


BILL OF MATERIAL											
TOTAL QUAN.	DESCRIPTION	LENGTH	PIECE MARK	SUB MARK	UNIT WEIGHT	TOTAL WEIGHT	REMARKS	DIV. NO.	DIV. QUAN.	PAGE & LINE #	STEEL GRADE
ONE BEAM	1 HSS14x14x5/16	36-513/16	9B1		2589	2589		5	1	7-8	A500B
1	PL 3/4x15	3-11	p405		148	148					A36
1	PL 3/4x15	1-11	p72		73	73					A36
1	PL 1/2x4 1/4x5/8	3-11	p481		283	283					A572-50
FIELD BOLTS											
1	7/8 Dia A307	11 1/2					+HHD WASH				
ONE BEAM	1 W12x14	16-85/8	9B2		227	227		5	1	6-4	A992-50
1	FB 3/4x4	11 1/2	f10		4	4					A572-50
FIELD BOLTS											
4	TC 7/8 Dia A325	2					+HHD WASH				
ONE BEAM	1 W18x76	35-41/4	9B3		2681	2681		5	1	3-4	A992-50
FIELD BOLTS											
6	TC 7/8 Dia A325	2 1/4					+HHD WASH				
ONE BEAM	1 W12x14	17-105/8	9B4		243	243		5	1	6-3	A992-50
1	FB 3/4x4	11 1/2	f9		4	4					A572-50
FIELD BOLTS											
4	TC 7/8 Dia A325	2					+HHD WASH				

Total weight : 5740

SHOP NOTE :
 INDICATES PAINT STRIPE TO BE SHOP APPLIED TO THIS FACE OF PLATE.

REF. DWG E1

KBA#16-035

APPROVAL/REVIEW AUTHORITY: PLEASE REVIEW THIS DRAWING CAREFULLY. IT REPRESENTS OUR INTERPRETATION OF THE INTENT OF THE CONTRACT DOCUMENTS. HOWEVER, THE STEEL FABRICATOR AND THE STRUCTURAL STEEL DETAILER ASSUME NO RESPONSIBILITY FOR THE DESIGN OF THE INFORMATION SHOWN ON THIS DRAWING. THIS IS THE RESPONSIBILITY OF THE BUYER. UNLESS NOTED TO THE CONTRARY, ON THIS DRAWING, WHEN IT IS RETURNED FROM APPROVAL IT WILL BE ASSUMED THAT ALL INFORMATION SHOWN HEREIN HAS THE AFFIRMATION OF THE APPROVAL AUTHORITY. SUBSEQUENT CHANGES TO INFORMATION SHOWN ON THESE DRAWINGS AFTER FIRST SUBMISSION WILL BE CONSIDERED AS CONTRACT CHANGES.		PRINTS ISSUED		PAINT: 1-S/C STD. PRIMER	
No.	For	Date	No.	For	Date
1st SUB.	STRU'L. SHOP				
3rd SUB.	MISC. SHOP				
FINAL APP.					
CONTR. FILE	FIELD USE				
ERECTION					

HOLES: 15/16Ø	WELDS = E70XX	MAT'L = ASTM A36	U.N.
WIRE FOR SHIPMENT ALL LOOSE CLIP ANGLES			
No.	By	REVISIONS	Date
▲			07-14-16
▲			
▲			
DATE:		CHECKED BY:	
DATE:		APPROVED:	

SHEET TITLE		BEAMS		JOB NO:
				1601
STRUCTURE				DRAWING NO.
				9
LOCATION				
CONTRACTOR				
ARCHITECT				

(AISC CERTIFIED) (STANDARD)

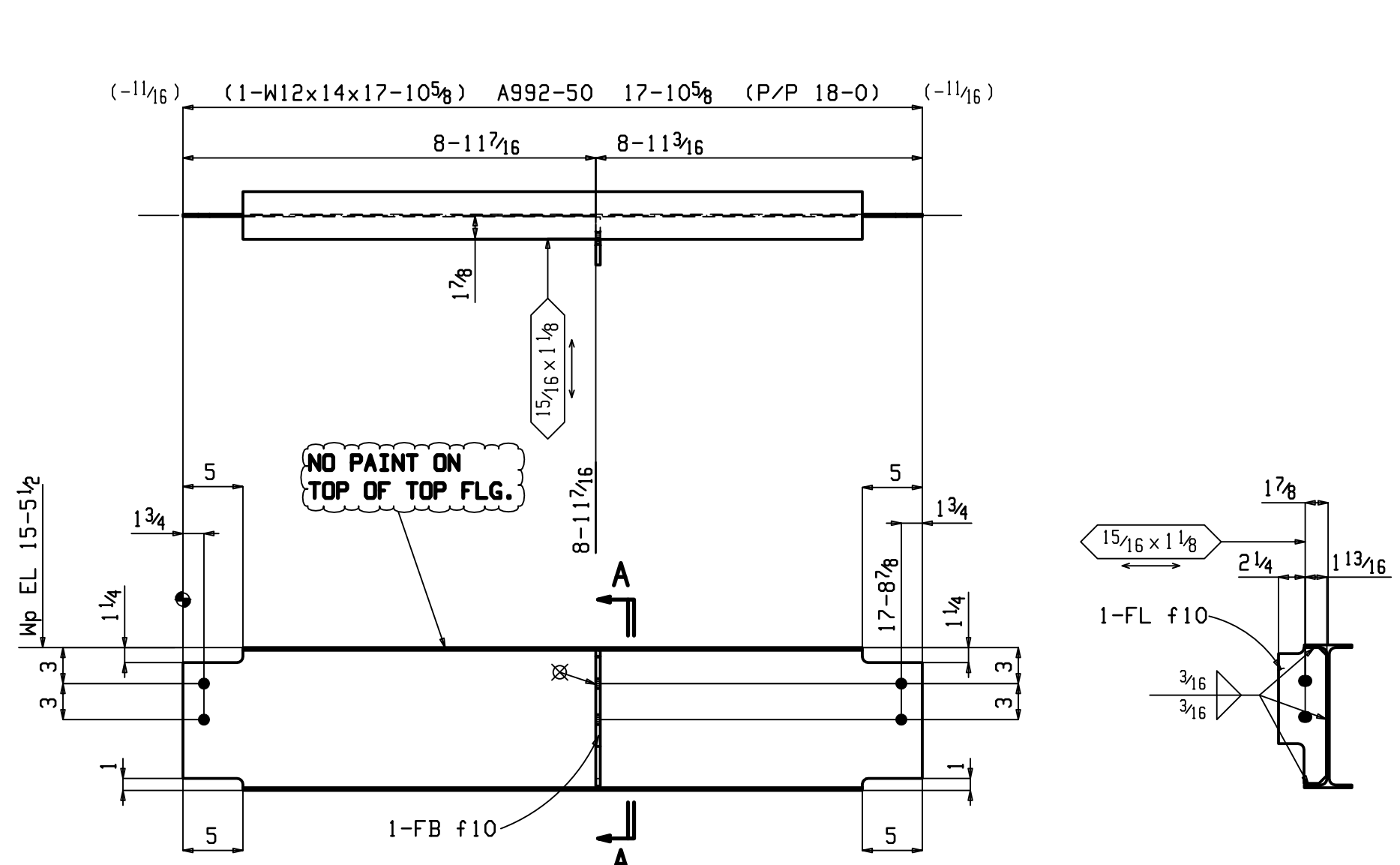
BILL OF MATERIAL

TOTAL QUAN.	DESCRIPTION	LENGTH	PIECE MARK	SUB MARK	UNIT WEIGHT	TOTAL WEIGHT	REMARKS	DIV. NO.	DIV. QUAN.	PAGE & LINE #	STEEL GRADE
ONE	BEAM		10B1		247	247		5	1	6-3	
1	W12x14	17-10 ⁵ / ₁₆		10B1	243	243					A992-50
1	FB ³ / ₈ x4	11 ⁵ / ₁₆		F10	4	4					A572-50
	FIELD BOLTS										
4	TC ⁷ / ₈ Dia A325	2					+HHD WASH				
ONE	BEAM		10B2		590	590		5	1	5-19	
1	W14x22	25-9 ⁴ / ₁₆		10B2	566	566	C- ³ / ₄				A992-50
2	L4x4x ³ / ₁₆	8 ¹ / ₂		a112	5	11					A36
2	L3 ¹ / ₂ x3 ¹ / ₂ x ³ / ₁₆	8 ¹ / ₂		a190	5	10					A36
3	⁷ / ₈ Dia A325	2 ¹ / ₄			1	3	+HHD WASH				
	FIELD BOLTS										
12	TC ⁷ / ₈ Dia A325	2 ¹ / ₄					+HHD WASH				
2	⁷ / ₈ Dia A325	2					+HHD WASH				
ONE	BEAM		10B3		3433	3433		5	1	1-18	
1	W30x99	34-9 ¹ / ₂		10B3	3433	3433					A992-50
	FIELD BOLTS										
14	TC ⁷ / ₈ Dia A325	2 ¹ / ₄					+HHD WASH				
2	BEAM		10B4		3433	6865		5	1	1-18	
2	W30x99	34-9 ¹ / ₂		10B4	3433	6865		7	1	1-18	A992-50
	FIELD BOLTS										
28	TC ⁷ / ₈ Dia A325	2 ¹ / ₄					+HHD WASH				

Total weight : 11135

SHOP NOTE :
 ⊗ → INDICATES PAINT STRIPE TO BE SHOP APPLIED TO THIS FACE OF PLATE.

