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Interior Decorator & Artist

Laundry Room

At the Witch Hut
Waterloo, ON
November 30, 2022

Client Information

Current Space and Notes

Constraints:

- Low bulkheads
- Low ceiling height:
 - Bulkhead in the laundry area is 69.75" A.F.F.
 - Bulkhead entering laundry area is 71" A.F.F.
 - Bulkhead by the staircase is 68" A.F.F.
 - Ceiling height everywhere else is 80.25" A.F.F.
 - Boiler must stay in place
 - Space underneath the staircase is currently being used as a bathroom space

Necessities:

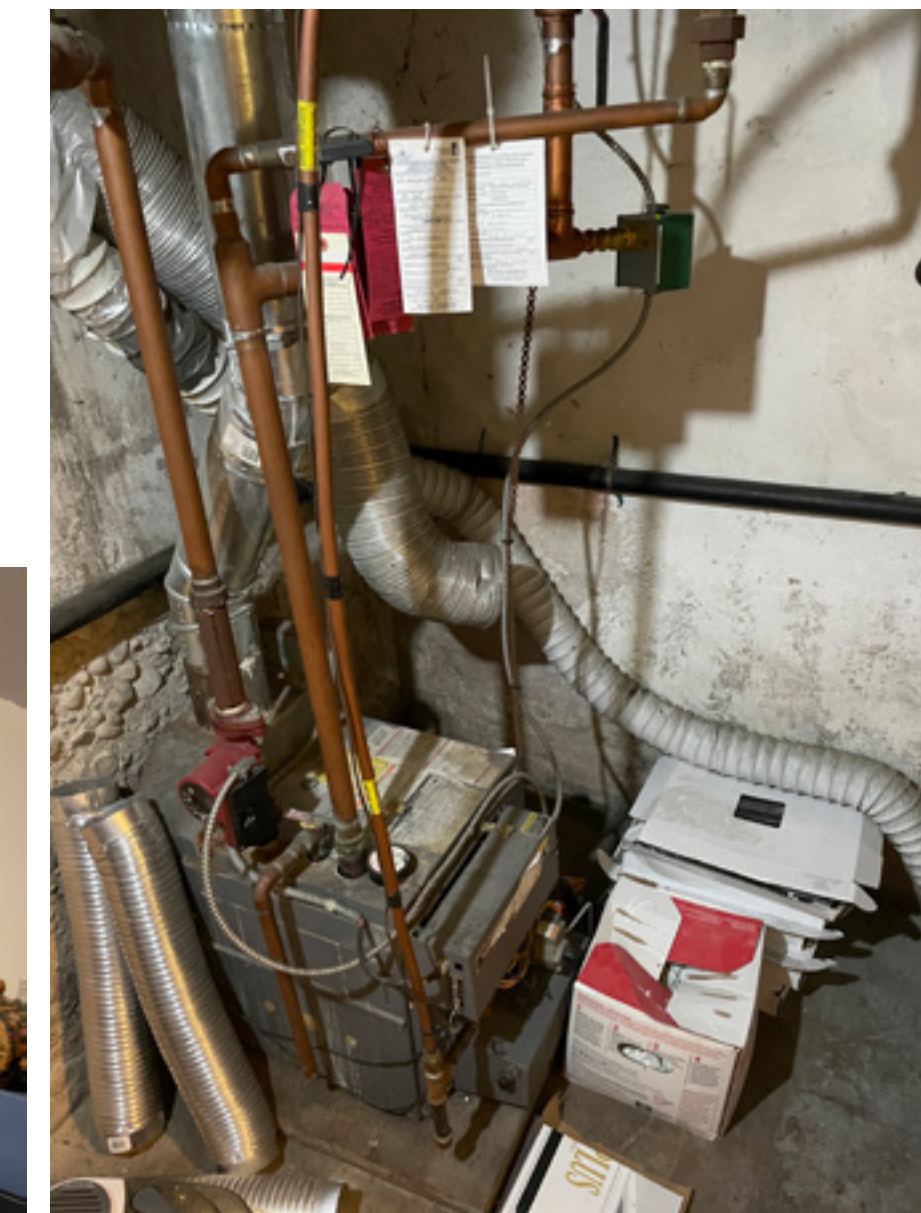
- Easy access to machines
- Storage for window air conditioners
- Storage for bins and filing boxes
- Easy access closed storage for laundry detergent and other cleaning supplies
- Access to chest freezer
- Waterproof vinyl tiling that mimicks wood flooring

Can be Changed/Added/Moved:

- Water connection Box
- Dryer exhaust
- GFI 240V split circuit outlet
- Washer and dryer
- Water heater tank can be replaced with tankless water heater

Would like:

- Sink
- Folding area
- Extra shelving space
- A reduced boiler room size for a larger laundry area
- Larger laundry machines



Research

Tankless Water Heater

Pros:

- **Long Term Energy and Cost Saving**
 - » Depending on usage, it can be 8-50% more efficient than tank style water heaters.
 - » if you use less than 41 gallons of hot water day, tankless heater will be 24-34% more efficient.
 - » If you use around 86 gallons of hot water day, tankless heaters are 8-14% more efficient .
- **Unlimited Supply of Hot Water**
 - » Tankless Water Heaters have a maximum flow rate and can heat a certain amount of water at any time. Good if you're taking showers back to back. Not so great if showers are happening simultaneously.
- **Less Space**
 - » Tankless water heaters are normally mounted to the wall, similar to a circuit breaker. They are around 27"T x 18"W x 10"D.
- **Lower Risk of Leaks Water Damage, and Tank Explosions**
 - » Leaks happen in tanks when there is hard water buildup. If there is no tank, this corrosion cannot cause flooding or tank explosions.
- **Lower Risk of Burns and Exposure to Toxic Metals**
 - » Minerals from the corrosion in water tanks will sometimes make it's way into the water supply. However, with a tankless water heater, there is no water sitting in a corroded tank.
- **Life Expectancy of Over 20 years**
 - » on average, a water tank will last between 8-12 year. A tankless heater will usually last over 20 years - good long term investment if you plan on staying in this home for a while.

Cons:

- **High Upfront Cost of the Unit and Installation**
 - » will normally cost around \$3000 for the tankless heater.
 - » will be more expensive because of installation - may need a new vent pipe and special wiring.
 - » Labour costs for installation will also be higher since this is a less common project in comparison to a tank.
 - » Hard water will make tankless heater work harder and may break down. For this reason, manufacturers sometimes require a softening system for the warranty to be valid.
- **Takes Longer to Deliver Hot Water**
 - » Will need to run your taps for a bit in order to get hot water since there is no hot water storage.
- **Cold Water Sandwich (lol)**
 - » This is when hot water is interrupted with some cold water, followed by another surge of hot water. This will normally happen if you turn your tap on and off while doing dishes, for example.
- **Inconsistent Water Temperature When Multiple Outlets are in Use**
 - » As mentioned, if you're running multiple showers at the same time, the tankless option may not be able to keep up. However, they are able to handle showers consecutively.
 - » Look for a higher GPM (Gallons per Minute) in a tankless system to help with this.
 - » Can also install fixtures such as shower heads and faucets with a lower flow rate to help with this.
- **Difficult to Achieve a Lukewarm Temperature**
 - » Tankless needs a minimum water flow to activate the system. Because of this, there is a gap between completely cold and the coolest warm water you can create with a hot and cold water mix .
- **No Access to Hot Water During a Power Outage**
 - » While tankless systems can be powered by electricity or gas, they rely on an electric control panel to operate the system.

