CUSTOMER INFORMATION

CUSTOMER NAME: ADDRESS:	PORT OF FRIDAY HARBOR PO BOX 889 FRIDAY HARBOR, WA 98250
PROJECT NAME:	10 UNIT NT 51-42 HANGAR
PROJECT LOCATION:	FRIDAY HARBOR, WA

GENERAL NOTES

1. MATERIALS

ASTM DESIGNATION

STRUCTURAL STEEL PLATE	A529 OR A572 OR A1011SS	GRADE 55
FLANGE MATERIAL	A529	GRADE 55
COLD FORMED LIGHT GAUGE SHAPES	A1011SS	GRADE 55
STRUCTURAL CABLES	A475	GRADE EHS
HOT ROLLED MILL SHAPE	A992	GRADE 50
HOLLOW STRUCTURAL SECTIONS	A500	GRADE 8
PBR36 ROOF AND WALL PANELS	A653 OR A792	GRADE 80
STANDING SEAM ROOF	A653 OR A792	GRADE 50
BOLTS	A325	A325
BOLTS	GRADE 5	GRADE 5

2. DESIGN

- A. ALL STRUCTURAL STEEL SECTIONS AND WELDED PLATE MEMBER ARE DESIGNED IN ACCORDANCE WITH THE AISC 360-16 "SPECIFICATIONS FOR THE DESIGN, FABRICATING AND ERECTION OF STRUCTURAL STEEL BUILDING", ALLOWABLE STRESS DESIGN.
- B. ALL COLD FORMED MEMBERS ARE DESIGNED IN ACCORDANCE WITH AISI S100-16 "SPECIFICATIONS FOR DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS".
- C. ALL WELDING OF STRUCTURAL STEEL IS BASED ON AWSD1.1 2017 "STRUCTURAL WELDING CODE".
- 3. HIGH STRENGTH BOLT CONNECTIONS:

ALL HIGH STRENGTH BOLTS ARE TYPE ASTM A325 AND ARE TO BE INSTALLED ACCORDING TO THE "SNUG-TIGHT" CONDITIONS AS DEFINED BY THE, RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS, UNLESS NOTED OTHERWISE. ALSO, NOTE THAT BOLTS IN STANDARD HOLES DO NOT REQUIRE WASHERS PER THE, RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS, SECTION 6 (REFERENCE STEEL CONSTRUCTION AISC MANUAL 360-16)

4. A325 BOLT TIGHTENING REQUIREMENTS

ALL HIGH STRENGTH BOLTED CONNECTIONS ARE SUBJECT TO AXIAL TENSION AND OR SLIP CRITICAL. AS SUCH THE BOLTS MUST BE FULLY PRE-TENSIONED AND INSPECTED IN ACCORDANCE WITH THE AISC 360-16 SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 BOLTS AND THE APPLICABLE BUILDING CODE. WASHERS ARE NOT REQUIRED WHEN THE "TURN OF THE NUT" TIGHTENING PROCEDURE IS USED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE PROPER BOLT TIGHTNESS.

5. STRUCTURAL PRIMER

ALL STRUCTURAL MEMBERS WILL BE GIVEN ONE COAT OF MANUFACTURER'S STANDARD RUST-INHIBITIVE PRIMER MEETING THE PERFORMANCE REQUIREMENTS OF TT-P-6645. THIS IS NOT A FINISH COAT AND IS NOT INTENDED FOR PROLONGED EXPOSURE TO THE ELEMENTS. REFERENCE AISC 360-16, CODE OF STANDARD PRACTICE SECTION 6.5.1-6.5.4.

6. BUILDER / CONTRACTOR RESPONSIBILITIES

R & M STEEL COMPANY STANDARD PRODUCT SPECIFICATIONS APPLY AND R & M STEEL COMPANY DESIGN, FABRICATION, QUALITY CONTROL STANDARDS AND TOLERANCE WILL GOVERN. IN CASE OF DISCREPANCIES BETWEEN R & M STEEL COMPANY'S PLANS AND PLANS FOR OTHER TRADES R & M STEEL PLANS SHALL GOVERN. (SECTION 3.3 AISC 303-16 CODE OF STANDARD PRACTICES.)

IT IS THE RESPONSIBILITY OF THE BUILDER / CONTRACTOR TO OBTAIN APPROPRIATE APPROVALS AND NECESSARY PERMITS FROM CITY, COUNTY, STATE OR FEDERAL AGENCIES AS REQUIRED.

APPROVAL OF R & M STEEL COMPANY'S DRAWINGS CONSTITUTES THE BUILDER / CONTRACTOR'S ACCEPTANCE OF R & M STEEL COMPANY'S INTERPRETATION OF THE PURCHASE ORDER. (SECTION 4.2.1 AISC 303.16 CODE OF STANDARD PRACTICES.)

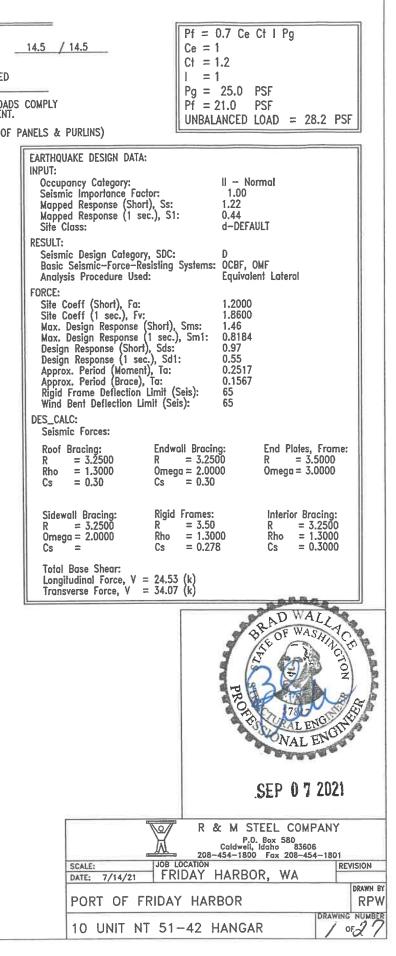
THE BUILDER / CONTRACTOR OR A/E FIRM IS RESPONSIBLE FOR THE OVERALL PROJECT. ALL INTERFACE AND COMPATIBILITY CONCERNING ANY MATERIAL NOT FURNISHED BY R & M STEEL COMPANY ARE TO BE CONSIDERED AND COORDINATED BY THE BUILDER / CONTRACTOR OR A/E FIRM UNLESS SPECIFIC DESIGN CRITERIA CONCERNING THIS INTERFACE BETWEEN MATERIALS IS FURNISHED AS PART OF THE PURCHASE ORDER. R & M STEEL COMPANY ASSUMPTIONS WILL GOVERN.

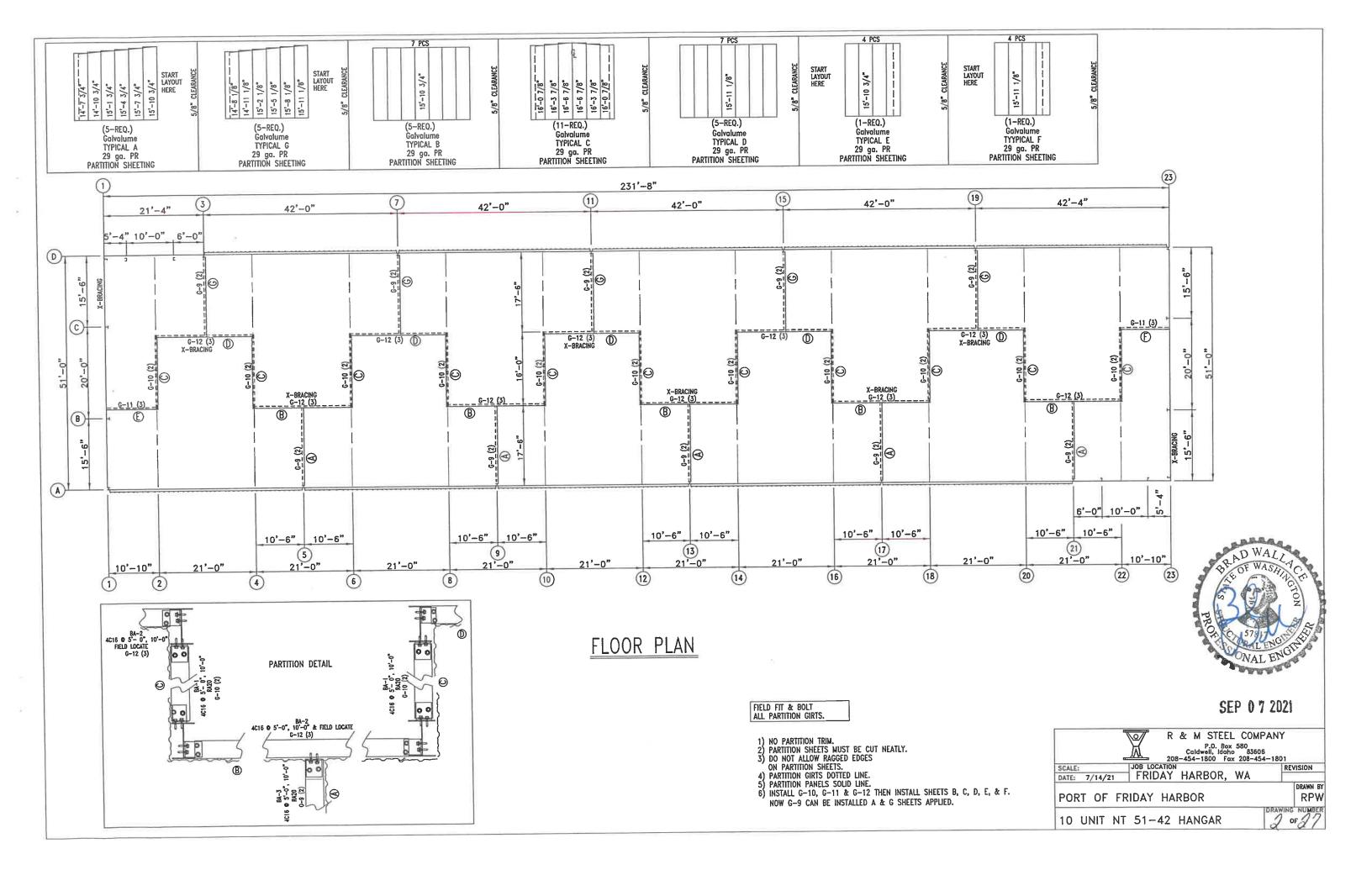
THE BUILDER / CONTRACTORS RESPONSIBLE FOR SETTING OF ANCHOR BOLTS AND ERECTION OF STEEL BUILDING COMPONENTS IN ACCORDANCE WITH R & M STEEL COMPANY'S BUILDING "FOR CONSTRUCTION" DRAWINGS. TEMPORARY SUPPORTS OR BRACING REQUIRED FOR THE BUILDING ERECTION WILL BE THE RESPONSIBILITY OF THE ERECTOR TO DETERMINE, FURNISH AND INSTALL. (SECTION 7.9.1 AISC 303.16 CODE OF STANDARD PRACTICES.)

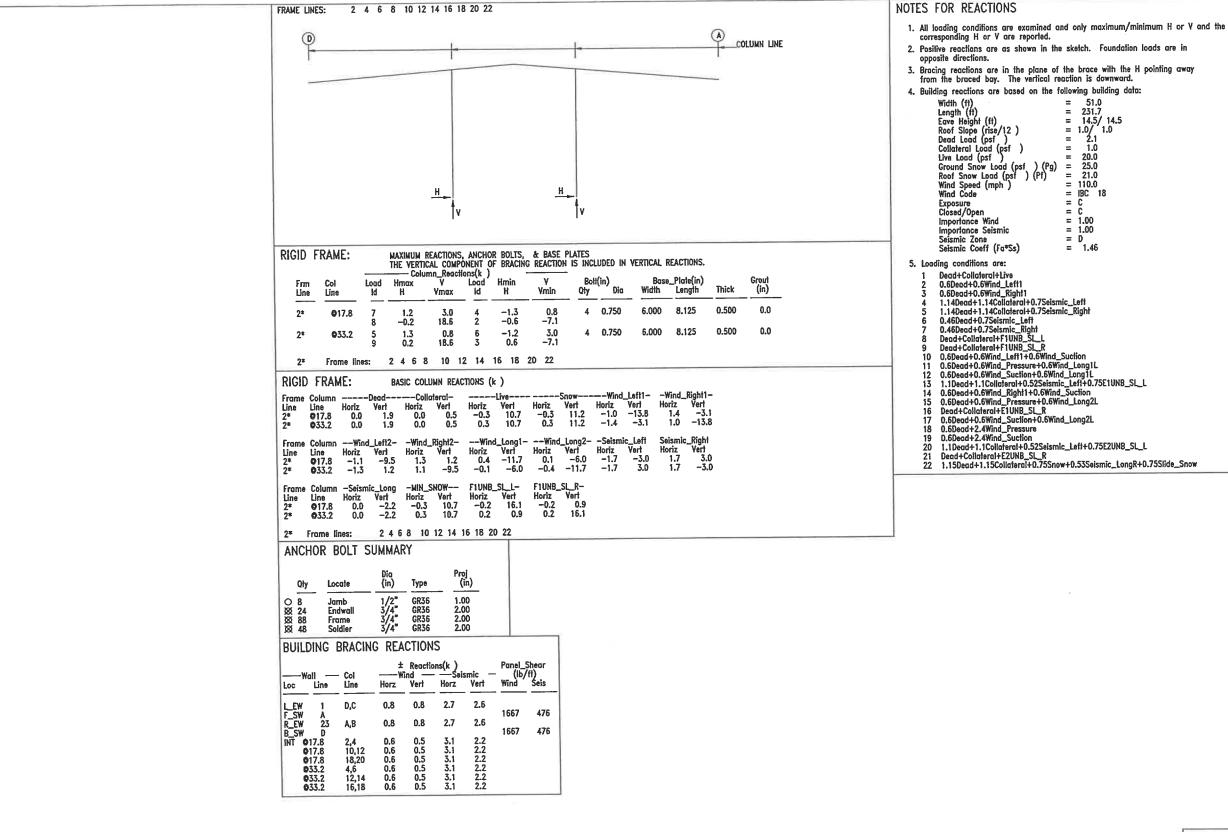
THE DESIGN OF THE ANCHOR BOLT EMBEDDMENT LENGTH IS THE RESPONSIBILITY OF THE FOUNDATION DESIGN ENGINEER. THE LENGTH PROVIDED BY R & M STEEL IS AN ESTIMATED LENGTH AND SHOULD BE ADJUSTED ACCORDING TO THE FOUNDATION DESIGN.

