

**TRANSMITTAL**

2665 Bill Foster Memorial Hwy  
PO BOX 1268  
CABOT, AR. 72023  
PHONE: 501-941-3929  
FAX: 501-941-2675

TO: **7B BUILDING & DEVELOPMENT**  
**13105 CR 1820**  
**LUBBOCK, TX 79424**

DATE: **11/15/2016**  
JOB #: **161645B**

**CONTACT: TYLER HOUCK**

**WE ARE SENDING YOU THE FOLLOWING ITEMS:**

3 SETS OF ANCHOR BOLT PLANS  SEALED  
 WITH CERT. SHEET

SET OF REVISED ANCHOR BOLT PLANS  SEALED  
 WITH CERT. SHEET

1 SETS OF PERMIT DRAWINGS NOT FOR CONSTRUCTION  SEALED  
 WITH CERT. SHEET

SETS OF APPROVAL DWGS NOT FOR CONSTRUCTION  SEALED  
 WITH CERT. SHEET

Roof Panel Type:  SSR  PBR  
(If SSR is checked, an installation manual will be provided.)

SETS OF FINAL DRAWINGS FOR CONSTRUCTION  SEALED  
 WITH CERT. SHEET

SETS OF ENGINEERING CALCULATIONS  SEALED

SET OF: \_\_\_\_\_

EMAIL DWGS TO: **tyler@7bdev.com**

CC: **Josh and Don**

Notes: **Drawings for Champion Express Car Wash Canopy Building 'B'**

PINNACLE STRUCTURES, INC  
BY: **Donald Sale**

US MAIL     2ND DAY     OVERNIGHT     CUSTOMER PICK-UP

**GENERAL NOTES**

1. This structure has been designed in accordance with the 2007 AISI NAUS Cold Formed Steel Design Manual and the AISI (14th Edition, ASD) Steel Construction Manual.

2. Fabrication shall be accordance with Pinnacle Standards in compliance with the applicable sections, relating to design requirements and allowable stresses of the latest edition of the "AWS Structural Welding Code D1.1".

3. Materials	ASTM Designation	Minimum Yield
Hot Rolled Angle	A36	Fy = 36 ksi
Structural Steel Plate	A572, A529, A1011	Fy = 55 ksi
Cold Formed Shapes	A1011/(A653 Galvanized)	Fy = 55 ksi
Cable Bracing	A475	Ex. High Strength
Roof & Wall Sheeting	A792 26 GA A792 24 and 22 GA	80 ksi, Class 1 50 ksi, Class 2
High Strength Bolts	A325-Group A/(A490-Group B)	
Pipe	A53, Gr. B	Fy = 35 ksi
Round Structural Tubing	A500, Gr. B	Fy = 42 ksi
Shaped Structural Tubing	A500, Gr. B	Fy = 46 ksi
Hot Rolled Shapes	A572, A992, A529 Gr. 50	Fy = 50 ksi
Hot Rolled Shapes	A36	Fy = 36 ksi

4. Shop primer paint is a rust inhibitive primer which meets the end performance of SSPC-Paint 15: Steel Joist Shop Primer/Metal Building Primer and is maroon oxide in color. This paint is not intended for long term exposure to the elements. Pinnacle Structures, Inc. is not responsible for any deterioration of the shop primer as a result of improper handling or storage. Pinnacle will not be responsible for any field applied paint and or coatings. (Section 7.17 AISI code of Standard Practice for Steel Buildings & Bridges, 13th Edition).

5. Bolts for the construction of Pinnacle Structures, Inc. material shall be as follows:  
 All secondary member connections - 1/2" x 1 1/4" A307 unless noted  
 Bearing frame endwall connections - A325  
 Main frame connections - A325 as shown on drawings

6. Connections Using High Strength Structural Bolts:  
 All high strength bolts are A325-N, unless noted otherwise. High strength structural bolts are supplied without washers, unless noted otherwise. Bolt length shall be such that the end of the bolt extends beyond or is at least flush with the outer face of the nut, when properly installed. All bolted connections, unless noted, are designed as bearing type connection with bolt threads not excluded from the shear plane.

**A325-N High Strength Structural Bolts:**  
 Snug-Tightened connections are permitted with A325-N bolts, except for these cases:  
 - Where crane beams and rigid frame connections in crane buildings are present  
 - In Slip-Critical Connections  
 - If noted in the erection drawings otherwise  
 For these exceptions, Turn-of-the-Nut method must be used.

**A490 High Strength Structural Bolts:**  
 A490 structural bolts shall be tightened using the Turn-of-the-Nut method. Snug-Tightened connections are not permitted with A490 bolts.

**Tightening Methods:**

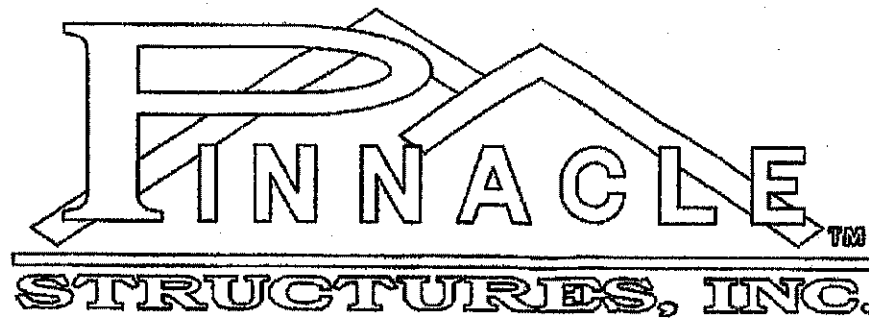
**Snug-Tightened Joint:** A condition in which the tightness that exists when all of the plies in a connection have been pulled into firm contact by the bolts in the joint and all of the bolts in the joint have been tightened sufficiently to prevent the removal of the nuts without the use of a wrench, in accordance with the 14th Edition of AISI "Specification for Structural Joints Using High-Strength Bolts", per Section 8.1.

**Turn-of-the-Nut method** is to be performed in accordance with the 14th Edition AISI "Specification for Structural Joints Using High-Strength Bolts" per Section 8.2.1.

7. All Bracing shown and provided by Pinnacle for this building is required for transferring building loads to the foundation and shall be installed by the erector as a permanent part of the structure. Cable/Rod bracing is designed for structural loads only and is not designed to plumb the building. The cable/rod bracing shall be taut, tighten to remove sag only. Bracing shall not be over-tighten. If additional bracing is required for stability during erection, it shall be the erectors responsibility to determine the amount of such bracing and to procure and install as necessary.

8. Soil profile type is determined by the foundation Engineer per local code.

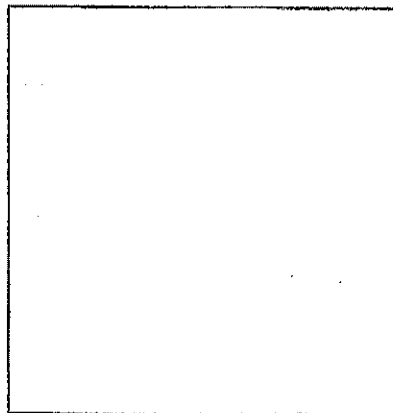
9. Building Codes Require Consideration of Snow Surcharges for Any Lower Roof of a Structure Located within 20 Feet of a Higher Structure. Information Supplied to Pinnacle Structures Does Not Indicate the Presence of a Shadowing Structure within this 20 Foot Envelope. Therefore Snow Surcharges Have Not Been Considered in this Design Unless Noted Otherwise.



