Wisconsin Department of Transportation

Division of Transportation Systems Development
Bureau of Project Development
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December 8, 2016

NOTICE TO ALL CONTRACTORS:

Proposal #21: 1517-07-80, WISC 2016 481
USH 10 – USH 10/STH 441
County CB – Oneida Street
USH 10
I-41 Interchange Ramps
Winnebago County

Letting of December 13, 2016

This is Addendum No. 01, which provides for the following:

Special Provisions

Added Special Provisions	
Article No.	Description
12.11	Paint and Painting

Deleted Special Provisions	
Article No.	Description
7.12	Concrete Barrier Temporary Precast Left in Place, Item SPV.0090.209
9.7	Removing Rumble Strips, Item SPV.0180.010

Schedule of Items

Revised Bid Item Quantities					
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
210.1100	Backfill Structure Type A **P**	CY	551	-15	536
305.0120	Base Aggregate Dense 1 ¼-Inch	Ton	29,095	154	29,249
501.1000.S	Ice Hot Weather Concreting	LB	10,971	7,354	18,325
502.3200	Protective Surface Treatment **P**	SY	1,937	-1,674	263
502.3210	Pigmented Surface Sealer	SY	826	169	995
505.0400	Bar Steel Reinforcement HS Structures	LB	36,120	-2,720	33,400
505.0600	Bar Steel Reinforcement HS Coated Structures	LB	419,700	4,140	423,840

505.0800.S	Bar Steel Reinforcement HS Stainless Structures	LB	2110	60	2170
506.0605	Structural Steel HS	LB	530,392	806	531,198
506.3015	Welded Stud Shear Connectors 7/8x6-Inch **P**	EA	4828	160	4988
511.1200.001	Temporary Shoring B-70-407	SF	675	1,120	1795
517.1010.S.001	Concrete Staining B-70-407 **P**	SF	10,802	979	11,781
517.1050.S.001	Architectural Surface Treatment B-70-407 **P**	SF	1931	1,118	3049
550.1120	Piling Steel HP 12-Inch x 53 LB	LF	2570	115	2685
603.8000	Concrete Barrier Temporary Precast Delivered	LF	6896	-1,421	5475
603.8125	Concrete Barrier Temporary Precast Installed	LF	18,005	-6,470	24,475
604.0600	Slope Paving Select Crushed Material **P**	SY	392	322	714
652.0125	Conduit Rigid Metallic 2-Inch **P**	LF	94	47	141
652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch **P**	LF	22,192	-524	21,668
653.0180	Pull Boxes Steel Communications 24x36-Inch	EA	2	2	4
671.0142	Conduit HDPE 4-Duct 2-Inch	LF	1390	495	1885
673.0105	Communication Vault Type 1	EA	6	1	7
SPV.0035.700	Modified High Performance Concrete (HPC) Masonry Bridges	CY	2475	-34	2441
SPV.0060.353	Lighting Control Cabinet – Freeway	EA	3	-1	2
SPV.0090.208	Maintain & Remove Concrete Barrier Temporary Precast Left in Place	LF	49,524	-23,659	25,865

Added Bid Item Quantities					
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
654.0105	Concrete Bases Type 5	EA	0	1	1
671.0112	Conduit HDPE 1-Duct 2-Inch	LF	0	470	470

Deleted Bid Item Quantities					
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
604.0500	Slope Paving Crushed Aggregate	SY	322	0	0
SPV.0090.209	Concrete Barrier Temporary Precast Left in Place	LF	12,760	0	0
SPV.0180.010	Removing Rumble Strips	SY	156	0	0

Plan Sheets

Revised Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
161	ITS-USH 10 (moved some 07-76 work to 07-80)
221	Lighting- Construction Details – Control Cabinet Schematics (revised circuit diagram)
226	Lighting Plan Overview (revised 'WisDOT Systems' information)
241	Lighting Plan – USH 10/441 System Interchange (revised control cabinet callouts)
242	Lighting Plan – Wiring Schematic (revised control cabinet callouts)
413	Miscellaneous Quantities (revised 'temporary barrier' quantities)
417	Miscellaneous Quantities (removed 'removing rumble strips' quantity)
418	Miscellaneous Quantities (moved some 07-76 lighting work to 07-80)

427	Miscellaneous Quantities (moved some 07-76 ITS work to 07-80)
428	Miscellaneous Quantities (moved some 07-76 ITS work to 07-80)
642	B-70-407, General Plan and Elevation (Updated temporary shoring and slope paving callouts)
643	B-70-407, Cross-Section (Updated typical section)
644	B-70-407, General Notes and Quantities (Updated quantities)
646	B-70-407, South Abutment Details (1 of 5) (Updated pile note and dimensions)
647	B-70-407, South Abutment Details (2 of 5) (Updated notes and dimensions)
648	B-70-407, South Abutment Details (3 of 5) (Updated callouts and rebar)
649	B-70-407, South Abutment Details (4 of 5) (Updated dimensions and rebar)
650	B-70-407, South Abutment Details (5 of 5) (Updated rebar)
651	B-70-407, South Abutment Approach Slab (Updated notes and callouts)
652	B-70-407, North Abutment Details (1 of 4) (Added pile note)
653	B-70-407, North Abutment Details (2 of 4) (Updated callouts and rebar)
654	B-70-407, North Abutment Details (3 of 4) (Updated rebar)
655	B-70-407, North Abutment Details (4 of 4) (Updated dimensions and notes)
656	B-70-407, North Abutment Approach Slab (Update callouts and rebar)
657	B-70-407, Pier 1 Details 1 (Updated dimensions)
658	B-70-407, Pier 1 Details 2 (Updated rebar)
661	B-70-407, Pier 3 Details 1 (Updated callouts)
662	B-70-407, Pier 3 Details 2 (Updated rebar)
668	B-70-407, Girder Details (4 of 4) (Added notes)
672	B-70-407, Superstructure Plan 1 (Added reference line)
675	B-70-407, Superstructure Details (Updated rebar)
677	B-70-407, Single Slope Parapet 32SS Modified (Updated rebar and notes)
678	B-70-407, Single Slope Parapet 42SS Modified (Updated rebar and notes)
679	B-70-407, Single Slope Parapet Details (Updated dimensions)
680	B-70-407, 42SS Parapet Electrical (Added notes)
681	B-70-407, Light Standard (Updated light locations)
682	B-70-407, Strip Seal Expansion Joint Details (Added temp table)
683	B-70-407, Cover Plated For Parapets (Added plan view)
685	B-70-407, Aesthetic Details (Changed girder color to hopsack)
686	B-70-407, Downspout Details (Updated callouts and notes)
687	B-70-407, Slope Paving (Crushed Aggregate) (Updated sheet title and depth)
689	B-70-409, General Plan (Updated slope paving callout)
690	B-70-409, Quantities & General Notes (Updated quantities and general notes)
693	B-70-409, West Abutment (Updated slope paving callout)
695	B-70-409, East Abutment (Updated slope paving callout)
733	B-70-409, Slope Paving @ West Abutment (Updated slope paving depth and callout)
734	B-70-409, Slope Paving @ East Abutment (Updated slope paving depth and callout)

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

Sincerely,

Mike Coleman

Proposal Development Specialist
Proposal Management Section

ADDENDUM NO. 01

1517-07-80

December 8, 2016

Special Provisions

7.12 DELETED

9.7 DELETED

Add the following article:

12.11 Paint and Painting

Replace standard spec 517.3.1.7.3 with the following:

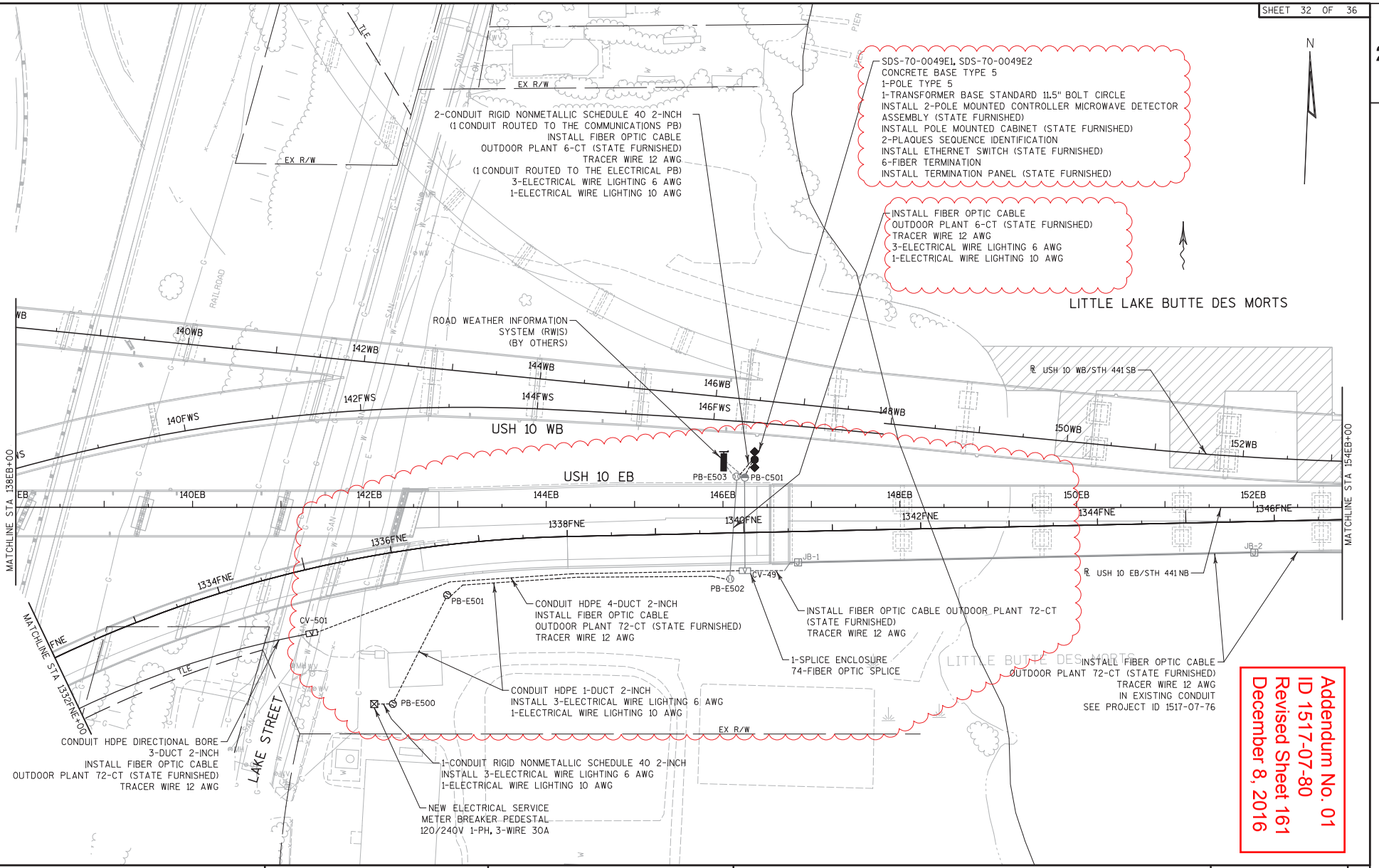
(1) Mask the faying surfaces of bolted field splices and the top of the top flanges where welding the stud shear connectors during coat application. On all other areas including the outside surfaces of splice plates, ensure that the dry film thickness conforms to the following:

1. For the white intermediate coat, 3.5 mils to 8 mils.
2. For the protective coat, sufficient thickness to provide a uniform color and appearance but not less than 2 mil or more than 5 mils.

Schedule of Items
Attached, dated December 8, 2016, are the revised Schedule of Items Pages. All pages of the Schedule of Items are being replaced.

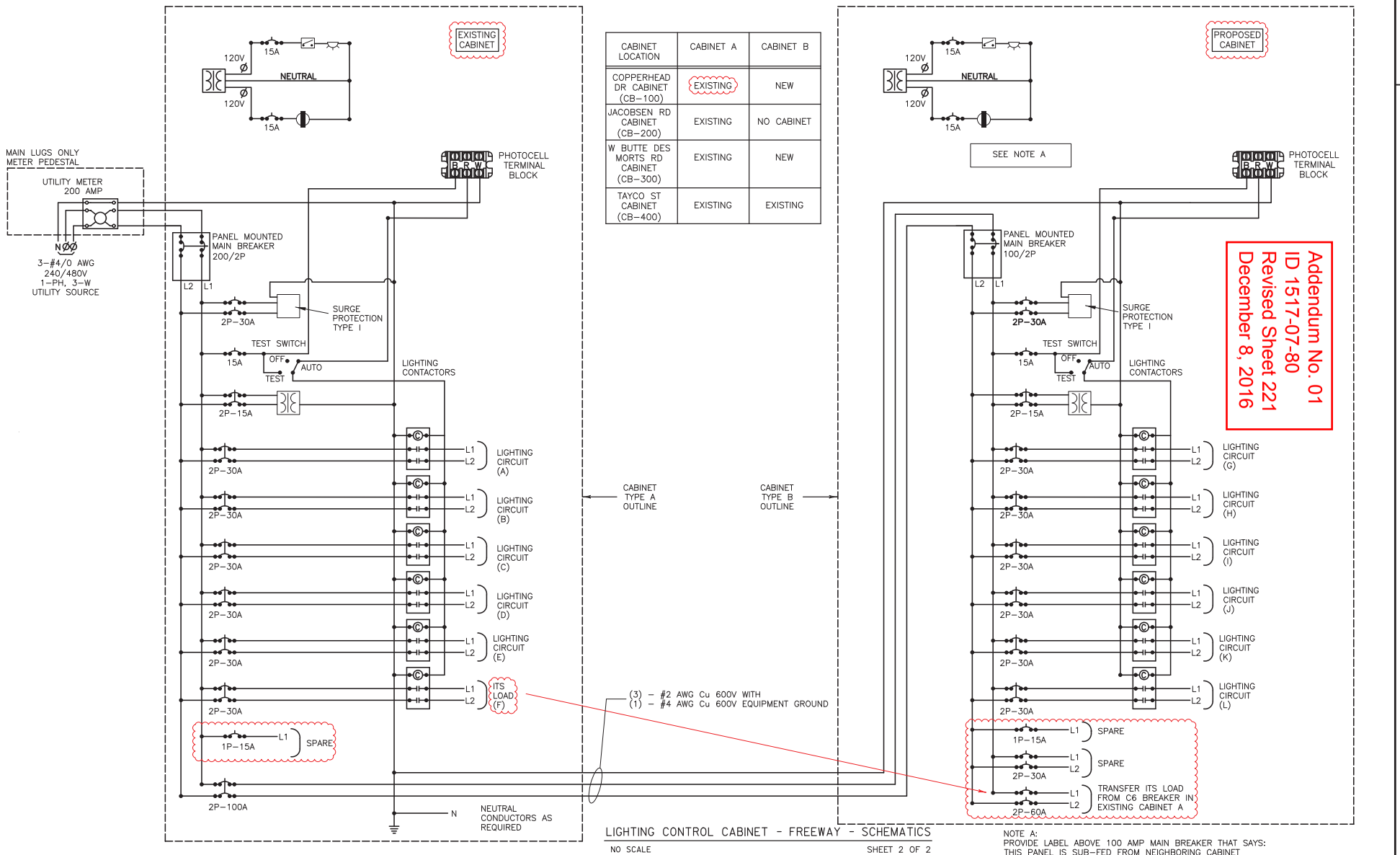
Plan Sheets
The following 8½ x 11-inch sheets are attached and made part of the plans for this proposal:
Revised: 161, 221, 226, 241, 242, 413, 417-418, 427-428, 642-644, 646-658, 661-662, 668, 672, 675, 677-683, 685-687, 689-690, 693, 695, and 733-734

END OF ADDENDUM



Addendum No. 01
ID 1517-07-80
Revised Sheet 161
December 8, 2016

PROJECT NO: 1517-07-80	HWY: USH 10	COUNTY: WINNEBAGO	ITS - USH 10	SHEET 161	E



CABINET LOCATION	CABINET A	CABINET B
COPPERHEAD DR CABINET (CB-100)	EXISTING	NEW
JACOBSEN RD CABINET (CB-200)	EXISTING	NO CABINET
W BUTTE DES MORTS RD CABINET (CB-300)	EXISTING	NEW
TAYCO ST CABINET (CB-400)	EXISTING	EXISTING

Addendum No. 01
ID 1517-07-80
Revised Sheet 221
December 8, 2016

LIGHTING CONTROL CABINET - FREEWAY - SCHEMATICS

NO SCALE

SHEET 2 OF 2

NOTE A:
PROVIDE LABEL ABOVE 100 AMP MAIN BREAKER THAT SAYS:
THIS PANEL IS SUB-FED FROM NEIGHBORING CABINET

PROJECT NO: 1517-07-80	HWY: USH 10	COUNTY: WINNEBAGO	LIGHTING - CONSTRUCTION DETAILS - CONTROL CABINET SCHEMATICS	SHEET 221	E

WISDOT SYSTEMS

■ 1

A - BLACK B - RED C - BLUE D - BROWN E - ORANGE F - YELLOW	480V PHASE-PHASE

- L70-2007 / USH 41 & USH 10, (COPPERHEAD DR)/ TOWN OF MENASHA / WINNEBAGO COUNTY
- CB 100 / NORTHWEST QUADRANT OF INTERCHANGE
- 240/480 VOLT / SINGLE PHASE / 200 AMP SERVICE
- MAIN LUGS ONLY METER PEDESTAL (EXISTING)
- CIRCUIT DESCRIPTIONS:

CB-100 (EXISTING)
- CKT. A/B - FSW RAMP LIGHTS
- CKT. C/D - IH 41 SB TO FSW RAMP LIGHTS
- CKT. E/F - FSE RAMP LIGHTS

CB-101
- CKT. G/H - NB AUX LANE LIGHTING NORTH OF MAINLINE CONDUIT CROSSING
- CKT. I/J - RAMP FWN LIGHTING
- CKT. K/L - RAMP FNW LIGHTING

■ 2

A - BLACK B - RED C - BLUE D - BROWN E - ORANGE F - YELLOW	480V PHASE-PHASE

- L70-2008 / USH 41 & USH 10, (JACOBSEN ROAD) / TOWN OF MENASHA / WINNEBAGO COUNTY
- CB 200 / SYSTEM INTERCHANGE SOUTH
- 240/480 VOLT / SINGLE PHASE / 200 AMP SERVICE
- MAIN LUGS ONLY METER PEDESTAL (EXISTING)
- CIRCUIT DESCRIPTIONS:
  - CKT. A/B - RAMPS FEN / FES - (EXISTING)
  - CKT. C/D - RAMPS FES / FWS - (EXISTING)
  - CKT. E/F - RAMP FEN

WISDOT SYSTEMS

■ 3

A - BLACK B - RED C - BLUE D - BROWN E - ORANGE F - YELLOW	480V PHASE-PHASE

- L70-2009 / USH 41 & USH 10, (WEST BUTTE DES MORTS RD) / CITY OF MENASHA / WINNEBAGO COUNTY
- CB 300 / SYSTEM INTERCHANGE (EAST) / ROLAND KAMPO BRIDGE
- 240/480 VOLT / SINGLE PHASE / 200 AMP SERVICE
- MAIN LUGS ONLY METER PEDESTAL (EXISTING)
- CIRCUIT DESCRIPTIONS:

CB-300 (EXISTING)
- CKT. A/B - RAMP FNW / FNE / B-70-402 BRIDGE - (EXISTING)
- CKT. C - RAMP FNE & BRIDGE B-70-403 SOUTH PARAPET - (EXISTING)
- CKT. D - TWO LIGHTS ON NORTH SIDE OF EB 441/10 BETWEEN B-70-400 AND B-70-403
- CKT. E/F - MAINLINE 441/10 EB FROM EAST OF COLD SPRING RD TO END OF B-70-400

CB-301
- CKT. G/H - RAMP FSW
- CKT. I/J - MAINLINE 441/10 WB LIGHTS FROM B-70-61 TO EAST OF COLD SPRING RD
- CKT. K/L - SPARE (FUTURE))

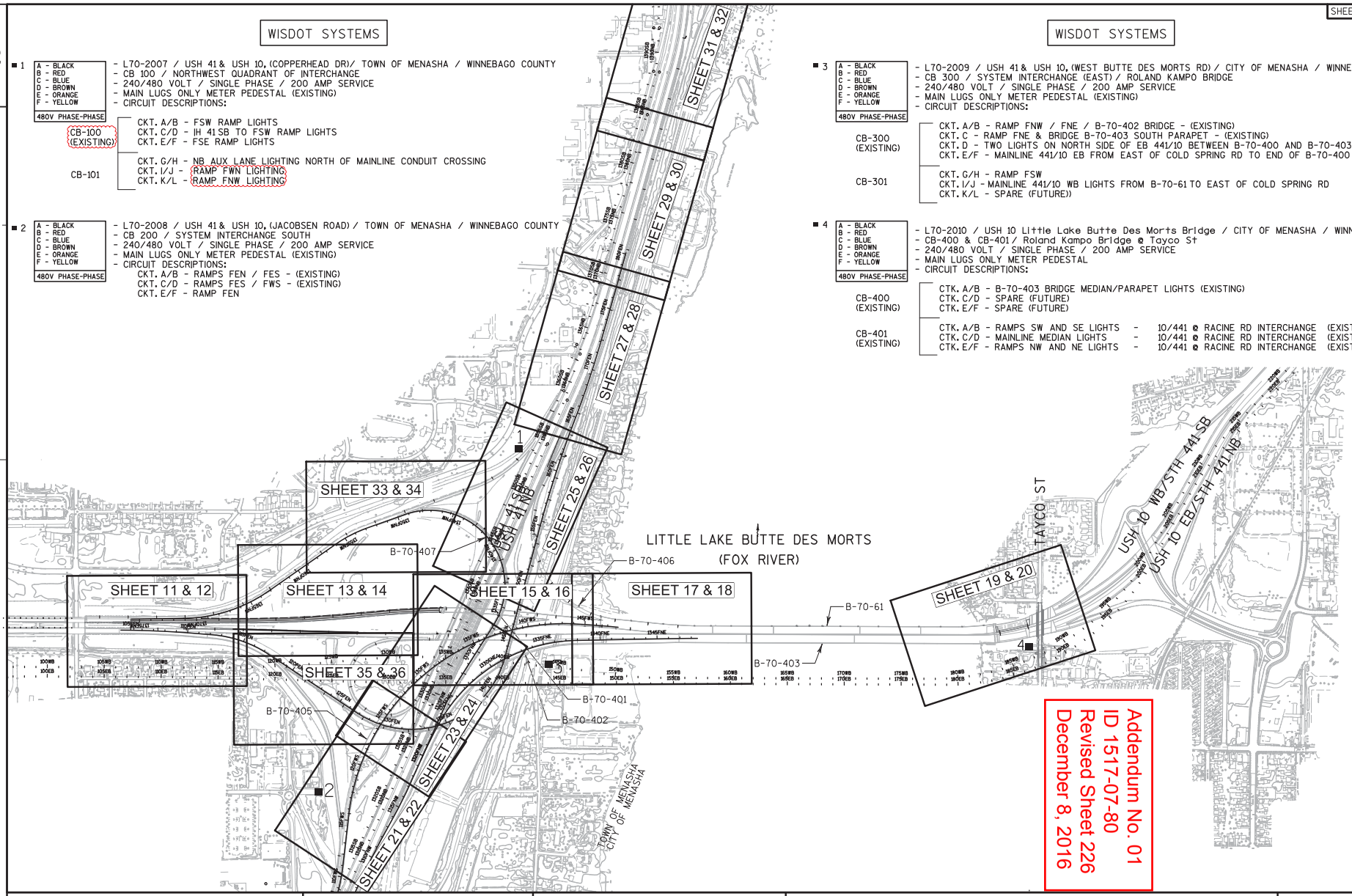
■ 4

A - BLACK B - RED C - BLUE D - BROWN E - ORANGE F - YELLOW	480V PHASE-PHASE

- L70-2010 / USH 10 Little Lake Butte Des Morts Bridge / CITY OF MENASHA / WINNEBAGO COUNTY
- CB-400 & CB-401 / Roland Kampo Bridge @ Tayco St
- 240/480 VOLT / SINGLE PHASE / 200 AMP SERVICE
- MAIN LUGS ONLY METER PEDESTAL
- CIRCUIT DESCRIPTIONS:

CB-400 (EXISTING)
- CTK. A/B - B-70-403 BRIDGE MEDIAN/PARAPET LIGHTS (EXISTING)
- CTK. C/D - SPARE (FUTURE)
- CTK. E/F - SPARE (FUTURE)

CB-401 (EXISTING)
- CTK. A/B - RAMPS SW AND SE LIGHTS - 10/441 @ RACINE RD INTERCHANGE (EXISTING)
- CTK. C/D - MAINLINE MEDIAN LIGHTS - 10/441 @ RACINE RD INTERCHANGE (EXISTING)
- CTK. E/F - RAMPS NW AND NE LIGHTS - 10/441 @ RACINE RD INTERCHANGE (EXISTING)



Addendum No. 01
ID 1517-07-80
Revised Sheet 226
December 8, 2016

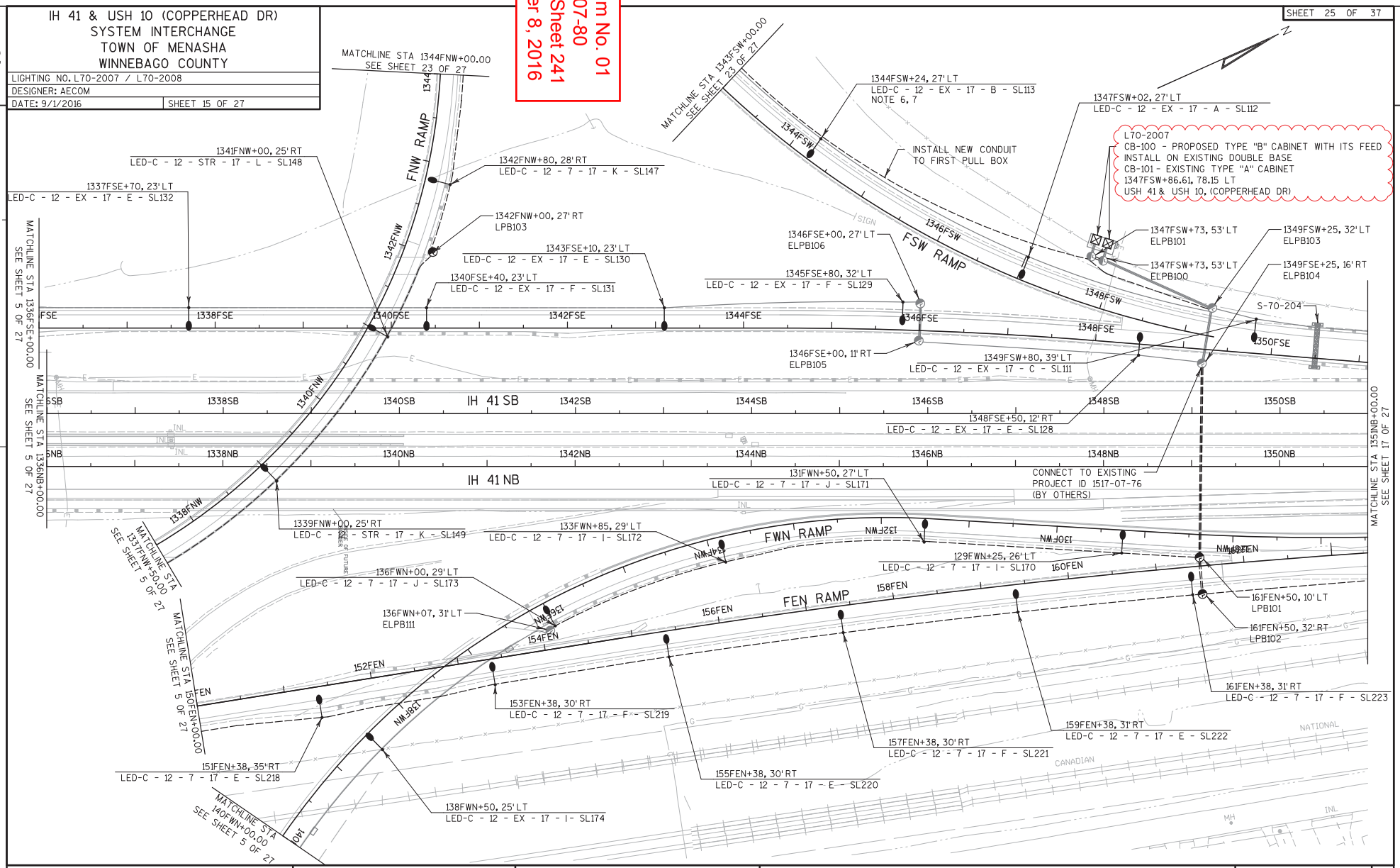
PROJECT NO: 1517-07-80	HWY: USH 10	COUNTY: WINNEBAGO	LIGHTING PLAN OVERVIEW	SHEET 226	E

Addendum No. 01
ID 1517-07-80
Revised Sheet 241
December 8, 2016

IH 41 & USH 10 (COPPERHEAD DR)
SYSTEM INTERCHANGE
TOWN OF MENASHA
WINNEBAGO COUNTY

LIGHTING NO. L70-2007 / L70-2008
DESIGNER: AECOM
DATE: 9/1/2016 | SHEET 15 OF 27

SHEET 25 OF 37



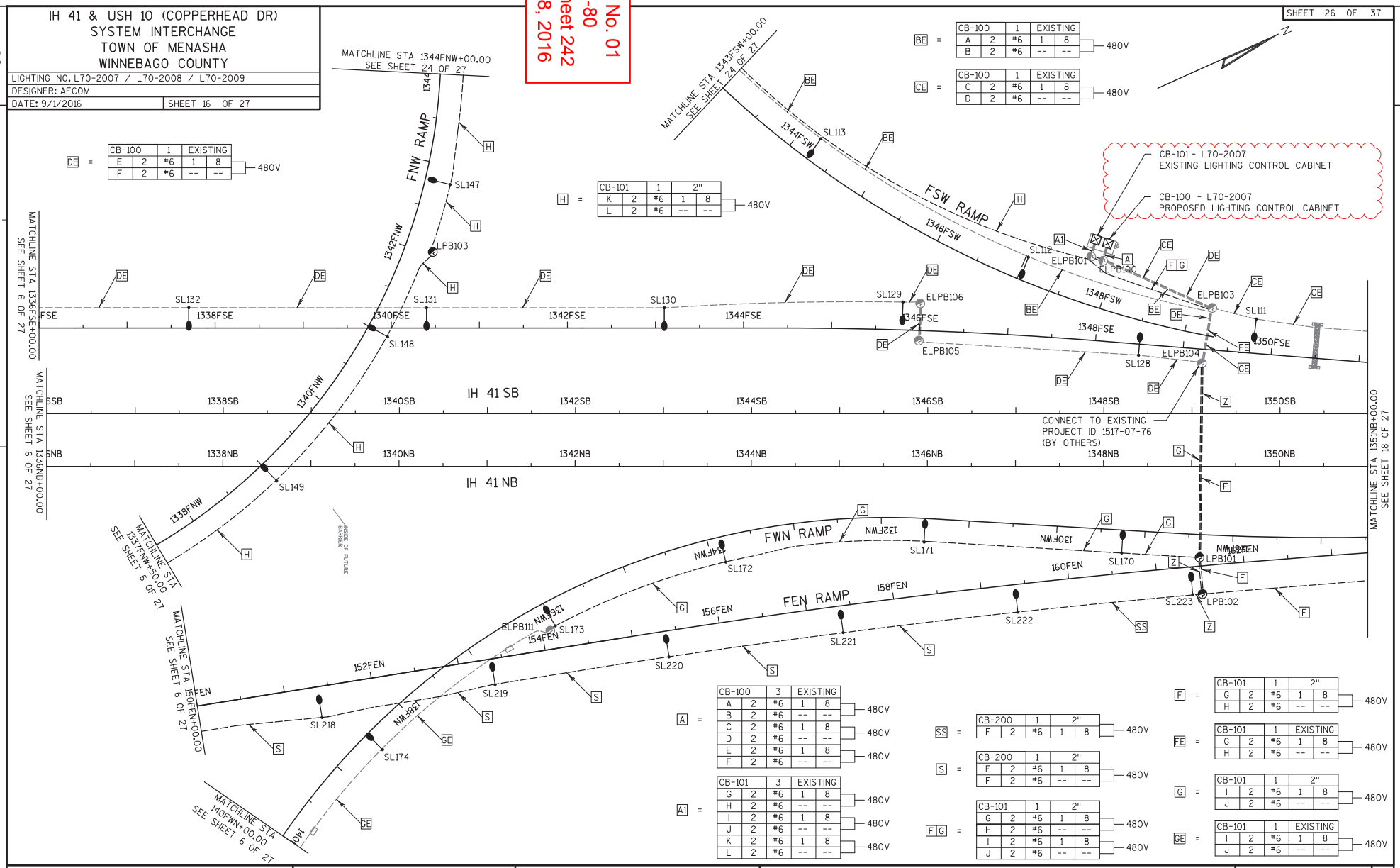
PROJECT NO: 1517-07-80	HWY: USH 10	COUNTY: WINNEBAGO	LIGHTING PLAN - USH 10/STH 441 SYSTEM INTERCHANGE	SHEET 241	E

Addendum No. 01
ID 1517-07-80
Revised Sheet 242
December 8, 2016

IH 41 & USH 10 (COPPERHEAD DR)
SYSTEM INTERCHANGE
TOWN OF MENASHA
WINNEBAGO COUNTY

LIGHTING NO. L70-2007 / L70-2008 / L70-2009
DESIGNER: AECOM
DATE: 9/1/2016 | SHEET 16 OF 27

SHEET 26 OF 37



DE =	CB-100	1	EXISTING		
	E	2	#6	1	8
	F	2	#6	--	--

480V

H =	CB-101	1	2"		
	K	2	#6	1	8
	L	2	#6	--	--

480V

BE =	CB-100	1	EXISTING		
	A	2	#6	1	8
	B	2	#6	--	--

480V

CE =	CB-100	1	EXISTING		
	C	2	#6	1	8
	D	2	#6	--	--

480V

A =	CB-100	3	EXISTING		
	A	2	#6	1	8
	B	2	#6	--	--
	C	2	#6	1	8
	D	2	#6	--	--
	E	2	#6	1	8
	F	2	#6	--	--

480V

A1 =	CB-101	3	EXISTING		
	G	2	#6	1	8
	H	2	#6	--	--
	I	2	#6	1	8
	J	2	#6	--	--
	K	2	#6	1	8
	L	2	#6	--	--

480V

SS =	CB-200	1	2"		
	F	2	#6	1	8

480V

S =	CB-200	1	2"		
	E	2	#6	1	8
	F	2	#6	--	--

480V

F&G =	CB-101	1	2"		
	G	2	#6	1	8
	H	2	#6	--	--
	I	2	#6	1	8
	J	2	#6	--	--

480V

F =	CB-101	1	2"		
	G	2	#6	1	8
	H	2	#6	--	--

480V

FE =	CB-101	1	EXISTING		
	G	2	#6	1	8
	H	2	#6	--	--

480V

G =	CB-101	1	2"		
	I	2	#6	1	8
	J	2	#6	--	--

480V

GE =	CB-101	1	EXISTING		
	I	2	#6	1	8
	J	2	#6	--	--

480V

PROJECT NO: 1517-07-80	HWY: USH 10	COUNTY: WINNEBAGO	LIGHTING PLAN - WIRING SCHEMATIC	SHEET 242	E

TRAFFIC CONTROL

STAGE	DURATION DAYS	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF	~~SPV.0090.209 LEFT IN PLACE LF~~	SPV.0090.208 MAINTAIN & REMOVE CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE LF	SPV.0060.205 MAINTAIN & REMOVE CRASH CUSHION TEMPORARY LEFT IN PLACE EACH	643.0300 TRAFFIC CONTROL DRUMS EACH	643.0300 TRAFFIC CONTROL DRUMS DAYS	SPV.0045.200 MAINTAIN & REMOVE TRAFFIC CONTROL DRUMS LEFT IN PLACE EACH	SPV.0045.200 MAINTAIN & REMOVE TRAFFIC CONTROL DRUMS LEFT IN PLACE DAYS	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAYS	SPV.0045.201 MAINTAIN & REMOVE TRAFFIC CONTROL BARRICADES TYPE III LEFT IN PLACE EACH	SPV.0045.201 MAINTAIN & REMOVE TRAFFIC CONTROL BARRICADES TYPE III LEFT IN PLACE DAYS	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS	SPV.0045.202 MAINTAIN & REMOVE TRAFFIC CONTROL WARNING LIGHTS TYPE A LEFT IN PLACE EACH	SPV.0045.202 MAINTAIN & REMOVE TRAFFIC CONTROL WARNING LIGHTS TYPE A LEFT IN PLACE DAYS
STAGE 1	304	--	--	~~11,855~~	17,590	12	--	--	615	186,960	--	--	22	6,688	--	--	35	10,640
STAGE 2A	60	--	1,945	~~905~~	--	2	41	2,460	176	10,560	5	300	3	180	8	480	6	360
STAGE 2B	30	--	530	--	--	--	210	6,300	8	240	29	870	--	--	41	1,230	--	--
STAGE 3	60	--	--	--	--	--	144	8,640	--	--	16	960	--	--	22	1,320	--	--
STAGE A	365	1,075	1,075	--	8,275	5	--	--	56	20,440	--	--	--	--	--	--	--	--
STAGE B	56	4,400	10,850	--	--	2	85	4,760	--	--	--	--	--	--	--	--	--	--
STAGE C	42	--	6,850	--	--	2	119	4,998	--	--	3	126	--	--	6	252	--	--
FSE SHOULDER	14	--	1,275	--	--	--	8	112	--	--	--	--	--	--	--	--	--	--
STAGE D	15	--	1,950	--	--	--	77	1,155	--	--	2	30	--	--	4	60	--	--
UNDISTRIBUTED		--	--	--	--	--	--	2,843	--	--	--	229	--	--	--	334	--	--
PROJECT 1517-07-80 TOTAL		5,475	24,475	0	25,865	23		31,268		218,200		2,515		6,868		3,676		11,000

STAGE	DURATION DAYS	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAYS	SPV.0045.203 MAINTAIN & REMOVE TRAFFIC CONTROL WARNING LIGHTS TYPE C LEFT IN PLACE EACH	SPV.0045.203 MAINTAIN & REMOVE TRAFFIC CONTROL WARNING LIGHTS TYPE C LEFT IN PLACE DAYS	643.0800 TRAFFIC CONTROL ARROW BOARDS EACH	643.0800 TRAFFIC CONTROL ARROW BOARDS DAYS	643.0900 TRAFFIC CONTROL SIGNS EACH	643.0900 TRAFFIC CONTROL SIGNS DAYS	SPV.0045.204 MAINTAIN & REMOVE TRAFFIC CONTROL SIGNS LEFT IN PLACE EACH	SPV.0045.204 MAINTAIN & REMOVE TRAFFIC CONTROL SIGNS LEFT IN PLACE DAYS	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	643.1050 TRAFFIC CONTROL SIGNS PCMS EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS DAYS	643.1051 TRAFFIC CONTROL SIGNS PCMS WITH CELLULAR COMMUNICATIONS EACH	643.1051 TRAFFIC CONTROL SIGNS PCMS WITH CELLULAR COMMUNICATIONS DAYS
STAGE 1	304	--	--	75	22,800	--	--	--	--	49	14,896	--	--	--	--	--
STAGE 2A	60	31	1,860	16	960	--	--	2	120	4	240	--	2	120	--	--
STAGE 2B	30	41	1,230	--	--	--	--	16	480	--	--	--	--	--	--	--
STAGE 3	60	87	5,220	--	--	--	--	9	540	--	--	--	--	--	--	--
STAGE A	365	--	--	20	7,300	--	--	--	--	56	20,440	--	2	730	--	--
STAGE B	56	13	728	--	--	3	168	12	672	43	2,408	98	--	--	--	--
STAGE C	42	35	1,470	--	--	2	84	13	546	43	1,806	336	--	--	--	--
FSE SHOULDER	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
STAGE D	15	8	120	13	195	2	30	9	135	43	645	--	--	--	--	--
UNDISTRIBUTED		--	1,063	--	--	--	28	--	249	--	--	--	--	--	4	1,800
PROJECT 1517-07-80 TOTAL			11,691		31,255		310		2,742		40,435	434		850		1,800

Addendum No. 01
ID 1517-07-80
Revised Sheet 413
December 8, 2016

ALL ITEMS ARE CATEGORY **1000** UNLESS OTHERWISE SPECIFIED.

REMOVING PAVEMENT MARKING WATER BLASTING

LOCATION	STATION		STATION	646.0690.S REMOVING PAVEMENT MARKING WATER BLASTING LF
WNE	1257WNE+00	-	1265WNE+00	1,576
IH 41 NB	1258NB+80	-	1262NB+75	1,242
IH 41 NB	1268NB+00	-	1306NB+00	3,800
FWS	103FWS+58	-	108FWS+65	1,268
IH 41 SB	1286SB+25	-	1295SB+00	865
IH 41 SB	1295SB+00	-	1300SB+73	145
IH 41 SB	1300SB+73	-	1306SB+00	504
PROJECT 1517-07-80 TOTAL				9,400

TRUCK MOUNTED ATTENUATOR

LOCATION	SPV.0075.206 TRUCK MOUNTED ATTENUATOR WITH OPERATOR HRS	SPV.0075.207 TRUCK MOUNTED ATTENUATOR WITHOUT OPERATOR HRS
UNDISTRIBUTED	50	50
PROJECT 1517-07-80 TOTAL	50	50

STREET SWEEPING

STATION	SPV.0075.001 STREET SWEEPING HRS
UNDISTRIBUTED	24
PROJECT 1517-07-80 TOTAL	24

GEOTECHNICAL INSTRUMENTATION

LOCATION	SPV.0105.014 GEOTECHNICAL INSTRUMENTATION LS
UNDISTRIBUTED	1
PROJECT 1517-07-80 TOTAL	1

SURVEY PROJECT

LOCATION	SPV.0105.001 SURVEY PROJECT ID 1517-07-80 LS
PROJECT 1517-07-80	1
PROJECT 1517-07-80 TOTAL	1

~~REMOVING RUMBLE STRIPS~~

~~STATION~~		~~STATION~~	~~LOCATION~~	~~SPV.0180.010 REMOVING RUMBLE STRIPS SY~~
~~1311NB+50~~	-	~~1339NB+80~~	~~USH 41 NB~~	~~156~~
~~PROJECT 1517-07-80 TOTAL~~				~~156~~

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ID 1517-07-80
Revised Sheet 417
December 8, 2016

ALL ITEMS ARE CATEGORY **1000** UNLESS OTHERWISE SPECIFIED.

