







Diana M. Higgins P.E. , FL# 69317 CA# 29831 PO BOX 81 TERRA CEIA, FL 34250 941.981.9992

# RESIDENCE POINTE FARMS LOT LAKE CITY, FL O'QUINN

TO THE BIST OF THE ENGINEER'S
KNOWLE'S AND BELIEF, THE STRUCTURAL
PLANS AND SPECIFICATIONS COMPLY WITH
2017 FLORIDA BUILDING CODE, SECTION
1609 WIND ZONE THIS DRAWING AND DESIGN IS VALID FOR 12 MONTHS AFTER THE DATE IT IS SIGNED AND SEA.ED.

SIGNED AND SEALED FOR THE STRUCTURAL PORTION OF THIS DRAWING ONLY. REVISION:

DATE DESCRIPTION

Engineer of Record: Diana M. Higgins P.E. , FL# 69317

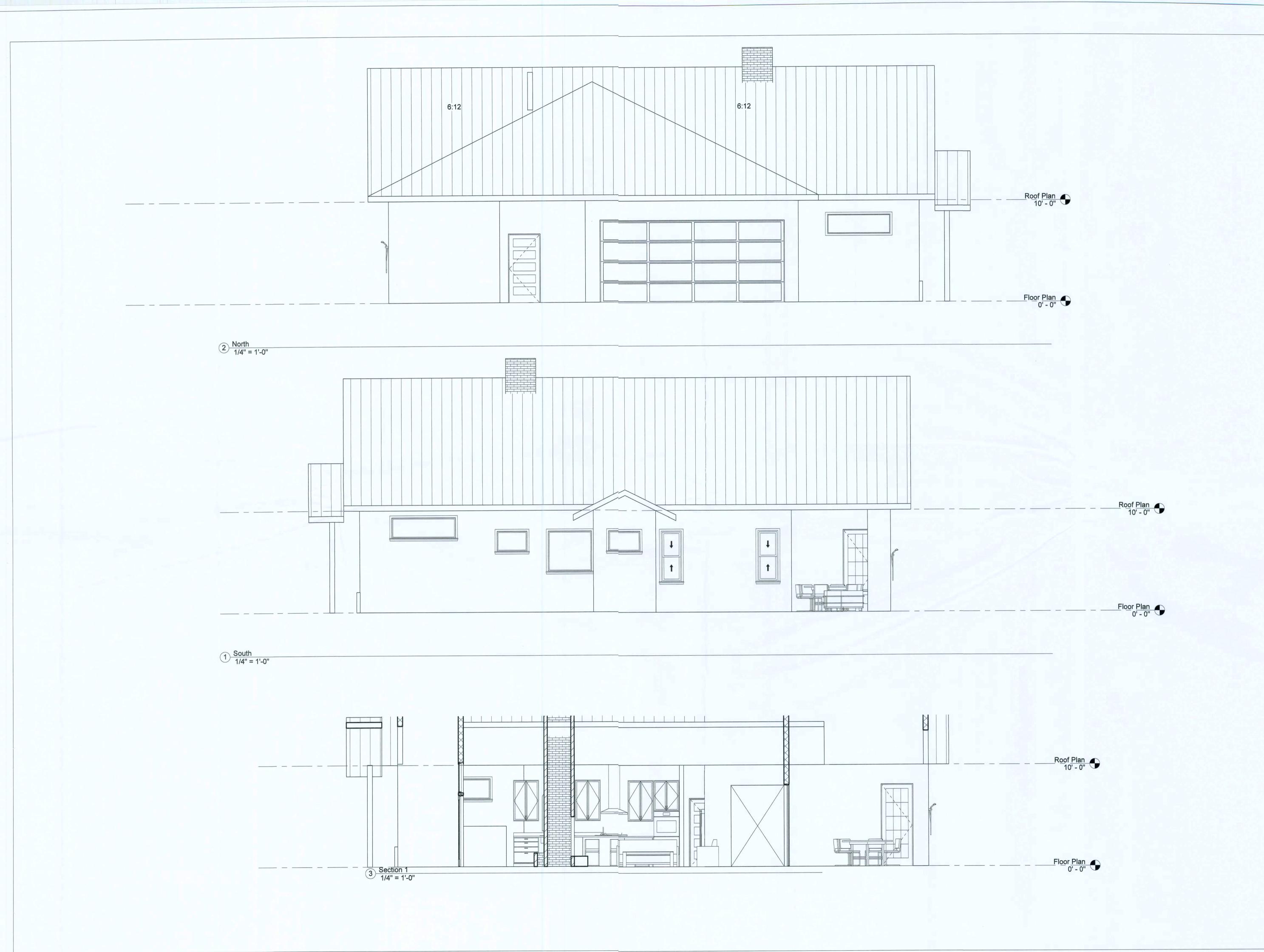
SHEET TITLE: ELEVATION

SHEET INFORMATION: JOB NO.: 04/04/19 DATE ISSUED:

DMH DRAWN BY: REVIEWED BY: DMH

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# RESIDENCE O'QUINN

TO THE BEST OF THE ENGINEER'S
KNOWLEDGE AND BELIEF, THE STRUCTURAL
PLANS AND SPECIFICATIONS COMPLY WITH
2017 FLORIDA BUILDING CODE, SECTION
1609 WIND ZONE THIS DRAWING AND DESIGN IS VALID FOR 12 MONTHS AFTER THE DATE IT IS SIGNED AND SEALED. SIGNED AND SEALED FOR THE STRUCTURAL PORTION OF THIS DRAWING ONLY.

