McCOY RESIDENCE DETACHED GARAGE

4001 TRAVERSE DRIVE FUQUAY VARINA NC 27526

NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.

APPROVED
Limited building only review
Permit holder responsible for full compliance with the code

12/28/2022

Harnett COUNTY NORTH CAROLINA

See Notes

This Plan Designed Under North Carolina

Residential Code 2018 Edition (2018 IRC)

ANCHOR BOLTS SHALL BE MINIMUM 5/8" DIAMETER & SHALL
EXTEND A MINIMUM OF 7" INTO MASONRY OR CONCRETE
AND WITHIN12' OF ALL CORNERS. THERE SHALL BE A MINIMUM
OF TWO (2) ANCHOR BOLTS PER PLATE SECTION Per R 403.1.6
MEAN ROOF HEIGHT14'
COMPONENT &CLADDING DESIGN FOR THE FOLLOWING LOADS

MEAN ROOF HEIGHT.	X=30'	30' < X < 35'	35'< X < 40'	40' < X < 45'
ZONE 1	16.5 - 18.0	17.3-18.9	18.0-19.6	18.5-20.2
ZONE 2	16.5-21.0	17.3-22.1	18.0-22.9	18.5-23.5
ZONE 3	16.5-21.0	17.3-22.1	18.0-22.9	18.5-23.5
ZONE 4	18.0-19.5	18.9-19.5	19.6-21.3	20.2-21.8
ZONE 5	18.0-24.1	18.9 -25.3	19.6-26.3	20.2-27.0

MINIMUM VALUES FOR ENERGY CODE COMPLIANCE
ZONE 4A
MAX GLAZING U-FACTOR = 0.30
CEILING INSULATION -R38
WALL INSULATION R-15
FLOOR INSULATION- R19
FENESTRATION U-FACTOR MAX = 0.35
WINDOW DP RATING IS 24 PSF (Design Pressure Rating)
SEISMIC DESIGN CATEGORY B PER IBC TABLE 1616.3 (1)
CONSTRUCTION IS DESIGNED IN ACCORDANCE WITH MINIMUM DESIGN
LOADS FOR BUILDING AND OTHER STRUCTURES (ASCE-7)

CONTRACTOR VERIFY

ALL WORK DESCRIBED SHALL BE VERIFIED FOR DIMENSION, GRADE, EXTENT, AND COMPATIBILITY TO THE EXISTING SITE. ANY DISCREPANCIES AND UNEXPECTED CONDITIONS THAT AFFECT OR CHANGE THE WORK DESCRIBED IN THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE DESIGNERS ATTENTION IMMEDIATELY . DO NOT PROCEED WITH THE WORK IN THE AREA OF THE DISCREPANCIES UNTIL ALL SUCH DISCREPANCIES ARE RESOLVED. IF THE CONTRACTOR CHOOSES TO DO SO HE SHALL BE PROCEEDING AT HIS OWN RISK.

OMISSIONS FROM THE DRAWINGS AND SPECIFICATIONS OR THE MIS-DESCRIPTION OF THE WORK WHICH IS MANIFESTLY NECESSARY TO CARRY OUT THE INTENT OF THE DRAWINGS AND SPECIFICATIONS, OR WHICH IS CUSTOMARILY PERFORMED, SHALL NOT RELIVE THE CONTRACTOR FROM PERFORMING SUCH OMITTED OR MIS-DESCRIBED DETAILS OF THE WORK AS IF AND COMPLETELY SET FORTH AND DESCRIBED IN THE DRAWINGS AND SPECIFICATIONS.

SITE CONDITIONS: ALL CONTRACTORS AND SUB-CONTRACTORS SHALL VERIFY DIMENSIONS AND CONDITIONS AT THE SITE PRIOR TO COMMENCEMENT OF THEIR WORK. FAILURE TO DO SO SHALL NOT RELEASE THEM FROM THE RESPONSIBILITY OF ESTIMATING THE WORK. IF ANY VARIATION, DISCREPANCY OR OMISSION (BETWEEN THE INTENT OF THESE CONTRACT DOCUMENTS ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE DESIGNER IN WRITING AND OBTAIN WRITTEN RESOLUTION FROM THE DESIGNER PRIOR TO PROCEEDING WITH ANY RELATED WORK.

DIMENSIONS

DIMENSIONS ARE TO FACE OF STUD, UNLESS NOTE OTHERWISE CLOSETS ARE 24" CLEAR INSIDE, UNLESS DIMENSIONED OTHERWISE.

S SNUG- PLACE DOOR OR WINDOW SO THAT TRIM WILL BE SNUG TO WALL

C CENTER-PLACE DOOR OR WINDOW CENTERED ON WALL

V VERIFY MILLWORK OR FIXTURE AND ADJUST WALL LOCATIONS AS REQUIRED TO ACCOMMODATE

F FIELD LOCATE WALLS- MAY REQUIRE ADJUSTMENT FOR FIXTURES, PLUMBING OR MECHANICAL

D DOUBLE STUD POCKET BETWEEN OPENINGS (APPROX 3" TRIM- FACTORY MULLED SUB OK)

WALL KEYS

③ 2X3 STUD WALLS

② 2X4 BRICK VENEER WOOD STUDS ON THE FLAT

⑥ 2X6 WOOD STUD WALL

ADDITIONAL KEY NOTES

A 30" X22" MINIMUM ATTIC ACCESS PANEL

T TEMPERED GLASS

84 WINDOW HEAD HEIGHT

S SMOKE DETECTOR

MEMBER AIBD® AMERICAN INSTITUTE of BUILDING DESIGN

Odeh Consulting
Apex, North Carolina
Mufeed Odeh PhD PE
108 Terasina Court
Apex NC 27502
919-888-8361
mufeed.odeh@gmail.com

Layout Page Table

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S1	STRUCTUAL NOTES		
E1	ELECTRICAL PLANS		

payette designs
Payette Designs
Custom Home Design

REVISION TABLE

NUMBER	DATE	REVISED BY	DESCRIPTION

Frankie McCoy
4001 Traverse Drive
Fuquay Varina NC 27526-9650
919-272-0658

Project Overview

DRAWINGS PROVIDED BY:
PAYETTE DESIGNS
6049 EPPING FOREST DRIVE
RALEIGH, NC 27613
919-615-1247 Cell:919-697-2428
payettedesigns@gmail.com

DATE:
12/13/2022

SCALE:

SHEET:
G1

General Requirements

1. **Owner/client responsibilities:** Reference this made throughout these general notes to responsibilities and standards of care to be fulfilled by those providing services and the development and construction of this project. Owner/client shall be responsible for adherence to these requirements by the owner, builder, developer, General Contractor, General Contractors and other professional consultants not retained by the Designer.
2. **Builders set:** the scope of this set of plans is to provide a builders set of construction documents and general notes hereinafter referred to as plans. After formal review and approval, this set of plans is sufficient to obtain a building permit ; however, all materials and methods of construction necessary to complete the project are not necessarily described. The plans delineate and describe only locations, dimensions, types of materials and general methods of assembling or fastening. The implementation of these plans require an owner/client/contractor thoroughly knowledgeable with the applicable building codes and methods of construction specific to this product type and type of construction.
3. **Building maintenance:** the exposed materials used in the construction of this project will deteriorate as the completed project ages unless properly and routinely maintained. Owner/client shall provide or cause the development of a plan to keep these exposed materials protected and maintained.
4. **Codes:** all construction shall comply with the most stringent requirements of all current applicable city, county, state and Federal laws, rules, codes ordinances and regulations if the General Contractor or any General Contractor performs any work and conflict with the above mentioned laws, rules, codes, ordinances and regulations, then the contractor in violation shall bear all cost of repairs arising out of the non- conforming work.
5. **Permits:** a general building permit and plan check shall be secured and paid for by the owner/client. All other permit should be secured and paid for by the sub- contractor directly responsible.
6. **Insurance:** the General Contractor and every General Contractor performing work or providing services and or materials for the work are required to purchase and maintain in force "ALL RISK" Builders Insurance prior to commencement of the work/or furnishing labor, services and materials. Each "all risk" policy shall be in an amount sufficient to cover the replacement value of the work being performed and/or the labor, services and materials being supplied by the General Contractor, General Contractors, Designer, and all professional Consultants.
7. **Insurance:** owner/client shall cause the General Contractor and every General Contractor performing work or providing services and/or materials for the work to purchase and maintain **general liability insurance.**
8. **Named products:** the Designer makes no guarantee for products identified By trade name or manufacturer.
9. **Scope:** the General Contractor and General Contractors shall furnish all labor, equipment and material indicated on the plans and reasonably inferred or required by the applicable codes.
10. **Substitution:** substitutions of specific materials or products listed on the specification sheet shall not be made without written authorization by owner/client. The General Contractor and any General Contractor shall not make the structural substitutions or changes without prior written authorization from the structural engineer.
11. **Changes:** any addition, deletions and or change in the scope of the work described by the plans shall be by written change order only. Any approval from the building official for a change in the work shall be the responsibility of the General Contractor.
12. **Intention:** the General Contractor shall ensure that all labor, materials, equipment and and transportation shall be included in the work for complete execution of the project. The Designer shall not be responsible for the means and methods of construction.
13. **Review of drawings:** the General Contractor and all General Contractors shall review the full content of the plans for discrepancies and omissions prior to commencement of work. The General Contractor and all General Contractors shall be responsible for any work not in conformance with the plans or in conflict with any code.
14. **Use of the drawings:** dimensions take precedence over scaled measurements. Details and sections on the drawings are shown at specific locations and are intended to show general requirements throughout. Details noted typically imply all like conditions treated similarly unless noted otherwise. The architectural details shown are intended to further illustrate the visual design concept and the minimum recommended weather protection for this project. Building code requirements, structural considerations, trade association manuals and publications product manufacturers written instructions shall also be considered in order to complete the construction of the details, and in some cases may supersede the details.
15. **Approved drawings:** the General Contractor shall be responsible for coordinating the work between the different sub-contractors and requiring all General Contractors to use the most current building department approved a set of plans.
16. **Cutting and patching:** all General Contractors shall do their own cartoon, 16, patching, etc, to make the several parts come together properly and fit it to receive the work of other trades.
17. **Cleanup: all trades,** shall at times, keep the promises of three from accumulation of waste materials or rubbish that was caused by their work. General Contractor shall remove all rubbish, tools, scaffolding and surplus materials and leave the job in a broom-clean condition. All fixtures, equipment, glazing, floors, etc, shall be left clean ready for occupancy upon completion of the project.
18. **Storage of materials:** the general contractor and General Contractors shall be responsible for storing the materials on site according to material suppliers or manufacturer's instructions the materials shall be kept secure and protected from moisture, pests, and vandals any loss arising out of materials stored at the site shall be the responsibility of the general contractor or General Contractor who stored the damaged or lost materials.

Insulation

1. Installation :

A. Thermal insulation: insulation between joists, below wall roof surfaces, and areas including any vertical wall areas separating living spaces from unconditioned space and between stud's at all exterior walls. Insulation shall be securely installed in tightly fitted without compressing the normal loft thickness. Provide insulation stops/baffles as required to prevent obstruction of vents.
B. Sound insulation: install insulation between studs, securely and tightly fitted at walls as indicated on drawings.
C. Plumbing insulation: all domestic hot water piping shall have R-4 insulation. Insulation shall be properly installed on all piping elbows to adequately insulate the 90 degree bend.
D. The general contractor and subcontractors shall be responsible for storing the materials on the site according to the materials or manufacturer's instructions. The materials shall be kept secure and protected from moisture.

2. Materials:

A. At a minimum, all insulation specified for this house meets or exceeds the R – value requirements listed in chapter 4 of the 2012 International Energy conservation code and also the grade II specifications set by the National Home Energy Rating Standards.
B. The pre-drywall thermal bypass inspection should be preformed by a qualified rater.

Rough Carpentry:

1.Framing:

A. Blocking and bridging:
(1) Stud walls per applicable building code: full height wall shall have continuous studs from bottom to top plate
(2) Ceiling joists: per applicable code. Use solid bridging.
(3) Backing: Joists: Provide solid backing at all pendant or surface-mounted fixtures as well as all other electrical fixtures, rails, grab bars, Bath accessories, etc
B Fire stopping: per applicable building code.
C. Stud walls: per applicable building code. All studs to have full bearing on plate all studs to be at 16 inch O. C. Unless noted otherwise. Studs to be sized per requirements of code.
D.Use continuous, full height studs in accordance with the highest standard of construction and framing practices.
E. All angled walls to be at 45° unless noted otherwise.
F. Built up roofs, waterproof balcony decks and exterior horizontal areas are to be framed with slope to ensure water drainage without ponding.
G. Provide crickets as indicated and as necessary for proper water drainage and to redirect channeled or runoff water away from vertical surfaces.
H. Provide blocking where required to provide uniform surface where flush joist and beams are different depths.
I. Use proper joints at fascia splices.
J. Unless otherwise noted, all dimensions to exterior walls are given from inside or outside face of rough framing. All dimensions to interior partitions are given from face of framing plan.
K. Align bottom of all adjacent window and door headers, unless noted otherwise and framing plan.

2. Trusses:

A. The general contractor shall have county approved truss plans when applicable on the job site prior to foundation inspection the Truss Manufacturer shall submit calculations, shop drawings, details, bridging and erection bracing signed by a registered engineer to The building department and structural engineer, for their review prior to fabrication .
B. Truss manufacturers shall provide members of adequate bearing area in such a width to insure against over-stressing of supporting timber, multiple joists, girders and plates or provide bearing plates and details to do same.
C. The general contractor shall coordinate with the trust's manufacturer, and framing , electrical, Plumbing and Mechanical contractors at fire protected areas to maintain required fire protection without penetrations unless allowed by code and local jurisdiction.