Tankless Gas Water Heater

[Rinnai 199MBTU Liquid Propane Sensei™ Direct Vent Indoor Condensing Tankless Water Heater Residential 11 GPM Energy Star®](#)



Spec Sheet

Product Code: RU199IP
Max Flow Rate: 11 GPM
Dimensions: 18.5"W x 26.4"H x 11.4"D

- Wifi technology for remote monitoring and management
- sliding mounting bracket for easy installation

[Navien NPE-240A Premium Condensing Tankless Gas Water Heater \(NPE-A\)](#)



Product Code: NPE-240A
Max Flow Rate: 11.2 GPM
Dimensions: 17.3"W x 27.4"H x 13.2"D

- Intelligent Preheating Technology - recognizes usage patterns to provide hot water at appropriate times

Tankless Electric Water Heater

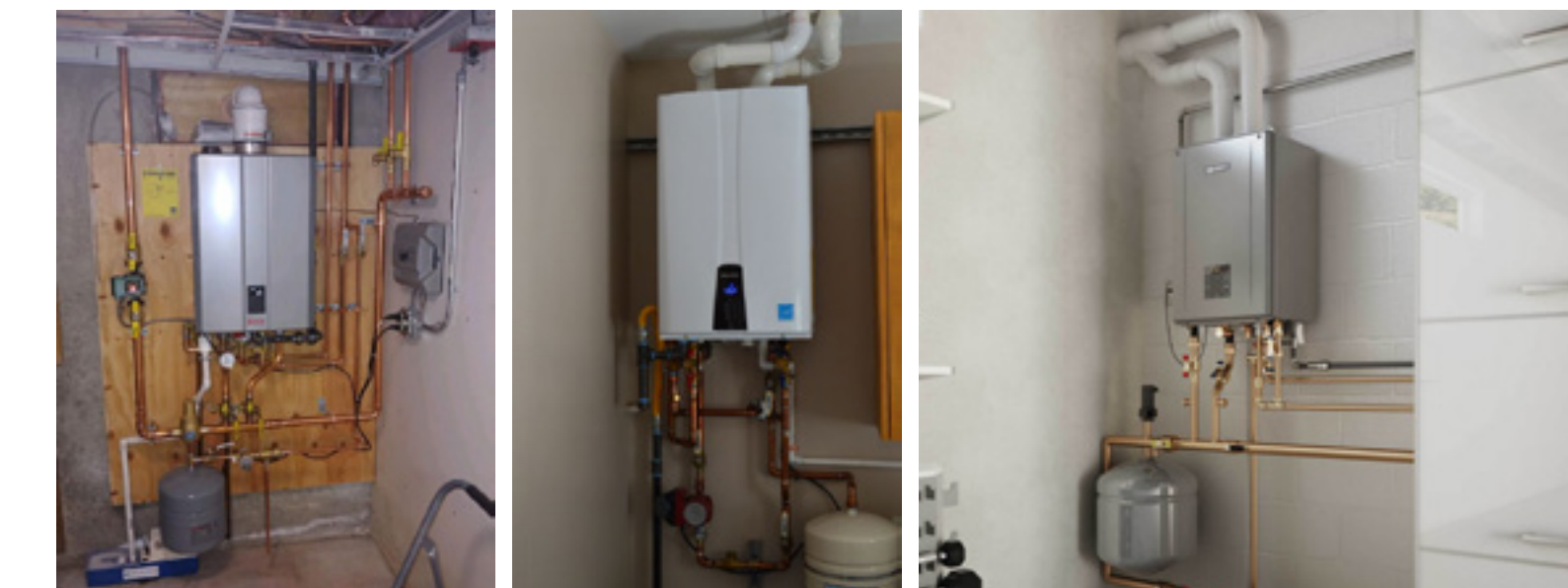
[Stiebel Eltron Temptra 36 Plus Advanced Flow Control and Self-Modulating 36KW 7.03GPM Electric Tankless Water Heater](#)



Spec Sheet

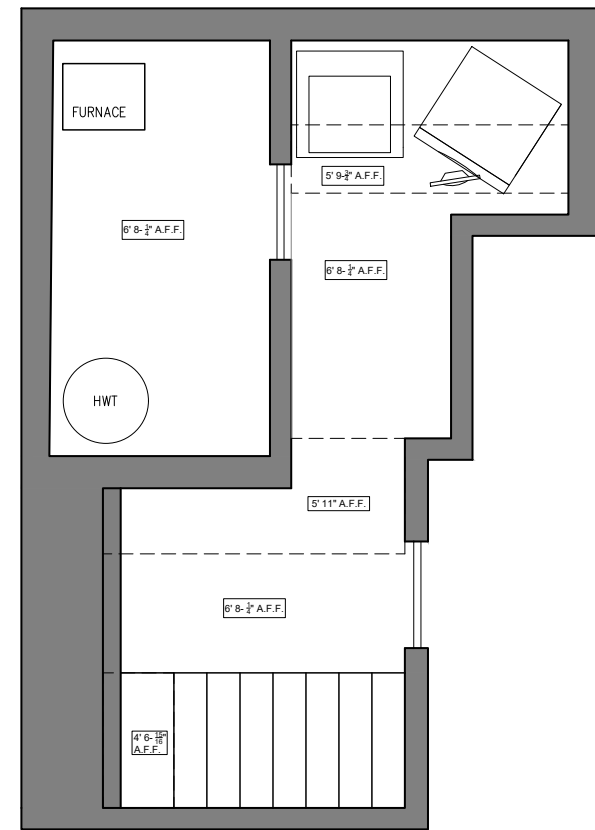
Product Code: 239225
Max Flow Rate: 7.03 GPM
Dimensions: 16.5"W x 14.5"H x 4.625"D

- Advanced Flow Control that automatically reduces output flow to maintain temperature if demand temporarily exceeds capacity



Examples of an installed tankless water heater.

Inspiration - Tight Laundry Room Spaces



- Varying counter heights to account for laundry machine height, and user friendly sink height
- Ceiling mounted closet rod for air drying



- Small open and closed storage over countertop and side by side laundry machines
- Includes a small closet rod for air drying



- Side by side machines with small lower cabinet to store detergents and user friendly sink height
- Wooden backsplash to match countertops
- open and closed upper cabinets



- Stacked layout with L-shape design
- pull-out ironing board
- stacked machines with storage around and long countertop perpendicular to machines
- Ample lower cabinetry and drawers
- Room for sink on countertop
- Taller cabinets for cleaning supplies such as brooms and mops



- Very narrow space for one machine stacked with open shelving
- Ironing board hung on the wall
- Curtain/accordion doors to conceal area when not in use



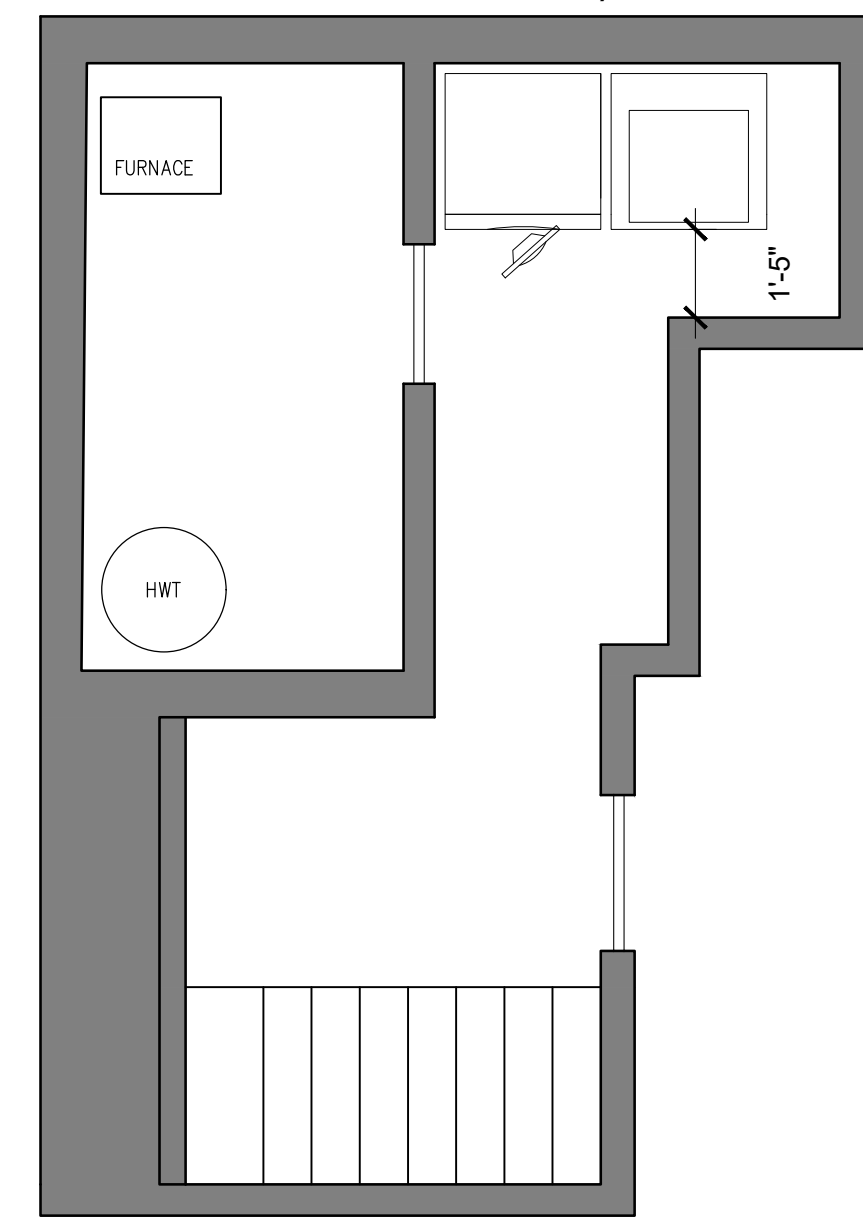
- Opposing machines with U-shape layout
- Higher and lower open storage and closed storage
- Closet rod for air drying
- Includes a small closet rod for air drying
- Counter height matches machine
- Room for sink on countertop