REF. DWG E1

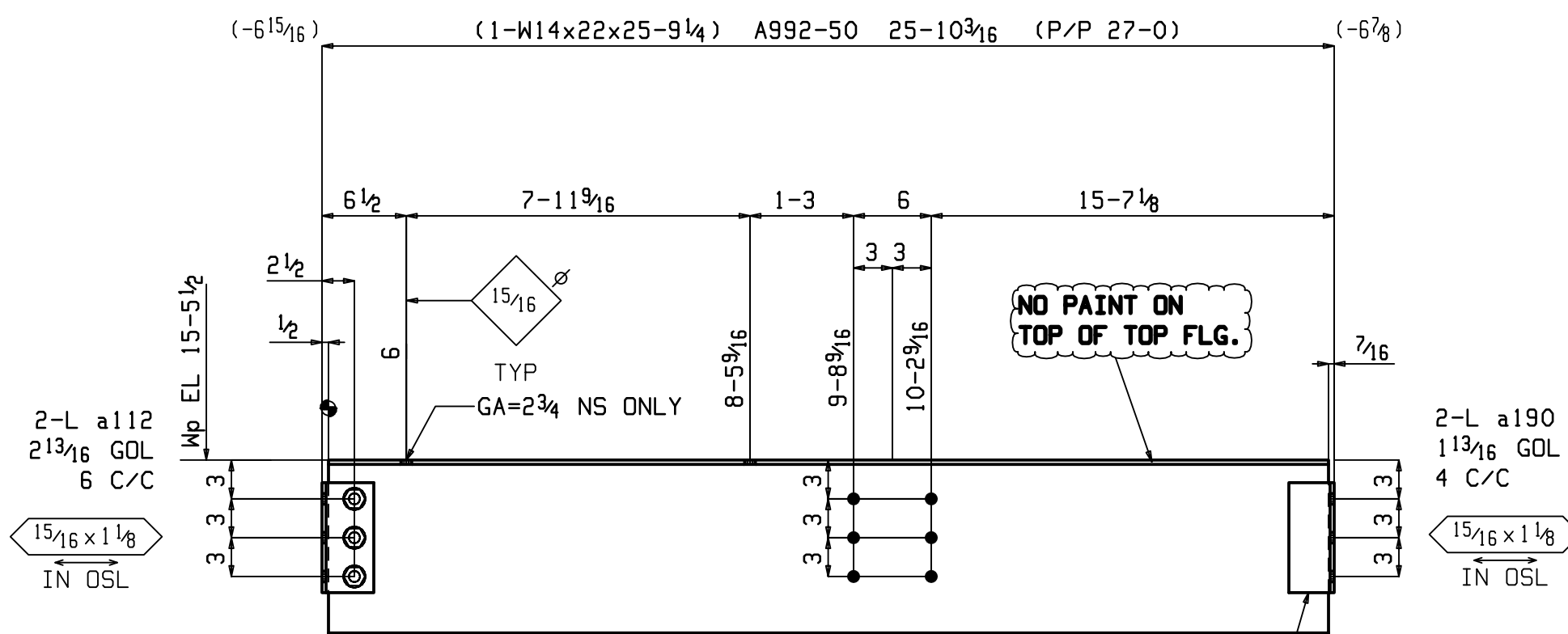


ONE BEAM 10B1

- W 11⁷/₈x³/₁₆
- F 4x¹/₄
- K ³/₄x⁵/₈

Section A-A

10B1

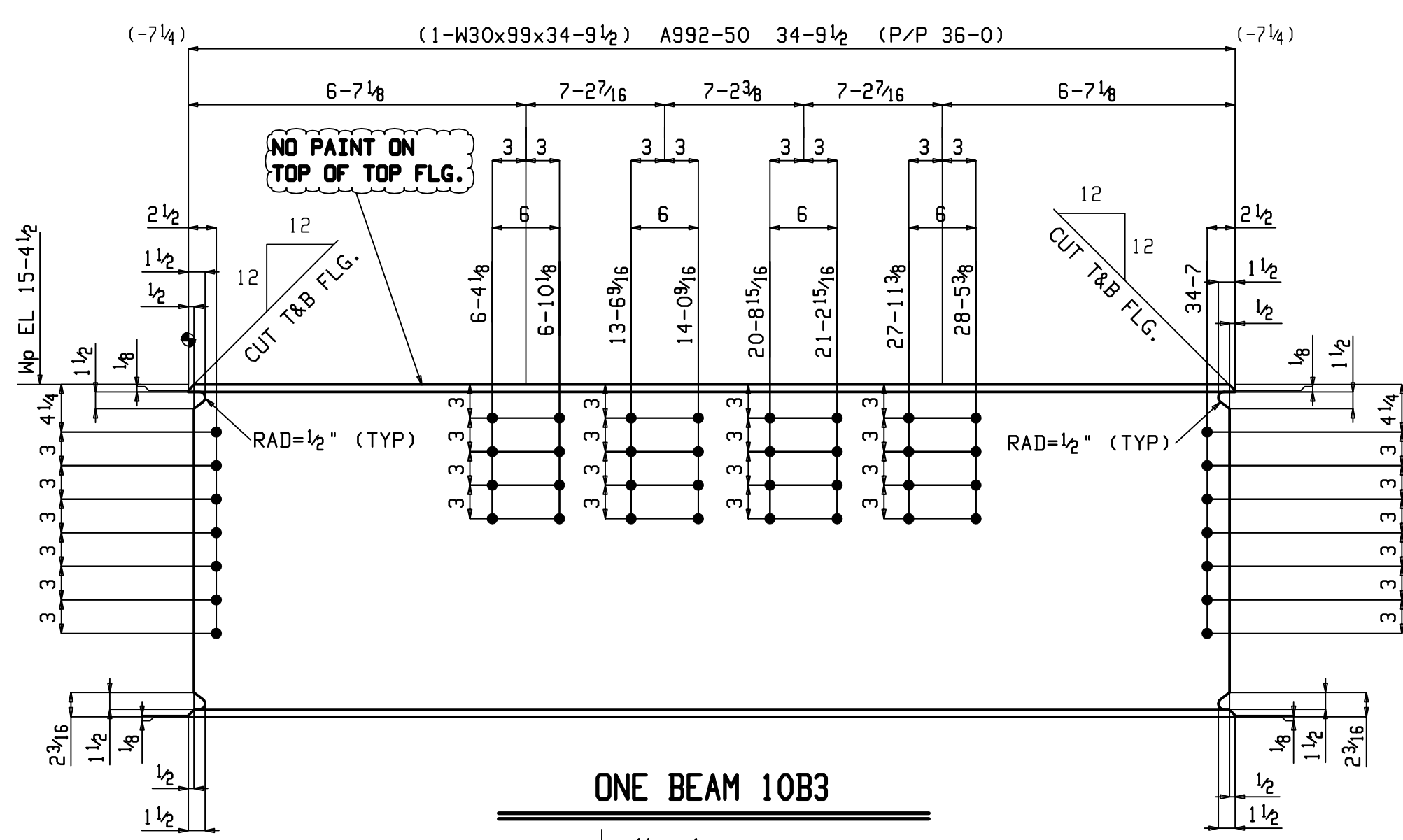


ONE BEAM 10B2

- W 13¹/₁₆x¹/₄
- F 5x³/₁₆
- K 1¹/₁₆x¹/₁₆

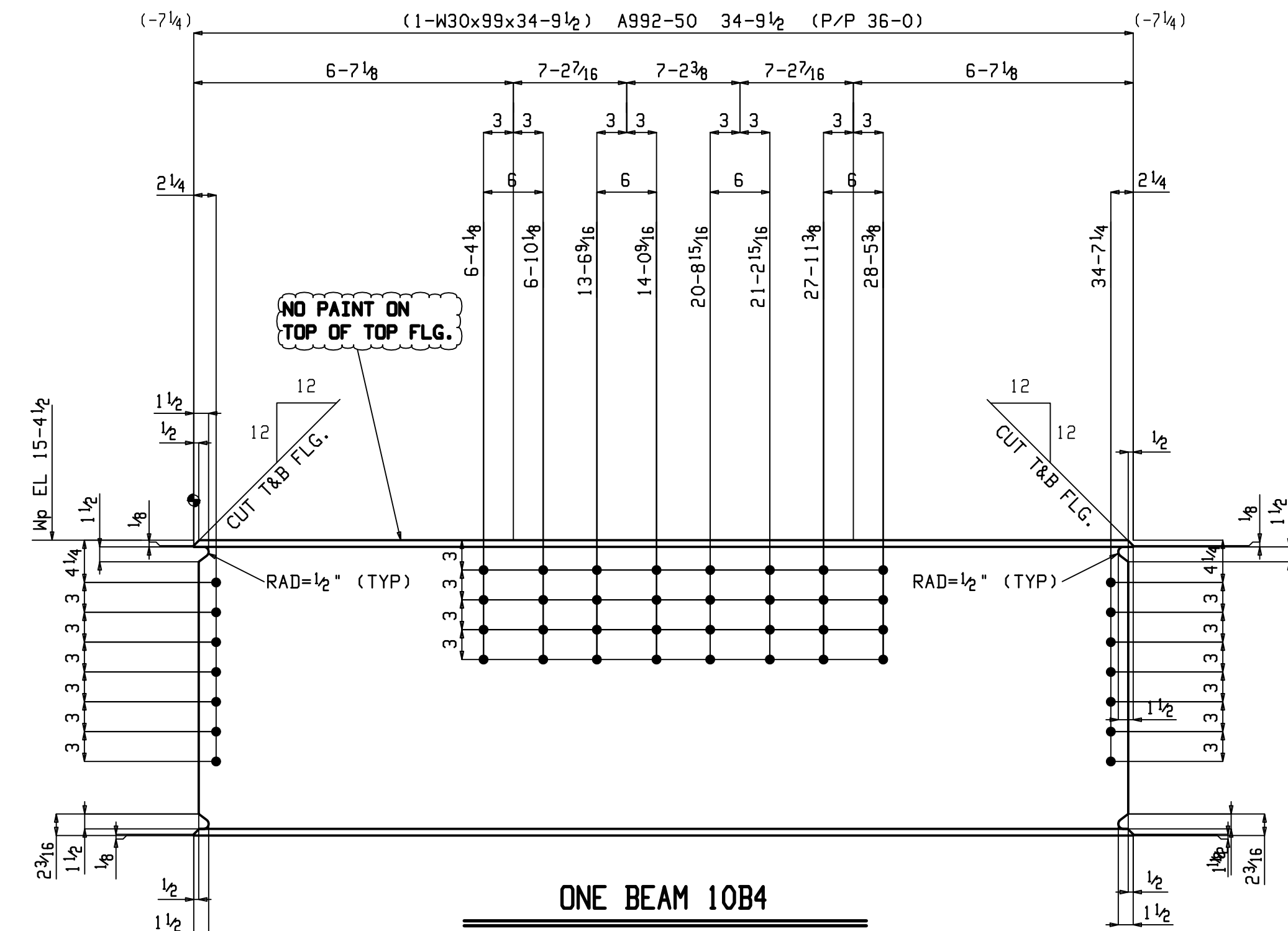
SHOP NOTE:
CAMBER ³/₄ UP

SHOP BOLTS:
3-⁷/₈x2¹/₄ A325



ONE BEAM 10B3

- W 29¹/₁₆x¹/₂
- F 10¹/₂x¹/₁₆
- K 1³/₁₆x¹/₈



ONE BEAM 10B4

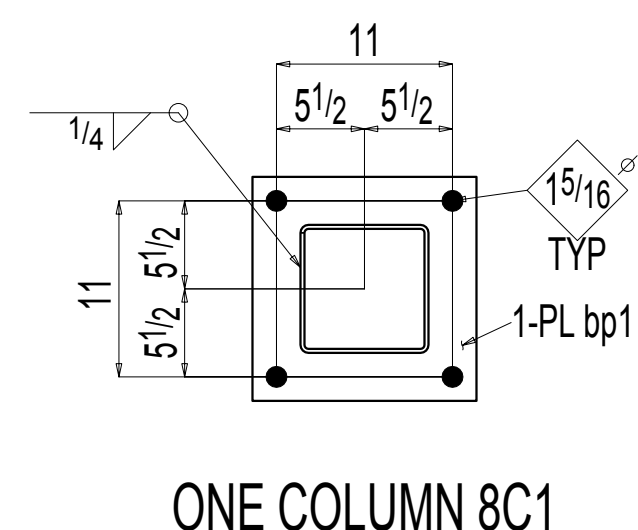
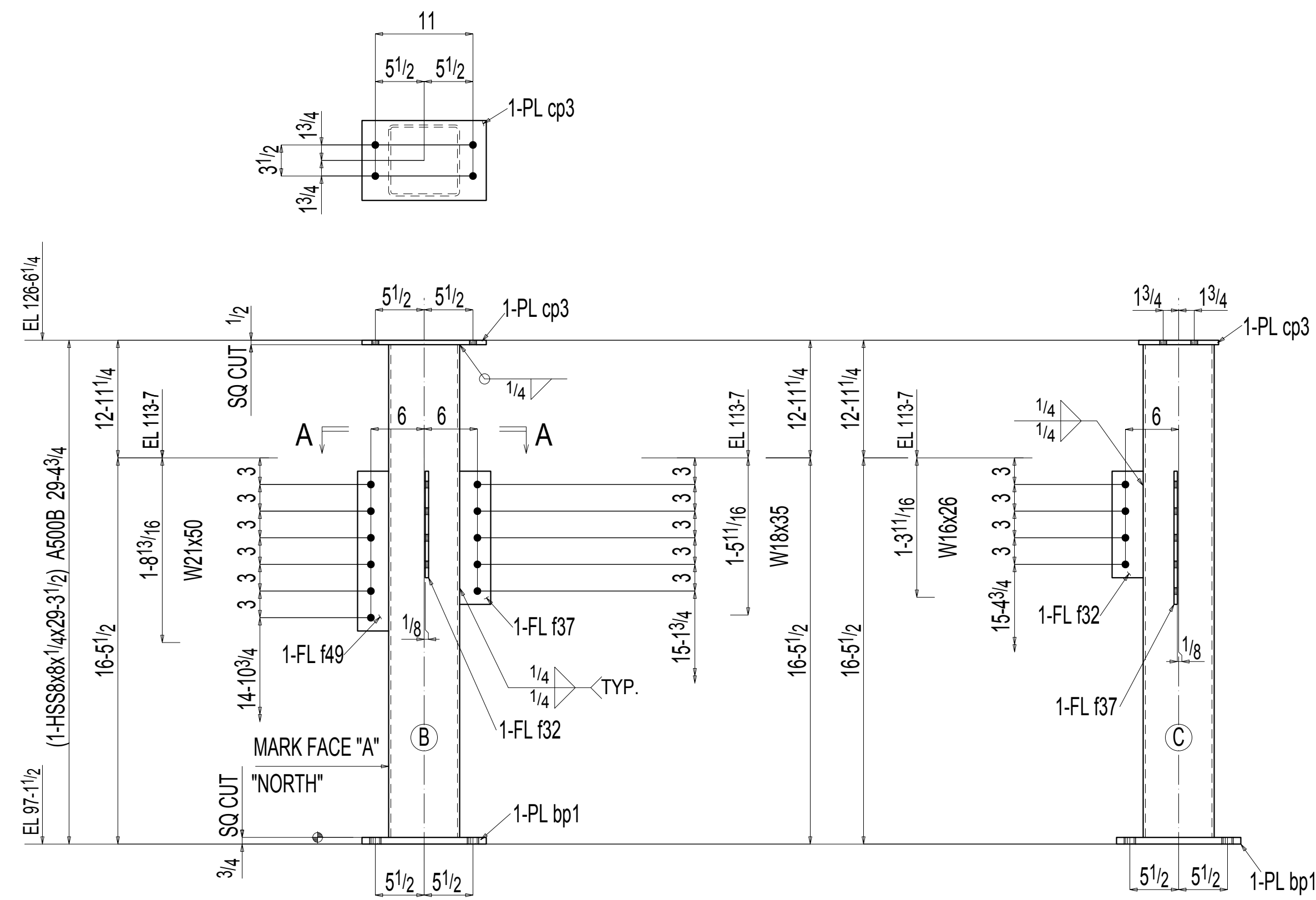
- W 29¹/₁₆x¹/₂
- F 10¹/₂x¹/₁₆
- K 1³/₁₆x¹/₈

APPROVAL/REVIEW AUTHORITY:			PRINTS ISSUED			PAINT: 1-S/C STD. PRIMER						
PLEASE REVIEW THIS DRAWING CAREFULLY. IT REPRESENTS OUR INTERPRETATION OF THE INTENT OF THE CONTRACT DOCUMENTS. HOWEVER, THE STEEL FABRICATOR AND THE STRUCTURAL STEEL DETAILER ASSUME NO RESPONSIBILITY FOR THE DESIGN OF THE INFORMATION SHOWN ON THIS DRAWING. THIS IS THE RESPONSIBILITY OF THE BUYER. UNLESS NOTED TO THE CONTRARY, ON THIS DRAWING, WHEN IT IS RETURNED FROM APPROVAL IT WILL BE ASSUMED THAT ALL INFORMATION SHOWN HEREIN HAS THE AFFIRMATION OF THE APPROVAL AUTHORITY. SUBSEQUENT CHANGES TO INFORMATION SHOWN ON THESE DRAWINGS AFTER FIRST SUBMISSION WILL BE CONSIDERED AS CONTRACT CHANGES.			No.	For	Date	No.	For	Date	Holes: 1 ⁵ / ₁₆ Ø	WELDS = E70XX	MAT'L = ASTM A36	U.N.
	1st SUB.			STRU'L. SHOP					WIRE FOR SHIPMENT ALL LOOSE CLIP ANGLES			
	2nd SUB.								No. By	REVISIONS	Date	DRAWN BY: AK
	3rd SUB.			MISC. SHOP					▲			DATE: 07-14-16
	FINAL APP.								▲			CHECKED BY:
	CONTR. FILE			FIELD USE					▲			DATE:
	ERECTION								▲			APPROVED:

(AISC CERTIFIED) (STANDARD)

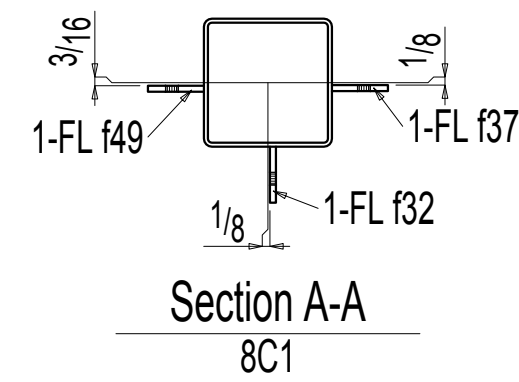
SHEET TITLE	BEAMS	JOB NO:
STRUCTURE		1601
LOCATION		DRAWING NO.
CONTRACTOR		10
ARCHITECT		

KBA#16-035

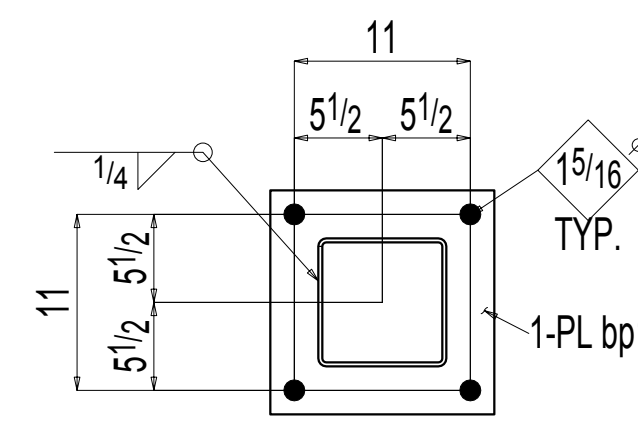
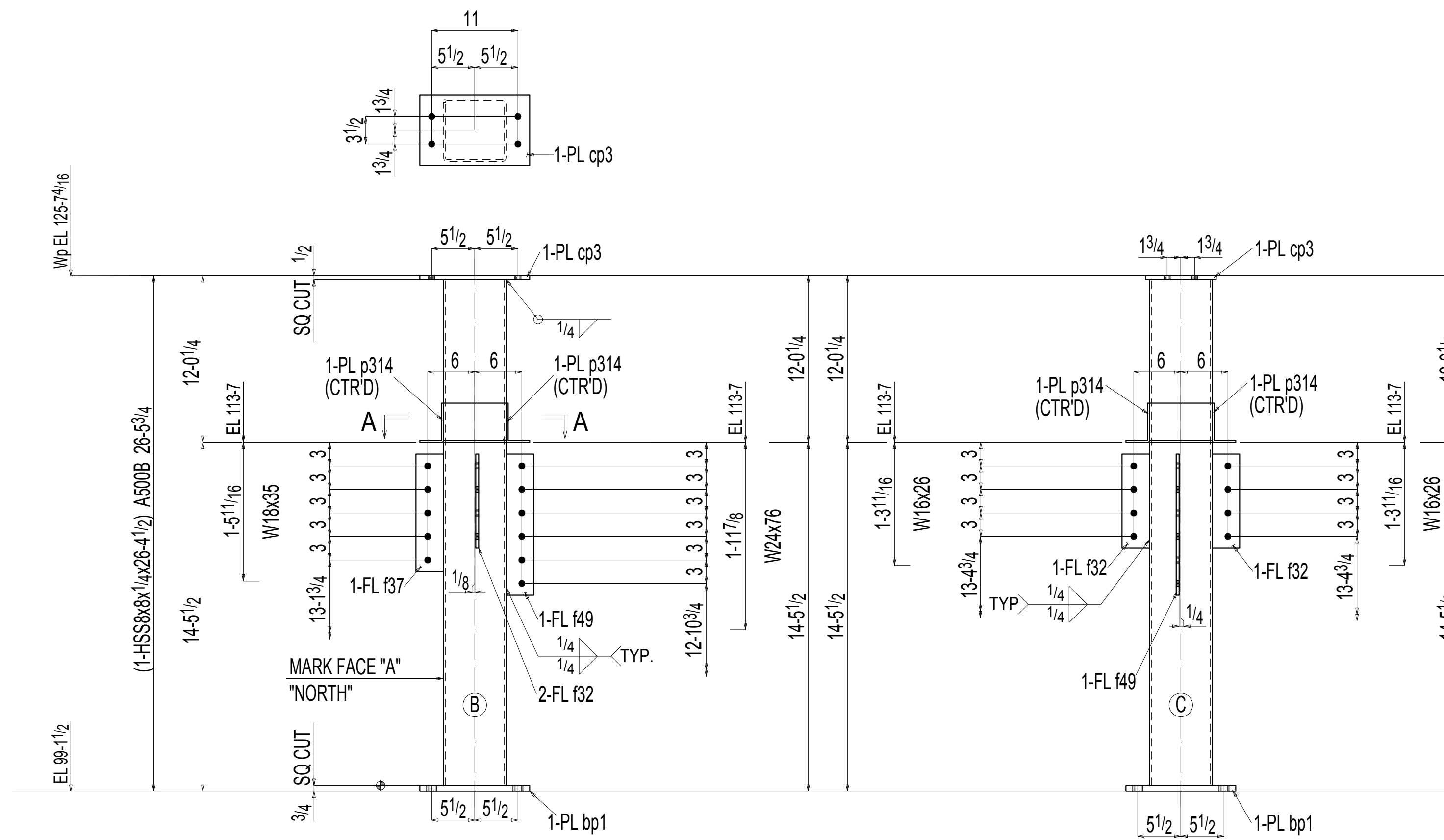


ONE COLUMN 8C1

AT GRID:
1 & B

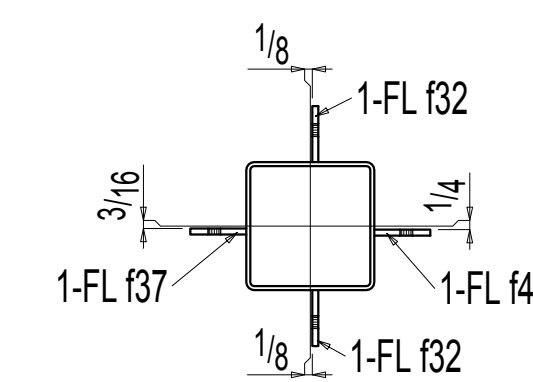


Section A-A
8C1



ONE COLUMN 8C2

AT GRID:
2 & G



Section A-A
8C2

BILL OF MATERIAL

PC	QTY	MATERIAL	LENGTH	WEIGHT	STEEL	REMARKS
8C1	ONE	COLUMN		832		
hss31	1	HSS8x8x1/4	29-3 1/2	755	A500B	SIZE
bp1	1	PL3/4x14	1-2	42	A36	
cp3	1	PL1/2x9	1-2	18	A36	
f49	1	FL3/8x3 1/2	1-6	7	A36	
f37	1	FL3/8x3 1/2	1-3	6	A36	
f32	1	FL3/8x3 1/2	1-0	4	A36	
8C2	ONE	COLUMN		778		
hss37	1	HSS8x8x1/4	26-4 1/2	680	A500B	SIZE
bp1	1	PL3/4x14	1-2	42	A36	
cp3	1	PL1/2x9	1-2	18	A36	
f49	1	FL3/8x3 1/2	1-6	7	A36	
f37	1	FL3/8x3 1/2	1-3	6	A36	
f32	2	FL3/8x3 1/2	1-0	4	A36	
p314	4	PL1/2x7 1/16	8	4	A36	BENT
	4	FIELD BOLTS 3/4 Dia A325	2			+1HD WASH

REF: E03
FILLET RADIUS=1/2" UNO

MATL (U.N.) A-36					
WF SECTIONS A-992					
HOLES (U.N.O.)	11 19 15	A	FOR APPROVAL	ST	RN
	DATE	NO.	REVISION	BY	CHK BY
CONN. (U.N.O.)					
SHOP WELD ELECTRODE (U.N.O.)					
SURFACE PREP.					
SHOP PAINT (U.N.O.)					
SPECIAL					
JOB NO.	15-20	DRAWN	CHECKED	APPROVED	DRG NO.
		ST	ST	RN	8
		11 19 15	11 19 15		

