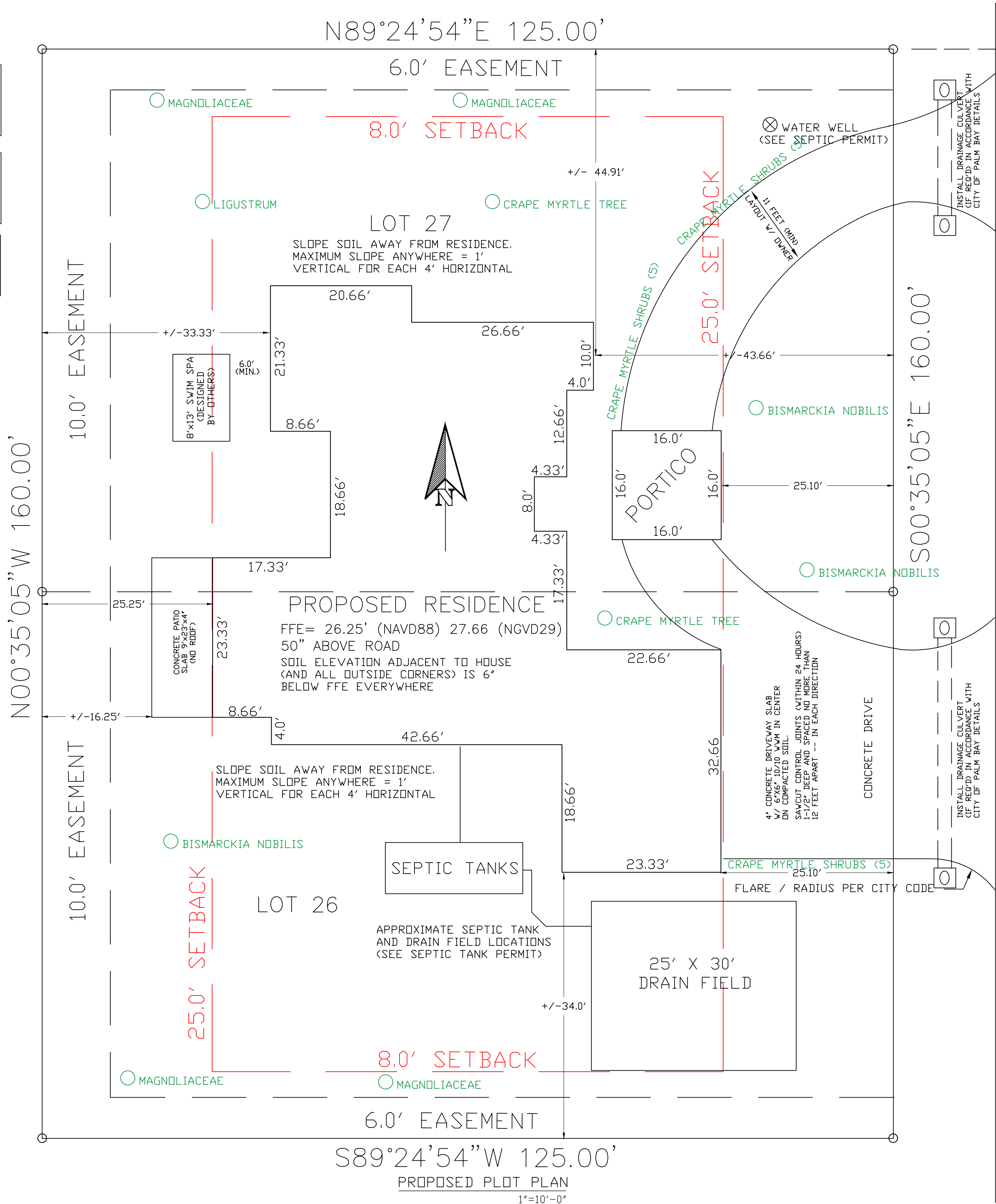


THIS PLAN ASSUMES VIRGIN SOIL UNDER THE BUILDING AREA PLUS 5 FEET BEYOND. THE CONTRACTOR SHALL VERIFY THAT NO SEPTIC TANKS, WELLS OR BURIED DEBRIS ARE LOCATED UNDER THE BUILDING AREA.

THE FLOOR ELEVATION SHALL BE NOT LESS THAN:
1. 50" ABOVE CROWN OF THE ROAD (MIN.)
2. AS REQUIRED BY THE SEPTIC TANK PERMIT.
3. AS REQUIRED BY THE PLUMBER.
4. EQUAL TO OR HIGHER THAN NEIGHBORS RESIDENCE.
5. AS REQUIRED FOR FLOOD INSURANCE.
6. AS REQUIRED BY THE BUILDING DEPARTMENT

SEE SURVEYORS PLOT PLAN SHOWING DRAINAGE ELEVATIONS (REVISION 10/13/20) BASED ON THE 2019 SURVEY OF THE PROPERTY, PREPARED BY (SUPER SURVEYING LLC.).



ENGINEERING NOTES

1.) These plans are certified to be designed in accordance with the 2020 Florida Building Code, Residential; and the 2020 Florida Building Code, Building; and ASCE 7-10 using an ultimate wind load "3 second gust velocity" as follows:

DESIGN CRITERIA

Wind Speed = 160 MPH (3 sec. gust)
Risk Category = II, (2)
Exposure Category = B
Enclosure Category. = enclosed
Internal pres. coef. + 0.18 &- 0.18

DESIGN LOADS

Soil Bearing Pressure = 2,000 psf (see below)
Floor loads - live load 40 psf
Roof Trusses (Minimum design loads)
Top Cord: live load= 20 psf, dead load= 15 psf
Bottom Cord dead load = 10 psf

ULT / ASD Load Equivalants

160 mph "ultimate" = 124 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 = $q_z = 0.00256 K_z K_{zt} K_d V$ = 38.99 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.

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 concrete shall have a maximum water/cement ratio of 0.55 (or design mix approval - submit to engineer 7 days prior to pour).

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 (See note 7). All slabs shall be cured with water for a period of 3 days. Use soaker hoses, or tarps, or use curing compound in accordance with manufacturers instructions. SawCut 1.5" deep control joints in all slabs within 12 hours (15' max. each way).

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 (22" for corner bars). 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 3/4" for slabs and 1" for interior faces of beam stirrups and column ties.

5.) BLOCK MATERIALS and PLACEMENT

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 at 4'-8" on center and where shown on the floor plans, and at 4'0" under windows. A continuous tie beam shall be provided over all block walls.

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, 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.)

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 reinforcement at corners shall be continuous 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.

RELEASE/REVISION

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SAMPLE PLAN SET
NOT FOR CONSTRUCTION

PLOT PLAN, LOCATION PLAN
& ENGINEERING NOTES

DRAWN MJS
DATE 4/4/20
CHECKED WJK
SCALE AS NOTED
JOB NO.
SHEET

1
OF 10 SHEETS

7.) Concrete testing – strength & slump tests – At least one slump test and at least one set of five concrete strength test cylinders shall be made during the foundation pour, and during the floor slab pour. Air temperature, concrete temperature, and added water shall also be recorded. Concrete cylinders shall be broken in accordance with ASTM standards as follows:
two cylinders at 7–days, two cylinders at 28–days, one extra – tested at contractors request
Concrete slump limitations: 4.5” min. and 6.5” max. for footings, slabs, beams, columns and walls. 8” to 10” for masonry downpours.

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 manuf. instructions.

8.) EXTERIOR WALLS
All exterior walls are masonry block – See specifications in note #5 & Wall Section Details (sheet 6).

9.) 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. All bottom plates shall be pressure treated 2x4’s (See partition wall section on sheet 6).

10.) ROOF TRUSSES & ROOF SHEATHING
The roof structure consists of pre–engineered trusses placed 24” o.c. The trusses shall be designed and engineered for the wind loads & categories stated in Note #1, by a “truss system” engineer in accordance with the “2020 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.

The roof trusses shall be sheathed with 1/2” (4 PLY) 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.). Where truss or roofing manufacturer specifications differ from these, use the more stringent. Brace all trusses as required by the truss manufacturer.

11.) UPLIFT CONNECTORS

SEE CONNECTOR SCHEDULE ON SHEET 10.

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.

TRUSSES ON CONCRETE TIE BEAMS:

- a.) Up to 1455 lbs uplift – One “Simpson” HETA16 (or HETA20) embedded truss strap 6” into the tie beam, with (7) – 10d x 1–1/2” galvanized nails.
- b.) Up to 1810 lbs uplift – One “Simpson” HETA16 (or HETA20) embedded truss straps 6” into the tie beam, with (9) – 10d x 1–1/2” galvanized nails.
- c.) Up to 2035 lbs uplift – Two “Simpson” HETA16 (or HETA20) embedded truss straps 6” into the tie beam, with (7) – 10d x 1–1/2” galvanized nails in each strap.
- d.) Up to 2480 lbs uplift – must be single ply truss – One “Simpson” DETAL20 embedded truss straps 6” into the tie beam, with (18) – 10d x 1–1/2” galv. nails.
- e.) Up to 2500 lbs uplift – must be 2 or 3 ply truss. Use two HETA16 (or HETA20) embedded truss straps 6” into the tie beam (one on each side of truss) nailed with (6) 16d galvanized nails in each strap (total of 12).

TRUSSES ON WOOD PORCH BEAMS

Locate uplift values on truss engineering then USE “Simpson” H1 or H10 truss connectors OR LTS/MTS/HTS Series “twist straps” OR LST/MST Series “flat straps” nailed in accordance with “Simpson” published specifications using 10d x 1–1/2” galvanized nails.

12.) WALL HEADERS AND BEAMS

All exterior headers and beams (except porch and portico beams) are pre–cast lintels with lintel block courses above (see details and sections on sheet 6 and sheet 9).

There are two interior walls that require header beams. See sheets 5, 6, and 10.

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

Where conventional framing is used to “fill–in” at valley framing or other locations at 24” on center (max.). USE A 2x6 OR 2X8 RIDGE BEAM AND RAFTER SIZES AS FOLLOWS:

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 1 1/2” galvanized nails.

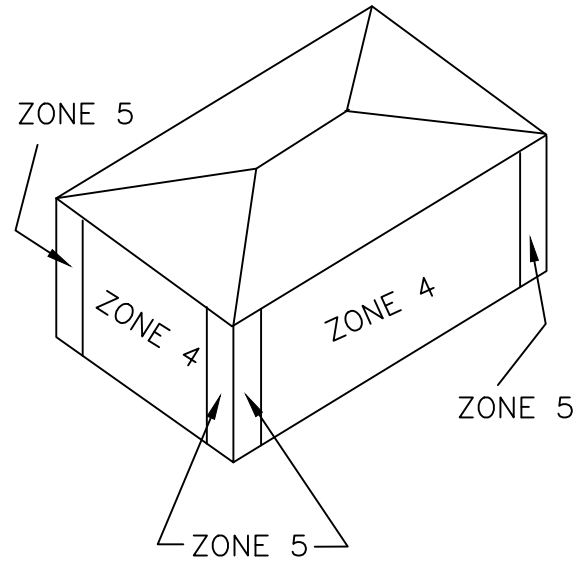
Attach base of rafters & each end other framing members to resist uplift forces equal to 50 lbs. multiplied by the overall rafter/member length. i.e – An 11’ long rafter/member requires straps (at each end) rated for 550 lbs.

