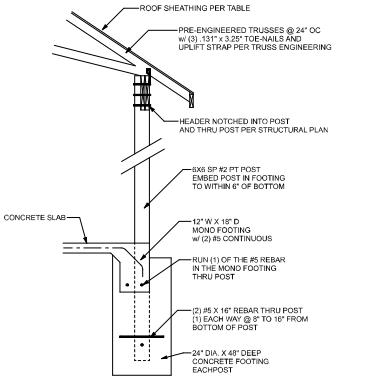
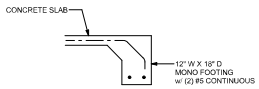


F2 S-2 MONOLITHIC FOOTING @ CARPORT

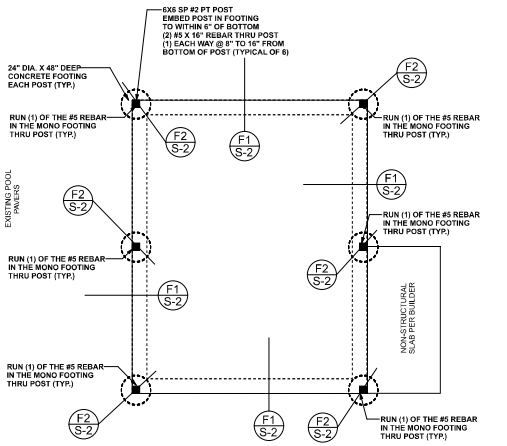
SCALE: 1/2" = 1'-0"



F1 S-2 MONOLITHIC FOOTING

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

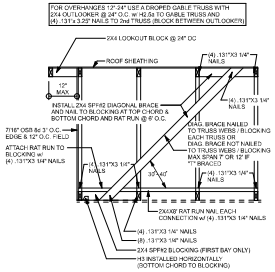
BOTTOM OF EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 12" BELOW UNDISTURBED SOIL OR ENGINEERED FILL



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. DISCOVERY DESIGN GROUP OR MARK DISOSWAY, P.E. 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 OR 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)



SPACE RAT RUN & DIAGONAL BRACE AT CENTER OF VALUT AND ABOVE BEAM AT CANT. PORCH ROOF

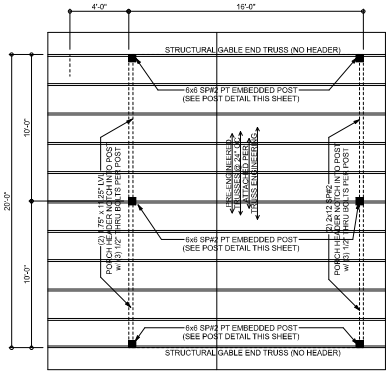
(TYP.) GABLE BRACING DETAIL

WOOD FRAME

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**
100 mph Exp. B	7/16"	ASTM F1667 RSRS-01 (2 3/8" x 0.113")	6" oc	12" oc
120 mph Exp. C	7/16"	ASTM F1667 RSRS-01 (2 3/8" x 0.113")	6" oc	6" oc
120 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
130 mph Exp. B	7/16"	ASTM F1667 RSRS-01 (2 3/8" x 0.113")	6" oc	6" oc
130 mph Exp. C	**15/32"**	**ASTM F1667 RSRS-01 (2 3/8" x 0.113")**	**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 0.113")	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.

CONNECTOR TABLE				
Uplift SP	**Uplift SP?**	**Truss Connector**	**To Plate**	**To Truss/Rafter**
615	485	SDWC15000	-	-
455	292	H3	4-8d x1 1/2"	4-8d x1 1/2"
575	465	LS-3A	5-8d x1 1/2"	5-8d x1 1/2"
1340	1015	H10A	9-10d1 1/2"	9-10d1 1/2"
720	620	LTS12-2D	6-10d1 1/2"	6-10d1 1/2"
1000	860	VHS12-20	7-10d1 1/2"	7-10d1 1/2"
1450	1245	HTS20-30	12-10d1 1/2"	12-10d1 1/2"
Uplift SP	**Uplift SP?**	**Strap Ties**	**To One Member**	**To Other Member**
1235	1235	LSTA21	8-10d	8-10d
1640	1455	MSTA24	9-10d	9-10d
1030	1030	CS20	7-10d	7-10d
Uplift SP	**Uplift SP?**	**Stud Plate Ties**	**To Stud**	**To Plate**
595	535	SP1	6-10d	4-10d
1065	905	SP2	6-10d	6-10d
771	771	LSTA24	10-10d	wrap under or over plate
1235	1235	LSTA24	14-10d	wrap under or over plate
Uplift SP	**Uplift SP?**	**Holdowns @ Stemwall**	**To Stud / Post**	**Anchor**
1825	1800	DTT2Z	8-SDS ¼"x1 1/2"	1/2"x12" Titen HD
4235	3640	HTT4	18-10d2 1/2"	1/2"x12" Titen HD
Uplift SP	**Uplift SP?**	**Holdowns @ Mono**	**To Stud / Post**	**Anchor**
1825	1800	DTT2Z	8-SDS ¼"x1 1/2"	1/2"x8" Titen HD
4235	3640	HTT4	18-10d2 1/2"	1/2"x12" Titen HD
Uplift SP	**Uplift SP?**	**Post Bases @ Stemwall**	**To Post**	**Anchor**
1900		ABU44Z	12-16d	5/8"x12" Drill & Epoxy
2475		ABA66Z	12-16d	5/8"x12" Drill & Epoxy
Uplift SP	**Uplift SP?**	**Post Bases @ Mono**	**To Post**	**Anchor**
1900		ABU44Z	12-16d	5/8"x12" Drill & Epoxy
2475		ABA66Z	12-16d	5/8"x12" Drill & Epoxy



