



FRONT ELEVATION

Scale: 1/4" = 1'0"

9'0" CEILING HEIGHT FIRST FLOOR  
(HEADER HEIGHT 7'6")  
8'0" CEILING HEIGHT SECOND FLOOR  
(FRAME HEADERS TO TOP PLATES ON 2ND FLOOR)

FRAME WINDOWS TO HEADER HEIGHT



LEFT ELEVATION

Scale: 1/8" = 1'0"



RIGHT ELEVATION

Scale: 1/8" = 1'0"



REAR ELEVATION

Scale: 1/8" = 1'0"



PLAN:  
Liberty 2.0

SHEET TITLE:  
**ELEVATIONS**

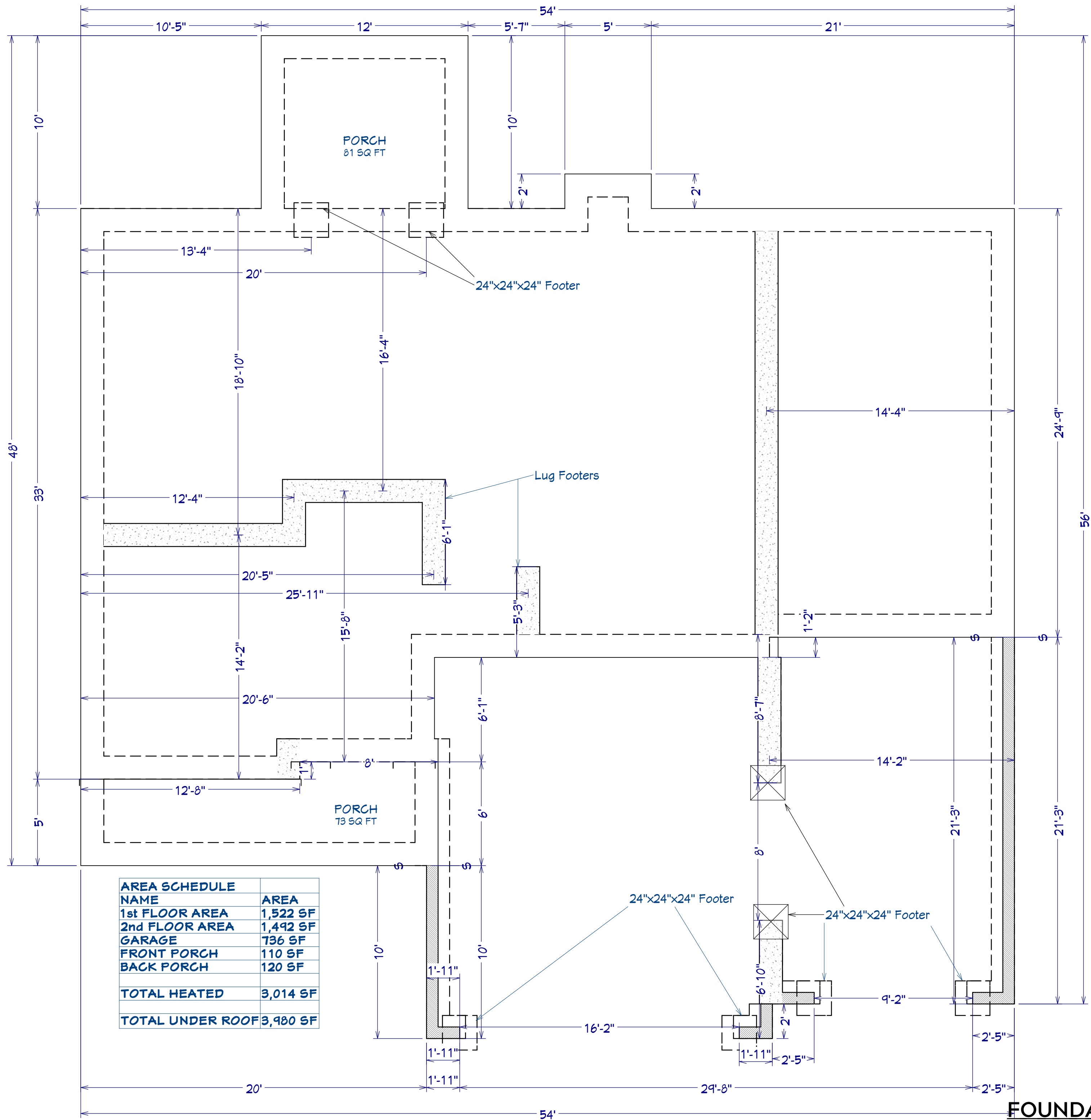
PROJECT ADDRESS:  
Alder Dr.  
Magnolia Hills Lot 81

DESIGNED BY:  
Precision Custom Homes  
Raeford, NC  
Shaun@PrecisionCustomHomesNC.com

DATE:  
9/26/25

SCALE:  
1/4" = 1'

SHEET:  
**A-1**



**FOUNDATION PLAN**  
Scale: 1/4" = 1'0"

PLAN:  
Liberty 2.0

SHEET TITLE:  
**FOUNDATION**

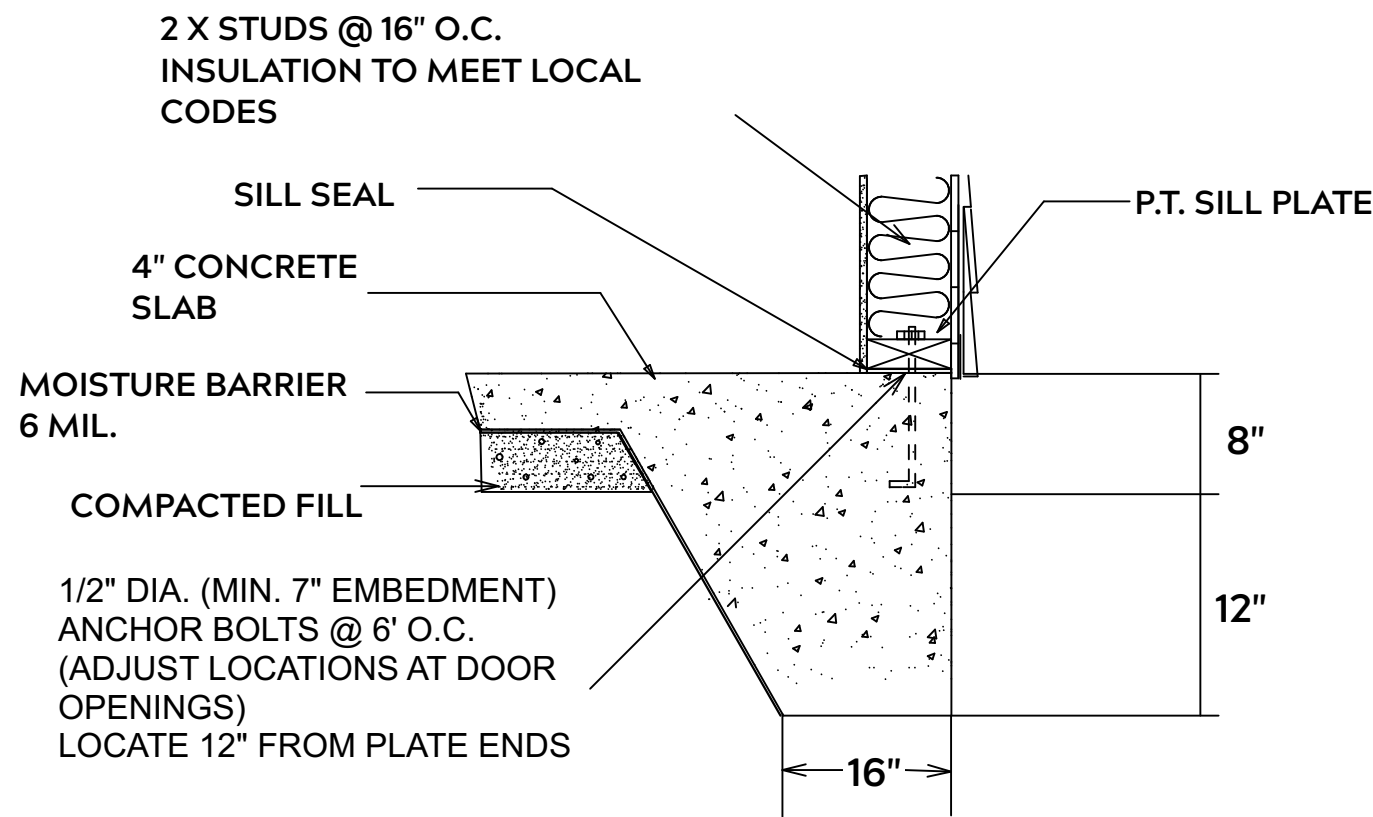
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SCALE:  
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SHEET:  
**A-2**



