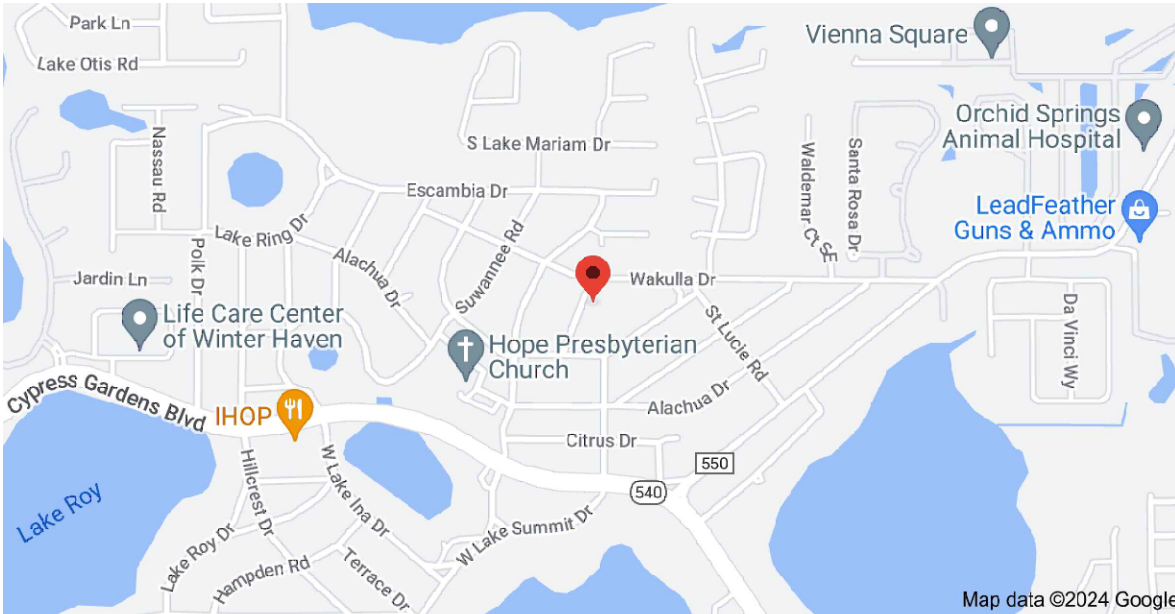
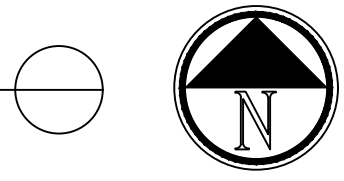


# CONSTRUCTION DRAWINGS



SITE LOCATION



## TABLE OF CONTENTS

NO	SHEET TITLE	NO	SHEET TITLE
1	TITLE SHEET	8	ELEVATIONS
2	SITE PLAN	9	NOTES
3	STRUCTURAL LAYOUT	10	NOTES
4	STRUCTURAL LAYOUT	11	NOTES
5	STRUCTURAL DETAILS	12	ELECTRICAL
6	STRUCTURAL DETAILS	13	PLUMBING
7	ELEVATIONS		

## PROJECT DATA

CLIENT NAME: PATRICK DUGGAN  
 ADDRESS: 116 PASCO RD.  
 WINTER HAVEN, FL 33884

DESCRIPTION: METAL HOUSE  
 OCCUPANT TYPE: R3

REFERENCE CODES  
 BUILDING: 2023 FLORIDA BUILDING CODE, 8TH ED.  
 BUILDING: 2023 FBC, RESIDENTIAL  
 BUILDING: 2023 FBC, EXISTING BUILDING  
 MECHANICAL: 2023 FBC, MECHANICAL  
 PLUMBING: 2023 FBC, PLUMBING  
 ELECTRICAL: 2023 NEC

USE GROUP CLASSIFICATION: LEVEL II  
 TYPE OF CONSTRUCTION: V-B  
 FLOOR CONSTRUCTION: CONCRETE SLAB  
 ROOF CONSTRUCTION: WOOD/METAL TRUSS

DESIGN LOADS:

ROOF LIVE LOAD	20 PSF.
FLOOR LIVE LOADS	40 PSF.
DECK LIVE LOADS	60 PSF.
ROOF DEAD LOAD	15 PSF.
FLOOR DEAD LOADS	30 PSF.
PRESUMPTIVE BEARING CAPACITY	2,000 PSF.
WIND SPEED	140 MPH
RISK CAT.	II
EXPOSURE CAT.	B
WIND LOADS	25 PSF.

SITE ADDRESS:

116 PASCO RD.  
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REV. 0  
 REV 1

07/09/24  
 08/21/24

ORIGINAL SET  
 BLDG. DEPT. COMM.



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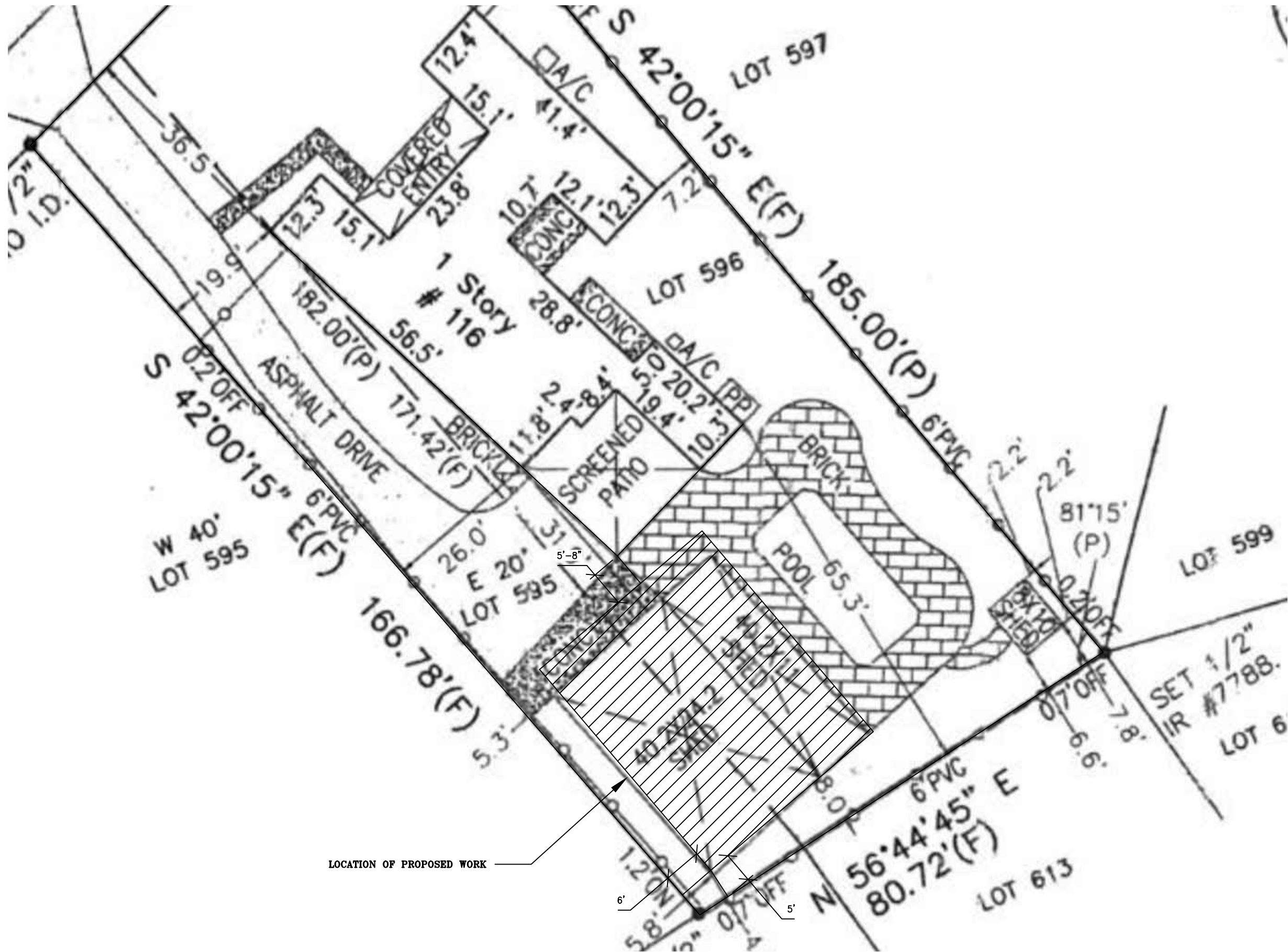
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SHEET DESCRIPTION:  
 TITLE SHEET

Sheet No.  
 1 OF 13

Drawing No.  
 T-1

\*THESE DRAWINGS ARE VALID FOR 1 YEAR FROM DATE OF SEAL



LOCATION OF PROPOSED WORK

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

1  
SI-1

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Scale AS SHOWN

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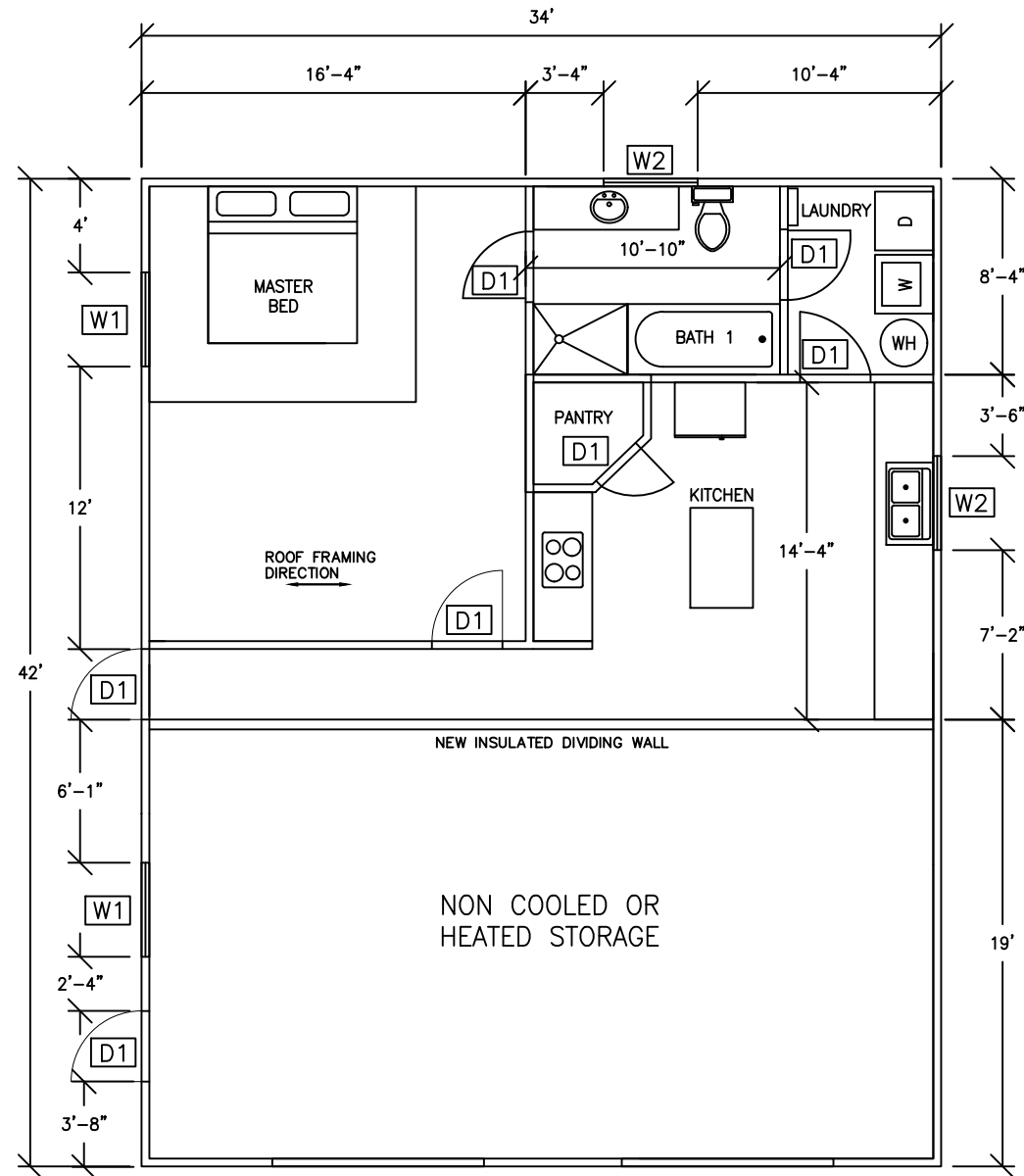
Sheet No. 2 OF 13

Drawing No. SI-1

# SCOPE OF WORK

1. EXISTING METAL BUILDING WITH NEW WOOD WALLS AND CEILING
2. PLUMBING AND ELECTRICAL ADDED TO HOUSE
3. 2 TON HVAC SYSTEM IN ATTIC. HVAC BLOWER ADDED TO CLOSET

DOOR & WINDOW SCH.			
NO	WIDTH X HEIGHT	NO	CATEGORY
1	4'-0" X 3'-0"	W1	CASEMENT
2	4'-0" X 2'-0"	W2	CASEMENT
3	3'-0" X 6'-8"	D1	SINGLE DOOR



FIRST FLOOR PLAN 1  
 SCALE: 1/8" = 1'-0" S-1

SITE ADDRESS:

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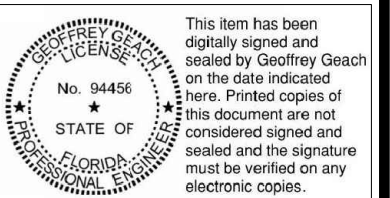
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SHEET DESCRIPTION:  
 LAYOUT

