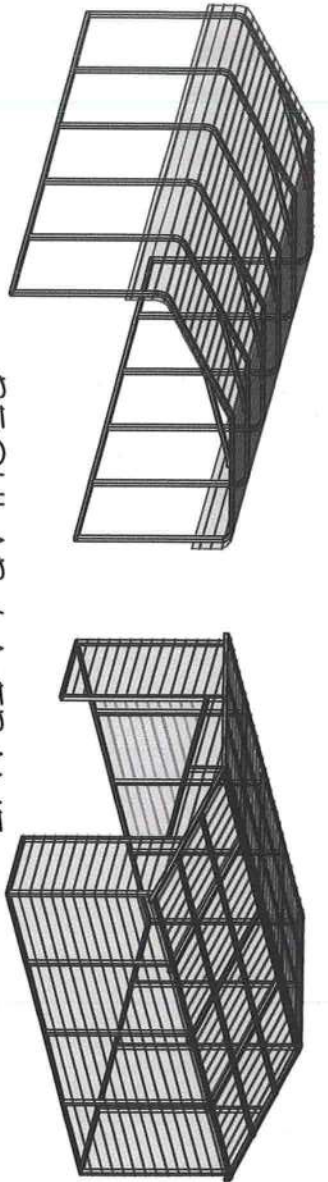




REGULAR / A-FRAME 24'-0" WIDE CARPORT STYLE BUILDINGS

DESIGN NOTES

1. ALL CONSTRUCTION SHALL BE PROVIDED IN ACCORDANCE WITH IBC 2021, OSHA, AISC 360, AISI 100, ASCE 7-16, AWS D13 CODES AND ALL APPLICABLE LOCAL REQUIREMENTS.
2. ALL MATERIALS IDENTIFIED BY MANUFACTURER NAME MAY BE SUBSTITUTED WITH MATERIAL EQUAL OR EXCEEDING ORIGINAL.
3. ALL SHOP CONNECTIONS SHALL BE WELDED CONNECTIONS.
4. ALL STRUCTURAL FIELD CONNECTIONS SHALL BE #12-14 x 3/4" SDS (ESR-2196 OR EQ) WITHOUT WASHERS.
5. STEEL SHEATHING SHALL BE 29GA CORRUGATED GALV. OR PAINTED STEEL - MAIN RIB HT. 3/4" (FY=60KSI) OR EQ. CONNECTIONS SHALL BE #12-14 x 3/4" SDS (ESR-2196 OR EQ) WITH NEOPRENE WASHERS.
6. ALL STRUCTURAL LIGHT GAUGE TUBING AND CHANNELS SHALL BE GRADE 50 STEEL (FY = 50 KSI, FU = 65 KSI).
7. STRUCTURAL TUBE 2 1/2" x 2 1/2" - 14GA IS EQUIVALENT TO TS 2 1/2" x 2 1/2" - 12GA AND EITHER ONE MAY BE USED IN LIEU OF THE OTHER.
8. GYPSUM BOARD OR DRYWALL FINISH OR ANY BRITTLE BASE MATERIAL IS NOT ACCOUNTED FOR IN THE DESIGN CRITERIA.
9. ALL DESIGN CRITERIA MUST BE INCREASED TO THE NEXT HIGHER INCREMENT BASED ON THE TABLES ON PAGE 4; NO INTERPOLATION IS ALLOWED.

DESIGN CRITERIA

PREVAILING CODE: FBC 2023 (IBC 2021)

USE GROUP: U (CARPORTS, BARN)

RISK CATEGORY: I

DRAWING INDEX

COVER SHEET 1

SCHEDULES & MEMBER SECTIONS 2

FRAME SECTIONS & DETAILS 3-A, 3-B

SPACING SCHEDULES - & ENCLOSURE NOTES 4

PURLIN & GIRT SCHEDULES 5

SHEATHING OPTIONS 6

SIDE WALL FRAMING & OPENINGS 7-A, 7-B

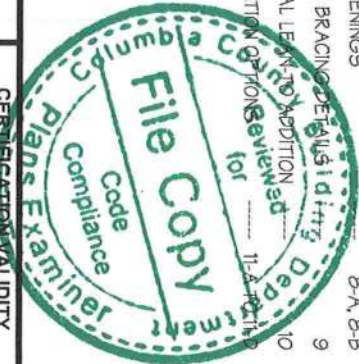
END WALL FRAMING & OPENINGS 8-A, 8-B

CORNER BRACING 9

OPTIONAL LEAN TO ADDITION 10

FOUNDATION 11-A, 11-B

LOAD COMBINATIONS: 1. D + (1.4R OR S) 2. D + (0.6W OR +0.7E) 3. D + 0.75 (0.6W OR +0.7E) + 0.75 (1.4R OR S) 4. 0.6D + (0.6W OR +0.7E)



CUSTOMER INFORMATION

OWNER: ADDRESS:

DESIGN LOADS

GROUND SNOW:

ROOF LIVE LOAD:

BASIC WIND SPEED:

BUILDING INFORMATION

WIDTH:

LENGTH:

HEIGHT:

FRAME TYPE:

☐ A-FRAME ☐ REGULAR ☐ FULL ☐ PARTIAL ☐ OPEN

CERTIFICATION VALIDITY NOTICE

DATE OF PLANS: 12-27-2024

EXPIRATION: CERTIFICATION ON THESE DRAWINGS IS VALID FOR ONE YEAR FROM DATE OF ISSUE

MANUFACTURED BY:



ENGINEERED BY:



A&A ENGINEERING
CIVIL STRUCTURAL
6035 Renaissance Place, Toledo, OH 43623
Tel. 419-292-1983 • Fax 419-292-0853
www.aandengineering.com

DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 711-23-3491

SHEET TITLE:

COVER SHEET

SHEET NO.: 1 / 11

DRAWN BY: A.W. DATE: 1/26/22

CHECKED BY: OAA DATE: 1/26/22

LEGAL INFORMATION

- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW. - DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

SEAL:



TABLE 2.1: MEMBER PROPERTIES

NO.	LABEL	PROPERTY	DETAIL NO.
1	COLUMN POST	2.5" X 2.5" X 14GA TUBE	1
2	ROOF BEAM	2.5" X 2.5" X 14GA TUBE	1
3	BASE RAIL	2.5" X 2.5" X 14GA TUBE	1
4	PEAK BRACE	2.5" X 2.5" X 14GA CHANNEL	4
5	KNEE BRACES	2.5" X 1.5" X 14GA CHANNEL	4
6	CONNECTOR SLEEVE	2.25" X 2.25" X 12GA TUBE	2
7	BASE ANGLE	2" X 2" X 3" LG. 3/16" ANGLE	10
8	PURLIN	4.25" X 1.5" X 14GA / 18GA HAT CHANNEL	5
9	GIRT	4.25" X 1.5" X 14GA / 18GA HAT CHANNEL	5
9A	OPT. END WALL GIRT	2.5" X 1.5" X 14GA CHANNEL	1
10	SHEATHING	29 GA CORRUGATED SHEET	8
11	END WALL POST	2.5" X 2.5" X 14GA TUBE	1
12	DOOR POST	2.5" X 2.5" X 14GA TUBE	1
13	SINGLE HEADER	2.5" X 2.5" X 14GA TUBE	1
14	DOUBLE HEADER	2.5" X 2.5" X 14GA TUBE	1
15	SERVICE DOOR / WINDOW FRAMING	2.5" X 2.5" X 14GA TUBE	1
16	ANGLE BRACKET	2" X 2" X 2" LG. 14GA ANGLE	7
17	STRAIGHT BRACKET	2" X 2" X 4" LG. 14GA PLATE	6
18	PIV SUPPORT	2.5" X 2.5" X 14GA TUBE	1
19	DIAGONAL BRACE	2" X 2" X 14 GA TUBE	3
20	GABLE BRACE	2" X 2" X 14 GA TUBE	3
21	DB BRACKET	2.25" X 2.25" X 6" LG. 14GA ANGLE	9
22	TRUSS SPACER	2.5" X 2.5" X 14GA TUBE	1
23	ALL FASTENERS	#12 X 1" SELF-DRILL SCREWS (ESR-2196 OR EQ) W/ NEOPRENE/STEEL WASHER	

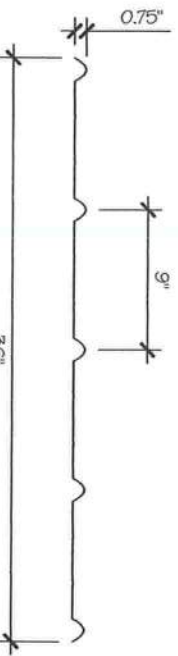
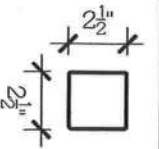
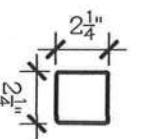
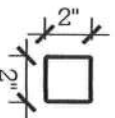
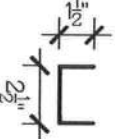
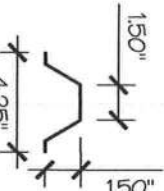
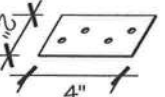
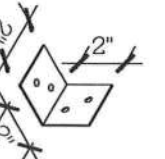
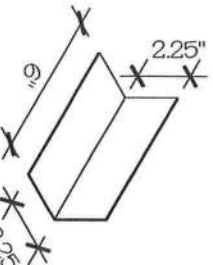
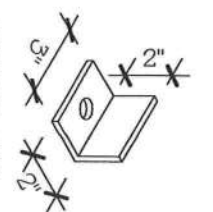
TABLE 2.2: SHEATHING FASTENER SCHEDULE

LOCATION	CORNER PANELS	SIDE LAPS	EDGE LAPS	ELSEWHERE
SPACING	9" C/C	MIN. 1	4 1/2" C/C	9" C/C

FASTENER TYPE: #12X1" SELF-DRILL SCREWS (ESR-2196 OR EQ) W/ NEOPRENE/STEEL WASHER
 *SEE TYP. SHEATHING FASTENER SCHEDULE DIAGRAM ON PAGE 6.

TABLE 2.3: GAUGE THICKNESS

GAUGE	29	18	14	12
THICKNESS (IN)	0.0135	0.049	0.083	0.109

29 GA CORRUGATED SHEATHING
SCALE: NTS2.5" X 2.5" 14GA TUBE
SCALE: NTS2.25" X 2.25" 12GA TUBE
SCALE: NTS2" X 2" 14GA TUBE
SCALE: NTS2.5" X 1.5" 14GA CHANNEL
SCALE: NTS4.25" X 1.5" X 14GA / 18GA
HAT CHANNEL
SCALE: NTS14GA STRAIGHT BRACKET
SCALE: NTS14GA ANGLE BRACKET
SCALE: NTS14GA DB BRACKET
SCALE: NTS3/16" BASE ANGLE
SCALE: NTS

MANUFACTURED BY:



ENGINEERED BY:



6036 Reubensau Place, Toledo, OH 43623
 Tel. 419-292-1983 • Fax. 419-292-0655
 www.a-a-engineering.com

DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 711-23-3491

SHEET TITLE:

SCHEDULES &
 MEMBER SECTIONS

SHEET NO.: 2 / 11

DRAWN BY: A.W. DATE: 1/26/22

CHECKED BY: OAA DATE: 1/26/22

LEGAL INFORMATION

- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW.
 - DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

SEAL:



STAMP EXPIRY: 02-28-2025
 DATE SIGNED: 12-27-2023

MANUFACTURED BY:



Garages,
Metal buildings,
Barns, Carports,
RV Covers,
& Storage units.

ENGINEERED BY:



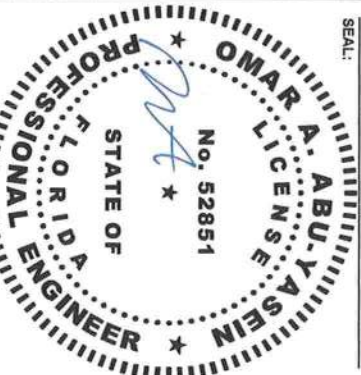
A&A ENGINEERING
CIVIL - STRUCTURAL
6036 Kemnauer Place, Toledo, OH 44623
Tel. 419-292-1983 • Fax. 419-292-0533
www.aandengineering.com

DRAWING INFORMATION

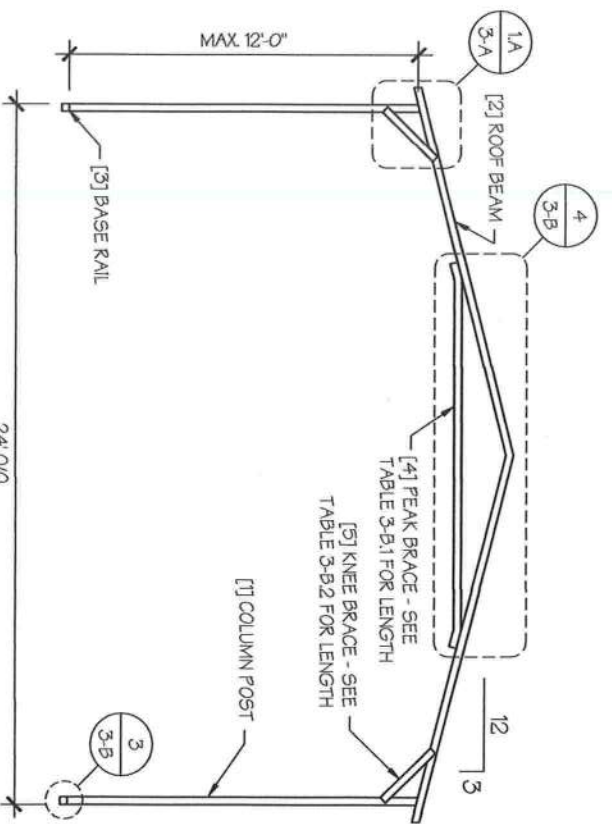
PROJECT: 24'-0" WIDE BUILDINGS
LOCATION: STATE OF FLORIDA
PROJECT NO.: 711-23-3491
SHEET TITLE:
FRAME SECTIONS &
DETAILS

LEGAL INFORMATION

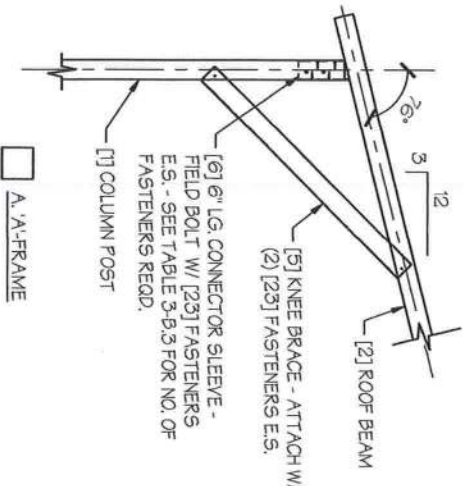
SHEET NO.: 3-A / 11
DRAWN BY: A.W. DATE: 1/26/22
CHECKED BY: OAA DATE: 1/26/22
SEAL:
- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW.
- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.



