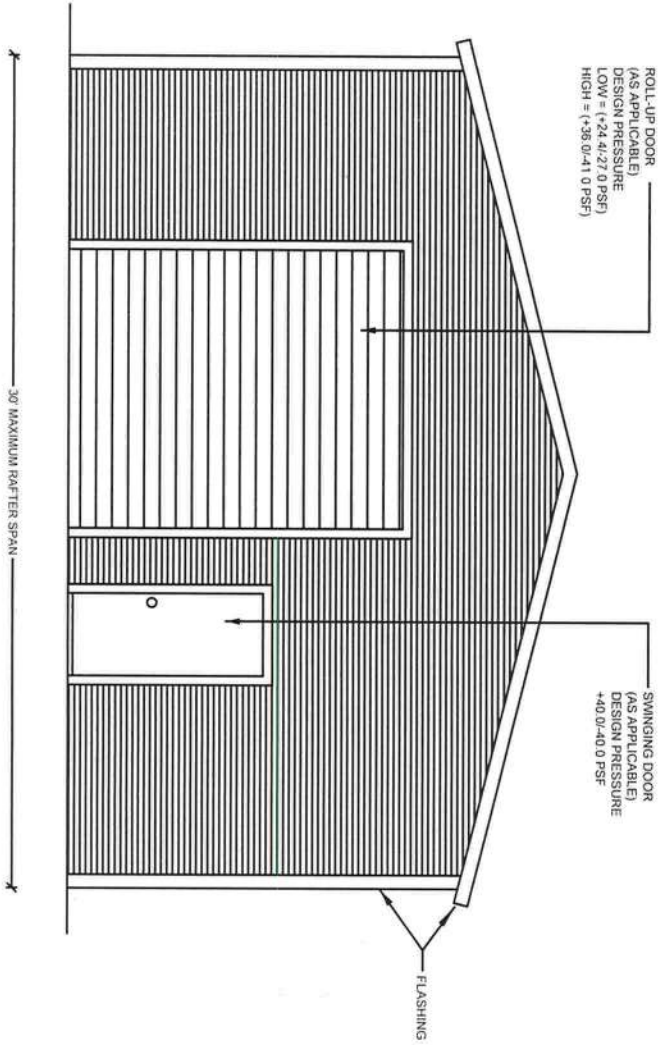


8x8 2 16  
3' m.d  
2' m.d  
End

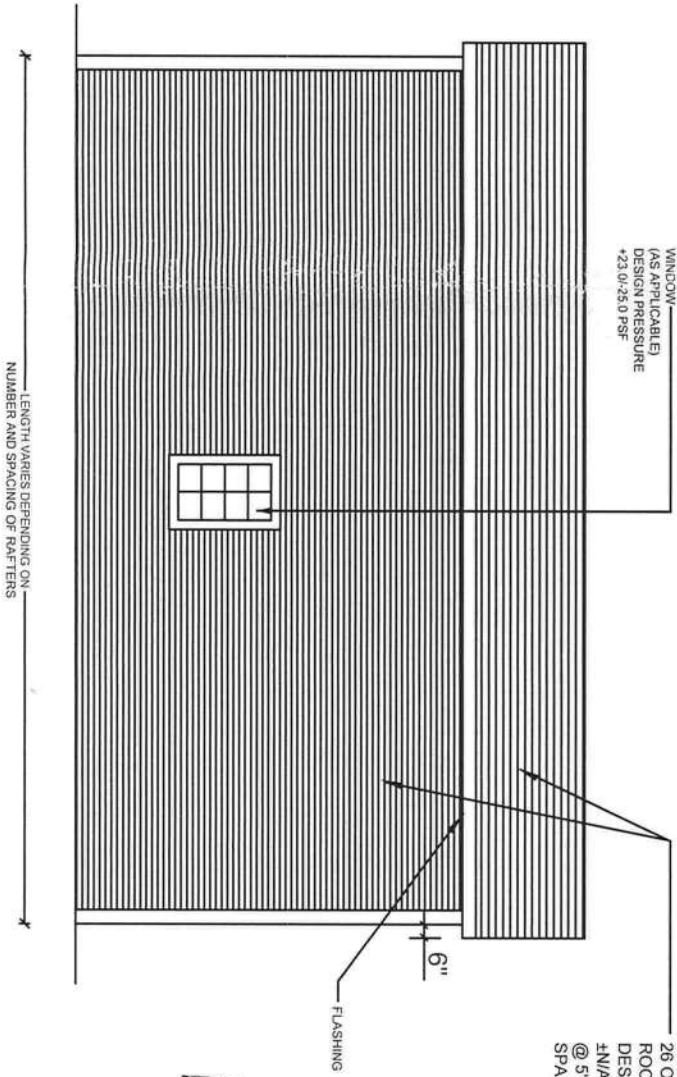
TABLE 1  
BOW/RAFTER FRAME, END POST, GROUND ANCHOR AND PANEL FASTENER SPACING  
SPECIFICATIONS

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 15 GAUGE STEEL TUBE BOW 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.



TYPICAL END ELEVATION-HORIZONTAL ROOF  
SCALE: NOT TO SCALE



TYPICAL SIDE ELEVATION-HORIZONTAL ROOF  
SCALE: NOT TO SCALE

WINDOW AND DOOR NOTE

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

ANSI/AAMA/NWMA 101/15 297

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 (FBC) 2020 SUPPLEMENT AMENDMENTS 2006 INTERNATIONAL BUILDING CODE (IBC), 2009 IBC AND 2012 IBC.

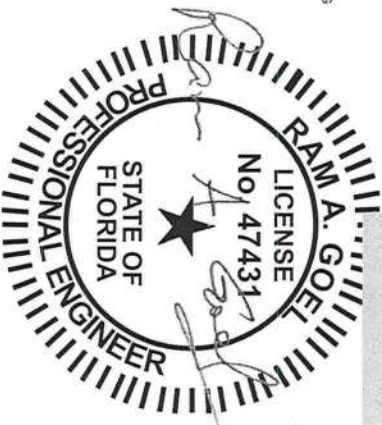
GENERAL NOTES:

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.
4. ALL SHOP CONNECTIONS SHALL BE WELDED.
5. CONCRETE EXPANSION ANCHORS SHALL BE WELT ANKR-TITE MODEL AT 1252, OR SLEEVE ANCHOR MODEL HSA 1280, 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 REQUIRED FOR CONCRETE FOOTING AND/OR CONCRETE SLAB CONSTRUCTION.
6. POST/RAFTER BRACING, BRACE ON EVERY POST/RAFTER CONNECTION, EXCEPT FOR END WALLS.