Sheet No.  
 3 OF 13

Drawing No.  
 S-1

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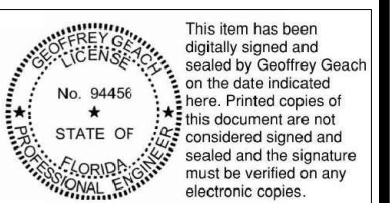
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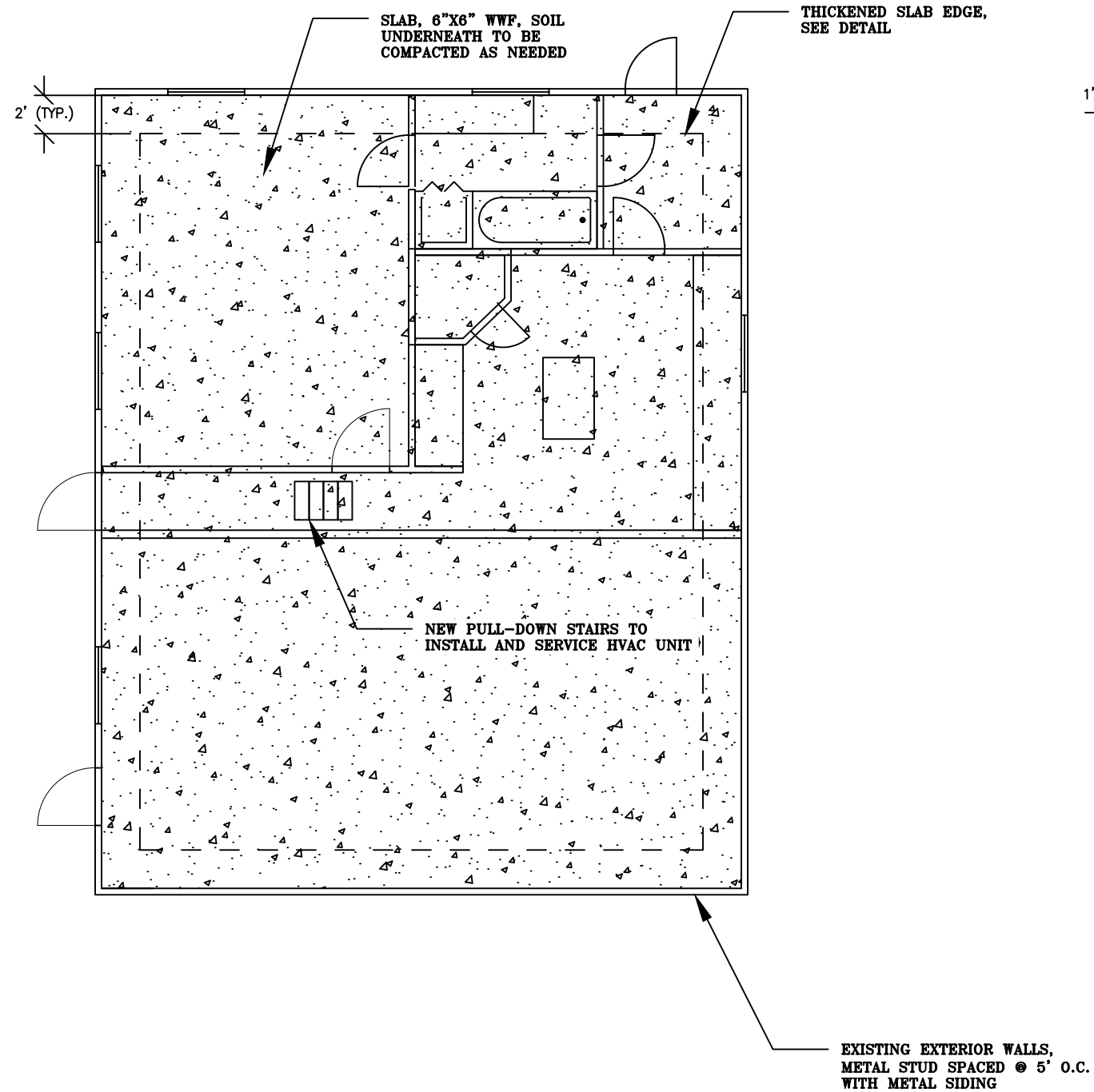
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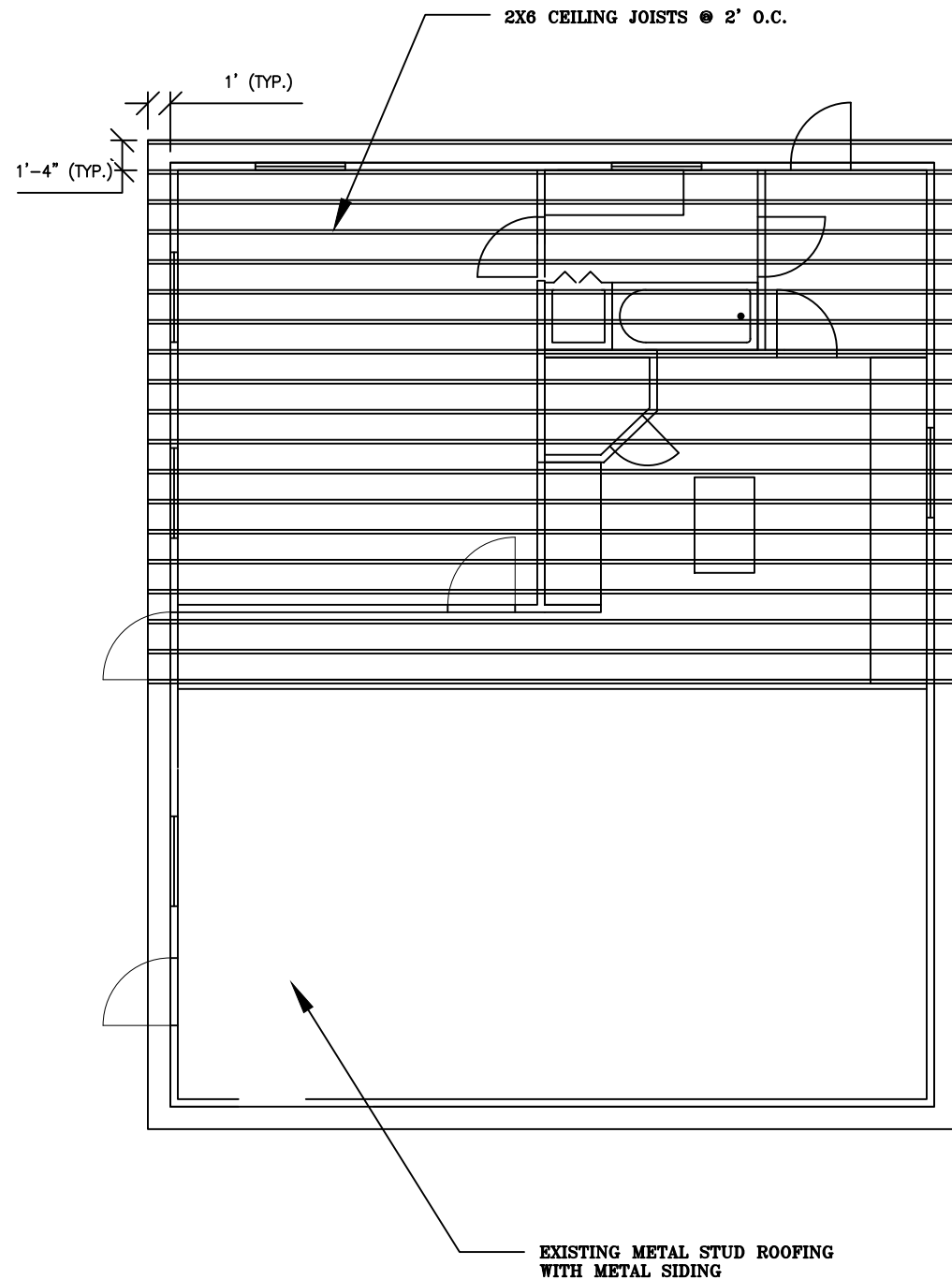
Sheet No.  
4 OF 13

Drawing No.

S-2



FOUNDATION PLAN (1)  
SCALE: 1/8" = 1'-0" (S-2)



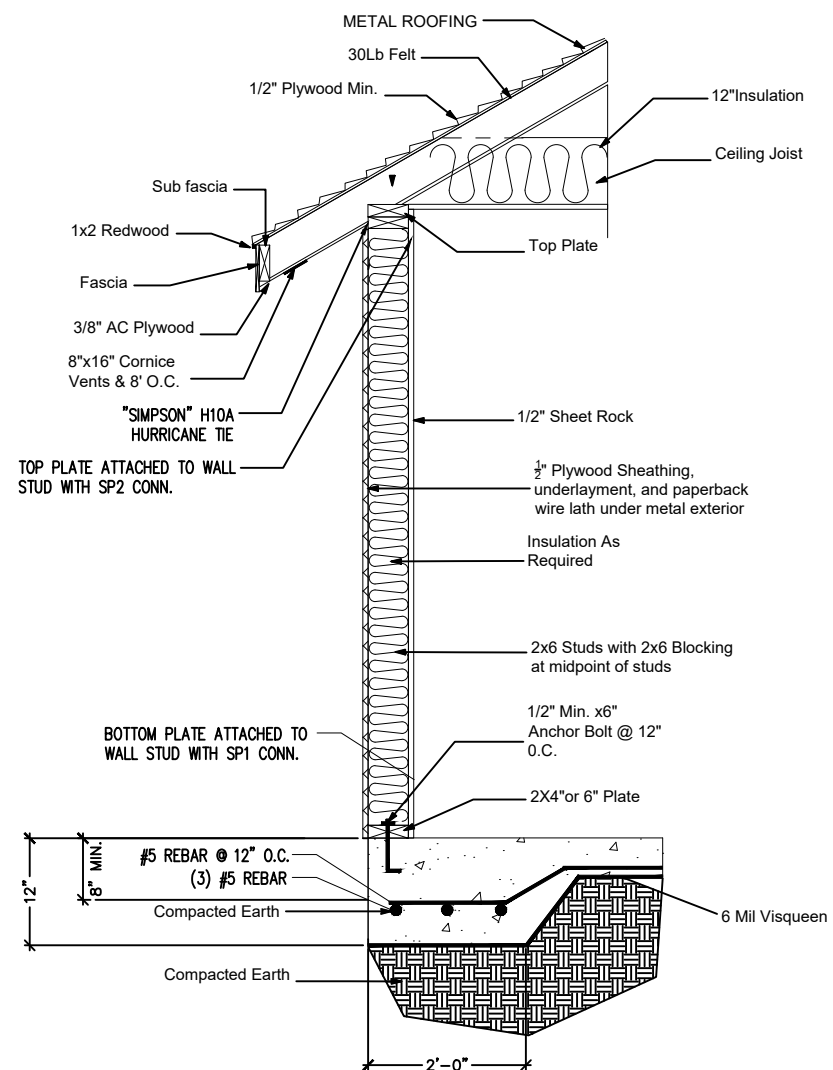
ROOF PLAN (2)  
SCALE: 1/8" = 1'-0" (S-2)

SITE ADDRESS:

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REV 1	08/21/24	BLDG. DEPT. COMM.

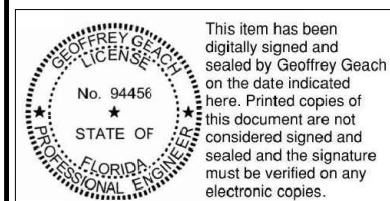


WALL SECTION 1  
 SCALE: 1/8" = 1'-0" S-3



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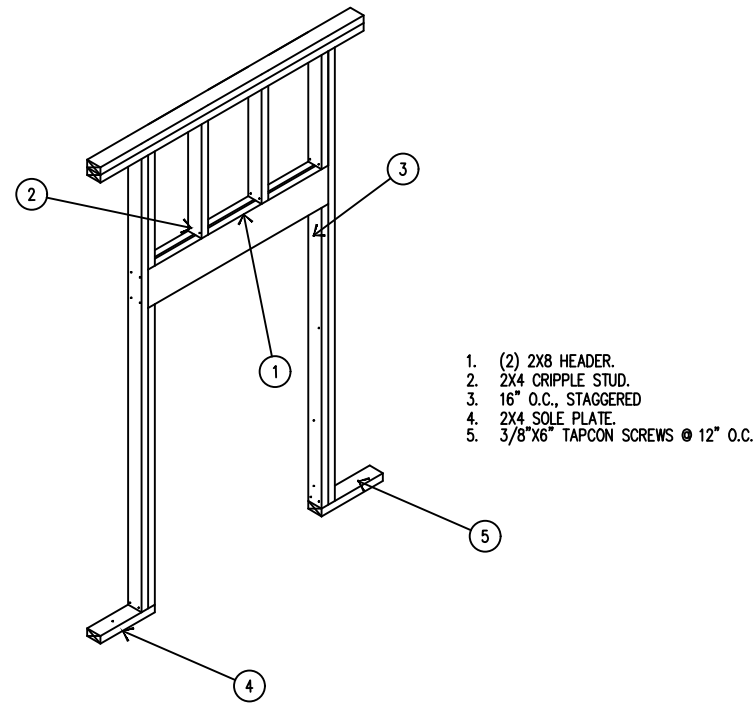
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7/9/2024

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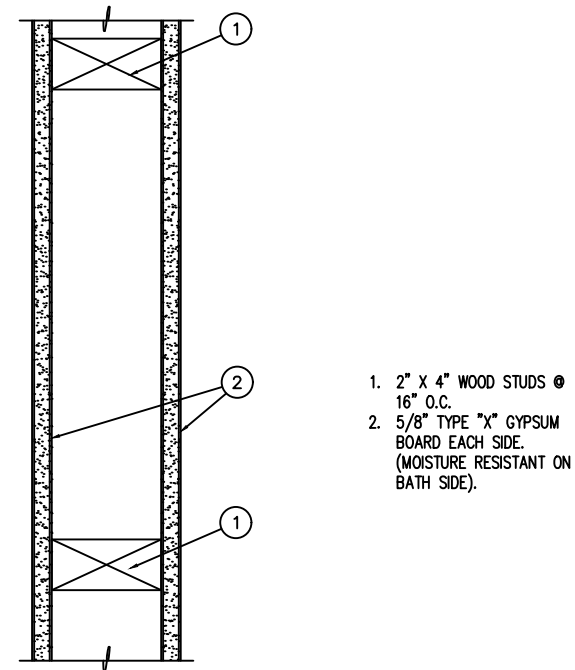
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DETAILS

