

GENERAL NOTES

SPECIFICATIONS:

1. THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY AASHTO, 2014, 7TH EDITION INCLUDING THE 2016 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL, 2007.
- ALL MATERIAL AND WORKMANSHIP TO BE IN ACCORDANCE WITH THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS DATED 2016 AND THE SPECIAL PROVISIONS.
2. THE ANSI/AASHTO/AWS (CURRENT EDITION) BRIDGE WELDING CODE.

MATERIAL SPECIFICATIONS:

1. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A709 GRADE 50W.
2. STRUCTURAL STEEL NOTED CVN INDICATES MATERIAL WHICH IS SUBJECT TO CHARPY V-NOTCH TESTING PER 711.01 OF STATE OF OHIO CMS.
3. HIGH STRENGTH BOLTS:
- HIGH STRENGTH BOLTS SHALL BE ASTM A325 TYPE 3 WITH ONE ASTM A563 TYPE 3 HEAVY HEX NUT AND TWO F436-3 HARDENED WASHERS. ALL TO BE WEATHERING HARDWARE.
- ALL HIGH STRENGTH BOLTS SHALL BE ROTATIONAL CAPACITY TESTED PRIOR TO USE. DO NOT MIX NUTS AND BOLTS FROM DIFFERENT LOTS.
4. SHOP CLEANING AND PAINTING OF STRUCTURAL STEEL TO BE IN ACCORDANCE WITH ODOT CMS 514.
* SOLVENT CLEAN PER SSPC-SP 1/SHOP BLAST CLEAN PER SSPC-SP 6
* MATERIAL IS TO BE SHIPPED UNCOATED.

FABRICATION:

1. ALL FIELD INSTALLED (BY THE CONTRACTOR) HIGH STRENGTH BOLTS SHALL BE PERMANENTLY INSTALLED AND TORQUED USING TURN OF THE NUT METHOD.
2. ALL RE-ENTRANT CUTS SHALL HAVE A MINIMUM RADIUS OF 1".
3. ALL FLAME CUT OR SHEARED EDGES SHALL BE DEBURRED AND BROKEN WITH A SINGLE PASS OF A GRINDER CREATING A 1/16"± RADIUS.

WELDING:

1. WELDING SHALL BE IN ACCORDANCE WITH THE AASHTO/AWS D1.5-2002 BRIDGE WELDING CODE AS AMENDED BY O.D.O.T. 1011 AND SECTION 513.21 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, DATED JANUARY 1, 2016 AND AS MODIFIED BY THE CONTRACT PLANS.

GENERAL:

1. FABRICATED PIECES ARE TO BE MARKED WITH THE SHIPPING MARKS ON THE LEFT END AS SHOWN ON THESE SHOP DRAWINGS. THE PIECES ARE ORIENTED IN THE FIELD WITH THE SHIPPING MARKS AT THE END AS SHOWN ON THESE SHOP DRAWINGS.
1. CONTRACTOR TO APPROVE ALL INFORMATION & DIMENSIONS PRIOR TO COMMENCING FABRICATION.

DRAWING INDEX		
SHEET NO.	DWG. NO.	DESCRIPTION
1	GN1	GENERAL NOTES, DRAWING INDEX & HARDWARE LIST
2	E1	SUPPORT BRACKET LOCATION PLAN
3	D1	SUPPORT BRACKET WELDMENT 3SB1 ASSEMBLY DETAIL
4	D2	SUPPORT BRACKET PART DETAILS & BILL OF MATERIAL

TRABUE ROAD OVER NSRR		PID NO.: 15125		OSI PROJ.NO.: 18-25		REF NO.: 20		ITEM NO.: 513 LEVEL 5	
HARDWARE LIST									
HARDWARE ONLY:									
LINE	PO#	QTY	MARK	DESCRIPTION	STL SPEC	WT PER (IN LBS)	NET WT (IN LBS)	HEAT #	LOCATION
1		* 378	ff	1-1/8x2-3/4 HEX HEAD BOLT	A325 TYPE 3	1.21	457.38		
2		* 378	nf	1-1/8 HEAVY HEX NUT	A563 TYPE 3	0.59	223.02		
3		* 756	wf	1-1/8 FLAT WASHER	F436 TYPE 3	0.11	79.38		
4		546	ss	7/8" DIAMETER x 6" SHEAR STUD	A108	1.15	627.90		
* INDICATES AN ITEM THAT WILL BE SHIPPED LOOSE									
						TOTAL WT	1,387.68		

