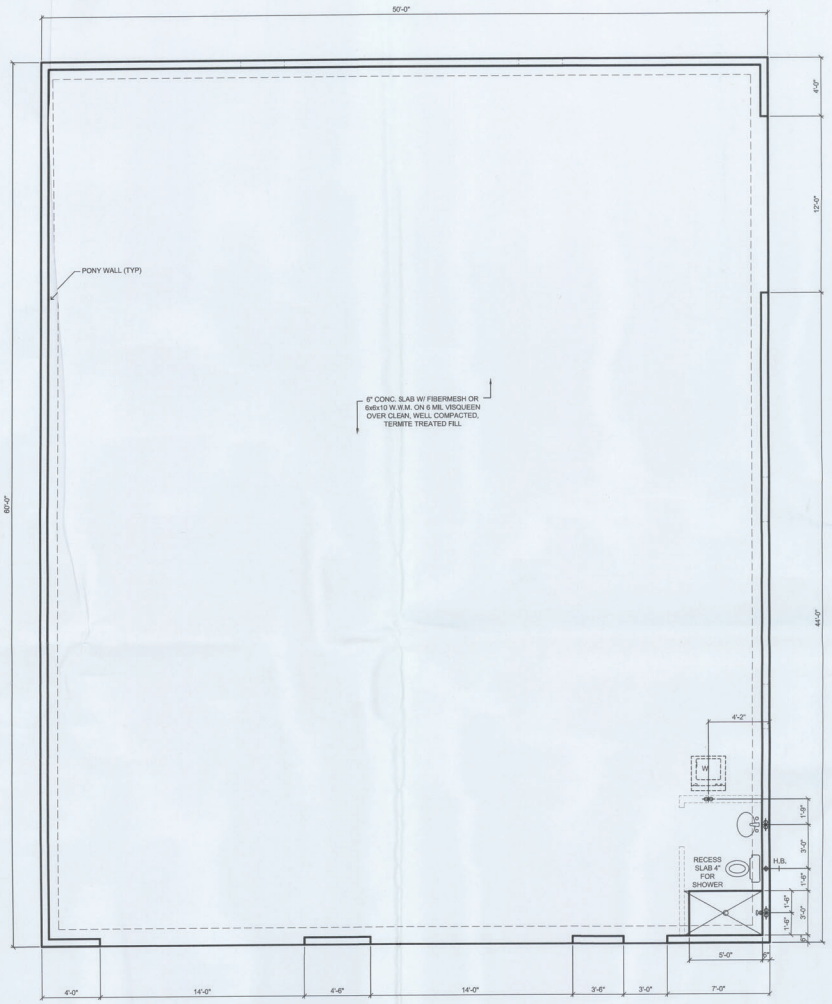
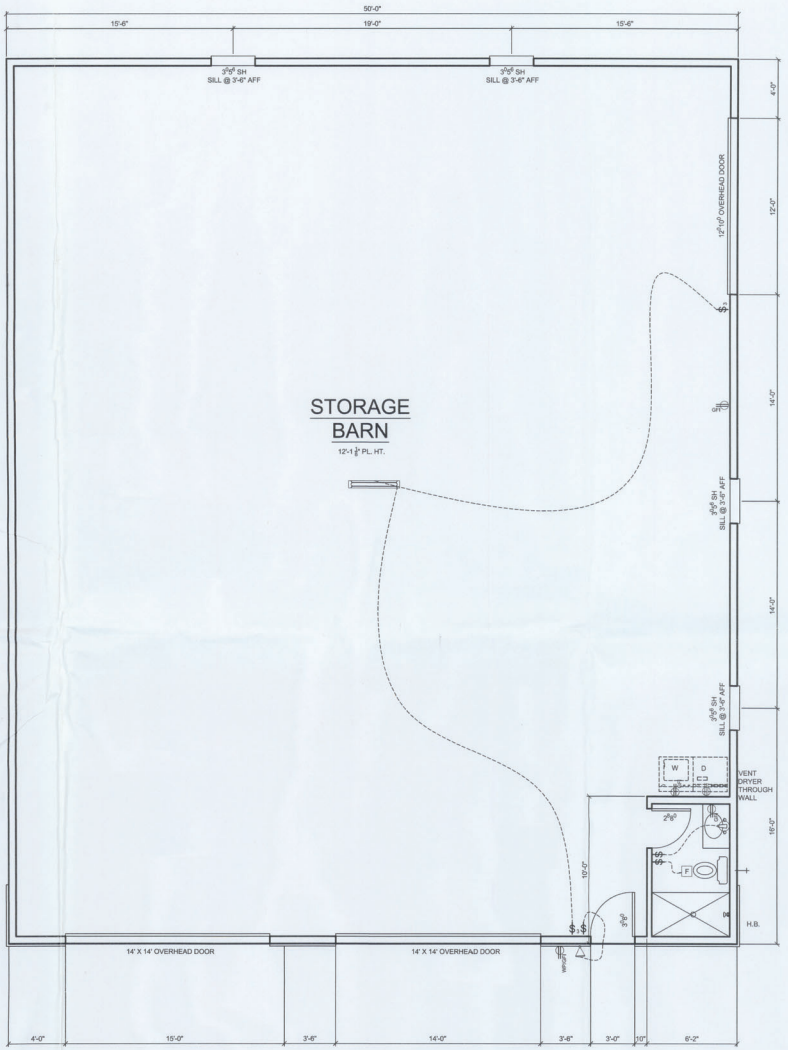


FOUNDATION LAYOUT

NOTE:

FOUNDATION LAYOUT FOR CONCRETE FORMING AND PLUMBING LOCATION REFERENCE ONLY. REFER TO ASSOCIATED ENGINEERING DRAWINGS FOR FOOTER LOCATIONS AND DETAILS.



FLOOR/ELECTRICAL PLAN

CODE INFORMATION:

OCCUPANCY: RESIDENTAL - R3
CONSTRUCTION TYPE: V-B UNSPRINKLERED

APPLICABLE CODES:
PROJECT MUST COMPLY WITH: THE 2023 FLORIDA BUILDING CODE, RESIDENTIAL (8TH EDITION)
NFPA 70 2020 NEC
2023 FLORIDA BUILDING CODE, PLUMBING
2023 FLORIDA BUILDING CODE, MECHANICAL

ELECTRICAL LEGEND

GFI DUPLEX OUTLET	HAZARDOUS LOCATION FLUORESCENT FIXTURE
WEATHER PROTECTED OUTLET	CARRIAGE LIGHT
220 OUTLET	DOUBLE FLOOD LIGHT
SWITCH	EXHAUST FAN
3-WAY SWITCH	
WALL MOUNTED LIGHT	

ELECTRICAL NOTES

1. ELECTRICAL OUTLET HEIGHTS AS MEASURED FROM FINISHED FLOOR TO CENTERED LINE OF THE BOX TO BE: EXTERIOR WATERPROOF 12" AFF TO 42" AFF - GARAGE GENERAL PURPOSE - 44" AFF
2. ALL TRIM PLATES & DEVICES TO BE GANGED, WHERE POSSIBLE.
3. ELECTRICAL SWITCHES TO BE AT 42" CENTERLINE ABOVE FINISHED FLOOR.
4. ELECTRICAL PLAN IS INTENDED FOR BID PURPOSES ONLY. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRIC CODE, LATEST EDITION, BY A LICENSED ELECTRICAL CONTRACTOR WHO SHALL BE RESPONSIBLE FOR THE INSTALLATION & SIZING OF ALL ELECTRICAL, WIRING & ACCESSORIES.
7. GFIs (GROUND FAULT INTERRUPTERS) FOR WATER AREAS AND OUTDOOR CIRCUITS PER FBCR E3902
8. ALL PERMANENT INTERIOR LIGHTING IS 100% HIGH EFFICACY CFLLED LAMPS PER FBC EC R404.1
9. ALL 125-VOLT 15-AND 20 AMP RECEPTACLES INSTALLED INSIDE AND OUTSIDE OF DWELLING UNITS, AND IN ATTACHED AND DETACHED GARAGES SHALL BE TAMPER RESISTANT RECEPTACLES