Sheet No.  
5 OF 13

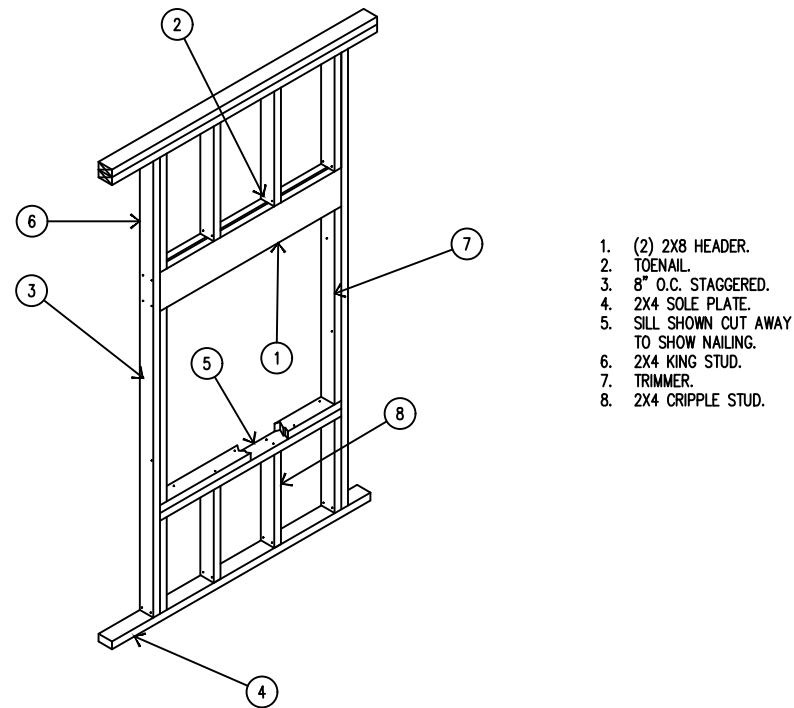
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S-3



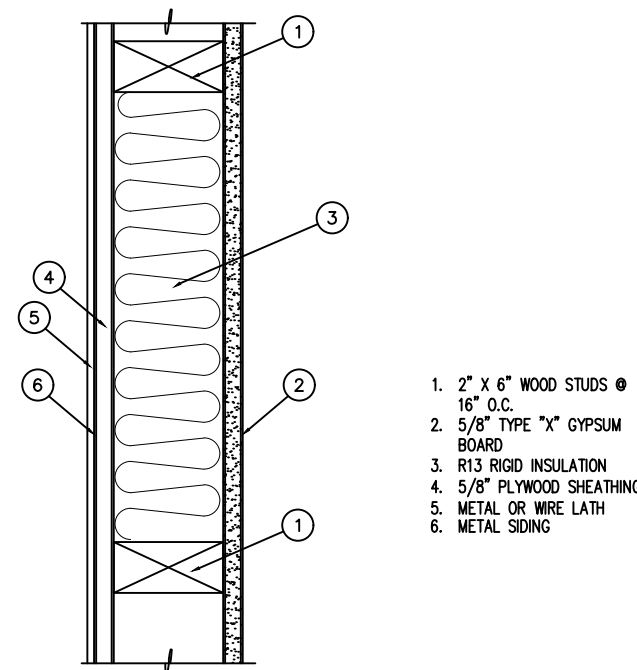
WOOD DOOR 1  
SCALE: 1/8" = 1'-0" S-4



INTERIOR WOOD WALL 2  
SCALE: 1/8" = 1'-0" S-4



WOOD WINDOW 3  
SCALE: 1/8" = 1'-0" S-4



EXTERIOR WALL DETAIL 4  
SCALE: 1/8" = 1'-0" S-4

SITE ADDRESS:

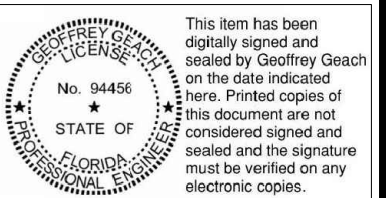
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REV 1	08/21/24	BLDG. DEPT. COMM.



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DETAILS

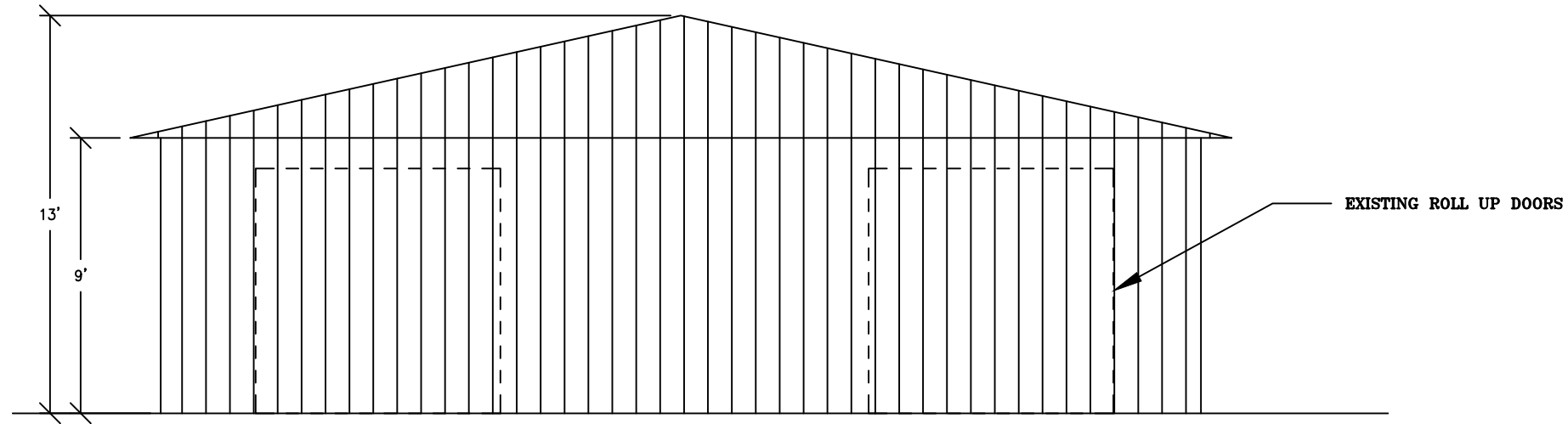
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6 OF 13

Drawing No.  
S-4

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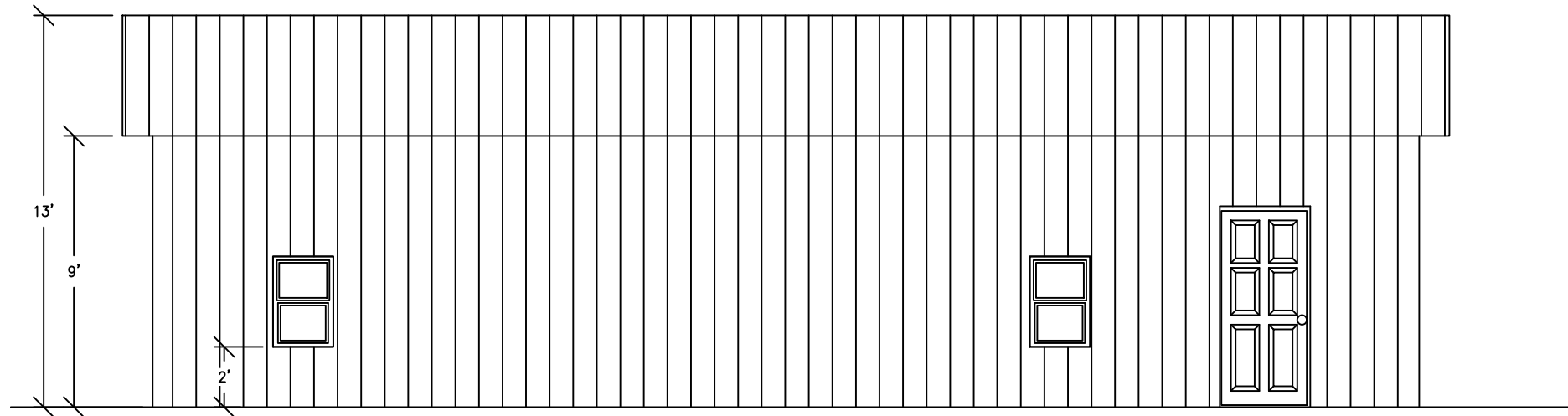
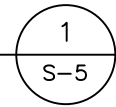
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REV 1	08/21/24	BLDG. DEPT. COMM.



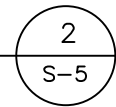
FRONT ELEVATION

SCALE: 3/16" = 1'-0"



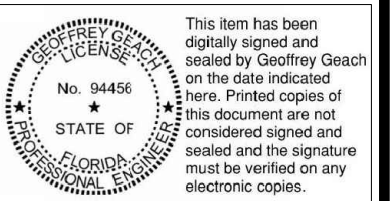
SIDE ELEVATION

SCALE: 3/16" = 1'-0"



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SHEET DESCRIPTION:  
ELEVATIONS

Sheet No.  
7 OF 13

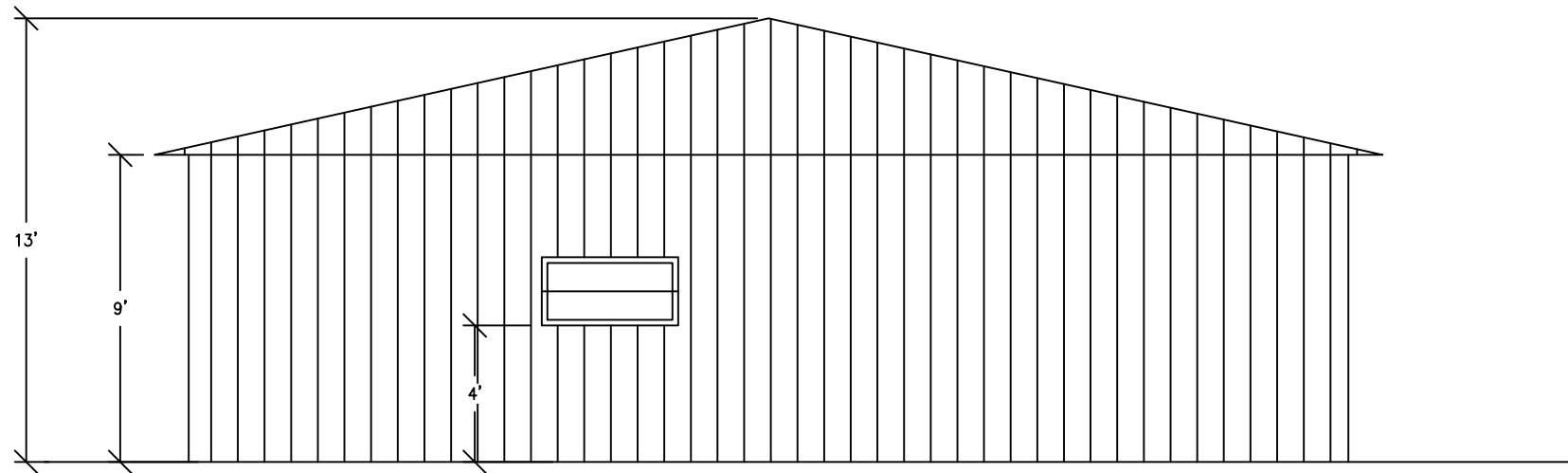
Drawing No.

S-5

SITE ADDRESS:

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REV 1	08/21/24	BLDG. DEPT. COMM.



REAR ELEVATION

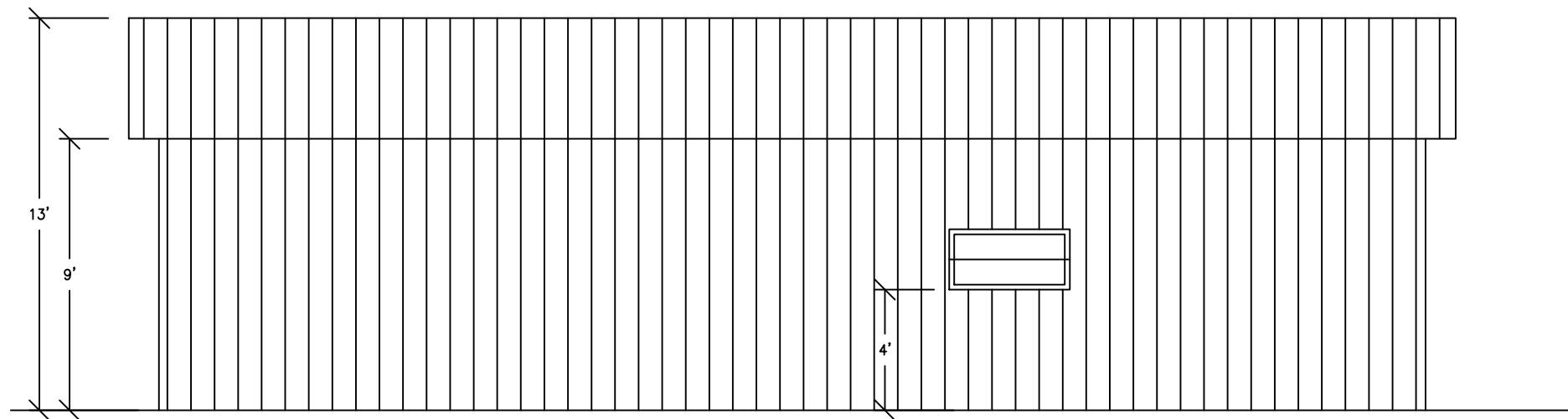
SCALE: 3/16" = 1'-0"

1  
S-6



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SIDE ELEVATION

SCALE: 3/16" = 1'-0"

2  
S-6

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SHEET DESCRIPTION:  
ELEVATIONS

Sheet No.  
8 OF 13

Drawing No.  
S-6



SITE ADDRESS:

116 PASCO RD.

WINTER HAVEN, FL 33884

REV. 0 REV 1	07/09/24 08/21/24	ORIGINAL SET BLDG. DEPT. COMM.
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**GENERAL REQUIREMENTS:**

1. General Contractor shall be responsible for verifying all dimensions and conditions including opening with the architectural and electrical plans.
2. This structure shall be adequately braced for wind loads until the roof, floor and walls have been permanently attached together.
3. Any discrepancy in plans is to be brought to attention of the designer prior to proceeding with work.
4. Contractor shall fully comply with the current edition of the FLORIDA BUILDING CODE requirements and all additional state requirements. Any work knowingly performed by the contractor contrary to such laws, ordinances, or regulations shall assume full responsibility of such work.
5. Contractor shall perform coordination with all utilities and services with state and local authorities and utilities.
5. THE CONTRACTOR ASSUMES FULL LIABILITY FOR THE STRUCTURE DURING CONSTRUCTION EXCEPT IN CASES WHERE THE TEMPORARY BRACING AND CONSTRUCTION METHODS ARE INCLUDED IN THE PLANS
6. CONTRACTOR TO COORDINATE FURNISHINGS, UTILITIES, AND APPLIANCES LAYOUT WITH THE OWNER CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGES AND CLEANING ANY DIRT FROM SURFACES BACK TO ORIGINAL CONDITIONS AFTER COMPLETION OF WORK.

