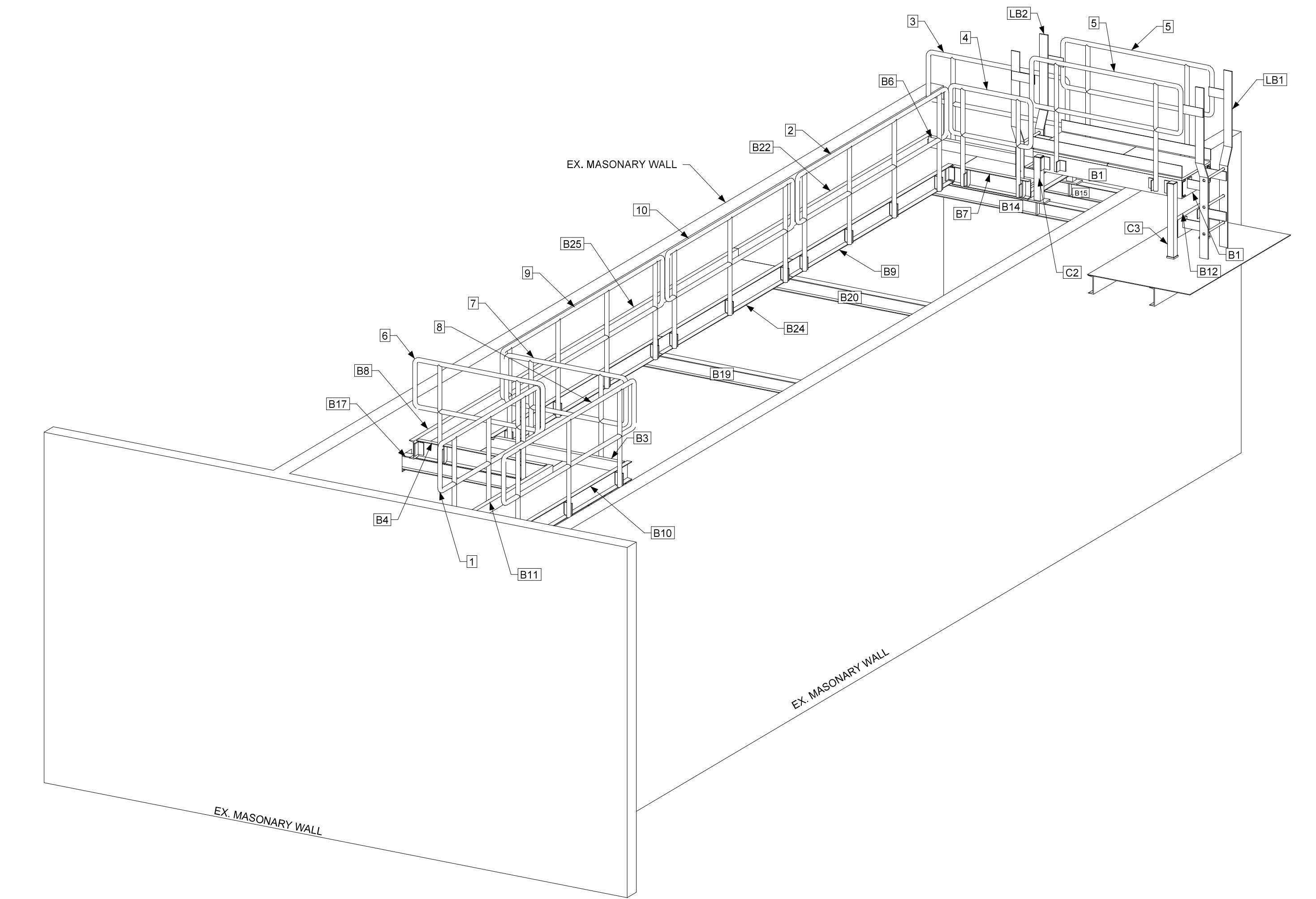
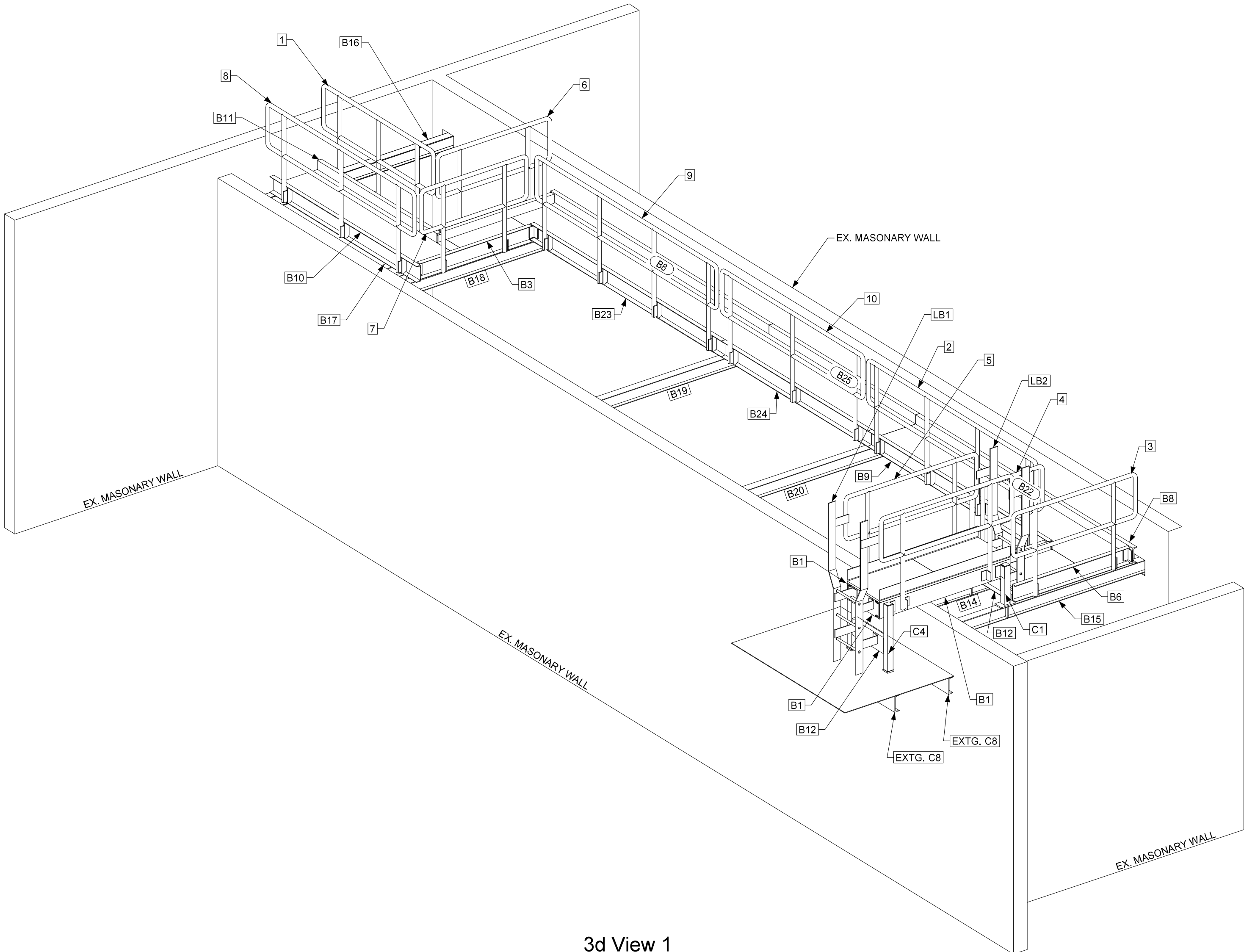




3d View



3d View 1

STRUCTURAL STEEL
1. FABRICATOR TO BE CERTIFIED BY THE CANADIAN WELDING BUREAU UNDER REQUIREMENTS OF CSA W47.1, DIVISION 1 OR 2, AND/OR CSA W55.3.
2. WELDERS TO BE CWB CERTIFIED AND WELDING TO BE IN ACCORDANCE WITH CSA W59.
3. PROVIDE STRUCTURAL STEEL TO MEET THE REQUIREMENTS OF CSA STANDARD G40.21-13 WITH THE FOLLOW GRADES:
WIDE FLANGE SECTIONS 350W
CHANNELS AND ANGLES 350W
HSS SECTIONS (CLASS 'C') 350W
STRUCTURAL BARS AND PLATES 350W
MISCELLANEOUS STEEL 300W
PIPE SECTIONS ASTM A53
STRUCTURAL BOLTS ASTM A325
ANCHOR RODS ASTM A307
4. WELDING ELECTRODES : E490XX, FASTENERS: A-325 (THREADS EXCLUDED).
5. STRUCTURAL STEEL SHALL BE FABRICATED AND ERRECTED IN ACCORDANCE WITH CSA-S16.1. AND THE CISC CODE OF STANDARD PRACTICE. SUBMIT SHOP DRAWINGS FOR ENGINEER'S REVIEW PRIOR TO FABRICATION.
6. DO NO CUT HOLES OR OTHERWISE MODIFY STRUCTURAL MEMBERS ON SITE WITHOUT APPROVAL FROM THE STRUCTURAL CONSULTANT. NO HOLES TO BE MADE IN MEMBERS IN TENSION.
7. PRIME/ PAINT ALL NEW STEEL TO MATCH EXISTING.