BUILDING LOADS / DESCRIPTION:

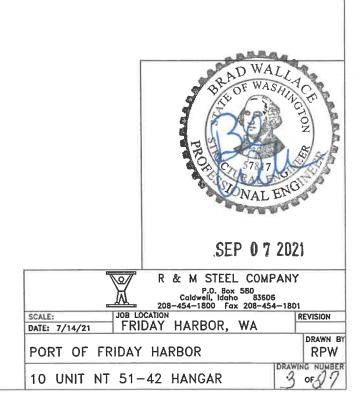
SUILDING LUADS /	DESCRIFTION:
WIDTH: 51 LENG ROOF PITCH: 1.0:12	TH: <u>231.67</u> Height: 1.0:12
THIS STRUCTURE IS DESIGNED AND APPLIED AS REQUIRED BY	UTILIZING THE LOADS INDICATED
THE CONTRACTOR / BUILDER I WITH THE REQUIREMENTS OF	IS TO CONFIRM THAT THESE LOA THE LOCAL BUILDING DEPARTMENT
ROOF DEAD LOAD:	2.10 PSF (ROOF
COLLATERAL LOAD:	1.00 PSF
ROOF LIVE LOAD:	20.00 PSF
GROUND SNOW LOAD: (Pg)	25.00 PSF
ROOF SNOW LOAD: (Pf)	
BASIC WIND SPEED:	
SEISMIC COEFFICIENT:	1.460
IMPORTANCE FACTOR	<u> </u>
WIND LOAD:	1.00
SNOW LOAD:	1.00
SEISMIC:	1.00
ROOF PANELS:	
COLOR: Ga	lvalume
WALL PANELS:	=
COLOR: Pa	cific White
PARTITION PANELS:	=
COLOR: 29 Gar	Prime Rib Galvalume
TRIM COLORS:	_
GABLE:	Pacific White
EAVE:	Pacific White
CORNER:	Pacific White
DOOR & WINDOW:	Pacific White
GUTTER:	
DOWNSPOUTS:	
BASE (OPTIONAL):	Pacific White
8" JAMB/HEAD:	Pacific White
SOFFIT PANEL:	
GABLE EXT:	
EAVE EXT:	
LINER PANEL:	_
LEFT :	
RIGHT:	
FRONT:	
BACK : ROOF :	
ACCREDITED ACCREDITED AC 472	CERTIFIED CSA A660 CSA W471





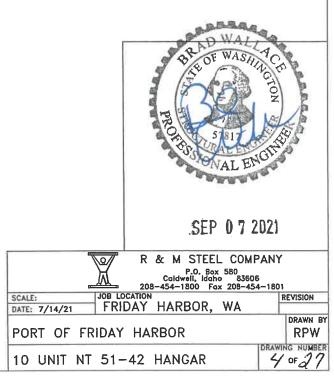


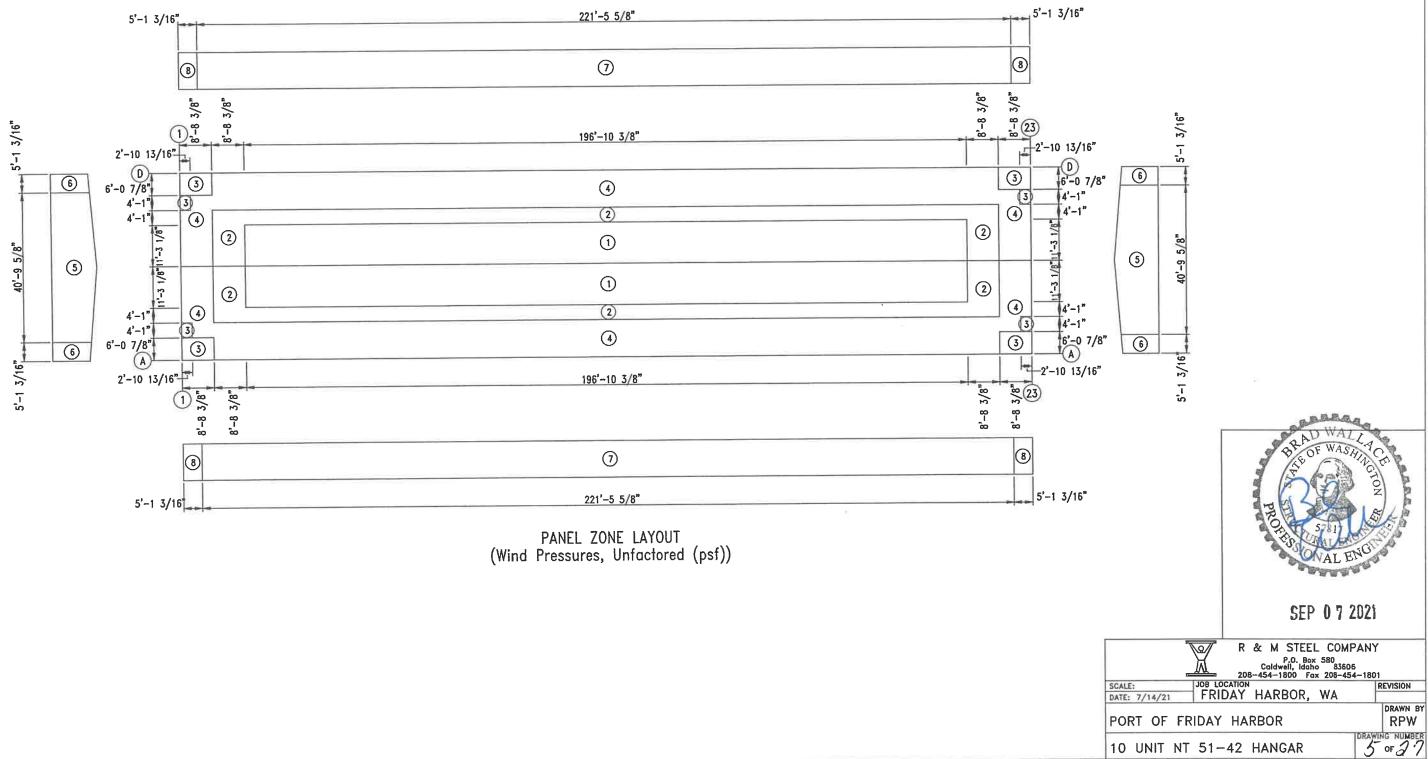
Pf = 0.7 Ce Ct | PgCe = 1 Ct = 1.21 = 1 Pg = 25.0 PSF Pf = 21.0 PSF UNBALANCED LOAD = 28.2 PSF



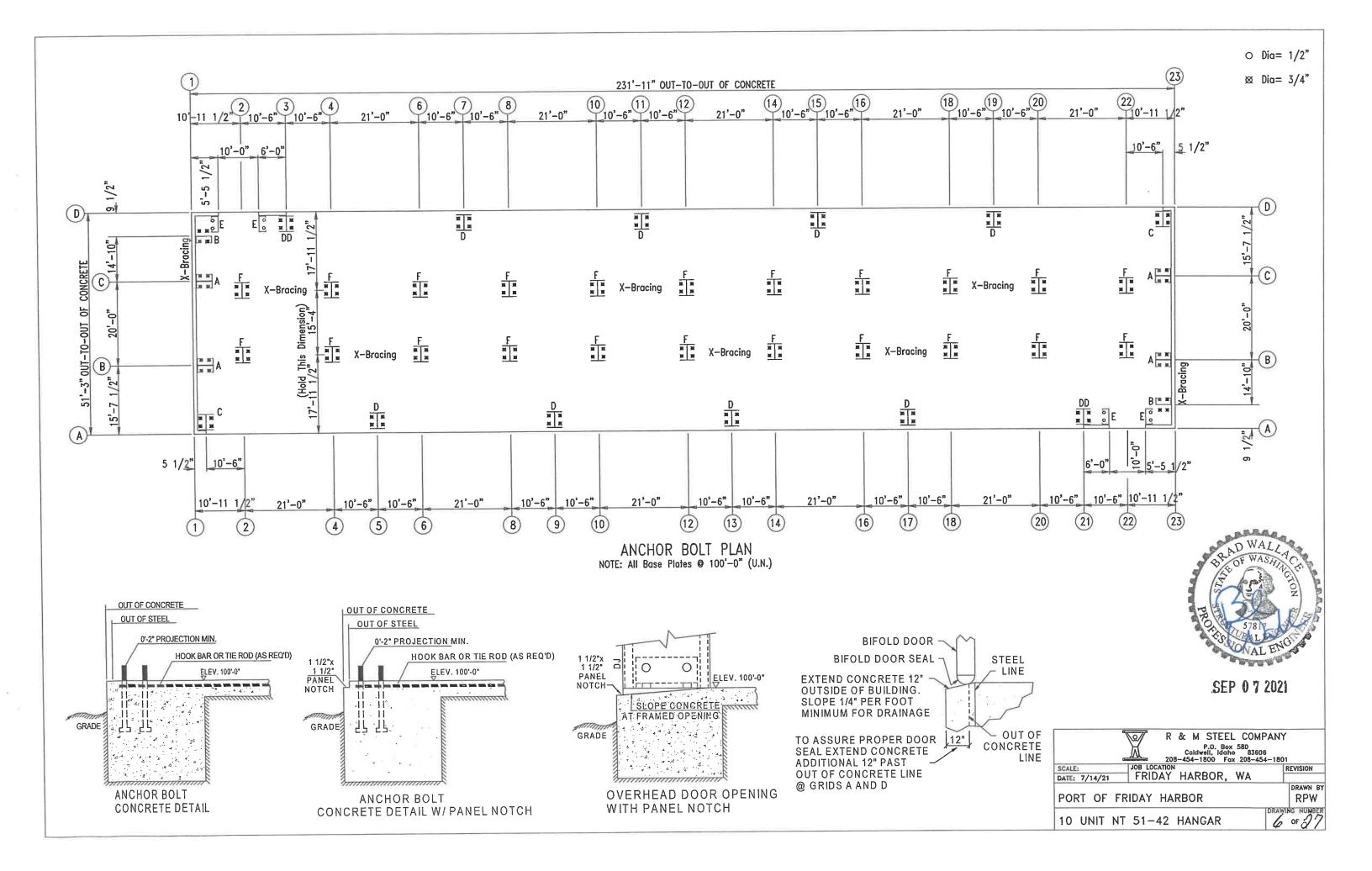
ENDWALL COLUMN: BASIC COLUMN REACTIONS (k) Wind	ENDWALL	COLUMN:		MAXIMUM REACTIONS, ANCH	ior bolts, & b	ASE PLATES			
Frm Col Daad Collat Live Snow Wind_Left1 Wind_Right1 Wind_Left2 Wind_Right2 Press Line Line Vert Vert Vert Horz Vert <	Frm (Line L		Col Hmax H	lumn_Reactions(k) V Load Hmin Vmax Id H -0.9 11 -0.6	V Vmin	Bolt(in) Qty Dia 4 0.750		ength Thi	ick <u>(in)</u> 250 0.0
Wind Wind_Long1 Wind_Long2 Seis_Left Seis_Right -MIN_SNOW E1UNB_SL_L- Frm Col Suct Wind_Long1 Wind_Long2 Seis_Left Seis_Right -MIN_SNOW E1UNB_SL_L- Line Line Horz Horz Vert Horz Vert 1 D 1.2 0.0 -0.1 -0.7 -3.4 -3.4 0.0 3.6 0.0 0.7 0.0 D.7 1 D 1.2 0.0 -0.1 -5 0.0 3.3 3.4 -3.6 0.0 2.7	1	C 12 B 14	0.0 1.6 0.0	2.8 6 0.0 -1.5 11 -1.5 4.5 7 0.0 -1.5 15 -1.5	-2.3	4 0.750 4 0.750	6.500 6	5.000 0.2	250 0.0 250 0.0
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		16 A 17 1	0.0	3.4 14 1.6 1.7 15 -0.6 11.5	-1.5 1.7	4 0.750		5.000 0.3	
Frm Cot E1UNB_SL_R- Line Line Horz Vert 1 D 0.0 0.2 1 C 0.0 0.9 1 B 0.0 2.8	23	A 10 5 B 12 20	0.0 1.6 0.0	-0.9 11 -0.6 2.8 6 0.0 -1.5 11 -1.5 4.5 7 0.0	-2.3 -1.5 -2.3	4 0.750 4 0.750	6.500 6	6.000 0.2	250 0.0 250 0.0
1 A 0.0 0.7 Wind	23 23	C 14 21 D 17	D.0	-1.5 15 -1.5 3.4 14 1.6 1.7 15 -0.6 11.5	-1.4 -1.5 1.7	4 0.750 4 0.750		6.000 0.2 6.000 0.3	250 0.0 575 0.0
	SOLDIER	COLUMN:		MAXIMUM REACTIONS, ANC	HOR BOLTS, & B	ASE PLATES			
23 B 0.5 0.1 2.2 2.3 0.0 -2.1 0.8 -2.6 0.0 -1.3 0.8 -1.8 -2.4 23 C 0.5 0.1 2.2 2.3 0.0 -1.8 0.0 -3.0 0.0 -1.0 0.0 -2.1 -2.5 23 C 0.5 0.1 2.2 2.3 0.0 -1.8 0.0 -3.0 0.0 -2.1 -2.5 23 D 3.8 0.0 7.6 1.0 0.0 -0.5 0.0 -0.9 0.0 -0.3 0.0 -0.6 -1.0	Frm Line	Col Loo Line Id	d Hmox H	olumn_Reactions(k) V Load Hmin Vmax Id H	V Vmin	Bolt(in) Qty Dia	Base_P Width L	Plate(in) Length Th	Grout ick (in)
Wind Frm Col Suct Wind_Long1 Wind_Long2 Seis_Left Seis_Right —MIN_SNOW E2UNB_SL_L- Line Line Horz Horz Vert Horz Vert Horz Vert Horz Vert Horz Vert Line Line Horz Horz Vert Horz Vert Horz Vert Horz Vert	5	A 18		4.0 19 -3.7 8.8	0.7	4 0.750	6.000 6	6.000 0.3	375 0.0
23 A 1.2 0.0 -0.9 -0.1 -0.7 -3.4 -3.4 0.0 3.6 0.0 0.7 0.0 0.7 23 B 2.7 0.1 -3.0 0.0 -1.6 0.0 3.3 3.4 -3.6 0.0 2.2 0.0 2.7 23 C 2.7 0.0 -1.8 0.0 -2.9 0.0 0.1 0.0 -0.1 0.0 2.2 0.0 1.0		A 18	0.0	4.0 19 -3.7 8.8		4 0.750	6.000 6		375 0.0
23 D 1.1 0.0 -0.5 0.0 -1.0 0.0 -0.1 0.0 0.7 0.0 0.0 0.0 0.1	13	A 18 1 A 18	0.0	4.0 19 -3.7 8.8 4.0 19 -3.7		4 0.750 4 0.750	6.000 6		375 0.0 375 0.0
Frm Col E2UNB_SL_R- Line Line Horz Veri 23 A 0.0 0.2 23 B 0.0 0.9	21	A 10	0.0	B.B 4.0 19 -3.7		4 0,750			375 0.0
23 A 0.0 0.2 23 B 0.0 0.9 23 C 0.0 2.8 23 D 0.0 0.7	3	1 D 11		8.8 4.0 19 -3.7 8.8	0.7	4 0.750	6.000	6.000 0.3	375 0.0
SQLDIER COLUMN: BASIC COLUMN REACTIONS (k)	7	D 11	0.0 3 3.4 0.0	6.6 4.0 19 −3.7 8.8	0.7	4 0.750	6.000	6.000 0.3	375 0.0
Wind Wind From Wind Suct Long L	11	D 11		4.0 19 -3.7 8.8	0.7	4 0.750	6.000	6.000 0.1	375 0.0
Frm Col Dead Live Snow Press Wind_Suct Long1 Line Line Vert Vert Horz Horz Vert Horz Fress Horz	15	D 11 2		4.0 19 -3.7 8.1		4 0.750			375 0.0
Image Cold Dedd Live Show Press Wind Long Line Line Line Vert Vert Horz Horz Vert Horz 5 A 6.7 2.1 0.6 1.4 -1.5 -1.4 -1.0 9 A 6.7 2.1 0.6 1.4 -1.5 -1.4 -1.0 13 A 6.7 2.1 0.6 1.4 -1.5 -1.4 -1.0 17 A 6.7 2.1 0.6 1.4 -1.5 -1.4 -1.0 21 A 6.7 2.1 0.6 1.4 -1.5 -1.4 -1.0 3 D 6.7 2.1 0.6 1.4 -1.5 -1.4 -1.0 3 D 6.7 2.1 0.6 1.4 -1.5 -1.4 -1.0 11 D 6.7 2.1 0.6 1.4 -1.5 -1.4 -1.0 15 D 6.7 2.1 0.6 1.4 -1.5 <td>19</td> <td>D 11</td> <td></td> <td>4.0 19 -3.7 9.3</td> <td>0.7</td> <td>4 0.750</td> <td>6.000</td> <td>6.000 0.</td> <td>375 0.0</td>	19	D 11		4.0 19 -3.7 9.3	0.7	4 0.750	6.000	6.000 0.	375 0.0
								45	BRAD W

