ENERGY EFFICIENCY REQUIREMENTS

All exterior joints and cracks are to be caulked, gasketed, weather-stripped or otherwise sealed.

All openings in the air barrier between conditioned and unconditioned space must be sealed. This includes sealing between windows/doors and their rough openings, the connection between walls and slabs, and the connection between walls and floor or roof systems. All lighting recessed into insulation spaces shall be Type IC with no penetrations.

Exterior windows and doors shall be rated to allow a penetration of a maximum of 0.3 cfm/sf of door area. All exterior doors and windows shall comply with the criteria in the Energy Calculations for this project (done by others) which accompany these drawings.

Exhaust fans vented to unconditioned spaces shall have dampers, except for combustion devices with integral exhaust ductwork. Combustion space and water heating systems must be provided with outside combustion air, except for direct-vent appliances.

For water heaters, a clearly-marked circuit breaker (for electrical models) or a clearly-marked cutoff valve (for gas models) shall be provided. An external or built-in heat trap is required in all water heaters. Insulation is required on hot water pipes for hot water circulating systems (including heat recovery units). Shower heads must have flow restrictors that reduce the flow to a maximum of 2.5 gallons per minute at a pressure of 80 psi.

All ducts, fittings, mechanical equipment and plenum chambers shall be mechanically attached, sealed, insulated and installed in accordance with the 2014 Florida Building Code.

Insulation in the exterior envelope shall be as follows: Roofs: R-30. Wood-Framed Walls: R-13. CMU Walls: R-7.8, Exposed floors above grade: R-13.

FLOOR TILE

Where tile is to be installed over concrete slab-on-grade floor systems, install the tile in accordance with the tile manufacturer's recommended crack mitigation techniques.

DOORS AND WINDOWS

Windows, exterior doors, garage doors and other vendor-provided exterior cladding shall comply with all provisions of the 6th Edition (2017) FBC.

Windows, sliding glass doors, exterior doors, and overhead garage doors shall be certified by the manufacturer to the design pressures specified in the "Basic Structural Criteria" included in these drawings. The window and door manufacturers shall provide engineered installation details that satisfy the specific design pressures and are in compliance with all the code provisions. The windows shall also comply with the glazing and tinting requirements of the Energy Calculations (by others) accompanying these drawings.

In areas requiring impact-resistance, the windows, exterior doors and sliding glass doors shall be certified as impact-resistant, or they shall be protected by an approved sheet metal shutter system installed as per the manufacturer's specifications, or shall be protected with 15/32" CDX plywood panels installed as per the provisions of the 6th Edition (2017) FBC.

STRUCTURAL CONNECTORS

Unless otherwise noted, all metal connectors shall be Simpson Strong-Tie brand connectors. All connectors shall be installed with fasteners as specified by the manufacturer's most recent recommendations.

Other Simpson connectors, or connectors supplied by a different manufacturer, may be substituted for the specified connectors, as long as the alternate connector meets or exceeds all of the structural capacities of the specified connector, or if the alternate connector meets or exceeds the structural requirements of the specialty truss engineer for the project. It is not necessary to submit these connector changes to the Engineer of Record for his approval; if all of the criteria described in this paragraph are adhered to, then these general notes constitute the engineer's approval to substitute the connector.

Uplift connectors such as hurricane clips, truss anchors and anchor bolts are only required in walls that are exposed to uplift forces. Interior load-bearing walls are not always exposed to uplift, and the wood members in these walls would not need to have connections applied. Consult the truss engineering for the location of these walls.

TERMITE PROTECTION

Termite protection shall be provided by registered termiticides or other approved methods of termite protection labeled for use as a preventative treatment to new construction, in accordance with the provisions of the 6th Edition (2017) FBC. The method of treatment shall be approved by the governing jurisdiction. Liquid Borate or "Bor-a-Cor" product methods must be determined at the permit stage, and Product Approval Data must be on file with the Building Department. The Contractor shall provide the building official with a Certificate of Protective Treatment for Prevention of Termites.

Pressure-treated lumber that has been cut or drilled (exposing untreated portions of the wood) are required to be field-treated to prevent insect infestation. Borage shall be applied to all framing members within 24" of the floor slab or grade.

No wood, vegetation, stumps, dead roots, cardboard, trash, or other cellulose-containing material shall be buried on the building lot within 15 feet of any building.

Condensate lines and roof downspouts shall discharge at least 1 foot away from the structure sidewall, whether by underground piping, tail extensions, or splash blocks. Irrigation/sprinkler systems and risers for spray heads shall not be installed within 1 foot of the building sidewall.

CMU WALL CONSTRUCTION

Concrete masonry units shall be hollow or solid unit masonry in accordance with ASTM C90 and shall have a minimum net area compressive strength of 1,900 psi when using Type M or S mortar or a minimum net area compressive strength of 2,150 psi when using Type N mortar.

Mortar and grout shall be either Type M, S or N, conforming to ASTM C-270. The grout/mortar mix shall be 1 part cement, 3 1/2 parts sand, and 1/4 part lime putty. Coarse grout shall conform to ASTM C 476 with a maximum aggregate size of 3/8" and a minimum compressive strength of 2,500 psi.

Vertical reinforcement shall be as noted on the drawings with cells filled with coarse grout. Vertical reinforcement shall be placed in the center of the masonry cell. The maximum center-to-center spacing of the vertical reinforcement shall be 6'-0".

Grout pours shall be limited to 48" at work stoppages. Horizontal construction joints shall be formed by stopping grout 1/2" below top of masonry. Tamp grout to ensure filling of all voids. Grout solid all cells below grade. Horizontal rebars are to be placed in bond beam units.

Grout stops shall be provided below the bond beam. Plastic screen, metal lath strip or cavity caps may be used to prevent the flow of grout into the cells below. The use of felt paper as a stop is prohibited.

All precast lintels must meet or exceed L/360 vertical deflection, except lintels 17'-4' and longer with a nominal height of 8", which must meet or exceed L/180. Cast-in-place concrete may be provided in composite lintel in lieu of concrete masonry units.

MISC. NOTES

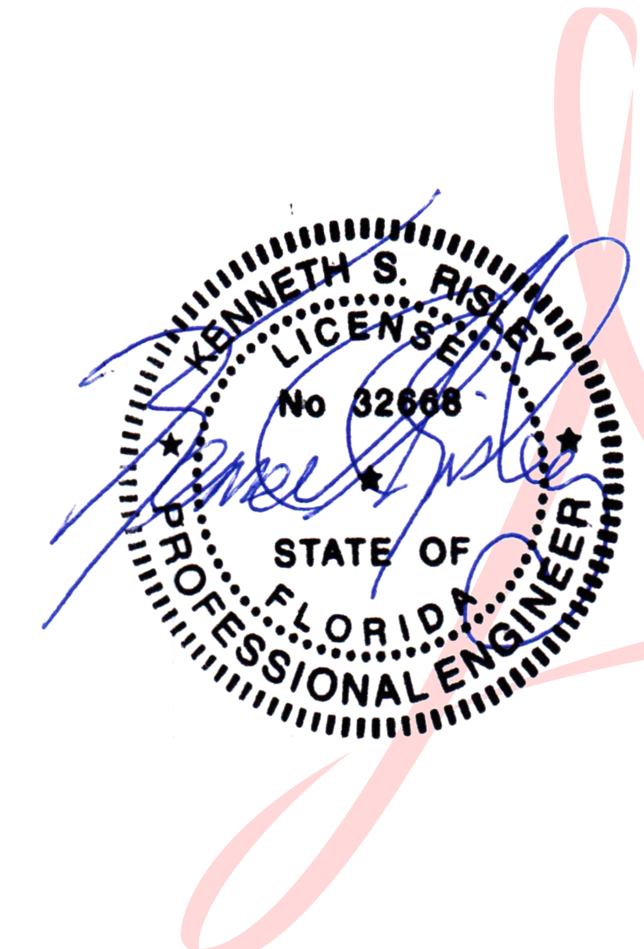
EXTERIOR LATHING AND PLASTERING

Exterior use of Portland cement plaster shall comply with the application requirements of ASTM C926. Installation of exterior lathing and framing shall comply with ASTM 1063. The licensed stucco applicator shall be fully familiar with these standards.

MECHANICAL, PLUMBING & ELECTRICAL SYSTEMS

The Mechanical, Plumbing and Electrical subcontractors are responsible for compliance with all respective Codes affecting their trades. Any MPE data on these plans are for placement only and have not been engineered by the Engineer of Record or reviewed against the applicable codes.

Residential Construction Phase



Digitally signed by Kenneth S Risley
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Date: 2020.05.08 13:58:15 -04'00'

Index of Drawings

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A5	ELEVATIONS MAIN HOUSE
S1	FOUNDATION PLAN
S2	ROOF FRAMING PLAN
D1	ENGINEERING INFO
E1	ELECTRICAL PLAN

Building Data

Item	Info
Living Area First	1918 sqft
Porch Area	100 sqft

Hangar Home Designed by:
KEN RISLEY
the Engineer Designer
www.EngineerDesigner.Com

Engineer Designer
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Kenneth S. Risley, P.E.
PE 32668
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Owner: Randel & Lilian Dutton
653 Monument Road, Apt 1004
Jacksonville, FL 32225

Builder:

Hangar Home Project Revised
Cannon Creek Airpark
Lots #16 & #28
Lake City, Florida

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Unless otherwise noted

Sheet Description
Cover, Notes

Issue Date: 5/8/2020

REVISION TABLE	
NUMBER	DATE

A1

GENERAL REQUIREMENTS

BUILDING CODE REQUIREMENTS

All work, materials and installation shall be in strict accordance with all extant ordinances, State and local building codes, OSHA regulations, and codes in force by reference, latest adopted editions, including: The 6th Edition (2017) FBC; the current National Electric Code; "Building Code Requirements for Reinforcing Concrete" (ACI 318-05); "Specifications for Structural Concrete Buildings" (ACI 301-05); "Building Code Require-ments for Masonry Structures" (ACI 530-05); "Wood-Framed Construction Manual"; and "APA Plywood Design Specification Manual".

NOTICE TO BUILDER AND OWNER

It is the intent of the designer that these plans are accurate and are clear enough for a licensed professional to construct this project. If the owner intends to build this project without the aid of a licensed professional contractor, it is assumed that the owner has the same abilities and knowledge as a fully licensed and experienced professional builder.

Post-permitting consulting fees are established in separate agreements between the designer and the builder or owner, and were not part of the agreement to produce these construction documents. No construction administration or inspection services were included in the agreement to produce these construction documents.

OWNERSHIP OF DOCUMENTS

All drawings & specifications are considered Instruments of Service, will remain the property of Florida Tectonics, Inc (DBA the Engineer Designer) and may not be reused in any fashion without express written permission.

DIMENSIONING CONVENTIONS

Written dimensions shall at all times take precedence over scaled dimensions, and no workman shall rely upon the scale of any portion of the drawings in determining dimensions on the job site.

Unless otherwise noted on the drawings, all dimensions of walls are to the face of the CMU in exterior walls, or to one side of the wood studs in interior partitions.

Unless otherwise noted on the drawings, elevations of floor and ceiling heights are to finished concrete of the primary habitable floor area.

In wood-framed exterior walls, the dimensions of window and door openings are to the centerline of the window or door. In CMU exterior walls, the dimensions of windows and doors are to rough masonry openings. It is the responsibility of the contractor and the mason to verify all window and door rough opening dimensions prior to commencement of construction, and to adjust the rough openings accordingly. The height dimensions of exterior windows and doors are to nominal finished openings.

All structural conditions noted as "existing" or of existing structures are based on the best information currently available at the time of preparation of these documents. The Contractor is to verify all conditions prior to commencing work and report any anomalies that may affect the Work. The Contractor is to verify all dimensions prior to construction.

SHORING & OTHER CONSTRUCTION PROCEDURES

The shoring of structural systems and foundation excavations are the responsibilities of the Contractor. Site visits by the designer do not include inspection of construction procedures. Complete shoring plans and calculations (when required by the Building Official) shall be submitted for plan check for the necessary approvals prior to commencing with the work.

LEAD-BASED PAINT POISONING PREVENTION

In the renovation of all residential structures constructed prior to 1978, the contractor shall comply with all provisions of Federal Code of Regulations Title 40, Part 745, "Lead-Based Paint Poisoning Prevention in Certain Residential Structures."

FIELD REPAIR NOTES

Missed J-bolts for wood bearing walls may be substituted with 1/2" diameter steel all-thread rods embedded a minimum of 6" into the concrete and secured with Simpson "Set" Epoxy Adhesive Binder, following all manufacturer's recommendations. See plans for embedment depth at floor steps.

For missed vertical dowels, drill a 3/4" diameter hole 6" deep at the location of the omitted rebar, clean all dust and debris from the hole with compressed air, and install a 32"-long #5 rebar into the epoxy-filled hole. Use a two-part embedment epoxy (Simpson "Set" Epoxy). Allow the epoxy to cure to the manufacturer's specifications, then fill the vertical cell in the normal manner during bond beam pour.

Missed lintel straps in masonry construction may be substituted as follows: For uplifts less than 860 lbs,, install (1) Simpson MTSM16 twist strap with (4) 1/4" X 2 1/4" Titen anchors to the CMU and (7) 10d nails to the truss; for uplifts less than 1,720 lbs., install (2) MTSM16's in similar fashion. If girder truss connections are missed, contact the Engineer of Record for substitution.

CONCRETE

REINFORCING STEEL

Reinforcement bars shall conform to ASTM A615 and be new domestic deformed grade 40 billet steel (with the exception of #9 bar or larger, which shall be grade 60 billet steel.

Joint reinforcement, anchors, ties and wire fabric shall conform to the following standards: ASTM A82 for joint reinforcement and wire anchors and ties; ASTM A36 for plate, header and bent bar anchors; and ASTM A366 for sheet metal anchors and ties.

