

TRANSMITTAL

TO: Maine Department of Transportation

24 Child Street
Augusta, ME 04330

**HSSI NUMBER
ME-1230178A-1**

RE:

Perkins Bridge over Black Stream
Levant - Penobscot Co, ME

ATTN: Jason Stetson

We are sending you the following Via: Electronic Transfer - Resubmit For Approval

<u>Drawing Numbers</u>	<u>Description</u>	<u>Rev</u>
WS1-1	WORKSHEET - CALCULATION PLAN	0
WS1-2	WORKSHEET - CALCULATION PLAN	0
TD1-1	TYPICAL DETAILS	0
E1-1	ERECTION FRAMING PLAN	0
E1-2	ERECTION FRAMING PLAN	0
FS1	FLANGE SPLICE DETAILS	0
WC1	WEB CAMBER DIAGRAMS	0
X1	GIRDER JOB STANDARDS	0
GN1	GENERAL SHOP NOTES	0
1-4	Girder	0
5	Diaphragm	0
6	Miscellaneous	0

COMMENTS: We are re-submitting 15 drawings and the "Response to Approval Comments" page for Approval.

IF ENCLOSURES ARE NOT AS NOTED, PLEASE NOTIFY US AT ONCE.

Please acknowledge receipt by signing and returning one copy of this transmittal.

By: _____ **Date:** _____

CC: Maine Department of Transportation, DOT Project in Box

24 Child Street Augusta, ME 04330

FILE

PER: Andrew Hoff

FOR: Mark Ditzler

mditzler@high.net



HSS Job No. 1230178A-1 ~ PDC Action/Reply plan to Approval Comments

Date: 01-09-2024

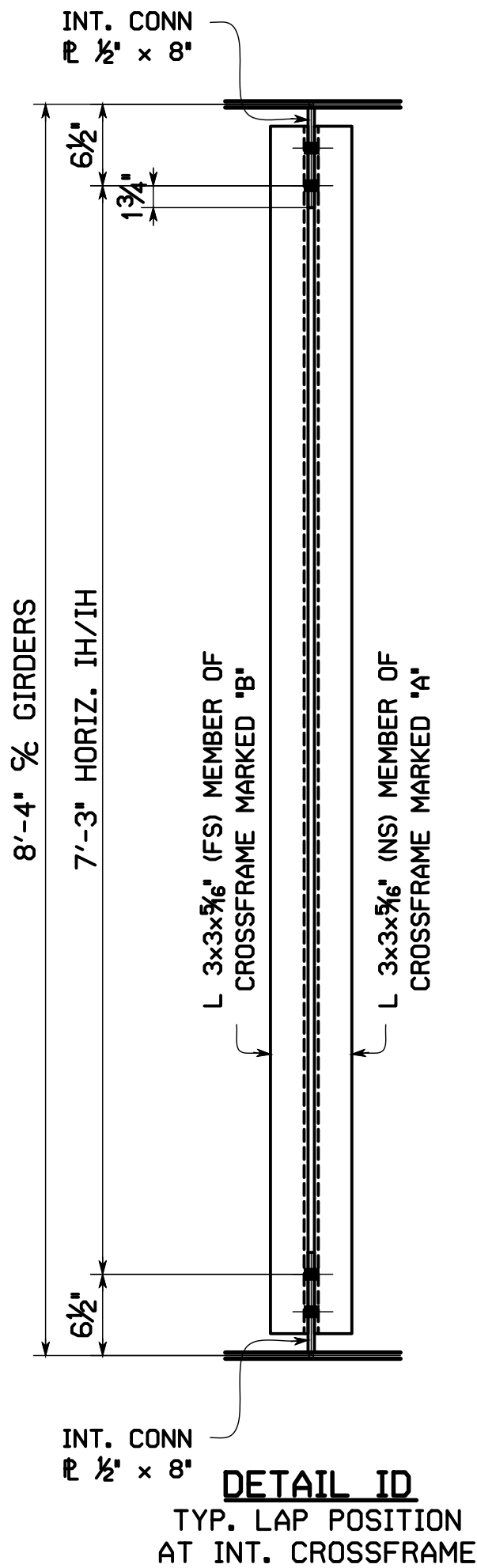
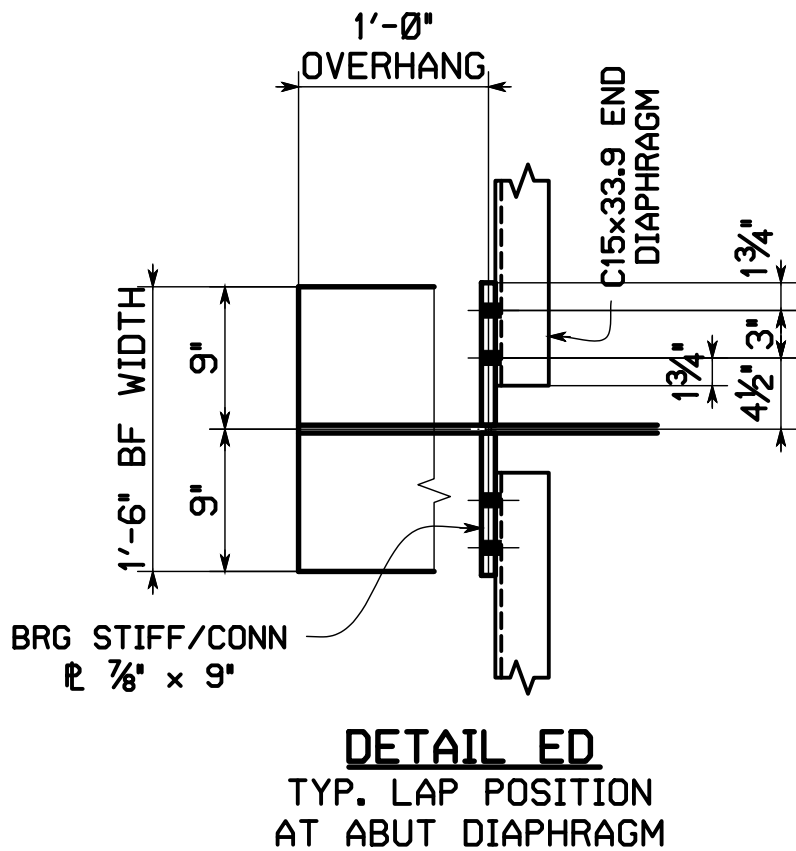
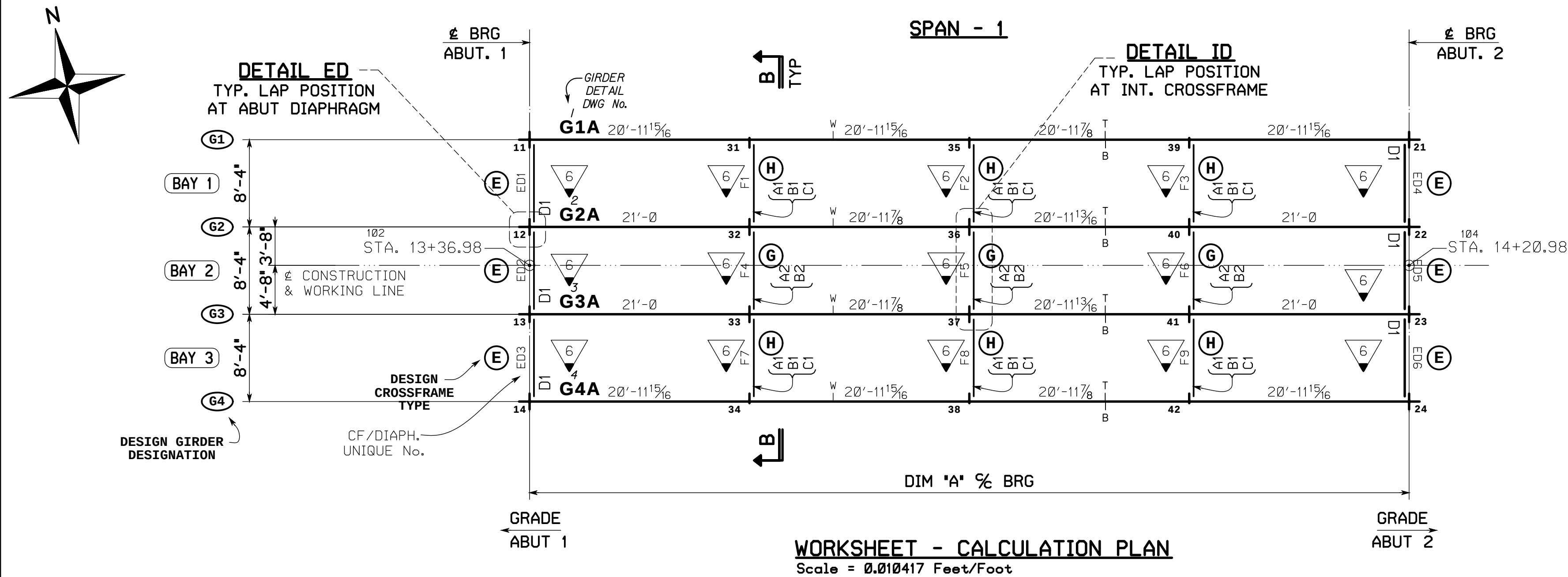
PDC Action/Reply plan to Approval Comments received from High Steel in the following file [Multi YY01 A-1 12-13-2023 (Submitting for Approval)_BJB.pdf] (16 pages)

The following returned drawings will not be revised

Misread and didn't originally see G was there 2x, one each side of midpoint.

Item	pdf	Dwg No.	Approval Comment	PDC Action/Reply plan	PDC additional verification/steps
1	8	WC1	- Some of these don't match up with camber ordinates on Contract Plan sheet 4. - Math doesn't seem right. 35 less 3.75 is less than 31.5	- Approver is pointing out TABULATED Camber ordinates "J/K/L/M/N/O" and asking the question. The ordinates detailed do match the design sheet Camber Diagram ordinates, however High Steel provides 20 equal spaces instead of the 10 spaces shown on designs. Ordinates "I / G/ K/ M/ 1 ½" " match the exact values of design 10th points while ordinates " J / L / N / O " are interpolated half points between the 10th points and their values are correct as detailed as well. - Approver seems to be subtracting 3.75" from the ordered 35" web depth and getting a result of 31.25" which is less than nominal web depth of 31.5". The 35" ordered depth for the 1st Pc of Web covers the 31.5" nominal web depth plus approximately ½" camber required for the 1st Pc midpoint which is 32" sufficient.	- Hi steel COGO program would have alerted the detailer's if there were camber irregularities in the profile of web. - Hi Steel COGO program calculates required Camber automatically then adds an additional 2.5" to the calculation to ensure ample width for web cutting and heat adjustment.

STATE OF MAINE	
DEPARTMENT OF TRANSPORTATION	
☒ REVIEWED	☐ REVIEWED WITH COMMENTS
☐ REJECTED	☐ REVISE AND RESUBMIT
Jan 11, 2024	
THIS DOCUMENT WAS REVIEWED IN ACCORDANCE WITH STATE OF MAINE SPECIFICATIONS SECTION 105.7 WORKING DRAWINGS	
<u>Benjamin Baultlett</u>	Transportation Engineer II
NAME	TITLE



DETAIL DIMS APPEARING ON GIRDER DET. DWGS AT BOT OF WEB

GDR LINE No.	Dim 'A' ± BRG (ABUT 1) TO ± BRG (ABUT 2)	GRADE ABUT 1	GRADE ABUT 2
G1	83'-11 ¹¹ / ₁₆ "	.0008	-.0052
G2	83'-11 ¹¹ / ₁₆ "	.0021	-.0043
G3	83'-11 ¹¹ / ₁₆ "	.0021	-.0043
G4	83'-11 ¹¹ / ₁₆ "	.0008	-.0052

NOTES:

DIMENSIONS ON PLAN ALONG GIRDERS ARE GIVEN TO THE CHORD AT THE BOTTOM OF WEB IN FULLY CAMBERED POSITION. ALL OTHER DIMENSIONS ARE GIVEN HORIZONTALLY.

DIMENSIONS PLACED ON THE GIRDER LINES REPRESENT CROSSFRAME SPACING.

ALL STIFFENER AND CONNECTION PLATE SPACING ARE GIVEN TO ± PLATE.

ENDS OF GIRDERS AND ALL BEARING STIFFENERS TO BE VERTICAL IN FINAL POSITION.

ALL STEEL TO BE ASTM A709 GRADE 50 (U.N.).

ALL FIELD CONNECTIONS TO BE MADE WITH 7/8" H.S. (ASTM F3125 GRADE A325 TYPE 1) WITH ONE ASTM F436 TYPE 1 WASHER EACH IN 15/16" HOLES. ALL BOLTS, NUTS & WASHERS TO BE MECHANICALLY GALVANIZED TO ASTM B695 CLASS 50.

DIAPHRAGM OR CROSSFRAME MARKS SHOWN THUS "ED1" / "F1" ARE THE DETAILER'S DESIGNATED INDIVIDUAL LOCATION MARKS. THE SHIPPING MARKS SHOWN ON THE PLAN REFER TO THE HIGH STEEL STRUCTURES, LLC MARKS.

FOR TYPICAL DETAIL LAYOUTS, SEE DRAWINGS PREFIXED 'TD'.

