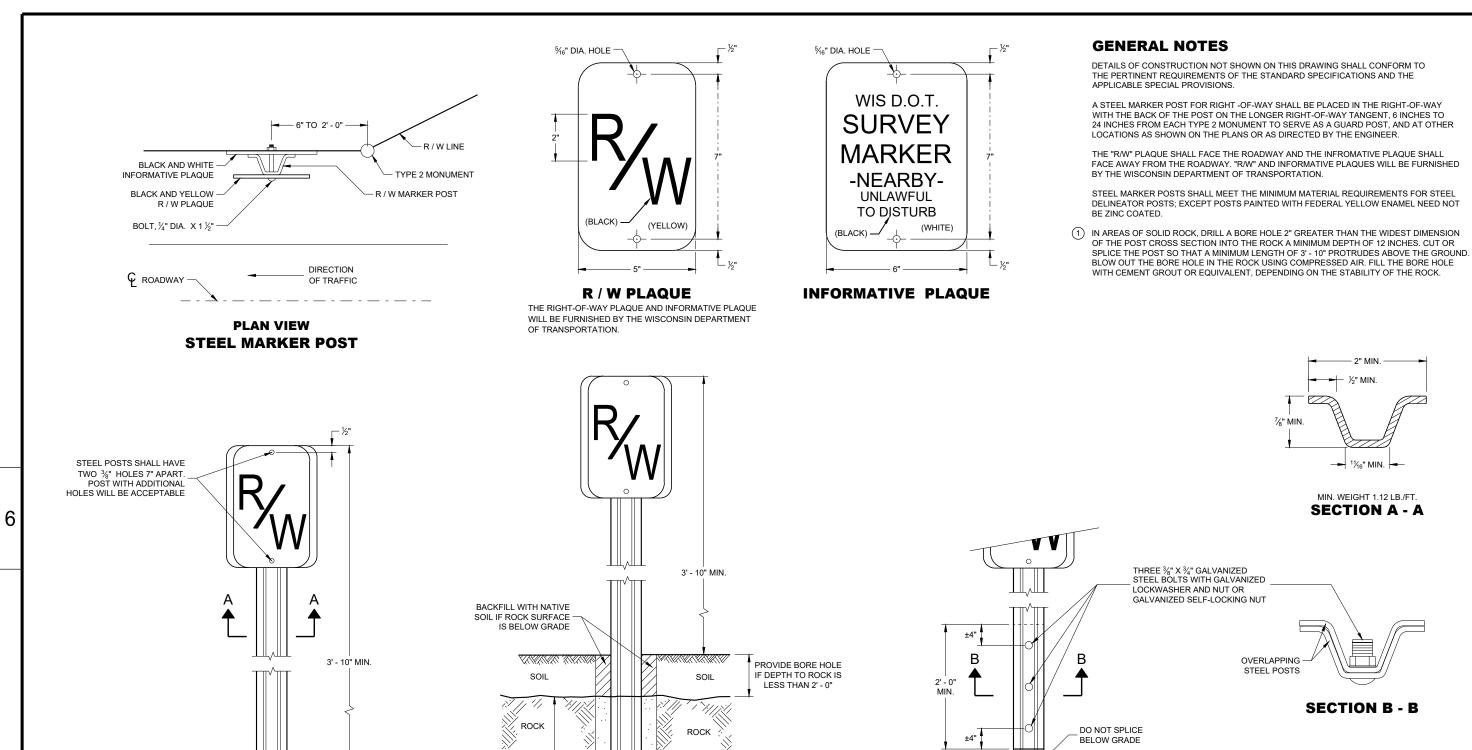
3/26/IO /S/ SCOT BECKET

CHIEF STRUCTURAL DEVELOPMENT ENGINEER

D.D. 12 A

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STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION /S/ Ray Kumapayi
CHIEF SURVEYING AND MAPPING
ENGINEER

FOR RIGHT - OF - WAY

APPROVED

2/18/2016 DATE

DIAMETER OF BORE HOLE EQUALS

- GREATEST DIMENSION OF POST CROSS SECTION PLUS 2 INCHES **FRONT VIEW** ROCK INSTALLATION 1

CEMENT GROUT OR EQUIVALENT IN BORE HOLE

1' - 0" MIN.

2' - 0" MIN.

FRONT VIEW

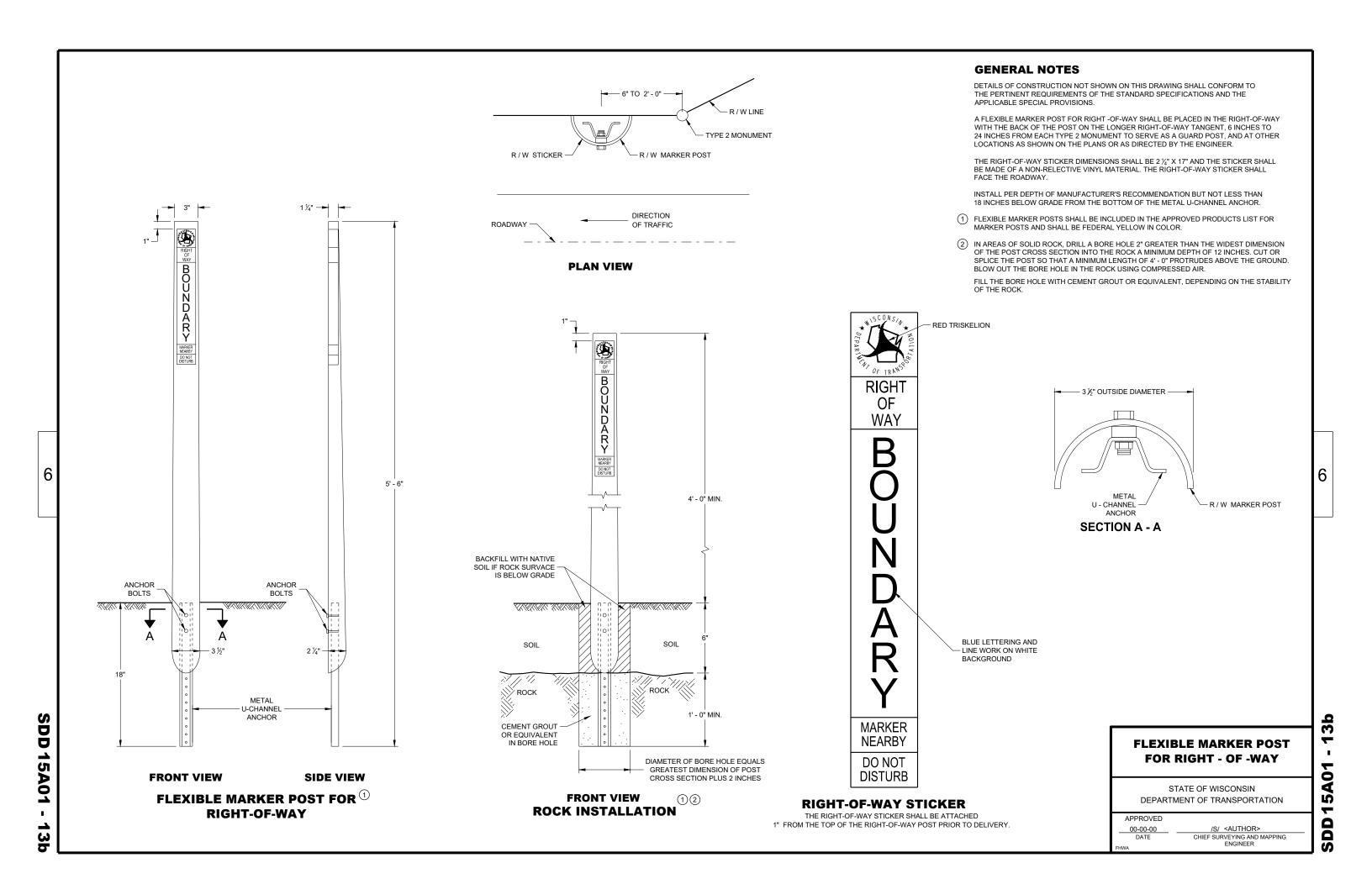
STEEL MARKER POST

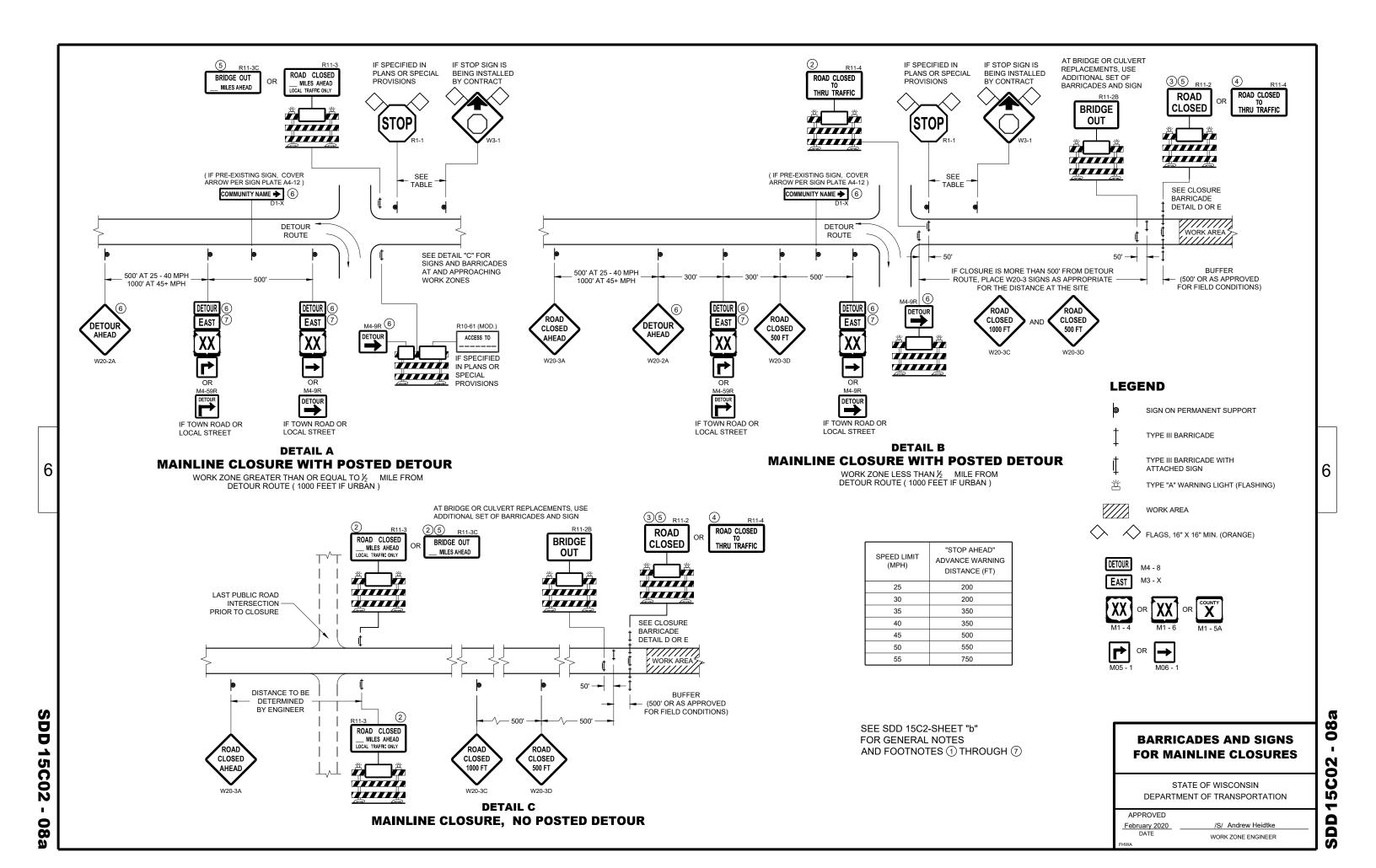
SDD 15A01

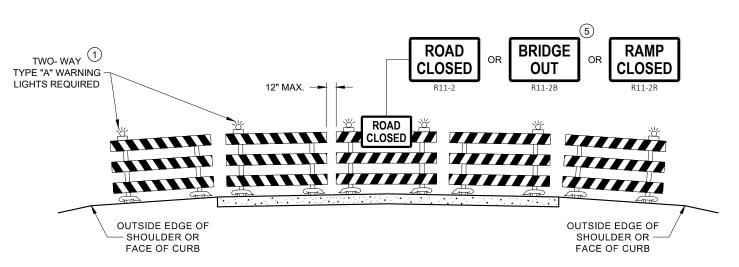
MIN. WEIGHT 1.12 LB./FT. **SECTION A - A SECTION B - B MARKER POST**

