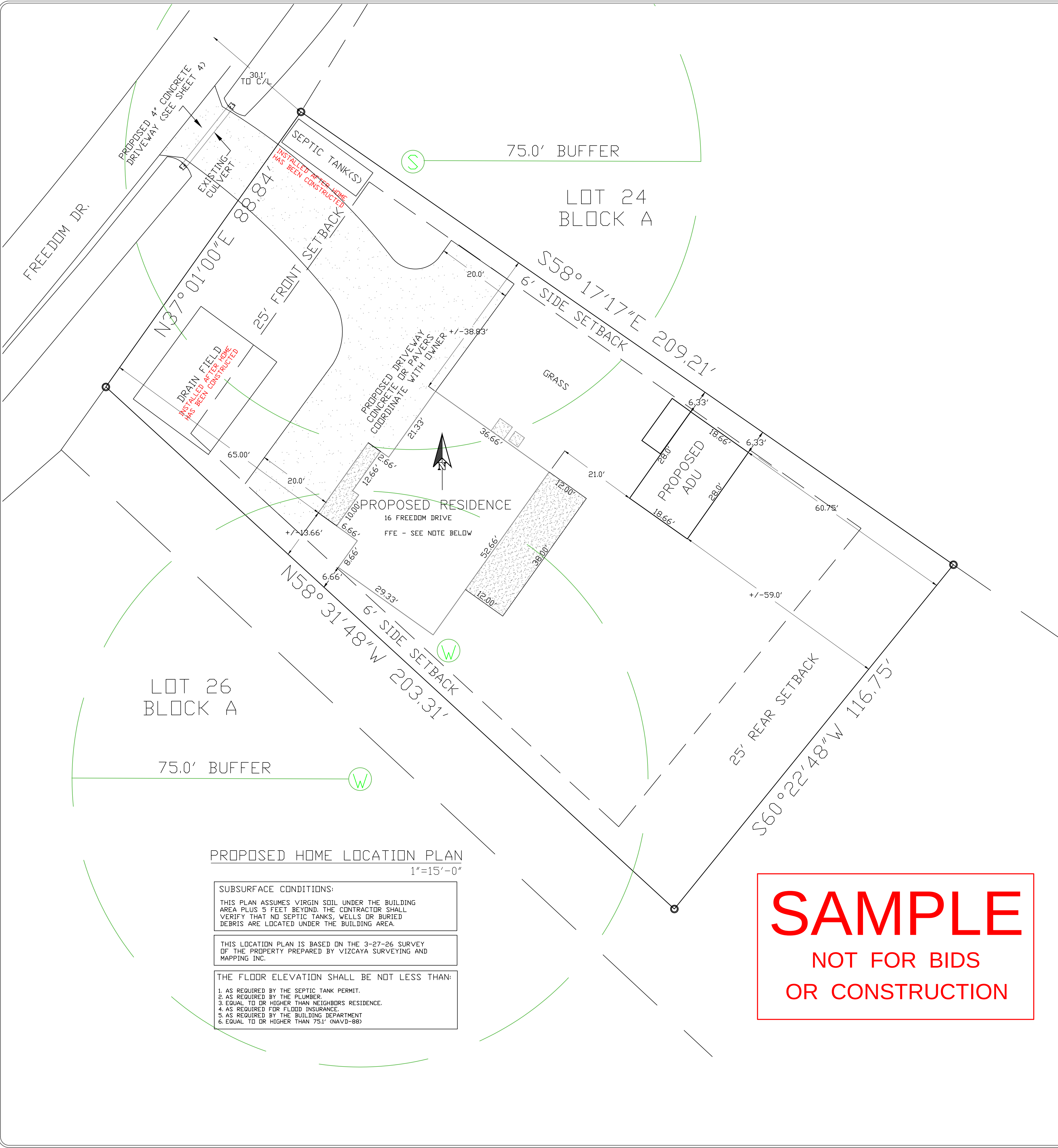




ENGINEERING NOTES

1.) These plans are certified to be designed in accordance with the 2023 Florida Building Code, Residential; and the 2023 Florida Building Code, Building; and ASCE 7-16, and ASCE 7-22 using an ultimate wind load 3 second gust velocity" as follows:

DESIGN CRITERIA	DESIGN LOADS
Wind Speed = 150 MPH (3 sec. gust)	Soil Bearing Pressure – 2,000 psf (see below)
Risk Category = II, (2)	Floor loads – live load 40 psf
Exposure Category = B	Roof Trusses (Minimum design loads)
Enclosure Category. = enclosed	Top Cord: live load= 20 psf, dead load= 15 psf
Internal pres. coef. + 0.18 &– 0.18	Bottom Cord dead load = 10 psf

ULT / ASD Load Equivalents	
150 mph "ultimate" = 116 mph "allowable" (nominal)	FBC TABLES R301.2.1.3 & 1609.3.1
Design Pressures = DP(ult) x 0.60 = DP(asd)	FBC SECTIONS R301.2.1.3 & 1609.3.1

VELOCITY PRESSURE = $Q_z = 0.00256 K_z K_{zt} K_d V$ = 34.27 PSF
at mean roof height of 30 feet.

The minimum window & door design pressures are specified under "DESIGN LOAD PRESSURES FOR WINDOWS AND DOORS" in these Notes. This Engineering Design is for resisting wind loads on this particular building to be built on this specific site and cannot be used for any other building or structure.

2.) FOUNDATIONS AND SOIL

This plan assumes virgin soil under the building area plus 5 feet beyond. The contractor shall verify that no septic tanks, wells or buried debris are located under the building area.

A Geotechnical Engineering and Testing Company should be retained to perform soil borings and make foundation recommendations prior to beginning any work. If your geotechnical engineer recommends a bearing pressure of less than 2000 PSF then contact me for foundation modifications and/or soil improvement requirements. The foundations shown on these plans have been designed for an allowable soil bearing pressure of 2000 PSF. I can not be responsible for future foundation settlement if you elect not to obtain soil borings. At a minimum, the building department will require compaction testing.

The soil directly beneath the buildings and 5 feet beyond should be prepared in accordance with your geotechnical engineers recommendations, and/or the following (whichever is more stringent): All fill shall be placed and compacted in 12" lifts (max). Compaction shall be tested beneath foundations and floor slabs and shall have a minimum value of 95% as determined by the modified proctor test. Prior to placing any concrete, the contractor shall verify that foundations have been provided for all bearing walls. The soil beneath foundation & slabs must be tested by an Engineering Testing Lab for compaction prior to pouring concrete.

Soil shall be termite treated. Chemical barrier method shall be completed in accordance with Florida Building Code – Residential Section R 318 (see foundation plan on sheet 4).

3.) CONCRETE MATERIALS and PLACEMENT

Foundation and Slab Concrete shall have a minimum "28 day" compressive strength of 3000 psi (4000 psi recommended) and be "regular mix" (3/4" rock) poured at a maximum slump of 5 inches. Block Wall cells and Tie Beams shall be pumped with "pea-rock" pump mix (1/4"rock) with a "28 day" compressive strength of 4000 psi, and a maximum slump of 10". All foundation slab concrete shall have a maximum water/cement ratio of 0.55.

All column, beam, and wall concrete shall be vibrated (or rodded) as it is poured. Wall concrete may be rodded using the downpour steel. Floor slab concrete shall be tested by a materials testing company for strength and slump. All slabs shall be cured with water for a period of 3 days. Use curing compound, soaker hoses, or tarps. SawCut 1.5" deep control joints in all slabs within 12 hours (12' max. each way).

Curing concrete – All slab concrete shall be cured. The preferred method of curing concrete is to keep slabs wet continuously for a minimum of three (3) days after placement (use soaker hoses or tarps). An acceptable alternate is to apply a curing compound in accordance with manufacturers instructions.

4.) REINFORCING STEEL and PLACEMENT

Reinforcing steel (rebar) shall have a minimum yield strength of 60 KSI (Grade 60). All lap splices shall be a minimum of 25 inches. All bends shall have a minimum radius of 6 bar diameters. All reinforcing steel shall have a minimum exterior concrete cover of 1.5" except that all reinforcing steel used in the foundations shall have a minimum concrete cover of 3". Minimum "Interior concrete cover" shall be a minimum of 3/4" for slabs and 1" for interior faces of beam stirrups and column ties.

5.) FIRST STORY BLOCK WALLS

Block Walls shall be constructed using 8" x 8" x 16" hollow "concrete" masonry block with a "net area" compressive strength of 1900 psi (min.) constructed using type M or S mortar meeting ACI Code, sections 530-08 & 530.1-08 and ASTM C 90-08. All block shall be laid in running bond and interlocked at all corners and intersections unless specified otherwise on the floor plans. All block walls shall have downpours where shown on the floor plans and at 4'0" (max.). A continuous triple lintel block tie-beam shall be provided over all block walls. (see typical wall section on sheet 6).

CUT ONE BOTTOM FACE OUT OF ALL DOWNPOUR BLOCK CELLS, WITH A MINIMUM AREA OF 12 SQUARE INCHES AND A MINIMUM DIMENSION OF 3 INCHES, TO CLEAN THE CELL, TIE STEEL, AND TO ENSURE A PROPER POUR.

DOWNPOUR STEEL shall be one #5 bar continuous from the foundation to the tie beam. The bar shall be hooked 12" in the foundation (along the bottom steel) and 12" in the tie beam (along the top steel) with 25" Lap splices (Min.)

RELEASE/REVISION

SAMPLE
NOT FOR BIDS
OR CONSTRUCTION

PROFESSIONAL ENGINEER
DAVID L. BRYANT
STATE LICENSE PE-08154
4280 DOW ROAD, SUITE 108
MELBOURNE, FLORIDA 32934
(321) 254-7913

CUSTOM ADU DESIGN FOR:
NEW CLIENT
XXXX MAIN STREET
CITY NAME, FLORIDA 329XX

HOME LOCATION PLAN
AND STRUCTURAL NOTES

DRAWN	MJS
DATE	06/16/26
CHECKED	DLB
SCALE	
JOB NO.	
SHEET	1
OF	6 SHEETS

ENGINEERING NOTES CONTINUED...

6.) CONCRETE BEAMS

All block walls shall have a continuous reinforced concrete tie beam. See Floor Plans and wall section for beam type and location.

Corner Bars – All tie beam corners shall be continuous double lintel block tie–beam with two (min) #5 corner bars tied in place prior to pouring concrete. The corner bars shall extend a minimum of 24” into each tie beam.

7.) SECOND STORY EXTERIOR FRAME WALLS

All exterior walls are 2x6 SPF (Spruce/Pine/Fir) studs spaced at no more than 16” on center. All studs shall be attached to the top and bottom plates using two @ 16d Galvanized Nails (or three @ 12d galv. nails) and shall have SIMPSON SP6 Stud straps at the top and bottom with 6 @ 10d x 1–1/2” Galvanized nails in each strap. Bolt all walls to the tie–beam below at 48” o.c. using 5/8” threaded rod and 5/8” x 12” ”J” Anchor Bolts (see typical wall section).