- Clever under the stairs option to occupy empty space
- Open shelving and countertop for detergent storage and folding
- Another storage area to the left of the machines

Floor Plan and Laundry Machine Options

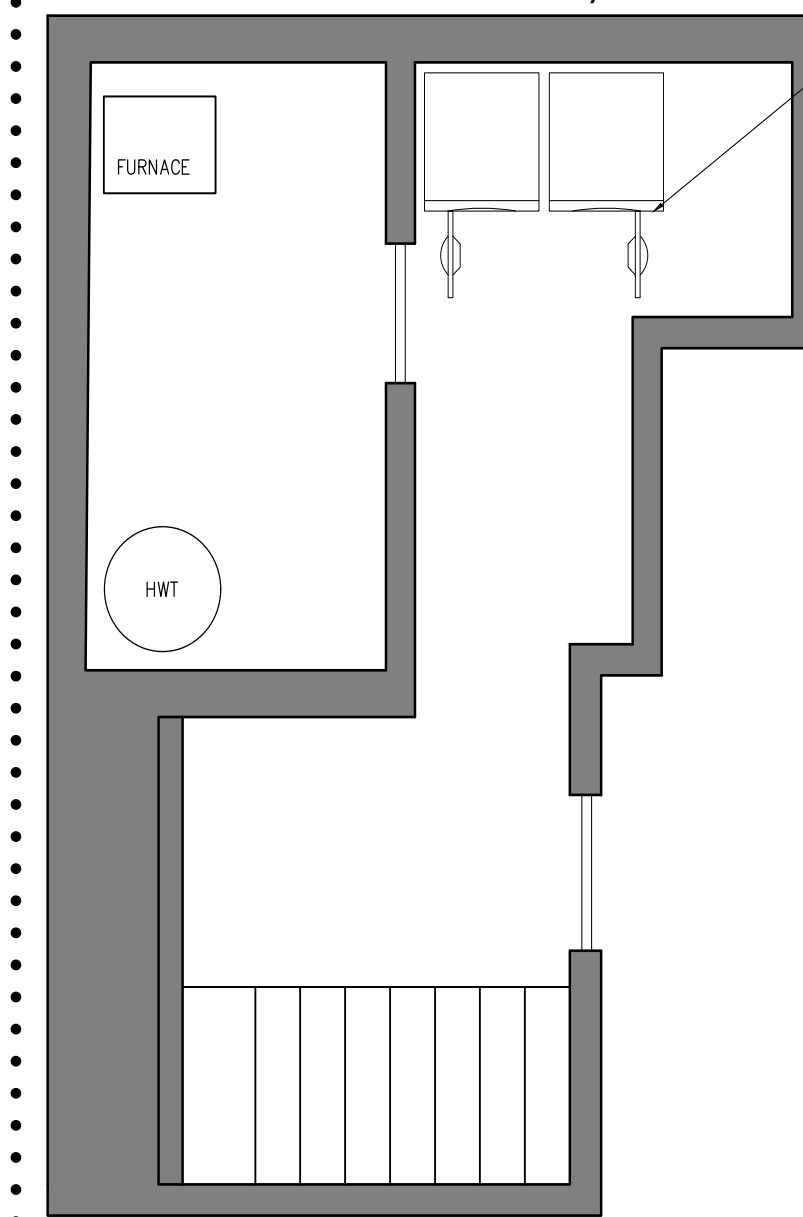
No Renovations with Same Laundry Machine



It does not look like there are any top loading dryers.

One option for opening the dryer door is to swap the location of your current machines, where you can access the dryer, and have the top loading washer in the tighter space. See drawing below.

No Renovations with New Laundry Machine

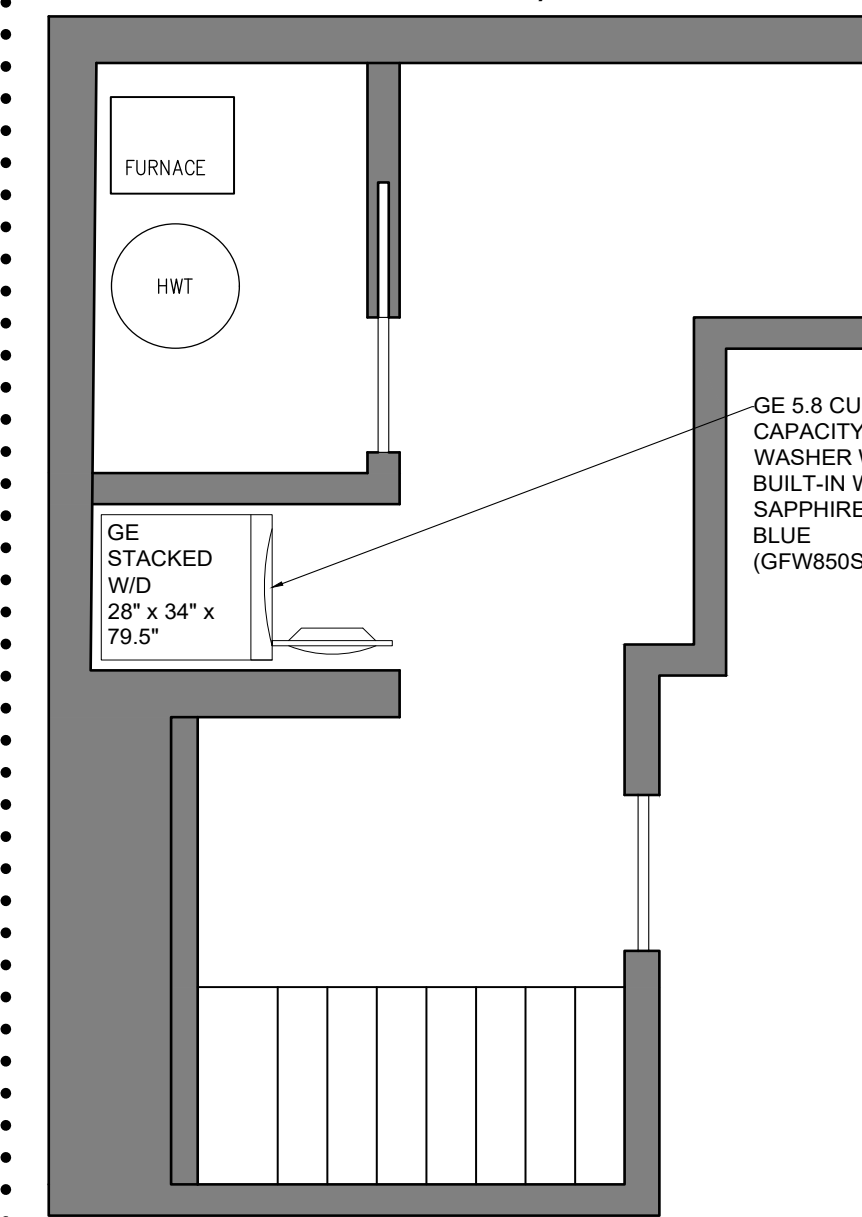


[Samsung 2.6Cu.Ft. Front Load Washer with Steam User Manual](#)

A smaller option that will fit into the original laundry room space. The doors will be able to fully open when the washer and dryer are placed side by side. This will also allow for counter and storage space.



Renovations with New Laundry Machine



[GE 5.8 Cu. Ft. \(IEC\) Capacity Washer with Built-in WiFi \(GFW850SPNRS\) Installation Manual](#)

For a stacked installation, there is a 0" clearance on all sides, though 1/2" is recommended. Because of the stacked height, this must be installed in an area where the ceilings are 80.25" A.F.F. Please see drawing on the right where stacked washers can work.

Drawing Notes:

- Boiler room reduced and water heater moved with 2' clearance on either side
- Stacked washer and drier located in area where ceilings are 80.25" A.F.F.
- Allows for more storage and shelving space outside of boiler room
- Can install sink with this layout



Schematic Design

Mood board

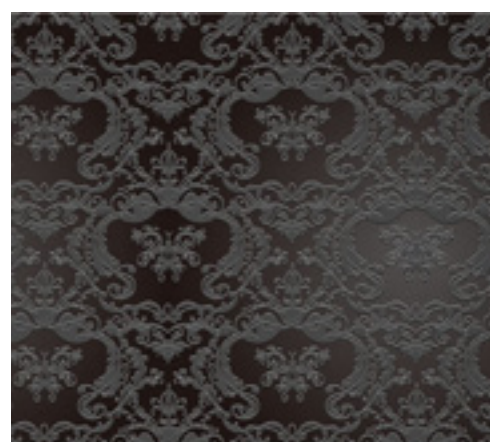


Colour Palette



[Merola Tile](#)

King Star Nero 17 5/8" x 17 5/8"
Ceramic Floor and Wall Tile



[Feelyou Vintage Floral Water-proof Fabric](#)

Exotic Royal Floral Pattern
Baroque Theme



[Hardwood Reflections -Live Edge in Acacia](#)

50" x 25"



Enchanted Forest - 700
Distinguished by a gray cast, this dark green brings to mind a magical, mist covered forest.