SHOP DRAWING REVIEW

REVIEW IS FOR GENERAL COMPLIANCE
WITH CONTRACT DOCUMENTS
NO RESPONSIBILITY ASSUMED FOR
CORRECTNESS OF DIMENSIONS OR DETAILS

NO EXCEPTIONS TAKEN	X
MAKE CORRECTIONS NOTED	
AMEND & RESUBMIT	
REJECTED - SEE REMARKS	

E.L. ROBINSON ENGINEERING

Date 11-9-18 By DFT

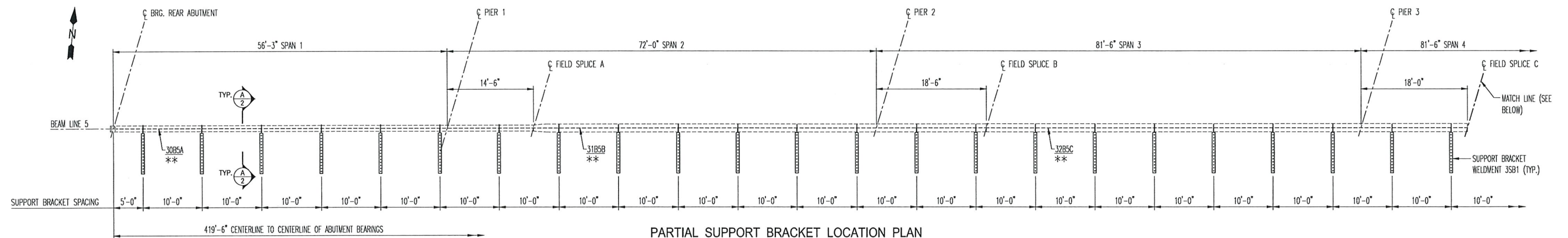


REV. No.	REVISION
A	CHANGED NOTE 1 UNDER SPECIFICATIONS 11/9/2018
SHOP INSPECTED BY:	

OHIO STRUCTURES INC.
535 NORTH BROAD STREET SUITE 5
CANFIELD, OHIO 44406
(330) 533-0084 FAX: 533-0191

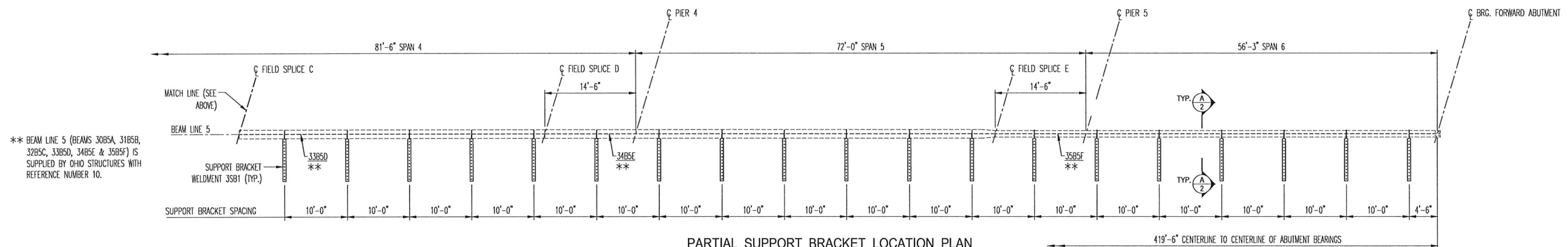
FRANKLIN COUNTY
BRIDGE: FRA-CR27-0785
TRABUE ROAD OVER NORFOLK SOUTHERN RAILROAD

SCALE: N.T.S.	DRAWN: JDC
DATE: 10/18	CHECK: TJK
GENERAL NOTES, DRAWING INDEX & HARDWARE LIST	
REF NO.: 20	ITEM NO.: 513 LEVEL 5
PID NO.: 15125	DWG. NO.: GN1
SFN: 2531526	OSI PROJ. NO.: 18-25 1 OF 4