8.) INTERIOR PARTITION WALLS

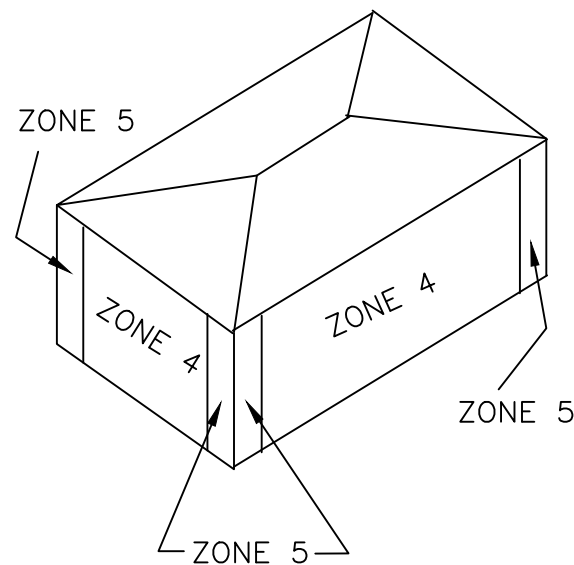
The minimum stud lumber shall be 2x4 SPF studs @ 16” on center. Nail studs to the top and bottom plates with two (2) 16d common nails or three (3) 12d common nails. Interlock top plates at all corners and nail with (4) 16d common nails. All bottom plates shall be pressure treated 2x4’s (See partition wall section on sheet 6).

9.) DESIGN LOAD PRESSURES FOR WINDOWS AND DOORS: The table below is based on ”ASD” (ALLOWABLE STRESS DESIGN) FBC 1609.1.5, and assumes that the windows and doors have been tested in accordance with CHAPTER 17 of the 2023 FBC and that the appropriate safety factor has been incorporated into their published load ratings. This engineering design is based on this building being an ”enclosed” structure, therefore; All windows, sliding glass doors, and glass panels in doors shall be ”impact resistant” meeting the minimum requirements of the 2023 Florida Building Code (section 1609) for impact resistance or shall have ”code compliant” protective shutters installed over the openings. All windows, sliding glass doors, and entry doors, shall be designed and certified by the manufacturer to resist minimum design wind pressures as shown below.

DESIGN PRESSURES FOR WINDOWS AND DOORS

END ZONE AREAS (within 48” of corners) = ZONE 5
The pressures are tabulated by category for this residence. Positive pressures are pushing inward on the window/door; and negative pressures are pushing outward on the window/door.

"ALLOWABLE" WIND PRESSURES FOR COMPONENTS, CLADDING, DOORS, & WINDOWS WIND = 150 MPH – EXPOSURE B – MRH=<30' (POUNDS PER SQUARE FOOT)				
EFFECTIVE WIND AREA (SQ.FT.)	ZONE 4 (Away from corners)		ZONE 5 (Within 4' of corners)	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
0–19	23.2	–25.2	23.2	–30.3
20–49	21.7	–23.8	21.7	–27.4
50–99	20.7	–22.7	20.7	–25.2



10.) TESTING & LABELING

All exterior windows and doors shall be tested and each product type certified to meet Florida Residential Building Code FBC–R609, and the design pressures specified above, including attachment to the main structure. ALL GLAZED OPENINGS SHALL MEET THE REQUIREMENTS OF THE LARGE MISSILE TEST unless they are covered with ”code compliant” protective shutters. All testing shall be in accordance with the testing provisions outlined in the 2023 Florida Building Code. Product certification shall be provided to the Building Department by an independent testing laboratory meeting the qualifications outlined in the 2023 Florida Building Code. The product certification shall include the minimum installation details (including fasteners and their spacing) required to resist the total force on the window when the design wind pressures are applied to the total area of the window. All Windows and glass doors shall bear an AAMA or WDMA or other approved label identifying the manufacturer, model or model number, performance characteristics, and approved product evaluation entity to indicate compliance with the requirements of ASTM E 1300, ANSI/AAMA/MWWDA 101/IS 2.

11.) CLADDING and COMPONENTS

Siding, roofing, soffits, and all other cladding and components shall be fastened in strict accordance with the manufacture specifications to resist the wind loads & categories stated in Note #1 (this includes decorative attachments). Contractors must make these manufacturers provide certifications that their product and fastener details meet or exceed the requirements of the 2023 Florida Building Code for this wind zone. The minimum design pressures are the same as used for windows and doors (see Note #9 on this sheet).

12.) ROOF TRUSSES AND FLOOR TRUSSES

The roof structure and second floor structure consist of pre–engineered trusses placed 24” o.c. The trusses shall be designed and engineered for the design loads stated in Note #1, by a ”truss system” engineer in accordance with the ”2023 Florida Building Code”. Final truss engineering shall include a signed & sealed truss system layout as well as individual drawings for each truss type. Truss drawings shall include wind design information, vertical and horizontal reactions, uplift forces on all trusses, all truss bracing requirements, and specify all girder loads. NOTE – Install vertical shoring beneath all floor trusses where drywall will be stocked with more than six sheets in any location.

13.) ROOF SHEATHING

ROOF SHEATHING – The roof trusses shall be sheathed with 5/8” (19/32”) CDX plywood (min.) and nailed with 8d (2–1/2”) galvanized common ”ring–shank” nails at 4” o.c. everywhere within 5’–0” of all roof edges and ridgelines and 3” o.c. within 5’0” of all corners. All other areas can be nailed at 6” on center (staples are not allowed). Install aluminum clips between horizontal plywood joints or ”gap” the joint 1/8” (min.).

14.) UPLIFT CONNECTORS ON WOOD FRAME WALLS

Use the following galvanized truss straps (or equal connectors) to resist the truss uplift loads categorized below or use these as an example. Use connector strengths and nailing requirements in accordance with the manufacturers’ recommendations.

Roof Trusses on Wood Frame walls:

- a.) Up to 400 lbs uplift – One ”Simpson” H1 truss connector with 6 @ 8d x 1–1/2” galvanized nails in truss & 4 @ 8d (full length nails) in top plates or beam)
- b.) Up to 1015 lbs uplift – One ”Simpson” H10A truss connector with 18 @ 10d x1½” galvanized nails (9 in truss & 9 in top plates or beam)
- c.) Up to 2030 lbs uplift – Two ”Simpson” H10A truss connectors with (one on each side of wall) with 18 @ 10d x1½” galvanized nails (9 in truss & 9 in top plates or beam) in each connector.
- d.) Up to 2400 lbs uplift – Two ”Simpson” HTS24 truss connectors (one on each side of truss) Double Girder Truss with 16 @ 10d x1½” galvanized nails (8 in truss & 8 in wall, plates, and studs. All Girder trusses require a minimum of two wall studs directly under the Truss

15.) ROOFING MATERIALS and INSTALLATION

The Roofing material manufacturer shall provide product certification showing that the roofing materials and their installation comply with all requirements of the 2023 Florida Building Code for the wind loads & categories stated in Note #1 (exposure B) and with all sections of Chapter 15. And be labeled by the manufacturer showing the manufacturers name, model, or type of product, and ASTM product approval information. The Building Contractor shall verify that the Roofing sub–contractor has a copy of these sections of the code. These sections are summarized below:

- a.) All roofing components shall be rated for 150 mph (exposure B) wind loads in accordance with the 2023 Florida Building Code, and be labeled by the manufacturer showing the manufacturers name, model, or type of product, and ASTM product approval information.
- b.) Self–adhering polymer modified bitumen sheet complying with the requirements of the manufacturers’ product approval sheet, and ASTM/D 1970. Installed in accordance with the manufacturers spec’s and the 2023 Florida Building Code, Chapter 15, BUT NOT LESS THAN 2” headlaps & 19” endlaps with Nails every 12” o.c. along edges, and 24” o.c. everywhere else. (offset successive endlaps 6’0” minimum)
- c.) Button Cap Nails shall be used to hold all underlayment in place every 6” o.c along edges, ends, and at overlaps, and 12” o.c in staggered rows everywhere else. All roofing materials shall be corrosion resistant.
- d.) Shingle roofing shall comply and be installed in accordance with manufacturers specifications and their product affidavit sheet for 150 mph (exposure B) ”116 mph allowable” in accordance with the 2023 Florida Building Code.

16.) CONVENTIONAL ROOF FRAMING for VALLEY CONSTRUCTION, MISC. FILL IN, OR OTHER

Where conventional roof framing is used to ”fill–in” at valley framing or other locations, the framing members shall be installed at 24” on center (max.). Ridge beams shall be the same size or larger than rafters, and rafter sizes shall be as follows:

Use 2x4 rafters to 6’ length, 2x6 rafters to 8’ length, 2x8 rafters to 11’ length, 2x10 rafters to 13’ length, and 2x12 rafters to 16’ length. Nail each end with 3 @ 12d gun nails. AND –

On all members over 48” long – Install HURRICANE STRAPS in addition to the nails.

Strap ”rafter to rafter” across the ridge beam using ”Simpson” LSTA18 (or MSTA18) straps with 14 @ 10d x 1½” galvanized nails.

Attach base of rafters (and both ends of all other miscellaneous framing members) to resist uplift forces equal to 50 lbs. multiplied by the overall rafter/member length. i.e – An 11’ long rafter/member requires straps (at each end) rated for 550 lbs.

17.) MISSED REINFORCING DOWELS AND HURRICANE STRAP CONNECTORS

Reinforcing steel that is misplaced can be drilled and epoxied 10” into concrete using ”Simpson” SET 3G (or equal) in accordance with the manufacturers specifications.

Embed hurricane straps that are left out (or misplaced by more than 1”) must have a new strap attached to the side of the tie beam with ¾6”x2¼” TAPCON (or TITEN screws). Use one Tapcon for each 400 lbs. of uplift and nail strap to truss per manufacturers specifications.

SAMPLE
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STAIR AND RAILING NOTES (ALSO SEE DETAIL ON SHEET 6)

The stairs, stair railings, and the balcony railing shall meet the 2023 Florida Building Code chapter 3 section R311.7. with a maximum rise of 7½” inches per step and a tread of 10 inches plus 1” nosing.

Stair Fabricator shall coordinate with contractor & owner as to the stair materials, stair components, railings, and stair finishes to be used. Minimum material and fabrication requirements are given below. ”FIELD VERIFY” exact stair height before any stair Fabrication!