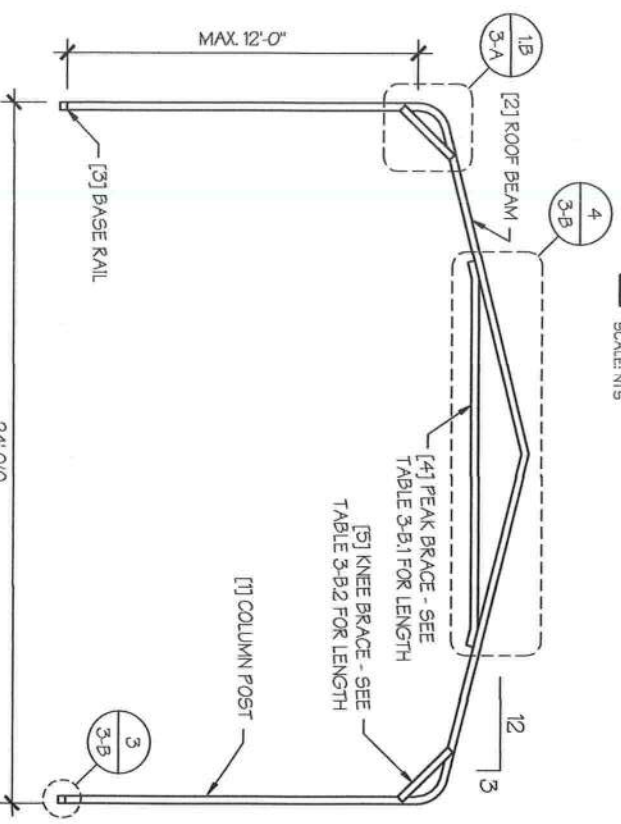
STAMP EXPIRY: 02-28-2025
DATE SIGNED: 12-27-2023



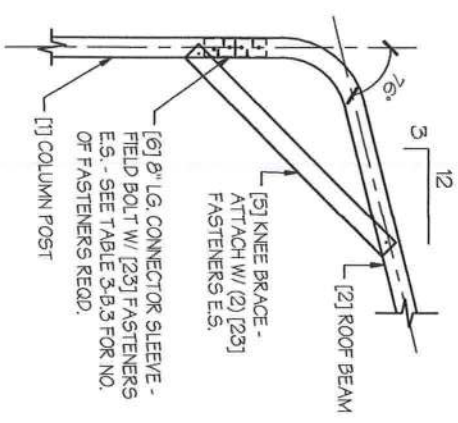
☐ TYP. A-FRAME SECTION
SCALE: NTS



☐ A-A-FRAME
SCALE: NTS



☐ TYP. REGULAR FRAME SECTION
SCALE: NTS



☐ B-REGULAR-FRAME
SCALE: NTS

☐ EAVE DETAIL
SCALE: NTS

MANUFACTURED BY:



**Garages,
Metal buildings,
Barns, Carports,
RV Covers,
& Storage units.**

ENGINEERED BY:



A&A ENGINEERING
CIVIL • STRUCTURAL
6036 Renaissance Place, Toledo, OH 44823
Tel. 419-292-1983 • Fax. 419-292-0535
www.a-a-engineers.com

DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS
LOCATION: STATE OF FLORIDA
PROJECT NO.: 711-23-3491
SHEET TITLE:

FRAME DETAILS

SHEET NO.: 3-B / 11

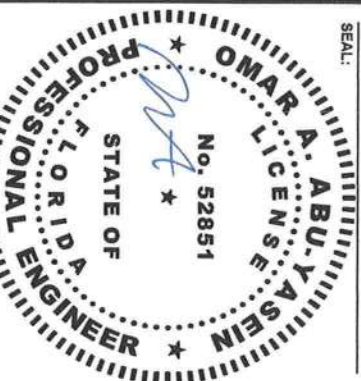
DRAWN BY: A.W. DATE: 1/26/22

CHECKED BY: OAA DATE: 1/26/22

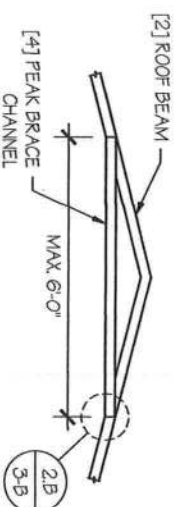
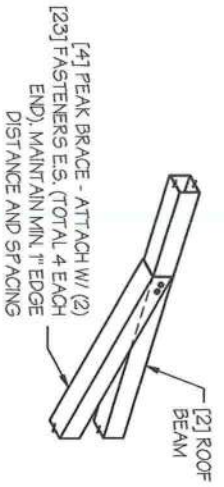
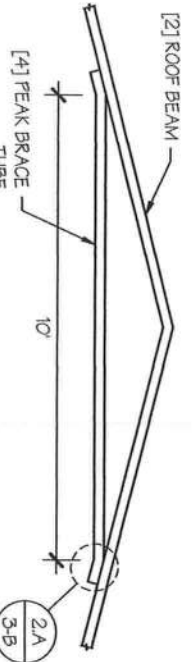
LEGAL INFORMATION

- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW.
- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

SEAL:



STAMP EXPIRY: 02-28-2025
DATE SIGNED: 12-27-2023



B. PEAK BRACE CHANNEL

PEAK BRACE CONNECTION DETAILS

2

SCALE: NTS

TABLE 3-B.1: PEAK BRACE SCHEDULE

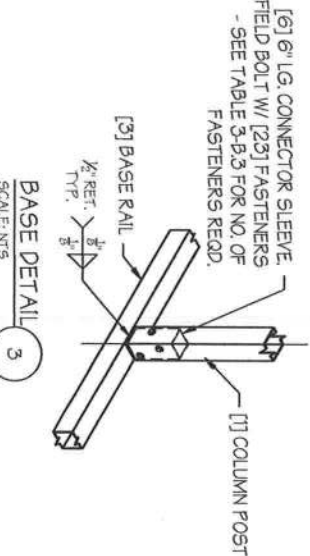
GROUND SNOW / ROOF LIVE LOAD (PSF)	WIND SPEED
□ 30 / 20	□ 105 TO 130
□ 35 / 25 TO 90 / 61	□ 140 TO 180
	6'
	10'
	10'

TABLE 3-B.2: KNEE BRACE SCHEDULE

EAVE HEIGHT	KNEE BRACE LENGTH
□ UP TO 8'	24"
□ 9' TO 12'	36"

TABLE 3-B.3 FASTENER SCHEDULE

WIND SPEED (MPH)	NO. OF FASTENERS
□ 105 TO 125	4
□ 130 TO 155	6
□ 160 TO 180	8



NOTE: COLUMN POST MAY BE ADJUSTED ±1" FOR LEVELING. MANUFACTURER IS NOT RESPONSIBLE FOR LEVELING OF GROUND AND/OR CONCRETE SURFACE PROVIDED BY OTHERS.

MANUFACTURED BY:



ENGINEERED BY:



A&A ENGINEERING
CIVIL • STRUCTURAL
6036 Renaissance Place, Toledo, OH 43623
Tel. 419-292-1983 • Fax. 419-292-4053
www.aandengineering.com

DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 711-23-3491

SHEET TITLE:

SPACING SCHEDULES
& ENCLOSURE NOTES

SHEET NO.: 4 / 11

DRAWN BY: A.W. DATE: 1/26/22

CHECKED BY: OAA DATE: 1/26/22

LEGAL INFORMATION

- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW.
- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

SEAL:



STAMP EXPIRY: 12-28-2025
DATE SIGNED: 12-27-2023

TABLE 4: FRAME SPACING CHART / SCHEDULE

EAVE HEIGHT = UP TO 8'-0"		EAVE HEIGHT = 7'-0" TO 9'-0"		EAVE HEIGHT = 10'-0" TO 12'-0"		GROUND SNOW / ROOF LIVE LOAD (PSF)											ENCLOSURED BUILDINGS WIND SPEED (MPH)											OPEN BUILDINGS WIND SPEED (MPH)													
						105						115						130						140						155						165					
30 / 20	40 / 27	50 / 34	60 / 41	70 / 47	80 / 54	90 / 61	30 / 20	40 / 27	50 / 34	60 / 41	70 / 47	80 / 54	90 / 61	30 / 20	40 / 27	50 / 34	60 / 41	70 / 47	80 / 54	90 / 61	30 / 20	40 / 27	50 / 34	60 / 41	70 / 47	80 / 54	90 / 61	30 / 20	40 / 27	50 / 34	60 / 41	70 / 47	80 / 54	90 / 61							
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16	14	12	10	8	6	4								
60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	60	48/60	40/48	36	30	24	---	48	42	36	30	24	18	16														

NOTES:

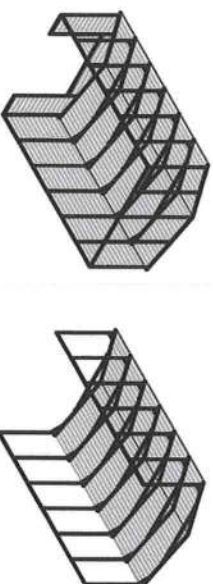
- FRAME SPACINGS ARE IN UNITS OF INCHES (IN).
- WHERE TWO VALUES ARE SHOWN, THE HIGHER VALUE CAN ONLY BE USED FOR VERTICAL SHEATHING.
- SNOW LOADS AND ROOF LIVE LOADS ARE IN POUNDS PER SQUARE FOOT (PSF). WIND SPEED IS 3 SEC. GUST IN MILES PER HOUR (MPH).
- FOR VALUES THAT LIE BETWEEN TWO CELLS, THE HIGHER (MORE STRINGENT) VALUE HAS TO BE USED. INTERPOLATION BETWEEN CELLS IS NOT ALLOWED.

ENCLOSURE CLASSIFICATION:

- ENCLOSURED BUILDING = ALL 4 WALLS FULLY ENCLOSURED WITH DOORS/WINDOWS = USE ENCLOSURED BUILDING SPACING CHART.
- OPEN BUILDING = ALL 4 WALLS FULLY OPEN = USE OPEN BUILDING SPACING CHART.
- 3FT PARTIALLY ENCLOSURED = BOTH END-WALLS FULLY OPEN, WITH BOTH SIDE-WALLS ONLY 3FT ENCLOSURED = USE OPEN BUILDING SPACING CHART.
- PARTIALLY ENCLOSURED = BOTH END-WALLS FULLY OPEN, WITH BOTH SIDE-WALLS ENCLOSURED MORE THAN 3FT = START WITH OPEN BUILDING SPACING CHART AND THEN REDUCE SPACING BY 6".
- SIDED ENCLOSURED = ALL WALLS ARE ENCLOSURED EXCEPT FOR 1 END-WALL = START WITH ENCLOSURED BUILDING SPACING + THE OPEN END FRAME MUST HAVE EITHER A GABLED END OR HAVE DOUBLED WELDED LEGS & ROOF.
- FOR ALL SHEATHING ENCLOSURES NOT LISTED ABOVE, REFER TO SHEET 5 FOR SPACING AND DESIGN REQUIREMENTS.

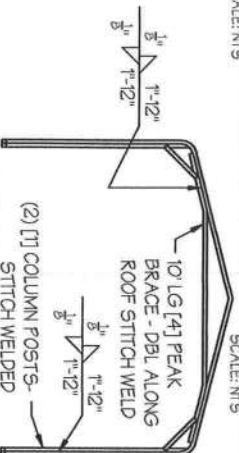
GENERAL NOTES:

- THE MAX BUILDING LENGTH FOR ENCLOSURED BUILDINGS IS 50'-0". THIS CAN BE INCREASED BY ADDING A DOUBLE FRAME AT THE CENTER TO BREAK THE LENGTH OF THE BUILDING.
- BUILDINGS WITH PARTIALLY ENCLOSURED END WALLS NEED TO HAVE SIDE WALL BRACING TO SUPPORT THE PARTIALLY ENCLOSURED END WALL. (SEE FIGURE A ON SHEET 5).
- ALL BUILDINGS WITH AN OPEN END WALL MUST HAVE A 10'-0" TUBE PEAK BRACE.