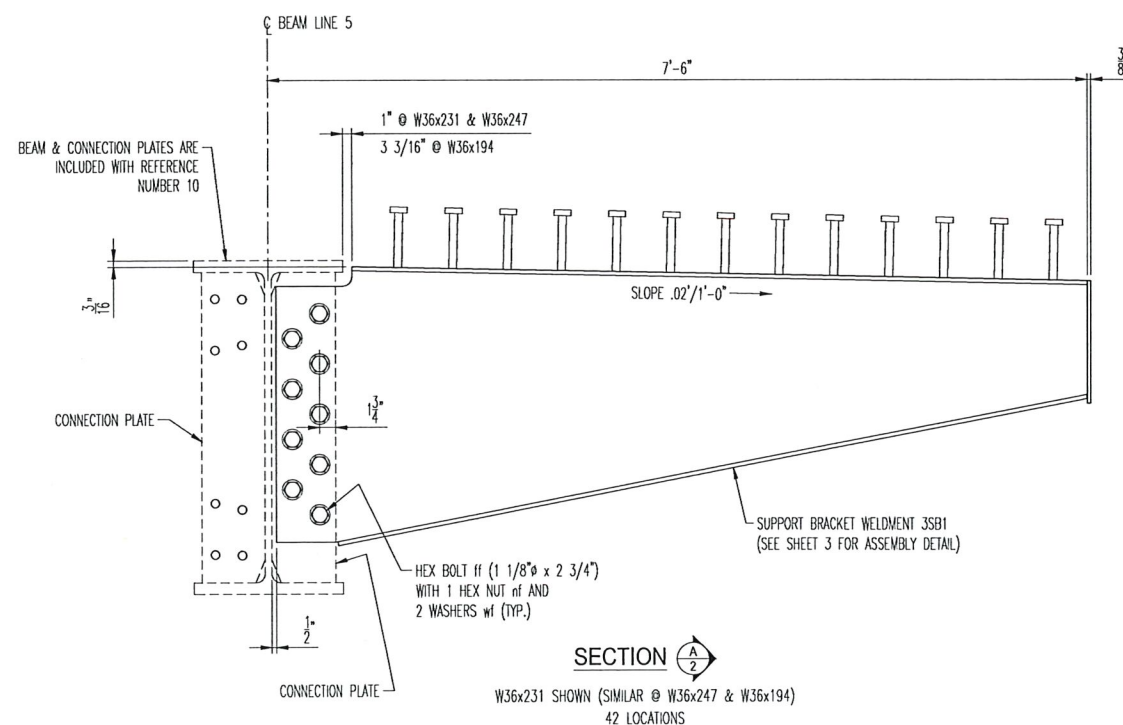
PARTIAL SUPPORT BRACKET LOCATION PLAN

SPANS 1, 2, 3 & 4



PARTIAL SUPPORT BRACKET LOCATION PLAN

SPANS 4, 5 & 6



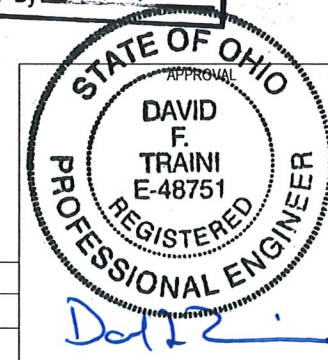
SHOP DRAWING REVIEW

REVIEW IS FOR GENERAL COMPLIANCE
WITH CONTRACT DOCUMENTS
NO RESPONSIBILITY ASSUMED FOR
CORRECTNESS OF DIMENSIONS OR DETAILS

NO EXCEPTIONS TAKEN	<input checked="" type="checkbox"/>
MAKE CORRECTIONS NOTED	<input type="checkbox"/>
AMEND & RESUBMIT	<input type="checkbox"/>
REJECTED - SEE REMARKS	<input type="checkbox"/>