FRONT VIEW

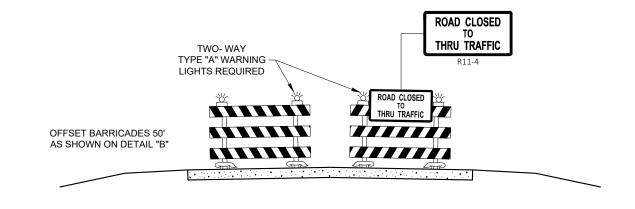
SPLICE DETAIL







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

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"

- 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**
- THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.
- (3) FOR ROAD CLOSURE <u>WITHOUT</u> 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
- "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

February 2020 DATE

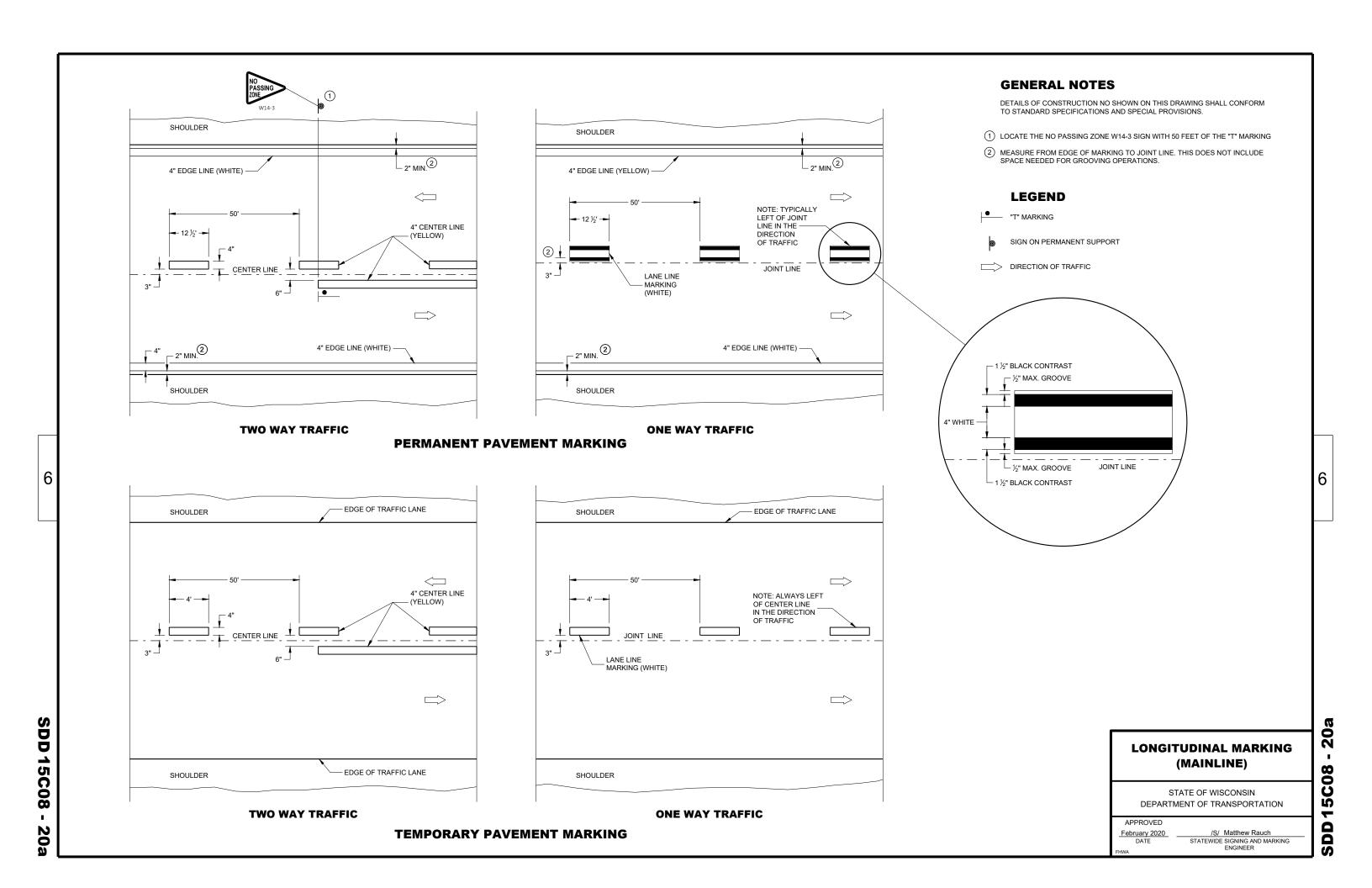
WORK ZONE ENGINEER

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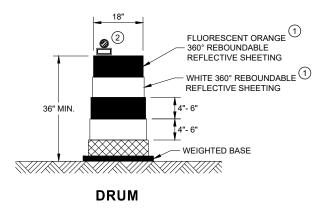


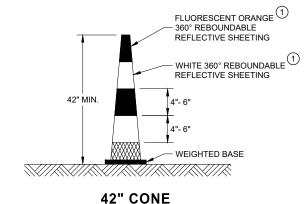


SDD 15C11

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.



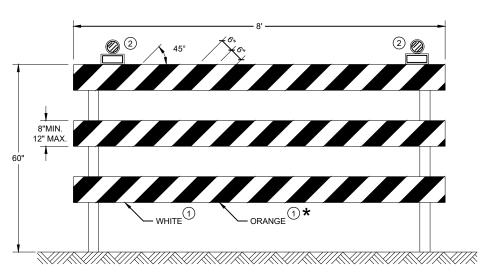


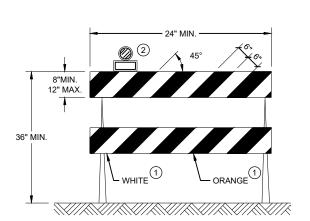


THE STRIPES SHALL SLOPE DOWNWARD TO

THE TRAFFIC SIDE FOR CHANNELIZATION.

DO NOT USE IN TAPERS ½ SPACING OF DRUMS





TYPE II BARRICADE

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

TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

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

07 Ŋ

SDD



TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SO. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SO.FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE). SIGNS LARGER THAN 27 SO.FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

URBAN AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST **EMBEDMENT DEPTH**

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

4" X 6" WOOD POST

POST SPACING REQUIREM	NUMBER OF		
L	E	WOOD POSTS REQUIRED	
48" OR LESS AND LESS THAN 20 SO.FT.	-	1	
LESS THAN 60"	12"	2	٤
60" TO 120"	L/5	2	
GREATER THAN 120" LESS THAN 168"	12"	3	
168" AND GREATER	12"	4	

SEE NOTE (3)

RURAL AREA

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

-11

D 15 D ∞

6

Δ

 ∞

6

- 11/2" DIAMETER HOLES

Ω

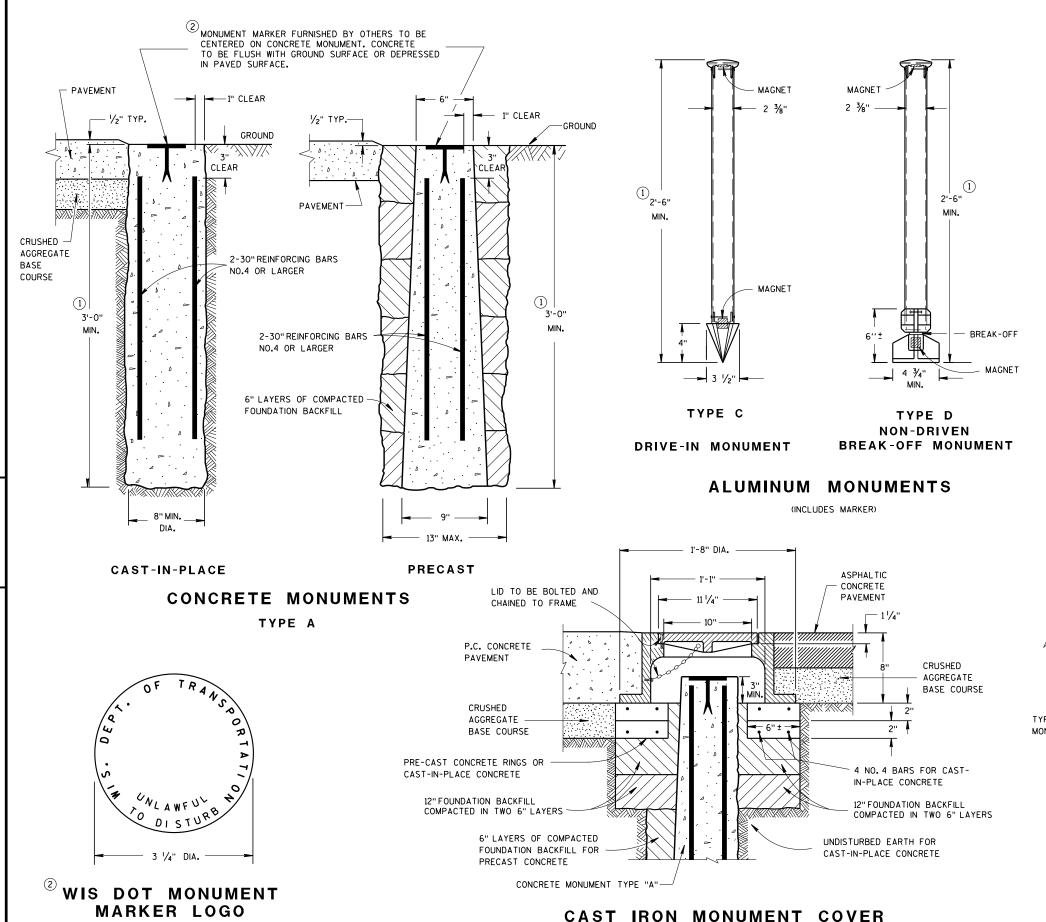
Ω

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

> /S/ Andrew Heidtke WORK ZONE ENGINEER

APPROVED

June 2017 DATE



(APPROXIMATE WEIGHT 95 LBS)

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.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

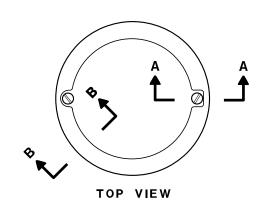
MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

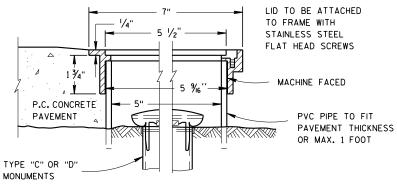
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER

- (1) MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.
- (2) AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.





SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS) (FOR CONCRETE PAVEMENT ONLY)

SECTION B-B

LANDMARK REFERENCE **MONUMENTS AND COVERS**

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

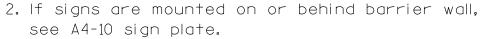
APPROVED

March 2018 DATE FHWA

/S/ Raymond A. Kumapayi CHIEF SURVEYING AND MAPPING ENGINEER

Ω

FOR TYPES "A", "C", & "D"



The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (\pm). 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" (\pm).

- 3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
- 4. Minimum mounting height for signs mounted on traffic signal poles is $5'-3''(\frac{+}{2})$.
- 5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
- 6. The (±) tolerance for mounting height is 3 inches.
- 7. Folding signs shall be mounted at a height of 5'-3'' (\pm) or as directd by the Engineer.

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

** Curb Flowline

D
White Edgeline Location

*

6'-3"(±)

D |

Outside Edge

of Gravel

White Edgeline
Location

Outside Edge
of Gravel

d.

POST EMBEDMENT DEPTH

Area of Sign
Installation
(Sq.Ft.)
(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.