HIGH

REVISION: DATE DESCRIPTION

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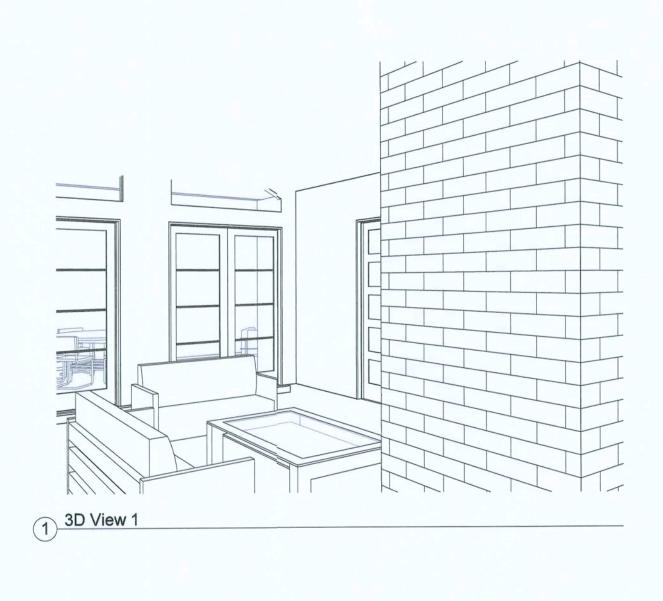
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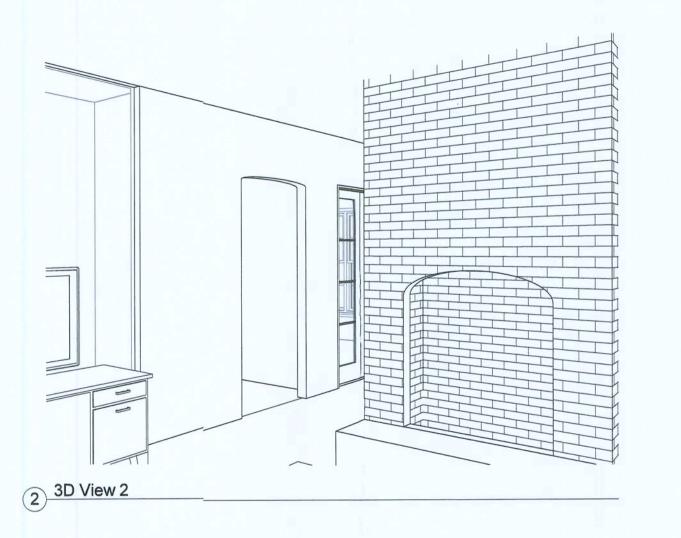
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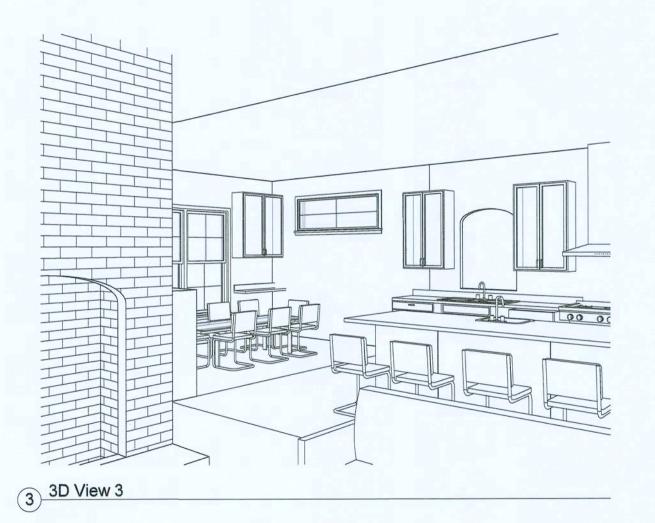
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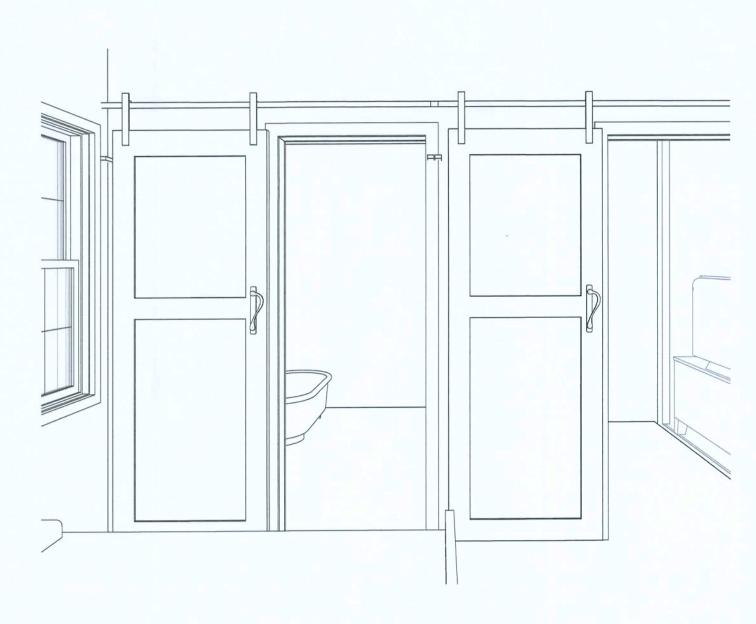
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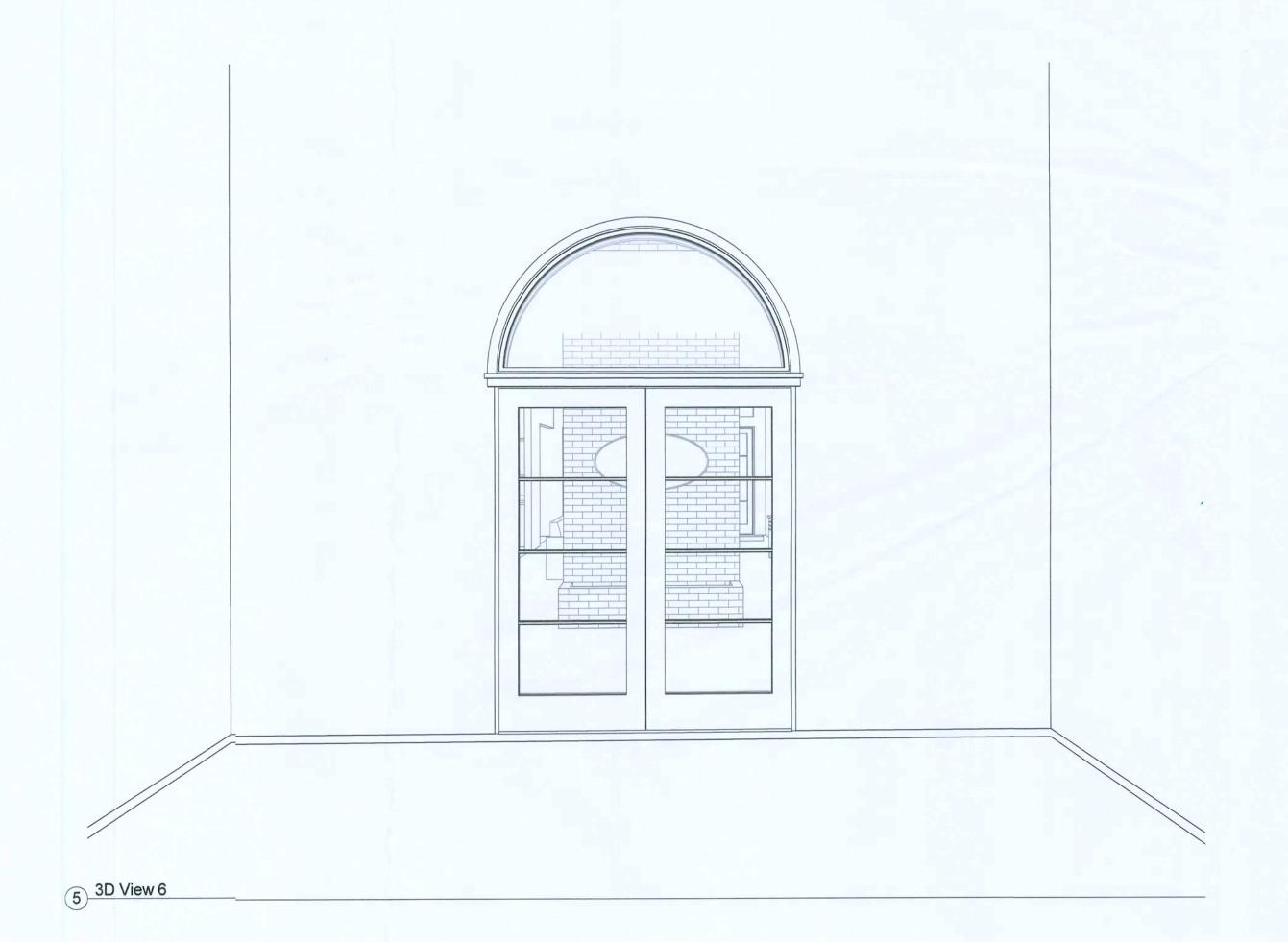








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O'QUINN RESIDENCE HIGH POINTE FRAMS LOT 5 LAKE CITY, FL

TO THE BEST OF THE ENGINEER'S
KNOWLEDGE AND BELIEF, THE STRUCTURAL
PLANS AND SPECIFICATIONS COMPLY WITH
2017 FLORIDA BUILDING CODE, SECTION
1609 WIND ZONE
THIS DRAWING AND DESIGN IS VALID FOR
12 MONTHS AFTER THE DATE IT IS SIGNED
AND SEALED.

SIGNED AND SEALED FOR THE STRUCTURAL
PORTION OF THIS DRAWING ONLY.

REVISION:

DATE DESCRIPTION

Engineer of Record:
Diana M. Higgins P.E.,
FL# 69317

SHEET TITLE: VIEWS

SHEET INFORMATION:

JOB NO.: 18055

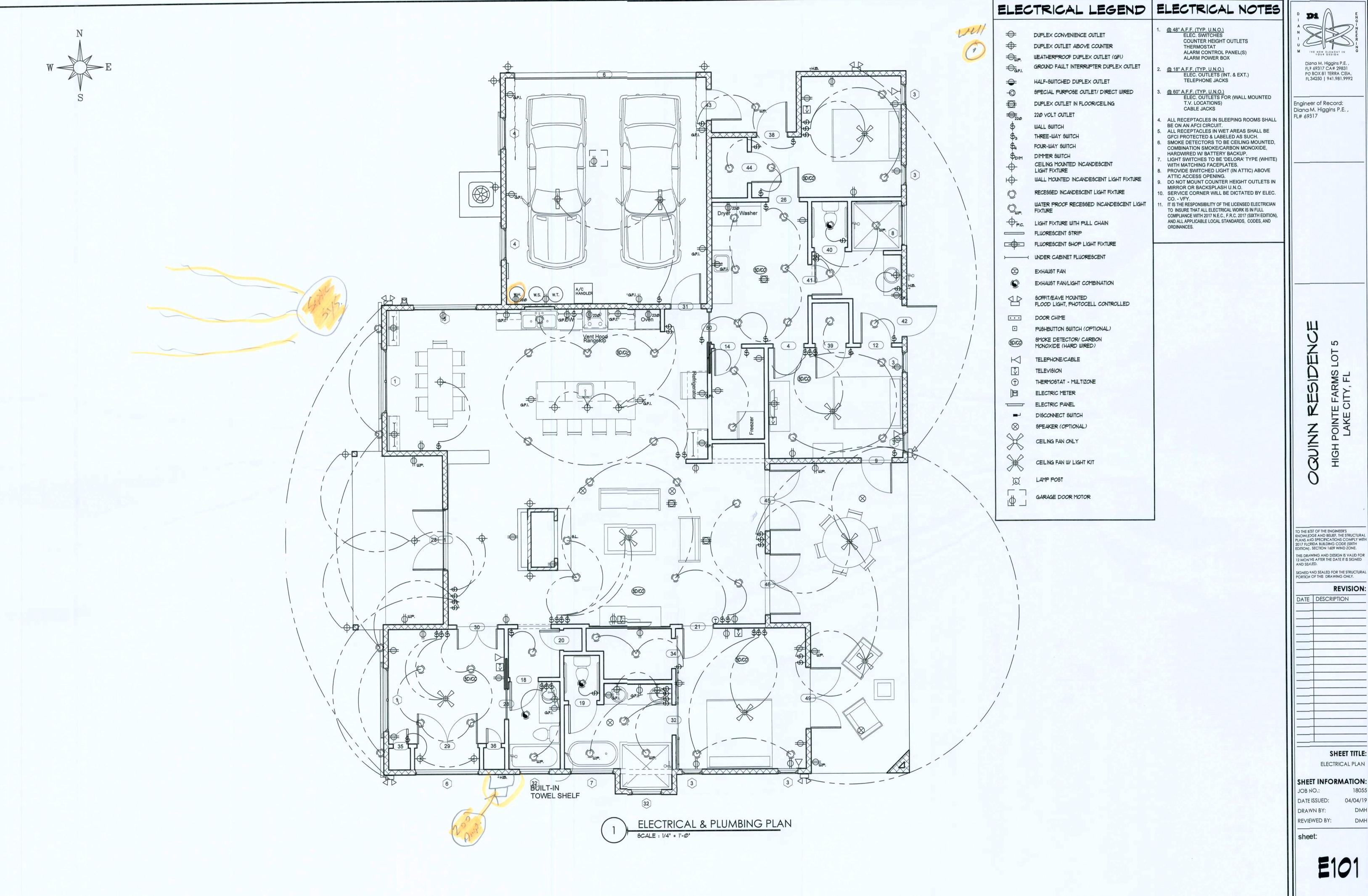
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DRAWN BY: DMH

REVIEWED BY: DMH

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Diana M. Higgins P.E. , FL# 69317 CA# 29831 PQ BOX 81 TERRA CEIA, FL34250 | 941.981.9992

TO THE BEST OF THE ENGINEER'S
KNOWLEDGE AND BELIEF, THE STRUCTURAL
PLANS AND SPECIFICATIONS COMPLY WITH
2017 FLORIDA BUILDING CODE (SIXTH
EDITION), SECTION 1609 WIND ZONE. THIS DRAWING AND DESIGN IS VALID FOR 12 MON'HS AFTER THE DATE IT IS SIGNED AND SEALED.