STAIR MATERIALS (Minimums)

- 1) Stringers – Use 2x12 stringers on each side of stairs. Add center stringer for additional support if 3/4” treads are used, or if desired. Stringers shall have support every 16” either by building 2x4 frame walls under stringers or attaching the stringer to the side of a frame wall. If side mounted, Connect stringers to side of wall studs with a minimum of 2 @ 1/4”x3–1/2” SPAX T–STAR lags.
- 2) Treads – All treads shall be 11” wide (10” + 1” nosing). Wood treads may be cut from 2x12 (SYP) material or use two 2x6 (SYP) boards. If SPF lumber is used then a center stringer is required. Hardwood treads sold by stair component manufacturers may be used in accordance with their span/support requirements. (See details on sheet 4).
- 3) Risers – All risers shall be equal height and not more than 7–3/4” as required by the 2023 Florida Building Code. Risers shall be solid and be constructed using 3/4” (Minimum) wood. See detail on sheet 4.
- 4) Hand Railings – Stair handrails shall be 34”–38” in height measured vertically from tread nose.
- Handrail grip size – The top rail on stair railings shall meet the ”grip–size” requirements of FBC RESIDENTIAL 2023 Section R311.7.8.3

GENERAL NOTES

- 1.) DOORS & WINDOWS
All windows and exterior doors shall meet all the provisions of the 2023 Florida Building Code including the wind load and impact criteria specified in the Engineering notes on this sheet. Coordinate window styles with owner. Coordinate ”rough” openings in new block walls with window and door manufacturers prior to laying any block. All bedroom windows shall be ”EGRESS” windows and meet the egress opening size requirements.
- 2.) HVAC
The HVAC contractor shall evaluate and make recommendations to install a Ductless Mini–split air conditioning system that will adequately condition the new ADU. The HVAC contractor shall coordinate with the owner to determine the quantity and location of mini–split air handlers. At a minimum, there shall I air handlers in the living room and in each bedroom. Mini–split equipment that produces condensate shall have a drain line with an exterior trap. Coordinate electrical power with the electrician, condensate drain with the plumber. Installation and materials shall be in accordance with the 2023 Florida Building Code.
- 3.) PLUMBING
All materials and installation shall be in accordance with the 2023 Florida Building Code and all other applicable codes to construct a complete working system. All materials and equipment shall be new and free of damage and blemishes. All pipes shall be secured and air chambers or bladders installed to prevent water hammer or noise in the system. The plumber shall work with owner to select supply line ”type” and the installation procedures used. All fixtures shall be selected and approved by the owner prior to purchase. Install condensate lines for all HVAC equipment. Provide all power requirements to the electrician before beginning any work. Plumber shall connect drain system to Septic Tank line.
- 4.) INSULATION (minimum requirements) Coordinate with owner for additional insulation requirements. All exterior walls and the attic shall be insulated. The exterior block walls shall have 3/4” (R=4.1) insulation between all furring strips from floor to ceiling. 2x6 frame walls shall have R=19 insulation from floor to ceiling. The attic shall have R=38 batt or ”spray” insulation installed under the roof sheathing over the entire area of conditioned space (conditioned attic space).
- 5.) STUCCO
Stucco over masonry ”stucco” block shall be a two coat system with a minimum thickness of 5/8”. If finish block is used, then apply a bonding agent prior to any stucco. Always apply bonding agent to all pre–cast lintels. Stucco materials & installation shall comply with 2023 Florida Building Code.
- Stucco over wood frame walls, beams, or Gables – 5/8” stucco over expanded ”galvanized” metal wire lathe over code approved vapor barrier. Install lath in accordance with the 2023 Florida Building Code for the wind speed and ”negative” pressures shown for components and cladding. All fasteners shall be galvanized or stainless steel. Install flashing around all doors and windows before installing lath.
- 6.) EXTERIOR SIDING OVER WOOD FRAME WALLS
- Plank lap siding shall be 7½” or 7½” wide planks (installed with 5” maximum reveal) fastened directly to wood frame wall studs at 16” o.c. (max.) in accordance with manufacturers specifications. Coordinate type and manufacturer with owner.
- Each lap siding panel shall be ”face nailed” using 8d (.113” shank x 2.375” long) ring shank box nails through the face of the panels (3/4” up from bottom). The nails shall go through the underlying ”lapped” panel and into a wall stud. Nails shall be installed 3/4” from the bottom of the panel. Use STAINLESS STEEL Nails or HD galvanized nails.
- To angle the first panel (bottom panel), use a starter strip behind the bottom of the first panel.
- The truss gables and end wall shall be sided with 5/8” (min.) T1–11, or RB&B exterior plywood wood siding. Attach siding to trusses using 8d galvanized ring shank nails at 4” o.c. everywhere.
- 7.) INTERIOR FINISHES
All interior walls and the interior of block walls shall have 5/8” drywall. Block walls shall have 1x2 PT furring strips spaced 16” on center. All interior walls shall have texture and 2 coats of paint. All ceilings shall be 5/8” drywall with texture and paint. Coordinate all textures, door styles, interior trim, and paint with owner. Install drywall in accordance with all the requirements of the 2023 Florida Building Code and accepted ”good” industry practices. Any mis–aligned (crooked) wall framing, ceiling framing, or furring strips shall be straightened by the drywall contractor or brought to the attention of the owner and contractor prior to installing any drywall. Care shall be taken so that all wall–to–ceiling joints are straight / flat for the installation of crown mouldings. NOTE – Install vertical shoring beneath all floor trusses where drywall will be stocked with more than six sheets in any location.
- 8.) EXTERIOR PAINT
Apply a minimum two coats of high quality exterior paint over primed surfaces. Coordinate paint type and color with owner. Apply paint in accordance with paint manufacturers specifications.

RELEASE/REVISION

SAMPLE
NOT FOR BIDS
OR CONSTRUCTION

PROFESSIONAL ENGINEER
DAVID L. BRYANT
STATE LICENSE PE–08154
4280 DOW ROAD, SUITE 108
MELBOURNE, FLORIDA 32934
(321) 254–7913
This plan has been prepared under my direct supervision and is, to the best of my knowledge, accurate and in compliance with applicable building codes. This plan is for use only for this specific building at this location.

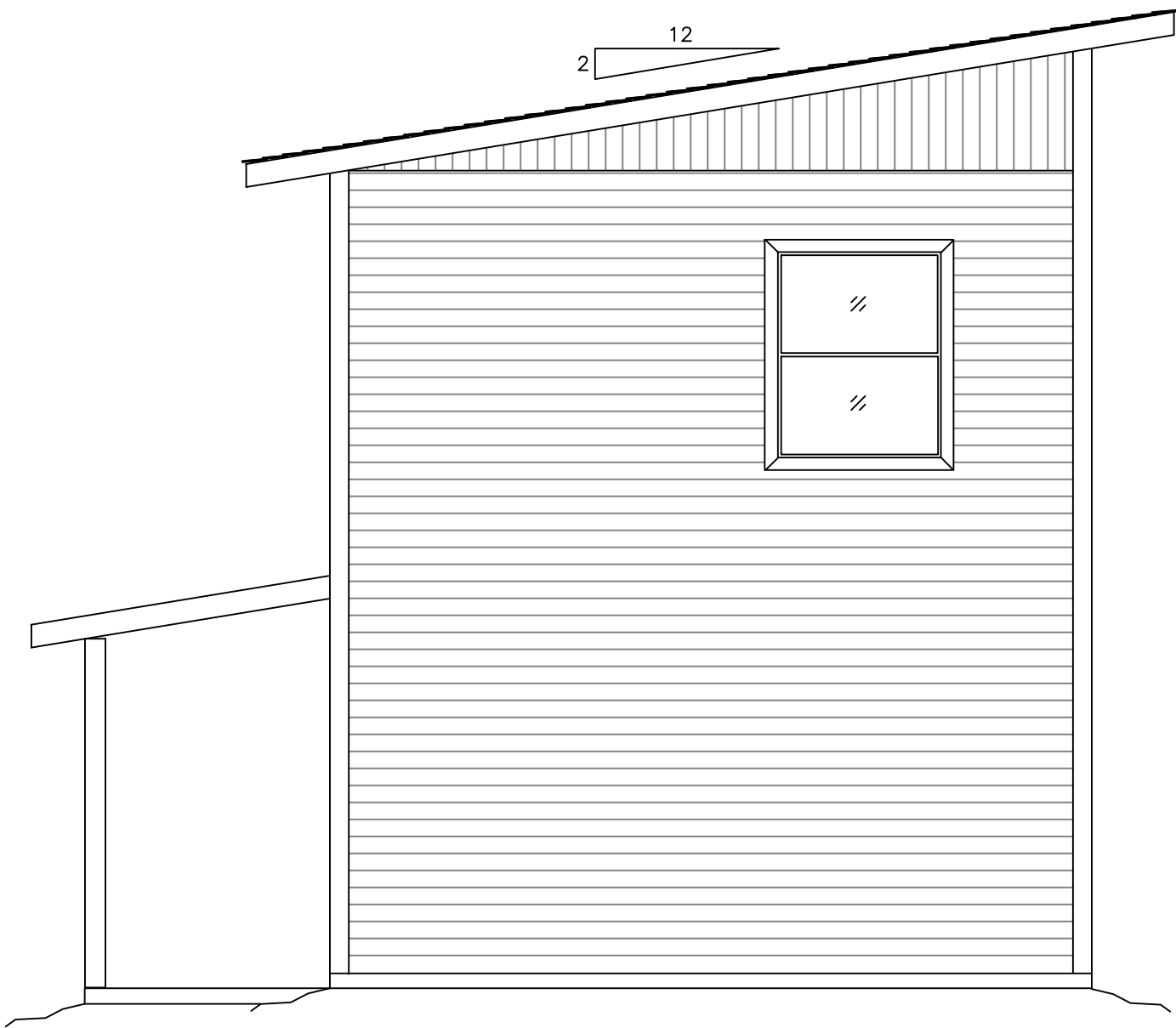
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NEW CLIENT
XXXX MAIN STREET
CITY NAME, FLORIDA 329XX

