

TABLE 1  
ANCHOR AND PANEL FASTENER SPACING  
SPECIFICATIONS

RISK CATEGORY	WIND EXPOSURE CATEGORY	ULTIMATE WIND SPEED (MPH)	NOMINAL WIND SPEED (MPH)	MAXIMUM RAFTER/BOW AND END POST SPACING (FEET)	AVERAGE FASTENER SPACING ON-CENTERS ALONG RAFTERS OR PURLINS, AND POSTS OR GIRTS (INCHES)	
					INTERIOR BOWS/RAFTERS	END BOWS/RAFTERS
I, II, III, or IV	B, C, or D	115 TO 150	89 TO 116	5.0	6	6
		151 TO 180	117 TO 139	4.0	6	6

NOTES:

1. SPECIFICATIONS APPLICABLE TO 26 OR 29 GAUGE METAL PANELS FASTENED DIRECTLY TO 12-14 OR 16 GAUGE STEEL TUBE ROW FRAMES.
2. FASTENERS CONSIST OF #12-14x3/4" SELF-DRILLING SCREWS WITH CONTROL SEAL WASHER.
3. SPECIFICATIONS APPLICABLE ONLY FOR MEAN ROOF HEIGHT OF 20 FEET OR LESS, AND ROOF SLOPES OF 14°(3:12 PITCH), SPACING REQUIREMENTS FOR OTHER ROOF HEIGHTS AND/OR SLOPES MAY VARY.
4. GROUND ANCHOR REQUIREMENTS ARE 1 @ EACH CORNER AND ONE EVERY OTHER INTERIOR BOW/RAFTER POST LOCATION, AT MAXIMUM OF 10' O.C., AND BOTH SIDES OF OPENINGS WHERE BASE RAIL IS ABSENT.
5. GROUND ANCHORS ARE NOT REQUIRED WITH CONCRETE SLAB CONSTRUCTION.

## WINDOW AND DOOR NOTE

TESTING WINDOWS AND GLASS DOORS SHALL BE TESTED BY AN APPROVED INDEPENDENT TESTING LABORATORY, AND BEAR AN AAMA OR WDMA, OR OTHER APPROVED LABEL IDENTIFYING THE MANUFACTURER, PERFORMANCE CHARACTERISTICS AND APPROVED PRODUCT EVALUATION ENTRY TO INDICATE COMPLIANCE WITH THE REQUIREMENTS OF THE FOLLOWING SPECIFICATION.

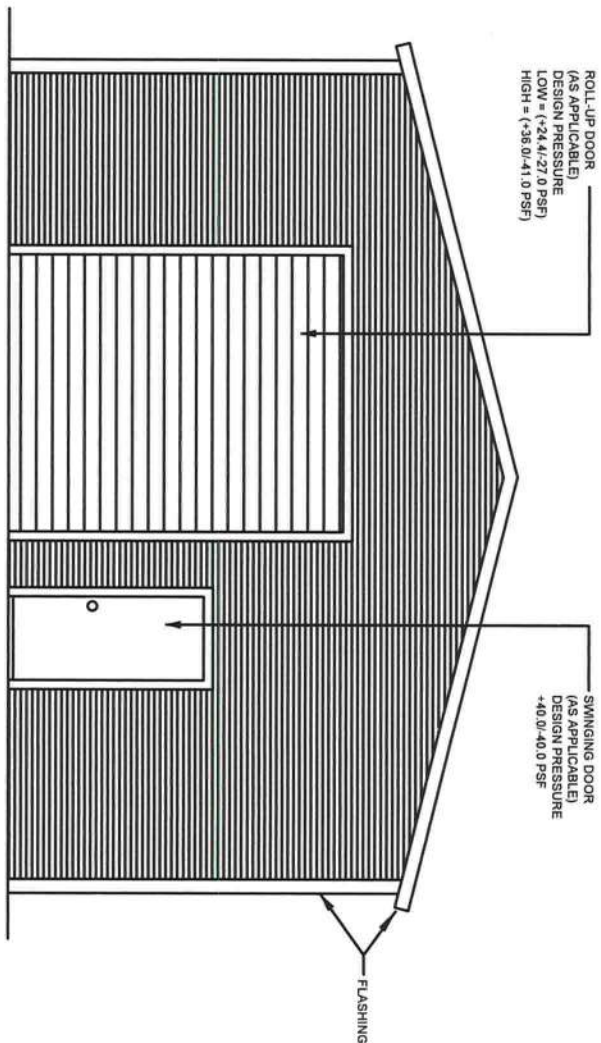
ANSI/AAMA/NWMA 101/15 2/97

THE CONSTRUCTION SHALL BE TESTED IN ACCORDANCE WITH ASTM E 330, STANDARD TEST METHODS FOR STRUCTURAL PERFORMANCE OF EXTERIOR WINDOWS, CURTAIN WALLS, AND DOORS BY UNIFORM STATIC AIR PRESSURE.

DESIGN WAS DONE IN ACCORDANCE WITH THE 2020 FLORIDA BUILDING CODE 7TH EDITION (FBC) 2020 SUPPLEMENT AMENDMENTS 2006 INTERNATIONAL BUILDING CODE (IBC), 2009 IBC AND 2012 IBC.

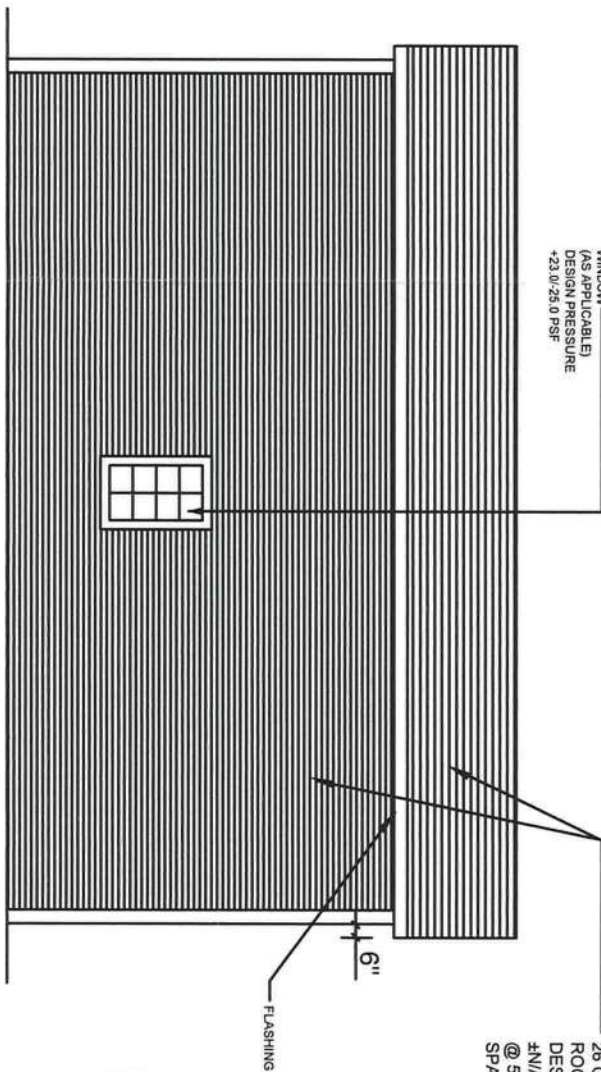
## GENERAL NOTES:

1. ALL STEEL SHALL BE 50 KSI STEEL.
2. FASTEN METAL ROOF AND WALL PANELS TO FRAMING WITH 1/4" X 3/4" SELF DRILLING FASTENERS WITH CONTROL SEAL WASHER @ 6" O.C. AVERAGE.
3. ALL FIELD CONNECTIONS SHALL BE #12-14X3/4" SELF DRILLING SCREWS.  
50°F S.
4. ALL SHOP CONNECTIONS SHALL BE WELDED.
5. CONCRETE EXPANSION ANCHORS SHALL BE WELT ANKR-TITE MODEL AT 1252, OR SLEEVE ANCHOR MODEL HSA 1250, OR EQUIVALENT. GROUND ANCHOR REQUIREMENTS ARE 1@ EACH CORNER & ONE EVERY OTHER INTERIOR RAFTER POST LOCATION, AT A MAXIMUM 10'-0" O.C., AND BOTH SIDES OF OPENINGS WHERE BASE RAIL IS ABSENT. GROUND ANCHORS ARE NOT REQUIREMENT FOR CONCRETE FOOTING AND/OR CONCRETE SLAB CONSTRUCTION.
6. POST/RAFTER BRACING, BRACE ON EVERY POST/RAFTER CONNECTION, EXCEPT FOR END WALLS.