SQUARE FOOTAGES

STORAGE BARN	3000
TOTAL COVERED	3000

NOTES

1. DOORS AND WINDOWS ARE APPROXIMATE FINISHED SIZES. REFER TO MFG'S SPECIFICATIONS FOR ROUGH OPENINGS PRIOR TO FRAMING

COLUMBIA COUNTY BUILDING DEPARTMENT Received for FILE COPY Code Compliance PLANS EXAMINER

REVISIONS	

Northeast Florida Design, Inc.
12627 San Jose Blvd. Ste. 702
Jacksonville, FL 32223
904.260.3319

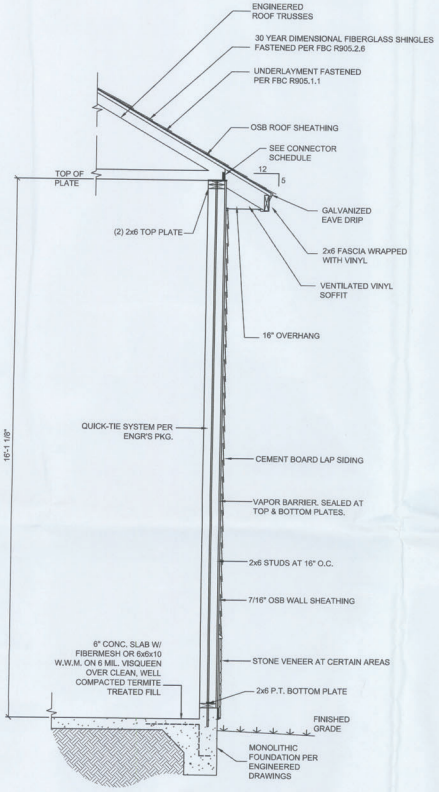
The Westernmost 1/2 of Lot 14 Cannon Creek Estates

Storage Barn at the Smith Residence

Foundation Layout/ Floor/Electrical Plan

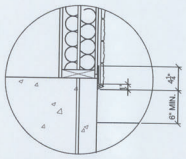
251 SW Fennigan Way
Lake City, FL 32025

Drawn	LP	Sheet	1
Date	04-15-25		
Scale	1/4"=1'-0"	of	4
Job	N25-005B		



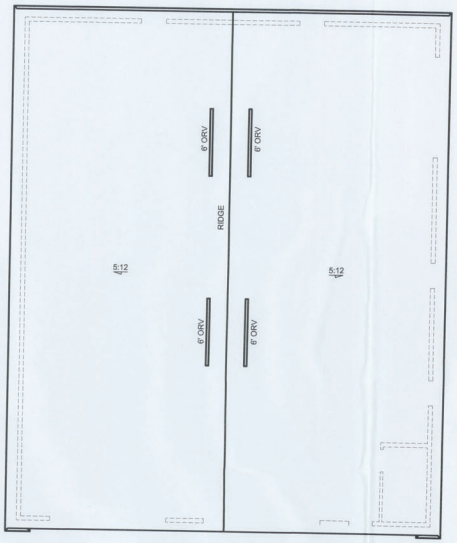
WALL SECTION (TYP)

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



TERMINATION OF STONE

STONE TERMINATION PER ASTM C -926
DRIP SCREED INSTALLED PER ASTM 1063-03



ROOF PLAN

SCALE: 1/8" = 1'-0"

ATTIC VENTILATION AREA CALCULATIONS

Excerpt of the 2023 Building Code, Residential

R806.1 Ventilation required.
Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters shall have cross ventilation for each separate space by ventilating openings protected against the entrance of rain or snow. Ventilation openings shall have a least dimension of 1/16 inch (1.6 mm) minimum and 1/4 inch (6.4 mm) maximum. Ventilation openings having a least dimension larger than 1/4 inch (6.4 mm) shall be provided with corrosion-resistant wire cloth screening, hardware cloth, or similar material with openings having a least dimension of 1/16 inch (1.6 mm) minimum and 1/4 inch (6.4 mm) maximum. Openings in roof framing members shall conform to the requirements of Section R802.1.8. Required ventilation openings shall open directly to the outside air.

Exception: Attic ventilation shall not be required when determined not necessary by the code official due to atmospheric or climatic conditions.

R806.2 Minimum vent area.
The minimum net free ventilating area shall be 1/150 of the area of the vented space.

Exception: The minimum net free ventilation area shall be 1/300 of the vented space provided one or more of the following conditions are met:

1. In Climate Zones 6, 7 and 8, a Class I or II vapor retarder is installed on the warm-in-winter side of the ceiling.

2. At least 40 percent and not more than 50 percent of the required ventilating area is provided by ventilators located in the upper portion of the attic or rafter space. Upper ventilators shall be located no more than 3 feet (914 mm) below the ridge or highest point of the space, measured vertically, with the balance of the required ventilation provided by eave or cornice vents. Where the location of wall or roof framing members conflicts with the installation of upper ventilators, installation more than 3 feet (914 mm) below the ridge or highest point of the space shall be permitted.

R806.3 Vent and insulation clearance.
Where eave or cornice vents are installed, insulation shall not block the free flow of air. A minimum of a 1-inch (25 mm) space shall be provided between the insulation and the roof sheathing and at the location of the vent.

Ventilation Required

Attic		3000	Square footage
3000	÷ 300 =	10.0	
10.0	x .5(50%) =	5.0	Square footage net free area req'd for vents

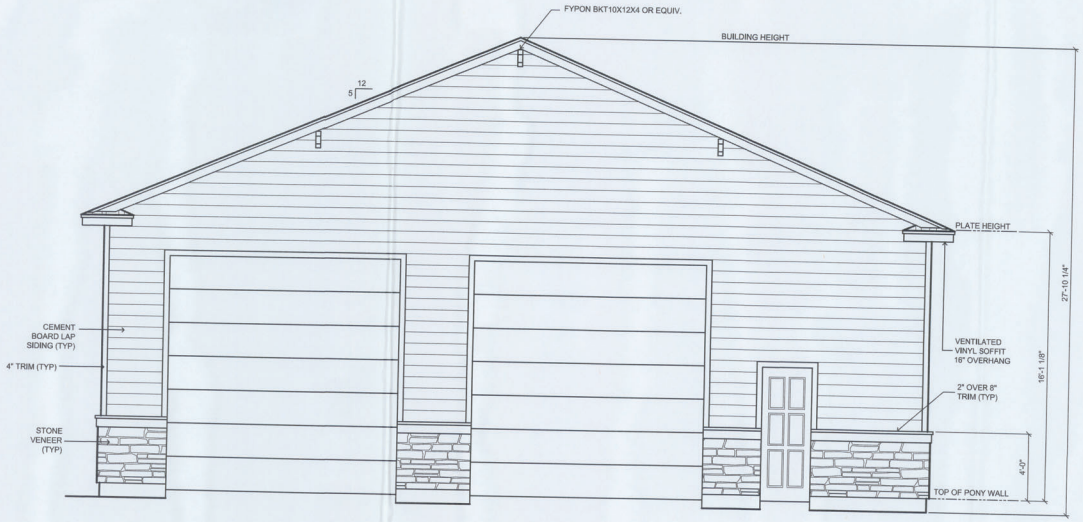
Roof Vent Specifications (per manufacturer)