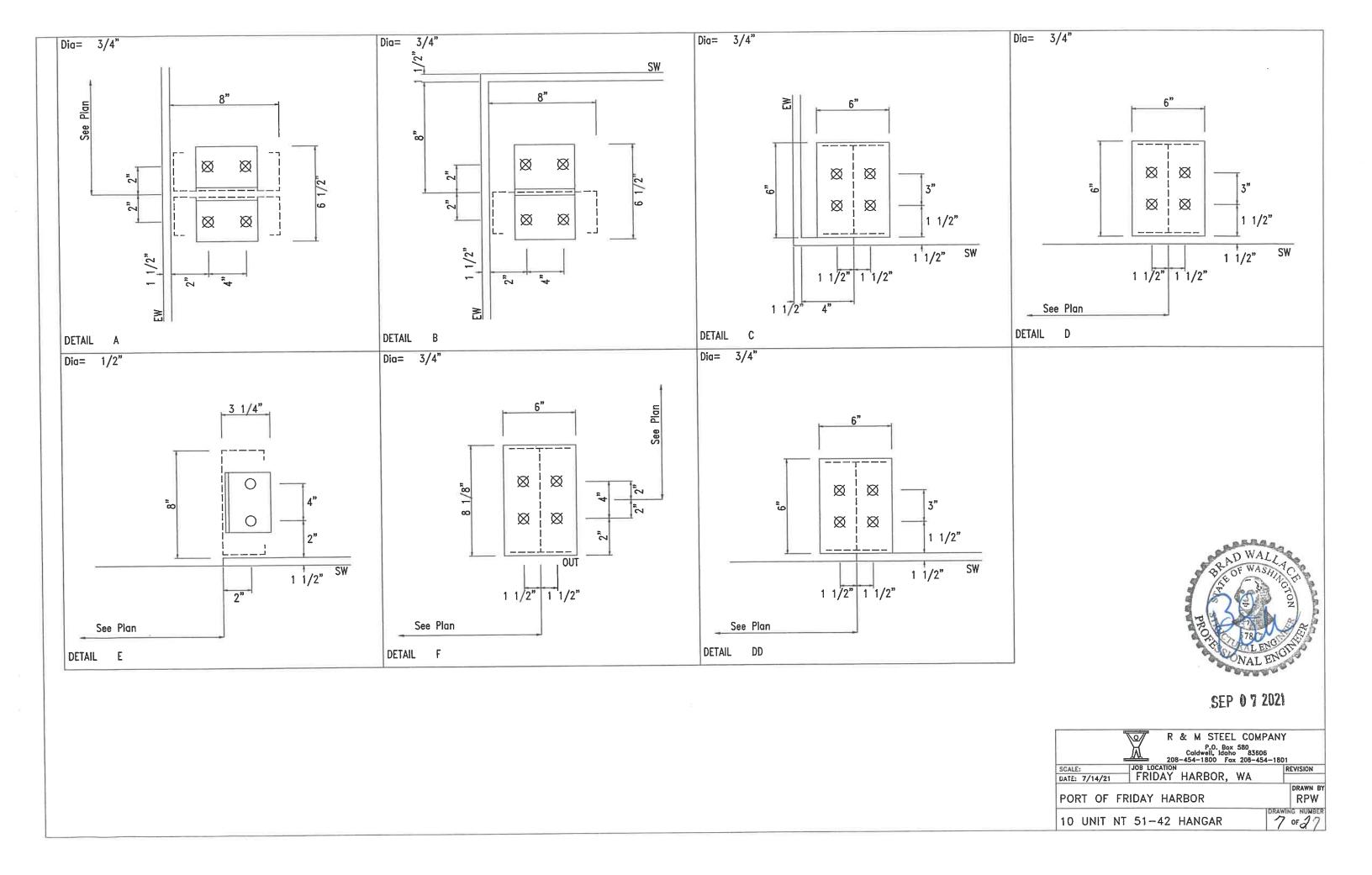
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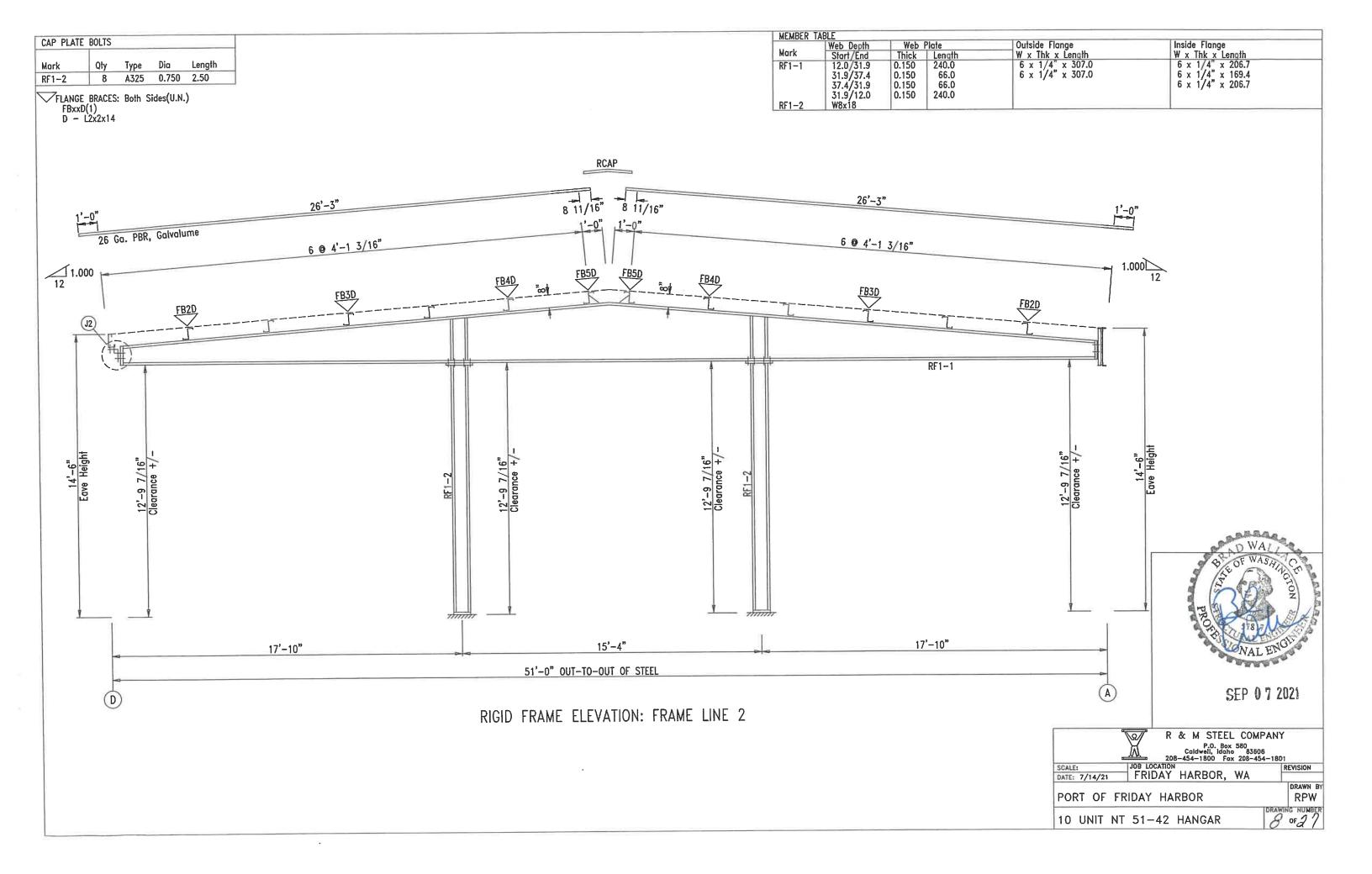