## TYPICAL END ELEVATION-HORIZONTAL ROOF

SCALE: NOT TO SCALE



TYPICAL SIDE ELEVATION-HORIZONTAL ROOF

SCALE: NOT TO SCALE

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OU=ENGINEERING,  
O=Sony FM LLC,  
L=Tempe, Sierrafide, Cal  
Date: 2021.09.28  
10:45:28-0400



DR. RAM A. GOEL, PH.D., P.E  
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Job #	2173
Drown By:	S.K.
Checked By:	R.G.

Issue Date:08-18-21

REVISIONS:	
No.	Date Description

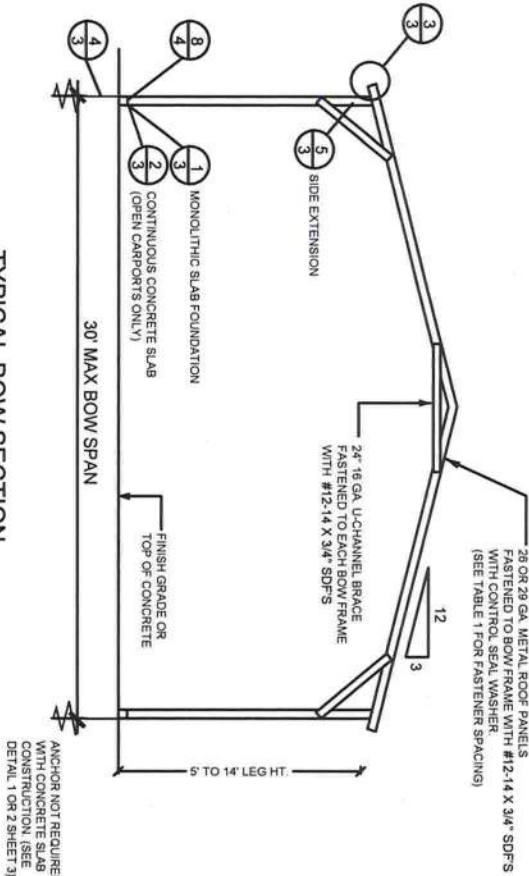
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11	11	11	11

## PREFABRICATED UTILITY STRUCTURE

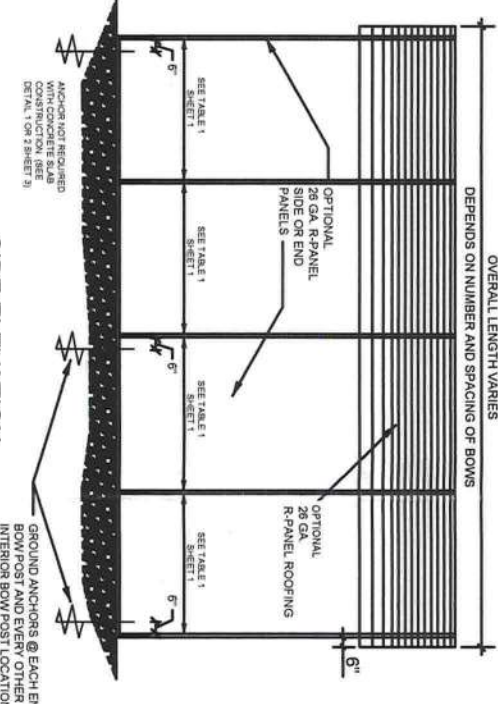
ELITE METAL MANUFACTURING,LLC  
10121 88TH TRACE  
LIVE OAK, FL 32060