13.) 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 2020 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 2020 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 = 160 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	27.7	–30.0	27.7	–37.0
20–49	26.4	–28.0	26.4	–34.0
50–99	24.7	–27.0	24.7	–31.0
100–499	23.5	–25.0	23.5	–28.0
500+	20.6	–22.0	20.6	–22.0



TESTING & LABELING

All exterior windows and doors shall be tested and each product type certified to meet Florida Building Code FBC R 301.2.1.1, and the design pressures specified above, including attachment to the main structure. ALL GLAZED OPENINGS MUST 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 2020 Florida Building Code. Product certification shall be provided to the Building Department by an independent testing laboratory meeting the qualifications outlined in the 2020 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.

14.) 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 2017 Florida Building Code for this wind zone. The minimum design pressures are the same as used for windows and doors (see Note #12 on this sheet).

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 2020 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 160 mph (exposure B) wind loads in accordance with the 2020 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 2020 Florida Building Code, Chapter 15, BUT NOT LESS THAN 2” endlaps & 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 160 mph (exposure B) “124 mph allowable” in accordance with the 2020 Florida Building Code.

MISSED REINFORCING DOWELS AND CONNECTORS

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

Embedd 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 3/8”x2 1/4” TAPCON (or TITEN screws). Use one Tapcon for each 300 lbs. of uplift and nail strap to truss per manufacturers specifications.

GENERAL NOTES

- 1.) DOORS & WINDOWS
All windows and exterior doors shall meet all the provisions of the 2020 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 per FBC (residential) section R310.
- 2.) HVAC
The HVAC contractor shall provide a “design–build” system in accordance with the owners “high–efficiency” requirements. The system shall be designed in accordance with the 2020 Florida Building Code and good practices. The HVAC contractor shall perform an energy evaluation and coordinate with the owner as to the size and locations of all HVAC equipment. All ductwork shall be sealed and tested for leaks prior to final trim. All primary main ducts shall be “rigid” ducts. Secondary ducts may be “flexduct” with sweeping radius bends. All ductwork shall be well supported, exceeding industry standards. All duct “air velocities” shall be calculated and held at acceptable levels to avoid noise. Coordinate electrical power with the electrician, condensate drains with the plumber, And “attic” equipment (if any) with truss system engineer prior to starting any work.
- 3.) PLUMBING
All materials and installation shall be in accordance with the 2020 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.
- 4.) INSULATION (minimum requirements) Coordinate with owner for additional insulation requirements. All exterior walls and the ceiling shall be insulated. The exterior block walls shall have 3/4” (R=4.1) insulation between all furring strips from floor to ceiling. The ceiling (attic) shall have R–38 batt or “blown–in” insulation over the entire area.
- 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 2020 Florida Building Code.
- Stucco over wood beams – 5/8” stucco over expanded “galvanized” metal wire
lathe over code approved vapor barrier. Install lath in accordance with the 2020 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.) INTERIOR FINISHES
All interior walls and the interior of block walls shall have 1/2” 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 2020 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.
- 7.) 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.
- 8.) WORKMANSHIP & SAFETY
All work shall be performed in a professional and workman–like manner in accordance with all applicable building codes and OSHA safety regulations by properly trained, licensed, and insured personnel. All workmen shall be covered by workers compensation insurance, and provide insurance certificates to the owner before beginning any work.
- 9.) COMPLIANCE RESPONSIBILITY
It is the responsibility of the contractor and building inspector to insure that these specifications are met and that all structural members are strapped, bolted, or otherwise fastened down to resist high wind loads with a continuous load path to the foundation.

STRUCTURAL INSPECTIONS THE LOCAL BUILDING DEPARTMENT AND THE GENERAL CONTRACTOR SHALL VERIFY STEEL PLACEMENT PRIOR TO ALL CONCRETE POURS. ALL REINFORCING STEEL SHALL BE INSPECTED FOR SIZE, QUANTITY, COVER, STIRRUP SPACING, COLUMN TIE SPACING, AND ADEQUATE BRACING TO RESIST MOVEMENT DURING CONCRETE PLACEMENT
"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.
DIMENSIONS, DISCREPENCIES, AND ELEVATIONS CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO BEGINNING ANY WORK. ANY SIGNIFICANT DISCREPENCIES SHALL BE DISCUSSED WITH THE ENGINEER PRIOR TO POURING ANY FOUNDATIONS VERIFY ALL WINDOW AND DOOR TYPES AND SIZES PRIOR TO PLACING DOWNPOUR STEEL AND PRIOR TO POURING ANY FOUNDATIONS

RELEASE/REVISION

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

PROFESSIONAL ENGINEER
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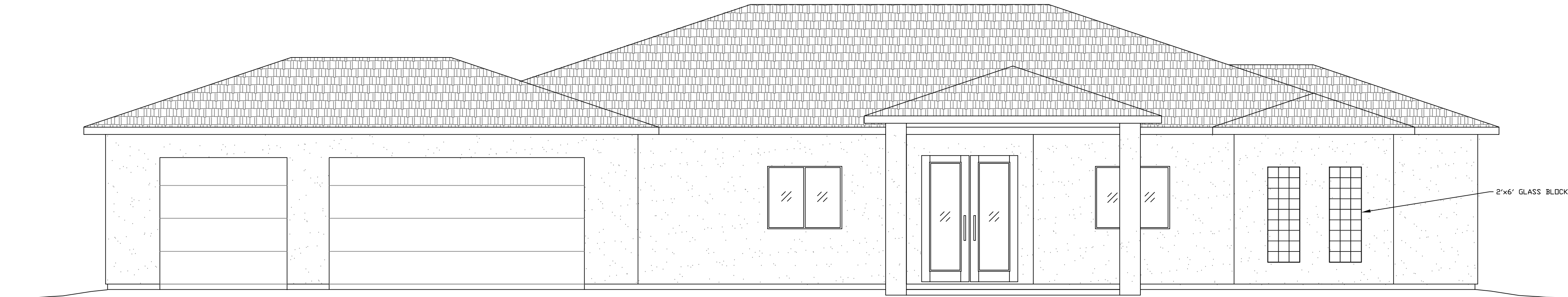
ENGINEERING NOTES
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SAMPLE PLAN SET
NOT FOR CONSTRUCTION

ENGINEERING NOTES
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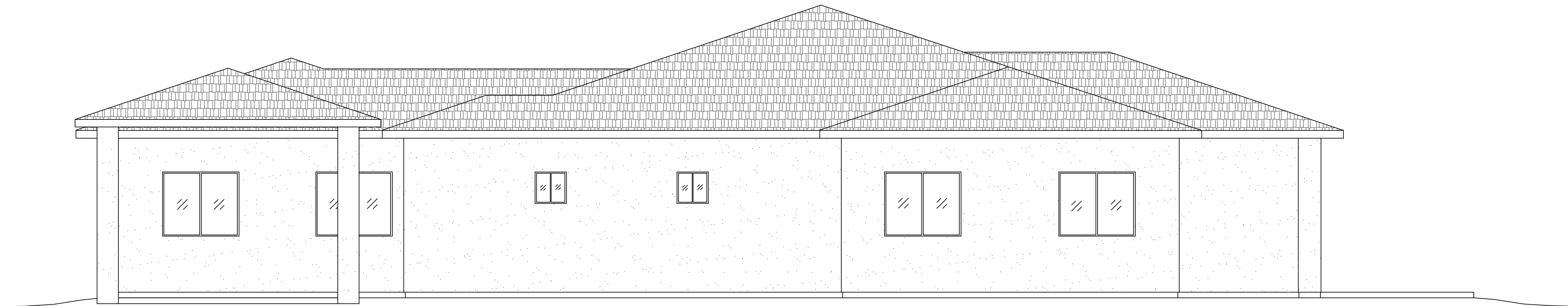
SAMPLE PLAN SET
NOT FOR CONSTRUCTION

DRAWN MJS DATE 4/4/20 CHECKED WJK SCALE AS NOTED JOB NO. SHEET 2 OF 10 SHEETS
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MAINTAIN SOIL 6" BELOW FFE
AND SLOPE AWAY FROM HOUSE

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



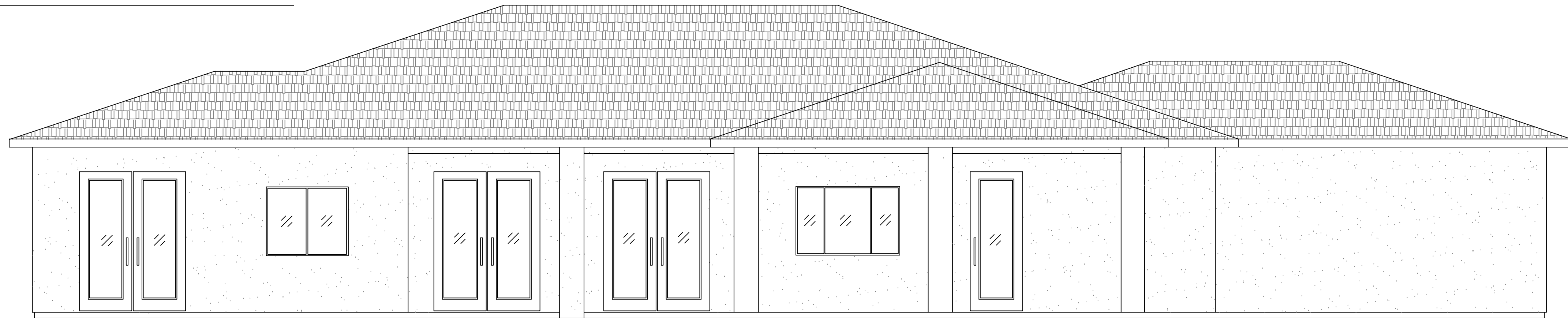
RIGHT SIDE ELEVATION
1/4"=1'-0"

+/-17'-6"

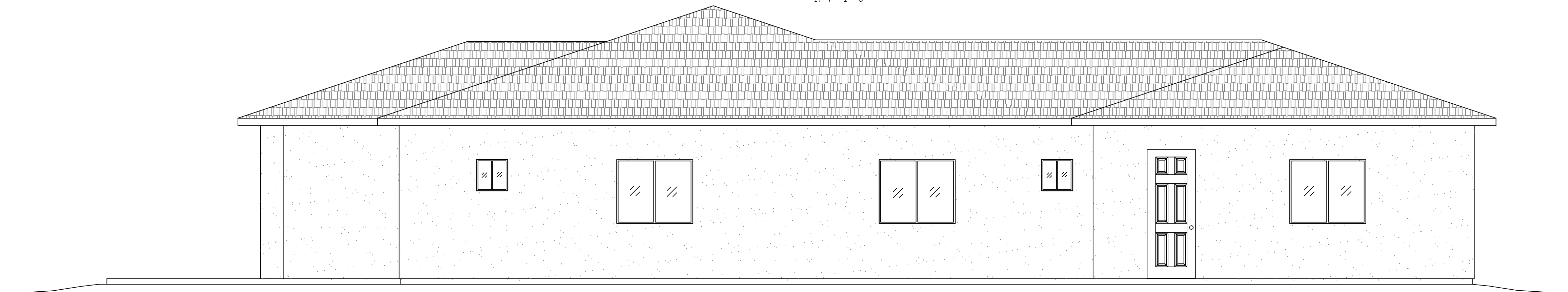
10'-0"
(T.O.B.)

0'-0"
(REF.)