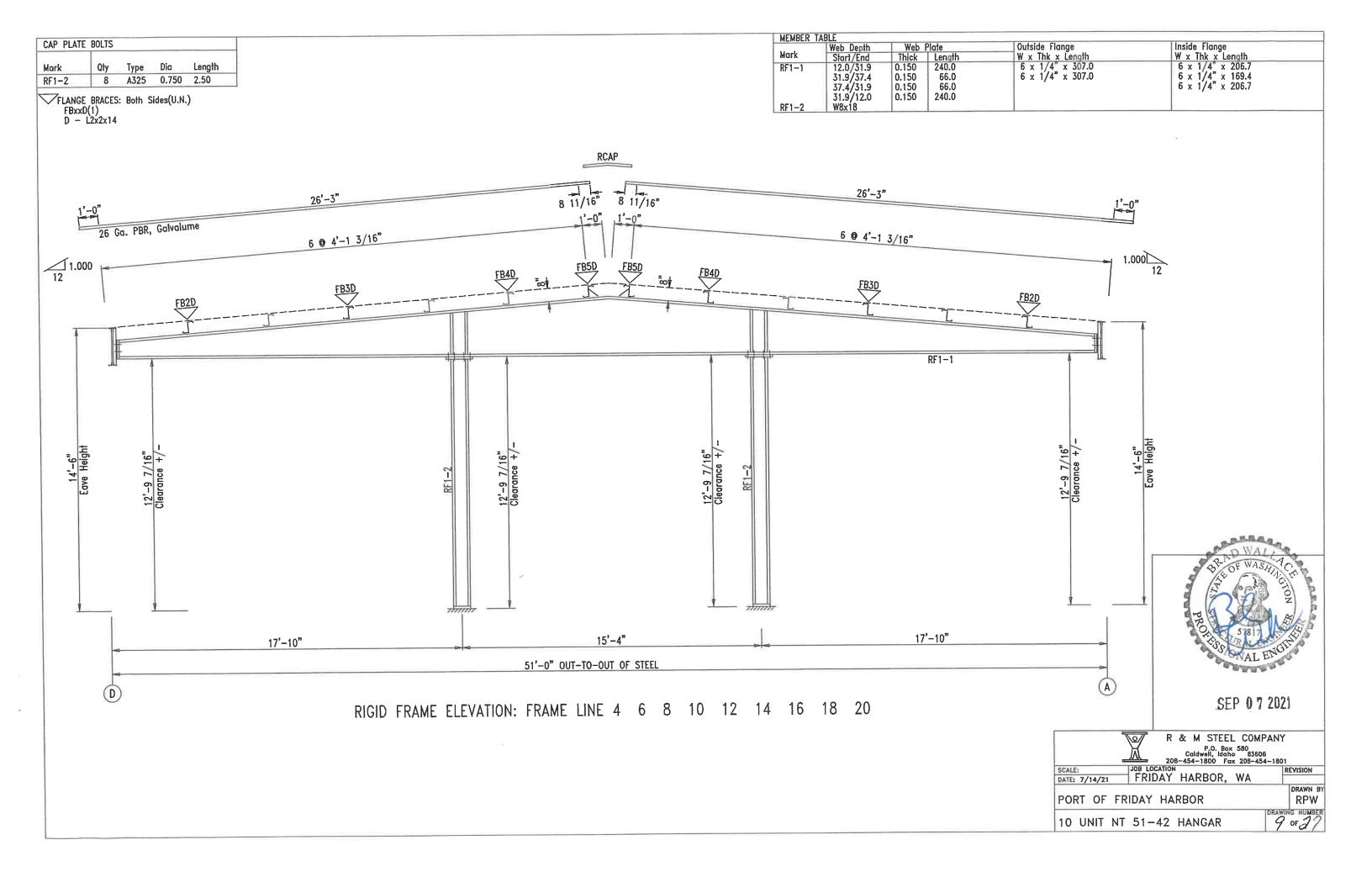


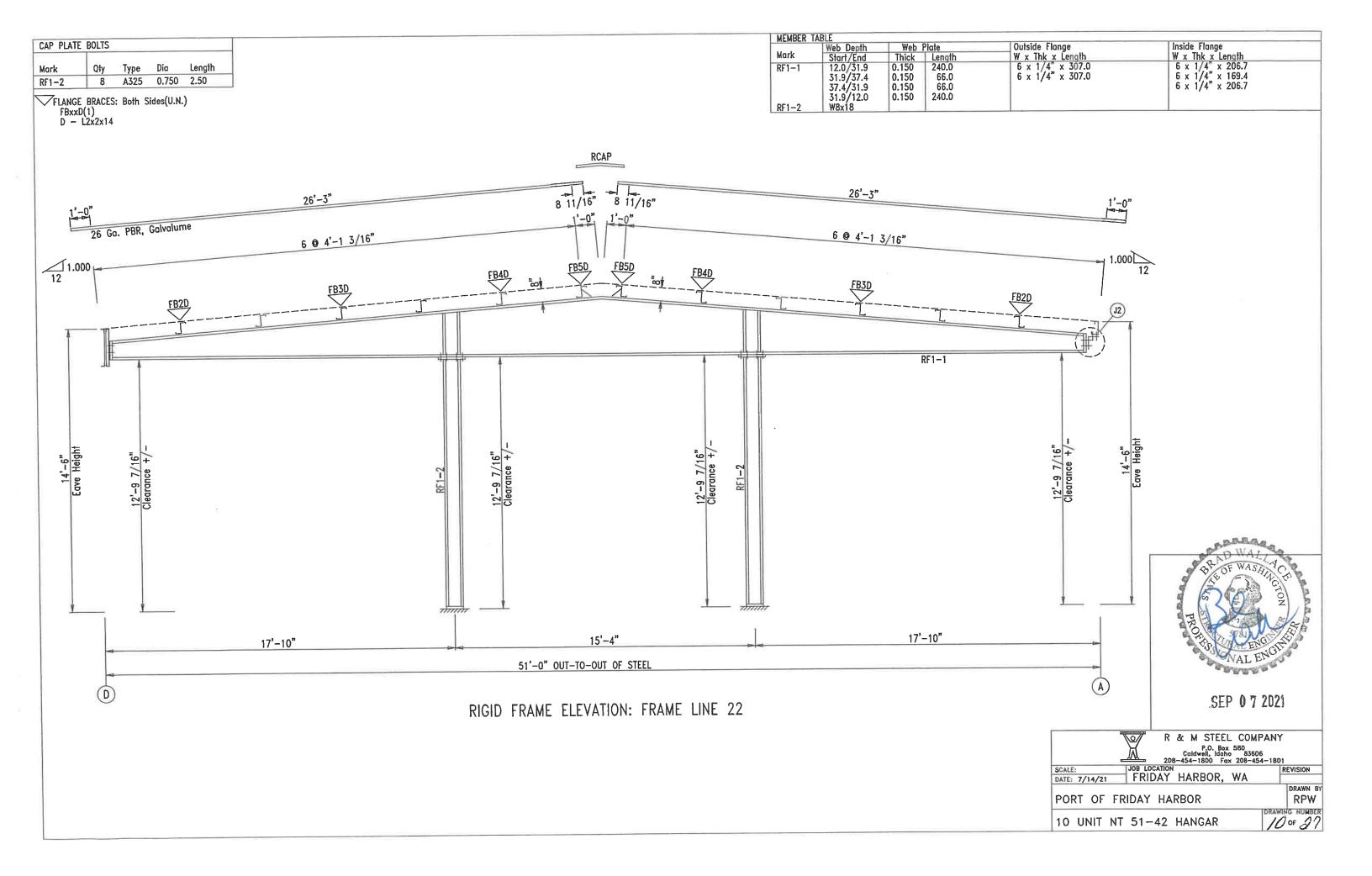
COMPONENTS AND CLADDING			(Unfactored)			
	Member		Panel			
O Id	Pressure	Suction	Pressure	Suction		
1	16.00	-20.60	16.00	-23.94		
2	16.00	-29.87	16.00	-41.66		
3	16.00	-44.29	16.00	-74.93		
4	16.00	-39.76	16.00	-55.06		
5	19.35	-21.35	23.94	-31.92		
6	19.35	-22.84	23.94	-31.92		
7	19.40	-21.30	23.90	-31.90		
8	19.40	-22.79	23.90	-31.90		