TYP. ENCLOSURED BUILDING
SCALE: NTS

TYP. OPEN BUILDING
SCALE: NTS



TYP. OPEN END WALL ON 3
SIDE ENCLOSURED BUILDING
SCALE: NTS

TABLE 5.1: PURLIN SPACING SCHEDULE

GROUND SNOW / ROOF LIVE LOAD (PSF)	■ 14GA. HAT CHANNEL PURLIN										■ 18GA. HAT CHANNEL PURLIN									
	WIND SPEED (MPH)					WIND SPEED (MPH)					WIND SPEED (MPH)					WIND SPEED (MPH)				
	105	115	130	140	155	165	180	195	210	225	105	115	130	140	155	165	180	195	210	225
■ 3' 0" OR LOWER	30/20	42	42	42	42	42	42	42	42	42	30/20	42	42	42	42	42	42	42	42	42
■ 3' 6"	40/27	42	42	42	42	42	42	42	42	42	40/27	42	42	42	42	42	42	42	42	42
■ 4' 0"	50/34	40	40	40	40	40	40	40	40	40	50/34	40	40	40	40	40	40	40	40	40
■ 4' 6"	60/41	36	36	36	36	36	36	36	36	36	60/41	36	36	36	36	36	36	36	36	36
■ 5' 0"	70/47	32	32	32	32	32	32	32	32	32	70/47	32	32	32	32	32	32	32	32	32
■ 3' 0" OR LOWER	80/54	30	30	30	30	30	30	30	30	30	80/54	30	30	30	30	30	30	30	30	30
■ 3' 6"	90/61	24	24	24	24	24	24	24	24	24	90/61	24	24	24	24	24	24	24	24	24
■ 4' 0"	30/20	54	48	42	42	36	36	30	30	30	30/20	54	48	42	42	36	36	30	30	30
■ 4' 6"	40/27	42	42	42	42	36	36	30	30	30	40/27	42	42	42	42	36	36	30	30	30
■ 5' 0"	50/34	40	40	40	40	36	36	30	30	30	50/34	40	40	40	40	36	36	30	30	30
■ 3' 0" OR LOWER	60/41	36	36	36	36	36	36	30	30	30	60/41	36	36	36	36	36	36	30	30	30
■ 3' 6"	70/47	32	32	32	32	32	32	30	30	30	70/47	32	32	32	32	32	32	30	30	30
■ 4' 0"	80/54	30	30	30	30	30	30	30	30	30	80/54	30	30	30	30	30	30	30	30	30
■ 4' 6"	90/61	30	30	30	30	30	30	30	30	30	90/61	30	30	30	30	30	30	30	30	30

NOTES:

- PURLIN SPACING UNITS ARE IN INCHES.
- FRAME SPACING NEEDS TO BE DETERMINED FROM TABLE 4.

IRREGULAR BUILDING NOTES:

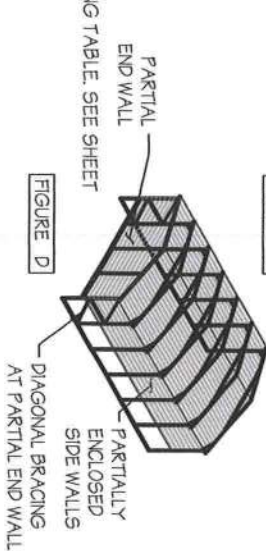
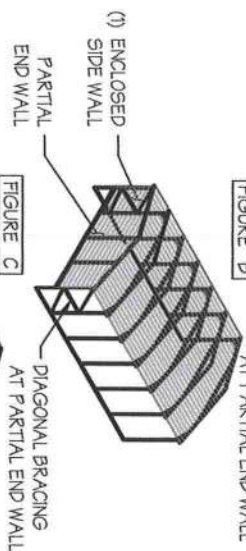
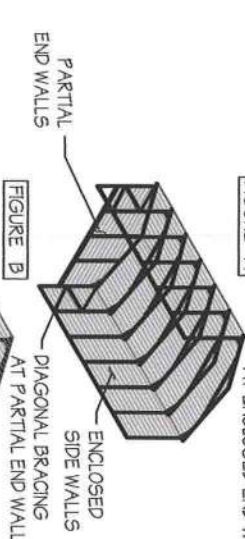
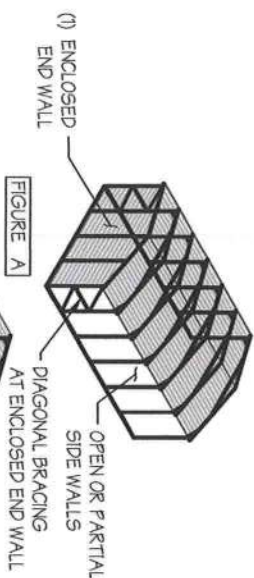
- FIGURES A, B, C & D ON THE RIGHT INDICATE EXAMPLES OF IRREGULAR BUILDINGS.
- FOR IRREGULAR BUILDINGS, FRAME SPACING MUST BE REDUCED BY 6" FROM OPEN BUILDING SPACING TABLE. SEE SHEET 4 FOR OPEN BUILDING TABLE.
- SITE SPECIFICS MAY ALLOW FOR ALTERNATIVE SPACING.
- IRREGULAR BUILDING & BUILDINGS W/ MORE THAN 2 SIDE OPENINGS MUST HAVE A 10" TUBE PEAK BRACE ON ALL FRAMES.

TABLE 5.2: GIRT SPACING SCHEDULE

FRAME SPACING	WIND SPEED (MPH)									
	105	115	130	140	155	165	180	195	210	225
■ 5'-0"	60	48	36	30	24	24	18	18	18	18
■ 4'-6"	60	60	48	42	36	30	24	24	24	24
■ 4'-0"	60	60	60	54	48	42	36	30	30	30
■ 3'-6"	60	60	60	54	48	42	36	30	30	30
■ 2'-0" TO 3'-0"	60	60	54	54	48	42	42	42	42	42

NOTES:

- GIRT SPACING UNITS ARE IN INCHES.
- THIS SCHEDULE IS TO BE USED FOR BOTH 14GA AND 18 GA PURLINS.
- FRAME SPACING NEEDS TO BE DETERMINED FROM TABLE 4.



MANUFACTURED BY:



ENGINEERED BY:



A&A ENGINEERING
CIVIL STRUCTURAL
6005 Broadwater Place, Toledo, OH 43623
Tel. 419-292-1983 • Fax. 419-292-0935
www.aandengineering.com

DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 711-23-3491

SHEET TITLE:

PURLIN & GIRT
SPACING SCHEDULES

SHEET NO.: 5 / 11

DRAWN BY: A.W. DATE: 1/26/22

CHECKED BY: OAA DATE: 1/26/22

LEGAL INFORMATION

- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR
PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL
BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW.
- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

SEAL:



STAMP EXPIRY: 02-28-2025

DATE SIGNED: 12-27-2023

MANUFACTURED BY:



**Garages,
Metal buildings,
Barns, Carports,
RV Covers,
& Storage units.**

ENGINEERED BY:



A&A ENGINEERING
CIVIL • STRUCTURAL
6005 Brubaker Place, Toledo, OH 43623
TEL 419-292-1983 • FAX 419-292-0935
WWW.A&AENGINEERING.COM

DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 711-23-3491

SHEET TITLE:

**SHEATHING OPTIONS
& DETAILS**

SHEET NO.: 6 / 11

DRAWN BY: A.W. DATE: 1/26/22

CHECKED BY: OAA DATE: 1/26/22

LEGAL INFORMATION

- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW.
- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

SEAL:

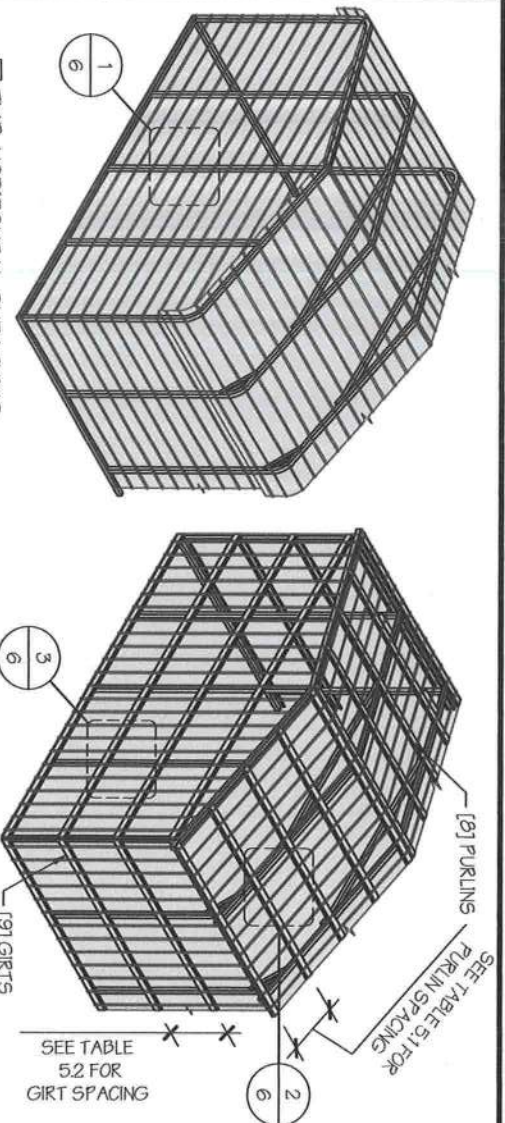


STAMP EXPIRY: 02-28-2025

DATE SIGNED: 12-27-2023

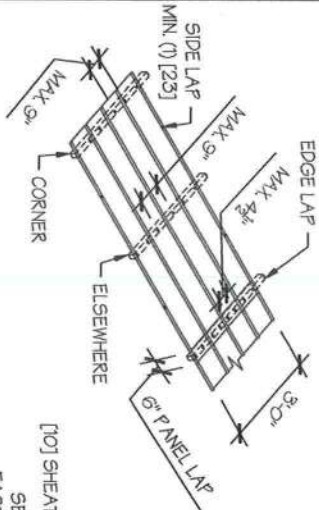
GENERAL SHEATHING NOTES:

1. REGULAR STYLE BUILDINGS CAN ONLY HAVE HORIZONTAL SHEATHING ON ROOF AND WALLS. A-FRAME STYLE BUILDINGS CAN HAVE ANY COMBINATION OF HORIZONTAL OR VERTICAL SHEATHING ON ROOFS AND WALLS. BOTH HORIZONTAL AND VERTICALS ROOF SHEATHING CAN HAVE MAX. 6" OVERHANG.
2. USING VERTICAL SHEATHING MAY ALLOW FOR GREATER FRAME SPACING. SEE NOTE 2 UNDER TABLE 4.
3. VERTICAL SHEATHING RECOMMENDED FOR BUILDINGS 30' OR LONGER
4. ALLOW FOR GREATER FRAME SPACING. SEE NOTE 2 UNDER TABLE 4.
5. VERTICAL SHEATHING RECOMMENDED FOR BUILDINGS 30' OR LONGER



☐ TYP. HORIZONTAL SHEATHING

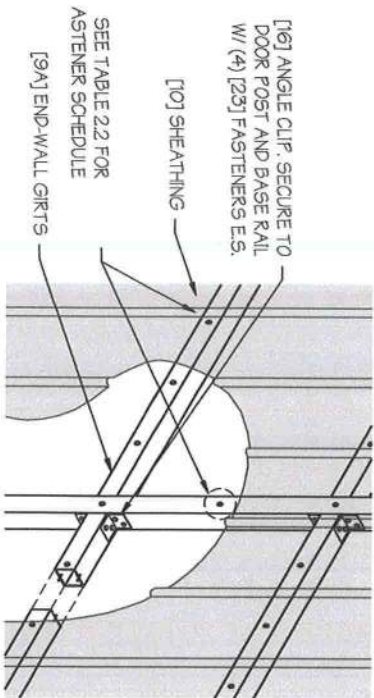
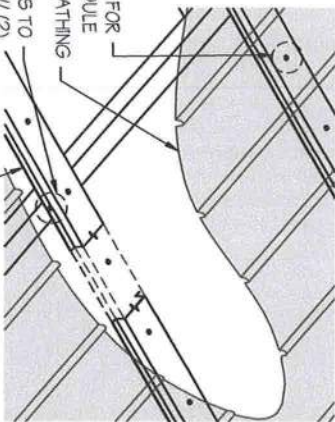
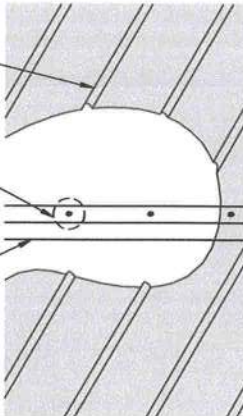
☐ TYP. VERTICAL SHEATHING