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 Cabot, AR 72023  
 Phone: (501) 941-3929 or (800) 201-1534  
 Fax: (501) 941-2675



AC472 ACCREDITED  
 MB-103



**DRAWING PACKAGE FOR:**

JOB NUMBER: 161645B

CUSTOMER: 7B Building & Development

PROJECT: Champion Express

JOBSITE: Roswell, NM (Chaves Co.)

BUILDING SIZE: 31'-1 1/2" x 21' x 12' (8:12)

**DESIGN REQUIREMENTS**

Building Code: IBC 2012  
 IBC Building Risk Category: II - Standard Risk  
 Metal Building Dead Load: 2.2 psf  
 Collateral Load: 5\* psf  
 Secondary Live Load: 20 psf  
 Primary Live Load: 20 psf (REDUCIBLE PER CODE)  
 Ground Snow Load: 40 psf  
 Roof Snow Load: 22.18 psf  
 Ce= 1.0 Ct= 1.2 Cs= 0.91 Is = 1.0  
 115 MPH Wind Speed / Vult<sup>1</sup> (10 Year Serviceability)  
 89 MPH Nominal Speed / V<sub>asd</sub> = (Vult\* r-0.6)  
 Exposure = C

**Seismic: EQUIVALENT LATERAL FORCE PROCEDURE**

Seismic Coefficient: I<sub>E</sub> = 1.0 S<sub>S</sub> = 0.09 S<sub>DS</sub> = 0.09  
 S<sub>1</sub> = 0.03 S<sub>D1</sub> = 0.06

Site Class: D  
 Seismic Design Category: A

**TRANSVERSE DIRECTION (Moment Frames)**

Ordinary Steel Moment Frames (R=3.5, Ω<sub>0</sub>=3.0, Cd=3.0\*\*\*)

**END WALLS**

Ordinary Steel Moment Frames (R=3.5, Ω<sub>0</sub>=3.0, Cd=3.0\*\*\*)

Left Endwall: Non-Expandable Rigid Frame

Ordinary Steel Moment Frames (R=3.5, Ω<sub>0</sub>=3.0, Cd=3.0\*\*\*)

Right Endwall: Non-Expandable Rigid Frame

**LONGITUDINAL DIRECTION**

Ordinary Steel Moment Frames (R=3.5, Ω<sub>0</sub>=3.0, Cd=3.0\*\*\*)

Front Sidewall: Portal Frame (where applicable)

Ordinary Steel Concentrically Braced Frames (R=3.25, Ω<sub>0</sub>=2.0, Cd=3.25\*\*\*)

Back Sidewall: Rod Bracing (where applicable)

**Crane:**

Type: N/A  
 Capacity: N/A Ton  
 Max. wheel load  
 not including impact N/A Kips

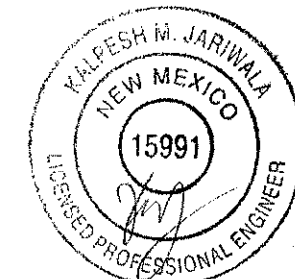
**Mezzanine:**

Dead Load: N/A psf  
 Live Load: N/A psf

**Snow Drift:**

Pd: N/A psf  
 Wd: N/A feet

Other: N/A



11-22-16

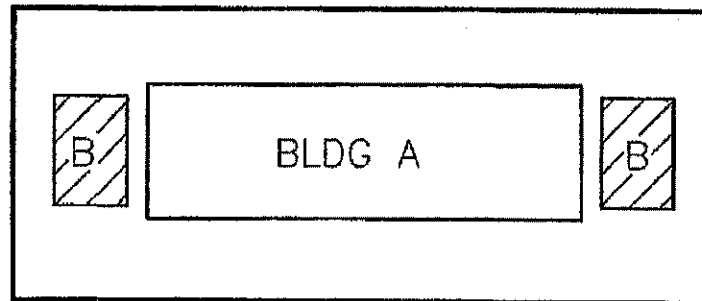
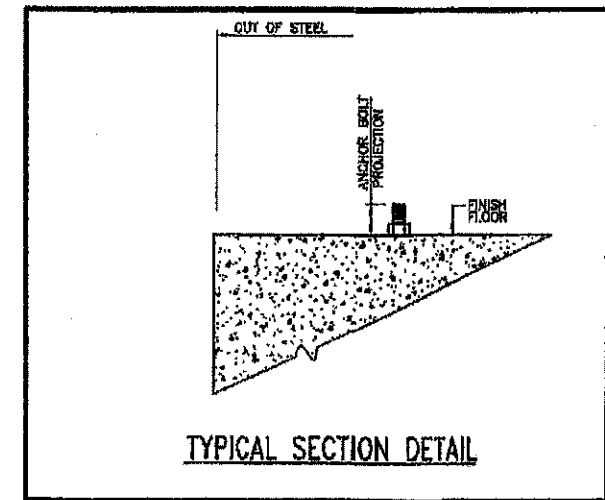
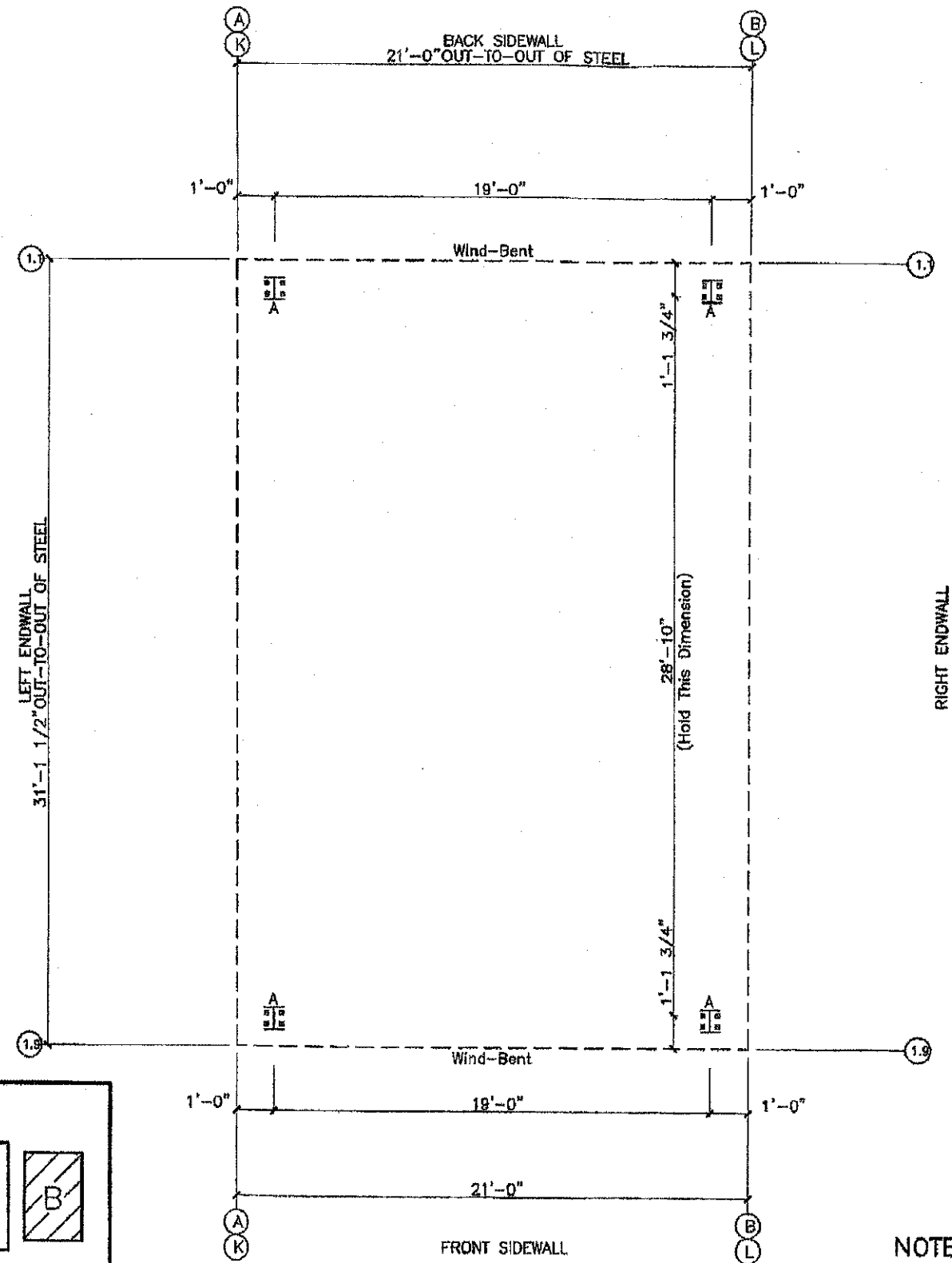
\* This project is designed for this collateral loading. NO additional loads shall be attached to the Pinnacle structure that will exceed this loading. All loads suspended from the purlins must be attached to the purlin webs and not the purlin flanges. Under NO circumstances are the purlin flanges to be modified by cutting, drilling or bending of flange or lip.