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 BCSI-I-03, BCSI-B1, BCSI-B2, & BCSI-B3. BCSI-B1, BCSI-B2, & BCSI-B3 ARE FURNISHED BY THE TRUSS SUPPLIER, WITH THE SEALED TRUSS PACKAGE

GENERAL NOTES:

TRUSSES: TRUSSES SHALL BE DESIGNED BY A FLORIDA LICENSED ENGINEER IN ACCORDANCE WITH THE FBCR. 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, TO PLACE THE TRUSS PLANS, TEMPORARY AND PERMANENT BRACING DETAILS, AND BRACING WALLS BUILDER IS TO FURNISH TRUSS ENGINEERING TO YOUR LOCAL ENGINEER FOR REVIEW OF TRUSS REACTIONS ON THE BUILDING STRUCTURE. STRAP 2X8 RAFTERS WITH MIN. UPLIFT CONNECTION 415LB EACH END. 2X6 RAFTERS 250 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, FB = 95KSI, WELDED WIRE REINFORCEMENT FABRIC (W WM) 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 FOR THE MANUFACTURER'S 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 TYPICAL SPACING OF CUTS TO BE 12'-1. DO NOT CUT WWM OR REINFORCING STEEL. RECOMMENDED LOCATION OF CONTROL JOINTS IS SUBJECT TO OWNER AND CONTRACTOR'S APPROVAL. THE CONTROL JOINTS ARE NOT INTENDED TO PREVENT CRACKS BUT RATHER TO ENCOURAGE THE SLAB TO CRACK ON A GIVEN LINE.

REBAR: ASTM A 615, GRADE 40, DEFORMED BARS; FY = 40 KSI. ALL LAP SPLICES 40 " DB (27.5 IN. #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, LINE LOCKED, 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 OMITS 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. THE BUILDER SHOULD USE CARE IN ORDERING TRUSSES TO BRACE 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.

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

DESIGN CRITERIA & LOADS:	
BUILDING CODE	6TH EDITION FLORIDA BUILDING CODE RESIDENTIAL (2023)
CODE FOR DESIGN LOADS	ASCE 7 -22
WINDLOADS	
BASIC WIND SPEED (ASCE 7-22, 35 (6)(51))	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 LESS THAN SLEEPING ROOM	40 PSF LIVE LOAD
SLEEPING ROOMS	30 PSF LIVE LOAD
ROOF LOADING	
FLAT OR < 4:12	30 PSF LIVE LOAD
4:12 TO < 12:12	18 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 130 MPH (EXP C)				
EFFECTIVE WIND AREA (FT2)	**ZONE 4 INTERIOR**		**ZONE 5 END 4 FROM ALL OUTSIDE CORNER**	
0 - 20	+25.6(Vasd)	-27.8(Vasd)	+25.6(Vasd)	-34.2(Vasd)
0 - 20	+42.6(Vult)	-46.2(Vult)	+42.6(Vult)	-57(Vult)

Bryan Zecher Homes, Inc

LACY PAVILION

PROJECT ADDRESS:
Lake City, Florida

Mark Disosway FL PE 50915
This item has been digitally signed and sealed by Mark Disosway 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=A01410C0000017E97DE07CA00046F0, CN=Mark Disosway
2024-08-27 18:05:05

DIMENSIONS:
Stated dimensions supercede scaled dimensions. Refer all questions to Mark Disosway, P.E. 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.

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disoswaydesign@gmail.com

JOB NUMBER:
240952

S-1
OF 1 SHEET