MAINTAIN SOIL 6" BELOW FFE
AND SLOPE AWAY FROM HOUSE



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



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

RELEASE/REVISION

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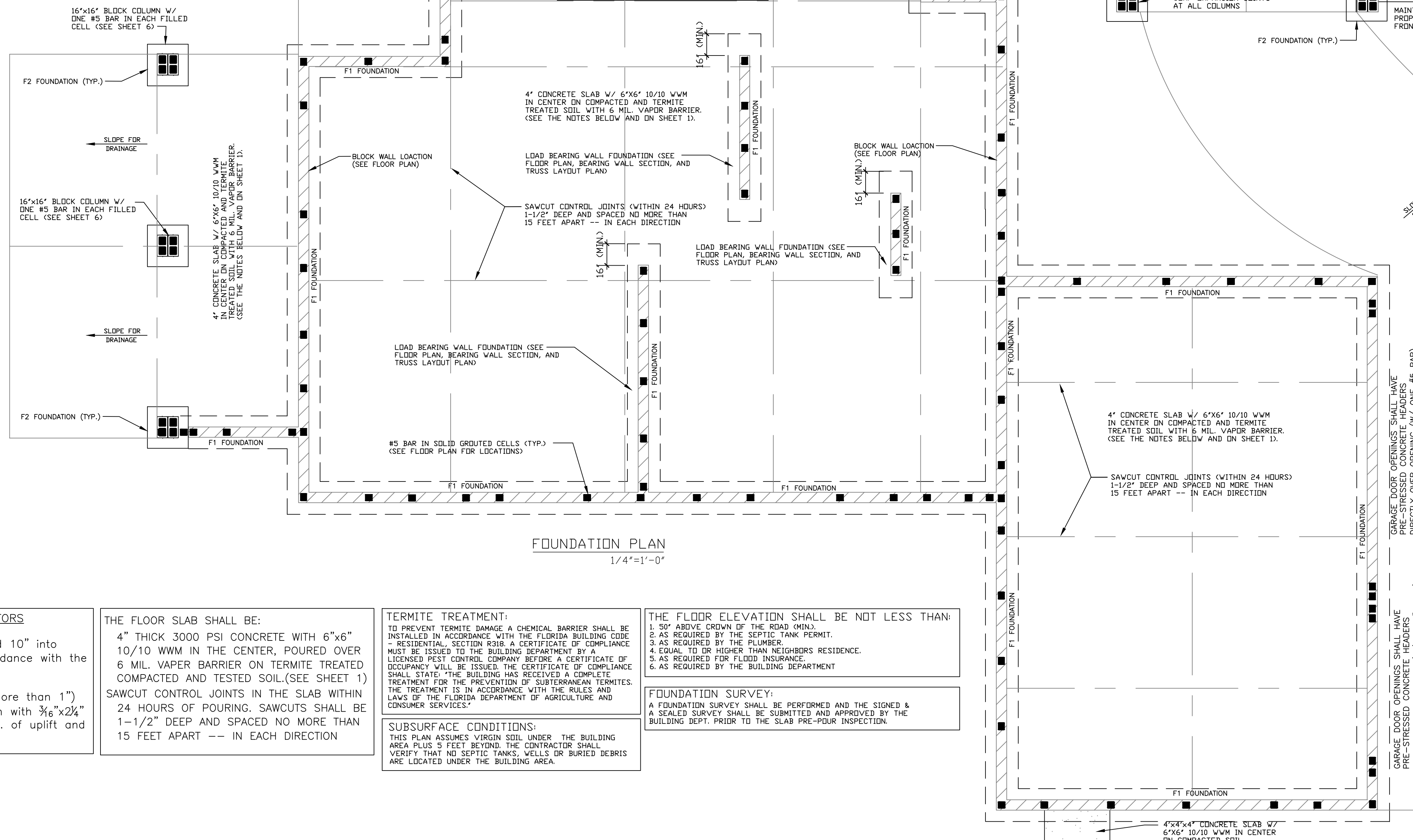
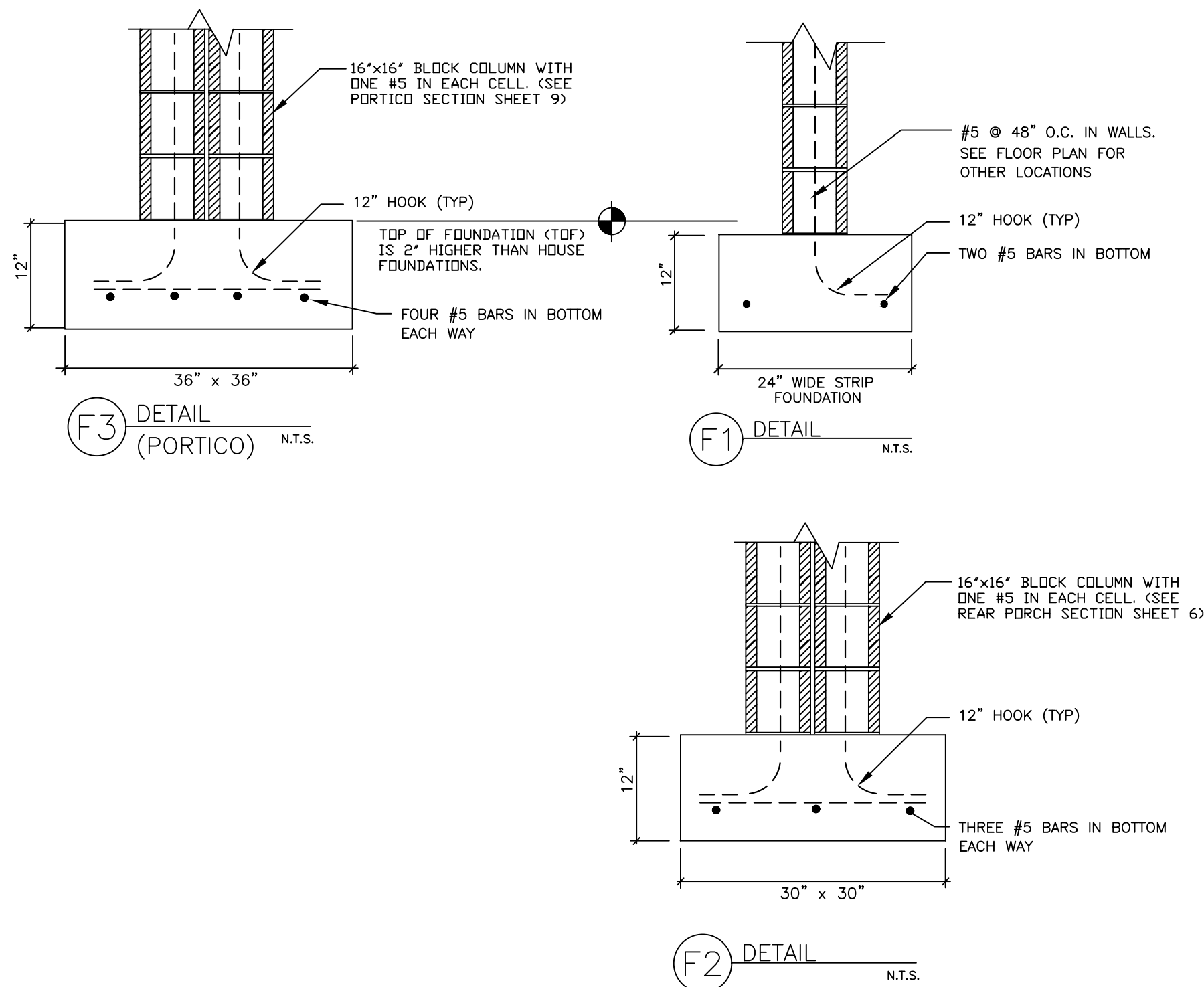
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SAMPLE PLAN SET
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ELEVATIONS

DRAWN MJS
DATE 4/4/20
CHECKED WJK
SCALE AS NOTED
JOB NO.

SHEET
3
OF 10 SHEETS



MISSED REINFORCING DOWELS AND HURRICANE STRAP CONNECTORS

Reinforcing steel that is misplaced can be drilled and epoxied 10" into concrete using "Simpson" SET or SET-XP (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 3/8"x2 1/4" TAPCON (or TITEN screws). Use one Tapcon for each 400 lbs. of uplift and nail strap to truss per manufacturers specifications.

THE FLOOR SLAB SHALL BE:

4" THICK 3000 PSI CONCRETE WITH 6"x6" 10/10 WWM IN THE CENTER, POURED OVER 6 MIL. VAPER BARRIER ON TERMITE TREATED COMPACTED AND TESTED SOIL.(SEE SHEET 1)

SAWCUT CONTROL JOINTS IN THE SLAB WITHIN 24 HOURS OF POURING. SAWCUTS SHALL BE 1-1/2" DEEP AND SPACED NO MORE THAN 15 FEET APART -- IN EACH DIRECTION

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."

SUBSURFACE CONDITIONS:

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.

THE FLOOR ELEVATION SHALL BE NOT LESS THAN:

1. 50" ABOVE CROWN OF THE ROAD (MIN.)
2. AS REQUIRED BY THE SEPTIC TANK PERMIT.
3. AS REQUIRED BY THE PLUMBER.
4. EQUAL TO OR HIGHER THAN NEIGHBORS RESIDENCE.
5. AS REQUIRED FOR FLOOD INSURANCE.
6. 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.

RELEASE/REVISION

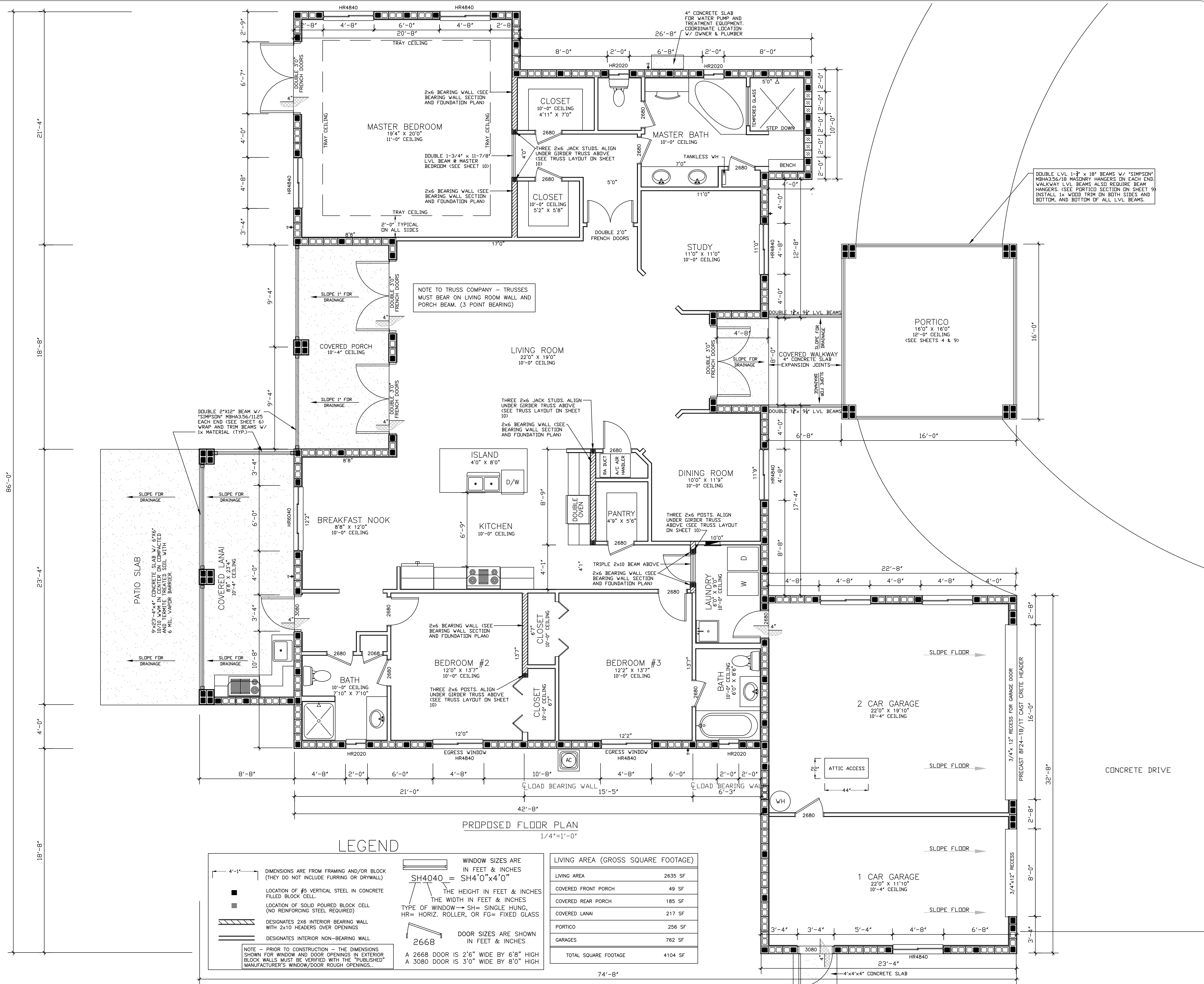
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SAMPLE PLAN SET
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FOUNDATION PLAN