Mark	Qty.	Profile	Length	Weight	Total Weight
1	1	RAIL		78	78
MR4	2	PIPE 1-1/2SCH40	2'-4-7/8"		
TR7	1	PIPE 1-1/2SCH40	12'-0-5/16"		
m2	2	PIPE 1-1/2SCH40	3'-7-13/16"		
m4	1	PIPE 1-1/2SCH40	3'-7-13/16"		
p23	1	PL 3/8"X3-11/16"	0'-5-1/2"		
p24	1	PL 3/8"X3-11/16"	0'-5-1/2"		
p26	1	PL 3/8"X3-11/16"	0'-5-1/2"		
2	1	RAIL		108	108
MR3	3	PIPE 1-1/2SCH40	3'-1-9/16"		
TR8	1	PIPE 1-1/2SCH40	14'-7-5/16"		
m2	4	PIPE 1-1/2SCH40	3'-7-13/16"		
p22	4	PL 3/8"X3-11/16"	0'-5-1/2"		
3	1	RAIL		60	60
MR8	1	PIPE 1-1/2SCH40	3'-7-1/4"		
TR3	1	PIPE 1-1/2SCH40	10'-9-13/16"		
m2	2	PIPE 1-1/2SCH40	3'-7-13/16"		
p22	2	PL 3/8"X3-11/16"	0'-5-1/2"		
4	1	RAIL		48	48
MR7	1	PIPE 1-1/2SCH40	2'-2-3/4"		
TR4	1	PIPE 1-1/2SCH40	7'-5-3/8"		
m2	2	PIPE 1-1/2SCH40	3'-7-13/16"		
p22	2	PL 3/8"X3-11/16"	0'-5-1/2"		
5	2	RAIL		90	180
MR6	2	PIPE 1-1/2SCH40	4'-0"		
TR5	2	PIPE 1-1/2SCH40	11'-2-9/16"		
a7	4	L3X3X3/8	0'-4-1/2"		
m3	4	PIPE 1-1/2SCH40	4'-0-5/16"		
p8	2	FL 1/4"X5"	6'-0"		
6	1	RAIL		58	58
MR9	1	PIPE 1-1/2SCH40	3'-1-3/4"		
TR6	1	PIPE 1-1/2SCH40	10'-4-3/8"		
m2	2	PIPE 1-1/2SCH40	3'-7-13/16"		
p22	2	PL 3/8"X3-11/16"	0'-5-1/2"		
7	1	RAIL		56	56
MR10	2	PIPE 1-1/2SCH40	2'-9-3/4"		
TR2	1	PIPE 1-1/2SCH40	10'-0-3/8"		
m2	2	PIPE 1-1/2SCH40	3'-7-13/16"		
p22	2	PL 3/8"X3-11/16"	0'-5-1/2"		
8	1	RAIL		89	89
MR10	2	PIPE 1-1/2SCH40	3'-6-5/8"		
TR1	1	PIPE 1-1/2SCH40	14'-3-13/16"		
m2	3	PIPE 1-1/2SCH40	3'-7-13/16"		
p22	3	PL 3/8"X3-11/16"	0'-5-1/2"		
9	1	RAIL		112	112
MR1	3	PIPE 1-1/2SCH40	3'-4-11/16"		
TR10	1	PIPE 1-1/2SCH40	15'-4-9/16"		
m2	4	PIPE 1-1/2SCH40	3'-7-13/16"		
p22	4	PL 3/8"X3-11/16"	0'-5-1/2"		
10	1	RAIL		88	88
MR2	2	PIPE 1-1/2SCH40	3'-10-1/2"		
TR9	1	PIPE 1-1/2SCH40	12'-11-9/16"		
m2	3	PIPE 1-1/2SCH40	3'-7-13/16"		
p22	3	PL 3/8"X3-11/16"	0'-5-1/2"		
Mark	Qty.	Profile	Length	Weight	Total Weight
C1	1	COLUMN		26	26
a6	1	L3X3X3/8	0'-5-1/2"		
hs1	1	HSS3X3X1/4	1'-7-1/8"		
p3	1	FL3/8"X6"	0'-3-5/8"		
p5	1	FL5/8"X4-3/4"	0'-8"		
p7	1	FL1/4"X2-3/4"	0'-2-3/4"		
C2	1	COLUMN		26	26
a6	1	L3X3X3/8	0'-5-1/2"		
hs1	1	HSS3X3X1/4	1'-7-1/8"		
p3	1	FL3/8"X6"	0'-3-5/8"		
p5	1	FL5/8"X4-3/4"	0'-8"		
p7	1	FL1/4"X2-3/4"	0'-2-3/4"		
C3	1	COLUMN		31	31
a6	1	L3X3X3/8	0'-5-1/2"		
hs2	1	HSS3X3X1/4	2'-8-1/2"		
p3	1	FL3/8"X6"	0'-3-5/8"		
p4	1	FL5/8"X3-1/2"	0'-3-1/2"		
p7	1	FL1/4"X2-3/4"	0'-2-3/4"		
C4	1	COLUMN		31	31
a6	1	L3X3X3/8	0'-5-1/2"		
hs2	1	HSS3X3X1/4	2'-8-1/2"		
p3	1	FL3/8"X6"	0'-3-5/8"		
p4	1	FL5/8"X3-1/2"	0'-3-1/2"		
p7	1	FL1/4"X2-3/4"	0'-2-3/4"		