HWY:

* 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

Matther & Rawk For State Traffic Engineer

DATE 5/13/2020 PLATE NO. _A4-3.22

SHEET NO:

Ε

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A43.dgn

PROJECT NO:

PLOT DATE: 13-MAY 2020 1:04

COUNTY:

PLOT BY : mscj9h

PLOT NAME :

PLOT SCALE: \$\$.....plo†scale.....\$\$ WISDOT/CADDS SHEET 42

APPROVED



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



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

HWY:



PLAN VIEW

COUNTY:

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

For State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

SHEET NO:

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN

PROJECT NO:

PLOT DATE: 27-JAN-2014 09:48

PLOT NAME :

PLOT BY: mscsja

PLOT SCALE: 13.659812:1.000000

APPROVED

WISDOT/CADDS SHEET 42

GENERAL NOTES

- 1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
- 2. See tables below for required number of posts.
- 3. For expressways and freeways, mounting height is 7'-3'' (±) or 6'-3'' (±) depending upon existence of sub-sign.
- 4. The (±) tolerance for mounting height is 3 inches.
- 5. J-Assemblies are considered to be one sign for mounting height.
- 6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
- 7. Folding signs shall be mounted at a height of 5'-3'' (\pm) or as directed by the engineer.
- 8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8). Roundabout Chevron panel (R6-4B), 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'' (±).
- * 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.
- ** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.
- ** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

D
(Min)
4'
5'

WISCONSIN DEPT OF TRANSPORTATION APPROVED For State Traffic Engineer DATE 8/21/17 PLATE NO. <u>A4-4.15</u>





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

HWY:

SIGN SHAPE OTHER THAN (THREE POSTS REQUIR	
L	E
Greater than 108" to 144"	12''

COUNTY:

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A44.DGN

PROJECT NO:

PLOT DATE: 21-AUG-2017 15:54

PLOT SCALE: 108.188297:1.000000

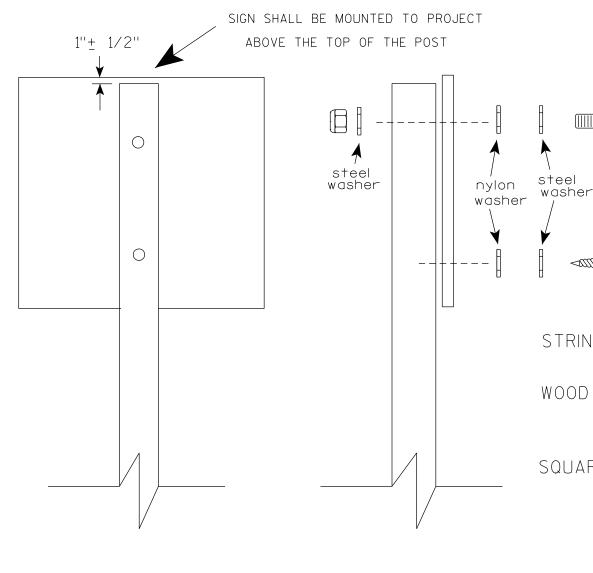
WISDOT/CADDS SHEET 42

OF TYPE II SIGNS ON MULTIPLE POSTS

TYPICAL INSTALLATION

SHEET NO:

PLOT BY: \$\$...plotuser...\$\$ PLOT NAME:



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 $(4" \times 6")$

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN) 3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - $\frac{1}{32}$ " (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 Matthew

For State Traffic Engineer

SHEET NO:

DATE <u>4/1/202</u>0

PLATE NO. <u>44-8.9</u>

PROJECT NO:

PLOT DATE: 01-APRIL-2020

PLOT BY : dotc4c

WISDOT/CADDS SHEET 42

Ε

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A48.DGN



PROJECT NO: HWY: COUNTY: SHEET NO: FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE: 05-FEB-2015 17:09 PLOT BY: mscsja PLOT NAME : PLOT SCALE: 13.659812:1.000000

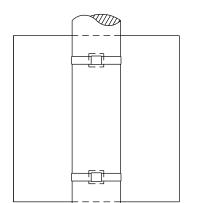
DATE 2/05/15

PLATE NO. <u>A4-9.9</u>

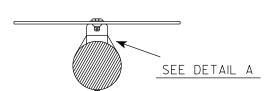
For State Traffic Engineer

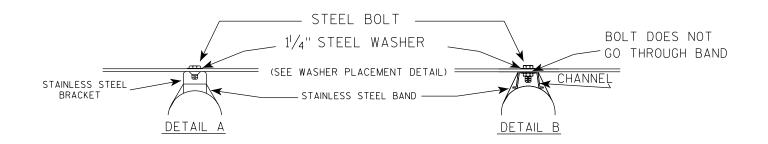


BANDING

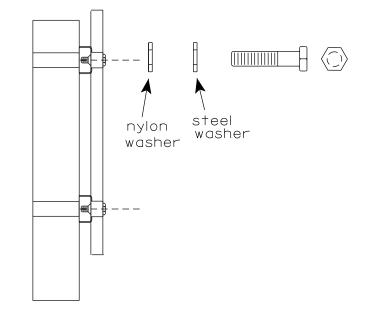


SINGLE SIGN





WASHER PLACEMENT



HWY:

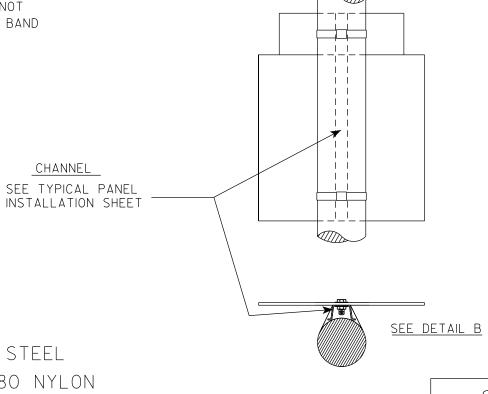
WASHERS (ALL POSTS) -

1-1/4" O.D. X³/₈" I.D. X¹/₁₆" STEEL 1-1/4" O.D. $\times \frac{3}{8}$ " I.D. \times .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 $\frac{3}{4}$ " in width and 0.025" thickness.
- 4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
 - b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



STANDARD SIGN SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

SHEET NO:

State Traffic Engineer

Ε

APPROVED

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

COUNTY:

PLOT DATE: 10-JUN 2019 4:10

PLOT NAME :

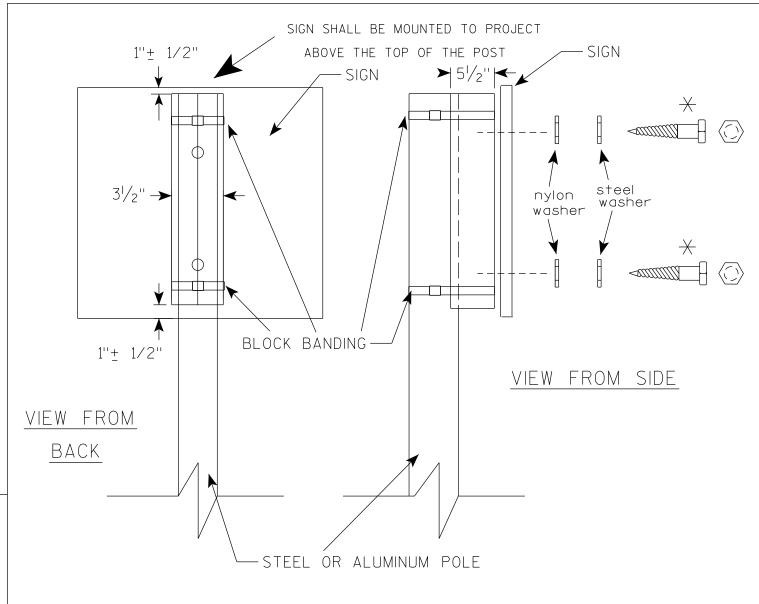
PLOT SCALE: \$\$.....plotscale.....\$\$ WISDOT/CADDS SHEET 42

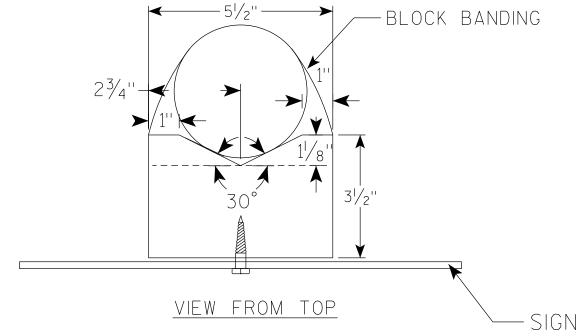
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn

PROJECT NO:

PLOT BY: mscj9h

CHANNEL





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 NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
- 5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
 - b. Electro-galvanized in accordance with ASTM Designation: B 633, TYPE III, SC 3
- 6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
- 7. STEEL WASHERS SHALL BE $1\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
- 8. NYLON WASHERS SHALL BE $1^{1}/_{4}$ " O.D. X $\frac{3}{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

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

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

| APPROVED

For State Traffic Engineer

SHEET NO:

Matthew R

DATE 6/10/19

PLATE NO. _A5-10.2

PROJECT NO:
FILE NAME: C:\CAEfiles\Projects\tr_stdplate\A510.dgn

PLOT DATE: 10-JUN 2019 4:15

PLOT BY: mscj9h

WISDOT/CADDS SHEET 42

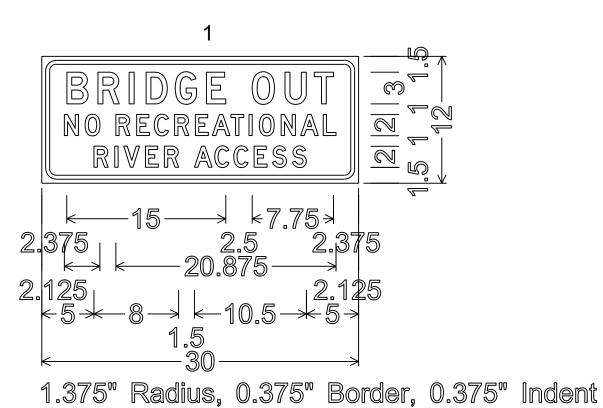


- 1. All Signs Type II Type F Reflective
- 2. Color:

PLOT NAME :

Background – Orange Message – Black

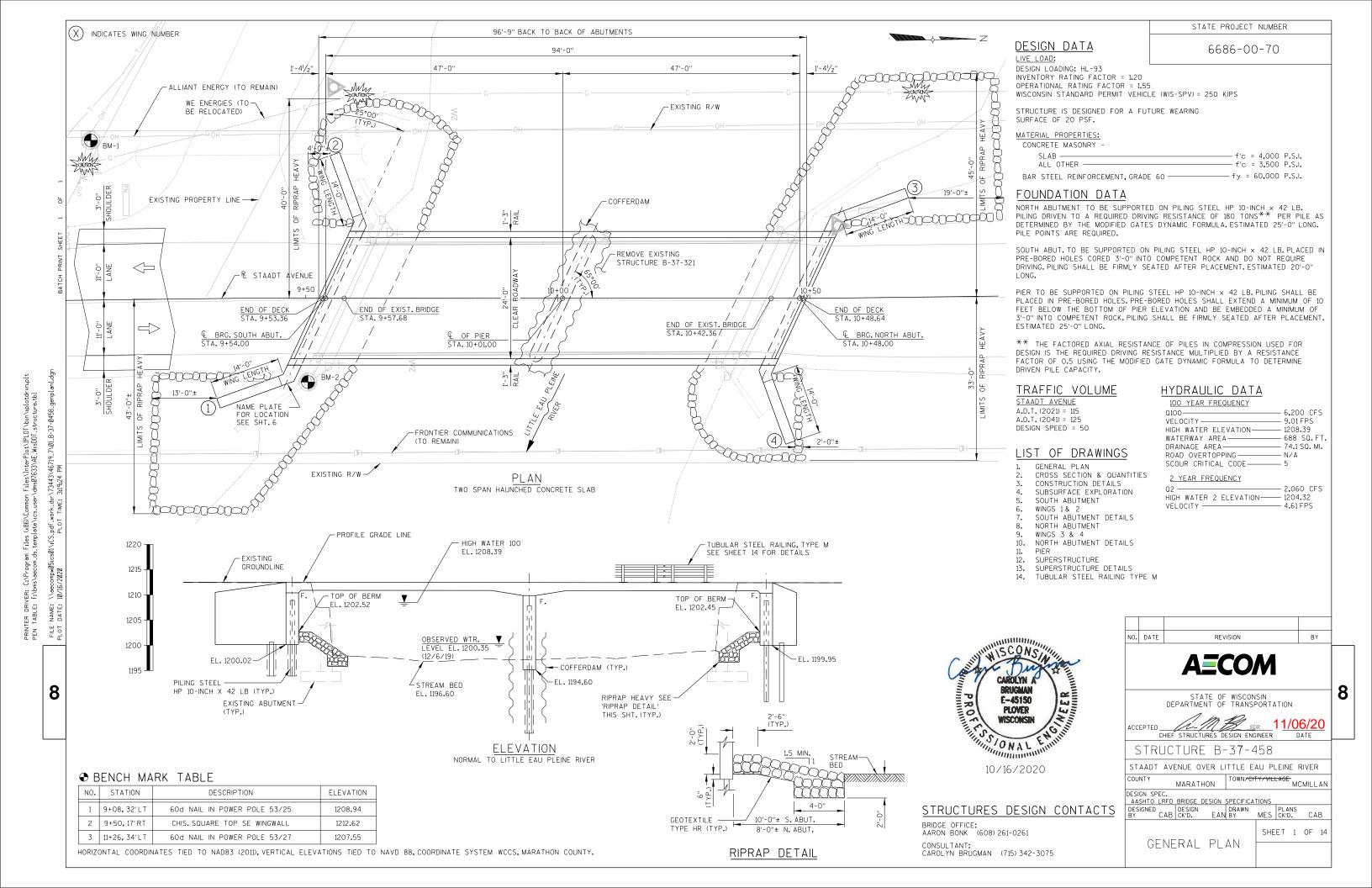
3. Message Series - D



PROJECT NO: 6686-00-70 HWY: STAADT AVE COUNTY: MARATHON TEMPORARY SIGNING SHEET **E**

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\NICHOLAS.WIEDERIN@AECOM.COM\DMS46973\0701-SD.DWG

