Proposed Home Plan
10412 Laurel Ridge Way Fredericksburg, VA







**OWNER:** 

**Proposed Home Plan** 

10412 Laurel Ridge Way Fredericksburg,

SEAL:

Release for construction

INTRODUCTION

Engr. Al Amin Drawn by: Checked: FEB, 06. Date: A-0 Scale: 1:100



**OWNER:** 

**Proposed Home Plan** 

10412 Laurel Ridge Way Fredericksburg,

SEAL:

Release for construction

**ELEVATION PLAN** 

Drawn by:	Engr. Al Ami
Checked:	
Date:	FEB, 06.
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Scale: 1:100

A-1





430 E 8TH ST STE 80 HOLLAND MI 4942

OWNER:

Proposed Home Plan

10412 Laurel Ridge Way Fredericksburg, VA

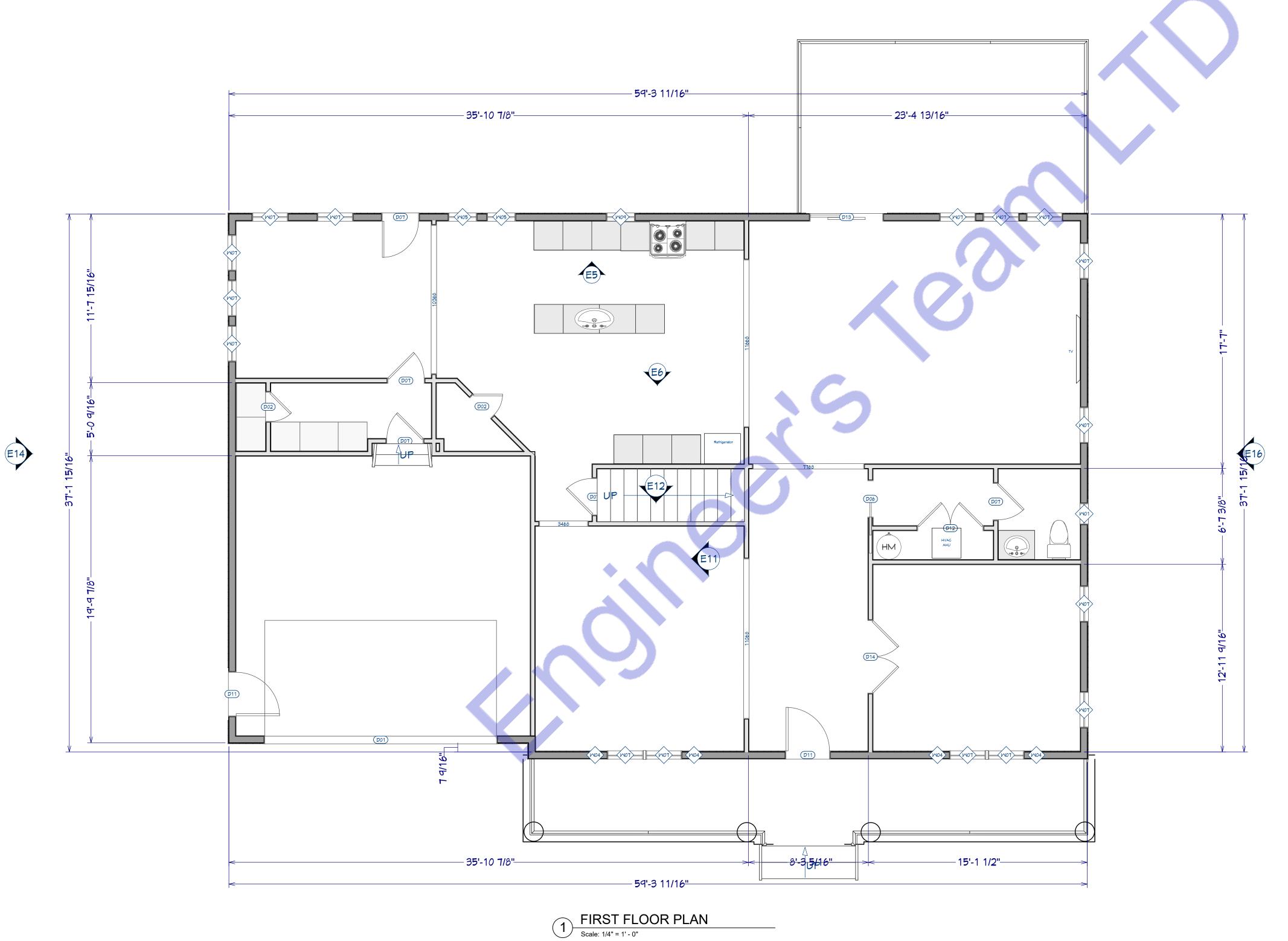
SEAL:

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ELEVATION PLAN

Drawn by:		Engr. Al Ami
Checked:		
Date:		FEB, 06.
	A-2	
Scale:	1:100	





V	NALL SCHEDULE
2D SYMBOL	MALL TYPE
	8" CONCRETE STEM WALL
	INTERIOR RAILING
	INTERIOR-4
	SIDING-6
	GLASS SHOWER

	DOOR SCHEDULE							
NUMBER	LABEL	QTY	FLOOR	R/0	HEADER	COMMENTS		
D01	16080	1	1	194"X99"	2"X12"X200" (2)			
D02	2068	2	1	26"X82 1/2"	2"X6"X29" (2)			
D03	2668	4	2	32"X82 1/2"	2"X6"X35" (2)			
D04	2068	12	2	26"X82 1/2"	2"X6"X29" (2)			
D06	2668	1	1	61 1/4"X82 1/2"	2"X6"X64 1/4" (2)			
D07	2668	5	1	32"X82 1/2"	2"X6"X35" (2)			
D11	3068	2	1	38"X83"	2"X6"X41" (2)			
D12	4668	1	1	56"X82 1/2"	2"X6"X59" (2)			
D13	5068	1	1	62"X83"	2"X8"X65" (2)			
D14	5068	1	1	62"X82 1/2"	2"X6"X65" (2)			
D15	5068	2	2	62"X82 1/2"	2"X6"X65" (2)			

				<u>W SCHEDUL</u>		
NUMBER	LABEL	QTY	FLOOR	R/0	HEADER	COMMENTS
M01	1616DH	1	1	19"X19"	2"X6"X22" (2)	
M02	2020DH	3	2	25"X25"	2"X6"X28" (2)	
M03	0640DH	18	2	7"X49"	2"X6"X10" (2)	
M04	0640DH	4	1	7"X49"	2"X6"X10" (2)	
M05	2040DH	2	1	25"X49"	2"X6"X28" (2)	
M06	2634DH	5	2	31"X40 <b>7</b> /8"	2"X6"X34" (2)	
M07	2640DH	16	1	31"X49"	2"X6"X34" (2)	
M08	2640DH	16	2	31"X49"	2"X6"X34" (2)	
M09	2020DH	1	1	25"X25"	2"X6"X28" (2)	



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430 E 8TH ST ST HOLLAND MI 4

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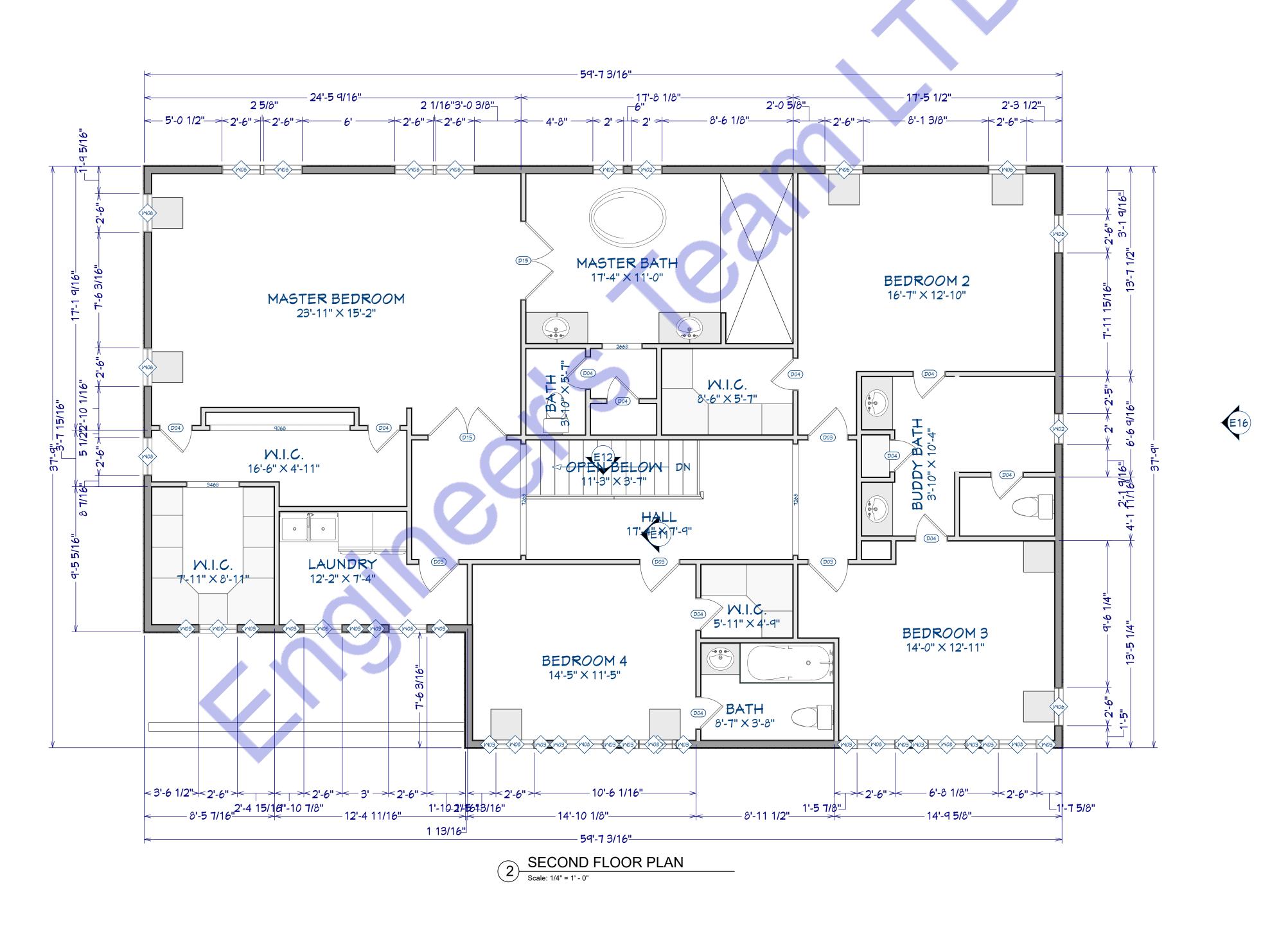
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PROPOSED FIRST FLOOR PLAN

Drawn by:	E	Engr. Al Amir
Checked:		
Date:		FEB, 06.
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Scale:	1:100	









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430 E 8TH ST STE HOLLAND MI 49

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OWNER:

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10412 Laurel Ridge Way Fredericksburg, VA

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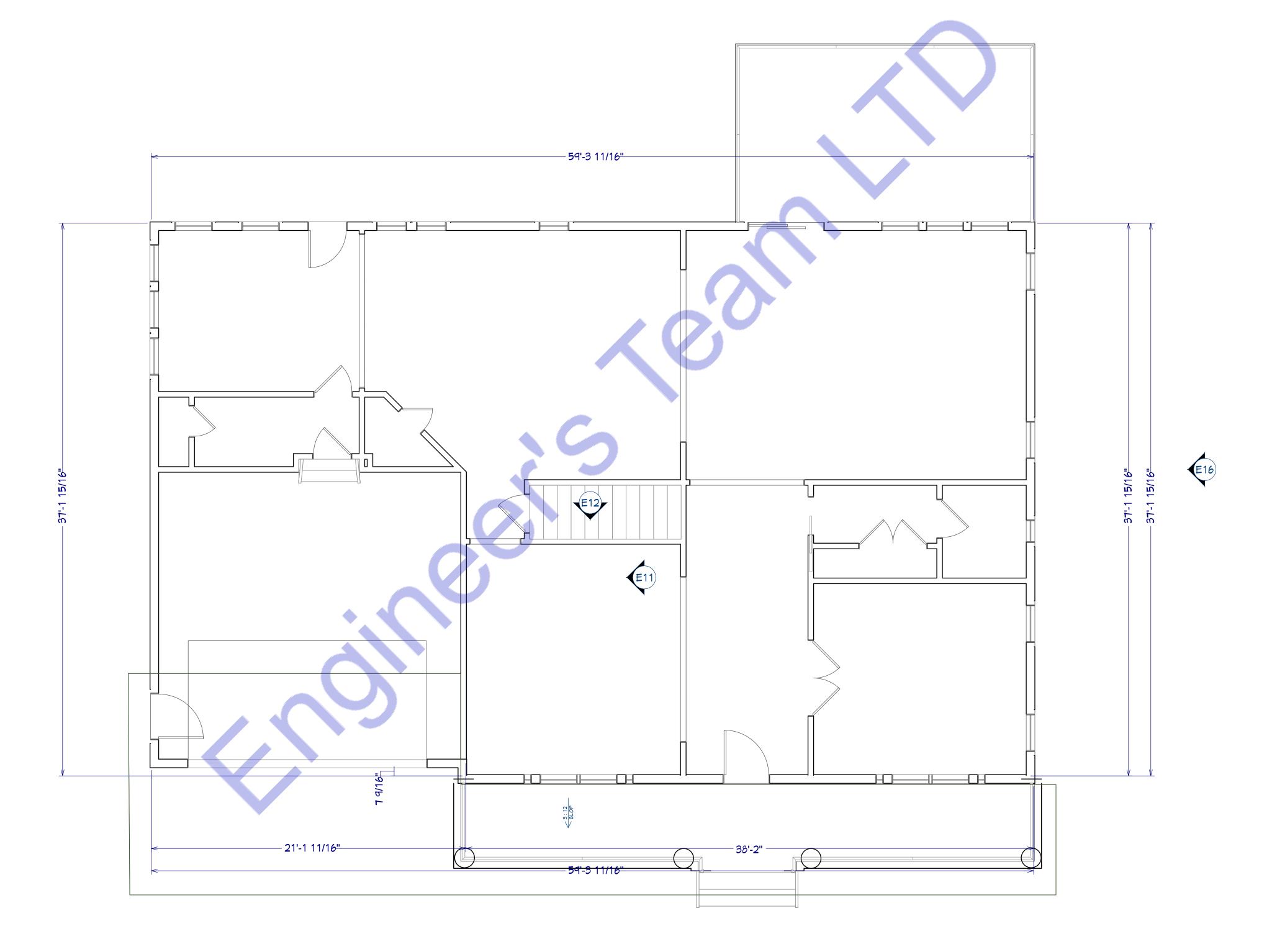
PROPOSED SECOND FLOOR PLAN

Drawn by: Engr. Al Amin
Checked:
Date: FEB, 06.

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Scale: 1:100







FIRST FLOOR ROOF PLAN

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





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**Proposed Home Plan** 

10412 Laurel Ridge Way Fredericksburg, VA

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PROPOSED FIRST FLOOR ROOF PLAN

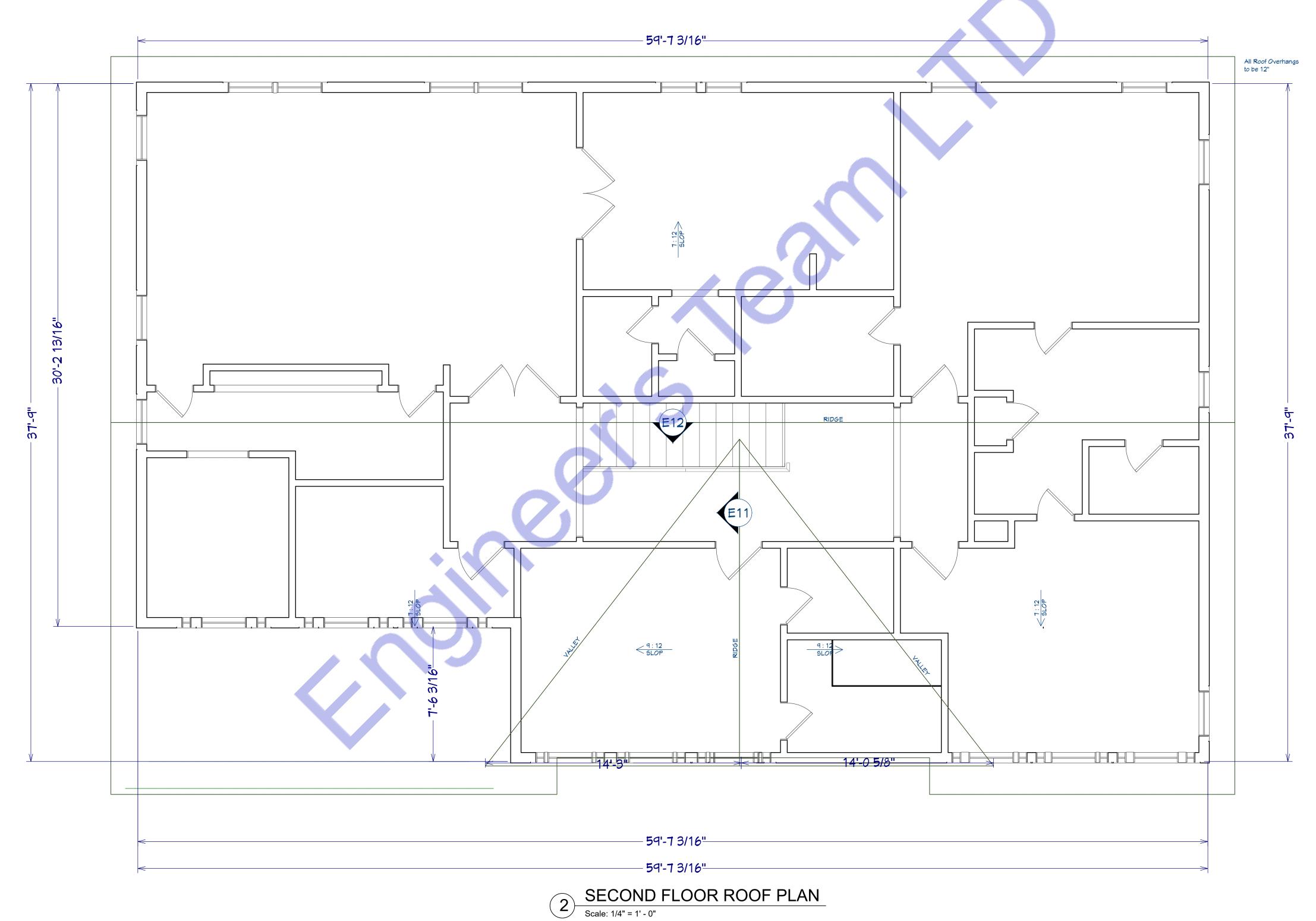
Drawn by:		Engr. Al Amin
Checked:		
Date:		FEB, 06.
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Scale:	1:100	

SEAL:

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# PROPOSED SECOND FLOOR ROOF PLAN

Drawn by:	Engr. Al Ami
Checked:	
Date:	FEB, 06.
	A-6
Scale:	1:100



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**Proposed Home Plan** 

# PROPOSED FOUNDATION PLAN

Drawn by:	Engr. Al Amir
Checked:	
Date:	FEB, 06.
	S-1
Scale:	1:100

- **5**9'-3 11/1<del>6"</del> P2\_\_\_\_ 6 X 6 - W2.1xW2.1 WWF **E**11 1 1/2" FROM TOP OF SLAB TYP.

- 1**5'-**11 3/8"–

- **5**9'-3 11/16<del>"</del>

FOUNDATION PLAN

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

- **6'-6 5**/8"-

– 15'-11 1/2"<del>-</del>

2'-1 9/16"

1 3/4"

20'-8 7/16"



1. Code Compliance: This foundation plan for 10412 Laurel Ridge Way, Fredericksburg, VA, USA, has been developed in strict adherence to the following codes and

 Virginia Uniform Statewide Building Code (USBC),
 2021 Edition: Effective January 18, 2024, this code references the 2021 International Building Code (IBC) and associated International Codes, including the International Residential Code (IRC), as amended by the Commonwealth of Virginia.

- International Building Code (IBC), 2021 Edition: As referenced by the USBC, this code provides comprehensive guidelines for building design and construction.

 International Residential Code (IRC), 2021 Edition:
 Also referenced by the USBC, this code specifically addresses residential building standards.

International Energy Conservation Code (IECC), 2021

Edition: Referenced by the USBC, this code sets forth energy efficiency requirements. International Plumbing Code (IPC), 2021 Edition: Referenced by the USBC, this code governs plumbing

system design and installation. International Mechanical Code (IMC), 2021 Edition: Referenced by the USBC, this code regulates mechanical system installations.

International Fuel Gas Code (IFGC), 2021 Edition: Referenced by the USBC, this code covers fuel gas systems and gas-fired appliances. National Electrical Code (NEC), 2020 Edition: Referenced by the USBC, this code provides standards for electrical installations.

2. Design Specifications:

 Slab Reinforcement: Incorporates wire mesh to enhance structural integrity.

- Footing Reinforcement: Equipped with two
continuous #4 rebar to ensure durability and compliance with structural standards. - Concrete Specification: Utilizes 3000 PSI concrete, meeting the required strength criteria for this

3. Product Approval Codes: All materials and construction methods comply with the relevant product approval codes as mandated by the Commonwealth of Virginia and the City of Fredericksburg

This note confirms that the foundation plan aligns with all applicable codes and regulations, ensuring safety, durability, and compliance with local building standards

### Schedule

P1 - CF 4"x4", 18"x18"x8" CONC. FTG P2 - CF 5"x5.5", 24"x26"x8" CONC. FTG

1. Allowable soil bearing capacity is 2,500 psf. 2. Bottom of footing to be located minimum 2'-0" below finished

. All lumber shall have a maximum moisture content of 19%. 2. All lumber shall be pressure treated in accordance with American Wood Preservation Association (AWPA) standards

3. All studs, band joists, beams, rails, stairs and posts shall be Southern Pine 抱 or better (UNO) with the foll owing minimum a. Extreme fiber stress Fb = 1,250 psi

b. Horizontal shear Fv = 175 psi c. Compression perpendicular to grain Fc = 565 psi d. Modulus of Elasticity E = 1,700,000 psi 4. Joists attached to supporting floor beams shall be secured using

joist hangers unless noted otherwise.

5. Joist hangers shall be Simpson Strong Tie, TECO or approved 6. Joist hangers for single joist shall be Simpson Strong—Tie LUS28 18 gauge with minimum allowable capacity of 1,100 lbs . or equal .

7. Joist hangers for double joist 2—2x shall be Simpson Strong—Tie LUS210—2 18 gauge with minimum allowable capacity of 1,800 lbs .

8. All nails, screws, lag screws and bolts shall be hot-dipped galvanized, stainless steel or approved for use with ACQ, CA or CA-B.

9. Hardware (joists hangers, anchors, clips, and angles) shall be hot-dipped galvanized with 1.85 oz/sf of zinc G-185 coating or stainless steel (Type 304 or better).

10. Electroplated galvanized materials shall not be used. Foundation Type: Slab—on—grade with no basement. 11. No members shown on the drawings shall be omitted without the Engineer's approval.

12. Notches, cuts, blocking shall not be performed without prior

13. Cuts in beams and joists shall be limited to a maximum of 1/6th of the member depth and shall be located outside middle

third of the member. 14. Notches at supports located within 3 times member depth shall be limited to 1/5th of member depth. 15. Holes in joists shall be minimum 2 inches away from edges and the diameter shall not exceed 1/3rd member depth.

16. Individual members of built—up beam ends shall not be closer than 3'-0" at all splice locations.

17. Mud sill plates shall be secured with 5/8" diameter bolts embedded 7" into concrete or masonry. There shall be minimum two bolts per piece with one bolt not closer than 4" from end and not more than 9" from end.

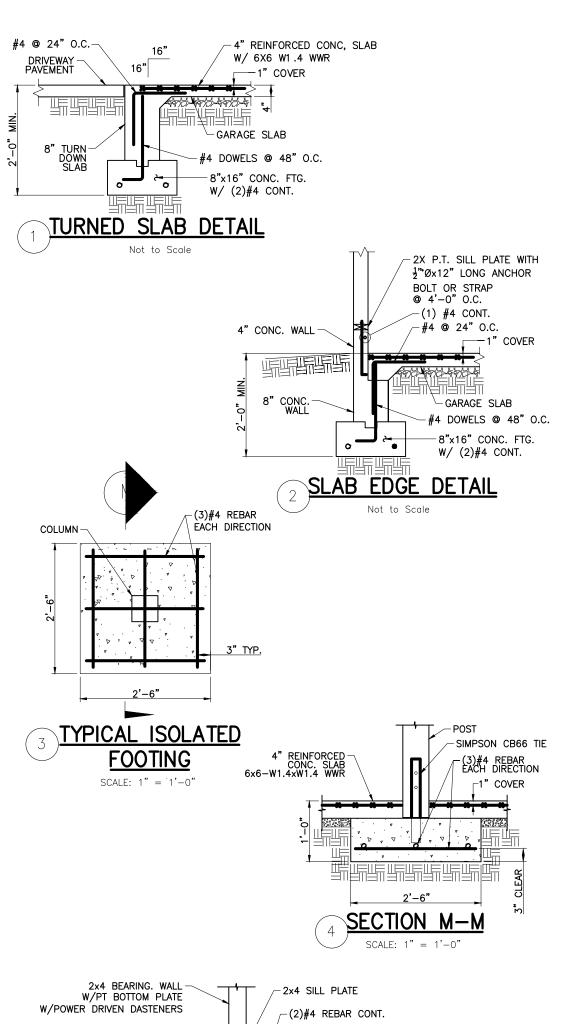
18. Provide 2" nominal blocking between joists at all supports. 19. Schedule of Nails — Unless noted otherwise on drawing

Joist or truss bearing on plate or girder 3—16d Bridging to joist, toenail each end 2—8d Sole plate to joist or blocking, face nail 16d @ 16" c/c Top plate to stud, end nail to each stud 2—16d Stud to sole plate 4-8d toenail or 2-16d end nail

Double studs, face nail Double top plate, face nail 16d @ 24" c/ct Top plates, laps and intersections, face nail 2-16d Ceiling joists to top plate, toe nail 3–8d
Continuous header to stud, toe nail 4–8d Continuous header to stud, toe nail Rafter to truss to plate, toe nail 3-8d Buildup corner studs nail 3-8d 24" c/c

Braced Wall Panels Continuous rim joist to double top plate of wall 8d @ 6" c/c Wall sole plate to continuous rim joist 3-16d @ 16" c/c All fasteners not shown here, refer IRC Table R602.3(1) 20. All connectors for the construction shall be Simpson Strong—tie or approved equal.