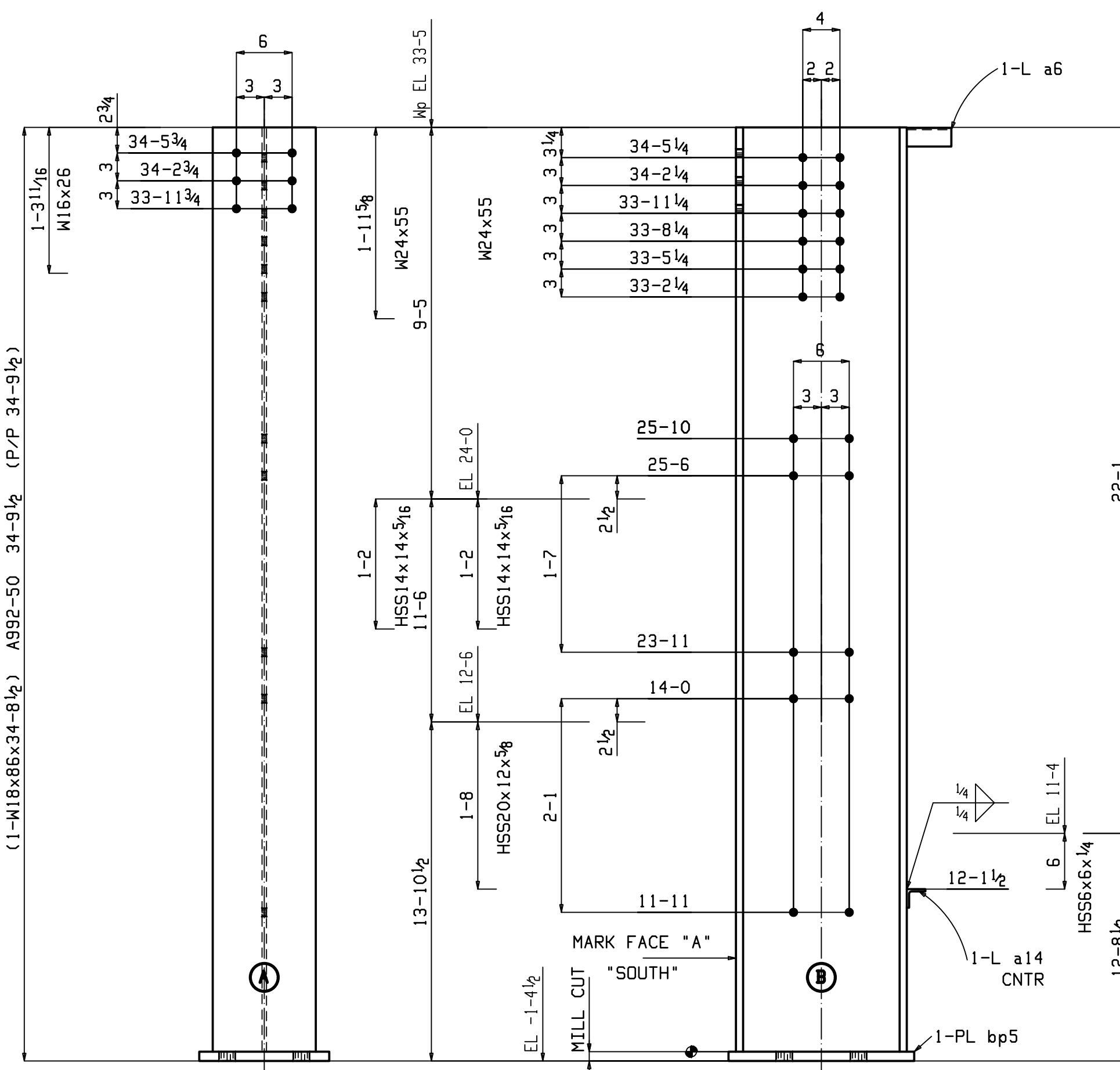
BILL OF MATERIAL

TOTAL	QUAN.	DESCRIPTION	LENGTH	PIECE MARK	SUB MARK	UNIT WEIGHT	TOTAL WEIGHT	REMARKS	DIV. NO.	DIV. QUAN.	PAGE #	STEEL GRADE
ONE COLUMN				104C1		3063	3063		5	1	3-1	
	1	M18x86	34-8½	104C1		2982	2982	MIE				A992-50
	1	L2x2x¼	5½		a14	1	1					A36
	2	L2x2x3/16	413/16		a6	1	2					A36
	1	PL1x14	1-8		bp5	78	78					A36
ONE COLUMN				104C2		3554	3554		5	1	2-46	
	1	M18x86	39-11½	104C2		3431	3431	MIE				A992-50
	2	L2x2x3/16	1-015/16		a96	3	5					A36
	1	L2x2x3/16	413/16		a216	1	1					A36
	1	L2x2x3/16	413/16		a215	1	1					A36
	1	PL1x14	1-8		bp5	78	78					A36
	4	PL3/8x33/16	1-4½		p82	9	38					A36
FIELD BOLTS												
	4	TC 1/8 Dia A325	2½					+HND WASH				

Total weight : 6617

SHOP NOTE :
 ⊗ → INDICATES PAINT STRIPE TO BE SHOP APPLIED TO THIS FACE OF PLATE.

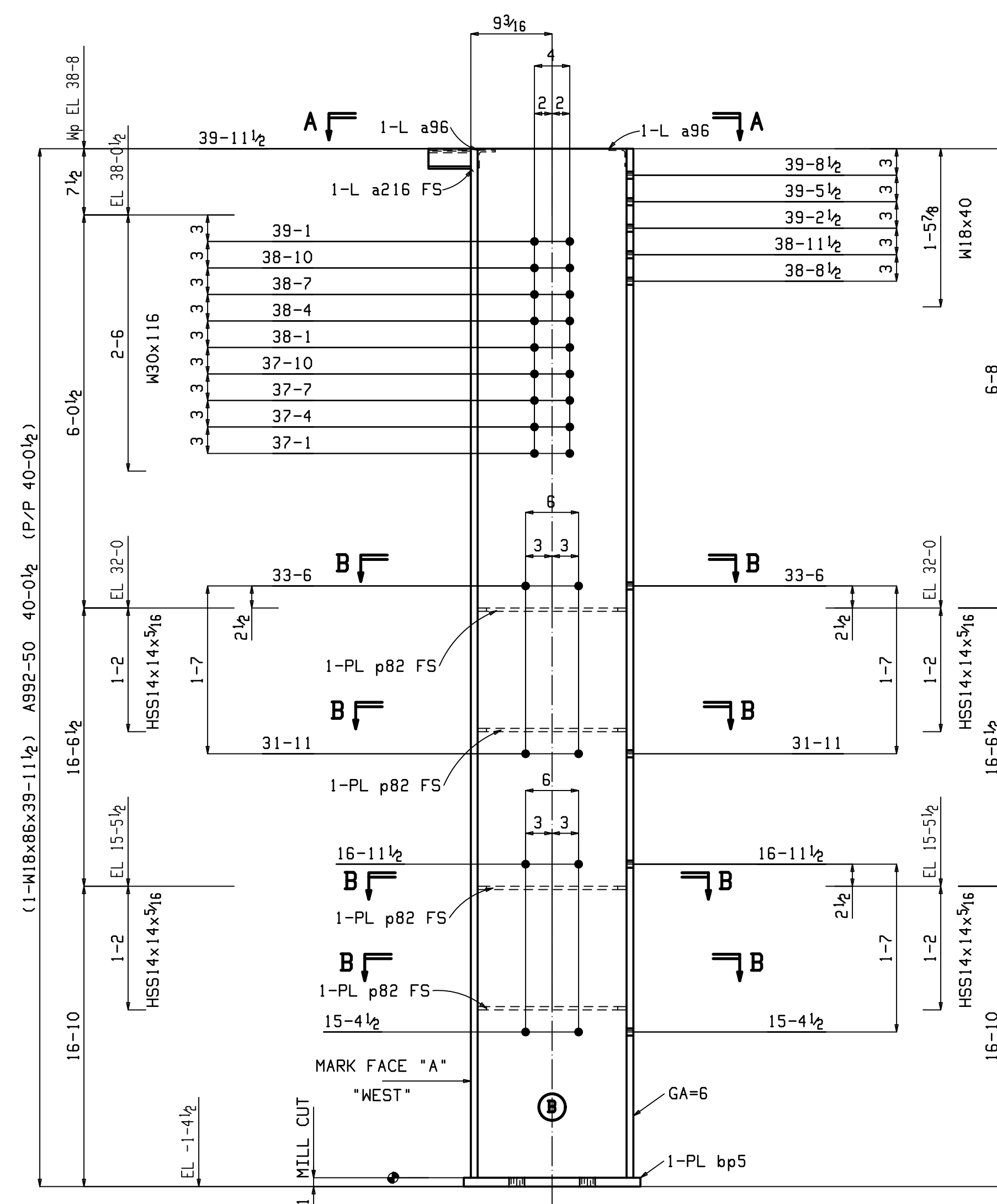
(1-M18x86x34-8½) A992-50 34-9½ (P/P 34-9½)



ONE COLUMN 104C1

W	18¾x½
F	11½x¾
K	1¾x1½

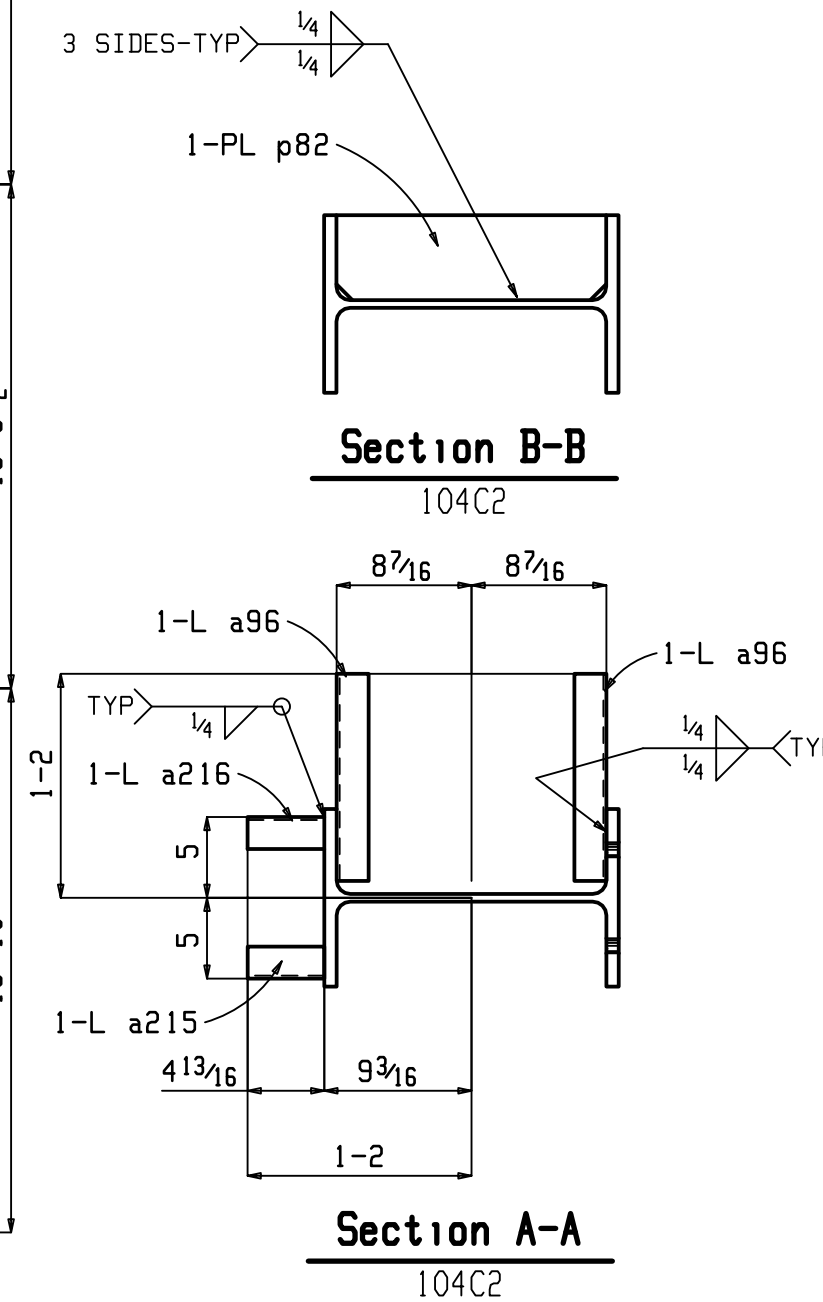
AT GRID:
6 & A



ONE COLUMN 104C2

W	18¾x½
F	11½x¾
K	1¾x1½

AT GRID:
1 & B



APPROVAL/REVIEW AUTHORITY:
 PLEASE REVIEW THIS DRAWING CAREFULLY. IT REPRESENTS OUR INTERPRETATION OF THE INTENT OF THE CONTRACT DOCUMENTS. HOWEVER, THE STEEL FABRICATOR AND THE STRUCTURAL STEEL DETAILER ASSUME NO RESPONSIBILITY FOR THE DESIGN OF THE INFORMATION SHOWN ON THIS DRAWING. UNLESS NOTED TO THE CONTRARY, ON THIS DRAWING, WHEN IT IS RETURNED FROM APPROVAL IT WILL BE ASSUMED THAT ALL INFORMATION SHOWN HEREIN HAS THE AFFIRMATION OF THE APPROVAL AUTHORITY. SUBSEQUENT CHANGES TO INFORMATION SHOWN ON THESE DRAWINGS AFTER FIRST SUBMISSION WILL BE CONSIDERED AS CONTRACT CHANGES.

PRINTS ISSUED			PAINT: 1-S/C STD. PRIMER		
No.	For	Date	No.	For	Date
1st SUB.	STRU'L. SHOP				
2nd SUB.					
3rd SUB.	MISC. SHOP				
FINAL APP.					
CONTR. FILE	FIELD USE				
ERECTION					

Holes: 15/16" Ø	WELDS = E70XX	MAT'L = ASTM A36	U.N.
WIRE FOR SHIPMENT ALL LOOSE CLIP ANGLES			
No.	By	REVISIONS	Date
DRAWN BY: AK		DATE: 07-14-16	
CHECKED BY:		DATE:	
APPROVED:		DATE:	

(AISC CERTIFIED) (STANDARD)

SHEET TITLE	COLUMNS	JOB NO:
STRUCTURE		1601
LOCATION		DRAWING NO.
CONTRACTOR		104
ARCHITECT		

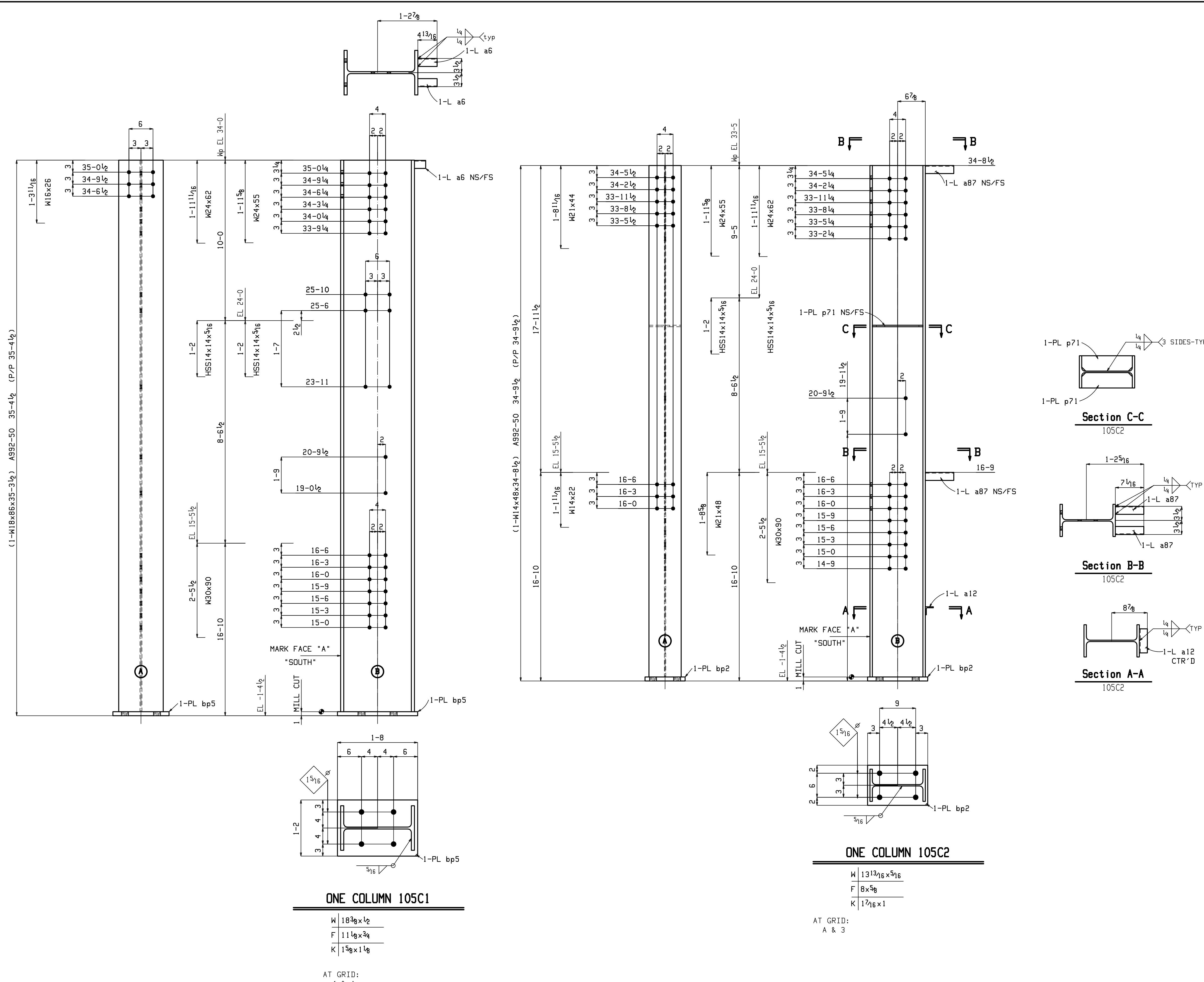
BILL OF MATERIAL

TOTAL QUAN.	DESCRIPTION	LENGTH	PIECE MARK	SUB MARK	UNIT WEIGHT	TOTAL WEIGHT	REMARKS	DIV. NO.	DIV. QUAN.	PAGE & LINE #	STEEL GRADE
ONE	COLUMN		105C1		3111	3111		5	1	2-48	
1	W18x86	35-3 1/2	105C1		3031	3031	MIE				A992-50
2	L2x2x3/8	41 3/8		a6	1	2					A36
1	PL1x14	1-8		bp5	78	78					A36
ONE	COLUMN		105C2		1721	1721		5	1	5-6	
1	W14x48	34-8 1/2	105C2		1662	1662	MIE				A992-50
1	L2x2x1/4	6		a12	2	2					A36
4	L2x2x3/8	7 1/8		a87	1	6					A36
1	PL1x10	1-3		bp2	41	41					A36
2	PL3/8x3 1/2	1-0 5/8		p71	5	10					A36

Total weight : 4831

SHOP NOTE :

⊗ → INDICATES PAINT STRIPE TO BE SHOP APPLIED TO THIS FACE OF PLATE.