Mark	Qty.	Profile	Length	Weight	Total Weight
B1	1	CHANNEL		196	196
a5	4	L3X3X3/8	0'-5-1/2"		
c7	1	C8X11.5	6'-1"		
c8	1	C8X11.5	6'-1"		
c9	2	C8X11.5	1'-10-9/16"		
B2	1	CHANNEL		28	28
a5	2	L3X3X3/8	0'-5-1/2"		
c10	1	C8X11.5	1'-10-9/16"		
B3	1	CHANNEL		89	89
a4	1	L2X2X1/4	5'-4"		
a5	2	L3X3X3/8	0'-5-1/2"		
c11	1	C8X11.5	5'-4"		
p21	2	PL3/8"X2-3/8"	0'-7-11/16"		
B4	1	CHANNEL		88	88
a3	1	L2X2X1/4	5'-2-1/2"		
a5	2	L3X3X3/8	0'-5-1/2"		
c11	1	C8X11.5	5'-4"		
p21	2	PL3/8"X2-3/8"	0'-7-11/16"		
B5	2	CHANNEL		33	67
a5	4	L3X3X3/8	0'-5-1/2"		
c12	2	C8X11.5	2'-4"		
B6	1	CHANNEL		82	82
a2	1	L2X2X1/4	4'-7-3/4"		
a5	1	L3X3X3/8	0'-5-1/2"		
c3	1	C8X11.5	5'-3-1/4"		
p21	2	PL3/8"X2-3/8"	0'-7-11/16"		
B7	1	CHANNEL		53	53
a1	1	L2X2X1/4	2'-7-1/2"		
a5	1	L3X3X3/8	0'-5-1/2"		
c4	1	C8X11.5	3'-3"		
p21	2	PL3/8"X2-3/8"	0'-7-11/16"		
B8	1	CHANNEL		156	156
c1	1	C8X11.5	13'-6-3/4"		
B9	1	CHANNEL		136	136
c2	1	C8X11.5	11'-2-1/4"		
p21	4	PL3/8"X2-3/8"	0'-7-11/16"		
B10	1	CHANNEL		110	110
c5	1	C8X11.5	9'-1-1/4"		
p25	3	PL3/8"X2-3/8"	0'-7-11/16"		
B11	1	CHANNEL		91	91
c6	1	C8X11.5	7'-4-3/4"		
p21	3	PL3/8"X2-3/8"	0'-7-11/16"		
B12	2	CHANNEL		22	44
c13	2	C8X11.5	1'-11"		
B13ex	2	CHANNEL		132	263
c14	2	C8X18.75	7'-0-1/4"		
B14	1	BEAM		126	126
p20	2	PL1/2"X1-7/8"	0'-5-1/2"		
w2	1	W6X12	10'-2-1/2"		
B15	1	BEAM		126	126
p20	2	PL1/2"X1-7/8"	0'-5-1/2"		
w4	1	W6X12	10'-2-1/2"		
B16	1	BEAM		123	123
w1	1	W6X12	10'-2-1/2"		
B17	1	BEAM		123	123
w3	1	W6X12	10'-2-1/2"		
B18	1	BEAM		123	123
w5	1	W6X12	10'-2-1/2"		
B19	1	BEAM		123	123
w6	1	W6X12	10'-2-1/2"		
B20	1	BEAM		123	123
w7	1	W6X12	10'-2-1/2"		
B21	1	BEAM		123	123
w8	1	W6X12	10'-2-1/2"		
B22	1	CHANNEL		155	155
c15	1	C8X11.5	13'-5-3/4"		
B23	1	CHANNEL		144	144
c16	1	C8X11.5	11'-10-1/4"		
p25	4	PL3/8"X2-3/8"	0'-7-11/16"		
B24	1	CHANNEL		110	110
c17	1	C8X11.5	9'-1"		
p21	3	PL3/8"X2-3/8"	0'-7-11/16"		
B25	1	CHANNEL		104	104
c18	1	C8X11.5	9'-1"		

Mark	Qty.	Profile	Length	Weight	Total Weight
D1	11	HORIZONTAL HSS BRACE			11
hs3	11	HSS2X2X3/16	1'-11 1/4"		119
p2	22	FL3/8"X2"	0'-7"		
LB1	1	LADDER		103	103
m1	3	ROD1"	1'-4 3/8"		
p10	2	FL3/8"X4"	6'-5 15/16"		
p11	2	FL3/8"X4"	1'-3 1/8"		
p12	2	FL3/8"X4"	1'-0 7/8"		
p19	2	FL1/8"X4"	0'-11 1/16"		
LB2	1	LADDER		86	86
m1	2	ROD1"	1'-4 3/8"		
p9	2	FL3/8"X4"	5'-1 1/16"		
p11	2	FL3/8"X4"	1'-3 1/8"		
p12	2	FL3/8"X4"	1'-0 7/8"		
p19	2	FL1/8"X4"	0'-11 1/16"		
M5 EXTG. 1 PLATE				358	358
p6	1	PL1/4"X60"	7'-0 1/4"		
M6	3	GRATING		245	735
p13	3	GRTG1"X24"	3'-0"		
M7	1	GRATING		1826	1826
p14	1	GRTG1"X24"	22'-4 1/4"		
M8	1	GRATING		1077	1077
p15	1	GRTG1"X24"	13'-2 1/4"		
M9	1	GRATING		174	174
p16	1	GRTG1"X17"	3'-0"		
M10	1	GRATING		720	720
p17	1	GRTG1"X24"	8'-9 3/4"		
M11	1	GRATING		25	25
p18	1	FL1"X5 1/4"	1'-5"		
P1	14	PLATE		5	71
p1	14	FL3/8"X6"	0'-8"		
R1	28	ROD		2	47
r1	28	RBS/8"	1'-2 1/2"		
w9	28	5/8_WASHER	0'-0 1/8"		
w10	56	5/8_HEAVY_HEX_NUT	0'-0 5/8"		
w11	28	PL2"X3/16"	0'-2"		
Total weight for 107 Assemblies:				9442	

