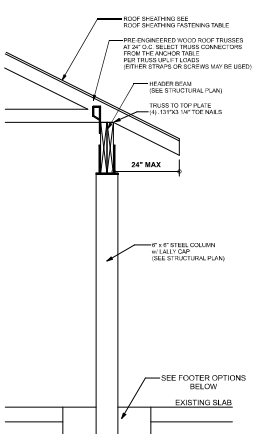


ONE STORY WALL SECTION

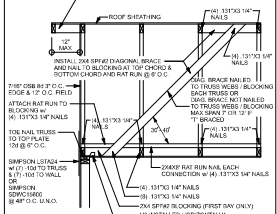
SCALE: 3/4" = 1'-0"

ROOF SHEATHING FASTENING TABLE (RAFTER / TRUSS SG = 0.49)

Wind Speed	Sheathing Thickness Plywood Or OSB	Required Nail	Nail spacing along panel edges	Nail spacing along intermediate supports in the panel field
120 mph Exp. B	7/16"	ASTM F1667 RSRS-01 (2 3/8" x 0.131")	6" oc	12" oc
120 mph Exp. C	7/16"	ASTM F1667 RSRS-01 (2 3/8" x 0.131")	6" oc	6" oc
130 mph Exp. D	19/32"	ASTM F1667 RSRS-03 (2 1/2" x 0.131") or ASTM F1667 RSRS-04 (3" x 0.120")	6" oc	6" oc
140 mph Exp. B	7/16"	ASTM F1667 RSRS-01 (2 3/8" x 0.131")	6" oc	6" oc
140 mph Exp. C	19/32"	ASTM F1667 RSRS-03 (2 1/2" x 0.131") or ASTM F1667 RSRS-04 (3" x 0.120")	6" oc	6" oc
140 mph Exp. D	19/32"	ASTM F1667 RSRS-03 (2 1/2" x 0.131") or ASTM F1667 RSRS-04 (3" x 0.120")	6" oc	6" oc
150 mph Exp. C	19/32"	ASTM F1667 RSRS-03 (2 1/2" x 0.131") or ASTM F1667 RSRS-04 (3" x 0.120")	6" oc	6" oc
150 mph Exp. D	19/32"	ASTM F1667 RSRS-03 (2 1/2" x 0.131") or ASTM F1667 RSRS-04 (3" x 0.120")	4" oc	4" oc

Note: For sheathing located a minimum of 4 feet from the perimeter edge of the roof, including 4 feet on each side of ridges and hips, nail spacing is permitted to be 6 inches on center along panel edges and 6 inches on center along intermediate supports in the panel field. Note: This table specifies the code minimum thickness of roof sheathing. The thickness of the sheathing may need to be increased based in the type of roofing material being used. See manufacturer Florida product approval.

FOR OVERHANGES 12"-24" USE A DROPED GABLE TRUSS WITH 2X4 OUTLOOKER @ 24" O.C. w/ (12) 3x TO GABLE TRUSS AND (4), 131"x 3.25" NAILS TO 2x4 TRUSS (BLOCK BETWEEN OUTLOOKER)