STRUCTURAL NOTES
CONTINUED

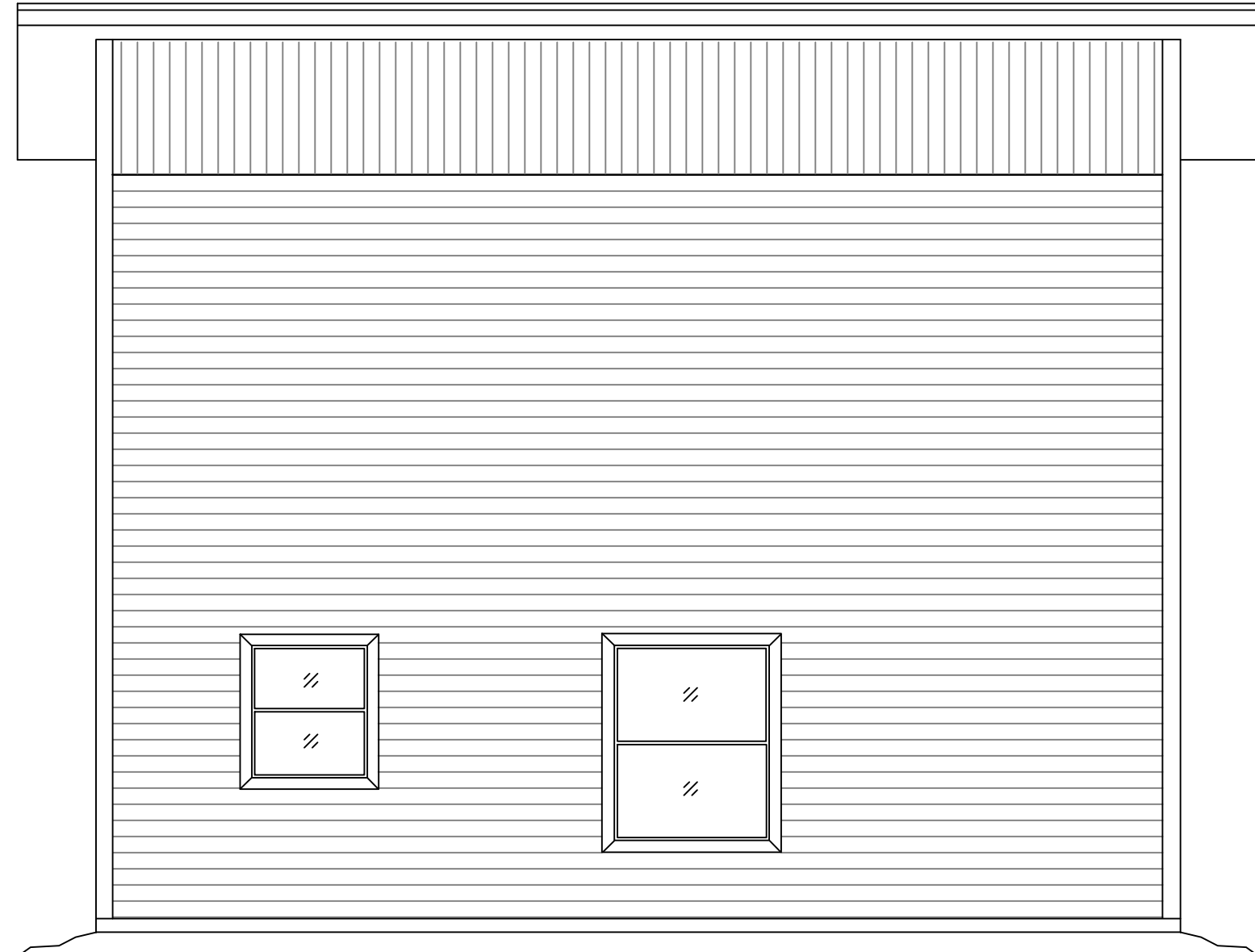
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CHECKED	DLB
SCALE	
JOB NO.	
SHEET	2
OF	6 SHEETS



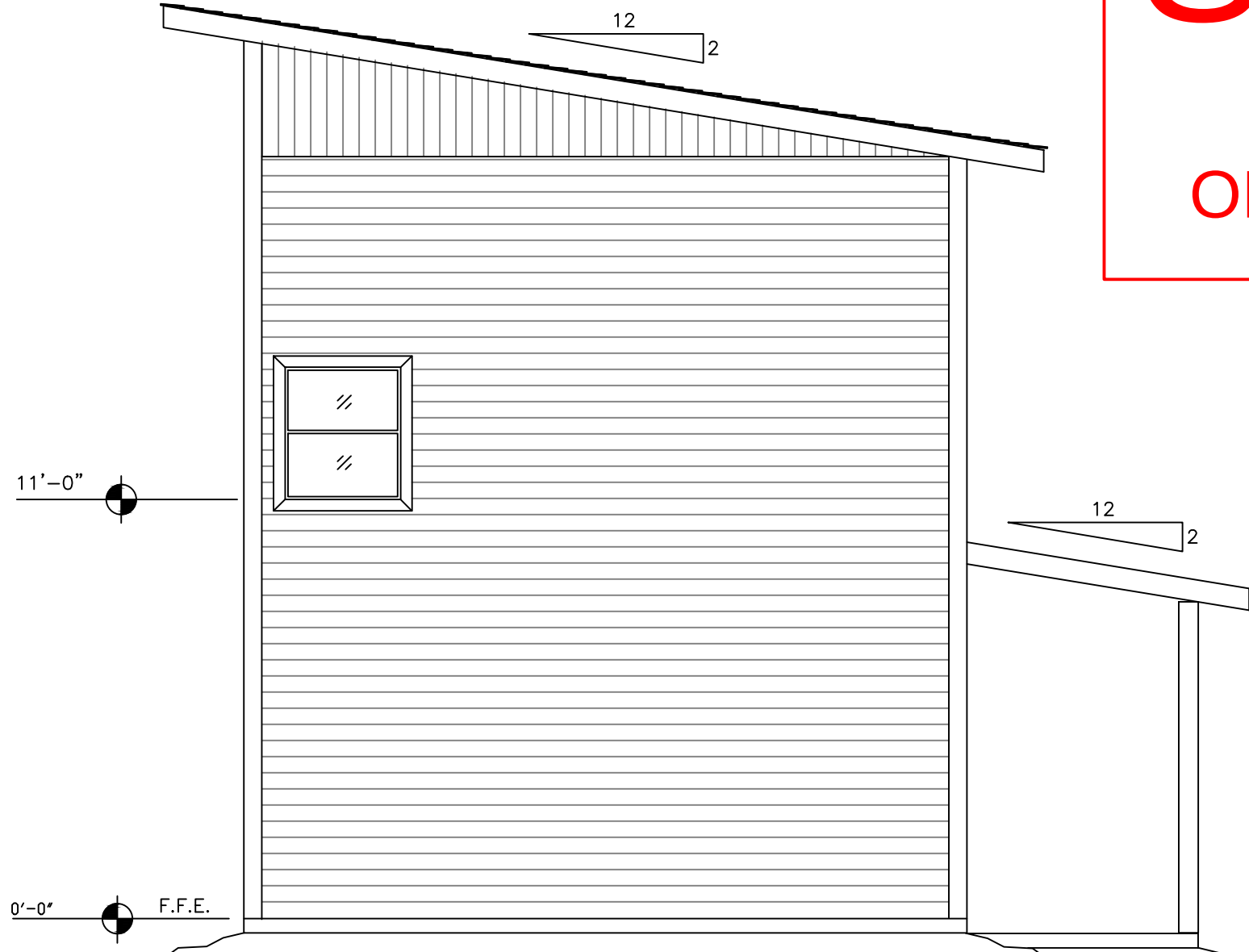
PROPOSED FRONT ELEVATION
1/4"=1'-0"



PROPOSED RIGHT ELEVATION
1/4"=1'-0"

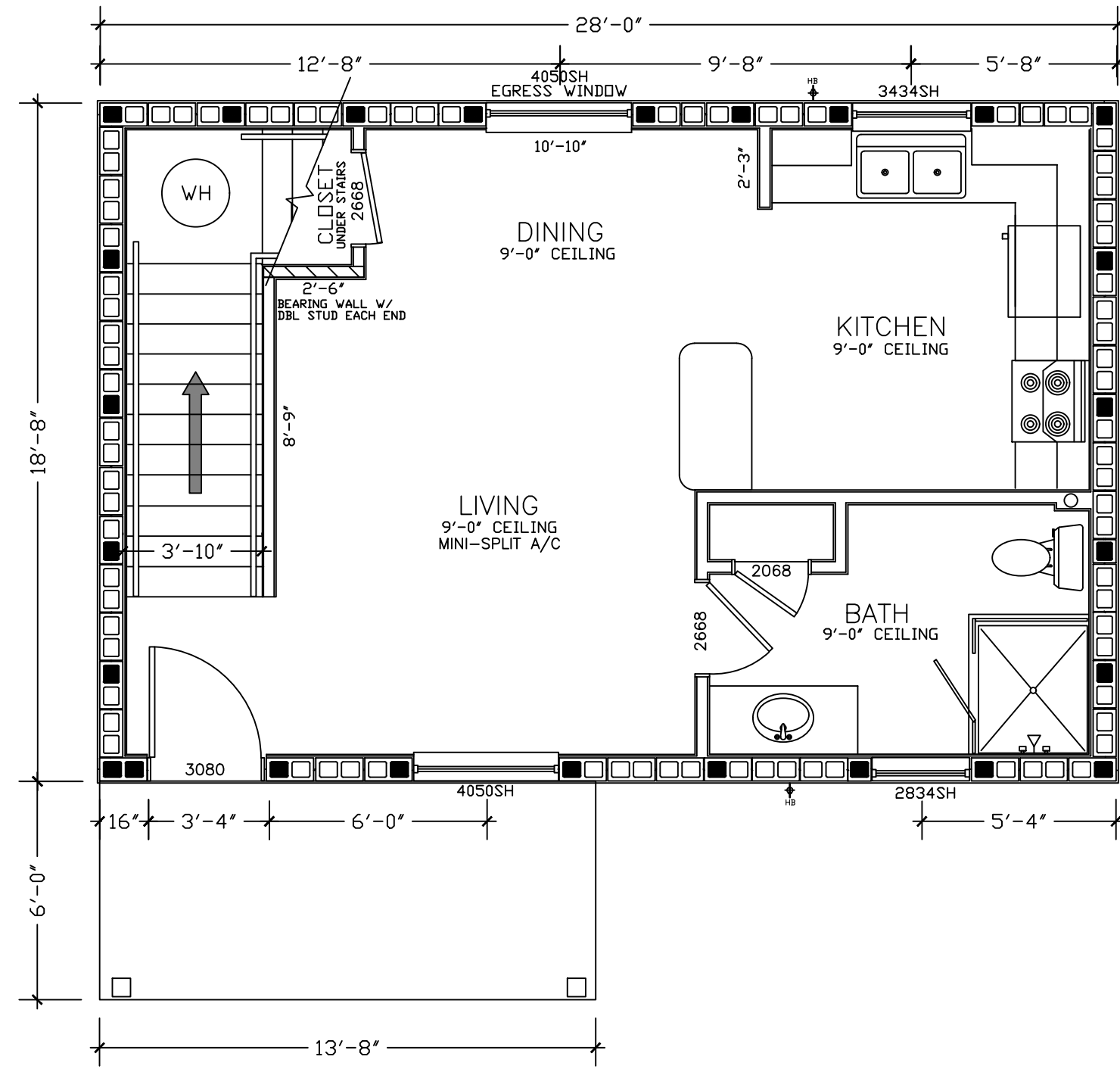


PROPOSED REAR ELEVATION
1/4"=1'-0"