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RELEASE/REVISION

PROFESSIONAL ENGINEER

DAVID L. BRYANT

STATE LICENSE PE-038154

4280 DOW ROAD, SUITE 108

MELBOURNE, FLORIDA 32934

(321) 254-7913

FLOOR PLAN

SAMPLE PLAN SET

NOT FOR CONSTRUCTION

DRAWN

MJS

DATE

4/4/20

CHECKED

WJK

SCALE

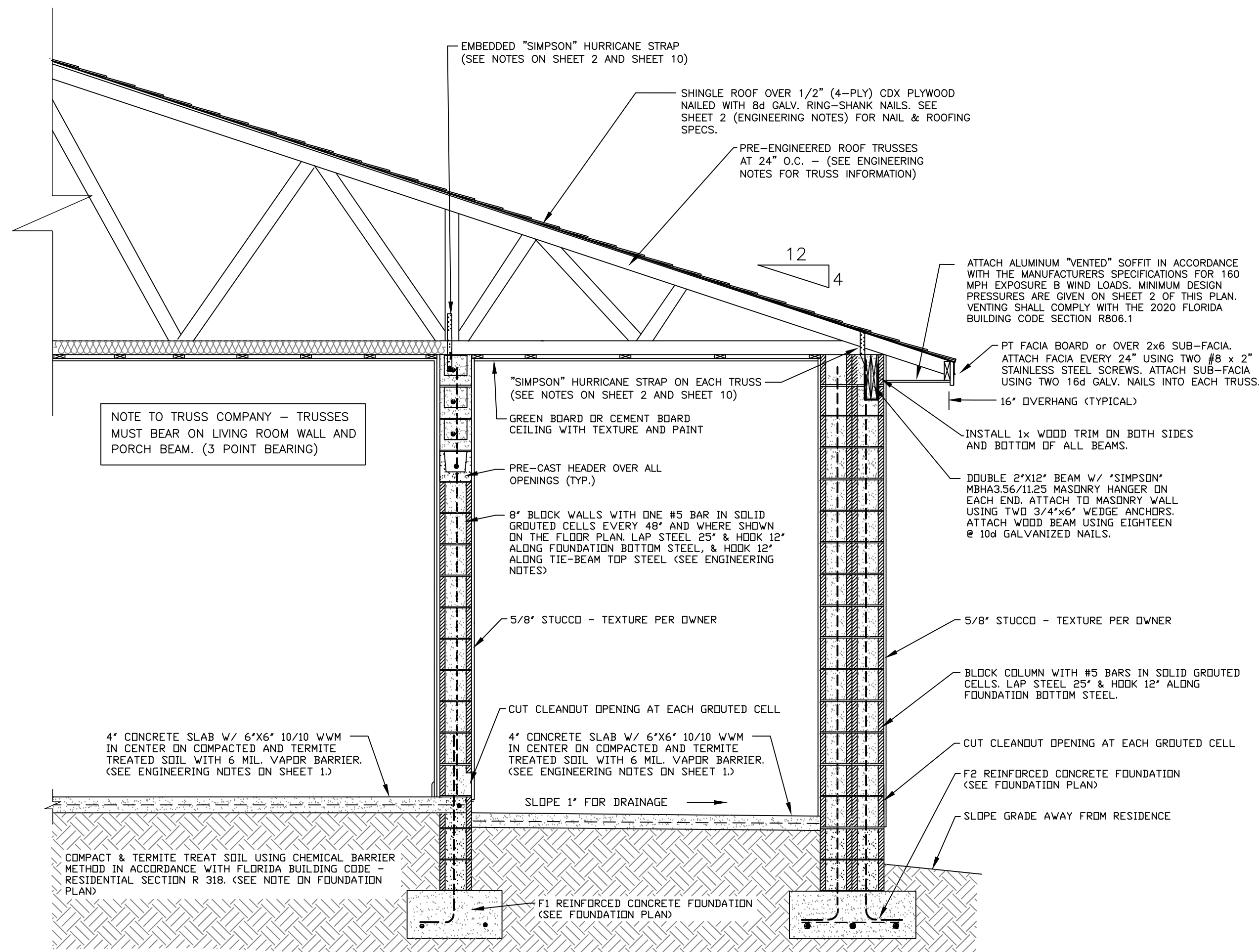
AS NOTED

JOB NO.