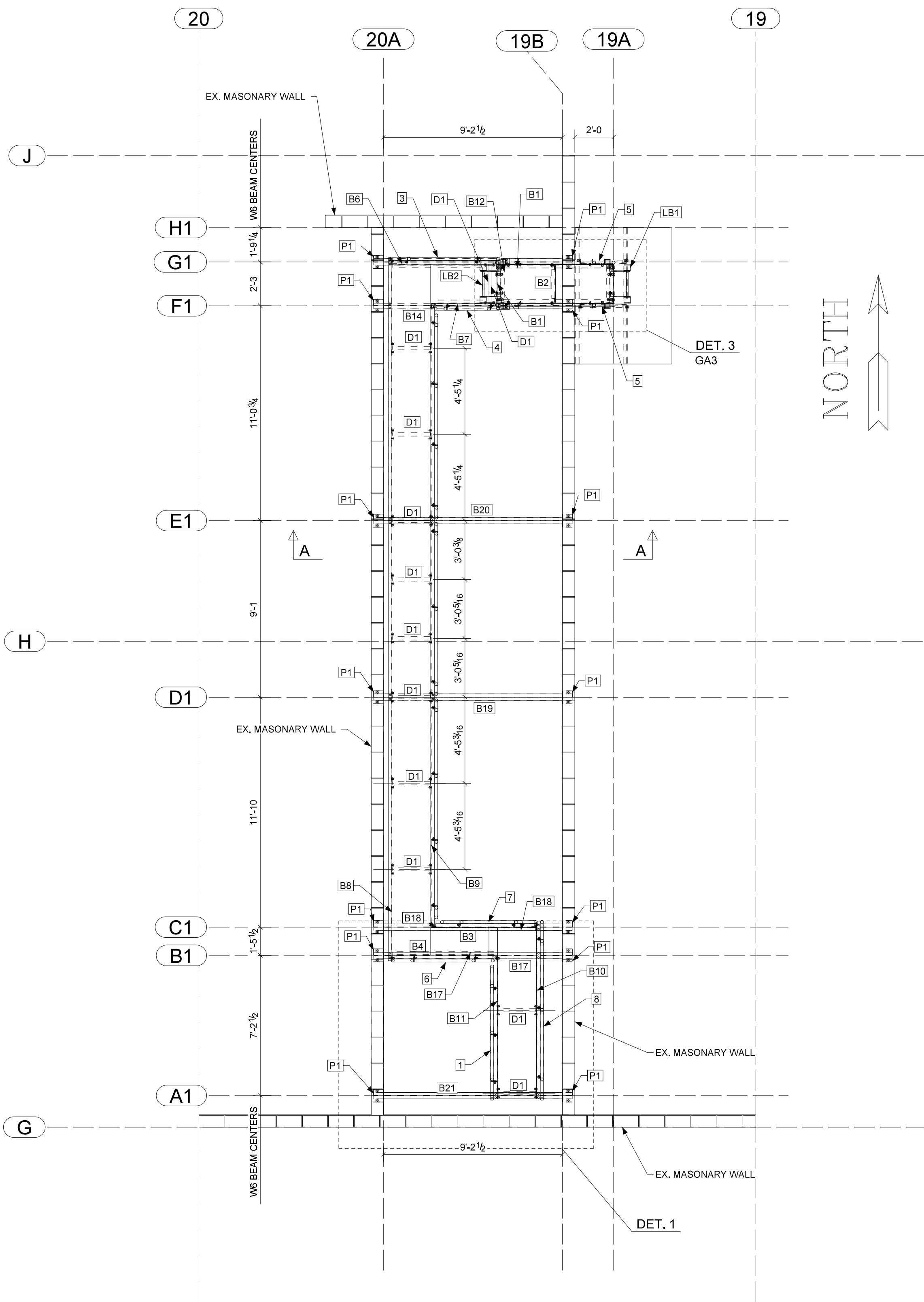
END OF REPORT

Total bolts

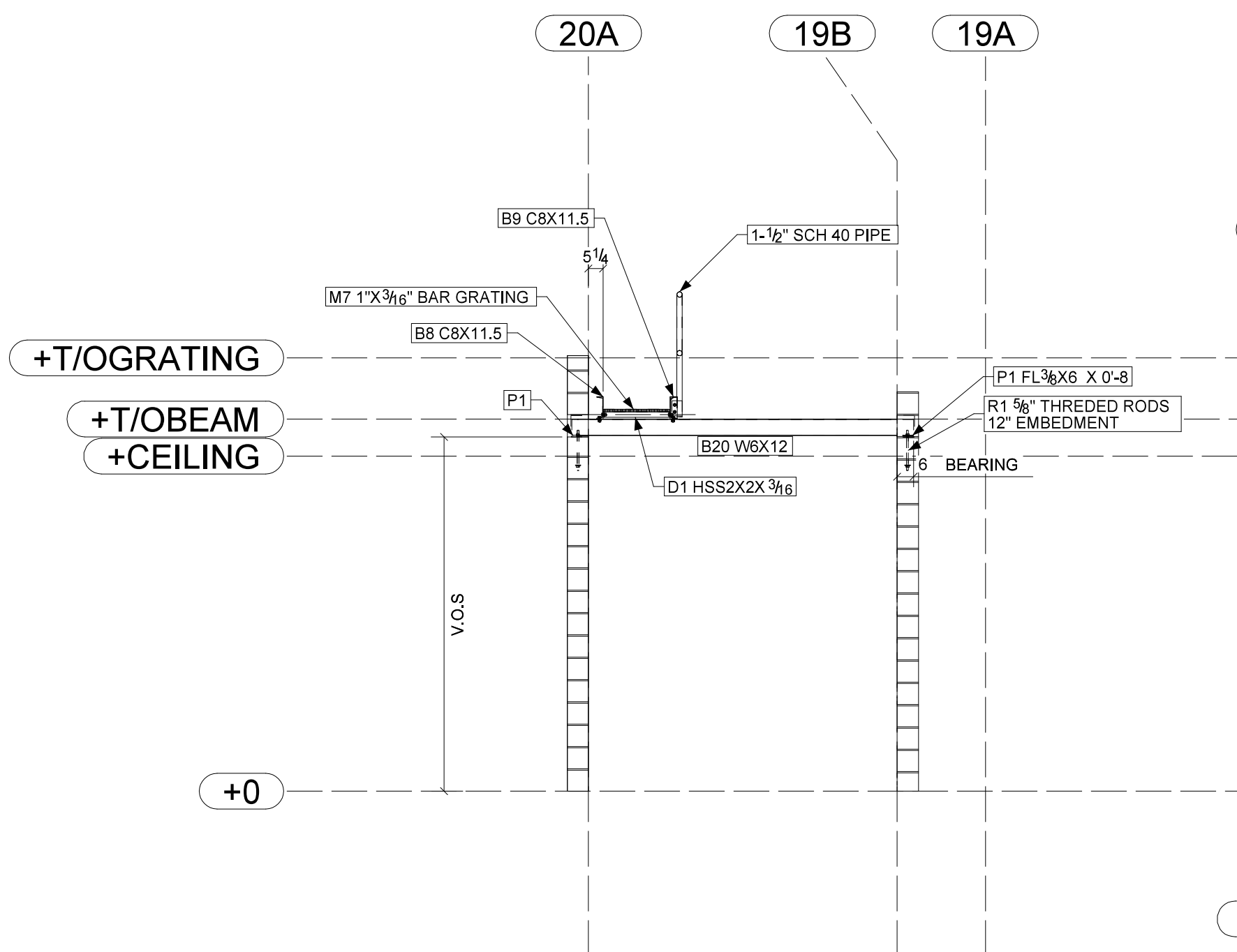
52-BOLT 1/2"DIA A325 1"1/2 10.0 lbs.
83-BOLT 1/2"DIA A325 1"3/4 17.0 lbs.
48-BOLT 3/4"DIA A325 1"3/4 26.6 lbs.
8-BOLT 3/4"DIA A325 2" 4.7 lbs.
25-WASHER 1/2" HARDENED PLAIN
135-WASHER 1/2" HARDENED PLAIN
56-WASHER 3/4" HARDENED PLAIN
135-NUT 1/2" HEAVY HEX
56-NUT 3/4" HEAVY HEX

58.2 lbs. of Bolts

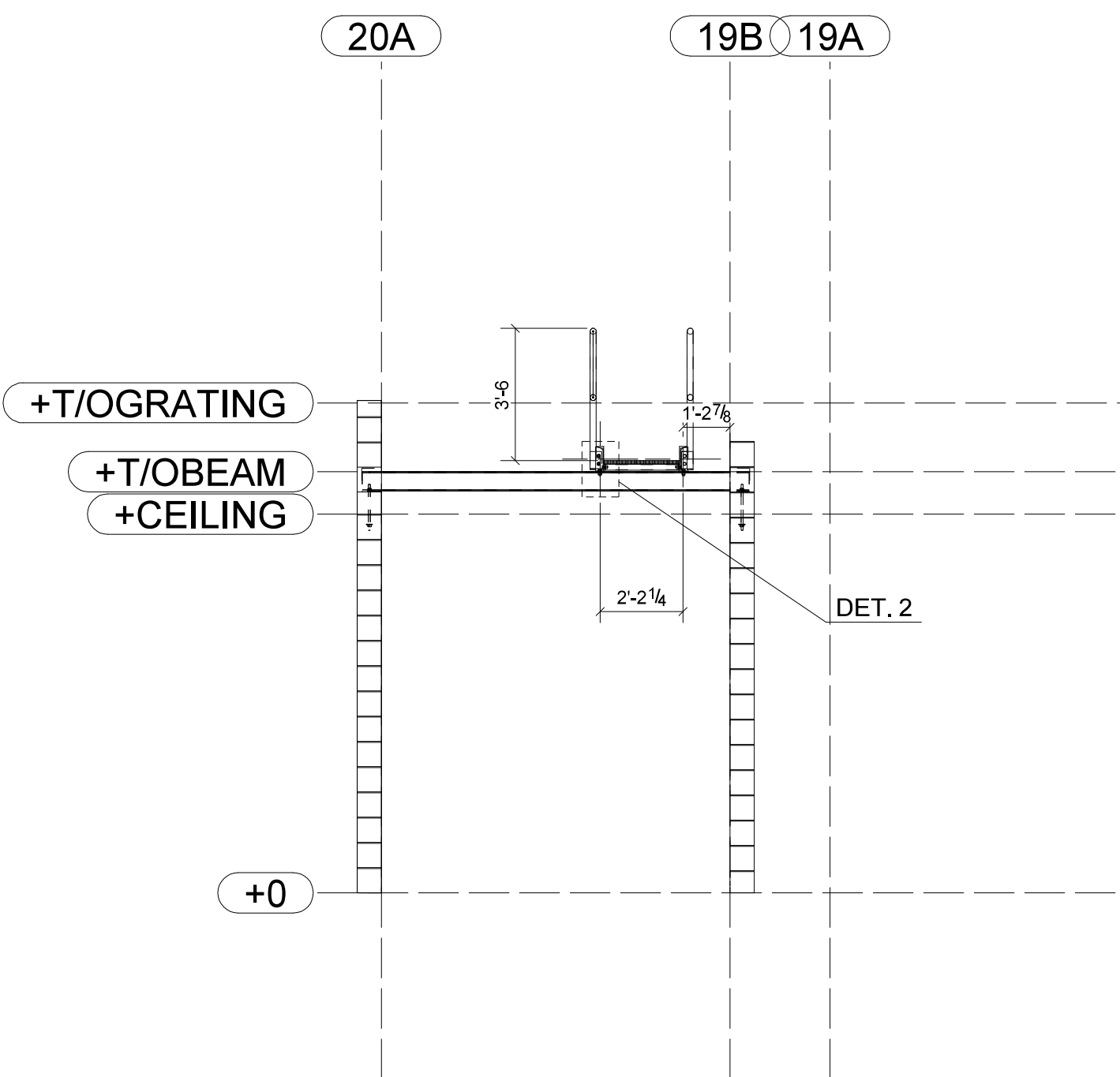
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STEELCAD PRO		
SCARBOROUGH, ON		
WWW.STEELCADPRO.COM		
http://www.steelcadpro.com		
info@steelcadpro.com		
+1(226)228-8452		
DESCRIPTION		
PROJECT NAME		
DRAWN BY		
DATE DRAWN		