FINISH CARPENTRY

1. SCOPE
A. FINISH AND INSTALL ALL FINISH CARPENTRY COMPLETE, INCLUDING TRIM, DOOR FRAMES , PANELING
AND SHELVING.
B. INSTALLATION OF FINISH HARDWARE, BATH ACCESSORIES, CABINET PULLS, ECT.

2. WORKMANSHIP:
A. ALL JOINTS SHALL BE TIGHT AND TRUE SECURELY FASTENED. CORNERS SHALL BE NEATLY
MITERED, BUTTED, OR COPED, WITH NAILS SET AND SURFACES FREE OF TOOL MARKS.
B. WOOD WORK SHALL BE ACCURATELY SCRIBED TO FIR ADJOINING SURFACES.
C. ALL WORK SHALL BE MACHINED OR HAND SANDED, SHARP EDGES AND SPLINTERS REMOVED, AND
COMPLETELY PREPARED FOR FINISH.
D. FULL LENGTH CONTINUOUS BOARDS SHALL BE USED WHEREVER APPLICABLE OR SPECIFICALLY NOTED.

3. FITTING AND HANGING DOORS
A. EACH DOOR SHALL BE ACCURATELY CUT, TRIMMED AND FITTED TO ITS RESPECTIVE FRAME AND
HARDWARE WITH DUE ALLOWANCE FOR PAINTERS FINISHES.
B. CLEARANCE AT THE LOCK AND HANGING STILES AND AT THE TOP SHALL NOT EXCEED 1/8"
CLEARANCE AT THE BOTTOM SHALL BE ADJUSTED FOR FINISH FLOOR COVERING.
C. LOCK STILE EDGES BEVELED.
D. DOOR SHALL OPERATE FREELY, BUT NOT LOOSELY, WITHOUT STICKING OR BINDING, WITHOUT HINGE
BOUND CONDITIONS, AND WITH ALL HARDWARE PROPERLY ADJUSTED AND FUNCTIONING.

4. MATERIALS
A. DOOR FRAMES: FRAMES SHALL BE SET PLUMB AND TRUE, RIGIDLY SECURED, AND PROTECTED
DURING THE COURSE OF CONSTRUCTION.
B. DOOR STOPS AND CASING: SIZE AND PROFILE AS SELECTED BY OWNER/CLIENT.
C. EXTERIOR TRIM: REFER TO DRAWINGS FOR EXTERIOR TRIM MATERIAL & SIZES. FOR WOOD, MEDIUM
DENSITY OVERLAY (MDO) OR FIBER CEMENT, ALL CUT SIDES/FACES/EDGES MUST BE PRIMED AND
PAINTED. IF SPECIFIC PRODUCT BRAND IS SPECIFIED ON DRAWINGS, SEE MANUFACTURES
SPECIFICATIONS AND INSTALLATION INSTRUCTIONS.
D. INTERIOR TRIM:
(1) INTERIOR RAILS: CLEAR MATERIAL FINISHED TO MATCH CASEWORK.
(2) WINDOW TRIM: 1X CLEAR WOOD TO MATCH CASEWORK OR AS NOTED IN DRAWINGS(VERIFY WITH
OWNER/CLIENT)
(3) BASE BOARDS: AS NOTED INDRWINGS OR APPROVED BY OWNER/CLIENT

Thermal & Moisture Protection

Foundations

1. Provide adequate drainage away from walls and foundations.
2. Seal all plumbing, electrical and other penetrations of the walls and floors and seal joints.
3. Sloped final grade away from foundation.
4. Provide capillary break at all concrete slabs (poly not req. if< 20" rainfall: not req. for free draining soils +IRC group 1.
5. Exterior surface of below grade walls damp proofed or water proofed.
6. Match existing grade of garage floor with new concrete floor.
7. Foundation continuous footing drain with stone covered with filter fabric, drained to daylight.
8. Basement foundation walls use porous backfill materials.
9. Provide continuous crushed stone under footings.
10. Provide rigid insulation as specified directly under slab.

Walls:

1. Install windows, doors, exterior cladding, flashing and sealants as detailed in this drawings set.
2.All deck ledgers must be pressure treated If the link to the material.
3.All penetrations that pass through exterior cladding into structure must be fully sealed.
4.Install materials with proper detailing to control of degradation from moisture.

Roofs :

1. Ice flashing over sheathing at eaves (except climates CZ1-4)
2.Metal drip edge at exposed roof decking.
3.Bituminous membrane at all eaves, Valleys and penetrations (not req. If < 20" rainfall).
4.Step flashing at all roof/walls intersections and terminated without kicked out flashing.
5.Install system for diverting roof order from house. (e.g gutters)
6. No. 30 # Roof fell underlayment minimum.
7. Reduce ice dams: non-airtight recessed light fixtures in insulated ceilings.
8. Roof insulation as specified in this drawing set.

Wet Rooms:

1. Install drains Or drain pans To capture leaks under water heaters or use tank-less water heaters.
2. Properly install washer and water heater drain pans.
3.Use highly durable materials in wet areas.
4.Use non -paper-faced backer board on walls and tub, shower and spot areas.
5.install no carpet in kitchens, bathrooms, spot areas, or within 3 inches of exterior door.

Air Infiltration:

1. Install "IC" Airtight rated recessed lights in insulated ceilings.
2. Complete air barrier between attic to and conditioned space and all penetrations sealed.
3. Air filter housings must be air tight to prevent bypass or leakage.
4. Air seal ventilation ductwork.

Interstitial Condensation:

1. Clothes dryers vented outdoors.
2. Insulate all cold water pipes and avoid plumbing in exterior walls.
3. Perma finish On inside of exterior walls. (only req. in Hot/humid and Mixed/ humid climates)

Heat Loss:

1. Insulate all ventilation exhaust duct work a minimum of R-8 Outside of the insulated and below.
2. R-5 Slab edge insulation break at foundation wall intersection and R-10 Slab edge insulation outward of any walk-out slab edge.
3. Install insulation wind baffles at attic eave bays.

Ultraviolet Radiation:

1. . Install materials with proper detailing to control degradation from sun.

Other:

1.Minimum 25 year expected lifetime roof warranty .
2. Define proper refrigerant charge to be within 10% of manufacturer recommendations.
3.. Mechanical equipment must be accessible for service, including AC condensate drain pan and trap.

Mechanicals:

1. Scope:
A. Supply all labor, transportation, material, etc, for installation of a complete heating and air conditioning system to operate according to all applicable standards and best practices of the trade including, but not limited to mechanical units, ducts, registers, catwalks, grills, boots, vent pipes, dampers, combustion air, fans, ventilators, refrigerant etc. all materials, work, etc , to comply with all requirements of all legally constituted public authorities having jurisdiction including all county and state ordinances. Furnish and install all the equipment complete an operable. Verify all material installation requirements and limitations and fire and sound assemblies.
B. Provide rubberized asphaltic membrane materials at all penetrations of the water-resistive membrane at all exterior walls.
2. Installation:
A. Provide required clearances for ductwork and to combustibles.
B. Provide a permanent electric outlet and switched light fixture wherever equipment is installed.
C. No alterations to the structural frame, diaphragms, connections or shear panels shall be made without prior written approval from the structural engineer.
D. No equipment located in garages.
E. All combustion equipment shall be directly vented with an outdoor combustion air supply.
F. All penetrations of fire assemblies shall meet the requirements of the building code and section 7D.
G. All HVAC equipment shall be approved prior to installation per nationally recognized standards and evidenced by listing and label of an approved agency.
H. Combustion air from outside shall be supplied to all fuel burning appliances .
I. Install air filters with a minimum efficiency reporting value (MERV) 10 and ensure that air handlers can maintain adequate pressure and airflow. Air filter housings must be airtight to prevent bypass or leakage.
J. All fixed appliances are required to be securely fastened in place. Provide seismic bracing our anchor unit to platform where appropriate.
K. Install centralized HVAC system equipped with additional controls to operate in dehumidification mode.
L. Condenser pad or compressor from ground must not be less than 3 inches above grade.
M. The general contractor and subcontractors shall be responsible for storing the materials on the site according to material suppliers or manufacturer's instructions the materials shall be kept secure and protected from moisture.

ELECTRICAL

1.Scope:
A. Supply all labor, transportation, materials, etc, for installation of complete electrical system to operate according to the best practices of the trade including but not limited to: fixtures, appliances, wiring, switches, outlets, television jacks, services, grounds, can bury power, junction boxes, conduit, sub panels, etc. All work, materials, etc to comply with all requirements of all legally constituted authorities having jurisdiction including all county and state ordinances. Furnish and install all electrical work complete and operable. Verify all material and installation requirements and limitations and fire and sound assemblies.
B. Provide rubberized asphaltic membrane materials at all penetrations of the water resisted membrane at exterior walls.

2. Installation:
A. Electrical system installed according to latest version of N. E. C or local code, whichever is more stringent.
B. Provide separate circuits each for dishwasher, garbage disposal, refrigerator, washer, dryer, F.A.U. and microwave oven.
C. Switched outlets shall be ½ hot.
D. Bathroom and kitchen fans: install local exhaust systems and all bathrooms and in the kitchen to meet requirements of section 5 of ASHRAE Standard 62.2-2007 kitchen to Design and install fan ducts to meet the requirements of section 7 & of ASHRAE Standard 62.2-2007. Exhaust air to outdoors and also use ENERGY STAR labeled bathroom exhaust fans.
E. For every bathroom exhaust fan, install an occupancy sensor or an automatic humidistat controller or an automatic timer to operate the fan for a timed interval after occupant leaves the room or a continuously operating exhaust fan.

F. All fixtures, outlets, and, penetrating fire assemblies shall be rated and installed to meet requirements of the building code. Outlet boxes on opposite sides of fire assembly walls shall be separated by a horizontal distance of at least 24 inches.
G. All equipment installed outdoors exposed to whether shall be weatherproof.
H. Provide ground fault circuit interrupters, G. F. C. I. , at all baths, and garages, Out- door and wet area outlets. All branch circuits that supply 125- Volt single phase, 15 and
20 amp receptacle outlets installed in dwelling unit bedrooms shall be protected by an arc- fault circuit interrupter.(s)
I. Each conductor of every system shall be permanently tag in compliance with OSHA. J. To complete electrical system shall be grounded in accordance with the presently adopted the addition of the NEC, ART #250. proper ground requires #4 copper wire, 20'
-0" long, embedded into concrete and provide bond to gas or water line.
K. Use only competent legal and skilled personnel and perform all work, including aesthetic as well as electrical and mechanical aspects to standards consistent with the best practices of the trade. L. No alterations to the structural frame, diaphragms, connections or shear panels shall be made without approval from the structural engineer and designer of record.

Plumbing:

1. Scope
A. Supply all labor, transportation, materials, etc for installation of complete plumbing system to operate according to the best practices of the trade and including but not limited to: fixtures, hot and cold water piping, exhaust flues, combustion air, gas piping, log lighters, drains, soil and vent piping, hot water heaters, pipe insulation, meters, valves, vaults, etc. If all materials, work etc Ito comply with all requirements of all legally constituted public authorities having jurisdiction including all county and state ordinances.

Furnish and install plumbing work complete and operable, including trenching and back filling. Verify all material and installation requirements and limitations and fire and sound assemblies.

B. Provide rubberized asphaltic membrane materials at all penetrations of the water resisted membrane at exterior wall.

C. Protect pipes from freezing. Please call water lines and waistlines within conditioned space and where are proved thermal
insulation is between "line" and unheated area.
2. Installation
A. Roughing-in shall be completed, tested and inspected as required by code before closing in with other work.
B. Openings in pipes, drains, and fittings shall be kept covered during construction.
C. Utilize solid backing for securing fixtures. All fixtures to be set level.
D. Provide cleanouts at ends of all lines and where required by codes.
E. Copper tubing shall be fully sweated to fittings.
F. Black iron and galvanized steel pipe joints shall be made with approved pipe thread compound.
G. Provide shut off valves each fixture.
H. Provide condensate client at each F.A.U location. To provide primary and secondary condensate line to an approved drainage receptacle at attic F.A. U. locations. Install condensation line for each piece of condensating HVAC equipment per manufacturer.
I. Provide cold water line to refrigerator space in recess box or in cabinet immediately adjacent to refrigerator space.
J. Isolate all piping from structure with fiber padding and at all penetrations with elastic caulking or sound isolators.
K. All vents to lead to outside air, where possible locate all roof vents to rear side of ridges. Vents to terminate a minimum of 3 feet from windows.
L. All horizontal ABS piping shall be home with approved hangers at 4 feet on center minimum and spaced to permit expansion and contraction without hitting any adjoining pipe. Vertical piping shall be supported at 8' O.C center with wrought steel U straps securely fastened to building frame.
M. Provide air chambers at lavatory, dishwasher clothes washer ,water connections set vertically as close to fixture as possible to
N. Provide ¾ tees for irrigation at main shut –off.
O. Provide water heater with pressure /temperature relief valve and pan and drain line piped to exterior of the building.
P. All combustion equipment shall be directly vented.
Q. No alterations to the structural frame, diaphragms, connections to shear panels shall be made without prior written approval from the structural engineer.
R Provide non removable backflow device on all exterior hose bibs.
S. A 12" minimum access panel to bath tub trap connection is required
T Provide pressure regulator for water service were pressure exceeds 80 PS I .
U. Provide drain pan under washer with drain in laundry room and shut all valve if washer is located above living space Provide solid metal pipe for dryer vent to exterior. Do not install screen on dryer vent. Provide energy efficient dryer vent with floating shuttle.
V. Provide solid metal pipe for dryer vent to exterior. Do not install screen on dryer vent.
provide energy efficient dryer vent with floating shuttle