4'-0" vent-provides 1.0 sq.ft. net free space
6'-0" vent-provides 1.5 sq.ft. net free space
8'-0" vents-provides 2.0 sq.ft. net free space

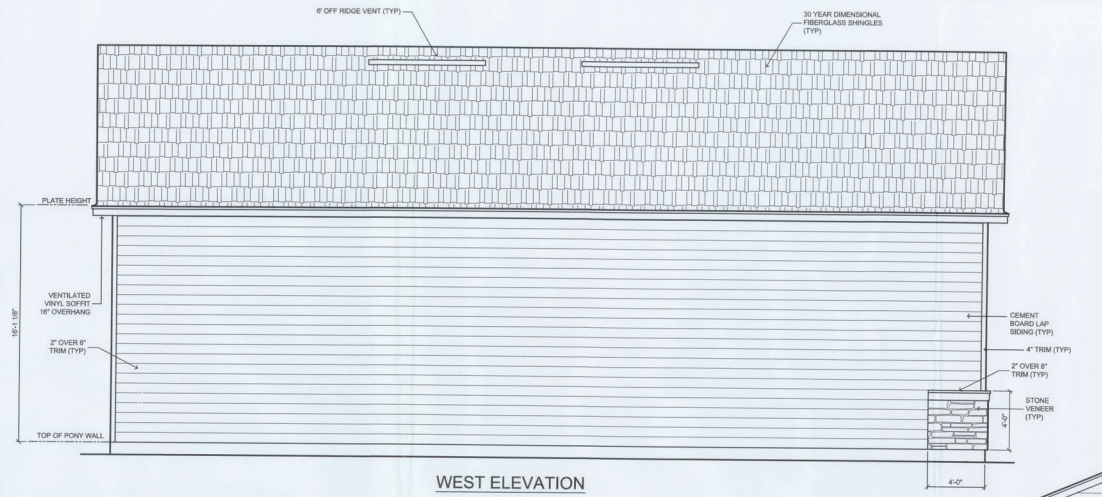
Vents Required

(0) 4'-0" vents @ 1 sq.ft.	=	0.0
(4) 6'-0" vents @ 1.5 sq.ft.	=	6.0
(0) 8'-0" vents @ 2 sq. ft.	=	6.0

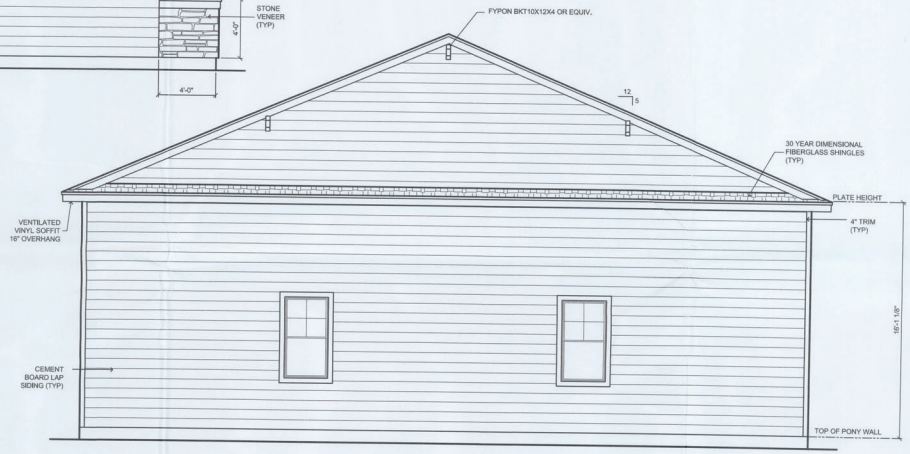
6.0 sq.ft. net free area provided by vents
6.0 sq.ft. net free area provided by soffit — 12.0 Total sq.ft. venting provided



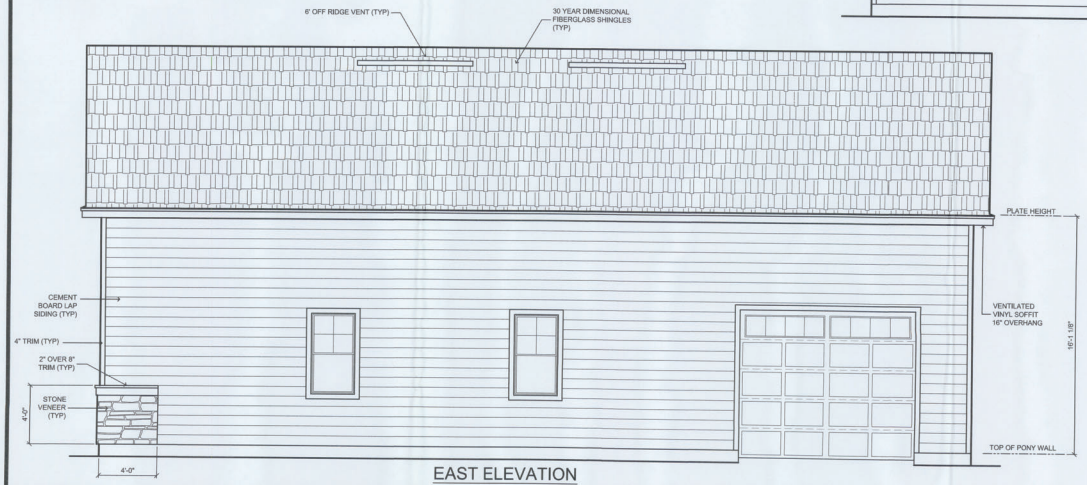
SOUTH ELEVATION



WEST ELEVATION



NORTH ELEVATION



EAST ELEVATION

NOTES

REVISIONS

Northeast Florida Design, Inc.
12627 San Jose Blvd. Ste. 702
Jacksonville, FL 32223
904.260.3319

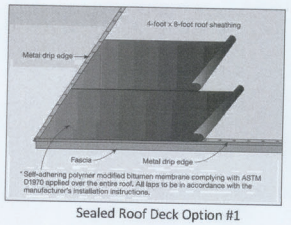
The Westernmost 1/2 of Lot 14 Cannon Creek Estates

Storage Barn at the Smith Residence

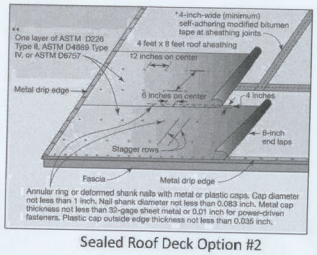
Elevations

251 SW Fennigan Way
Lake City, FL 32025

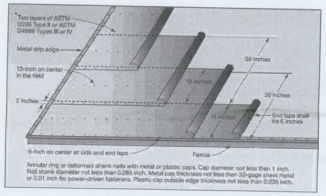
Drawn	LP	Sheet	3
Date	04-15-25		
Scale	1/4"=1'-0"	of	4
Job	N25-005B		