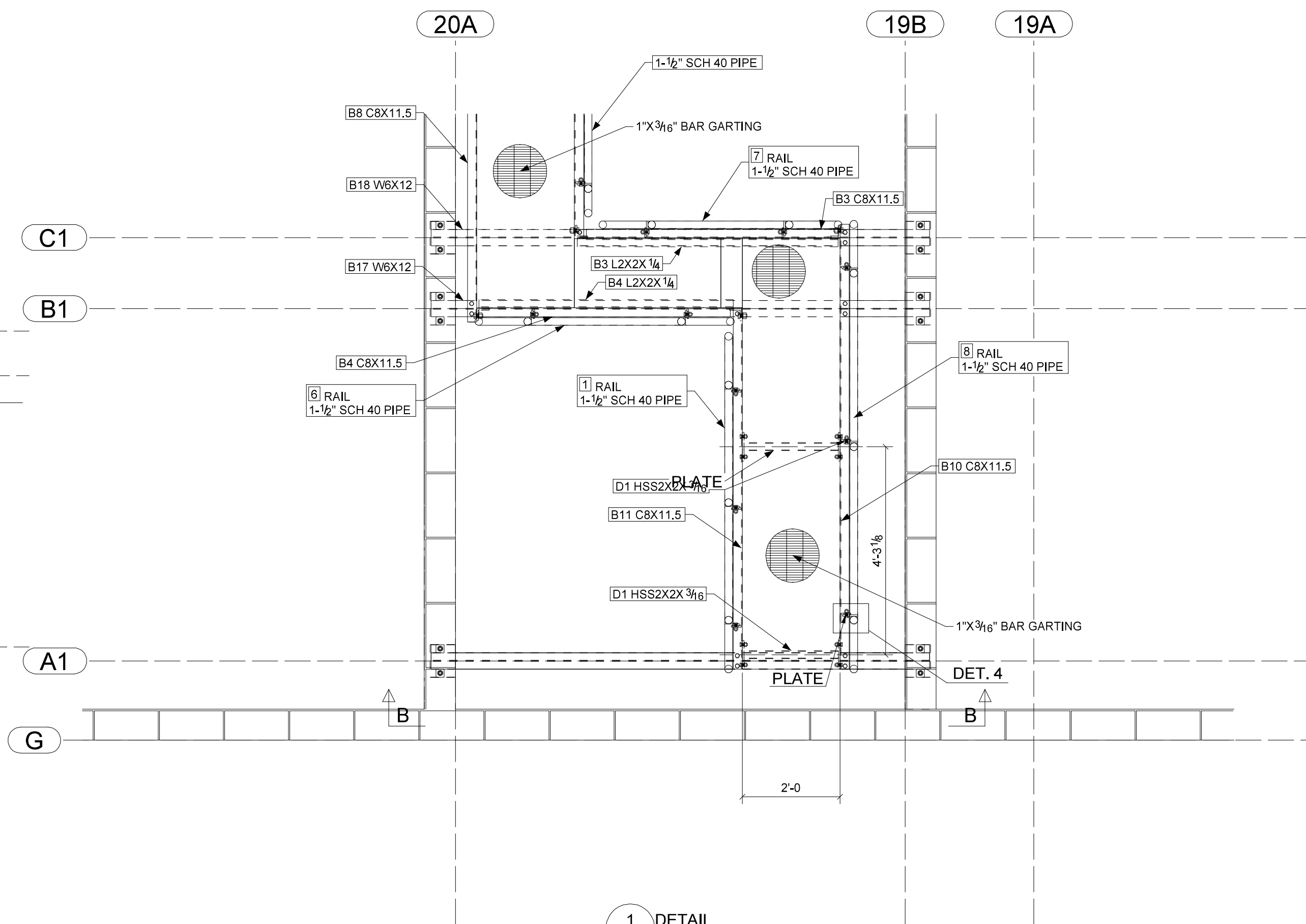
PLAN AT EL. +CEILING
1:48



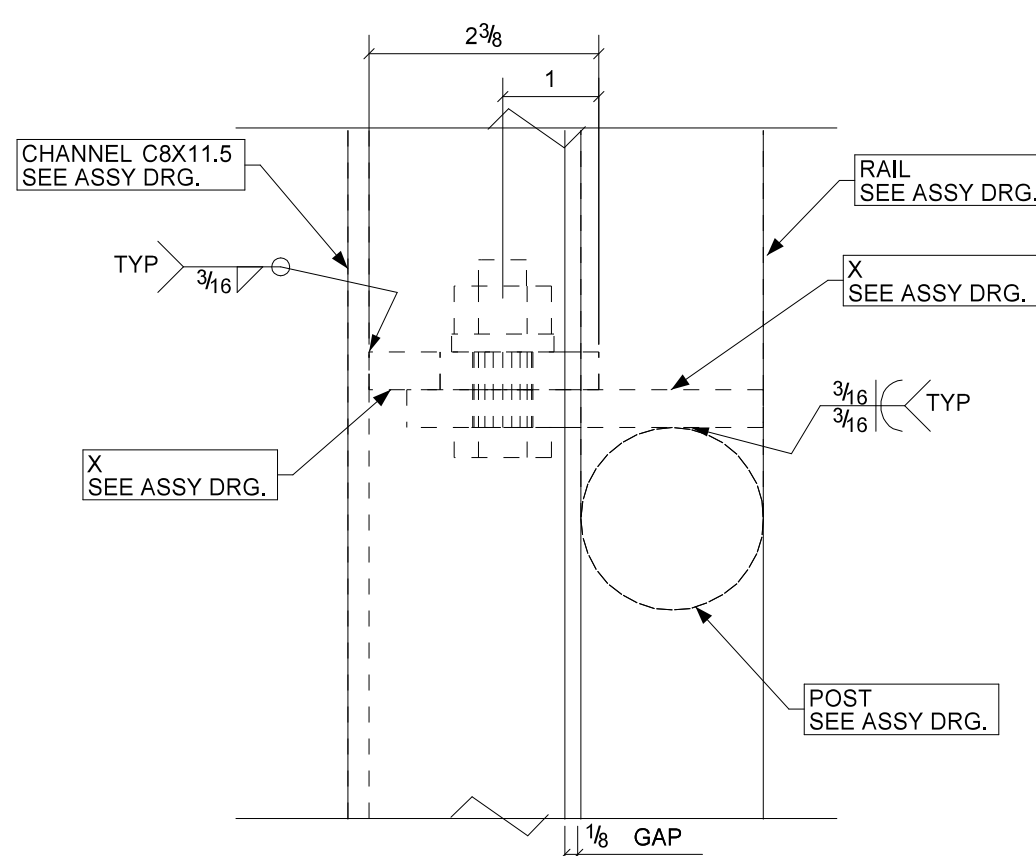
A SECTION
GA1 1:48