**MONOLITHIC SLAB**

**FOUNDATION NOTES:**

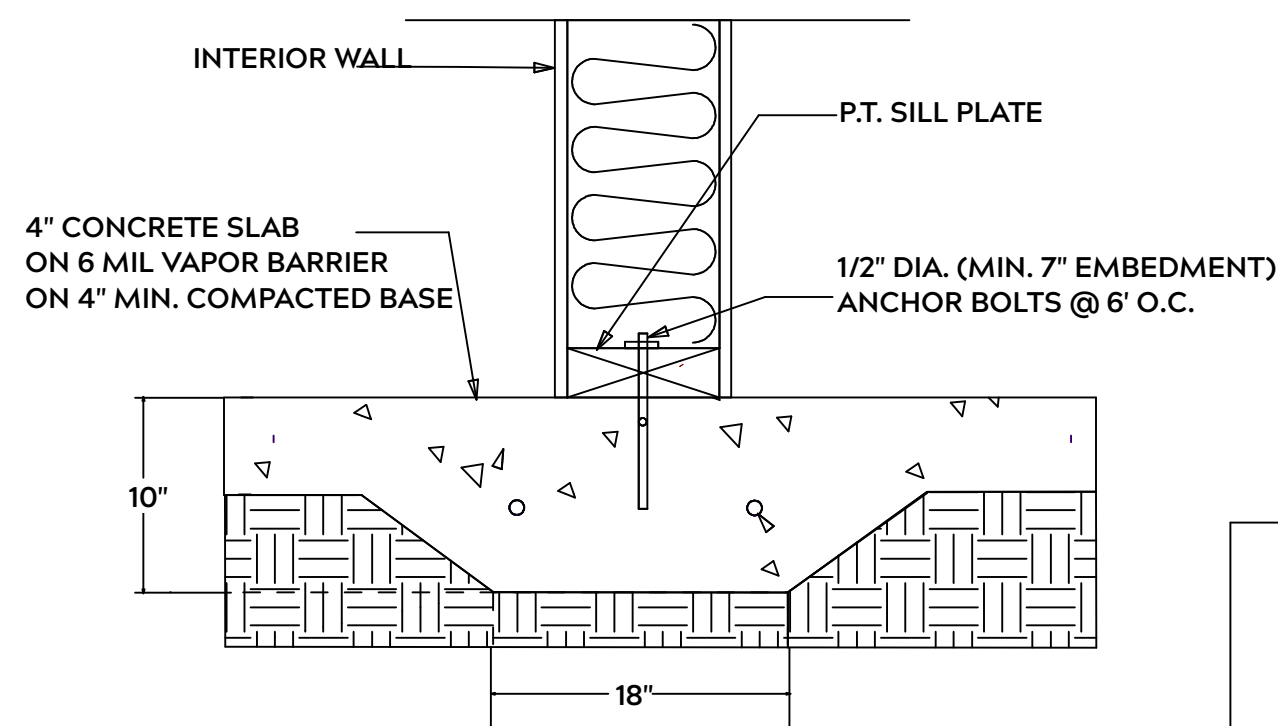
ALL FOOTINGS SHALL BEAR ON ORIGINAL UNDISTURBED SOIL  
THE 28 DAY COMPRESSIVE STRENGTH OF ALL FOOTINGS IS 3000 PSI

PROVIDE WATER PROOFING AND PERIMTER DRAINS AS REQUIRED

FOOTING WIDTHS ARE BASED ON A LOAD BEARING SOIL CAPACITY OF 2000 PSI

PROVIDE 6 MIL POLY VAPOR BARRIER TO COVER GROUND IN CRAWL SPACE AND GROUND UNDER POURED CONCRETE

ALL ANCHOR BOLTS TO BE 1/2" X 12" LONG.  
ANCHOR BOLTS SHALL BE SPACED AT A MAXIMUM OF 6' ON CENTER AND NO MORE THEN 1' FROM EACH CORNER



**LUG FOOTING**

**GENERAL FRAMING NOTES:**

ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY SHALLE BE PRESSURE TREATED

FRAMING LUMBER SHALL BE SYP #2 GRADE AND / OR SPRUCE PINE FIR #1 AND / OR KILN DRIED

WHERE PRE-ENGINEERED JOISTS AND TRUSSES ARE USED, MANUFACTURER SHALL PROVIDE DRAWINGS / SCHEMATICS, WHICH SHALL BEAR OF A N.C. ENGINEER

STUDS AND JOISTS SHALL NOT BE CUT TO INSTALL PLUMBING OR WIRING WITHOUT ADDING METAL OR WOOD SIDE PANELS TO STRENGTHEN MEMBER TO ITS ORIGINAL CAPACITY

NAIL MULTIPLE MEMBERS WITH 2 ROWS OF 16d NAILS STAGGERED 32" O.C. AND USE 3 X 16d NAILS 2" IN AT EACH END.

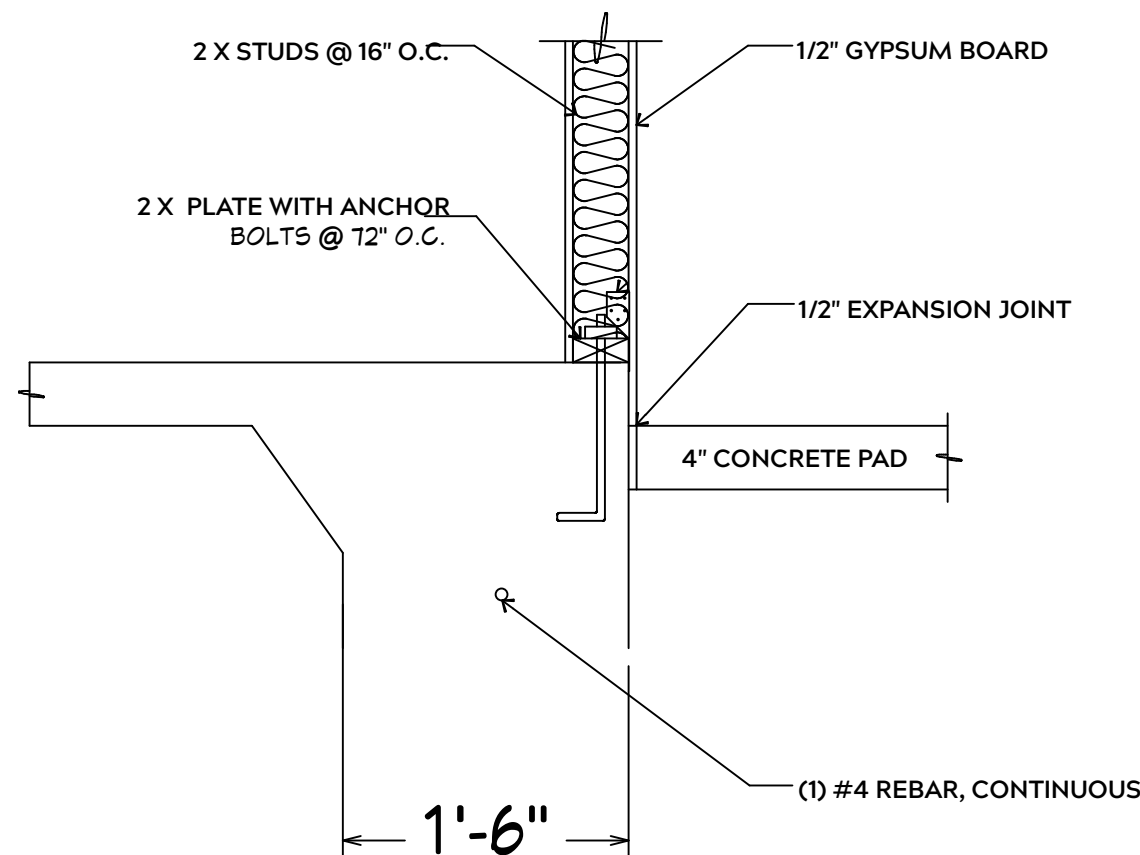
NAIL FLOOR JOISTS TO SILL PLATE WITH WITH 8d TOE NAILS