\*/\*\*\*/ SEE LETTER OF CERTIFICATION.

150

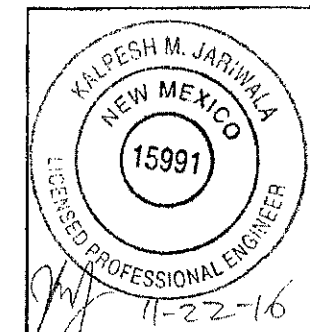
**ANCHOR BOLT SUMMARY**

Qty	Locate	Dia (in)	Type	Proj (in)
16	Frame	3/4"	A307	2.50



**ANCHOR BOLT PLAN**  
NOTE: All Base Plates @ 100'-0"

NOTE: DWGS FOR (2) IDENTICAL BLDGS



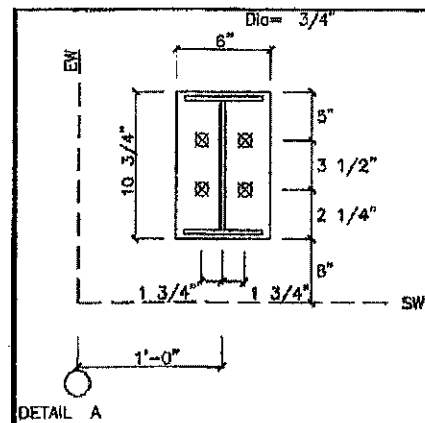
**GENERAL NOTES**

- These drawings are NOT to scale.
- Pinnacle's steel line is shown.
- A sheeting notch or brick ledge, if used, must be added to determine the out of concrete.
- Wall panels shall be held 1/4" above the sheet notch and/or base trim.
- Attachment of material by others to Pinnacle steel is the responsibility of others.

ISSUE	DESCRIPTION	DATE	MARK
0	CONSTRUCTION	11/14/16	



DESCRIPTION:	ANCHOR BOLT PLAN		
CUSTOMER:	7B BUILDING & DEVELOPMENT		
LOCATION:	ROSWELL, NM (CHAVES CO.)		
Detailer:	SS	Checker:	DS
Designer:	So		
Job No.:	161845B	Sheet:	F1
Issue:	0		

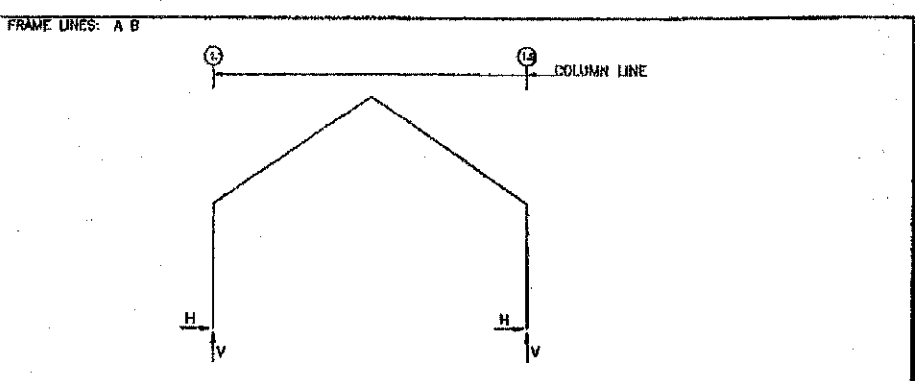


**BUILDING BRACING REACTIONS**

Loc	Wall Line	Col Line	± Reactions (k)				Panel Shear (lb/ft)		Note
			Wind	Seismic	Wind	Seis	Wind	Seis	
L_EW	A								(b)
R_SW	1.9	A,B	1.3	1.5	0.1	0.1			(b)
R_EW	B								(b)
B_SW	1.7	A,B	1.3	1.5	0.1	0.1			(b)

(b) Wind bent in bay, base above finish floor  
(h) Rigid frame at endwall

- GENERAL NOTES**
- ANCHOR BOLTS ARE NOT DESIGNED TO STABILIZE THE COLUMNS DURING ERECTION. TEMPORARY BRACING AS NEEDED FOR SAFETY AND STABILITY IS THE ERECTOR'S RESPONSIBILITY.
  - FOUNDATION DESIGN AND ANCHOR BOLT LENGTHS ARE NOT THE RESPONSIBILITY OF PINNACLE STRUCTURES, INC.
  - THE BUILDING REACTION DATA REPORTS THE LOADS WHICH THIS BUILDING PLACES ON THE FOUNDATION. THE ANCHOR BOLT SUMMARY TABLE REPORTS THE BOLT DIAMETERS.
  - COLUMN BASE PLATES ARE DESIGNED NOT TO EXCEED A BEARING PRESSURE OF 1050 POUNDS PER SQUARE INCH.
  - ANCHOR BOLTS SHALL BE ACCURATELY SET TO A TOLERANCE OF 1/8.



**RIGID FRAME: MAXIMUM REACTIONS, ANCHOR BOLTS, & BASE PLATES**

Frm Line	Col Line	Load ID	Column Reactions (k)				V Vmin	Ana. Bolt Qty	Base Plate Dia	Base Plate (in)		Grout (in)	
			Hmax	Vmax	Hmin	Vmin				Width	Length		
A*	1.1	2	2.0	4.3	8	-2.3	1.0	4	0.750	6.000	10.75	0.375	0.0
A*	1.9	B	2.4	6.8	8	0.4	-3.5	4	0.750	6.000	10.75	0.375	0.0
A*		3	-2.4	6.8	7	-0.4	-3.5						

A\* Frame lines: A B

**RIGID FRAME: BASIC COLUMN REACTIONS (k)**

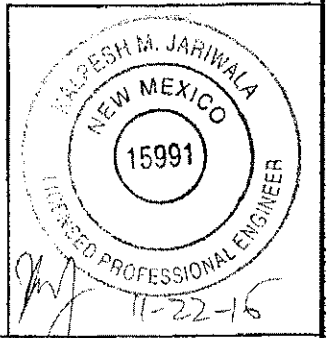
Frame Line	Column Line	Dead		Collateral		Live		Snow	Wind Left		Wind Right	
		Horiz	Vert	Horiz	Vert	Horiz	Vert		Horiz	Vert	Horiz	Vert
A*	1.1	0.2	0.9	0.3	1.1	0.7	2.5	1.2	4.1	-3.0	-4.5	3.4
A*	1.9	-0.2	0.9	-0.3	1.1	-0.7	2.5	-1.2	4.1	-3.4	-4.5	3.0