PLOT DATE : 10/30/2020 11:40 AM PLOT BY : WIEDERIN, NICHOLAS



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

THE FIRST DIGIT OF A THREE DIGIT BAR MARK AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

THE EXISTING STRUCTURE (B-37-0321) IS A STEEL TRUSS BRIDGE, 80'LONG x 22.5'

THE EXISTING STREAM BED SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION

ALL REQUIRED REMOVAL OF THE EXISTING SUBSTRUCTURES IS INCLUDED IN THE BID ITEM "REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS, STA.

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

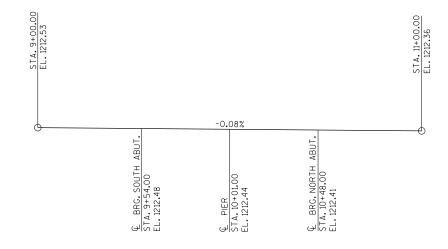
AT PIER, COFFERDAM REQUIRED. CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.

LEGEND

-RAILING NOT SHOWN FOR CLARITY

SURFACE PROTECTION DETAIL

- → ¾" V-GROOVE REQ'D. EXTEND V-GROOVE TO 6" FROM FRONT FACE OF ABUT.
- COAT WITH "PROTECTIVE SURFACE TREATMENT" AS PER STANDARD SPECIFICATIONS.



PROFILE GRADE LINE - STAADT AVENUE

NO.	DATE	F	REVISION			BY	
	[STATE DEPARTMENT (OF WISCONS OF TRANSPO		ION		
	S	STRUCTU	RE B-	37-	458		
			DRAWN BY	MES	PLANS CK'D.	САВ	
		SS SECT		SHE	ET 2	OF 14	

26'-6" - OUT TO OUT OF BRIDGE 12'-0" 12'-0" R STAADT AVENUE — RAILING TUBULAR TYPE M (TYP.) SEE SHEET 14 FOR DETAILS POINT REFERRED TO ON 2'-10" SLAB,-PROFILE GRADE LINE -_1'-81/2" SLAB 2.0% 2.0% HAUNCH: TOP OF BERM PILING STEEL -ABUTMENT HP $10-INCH \times 42 LB$.

> CROSS-SECTION THRU ROADWAY (LOOKING NORTH)

TOTAL ESTIMATED QUANTITIES

BID ITEM			SOUTH		NORTH		
NUMBER	BID ITEM	UNIT	ABUTMENT	PIER	ABUTMENT	SUPER.	TOTALS
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STATION 10+00	LS					1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-37-458	LS					1
206.5000	COFFERDAMS B-37-458	LS					1
210.1500	BACKFILL STRUCTURE TYPE A	TON	400		400		800
502.0100	CONCRETE MASONRY BRIDGES	CY	57	37	57	177	328
502.3200	PROTECTIVE SURFACE TREATMENT	SY	60		60	340	460
502.9000.S	UNDERWATER SUBSTRUCTURE INSPECTION B-37-458	EACH		1			1
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	2,500	1,840	2,500		6,840
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	2,190	60	2,190	37,940	42,380
513.4061	RAILING TUBULAR TYPE M	LF				194	194
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	7		7		14
550.0020	PRE-BORING ROCK OR CONSOLIDATED MATERIALS	LF	63	70			133
550.0500	PILE POINTS	EACH			7		7
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	140	175	175		490
606.0300	RIPRAP HEAVY	CY	140		150		290
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	75		75		150
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	60		60		120
645.0120	GEOTEXTILE TYPE HR	SY	310		330		640
	NON-BID ITEMS						
	FILLER	SIZE					1/2" & 3/

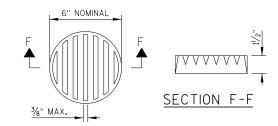
ROADWAY PAVEMENT/SUBBASE -BRIDGE STRUCTURE SEE ROADWAY PLANS FOR DETAILS. LIMITS OF BACKFILL (A01) BACKFILL STRUCTURE TYPE A -"GEOTEXTILE TYPE DF SCHEDULE A" LIMITS.EXTEND 2'-O" ABOVE BOTTOM 3'-0" REQUIRED OF ABUTMENT.

BACKFILL STRUCTURE LIMITS

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-37-458" SHALL BE THE EXISTING GROUNDLINE.

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

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



SECTION THRU ABUTMENT

RODENT SHIELD DETAIL

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

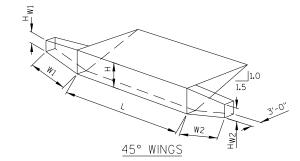
THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

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

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 THE BOTTOM OF THE ABUTMENT.

PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. PLACE ABOVE GROUND WATER ELEVATION MIN. INVERT = 1202 +/-

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 BRIDGES



ABUTMENT BACKFILL DIAGRAM (SOUTH ABUTMENT SHOWN, NORTH ABUTMENT SIMILAR)

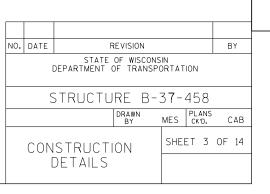
= OUT TO OUT OF ABUTMENT BODY (SOUTH ABUTMENT SHOWN, NORTH ABUTMENT SIMILAR)
= AVERAGE ABUTMENT FILL HEIGHT (FT)
= WING 1 LENGTH (FT)

= WING 2 LENGTH (FT) = EXPANSION FACTOR (1.20 FOR CY BID ITEMS, AND 1.00 FOR TON BID ITEMS)

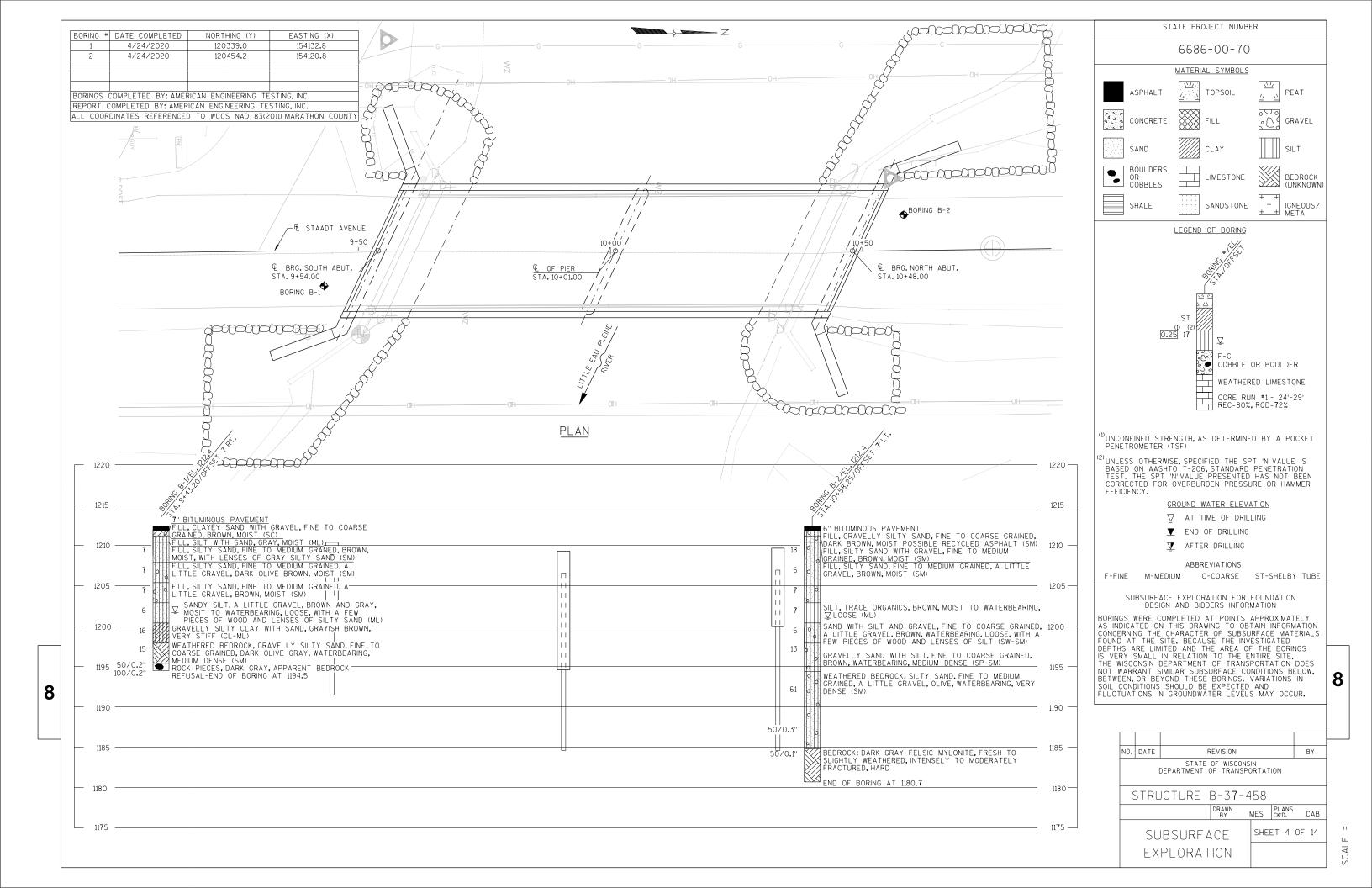
= (L)(3.0')(H) + (L)(0.5)(1.5H)(H) + (3.0')(0.5)(Wx)(H+Hwx)