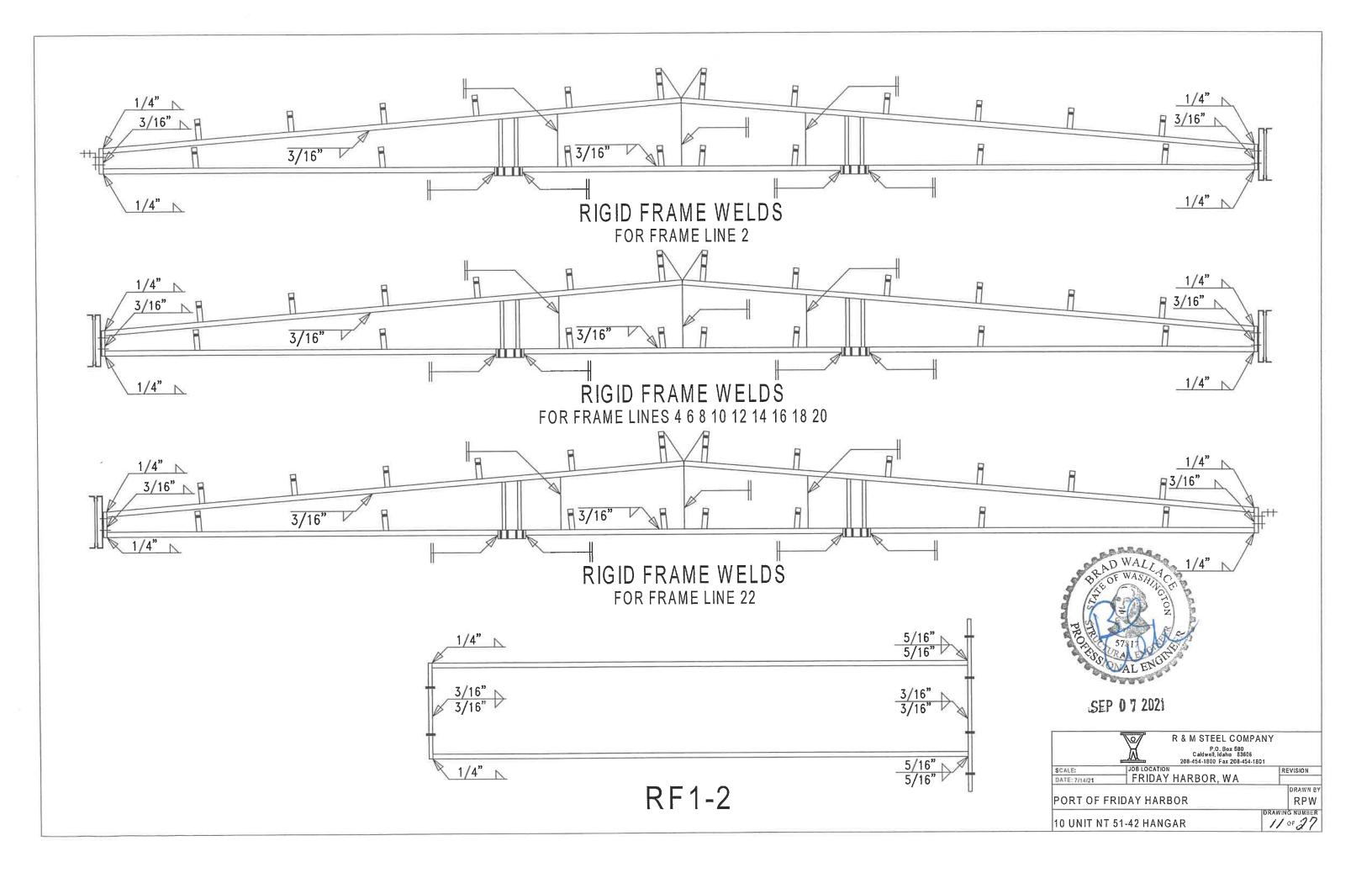


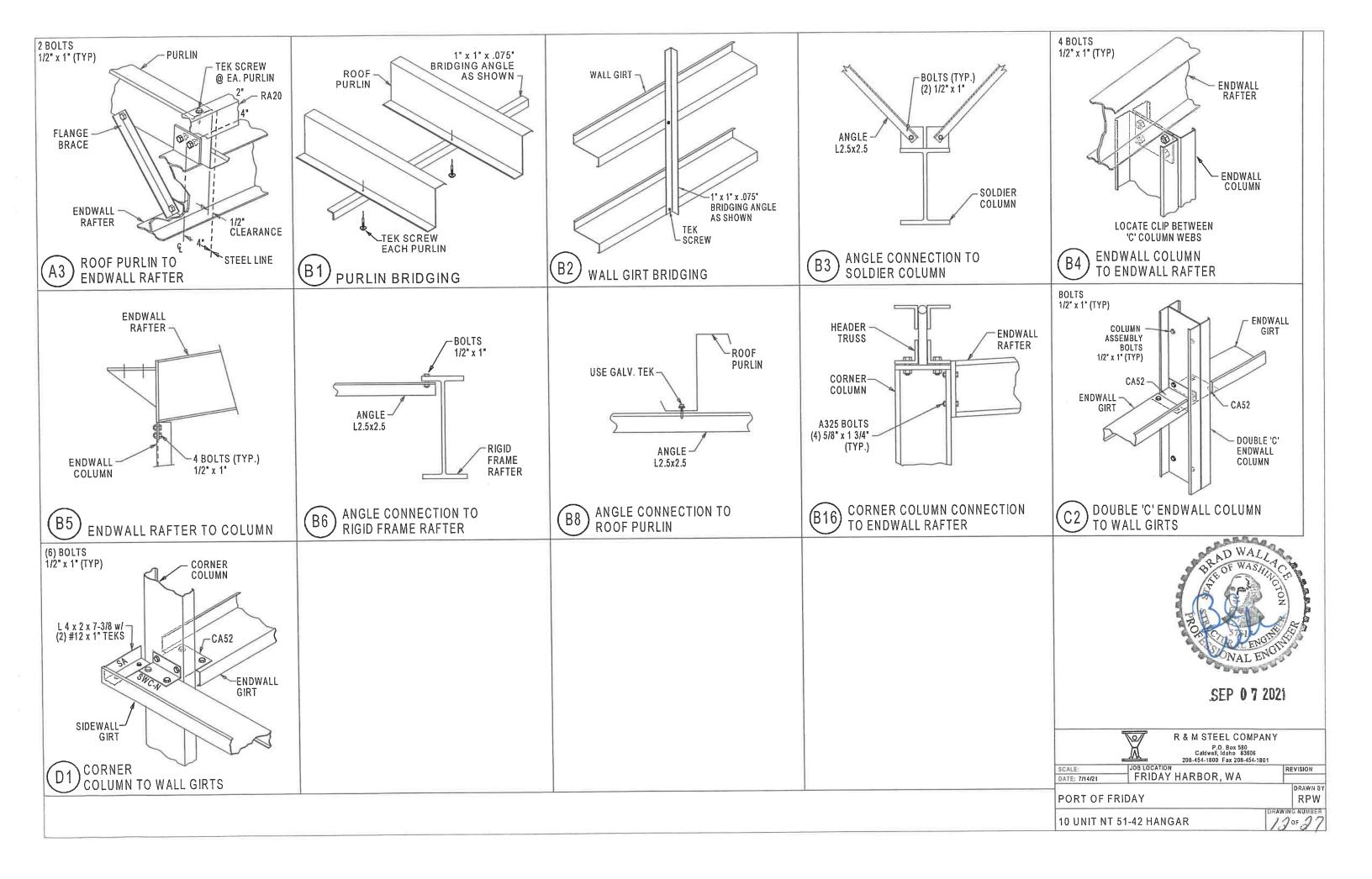


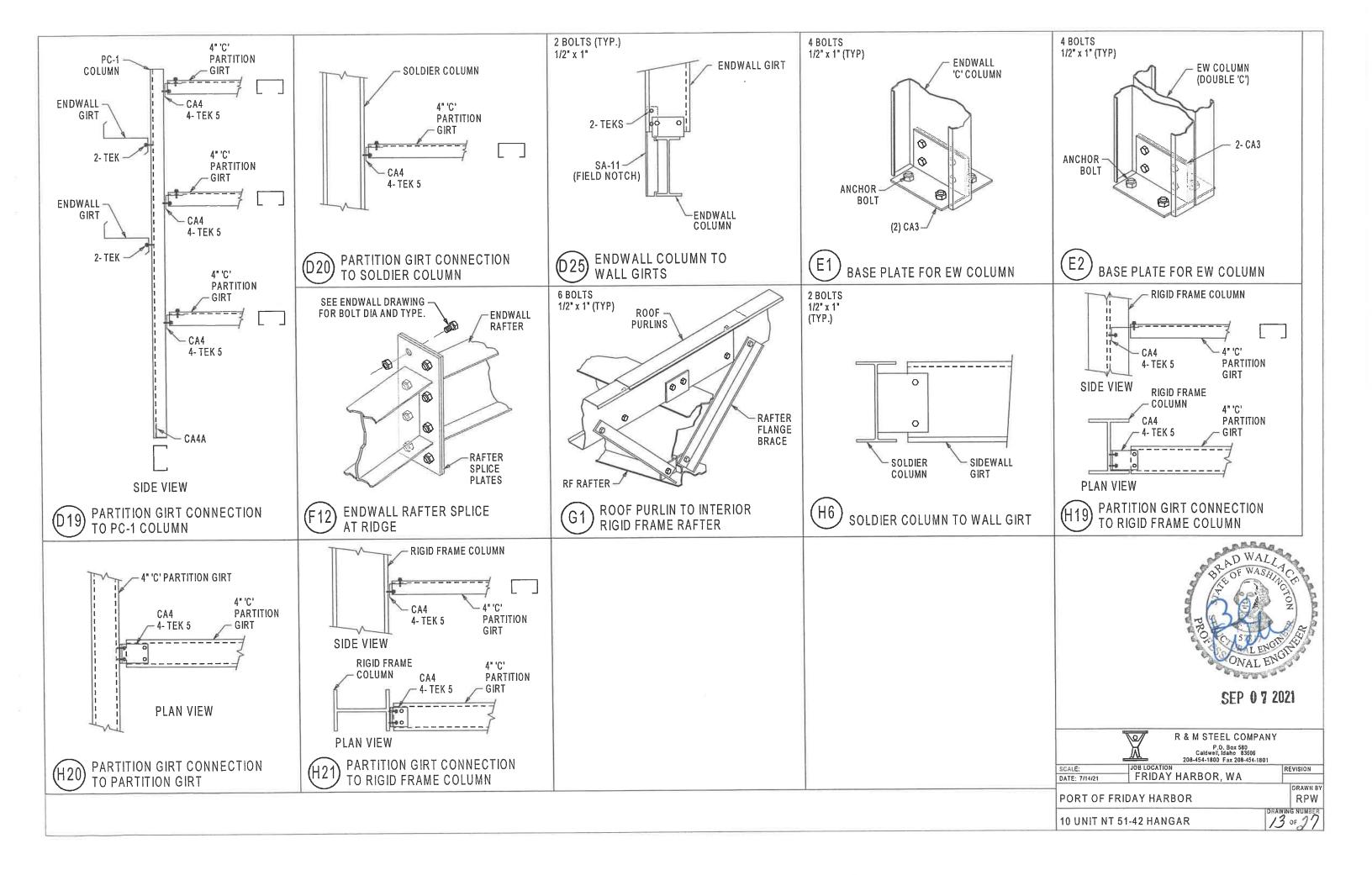


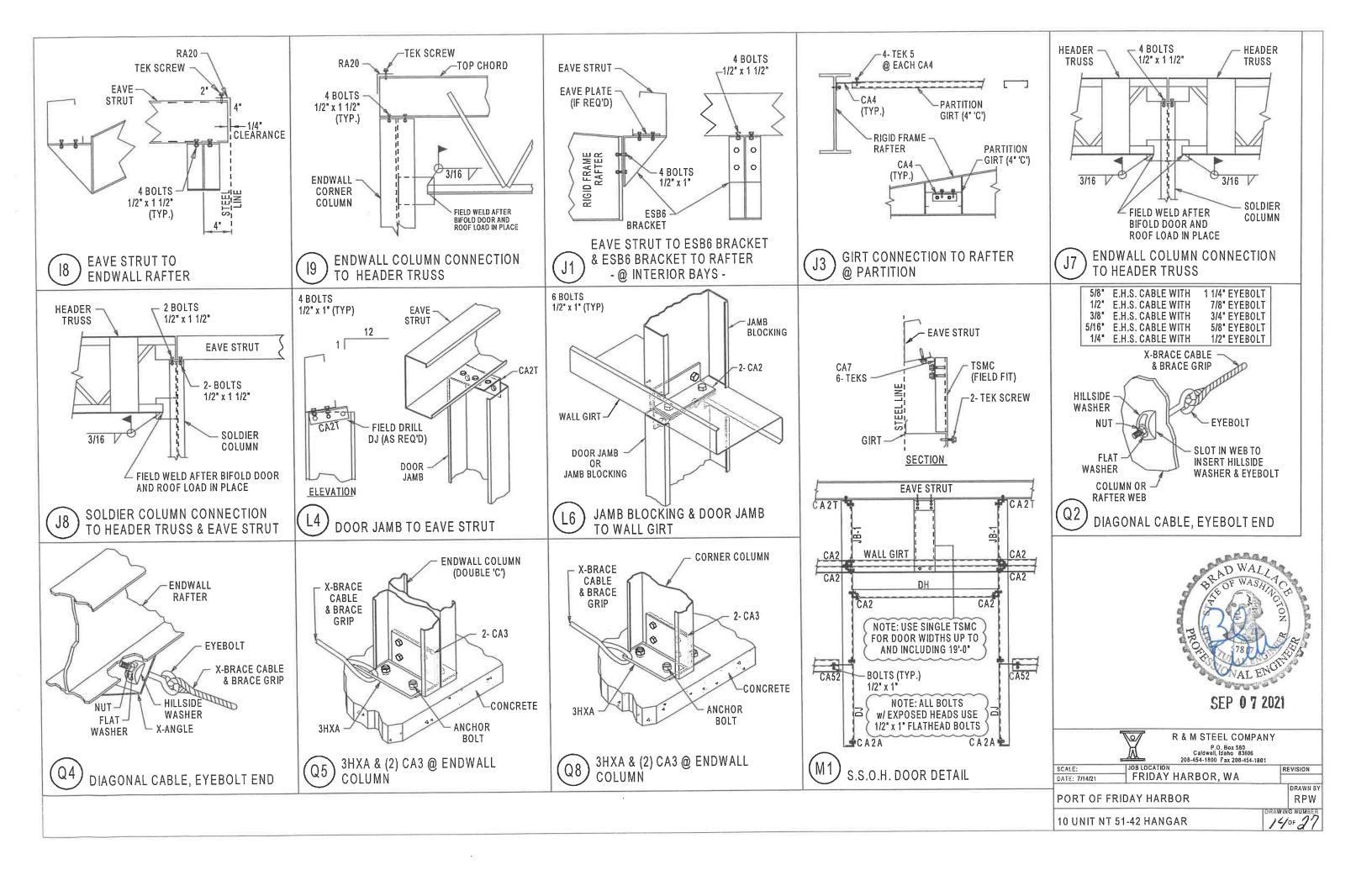


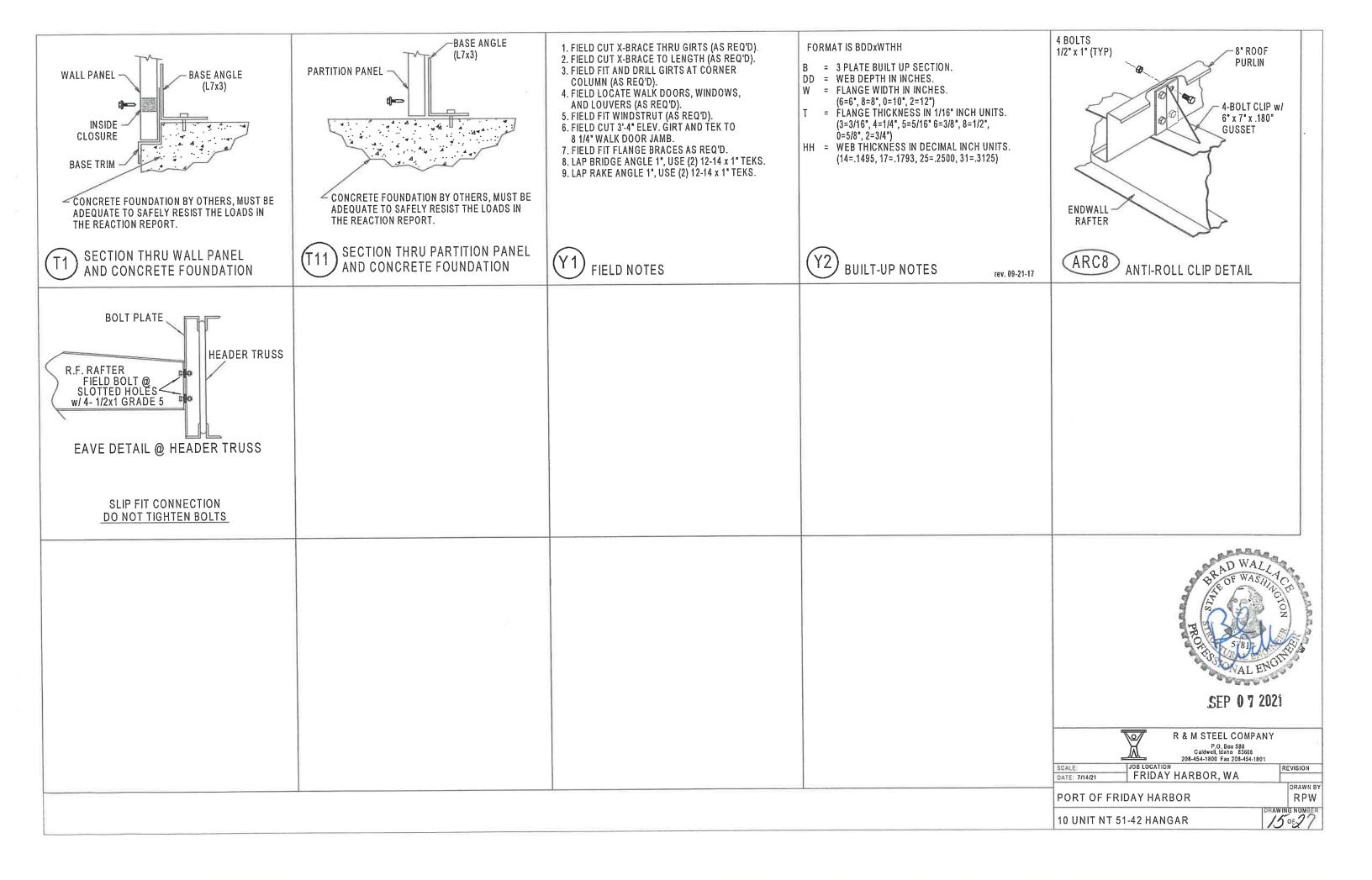


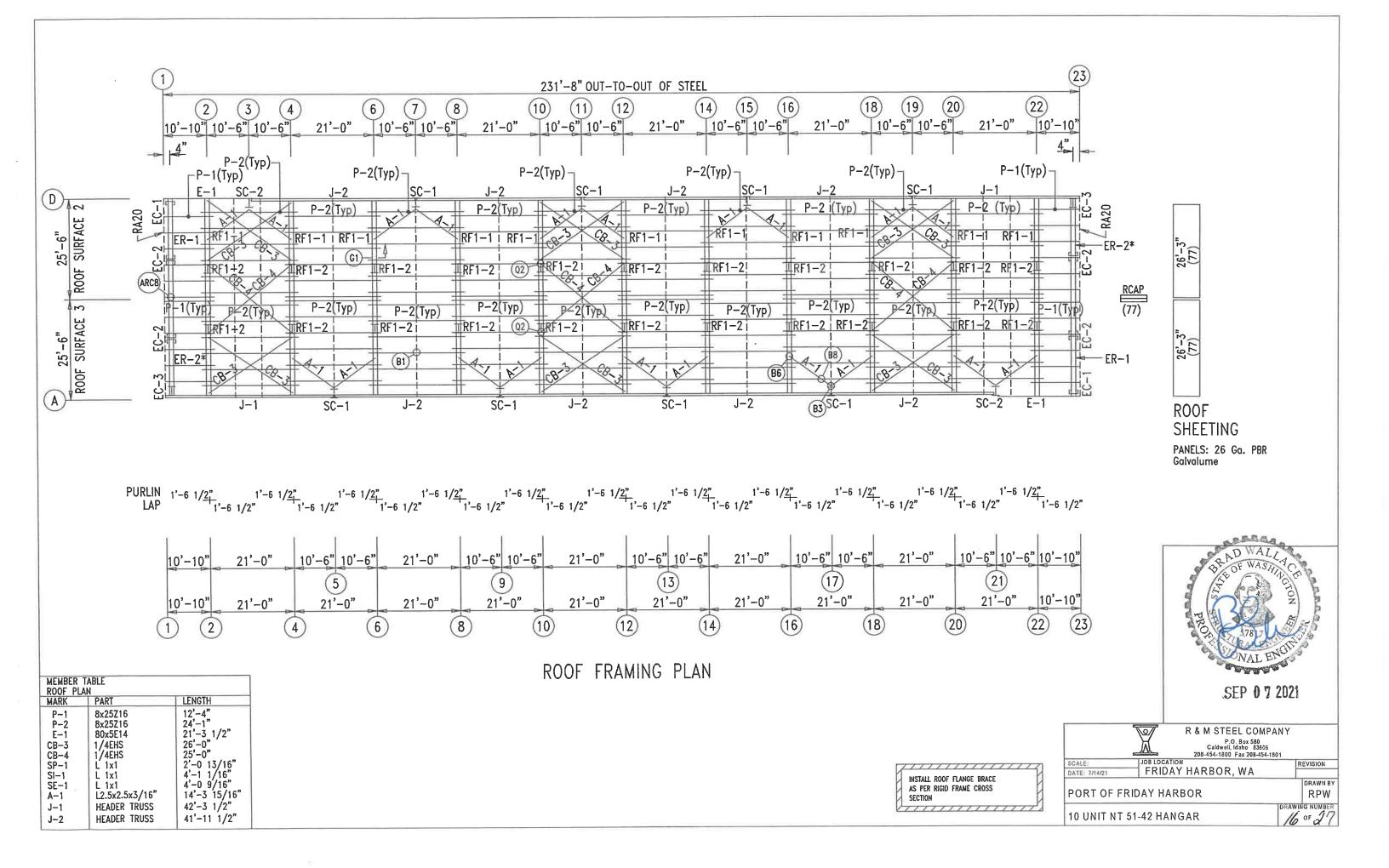


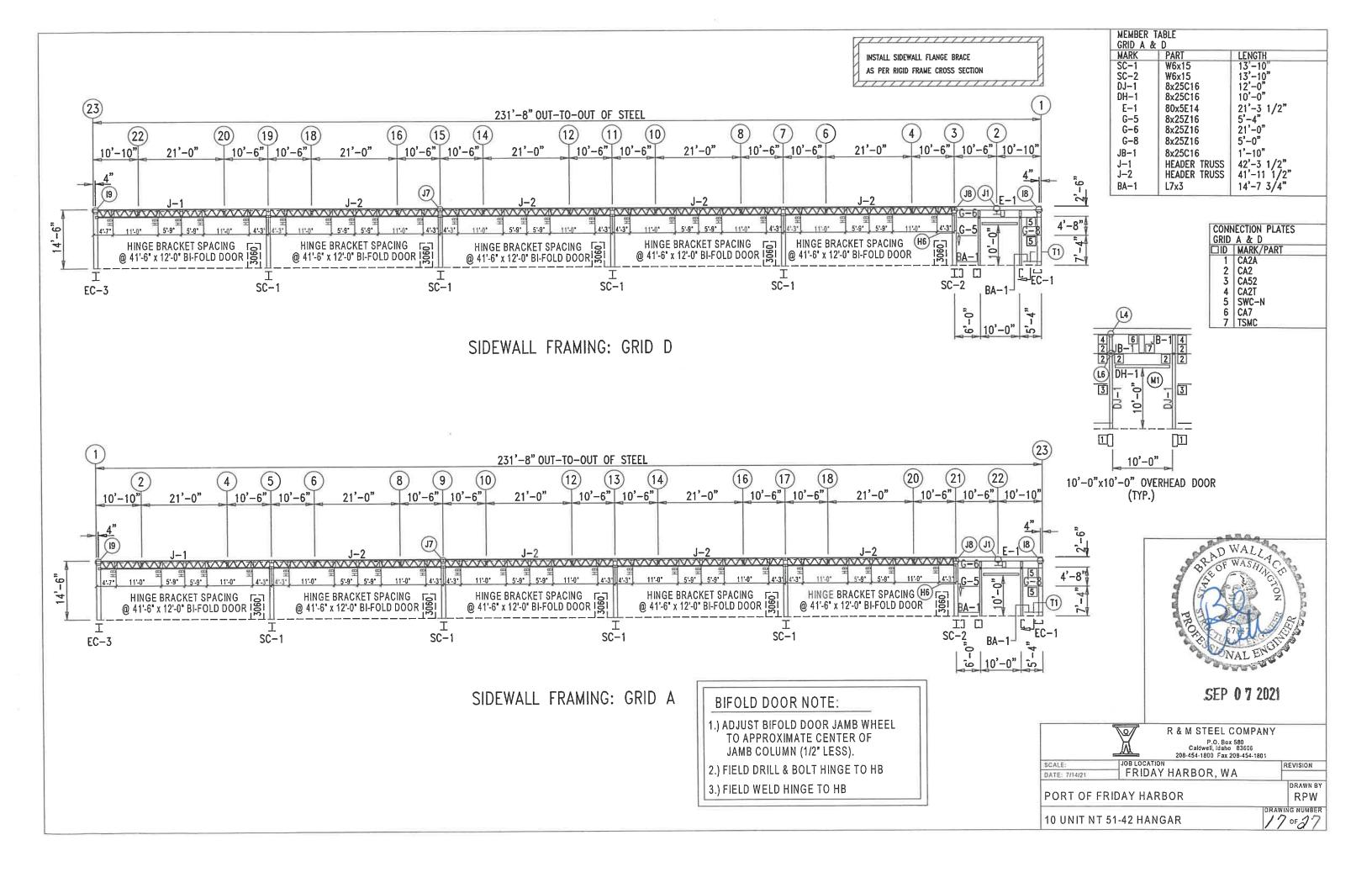