BRIDGE FIT NOTE: REFERENCE DESIGN SHEET No. 3 (FRAMING PLAN), NOTE No. 7: "GIRDER WEBS SHALL BE VERTICAL UNDER FULL DEAD LOAD", THE SHOP DWGS HAVE BEEN PREPARED FOR THE 'TDLF' (TOTAL DEAD LOAD FIT) CONDITION.

FIGURES GIVEN THUS: "Dec. Value" ARE THE GRADES OF THE GIRDERS AT THE BEARINGS IN FINAL POSITION; ARROW POINTS DOWNGRADE. NEGATIVE GRADES INDICATE GIRDER IS DOWN TO RIGHT; POSITIVE GRADES INDICATE GIRDER IS DOWN TO LEFT (UP TO RIGHT).

FIGURES GIVEN THUS: "6" ARE THE DIFFERENCES IN ELEVATIONS OF GIRDERS (IN THE PLANE OF THE CROSSFRAME IN THE TOTALLY DEFLECTED POSITION AT CROSSFRAMES; ARROW POINTS TOWARD LOW GIRDER.

MARKS GIVEN THUS: "I" "W" "B" REPRESENT WEB & FLANGE SHOP SPLICE LOCATIONS.

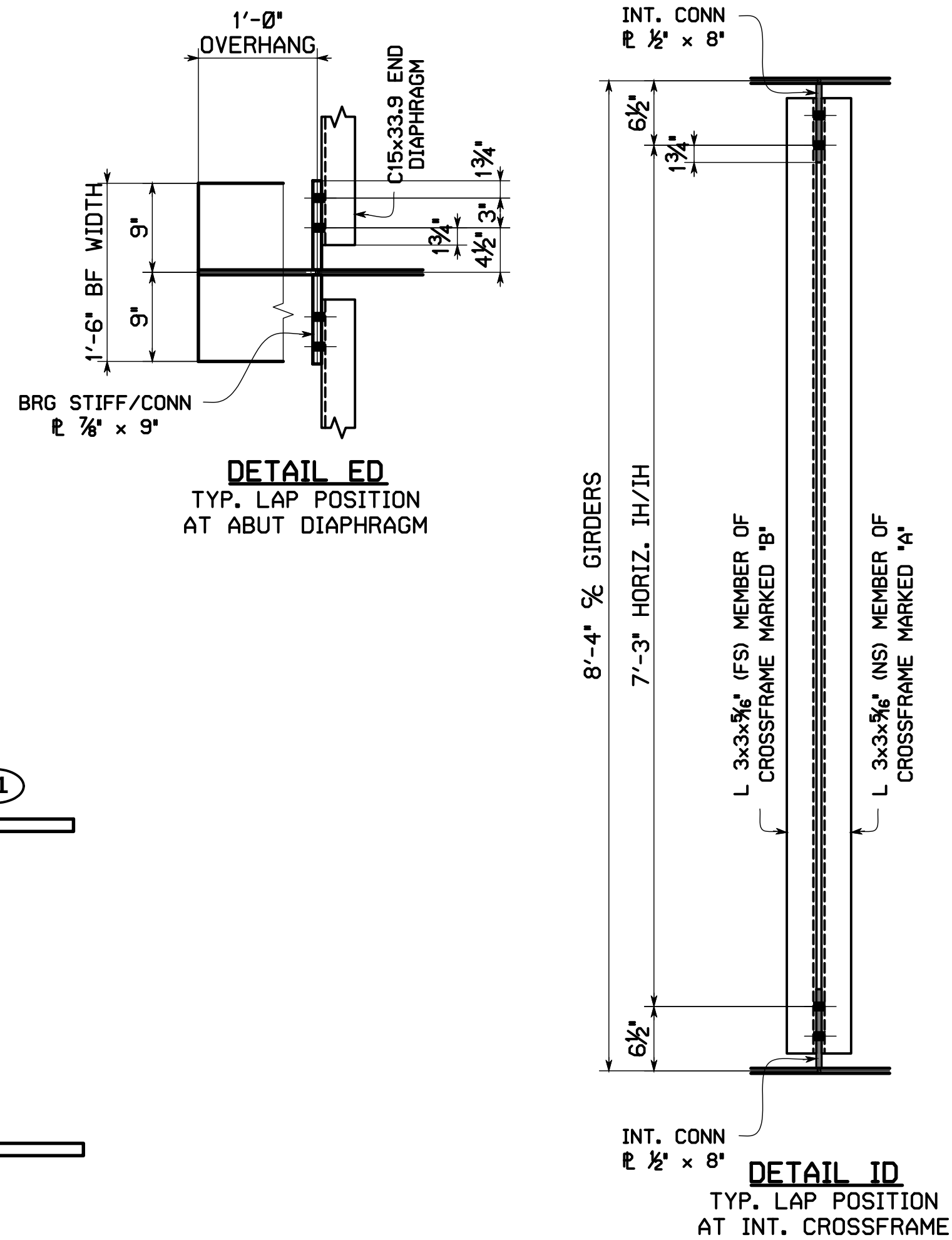
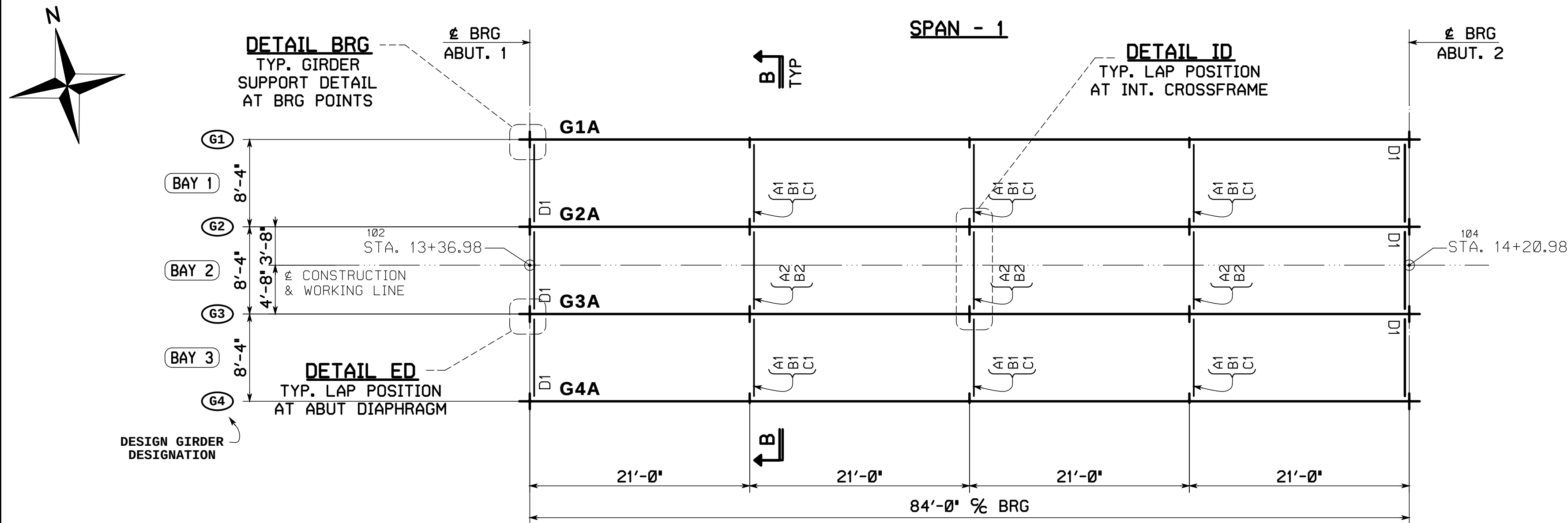
THIS IS A "DETAILER'S USE ONLY" WORKSHEET SHOWING GEN. DIMS, LAYOUTS AND INFO FOR REFERENCE ONLY. IT IS NOT INTENDED TO BE USED FOR ERECTION OR FABRICATION. APPROVAL OF THIS DWG IS NOT REQUIRED.

THE PURPOSE OF THIS DRAWING IS TO COORDINATE GEOMETRIC CONTROL INFORMATION. THIS DRAWING IS SUBMITTED FOR INFORMATION ONLY AND IS NOT INTENDED FOR SHOP FABRICATION. THIS DRAWING IS FOR REFERENCE ONLY, APPROVAL IS NOT REQUIRED.

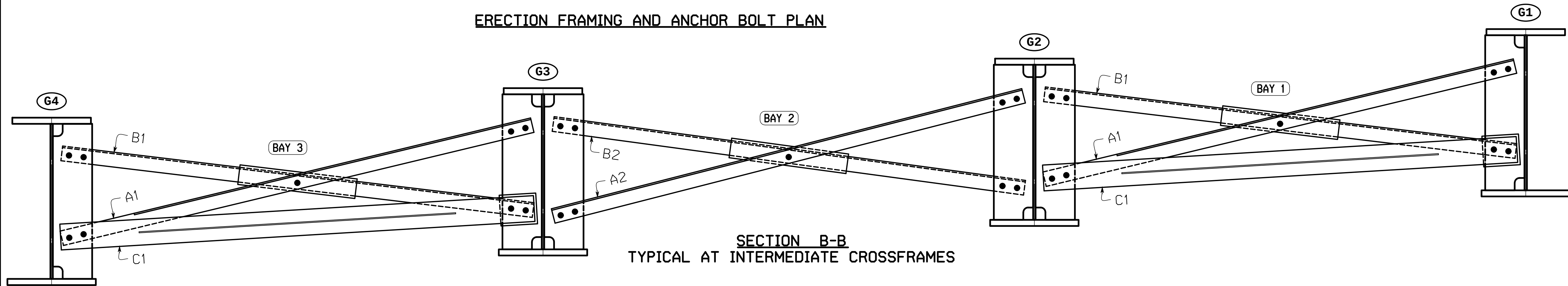
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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
REVIEWED
REJECTED
REVIEWED WITH COMMENTS
REVISE AND RESUBMIT
Jan 11, 2024
THIS DOCUMENT WAS REVIEWED IN ACCORDANCE WITH STATE OF MAINE SPECIFICATIONS SECTION 105.7 WORKING DRAWINGS
NAME: [Signature] TITLE: Transportation Engineer II

NO.	REVISION	BY	CHK'D	DATE
Holes	NONE			
Bolts	NONE			
Coating	NONE			
CODE(S)				
SCALE	STATE CONT. OR REF. NO.	BRIDGE No. 6133	FED. AID PROJ. NO.	2709810
N.T.S.	GENERAL CONTRACTOR	MAINE DEPT. OF TRANSPORTATION	HSSI PROJ. MGR	MARK DITZLER
ME	DETAILER	PDCUS	MADE BY	GM
	HSSI PROJECT NUMBER	1230178A-1	CHK'D BY	SB
			DATE	12-09-23
			DRAWING NUMBER	WS1-1 OF WS1-2



ERECTION FRAMING AND ANCHOR BOLT PLAN



SECTION B-B
TYPICAL AT INTERMEDIATE CROSSFRAMES

ERECTION FRAMING PLAN NOTES:

NO CREDIT WILL BE ALLOWED FOR WORK PERFORMED BY OTHERS IN REPLACING OR CORRECTING MATERIALS OR WORKMANSHIP COVERED BY THIS DRAWING UNLESS EXPRESSLY AUTHORIZED BY HIGH STEEL STRUCTURES LLC.

HIGH STEEL STRUCTURES LLC DOES NOT SUPPLY STUD SHEAR CONNECTORS, EXPANSION DAM MATERIAL, SCUPPERS OR TEMPORARY SUPPORTS.

NOTICE TO ERECTOR & CONTRACTOR: THIS STRUCTURAL STEEL IS BEING DELIVERED WITH THE FINAL FINISH COAT APPLIED. USE EXTREME CARE AND APPROPRIATE EQUIPMENT FOR HANDLING DURING ERECTION AND SUBSEQUENT FIELD OPERATIONS. HIGH STEEL STRUCTURES LLC WILL NOT BE RESPONSIBLE FOR ANY TOUCH-UP REQUIRED DUE TO YOUR FAILURE TO PROPERLY PROTECT FINISH PAINT.

NOTICE: WEIGHTS OF MEMBERS LISTED ON THESE DRAWINGS ARE ESTIMATED WEIGHTS AND ACTUAL WEIGHTS WILL VARY. HIGH STEEL STRUCTURES LLC WILL NOT BE RESPONSIBLE FOR ANY ERECTION PROCEDURES, SHIPPING PROCEDURES, ETC. DEVELOPED USING ESTIMATED WEIGHTS AS SHOWN.

ALL DIMENSIONS ARE GIVEN HORIZONTALLY (U.N.).

ERECTOR NOTE: ALL BOLTS MUST BE LOCATED IN ACCORDANCE WITH THE LIST OF FIELD CONNECTIONS. HIGH STEEL STRUCTURES WILL NOT BE RESPONSIBLE FOR FURNISHING ADDITIONAL BOLTS OR FOR ANY OTHER RELATED COSTS OR DAMAGES RESULTING FROM IMPROPER LOCATION OF BOLTS.

