### CONSTRUCTION DOCUMENTS

ALL WORK IS TO BE PERFORMED BY FLORIDA BUILDING CODE 2023 8TH EDITION, BUILDING AND RESIDENTIAL. ALL CONSTRUCTION SHALL CONFORM REFERENCED STANDARDS FBC-BUILDING CHAPTER 35; FBC-RESIDENTIAL CHAPTER 46

#### **DESIGN CRITERIA (1603)**

1603.1 MINIMUM LOADS

- 1606 ROOF DEAD LOAD (D)= ROOF TRUSSES TOP CHORD = 15 PSF (ASPHALT SHINGLES AND FLAT ROOFS) ROOF TRUSSES TOP CHORD = 25 PSF (CEMENT TILE OR SIMILAR) ROOF TRUSSES BOTTOM CHORD = 10 PSF (ALL CASES UNLESS NOTED OTHERWISE) CONVENTIONALLY FRAMED (ROOF RAFTERS) = 15 PSF (ASPHALT SHINGLES AND FLAT ROOFS) CONVENTIONALLY FRAMED (ROOF RAFTERS) = 25 PSF (CEMENT TILE OR SIMILAR) = 10 PSF
- 1607 ROOF LIVE LOADS ORDINARY FLAT, PITCHED AND CURVED ROOFS (L<sub>r</sub>)= 20 PSF
- 1607 FLOOR LIVE LOADS ALL OTHER AREAS (L) = 40 PSF
- 1608 ROOF SNOW LOAD DATA (Pg) = 0 PSF
- 1610 SOIL LATERAL LOADS (F) = 0 PSF
- 1611 ROOF RAIN LOAD = 0 PSF. (FREE EDGE) RAIN INTENSITY = 4.5in/hr (100 YEARS- RAINFALL)
- 1612 FLOOD LOADS (Fa)= 0 PSF; MAP #12115C0143F FLOOD ZONE "AE(EL. 11)". THIS ITEM TO BE CONFIRMED WITH AHJ
- 1613 EARTHQUAKE LOADS (E) = 0 PSF. SEISMIC DESIGN CATEGORY A

#### 1603.1.4 & 1609 WIND DESIGN DATA

- ULTIMATE DESIGN WIND SPEED, V<sub>ULT</sub>, (3-SECOND GUST) = 150 MPH, NOMINAL DESIGN WIND SPEED, V<sub>ASD</sub> = **116 MPH** TORNADO SPEED,  $V_T = 0$  MPH. (NOT APPLICABLE FOR RISK CATEGORY II STRUCTURES)
- RISK CATEGORY(TABLE 1604.5) = II
- WIND EXPOSURE = D
- APPLICABLE INTERNAL PRESSURE COEFFICIENT = +/- 0.18 (ENCLOSED)
- ENCLOSURE CLASSIFICATION = ENCLOSED

# 1604.3 SERVICEABILITY

STRUCTURAL SYSTEMS AND MEMBERS THEREOF SHALL BE DESIGNED TO HAVE ADEQUATE STIFFNESS TO LIMIT DEFLECTIONS AND LATERAL DRIFT. SEE SECTION 12.12.1 OF ASCE 7 FOR DRIFT LIMITS APPLICABLE TO EARTHQUAKE LOADING. REFER TO TABLE 1604.3 DEFLECTION LIMITS AS MINIMUM REQUIREMENTS U.N.O.

#### FBC 2023 8TH EDITION, BUILDING: BUILDING USE, SPECIFICATIONS AND OCCUPANCY CLASSIFICATION (CHAPTER 3, CHAPTER 5 AND CHAPTER 6)

- RESIDENTIAL (SEE SECTION 310.5): R-3
- ALLOWABLE BUILDING HEIGHT (SECTION 504, TABLE 504.3) = 40 FEET • EXISTING BUILDING HEIGHT = 25 FEET
- ALLOWABLE NUMBER OF STORIES (SECTION 504, TABLE 504.4) = 3 EXISTING NUMBER OF STORIES = 2
- TYPE OF CONSTRUCTION (SECTION 601, TABLE 601) = TYPE V-B

FBC 2023 8TH EDITION, EXISTING BUILDING CODE (CHAPTER 6 AND CHAPTER 8) SECTION 603 CLASSIFICATION OF WORK ALTERATION LEVEL II

PRESUMPTIVE LOAD-BEARING VALUES OF SOILS (CHAPTER 18)

4. SAND, SILTY SAND, CLAYEY SAND, SILTY GRAVEL

AND CLAYEY GRAVEL (SW, SP, SM, SC, GM

#### SOIL TERMITE PROTECTION TREATMENT SHALL BE REQUIRED ANYWHERE IF NEW CONCRETE AGAINST SOILS IS IN PLACE. REFER TO FLORIDA BUILDING CODE, RESIDENTIAL CHAPTER 318

ALL ORGANIC MATERIAL TOP SOIL SHALL BE REMOVED TO A MINIMUM DEPTH OF ONE FOOT OVER THE ENTIRE BUILDING AREA AND FIVE FEET BEYOND BUILDING LINES. NECESSARY FILL MATERIAL SHALL BE PREVIOUSLY TESTED AND APPROVED TECHNICAL DATA SHALL BE PROVIDED BY AN INDEPENDENT CONSULTANT PRIOR USE. FILL MATERIAL TO FINISHED GRADE SHALL BE PLACED WITH MAXIMUM LIFT OF 12 INCHES. SUB GRADE AND EACH LIFT OF MATERIAL SHALL BE COMPACTED TO 95% OF A MODIFIED PROCTOR DENSITY DETERMINED IN ACCORDANCE WITH ASTM D\_1557. REFER TO GEOTECHNICAL EXPERT FOR VERIFICATION THAT REQUIRED COMPACTION REQUIREMENTS HAVE

# CONCRETE CONSTRUCTION

REFER TO CHAPTER 19 OF THE FLORIDA BUILDING CODE, BUILDING AND RESIDENTIAL; CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE TO THE APPLICABLE AMERICAN CONCRETE INSTITUTE (ACI) CODES AND REINFORCED STRUCTURAL CONCRETE DESIGN SHALL BE BY THE LATEST ACI 318.

CONCRETE MIX SHALL BE PROPORTIONED AND MIX IN CONFORMANCE WITH ACI STANDARDS AND INDUSTRY PRACTICE. CONCRETE COMPRESSIVE STRENGTH SHALL ACHIEVE MINIMUM DESIGN COMPRESSIVE STRENGTH AT 28 DAYS AGE AS LISTED BELOW WITH A PLASTIC AND WORKABLE MIX:

#### 3000 psi FOR SHALLOW FOUNDATIONS AND SLABS ON GRADE. 4000 psi FOR ALL OTHER STRUCTURAL CONCRETE UNLESS NOTED OTHERWISE.

CONCRETE SHALL COMPLY WITH ALL THE REQUIREMENTS OF ASTM STANDARD C94 FOR READY-MIXED CONCRETE. CONCRETE TICKETS SHALL BE TIME STAMPED WHEN CONCRETE IS BATCHED. CONCRETE SHALL BE DISCARDED IF THE FOREGOING ELAPSED TIME IS EXCEEDED. THE ON-SITE REPRESENTATIVE OF THE TESTING LAB SHALL NOTIFY THE OWNER'S REPRESENTATIVE AND THE CONTRACTOR OF ANY NOTED NONCOMPLIANCE WITH THE ABOVE.