SIGNED AND SEALED FOR THE STRUCTURAL PORTION OF THIS DRAWING ONLY.

SHEET TITLE:

ELECTRICAL PLAN

04/04/19

# CODE REFERENCES/SPECIFICATIONS

# GENERAL REQUIREMENTS:

- THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE DRAWINGS OF ALL OTHER DISCIPLINES AND THEIR SPECIFICATIONS. THE CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF OTHER TRADES AS TO SLEEVES, CHASES HANGERS, INSERTS, ANCHORS, HOLES, AND OTHER ITEMS TO BE PLACED OR SET IN THE STRUCTURAL WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL SAFETY PRECAUTIONS AND OSHA REGULATIONS DURING WORK. THE ENGINEER WILL NOT ADVISE ON NOR ISSUE DIRECTION AS TO SAFETY PRECAUTIONS AND PROGRAMS.
- THE STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE METHODS OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY SUPPORT UNTIL ALL STRUCTURAL WORK IS COMPLETED AND INSPECTED,
- DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO THE APPROVAL BY THE EOR.
- LOADING APPLIED TO THE STRUCTURE DURING THE PROCESS OF CONSTRUCTION SHALL NOT EXCEED THE SAFE LOAD CARRYING CAPACITY OF THE STRUCTURAL MEMBERS. THE LIVE LOADING USED IN THE DESIGN OF THE STRUCTURE IS INDICATED IN THE "DESIGN CRITERIA LOADS" SECTION. DO NOT APPLY ANY CONSTRUCTION LOADS UNTIL ALL TEMPORARY BRACING IS IN
- 6. DRAWINGS ARE SIGNED AND SEALED FOR THE STRUCTURAL PORTION ONLY.

# CONSTRUCTION/DESIGN:

- 2017 FLORIDA BUILDING CODE, 2017 FLORIDA BUILDING CODE: RESIDENTIAL AND 2017 FLORIDA BUILDING CODE: EXISTING STRUCTURES.
- AMERICAN CONCRETE INSTITUTE (ACI 318-11), BUILDING CODE REQUIREMENTS FOR STRUCTURAL
- 3. MANUAL OF STANDARD PRACTICE, CONCRETE REINFORCING STEEL INSTITUTE (CRSI).
- 4. AMERICAN CONCRETE INSTITUTE (ACI 530-11), BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES.
- NATIONAL DESIGN SPECIFICATIONS (NDS 2012) FOR WOOD CONSTRUCTION AND ACCOMPANYING STANDARDS.
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) 14TH EDITION FOR ALL STEEL OR STEEL RELATED COMPONENTS.
- TRUSS PLATE INSTITUTE (TPI-08), DESIGN SPECIFICATIONS FOR LIGHT METAL PLATE CONNECTORS
- BUILDING COMPONENT SAFETY INFORMATION BCSI 2008, GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING AND BRACING OF METAL PLATE CONNECTED WOOD TRUSSES.
- 9. AMERICAN PLYWOOD ASSOCIATION (APA).
- 10. AMERICAN SOCIETY OF CIVIL ENGINEERS/STRUCTURAL ENGINEERING INSTITUTE (ASCE 7-10)

# SHOP DRAWINGS

- THERE SHALL BE NO DEVIATIONS FROM THESE DESIGN PLANS BY OTHERS DURING THE PREPARATION OF SHOP DRAWINGS WITHOUT THE WRITTEN APPROVAL FROM THE ENGINEER OF
- 2. ALL SHOP DRAWINGS ARE TO BE SUBMITTED TO THE ENGINEER OF RECORD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- 3. ALL ROOF AND FLOOR FRAMING SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER AND SHALL INCLUDE THE FOLLOWING: DRAWINGS AND CALCULATIONS, REACTIONS AND BEARING POINTS, BRACING REQUIREMENTS AND CONNECTIONS TO SUPPORTING TRUSS MEMBERS.
- 4. ALL STEEL SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER AND SHALL INCLUDE DRAWINGS AND CALCULATIONS.

# II. DESIGN CRITERIA LOADS

# DEAD/LIVE LOADS:

TYPE	DEAD LOAD, DL	LIVE LOAD, LL	
UNIT WEIGHT OF SOIL	120 PCF	NA	
UNIT WEIGHT OF REINFORCED CONCRETE	150 PCF	NA	
UNIT WEIGHT OF CMU BLOCK	105 PCF	NA	
FRAME WALLS:			
UNIT WEIGHT OF 2 x 4 FRAME WALL	11 PSF	NA	
UNIT WEIGHT OF 2 x 6 FRAME WALL	12 PSF	NA	
BALCONIES:			
NOT EXCEEDING 100 ff2	15 PSF	60 PSF	
EXCEEDING 100 ft2	15 PSF	100 PSF	
DECKS	15 PSF	60 PSF	
TILE ROOF	35 PSF	20 PSF	
SHINGLE/METAL ROOF	20 PSF	20 PSF	
OTHER ROOF SYSTEM	50 PSF	20 PSF	
FLOOR (RESIDENTIAL)	15 PSF	40 PSF	
FLOOR (ALL OTHER)	15 PSF	100 PSF	
SIDEWALK & DRIVEWAYS	NA	250 PSF & 8000 LBS	
GARAGE LOADS	15 PSF	50 PSF	
STAIRWAYS & LANDINGS (RESIDENTIAL)	15 PSF	40 PSF	
STAIRWAYS & LANDINGS (COMMERCIAL)	15 PSF	100 PSF	

PERMISSIBLE WITH THE EXCEPTION OF FIRE ESCAPES AND STAIRWELLS.

- HANDRAIL ASSEMBLIES AND GUARDS SHALL BE DESIGNED TO RESIST A LOAD OF 50 PLF APPLIED IN ANY DIRECTION AT THE TOP AND TO TRANSFER THIS LOAD THROUGH THE SUPPORTS TO THE STRUCTURE.
- HANDRAIL ASSEMBLIES AND GUARDS SHALL BE ABLE TO RESIST A SINGLE CONCENTRATED LOAD OF 200 POUNDS APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP, AND HAVE ATTACHMENT DEVICES AND SUPPORTING STRUCTURE TO TRANSFER THIS LOADING TO APPROPRIATE STRUCTURAL ELEMENTS OF THE BUILDING.
- IT IS NOT REQUIRED THAT THE LOADS IN SECTIONS |  $\pm$  2 BE APPLIED SIMULTANEOUSLY, BUT EACH SHALL BE APPLIED TO PROVIDE THE MAXIMUM STRESSES IN THE MEMBER COMPONENTS. ONLY SECTION | APPLIES TO RESIDENTIAL STRUCTURES.

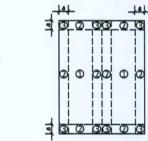
# II. DESIGN CRITERIA LOADS (CONT.)

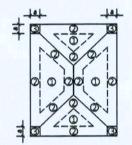
## WIND LOADS:

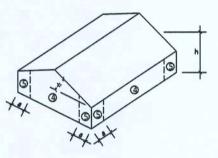
- 1. WIND DESIGN IS BASED ON THE 2017 FBC AND ASCE 7-10.
- 2. ALL OPENINGS AND BUILDING COMPONENTS SHALL CONFORM TO THE ALLOWABLE STRESS DESIGN PRESSURES LISTED IN THE TABLES, IN PSF, PER SQUARE FOOTAGE OF OPENING.
- 3. ROUND DOWN FOR WINDOWS/DOORS FALLING IN BETWEEN THE ABOVE-VALUES IN SECTION 2. 4. NET UPLIFT PRESSURE SHALL NOT BE LESS THAN 16 PSF (10 PSF ASD).