The minimum reinforcement bar lap shall be 40 bar diameters (or 2'-0" min., whichever is greater) in concrete unless otherwise noted on the drawings. Horizontal footing bars shall be bent 1'-0" around corners, or corner bars with a minimum 2'-0" lap shall be provided. Splicing of horizontal rebar in walls and footings shall be staggered a minimum of 4'-0".

Welded wire mesh shall conform to ASTM A185. All W.W.M. shall be lapped min. 8", containing at least 1 cross-wire within the 8"

Hooks shall be provided at discontinuous ends of all top bars of beams.

For foundations, minimum concrete cover over reinforcing bars shall be 3" where the concrete is cast against and permanently in contact with the earth, or 1 1/2" where the concrete is not exposed to the weather.

Cleanout openings shall be provided, in the bottom course of the masonry cell to be filled, for cells containing spliced reinforcement when the grout pour exceeds 5 feet in height. Cleanout openings shall have a minimum area of 12 square inches and a minimum opening dimension of 3 inches.

CAST-IN-PLACE CONCRETE

All concrete shall have a minimum compressive strength at 28 days of 3,000 psi, a slump of 5" +/- 1", air entrainment of 2% to 5% and a maximum water/cement ratio of 0.63. Cement shall be tested, Type 1 Portland cement conforming to ASTM C-150. Aggregate shall me a maximum of 1 1/2" for footings and 1" for all other work and shall conform to ASTM C-33.

Water used in concrete mixtures shall be potable, clean and free from injurious amounts of oils, acids, alkalis, salts, organic materials or other substances that may be deleterious to the concrete or the reinforcement. Concrete containing reinforcement that will be exposed to chlorides from deicing chemicals, salts, salt water, brackish water, sea water or spray from these sources shall meet the durability of 6th Edition (2017) FBC.

Concrete shall be cured while in a moist condition for at least the first 7 days after placement.

Before placing any concrete, the Contractor shall coordinate with all trades to ensure proper placement of all openings, sleeves, inserts, depressions, etc.

Removal of forms shall be as follows: Vertical surfaces: 2 days minimum. Horizontal slabs and beams, if reinforced with 5% of props within 3 hours in checkerboard fashion: 15 days minimum.

All concrete work shall be in accordance with the "The Building Code Requirements for Reinforced Concrete" (ACI 318, latest edition), and "Specifications for Concrete for Buildings" (ACI 301, latest Edition).

FOOTINGS AND FOUNDATIONS

All fill soil and disturbed natural soils are to be excavated and replaced with properly-compacted fill. The foundation design is based on an assumed allowable bearing pressure of 2,000 psf. The Contractor shall verify to his or her satisfaction the assumed capacity in the field prior to the pouring of any foundation concrete. Geotechnical evaluation is not part of the services making up these drawings.

Relatively non-expansive fill shall be used in back-filling behind retaining walls. CMU cells reinforced with reinforcing bars shall be filled solid with concrete prior to back-filling. All walls shall be adequately shored during back-filling.

Footing excavations shown on these plans are for estimating purposes only. The Contractor shall verify all field conditions prior to bidding plans. No pipes, conduits or chases are allowed in footings.

Footings shall preferably bear on undisturbed, naturally-compacted soil. Where backfilling under footings is necessary, the following standards shall apply:

Where footings will bear on compacted fill material less that 12" in depth, the fill material shall be compacted to a minimum of 90% modified proctor in accordance with ASTM D1557, and the compaction shall be verified by a method approved by the building official.

Where footings will bear on compacted fill 12" or more in depth, the contractor shall secure the services of a licensed geotechnical engineer, who will prepare specifications for the preparation of the site prior to placement of foundations.

GENERAL ENERGY REQUIREMENTS

VENTILATED ATTICS: WHERE VENTILATED ATTICS OCCUR, PROVIDE THE FOLLOWING:

1. MAINTAIN AIR BARRIER ACROSS CEILINGS WHICH COINCIDE WITH VENTILATED ATTICS. THIS INCLUDES SEALING ALL PIPE, WIRES, CONDUITS, DUCT, LIGHT, AND HVAC SUPPLY/RETURN REGISTER PENETRATIONS.
2. CHAULK/SEAL EDGES OF CEILING AT PERIMETER WALLS, SHAFTS, ELEVATORS, AND CHIMNEYS.
3. PROVIDE WEATHER STRIPPING AROUND ATTIC ACCESS.
4. RECESSED LIGHTS SHALL BE SUBSTANTIALLY AIR TIGHT EITHER WITH A TYPE IC RATING OR ADDING SEALED BOX WITH 1/2" CLEARANCE TO LIGHT FIXTURE. SEAL BETWEEN LIGHT FIXTURE AND CEILING.
5. AIR CONDITIONING DUCTWORK SHALL HAVE MINIMUM R-6 INSULATION VALUE.
6. LAY-IN TYPE CEILINGS ARE NOT ACCEPTABLE AS AIR BARRIERS.
7. AIR PERMEABLE INSULATION IS NOT ACCEPTABLE AS AN AIR BARRIER OR AS A SEALING MATERIAL.

WINDOWS AND DOORS:

1. ALL WINDOWS AND DOORS MUST HAVE WEATHERSTRIPPING WHICH MAINTAINS A .3 CFM/SF MAXIMUM WINDOW LEAKAGE AND .5 CFM/SF MAXIMUM DOOR LEAKAGE.
2. CAULK/GASKET/SEAL AROUND EDGES OF DOORS AND WINDOWS (UNLESS OPENING IS ALREADY SEALED BY A CONTINUOUS MEMBRANE WRAPPING AROUND OPENING).

THERMAL BARRIER: IN ADDITION TO MAINTAIN THE AIR BARRIER, MAINTAIN THE THERMAL BARRIER INTEGRITY BETWEEN INSIDE AND OUTSIDE. THIS INCLUDES, BUT IS NOT LIMITED TO:

1. THERMAL INSULATION FOR FRAMED EXTERIOR WALLS MUST BE INSTALLED IN SUBSTANTIAL CONTACT AND CONTINUOUS ALIGNMENT WITH THE AIR BARRIER.
2. AIR PERMEABLE INSULATION IS NOT A SEALING MATERIAL AND MUST BE INSTALLED INSIDE OF AIR BARRIER.
3. PATCH ALL BREACHES IN THERMAL ENVELOPE WITH INSULATION.
4. CORNERS OF EXTERIOR WALLS AND HEADERS MUST HAVE CONTINUOUS INSULATION.
5. INSTALL FLOOR INSULATION IN PERMANENT CONTACT WITH UNDERSIDE OF SUB-FLOOR DECKING.
6. BATT INSULATION IN NARROW CAVITIES SHALL NOT BE COMPRESSED BUT CUT TO FIT.
7. CUT BATT INSULATION TO FIT AROUND WIRING AND PLUMBING, OR SPRAYED/BLOWN INSULATION BEHIND PLUMBING AND WIRING. INSTALL INSULATION BETWEEN PIPES/WIRING AND OUTSIDE WALL.
8. COMMON WALLS SHALL BE INSULATED WITH R-11 (FOR FRAME WALLS) OR R-3 ON BOTH SIDES OF BLOCK WALLS . COMMON CEILING/FLOOR ASSEMBLIES SHALL BE INSULATED WITH R-11 (WHERE APPLICABLE).

MECHANICAL AND SWIMMING POOLS:

1. WATER HEATER EFFICIENCY MUST BE IN COMPLIANCE WITH TABLE N1112.ABC.3 PROVIDE A SWITCH OR CLEARLY MARKED CIRCUIT BREAKER AT ELECTRIC WATER HEATERS AND A GAS SHUT-OFF VALVE AT GAS WATER HEATERS. PROVIDE HEAT TRAPS IN PIPE CONNECTIONS (WHERE NOT ALREADY PROVIDED BY WATER HEATER MANUFACTURER).
2. SPAS AND HEATED POOLS MUST HAVE COVERS (EXCEPT SOLAR HEATED POOLS). NON-COMMERCIAL POOLS MUST HAVE PUMP TIMERS. GAS SPA AND POOL HEATERS MUST HAVE A MINIMUM THERMAL EFFICIENCY OF 78%. HEAT PUMP POOL HEATERS MUST HAVE A MINIMUM COP OF 4.0.
3. PROVIDE FLOW RESTRICTORS FOR ALL SHOWERS TO LIMIT FLOW TO 2.5 GALLONS PER MINUTE AT 80 PSIG.
4. ALL HVAC DUCTS/FITTINGS/PLENUMS, AND EQUIPMENT SHALL BE MECHANICAL ATTACHED, SEALED, AND INSULATED PER SECTION N1110.AB OF ENERGY CODE. PROVIDE EXTRA INSULATION FOR DUCTS EXPOSED TO OUTDOORS OR LOCATED IN VENTILATED ATTICS.
5. PROVIDE PROGRAMMABLE THERMOSTAT FOR HVAC SYSTEM.

AIR BARRIER: MAINTAIN AIR BARRIER INTEGRITY BETWEEN AIR CONDITIONED/HEATED SPACES AND OUTDOORS. AIR PERMEABLE INSULATION MUST BE LOCATED INSIDE THE AIR BARRIER.

1. SEAL JUNCTION OF FOUNDATION AND SILL PLATE (UNLESS ALREADY SEALED BY CONTINUOUS MEMBRANE).
2. RIM JOISTS SHALL NOT INTERRUPT AIR BARRIER.
3. SEAL FLOORS AIR TIGHT, INCLUDING EDGES OF FLOOR AND PENETRATIONS GREATER THAN 1/8". THIS INCLUDES FLOORS ABOVE GARAGES, EXPOSED FLOORS, CANTILEVERED FLOORS, AND SLABS ON GRADE. MAINTAIN AIR BARRIER AT EDGES OF FLOOR/FOUNDATION WALL INSULATION.
4. MAINTAIN AIR BARRIER BETWEEN GARAGE AND OTHER UNCONDITIONED SPACES.
5. MAINTAIN AIR BARRIER BETWEEN SHOWERS/TUBS AND OUTSIDE WALLS.
6. MAINTAIN AIR BARRIER BEHIND ELECTRICAL/COMMUNICATIONS/ TELEPHONE WALL BOXES AND OUTSIDE WALLS.
7. PROVIDE AIR BARRIER BETWEEN COMMON WALLS BETWEEN SEPARATE DWELLING UNITS (WHERE APPLICABLE).
8. MAINTAIN AIR BARRIER AROUND FIREPLACES, CHIMNEYS, FLUES, CABINETS, AND COMBUSTION AIR PASSAGES.
9. INTERIOR SPACES HOUSING GAS APPLIANCES SHALL HAVE THEIR OWN AIR BARRIERS UNLESS THE GAS APPLIANCES ARE SEALED COMBUSTION TYPE.
10. MAINTAIN AIR BARRIERS ALONG ROOF PENETRATIONS AND AT EXHAUST DUCT PENETRATIONS.
11. FOR MULTISTORY DWELLINGS, MAINTAIN AIR BARREIR AT PERMITER OF FLOOR CAVITY BETWEEN FLOORS.
12. OUTSIDE WALLS-MAINTAIN WALL'S AIR BARRIER AT CORNERS, SEAMS, AND ALL ELECTRICAL/MECHANICAL PENETRATIONS.

FRAMING WOOD

All structural lumber shall be either Spruce-Pine-Fir (SPF) or Southern Yellow Pine (SYP) No. 2, 1200f. All wood in direct contact with masonry or concrete shall be SYP pressure-treated with an approved preservative.

Plywood. All plywood sheathing shall be marked "CD" By the DFPA, and shall comply w/ US Product standard PS 1-77. All horizontal plywood diaphragms (i.e., roofs & floors) shall be laid face grain perpendicular to joists or rafters & staggered w/ the joists.

Provide 2x solid blocking between joists & rafters @ all supports. Blocking shall be one-piece & the full depth of the joist or rafter. Cross-bridging or solid blocking shall be provided @ 8'-0" O.C. max.

Cutting & Notching of Wood Floor Joists, Beams & Girders: notches on the ends of joists shall not exceed one-fourth the joist depth. Holes bored in joists shall not be within 2" of the top or bottom of the joist, & the diameter of any such hole shall not exceed one-third the depth of the joist. Notches in the top of bottom of joists shall not exceed one-sixth the depth & shall be located in the middle third of the span.

Cutting & Notching of Wood Studs: In exterior walls & bearing partitions, any wood stud may be cut or notched to a depth not exceed\-ing 25 percent of the width of the stud. In on bearing parti\-tions, any wood stud may be cut or notched to a depth not exceeding 40 percent of the width of the stud.

Bored holes in Wood Studs: a hole not greater in diameter than 40 per\-cent of the stud width may be bored in any wood stud. Bored holes not greater than 60 percent of the width of the stud are permitted in non-bearing partitions or in any wall where each bored stud is doubled, provided not more than two such successive doubled stud are so bored. In no case shall the edge of the bored hole be nearer than 5/8" to the edge of the stud. Bored holes shall not be located @ the same sec\-tion of stud as a cut or notch.

Bearing walls (not otherwise braced by plywood) shall be braced w/ not less than 1x6 diagonal let-ins, a minimum of one each end of each exterior wall not to exceed 25'-0" O.C. Each brace shall cover 4 studs & be nailed w/ (2) 8d nails @ each end into the top plate & sill & (2) 8d nails into each intersect\-ing stud.

The enclosed space in stud walls, partitions, & furred walls shall be fire-stopped @ the top, bottom & mid-point in which are more than 10' high. Fire-stops shall consist of wood not less than 2" nominal thickness or of incombustible materials as permitted by the building code. Fire-stopping shall form a complete block across the space to be fire-stopped & the space between them shall not ex\-ceed 10' measured horizontally or vertically. Top & bottom plates which fill all spaces between studs & furring shall be considered fire-stops.

The top plates of all stud walls shall be 2 pieces the same size as the studs, spliced to lap a min. of 4'-0" & nailed as per the schedule.