Sealed Roof Deck Option #1



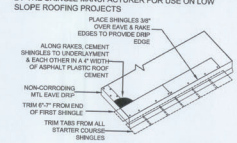
Sealed Roof Deck Option #2



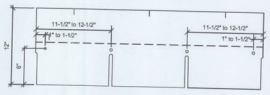
Sealed Roof Deck Option #3

ROOFING DETAILS

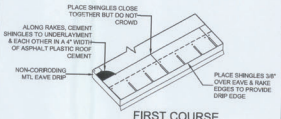
NOTE: DETAILS ARE FOR SLOPES OF 4:12 OR GREATER. FOR SLOPES BELOW 4:12, ALL ROOFING UNDERLAYMENT SHALL BE SELF ADHERING SHEET MEMBRANE APPROVED BY THE SHINGLE MANUFACTURER FOR USE ON LOW SLOPE ROOFING PROJECTS



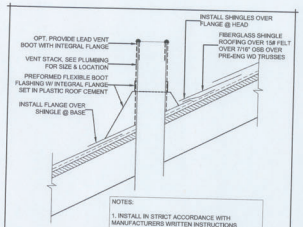
STARTER COURSE



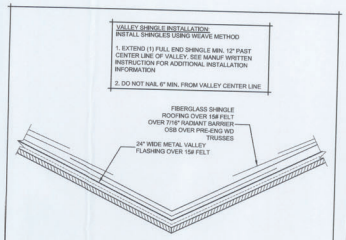
SHINGLE NAILING



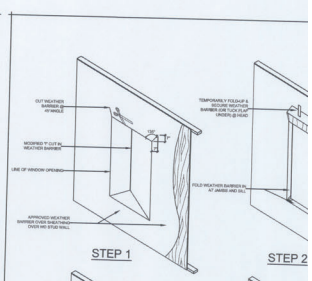
FIRST COURSE

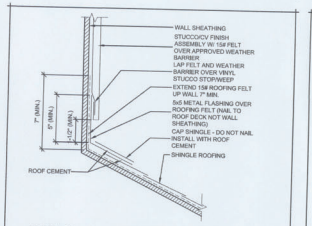


VENT STACK FLASHING DETAIL
N.T.S.

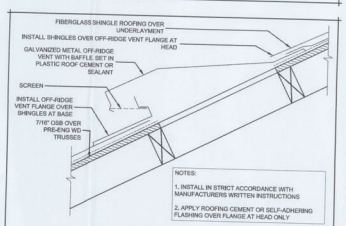


VALLEY FLASHING DETAIL
N.T.S.





WALL FLASHING DETAIL - STUCCO
N.T.S.



OFF-RIDGE VENT FLASHING DETAIL
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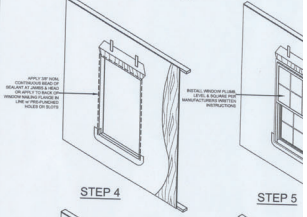
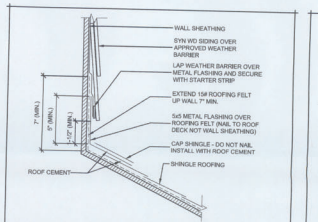
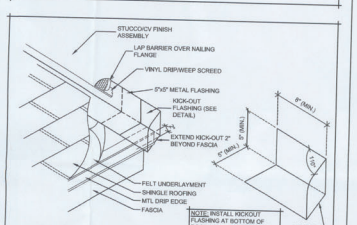
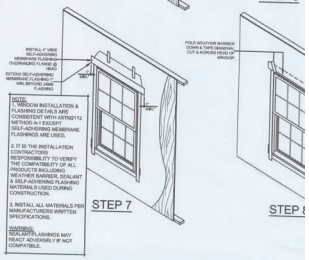




WALL FLASHING DETAIL - LAP SIDING
N.T.S.



WALL/KICKOUT FLASHING DETAIL
N.T.S.



WINDOW FLASHING INSTALLATION DETAILS
N.T.S.

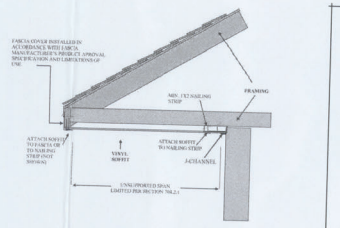


FIGURE R704.2.1
TYPICAL SINGLE-SPAN VINYL SOFFIT PANEL SUPPORT

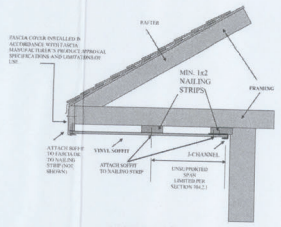
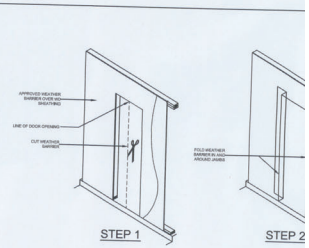
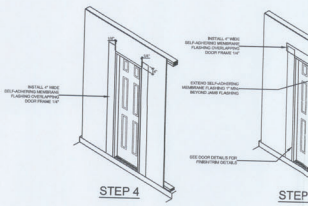


FIGURE R704.2.1
TYPICAL MULTI-SPAN VINYL SOFFIT PANEL SUPPORT





DOOR FLASHING INSTALLATION DETAILS
N.T.S.

COLUMBIA COUNTY BUILDING COVER SHEET
STRUCTURAL ENGINEERING – NEW BARN

DESIGN SPECIFICATIONS

- DESIGN CODES:
  2023 FLORIDA BUILDING CODE (FBC) – RESIDENTIAL, EXISTING
  ASCE 7-22, NDS 2018, ACI 318-19, ACI 332-20, AWPA, AITC
  APA, ICC 600-20
- OCCUPANCY: RESIDENTIAL GROUP R-3 (ONE- AND TWO-FAMILY DWELLINGS)
- DESIGN LOADS:

ROOF LOADING:
LL 20 PSF
DL 12 PSF

ROOF CONVENTIONAL FRAMING:
LL 20 PSF RAFTERS
LL 20 PSF CEILING JOISTS

DL 10 PSF RAFTERS
DL 10 PSF CEILING JOISTS

DL 30 PSF ATTICS WITH STORAGE
DL 10 PSF ATTICS W/O STORAGE

STRUCTURE HEIGHT & NO. OF STORIES

- MAXIMUM HEIGHT OF STRUCTURE (FT) 28
- NUMBER OF STORIES 1

TYPE OF CONSTRUCTION

- TYPE V-B
- UNPROTECTED
- UNSPRINKLERED

WIND ZONE INFORMATION

NOTE: THIS STRUCTURE HAS BEEN DESIGNED N ACCORDANCE WITH, AND MEETS THE REQUIREMENTS OF SECTION 1509 OF THE 2023 EDITION OF THE FLORIDA BUILDING CODE

THIS BUILDING IS NOT LOCATED IN THE WIND BORNE DEBRIS REGION

- BUILDING: ENCLOSED STRUCTURE
- ULTIMATE DESIGN WIND SPEED (MPH – Vult) 130
- NOMINAL DESIGN WIND SPEED (MPH – Vasd) 101
- BUILDING RISK CATEGORY II
- WIND EXPOSURE CATEGORY C
- INTERNAL PRESSURE COEFFICIENT GCpi (+/–) 0.18