WALL	Area (ft2)	10		20		50		100	
Zone 4	p (psf) =	19.55	-21.20	17.89	-20.38	17.06	-19.55	16.23	-17.89
Zone 5	p (psf) =	19.55	-26.17	17.89	-24.52	17.06	-22.03	16.23	-20.38
ROOF	Area (ft2)	10		20		50		100	
ROOF	Area (ft2)	10	47.00	20	17.00	50	17.06	100	16.22
ROOF Zone 1	Area (ft2) p (psf) =	10 11.26	-17.89	20 9.61	-17.89	50 10.44	-17.06	100 7.95	-16.23
			-17.89 -31.14		-17.89 -28.66		-17.06 -25.35	_	-16.23 -22.86

OVERHANG	Area (ft2)	10	20	50	100	
Zone 1	p (psf) =					
Zone 2	p (psf) =	-39.43	-39.43	-39.43	-39.43	
Zone 3	p (psf) =	-64.27	-57.65	-51.02	-44.40	







# DEFLECTION CRITERIA

DEFLECTION DESIGN IS BASED ON THE 2017 FBC. REFER TO THE TABLE BELOW FOR THE ALLOWABLE DEFLECTION OF STRUCTURAL MEMBERS.

	ALLOWABLE DEFLECTION			
CONSTRUCTION	LL	W & S	LL + DI	
Roof members:				
Supporting plaster ceiling or stucco ceiling	L/360	L/360	L/240	
Supporting nonplaster ceiling	L/240	L/240	L/180	
Not supproting ceiling	L/180	L/180	L/120	
Members supporting screen surface	- 1	_	L/60	
Floor members	L/360	_	L/240	
Exteropr walls and interior patitions:				
With plaster or stucco finishes	-	L/360	-	
With brittle finishes	- :	L/240	-	
With flexible finishes		L/120	-	

# III. GENERAL STRUCTURAL NOTES:

- 1. ALL CONCRETE PLACEMENTS SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS: ACI 318-11 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI 301-10, SPECIFICATIONS FOR STRUCTURAL CONCRETE, ACI 305-10, HOT WEATHER CONCRETING, AND 2017 FLORIDA BUILDINGS
- 2. CONCRETE MIX SHALL BE DESIGNED PER ACI 3 | 8- | |, USING PORTLAND CEMENT CONFORMING TO ASTM C | 50. AGGREGATE CONFORMING TO ASTM C33 AND ADMIXTURES CONFORMING TO ASTM C494, C | 0 | 7, C260, C6 | 8, AND C989. READY MIX CONCRETE SHALL CONFORM TO ASTM C94. 2. I. CEMENT MIX SHALL CONFORM TO THE FOLLOWING TYPES:
- 2.1.1. TYPE 1: GENERAL CONSTRUCTION MOST BUILDINGS, BRIDGES, PAVEMENTS, PRECAST UNITS. NCE - STRUCTURES EXPOSED TO SOIL OR WATER
- CONTAINING SULFATE IONS 2.1.3. TYPE III: HIGH EARLY STRENGTH - RAPID CONSTRUCTION, COLD WEATHER CONCRETING. 2.1.4. TYPE IV: LOW HEAT OF HYDRATION (SLOW REACTING) - MASSIVE STRUCTURES SUCH AS DAMS. 2.1.5. TYPE V: HIGH SULFATE RESISTANCE - STRUCTURES EXPOSED TO HIGH LEVELS OF SULFATE IONS.
- 2. I.G. WHITE: WHITE COLOR DECORATIVE 3. THE NOMINAL MAXIMUM SIZE OF COARSE AGGREGATE SHALL NOT EXCEED 3/4" FOR CONCRETE. GROUT SHALL CONSIST OF PEAROCK WITH MAXIMUM SIZE AGGREGATE OF 3/8".

# 4. CONCRETE SHALL CONFORM TO THE FOLLOWING COMPRESSIVE STRENGTH AND SLUMP INDICATED

TYPE	Fc @ 28 DAYS	MAX SLUMP (in)
COLUMNS	5000	3" TO 5"
ELEVATED SLABS	5000	3" TO 5"
FOOTINGS	3000	3" TO 5"
SLABS-ON-GRADE	3000	3" TO 5"
TIE BEAMS	3000	4" TO 6"
BOND BEAMS	3000	8" TO 11"

- 5. ALL REINFORCING STEEL SHALL CONFORM TO ASTM AG | 5 GRADE GO OR A70G GRADE GO FOR USE IN
- 6. ALL WELDED WIRE FABRIC (WWF)SHALL CONFORM TO ASTM A I 85 WITH A MINIMUM YIELD STRENGTH OF 65 KSI. ASTM A82 MAYBE SUBSTITUTED.
- 7. ALL REINFORCING STEEL SHALL BE SET AND TIED IN PLACE PRIOR TO POURING OF CONCRETE. EXCEPT IN MASONRY VERTICAL DOWELS, WHICH MAY BE 'FLOATED IN PLACE".

8. INDICATED CONCRETE TYPES SHALL BE PROPORTIONED FOR A MAXIMUM WATER CEMENT RATIO OF 0.45.

- 9. EXTERIOR CONCRETE SHALL HAVE AN AIR CONTENT FOR AIR ENTRAINED OF 6% FOR SEVER EXPOSURE CONDITIONS AND 5% FOR MODERATE CONDITIONS AS DEFINED BY ASTM C94.
- 10. ALL CONCRETE SHALL HAVE ALLOWABLE UNIT SHRINKAGE OF 0.03% AT 28 DAYS (ASTM C | 57).
- DISCHARGING CONCRETE IS 90 MINUTES. NO WATER SHALL BE ADDED ON SITE.
- 12. HOOKS, BENDS AND LAPSPLICES FOR REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ACI 318-11 REFER TO THE TABLES FOR REQUIREMENTS.

4.5

BAR	LAPSPLICE LENGTH "L" (in)
#3	15
#4	20
#5	25
#6	30
#7	35



Г	#3	2.5	2.25
	#4	2.5	3
	#5	2.5	3.75
	#6	3	4.5
	#7	3.5	5.25
_			
	BAR	STD. 90 "L" (in)	HOOK Ø (ın)
	#3	6	2.25



STANDARD 90° HOOK DETAIL

# III. GENERAL STRUCTURAL NOTES (CONT):

# CONCRETE (CONT.)

- 9. UNLESS OTHERWISE NOTED, STEEL CLEAR COVERS IN CONCRETE SHALL BE AS FOLLOWS:
  - A. CONCRETE WALLS EXPOSED TO WEATHER, #11 BARS AND SMALLER 3/4",
  - B. CONCRETE EXPOSED TO EARTH, 3",
  - C. CONCRETE BEAMS OR COLUMNS NOT EXPOSED TO EARTH OR WEATHER, 1.5" FOR MAIN REINFORCING STEEL AND 3/8" FOR TIES, STIRRUPS AND SPIRALS.
- 10. BAR SUPPORTS AND HOLDING BARS SHALL BE PROVIDED FOR ALL REINFORCING STEEL TO ENSURE MINIMUM CONCRETE COVER IS SATISFIED. BAR SUPPORTS FOR CONCRETE FOOTERS/SLABS ON GRADE SHALL SATISFY CRSI MANUAL CLASS 3 REQUIREMENTS. ALL OTHERS SHALL SATISFY CLASS I
- II. FORMWORK SHALL REMAIN IN PLACE UNTIL 90% OF IT'S COMPRESSIVE STRENGTH ITS OBTAINED. CONTRACTOR TO PROVIDE SHORING AND RESHORING.

- 1. ALL WOOD PLACEMENTS SHALL BE IN ACCORDANCE WITH 2012 NDS STANDARDS.
- 2. WOOD CONNECTIONS AND NAILING REQUIREMENTS SHALL CONFORM TO THE 2017 FBC, FASTENING SCHEDULE AND 2012 NDS REQUIREMENTS, U.N.O. REFER TO THE FASTENING ON THIS SHEET FOR
- 3. ALL WOOD FRAMING MATERIAL SHALL BE SURFACED DRY AND USED AT 19% MAXIMUM MOISTURE
- 4. ALL LOAD BEARING WALLS, EXTERIOR WALLS, SHALL BE SPRUCE PINE FIR #2.
- 5. JOIST AND RAFTERS SHALL BE FRAMED WITH SOUTHERN YELLOW PINE #2 LUMBER.
- 6. SOUTHERN YELLOW PINE SHALL CONFORM TO THE DESIGN PROPERTIES:

	ALL VALUES ARE IN PSI			
SIZE	Fb	Fv	Fc	E
2 x 4	1100	175	1450	1400000
2 x 6	1000	175	1400	1400000
2 x 8	925	175	1350	1400000
2 x 10	800	175	1300	1400000
2 x 12	750	175	1250	1400000

- 7. ALL FRAMING EXPOSED TO WEATHER OR IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE-TREATED IN ACCORDANCE WITH THE AMERICAN WOOD PRESERVERS ASSOCIATION
- 8. ALL INTERIOR NON-LOAD BEARING WALLS SHALL BE FRAMED WITH SPF "STUD GRADE" OR BETTER, F'b = 675 PSI (MIN).
- 9. BOLT HEADS SHALL BE CAREFULLY CENTERED AND DRILLED NOT MORE THAN 1/16" LARGER THAN THE
- 10. BOLTED CONNECTIONS SHALL BE SNUG TIGHT BUT NOT TO THE EXTENT OF CRUSHING THE WOOD
- II. PREFABRICATED "MICOR-LAM" LUMBER HEADERS AND BEAMS SHALL BE MANUFACTURED BY "TRUSS JOIST MacMILLIAN
- 12. PREFABRICATED METAL JOIST, HANGERS, HURICANE CLIPS, HOLD-DOWN ANCHORS AND OTHER ACCESSORIES SHALL BE "SIMPSON STRONG TIE COMPANY" OR EQUAL. INSTALL ALL ACCESSORIES AS PER THE MANUFACTURER'S REQUIREMENTS.
- 13. MIRCO-LAM LUMBER SHALL CONFORM TO THE FOLLOWING PROPERTIES:
  - E = 2,000,000 PSIFb = 2950 PSI
  - Ft= 1850 PSI
  - Fc= 500 PSI (PERPENDICULAR) Fc= 2700 PSI (PARALLEL)

CORP", BOISE IDAHO, OR APPROVED EQUAL.