SPACE RAT RUN & DIAGONAL BRACE 6'-0" O.C.
FOR GABLE HEIGHT UP TO 25'-0" 130 MPH, EXP. C, ENCLOSED

(TYP.) GABLE BRACING DETAIL

WOOD FRAME

CONNECTOR TABLE

Uplift SP	Uplift SPF	Truss Connector	To Plate	To Truss/Rafter
805	905	SDWC15600	-	-
615	290	H3	4-8d x 1 1/2"	4-8d x 1 1/2"
515	540	H2.5A	5-8d x 1 1/2"	5-8d x 1 1/2"
1340	1015	H10A	9-10d x 1 1/2"	9-10d x 1 1/2"
720	620	LTS12-20	6-10d x 1 1/2"	6-10d x 1 1/2"
1000	890	MT312-10	7-10d x 1 1/2"	7-10d x 1 1/2"
1450	1245	HTS20-30	12-10d x 1 1/2"	12-10d x 1 1/2"
Uplift SP	**Uplift SPF**	**Strap Ties**	**To One Member**	**To Other Member**
1230	1230	LSTA21	8-10d	8-10d
1640	1455	MSTA24	9-10d	9-10d
1630	1530	CS20	7-10d	7-10d
Uplift SP	**Uplift SPF**	**Stud Plate Ties**	**To Stud**	**To Plate**
985	935	SP1	6-10d	4-10d
1065	805	SP2	6-10d	6-10d
771	771	LSTA24	15-10d	wrap under w/ over plate
1235	1235	LSTA24	14-10d	wrap under w/ over plate
Uplift SP	**Uplift SPF**	**Holdowns @ Stemwall**	**To Stud / Post**	**Anchor**
1825	1800	DTT2Z	8-SDS 1/4"x1 1/2"	1/2"x12" Titen HD
4235	3940	HTT4	18-16d x2 1/2"	1/2"x12" Titen HD
Uplift SP	**Uplift SPF**	**Holdowns @ Mono**	**To Stud / Post**	**Anchor**
1825	1800	DTT2Z	8-SDS 1/4"x1 1/2"	1/2"x9" Titen HD
4235	3940	HTT4	18-16d x2 1/2"	1/2"x12" Titen HD
Uplift SP	**Uplift SPF**	**Post Bases @ Stemwall**	**To Post**	**Anchor**
1900		ABU44Z	12-16d	5/8"x12" Drill & Epoxy
2475		ABU66Z	12-16d	5/8"x12" Drill & Epoxy
Uplift SP	**Uplift SPF**	**Post Bases @ Mono**	**To Post**	**Anchor**
1900		ABU44Z	12-16d	5/8"x7" Drill & Epoxy
2475		ABU66Z	12-16d	5/8"x7" Drill & Epoxy

EXTERIOR WALL STUD TABLE FOR SPF #2 STUDS:

THIS STUD HEIGHT TABLE IS PER 2012 WFCM, TABLE 3.20B5. EXTERIOR LOAD BEARING & NON LOAD BEARING STUD LENGTHS FOR WALLS WITH OSB EXTERIOR AND 1/2" GYP INTERIOR RESISTING INTERIOR ZONE WINDLOADS, 130 MPH, EXPOSURE C, STUD DEFLECTION LIMIT H/240 (NOT OK FOR BRITTLE FINISH). STUD SPACINGS SHALL BE MULTIPLES BY 0.8 FOR FRAMING LOCATED WITHIN 4 FEET OF CORNERS FOR END ZONE LOADING. (END ZONE EXAMPLE 16" O.C. x 0.8 = 12.8" O.C.)

(1) 2x4 @ 16" OC	TO 10'-1" STUD HEIGHT
(1) 2x4 @ 12" OC	TO 11'-2" STUD HEIGHT
(1) 2x6 @ 16" OC	TO 15'-7" STUD HEIGHT
(1) 2x6 @ 12" OC	TO 17'-3" STUD HEIGHT

GRADE & SPECIES TABLE

		Fb	E
2x8	SP #2	925	1.4
2x10	SP #2	800	1.4
2x12	SP #2	750	1.4
GLB	24F-V3 SP	2600	1.9
LSL	TIMBERSTRAND	1700	1.7
LVL	MICROLAM	2950	2.0
PSL	PARALAM	2900	2.0

GENERAL NOTES:

TRUSSES: TRUSSES SHALL BE DESIGNED BY A FLORIDA LICENSED ENGINEER IN ACCORDANCE WITH THE FBC. TRUSS ENGINEERING SHALL INCLUDE TRUSS DESIGN, PLACEMENT PLANS, TEMPORARY AND PERMANENT BRACING DETAILS, TRUSS-TO-TRUSS CONNECTIONS, AND UPLIFT AND REACTION LOADS FOR ALL BEARING LOCATIONS. TRUSS ENGINEERING IS THE RESPONSIBILITY OF THE TRUSS MANUFACTURER AND SHALL BE SIGNED & SEALED BY THE MANUFACTURER'S DESIGN ENGINEER. IT IS THE BUILDER'S RESPONSIBILITY VERIFY THE TRUSS DESIGNER FULLY SATISFIES ALL THE ABOVE REQUIREMENTS AND TO SELECT UPLIFT CONNECTIONS BASED ON TRUSS ENGINEERING UPLIFT AND PROVIDE FOOTINGS FOR INTERIOR BEARING WALLS. BUILDER IS TO FURNISH TRUSS ENGINEERING TO WIND LOAD ENGINEER FOR REVIEW OF TRUSS REACTIONS ON THE BUILDING STRUCTURE. STRAP 2X6 RAFTERS WITH MIN. UPLIFT CONNECTION 415LB EACH END; 2X8 RAFTERS 700 LB EACH END.

SITE PREPARATION: SITE ANALYSIS AND PREPARATION IS NOT PART OF THIS PLAN

FOUNDATION: CONFIRM THAT THE FOUNDATION DESIGN & SITE CONDITIONS MEET GRAVITY LOAD REQUIREMENTS (ASSUME 1500 PSF BEARING CAPACITY, UNLESS VISUAL OBSERVATION OR SOILS TEST PROVES OTHERWISE)

CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS, f'c = 2500 PSI.