**DESIGN LOADS:**

The contractor shall be responsible for complying with Chapter 4 of the current CABO for all framing execution and for verification of all local design loads.

Roof	Live Load = 20 PSF
Floor	Live Load = 40 PSF
Decks	Live Load = 60 PSF
Garage	Live Load 50 PSF (2000 lb pt. load 1' from
Stairs	Live Load = 100 PSF
Soil Bearing Capacity	2000 PSF (assumed)
Wind	SEE T-1 FOR WIND LOAD INFORMATION
Seismic	NOT REQUIRED FOR RISK CAT. 1 AND 2

**SITE WORK:**

- Earthwork:**
1. Footings to bear on undisturbed soil with min depth Below final grade of 1' 6" for 1 & 2 story and 2'-0" for 3 story, unless noted otherwise.
  2. Do not excavate closer than 1 1/2 = 2 slope below footings.
  3. Backfill shall consist of non-expansive, free-draining, predominately granular material, free of debris and organic material.

**Drainage:**

1. Provide crawl space drain per Section 1506.5, 1804.7, 1806.5.5 and Appendix 3315 current FBC.

**CONCRETE:**

**Accessories:**

1. Foundation vents 16" X 8" with 8-mesh corr. resist screen (closable)- post closable vent notice on electrical panel door.
2. Cover entire ground area of crawl space with mil. black visqueen and extend up to mud sill.
3. Foundation wall to have 1/2" airspace @ sides and ends of beams @ girders.
4. Foundation thickness indicated are minimum.
5. All concrete shall develop a min. 28 day strength OF 3,000 PSI AND INSTALLED IN ACCORDANCE WITH ACI CURRENT CODE

**REINFORCEMENT:**

1. Reinforcement bars to be deformed bars conforming to current ASTM A615 Grade 60. All reinforcement steel shall be detailed, fabricated and placed in accordance with ACI Detailing Manual 315-80.
2. All welded wire fabric shall conform to current ACTM A185 specs.
3. Garage floor to have 6X6X6/6 WWM centered in slab.
4. Reinforcement shall be accurately placed and adequately supported by concrete, metal or other approved chairs, spacers, or ties and secured against displacement during concrete or grout placement. ALL REINFORCEMENT TO BE CORROSION RESISTANT.

**STRUCTURAL STEEL:**

1. All structural steel shall be ASTM A-36 detailed, fabricated and erected in accordance with AISC Manual CURRENT Edition. ALL STEEL TO BE CORROSION RESISTANT.
2. All welding to be done by certified welders in accordance with minimum AWS specifications.
3. All anchor bolts to be ASTM 307.

**STEEL ACCESSORIES:**

1. Foundation bolts to be MIN. 1/2" dia X 10" with not less than 7" embedment into concrete.
2. Holdown at foundation and steel connectors to be Simpson Mfg. or approved equal.
3. ALL STEEL ACCESSORIES ARE TO BE CORROSION RESISTANT.

**MASONRY:**

1. CONCRETE MASONRY UNITS SHALL HAVE F'M OF AT LEAST 1,500 PSI
2. All voids containing reinforcement bars shall be reinforced with 1-#5 vertical bars, placed accurately at centerline of grout cores at 4'-0".
3. Provide 2'-0" x 2'-0" corner bars equal in size and number to horizontal reinforcing at all intersections and corners of brick walls.
4. MASONRY BLOCKS SHALL BE IN ACCORDANCE WITH ASTM C90 AND MORTAR TO BE IN ACCORDANCE WITH ASTM C270. ALL MASONRY CELLS ARE TO BE FILLED WITH GROUT.

**MASONRY or STONE VENEER:**

1. All veneer shall be anchored to structural elements using corrosion resistance anchor ties. The ties shall be minimum 22 ga. x 1" with maximum vertical and horizontal spacing of 16" O.C..

**WOOD**

**Framing Lumber:**

1. All sawn lumber shall be #2 SOUTHERN YELLOW PINE Lumber erected as required by FBC nailing schedule, plan & details and in specifications.
2. ALL EXTERIOR LUMBER TO BE PRESSURE TREATED AND CONNECTED USING GALVANIZED STEEL BOLTS.

**Sheathing Materials:**

1. Plywood Wall sheathing 1/2" thick C-D interior with exterior glue index 32/16 nailed
2. Plywood Floor Sheathing 1/2" min thick C-D interior glued & nailed.
3. Plywood Roof Sheathing 1/2" thick C-D interior with exterior glue index 32/16 nailed
4. Particle Board Underlayment 1/2" thick CS-236-66 mat formed type 1-B-2.
5. Water Resistant Particle Board 1/2" thick phenolic resin treated type 2-B-2. Installed at kitchen and bathroom.

**Interior Decking:**

1. Use 2-4-1 T&G D/F plywood Subfloor over post & beam.

**Exterior Decking:**

1. Open decking and weather exposed material to be pressure treated.

**Pre-Engineered Roof Trusses:**

1. Trusses shall conform to all provisions of the current edition of of FBC (or local Code requirements) for standards for design and materials.

**Pressure Treated Lumber:**

1. All wood in permanent contact with concrete to be pressure treated or decay resistant

**CONSTRUCTION ACCESSORIES:**

1. Building Paper---"Tyvek" Housewrap
2. Provide hurricane ties at eaves per current edition of FBC or local code requirements.
3. Provide earthquake ties as necessary as per earthquake zone

**Insulation: Prescriptive Path One**

1. Roof Vaulted R-30 with vapor barrier on warm side (winter).  
Roof Flat R-38 with vapor barrier on warm side (winter).
2. Wall (ext) R-13 with vapor barrier on warm side (winter).
3. Floors over unheated spaces R-25 with vapor on warm side (winter).
4. Basement floor slab on grade R-15 in 24" at perimeter.
5. Furnace ducts in unheated spaces R-8.

**Flashings:**

1. Provide 26 ga. metal at roof counter-flashing, penetration flashing and base flashing.
2. Gutters and downspouts to be 25 ga. pre-finish metal.

**Caulking and Sealants:**

1. Caulk and/or seal all exposed interior and exterior joints above and below grade and all those interior and exterior joints and appendages concealed by other building materials, flashing, etc. with caulking and/or sealant material abutting natural or painted finishes.

**WINDOWS and DOORS:**

1. All windows to be U40 insulated glass or better. Provide tempered glass at sliding doors, windows within 12" of any door and windows less than 18" above finish floor.
2. All skylites to be U50 insulated, tempered glass.
3. All exterior wood doors to be solid core wood as selected by owner, or prefinished steel doors with wood frames. Main entry doors to be U54, all other exterior doors to be U20. All interior doors to be hollow core, wood frame.
4. Each bedroom to have at least one window with min. clear opening of 5.7 Sq. Ft., min., height opening of 24", min., width opening of 20" and max. 44" sill height above finish floor.
5. ALL EXTERIOR GLASS SHALL BE IMPACT RESISTANT OR UTILIZE HURRICANE SHUTTERS

**FINISHES:**

**Gypsum Wallboard:**

1. Provide gypsum wallboard of type and thickness as indicated on drawings. Gypsum board work and materials shall meet requirements on ANSI No. 97-1 for the "Application and finish of Wallboard". Joint compound system mixed, applied and finished in compliance with MFG printed directions, to be invisible after finish, including all metal corner beads and trim.
2. Provide 1/2" thick gypsum wallboard at all interior walls, except at tub and shower recess, walls to have 1/2" waterproof gypsum wallboard with hard moisture resistant surface up min. 6'-0". Walls between garage and residence to have 5/8" gypsum X Type Fire rated wallboard to roof or on all walls and ceiling or as indicated by drawings or local codes.

**MECHANICAL:**

1. General plumbing: Per current plumbing code. Use ABS/PVC plastic waste and vent piping. Use copper water supply piping.
2. Exhaust fans, range hood and clothes dryer to vent outside.

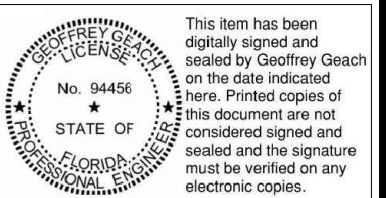
**ELECTRICAL:**

1. General Electrical: Per current electrical code and as notes on drawings.
2. Smoke detectors shall be connected to house power and interconnected floor to floor.



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7/9/2024

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SHEET DESCRIPTION:  
NOTES

Sheet No.  
9 OF 13

Drawing No.  
N-1

**Shearwall Schedule**

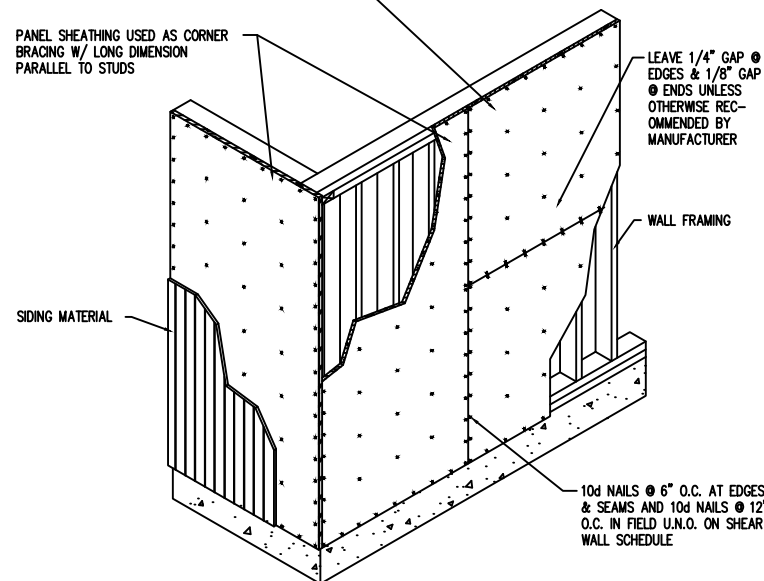
- 7/16" plywood with all edges to be nailed 8D @ Max. 4" O.C..
- 7/16" plywood with all edges to be nailed 8D @ Max. 4" O.C., provide strapping around all windows and doors.
- ALL EXTERIOR WALLS TO BE CONSTRUCTED AS SHEAR WALLS

**NOTE:**

- 7/16" particle board or OSB may be used in lieu of plywood in shearwalls.
- Applications: Grade w/ exterior glue.
- Should staples be substituted for nails in shearwall application, use 14ga. staples in lieu of 8D nails.
- Provide 3x blocking along all unsupported plywood panel edges unless otherwise noted.
- Nail sheathing to holdown stud w/ panel edge nailing per above shearwall schedule.
- Use Simpson Anchor Bolts as indicated at foundation locations. Where multiple studs are substituted for 4x and 6x memebrrs nail studs together w/16D @ 4" O.C. (Staggared along entire length. Provide required bolts and nuts to secure Simpson holdowns) (See Simpson catalog for proper installation of holdowns).

