- A. THE 2023 FLORIDA BUILDING CODE, 8TH EDITION
- B. ASCE/SEI 7-22: MINIMUM DESIGN LOADS ON BUILDINGS AND OTHER STRUCTURES
- C. ACI 318-19: BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE D. AISC STEEL CONSTRUCTION MANUAL (15TH EDITION)
- E. AWS D1.1: STRUCTURAL WELDING
- 1. THESE PLANS BELONG EXCLUSIVELY TO THE STRUCTURE, INCLUDING MAIN WIND FORCE RESISTING SYSTEM (MWFRS), COMPONENTS AND CLADDING (C&C), AND BASE RAIL ANCHORAGE. OTHER DESIGN ISSUES, INCLUDING BUT NOT LIMITED TO PROPERTY SET-BACKS, ELECTRICAL, PLUMBING, INGRESS/EGRESS, FINISH FLOOR SLOPES AND ELEVATIONS, OR OTHER LOCAL ZONING REQUIREMENTS ARE THE LIABILITY OF OTHERS.
- 2 THESE STRUCTURES ARE ENGINEERED AS CAPABLE OF SUPPORTING DEAD LOAD OF THE STRUCTURE AND LIVE AND WIND LOADS, UPGRADES NOT SPECIFICALLY ADDRESSED HEREIN, SUCH AS WINDOWS, DOORS, OR ANOTHER COMPONENT NOT LISTED IN THE FLORIDA BUILDING CODE APROVED PRODUCT LIST, AND NOT PROVIDED AND INSTALLED BY TUBULAR BUILDING. SYSTEMS, WHICH CAUSE ADDITIONAL LOADS ON THE STRUCTURE SHALL BE AT THE OWNER'S RISK. FLORIDA ENGINEERING LLC, SHALL NOT BE RESPONSIBLE FOR FAILURE OR STRUCTURAL DAMAGE DUE TO THE EXTRA LOAD.
- 3 LOW LILTIMATE WIND SPEED 105 TO 140 MPH (NOMINAL WIND SPEED 81 TO 108 MPH): MAXIMUM RAFTER/POST AND END POST SPACING = 5.0 FEET.
- 4. HIGH ULTIMATE WIND SPEED 141 TO 170 MPH (NOMINAL WIND SPEED 109 TO 132 MPH); MAXIMUM RAFTER/POST AND END POST SPACING = 4.0
- 5. ALL STEEL TUBING SHALL BE 50 KSI GALVANIZED STEEL. ALL FASTENERS SHALL BE ZINC COATED HARDWARE
- 6. SPECIFICATIONS APPLICABLE TO 29 GAUGE METAL PANELS FASTENED DIRECTLY TO 2 1/2" x 2 1/2" - 12 GAUGE TUBE STEEL (TS) FRAMING MEMBERS FOR VERTICAL PANELS, 29 GAUGE METAL PANELS SHALL BE FASTENED TO 18 GAUGE HAT CHANNELS (UNLESS OTHERWISE NOTED)
- 7. FASTENERS CONSIST OF #12-14 x 3/4" SELF DRILLING FASTENER (SDF), USE CONTROL SEAL WASHER WITH EXTERIOR FASTENERS SPECIFICATIONS APPLICABLE ONLY FOR MEAN ROOF HEIGHT OF 20 FEFT OR LESS, AND ROOF SLOPES OF 14° (3:12 PITCH) OR LESS SPACING REQUIREMENTS FOR OTHER
- 8. AVERAGE FASTENER SPACING ON-CENTERS ALONG RAFTERS OR PURLINS, AND POSTS, INTERIOR = 9" OR END = 6", (MAX.)
- 9. WIND FORCES GOVERN OVER SEISMIC FORCES. SEISMIC PARAMETERS ANALYZED ARE:

SOIL SITE CLASS = D RISK CATEGORY I/II/III R = 3.25Sds = 0.087 g V = CsW Sdi = 0.084 g

- 10. GROUND ANCHORS SHALL BE INSTALLED THROUGH BASE RAIL WITHIN 6" OF EACH RAFTER COLUMN ALONG SIDES.
- 11. GROUND ANCHOR (SOIL NAILS) CONSIST OF #5 REBAR W/ WELDED NUT X 30" LONG IN SUITABLE SOIL CONDITIONS MAY BE USED FOR LOW (≤ 108 MPH NOMINAL) WIND SPEEDS ONLY. OPTIONAL ANCHORAGE MAY BE USED IN SUITABLE SOILS AND MUST BE USE IN UNSUITABLE SOILS AS NOTED.
- 12. MIN. LAP REQUIREMENT FOR REBAR IN FOOTER IS 25".
- 13. SOIL TO BE COMPACTED TO 95% OF ITS MAXIMUM DRY DENSITY, AT OPTIMUM MOISTURE CONTENT. IN ACCORDANCE WITH ASTM D1557-93.
- 14. PRIOR TO PLACING CONCRETE, TREAT THE ENTIRE SUBSURFACE AREA FOR TERMITES IN COMPLIANCE WITH THE FBC. FOR RISK CATEGORY II, III, & IV STRUCTURES ONLY.
- 15. ALL OPEN AREAS OF CONCRETE OUTSIDE OF THE PROPOSED STRUCTURE SHALL BE DESIGNED TO SLOPE AWAY FROM THE STRUCTURE.
- 16. A LANDING OF MIN. 36" WIDTH IN THE DIRECTION OF TRAVEL SHALL BE PROVIDED AT THE EXTERIOR DOORS. SLOPE OF LANDING NOT TO EXCEED 1/4"-1'. LANDING LEVEL NOT TO BE LOWER THAN 1-1/2" (FOR EGRESS DOORS) & 7-3/4" (FOR OTHER EXTERIOR DOORS) BELOW THE TOP OF THRESHOLD.

DRAWING INDEX
GENERAL NOTES
PLAN/ ELEVATIONS
FOUNDATION PLAN
DETAILS

THE ENGINEERING ON THESE PLANS IS SITE SPECIFIC FOR (1) STRUCTURE ONLY AT THE PROVIDED ADDRESS(ES).

PROPOSED METAL BUILDING FOUNDATION & SHELL TRUCTURAL DESIGN ONLY. ALL OTHER REQUIRED PERMITS TO BUILD OUT TO A HABITABLE LIVING SPACE ARE TO BE BY OTHERS/ PER SEPERATE CERTIFICATE. INCLUDING BUT NOT LIMITED TO, ELECTRICAL, PLUMBING, ENERGY CALCS., ETC. FOR MORE INFORMATION VISIT: nttps://flengineeringllc.com/order/ OR SCAN QR CODE.



DESIGN DATA	
DESIGN CRITERIA :	ASCE/SEI 7
RISK CATEGORY:	· II
OCCUPANCY CLASSIFICATION:	S2
CONSTRUCTION TYPE :	II-B
DEFLECTION LIMIT =	L/240
ULTIMATE DESIGN WIND SPEED (MPH) VULT =	120
NOMINAL DESIGN WIND SPEED (MPH) VASD =	93
EXPOSURE CATEGORY :	C
MEAN BUILDING HEIGHT (FT) =	17.50
MINIMUM BUILDING PLAN DIMENSION (FT) =	56.00
END ZONE DIMENSION (FT) a =	5.60
ROOF STYLE :	GABLE
ROOF PITCH (IN 12):	3
OCCUPANCY CLASSIFICATION:	PARTIALLY OPEN
DEAD LOAD (DUE TO SELF-WEIGHT) =	4.8 PSF
ROOF LIVE LOAD =	12 PSF
GROUND SNOW LOAD =	4 PSF
ADJUSTED C & C WIND PRESSU	RES (ASD) (PSF)
EFFECTIVE WIND AREA FOR ROOF (SQ. FT) :	261.33
ZONE 1' (POSITIVE) =	NA
ZONE 1' (NEGATIVE) =	NA
ZONE 1' (OVERHANG) =	NA
ZONE 1 (POSITIVE) =	8.0
ZONE 1 (NEGATIVE) =	-12.3
ZONE 1 (OVERHANG) =	-24.6
ZONE 2 (POSITIVE) =	8.0
ZONE 2 (NEGATIVE) =	-19.5
ZONE 2 (OVERHANG) =	-31.9
ZONE 3 (POSITIVE) =	8.0
ZONE 3 (NEGATIVE) =	-32.7
ZUNE 3 (NEGATIVE) =	
ZONE 3 (OVERHANG) =	-45.1