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payette designs

NUMBER	DATE	REVISION TABLE REVISED BY	DESCRIPTION

Frankie McCoy
4001 Traverse Drive
Fuquay Varina NC 27526-9650
919-272-0658

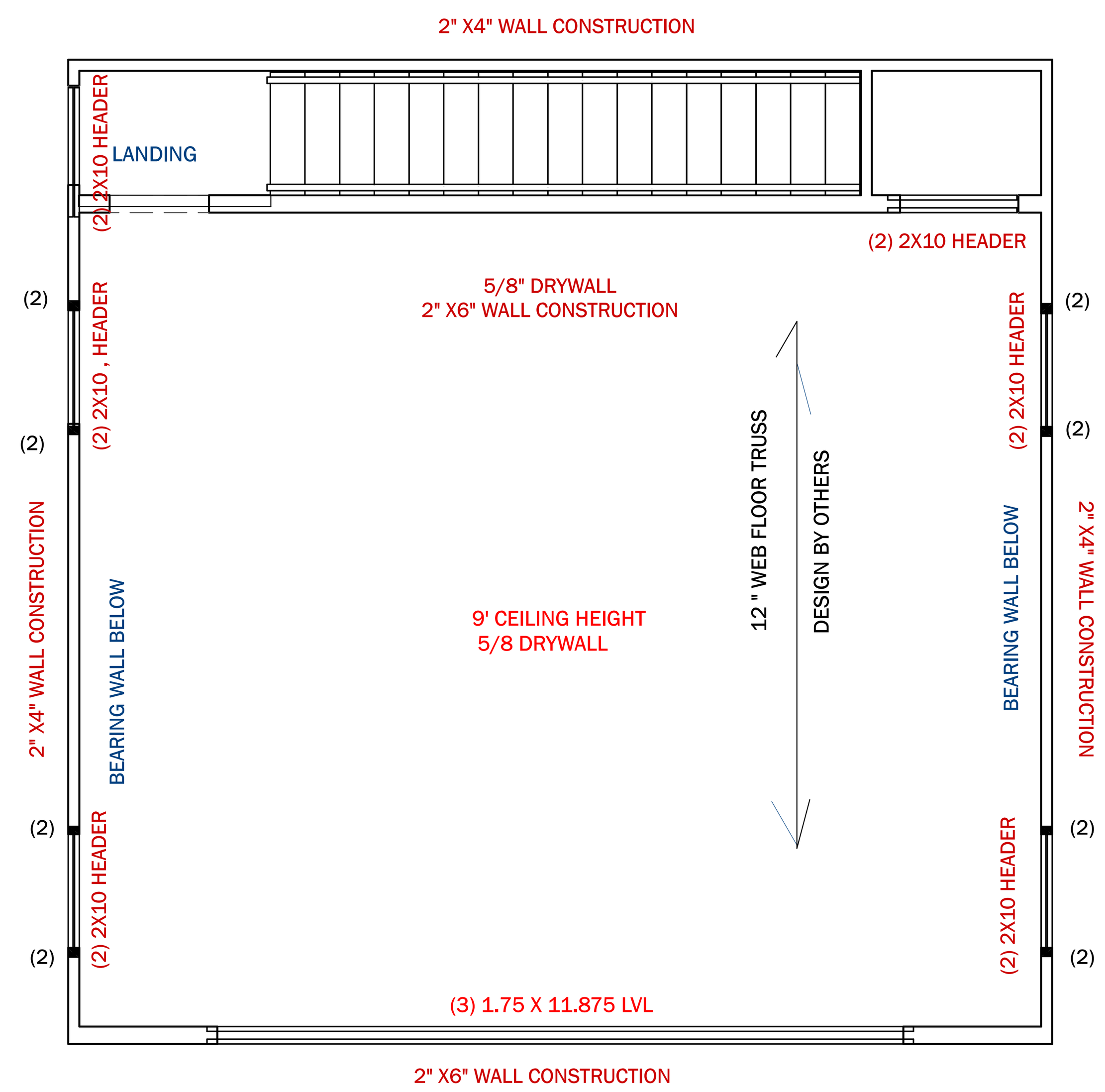
GENERAL NOTES AND SPECS

DRAWINGS PROVIDED BY:
PAYETTE DESIGNS
6049 EPPING FOREST DRIVE
RALEIGH, NC 27613
919-615-1247 Cell-919-697-2428
payettedesigns@gmail.com

DATE: 12/13/2022

SCALE: 1/4" =1'

SHEET: G2

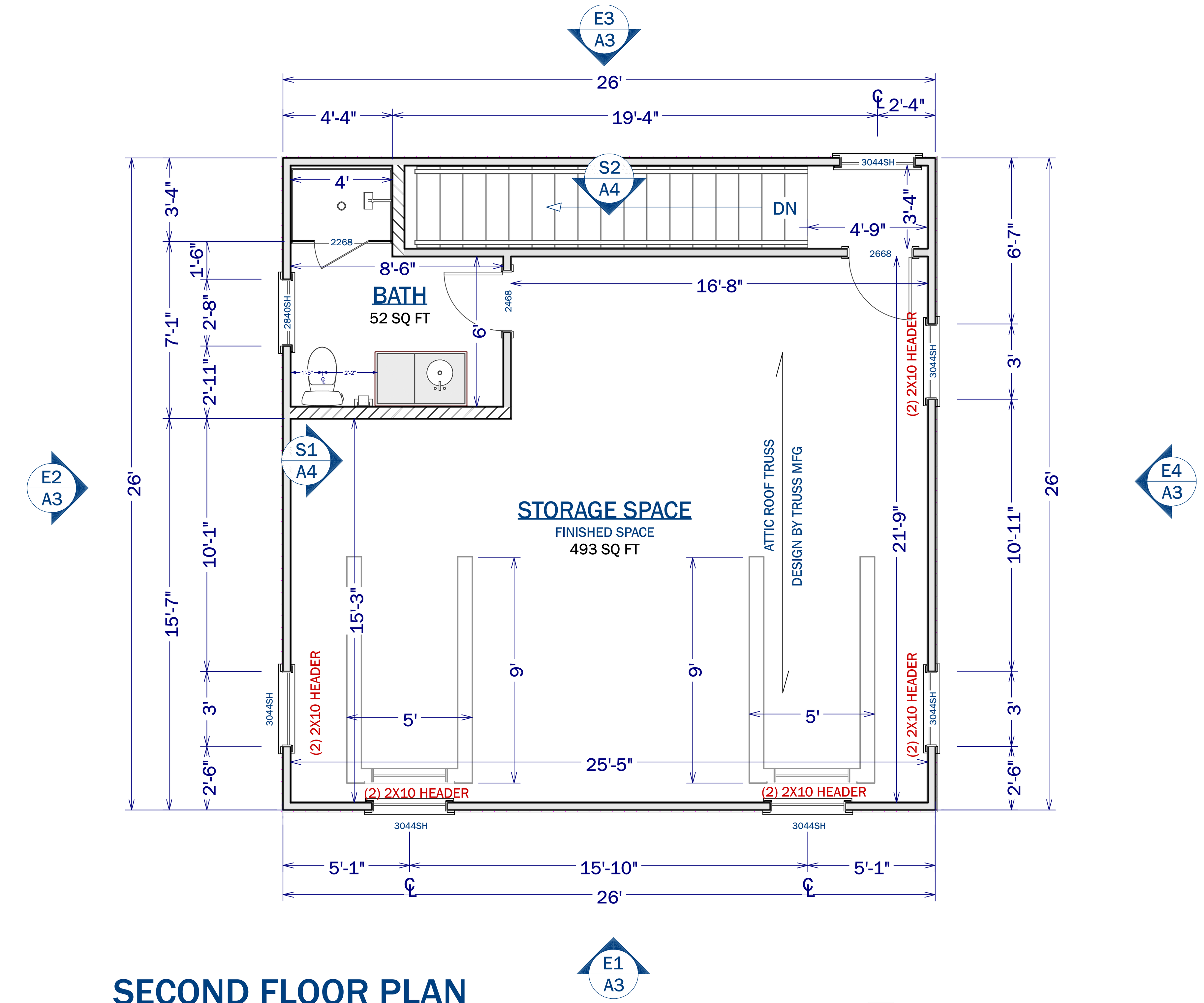


SECOND FLOOR FRAMING

SCALE : 1/4=1'

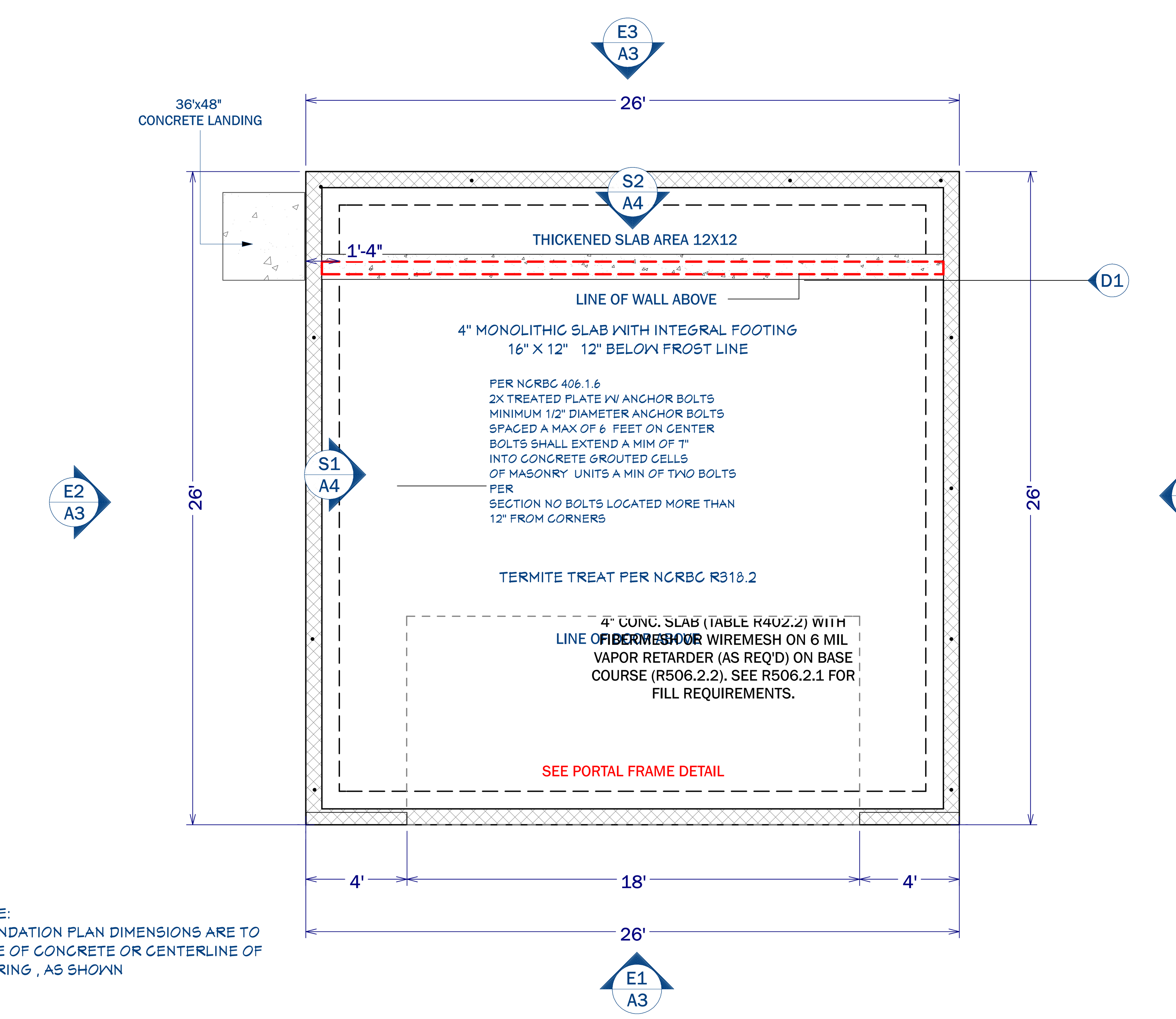
WALL SCHEDULE	
2D SYMBOL	WALL TYPE
	8" CMU (BLOCK) STEM WALL
	GLASS SHOWER
	INTERIOR RAILING
	INTERIOR-4
	INTERIOR-6
	SIDING-4
	SIDING-6

NOTE:
DOOR AND WINDOW HEADERS SHALL BE (2) 2X8 UNLESS OTHERWISE NOTED



SECOND FLOOR PLAN

SCALE : 1/4=1'



NOTE:
FOUNDATION PLAN DIMENSIONS ARE TO FACE OF CONCRETE OR CENTERLINE OF BEARING , AS SHOWN

FOUNDATION

SCALE : 1/4=1'

BRACED WALLS PER NCRBC R602.10 APPLICABLE FOR LOCAL CODES

ALL EXTERIOR WALLS ARE BRACED WALLS NAIL SIDING PANELS OR SHEATHING W/8D @ 6" O.C. EDGES AND @12" O.C IN THE FIELD AND PROVIDE ALTERNATE BRACED WALL PANELS AS INDICATED

INTERIOR BRACED WALLS FRAMED W/ 2X4 STUDS @16" O.C W/DOUBLE TOP PLATE AND PRESSURE TREATED BOTTOM PLATE. SHEATHE WITH 7/16" OSB AND NAIL W/8D @ 6" O.C EDGES AND 12" O.C FIELD