Glue-lam lumber shall be fabricated as per UBC Standard No. 25-10, sect 2511(f). Exposed structural glue-laminated lumber shall be moisture-resistant, treated wood.

PREFABRICATED WOOD TRUSSES

Trusses, bracing, bridging and connectors are to be designed by the truss manufacturer to safely carry the design loads as indicated on the plans. Deflection under live load shall not exceed 1/360th of the span. Identify all lumber by official grade marks. Trusses will be braced in accordance with the latest Commentary as Reviewed by the Wood Truss Council of America and the Technical Advisory Committee of the Truss Plate Institute.

Shop drawings shall be submitted for review and approval by the Building Official prior to fabrication or erection of wood trusses. Shop drawings shall indicate that provisions are made for support and bearing of the roof/ floor structural system, for cross and lateral bracing, and for bracing and anchorage required to resist uplift and lateral forces. Clearly indicate on shop drawings the species, sizes and stress grades of the lumber used. Show pitch, span, camber, configuration and spacing. Indicate connector types, thicknesses, sizes, locations and design values. These ship drawings shall bear the impressed seal of the Florida-registered professional engineer responsible for the design. The truss supplier and The Contractor are solely responsible for seeing that the work is complete, accurate and in conformity with the drawings.

The Engineer of Record shall review the truss engineering supplied by the Truss Manufacturer to assure that truss reactions and uplifts have been properly accounted for in the drawings. It's the Contractor's responsibility to get the truss drawings to the Engineer for review.

Hoist all necessary temporary bracing required to hold trusses plumb until permanent bracing is installed. Install permanent bracing and related components prior to application of loads to trusses.

Do not cut or remove chords or webs of trusses. Do not notch or drill truss members without approval of the specialty engineer responsible for truss design. Remove or replace trusses damaged during shipping or erection. Do not repair trusses without the written approval of the specialty engineer responsible for the truss design.

Connect roof trusses to bearing walls with anchors as detailed on drawings. The reaction and uplift requirements on the specialty truss engineer's documents supersede the connection specifications on these construction drawings and are to be complied with in the construction.

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Kenneth S. Risley, P.E.
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Auth. Number 00009670

Owner:
Randel & Lilian Dutton
653 Monument Road, Apt 1004
Jacksonville, FL 32225

Builder:

Hangar Home Project Revised
Cannon Creek Airpark
Lots #16 & #28
Lake City, Florida

All Scales are 1/4" = 1'0"
Unless otherwise noted

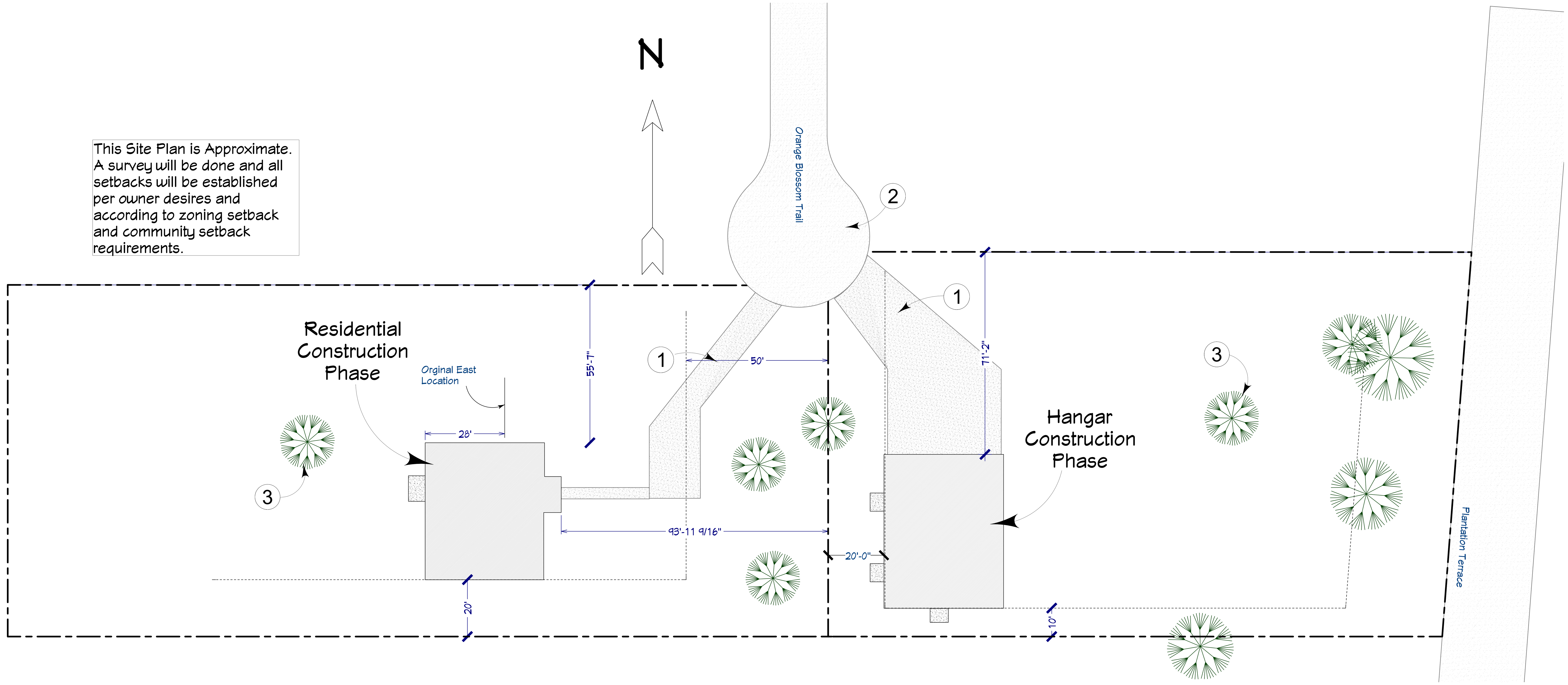
Sheet Description
General Notes

Issue Date: 5/8/2020

REVISION TABLE

NUMBER	DATE

A2



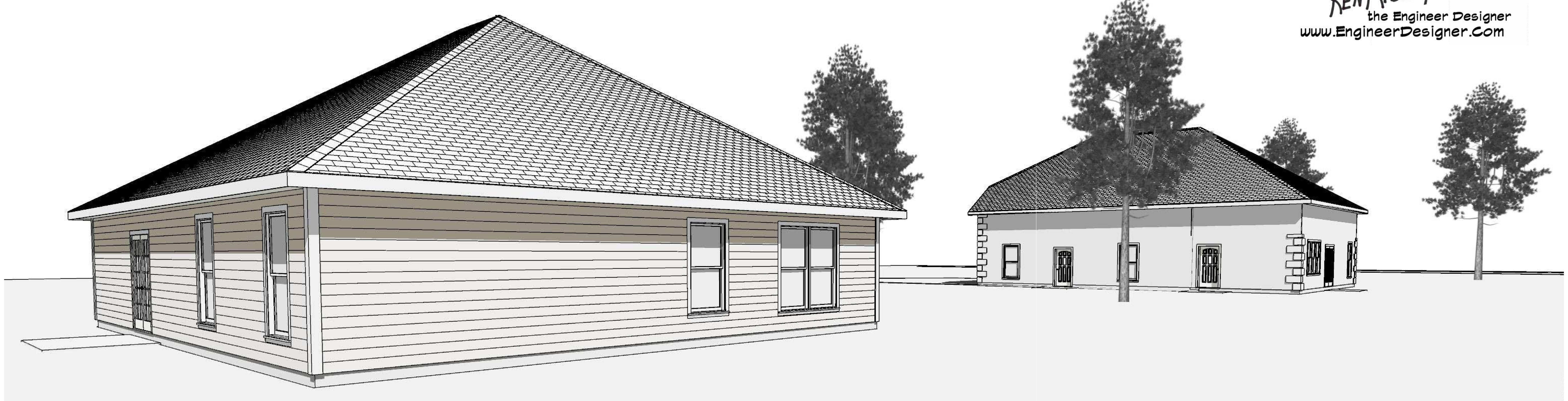
Site Plan Notes

1. This driveway to be placed per owner intentions. It may not be as large as that shown.
2. Approximate road and cul-de-sac location.
3. Tree locations are approximate.

Site Plan - Lots 16 and 28

Scale 1"=20'

Hangar Home Designed by:
KEN RISLEY
the Engineer Designer
www.EngineerDesigner.Com



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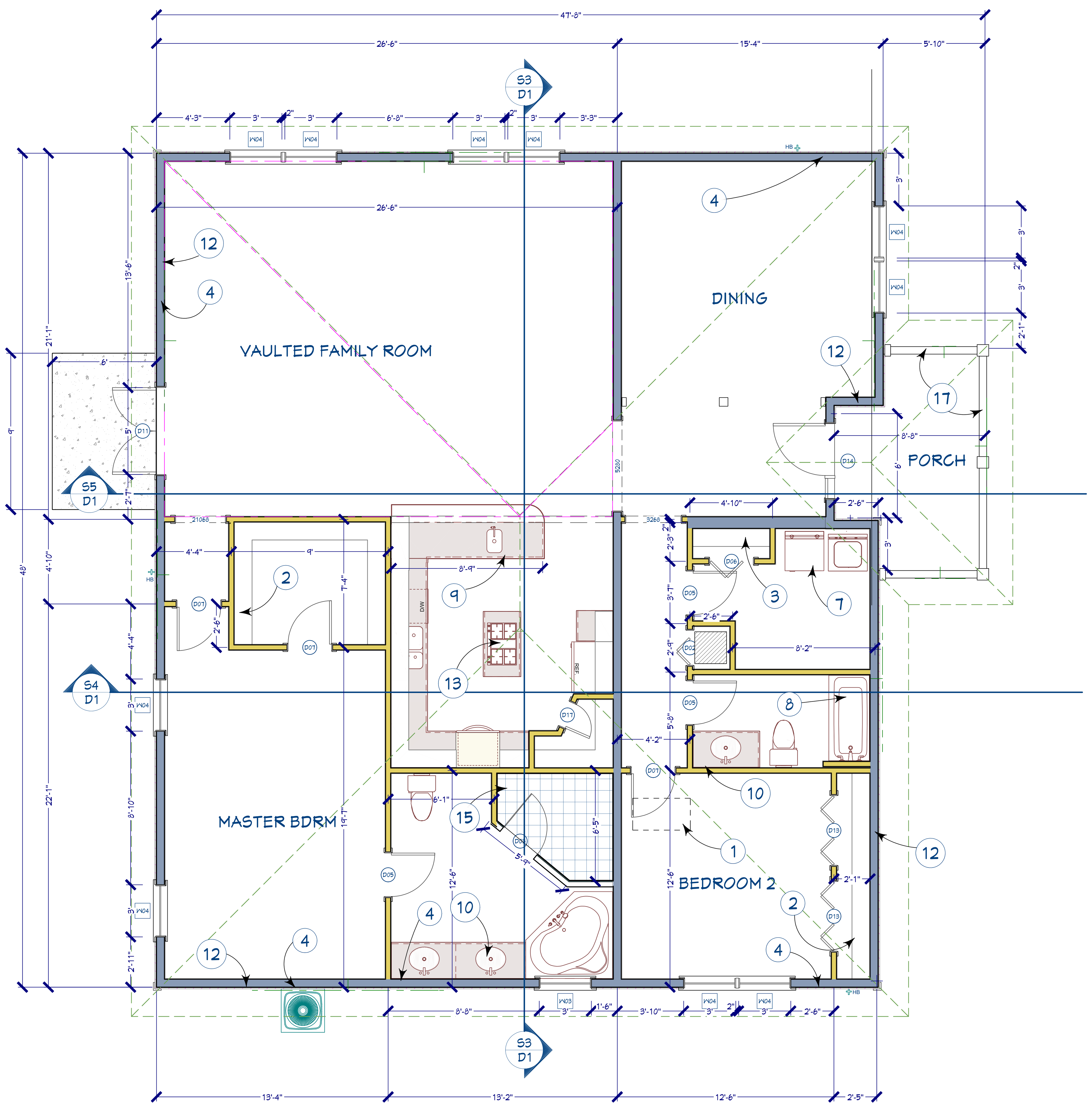
Sheet Description: Site Plan

Issue Date: 5/8/2020

REVISION TABLE

NUMBER	DATE

A3



1st Floor

Contractor to assure that Tempered Glass is placed according to current Code.

Windows will comply with Emergency Egress requirements of the current Code. Contractor is ultimately responsible to assure that such requirements are met. Should a window size be found different on these plans Contractor shall make the necessary change.

Windows sizes shown are modular. 3048, as an example, would me 3'0" wide by 4'8" high. Rough openings will be determined by the Contractor prior to building the exterior walls. Rough openings are no shown on the plans nor determined by the designer.

All windows will be place per manufacturer recommendation contained in the Florida Approval documentation for their windows.

WINDOW SCHEDULE

NUMBER	SIZE	EGRESS	DESCRIPTION
W02	2850SH		SINGLE HUNG
W03	3059SH		SINGLE HUNG
W04	3060SH		SINGLE HUNG

DOOR SCHEDULE

NUMBER	SIZE	DESCRIPTION	THICKNESS
D01	16080	GARAGE-GARAGE DOOR CHD05	1 3/4"
D02	2068 L	2 DR. BIFOLD-LOUVERED	1 3/8"
D03	2668 L	SHOWER-GLASS SLAB	1/2"
D04	2668 L EX	EXT. HINGED-DOOR E29	1 3/8"
D05	2668 L IN	HINGED-DOOR F04	1 3/8"
D06	2668 R	2 DR. BIFOLD-LOUVERED	1 3/8"
D07	2668 R IN	HINGED-DOOR F04	1 3/8"
D08	2868 R IN	HINGED-DOOR F04	1 3/8"
D09	3068 L EX	EXT. HINGED-DOOR E29	1 3/4"
D10	3068 R EX	EXT. HINGED-DOOR E29	1 3/4"
D11	3068 R EX	EXT. HINGED-GLASS PANEL	1 3/4"
D12	380140	HANGAR DOOR	4"
D13	4068 L/R	4 DR. BIFOLD-LOUVERED	1 3/8"
D14	44710	MULLED UNIT	
D15	6068 L/R EX	EXT. DOUBLE HINGED-GLASS PANEL	1 3/4"
D16	8068 R IN	SLIDER-GLASS PANEL	1 3/8"

HANDRAIL/GUARDRAIL NOTES

1009.11.1 Exception 2.
In one- and two-family dwellings and within dwelling units in R2 occupancies, stairways having four or more risers above a floor or finished ground level shall be equipped with handrails located not less than 34 inches (864 mm) nor more than 38 inches (965 mm) above the leading edge of a tread.