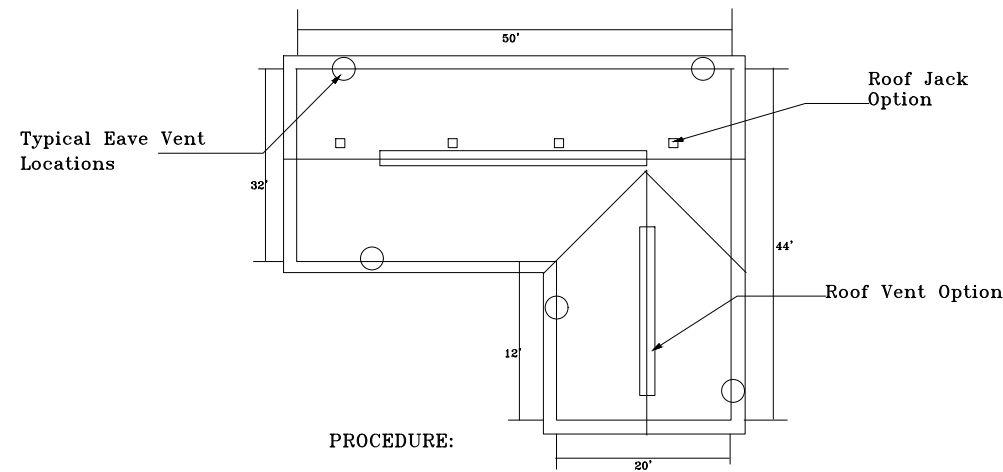
CDX PLYWOOD SHEAR WALL INSTALLED W/ LONG DIMENSION ACROSS STUDS. STAGGER VERTICAL JOINTS

PANEL SHEATHING USED AS CORNER BRACING W/ LONG DIMENSION PARALLEL TO STUDS



**TYPICAL SHEAR WALL**  
N.T.S.

**ROOF VENTILATION REQUIREMENTS**

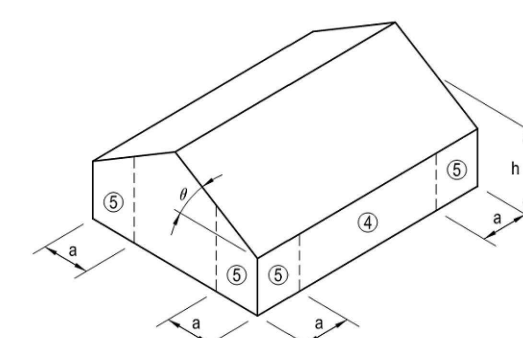
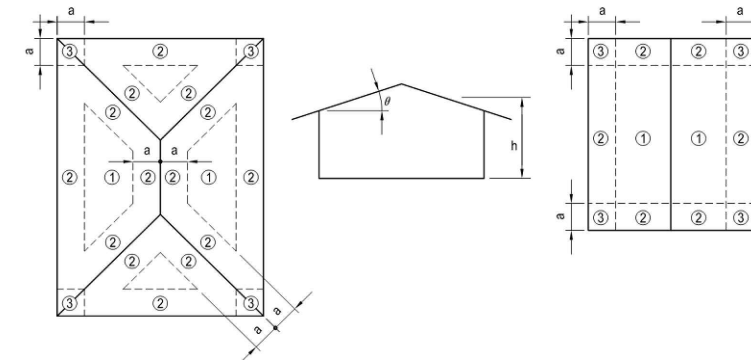


- Ceiling Area:**  
Example:  $(32 \times 50) + (12 \times 20) = 1840 \text{ sf}$
- Vent Area Required**  
Example: 1sf Vent PER 300 sf ceiling area  
 $1840 \text{ sf Ceiling Area} \div 300 = 6.13 \text{ sf Total Vent Area Required}$
- Distribution Vents**  
Example: 50% (3sf) at Ridge  
50% (3sf) at Eave
- Number of Vents:**  
Eave Vents:  $\frac{3 \text{ sf}}{0.9 \text{ sf Net Free Area Per Vent}} = 3-4 \text{ Vents}$   
Ridge Vents:  $\frac{3 \text{ sf Required Area}}{0.6 \text{ sf Net Free Area Per Vent}} = 5 \text{ Vents}$   
or  
Continous Ridge Vents:  
 $\frac{18 \text{ sq.in. PER Lin Ft}}{144 \text{ sq.in. PER Sq. Ft}} = .125 \text{ sq.ft PER lin ft.}$   
 $\frac{3 \text{ sf REQUIRED AREA}}{0.125 \text{ sf}} = 24 \text{ Lin Ft}$

NOTE: VENT RATIO MUST BE INCREASED TO 1/150 IF VENTS ARE ALL ON ONE LEVEL.

**FOUNDATION NOTES:**

- FOOTINGS ARE TO BEAR ON UNDISTURBED LEVEL SOIL DEVOID OF ANY ORGANIC MATERIALS AND STEPPED AS REQUIRED TO MAINTAIN THE REQUIRED DEPTH BELOW THE FINAL GRADE.
- SOIL BEARING PRESSURE ASSUMED TO BE 2000 PSI.
- ANY FILL UNDER GRADE SUPPORTED SLABS TO BE A MINIMUM OF 4" GRANULAR MATERIAL COMPACTED TO 95%.
- CONCRETE: 3000 PSI
- CONCRETE SLABS TO HAVE CONTROL JOINTS AT 20' (MAXIMUM) INTERVALS EACH WAY.
- CONCRETE SIDEWALKS TO HAVE TOOLED JOINTS AT 5' O.C. (MINIMUM)
- REINFORCED STEEL TO BE A-815 GRADE 40. WELDED WIRE MESH TO BE A-185.
- EXCAVATE THE SITE TO PROVIDE A MINIMUM OF 18" CLEARANCE UNDER ALL GIRDERS.
- COVER ENTIRE CRAWLSPACE WITH 6 MIL BLACK "VISQUEEN" AND EXTEND UP FDTN. WALLS TO P.T. MUDSILL.
- PROVIDE A MINIMUM OF 1 SQ. FT. OF VENTILATION AREA FOR EACH 150 SQ.FT. OF CRAWLSPACE AREA. VENTS ARE TO BE CLOSABLE WITH OPENINGS IN CORROSIVE RESISTANT SCREEN. POST NOTICE RE: OPENING VENTS ARE THE ELECTRICAL PANEL.
- ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED OR PROTECTED WITH SILL PLATE.
- BEAM POCKETS IN CONCRETE TO HAVE 1/2" AIRSPACE AT SIDES AND ENDS WITH A MINIMUM BEARING OF 3".
- PROVIDE CRAWLSPACE DRAIN AS PER 2910 OF FBC.
- WATERPROOF BASEMENT WALLS BEFORE BACKFILLING PROVIDING A 4" PERFORATED DRAIN TILE BELOW THE TOP OF THE FOOTING.
- BACKFILL FORMS, SHORING AND POURING METHODS MUST CONFORM TO UP TO DATE A.C.I STANDARDS.
- DAY STRENGTH AND NOT BEFORE STRUCTURAL FLOOR FRAMING (INCLUDING SUB-FLOOR) IS IN PLACE. (FRAMING MUST BE FULLY NAILED AND ANCHORED)
- ALL CONCRETE IN FOUNDATION SHALL DEVELOP A MIN. COMPRESSION STRENGTH OF 3000 PSI IN 28 DAYS.
- SINGLE STORY AND TWO STORY STRUCTURES SHALL HAVE A FOOTING 12" BELOW THE FINISHED GRADE LINE. A THREE STORY STRUCTURE SHALL HAVE A FOOTING AT 18" BELOW FINISHED GRADE



GC <sub>p</sub>						Zone	Roof Pressure, p ( psf )					
Effective Wind Area							Effective Wind Area					
10 ft <sup>2</sup>	20 ft <sup>2</sup>	50 ft <sup>2</sup>	100 ft <sup>2</sup>	200 ft <sup>2</sup>	500 ft <sup>2</sup>	10 ft <sup>2</sup>	20 ft <sup>2</sup>	50 ft <sup>2</sup>	100 ft <sup>2</sup>	200 ft <sup>2</sup>	500 ft <sup>2</sup>	
+0.50	+0.44	+0.36	+0.30	+0.30	+0.30	1	+17	+15	+13	+12	+12	+12
-0.90	-0.87	-0.83	-0.80	-0.80	-0.80		-26	-26	-25	-24	-24	-24
+0.50	+0.44	+0.36	+0.30	+0.30	+0.30		+17	+15	+13	+12	+12	+12
-1.70	-1.55	-1.35	-1.20	-1.20	-1.20	2	-46	-42	-37	-34	-34	-34
+0.50	+0.44	+0.36	+0.30	+0.30	+0.30		+17	+15	+13	+12	+12	+12
-2.60	-2.42	-2.18	-2.00	-2.00	-2.00	3	-68	-63	-57	-53	-53	-53

GC <sub>p</sub>						Zone	Wall Pressure, p ( psf )					
Effective Wind Area							Effective Wind Area					
10 ft <sup>2</sup>	20 ft <sup>2</sup>	50 ft <sup>2</sup>	100 ft <sup>2</sup>	200 ft <sup>2</sup>	500 ft <sup>2</sup>	10 ft <sup>2</sup>	20 ft <sup>2</sup>	50 ft <sup>2</sup>	100 ft <sup>2</sup>	200 ft <sup>2</sup>	500 ft <sup>2</sup>	
+1.00	+0.95	+0.88	+0.83	+0.77	+0.70	4	+29	+27	+26	+25	+23	+21
-1.10	-1.05	-0.98	-0.93	-0.87	-0.80		-31	-30	-28	-27	-26	-24
+1.00	+0.95	+0.88	+0.83	+0.77	+0.70	5	+29	+27	+26	+25	+23	+21
-1.40	-1.30	-1.16	-1.05	-0.94	-0.80		-38	-36	-33	-30	-27	-24

SITE ADDRESS:

116 PASCO RD.

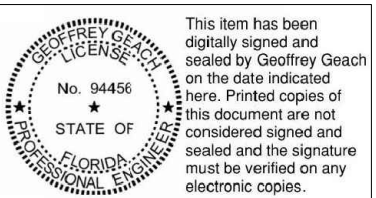
WINTER HAVEN, FL 33884

REV. 0	07/09/24	ORIGINAL SET
REV 1	08/21/24	BLDG. DEPT. COMM.



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This item has been digitally signed and sealed by Geoffrey Geach on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

GEOFFREY GEACH, P.E.  
P.E. # 94456

Date  
7/9/2024

Scale  
AS SHOWN

SHEET DESCRIPTION:  
NOTES

Sheet No.  
10 OF 13

Drawing No.  
N-2

**FLORIDA PRODUCT APPROVAL SCHEDULE**

NO	MODEL/TYPE	MANUFACTURER	FPAN #	REV.	EXP. DATE
1	SH 5500	PGT	1435.2	27	12/31/2032
2	DH 5560	PGT	7058.2	22	12/31/2032
3	HR 5510	PGT	1844.2	29	12/31/2032
4	AR & PW 5520	PGT	5012.4	26	12/31/2032
5	SGD 5570	PGT	21179.2	8	12/31/2032
1	UNDERLAYMENT	POLYGLASS USA	#5259.1	42	12/04/26
2	SHINGLES	GAF	#10124.1	35	12/16/25
3	COBRA RIGID 3	GAF	#6267.1	19	07/12/25
4	V PANEL SOFFIT	AMERIMAX HOME PROD...	#5896.1	6	12/31/24
5	ROOFING	MULE-HIDE PRODUCT CO.	#10497.1	13	03/14/27
6	5V CRIMP	L.V. THOMPSON INC	#16667.1	8	12/31/27

SECTION R318  
PROTECTION AGAINST TERMITES

R318.1 Termite protection.

Termite protection shall be provided by registered termiticides, including soil applied pesticides, baiting systems, and pesticides applied to wood, or other approved methods of termite protection labeled for use as a preventative treatment to new construction. See Section 202, "Registered termiticide." Upon completion of the application of the termite protective treatment, a Certificate of Compliance shall be issued to the building department by the licensed pest control company that contains the following statement: "The building has received a complete treatment for the prevention of subterranean termites. Treatment is in accordance with rules and laws established by the Florida Department of Agriculture and Consumer Services."

R318.1.1 If soil treatment is used for subterranean termite prevention, the initial chemical soil treatment inside the foundation perimeter shall be done after all excavation, backfilling and compaction is complete.

R318.1.2 If soil treatment is used for subterranean termite prevention, soil area disturbed after initial chemical soil treatment shall be retreated with a chemical soil treatment, including spaces boxed or formed.

R318.1.3 If soil treatment is used for subterranean termite prevention, space in concrete floors boxed out or formed for the subsequent installation of plumbing traps, drains or any other purpose shall be created by using plastic or metal permanently placed forms of sufficient depth to eliminate any planned soil disturbance after initial chemical soil treatment.

R318.1.4 If soil treatment is used for subterranean termite prevention, chemically treated soil shall be protected with a minimum 6 mil vapor retarder to protect against rainfall dilution. If rainfall occurs before vapor retarder placement, retreatment is required. Any work, including placement of reinforcing steel, done after chemical treatment until the concrete floor is poured, shall be done in such manner as to avoid penetrating or disturbing treated soil.

R318.1.5 If soil treatment is used for subterranean termite prevention, concrete overpour or mortar accumulated along the exterior foundation perimeter shall be removed prior to exterior chemical soil treatment, to enhance vertical penetration of the chemicals.

R318.1.6 If soil treatment is used for subterranean termite prevention, chemical soil treatments shall also be applied under all exterior concrete or grade within 1 foot (305 mm) of the primary structure sidewalls. Also, a vertical chemical barrier shall be applied promptly after construction is completed, including initial landscaping and irrigation/sprinkler installation. Any soil disturbed after the chemical vertical barrier is applied shall be promptly retreated.

R318.1.7 If a registered termiticide formulated and registered as a bait system is used for subterranean termite prevention, Sections R318.1.1 through R318.1.6 do not apply; however, a signed contract assuring the installation, maintenance and monitoring of the baiting system that is in compliance with the requirements of Chapter 482, Florida Statutes shall be provided to the building official prior to the pouring of the slab, and the system must be installed prior to final building approval.

If the baiting system directions for use require a monitoring phase prior to installation of the pesticide active ingredient, the installation of the monitoring phase components shall be deemed to constitute installation of the system.

2 | 3

R318.1.8 If a registered termiticide formulated and registered as a wood treatment is used for subterranean termite prevention, Sections R318.1.1 through R318.1.6 do not apply. Application of the wood treatment termiticide shall be as required by label directions for use, and must be completed prior to final building approval.

R318.2 Penetration.

Protective sleeves around piping penetrating concrete slab-on-grade floors shall not be of cellulosecontaining materials. If soil treatment is used for subterranean termite protection, the sleeve shall have a maximum wall thickness of 0.010 inch (0.25 mm), and be sealed within the slab using a noncorrosive clamping device to eliminate the annular space between the pipe and the sleeve. No termiticides shall be applied inside the sleeve.

R318.3 Cleaning.

Cells and cavities in masonry units and air gaps between brick, stone or masonry veneers and the structure shall be cleaned of all nonpreservative treated or nonnaturally durable wood, or other cellulosecontaining material prior to concrete placement. Exception: Inorganic material manufactured for closing cells in foundation concrete masonry unit construction or clean earth fill placed in concrete masonry unit voids below slab level before termite treatment is performed.

R318.4 Concrete bearing ledge.

Brick, stone or other veneer shall be supported by a concrete bearing ledge at least equal to the total thickness of the brick, stone or other veneer which is poured integrally with the concrete foundation. No supplemental concrete foundation pours which will create a hidden cold joint shall be used without supplemental treatment in the foundation unless there is an approved physical barrier. An approved physical barrier shall also be installed from below the wall sill plate or first block course horizontally to embed in a mortar joint. If masonry veneer extends below grade, a termite protective treatment must be applied to the cavity created between the veneer and the foundation, in lieu of a physical barrier. Exception: Veneer supported by a structural member secured to the foundation sidewall in accordance with ACI 530/ASCE 5/TMS 402, provided at least a 6 inch (152 mm) clear inspection space of the foundation sidewall exterior exist between the veneer and the top of any soil, sod, mulch or other organic landscaping component, deck, apron, porch, walk or any other work immediately adjacent to or adjoining the structure.