E.L. ROBINSON ENGINEERING

Date: 11-9-18 By: DFT



NOTES:
SEE SHEET 3 FOR SUPPORT BRACKET WELDMENT 3SB1 ASSEMBLY DETAIL
SEE SHEET 4 FOR SUPPORT BRACKET PART DETAILS & BILL OF MATERIAL

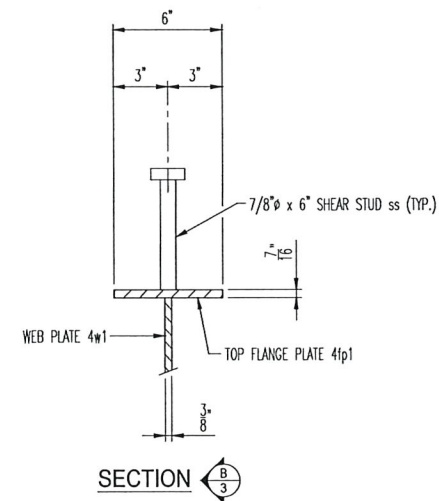
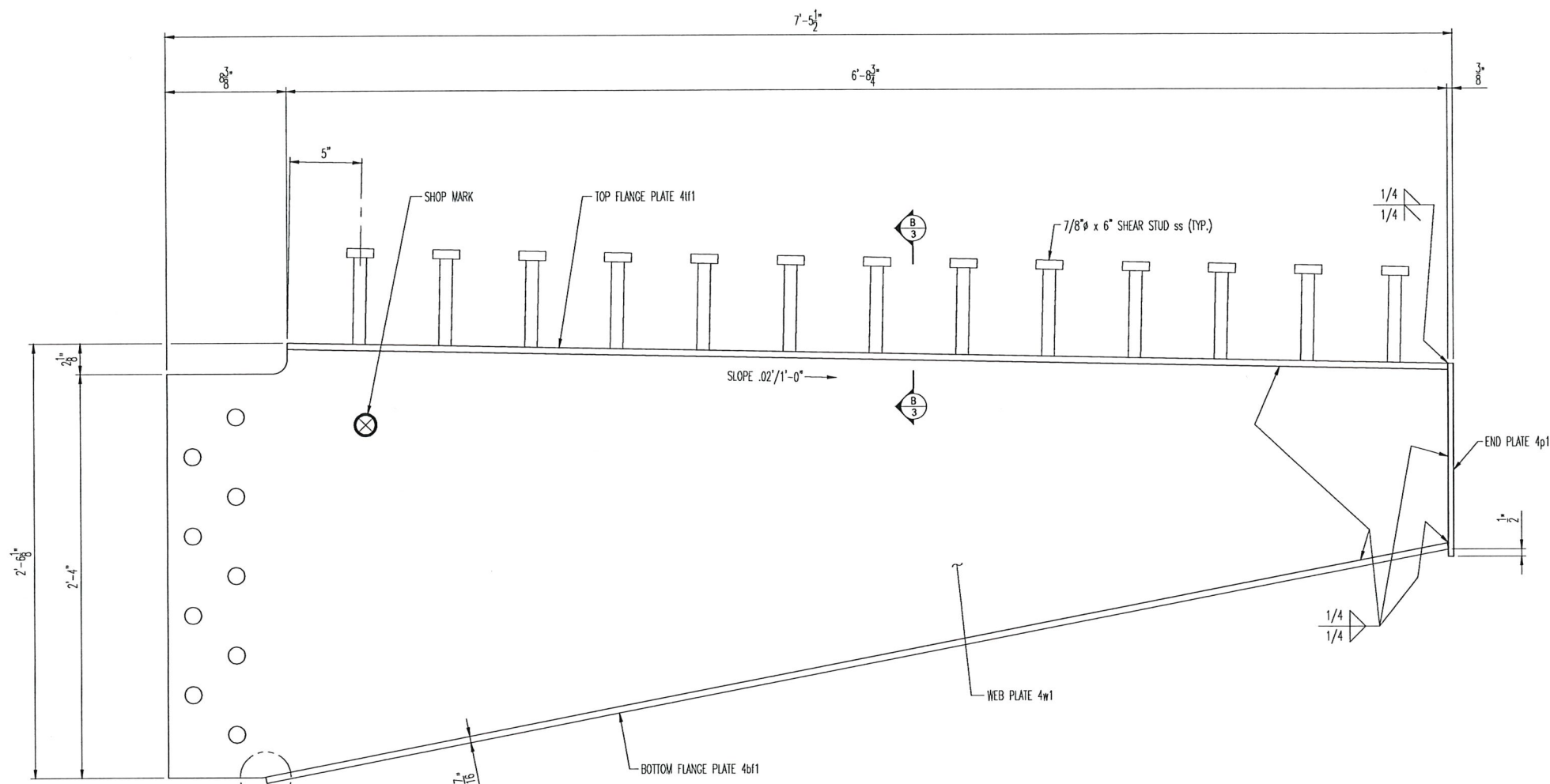
OHIO STRUCTURES INC.
535 NORTH BROAD STREET SUITE 5
CANFIELD, OHIO 44406
(330) 533-0084 FAX: 533-0191

