

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

WIND EXPOSURE CATEGORY	ULTIMATE WIND SPEED (MPH)	NOMINAL WIND SPEED (MPH)	MAXIMUM GROUND SNOW LOAD (PSF)	MAXIMUM POST/RAFTER SPACING (FEET)	AVERAGE FASTENER SPACING ON-CENTERS ALONG RAFTERS OR PURLINS, AND POSTS OR GIRTS (INCHES)	
					METAL PANELS	SPACING
B or C	105 TO 150	82 TO 117	35	5.0	29 Gauge	8
			40	4.0		
			50	4.0 (12 Ga.)		

NOTES: 1. Specifications applicable to 29 gauge metal panels fastened directly to 12 or 14 gauge steel tube bow frames.
2. Fasteners consist of #12 x 3/4" self-drilling screws without control seal washers.
3. Specifications applicable only for mean roof height of 24 feet or less and roof slopes of 7 to 27 degrees (1.5:12 to 6:12 pitch). Spacing requirements for other roof heights and/or slopes may vary.

STANDARD CARPORT DETAILS

12 ft to 24 ft SPAN

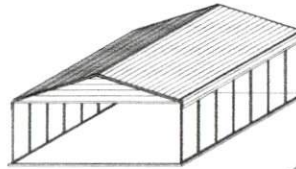
LIGHT FRAME CONSTRUCTION

NOTE: THESE PLANS MAY BE USED FOR SPANS LESS THAN 12 FEET.

NOTE: USE \odot 2 1/2" x 2 1/2" 14 Ga.
 \odot 2 1/2" x 2 1/2" 12 Ga.

STEEL TUBE FOR ALL FRAME AND BASE RAIL MEMBERS UNLESS OTHERWISE SHOWN.

NOTE: THESE PLANS INCLUDE STANDARD DETAILS THAT CAN BE USED FOR A WIDE RANGE OF APPLICATIONS. IF SITE SPECIFIC PLANS ARE REQUIRED, A SEPARATE SET OF PLANS WILL NEED TO BE PREPARED.



ISOMETRIC



ISOMETRIC

GENERAL NOTES:

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THE SPACING INDICATED IN THE ABOVE TABLE IS THE MAXIMUM SPACING FOR THE MAIN WIND FORCE RESISTING SYSTEM. A CLOSER SPACING MAY BE NEEDED TO MEET LOCAL BUILDING CODE AND/OR SITE SPECIFIC REQUIREMENTS.

ALL STEEL TUBING SHALL BE 55 KSI STEEL OR BETTER. ALL METAL PANELS SHALL BE 80 KSI STEEL OR BETTER.

FASTEN METAL ROOF AND WALL PANELS TO FRAMING WITH #12 x 3/4" SELF DRILLING FASTENERS WITH CONTROL SEAL WASHERS AT AN AVERAGE SPACING OF 8" FOR 29 GAUGE PANELS AND 6" FOR 26 GAUGE PANELS.

ALL FIELD CONNECTIONS SHALL BE #12 x 3/4" SELF DRILLING FASTENERS (SDF) UNLESS NOTED OTHERWISE.

ALL WELDED CONNECTIONS SHALL BE SHOP WELDED UNLESS NOTED OTHERWISE.

GROUND ANCHOR REQUIREMENTS: INSTALL HELICAL ANCHORS ALONG SIDE BASE RAIL WITHIN 6" OF EACH CORNER POST AND AT A MAXIMUM SPACING OF 25' ALONG THE BASE RAIL. INSTALL GROUND ANCHORS (#4 THREADED REBAR) BETWEEN THE HELICAL ANCHORS WITHIN 6" OF EACH POST ALONG THE BASE RAIL. HELICAL ANCHORS AND GROUND ANCHORS ARE NOT REQUIRED FOR CONCRETE FOOTING AND/OR CONCRETE SLAB CONSTRUCTION.

INSTALL CONCRETE ANCHORS WITHIN 6" OF EACH VERTICAL POST ALONG SIDE AND END BASE RAILS. USE ITW RAMSET/ REDHEAD TRUBOLT OR SIMPSON STRONG-TIE STRONG BOLT-2 WEDGE ANCHORS, OR ITW REDHEAD TAPCON+ OR TITEN HD SCREW ANCHORS OR AN APPROVED EQUAL.