Frame Line	Column Line	Wind Left		Wind Right		Wind Long 1		Wind Long 2		Seismic Left		Seismic Right	
		Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert
A*	1.1	-4.1	0.7	2.3	3.2	1.4	-6.4	0.4	-6.7	-0.1	-0.1	0.1	0.1
A*	1.9	-2.3	3.2	4.1	0.7	-0.4	-6.7	-1.4	-6.4	-0.1	0.1	0.1	-0.1

Frame Line	Column Line	Seismic Long	
		Horiz	Vert
A*	1.1	0.0	-0.1
A*	1.9	0.0	-0.1

A\* Frame lines: A B

- NOTES FOR REACTIONS**
- All loading conditions are examined and only maximum/minimum H or V and the corresponding H or V are reported.
  - Positive reactions are as shown in the sketch. Foundation loads are in opposite directions.
  - Bracing reactions are in the plane of the brace with the H pointing away from the braced bay. The vertical reaction is downward.
  - Building reactions are based on the following building data:
    - Width (ft) = 31.1
    - Length (ft) = 21.0
    - Eave Height (ft) = 12.0
    - Roof Slope (rise/run) = 8.0/12.0
    - Dead Load (psf) = 2.2
    - Collateral Load (psf) = 5.0
    - Roof Live Load (psf) = 20.0
    - Frame Live Load (psf) = 13.5
    - Snow Load (psf) = 22.2
    - Wind Speed (mph) = 115.0
    - Wind Code = IRC 12
    - Exposure = C
    - Closed/Open = P
    - Importance Wind = 1.00
    - Importance Seismic = 1.00
    - Seismic Zone = A
    - Seismic Coeff (F<sub>a</sub>S<sub>s</sub>) = 0.15
  - Loading conditions are:
    - Dead+Collateral+0.75Snow+0.45Wind\_Left1+0.75Slide\_Snow
    - Dead+Collateral+0.75Snow+0.45Wind\_Right1+0.75Slide\_Snow
    - Dead+Collateral+0.75Snow+0.45Wind\_Left2+0.75Slide\_Snow
    - Dead+Collateral+0.75Snow+0.45Wind\_Right2+0.75Slide\_Snow
    - 0.6Dead+0.6Wind\_Left1
    - 0.6Dead+0.6Wind\_Right1
    - 0.6Dead+0.6Wind\_Long1
    - 0.6Dead+0.6Wind\_Long2



ISSUE	DESCRIPTION	DATE	MARK
0	CONSTRUCTION	11/14/16	

PO BOX 1288 - CABOT, AR 72023 (501) 841-3929

DESCRIPTION: ANCHOR BOLT DETAILS & REACTIONS

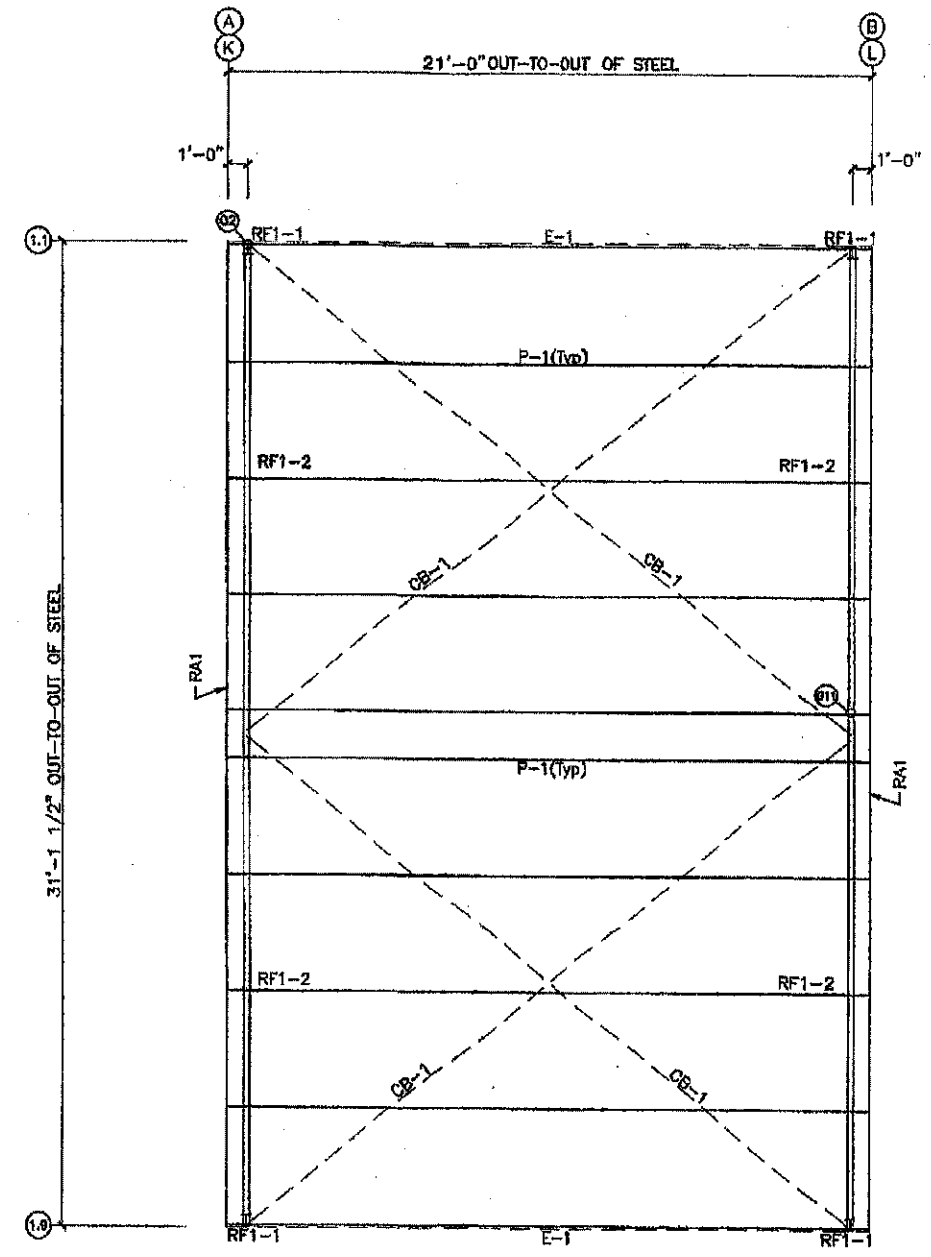
CUSTOMER: 7B BUILDING & DEVELOPMENT

LOCATION: ROSWELL, NM (CHAVES CO.)