ONE COLUMN 105C1

W 18 3/8 x 1/2
F 11 1/8 x 3/4
K 1 5/8 x 1 1/8

AT GRID:
4 & A

ONE COLUMN 105C2

W 13 13/16 x 3/16
F 8 x 3/8
K 1 7/16 x 1

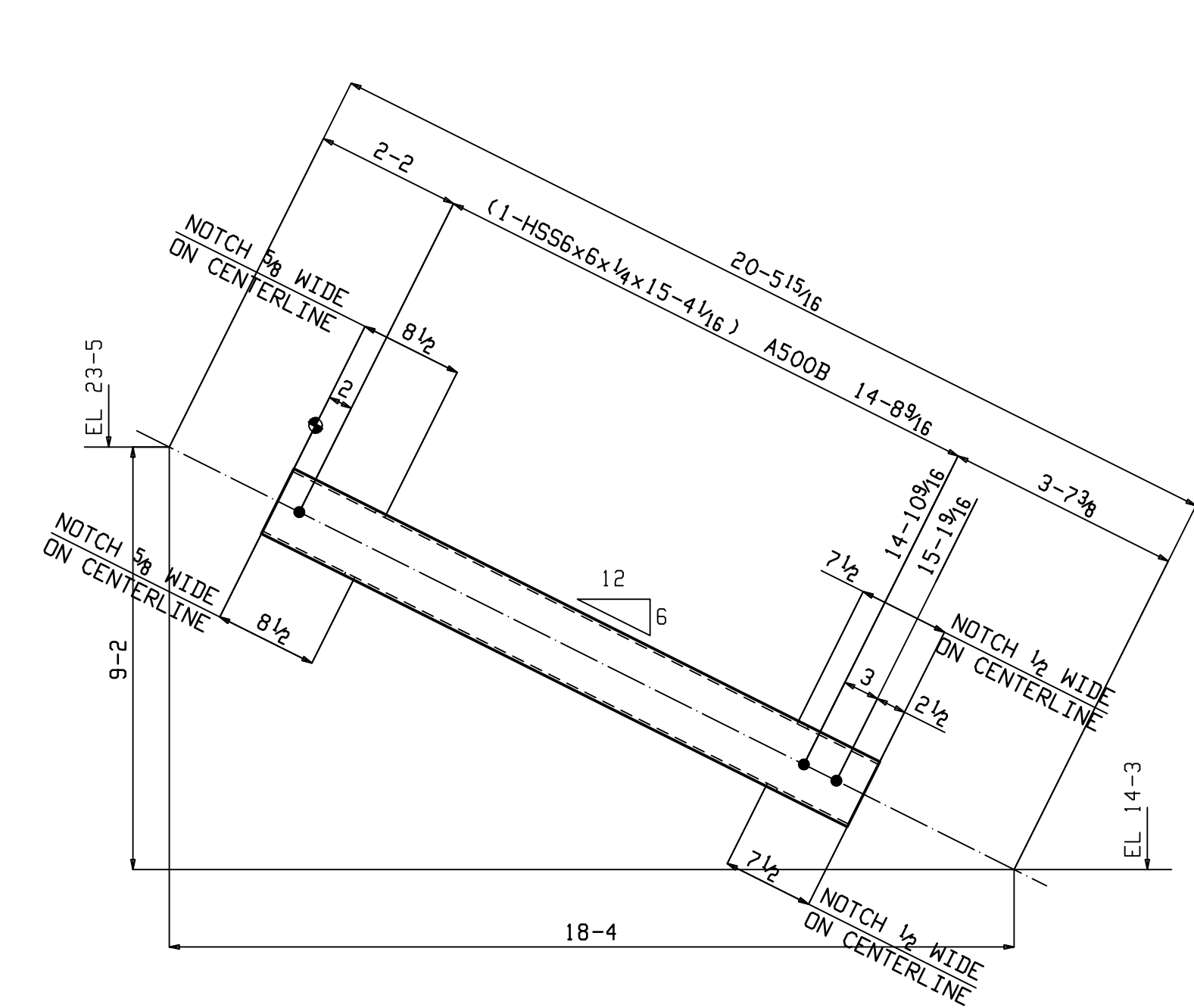
AT GRID:
A & 3

APPROVAL/REVISION AUTHORITY				PRINTS ISSUED				PAINT: 1-S/C STD. PRIMER					
PLEASE REVIEW THIS DRAWING CAREFULLY IT REPRESENTS OUR INTERPRETATION OF THE INTENT OF THE CONTRACT DOCUMENTS. HOWEVER, THE STEEL FABRICATOR AND THE STRUCTURAL STEEL DETAILER ASSUME NO RESPONSIBILITY FOR THE DESIGN OF THE INFORMATION SHOWN ON THIS DRAWING THIS IS THE RESPONSIBILITY OF THE BUYER. UNLESS NOTED TO THE CONTRARY, ON THIS DRAWING, WHEN IT IS RETURNED FROM APPROVAL IT WILL BE ASSUMED THAT ALL INFORMATION SHOWN HEREIN HAS THE AFFIRMATION OF THE APPROVAL AUTHORITY. SUBSEQUENT CHANGES TO INFORMATION SHOWN ON THESE DRAWINGS AFTER FIRST SUBMISSION WILL BE CONSIDERED AS CONTRACT CHANGES.				No.	For	Date	No.	For	Date	Holes: 1 5/16 Ø	WELDS = E70XX	MAT'L = ASTM A36	U.N.
	1st SUB.		STRU'L. SHOP						WIRE FOR SHIPMENT ALL LOOSE CLIP ANGLES				
	2nd SUB.								No. By	REVISIONS	Date	DRAWN BY: AK	
	3rd SUB.		MISC. SHOP						DATE: 07-14-16				
	FINAL APP.								CHECKED BY:				
	CONTR. FILE		FIELD USE						DATE:				
	ERECTION								APPROVED:				

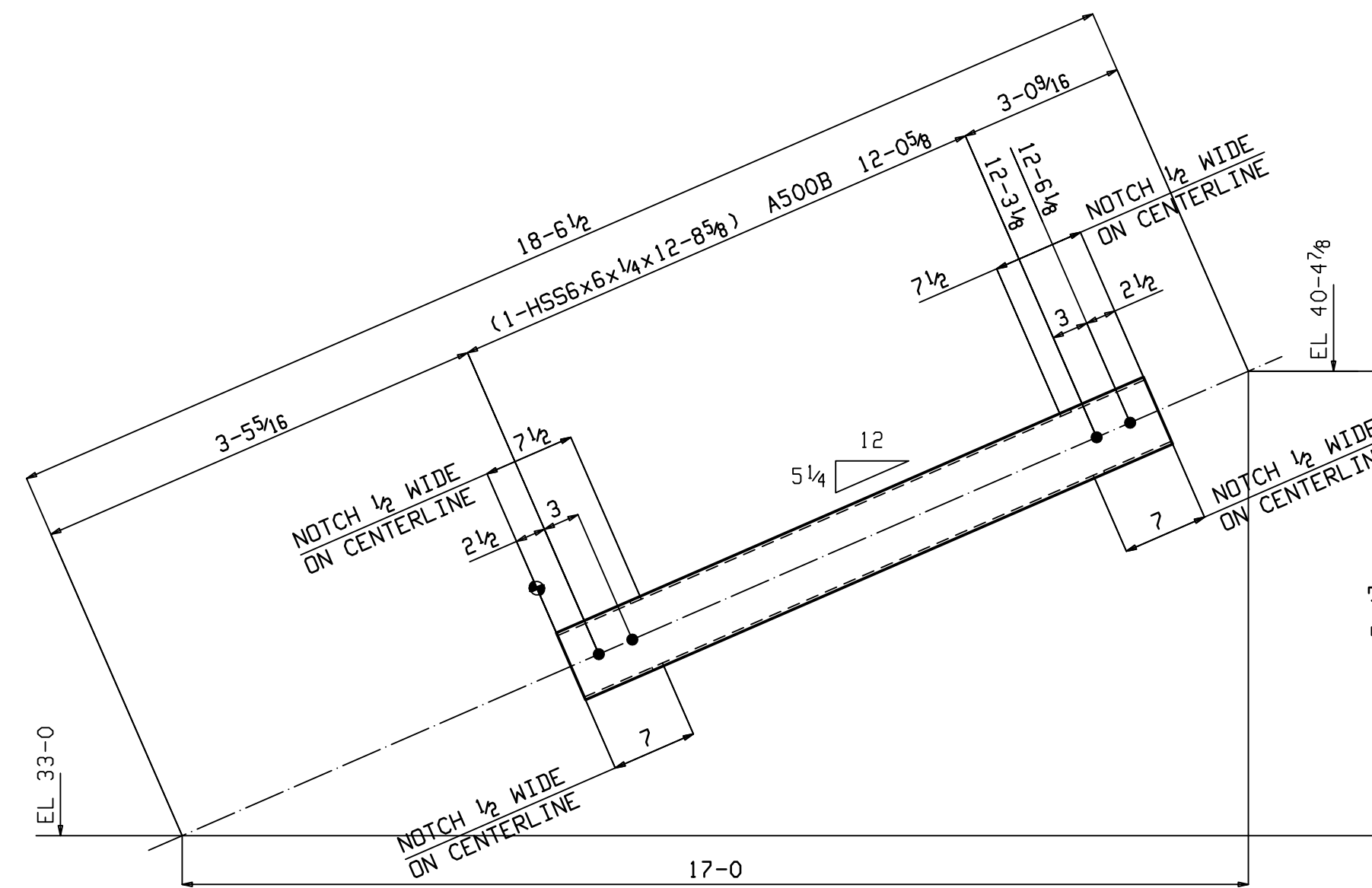
(AISC CERTIFIED) (STANDARD)

SHEET TITLE	COLUMNS	JOB NO:
STRUCTURE		1601
LOCATION		DRAWING NO.
CONTRACTOR		105
ARCHITECT		

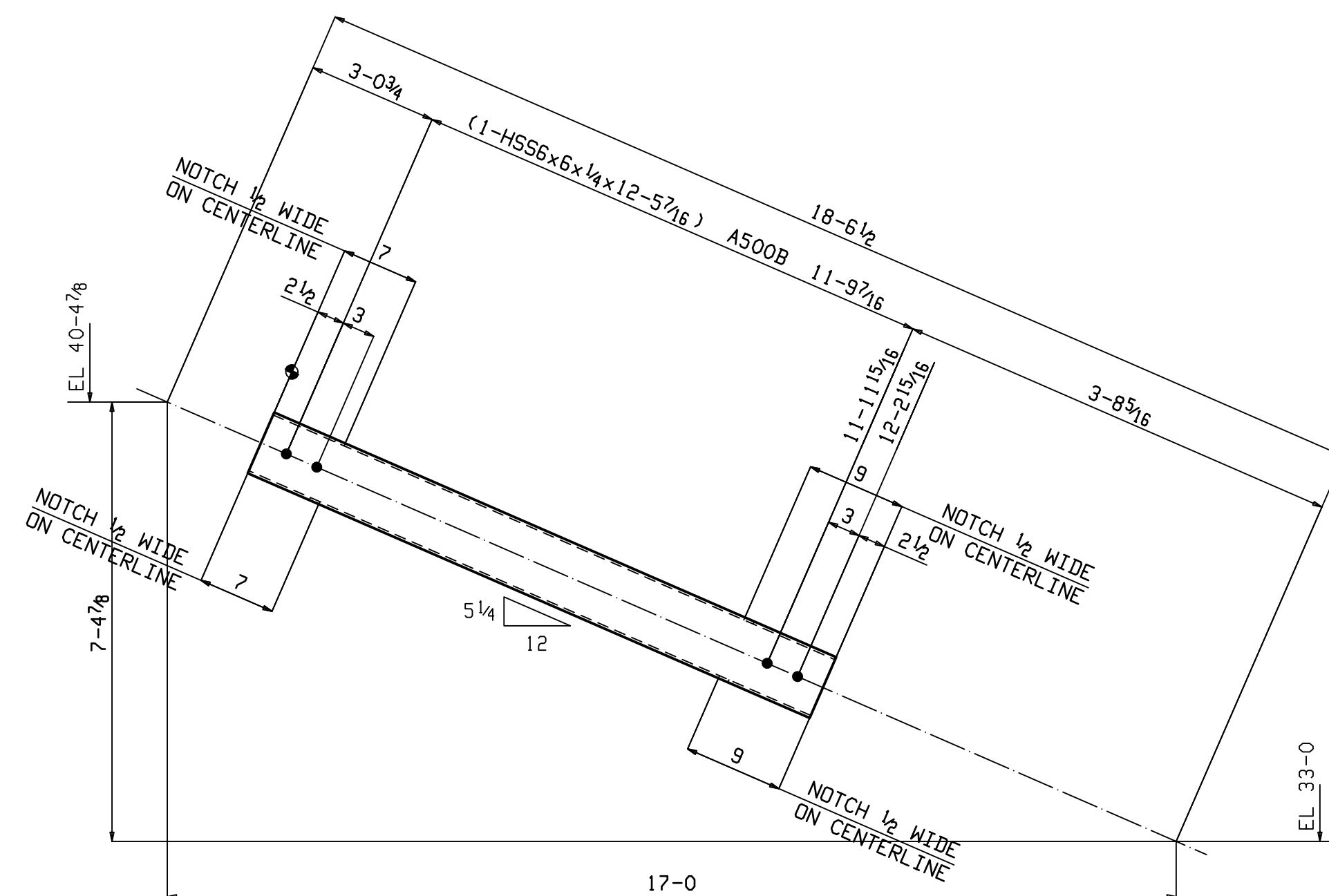
KBA#16-035



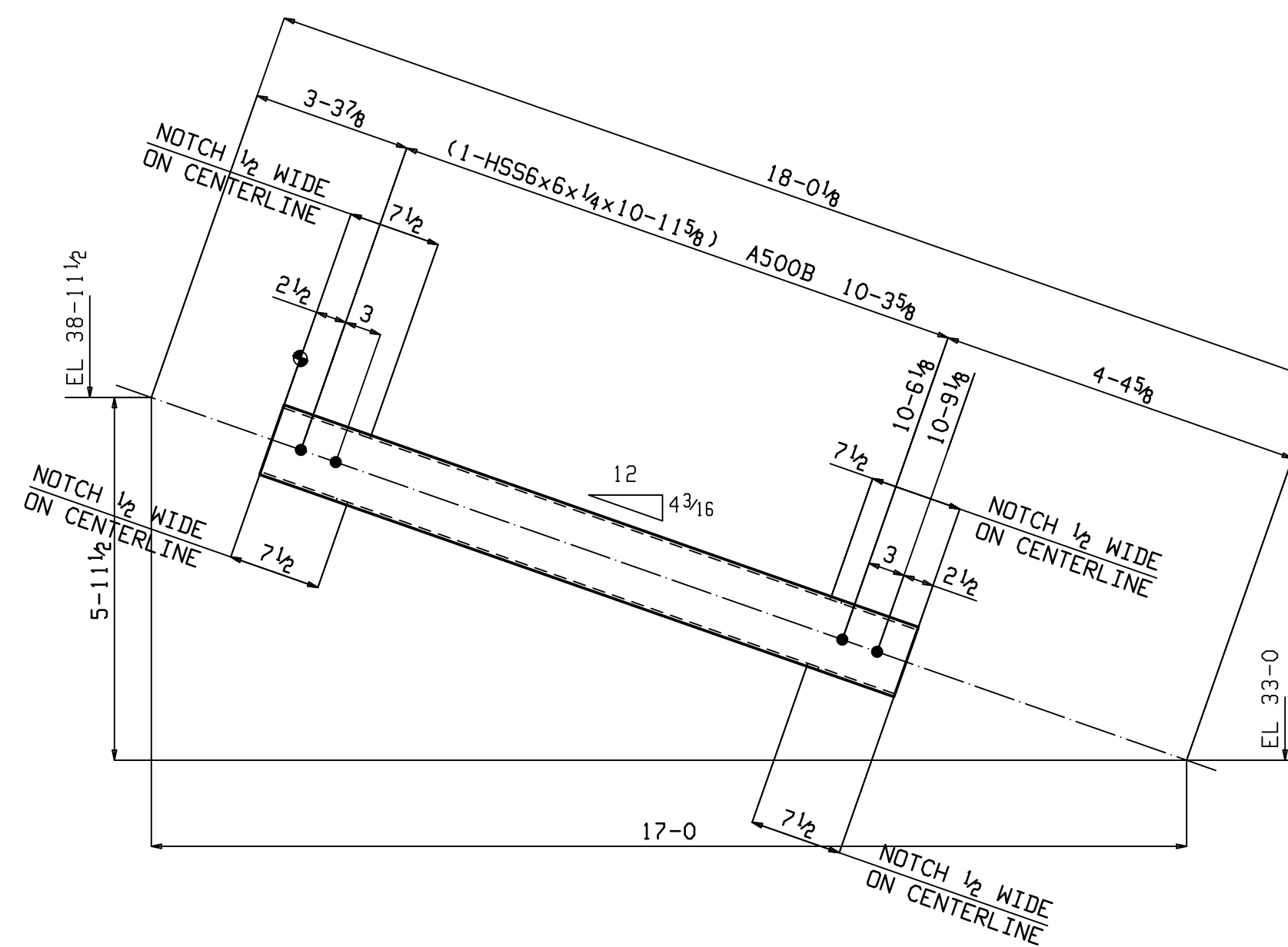
ONE VERT. BRACE 149VB1



ONE VERT. BRACE 149VB2



ONE VERT. BRACE 149VB3



ONE VERT. BRACE 149VB4

BILL OF MATERIAL

TOTAL QUAN.	DESCRIPTION	LENGTH	PIECE MARK	SUB MARK	UNIT WEIGHT	TOTAL WEIGHT	REMARKS	DIV. NO.	DIV. QUAN.	PAGE & LINE #	STEEL GRADE
ONE	VERT. BRACE		149VB1		290	290		1	1	8-24	
1	HSS6x6x1/4	15-4 1/8		149VB1		290					A500B
	FIELD BOLTS										
1	7/8 Dia A307	7 1/2					+1HD WASH				
2	7/8 Dia A325	7 1/2					+1HD WASH				
ONE	VERT. BRACE		149VB2		240	240		2	1	8-27	
1	HSS6x6x1/4	12-8 5/8		149VB2		240					A500B
	FIELD BOLTS										
2	7/8 Dia A307	7 1/2					+1HD WASH				
2	7/8 Dia A325	7 1/2					+1HD WASH				
ONE	VERT. BRACE		149VB3		235	235		2	1	8-28	
1	HSS6x6x1/4	12-5 7/8		149VB3		235					A500B
	FIELD BOLTS										
2	7/8 Dia A307	7 1/2					+1HD WASH				
2	7/8 Dia A325	7 1/2					+1HD WASH				
ONE	VERT. BRACE		149VB4		207	207		6	1	8-30	
1	HSS6x6x1/4	10-11 5/8		149VB4		207					A500B
	FIELD BOLTS										
4	7/8 Dia A325	7 1/2					+1HD WASH				

Total weight : 971

SHOP NOTE :

⊗ → INDICATES PAINT STRIPE TO BE SHOP APPLIED TO THIS FACE OF PLATE.