POST/RAFTER BRACING: BRACE ON EVERY POST/RAFTER CONNECTION, EXCEPT FOR END WALLS AND HEADERS.

GALVANIZATION: METAL ACCESSORIES FOR USE IN EXTERIOR WALL CONSTRUCTION AND NOT DIRECTLY EXPOSED TO THE WEATHER SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 153, CLASS B-2. METAL PLATE CONNECTORS, SCREWS, BOLTS AND NAILS EXPOSED DIRECTLY TO THE WEATHER SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED.

CONCRETE FOUNDATION DESIGN RECOMMENDATIONS:

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CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS OR AS REQUIRED BY LOCAL BUILDING CODE. THE USE OF HIGHER STRENGTH CONCRETE IS ACCEPTABLE.

COVER OVER REINFORCING STEEL: MINIMUM CONCRETE OVER REINFORCING BARS SHALL BE 3 INCHES WHERE CONCRETE IS CAST AGAINST AND PERMANENTLY IN CONTACT WITH THE EARTH OR EXPOSED TO THE EARTH OR WEATHER AND 1 1/2" ELSEWHERE.

REINFORCING STEEL: THE REINFORCING STEEL SHALL BE MINIMUM GRADE 40. THE USE OF FIBER REINFORCED CONCRETE (FRC) OR WELDED WIRE FABRIC (WWF) IS ACCEPTABLE.



CAROLINA CARPORTS INC.
P.O. BOX 1263
DOBSON, NC 27017
TOLL FREE 1-800-670-4262
LOCAL 336-367-6400
FAX 336-367-6410

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METAL CARPORT INSTALLATION PLANS AND DETAILS AND FRAMING AND FASTENER SPECIFICATIONS

CAROLINA CARPORTS, INC.
187 Cardinal Ridge Trail
DOBSON, NORTH CAROLINA 27017

THE OWNER IS RESPONSIBLE FOR OBTAINING A BUILDING PERMIT, IF NEEDED, AND FOR COMPLYING WITH ALL LOCAL BUILDING CODE REQUIREMENTS.

THIS IS TO CERTIFY THAT THE CALCULATIONS AND SPECIFICATIONS HEREIN HAVE BEEN PREPARED BY THE UNDERSIGNED PROFESSIONAL ENGINEER, AND ARE IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2018 INTERNATIONAL BUILDING CODE AND THE 2018 NORTH CAROLINA BUILDING CODE.

BUILDING CODE INFORMATION	
OCCUPANCY CATEGORY	I or II
USE GROUP	U or S
CONSTRUCTION TYPE	2B
IMPORTANCE FACTORS	
WIND <i>Iw</i>	1.0
SNOW <i>I_s</i>	0.8 1.0
EARTHQUAKE <i>I_e</i>	1.0

DESIGN LOADS	
MIN. DEAD LOAD	5 PSF
MIN. FLOOR LIVE LOAD	125 PSF
MIN. ROOF LIVE LOAD	20 PSF
MIN. GROUND SNOW LOAD	SEE TABLE 1
MAX. GROUND SNOW LOAD	
MIN. ULTIMATE WIND SPEED	SEE TABLE 1
MAX. ULTIMATE WIND SPEED	
EXPOSURE CATEGORY	
MAX. SEISMIC DESIGN CATEGORY	D2