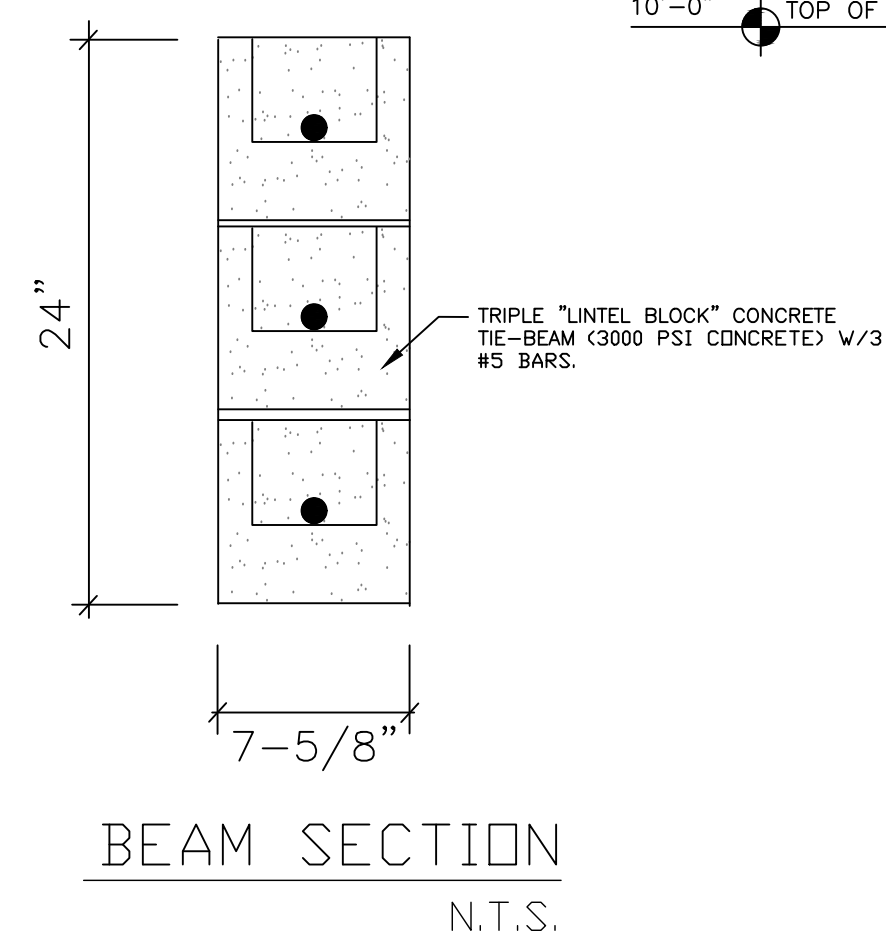
SHEET

5

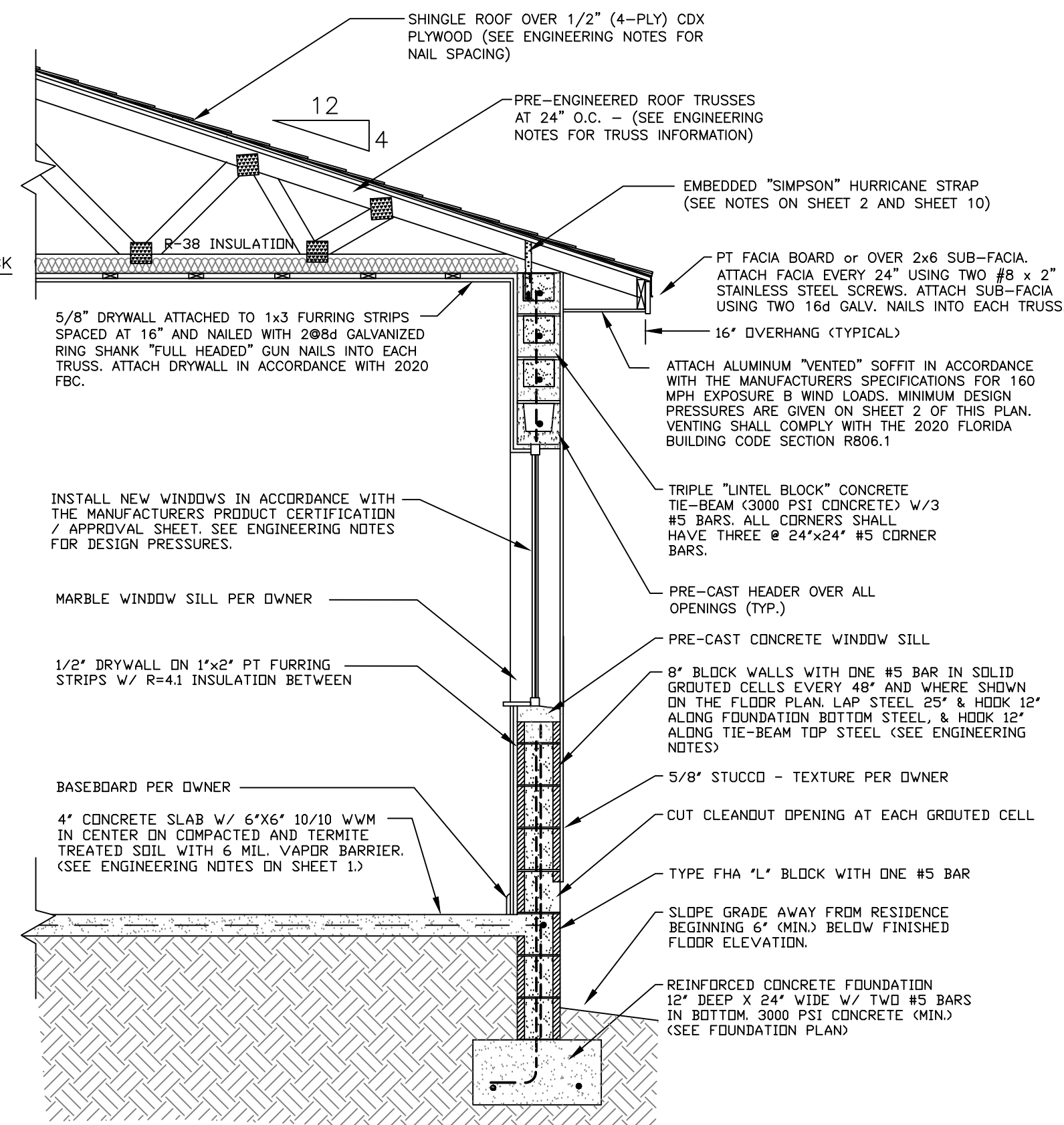
OF 10 SHEETS



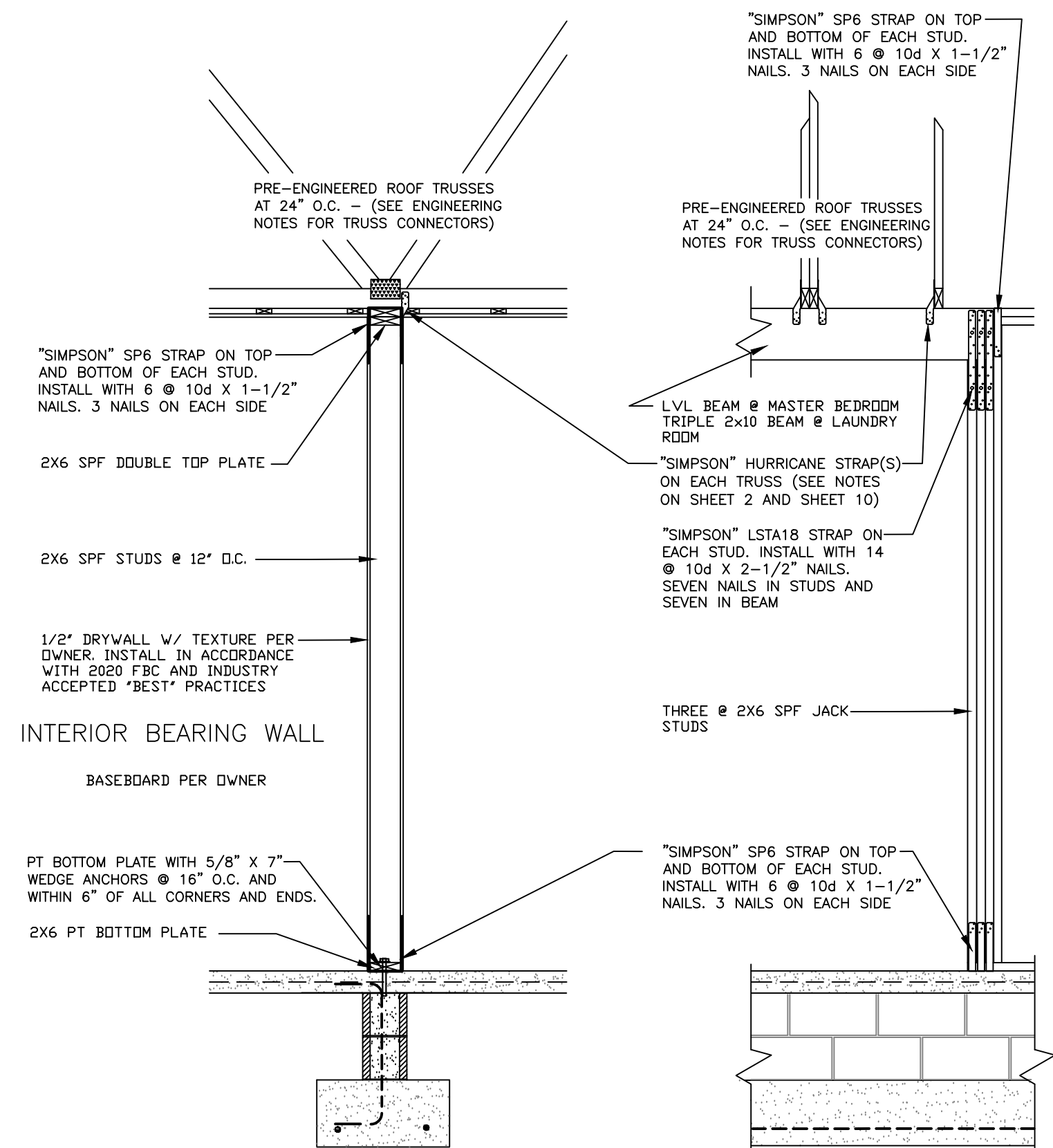
REAR PORCH SECTION
1/2"=1'-0"



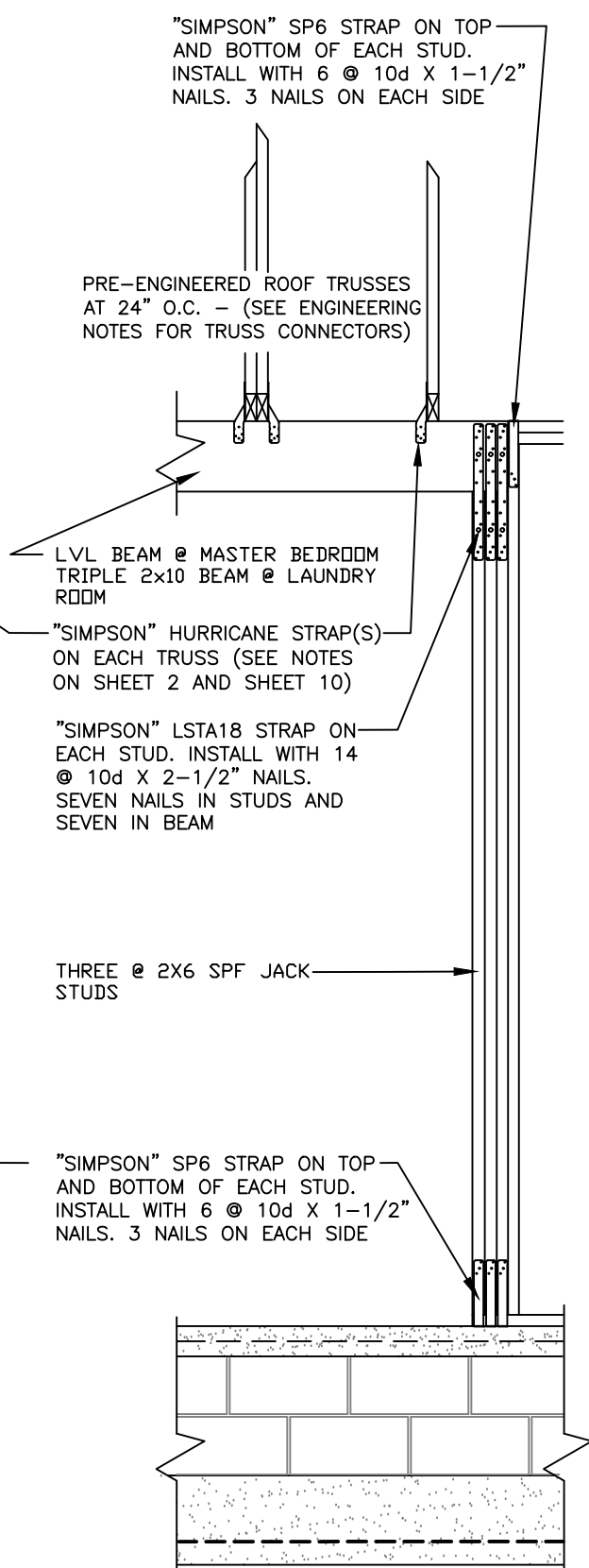
BEAM SECTION
N.T.S.



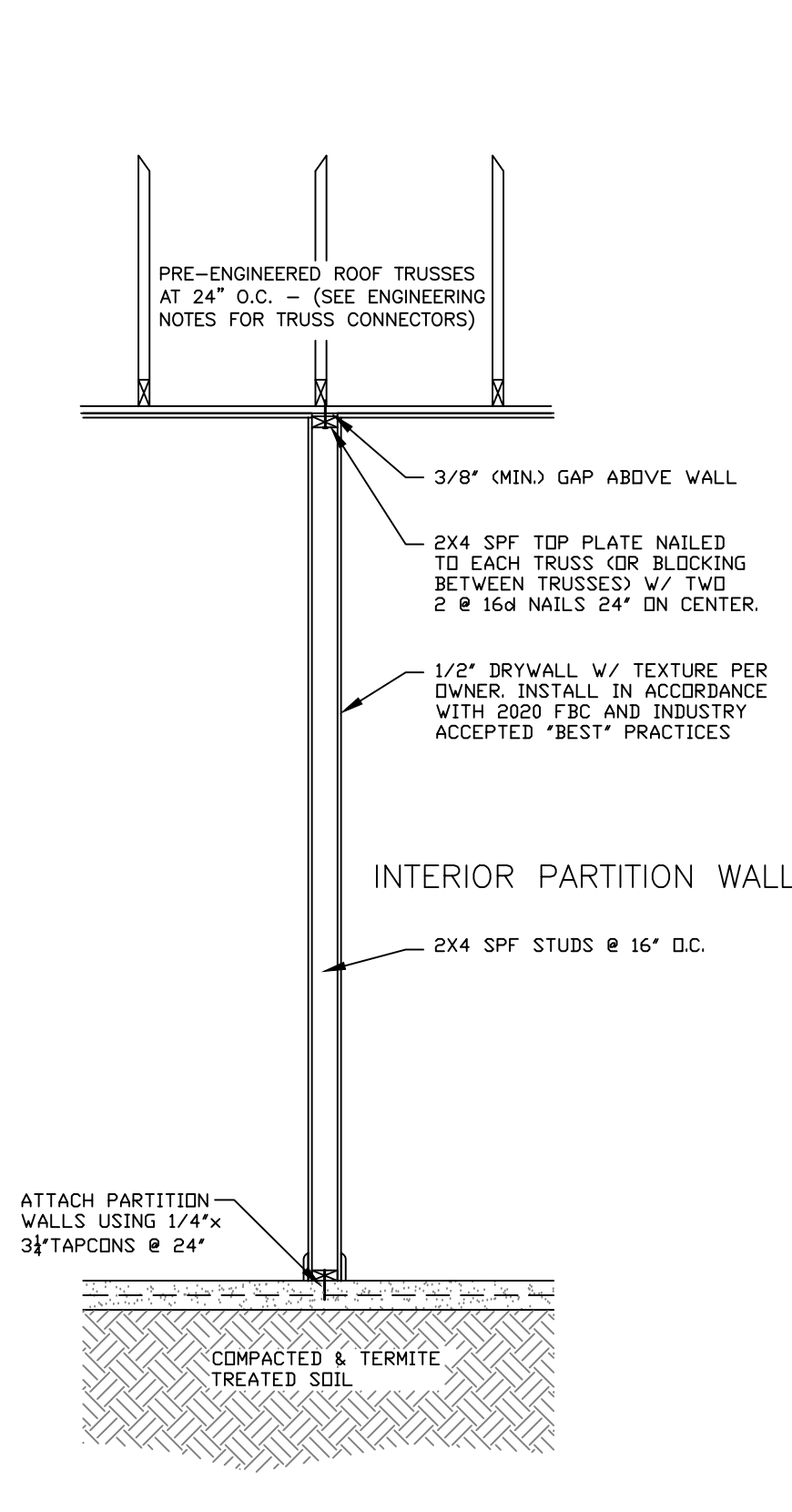
WALL SECTION (TYP.)
1/2"=1'-0"