<u>-2'-4 7/8"</u>

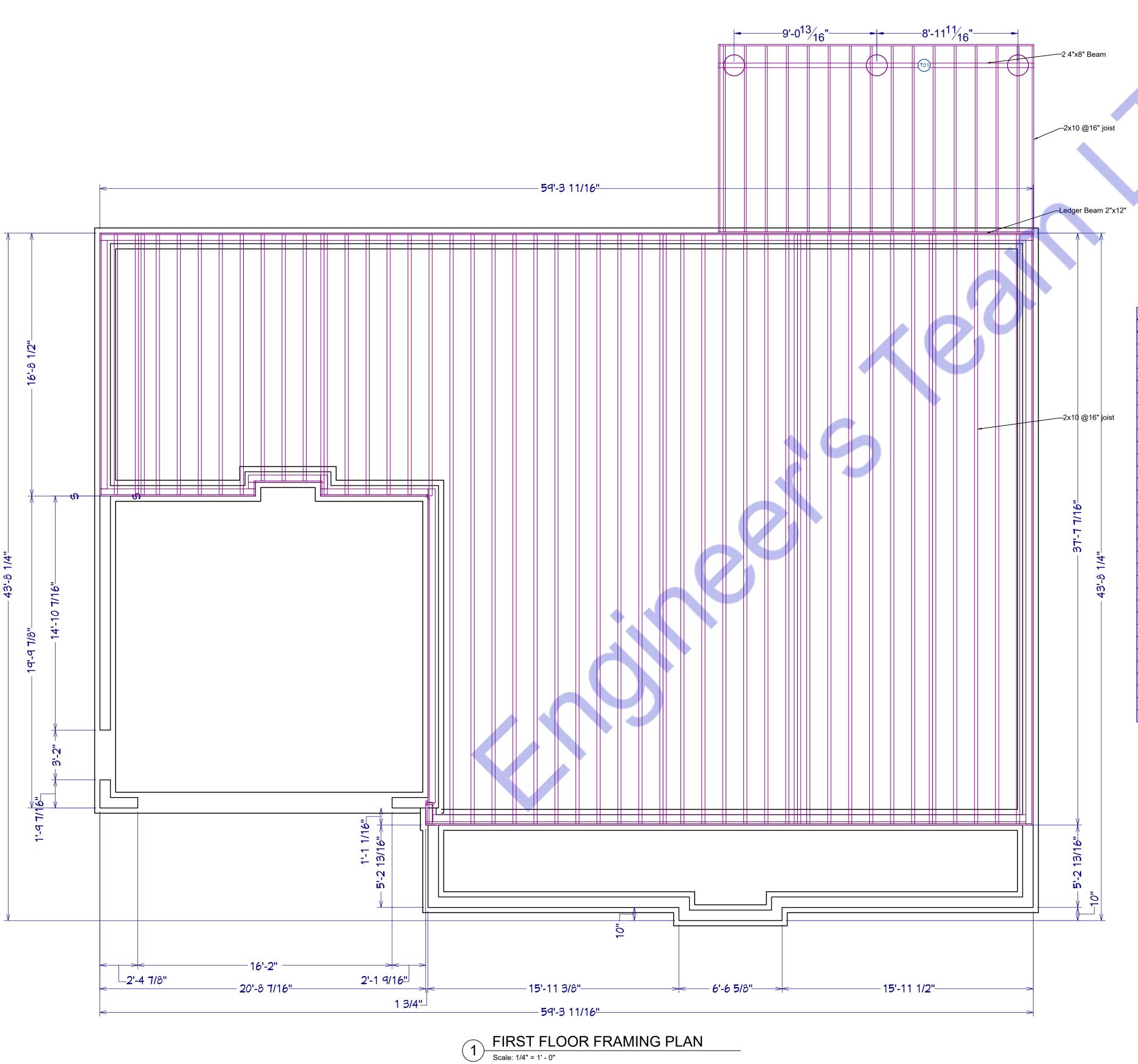


\_4" REINFORCED

CONC. SLAB

TYPICAL THICKENED SLAB

P2⊢



FRAMING SCHEDULE								
NUMBER	NAME	QTY	NOMINAL	LENGTH	MATERIAL	TYPE		
T01	DECK BEAM	1	4X8	20'-0 7/16"	CA-B PRESSURE TREATED LUMBER	LUMBER		
T02	HEADER	2	1 1/2 × 11 7/8	10'-7 15/16"	FIR FRAMING 2	LUMBER		
T03	HEADER	2	1 1/2 × 11 7/8	11'-11"	FIR FRAMING 2	LUMBER		
T04	HEADER	2	1 1/2 × 11 7/8	11'-5"	FIR FRAMING 2	LUMBER		
T05	HEADER	2	1 1/2 × 11 7/8	16'-8"	FIR FRAMING 2	LUMBER		
T06	HEADER	4	2X10	7'-6 1/2"	FIR FRAMING 2	LUMBER		
T07	HEADER	2	2X10	8'-0 5/16"	FIR FRAMING 2	LUMBER		
T08	HEADER	2	2X12	9'-5"	FIR FRAMING 2	LUMBER		
T09	HEADER	2	2X6	1'-10"	FIR FRAMING 2	LUMBER		
T10	HEADER	20	2X6	10"	FIR FRAMING 2	LUMBER		
T11	HEADER	46	2X6	2'-10"	FIR FRAMING 2	LUMBER		
T12	HEADER	20	2X6	2'-11"	FIR FRAMING 2	LUMBER		
T13	HEADER	12	2X6	2'-4"	FIR FRAMING 2	LUMBER		
T14	HEADER	28	2X6	2'-5"	FIR FRAMING 2	LUMBER		
T15	HEADER	4	2X6	3'- <b>5</b> "	FIR FRAMING 2	LUMBER		
T16	HEADER	2	2X6	3'-8 11/16"	FIR FRAMING 2	LUMBER		
T17	HEADER	2	2X6	3'-8 15/16"	FIR FRAMING 2	LUMBER		
T18	HEADER	2	2X6	4'-11"	FIR FRAMING 2	LUMBER		
T19	HEADER	4	2X6	4'-2"	FIR FRAMING 2	LUMBER		
T20	HEADER	2	2X6	5'-4 1/4"	FIR FRAMING 2	LUMBER		
T21	POST	2	4X4	9'-1 1/8"	FIR FRAMING 3	LUMBER		
T22	POST	1	4X4	13'-1"	FIR FRAMING 3	LUMBER		
T23	POST	1	4X4	13'-1 3/16"	FIR FRAMING 3	LUMBER		
T24	HEADER	6	2X6	5'-5"	FIR FRAMING 2	LUMBER		
T25	HEADER	2	2X8	4'-4 1/8"	FIR FRAMING 2	LUMBER		
T26	HEADER	2	2X8	4'-5 1/16"	FIR FRAMING 2	LUMBER		
T27	HEADER	2	2X8	4'-6 1/4"	FIR FRAMING 2	LUMBER		
T28	HEADER	2	2X8	4'-7 5/8"	FIR FRAMING 2	LUMBER		
T29	HEADER	2	2X8	5'-5"	FIR FRAMING 2	LUMBER		
T30	HEADER	2	2X8	5'-6 1/16"	FIR FRAMING 2	LUMBER		
T31	HEADER	2	2X8	5'-6 5/8"	FIR FRAMING 2	LUMBER		
T32	HEADER	4	2X8	5'-6"	FIR FRAMING 2	LUMBER		



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430 E 8TH HOLLAN

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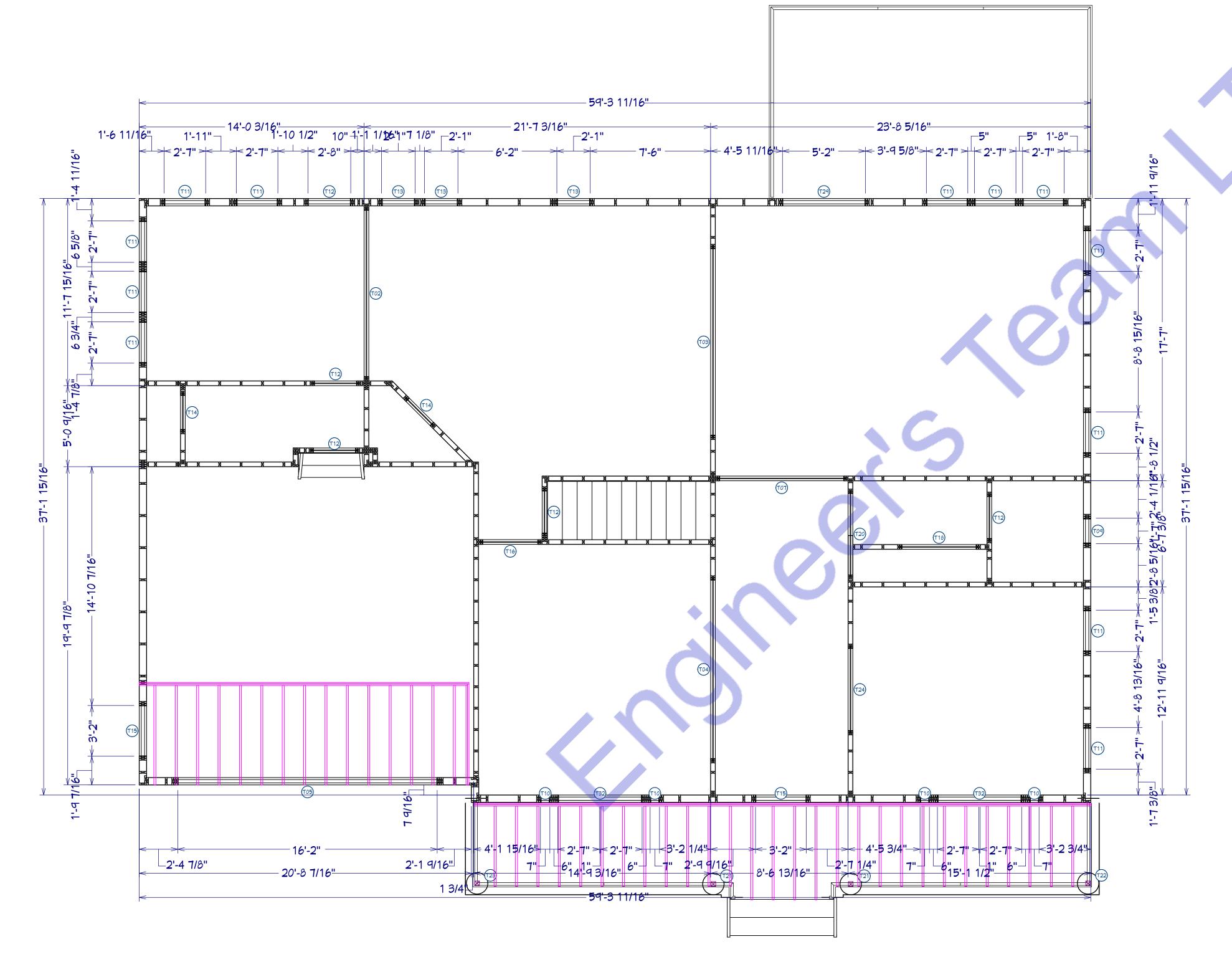
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PROPOSED FIRST FLOOR FRAMING PLAN

Drawn by: Engr. Al Amin
Checked:
Date: FEB, 06.

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Scale: 1:100



			FR,	AMING SCHE	DULE	
NUMBER	NAME	QTY	NOMINAL	LENGTH	MATERIAL	TYPE
T01	DECK BEAM	1	4X8	20'-0 7/16"	CA-B PRESSURE TREATED LUMBER	
T02	HEADER	2	1 1/2 × 11 7/8	10'-7 15/16"	FIR FRAMING 2	LUMBER
T03	HEADER	2	1 1/2 × 11 7/8	11'-11"	FIR FRAMING 2	LUMBER
T04	HEADER	2	1 1/2 × 11 7/8	11'-5"	FIR FRAMING 2	LUMBER
T05	HEADER	2	1 1/2 × 11 7/8	16'-8"	FIR FRAMING 2	LUMBER
T06	HEADER	4	2X10	7'-6 1/2"	FIR FRAMING 2	LUMBER
T07	HEADER	2	2X10	8'-0 <b>5</b> /1 <b>6</b> "	FIR FRAMING 2	LUMBER
T08	HEADER	2	2X12	9'-5"	FIR FRAMING 2	LUMBER
T09	HEADER	2	2X6	1'-1 <i>0</i> "	FIR FRAMING 2	LUMBER
T10	HEADER	20	2X6	10"	FIR FRAMING 2	LUMBER
T11	HEADER	46	2X6	2'-10"	FIR FRAMING 2	LUMBER
T12	HEADER	20	2X6	2'-11"	FIR FRAMING 2	LUMBER
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T14	HEADER	28	2X6	2'-5"	FIR FRAMING 2	LUMBER
T15	HEADER	4	2X6	3'- <b>5</b> "	FIR FRAMING 2	LUMBER
T16	HEADER	2	2X6	3'-8 11/16"	FIR FRAMING 2	LUMBER
T17	HEADER	2	2X6	3'-8 <b>15/16</b> "	FIR FRAMING 2	LUMBER
T18	HEADER	2	2X6	4'-11"	FIR FRAMING 2	LUMBER
T19	HEADER	4	2X6	4'-2"	FIR FRAMING 2	LUMBER
T20	HEADER	2	2X6	5'-4 1/4"	FIR FRAMING 2	LUMBER
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T23	POST	1	4X4	13'-1 3/16"	FIR FRAMING 3	LUMBER
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T27	HEADER	2	2X8	4'-6 1/4"	FIR FRAMING 2	LUMBER
T28	HEADER		2X8	4'-7 5/8"	FIR FRAMING 2	LUMBER
T29	HEADER	2	2X8	5'-5"	FIR FRAMING 2	LUMBER
T30	HEADER	2	2X8	5'-6 1/16"	FIR FRAMING 2	LUMBER
T31	HEADER	2	2X8	5'-6 5/8"	FIR FRAMING 2	LUMBER
T32	HEADER	4	2X8	5'-6"	FIR FRAMING 2	LUMBER

1 FIRST FLOOR CEILING/TRUES FRAMING PLAN

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



E 8TH ST STE 8017 OLLAND MI 49423

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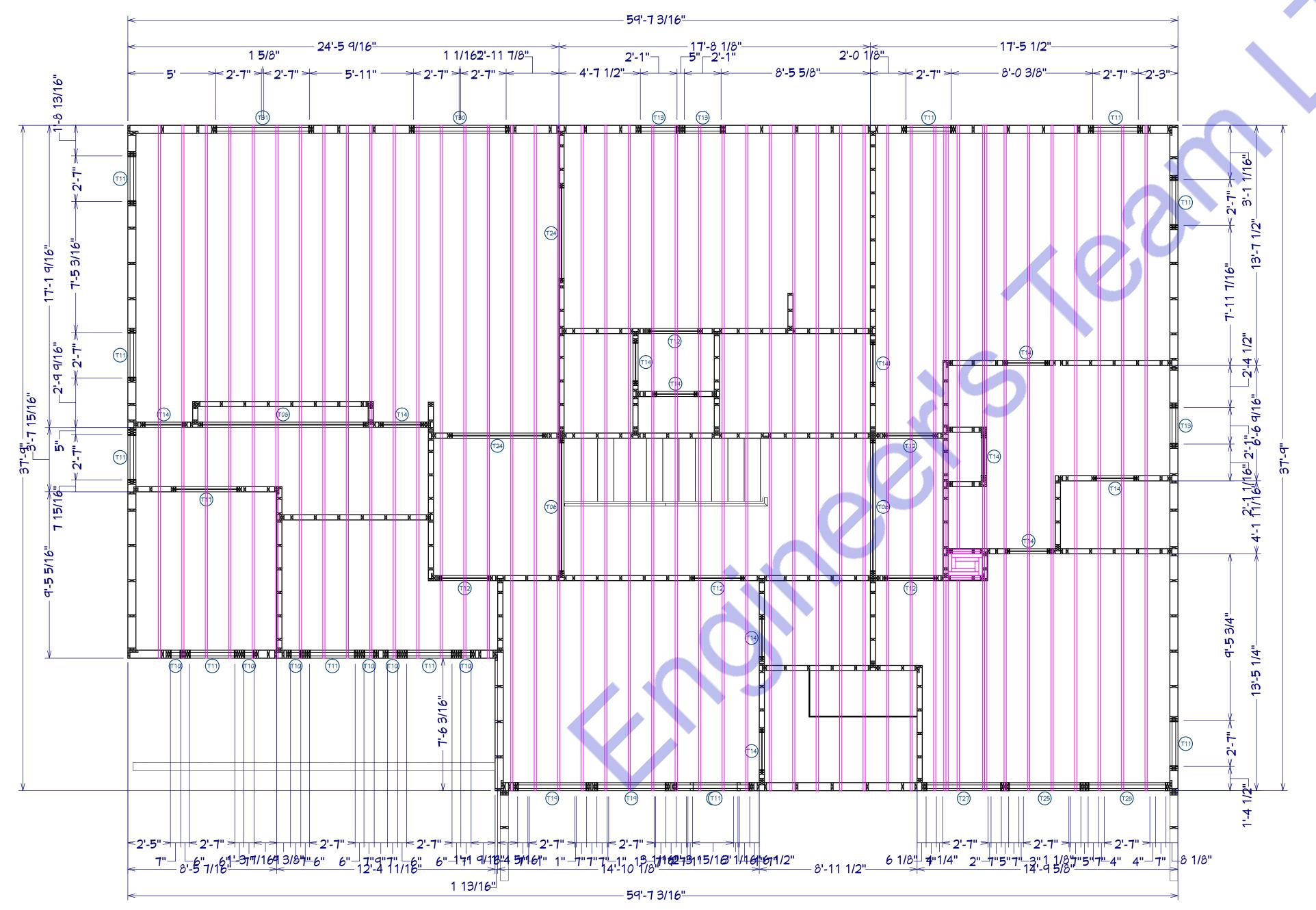
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PROPOSED FIRST FLOOR CEILING FRAMING PLAN

Drawn by: Engr. Al Amin
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Date: FEB, 06.
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NIIMBED	NAME	OTY		AMING SCHE	MATERIAL	TYPE
NUMBER		QTY	NOMINAL	LENGTH		
T01	DECK BEAM	1	4X8	20'-0 7/16"	CA-B PRESSURE TREATED LUMBER	LUMBER
T02	HEADER	2	1 1/2 × 11 7/8	10'-7 15/16"	FIR FRAMING 2	LUMBE
T03	HEADER	2	1 1/2 × 11 7/8	11'-11"	FIR FRAMING 2	LUMBE
T04	HEADER	2	1 1/2 × 11 7/8	11'-5"	FIR FRAMING 2	LUMBE
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430 E 8TH S HOLLAND

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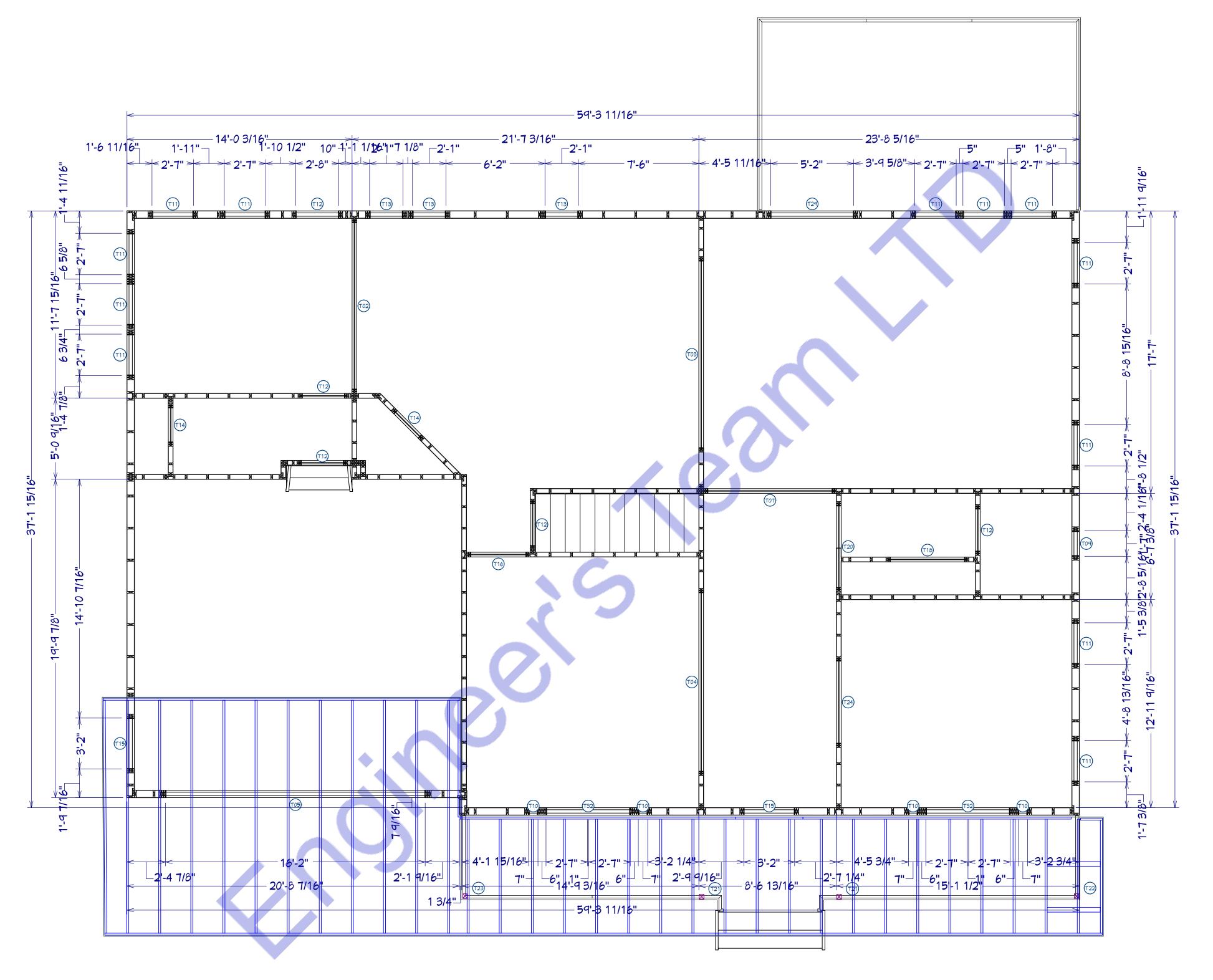
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PROPOSED SECOND FLOOR CEILING FRAMING PLAN

Drawn by:		Engr. Al Amin
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	S-4	
Scale:	1:100	

SECOND FLOOR CEILING/TRUES FRAMING PLAN

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



# 1 FIRST FLOOR ROOF TRUSS FRAMING PLAN Scale: 1/4" = 1' - 0"

					ROOM FINISH SCHEDULE						
ROOM NAME	AREA, INTERIOR (SQ FT)	CEILING HEIGHT	MALL MATERIAL	FLOOR FINISH		CEILING FINISH	BASE MOLDING	CHAIR RAIL	CROWN MOLDING WINDOW CASING	MINDOM SILL	DOOR CASING
2 CAR GARAGE	395	135 1/4"	DRYMALL			DRYMALL, COLOR - WHITE					STOCK
FRONT PORCH	191	109 1/8"	DRYMALL			DRYMALL, COLOR - WHITE				STOCK	STOCK
DINING ROOM	223		DRYWALL, FIBER SIDING NEUTRAL							STOCK	STOCK
FAMILY ROOM	383	109 1/8"	ARTIQUE GLASS, DRYMALL		BLONDE, FOAM UNDERLAYMENT				STOCK	STOCK	STOCK
FOYER	159		DRYWALL, FIBER SIDING NEUTRAL		<u> </u>	<u> </u>					STOCK
KITCHEN	345		ARTIQUE GLASS, DRYMALL		BLONDE, FOAM UNDERLAYMENT					STOCK	STOCK
LIVING ROOM	184	i	DRYWALL, FIBER SIDING NEUTRAL							STOCK	STOCK
MORNING ROOM	1 146	109 1/8"	DRYWALL	MAPLE 3-4-5" PLANK -	BLONDE, FOAM UNDERLAYMENT					STOCK	STOCK
OPEN DECK	241		FIBER SIDING NEUTRAL			DRYMALL, COLOR - WHITE			STOCK	STOCK	STOCK
UNSPECIFIED	0	109 1/8"	DRYWALL	MAPLE 3-4-5" PLANK -	BLONDE, FOAM UNDERLAYMENT	DRYMALL, COLOR - WHITE	STOCK				
UNSPECIFIED	16	109 1/8"	DRYMALL		BLONDE, FOAM UNDERLAYMENT						STOCK
UNSPECIFIED	32	109 1/8"	DRYWALL		BLONDE, FOAM UNDERLAYMENT						STOCK
UNSPECIFIED	35	1 1 1 1 1	COLOR - WHITE, DRYWALL		BLONDE, FOAM UNDERLAYMENT				STOCK	STOCK	STOCK
UNSPECIFIED	36	121 3/4"	DRYMALL		BLONDE, FOAM UNDERLAYMENT	·					STOCK
UNSPECIFIED	48	109 1/8"	DRYWALL		BLONDE, FOAM UNDERLAYMENT	·					STOCK
UNSPECIFIED	9	109 1/8"	DRYMALL	MAPLE 3-4-5" PLANK -	BLONDE, FOAM UNDERLAYMENT	DRYMALL, COLOR - MHITE	STOCK				STOCK
TOTALS:	2459										



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OWNER:

**Proposed Home Plan** 

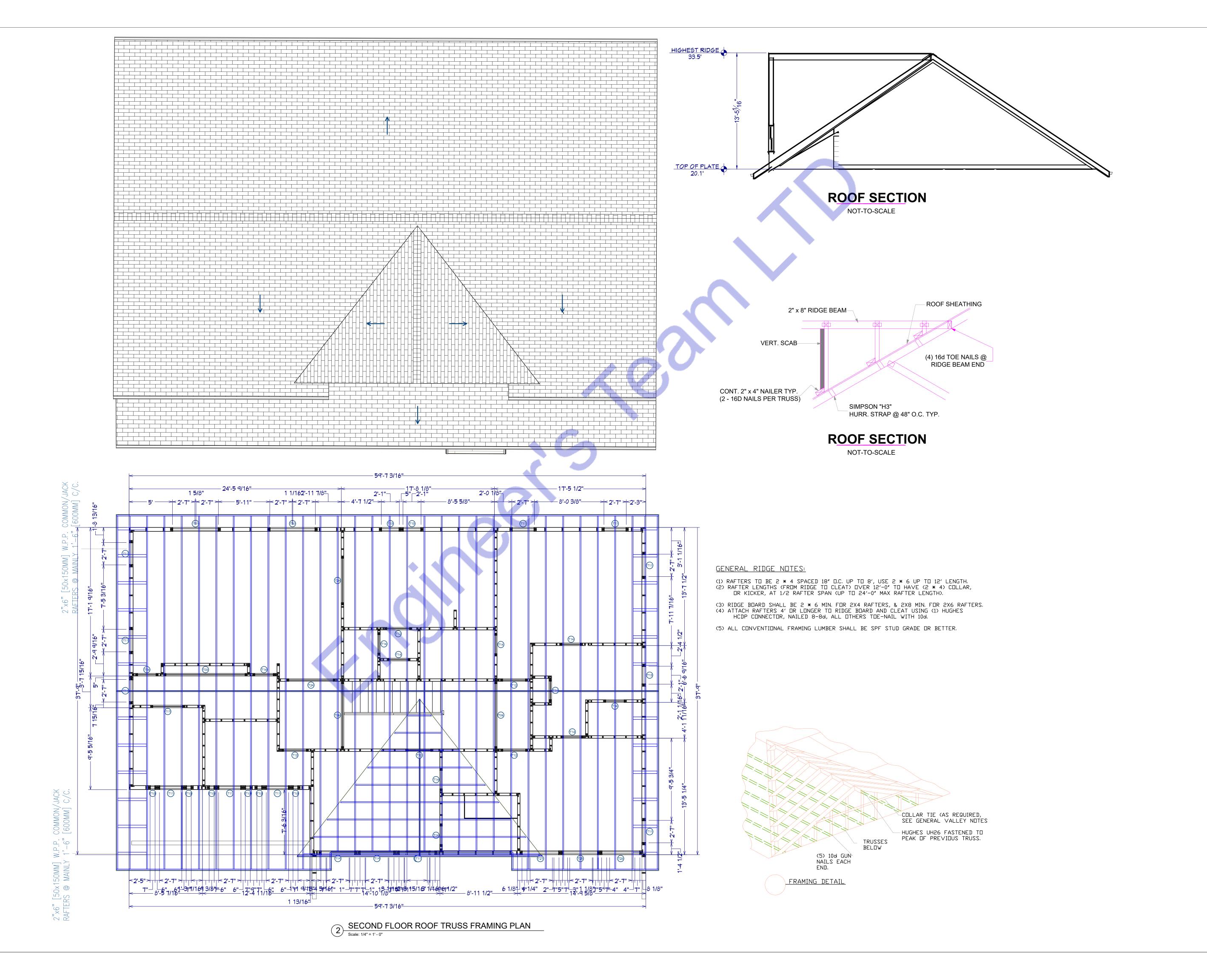
10412 Laurel Ridge Way Fredericksburg, VA

SEAL:

Release for construction

PROPOSED FIRST FLOOR ROOF TRUSS FRAMING PLAN

Drawn by:	E	Engr. Al Amin
Checked:		
Date:		FEB, 06.
	S-5	
Scale:	1:100	





TE 8017 49423

430 E 8TH ST STE HOLLAND MI 49

OWNER:

Proposed Home Plan

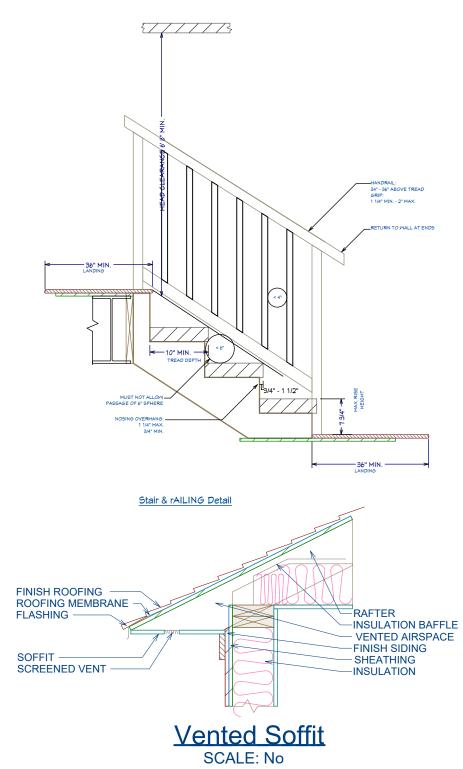
10412 Laurel Ridge Way Fredericksburg, VA

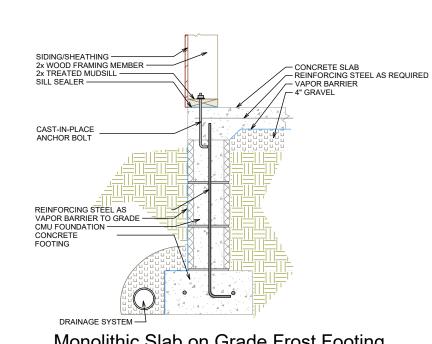
SEAL:

Release for construction

PROPOSED SECOND FLOOR ROOF TRUSS FRAMING PLAN

Drawn by:	Engr. Al Amin
Checked:	
Date:	FEB, 06.
	S-6
Scale:	1:100





CROSS SECTION A

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



<u>OWNER:</u>

**Proposed Home Plan** 

10412 Laurel Ridge Way Fredericksburg,

SEAL:

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PROPOSED CROSS SECTION PLAN

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Date:		FEB, 06.
	S-7	
Scale:	1:100	



17

430 E 8TH ST STE 801 HOLLAND MI 49423

OWNER:

Proposed Home Plan

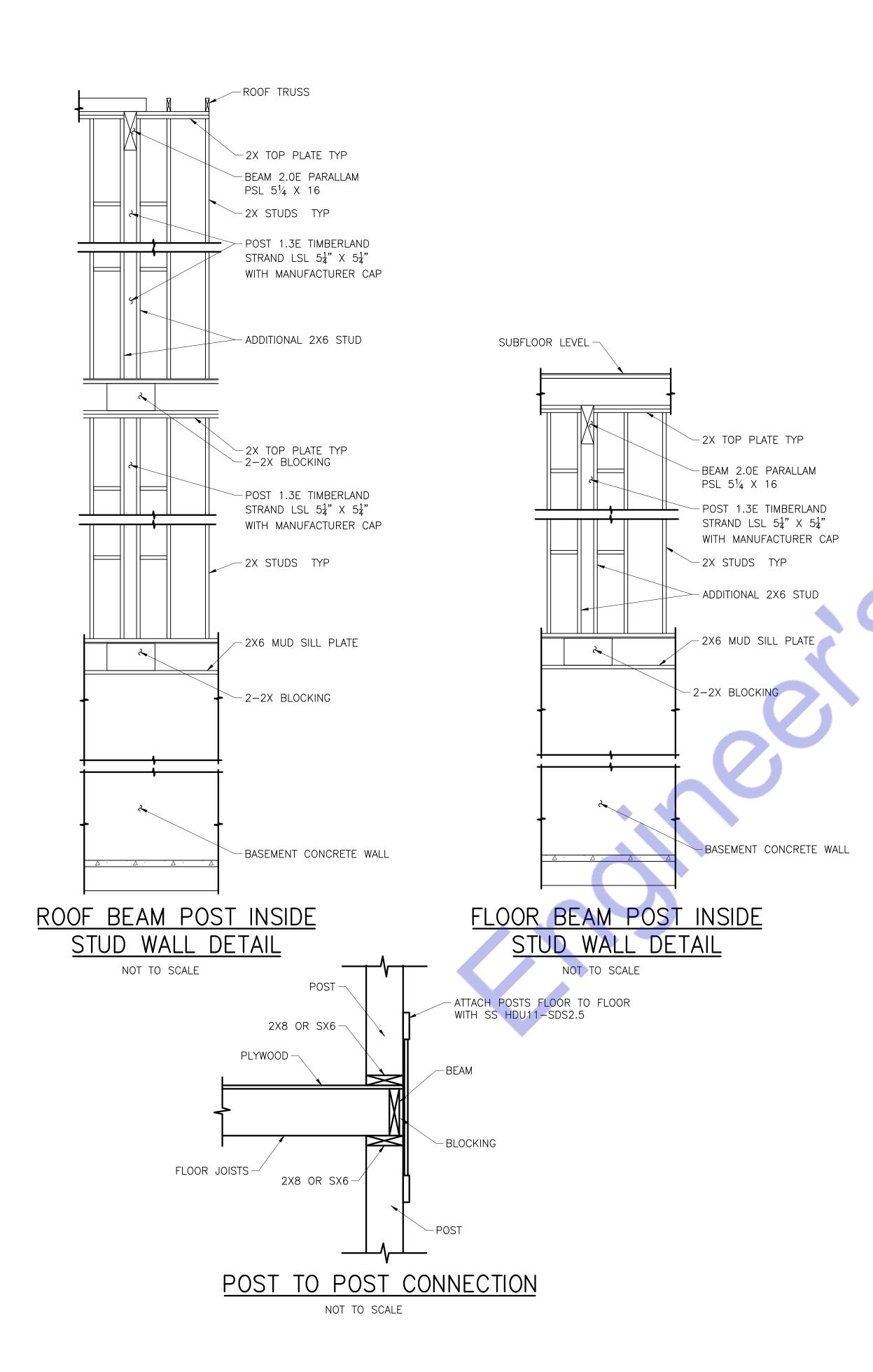
10412 Laurel Ridge Way Fredericksburg, VA

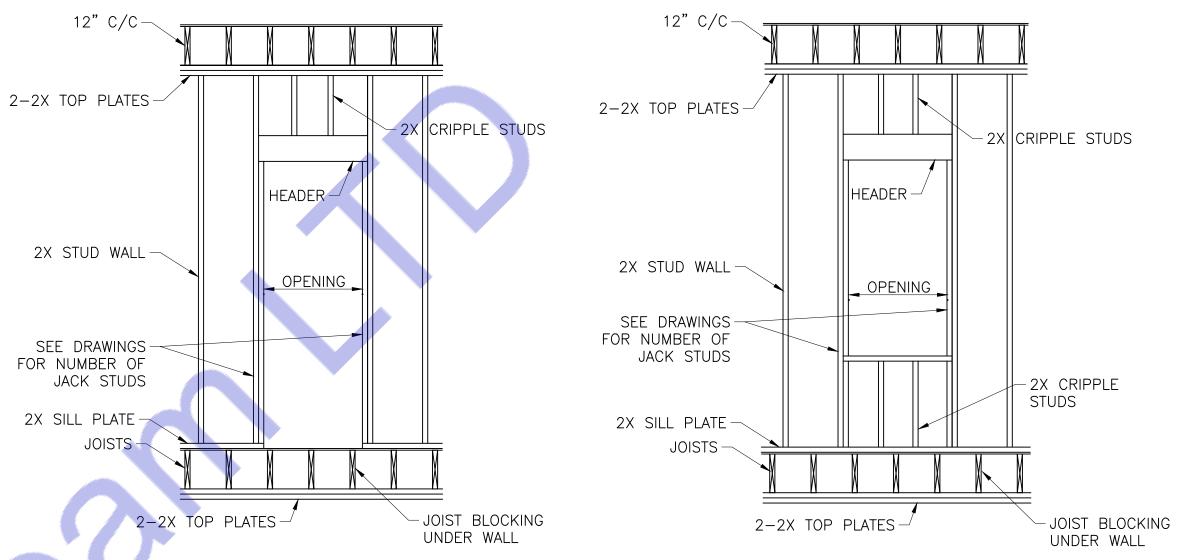
SEAL:

Release for construction

# PROPOSED CROSS SECTION PLAN

Drawn by:	E	Engr. Al Amin
Checked:		
Date:		FEB, 06.
	S-8	
Scale:	1:100	

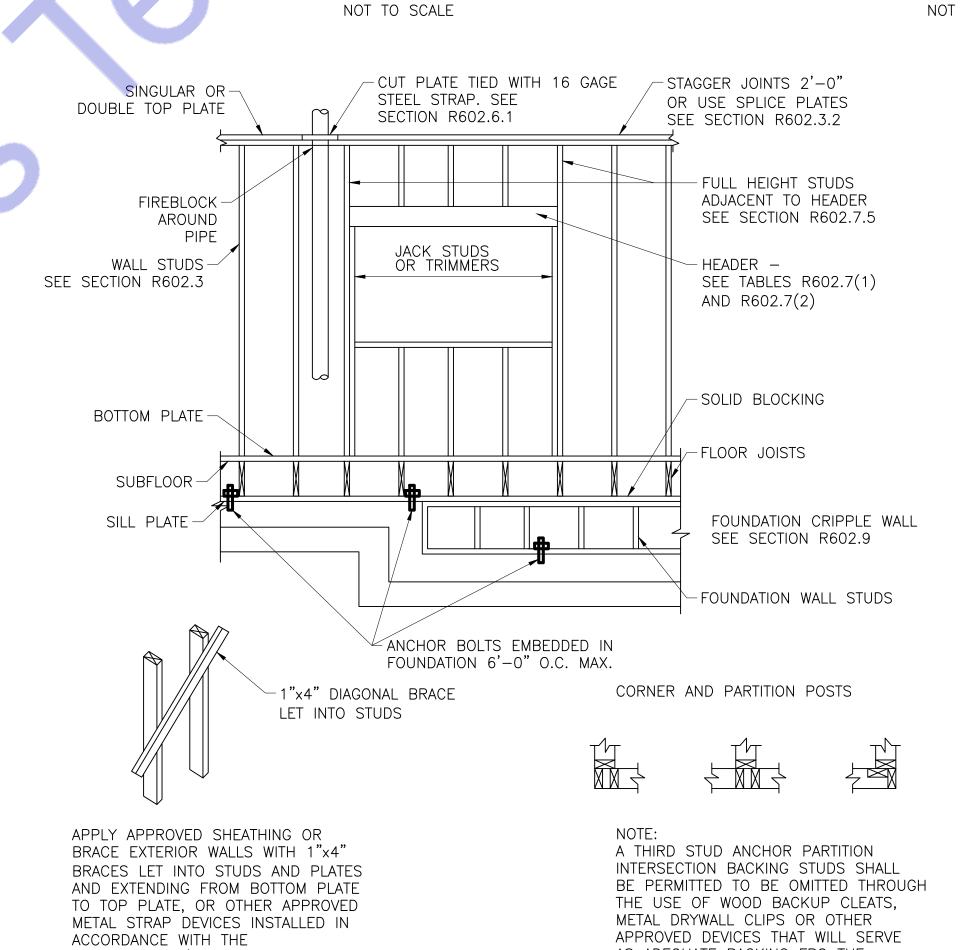




# TYPICAL DOOR FRAME ELEVATION

### TYPICAL WINDOW FRAME ELEVATION

NOT TO SCALE



### TYPICAL WALL FLOOR ROOF FRAMING

AS ADEQUATE BACKING FRO THE

FACING MATERIALS.

NOT TO SCALE

MANUFACTURER'S SPECIFICATIONS

SEE SECTION R602.10



| S1E 801/ MI 49423

430 E 8TH ST STE 8017 HOLLAND MI 49423

**OWNER:** 

**Proposed Home Plan** 

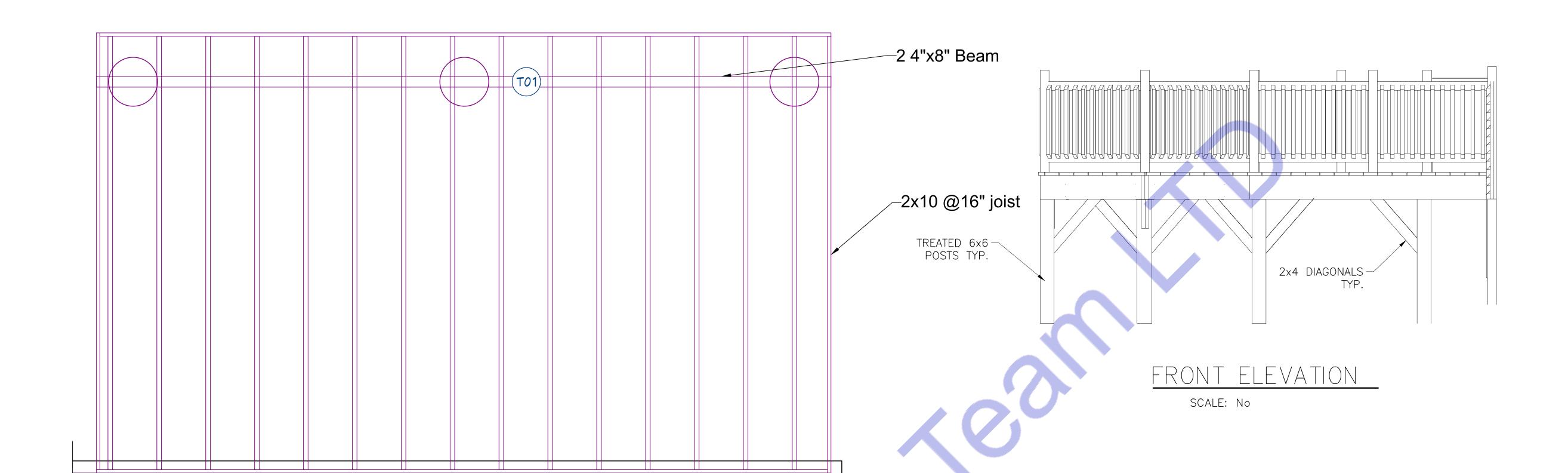
10412 Laurel Ridge Way Fredericksburg, VA

SEAL:

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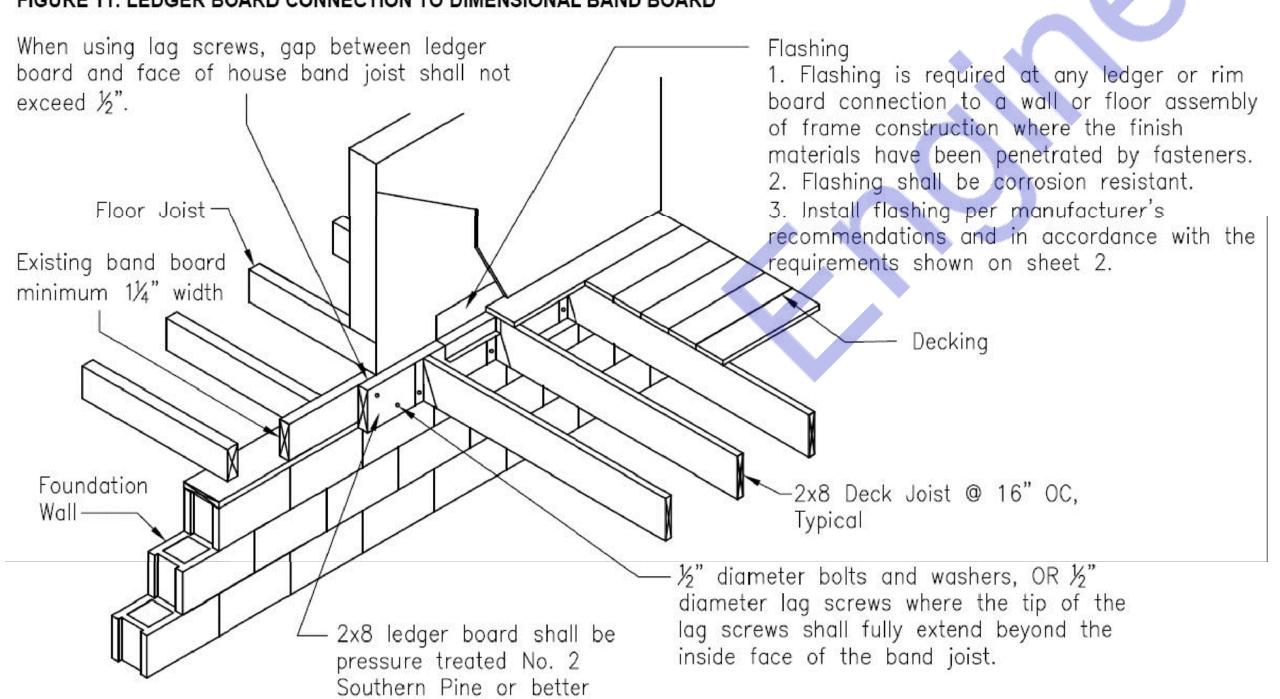
# PROPOSED CROSS SECTION PLAN

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Scale:	1:100	

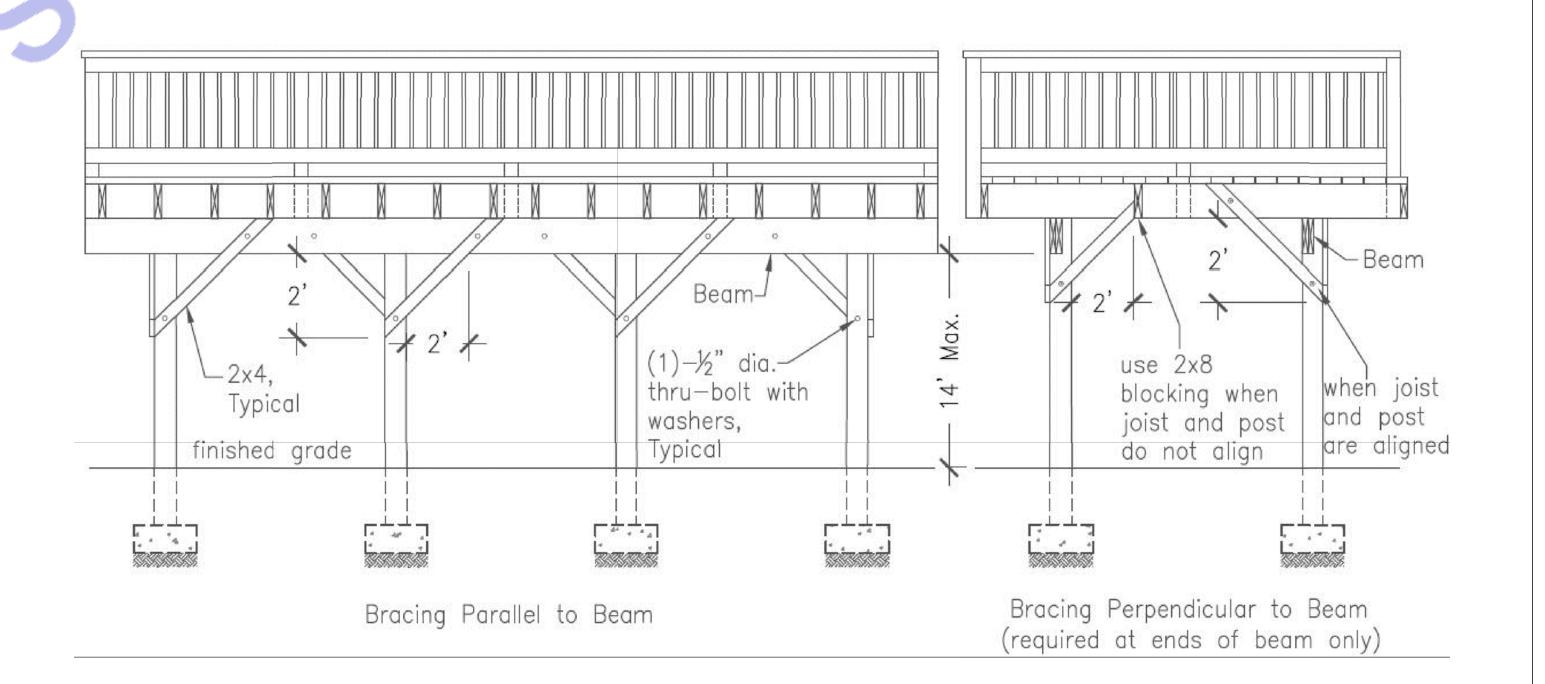




### FIGURE 11: LEDGER BOARD CONNECTION TO DIMENSIONAL BAND BOARD



NOTE: FLASHING SHALL BE COPPER, STAINLESS STEEL, SILICON, BRONZE, OR UV-RESISTANT PLASTIC, AND HOT-DIPPED GALVANIZED STEEL WITH A G30 ZINC COATING.