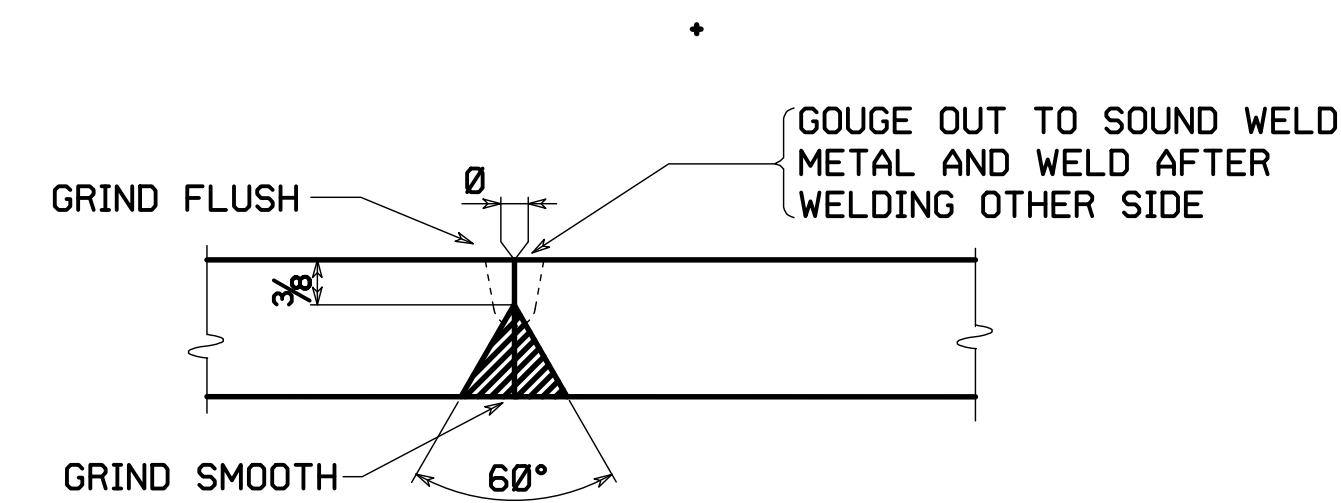
(RCT) INDICATES ROTATIONAL CAPACITY TESTED BOLTS. DO NOT MIX NUTS, BOLTS AND WASHERS FROM DIFFERENT CONTAINERS UNLESS ALL NUTS, BOLTS AND WASHERS HAVE THE SAME LOT NUMBER.

SHIPPING PIECES		
SHIPPING PIECE MARK	WEIGHT EA. (LBS)	DWG NO.
G1A	17,438	1
G2A	17,544	2
G3A	17,544	3
G4A	17,438	4
AB1	79	6
W1	0	6
LP1	204	6
A1	50	5
A2	50	5
B1	63	5
B2	63	5
C1	77	5
D1	267	5

SHIPPING GROUP A1	
SHIPPING PIECE MARK	QUANTITY
G1A	1
G2A	1
G3A	1
G4A	1
D1	6
A1	6
B1	6
C1	6
A2	3
B2	3

SHIPPING GROUP SGMISC1	
SHIPPING PIECE MARK	QUANTITY
AB1	16
W1	16
LP1	8

STATE OF MAINE
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Benjamin Smith
NAME
Transportation Engineer II
TITLE



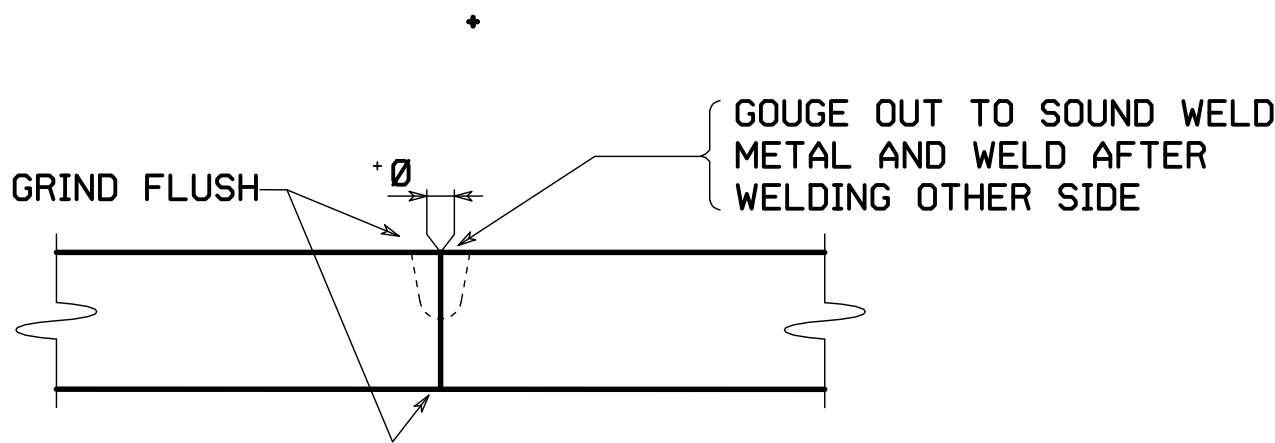
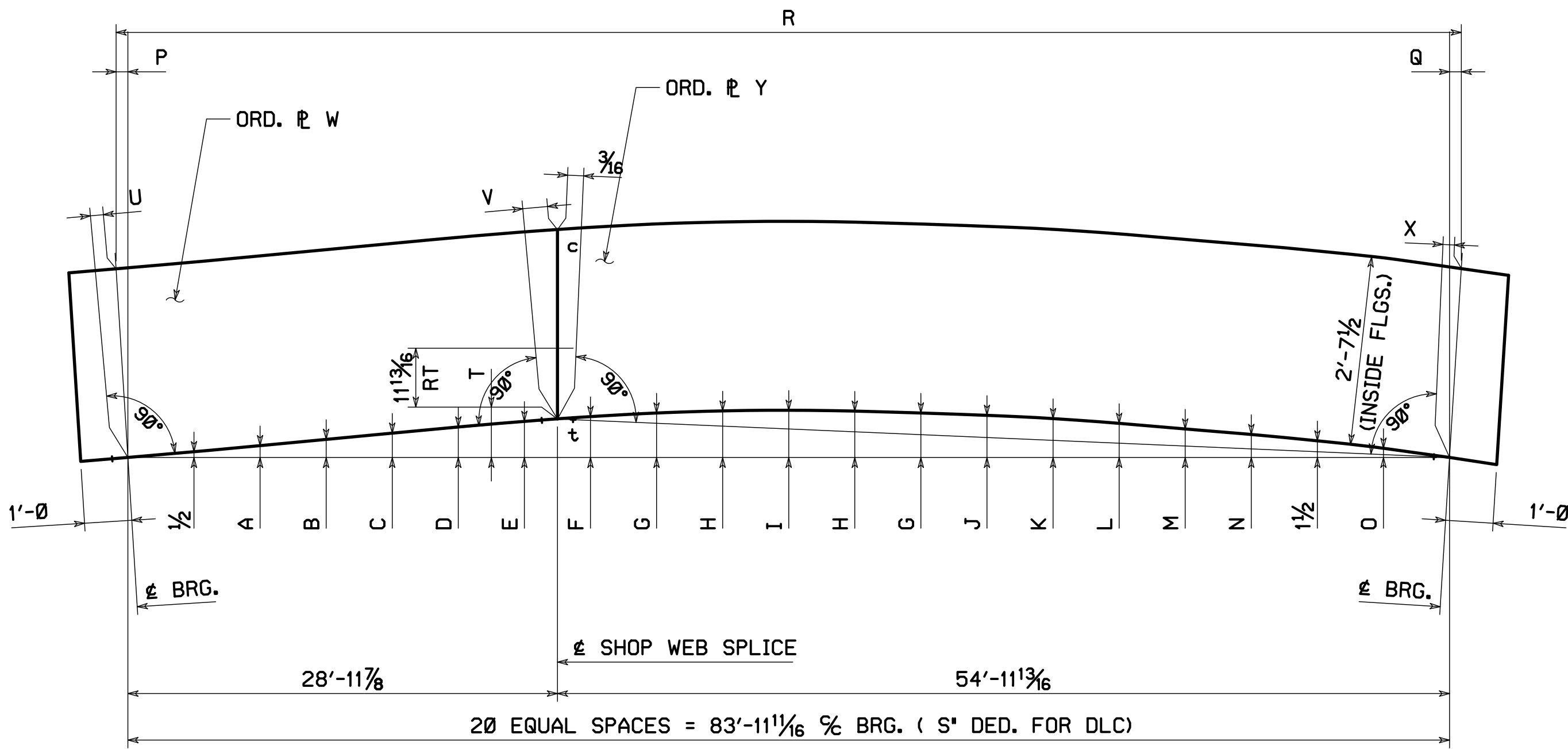
FOR FLANGE PLATES 2" THICK AND UNDER (B-L2c-S)
(WP71X-TW)

FOR GENERAL SHOP NOTES, SEE DRAWING GNI.
ALL FLANGE PLATES TO BE A709 GR. 50.
ALL FLANGE PLATES REQUIRE CHARPY V-NOTCH TEST.
THE LETTERS 't' & 'c' AT FLANGE SPLICES INDICATE TENSION
AND COMPRESSION SPLICES RESPECTIVELY.
ALL SPLICES MARKED 'c' TO BE ULTRASONICALLY TESTED 25%.
ALL SPLICES MARKED 't' TO BE RADIOGRAPHICALLY TESTED 100%.

																											
																											
NO.	REVISION					BY	CHK'D	DATE																			
HOLES NONE	   Wilmington Facility 195 Old Philadelphia Pike Lancaster, PA 17605-0008 Phone (717) 299-5211 Wilmington Facility 3501 W. 41th Street Wilmington, PA 17101 Phone (570) 326-9051 www.highsteel.com An Affiliate of High Industries Inc.																										
BOLTS NONE																											
COATING NONE	FLANGE SPlice DETAILS PERKINS BRIDGE OVER BLACK STREAM CL BRG ABUT 1 STA: 13+36.98 TO CL BRG ABUT 2 STA: 14.21 LEVANT - PENOBSCOT COUNTY, ME STATE OF MAINE DEPARTMENT OF TRANSPORTATION																										
CODE(S)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">STATE CONT. OR REF. NO.</td> <td style="width: 35%;">BRIDGE No. 6133 WIN 2709810</td> <td style="width: 20%;">FED. AID PROJ. NO.</td> <td colspan="2" style="width: 20%; text-align: center;">2709810</td> </tr> <tr> <td>GENERAL CONTRACTOR</td> <td>MAINE DEPT. OF TRANSPORTATION</td> <td>HSSI PROJ. MGR</td> <td colspan="2">MARK DITZLER</td> </tr> </table>									STATE CONT. OR REF. NO.	BRIDGE No. 6133 WIN 2709810	FED. AID PROJ. NO.	2709810		GENERAL CONTRACTOR	MAINE DEPT. OF TRANSPORTATION	HSSI PROJ. MGR	MARK DITZLER									
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SCALE N.T.S.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">DETAILER</td> <td style="width: 25%;">PDCUS</td> <td style="width: 10%;">MADE BY</td> <td style="width: 10%;">GM</td> <td style="width: 10%;">CHK'D BY</td> <td style="width: 10%;">SB</td> <td style="width: 10%;">DATE</td> <td colspan="2" style="width: 15%; text-align: center;">12-09-23</td> </tr> <tr> <td>HSSI PROJECT NUMBER</td> <td colspan="3" style="text-align: center;">1230178A-1</td> <td>DRAWING NUMBER</td> <td>FS1</td> <td>OF</td> <td colspan="2">FS1</td> </tr> </table>									DETAILER	PDCUS	MADE BY	GM	CHK'D BY	SB	DATE	12-09-23		HSSI PROJECT NUMBER	1230178A-1			DRAWING NUMBER	FS1	OF	FS1	
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ME																											

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STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
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Jan 11, 2024	
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<u>Benjamin Battista</u>	Transportation Engineer I



TYPICAL WEB PLATE SPLICE
FOR WEB PLATES 1/2" THICK AND UNDER (B-L1a-S)
(WP71X)

MARK	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
G1A,G4A	1 1/16	1 5/8	2 3/16	2 3/4	3 1/4	3 11/16	4	4 3/16	4 1/4	3 13/16	3 1/2	3 1/16	2 9/16	2 1/16	1 3/16	5/16	3/8	84'-0 3/8	3/8	3 5/8	0	5/16	1/2 x 34 x 30'-3 (030004)	3/16	1/2 x 35 1/2 x 56'-3 (030002)
G2A,G3A	1/8	1 13/16	2 1/2	3 3/16	3 3/4	4 3/16	4 1/2	4 5/8	4 11/16	4 1/4	3 3/8	3 3/16	2 7/8	2 1/4	3/4	3/16	5/16	84'-0 3/16	1/4	4 1/8	3/16	3/8	1/2 x 35 x 30'-3 (030003)	1/8	1/2 x 36 x 56'-3 (030001)

NOTES:
FOR GENERAL SHOP NOTES, SEE DRAWING GN1.
ALL WEB PLATES TO BE A709 GR. 50.
ALL WEB PLATES REQUIRE CHARPY V-NOTCH TEST.
THE LETTERS 't' & 'c' AT WEB SPLICES INDICATE TENSION AND
COMPRESSION EDGES AT SPLICES.
RT INDICATES RADIOGRAPHIC TESTING.