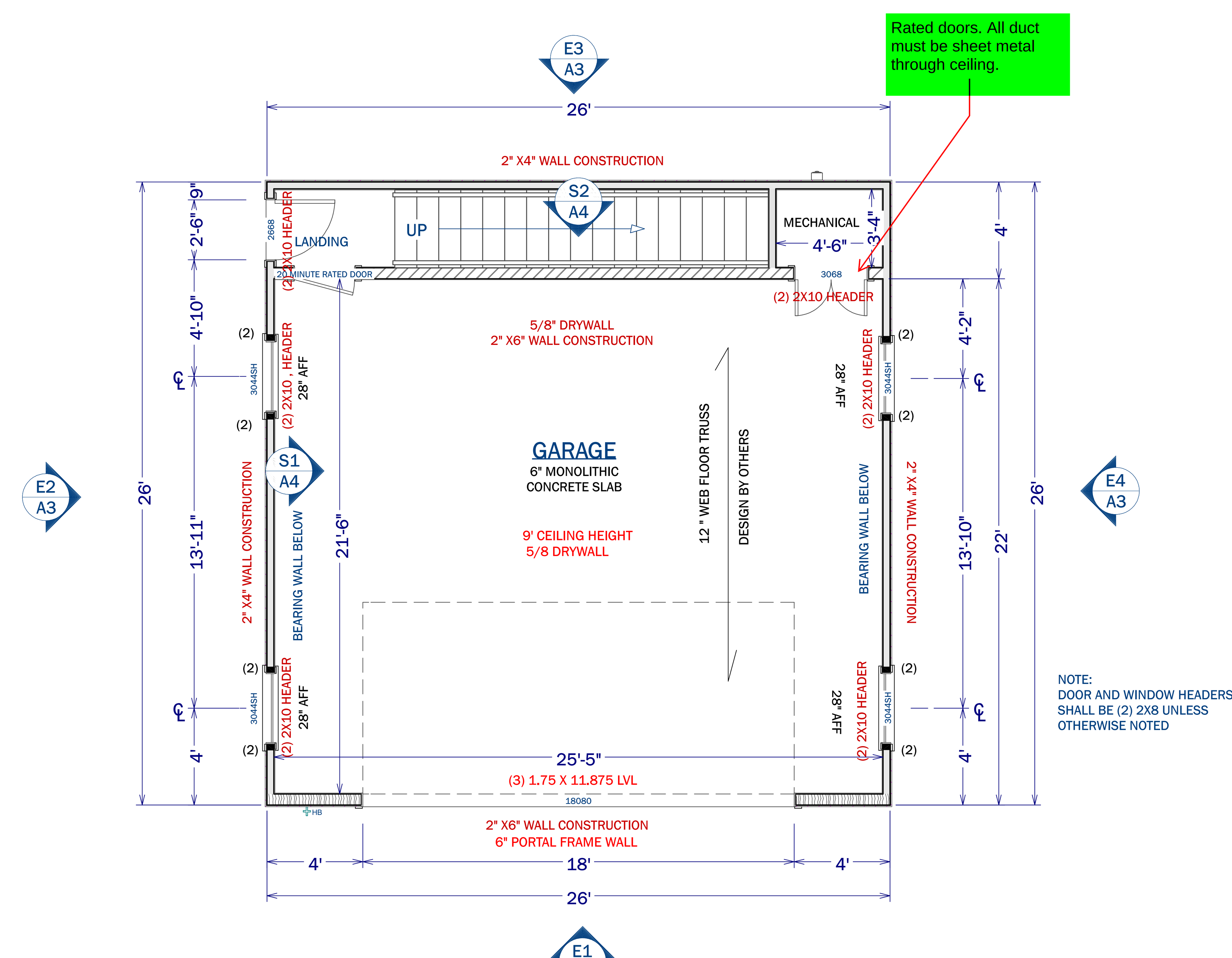
HEADER/BEAM & COLUMN NOTES

1. ALL EXTERIOR LOAD BEARING HEADERS SHALL BE MIN (2) 2X10 (4" WALL) OR (3) 2X10 (6" WALL) WITH (1) SUPPORT STUD, UNLESS NOTED OTHERWISE.

2. THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD POCKET OR COLUMN. THE NUMBER OF KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM "d" IN TABLE R602.3(5) OR AS BELOW PER NCDOI COMMENTARY "KING STUDS AT WALL OPENINGS" REVISED 1-9-2020

- UP TO 3' SPAN (1) KING STUD
- OVER 3' UP TO 6' SPAN (2) KING STUDS
- OVER 6' UP TO 9' SPAN (3) KING STUDS
- OVER 9' UP TO 12' SPAN (4) KING STUDS
- OVER 12' UP TO 15' SPAN (5) KING STUDS

D1



NOTE:
DOOR AND WINDOW HEADERS SHALL BE (2) 2X8 UNLESS OTHERWISE NOTED

FIRST FLOOR PLAN

SCALE : 1/4=1'

payette designs
REVISION TABLE
NUMBER | DATE | REVISED BY | DESCRIPTION
Frankie McCoy
4001 Traverse Drive
Fuquay Varina NC 27526-9650
919-272-0658

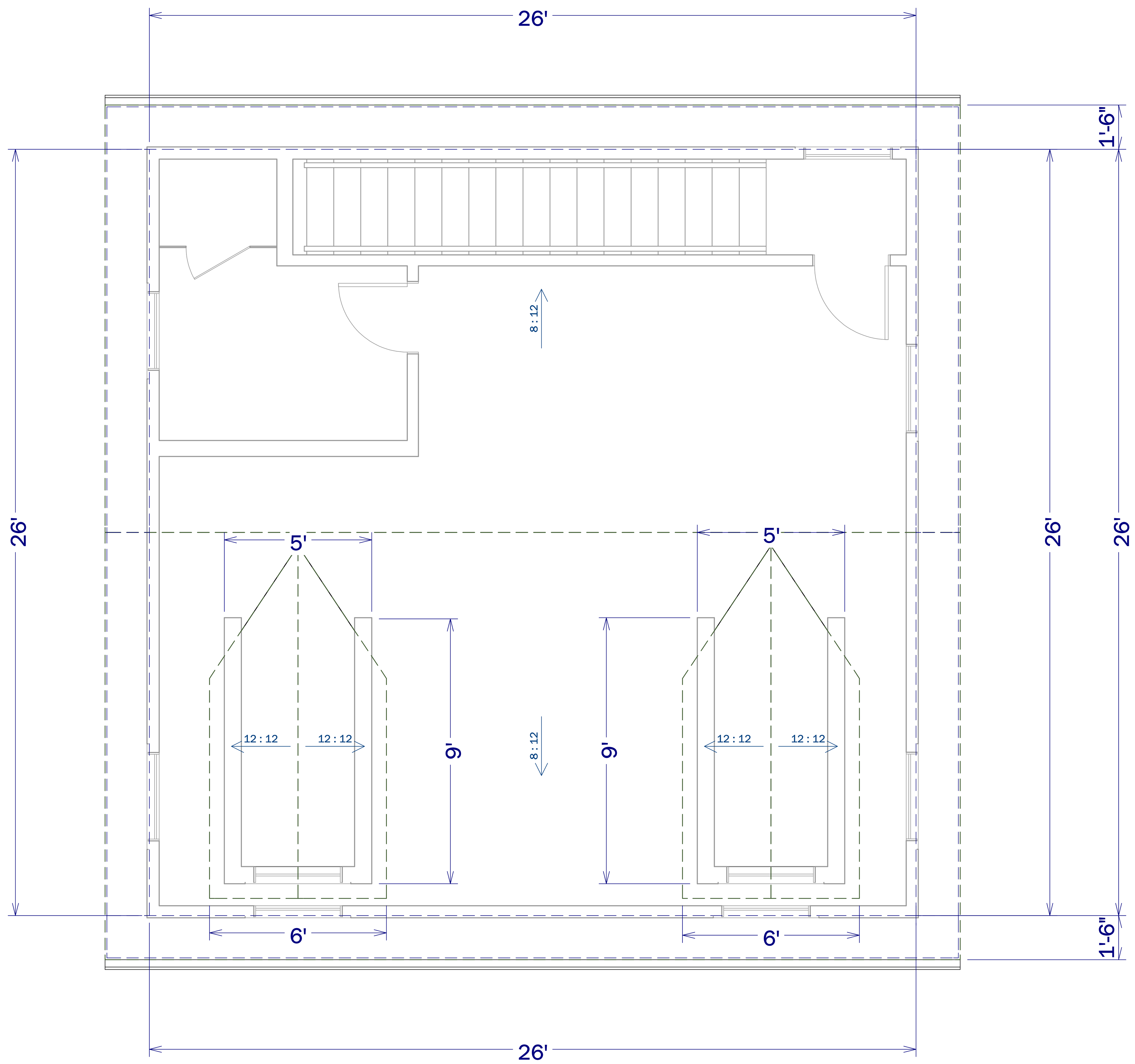
FLOOR PLANS

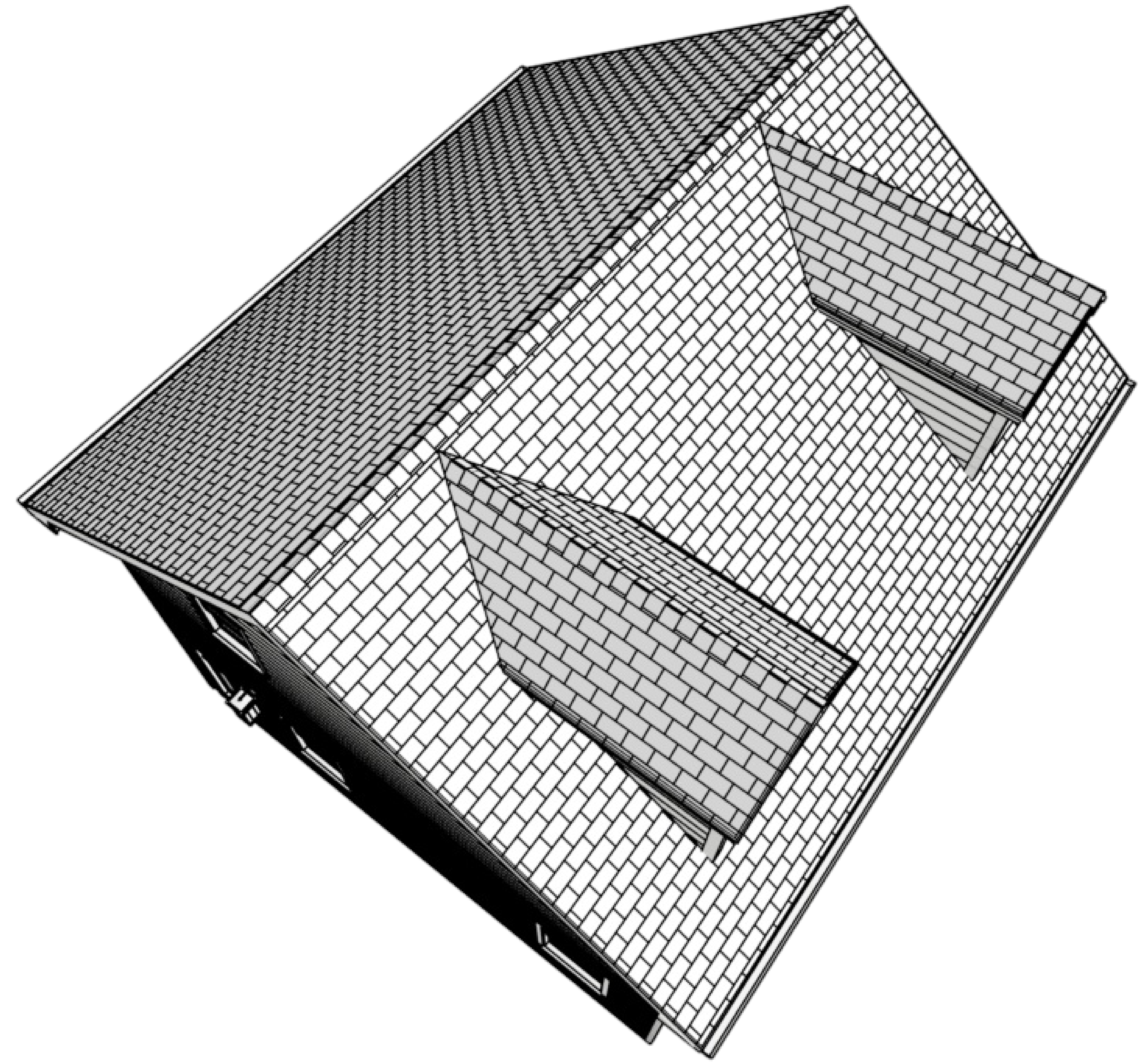
DRAWINGS PROVIDED BY:
PAYETTE DESIGNS
6049 EPPING FOREST DRIVE
RALEIGH, NC 27613
919-615-1247 Cell:919-697-2428
payettedesigns@gmail.com

DATE: 12/13/2022

SCALE: 1/4" =1'

SHEET: A1





ATTIC VENTILATION
The net free ventilating area shall not be less than 1 to 150 of the area of the space ventilate except that the area may be 1 to 300, provided at least 50 percent of the requires ventilating area is provided ventilators located in the upper portion of the space to be ventilated at least 3 feet above the eave or cornice vents with the balance of the required ventilation to be provide by eave or cornice venting.

Gross area to be ventilated is 1540 sqft + -
1540/300 = 5 sqft Above eave or soffit vents

PLAN SOFFIT VENT AND CONTINUOUS RIDGE VE
EXCEEDS REQUIRED VENTILATION

ROOF PLAN 3/8" =1'

ROOF FRAMING / TRUSS NOTES:

TRUSS DRAWING IS FOR ILLUSTRATION ONLY. ALL TRUSSES SHALL BE INSTALLED & BRACED TO MANUFACTURERS DRAWINGS & SPECIFICATIONS.

ALL TRUSSES SHALL CARRY MANUFACTURERS STAMP.

ALL TRUSSES WILL NOT BE FIELD ALTERED WITHOUT PRIOR BUILDING DEPT. APPROVAL OF ENGINEERING CALCULATIONS.

ALL TRUSSES SHALL HAVE DESIGN DETAILS & DRAWINGS ON SITE FOR FRAMING INSPECTION.