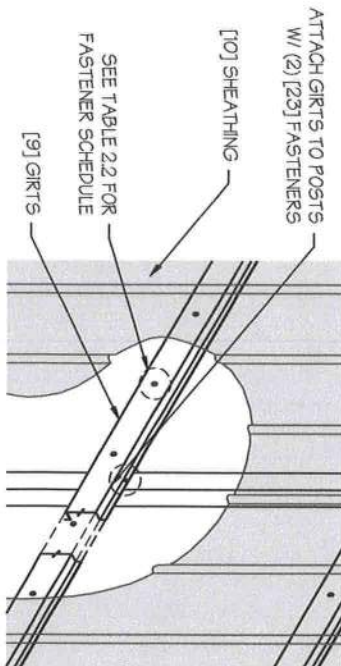
TYP. SHEATHING FASTENER SCHEDULE

TYP. HORIZONTAL SHEATHING DETAIL 1

ROOF VERTICAL SHEATHING DETAIL 2



☐ WALL VERTICAL SHEATHING - TUBE DETAIL 3



☐ WALL VERTICAL SHEATHING - HAT CHANNEL DETAIL 3

MANUFACTURED BY:



ENGINEERED BY:



A&A ENGINEERING
CIVIL • STRUCTURAL
6030 Renaissance Place, Toledo, OH 43623
Tel. 419-292-1983 • Fax. 419-292-0953
www.a-a-engineers.com

DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 711-23-3491

SHEET TITLE:

SIDE WALL FRAMING
& OPENINGS

SHEET NO.: 7-A / 11

DRAWN BY: A.W. DATE: 1/26/22

CHECKED BY: OAA DATE: 1/26/22

LEGAL INFORMATION

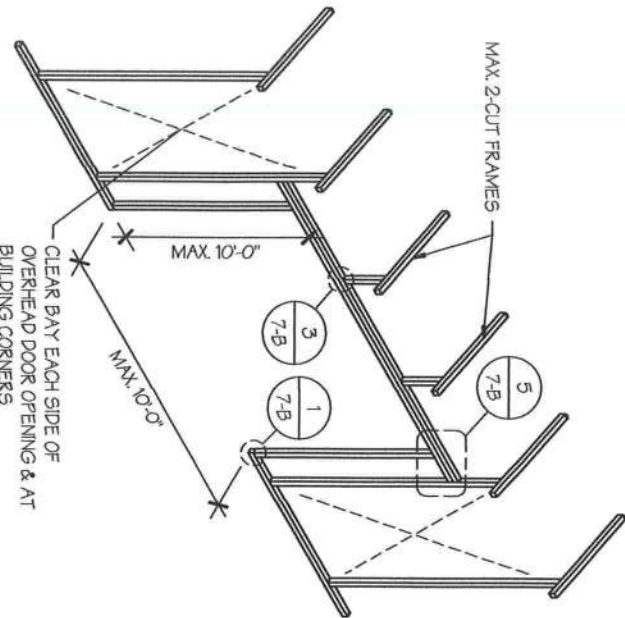
- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW.
- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

SEAL:



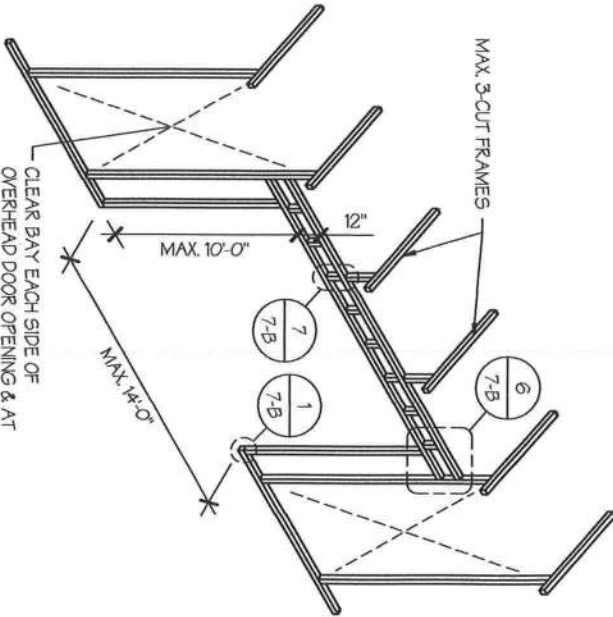
STAMP EXPIRY: 02-28-2025

DATE SIGNED: 12-27-2023



☐ SIDE WALL OVERHEAD DOOR OPENINGS

SCALE: NTS

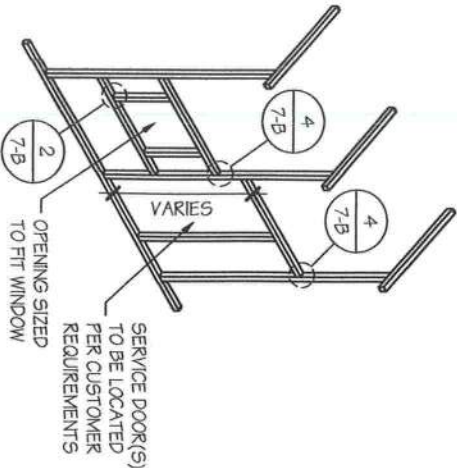


☐ SIDE WALL OVERHEAD DOOR OPENINGS
WITH TRUSS STYLE HEADER

SCALE: NTS

SIDE WALL FRAMING NOTES:

1. TRUSS-STYLE HEADERS ARE REQUIRED FOR WHERE THE GROUND SNOW LOAD IS 40 PSF OR GREATER.
2. DESIGNS AND DETAILS SHOWN HERE ARE APPLICABLE TO BOTH REGULAR AND A-FRAME STYLE BUILDINGS.
3. MAX. HEIGHT OF SIDE WALL OVERHEAD DOOR OPENINGS IS 2 FT LESS THAN THE EAVE HEIGHT.
4. OVERHEAD DOOR OPENINGS CANNOT CUT THROUGH MORE THAN 2 FULL FRAMES.
5. MIN. 1 CLEAR BAY MUST BE MAINTAINED BETWEEN ANY 2 OVERHEAD DOOR OPENINGS. A CLEAR BAY IS A SPACE BETWEEN TWO FRAMES THAT HAS NO OVERHEAD DOOR OPENINGS.
6. MIN. 1 CLEAR BAY MUST ALSO BE MAINTAINED FROM THE BUILDING CORNERS.
7. SERVICE DOORS AND WINDOWS CAN BE PLACED IN CLEAR BAYS OR ANY WHERE ELSE AS NEEDED.



☐ SIDE WALL SERVICE DOOR / WINDOW OPENINGS

SCALE: NTS

MANUFACTURED BY:



ENGINEERED BY:



A&A ENGINEERING
CIVIL • STRUCTURAL

6038 Renaissance Place, Toledo, OH 43623
Tel. 419.292.1983 • Fax. 419.292.4955
www.a-a-engineering.com

DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 711-23-3491

SHEET TITLE:

**SIDE WALL FRAMING
DETAILS**

SHEET NO.: 7-B / 11

DRAWN BY: A.W. DATE: 1/26/22

CHECKED BY: OAA DATE: 1/26/22

LEGAL INFORMATION

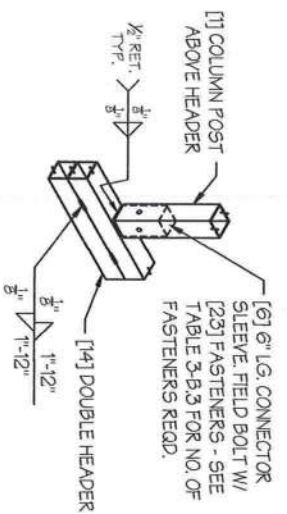
- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW.
- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

SEAL:

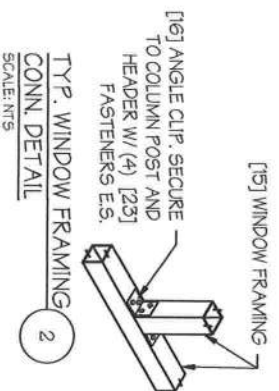


STAMP EXPIRY: 02-28-2025

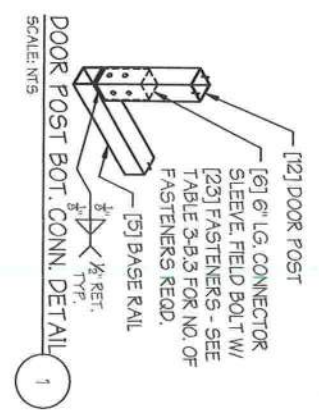
DATE SIGNED: 12-27-2023



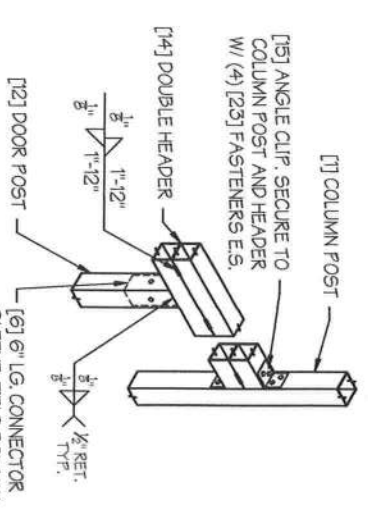
**COLUMN POST ABOVE DBL.
DOOR HEADER CONN. DETAIL** 3
SCALE: NTS



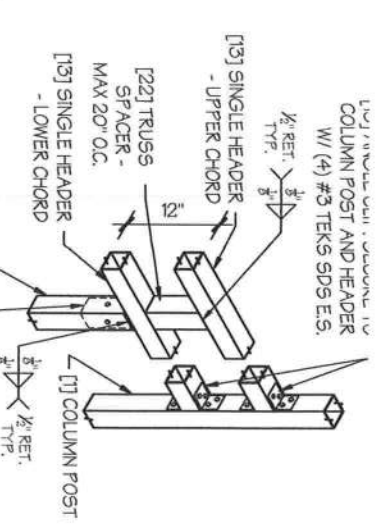
**TYP. WINDOW FRAMING
CONN. DETAIL** 2
SCALE: NTS



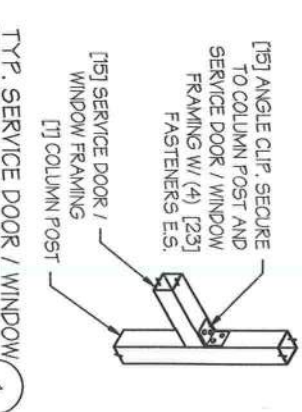
DOOR POST BOT. CONN. DETAIL 1
SCALE: NTS



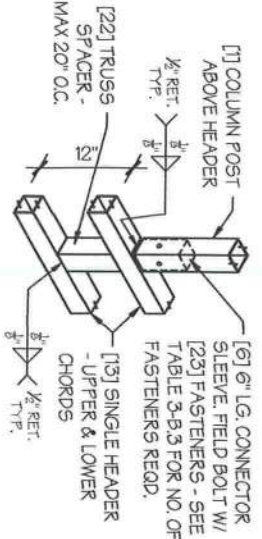
**COLUMN POST ABOVE DBL.
DOOR HEADER CONN. DETAIL** 5
SCALE: NTS



**COLUMN POST ABOVE TRUSS
DOOR HEADER CONN. DETAIL** 6
SCALE: NTS



**TYP. SERVICE DOOR / WINDOW
FRAMING CONN. DETAIL** 4
SCALE: NTS



**COLUMN POST ABOVE TRUSS
DOOR HEADER CONN. DETAIL** 7
SCALE: NTS

MANUFACTURED BY:



Garages,
Metal buildings,
Barns, Carports,
RV Covers,
& Storage units.

ENGINEERED BY:



A&A ENGINEERING
CIVIL • STRUCTURAL
6036 Rembrandt Place, Toledo, OH 43623
Tel. 419-292-1983 • Fax. 419-292-4955
www.aandengineering.com

DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS
LOCATION: STATE OF FLORIDA
PROJECT NO.: 711-23-3491
SHEET TITLE:

END WALL FRAMING

SHEET NO.: 8-A / 11

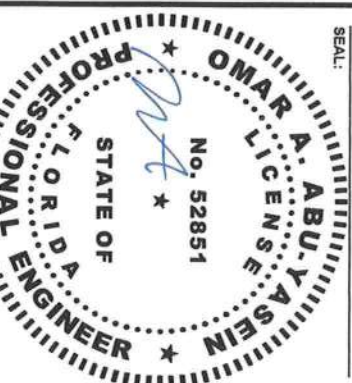
DRAWN BY: A.W. DATE: 1/26/22

CHECKED BY: OAA DATE: 1/26/22

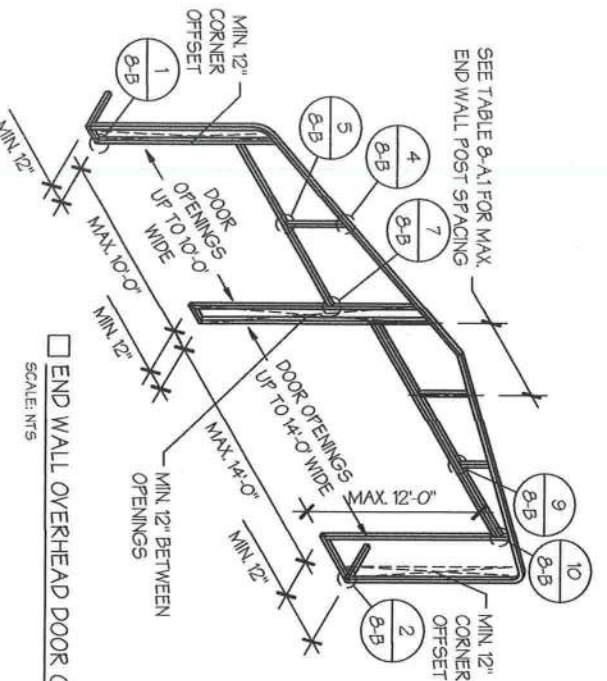
LEGAL INFORMATION

- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW.
- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