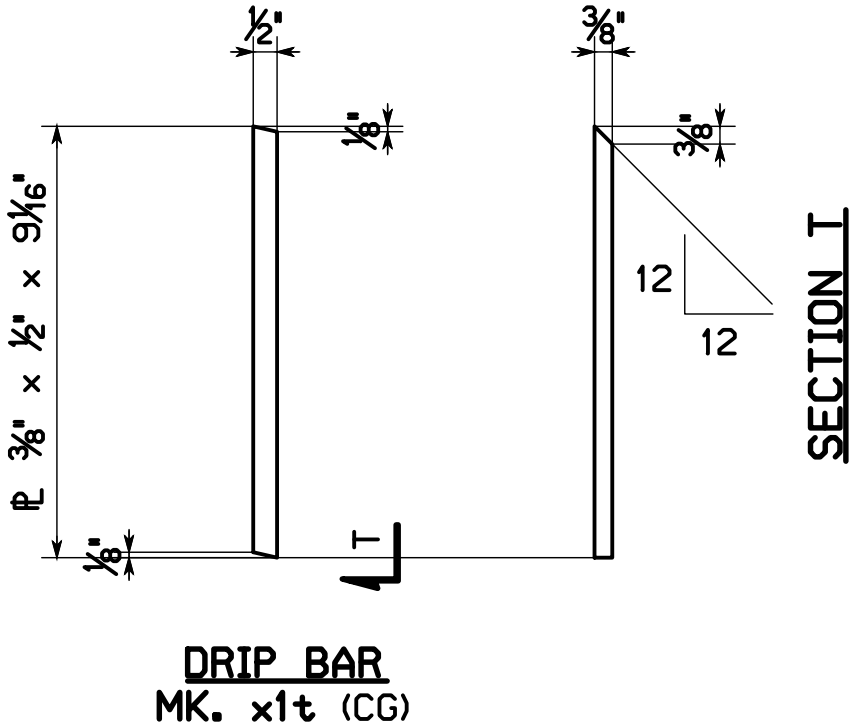
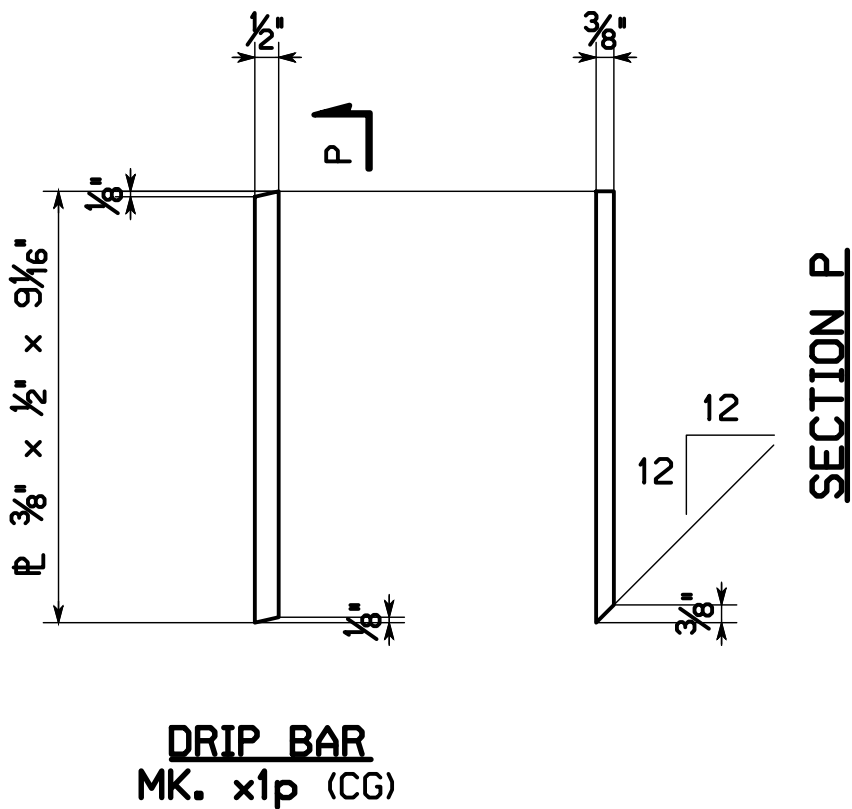
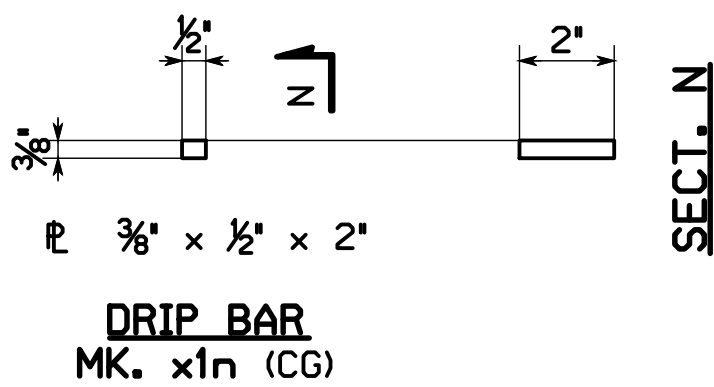
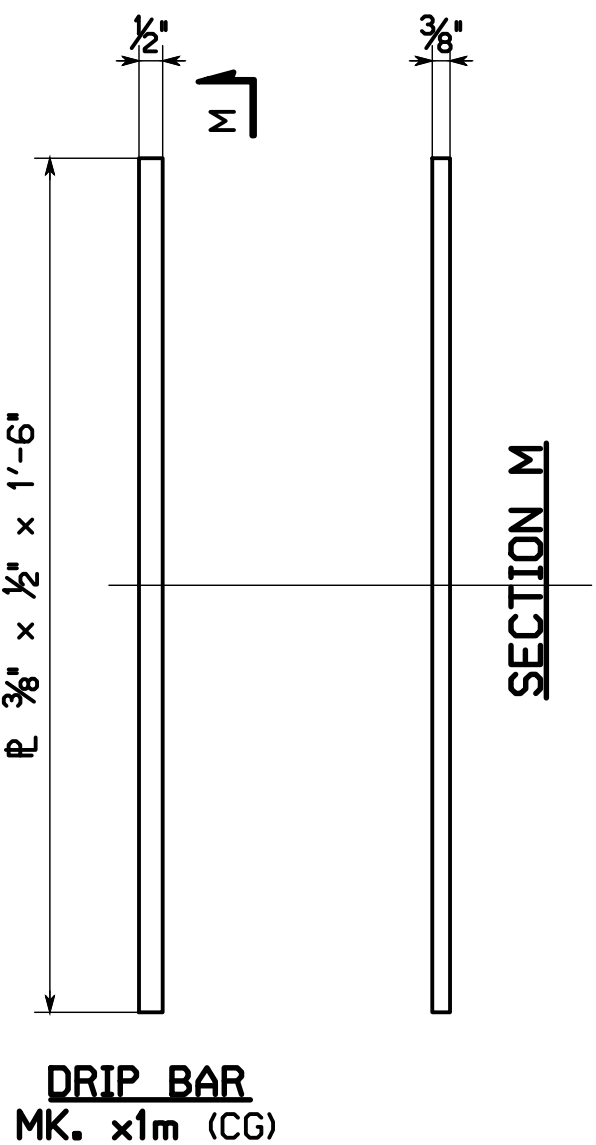
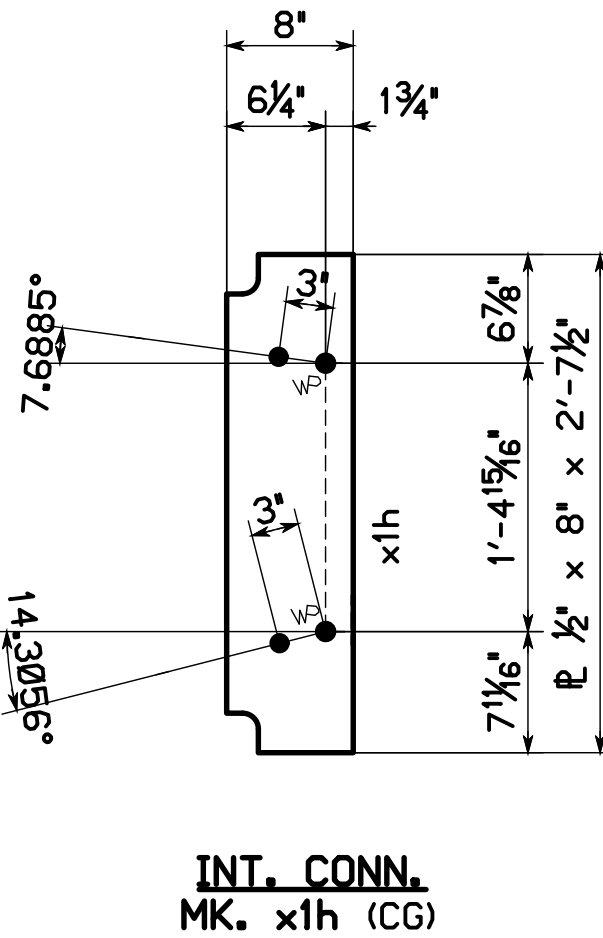
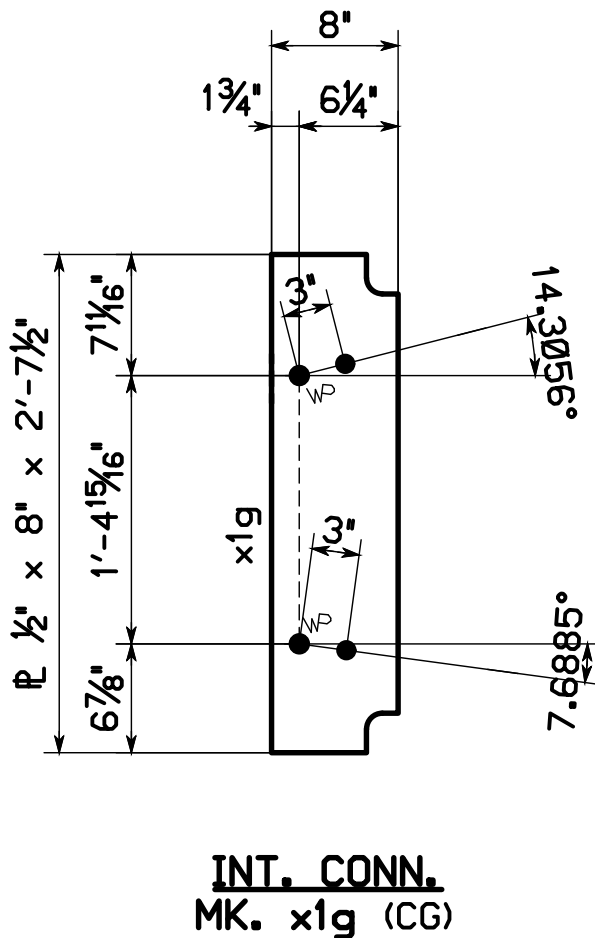
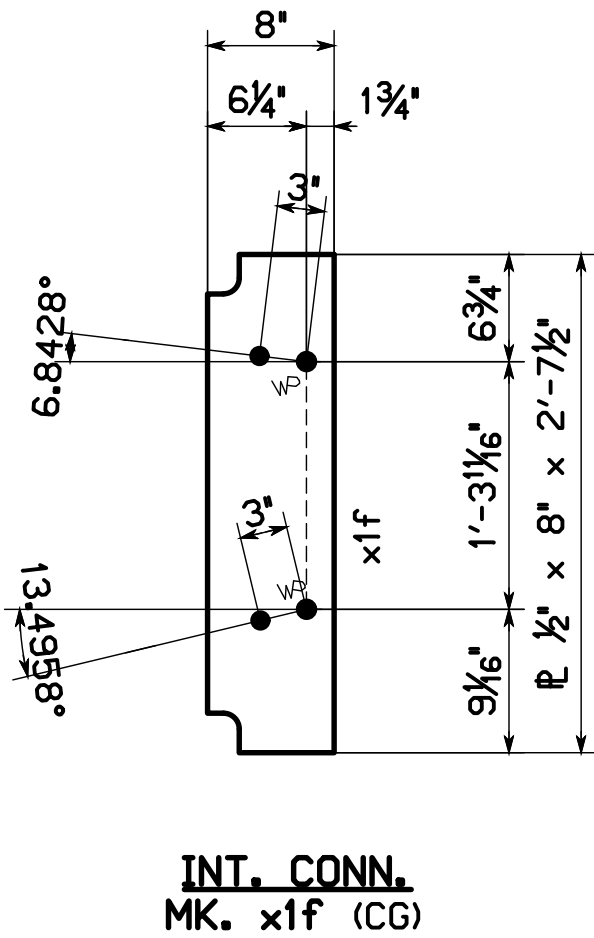
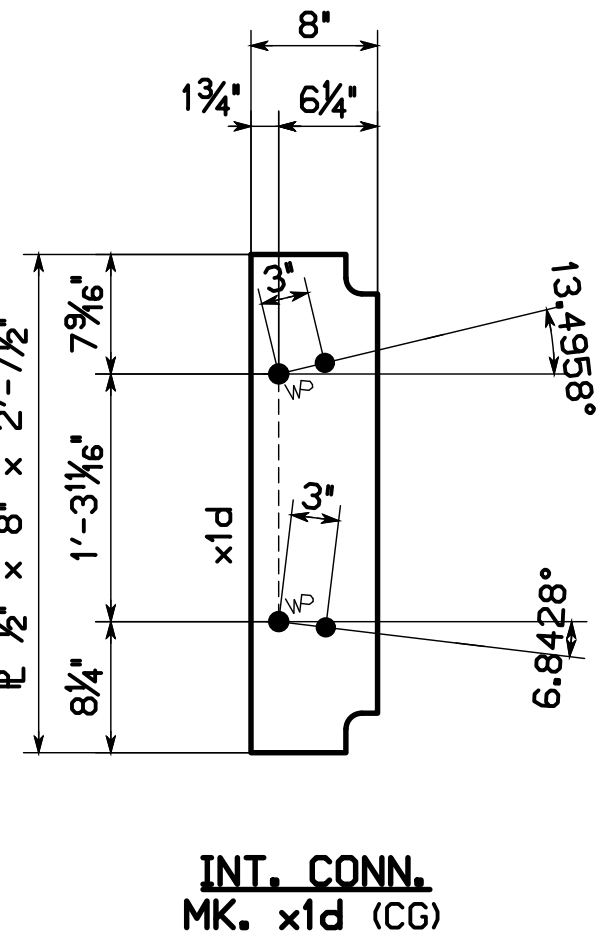
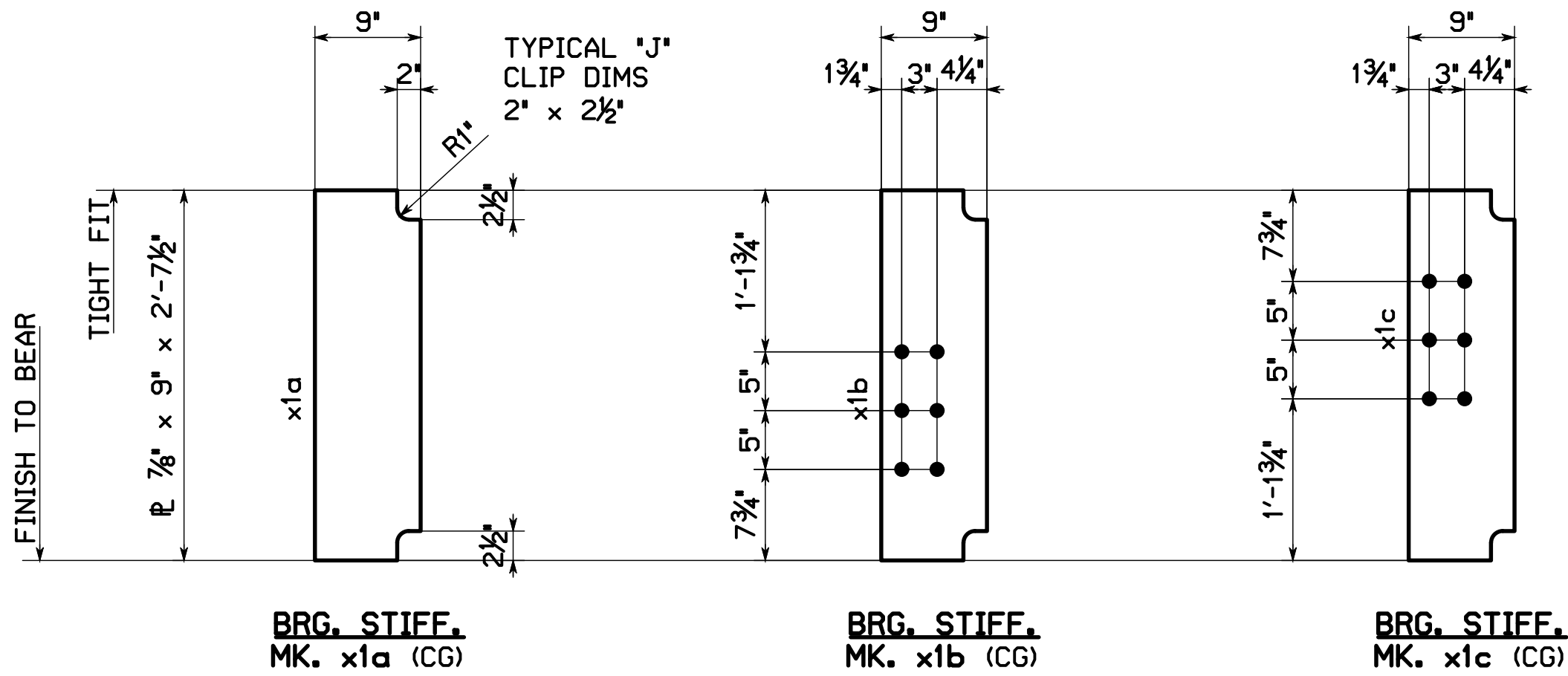
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NAME: Benjamin Bartlett
TITLE: Transportation Engineer II