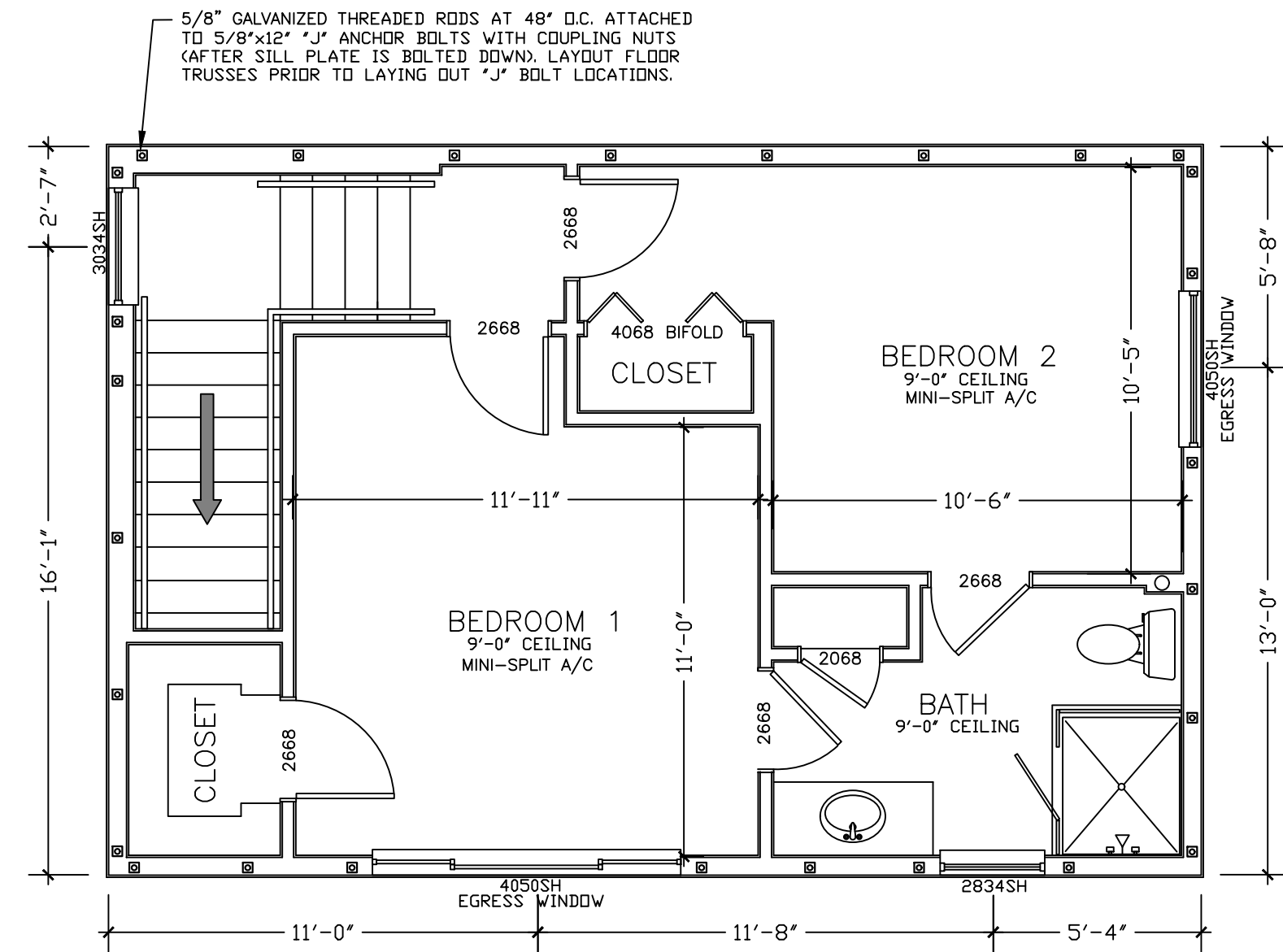


PROPOSED LEFT ELEVATION
1/4"=1'-0"

SAMPLE
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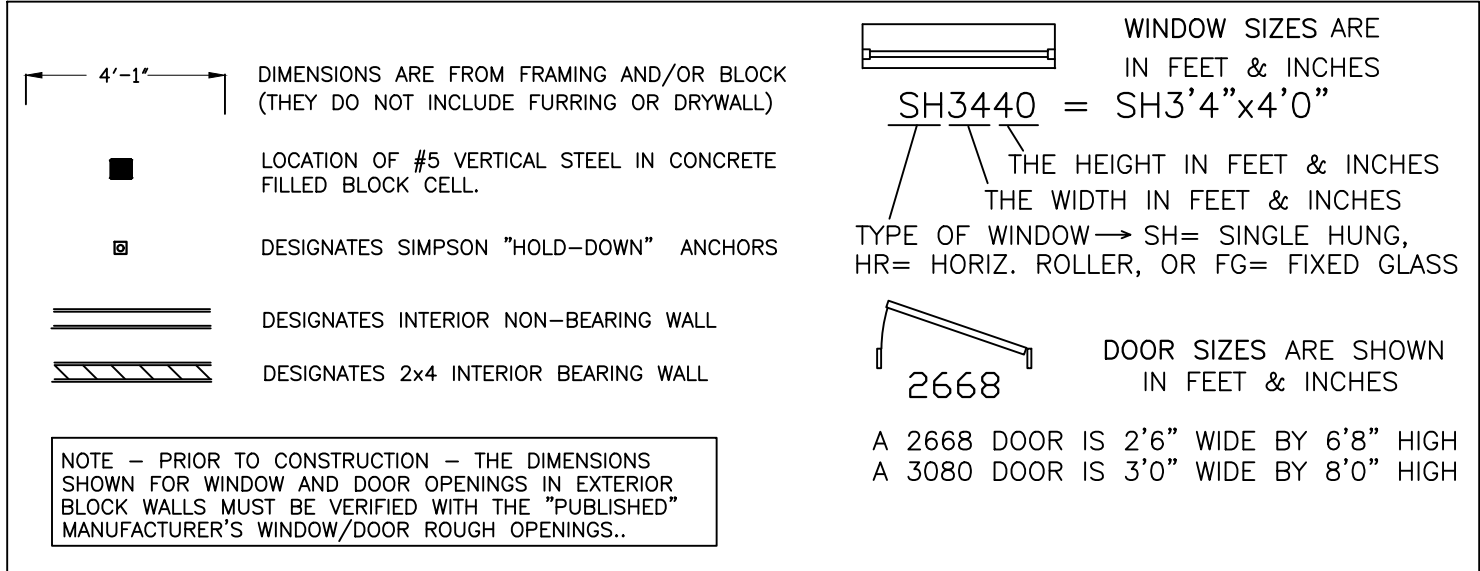


PROPOSED 1ST FLOOR PLAN
1/4"=1'-0"



PROPOSED 2ND FLOOR PLAN
1/4"=1'-0"

LEGEND



MISSED REINFORCING DOWELS AND HURRICANE STRAP CONNECTORS

REINFORCING STEEL THAT IS MISSED OR MISPLACED CAN BE DRILLED AND EPOXIED 10" INTO THE CONCRETE USING "SIMPSON" SET 3G (OR EQUAL) IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.

EMBEDDED HURRICANE STRAPS THAT ARE LEFT OUT (OR MISPLACED BY MORE THAN 1") MUST HAVE A NEW STRAP ATTACHED TO THE SIDE OF THE TIE BEAM WITH 3/16"x2 1/2" TAPCON (OR TITEN SCREWS). USE ONE TAPCON FOR EACH 400 LBS. OF UPLIFT AND NAIL STRAP TO TRUSS PER MANUFACTURERS SPECIFICATIONS.

SUBSURFACE CONDITIONS:

THIS PLAN ASSUMES VIRGIN SOIL UNDER THE BUILDING AREA PLUS 3 FEET BEYOND. THE CONTRACTOR SHALL VERIFY THAT NO SEPTIC TANKS, WELLS OR BURIED DEBRIS ARE LOCATED UNDER THE BUILDING AREA.

TERMITE TREATMENT:

TO PREVENT TERMITE DAMAGE A CHEMICAL BARRIER SHALL BE INSTALLED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE - RESIDENTIAL, SECTION R318. A CERTIFICATE OF COMPLIANCE MUST BE ISSUED TO THE BUILDING DEPARTMENT BY A LICENSED PEST CONTROL COMPANY BEFORE A CERTIFICATE OF OCCUPANCY WILL BE ISSUED. THE CERTIFICATE OF COMPLIANCE SHALL STATE: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. THE TREATMENT IS IN ACCORDANCE WITH THE RULES AND LAWS OF THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES."

THE FLOOR ELEVATION SHALL BE NOT LESS THAN:

1. AS REQUIRED BY THE SEPTIC TANK PERMIT.
2. AS REQUIRED BY THE PLUMBER.
3. EQUAL TO OR HIGHER THAN NEIGHBORS RESIDENCE.
4. AS REQUIRED FOR FLOOD INSURANCE.
5. AS REQUIRED BY THE BUILDING DEPARTMENT

FOUNDATION SURVEY:

A FOUNDATION SURVEY SHALL BE PERFORMED AND THE SIGNED & SEALED SURVEY SHALL BE SUBMITTED AND APPROVED BY THE BUILDING DEPT. PRIOR TO THE SLAB PRE-POUR INSPECTION.

"CLEAN-OUT" & "INSPECTION" OPENINGS:

CUT ONE BOTTOM FACE OUT OF ALL DOWNPOUR BLOCK CELLS (ABOVE SLAB LEVEL), WITH A MINIMUM AREA OF 12 SQ. INCHES AND A MINIMUM DIMENSION OF 3 INCHES. TO CLEAN CELL, INSPECT STEEL, AND VERIFY A PROPER POUR.