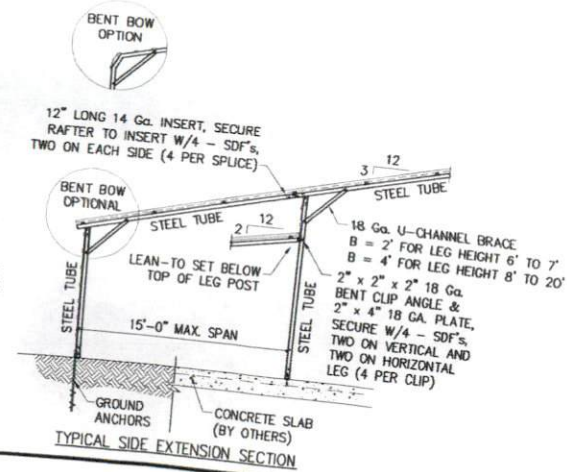
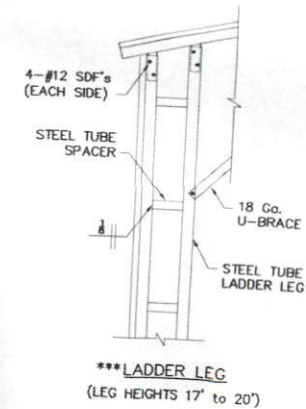
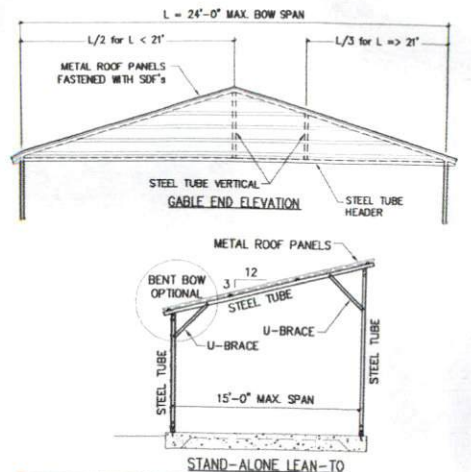
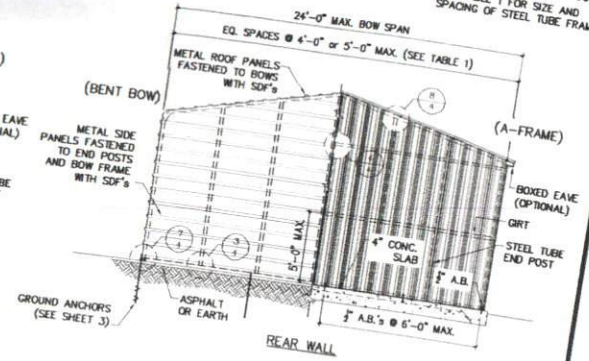
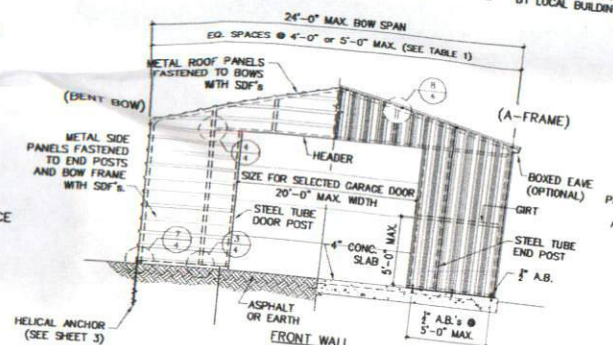
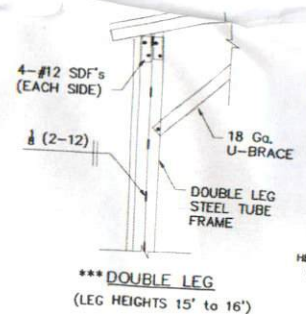
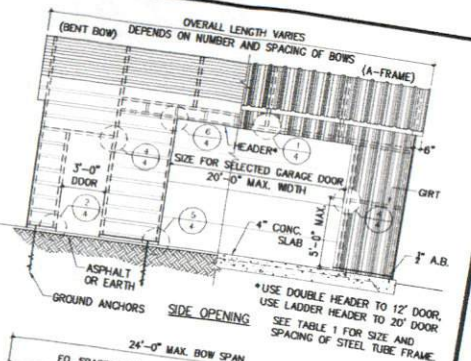
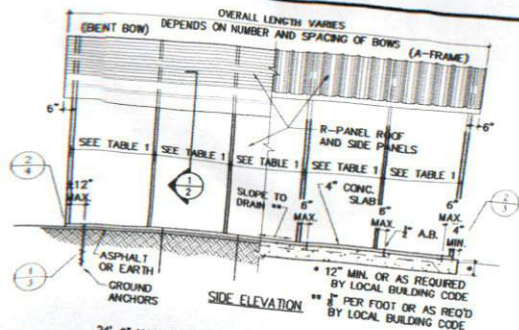
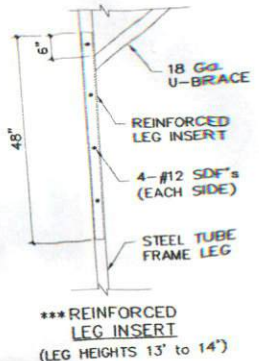
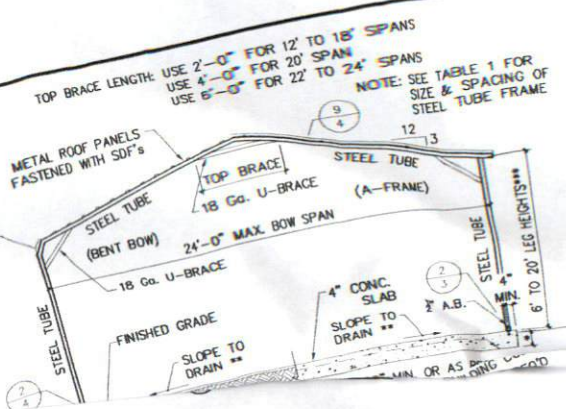
These plans have been provided for the purpose of obtaining a building permit for the construction of the building for:

Name: Melvin Corey
Address: 530 Kramer Rd.
City: Lillington State: NC
Zip: 27546

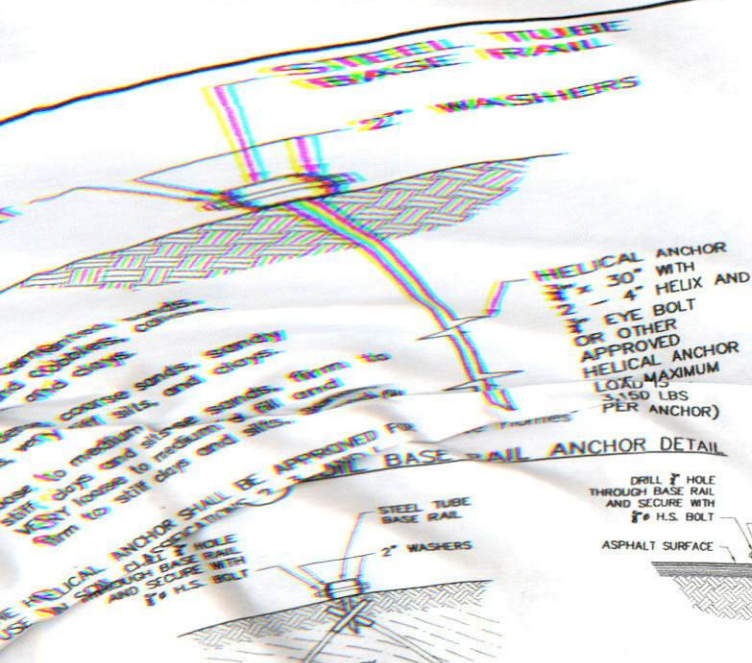
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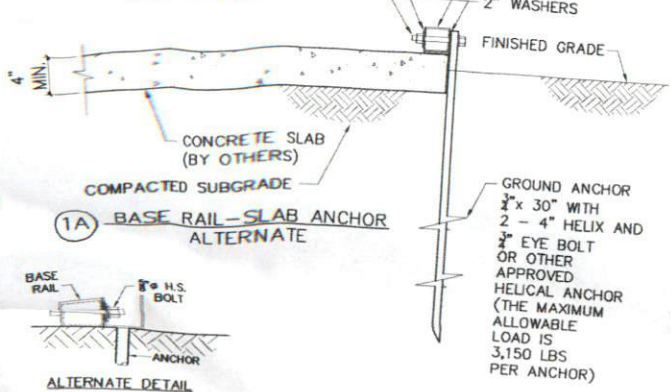
03/25/2024