APPROVAL/REVIEW AUTHORITY:
 PLEASE REVIEW THIS DRAWING CAREFULLY. IT REPRESENTS OUR INTERPRETATION OF THE INTENT OF THE CONTRACT DOCUMENTS. HOWEVER, THE STEEL FABRICATOR AND THE STRUCTURAL STEEL DETAILER ASSUME NO RESPONSIBILITY FOR THE DESIGN OF THE INFORMATION SHOWN ON THIS DRAWING. THIS IS THE RESPONSIBILITY OF THE BUYER.
 UNLESS NOTED TO THE CONTRARY, ON THIS DRAWING, WHEN IT IS RETURNED FROM APPROVAL IT WILL BE ASSUMED THAT ALL INFORMATION SHOWN HEREIN HAS THE AFFIRMATION OF THE APPROVAL AUTHORITY.
 SUBSEQUENT CHANGES TO INFORMATION SHOWN ON THESE DRAWINGS AFTER FIRST SUBMISSION WILL BE CONSIDERED AS CONTRACT CHANGES.

PRINTS ISSUED			PAINT: 1-S/C STD. PRIMER		
No.	For	Date	No.	For	Date
1st SUB.				STRU'L. SHOP	
2nd SUB.				MISC. SHOP	
3rd SUB.				FIELD USE	
FINAL APP.					
CONTR. FILE					
ERECTION					

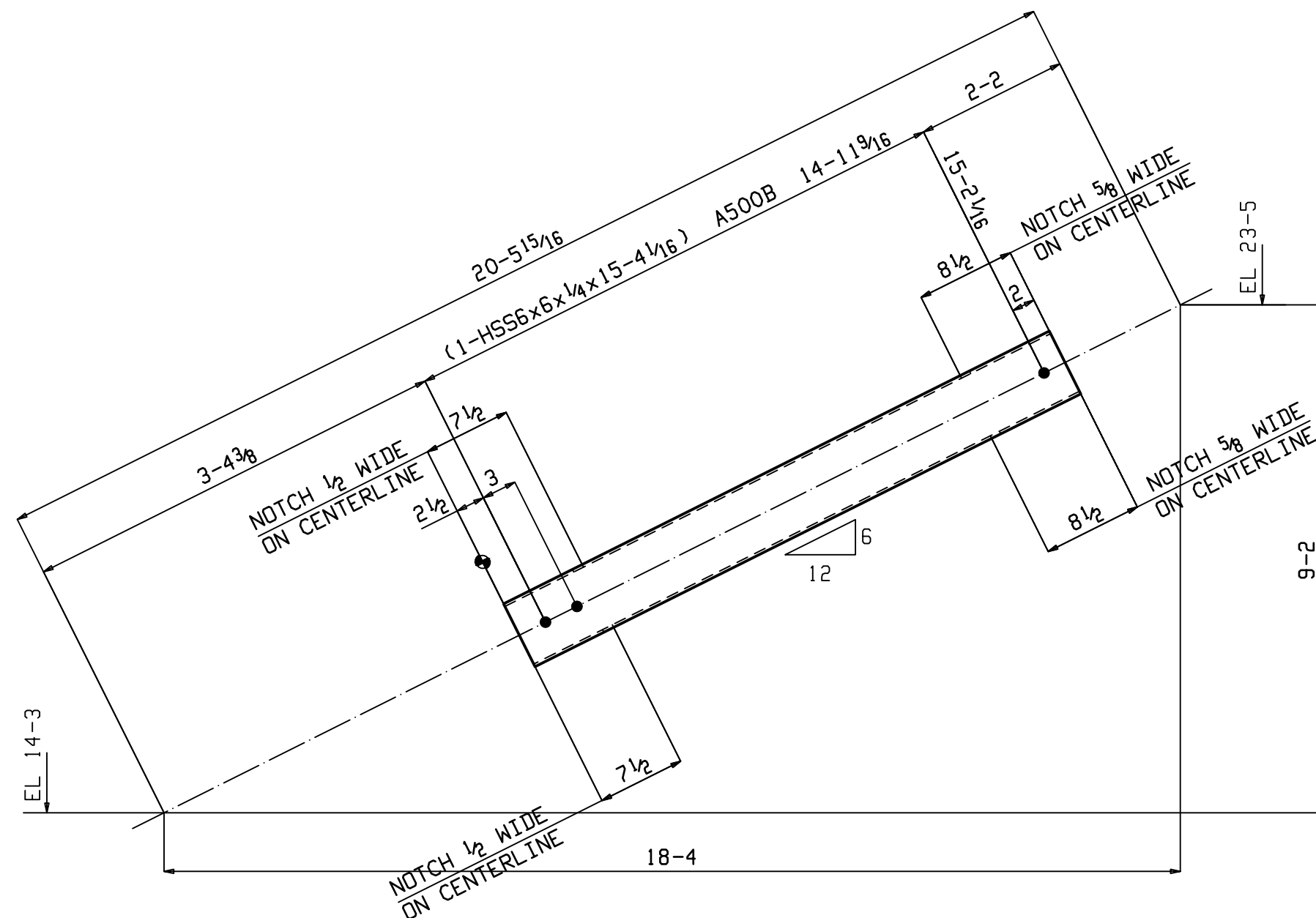
HOLES: 1 5/16 Ø	WELDS = E70XX	MAT'L = ASTM A36	U.N.
WIRE FOR SHIPMENT ALL LOOSE CLIP ANGLES			
No.	By	REVISIONS	Date
Δ			
Δ			
Δ			
Δ			

DRAWN BY: AK	DATE: 07-28-16
CHECKED BY:	DATE:
APPROVED:	

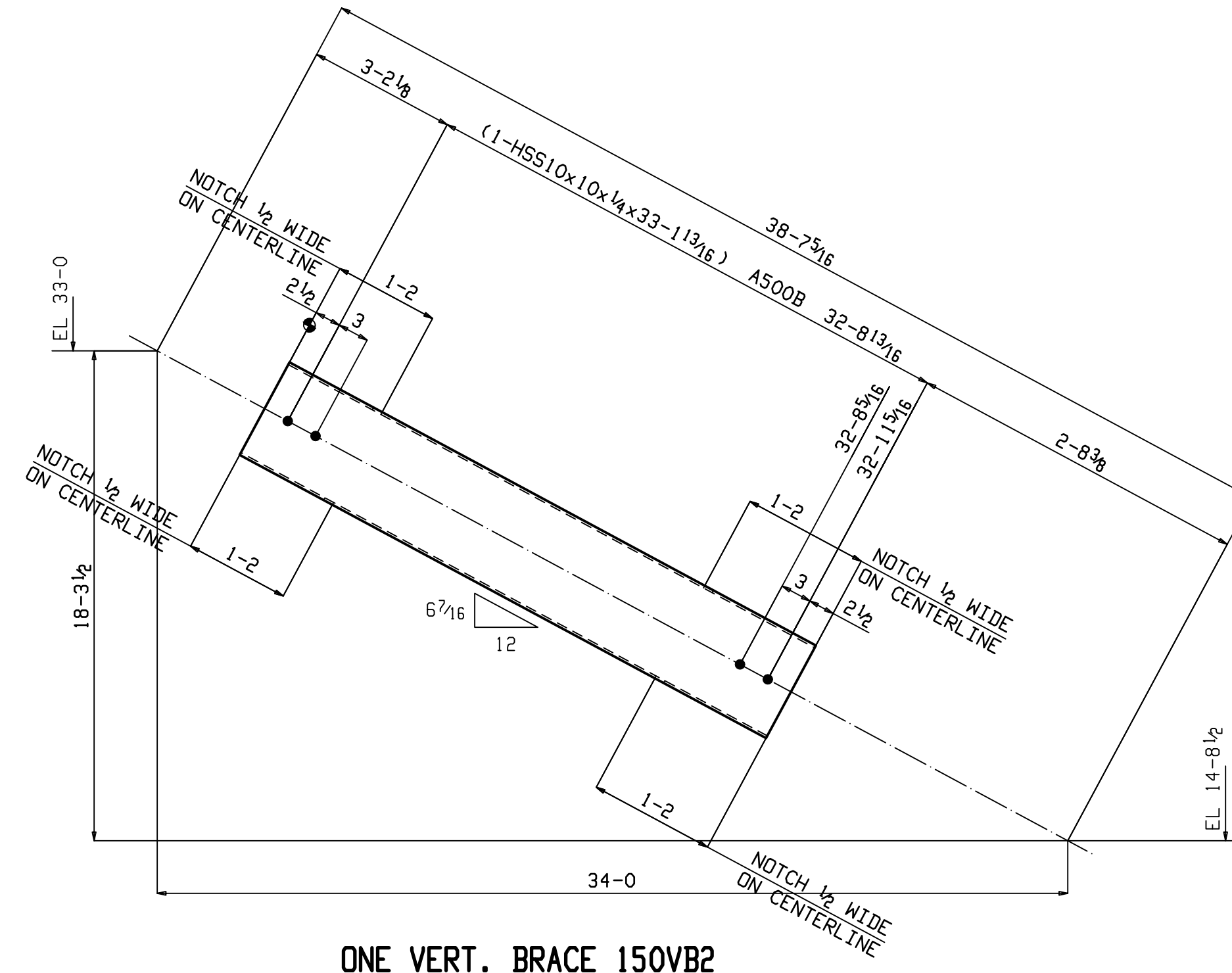
(AISC CERTIFIED) (STANDARD)

KBA#16-035

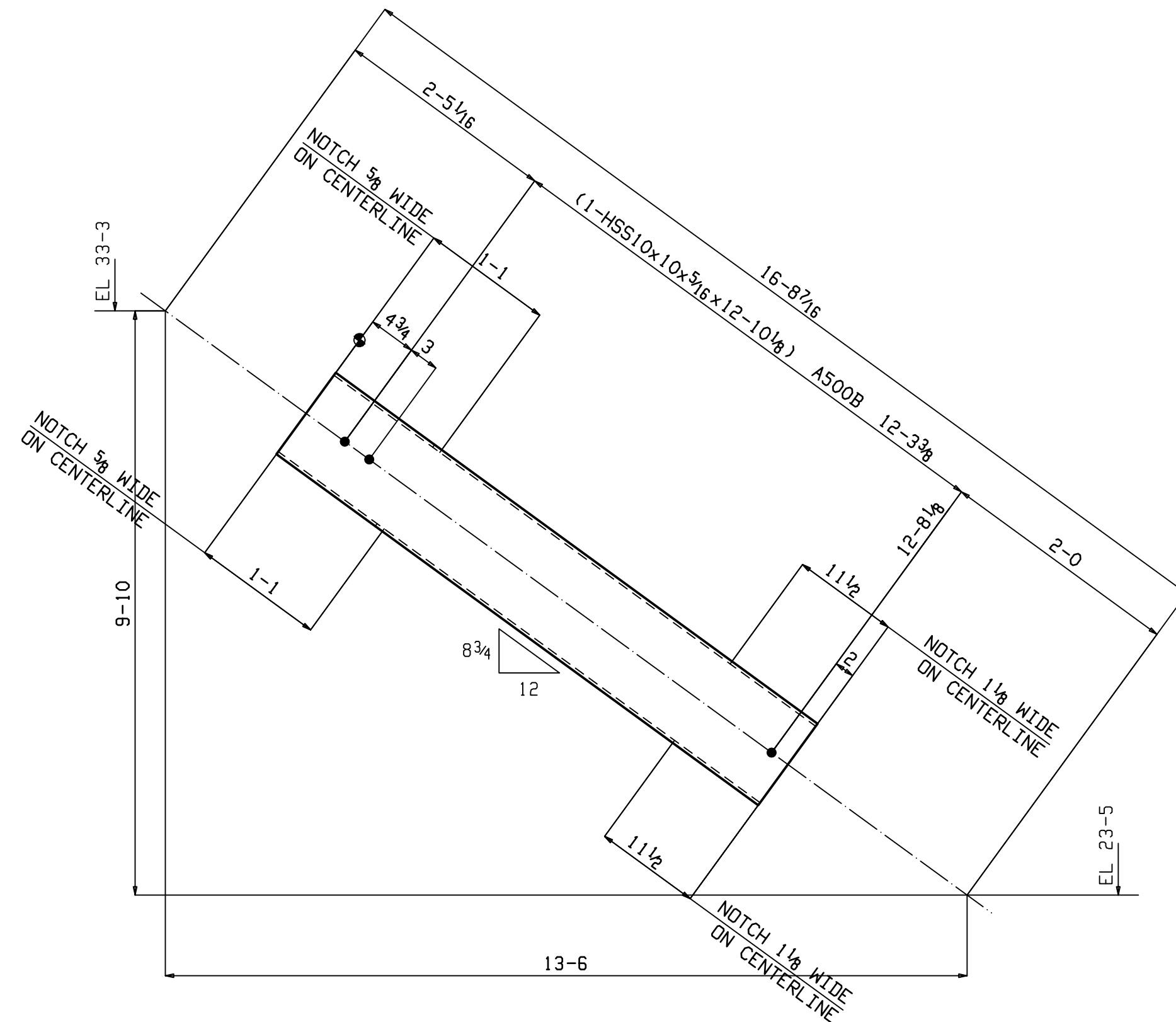
SHEET TITLE	BRACES	JOB NO:	1601
STRUCTURE		DRAWING NO.	149
LOCATION			
CONTRACTOR			
ARCHITECT			



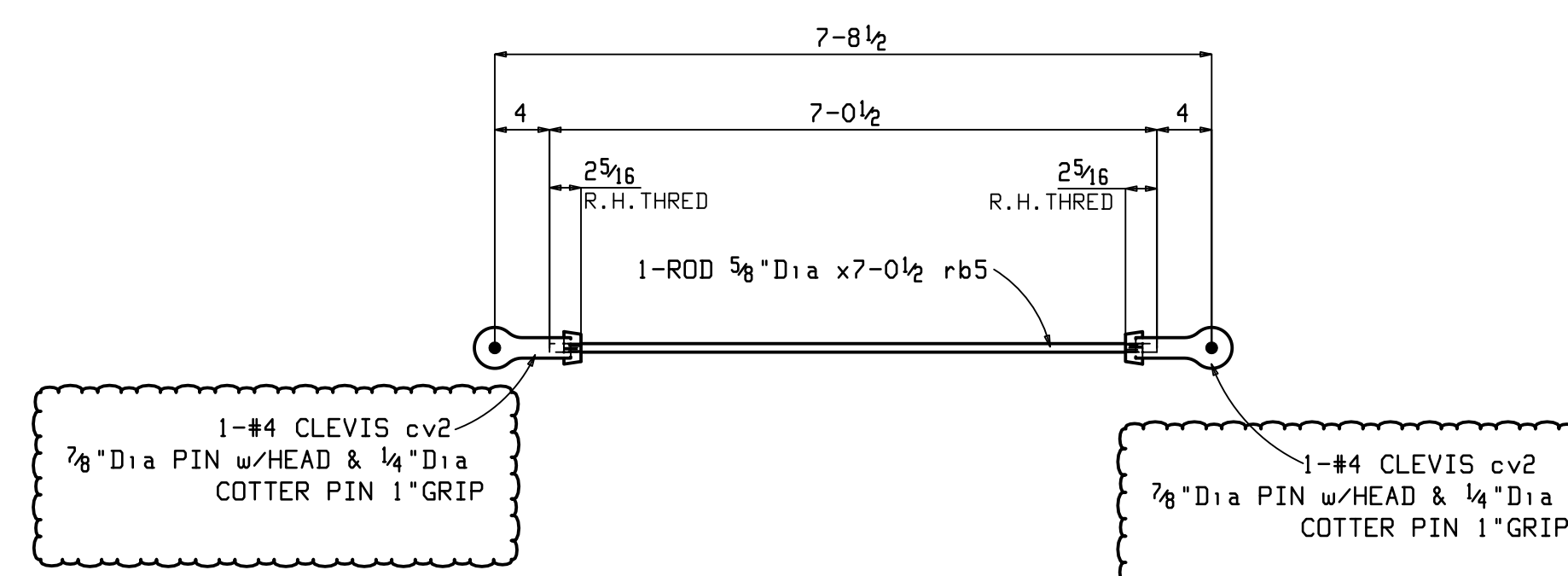
ONE VERT. BRACE 150VB1



ONE VERT. BRACE 150VB2



ONE VERT. BRACE 150VB3



9 ROD BRACES 150RB1

BILL OF MATERIAL

TOTAL QUAN.	DESCRIPTION	LENGTH	PIECE MARK	SUB MARK	UNIT WEIGHT	TOTAL WEIGHT	REMARKS	DIV. NO.	DIV. QUAN.	PAGE & LINE #	STEEL GRADE
ONE	VERT. BRACE		150VB1		290	290		1	1	8-24	
1	HSS6x6x1/4	15'-4 1/2		150VB1		290					A500B
	FIELD BOLTS										
1	7/8 Dia A307	7 1/2					+1HD WASH				
2	7/8 Dia A325	7 1/2					+1HD WASH				
ONE	VERT. BRACE		150VB2		1078	1078		5	1	7-49	
1	HSS10x10x1/4	33'-11 3/8		150VB2		1078					A500B
	FIELD BOLTS										
4	7/8 Dia A307	11 1/2									
ONE	VERT. BRACE		150VB3		514	514		5	1	7-44	
1	HSS10x10x5/16	12'-10 1/2		150VB3		514					A500B
	FIELD BOLTS										
2	7/8 Dia A307	11 1/2									
9	ROD BRACE		150RB1		15	138		1	3		
9	RB1	7'-0 1/2		150RB1		7	66	5	6		A36
18	CV3	5 1/2		cv2		4	72				
	FIELD BOLTS										
18	TC 3/4 Dia A325	3 1/4					+1HD WASH				

Total weight : 2019

SHOP NOTE :

⊗ → INDICATES PAINT STRIPE TO BE SHOP APPLIED TO THIS FACE OF PLATE.