A THIRD PARTY TESTING CONSULTANT PERFORMING LABORATORY UNDER DIRECT SUPERVISION OF A PROFESSIONAL REGISTERED IN THE STATE OR AHJ SHALL REVIEWED SUPPORTIVE DOCUMENTATION FROM THE LABORATORY FOLLOWING TESTS ON CAST IN PLACE CONCRETE AS DESCRIBED BELOW:

ASTM C143 - "STANDARD TEST METHOD FOR SLUMP OF PORTLAND CEMENT CONCRETE." ASTM C39 - "STANDARD TEST METHOD FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE

A SEPARATE TEST SHALL BE CONDUCTED FOR EACH CONCRETE MIX, FOR EVERY 50 CUBIC YARDS (OR FRACTION THEREOF), PLACED PER DAY. REQUIRED CYLINDER(S) QUANTITIES AND TEST AGE AS FOLLOWS:

ONE AT THREE DAYS ONE AT SEVEN DAYS TWO AT TWENTY-EIGHT DAYS

ONE ADDITIONAL RESERVE CYLINDER TO BE TESTED UNDER THE DIRECTION OF THE ENGINEER, IF REQUIRED. IF TWENTY-EIGHT DAY STRENGTH IS ACHIEVED, THE ADDITIONAL CYLINDER(S) MAY BE DISCARDED.

STRUCTURAL STEEL REINFORCEMENT SHALL BE ASTM A615 GRADE 60 DEFORMED BARS, FREE FROM OIL, SCALE AND RUST AND PLACED IN ACCORDANCE WITH THE TYPICAL BENDING DIAGRAM AND PLACING DETAILS OF ACI STANDARDS AND SPECIFICATIONS. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185, FREE FROM OIL, SCALE AND RUST AND PLACED IN ACCORDANCE WITH THE TYPICAL PLACING DETAILS OF ACI STANDARDS AND SPECIFICATIONS.

STRUCTURAL STEEL REINFORCEMENT COVERING SHALL BE SPECIFIED ACCORDING TO TABLE 20.5.1.3.1 OF THE ACI 318 WHERE APPLICABLE.

ALL LAP SPLICES. DEVELOPMENT LENGTHS. STANDARD HOOKS SHALL BE PREPARED AND REFER TO CHAPTER 25 OF THE ACI 318 AND TYPICAL ACI CODES IN THE INDUSTRY.

		Specified concrete cover essed concrete members		
Concrete exposure	Member	Reinforcement	Specified cover, in.	
Cast against and permanently in contact with ground	All	All	3	
Exposed to weather or in contact with	All	No. 6 through No. 18 bars	2	
ground	All	No. 5 bar, W31 or D31 wire, and smaller	1 1/2	
	Slabs, joists,	No. 14 and No. 18 bars	1-1/2	
Not exposed to weather or in	and walls	No. 11 bar and smaller	3/4	
contact with ground	Beams, columns, pedestals, and tension ties	Primary reinforcement, stirrups, ties, spirals, and hoops	1-1/2	

#### MASONRY CONSTRUCTION

REFER TO CHAPTER 21 OF THE FLORIDA BUILDING CODE, BUILDING AND RESIDENTIAL; MASONRY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST TMS 402/602.

INFORMATIONAL SERIES BULLETINS BY THE NATIONAL CONCRETE MASONRY ASSOCIATION NCMA TEK SHALL BE REFERRED FOR SPECIFICATIONS OF SECTION PROPERTIES OF CONCRETE MASONRY UNITS, CONCRETE MASONRY UNITS WEIGHTS, INSTALLATIONS AND SIMILAR.

#### CONCRETE MASONRY UNITS

MASONRY DESIGN MASONRY UNITS SHALL MEET ASTM C-90 FOR HOLLOW LOAD BEARING TYPE MASONRY WITH UNIT STRENGTH OF 1,900 psi ON THE NET AREA (F'm = 1,500 psi). COURSING SHALL BE

MORTAR \$HALL BE TYPE "M" OR "S" AND MEET ASTM C-270 WITH MINIMUM COMPRESSION STRENGTH OF 1,800 psi FOR TYPE "S" OR 2,500 psi FOR TYPE "M". GROUT SHALL BE 3,000 psi MINIMUM WITH A SLUMP WITHIN 8 INCHES TO 11 INCHES COMPRESSIVE STRENGTH AND MEET ASTM C-1019 AND ASTM

STEEL WRES ASTM 510.

REINFORCED MASONRY WALLS REINFORCED VERTICAL STEEL REINFORCEMENT AT CELLS AS SHOWN ON PLANS SHALL BE GROUT FILLED WITH REINFORCING BAR VERTICAL AS SHOWN ON PLANS, UNLESS NOTED OTHERWISE. VERTICAL REINFORCEMENT SHALL BE PROVIDED AT CORNERS, INTERSECTIONS, WITHIN 16 IN. OF EACH SIDE OF OPENINGS, WITHIN 8 IN. OF EACH SIDE OF MOVEMENT JOINTS, WITHIN 8 IN. OF THE ENDS OF THE WALLS AND AT A MAXIMUM SPACING OF 4 FEET ON CENTER UNLESS NOTED OTHERWISE ON PLAN OR IN DETAILS. REINFORCEMENT ADJACENT TO OPENINGS NEED NOT BE PROVIDED FOR OPENINGS SMALLER THAN 16 IN. IN EITHER THE HORIZONTAL OR VERTICAL DIRECTION, UNLESS THE SPACING OF DISTRIBUTED REINFORCEMENT IS INTERRUPTED BY SUCH OPENINGS. HORIZONTAL JOINT REINFORCEMENT SHALL CONSIST OF AT LEAST TWO WIRES OF W1.7 (9 GAGE, MW11) LADDER -TYPE JOINT REINFORCEMENT SPACED NOT MORE THAN 16 IN. HORIZONTAL, REINFORCEMENT SHALL ALSO BE PROVIDED AT THE BOTTOM AND TOP OF WALL OPENINGS AND SHALL EXTEND NOT LESS THAN 24 IN. NOR LESS THAN 48 BAR DIAMETERS PAST THE OPENING; CONTINUOUSLY AT STRUCTURALLY CONNECTED ROOF AND FLOOR LEVELS; AND WITHIN 16 IN. OF THE TOP OF WALLS. DOWELS SHALL BE USED TO PROVIDE CONTINUITY INTO THE STRUCTURE ABOVE AND/OR BELOW, UNLESS NOTED OTHERWISE. USE METAL LATH, MORTAR OR SPECIAL UNITS TO CONFINE CONCRETE AND GROUT TO AREAS REQUIRED.

STRUCTURAL STEEL REINFORCEMENT SHALL BE ASTM A615 GRADE 60 DEFORMED BARS. REFER TO CONCRETE SECTION FOR FURTHER SPECIFICATIONS.

STRUCTURAL STEEL REINFORCEMENT COVERING AND LAPS SPLICES SHALL BE SPECIFIED ACCORDING TMS 402/602 CHAPTER 6 AND TYPICAL ACI CODES IN THE INDUSTRY.

LINTELS (PRECAST CONCRETE REINFORCED LINTELS) TYPICAL PRECAST LINTELS PRODUCTS, SPAN CHARTS, BEARING LENGTHS AND SIMILAR SHALL BE REFERRED TO CAST-CRETE PRODUCTS. ALL STEEL REINFORCEMENT SHALL BE ASTM 615 GRADE 60;

## WOOD CONSTRUCTION

REFER TO CHAPTER 23 OF THE FLORIDA BUILDING CODE, BUILDING AND RESIDENTIAL; WOOD INSTRUCTION SHALL BE IN ACCORDANCE WITH THE AMERICAN FOREST & PAPER ASSOCIATION (AF&PA) AND AMERICAN WOOD COUNCIL-NATIONAL DESIGN SPECIFICATIONS (AWC-NDS).