Onyx - 2133-10
Like it's namesake, this deep black is both luxurious and grounded.

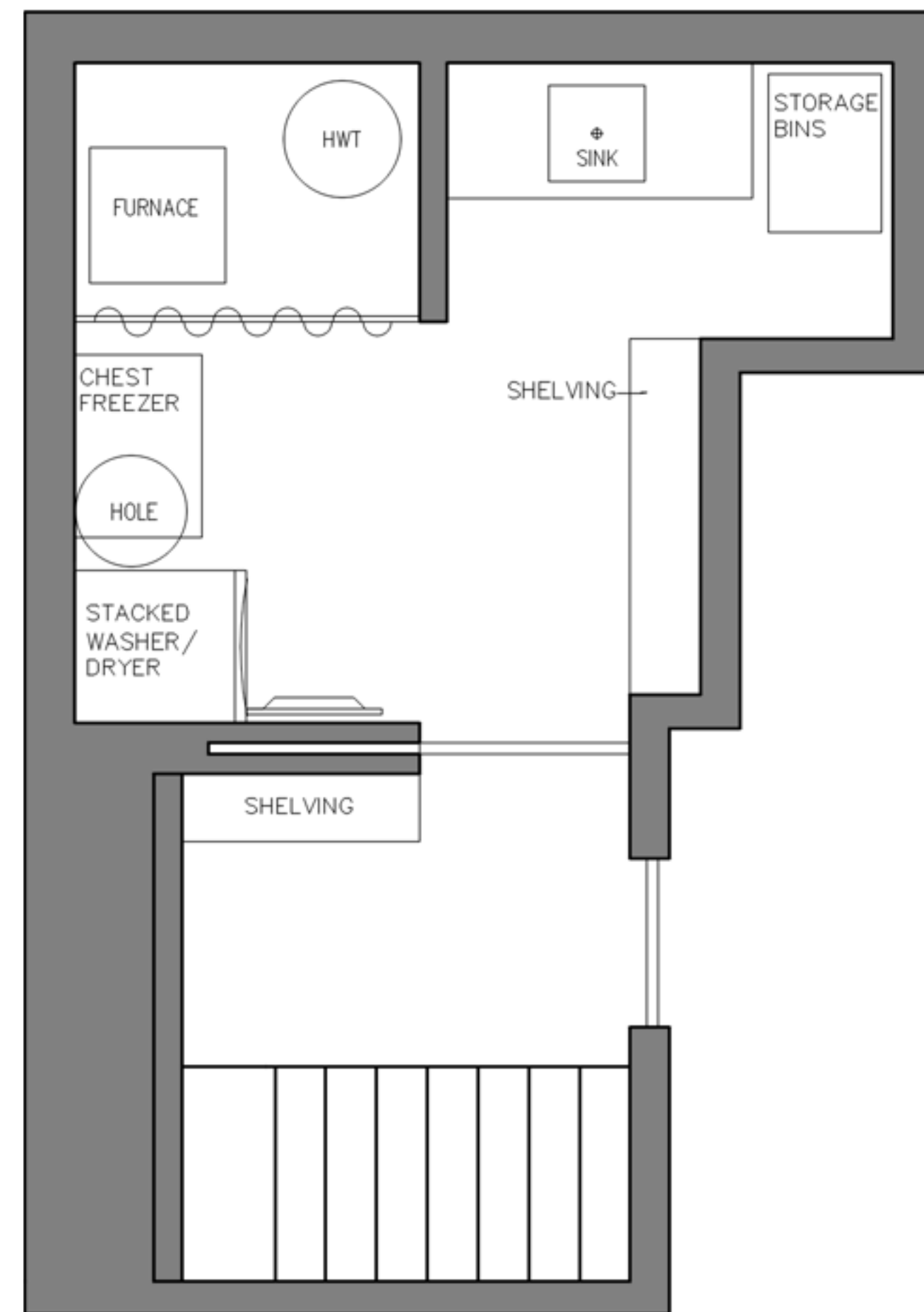


October Mist - cc-550
Evocative of the stem of a flower, this gently shaded sage anchors and uplifts.



[Krishika Peel and Stick Wallpaper](#)

Floor Planning



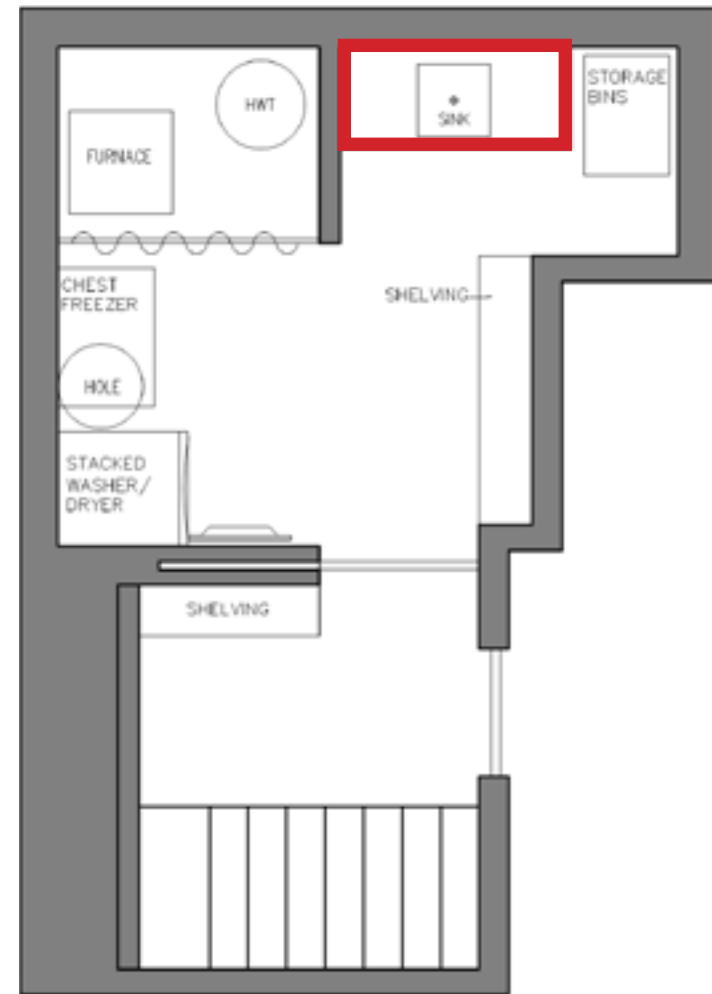
Changes and Adjustments to New Floor Plan:

- Water heater moved
- Wall enclosing furnace room removed
- Furnace enclosure shortened
- Entryway widened with a 3' 1-7/16" clearance
- Sliding pocket door to be installed
- Countertop and sink added
- Space made for storage bins
- Laundry machines stacked and moved
- Chest freezer moved and used as folding station when not in use.
- Floating shelves added above sink with LED lights for plants
- Floating shelves added above chest freezer with LED lights for plants

Further Changes and Adjustments to be made:

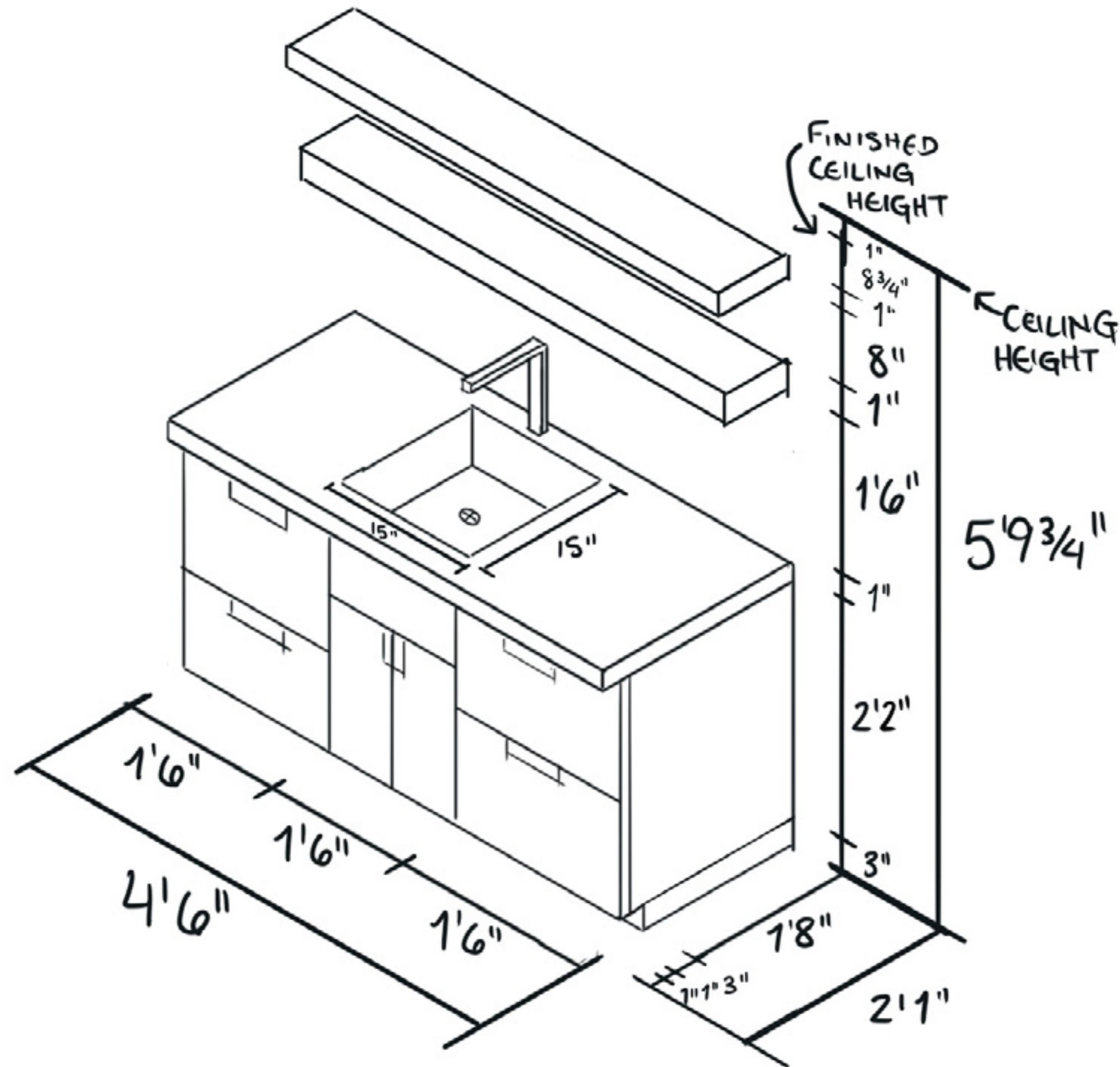
- Drying rack to be installed on wall by the perpendicular to storage bins
- Retractable ironing board to be installed in shelving unit

Millwork Ideation - Countertop with Sink and Shelving

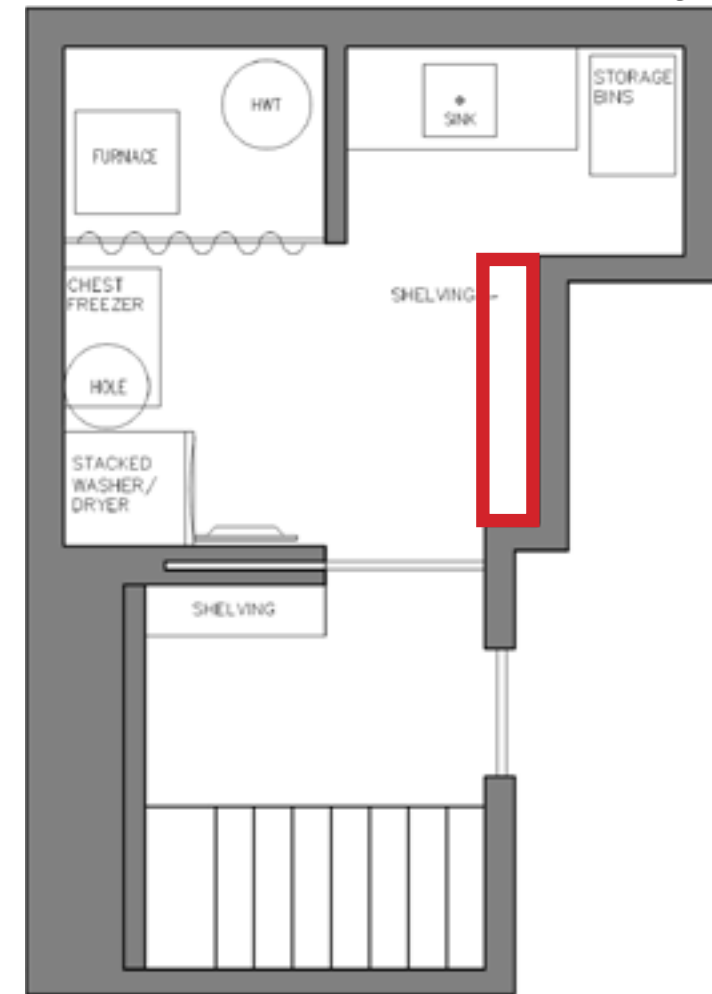


Adjustments:

- Lighting to be installed on either side of floating shelves.
- Floating shelves to be adjusted lengthwise for lighting clearance.
- Countertop height shortened from the standard 3' to 2'6" because of low ceiling height.