ALL CONNECTIONS OF RAFTERS, JACK OR HIP TRUSSES TO MAIN GIRDER TO BE PROVIDED BY TRUSS MANUFACTURER.

ALL ROOF FRAMING 24" O.C.

ALL OVERHANGS 16".

INSTALL POLYISOCYANURATE FOAM TYPE INSULATION AT FLOOR AND PLATE LINES, OPENINGS IN PLATES, CORNER STUD CAVITIES AND AROUND DOOR AND WINDOW ROUGH OPENING CAVITIES.

ATTIC VENTILATION: REQUIRED ABOVE HOUSE.

MIN. SNOW LOAD 50 LBs PER SQUARE FOOT.

WALL HEADERS: (2) 2 X 10 DF 2 TYP. UNO

ROOF & FLOOR TRUSS MANUFACTURER: TRUSS BUILDER S MORRISVILLE__

payette designs
Payette Designs
Custom Home Design

REVISION TABLE

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Frankie McCoy
4001 Traverse Drive
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ROOF PLAN

DRAWINGS PROVIDED BY:
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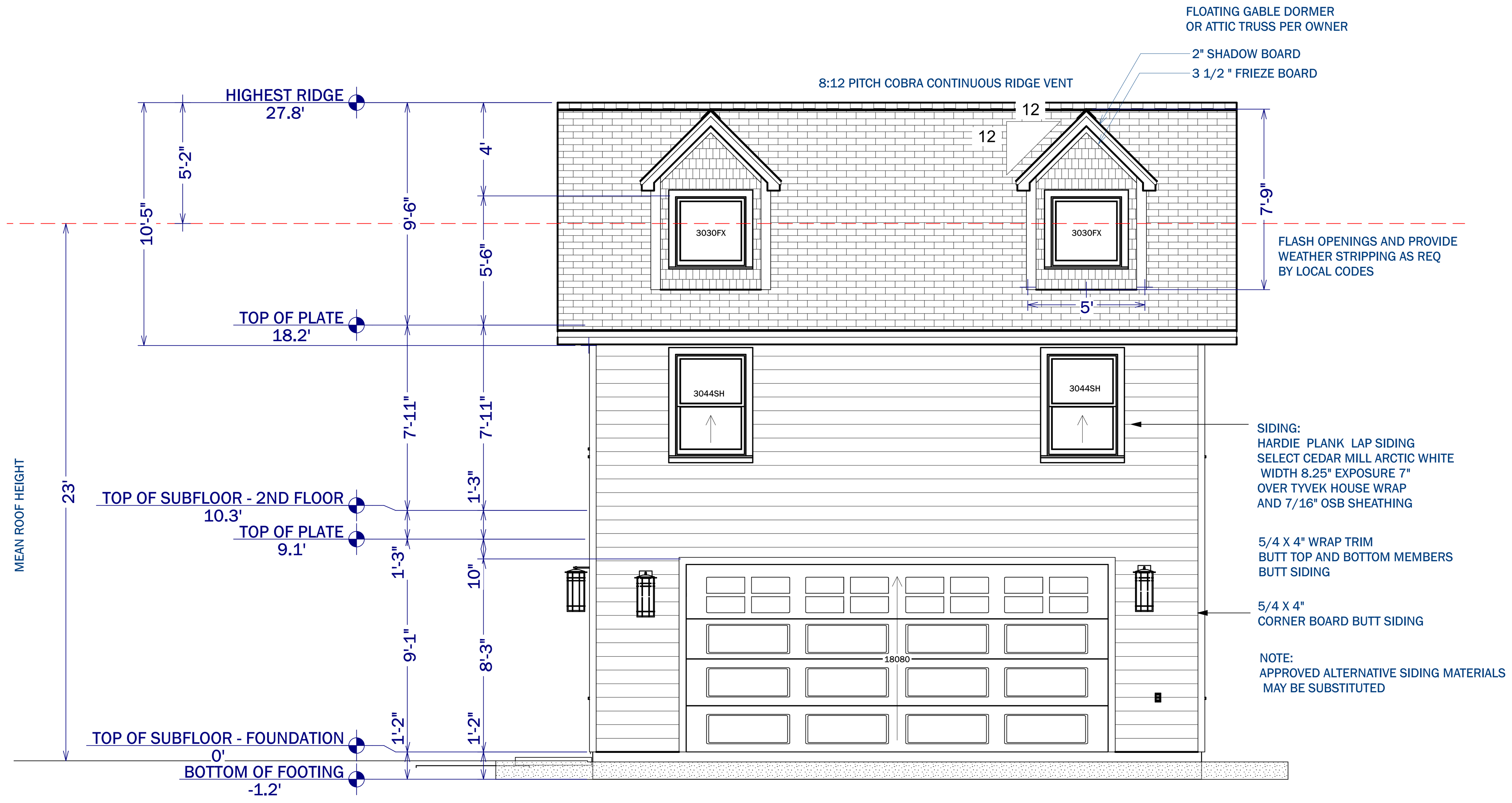
RALEIGH, NC 27613
919-615-1247 Cell:919-697-2428
payettedesigns@gmail.com

DATE: 12/13/2022

SCALE: 1/4" =1'

SHEET: A2



FLAT LOT ELEVATION SPOT ELEVATION ON ALL CORNERS INSIGNIFICANT
MEAN ROOF HEIGHT = 23'

FRONT ELEVATION

SCALE : 1/4=1'

REAR ELEVATION

SCALE : 1/4=1'

R312.2Window fall protection.
Window fall protection shall be provided in accordance with Sections R312.2.1 and R312.2.2.

R312.2.1Window sills.
In dwelling units, where the top of the sill of an operable window opening is located less than 24 inches (610 mm) above the finished floor and greater than 72 inches (1829 mm) above the finished *grade* or other surface below on the exterior of the building, the operable window shall comply with one of the following:

1. Operable windows with openings that will not allow a 4-inch-diameter (102 mm) sphere to pass through the opening where the opening is in its largest opened position.
2. Operable windows that are provided with window fall prevention devices that comply with ASTM F2090.
3. Operable windows that are provided with window opening control devices that comply with Section R312.2.2.

R312.2.2Window opening control devices.
Window opening control devices shall comply with ASTM F2090. The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the net clear opening area of the window unit to less than the area required by Section R310.2.1.

ELEVATION NOTES

1. Roof assembly. Provide 30 year Asphalt Dimensional shingles over 15# felt over 1/2" APA rated, code certified, span rated plywood installed with plywood "H" clips. Color and style of shingles to be selected by owner.
2. Flashing. 20" wide galvanized flashing shall be used on all valleys. Provide metal flashing over all windows and doors in exterior walls throughout. Provide pan flashing under all exterior doors. Provide all wall, base, cap, thru-wall flashing and/or counter flashing, etc. as required to prevent the entrance of water.
3. Fascia and Soffit. Pressure treated southern yellow pine or Hardi w/ white aluminum drip strip. Hardi-board soffit with vents. Paint color to be selected by owner.
4. ~~Stucco finish. Provide exterior stucco finish on exterior surfaces as shown on elevations. Manufacturer and color of stucco to be selected by owner and contractor. Provide all trim, banding and detailing as weather tight surfaces.~~
5. Door and Window Trim. Provide trim as shown on plans. Color to be selected by owner.
6. Windows. Wood, or Vinyl single-hung, clear glazed, insulated windows painted as specified. Confirm that openings are compliant with all applicable codes concerning egress, lighting and ventilation requirements. Temper all glass 2'-0" from door and above whirlpool tubs. Trim windows with casing. Bedroom windows shall comply with BOCA Code requirements for emergency escape. Minimum net clear opening shall be 5.7 sq.ft., minimum net clear width shall be 20", minimum net clear height shall be 24", and sill height shall not exceed 24" above floor. Provide manufacturer's egress hardware at bedroom windows in each bedroom without exterior door. Windows to be standard sized, constructed for block application. Fasten each pressure treated 1x2 liner to block with min. (4) 1/4" x 2 1/2" tap-cons. Fasten windows to liner with 2" stainless steel wood screws at 6" on center (OC) each edge flange or as specified by the manufacture for 100 mph resistance.
7. Columns. where applicable 12" x 8" x 16" CMU column. Block laid in stack bond, w/ type M or S mortar and smooth tooled joints. Fill all vertical fill cells w/ #5 rebar with 3000 PSI grout. Provide 22 gauge Galvanized tie straps at 16" on center (OC) each way, laid in wet mortar joints.8" x 8" x 16" CMU column. Block laid in stack bond, w/ type M or S mortar and smooth tooled joints. Fill all vertical fill cells w/ #5 rebar with 3000 PSI grout. Finish exterior columns as shown on elevations.
8. Gutters and Downspouts. Provide optional gutters and downspouts to be selected by owners.
9. Hand Rail. All hand rails shall be constructed so as to prevent passage of a 4" sphere.

LEFT ELEVATION

SCALE : 1/4=1'

RIGHT ELEVATION

SCALE : 1/4=1'

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REVISION TABLE

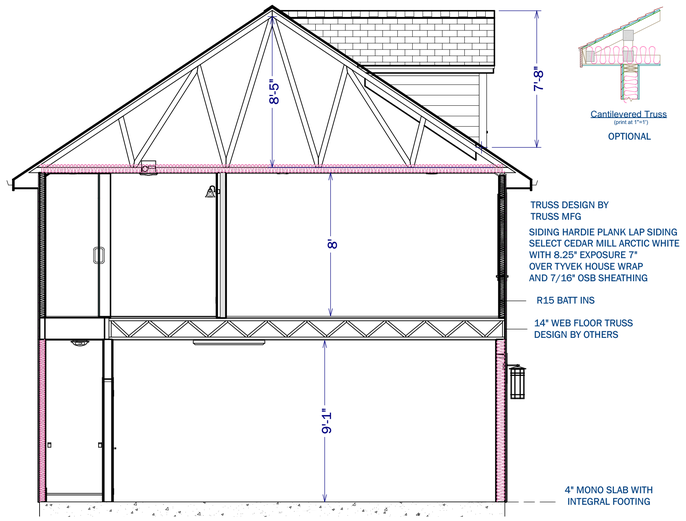
NUMBER	DATE	REVISED BY	DESCRIPTION

Frankie McCoy
4001 Traverse Drive
Fuquay Varina NC 27526-9650
919-272-0658

ELEVATIONS

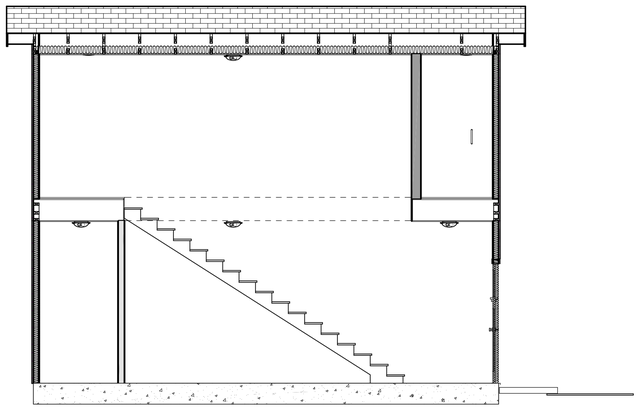
DRAWINGS PROVIDED BY:
PAYETTE DESIGNS
6049 EPPING FOREST DRIVE
RALEIGH, NC 27613
919-615-1247 Cell:919-697-2428
payettedesigns@gmail.com

DATE:
12/13/2022
SCALE:
1/4" =1'
SHEET:
A3



Cantilevered Truss
(print at 1"=1')

OPTIONAL



Staircase Information

Start and end heights are set manually.

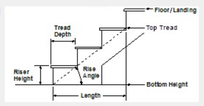
Best fit riser height of 6 5/8" requires 19 total risers to reach 126" to next level.