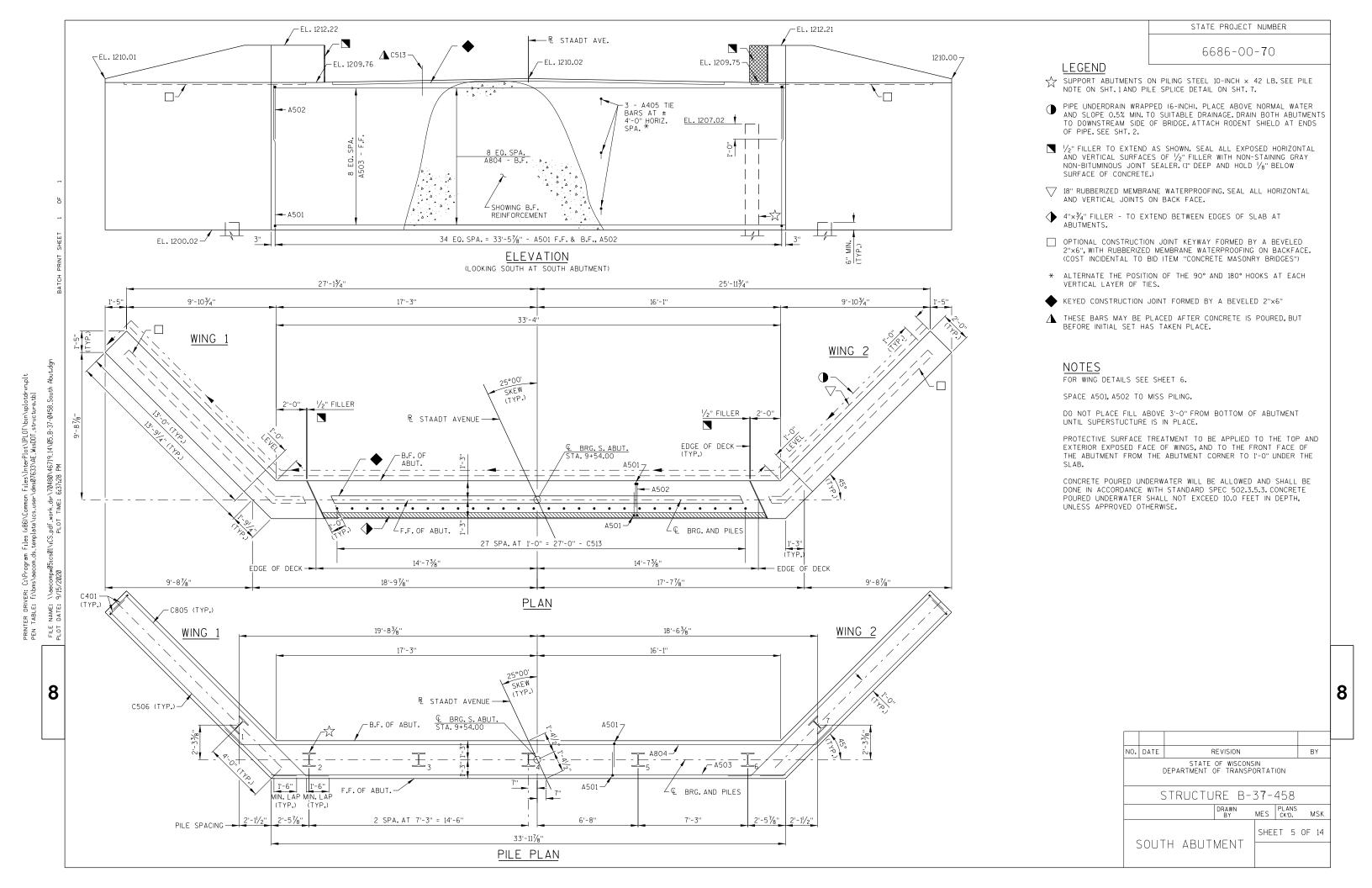
 $= V_{CF} (EF)/27$

 $= V_{CY} (2.0)$ V_{TON}



8





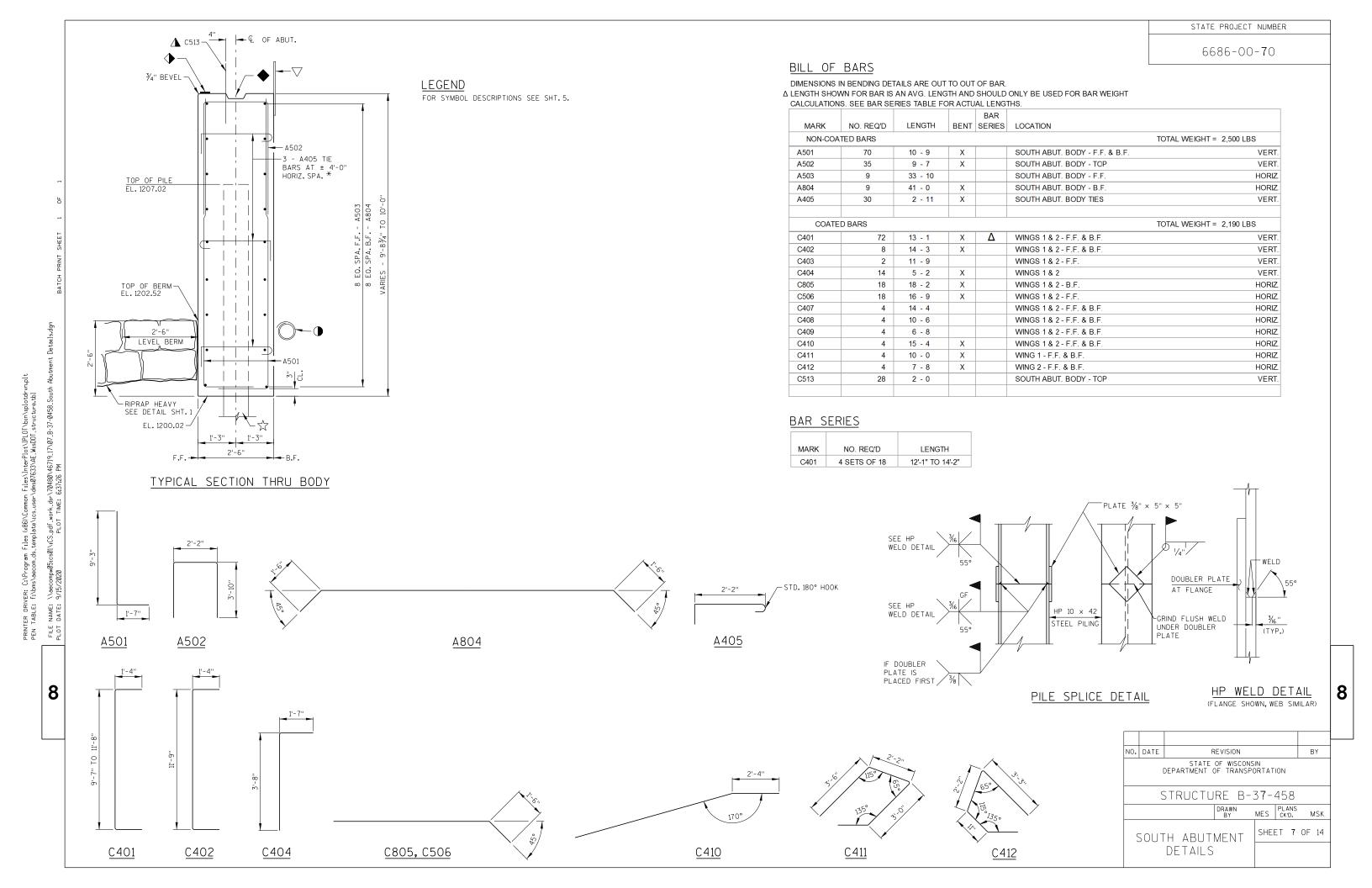
WINGS 1 & 2

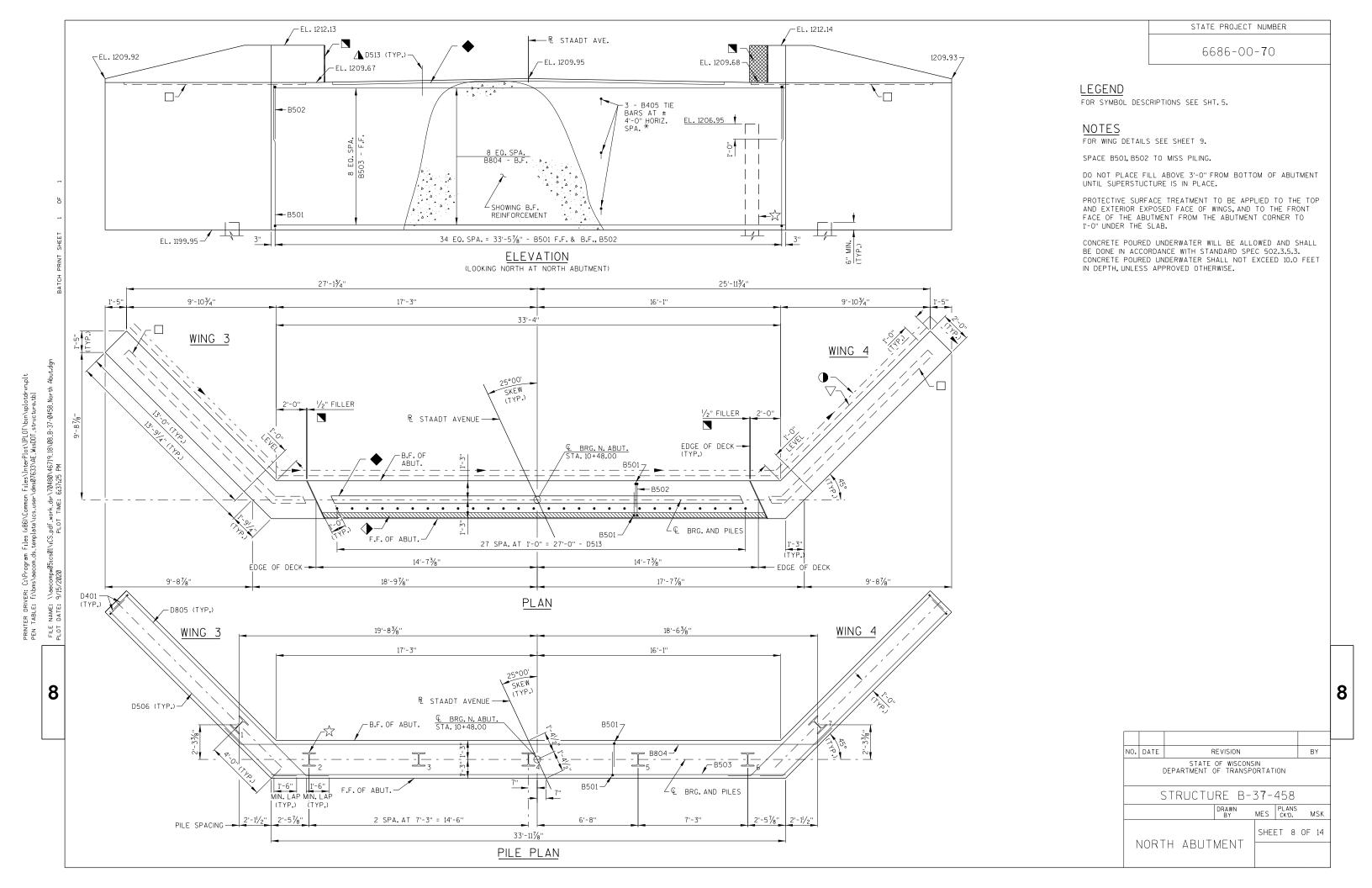
__C402 F.F. & B.F. **△** NAME PLATE ┌ C 4 11 C410 F.F. & B.F.-C408-EL. 1210.01 <u>LEGEND</u> C407-FOR SYMBOL DESCRIPTIONS SEE SHT. 5. C407 F.F. & B.F. NOTE
ADJUST C401 BARS TO MISS PILING. C506 -C401 BARS C403 F.F. & B.F. RIPRAP HEAVY-C.L. OF PILE ELEVATION - WING 1 WING 2 SIMILAR SECTION A-A . ← € OF ABUT. → 1'-0'' LEVEL 17 EQ. SPA. = 12'-6" 17 EQ. SPA. = 12'-6" C401 C506 – 2'-63/8" 13'-0" 13'-0" PLAN - WING 2 PLAN - WING 1 SHEET 6 OF 14

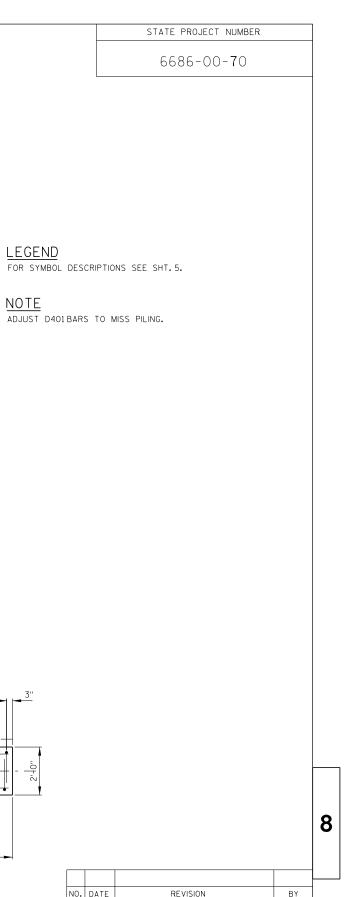
\70562\46719_15\06_B-37-0458_Wings 1 & 2.dgn 3.44.07 PM