3

3

LIGHTING CONTROL CABINETS

WIS 441 Lighting - Contract 1517-07-80

SYSTEM	DESCRIPTION	CATEGORY	STATION	OFFSET		SPV.0060.353 LIGHTING CONTROL CABINET – FREEWAY EACH
		1100				
L70-2007	COPPERHEAD DR		1347FSW+86.61	78.15	LT	1
L70-2008	JACOBSEN RD		STA 131+20	162.00	RT	EXISTING
L70-2009	W BUTTE DES MORTS RD		1334FNE+80.95	174.00	RT	1
L70-2010	TAYCO ST		184EB+03.86	172.00	RT	EXISTING
				PROJECT TOTAL		2

PULL BOXES

WIS 441 Lighting - Contract 1517-07-80

CATEGORY	DESCRIPTION	STATION	OFFSET		SPV.0060.352 PULL BOX NON-CONDUCTIVE 24X42-INCH EACH
1100					
	LPB001	STA 1324+40	30.00	RT	1
	LPB002	STA 1335+60	30.00	LT	1
	LPB101	STA 161+50	10.00	LT	1
	LPB102	STA 161+50	32.00	RT	1
	LPB103	STA 1342+00	27.00	RT	1
	LPB104	STA 1337+33	28.00	RT	1
	LPB201	STA 131+11	31.00	RT	1
	LPB202	STA 137+45	30.00	RT	1
	LPB301	STA 131+92	22.00	LT	1
PROJECT TOTAL					9

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ALL ITEMS ARE CATEGORY **1000** UNLESS OTHERWISE SPECIFIED.

ITS CCTV ITEMS

INTERCHAGNE	STATION		ITEM ID	654.0105 CONCRETE BASES TYPE 5 EACH	657.0322 POLES TYPE 5 ALUMINUM EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	673.0225.S INSTALL POLE MOUNTED CABINET EACH	675.0300 INSTALL MOUNTED CONTROLLER MICROWAVE DIRECTOR ASSEMBLY EACH	675.0400.S INSTALL ETHERNET SWITCH EACH	SPV.0060.402 REMOVE RADIO LINK EACH	678.0400 INSTALL FIBER OPTIC TERMINATION EACH	SPV.0060.401 INSTALL TERMINATION PANEL EACH	670.0100 FIELD SYSTEM INTEGRATOR LUMP SUM	670.0200 ITS DOCUMENTATION LUMP SUM	678.0500 COMMUNICATIONS SYSTEM TESTING LUMP SUM
CATEGORY 1200															
CTH II	1256+50SB	RT	CCTV-70-0091	-	-	-	-	-	-	1	-	-	-	-	-
SYSTEM INTERCHANGE	1328+00SB	LT	HUB-70-0025	-	-	-	-	-	1	-	28	7	-	-	-
	1332+00SB	LT	CCTV-70-0092	-	-	-	-	-	-	3	6	1	-	-	-
	1325+10FNE	RT	SDS-70-0049SE	-	1	1	-	1	-	-	6	1	-	-	-
	1348+70FSW	LT	SDS-70-0049NW	-	1	1	-	1	-	-	-	-	-	-	-
	146+30EB	LT	SDS-70-0049E1/E2	1	1	1	1	2	1	-	6	1	-	-	-
RACINE ROAD	187+15WB	LT	SDS-70-0032SW	-	1	1	-	1	-	-	-	-	-	-	-
	187+50EB	RT	SDS-70-0032SE	-	1	1	-	1	-	-	-	-	-	-	-
	192+40EB	RT	CCTV-70-0085	-	-	-	0	-	0	1	6	1	-	-	-
	202+00EB	RT	SDS-70-0032NE	-	1	1	-	1	-	-	-	-	-	-	-
	202+60WB	LT	SDS-70-0032NW	-	1	1	-	1	-	-	-	-	-	-	-
PROJECT				-	-	-	-	-	-	-	-	-	1	1	1
TOTALS				1	7	7	1	8	2	5	52	11	1	1	1

ITS PULL BOX, COMMUNICATION VAULT & MANHOLE ITEMS

INTERCHANGE	STATION	LOCATION	ITEM ID	653.0180 PULL BOXES STEEL COMMUNICATIONS 24X36-INCH COMM PB EACH	653.0180 PULL BOXES STEEL COMMUNICATIONS 24X36-INCH ELECTRICAL PE EACH	656.0200 ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) LS	656.0500 ELECTRICAL SERVICE BREAKER DISCONNECT BOX (LOCATION) LS	673.0105 COMMUNICATION VAULT TYPE 1 EACH	672.0100 BASE ITS CONTROLLER CABINET EACH	673.0200.S INSTALL ITS FIELD CABINET EACH
CATEGORY 1200										
SYSTEM INTERCHANGE	1309+60SB	LT	CV-30	-	-	-	-	1	-	-
	1315+20SB	LT	CV-31	-	-	-	-	1	-	-
	1320+85SB	LT	CV-32	-	-	-	-	1	-	-
	1325+00SB	LT	CV-33	-	-	-	-	1	-	-
	1327+90SB	LT	CV-34/PB-32/PB-E500	1	1	-	-	1	-	-
	1328+00SB	LT	HUB-70-0025	-	-	-	1	-	1	1
	1328+90FNE	RT	CV-47	-	-	-	-	1	-	-
	1334FNE+90	RT	CV-501	-	-	-	-	1	-	-
	1335+40FNE	RT	ELECTRICAL SERVICE	-	-	1	-	-	-	-
	1335FNE+70	RT	PB-E500	-	1	-	-	-	-	-
	1336FNE+55	RT	PB-E501	-	1	-	-	-	-	-
	185+70EB	RT	CCTV-70-0085 (INTERIM)	-	-	-	-	-	-	-
	SUBTOTAL			1	3	1	1	7	1	1
	TOTALS				4					

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ALL ITEMS ARE CATEGORY **1000** UNLESS OTHERWISE SPECIFIED.

ITS CONDUIT ITEMS

INTERCHANGE	FROM	TO	LINEAR DISTANCE	NO. OF CONDUIT	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	671.0242 CONDUIT HDPE DIRECTIONAL BORE 4-DUCT 2-INCH LF	671.0232 CONDUIT HDPE DIRECTIONAL BORE 3-DUCT 2-INCH LF	671.0112 CONDUIT HDPE 1-DUCT 2-INCH LF	671.0142 CONDUIT HDPE 4-DUCT 2-INCH LF	SPV.0090.402 CONDUIT HDPE 6-DUCT 2-INCH LF
CATEGORY 1200										
SYSTEM INTERCHANGE	CV-30	CV-31	565	1	-	-	-	-	565	-
	CV-31	CV-32	550	1	-	-	-	-	550	-
	CV-32	CV-33	410	1	-	410	-	-	-	-
	CV-33	CV-34/PB-32/PB-E500	275	1	-	-	-	-	275	-
	CV-34/PB-32/PB-E500	HUB-70-0025	10	6	60	-	-	-	-	-
	CV-34/PB-32/PB-E500	CV-38/PB-38/PB-E6	435	1	-	-	-	-	-	435
	CV-34/PB-32/PB-E500	CV-47/PB-53	430	1	-	430	-	-	-	-
	CV-47/PB-53	CV-501	575	1	-	-	575	-	-	-
	CV-501	CV-49	495	1	-	-	-	-	495	-
	ELECTRICAL SERVICE	PB-E500	15	1	15	-	-	-	-	-
	PB-E500	PB-E501	135	1	-	-	-	135	-	-
	PB-E501	PB-E502	335	1	-	-	-	335	-	-
	PB-C501/PB-E503	SDS-70-0049E1/E2	25	2	50	-	-	-	-	-
	~~CV-49~~	~~JB-1~~	~~55~~	~~1~~	—	—	—	—	—	—
	TOTALS				125	840	575	470	1,885	435

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Revised Sheet 428
December 8, 2016

ALL ITEMS ARE CATEGORY **1000** UNLESS OTHERWISE SPECIFIED.

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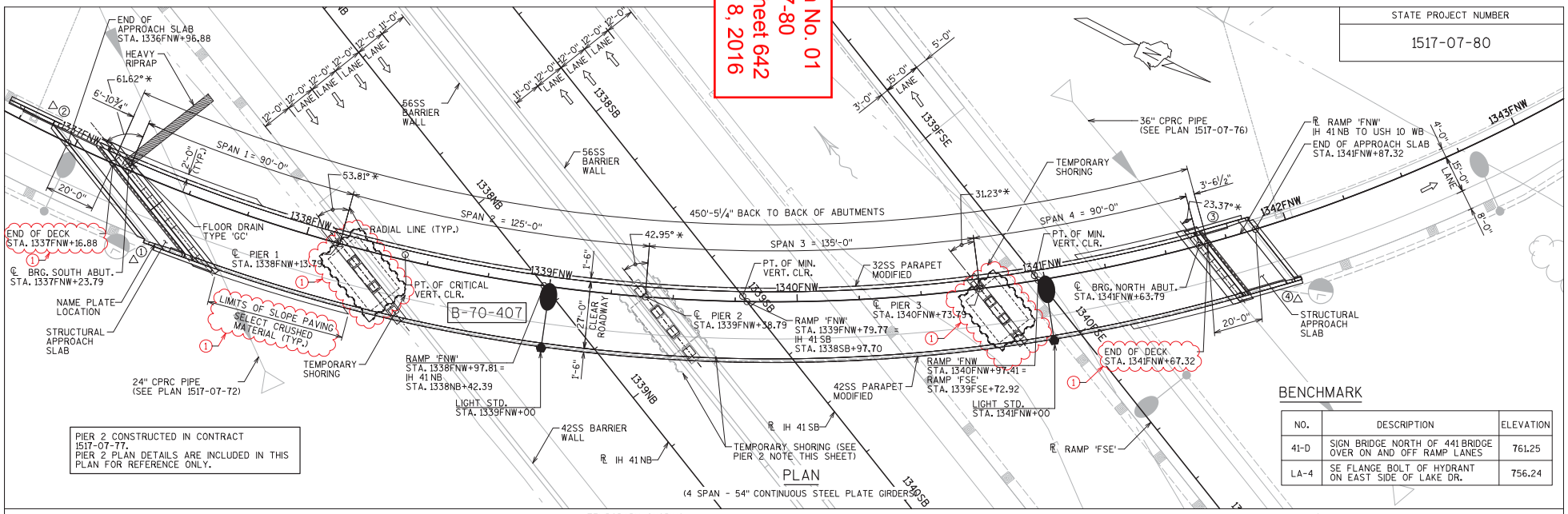
ID 1517-07-80
Revised Sheet 642
December 8, 2016

STATE PROJECT NUMBER
1517-07-80

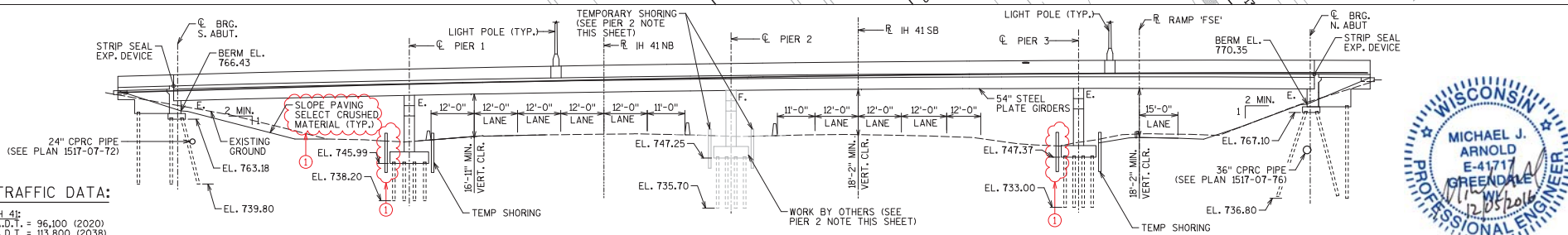


PIER 2 CONSTRUCTED IN CONTRACT 1517-07-77.
PIER 2 PLAN DETAILS ARE INCLUDED IN THIS PLAN FOR REFERENCE ONLY.

PLAN
(4 SPAN - 54" CONTINUOUS STEEL PLATE GIRDERS)

BENCHMARK

NO.	DESCRIPTION	ELEVATION
41-D	SIGN BRIDGE NORTH OF 441 BRIDGE OVER ON AND OFF RAMP LANES	761.25
LA-4	SE FLANGE BOLT OF HYDRANT ON EAST SIDE OF LAKE DR.	756.24



ELEVATION
(LOOKING SOUTHWEST)

TRAFFIC DATA:

IH 41:
A.D.T. = 96,100 (2020)
A.D.T. = 113,800 (2038)
R.D.S. = 70 M.P.H.

RAMP FNW:
A.D.T. = 1,700 (2038)
R.D.S. = 45 M.P.H.

RAMP FSE:
A.D.T. = 10,300 (2038)
R.D.S. = 30 M.P.H.

William C. Dreher SDR
12/07/16

NOTES

SPAN LENGTHS AND ASSOCIATED LENGTH DIMENSIONS SHOWN ARE MEASURED ALONG ℄ FNW.

FOR CURVE DATA SEE SHEET "CROSS-SECTION."

THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR CONSIDERED ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES.

LEGEND

△ ANCHOR ASSEMBLY FOR STEEL PLATE BEAM GUARD ATTACHMENT.

① INDICATES WINGWALL NUMBER.

* ANGLES BETWEEN RADIAL LINE AND ℄ BRG. OF ABUTMENT OR ℄ OF PIER.

DESIGN DATA

LIVE LOAD:

DESIGN RATING: HL-93
INVENTORY RATING FACTOR: 1.28
OPERATING RATING FACTOR: 1.66
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS

THE DESIGN PROVIDES FOR AN ADDITIONAL LOAD DUE TO A FUTURE WEARING SURFACE EQUAL TO 20 PSF AND A POLYMER OVERLAY EQUAL TO 5 PSF.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY
ALL CONCRETE (HPC) ..... F'C = 4,000 PSI

BAR STEEL REINFORCEMENT,
HIGH STRENGTH, GRADE 60 .....FY = 60,000 PSI

54-INCH STEEL PLATE GIRDERS,
HIGH STRENGTH, GRADE 50.....FY = 50,000 PSI

FOUNDATION DATA

ABUTMENTS AND PIERS 1, 2, AND 3 TO BE SUPPORTED ON HP 12x53 STEEL PILING WITH PILE POINTS AND PRE-BORED PILES. REQUIRED DRIVING RESISTANCE FOR DRIVEN PILES AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA:

SOUTH ABUTMENT..... 170 TONS* PER PILE
PIER 1 ..... 170 TONS* PER PILE
PIER 3 ..... 220 TONS* PER PILE
NORTH ABUTMENT..... 140 TONS* PER PILE

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

SOUTH ABUTMENT..... 24 FEET
PIER 1 ..... 9 FEET
PIER 2 ..... 13 FEET
PIER 3 ..... 16 FEET
NORTH ABUTMENT..... 31 FEET

LIST OF DRAWINGS

1. GENERAL PLAN AND ELEVATION
2. CROSS-SECTION
3. GENERAL NOTES AND QUANTITIES
4. SUBSURFACE EXPLORATION
5. SOUTH ABUTMENT DETAILS (1 OF 5)
6. SOUTH ABUTMENT DETAILS (2 OF 5)
7. SOUTH ABUTMENT DETAILS (3 OF 5)
8. SOUTH ABUTMENT DETAILS (4 OF 5)
9. SOUTH ABUTMENT DETAILS (5 OF 5)
10. SOUTH ABUTMENT APPROACH SLAB
11. NORTH ABUTMENT DETAILS (1 OF 4)
12. NORTH ABUTMENT DETAILS (2 OF 4)
13. NORTH ABUTMENT DETAILS (3 OF 4)
14. NORTH ABUTMENT DETAILS (4 OF 4)
15. NORTH ABUTMENT APPROACH SLAB
16. PIER 1 DETAILS (1 OF 2)
17. PIER 1 DETAILS (2 OF 2)
18. PIER 2 DETAILS (1 OF 2)
19. PIER 2 DETAILS (2 OF 2)
20. PIER 3 DETAILS (1 OF 2)
21. PIER 3 DETAILS (2 OF 2)
22. BEARING PEDESTAL DETAILS
23. FRAMING PLAN
24. GIRDER DETAILS (1 OF 4)
25. GIRDER DETAILS (2 OF 4)
26. GIRDER DETAILS (3 OF 4)
27. GIRDER DETAILS (4 OF 4)
28. DEAD LOAD DEFLECTION DIAGRAM
29. BEARING DETAILS (1 OF 2)
30. BEARING DETAILS (2 OF 2)
31. SUPERSTRUCTURE PLAN
32. DECK POUR SEQUENCE
33. SUPERSTRUCTURE CROSS SECTION
34. SUPERSTRUCTURE DETAILS
35. TOP OF DECK ELEVATIONS
36. SINGLE SLOPE PARAPET 32SS MODIFIED
37. SINGLE SLOPE PARAPET 42SS MODIFIED
38. SINGLE SLOPE PARAPET DETAILS
39. 42SS PARAPET ELECTRICAL
40. LIGHT STANDARD
41. STRIP SEAL EXPANSION JOINT DETAILS
42. COVER PLATES FOR PARAPETS
43. FLOOR DRAIN TYPE "GC"
44. DOWNSPOUT DETAILS
45. AESTHETIC DETAILS
46. SLOPE PAVING (CRUSHED AGGREGATE)
47. ALTERNATE CONSTRUCTION JOINT

NE REGION CONTACT - SCOTT EBEL (920) 492-2240
BUREAU OF STRUCTURES CONTACT - WILLIAM DREHER (608) 266-8489
CONSULTANT CONTACT - MICHAEL ARNOLD (414) 944-6142

WISCONSIN
MICHAEL J. ARNOLD
E-41717
GREENDALE
PROFESSIONAL ENGINEER
12/07/2016

NO.	DATE	REVISION	BY
NO.	11/18/16	REVISED CALLOUTS/TEMP SHORING	DNJ

AECOM
1555 North Rivercenter Drive, Suite 214
Milwaukee, WI 53212
(414) 944-6080

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED _____ _____
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-70-407

IH 41 NB TO USH 10 WB- RAMP 'FNW'

COUNTY	TOWN/~~CITY/VILLAGE~~
WINNEBAGO	MENASHA

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

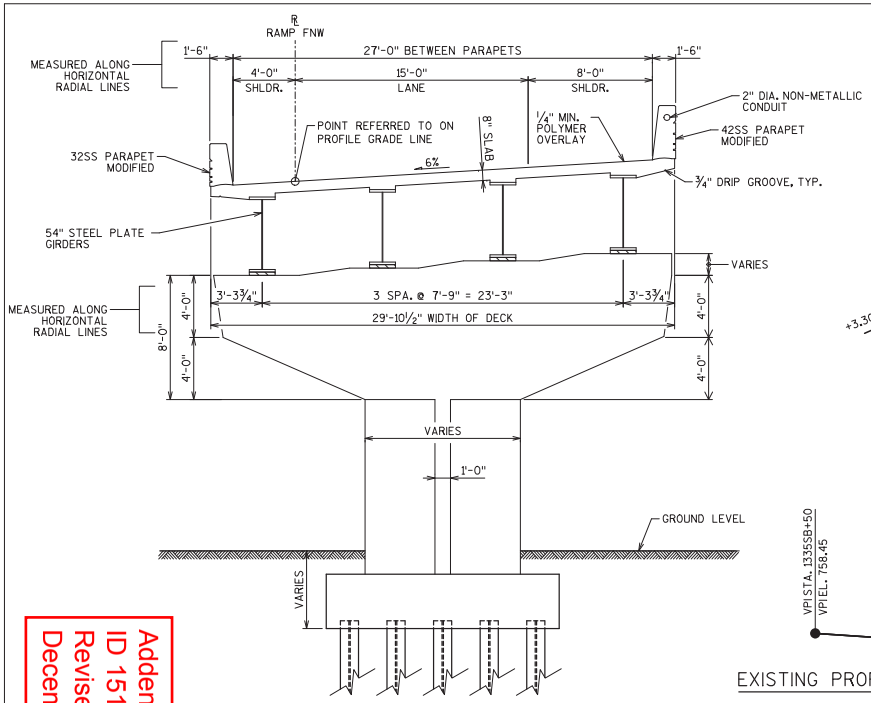
DESIGNED BY	JRS	DESIGN CK'D.	LKH	DRAWN BY	DNJ	PLANS CK'D.	MJA

GENERAL PLAN AND ELEVATION

SHEET 1 OF 47
642

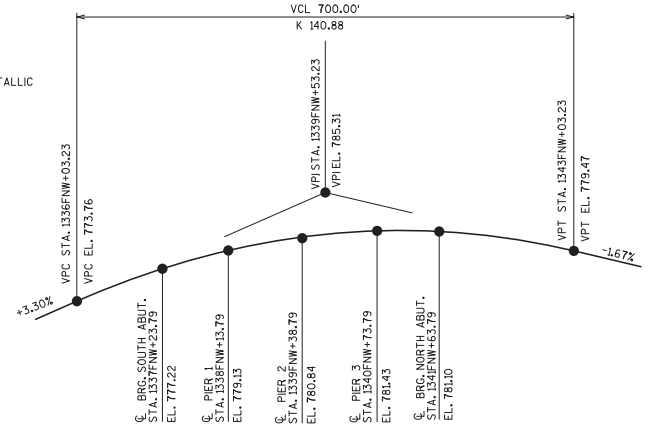
DATE: 12/3/2016
I.D.

FILE= \\s1102k306\projects\Transportation\US 10 WIS 441\CADD\sheets\Structures\B-70-407\Sheets\07-80 Plan Set\01-B-70-407.gp.dgn

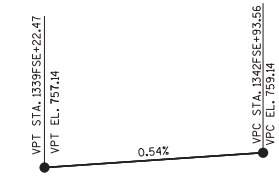


CROSS SECTION THRU ROADWAY

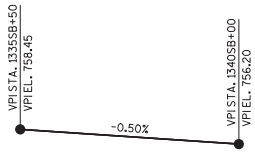
(LOOKING UP STATION)



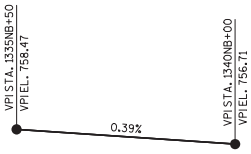
PROFILE GRADE LINE RAMP FNW



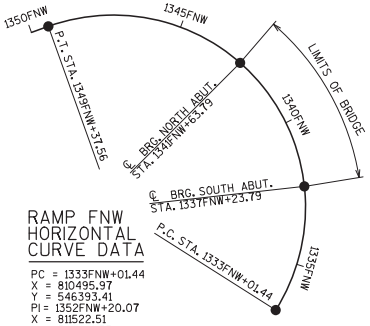
PROFILE GRADE LINE RAMP FSE



EXISTING PROFILE GRADE LINE IH 41SB



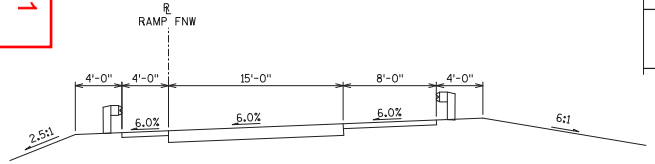
EXISTING PROFILE GRADE LINE IH 41NB



RAMP FNW HORIZONTAL CURVE DATA

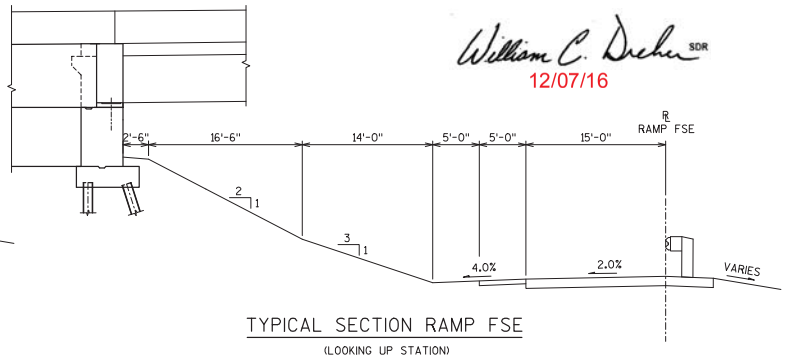
PC = 1333FNW+01.44
X = 810495.97
Y = 546393.41
PI = 1352FNW+20.07
X = 811522.51
Y = 548014.33
PT = 1349FNW+37.56
X = 809716.04
Y = 547367.95
R = 660.00
DELTA = 142°02'03" LT
D = 8°40'52"
L = 1636.11

HORIZONTAL ALIGNMENT RAMP FNW



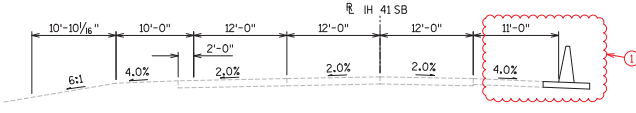
TYPICAL SECTION RAMP FNW

(LOOKING UP STATION)



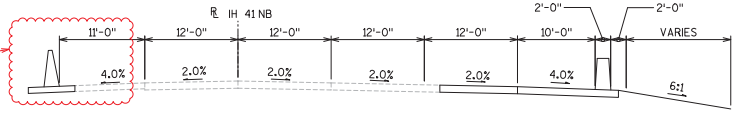
TYPICAL SECTION RAMP FSE

(LOOKING UP STATION)



TYPICAL SECTION IH 41 SB

(LOOKING UP STATION)



TYPICAL SECTION IH 41 NB

(LOOKING UP STATION)

Addendum No. 01
ID 1517-07-80
Revised Sheet 643
December 8, 2016

William C. Dreher SDR
12/07/16

WISCONSIN
MICHAEL J. ARNOLD
E-41717
GREENDALE
WI
PROFESSIONAL ENGINEER
12/05/2016

NO.	DATE	REVISION	BY
1	11/18/16	UPDATED TYP. SECTION	DNJ

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY DNJ | PLANS CK'D. MJA

CROSS-SECTION

SHEET 2 OF 47

643

STATE PROJECT NUMBER

1517-07-80

8

8

FILE= \\s1102k306\projects\Transportation\US 10 WIS 441\CADD\sheets\Structures\B-70-407\Sheets\07-80 Plan Set\02-B-70-407_ts.dgn

DATE: 12/3/2016
I.D.

STATE PROJECT NUMBER
1517-07-80

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL DIMENSIONS ARE IN SURVEY FEET AND SURVEY INCHES. ALL STATIONS ARE IN SURVEY FEET.

ELEVATIONS ARE REFERENCED TO NGVD29.

FILLER SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M153, TYPE I, II, OR III OR M213.

THE EXISTING GRADE LINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

AT ABUTMENTS, BACKFILL ALL EXCAVATED VOLUME NOT OCCUPIED BY NEW STRUCTURE WITH BACKFILL STRUCTURE.

THE SLOPE OF FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING MATERIAL TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS.

THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

THE QUANTITY FOR BACKFILL STRUCTURE, BID ITEM 210.0100, IS CALCULATED BASED ON SECTION 6.4.2 AND STANDARD DETAIL DRAWING 9.01 IN THE WISCONSIN DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL. (1)

REINFORCING STEEL

ALL REINFORCING BARS ARE ENGLISH AND THE FIRST OR THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFY THE BAR SIZE.

REINFORCING STEEL SHALL BE HIGH STRENGTH, GRADE 60 WITH FY=60 KSI. PROVIDE STAINLESS STEEL REINFORCEMENT CONFORMING TO ASTM A615, GRADE 60 REQUIREMENTS.

REINFORCING STEEL SHALL BE UNCOATED IN FOUNDATIONS (EXCEPT PIER SHAFT DOWELS) AND EPOXY COATED IN ALL OTHER LOCATIONS (INCLUDING PIER SHAFT DOWELS).

PLACE ALL REINFORCEMENT WITH A MINIMUM CLEAR COVER OF 2" UNLESS NOTED OTHERWISE.

PLACE REINFORCEMENT IN FOOTINGS AND PILECAPS WITH A MINIMUM CLEAR COVER OF 3" BOTTOM AND 2" TOP AND SIDES UNLESS NOTED OTHERWISE.

PLACE TOP LAYER OF REINFORCING STEEL IN THE DECK SURFACE WITH 2½" CLEAR COVER TO TOP OF SLAB.

PLACE BOTTOM LAYER OF REINFORCING STEEL IN THE DECK WITH 1½" CLEAR COVER TO BOTTOM OF SLAB.

ONLY REINFORCEMENT REQUIRED BY DESIGN IS SHOWN EXPLICITLY ON THE DRAWINGS. ADDITIONAL REINFORCEMENT MAY BE USED TO SIMPLIFY ASSEMBLY AND ERECTION OF THE REINFORCING STEEL AND MAY BE REQUIRED TO ENSURE STABILITY AND POSITIONING OF THE COMPLETED REINFORCEMENT CAGE. REINFORCEMENT IN ADDITION TO THAT SHOWN WILL NOT BE INCLUDED FOR PAYMENT.

LAP SPLICE LENGTHS SHALL BE CLASS C UNLESS NOTED OTHERWISE.

CONCRETE

CONCRETE QUANTITY IN THE HAUNCHES WAS CALCULATED BASED ON A 4.48-INCH HAUNCH DEPTH FROM TOP OF WEB TO BOTTOM OF DECK AT THE ℄ OF GIRDERS. THIS IS THE MAXIMUM HAUNCH QUANTITY FOR WHICH PAYMENT WILL BE MADE.

CHAMFER ALL EXPOSED OUTSIDE CORNERS ¾" UNLESS NOTED OTHERWISE.

PROTECTIVE SURFACE TREATMENT IS TO BE APPLIED TO THE APPROACH SLABS.

PIGMENTED SURFACE SEALER IS TO BE APPLIED TO THE INSIDE FACE AND TOP OF PARAPETS.

APPLY BRIDGE SEAT PROTECTION, AS PER SECTION 502.3.12 OF THE STANDARD SPECIFICATIONS, TO THE TOP SURFACES OF BOTH ABUTMENTS BELOW EXPANSION DEVICES.

THE RUSTICATIONS ON THE BACK FACE OF PARAPETS AND THE PIER COLUMNS ARE INCLUDED IN THE BID ITEM "MODIFIED HIGH PERFORMANCE CONCRETE (HPC) MASONRY BRIDGES". (1)

OTHER DESIGN LOADS

THE STRUCTURE IS DESIGNED FOR THE DECK THICKNESS SHOWN. AN ADDITIONAL LOAD OF 20 PSF FOR A FUTURE WEARING SURFACE AND 5 PSF FOR A POLYMER OVERLAY ARE CONSIDERED IN THE DESIGN.

TEMPERATURE CHANGE FOR DETERMINING THERMAL FORCES ON SUBSTRUCTURES = 90°F.

PARAPETS WERE ASSUMED TO WEIGH 639 PLF AND 516 PLF FOR 42SS MODIFIED AND 32SS MODIFIED SECTIONS, RESPECTIVELY.

ALL OTHER LOADS IN ACCORDANCE WITH AASHTO.

DESIGN CRITERIA

DESIGN IS IN ACCORDANCE WITH AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LRFD BRIDGE DESIGN SPECIFICATIONS AND THE WISDOT BRIDGE MANUAL.

ALL DETAILS, MATERIALS, AND FABRICATION SHALL CONFORM TO THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. USE THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS AT THE TIME OF CONSTRUCTION.

LIVE LOAD PLUS DYNAMIC LOAD DEFLECTION LIMIT = SPAN / 800 (HL93).

STRUCTURAL STEEL

PROVIDE HIGH STRENGTH STRUCTURAL STEEL CONFORMING TO THE REQUIREMENTS OF ASTM A709 GRADE 50 FOR ALL GIRDER WEB, FLANGES, STIFFENERS, SPLICE PLATES, CROSS FRAMES AND DIAPHRAGMS. (1)

ALL STEEL SHALL BE PAINTED. STRUCTURAL STEEL PAINT COLOR SHALL BE "HOPSACK" (SW 6109). (1)

SHEAR STUDS MUST BE EMBEDDED A MINIMUM OF 2" ABOVE BOTTOM OF CONCRETE SLAB.

TEMPORARY SUPPORTS AND FALSEWORK (INCLUDING DECK OVERHANG BRACKETS) SHALL NOT BE ATTACHED TO OR BEAR ON GIRDER WEBS EXCEPT AT WEB STIFFENER LOCATIONS.

ALL FIELD CONNECTIONS SHALL BE MADE WITH ⅞" DIAMETER FRICTION TYPE HIGH-TENSILE STRENGTH BOLTS UNLESS SHOWN OR NOTED OTHERWISE.

DETAIL STRUCTURAL STEEL FOR STEEL DEAD LOAD ONLY FIT (ERECTED FIT). (1)

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEM	UNIT	SUPER.	S. APPR. SLAB	S. ABUT.	PIER 1	*PIER 2	PIER 3	N. ABUT.	N. APPR. SLAB	TOTAL
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-70-407	LS	-	-	-	-	-	-	-	-	1
210.1100	BACKFILL STRUCTURE TYPE A	CY	-	-	210	-	-	-	110	-	320
305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	-	220	-	-	-	-	-	120	340
501.1000.S	ICE HOT WEATHER CONCRETING	LB	3,675	345	1,395	1,220	10	995	835	290	8,765
502.3100	EXPANSION DEVICE B-70-407	LS	-	-	-	-	-	-	-	-	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	-	64	-	-	-	-	-	67	131
502.3210	PIGMENTED SURFACE SEALER	SY	449	-	-	-	-	-	-	-	449
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	-	-	1,350	6,700	-	7,220	1,500	-	16,770
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	95,320	9,480	15,240	22,960	-	14,710	7,920	6,830	172,460
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	-	-	570	-	-	-	530	-	1,100
506.0605	STRUCTURAL STEEL HS	LB	531,198	-	-	-	-	-	-	-	531,198
506.3015	WELDED STUD SHEAR CONNECTORS 7/8X6-INCH	EACH	4,988	-	-	-	-	-	-	-	4,988
509.5100.S	POLYMER OVERLAY	SY	1,314	-	-	-	-	-	-	-	1,314
511.1200	TEMPORARY SHORING B-70-407	SF	-	-	-	1,020	-	775	-	-	1,795
514.0445	FLOOR DRAINS TYPE GC	EACH	1	-	-	-	-	-	-	-	1
514.2625	DOWNSPOUT 6-INCH	LF	6	-	-	-	-	-	-	-	6
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	-	-	19	-	-	-	11	-	30
517.0600	PAINTING EPOXY SYSTEM B-70-407	LS	-	-	-	-	-	-	-	-	1
517.1010.S	CONCRETE STAINING B-70-407	SF	5,938	-	1,244	1,496	1,244	1,087	772	-	11,781
517.1050.S	ARCHITECTURAL SURFACE TREATMENT B-70-407	SF	1,918	-	704	-	-	-	427	-	3,049
550.0020	PREBORING ROCK OR CONSOLIDATED MATERIALS	LF	-	-	-	181	-	286	-	-	467
550.0500	PILE POINTS	EACH	-	-	23	12	-	8	13	-	56
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	-	-	555	305	-	425	420	-	1,705
604.0600	SLOPE PAVING SELECT CRUSHED MATERIAL	SY	-	-	224	-	-	-	168	-	392
606.0300	RIPRAP HEAVY	CY	-	-	11	-	-	-	-	-	11
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	-	-	110	-	-	-	75	-	185
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	3	-	-	-	-	-	-	-	3
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	71	-	-	-	-	-	-	-	71
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	425	-	-	-	-	-	-	-	425
653.0220	JUNCTION BOXES 18X6X6-INCH	EACH	1	-	-	-	-	-	-	-	1
653.0222	JUNCTION BOXES 18X12X6-INCH	EACH	2	-	-	-	-	-	-	-	2
657.6005.S	ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURES	EACH	2	-	-	-	-	-	-	-	2
SPV.0035.700	MODIFIED HIGH PERFORMANCE CONCRETE (HPC) MASONRY BRIDGES	CY	490	46	186	162	1	133	111	39	1,167
SPV.0060.700	BEARINGS HIGH-LOAD MULTI-ROTATIONAL GUIDED	EACH	-	-	4	4	-	4	4	-	16
SPV.0060.701	BEARINGS HIGH-LOAD MULTI-ROTATIONAL FIXED	EACH	-	-	-	-	4	-	-	-	4
SPV.0060.702	JUNCTION BOXES FIBERGLASS 18X12X6-INCH	EACH	-	-	1	-	-	-	1	-	2
	NON-BID ITEMS										
	FILLER	SIZE	-	-	-	-	-	-	-	-	¾", 1½"

* QUANTITIES SHOWN FOR PIER 2 ARE FOR THIS CONTRACT ONLY.

Addendum No. 01
ID 1517-07-80
Revised Sheet 644
December 8, 2016

William C. Dreher SDR
12/07/16

WISCONSIN
MICHAEL J. ARNOLD
E-41717
GREENDALE
PROFESSIONAL ENGINEER
12/05/2016

NO.	DATE	REVISION	BY
1	11/11/16	UPDATED QUANTITIES, NOTES	DNJ/JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY DNJ | PLANS CK'D. MJA

GENERAL NOTES AND QUANTITIES

SHEET 3 OF 47

644

DATE: 12/3/2016

FILE= \\s1102k306\projects\Transportation\US 10 WIS 441\CADD\sheets\Structures\B-70-407\Sheets\07-80 Plan Set\03-B-70-407_gn.dgn

I.D.

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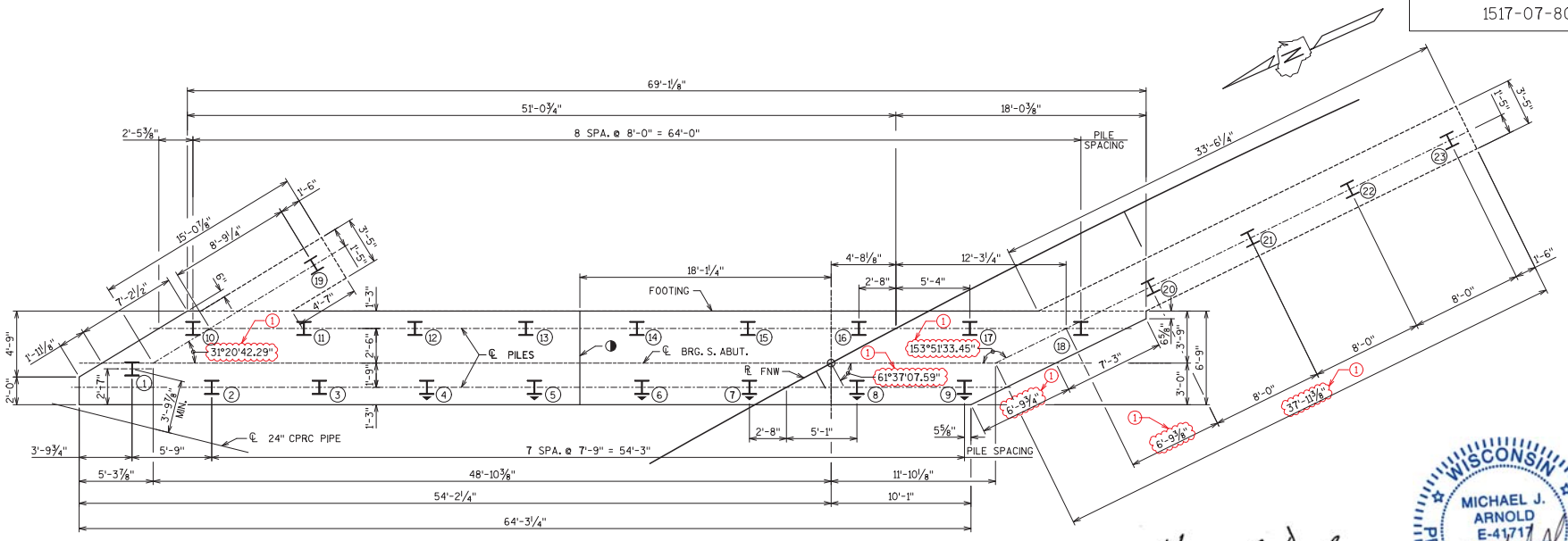
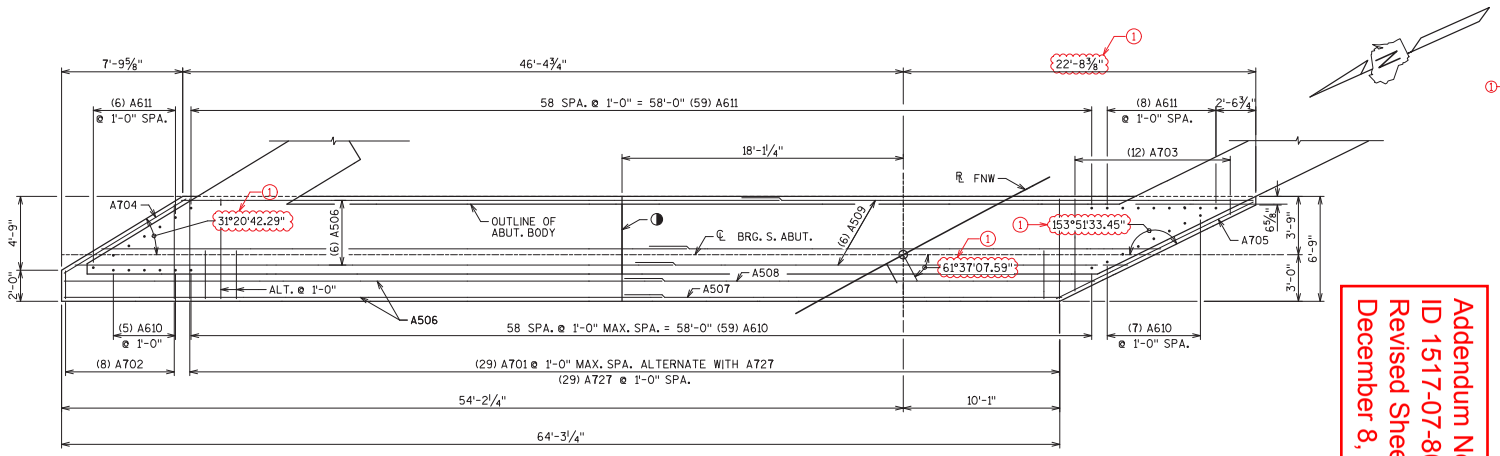
STATE PROJECT NUMBER
1517-07-80



PILE PLAN



FOOTING PLAN

FOOTING REINFORCEMENT SHOWN

William C. Drecher SDR
12/07/16

WISCONSIN
MICHAEL J. ARNOLD
E-41717
GREENDALE
WI
12/05/2016
PROFESSIONAL ENGINEER

Addendum No. 01
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Revised Sheet 646
December 8, 2016

PILE NOTE

① ABUTMENT TO BE SUPPORTED ON HP 12X53 STEEL PILING FOUNDED ON BEDROCK. PILES TO BE DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 170 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED DRIVEN PILE LENGTH IS 24 FEET. DRIVEN PILES REQUIRE PILE POINTS.

LEGEND

- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE ABOVE FOOTING.
- VERTICAL CONSTRUCTION JOINT - KEYWAY FORMED BY BEVELED 2"X8". CLEAR BEARING SEAT BY 3" MIN. USE ¾" V-GROOVE.
- DIRECTION OF BATTERED PILE.

2'-5" MIN. LAP FOR #5 BARS.

NO.	DATE	REVISION	BY
1	11/15/16	UPDATED DIMENSIONS, PILE NOTE	DNJ

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY DNJ | PLANS CK'D. JDL

SOUTH ABUTMENT DETAILS (1 OF 5)

SHEET 5 OF 47

646

DATE: 12/3/2016
I.D.