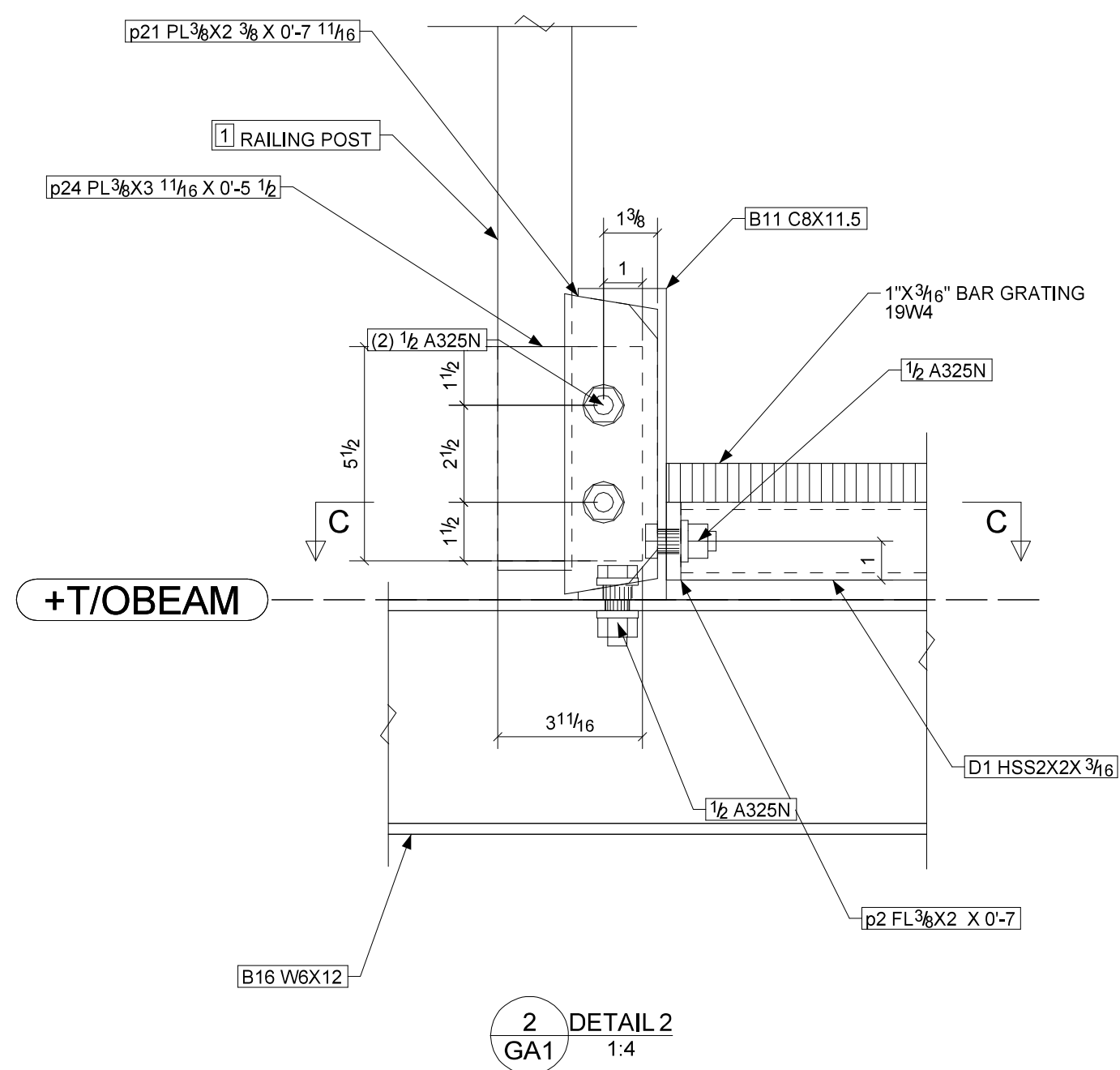
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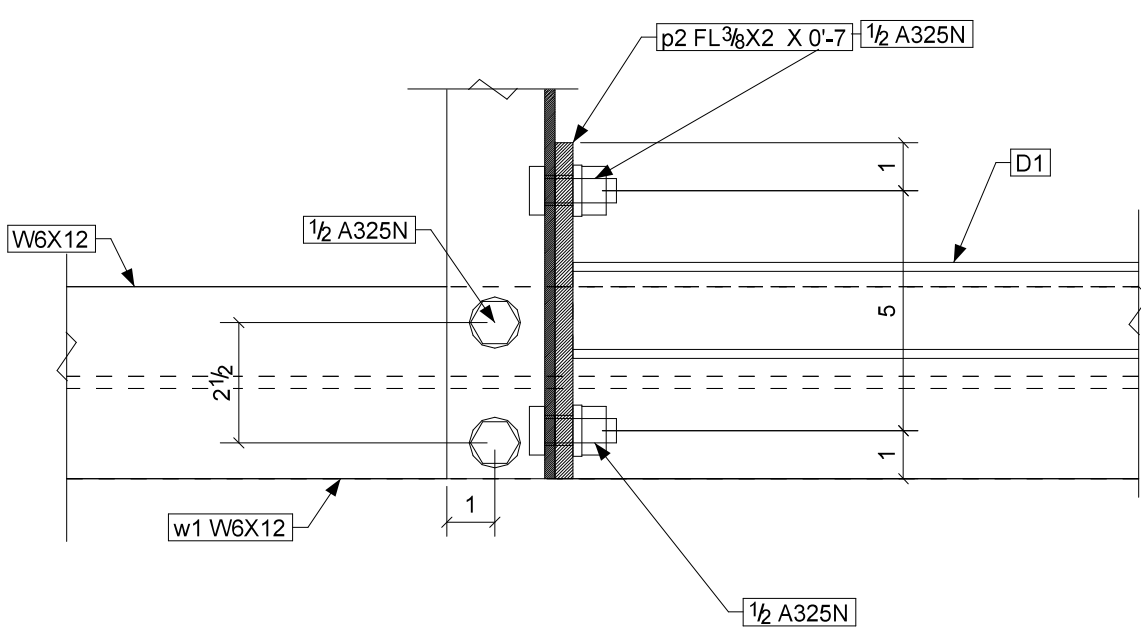
1 DETAIL
GA1 1:24