COMPONENTS & CLADDING PRESSURES

COMPONENTS & CLADDING PRESSURES (PSF)				
SIZE	INTERIOR ZONES		END ZONES	
	+	- +	-	
0–20 sf	23.5	25.6	23.5	30.8
21–50 sf	22.0	24.1	22.0	27.8
51–100sf	21.0	23.0	21.0	25.6
> 100 sf	18.4	20.4	18.4	20.4

DIMENSION OF END ZONE IN FT. 4.0
END ZONE IS LOCATED AT BUILDING CORNERS

SHEET INDEX:

STRUCTURAL:

FLORIDA PRODUCT APPROVAL:

STRUCTURAL:

CONNECTOR	TYPE	FL PRODUCT APPROVAL	
SDS	SCREW	9589.8	SIMPSON
SDWC	SCREW	13975.3	SIMPSON
MUS	HANGER	10531.2	SIMPSON
LUS	HANGER	10531.17	SIMPSON
HU	HANGER	10531.10	SIMPSON
MTS	STRAP	10456.12	SIMPSON
MSTA	STRAP	13872.4	SIMPSON
H2.5A	CLIP	10456.7	SIMPSON

1.0 GENERAL NOTES

A. IT IS THE INTENT OF THE ENGINEER OF RECORD THAT HIS WORK BE IN CONFORMANCE WITH ALL REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION OVER THIS TYPE OF CONSTRUCTION AND OCCUPANCY. ALL CONTRACTORS ARE RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTING AND SHALL DO THEIR WORK IN CONFORMANCE WITH ALL APPLICABLE CODES AND REGULATIONS.
B. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE PRIOR TO COMMENCING WORK. THE CONSTRACTOR SHALL REPORT ALL DISCREPANCIES BETWEEN THE STRUCTURAL DRAWINGS AND EXISTING CONDITIONS TO THE ENGINEER OF RECORD IN WRITING PRIOR TO COMMENCING WORK.
C. CONTRACTOR SHALL SUPPLY, LOCATE, AND BUILD INTO THE WORK ALL INSERTS, ANCHORS, ANGLES, PLATES, OPENINGS, SLEEVES, HANGERS, SLAB DEPRESSIONS, AND PITCHES AS MAY BE REQUIRED TO ATTACH AND ACCOMMODATE OTHER WORK.
D. THESE DOCUMENTS, AS INSTRUMENTS OF SERVICE, ARE THE PROPERTY OF THE ENGINEER OF RECORD AND MAY NOT BE USED OR REPRODUCED WITHOUT EXPRESSED WRITTEN CONSENT BY THE ENGINEER OF RECORD.
E. ALL DETAILS SHALL BE IN ACCORDANCE WITH INSTRUCTIONS FROM MANUFACTURER OR DESIGNER.
F. THE OWNER SHALL PROVIDE CONTRACTOR WITH A SOIL INVESTIGATION REPORT AND ANALYSIS. ALL REQUIREMENTS FOR SITE PREPARATION AND SOIL COMPACTION SPECIFIED IN THE SOIL REPORT SHALL BE FOLLOWED UNLESS ADDITIONAL MORE STRINGENT REQUIREMENTS ARE SPECIFIED. NOTIFY ENGINEER OF RECORD IF FOUNDATION CONDITIONS ENCOUNTERED DIFFER FROM SOIL EXPLORATION INFORMATION MADE AVAILABLE TO THE CONTRACTOR.
G. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION.
H. CONTRACTORS SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING THAT IS REQUIRED DURING CONSTRUCTION TO KEEP STRUCTURE SAFE AND PLUMB UNTIL THE ENTIRE STRUCTURE IS IN PLACE. BRACING SHOWN ON STRUCTURAL PLANS IS FOR COMPLETED STRUCTURE ONLY.
I. DESIGN IS VOID AFTER ONE YEAR FROM ORIGINAL DATE.
J. DO NOT SCALE. USE DIMENSIONS FROM ARCHITECTURAL PLAN.
K. SUBMITTALS FOR THIS PROJECT ARE REVIEWED ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. IT SHALL NOT INCLUDE REVIEW OF QUANTITIES, DIMENSIONS, WEIGHTS OR GAUGES, FABRICATION PROCESSES, CONSTRUCTION METHODS, COORDINATION OF THE WORK WITH OTHER TRADES, OR CONSTRUCTION SAFETY PRECAUTIONS, ALL OF WHICH ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. REVIEW OF A SPECIFIC ITEM SHALL NOT INDICATE ACCEPTANCE OF AN ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS NOT CLEARLY NOTED BY THE CONTRACTOR.

2.0 MATERIAL SPECIFICATIONS

CAST-IN-PLACE CONCRETE: SHALL HAVE A MINIMUM DESIGN COMPRESSIVE STRENGTH (F'C) OF 2500 PSI AT 28 DAYS UNLESS NOTED OTHERWISE. ALL FOOTINGS SHALL HAVE A MINIMUM DESIGN COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS. ALL CONCRETE OPERATIONS, INCLUDING BUT NOT LIMITED TO MIX DESIGN, MIXING, TRANSPORTING, PLACING, REINFORCING DETAILING AND PLACING, CURING, AND TESTING SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS AND APPLICATION OF ACI 301–16, " SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".
CONCRETE MASONRY UNITS: SHALL BE HOLLOW UNIT MASONRY IN ACCORDANCE WITH ASTM C 90–14 "HOLLOW LOAD–BEARING CONCRETE MASONRY UNITS" AND SHALL HAVE A MINIMUM NET AREA COMPRESSIVE STRENGTH OF 2000 PSI WHEN USING TYPE M OR S MORTAR (ASTM C 270–14A). IN ACCORDANCE WITH ACI 530 "BUILDING CODE REQUIREMENTS AND SPECIFICATION FOR MASONRY STRUCTURES". THE 2000 PSI BLOCK IN COMBINATION WITH TYPE M OR S MORTAR PROVIDES A DESIGN COMPRESSIVE STRENGTH (F'M) OF 1500 PSI.
GROUT: SHALL BE IN ACCORDANCE WITH ASTM C 476–19 AND SHALL HAVE A MAXIMUM COARSE AGGREGATE SIZE OF 3/8" PLACED AT AN 8" TO 11" SLUMP AND HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS WHEN TESTED IN ACCORDANCE WITH ASTM C 1019–20.
REINFORCING STEEL: SHALL BE IN ACCORDANCE WITH ASTM A615 MINIMUM GRADE 40, AND CONFORMING TO ACI 301–16, ACI 315 ("MANUAL OF CONCRETE PRACTICE"), ACI 318 ("BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"), AND CRSI MANUAL OF STANDARD PRACTICE.
STRUCTURAL STEEL: ASTM A36–14 AND CONFORM TO AISC "SPECIFICATIONS FOR DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
STRUCTURAL PIPE AND STRUCTURAL TUBING: SHALL BE ASTM A500 (GRADE B).
WELDED WIRE FABRIC (WWF): SHALL BE ASTM A185–07.
ANCHOR BOLTS AND THREADED RODS: SHALL BE IN ACCORDANCE WITH ASTM A 307 OR ASTM F 1554 GRADE 36.
WASHERS: SHALL BE IN ACCORDANCE WITH ASTM F 436 GRADE 36.
NUTS: SHALL BE IN ACCORDANCE WITH ASTM A 563 GRADE A HEX.
ANCHORING ADHESIVE: SHALL BE ONE OF THE FOLLOWING PRODUCTS:
SIMPSON STRONG–TIE CO., PRODUCT: SET–XP (CONCRETE, SOLID MASONRY)
SIMPSON STRONG–TIE CO., PRODUCT: AT–XP (CONCRETE, SOLID MASONRY)
METAL CONNECTORS: ALL METAL CONNECTORS WHICH ARE EXPOSED TO MOISTURE SHALL BE GALVANIZED (ASTM A 153), Z–MAX, OR STAINLESS STEEL. METAL CONNECTORS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE ZMAX IN WET ENVIRONMENTS AND STAINLESS STEEL IN COASTAL ENVIRONMENTS.