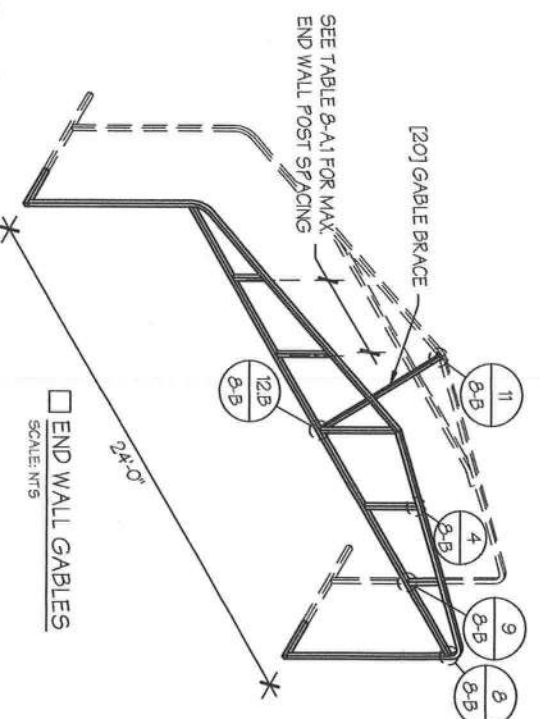
SEAL:



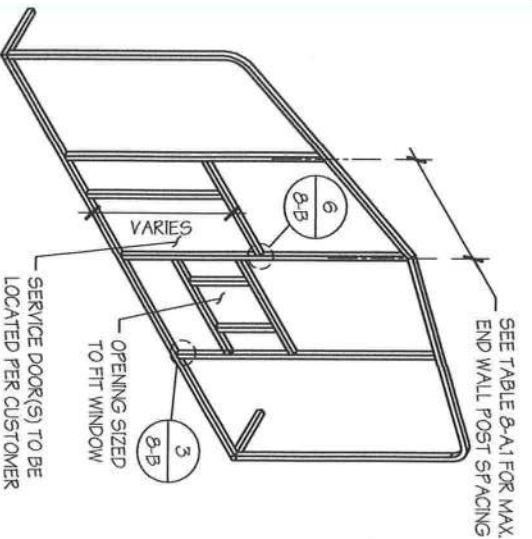
STAMP EXPIRY: 02-28-2025
DATE SIGNED: 12-27-2023



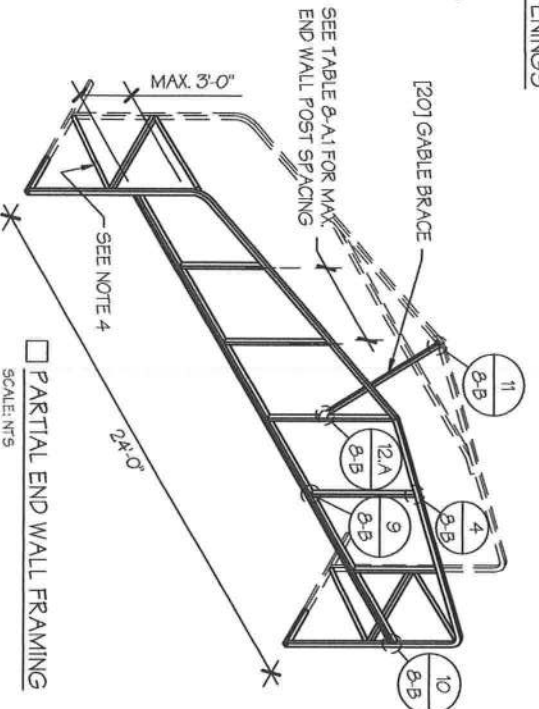
END WALL OVERHEAD DOOR OPENINGS
SCALE: NTS



END WALL GABLES
SCALE: NTS



END WALL SERVICE DOOR AND WINDOW OPENINGS
SCALE: NTS



PARTIAL END WALL FRAMING
SCALE: NTS

TABLE 8-A.1: END WALL POST SPACING SCHEDULE

WIND SPEED (MPH)	UP TO 7'	8' TO 9'	10' TO 12'
105	5'	5'	5'
115	5'	5'	4.5'
130	4.5'	4.5'	4'
140	4.5'	4.5'	3'
155	4'	4'	2.5'
165 - 180	3.5'	3'	2'

- END WALL FRAMING NOTES:
- DESIGNS AND DETAILS SHOWN HERE ARE APPLICABLE TO BOTH REGULAR AND A-FRAME STYLE BUILDINGS.
 - MIN. 12" CLEARANCE MUST BE MAINTAINED BETWEEN ANY TWO OPENINGS (OVERHEAD DOOR OR SERVICE DOOR) AND FROM CORNERS.
 - SERVICE DOORS AND WINDOWS CAN BE PLACED AS NEEDED.
 - DIAGONAL BRACES NEED TO BE ADDED FOR PARTIAL END WALL ENCLOSURES. SEE SHEET 9 FOR DIAGONAL BRACE CONNECTION DETAILS.

MANUFACTURED BY:



**Garages,
Metal buildings,
Barns, Carports,
RV Covers,
& Storage units.**

ENGINEERED BY:



A&A ENGINEERING
CIVIL • STRUCTURAL
6036 Reinhardt Place, Toledo, OH 43623
Tel. 419-293-1983 • Fax 419-293-2405
www.a-a-engineers.com

DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 711-23-3491

SHEET TITLE:

**END WALL FRAMING
DETAILS**

SHEET NO.: 8-B / 11

DRAWN BY: A.W. DATE: 1/26/22

CHECKED BY: OAA DATE: 1/26/22

LEGAL INFORMATION

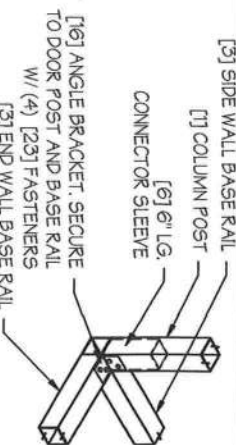
- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW.
- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

SEAL:

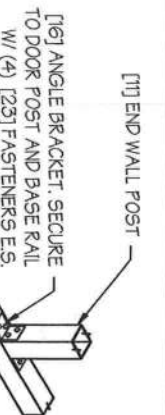


STAMP EXPIRY: 02-28-2025
DATE SIGNED: 12-27-2023

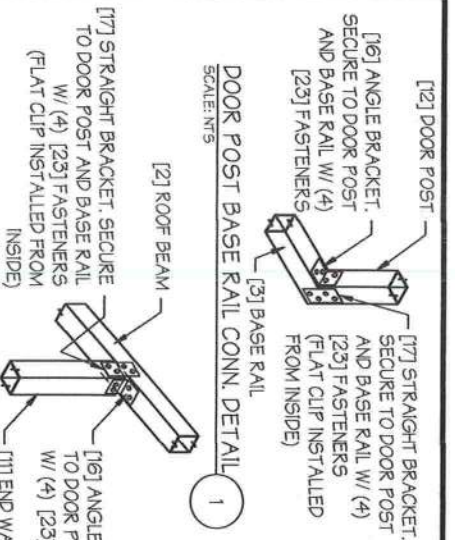
[3] SIDE WALL BASE RAIL



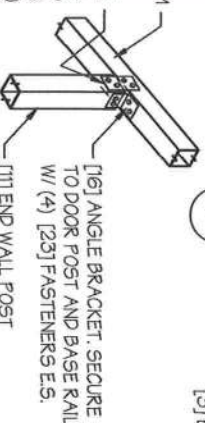
CORNER DETAIL 2
SCALE: NTS



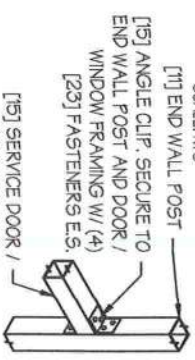
3
SCALE: NTS



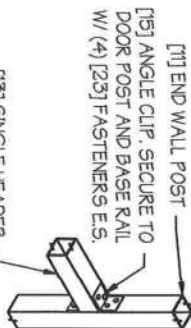
1
SCALE: NTS



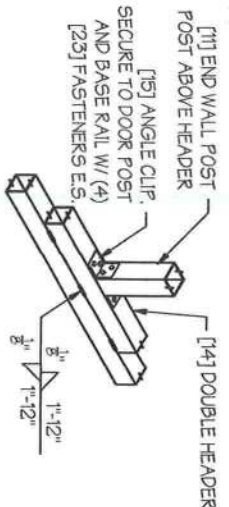
4



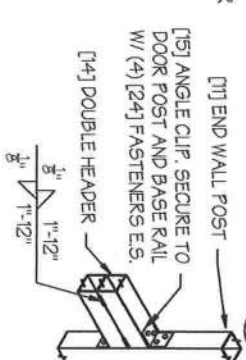
6
SCALE: NTS



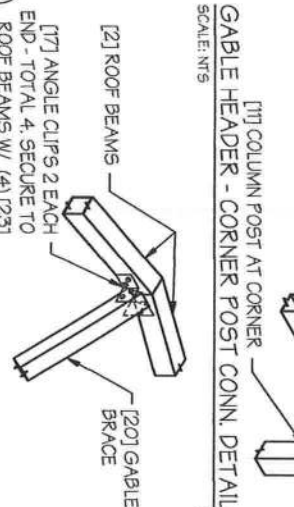
7
SCALE: NTS



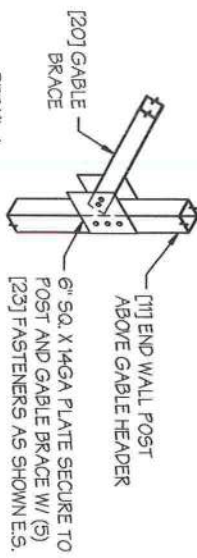
9
SCALE: NTS



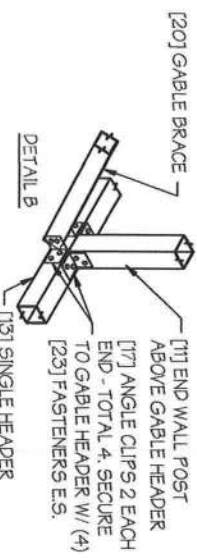
10
SCALE: NTS



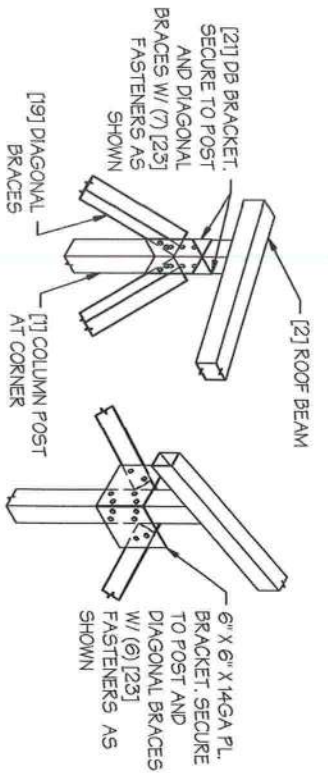
8
SCALE: NTS



12
SCALE: NTS

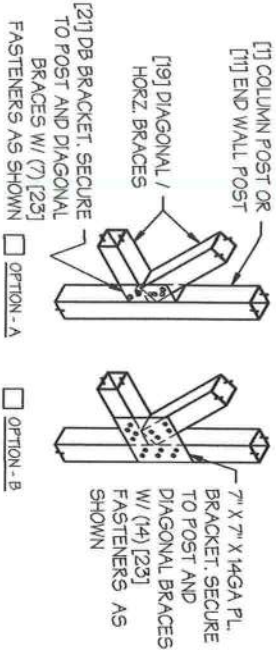


11
SCALE: NTS



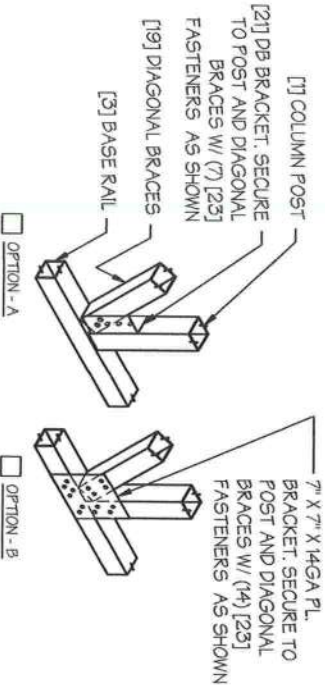
DIAGONAL BRACE TOP CORNER CONN. DETAIL* 1