△						
△						
△						
△						
NO.	REVISION			BY	CHK'D	DATE
HOLES NONE				Lancaster Facility 395 Old Philadelphia Pike Lancaster, PA 17605-0008 Phone (717) 299-5211 Williamsport Facility 3501 W. 4th Street Williamsport, PA 17701 Phone (570) 326-9051 www.highsteel.com		
BOLTS NONE	WEB CAMBER DIAGRAMS					
COATING NONE	PERKINS BRIDGE OVER BLACK STREAM CL BRG ABUT 1 STA: 13+36.98 TO CL BRG ABUT 2 STA: 14.21 LEVANT - PENOBSCOT COUNTY, ME					
CODE(S)	STATE OF MAINE DEPARTMENT OF TRANSPORTATION					
SCALE	STATE CONT. OR REF. NO. WIN 2709810			FED. AID PROJ. NO.	2709810	
N.T.S.	GENERAL CONTRACTOR MAINE DEPT. OF TRANSPORTATION			HSSI PROJ. MGR	MARK DITZLER	
ME	DETAILER	PDCUS		MADE BY	GM	CHK'D BY SB DATE 12-09-23
	HSSI PROJECT NUMBER	1230178A-1		DRAWING NUMBER	WC1 OF WC1	

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NOTES:
FOR GENERAL SHOP NOTES, SEE DWG. GNI.



BILL OF MATERIAL												
QTY	MARK	COMMODITY	DESCRIPTION		LENGTH		SPEC	GRADE	TEST	REMARKS	ITEM	WEIGHT EA. (LBS)
4	x1a	PL	7/8	x 9	2	7 1/2	A709	50	T	F2E	07001	70
6	x1b	PL	7/8	x 9	2	7 1/2	A709	50	T	F2E	07001	70
6	x1c	PL	7/8	x 9	2	7 1/2	A709	50	T	F2E	07001	70
6	x1d	PL	1/2	x 8	2	7 1/2	A709	50			07002	36
6	x1f	PL	1/2	x 8	2	7 1/2	A709	50			07002	36
3	x1g	PL	1/2	x 8	2	7 1/2	A709	50			07002	36
3	x1h	PL	1/2	x 8	2	7 1/2	A709	50			07002	36
8	x1m	PL	3/8	x 1/2	1	6	A709	50			07003	1
8	x1n	PL	3/8	x 1/2	0	2	A709	50			07003	0
8	x1p	PL	3/8	x 1/2	0	9 1/16	A709	50			07003	0
8	x1t	PL	3/8	x 1/2	0	9 1/16	A709	50			07003	0

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DEPARTMENT OF TRANSPORTATION
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OF MAINE SPECIFICATIONS SECTION 105.7 WORKING DRAWINGS

Benjamin Smith

Transportation Engineer II

NAME

TITLE

△									
△									
△									
NO.	REVISION					BY	CHK'D	DATE	
HOLES 15 1/16" Ø	 An Affiliate of High Industries Inc. Lancaster Facility: 195 Old Philadelphia Pike Lancaster, PA 17605-0008 Phone (717) 299-5211 Williamsport Facility: 3501 W. 4th Street Williamsport, PA 17701 Phone (570) 326-9051 www.highsteel.com								
BOLTS NONE									
COATING NONE									
CODE(S)									
SCALE N.T.S.	GIRDER JOB STANDARDS								
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	LEVANT - PENOBSCOT COUNTY, ME								
ME	STATE OF MAINE DEPARTMENT OF TRANSPORTATION								
	STATE CONT. OR REF. NO. WIN 2709810		FED. AID PROJ. NO. 2709810						
	GENERAL CONTRACTOR MAINE DEPT. OF TRANSPORTATION		HSSI PROJ. MGR MARK DITZLER						
ME	DETAILER PDCUS		MADE BY GM		CHK'D BY SB		DATE 12-09-23		
	HSSI PROJECT NUMBER 1230178A-1		DRAWING NUMBER X1		X1		OF		X1

GENERAL SHOP NOTES

SPECIFICATIONS:

CONSTRUCTION SPECIFICATIONS: MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, AND STANDARD DETAILS DATED MARCH 2020 EDITION, INCLUDING SUPPLEMENTAL SPECIFICATION DATED FEBRUARY 17,2023, EXCEPT AS MODIFIED ON THE PLANS AND IN THE SPECIAL PROVISIONS.
DESIGN SPECIFICATIONS: LOAD & RESISTANCE FACTOR DESIGN PER ASSHTO LRFD BRIDGE DESIGN SPECIFICATIONS, NINTH EDITION, 2020.

MATERIAL:

UNLESS NOTED OTHERWISE, ALL STEEL TO BE ASTM A709 GRADE 50.
(T) INDICATES ZONE 2 CHARPY V-NOTCH TESTING REQUIRED.

FIELD BOLTS TO BE HIGH STRENGTH ASTM F3125 GR A325 TYPE 1 (FRICTION) (RCT) WITH HEAVY HEX HEAD AND ASTM A563 GRADE DH HEAVY HEX NUT, WITH ONE ASTM F436 TYPE 1 WASHER PER BOLT.
ALL BOLTS, NUTS & WASHERS TO BE MECHANICALLY GALVANIZED TO ASTM B695 CLASS 50.

(RCT) INDICATES ROTATIONAL CAPACITY TESTED BOLTS. DO NOT MIX NUTS, BOLTS AND WASHERS FROM DIFFERENT CONTAINERS UNLESS ALL NUTS, BOLTS AND WASHERS HAVE THE SAME LOT NUMBER.

SHOP PROCEDURE:

ALL FLANGE AND WEB PLATE SPLICES TO BE MADE BEFORE FINAL FITTING AND WELDING INTO GIRDER.

ALL RE-ENTRANT CUTS TO HAVE 1' MIN. RADIUS.

BEARING AREA, AS NOTED ON GIRDER DETAILS, INDICATES AREA THAT MUST BE FLAT AND TRUE TO RECEIVE SOLE PLATE.

(CG) INDICATES CORNER GRINDING.

CORNER GRINDING TO A 1/16" RADIUS IS REQUIRED FOR ALL SHARP CORNERS. (SS 506.21)
DIE STAMP PRIMARY MEMBERS IN NO-STRESS LOCATIONS OF MAIN STRESS CARRYING MEMBERS; AREAS INCLUDE THE ENDS OF GIRDERS, USING LOW STRESS DIES.

INSPECTION:

SHOP INSPECTION BY KTA.

WELDING:

ALL WELDING IS TO CONFORM TO AWS D1.5-20.
FOR WELDING STIFFENERS AND CONNECTION PLATES TO GIRDERS, SEE STIFFENER WELDING DETAIL.

FOR WELDING CROSSFRAMES, SEE CROSSFRAME MEMBER WELDING DETAIL.

NON-DESTRUCTIVE TESTING:

FLANGE AND WEB PLATE SPLICES TO BE ULTRASONICALLY AND RADIOGRAPHICALLY TESTED, AS CALLED FOR ON DRAWINGS PREFIXED 'FS' AND 'WC', BY H.S.S.

MAGNETIC PARTICLE INSPECTION IS REQUIRED ON AT LEAST 1'-0 OF EVERY 10'-0 LENGTH OF FILLET WELD AND 1'-0 OF SUCH WELDS LESS THAN 10'-0 IN LENGTH ON GIRDER WEB TO FLANGE, CONNECTION PLATE TO WEB AND FLANGE AND BEARING STIFFENER WELDS.
TESTING PER THE YOKE METHOD USING DC.

ALL TESTING TO BE DONE UNDER THE SUPERVISION OF THE MAINE DEPARTMENT OF TRANSPORTATION INSPECTION PERSONNEL.

DRILLING, PUNCHING, AND REAMING HOLE PROCEDURES:

UNLESS NOTED OTHERWISE, BOLT HOLES IN MATERIAL 3/8" OR LESS IN THICKNESS MAY BE CNC (COMPUTER NUMERICALLY CONTROLLED) PUNCHED OR CNC DRILLED FULL SIZE UNASSEMBLED. ALL MATERIAL THICKER THAN 3/8" IS TO BE DRILLED.

CLEANING:

ALL STEEL: SSPC-SP1, AS NECESSARY
ALL STEEL: SSPC-SP6, PRIOR TO GALVANIZING.
TOP OF TOP FLANGE OF GIRDERS TO BE SOLVENT WIPED TO SSPC-SP1 AFTER SSPC-SP6 AND BEFORE MASKING.