Fv = 285 PSI

- I. ALL MASONRY CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 530-11 AND 5TH EDITION (2017) FLORIDA BUILDING CODE.
- 2. HOLLOW LOAD-BEARING MASONRY UNITS SHALL CONFORM TO ASTM C-90 AND BE CONSTRUCTED USING NORMAL WEIGHT AGGREGATE. MASONRY UNITS SHALL SATISFY A MINIMUM COMPRESSIVE STRENGTH, F'm = 1900 PSI AS DETERMINED BY THE STRENGTH METHOD OF ACI 530.
- 3. FILL ALL BOND BEAMS AND REINFORCED CELLS SOLIDLY WITH 3000 PSI GROUT. GROUT SHALL CONFORM TO ASTM C-476 AND SHALL OBTAIN A MIN 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI. GROUT STOPS ARE TO BE MESHED OR SCREENED TYPE, FELT PAPER IS NOT PERMITTED.
- 4. ALL REINFORCING STEEL SHALL CONFORM TO ASTM AG | 5 GR. GO OR A706 GR. GO FOR USE IN
- 5. HOOKS, BENDS, AND LAPSPLICES FOR REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ACI 318-11. REFER TO THE LAPSPLICE TABLE AND HOOK REQUIREMENTS IN THE CONCRETE SECTION FOR ADDITIONAL INFORMATION.
- 6. MIORIAR SHALL CUNTURY TO ASTIVI C-2/0, TITL IVI, 3, OK N. ALL MORTAR SHALL MEET THE "PROPORTION SPECIFICATION" OF ASTM C-270 AND EVALUATED IN ACCORDANCE WITH ASTM

7. UNLESS OTHERWISE NOTED, ALL WALLS SHALL BE LAYED IN RUNNING BOND. BOND CORNERS AND

- INTERSECTIONS OF ALL WALLS. 8. PROVIDE VERTICAL REINFORCING BARS OF THE GIVEN SIZE AND SPACING AS INDICATED PER PLAN.
- PROVIDE VERTICAL REINFORCING BARS AT ALL WALL CORNERS, INTERSECTIONS, OPENING EDGES AND MASONRY STEPS (HIGHER SIDE). PROVIDE CLEANOUTS FOR EACH GROUT POUR EXCEEDING 5FT. VERTICAL REINFORCEMENT SHALL NOT EXCEED THE SPACING INDICATED ON THE STRUCTURAL
- 9. PROVIDE PRECAST LINTELS ABOVE ALL WALL OPENING INCLUDING HVAC DUCTS. SEE DRAWINGS FOR LOCATIONS AND SIZE.
- 10. ALL MASONRY WALLS MUST BE BRACED PRIOR POURING THE BOND BEAMS AND VERTICAL REINFORCING CELLS.
- 12. ALL MASONRY WALLS GREATER 10 FT SHALL BE CONSTRUCTED WITH A DOUBLE BOND BEAM FILLED SOLID WITH GROUT AND (1) #5 CONT. IN EACH.

# III. GENERAL STRUCTURAL NOTES (CONT):

# PRE-ENGINEERED WOOD TRUSSES:

PRE-ENGINEERED WOOD TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER TO SUPPORT THE FOLLOWING LOADS:

> SHINGLE/METAL ROOF LOADING TOP CHORD LOADING: LIVE LOAD 20 PSF DEAD LOAD 10 PSF

> > BOTTOM CHORD LOADING: ATTIC LIVE LOAD 10 PSF ATTIC LIVE LOAD W/ STORAGE 30 PSF DEAD LOAD 10 PSF

TILE ROOF LOADING TOP CHORD: LIVE LOAD 20 PSF DEAD LOAD 35 PSF

> BOTTOM CHORD LOADING: ATTIC LIVE LOAD 10 PSF ATTIC LIVE LOAD W/ STORAGE 30 PSF DEAD LOAD 10 PSF

LIVE LOAD 40 PSF DEAD LOAD 15 PSF

FLOOR LOADING

WIND LOADING TRUSSES SHALL BE DESIGNED FOR WIND LOADING SET FORTH IN ASCE 7-10 PER THE REQUIRED DESIGN CRITERIA INDICATED IN THE DRAWINGS. NET UPLIFT PRESSURE SHALL NOT BE LESS THAN 16 PSF (10 PSF ASD).

- 2. WOOD TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE LATEST EDITION OF THE "NDS" NATIONAL DESIGN SPECIFICATIONS FOR WOOD.
- CONSTRUCTION, ANSI/AF & PA AND THE NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION "ANSI/TPI".
- 4. WOOD MATERIALS SHALL BE S.Y.P. #2 AND SURFACED DRY AND USED AT 19% MAXIMUM MOISTURE CONTENT.
- CONNECTOR PLATES SHALL BE NOT LESS THAN 0.036" (20 Ga.) IN COATED THICKNESS AND SHALL MEET OR EXCEED ASTM AG53 GRADE 33 OR HIGHER AND SHALL BE HDG ACCORDING TO ASTM A-525 (COATING GGO).
- THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY AND PERMANENT BRACING AS REQUIRED FOR SAFE ERECTION AND PERFORMANCE OF THE TRUSS. THE GUIDELINES SET FORTH BY THE LATEST TRUSS PLATE INSTITUTION PUBLICATION, COMMENTARY AND RECOMMENDATIONS FOR HANDLING, INSTALLING AND BRACING METAL PLATE CONNECTED WOOD TRUSSES SHALL BE A MINIMUM
- 7. TRUSS MEMBERS AND COMPONENTS SHALL NOT BE CUT, NOTCHED, DRILLED NOR OTHERWISE ALTERED IN ANY WAY W/O THE WRITTEN APPROVAL OF THE TRUSS MANUFACTURER'S ENGINEER.
- 8. SUBMIT COMPLETE SHOP DRAWINGS FOR ALL WOOD TRUSSES SHOWING MEMBER SIZES, SPANS, DIMENSIONS, CHORD PITCH, LOADING AND REACTIONS. SHOP DRAWINGS SHALL BE SUBMITTED TO THE EOR AND SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA.
- 9. IF THE NET UPLIFT FORCES SHOWN ON THE FINAL ENGINEERED TRUSS CALCULATION ARE GREATER THAN THE CAPACITY OF THE SPECIFIED CONNECTOR, THE EOR SHALL SUPPLY CONNECTORS TO MEET THOSE UPLIFT FORCES.

# PLYWOOD SHEATHING NOTES:

- . ALL PLYWOOD CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE AMERICAN PLYWOOD ASSOCIATION (APA) SPECIFICATIONS.
- 2. ALL ROOF PANEL SHEATHING SHALL BE APA SPAN RATED SHEATHING SIZED PER THE TABLE IN THE SCHEDULES SHEET. SUITABLE EDGE SUPPORT SHALL BE PROVIDED BY USE OF PANEL CLIPS OR BLOCKING BETWEEN FRAMING. REFER TO NAILING SCHEDULE FOR ATTACHMENT REQUIREMENTS.
- 3. INSTALL ALL PLYWOOD SHEATHING WITH THE LONG DIMENSION OF THE PANEL ACROSS SUPPORTS AND WITH THE PANEL CONTINUOUS OVER TWO OR MORE SPANS. STAGGER PANEL END JOINTS. ALLOW 1/8" SPACING AT PANEL ENDS AND EDGES UNLESS OTHERWISE NOTED.
- 4. ALL NAILING SHALL BE CAREFULLY DRIVEN AND NOT OVERDRIVEN. THE USE OF STAPLES ARE PROHIBITED. MINIMUM EDGE DISTANCE FOR NAILS IS  $4 \times D$  OR  $\frac{1}{2}$ " WHICHEVER IS GREATER, WHERE D = NAIL DIAMETER.

- I. ANCHOR BOLTS ARE DEFINED AS THE FOLLOWING TYPES: J-BOLTS, L-BOLTS, WEDGE BOLTS, AND HEAVY SCREW ANCHORS.
- 2. WHERE NO SPECIFIC TYPE OF ANCHOR IS SPECIFIED, ALL TYPES OF ANCHORS ARE ACCEPTABLE.
- 3. WHERE SPECIFIC ANCHORS ARE SPECIFIED, NO SUBSTITUTION SHALL BE ALLOWED WITHOUT THE WRITTEN CONSENT OF THE STRUCTURAL ENGINEER.
- 4. THE USE OF WEDGE BOLTS IN CMU IS PROHIBITED UNLESS WRITTEN CONSENT BY THE EOR HAS
- BEEN PROVIDED. 5. REFERENCE DETAIL BELOW FOR DIFFERENT TYPE OF ANCHORS.