SCALE: NTS



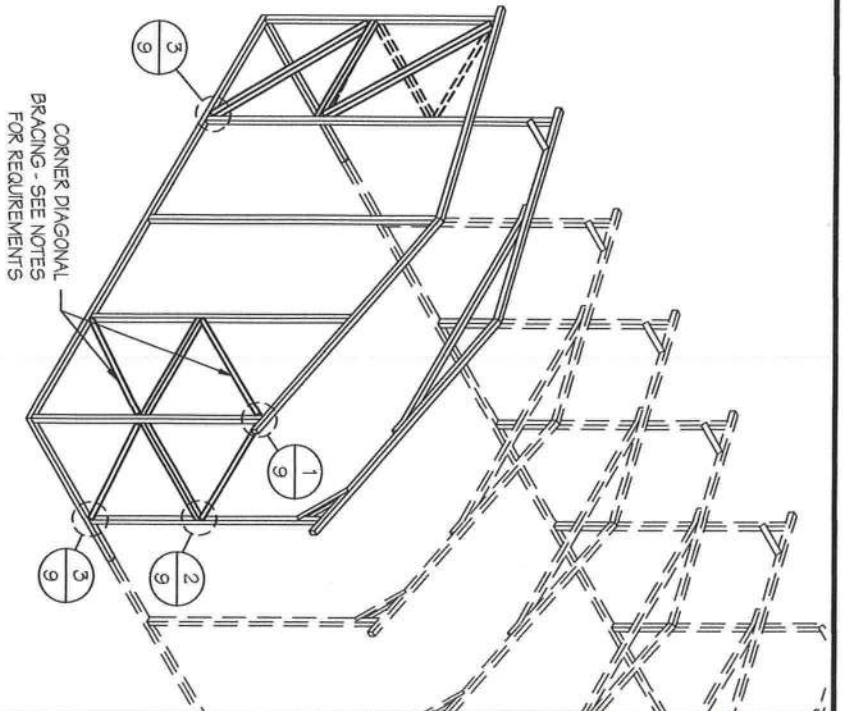
DIAGONAL BRACE - POST CONN. DETAIL* 2

SCALE: NTS



DIAGONAL BRACE BOT. CORNER CONN. DETAIL* 3

SCALE: NTS



DIAGONAL BRACING AT CORNERS

SCALE: NTS

CORNER BRACING NOTES:

1. DIAGONAL BRACING AT BUILDING CORNERS IS REQUIRED FOR ALL BUILDINGS IN LOCATIONS WHERE WIND SPEED IS 140 MPH OR GREATER.
 - FOR 3 SIDED ENCLOSED BUILDINGS, 140 MPH OR GREATER WIND SPEED
 - THE BUILDING MUST BE DESIGNED WITH OPEN BUILDING SPACING AND DIAGONAL BRACING IS REQUIRED ON ALL ENCLOSED WALLS.
2. SIDE-WALL DIAGONAL BRACING IS REQUIRED WHEN THE ADJACENT END-WALL IS PARTIALLY ENCLOSED.
3. ALL BUILDINGS WITH IRREGULAR ENCLOSURE (SEE SHEET 5) WILL REQUIRE SIDE-WALL BRACING CLOSE TO THE PARTIALLY ENCLOSED END-WALL.



ENGINEERED BY:



A&A ENGINEERING
CIVIL • STRUCTURAL

6038 Renaissance Place, Toledo, OH 43623
Tel. 419-292-1983 • Fax. 419-292-4055
www.a-a-engineering.com

DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS
LOCATION: STATE OF FLORIDA
PROJECT NO.: 711-23-3491
SHEET TITLE: CORNER BRACING DETAILS

SHEET NO.: 9 / 11

DRAWN BY: A.W. DATE: 1/26/22

CHECKED BY: OAA DATE: 1/26/22

LEGAL INFORMATION

- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW.
- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

SEAL:



STAMP EXPIRY: 02-28-2025

DATE SIGNED: 12-27-2023

* INSIDE VIEW SHOWN FOR CLARITY

MANUFACTURED BY:



Garages,
Metal buildings,
Barns, Carports,
RV Covers,
& Storage units.

ENGINEERED BY:



A&A ENGINEERING
CIVIL • STRUCTURAL
6006 Renaissance Place, Toledo, OH 46023
Tel. 419-292-1983 • Fax. 419-292-0653
www.aandengineering.com

DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 71-23-3491

SHEET TITLE:

OPTIONAL LEAN-TO
ADDITION

SHEET NO.: 10 / 11

DRAWN BY: A.W. DATE: 1/26/22

CHECKED BY: OAA DATE: 1/26/22

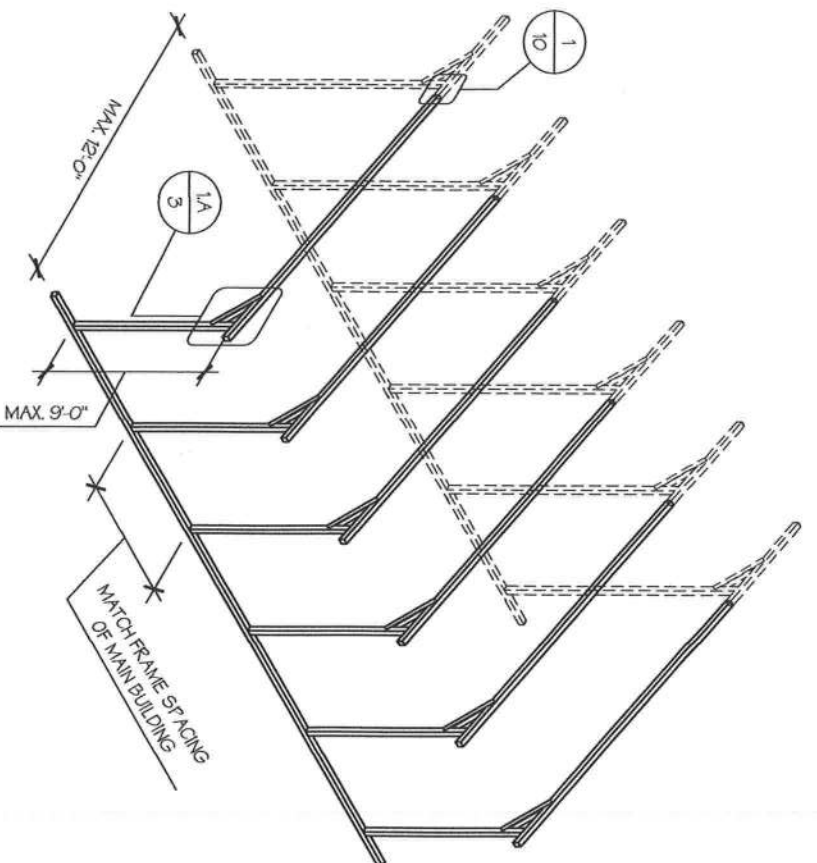
LEGAL INFORMATION

- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW.
- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

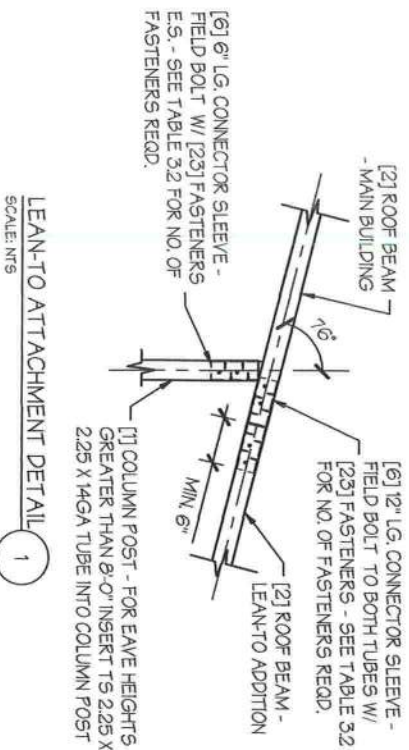
SEAL:



- LEAN-TO ADDITION NOTES:**
1. LEAN-TO ADDITIONS CAN BE ADDED ON EITHER OR BOTH SIDES OF THE BUILDING.
 2. ROOF SLOPE, PURLIN, GIRT AND FRAME SPACING OF THE ADDITION HAVE TO MATCH THAT OF THE MAIN STRUCTURE.
 3. IF THE LEAN-TO ADDITION IS "OPEN" (BOTH END WALLS OR SIDE WALL IS NOT ENCLOSED), THE DESIGN OF THE MAIN BUILDING HAS TO USE THE FRAME SPACING OF AN OPEN BUILDING FROM TABLE 4.



☐ **OPTIONAL LEAN-TO ADDITION**
SCALE: NTS



LEAN-TO ATTACHMENT DETAIL 1
SCALE: NTS

CONCRETE SLAB FOUNDATION NOTES:

- DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE SLAB FOUNDATION. ANY OF THE FOUNDATIONS SHOWN ON SHEETS 11-A THRU C CAN BE USED.
- CONCRETE ANCHORS SHALL BE LOCATED NEXT TO EVERY POST AND ON EITHER SIDE OF OPENINGS. TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST.
- ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4" SPACING.
- MIN. NUMBER OF CONCRETE ANCHORS PER POST SHALL BE AS SHOWN IN TABLE 11-A.2.
- THE SIZE OF THE SLAB SHALL BE THE SIZE (WIDTH AND LENGTH) OF THE BUILDING PLUS 5 1/2" FOR 14GA MATERIAL AND 5 1/2" FOR 12GA MATERIAL.
- DEPTH OF SLAB TURN DOWN FOOTING SHALL BE GREATER THAN FROST DEPTH SPECIFIED PER LOCAL CODE.
- CONTROL JOINTS SHALL BE PLACED 50 AS TO LIMIT MAX. SLAB SPANS TO 20' IN EACH DIRECTION.
- ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
- CONCRETE STRENGTH TO BE A MIN. OF 2500 PSI @ 28 DAYS.

CONCRETE SLAB FOUNDATION

SCALE: NTS

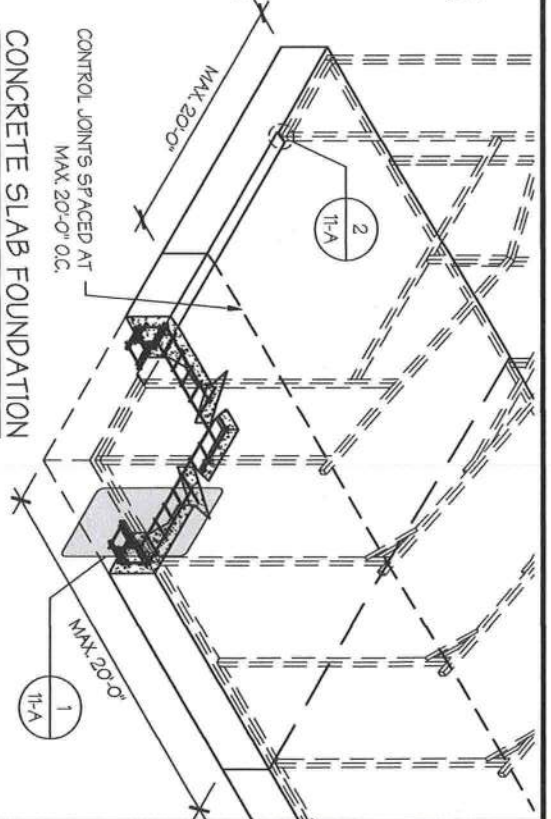
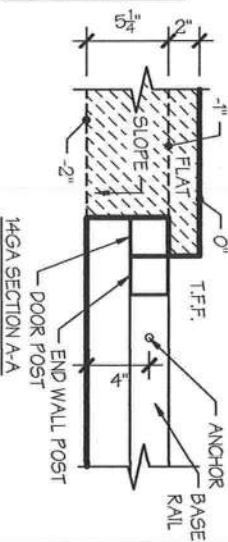


TABLE 11-A.2: CONCRETE SLAB ANCHOR SCHEDULE

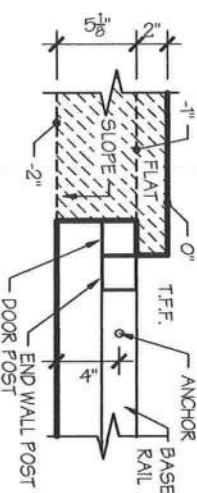
ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER
ENCLOSED	105 TO 135	(1) 1/2" Ø X 7"
	136 TO 180	(2) 1/2" Ø X 7"
OPEN	105 TO 135	(1) 1/2" Ø X 7"
	136 TO 180	(2) 1/2" Ø X 7"

NOTES:

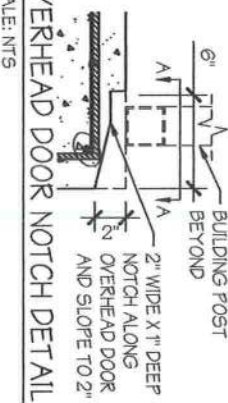
- ANCHORS ARE TO BE CONCRETE WEDGE OR EXPANSION ANCHORS.
- MIN. EMBEDMENT DEPTH TO BE 28".
- ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.