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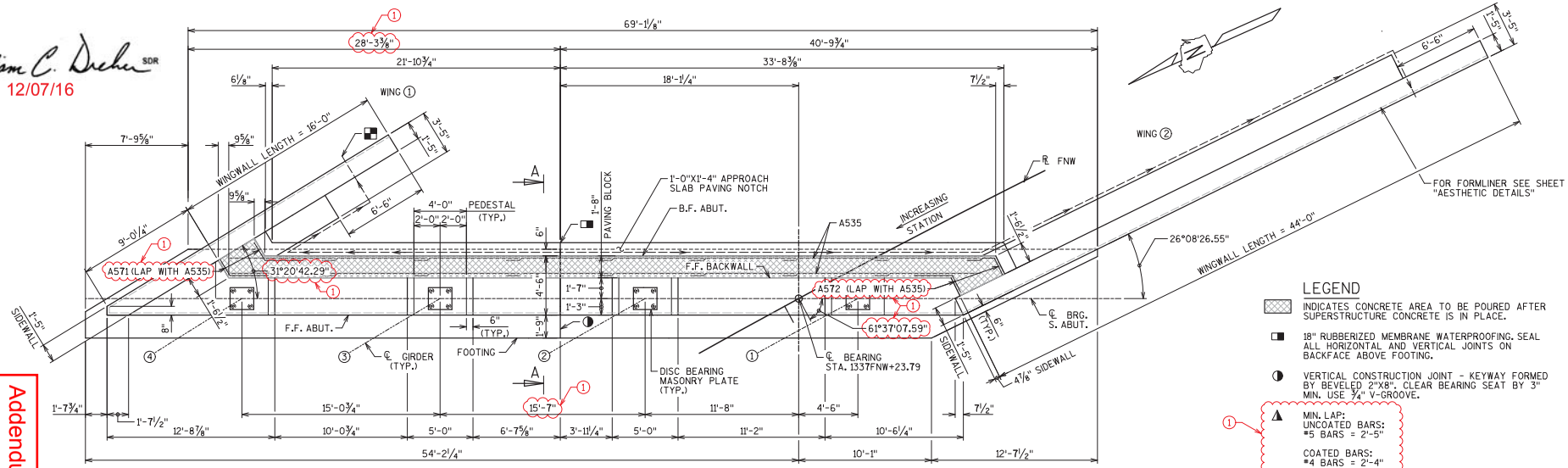
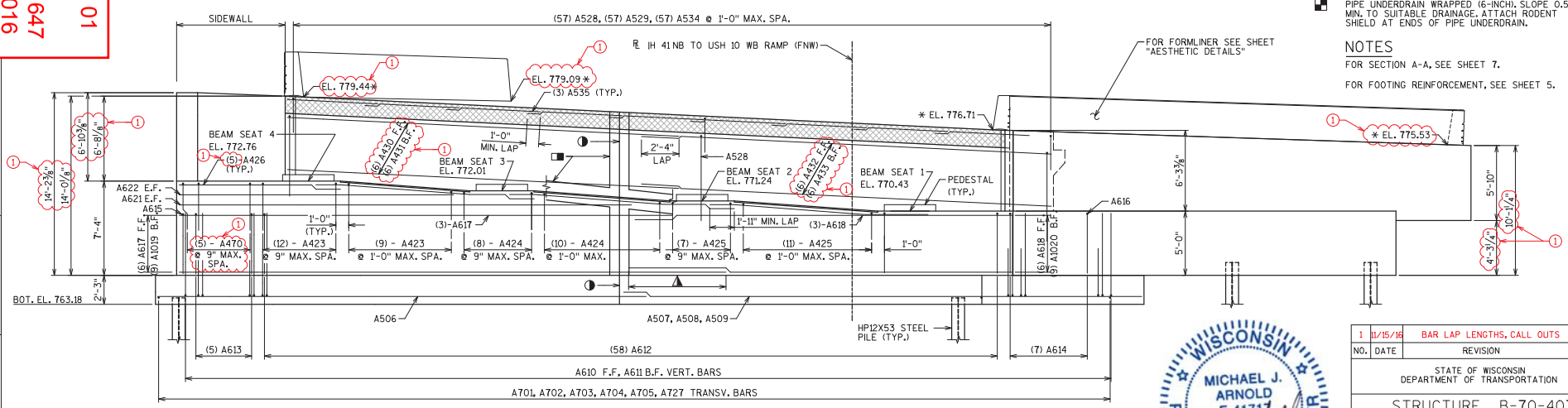
STATE PROJECT NUMBER
1517-07-80

William C. Dreher SDR
12/07/16

Addendum No. 01
ID 1517-07-80
Revised Sheet 647
December 8, 2016



PLAN



ELEVATION
(LOOKING SOUTH-EAST)

LEGEND

INDICATES CONCRETE AREA TO BE POURED AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE.

18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE ABOVE FOOTING.

VERTICAL CONSTRUCTION JOINT - KEYWAY FORMED BY BEVELED 2"X8". CLEAR BEARING SEAT BY 3" MIN. USE ¾" V-GROOVE.

① MIN. LAP:
UNCOATED BARS:
#5 BARS = 2'-5"

COATED BARS:
#4 BARS = 2'-4"
#6 BARS = 3'-6"
#10 BARS = 9'-3"

* ELEVATIONS GIVEN AT THE TOE OF THE PARAPET.

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

NOTES

FOR SECTION A-A, SEE SHEET 7.

FOR FOOTING REINFORCEMENT, SEE SHEET 5.

WISCONSIN
MICHAEL J. ARNOLD
E-41717
GREENDALE, WI
PROFESSIONAL ENGINEER
12/05/2016

NO.	DATE	REVISION	BY
1	11/15/16	BAR LAP LENGTHS, CALL OUTS	DNJ/JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY DNJ | PLANS CK'D. JDL

SOUTH ABUTMENT DETAILS (2 OF 5)

SHEET 6 OF 47

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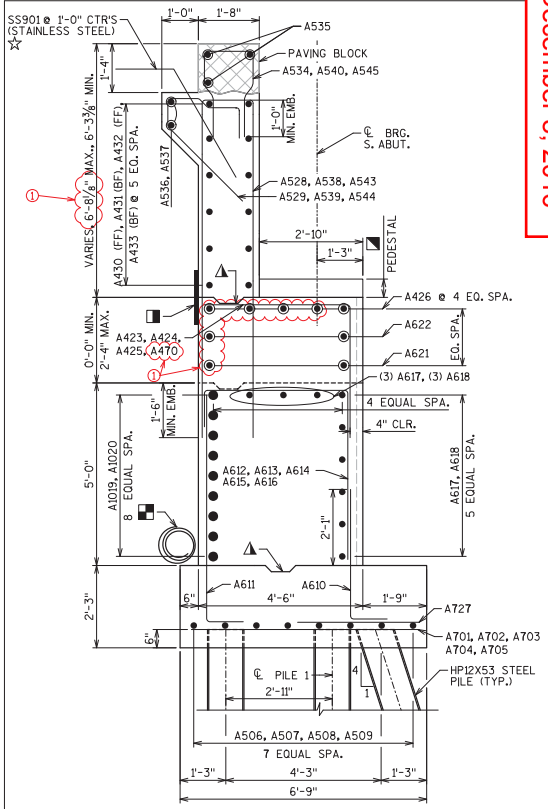
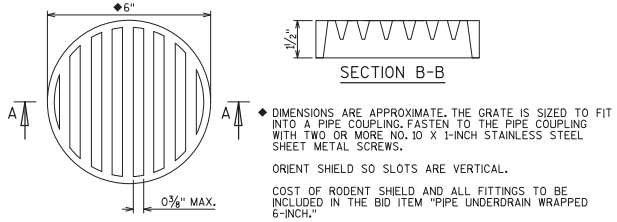
DATE: 12/3/2016
I.D.

Addendum No. 01
ID 1517-07-80
Revised Sheet 648
December 8, 2016

STATE PROJECT NUMBER
1517-07-80



SECTION A-A



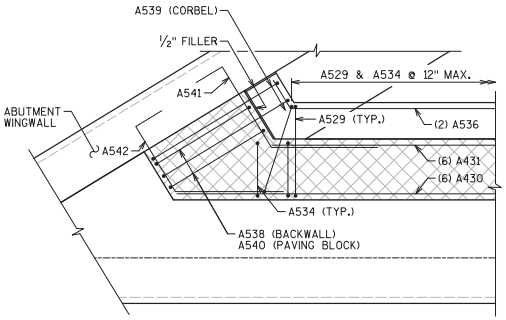
SECTION B-B

◆ DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. FASTEN TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

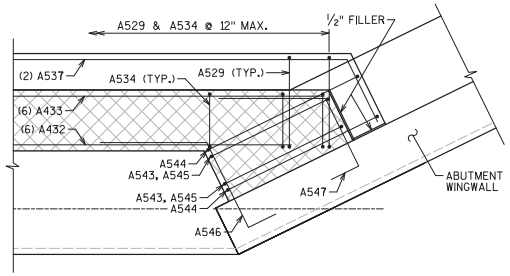
ORIENT SHIELD SO SLOTS ARE VERTICAL.

COST OF RODENT SHIELD AND ALL FITTINGS TO BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH."

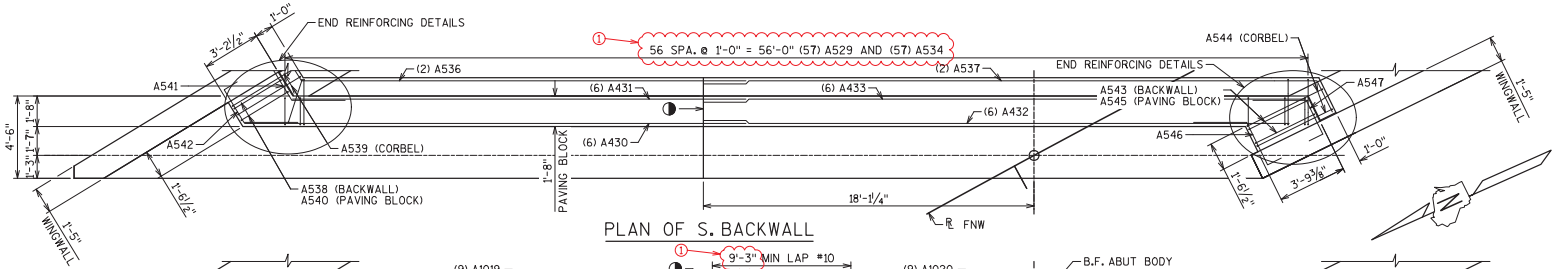
RODENT SHIELD



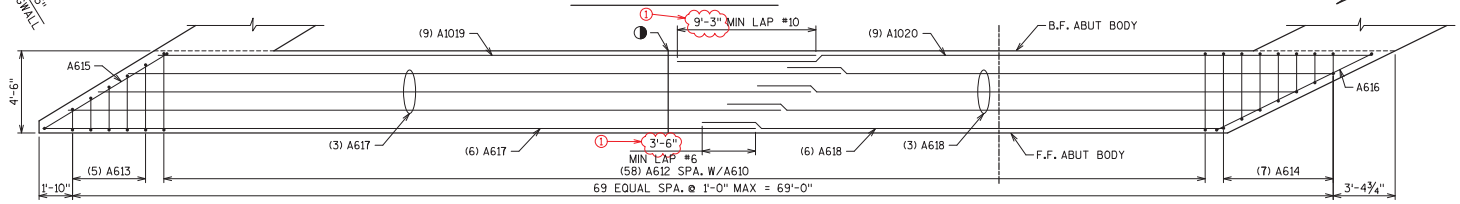
EAST END REINFORCING DETAIL



WEST END REINFORCING DETAIL



PLAN OF S. BACKWALL



PLAN OF S. ABUT. BODY

William C. Dreher SDR
12/07/16

NOTES
1. FOR MIN. LAP LENGTHS SEE "SOUTH ABUTMENT DETAILS (2 OF 5).

LEGEND
- SEE SHEET "BEARING PEDESTAL DETAILS" FOR PEDESTAL DIMENSIONS AND REINFORCEMENT.
- SS901 STAINLESS STEEL BARS PLACED AT 1'-0". SEE SHEET "SOUTH ABUTMENT APPROACH SLAB DETAILS."
- VERTICAL CONSTRUCTION JOINT - KEYWAY FORMED BY BEVELED 2"X8". CLEAR BEARING SEAT BY 3" MIN. USE ¾" V-GROOVE.
- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE ABOVE FOOTING.
- KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2"x6".
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELDS AT ENDS OF PIPE UNDERDRAIN.

NO.	DATE	REVISION	BY
1	11/15/16	UPDATED CALL OUTS, ADDED BARS	DNJ/JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY DNJ | PLANS CK'D. JDL

SOUTH ABUTMENT DETAILS (3 OF 5)

SHEET 7 OF 47

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DATE: 12/3/2016
I.D.

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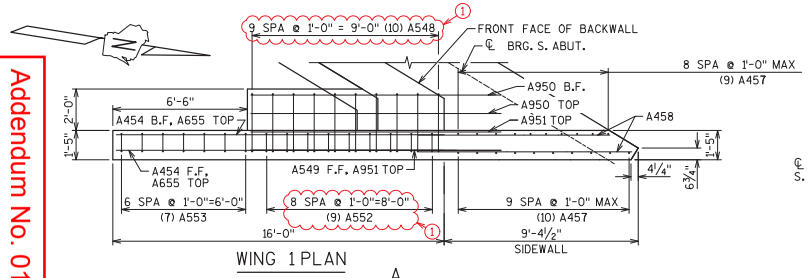
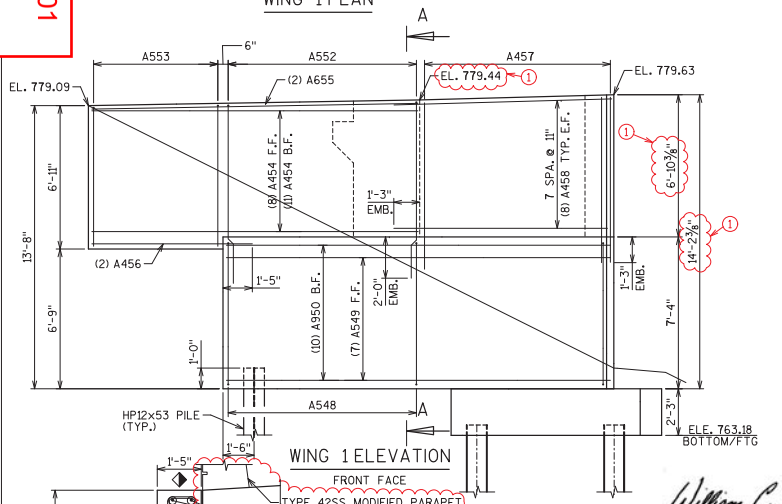
Addendum No. 01
ID 1517-07-80
Revised Sheet 649
December 8, 2016

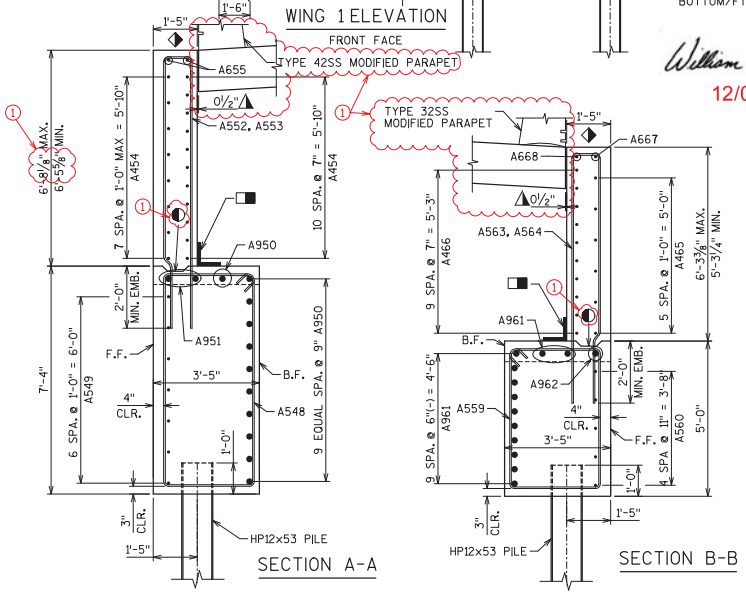
STATE PROJECT NUMBER
1517-07-80



WING 1 PLAN



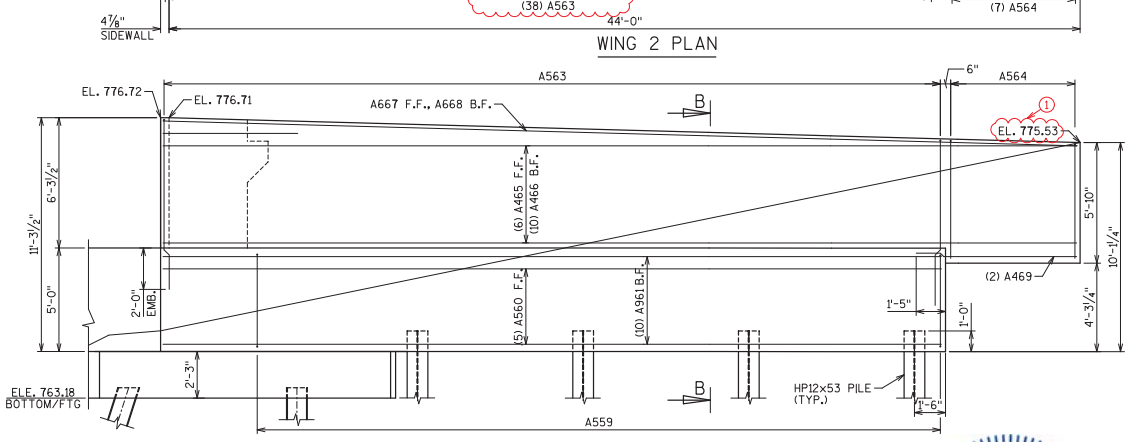
WING 1 ELEVATION



SECTION A-A

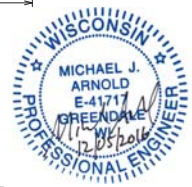
SECTION B-B

William C. Dreher SDR
12/07/16

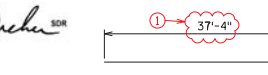


WING 2 PLAN

WING 2 ELEVATION
FRONT FACE

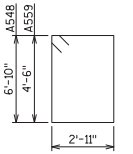


BILL OF BARS

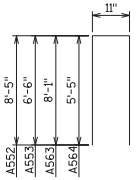


BAR MARK	COAT	NO. REQ'D	LENGTH	BAR SERIES	BENT	LOCATION
A548	X (1)	10	20'-2"		X	WING 1, BASE, VERTICAL STIRRUP
A549	X	7	18'-4"			WING 1, BASE, HORIZONTAL, F.F.
A950	X	11	10'-9"			WING 1, BASE, HORIZONTAL, B.F. AND TOP
A951	X	2	10'-9"	(1)		WING 1, BASE, HORIZONTAL, TOP
A552	X (1)	9	17'-6"		X	WING 1, STEM, VERTICAL
A553	X	7	13'-8"		X	WING 1, STEM, VERTICAL
A454	X	19	15'-8"			WING 1, STEM, HORIZONTAL, F.F. AND B.F.
A655	X	2	15'-8"			WING 1, STEM, HORIZONTAL, TOP
A456	X	2	7'-9"			WING 1, STEM, HORIZONTAL, BOTTOM
A457	X	19	8'-0"			WING 1, SIDEWALL, VERTICAL
A458	X	16	10'-6"			WING 1, SIDEWALL, HORIZONTAL
A559	X (1)	34	15'-6"		X	WING 2, BASE, VERTICAL STIRRUP
A560	X	5	37'-4"			WING 2, BASE, HORIZONTAL, F.F.
A961	X	12	38'-2"	(1)		WING 2, BASE, HORIZONTAL, B.F. AND TOP
A962	X	1	38'-7"		X	WING 2, BASE, HORIZONTAL, TOP
A563	X	38	16'-10"		X	WING 2, STEM, VERTICAL
A564	X (1)	7	11'-6"		X	WING 2, STEM, VERTICAL
A465	X	6	44'-0"			WING 2, STEM, HORIZONTAL, F.F.
A466	X	10	44'-0"	(1)		WING 2, STEM, HORIZONTAL, B.F.
A667	X	1	44'-0"			WING 2, STEM, HORIZONTAL, TOP, F.F
A668	X	1	44'-0"			WING 2, STEM, HORIZONTAL, TOP, B.F.
A469	X	2	7'-9"			WING 2, HORIZONTAL, BOTTOM

TOTAL WEIGHT = 5,360 LB (1)



A548, A559



A552, A553
A563, A564

LEGEND

(1) SLOPE 1% FOR DRAINAGE

18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE ABOVE FOOTING.

(1) OPTIONAL CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6" KEYWAY WITH MEMBRANE ON BACKFACE.

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

NO.	DATE	REVISION	BY
1	11/8/16	UPDATED NOTES, REBAR, DIMS.	JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY JDL | PLANS CK'D. DNJ

SOUTH ABUTMENT DETAILS (4 OF 5)

SHEET 8 OF 47

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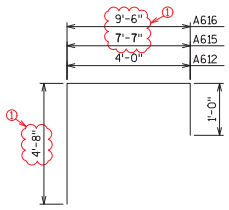
DATE: 12/3/2016
I.D.

Addendum No. 01
ID 1517-07-80
Revised Sheet 650
December 8, 2016

STATE PROJECT NUMBER
1517-07-80



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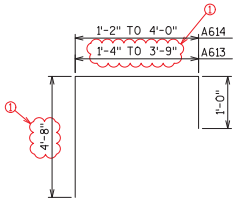

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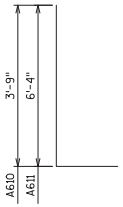

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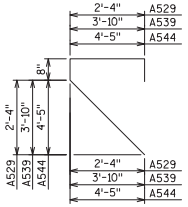

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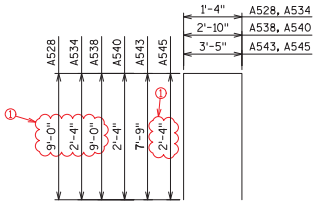

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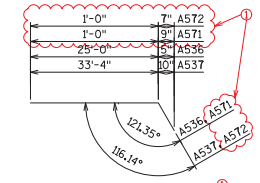

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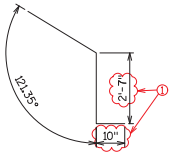

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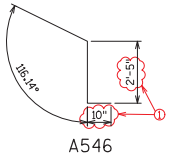

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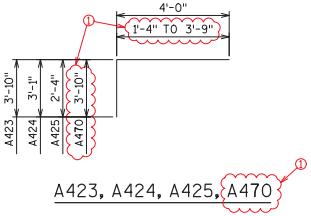

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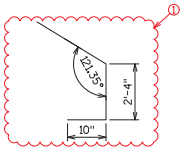

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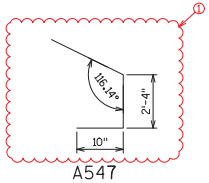

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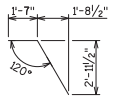


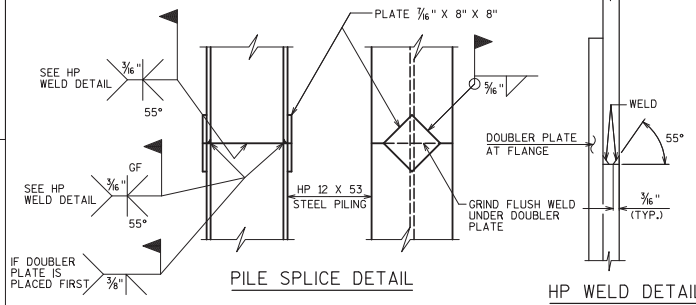
SS901

William C. Dreher SDR
12/07/16

BILL OF BARS

BAR MARK	COAT	NO. REQ'D	LENGTH	BAR SERIES	BENT	LOCATION
A701		29	6'-5"			S. ABUT - FOOTING TRANS.
A702		8	3'-10"	X		S. ABUT - FOOTING TRANS.
A703		12	3'-6"	X		S. ABUT - FOOTING TRANS.
A704		1	8'-10"			S. ABUT - FOOTING TRANS.
A705		1	13'-10"			S. ABUT - FOOTING TRANS.
A506		8	38'-4"			S. ABUT - FOOTING LONGIT.
A507		1	28'-0"			S. ABUT - FOOTING LONGIT.
A508		1	30'-4"			S. ABUT - FOOTING LONGIT.
A509		6	33'-0"			S. ABUT - FOOTING LONGIT.
A610	X	71	4'-7"		X	S. ABUT - BODY VERT.
A611	X	73	7'-2"		X	S. ABUT - BODY VERT.
A612	X	58	9'-4"		X	S. ABUT - BODY VERT.
A613	X	5	7'-11"	X	X	S. ABUT - BODY VERT.
A614	X	7	7'-11"	X	X	S. ABUT - BODY VERT.
A615	X	1	12'-11"		X	S. ABUT - BODY VERT.
A616	X	1	14'-10"		X	S. ABUT - BODY VERT.
A617	X	9	40'-6"			S. ABUT - BODY LONGIT.
A618	X	9	30'-1"			S. ABUT - BODY LONGIT.
A1019	X	9	37'-11"			S. ABUT - BODY LONGIT.
A1020	X	9	39'-3"			S. ABUT - BODY LONGIT.
A621	X	2	34'-6"			S. ABUT - BEAM SEAT LONGIT.
A622	X	2	17'-6"			S. ABUT - BEAM SEAT LONGIT.
A423	X	21	7'-9"		X	S. ABUT - BEAM SEAT VERT.
A424	X	18	7'-0"		X	S. ABUT - BEAM SEAT VERT.
A425	X	18	6'-3"		X	S. ABUT - BEAM SEAT VERT.
A426	X	20	15'-1"			S. ABUT - BEAM SEAT LONGIT.
A727		29	3'-1"			S. ABUT - FOOTING LONGIT.
A528	X	57	19'-1"		X	S. ABUT - BACKWALL VERT.
A529	X	57	6'-10"		X	S. ABUT - CORBEL VERT.
A430	X	6	27'-6"			S. ABUT - BACKWALL LONGIT.
A431	X	6	24'-11"			S. ABUT - BACKWALL LONGIT.
A432	X	6	32'-4"			S. ABUT - BACKWALL LONGIT.
A433	X	6	32'-9"			S. ABUT - BACKWALL LONGIT.
A534	X	57	5'-9"		X	S. ABUT - PAVING BLOCK VERT.
A535	X	27	7'-4"			S. ABUT - PAVING BLOCK LONGIT.
A536	X	2	25'-10"		X	S. ABUT - CORBEL LONGIT.
A537	X	2	35'-3"		X	S. ABUT - CORBEL LONGIT.
A538	X	2	20'-7"		X	S. ABUT - BACKWALL VERT.
A539	X	2	10'-6"		X	S. ABUT - CORBEL VERT.
A540	X	2	7'-3"		X	S. ABUT - PAVING BLOCK VERT.
A541	X	6	6'-1"		X	S. ABUT - BACKWALL LONGIT.
A542	X	6	5'-10"		X	S. ABUT - BACKWALL LONGIT.
A543	X	2	18'-8"		X	S. ABUT - BACKWALL VERT.
A544	X	2	11'-9"		X	S. ABUT - CORBEL VERT.
A545	X	2	7'-10"		X	S. ABUT - PAVING BLOCK VERT.
A546	X	6	5'-11"		X	S. ABUT - BACKWALL LONGIT.
A547	X	6	6'-2"		X	S. ABUT - BACKWALL LONGIT.
FOR BARS A548 TO A469 SEE "SOUTH ABUTMENT DETAILS (4 OF 5)"						
A470	X	5	6'-4"	X	X	S. ABUT - BACKWALL LONGIT.
A571	X	3	2'-4"		X	S. ABUT - PAVING BLOCK LONGIT.
A572	X	3	2'-4"		X	S. ABUT - PAVING BLOCK LONGIT.

TOTAL WEIGHT COATED = 9,880 LB
TOTAL WEIGHT UNCOATED = 1,350 LB



PILE SPLICE DETAIL

HP WELD DETAIL
(FLANGE SHOWN, WEB SIMILAR)

WISCONSIN
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PROFESSIONAL ENGINEER
12/07/2016

BAR SERIES TABLE

BAR MARK	NO. REQ'D	LENGTH
A702	1 SERIES OF 8	1'-8" TO 5'-9"
A703	1 SERIES OF 12	1'-0" TO 5'-11"
A613	1 SERIES OF 5	6'-8" TO 9'-1"
A614	1 SERIES OF 7	6'-6" TO 9'-4"
A470	1 SERIES OF 5	5'-1" TO 7'-6"

BAR MARK	NO. REQ'D	LENGTH	BENT	LOCATION
STAINLESS STEEL BARS				
SS901	33	5'-0"	X	CONC BACKWALL TO APPROACH SLAB - S. ABUT.

TOTAL WEIGHT = 570 LB

NO.	DATE	REVISION	BY
1	11/9/16	PILE NOTES, REBAR	DNJ/JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

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SOUTH ABUTMENT DETAILS (5 OF 5)

SHEET 9 OF 47

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DATE: 12/3/2016
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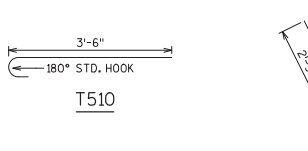
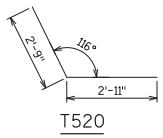
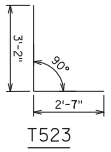
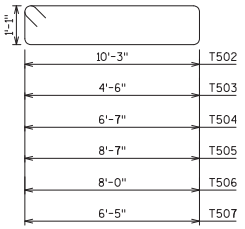
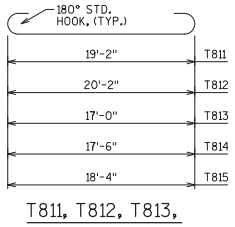








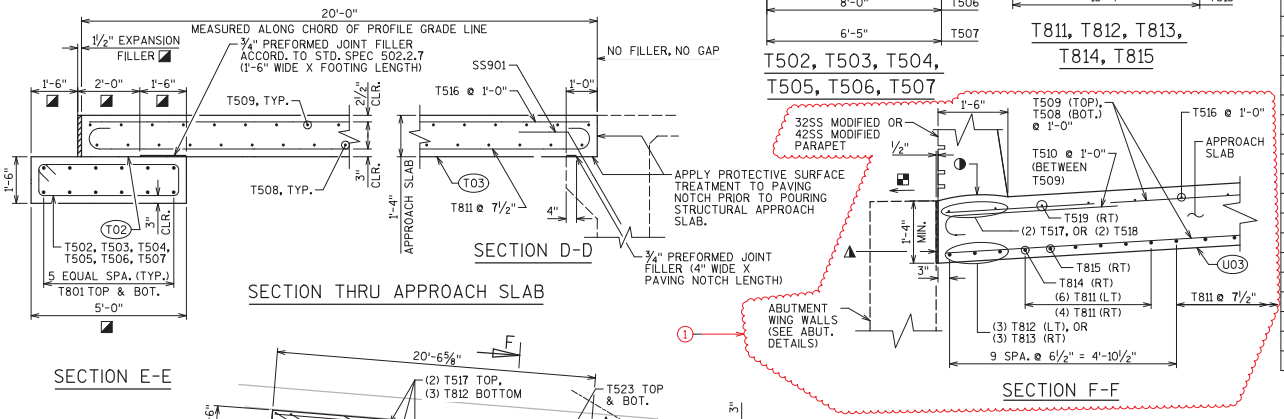


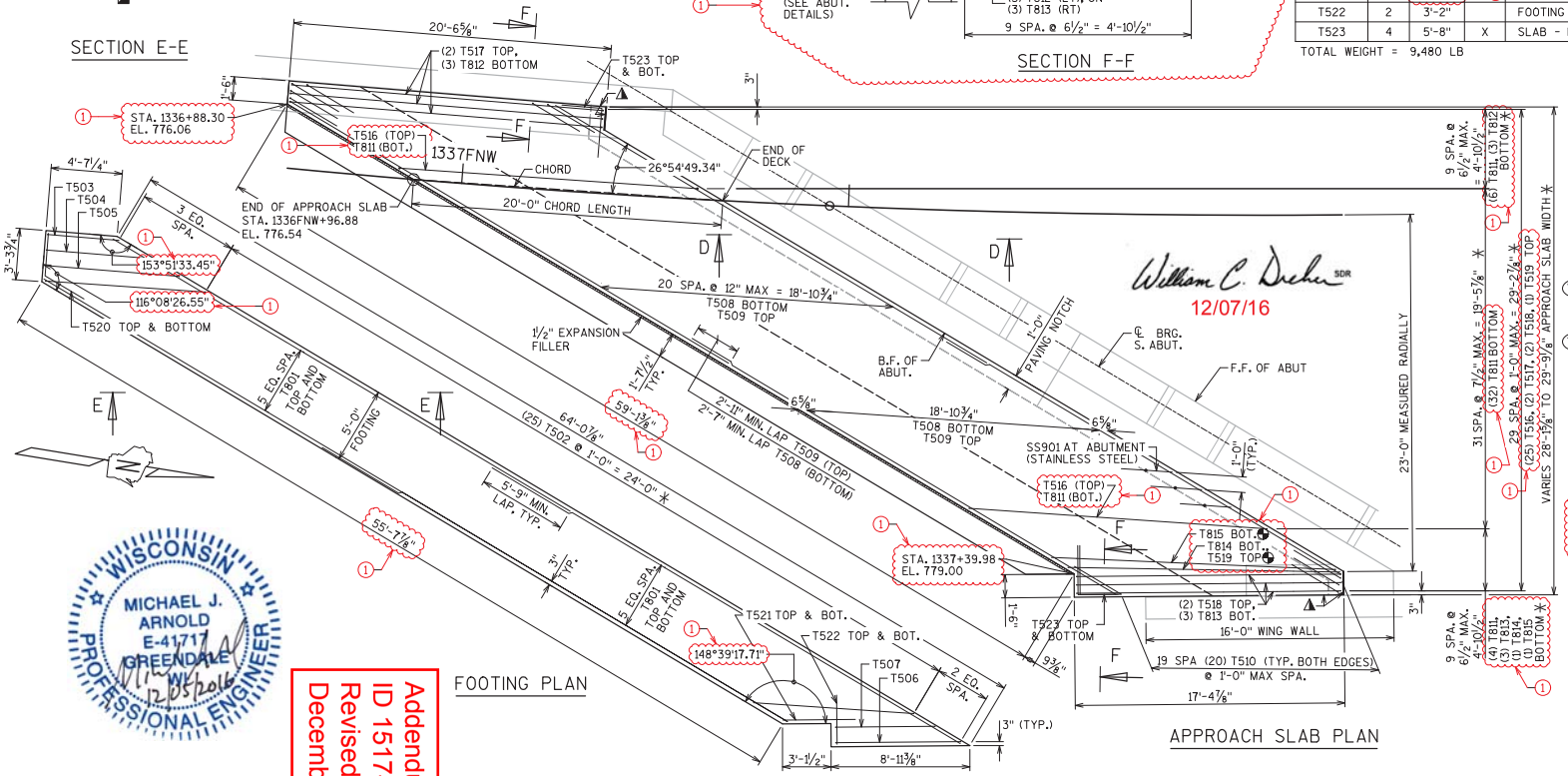
BILL OF BARS

(ALL BARS EPOXY COATED) (1)

BAR MARK	NO. REQ'D	LENGTH	BENT	LOCATION
T801	24	35'-0"		FOOTING TRANS.
T502	25	23'-4"	X	FOOTING STIRRUP
T503	1	11'-10"	X	FOOTING STIRRUP LT
T504	1	16'-0"	X	FOOTING STIRRUP LT
T505	1	20'-0"	X	FOOTING STIRRUP LT
T506	1	18'-10"	X	FOOTING STIRRUP RT
T507	1	15'-8"	X	FOOTING STIRRUP RT
T508	42	33'-5"		SLAB TRANS. - BOTTOM
T509	42	33'-7"		SLAB TRANS. - TOP
T510	40	4'-1"	X	SLAB TRANS - TOP - EACH EDGE
T811	42	21'-0"	X	SLAB LONG. - BOTTOM
T812	3	22'-0"	X	SLAB LONG. - BOTTOM
T813	3	18'-10"	X	SLAB LONG. - BOTTOM
T814	1	19'-4"	X	SLAB LONG. - BOTTOM
T815	1	20'-2"	X	SLAB LONG. - BOTTOM
T516	25	19'-2"		SLAB LONG. - TOP
T517	2	20'-2"		SLAB LONG. - TOP
T518	2	17'-0"		SLAB LONG. - TOP
T519	1	17'-6"		SLAB LONG. - TOP
T520	2	5'-8"	X	FOOTING - SW CORNER - TOP & BOTTOM
T521	2	4'-8"	(1)	FOOTING LONG. - SE CORNER - TOP & BOTTOM
T522	2	3'-2"		FOOTING TRANS. - SE CORNER - TOP & BOTTOM
T523	4	5'-8"	X	SLAB - NW & SE CORNER - TOP & BOTTOM

TOTAL WEIGHT = 9,480 LB





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12/07/16

NOTES

LONGITUDINAL APPROACH SLAB REINFORCEMENT SHALL BE PLACED PARALLEL TO THE APPROACH (NOT NORMAL TO THE CENTERLINE OF THE ABUTMENT).

FOR SS901 BARS SEE "SOUTH ABUTMENT DETAILS (3 OF 5)" SHEET.

LEGEND

- ✳ MEASURED PERPENDICULAR TO CHORD
- (T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER ENTIRE TOP OF FOOTING.
- (T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE UNDERNEATH SLAB.
- ◪ MEASURED NORMAL TO ABUTMENT BODY
- ◭ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).
- ◑ CONSTRUCTION JOINT, STRIKE OFF AS SHOWN.
- ✥ FAN T814 (BOT.), T815 (BOT.), AND T519 (TOP) AS NEEDED TO MAINTAIN 6½" MAX. SPACING.
- ◪ SLOPE TO DRAIN

NO.	DATE	REVISION	BY
1	11/15/16	NOTES AND CALLOUTS	DNJ

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

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SOUTH ABUTMENT APPROACH SLAB

SHEET 10 OF 47

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DATE: 12/3/2016
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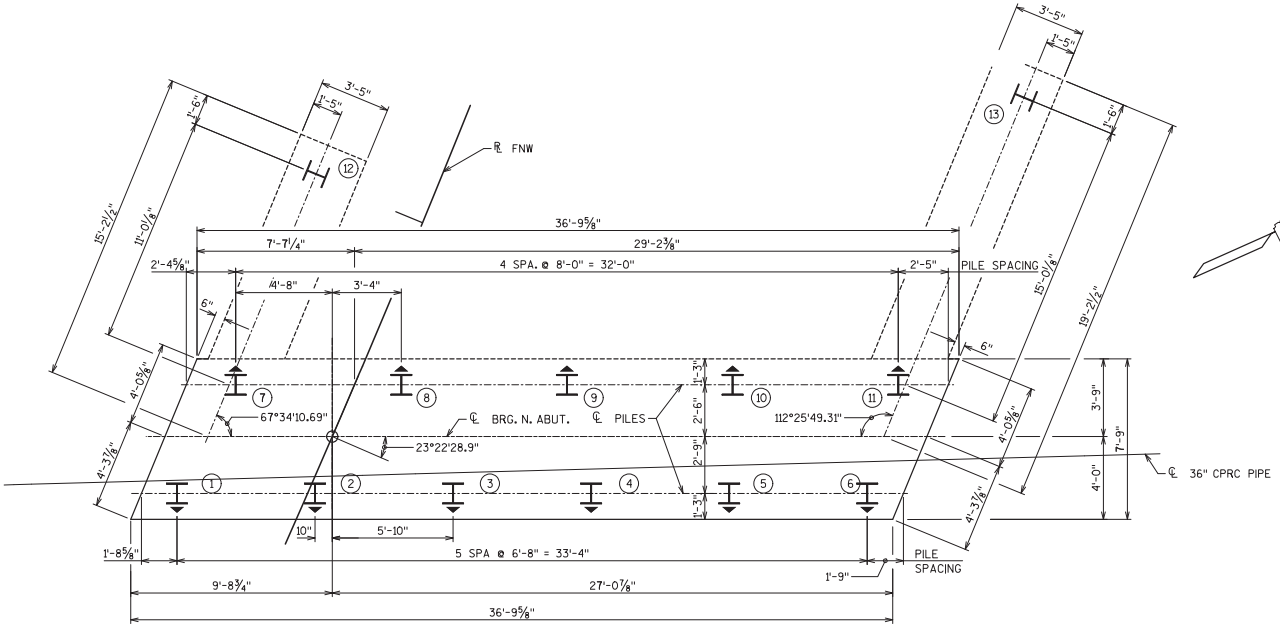
12/05/2016

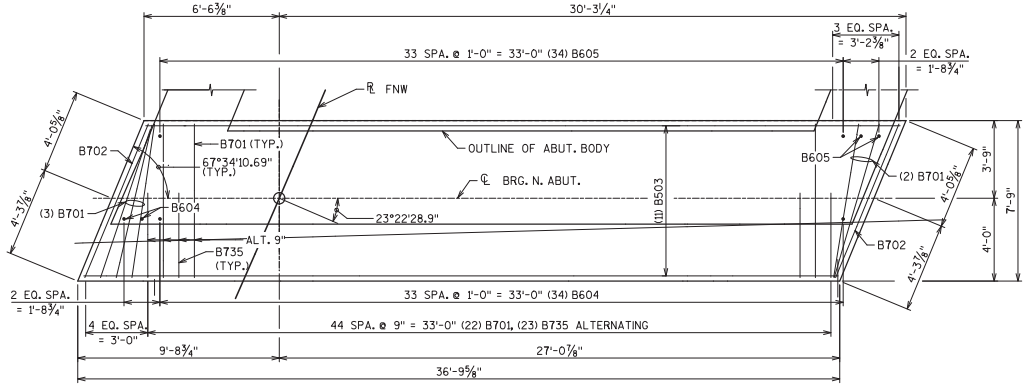
Addendum No. 01
ID 1517-07-80
Revised Sheet 651
December 8, 2016

STATE PROJECT NUMBER
1517-07-80

Addendum No. 01
ID 1517-07-80
Revised Sheet 652
December 8, 2016



PILE PLAN



FOOTING PLAN

SHOWING FOOTING REINF.

LEGEND

- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE ABOVE FOOTING.
- DIRECTION OF BATTERED PILE.

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12/07/16

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12/05/2016

PILE NOTE

① ABUTMENT TO BE SUPPORTED ON HP 12x53 STEEL PILING FOUNDED ON BEDROCK. PILES TO BE DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 140 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED DRIVEN PILE LENGTH IS 31 FEET. DRIVEN PILES REQUIRE PILE POINTS.

NOTES

SEE SHEET "SOUTH ABUTMENT DETAILS (5 OF 5)" FOR PILE SPLICE DETAIL.