2.23 WOOD

A. ALL WOOD MEMBERS EXPOSED TO WEATHER OR IN CONTACT WITH MASONRY, CONCRETE, OR SOIL SHALL BE PRESSURE–TREATED.
B. ALL FRAMING ANCHORS AND CONNECTORS SHALL BE SIMPSON OR EQUAL.
C. ALL PREFABRICATED STRUCTURAL TRUSSES SHALL BE CERTIFIED BY THE TRUSS MANUFACTURER'S REGISTERED ENGINEER.

2.2324 FASTENINGS

ALL FRAMING ANCHORS AND CONNECTORS SHALL BE MANUFACTURED BY SIMPSON OR EQUAL UNLESS OTHERWISE NOTED. ALL METAL CONNECTIONS AND FABRICATIONS SHALL COMPLY WITH AISC SPECIFICATIONS.
NAIL FASTENERS SHALL BE COMMON NAILS UNO.

2.2307.1 SILLS ON CONCRETE

WHERE SILLS ON CONCRETE ARE USED, TYPICAL ANCHOR BOLTS SHALL HAVE A MINIMUM DIAMETER OF 1/2" W/ 2X2X3/16 MINIMUM WASHER AND A MINIMUM EMBEDMENT OF 7" IN CONCRETE. ANCHOR BOLTS ARE REQUIRED AT THE FOLLOWING LOCATIONS:
A MINIMUM OF (1) ANCHOR BOLT SHALL BE PROVIDED WITHIN 6 TO 12 INCHES OF EACH END OF EACH PLATE AND A MINIMUM OF (2) ANCHOR BOLTS PER PLATE.
ANCHOR BOLTS SHALL BE LOCATED WITHIN 12" OF CORNERS AND OPENINGS & AT MAXIMUM SPACINGS OF 48" OC.

2.2307.6 SUBFLOORS

WHERE SUBFLOORING IS INDICATED IN THESE PLANS USE 3/4" T&G PLYWOOD GLUED WITH A CONSTRUCTION ADHESIVE AND FASTENED PER FBC – BUILDING.

3.0 CONSTRUCTION SPECIFICATIONS

3.18 FOOTINGS AND FOUNDATIONS

A. FOOTINGS AND FOUNDATIONS SHALL BE IN ACCORDANCE WITH FBC – BUILDING. THIS DESIGN HAS BEEN COMPLETED IN ACCORDANCE WITH PERTINENT STANDARDS AND ACCEPTED ENGINEERING DESIGN PROCEDURES, AND IS BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME OF COMPLETION. THE DESIGN IS INTENDED TO MINIMIZE DIFFERENTIAL MOVEMENT RESULTING FROM THE HEAVING OF EXPANSIVE SOILS OR SETTLING OF SUBSURFACE SOILS. IT MUST BE RECOGNIZED THAT FOUNDATION COMPONENTS WILL UNDERGO MOVEMENT. ANY SUBSEQUENT OWNERS SHALL BE APPRAISED OF THE SOIL CONDITION AND ADVISED TO MAINTAIN GOOD PRACTICES IN THE FUTURE WITH REGARD TO SURFACE AND SUBSURFACE DRAINAGE, FRAMING OF PARTITIONS ABOVE FLOOR SLABS, FINISH WORK ABOVE FLOOR SLABS, ETC.
B. FOOTINGS SHALL BEAR UPON UNDISTURBED SOIL OR UPON SOIL COMPACTED TO A MINIMUM OF 95% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY FOR A DEPTH OF AT LEAST (2) FEET BELOW FOOTING.
C. FILL UNDER CONCRETE SLABS SHALL BE CLEAN, FREE OF DEBRIS AND OTHER DELETERIOUS MATERIALS. FILL SHALL BE COMPACTED TO A MINIMUM OF 95% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D1557–07).
D. FILL SHALL BE TREATED WITH TERMITE PROTECTION BEFORE SLAB IS PLACED OR BORATE APPLIED TO WOOD FRAMING ABOVE SLAB.
E. A CONCRETE SLAB–ON–GRADE USED IN CONJUNCTION WITH THE EXTERIOR STEMWALL FOUNDATION, SHALL HAVE MINIMUM 6X6 W1.4XW1.4 WELDED WIRE FABRIC (WWF) OR FIBER REINFORCEMENT IN THE SLAB AND THE SLAB SHALL BE KEYED INTO OR TIED INTO THE FOUNDATION.
F. THE TOP OF A MONOLITHIC SLAB–ON–GRADE SHALL BE AT LEAST 8 INCHES ABOVE FINISHED GRADE. THE SLAB SHALL HAVE MINIMUM 6X6 W1.4XW1.4 WWF AT MID–HEIGHT OR SYNTHETIC FIBER REINFORCEMENT. A DOUBLE LAYER OF WWF 3 FEET WIDE SHALL BE PROVIDED AROUND THE PERIMETER OF THE SLAB FOR NO SYNTHETIC FIBER REINFORCEMENT.
G. VAPOR BARRIER SHALL CONSIST OF MINIMUM 6 MIL. POLYETHYLENE.
H. WHERE SUBSURFACE SOIL CONDITION INFORMATION IS NOT AVAILABLE, FOUNDATIONS HAVE BEEN DESIGNED FOR A 2000 PSF SOL BEARING CAPACITY. CONTRACTOR SHALL REPORT ANY DIFFERING CONDITIONS TO THE ENGINEER OF RECORD PRIOR TO COMMENCING WORK.

3.19 CONCRETE

A. CONCRETE AND STEEL REINFORCEMENT SHALL BE IN ACCORDANCE WITH FBC–BUILDING CHAPTER 19.
MINIMUM CONCRETE COVER SHALL BE AS FOLLOWS:
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"
CONCRETE EXPOSED TO EARTH OR WEATHER: #6 – #18 BARS 2", #5 BARS OR SMALLER 11/2"
CONCRETE NOT EXPOSED TO WEATHER OR EARTH: PRIMARY REINFORCEMENT FOR BEAMS AND COLUMNS 1 1/2"
B. ALL CONTINUOUS REINFORCING STEEL IN BEAMS, COLUMNS, AND FOOTINGS SHALL BE LAPPED A MINIMUM OF 36 BAR DIAMETERS OR 25", WHICHEVER IS GREATER.
C. HORIZONTAL BEAM AND FOOTING BARS SHALL BE BENT 25" AROUND CORNERS OR CORNER BARS WITH A MINIMUM 25" LAP (UNO).