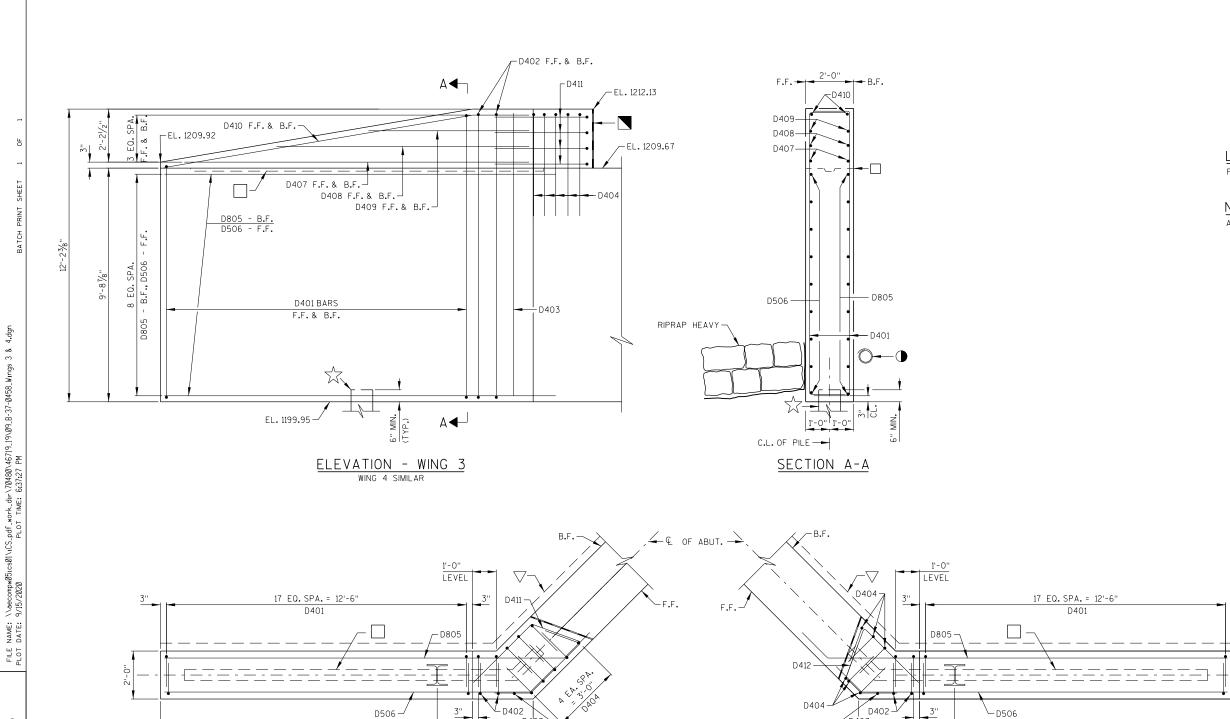
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8

13'-0"

2'-63/8"

PLAN - WING 3
PLAN - WING 4

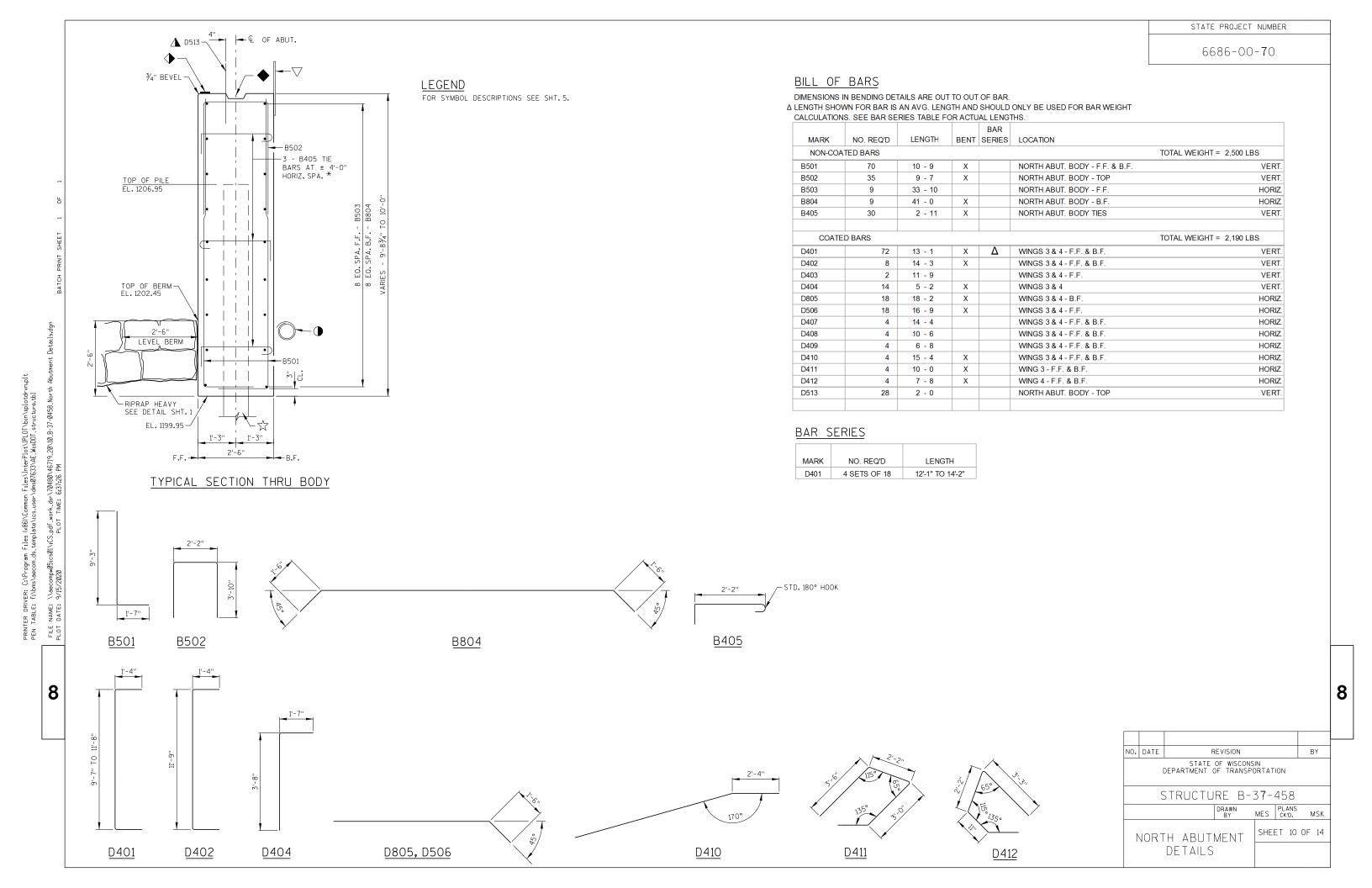
NO. DATE REVISION BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

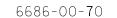
STRUCTURE B-37-458

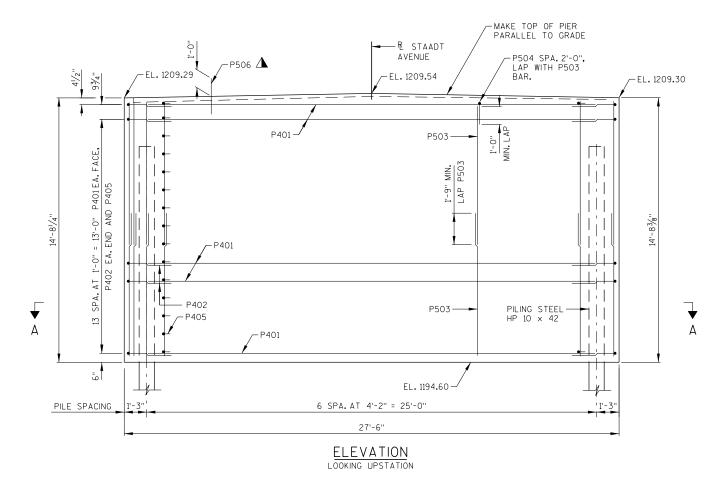
| DRAWN MES | PLANS CKD. MSK |
| WINGS 3 & 4 | SHEET 9 OF 14

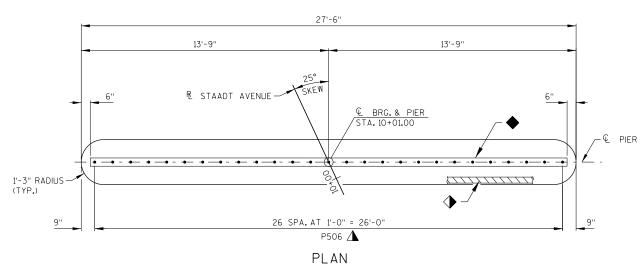
13'-0"







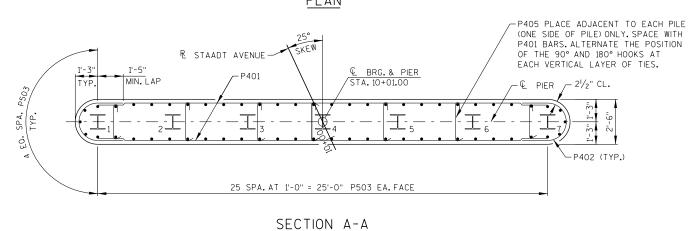




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-¾" BEVEL TOP OF PILE EL. 1206.60 P503 — (TOP & BOTTOM) -STREAM BED -STD.180° HOOK SEE PILE NOTE BELOW $2\frac{1}{2}$ " CL. (TYP.) P405 P402 P504

TYPICAL SECTION THRU PIER

2'-6"

−P506 <u></u>

€ PIER-

BILL OF BARS

DIMENSIONS	<u>IN BENDING [</u>	DETAILS ARE	OUT T	0 OUT (OF BAR.			
				BAR				
MARK	NO. REQ'D	LENGTH	BENT	SERIES	LOCATION			
NON-COATED BARS TOTAL WEIGHT = 1								
P401	30	25 - 0			PIER - SIDES	HORIZ.		
P402	30	6 - 2	X		PIER - ENDS	HORIZ.		
P503	116	7 - 10			PIER - SIDES AND ENDS	VERT.		
P504	14	4 - 3	X		PIER - TOP	VERT.		
P405	105	2 - 11	X		PIER - TIES AT EA. PILE	HORIZ.		
COATE	D BARS				TOTAL WEIGHT	= 60 LBS		
P506	27	2-0			PIER - DOWEL	VERT		

LEGEND

FOR SYMBOL DESCRIPTIONS SEE SHT. 5

NOTE

EXCAVATE TO EL. 1194.60 BEFORE DRIVING PILING. EXCAVATION IS INCIDENTAL TO BID ITEM "EXCAVATION FOR STRUCTURES B-37-458"