Number of Sections: 1

Number of Landings: 0

Number of Risers: 18

Rise Angle: 32.47



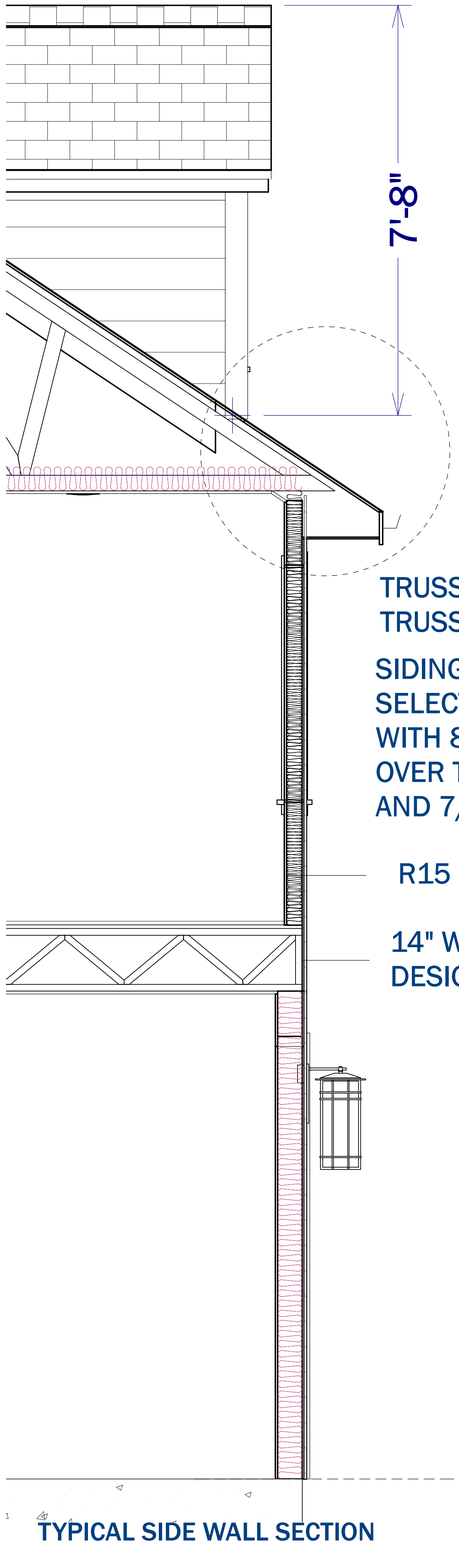
Section Number	Length	Width	Tread Depth	Treads	Bottom Height	Top Height	Riser Height	Winders
1	187"	39"	11"	17	-1 1/4"	124 3/4"	7"	

STAIR NOTES:

1 STAIRWAYS SHALL HAVE A MIN. WIDTH OF 34". HAND RAILS MAY ENCROACH A MAX. OF 3 1/2" INTO THE REQUIRED WIDTH.
2 TREADS SHALL HAVE A MIN. WIDTH OF 10". STAIR TREADS MUST BE UNIFORM AND CAN NOT VARY FROM THE LARGEST TO THE SMALLEST BY MORE THAN 3/8".
3 STAIRWAYS SHALL HAVE MIN. 6'-8" OF HEADROOM AT THE NOSE OF THE STAIR.
4 ENCLOSED USABLE SPACE UNDER INTERIOR STAIRS SHALL BE PROTECTED ON THE ENCLOSED FACE WITH 5/8" TYPE 'X' GYPSUM WALL BOARD.
5 STAIRWAYS SHALL HAVE AT LEAST ONE HANDRAIL LOCATED 36" ABOVE THE NOSING OF TREADS AND LANDINGS. THE HAND GRIP PORTION OF HANDRAILS SHALL NOT BE LESS THAN 1-1/2" OR GREATER THAN 2" IN CROSS-SECTIONAL DIMENSION.
6 HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS. THE ENDS OF HANDRAILS SHALL RETURN TO WALL OR TERMINATE INTO A NEWEL POST OR SAFETY TERMINAL.
7 STAIRWAYS HAVING LESS THAN 2 RISERS DO NOT REQUIRE A HAND RAIL.
8 GUARDRAILS SHALL BE PROVIDED FOR AT PORCHES, DECKS, BALCONIES, STAIRWAYS AND LANDINGS WHERE THE ADJACENT SURFACE IS GREATER THAN 24" BELOW AND SHALL HAVE A 34" MIN. HEIGHT
9 RAILING AND GUARDRAIL BALUSTER SPACING SHALL BE NO GREATER THAN 4".
10 THE TRIANGULAR OPENINGS FORMED BY THE RISER, TREAD, AND BOTTOM OF GUARDRAIL SHALL NOT ALLOW A 6" DIAMETER SPHERE TO PASS THROUGH.

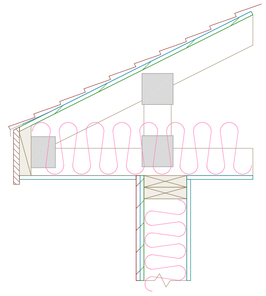
CROSS SECTION

SCALE : 1/4=1'



TYPICAL SIDE WALL SECTION

SCALE : 1/4=1'



Cantilevered Truss
(print at 1"=1')

OPTIONAL

STRUCTURAL NOTES
(2018 NCRC) 115-120 mph

1. ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS INCLUDING ROOF RAFTERS, HIPS, VALLEYS, RIDGES, FLOORS, WALLS, BEAMS AND HEADERS, COLUMNS, CANTILEVERS,OFFSET LOAD BEARING WALLS, PIER & GIRDER SYSTEM FOOTINGS AND PILING SYSTEM. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM.ALL REQUIREMENTS FOR PROFESSIONAL CERTIFICATION SHALL BE PROVIDED BY THE APPROPRIATE PROFESSIONAL. MUFFED ODEH, P.A. CERTIFIES ONLY THE STRUCTURAL COMPONENTS AS SPECIFICALLY STATED.

2. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2018 EDITION), PLUS ALL LOCAL CODES AND REGULATIONS. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK, NOR WILL THE ENGINEER BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. "CONSTRUCTION REVIEW" SERVICES ARE NOT PART OF OUR CONTRACT. ALL MEMBERS SHALL BE FRAMED, ANCHORED,TIED AND BRACED IN ACCORDANCE WITH GOOD CONSTRUCTION PRACTICE AND THE BUILDING CODE.

3) DESIGN LOADS (R301.4) (LISTED AS: LIVE LOAD, DEAD LOAD, DEFLECTION LIMIT)
ROOMS OTHER THAN SLEEPING ROOMS: (40 PSF, 10 PSF, L/360)
SLEEPING ROOMS: (30 PSF, 10 PSF, L/360)
ATTIC WITH PERMANENT STAIR: (40 PSF, 10 PSF, L/360)
ATTIC WITH OUT PERMANENT STAIR: (20 PSF, 10 PSF, L/360)
ATTIC WITH OUT STORAGE: (10 PSF, 10 PSF, L/240)
STAIRS: (40 PSF, --, L/360)
EXTERIOR BALCONIES: (60 PSF, 10 PSF, L/360)
DECKS: (40 PSF, 10 PSF, L/360)
GUARDRAILS AND HANDRAILS: (200 LBS)
PASSENGER VEHICLE GARAGES: (50 PSF, 10 PSF, L/360)
FIRE ESCAPES: (40 PSF, 10 PSF, L/360)
SNOW: (20 PSF)
WIND LOAD: (BASED ON 100 MPH WIND VELOCITY)

4. WALL SHALL BE BRACED BY SHEATHING WALLS ON ALL STORIES WITH STRUCTURAL PANELS, SEE FRAMING NOTES FOR THICKNESS AND NAILING REQUIREMENTS SEE APPENDIX M (DCA6) FOR EXTERIOR DECK REQUIREMENTS
INCLUDING ATTACHMENTS FOR LATERAL LOADS

5. CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF 5 INCHES UNLESS NOTED OTHERWISE (UNO). AIR ENTRAINED PER TABLE 402.2. ALL CONCRETE SHALL BE PROPORTIONED, MIXED, HANDLED, SAMPLED, TESTED, AND PLACED IN ACCORDANCE WITH ACI STANDARDS. ALL SAMPLES FOR PUMPING SHALL BE TAKEN FROM THE EXIT END OF THE PUMP. CONTROL JOINTS IN SLABS SHALL BE SPACED ON A GRID OF + - 30 TIMES THE DEPTH (D) . CONTROL JOINTS SHALL BE A SAWCUT TO DEPTH OF I/D. (I.E 4" CONCRETE SLABS SHALL HAVE 1/4" DEEP CONTROL JOINTS SAWCUT IN SLAB ON A + -10'-0" X 10' -0" GRID)

6. ALLOWABLE SOIL BEARING PRESSURE ASSUMED TO BE 2000 PSF. THE CONTRACTOR MUST CONTACT A GEOTECHNICAL ENGINEER AND THE STRUCTURAL ENGINEER IF UNSATISFACTORY SUBSURFACE CONDITIONS ARE ENCOUNTERED. THE SURFACE AREA ADJACENT TO THE FOUNDATION WALL SHALL BE PROVIDED WITH ADEQUATE DRAINAGE, AND SHALL BE GRADED SO AS TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS.

7. ALL FRAMING LUMBER SHALL BE SPF #2 (Fb = 875 PSI) UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE SYP # 2 (Fb=975 PSI). PLATE MATERIAL MAY BE SPF # 3OR SYP #3 (Fc(perp) = 425 PSI - MIN).

8) ALL WOODEN BEAMS AND HEADERS SHALL HAVE THE FOLLOWING END SUPPORTS: (1) 2x4 STUD COLUMN FOR 6'-0" MAX. BEAM SPAN (UNO), (2) 2X4 STUDS FOR BEAM SPAN GREATER THAN 6'-0" (UNO).

9. L.V.L. SHALL BE LAMINATED VENEER LUMBER: Fb=2600 PSI, Fv=285 PSI, E=1,900,000 PSI.
9.1 P.S.L. SHALL BE PARALLEL STRAND LUMBER: Fb=2900 PSI, Fv=290 PSI, E=2,000,000 PSI.
9.2 L.S.L. SHALL BE LAMINATED STRAND LUMBER: Fb=2250 PSI, Fv=400 PSI, E=1,550,000 PSI. INSTALL ALL CONNECTIONS PER MANUFACTURERS INSTRUCTIONS.

10. ALL ROOF TRUSS AND I-JOIST LAYOUTS SHALL BE PREPARED IN ACCORDANCE WITH THE SEALED STRUCTURAL DRAWINGS. TRUSSES AND I-JOISTS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURE'S SPECIFICATIONS. ANY CHANGE IN TRUSS OR I-JOIST LAYOUT SHALL BE COORDINATED WITH MUFFED ODEH PA

11. ALL STRUCTURAL STEEL SHALL BE ASTM A-36. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" INCHES AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO LAG SCREWS (1/2" DIAMETER x 4" LONG). LATERAL SUPPORT IS
CONSIDERED ADEQUATE PROVIDED THE JOIST ARE TOE NAILED TO THE SOLE PLATE, AND SOLE PLATE IS NAILED OR BOLTED TO THE BEAM FLANGE @ 48" O.C. ALL STEEL TUBING SHALL BEASTM A500.

12. REBAR SHALL BE DEFORMED STEEL, ASTM615, GRADE 60.

13. FLITCH BEAMS SHALL BE BOLTED TOGETHER USING (2) ROWS OF 1/2" DIAMETER BOLTS (ASTM A325) WITH WASHERS PLACED UNDER THE THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" O.C. (MAX), AND STAGGERED AT THE TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH 2 BOLTS LOCATED AT 6" FROM EACH END.

14. BRICK LINTELS SHALL BE 3 1/2"x3 1/2"x1/4" STEEL ANGLE FOR UP TO 6'-0" SPAN AND 6"x4"x5/16" STEEL ANGLE WITH 6" LEG VERTICAL FOR SPANS UP TO 9'-0" (UNO).

15. THE POSITIVE AND NEGATIVE DESIGN PRESSURE FOR DOORS AND WINDOWS FOR A MEAN ROOF HEIGHT OF 35 FEET OR LESS SHALL BE 25 PSF. THE POSITIVE AND NEGATIVE DESIGN PRESSURES REQUIRED FOR ANY ROOF OR WALL CLADDING APPLICATION NOT SPECIFICALLY ADDRESSED IN THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2018 EDITION SHALL BE AS
FOLLOWS: :

payette designs
Payette Designs
Carbon Zero Design

REVISION TABLE

NUMBER	DATE	REVISED BY	DESCRIPTION

Frankie McCoy
4001 Traverse Drive
Fuquay Varina NC 27526-9650
919-272-0658

CROSS SECTIONS

DRAWINGS PROVIDED BY:
PAYETTE DESIGNS
6049 EPPING FOREST DRIVE
RALEIGH, NC 27613
919-615-1247 Cell:919-697-2428
payettedesigns@gmail.com

DATE:
12/13/2022

SCALE:
1/4" =1'

SHEET:
A4

STRUCTURAL NOTES

<u>STRUCTURAL NOTES</u>
(2018 NCRC) 115-120 mph

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SLEEPING ROOMS: (30 PSF, 10 PSF, L/360)
ATTIC WITH PERMANENT STAIR: (40 PSF, 10 PSF, L/360)
ATTIC WITH OUT PERMANENT STAIR: (20 PSF, 10 PSF, L/360)
ATTIC WITH OUT STORAGE: (10 PSF, 10 PSF, L/240)
STAIRS: (40 PSF, --, L/360)
EXTERIOR BALCONIES: (60 PSF, 10 PSF, L/360)
DECKS: (40 PSF, 10 PSF. L/360)
GUARDRAILS AND HANDRAILS: (200 LBS)
PASSENGER VEHICLE GARAGES: (50 PSF, 10 PSF, L/360)
FIRE ESCAPES: (40 PSF, 10 PSF, L/360)
SNOW: (20 PSF)
WIND LOAD: (BASED ON 100 MPH WIND VELOCITY)

4. WALL SHALL BE BRACED BY SHEATHING WALLS ON ALL STORIES WITH STRUCTURAL PANELS, SEE FRAMING NOTES FOR THICKNESS AND NAILING REQUIREMENTS SEE APPENDIX M (DCA6) FOR EXTERIOR DECK REQUIREMENTS
INCLUDING ATTACHMENTS FOR LATERAL LOADS

5. CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF 5 INCHES UNLESS NOTED OTHERWISE (UNO). AIR ENTRAINED PER TABLE 402.2. ALL CONCRETE SHALL BE PROPORTIONED, MIXED, HANDLED, SAMPLED, TESTED, AND PLACED IN ACCORDANCE WITH ACI STANDARDS. ALL SAMPLES FOR PUMPING SHALL BE TAKEN FROM THE EXIT END OF THE PUMP. CONTROL JOINTS IN SLABS SHALL BE SPACED ON A GRID OF + - 30 TIMES THE DEPTH (D) . CONTROL JOINTS SHALL BE A SAWCUT TO DEPTH OF i/D. (I.E 4" CONCRETE SLABS SHALL HAVE 1/4" DEEP CONTROL JOINTS SAWCUT IN SLAB ON A + -10'-0" X 10' -0" GRID)

6. ALLOWABLE SOIL BEARING PRESSURE ASSUMED TO BE 2000 PSF. THE CONTRACTOR MUST CONTACT A GEOTECHNICAL ENGINEER AND THE STRUCTURAL ENGINEER IF UNSATISFACTORY SUBSURFACE CONDITIONS ARE ENCOUNTERED. THE SURFACE AREA ADJACENT TO THE FOUNDATION WALL SHALL BE PROVIDED WITH ADEQUATE DRAINAGE, AND SHALL BE GRADED SO AS TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS.