1012.1 Where required.
Guards shall be located along open-sided walking surfaces, mezzanines, industrial equipment platforms, stairways, ramps and landings which are located more than 30 inches (762 mm) above the floor or grade below. Guards shall be adequate in strength and attachment in accordance with Section 1607.7.

1012.2 Height.
Guards shall form a protective barrier not less than 42 inches (1067 mm) high, measured vertically above the leading edge of the tread, adjacent walking surface or adjacent seatboard.

1012.3 Opening limitations.
Open guards shall have balusters or ornamental patterns such that a 4-inch-diameter (102 mm) sphere cannot pass through any opening up to a height of 34 inches (864 mm). From a height of 34 inches (864 mm) to 42 inches (1067 mm) above the adjacent walking surfaces, a sphere 8 inches (203 mm) in diameter shall not pass.

Architectural Keyed Notes

1. Attic Access
2. Shelf and Rod
3. 6 shelves
4. #5 rebar uprights. This mark indicated an upright that is continuous from footing to the bond beam. Rebar tied to footing steel as well as bond beam steel. Pour cores with small chat concrete.
5. 16"x16" block pilaster. Pour 4@ cores with steel from footing to top. This is integral to the CMU wall.
6. See Section 5 for stair details. 17 Risers, each 6-9/16", 10-11/16 treads (not including nosing) with a 112 reach between floors.
7. Laundry center
8. Tub with enclosure.
9. Cabinet design by others.
10. Vanity designed by others. Mirror on wall behind.
11. See elsewhere on plans for guardrail data
12. 2x6 Loadbearing Walls. 2x6 set 16" O.C. with double top plate and single PT bottom plate.
13. Vented Stove. Venting details worked out by builder and owner. This may be a down-draft stove or to a hood (venting details by others).
14. Balcony above
15. Tiled Shower. Depressed slab. All waterproofing worked out by Plumber and tile installer.
16. Floor Finish – this will be tile or some other surface as selected by the owner. This is to be placed over a waterproofing and properly flashed roof membrane. THESE PLANS DO NOT SHOW THE DESIGN OF THIS OR ANY WATERPROOFING DETAILS ON THESE PLANS. THE LICENSED ROOFER IS ENTIRELY RESPONSIBLE FOR THIS AND ALL WATER PROOFING (INCLUDING THE ROOF) FOR THIS PROJECT.
17. Triple 2x12 YP beam. This is a porch beam. It will be finished to suit with wood, or Hardy Board or aluminum/vinyl.

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Kenneth S. Risley, P.E.
PE 32668
Auth. Number 00009670

Owner:
Randel & Lilian Dutton
653 Monument Road, Apt 1004
Jacksonville, FL 32225

Builder:

Hangar Home Project Revised
Cannon Creek Airpark
Lots #16 & #28
Lake City, Florida

All Scales are 1/4" = 1'0"
Unless otherwise noted

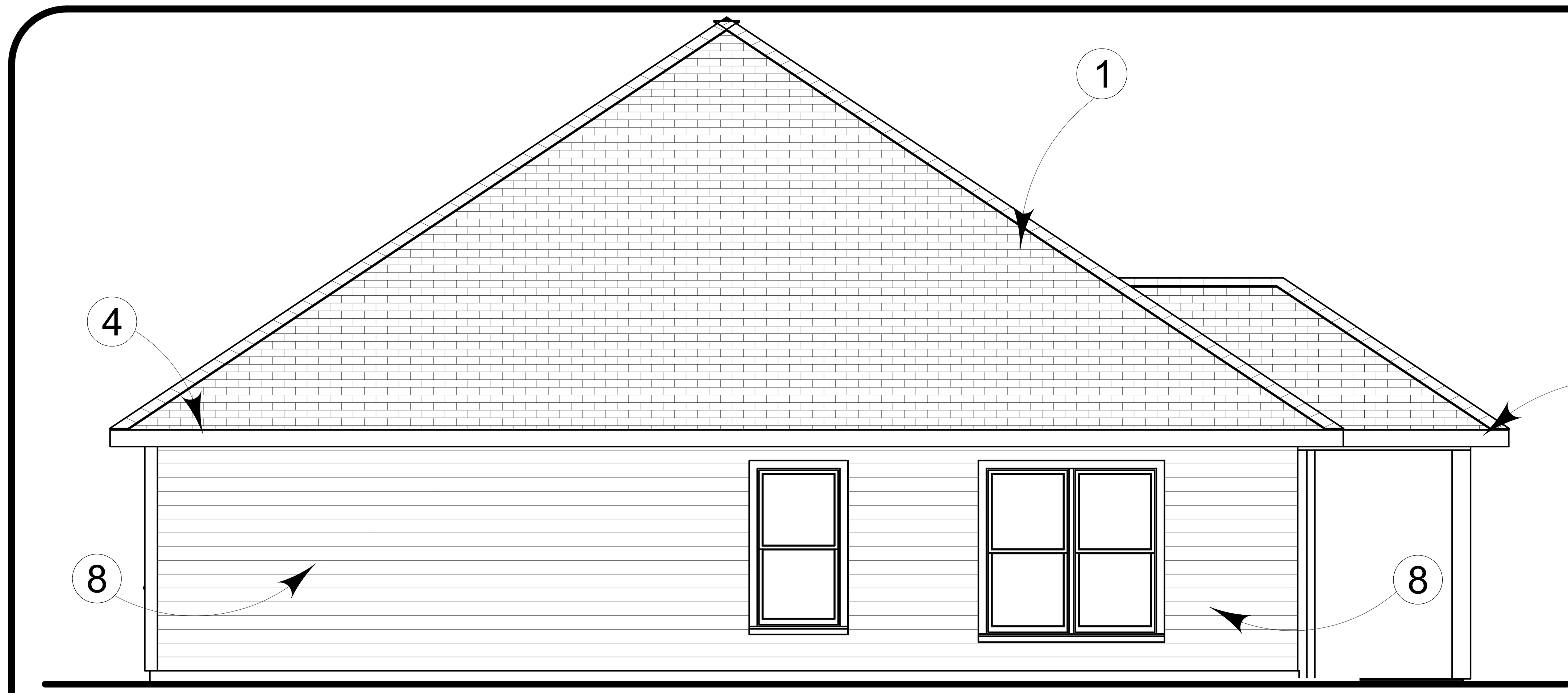
Sheet Description
Plan Main House

Issue Date: 5/8/2020

REVISION TABLE

NUMBER	DATE

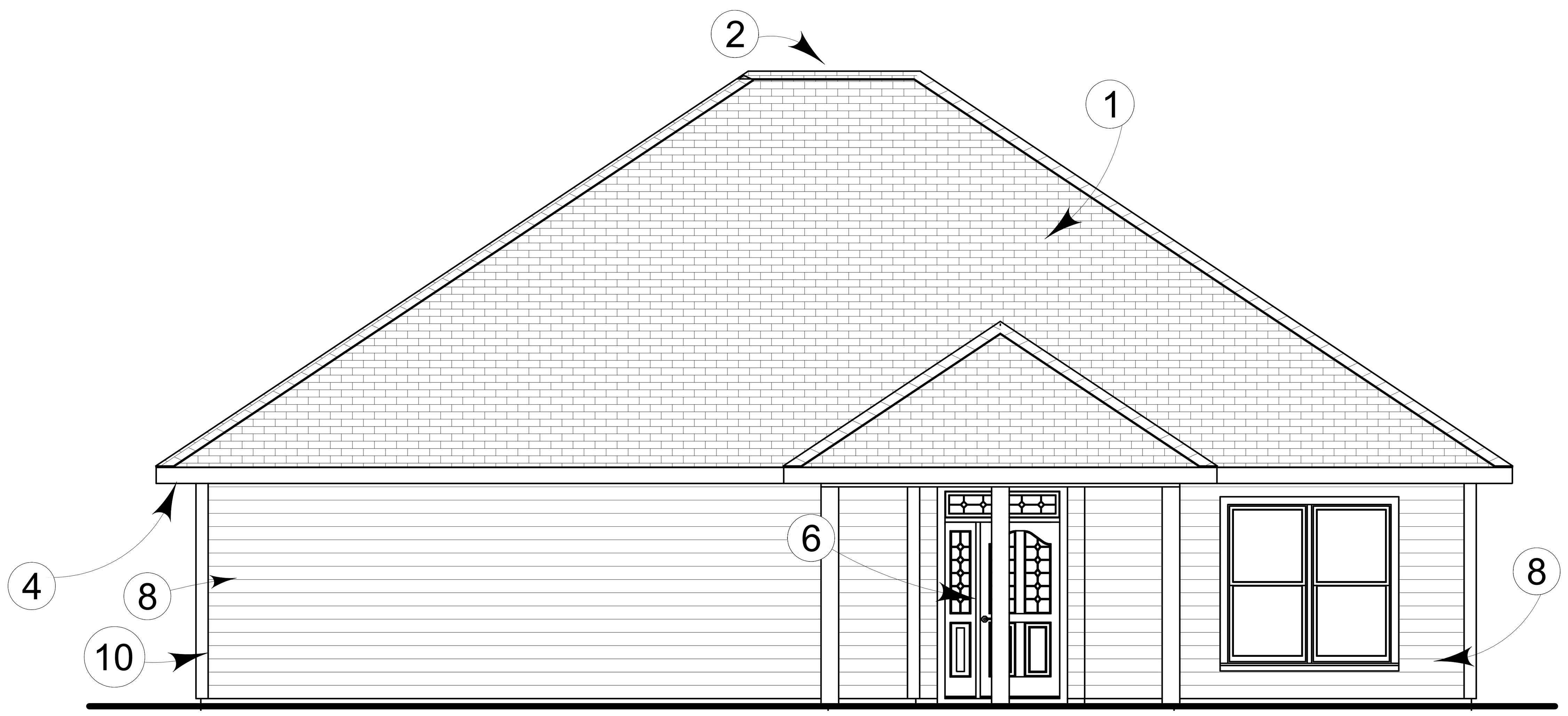
A4



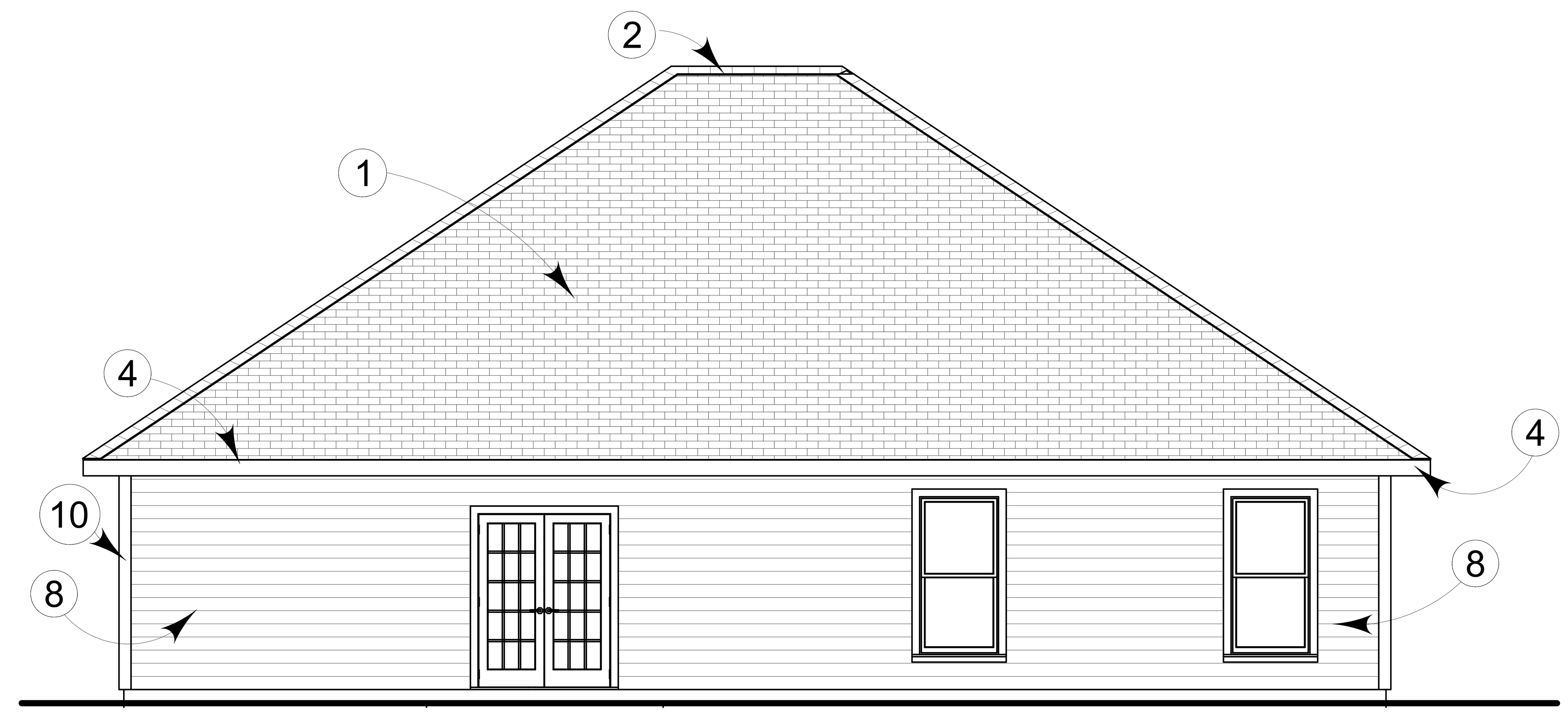
South Elevation

Elevation Keyed Notes

1. Asphalt Shingles (chosen by owner). THESE PLANS DO NOT SHOW THE DESIGN OF THIS OR ANY WATERPROOFING DETAILS ON THESE PLANS. THE LICENSED ROOFER IS ENTIRELY RESPONSIBLE FOR THIS AND ALL WATER PROOFING (INCLUDING THE ROOF) FOR THIS PROJECT.
2. Roof Vents Placed by Roofer as determined by Standard Practice.
3. Decorative Cementitious Finish
4. Aluminum Fascia and Soffit with Trim as shown (see details)
5. Hangar Door to be selected by the Owner. This and the “skin” to be supplied and engineered by the respective suppliers. It is entirely the Contractor’s responsibility to coordinate the rough opening for this door with the requirements of the selected door. Rotation Resistance provided by the jamb, not the header.
6. Details of exterior doors may not be shown correctly. See Owner for precise selections.
7. Stucco over lathe and backer board over this framed wall and edge of beam above the hangar door.
8. Hardy-Board Lap Siding over Tyvec or equivalent house wrap. Attach to exterior framed wall.
9. Hardy-Board Lap Siding over Tyvec or equivalent house wrap. Attach to firring over masonry wall. Outside of firring to match exterior sheathing of exterior frame walls.
10. Corner Trim (chosen by owner). Azak or Hardy recommended.
11. Corner quoins optional.