ALL EXPOSED FRAMING ON PORCHES OR DECKS SHALL BE PRESSURE TREATED

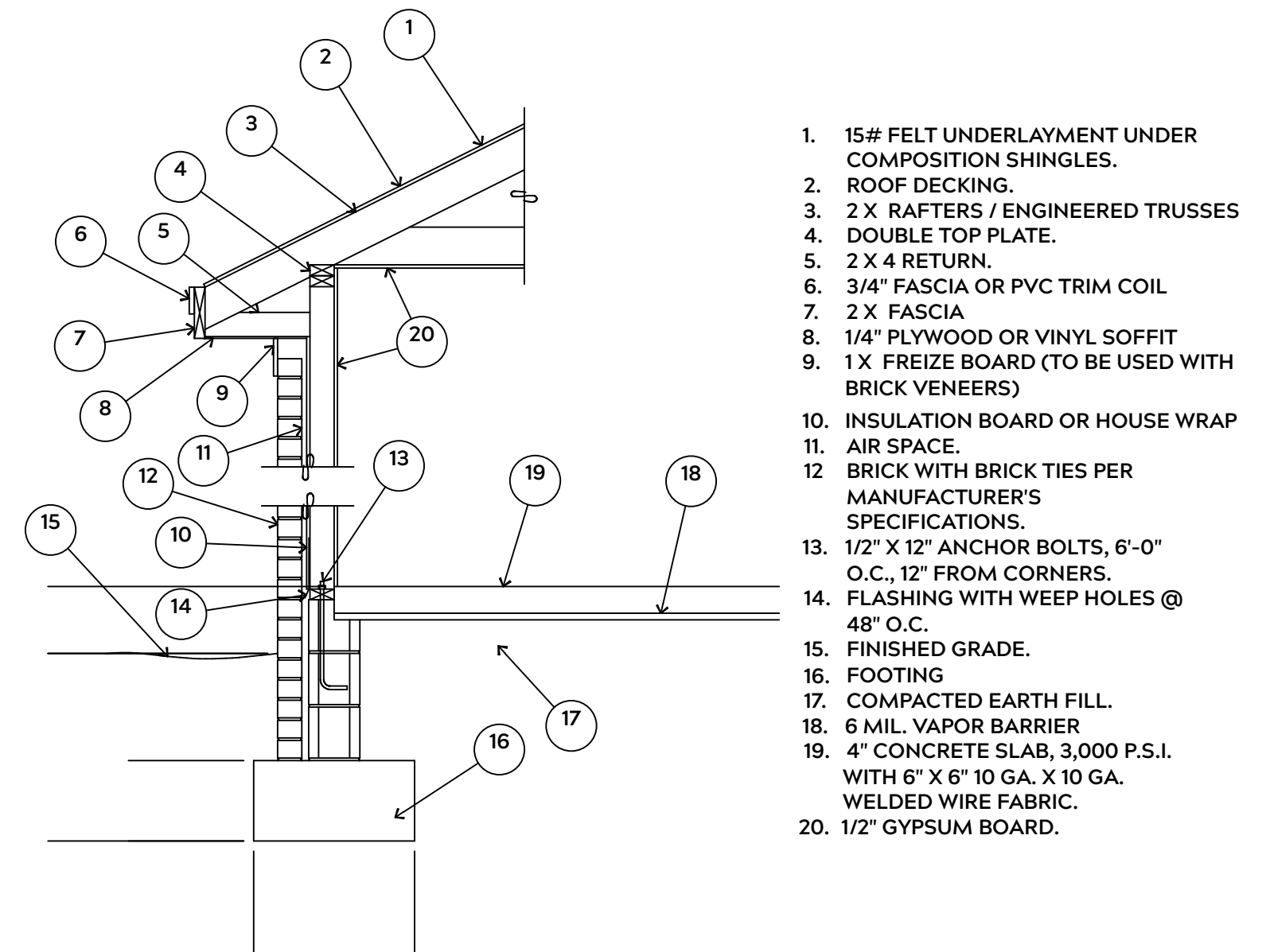
PROVIDE WATERPROOFING AND DRAINS AS REQUIRED

ALL FRAMING TO BE 16" O.C. WALL FRAMING DIMENSIONS ARE BASED ON 2X4 OR 2X6 EXTERIOR WALLS AND 2X4 INTERIOR WALLS. DOULBE / TRIPLE JACK STUDS AS NECESSARY UNDER HEADERS AS REQUIRED

LVL'S TO BE SIZED BY OTHERS (TRUSS MANUFACTURER)

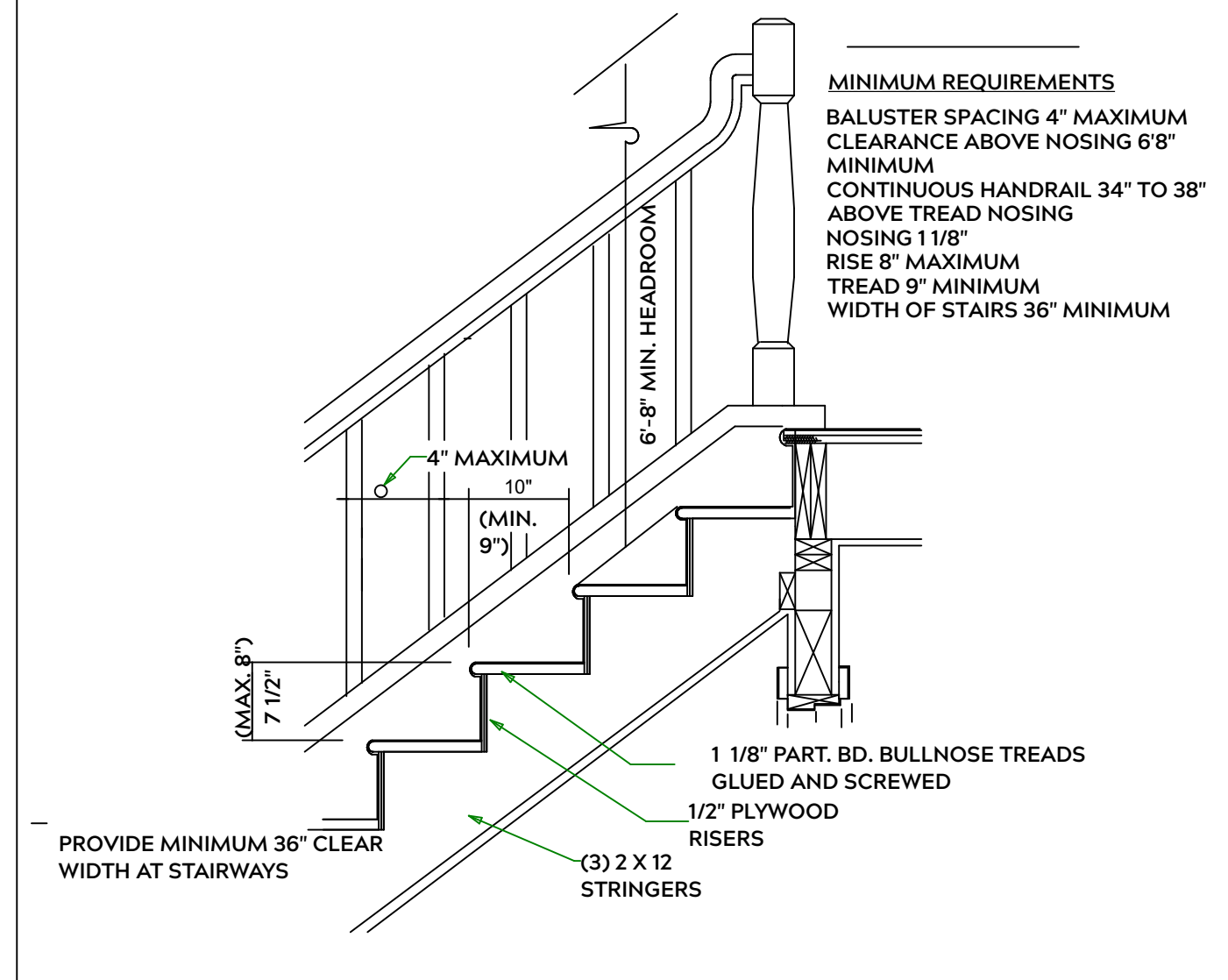


**INTERIOR WALL @ GARAGE STEP DOWN**



- 15# FELT UNDERLAYMENT UNDER COMPOSITION SHINGLES.
- ROOF DECKING.
- 2 X RAFTERS / ENGINEERED TRUSSES
- DOUBLE TOP PLATE.
- 2 X 4 RETURN.
- 3/4" FASCIA OR PVC TRIM COIL
- 2 X FASCIA
- 1/4" PLYWOOD OR VINYL SOFFIT
- 1 X FREIZE BOARD (TO BE USED WITH BRICK VENEERS)
- INSULATION BOARD OR HOUSE WRAP
- AIR SPACE.
- BRICK WITH BRICK TIES PER MANUFACTURER'S SPECIFICATIONS.
- 1/2" X 12" ANCHOR BOLTS, 6'-0" O.C., 12" FROM CORNERS.
- FLASHING WITH WEEP HOLES @ 48" O.C.
- FINISHED GRADE.
- FOOTING
- COMPACTED EARTH FILL.
- 6 MIL. VAPOR BARRIER
- 4" CONCRETE SLAB, 3,000 P.S.I. WITH 6" X 6" 10 GA. X 10 GA. WELDED WIRE FABRIC.
- 1/2" GYPSUM BOARD.

**EXTERIOR WALL SECTION**



- MINIMUM REQUIREMENTS**
- BALUSTER SPACING 4" MAXIMUM
  - CLEARANCE ABOVE NOSING 6"8"
  - MINIMUM CONTINUOUS HANDRAIL 34" TO 38" ABOVE TREAD NOSING
  - NOSING 1 1/8"
  - RISE 8" MAXIMUM
  - TREAD 9" MINIMUM
  - WIDTH OF STAIRS 36" MINIMUM

**STAIR DETAIL**

PLAN:  
Liberty 2.0

SHEET TITLE:  
**DETAIL SHEETS**

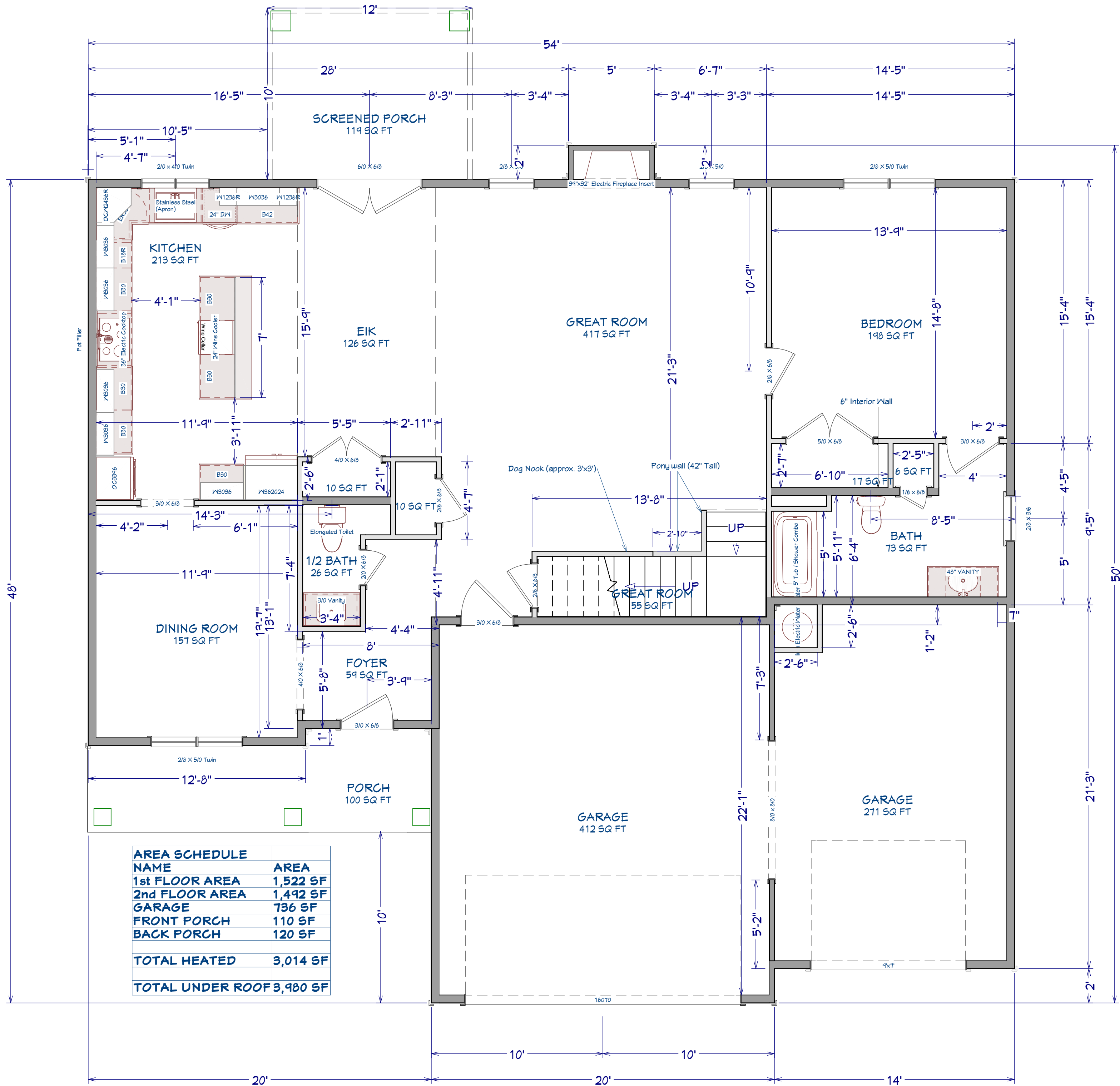
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9/26/25

SCALE:  
1/4" = 1'

SHEET:  
**A-3**



PLAN:  
Liberty 2.0

SHEET TITLE:  
**1st FLOOR**

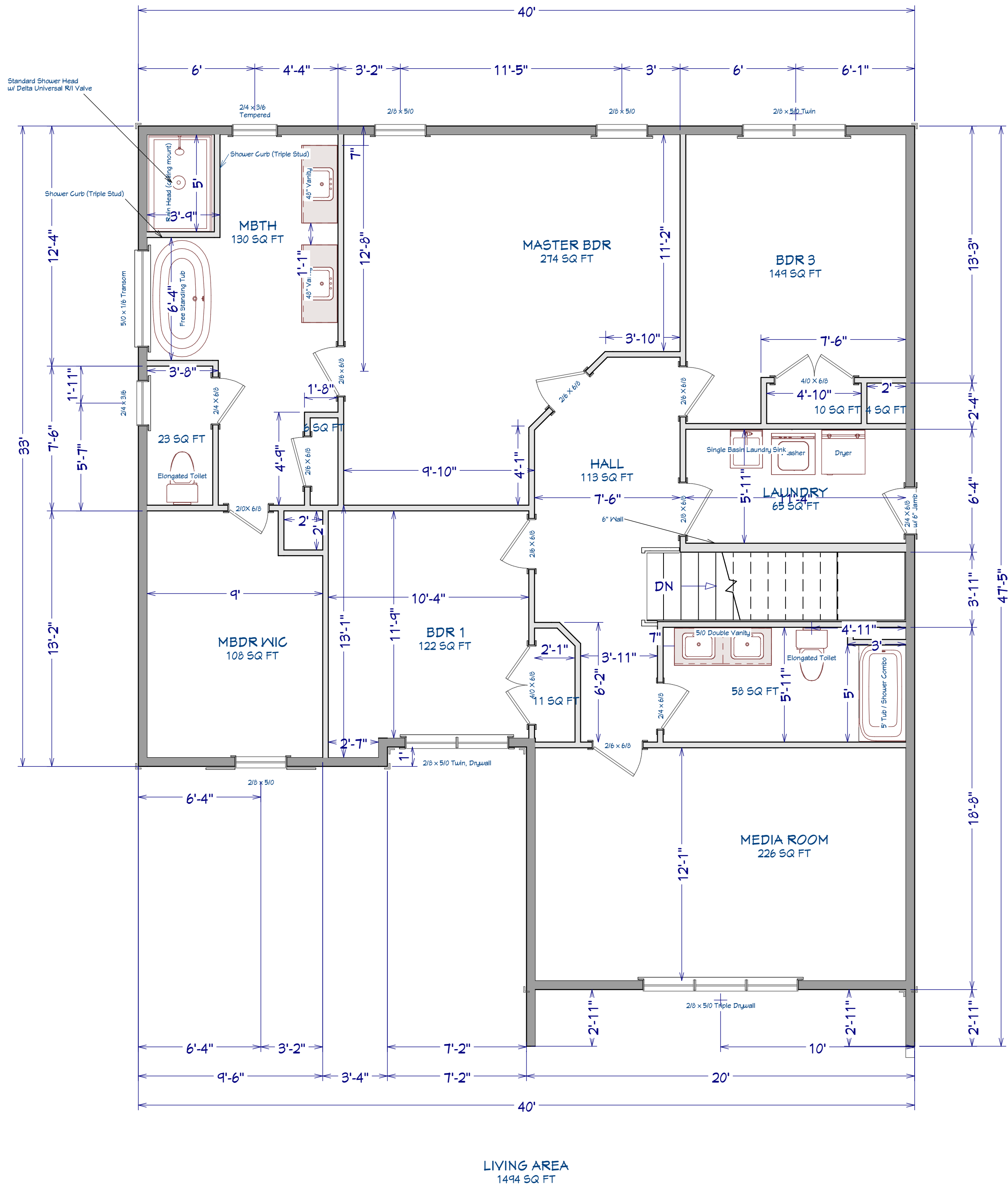
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9/26/25

SCALE:  
1/4" = 1'

SHEET:  
**A-4**



| AREA SCHEDULE    |          |
|------------------|----------|
| NAME             | AREA     |
| 1st FLOOR AREA   | 1,522 SF |
| 2nd FLOOR AREA   | 1,492 SF |
| GARAGE           | 736 SF   |
| FRONT PORCH      | 110 SF   |
| BACK PORCH       | 120 SF   |
| TOTAL HEATED     | 3,014 SF |
| TOTAL UNDER ROOF | 3,980 SF |

PLAN:  
Liberty 2.0

SHEET TITLE:  
2nd FLOOR

PROJECT ADDRESS:  
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DATE:

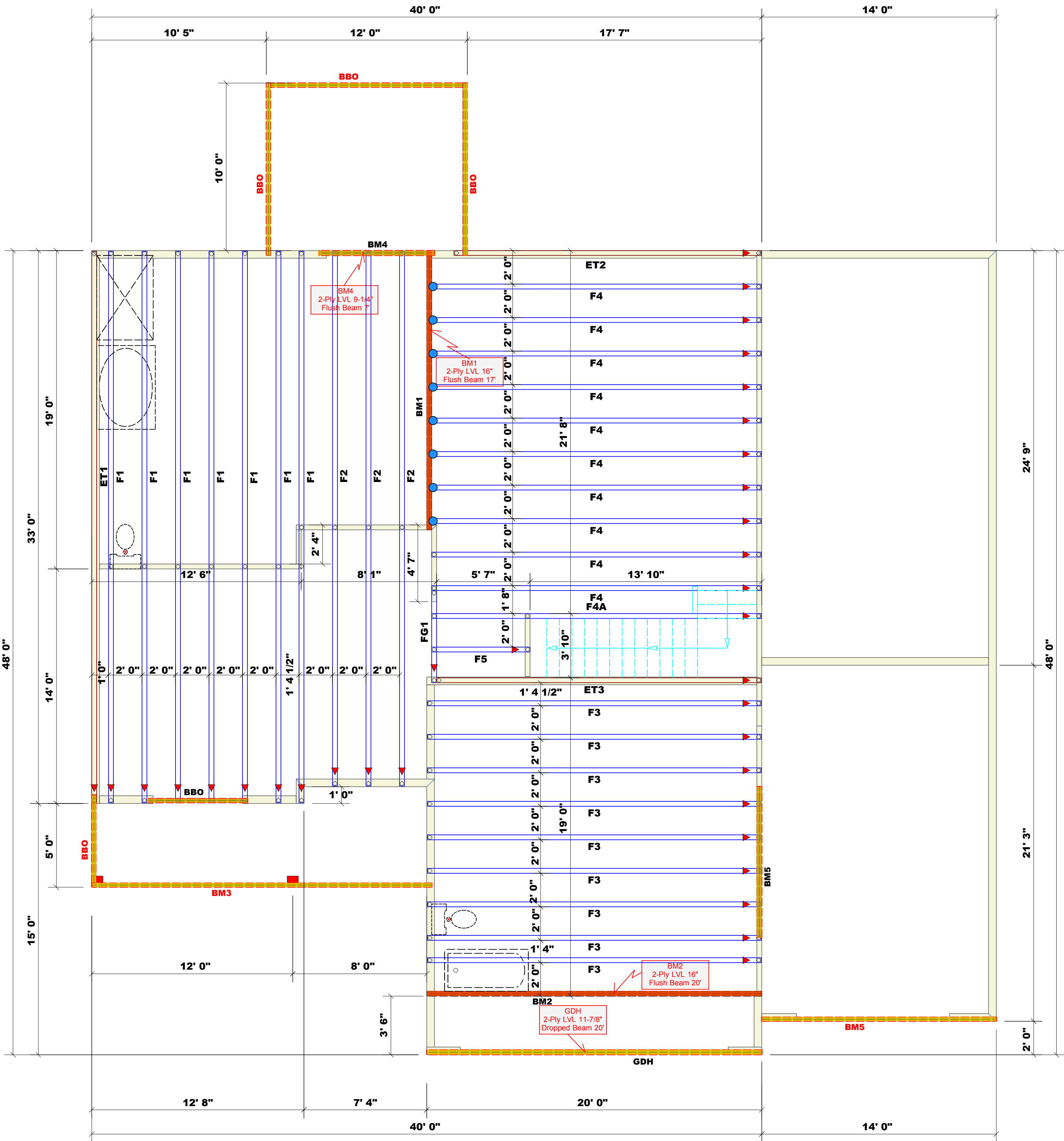
9/26/25

SCALE:

1/4" = 1'

SHEET:

A-5



| Products |        |                             |       |         |
|----------|--------|-----------------------------|-------|---------|
| PlotID   | Length | Product                     | Plies | Net Qty |
| BM1      | 16' 8" | 1-3/4"x 16" LVL Kerto-S     | 2     | 2       |
| BM2      | 20' 0" | 1-3/4"x 16" LVL Kerto-S     | 2     | 2       |
| BM4      | 6' 11" | 1-3/4"x 9-1/4" LVL Kerto-S  | 2     | 2       |
| BM5      | 9' 0"  | 1-3/4"x 11-7/8" LVL Kerto-S | 2     | 2       |
| GDH      | 20' 0" | 1-3/4"x 11-7/8" LVL Kerto-S | 2     | 2       |

1 Truss Placement Plan  
Scale: 1/4" = 1'

| Dimension Notes                                                                           |
|-------------------------------------------------------------------------------------------|
| 1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise   |
| 2. All interior wall dimensions are to face of frame wall unless noted otherwise          |
| 3. All exterior wall to truss dimensions are to face of frame wall unless noted otherwise |

| Connector Information |         |       |     | Nail Information |  |
|-----------------------|---------|-------|-----|------------------|--|
| Sym                   | Product | Manuf | Qty | Supported Member |  |
| ●                     | HUS410  | USP   | 8   | Varies           |  |

| Plumbing Drop Notes                                                                 |
|-------------------------------------------------------------------------------------|
| 1. Plumbing drop locations shown are NOT exact.                                     |
| 2. Contractor to verify ALL plumbing drop locations prior to setting Floor Trusses. |
| 3. Adjust spacing as needed not to exceed 24"oc.                                    |

▲ = Indicates Left End of Truss  
(Reference Engineered Truss Drawing)  
Do NOT Erect Truss Backwards

| LOAD CHART FOR JACK STUDS<br>(BASED ON TABLES R502.5(1) & (2))<br>NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADS/GUDES |                            |                            |                             |
|-------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------------------|-----------------------------|
| END REACTION (UP TO) 2550#                                                                                              | END REACTION (UP TO) 5100# | END REACTION (UP TO) 7650# | END REACTION (UP TO) 10200# |
| 1700                                                                                                                    | 2550                       | 3400                       | 4250                        |
| 3400                                                                                                                    | 5100                       | 6800                       | 8500                        |
| 5100                                                                                                                    | 7650                       | 10200                      | 12850                       |
| 6800                                                                                                                    | 10200                      | 13600                      | 17000                       |
| 8500                                                                                                                    | 12750                      | 17000                      |                             |
| 10200                                                                                                                   | 15300                      |                            |                             |
| 11900                                                                                                                   |                            |                            |                             |
| 13600                                                                                                                   |                            |                            |                             |
| 15300                                                                                                                   |                            |                            |                             |

|           |                        |           |                       |
|-----------|------------------------|-----------|-----------------------|
| BUILDER   | Precision Custom Homes | COUNTY    | Cameron - Moore       |
| JOB NAME  | Lot 33 Magnolia Hills  | ADDRESS   | Lot 33 Magnolia Hills |
| PLAN      | Liberty 2.0            | MODEL     | Floor                 |
| SEAL DATE | N/A                    | DATE REV. | 09/26/25              |
| QUOTE #   | Quote #                | DRAWN BY  | Hampton Horrocks      |
| JOB #     | 251385-B               | SALESMAN  | Neil Baggett          |

**THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.**  
These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature \_\_\_\_\_  
David Landry

**comtech**  
ROOF & FLOOR  
TRUSSES & BEAMS  
Reilly Road Industrial Park  
Fayetteville, N.C. 28309  
Phone: (910) 864-8787  
Fax: (910) 864-4444



# North Carolina 2018 - R402.1.5 Total UA

**Property**

Cameron, NC 28326  
Model: Liberty  
Community: Liberty Meadows

**Organization**

Southern Energy Manager  
Justin Smith

**Inspection Status**

Results are projected

Template - SMG Precision - Liberty  
Meadows lot 14 - CZ 3 slab -  
Liberty Meadows lot 14

**Builder**

SMG Precision Properties

**This report is based on a proposed design and does not confirm field enforcement of design elements.**

## Building UA

| Elements                                           | NC Reference | As Designed  |
|----------------------------------------------------|--------------|--------------|
| Ceilings                                           | 56.8         | 53.9         |
| Above-Grade Walls                                  | 203.3        | 151.0        |
| Windows, Doors and Skylights                       | 115.3        | 103.5        |
| Slab Floor:                                        | 86.5         | 112.9        |
| Framed Floors                                      | 17.4         | 19.0         |
| Foundation Walls                                   | 0.0          | 0.0          |
| Rim Joists                                         | 8.4          | 6.8          |
| <b>Overall UA (Design must be equal or lower):</b> | <b>487.7</b> | <b>447.1</b> |

## Requirements

|   |                     |                                                                                             |
|---|---------------------|---------------------------------------------------------------------------------------------|
| ✓ | 402.1.5             | Total UA alternative compliance passes by 8.3%.                                             |
| ✓ | 402.3.2             | Average SHGC: 0.28 Max SHGC: 0.30                                                           |
| ✓ | R402.4.2.2          | Air Leakage Testing Air sealing is 4.80 ACH at 50 Pa. It must not exceed 5.00 ACH at 50 Pa. |
| ✓ | R402.5              | Area-weighted average fenestration SHGC                                                     |
| ✓ | R402.5              | Area-weighted average fenestration U-Factor                                                 |
| ✓ | R404.1              | Lighting Equipment Efficiency                                                               |
| ✓ | Mandatory Checklist | Mandatory code requirements that are not checked by Ekotrope must be met.                   |
| ✓ | R403.3.1            | Duct Insulation                                                                             |
| ✓ | 403.3.3             | Duct Testing                                                                                |

**Design exceeds requirements for North Carolina 2018 Prescriptive compliance by 8.3%.**

Name: Justin Smith  
Organization: Southern Energy Management

Signature: Justin Smith  
Digitally signed: 8/9/22 at 11:20 AM

### Ekotrope RATER - Version 4.0.1.2966

North Carolina 2018 Prescriptive compliance results calculated using Ekotrope RATER's energy and code compliance algorithm, including appropriate amendments.  
Ekotrope RATER is a RESNET Accredited HERS Rating Tool. All results are based on data entered by Ekotrope users.  
Ekotrope disclaims all liability for the information shown on this report.

# Building Summary

## Property

Cameron, NC 28326  
Model: Liberty  
Community: Liberty Meadows

## Organization

Southern Energy Management  
Justin Smith

## Inspection Status

Results are projected



**SOUTHERN ENERGY**  
MANAGEMENT  
ENERGY EFFICIENCY & SOLAR POWER

Template - SMG Precision - Liberty Meadows lot 14  
- CZ 3 slab - ecoSelect  
Liberty Meadows lot 14

## Builder

SMG Precision Properties

## General Building Information

|                                  |                        |
|----------------------------------|------------------------|
| Number Of Bedrooms               | 3                      |
| Number Of Floors                 | 2                      |
| Conditioned Floor Area [sq. ft.] | 3,014                  |
| Has Electric Vehicle Ready Space | No                     |
| Unconditioned, attached garage?  | Yes                    |
| Conditioned Volume [cu. ft.]     | 27,126                 |
| Total Units in Building          | 1                      |
| Residence Type                   | Single family detached |
| Number of Floors in Building     | -                      |
| Floor Number                     | -                      |
| Model                            | Liberty                |
| Community                        | Liberty Meadows        |
| RESNET/IECC 2006 Climate Zone    | 4A                     |
| IECC 2021 Climate Zone           | 3A                     |

## Foundation Wall

None Present

## Foundation Wall Library List

None Present

## Slab

| Name | Library Type | Perimeter | Floor Grade | Carpet R | Exposed Masonry Area | Surface Area | Location         | Enclosing         |
|------|--------------|-----------|-------------|----------|----------------------|--------------|------------------|-------------------|
| slab | Uninsulated  | 178       | On Grade    | 1        | 0                    | 1,522.0 ft²  | Exposed Exterior | Conditioned Space |

## Slab Library List

| Name        | Wall Construction Type | Slab Completely Insulated? | Underslab Insulation Width [ft] | Perimeter Insulation Depth [ft] | Perimeter Insulation R Value | Thermal Break | Effective R-value |
|-------------|------------------------|----------------------------|---------------------------------|---------------------------------|------------------------------|---------------|-------------------|
| Uninsulated | Wood Frame / Other     | No                         | 0                               | 0                               | 0                            | No            | 0.00              |

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- CZ 3 slab - ecoSelect  
Liberty Meadows lot 14

**Builder**  
SMG Precision Properties

## Framed Floor

| Name        | Library Type          | Carpet R | Floor Grade | Surface Area | Location                       |
|-------------|-----------------------|----------|-------------|--------------|--------------------------------|
| over garage | R 19, 16"OC G1 Carpet | 0        | Above Grade | 371.0 ft²    | Unconditioned, attached garage |

## Framed Floor Library List

| Name                  | Effective R-value |
|-----------------------|-------------------|
| R 19, 16"OC G1 Carpet | 19.566            |

## Rim Joist

| Name              | Library Type   | Surface Area | Location                       |
|-------------------|----------------|--------------|--------------------------------|
| 1st floor ambient | R 19 G1, 16"OC | 127.0 ft²    | Exposed Exterior               |
| 1st floor garage  | R 19 G1, 16"OC | 25.0 ft²     | Unconditioned, attached garage |

## Rim Joist Library List

| Name           | Effective Insulation R-value |
|----------------|------------------------------|
| R 19 G1, 16"OC | 17.30                        |

## Wall

| Name              | Library Type                 | Surface Color | Surface Area | Location                       |
|-------------------|------------------------------|---------------|--------------|--------------------------------|
| 1st floor ambient | R 19 Adv. Framing G1 16" O.C | Medium        | 1,242.0 ft²  | Exposed Exterior               |
| 1st floor garage  | R 19 Adv. Framing G1 16" O.C | Medium        | 360.0 ft²    | Unconditioned, attached garage |
| 2nd floor ambient | R 19 Adv. Framing G1 16" O.C | Medium        | 1,016.0 ft²  | Exposed Exterior               |
| 2nd floor attic   | R 19 Adv. Framing G1 16" O.C | Medium        | 352.0 ft²    | Attic                          |

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MANAGEMENT  
ENERGY EFFICIENCY & SOLAR POWER

Template - SMG Precision - Liberty Meadows lot 14  
- CZ 3 slab - ecoSelect  
Liberty Meadows lot 14

## Builder

SMG Precision Properties

## Wall Library List

| Name                         | Effective R-value |
|------------------------------|-------------------|
| R 19 Adv. Framing G1 16" O.C | 17.492            |

## Glazing

| Name               | Library Type | Wall Assignment   | Foundation Wall Assignment | Is Operable | Overhang Depth | Overhang Ft To Top | Overhang Ft To Bottom | Orientation | Surface Area |
|--------------------|--------------|-------------------|----------------------------|-------------|----------------|--------------------|-----------------------|-------------|--------------|
| front 2nd unshaded | 33/28        | 2nd floor ambient |                            | Yes         | 0              | 0                  | 0                     | West        | 66.8 ft²     |
| front shaded       | 33/28        | 1st floor ambient |                            | Yes         | 5              | 2                  | 7                     | West        | 26.7 ft²     |
| left 2nd unshaded  | 33/28        | 2nd floor ambient |                            | Yes         | 0              | 0                  | 0                     | North       | 15.7 ft²     |
| rear 2nd unshaded  | 33/28        | 2nd floor ambient |                            | Yes         | 0              | 0                  | 0                     | East        | 61.6 ft²     |
| rear shaded        | 33/28        | 1st floor ambient |                            | Yes         | 10             | 2                  | 9                     | East        | 40.0 ft²     |
| rear unshaded      | 33/28        | 1st floor ambient |                            | Yes         | 0              | 0                  | 0                     | East        | 69.4 ft²     |
| right unshaded     | 33/28        | 1st floor ambient |                            | Yes         | 0              | 0                  | 0                     | South       | 9.3 ft²      |

## Glazing Library List

| Name  | Shgc | U-factor |
|-------|------|----------|
| 33/28 | 0.28 | 0.330    |

## Skylight

None Present

## Skylight Library List

None Present

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Template - SMG Precision - Liberty Meadows lot 14

- CZ 3 slab - ecoSelect

Liberty Meadows lot 14

## Builder

SMG Precision Properties

## Opaque Door

| Name         | Library Type   | Wall Assignment   | Foundation Wall Assignment | Emittance | Solar Absorptance | Surface Color | Surface Area | Location                       |
|--------------|----------------|-------------------|----------------------------|-----------|-------------------|---------------|--------------|--------------------------------|
| front entry  | Fiberglass R-5 | 1st floor ambient |                            | 0.9       | 0.75              | Medium        | 20.0 ft²     | Exposed Exterior               |
| garage entry | Fiberglass R-5 | 1st floor garage  |                            | 0.9       | 0.75              | Medium        | 20.0 ft²     | Unconditioned, attached garage |

## Opaque Door Library List

| Name           | Effective U-factor |
|----------------|--------------------|
| Fiberglass R-5 | 0.200              |

## Roof Insulation

| Name  | Library Type                                               | Attic Exterior Area [ft²] | Clay or Concrete Roof Tiles | Surface Color | Surface Area | Location |
|-------|------------------------------------------------------------|---------------------------|-----------------------------|---------------|--------------|----------|
| attic | R 38 Attic BLOWN FG<br>G1 2x10 24"OC NO<br>Radiant Barrier | 2,782.71                  | No                          | Dark          | 1,893.0 ft²  | Attic    |

## Roof Insulation Library List

| Name                                                       | Has Radiant Barrier | Effective R-value |
|------------------------------------------------------------|---------------------|-------------------|
| R 38 Attic BLOWN FG<br>G1 2x10 24"OC NO<br>Radiant Barrier | No                  | 35.115            |

## Whole House Infiltration

| Infiltration      | Measurement Type   | Shelter Class |
|-------------------|--------------------|---------------|
| 2170 CFM at 50 Pa | Blower-door tested | 4             |

## Mechanical Ventilation

None Present

# Building Summary

|                                                                                                        |                                                                   |                                                   |                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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| Template - SMG Precision - Liberty Meadows lot 14<br>- CZ 3 slab - ecoSelect<br>Liberty Meadows lot 14 | <b>Builder</b><br>SMG Precision Properties                        |                                                   |                                                                                                                                                                                  |

## Lighting

| % Interior Fluorescent Lighting | % Interior LED Lighting | % Exterior Fluorescent Lighting | % Exterior LED Lighting | % Garage Fluorescent Lighting | % Garage LED Lighting |
|---------------------------------|-------------------------|---------------------------------|-------------------------|-------------------------------|-----------------------|
| 0                               | 90                      | 0                               | 0                       | 0                             | 0                     |

## Onsite Generation

None Present

## Onsite Generation Library List

None Present

## Solar Generation

None Present

## Dehumidifier

None Present

## Dehumidifier Library List

None Present

## Whole House Fan

None Present

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ENERGY EFFICIENCY & SOLAR POWER

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Liberty Meadows lot 14

## Builder

SMG Precision Properties

## Whole House Fan Library List

None Present

## Conditioning Equipment

| Name                | Library Type           | Serial Number | Heating Percent Load | Cooling Percent Load | Hot Water Percent Load | Location             |
|---------------------|------------------------|---------------|----------------------|----------------------|------------------------|----------------------|
| 1st floor heat pump | z 24k 14 SEER 8.2hspf  |               | 50%                  | 50%                  | 0%                     | Attic                |
| 2nd floor heat pump | z 24k 14 SEER 8.2hspf  |               | 50%                  | 50%                  | 0%                     | Attic                |
| Water Heating       | z 50 gal. 0.95 EF Elec |               | 0%                   | 0%                   | 100%                   | Unconditioned Garage |

## Equipment Type: z 24k 14 SEER 8.2hspf

|                               |                      |
|-------------------------------|----------------------|
| Equipment Type                | Air Source Heat Pump |
| Fuel Type                     | Electric             |
| Distribution Type             | Forced Air           |
| Motor Type                    | PSC (Single Speed)   |
| Heating Efficiency            | 8.2 HSPF             |
| Heating Capacity [kBtu/h]     | 24                   |
| Backup Fuel Type              | Electric             |
| Switchover Temperature [°F]   | 0                    |
| Backup Heating Efficiency     | 1 COP                |
| Use default Supplemental Heat | Yes                  |
| Cooling Efficiency            | 14 SEER              |
| Cooling Capacity [kBtu/h]     | 24                   |

## Equipment Type: z 50 gal. 0.95 EF Elec

|                             |                             |
|-----------------------------|-----------------------------|
| Equipment Type              | Residential Water Heater    |
| Fuel Type                   | Electric                    |
| Distribution Type           | Hydronic Delivery (Radiant) |
| Hot Water Efficiency        | 0.95 Energy Factor          |
| Tank Capacity (gal.)        | 50                          |
| Hot Water Capacity [kBtu/h] | 40                          |
| Recovery Efficiency         | 0.98                        |

# Building Summary

## Property

Cameron, NC 28326  
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Community: Liberty Meadows

## Organization

Southern Energy Management  
Justin Smith

## Inspection Status

Results are projected



**SOUTHERN ENERGY**  
**MANAGEMENT**  
ENERGY EFFICIENCY & SOLAR POWER

Template - SMG Precision - Liberty Meadows lot 14  
- CZ 3 slab - ecoSelect  
Liberty Meadows lot 14

## Builder

SMG Precision Properties

## Distribution System

|                                    |                                |
|------------------------------------|--------------------------------|
| Distribution Type                  | Forced Air                     |
| Heating Equipment                  | 1st floor heat pump            |
| Cooling Equipment                  | 1st floor heat pump            |
| Sq. Feet Served                    | 1,522                          |
| # Return Grilles                   | 2                              |
| Supply Duct R Value                | 8                              |
| Return Duct R Value                | 8                              |
| Supply Duct Area [ft²]             | 410.94                         |
| Return Duct Area [ft²]             | 152.2                          |
| Leakage to Outdoors                | 60 CFM @ 25Pa (3.94 / 100 ft²) |
| Total Leakage                      | 60 CFM25                       |
| Total Leakage Duct Test Conditions | Post-Construction              |
| Use Default Flow Rate              | Yes                            |
| Duct 1                             |                                |
| Duct Location                      | Attic (well vented)            |
| Percent Supply Area                | 70                             |
| Percent Return Area                | 70                             |
| Duct 2                             |                                |
| Duct Location                      | Conditioned Space              |
| Percent Supply Area                | 30                             |
| Percent Return Area                | 30                             |
| Duct 3                             |                                |
| Duct Location                      | Conditioned Space              |
| Percent Supply Area                | 0                              |
| Percent Return Area                | 0                              |
| Duct 4                             |                                |
| Duct Location                      | Conditioned Space              |
| Percent Supply Area                | 0                              |
| Percent Return Area                | 0                              |
| Duct 5                             |                                |
| Duct Location                      | Conditioned Space              |
| Percent Supply Area                | 0                              |
| Percent Return Area                | 0                              |
| Duct 6                             |                                |
| Duct Location                      | Conditioned Space              |
| Percent Supply Area                | 0                              |
| Percent Return Area                | 0                              |

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Liberty Meadows lot 14

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SMG Precision Properties

## Distribution System

|                                    |                                |
|------------------------------------|--------------------------------|
| Distribution Type                  | Forced Air                     |
| Heating Equipment                  | 2nd floor heat pump            |
| Cooling Equipment                  | 2nd floor heat pump            |
| Sq. Feet Served                    | 1,492                          |
| # Return Grilles                   | 2                              |
| Supply Duct R Value                | 8                              |
| Return Duct R Value                | 8                              |
| Supply Duct Area [ft²]             | 402.84                         |
| Return Duct Area [ft²]             | 149.2                          |
| Leakage to Outdoors                | 59 CFM @ 25Pa (3.95 / 100 ft²) |
| Total Leakage                      | 59 CFM25                       |
| Total Leakage Duct Test Conditions | Post-Construction              |
| Use Default Flow Rate              | Yes                            |
| Duct 1                             |                                |
| Duct Location                      | Attic (well vented)            |
| Percent Supply Area                | 100                            |
| Percent Return Area                | 100                            |
| Duct 2                             |                                |
| Duct Location                      | Conditioned Space              |
| Percent Supply Area                | 0                              |
| Percent Return Area                | 0                              |
| Duct 3                             |                                |
| Duct Location                      | Conditioned Space              |
| Percent Supply Area                | 0                              |
| Percent Return Area                | 0                              |
| Duct 4                             |                                |
| Duct Location                      | Conditioned Space              |
| Percent Supply Area                | 0                              |
| Percent Return Area                | 0                              |
| Duct 5                             |                                |
| Duct Location                      | Conditioned Space              |
| Percent Supply Area                | 0                              |
| Percent Return Area                | 0                              |
| Duct 6                             |                                |
| Duct Location                      | Conditioned Space              |
| Percent Supply Area                | 0                              |
| Percent Return Area                | 0                              |

## HVAC Grading

HVAC Grading Not Conducted

## Ceiling Fan

|                 |     |
|-----------------|-----|
| Has Ceiling Fan | No  |
| Cfm Per Watt    | 100 |

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Liberty Meadows lot 14

## Builder

SMG Precision Properties

## Water Distribution

|                                            |          |
|--------------------------------------------|----------|
| Water Fixture Type                         | Low-flow |
| Use Default Hot Water Pipe Length          | No       |
| Hot Water Pipe Length [ft]                 | 89       |
| At Least R3 Pipe Insulation?               | No       |
| Hot Water Recirculation System?            | No       |
| Recirculation System Pipe Loop Length [ft] | 20       |
| Drain Water Heat Recovery?                 | No       |

## Clothes Dryer

|                              |                |
|------------------------------|----------------|
| Cef                          | 3.01           |
| Fuel Type                    | Electric       |
| Field Utilization            | Timer Controls |
| Is Outside Conditioned Space | No             |
| Clothes Dryer Available      | Yes            |
| Defaults Type                | HERS Reference |

## Clothes Washer

|                              |              |
|------------------------------|--------------|
| Label Energy Rating          | 153 kWh/Year |
| Annual Gas Cost              | \$12.00      |
| Electric Rate                | \$0.11/kWh   |
| Gas Rate                     | \$1.22/Therm |
| Capacity                     | 3.31         |
| Imef                         | 2.1547       |
| Defaults Type                | Custom       |
| Load Type                    | Front-load   |
| Loads Per Week               | 6            |
| Is Outside Conditioned Space | No           |
| Clothes Washer Available     | Yes          |

## Dishwasher

|                              |              |
|------------------------------|--------------|
| Dishwasher Efficiency        | 270 kWh      |
| Dishwasher Size              | Standard     |
| Annual Gas Cost              | \$22.23      |
| Electric Rate                | \$0.12/kWh   |
| Gas Rate                     | \$1.09/Therm |
| Is Outside Conditioned Space | No           |

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Liberty Meadows lot 14

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SMG Precision Properties

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## Appliances and Controls

|                                         |              |
|-----------------------------------------|--------------|
| Thermostat Cooling Setpoint             | **** 75.0    |
| Thermostat Heating Setpoint             | **** 70.0    |
| Range/Oven Fuel                         | Electric     |
| Convection Oven?                        | No           |
| Induction Range?                        | No           |
| Range/Oven Outside Conditioned Space?   | No           |
| Refrigerator Consumption                | 538 kWh/Year |
| Refrigerator Outside Conditioned Space? | No           |

## Notes

Initial Inputs \_\_\_\_\_ MS 07/01/22 \_\_\_\_\_

- confirm HVAC specs
- confirm water heater specs
- confirm ventilation entry, modeled as air cycler
- modeled to worst case orientation
- confirm cfl lighting %