CIP ANCHOR

# STRUCTURAL STEEL

- I. A CERTIFIED TESTING AGENCY SHALL BE ENGAGED TO PERFORM INDUSTRY STANDARD INSPECTIONS TO ENSURE CONFORMANCE WITH PLANS AND SPECIFICATIONS. ALL STEEL PLACEMENT SHALL BE IN ACCORDANCE WITH AISC 14TH EDITION, OSHA STANDARDS AND ALL OTHER APPLICABLE BUILDING CODES. SUBMIT REPORTS TO ARCHITECT AND ENGINEER.
- 2. UNLESS OTHERWISE NOTED, ALL MATERIAL SHALL BE IN ACCORDANCE WITH THE FOLLOWING ASTM SPECIFICATIONS:

MEMBER	ASTM	MIN. YIELD STRENGTH
RECTANGULAR HSS	A500 GR. B	46 KSI
ROUND HSS	A500 GR. B	42 KSI
STEEL PIPE	A53 (TYPE E, GR. B)	35 KSI
OTHER SHAPES/PLATES	A36	36 KSI
CONNECTION BOLTS	A325	92 KSI
ANCHOR BOLTS	A307	
THREADED RODS	A36	36 KSI
HEADED STUDS	A108	50 KSI

# III. GENERAL STRUCTURAL NOTES (CONT):

CERTIFIED WELDER IN ACCORDANCE WITH AWS STANDARDS.

- 3. ALL CONNECTIONS SHALL BE SHEAR TYPE CONNECTIONS AND DESIGNED BY THE FABRICATOR BASED ON THE AISC MANUAL. SHOP DRAWINGS AND CALCULATIONS.
- 4. DETAILED SHOP DRAWINGS OF ALL STRUCTURAL STEEL, STEEL JOISTS, STEEL DECKING AND MISCELLANEOUS STEEL SHALL BE SUBMITTED AND SIGNED AND SEALED BY A REGISTERED FLORIDA
- PROFESSIONAL ENGINEER PRIOR TO FABRICATION. 5. ALL WELDING SHALL BE IN ACCORDANCE WITH AWS DI.I USING ETOXX ELECTRODES. UNLESS OTHERWISE NOTED, PROVIDE CONT. MIN SIZED FILLET WELDS PER AISC REQUIREMENTS. ALL FILLER

MATERIAL SHALL HAVE A MINIMUM YIELD STRENGTH OF 58 KSI. ALL WELDING SHALL BE DONE BY A

- 6. HOLES IN STEEL FOR OTHER TRADES SHALL BE DRILLED OR PUNCHED AND DETAILED ON THE SHOP DRAWINGS. ALL SLOTTED HOLES SHALL BE PROVIDED WITH SMOOTH EDGES. BURNING OF HOLES AND | FL# 69317 TORCH CUTTING AT THE SITE IS NOT PERMITTED.
- 7. COLUMNS, ANCHOR BOLTS, BASE PLATES, ETC. HAVE BEEN DESIGNED FOR THE FINAL COMPLETED CONDITION AND HAVE NOT BEEN INVESTIGATED FOR POTENTIAL LOADINGS ENCOUNTERED DURING STEEL ERECTION AND CONSTRUCTION. THE CONTRACTOR IS TO VERIFY ADEQUACY OF THE STEEL
- 8. UNLESS OTHERWISE NOTED, ALL STRUCTURAL STEEL PERMANENTLY EXPOSED TO THE WEATHER, INCLUDING ALL BRICK SHELF ANGLES SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM
- 9. PREFABRICATED METAL JOIST, HANGERS, HURRICANE CLIPS, HOLD-DOWN ANCHORS AND OTHER ACCESSORIES SHALL BE "SIMPSON STRONG TIE COMPANY" OR EQUAL. INSTALL ALL ACCESSORIES AS PER THE MANUFACTURER'S REQUIREMENTS.
- 10. PROVIDE FULL DEPTH BEARING STIFFENERS EACH SIDE OF THE BEAM WEB AT ALL SUPPORTS AND CONCENTRATED LOADS U.N.O. THICKNESS OF STIFFENERS SHALL MATCH THAT OF BEAM WEB (MIN. 1/4") U.N.O. FILLET WELD BOTH SIDES OF STIFFENER, ALL AROUND.
- I. STEEL SHALL BE PROPERLY SHOP PRIMED/PAINTED UNLESS EMBEDDED IN CONCRETE, COVERED WITH SPRAY-ON FIREPROOFING, OR WITHIN 2-INCHES OF AREAS REQUIRING FIELD WELDING. PRIMING AND PAINTING OF ALL FIELD WELDS IS REQUIRED AFTER APPROVED INSPECTION AND AFTER WELDS OF EXPOSED STEEL HAVE BEEN GROUND SMOOTH. FIELD TOUCH-UP OF PAINT IS REQUIRED.
- 12. PRIOR TO ERECTION, THE CONTRACTOR SHALL REMOVE ALL FOREIGN MATTER WHICH HAS ACCUMULATED ON THE STEEL DURING HANDLING AND STORAGE.
- 13. DRIFTING TO ENLARGE UNFAIR HOLES SHALL NOT BE PERMITTED. DRILL SUCH HOLES TO ACCOMMODATE THE NEXT LARGER FASTENER SIZE, WHERE POSSIBLE.
- 14. ERECT ALL MEMBERS IN THEIR FINAL LOCATION SUCH THAT LEVEL, PLUMBNESS, AND ALIGNMENT ARE WITHIN AISC TOLERANCES.
- I5. STANDARD NON-SLOPED AND NON-SKEWED SHEAR CONNECTIONS HAVE BEEN DESIGNED AND THE NECESSARY INFORMATION MAY BE FOUND IN THE DETAILS. THE SERVICE REACTIONS HAVE BEEN PROVIDED AT EACH END OF EACH MEMBER SHOULD THE FABRICATOR DECIDE TO RE-ENGINEER THE CONNECTIONS TO THEIR PREFERENCES. SHOULD THE FABRICATOR DECIDE TO RE-ENGINEER THE CONNECTIONS, THEY MUST PROVIDE SUBMITTALS THAT HAVE BEEN PREPARED AND SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE SAME STATE AS THE PROJECT LOCATION. ALL OTHER NON-STANDARD CONNECTIONS SHALL BE DESIGNED AND DETAILED BY FABRICATOR'S ENGINEER AND PROVIDE SIGN AND SEALED CONNECTION SUBMITTAL FOR REVIEW.

# IV. SITE PREPARATION/SOIL BEARING NOTES

THE BUILDING SHALL BE PREPARED AND TESTED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE SOILS ENGINEER.

2. ALLOWABLE SOIL BEARING PRESSURE SHALL BE 2000 PSF.

OR OTHERWISE DELETERIOUS MATERIAL.

- 3. MAXIMUM STRUCTURAL LOADS HAVE BEEN DESIGNED NOT TO EXCEED 3000 PLF FOR WALLS AND 50 KIPS FOR ISOLATED COLUMNS.
- 4. IF THE SITE PREPARATION REQUIREMENTS ARE NOT SPECIFIED BY A GEOTECHNICAL REPORT THE FOLLOWING PROCEDURES SHALL BE USED AS A MINIMUM: 4.1. EXCAVATE A MINIMUM OF 4" OF EXISTING SOIL WITHIN THE BUILDING AREA AND 5 FT BEYOND THE BUILDING LIMITS. REMOVE ALL ORGANICS, PAVEMENT, ROOTS, DEBRIS AND OTHERWISE
- UNSUITABLE MATERIAL. 4.2. THE SURFACE OF THE EXPOSED SUBGRADE SHALL BE INSPECTED FOR POCKETS OF SOFT SOIL OR UNSUITABLE MATERIAL. EXCAVATE UNSUITABLE SOIL AS DIRECTED BY THE GEOTECHNICAL
- 4.3. FILL ALL EXCAVATED AREAS WITH APPROVED CONTROLLED FILL. PLACE IN 8" LIFTS AND COMPACT TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY BASED ON THE MODIFIED PROCTOR TEST. 4.4. ALL CONTROLLED FILL MATERIAL SHALL BE A SELECT GRANULAR MATERIAL, FREE FROM ORGANICS

CONTROLLED FILL.

(2017) FLORIDA BUILDING CODE.

TERMITE PROTECTION: 1. ALL SOIL SHALL BE CLEAN AND POISONED FOR TERMITES PER SECTION 1816 OF THE 5TH EDITION

4.5. PROVIDE FIELD DENSITY TEST FOR EACH 1500 S.F. OF BUILDING AREA FOR EACH LIFT OF

2. A PERMANENT SIGN WHICH IDENTIFIES THE TERMITE TREATMENT PROVIDER AND NEED FOR RE-INSPECTION AND TREATMENT CONTRACT RENEWAL SHALL BE PROVIDED. THE SIGN SHALL BE POSTED NEAR THE WATER HEATER OR ELECTRIC PANEL.

3. TERMITE PROTECTION SHALL BE PROVIDED BY REGISTERED TERMICIDES, INCLUDING SOIL APPLIED PESTICIDES. BAITING SYSTEMS. AND PESTICIDES APPLIED TO WOOD, OR OTHER APPROVED METHODS

OF TERMITE PROTECTION LABELED FOR USE AS A PREVENTATIVE TREATMENT TO NEW CONSTRUCTION.