26 OR 29 GA. METAL ROOF AND WALL PANELS DESIGN PRESSURE MIN/A -40.0 PSF @ 5'-0" O.C. FASTENER SPACING

Digitaly signed by Ram Goel  
Date: 2021.03.29  
10:48:28 -04'00'  
Email: ramgoel@yahoo.com  
On: Ram Goel, P.E.  
Society: S.E.C.  
License: 47431  
State: FL  
Exp: 10/48/28



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

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

SONEY FM LLC  
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10329 CROSS CREEK BLVD., SUITE P  
TAMPA, FL 33647  
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Fax: (813) 972-2846  
www.soneyfmllc.com



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

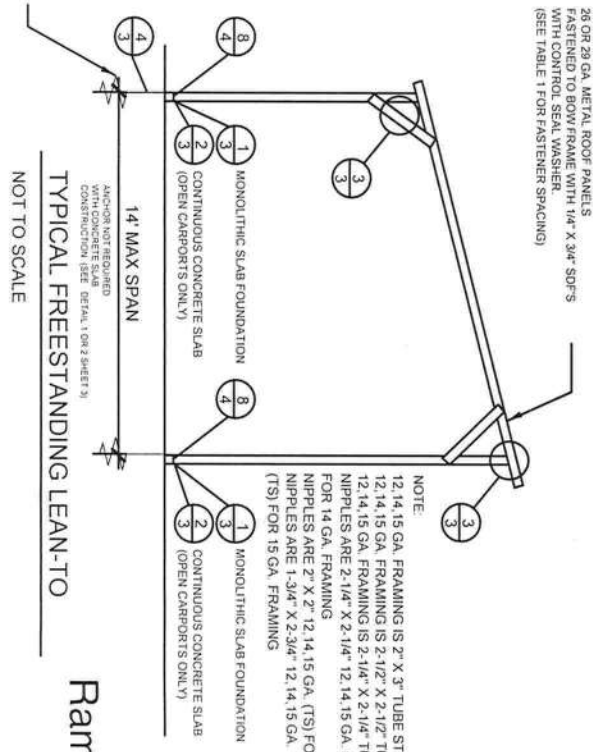
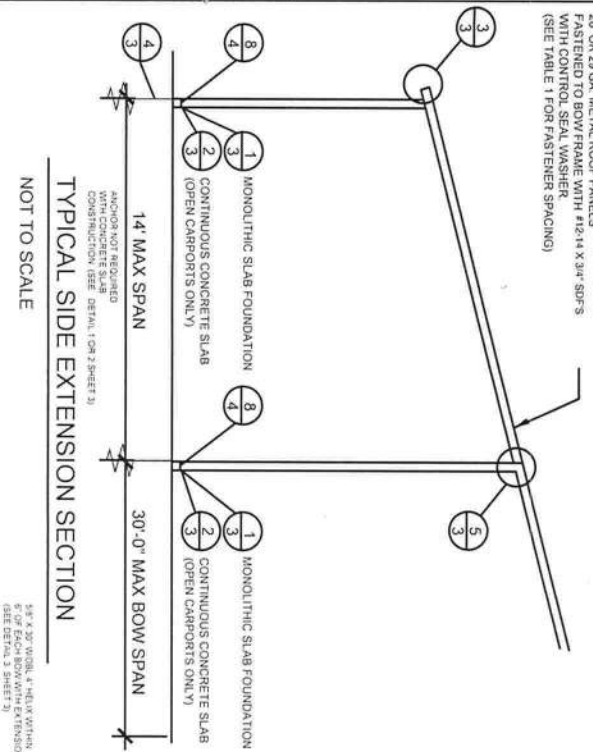
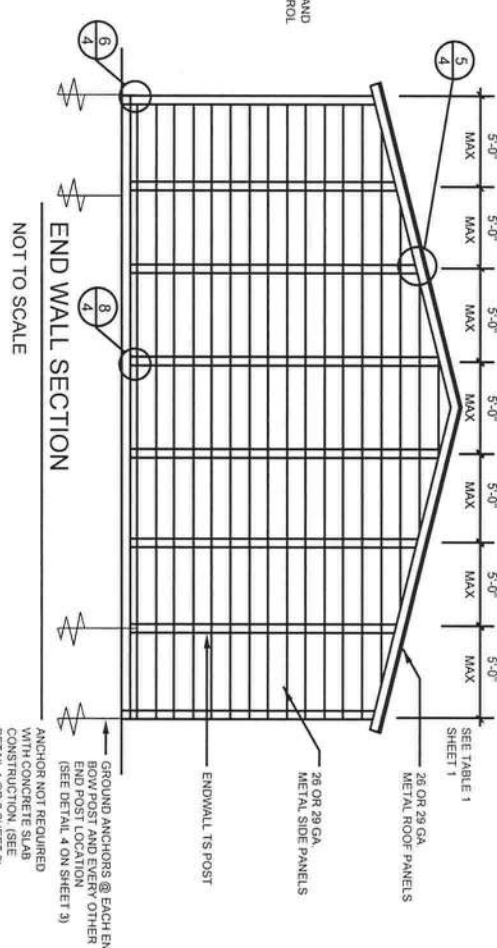
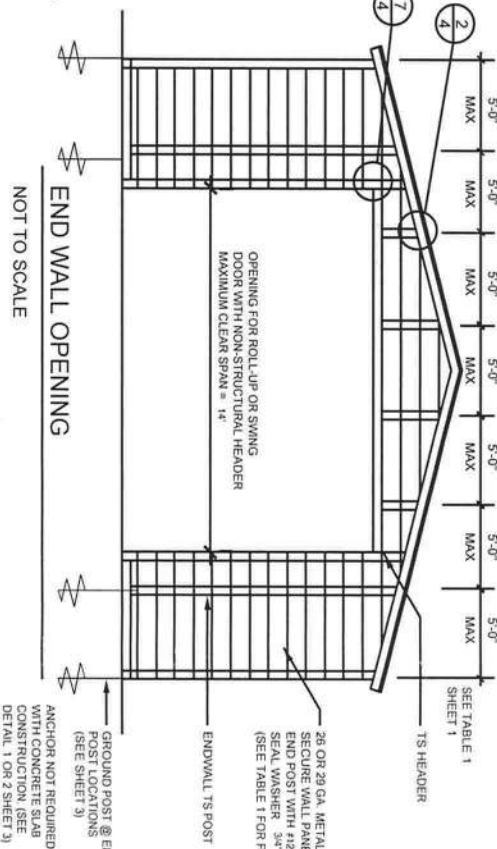
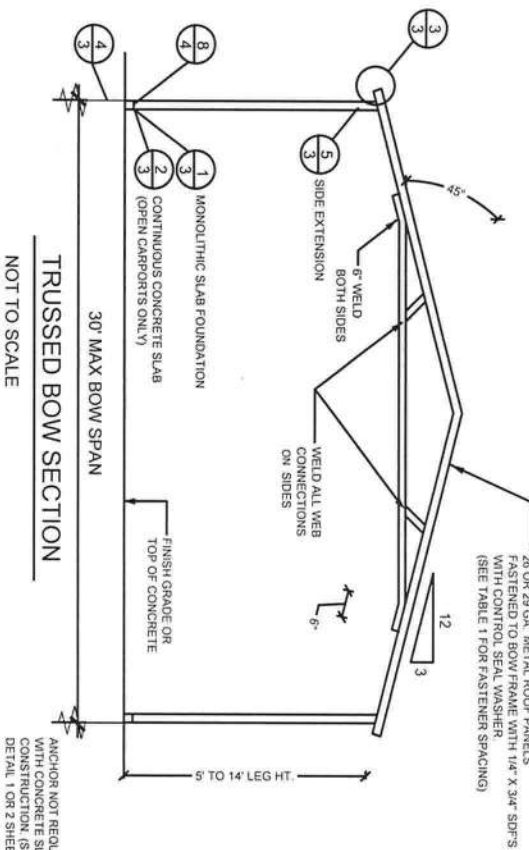
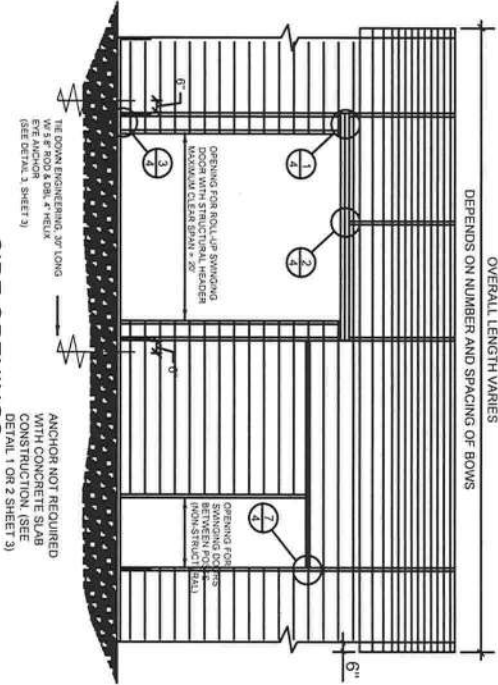
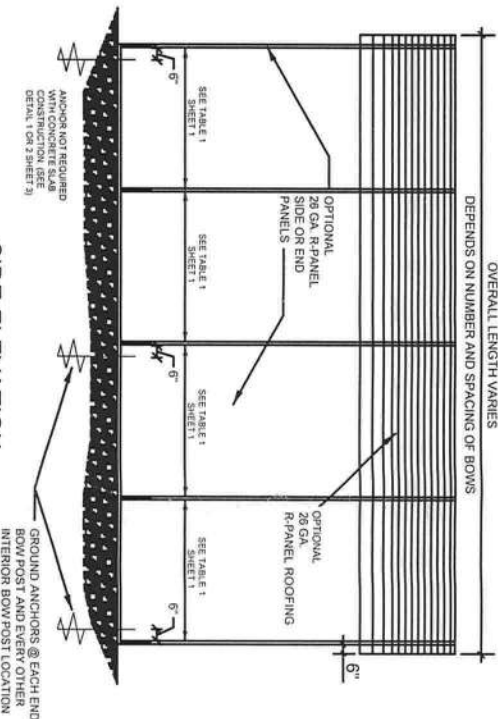
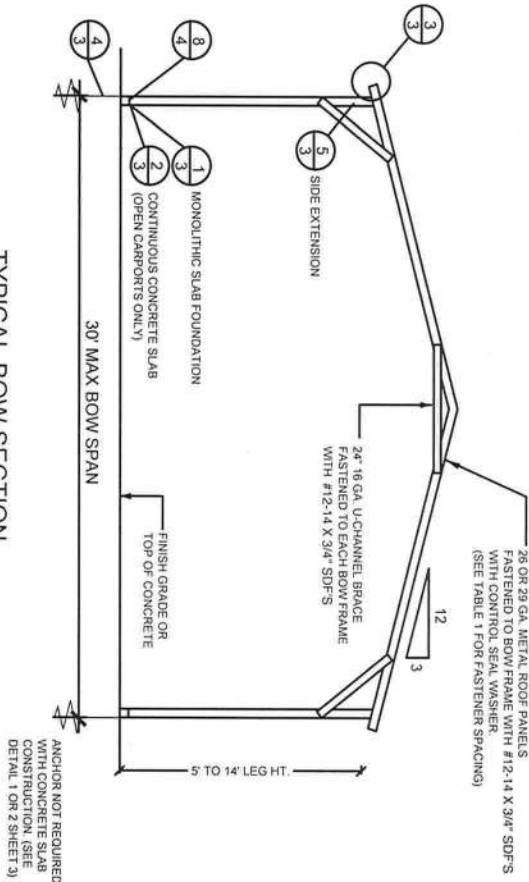
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Revisions:		
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Δ 11		