WELDED WIRE REINFORCED SLAB: 6" x 6" W1.4 x W1.4 (10 x 10) - 6X6GW, WELDED WIRE REINFORCEMENT FABRIC (W.W.M.) CONFORMING TO ASTM A185. LOCATED IN MIDDLE OF THE SLAB SUPPORTED WITH APPROVED MATERIALS OR SUPPORTS AT SPACINGS NOT TO EXCEED 3'.

FIBER CONCRETE SLAB: CONCRETE SLABS ON GROUND CONTAINING SYNTHETIC FIBER REINFORCEMENT FIBER LENGTH 1/2 INCH TO 2 INCHES. DOSAGE AMOUNTS FROM 0.75 TO 1.5 POUNDS PER CUBIC YARD PER THE MANUFACTURERS RECOMMENDATIONS. FIBERS TO COMPLY WITH ASTM C 1116. SUPPLIER TO PROVIDE ASTM C 1116 CERTIFICATION OF COMPLIANCE WHEN REQUESTED BY BUILDING OFFICIAL.

CONTROL JOINTS: WHERE SPECIFIED, SAWN CONTROL JOINTS IN SLAB-ON-GRADE SHALL BE CUT IN ACCORDANCE WITH ACI 302. JOINTS SHALL BE CUT WITHIN 12 HOURS OF SLAB PLACEMENT. THE LENGTH / WIDTH RATIOS OF SLAB AREAS SHALL NOT EXCEED 1.5 AND THE LENGTH / WIDTH RATIOS OF ANY PANEL SHALL NOT EXCEED 1.25. ACTUAL RECOMMENDED LOCATION OF CONTROL JOINTS IS SUBJECT TO OWNER AND CONTRACTORS APPROVAL. THE CONTROL JOINTS ARE NOT INTENDED TO PREVENT CRACKS BUT RATHER TO ENCOURAGE THE SLAB TO CRACK ON A GIVEN LINE.

REBAR: ASTM A615, GRADE 40, DEFORMED BARS, Fy = 40 KSI. ALL LAP SPLICES 40 * DB (25" FOR #5 BARS), UNO. ALL REINFORCEMENT SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI 315-99, U.N.O.

ROOF SHEATHING: ALL ROOFS ARE HORIZONTAL DIAPHRAGMS; SHEATHING, UNBLOCKED, APPLIED PERPENDICULAR TO FRAMING, OVER A MINIMUM OF 3 FRAMING MEMBERS, WITH PANEL EDGES STAGGERED.

STRUCTURAL CONNECTORS: MANUFACTURERS AND PRODUCT NUMBER FOR CONNECTORS, ANCHORS, AND REINFORCEMENT ARE LISTED FOR EXAMPLE NOT ENDORSEMENT. AN EQUIVALENT DEVICE OF THE SAME OR OTHER MANUFACTURER CAN BE SUBSTITUTED FOR ANY DEVICES LISTED IN THE EXAMPLE TABLES AS LONG AS IT MEETS THE REQUIRED LOAD CAPACITIES. MANUFACTURER'S INSTALLATION INSTRUCTIONS MUST BE FOLLOWED TO ACHIEVE RATED LOADS.

ANCHOR BOLTS: A-307 ANCHOR BOLTS WITH MINIMUM EMBEDMENT AS SPECIFIED IN DRAWINGS BUT NO LESS THAN 7" IN CONCRETE OR REINFORCED BOND BEAM OR 15" IN GROUTED CMU.

BUILDER'S RESPONSIBILITY:

THE BUILDER AND OWNER ARE RESPONSIBLE FOR THE FOLLOWING, WHICH ARE SPECIFICALLY NOT PART OF THE WIND LOAD ENGINEER'S SCOPE OF WORK.

CONFIRM SITE CONDITIONS, FOUNDATION BEARING CAPACITY, GRADE AND BACKFILL HEIGHT, WIND SPEED AND DEBRIS ZONE, AND FLOOD ZONE.

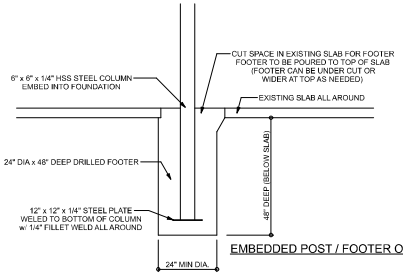
PROVIDE MATERIALS AND CONSTRUCTION TECHNIQUES, WHICH COMPLY WITH FBCR REQUIREMENTS FOR THE STATED WIND VELOCITY AND DESIGN PRESSURES.