<p>APPROVAL/REVIEW AUTHORITY: IT REPRESENTS OUR INTERPRETATION OF THE INTENT OF THE CONTRACT DOCUMENTS. HOWEVER, THE STEEL FABRICATOR AND THE STRUCTURAL STEEL DETAILER ASSUME NO RESPONSIBILITY FOR THE DESIGN OF THE INFORMATION SHOWN ON THIS DRAWING THIS IS THE RESPONSIBILITY OF THE BUYER. UNLESS NOTED TO THE CONTRARY, ON THIS DRAWING, WHEN IT IS RETURNED FROM APPROVAL IT WILL BE ASSUMED THAT ALL INFORMATION SHOWN HEREIN HAS THE AFFIRMATION OF THE APPROVAL AUTHORITY. SUBSEQUENT CHANGES TO INFORMATION SHOWN ON THESE DRAWINGS AFTER FIRST SUBMISSION WILL BE CONSIDERED AS CONTRACT CHANGES.</p>	PRINTS ISSUED				PAINT: 1-S/C STD. PRIMER				SHEET TITLE: BRACES					
	No.	For	Date	No.	For	Date	Holes: 1 5/16 Ø	WELDS = E70XX	MAT'L = ASTM A36	JOB NO: 1601				
	1st SUB.				STRU'L. SHOP		WIRE FOR SHIPMENT ALL LOOSE CLIP ANGLES				DRAWING NO. 150			
	2nd SUB.				MISC. SHOP		No.	By	REVISIONS	Date	DRAWN BY: AK			
	3rd SUB.						Δ				DATE: 07-28-16			
	FINAL APP.						Δ				CHECKED BY:			
	CONTR. FILE				FIELD USE		Δ				DATE:			
ERECTION						Δ				APPROVED:				

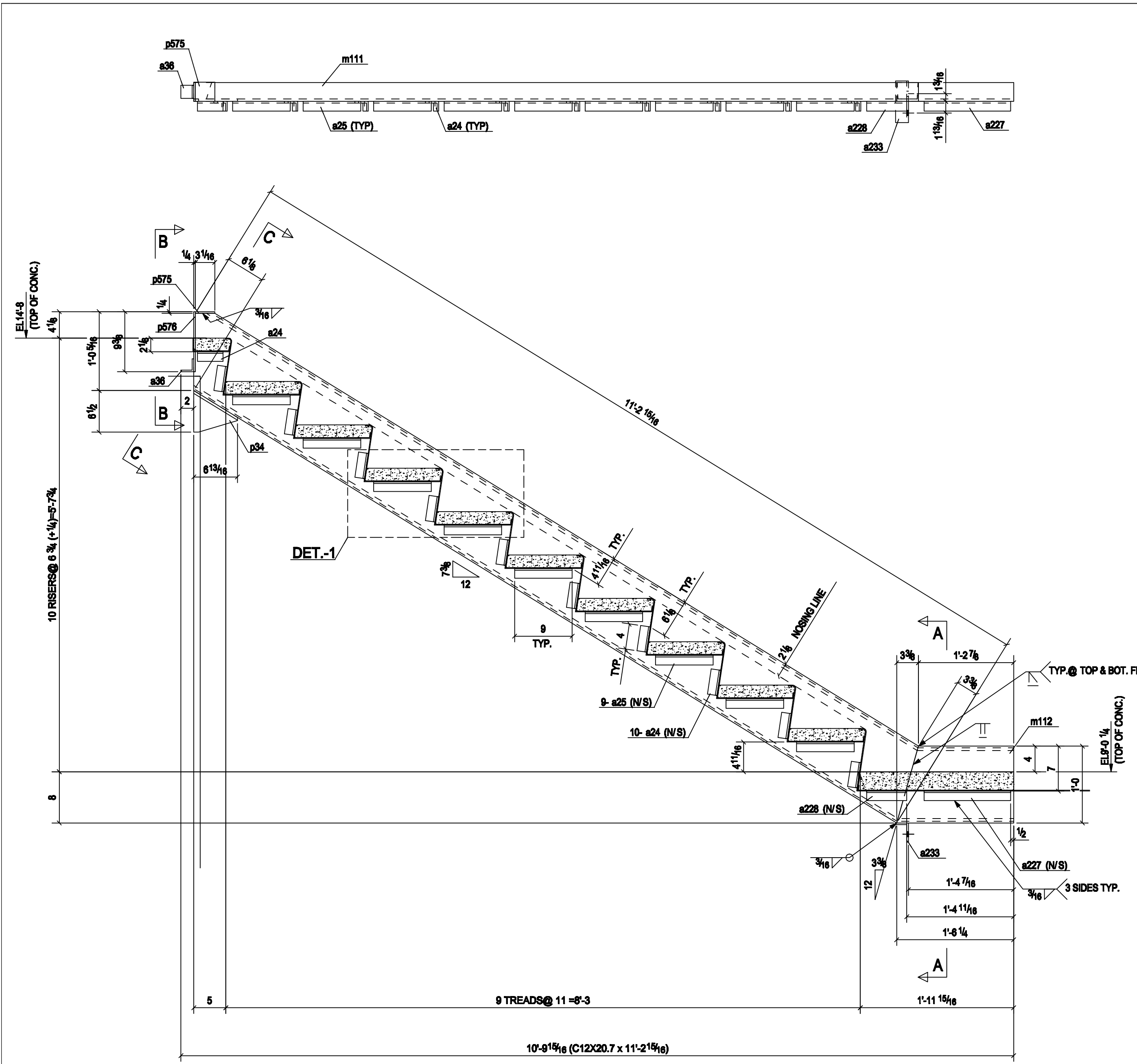
(AISC CERTIFIED) (STANDARD)

KBA#16-035

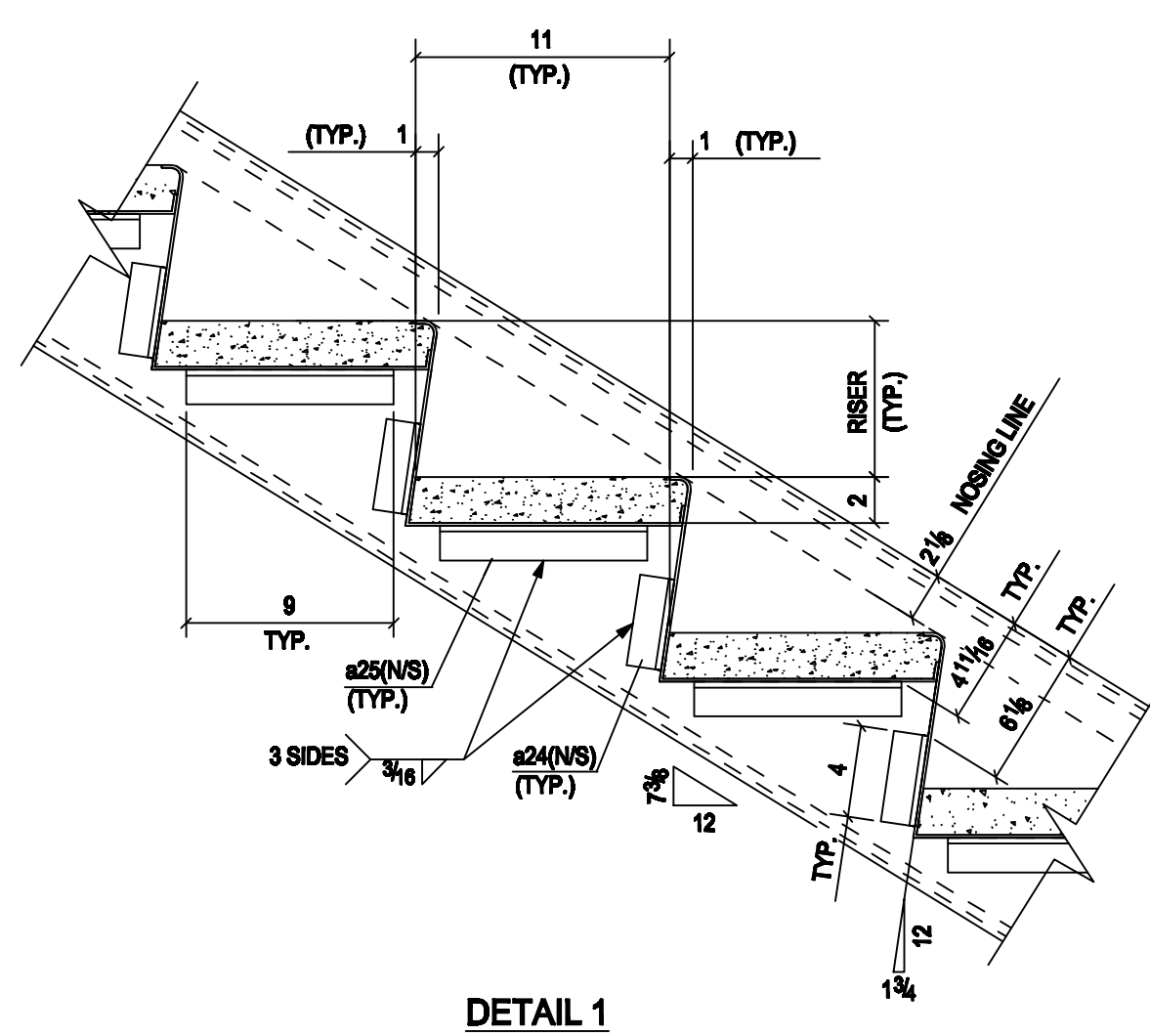
JOB NO: 1601

DRAWING NO. 150

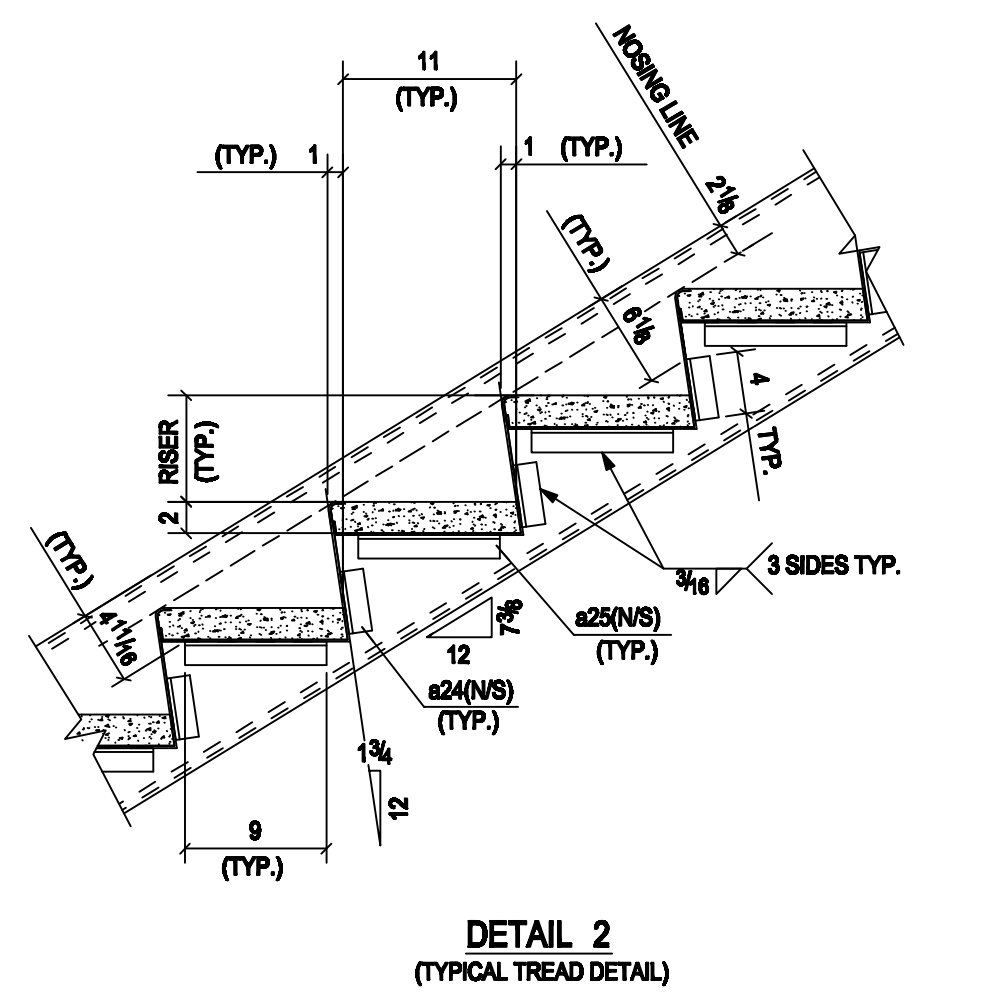
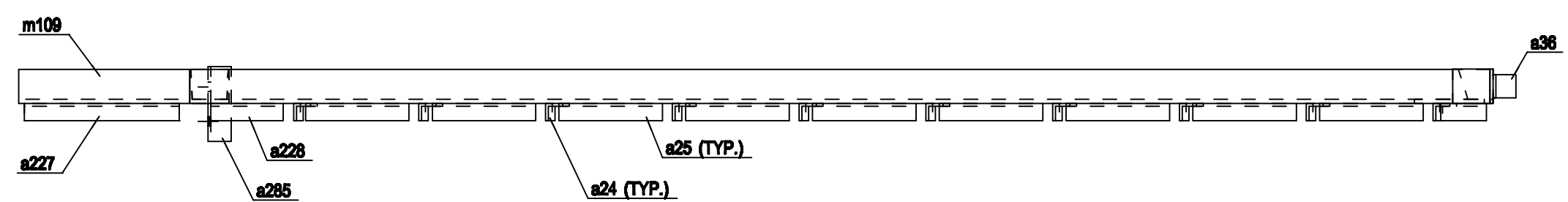
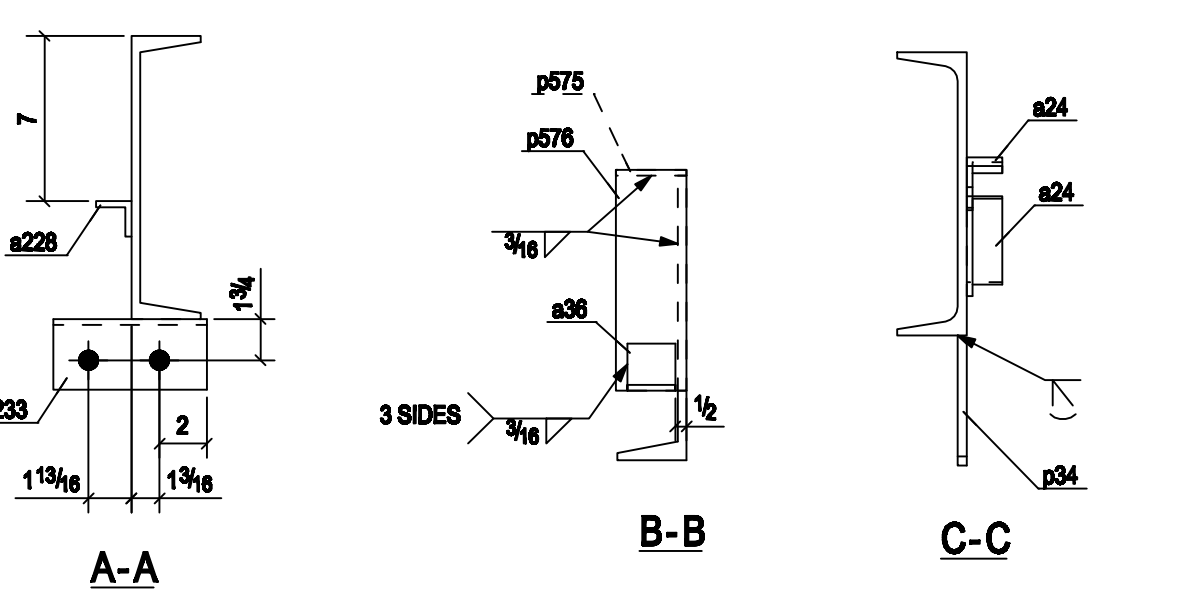
CONTRACTOR ARCHITECT