FRANKLIN COUNTY
BRIDGE: FRA-CR27-0785
TRABUE ROAD OVER NORFOLK SOUTHERN RAILROAD

SCALE: N.T.S.	Franklin County Engineer	DRAWN: JDC
DATE: 10/18		CHECK: TJK

REF NO.: 20
PID NO.: 15125
SFN: 2531526

ITEM NO.: 513 LEVEL 5
DWG. NO.: E1
OSI PROJ. NO.: 18-25 2 OF 4



ELEVATION VIEW
42 - SUPPORT BRACKET WELDMENTS 3SB1
ASSEMBLY DETAIL

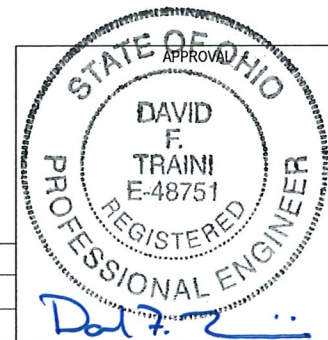
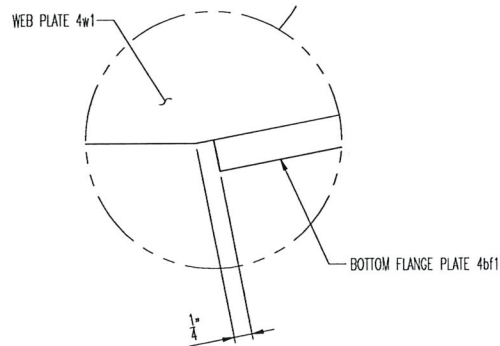
SHOP DRAWING REVIEW

REVIEW IS FOR GENERAL COMPLIANCE
WITH CONTRACT DOCUMENTS
NO RESPONSIBILITY ASSUMED FOR
CORRECTNESS OF DIMENSIONS OR DETAILS