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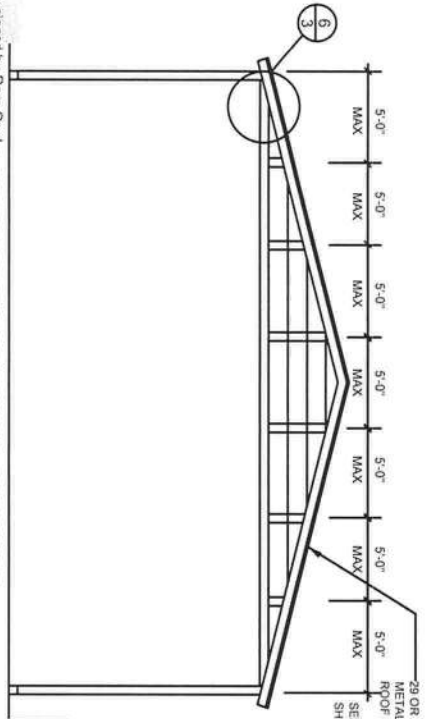
RAM A. GOEL, P.E. # 47431





Digitally signed by Ram Goel  
E=Soneyfmllc@yahoo.com,  
CN=Ram Goel,  
OU=ENGINEERING,  
O=Soney FM LLC,  
L=Tampa, S=Florida, C=US  
Date: 2021.09.29  
10:48:59-0400'

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

STATE OF  
FLORIDA  
PROFESSIONAL ENGINEER  
RAM A. GOEL  
LICENSE  
No. 47431

PREFABRICATED UTILITY STRUCTURE

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

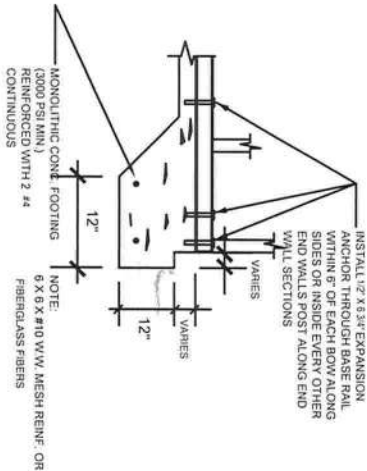
Issue Date: 08-18-21
Revisions:
No. Date Description
1/1
1/1
1/1

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

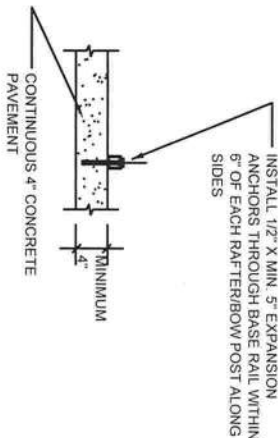
DR. RAM A. GOEL, PH.D., P.E  
F.P.E. 47431.

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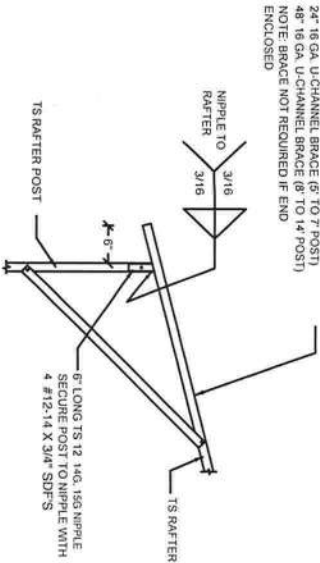




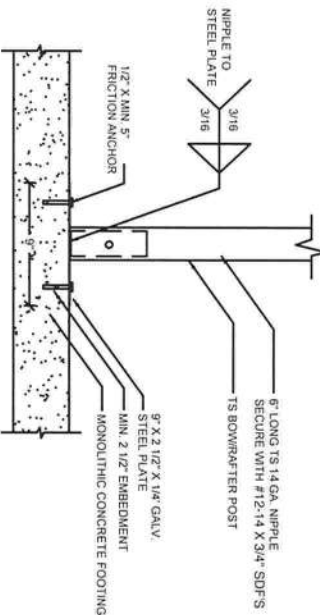
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SCALE: NTS (OPTIONAL)



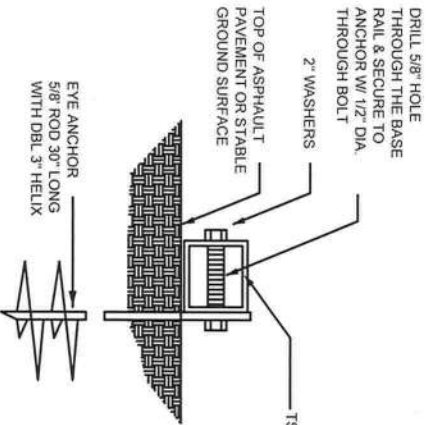
2 CONCRETE BASE RAIL ANCHORAGE  
SCALE: NTS (OPTIONAL - OPEN CARPORT ONLY)



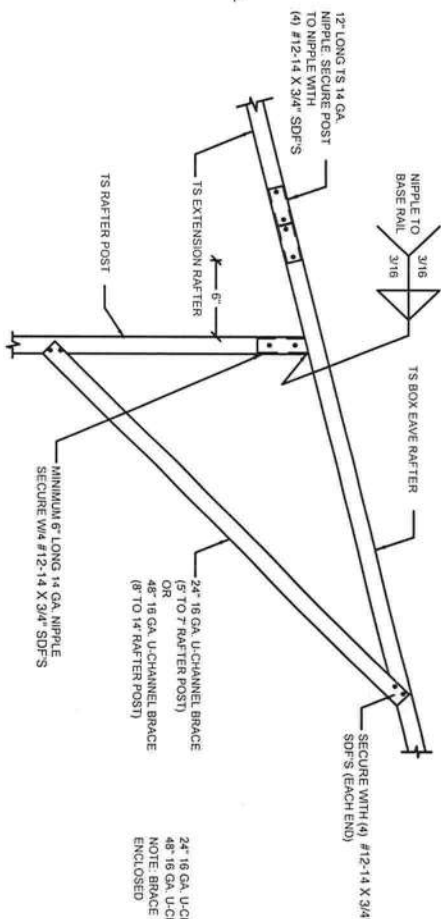
3 BOX EAVE RAFTER/CORNER POST DETAIL  
SCALE: NTS



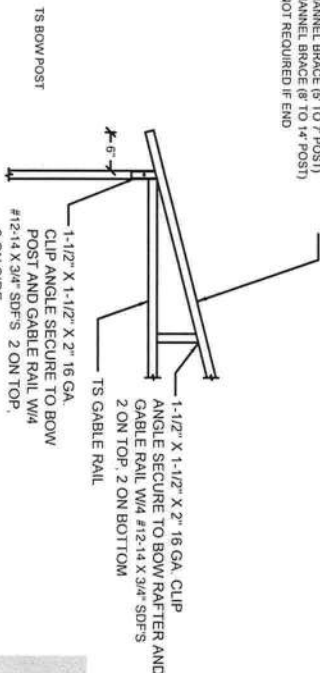
4 ALTERNATE POST TO CONCRETE FOUNDATION CONNECTION DETAIL  
SCALE: NTS



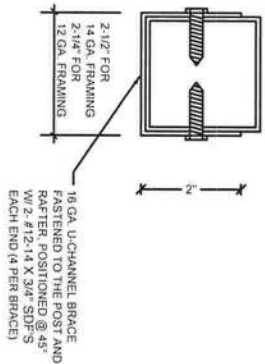
5 BASE RAIL ANCHORAGE  
SCALE: NTS



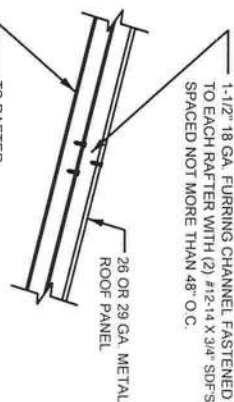
6 SIDE EXTENSION RAFTER/CORNER POST DETAIL  
SCALE: NTS



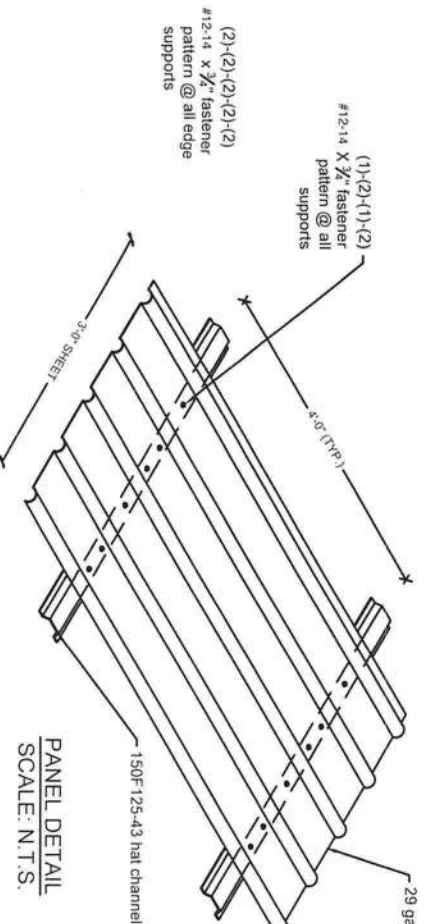
7 GABLE RAIL TO RAFTER POST CONNECTION DETAIL  
SCALE: NTS



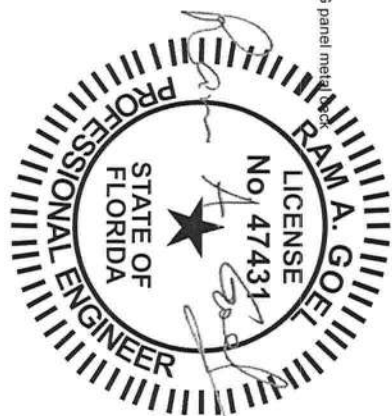
8 BRACE SECTION  
SCALE: NTS



9 ROOF PANEL ATTACHMENT  
SCALE: NTS



10 PANEL DETAIL  
SCALE: NTS



**Ram Goel**  
Digitally signed by Ram Goel  
DN:  
E=Soney/mlc@yahoo.com,  
CN=Ram Goel,  
OU=ENGINEERING,  
O=Soney FM LLC,  
L=Tampa, S=Florida, C=US  
Date: 2021.09.29  
10:49:16-04'00'

PREFABRICATED UTILITY STRUCTURE

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

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

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

DR. RAM A. GOEL, PH.D., P.E.  
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TAMPA, FL 33647  
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Fax: (813) 972-2846  
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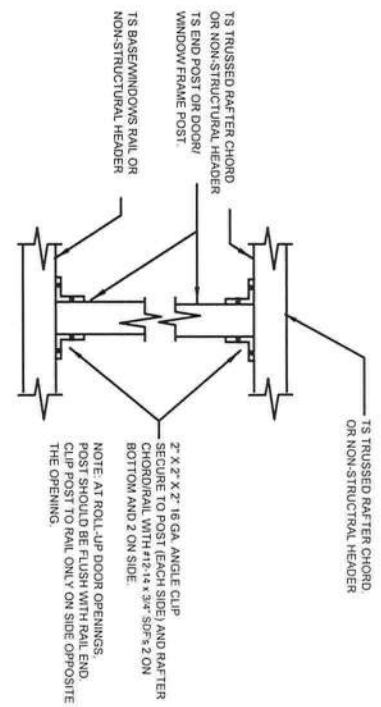
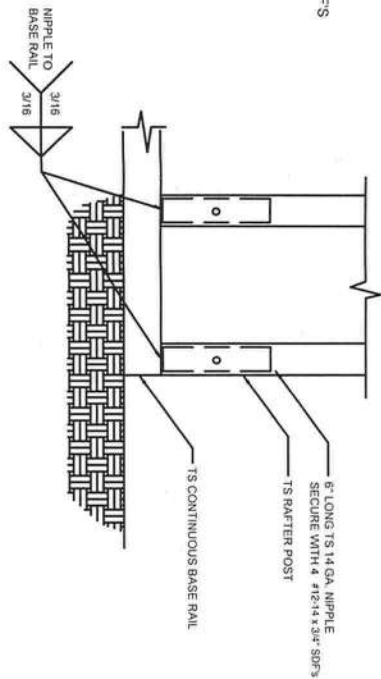
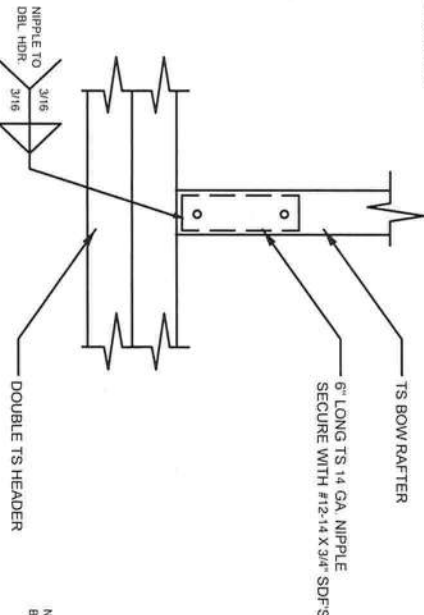
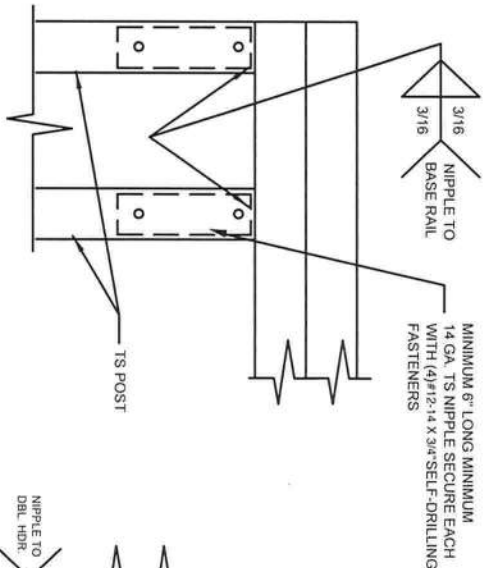


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BUILDING CODE 2020, 7TH EDITION AND ASCE 7-16 FOR  
WIND LOADS OF 180 MPH

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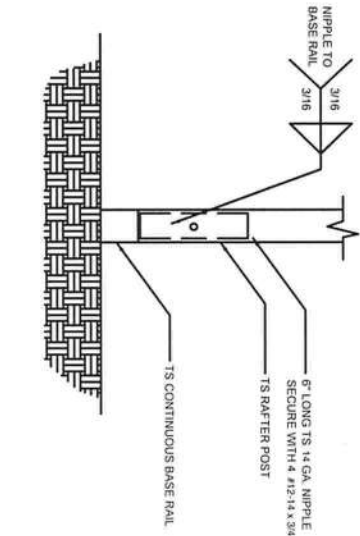
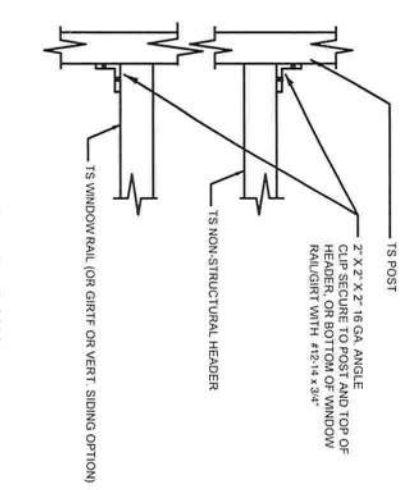
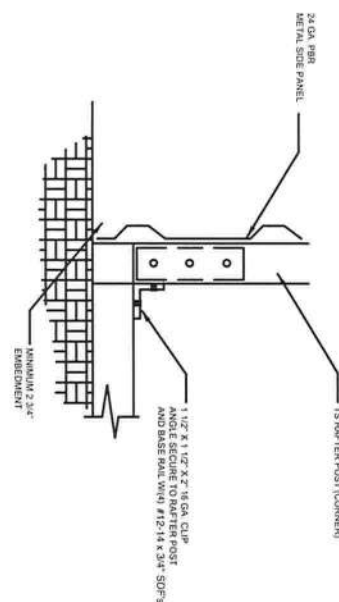
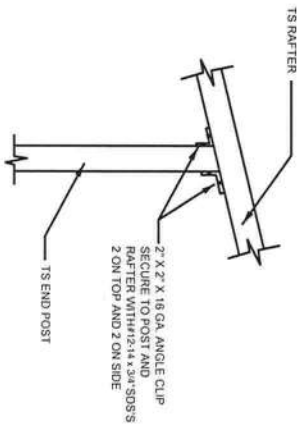


1 RAFTER POST/DBL. HEADER DETAIL  
SCALE: NTS

2 RAFTER POST/BASE BASE RAIL CONNECTION DETAIL  
SCALE: NTS

3 RAFTER POST/BASE BASE RAIL CONNECTION DETAIL  
SCALE: NTS

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

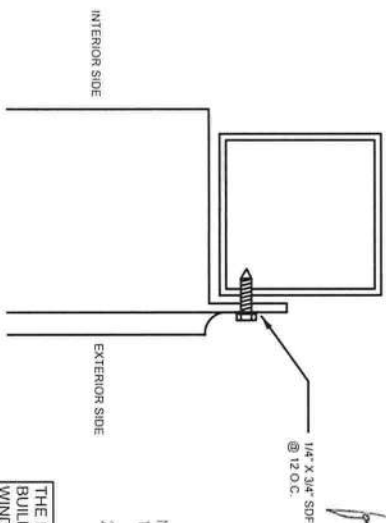
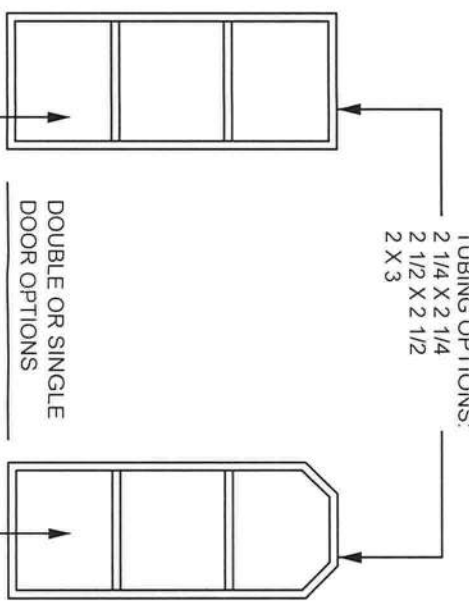
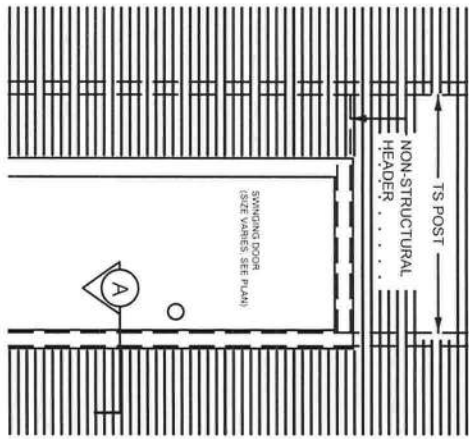
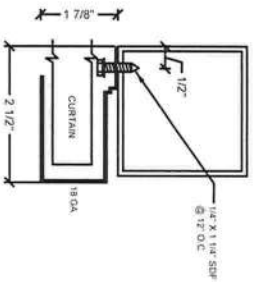


5 END POST/RAFTER CONN. DETAIL  
SCALE: NTS

6 END POST/BASE RAIL CONN.  
SCALE: NTS

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

8 POST/BASE RAIL CONN. DETAIL  
SCALE: NTS



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WIND LOADS OF 180 MPH



PREFABRICATED UTILITY STRUCTURE

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

Revisions:	
No.	Description
1/1	
1/1	
1/1	

Issue Date: 08-18-21

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



SCALE: NTS

CURTAIN 24 GA. PBR WITH BAKED ON EPOXY  
PRIMER & POLYESTER TOP COAT

SECTION  
SCALE: NTS

Ram Goel  
10-20-21-04-00

24, 26, OR 29 GAUGE SKIN

RAM A. GOEL, P.E. # 47431

4





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Ram Goel

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DN:  
E=Souryashikha@iitdcoi.com,  
CN=Ram Goel,  
OU=ENGINEERING,  
O=Skymy FM LLC,  
L=Tampa, S=Florida, C=US  
Date: 2021.09.29  
10:49:45-0400'

## PREFABRICATED UTILITY STRUCTURE

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

Revisions:		Issue Date: 08-18-21
No.	Date	Description
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Δ //		
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Job #	2173
Drawn By:	S.K.
Checked By:	R.G.

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

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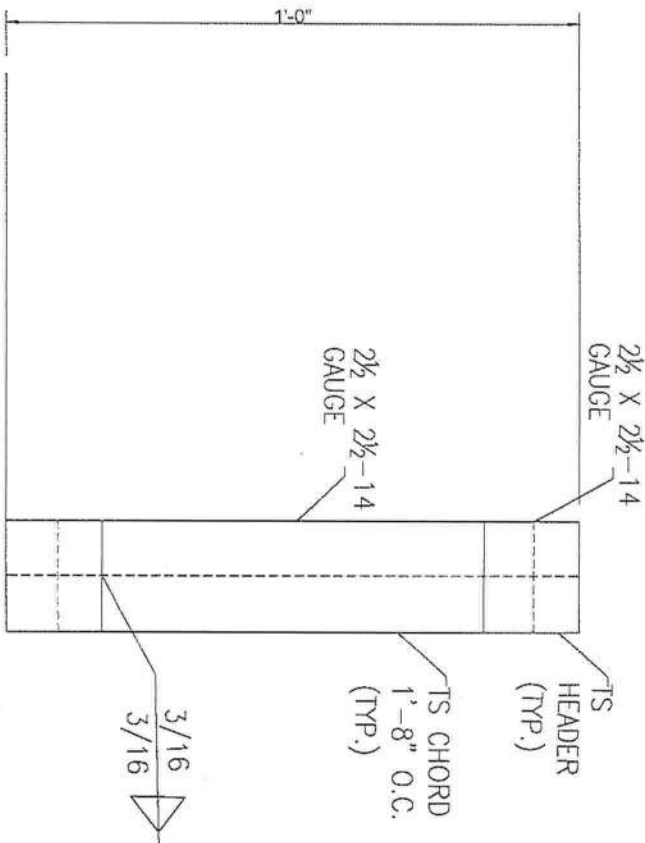
**SONEY FM**  
ENGINEERS  
Professional, Efficient & Economical

Professional, Student &amp; Recreational

57



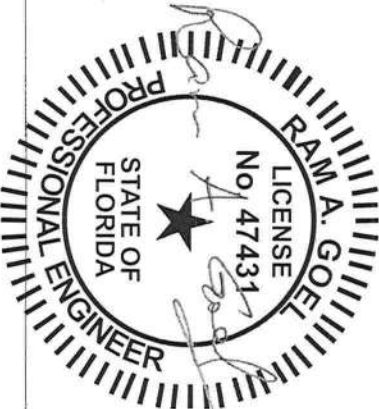
OPTIONAL HEADER



HEADER DETAIL FOR DOOR  
OPENINGS 12'-0" < LENGTH < 20'-0"  
SCALE: NTS

Ram Goel

Digitally signed by Ram Goel  
DN:  
E=Soneyfmllc@yahoo.com,  
CN=Ram Goel,  
OU=ENGINEERING,  
O=Soney FM LLC,  
L=Tampa, S=Florida, C=US  
Date: 2021.09.29  
10:50:26-0400'



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WIND LOADS OF 180 MPH

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Dr. Ram A. Goel P.E. # 47431

OPTIONAL HEADER

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

7

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

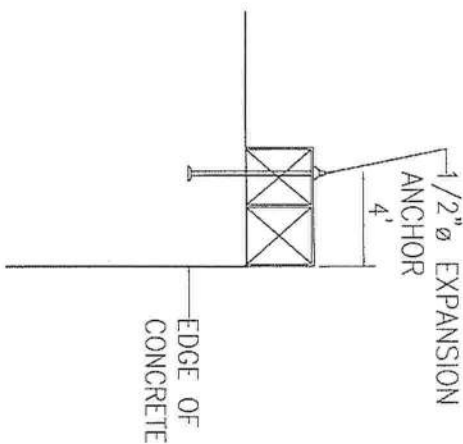
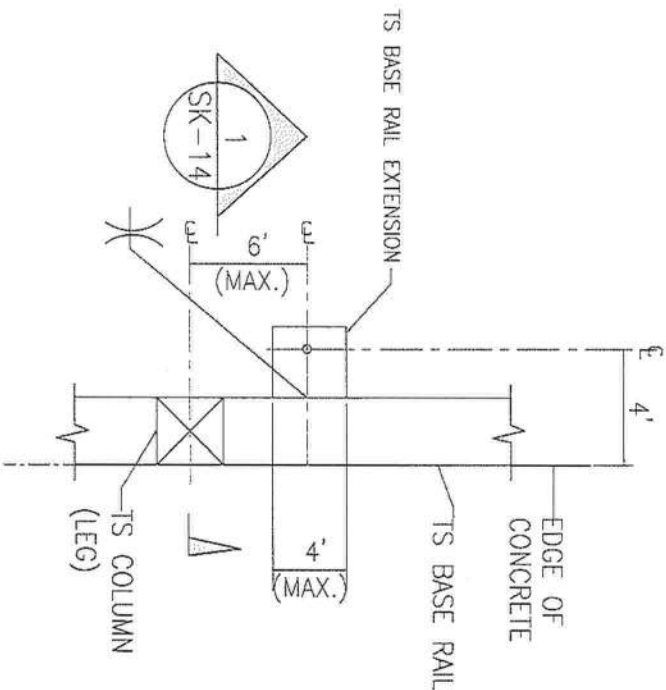
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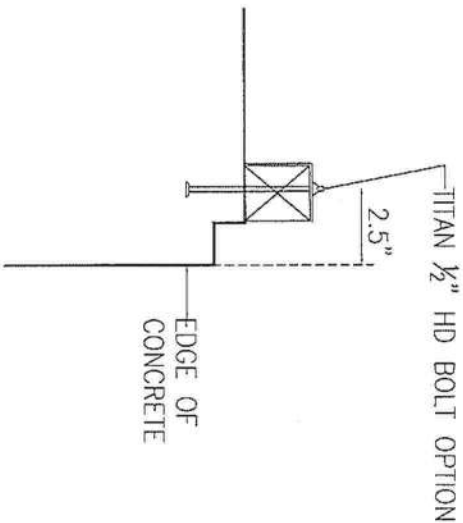
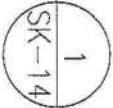
Job # 2173  
Drawn By: S.K.  
Checked By: R.G.

Issue Date: 08-18-21	
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No.	Description
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2	
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5	

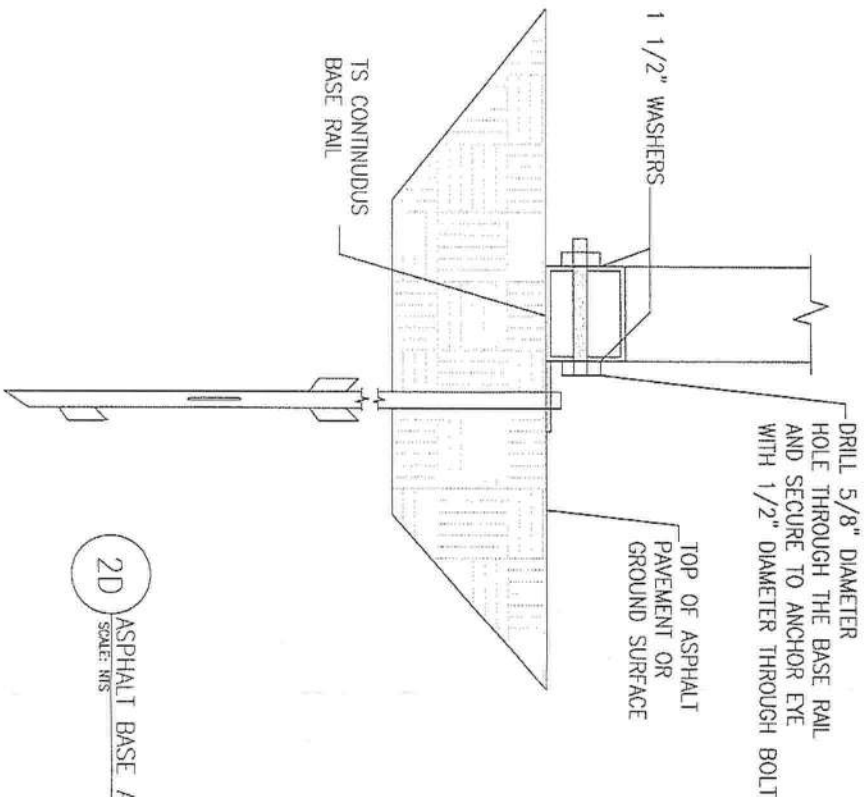
ADDITIONAL BASE RAIL ANCHORAGE OPTION



SECTION 1  
SCALE: N.T.S.

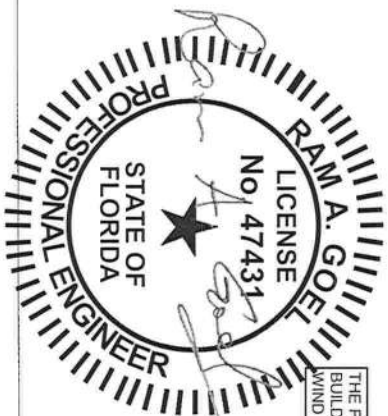


TYPICAL ANCHOR DETAIL WHEN  
BASE RAIL IS NEAR EDGE OF CONCRETE  
SCALE: N.T.S.



2D  
SCALE: N.T.S.

ASPHALT BASE ANCHORAGE



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

**Ram Goel**  
Digitally signed by Ram Goel  
DN:  
E=Soneyfmllc@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

NOTE:  
1. THIS ITEM HAS BEEN SIGNED AND SEALED BY  
RAM A. GOEL USING A DIGITAL SIGNATURE & DATE.  
2. PRINTED COPIES OF THIS SIGNED THIS SIGNATURE MUST  
BE VERIFIED ON ANY ELECTRONIC COPIES.

ADDITIONAL BASE RAIL ANCHORAGE OPTION

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

Issue Date: 08-18-21	
Revisions:	
No.	Description
1/1	
1/1	
1/1	
1/1	

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  
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TAMPA, FL 33647  
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