WOOD IN CONTACT WITH CONCRETE, MASONRY, AND AREAS EXPOSED TO OUTDOORS OR SEVERE WEATHER AS SPECIFIED ON THE CONSTRUCTION DOCUMENTS SHALL BE PROTECTED OR PRESERVATIVE TREATED. MODIFICATION FACTOR SUCH AS MOISTURE CONTENT SHALL BE ADJUSTED AND CONSIDERED FOR DESIGN PURPOSES.

TYPICAL SOLID SAWN WOOD SPECIES FOR FRAMING PURPOSES RELATED TO VERTICAL AND LATERAL STRUCTURAL COMPONENTS TO BE SOUTHERN YELLOW PINE #2 UNLESS NOTED OTHERWISE. ALL WOOD TO BE SURFACE DRY WITH MAXIMUM MOISTURE CONTENT OF 19%. ALL EXTERIOR AND INTEROR VERTICAL STUDS THAT BELONG TO BEARING AND LATERAL FORCE RESISTING SYSTEMS SHALL BE SOUTHERN YELLOW PINE #2 . DESIGN VALUES FOR WOOD CONSTRUCTION SHALL BE REFERENCED AT THE LATEST NATIONAL DESIGN SPECIFICATIONS NDS SUPPLEMENT.

THE FOLLOWING LOAD DURATION FACTORS (CD) FOR THE DESIGN STRUCTURAL COMPONENTS SHALL BE USED:

DEAD LOAD	0.9
DEAD LOAD + FLOOR LIVE LOAD	1.0
DEAD LOAD + ROOF LIVE LOAD	1.2
DEAD LOAD + WIND LOAD	1.6

WOOD WALL CONSTRUCTION AND FRAMING SHALL BE REFEREED TO SECTION R602 OF THE FLORIDA BUILDING CODE, RESIDENTIAL 7TH EDITION IF RESIDENTIAL CONSTRUCTION.

# WOOD PANEL DIAPHRAGMS

STRUCTURAL WALLS, FLOORS AND ROOFS PANELS ARE DESIGNED AS DIAPHRAGMS AND SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF THE SPECIAL DESIGN PROVISION FOR WIND AND SEISMIC OF THE AMERICAN WOOD COUNCIL AND NATIONAL DESIGN SPECIFICATIONS (AWC-NDS):

ROOF WOOD PANELS: ROOF WOOD PANELS: ALL PANELS TO BE 19/32" MINIMUM THICKNESS AND APA STRUCTURAL I RATED SHEATHING PLYWOOD AND FASTENED WITH MIN 10d(3"x0.148"x0.312") RING SHANK NAILS AT 4" O.C. @ EDGES & AND AT 6" O.C. IN FIELD U.N.O. (TYPICAL UNBLOCKED DIAPHRAGM U.N.O)

FLOOR WOOD PANELS: ALL PANELS TO BE 23/32" MINIMUM THICKNESS AND APA STRUCTURAL I RATED SHEATHING PLYWOOD AND FASTENED WITH MIN 10d(3"x0.148"x0.312") COMMON NAILS AT 6" O.C. @ EDGES & AND AT 6" O.C. IN FIELD U.N.O. (TYPICAL UNBLOCKED DIAPHRAGM

WALL WOOD PANELS: ALL PANELS TO BE 15/32" MINIMUM THICKNESS AND APA STRUCTURAL I RATED SHEATHING PLYWOOD. WALL SHEATHING SHALL BE FASTENED WITH MIN 8d(2-1/2"x0.131"x0.281") COMMON NAILS U.N.O. ALL PANELS EDGES SHALL BE BLOCKED. (TYPICAL BLOCKED DIAPHRAGMS U.N.O)

DIAPHRAGMS SHALL BE SUPPORTED AT ALL EDGES AND BLOCKED FOR PROVIDING NECESSARY SHEAR TRANSFERRING AND CONTINUOUS LOAD PATH UNLESS NOTED OTHERWISE. WOOD PANEL DIAPHRAGMS FOR ROOFS SHALL BE PERMITTED TO BE DESIGN AS UNBLOCKED.

# WOOD CONSTRUCTION CONNECTORS:

METAL CONNECTORS SHALL PREFER TO BE FROM SIMPSON STRONG TIE COMPANY AND SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S DIRECTIONS TO RESIST THE SPECIFIED LOADS.

# ANCHOR BOLTS, MACHINE BOLTS AND BONDED ADHESIVE (EPOXY) ANCHORS

# ANCHOR BOLTS:

SHALL CONFORM TO ASTM A307 OR F1554 (THREADED ROD). ANCHOR BOLTS SHALL BE MINIMUM ASTM A36 (GRADE 36) STEEL.

MACHINE AND LAG BOLTS:

SHALL BE A307 HOT DIPPED GALVANIZED WITH GALVANIZED WASHERS.

EPOXY ANCHORS:

SIMPSON SET-3G OR HILTI RE-500 V3 SHALL BE USED AND INSTALLED PER MANUFACTURER SPECIFICATIONS.

### WINDOWS AND DOORS EXTERIOR OPENINGS

DESIGN AND INSTALLATION SHOP DRAWINGS PACKAGES WILL CONTAIN DETAILS AND SPECIFICATIONS FOR USE AT THE PROJECT. EVALUATION REPORTS, FLORIDA PRODUCT APPROVAL NUMBER OR MIAMI DADE NOA SHALL BE IMPRINT AT THE PRODUCTS OR REFERENCED AT THE TIME OF PERMIT SUBMISSION. PRODUCTS SHALL BE PREVIOUSLY TESTED AND APPROVED BY A DELEGATED PROFESSIONAL ENGINEER IN THE STATE OF FLORIDA. CONNECTIONS TO WOOD, , CONCRETE, MASONRY, ALUMINUM, STRUCTURAL STEEL, LIGHT GAGE STEEL AND SIMILAR WILL BE FOLLOWED BY THE APPROVED SHOP DRAWINGS SPECIFICATIONS. IN THE EVENT OF MODIFICATIONS DUE TO FIELD CONDITIONS, CONTRACTOR/BUILDER SHALL BRING INTO ATTENTION TO THE ENGINEER OF RECORD FOR FURTHER INVESTIGATION.

### PORTLAND CEMENT PLASTERING STUCCO NOTES

EXPANSION JOINTS SHALL BE TWO PIECE, FORMED WITH A SLIP JOINT AND SQUARE EDGE 1 -1/2" WIDE REVEAL WITH PERFORATED CONCEALED FLANGES. WATER FOR MIXING SHALL BE POTABLE AND FREE OF ANY CONTAMINANTS.

FIBER FOR BASE COAT SHALL BE ALKALINE RESISTANT GLASS OR POLYPROPYLENE FIBERS 1 /2 INCH LONG, FREE OF CONTAMINANTS, MANUFACTURED FOR USE IN PORTLAND CEMENT PLASTER. THE BONDING COMPOUND SHALL CONFORM WITH ASTM C 932. STEEL DRILL SCREWS SHALL COMPLY WITH ASTM C 1002 OR ASTM C 954. FASTENERS USED FOR ATTACHING METAL LATH TO SUBSTRATES SHALL COMPLY WITH ASTM C 1063. MASONRY CEMENT SHALL CONFORM WITH ASTM C 91 TYPE N. LIME SHALL COMPLY WITH ASTM C 206 TYPE S OR ASTM C 207

SAND AGGREGATE SHALL COMPLY WITH ASTM C 897. PERLITE AGGREGATE SHALL COMPLY WITH ASTM C 35

PLASTER MIXES SHALL COMPLY WITH ASTM C 926. COMPLY WITH FIBER MANUFACTURERS RECOMMENDATIONS FOR QUANTITY OF FIBER AND MIXING PROCEDURE. CONTROL JOINTS SHALL BE DELINEATED INTO AREAS WITH THE MAXIMUM SIZES FOR VERTICAL SURFACES AT 144 SQ. FT. AND NON VERTICAL SURFACES AT 100 SQ. FT. WITH LENGTH TO WIDTH RATIOS OF 21/2:1. DISTANCES BETWEEN CONTROL JOINTS SHALL NOT EXCEED 12 FT. INSTALL CONTROL JOINTS AT LOCATIONS WHERE CONTROL JOINTS OCCUR IN THE MAIN WALL BEHIND THE PLASTER.