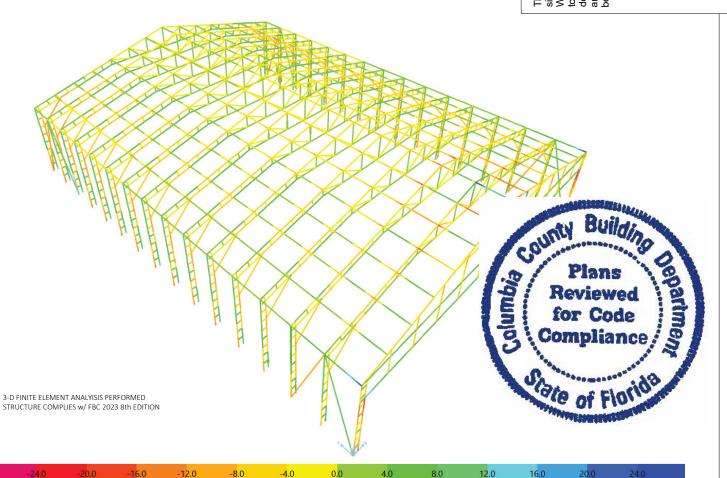
CONTRACTOR TO PROVIDE BUILDING CODE APPROVED PRODUCTS TO MEET OR EXCEED THE DESIGN PRESSURES AS TABULATED.

TO WEET ON EXCEED THE DE	31014 1 11233011
ADJUSTED C & C WIN PRESSURES (ASD) (PS FOR OPENINGS	
SWING DOOR	
FFECTIVE WIND AREA (SQ. FT) = ZONE 4 (POSITIVE) = ZONE 4 (NEGATIVE) = ZONE 5 (POSITIVE) = ZONE 5 (NEGATIVE) =	N/A N/A N/A N/A N/A
ROLL-UP DOOR	
FFECTIVE WIND AREA (SQ. FT) = ZONE 4 (POSITIVE) = ZONE 4 (NEGATIVE) = ZONE 5 (POSITIVE) = ZONE 5 (NEGATIVE) =	N/A N/A N/A N/A N/A
WINDOW	
FFECTIVE WIND AREA (SQ. FT) = ZONE 4 (POSITIVE) = ZONE 4 (NEGATIVE) = ZONE 5 (POSITIVE) = ZONE 5 (NEGATIVE) =	N/A N/A N/A N/A N/A

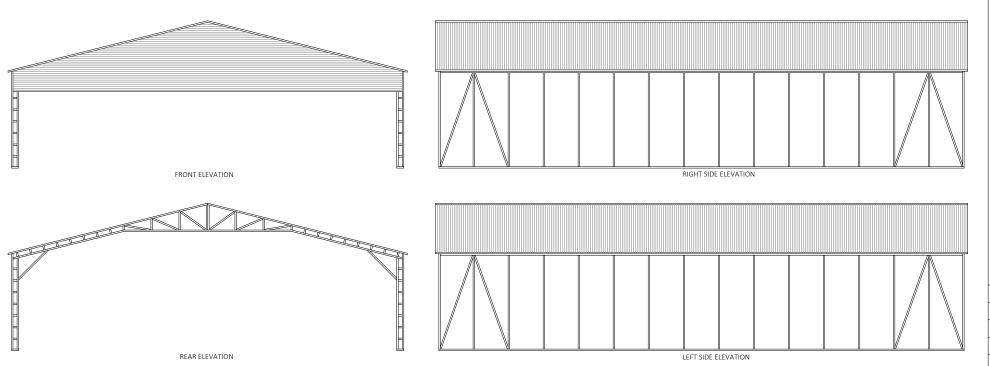
ZONE 4 (POSITIVE) = ZONE 4 (POSITIVE) = ZONE 5 (POSITIVE) = ZONE 5 (NEGATIVE) =

PRODUCT CATEGORY	SUB CATEGORY	MANUFACTURER	APPROVAL No. & DATE
STRUCTURAL	ROOF DECK	CAPITAL METAL SUPPLY, INC.	FL20147.2-R3
COMPONENTS		29 GA. CAPITAL RIB ROOF PANEL	12/13/23
STRUCTURAL	STRUCTURAL	CAPITAL METAL SUPPLY, INC.	FL20148.2-R3
COMPONENTS	WALL	29 GA. CAPITAL RIB WALL PANEL	12/13/23

CTP = CONTRACTOR TO PROVIDE APPROVED PRODUCTS THAT MEET OR EXCEED WIND DESIGN PRESSURES



Stress S11 Max/Min Diagram (D+0.6Wyb)



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PROJECT NO.

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Date:

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STATE OF

LORIDA CHE

SW BASCOM NORRIS DR CITY, FL 32025 32056 TUBULAR BUILI P.O. BOX. 2254 LAKE CITY, FL 3

SYSTEMS

BUILDING

LAKE 1963 S LAKE

DESIGN DATE: 02/07/2025 **REVISION 1:** DATE **REVISION 2**: DATE SHEET: DRAWN BY: TCP SCALE: NTS