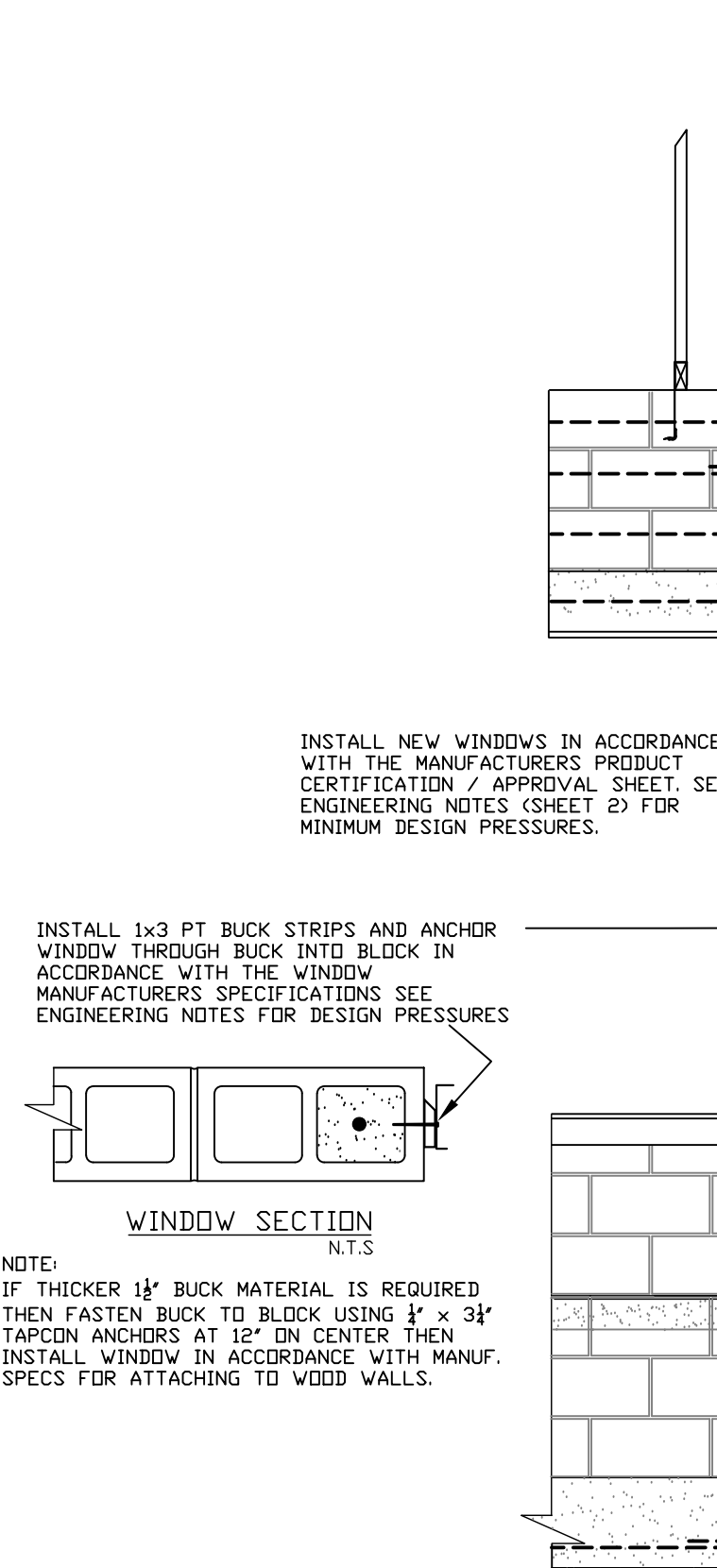
BEARING WALL SECTION
1/2"=1'-0"



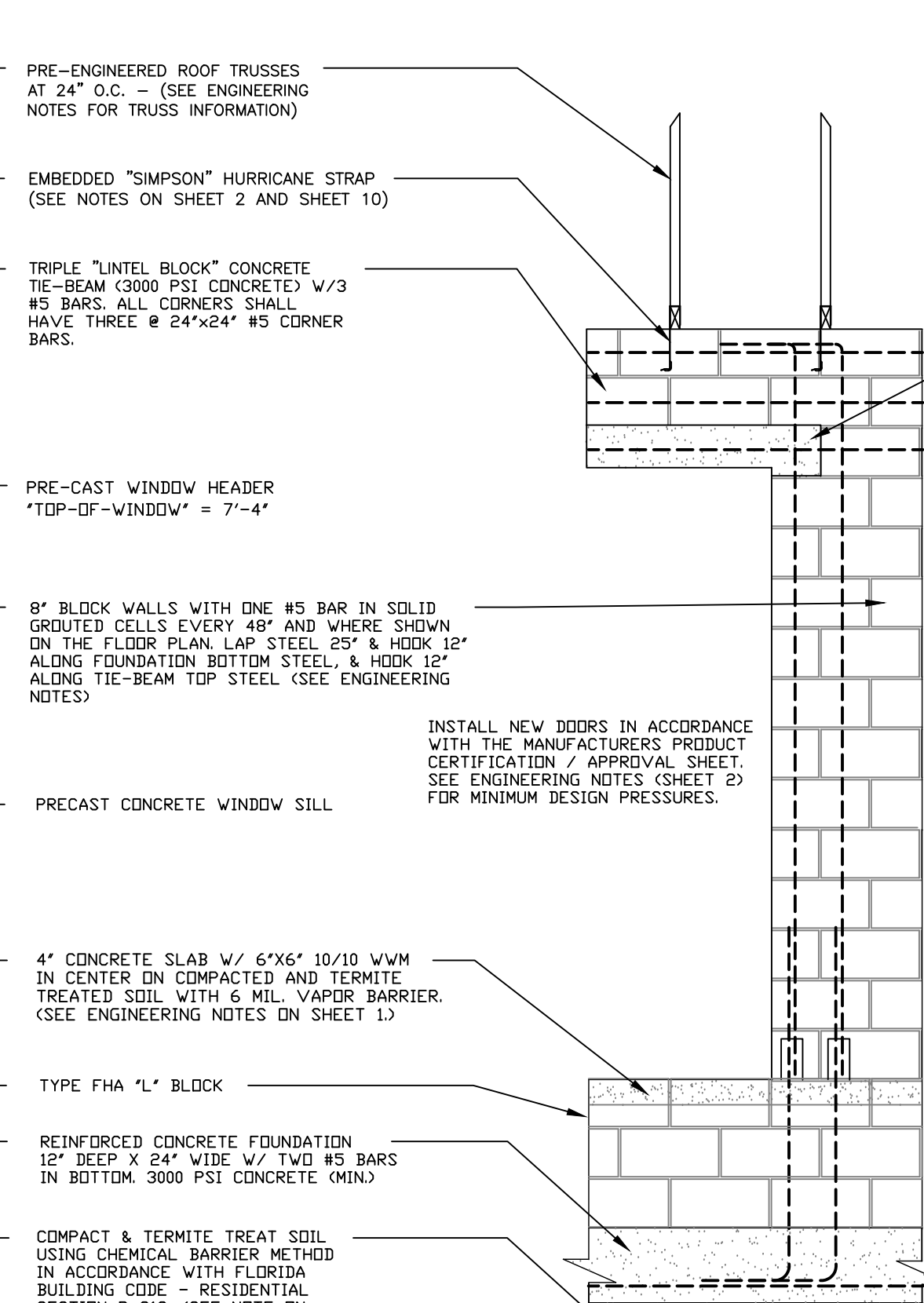
BEAM DETAIL
1/2"=1'-0"



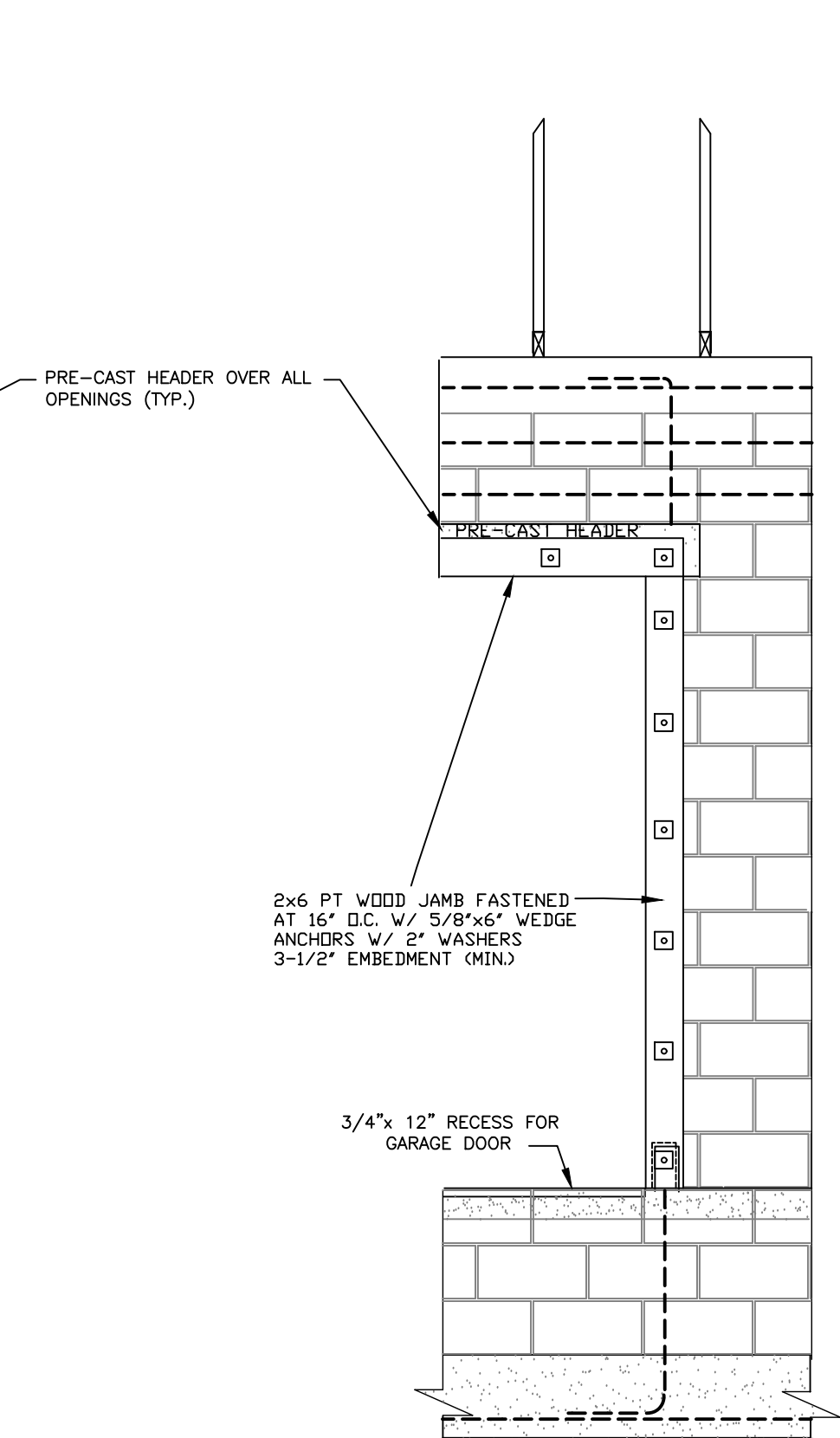
PARTITION WALL SECTION
1/2"=1'-0"



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



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



GARAGE DOOR MOUNTING JAMB
DETAIL (FROM INSIDE) 1/2"=1'-0"

ATTIC VENTILATION REQUIREMENT

PER THE 2017 FLORIDA BUILDING CODE RESIDENTIAL R806.1 & R806.2, THE MINIMUM NET FREE VENTILATED AREA HAS BEEN CALCULATED AS FOLLOWS:

TOTAL AREA OF ATTIC = 3156 S.F.