THE PLASTER APPLICATION SHALL CONFORM WITH ASTM C 926. THE PLASTER APPLICATION SHALL NOT DEVIATE MORE THAN 1/4" IN 10 FT.

### DELEGATED DESIGN AND SHOP DRAWINGS SUBMITTALS

SUBMITTAL DOCUMENTS CONSISTING OF CONSTRUCTION DOCUMENTS, STATEMENT OF SPECIAL INSPECTIONS, GEOTECHNICAL REPORT AND OTHER DATA SHALL BE SUBMITTED IN TWO OR MORE SETS WITH EACH PERMIT APPLICATION. THE CONSTRUCTION DOCUMENTS SHALL BE PREPARED BY A REGISTERED DESIGN PROFESSIONAL WHERE REQUIRED BY CHAPTER 471, FLORIDA STATUTES OR CHAPTER 481, FLORIDA STATUTES. WHERE SPECIAL CONDITIONS EXIST, THE BUILDING OFFICIAL IS AUTHORIZED TO REQUIRE ADDITIONAL CONSTRUCTION DOCUMENTS TO BE PREPARED BY A REGISTERED DESIGN PROFESSIONAL.

ALL DELEGATED SHOP DRAWINGS SUBMITTAL AS REQUIRED AND SPECIFY IN THE CONSTRUCTION DOCUMENTS SHALL BE PRESENTED TO THE EOR FOR REVIEW.

#### ALUMINUM CONSTRUCTION

ALL ALUMINUM CONSTRUCTION TO BE IN COMPLIANCE WITH CHAPTER 20 OF THE FBC, BUILDING 2023 8TH EDITION, ALUMINUM DESIGN MANUAL 2020 (ADM) AND LATEST EDITION OF ALUMINUM ASSOCIATION OF FLORIDA (AAF) SHALL CONFORM TO ASTM B308, ALUMINUM ALLOY 6063-T5, 6063-T6, 6061-T6, OR EQUIVALENT. OTHER ALLOYS SHALL CONFORM TO ASTM B221 AND ASTM B429. ALL ALUMINUM SECTIONS SHALL BE FABRICATED AND DESIGNED PER THE ALUMINUM DESIGN MANUAL, 2020, SPECIFICATIONS AND GUIDELINES FOR ALUMINUM STRUCTURES. BY THE ALUMINUM

ASSOCIATION. ALL STRESSES SHALL BE REFERENCED TO TABLE.3.3 FOR ALL WROUGHT PRODUCTS OF NON-WELD AFFECTED MATERIAL . STRESSES SHALL BE REDUCED WITHIN ALL WELD-AFFECTED ZONES AND DESIGN VALUES SHALL BE TAKEN FROM TABLE A.3.3; THE ALUMINUM DESIGN MANUAL SECTION 7 DEFINES THE WELD-AFFECTED ZONE AS 1" TO EACH SIDE OF THE CENTERLINE OF A WELD.

## 2002.4.1 DESIGN GUIDE.

THE AAF GUIDE TO ALUMINUM CONSTRUCTION IN HIGH WIND AREAS SHALL BE ACCEPTED AS CONFORMING TO ACCEPTED ENGINEERING PRACTICES.

# **GENERAL NOTES**

THESE PLANS HAVE BEEN PREPARE FOR THE CONSTRUCTION OF THE STRUCTURE SHOWN ON PLANS FOLLOWING ARCHITECTURAL SCHEMATIC LAYOUTS. STRUCTURAL DESIGN AND SPECIFICATIONS ARE DEPICTED FOLLOWING THE ARCHITECTURAL CONCEPT OF THE STRUCTURE. STRUCTURAL DESIGN IS SITE SPECIFIC FOR THE STRUCTURE DUE TO THE LOCATION AND INTENTED USE. CONTRACTOR/BUILDER SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO STARTING ANY CONSTRUCTION. IN THE EVENT ANY DISCREPANCIES OCCUR THAT AFFECTS CONSTRUCTION, NOTIFY THE ARCHITECT OR ENGINEER FOR CLARIFICATION.

ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING LAYOUTS AND DIAGRAMS DEPICTED ON THESE CONSTRUCTION DOCUMENTS ARE SCHEMATIC ONLY AND LICENSED DESIGN PROFESSIONAL OR CERTIFIED PROFESSIONAL FOR THESE DISCIPLINES SHALL BE CONSULTED FOR DESIGN AND INSTALLATION OF COMPONENTS, ENGINEER OF RECORD SHALL NOT BE HELD LIABLE FOR THE DESIGNED NOR CONSTRUCTION OF THESE ELEMENTS.

THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR THE SUPERVISION OF THE CONTRACTOR NOR THEIR EMPLOYEES DURING THE CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND IMPLEMENTING THE MEANS AND METHODS FOR THE CONSTRUCTION PROCESS AND PERFORM ALL WORKS IN CONFORMANCE WITH THE STANDARDS AND REQUIREMENTS OF THE 2020 FLORIDA BUILDING CODE, MANUFACTURER'S RECOMMENDATIONS, LOCAL COUNTY AND CITY CODES AND ORDINANCES, AND SPECIFICATIONS REFERENCED WITHIN THESE PLANS.

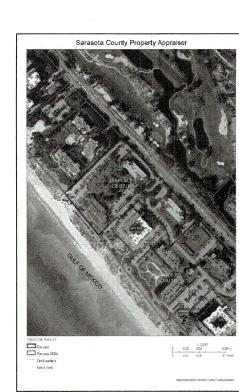
THE CONTRACTOR MUST COMPLETE THE CONSTRUCTION IN ACCORDANCE WITH THE BUILDING ENVELOPE ENERGY REQUIREMENTS OF THE FLORIDA MODEL ENERGY CODE. QUALITY OF THE WORK MUST MEET OR EXCEED THE INDUSTRY STANDARD PRACTICES ANY DEVIATIONS FROM THESE PLANS SHALL BE REVIEWED AND APPROVED BY THE ENGINEER OF RECORD.

INSTALL SHORING AS REQUIRED FOR ALL STRUCTURAL MEMBERS OF THE EXISTING STRUCTURE.

CONTRACTOR IS RESPONSIBLE FOR ALL MEANS AND METHODS AS REQUIRED TO IMPROVE OR MAINTAIN THE EXISTING CONDITION, STRUCTURAL INTEGRITY, AND SAFETY OF THE STRUCTURE INCLUDING BUT NOT LIMITED TO THE DESIGN AND INSTALLATION OF STRUCTURAL SHORING OR TIE-DOWNS AND DILIGENTLY PERFORMING WORKS. THE CONTRACTOR IS RESPONSIBLE FOR THE SAFETY OF ALL PERSONNEL ENTERING THE DESIGNATED WORKING AREA.

THE CONTRACTOR SHALL COORDINATE THEIR WORK WITH ALL OTHER TRADES IN ORDER TO AVOID SCHEDULING CONFLICTS.

THE ENGINEER OF RECORD CERTIFYING THIS DOCUMENT SHALL NOT BE HELD LIABLE FOR ANY FINANCIAL OR TIME RELATED DAMAGES INCLUDING BUT NOT LIMITED TO DAMAGES TO THE STRUCTURE, PERSONNEL, TIME RELATED DELAYS, AND STRUCTURAL ISSUES THAT RESULT FROM THE CONSTRUCTION IN ACCORDANCE WITH THE APPLICABLE SPECIFICATIONS OF THIS CERTIFIED DOCUMENT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IF ANY CONDITIONS OR ISSUES ARISE THAT DO NOT ADHERE TO THE DETAILS SPECIFIED.