ALL STEEL SHALL BE PROPERLY CLEANED TO THE EQUIVALENT CLEANLINESS REQUIREMEMENTS OF SSPC-SP8. QA & QC SHALL VERIFY CLEANING REQUIREMENTS ARE MET PRIOR TO EMERSION IN ZINC BATH.

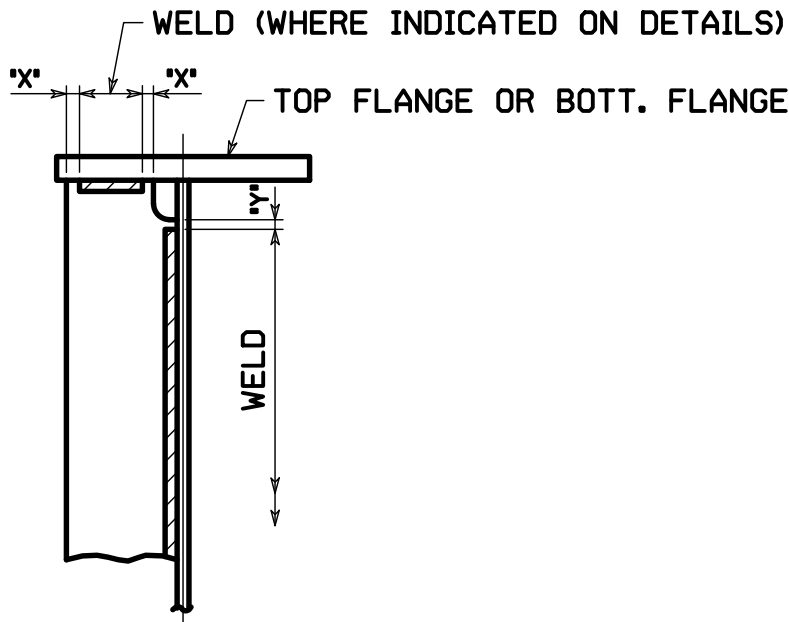
PAINTING:

ALL STEEL (U.N.) TO BE GALVANIZED TO AASHTO M111.
PRIOR TO GALVANIZING, MASK TOP OF TOP GIRDER FLANGE, EXCEPT FOR 1' ON EACH EDGE AND ALSO WITHIN 2' OF FIELD WELDS, AS SHOWN ON DETAIL DRAWINGS.

AFTER GALVANIZING, APPLY LIGHT RUST PREVENTATIVE PRIME COAT OF CARBOLINE CARBOZINC 11HS TO UNGALVANIZED PORTION OF TOP OF TOP FLANGE OF GIRDERS AND FIELD WELDED AREAS, AS SHOWN ON DETAIL DRAWINGS.

DRAWING REFERENCE:

FLANGE SPLICES -PREFIXED 'FS'
WEB CAMBERS -PREFIXED 'WC'
GIRDER JOB STANDARDS -PREFIXED 'X'

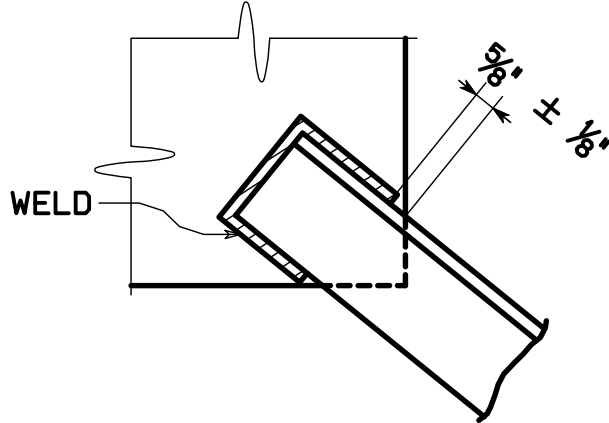


"X" = 5/8" ± 1/8"

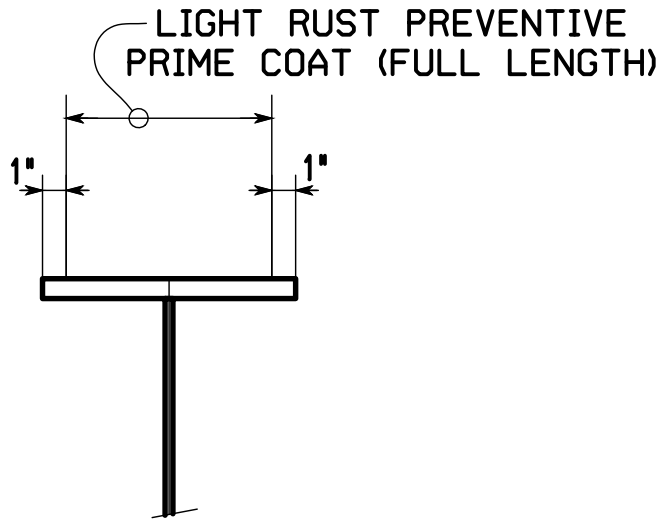
"Y" = 5/8" ± 1/8"

STIFFENER WELDING DETAIL

ALL CROSSFRAME WELDS ARE TO BE TERMINATED FROM EDGE OF GUSSET PLATES, FILL PLATES OR ANGLES AS INDICATED



CROSSFRAME MEMBER WELDING DETAIL



TYP. TOP FLG SECTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

☒ REVIEWED
☐ REJECTED

☐ REVIEWED WITH COMMENTS
☐ REVISE AND RESUBMIT

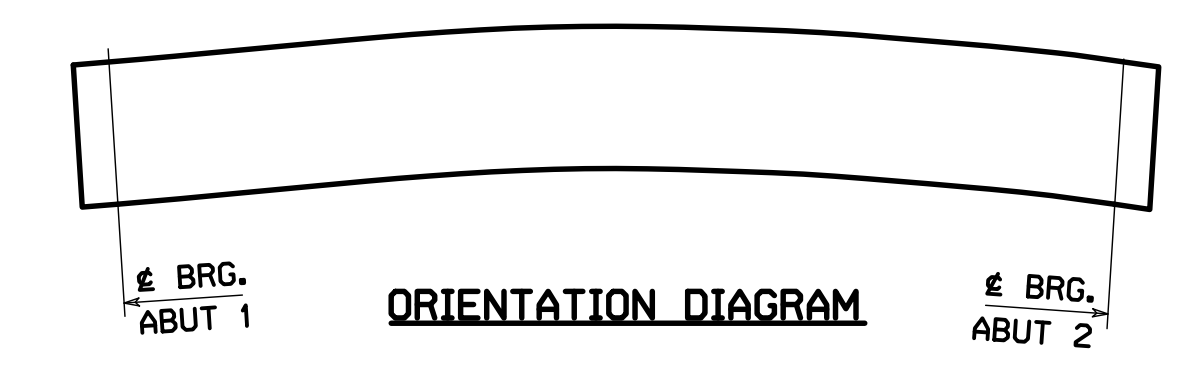
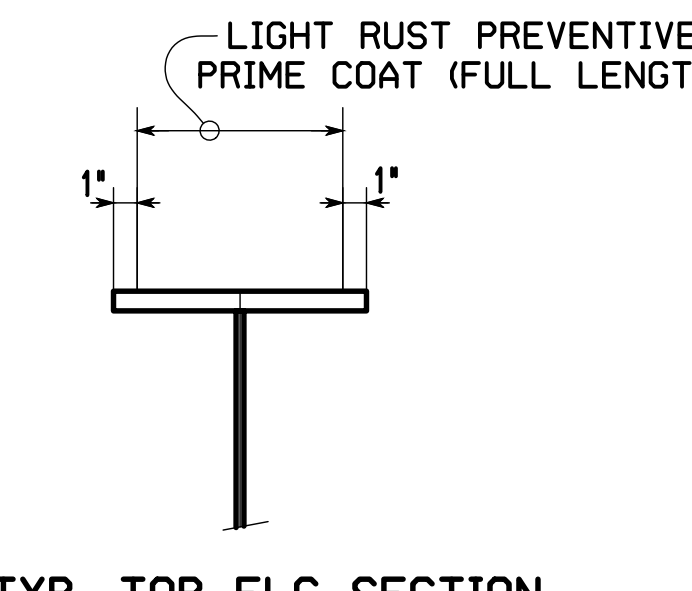
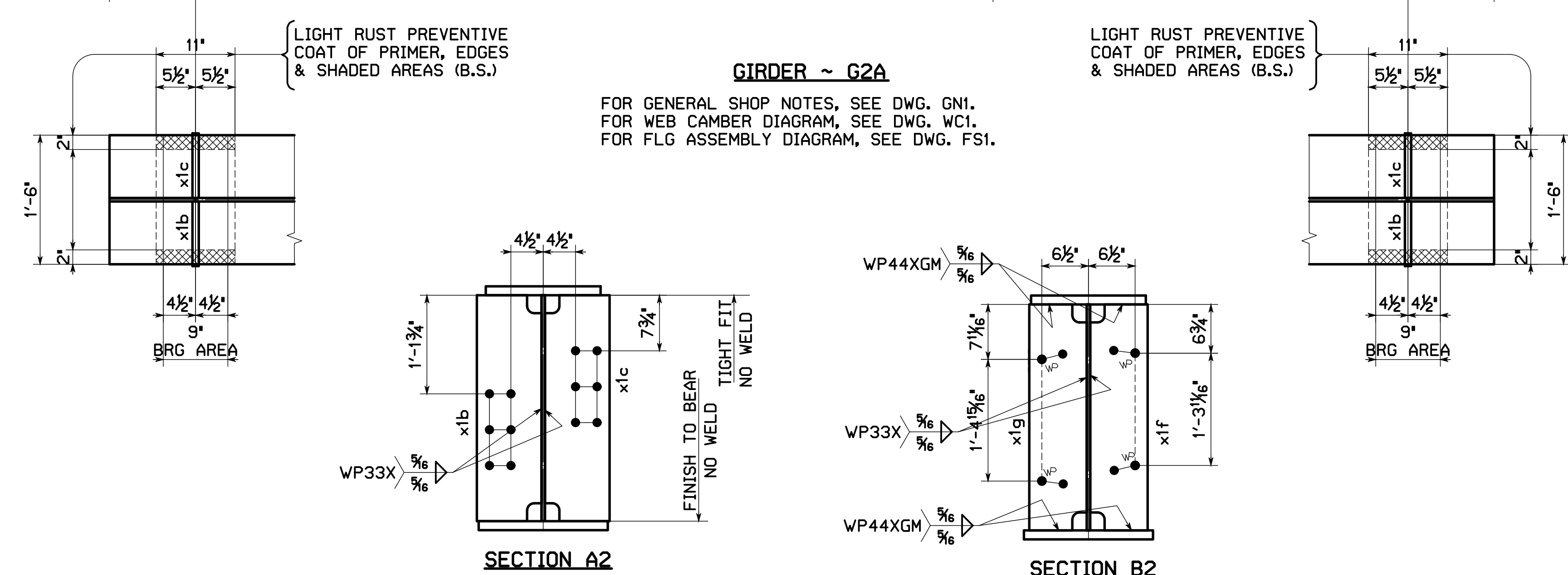
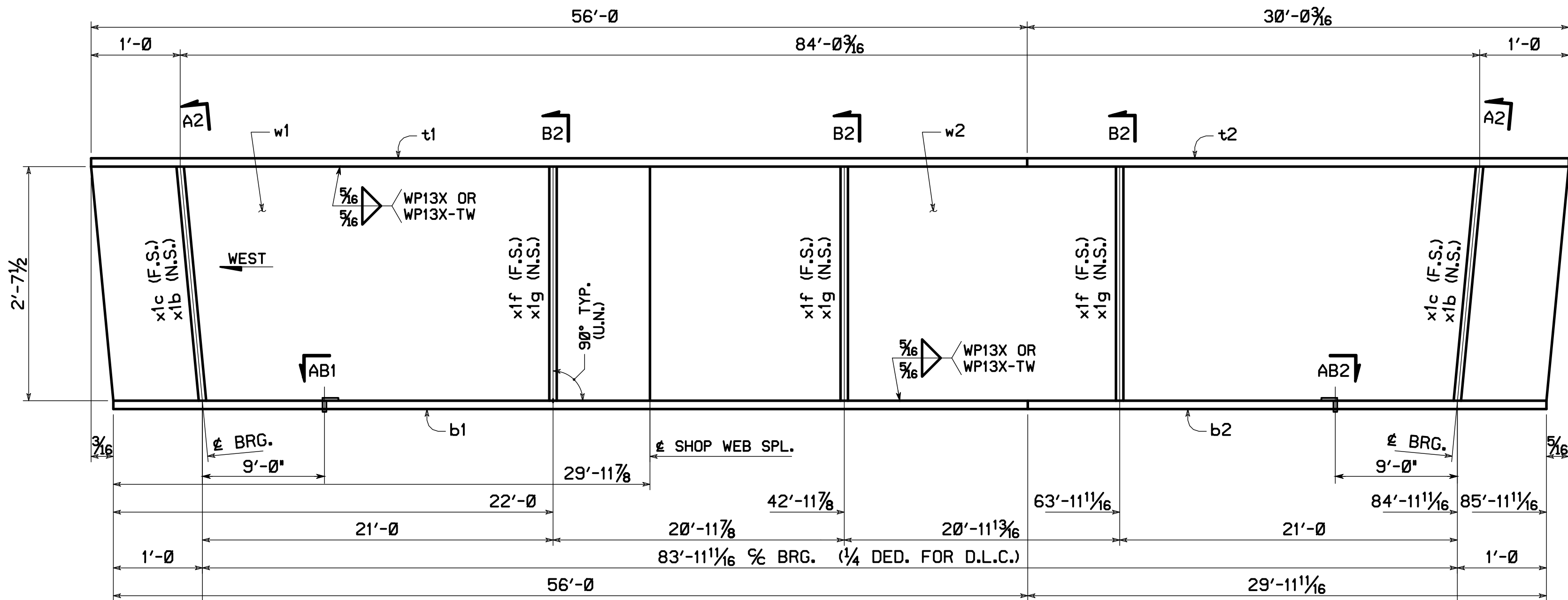
Jan 11, 2024