LIVING AREA (NET SQUARE FOOTAGE)

LIVING AREA (FIRST FLOOR)	465 SF
LIVING AREA (SECOND FLOOR)	471 SF
TOTAL LIVING AREA	926 SF
COVERED ENTRY	83 SF
TOTAL NET SQUARE FOOTAGE	1009 SF
TOTAL GROSS SQUARE FOOTAGE	1046 SF

RELEASE/REVISION

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STATE LICENSE PE-038154
4280 DOW ROAD, SUITE 108
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CUSTOM ADU DESIGN FOR:
NEW CLIENT
XXXX MAIN STREET
CITY NAME, FLORIDA 329XX

**ELEVATIONS
& FLOOR PLANS**

DRAWN MJS
DATE 06/16/26
CHECKED DLB
SCALE
JOB NO.
SHEET
3
OF 6 SHEETS

WINDOW DETAIL
1/2"=1'-0"

FOUNDATION PLAN
1/4"=1'-0"
SEE FLOOR PLAN FOR DIMENSIONS

COVERED ENTRY SECTION
1/2"=1'-0"

PARTITION WALL SECTION
1/2"=1'-0"

TYPICAL WALL SECTION
1/2"=1'-0"

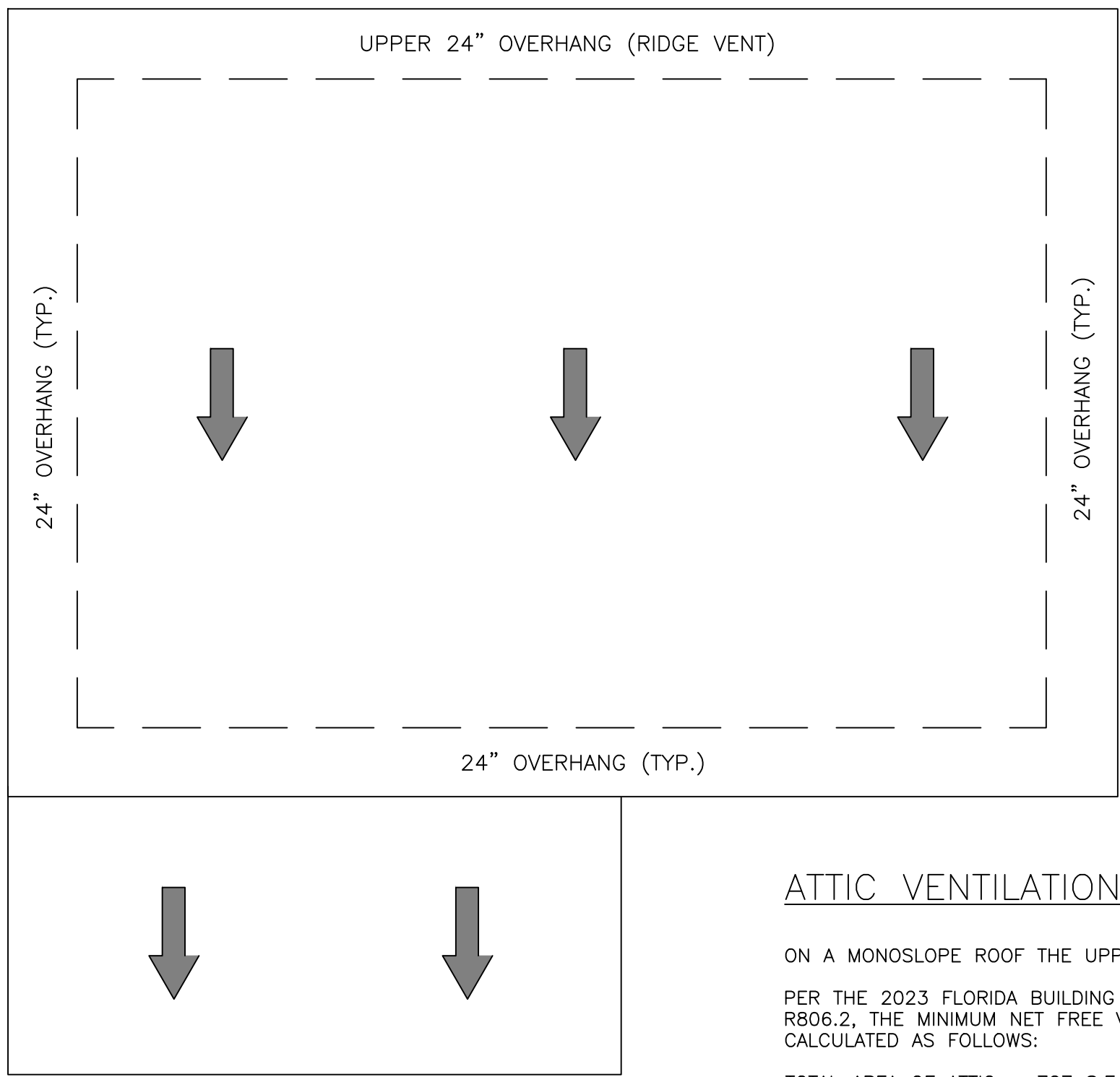
TYPICAL STAIR DETAILS

1/2"=1'-0"

(F1) DETAIL
N.T.S.

(F2) DETAIL
N.T.S.

SAMPLE
NOT FOR BIDS
OR CONSTRUCTION



ROOF PLAN
1/4"=1'-0"

ATTIC VENTILATION REQUIREMENT

ON A MONOSLOPE ROOF THE UPPER SOFFIT IS THE RIDGE VENT.

PER THE 2023 FLORIDA BUILDING CODE RESIDENTIAL R806.1 & R806.2, THE MINIMUM NET FREE VENTILATED AREA HAS BEEN CALCULATED AS FOLLOWS:

TOTAL AREA OF ATTIC = 727 S.F.
ATTIC VENTILATION REQUIRED - (1 S.F. PER 300 S.F.)
1/300 X 727 SQ.FT. = 2.5 SQ.FT. (360 SQ.IN.) VENTING
REQUIRED IS 40% - 50% OF THIS AREA (BETWEEN 144 AND 179 SQ. IN.)

FOR THIS RESIDENCE THE CONTRACTOR SHALL SELECT SOFFIT MATERIALS THAT HAVE:

THE MINIMUM SOFFIT VENTING AREA = 2.73 SQUARE INCHES PER SQUARE FOOT OF SOFFIT MATERIAL.

ELECTRICAL NOTES

- 1) CODE COMPLIANCE - All electrical work shall be performed by a Florida licensed electrician in accordance with the 2023 Florida Building Code, NFPA-70 National Electric Code (NEC), and all other applicable codes and standards.
- 2) CONTRACTOR REQUIREMENTS - The electrical contractor shall be licensed in the State of Florida. The electrical contractor shall provide all labor, materials and equipment required to construct a complete electrical system in accordance with the 2023 Florida Building Code and "good" industry practices.
- 3) REQUIRED CALCULATIONS - The electrical contractor shall perform electrical load calculations in accordance with the codes referenced in note #1 to determine the required service size, materials, and equipment. And provide all information required to be submitted with the building permit application.
- 4) WORKMANSHIP - All work shall be performed in an organized, safe, and professional manner using properly trained personnel. All tools and equipment shall be in good condition and protective safety gear shall be worn in accordance with OSHA requirements.
- 5) MATERIALS & EQUIPMENT - All materials and equipment shall be new, UL labeled, and shall meet (or exceed) all building code and OSHA requirements. Circuit breakers shall be of the same brand as the panel. Equipment and materials shall be protected against damage and shall be the responsibility of the electrical contractor until installed secured/mounted and connected to the electrical system. Materials and/or equipment shall not be stored on site.

WIRE TYPE - All wiring shall be copper except the service cable may be aluminum with connectors rated for aluminum wire. All wiring for branch circuits shall be NM-B #12-2 conductor + ground.

RECEPTACLES (OUTLETS)- All receptacles shall be UL Rated and "tamper-resistant" (TR).

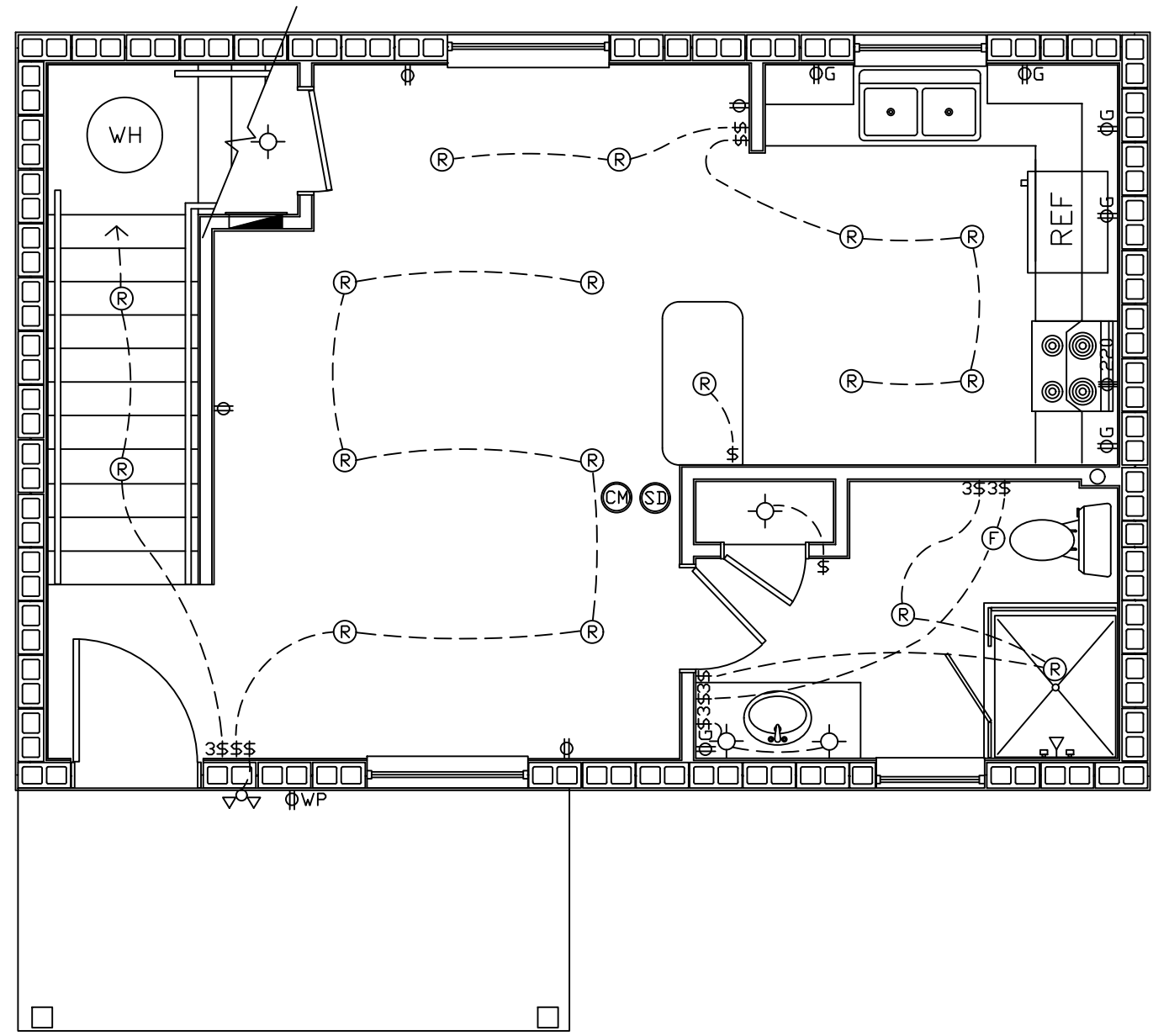
GFCI RECEPTACLES/CIRCUITS - All bathroom outlets, kitchen counter top outlets, garage outlets, and exterior outlets shall be GFCI protected as required by code. Each bathroom shall be on its own branch circuit.