PLOT PLAN SHOWN IS FOR GENERAL LOCATION ONLY REFER TO SURVEY PLAN.

PARCEL ID: 0008061102 LAND AREA: REFER TO SURVEY PLAN MUNICIPALITY: TOWN OF LONGBOAT KEY SEC/TWP/RGE: 17-36S-17E ZONING CODE: R6MX - HIGH DENSITY MIXED RESIDENTIAL DISTRICT PARCEL DESCRIPTION: UNIT 112C BLDG T-1 SEA PLACE 1 FEMA FLOOD ZONE: MAP #12115C0126F, EFFECTIVE ON11/4/2016 FLOOD ZONE "AE" 11 FEET (TO BE CONFIRMED BY AHJ)

#### SCOPE OF WORK

- 1. REMOVE EXISTING BOTTOM CHORD OF THE REAR LIVING SPACE AT FIRST FLOOR AS SHOWN ON PLANS.
- 2. REMOVE AND REPLACE EXISTING SLIDING GLASS DOORS AS SHOWN ON

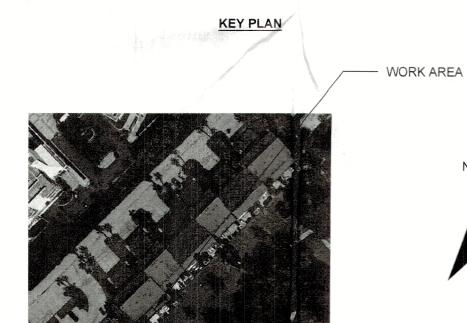
AR	EAS	
•	EXISTING LIVING AREA (UNDER A/C) =	1,846 S
•	BALCONY W/ RAILING(NOT UNDER A/C) =	120 S
•	ENCLOSED PORCH (UNDER A/C) =	208 S
•	UTILITY (NOT UNDER A/C) =	91 S
•	ATTACHED GARAGE (NOT UNDER A/C)=	286 SI
•	OPEN PORCH (NOT UNDER A/C) =	80 S

TOTAL GROSS AREA =

S1.0 COVER SHEET AND STRUCTURAL NOTES

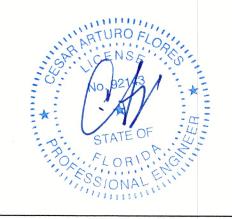
S2.0 EXISTING AND PROPOSE PARTIAL FLOOR PLAN, ELEVATIONS AND CUT SECTIONS E-1 EXISTING AND PROPOSED PARTIAL ELECTRICAL LAYOUT

2,631 SF



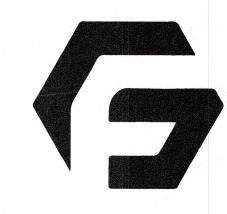


# MECHANICAL, ELECTRICAL AND PLUMBING REVIEWS



CESAR ARTURO FLORES, P.E. DATE: 03/15/2024 PROFESSIONAL ENGINEER FLORIDA LICENSE #92143 ADDRESS: 4986 VINSON WAY, SARASOTA FL 34232 PHONE: (941) 203 9363 EMAIL: info@fgconsultingg.com

TO THE BEST OF MY KNOWLEDGE AND ABILITY, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH APPLICABLE BUILDING CONSTRUCTION CODES AND STANDARDS AND THE APPLICABLE FIRE SAFETY STANDARDS AS DETERMINED BY THE LOCAL AGENCY IN ACCORDANCE WITH CHAPTER 553.79 AND CHAPTER 633 OF FLORIDA STATUTES



FG CONSULTING GROUP LLC, REGISTRY #35837 **DRAFTING & ENGINEERING SOLUTIONS** INFO@FGCONSULTINGG.COM 4710 WEBBER STREET, SARASOTA FL, 34232



# **COVER SHEET AND NOTES**

EMAIL INFO@FGCONSULTINGG.COM 4710 WEBBER STREET SARASOTA FL, 34232

2083 GULF OF MEXICO DR #T1-112 LONGBOAT KEY, FL 34228 DATE

PROJECT ADDRESS

**JOB NO** 24016

02/12/2024

DRAWN BY

SHEET:

**REVISIONS** 

Reviewer: Jourtan

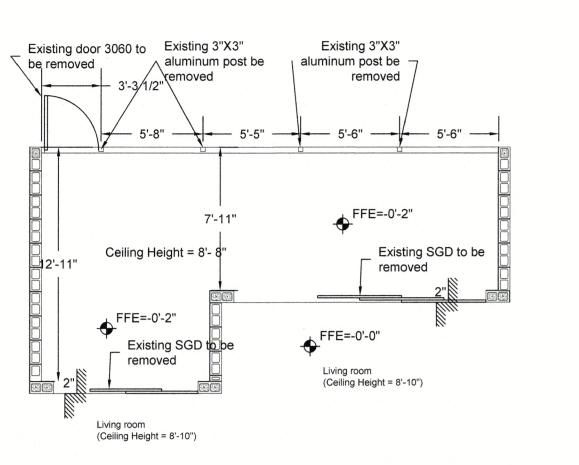
REVIEWED FOR CODE COMPLIANCE

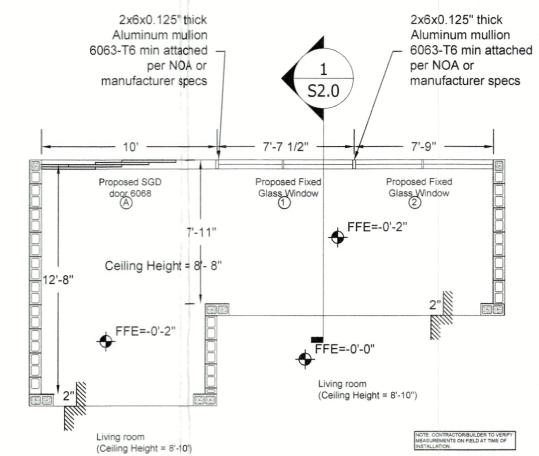
LONGBOAT KEY BUILDING DEPT

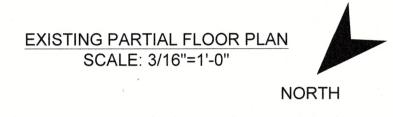
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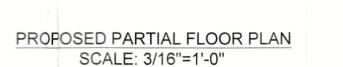
TOWN OF LONGBOAT KEY