East Elevation



West Elevation

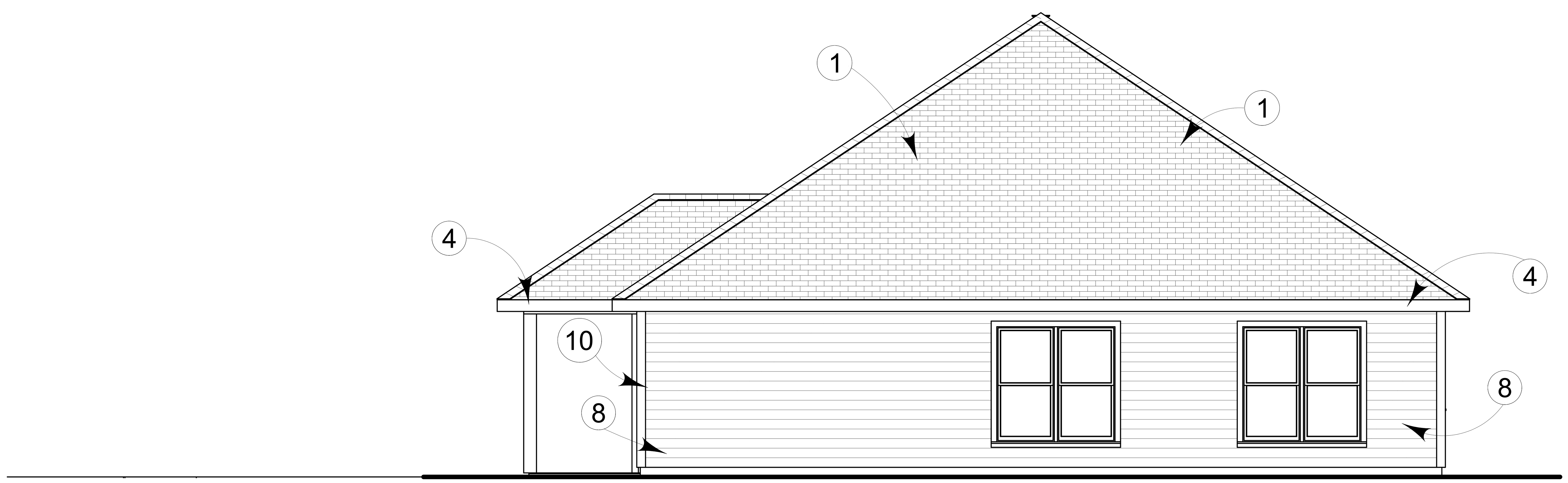
HANDRAIL/GUARDRAIL NOTES

1009.11.1 Exception 2.
In one- and two-family dwellings and within dwelling units in R2 occupancies, stairways having four or more risers above a floor or finished ground level shall be equipped with handrails located not less than 34 inches (864 mm) nor more than 38 inches (965 mm) above the leading edge of a tread.

1012.1 Where required.
Guards shall be located along open-sided walking surfaces, mezzanines, industrial equipment platforms, stairways, ramps and landings which are located more than 30 inches (762 mm) above the floor or grade below. Guards shall be adequate in strength and attachment in accordance with Section 1607.7.

1012.2 Height.
Guards shall form a protective barrier not less than 42 inches (1067 mm) high, measured vertically above the leading edge of the tread, adjacent walking surface or adjacent seatboard.

1012.3 Opening limitations.
Open guards shall have balusters or ornamental patterns such that a 4-inch-diameter (102 mm) sphere cannot pass through any opening up to a height of 34 inches (864 mm). From a height of 34 inches (864 mm) to 42 inches (1067 mm) above the adjacent walking surfaces, a sphere 8 inches (203 mm) in diameter shall not pass.



North Elevation

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Hangar Home Project Revised
Cannon Creek Airpark
Lots #16 & #28
Lake City, Florida