NO.	DATE	REVISION	BY
1	1/18/16	ADDED PILE NOTE	DNJ

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

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NORTH ABUTMENT DETAILS (1 OF 4)

SHEET 11 OF 47

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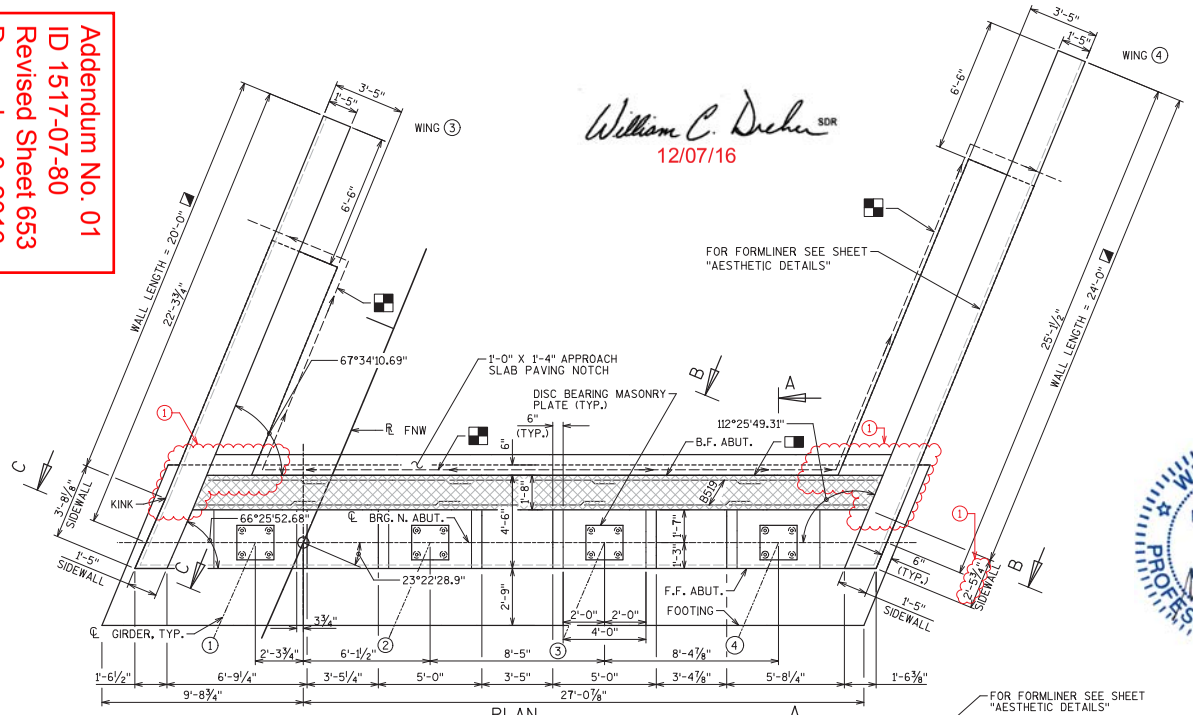
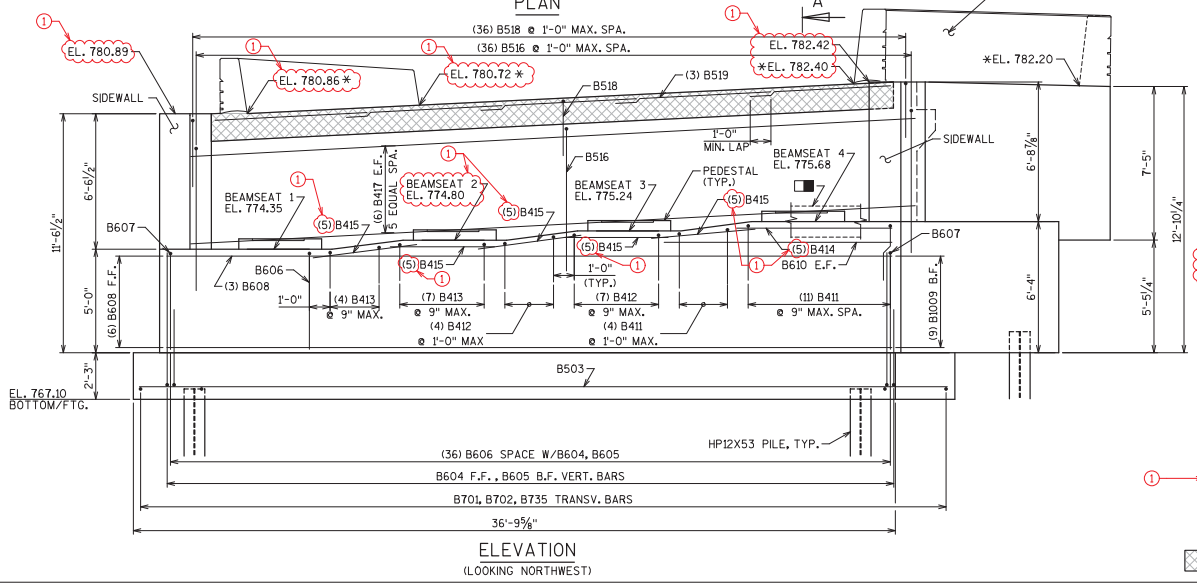
I.D.

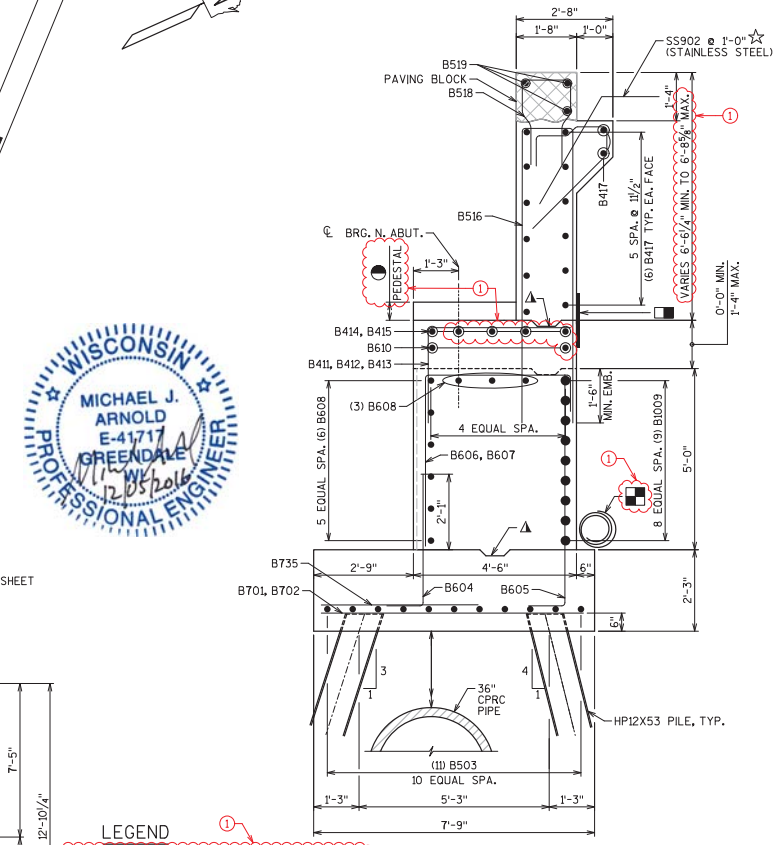
Addendum No. 01
ID 1517-07-80
Revised Sheet 653
December 8, 2016

STATE PROJECT NUMBER
1517-07-80





ELEVATION
(LOOKING NORTHWEST)



SECTION A-A

LEGEND

① SEE SHEET "BEARING PEDESTAL DETAILS" FOR PEDESTAL DIMENSIONS AND REINFORCEMENT.

☆ SS902 STAINLESS STEEL BARS PLACED AT 1'-0". SEE SHEETS "NORTH ABUTMENT APPROACH SLAB DETAILS", AND "NORTH ABUTMENT DETAILS (4 OF 4)".

18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE ABOVE FOOTING.

KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2'X6".

ELEVATIONS GIVEN AT THE TOE OF THE PARAPET.

① DIMENSIONS TAKEN AT INSIDE FACE OF WALL.

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

INDICATES CONCRETE AREA TO BE POURED AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE.

NOTES

FOR SECTIONS B-B AND C-C, SEE SHEET "NORTH ABUTMENT DETAILS (3 OF 4)".

NO.	DATE	REVISION	BY
1	11/15/16	CALLOUTS/ADDED B610 BAR	DNJ/JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

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NORTH ABUTMENT DETAILS (2 OF 4)

SHEET 12 OF 47

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DATE: 12/3/2016
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GREENDALE
PROFESSIONAL ENGINEER
12/05/2016

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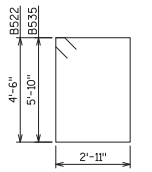
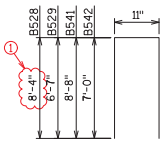
12/07/16

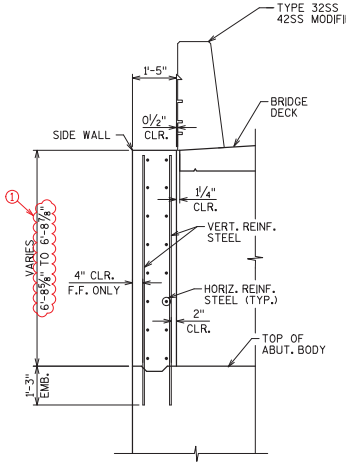
STATE PROJECT NUMBER
1517-07-80



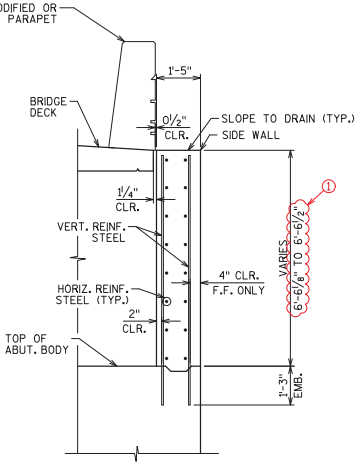
B522, B535



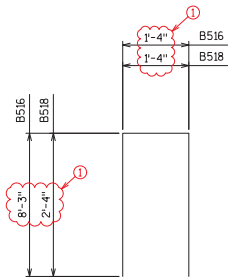
B528, B529, B541, B542



SECTION B-B



SECTION C-C



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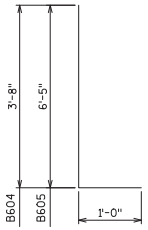

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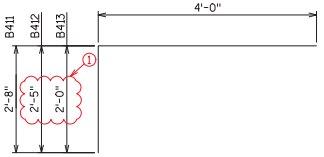
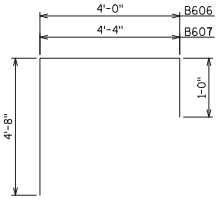


B411, B412, B413



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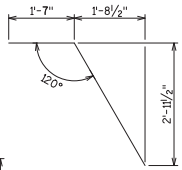
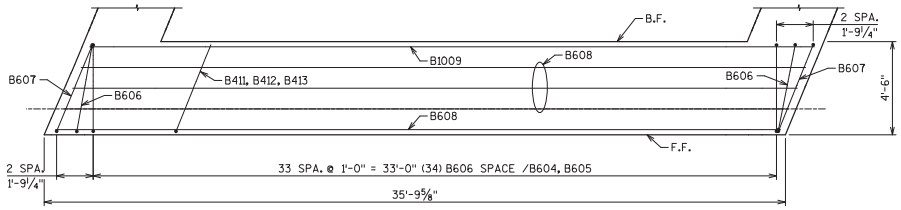


SS902



PLAN OF N. ABUT. BODY
SHOWING REINF.

Addendum No. 01
ID 1517-07-80
Revised Sheet 654
December 8, 2016

BILL OF BARS

BAR MARK	COAT	NO. REQ'D	LENGTH	BAR SERIES	BENT	LOCATION
B701		27	7'-5"			FOOTING, TRANSVERSE
B702	①	2	8'-0"			FOOTING, TRANSVERSE
B503		11	36'-5"			FOOTING, LONGITUDINAL
B604		36	4'-6"		X	FOOTING, BODY VERTICAL, FRONT FACE
B605		36	7'-3"		X	FOOTING, BODY VERTICAL, BACK FACE
B606	X	36	9'-4"		X	BODY STIRRUPS
B607	X	2	9'-8"	①	X	BODY STIRRUPS
B608	X	9	35'-1"			BODY, HORIZONTAL, FRONT FACE, TOP
B1009	X	9	35'-1"			BODY, HORIZONTAL, BACK FACE
B610	X	2	11'-0"			BODY, HORIZONTAL, BOLSTER
B411	X	15	6'-9"		X	BODY, TRANSVERSE, BEAM SEAT
B412	X	11	6'-4"		X	BODY, TRANSVERSE, BEAM SEAT
B413	X	11	5'-11"		X	BODY, TRANSVERSE, BEAM SEAT
B414	X	5	7'-7"			BODY, LONGITUDINAL, BEAM SEAT
B415	X	25	5'-1"			BODY, LONGITUDINAL, BEAM SEAT
B516	X	36	17'-7"	①	X	BACKWALL, VERTICAL
B417	X	14	35'-1"			BACKWALL, HORIZONTAL
B518	X	36	5'-9"		X	PAVING BLOCK, VERTICAL
B519	X	15	7'-4"	①		PAVING BLOCK, HORIZONTAL
B520						BAR MARK NOT USED
B521						BAR MARK NOT USED
B522	X	13	15'-6"		X	WING 3, BASE, VERTICAL STIRRUP
B523	X	5	16'-8"			WING 3, BASE, HORIZONTAL, F.F.
B924	X	10	15'-3"			WING 3, BASE, HORIZONTAL, B.F.
B925	X	1	15'-5"			WING 3, BASE, HORIZONTAL, TOP
B926	X	1	16'-1"			WING 3, BASE, HORIZONTAL, TOP
B927	X	1	16'-5"			WING 3, BASE, HORIZONTAL, TOP
B528	X	13	17'-4"	①	X	WING 3, STEM, VERTICAL
B529	X	7	13'-10"		X	WING 3, STEM, VERTICAL
B430	X	16	19'-8"			WING 3, STEM, HORIZONTAL, F.F. AND B.F.
B631	X	2	19'-8"			WING 3, STEM, HORIZONTAL, TOP
B432	X	2	7'-9"			WING 3, STEM, HORIZONTAL, BOTTOM
B433	X	10	7'-7"			WING 3, SIDEWALL, VERTICAL
B434	X	14	5'-0"	①		WING 3, SIDEWALL, HORIZONTAL
B535	X	17	18'-2"		X	WING 4, BASE, VERTICAL STIRRUP
B536	X	6	19'-8"			WING 4, BASE, HORIZONTAL, F.F.
B937	X	10	20'-10"			WING 4, BASE, HORIZONTAL, B.F.
B938	X	1	20'-6"			WING 4, BASE, HORIZONTAL, TOP
B939	X	1	20'-1"			WING 4, BASE, HORIZONTAL, TOP
B940	X	1	19'-5"			WING 4, BASE, HORIZONTAL, TOP
B541	X	17	18'-0"		X	WING 4, STEM, VERTICAL
B542	X	7	14'-8"		X	WING 4, STEM, VERTICAL
B443	X	18	23'-6"			WING 4, STEM, HORIZONTAL, F.F AND B.F.
B644	X	2	23'-6"			WING 4, STEM, HORIZONTAL, TOP
B445	X	2	7'-9"			WING 4, HORIZONTAL, BOTTOM
B446	X	8	7'-11"			WING 4, SIDEWALL, VERTICAL
B447	X	16	4'-6"			WING 4, SIDEWALL, HORIZONTAL

TOTAL COATED WEIGHT = 7,920 LB ①
TOTAL UNCOATED WEIGHT = 1,500 LB

BAR MARK	NO. REQ'D	LENGTH	BENT	LOCATION
STAINLESS STEEL BARS				
SS902	31	5'-0"	X	CONC BACKWALL TO APPROACH SLAB - N. ABUT.

TOTAL WEIGHT = 530 LB

William C. Dreher SDR
12/07/16

WISCONSIN
MICHAEL J. ARNOLD
E-41717
GREENDALE WI
12/05/2016
PROFESSIONAL ENGINEER

NO.	DATE	REVISION	BY
1	11/15/16	REBAR/ DIMENSIONS	DNJ/JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY DNJ/EAN | PLANS CK'D. JDL

NORTH ABUTMENT DETAILS (3 OF 4)

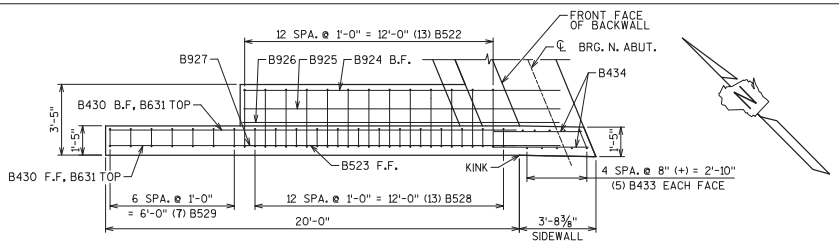
SHEET 13 OF 47

654

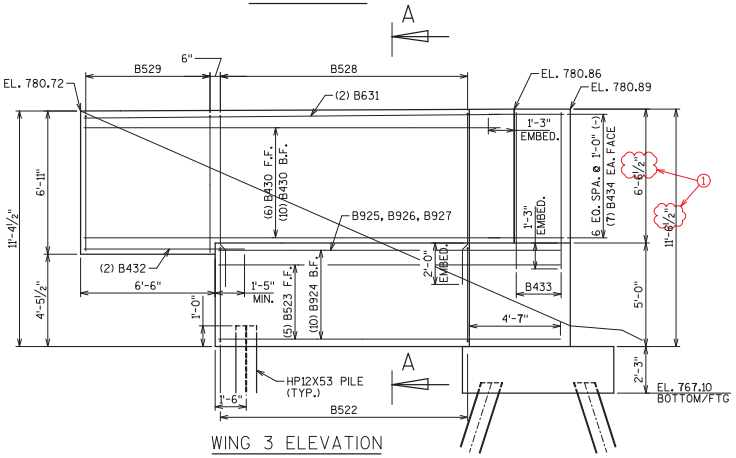
FILE= \\s1102k306\projects\Transportation\US 10 WIS 441\CADD\sheets\Structures\B-70-407\Sheets\07-80 Plan Set\13-B-70-407_N_Abut_3.dgn

DATE: 12/3/2016
I.D.

STATE PROJECT NUMBER
1517-07-80

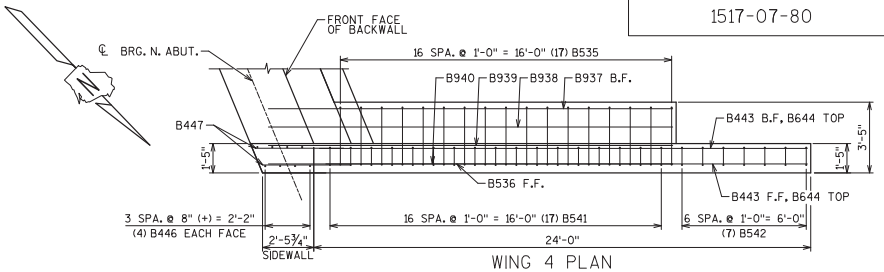


WING 3 PLAN



WING 3 ELEVATION

FRONT FACE



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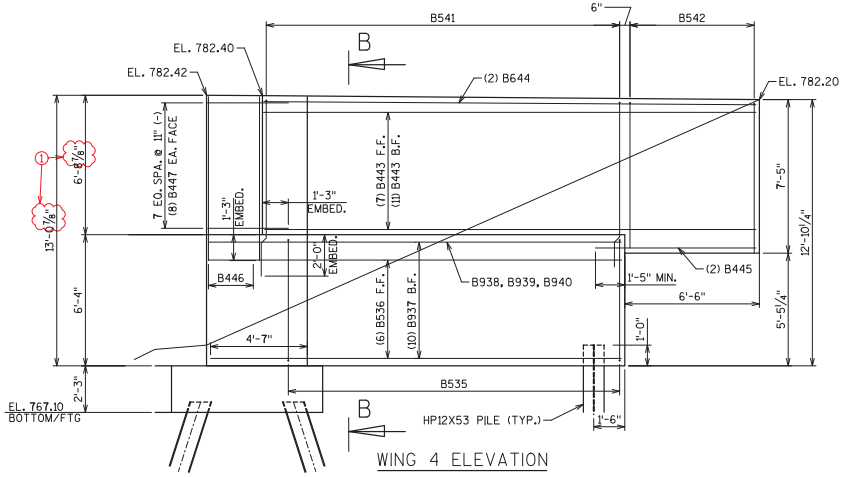
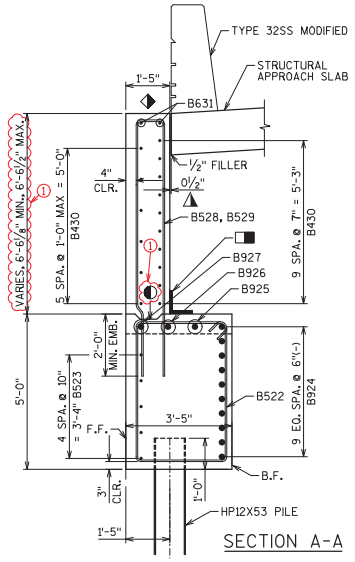
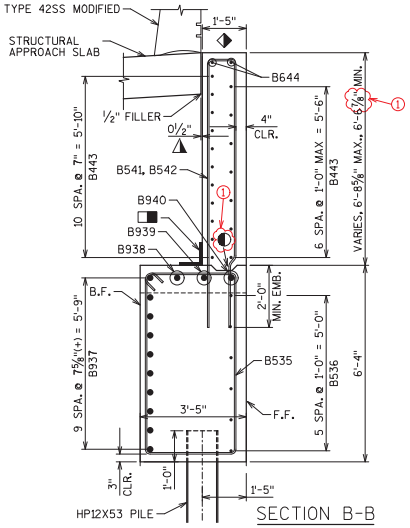


WING 4 ELEVATION

FRONT FACE



SECTION A-A



SECTION B-B

Addendum No. 01
ID 1517-07-80
Revised Sheet 655
December 8, 2016

William C. Dreher SDR
12/07/16

LEGEND

① SLOPE 1% FOR DRAINAGE.

18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE ABOVE FOOTING.

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

① OPTIONAL CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6" KEYWAY WITH MEMBRANE ON BACKFACE.

NO.	DATE	REVISION	BY
1	11/8/16	ADDED NOTE, UPDATED DIMENSIONS	JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY	JDL	PLANS CK'D.	DNJ

NORTH ABUTMENT DETAILS (4 OF 4)

SHEET 14 OF 47

655

DATE: 12/3/2016
I.D.

FILE= \\s1102k306\projects\Transportation\US 10 WIS 441\CADD\sheets\Structures\B-70-407\Sheets\07-80 Plan Set\14-B-70-407_N_Abut_4.dgn

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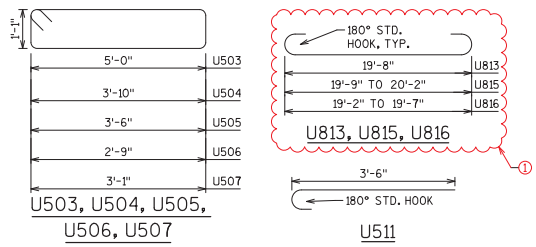
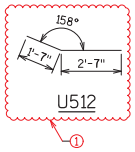
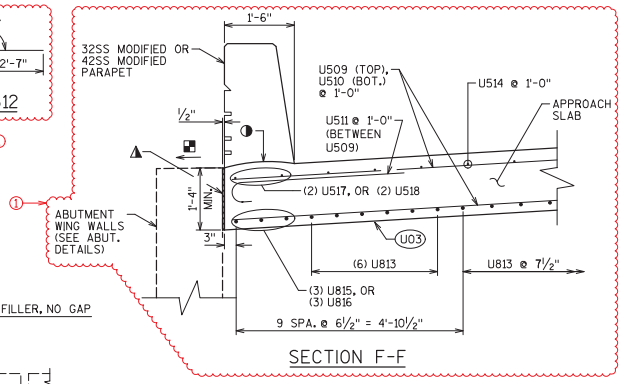
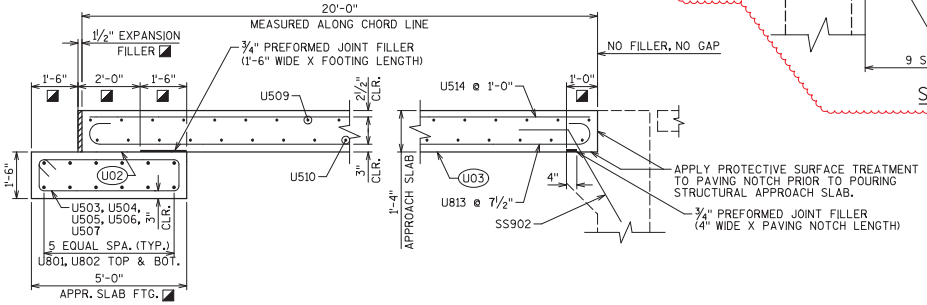
STATE PROJECT NUMBER
1517-07-80









BILL OF BARS

(ALL BARS EPOXY COATED)

BAR MARK	NO. REQ'D	LENGTH	BENT	SERIES	LOCATION
U801	16	19'-0"			FOOTING TRANS.
U802	4	28'-10"			FOOTING TRANS.
U503	28	12'-10"	X		FOOTING STIRRUP
U504	1	10'-6"	X		FOOTING STIRRUP LT
U505	1	9'-10"	X		FOOTING STIRRUP LT
U506	1	8'-4"	X		FOOTING STIRRUP RT
U507	1	9'-0"	X		FOOTING STIRRUP RT
U508	4	3'-2"			FOOTING PARAPET NOTCH - TOP & BOTTOM - EACH SIDE
U509	42	17'-7"			SLAB TRANS. TOP
U510	42	17'-5"			SLAB TRANS. BOTTOM
U511	40	4'-1"	X		SLAB TRANS. TOP - EACH EDGE
U512	4	4'-2"	X		SLAB TOP & BOTTOM (1) EACH CORNER AT END OF APPR. SLAB
U813	45	21'-6"	X		SLAB LONG. BOTTOM
U514	27	19'-8"			SLAB LONG. TOP
U815	3	21'-10"	X	X	SLAB LONG. BOTTOM LT
U816	3	21'-3"	X	X	SLAB LONG. BOTTOM RT
U517	2	20'-0"		X	SLAB LONG. TOP LT
U518	2	19'-5"		X	SLAB LONG. TOP RT

TOTAL WEIGHT = 6,830 LB

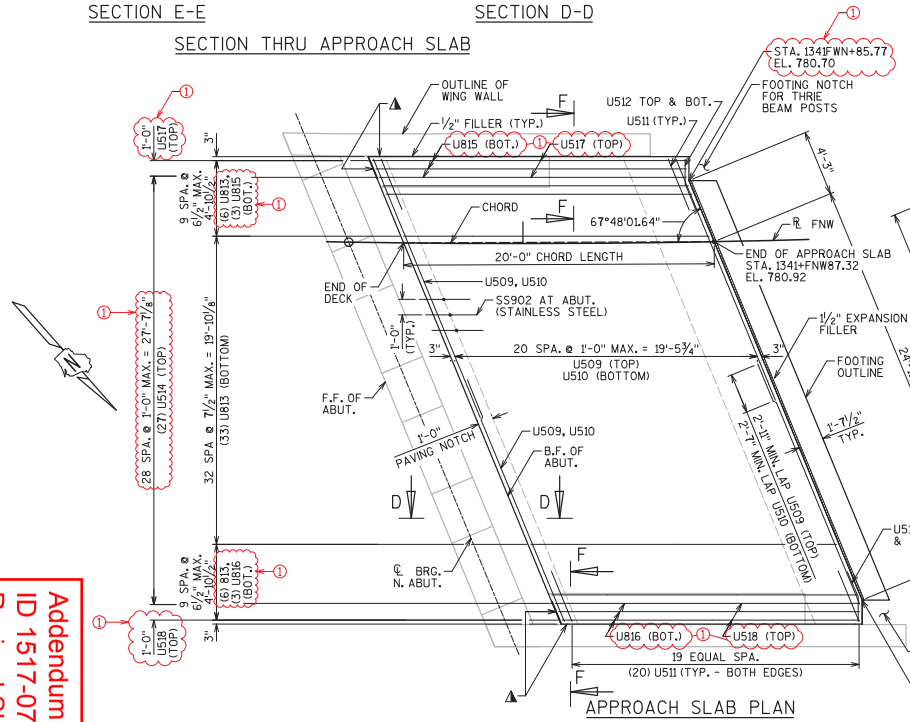
BAR SERIES TABLE

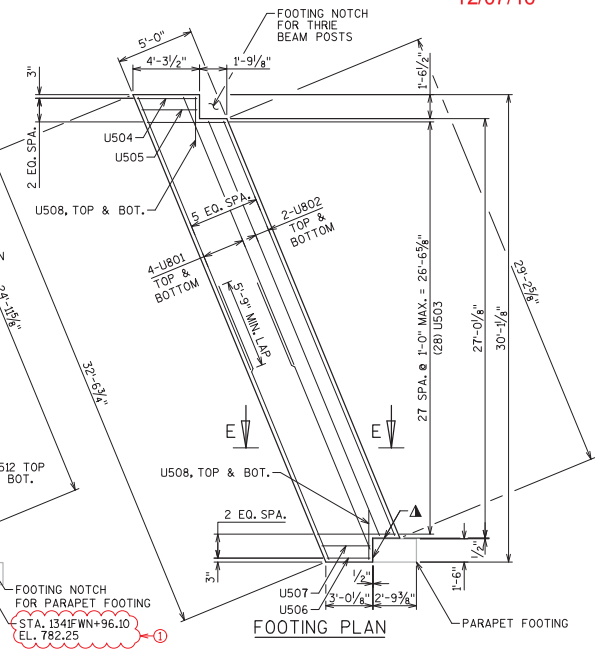
BAR MARK	NO. REQ'D	LENGTH
U815	1 SERIES OF 3	21'-7" TO 22'-0"
U816	1 SERIES OF 3	21'-0" TO 21'-5"
U517	1 SERIES OF 2	19'-9" TO 20'-2"
U518	1 SERIES OF 2	19'-2" TO 19'-7"

WISCONSIN MICHAEL J. ARNOLD E-41717 GREENDALE PROFESSIONAL ENGINEER 12/05/2016

William C. Drehe SDR 12/07/16

SECTION THRU APPROACH SLAB





NOTES

LONGITUDINAL APPROACH SLAB REINFORCEMENT SHALL BE PLACED PARALLEL TO THE APPROACH (NOT NORMAL TO THE CENTERLINE OF THE ABUTMENT)

FOR SS902 BARS SEE "NORTH ABUTMENT DETAILS (3 OF 4)" SHEET.

LEGEND

(U02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER ENTIRE TOP OF FOOTING.

(U03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

◪ MEASURED NORMAL TO ABUTMENT.

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

◑ CONSTRUCTION JOINT, STRIKE OFF AS SHOWN.

(1) ◪ SLOPE TO DRAIN

NO.	DATE	REVISION	BY
1	11/15/16	NOTES AND CALLOUTS	DNJ

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY DNJ | PLANS CK'D. JDL

NORTH ABUTMENT APPROACH SLAB

SHEET 15 OF 47

656

DATE: 12/3/2016

I.D.

FILE= \\s1102k306\projects\Transportation\US 10 WIS 441\CADD\sheets\Structures\B-70-407\Sheets\07-80 Plan Set\15-B-70-407_N_Abut_approach slab.

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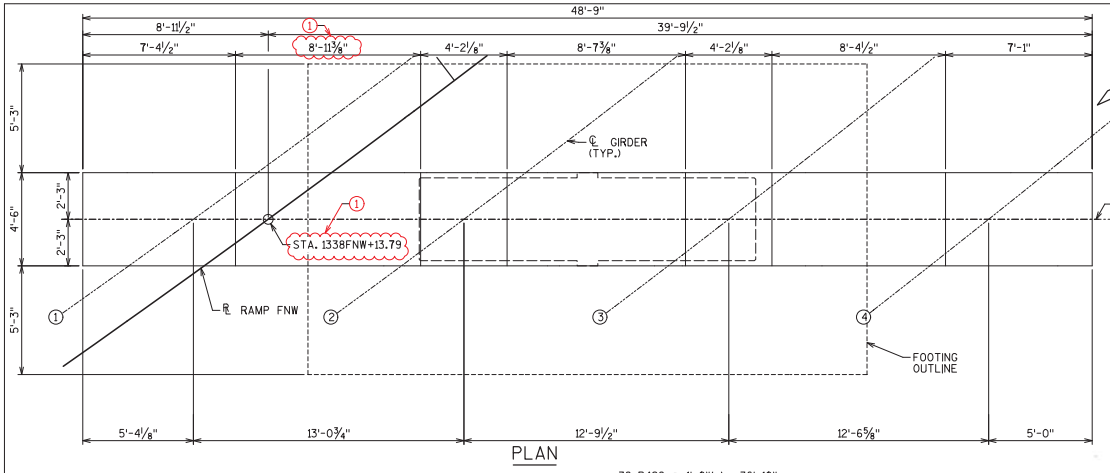
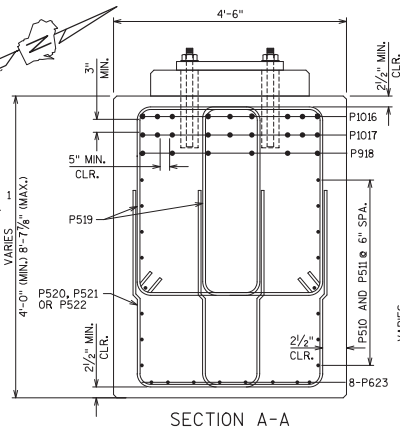
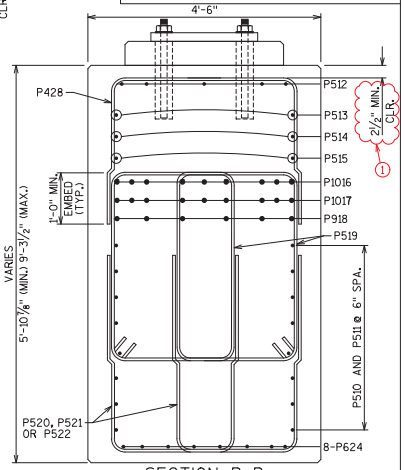
Addendum No. 01
ID 1517-07-80
Revised Sheet 656
December 8, 2016



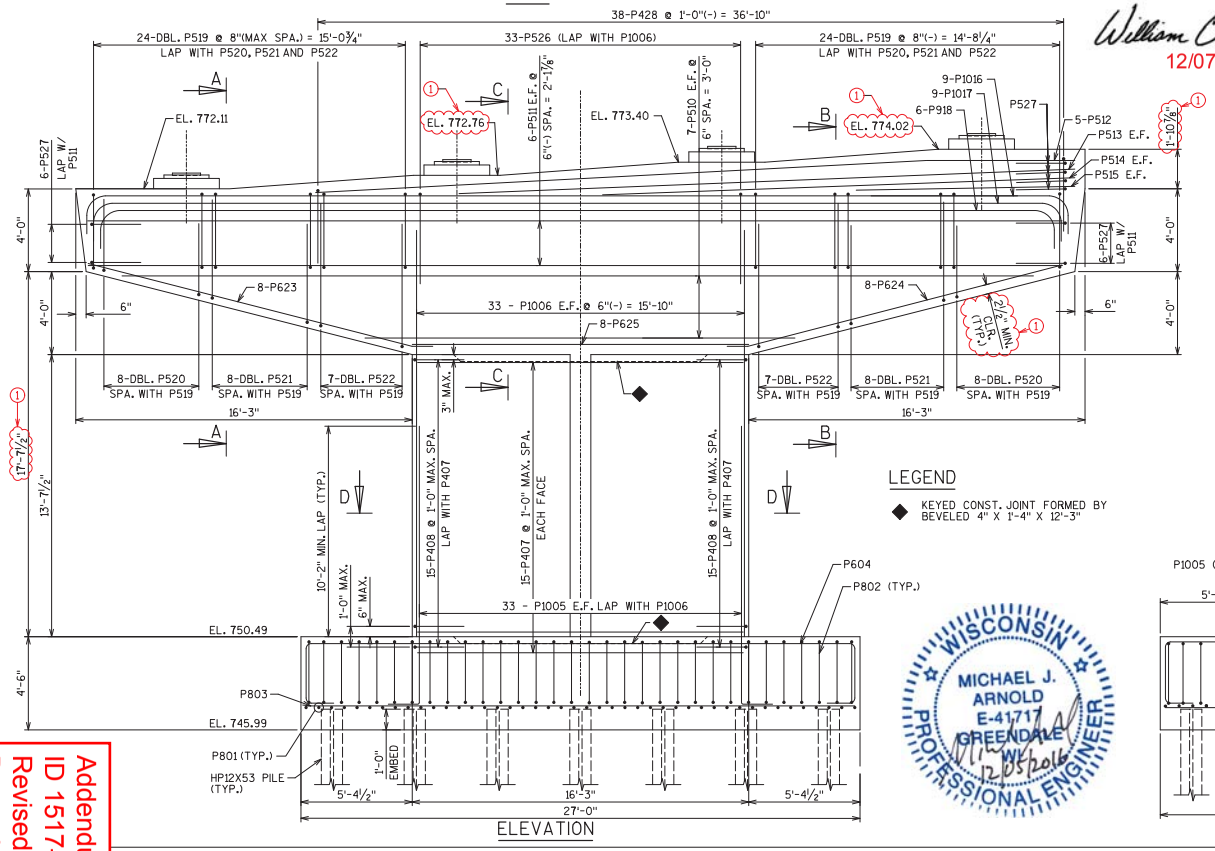
PLAN



SECTION A-A



SECTION B-B

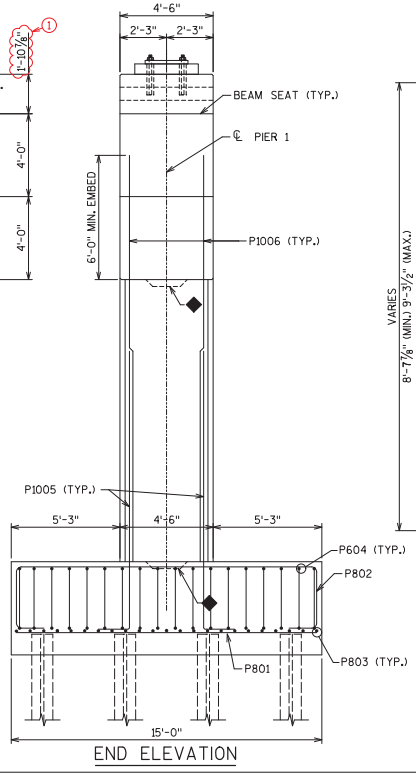


ELEVATION

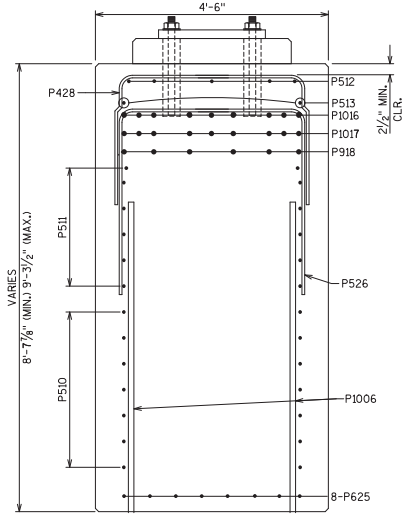
LEGEND

◆ KEYED CONST. JOINT FORMED BY BEVELED 4" X 1'-4" X 12'-3"

William C. Dreher SDR
12/07/16



END ELEVATION



SECTION C-C

NO.	DATE	REVISION	BY
1	11/15/16	UPDATED DIMENSIONS	DNJ/JDL

STATE PROJECT NUMBER
1517-07-80

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY DNJ | PLANS CK'D. JDL

PIER 1 DETAILS

SHEET 16 OF 47

657

DATE: 12/3/2016
I.D.

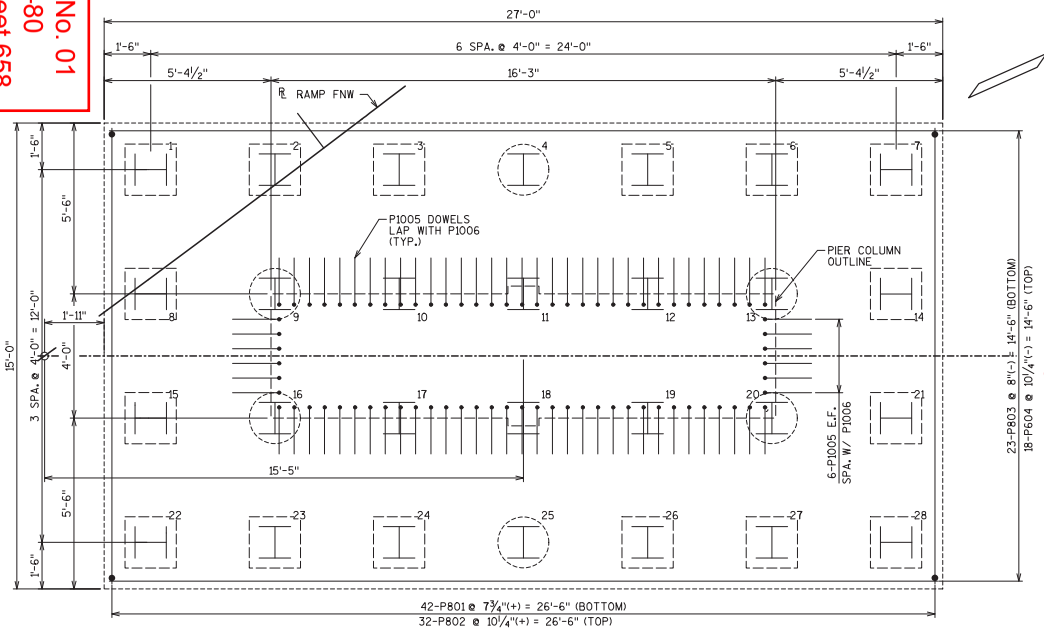
FILE= \\s1102k306\projects\Transportation\US 10 WIS 441\CADD\sheets\Structures\B-70-407\Sheets\07-80 Plan Set\16-B-70-407_Pier1_1.dgn

MICHAEL J. ARNOLD E-41717 GREENDALE WI 12/05/2016 PROFESSIONAL ENGINEER WISCONSIN

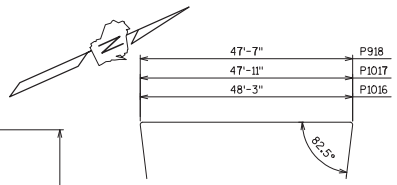
Addendum No. 01
ID 1517-07-80
Revised Sheet 657
December 8, 2016

Addendum No. 01
ID 1517-07-80
Revised Sheet 658
December 8, 2016

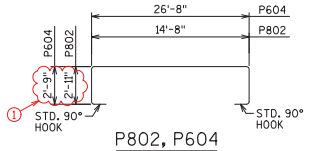
STATE PROJECT NUMBER
1517-07-80



FOOTING PLAN



P1016, P1017, P918



P802, P604

LEGEND

INDICATES PILE UPLIFT DETAIL REQUIRED

INDICATES PRE-BORE PILE 3'-6" INTO ROCK AND UPLIFT DETAIL REQUIRED

BILL OF BARS

BAR MARK	COAT	NO. REQ'D	LENGTH	BAR SERIES	BENT	LOCATION
P801		42	14'-8"			PIER 1 FOOTING
P802		32	22'-4"		X	PIER 1 FOOTING
P803		23	26'-8"	1		PIER 1 FOOTING
P604		18	33'-6"		X	PIER 1 FOOTING
P1005	X	80	15'-1"		X	PIER 1 FOOTING DOWELS
P1006	X	80	19'-8"			PIER 1 SHAFT VERTICAL
P407	X	30	15'-9"			PIER 1 SHAFT STIRRUP
P408	X	30	8'-1"		X	PIER 1 SHAFT STIRRUP
P409	X	105	4'-8"		X	PIER 1 SHAFT TIES
P510	X	14	31'-7"	X		PIER 1 CAP LATERAL
P511	X	12	47'-4"			PIER 1 CAP LATERAL
P512	X	5	37'-0"		X	PIER 1 CAP BEAM SEAT LATERAL
P513	X	2	30'-1"			PIER 1 CAP BEAM SEAT LATERAL
P514	X	2	23'-2"			PIER 1 CAP BEAM SEAT LATERAL
P515	X	2	10'-10"			PIER 1 CAP BEAM SEAT LATERAL
P1016	X	9	51'-3"		X	PIER 1 CAP LATERAL
P1017	X	9	50'-11"		X	PIER 1 CAP LATERAL
P918	X	6	50'-3"		X	PIER 1 CAP LATERAL
P519	X	96	13'-4"		X	PIER 1 CAP STIRRUPS
P520	X	32	9'-8"		X	PIER 1 CAP STIRRUPS
P521	X	32	12'-8"	1	X	PIER 1 CAP STIRRUPS
P522	X	28	14'-8"		X	PIER 1 CAP STIRRUPS
P623	X	8	17'-0"		X	PIER 1 CAP LATERAL
P624	X	8	17'-0"		X	PIER 1 CAP LATERAL
P625	X	8	16'-3"			PIER 1 CAP LATERAL
P526	X	33	9'-6"		X	PIER 1 CAP VERTICAL
P527	X	16	8'-10"		X	PIER 1 CAP ENDS
P428	X	38	9'-7"		X	PIER 1 CAP BEAM SEAT VERTICAL
P629		44	9'-1"		X	PIER 1 UPLIFT CONNECTION

TOTAL UNCOATED WEIGHT = 6,700 LB
TOTAL COATED WEIGHT = 22,960 LB ①

PILE NOTE

PIER 1 TO BE SUPPORTED ON HP 12 X 53 STEEL PILING FOUNDED ON BEDROCK. DRIVEN PILES TO BE DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 170 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED DRIVEN PILE LENGTH IS 9 FEET. DRIVEN PILES REQUIRE PILE POINTS.