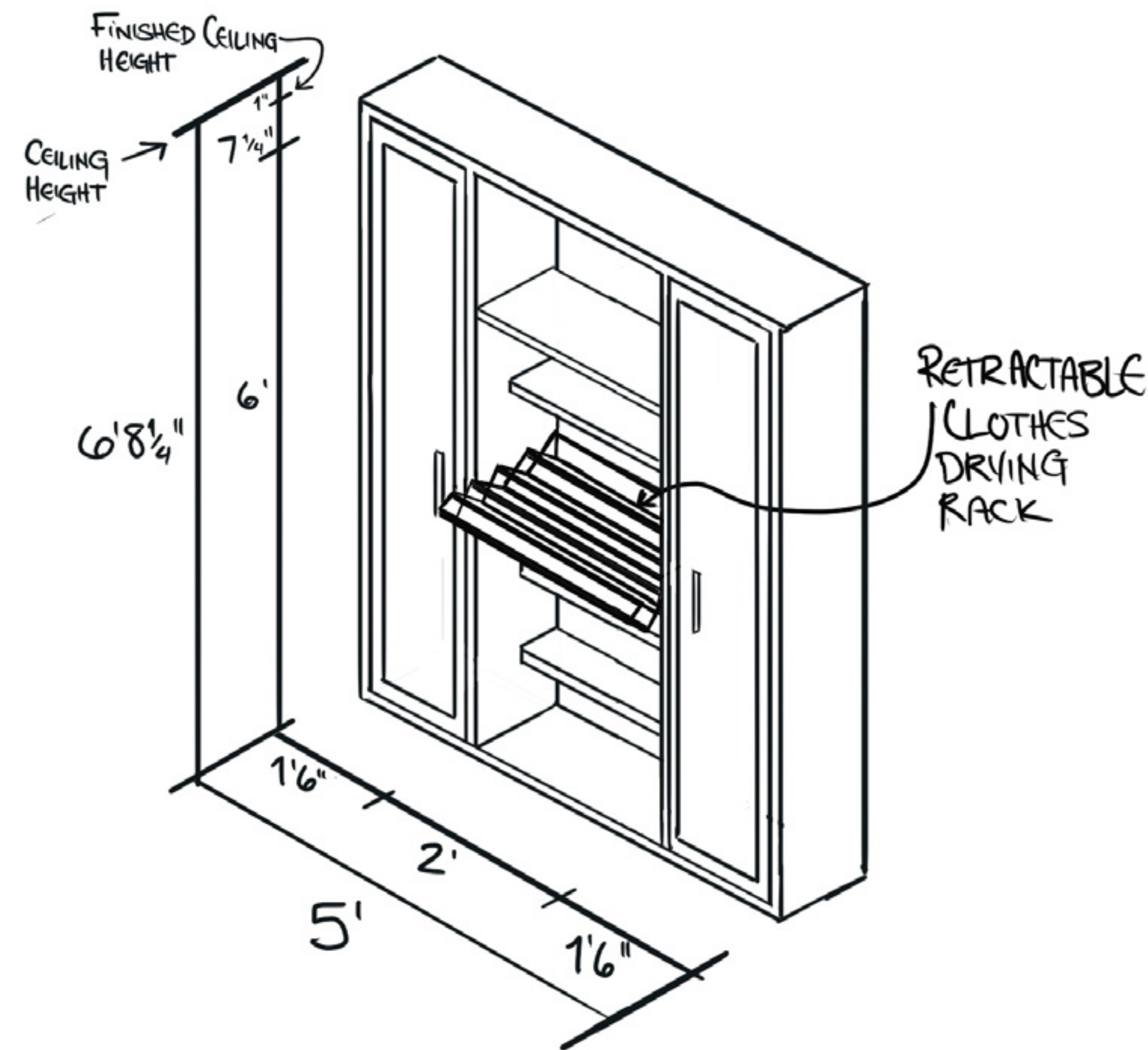


Millwork Ideation - Shelving Unit



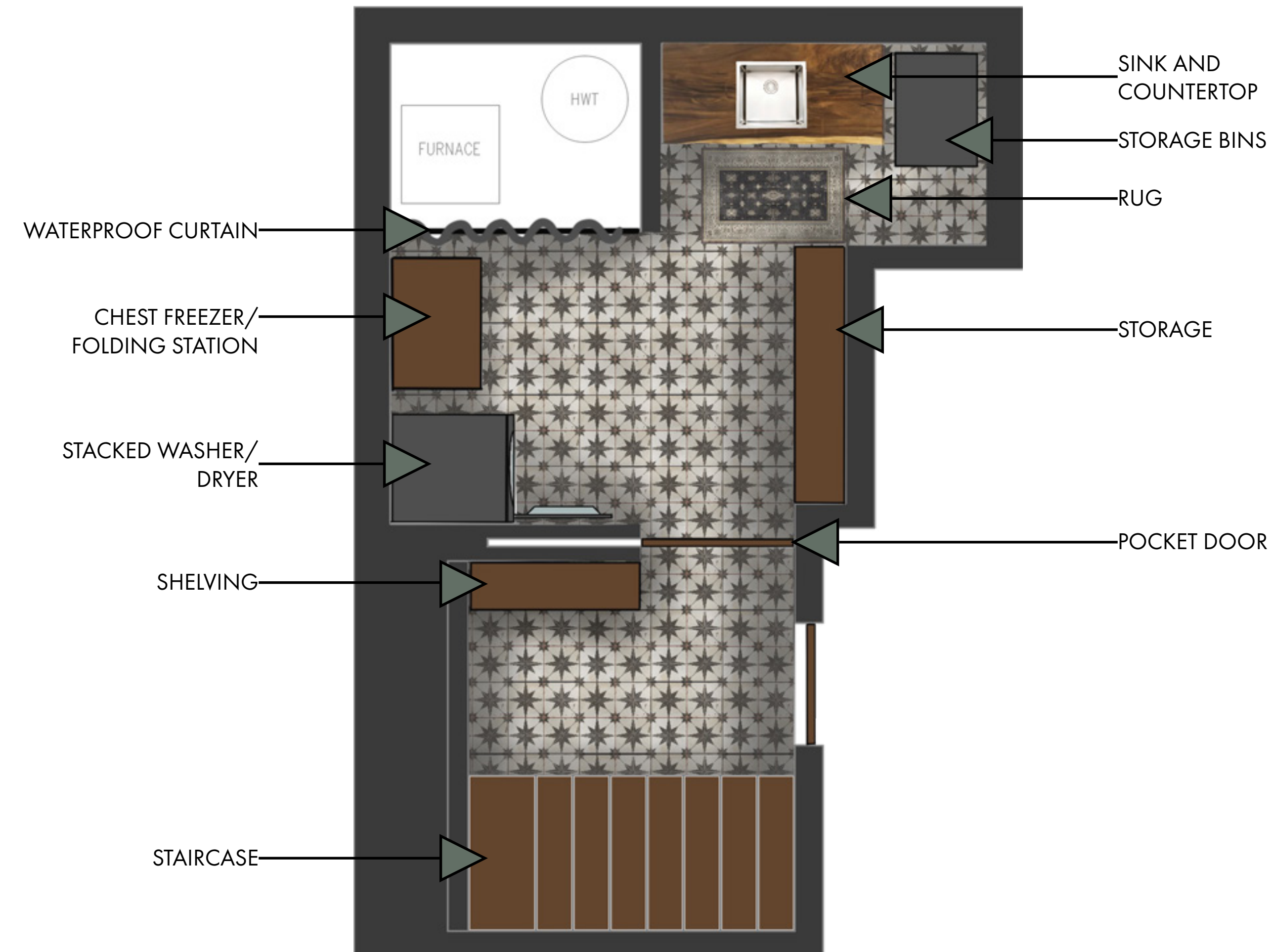
Adjustments:

- Retractable drying rack will not be installed in shelving unit and will be replaced with a heated drying rack on the wall.
- 2' open shelving will be installed in the middle of the two tower cabinet enclosures.
- Retractable ironing board will be installed in left tower cabinet enclosure here.

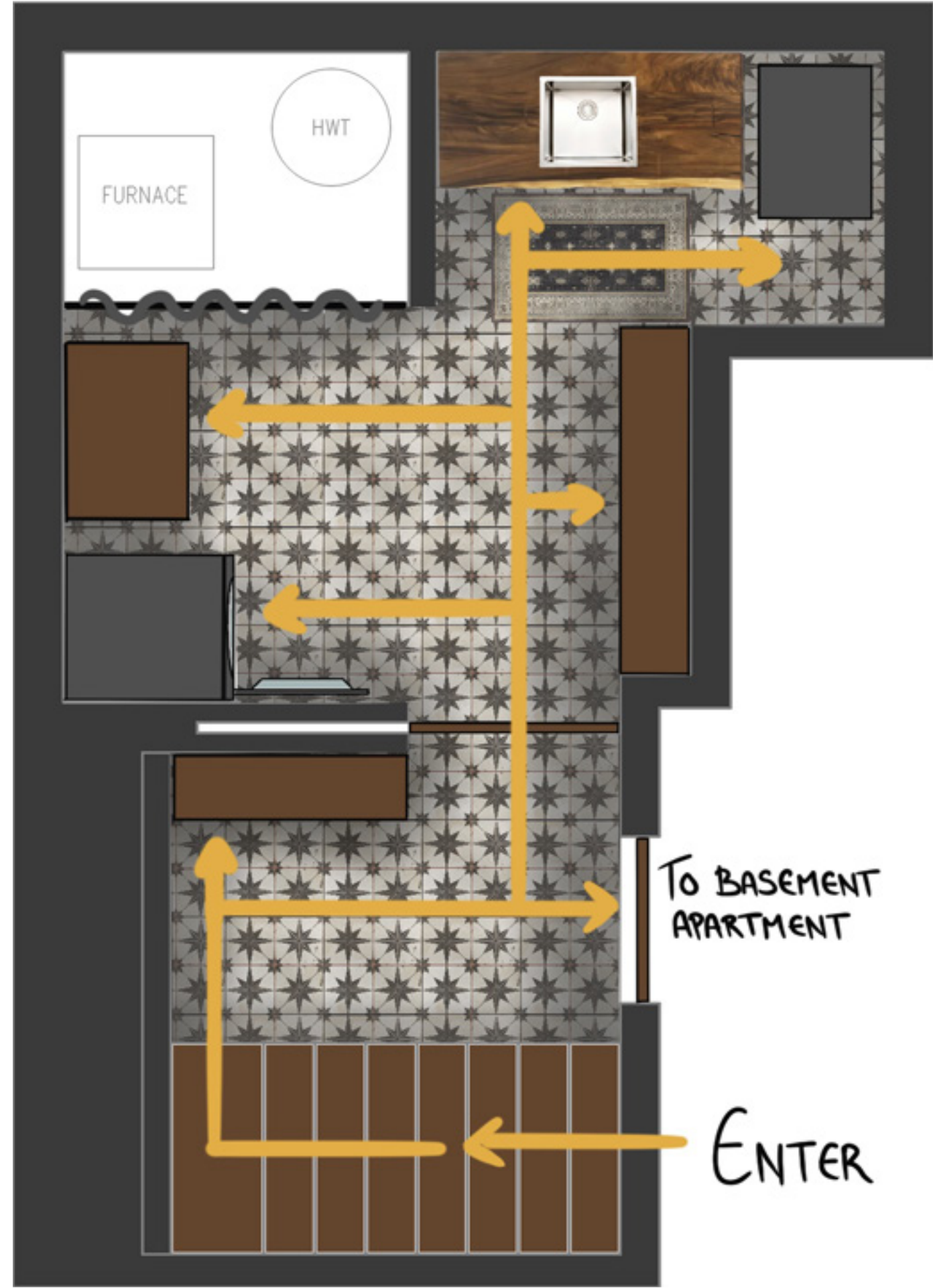
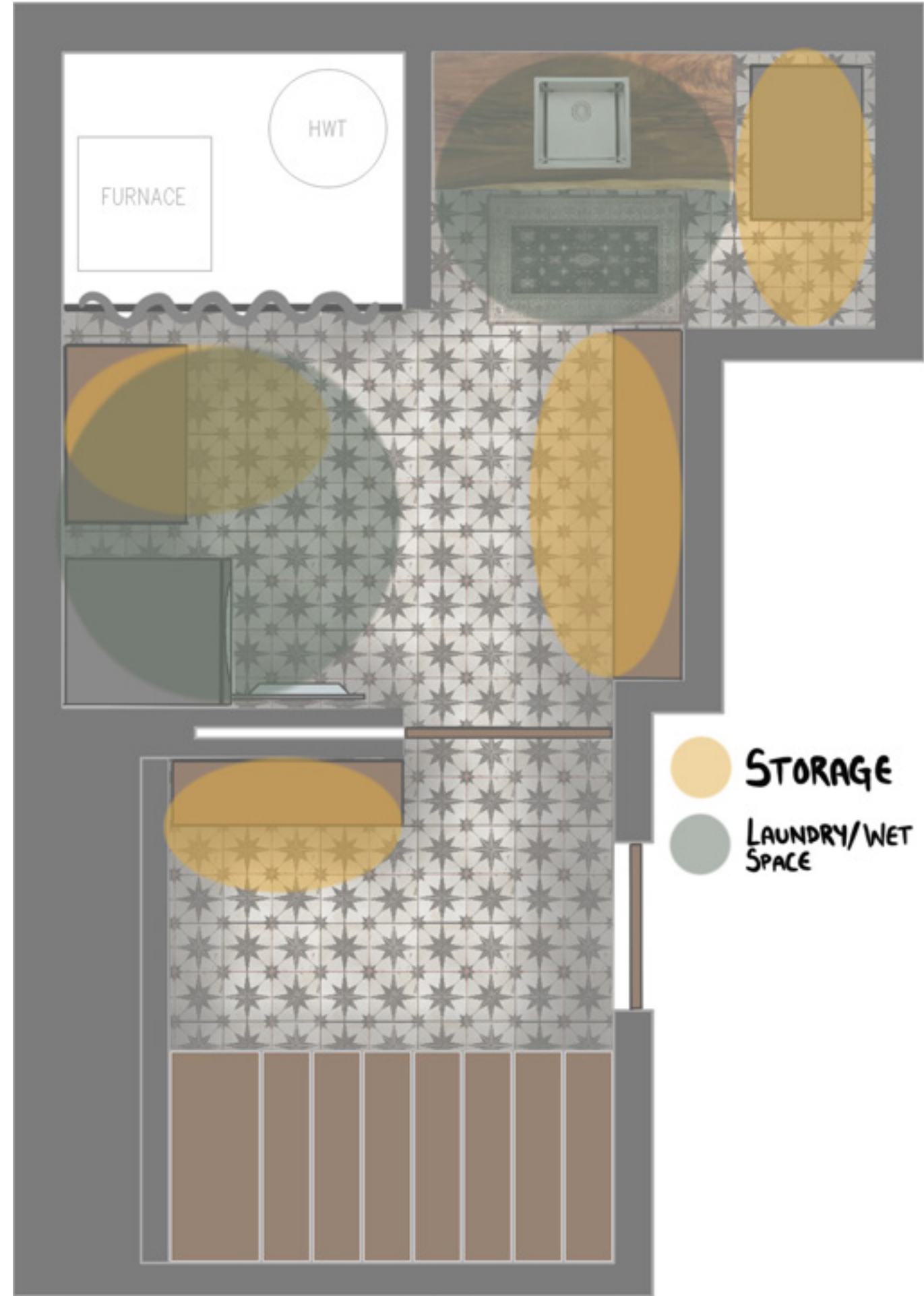