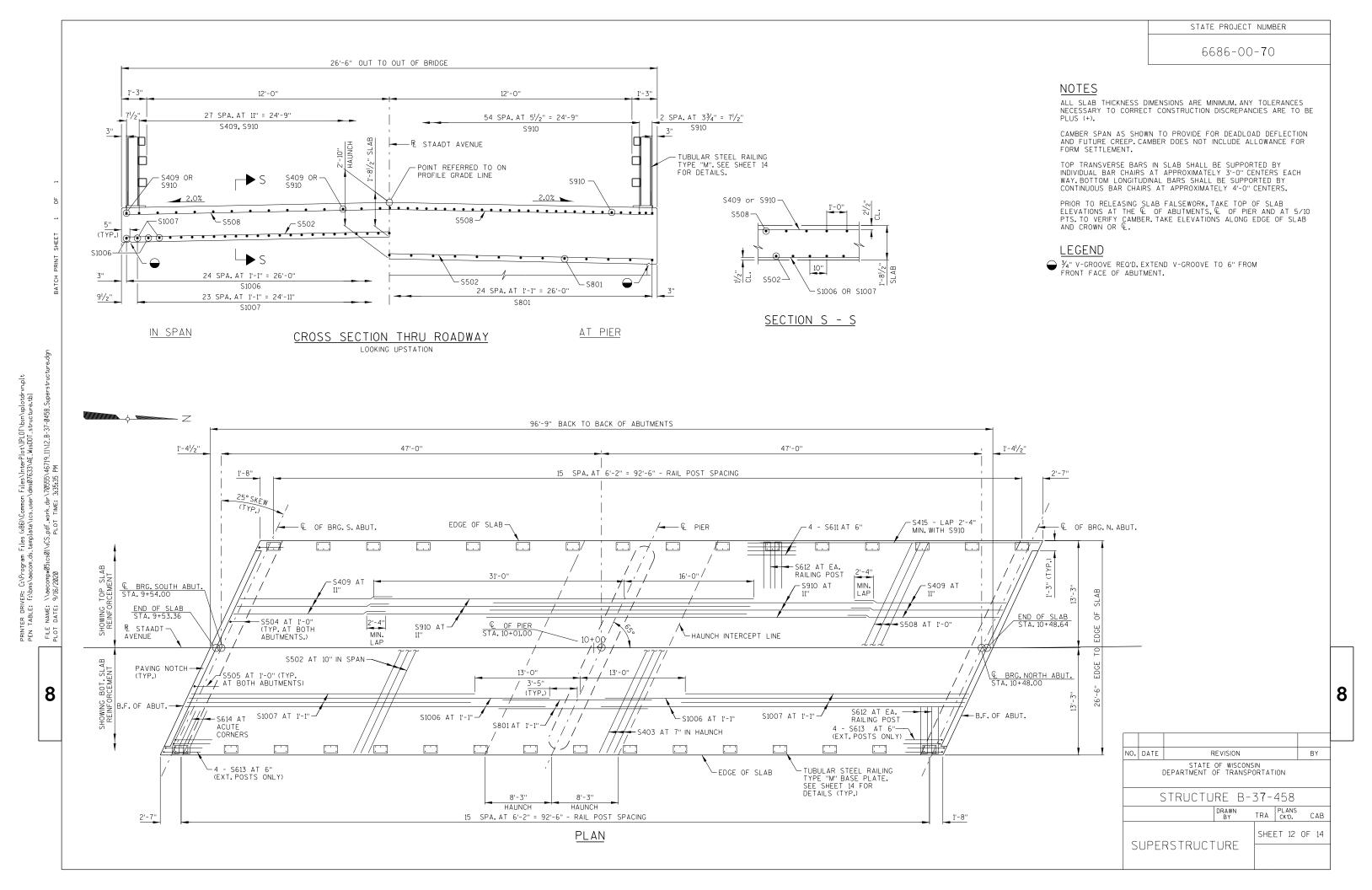
AT PIER, COFFERDAM REQUIRED. CONCRETE POURED UNDERWATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH STANDARD SPEC. 502.3.5.3. CONCRETE POURED UNDERWATER SHALL NOT EXCEED 10.0 FEET IN DEPTH UNLESS APPROVED OTHERWISE.

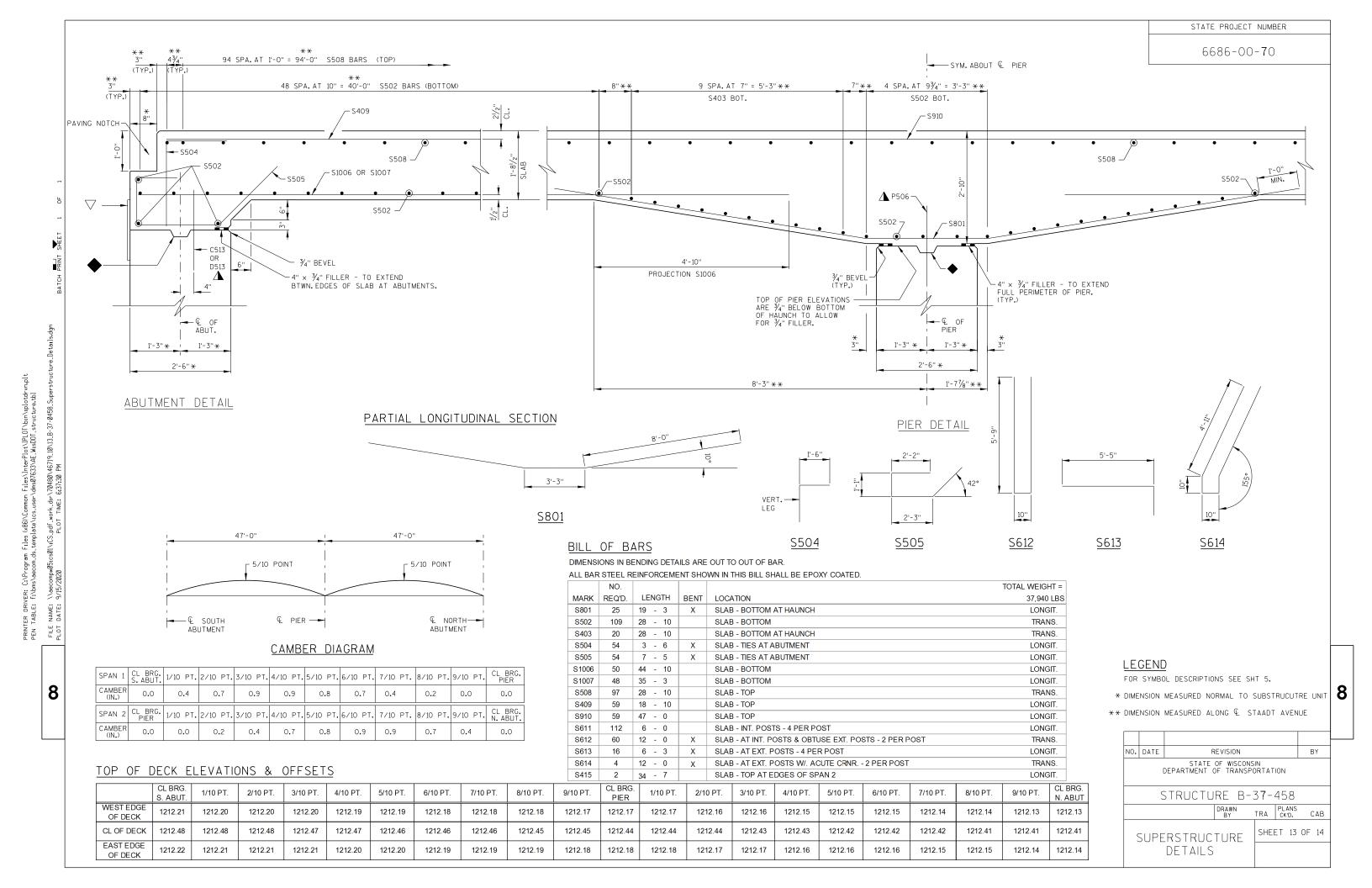
PILE NOTE

PIER TO BE SUPPORTED ON PILING STEEL HP 10-INCH imes 42 LB. PILING SHALL BE PLACED IN PRE-BORED HOLES. PRE-BORED HOLES SHALL EXTEND A MINIMUM OF 10 FEET BELOW THE BOTTOM OF PIER ELEVATION AND BE EMBEDDED A MINIMUM OF 3'-O" INTO COMPETENT ROCK.

0.	DATE	Ri	EVISION			BY		
	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION							
STRUCTURE B-37-458								
	CAB							
		PIER	SHEE	T 11	OF 14			

8





PART ELEVATION OF RAILING

Files\InterPlot\IPLOT dms07633\AE.WisDOT.s

PRIN

8

POST SHIM

DETAIL

' DIA. HOLES

FOR 1/8" DIA. ANCHOR BOLTS

ANCHOR PLATE

AT RAIL TO DECK CONNECTION

' DIA. HOLES FOR

DIA. HEX BOLTS

1" DIA.

BACK-UP PLATE DETAIL

AT BEAM GUARD ATTACHMENT

TYP.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURE B-37-458 TRA CK'D. SHEET 14 OF 14 TUBULAR STEEL RAILING TYPE 'M

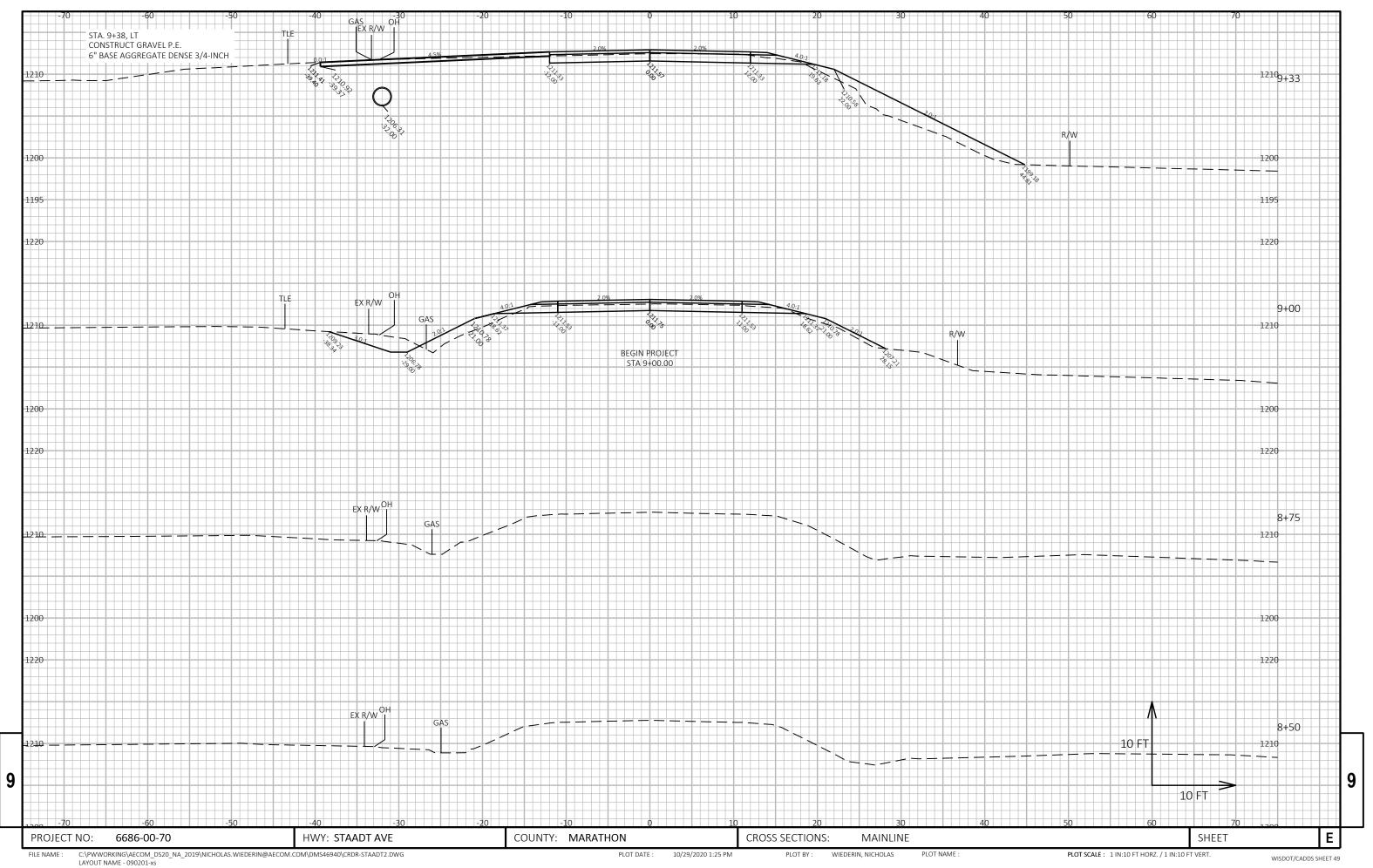
TIE TO TOP MAT OF STEEL.