PRE-BORED PILES TO BE PRE-BORED 3'-6" INTO SOUND BEDROCK. BACKFILL ROCK SOCKET WITH CEMENT GROUT. PRE-BORED PILES ARE NOT DRIVEN AND DO NOT REQUIRE PILE POINTS. PRE-BORING IS PAID UNDER BID ITEM 550.0020 "PRE-BORING ROCK OR CONSOLIDATED MATERIALS." ESTIMATED PRE-BORED PILE LENGTH IS 13 FEET.

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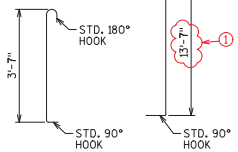
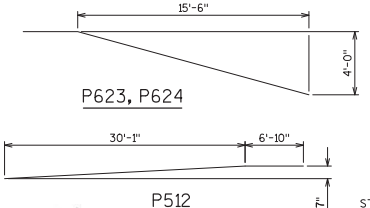
WI
PROFESSIONAL ENGINEER
12/07/2016



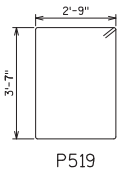
P409

P1005



P623, P624

P512



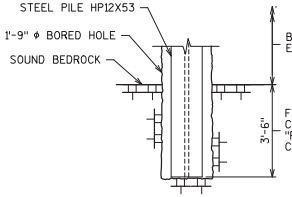
P519

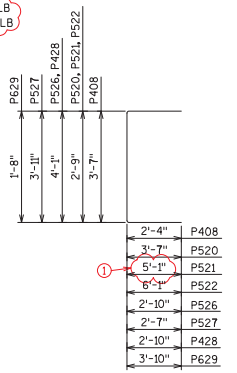
12/07/16

BAR SERIES TABLE

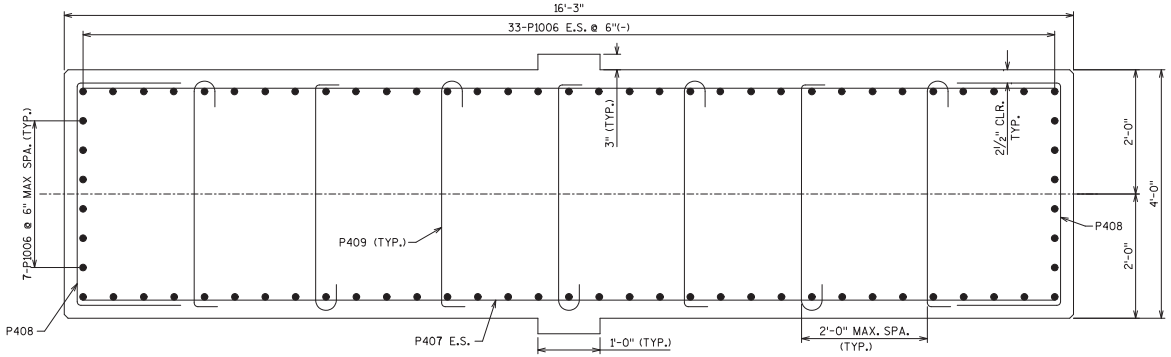
BAR MARK	NO. REQUIRED	LENGTH
P510	2 SERIES OF 7	19'-9" TO 43'-5"

LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS. BUNDLE AND TAG EACH SERIES SEPARATELY.



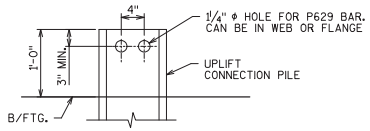


P408, P520, P521, P522, P526, P527, P428, P629



SECTION D-D

DETAIL FOR PILE ANCHOR IN ROCK



UPLIFT CONNECTION DETAIL

NO.	DATE	REVISION	BY
1	11/9/16	REBAR	JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY DNJ | PLANS CK'D. JDL

PIER 1
DETAILS 2

SHEET 17 OF 47

658

DATE: 12/3/2016
I.D.

FILE= \\s1102k306\projects\Transportation\US 10 WIS 441\CADD\sheets\Structures\B-70-407\Sheets\07-80 Plan Set\17-B-70-407_Pier1_2.dgn

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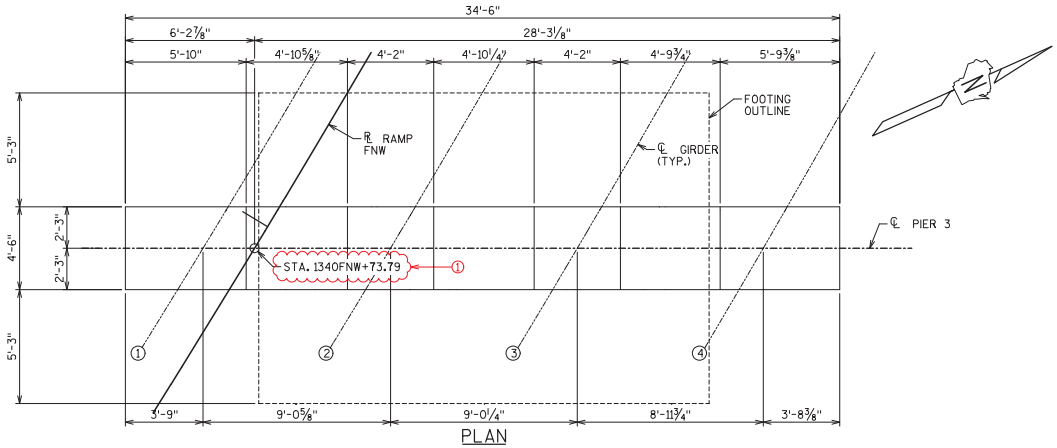
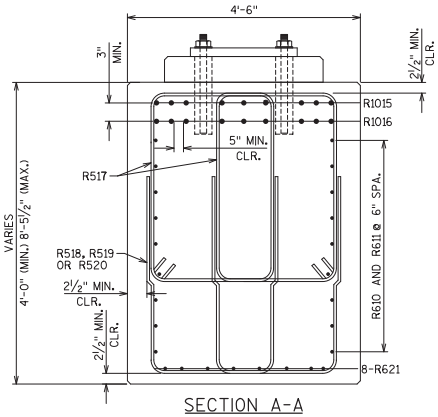
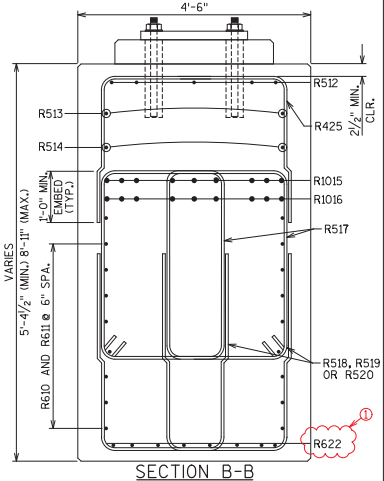


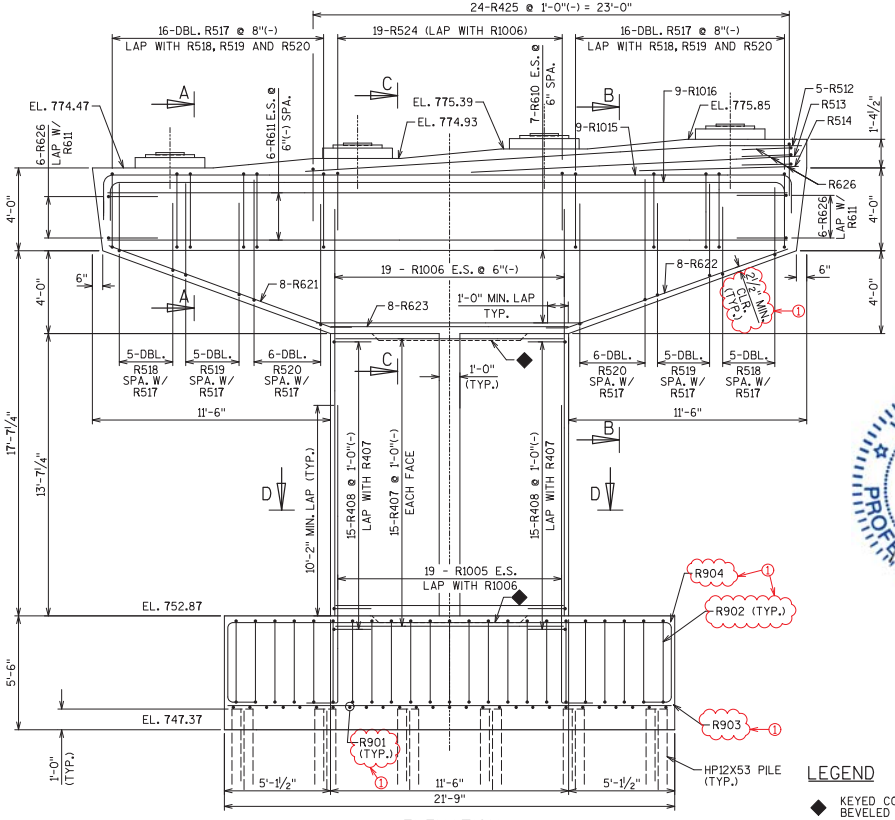
PLAN



SECTION A-A



SECTION B-B



ELEVATION

William C. Drehe SDR
12/07/16

Addendum No. 01
ID 1517-07-80
Revised Sheet 661
December 8, 2016

WISCONSIN
MICHAEL J. ARNOLD
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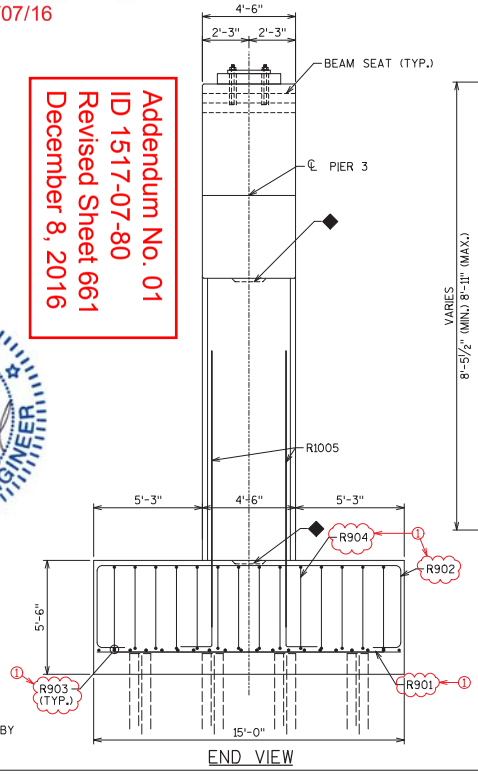
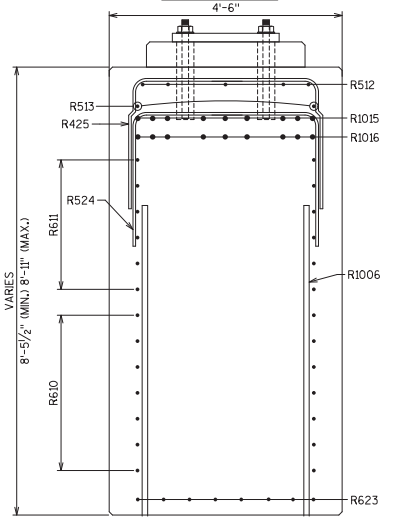
GREENDALE, WI
12/05/2016
PROFESSIONAL ENGINEER

LEGEND

◆ KEYED CONST. JOINT FORMED BY BEVELED 4" X 1'-4" X 7'-6"



END VIEW



SECTION C-C

NO.	DATE	REVISION	BY
1	11/15/16	UPDATED BAR CALL OUTS	JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY DNJ | PLANS CK'D. JDL

PIER 3
DETAILS 1

SHEET 20 OF 47

661

STATE PROJECT NUMBER
1517-07-80

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DATE: 12/3/2016
I.D.

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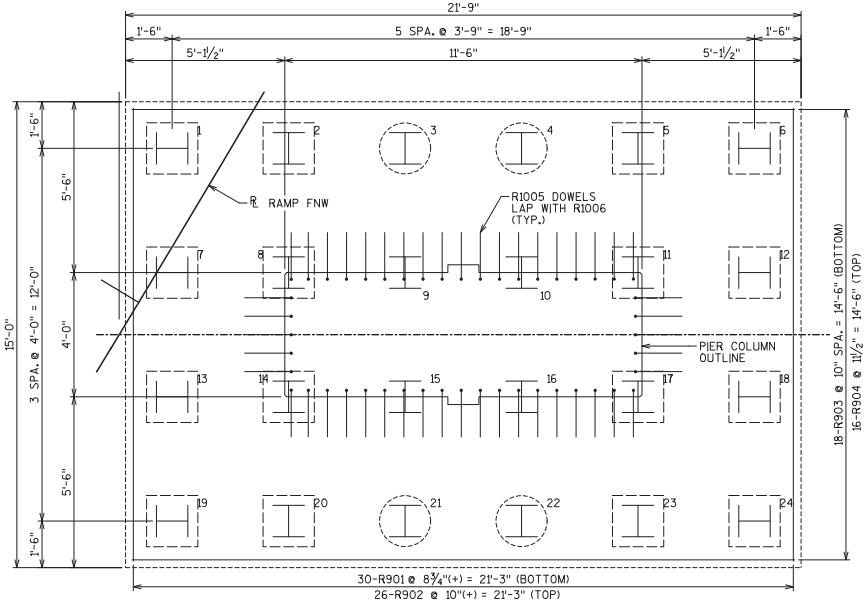
STATE PROJECT NUMBER
1517-07-80

Addendum No. 01
ID 1517-07-80
Revised Sheet 662
December 8, 2016



FOOTING PLAN

William C. Drecher SDR
12/07/16

BAR SERIES TABLE

BAR MARK	NO. REQUIRED	LENGTH
R610	2 SERIES OF 7	13'-10" TO 30'-4"

LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS. BUNDLE AND TAG EACH SERIES SEPARATELY.

LEGEND

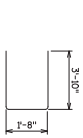
INDICATES PILE UPLIFT DETAIL REQUIRED

INDICATES PRE-BORE PILE 3'-6" INTO ROCK AND UPLIFT DETAIL REQUIRED

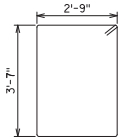
BILL OF BARS

BAR MARK	COAT	NO. REQ'D	LENGTH	BAR SERIES	BENT	LOCATION
R901		30	14'-8"			PIER 3 FOOTING
R902		26	24'-8"	①	X	PIER 3 FOOTING
R903		18	21'-5"			PIER 3 FOOTING
R904		16	30'-11"		X	PIER 3 FOOTING
R1005	X	48	16'-0"		X	PIER 3 FOOTING DOWELS
R1006	X	48	19'-8"			PIER 3 SHAFT VERTICAL
R407	X	30	11'-0"			PIER 3 SHAFT STIRRUP
R408	X	30	8'-1"		X	PIER 3 SHAFT STIRRUP
R409	X	75	4'-8"		X	PIER 3 SHAFT TIES
R610	X	14	22'-1"	X		PIER 3 CAP LATERAL
R611	X	12	33'-1"			PIER 3 CAP LATERAL
R512	X	5	24'-1"		X	PIER 3 CAP BEAM SEAT LATERAL
R513	X	2	16'-0"			PIER 3 CAP BEAM SEAT LATERAL
R514	X	2	8'-0"			PIER 3 CAP BEAM SEAT LATERAL
R1015	X	9	36'-4"			PIER 3 CAP LATERAL
R1016	X	9	36'-0"		X	PIER 3 CAP LATERAL
R517	X	64	13'-4"		X	PIER 3 CAP STIRRUPS
R518	X	20	9'-4"		X	PIER 3 CAP STIRRUPS
R519	X	20	11'-6"		X	PIER 3 CAP STIRRUPS
R520	X	24	14'-6"		X	PIER 3 CAP STIRRUPS
R621	X	8	12'-6"		X	PIER 3 CAP LATERAL
R622	X	8	12'-6"		X	PIER 3 CAP LATERAL
R623	X	8	11'-6"			PIER 3 CAP LATERAL
R524	X	19	9'-6"		X	PIER 3 CAP VERTICAL
R425	X	24	9'-7"		X	PIER 3 CAP ENDS
R626	X	15	9'-9"	①	X	PIER 3 CAP BEAM SEAT VERTICAL
R627		40	9'-1"		X	PIER 3 CAP UPLIFT CONNECTION

TOTAL WEIGHT COATED = 14,710LB
TOTAL WEIGHT UNCOATED = 7,220LB



R627



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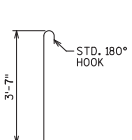
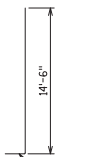
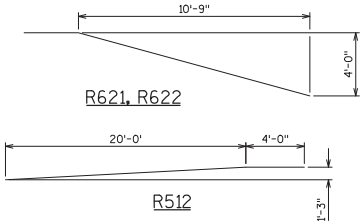
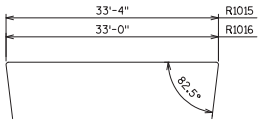


R409

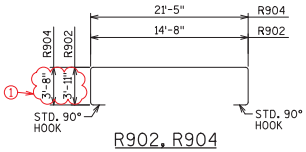


R1005

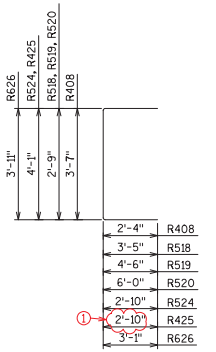




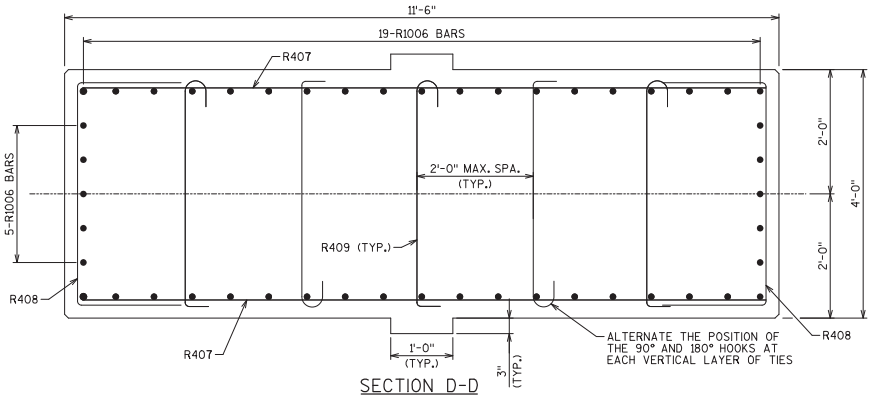
R1015, R1016



R902, R904



R408, R518, R519, R520, R524, R425, R626



SECTION D-D

WISCONSIN
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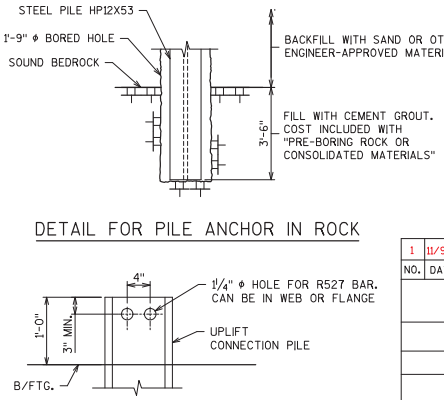
WI
12/05/2016
PROFESSIONAL ENGINEER

PILE NOTE

PIER 3 TO BE SUPPORTED ON HP 12 X 53 STEEL PILING FOUNDED ON BEDROCK. DRIVEN PILES TO BE DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED DRIVEN PILE LENGTH IS 16 FEET. DRIVEN PILES REQUIRE PILE POINTS.

PRE-BORED PILES TO BE PRE-BORED 3'-6" INTO SOUND BEDROCK. BACKFILL ROCK SOCKET WITH CEMENT GROUT. PRE-BORED PILES ARE NOT DRIVEN AND DO NOT REQUIRE PILE POINTS. PRE-BORING IS PAID UNDER BID ITEM 550.0020 "PRE-BORING ROCK OR CONSOLIDATED MATERIALS." ESTIMATED PRE-BORED PILE LENGTH IS 20 FEET.

DETAIL FOR PILE ANCHOR IN ROCK



UPLIFT CONNECTION DETAIL

NO.	DATE	REVISION	BY
1	11/9/16	REBAR	JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY DNJ | PLANS CK'D. JDL

PIER 3
DETAILS 2

SHEET 21 OF 47

662

DATE: 12/3/2016
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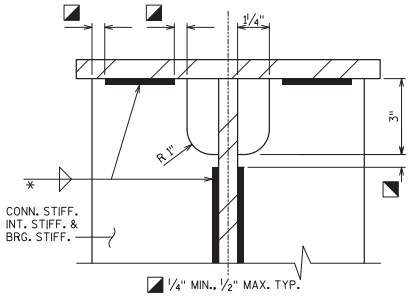
STATE PROJECT NUMBER
1517-07-80

* TABLE OF FILLET WELD SIZES

MATERIAL THICKNESS OF THICKER PART JOINED.	+ MIN. SIZE OF FILLET WELD
TO 1/2" INCLUSIVE	3/16"
OVER 1/2" TO 3/4"	1/4"
OVER 3/4" TO 1 1/2"	△ 5/16"
OVER 1 1/2" TO 2 1/4"	△ 3/8"
OVER 2 1/4" TO 6"	△ 1/2"

+ EXCEPT THAT THE WELD SIZE SHALL NOT EXCEED THE THICKNESS OF THE THINNER PART JOINED.

△ MIN. PASS SIZE IS 5/16"



STIFF. & CONN. STIFF. TO WEB/FLANGE CONN. WELDS

NOTES

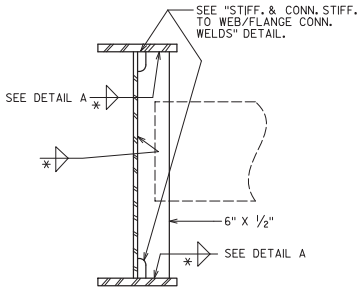
OPTIONAL WELDED SHOP SPLICES MAY BE USED FOR ALL FLANGE AND WEB PLATES OVER 60'-0" LONG. IF USED, THE LOCATION OF THE SPLICE SHALL BE SHOWN ON SHOP DRAWINGS AND WILL BE SUBJECT TO THE APPROVAL OF THE STRUCTURES DESIGN SECTION.

AT EXTERIOR GIRDERS PLACE INTERMEDIATE TRANSVERSE STIFFENERS ON INTERIOR FACE OF GIRDER.

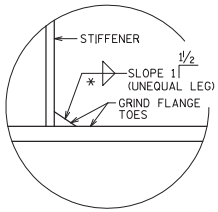
PRIOR TO STEEL BLAST, ALL FLAME CUT EDGES OF PLATES THAT ARE TO BE PAINTED SHALL BE GROUND OR PLANED TO REMOVE THE HARDENED SURFACE CAUSED BY THE FLAME, AND CORNERS CHAMFERED 1/16" MIN.

① FOR CONNECTION STIFFENERS IN STRESS REVERSAL ZONES, FOLLOW "DETAIL A" FOR BOTH THE TOP AND BOTTOM FLANGES.

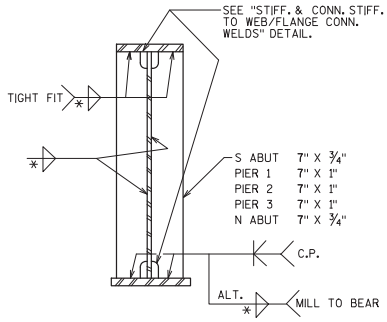
FOR INTERMEDIATE STIFFENERS IN STRESS REVERSAL ZONES, DIVIDE THE STRESS REVERSAL ZONE LENGTH IN HALF, FOLLOWING "DETAIL A" IN THE FLANGE CLOSEST TO THE COMPRESSION ZONE AND PROVIDING TIGHT FIT AT THE OPPOSITE FLANGE.



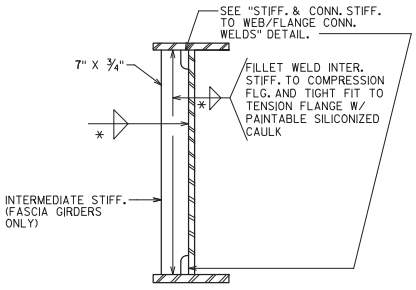
CONNECTION STIFF. DETAILS



DETAIL A
CONNECTION STIFFENER DETAIL @ TENSION FLANGE

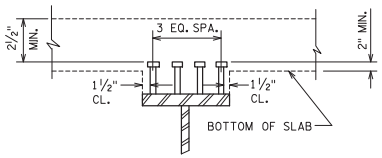


BRG. & JACKING STIFF. DETAILS TYP. AT ABUT. & PIER



INTERMEDIATE & TRANSVERSE STIFF. DETAILS
(ALL GIRDERS)

NOTE: USE FOUR FIELD WELDED 7/8" DIA. X 6" LONG STUDS EQUALLY SPACED WITH A MIN. OF 1 1/2" CL. FROM THE FLANGE EDGE. STUDS SHALL NOT BE PLACED OVER FIELD SPLICE PLATES.



SHEAR CONN. DETAILS

William C. Dreher SDR
12/07/16

WISCONSIN
MICHAEL J. ARNOLD
E-41717
GREENDALE
PROFESSIONAL ENGINEER
12/05/2016

Addendum No. 01
ID 1517-07-80
Revised Sheet 668
December 8, 2016

NO.	DATE	REVISION	BY
1	11.23.16	ADDED NOTES	JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY: DNJ | PLANS CK'D.: JRS

GIRDER DETAILS (4 OF 4)

SHEET 27 OF 47

668

DATE: 12/3/2016
I.D.

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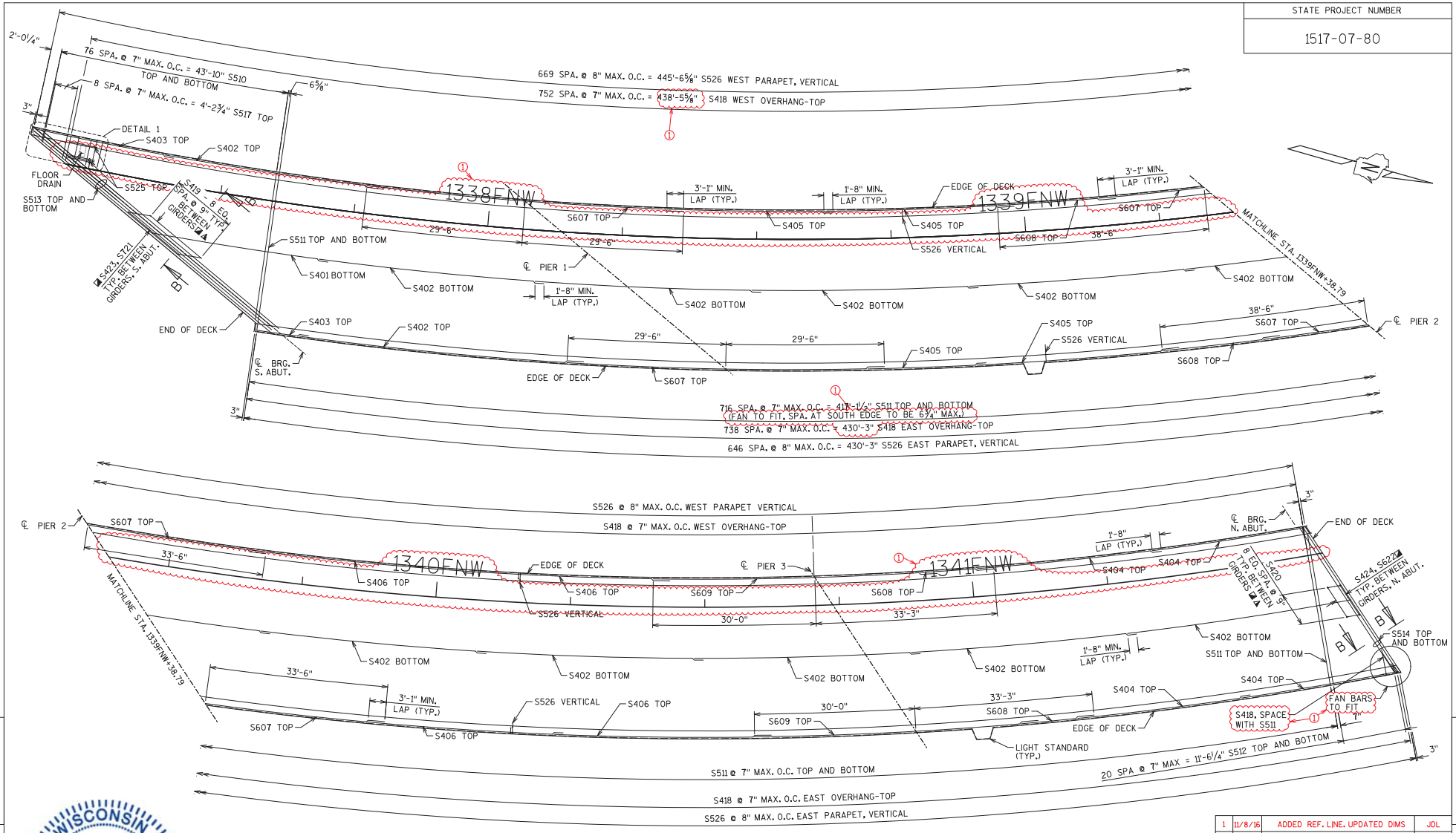
STATE PROJECT NUMBER
1517-07-80



WISCONSIN
MICHAEL J. ARNOLD
E-41717
GREENDALE
PROFESSIONAL ENGINEER
12/05/2016

William C. Dreher SDR
12/07/16

DECK PLAN

LEGEND
◪ FOR DIAPHRAGM REINFORCEMENT, SEE SECTION B-B.
◭ BARS PLACED PARALLEL TO GIRDERS. SPACING PERPENDICULAR TO ℄ GIRDERS.

Addendum No. 01
ID 1517-07-80
Revised Sheet 672
December 8, 2016

NO.	DATE	REVISION	BY
1	11/8/16	ADDED REF. LINE. UPDATED DIMS	JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY JDL | PLANS CK'D. DNJ

SUPERSTRUCTURE PLAN 1

SHEET 31 OF 47

672

DATE: 12/3/2016
I.D.

FILE= \\s1102k306\projects\Transportation\US 10 WIS 441\CADD\sheets\Structures\B-70-407\Sheets\07-80 Plan Set\31-B-70-407_deck-reinf.dgn

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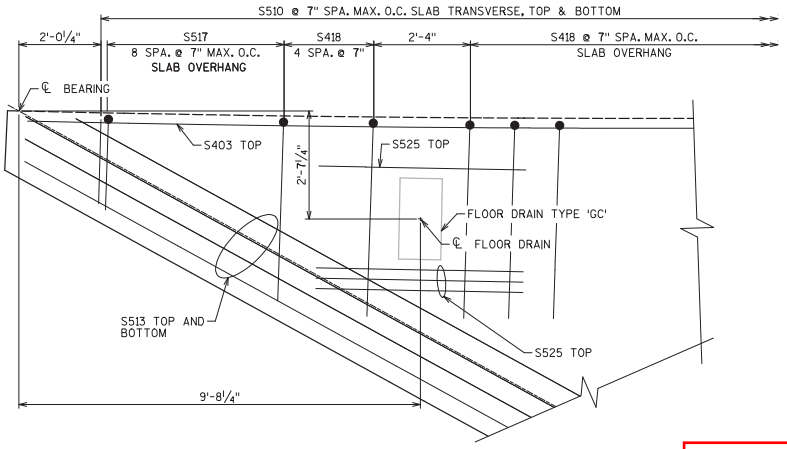
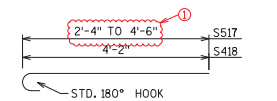
STATE PROJECT NUMBER
1517-07-80

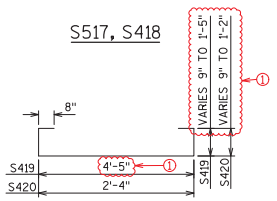


DETAIL 1

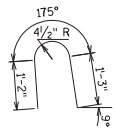
PARAPET AND PARAPET REINFORCEMENT NOT SHOWN FOR CLARITY



S517, S418



S419, S420



S526

BILL OF BARS

BAR MARK	NO. REQ'D	LENGTH	BENT	SERIES	LOCATION
S401	46	13'-1" ①		X	BOT. OF DECK - LONGIT.
S402	505	44'-3"			TOP AND BOT. OF DECK - LONGIT.
S403	45	22'-2"		X	TOP OF DECK - LONGIT.
S404	90	31'-11"			TOP OF DECK - LONGIT.
S405	90	33'-2"			TOP OF DECK - LONGIT.
S406	90	40'-0"			TOP OF DECK - LONGIT.
S607	90	59'-0"			TOP OF DECK - LONGIT.
S608	90	16'-1"			TOP OF DECK - LONGIT.
S609	45	50'-3"			TOP OF DECK - LONGIT.
S510	154	15'-0"		X	TOP AND BOT. DECK - TRANS.
S511	1434	29'-6" ①			TOP AND BOT. DECK - TRANS.
S512	42	15'-6"		X	TOP AND BOT. DECK - TRANS.
S513	8	57'-6"			JOINT AT SOUTH ABUT
S514	4	32'-1"			JOINT AT NORTH ABUT
S515					NOT USED
S516					NOT USED
S517	9	4'-0"	X	X	OVERHANG BARS
S418	1492	4'-8"	① X		OVERHANG BARS
S419	27	7'-7"	X	X	DIAPHRAGM VERT. SOUTH ABUT.
S420	27	5'-3"	X	X	DIAPHRAGM VERT. NORTH ABUT.
S721	15	12'-9"			DIAPHRAGM LONGIT. SOUTH ABUT
S622	15	6'-9"			DIAPHRAGM LONGIT. NORTH ABUT.
S423	6	12'-9"			DIAPHRAGM LONGIT. SOUTH ABUT
S424	6	6'-9"			DIAPHRAGM LONGIT. NORTH ABUT.
S525	4	5'-0"			FLOOR DRAIN
S526	1317	4'-5"	X		PARAPET VERTICAL BARS

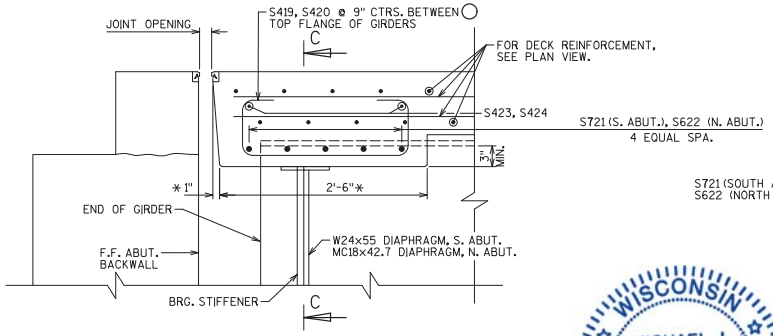
TOTAL WEIGHT = 95,320 LB ①

BAR SERIES TABLE

BAR MARK	NO. REQ'D	LENGTH
S401	1 SERIES OF 46	4'-7" TO 21'-7"
S403	1 SERIES OF 45	19'-0" TO 25'-4" ①
S510	2 SERIES OF 77	2'-3" TO 27'-9"
S512	2 SERIES OF 21	2'-3" TO 28'-9"
S517	1 SERIES OF 9	2'-11" TO 5'-1"
S419	3 SERIES OF 9	6'-11" TO 8'-3"
S420	3 SERIES OF 9	4'-10" TO 5'-8"

Addendum No. 01
ID 1517-07-80
Revised Sheet 675
December 8, 2016

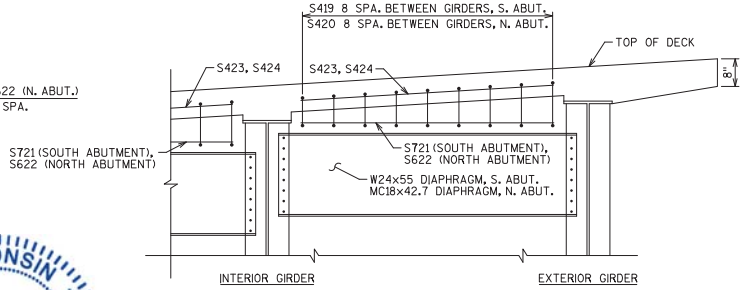
William C. Dreher SDR
12/07/16



SECTION B-B

* DIMENSIONS TAKEN NORMAL TO ℄ ABUTMENT

○ BARS PLACED PARALLEL TO GIRDERS. SPACING PERPENDICULAR TO GIRDERS. ①



SECTION C-C

NOTES

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

ALL BARS TO BE EPOXY COATED.

PLACE LONGITUDINAL BARS PARALLEL TO THE CURVED DECK EDGE. PLACE TRANSVERSE BARS PERPENDICULAR TO THE GIRDERS.

ALL SUPPORT ANGLES SHALL BE HOT-DIPPED GALVANIZED.

ALL BOLTS, NUTS, AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563. LUBRICANT AND TEST FOR COATED NUTS.

ALL DIAPHRAGM SUPPORT HARDWARE SHALL BE INCIDENTAL TO "MODIFIED HIGH PERFORMANCE CONCRETE (HPC) MASONRY STRUCTURES".

FOR SECTION B-B, SEE SHEET 31.

FOR THE LOCATION OF DETAIL 1, SEE SHEET 31.

FOR FLOOR DRAIN REINFORCEMENT, SEE DETAIL 1.

NO.	DATE	REVISION	BY
1	11/9/16	ADDED NOTES, REBAR	JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY JDL | PLANS CK'D. DNJ

SUPERSTRUCTURE DETAILS

SHEET 34 OF 47

675

DATE: 12/3/2016
I.D.

FILE= \\s1102k306\projects\Transportation\US 10 WIS 441\CADD\sheets\Structures\B-70-407\Sheets\07-80 Plan Set\34-B-70-407_super_det.dgn

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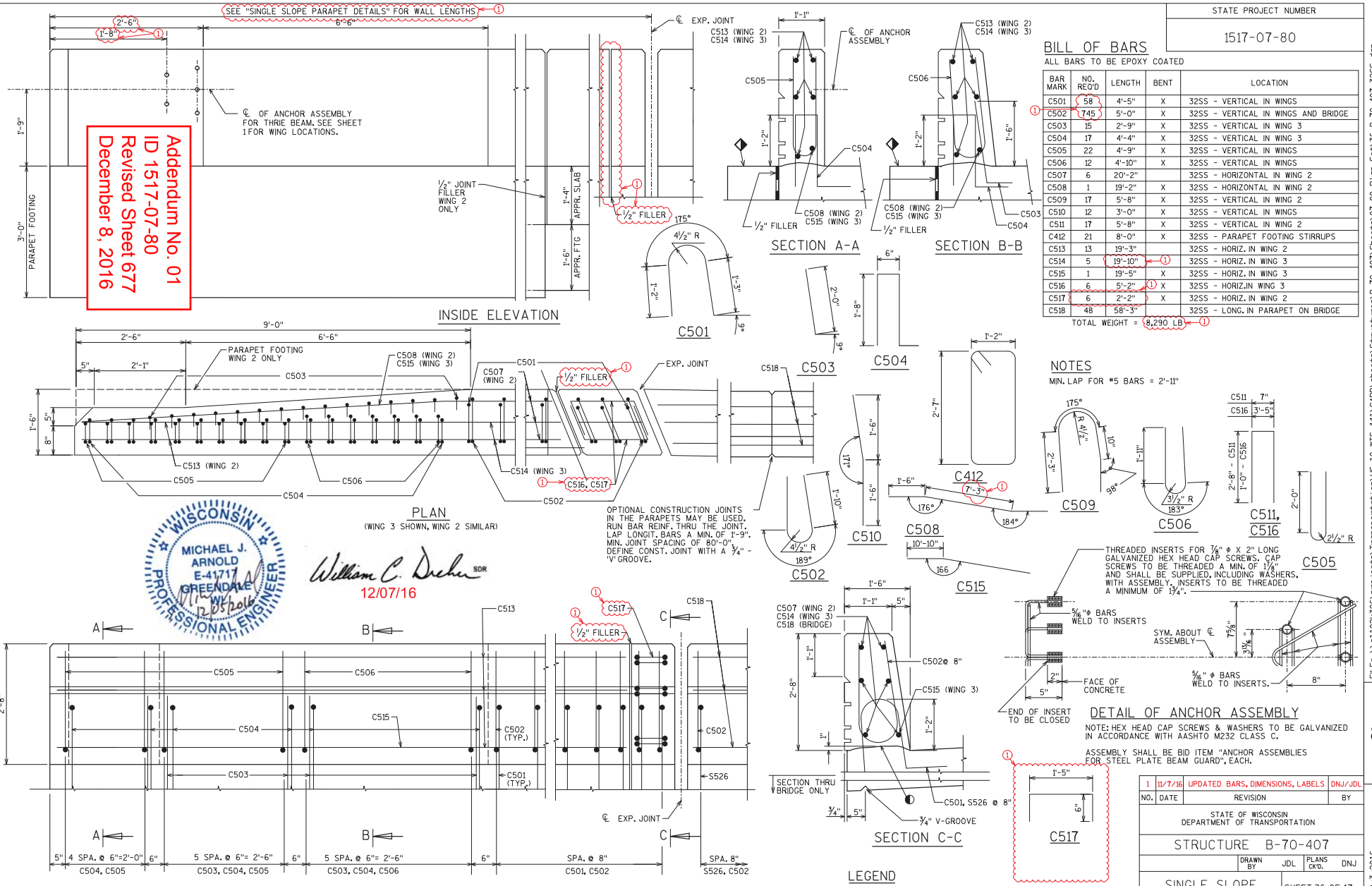

Addendum No. 01
ID 1517-07-80
Revised Sheet 677
December 8, 2016

WISCONSIN
MICHAEL J. ARNOLD
E-41,717
GREENDALE
PROFESSIONAL ENGINEER
12/05/2016

William C. Dreher SDR
12/07/16

STATE PROJECT NUMBER
1517-07-80

BILL OF BARS

ALL BARS TO BE EPOXY COATED

BAR MARK	NO. REQ'D	LENGTH	BENT	LOCATION
C501	58	4'-5"	X	32SS - VERTICAL IN WINGS
C502	745	5'-0"	X	32SS - VERTICAL IN WINGS AND BRIDGE
C503	15	2'-9"	X	32SS - VERTICAL IN WING 3
C504	17	4'-4"	X	32SS - VERTICAL IN WING 3
C505	22	4'-9"	X	32SS - VERTICAL IN WINGS
C506	12	4'-10"	X	32SS - VERTICAL IN WINGS
C507	6	20'-2"		32SS - HORIZONTAL IN WING 2
C508	1	19'-2"	X	32SS - HORIZONTAL IN WING 2
C509	17	5'-8"	X	32SS - VERTICAL IN WING 2
C510	12	3'-0"	X	32SS - VERTICAL IN WINGS
C511	17	5'-8"	X	32SS - VERTICAL IN WING 2
C412	21	8'-0"	X	32SS - PARAPET FOOTING STIRRUPS
C513	13	19'-3"		32SS - HORIZ. IN WING 2
C514	5	19'-10"	(1)	32SS - HORIZ. IN WING 3
C515	1	19'-5"	X	32SS - HORIZ. IN WING 3
C516	6	5'-2"	(1) X	32SS - HORIZ.IN WING 3
C517	6	2'-2"	X	32SS - HORIZ. IN WING 2
C518	48	58'-3"		32SS - LONG. IN PARAPET ON BRIDGE

TOTAL WEIGHT = 8,290 LB (1)

NO.	DATE	REVISION	BY
1	11/7/16	UPDATED BARS, DIMENSIONS, LABELS	DNJ/JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY JDL | PLANS CK'D. DNJ

SINGLE SLOPE PARAPET 32SS MODIFIED

SHEET 36 OF 47

677

DATE: 12/3/2016
I.D.