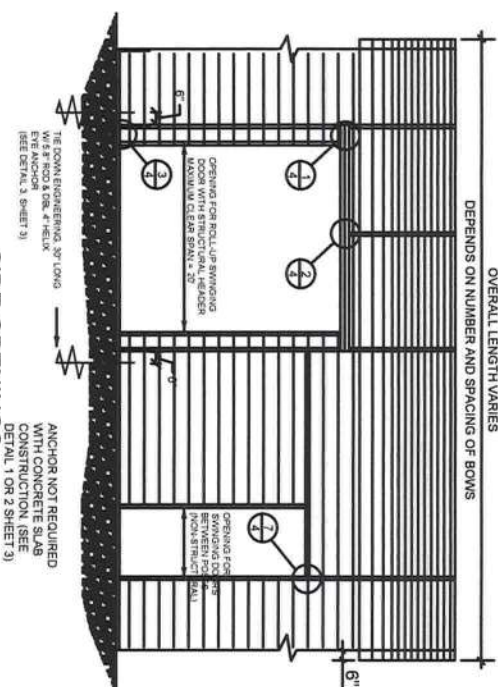




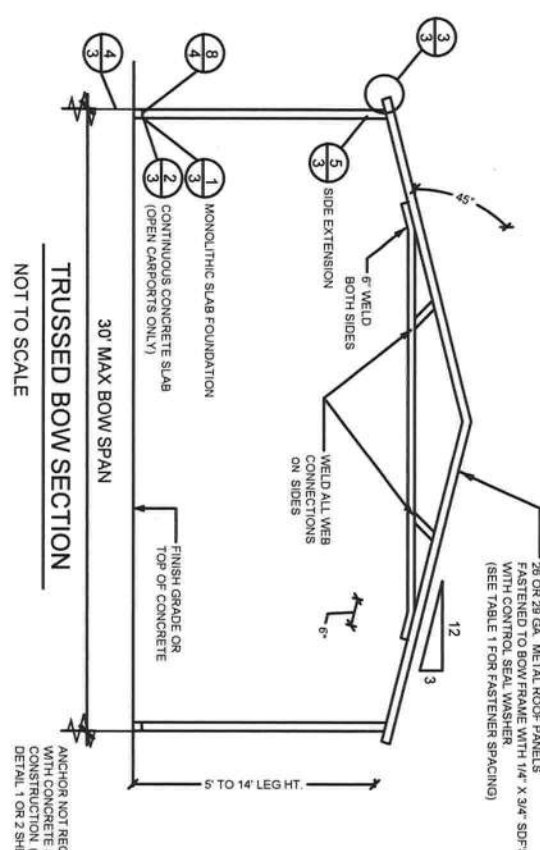
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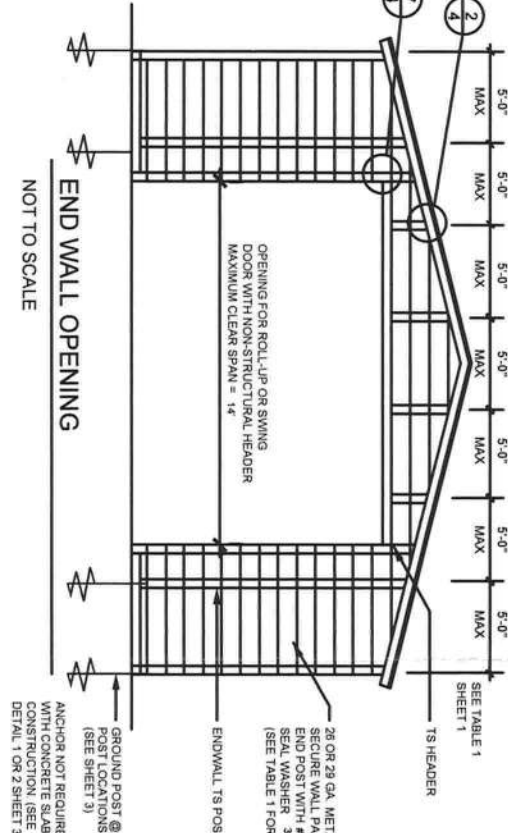
SIDE ELEVATION  
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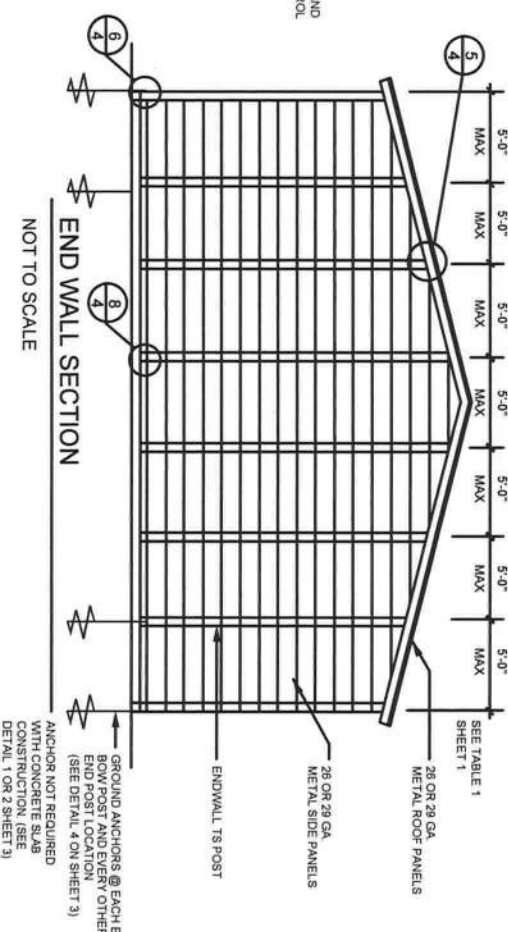
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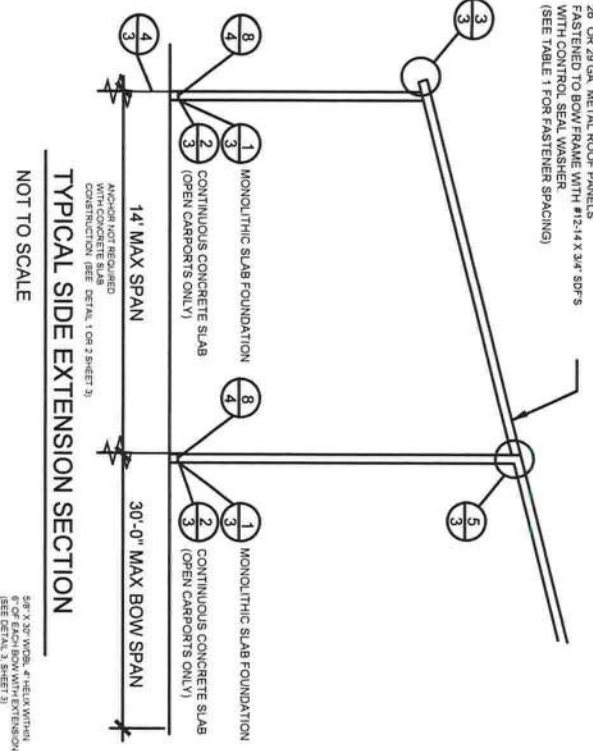
TRUSSED BOW SECTION  
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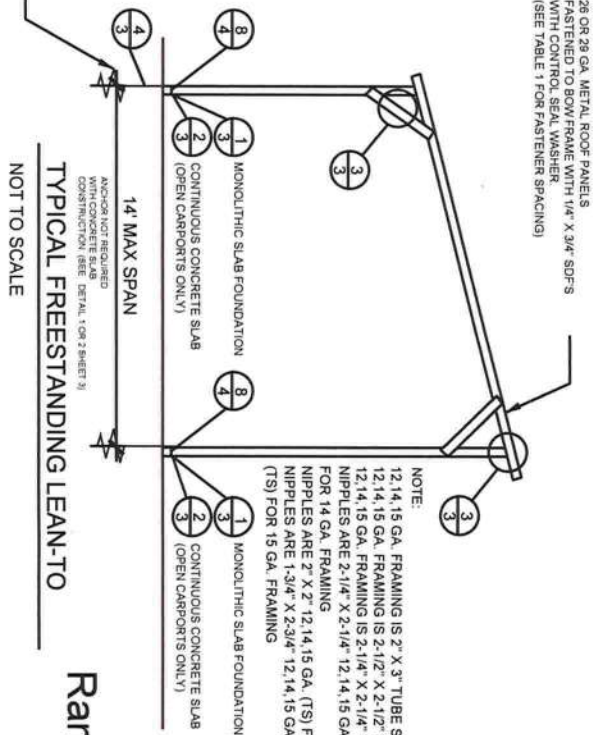
END WALL OPENING  
NOT TO SCALE



END WALL SECTION  
NOT TO SCALE

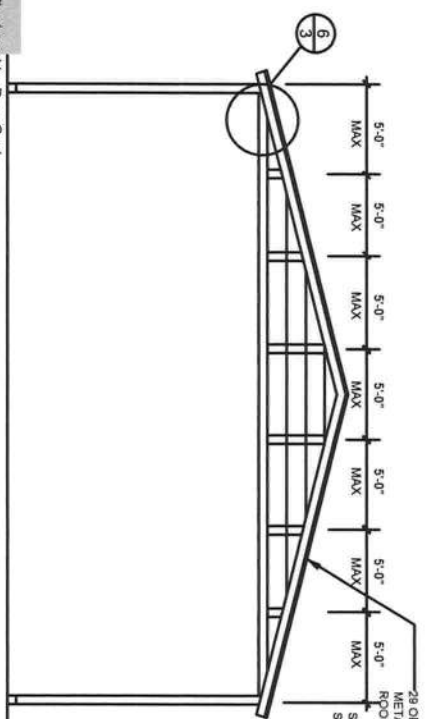


TYPICAL SIDE EXTENSION SECTION  
NOT TO SCALE



TYPICAL FREESTANDING LEAN-TO  
NOT TO SCALE

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Date: 2021.08.29 10:48:59-0400'  
NOT TO SCALE



GABLED OPEN END WALL SECTION  
NOT TO SCALE

THE FOLLOWING IS COMPLIANT TO THE FLORIDA BUILDING CODE 2020, 7TH EDITION AND ASCE 7-16 FOR WIND LOADS OF 180 MPH



PREFABRICATED UTILITY STRUCTURE

ELITE METAL MANUFACTURING, LLC  
10121 88TH TRACE  
LIVE OAK, FL 32060

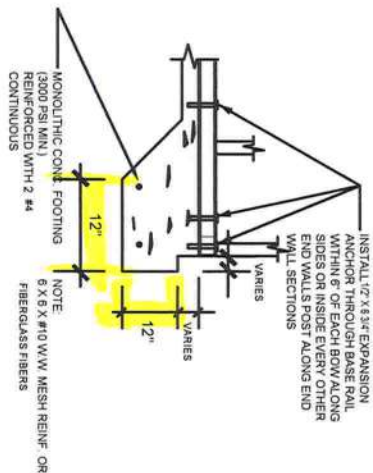
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Revisions:
No. Description
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4/1

Job # 21731
Drawn By: S.K.
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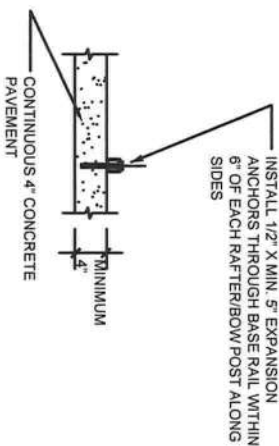
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SONEY FM LLC  
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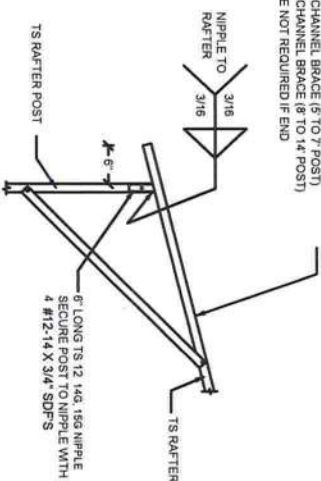