Detailer	SS	Checker	DS	Designer	SD
Job No.	161645B	Sheet	F2	Issue	0

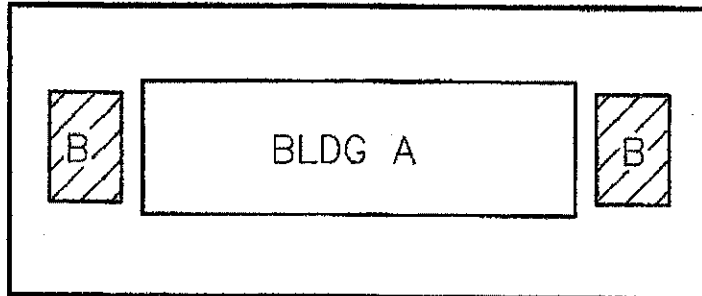
MEMBER TABLE	
ROOF PLAN	
MARK	PART
P-1	10X35Z14
E-1	10X25Z16
CB-1	1/4" CB

**NOTE:**  
Alternate Arrows  $\nabla$ - $\Delta$   
Up And Down From Bay  
To Bay For Purins To Lap.



T107  
(2)

ROOF SHEETING  
PANELS: 24 Ga. PBR  
Brite Red



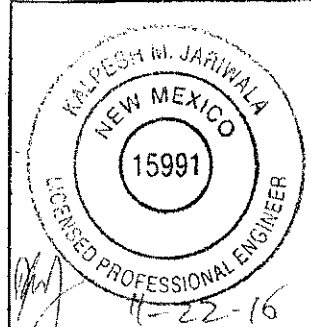
ROOF FRAMING PLAN

**COLLATERAL LOAD NOTE:**  
Roof purlin has been designed for the collateral load listed on the cover. The total applied loads due to ceiling panels, ducts, sprinkler distribution lines, electrical equipment, conduit, fireproofing, other piping or mechanical loads cannot exceed this maximum uniform load. Pinnacle Structures, Inc. is not responsible for lateral or longitudinal bracing of suspended members subject to lateral seismic or wind loading.  
Loads supported directly from the purlins must have connections through the web of the purlin.

Loads supported between purlins must be supported such that the loads are applied to the webs of the purlins.

NOTE: DWGS FOR (2) IDENTICAL BLDGS

**FOR PERMITS ONLY**



ISSUE	DESCRIPTION	DATE	MARK
P	PERMIT	11/14/16	

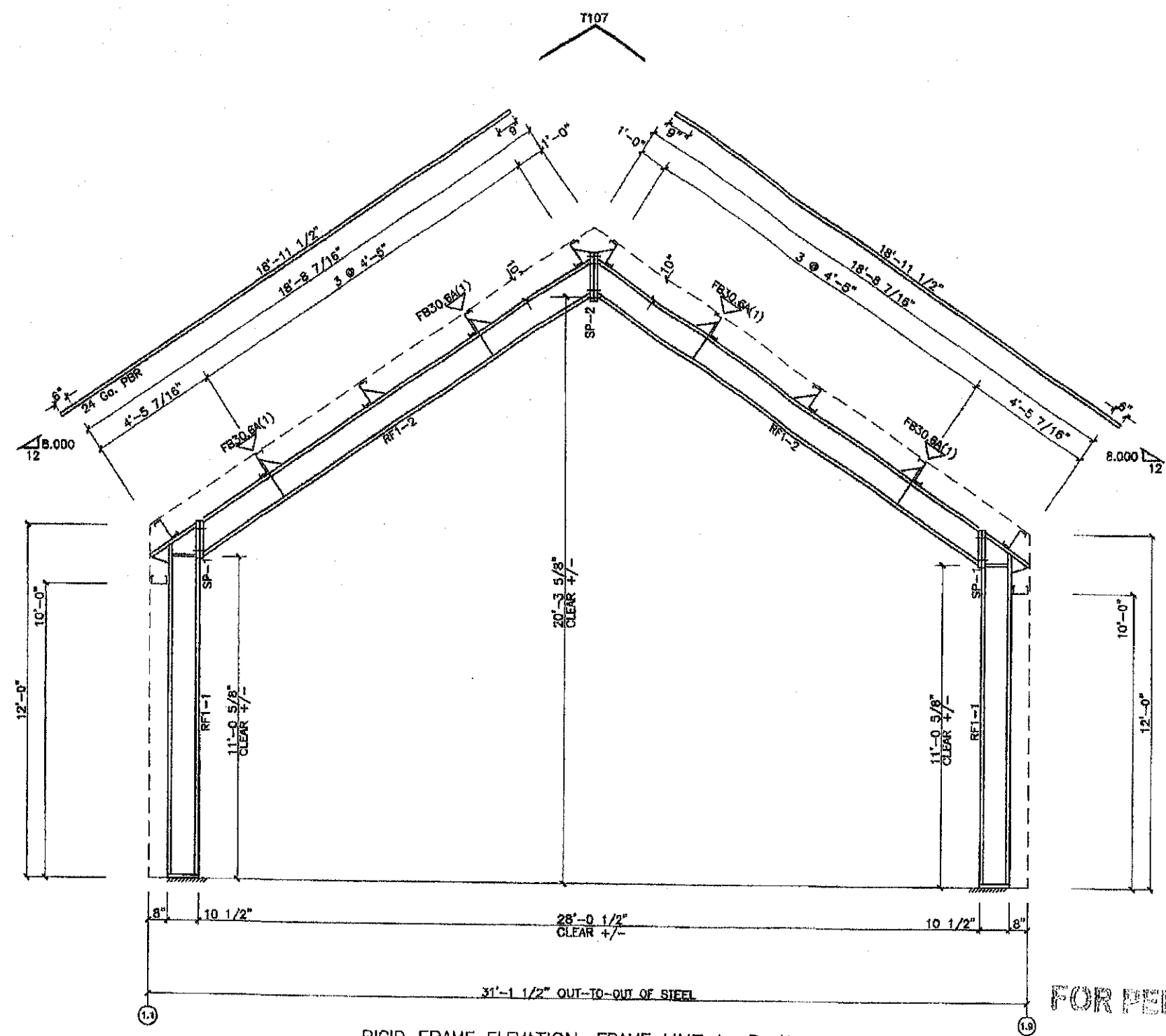


DESCRIPTION:	ROOF FRAMING		
CUSTOMER:	7B BUILDING & DEVELOPMENT		
LOCATION:	ROSWELL, NM (CHAVES CO.)		
Detailer	SS	Checker	DS
Designer	So		
Job No.	161645B	Sheet	E1
Issue	P		

SPlice PLATE & BOLT TABLE									
Mark	Qty		Int	Type	Dia	Length	Width	Thick	Length
	Top	Bot							
SP-1	2	2	0	A325	7/8"	2 3/4"	6"	3/4"	1'-0 7/8"
SP-2	4	4	0	A325	3/4"	1 3/4"	8"	3/8"	1'-9 1/8"

MEMBER TABLE						
Mark	Web		Web Plate		Outside Flange	Inside Flange
	Start/End	Depth	Thick	Length		
RF1-1	10.0/10.0	0.155	143.5		6 x 1/4" x 136.6	6 x 1/4" x 132.1
RF1-2	10.0/10.0	0.135	206.9		6 x 1/4" x 200.1	6 x 1/4" x 200.1

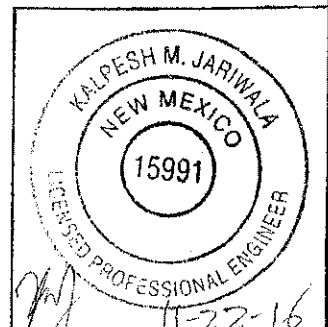
FLANGE BRACES: (1) One Side; (2) Two Sides  
 FBxxA(1); xx=length(in)  
 A - L2X2X1/8