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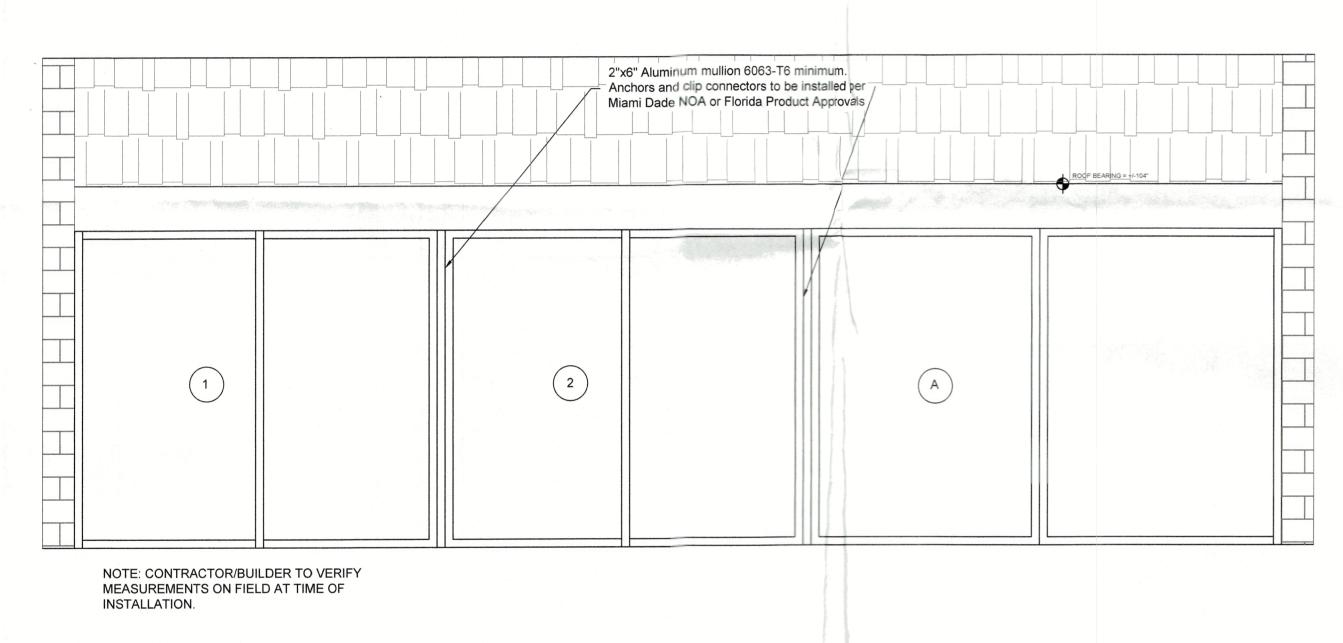