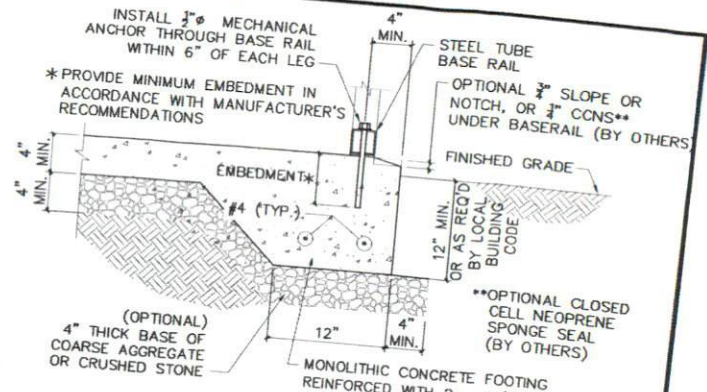
NORTH CAROLINA
 PROFESSIONAL ENGINEER
 SEAL
 030198
 ROBERT L. LUEBBERS



DRILL $\frac{3}{4}$ " HOLE THROUGH THE BASE RAIL AND SECURE TO ANCHOR EYE WITH $\frac{3}{4}$ " THROUGH BOLT



(1A) BASE RAIL-SLAB ANCHOR ALTERNATE

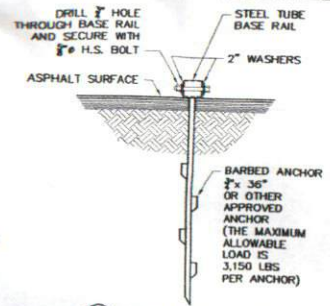


(2) CONCRETE BASE RAIL ANCHORAGE (SINGLE LEG)

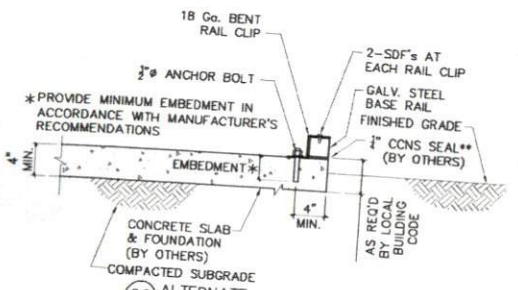
SOIL CLASSIFICATIONS
SOIL CLASS SOIL DESCRIPTION
Rock or Hard Pan

ROCK ANCHOR MMA-35 36 X34H WITH $\frac{3}{4}$ " H.S. BOLT OR EQUIVALENT (THE MAXIMUM ALLOWABLE LOAD IS 4,725 LBS PER ANCHOR)

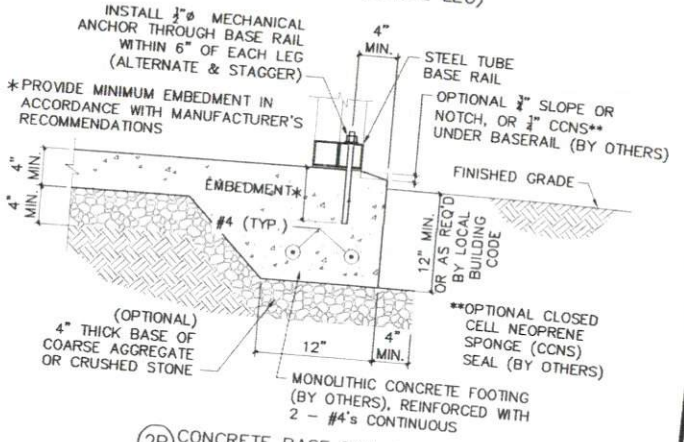
(1C) ROCK BASE RAIL ANCHOR DETAIL



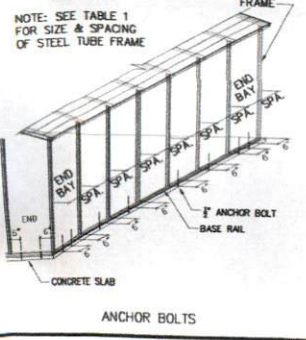
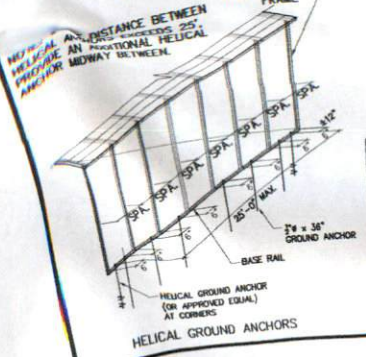
(1B) ASPHALT ANCHOR DETAIL



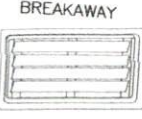
(2C) ALTERNATE BASE RAIL ANCHORAGE



(2B) CONCRETE BASE RAIL ANCHORAGE (DOUBLE LEG)

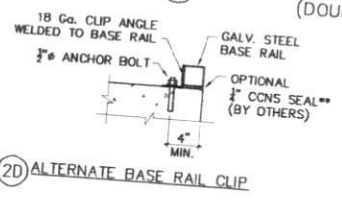


NOTE: SEE TABLE 1 FOR SIZE & SPACING OF STEEL TUBE FRAME



CRAWL SPACE DOOR SYSTEMS, INC.
5741 Bayside Road, #105
Virginia Beach, VA 23455
Engineered Flood Vent
Model CSBA816