RIGID FRAME ELEVATION: FRAME LINE A B K L

NOTE: DWGS FOR (2) IDENTICAL BLDGS

FOR PERMITS ONLY



ISSUE	DESCRIPTION	DATE	MARK
P	PERMIT	11/14/16	

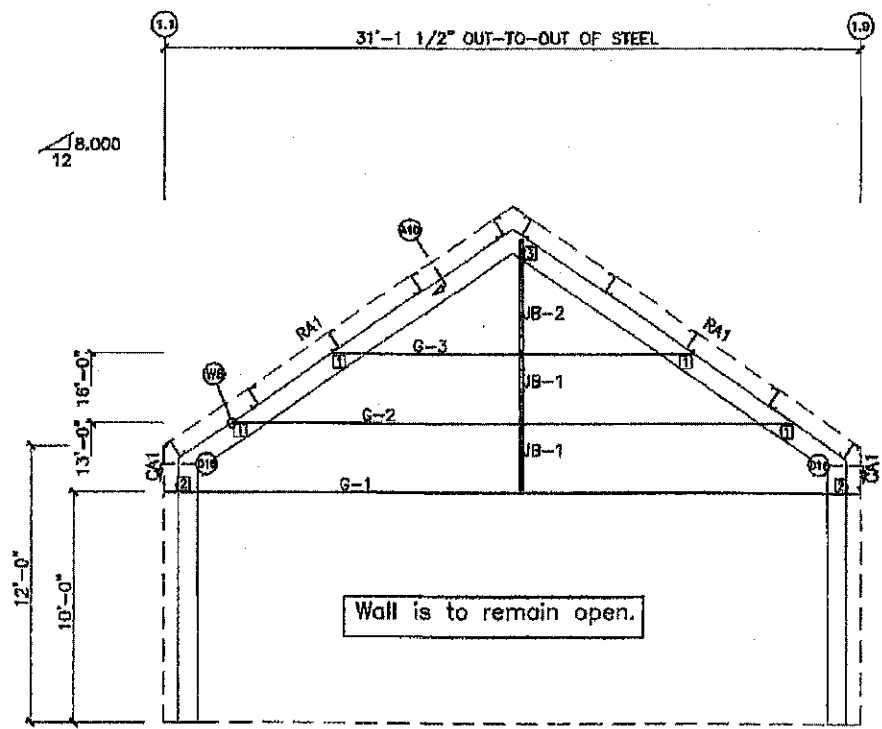
		DESCRIPTION: RIGID FRAME ELEVATION CUSTOMER: 7B BUILDING & DEVELOPMENT LOCATION: ROSWELL, NM (CHAVES CO.)
Detailer: SS Job No: 161645B	Checker: DS Sheet: E3	Designer: <i>SS</i> Issue: P

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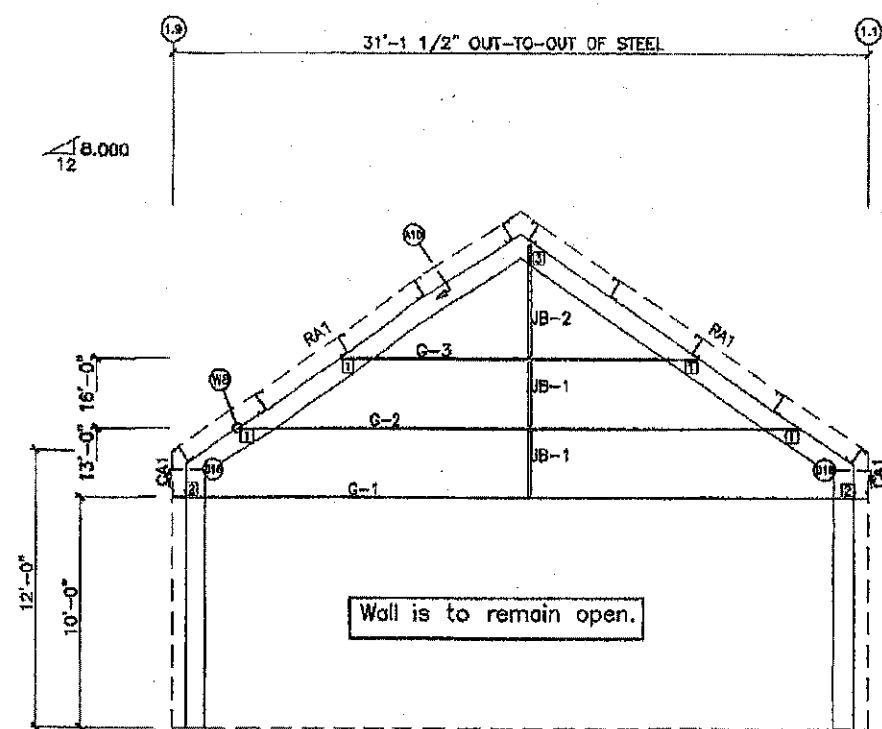
CONNECTION PLATES	
FRAME LINE A & B	
ID	MARK/PART
1	CL13
2	PL34
3	CL43

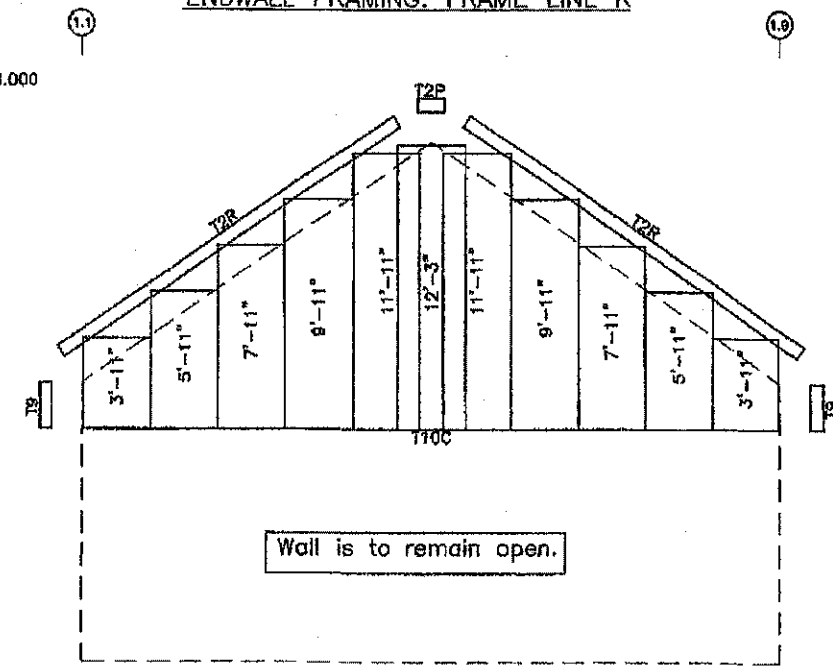
MEMBER TABLE	
FRAME LINE A & B	
MARK	PART
G-1	8X25C14
G-2	8X25Z14
G-3	8X25Z16
JB-1	8X25C16
JB-2	8X25C18



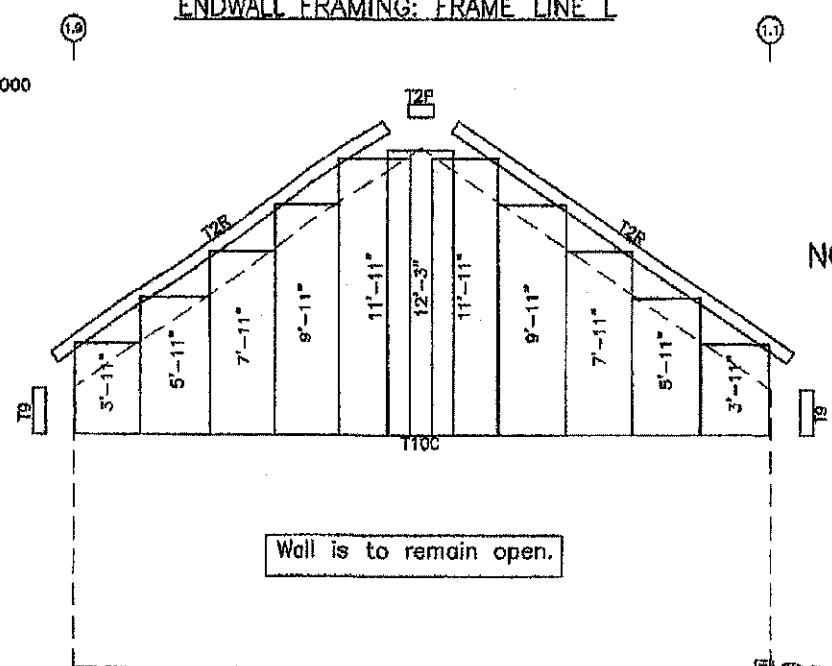
ENDWALL FRAMING: FRAME LINE A  
ENDWALL FRAMING: FRAME LINE K



ENDWALL FRAMING: FRAME LINE B  
ENDWALL FRAMING: FRAME LINE L



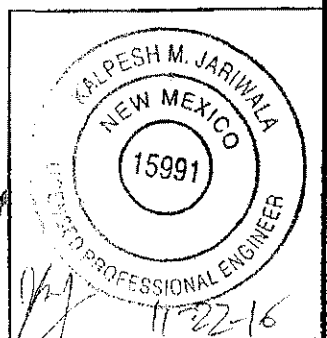
ENDWALL SHEETING & TRIM: FRAME LINE A  
ENDWALL SHEETING & TRIM: FRAME LINE K  
PANELS: 24 Ga. PBR - Brite Red



ENDWALL SHEETING & TRIM: FRAME LINE B  
ENDWALL SHEETING & TRIM: FRAME LINE L  
PANELS: 24 Ga. PBR - Brite Red

NOTE: DWGS FOR (2) IDENTICAL BLDGS

FOR PERMITS ONLY



**GENERAL NOTES:**  
 1. Pinnacle standard trim lap is 3 inches max.  
 2. Pinnacle pre-cuts wall panels at factory located openings as required.  
 3. Slot girls in field for cable passage at flush walls as required.

ISSUE	DESCRIPTION	DATE	MARK
P	PERMIT	11/14/16	

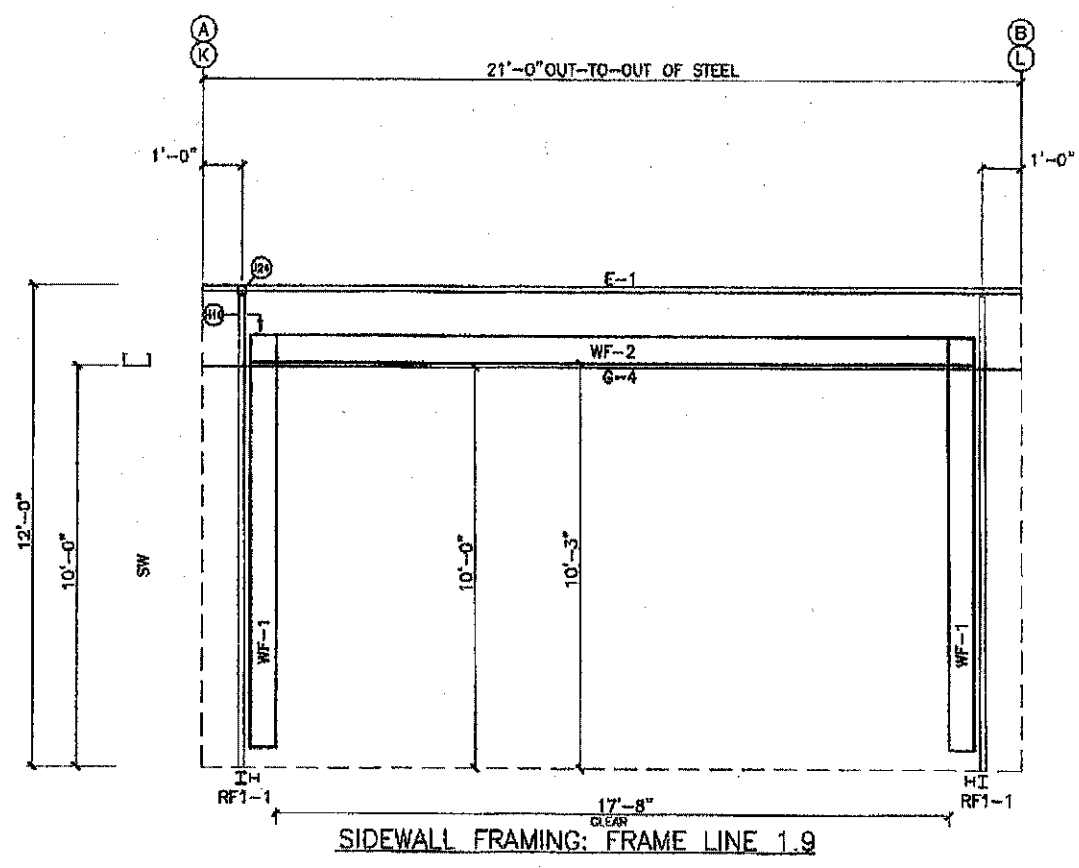


DESCRIPTION:	ENDWALL FRAMING
CUSTOMER:	7B BUILDING & DEVELOPMENT
LOCATION:	ROSWELL, NM (CHAVES CO.)
Detailer:	SS
Checker:	DS
Designer:	
Job No.:	161645B
Sheet:	E4
Issue:	P

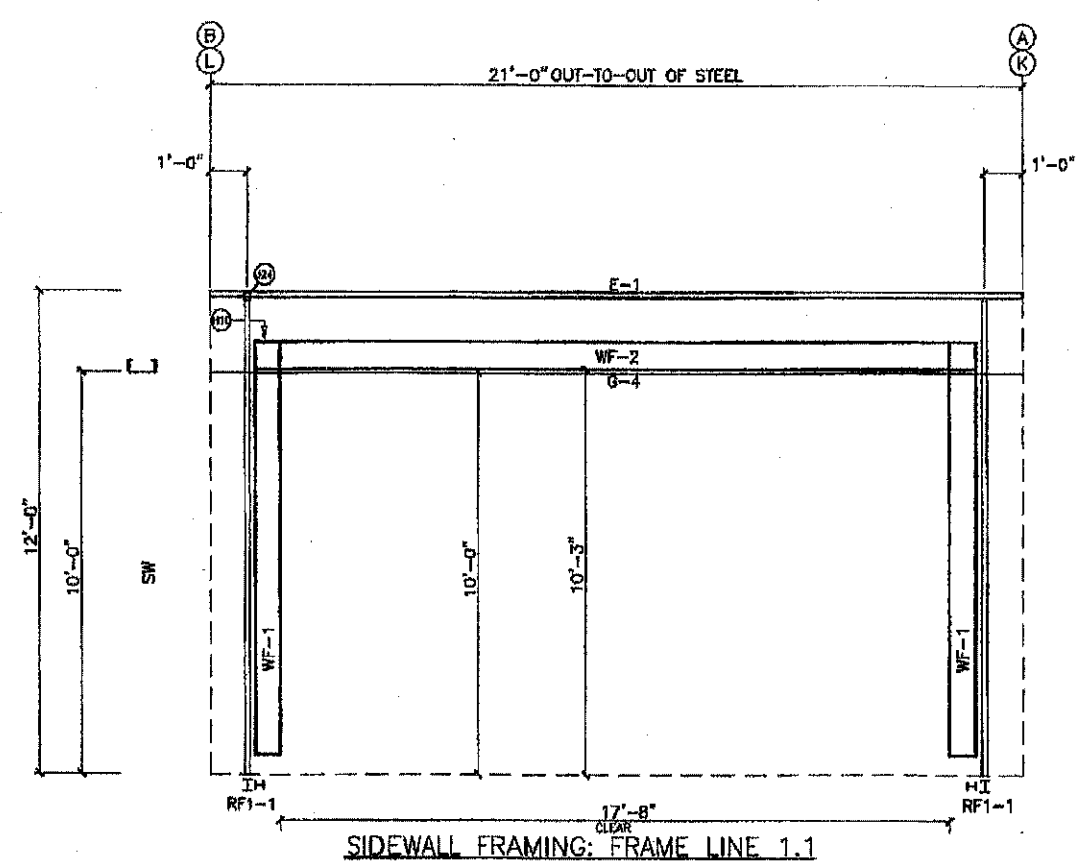
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BOLT TABLE				
FRAME LINE 1.9 & 1.1				
LOCATION	QUAN	TYPE	DIA	LENGTH
WF-1 - WF-2	4	A325	3/4"	1 3/4"
WF-1 - RF1-1	10	A325	5/8"	1 1/2"