3.21 MASONRY

1. MASONRY CONSTRUCTION SHALL BE IN ACCORDANCE WITH FBC–BUILDING CHAPTER 21 AND IN ACCORDANCE WITH THE SPECIFICATIONS FOR MASONRY STRUCTURES ACI 530.1. ACI LIMITS THE GROUT LIFT HEIGHT TO 12 FT AND REQUIRES A 1–HOUR INITIAL SET TIME BETWEEN LIFTS.
2. FOR MASONRY CONSTRUCTION, PROVIDE PRE–CAST CONCRETE LINTELS OVER ALL OPENINGS (UNO). LINTELS SHALL BE OF SUFFICIENT SIZE AND REINFORCEMENT FOR THE GIVEN SPAN LOADING CONDITIONS.

REV. #	DESCRIPTION	DWG.	DATE
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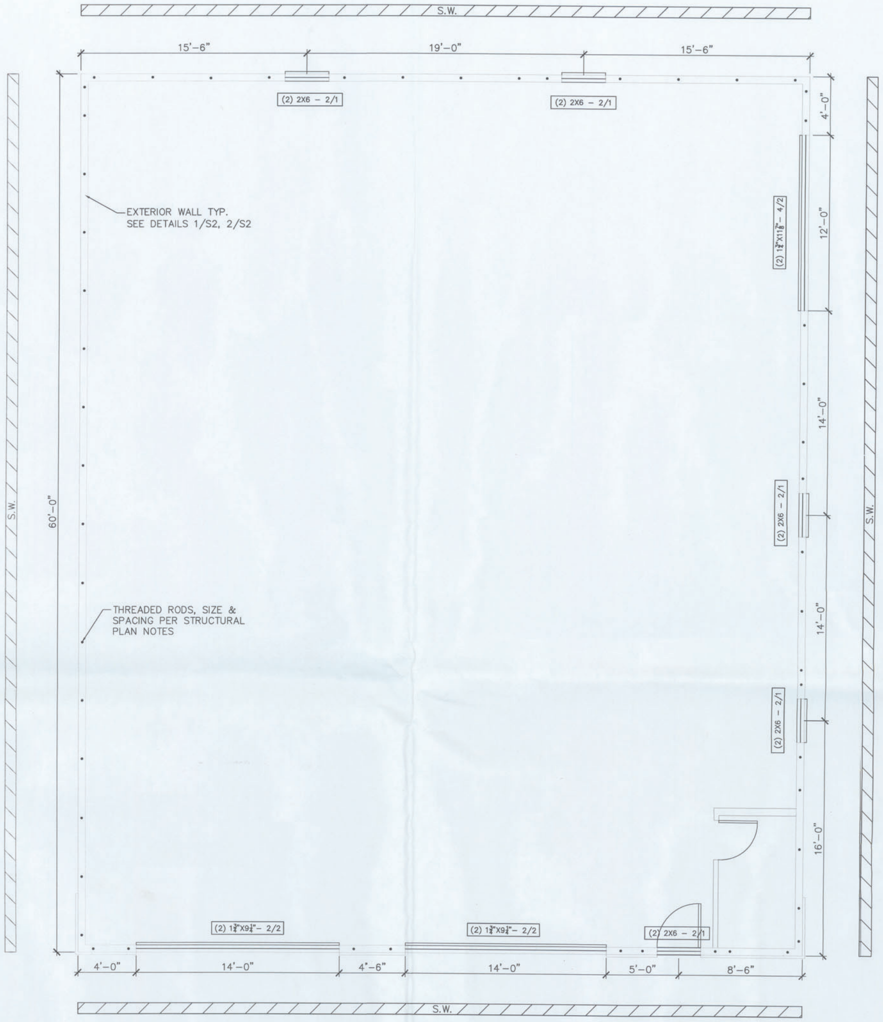
LUCAS & SCOTT ENGINEERING, INC.
12627 SAN JOSE BLVD., STE. 603
JACKSONVILLE, FLORIDA
(904) 260-2690
FLORIDA CERTIFICATE
OF AUTHORIZATION 9933

DOUGLAS V. LUCAS
FL PE No. 49489

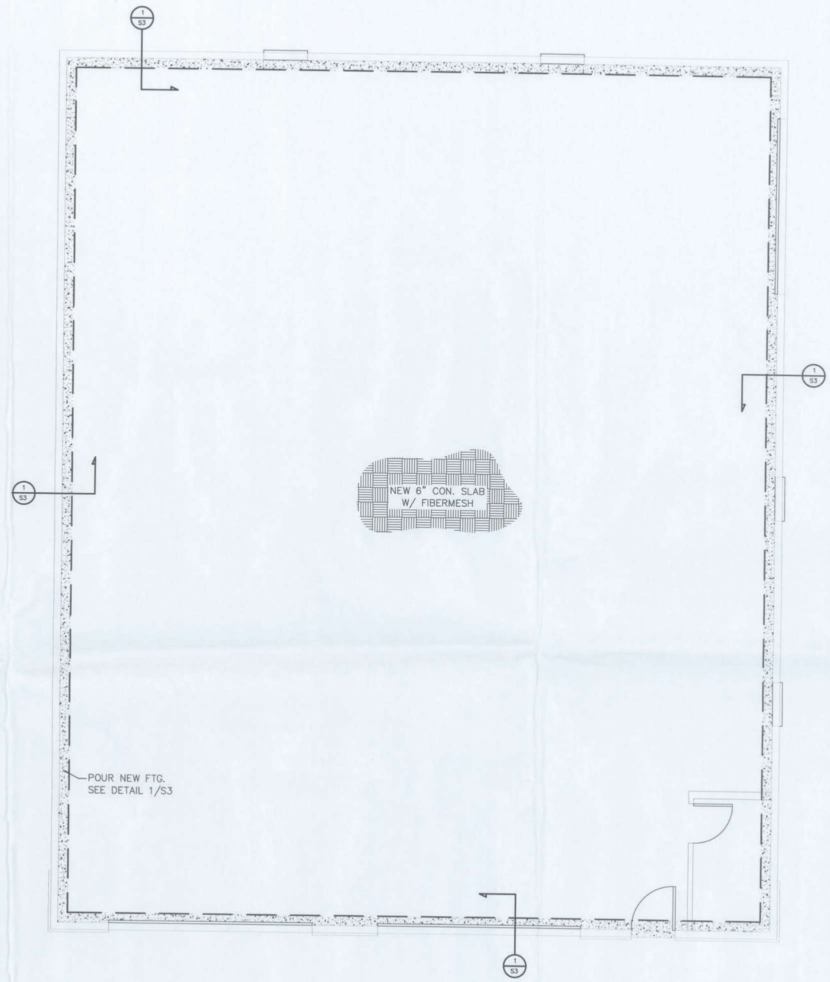
COVER SHEET & GENERAL NOTES
NORTHEAST FLORIDA DESIGN

NEW BARN
251 SW FENNIGAN WAY
LAKE CITY, FLORIDA

DRAWN BY: VML
DATE: 06/09/2025
SCALE: AS NOTED
DESIGNED BY: DVL
JOB NO. 20251152
SHEET No. S1 OF 3



STRUCTURAL PLAN
¼"=1'-0"



FOUNDATION PLAN
¼"=1'-0"

STRUCTURAL PLAN NOTES:
THREADED ROD UPLIFT SYSTEM

1. USE ½" DIA THREADED ROD & COUPLER & 18" ROD EPOXIED 7" MINIMUM. THREADED ROD SHALL BE A36 STEEL W/ MINIMUM 2x2x⅛" WASHER & NUT AT TOP PLATE. THREADED RODS SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS:
   A. 8" ADJACENT TO EACH CORNER
   B. 12" EACH SIDE OF WALL OPENINGS
   C. 48" IN FIELD BEARING WALLS THROUGHOUT

2. SHEARWALLS: SHEARWALLS ARE SHOWN. APA RATED 7/16" MINIMUM STRUCTURAL PANELS INSTALLED W/8d NAILS @ THE FOLLING:
   SW : 3" o/c EDGES & 6" o/c FIELD.