THIS DOCUMENT WAS REVIEWED IN ACCORDANCE WITH STATE OF MAINE SPECIFICATIONS SECTION 105.7 WORKING DRAWINGS

Benjamin Ditzler
NAME

Transportation Engineer II
TITLE

△				
△				
△				
NO.	REVISION		BY	CHK'D DATE
HOLES NONE	NATIONAL STEEL INSTITUTE STEEL ALLIANCE 415 STEEL INSTITUTE HIGH STEEL STRUCTURES LLC An Affiliate of High Industries Inc. Lancaster Facility: 195 Old Philadelphia Pike Lancaster, PA 17605-0008 Phone (717) 299-5211 Williamsport Facility: 3501 W. 4th Street Williamsport, PA 17701 Phone (570) 326-9051 www.highsteel.com			
BOLTS NONE	GENERAL SHOP NOTES			
COATING NONE	PERKINS BRIDGE OVER BLACK STREAM CL BRG ABUT 1 STA: 13+36.98 TO CL BRG ABUT 2 STA: 14.21 LEVANT - PENOBSCOT COUNTY, ME			
CODE(S)	STATE OF MAINE DEPARTMENT OF TRANSPORTATION			
SCALE N.T.S.	STATE CONT. OR REF. NO.	BRIDGE No. 6133 WIN 2709810	FED. AID PROJ. NO.	2709810
	GENERAL CONTRACTOR	MAINE DEPT. OF TRANSPORTATION	HSSI PROJ. MGR	MARK DITZLER
ME	DETAILER	PDCUS	MADE BY	GM
	HSSI PROJECT NUMBER	1230178A-1	CHK'D BY	SB
		DRAWING NUMBER	GN1	OF GN1
			DATE	12-09-23

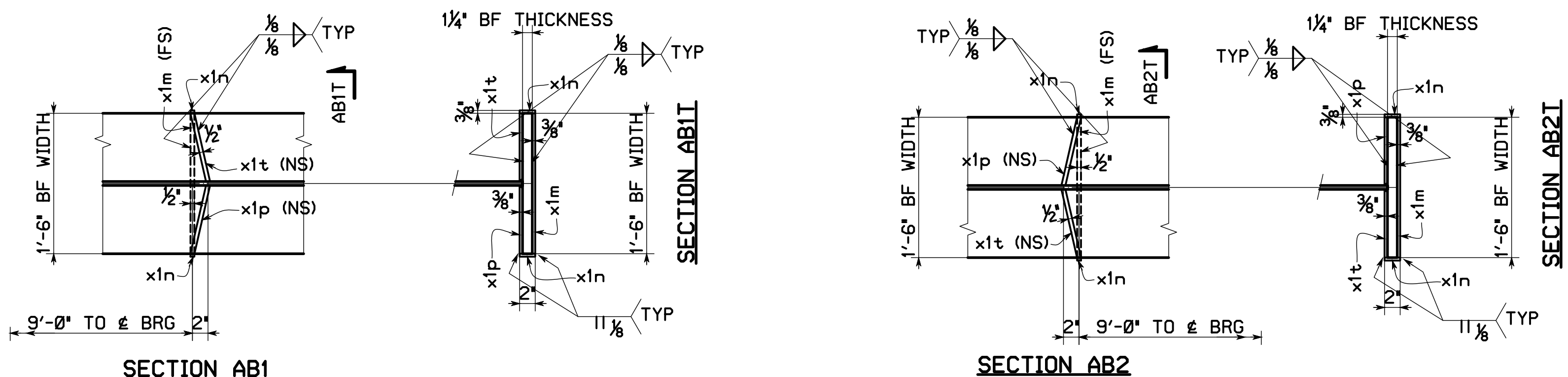
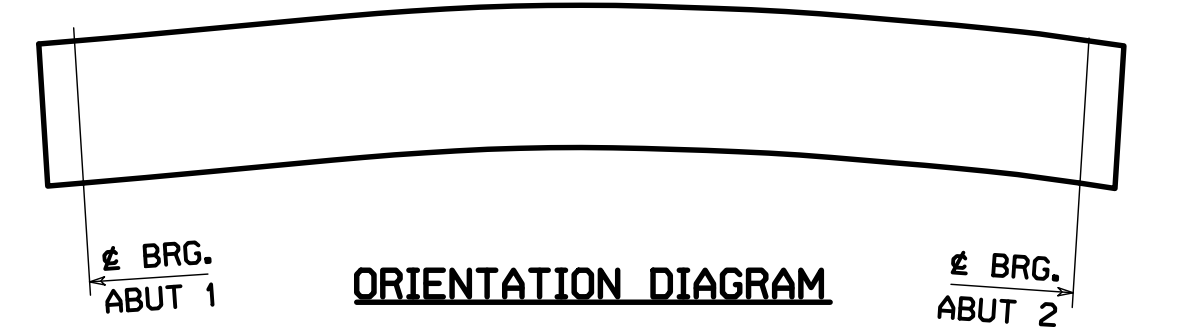
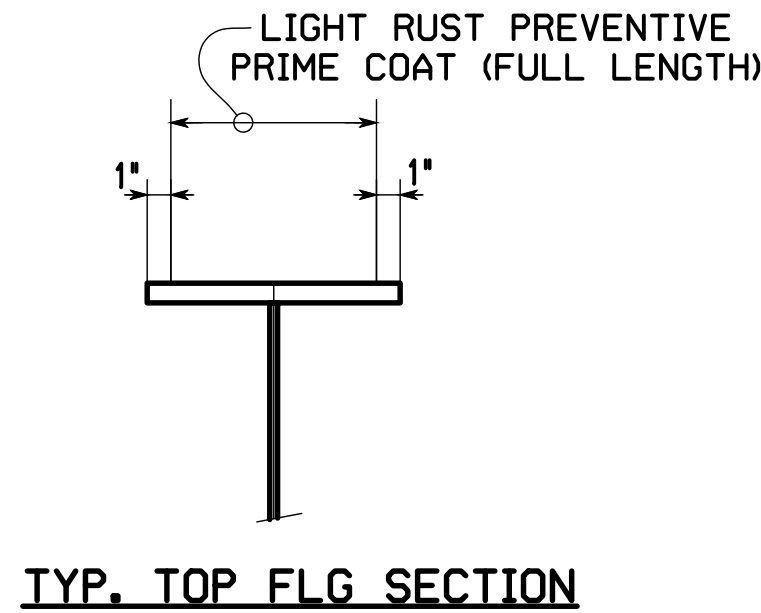
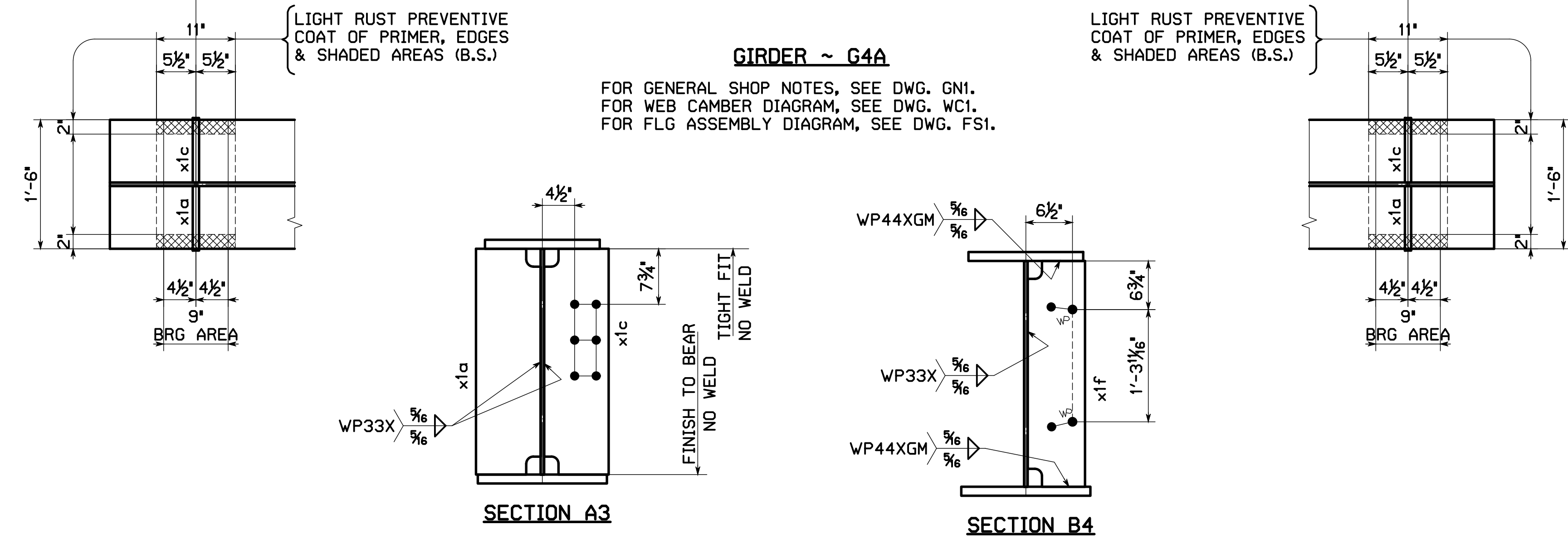
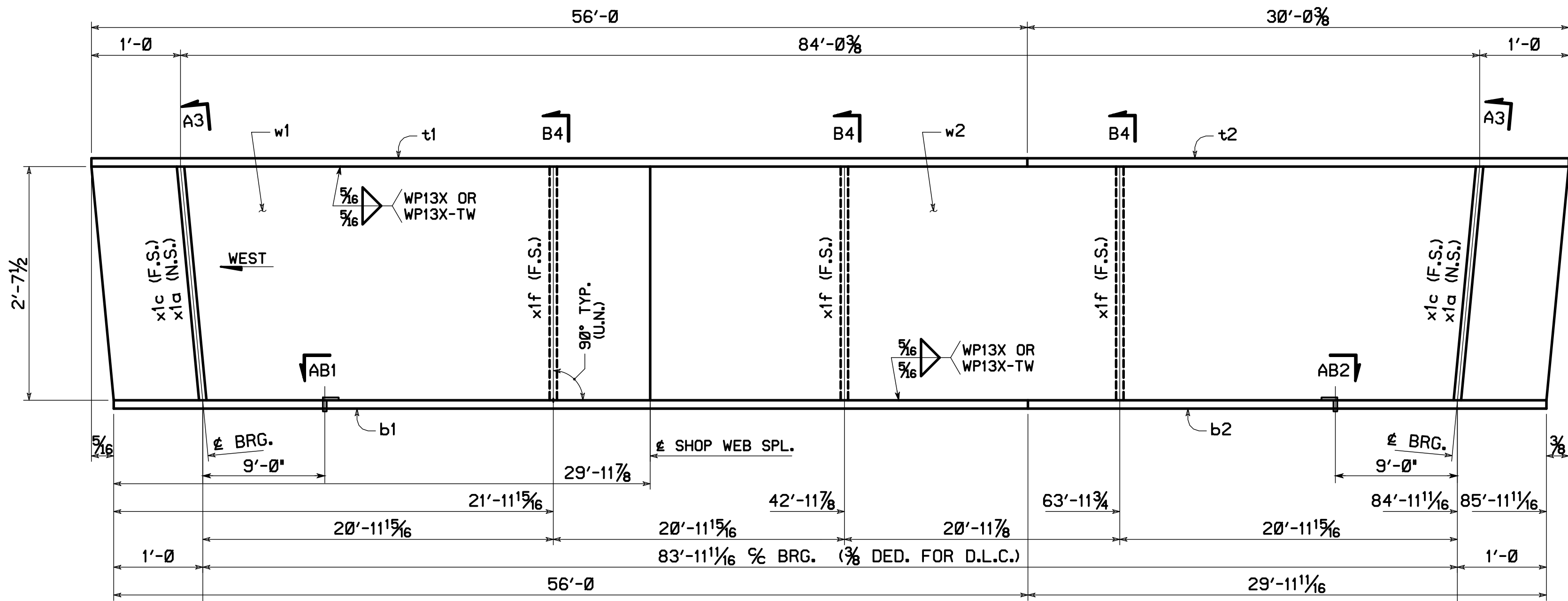