			AREA (SF)			IN	INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
STATION	REAL STATION	DISTANCE	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	СИТ	EXPANDED FILL 1.25	MASS ORDINATE	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8	
9+00.00	900		22	7	7	0	0	0	0	0	0	
9+32.51	933	33	33	7	17	33	9	14	0	18	7	
9+50.00	950	17	29	7	0	20	5	6	0	25	15	
9+55.81	956	6	7	0	7	4	1	1	0	26	17	
10+00.00	1000	44	0	0	0	6	0	6	0	33	15	
10+44.18	1044	44	5	7	4	4	6	3	0	37	9	
10+50.00	1050	6	29	7	0	4	2	0	0	38	11	
10+67.49	1067	17	38	7	0	22	5	0	0	38	27	
11+00.00	1100	33	38	7	0	45	9	0	0	38	64	
							0					
							0					
					COLUMN TOTALS	137	36	30				

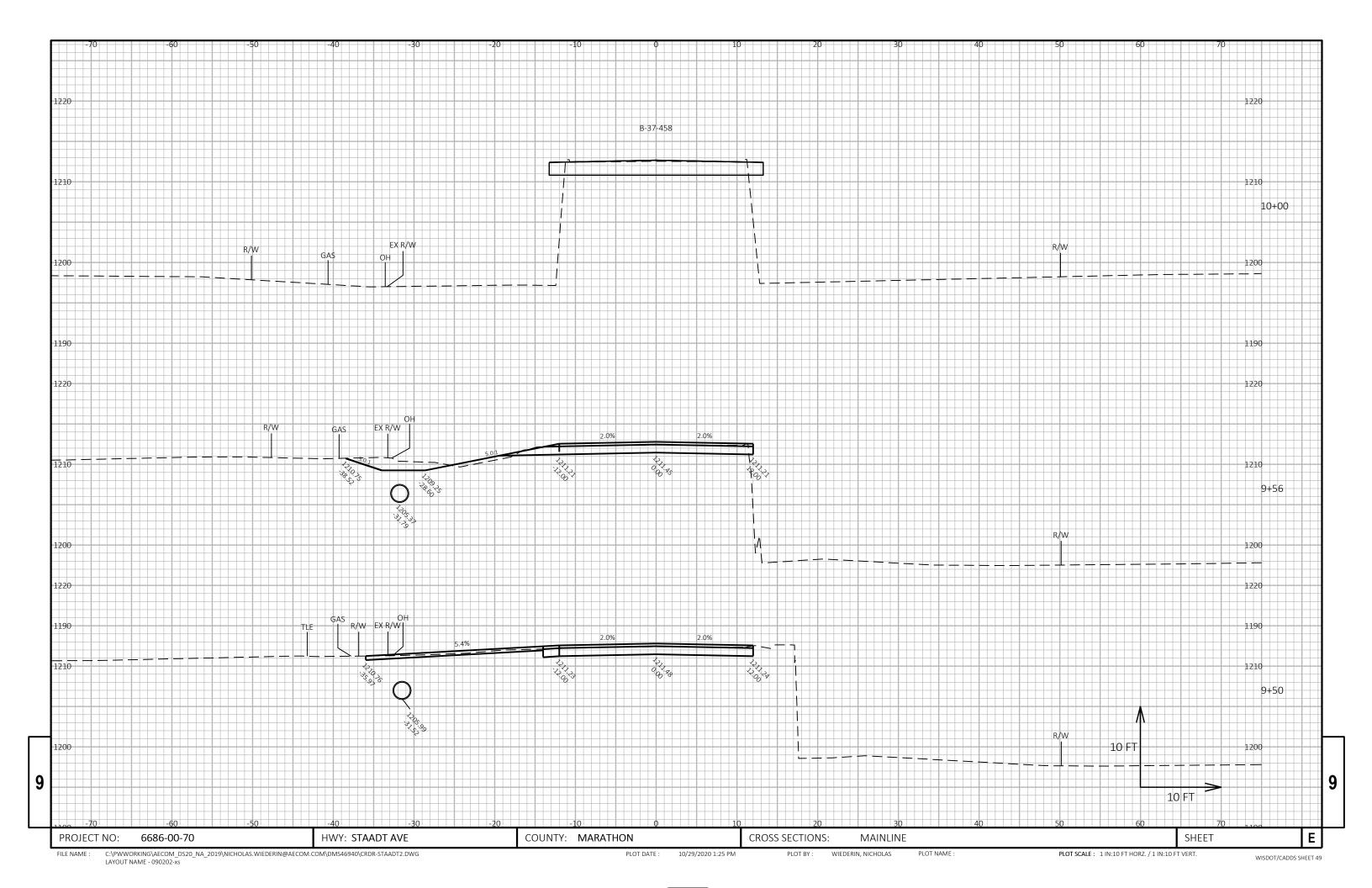
9

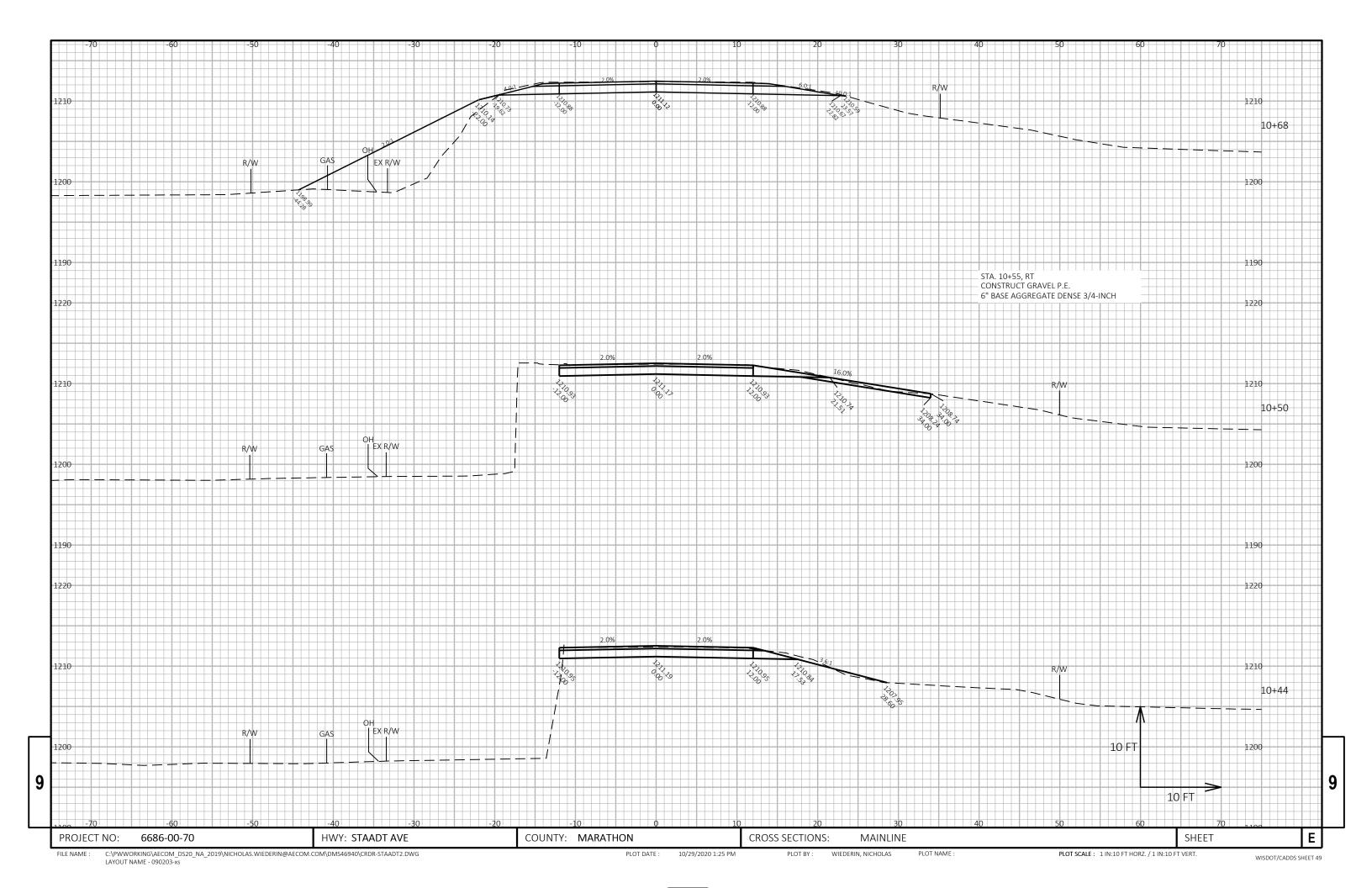
PROJECT NO: 6686-00-70 HWY: STAADT AVE COUNTY: MARATHON EARTHWORK SHEET **E**

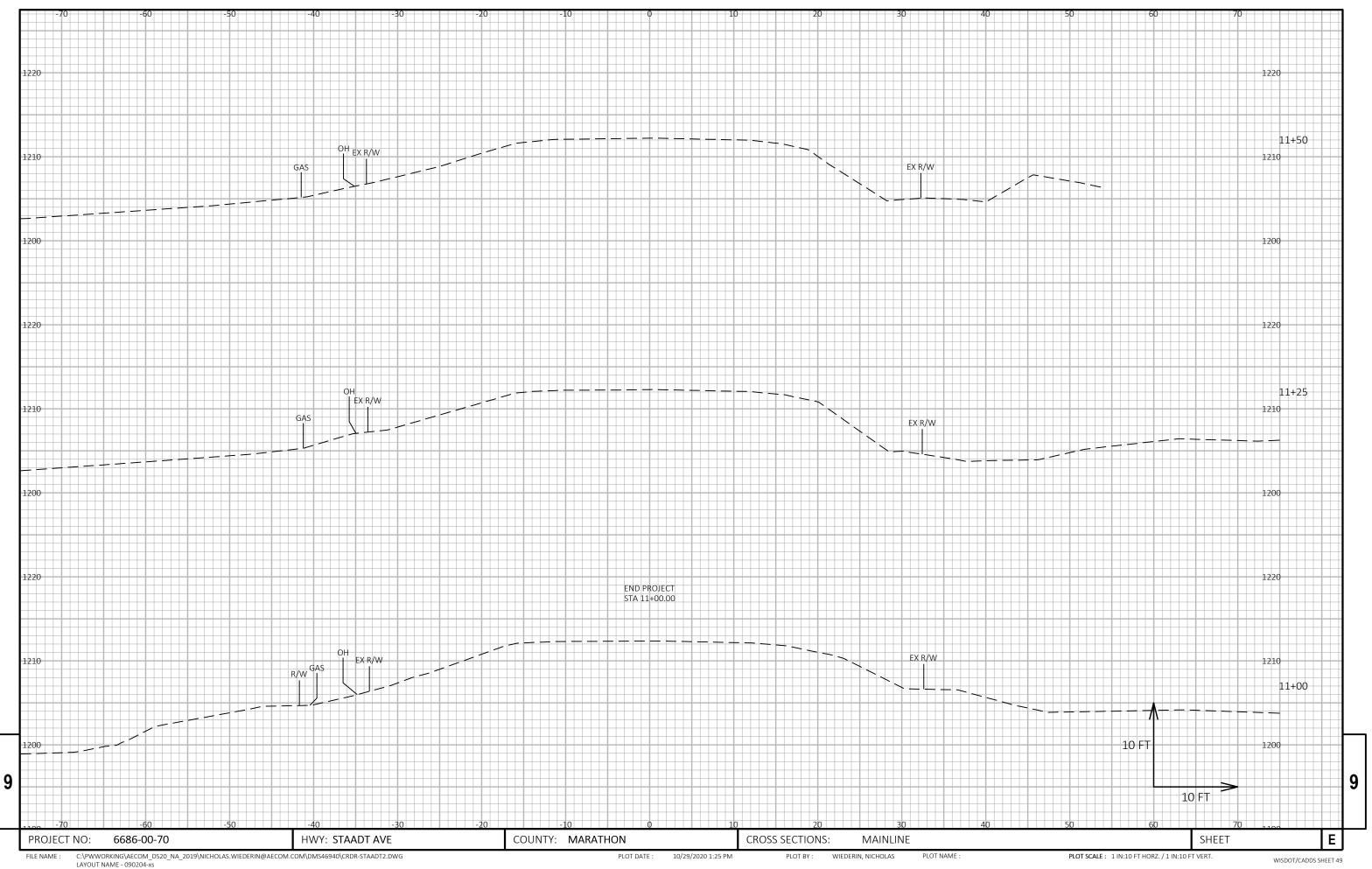
FILE NAME: \\P:\60548152\900_Work\910_CAD\60548152\SheetsPlan\0302-MQ.pptx PLOT BY: WIEDERIN, NICHOLAS PLOT NAME: \\P:\CADDS SHEET 41



WISDOT/CADDS SHEET 49









Wisconsin Department of Transportation

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