14GA SECTION A-A



12GA SECTION A-A



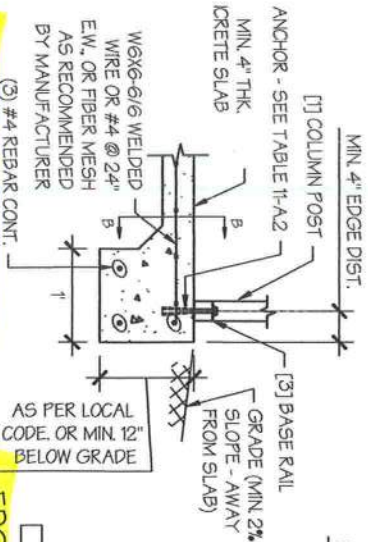
OVERHEAD DOOR NOTCH DETAIL (2)

SCALE: NTS

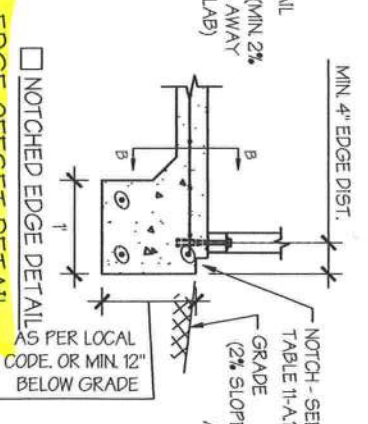
TABLE 11-A.1: NOTCH WIDTH

HORIZONTAL/OPEN	VERTICAL
14GA	12GA
12GA	14GA
10GA	12GA
8GA	10GA

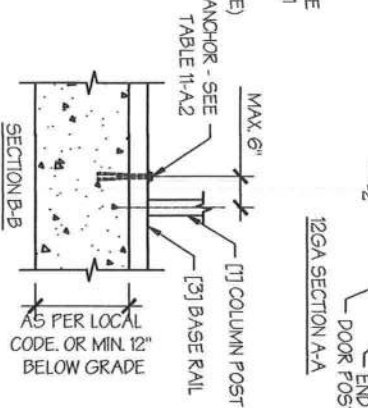
NOTE: DEPTH IS TO BE 1 1/2"



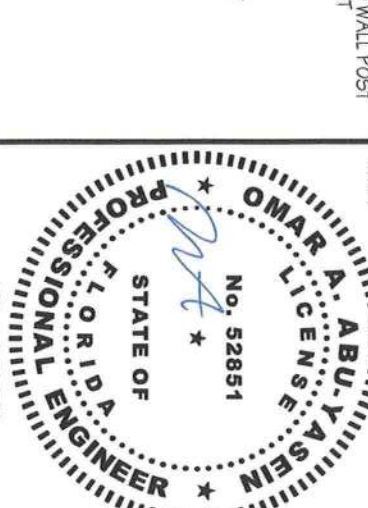
AS PER LOCAL CODE, OR MIN. 12" BELOW GRADE



AS PER LOCAL CODE, OR MIN. 12" BELOW GRADE



AS PER LOCAL CODE, OR MIN. 12" BELOW GRADE



AS PER LOCAL CODE, OR MIN. 12" BELOW GRADE

MANUFACTURED BY:

Garages, Metal buildings, Barns, Carports, RV Covers, & Storage units.

A&A ENGINEERING
CIVIL • STRUCTURAL
6036 Renaissance Place, Toledo, OH 43623
Tel. 419-292-1983 • Fax. 419-292-4953
www.aandengineering.com

ENGINEERED BY:

DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 711-23-3491

SHEET TITLE: FOUNDATION OPTION 1: CONCRETE SLAB

SHEET NO.: 11-A / 11

DRAWN BY: A.W. DATE: 1/26/22

CHECKED BY: OAA DATE: 1/26/22

LEGAL INFORMATION

ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS PROHIBITED WITHOUT THE WRITTEN PERMISSION OF THE ENGINEER. DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

SEAL:

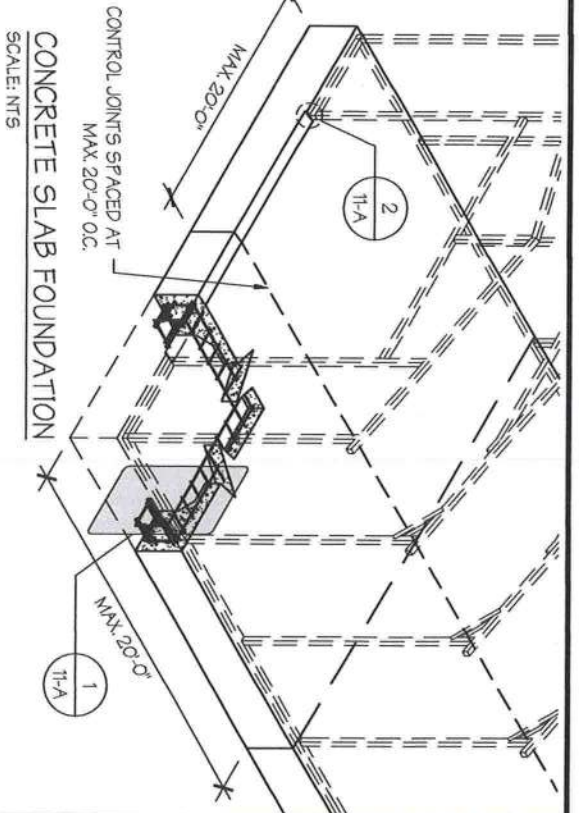
OMAR ABU-YASEIN
No. 52851
STATE OF FLORIDA
PROFESSIONAL ENGINEER

STAMP EXPIRY: 02-28-2025

DATE SIGNED: 12-27-2023

CONCRETE SLAB FOUNDATION NOTES:

- DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE SLAB FOUNDATION. ANY OF THE FOUNDATIONS SHOWN ON SHEETS 11-A THRU C CAN BE USED.
- CONCRETE ANCHORS SHALL BE LOCATED NEXT TO EVERY POST AND ON EITHER SIDE OF OPENINGS. TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST. ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4" SPACING.
- MIN. NUMBER OF CONCRETE ANCHORS PER POST SHALL BE AS SHOWN IN TABLE 11-A.1.
- THE SIZE OF THE SLAB SHALL BE THE SIZE (WIDTH AND LENGTH) OF THE BUILDING PLUS 2" FOR 14GA MATERIAL AND 1" FOR 12GA MATERIAL.
- DEPTH OF SLAB TURN DOWN FOOTING SHALL BE GREATER THAN FROST DEPTH SPECIFIED PER LOCAL CODE.
- CONCRETE JOINTS SHALL BE PLACED SO AS TO LIMIT MAX. SLAB SPANS TO 20' IN EACH DIRECTION.
- ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
- CONCRETE STRENGTH TO BE A MIN. OF 2500 PSI @ 28 DAYS.



CONCRETE SLAB FOUNDATION

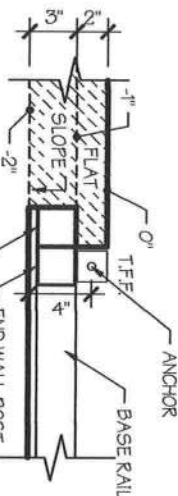
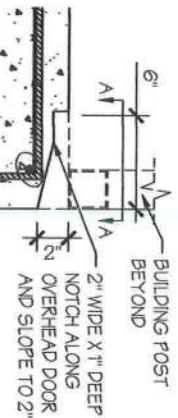
SCALE: NTS

TABLE 11-A.1: CONCRETE SLAB ANCHOR SCHEDULE

ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER
ENCLOSED	105 TO 135	(1) 1/2" Ø X 7"
	136 TO 160	(2) 1/2" Ø X 7"
OPEN	105 TO 135	(1) 1/2" Ø X 7"
	136 TO 160	(2) 1/2" Ø X 7"

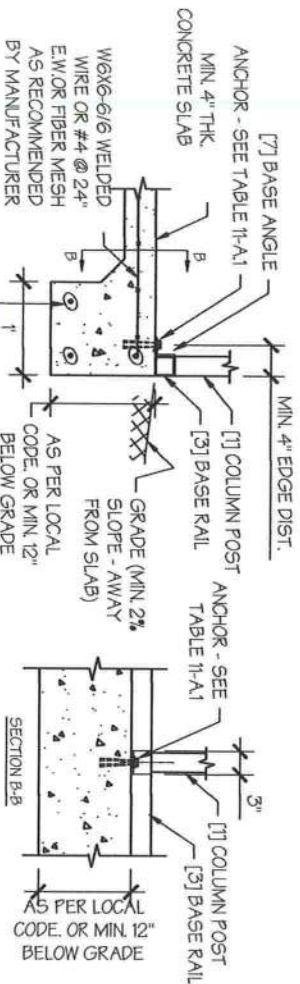
NOTES:

- ANCHORS ARE TO BE CONCRETE WEDGE OR EXP ANCHOR ANCHORS.
- MIN. EMBEDMENT DEPTH TO BE 28".
- ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.



OVERHEAD DOOR NOTCH DETAIL 2

SCALE: NTS



WEDGE FLUSH DETAIL 1

SCALE: NTS

MANUFACTURED BY:



Garages,
Metal buildings,
Barns, Carports,
RV Covers,
& Storage units.

ENGINEERED BY:



A&A ENGINEERING
CIVIL • STRUCTURAL
6038 Renaissance Place, Toledo, OH 43623
Tel. 419-292-1983 • Fax. 419-292-0955
www.a-a-engineers.com

DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS
LOCATION: STATE OF FLORIDA
PROJECT NO.: 711-23-3491
SHEET TITLE:
FOUNDATION OPTION 1:
CONCRETE SLAB

SHEET NO.: 11-A / 11

DRAWN BY: A.W. DATE: 1/26/22

CHECKED BY: OAA DATE: 1/26/22

LEGAL INFORMATION

- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW.
- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

SEAL:



STAMP EXPIRY: 02-28-2025
DATE SIGNED: 12-27-2023

TABLE 11-B.1: ANCHOR SCHEDULE

ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER
ENCLOSED	105 TO 135	(1) 1/2" Ø X 7"
	136 TO 180	(2) 1/2" Ø X 7"
OPEN	105 TO 135	(1) 1/2" Ø X 7"
	136 TO 180	(2) 1/2" Ø X 7"

NOTES:

1. ANCHORS ARE TO BE CONCRETE WEDGE OR EXPANSION ANCHORS.
2. MIN. EMBEDMENT DEPTH TO BE 2 $\frac{1}{2}$ ".
3. ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.

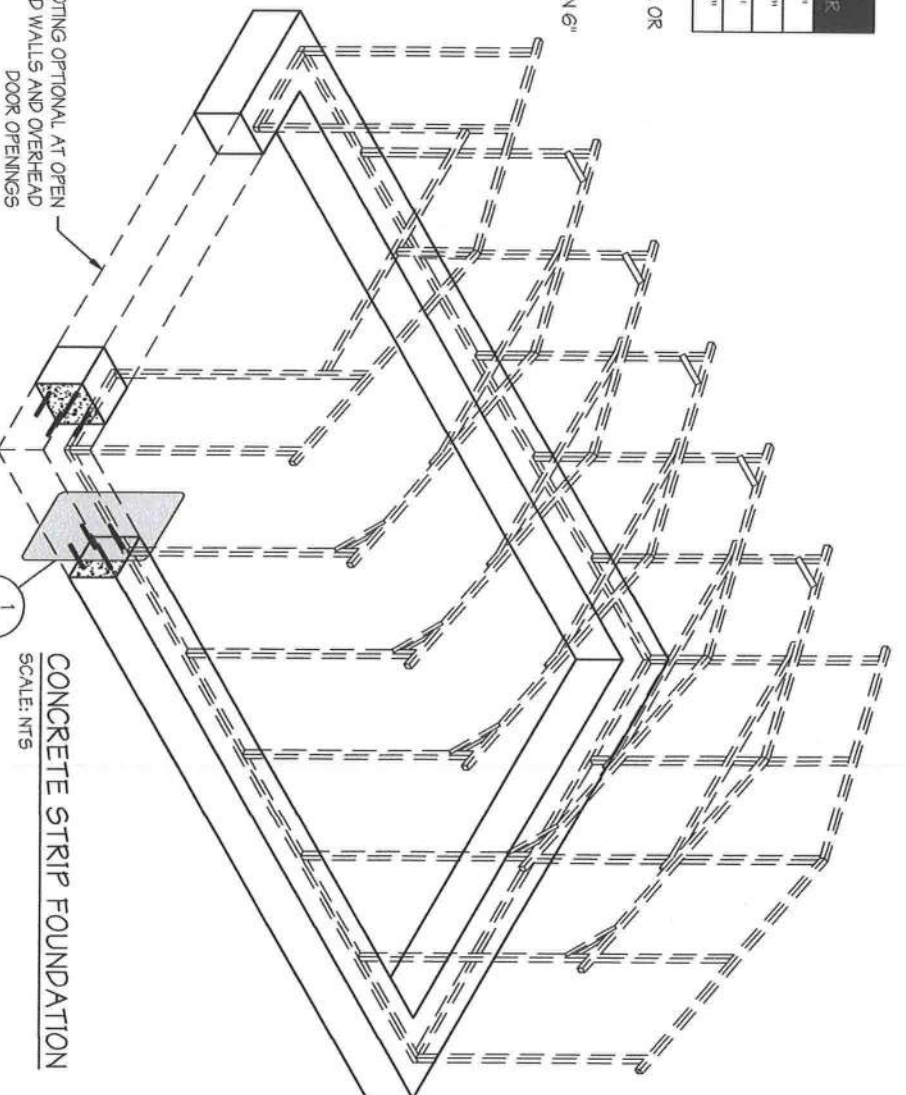
TABLE 11-B.2: CONC. STRIP SCHEDULE

WIND SPEED (MPH)	MIN. SIZE REQ'D
105 TO 130	15" X 12"
140 TO 155	24" X 12"
165 TO 180	30" X 12" 24 X 15" 20" X 18"

NOTES:

1. WIDTH AND DEPTH DIMENSIONS CAN BE INTERCHANGED.

FOOTING OPTIONAL AT OPEN
END WALLS AND OVERHEAD
DOOR OPENINGS

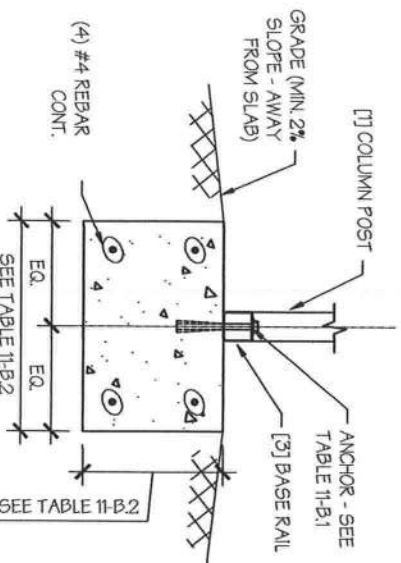


CONCRETE STRIP FOUNDATION

SCALE: NTS

CONCRETE STRIP FOUNDATION NOTES:

1. DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE STRIP FOUNDATION. ANY OF THE FOUNDATIONS SHOWN ON SHEETS 11-A THRU C CAN BE USED.
2. CONCRETE ANCHORS SHALL BE LOCATED NEXT TO EVERY POST AND ON EITHER SIDE OF OPENINGS. TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST.
3. MIN. NUMBER OF CONCRETE ANCHORS PER POST SHALL BE AS SHOWN IN TABLE 11-B.1.
4. ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4" SPACING. DEPTH OF CONCRETE STRIP FOOTING SHALL BE GREATER THAN FROST DEPTH SPECIFIED PER LOCAL CODE.
6. ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
7. CONCRETE STRENGTH TO BE A MIN. OF 2500 PSI @ 28 DAYS.
8. BUILDING IS TO BE MOUNTED ON THE CENTER OF THE STRIP FOUNDATION.