ATTIC VENTILATION PROVIDED - WITH RIDGE VENTS (1 S.F. PER 300 S.F. REQUIREMENT) 1/300 X 3156 SQ.FT. = 10.52 SQ.FT. (1515 SQ.IN.) RIDGE VENTING REQUIRED IS 40% - 50% OF THIS AREA (BETWEEN 606 AND 757 SQ. IN.)

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

A MINIMUM NET RIDGE VENTING AREA = 17.2 SQUARE INCHES PER LINEAR FOOT.

A MINIMUM SOFFIT VENTING AREA = 4.70 SQUARE INCHES PER SQUARE FOOT.

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

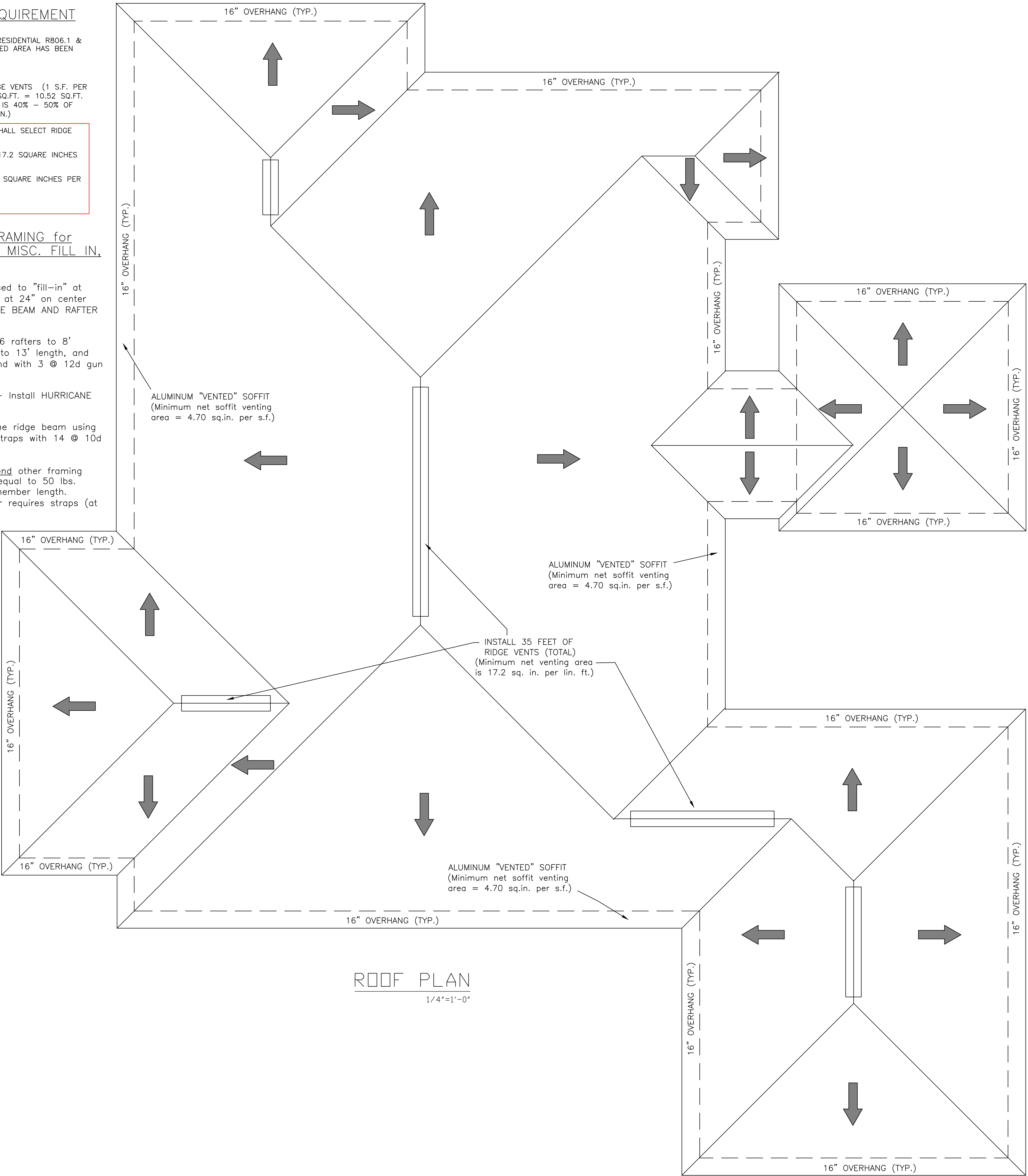
Where conventional framing is used to "fill-in" at valley framing or other locations at 24" on center (max.). USE A 2x6 OR 2X8 RIDGE BEAM AND RAFTER SIZES AS FOLLOWS:

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 & each end other 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.



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

RELEASE/REVISION

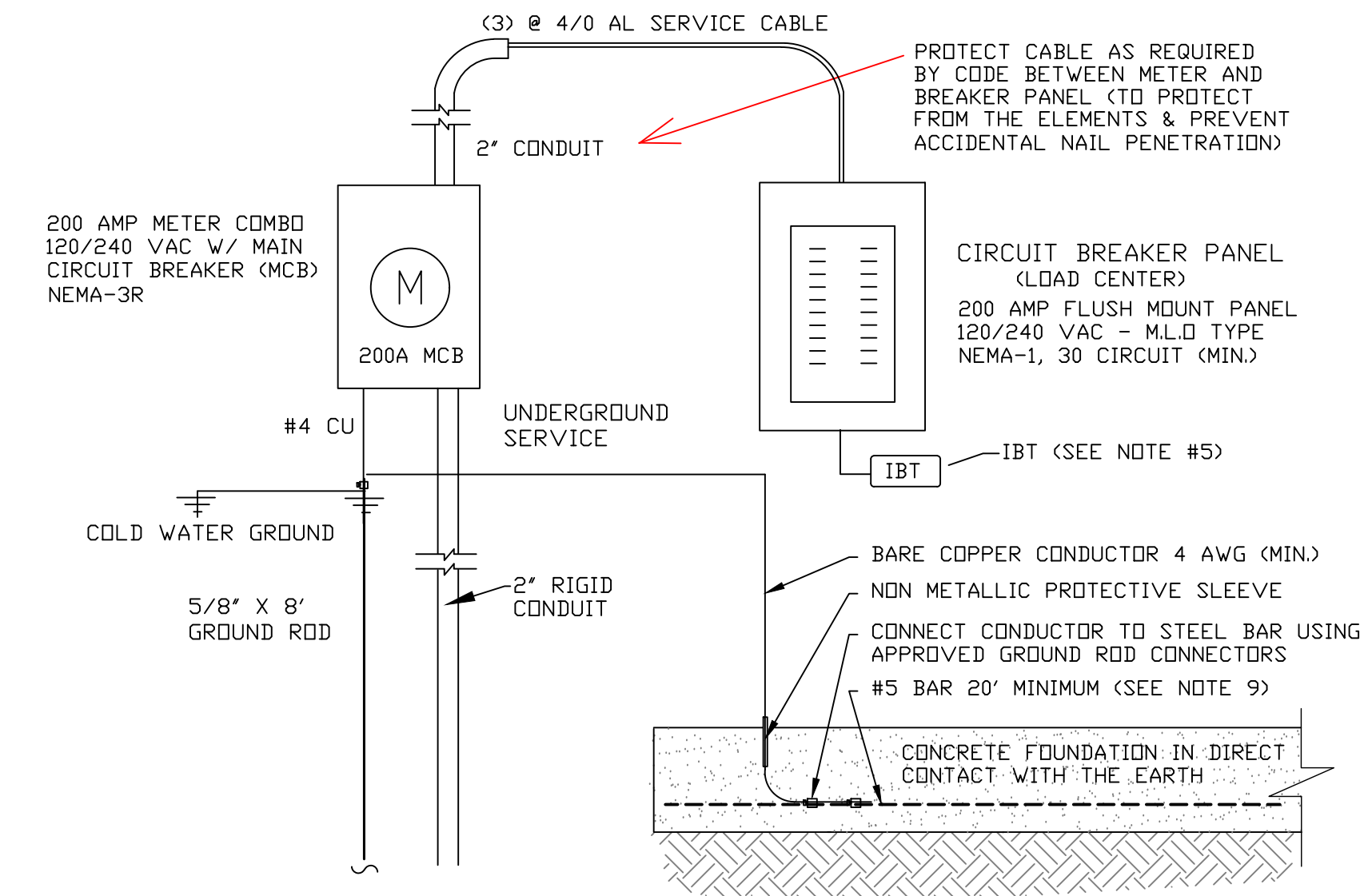
This plan has been prepared under my direct supervision and is, to the best of my knowledge, accurate and complete. This plan is for use only for this specific building at this location.

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SAMPLE PLAN SET
NOT FOR CONSTRUCTION

ROOF PLAN

DRAWN	MJS
DATE	4/4/20
CHECKED	WJK
SCALE	AS NOTED
JOB NO.	
SHEET	7
OF	10 SHEETS



ELECTRICAL RISER DIAGRAM

ELECTRICAL NOTES

- CODE COMPLIANCE – All electrical work shall be performed by a Florida licensed electrician in accordance with the 2017 Florida Building Code, NFPA-70 National Electric Code (NEC), and all other applicable codes and standards.
- 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 2017 Florida Building Code and "good" industry practices.
- 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. INCLUDE POOL/SPA EQUIPMENT AND HEATER IN CALCULATIONS
- 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.
- 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.