PROVIDE A CONTINUOUS LOAD PATH FROM TRUSSES TO FOUNDATION. IF YOU BELIEVE THE PLAN ONITS A CONTINUOUS LOAD PATH CONNECTION, CALL THE WIND LOAD ENGINEER IMMEDIATELY.

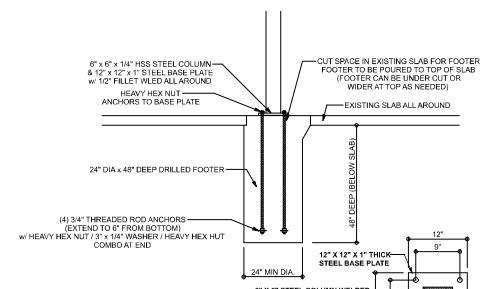
VERIFY THE TRUSS MANUFACTURER'S SEALED ENGINEERING INCLUDES TRUSS DESIGN, PLACEMENT PLANS, TEMPORARY AND PERMANENT BRACING DETAILS, TRUSS-TO-TRUSS CONNECTIONS, AND UPLIFT AND REACTION LOADS FOR ALL BEARING LOCATIONS

ROOF SYSTEM DESIGN:

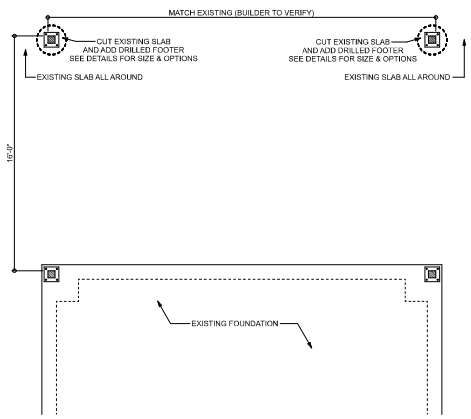
THE SEAL ON THESE PLANS FOR COMPLIANCE WITH FBCR, IS BASED ON REACTIONS, UPLIFTS, AND BEARING LOCATIONS IN TRUSS ENGINEERING SUBMITTED TO THE WIND LOAD ENGINEER. IT IS THE RESPONSIBILITY OF THE BUILDER TO CHECK ALL DETAILS OF THE COMPLETE ROOF SYSTEM DESIGN SUBMITTED BY THE TRUSS MANUFACTURER AND HAVE IT SIGNED, AND SEALED BY A DESIGN PROFESSIONAL FOR CORRECT APPLICATION OF FBCR REQUIRED LOADS AND ANY SPECIAL LOADS. THE BUILDER IS RESPONSIBLE TO REVIEW EACH INDIVIDUAL TRUSS MEMBER AND THE TRUSS ROOF SYSTEM AS A WHOLE AND TO PROVIDE RESTRAINT FOR ANY LATERAL BRACING. THE BUILDER SHOULD USE CARE CHECKING THE ROOF DESIGN BECAUSE THE WIND LOAD ENGINEER IS SPECIFICALLY NOT RESPONSIBLE FOR THE TRUSS LAYOUT WHICH WAS CREATED BY THE TRUSS MANUFACTURER AND THE TRUSS DESIGNER ALSO DENIES RESPONSIBILITY FOR THE LAYOUT PER NOTES ON THEIR SEALED TRUSS SHEETS.



EMBEDDED POST / FOOTER OPTION



MATCH PLATE w/ ANCHORS POST / FOOTER OPTION

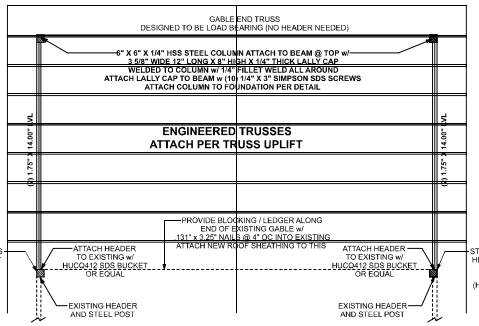


FOUNDATION PLAN

SCALE: 1/4" = 1'-0"