FILE= \\s1102k306\projects\Transportation\US 10 WIS 441\CADD\sheets\Structures\B-70-407\Sheets\07-80 Plan Set\36-B-70-407_32SS.dgn

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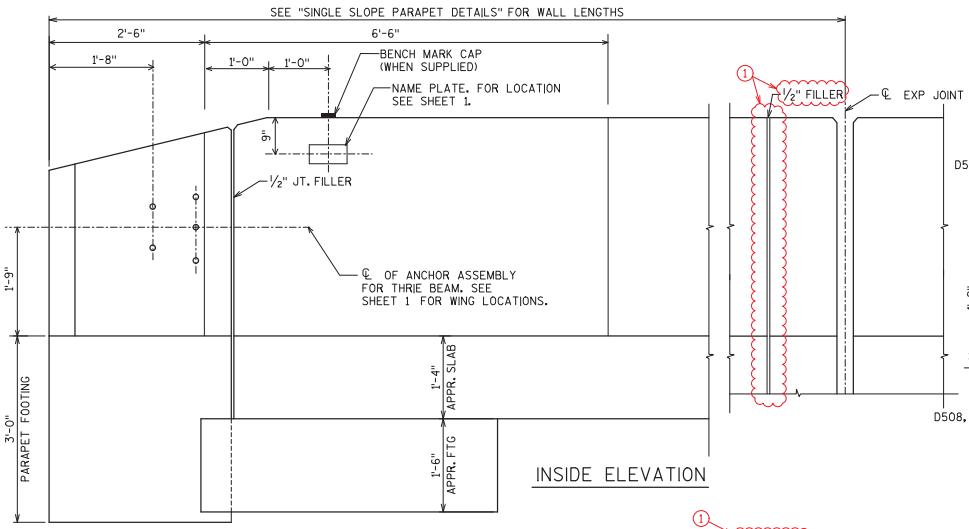
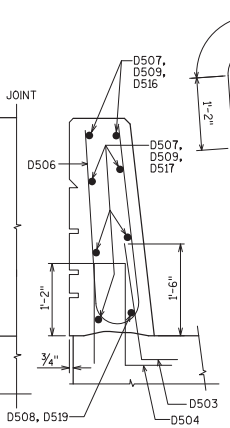
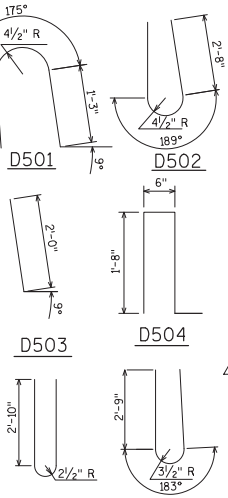
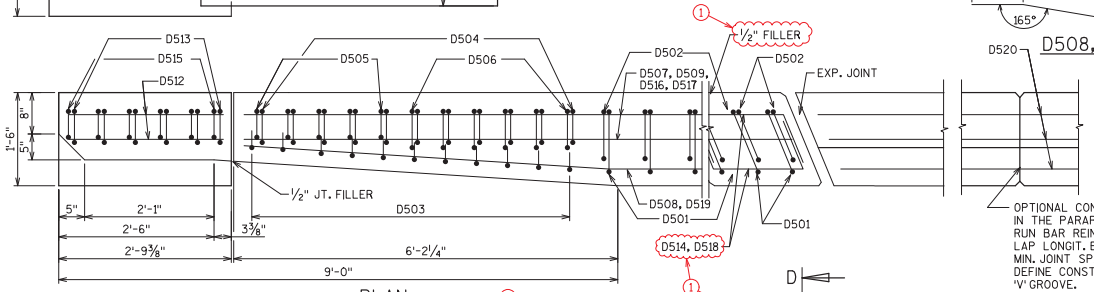
STATE PROJECT NUMBER

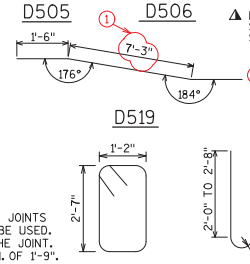
1517-07-80

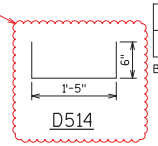


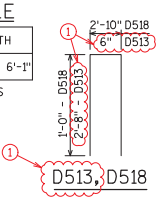












BILL OF BARS

ALL BARS TO BE EPOXY COATED (1)

BAR MARK	BAR SERIES	NO. REQ'D	LENGTH	BENT	LOCATION
D501		42	4'-5"	X	42SS - VERTICAL IN WINGS
D502	(1)	689	6'-8"	X	42SS - VERT. IN WINGS AND ON BRIDGE
D503		23	2'-9"	X	42SS - VERTICAL IN WINGS
D504		28	4'-4"	X	42SS - VERTICAL IN WINGS
D505		10	6'-5"	X	42SS - VERTICAL IN WINGS
D506		12	6'-6"	X	42SS - VERTICAL IN WINGS
D507		3	19'-2"		42SS - HORIZONTAL IN WING 4
D508		1 (1)	19'-7"	X	42SS - HORIZONTAL IN WING 4
D509		4	19'-2"		42SS - HORIZONTAL IN WING 4
D410		4	8'-0"	X	42SS - PARAPET FTG. STIRRUPS WING 4
D411		8	2'-5"		42SS - PARAPET FOOTING HORIZ. WING 4
D512		8	2'-5"		42SS - HORIZONTAL IN WING 4
D513		6	5'-8"	X	42SS - VERTICAL IN WING 4
D514	(1)	8	2'-2"	X	42SS - HORIZONTAL IN WING 4
⚠ D515	X	12	5'-5"	X	42SS - VERTICAL IN WINGS
D516		2	16'-11"	X	42SS - HORIZONTAL IN WING 1
D517		5	16'-10"		42SS - HORIZONTAL IN WING 1
D518		8	4'-7"	X	42SS - HORIZONTAL IN WING 1
D519		1	16'-11"	X	42SS - HORIZ. IN WING 1
D520		64	56'-4"		42SS - HORIZ.IN PARAPET ON BRIDGE

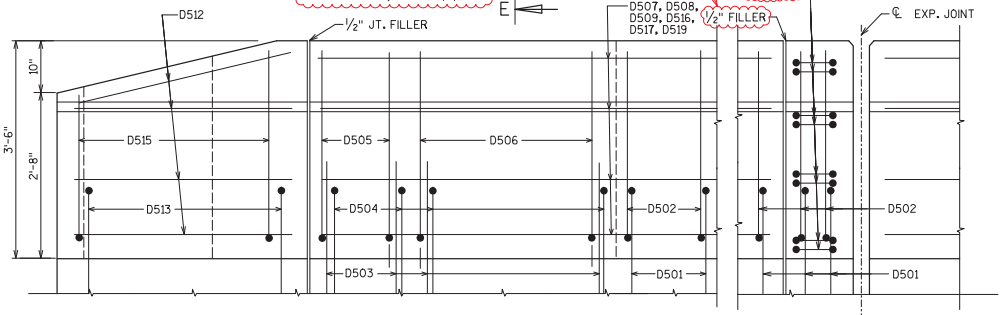
TOTAL WEIGHT = 9,610 LB (1)

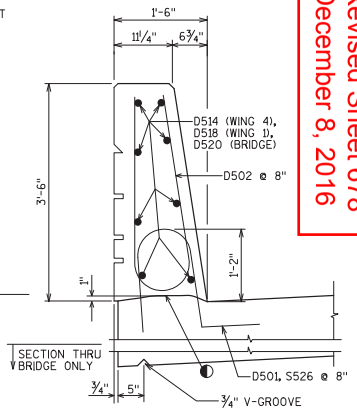
⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

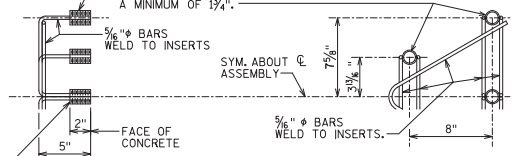
BAR SERIES TABLE

BAR MARK	NO. REQ'D	LENGTH
D515	2 SERIES OF 6	4'-9" TO 6'-1"

BUNDLE AND TAG EACH SERIES SEPARATELY.







DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

NOTES

MIN. LAP FOR #5 BARS = 2'-11"

LEGEND

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

Addendum No. 01
ID 1517-07-80
Revised Sheet 678
December 8, 2016

William C. Dreher SDR
12/07/16

WISCONSIN
MICHAEL J. ARNOLD
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PROFESSIONAL ENGINEER
12/05/2016

NO.	DATE	REVISION	BY
1	11/7/16	JT. FILLER NOTE, LABELS, BARS	DNJ/JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY JDL | PLANS CK'D. DNJ

SINGLE SLOPE PARAPET 42SS MODIFIED

SHEET 37 OF 47

678

DATE: 12/3/2016
I.D.

FILE= \\s1102k306\projects\Transportation\US 10 WIS 441\CADD\sheets\Structures\B-70-407\Sheets\07-80 Plan Set\37-B-70-407-42SS.dgn

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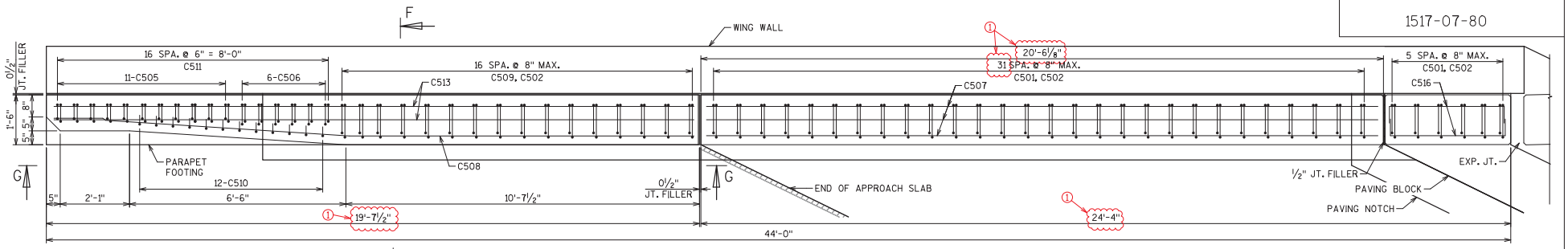
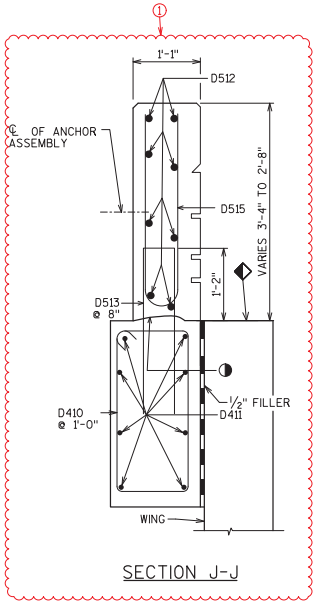
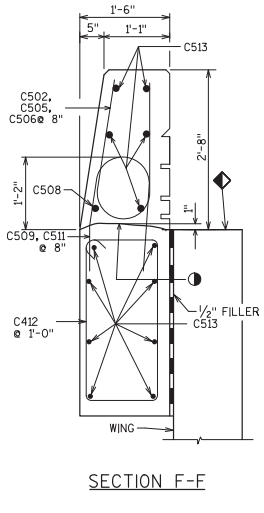
STATE PROJECT NUMBER
1517-07-80



32SS PARAPET MODIFIED - WING 2

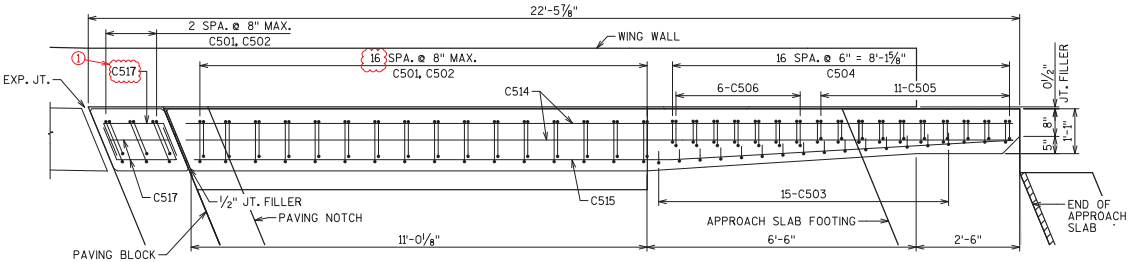


SECTION J-J

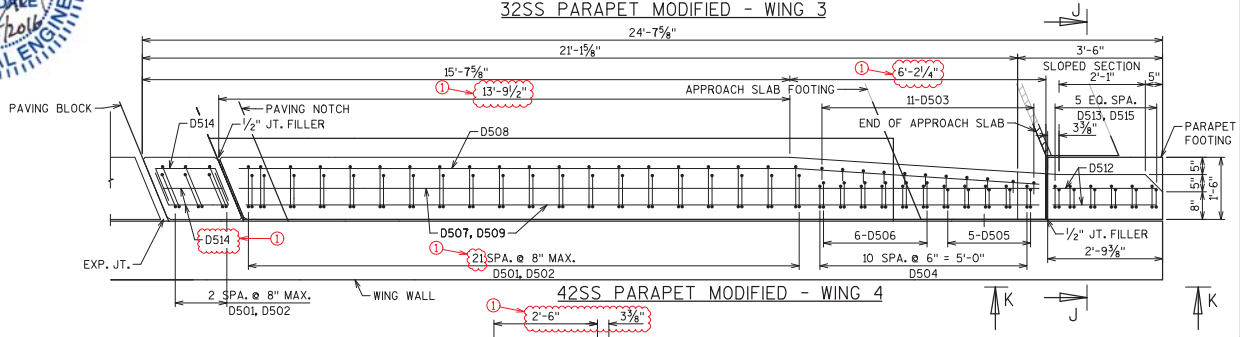


SECTION F-F

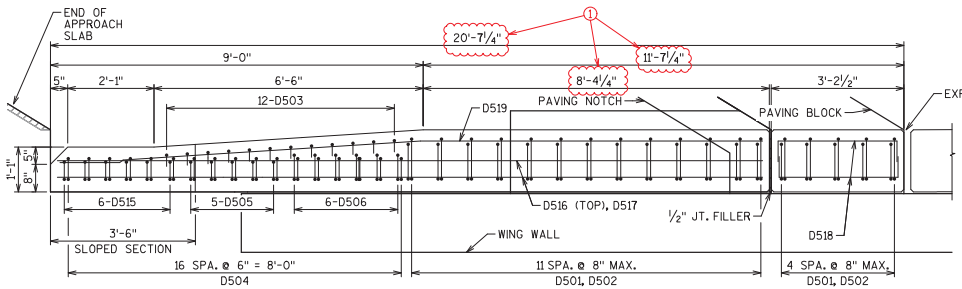
William C. Dreher SDR
12/07/16



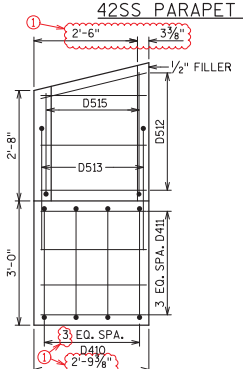
32SS PARAPET MODIFIED - WING 3



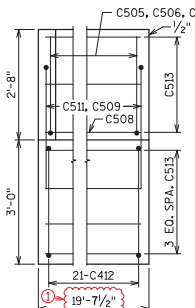
42SS PARAPET MODIFIED - WING 4



42SS PARAPET MODIFIED - WING 1



SECTION K-K



SECTION G-G

LEGEND

- CONST. JOINT - STRIKE OFF AS SHOWN.
- SLOPE FOR DRAINAGE

Addendum No. 01
ID 1517-07-80
Revised Sheet 679
December 8, 2016

NO.	DATE	REVISION	BY
1	11/7/16	UPDATED DIMENSIONS AND SECTION	DNJ/JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY	JDL	PLANS CK'D.	DNJ

SINGLE SLOPE PARAPET DETAILS

SHEET 38 OF 47

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DATE: 12/3/2016
I.D.

FILE= \\s1102k306\projects\Transportation\US 10 WIS 441\CADD\sheets\Structures\B-70-407\Sheets\07-80 Plan Set\38-B-70-407_parapet or wing walls

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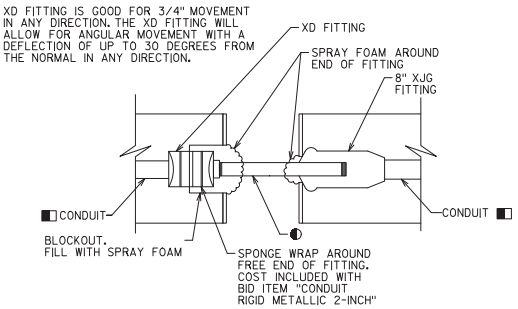
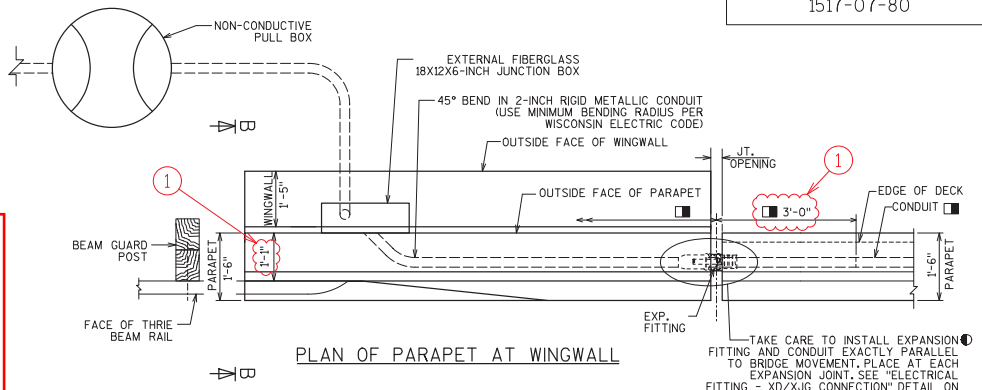
STATE PROJECT NUMBER
1517-07-80

William C. Drecher SDR
12/07/16

Addendum No. 01
ID 1517-07-80
Revised Sheet 680
December 8, 2016



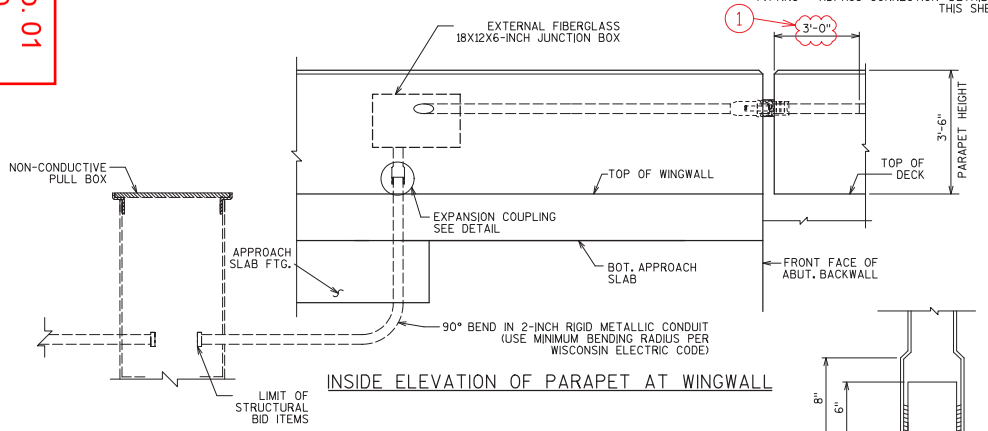
ELECTRICAL FITTING - XD/XJG CONNECTION



PLAN OF PARAPET AT WINGWALL

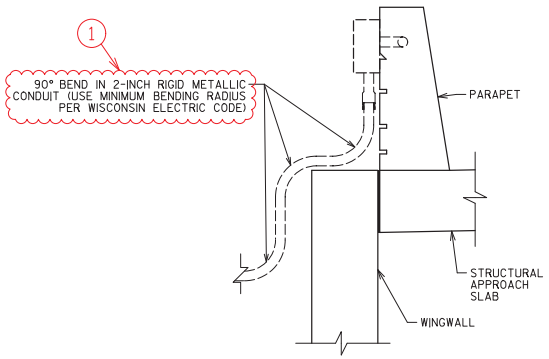
POSITION MOVABLE END OF CONDUIT INSIDE EXPANSION FITTING, SUCH THAT IT WILL HAVE THE SAME ALLOWANCE FOR MOVEMENT (EXPANSION/CONTRACTION) AS THE EXPANSION DEVICE SET IN PLACE IN THE DECK BELOW IT. TAKE CARE TO INSTALL EXPANSION FITTING AND CONDUIT EXACTLY PARALLEL TO BRIDGE MOVEMENT.

1 USE RIGID METALLIC CONDUIT TO NEAREST JUNCTION BOX OFF BRIDGE AND 3'-0" ONTO BRIDGE.



INSIDE ELEVATION OF PARAPET AT WINGWALL

EXPANSION COUPLING DETAIL
(NOT TO SCALE)



VIEW B-B

NOTES

FOR LIGHT STANDARD DETAILS AND LOCATIONS SEE SHEET "LIGHT STANDARD".

BID ITEMS SHALL BE:
"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
"CONDUIT RIGID METALLIC 2-INCH"
~~"JUNCTION BOXES FIBERGLASS 18X12X6-INCH", EACH.~~
"JUNCTION BOXES 18X6X6-INCH", EACH.
"JUNCTION BOXES 18X12X6-INCH", EACH.
"ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURE", EACH.
~~APPROVED MANUFACTURERS - JUNCTION BOXES:~~
SEE APPROVED MATERIAL LIST.

APPROVED MANUFACTURER OR EQUIVALENT - EXPANSION FITTING:
O-Z/GEDNEY TYPE AX-8-200 AND BONDING JUMPER (8" TOTAL CONDUIT MOVEMENT).

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. OR NRTL LISTED FOR ELECTRICAL USE SHALL BE USED.

1 INSTALL GROUNDING BUSHINGS ON ALL RIGID METALLIC ELECTRICAL CONDUITS THAT TERMINATE IN JUNCTION OR PULL BOXES.

FOR LENGTH OF EXPECTED MOVEMENT SEE TEMPERATURE TABLE ON SHEET "STRIP SEAL EXPANSION DEVICE".

WISCONSIN
MICHAEL J. ARNOLD
E-41717
GREENDALE
WI
12/05/2016
PROFESSIONAL ENGINEER

NO.	DATE	REVISION	BY
1	11/3/16	UPDATED NOTES, DIM. ADD CALLOUT	JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY	JDL	PLANS CK'D.	DNJ

42SS PARAPET ELECTRICAL

SHEET 39 OF 47

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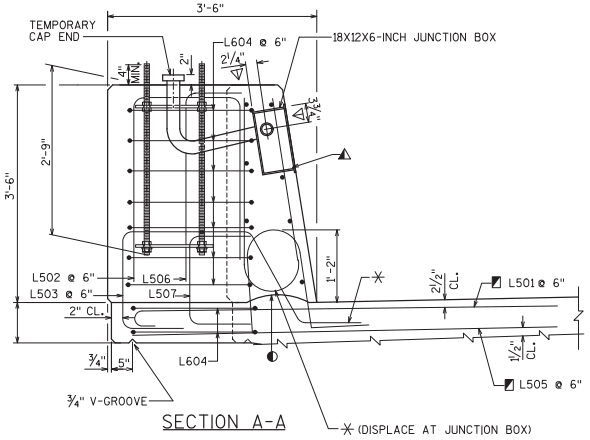
DATE: 12/3/2016
I.D.

STATE PROJECT NUMBER
1517-07-80

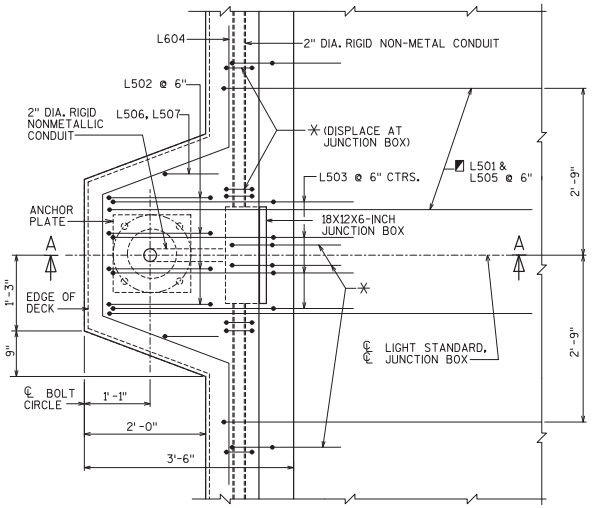


SECTION A-A

LIGHT STD. & JUNCTION BOX LOCATIONS

℄ LIGHT STD. & 18X12X6-INCH JUNCTION BOX	℄ 18X6X6-INCH JUNCTION BOX
STA. 1339FNW+00.00 RT	STA. 1340FNW+00.00 RT
STA. 1341FNW+00.00 RT	

(1)



PLAN AT LIGHT STANDARD

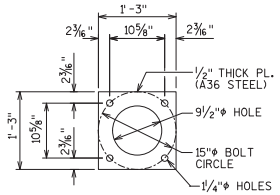
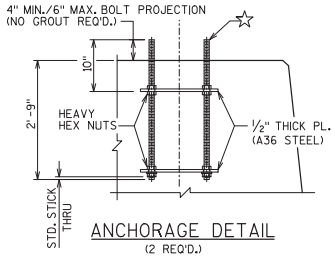


PLATE DETAIL
(4 REQ'D.)



ANCHORAGE DETAIL
(2 REQ'D.)

LEGEND

- ◐ CONSTR. JT. STRIKE OFF AS SHOWN
- ◭ CUT OUT ± 1" OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE.
- ▽ LOCATION OF CONDUIT IS MEASURED FROM OUTSIDE EDGE OF JUNCTION BOX.
- ◩ THESE BARS ARE IN ADDITION TO STANDARD TRANSVERSE BARS IN DECK.
- ✳ SEE SINGLE SLOPE PARAPET SHEET FOR ADDITIONAL BAR STEEL DETAILS.
- ☆ 1"ϕ THREADED ANCHOR BOLTS ASTM A449 OR AASHTO M 314-90 GR 55. HOT DIP ASTM A153, CLASS C, UPPER 8" (MIN) OF BOLT INCLUDING NUTS & WASHERS. PROVIDE ENLARGED THREAD ON NUTS FOR PROPER FIT AFTER GALVANIZING. PROVIDE DOUBLE FLAT WASHERS & NUTS.

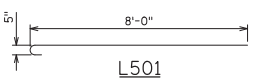
(1) FOR LENGTH OF EXPECTED MOVEMENT SEE TEMPERATURE TABLE ON SHEET "STRIP SEAL EXPANSION DEVICE".

SEE SHEET "42SS PARAPET ELECTICAL DETAIL" FOR NOTES.

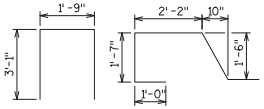
BILL OF BARS

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
L501	X	20	8'-7"	X		DECK TRANSV. @ LIGHT STD.
L502	X	8	7'-8"	X		PARAPET VERT. @ LIGHT STD.
L503	X	8	7'-0"	X		PARAPET VERT. @ LIGHT STD.
L604	X	18	10'-0"	X		PARAPET HORIZ. @ LIGHT STD.
L505	X	20	8'-0"			DECK TRANSV. @ LIGHT STD.
L506	X	4	4'-0"	X		PARAPET VERT. @ LIGHT STD.
L507	X	4	3'-4"	X		PARAPET VERT. @ LIGHT STD.

Addendum No. 01
ID 1517-07-80
Revised Sheet 681
December 8, 2016

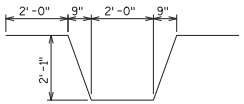


L501

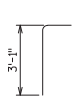


L502

L503



L604



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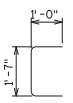

L507

William C. Dreher SDR
12/07/16

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GREENDALE
PROFESSIONAL ENGINEER
12/5/2016

NO.	DATE	REVISION	BY
1	11/2/16	UPDATED STATIONS, ADDED NOTE	JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY JDL | PLANS CK'D. DNJ

LIGHT STANDARD

SHEET 40 OF 47

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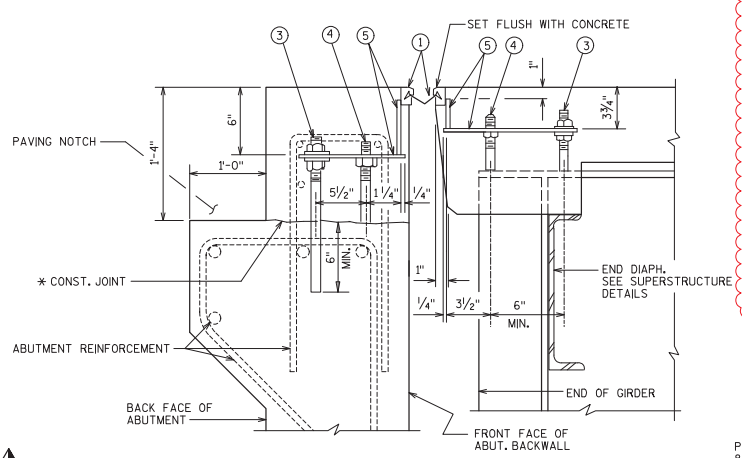
DATE: 12/3/2016
I.D.

STATE PROJECT NUMBER
1517-07-80



TYPICAL SECTION THRU JOINT

NORMAL TO ℄ SUBSTRUCTURE

* POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.

▲ TEMPERATURE TABLE

SHADED UNDERSIDE DECK TEMP. (°F)	FINAL JOINT OPENING (IN.) S. ABUT.	FINAL JOINT OPENING (IN.) N. ABUT.
85°	1½"	1⅝"
75°	1½"	1¾"
65°	1⅝"	1⅞"
55°	1⅝"	2⅛"
45°	1¾"	2¼"
35°	1⅞"	2⅜"
25°	1⅞"	2⅝"
15°	2"	2¾"
5°	2⅛"	2⅞"

A SMALL JOINT OPENING DUE TO A HIGH TEMPERATURE AT TIME OF CONSTRUCTION MAY REQUIRE NEOPRENE STRIP SEAL INSTALLATION INTO STEEL EXTRUSIONS PRIOR TO SETTING THE EXPANSION JOINT.

LEGEND

▲ (1) NEOPRENE STRIP SEAL (5-INCH AT SOUTH ABUTMENT, 4-INCH AT NORTH ABUTMENT) & STEEL EXTRUSIONS. SEE THE TEMPERATURE TABLE GIVEN ON THIS SHEET. JT. OPENINGS GIVEN NORMAL TO JOINT.

(2) STUDS ⅝" ϕ x 6⅜" LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS & BEND AS SHOWN AFTER WELDING.

(2A) ½" THICK ANCHOR PLATE WITH ⅝" ϕ ROD (OR ALTERNATE STRIP SEAL ANCHOR). WELD ROD TO ANCHOR PLATE, WELD ANCHOR PLATE TO NO. 1 AT 1'-6" CENTERS BETWEEN GIRDERS.

(3) ¾" ϕ THREADED ROD WITH 2 NUTS, PLATES, AND WASHERS. WELD THREADED ROD TO TOP FLANGE OR ATTACH BY BOLTING THRU FLANGE. ON ABUTMENT SIDE GROUT THREADED ROD INTO FIELD DRILLED HOLES IN ABUTMENT BACKWALL AS SHOWN.

(4) ¾" ϕ THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.

(5) FABRICATE SUPPORT FROM 3" x ½" BAR AS SHOWN OR EQUIVALENT. ONE PER GIRDER PER SIDE. SHOP OR FIELD WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE 1½" ϕ HOLE FOR NO. 3 & 1" ϕ HOLE FOR NO. 4.

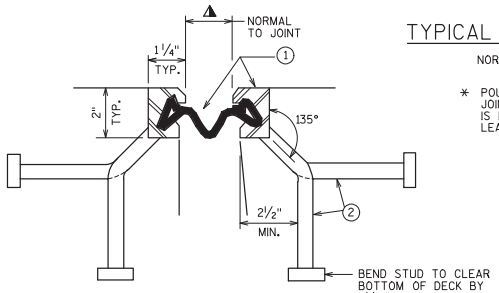
(6) GALVANIZED PLATE ⅜" x 10" x 3'-0" FOR SOUTH ABUTMENT, 2'-2" FOR NORTH ABUTMENT, WITH HOLES FOR NO. 7. BEND AS SHOWN.

(7) ¾" ϕ x 1½" STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. PLACE IN COUNTERSUNK HOLE. RECESS 1/16" BELOW PLATE SURFACE.

(8) ¾" ϕ x 4" GALVANIZED HEX HEAD BOLT. BEND 45°.

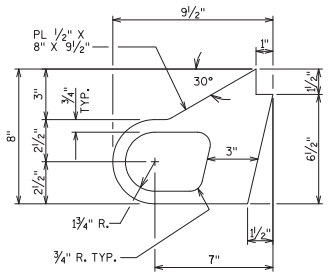
(9) ¾" ϕ x 2¼" GALVANIZED THREADED COUPLING.

(10) 1" x 5" SLOTTED COUNTERSUNK HOLE FOR NO. 7. SLOT PARALLEL TO DIRECTION OF MOVEMENT.



SECTION THRU JOINT

EXTERIOR GIRDER TO EDGE OF DECK & AT PARAPETS



ALTERNATE STRIP SEAL ANCHOR

NOTES

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS. IF USED, DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE STRIP SEAL.

AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST & SWEEP.

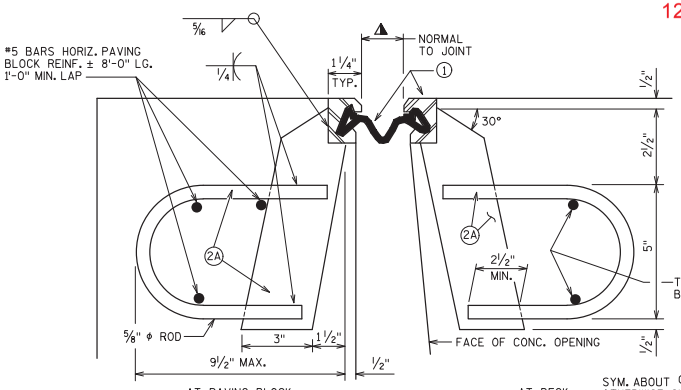
FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN & SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST PLATES, SUPPORTS, AND EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING, THE PLATES, SUPPORTS, AND EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED.

ANCHOR SYSTEM NO. 8 & NO. 9 SHALL CONFORM TO ASTM A307 & SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C & D.

STRIP SEAL EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS & HARDWARE WILL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "EXPANSION DEVICE B-70-407".

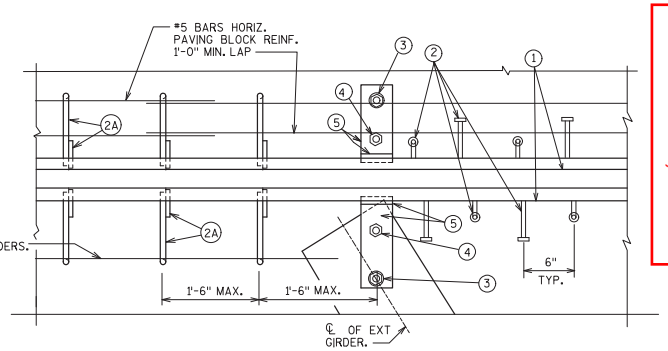
William C. Dreher SDR
12/07/16



SYM. ABOUT ℄ JOINT UNLESS OTHERWISE SHOWN OR NOTED

SECTION THRU JOINT

ROADWAY TRAFFIC AREA BETWEEN EXTERIOR GIRDERS.



PART PLAN

Addendum No. 01
ID 1517-07-80
Revised Sheet 682
December 8, 2016

WISCONSIN
MICHAEL J. ARNOLD
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PROFESSIONAL ENGINEER
12/05/2016

NO.	DATE	REVISION	BY
1	11/10/16	ADDED TEMPERATURE TABLE	DNJ

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY DNJ/EAN | PLANS CK'D. JDL

STRIP SEAL EXPANSION JOINT DETAILS

SHEET 41 OF 47

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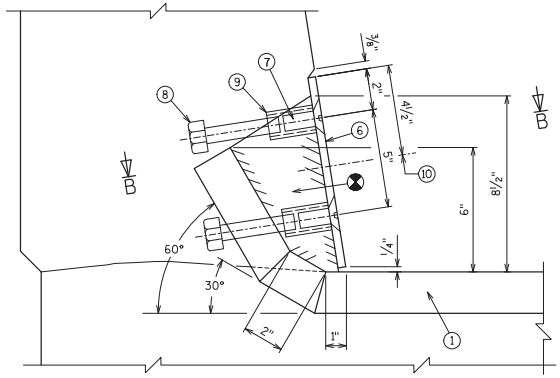
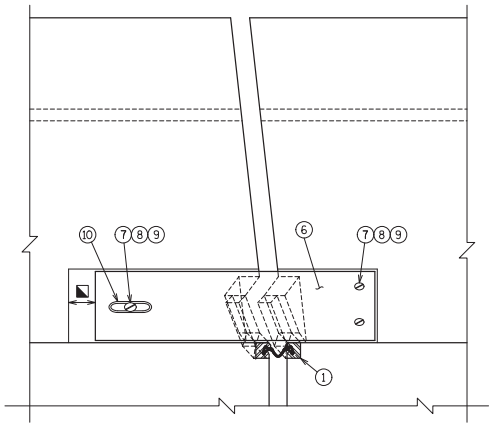
DATE: 12/3/2016
I.D.

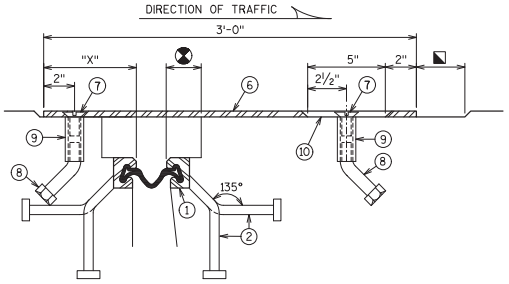
STATE PROJECT NUMBER
1517-07-80



SECTION A-A

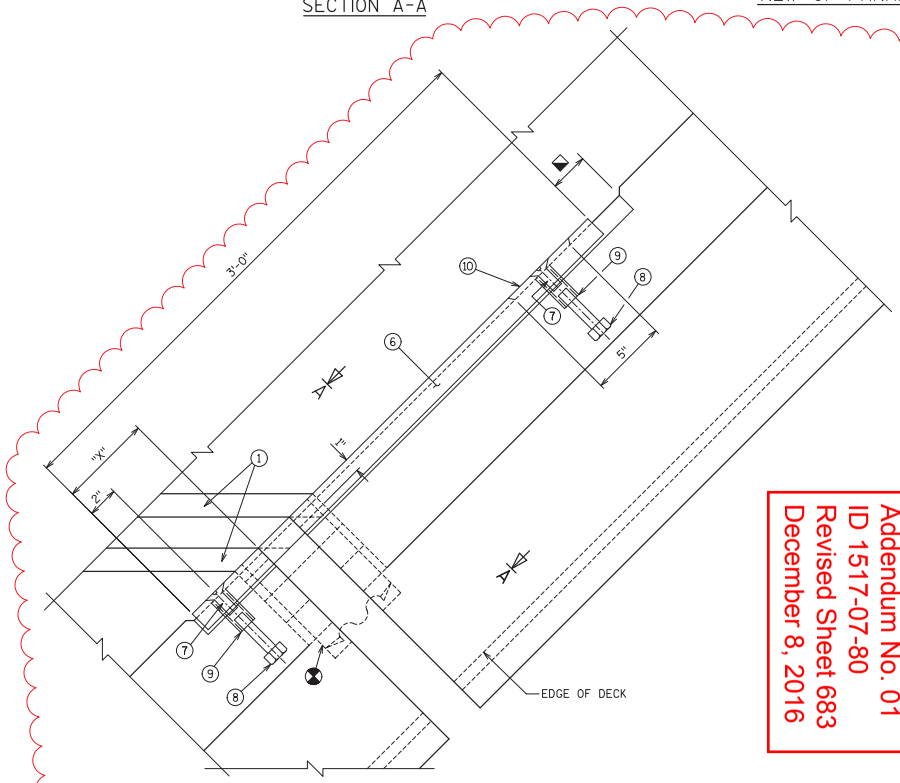


VIEW OF PARAPET PLATE FROM ROADWAY

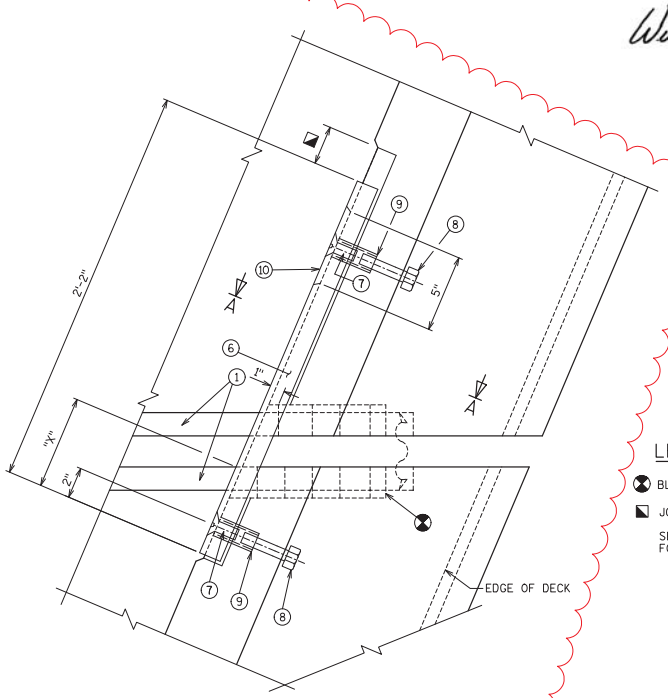


SECTION B-B

"X" = 8" (SOUTH ABUTMENT)
6½" (NORTH ABUTMENT)



PLAN
(SOUTH ABUTMENT)



PLAN
(NORTH ABUTMENT)

Addendum No. 01
ID 1517-07-80
Revised Sheet 683
December 8, 2016

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12/07/16

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LEGEND

⊗ BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.