CONCRETE STRIP FOUNDATION DETAIL

SCALE: NTS

MANUFACTURED BY:



ENGINEERED BY:



A&A ENGINEERING
CIVIL • STRUCTURAL
6036 Reussville Place, Toledo, OH 43623
Tel. 419-292-1983 • Fax. 419-292-0953
www.aandengineering.com

DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS
LOCATION: STATE OF FLORIDA
PROJECT NO.: 711-23-3491
SHEET TITLE:

FOUNDATION OPTION 2:
CONCRETE STRIP

SHEET NO.: 11-B / 11

DRAWN BY: A.W. DATE: 1/26/22

CHECKED BY: OAA DATE: 1/26/22

LEGAL INFORMATION

- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW.
- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

SEAL:



STAMP EXPIRY: 02-28-2025

DATE SIGNED: 12-27-2023

MANUFACTURED BY:



ENGINEERED BY:



A&A ENGINEERING
CIVIL • STRUCTURAL
6088 Renaissance Place, Toledo, OH 43623
Tel. 419-292-1983 • Fax. 419-292-0955
www.a-a-engineering.com

DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 711-23-3491

SHEET TITLE:

FOUNDATION OPTION 3:
CONCRETE PIERS

SHEET NO.: 11-C / 11

DRAWN BY: A.W. DATE: 1/26/22

CHECKED BY: OAA DATE: 1/26/22

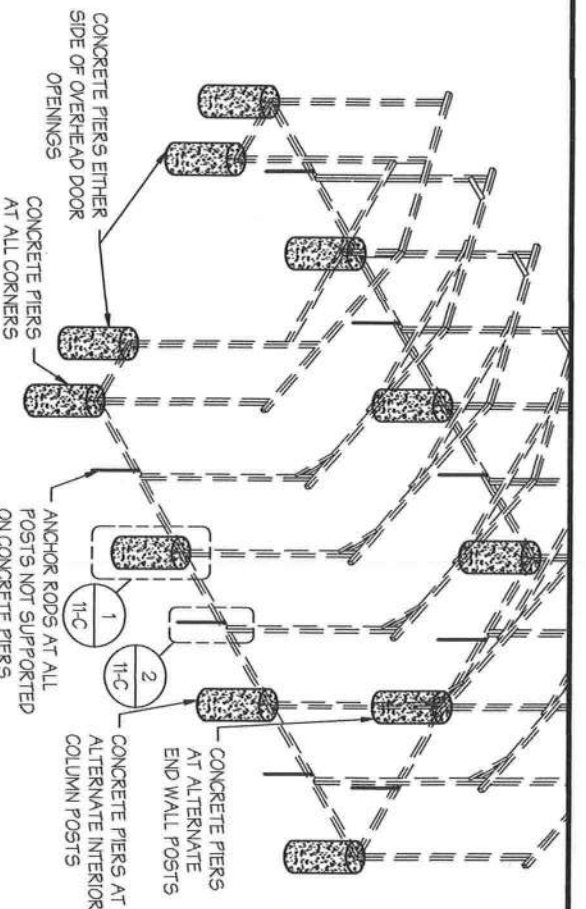
LEGAL INFORMATION

- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN, ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW.
- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

SEAL:



STAMP EXPIRY: 02-28-2025
DATE SIGNED: 12-27-2023



CONCRETE PIER FOUNDATION

SCALE: NTS

TABLE 11-C.2: ANCHOR SCHEDULE

ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER
ENCLOSED	□105 TO 135	(1) 1/2" Ø X 7"
	□136 TO 160	(2) 1/2" Ø X 7"
	□161 TO 180	(1) 1/2" Ø X 7"
OPEN	□181 TO 190	(2) 1/2" Ø X 7"

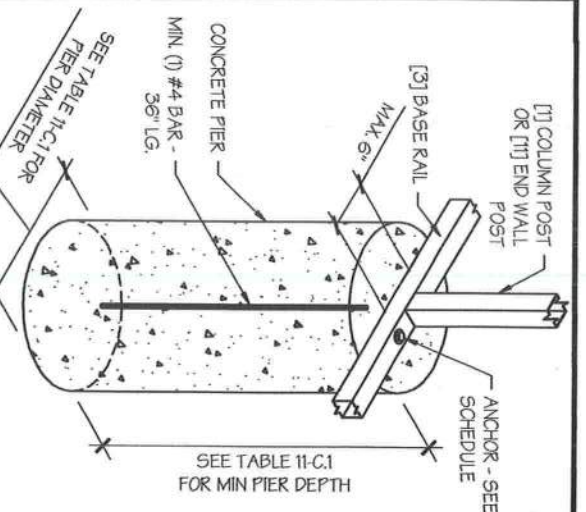
NOTES:

- ANCHORS ARE TO BE CONCRETE WEDGE OR EXPANSION ANCHORS.
- MIN. EMBEDMENT DEPTH TO BE 28".
- ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.

CONCRETE PIER FOUNDATION NOTES:

CONCRETE PIER DETAIL 1

SCALE: NTS



ANCHOR ROD INTO SOIL DETAIL 2

SCALE: NTS

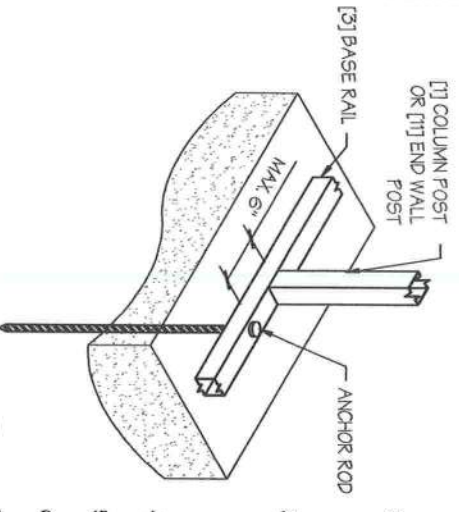


TABLE 11-C.1: CONC. PIER SCHEDULE

WIND SPEED (MPH)	MIN. SIZE REQD.
□105 TO 130	24" Ø X 36"
□140 TO 165	24" Ø X 42"
□165 TO 180	24" Ø X 48"

**Garages,
Metal buildings,
Barns, Carports,
RV Covers,
& Storage units.**

DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS

LOCATION: STATE OF FLORIDA

PROJECT NO.: 711-23-3491

SHEET TITLE:

FOUNDATION OPTION 4:

SOIL ANCHORS

SHEET NO.: 11-D / 11

DRAWN BY: A.W. DATE: 1/26/22

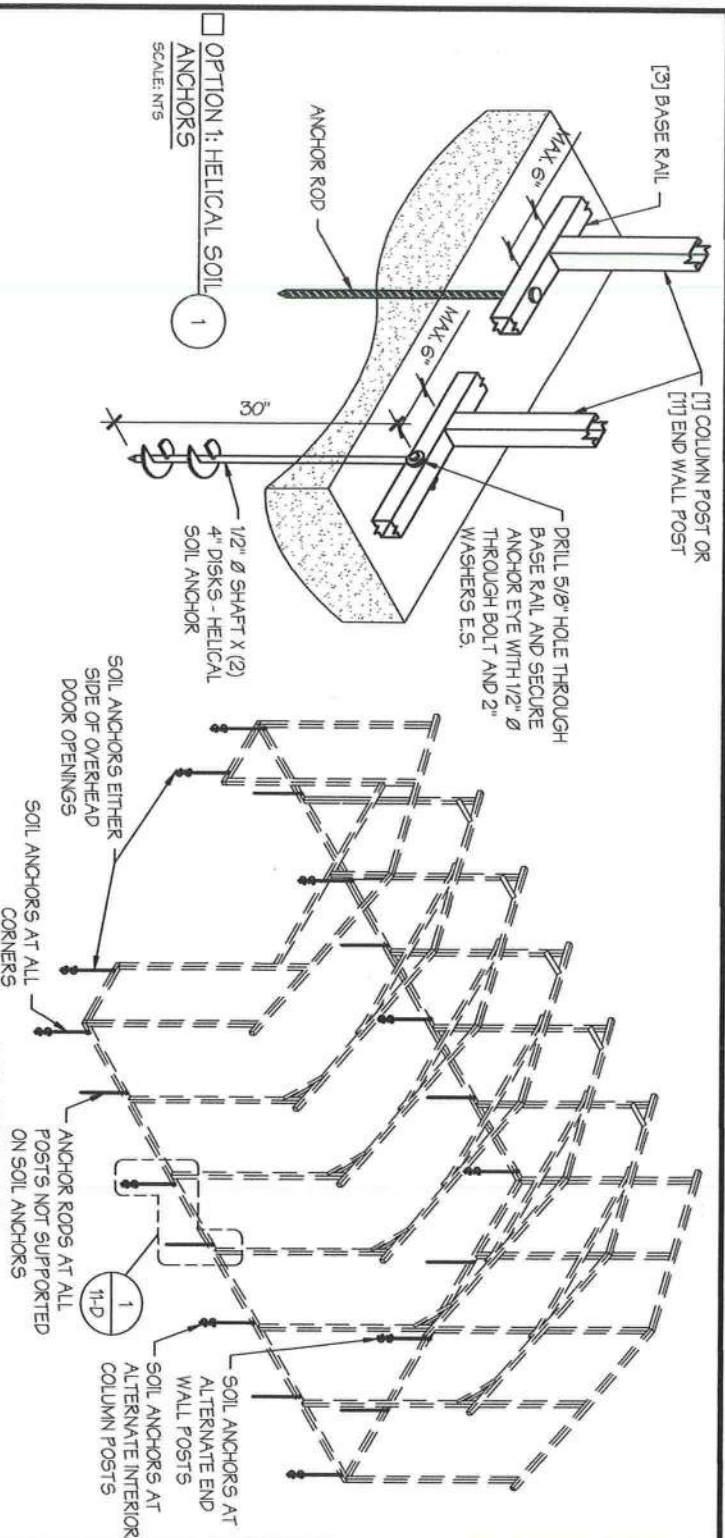
CHECKED BY: OAA DATE: 1/26/22

LEGAL INFORMATION

- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW.
- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE

STAMP EXPIRY: **02-28-2025**

DATE SIGNED: **12-27-2023**



SOIL FOUNDATION NOTES:

1. DESIGNS SHOWN ON THIS SHEET ARE FOR SOIL ANCHOR FOUNDATION.
2. SOIL ANCHORS (HELICAL OR ROCK/ASPHALT) SHALL BE LOCATED AT ALL 4 CORNERS, ON EACH SIDE OF OVERHEAD DOOR OPENINGS, ON POSTS WITH DIAGONAL BRACING IF REQUIRED, AND ON ALTERNATE INTERIOR COLUMN POSTS AND END WALLS POSTS.
3. HELICAL ANCHORS ARE TO BE USED ONLY IF THE DRIVING TORQUE INTO THE GROUND IS 150 FT-LBS OR GREATER. MANUFACTURER IS NOT RESPONSIBLE FOR SOIL QUALITY AT SITE.
4. HELICAL ANCHORS CAN ONLY BE USED FOR CLASS 2, 3 & 4 SOILS. (SEE SOIL CLASSIFICATIONS THIS PAGE).
5. ALL POSTS WITH NO ANCHORS ADJACENT SHALL BE ANCHORED TO THE GROUND WITH A 1/2" x 30" LG. ROD. RODS WILL HAVE A PRE-FORMED HEAD AT THE TOP AND ONE COAT OF RUST PROOF MATERIAL.
6. ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.

SOIL CLASSIFICATIONS:

SOIL CLASS	DESCRIPTION
2	SANDY GRAVEL AND GRAVEL, VERY THIN DENSE AND/OR CEMENTED SANDS, COARSE GRAVEL/COBLES, PRELOADED SILTS, CLAYS AND CORAL.
3	SAND, SILTY SAND, CLAYEY SAND, SILTY GRAVEL, MEDIUM DENSE COARSE SANDS, SANDY GRAVEL, VERY STIFF SILT AND SANDY CLAYS.
4	LOOSE TO MEDIUM DENSE SANDS, FIRM TO STIFF CLAYS AND SILTS AND ALLUVIAL FILLS.