AFCI CIRCUIT BREAKERS - All outlets shall be protected by AFCI circuit breakers per FBC R E3902.16

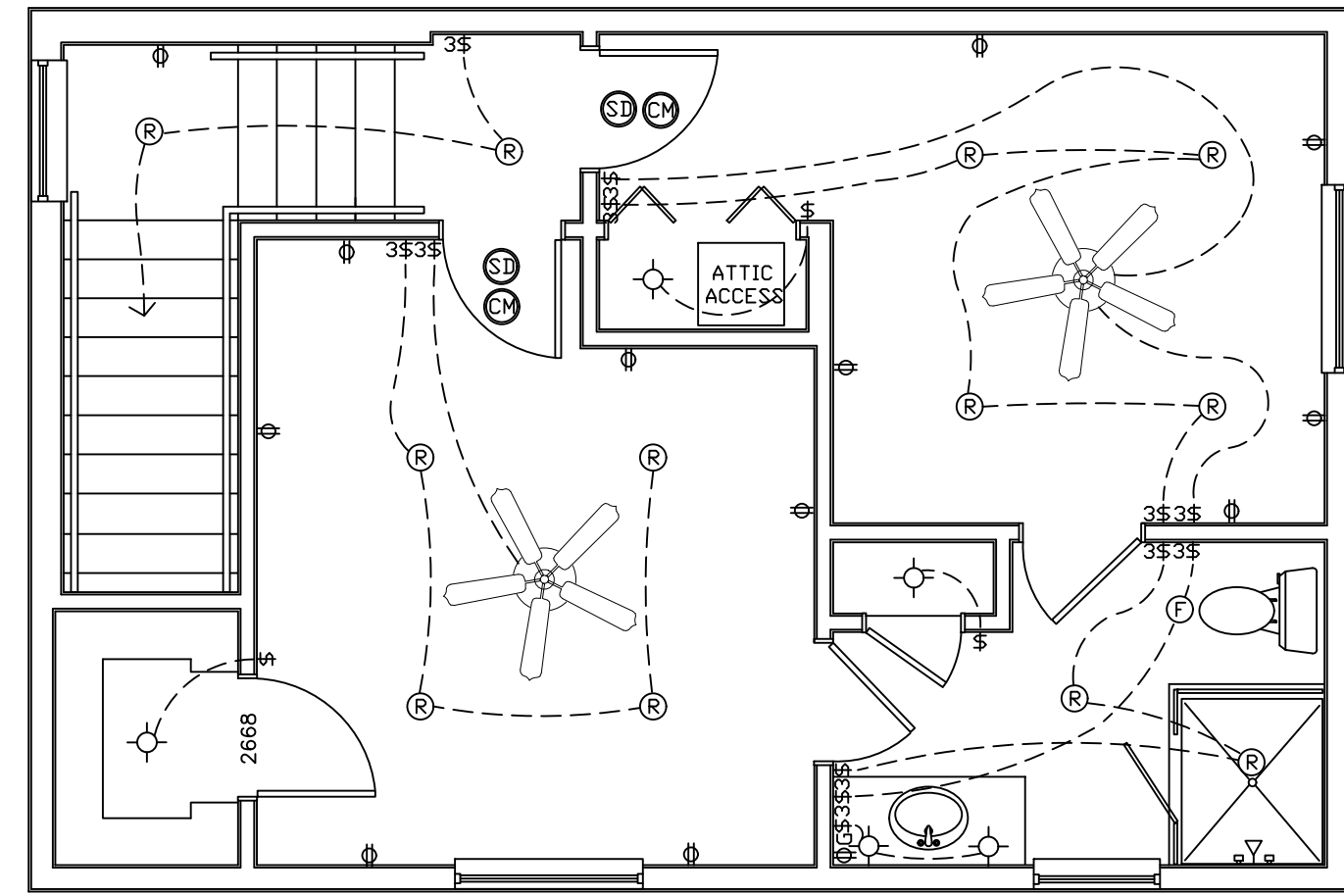
INTERSYSTEM BONDING - An intersystem bonding termination (IBT) device for connecting intersystem bonding conductors shall be provided external to enclosures at the service equipment or metering equipment enclosure and at the disconnecting means for any additional buildings or structures. The IBT shall comply with all 2023 NEC 250.94(A)or(B) requirements.

- 6) SMOKE DETECTORS - Smoke detector type, locations, and installation shall be installed in accordance with the 2023 Florida Building Code and NFPA requirements and shall have battery backup. Smoke detectors shall NOT be on GFCI circuits.
- 7) CARBON MONOXIDE DETECTORS - Carbon monoxide detector type, locations, and installation shall be installed in accordance with the 2023 Florida Building Code and NFPA requirements and shall have battery backup. Carbon Monoxide detectors shall NOT be on GFCI circuits.
- 8) LABELING - All circuit breakers shall be clearly labeled in the panel box. Neatly print or type a clear description of each branch circuit and the location(s) it feeds.
- 9) CONCRETE-ENCASED ELECTRODE GROUND (FBC R E3608.1.2) A concrete encased electrode consisting of at least 20 feet of one or more bare steel reinforcing bars or rods not less than 1/2 inch (#5 Bar) in diameter installed in one continuous 20-foot length, or if in multiple pieces connected together by the usual steel tie wires.

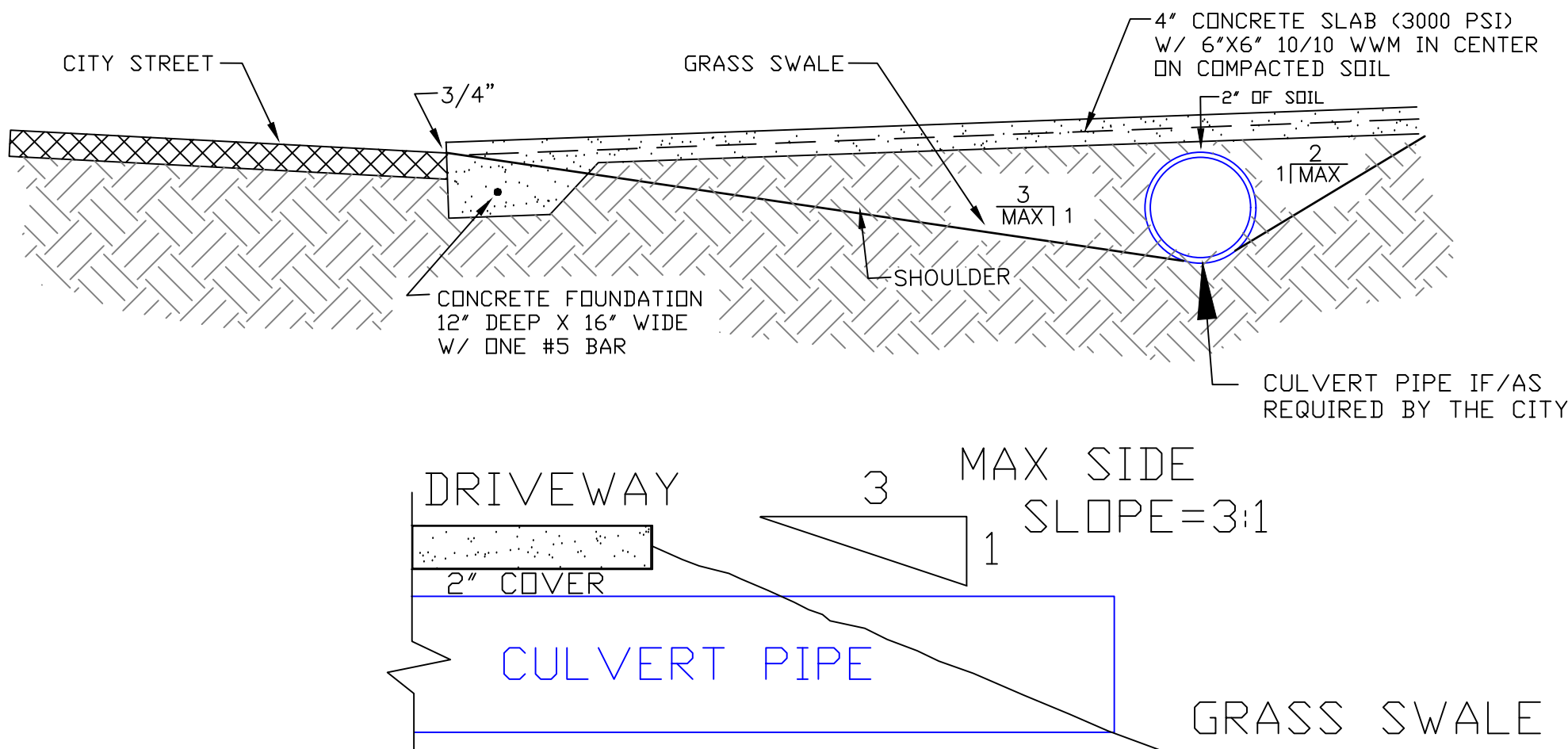
ELECTRICAL LEGEND	
⊕	TAMPER-RESISTANT (TR) ELECTRICAL RECEPTACLE 110V/15A TAMPER-RESISTANT
⊕WP	WEATHERPROOF RECEPTACLE 110V/15A DN GFCI CIRCUIT
⊕G	110V/15A GFCI CIRCUIT
⊕220	220 VOLT RECEPTACLE
\$	WALL SWITCH
3S	3 POLE SWITCH
Ⓛ	LIGHT/FAN FIXTURE BOX
Ⓛ	EXHAUST FAN
Ⓛ	LIGHT/FAN FIXTURE BOX (COORDINATE FIXTURE WITH OWNER)
Ⓛ	FLOOD LIGHT
Ⓛ	220/110-200A ELECTRICAL PANEL
Ⓛ	SMOKE DETECTOR - 110V WITH BATTERY BACKUP
Ⓛ	CARBON MONOXIDE DETECTOR - 110V WITH BATTERY BACKUP