◪ JOINT OPENING DIMENSION ALONG SKEW PLUS ½".

SEE "STRIP SEAL EXPANSION JOINT DETAILS" FOR LEGEND AND NOTES.

NO.	DATE	REVISION	BY
1	11/15/16	UPDATED PLAN VIEWS	JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY DNJ/EAN | PLANS CK'D. JDL

COVER PLATES FOR PARAPETS

SHEET 42 OF 47

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DATE: 12/3/2016
I.D.

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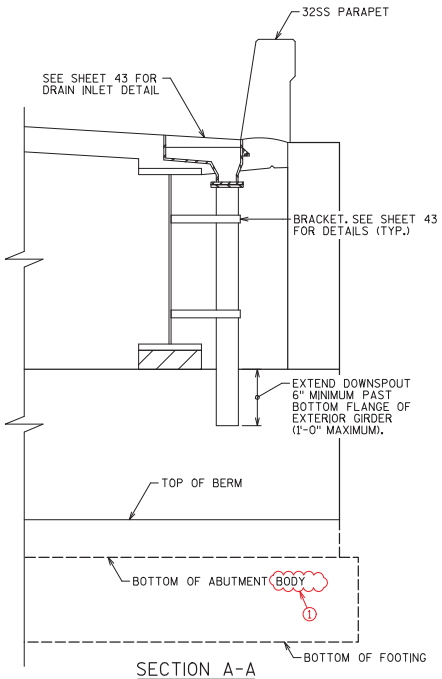
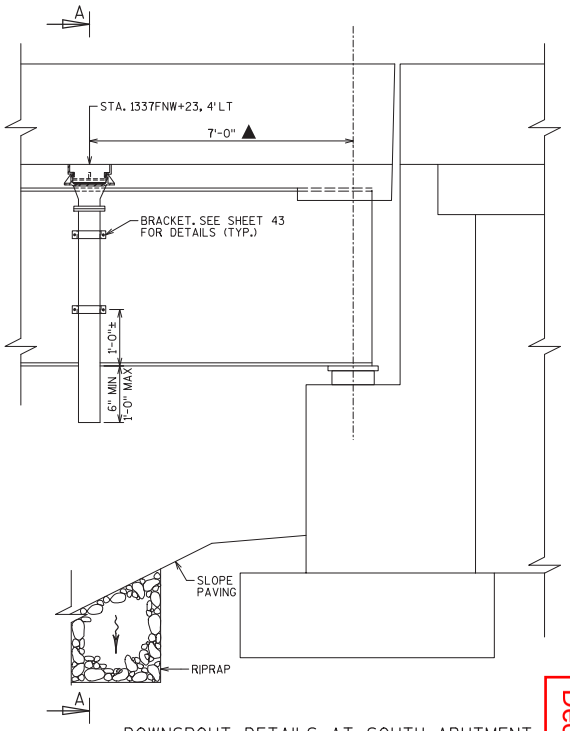
STATE PROJECT NUMBER
1517-07-80

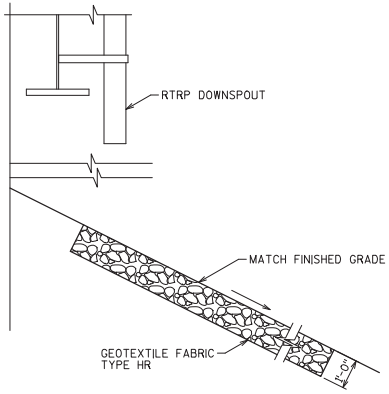


SECTION A-A
(LOOKING DOWNSTATION)

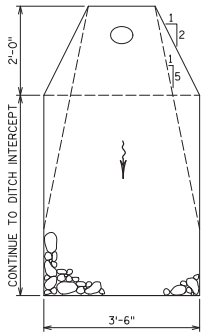


DOWNSPOUT DETAILS AT SOUTH ABUTMENT

▲ MEASURED ALONG GUTTER LINE OF PARAPET TO ℄ BEARING.



ELEVATION VIEW



PLAN VIEW

ENERGY DISSIPATOR DETAIL

NOTES

EXCAVATION FOR ENERGY DISSIPATOR IS INCIDENTAL TO BID ITEM "RIPRAP HEAVY".

FLANGED 6" DIA. DOWNSPOUTS SHALL BE REINFORCED THERMOSETTING RESIN PIPE CONFORMING TO SECTION 514 OF THE STANDARD SPECIFICATIONS.

MATERIAL FOR BRACKETS SHALL CONFORM TO ASTM A36.

THE CONTRACTOR MAY PROPOSE AN ALTERNATE TYPE OF BRACKET. THE PROPOSED ALTERNATE DETAILS SHALL BE SUBMITTED AND SUBJECT TO THE APPROVAL OF THE ENGINEER.

(1) DOWNSPOUT TO BE PIGMENTED SAME COLOR AS GIRDERS. SEE SHEET "AESTHETIC DETAILS" FOR DETAILS.

ALL MATERIAL FOR DOWNSPOUT INCLUDING BRACKETS, CLEVIS, PIPE CLAMPS, HANGERS, AND MISC. ITEMS ARE INCLUDED IN BID ITEM "DOWNSPOUT 6-INCH."

TIGHTEN CLAMPS TO A TIGHT SLIP FIT (FOR TEMP. EXPANSION).

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12/07/16

Addendum No. 01
ID 1517-07-80
Revised Sheet 685
December 8, 2016

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12/05/2016
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NO.	DATE	REVISION	BY
1	11-23-16	REVISED CALLOUT & NOTE	DNJ/JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY DNJ | PLANS CK'D. JDL

DOWNSPOUT DETAILS

SHEET 44 OF 47

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DATE: 12/3/2016
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FILE= \\s1102k306\projects\TransportationUS 10 WIS 441\CADD\sheets\Structures\B-70-407\Sheets\07-80 Plan Set\44-B-70-407_downspout.dgn

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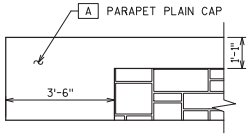
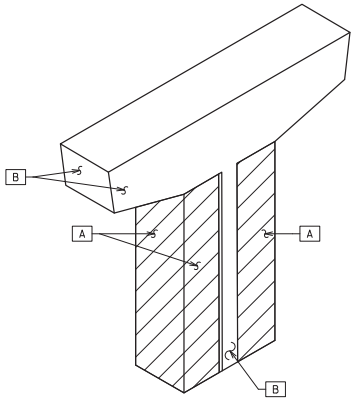
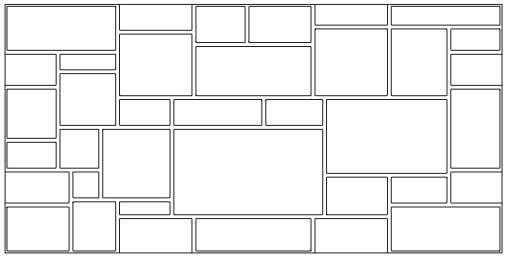
STATE PROJECT NUMBER
1517-07-80



ABUT. PARAPET END



PIER STAINING DETAIL

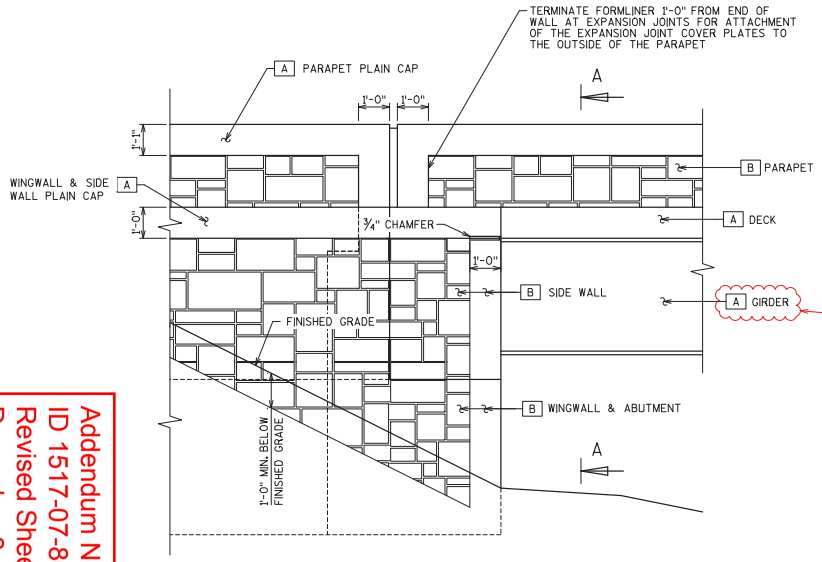


ASHLAR

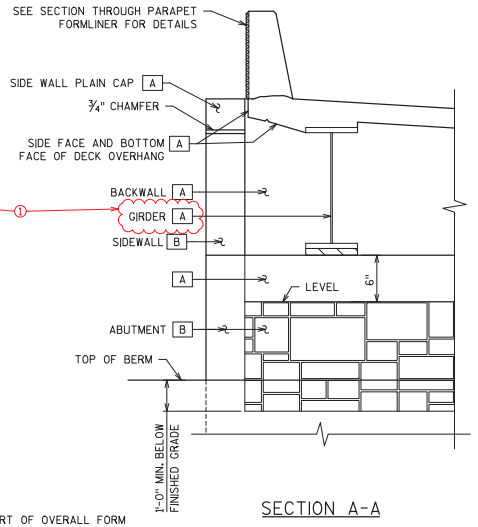
MAXIMUM RELIEF:	1⅝"
AVERAGE RELIEF:	1¼"
LINER THICKNESS*:	2½"
STONE SIZE:	H: 3" - 17"
	W: 5"-29"

* INCLUDES INTERNAL PLYWOOD BACKING

Addendum No. 01
ID 1517-07-80
Revised Sheet 686
December 8, 2016



ABUTMENT STAINING DETAIL



SECTION A-A

STAINING SCHEDULE

MARK	COLOR	FED. COLOR NO.	LOCATION
A	HOPSACK	SW 6109	DECK EDGE, PARAPET AND WING PLAIN CAPS, STEEL GIRDERS ①
B	LATTE	FED. 33522	PARAPETS, WINGWALLS, SIDE WALLS, ABUTMENTS, PIER CAPS, AND BASES.

NOTE: 1. FINISH ON CONCRETE STAIN COLORS IS FLAT (LUSTERLESS)

William C. Drecher SDR
12/07/16

NOTES

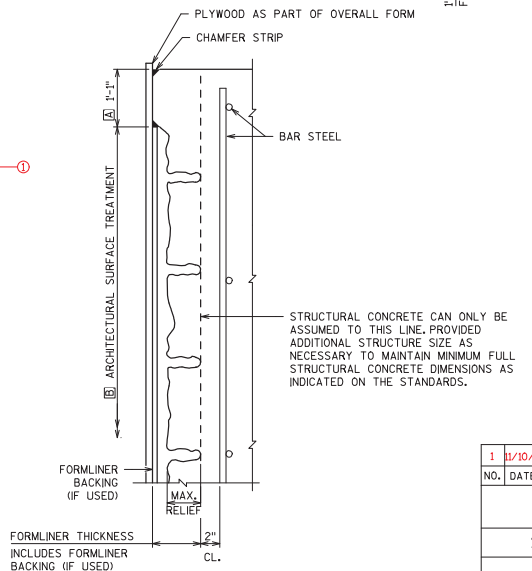
FORMLINER COURSING ON ABUTMENTS AND WINGS SHALL BE LEVEL.

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.

FORMLINER COURSING ON PARAPET SHALL BE PARALLEL TO TOP OF PARAPET.

FORMLINER NEED NOT EXTEND AROUND LIGHT BLISTER.



SECTION THROUGH PARAPET FORMLINER

WISCONSIN
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WI
12/05/2016
PROFESSIONAL ENGINEER

NO.	DATE	REVISION	BY
1	11/10/16	STEEL GIRDER COLOR	JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY	DNJ	PLANS CK'D.	JDL

AESTHETIC DETAILS

SHEET 45 OF 47

686

DATE: 12/3/2016
I.D.

FILE= \\s1102k306\projects\Transportation\US 10 WIS 441\CADD\sheets\Structures\B-70-407\Sheets\07-80 Plan Set\45-B-70-407_aesthetic details.dgr

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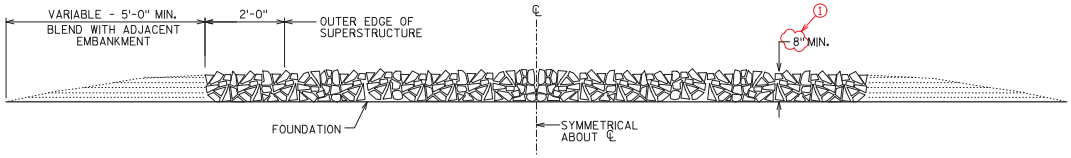
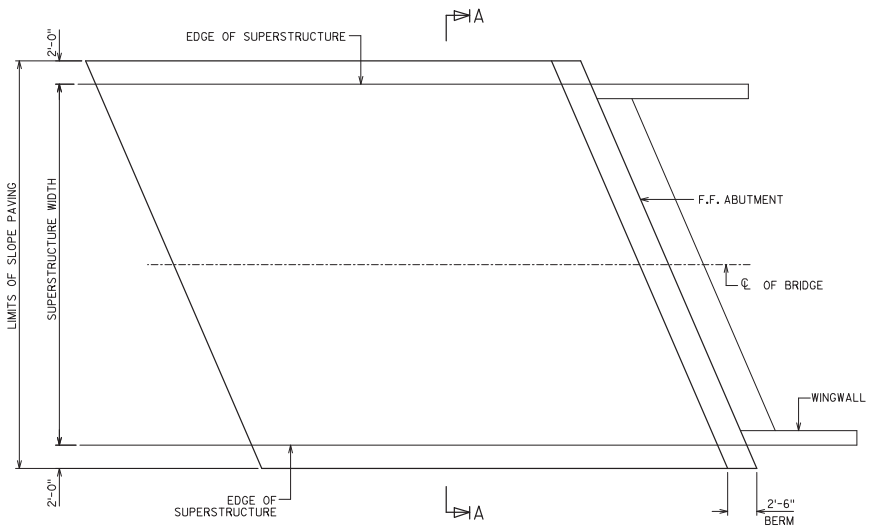
8

STATE PROJECT NUMBER
1517-07-80

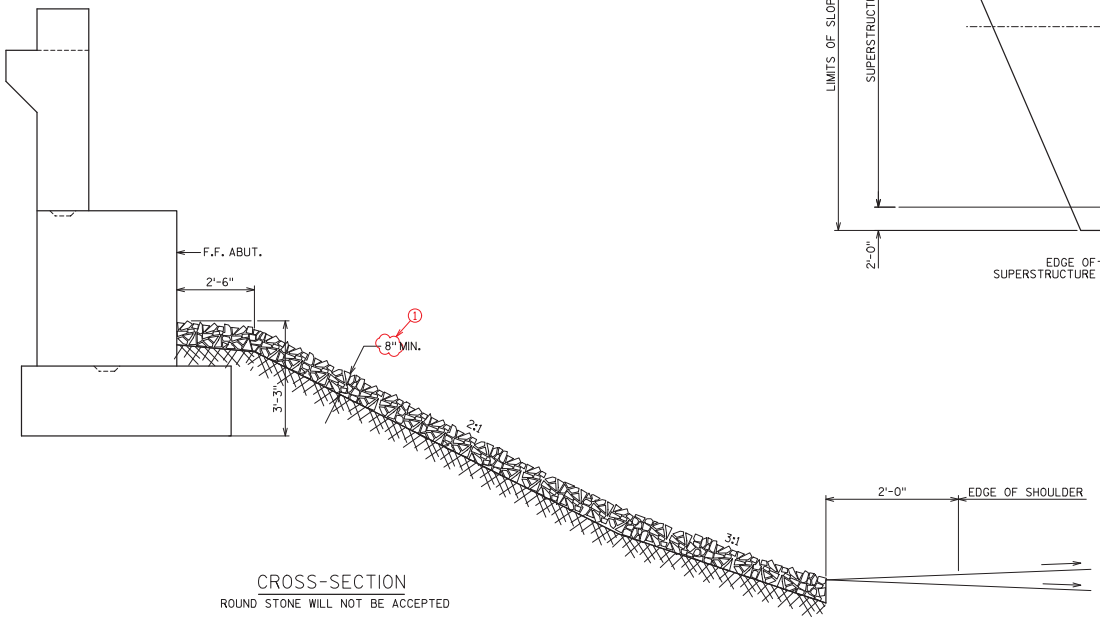
Addendum No. 01
ID 1517-07-80
Revised Sheet 687
December 8, 2016



SECTION A-A



PLAN



CROSS-SECTION
ROUND STONE WILL NOT BE ACCEPTED

William C. Dreher SDR
12/07/16

WISCONSIN
MICHAEL J. ARNOLD
E-41,717
GREENDALE
PROFESSIONAL ENGINEER
12/05/2016

NOTES

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

WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.

NO.	DATE	REVISION	BY
1	11.23.16	UPDATED DEPTH	JDL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-407

DRAWN BY DNJ | PLANS CK'D. JDL

SLOPE PAVING (SELECT CRUSHED MATERIAL)

SHEET 46 OF 47

687

DATE: 12/3/2016
I.D.

FILE= \\s1102k306\projects\Transportation\US 10 WIS 441\CADD\sheets\Structures\B-70-407\Sheets\07-80 Plan Set\46-B-70-407_slope paving.dgn

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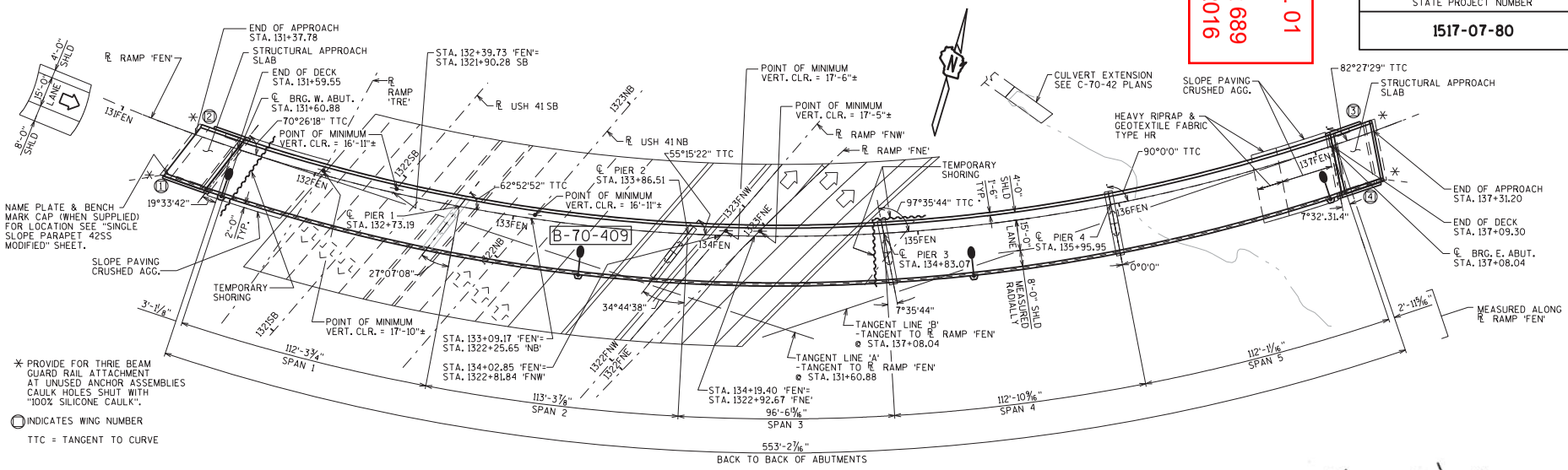
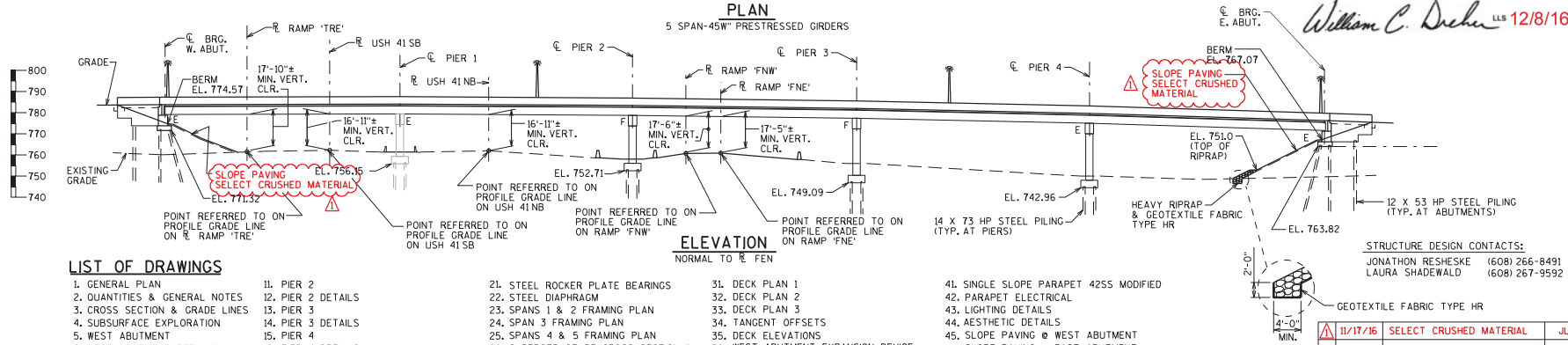
Addendum No. 01
ID 1517-07-80
Revised Sheet 689
December 8, 2016

STATE PROJECT NUMBER
1517-07-80



PLAN
5 SPAN-45W" PRESTRESSED GIRDERS



ELEVATION
NORMAL TO ℄ FEN

William C. Dreher LLS 12/8/16

LIST OF DRAWINGS

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF=1.05
OPERATING RATING FACTOR: RF=1.36
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 240 (KIPS)

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

MATERIAL PROPERTIES:

CONCRETE MASONRY SUPERSTRUCTURE (HPC) ——— f'c = 4,000 P.S.I.
CONCRETE MASONRY ALL OTHER (HPC) ——— f'c = 4,000 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 ——— fy = 60,000 P.S.I.
BAR STEEL REINFORCEMENT, STAINLESS, GRADE 60 ——— fy = 60,000 P.S.I.

45W" PRESTRESSED GIRDERS, CONCRETE MASONRY ——— f'c = 8,000 P.S.I.
STRANDS- 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 12 X 53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS ✳✳ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 35'-0" LONG.

PIERS TO BE SUPPORTED ON HP 14 X 73 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 250 TONS ✳✳ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 20'-0" LONG @ PIER 1, PIER 2, & PIER 3. PILE POINTS REQ'D. ESTIMATED 15'-0" LONG @ PIER 4. PILE POINTS REQ'D.

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

CURVE DATA

CURVE FEN3	CURVE FNE1	CURVE FNE2
P.I. = 138FEN+68.34	P.I. = 1321FNE+32.58	P.I. = 1331FNE+30.30
Δ = 108°27'34"	Δ = 4°34'00"	Δ = 60°16'41"
D = 6°43'44"	D = 1°18'08"	D = 4°02'41"
T = 1181.93	T = 175.44	T = 822.46
L = 1611.87	L = 350.69	L = 1490.33
R = 851.50	R = 4400.00	R = 1416.60
S.E. = 0.06'/'	S.E. = ——	S.E. = ——
P.C. = 126FEN+86.41	P.C. = 1319FNE+57.14	P.C. = 1323FNE+07.83
P.T. = 142FEN+98.28	P.C.C. = 1323FNE+07.83	P.T. = 1337FNE+98.17

TRAFFIC VOLUME

RAMP 'FEN'
A.D.T.=2,050 (2035)
R.D.S.=50 M.P.H.

USH 41
A.D.T.=139,770 (2035)
R.D.S.=70 M.P.H.

STRUCTURE DESIGN CONTACTS:
JONATHON RESHESKE (608) 266-8491
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY
1	11/17/16	SELECT CRUSHED MATERIAL	JLR

Plans Prepared By WISDOT
BUREAU OF STRUCTURES

ACCEPTED _____ CHIEF STRUCTURES DESIGN ENGINEER _____ DATE

STRUCTURE B-70-409
USH 10 EB (RAMP 'FEN') TO USH 41 NB

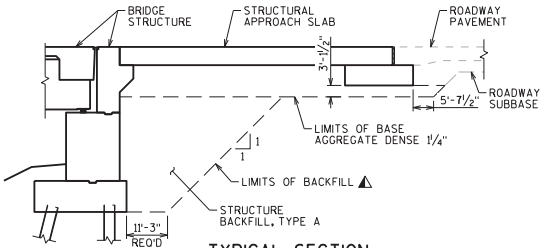
COUNTY WINNEBAGO | TOWN/~~CITY/VILLAGE~~ MENASHA
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS
DESIGNED BY JLR | DESIGN CK'D. BLB | DRAWN BY WWR | PLANS CK'D. JLR/BLB

GENERAL PLAN

SHEET 1 OF 49
689

I.D. 1517-07-04D
DATE: SEPT. 2016
SCALE = 25

Addendum No. 01
ID 1517-07-80
Revised Sheet 690
December 8, 2016



TYPICAL SECTION THRU ABUTMENT

(A3 ABUTMENT WITH STRUCTURAL APPROACH)

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

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	WEST APPROACH SLAB	WEST ABUTMENT	PIER 1	PIER 2	PIER 3	PIER 4	EAST ABUTMENT	EAST APPROACH SLAB	TOTALS
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-70-409	LS	—	—	—	—	—	—	—	—	—	1
206.5000	COFFERDAMS B-70-409	LS	—	—	—	—	—	—	—	—	—	1
210.1100	BACKFILL STRUCTURE TYPE A	CY	—	—	108	—	—	—	—	108	—	216
305.0120	BASE AGGREGATE DENSE 1¼-INCH	TONS	—	110	—	—	—	—	—	—	110	220
501.1000.S	ICE HOT WEATHER CONCRETING	LB	5,175	330	675	745 *	765	805	805	675	330	9,560 **
502.3100	EXPANSION DEVICE B-70-409	LS	—	—	—	—	—	—	—	—	—	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	—	66	—	—	—	—	—	—	66	132 ⚠
502.3210	PIGMENTED SURFACE SEALER	SY	506	20	—	—	—	—	—	—	20	546
503.0146	PRESTRESSED GIRDER TYPE I45W-INCH	LF	2,778	—	—	—	—	—	—	—	—	2,778
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	—	—	3,370	2,580 *	2,470	4,960	2,470	3,360	—	16,630 **
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	195,280	7,880	3,710	9,930 *	10,490	10,460	12,040	3,790	7,730	251,380 **
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	—	—	540	—	—	—	—	530	—	1,070
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	—	—	—	—	10	10	—	—	—	20
506.2610	BEARING PADS ELASTOMERIC LAMINATED	EACH	—	—	—	10	—	—	10	—	—	20
506.4000	STEEL DIAPHRAGMS B-70-409	EACH	40	—	—	—	—	—	—	—	—	40
506.6000	BEARING ASSEMBLIES EXPANSION B-70-409	EACH	—	—	5	—	—	—	—	5	—	10
509.5100.S	POLYMER OVERLAY	SY	1,673	—	—	—	—	—	—	—	—	1,673
511.1200	TEMPORARY SHORING B-70-409	SF	—	—	1,100	600 *	—	900	—	—	—	2,000 **
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	—	—	10	—	—	—	—	10	—	20
517.1010.S	CONCRETE STAINING B-70-409	SF	14,930	124	451	930	1,009	1,013	1,127	446	124	20,154
517.1050.S	ARCHITECTURAL SURFACE TREATMENT B-70-409	SF	2,242	80	373	—	—	—	—	365	80	3,140
550.0500	PILE POINTS	EACH	—	—	—	20 *	20	25	22	—	—	67 **
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	—	—	490	—	—	—	—	490	—	980
550.1140	PILING STEEL HP 14-INCH X 73 LB	LF	—	—	—	400 *	400	500	330	—	—	1,230 **
604.0600	SLOPE PAVING SELECT CRUSHED MATERIAL ⚠	SY	—	—	190	—	—	—	—	132	—	322
606.0300	RIPRAP HEAVY	CY	—	—	—	—	—	—	—	35	—	35
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	—	—	70	—	—	—	—	70	—	140
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	—	2	—	—	—	—	—	—	2	4
645.0120	GEOTEXTILE FABRIC TYPE HR	SY	—	—	—	—	—	—	—	71	—	71
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	—	35	—	—	—	—	—	—	35	70
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	574	—	—	—	—	—	—	—	—	574
653.0220	JUNCTION BOXES 18X6X6-INCH	EACH	5	—	—	—	—	—	—	—	—	5
657.6005.S	ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURES	EACH	4	—	—	—	—	—	—	—	—	4
SPV.0035	MODIFIED HIGH PERFORMANCE CONCRETE (HPC) MASONRY BRIDGES	CY	690	44	90	99 *	102	107	107	90	44	1,274 **
SPV.0060	JUNCTION BOXES FIBERGLASS 18X12X6-INCH ⚠	EACH	—	1	—	—	—	—	—	—	1	2
	NON-BID ITEMS											
	FILLER	SIZE										½',¾",1½"
	BRIDGE SEAT PROTECTION	LS										1

* QUANTITY SHOWN FOR INFORMATIONAL PURPOSES ONLY. CONSTRUCTION FOR PIER 1 IS NOT INCLUDED IN THIS CONTRACT. SEE CONTRACT 1517-07-77 FOR FURTHER DETAILS.

** TOTAL DOES NOT INCLUDE PIER 1 QUANTITY.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

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

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

⚠ PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE PAVING BLOCK & NOTCH AREAS, & APPROACH SLABS.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF THE PARAPETS, INCLUDING PPTS. ON APPROACH SLABS.

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

THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

⚠ THE SLOPE OF THE FILL IN FRONT OF THE EAST ABUTMENT SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE FABRIC TYPE 'HR' AND SLOPE PAVING SELECT CRUSHED MATERIAL TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS.

THE SLOPE OF THE FILL IN FRONT OF THE WEST ABUTMENT SHALL BE COVERED WITH SLOPE PAVING SELECT CRUSHED MATERIAL TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS.

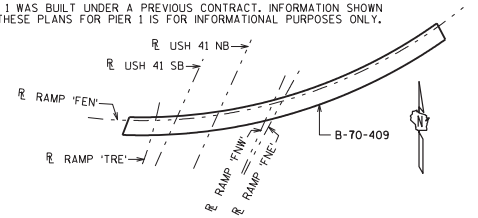
APPLY BRIDGE SEAT PROTECTION, AS PER SECTION 502.3.12 OF THE STANDARD SPECIFICATIONS, TO THE TOP SURFACES OF BOTH ABUTMENTS BELOW EXPANSION DEVICES.

THE RUSTICATIONS ON THE BACK FACE OF PARAPETS AND THE PIER COLUMNS ARE INCLUDED IN THE BID ITEM "CONCRETE MASONRY BRIDGES".

AT ABUTMENTS, HP 14X73 STEEL PILING MAY BE USED IN LIEU OF HP 12X53 STEEL PILING. PAYMENT SHALL BE BASED ON BID PRICE FOR HP 12X53 STEEL PILING.

COFFERDAMS ANTICIPATED AT PIER 4 LOCATION.

PIER 1 WAS BUILT UNDER A PREVIOUS CONTRACT. INFORMATION SHOWN ON THESE PLANS FOR PIER 1 IS FOR INFORMATIONAL PURPOSES ONLY.



BRIDGE LOCATION PLAN

William C. Dreher LLS 12/8/16

STATE PROJECT NUMBER
1517-07-80

NO.	DATE	REVISION	BY
⚠	11/17/16	BID ITEM, QUANTITIES, & NOTES	JLR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-409

DRAWN BY WWR | PLANS CK'D. JLR/BLB

QUANTITIES & GENERAL NOTES

SHEET 2

690

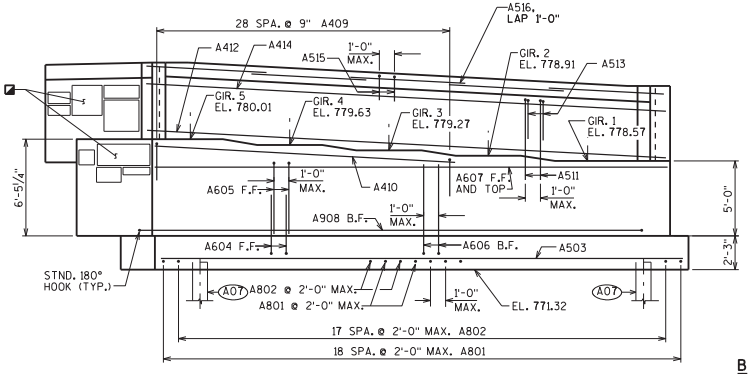
8

8

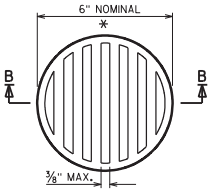
SCALE =

Addendum No. 01
ID 1517-07-80
Revised Sheet 693
December 8, 2016

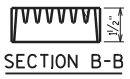
STATE PROJECT NUMBER
1517-07-80



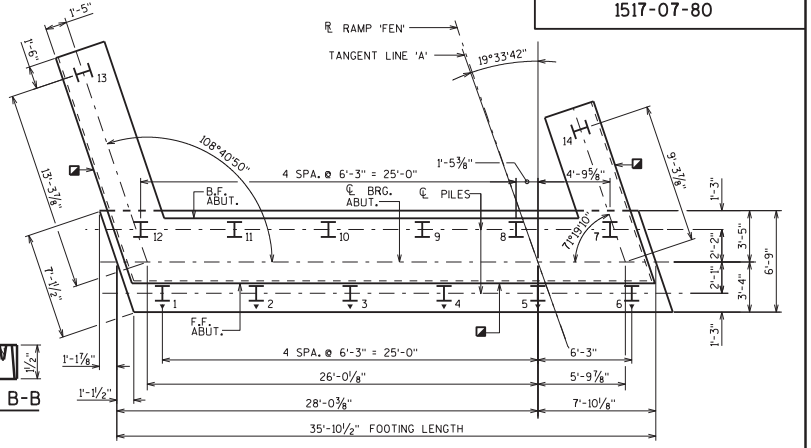
ELEVATION



RODENT SHIELD DETAIL



SECTION B-B

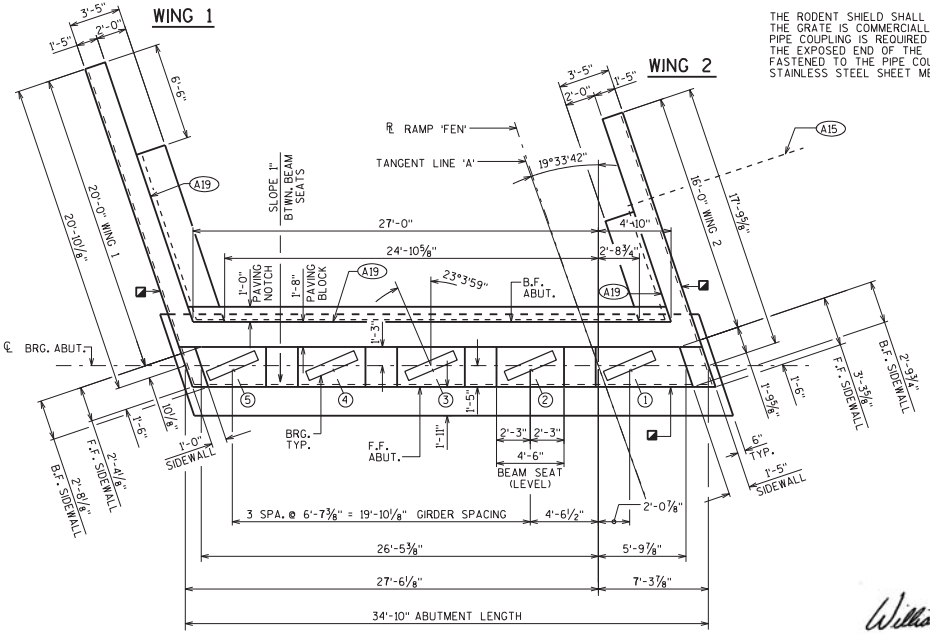


PILE & FOOTING PLAN

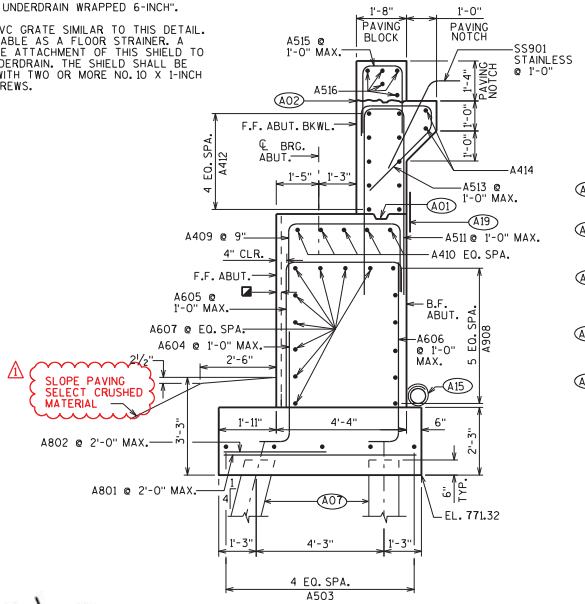
* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

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.



PLAN



SECTION THRU ABUTMENT

NOTES:

A604, A605, A606, A409 BARS TO BE FLARED AT THE ENDS OF ABUTMENTS. (FLARED BARS MAY FIT AND TIE INSIDE HORIZ. BARS)

A801 AND A802 BARS TO BE PLACED PARALLEL TO FOOTING ENDS.

(A01) CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 6.

(A02) CONSTRUCTION JOINT: POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.

(A07) SUPPORT ABUTMENT ON HP 12 x 53 STEEL PILING, ESTIMATED 35 FEET LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

INDICATES PILE BATTERED 1:4 IN DIRECTION SHOWN

2" FORMLINER (SEE "AESTHETIC DETAILS" SHEET)

NO.	DATE	REVISION	BY
⚠	11/17/16	SELECT CRUSHED MATERIAL	JLR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-409

DRAWN BY WWR | PLANS CK'D. JLR/BLB

WEST ABUTMENT

SHEET 5

693

William C. Dreher LLS 12/8/16

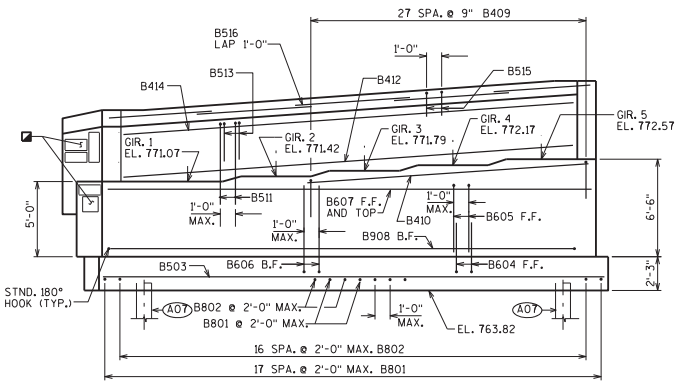
SCALE =

8

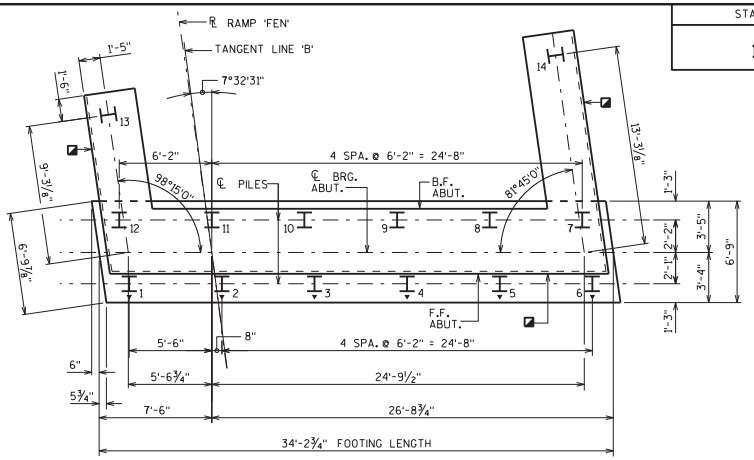
8

STATE PROJECT NUMBER
1517-07-80

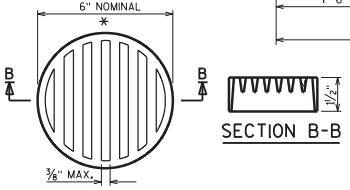
Addendum No. 01
ID 1517-07-80
Revised Sheet 695
December 8, 2016



ELEVATION



PILE & FOOTING PLAN



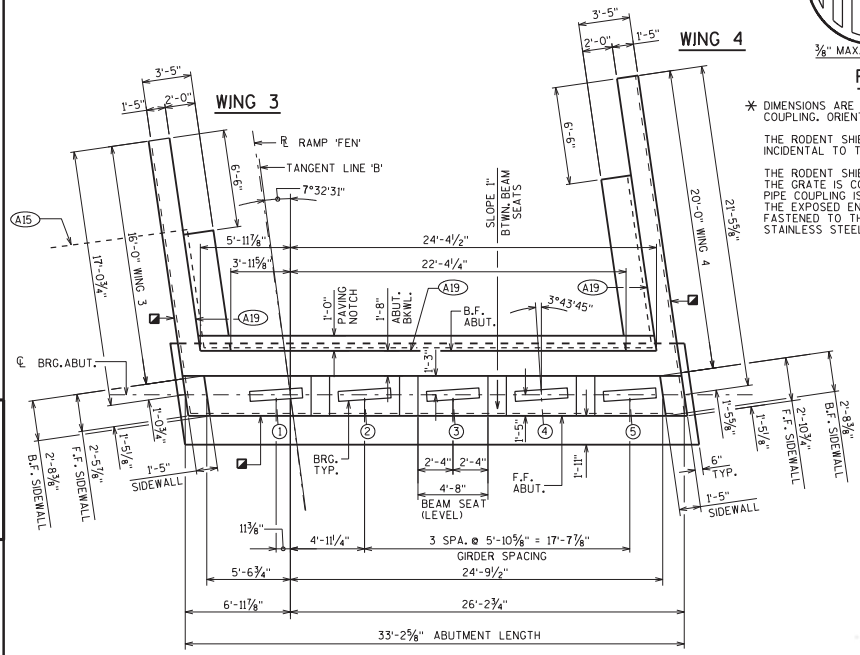
SECTION B-B

RODENT SHIELD DETAIL

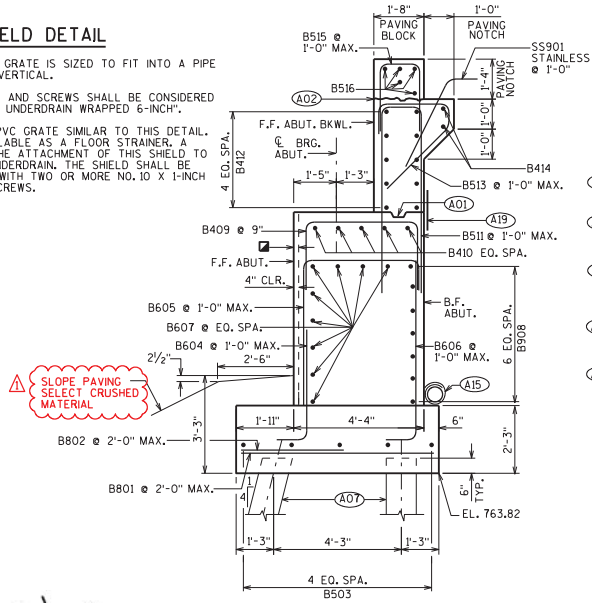
* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

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.