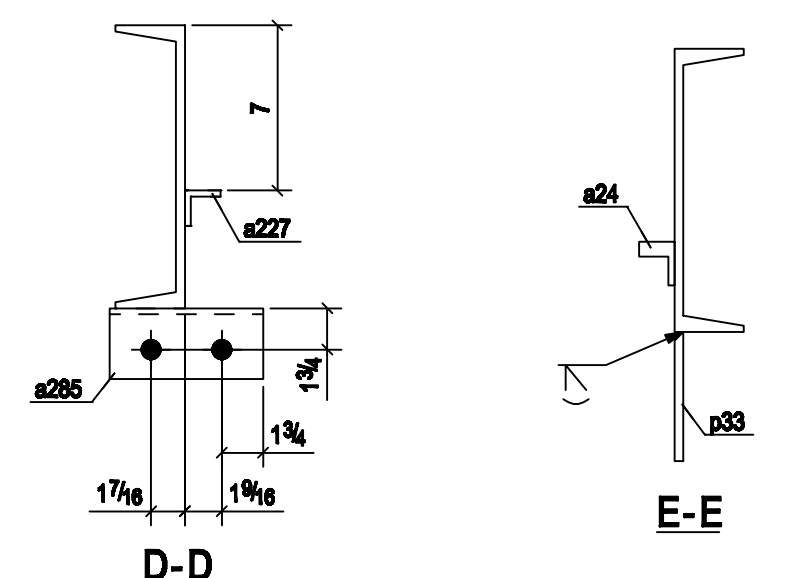
ONE - STAIR - 403ST2



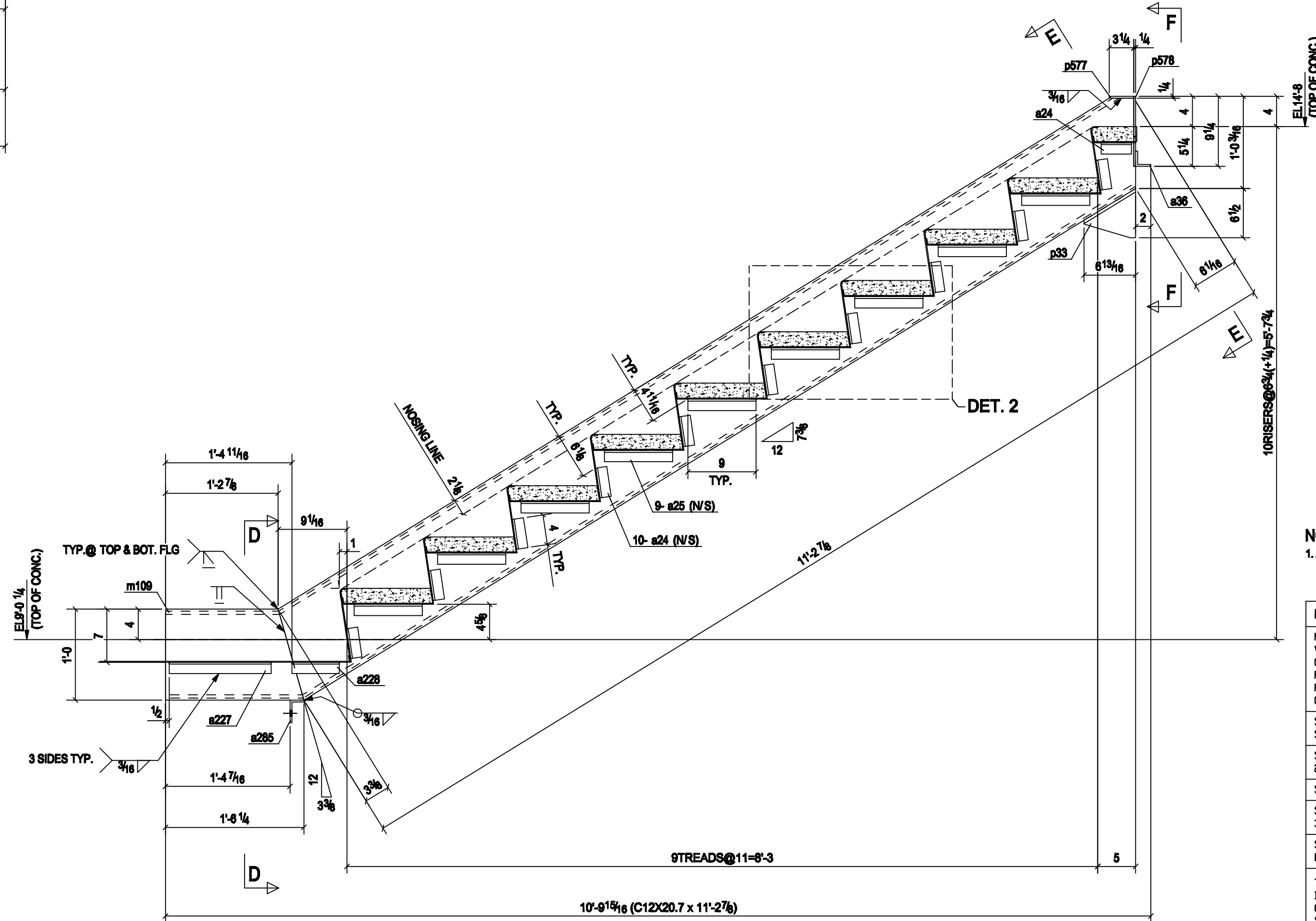
DETAIL 1
(TYPICAL TREAD DETAIL)



DETAIL 2
(TYPICAL TREAD DETAIL)



D-D
E-E
F-F

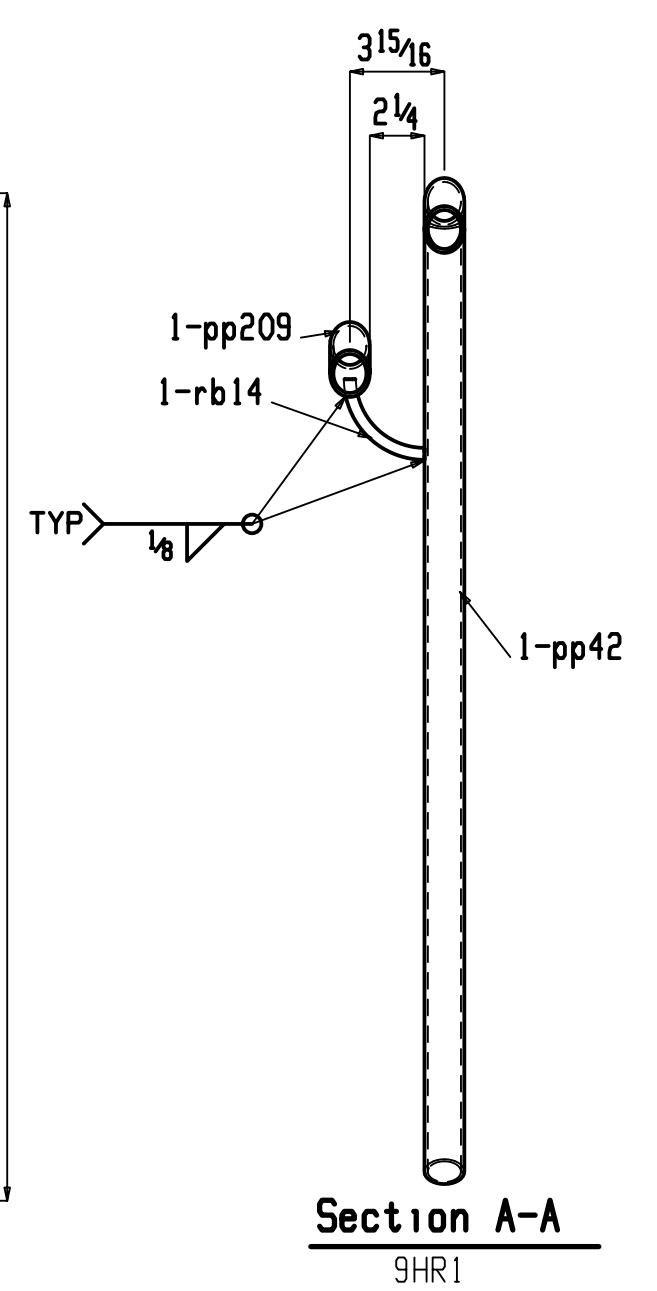
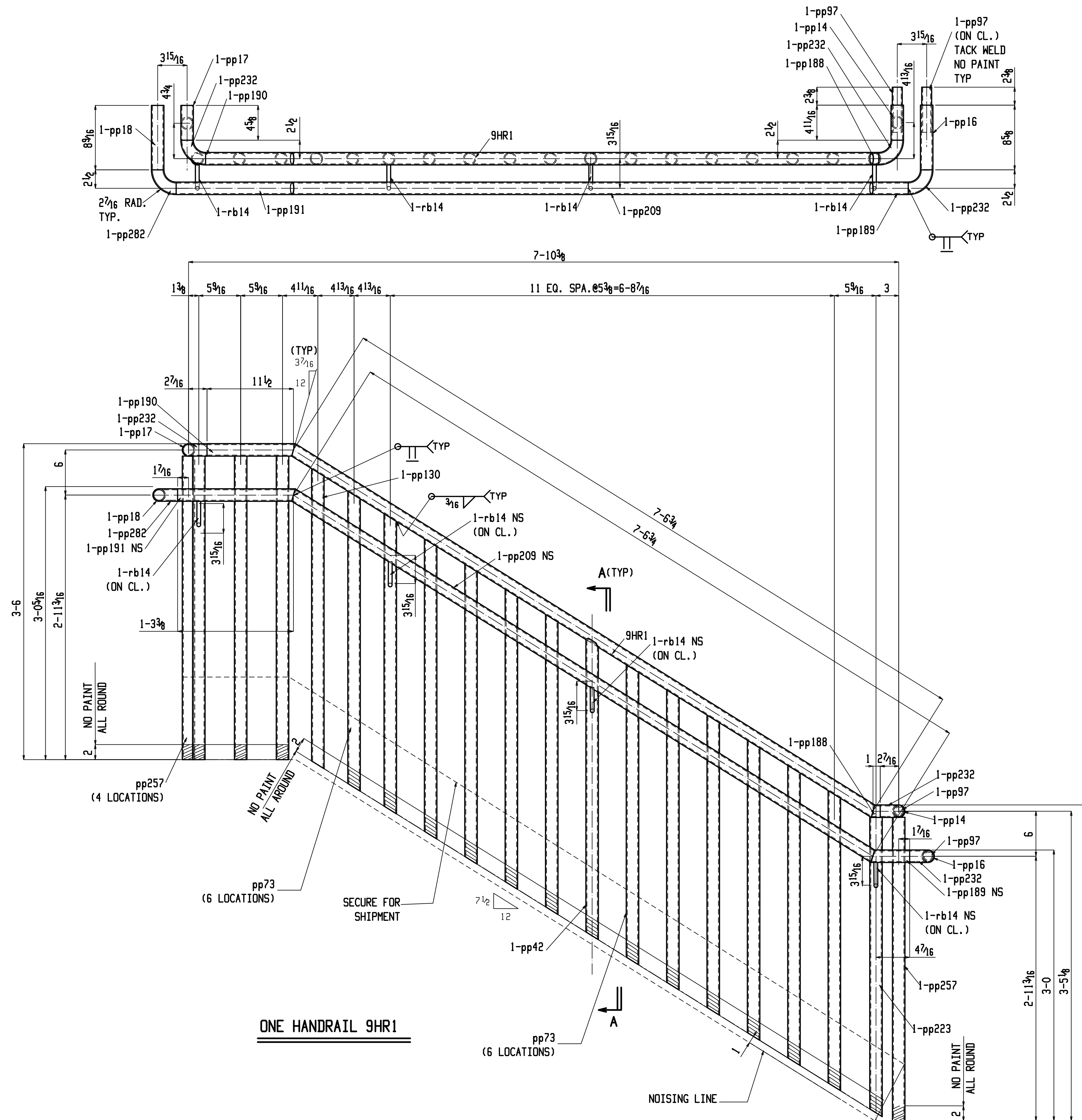


ONE - STAIR - 403ST1

BILL OF MATERIAL										
QTY.	PIECE	MINOR	DESCRIPTION	LENGTH	SEQ	REMARKS	UNIT	TOTAL	STEEL	
TOTAL	MARK	MARK			NO.		WEIGHT	WEIGHT	GRADE	
1	403ST1									
1		403ST1	C12X20.7	11'-2 7/8"	3A&3B		232.5	232.5	A36	
11		a24	L1-1/2X1-1/2X1/4	0'-4"			0.8	8.5	A36	
9		a25	L1-1/2X1-1/2X1/4	0'-0"			1.8	15.8	A36	
1		a36	L2X2X1/4	0'-2"			0.5	0.5	A36	
1		a227	L1-1/2X1-1/2X1/4	1'-1 7/16"			2.6	2.6	A36	
1		a228	L1-1/2X1-1/2X1/4	0'-8 1/4"			1.2	1.2	A36	
1		a285	L3X2X1/4	0'-6 1/2"			2.2	2.2	A36	
1		m109	C12X20.7	1'-6 1/4"			31.5	31.5	A36	
1		p33	PL3/8"X8 1/2"	0'-8 13/16"			4.7	4.7	A36	
1		p577	PL1/4"X3"	0'-3 1/4"			0.7	0.7	A36	
1		p578	PL1/4"X3"	0'-8 1/4"			2.0	2.0	A36	
1	403ST2									
1		403ST2	C12X20.7	11'-2 15/16"	3A&3B		232.7	232.7	A36	
11		a24	L1-1/2X1-1/2X1/4	0'-4"			0.8	8.5	A36	
9		a25	L1-1/2X1-1/2X1/4	0'-0"			1.8	15.8	A36	
1		a36	L2X2X1/4	0'-2"			0.5	0.5	A36	
1		a227	L1-1/2X1-1/2X1/4	1'-1 1/2"			2.6	2.6	A36	
1		a228	L1-1/2X1-1/2X1/4	0'-8 1/4"			1.2	1.2	A36	
1		a233	L3X2X1/4	0'-6 1/2"			2.2	2.2	A36	
1		m112	C12X20.7	1'-6 1/4"			31.5	31.5	A36	
1		p34	PL3/8"X8 1/2"	0'-8 13/16"			4.7	4.7	A36	
1		p575	PL1/4"X3"	0'-3 1/8"			0.6	0.6	A36	
1		p576	PL1/4"X3"	0'-8 3/8"			2.0	2.0	A36	
TOTAL WEIGHT THIS DRAWING								465		

NOTES:
1. ALL WELDS GROUND SMOOTH.

FABRICATION STANDARDS (UN)		REVISION	DATE	REVISION DESCRIPTION	BY
MATERIAL: V-SHAPES - ASTM A992 CHANNELS - ASTM A36 RECT. HSS - A500 GR.B ROUND HSS - A513 GR.B CONN. MATERIAL - ASTM A36					
SURFACE PREP: SSPC-SP3					
SHOP PAINT: 2 S/C RED OXIDE PRIMER (UN)					
STD. HOLES: 13/16 DIA UNL					
STD. SHIPFIELD FASTENER: 3/4 DIA A325 BOLTS UNL					
STD. SHIPFIELD WELD: E70XX/HL 1/4 FILLET					
DETAILS OF: STAIR SEQ-3A & 3B (PHASE I)					
PROJECT:					
LOCATION:					
ARCHITECT:					
ENGINEER:					
CONTRACTOR:					
DRAWN BY:					
DATE:					
CHK'D BY:					
DATE:					
PROJECT NO:					
PAGE:					



- STANDARD SHOP NOTES**
- ALL EDGE DISTANCES FOR PLATE IS 1/2" U.N.
 - ALL EDGE DISTANCES FOR ANGLE IS 1/4" U.N.
 - ALL HS SHOP BOLTS TO BE TORQUED UNLESS NOTED
 - ALL RUNNING DIMENSIONS FROM END OF MAIN MATERIAL
 - ALL SHOP WELD TO BE E70XX-LH ELECTRODES
 - ALL COPIES TO BE RADIUSED
 - ALL BEAM TO BE FABRICATED WITH RESIDUAL CAMBER UP
 - SIPPING MARK MUST BE AT LEFT END OF MAIN MATERIAL SO THE MARK END IS THE SAME LOCATION AS ON THE ERECTION DRAWING.

ALL DIMENSIONS TO BE ON CENTER LINE OF PIPE ALL WELD TO BE GRIND SMOOTH ALL SHARP EDGES TO BE GRIND & SMOOTH.