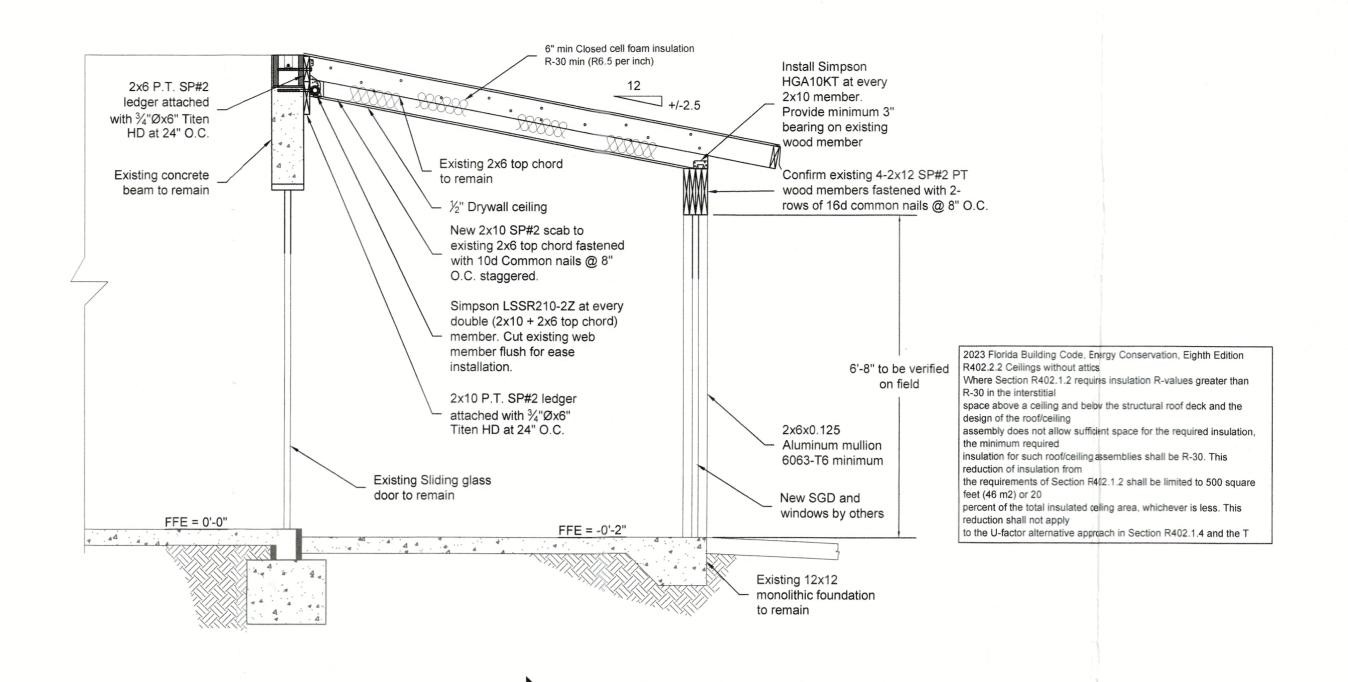


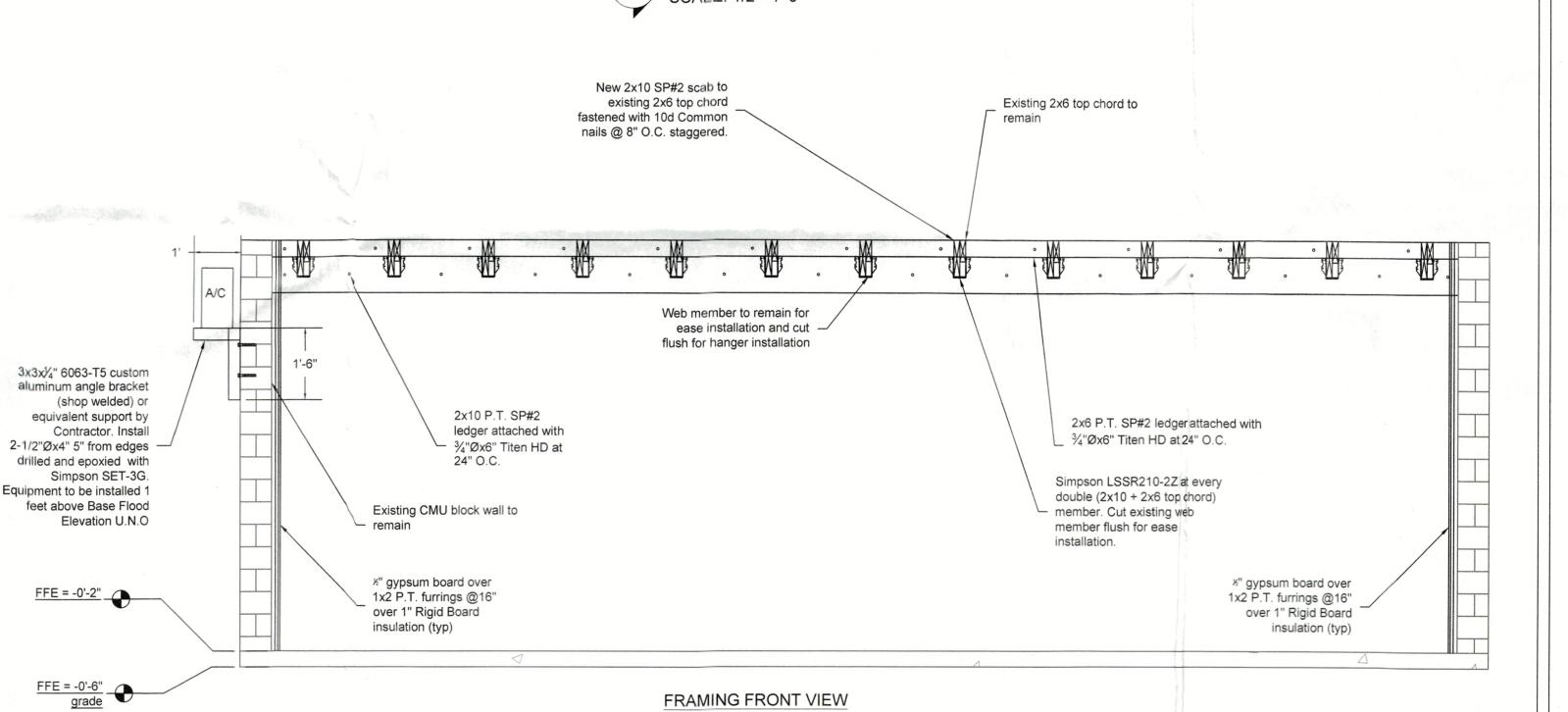




## PROPOSED ELEVATION PLAN SCALE: 1/2"=1'-0"

						VVIIVECVV	OGGILDOLL		7 1				
	LABEL	LOCATION	DIMENSIONS (WidthxHeight)	PROPOSED MODEL TYPE	MANUFACTURER	IMPACT RATED	FL# APPROVAL ORMIAMI DADE NOA	APPROVAL DATE	DESCF	RIPTION	WIND ZONE W	(+/-) PSF REQUIRED	
	1	REAR PORCH	90"x78"	FIXED GLASS	PER NOA	PER CONTRACTOR	PER CONTRACTOR	PER CONTRACTOR	PER CON	ITRACTOR	5	+49.5/-61.0	
	2	REAR PORCH	90"x78"	FIXED GLASS	PER NOA	PER CONTRACTOR	PER CONTRACTOR	PER CONTRACTOR	PER CON	TRACTOR	5	+49.5/-61.0	
DOORS SCHEDULE													
EXTERIOR													
	LABEL	NOMENCLATURE	LOCATION	DIMENSIONS (WidthxHeight)	PROPOSED MODEL TYPE	MANUFACTURER	IMPACT RATED	FL# APPROVAL ORMIAMI DADE NOA	APPR0V	AL DATE	DESCRIPTION	WIND ZONE	WIND PREASSURES ASD (+/- PSF) REQUIRED
	Α	6068	REAR PORCH	120"x78"	SLIDING GLASS DOOR	PER CONTRACTOR	PER CONTRACTOR	PER CONTRACTOR	PER CONT	TRACTOR	PER CONTRACTOR	5	+49.5/-61.0





SCALE: 1/2"=1'-0"

CONSTRUCTION WALL LEGEND

EXISTING 4" PARTITION WOOD FRAME WALL

PROPOSED 4" PARTITION WOOD FRAME WALL

NEW 4" EXTERIOR FRAME WALL

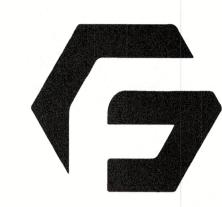
 PROPOSED 8" CMU BLOCK WALL INFILL WITH CMU BLOCK AT AREAS AS SHOWN

EXISTING 8" CMU BLOCK WALL



CESAR ARTURO FLORES, P.E. DATE: 03/15/2024 PROFESSIONAL ENGINEER FLORIDA LICENSE #92143 ADDRESS: 4986 VINSON WAY, SARASOTA FL 34232 PHONE: (941) 203 9363 EMAIL: info@fgconsultingg.com

TO THE BEST OF MY KNOWLEDGE AND ABILITY, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH APPLICABLE BUILDING CONSTRUCTION CODES AND STANDARDS AND THE APPLICABLE FIRE SAFETY STANDARDS AS DETERMINED BY THE LOCAL AGENCY IN ACCORDANCE WITH CHAPTER 553.79 AND CHAPTER 633 OF FLORIDA STATUTES



**Consulting** group, LLC

FG CONSULTING GROUP LLC, **REGISTRY #35837 DRAFTING & ENGINEERING SOLUTIONS** INFO@FGCONSULTINGG.COM 4710 WEBBER STREET, SARASOTA FL, 34232



# **EXISTING AND** PROPOSED PARTIAL FLOOR PLAN, **ELEVATIONS AND CUT** SECTIONS

INFO@FGCONSULTINGG.COM 4710 WEBBER STREET, SARASOTA FL, 34232

PROJECT ADDRESS 2083 GULF OF MEXICO DR #T1-112 LONGBOAT KEY, FL 34228

DATE

02/12/2024

24016

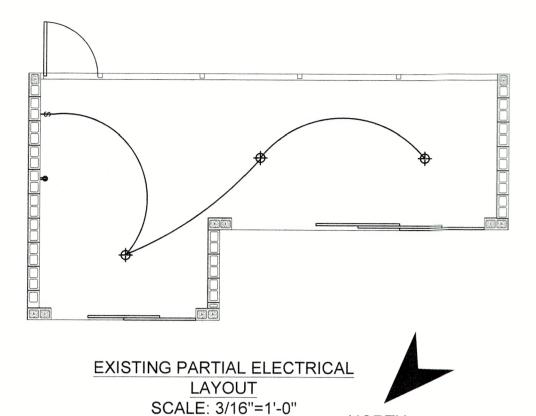
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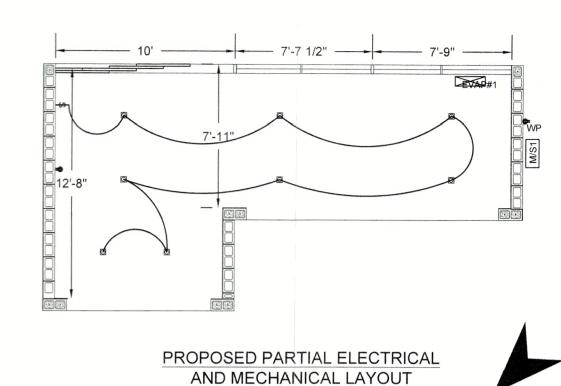
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SCALE: 3/16"=1'-0"

NORTH

ELECTRICAL LEGEND

#### HVAC NOTES: MINI SPLIT #1 CALCULATIONS: SWITCH (±286 sf) WILL BE AIR CONDITIONED BY PROPOSED MINI SPLIT RECEPTACLE SYSTEM AS FOLLOWS: MINI SPLIT CALCULATIONS A/C WINDOW CALCULATIONS SWITCHED RECEPTACLE TOTAL A/C AREA= ±286 SF GFI GFCI DUPLEX PROVIDE 12,000 BTU MINISPLIT SEER 14.0 & HSPF 8.2 ELECTRICAL METER **EVAPORATOR** (MINI ELECTRICAL PANEL 200 AMP CONDENSER (MINI SPLIT) 12,000 BTU / SEER 14.0 WALL HUNG LIGHT VENT (50 CFM MIN) SMOKE DETECTOR BUILDING TO BE IN COMPLIANCE WITH NATIONAL ELECTRIC CODE. CARBON MONOXIDE NOTE ALL RECEPTACLES NOT REQUIRED TO BE GFI SHAL BE ARC FAULT RECESSED LED LIGHT PROTECTED PER LATEST NEC CODE. ALL RECEPTACLES TO BE TAMPER CEILING LIGHT PROOF WHERE REQUIRED BY LATEST NEC CODE. SWITCHED RECEPTACLE