PLAN



SECTION THRU ABUTMENT

NOTES:

B604, B605, B606, B409 BARS TO BE FLARED AT THE ENDS OF ABUTMENTS. (FLARED BARS MAY FIT AND TIE INSIDE HORIZ. BARS)

B801 AND B802 BARS TO BE PLACED PARALLEL TO FOOTING ENDS.

A01 CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 6.

A02 CONSTRUCTION JOINT: POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.

A07 SUPPORT ABUTMENT ON HP 12 x 53 STEEL PILING, ESTIMATED 35 FEET LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

INDICATES PILE BATTERED 1:4 IN DIRECTION SHOWN

2" FORMLINER (SEE "AESTHETIC DETAILS" SHEET)

William C. Dreher LLS 12/8/16

NO.	DATE	REVISION	BY
1	11/17/16	SELECT CRUSHED MATERIAL	JLR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-409

DRAWN BY WWR | PLANS CK'D. JLR/BLB

EAST ABUTMENT

SHEET 7

695

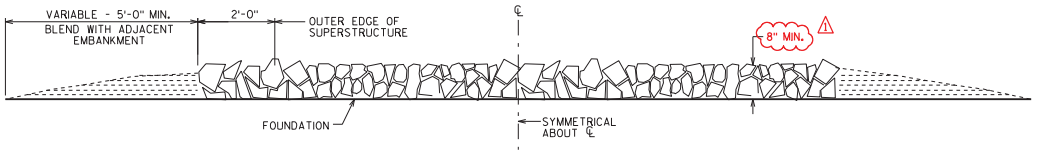
8

8

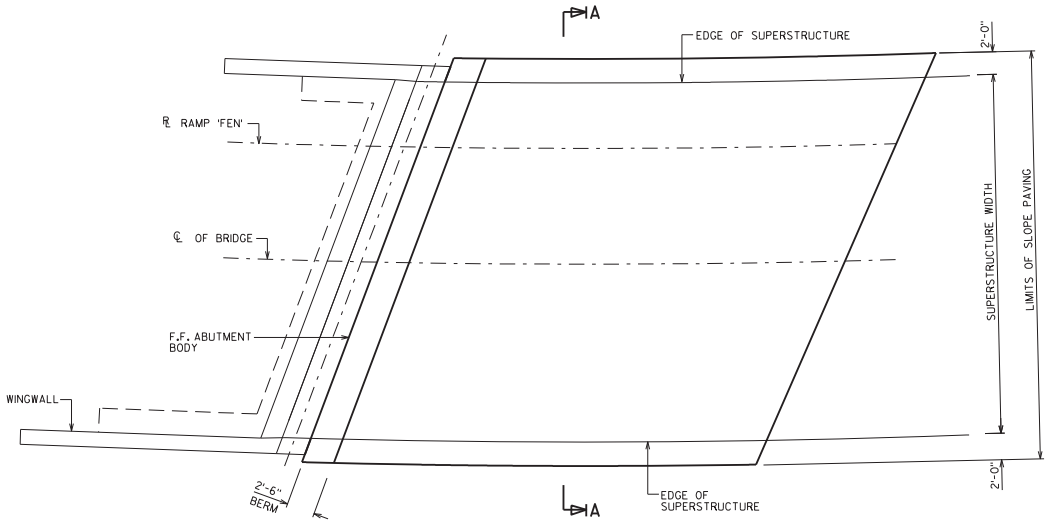
SCALE =

STATE PROJECT NUMBER
1517-07-80

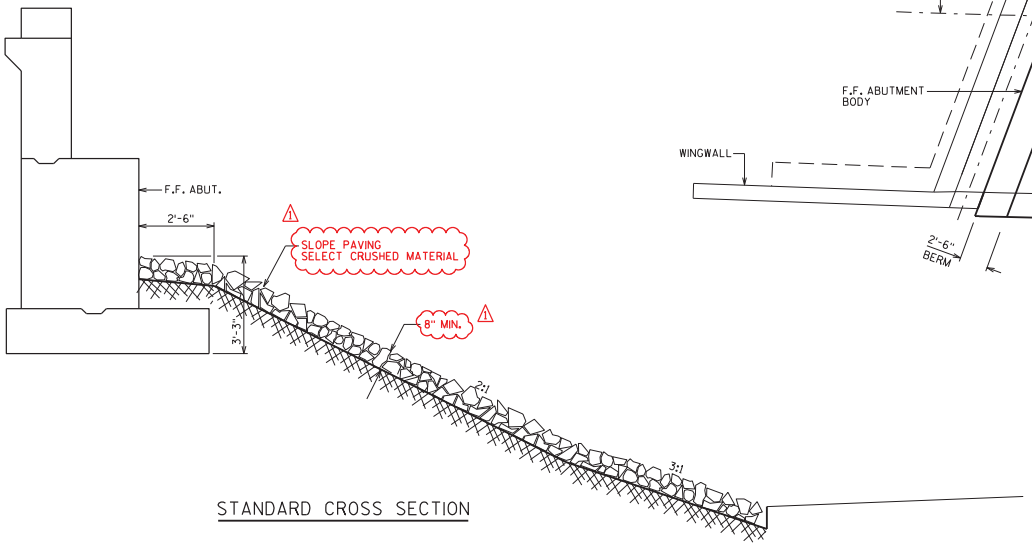
Addendum No. 01
ID 1517-07-80
Revised Sheet 733
December 8, 2016



SECTION A-A



PLAN



STANDARD CROSS SECTION

GENERAL NOTES

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

WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.

William C. Dreher LLS 12/8/16

NO.	DATE	REVISION	BY
1	11/17/16	MATERIAL & MIN. THICKNESS	JLR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-409

DRAWN BY WWR | PLANS CK'D. JLR/BLB

SLOPE PAVING @ WEST ABUTMENT

SHEET 45

733

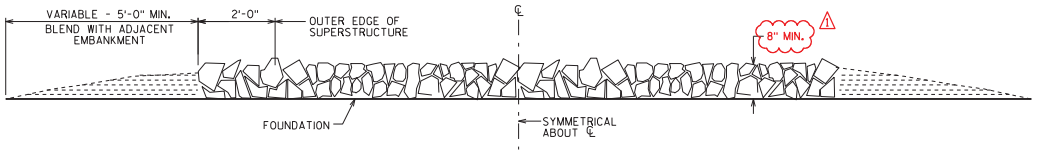
SCALE =

SLPPAVCRAG

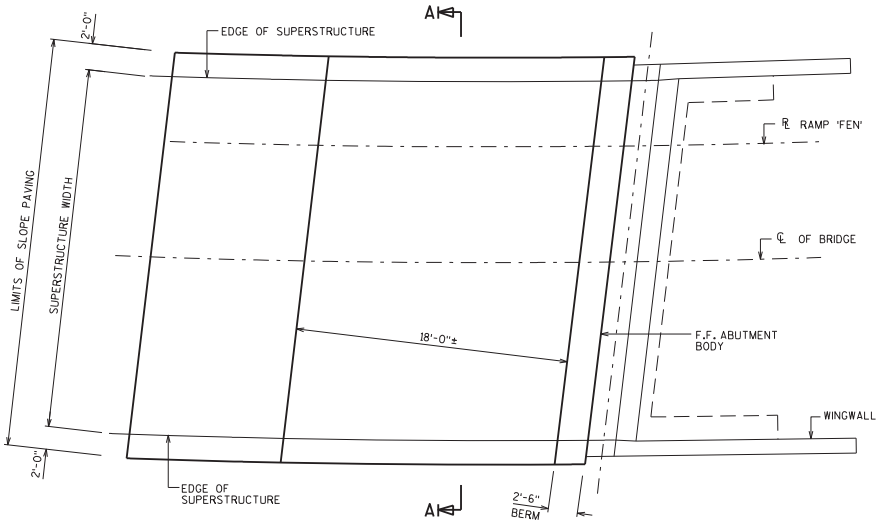
8

8

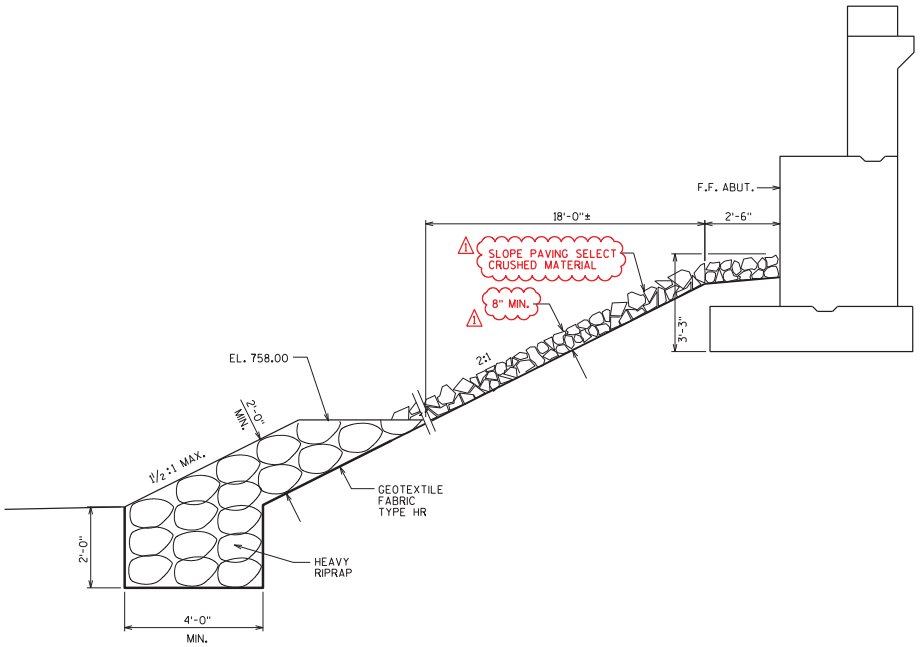
STATE PROJECT NUMBER
1517-07-80



SECTION A-A



PLAN



STANDARD CROSS SECTION

Addendum No. 01
ID 1517-07-80
Revised Sheet 734
December 8, 2016

William C. Dreher LLS 12/8/16

GENERAL NOTES

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

WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.

NO.	DATE	REVISION	BY
1	11/17/16	MATERIAL & MIN. THICKNESS	JLR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-409

DRAWN BY WWR | PLANS CK'D. JLR/BLB

SLOPE PAVING @ EAST ABUTMENT

SHEET 46

734

SLPPAVCRAG

SCALE =

Proposal ID: 20161213021 Project(s): 1517-07-80

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0010	108.4400 CPM Progress Schedule	20.000 EACH	_____.____	_____.____
0020	201.0105 Clearing **P**	2.000 STA	_____.____	_____.____
0030	201.0205 Grubbing **P**	2.000 STA	_____.____	_____.____
0040	203.0100 Removing Small Pipe Culverts	3.000 EACH	_____.____	_____.____
0050	204.0100 Removing Pavement **P**	16,845.000 SY	_____.____	_____.____
0060	204.0110 Removing Asphaltic Surface	2,317.000 SY	_____.____	_____.____
0070	204.0150 Removing Curb & Gutter **P**	581.000 LF	_____.____	_____.____
0080	204.0180 Removing Delineators and Markers	10.000 EACH	_____.____	_____.____
0090	204.0190 Removing Surface Drains	2.000 EACH	_____.____	_____.____
0100	204.0220 Removing Inlets	16.000 EACH	_____.____	_____.____
0110	204.0245 Removing Storm Sewer (size) 001. 12-Inch - 18-Inch **P**	729.000 LF	_____.____	_____.____
0120	204.0245 Removing Storm Sewer (size) 002. 21-Inch - 30-Inch **P**	15.000 LF	_____.____	_____.____
0130	204.0280 Sealing Pipes	2.000 EACH	_____.____	_____.____
0140	204.9060.S Removing (item description) 001. Concrete Apron Endwall for Pipe Underdrain	5.000 EACH	_____.____	_____.____
0150	204.9060.S Removing (item description) 002. Storm Sewer Plug	1.000 EACH	_____.____	_____.____
0160	205.0100 Excavation Common **P**	50,327.000 CY	_____.____	_____.____

Proposal ID: 20161213021 Project(s): 1517-07-80

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0170	205.0200 Excavation Rock	100.000 CY	_____.____	_____.____
0180	206.1000 Excavation for Structures Bridges (structure) 001. B-70-407	LS	LUMP SUM	_____.____
0190	206.1000 Excavation for Structures Bridges (structure) 002. B-70-409	LS	LUMP SUM	_____.____
0200	206.5000 Cofferdams (structure) 001. B-70-409	LS	LUMP SUM	_____.____
0210	210.1100 Backfill Structure Type A **P**	536.000 CY	_____.____	_____.____
0220	211.0400 Prepare Foundation for Asphaltic Shoulders	33.000 STA	_____.____	_____.____
0230	213.0100 Finishing Roadway (project) 001. 1517-07-80	1.000 EACH	_____.____	_____.____
0240	214.0100 Obliterating Old Road	20.000 STA	_____.____	_____.____
0250	305.0110 Base Aggregate Dense 3/4-Inch	18,028.000 TON	_____.____	_____.____
0260	305.0120 Base Aggregate Dense 1 1/4-Inch	29,249.000 TON	_____.____	_____.____
0270	310.0110 Base Aggregate Open-Graded	70.000 TON	_____.____	_____.____
0280	311.0110 Breaker Run	60,608.000 TON	_____.____	_____.____
0290	320.0145 Concrete Base 8-Inch	327.000 SY	_____.____	_____.____
0300	320.0155 Concrete Base 9-Inch **P**	342.000 SY	_____.____	_____.____
0310	415.0410 Concrete Pavement Approach Slab **P**	241.000 SY	_____.____	_____.____
0320	416.0610 Drilled Tie Bars	2,170.000 EACH	_____.____	_____.____

Proposal ID: 20161213021 Project(s): 1517-07-80

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0330	416.0620 Drilled Dowel Bars	273.000 EACH	_____.____	_____.____
0340	416.1010 Concrete Surface Drains	12.000 CY	_____.____	_____.____
0350	416.1110 Concrete Shoulder Rumble Strips	46,714.000 LF	_____.____	_____.____
0360	440.4410 Incentive IRI Ride	7,171.000 DOL	1.00000	7,171.00
0370	455.0605 Tack Coat	134.000 GAL	_____.____	_____.____
0380	460.2000 Incentive Density HMA Pavement	3,841.000 DOL	1.00000	3,841.00
0390	460.5224 HMA Pavement 4 LT 58-28 S	6,328.000 TON	_____.____	_____.____
0400	465.0120 Asphaltic Surface Driveways and Field Entrances	11.000 TON	_____.____	_____.____
0410	465.0315 Asphaltic Flumes	56.000 SY	_____.____	_____.____
0420	465.0400 Asphaltic Shoulder Rumble Strips	52,351.000 LF	_____.____	_____.____
0430	501.1000.S Ice Hot Weather Concreting	18,325.000 LB	_____.____	_____.____
0440	502.3100 Expansion Device (structure) 001. B-70-407	LS	LUMP SUM	_____.____
0450	502.3100 Expansion Device (structure) 002. B-70-409	LS	LUMP SUM	_____.____
0460	502.3200 Protective Surface Treatment **P**	263.000 SY	_____.____	_____.____
0470	502.3210 Pigmented Surface Sealer	995.000 SY	_____.____	_____.____
0480	503.0146 Prestressed Girder Type I 45W-Inch **P**	2,778.000 LF	_____.____	_____.____

Proposal ID: 20161213021 Project(s): 1517-07-80

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0490	505.0400 Bar Steel Reinforcement HS Structures	33,400.000 LB	_____.____	_____.____
0500	505.0600 Bar Steel Reinforcement HS Coated Structures	423,840.000 LB	_____.____	_____.____
0510	505.0800.S Bar Steel Reinforcement HS Stainless Structures	2,170.000 LB	_____.____	_____.____
0520	506.0605 Structural Steel HS	531,198.000 LB	_____.____	_____.____
0530	506.2605 Bearing Pads Elastomeric Non-Laminated **P**	20.000 EACH	_____.____	_____.____
0540	506.2610 Bearing Pads Elastomeric Laminated **P**	20.000 EACH	_____.____	_____.____
0550	506.3015 Welded Stud Shear Connectors 7/8x6-Inch **P**	4,988.000 EACH	_____.____	_____.____
0560	506.4000 Steel Diaphragms (structure) 002. B-70-409 **P**	40.000 EACH	_____.____	_____.____
0570	506.6000 Bearing Assemblies Expansion (structure) 002. B-70-409 **P**	10.000 EACH	_____.____	_____.____
0580	509.5100.S Polymer Overlay	92,141.000 SY	_____.____	_____.____
0590	511.1200 Temporary Shoring (structure) 001. B-70-407	1,795.000 SF	_____.____	_____.____
0600	511.1200 Temporary Shoring (structure) 002. B-70-409	2,000.000 SF	_____.____	_____.____
0610	514.0445 Floor Drains Type GC	1.000 EACH	_____.____	_____.____
0620	514.2625 Downspout 6-Inch **P**	6.000 LF	_____.____	_____.____

Proposal ID: 20161213021 Project(s): 1517-07-80

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0630	516.0500 Rubberized Membrane Waterproofing **P**	50.000 SY	_____.____	_____.____
0640	517.0600 Painting Epoxy System (structure) 001. B-70-407	 LS	LUMP SUM	_____.____
0650	517.1010.S Concrete Staining (structure) 001. B-70-407 **P**	11,781.000 SF	_____.____	_____.____
0660	517.1010.S Concrete Staining (structure) 002. B-70-409 **P**	20,154.000 SF	_____.____	_____.____
0670	517.1050.S Architectural Surface Treatment (structure) 001. B-70-407 **P**	3,049.000 SF	_____.____	_____.____
0680	517.1050.S Architectural Surface Treatment (structure) 002. B-70-409 **P**	3,140.000 SF	_____.____	_____.____
0690	520.8000 Concrete Collars for Pipe	3.000 EACH	_____.____	_____.____
0700	521.1012 Apron Endwalls for Culvert Pipe Steel 12-Inch	5.000 EACH	_____.____	_____.____
0710	522.1015 Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	3.000 EACH	_____.____	_____.____
0720	522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	6.000 EACH	_____.____	_____.____
0730	524.0624 Apron Endwalls for Culvert Pipe Salvaged 24-Inch	1.000 EACH	_____.____	_____.____
0740	531.0300.S Noise Barriers Double-Sided Sound Absorptive (structure) 001. N-70-100	10,000.000 SF	_____.____	_____.____
0750	531.0300.S Noise Barriers Double-Sided Sound Absorptive (structure) 002. N-70-101	3,910.000 SF	_____.____	_____.____
0760	531.0300.S Noise Barriers Double-Sided Sound Absorptive (structure) 003. N-70-110	15,880.000 SF	_____.____	_____.____

Proposal ID: 20161213021 Project(s): 1517-07-80

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0770	550.0020 Pre-Boring Rock or Consolidated Materials	467.000 LF	_____.____	_____.____
0780	550.0500 Pile Points	123.000 EACH	_____.____	_____.____
0790	550.1120 Piling Steel HP 12-Inch X 53 Lb	2,685.000 LF	_____.____	_____.____
0800	550.1140 Piling Steel HP 14-Inch X 73 Lb	1,230.000 LF	_____.____	_____.____
0810	601.0105 Concrete Curb Type A	15.000 LF	_____.____	_____.____
0820	601.0409 Concrete Curb & Gutter 30-Inch Type A	858.000 LF	_____.____	_____.____
0830	601.0511 Concrete Curb & Gutter Integral 6-Inch Sloped 36-Inch	1,125.000 LF	_____.____	_____.____
0840	602.0410 Concrete Sidewalk 5-Inch	5,435.000 SF	_____.____	_____.____
0850	603.1132 Concrete Barrier Type S32	245.000 LF	_____.____	_____.____
0860	603.1142 Concrete Barrier Type S42	1,946.000 LF	_____.____	_____.____
0870	603.1156 Concrete Barrier Type S56	3,650.000 LF	_____.____	_____.____
0880	603.1442 Concrete Barrier Type S42C	93.000 LF	_____.____	_____.____
0890	603.3113 Concrete Barrier Transition Type NJ32SF to S36	4.000 EACH	_____.____	_____.____
0900	603.3535 Concrete Barrier Transition Type S36 to S42	4.000 EACH	_____.____	_____.____
0910	603.3559 Concrete Barrier Transition Type S42 to S56	4.000 EACH	_____.____	_____.____

Proposal ID: 20161213021 Project(s): 1517-07-80

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0920	603.8000 Concrete Barrier Temporary Precast Delivered	5,475.000 LF	_____.____	_____.____
0930	603.8125 Concrete Barrier Temporary Precast Installed	24,475.000 LF	_____.____	_____.____
0950	604.0600 Slope Paving Select Crushed Material **P**	714.000 SY	_____.____	_____.____
0960	606.0200 Riprap Medium	56.000 CY	_____.____	_____.____
0970	606.0300 Riprap Heavy	46.000 CY	_____.____	_____.____
0980	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	182.000 LF	_____.____	_____.____
0990	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	211.000 LF	_____.____	_____.____
1000	608.0330 Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	16.000 LF	_____.____	_____.____
1010	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	34.000 LF	_____.____	_____.____
1020	608.0424 Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	48.000 LF	_____.____	_____.____
1030	611.0420 Reconstructing Manholes	2.000 EACH	_____.____	_____.____
1040	611.0615 Inlet Covers Type F	5.000 EACH	_____.____	_____.____
1050	611.0639 Inlet Covers Type H-S	2.000 EACH	_____.____	_____.____
1060	611.0642 Inlet Covers Type MS	3.000 EACH	_____.____	_____.____
1070	611.0654 Inlet Covers Type V	13.000 EACH	_____.____	_____.____

Proposal ID: 20161213021 Project(s): 1517-07-80

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
1080	611.2005 Manholes 5-FT Diameter	1.000 EACH	_____.____	_____.____
1090	611.3003 Inlets 3-FT Diameter	5.000 EACH	_____.____	_____.____
1100	611.3004 Inlets 4-FT Diameter	2.000 EACH	_____.____	_____.____
1110	611.3220 Inlets 2x2-FT	5.000 EACH	_____.____	_____.____
1120	611.3901 Inlets Median 1 Grate	1.000 EACH	_____.____	_____.____
1130	611.3902 Inlets Median 2 Grate	1.000 EACH	_____.____	_____.____
1140	611.8115 Adjusting Inlet Covers	9.000 EACH	_____.____	_____.____
1150	612.0206 Pipe Underdrain Unperforated 6-Inch	113.000 LF	_____.____	_____.____
1160	612.0212 Pipe Underdrain Unperforated 12-Inch	313.000 LF	_____.____	_____.____
1170	612.0406 Pipe Underdrain Wrapped 6-Inch	1,642.000 LF	_____.____	_____.____
1180	612.0806 Apron Endwalls for Underdrain Reinforced Concrete 6-Inch	4.000 EACH	_____.____	_____.____
1190	614.0010 Barrier System Grading Shaping Finishing	1.000 EACH	_____.____	_____.____
1200	614.0150 Anchor Assemblies for Steel Plate Beam Guard	7.000 EACH	_____.____	_____.____
1210	614.0397 Guardrail Mow Strip Emulsified Asphalt	1,323.000 SY	_____.____	_____.____
1220	614.0905 Crash Cushions Temporary	7.000 EACH	_____.____	_____.____
1230	614.0920 Salvaged Rail	244.000 LF	_____.____	_____.____

Proposal ID: 20161213021 Project(s): 1517-07-80

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
1240	614.0925 Salvaged Guardrail End Treatments	1.000 EACH	_____.____	_____.____
1250	614.2300 MGS Guardrail 3	5,792.000 LF	_____.____	_____.____
1260	614.2500 MGS Thrie Beam Transition	468.000 LF	_____.____	_____.____
1270	614.2610 MGS Guardrail Terminal EAT	19.000 EACH	_____.____	_____.____
1280	614.2620 MGS Guardrail Terminal Type 2	11.000 EACH	_____.____	_____.____
1290	616.0206 Fence Chain Link 6-FT	5,563.000 LF	_____.____	_____.____
1300	616.0700.S Fence Safety	2,000.000 LF	_____.____	_____.____
1310	618.0100 Maintenance And Repair of Haul Roads (project) 001. 1517-07-80	1.000 EACH	_____.____	_____.____
1320	619.1000 Mobilization	1.000 EACH	_____.____	_____.____
1330	624.0100 Water	791.000 MGAL	_____.____	_____.____
1340	625.0100 Topsoil	14,235.000 SY	_____.____	_____.____
1350	625.0500 Salvaged Topsoil	44,117.000 SY	_____.____	_____.____
1360	627.0200 Mulching	27,078.000 SY	_____.____	_____.____
1370	628.1504 Silt Fence	1,829.000 LF	_____.____	_____.____
1380	628.1520 Silt Fence Maintenance	1,829.000 LF	_____.____	_____.____
1390	628.1905 Mobilizations Erosion Control	22.000 EACH	_____.____	_____.____
1400	628.1910 Mobilizations Emergency Erosion Control	11.000 EACH	_____.____	_____.____

Proposal ID: 20161213021 Project(s): 1517-07-80

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
1410	628.2004 Erosion Mat Class I Type B	34,991.000 SY	_____.____	_____.____
1420	628.7005 Inlet Protection Type A	51.000 EACH	_____.____	_____.____
1430	628.7010 Inlet Protection Type B	25.000 EACH	_____.____	_____.____
1440	628.7015 Inlet Protection Type C	4.000 EACH	_____.____	_____.____
1450	628.7020 Inlet Protection Type D	9.000 EACH	_____.____	_____.____
1460	628.7504 Temporary Ditch Checks	713.000 LF	_____.____	_____.____
1470	628.7555 Culvert Pipe Checks	163.000 EACH	_____.____	_____.____
1480	628.7570 Rock Bags	52.000 EACH	_____.____	_____.____
1490	629.0210 Fertilizer Type B	38.000 CWT	_____.____	_____.____
1500	630.0120 Seeding Mixture No. 20	1,626.000 LB	_____.____	_____.____
1510	630.0200 Seeding Temporary	1,626.000 LB	_____.____	_____.____
1520	634.0614 Posts Wood 4x6-Inch X 14-FT	16.000 EACH	_____.____	_____.____
1530	634.0616 Posts Wood 4x6-Inch X 16-FT	28.000 EACH	_____.____	_____.____
1540	634.0618 Posts Wood 4x6-Inch X 18-FT	24.000 EACH	_____.____	_____.____
1550	634.0620 Posts Wood 4x6-Inch X 20-FT	2.000 EACH	_____.____	_____.____
1560	634.0808 Posts Tubular Steel 2x2-Inch X 8-FT	7.000 EACH	_____.____	_____.____
1570	635.0200 Sign Supports Structural Steel HS	2,162.000 LB	_____.____	_____.____

Proposal ID: 20161213021 Project(s): 1517-07-80

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
1580	636.0100 Sign Supports Concrete Masonry	14.000 CY	_____.____	_____.____
1590	636.0500 Sign Supports Steel Reinforcement	234.000 LB	_____.____	_____.____
1600	636.1500 Sign Supports Steel Coated Reinforcement HS	1,110.000 LB	_____.____	_____.____
1610	637.1220 Signs Type I Reflective SH	2,544.500 SF	_____.____	_____.____
1620	637.2210 Signs Type II Reflective H	928.630 SF	_____.____	_____.____
1630	637.2230 Signs Type II Reflective F	222.000 SF	_____.____	_____.____
1640	638.2102 Moving Signs Type II	1.000 EACH	_____.____	_____.____
1650	638.2601 Removing Signs Type I	8.000 EACH	_____.____	_____.____
1660	638.2602 Removing Signs Type II	35.000 EACH	_____.____	_____.____
1670	638.3000 Removing Small Sign Supports	41.000 EACH	_____.____	_____.____
1680	638.3100 Removing Structural Steel Sign Supports	8.000 EACH	_____.____	_____.____
1690	641.1200 Sign Bridge Cantilevered (structure) 001. S-70-257	 LS	LUMP SUM	_____.____
1700	642.5401 Field Office Type D	1.000 EACH	_____.____	_____.____
1710	643.0200.S Traffic Control Surveillance and Maintenance (project) 001. 1517-07-80	540.000 DAY	_____.____	_____.____
1720	643.0300 Traffic Control Drums	31,268.000 DAY	_____.____	_____.____
1730	643.0420 Traffic Control Barricades Type III	2,515.000 DAY	_____.____	_____.____

Proposal ID: 20161213021 Project(s): 1517-07-80

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
1740	643.0705 Traffic Control Warning Lights Type A	3,676.000 DAY	_____.____	_____.____
1750	643.0715 Traffic Control Warning Lights Type C	11,691.000 DAY	_____.____	_____.____
1760	643.0800 Traffic Control Arrow Boards	310.000 DAY	_____.____	_____.____
1770	643.0900 Traffic Control Signs	2,742.000 DAY	_____.____	_____.____
1780	643.0910 Traffic Control Covering Signs Type I	10.000 EACH	_____.____	_____.____
1790	643.0920 Traffic Control Covering Signs Type II	10.000 EACH	_____.____	_____.____
1800	643.1000 Traffic Control Signs Fixed Message	434.000 SF	_____.____	_____.____
1810	643.1050 Traffic Control Signs PCMS	890.000 DAY	_____.____	_____.____
1820	643.1051 Traffic Control Signs PCMS with Cellular Communications	1,800.000 DAY	_____.____	_____.____
1830	643.2000 Traffic Control Detour (project) 001. 1517-07-80	1.000 EACH	_____.____	_____.____
1840	643.3000 Traffic Control Detour Signs	450.000 DAY	_____.____	_____.____
1850	645.0120 Geotextile Type HR **P**	176.000 SY	_____.____	_____.____
1860	646.0106 Pavement Marking Epoxy 4-Inch	127,383.000 LF	_____.____	_____.____
1870	646.0126 Pavement Marking Epoxy 8-Inch	1,688.000 LF	_____.____	_____.____
1880	646.0129 Pavement Marking Preformed Plastic 8-Inch	230.000 LF	_____.____	_____.____
1890	646.0156 Pavement Marking Epoxy 18-Inch	54.000 LF	_____.____	_____.____

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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
1900	646.0600 Removing Pavement Markings	84,045.000 LF	_____.____	_____.____
1910	646.0690.S Removing Pavement Markings Water Blasting	9,400.000 LF	_____.____	_____.____
1920	646.0841.S Pavement Marking Grooved Wet Reflective Contrast Tape 4-Inch	18,214.000 LF	_____.____	_____.____
1930	646.0843.S Pavement Marking Grooved Wet Reflective Contrast Tape 8-Inch	23,036.000 LF	_____.____	_____.____
1940	647.0159 Pavement Marking Arrows Preformed Plastic Type 1	1.000 EACH	_____.____	_____.____
1950	647.0162 Pavement Marking Arrows Preformed Plastic Type 2R	1.000 EACH	_____.____	_____.____
1960	647.0169 Pavement Marking Arrows Preformed Plastic Type 2	1.000 EACH	_____.____	_____.____
1970	647.0179 Pavement Marking Arrows Preformed Plastic Type 3	1.000 EACH	_____.____	_____.____
1980	647.0196 Pavement Marking Arrows Epoxy Type 5	10.000 EACH	_____.____	_____.____
1990	647.0359 Pavement Marking Words Preformed Plastic	3.000 EACH	_____.____	_____.____
2000	647.0726 Pavement Marking Diagonal Epoxy 12-Inch	446.000 LF	_____.____	_____.____
2010	649.0400 Temporary Pavement Marking Removable Tape 4-Inch	18,686.000 LF	_____.____	_____.____
2020	649.0402 Temporary Pavement Marking Paint 4-Inch	43,973.000 LF	_____.____	_____.____
2030	649.0802 Temporary Pavement Marking Paint 8-Inch	3,869.000 LF	_____.____	_____.____

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Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
2040	649.0803 Temporary Pavement Marking Epoxy 8-Inch	2,699.000 LF	_____.____	_____.____
2050	649.2100 Temporary Raised Pavement Markers Type I	387.000 EACH	_____.____	_____.____
2060	652.0125 Conduit Rigid Metallic 2-Inch **P**	141.000 LF	_____.____	_____.____
2070	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch **P**	21,668.000 LF	_____.____	_____.____
2080	653.0180 Pull Boxes Steel Communications (inch) 001. 24x36-Inch	4.000 EACH	_____.____	_____.____
2090	653.0220 Junction Boxes 18x6x6-Inch	6.000 EACH	_____.____	_____.____
2100	653.0222 Junction Boxes 18x12x6-Inch	2.000 EACH	_____.____	_____.____
2110	654.0107 Concrete Bases Type 7	67.000 EACH	_____.____	_____.____
2120	655.0610 Electrical Wire Lighting 12 AWG **P**	25,740.000 LF	_____.____	_____.____
2130	655.0615 Electrical Wire Lighting 10 AWG	1,409.000 LF	_____.____	_____.____
2140	655.0620 Electrical Wire Lighting 8 AWG **P**	45,319.000 LF	_____.____	_____.____
2150	655.0625 Electrical Wire Lighting 6 AWG	4,227.000 LF	_____.____	_____.____
2160	655.0625 Electrical Wire Lighting 6 AWG **P**	173,512.000 LF	_____.____	_____.____
2170	655.0630 Electrical Wire Lighting 4 AWG	2,234.000 LF	_____.____	_____.____
2180	655.0635 Electrical Wire Lighting 2 AWG	6,702.000 LF	_____.____	_____.____

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Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
2190	656.0200 Electrical Service Meter Breaker Pedestal (location) 001. Sta 1335+40FNE RT	LS	LUMP SUM	_____.____
2200	656.0500 Electrical Service Breaker Disconnect Box (location) 001. Sta. 1328+00SB LT	LS	LUMP SUM	_____.____
2210	657.0210 Transformer Bases Breakaway 15-17 Inch Bolt Circle	115.000 EACH	_____.____	_____.____
2220	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	7.000 EACH	_____.____	_____.____
2230	657.0322 Poles Type 5-Aluminum	18.000 EACH	_____.____	_____.____
2240	657.0337 Poles Type 17-Aluminum	144.000 EACH	_____.____	_____.____
2250	657.0710 Luminaire Arms Truss Type 4 1/2-Inch Clamp 12-FT	11.000 EACH	_____.____	_____.____
2260	657.0730 Luminaire Arms Truss Type 6-Inch Clamp 12-FT	146.000 EACH	_____.____	_____.____
2270	657.6005.S Anchor Assemblies Light Poles on Structures	6.000 EACH	_____.____	_____.____
2280	659.1120 Luminaires Utility LED B	11.000 EACH	_____.____	_____.____
2290	659.1125 Luminaires Utility LED C	142.000 EACH	_____.____	_____.____
2300	659.1130 Luminaires Utility LED D	4.000 EACH	_____.____	_____.____
2310	670.0100 Field System Integrator	LS	LUMP SUM	_____.____
2320	670.0200 ITS Documentation	LS	LUMP SUM	_____.____
2330	671.0142 Conduit HDPE 4-Duct 2-Inch	1,885.000 LF	_____.____	_____.____

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Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
2340	671.0232 Conduit HDPE Directional Bore 3-Duct 2-Inch	575.000 LF	_____.____	_____.____
2350	671.0242 Conduit HDPE Directional Bore 4-Duct 2-Inch	840.000 LF	_____.____	_____.____
2360	671.0300 Fiber Optic Cable Marker	18.000 EACH	_____.____	_____.____
2370	672.0100 Base ITS Controller Cabinet	1.000 EACH	_____.____	_____.____
2380	673.0105 Communication Vault Type 1	7.000 EACH	_____.____	_____.____
2390	673.0200.S Install ITS Field Cabinet	1.000 EACH	_____.____	_____.____
2400	673.0225.S Install Pole Mounted Cabinet	1.000 EACH	_____.____	_____.____
2410	674.0200 Cable Microwave Detector	7,701.000 LF	_____.____	_____.____
2420	675.0300 Install Mounted Controller Microwave Detector Assembly	8.000 EACH	_____.____	_____.____
2430	675.0400.S Install Ethernet Switch	2.000 EACH	_____.____	_____.____
2440	678.0006 Install Fiber Optic Cable Outdoor Plant 6-CT	2,159.000 LF	_____.____	_____.____
2450	678.0072 Install Fiber Optic Cable Outdoor Plant 72-CT	15,070.000 LF	_____.____	_____.____
2460	678.0200 Fiber Optic Splice Enclosure	4.000 EACH	_____.____	_____.____
2470	678.0300 Fiber Optic Splice	312.000 EACH	_____.____	_____.____
2480	678.0400 Fiber Optic Termination	52.000 EACH	_____.____	_____.____
2490	678.0500 Communication System Testing	 LS	 LUMP SUM	 _____.____

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Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
2500	690.0150 Sawing Asphalt	3,152.000 LF	_____.____	_____.____
2510	690.0250 Sawing Concrete	8,395.000 LF	_____.____	_____.____
2520	715.0415 Incentive Strength Concrete Pavement	8,803.000 DOL	1.00000	8,803.00
2530	715.0502 Incentive Strength Concrete Structures	14,850.000 DOL	1.00000	14,850.00
2540	ASP.1T0A On-the-Job Training Apprentice at $5.00/HR	2,100.000 HRS	5.00000	10,500.00
2550	ASP.1T0G On-the-Job Training Graduate at $5.00/HR	5,760.000 HRS	5.00000	28,800.00
2560	SPV.0035 Special 001. Roadway Embankment	19,748.000 CY	_____.____	_____.____
2570	SPV.0035 Special 700. Modified High Performance Concrete (HPC) Masonry Bridges	2,441.000 CY	_____.____	_____.____
2580	SPV.0045 Special 200. Maintain and Remove Traffic Control Drums Left in Place	218,200.000 DAY	_____.____	_____.____
2590	SPV.0045 Special 201. Maintain and Remove Traffic Control Barricades Type III Left in Place	6,868.000 DAY	_____.____	_____.____
2600	SPV.0045 Special 202. Maintain and Remove Traffic Control Warning Lights Type A Left in Place	11,000.000 DAY	_____.____	_____.____
2610	SPV.0045 Special 203. Maintain and Remove Traffic Control Warning Lights Type C Left in Place	31,255.000 DAY	_____.____	_____.____
2620	SPV.0045 Special 204. Maintain and Remove Traffic Control Signs Left in Place	40,435.000 DAY	_____.____	_____.____
2630	SPV.0060 Special 100. Drain Slotted Vane Type A	1.000 EACH	_____.____	_____.____

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Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
2640	SPV.0060 Special 200. Traffic Control Close-Open Freeway Entrance Ramp	46.000 EACH	_____.____	_____.____
2650	SPV.0060 Special 201. Repositioning Traffic Control Devices for Mainline Closure	72.000 EACH	_____.____	_____.____
2660	SPV.0060 Special 205. Maintain and Remove Crash Cushion Temporary Left in Place	23.000 EACH	_____.____	_____.____
2670	SPV.0060 Special 250. Removing Traffic Control Cover Type I Sign	35.000 EACH	_____.____	_____.____
2680	SPV.0060 Special 350. Anchor Bolt Cover Shroud	4.000 EACH	_____.____	_____.____
2690	SPV.0060 Special 351. Concrete Bases Type 7 Median	4.000 EACH	_____.____	_____.____
2700	SPV.0060 Special 352. Pull Box Non-conductive 24x42-Inch	9.000 EACH	_____.____	_____.____
2710	SPV.0060 Special 353. Lighting Control Cabinet - Freeway	2.000 EACH	_____.____	_____.____
2720	SPV.0060 Special 401. Install Termination Panel	11.000 EACH	_____.____	_____.____
2730	SPV.0060 Special 402. Remove Radio Link	5.000 EACH	_____.____	_____.____
2740	SPV.0060 Special 700. Bearings High-Load Multi-Rotational Guided	16.000 EACH	_____.____	_____.____
2750	SPV.0060 Special 701. Bearings High-Load Multi-Rotational Fixed	4.000 EACH	_____.____	_____.____
2760	SPV.0060 Special 702. Junction Boxes Fiberglass 18x12x6-Inch	4.000 EACH	_____.____	_____.____
2770	SPV.0060 Special 703. Stand Pipe System	2.000 EACH	_____.____	_____.____

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Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
2780	SPV.0075 Special 001. Street Sweeping	24.000 HRS	_____.____	_____.____
2790	SPV.0075 Special 206. Truck Mounted Attenuator With Operator	50.000 HRS	_____.____	_____.____
2800	SPV.0075 Special 207. Truck Mounted Attenuator Without Operator	50.000 HRS	_____.____	_____.____
2810	SPV.0090 Special 001. Concrete Curb & Gutter 6-Inch Sloped 60-Inch Type A	150.000 LF	_____.____	_____.____
2820	SPV.0090 Special 208. Maintain and Remove Concrete Barrier Temporary Precast Left in Place	25,865.000 LF	_____.____	_____.____
2840	SPV.0090 Special 210. Traffic Control Gawk Screen Furnished	9,450.000 LF	_____.____	_____.____
2850	SPV.0090 Special 211. Traffic Control Gawk Screen Installed	9,450.000 LF	_____.____	_____.____
2860	SPV.0090 Special 402. Conduit HDPE 6-Duct, 2-Inch **P**	435.000 LF	_____.____	_____.____
2870	SPV.0090 Special 403. Tracer Wire 12 AWG	16,194.000 LF	_____.____	_____.____
2880	SPV.0105 Special 001. Survey Project I.D. 1517-07-80	LS	LUMP SUM	_____.____
2890	SPV.0105 Special 010. Removing Cantilever Sign Support (S-70-38)	LS	LUMP SUM	_____.____
2900	SPV.0105 Special 014. Geotechnical Instrumentation	LS	LUMP SUM	_____.____
2910	SPV.0120 Special 001. Water for Seeded Areas	1,489.000 MGAL	_____.____	_____.____
2920	SPV.0180 Special 001. Modified High Performance Concrete (HPC) Pavement 9-Inch	9,623.000 SY	_____.____	_____.____

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Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
2930	SPV.0180 Special 002. Modified High Performance Concrete (HPC) Pavement 10-Inch	8,349.000 SY	_____._____	_____._____
2940	SPV.0180 Special 003. Modified High Performance Concrete (HPC) Pavement 11-Inch	20,053.000 SY	_____._____	_____._____
2960	654.0105 Concrete Bases Type 5	1.000 EACH	_____._____	_____._____
2970	671.0112 Conduit HDPE 1-Duct 2-Inch	470.000 LF	_____._____	_____._____
	Section: 0001		Total:	_____._____
			Total Bid:	_____._____