1 CONCRETE BASE RAIL ANCHORAGE  
SCALE: NTS (OPTIONAL)

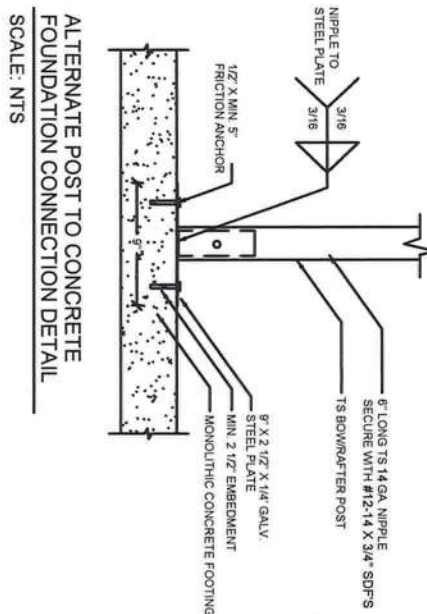


2 CONCRETE BASE RAIL ANCHORAGE  
SCALE: NTS (OPTIONAL - OPEN CARPORT ONLY)

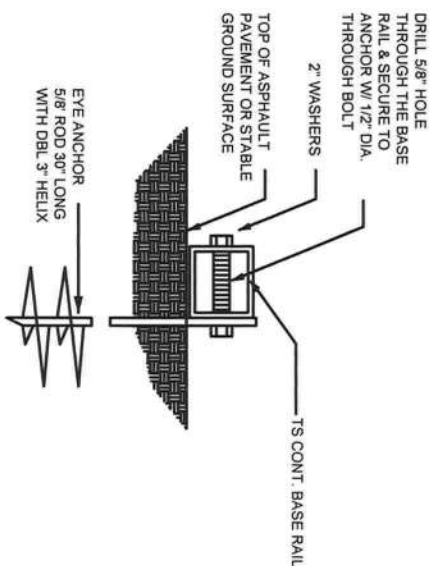
2x 16 GA. U-CHANNEL BRACE (6" TO 7" POST)  
4x 16 GA. U-CHANNEL BRACE (8" TO 14" POST)  
NOTE: BRACE NOT REQUIRED IF END ENCLOSED



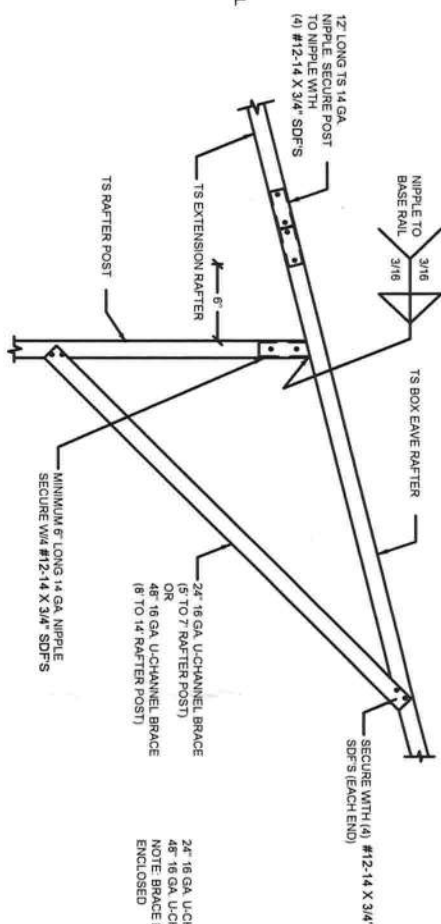
3 BOX EAVE RAFTER/CORNER POST DETAIL  
SCALE: NTS



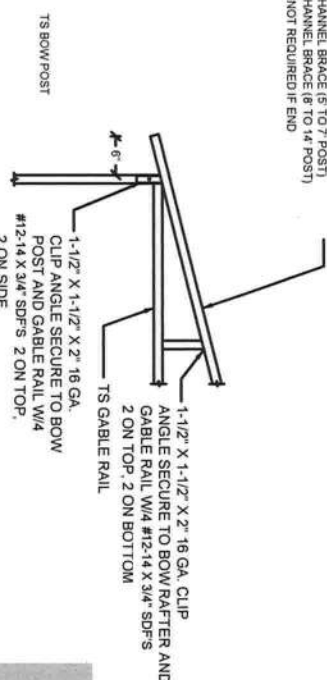
ALTERNATE POST TO CONCRETE FOUNDATION CONNECTION DETAIL  
SCALE: NTS



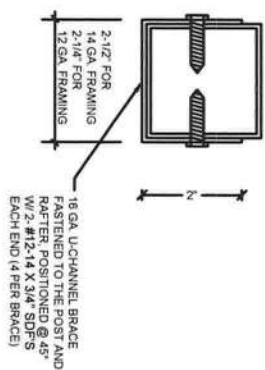
4 BASE RAIL ANCHORAGE  
SCALE: NTS



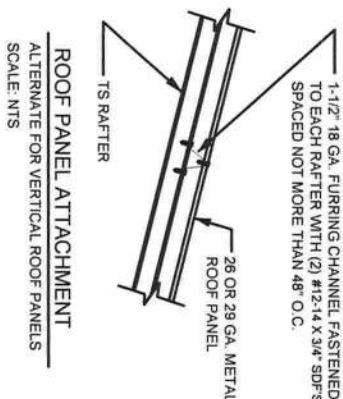
5 SIDE EXTENSION RAFTER/ CORNER POST DETAIL  
SCALE: NTS



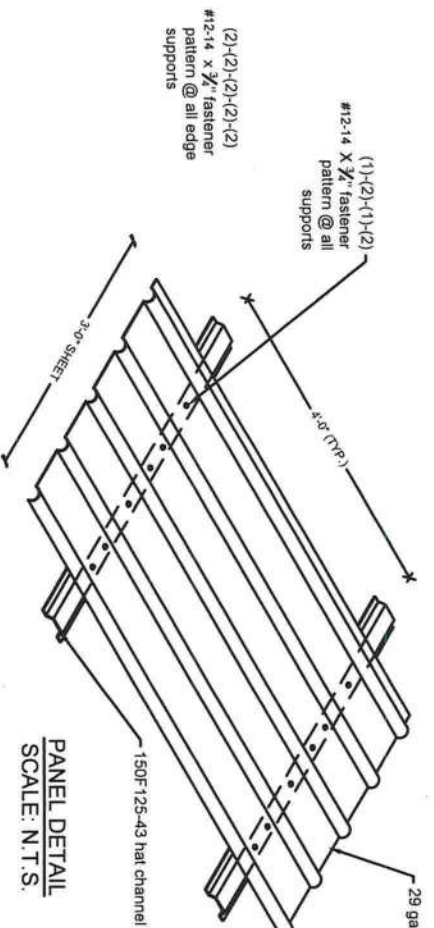
6 GABLE RAIL TO RAFTER POST CONNECTION DETAIL  
SCALE: NTS



BRACE SECTION  
SCALE: NTS



ROOF PANEL ATTACHMENT  
ALTERNATE FOR VERTICAL ROOF PANELS  
SCALE: NTS



PANEL DETAIL  
SCALE: N.T.S.



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Date: 2021.09.29  
10:46:16-04'00'

PREFABRICATED UTILITY STRUCTURE

ELITE METAL MANUFACTURING,LLC  
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3

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Job # 2173  
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Checked By R.G.