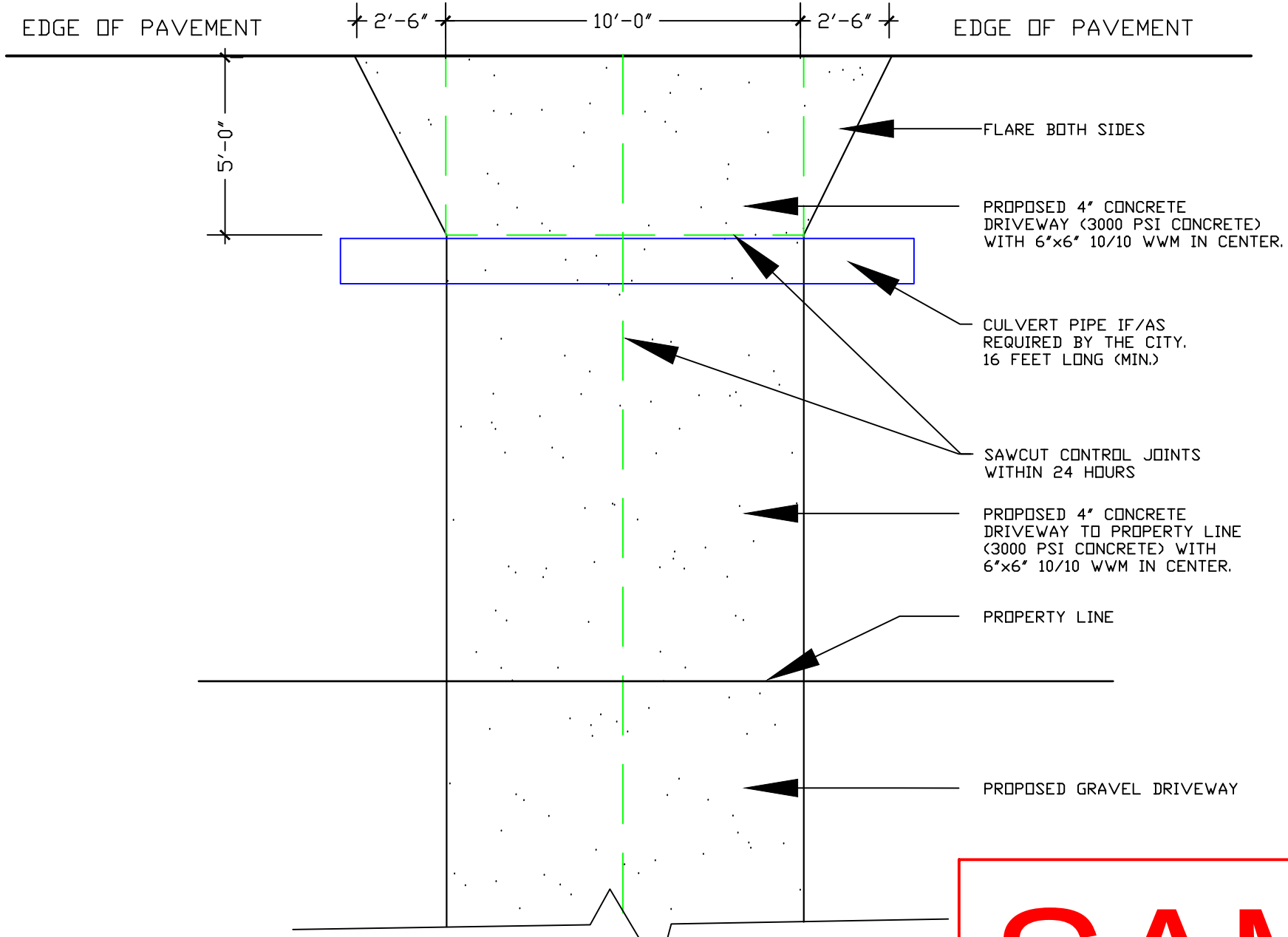
1ST FLOOR ELECTRICAL PLAN
1/4"=1'-0"



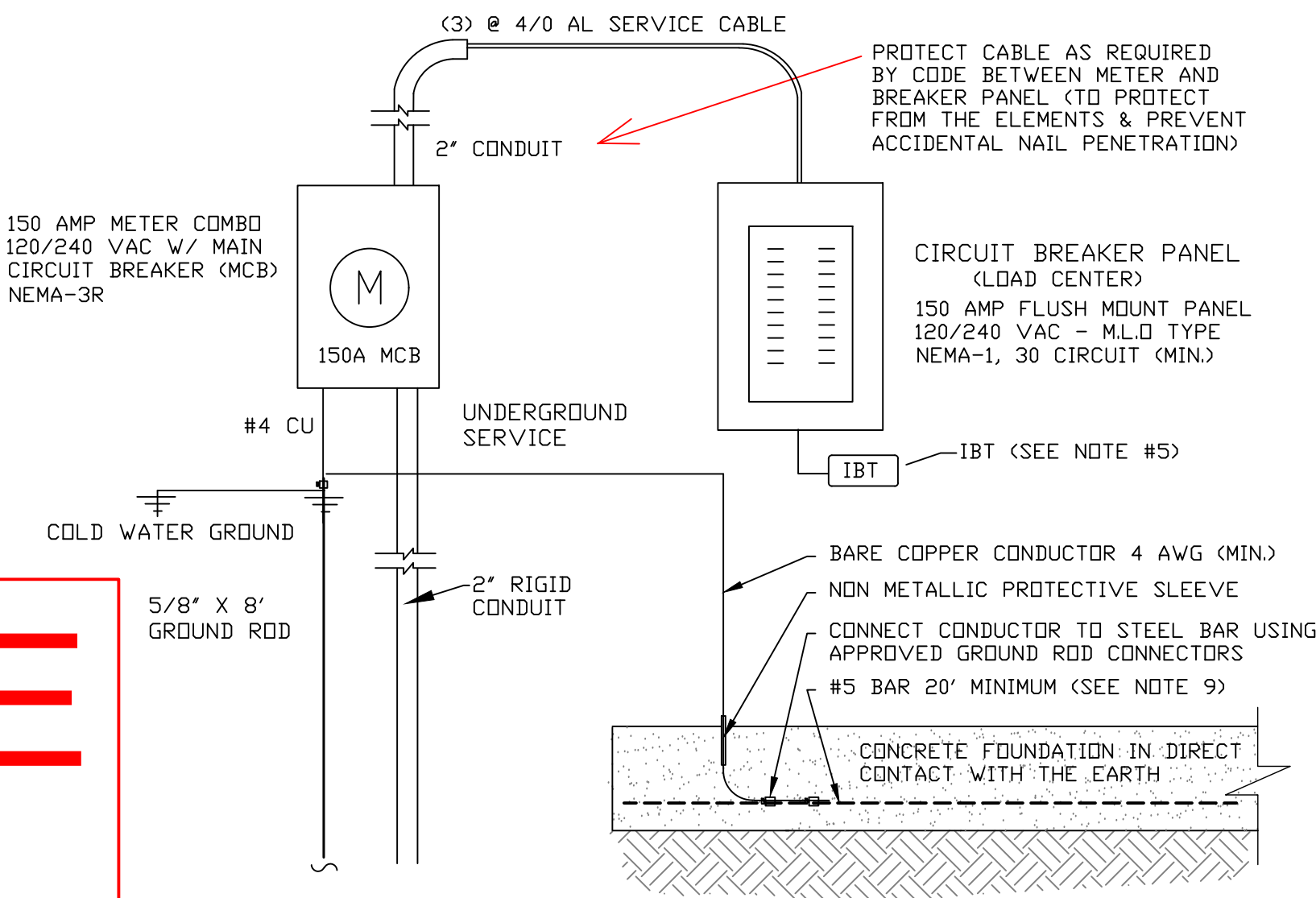
2ND FLOOR ELECTRICAL PLAN
1/4"=1'-0"



DRIVEWAY SECTIONS
1/4"=1'-0"



DRIVEWAY PLAN
1/4"=1'-0"



ELECTRICAL RISER DIAGRAM

SAMPLE
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OR CONSTRUCTION

RELEASE/REVISION

SAMPLE
NOT FOR BIDS
OR CONSTRUCTION

This plan has been prepared under my direct supervision and is, to the best of my knowledge, accurate and in compliance with applicable building codes. This plan is for use only for this specific building at this location.

PROFESSIONAL ENGINEER
DAVID L. BRYANT
STATE LICENSE PE-038154
4280 DOW ROAD, SUITE 108
MELBOURNE, FLORIDA 32934
(321) 254-7913

CUSTOM ADU DESIGN FOR:
NEW CLIENT
XXXX MAIN STREET
CITY NAME, FLORIDA 329XX

**FIRST AND SECOND
FLOOR PLANS**

DRAWN MJS
DATE 03/31/26
CHECKED DLB
SCALE
JOB NO.
SHEET

5
OF 6 SHEETS

RESERVED FOR TRUSS LAYOUT

SAMPLE
NOT FOR BIDS
OR CONSTRUCTION

CONVENTIONAL ROOF FRAMING for VALLEY CONSTRUCTION, MISC. FILL IN, OR OTHER

Where conventional framing is used to "fill-in" at valley framing or other roof locations, install rafters at 24" on center (max.). USE A RIDGE BEAM THAT IS ONE SIZE LARGER THAN THE RAFTERS (i.e. – use 2x8 ridge beam for 2x6 rafters.

Use 2x4 rafters to 6' length, 2x6 rafters to 8' length, 2x8 to 11' length, 2x10 to 13' length, and 2x12 to 16' length. Nail each end with 3 @ 12d gun nails. AND –

On all members over 40" long – Install HURRICANE STRAPS

Strap "rafter to rafter" across the ridge beam using "Simpson" LSTA18 (or MSTA18) straps with 14 @ 10d x 1½" galvanized nails.

Attach base of rafters and each end of other framing members to resist uplift forces equal to 50 lbs. multiplied by the overall rafter/member length. i.e – An 11' long framing member requires straps (at each end) rated for 550 lbs.

TRUSS "HURRICANE" CONNECTOR SCHEDULE		
TRUSS TYPE	EMBEDDED CONNECTORS REQUIRED BLOCK WALLS AND TIE-BEAMS	WOOD CONNECTORS REQUIRED WOOD WALLS OR WOOD BEAMS
SINGLE TRUSS (1-PLY)	(None specified on this project)	One "Simpson" H10A connector with nine 10d x 1-1/2" galvanized nails in beam and nine 10d x 1-1/2" nails in truss.
DOUBLE TRUSS (2-PLY) (None specified on this project)	Call for assistance.	Call for assistance.
FLOOR TRUSSES	5/8" galvanized threaded rods at 32" o.c. attached to 5/8"x12" "J" anchor bolts with coupling nuts (after sill plate is bolted down).	(None specified on this project)
TRUSS TO TRUSS CONNECTORS	(specified by Truss Engineer)	

THIS TRUSS LAYOUT PLAN PROVIDED BY CAPITAL TRUSSES DATED 5/22/2026, IS HEREBY APPROVED AND MADE PART OF OUR ENGINEERED PLANS FOR CONSTRUCTION.

RELEASE/REVISION

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PROFESSIONAL ENGINEER
DAVID L. BRYANT
STATE LICENSE PE-038154
4280 DOW ROAD, SUITE 108
MELBOURNE, FLORIDA 32934
(321) 254-7913

This plan has been prepared under my direct supervision and is, to the best of my knowledge, accurate and in compliance with applicable building codes. This plan is for use only for this specific building at this location.

CUSTOM ADU DESIGN FOR:
NEW CLIENT
XXXX MAIN STREET
CITY NAME, FLORIDA 329XX

SECTIONS &
DETAILS

DRAWN	MJS
DATE	06/16/26
CHECKED	DLB
SCALE	
JOB NO.	
SHEET	6
OF	6 SHEETS