4 DETAIL RAILING POST
GA1 1:2

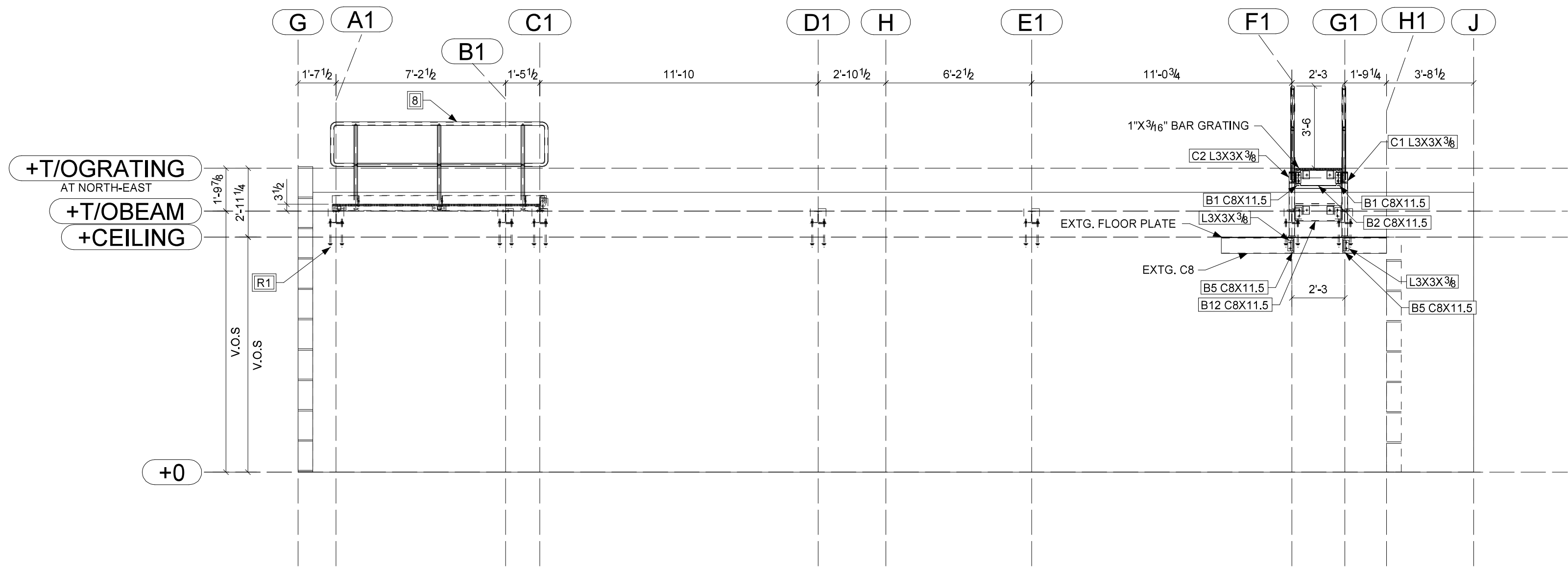


2 DETAIL 2
GA1 1:4

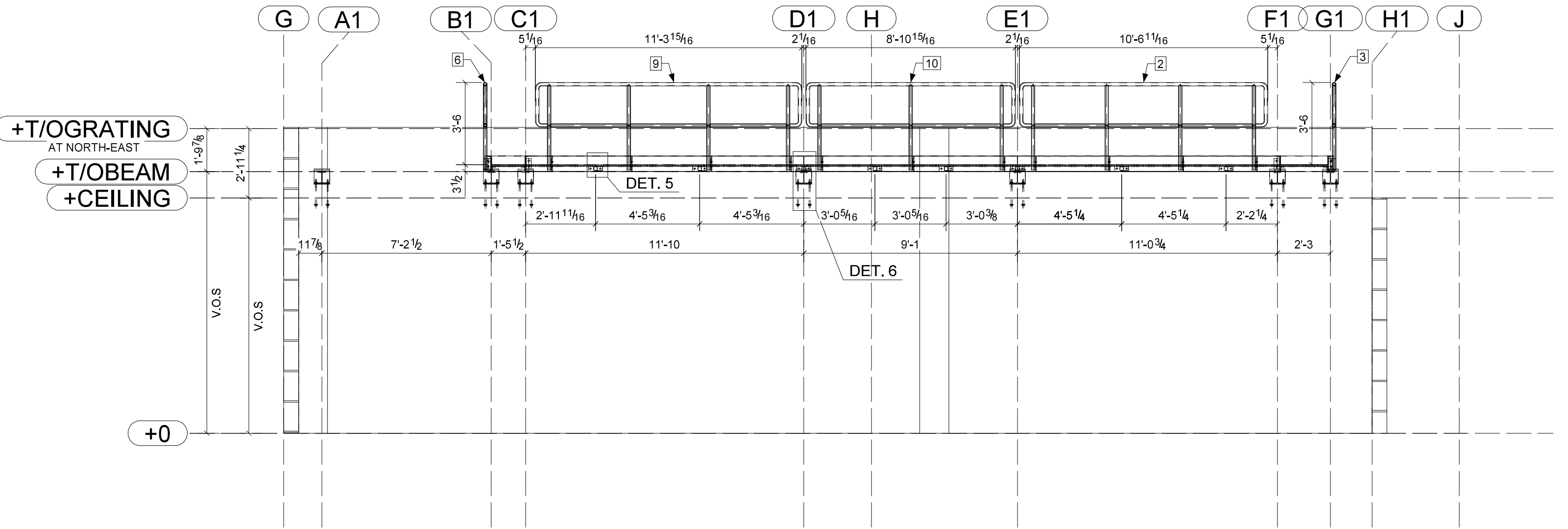


C SECTION
GA1

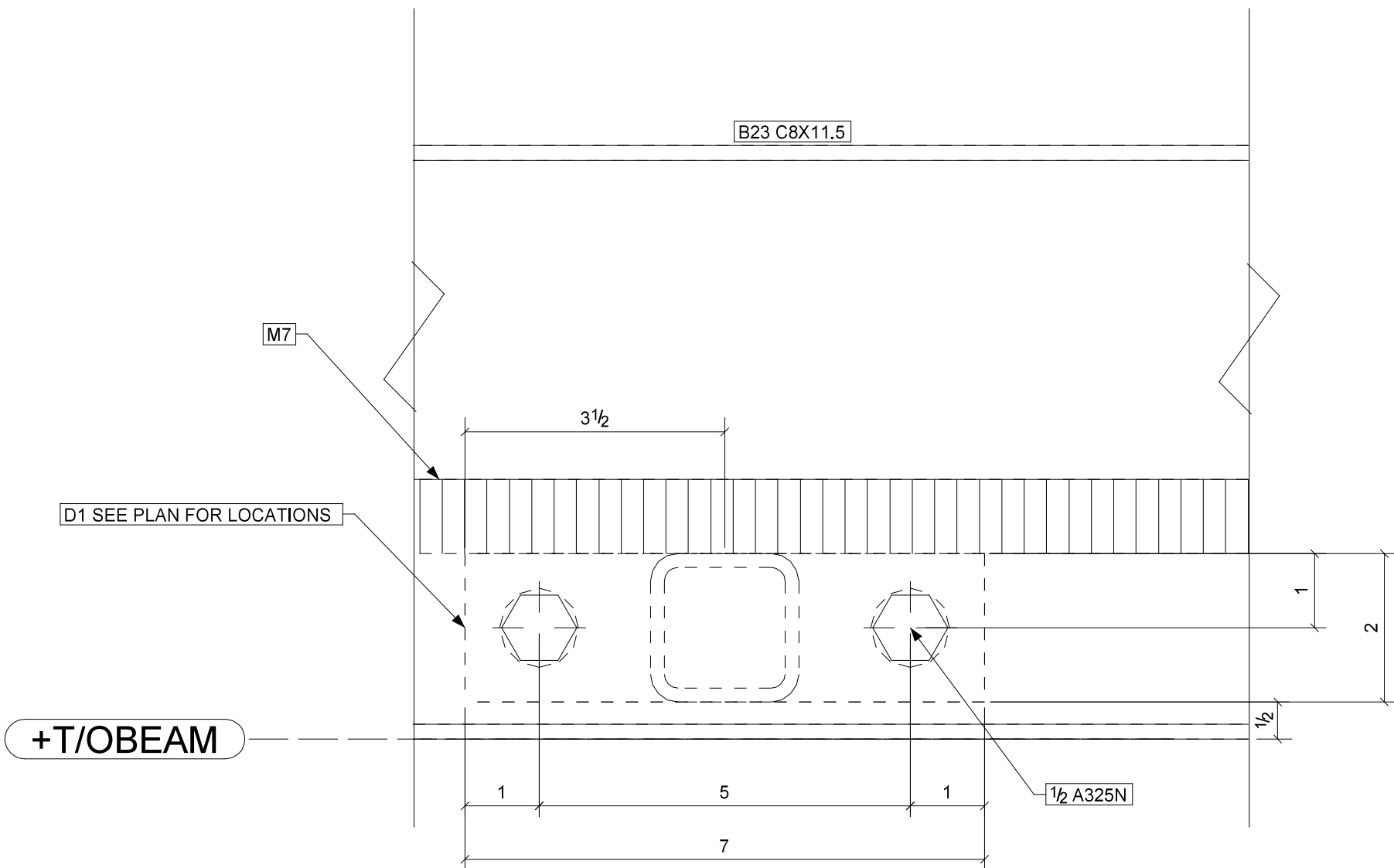
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DESCRIPTION		
PROJECT NAME		
DRAWN BY		
DATE DRAWN		