30 E 8TH ST STE 8017 HOLLAND MI 49423

OWNER:

Proposed Home Plan

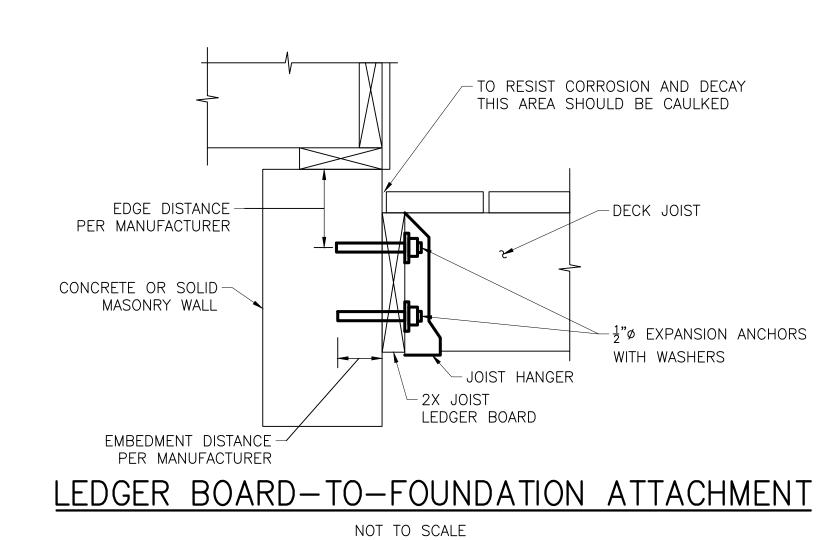
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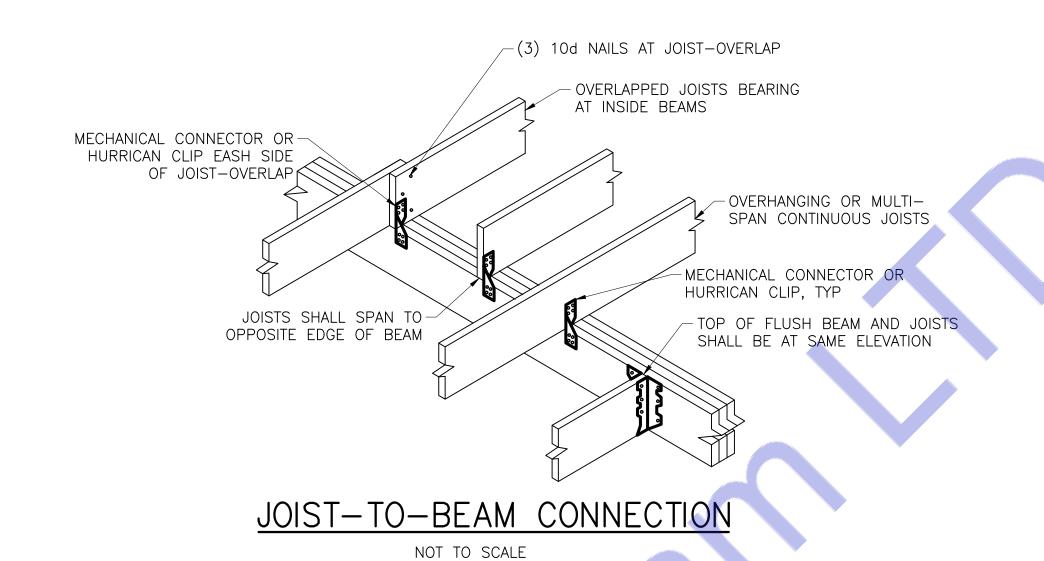
SEAL:

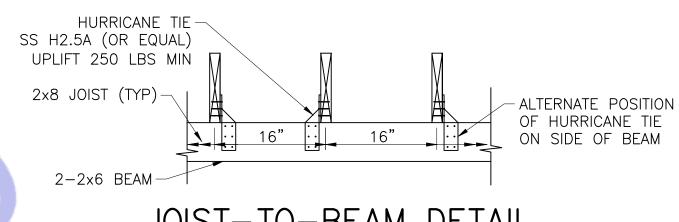
Release for construction

# PROPOSED DECK STRUCTURAL PLAN

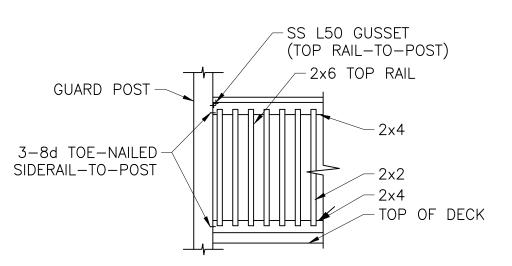
Drawn by:	Engr. Al Amin
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Date:	FEB, 06.
	S-10
Scale:	1:100





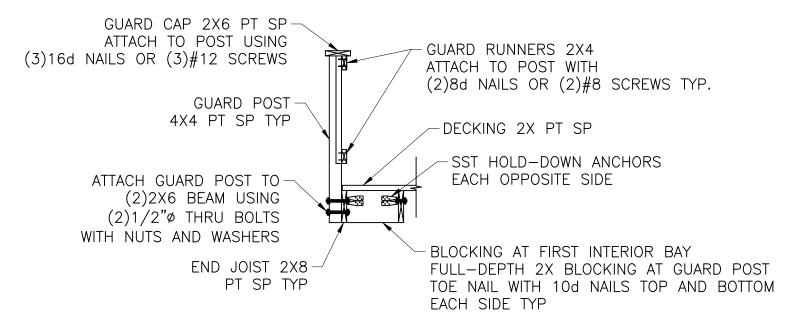


# JOIST-TO-BEAM DETAIL NOT TO SCALE

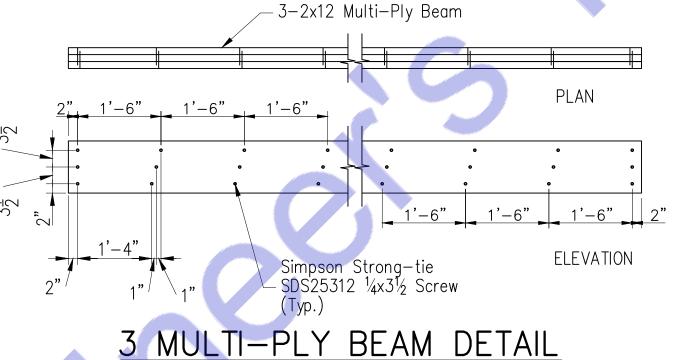


RAIL ATTACHMENT TO GUARD POST

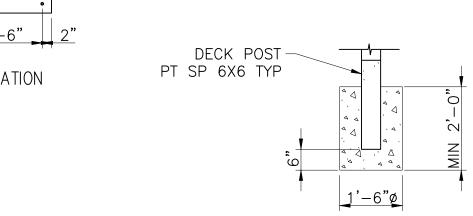
NOT TO SCALE

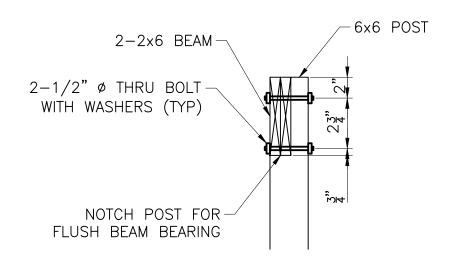






NOT TO SCALE



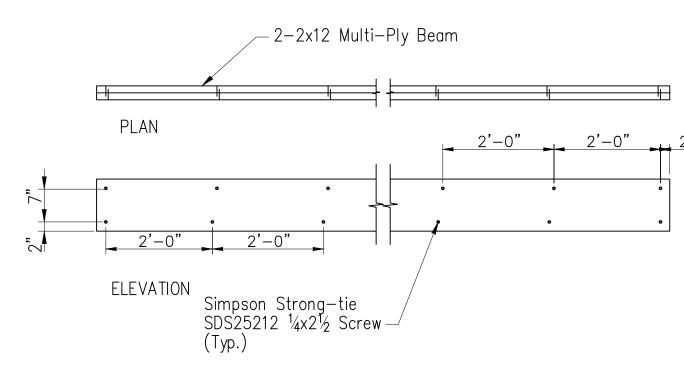


DECK POST FOUNDATION DETAIL

NOT TO SCALE

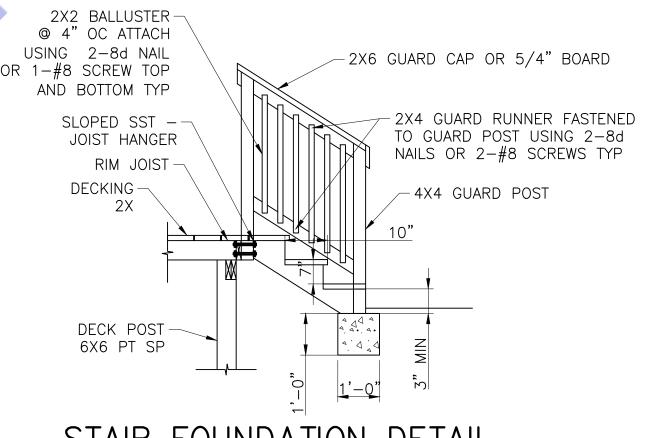
BEAM-TO-POST SECTION

NOT TO SCALE



2 MULTI-PLY BEAM DETAIL

NOT TO SCALE



STAIR FOUNDATION DETAIL

NOT TO SCALE

GUARD CAP 2X6 PT SP
ATTACH TO POST USING

(3)16d NAILS OR (3)#12 SCREWS

GUARDRAIL POST
4X4 PT SP @ MAX
6'-0" C/C TYP.

ATTACH GUARD POST
TO 2X8 RIM JOIST USING
(2)1/2"ø THRU BOLTS
WITH NUTS AND WASHERS

QUARD RUNNERS 2X4
ATTACH TO POST WITH
(2)8d NAILS OR (2)#8
SCREWS TYP.

DECKING 2X10

JOIST 2X8 @ 16" C/C

2X8 RIM JOIST ATTACH
TO END OF JOIST WITH
3-8d NAILS OR 3-#8
SCREWS TYP

JOIST-TO-BEAM DETAILGUARD

NOT TO SCALE

430 E 8TH ST STE 8017 HOLLAND MI 49423

OWNER:

**Proposed Home Plan** 

10412 Laurel Ridge Way Fredericksburg, VA

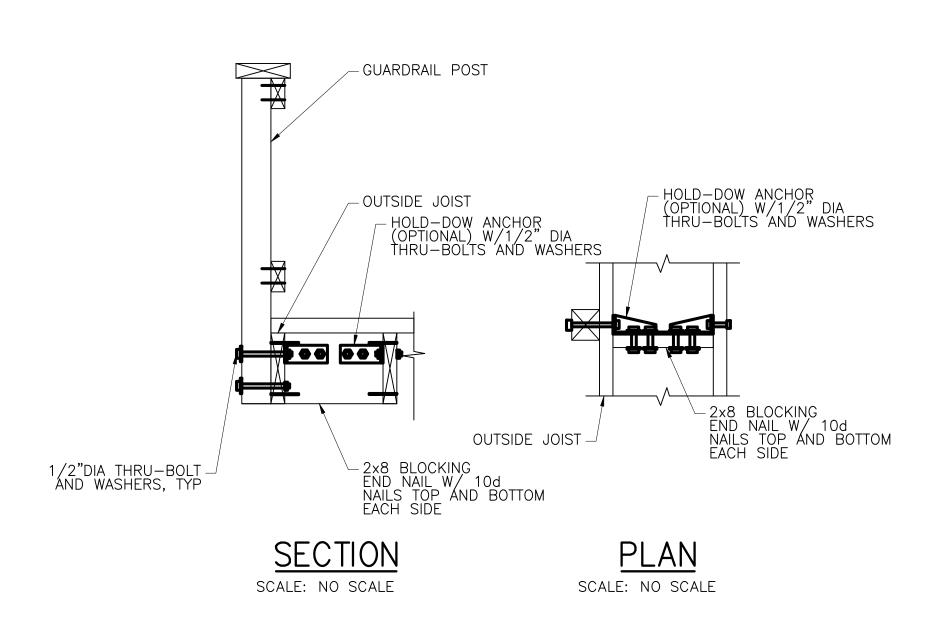
SEAL:

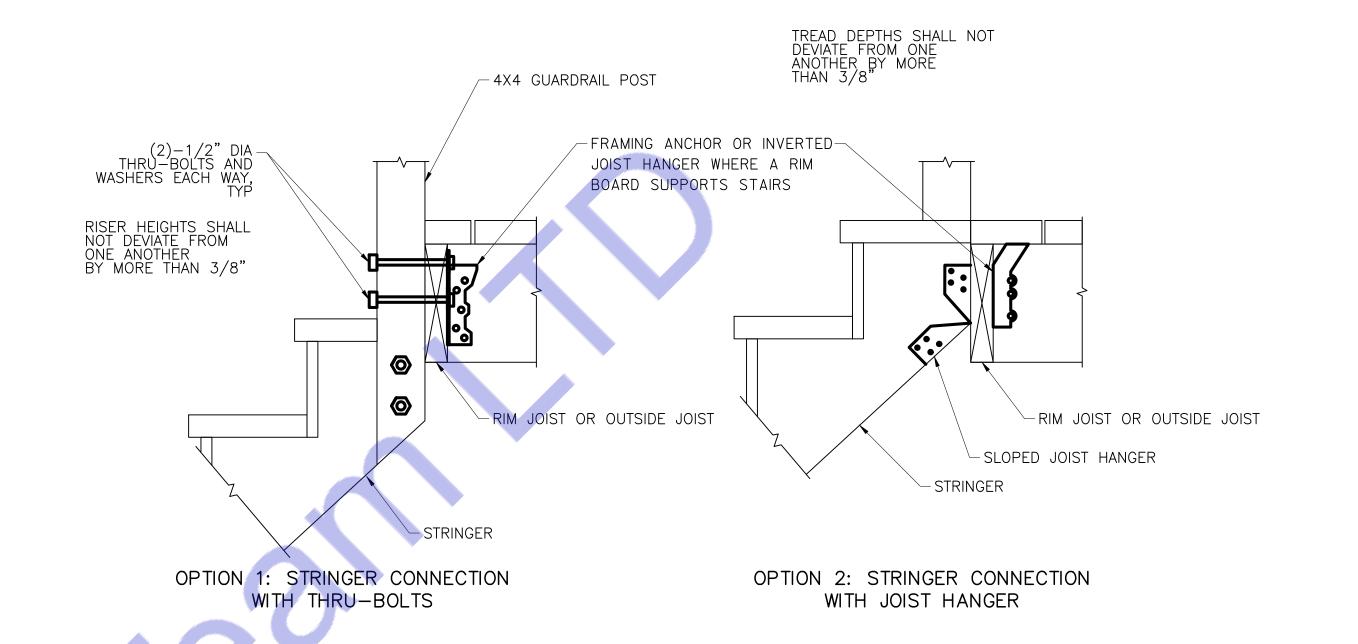
Release for construction

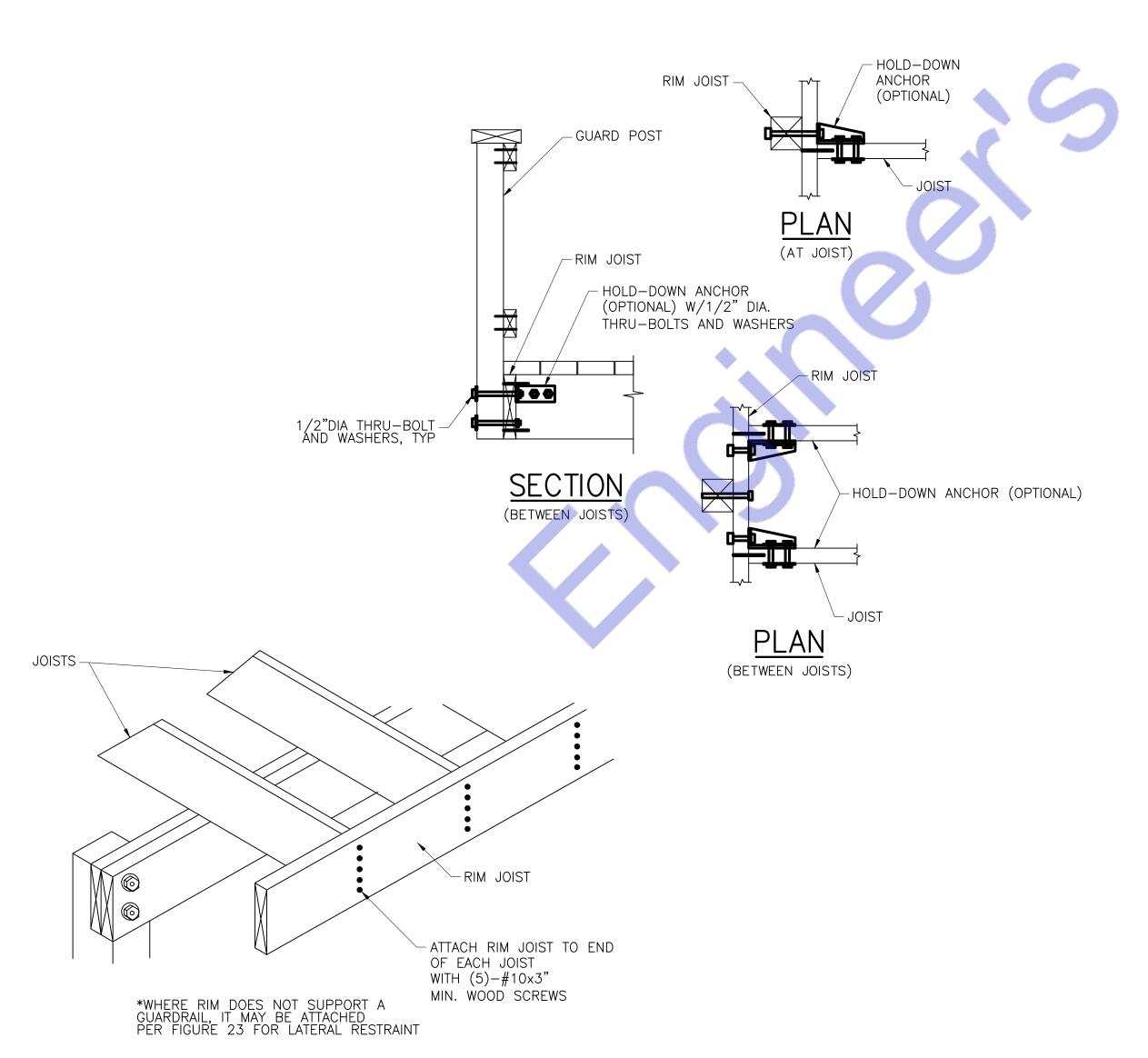
STRUCTURAL DETAILS

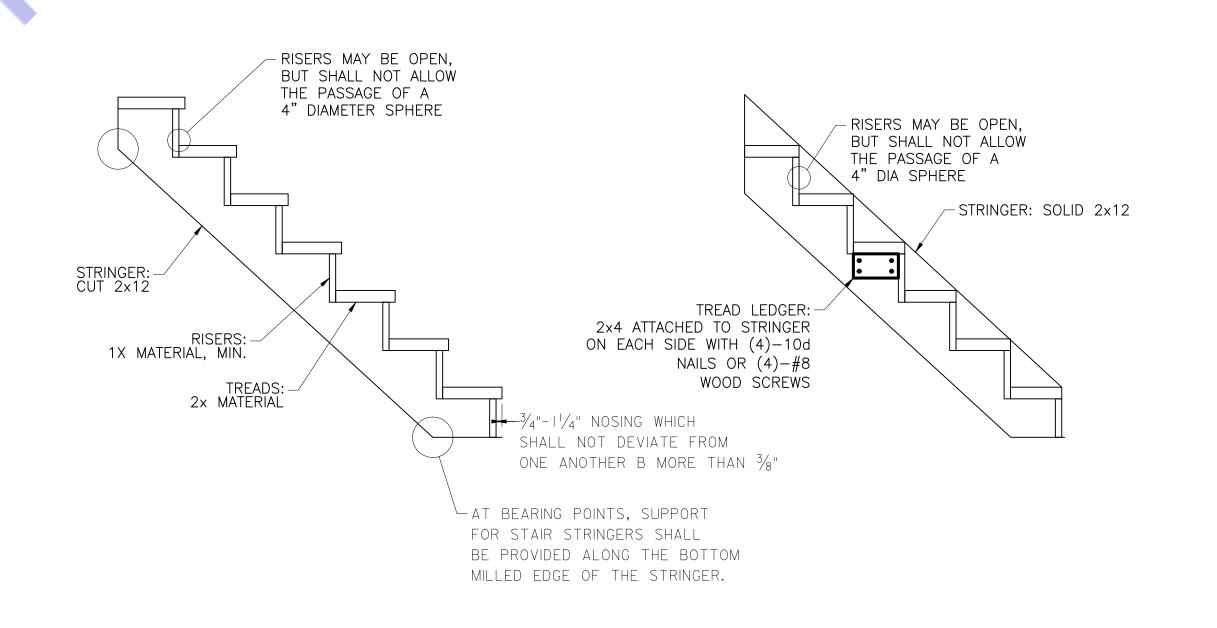
Drawn by: Engr. Al Amin
Checked:
Date: FEB, 06.

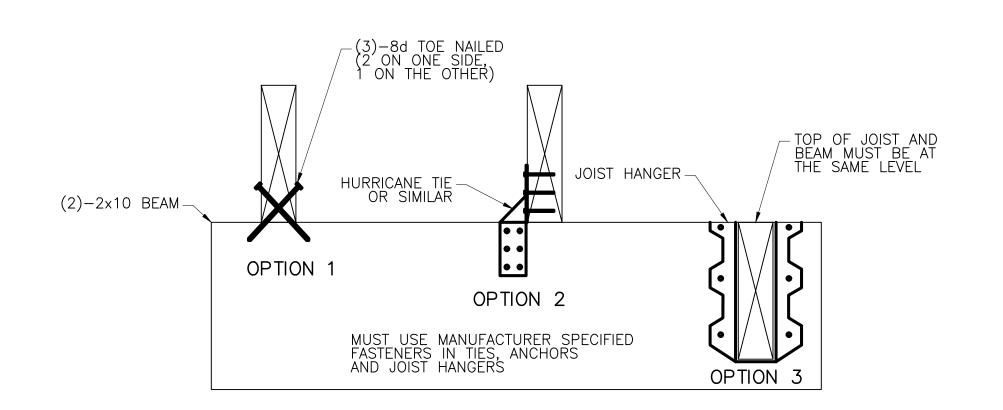
S-11
Scale: 1:100













430 E 8TH ST STE 8017 HOLLAND MI 49423

430 E 8TH HOLLAN

OWNER:

**Proposed Home Plan** 

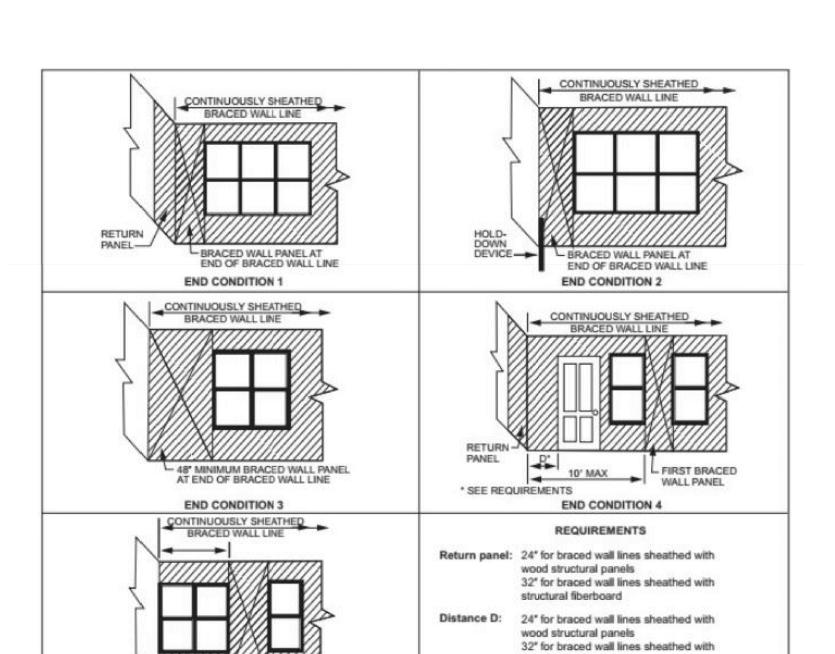
10412 Laurel Ridge Way Fredericksburg, VA

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STRUCTURAL DETAILS

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Date:	FEB, 06.
	S-12
Scale:	1:100



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound = 4.45 N.

structural fiberboard

Hold-down 800 lbs capacity fastened to the edge of the

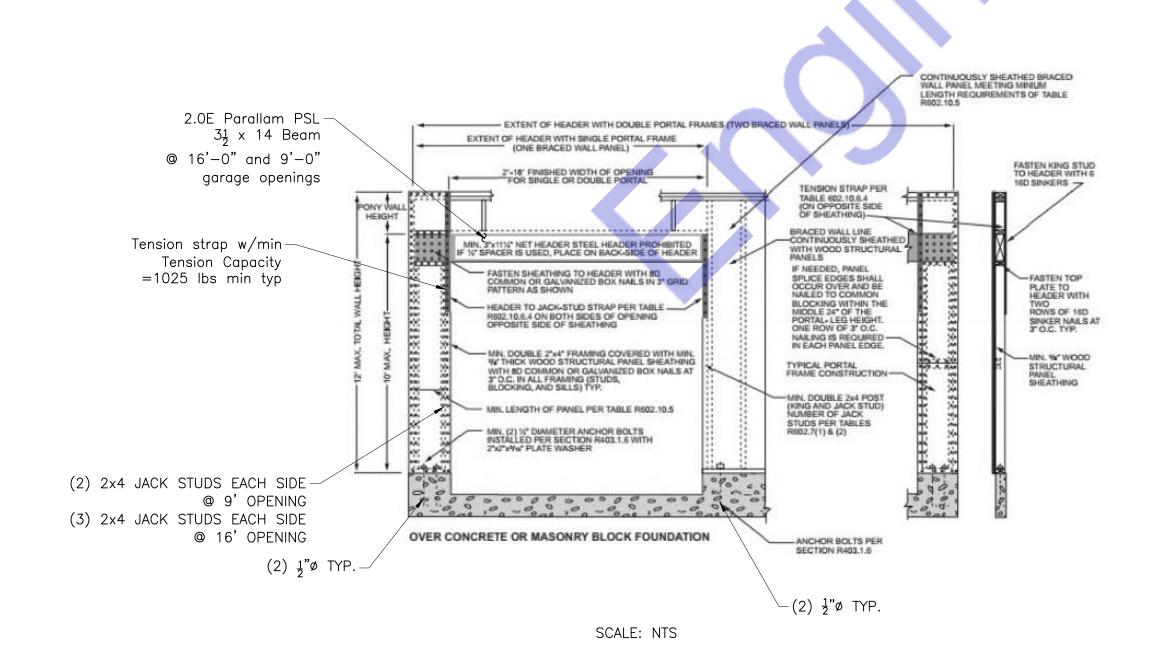
braced wall panel closest to the corner and