# Di THE NEW ELEMENT IT Diana M. Higains P.E.

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Engineer of Record: Diana M. Higgins P.E.,



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SHEET TITLE:

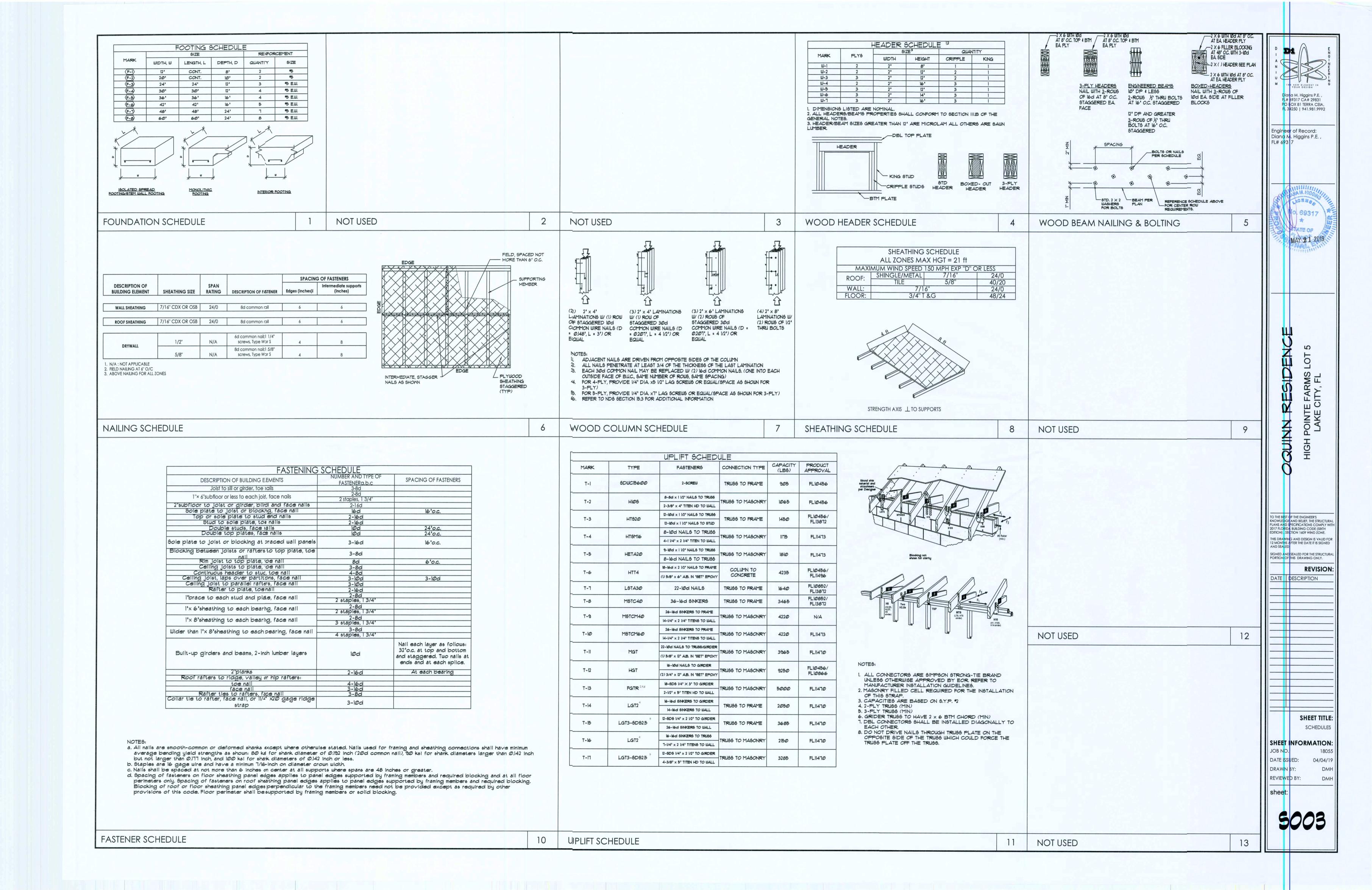
GENERAL NOTES

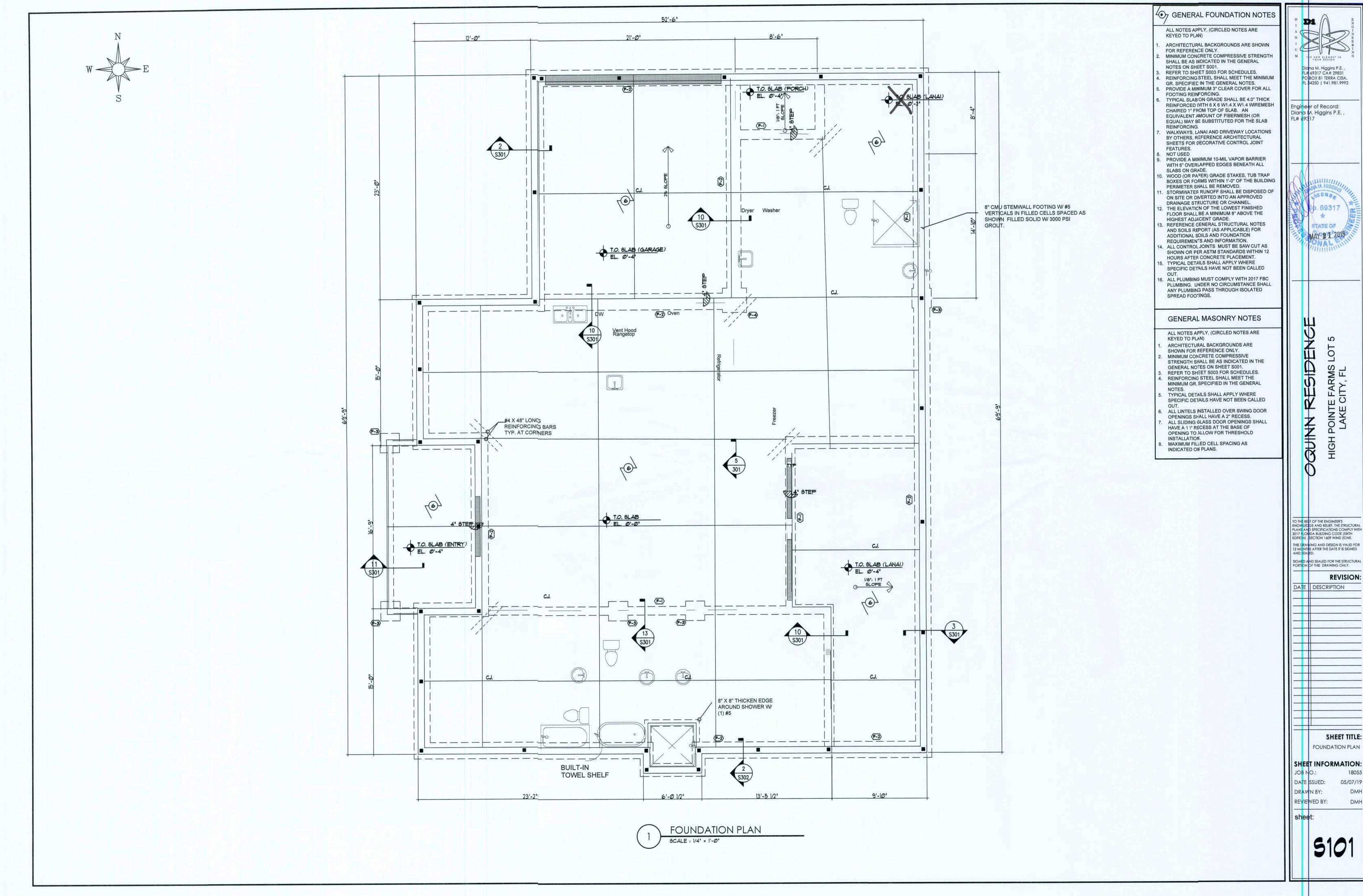
SHEET INFORMATION JOB NO .: DATE ISSUED: 04/04/19 DRAWN BY:

REVIEWED BY:

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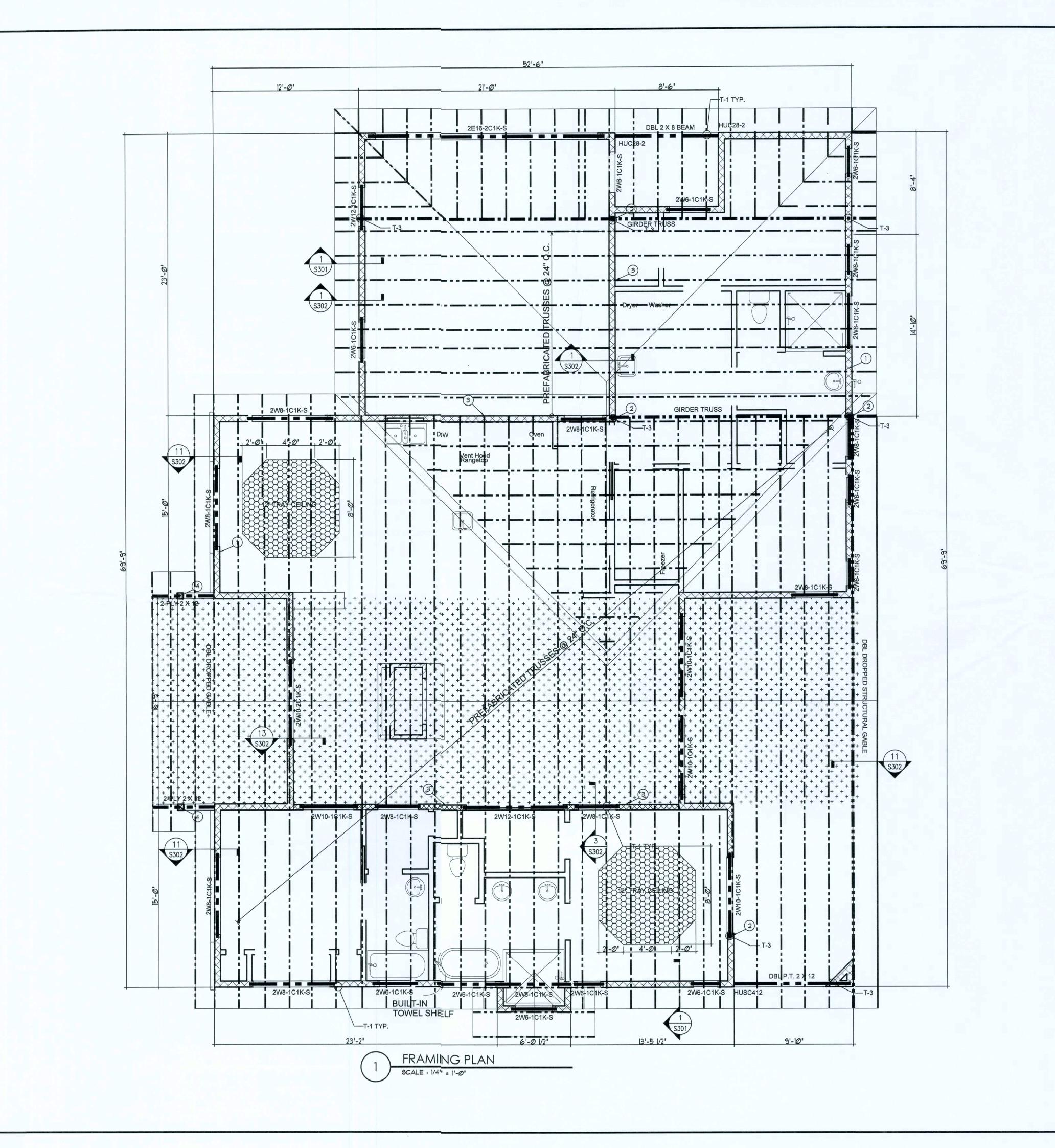
017 FLORIDA BUILDING CODE (SIXTH EDITION), SECTION 1609 WIND ZONE. THIS DRAWING AND DESIGN IS VALID FO 12 MONTHS AFTER THE DATE IT IS SIGNED SIGNED AND SEALED FOR THE STRUCTURA PORTION OF THIS DRAWING ONLY. **REVISION:** DATE DESCRIPTION





SHEET TITLE: FOUNDATION PLAN

05/07/19



GENERAL FLOOR PLAN NOTES

. REFERENCE SHEET S-003 FOR ALL

SCHEDULES. 2. X PLF INDICATES AXIAL TENSION OR

COMPRESSION DUE TO WIND APPLIED TO CHORD.

3. FINDICATES ADDITIONAL VERTICAL LOAD. 'D' INDICATES DEAD LOAD. 'L' INDICATES LIVE LOAD.

4. ALL EXTERIOR WALLS ARE CONSIDERED SHEAR WALLS. 5. REFER TO ARCHITECTURAL DRAWINGS

FOR DIMENSIONS NOT SHOWN. 6. ARCHITECTURAL BACKGROUNDS ARE SHOWN FOR REFERENCE ONLY.

7. MINIMUM REQUIREMENTS FOR CODE COMPLIANT CONSTRUCTION ARE SHOWN ON THE PLANS. 8. CONTRACTOR SHALL VERIFY ALL INFORMATION ON THIS ROOF FRAMING

PLAN AND REPORT ANY DISCREPANCIES TO STRUCTURAL ENGINEER FOR ADDITIONAL CONSIDERATION. 9. IT SHALL BE THE RESPONSIBILITY OF THE BUILDING OFFICIAL AND/OR THIRD PARTY INSPECTOR TO ENFORCE THAT

CONSTRUCTION IS IN COMPLIANCE WITH THE CODE AND WITH THESE PLANS. 10. GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS SHALL APPLY WHERE NO SPECIFIC DETAILS ARE CALLED OUT ON

THE PLANS. 11. REFERENCE GENERAL STRUCTURAL NOTES FOR ADDITIONAL INFORMATION.

12. INDICATE REQUIRED DESIGN WINDOW PRESSURES. 13. ALL FLOOD VENTS ARE SMART VENTS W/ A TOTAL SQ. OPENING OF 200 SQ. IN EA. SEE PLAN FOR LOCATIONS.

14. BEAM ANNOTATION EXAMPLE:

BEAM SIZE

15. B - #, DENOTES CIP BEAM, REFERENCE TABLE ON SHEET S003 FOR REINFORCING. 16. PRECAST LINTEL TAG: F=FILLED WITH GROUT /U = UNFILLED

QUANTITY 0" #5 FIELD ADDED
REBAR AT BOTTOM OF COMPOSITE
U-LINTEL CAVITY FOR GRAVITY QUANTITY OF #5 FIELD
ADDEC REBAR AT TOP
OF COMPOSITE U-LINTEL
FOR UPLIFT LOAD NOMINAL WIDTH

17. (#) T - XX DENOTES HURRICANE TIE DOWN CONNECTION. (#) T - XX QUANTITY

NUMBER REFERENCE SEE UPLIFT TABLE ----SCHEDULE ON S003 18. WOOD BEAM DENOTION W=WOOD/ E=ENGINEERED QUANTITY OF CRIPPLE (JACK) STUDS

PT = PRESSURE TREATED

S = STANDARD

2W12-1C1K-PT NO. OF PLYS NOMINAL DEPTH QUANTITY OF KING\_

# TRUSS FRAMING NOTES:

PRE-ENGINEERED WOOD TRUSSES

SPACED AS INDICATED ON PLANS. SEE FLOOR PLAN AND ELEVATIONS FOR ADDITIONAL ROOF INFORMATION. TRUSS MANUFACTURE SHALL EXACTLY MATCH THE PROPOSED TRUSS LAYOUT AND BEARING POINTS PROVIDED FOR THE STRUCTURE. FAILURE TO MATCH THE LAYOUT WILL RESULT IN ADDITIONAL

> COST FROM THE EOR TO THE CLIENT. ALL CONNECTIONS PER SIMPSON CATALOG (LATEST EDITION). CONTACT ENGINEER FOR ALTERNATE

CONNECTIONS. THE PRE-ENGINEERED TRUSS DRAWINGS HAVE NOT BEEN REVIEWED FOR THIS STRUCTURE. TRUSS DRAWINGS MUST BE SUBMITTED TO EOR PRIOR TO PLACEMENT OF FOUNDATION. FAILURE TO SUBMIT TRUSS ENGINEERING MAY RESULT IN COSTLY REPAIRS AND

PROJECT DELAYS. ALL TEMPORARY TRUSS BRACING SHALL BE CONSIDERED PERMANENT TRUSS BRACING. REFER TO THE TRUSS MANU. INSTALLATION INSTRUCTIONS FOR FINAL

PLACEMENT. THE USE OF TWIST TYPE STRAFS ARE STRICTLY PROHIBITED AS RETROFIT CONNECTORS IN THE EVENT EMBEDED CONNECTORS ARE NOT INSTALLED PROPERLY. PLEASE CONTACT EOR FOR ACCEPTABLE EQUIVALENT.

# \* STRUCT. KEYNOTES

2 X 6 EXT FRAME BEARING WALL WITH STUDS AT 16" O.C. AND 1/2" X 6" A.B. AT 32" O.C. PROVIDE 7/16" OSB OR CDX PLYWOOD SHEATHING TO EXTERIOR WALLS AND NAIL PER SCHEDULE.

(3) 2 X 6 SYP # 2 BUILT UP COLUMN W/ SIMPSON LTT19 AT BASE WITH 5/8" X 8" A.B. IN MIN. 5 1/2" EMBEDMENT INTO SIMPSON SET EPOXY OR 2 X 4/6 INTERIOR FRAME BEARING WALL WITH

GARAGE WALL IS 2 X 6. 6 x 6 P.T. POST W/ SIMPSON AC6 COLUMN CAP (4) AT TOP CONNECTION AND ABU63 AT BASE WITH 5/8" A.B. IN MIN. 5" EMBEDMENT INTO SIMPSON

SET EPOXY OR EQUAL. INDICATES VAULTED CEILING.
VAULT TRUSSES WITH 6:12 PITCH

3 STUDS AT 16" O.C. AND 1/2" X 6"A.B. AT 32" O.C.

INDICATES TRAY CEILING

Di

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STATE OF MAY 2 1 2019

TO THE BEST OF THE ENGINEER'S KNOWLEDGE AND BELIEF, THE STRUCTURA
PLANS AND SPECIFICATIONS COMPLY WIT EDITION), SECTION 1609 WIND ZONE

THIS DRAWING AND DESIGN IS VALID FOR 12 MONTHS AFTER THE DATE IT IS SIGNED SIGNED AND SEALED FOR THE STRUCTURA PORTION OF THIS DRAWING ONLY.

DATE DESCRIPTION

REVISION:

SHEET TITLE: FRAMING PLAN

SHEET INFORMATION:

JOB NO.: DRAWN BY:

REVIEWED BY: sheet:

