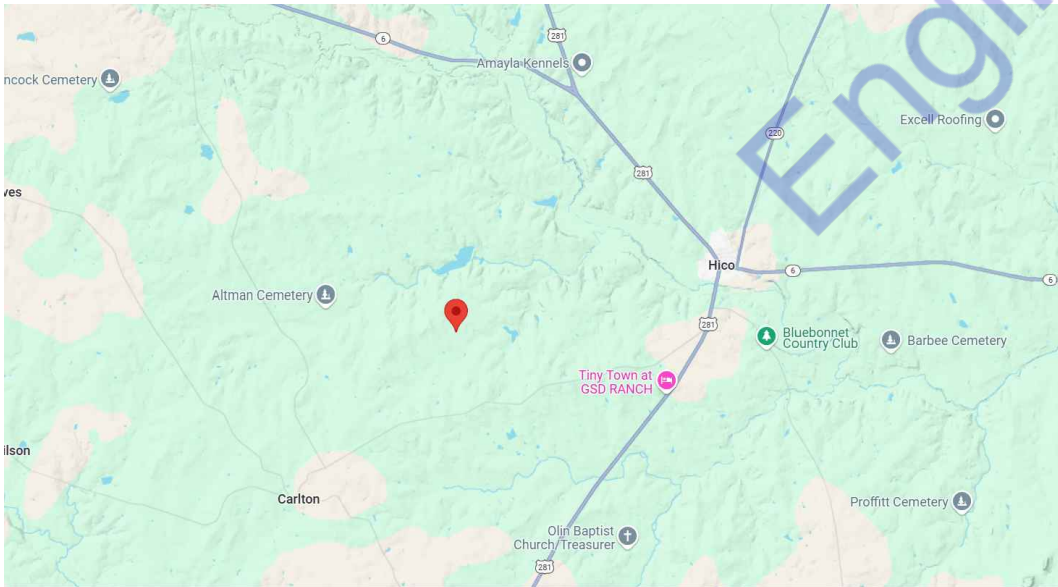


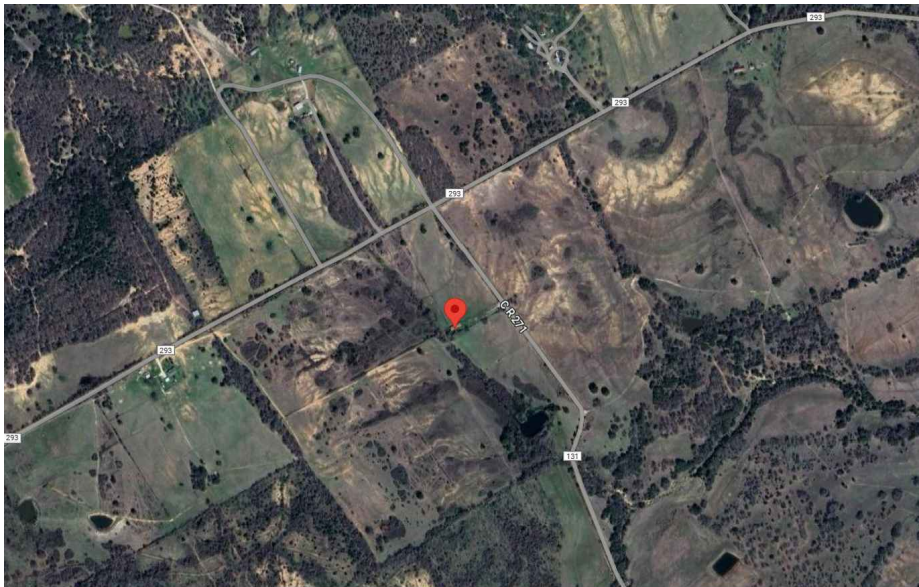
8090 County Road 293 Hico Texas, 76457



VISUAL PLAN



MAP-1



MAP-2



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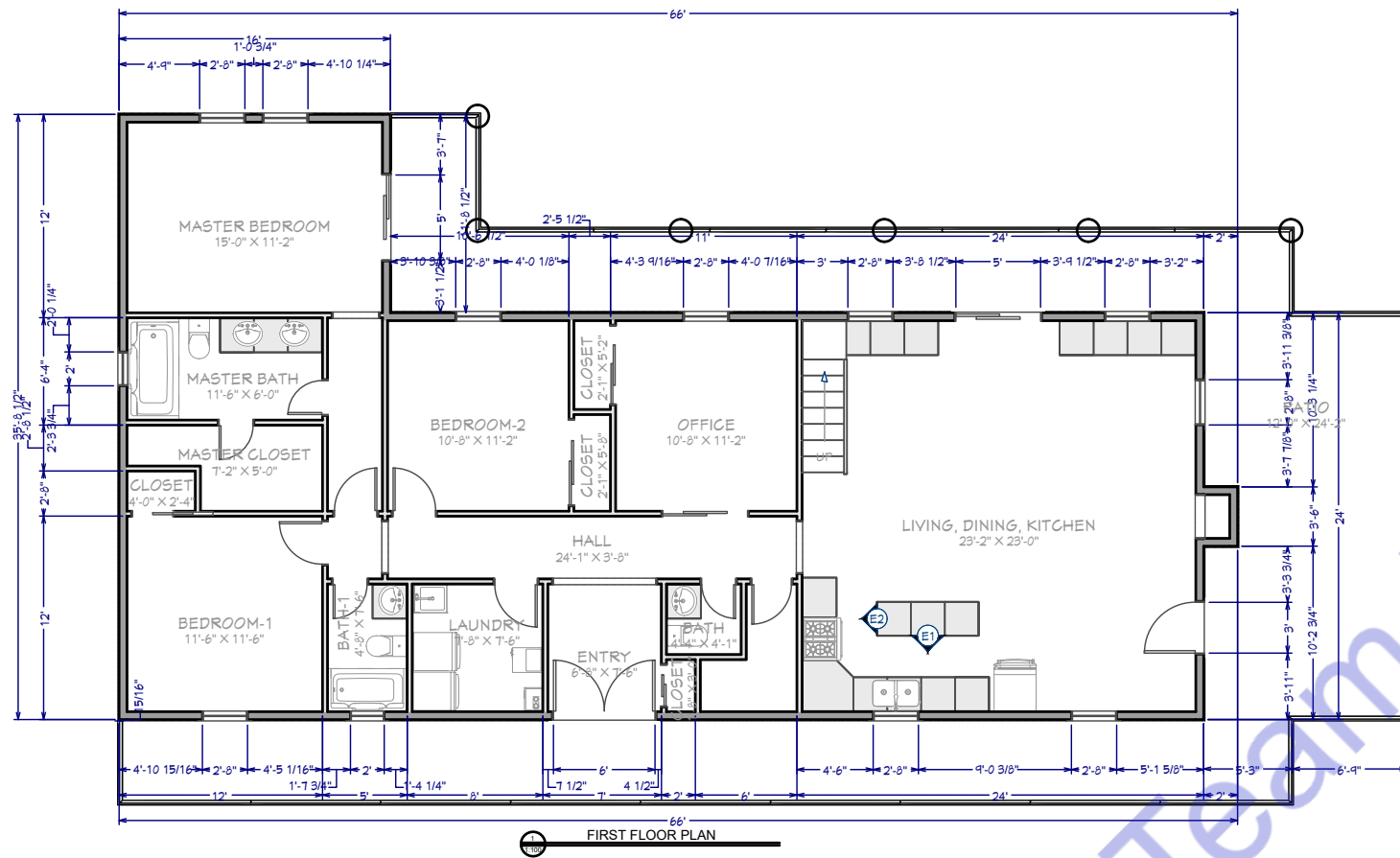
8090 County Road 293 Hico
Texas, 76457

SEAL:

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INTRODUCE

Drawn by:	Engr. Al Amin
Checked:	
Date:	NOV, 24.
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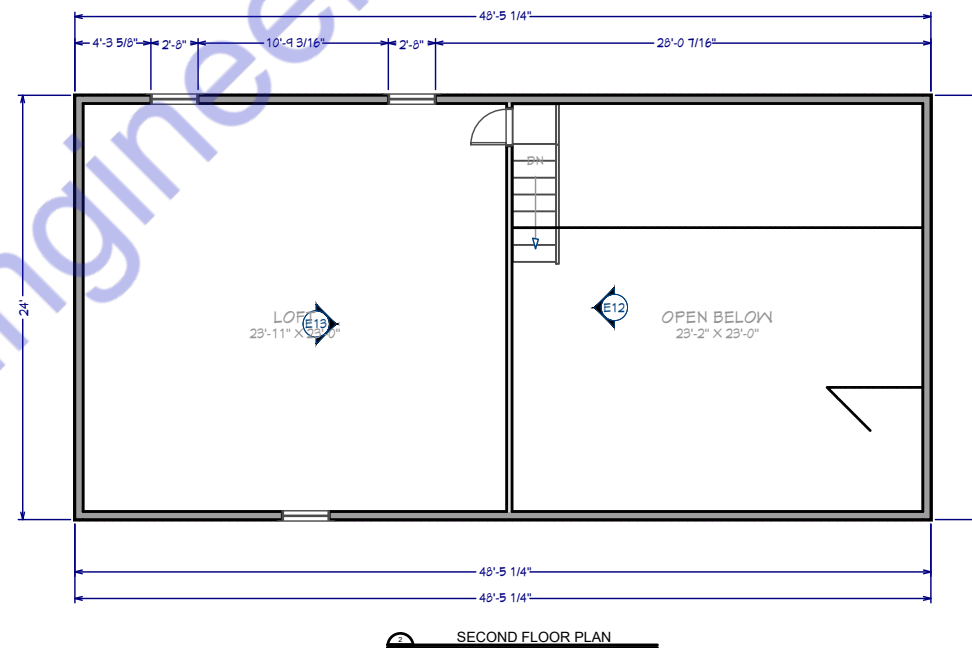


WALL SCHEDULE	
2D SYMBOL	WALL TYPE
	INTERIOR-4
	INTERIOR RAILING
	SIDING-6

DOOR SCHEDULE					
NUMBER	LABEL	QTY	SIZE	DESCRIPTION	COMMENTS
D01	2060	3	2060 L IN	HINGED-DOOR P04	
D02	2060	2	2060 R IN	HINGED-DOOR P04	
D03	2060	1	2060 S IN	HINGED-DOOR P04	
D04	2060	1	2060 L	POCKET-DOOR P04	
D05	2060	1	2060 R IN	SLIDER-DOOR P04	
D06	2060	2	2060 L IN	HINGED-DOOR P04	
D07	2060	2	2060 R IN	HINGED-DOOR P04	
D08	3060	1	3060 L EX	EXT. HINGED-DOOR E21	
D09	4760	1	4760 L IN	SLIDER-DOOR P04	
D10	5060	2	5060 L EX	EXT. SLIDER-GLASS PANEL	
D11	5060	1	5060 L IN	SLIDER-DOOR P04	
D12	5060	1	5060 R IN	SLIDER-DOOR P04	
D13	6060	1	6060 L R EX	EXT. DOUBLE HINGED-DOOR E21	

WINDOW SCHEDULE					
NUMBER	LABEL	QTY	SIZE	DESCRIPTION	COMMENTS
W01	2020DH	2	2020DH	DOUBLE HUNG	
W02	2034DH	3	2034DH	DOUBLE HUNG	
W03	2840DH	10	2840DH	DOUBLE HUNG	

FRAMING SCHEDULE						
NUMBER	NAME	QTY	NOMINAL	LENGTH	MATERIAL	TYPE
F01	HEADER	2	2X10	6'-5 1/2"	FIR FRAMING 2	LUMBER
F02	HEADER	2	2X10	6'-5"	FIR FRAMING 2	LUMBER
F03	HEADER	3	2X6	2'-11"	FIR FRAMING 2	LUMBER
F04	HEADER	4	2X6	2'-4"	FIR FRAMING 2	LUMBER
F05	HEADER	2	2X6	2'-5 3/4"	FIR FRAMING 2	LUMBER
F06	HEADER	6	2X6	2'-5"	FIR FRAMING 2	LUMBER
F07	HEADER	2	2X6	2'-9"	FIR FRAMING 2	LUMBER
F08	HEADER	20	2X6	3'	FIR FRAMING 2	LUMBER
F09	HEADER	2	2X6	3'-0 15/16"	FIR FRAMING 2	LUMBER
F10	HEADER	2	2X6	3'-1 1/2"	FIR FRAMING 2	LUMBER
F11	HEADER	2	2X6	3'-5 1/2"	FIR FRAMING 2	LUMBER
F12	HEADER	4	2X6	3'-5"	FIR FRAMING 2	LUMBER
F13	HEADER	2	2X6	3'-2 3/4"	FIR FRAMING 2	LUMBER
F14	HEADER	2	2X6	2'-9 15/16"	FIR FRAMING 2	LUMBER
F15	HEADER	2	2X6	3'	FIR FRAMING 2	LUMBER
F16	HEADER	2	2X6	3'-5 1/2"	FIR FRAMING 2	LUMBER
F17	POST	6	4X4	3'-1 1/8"	FIR FRAMING 3	LUMBER
F18	HEADER	6	2X6	3'-5"	FIR FRAMING 2	LUMBER



Note:

This architectural plan for "8090 County Road 293, Hico, Texas, 76457" is designed in strict adherence to all applicable updated codes and standards. The following codes and regulations have been considered in the creation of this plan:

- 2018 International Building Code (IBC) -This plan follows the IBC as adopted by Texas for structural integrity, safety, and general building requirements for non-residential construction.
- 2018 International Residential Code (IRC) -For any residential construction components, the IRC requirements are followed, including standards for construction, structural elements, and safety.
- 2020 National Electrical Code (NEC) -Compliance with the NEC is ensured for all electrical installations, fixtures, and systems, covering residential and commercial electrical requirements.
- 2018 International Plumbing Code (IPC) -The IPC guidelines are incorporated for all plumbing fixtures and systems, ensuring safety, functionality, and code compliance.
- 2018 International Mechanical Code (IMC) -HVAC and other mechanical systems are designed following the IMC standards for system safety and energy efficiency.
- 2018 International Fire Code (IFC) -Fire safety measures within this plan comply with the IFC, addressing fire prevention, protection, and occupant safety protocols.
- 2015 International Energy Conservation Code (IECC) -This code guides the energy efficiency aspects of the plan, ensuring that all elements meet Texas's energy conservation requirements.

Each aspect of this architectural plan has been developed to meet or exceed these standards, ensuring safety, efficiency, and compliance with the updated codes as of 2024.



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FLOOR PLAN

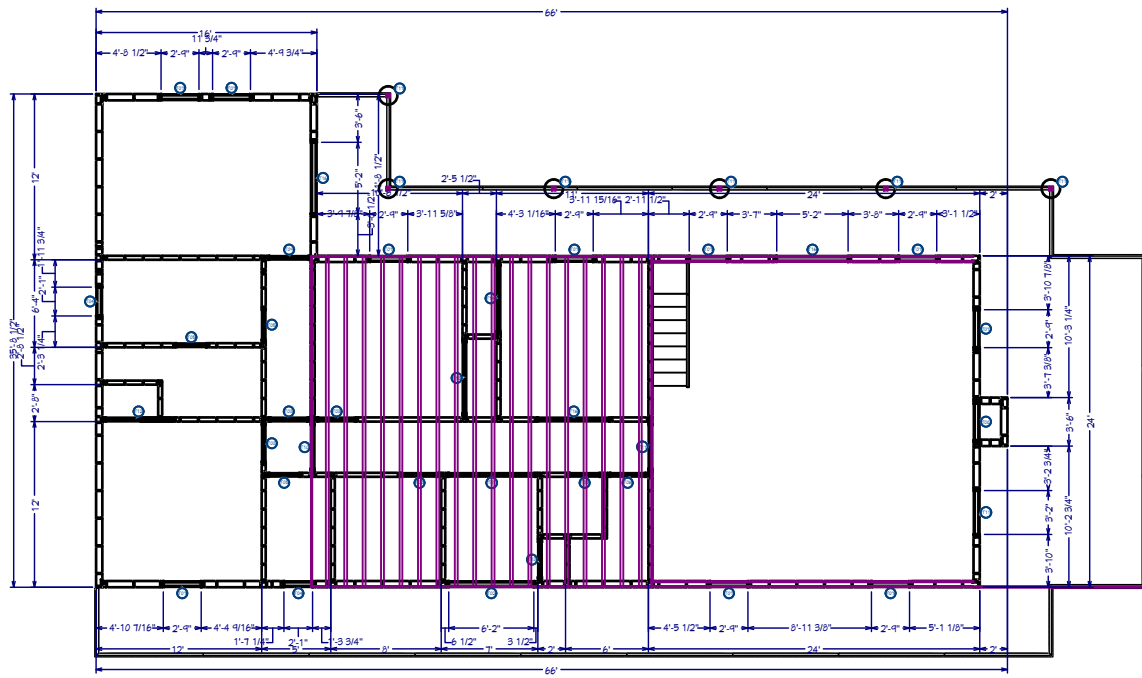
Drawn by: Engr. Al Amin

Checked:

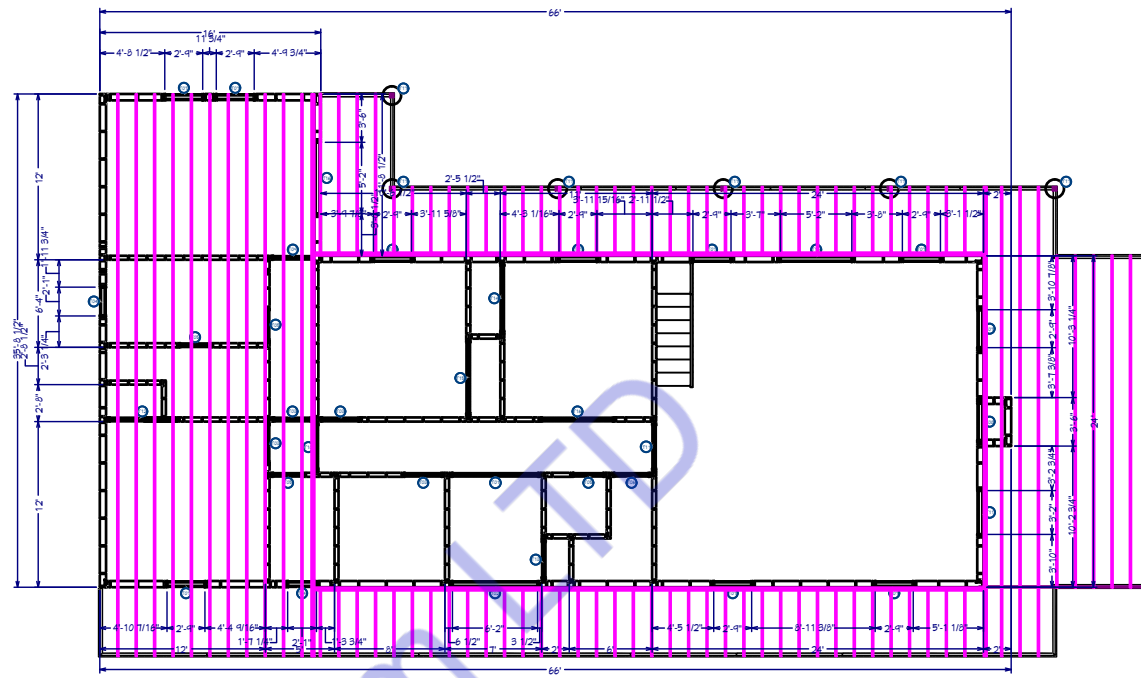
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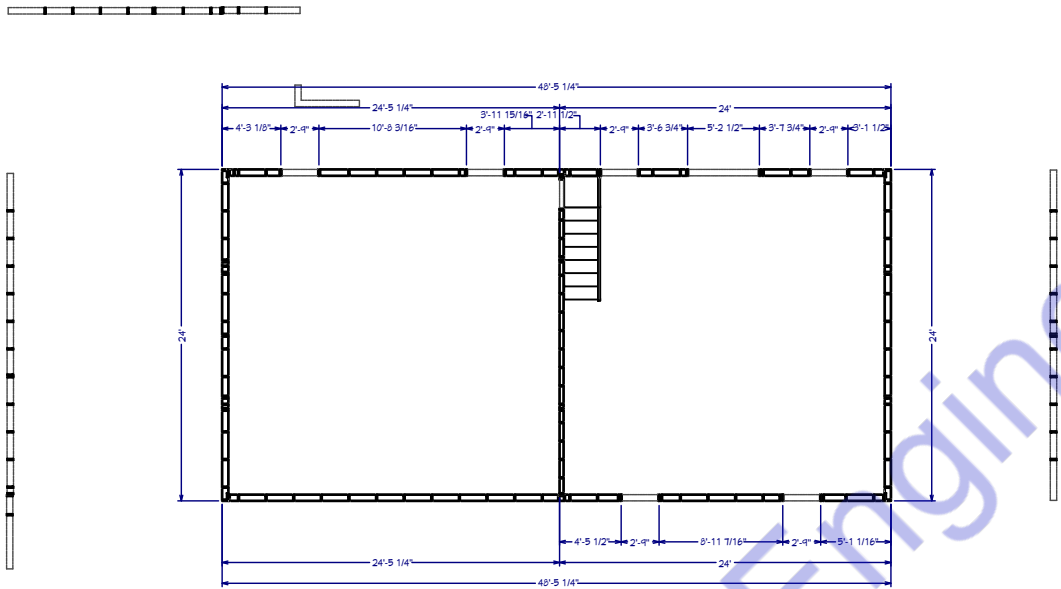
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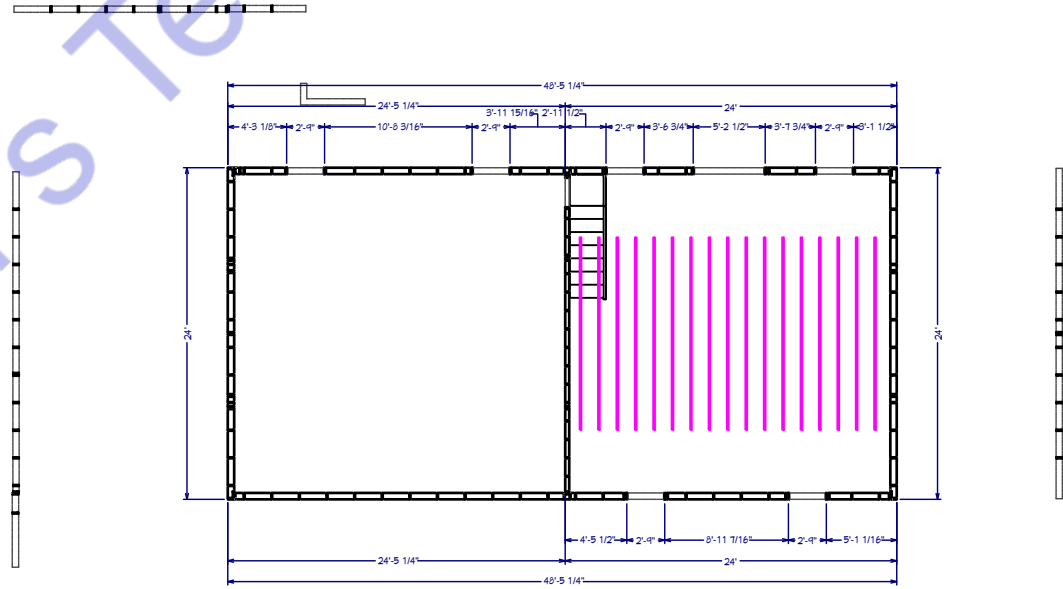
FIRST FLOOR FRAMING PLAN



FIRST FLOOR CEILING FRAMING PLAN



SECOND FLOOR FRAMING PLAN



SECOND FLOOR CEILING FRAMING PLAN

Note:
Framing Plan
1. This framing plan aligns with the 2024 IRC and IBC guidelines for structural framing, adhering to the updated Texas Building Codes.
2. Exterior wall framing is specified at 2"x6", while interior walls are framed with 2"x4", in accordance with IRC Section R602, which regulates the use of wood framing for exterior and load-bearing walls.
3. Structural integrity calculations meet the minimum live and dead load standards in IBC Chapter 23, considering wall dimensions and framing spacing.
All materials were selected to comply with local structural load and fire safety requirements as defined by the Texas Department of Insurance for residential framing safety.



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FLOOR & CEILING FRAMING PLAN

Drawn by: Engr. Al Amin

Checked:

Date: NOV, 24.

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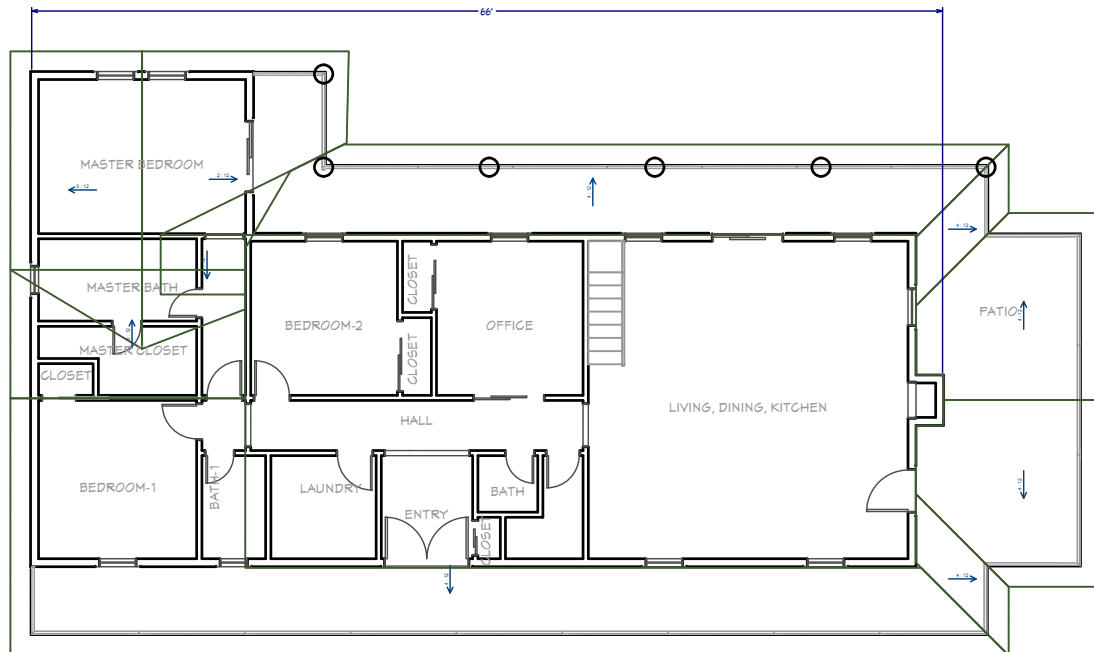
ROOF PLAN

Drawn by: Engr. Al Amin

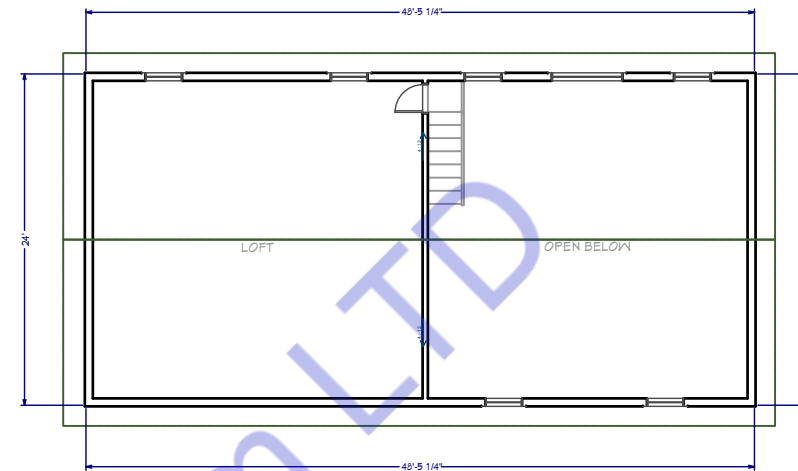
Checked:
Date: NOV, 24.

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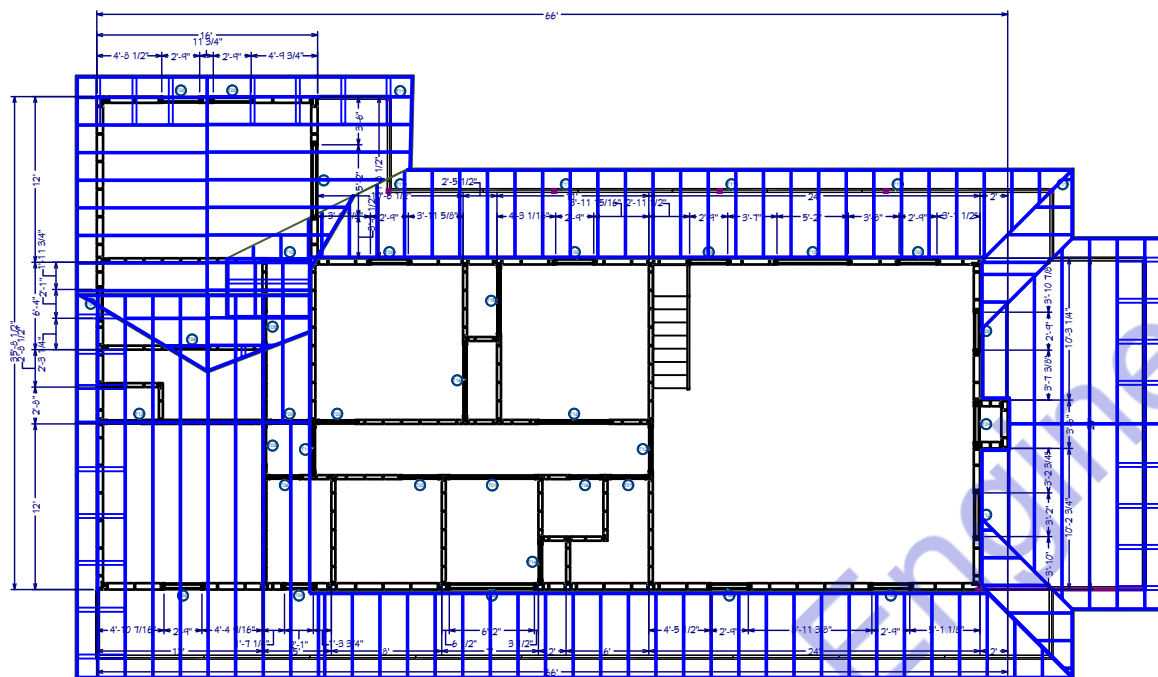
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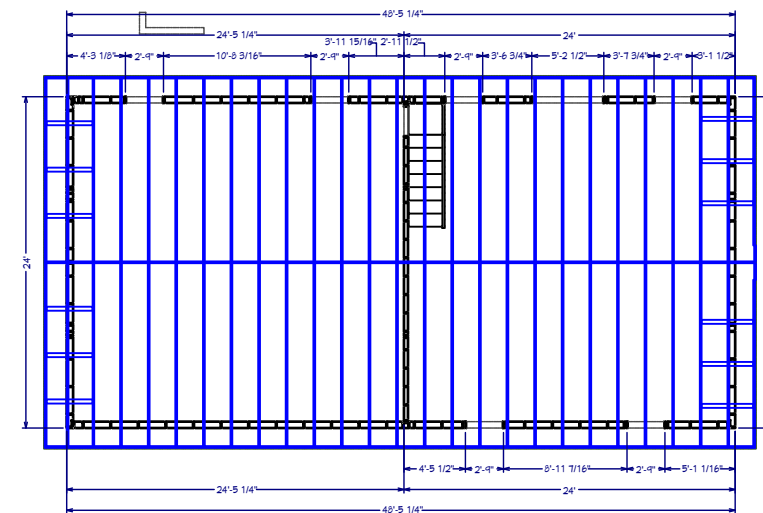
FIRST FLOOR ROOF PLAN



SECOND FLOOR ROOF PLAN



FIRST FLOOR ROOF FRAMING PLAN



SECOND FLOOR ROOF FRAMING PLAN

Note:

Roof Plan

1. This roof plan complies with the 2024 International Residential Code (IRC) and the International Building Code (IBC) specific to roofing standards in Hico, Texas.

2. The roof pitch is 4/12, adhering to Section R905 of the 2024 IRC, which governs the minimum roof slope and materials required based on pitch and climate factors.

3. Texas energy standards, per the 2021 IECC (International Energy Conservation Code), were considered, including requirements for roof insulation and material efficiency.

Wind resistance and uplift specifications comply with IBC Chapter 15, ensuring the roof meets local wind-load requirements for safety and durability.



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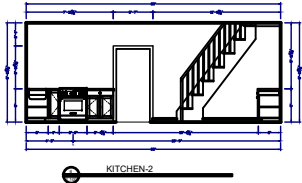
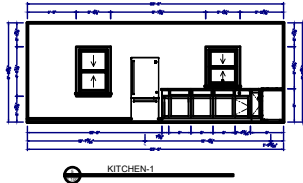
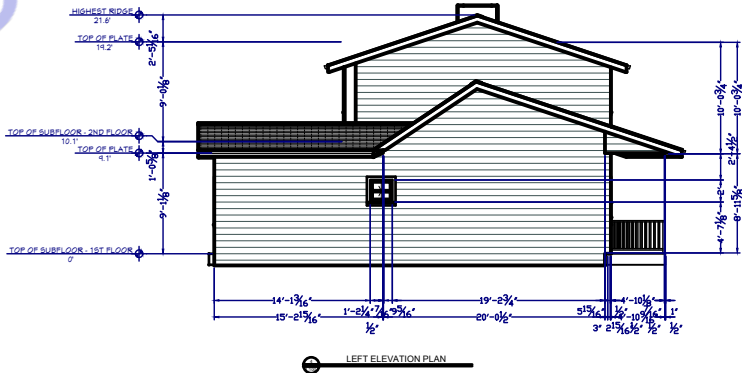
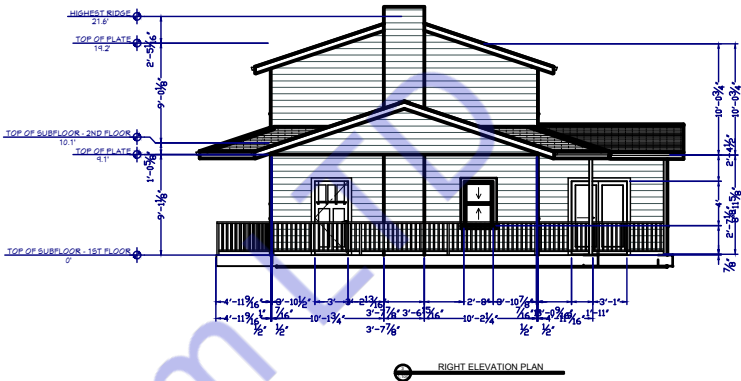
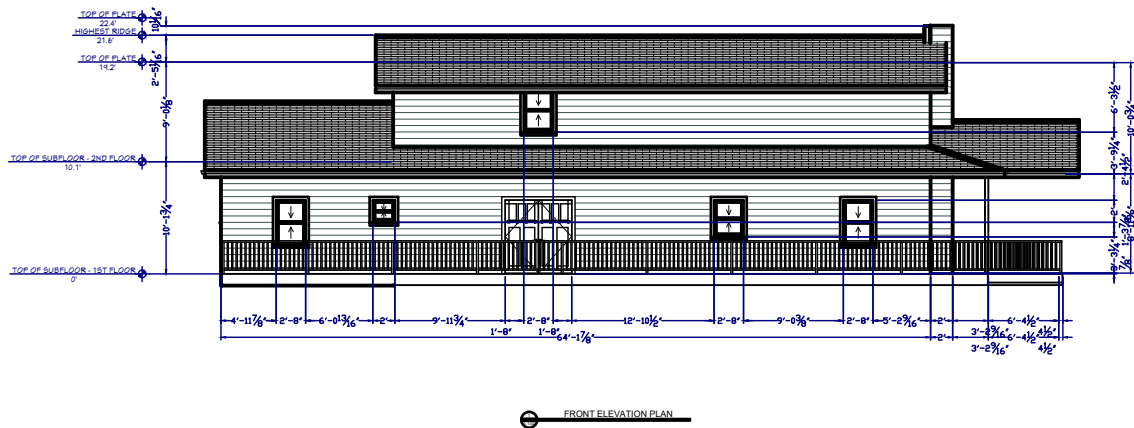
8090 County Road 293 Hico
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ELEVATION PLAN

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Date:	NOV, 24.
A. 4	
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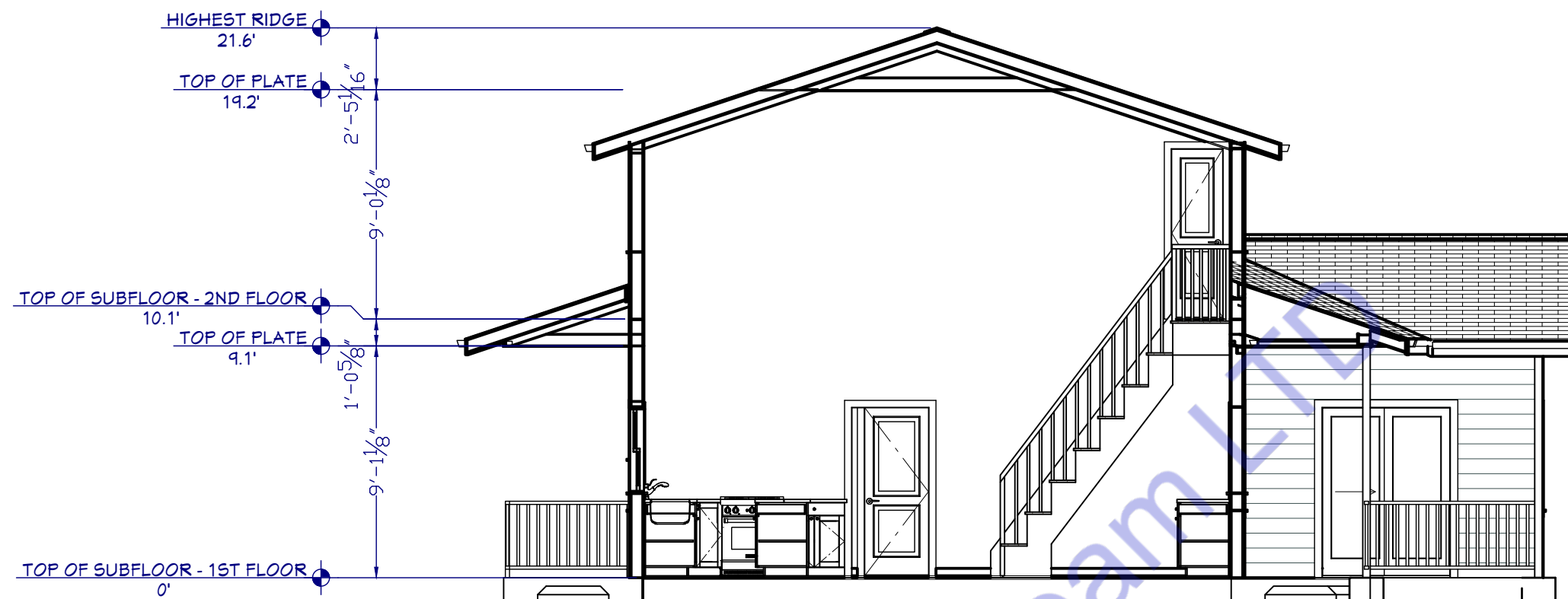
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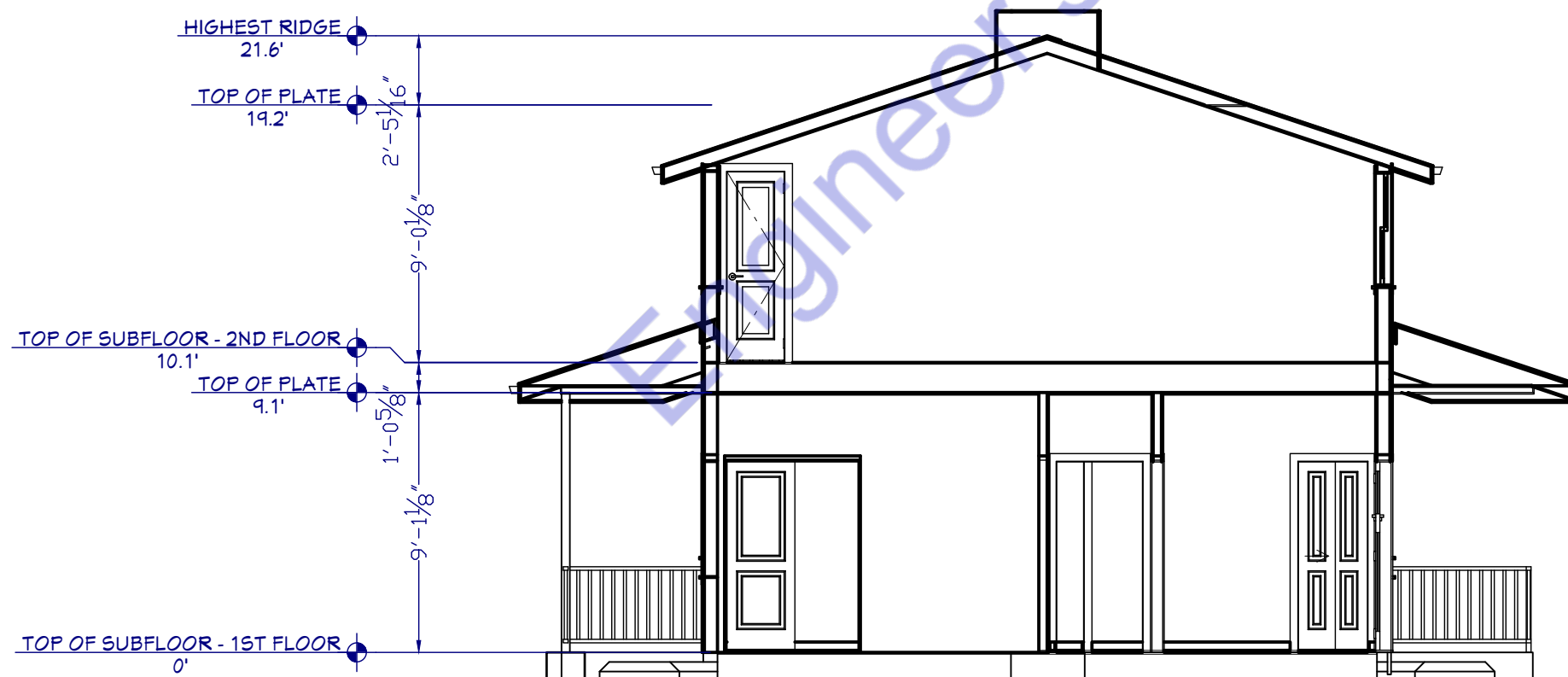
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CROSS SECTION PLAN & DETAILS

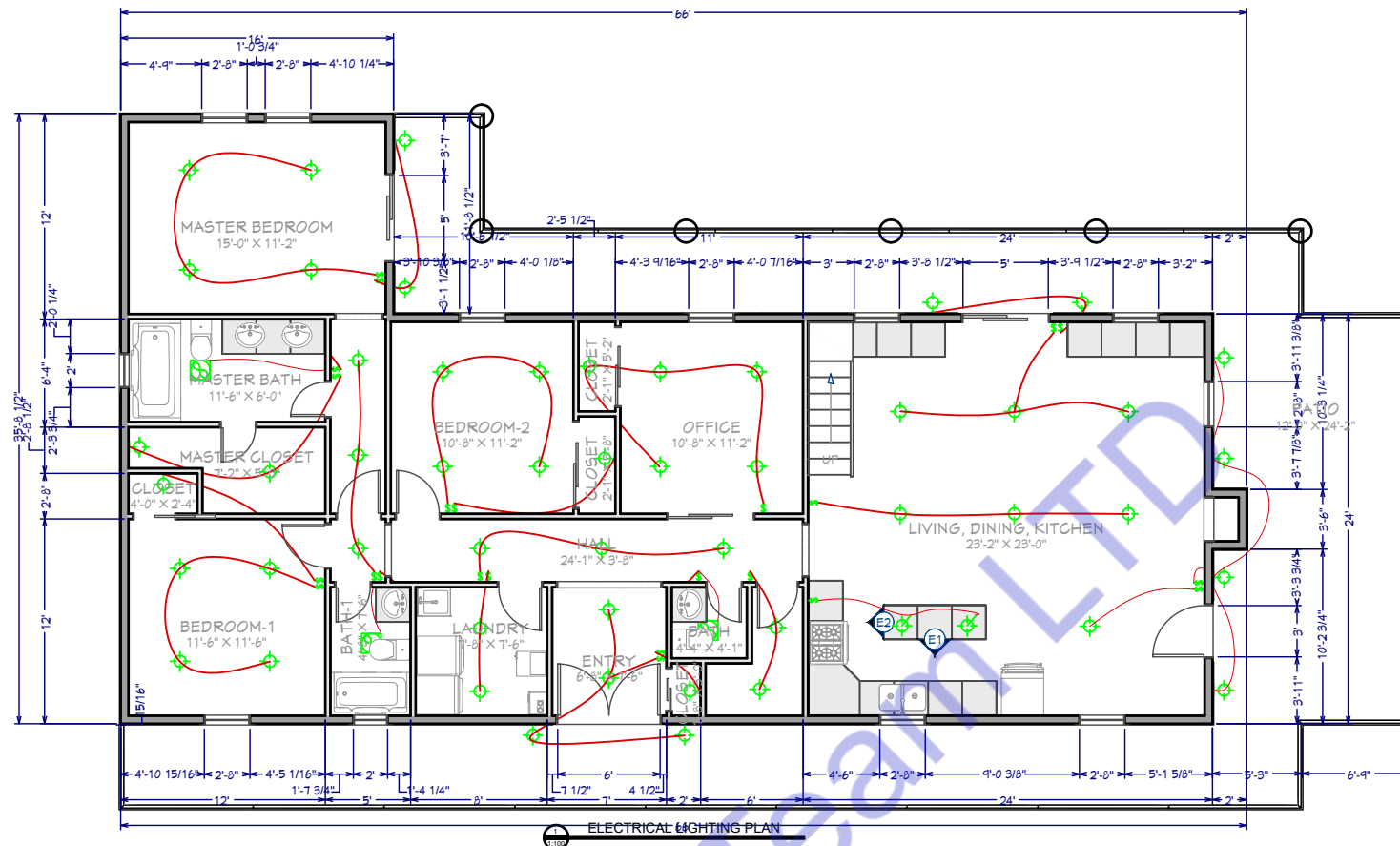
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Checked:



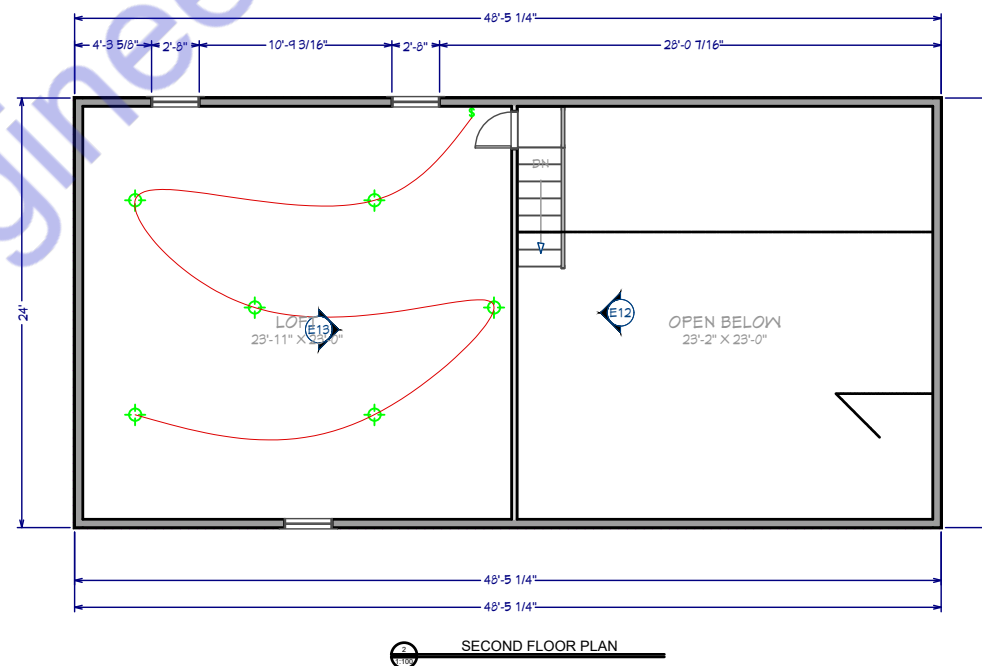
1 SOUTH CROSS SECTION PLAN
1:100



2 NORTH CROSS SECTION PLAN
1:100



ELECTRICAL LEGEND	
	20W CEILING MOUNT LED LIGHT
	20W HANGING LED LIGHT
	SMOKE DETECTOR
	40W LED TUBE LIGHT 4 FEET
	40W LED LIGHT 4X4
	ONE WAY SWITCH 220V
	MULTI SOCKET OUTLET 220V
	10W WALL MOUNTED LED LIGHT
	60W CEILING FAN 220V
	SUB DISTRIBUTION BOARD
	MAIN DISTRIBUTION BOARD
	40W BATHROOM EXHAUST FAN
	CALLING BELL



Note:

This Electrical Plan for the property located at 8090 County Road 293, Hico, Texas, 76457, adheres to the most current Texas state and local codes, ensuring both safety and compliance. The following standards were applied:

- National Electrical Code (NEC) 2023: This electrical plan complies with NEC 2023, as adopted by the State of Texas, which governs electrical system safety standards and installations for residential and commercial buildings.
- Texas Administrative Code - Title 16, Chapter 73: All licensing and installation requirements meet the Texas Department of Licensing and Regulation's (TDLR) standards for electricians and electrical systems in accordance with the Texas Electrical Safety and Licensing Act.
- Local Hico Amendments and Regulations: Additional local ordinances and any specific amendments or requirements for Erath County, where applicable, have been incorporated into the design to ensure full compliance with the regional standards.

These codes ensure that the design and implementation of electrical systems maintain the highest safety and operational standards, meeting Texas's regulatory and safety requirements.



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ELECTRICAL LAYOUT PLAN

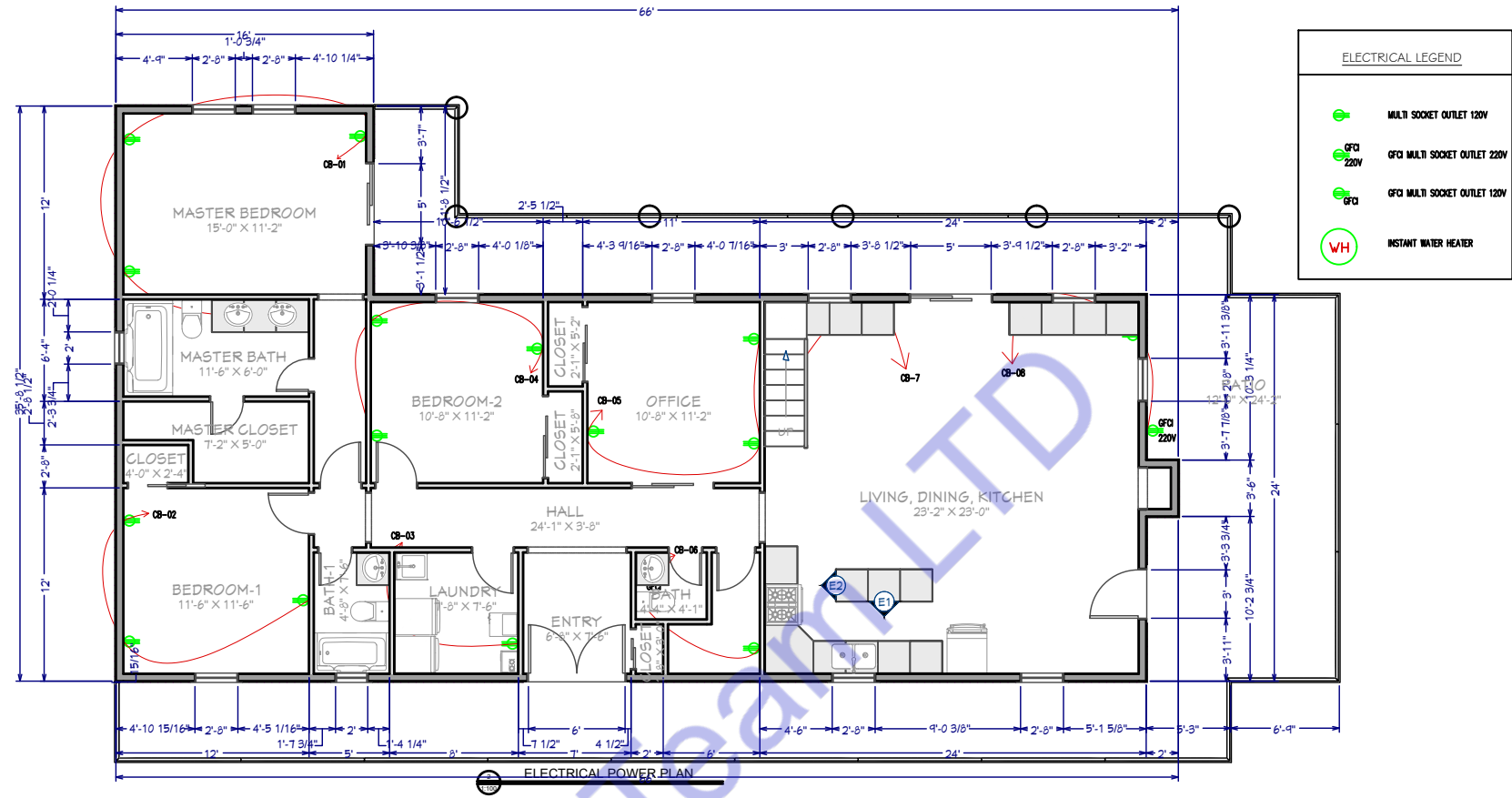
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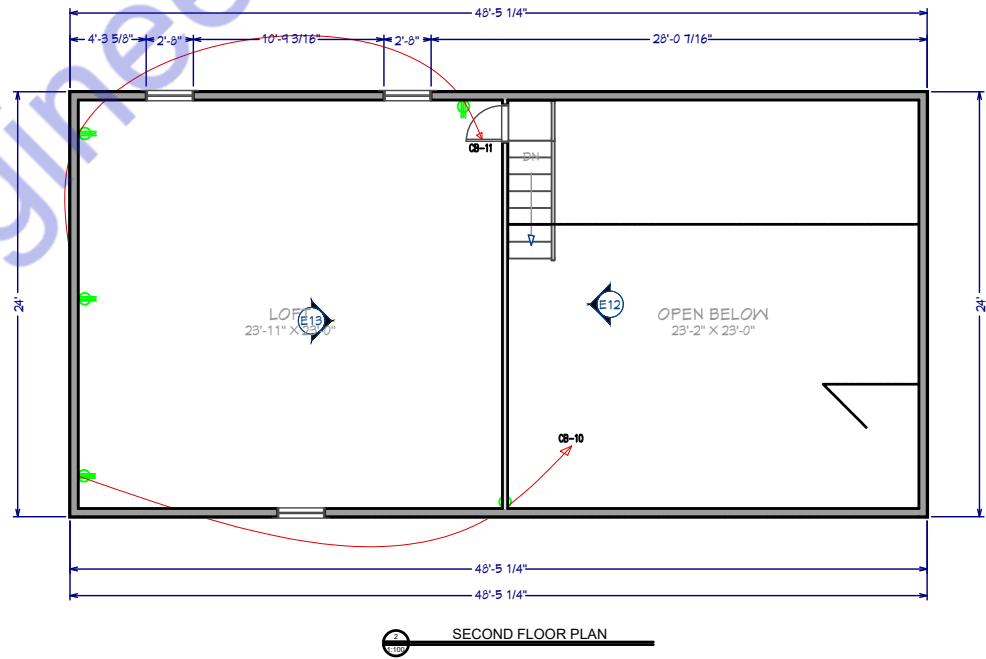
Date: NOV, 24.

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Scale: 1:100



ELECTRICAL LEGEND	
	MULTI SOCKET OUTLET 120V
	GFI MULTI SOCKET OUTLET 220V
	GFI MULTI SOCKET OUTLET 120V
	INSTANT WATER HEATER



Note:
This Electrical Plan for the property located at 8090 County Road 293, Hico, Texas, 76457, adheres to the most current Texas state and local codes, ensuring both safety and compliance. The following standards were applied:

- National Electrical Code (NEC) 2023: This electrical plan complies with NEC 2023, as adopted by the State of Texas, which governs electrical system safety standards and installations for residential and commercial buildings.
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- Local Hico Amendments and Regulations: Additional local ordinances and any specific amendments or requirements for Erath County, where applicable, have been incorporated into the design to ensure full compliance with the regional standards.

These codes ensure that the design and implementation of electrical systems maintain the highest safety and operational standards, meeting Texas's regulatory and safety requirements.

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ELECTRICAL LAYOUT PLAN	
Drawn by:	Engr. Al Amin
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120/240 VOLT SINGLE PHASE 2 WIRE ELECTRICAL SERVICE				
ITEM	CONN. LOAD (VA)	DEMAND F.	DEMAND LOAD (WATTS)	TOTAL (AMPS)
LIGHTING	1380	125%	1725	
WATER HEATERS	2000	100%	2000	
EQUIPMENT	5000	65%	3250	
HVAC LOADS	19343	100%	19343	
SUB-TOTAL			26318	
LARGEST MOTOR	0	125%	0	
TOTAL @ 120/208 V	27723		26318	220

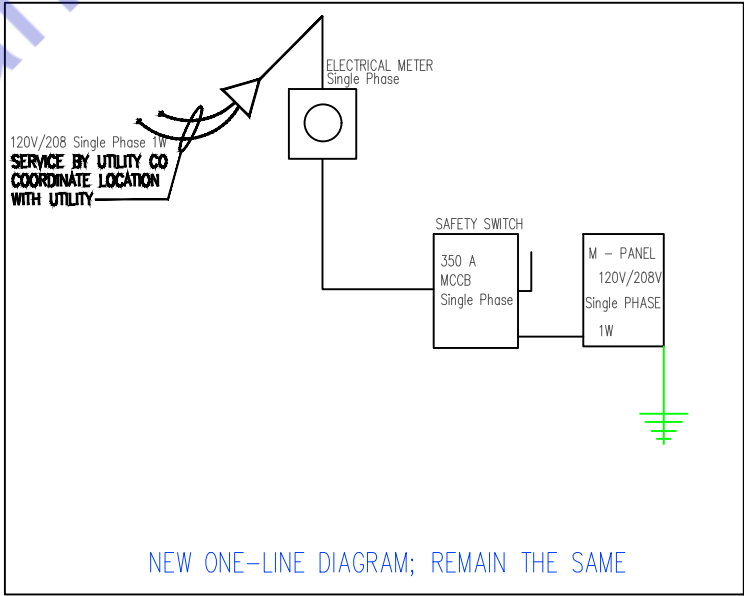
1
E200

PANEL SCHEDULE & SERVICE CALCULATION

ELECTRICAL PANEL -MAIN

LOAD SERVED	CKT #	TYPE	BKR TRIP	WIRE SIZE	PHASE A	PHASE A	BKR TRIP	WIRE SIZE	TYPE	CKT #	LOAD SERVED
HVAC-5.5 TONS	1		170	#3/0	19343	1380	15	#14		2	LIGHTING LOAD
CB-5	3		20	#12	500	2000	20	#12		4	WATER HEATER
CB-6	5		20	#12	1000	500	20	#12		6	CB-1
CB-7	7		20	#12	500	500	20	#12		8	CB-2
CB-8	9		20	#12	500	4000	40	#8		10	CB-3
CB-9	11		20	#12	500	500	20	#12		12	CB-4
CB-11	13		20	#12	500	500	20	#12		14	CB-10
TOTAL VA PHASE A						9160	32003				
TOTAL VOLT-AMPS						32000					
DIVIDE TOTAL VOLT-AMPS BY SYSTEM VOLTAGE (PHASE)						120	AMPS				
TOTAL CONNECTED LOAD (AMPS) @ 125%						334					
MAIN TYPE AND AMPERE RATING						350 AMP MCCB					
PANEL FEEDER SIZE - SEE RISER DIAGRAM											

Material	
Name	Watt
CEILING MOUNT ROUND LED LIGHT	20W
WALL MOUNT LED LIGHT	10W
CEILING MOUNT 2"X2" SQUARE LED LIGHT	40W
HANGING LIGHT	20W



2
E200

SINGLE LINE DIAGRAM



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ELECTRICAL LOAD SHEDULE PLAN

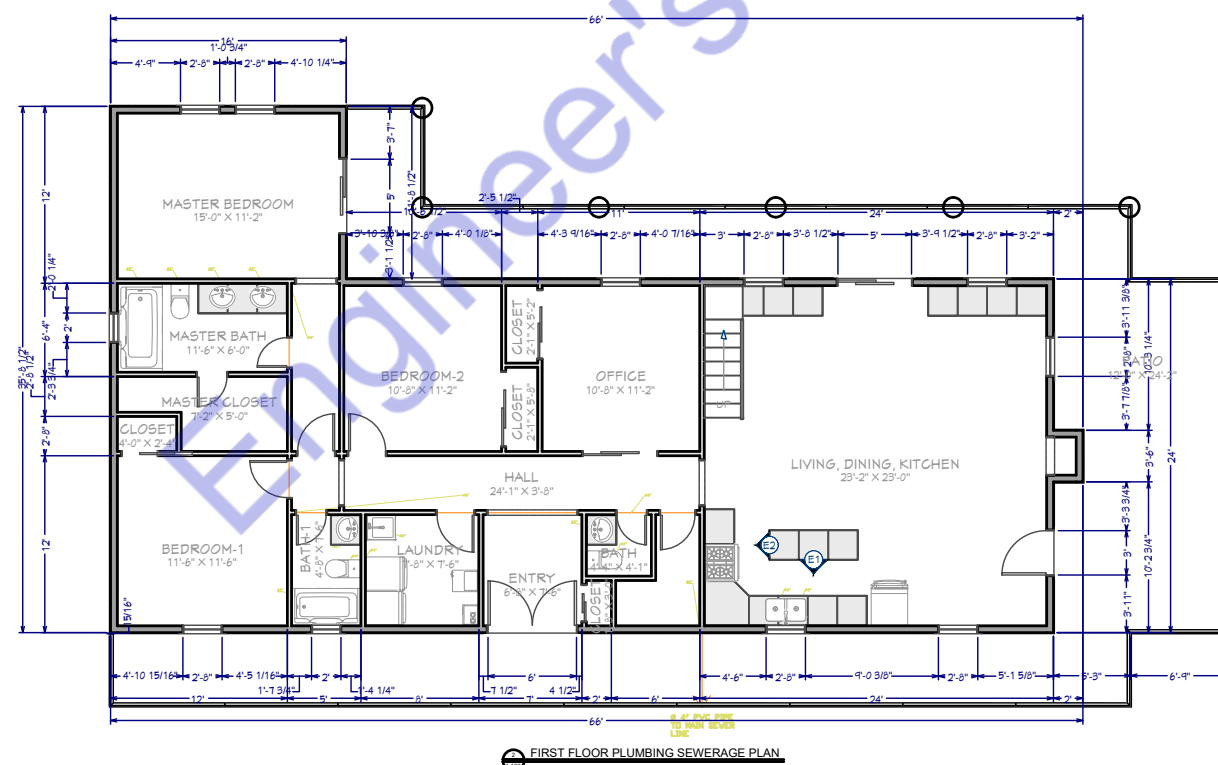
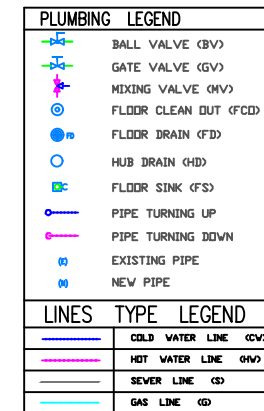
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WASTE WATER/ SEWER LINE (UPVC PIPE)

TOILET WASTE/ SEWER LINE (UPVC PIPE)

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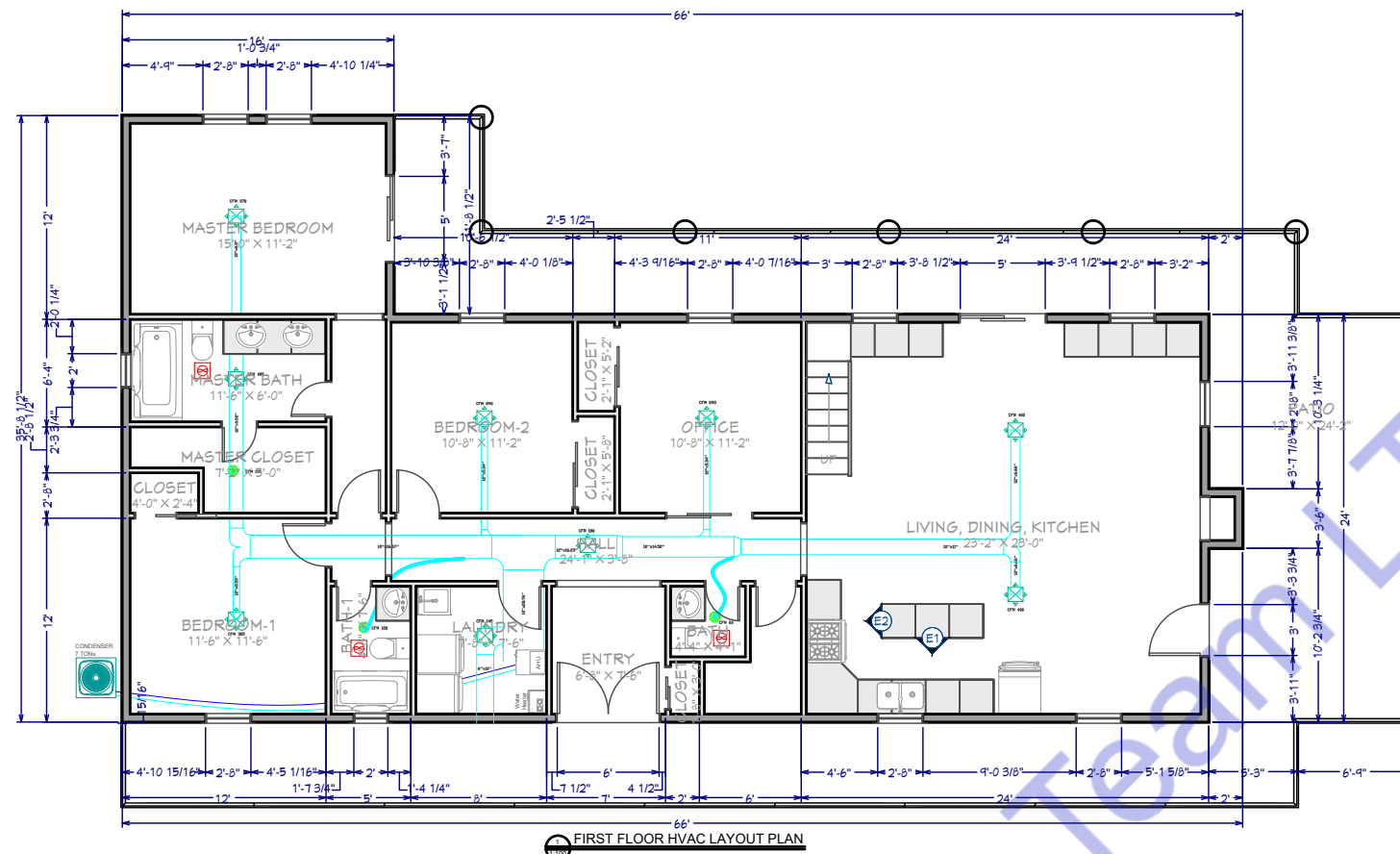
PLUMBING PLAN

Drawn by:	Engr. Al Amin
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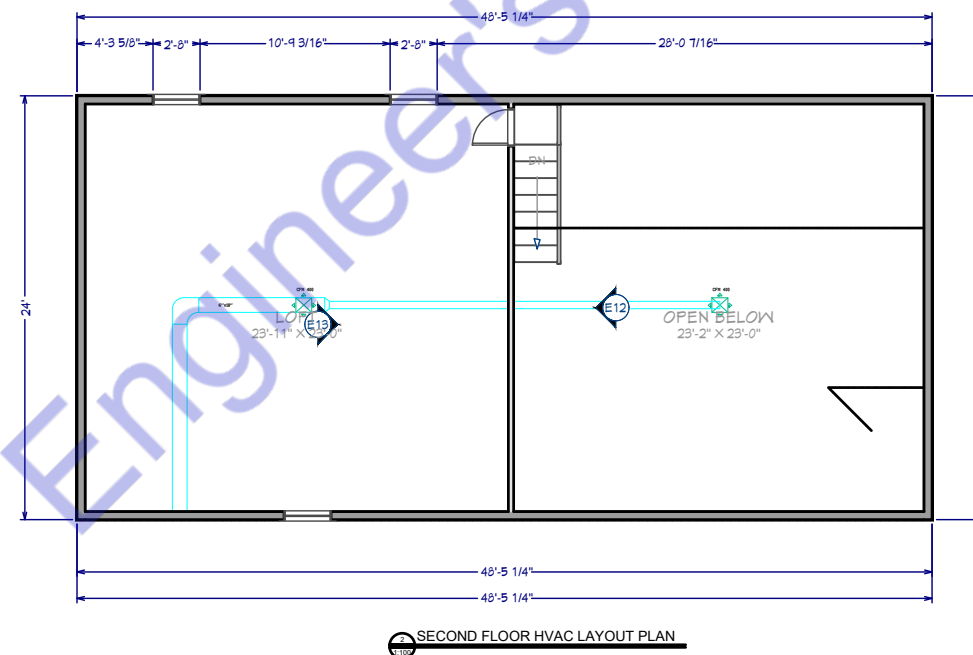
Drawn by:	Engr. A. A. Amin
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P. 1

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Mechanical Legends	
	AIR HANDLING UNIT
	ROOF TOP UNIT
	OUTDOOR CONDENSER
	SUPPLY AIR DIFFUSER
	EXHAUST AIR DIFFUSER
	KITCHEN CHIMNEY
	EXHAUST FAN
	SUPPLY AIR DUCT



Note:

This HVAC plan has been designed to fully comply with the updated codes and regulations for the location specified, ensuring safe and efficient system operation. The following codes and standards have been applied:

- International Mechanical Code (IMC) - 2018 Edition: Compliance with the IMC is required under Texas state guidelines, addressing ventilation, ductwork, exhaust, and mechanical system requirements essential for health and safety.
- International Fuel Gas Code (IFGC) - 2018 Edition: This code regulates gas piping installations, including the supply of fuel for HVAC systems, ensuring safe handling and containment within the design.
- International Energy Conservation Code (IECC) - 2018 Edition: The plan incorporates the IECC standards for energy efficiency, which guide the insulation, ventilation, and mechanical system controls to optimize energy use in heating, cooling, and ventilation operations.
- Uniform Mechanical Code (UMC) - 2018 Edition: As per Texas Administrative Code, Title 16, Rule 875.100, either the IMC or UMC may be adopted; for this project, UMC requirements were considered to further align with HVAC best practices.
- Each aspect of the HVAC system design adheres to the above codes, reflecting a commitment to quality, safety, and compliance with Texas Department of Licensing and Regulation (TDLR) standards.

This document ensures that the HVAC plan meets local and state regulatory requirements, offering a foundation for safe installation and operation.

EXHAUST FAN SCHEDULE									
MARK	SERVING	CFM	SP	WATTS	RPM	VOLTAGE	MAKE MODEL	NOTES	FAN TYPE
EF-1	BATHROOM	50	-	50	460	120/60/1	Broan-NuTone 685		IN-LINE
EF-2	KITCHEN	1600	-	78	1291	115/60/1	HODDMART 28D-1600-FF		IN-LINE

NOTES

- COMPLETE V/BACKDRAFT DAMPER.
- PROVIDE THERMOSTATIC CONTROL DEVICES
- INTERLOCK TO OPERATE WHENEVER RTU'S OPERATE.
- MAINTAIN A MINIMUM CLEARANCE OF 10'-0" FROM ALL INTAKE AIR FANS AND ALL ROOF TOP UNITS OUTSIDE AIR INTAKE OPENINGS.



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HVAC LAYOUT PLAN

Drawn by: Engr. Al Amin

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HVAC LAYOUT PLAN

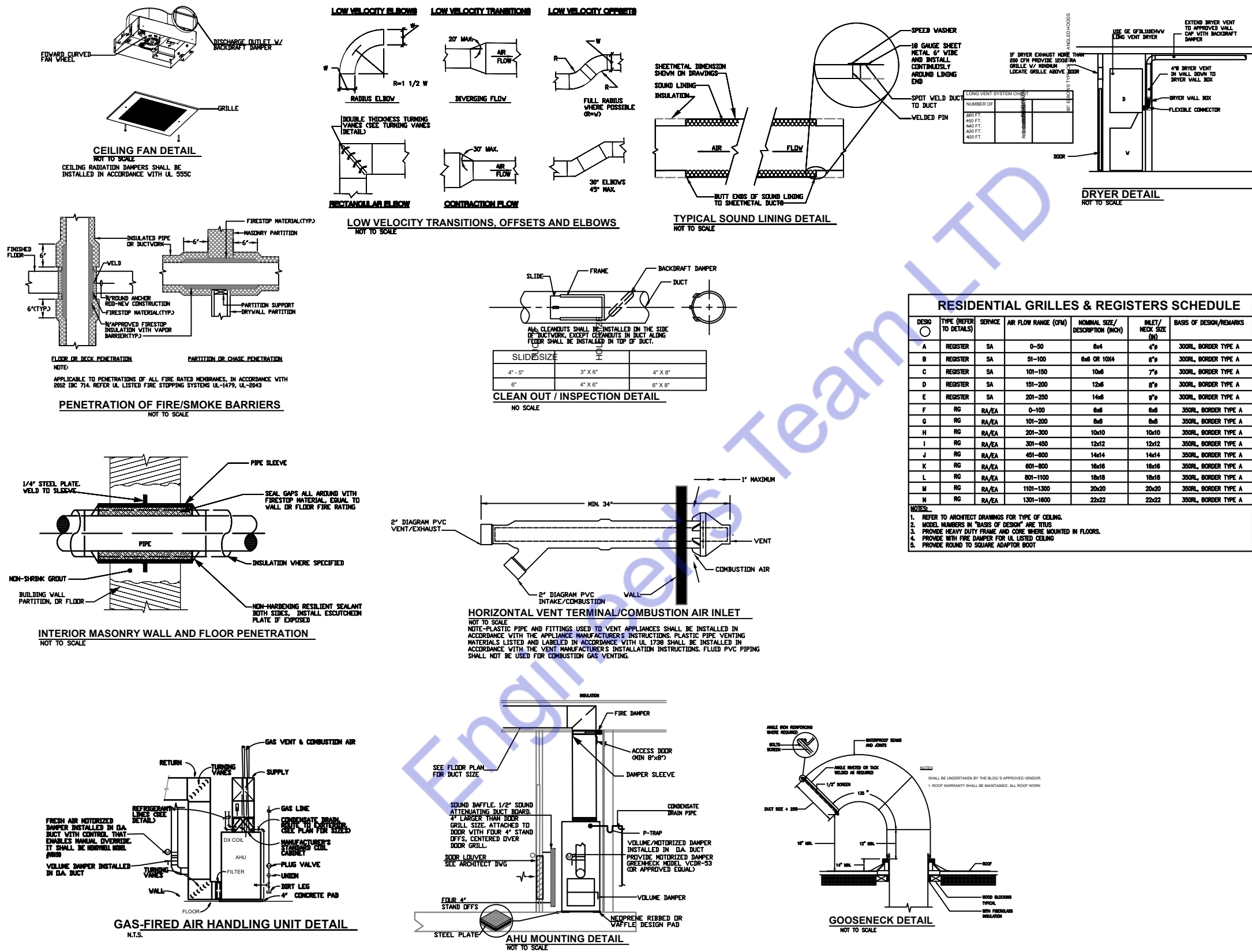
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Designed By Engr. Al Amin (MEP Engineer | Director - Engineer's Team LTD)

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