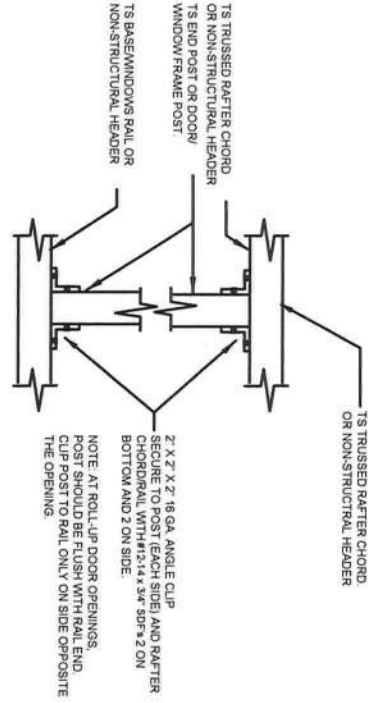
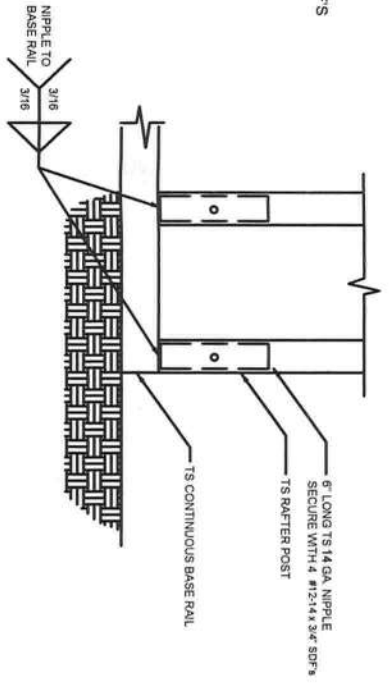
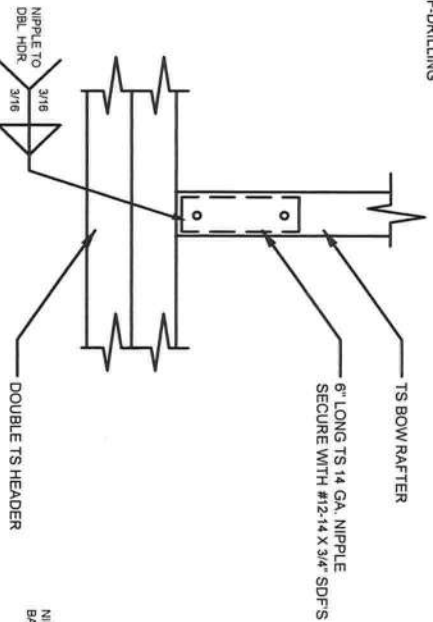
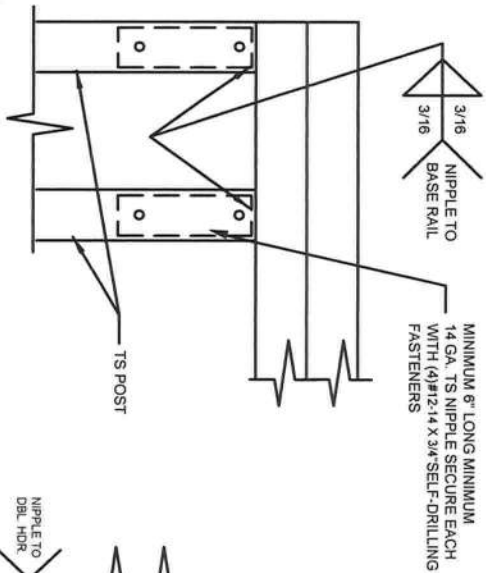
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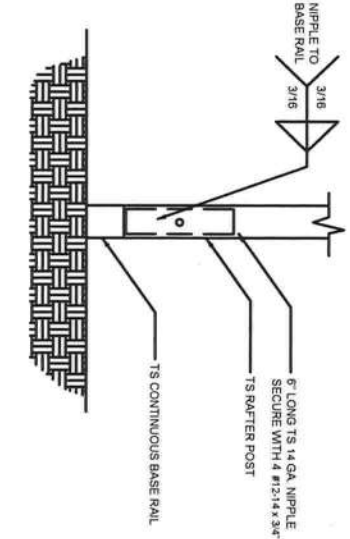
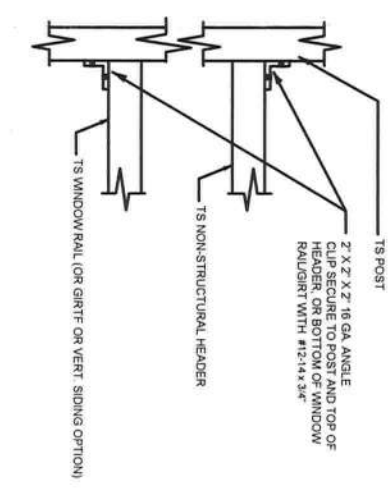
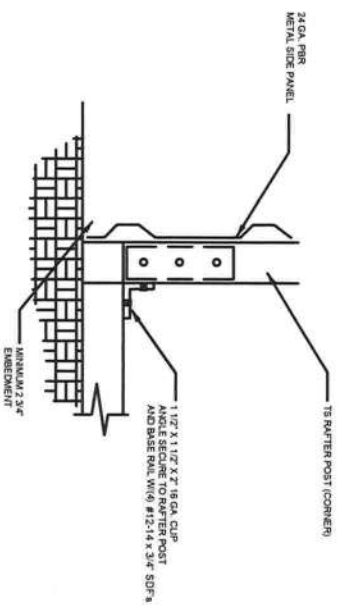
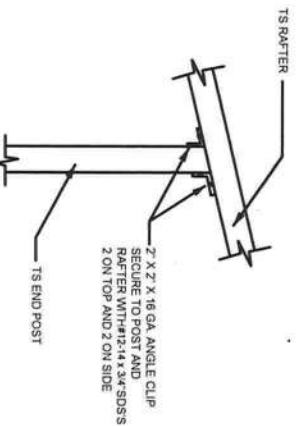


1 RAFTER POST/DBL. HEADER DETAIL  
SCALE: NTS

2 RAFTER POST/BASE RAIL CONNECTION DETAIL  
SCALE: NTS

3 RAFTER POST/BASE RAIL CONNECTION DETAIL  
SCALE: NTS

4 POST TO RAIL, TRUSS CHORD, OR NON-STRUCTURAL HEADER CONNECTION DETAIL  
SCALE: NTS

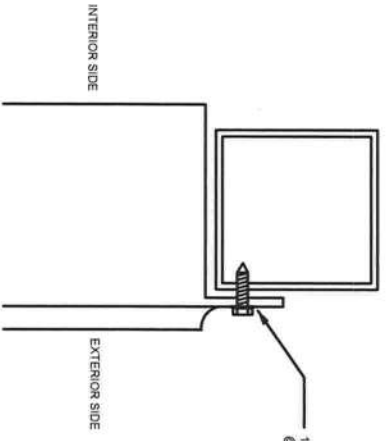
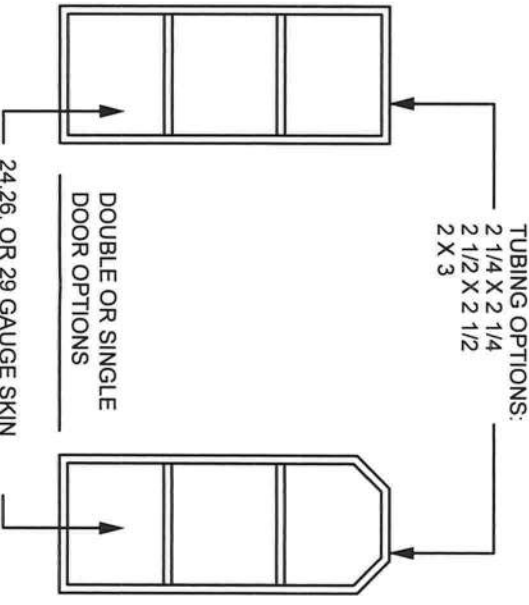
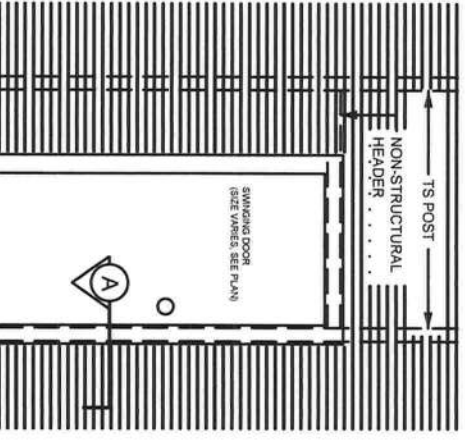
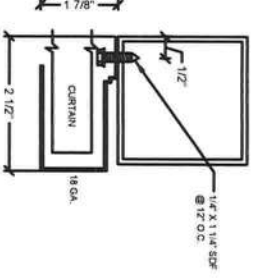


5 END POST/RAFTER CONNECTION DETAIL  
SCALE: NTS

6 END POST/BASE RAIL CONNECTION DETAIL  
SCALE: NTS

7 NON-STRUCTURAL HEADER, WINDOW RAIL, OR GIRT TO POST CONNECTION DETAIL  
SCALE: NTS

8 POST/BASE RAIL CONNECTION DETAIL  
SCALE: NTS



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THE FOLLOWING IS COMPLIANT TO THE FLORIDA  
BUILDING CODE 2020, 7TH EDITION AND ASCE 7-16 FOR  
WIND LOADS OF 180 MPH



PREFABRICATED UTILITY STRUCTURE

ELITE METAL MANUFACTURING, LLC  
10121 88TH TRACE  
LIVE OAK, FL 32060

Revisions:	
No.	Description
1	Issue Date: 08-18-21
2	
3	
4	
5	

Job #	2173
Drawn By	S.K.
Checked By	R.G.