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Unless otherwise noted

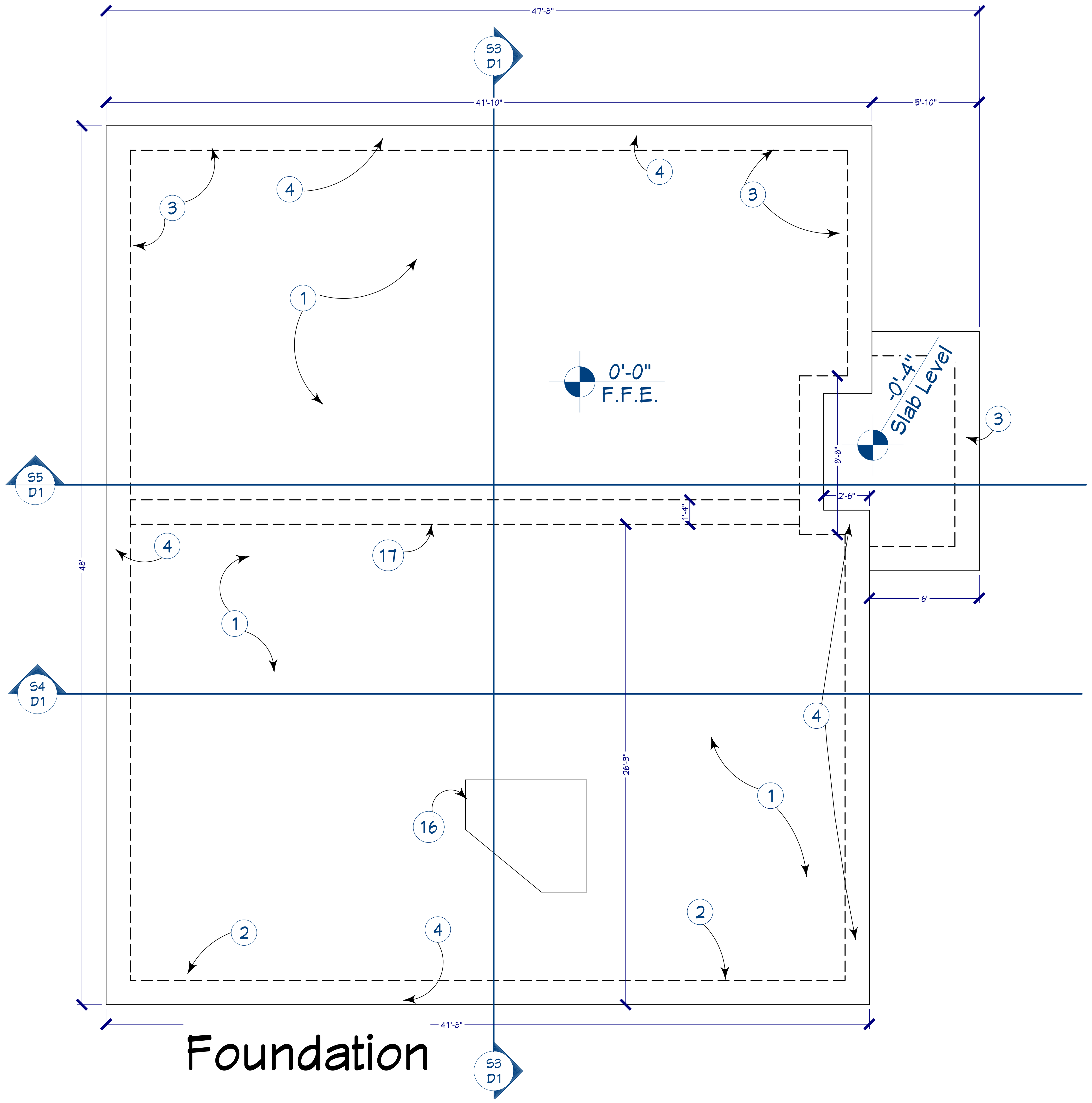
Sheet Description
Elevations Main House

Issue Date: 5/8/2020

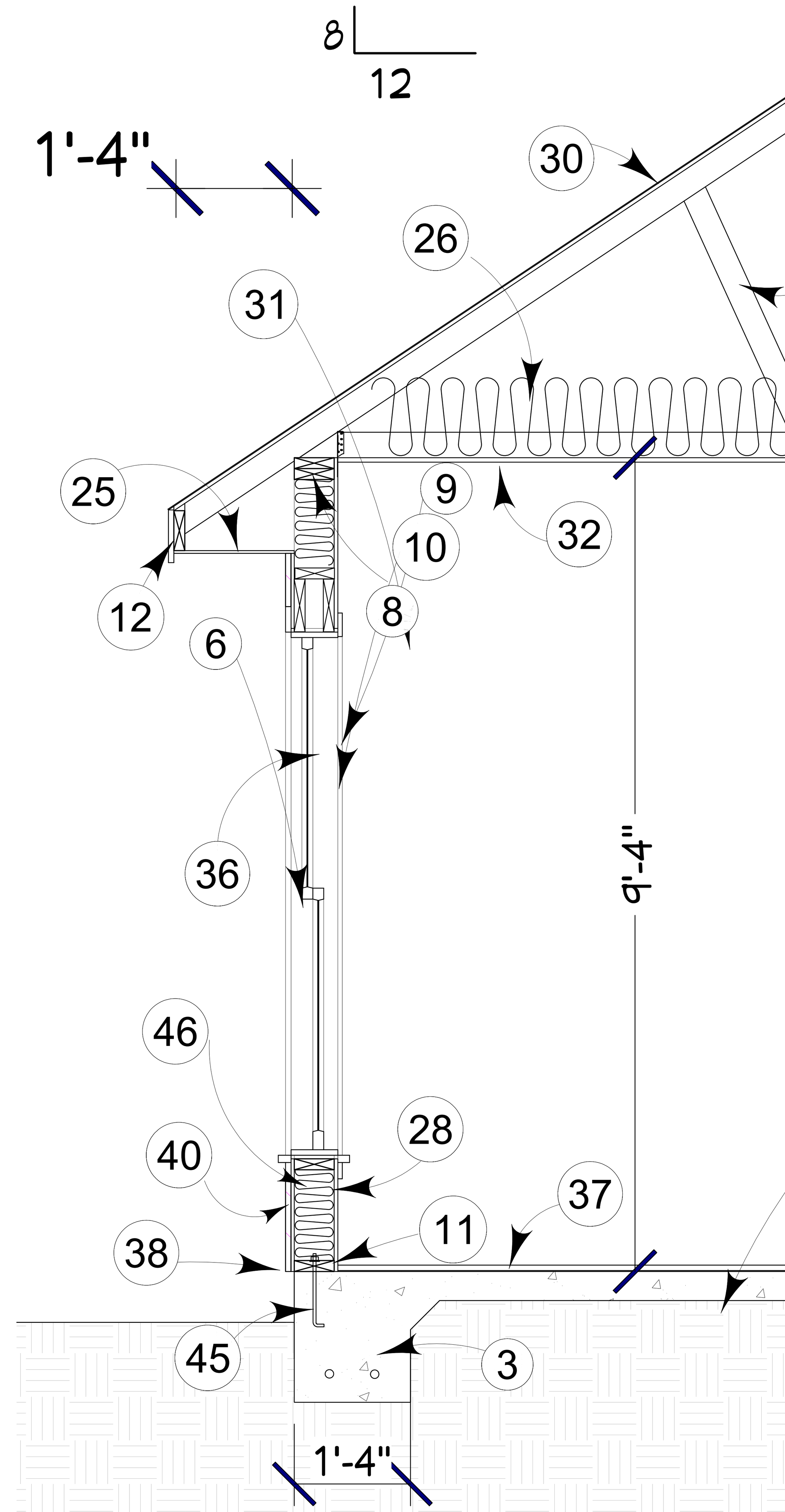
REVISION TABLE

NUMBER	DATE

A5



Foundation



Typical Wall Section

3/4" Scale

Structural: Foundation, Framing, Section Keyed Notes

1. Concrete Slab 4" thick. 6"x6" #10 wire mesh reinforcement over .006 visquin barrier over compacted fill. Fill to be treated per local requirements.
2. Monolithic footer –24" wide by 20" deep (minimum). Use 3@ #5 rebar on chairs. Bottom of footings at least 12" below grade.
3. Monolithic footer –16" wide by 20" deep (minimum). Use 2@ #5 rebar on chairs. Bottom of footings at least 12" below grade.
4. #5 rebar uprights See Legend for details. Pour with small chat concrete.
5. Rebar and poured cores for hangar pilasters
6. Double 2x8 header. Strap each end to double buck support each side of the openings.
7. Roof Trusses Designed by Others.
8. Double Top Plate
9. H-10 Simpson Connector
10. SP-2 each stud to double top plate
11. SP-1 each stud to single bottom plate.
12. 2x6 sub fascia
13. Gable Eave Outlooks (2x4 flat) – or per standard practice.
14. Attic Access
15. Gable Cross Braces
16. Depressed Slab for shower (depressed 3" below F.F.E.) See Architectural drawings for location.
17. Interior Footing 16" wide, top even with top of slab. Use 2@ #5 rebar on chairs.
18. HETA 20 Connectors, each truss, to the top of the CMU wall.
19. ¾" sub flooring T and G – glued and nailed.
20. Floor Finish – this will be tile or some other surface as selected by the owner. This is to be placed over a waterproofing and properly flashed roof membrane. THESE PLANS DO NOT SHOW THE DESIGN OF THIS OR ANY WATERPROOFING DETAILS ON THESE PLANS. THE LICENSED ROOFER IS ENTIRELY RESPONSIBLE FOR THIS AND ALL WATER PROOFING (INCLUDING THE ROOF) FOR THIS PROJECT.
21. Triple 12" LVL beam glued and nailed.
22. Triple 2x12 YP beam. This is a porch beam. It will be finished to suit with wood, or Hardy Board or aluminum/vinyl.
23. Guardrail selected by owner. Supplier to supply engineered drawing in compliance with Code.
24. Porch Floor Trusses are 12" deep.
25. Aluminum Eaves (fascia and soffit)
26. R-30 Insulation
27. Precast lintel over all exterior openings.
28. Sheetrock (1/2") over ¾" PT firring strips. Use sheet R-Max or equivalent in airgap for insulation.
29. Decorative Cementitious Finish over CMU wall.
30. 5/8" plywood sheathing
31. Asphalt Shingles (chosen by owner). THESE PLANS DO NOT SHOW THE DESIGN OF THIS OR ANY WATERPROOFING DETAILS ON THESE PLANS. THE LICENSED ROOFER IS ENTIRELY RESPONSIBLE FOR THIS AND ALL WATER PROOFING (INCLUDING THE ROOF) FOR THIS PROJECT.
32. ½" ceiling board.
33. Masonry Wall to have DURAWALL placed every other course.
34. Hangar Door to be selected by the Owner. This and the "skin" to be supplied and engineered by the respective suppliers. It is entirely the Contractors responsibility to coordinate the rough opening for this door with the requirements of the selected door. Rotation Resistance provided by the jamb, not the header.
35. Rebar and poured core shown behind window for orientation. These serve as load-path elements.
36. Window – see schedule. Installation according to Florida Approval Numbers
37. Finish Flooring.
38. Hardy Board over ¾" PT firring. Outside of furring to align with any upper framed wall exterior sheathing.
39. TJI's to be notched over top of bearing beams
40. ½" sheathing, nailed per schedule. Use Tyvec house wrap. Sheathing handles all shear for the building. Use Hardyboard Lap Siding Installed per manufacturer's specifications
41. Transom optional. Work out all rough openings prior to framing or concrete block work.
42. Front Door (including transom) to be established through selections prior to constructi9on.
43. 2x6 porch posts (chosen by owner). AB44 post seat – AC4 top connection to beam.
44. 16"x16" block pilaster. Pour 4@ cores with steel from footing to top. This is integral to the CMU wall. Dashed lines indicate pilasters beyond.
45. ½" anchor 36" O.C., side of openings and corners. May use expansion bolts.
46. 2x6 Loadbearing Walls. 2x6 set 16" O.C. with double top plate and single PT bottom plate.

TABLE 2304.9.1
FASTENING SCHEDULE

CONNECTION	FASTENING[a, m]	LOCATION
1. Joist to sill or girder	3 - 8d common (2 1/2″ × 0.131″) 3 - 3″ × 0.131″ nails 3 - 3″ 14 gage staples	toenail
2. Bridging to joist	2 - 8d common (2 1/2″ × 0.131″) 2 - 3″ × 0.131″ nails 2 - 3″ 14 gage staples	toenail each end
3. 1″ × 6″ subfloor or less to each joist	2 - 8d common (2 1/2″ × 0.131″)	face nail
4. Wider than 1″ × 6″ subfloor to each joist	3 - 8d common (2 1/2″ × 0.131″)	face nail
5. 2″ subfloor to joist or girder	2 - 16d common (3 1/2″ × 0.162″)	blind and face nail
6. Sole plate to joist or blocking	16d (3 1/2″ × 0.135″) at 16″ o.c. 3″ × 0.131″ nails at 8″ o.c. 3″ 14 gage staples at 12″ o.c.	typical face nail
Sole plate to joist or blocking at braced wall panel	3 - 16d (3 1/2″ × 0.135″) at 16″ o.c. 4 - 3″ × 0.131″ nails at 16″ o.c. 4 - 3″ 14 gage staples at 16″ o.c.	braced wall panels
7. Top plate to stud	2 - 16d common (3 1/2″ × 0.162″) 3 - 3″ × 0.131″ nails 3 - 3″ 14 gage staples	end nail
8. Stud to sole plate	4 - 8d common (2 1/2″ × 0.131″) 4 - 3″ × 0.131″ nails 3 - 3″ 14 gage staples	toenail
	2 - 16d common (3 1/2″ × 0.162″) 3 - 3″ × 0.131″ nails 3 - 3″ 14 gage staples	end nail
9. Double studs	16d (3 1/2″ × 0.135″) at 24″ o.c. 3″ × 0.131″ nail at 8″ o.c. 3″ 14 gage staple at 8″ o.c.	face nail
10. Double top plates	16d (3 1/2″ × 0.135″) at 16″ o.c. 3″ × 0.131″ nail at 12″ o.c. 3″ 14 gage staple at 12″ o.c.	typical face nail
Double top plates	8 - 16d common (3 1/2″ × 0.162″) 12 - 3″ × 0.131″ nails 12 - 3″ 14 gage staples	lap splice
11. Blocking between joists or rafters to top plate	3 - 8d common (2 1/2″ × 0.131″) 3 - 3″ × 0.131″ nails 3 - 3″ 14 gage staples	toenail
12. Rim joist to top plate	8d (2 1/2″ × 0.131″) at 6″ o.c. 3″ × 0.131″ nail at 6″ o.c. 3″ 14 gage staple at 6″ o.c.	toenail
13. Top plates, laps and intersections	2 - 16d common (3 1/2″ × 0.162″) 3 - 3″ × 0.131″ nails 3 - 3″ 14 gage staples	face nail
14. Continuous header, two pieces	16d common (3 1/2″ × 0.162″)	16″ o.c. along edge
15. Ceiling joists to plate	3 - 8d common (2 1/2″ × 0.131″) 5 - 3″ × 0.131″ nails 5 - 3″ 14 gage staples	toenail
16. Continuous header to stud	4 - 8d common (2 1/2″ × 0.131″)	toenail

(continued)

TABLE 2304.9.1—continued
FASTENING SCHEDULE

CONNECTION	FASTENING[a, m]	LOCATION
17. Ceiling joists, laps over partitions (see Section 2308.10.4.1, Table 2308.10.4.1)	3 - 16d common (3 1/2″ × 0.162″) minimum, Table 2308.10.4.1 4 - 3″ × 0.131″ nails 4 - 3″ 14 gage staples	face nail
18. Ceiling joists to parallel rafters (see Section 2308.10.4.1, Table 2308.10.4.1)	3 - 16d common (3 1/2″ × 0.162″) minimum, Table 2308.10.4.1 4 - 3″ × 0.131″ nails 4 - 3″ 14 gage staples	face nail
19. Rafter to plate (see Section 2308.10.1, Table 2308.10.1)	3 - 8d common (2 1/2″ × 0.131″) 3 - 3″ × 0.131″ nails 3 - 3″ 14 gage staples	toenail
20. 1″ diagonal brace to each stud and plate	2 - 8d common (2 1/2″ × 0.131″) 2 - 3″ × 0.131″ nails 3 - 3″ 14 gage staples	face nail
21. 1″ × 8″ sheathing to each bearing	3 - 8d common (2 1/2″ × 0.131″)	face nail
22. Wider than 1″ × 8″ sheathing to each bearing	3 - 8d common (2 1/2″ × 0.131″)	face nail
23. Built-up corner studs	16d common (3 1/2″ × 0.162″) 3″ × 0.131″ nails 3″ 14 gage staples	24″ o.c. 16″ o.c. 16″ o.c.
24. Built-up girder and beams	20d common (4″ × 0.192″) 32″ o.c. 3″ × 0.131″ nail at 24″ o.c. 3″ 14 gage staple at 24″ o.c.	face nail at top and bottom staggered on opposite sides
	2 - 20d common (4″ × 0.192″) 3 - 3″ × 0.131″ nails 3 - 3″ 14 gage staples	face nail at ends and at each splice
25. 2″ planks	16d common (3 1/2″ × 0.162″)	at each bearing
26. Collar tie to rafter	3 - 10d common (3″ × 0.148″) 4 - 3″ × 0.131″ nails 4 - 3″ 14 gage staples	face nail
27. Jack rafter to hip	3 - 10d common (3″ × 0.148″) 4 - 3″ × 0.131″ nails 4 - 3″ 14 gage staples	toenail
	2 - 16d common (3 1/2″ × 0.162″) 3 - 3″ × 0.131″ nails 3 - 3″ 14 gage staples	face nail
28. Roof rafter to 2-by ridge beam	2 - 16d common (3 1/2″ × 0.162″) 3 - 3″ × 0.131″ nails 3 - 3″ 14 gage staples	toenail
	2 -16d common (3 1/2″ × 0.162″) 3 - 3″ × 0.131″ nails 3 - 3″ 14 gage staples	face nail
29. Joist to band joist	3 - 16d common (3 1/2″ × 0.162″) 4 - 3″ × 0.131″ nails 4 - 3″ 14 gage staples	face nail

(continued)

TABLE 2304.9.1—continued
FASTENING SCHEDULE

CONNECTION	FASTENING[a, m]		LOCATION
30. Ledger strip	3 - 16d common (3 1/2″ × 0.162″) 4 - 3″ × 0.131″ nails 4 - 3″ 14 gage staples		face nail at each joist
31. Wood structural panels and particleboard[b] Subfloor, roof and wall sheathing (to framing)	1/2″ and less	6d[c, l] 2 3/8″ × 0.113″ nail[n] 1 3/4″ 16 gage[o]	6 inch o.c. edges and intermediate, 4 inch o.c. at component and cladding edge strip # Zone 3 [refer to Figure 30.5-1 of ASCE 7]
	15/32″ to 19/32″	8d common (roofs in 110-140 V_{asd} mph (Exp. B)	
	19/32″ to 3/4″	8d[d] or 6d[e] 2 3/8″ × 0.113″ nail[p] 2″ 16 gage[p]	
	7/8″ to 1″ 1 1/8″ to 1 1/4″	8d[c] 10d[d] or 8d[d]	
Single Floor (combination subfloor-underlayment to framing)	3/4″ and less 7/8″ to 1″ 1 1/8″ to 1 1/4″	6d[e] 8d[e] 10d[d] or 8d[e]	
32. Panel siding (to framing)	1/2″ or less 5/8″	6d[f] 8d[f]	
33. Fiberboard sheathing[g]	1/2″	No. 11 gage roofing nail[h] 6d common nail (2″ × 0.113″) No. 16 gage staple[i]	
	25/32″	No. 11 gage roofing nail[h] 8d common nail (2 1/2″ × 0.131″) No. 16 gage staple[i]	
34. Interior paneling	1/4″ 3/8″	4d[j] 6d[k]	

For SI: 1 inch = 25.4 mm.

a. Common or box nails are permitted to be used except where otherwise stated.
b. Nails spaced at 6 inches on center at edges, 12 inches at intermediate supports except 6 inches at supports where spans are 48 inches or more. For nailing of wood structural panel and particleboard diaphragms and shear walls, refer to Section 2305. Nails for wall sheathing are permitted to be common, box or casing.
c. Common or deformed shank (6d - 2″ × 0.113″; 8d - 2 1/2″ × 0.131″; 10d - 3″ × 0.148″).
d. Common (6d - 2″ × 0.113″; 8d - 2 1/2″ × 0.131″; 10d - 3″ × 0.148″).
e. Deformed shank (6d - 2″ × 0.113″; 8d - 2 1/2″ × 0.131″; 10d - 3″ × 0.148″).
f. Corrosion-resistant siding (6d - 1 7/8″ × 0.106″; 8d - 2 3/8″ × 0.128″) or casing (6d - 2″ × 0.099″; 8d - 2 1/2″ × 0.113″) nail.
g. Fasteners spaced 3 inches on center at exterior edges and 6 inches on center at intermediate supports, when used as structural sheathing. Spacing shall be 6 inches on center on the edges and 12 inches on center at intermediate supports for nonstructural applications.
h. Corrosion-resistant roofing nails with 7/16-inch-diameter head and 1 1/2-inch length for 1/2-inch sheathing and 1 3/4-inch length for 25/32-inch sheathing.
i. Corrosion-resistant staples with nominal 7/16-inch crown or 1-inch crown and 1 1/4-inch length for 1/2-inch sheathing and 1 1/2-inch length for 25/32-inch sheathing. Panel supports at 16 inches (20 inches if strength axis in the long direction of the panel, unless otherwise marked).
j. Casing (1 1/2″ × 0.080″) or finish (1 1/2″ × 0.072″) nails spaced 6 inches on panel edges, 12 inches at intermediate supports.
k. Panel supports at 24 inches. Casing or finish nails spaced 6 inches on panel edges, 12 inches at intermediate supports.
l. For roof sheathing applications, 8d nails (2 1/2″ × 0.113″) are the minimum required for wood structural panels.
m. Staples shall have a minimum crown width of 7/16 inch.
n. For roof sheathing applications, fasteners spaced 4 inches on center at edges, 8 inches at intermediate supports.
o. Fasteners spaced 4 inches on center at edges, 8 inches at intermediate supports for subfloor and wall sheathing and 3 inches on center at edges, 6 inches at intermediate supports for roof sheathing.
p. Fasteners spaced 4 inches on center at edges, 8 inches at intermediate supports.