R318.5 Protection against decay and termites.

Condensate lines, irrigation/sprinkler system risers for spray heads, and roof downspouts shall discharge at least 1 foot (305 mm) away from the structure sidewall, whether by underground piping, tail extensions or splash blocks. Gutters with downspouts are required on all buildings with eaves of less than 6 inches (152 mm) horizontal projection except for gable end rakes or on a roof above another roof.

R318.6 Preparation of building site and removal of debris.

R318.6.1 All building sites shall be graded to provide drainage under all portions of the building not occupied by basements.

R318.6.2 The foundation and the area encompassed within 1 foot (305 mm) therein shall have all vegetation, stumps, dead roots, cardboard, trash and foreign material removed and the fill material shall be free of vegetation and foreign material. The fill shall be compacted to assure adequate support of the foundation.

R318.6.3 After all work is completed, loose wood and debris shall be completely removed from under the building and within 1 foot (305 mm) thereof. All wood forms and supports shall be completely removed. This includes, but is not limited to: wooden grade stakes, forms, contraction spacers, tub trap boxes, plumbing supports, bracing, shoring, forms or other cellulose-containing material placed in any location where such materials are not clearly visible and readily removable prior to completion of the work. Wood shall not be stored in contact with the ground under any building.

3 | 3

R318.7 Inspection for termites.

In order to provide for inspection for termite infestation, clearance between exterior wall coverings and final earth grade on the exterior of a building shall not be less than 6 inches (152 mm).

Exceptions:

1. Paint or decorative cementitious finish less than 5

/8 inch (17.1 mm) thick adhered directly to the masonry foundation sidewall.

2. Access or vehicle ramps which rise to the interior finish floor elevation for the width of such ramps only.

3. A 4-inch (102 mm) inspection space above patio and garage slabs and entry areas.

4. If the patio has been soil treated for termites, the finish elevation may match the building interior finish floor elevations on masonry construction only.

5. Masonry veneers constructed in accordance with Section R318.4.

1. A PERMANENT SIGN WHICH IDENTIFIES THE TERMITE TREATMENT PROVIDER AND NEED FOR RE-INSPECTION AND TREATMENT CONTRACT RENEWAL SHALL BE PROVIDED. THE SIGN SHALL BE POSTED NEAR THE WATER HEATER OR ELECTRIC PANEL.
2. CONDENSATE AND ROOF DOWN SPOUTS SHALL DISCHARGE 1'-0" AWAY FROM BUILDING SIDE WALLS.
3. IRRIGATION/SPRINKLER SYSTEM INCLUDING ALL RISERS AND SPRAY HEADS SHALL NOT BE INSTALLED WITHIN 1'-0" OF THE BUILDING SIDE WALLS.
4. TO PROVIDE FOR INSPECTION FOR TERMITE INFESTATION THE DISTANCE BETWEEN WALL COVERING AND FINAL EARTH GRADE SHALL NOT BE LESS THAN 6". EXCEPTION: PAINT OR DECORATIVE CEMENTITIOUS FINISH LESS THAN 5/8" THICK ADHERED DIRECTLY TO THE FOUNDATION WALL.
5. INITIAL TREATMENT SHALL BE DONE AFTER ALL EXCAVATION AND BACKFILL IS COMPLETE. IN ACCORDANCE WITH FLORIDA BUILDING CODE 8TH EDITION 2023 SECTION 1816.1.1
6. SOIL DISTRIBUTED AFTER THE INITIAL TREATMENT SHALL BE RETREATED INCLUDING SPACES BOXED AND FORMED. IN ACCORDANCE WITH FLORIDA BUILDING CODE 8TH EDITION 2023 SECTION 1816.1.2
7. BOXED AREAS IN CONCRETE FLOORS FOR SUBSEQUENT INSTALLATIONS OF TRAPS, ETC., SHALL BE MADE WITH PERMANENT METAL OR PLASTIC FORMS. PERMANENT FORMS MUST BE THE SIZE AND DEPTH THAT WILL ELIMINATE THE DISTURBANCE OF SOIL AFTER THE INITIAL TREATMENT. IN ACCORDANCE WITH FLORIDA BUILDING CODE 8TH EDITION 2023 SECTION 2304.11
8. MINIMUM 6 MIL RETARDER MUST BE INSTALLED TO PROTECT AGAINST RAINFALL DILUTION. IF RAINFALL OCCURS BEFORE VAPOR RETARDER PLACEMENT, RETREATMENT IS REQUIRED. IN ACCORDANCE WITH FLORIDA BUILDING CODE 8TH EDITION 2023 SECTION 2304.11.
9. CONCRETE OVER POUR AND MORTAR ALONG THE FOUNDATION PERIMETER MUST BE REMOVED BEFORE EXTERIOR SOIL TREATMENT. IN ACCORDANCE WITH FLORIDA BUILDING CODE 8TH EDITION 2023 SECTION 2304.11.
10. SOIL TREATMENT MUST BE APPLIED UNDER ALL EXTERIOR CONCRETE OR GRADE WITHIN 1'-0" OF THE STRUCTURE SIDEWALLS. IN ACCORDANCE WITH FLORIDA BUILDING CODE 8TH EDITION 2023 SECTION 2304.11.
11. AN EXTERIOR VERTICAL CHEMICAL BARRIER MUST BE INSTALLED AFTER CONSTRUCTION IS COMPLETE INCLUDING LANDSCAPING & IRRIGATION ANY SOIL DISTRIBUTED AFTER THE VERTICAL BARRIER IS APPLIED, SHALL BE RETREATED. IN ACCORDANCE WITH FLORIDA BUILDING CODE 8TH EDITION 2023 SECTION 2304.11.
12. ALL BUILDING ARE REQUIRED TO HAVE PRE-CONSTRUCTION TREATMENT. IN ACCORDANCE WITH FLORIDA BUILDING CODE 8TH EDITION 2023 SECTION 2304.11.
13. A CERTIFICATE OF COMPLIANCE MUST BE ISSUED TO THE BUILDING DEPARTMENT BY A LICENSED PEST CONTROL COMPANY BEFORE A CERTIFICATE OF OCCUPANCY WILL BE ISSUED. THE CERTIFICATE OF COMPLIANCE SHALL STATE: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. THE TREATMENT IS IN ACCORDANCE WITH THE RULES AND LAWS OF THE FLORIDA DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES." IN ACCORDANCE WITH FLORIDA BUILDING CODE 8TH EDITION 2023 SECTION 2304.11.
14. AFTER ALL WORK IS COMPLETED, LOOSE WOOD AND FILL MUST BE REMOVED FROM BELOW AND WITHIN 1'-0" OF THE BUILDING. THIS INCLUDES ALL GRADE STAKES, TUB TRAP BOXES, FORMS, SHORING OR OTHER CELLULOSE CONTAINING MATERIAL.
15. NO WOOD, VEGETATION, STUMPS, CARDBOARD, TRASH, ETC., SHALL BE BURIED WITHIN 15'-0" OF ANY BUILDING OR PROPOSED BUILDING.

SITE ADDRESS:

116 PASCO RD.

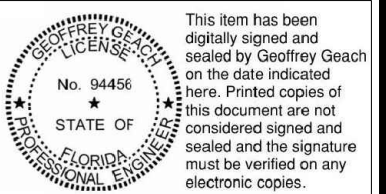
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P.E. # 94456

Date  
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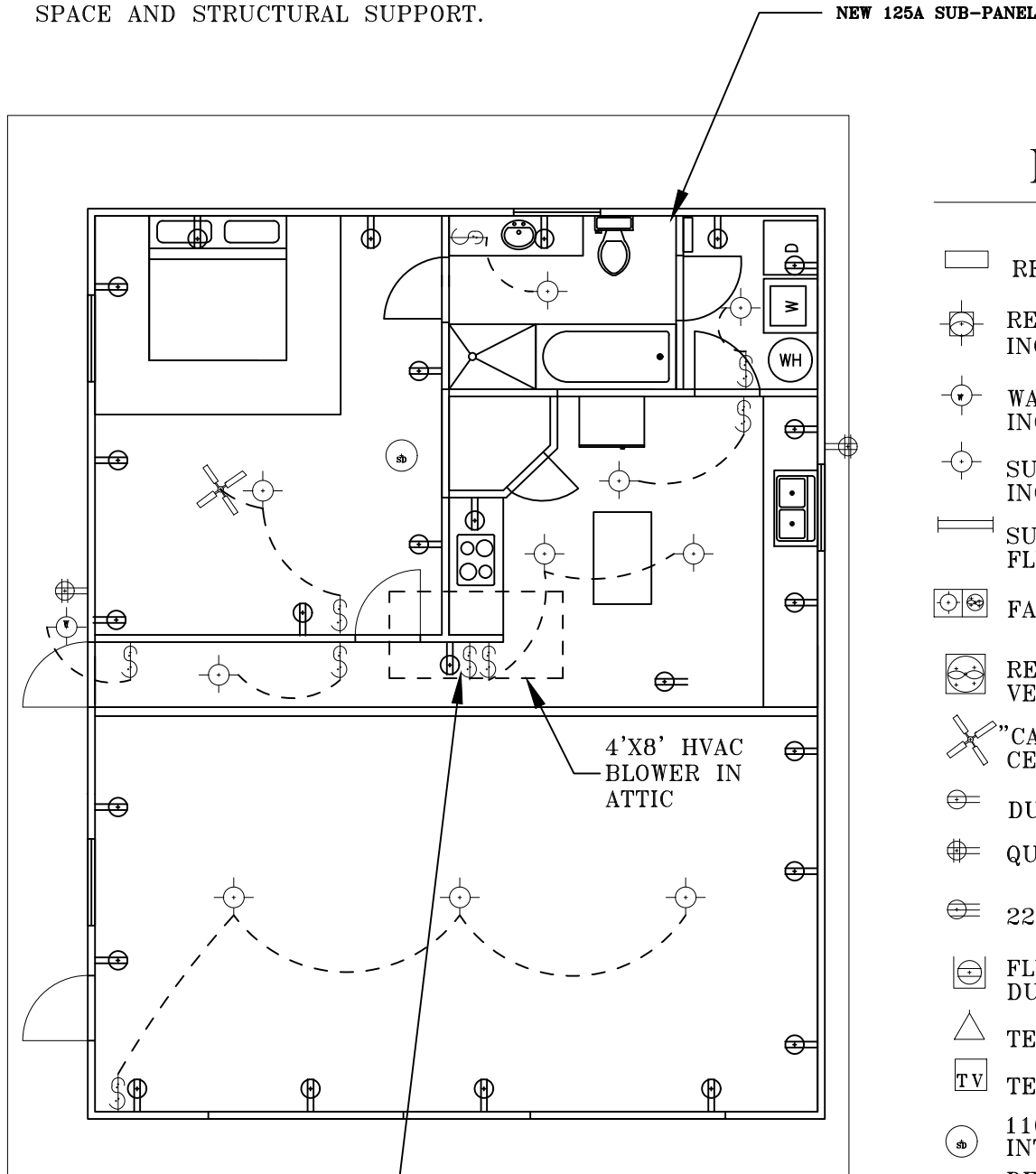
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











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11 OF 13

Drawing No.  
N-3

NOTE: HVAC CONTRACTOR TO INSTALL 2 TON HVAC SYSTEM IN ATTIC INCLUDING DUCTWORK AND CONDENSOR. HVAC SUBCONTRACTOR TO COORDINATE INSTALLATION WITH ROOF MANUFACTURER FOR SPACE AND STRUCTURAL SUPPORT.



## LEGEND

-  RECESSED INCANDESCANT
-  RECESSED DIRECTIONAL INCANDESCENT FIXTURE
-  WALL MOUNTED INCANDESCENT
-  SURFACE MOUNTED INCANDESCENT
-  SURFACE MOUNTED FLUORESCENT
-  FAN/LITE COMBINATION
-  RECESSED EXHAUST FAN VENTED TO THE EXTERIOR
-  "CASABLANCA" TYPE CEILING FAN
-  DUPLEX OUTLET
-  QUADRUPEX OUTLET
-  220V OUTLET
-  FLUSH FLOOR MOUNTED DUPLEX OUTLET
-  TELEPHONE OUTLET
-  TELEVISION OUTLET
-  110 V. SMOKE DETECTOR INTERCONNECT W/ ALL THE DETECTORS IN HOUSE
-  CONNECTION (ELECTRICAL)
-  LIGHT SWITCH