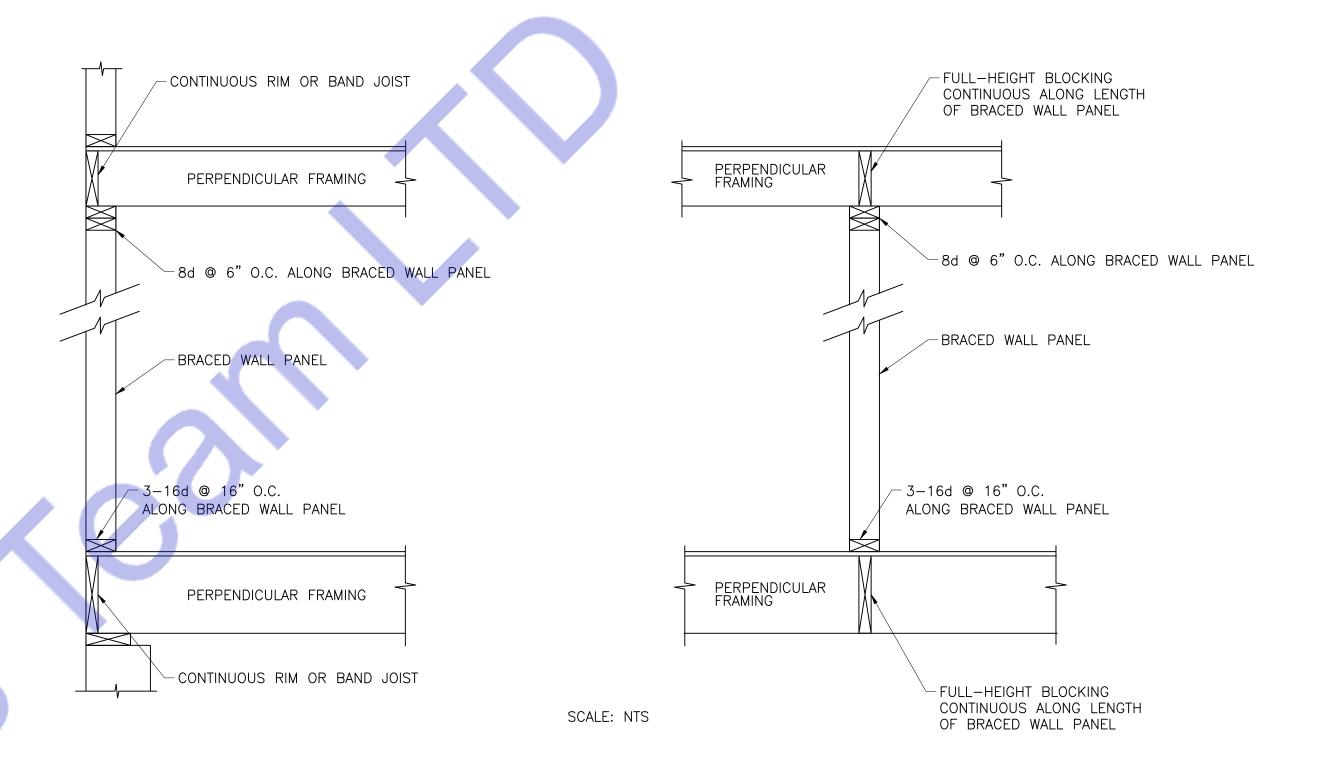
to the foundation or floor framing below

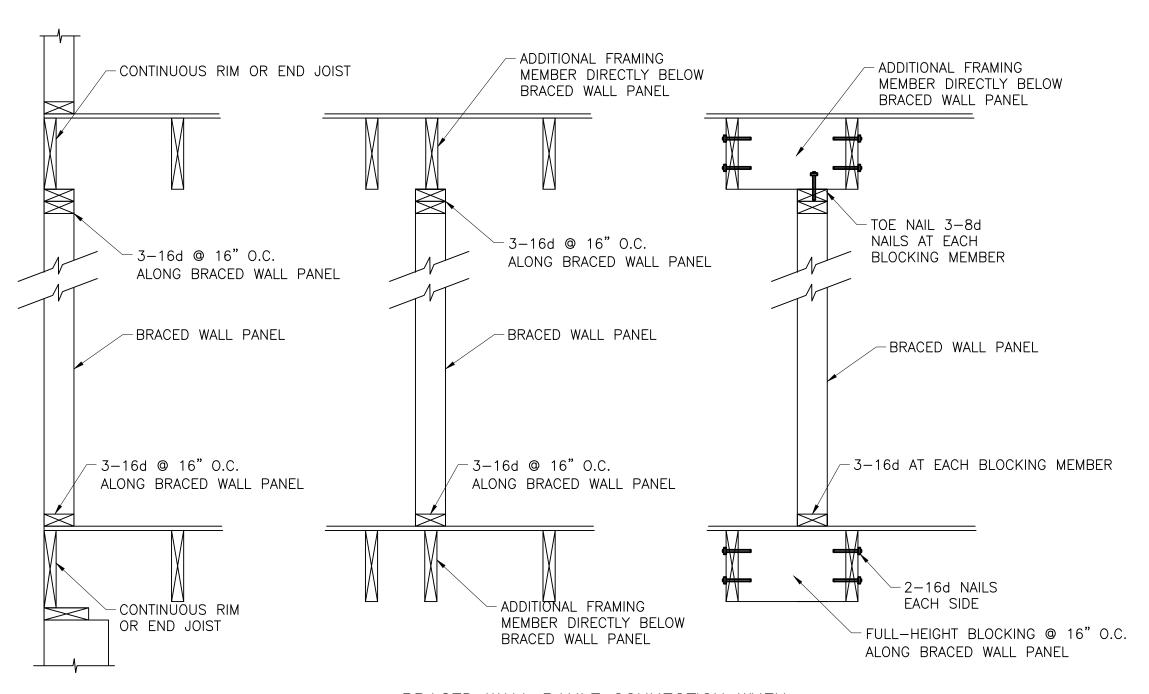
### FIGURE R602.10.7END CONDITIONS FOR BRACED WALL LINES WITH CONTINUOUS SHEATHING

### SCALE: NTS

**END CONDITION 5** 







BRACED WALL PANLE CONNECTION WHEN PARALLEL TO THE FLOOR/CEILING FRAMING

SCALE: NTS



T STE 8017 MI 49423

430 E 8TH ST S HOLLAND MI

**OWNER:** 

Proposed Home Plan

10412 Laurel Ridge Way Fredericksburg, VA

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STRUCTURAL DETAILS

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	S-13	
Scale:	1:100	

#### ELECTRICAL LEGEND

RACEWAY CONCEALED IN CEILING CAVITY, SLAB, OR WALL. RACEWAY HOMERUN TO PANEL, ONE ARROWHEAD PER CIRCUIT.

RACEIVAY MITH 3 MIRES #12 AMB IN CONDUIT AND #12 AMB GROUNDING CONDUCTOR. NOTE: NUMBER OF CROSS HATCHES INDICATES NUMBER OF #12 AMB CONDUCTORS SHORT CROSS HATCH = PHASE CONDUCTOR. LONG

CROSS HATCH NEUTRAL CONDUCTOR. DOT INDICATES GROUNDING CONDUCTOR AND SMALL HATCHES AFTER NEUTRAL CONDUCTOR REPRESENT SHITCHED CONDUCTORS. NO CROSS HATCHES INDICATES 2 #12 AWG AND #12 AWG GROUNDING CONDUCTOR. WE WALL SHITCH, SINGLE TRUE, SINGLE THROW, MOUNT 48\* AFF.

WALL SWITCH, 3-WAY, SINGLE POLE, DOUBLE THROW, MOUNT 48" AFF. WALL VACANCY SENSOR SWITCH, SINGLE POLE, MOUNT 48" AFF.

DISCONNECT SMITCH, SIZE/POLES/FUSE/ENCLOSURE TYPE IF OTHER THAN NEMA 3R, MOUNT 48" AFF. "NF" INDICATES NON-FUSED TYPE (30/3/20/3R).

Ф DUPLEX RECEPTACLE

ㅁ

ЭH

DUPLEX RECEPTACLE - BOTTOM HALF SWITCHED

DUPLEX RECEPTAGLE - FLOOR MOUNTED

RECEPTACLE - 220V 茵

DUPLEX RECEPTACLE - GROUND FAULT INTERRUPT

DUPLEX RECEPTACLE - WEATHER PROOF AND GROUND FAULT INTERRUPT ENP SMOKE DETECTOR - WIRED IN SERIES

6 CARBON MONOXIDE DETECTOR

€

EXHAUST FAN MOTOR 9

**\$** EXHAUST FAN MOTOR WITH LIGHT

**①** JUNCTION BOX, ABOVE CEILING.

JUNCTION BOX, WALL-MOUNTED.

PANELBOARD, SURFACE-MOUNTED MOUNT AT 6'-0" TO TOP.

UTILITY SERVICE METER

DC DOOR BELL.

CEILING FAN I PHASE, I20 VOLT, SINGLE POLE, 60HZ.

#### GENERAL

A. ALL ELECTRICAL WORK SHALL CONFORM TO NEC 2011 AND VIRGINIA RULES AND REGULATION.

B. ALL EQUIPMENT SHALL BE NEW AND UL. APPROVED.

C. ELECTRICAL DRAWINGS ARE DIAGRAMATIC. SIZE AND LOCATION OF EQUIPMENT AND WIRING ARE SHOWN TO SCALE WERRE POSSIBLE, BUT MAY BE DISTORIED FOR CLARITY ON THE DRAWINGS. FINAL LOCATIONS OF DISTORMENT AND EQUIPMENT SHALL BE SHOWN IN ENLARGED DETAILS OR AS APPROVED BY THE ARCHITECT OR HIS OPPERING AND EQUIPMENT SHALL BE SHOWN IN ENLARGED DETAILS OR AS APPROVED BY THE ARCHITECT OR HIS OPPERING.

REPRESENTATIVE.
IT IS NOT WITHIN THE SCOPE OF DRANNINGS TO SHOW ALL THE RECEISARY BENDS, OFFSETS, PALLEDUSES AND
OBSTRUCTIONS, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL HIS WORK TO CONFORM TO
THE STRUCTURE, MAINTAIN HEAD-ROOM AND KEEP OPENINGS AND PASSAGEHAY'S CLEAR, REFER TO THE
ARCHITECTURAL DRANNINGS FOR DIMENSIONS.
THE CONTRACTOR SHALL CARPILLY EXAMINE THE SITE AND SHALL COMPARE THE DRANNINGS HIT EXISTING
THE CONTRACTOR SHALL CARPILLY EXAMINE THE SITE AND SHALL COMPARE THE DRANNINGS HIT EXISTING
THE CONTRACTOR SHALL CARPILLY EXAMINE THE SITE AND SHALL CONTRACTOR HILL REVERTING THE PROPERTY OF THE PROPERTY OF

THEREFORE.

F. IN PERPANEL HIS BID. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH ALL TRADES AND
FIN PERPANEL REPRESENTATION OF THE PROPERTY OF THE PROPE

EXPENSE: TO OWNER, TELLIER, AND CORRECT ANT INFOCURACY RESULTION PROPRIES TO DO SO, AND THE PROPRIES OF CONTROL OF THE PROPRISE OF THE PROPRIS

6. AFTEX COMPLETION OF WORK INDEX THIS SECTION, CLEAN OF RESULTANT DEBKIS FROM THIS WORK AND REM FROM THE STE.
L. CODE REGULEMENTS OF THESE DRAININGS EXCEED CODE REGULEMENTS, WORK SHALL BE TRANSHED AND INSTALLED IN ACCORDANCE WITH THE DRAININGS.
M. DEVIATION FROM MATERIALS, METHODS AND PROCEDURES SET FORTH HEREIN MUST BE APPROVED IN WRITING APPROVAL WILL NOT BE GIVEN INLESS THE PROPOSED SYSTEM IS EQUAL. IN PERFORMANCE, DURABILITY LONGEVITY, AND RELIABILITY TO THAT SPECIFIED.

#### LIGHTING FIXTURES

A. INSTALL LIGHTING FIXTURES AS SHOWN ON THE ELECTRICAL DRAWINGS, VERIFY EXACT LOCATIONS OF FIXTURES WITH ARCHITECTURAL REFLECTED CEILING FLANS, COORDINATE FIXTURE HOUSINGS AND TRINS WITH CEILING TYPE. PROVIDE REQUIRED ACCESSORIES FOR CEILING TYPES.

B. ALL RECESSED LIGHTING FIXTURES SHALL BE LED.

C. ALL BULDS ARE DIMMARLE LID. BY FIXTURE CHOSEN BY CUSTOMER.

I.C-PATED RECESSED LIGHT FIXTURES SHALL BE ESCALED AT HOUSING/INTERIOR FINISH AND LABELED TO INDICATE.

1.C-PATED RECESSED LIGHT FIXTURES SHALL BE SEALED AT HOUSING/INTERIOR FINISH AND LABELED TO INDICATE.

INDICATE

F. 2.0 CFM LEAKAGE AT 75% PA. (2018 VA ENERGY CODE) 75% LAMPS IN PERMANENT FIXTURES OR 75%

PERMANENT FIXTURES SHALL BE USE HIGH EFFIC LAMPS. (2018 VA ENERGY CODE)

#### DISTRIBUTION EQUIPMENT

A. ALL PANELBOARDS SHALL BE ENCLOSED TYPE, FLISH OR SURFACE MOUNTED AS REQUIRED, IN STEEL CABINETS CODE GAUGE, WITH STEEL TRIM CONCEALED HINGES DOORS AND FLUSH TYPE LOCKS, MANURACTURER SHALL BE SQUARE D, CUILER HAMPER, GE, ITE, OR APPROVED EQUIVALENT.

B. ALL BUSSES, INCLIDING NEUTRAL, AND GROUND BUS, SHALL BE MINIMM 49% CONDUCTIVITY, HARD DRAWN COPPER, SILVER OR TIN-PLATED JOINTS, AND SIZED ON THE BASIS OF 1000 AMPERES PER SQUARE INCH CROSS-SECTIONAL AREA, BUSSES SHALL BE ARRANGED FOR SEQUENCING PHASING, EXCEPTION, ALLMINUM BUSSING S FERMITTED FOR RESIDENTIAL BLADA CORRESPONDED FOR SEQUENCING PHASING, EXCEPTION, ALLMINUM BUSSING S FERMITTED FOR RESIDENTIAL BLADA CORRESPONDED FOR STANDARD OF THE TYPE NAMES OF THE TYPE NAMES OF THE TYPE NAMES OF THE TYPE NAMES AS SHOWN IN DRAWINGS AND INTERRIPTING CAPACITY AS FER BUILDING REQUIREMENTS, EXCEPTION-RESIDENTIAL WITH SHALL BE EQUIPPED HAT PLAYED AND INTERRIPTING CAPACITY AS FER BUILDING REQUIREMENTS, FORDY AND LOCA ALL CONDUCTORS WITHIN PANEL BYCLOSURE.

D. SCAL EXISTING PANEL, KNOCKAOUTS NOT RELISED.

E. DISCONNECT SMITCHES SHALL BE SQUARED CLASS 3110 TYPE RUSED OR NON-RUSED, OR APPROVED EQUIVALENCE.

#### **DEVICES**

DUPLEX RECEPTACLES FOR WALL AND FLOOR CONVENIENCE OUTLETS SHALL BE 2 POLE, 3 WIRE, GROUNDED, IS AMPERE, NEMA CONFIGURATION 5-20R, COLOR BY ARCHITECT.
ALL RECEPTACLES SHALL BE TAMPER RESISTANT.

DUPLEX OF RECEPTACLE SHALL BE 2 POLE, 3 WIRE, GROUNDED, 20 AMPERE, NEMA CONFIGURATION 5-20R, COLOR BY ARCHITECT

ARCHITECT.
SINGLE POILE SHITCHES AND 3-MAY SHITCHES SHALL BE SPECIFICATION GRADE. COLOR BY ARCHITECT. DEVICE SHALL BE
MOUNTED WIDER COMMON COVERPLATE WHERE MULTIFLE DEVICES ARE INDICATED.
AC-DC SHOKE AND CARBON MONOXIDE DETECTOR. SHOULD BE INSTALLED ACCORDING TO NEPA T2.
AC/BATTERY: THESE SHOULD CONFORM TO THE NEPA T2, SECTION 286 ALARMS HAVE TWO POWER SUPPLIES 120-VOLT AC FOR
THE PRINTARY SOURCE OF POWER AND BATTERY BACKUP FOR THE SECONDARY SOURCE.

#### CONDUCTORS

AIC AMPERES INTERUPTING CURRE A. ALL BRANCH CIRCUIT CONDUCTOR'S SHALL BE COPPER UNLESS OTHERWISE NOTED. ALL #8 ANG WIRE AND LARGER SHALL BE STRANDED.

BE STRANCED.

ALL #10 ANS MIRE AND SMALLER SHALL BE SOLID.

VOLTAGE RATING OF INSULATION SHALL BE SOLID.

VOLTAGE RATING OF INSULATION SHALL BE 600 VOLTS.

FACTORY COLOR CODING FOR MIRE AND CABLE SHALL BE AS FOLLOWS. 120/200V - BLACK, RED, BLUE AND WHITE, FOR FHASES A, B AND NEITRAL RESPECTIVELY. GROUND MIRES SHALL BE GREEN.

LEVER MIRE SUFFICIENTLY LOW TO PERMIT MASING FINAL CONNECTIONS.

LIGHTING AND POPER NEWNO FOR CIRCUITS LESS THAN 100 FEET SHALL BE #12 ANG, UNLESS NOTED. WIRE SIZES SHALL BE WIF FOR CIRCUITS GREATER THAN 100 FEET.

#### NONMETALLIC CABLE (NM):

A. TYPE NM CABLE SHALL BE PERMITTED PER NFPA-10 ARTICLE 334.10. ALL OTHER LOCATIONS SHALL USE TYPE MC AS A SUBSTITUTE FOR CONDUIT,

#### OUTLET JUNCTION AND PULL BOXES

ALL CUTLET BOXES SHALL BE PLASTIC RATED FOR RESIDENTIAL USE.

CUTLET BOXES FOR RECEPTACLES AND SWITCHES IN DRY PAUL PARTITION SHALL BE 4" SQUARE, BY 1-1/2" MINIMUM DEPTH AND

SHALL BE 1"TIED WITH DEVICE COVERS AND DEPTH EQUAL. TO THE DRY PAUL THICKNESS.

SET BOXES SQUARE AND TRIE WITH BUILDING FINISH. ERECT WALL AND SWITCH CUTLETS IN ADVANCE OF FURRING AND

FIREPROCEINE.

FIREPROPING.
LOCATIONS NOICATED FOR LOCAL WALL SWITCHES ARE SUBJECT TO MODIFICATIONS. AT OR NEAR DOORS INSTALL SWITCH, IN
SIDE OPPOSITE HINGE, VERIFY FINAL DOOR HINGE LOCATION IN FIELD PRIOR TO SWITCH CULTET INSTALLATION.
LOCATION INDICATED FOR LOCAL MALL SWITCHES, CONTROLLERS, EVERGENCY PUSH BUTTONS, RECEIPTACLE, ETC. ARE SUBJECT TO

MODIFICATION INDICATED FOR LOCAL PARLE SHIFTONES, CONTROLLERS, EMERGENCE FOR BUTTONS, RECEIPMENT, I.C. AND SHA MODIFICATIONS.
HEIGHTS OF QUILET ROM FINISHED FLOOR TO CENTERLINE OF QUILETS, AS PER ELECTRICAL DRAWINGS, EXCEPTIONS, HEIGHTS OF OPERAL IN WALL SURFACE IN VIOLATION OF CODE REQUIREMENTS.

#### GROUNDING

A. GROUND ALL CONDUITS, CABINETS, MOTORS, PANELS, AND OTHER EXPOSED NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ALL PROVISIONS OF THE NATIONAL ELECTRICAL CODE, OR LOCAL CODES THAT

#### **SLEEVES**

A. ALL PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS OR PARTITIONS SHALL BE SEALED TO PREVENT THE SPREAD OF SOME AND FIRE THROUGH THEM. THE FIRE PRETRATIONS OF SEAL, SHALL BE AT LEAST THAT OF THE FLOOR OR OR SHALL BE AT LEAST THAT OF THE FIRE THE FLOOR OR SHALL BE AT LEAST THAT OF THE FIRE THE THEM AND SHALL BE ALL DEFINED AS AND SHALL BE SHALL MEET ALL OF THE FIRE THEM AND SHALL BE UL. CLASSIFED AS A WALL OPENING PROTECTIVE DEVICE, AS MANUFACTURED BY CHASE TECHNOLOGY CORPORATION, OR APPROVED EQUIVALENT.

#### HVAC CONTROLS

MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL CONTROL WIRING INCLUDING CONDUITS, RELAYS, TIME CLOCK, CONTROL TRANSFORMERS, ETC., FORALL HYAC EQUIPMENT, UNLESS OTHERWISE NOTED. ELECTRICAL CONTRACTOR SHALL FUNDE HAD INSTALL ONLY POWER WIRING WITH DISCONNECTS, AS SHOWN IN ELECTRICAL

#### TEST AND GUARANTEES

A. UPON COMPLETION OF ALL ELECTRICAL WORK, CONTRACTOR SHALL TEST FOR GROUNDS AND SHORTS, TO ENSURE PROPER
OFFERATION OF ELECTRICAL EQUIPMENT,
B. OFFERATION OF ELECTRICAL EQUIPMENT,
B. OFFERATION OF ELECTRIC TEST SHOULD BE DONE IN ACCORDANCE WITH NEPPA-T2.
C. SHOKE DETECTION TEST SHOULD BE DONE IN ACCORDANCE WITH NEPPA-T2.

ELECTRICAL ABBREVIATIONS

AFF/ARF ABOVE FINISHED FLOOR/ ABOVE RAISED FLOOR ARCH ARCHITECT/ARCHITECTURAL

AT AMPERE TRIP AF AMPERE FRAME

C CONDUIT CB CIRCUIT BREAKER

CKT CIRCUIT EC EMPTY CONDUIT

EMT ELECTRICAL METALLIC TUBING

EX EXISTING FUSED

FFL FINISHED FLOOR FLR FLOOR

6 GROUND

GF GROUND FAULT CIRCUIT INTERUPTER

HID HIGH INTENSITY DISCHARGE

J. JB JUNCTION BOX kcmil THOUSAND CIRCULAR MILLS

MC METAL-CLAD CABLE

MCB MAIN CIRCUIT BREAKER

MH METAL HALIDE

MLO MAIN LUG ONLY NF NONFUSIBLE

PH PHASE

PVC POLYVINYL CHLORIDE CONDUIT

RECP RECEPTACLE

RGS RIGID GALVANIZED STEEL SYM SYMMETRICAL

TEL TELEPHONE

V VOLT VA VOLT-AMPERE

M MIRE OF WATT

MP WEATHERPROOF

ELECTRICAL DRAWING LIST

ELECTRICAL BASEMENT FLOOR PLAN

ELECTRICAL FIRST FLOOR PLAN

ELECTRICAL SECOND FLOOR PLAN

ELECTRICAL GROUNDING DETAILS E600 ELECTRICAL PANEL SCHEDULE

ELECTRICAL GENERAL NOTES, SYMBOLS, & ABBREVIATIONS

FOOO

Eloo

ElOI

EIO2

E500

XFMR TRANSFORMER CLG CEILING GROUND FAULT CIRCUIT INTERRUPTER(GFCI).

A-X A IS THE NAME OF ELECTRICAL PANEL BOARD AND X IS THE NUMBER OF CIRCUIT.



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LONDON
UNITED KINGDOM E6 2JA
Email support@engrteam.com

	NO.	Description	Date
· · · · · · · · · · · · · · · · · · ·			

#### Owner

10412 Laurel Ridge Way Fredericksburg, VA 22408

Electrical General Note

Project Number	Project Number
Date	Issue Date
Drawn By	Author
Checked By	Checker
_	

1" = 1'-0"

MOUNTING VOLTS INPUT SYMBOL FIXTURE DESCRIPTION MANUFACTURER PART # ITEM # REMARK 5.5" LED DOWNLIGHT, WHITE PAINTED FLANGE, O-IOV DIMMING, 65 DEG BEAM SPREAD RECESS 120 12.5 PROGRESS LIGHTING FIXTURES P810001-0 28-30K OR EQUIVALENT
APPROVED BY
OWNER
OR EQUIVALENT
APPROVED BY
OWNER
OR EQUIVALENT
APPROVED BY SURFACE 120 17 SPECIFIED BY OWNER FIXTURE ALLOWANCE KEYLESS CEILING MOUNTED EXPOSED LED BULB SURFACE 120 17 PROGRESS LIGHTING FIXTURES EXTERIOR WALL MOUNT LED BULB LO439623 P5674-31 LO478974 P300160--CLOSE TO CEILING, BOWL GLASS, LED LAMPS SURFACE 120 30 PROGRESS LIGHTING FIXTURES PENDANT FIXTURE, LED LAMPS SURFACE 120 100 PROGRESS LIGHTING FIXTURES L478483 P500125-0 Ø SURFACE 120 7 PROGRESS LIGHTING FIXTURES LIGHT FIXTURE - UNDER CABINET LED LIGHT L0369834 P100000-028-30 ALL BILBS DIMMABLE LED. LIMINARIES SHALL BE SUPPORTED IN ACCORDANCE WITH NEC ARTICLE 410.

2. SPECIFIED LIGHT PIXTURES SHALL BE USED AS A BASIS OF DESIGN. ARCHITECT/COWER SHALL APPROVE EXACT LIGHTING FIXTURE PACKAGE PRIOR TO BID SUBMITTAL.