NO EXCEPTIONS TAKEN	X
MAKE CORRECTIONS NOTED	
AMEND & RESUBMIT	
REJECTED - SEE REMARKS	

E.L. ROBINSON ENGINEERING

Date 11-9-18 By DFT



OHIO STRUCTURES INC.
535 NORTH BROAD STREET SUITE 5
CANFIELD, OHIO 44406
(330) 533-0084 FAX: 533-0191

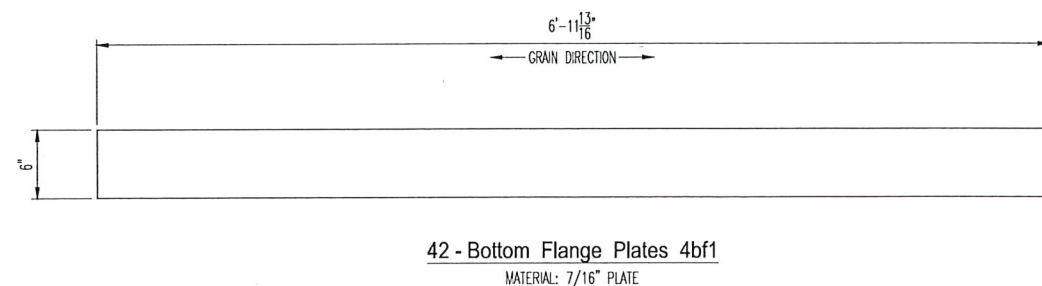
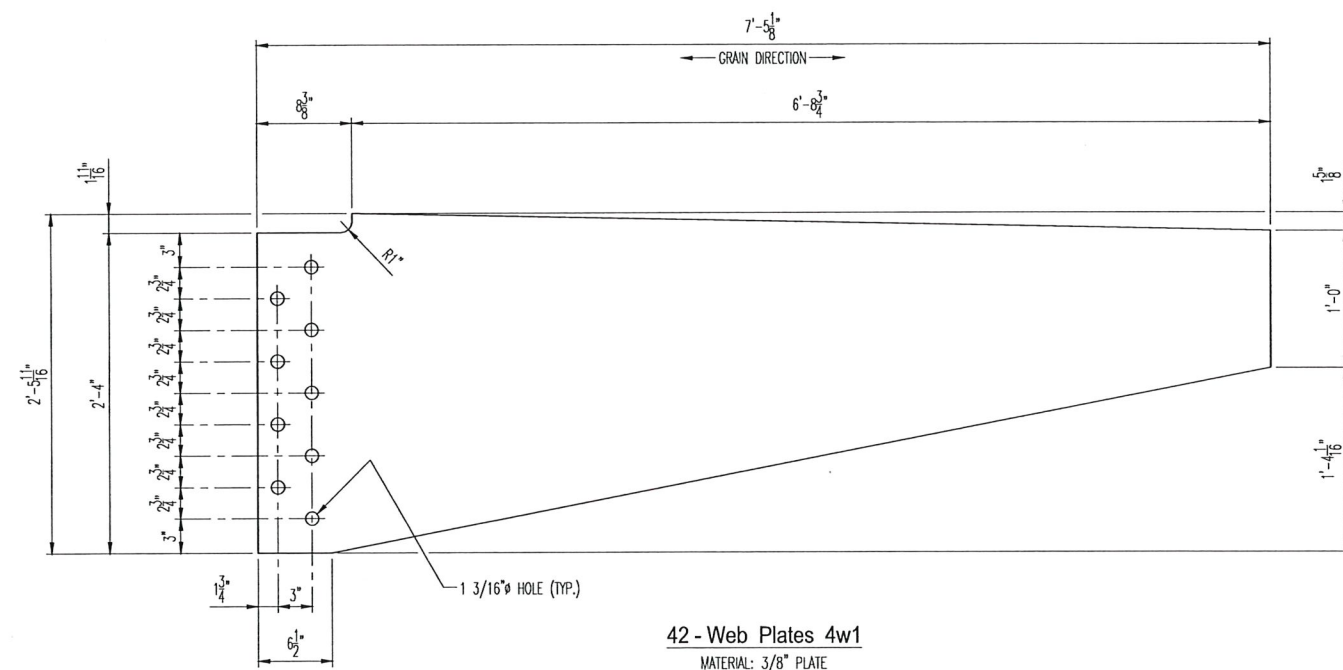
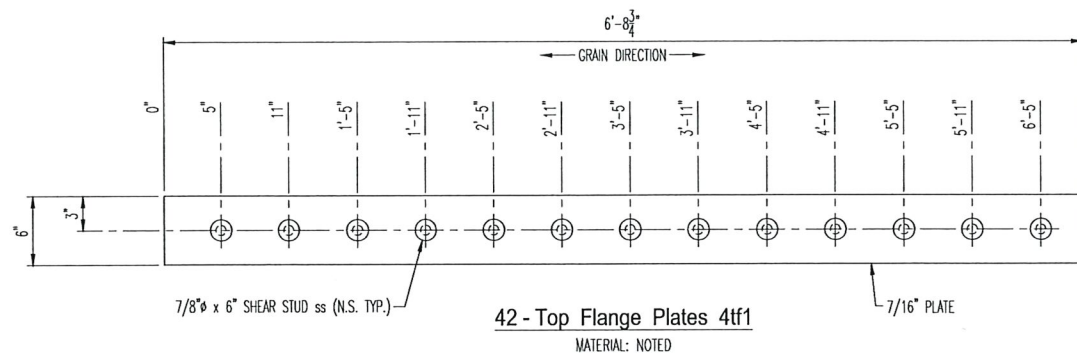
FRANKLIN COUNTY
BRIDGE: FRA-CR27-0785
TRABUE ROAD OVER NORFOLK SOUTHERN RAILROAD