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Cannon Creek Airpark
Lots #16 & #28
Lake City, Florida

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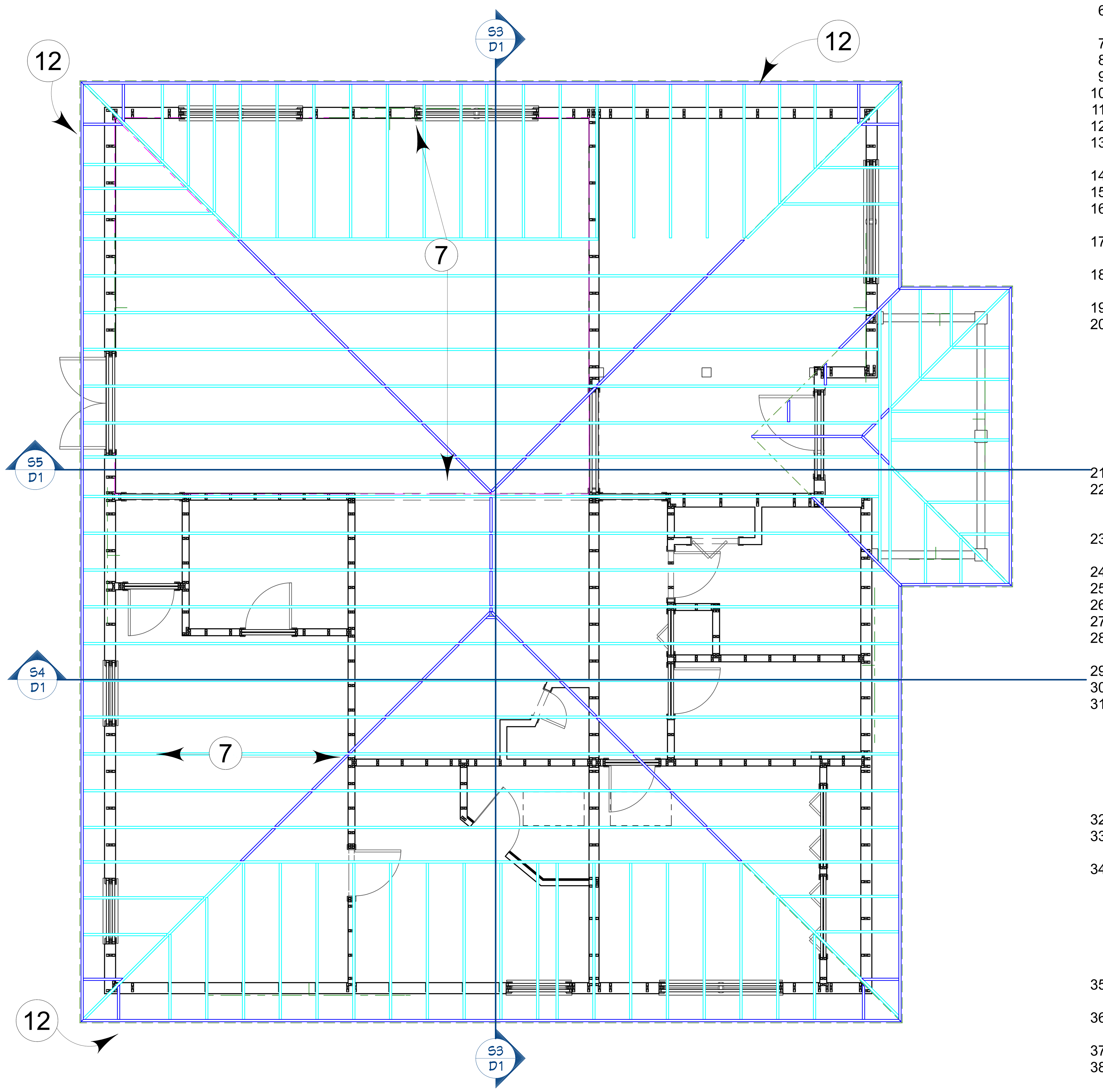
Unless otherwise noted

Sheet Description
Foundation Plan

Issue Date: 5/8/2020

REVISION TABLE	
NUMBER	DATE

S1



Roof Framing Plan

Structural: Foundation, Framing, Section Keyed Notes

1. Concrete Slab 4" thick. 6"x6" #10 wire mesh reinforcement over .006 visquin barrier over compacted fill. Fill to be treated per local requirements.
2. Monolithic footer –24" wide by 20" deep (minimum). Use 3@ #5 rebar on chairs. Bottom of footings at least 12" below grade.
3. Monolithic footer –16" wide by 20" deep (minimum). Use 2@ #5 rebar on chairs. Bottom of footings at least 12" below grade.
4. #5 rebar uprights See Legend for details. Pour with small chat concrete.
5. Rebar and poured cores for hangar pilasters
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21. Triple 12" LVL beam glued and nailed.
22. Triple 2x12 YP beam. This is a porch beam. It will be finished to suit with wood, or Hardy Board or aluminum/vinyl.
23. Guardrail selected by owner. Supplier to supply engineered drawing in compliance with Code.
24. Porch Floor Trusses are 12" deep.
25. Aluminum Eaves (fascia and soffit)
26. R-30 Insulation
27. Precast lintel over all exterior openings.
28. Sheetrock (1/2") over ¾" PT firring strips. Use sheet R-Max or equivalent in airgap for insulation.
29. Decorative Cementitious Finish over CMU wall.
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35. Rebar and poured core shown behind window for oriention. These serve as load-path elements.
36. Window – see schedule. Installation according to Florida Approval Numbers
37. Finish Flooring.
38. Hardy Board over ¾" PT firring. Outside of furring to align with any upper framed wall exterior sheathing.
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45. ½" anchor 36" O.C., side of openings and corners. May use expansion bolts.

Dutton
Basic Building Structural Information

Floor and Roof Live Loads

Attics:	20 psf w/ storage, 10 psf w/o storage
Habitable Attics, Bedroom:	30 psf
All Other Rooms:	40 psf
Garage:	40 psf
Roofs:	20 psf

Wind Design Data

Ultimate Wind Speed:	128 mph	Nominal Wind Speed:	99 mph
Risk Category:	II	Wind Exposure:	C
Enclosure Classification:	Enclosed	End Zone Width:	4.00 ft.
Internal Pressure Coefficient:	0.18 +/-		

Components and Cladding Design Pressures			
	Roof Zone 1:	+22.9 psf max.,	-36.5 psf min.
	Roof Zone 2:	+22.9 psf max.,	-63.5 psf min.
	Roof Zone 3:	+22.9 psf max.,	-93.9 psf min.
	Roof at Zone 2 Overhangs:		-74.3 psf min.
	Roof at Zone 3 Overhangs:		-125.0 psf min.
	Wall Zone 4:	+39.8 psf max.,	-43.2 psf min.
	Wall Zone 5:	+39.8 psf max.,	-53.3 psf min.

The Ultimate Wind Speed was used to determine the above Component and Cladding Design Pressures.

This Building is not in a Wind-Borne Debris Region, and opening protection is not required.

The site of this building is not subject to special topographic wind effects.

Geotechnical Information

Design Soil Load-Bearing Capacity:	2,000 psf

Flood Design Data

Flood Zone:	X

This table was created using Windload Calculator Plus

(Software available at www.windcalcs.com)

Engineer Designer
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Weirsdale, Florida 32195
352-821-9975
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Kenneth S. Risley, P.E.
PE 32668
Auth. Number 00009670

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Randel & Lilian Dutton
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Jacksonville, FL 32225

Builder:

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Cannon Creek Airpark
Lots #16 & #28
Lake City, Florida

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Unless otherwise noted

Sheet Description
Roof Framing Plan

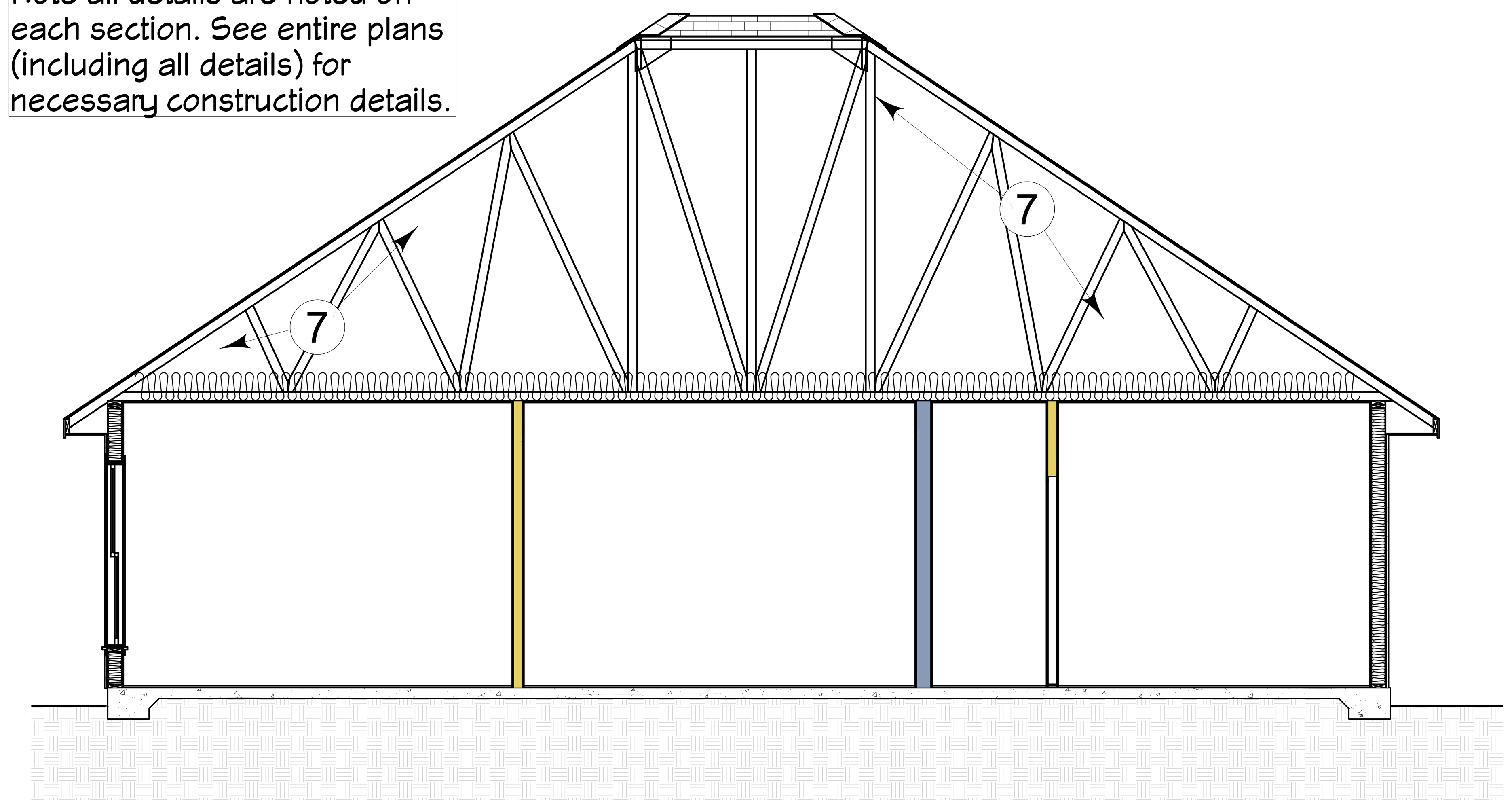
Issue Date: 5/8/2020

REVISION TABLE

NUMBER	DATE

S2

Note all details are noted on each section. See entire plans (including all details) for necessary construction details.