3. RECESSED FIXTURES INSTALLED WITHIN FIRE RATED CEILINGS SHALL BE RATED HOUSING OR PROVIDED WITH FIRE RATED TENTING ASSEMBLY AROUND PERINETER OF HOUSING. COORDINATE WITH ARCHITECTURAL FOR RATED CEILING AREAS,

4. ALL INST LED LIMINARIES SHALL BE EXDIPPED WITH DRIERS VANIND EXPRESS.

LIGHTING FIXTURE SCHEDULE

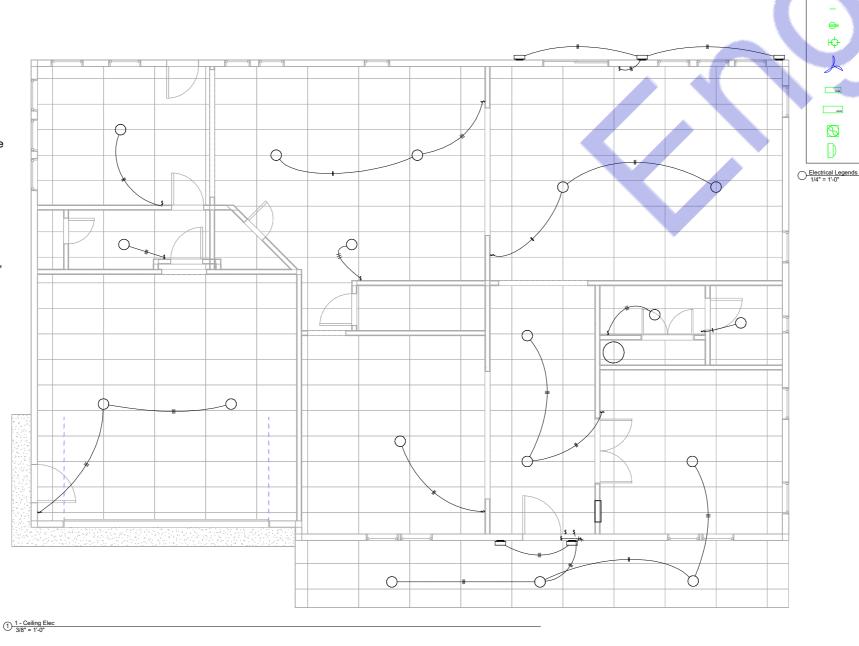
Electrical General Note
1" = 1'-0"

#### Note

This electrical plan for 10412 Laurel Ridge Way, Fredericksburg, VA, has been developed in strict adherence to all applicable and updated codes and regulations. The following standards have been meticulously followed:

- 1. 2021 Virginia Uniform Statewide Building Code (USBC): Effective January 18, 2024, the USBC incorporates the 2021 International Building Code (IBC) and other 2021 International Codes, ensuring compliance with statewide building regulations.
- 2. 2021 International Residential Code (IRC): Referenced by the USBC, the IRC provides comprehensive guidelines for residential construction projects.
- 3. 2020 National Electrical Code (NEC): Adopted by Virginia as part of the 2021 USBC, the 2020 NEC sets the standard for safe electrical design, installation, and inspection to protect people and property from electrical hazards.
- 4. City of Fredericksburg Electrical Regulations: Local ordinances regulate the construction, erection, maintenance, and alteration of electrical conduits, poles, and other fixtures within city limits, ensuring safety and compliance with municipal standards.
- 5. Virginia Administrative Code Electrical Requirements: Specific provisions, such as those in 13VAC5-63-540, outline mechanical and electrical requirements to ensure safety and compliance in electrical installations.
- 6. VA, USA Product Approval Codes: All electrical products and materials specified in this plan meet or exceed the product approval standards mandated by Virginia state regulations, ensuring quality and safety in all installations.

By adhering to these updated codes and regulations, this electrical plan ensures the safety, reliability, and compliance of all electrical installations for the specified property.





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SMOKE DETECTOR

40W LED LIGHT 2'X4'

ONE WAY SWITCH 220V

MULTI SOCKET OUTLET 220V

MAIN DISTRIBUTION BOARD

CALLING BELL

lo.	Description	Date

#### Owner

10412 Laurel Ridge Way Fredericksburg, VA 22408

First Floor Electrical Lighting Plan

 Project Number
 Project Number

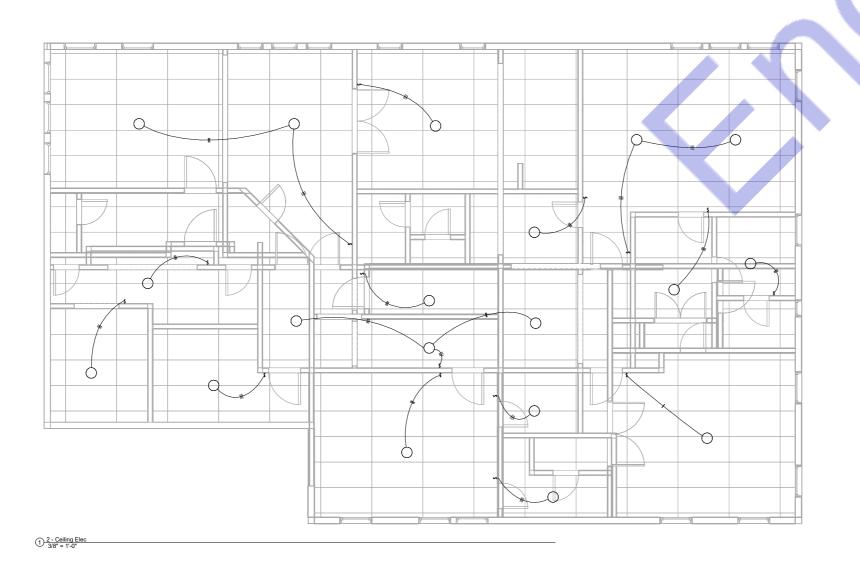
 Date
 Issue Date

 Drawn By
 Author

 Checked By
 Checker

E. 1

As indicated





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No.	Description	Date

### Owner

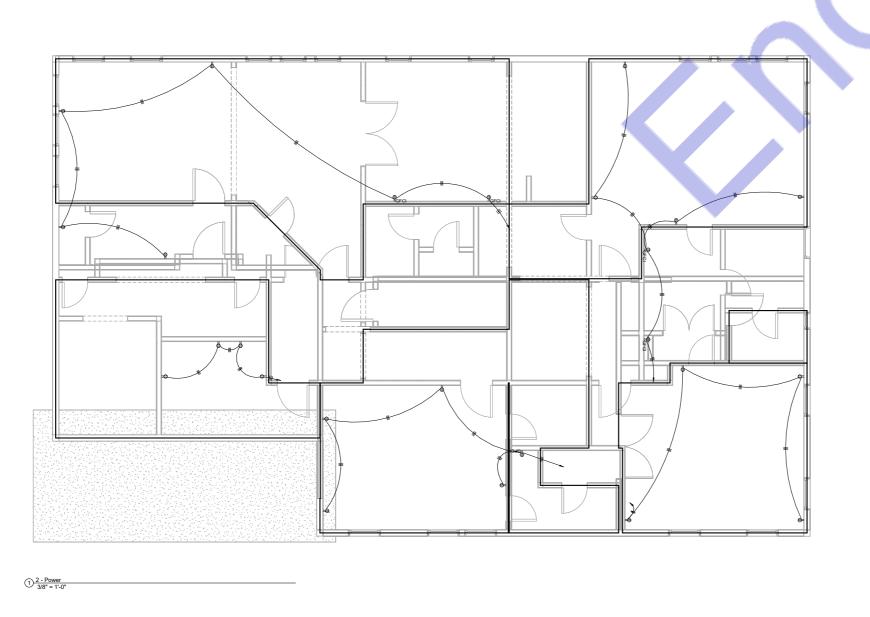
10412 Laurel Ridge Way Fredericksburg, VA 22408

Second Floor Electrical Lighting Plan

Project Number	Project Number
Date	Issue Date
Drawn By	Author
Checked By	Checker

3/8" = 1'-0"







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Description Date

### Owner

10412 Laurel Ridge Way Fredericksburg, VA 22408

Second Floor Electrical Power Plan

Project Number	Project Number
Date	Issue Dat
Drawn By	Autho
Checked By	Checke

E. 4

3/8" = 1'-0"

#### **Branch Panel: Panel M**

Location: PANTRY 4
Supply From:
Mounting: Recessed
Enclosure: Type 1

Volts: 120/208 Wye Phases: 3 Wires: 4 A.I.C. Rating: Mains Type: Mains Rating: 115 A MCB Rating: 140 A

Notes

СКТ	Circuit Description	Wire	Trip	Poles	Phase	A (VA)	Phase	B (VA)	Phase	C (VA)	Poles	Trip	Wire	Circuit Description	СКТ
1	HVAC Cooling	#6	70 A	2	14067.5	2250					2	20 A	#12	Water Heater - Dwelling Unit	2
3	<u> </u>						14067.5	2250						Ŭ	4
5	Receptacle DINING ROOM-1 15-1	#12	20 A	1					900	1260	1	20 A	#12	Receptacle FAMILY ROOM-1 10-1	6
7	Receptacle LIVING ROOM-1 17-1	#12	20 A	1	900	1080					1	20 A	#12	Receptacle MORNING ROOM-2 12-2	8
9	Receptacle MORNING ROOM-1 12-1	#12	20 A	1			900	720			1	20 A	#12	Receptacle BEDROOM-3 17-2	10
11	Receptacle BEDROOM-2 10-2	#12	20 A	1					1080	1380	1	15 A	#14	Lighting - First Floor	12
13	Lighting - Second Floor	#14	15 A	1	1140	3100					2	30 A	#10	Receptacle LAUNDRY 13 (Dryer)	14
15	Spare							3100				30 A	#10	Receptacie Excitation 13 (Bryer)	16
17															18
19															20
21															22
23															24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
			Tota	al Load:	22537	7.5 VA	21037	7.5 VA	4620	) VA					
			Tota	l Amps:	188	8 A	175	5 A	40	) A	-				

Legend

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel	Totals
Water Heater - Dwelling Unit	4500 VA	100.00%	4500 VA		
Cooling	28134 VA	100.00%	28134 VA	Total Conn. Load:	43614 VA
Lighting - Dwelling Unit	2520 VA	125.00%	3150 VA	Total Est. Demand:	41283 VA
Other	0 VA	0.00%	0 VA	Total Conn.:	121 A
Receptacle	8460 VA	65.00%	5499 VA	Total Est. Demand:	115 A

Notes

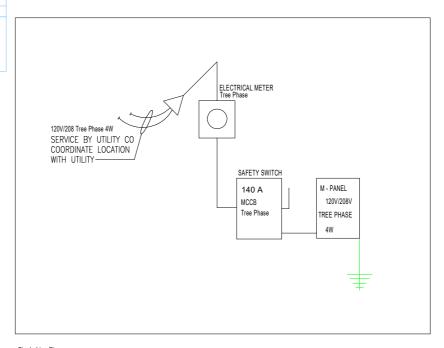
Electrical Load Schedule
1"= 1"-0"

#### GENERAL NOTES:

- I. FOR ALL 120- VOLT, SINGLE- PHASE, 15 AND 20AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS
  INSTALLED IN DWELLING UNIT KITCHEN, FAMILY
  ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS,
  LIBRARIES, DENS, BEDROOMS, SUNROOMS,
  RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY
  AREAS, OR SIMILAR ROOMS OR AREAS SHALL BE
  PROTECTED BY A LISTED ARC- FAULT CIRCUITINTERRUPTER, PROTECTION (AFCI) OF THE BRANCH
  CIRCUIT. PER NEC 210.12.
- 2. THE AIC RATINGS INDICATED ON THE ELECTRICAL DRAWINGS FOR PANELS ARE FOR BID PURPOSES ONLY. IT IS THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO VERIFY THE AVAILABLE FAULT CURRENTS WITH THE UTILITY COMPANY, AND THE REQUIREMENTS OF THE COUNTY, PRIOR TO ORDERING THE EQUIPMENT.
- 3. CONDUCTOR USED ON WIRING TERMINATION LESS THAN 100A ARE SIZED BASED ON CONDUCTOR TEMPERATURE RATING OF 60°C AND CONDUCTORS 100A OR GREATER ARE SIZED BASED ON CONDUCTOR TEMPERATURE RATING OF 75 °C PER NEC TABLE 310.15(B)(16).

#### KEY NOTES: (#)

- INCOMING UTILITY SERVICE CONDUCTORS TO UTILITY METER. COORDINATE REQUIREMENTS AND SIZING WITH LOCAL POWER COMPANY.
- 2. I( 3x 4/0 AWG)(AL) RATED 180A IN 2" PVC SCH.40. PROTECT SERVICE CONDUCTOR PER NEC 230.50.
- 3. FOR GROUNDING DETAIL REFER TO SHEET# E-500.
- 4. ELECTRICAL UTILITY SERVICE METER 120/240V, I
  PHASE 3 WIRE, IN NEMA 3R ENCLOSURE. SERVICE
  ENTRANCE RATED. VERIFY EXACT MOUNTING LOCATION
  PRIOR TO INSTALLATION.
- 5. THE SERVICE POINT IS AT METER BOX.



Single Line Diagram
3/8" = 1'-0"



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No. Description Date

#### Owner

10412 Laurel Ridge Way Fredericksburg, VA 22408

Electrical Load Schedule Plan

 Project Number
 Project Number

 Date
 Issue Date

 Drawn By
 Author

 Checked By
 Checker

E. 5

As indicated

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#### GENERAL NOTES:

I. A LISTED INTERSYSTEM BONDING TERMINATION PROVIDING THE REQUIRED NUMBER OF TERMINALS (MINIMUM OF THREE) FOR CONNECTING OTHER BUILDING SYSTEMS TO THE GROUNDING SYSTEM OF THE ELECTRICAL POWER SUPPLY (NEC250.94).

#### KEY NOTES: (#)

# 6 (CU) FOR 150A SERVICE MAIN BONDING JUMPER

GROUNDED / SERVICE ENTRANCE CONDUCTOR

1 6" MIN. 1

2>-

(2)-

- I. ALL METAL CONDUITS ENCLOSING ANY SERVICE SHALL BE FITTED WITH A "BONDING BUSHING".
- 2. ALL METAL CONDUITS ENCLOSING ANY GROUNDING ELECTRODE CONDUCTOR SHALL BE FITTED WITH A "BONDING BUSHING" AT EACH END.
- 3. PROVIDE GROUNDING ELECTRODE PER NEC. ELECTRODE SHALL BE IN THE FORM OF A 20'-0" x I/2" COPPER CLAD GROUND ROD LAID AT LEAST 2" OFF THE BOTTOM OF A CONCRETE FOOTING. SECURE THE GROUND ROD TO THE REBAR WITH STEEL TIE WRAPS, IF THE REBAR BEING USED IN THE FOOTING IS SMALLER THAN 1/2" (#4), THEN USE 20' OF BARE

PANEL-A, B (7/8)

GROUNDING ELECTRODE SYSTEM DIAGRAM

SCALE-NOT TO SCALE

8888

SCHEDULE 40 PVC -PROTECTION ABOVE GRADE, OR AS REQUIRED

METAL UNDERGROUND WATER PIPE

- SOLID #4 COPPER WIRE IN PLACE OF THE GROUND ROD. IN REMODEL PROJECTS THAT WILL NOT HAVE NEW FOOTINGS INSTALLED, THIS SUPPLEMENTAL ELECTRODE SHALL BE PER NOTE #4 BELOW OR OTHER ELECTRODE PER NEC 250.52.
- 4. FOR CONNECTION TO COLD WATER MAIN. CONNECT WITHIN 5 FT. OF CONTACT OF EARTH. 5. IF STRUCTURAL STEEL MEMBER OR REBARS ARE AVAILABLE, BOND IT TO
- THE SERVICE USING A UL LISTED IRREVERSIBLE CLAMP OR WELDING LUG. 6. PROVIDE A INTERSYSTEM BONDING TERMINATION PER NEC 250.94.

BONDED NEUTRAL BUS

BUILDING STRUCTURAL STEEL MEMBER WHEN PRESENT

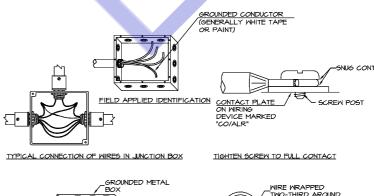
- INTERSYSTEM BONDING TERMINATION 6.I. BE ACCESSIBLE FOR CONNECTION
- AND INSPECTION. 6.2. CONSIST OF A SET OF TERMINALS (LISTED AS GROUNDING AND BONDING EQUIPMENT) WITH THE CAPACITY OF NOT LESS THAN THREE INTERSYSTEM BONDING CONDUCTORS.
- 6.3. BE SECURELY MOUNTED AND ELECTRICALLY CONNECTED TO SERVICE EQUIPMENT, METER ENCLOSURE, OR EXPOSED NON METALLIC SERVICE RACEWAY, OR BE MOUNTED ON ONE OF THESE ENCLOSURES AND BE CONNECTED TO THE ENCLOSURE OR GROUNDING
- ELECTRODE CONDUCTOR WITH A MINIMUM #6 CU CONDUCTOR.
- 6.4. BE SECURELY MOUNTED TO THE BUILDING'S DISCONNECTING MEANS, OR BE MOUNTED AT THE DISCONNECTING MEANS AND BE CONNECTED TO THE METALLIC ENCLOSURE OR GROUNDING ELECTRODE CONDUCTOR WITH A MINIMUM #6 CU CONDUCTOR.
- 7. ALL BRANCH CIRCUIT AND FEEDER CONDUITS ARE TO HAVE AN INSULATED EQUIPMENT GROUNDING CONDUCTOR REGARDLESS OF THE CONDUIT MATERIAL.
- $\delta.$  WHEN THE SERVICE CONSISTS OF MULTIPLE DISCONNECTING MEANS IN SEPARATE ENCLOSURES, CONNECT A TAP
- CONDUCTOR FROM THE MAIN GROUNDING ELECTRODE CONDUCTOR TO EACH DISCONNECTING MEANS. SIZE THIS TAP BASED ON THE LARGEST SERVICE CONDUCTOR IN THAT SERVICE
- DISCONNECT ENGLOSURE. #6 COPPER GROUNDING ELECTRODE CONDUCTOR.
- IO. INSTALL #6 CU TO TWO 5/8"x 8" MIN. GROUND RODS AS SHOWN.
- #4 COPPER GROUNDING ELECTRODE CONDUCTOR.
- 12. COPPER GROUNDING ELECTRODE CONDUCTOR, PROVIDE #6 COPPER.

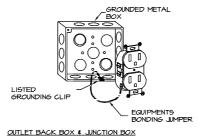


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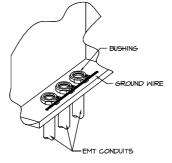
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\_WIRE WRAPPED THREE-QUARTER AROUND

STRIP INSULATION AND WRAP WIRE



CONCENTRIC KNOCKOUTS

BONDING THE KNOCKOUTS

GROUNDING INSULATION THE BUSHING

ECCENTRIC

2 BOUNDING DETAILS

SCALE: NOT TO SCALE

Description

Date

No

#### Owner

10412 Laurel Ridge Way Fredericksburg, VA 22408

Electrical Installation

Project Number Issue Date Drawn By Author Checked By Checker

E. 6

1/2" = 1'-0"

Electrical Installation

#### MECHANICAL GENERAL NOTES

1. ALL WORK SHALL CONFORM TO VRC 2018, VECC 2018, AND LOCAL RULES AND REGULATIONS.

2. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, FEES, AND TAXES AND OBTAIN, SCHEDULE, AND PAY FOR REQUIRED IN SPECTIONS BY THE AUTHORITY HAVING JURISDICTION (AHJ), SCHEDULE AND CONDUCT INSPECTIONS REQUIRED BY AND TO OBTAIN FINAL CERTIFICATE OF DOCUMENCY (COD), INSPECTIONS OR REVIEWS BY THE ARCHITECT AND ENGINEER, POST AND COMPLETE FORM ASSOCIATED WITH THE PERMITS AND REQUIRED BY THE ARLY FROM THE WRITTEN NOTIFICATION TO THE ARCHITECT AND ENGINEER POST AND TWO DAYS PRIOR TO CACH INSPECTION OF THE ARCHITECT OR BY AND THE ARCHITECT OR SENSE THE IN SPECTION.

3. MAKE NO CHANGES WITHOUT THE WRITTEN PERMISSION FROM THE ENGINEER.

4. ALL MATERIAL AND EQUIPMENT INDICATED ON THE PLANS AND DESCRIBED IN THE SPECIFICATIONS SHALL BE PROVIDED BY THE CONTRACTOR NEW AND THE BEST PRODUCTS OF REPUTABLE MANUFACTURERS AND SHALL BE IN NEW CONDITION AT ACCEPTANCE OF WORK.

5. THIS CONTRACTOR SHALL GUARANTEE ALL MATERIALS, LABOR, AND EQUIPMENT FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE. COMPRESSORS SHALL HAVE A FULL FIVE-YEAR WARRANTY. CONTRACTOR SHALL PAY FOR ANY REPAIRS OR REPLACEMENTS CAUSED BY DEFECTIVE WORKMANSHIP OR FAULTY MATERIALS AS CONSTRUED HEREN WITHIN THE PERIOD COVERED BY THE GUARANTEE.

6. SCAFFOLDING, RIGGING, AND HOISTING: UNLESS OTHERWISE SPECIFIED, CONTRACTOR SHALL FURNISH ALL SCAFFOLDING, RIGGING, HOISTING, AND SERVICES NECESSARY FOR ERECTION AND DELIVERY INTO THE PREMISES OF ANY EQUIPMENT AND APPARATUS FURNISHED, AND REMOVAL OF SAME FROM PREMISES WHEN NO LONGER REQUIRED.

7. LOCATION OF EQUIPMENT, PIPING, AND OTHER MECHANICAL WORK IS INDICATED DIAGRAMMATICALLY BY THE DRAWINGS. DETERMINE EXACT LOCATIONS ON THE JOB SITE, SUBJECT TO STRUCTURAL CONDITIONS AND WORK OF OTHER CONTRACTORS.

8. CONTRACTOR ASSUMES RESPONSIBILITY FOR PROPER ARRANGEMENT OF PIPES, DUCTS, ETC., TO CONNECT APPROVED EQUIPMENT IN A PROPER AN APPROVED MANNER. FOLLOW EQUIPMENT MANUFACTURER'S DETAILED INSTRUCTIONS AND THE CONTRACT DOCUMENTS. NOTIFY THE ARCHITECT PROCEEDING. NO EQUIPMENT INSTALLATION OR CONNECTIONS SHALL EM MORE IN A MANNER THAT VIOLS THE MACHITECTURER'S WARRANTY.

9. SEE ARCHITECTURAL DRAWINGS FOR THE LOCATION OF ROOF PENETRATIONS.

10. UNLESS OTHERWISE NOTED, ALL SPECIFIED EQUIPMENT IS LESS THAN 200 POUNDS. SEE ARCHITECTURAL DRAWINGS FOR SUPPORT DETAILS OF ALL EQUIPMENT GREATER THAN 200 I RS

11. INSTALL EACH ITEM OF EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

12. NSTALL ALL WORK IN A NEAT AND WORKMANLIKE MANNER, USING ONLY WORKMEN THOROUGHLY QUALIFIED IN THE TRADE OF DUTIES THEY ARE TO PERFORM. ROUGH WORK WILL BE REJECTED. 13. CUTTING AND PATCHING SHALL BE DONE BY THE APPROPRIATE TRADE UNLESS OTHERWISE REQUIRED BY TRADE CUSTOM OR SPECIFIED UNDER ANOTHER SECTION OF THE SPECIFICATIONS CONTRACTOR SHALL FURNISH SECTIONS SHOWING THE LOCATIONS AND SIZES OF ALL OPENIOS, CHASSES, ETC. REQUIRED. CONTRACTOR IS LIBLE FOR CUTTING OR PACTINING MORE DECESSARY BY HIS PALIURE TO MAKE PROPER ARRANDEMENTS IN THIS RESPECT.

14. DO NOT CUT STRUCTURAL MEMBERS WITHOUT THE APPROVAL OF THE ARCHITECT AND ALL SUCH CUTTING SHALL BE DONE IN A MANNER AS DIRECTED BY

15. MAINTAIN CLEAN WORK AREA AT ALL TIMES DURING CONSTRUCTION. AFTER COMPLETING INSTALLATIONS OF DUCTWORK, CONTRACTOR SHALL CLEAN ENTIRE SYSTEM OF RUBBISH, PLASTER, DIRT, AND ANY OTHER DEBRIS.

16. TEST ALL SYSTEMS, SYSTEMS SHALL OPERATE SATISFACTORILY AS DESIGNED AND INTENDED, REPORT ANY DEFICIENCIES TO ARCHITECT.

SHOP DRAWINGS

1 CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR THE HVAC LAYOUT

2. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF MECHANICAL EQUIPMENT, DUCTWORK ROUTING, LOCATION OF SYSTEM

INSTALLATION, DUE TO DEVIATIONS FROM THE MECHANICAL EQUIPMENT'S "BASIS OF DESIGN" OR "PROTOTYPE" ELECTRICAL DATA, SHALL BE AT A COST TO THE MECHANICAL CONTRACTOR.

EQUIPMENT 1 GENERAL:

A. REFER TO EQUIPMENT SCHEDULES FOR ADDITIONAL REQUIREMENTS.

A STEEL CONSTRUCTION WITH ENAMEL FINISH WHITE.
B. ACCEPTABLE MANUFACTURERS: HARTY & COOLEY, TITUS, PRICE, NAILOR, OR EQUIVALENT APPROVED BY NVR, INC.

3 FANS:

A EACH FAN SHALL BE AMCA CERTIFIED AND LABELED.
B EACH FAN SHALL BE ULLISTED AND LABELED.
C. ALL WINING PROVIDED AS PART OF THE UNIT SHALL BE IN ACCORDANCE WITH NEC
D. ACCEPTABLE MANUFACTURERS: BROAN OR EQUIVALENT APPROVED BY NN; INC.
E. SUBBIT SAMPLE MODEL FOR ARCHITECTURAR, EVEN WITH APPROVAL.

4. AIR HANDLING UNITS:

A. PACKAGED, FACTORY ASSEMBLED, PRE-WIRED AND PRE-PIPED WITH MICROPROCESSOR CONTROL SYSTEM AND ALL OPTIONS AS SCHEDULED. UL LISTED. B. ACCEPTABLE MANUFACTURERS: GOODMAN OR EQUIVALENT APPROVED BY NVR, INC.

5. ACCESS PANELS: PROVIDE ACCESS PANELS IN DUCTWORK IN A LOCATION TO SERVICE DAMPERS. ACCESS PANELS SHALL BE OF THE INSULATED DOOR TYPE ON ALL INSULATED DUCTS AND SHALL NOT BE COVERED BY DUCT INSULATION. ACCESS PANELS SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH SMACONA STANDARDS. MINIMUM SIZE OF ACCESS PANELS SHALL BE 12" X 12" EXCEPT WHERE DUCT IS LESS THAN 14" WIDE IN WHICH CASE ONE DIMENSION SHALL BE 12" AND THE OTHER SHALL BE 2" LESS THAN 11" WIDTH ACCESS DOOR SHALL BE ACCESSIBLE.