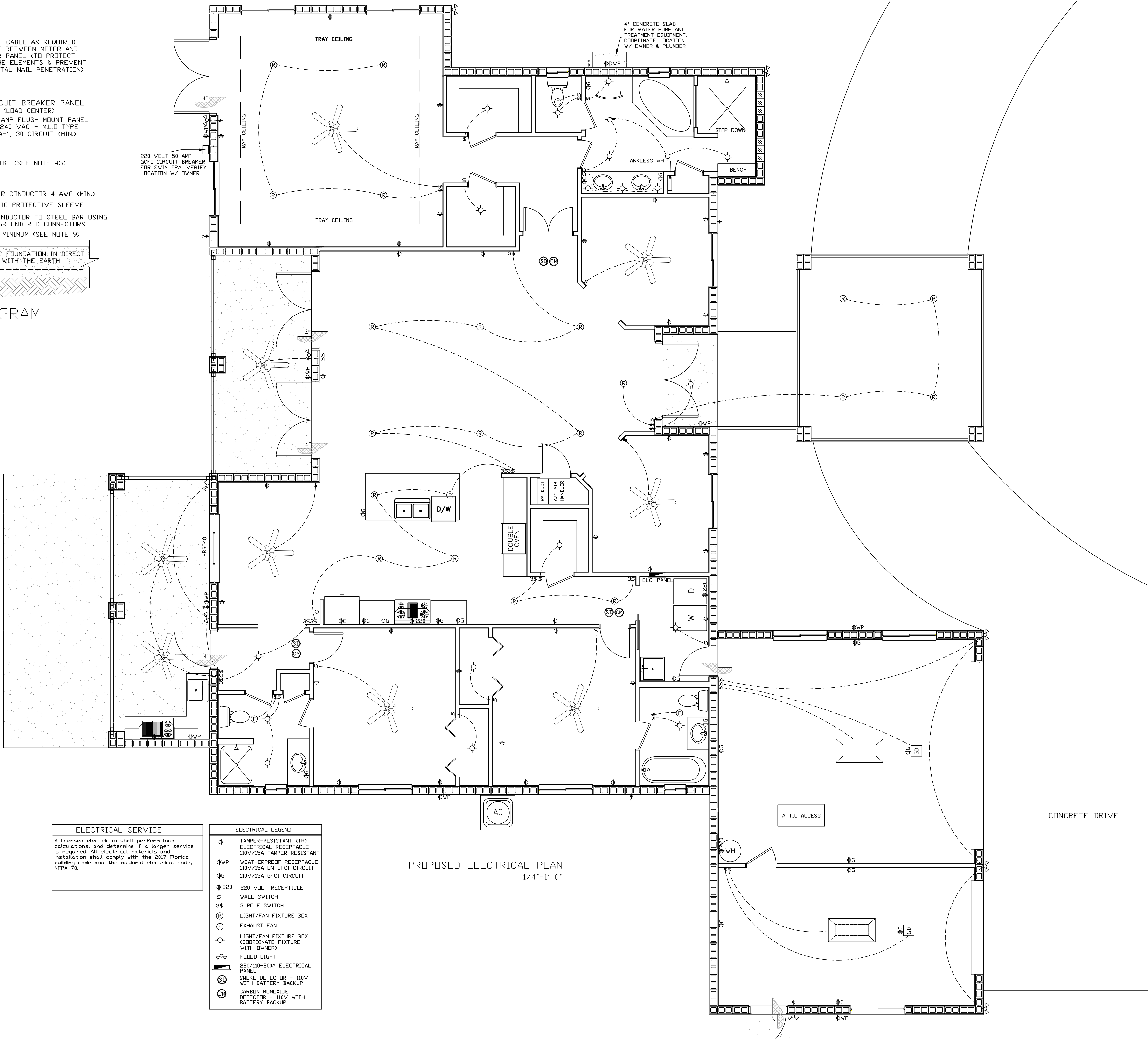
WIRE TYPE – All wiring shall be copper except the service cable may be aluminum with connectors rated for aluminum wire. All wiring for branch circuits shall be NM-B #12-2 conductor + ground.

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 2017 NEC 250.94(A)or(B) requirements.
- SMOKE DETECTORS – Smoke detector type, locations, and installation shall be installed in accordance with the 2017 Florida Building Code and NFPA requirements and shall have battery backup. Smoke detectors shall NOT be on GFCI circuits.
- CARBON MONOXIDE DETECTORS – Carbon monoxide detector type, locations, and installation shall be installed in accordance with the 2017 Florida Building Code and NFPA requirements and shall have battery backup. Carbon Monoxide detectors shall NOT be on GFCI circuits.
- 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.
- 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 SERVICE	
A licensed electrician shall perform load calculations, and determine if a larger service is required. All electrical materials and installation shall comply with the 2017 Florida building code and the national electrical code, NFPA 70.	

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

RELEASE/REVISION

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This plan has been prepared under my direct supervision and is, to the best of my knowledge, accurate and complete. I am a duly licensed professional engineer in the State of Florida. This plan is for use only for this specific building at this location.

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SAMPLE PLAN SET
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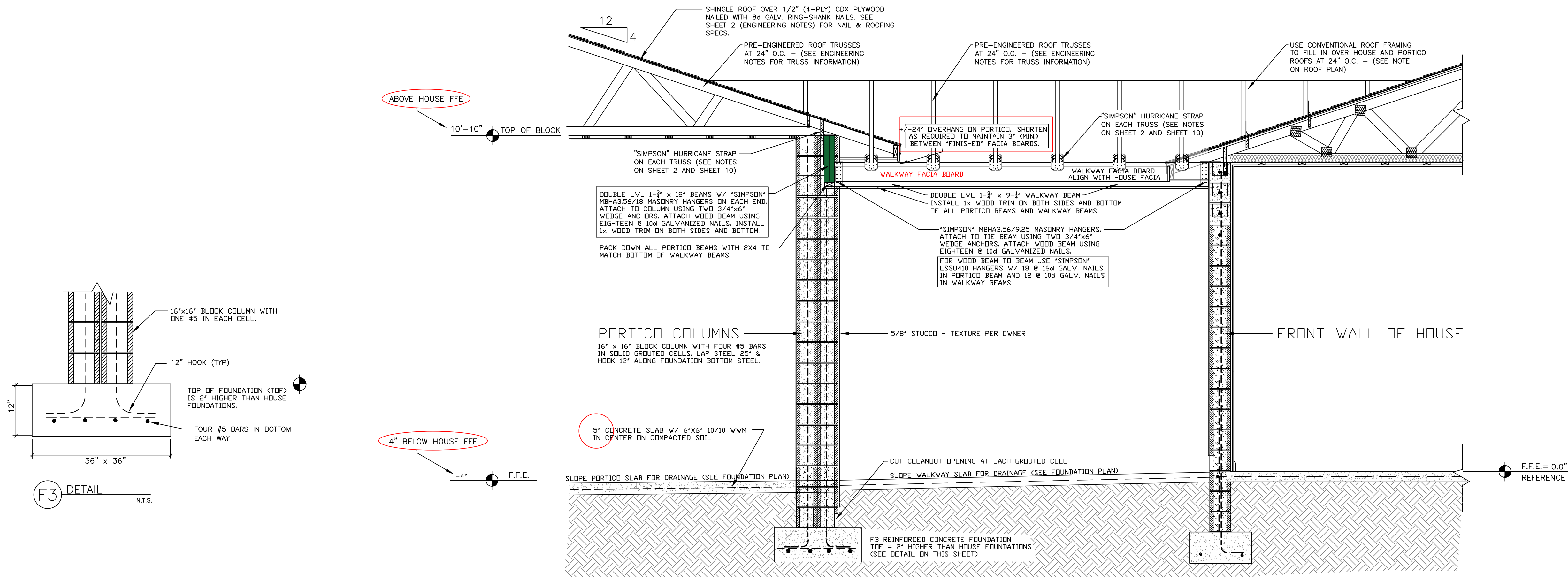
ELECTRICAL PLAN

DRAWN	MJS
DATE	4/4/20
CHECKED	WJK
SCALE	AS NOTED
JOB NO.	
SHEET	8
OF	10 SHEETS



FRONT (PORTICO) ELEVATION
1/4"=1'-0"

RIGHT SIDE (PORTICO) ELEVATION
1/4"=1'-0"



PORTICO SECTION (TYP.)
1/2"=1'-0"

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SAMPLE PLAN SET
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PORTICO ELEVATIONS
AND SECTIONS

DRAWN MJS
DATE 4/4/20
CHECKED WJK
SCALE AS NOTED
JOB NO.
SHEET

9
OF 10 SHEETS

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)	One "Simpson" HETA16 (or HETA20) embedded truss strap 6" into the tie beam, with (7) - 10d x 1-1/2" galvanized nails.	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)	Two "Simpson" HETA16 (or HETA20) embedded truss straps 6" into the tie beam, with (7) - 10d x 1-1/2" galvanized nails <u>in each strap</u> .	Two "Simpson" H8 connectors, use 10 @ 10d X1-1/2" galvanized nails <u>in each strap</u> .
TRIPLE TRUSS (3-PLY) (None specified on this project)	Call for assistance.	Call for assistance.
TRUSS TO TRUSS CONNECTORS	All truss to truss connectors (hangers) have been specified by the truss engineer to be "Simpson" HUS26. Install HUS26 hangers with 20 @ 16d (0.162") x 3-1/2" galvanized nails. 14 nails in girder truss and 6 nails in truss being supported.	

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

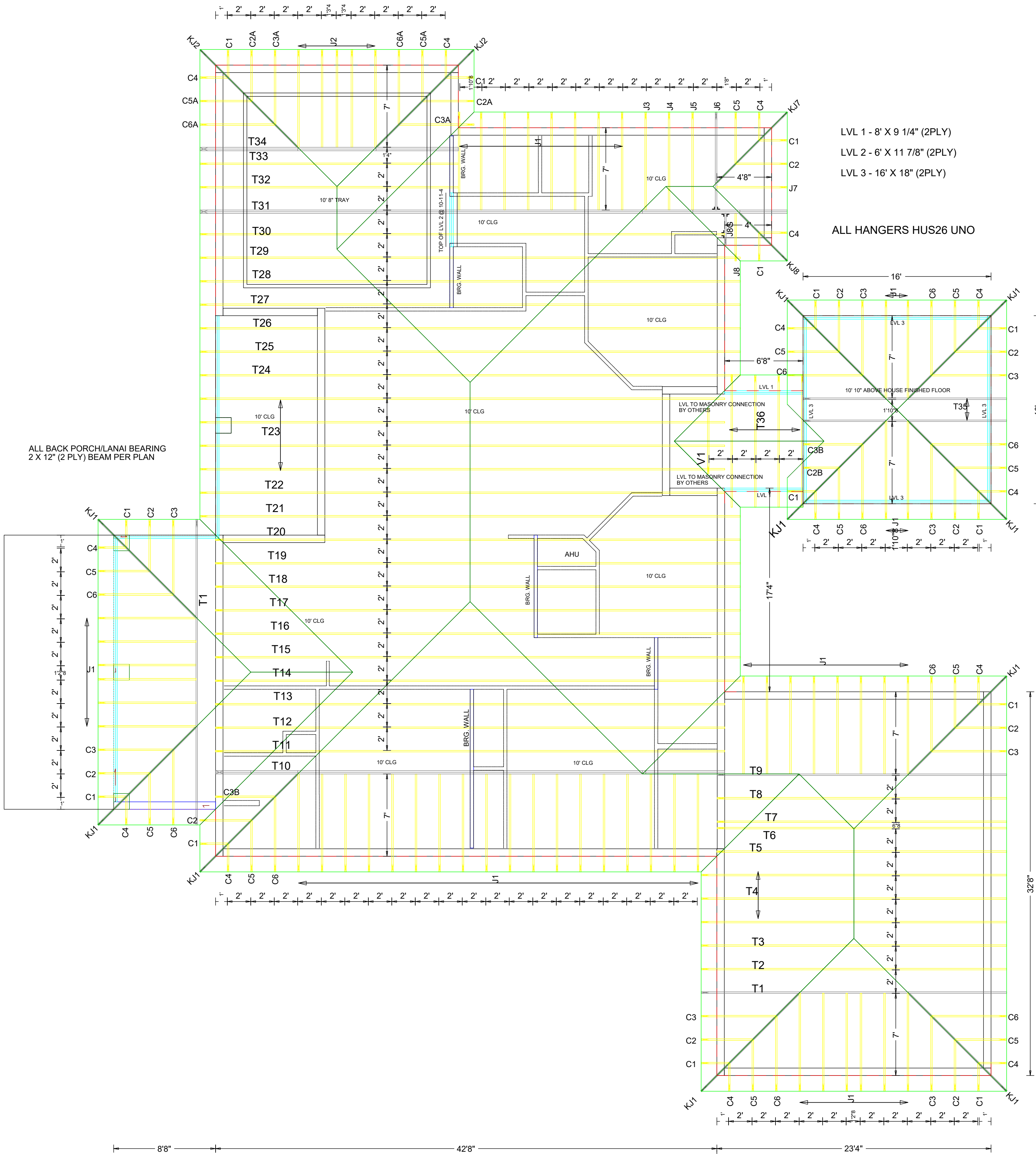
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SAMPLE PLAN SET
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TRUSS LAYOUT

DRAWN	MJS
DATE	11/11/20
CHECKED	WJK
SCALE	3/16"=1'-0"
JOB NO.	
SHEET	10
OF 10 SHEETS	