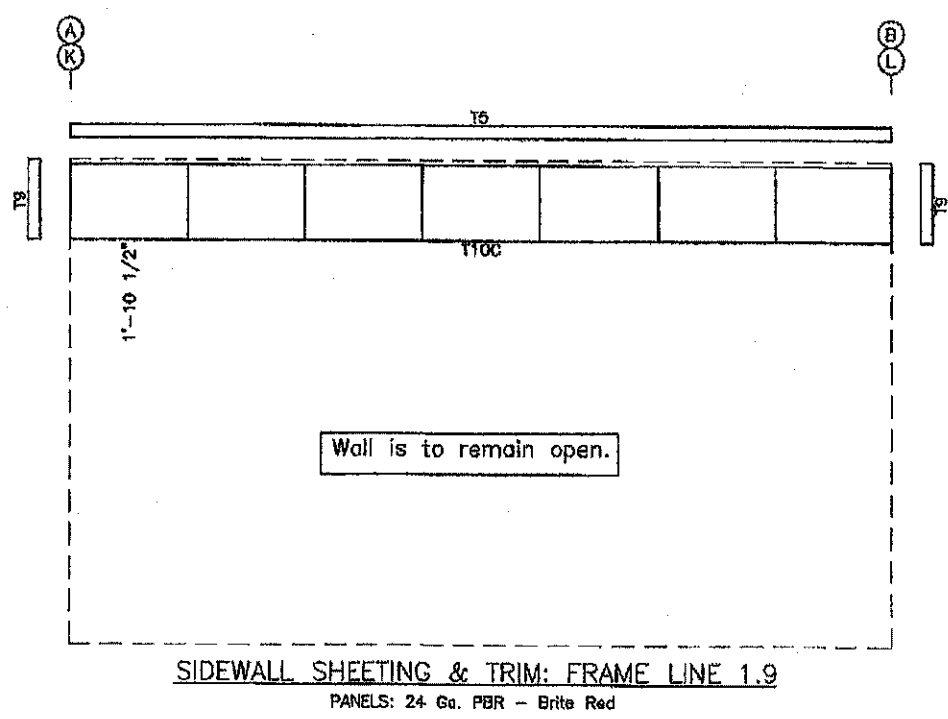
MEMBER TABLE	
FRAME LINE 1.9 & 1.1	
MARK	PART
WF-1	W08641
WF-2	W08641
E-1	10X25Z16
G-4	8X25C16



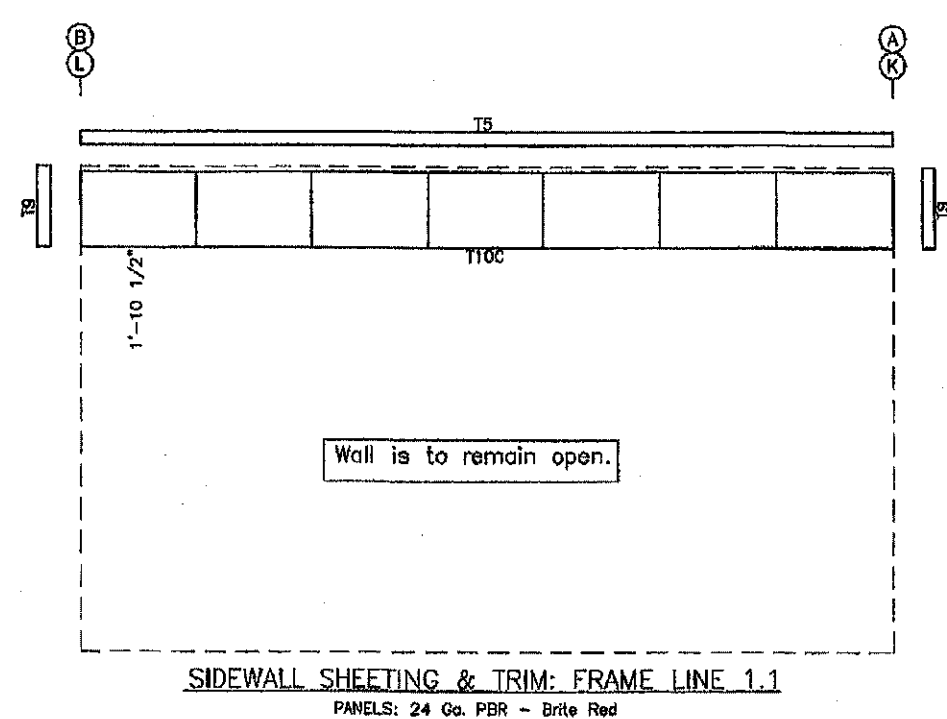
SIDEWALL FRAMING: FRAME LINE 1.9



SIDEWALL FRAMING: FRAME LINE 1.1



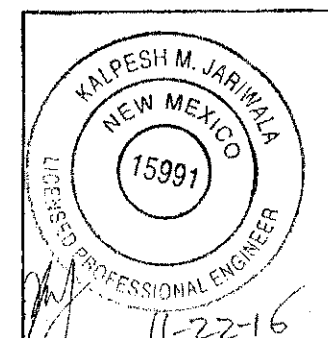
SIDEWALL SHEETING & TRIM: FRAME LINE 1.9  
PANELS: 24 Ga. PBR - Brite Red



SIDEWALL SHEETING & TRIM: FRAME LINE 1.1  
PANELS: 24 Ga. PBR - Brite Red

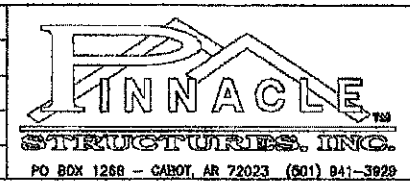
NOTE: DWGS FOR (2) IDENTICAL BLDGS

FOR PERMITS ONLY



GENERAL NOTES:  
 1. Pinnacle standard trim lap is 3 inches max.  
 2. Pinnacle pre-cuts wall panels at factory located openings as required.  
 3. Slot girts in field for cable passage at flush walls as required.

ISSUE	DESCRIPTION	DATE	MARK
P	PERMIT	11/14/16	



DESCRIPTION:	SIDEWALL FRAMING		
CUSTOMER:	7B BUILDING & DEVELOPMENT		
LOCATION:	ROSWELL, NM (CHAVES CO.)		
Detailer:	SS	Checker:	DS
Job No.:	161645B	Sheet:	E5
Designer:	SS	Issue:	P