1. ALL WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES, AND REGULATIONS ADOPTED BY MUNICIPAL, COUNTY, STATE, AND FEDERAL AUTHORITIES, INCLUDING THE 2020 EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) NFPA 70, AND WITH THE REQUIREMENTS/AMENDMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ).
2. CONTRACT DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE INTENDED TO CONVEY SCOPE, DESIGN INTENT, AND GENERAL ARRANGEMENT ONLY. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL WORK OF ALL TRADES INCLUDING RESOLUTION OF FIELD CONFLICTS THAT MAY ARISE.
3. EACH FEEDER AND BRANCH CIRCUIT SHALL INCLUDE AN INSULATED EQUIPMENT GROUNDING CONDUCTOR. BOND ALL ELECTRICAL EQUIPMENT, OUTLET BOXES, GROUNDING TYPE RECEPTACLES, ETC., IN ACCORDANCE WITH NEC ARTICLE 250.
4. TROUGHS, JUNCTION AND PULL BOXES ARE NOT NECESSARILY INDICATED, BUT SHALL BE PROVIDED WHERE MANDATED BY THE NEC, AND AS REQUIRED FOR EASE OF INSTALLATION. BOXES SHALL BE SIZED (MINIMUM) IN ACCORDANCE WITH NEC ARTICLE 314. TROUGHS SHALL BE SIZED PER NEC ARTICLE 366.
5. FEEDER AND BRANCH CIRCUIT WIRING ARE DEPICTED BY ASSIGNMENT OF CIRCUIT NUMBERS, INTERCONNECTING WIRING AND HOMERUNS, OR HOMERUNS ONLY (FOR SINGULAR LOADS). ALL FEEDERS AND BRANCH CIRCUITS ARE NEW TO BE PROVIDED UNDER THIS CONTRACT UNLESS OTHERWISE NOTED. INTERIOR WIRING SHALL BE INSTALLED IN RIGID METALLIC CONDUIT AND/OR EMT, 3/4" MINIMUM. FLEXIBLE METAL CONDUIT, LIQUID-TIGHT FLEXIBLE METAL CONDUIT, MC CABLE SHALL BE UTILIZED IN LIMITED LENGTHS AS NECESSARY, OR AS REQUIRED/ALLOWED BY CODE.
6. ALL NEW 600V OVER-CURRENT PROTECTIVE DEVICES SHALL HAVE INTERRUPTING CAPABILITIES OR RATINGS (AIC OR AIR) IN RMS AMPERES SYMMETRICAL. ALL DEVICES SHALL BE FULLY RATED FOR AVAILABLE FAULT CURRENT.
7. ALL BUILDING WIRE SHALL BE COPPER CONDUCTORS, TYPE THHN/THWN-2 (DUAL LISTED) 90 DEGREE CELSIUS RATED INSULATION, #12 AWG MINIMUM. UTILIZE #10 AWG WIRE FOR ANY 15A OR 20A, 120V CIRCUIT THAT EXCEEDS 100 FEET FROM SOURCE TO LAST DEVICE OR OUTLET. 8. CONTRACTOR SHALL PROVIDE AND INSTALL AN APPROVED, UL LISTED, FIRE STOP SEALANT, TOTALLY ENCLOSING ALL PENETRATIONS THROUGH RATED CEILINGS, WALLS, ROOFS, FLOORS, ETC. ALL FLOOR PENETRATIONS SHALL BE CORE-DRILLED, SLEEVED AND SEALED WITH AN APPROVED FIRE RATED SEALANT. CONTRACTOR SHALL SUBMIT LETTER TO OWNER THAT THE REQUIRED FIRE SEALANT WAS INSTALLED PER MANUFACTURER'S REQUIREMENTS. ALL EXISTING CERTIFIED AND NOTARIZED PENETRATIONS BETWEEN FLOORS AND WALLS MUST BE CLOSED TO MAINTAIN FIRE RATING.
9. THE CONTRACTOR SHALL PERFORM THE WORK AS INDICATED ON THE DRAWINGS. ANY DEVIATIONS FROM THE DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL IN WRITING. IF CHANGES ARE MADE WITHOUT THE ENGINEER'S WRITTEN CONSENT, THE CONTRACTOR SHALL BE LIABLE FOR ANY ISSUES THAT MAY ARISE DUE TO THE CHANGES.
10. UNLESS OTHERWISE NOTED, ALL WIRE SIZES SHALL BE BASED ON THE FOLLOWING: a. #12 THROUGH #1 OR 100A OR LESS - NEC TABLE 310.16 60' COLUMN b. #1/0 AND GREATER OR 101A OR GREATER - NEC TABLE 310.16 75' COLUMN c. OTHER ALLOWANCES OF NEC 110.14(C)
12. UNLESS OTHERWISE NOTED, ALL CONDUIT SIZES SHALL BE BASED ON EMT, RMC, OR RNC (PVC SCHEDULE 40).
13. ALL ELECTRICAL MATERIALS, DEVICES, APPLIANCES, AND EQUIPMENT SHALL BE NEW, LABELED AND LISTED BY A NATIONALLY RECOGNIZED TESTING LABORATORY OR AGENCY (E.G. UL), UNLESS OTHERWISE NOTED.
14. ELECTRICAL CONTRACTOR SHALL FOLLOW ALL MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION OF ALL EQUIPMENT IF NOT INDICATED ON DRAWINGS. IF THERE IS A DISCREPANCY, MANUFACTURER'S INSTRUCTIONS TAKE PRECEDENCE.
15. THE ELECTRICAL CONTRACTOR SHALL FURNISH ALL EQUIPMENT, LABOR, SERVICES, AND MATERIALS REQUIRED FOR COMPLETE INSTALLATION OF THE WORK INDICATED. UNLESS OTHERWISE NOTED, ALL MATERIALS SHALL BE NEW.
16. DO NOT SCALE DRAWINGS. CONTRACTOR SHALL VERIFY AND CONFIRM ALL DIMENSIONS IN THE FIELD AND NOTIFY THE ENGINEER OF ANY AND ALL DISCREPANCIES ON THE DRAWINGS. COPIES OF THIS DRAWING WITHOUT A PROFESSIONAL ENGINEER'S SEAL AND ORIGINAL SIGNATURE SHALL NOT BE CONSIDERED VALID AND ARE FOR CONVENIENCE TO THE USER AT THEIR OWN RISK.
17. FURNISH ALL NECESSARY MATERIALS, TOOLS AND LABOR AND INSTALL A COMPLETE AND FULLY OPERABLE WIRING SYSTEM AS INDICATED OR REASONABLY IMPLIED. UNLESS NOTED OTHERWISE, ALL MATERIALS SHALL BE NEW, FREE OF DEFECTS AND BE UL LISTED.
18. ALL SMALL MOTORS UNDER 1 HORSEPOWER SHALL HAVE INTEGRAL OVERLOAD PROTECTION PER NEC 430.32 AND 430.53(A) IF PLANNING TO BE INSTALLED ON ONE BRANCH CIRCUIT DUE TO SMALL LOADS.
19. MEANS AND METHODS EMPLOYED SHALL MEET ALL DESIGN STANDARDS REQUIRED BY ALL CONTRACT DOCUMENTS AND THE CODES ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
20. THE CONTRACTOR SHALL COORDINATE ALL HVAC EQUIPMENT LOCATIONS IN FIELD.
21. UNLESS OTHERWISE NOTED, ALL CIRCUIT BREAKERS ARE BASED ON INVERSE TIME TYPE AND ALL FUSES ARE BASED ON DUAL ELEMENT TIME-DELAY TYPE.
22. ALL ELECTRICAL DRIVEN EQUIPMENT PROVIDED OR FURNISHED BY THE MECHANICAL CONTRACTOR SHALL INCLUDE MOTORS, PUSH BUTTONS, RELAYS, CONTACTORS, DISCONNECTS & ALL OTHER CONTROLLING DEVICES REQUIRED FOR PROPER AND SATISFACTORY OPERATION OF THE EQUIPMENT. ELECTRICAL CONTRACTOR SHALL INSTALL EQUIPMENT AS REQUIRED FROM THE LINE SIDE OF THE LAST DISCONNECTING MEANS (INCLUDING SUPPLIED DISCONNECT) BACK TO POWER SOURCE.
23. CONTRACTOR SHALL VISIT SITE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS THAT MAY EFFECT HIS WORK. THE CONTRACTOR SHALL NOT BE ENTITLED TO CHANGE ORDER(S) DUE TO FAILURE TO COMPLY.
24. PRIOR TO ACCEPTANCE OF THE SPACE, ALL SYSTEMS SHALL BE TESTED, BALANCED AND OPERATED TO DEMONSTRATE TO THE OWNER THAT THE INSTALLATION AND PERFORMANCE OF THE INSTALLED SYSTEMS AND/OR PARTS THEREOF CONFORM TO THE DESIGN INTENT AS DEFINED BY ALL CONSTRUCTION DOCUMENTS.
25. ANY DEFECTS IN WORKMANSHIP, MATERIALS, MALFUNCTION OF EQUIPMENT OR UNSATISFACTORY PERFORMANCE, AND ALL OTHER PARTS OF THE BUILDING DAMAGED THEREBY, SHALL BE REPAIRED, REPLACED OR OTHERWISE REMEDIATED WITHOUT EXPENSE TO THE OWNER. SUCH REPAIRS OR REPLACEMENTS SHALL BE MADE IN A TIMELY MANNER AND AT THE CONVENIENCE OF THE OWNER. 26. ALL ITEMS MARKED WITH A (R) ON PLAN SHALL BE DISCONNECTED AND REMOVED BY THE CONTRACTOR UNLESS OTHERWISE NOTED. REMOVE EXISTING CONDUCTORS/CABLES WHERE NO LONGER REQUIRED. REMOVE WIRE FROM ALL ABANDONED CONDUIT. RECONNECT DISTURBED FACILITIES WHICH ARE TO REMAIN IN PLACE AND OPERATING CONDITION.
27. UPON COMPLETION OF THE CONTRACT, THE CONTRACTOR SHALL PROVIDE THE OWNER WITH THREE (3) COMPLETE SETS OF MANUFACTURERS' OPERATING, MAINTENANCE AND PREVENTIVE MAINTENANCE INSTRUCTIONS (IN BOUND BOOK FORM AND ON (3) USB) INCLUDING PARTS LIST, AND COMPLETE PROCUREMENT INFORMATION SPECIFYING EQUIPMENT NUMBERS AND DESCRIPTIONS. OPERATING STAFF PERSONNEL SHALL BE INSTRUCTED AS TO PROPER OPERATING AND SERVICE REQUIREMENTS OF THE SYSTEMS AND EQUIPMENT.
28. CONTRACTOR SHALL UPON COMPLETION OF THE WORK, SUBMIT A SET OF RECORD DRAWINGS SHOWING ALL BURIED OR CONCEALED EQUIPMENT OF PARTS OF THE WORK.
29. UPON COMPLETION OF ALL WORK, THOROUGHLY CLEAN ALL SYSTEMS OF OBSTRUCTIONS, DEBRIS, SCALE, DUST, DIRT, ETC. AND PLACE SYSTEMS IN OPERATION.
30. THE CONTRACTOR SHALL APPLY FOR AND PAY FOR ALL REQUIRED PERMITS, INSPECTIONS, ETC.
31. ALL NEW CIRCUIT BREAKERS WITHIN EACH EXISTING PANELBOARD SHALL BE THE SAME MANUFACTURER TYPE, STYLE AND A.I.C. RATING OF EXISTING PANELBOARD.
32. ALL ELECTRICAL EQUIPMENT AND RECEPTACLES SHALL BE LABELED WITH BRANCH CIRCUIT INFORMATION (PANEL: CIRCUIT NUMBER)

OUTLET AND SWITCH FOR SERVICING HVAC UNIT

ELECTRICAL LAYOUT 1  
SCALE: 1/8" = 1'-0" E-1

SITE ADDRESS:

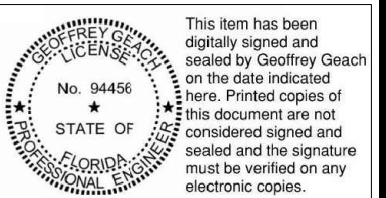
116 PASCO RD.  
WINTER HAVEN, FL 33884

REV. 0	07/09/24	ORIGINAL SET
REV 1	08/21/24	BLDG. DEPT. COMM.



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This item has been digitally signed and sealed by Geoffrey Geach on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

GEOFFREY GEACH, P.E.  
P.E. # 94456

Date 7/9/2024

Scale AS SHOWN

SHEET DESCRIPTION: ELECTRICAL

Sheet No. 12 OF 13

Drawing No. E-1

SITE ADDRESS:

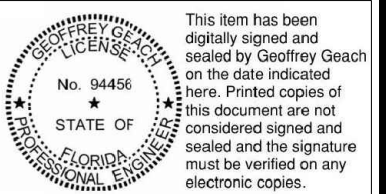
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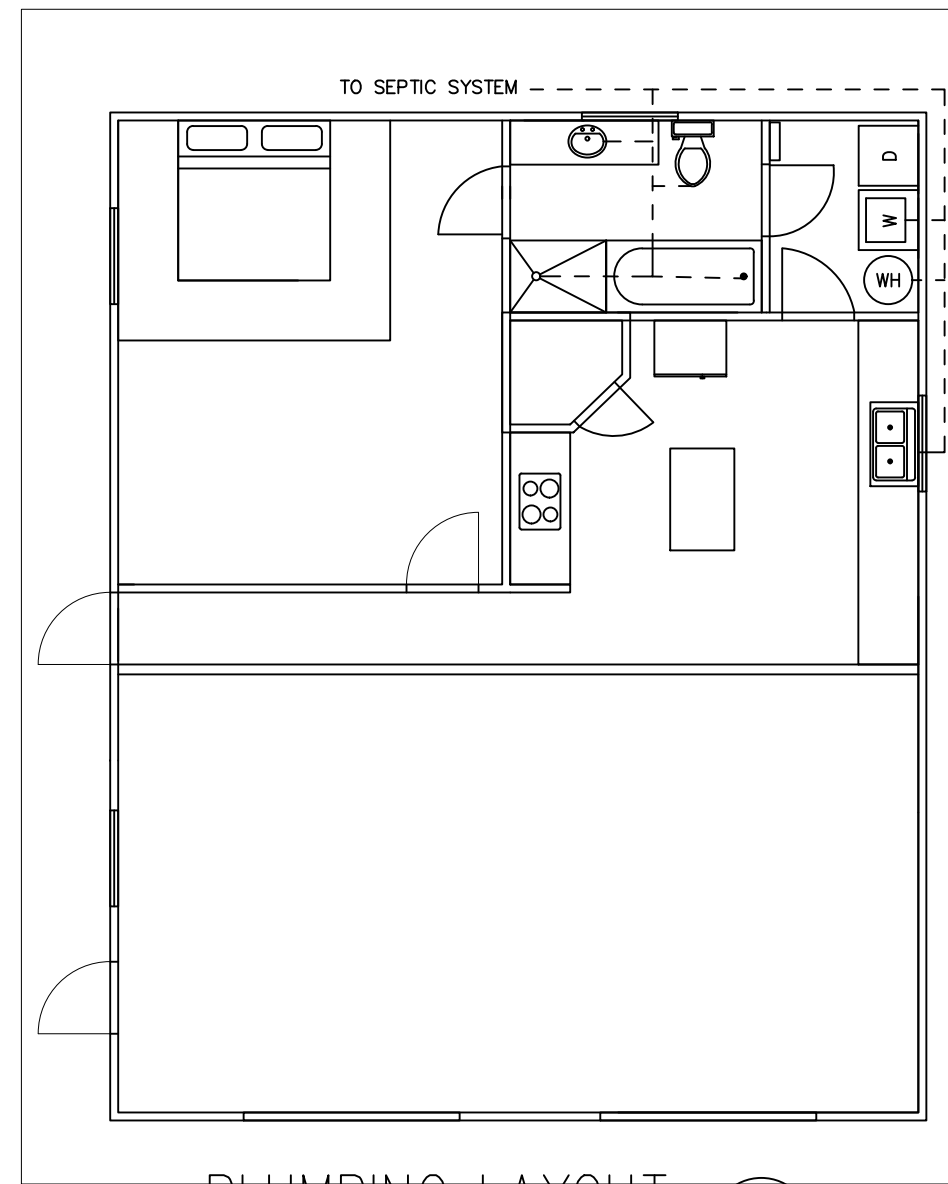
Date 7/9/2024

Scale AS SHOWN

SHEET DESCRIPTION:  
PLUMBING

Sheet No. 13 OF 13

Drawing No. P-1



# PLUMBING LAYOUT

SCALE: 1/4" = 1'-0"

1  
P-1

## PLUMBING SPECIFICATIONS:

FURNISH LABOR, MATERIALS TO COMPLETE WORK SPECIFIED OR INDICATED ON PLANS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: DRAINAGE, SEWER WASTE, VENT SYSTEMS, COLD WATER SYSTEM, HOT WATER SYSTEM, PLUMBING FIXTURES, AND WATER SERVICE, MATERIALS, METHODS AND DETAILS OF PLUMBING WORK SHALL CONFORM TO "UNIFORM PLUMBING CODE" AND APPLICABLE STATE AND LOCAL CODES (LATEST EDITION).