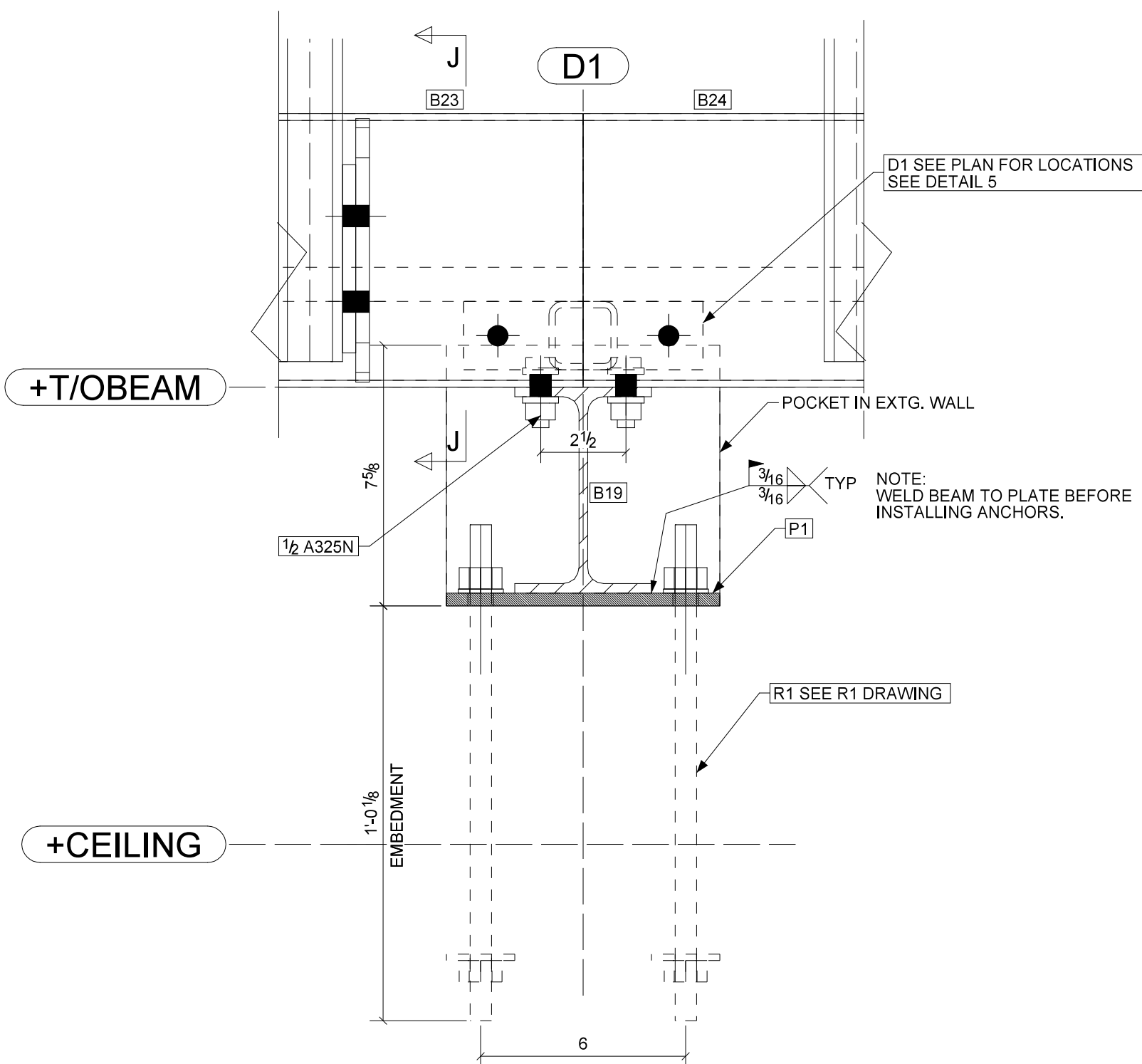
ELEVATION ON GRID 19B
1:48



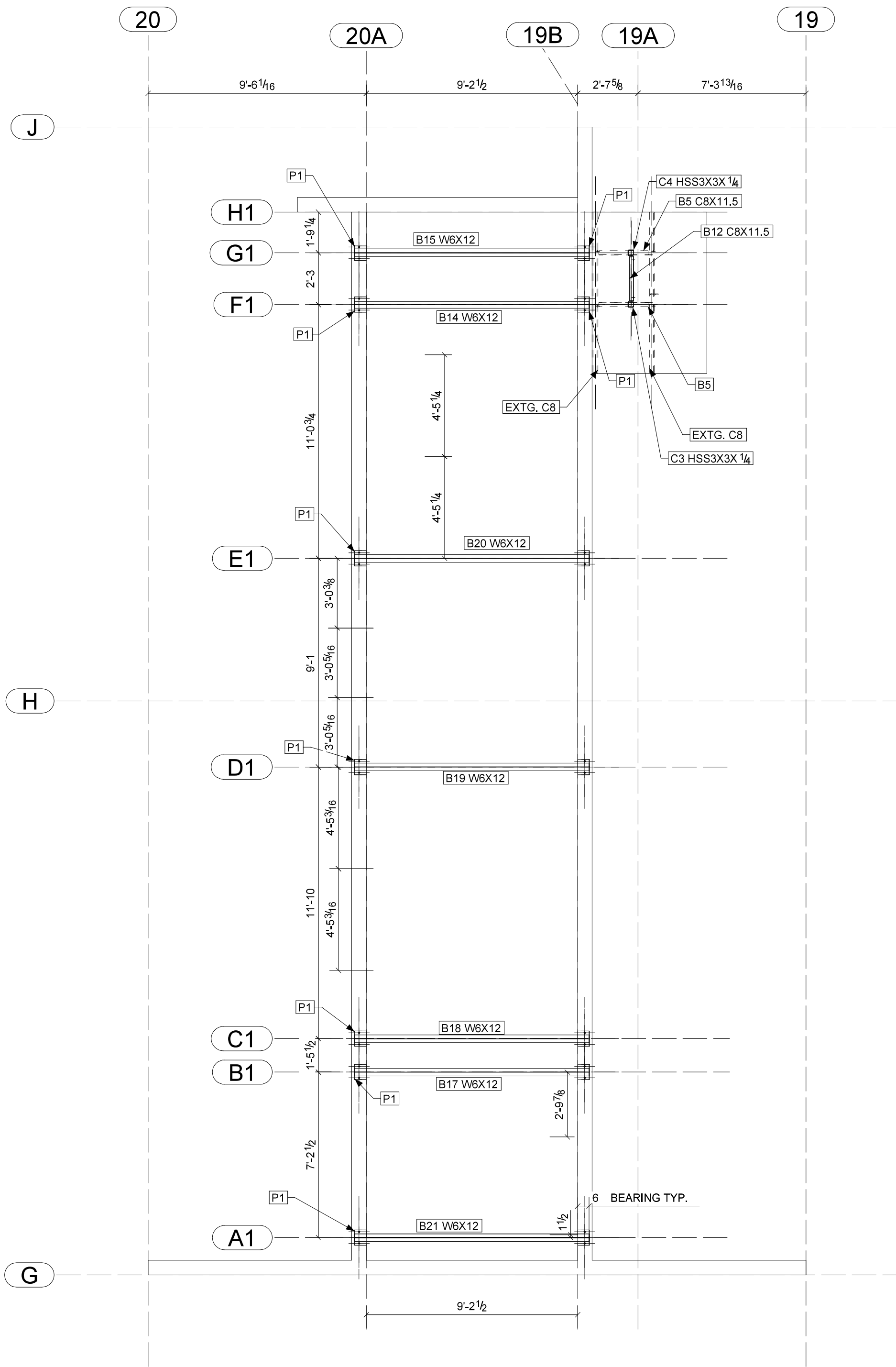
ELEVATION ON GRID 20A
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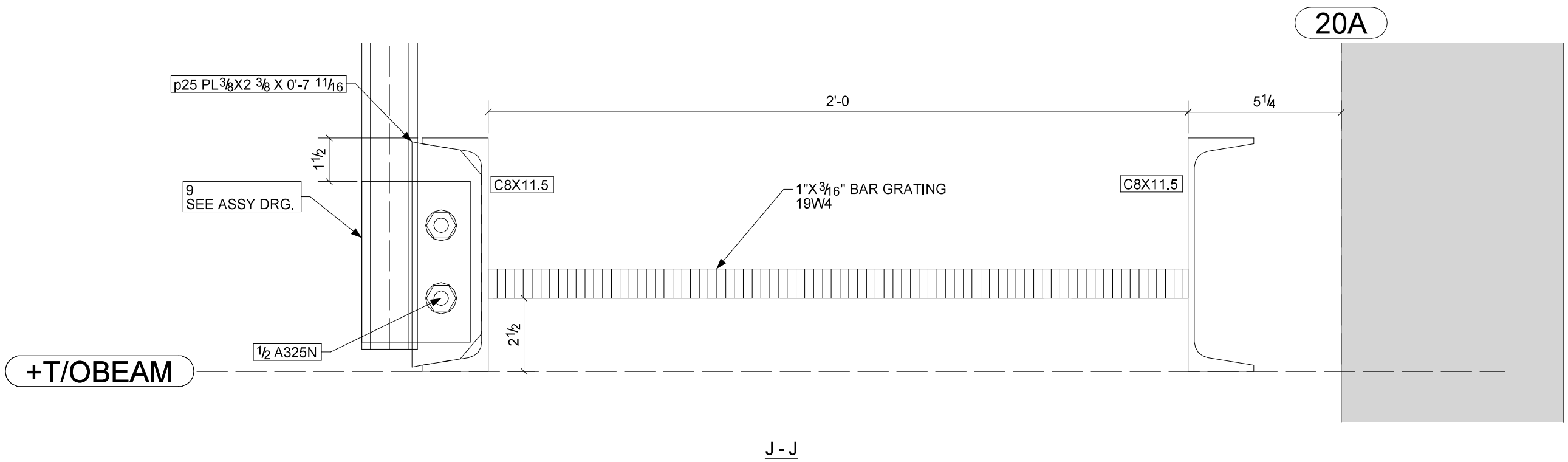
5 DETAIL D1
GA2 1:2



6 DETAIL
GA2 1:4



PLAN AT EL. +T/OBEAM
1:48



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REV	DESCRIPTION	DATE
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