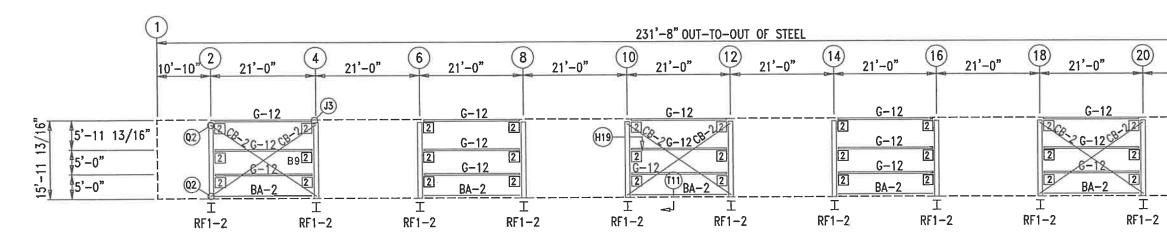




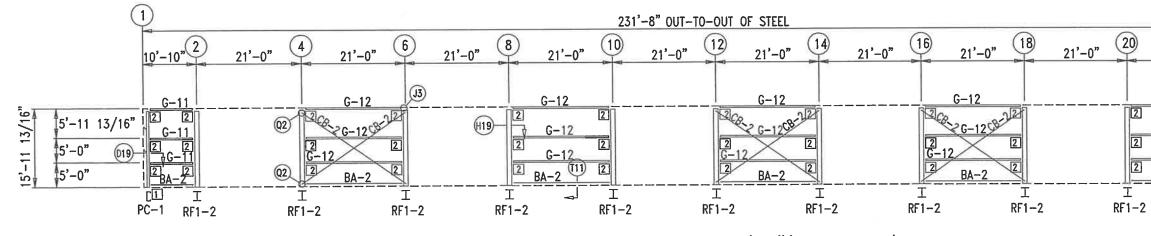




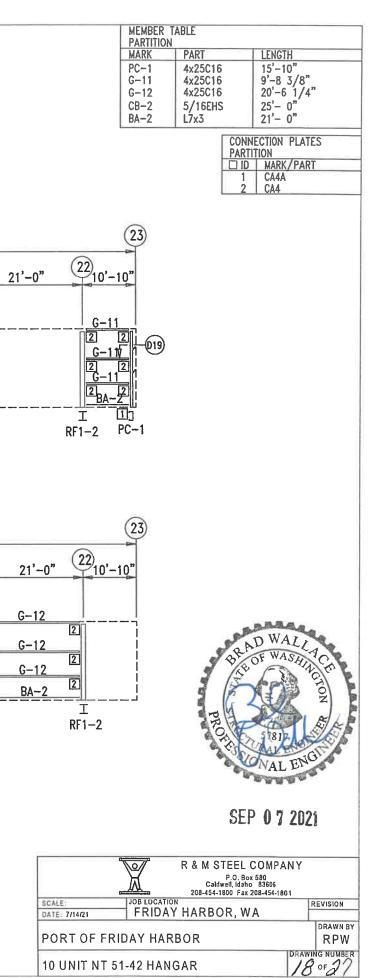




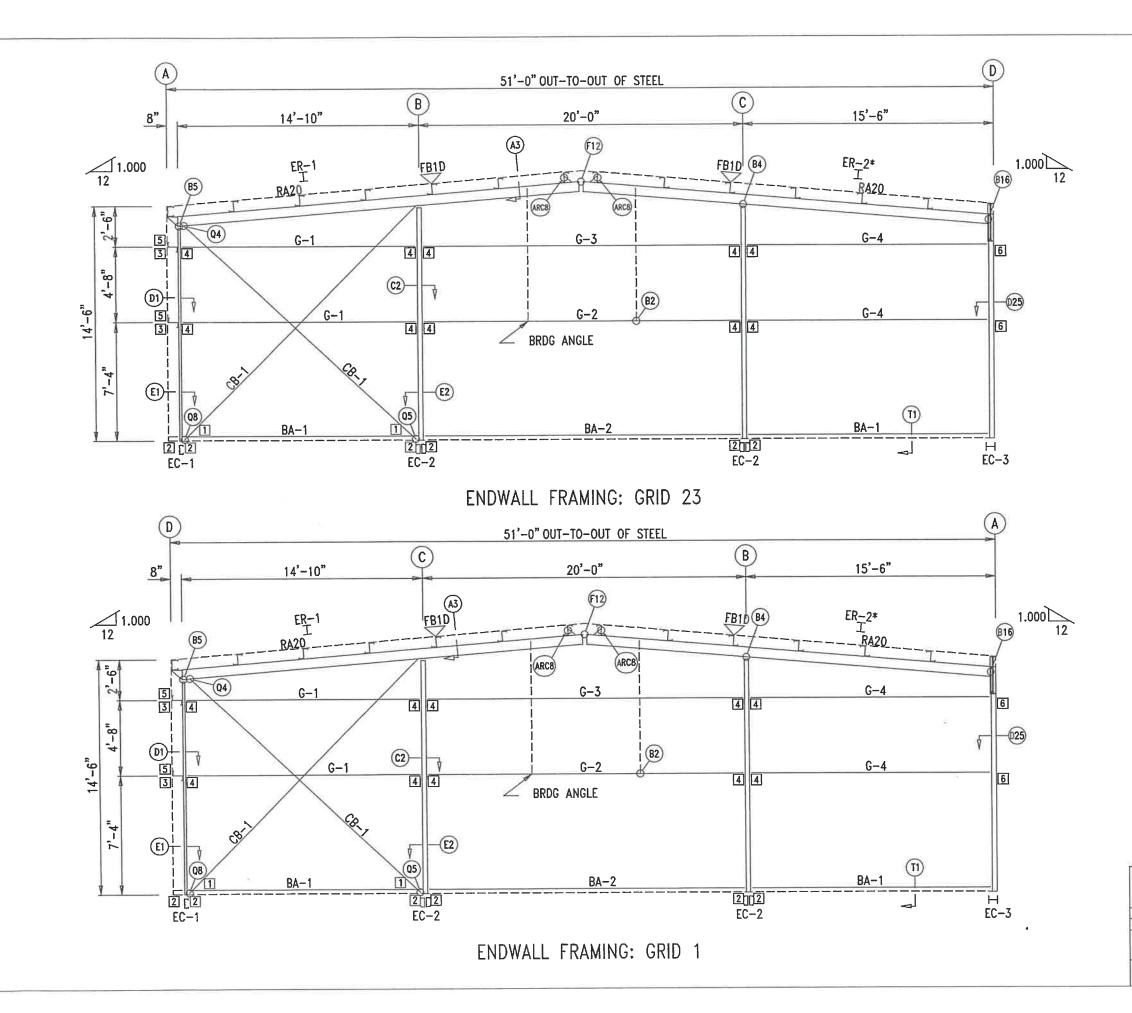
PARTITION FRAMING: @ 33'-6" (INSIDE VIEW)

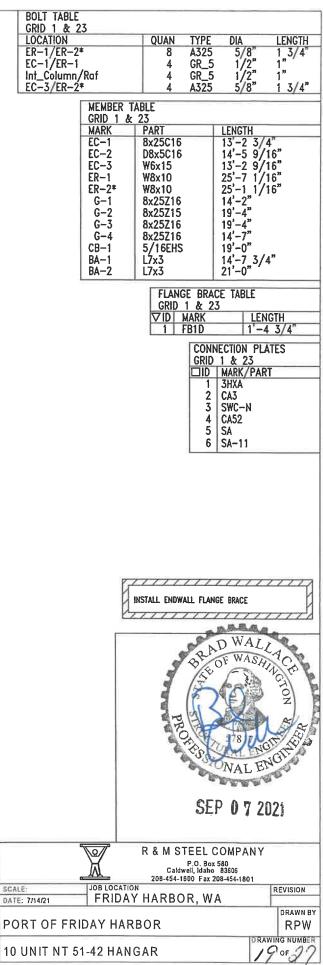


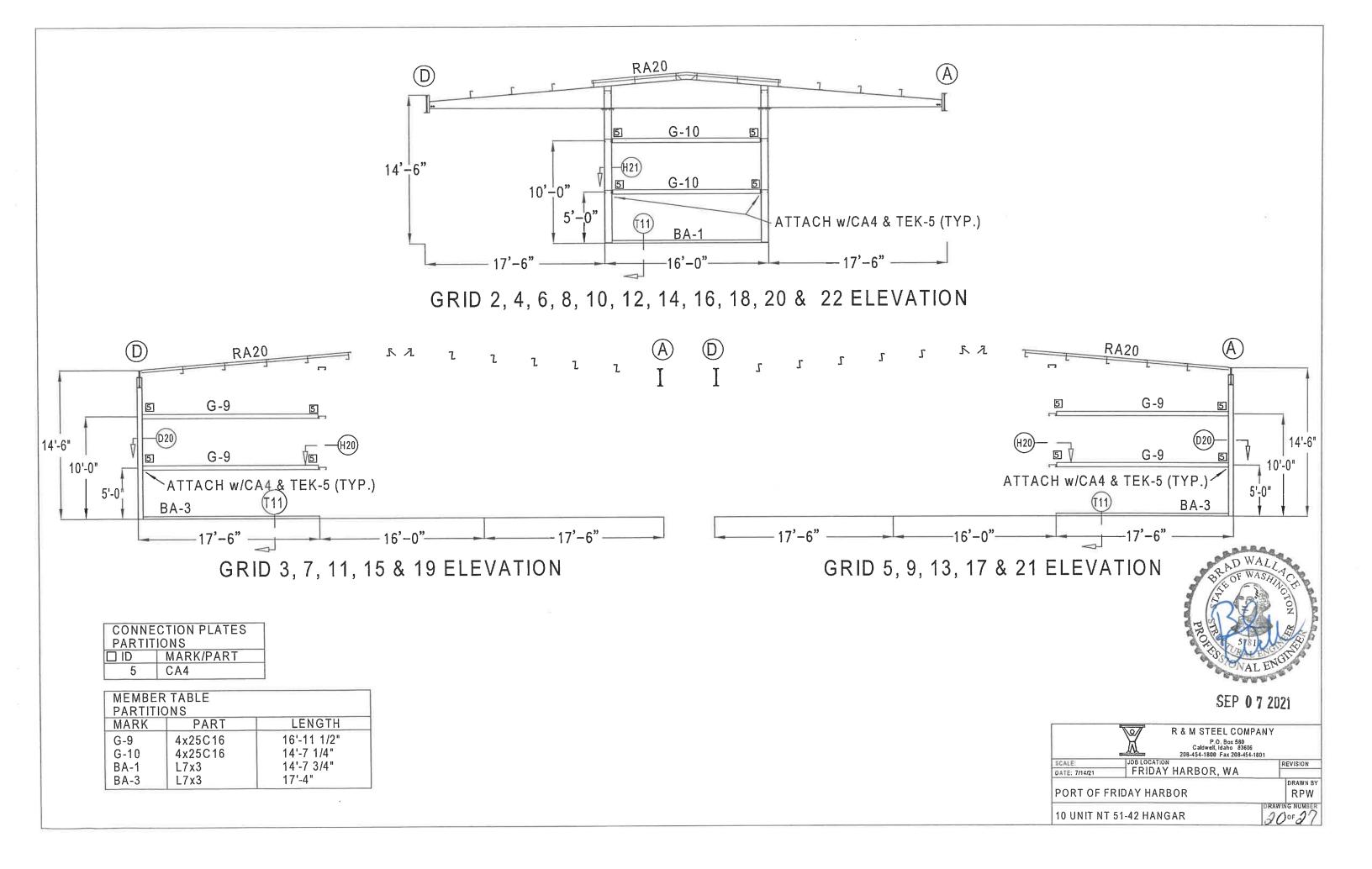
PARTITION FRAMING: @ 17'-6"(INSIDE VIEW)