### PIPE, PIPING INSTALLATION:

- A. METAL PIPE SHALL BE STRAIGHT, FREE FROM DENTS, SCARS, BURNS, AND DISTORTIONS, END REAMED OUT SMOOTH.
- B. PROVIDE PROPER ALLOWANCES FOR EXPANSION AND CONTRACTION.
- C. CLEAN PIPING WHEN INSTALLED, KEEP CLEAN.
- D. PITCH AND GRADE: 1. SOIL, WASTE DRAINAGE, UNIFORM 1/4" PER FOOT EXCEPT WHERE SHOWN OTHERWISE. 2. HOT AND COLD WATER; LEVEL OR SLIGHTLY PITCHED TOWARD DRAIN POINTS.

### UNIONS:

- A. PROVIDE AT ALL VALVES AND EQUIPMENT WHEREVER NECESSARY TO ALLOW REPAIRS OR REPLACEMENT.
- B. PROVIDE UNION SAME AS THE PIPING IN WHICH THEY ARE BEING INSTALLED.
- C. UNIONS FOR STEEL PIPING 2" AND SMALLER, 150 PSI MALLEABLE IRON GROUND JOINT, BRASS TO IRON SEAT.
- D. UNIONS FOR COPPER PIPING 2" AND SMALLER SHALL BE COPPER TO COPPER TYPE.
- E. INSTALL DIELECTRIC UNIONS WHERE PIPING OF DISSIMILAR MATERIALS ARE JOINED.

### PIPE AND FITTINGS:

- A. SCHEDULE 40, PVC PIPE SHALL BE ACCEPTABLE IN LIEU OF CAST IRON FOR DRAIN, WASTE AND VENT PIPING WHERE APPROVED BY THE LOCAL GOVERNING CODES AND ORDINANCES.
- B. IN LOCATIONS WHERE PVC IS NOT APPROVED FOR USE, PIPING SHALL BE SERVICE WEIGHT CAST IRON FOR SIZED LARGER THAN 1-1/2", OR GALVANIZED SCHEDULE 40 STEEL PIPE WITH MALLEABLE IRON SCREWED VENT FITTINGS FOR SIZES 1-1/2" AND SMALLER.
- C. FITTING TO BE SUITABLE FOR TYPE OF PIPE USED.
- D. ALL DOMESTIC HOT, COLD WATER LINES ABOVE THE BUILDING SLAB TO BE TYPE "L" HARD COPPER IS INSTALLED, JOINTS BETWEEN PIPE AND FITTINGS SHALL BE BRAZED. NO JOINTS WILL BE PERMITTED IN SOFT COPPER UNDER THE SLAB.
- E. ALL CHANGES IN PIPE SIZES IN SOIL PIPE SHALL BE MADE WITH REDUCED FITTINGS. WYE FITTINGS WITH 1/8" OR 1/16" BEND OR COMBINATION WYE AND 1/8" BEND FITTINGS SHALL BE USED WHERE CHANGES IN DIRECTION OCCUR. SANITARY LONG SWEEP BENDS OR TEES MAY BE USED FOR CONNECTIONS TO BRANCH LINES, TO FIXTURES, AND TO ALL VERTICAL RUNS OF PIPE. INSTALL IN ACCORDANCE WITH UPC APPENDIX "D".
- F. SLOPE ALL SEWER PIPING 3" AND SMALLER AT 2% PER FOOT AND 4" AND LARGER AT 1% PER FOOT. ROOF DRAIN PIPING WHERE SHOWN ON DRAWINGS, SHALL BE SAME AS SPECIFIED FOR WASTE PIPING.

### VALVES:

- A. VALVES SHALL HAVE TEST RATING OF NOT LESS THAT 125 PSI.
- B. VALVE MATERIAL: BRONZE MATERIAL FOR SIZE 2" AND SMALLER, IRON BODY BRONZE MOUNTED FOR 2-1/2" AND LARGER.
- C. VALVE ENDS FOR THREADED PIPE: SCREWED FOR SIZE 2-1/2" AND SMALLER.
- D. VALVE ENDS FOR COPPER WATER TUBE TYPE "L"; SOLDER-JOINT TYPE.
- E. GATE VALVES SHALL HAVE SOLID TAPERED WEDGE.
- F. GLOBE VALVES SHALL BE SCREWED BRONZE.
- G. CHECK VALVES, SWING TYPE, SCREWED, BRONZE BODY, COMPOSITION DISC.
- H. CHECK VALVES, SWING TYPE FLANGED, IRON BODY BRASS MOUNTED, BRONZE SEAT, COMPOSITION DISC.
- I. ALL VALVES TO BE BALL VALVES WHERE POSSIBLE.

### CLEANOUTS:

- A. FULL SIZE CLEANOUTS SHALL BE INSTALLED AT THE BASE OF EACH WASTE OR SOIL STACK, AND AT THE END OF EACH HORIZONTAL RUN OF PIPE. THE DISTANCE BETWEEN CLEANOUTS IN HORIZONTAL RUNS OF PIPING SHALL NOT EXCEED 50'-0".
- B. ALL CLEANOUTS SHALL BE INSTALLED IN LOCATIONS EASILY ACCESSIBLE FOR RODDING (IN UNFURNISHED AREAS WHEREVER POSSIBLE) WHERE STACKS OR OTHER PIPING ARE CONCEALED, CLEANOUTS SHALL BE INSTALLED FLUSH WITH FLOOR AND PROVIDED WITH FLANGED CLEANOUT COVER. PROVIDE ACCESS PANELS AS REQUIRED.

### ROOF FLASHING:

- A. VENTS THROUGH ROOF TERMINATE 12" ABOVE THE ROOF OR FIREWALL.
- B. FLASH WITH LONG BOOT LEAD FLASHING AROUND PIPE.
- C. THE BASE OF THE FLASHING SHALL BE MINIMUM 12" X 12" ON THE ROOF.

### SANITARY SYSTEM:

- A. CONTRACTOR TO VERIFY ELEVATIONS OF SEWER MAINS BEFORE STARTING WORK. LAY PIPING TRUE TO LINE AND GRADE UNIFORMLY UNLESS OTHERWISE INDICATED OR DIRECTED, MAINTAIN 36" MINIMUM COVER ABOVE PIPING OUTSIDE BUILDINGS.

### WATER SUPPLY SYSTEMS:

- A. BUILDING PIPING: PROVIDE A COMPLETE PIPING SYSTEM AS SHOWN ON PLANS INCLUDING SHUT-OFF AND DRAIN VALVE ON SERVICE TO ALL FIXTURES AND EQUIPMENT OUTLETS REQUIRING A COLD AND/OR HOT WATER SUPPLY. ALL BRANCH MAINS AND CONNECTIONS TO RISERS SHALL BE VALVED AND DRIP COCKS PROVIDED SO THAT THE ENTIRE SYSTEM MAY BE DRAINED. FIXTURE STOPS SHALL BE INSTALLED ON ALL FIXTURE CONNECTIONS.

### TESTS FOR PLUMBING AND DRAINAGE SYSTEMS:

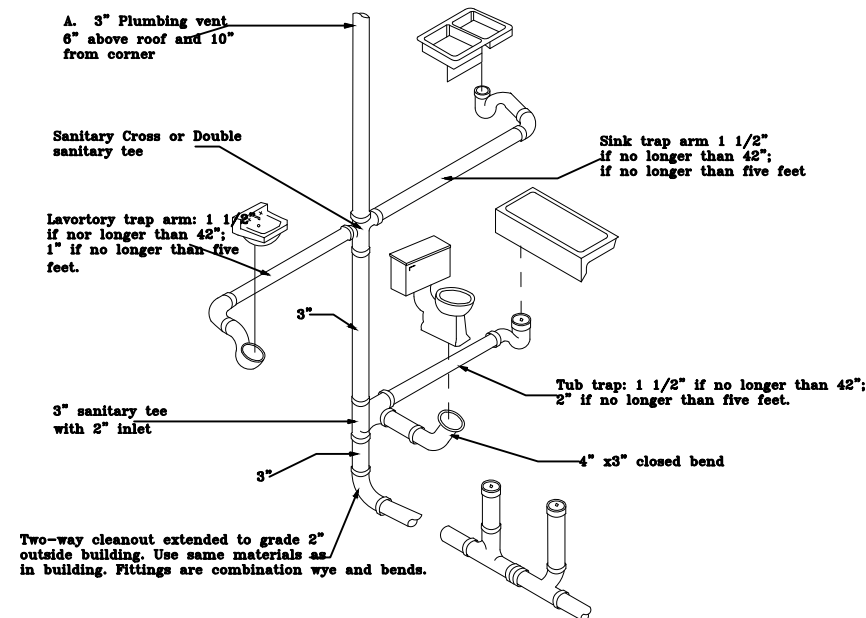
- A. ALL HOT AND COLD WATER LINES SHALL BE CAPPED OR PLUGGED AND TESTED WITH 125 LBS. HYDROSTATIC TEST AND PROVEN TIGHT BEFORE ANY PIPING IS COVERED OR CONCEALED IN ANY PART OF THE BUILDING.
- B. ALL WASTE AND VENT PIPING SHALL BE TESTED WITH WATER OR AIR FREEZE-PROOF AS REQUIRED BY THE UNIFORM PLUMBING CODE.
- C. GAS PIPING, IF ANY, SHALL BE TESTED AS REQUIRED BY LOCAL OR STATE GAS CODE.
- D. BEFORE FINAL ACCEPTANCE OF THE SYSTEM AS A WHOLE, THIS CONTRACTOR SHALL MAKE ALL ADJUSTMENTS AS REQUIRED AND PLACE THE ENTIRE PLUMBING SYSTEM IN SATISFACTORY OPERATING CONDITION.

### PLUMBING EQUIPMENT:

- A. SILLCOCK: NIBCO FIG. NO. 62-6S, WITH ANTI-SIPHON PROTECTION.
- B. HOSE BIBBS: THREADED END, 3/4" SIZE, ADJUSTABLE FLANGE, INDEXED FOUR ARM HANDLE, BRASS, AMERICAN STANDARD OR EQUAL, WHERE NECESSARY.
- C. STOP VALVES: ALL FIXTURES, SILLCOCKS, YARD HYDRANTS, HOSE BIBBS, ROUGH-INS, ETC. TO BE SUPPLIED WITH STOP VALVES TO PREVENT SHUTTING DOWN ENTIRE WATER SYSTEM WHEN REPLACING FAUCET WASHERS.
- D. VACUUM BREAKERS: PROVIDE LINE SIZE VACUUM BREAKER ON ALL BRANCH LINES TO ALL OUTLETS WITH THREADED OUTLETS WHERE A GARDEN HOSE MAY BE ATTACHED AND WHERE INDICATED IN THE PLANS.

### FIXTURES:

- A. FURNISH AND INSTALL PLUMBING FIXTURES, TYPE "A" QUALITY SPECIFIED IN THE FIXTURE LIST.
- B. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF FIXTURES UNTIL FINAL ACCEPTANCE OF THE BUILDING BY OWNER. ANY DAMAGED FIXTURE SHALL BE IMMEDIATELY REPLACED BY THIS CONTRACTOR REGARDLESS OF WHO CAUSED THE DAMAGE.
- C. ALL EXPOSED METAL PARTS REQUIRED FOR FIXTURE INSTALLATION SHALL BE CHROMIUM PLATED UNLESS A DIFFERENT PLATING OR FINISH IS SPECIFIED. THIS INCLUDES FIXTURE CONNECTIONS, FIXTURE STOPS, TRAPS DRAIN STRAINERS, ETC.
- D. PROVIDE LOW-FLOW PLUMBING FIXTURE DEVICES FOR: WATERCLOSETS 1.6 GPF, URINALS 1.5 GPF, LAVATORIES 2.75 GPM, SINKS 2.75 GPM, AND SHOWERS 3.0 GPM.
- E. BACKFLOW PREVENTER: PROVIDE WATTS SERIES 7 OR #9BD. DOUBLE CHECK VALVE TYPE (VERIFY WITH LOCAL CODES) AT ALL CONNECTIONS TO EQUIPMENT (ICE MAKERS, VENDING MACHINES, COFFEE MAKERS, ETC.)



One Bath Plumbing