2. REFRIGERANT PIPING: TYPE ACR HARD COPPER WITH STREAMLINE FITTINGS JOINTED WITH SPECIAL REFRIGERATION SOLDER SUCH AS SIL-FOS. RUN, SIZE, AND TARAP REFRIGERANT LINES PER MANUFACTURERS RECOMMENDATIONS, REFRIGERANT PIPING IN CONCEALED LOCATIONS MAY BE ANNEALED SOFT TEMPERED ACR TUBING ASSEMBLES UNITY "STAYBRIET DO, 0° SOLDER. PIPE FITTINGS AND COMPONENTS SHALL BE CAPABLE OF WITHSTAYMORS THE PRESSURED AND TEMPERATURES OF THE SERVICE THEY ARE HANDLING. PRE-CHARGED OR PREFABRICATED LINES BY EQUIPMENT MANUFACTURER MAY BE USED. TUBING, USED FOR REFRIGERANT SERVICE SHALL BE CLEANED, SEALED, CAPPED OR PRUEGED PRIOR TO SERVIS SHIPPED FROM INMURFACTURERS FAUNT.

3. IDENTIFICATION: ALL PIPING SHALL BE IDENTIFIED BY NAME AND DIRECTIONAL FLOW ARROWS IN ACCORDANCE WITH ASME AND ANSI STANDARDS. 4. FINAL DRAIN AND REFRIGERANT LINES SHALL NOT BLOCK SERVICE ACCESS TO FAN OR AIR FILTER REMOVAL AT THE AHU.

PIPING SPECIALTIES

1. PROVIDE TRAPS FOR CONDENSATE DRAIN LINES AT ALL HVAC EQUIPMENT THAT IS NOT INTERNALLY TRAPPED.

INSULATION

ALL DUCT AND PIPE INSULATION AND COVERINGS SHALL HAVE A FIRE AND SMOKE HAZARD RATING AS TESTED UNDER PROCEDURE ASTM-E-84, NFPA 255 AND UL 723 NOT EXCEEDING A FLAME SPREAD RATING OF 25 AND A SMOKE DEVELOPED RATING OF 50.

2. PIPING: INSULATE ALL HEATING AND COOLING SYSTEM PIPING THAT CONVEYS FLUIDS THAT HAVE A DESIGN OPERATING RANGE OF LOWER THAN 55 DEGREES F OR GREATER THAN 105 DEGREES F: INSULATION SHALL HAVE A CONDUCTIVITY NOT EXCEEDING 0.27 BTU PER INCHHIFT\*\*DEGREE F AT 75 DEGREE F MEAN TEMPERATURE.

A. REFRIGERANT SUCTION: FOR PIPING SIZES 1-1/2" OR LESS, INSULATE WITH 1" THICK ARMAPLEX FIRE RATED INSULATION OR APPROVED ON EQUAL, WITH INSULATION SHALL BE SLIPPED OVER THE TUBING AS FULL CYLINDER. INSULATION OF PIPING SHALL BE VAPOR TIGHT AND CONTINUOUS THROUGH HANGERS, WALLS, ETC. PROVIDE GALVANIZED SHEET METAL SADDLES AT HANGERS.

B. REFRIGERANT LIQUID AND HOT GAS PIPING WITHIN THE BUILDING: INSULATE WITH 1/2" THICK ARMAFLEX FIRE RATED INSULATION OR APPROVED EQUAL

5. INSULATION OF DUCTWORK AND PIPING PASSING THROUGH NON-RATED WALLS SHALL BE CONTINUOUS THROUGH THE WALL PENETRATION. Mechanical General Note
1" = 1'-0"

6. WHEREVER PIPES, DUCTWORK OR OTHER ITEMS PASS THROUGH FIRE RATED WALLS AND FLOORS, THE CONTRACTOR SHALL ADEQUATELY FIRE STOP THE SPACE BETWEEN THE ITEMS AND THE MASONRY OR THE SPACE BETWEEN THE ITEM AND SLEEVE. FIRE STOP SHALL BE A NON-COMBUSTIBLE, NON-MELTING, APPROVED

DUCTWORK

1. GENERAL: CONSTRUCT ALL DUCTWORK AND ACCESSORIES IN ACCORDANCE WITH THE LATEST EDITION OF SMACNA STANDARDS FOR 2° PRESSURE CLASS AND SEAL CLASS B.

2. METAL DUCTWORK: UNLESS OTHERWISE NOTED, FABRICATE ALL DUCTWORK, HOUSING, DAMPERS, AND ALL OTHER DUCT RELATED ACCESSORIES FROM GALVANIZED STEEL SHEETS. EXHAUST DUCTWORK AND ACCESSORIES SERVING SHOWER ROOMS SHALL BE CONSTRUCTED FROM ALUMINUM SHEETS.

4. ALL ROUND DUCTWORK RUNOUTS TO A SINGLE CEILING DIFFUSER SHALL BE SAME SIZE AS DIFFUSER NECK

5. INSTALL OUTSIDE AIR INTAKES, INCLUDING CONCENTRIC VENTS, A MINIMUM OF 10'-0" FROM ANY EXHAUST OR PLUMBING VENT

6. INSTALL CEILING AIR DEVICES AS CLOSE AS POSSIBLE TO LOCATION SHOWN ON PLAN. COORDINATE LOCATION WITH LIGHT FIXTURES AND SPRINKLER HEADS.

7. CHANGES TO DUCT DUE TO FIELD CONDITIONS SHALL BE MADE ONLY IF THE DUCT SIZE FREE AREA IS MAINTAINED AND SHALL BE SUBMITTED TO ENGINEER FOR

8. FLEXIBLE CONNECTORS: PROVIDE FLEXIBLE CONNECTORS AT THE INLET AND OUTLET CONNECTION FOR EACH FAN AND AIR HANDLING UNIT. EACH FLEXIBLE CONNECTOR SHALL ALLOW 1º OF FREE MOVEMENT AND SHALL BE COMPLETELY AIR TIGHT. PROVIDE NEOPRENE COATED GLASS FABRIC MATERIAL, MINIMA 30 0Z. PER SQUARE YARD. CONTRACTOR SHALL BRACE DUCTWORK (AS REQUIRED) AT ALL FLEXIBLE CONNECTORS TO ENSURE THAT DUCTWORK IS KEPT ALLOWMENT.

9. LEAKAGE

A ALL EXPOSED DUCT JOINTS SHALL BE SEALED WITH HARDCAST 601.

B LEARAGE TESTING FOR ALL DUCTWORK SHALL BE BY PHYSICAL SENSATION AND SHALL BE PERFORMED IN THE PRESENCE OF THE OWNERS REPRESENTATIVE.

C PERFORM ALL TESTING AFTER THE SEALS HAVE CURED COMPLETELY AND BEFORE COVERING WITH INSULATION OR CONCEALING IN MASONRY.

D ALL DUCT JOINT'S ABOVE CELING SHALL BE SEALED WITH MASTIC.

LEAKAGE TESTING

POST CONSTRUCTION TEST: TOTAL DUCT LEAKAGE SHALL BE LESS THAN OR EQUAL TO 6 CPM PER 100 SQUARE FEET OF CONDITIONED FLOOR AREA WHEN TESTED AT A PRESSURE DIFFERENTIAL OF 0.1 INCHES W.G. (25 PA) ACROSS THE ENTIRE SYSTEM, INCLUDING THE MANUFACTURERS AR HANDLER ENCLOSURE. ALL REGISTER BOOTS SHALL BE TAPED OF OTHERWISE SHEED DURING THE TEST.

2. ROUGH-IN TEST: TOTAL LEAKAGE SHALL BE LESS THAN OR EQUAL. TO 5 CFM PER 100 SQUARE FEET OF CONDITIONED FLOOR AREA WHEN TESTED AT PRESSURE DIFFERENTIAL OF 0.1 INCHES W.G. (25 PA) ACROSS THE SYSTEM, INCLUDING THE MANUFACTURERS RIA PROMOTE PROCLOSURE ALL REGISTERS SHALL BE TAPED OR OTHERWISE SEALED DURING THE TEST. IF THE ARI HANDLER IS NOT INSTALLED AT THE TIME OF THE TEST, TOTAL LEAKAGE SHALL BE LESS THAN OR EQUAL TO CFM PER 100 SQUARE FEET OF CONDITIONED FLOOR AREA.

3. A WRITTEN REPORT OF THE TEST RESULTS SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL UPON REQUEST.

TEMPERATURE CONTROL

THERMOSTAT LOCATIONS SHOWN ARE APPROXIMATE AND SHALL BE COORDINATED WITH ARCHITECTURAL DRAWINGS. MOUNT THERMOSTATS 4-0" ABOVE FINSHED FLOOR, UNLESS OTHERWISE NOTED.

2 PROVIDE INTILL SETUP AND PROGRAMMING OF ALL CONTROLS AND DEMONSTRATE TO OWNER.

3. CONTROL WRING LOCATED IN PLENUM SPACE NOT INSTALLED IN CONDUIT SHALL BE PLENUM RATED CABLE.

4. THERMOSTATIC CONTROLS SHALL COMPLY WITH 2015 VIRGINA ON BRICRY OYNERS WATCH TO CONTROLS SHALL COMPLY WITH 2015 VIRGINA ON BRICRY OYNERS WATCH TO CONTROLS SHALL COMPLY WITH 2015 VIRGINA ON BRICRY OYNERS WATCH TO CONTROLS SHALL COMPLY WITH 2015 VIRGINA ON BRICRY OYNERS WATCH TO CONTROLS SHALL COMPLY WITH 2015 VIRGINA ON BRICRY OYNERS WATCH TO CONTROLS SHALL COMPLY WITH 2015 VIRGINA ON BRICRY OYNERS WATCH TO CONTROLS SHALL COMPLY WITH 2015 VIRGINA ON BRICRY OYNERS WATCH TO CONTROLS SHALL COMPLY WITH 2015 VIRGINA ON BRICRY OYNERS WATCH TO CONTROLS SHALL COMPLY WITH 2015 VIRGINA ON BRICRY OYNERS WATCH TO CONTROLS SHALL COMPLY WITH 2015 VIRGINA ON BRICRY OYNERS WATCH TO CONTROLS SHALL COMPLY WITH 2015 VIRGINA ON BRICRY OYNERS WATCH TO CONTROLS SHALL COMPLY WITH 2015 VIRGINA ON BRICRY OYNERS WATCH TO CONTROLS SHALL COMPLY WITH 2015 VIRGINA ON BRICRY OYNERS WATCH TO CONTROLS SHALL COMPLY WITH 2015 VIRGINA ON BRICRY OYNERS WATCH TO CONTROLS SHALL COMPLY WITH 2015 VIRGINA ON BRICRY OYNERS WATCH TO CONTROLS SHALL COMPLY WITH 2015 VIRGINA ON BRICRY OYNERS WATCH TO CONTROLS SHALL COMPLY WITH 2015 VIRGINA ON BRICRY OYNERS WATCH TO CONTROLS SHALL COMPLY WITH 2015 VIRGINA ON BRICRY OYNERS WATCH TO CONTROLS WATCH TO CONTROL

BUILDING ENVELOPE AIR LEAKAGE

THE AIR LEAKAGE OF THE BUILDING SHALL BE TESTED PER 2018 VIRGINIA ENERGY CONSERVATION CODE TO COMPLY WITH THE MAXIMUM ALLOWABLE AIR LEAKAGE RATE OF 5.0 AIR CHANGES PER HOUR.

REFRIGERANT PIPING INSULATION

A INSULATION SHALL BE A FLEXIBLE, CLOSED-CELL ELASTOMERIC PIPE INSULATION: AP ARMAFLEX, AC ACCOFLEX OR SIMILAR. ADHESIVE SHALL BE ARMAFLEX 520, 520 BLACK OR 520 BLV ADHESIVE OR SIMILAR. R.3 INSULATION MINIMUM. THE INSULATION MUST CONFORM TO ASTM CS34 GRADE 1

ANIA-LEX 20, 320 BLOCK OR 520 BLV AUHESINE OR SIMILAR. R-3 INSULATION IMMINUM. THE INSULATION MUST CONFORM TO AS IM 6334 GRADE 1, TYPE I.

B. ALL LIQUID AND SUCTION LINES SHALL BE INSULATED CONTINUOUSLY FROM A POINT 6" INSIDE THE DISPLAY CASE TO THE SUCTION SERVICE VALVE AT THE COMPRESSOR.

COMPRESSOR.
C. ALL OW TEMPERATURE LINES (+10°F AND BELOW) SHALL BE INSULATED WITH A MINIMUM OF 1° WALL THICKNESS.
D. ALL MEDIUM AND HIGH TEMPERATURE LINES (ABOVE +10°F) SHALL BE INSULATED WITH A MINIMUM OF 34° WALL THICKNESS.
E. HEAT RECLAIM LINES SHALL BE INSULATED FROM THE COMBINISM UNIT 10° THE HEAT RECLAIM UNITS WITH 34° THICKNESS.

2. INSTALLATION:

A ALL REFRIGERANT COPPER LINES MUST BE FREE OF EXTRANEOUS CHEMCALS SUCH AS CORROSIVE CLEANERS OR BUILDING MATERIALS DUST PRIOR TO THE INSTALLATION OF THE INSULATION. THE INSULATION MUST BE CLEAN AND DRY PRIOR TO INSTALLATION.

B. REFRIGERANT PIPE SHALL BE SEALED WHILE SUPPING ON INSULATION TO PREVENT FOREIGN MATTER FROM INTERING THE TUBE.

C. ALL BUTT JOINTS AND MITERED SEAMS SHALL BE ADHERED WITH FULL COVERAGE OF ADHESIVE ON BOTH SURFACES, INSULATION SHALL NOT BE STRETCHED WHEN ADHERING.

D. SADDLES SHALL BE INSTALLED UNDER ALL INSULATED LINES AT UNISTRUT CLAMPS, CLEVIS HANGERS, OR LOCATIONS WHERE INSULATION MAY BE COMPRESSED.

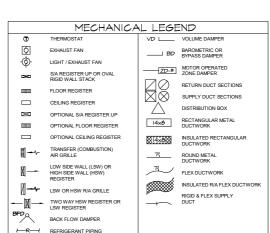
E. ALL INSULATION EXPOSED TO SUNLIGHT OR INSTALLED OUTDOORS SHALL BE PROTECTED WITH TWO COATS OF WB ARMAFLEX FINISH OR WEATHER

ABBREVIATIONS

ABOVE
ACCESS DOOR
ACCESS DOOR
ABOVE FINISHED FLOOR
AIR HANDLING UNIT
ALTERNATE
BALANCE DAMPER
BACK DRAFT DAMPER
BACK DRAFT DAMPER
BELOW
TON AIR
CELLING DIEFLISER
CUBIC FEET FER NINUTE
CELLING REGISTER
CONDENSING UNIT
DOWN
EXHAUST FAN
EXHAUST FAN
EXHAUST FAN
ENERGY RECOVERY ABV
AD
AFF
AHU
ALT
BD
BDD
BLW
CA
CD
CFM
CG
CR
CU
DN
EA
EF
ERV
ESP

ECHAUST FAN
DHARDST FAN
ENDER FA FD FLR FR HP HSW HVAC INS INT LSW MBHA OA OA OA OPT PDR R-8 R/A REF. RG RMR SR SR S/A TD

WALL CAP WIRE MESH SCREEN





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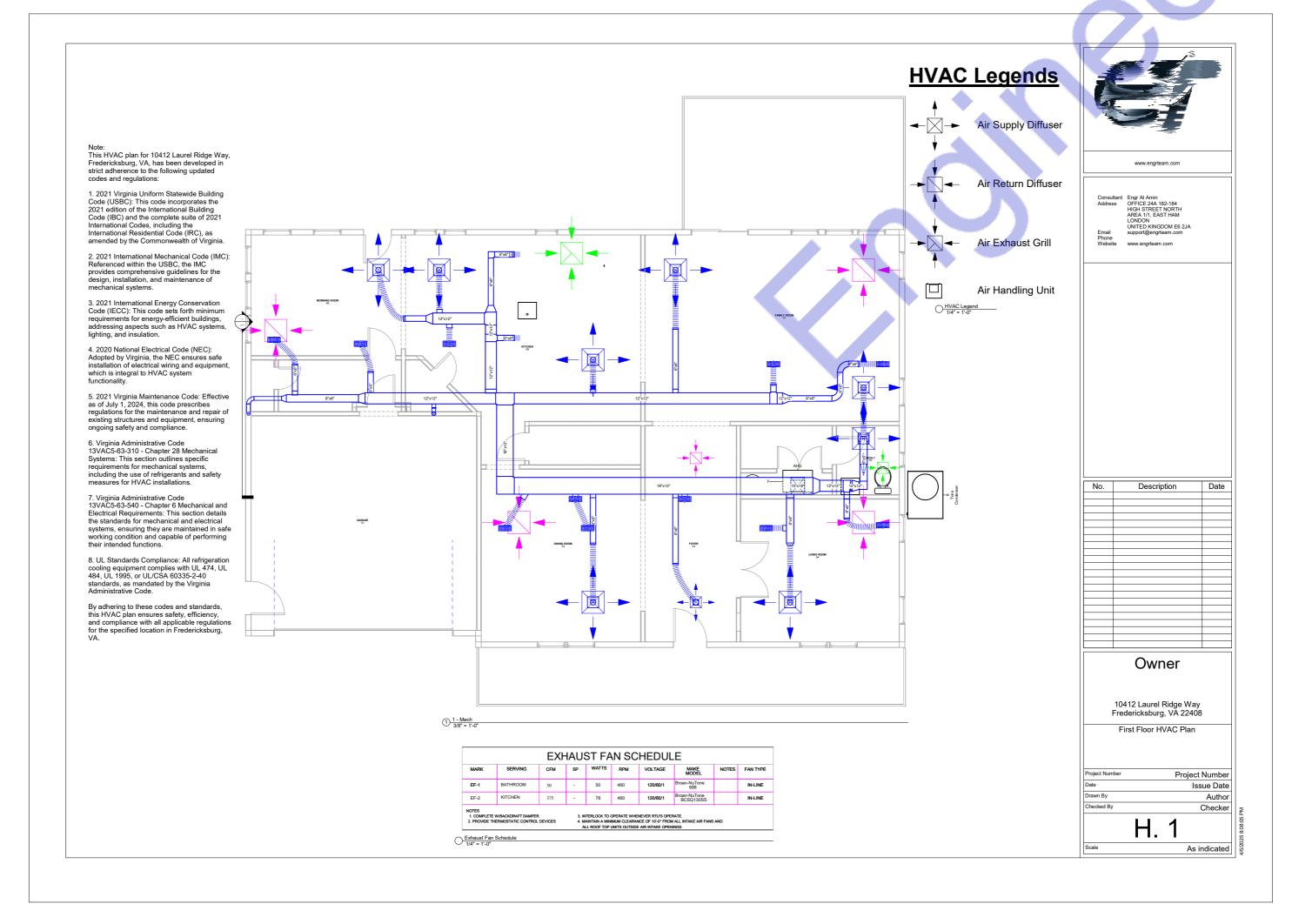
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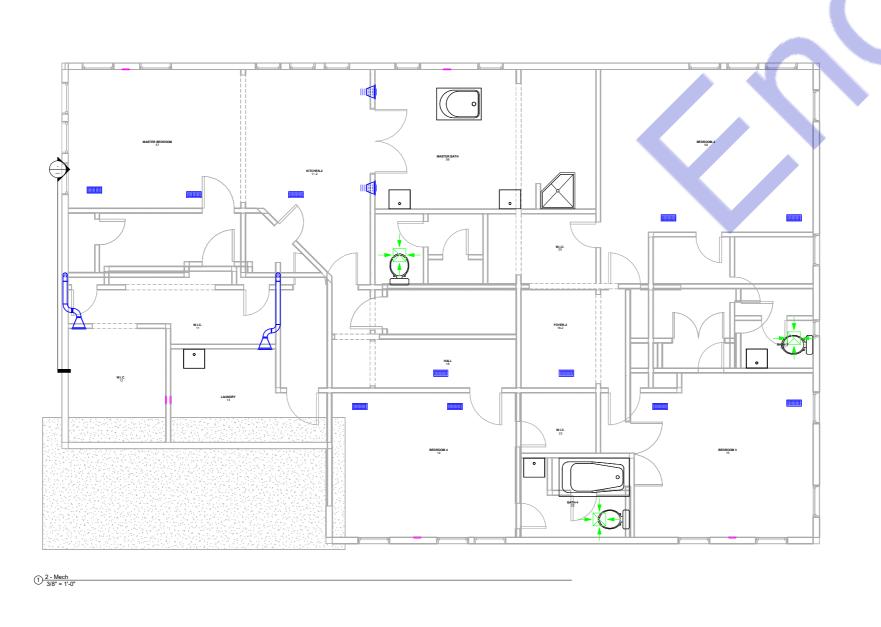
Mechanical General Note

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H. 0

1" = 1'-0"







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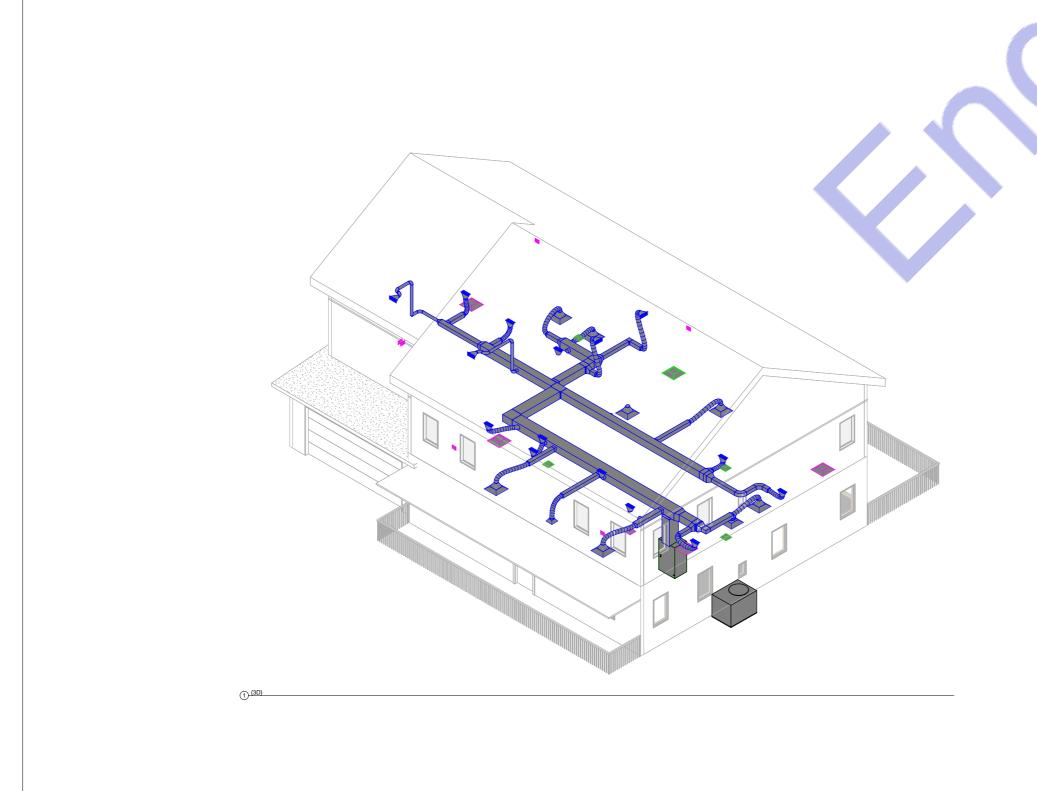
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Second Floor HVAC Plan

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Date	Issue Date
Drawn By	Author
Checked By	Chaalian

H. 2

3/8" = 1'-0"





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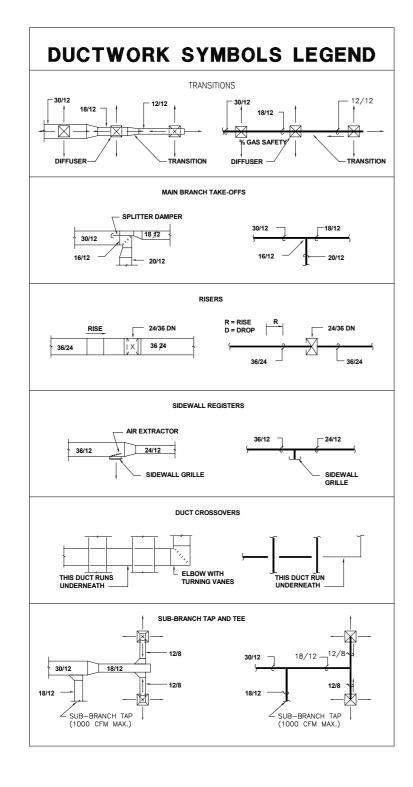
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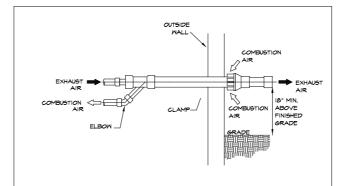
3D HVAC Plan

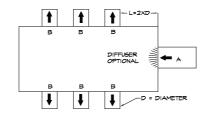
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Checked By	Checke

H. 3

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- I. ENTRANCE (A) HAS A DIFFUSER FITTING THAT RECOVERS VELOCITY PRESSURES AND PREVENTS SMIRLS (OPTIONAL)

  (OPTIONAL)

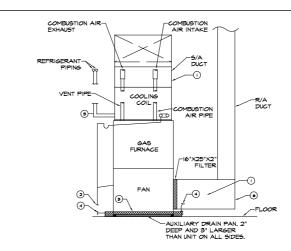
  (OPTIONAL)

  (STRAIGHT APPROACH (A) AND STRAIGHT EXITS (B)

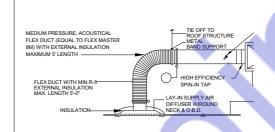
  S. EXITS OPENING ON SIDE (NO TOP OR BOTTOM EXITS)

  4. EXIT OPENING AT LEAST TWO DIAMETERS FROM ENTRANCE (L)

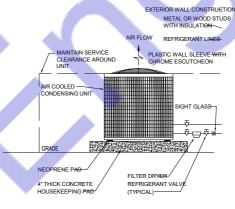
  MAKE BOX AS GMALL AS POSSIBLE BY COMPLYING WITH L = 2 X D



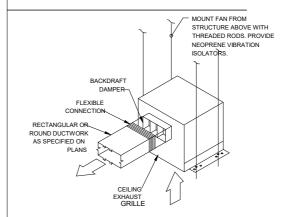
- INTERNALLY LINED SUPPLY AND RETURN SHEET METAL PLENUMS THAT EXTENDS IO FEET ON EITHER SIDE OF AHU. FULL SIZE OF UNIT OPENING.
- 2 3/4" CONDENSATE DRAIN LINE, ROUTE BEHIND R.A. DUCT AND DOWN TO FLOOR DRAIN. TRAP FOR CONDENSATE IF UNIT HAS NO INTERNAL TRAP.
- (3) INSTALL REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS AND CODE REQUIREMENTS.
- (4) PROVIDE EMERGENCY DRAIN PAN WITH FLOAT SMITCH BELOW THE AND TO DE-ENERGIZE THE AND PRIOR TO OVERFLOW OF THE PAN, PROVIDE SECONDARY 344: CPVC CONDENSANT DRAIN LINE FOR THE EMERGENCY DRAIN PAN THAT DAYLIGHTS INTO ADJACENT HIB DRAIN.
- (5) EMERGENCY DRAIN PAN: A MINIMUM DEPTH OF 1.5° AND FOOTPRINT NOT LESS THAN 3° LARGER THAN THE UNIT IN WIDTH AND LEWSTH, EMERGENCY DRAIN PAN SHALL BE MADE OF CORROSION-RESISTANT MATERIAL WITH MINIMUM THICKNESS AS DEFINED BY CODE REQUIREMENTS.