BILL OF MATERIAL

LINE #	SEQUENCE QTY	Piece Mark	Qty Tot	Description	Steel Grade	Length Ft In	WEIGHT UNIT	Weight Total	Adv Mill #	Remarks
1	9HR1	ONE		HANDRAIL			204	204		
	9HR1	1		PIPE 1 1/4 STD	A53	7 7/4	17	17		
	pp209	1		PIPE 1 1/4 STD	A53	7 7 3/16	17	17		
	pp257	5		PIPE 1 1/4 STD	A53	3 4 5/16	8	38		
	pp42	1		PIPE 1 1/4 STD	A53	3 4 1/16	8	8		
	pp73	12		PIPE 1 1/4 STD	A53	3 3 7/8	8	91		
	pp130	1		PIPE 1 1/4 STD	A53	3 3 7/8	8	8		
	pp223	1		PIPE 1 1/4 STD	A53	3 3 3/4	8	8		
	pp191	1		PIPE 1 1/4 STD	A53	1 3 5/8	3	3		
	pp190	1		PIPE 1 1/4 STD	A53	0 11 3/4	2	2		
	pp16	1		PIPE 1 1/4 STD	A53	0 8 5/8	2	2		
	pp18	1		PIPE 1 1/4 STD	A53	0 8 9/16	2	2		
	pp232	3		PIPE 1 1/4 STD	A53	0 5 3/16	1	3		
	pp282	1		PIPE 1 1/4 STD	A53	0 5 3/16	1	1		
	pp189	1		PIPE 1 1/4 STD	A53	0 5 1/8	1	1		
	pp14	1		PIPE 1 1/4 STD	A53	0 4 1 1/16	1	1		
	pp17	1		PIPE 1 1/4 STD	A53	0 4 5/8	1	1		
	pp188	1		PIPE 1 1/4 STD	A53	0 1 3/16	0	0		
	pp97	2		PIPE 1 STD	A53	0 6	1	2		
	rb14	4		RB 1/2	A36	0 5 1/4	0	1		

Total weight : 204

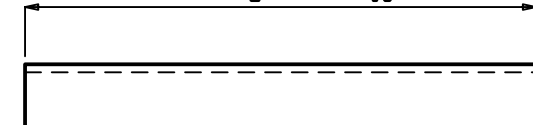
IMPORTANT FOR APPROVAL ONLY
NOT FOR SHOP USE

NO.	DATE	BY	DRAWING ISSUE/REVISION LOG

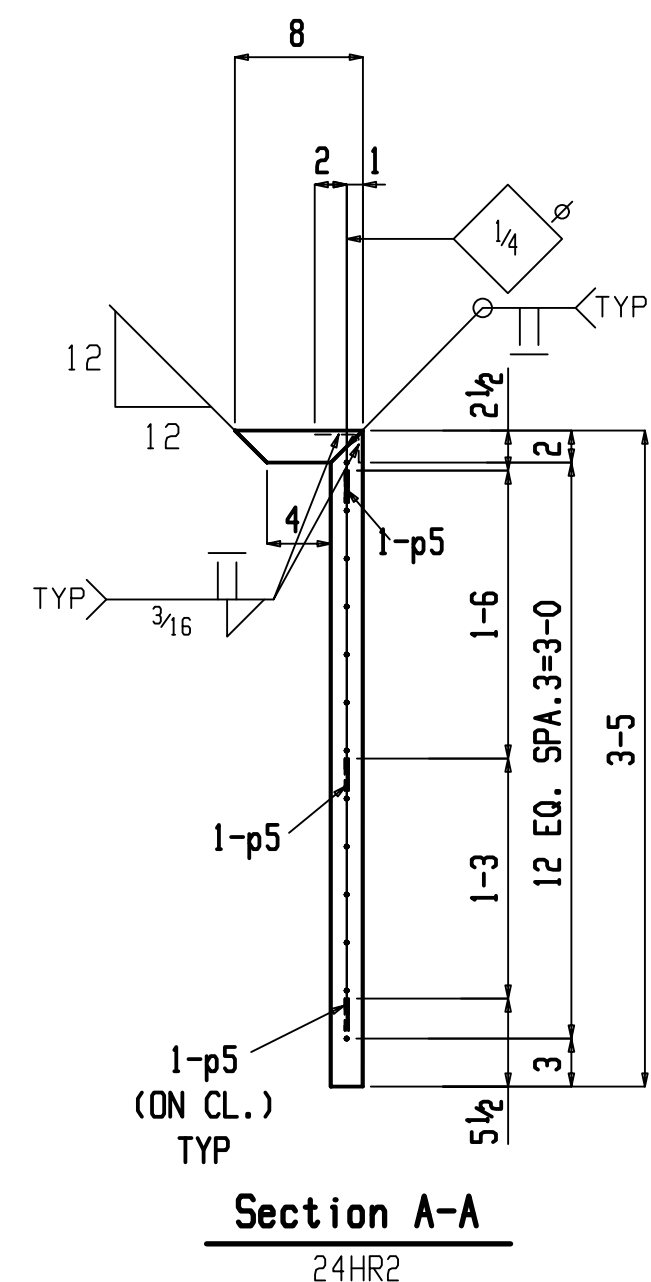
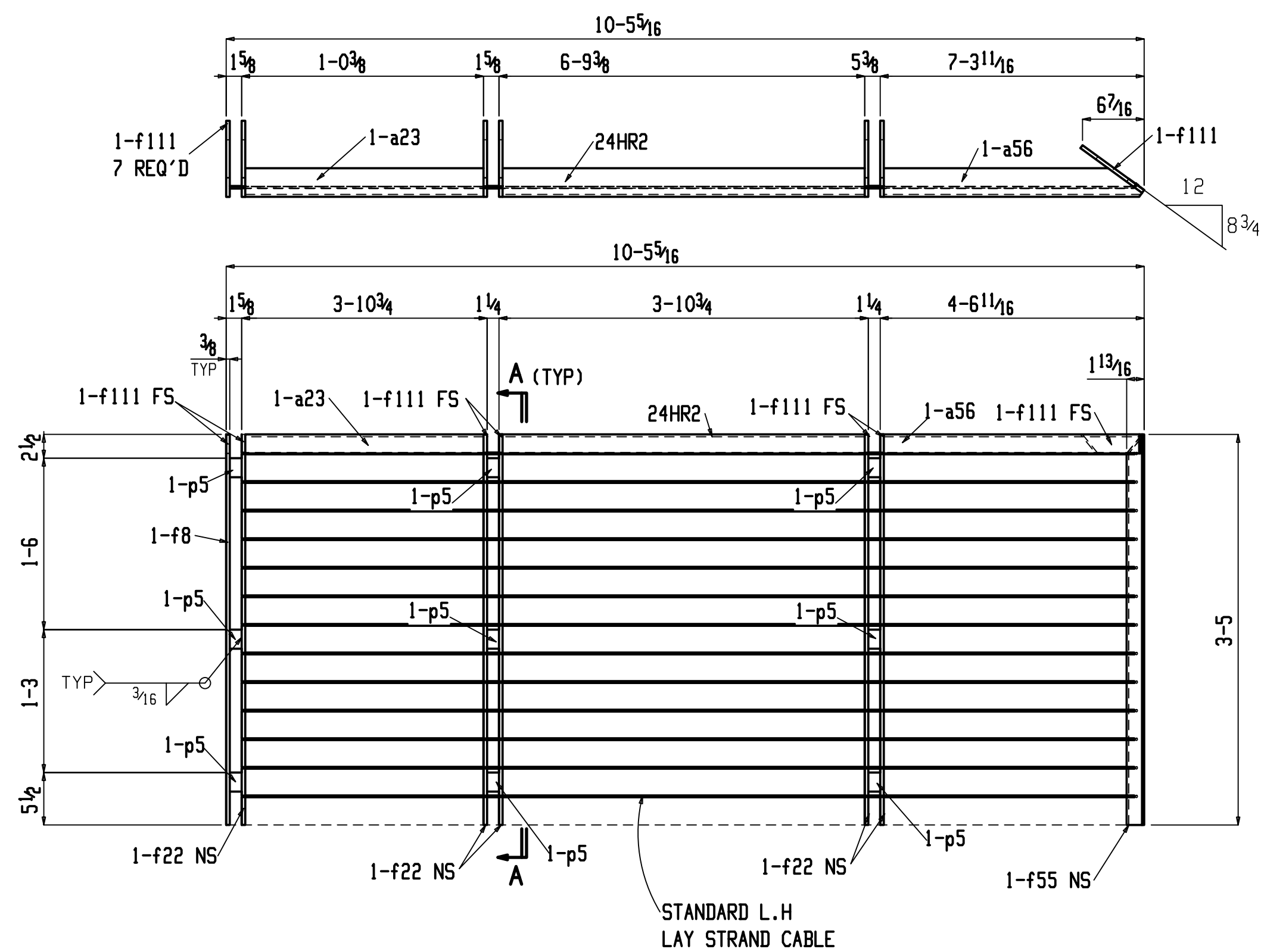
PROJECT MANAGER: SK CHECKED BY: RR DETAILED BY: BN
DETAIL OF: HANDRAIL REF. DWG. E02 & E03

PROJECT:	JOB NO. 16.345	DWG. NO. 9
LOCATION:		
CUSTOMER:		
ENGINEER:		

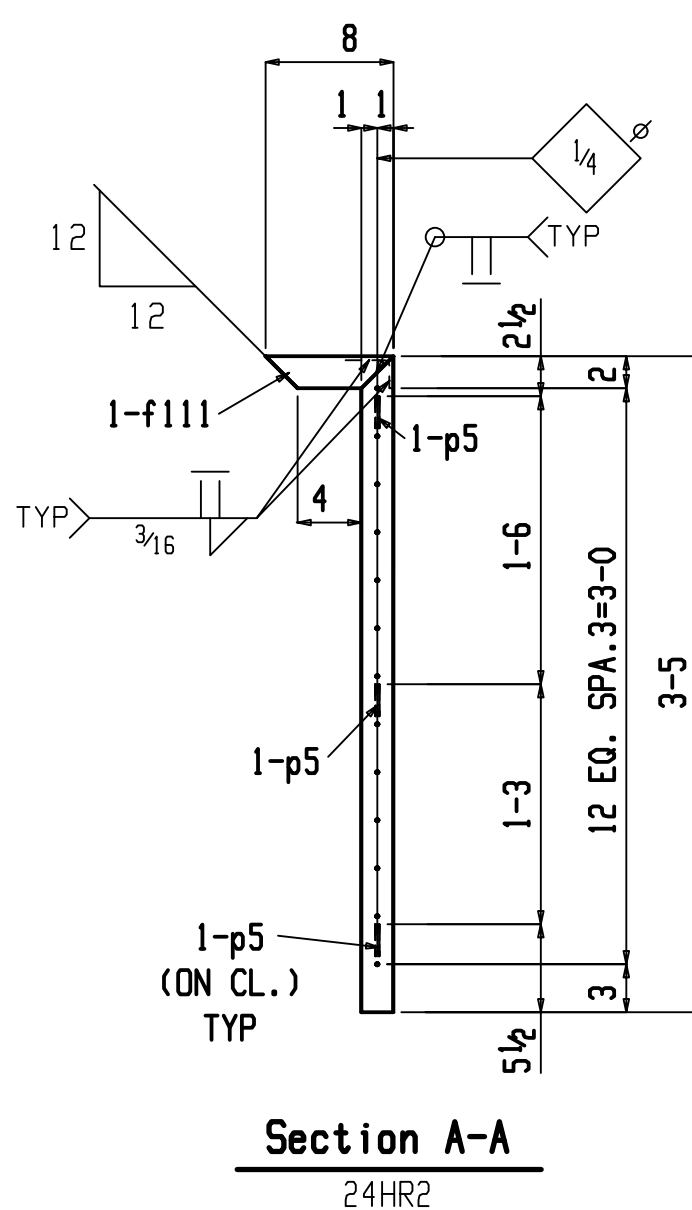
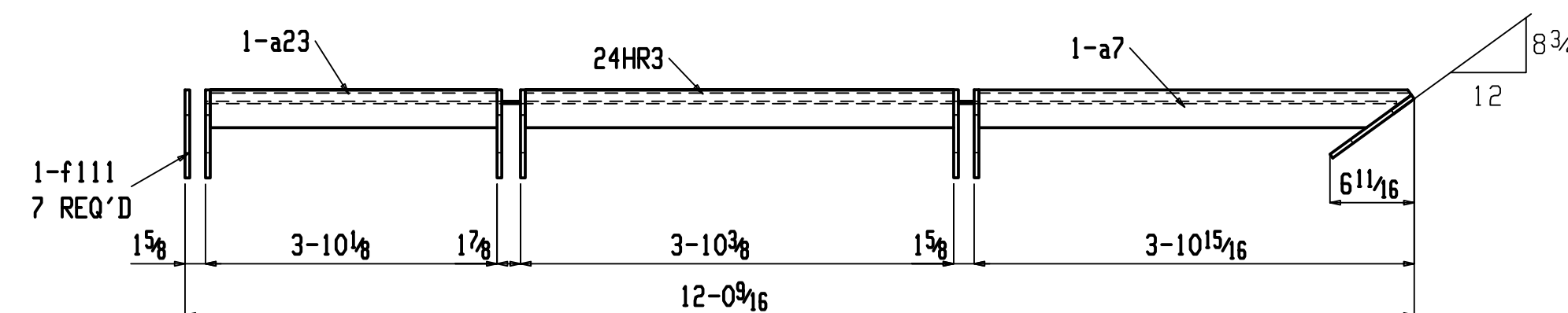
(L4x4x1/2x5-615/16) A36



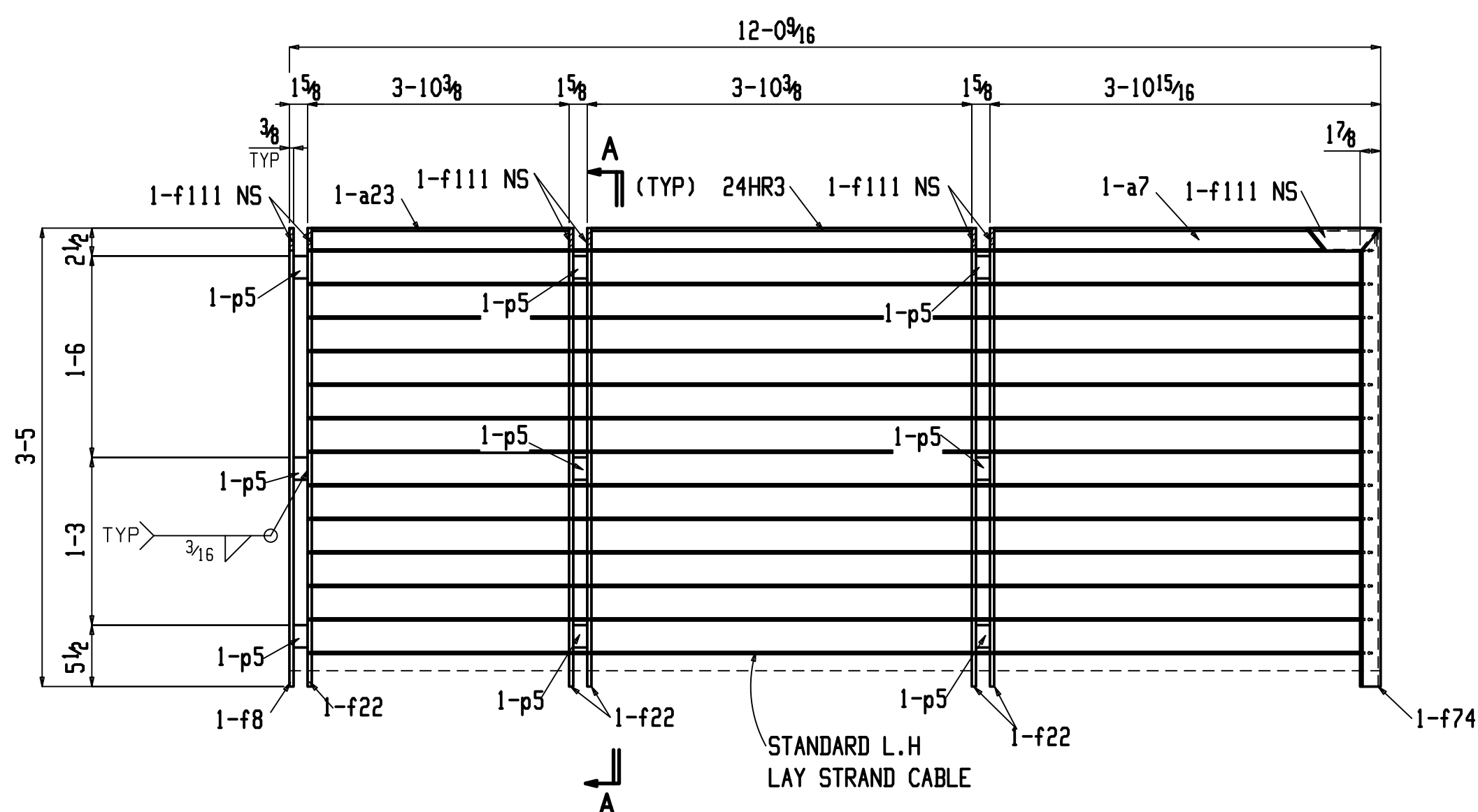
ONE MISC 24M1



ONE HANDRAIL 24HR2



ONE HANDRAIL 24HR3



BILL OF MATERIAL

Table with columns: LINE #, SEQUENCE QTY, Piece Mark, Qty Tot, Description, Steel Grade, Length Ft In, WEIGHT UNIT, Weight Total, Adv Mill #, Remarks. It lists materials for MISC 24M1, HANDRAIL 24HR2, and HANDRAIL 24HR3.

Total weight : 277

GC NOTE: PLEASE VERIFY PAINT NOTE AND CLEANING PRIOR TO FABRICATION.

STANDARD SHOP NOTES

- ALL EDGE DISTANCES FOR PLATE IS 1/2" U.N.
-ALL EDGE DISTANCES FOR ANGLE IS 1/4" U.N.
-ALL HS SHOP BOLTS TO BE TORQUED UNLESS NOTED
-ALL RUNNING DIMENSIONS FROM END OF MAIN MATERIAL
-ALL SHOP WELD TO BE E70XX-LH ELECTRODES
-ALL COPIES TO BE RADIUSED
-ALL BEAM TO BE FABRICATED WITH RESIDUAL CAMBER UP
-SHIPING MARK MUST BE AT LEFT END OF MAIN MATERIAL
SO THE MARK END IS THE SAME LOCATION AS ON THE ERECTION DRAWING.

Table with columns: HOLE SIZE, CONNECTIONS, CLEANING, SHOP PAINT. Values include 13/16 U.N., 3/4 A325 U.N., SSPC SP3 U.N., and STD. SHOP PRIMER.

Table with columns: NO., DATE, BY, DRAWING ISSUE/REVISION LOG, PROJECT, LOCATION, CUSTOMER, ENGINEER, JOB NO., DWG. NO.