3. SHEARWALL HOLD-DOWNS:
   SHEARWALL CORNERS. STUDS TO FOUNDATION W/ ½" ø THREADED RODS.

HEADER / BEAM CALL-OUT LEGEND

(2) 2x6 -1/2

WHERE:
(2) NUMBER OF PLIES IN HEADER
2x6 SIZE OF HEADER MATERIAL
1 NO. OF JACK STUDS EA SIDE OPENING
2 NO. OF KING STUDS EA SIDE OPENING

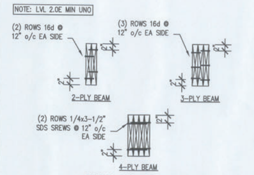
WALL HEIGHTS FOR:
130 MPH (Vult), ENCLOSED
BRITTLE FINISHES L/240

STUD	SPACING	GRADE / SPECIES	MAX HEIGHT
2x4	16" o.c.	#2 SPF	9'-1 1/8"
2x4	12" o.c.	#2 SPF	10'-1 1/8"
2x6	16" o.c.	#2 SPF	13'-7 1/8"
2x6	16" o.c.	#2 SYP	14'-7 1/8"
2x8	16" o.c.	#2 SYP	20'-7"
2x10	16" o.c.	#2 SYP	23'-0"

FLEXIBLE FINISHES L/120

STUD	SPACING	GRADE / SPECIES	MAX HEIGHT
2x4	16" o.c.	#2 SPF	10'-1 1/8"
2x4	12" o.c.	#2 SPF	11'-1 1/8"
2x6	16" o.c.	#2 SPF	16'-1 1/8"
2x6	16" o.c.	#2 SYP	17'-7 1/8"
2x8	16" o.c.	#2 SYP	23'-1 1/8"
2x10	16" o.c.	#2 SYP	26'-1 1/8"

NOTE: LVL 2.0E MIN UNO

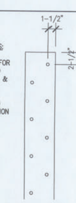


BUILT-UP BEAM DETAIL

BUILT-UP COLUMN NOTES:

1. TYPICAL CONNECTION FOR STUD COLUMNS, JACK TO KING STUD ASSEMBLIES, & CORNER POSTS.

2. CONNECTION REQUIRED FOR EVERY PLY IN ADDITION TO 2-PLYS.



2x4 MEMBERS:
(1) ROW OF 10d NAILS @ 6" O.C. STAGGERED

2x6 MEMBERS:
(1) ROW OF 10d NAILS @ 4" O.C. STAGGERED

2x8 MEMBERS:
(1) ROW OF 10d NAILS @ 3" O.C. STAGGERED

BUILT-UP COLUMN DETAIL

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STRUCTURAL & FOUNDATION PLAN

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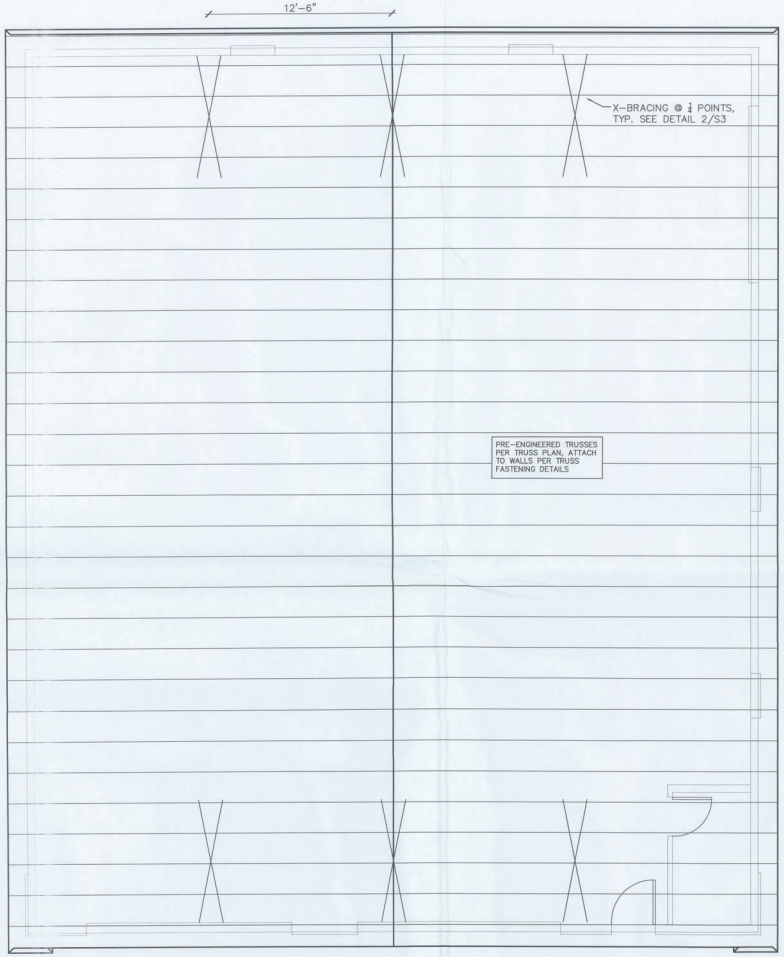
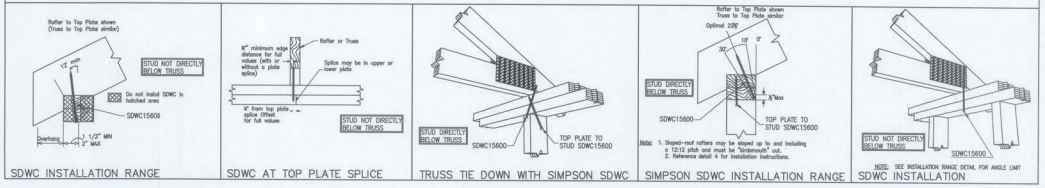


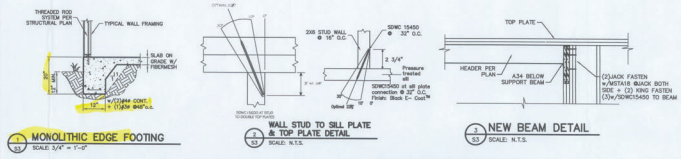
ROOF PLAN
¼"=1'-0"

ROOF PLAN NOTES:

1. SCHEMATIC ONLY.
2. SHEATHING SHALL BE 15/32" MIN. APA RATED OSB ATTACH W/ 8d RINGSHANK NAILS 6" o/c EDGES & 6" o/c FIELD.
3. SHINGLES & UNDERLAYMENT PER ARCHITECTURAL.
4. FASCIA & SOFFIT PER ARCHITECTURAL WALL SECTION.

TRUSS FASTENING DETAILS





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LUCAS & SCOTT ENGINEERING — LLC
12627 SAN JOSE BLVD, STE 603
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FLORIDA CERTIFICATE OF AUTHORIZATION #883

DOUGLAS VAN LUCAS LICENSE No. 49489 STATE OF FLORIDA PROFESSIONAL ENGINEER
DOUGLAS VAN LUCAS
FL PE No. 49489

ROOF PLAN & DETAILS

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