Section 4

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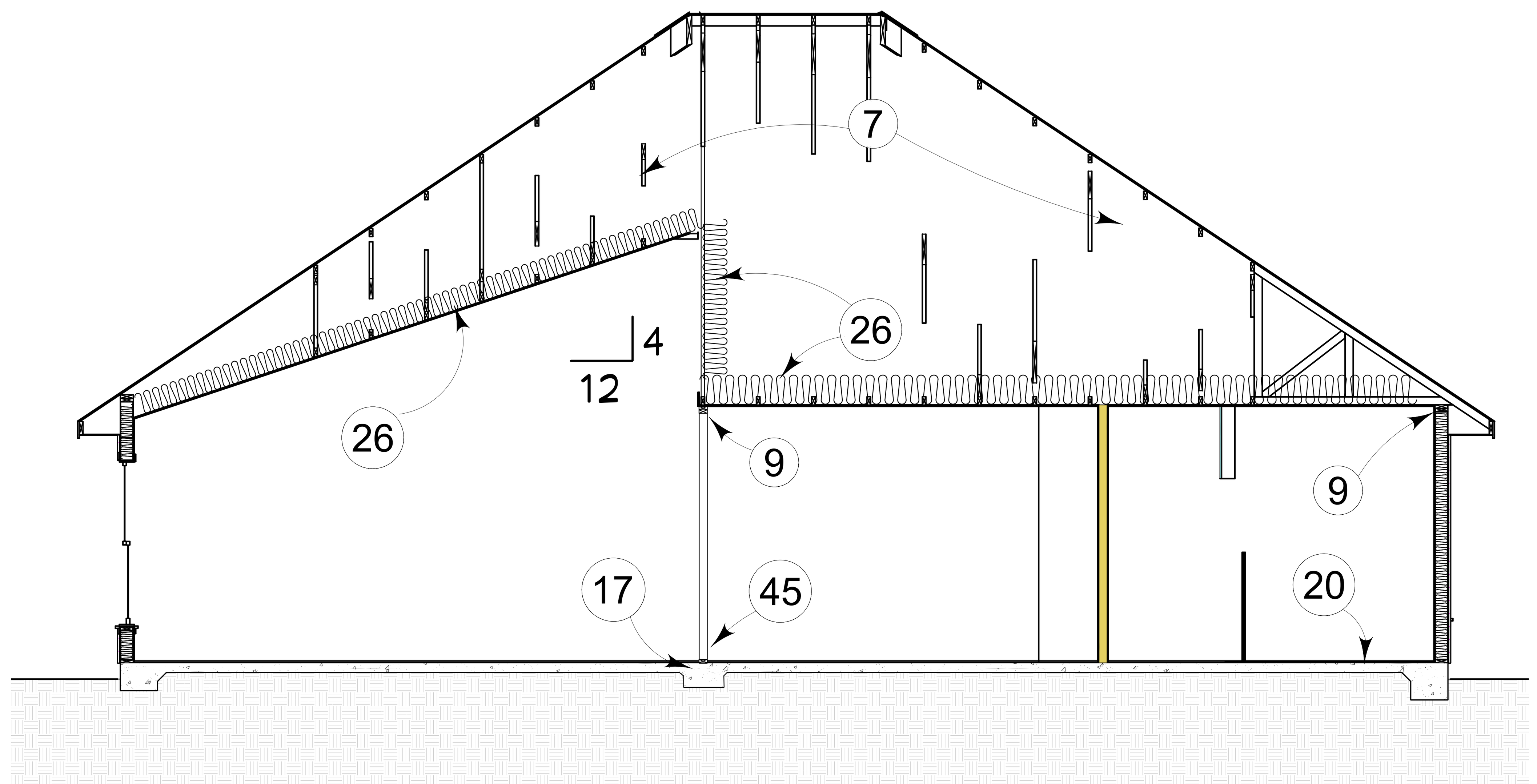

Section 3

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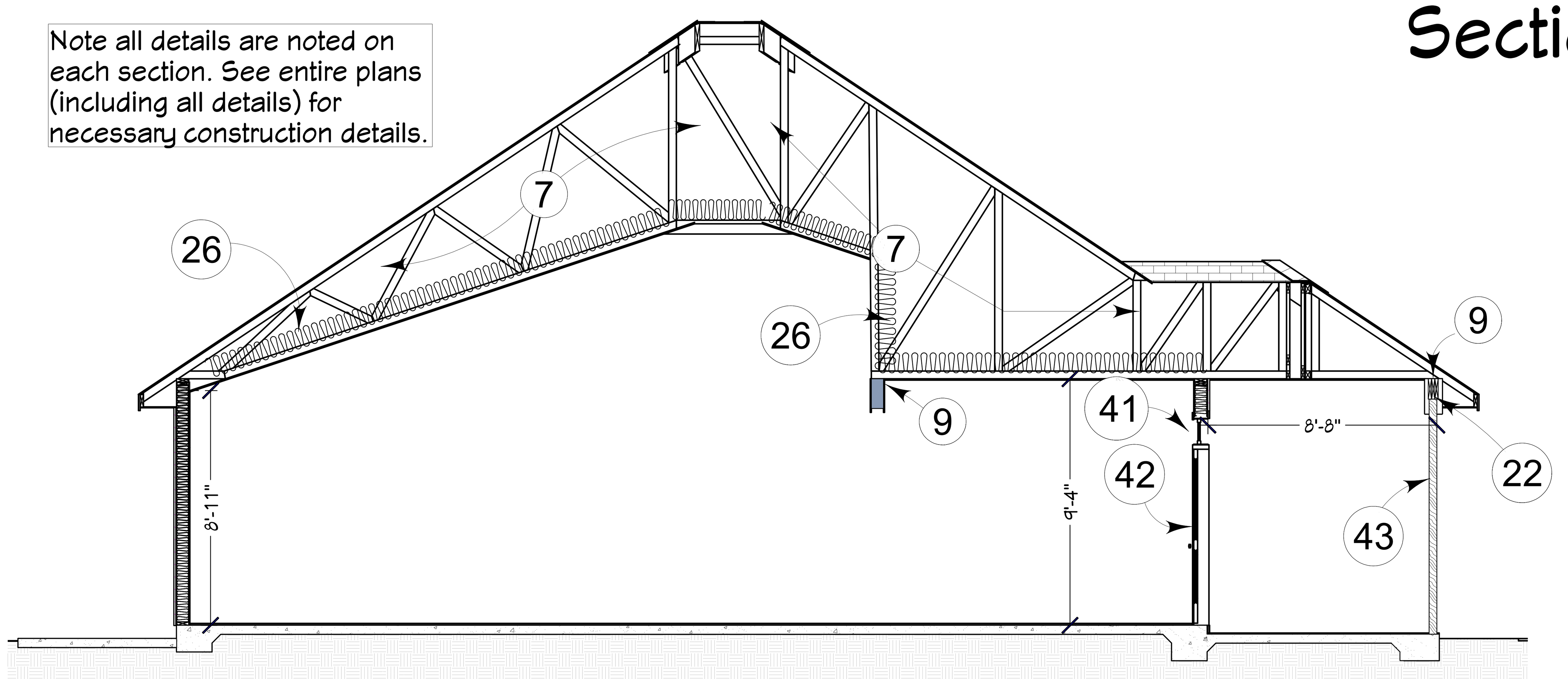

Section 5

Structural: Foundation, Framing, Section Keyed Notes

1. Concrete Slab 4" thick. 6"x6" #10 wire mesh reinforcement over .006 visquin barrier over compacted fill. Fill to be treated per local requirements.
2. Monolithic footer –24" wide by 20" deep (minimum). Use 3@ #5 rebar on chairs. Bottom of footings at least 12" below grade.
3. Monolithic footer –16" wide by 20" deep (minimum). Use 2@ #5 rebar on chairs. Bottom of footings at least 12" below grade.
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Sheet Description
Details Page

Issue Date: 5/8/2020

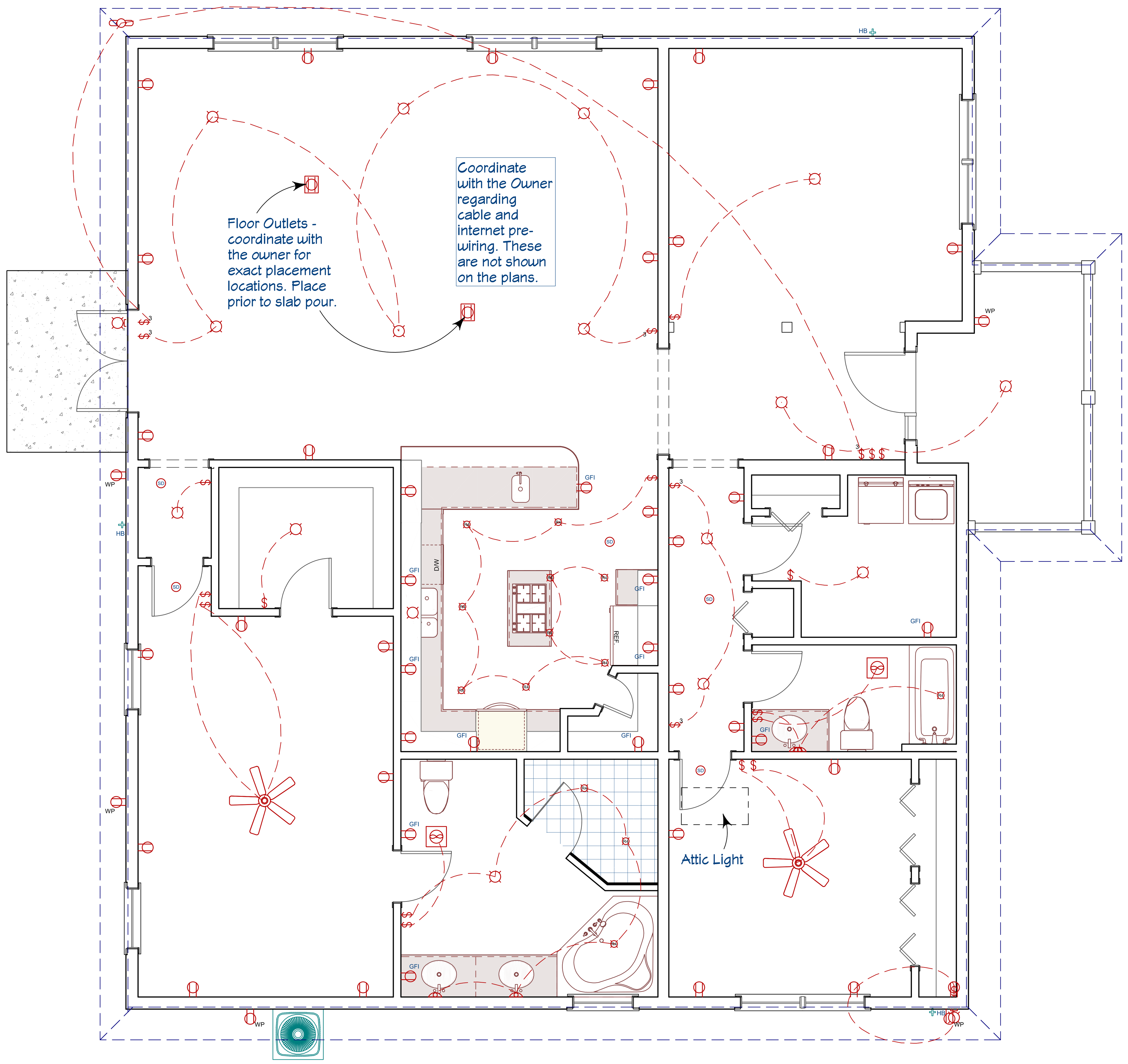
REVISION TABLE

NUMBER	DATE

D1

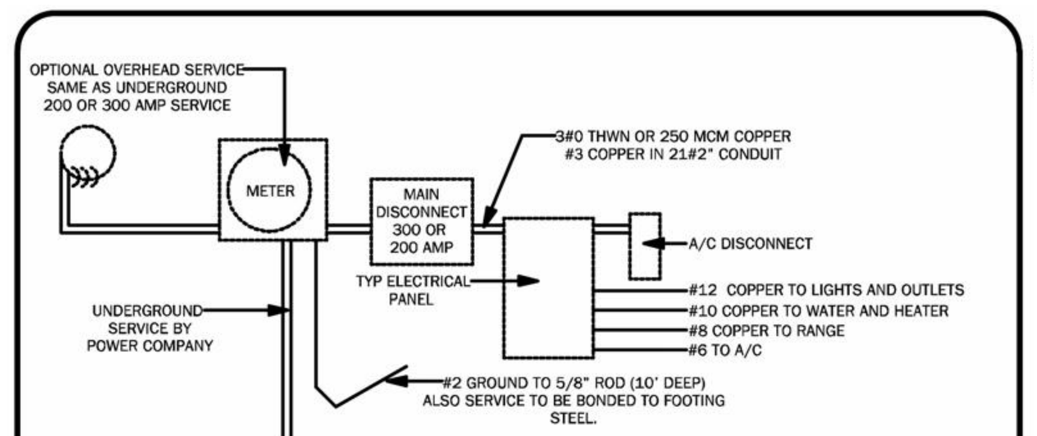
ELECTRICAL NOTES

1. Electrical outlet heights as measured from the finished floor to centered line of the box tobe 12" AFF (general)
   a. Kitchen 44" AFF
   b. Bathroom 39" AFF
   c. Laundry Room 36" AFF
   d. Exterior Waterprrof 12" AFF
   e. Garage General Purpose 42" AFF
   f. Range 2" AFF
2. All trim plates and devices to be ganged, wherever possible.
3. Electrical switches to be 42" center line AFF
4. Electrical Plan is intended for bid purposes only. All work shall be done in strict accordance with the National Electrical Code, latest addition, by a licensed electrical contractor who shall be responsible for the installation and sizing of all electrical, wiring and accessories.
5. Smoke detectors shall be in accordance with the FRC 2007.
6. Provide AFCI (Arc Fault Interrupters) in all dwelling unit bedrooms per NPFA 70a-2.
7. Keep all smoke detectors minimum of 36" from bathroom doors.
8. In new construction, smoke detectors shall be hardwired into an AC electrical power source and shall be equipped with a monitored batter backup.
9. Bathroom exhaust fans must vent to the exterior of the building. Venting into attic space and soffits is not acceptable.
10. Add GFCI protection to receptacles in laundry rooms of dwelling where installed within 8' of the outside edge of a sink. This would include the receptacle installed for the washing machine.
11. Receptacle outlets shall not be required on a wall directly behind a range or sink to fulfill the requirement for an outlet every 24". The width of the sink to or range is not to be included in the spacing of the outlets unless the distance from the sink or range is greater than 12" for straight counter tops and 18" for sink and ranges installed in corner counters.



ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	FLUORESCENT LIGHT FIXTURE
	110V CEILING LIGHT FIXTURE
	110V RECESSED LIGHT FIXTURE
	110V EAVE LIGHT FIXTURE
	110V WALL LIGHT FIXTURE
	SINGLE POLE SWITCH
	110V DUPLEX RECEPTACLE
	110V DUPLEX RECEPTACLE GROUND FAULT INTERUPTED
	110V DUPLEX RECEPTACLE W/ WEATHERPROOF COVER
	240V RECEPTACLE
	TELEPHONE JACKS
SD	SMOKE DETECTOR
	EXHAUST FAN



ELECTRICAL RISER

NOTE:
ELECTRICAL MATERIAL AND INSTALLATIONS SHALL COMPLY WITH APPLICABLE PROVISIONS OF THE NFPA 70A-2, LOCAL CODES AND THE LOCAL POWER CO.

ELECTRICAL RISER

1st Floor Electrical

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Electrical Plan

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