FOUNDATION NOTES

FN - 1	DIMENSIONS ON FOUNDATION & STRUCTURAL SHEETS ARE NOT EXACT. REFER TO ARCHITECTURAL PLANS FOR ACTUAL DIMENSIONS, RECESSES IN SLAB, STEP DOWNS, ETC. DIESDAWY DESIGN GROUP OR MARK DIESDAWY, PE IS NOT RESPONSIBLE FOR DIMENSION ERRORS ON THIS PLAN.
FN - 2	CONTRACTOR SHALL VERIFY NEED FOR INTERIOR BEARING IN ALL AREAS BY REVIEWING THE ROOF TRUSS PLAN BY THE SUPPLIER) BEFORE FINALIZING FOUNDATION PLAN
FN - 3	THE SLAB SHALL BE 4" CONCRETE SLAB REINFORCED w/ 6X6/ - 1.4/ 1.4 WELDED WIRE MESH PLACED ON CHAIRS @ 1 1/2" DEPTH FOR FIBER MESH CONCRETE. 6 MIL POLY VAPOR BARRIER w/ 6" LAPS SEALED w/ POLY TAPE OVER TERMITE-TREATED & COMPACTED FILL (ALSO, ANY OTHER CODE APPROVED TERMITE-TREATMENT METHOD CAN BE USED INSTEAD)



STRUCTURAL PLAN

SCALE: 1/4" = 1'-0"

STRUCTURAL PLAN NOTES

SN-1 DIMENSIONS ON STRUCTURAL SHEETS ARE NOT EXACT. REFER TO ARCHITECTURAL FLOOR PLAN FOR ACTUAL DIMENSIONS

SN-2 PERMANENT TRUSS BRACING IS TO BE INSTALLED AT LOCATIONS AS SHOWN ON THE SEALED TRUSS DRAWINGS. LATERAL BRACING IS TO BE RESTRAINED PER BCSI1-03, BCSI-B1, BCSI-B2, & BCSI-B3, BCSI-B1, BCSI-B2, & BCSI-B3 ARE FURNISHED BY THE TRUSS SUPPLIER, WITH THE SEALED TRUSS PACKAGE

DESIGN CRITERIA & LOADS:

BUILDING CODE	8TH EDITION FLORIDA BUILDING CODE RESIDENTIAL (2023)
CODE FOR DESIGN LOADS	ASCE 7-22
WINDLOADS	
BASIC WIND SPEED (ASCE 7-02, 35 DUST)	130 MPH
WIND EXPOSURE (BUILDER MUST FIELD VERIFY)	C
TOPOGRAPHIC FACTOR (BUILDER MUST FIELD VERIFY)	1
RISK CATEGORY	II
ENCLOSURE CLASSIFICATION	ENCLOSED
INTERNAL PRESSURE COEFFICIENT	0.18
ROOF ANGLE	7-45 DEGREES
MEAN ROOF HEIGHT	30 FT
C&C DESIGN PRESSURES	SEE TABLE
FLOOR LOADING	
ROOMS OTHER THAN SLEEPING ROOM	40 PSF LIVE LOAD
SLEEPING ROOMS	30 PSF LIVE LOAD
ROOF LOADING	
FLAT OR < 4/12	20 PSF LIVE LOAD
4/12 TO < 12/12	16 PSF LIVE LOAD
12/12 & GREATER	12 PSF LIVE LOAD
SOIL BEARING CAPACITY	1500 PSF
FLOOD ZONE	THIS BUILDING IS NOT IN THE FLOOD ZONE

COMPONENT & CLADING DESIGN PRESSURES 120 MPH (EXP C)

EFFECTIVE WIND AREA (FT2)	ZONE 4 INTERIOR		ZONE 5 END 4' FROM ALL OUTSIDE CORNER	
0 - 20	+21.8(Ward)	-23.6(Ward)	+21.8(Ward)	-29.1(Ward)
0 - 20	+36.3(Vult)	-39.3(Vult)	+36.3(Vult)	-48.5(Vult)

Bryan Zoecher Construction

Farnell Residence

PROJECT ADDRESS:
Seminole Terr. Lake City, FL

FL PE 53955

This item has been digitally signed and sealed by Mark Diesdway PE on digital signature date. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

C=US, O=Florida, dnQualifier=A01410C0000017E97DE07CA000746F0, CN=Mark Diesdway
2024-08-15 18:20:27

DIMENSIONS:
Stated dimensions as precise scaled dimensions. Refer all questions to Mark Diesdway, PE, for resolution. Do not proceed without clarification.

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CERTIFICATION: I hereby certify that I have examined this plan, and that the applicable portions of the plan, relating to wind engineering comply with the 8th Edition Florida Building Code Residential (2023) to the best of my knowledge.

LIMITATION: This design is valid for one building, at specified location.

Mark Diesdway P.E.
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Lake City, Florida 32025
386.754.5419
diesdwaydesign@gmail.com

JOB NUMBER:
240902

S-1
OF 1 SHEET