OR Approved Equal
FLOOD VENTS



(2D) ALTERNATE BASE RAIL CLIP



03/25/2024

SHEET 3 OF 4

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

WIND EXPOSURE CATEGORY	ULTIMATE WIND SPEED (MPH)	NOMINAL WIND SPEED (MPH)	MAXIMUM GROUND SNOW LOAD (PSF)	MAXIMUM POST/RAFTER SPACING (FEET)	AVERAGE FASTENER SPACING ON-CENTERS ALONG RAFTERS OR PURLINS, AND POSTS OR GIRTS (INCHES)	
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STANDARD CARPORT DETAILS

12 ft to 24 ft SPAN

LIGHT FRAME CONSTRUCTION

NOTE: THESE PLANS MAY BE USED FOR SPANS LESS THAN 12 FEET.

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USE GROUP	U or S
CONSTRUCTION TYPE	2B
IMPORTANCE FACTORS	
WIND <i>Iw</i>	1.0
SNOW <i>I_s</i>	0.8 1.0
EARTHQUAKE <i>I_e</i>	1.0

DESIGN LOADS	
MIN. DEAD LOAD	5 PSF
MIN. FLOOR LIVE LOAD	125 PSF
MIN. ROOF LIVE LOAD	20 PSF
MIN. GROUND SNOW LOAD	SEE TABLE 1
MAX. GROUND SNOW LOAD	
MIN. ULTIMATE WIND SPEED	SEE TABLE 1
MAX. ULTIMATE WIND SPEED	
EXPOSURE CATEGORY	
MAX. SEISMIC DESIGN CATEGORY	D2

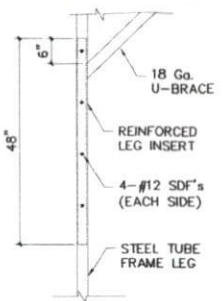
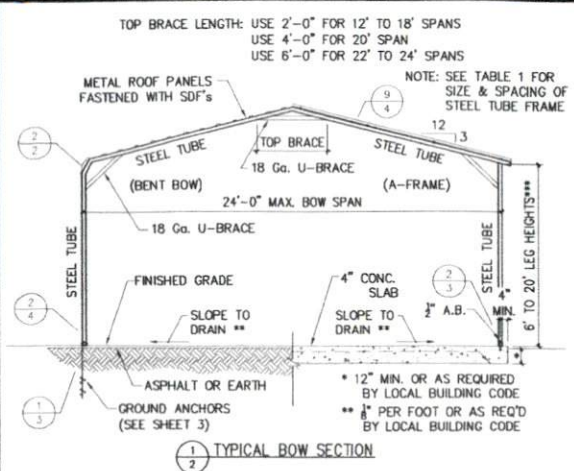
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Address: 530 Kramer Rd.
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Zip: 27546

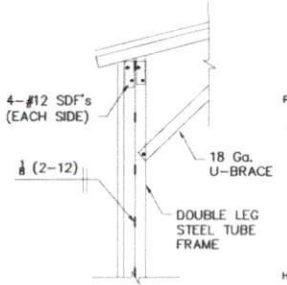
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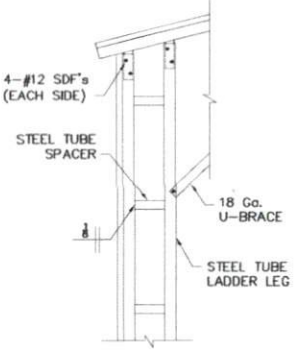
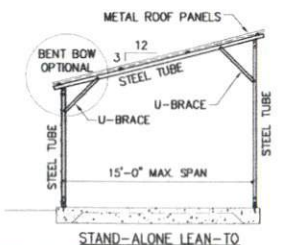
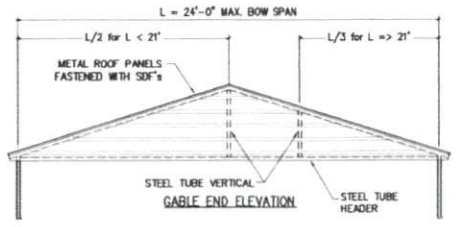
03/25/2024



*** REINFORCED LEG INSERT
(LEG HEIGHTS 13' TO 14')



*** DOUBLE LEG
(LEG HEIGHTS 15' TO 16')



*** LADDER LEG
(LEG HEIGHTS 17' TO 20')