7. ALL FRAMING LUMBER SHALL BE SPF #2 (Fb = 875 PSI) UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE SYP # 2 (Fb=975 PSI). PLATE MATERIAL MAY BE SPF # 3OR SYP #3 (Fc(perp) = 425 PSI - MIN).

8) ALL WOODEN BEAMS AND HEADERS SHALL HAVE THE FOLLOWING END SUPPORTS: (1) 2x4 STUD COLUMN FOR 6'-0" MAX. BEAM SPAN (UNO), (2) 2X4 STUDS FOR BEAM SPAN GREATER THAN 6'-0" (UNO).

9. L.V.L. SHALL BE LAMINATED VENEER LUMBER: Fb=2600 PSI, Fv=285 PSI, E=1,900,000 PSI.
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9.2 L.S.L. SHALL BE LAMINATED STRAND LUMBER: Fb=2250 PSI, Fv=400 PSI, E=1,550,000 PSI. INSTALL ALL CONNECTIONS PER MANUFACTURERS INSTRUCTIONS.

10. ALL ROOF TRUSS AND I-JOIST LAYOUTS SHALL BE PREPARED IN ACCORDANCE WITH THE SEALED STRUCTURAL DRAWINGS. TRUSSES AND I-JOISTS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURE'S SPECIFICATIONS. ANY CHANGE IN TRUSS OR I-JOIST LAYOUT SHALL BE COORDINATED WITH MUFFED ODEH PA

11. ALL STRUCTURAL STEEL SHALL BE ASTM A-36. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" INCHES AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO LAG SCREWS (1/2" DIAMETER x 4" LONG). LATERAL SUPPORT IS
CONSIDERED ADEQUATE PROVIDED THE JOIST ARE TOE NAILED TO THE SOLE PLATE, AND SOLE PLATE IS NAILED OR BOLTED TO THE BEAM FLANGE @ 48" O.C. ALL STEEL TUBING SHALL BEASTM A500.

12. REBAR SHALL BE DEFORMED STEEL, ASTM615, GRADE 60.

13. FLITCH BEAMS SHALL BE BOLTED TOGETHER USING (2) ROWS OF 1/2" DIAMETER BOLTS (ASTM A325) WITH WASHERS PLACED UNDER THE THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" O.C. (MAX), AND STAGGERED AT THE TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH 2 BOLTS LOCATED AT 6" FROM EACH END.

14. BRICK LINTELS SHALL BE 3 1/2"x3 1/2"x1/4" STEEL ANGLE FOR UP TO 6'-0" SPAN AND 6"x4"x5/16" STEEL ANGLE WITH 6" LEG VERTICAL FOR SPANS UP TO 9'-0" (UNO).

15. THE POSITIVE AND NEGATIVE DESIGN PRESSURE FOR DOORS AND WINDOWS FOR A MEAN ROOF HEIGHT OF 35 FEET OR LESS SHALL BE 25 PSF. THE POSITIVE AND NEGATIVE DESIGN PRESSURES REQUIRED FOR ANY ROOF OR WALL CLADDING APPLICATION NOT SPECIFICALLY ADDRESSED IN THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2018 EDITION SHALL BE AS
FOLLOWS: :
ROOF
45.4 PSF - 2.25:12 PITCH OR LESS
34.8 PSF - 2.25:12 TO 7:12 PITCH
21 PSF - 7:12 TO 12:12 PITCH :

<u>FRAMING NOTES</u>

NC (2018): WIND; 115-120 mph

1. BRACING METHOD AND TYPE/ CONTINUOUSLY WSP, CS-WSP
NOTE THAT THE WALL BRACING AMOUNT PROVIDED ON THE PLANS (DETAILS AND SPECIFICATIONS) IS GREATER THAN THE AMOUNT OF WALL BRACING REQUIRED BY SECTION R602.10 OF THE CODE. SEE NOTES BELOW FOR DETAILS AND SPECIFICATIONS FOR WALL BRACING AND FRAMING.

2. EXTERIOR WALL, SHEATHING WALLS SHALL BE BRACED BY SHEATHING WALLS ON ALL STORIES WITH WOOD STRUCTURAL PANEL SHEATHING (WSP) (EXPOSURE B. 7/16 ". EXPOSURE C 15/32") SHEATHING SHALL BE ATTACHED WITH 8d NAILS AT A 6"/12" NAILING PATTERN (6" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES.

3. WSP SHEATHING SHALL EXTEND TO THE UPPERMOST DOUBLE BEARING PLATE. BLOCK AT ROOF PER SECTION R602.10.4.5 AND ATTACH BRACED WALLS PER CODE. WSP SHEATHING BETWEEN FLOORS SHALL BE SPLICED ALONG CONTINUOUS BAND OR THE WSP SHEATHING MAY BE SPLICED ACROSS STUDS (CONTINUOUS ACROSS FLOOR SYSTEM) WITH BLOCKING AT PANEL EDGES, (MINIMUM 12" BEYOND FLOOR BREAK) OR OTHER APPROVED METHOD.

4. " HD" =<u>HOLDOWN:</u> HOLD-DOWN DEVICE (NOTED AS "HD" ON PLANS) SHALL BE AN 800 POUND CAPACITY ASSEMBLY AS NOTED ON PLANS. SEE DETAIL FOR HOLD DOWN ASSEMBLY.
<u>** GROUND FIRST FLOOR:</u> USE " HD HOLD DOWN DETAIL" ON SHEET SD (OR EQUIV)
<u>** UPPER FLOORS</u> ATTACH BASE OF KING STUD WITH A SIMPSON CS22 STRAP DOWN ACROSS THE BAAND AND DOWN TO A STUD BELOW OR HEADER BELOW. EXTEND STRAP 7" MIN ALONG EACH STUD (OR HEADER) AND ATTACH EACH END W/(7) 8d NAILS.

5. INTERIOR BRACED WALL. (NOTED AS" IBW" ON PLANS) ATTACH 1/2" GYPSUM BOARDS (GB) ON EACH SIDE OF WITH A MIN 5d COOLER NAILS OR # 6 SCREWS @ 7" OC ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS.

6. INTERIOR BRACED WALL -WOOD STRUCTURAL PANEL, (NOTED AS " IBW--WSP ON PLANS). ATTACH ONE SIDE WITH 7/16" WSP -SHEATHING WITH 8d NAILS t 6 1/2" oc AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES. ATTACH GB OVER WSP AS REQUIRED. ATTACH OPPOSITE SIDE WITH 1/2" GB WITH A MIN 5d COOLER NAIL OR # 6

<u>HEADER/BEAM & COLUMN NOTES</u>

1. ALL EXTERIOR LOAD BEARING HEADERS SHALL BE MIN (2) 2X10 (4" WALL) OR (3) 2X10 (6" WALL) WITH (1) SUPPORT STUD, UNLESS NOTED OTHERWISE.

2. THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD POCKET OR COLUMN. THE NUMBER OF KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM "d" IN TABLE R602.3(5) OR AS BELOW PER NCDOI COMMENTARY "KING STUDS AT WALL OPENINGS" REVISED 1-9-2020

- UP TO 3" SPAN (1) KING STUD
- OVER 3' UP TO 6' SPAN (2) KING STUDS
- OVER 6' UP TO 9' SPAN (3) KING STUDS
- OVER 9' UP TO 12' SPAN (4) KING STUDS
- OVER 12' UP TO 15' SPAN (5) KING STUDS

FOUNDATION STRUCTURAL NOTES:
(100 MPH WIND ZONE)

1 ~~(3) 2 x 12 SPF #2 GIRDER, TYPICAL UNO.~~

2 CONCRETE BLOCK PIER SIZE SHALL BE FOR MASONRY OPTION:

SIZE	HOLLOW MASONRY	SOLID MASONRY
8 x 16	UP TO 32" HIGH	UP TO 5'-0" HIGH
12 x 16	UP TO 48" HIGH	UP TO 9'-0" HIGH
16 x 16	UP TO 64" HIGH	UP TO 12'-0" HIGH
24 x 24	UP TO 96" HIGH	

WITH 30" x 30" x 10" CONCRETE FOOTING, UNO.

3 WALL FOOTING AS FOLLOWS FOR MASONRY OPTION:

DEPTH: 8" - UP TO 2-1/2 STORY
10" - 3 STORY

WIDTH: SIDING (OR EQUAL)
- 16" - UP TO 2-1/2 STORY
- 18" - 3 STORY
BRICK VENEER
- 16" - 1 STORY
- 20" - 2 STORY
- 24" - 3 STORY

FOR FOUNDATION WALL HEIGHT AND BACKFILL REQUIREMENTS, REFER TO NORTH CAROLINA RESIDENTIAL CODE TABLE R404.1.1 (1 THRU 4)
NOTE: ASSUMED SOIL BEARING CAPACITY = 2000 PSF. CONTRACTOR MUST VERIFY SITE CONDITIONS AND CONTACT SOILS ENGINEER IF MARGINAL OR UNSTABLE SOILS ARE ENCOUNTERED.

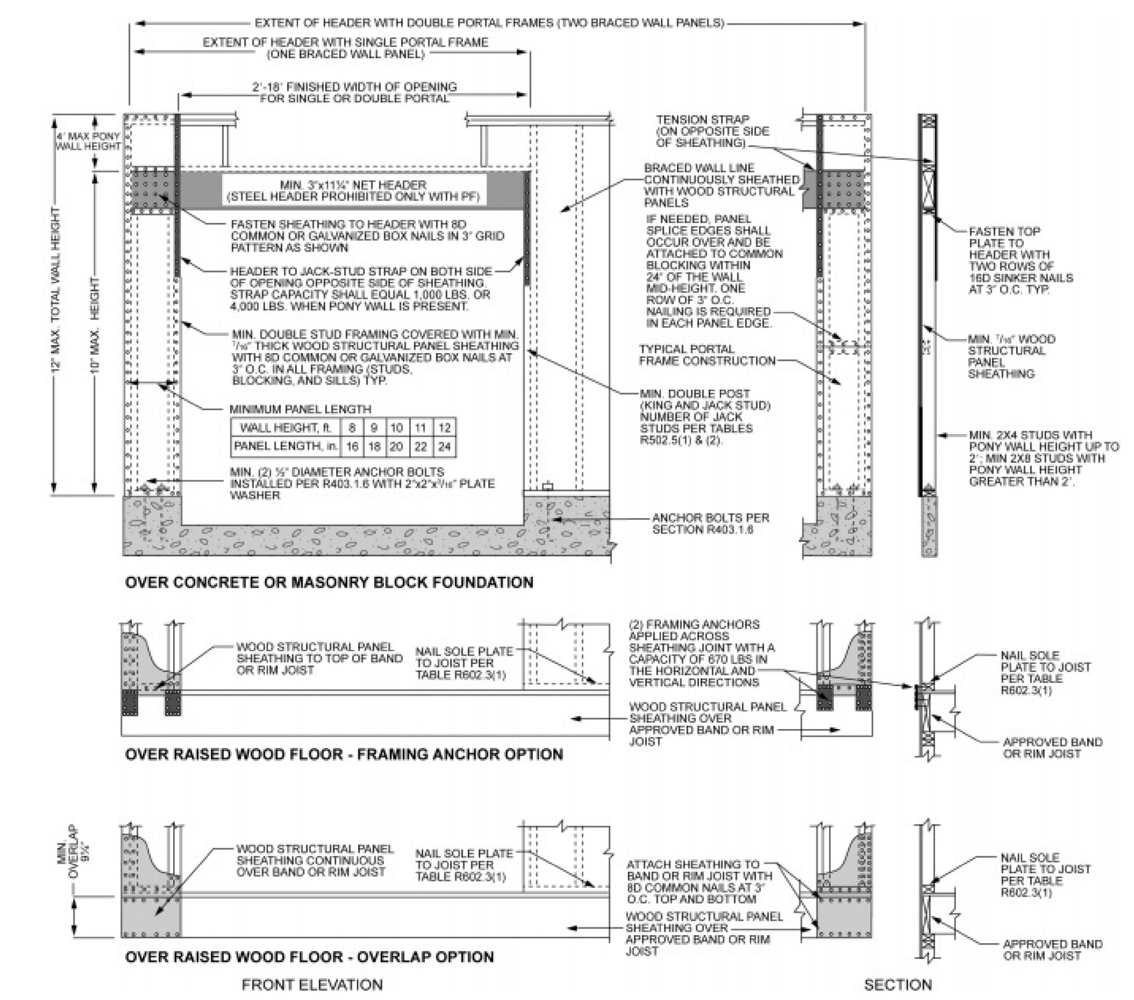
ATTACH SILL PLATE WITH 1/2"dia. ANCHOR BOLTS AT 6'-0" CENTERS (7" EMBEDMENT) AND 12" FROM EACH PLATE END. (SECTION R 403.1.6)

4 " " DESIGNATES A SIGNIFICANT POINT LOAD TO HAVE SOLID BLOCKING TO PIER. SOLID BLOCK ALL BEAM BEARING POINTS NOTED TO HAVE THREE OR MORE STUDS TO FND, TYPICAL.

5 ABBREVIATIONS:

"SJ" = SINGLE JOIST
"DJ" = DOUBLE JOIST
"TJ" = TRIPLE JOIST

CHAPTER 6 WALL CONSTRUCTION



For SI: 1 inch = 25.4 mm, 1 foot = 305 mm, 1 lb = 4.45 N.

FIGURE R602.10.1
METHOD PF—PORTAL FRAME CONSTRUCTION

PORTAL FRAME PER NCRB

R312.2Window fall protection.
Window fall protection shall be provided in accordance with Sections R312.2.1 and R312.2.2.