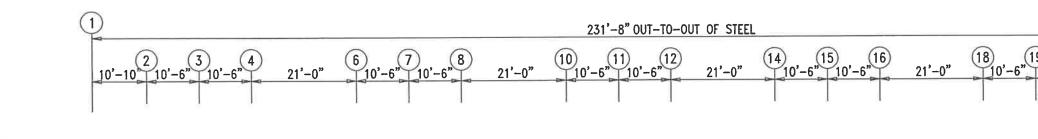


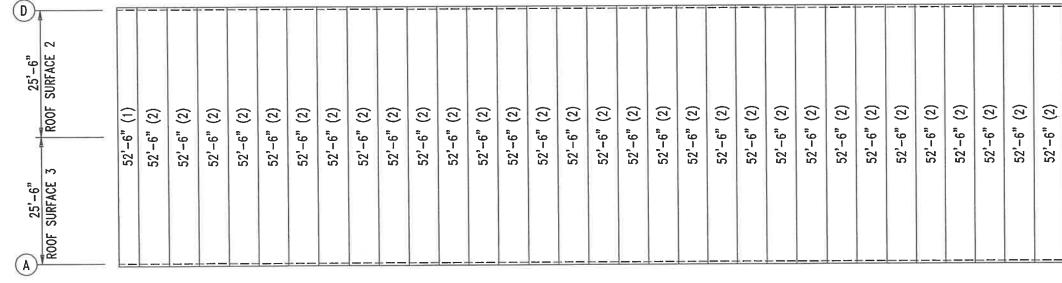
10 UNIT NT 51-42 HANGAR





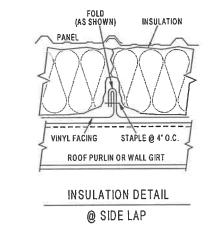


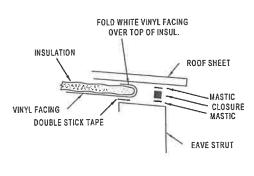




ROOF INSULATION

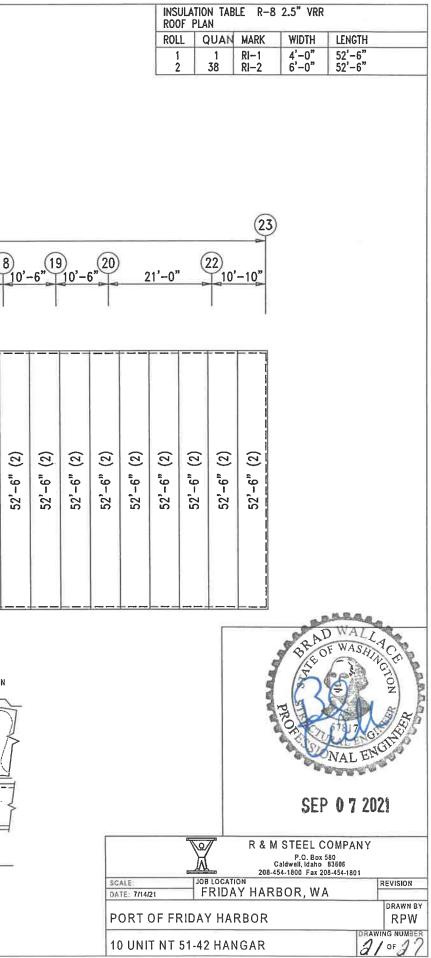
INSULATION: R-8 2.5" VRR

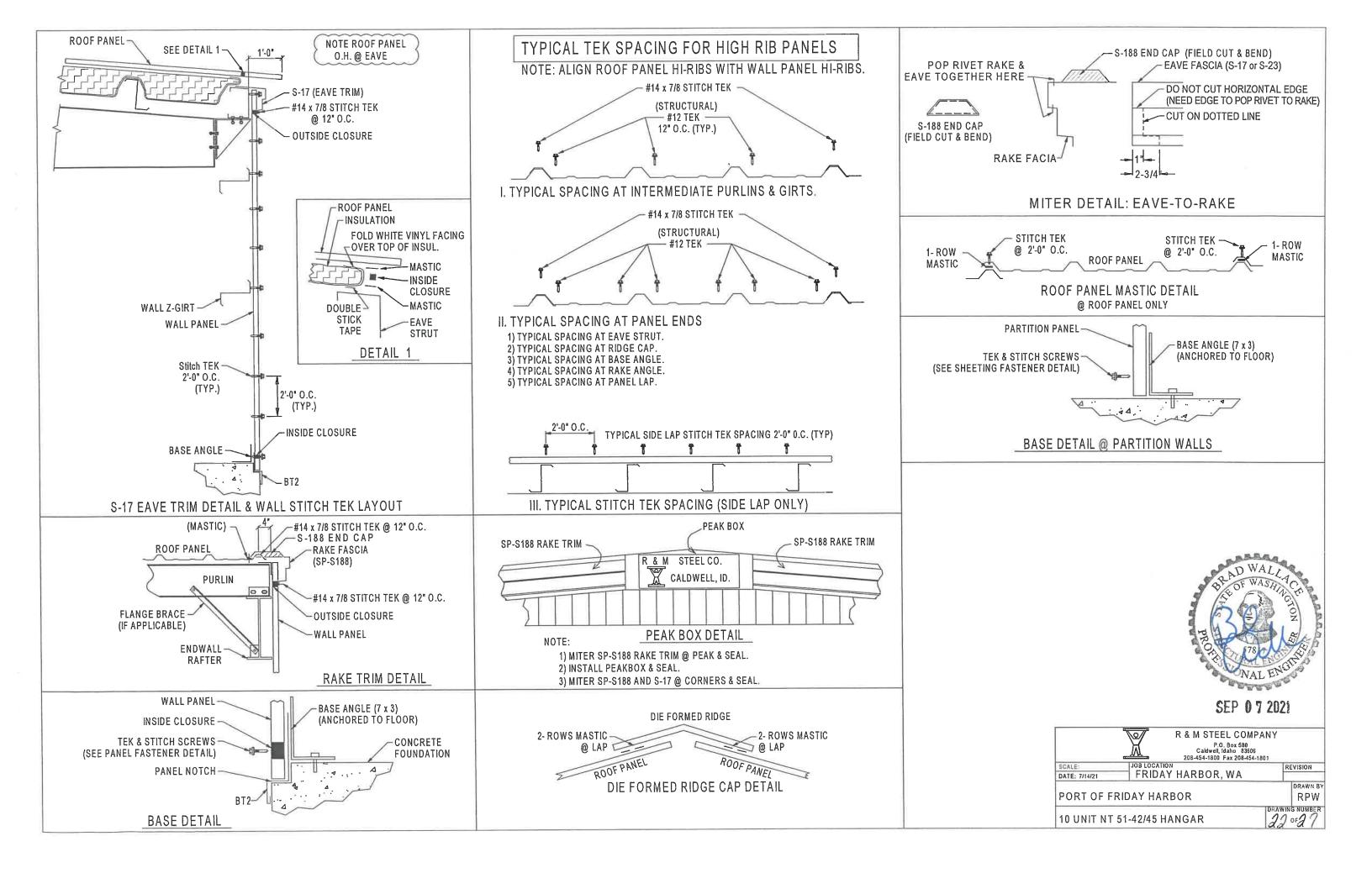


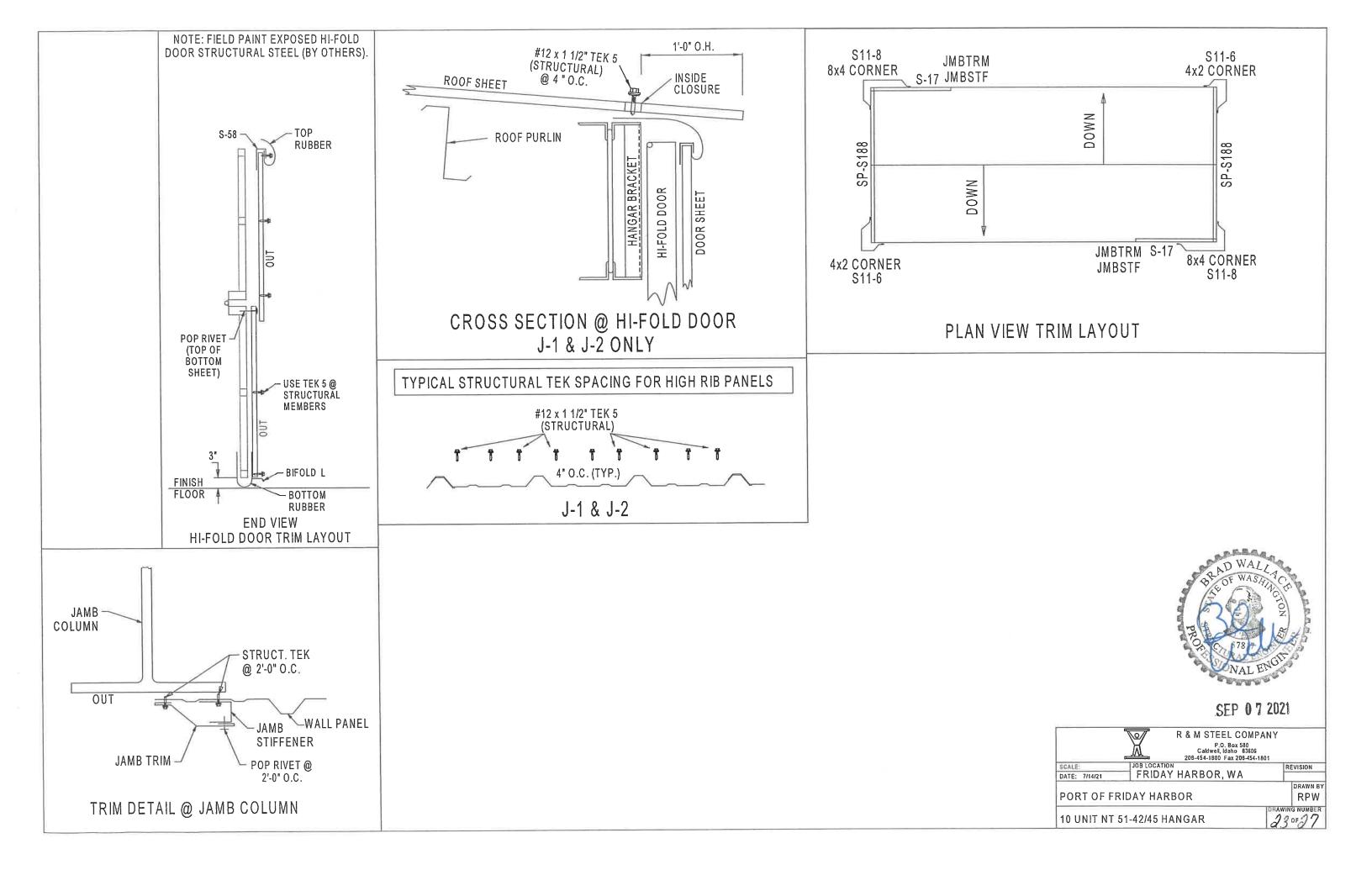