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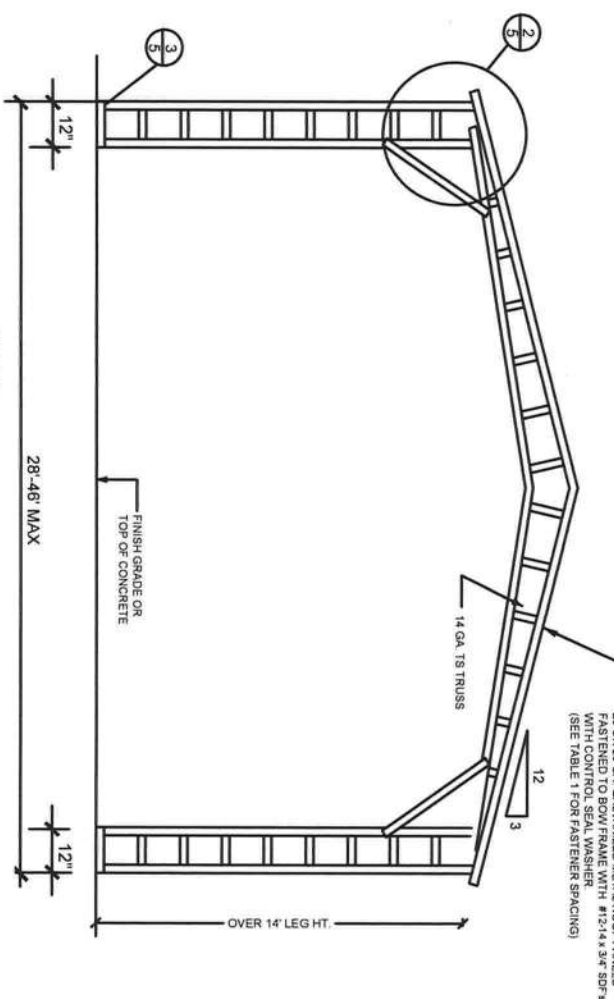
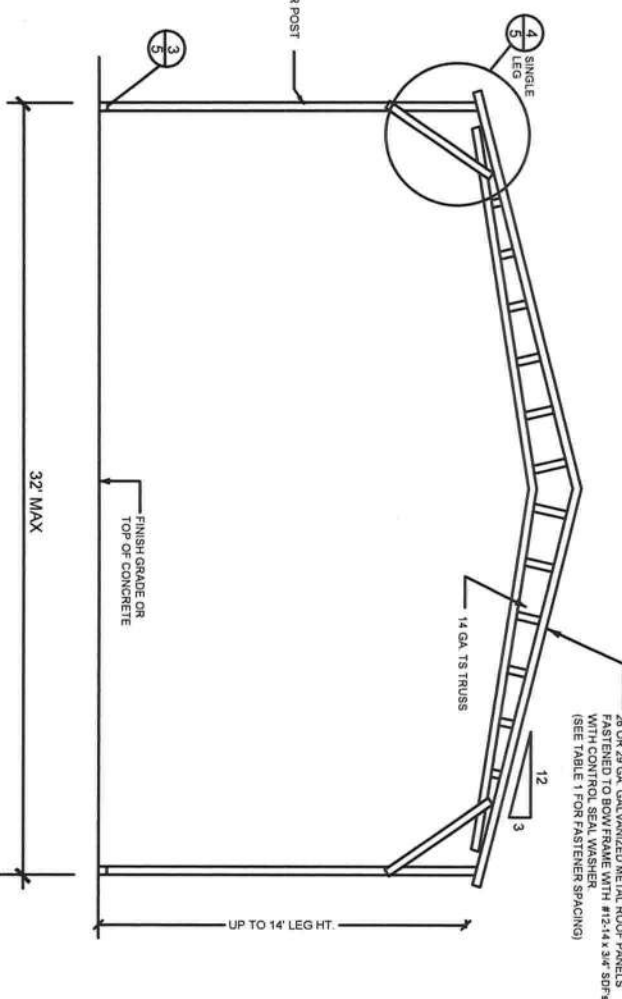
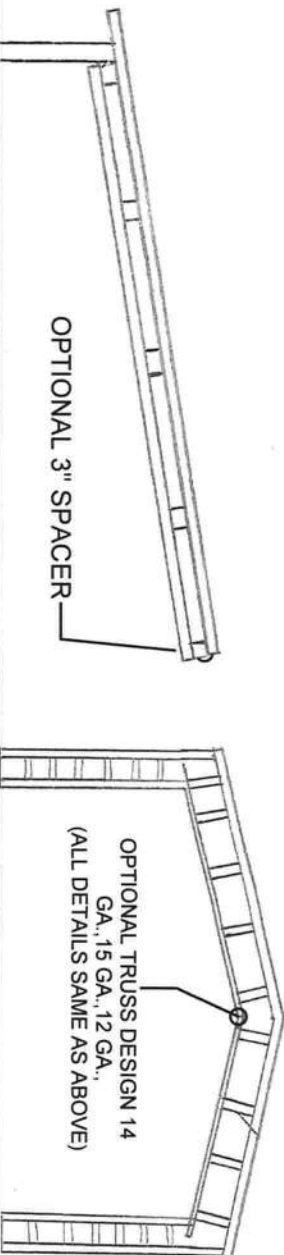
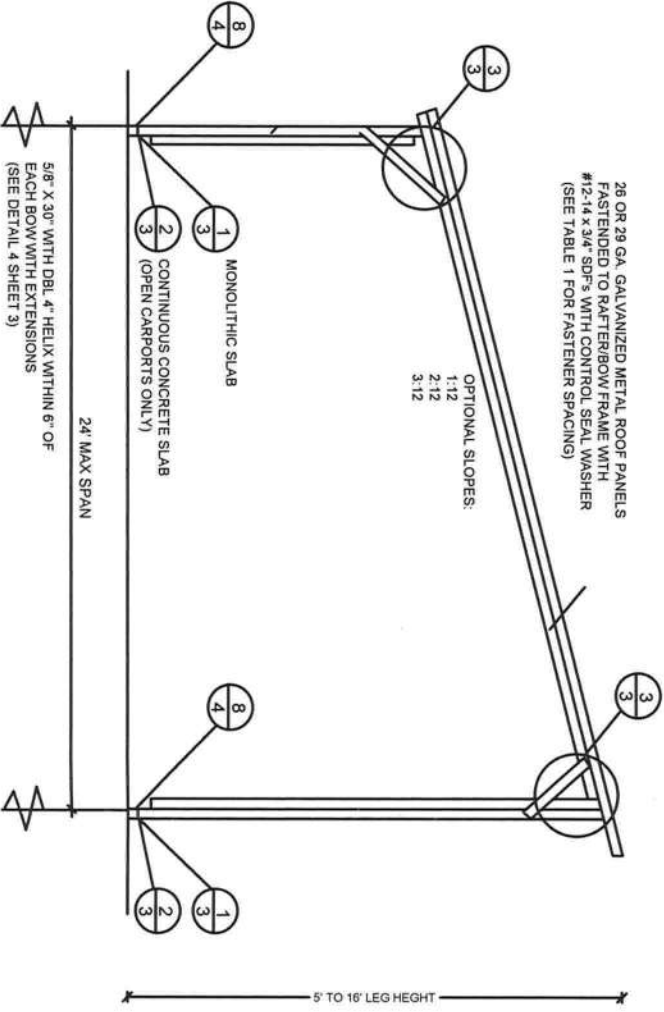
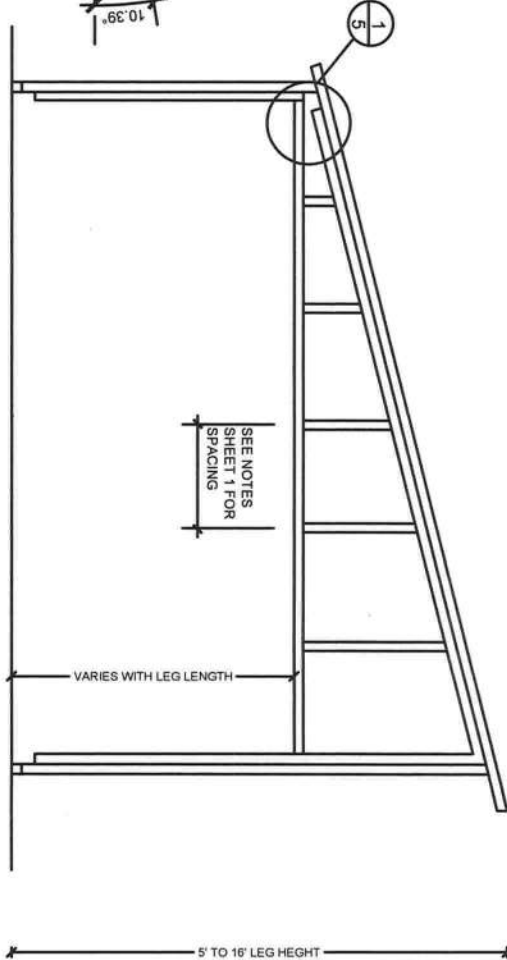
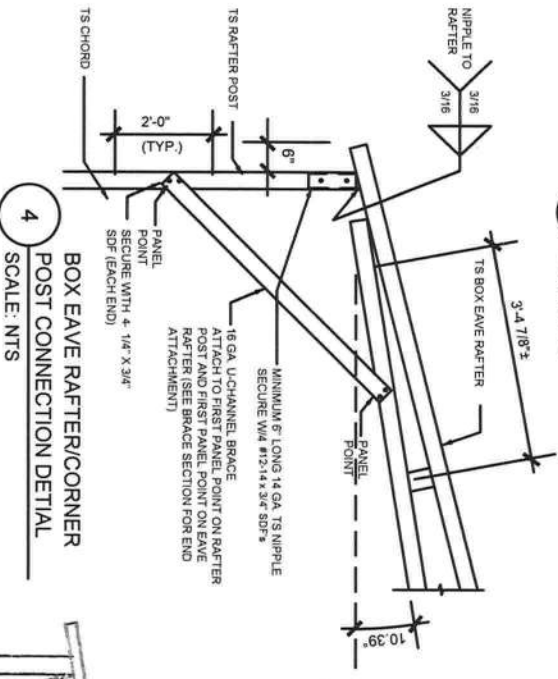
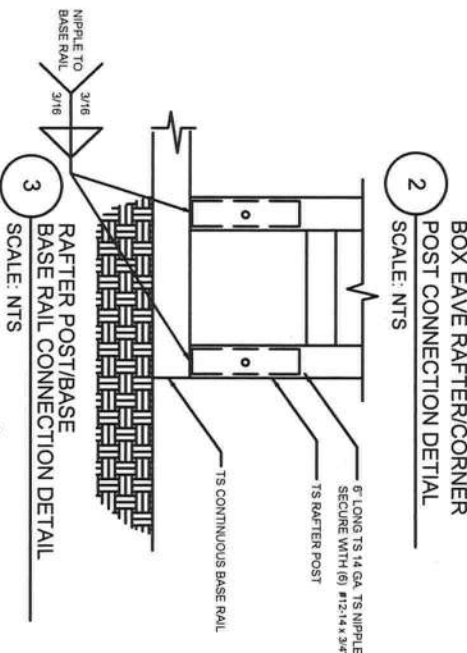
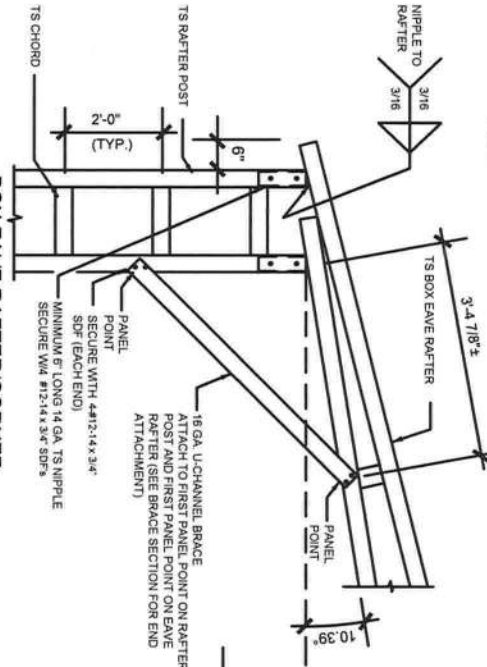
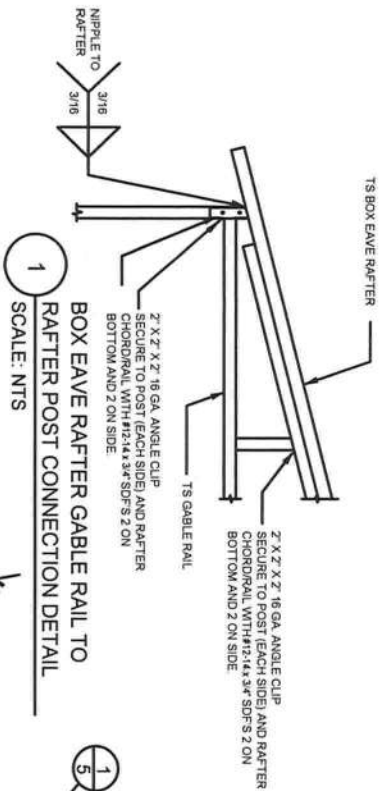
SECTION THROUGH ROLL UP  
DOOR HEADER  
SCALE: NTS