SCALE: N.T.S. DATE: 10/18
DRAWN: JDC CHECK: TJK

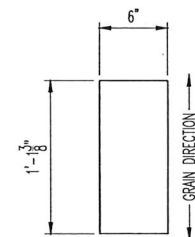
REF NO.: 20 ITEM NO.: 513 LEVEL 5
PID NO.: 15125 DWG. NO.: D1
SFN: 2531526 OSI PROJ. NO.: 18-25 3 OF 4

NOTES:
SEE SHEET 2 FOR SUPPORT BRACKET LOCATION PLAN
SEE SHEET 3 FOR SUPPORT BRACKET PART DETAILS & BILL OF MATERIAL

REV. No.	REVISION



TRABUE ROAD OVER NSRR				PID NO.: 15125			OSI PROJ. NO.: 18-25			REF NO.: 20		ITEM NO.: 513 LEVEL 5	
42 - SUPPORT BRACKET WELDMENTS 3SB1													
MATERIALS ONLY:													
LINE	PO#	QTY	MARK	DESCRIPTION	LENGTH (FEET)	LENGTH (INCHES)	STL SPEC	PC WT (IN LBS)	NET WT (IN LBS)	HEAT #	REMARKS		
2		42	4w1	PLATE 3/8 x 29 11/16	7	5 1/8	A709-50-W-CVN	201.30	8,454.60		WEB PLATE		
2		42	4p1	PLATE 3/8 x 6	1	1 3/8	A709-50-W-CVN	8.54	358.68		END PLATE		
2		42	4#1	PLATE 7/16 x 6	6	8 3/4	A709-50-W-CVN	60.14	2,525.88		TOP FLANGE PLATE		
3		42	4bf1	PLATE 7/16 x 6	6	11 13/16	A709-50-W-CVN	62.42	2,621.64		BOTTOM FLANGE PLATE		
								TOTAL WT	13,960.80				



SHOP DRAWING REVIEW

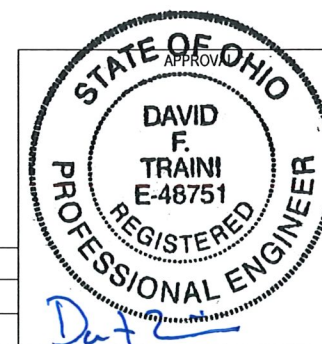
REVIEW IS FOR GENERAL COMPLIANCE
WITH CONTRACT DOCUMENTS
NO RESPONSIBILITY ASSUMED FOR
CORRECTNESS OF DIMENSIONS OR DETAILS

NO EXCEPTIONS TAKEN	X
MAKE CORRECTIONS NOTED	
AMEND & RESUBMIT	
REJECTED - SEE REMARKS	

E.L. ROBINSON ENGINEERING

Date: 11-9-18 By: DFT

NOTES:
SEE SHEET 2 FOR SUPPORT BRACKET LOCATION PLAN
SEE SHEET 3 FOR SUPPORT BRACKET ASSEMBLY DETAIL



OHIO STRUCTURES INC.
535 NORTH BROAD STREET SUITE 5
CANFIELD, OHIO 44406
(330) 533-0084 FAX: 533-0191

FRANKLIN COUNTY
BRIDGE: FRA-CR27-0785
TRABUE ROAD OVER NORFOLK SOUTHERN RAILROAD

SCALE: N.T.S.	Franklin County Engineer	DRAWN: JDC
DATE: 10/18	CHECK: TJK	
SUPPORT BRACKET PART DETAILS & BILL OF MATERIAL		
REF NO.: 20	ITEM NO.: 513 LEVEL 5	
PID NO.: 15125	DWG. NO.: D2	
SFN: 2531526	OSI PROJ. NO.: 18-25	4 OF 4