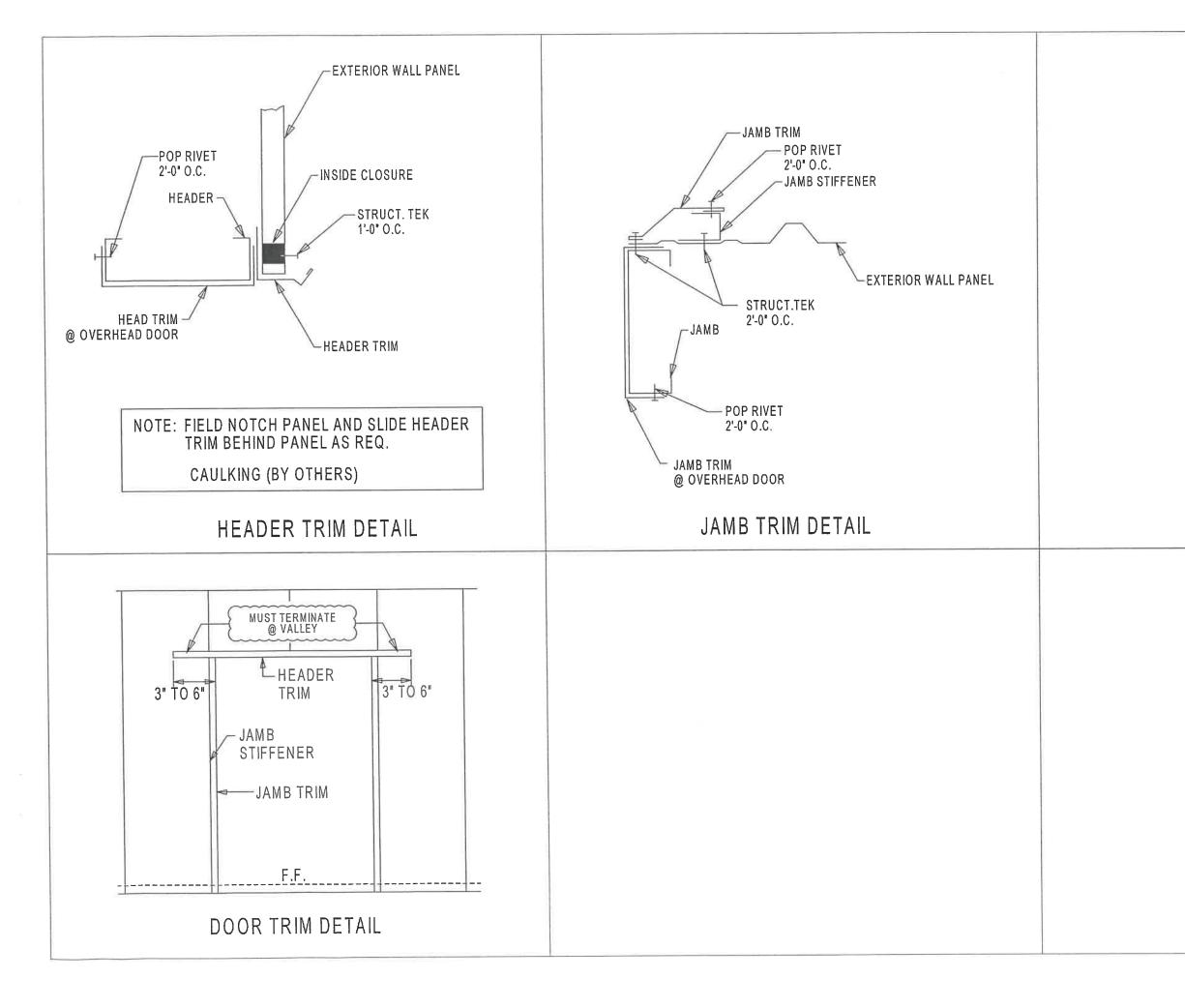
INSULATION DETAIL

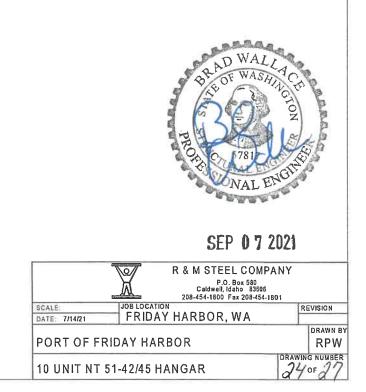
@ EAVE

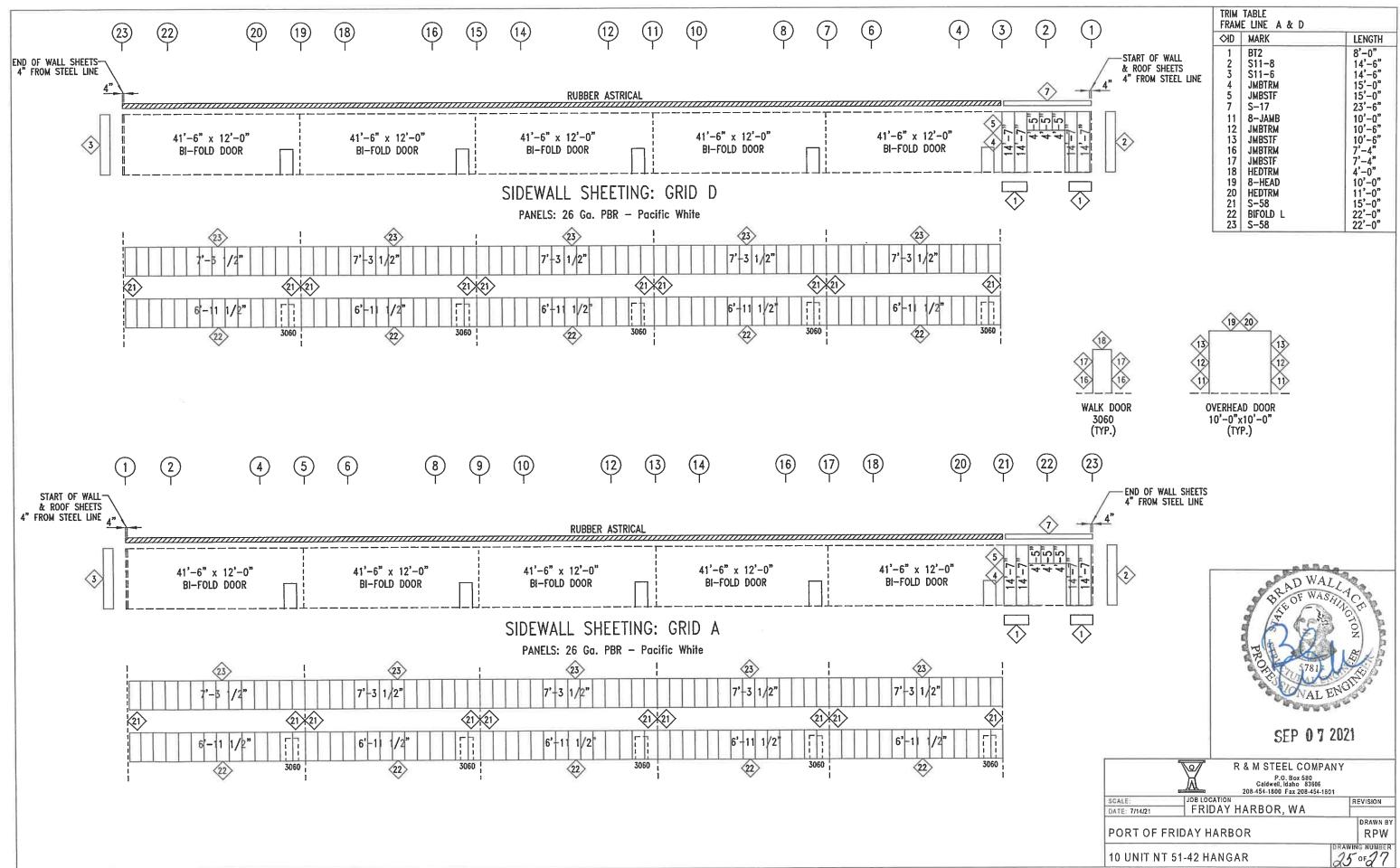


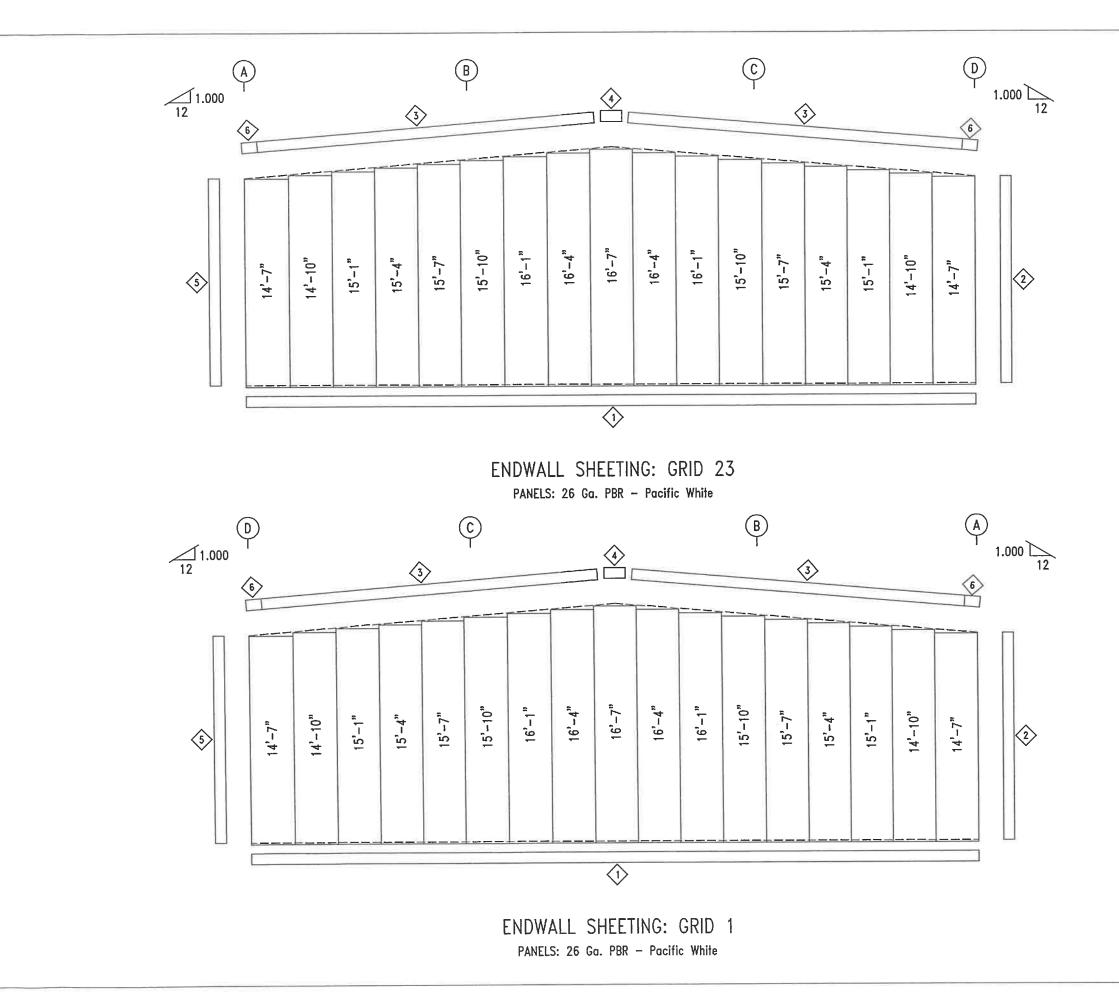


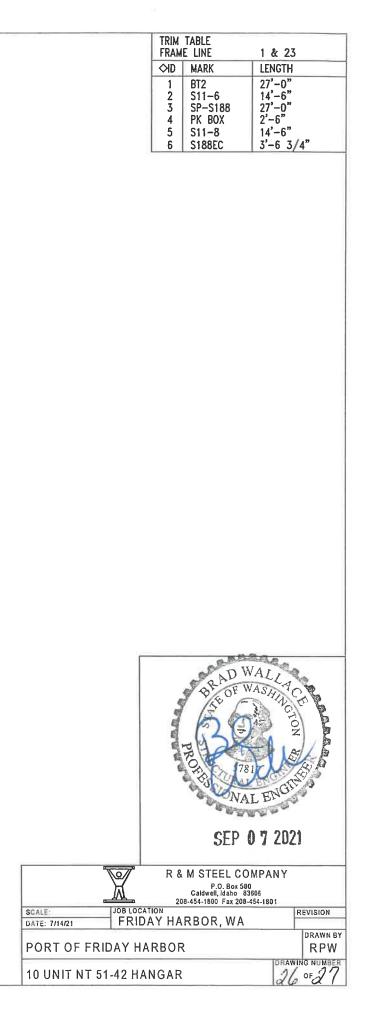


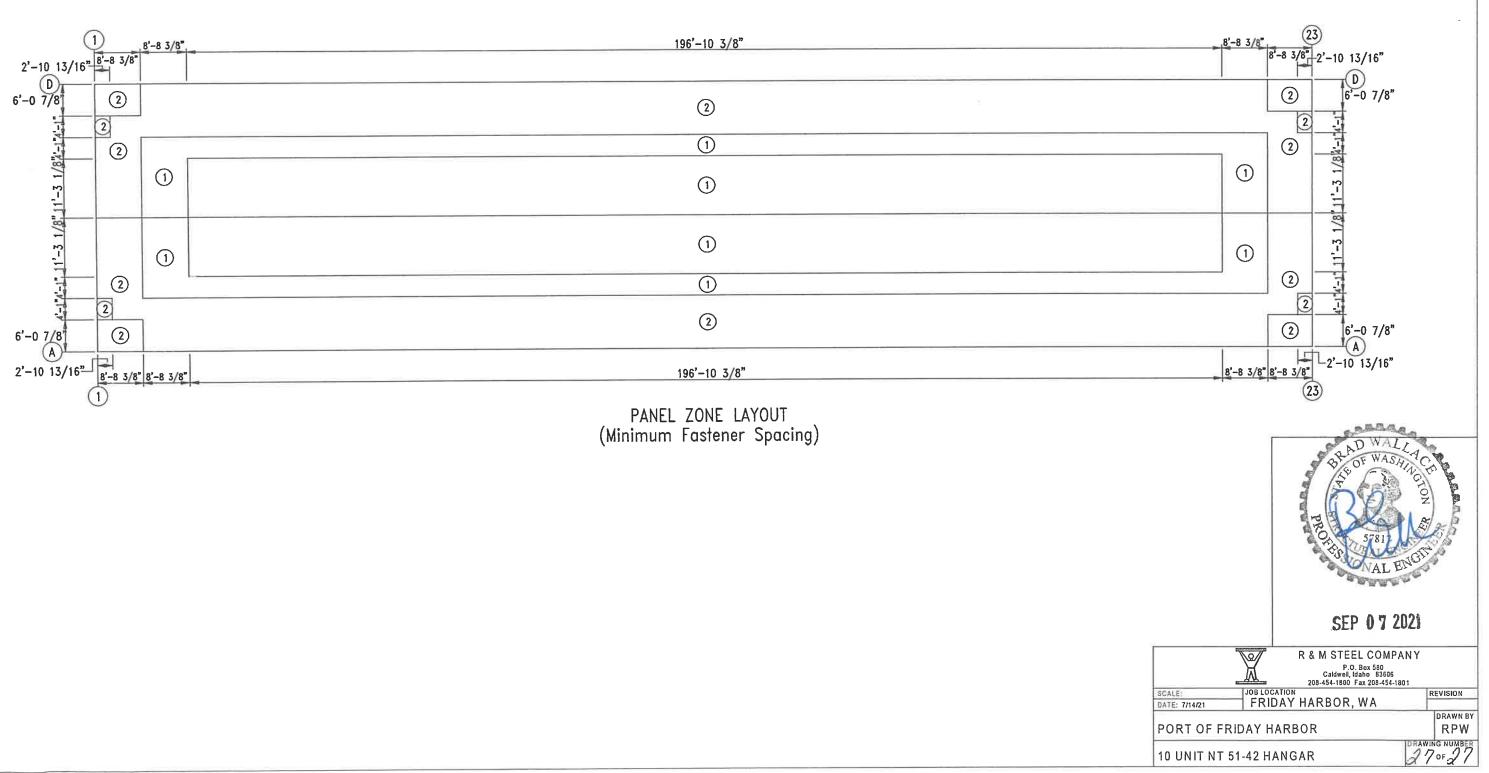












FASTE	NER TABLE	
OID	SCREW PART	SPACE (in)
1 2	#12S #12S	12.0 6.0