BILL OF MATERIAL										
QTY EA.	MARK	COMM	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	SHIP WT. EA. (LBS)
1	G2A		GIRDER							17548
1	w1	PL	1/2 x 31 1/2	30 0 5/16	A709	50	T		03003	
1	w2	PL	1/2 x 31 1/2	56 0 1/8	A709	50	T		03001	
1	t1	PL	1 1/4 x 16	56 0	A709	50	T		04003	
1	t2	PL	1 1/4 x 16	30 0 1/4	A709	50	T		04004	
1	b1	PL	1 1/4 x 18	56 0	A709	50	T		04001	
1	b2	PL	1 1/4 x 18	29 11 3/4	A709	50	T		04002	
2	x1b	PL	7/8 x 9	2 7 1/2	A709	50	T	F2E	07001	
2	x1c	PL	7/8 x 9	2 7 1/2	A709	50	T	F2E	07001	
3	x1f	PL	1/2 x 8	2 7 1/2	A709	50			07002	
3	x1g	PL	1/2 x 8	2 7 1/2	A709	50			07002	
2	x1m	PL	3/8 x 1/2	1 6	A709	50			07003	
2	x1n	PL	3/8 x 1/2	0 2	A709	50			07003	
2	x1p	PL	3/8 x 1/2	0 9 1/16	A709	50			07003	
2	x1t	PL	3/8 x 1/2	0 9 1/16	A709	50			07003	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
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REJECTED
REVIEWED WITH COMMENTS
REVISE AND RESUBMIT
Jan 11, 2024
THIS DOCUMENT WAS REVIEWED IN ACCORDANCE WITH STATE OF MAINE SPECIFICATIONS SECTION 105.7 WORKING DRAWINGS
NAME: Benjamin Gault TITLE: Transportation Engineer II

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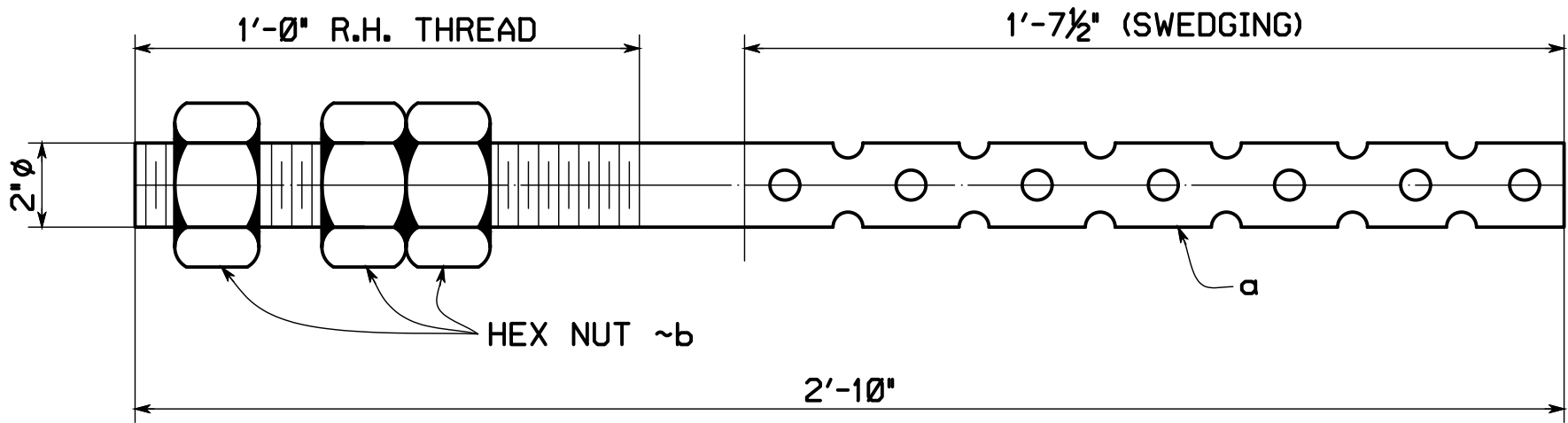
NO.	REVISION	BY	CHK'D	DATE
HOLDS 15/16" Ø				
BOLTS NONE				
COATING SEE DWG GN1				
CODE(S)				
SCALE N.T.S.	STATE CONT. OR REF. NO. BRIDGE No. 6133 WIN 2709810	FED. AID PROJ. NO. 2709810		
	GENERAL CONTRACTOR MAINE DEPT. OF TRANSPORTATION	HSSI PROJ. MGR MARK DITZLER		
	DETAILER PDCUS	MADE BY GM	CHK'D BY SB	DATE 12-09-23
ME	HSSI PROJECT NUMBER 1230178A-1	DRAWING NUMBER 2	OF	6



BILL OF MATERIAL										
QTY EA.	MARK	COMM	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	SHIP WT. EA. (LBS)
1	G4A		GIRDER							17442
1	w1	PL	1/2 x 31 1/2	30 0 1/4	A709	50	T		03004	
1	w2	PL	1/2 x 31 1/2	56 0 3/16	A709	50	T		03002	
1	t1	PL	1 1/4 x 16	56 0	A709	50	T		04003	
1	t2	PL	1 1/4 x 16	30 0 7/16	A709	50	T		04004	
1	b1	PL	1 1/4 x 18	56 0	A709	50	T		04001	
1	b2	PL	1 1/4 x 18	29 11 3/4	A709	50	T		04002	
2	x1c	PL	7/8 x 9	2 7 1/2	A709	50	T	F2E	07001	
2	x1a	PL	7/8 x 9	2 7 1/2	A709	50	T	F2E	07001	
3	x1f	PL	1/2 x 8	2 7 1/2	A709	50			07002	
2	x1m	PL	3/8 x 1/2	1 6	A709	50			07003	
2	x1n	PL	3/8 x 1/2	0 2	A709	50			07003	
2	x1p	PL	3/8 x 1/2	0 9 1/16	A709	50			07003	
2	x1t	PL	3/8 x 1/2	0 9 1/16	A709	50			07003	

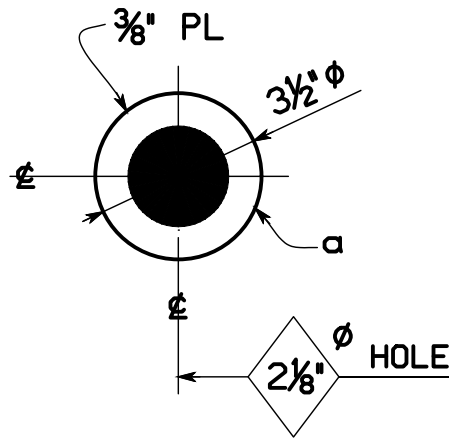
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
REVIEWED
REJECTED
REVIEWED WITH COMMENTS
REVISE AND RESUBMIT
Jan 11, 2024
THIS DOCUMENT WAS REVIEWED IN ACCORDANCE WITH STATE OF MAINE SPECIFICATIONS SECTION 106.7 WORKING DRAWINGS
NAME: Benjamin Baulty TITLE: Transportation Engineer II

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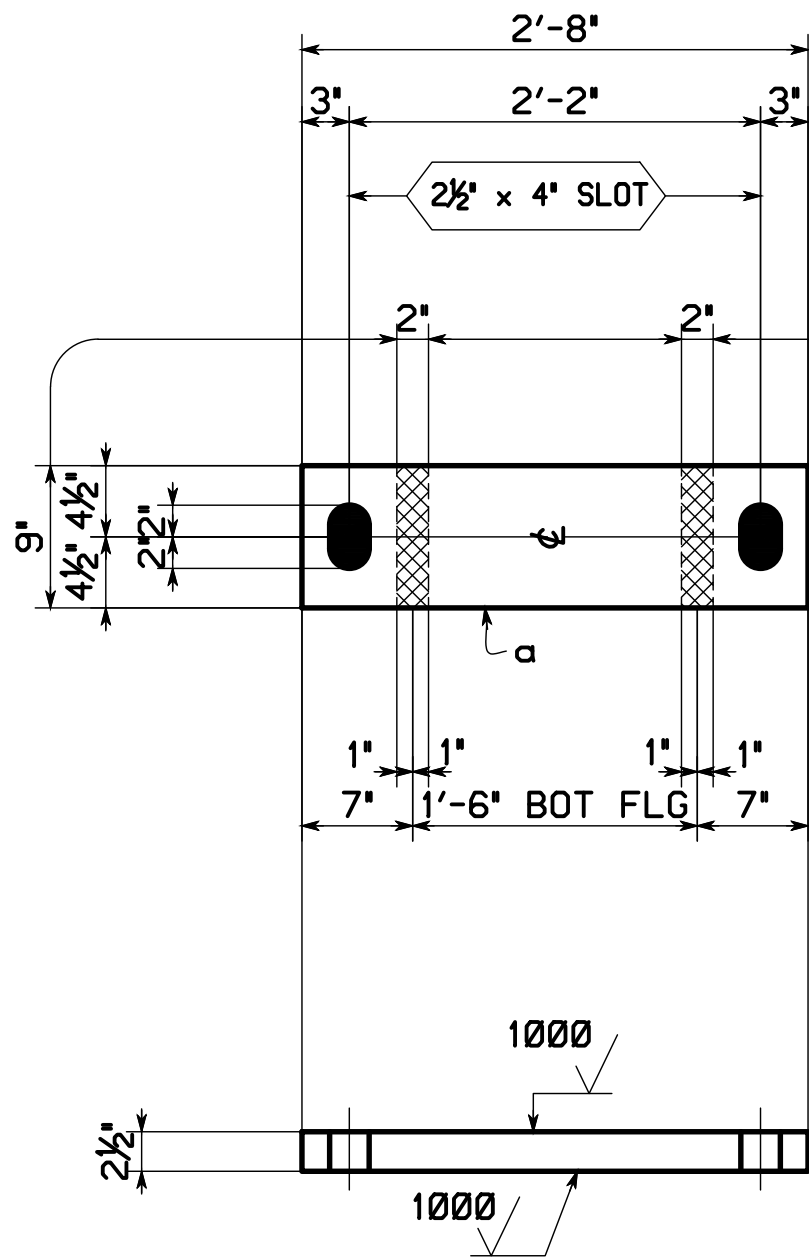


ANCHOR BOLT ~ MK. AB1
(GALV. A153)

ENSURE NUTS CAN BE TURNED ON
ANCHOR BOLTS AFTER GALVANIZING



WASHER ~ MK. W1
(GALV. A153)



MASK WITH MACROPROXY 646
PRIOR TO GALVANIZING, EDGES &
SHADED AREAS (N.S.)

LEVELING PL ~ MK. LP1

NOTES:

FOR GENERAL SHOP NOTES, SEE DWG. GN1.
GALVANIZE ANCHOR BOLTS PRIOR TO ASSEMBLY.
GALVANIZE LEVELING PL TO ASTM A123 AFTER FAB.

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BILL OF MATERIAL											
QTY EA.	MARK	COMM	DESCRIPTION	LENGTH		SPEC	GRADE	TEST	REMARKS	ITEM	SHIP WT. EA. (LBS)
16	AB1		ANCHOR BOLT								79
1	a	Anch Bolt	2	2	10	F1554	55		GALV. A153	01001	
3	b	Nut	2			A563	DH		HEV. HEX GALV. A153	01002	
16	W1		WASHER								0
1	a	Anch Wash	3/8 x 3 1/2			A709	50		GALV. A153	01003	

BILL OF MATERIAL											
QTY EA.	MARK	COMM	DESCRIPTION	LENGTH		SPEC	GRADE	TEST	REMARKS	ITEM	SHIP WT. EA. (LBS)
8	LP1		LEVELING PL								204
1	a	PL	2 1/2 x 9	2	8	A709	50			02001	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
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☐ REJECTED ☐ REVISE AND RESUBMIT

Jan 11, 2024

THIS DOCUMENT WAS REVIEWED IN ACCORDANCE WITH STATE
OF MAINE SPECIFICATIONS SECTION 105.7 WORKING DRAWINGS

Benjamin Smith

TRANSPORTATION ENGINEER II

NAME

TITLE

△ △ △				
NO.	REVISION	BY	CHK'D	DATE
Holes AS NOTED	NATIONAL STEEL BRIDGE ALLIANCE 400 STEEL INSTITUTE HIGH STEEL STRUCTURES LLC Lancaster Facility: 195 Old Philadelphia Pike Lancaster, PA 17605-0008 Phone (717) 299-5211 Williamsport Facility: 3501 W. 4th Street Williamsport, PA 17701 Phone (570) 326-9051 www.hghsteel.com			
BOLTS NONE	BEARINGS			
COATING AS NOTED	PERKINS BRIDGE OVER BLACK STREAM CL BRG ABUT 1 STA: 13+36.98 TO CL BRG ABUT 2 STA: 14.21 LEVANT - PENOBSCOT COUNTY, ME			
CODE(S)	STATE OF MAINE DEPARTMENT OF TRANSPORTATION			
SCALE N.T.S.	STATE CONT. OR REF. NO. BRIDGE No. 6133 WIN 2709810	FED. AID PROJ. NO. 2709810		
	GENERAL CONTRACTOR MAINE DEPT. OF TRANSPORTATION	HSSI PROJ. MGR	MARK DITZLER	
ME	DETAILER PDCUS	MADE BY GM	CHK'D BY SB	DATE 12-09-23
	HSSI PROJECT NUMBER 1230178A-1	DRAWING NUMBER	6	OF 6