#### **ELECTRICAL NOTES:**

- 1. THIS PLAN SHOWS AN SCHEMATIC ELECTRICAL LAYOUT ONLY. A LICENSED FLORIDA ELECTRICAL CONTRACTOR SHALL DESIGN A COMPLETE SYSTEM THAT MEETS ALL APPLICABLE CODES (NEC 2020).
- 2. THE PURPOSE OF THE ELECTRICAL FIXTURES SHOWN ON PLANS IS FOR LOCATION ONLY. THE UNDERSIGNED ENGINEER IS NOT RESPONSIBLE FOR THE ELECTRICAL DESIGN.
- 3. ALL DEVICES, EQUIPMENT, MATERIAL AND LABOR SHALL LBE PROVIDED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
- 4. ALL ELECTRICAL EQUIPMENT AND DEVICES SHALL BE MOUNTED AS PER EQUIPMENT AND DEVICE MANUFACTURER RECOMMENDATIONS.
- 5. SERVICE ENTRANCE, PANEL BOARDS, AND DISCONNECTS; SQUARE D OR APPROVED EQUAL. VERIFY LOCATIONS WITH OWNER.
- 6. CONDUCTORS: NON-METALLIC SHEATHED CABLE- ALL COPPER (CITREX OR APPROVED EQUAL). CONDUIT FOR ALL EXTERIOR LOCATIONS.
- 7. NO PIPE, CONDUIT OR JUNCTION BOX SHALL BE INSTALLED IN STRUCTURAL SLABS, COLUMNS OR BEAMS UNLESS SPECIFICALLY SHOWN ON STRUCTURAL DRAWINGS.
- 8. ALL BATHROOM, GARAGE AND EXTERIOR RECEPTACLE OUTLETS AND KITCHEN RECEPTACLE OUTLETS WITHIN 6' OF WATER SOURCE SHALL BE GFI PROTECTED. ALL EXTERIOR RECEPTACLE OUTLETS SHALL BE WATER-PROOF PROTECTED. ALL BEDROOM RECEPTACLE OUTLETS SHALL BE ARC FAULT PROTECTED IN ACCORDANCE WITH NEC
- 9. ELECTRICAL PANEL MINIMUM 150 AMPS.
- 10. NEW FIXTURE INSTALLATION: TO BE COORDINATED WITH OWNER.
- 11. GROUND FAULT CIRCUITS PER CODE.
- 12. ALL WALL OUTLETS TO BE LOCATED @ 18 AFF. UNLESS OTHERWISE NOTED.
- 13. ALL BOTTOMS OF SWITCHES AT 42" AFF. UNLESS OTHERWISE NOTED.
- 14. PROVIDE OUTLETS OR DEVICES AS REQUIRED BY CODES WHETHER SHOWN ON PLANS OR
- 15. ALL DUPLEX/SINGLE/GFI RECEPTACLES ARE TAMPER RESISTANCE.
- 16. THE EXISTING RESIDENCE WILL NOT BE REWIRE. IF ANY EXISTING ELECTRICAL WIRE IS IN BAD CONDITION WILL BE REPLACED OR RE WIRED AS REQUIRED.
- 17. ALL OUTLETS NOT REQUIRED TO BE GFI PROTECTED SHALL BE ARC FAULT WITH TAMPER PROOF RECEPT.
- 18. AT LEAST 75% OF ALL PERMANENTLY INSTALLED LAMPS WILL BE FITTED WITH HIGH EFFICIENCY LAMPS IN ACCORDANCE W/ ENERGY CONSERVATION CODE 2017 SECTION 505.

ELECTRICAL CONTRACTOR SHALL REVIEW THESE DRAWINGS PRIOR FOR BIDDING AND/OR PERMITTING. PERMITTING SHALL BE COVERED BY CONTRACTOR. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND SHALL BE USED AS A REFERENCE ONLY. PURSUANT TO FLORIDA STATUES 2020 CHAPTER 471.003 (20 (H), THE LICENSED CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR WORK PERFORMED USING THIS DESIGN AS APPLICABLE.

EXISTING DWELLING SHALL HAVE SMOKE DETECTORS INSTALLED AT LOCATIONS REQUIRED FOR NEW CONSTRUCTION. FBC-R, R314.2.2 SMOKE DETECTORS SHALL BE INSTALLED THRU-OUT THE REST OF THE RESIDENCE. THEY SHALL BE INSTALLED WITH IN THE 10' FROM EACH EXISTING BEDROOM IN AND OUT. SMOKE DETECTORS SHOWN ARE EXISTING

#### **HVAC NOTES**

- 1. THIS PLAN SHOWS AN SCHEMATIC MECHANICAL/HVAC LAYOUT ONLY. A LICENSED FLORIDA HVAC CONTRACTOR SHALL DESIGN A COMPLETE SYSTEM THAT MEETS ALL APPLICABLE MECHANICAL CODES AND FLORIDA ENERGY EFFICIENCY CODE AND ALL LOCAL ORDINANCES.
- 2. THE PURPOSE OF THE MECHANICAL FIXTURES SHOWN ON PLANS IS FOR LOCATION ONLY. THE UNDERSIGNED ENGINEER IS NOT RESPONSIBLE FOR THE HVAC DESIGN.
- 3. CONTRACTOR SHALL VERIFY SPACE CONDITIONS AND DIMENSIONS AND SHALL COORDINATE WORK WITH ALL OTHER TRADES PRIOR TO FABRICATING DUCTWORK OR INSTALLING EQUIPMENT OR
- 4. PRIMARY DUCTWORK SHALL BE CONSTRUCTION OF ONE AND HALF-INCH THICK (R-6 MINIMUM) FIBERGLASS DUCTBOARD WITH REINFORCED ALUMINUM FOIL FACED COVERING FABRICATED AND INSTALLED PER SMACNA RECOMMENDATIONS.
- 5. REFRIGERANT PIPING SHALL BE TYPE "L" COPPER TUBING SIZED AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. INSULATED SUCTION AND CONDENSATE PIPING WITH 1/4" THICK FOAM PLASTIC OF FIRE RETARDANT TYPE 25/30 MAXIMUM SMOKE DEVELOPED AND FLAME SPREAD RATING RESPECTIVELY PER TESTS IN MFPA-255. FINISH WHERE EXPOSED WITH TWO COATS OF ACRYLIC LACQUER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- 6. CONTRACTOR SHALL PROVIDE MAKE UP AIR PER FRC M1502.1 IF THE DRYER EXHAUSTS MORE THAN 200 CFM.
- 7. CONTRACTOR SHALL SUBMIT ENERGY CALCULATIONS PACKAGE ALONG WITH THE DESIGN FOR PERMITTING.

MECHANICAL DISCLAIMER: Mechanical contractor shall be responsible to provide any energy performance and test and balance documentation as applicable. Contractor shall review these drawings prior for bidding and/or permitting. Permitting shall be covered by contractor. These drawings are schematic in nature and shall be used as a reference only. Pursuant to Florida statues 2020 chapter 471.003 (20 (h), the licensed contractor assumes full responsibility for work performed using this design.



CESAR ARTURO FLORES, P.E. DATE: 03/15/2024 PROFESSIONAL ENGINEER FLORIDA LICENSE #92143 ADDRESS: 4986 VINSON WAY, SARASOTA FL 34232 PHONE: (941) 203 9363 EMAIL: info@fgconsultingg.com

TO THE BEST OF MY KNOWLEDGE AND ABILITY, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH APPLICABLE BUILDING CONSTRUCTION CODES AND STANDARDS AND THE APPLICABLE FIRE SAFETY STANDARDS AS DETERMINED BY THE LOCAL AGENCY IN ACCORDANCE WITH CHAPTER 553.79 AND CHAPTER 633 OF FLORIDA STATUTES



Consulting group, LLC

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# **EXISTING AND** PROPOSED PARTIAL **ELECTRICAL LAYOUT**

INFO@FGCONSULTINGG.COM 4710 WEBBER STREET SARASOTA FL, 34232

**PROJECT ADDRESS** 

2083 GULF OF MEXICO DR #T1-112 LONGBOAT KEY, FL 34228

DATE 02/12/2024

**JOB NO** 24016

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OWN OF LONGBOAT KEY!
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- EXISTING 4" PARTITION WOOD FRAME WALL
- PROPOSED 4" PARTITION WOOD FRAME WALL
- NEW 4" EXTERIOR FRAME WALL
- PROPOSED 8" CMU BLOCK WALL
- INFILL WITH CMU BLOCK AT AREAS AS SHOWN
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