A SECTION  
SCALE: NTS

RAM A. GOEL, P.E. # 47431

4





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**RAM A. GOEL**  
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BUILDING CODE 2020, 7TH EDITION AND ASCE 7-16 FOR  
WIND LOADS OF 180 MPH**

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**Job # 2173**  
**Drawn By: S.K.**  
**Checked By: R.G.**

**Issue Date: 08-18-21**  
**Revisions:**  

No.	Date	Description
1/1		
2/1		
3/1		

**PREFABRICATED UTILITY STRUCTURE**

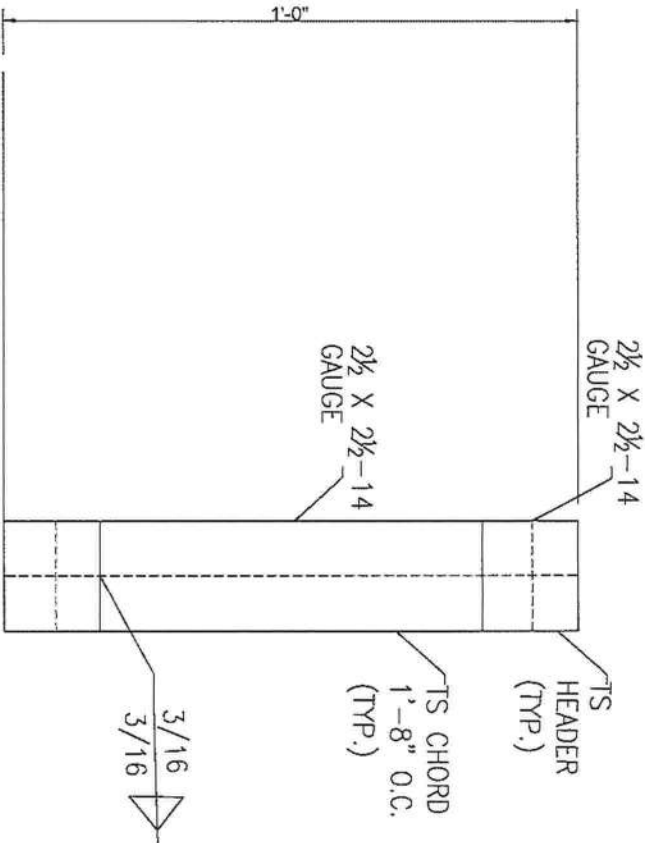
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**10121 88TH TRACE**  
**LIVE OAK, FL 32060**

**5**





OPTIONAL HEADER



HEADER DETAIL FOR DOOR  
OPENINGS 12'-0" < LENGTH < 20'-0"  
SCALE: 1/16" = 1'-0"

Ram Goel

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DN: E=Soneyfmllc@yahoo.com, CN=Ram Goel, OU=ENGINEERING, O=Soney FM LLC, L=Tampa, S=Florida, C=US  
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Dr. Ram A. Goel PE # 47431

OPTIONAL HEADER

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10121 88TH TRACE  
LIVE OAK, FL 32060

7

Revisions:	
No.	Date
1	11/11
2	11/11
3	11/11
4	11/11

Job #	2173
Drawn By	S.K.
Checked By	R.G.