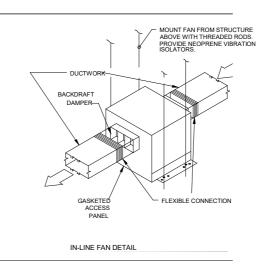
#### SUPPLY AIR DIFFUSER CONNECTION



OUTSIDE AIR CONDITIONER



CEILING EXHAUST FAN DETAIL





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HVAC Installation

Project Number Issue Date Drawn By Author Checker

H. 4

1" = 1'-0"

#### PLUMBING SPECIFICATIONS

#### I. BASIC MATERIALS & METHODS

- A. ALL MORK SHALL CONFORM TO 2018 VIRGINIA PLUMBING CODE, 2019 VIRGINIA RESIDENTIAL CODE, 2019 VIRGINIA RESIDENTIAL CODE, 2019 VIRGINIA FUEL GAS CODE, PROVIDE A COMPLETE FLUMBING SYSTEM, LEFT IN PROPER MORKING ORDER, PROVIDE HEREIN MEANS INSTALLED COMPLETELY, INCLUDING LABOR AND MATERIALS, CONTRACTOR RESPONSIBLE FOR ALL CODE FOR REDISSIONS, REINSPECTIONS, ETC. CAUSED OR CREATED BY THE CONTRACTOR, SECURE AND PACKET STATES FERRITS, AND INTERCENTIAL AND COMPLY MITH ALL FEDERAL, STATE, CONTRY, AND CITY CODES AND REGULATIONS.
- B. THE INSTALLING CONTRACTOR PROVIDING FOR THIS MORK SHALL BE A FIRM LICENSED FOR THIS TYPE OF MORK AND SHALL PROVIDE COPIES OF LICENSES, BLOSHESS LICENSES, BONDING LIMITS, AND INSURANCE COVERAGE. THE CONTRACTORS FIELD PERSONNEL SHALL BE INDER THE DIRECT SUPERVISION OF A LICENSED PLUMBERS).
- LICENSED PLIMBER(S).

  PROVISIONS INCLUDE LABOR SUPPLIES AND MATERIALS, TOOLS EQUIPMENT, ETC. PROVIDE COMPLIES SUBMITTALS AND SHOP EQUIPMENT, ETC. PROVIDE COMPLIES SUBMITTALS AND SHOP PRANINGS ON ALL ITEMS. CORDINATE WITH OTHER TRADES PRIOR TO ROUGH IN AND PROVIDE ANY NECESSARY ADJUSTMENTS. CONTRACTOR IS RESPONSIBLE FOR MATERIAL SHIPPING. DELIVERY, RECEIVING, STORAGE & PROVIDETION, EXCAVATION, BACKFILLING, CUTTING SUMMANTED FOR THOU THAT PLAY EXTRIBUTE SHALL BE SUMMANTED FOR THOU THAT PLAY EXTRIBUTE. SHALL BE MANIFACTURERS WARRANTIES, PROVIDE COMPLETE PARTS, MANIFEMENTE AND SERVICE MANIFACTURERS WARRANTIES, PROVIDE COMPLETE PARTS, MANIFEMENTE AND SERVICE MANIFACTURERS WARRANTIES, PROVIDE COMPLETE PARTS, MANIFEMENTE AND SERVICE MANIFEMENTS. ALONG WITH THE NECESSARY TRAINING OF OWNERS PERSONNEL.
- D. ALL MATERIALS SHALL BE NEW AND CURRENTLY MANUFACTURED. ALL MATERIALS SHALL BE UL., LABELED, AND MET ALL NDUSTRY STANDARDS, PROVIDE PIPE LABELING FOR ALL POTABLE WATER AND OTHER LINES,

#### 2. GENERAL PIPING REQUIREMENTS

- A. DRAMINGS ARE DIAGRAMMATIC TO INDICATE THE REQUIRED PLIMBING SYSTEM. EVERY FITTING AND DETAIL IS NOT NECESSARILY INDICATED. THE CONTRACTOR SHALL PROVIDE AND INSTALLA COMPLETE AND PROPERLY FUNCTIONING SYSTEMS) IN A PROFESSIONAL MANNER. ALL WORK SHALL BE INSTALLED SO THAT VALVES AND OTHER WORKING COMPONENTS ARE ACCESSIBLE FOR SERVICE.
- B. CONTRACTOR SHALL CHECK AND VERIFY THE UTILITY SOURCE MATER PRESSURE. IF THE PRESSURE EXCEEDS 60 PSI THE CONTRACTOR SHALL PROVIDE A LINE SIZE PRESSURE REDUCING VALVE, NATIS MODEL 2235B TYPE OR OTHER AS APPROVED BY BUILDER
- ALL VENT, MATER, AND MASTE PIPING SHALL BE CONCEALED IN MALLS OR ABOVE CELLINGS, UNLESS NOTED OTHERWISE. ANY PIPING ROUTED THROUGH COUNTER MORE SHALL BE LOCATED OUT-OF-THE-MAY TO THE REAR OF THE COUNTER AND MELL SECURED. COORDINATE CAREFULLY MITH THE COUNTER MANUFACTURER AND ARCHITECT FOR ROUTING OF ANY PIPING.
- D. THE CONTRACTOR SHALL PROVIDE FINAL FIELD COORDINATION AND VERIFICATION OF THE EXACT LOCATION OF SHEAP AND STUB-OUT LOCATION PRIOR TO ROUGH IN FLOOR SLAB PENETRATIONS SHALL FIRST DE CHECKED AND VERIFIED WITH STRUCTURAL PLANS TO AVOID STRUCTURAL DAMAGE. WHERE REQUIRED BY CODE, PENETRATIONS SHALL BE SLEEVED AND SEALED.

  SEALED. BY CODE, PENETRATIONS SHALL BE SLEEVED AND SEALED. SALE LOOR TO DRAIN PER ARCHITECURAL REQUIREMENTS. SALE LOOR TO DRAIN PER ARCHITECURAL REQUIREMENTS. SALE LOOR TO ARCHITECURAL DE MADE AS DIRECTED BY OWNERS ROOFING INSTALLER TO MAINTAIN ROOF MARRANTY, PROVIDE ALL NECESSARY ROOF FLANSES, ETC.
- PROVIDE ALL RESIDENT I PROVIDE PIPE HANGERS & SUPPORTS WITH WIDE SADDLES THAT SUPPORT BOTH THE INSULATION AND PIPING WITHOUT CRISCHING THE RISULATION AND PIPING WITHOUT CRISCHING THE ROLLATION SPACE HANGERS TO PROVIDE NO MOVEMENT OR SAGGING BETNEEN SUPPORTS. ALL PIPING PROTETTATION MALLS AND THE FINISHED SUPPORTS. ALL PIPING PROTETTATION MALLS AND THE FINISHED SUPPORTS. ALL PIPING SHALL HAVE CHROME-PLATED ESCUPLECOMS. ALL PIPING SHEETMAND EXTERIOR MALLS, ROOPS ETC. SHALL BE PLASHED AND SEALED IN AN APPROVED MANNER. THE SANITARY MASTE AND VENT SYSTEM DESIGN IS BASED ON 1/4 INCH SLOPE PER FOOT.

6. PERFORM SYSTEM TESTS PRIOR TO COVERING UP ANY PIPING, IN ACCORDANCE MITH THE CODE. ALL TESTING SHALL BE PERFORMED IN THE PRESENCE OF THE OWNERS REPRESENTATIVE. ANY DEFECTIVE MATERIALS SHALL BE REPLACED MITH NEW MATERIALS AND THE SYSTEM RE-TESTED DO NOE ALL MORK IS COMPLETED THEN EACH SYSTEM SHALL BE SANITIZED IN ACCORDANCE MITH THE CODE AND THEN FLUSHED CLEAN WITH POTABLE MATER.

#### MATER PIPING SYSTEM MATERIALS

MATER SERVICE UNDERGROUND - COPPER, ALTERNATIVE - SHALL BE "ENDPOLY PE-4TIO HIGH DENSITY POLYETHYLENE WATER SERVICE TUBING.

- H. WATER PIPING IN GRADE COPPER, ALTERNATIVE SHALL BE "EDNPOLY PE-4110 HIGH DENSITY POLYETHYLENE WATER SERVICE TUBING.
- MATER PIPING ABOVE GRADE CPVC OR PEX TUBE, SOLDER JOINT FITTINGS AND CONNECTORS, COPPER TO CPVC OR PEX CONNECTONS SHALL UTILIZE INSLATING MICHOS, CAPITOL MANUFACTURING OR EQUIAL APPROVED BY BUILDER.
- J. GATE VALVES PROVIDE LINE SIZE, BRASS OR BRONZE BODY, RATED FOR 125 PSI SHOCK WATER PRESSURE, CRANE, NIBCO, WATTS, OR HAMMOND. TAG OR LABEL EACH VALVE.
- K. HOSE BIBBS PROVIDE BRASS OR BRONZE CASING WITH BRONZE INTERIOR PARTS, REPLACEABLE SEAT AND SEAT NASHER, HOSE BIBBS SHALL HAVE VACUAN BREAKER FEATURE. L. HAMMER ARRESTORS-SHALL BE PROVIDED AND INSTALLED AS PER PID I STANDARDS, UTILIZE LIVESWITH HYDROTOL WATER HAMMER ARRESTOR, OR OTHER AS APPROVED BY BUILDER.
- M. TESTING ALL PIPING SYSTEM(S) SHALL BE PRESGURE TESTED, BEFORE INSULATED & CONCEALED, AT 125 PSI AND HOLD THIS PRESSURE WITH NO LOSS FOR 24 HOURS.
- N. DISINFECTION THE COMPLETE PIPING SYSTEM(S) SHALL BE DISINFECTED IN ACCORDANCE WITH THE CODE, THEN FLUSHED CLEAN, ALL FIXTURES SHALL BE CLEANED PRIOR TO DISINFECTION.

#### 4. SOIL, WASTE & VENT PIPING SYSTEM MATERIALS

- A SOIL, MASTE & VENT PIPING SHALL BE PVC SCHEDULE 40, FOAM CORE (NONE PRESSURE PIPE).

  B. P-TRAPS PXCVIDE ALL FIXTURES WITH P-TRAP SIZED IN ACCORDANCE WITH CODE.

  C. CLENVOYS SHALL BE PXCVIDED PER CODE. WALL CLEANOUTS SHALL BE FVC

#### GENERAL PLUMBING NOTES:

- REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL PLIMBING APPLIANCES, REFER TO RIGER DIAGRAMS FOR PIPE SIZES, FITTINGS, ACCESSORIES NOT SHOWN ON PLANS.
- 2. CONTRACTOR SHALL COORDINATE LOCATION OF PIPING PENETRATION THROUGH SLAB AND ROUTING OF SANITARY PIPING BELOW FLOOR WITH DUCTWORK AND PIPING LOCATED IN CEILING SPACE OF FLOOR BELOW.

PLUMBING SYMBOLS

SYMBOL	DESCRIPTION
en	DOMESTIC COLD WATER
HW-	DOMESTIC HOT WATER
——SAN	SANITARY, SOIL OR WASTE PIPE
	VENT PIPE
	GAS
RM	RAIN WATER/STORM WATER
0	CONNECT TO EXISTING
——⇒∞	P-TRAP
——¬ г—— вгр	BACK FLOW PREVENTER
F "A"SA	SHOCK ARRESTOR
	VACUM RELIEF
	PIPE CAP OR PLUG
<del></del>	PIPE CONTINUES
<b>─</b> ──	STOP VALVE
——↓——	UNION
NG C	ELBOW DOWN
OUP	ELBOW UP
p	INDIRECT DRAIN
Ø □ FD	FLOOR DRAIN
О нр	HUB DRAIN
——————————————————————————————————————	HOSE BIBB
₽	SHOWERHEAD

BACKWATER VALVE GAS PRESSURE REGULATOR

**⊸**Ā—

-₩---

#### ABBRE

BRE	VIATIONS
	ABOVE CEILING
	ABOVE FINISHED FLOOR
	ABOVE FINISHED GRADE
	AIR ADMITTANCE VALVE
	AIR HANDLING UNIT
	BELOW FLOOR
	BELOW FINISHED FLOOR
	BACKFLOW PREVENTOR
4	CUBIC FEET PER HOUR
- 4	CLEAN OUT
	COLD WATER EXPANSION TANK
	FLOOR DRAIN
	GARBAGE DIPOSAI
	HOSE BIB
	HUB DRAIN
	HOT WATER
	BTU PER HOUR
	PRESSURE REDUCING VALVE
	50II
	HAMMER ARRESTOR
	TOTAL DEVELOPED LENGTH
	TRAP PRIMER
	VENT
	VENT THROUGH ROOF
	WASTE

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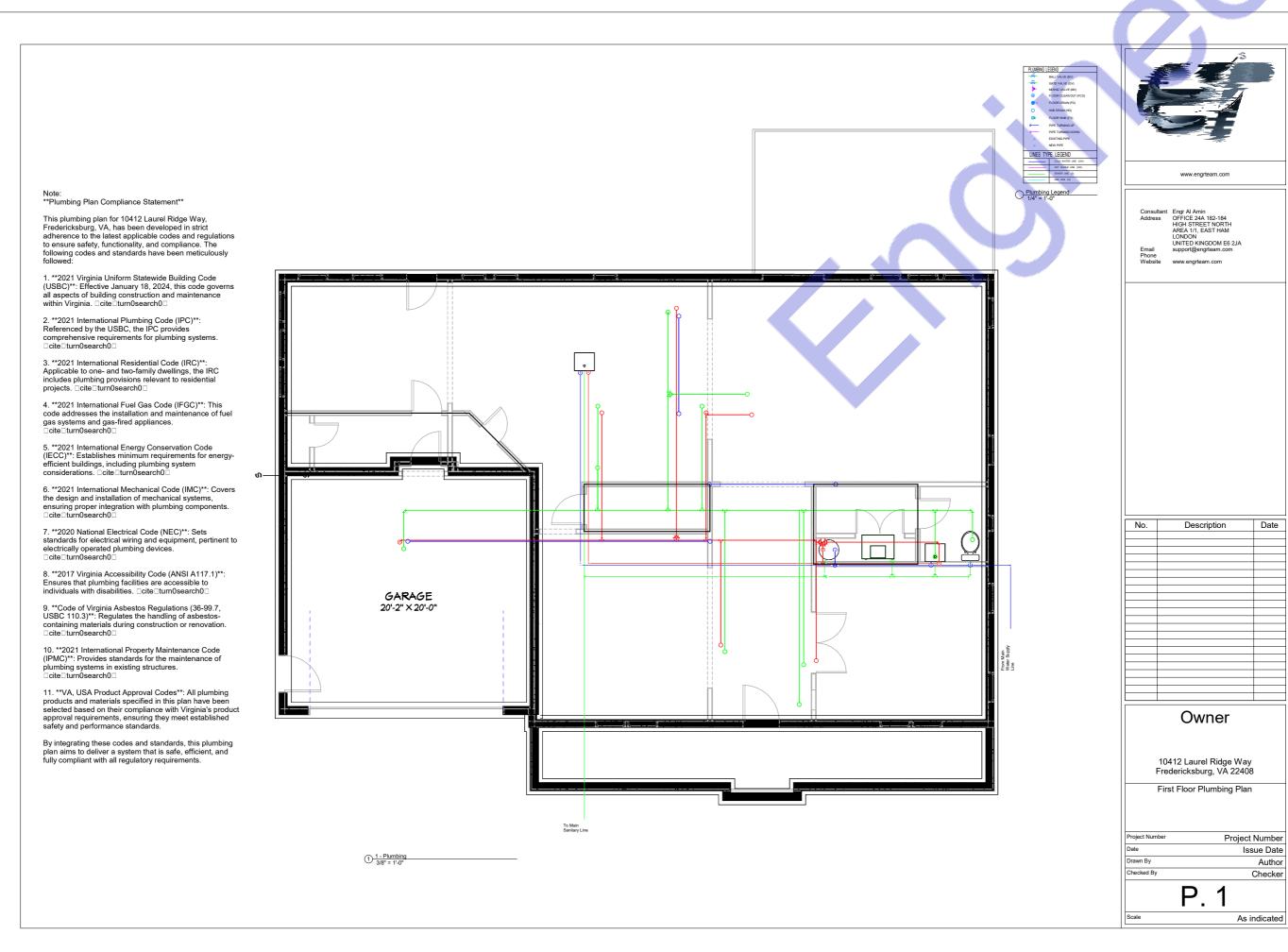
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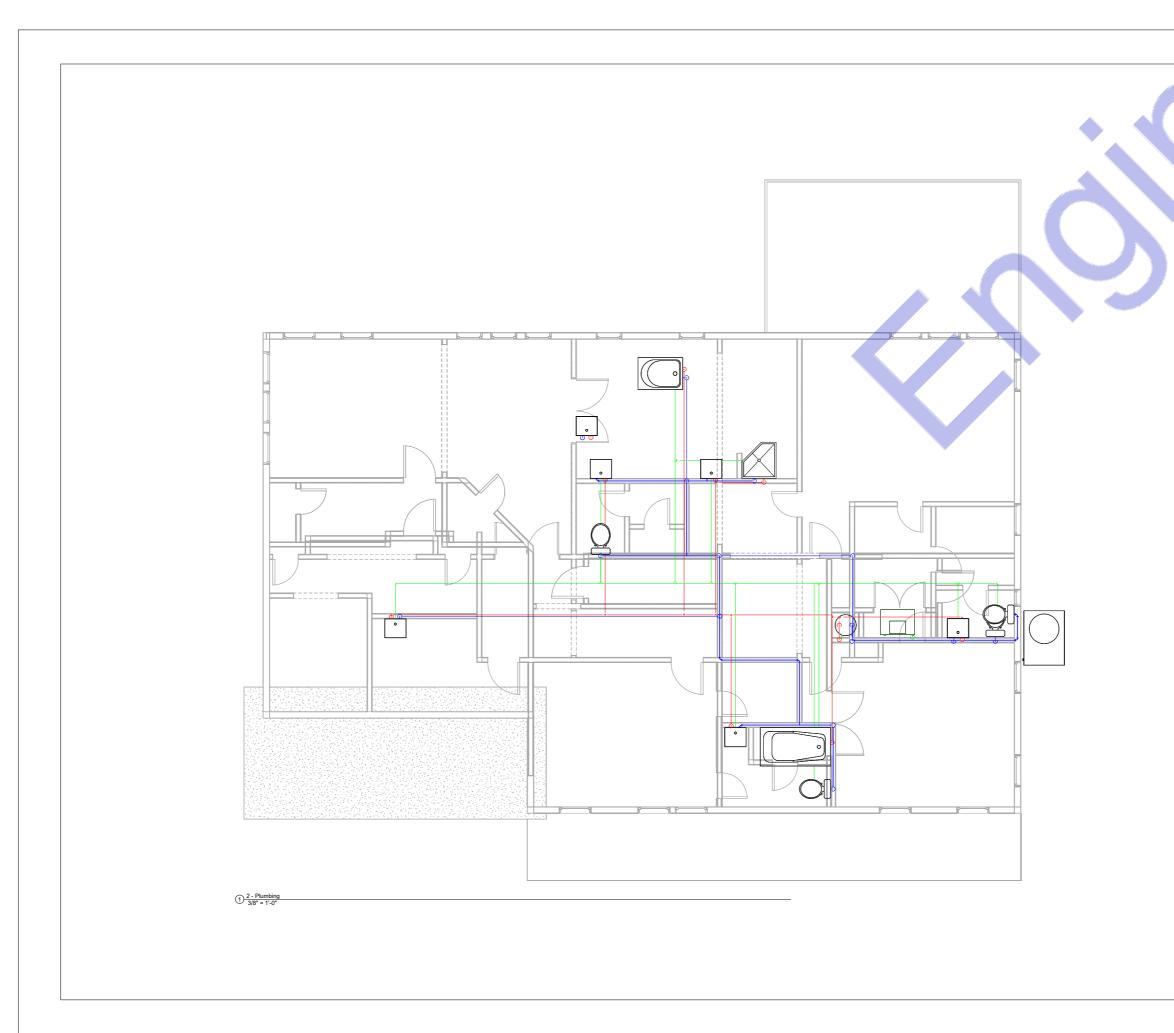
1" = 1'-0"

Plumbing General Note
1" = 1'-0"

PLUMBING DRAWING LIST				
DRAWING	TITLE			
P000	PLUMBING GENERAL NOTES, SYMBOLS, & ABBREVIATIONS			
P100	BASEMENT SANITARY, WASTE & VENT PLUMBING PLAN			
PIOI	FIRST FLOOR SANITARY, WASTE & VENT PLUMBING PLAN			
Pl02	SECOND FLOOR SANITARY, WASTE & VENT PLUMBING PLAN			
PI03	ROOF SANITARY, WASTE & VENT PLUMBING PLAN			
P200	BASEMENT FLOOR DOMESTIC WATER & NATURAL GAS PLUMBING PLAN			
P201	FIRST FLOOR DOMESTIC WATER & NATURAL GAS PLUMBING PLAN			
P202	SECOND FLOOR DOMESTIC WATER & NATURAL GAS PLUMBING PLAN			
P500	SANITARY, WASTE & VENT RISER DIAGRAM			
P600	DOMESTIC WATER RISER DIAGRAM			
P100	NATURAL GAS RISER DIAGRAM			
P800	PLUMBING SCHEDULES			
P900	PLUMBING DETAILS			



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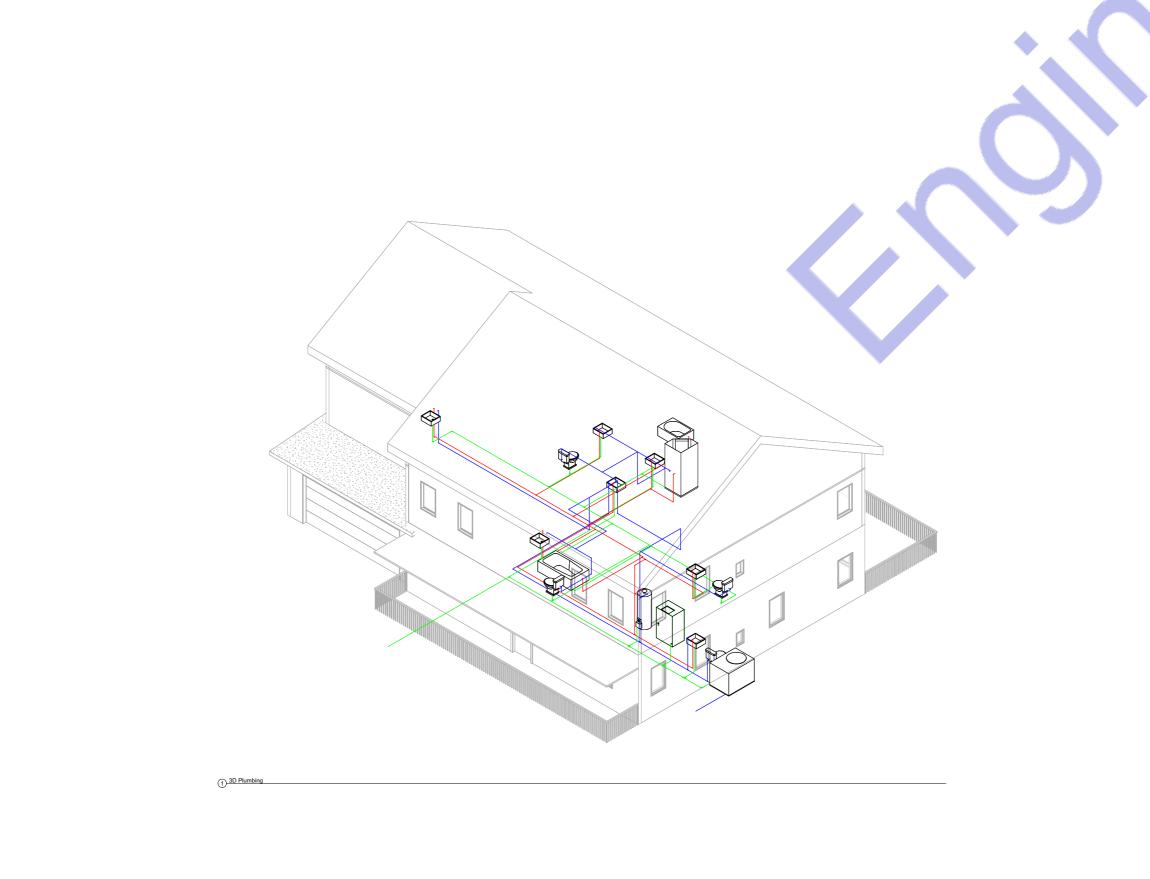
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Second Floor Plumbing Plan

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P. 2

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3D Plumbing Plan

Project Number Issue Date Author Checker

P. 3



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