R312.2.1Window sills.
In dwelling units, where the top of the sill of an operable window opening is located less than 24 inches (610 mm) above the finished floor and greater than 72 inches (1829 mm) above the finished *grade* or other surface below on the exterior of the building, the operable window shall comply with one of the following:

1.Operable windows with openings that will not allow a 4-inch-diameter (102 mm) sphere to pass through the opening where the opening is in its largest opened position.
2.Operable windows that are provided with window fall prevention devices that comply with ASTM F2090.
3.Operable windows that are provided with window opening control devices that comply with Section R312.2.2.

R312.2.2Window opening control devices.
Window opening control devices shall comply with ASTM F2090. The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the net clear opening area of the window unit to less than the area required by Section R310.2.1.

NCRBC R310.1.1 Minimum Opening Area

All emergency escape and rescue opening shall have a minimum net clear openable area of of 4 square feet. The minimum net clear opening height shall be 22 inches.
The minimum net clear opening width shall be be 20 inches.

Emergency escape and rescue openings must have a minimum total glazing area of at not less than 5 square feet in the case of a ground floor level window and not less than 5.7 square feet in the case of an upper story window.

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REVISION TABLE

NUMBER	DATE	REVISED BY	DESCRIPTION

Frankie McCoy
4001 Traverse Drive
Fuquay Varina NC 27526-9650
919-272-0658

STRUCTUAL NOTES

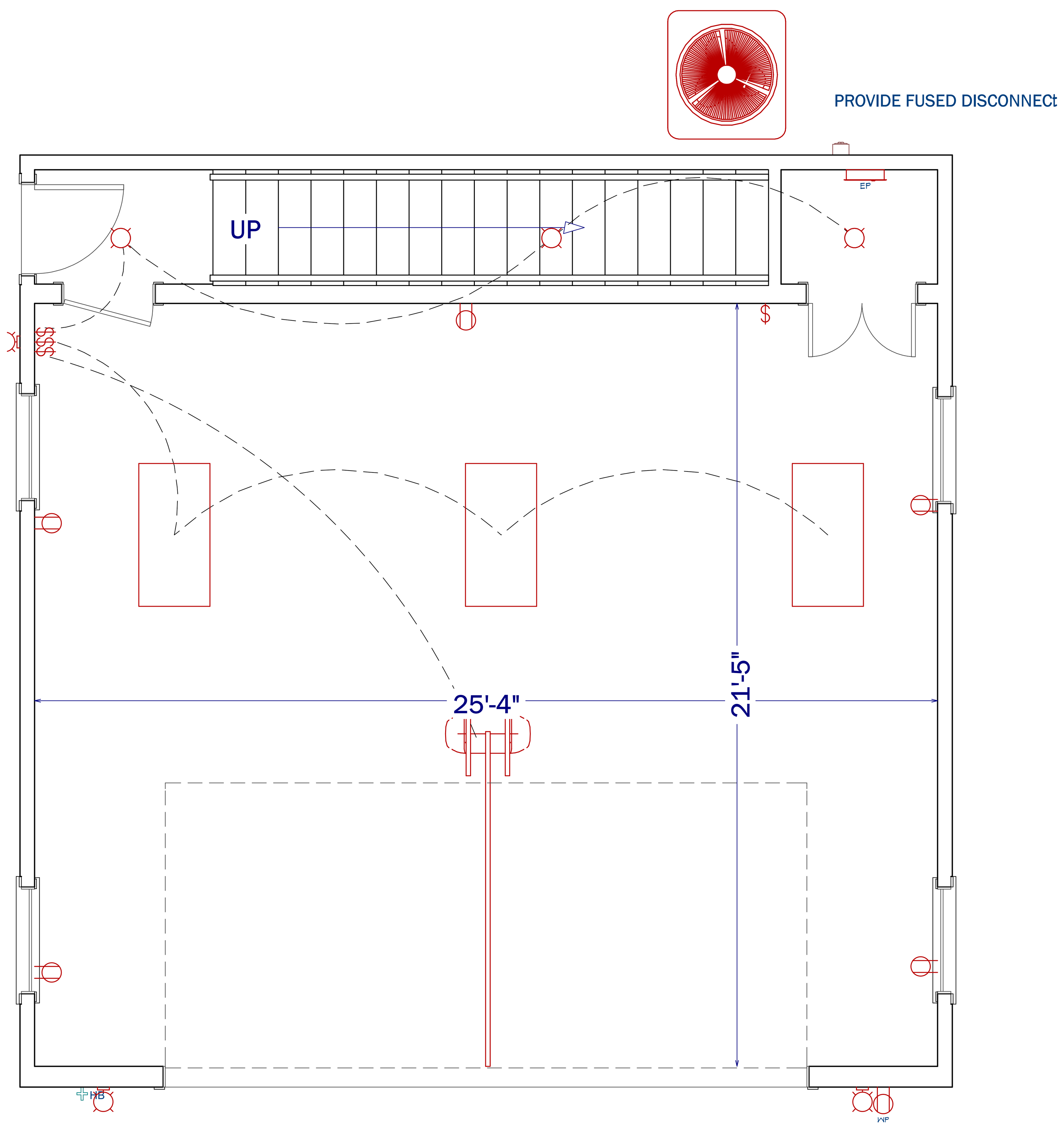
DRAWINGS PROVIDED BY:
PAYETTE DESIGNS
6049 EPPING FOREST DRIVE
RALEIGH, NC 27613
919-615-1247 Cell:919-697-2428
payettedesigns@gmail.com

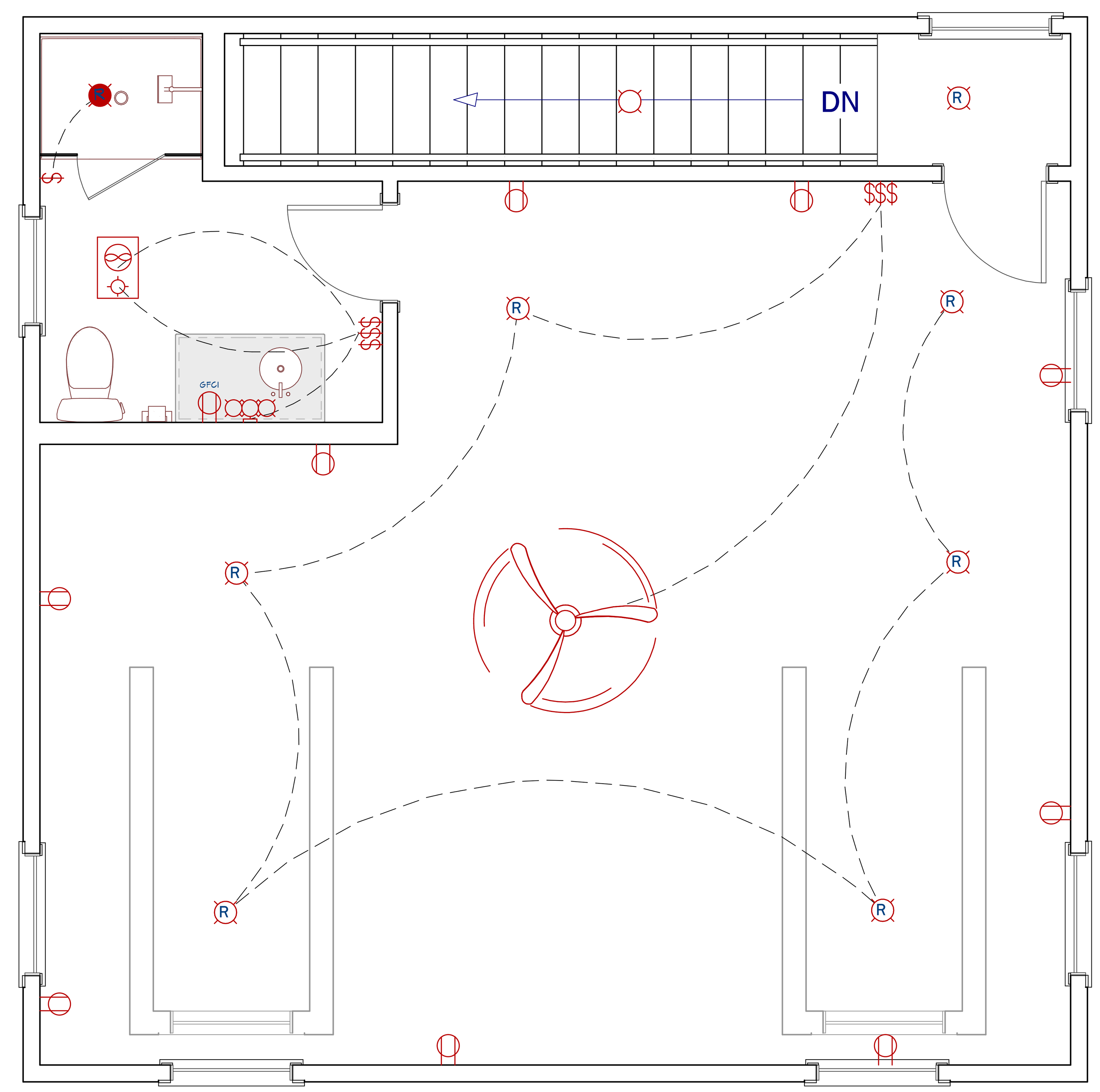
DATE: 12/13/2022

SCALE: NTS

SHEET: S1

ELECTRICAL PLANS ARE FOR GENERAL REFERENCE OWNER MAKE FINAL SELECTIONS AND LOCATIONS OUTSIDE SPOT. SECURITY AND EXTERIOR LANTERNS PLACED ON TIMER AND OR DAY NIGHT/ MOTION SENSING CIRCUIT.





ELECTRICAL SCHEDULE			
ROOM NAME	QTY	DESCRIPTION	COMMENTS
	1	DUPLEX WEATHERPROOF	
	3	EXTERIOR LANTERN 2	
BATH	1	3 GANG SWITCH	
BATH	1	EXHAUST (LIGHT)	
BATH	1	GFCI	
BATH	1	SCONCE 3	
BATH	1	SINGLE POLE SWITCH	
GARAGE	1	3 GANG SWITCH	
GARAGE	5	DUPLEX	
GARAGE	1	ELECTRICAL PANEL - SURFACE MOUNTED	
GARAGE	3	HALF DOME	
GARAGE	3	MEDIUM DOUBLE SURFACE MOUNTED TUBE LIGHT [48W21D]	
GARAGE	1	SINGLE POLE SWITCH	
STAIRWELL	1	HALF DOME	
STORAGE	1	3 GANG SWITCH	
STORAGE	1	CONDOR CEILING FAN	
STORAGE	9	DUPLEX	
STORAGE	6	RECESSED DOWN LIGHT 6	
UNSPECIFIED	1	RECESSED DOWN LIGHT 6	
UNSPECIFIED	1	RECESSED VAPOR LIGHT	

ELECTRICAL PLANS 3/8" =1'

ELECTRICAL, DATA, & AUDIO NOTES:
HOME OWNER SHALL DO A WALK-THRU WITH RELEVANT INSTALLERS TO VERIFY THE EXACT LOCATION FOR OUTLETS, LIGHTS, SWITCHES, CABLE, DATA, PHONE, AUDIO, ETC.

ELECTRICAL NOTES:
1. ELECTRICAL RECEPTACLES IN BATHROOMS, KITCHENS AND GARAGES SHALL BE G.F.I. ORG.F.I.C. PER NATIONAL ELECTRICAL CODE REQUIREMENTS.
2. PROVIDE ONE SMOKE DETECTOR IN EACH ROOM AND ONE IN EACH CORRIDOR ACCESSING BEDROOMS. CONNECT SMOKE DETECTORS TO HOUSE POWER AND INTER-CONNECT SMOKE DETECTORS SO THAT, WHEN ANY ONE IS TRIPPED, THEY ALL WILL SOUND. PROVIDE BATTERY BACKUP FOR ALL UNITS.
3. CIRCUITS SHALL BE VERIFIED WITH HOME OWNER PRIOR TO WIRE INSTALLATION.
4. FINAL SWITCHES FOR TIMERS AND DIMMERS SHALL BE VERIFIED WITH HOME OWNER.
5. FIXTURES TO BE SELECTED BY HOME OWNER.

AUDIO:
1. LOCATE SPEAKERS AND AUDIO CONTROLS AS INDICATED IN THE PLAN; RUN CIRCUIT OF SPEAKER WIRING TO AUDIO HOME PANEL SPECIFIED BY FLOOR;
2. AUDIO SPEAKERS TO BE APPROVED BY HOME OWNER;
3. LOCATE JACKS AS INDICATED IN THE PLAN; INSTALL DATA / CABLE PANEL SIMILAR TO "ON Q". SYSTEM TO BE APPROVED BY HOME OWNER.

DATA / CABLE:
LOCATE SECURITY PANELS AS INDICATED IN THE PLAN; SYSTEM TO BE APPROVED BY HOME OWNER.

ELECTRICAL - DATA - AUDIO LEGEND	
SYMBOL	DESCRIPTION
	Ceiling Fan
	Ventilation Fans: Ceiling Mounted, Wall Mounted
	Ceiling Mounted Light Fixtures: Surface/Pendant, Recessed, Heat Lamp, Low Voltage
	Wall Mounted Light Fixtures: Flush Mounted, Wall Sconce
	Chandelier Light Fixture
	Fluorescent Light Fixture
	240V Receptacle
	110V Receptacles: Duplex, Weather Proof, GFCI
	Switches: Single Pole, Weather Proof, 3-Way, 4-Way
	Switches: Dimmer, Timer
	Audio Video: Control Panel, Switch
	Speakers: Ceiling Mounted, Wall Mounted
	Wall Jacks: CAT5, CAT5 + TV, TV/Cable
	Telephone Jack
	Intercom
	Thermostat
	Door Chime, Door Bell Button
	Smoke Detectors: Ceiling Mounted, Wall Mounted
	Electrical Breaker Panel

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