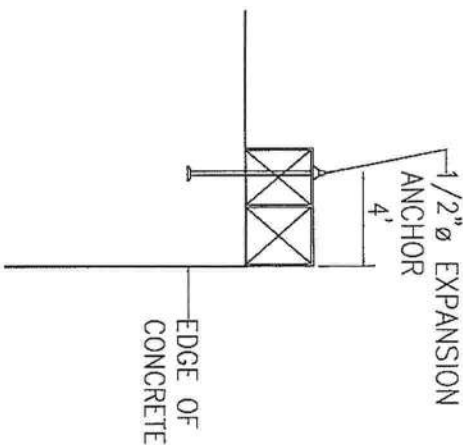
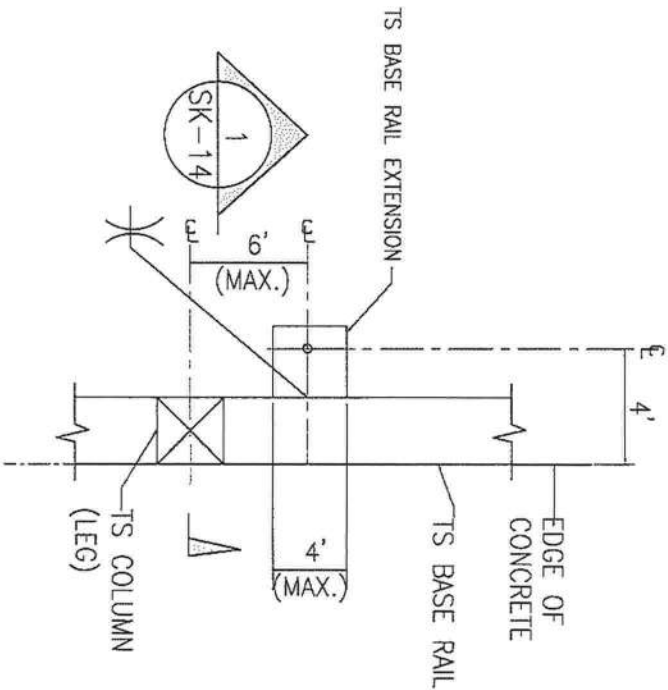
DR. RAM A. GOEL, PH.D., P.E.  
F.P.E. 47431.

SONEY FM LLC  
CORY LAKE PROFESSIONAL CENTER  
10329 CROSS CREEK BLVD., SUITE P  
TAMPA, FL 33647  
Ph: 727-420-4796  
Fax: (813) 972-2846  
www.soneyfmllc.com



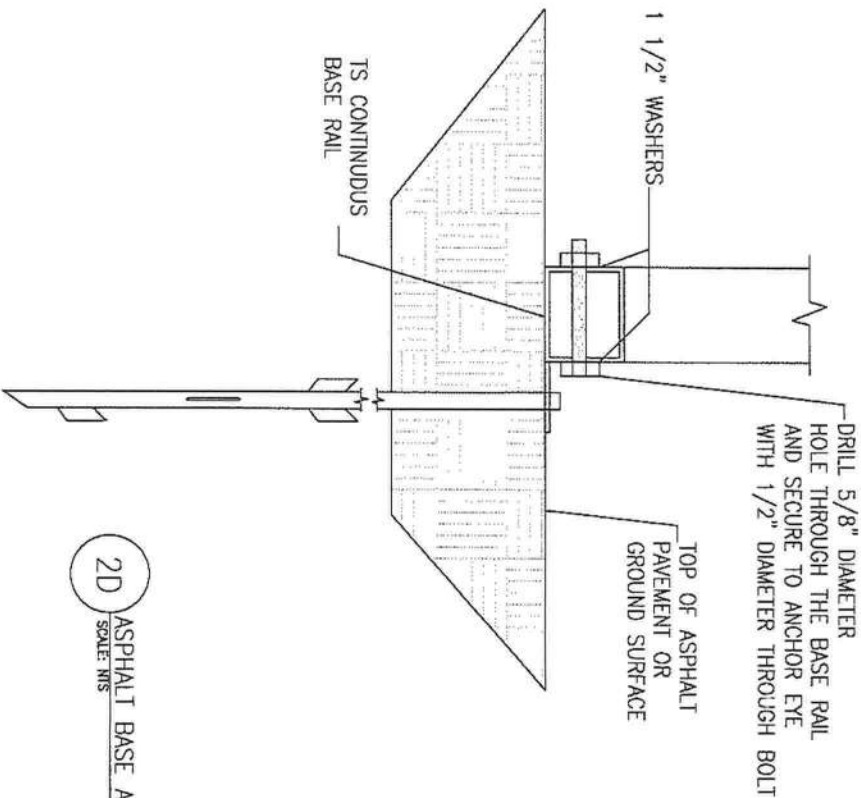


ADDITIONAL BASE RAIL ANCHORAGE OPTION



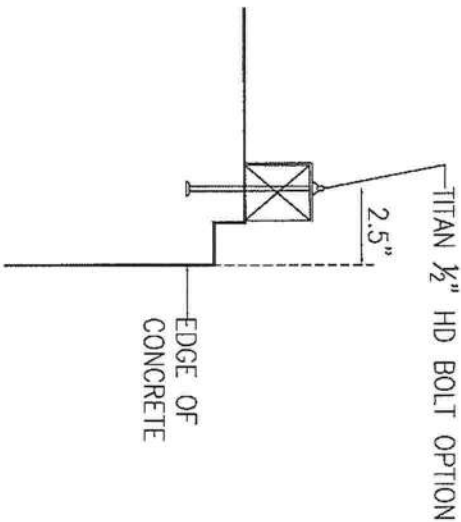
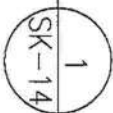
TYPICAL ANCHOR DETAIL WHEN  
BASE RAIL IS NEAR EDGE OF CONCRETE

SCALE: N.T.S.



SECTION 1

SCALE: N.T.S.

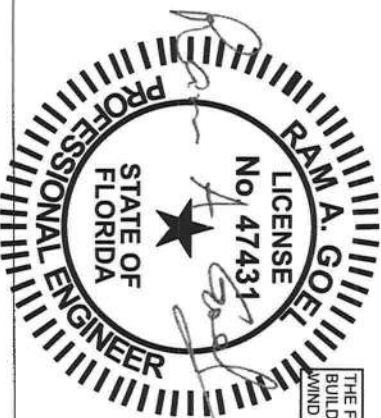


Ram Goel

Digitally signed by Ram Goel  
DN:  
E=Soneyfm@yahoo.com,  
CN=Ram Goel,  
OU=ENGINEERING,  
O=Soney FM LLC, L=Tampa,  
S=Florida, C=US  
Date: 2021.09.29  
10:50:42-0400

THE FOLLOWING IS COMPLIANT TO THE FLORIDA  
BUILDING CODE 2020, 7TH EDITION AND ASCE 7-16 FOR  
WIND LOADS OF 160 MPH

NOTE:  
1. THIS ITEM HAS BEEN SIGNED AND SEALED BY  
RAM GOEL, ENGINEER, AND THE SIGNATURE IS  
2. CONSIDERED SIGNED & SEALED. THIS SIGNATURE MUST  
BE VERIFIED ON ANY ELECTRONIC COPIES.



Dr. Ram A. Goel PE # 47431

ADDITIONAL BASE RAIL ANCHORAGE OPTION

ELITE METAL MANUFACTURING, LLC  
10121 88TH TRACE  
LIVE OAK, FL 32060

Revisions:	
No.	Description
1	
2	
3	
4	
5	

Job #	2173
Drawn By	S.K.
Checked By	R.G.

DR. RAM A. GOEL, PH.D., P.E.  
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