Design Development

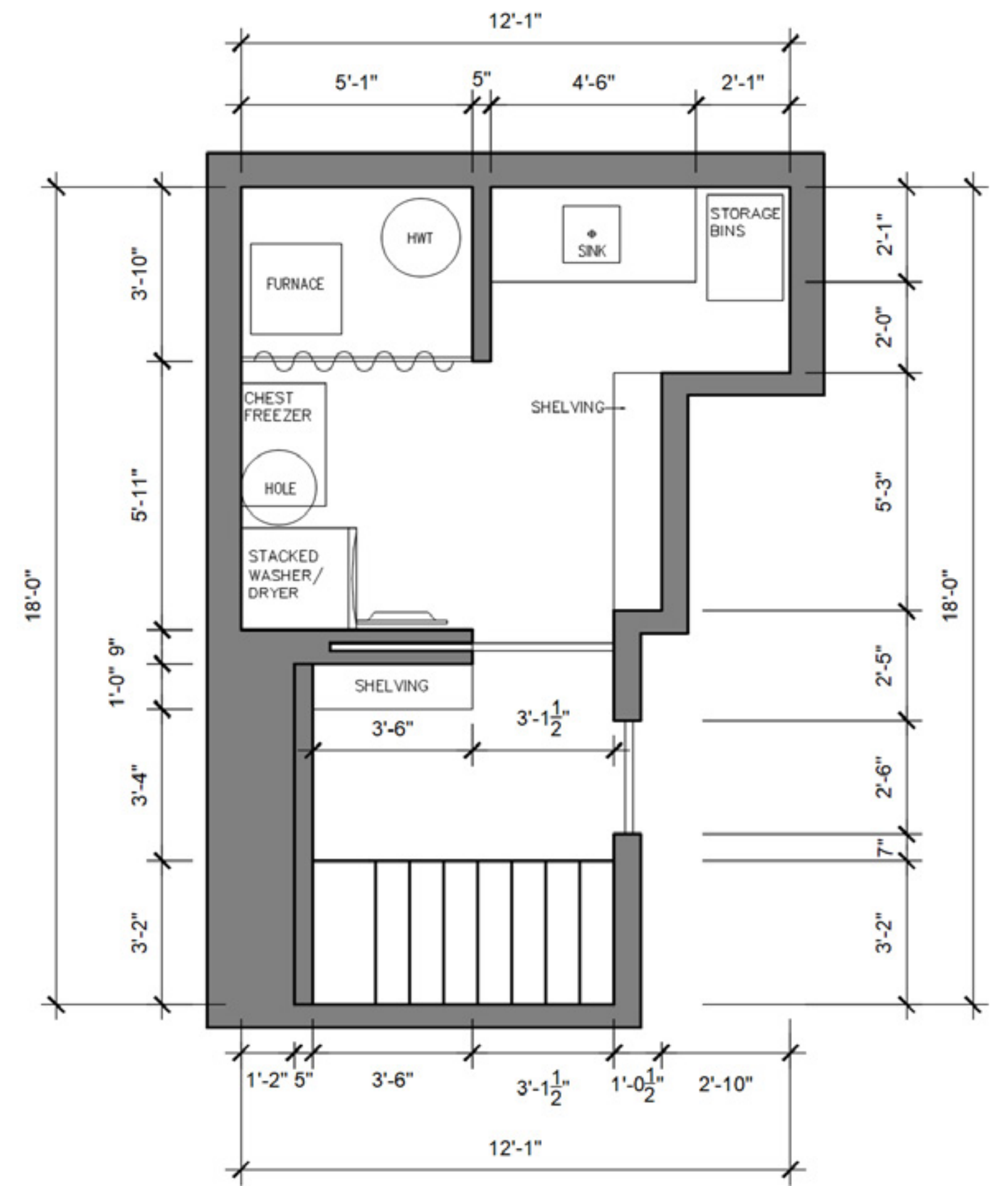
Finalized Floor Plan



Zones and Flow

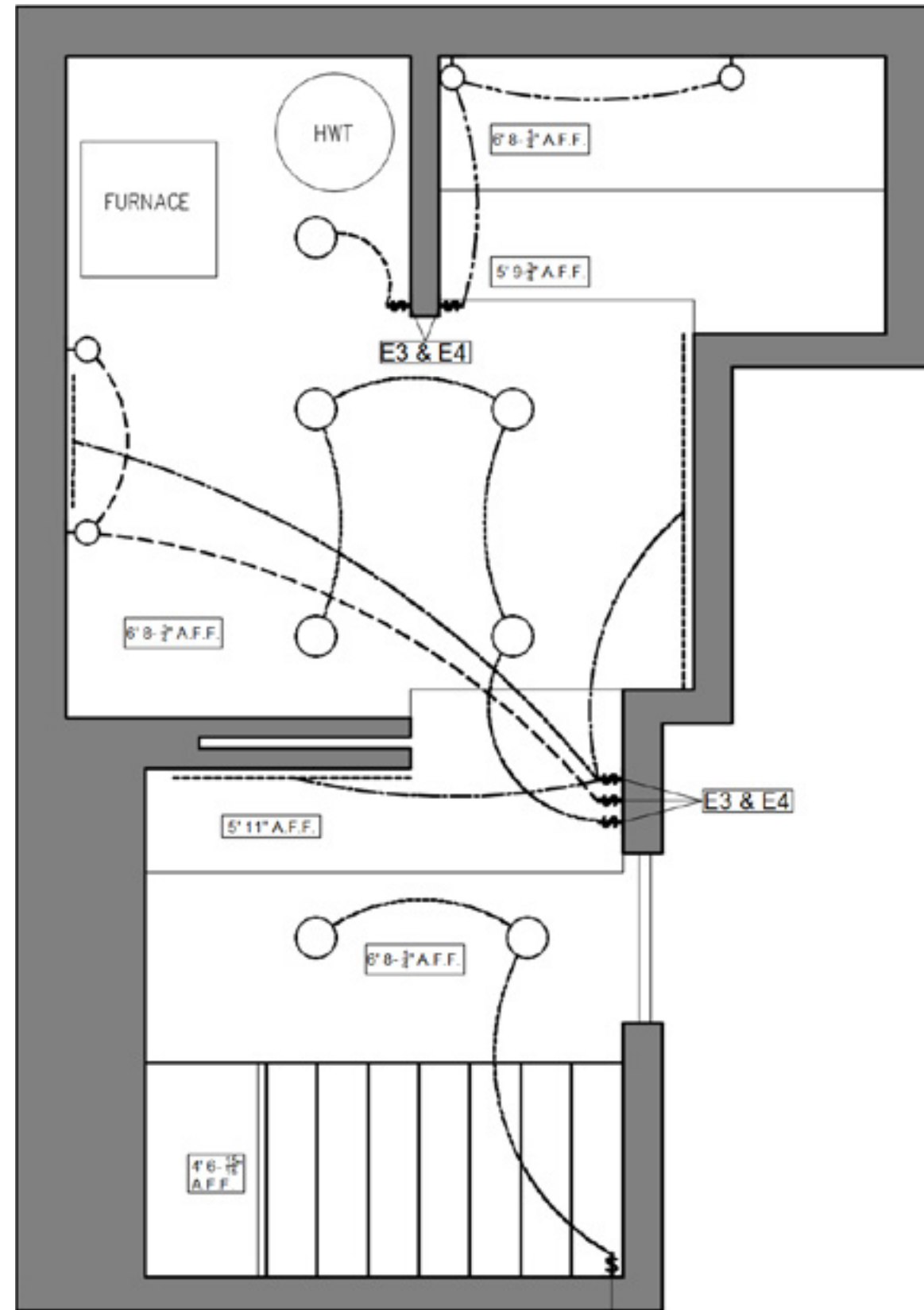


Dimensions



Reflected Ceiling Plan

Lighting



REFLECTED CEILING PLAN LEGEND

SYMBOL	DESCRIPTION
⏚	SINGLE POLE WALL SWITCH AT 46" A.F.F.
○	PHILLIPS HUE RECESSED DOWN LIGHT
---	LED STRIP LIGHTING
⦿	WALL SCONCE

FINISHES SCHEDULE

CODE	MATERIAL	COLOUR	FINISH
F1	PVC DROP IN CEILING TILES	BLACK	POLISHED
F2	PAINT	OCTOBER MIST (CC-550)	EGGSHELL

EQUIPMENT SCHEDULE

CODE	DESCRIPTION
E1	WALL PLATE
E2	LIGHT SWITCH



Please let me know if you like the switch placements, these can definitely be adjusted based on what you will likely use in each area.

Ceiling Finishes

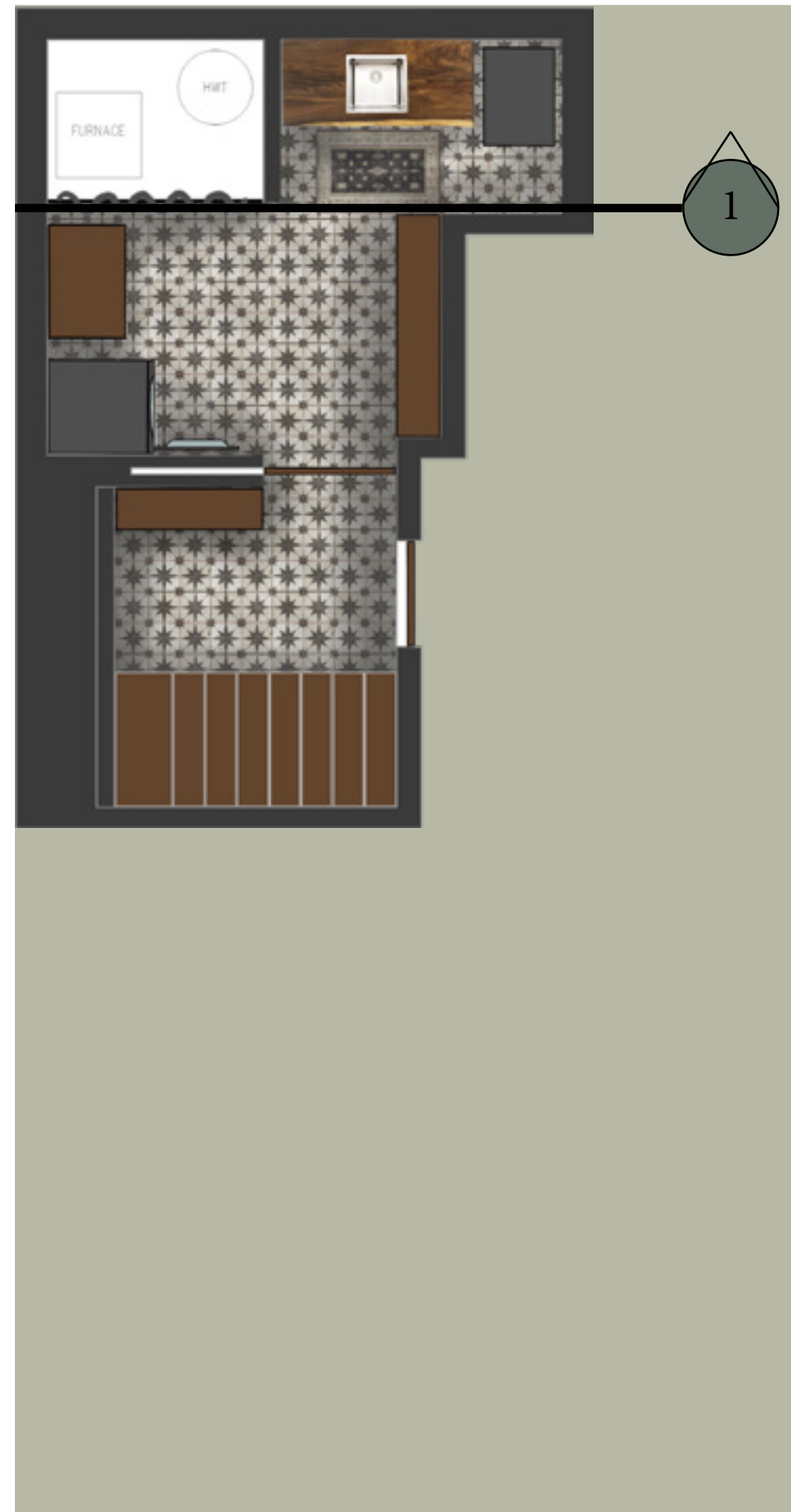


If you plan on doing a DIY drop in ceiling, I found [this site](#) that may be helpful. The video embedded is a full walkthrough.

Sample Board



1. Gracie Oaks Krishika Peel and Stick Wallpaper, *Wayfair*
2. Genesis Antique Black Ceiling Panel, *Home Depot*
3. Moen Weymouth Gold Single Hand Smart Touchless Pull Down Sprayer Faucet with Voice Control and Power Boost, *Home Depot*
4. Merola Tile King Star Nero Ceramic Floor and Wall Tile, *Home Depot*
5. Feelyou Vintage Floral Fabric Baoque Theme Waterproof Fabric, *Amazon*
6. Skull Shaped Resin Planter, *AliExpress*
7. Brass Libre Forme No.22 Cabinet Pull, *Casson Hardware*
8. Handwoven Water Hyacinth Wicker Basket, *Amazon*
9. Verena Dark Wood Rug, *Ruggable*
10. KSP Spa Apothecary Jars, *Kitchen Stuff Plus*
11. Torre & Tagus Geometric Black Cat Statue, *Amazon*

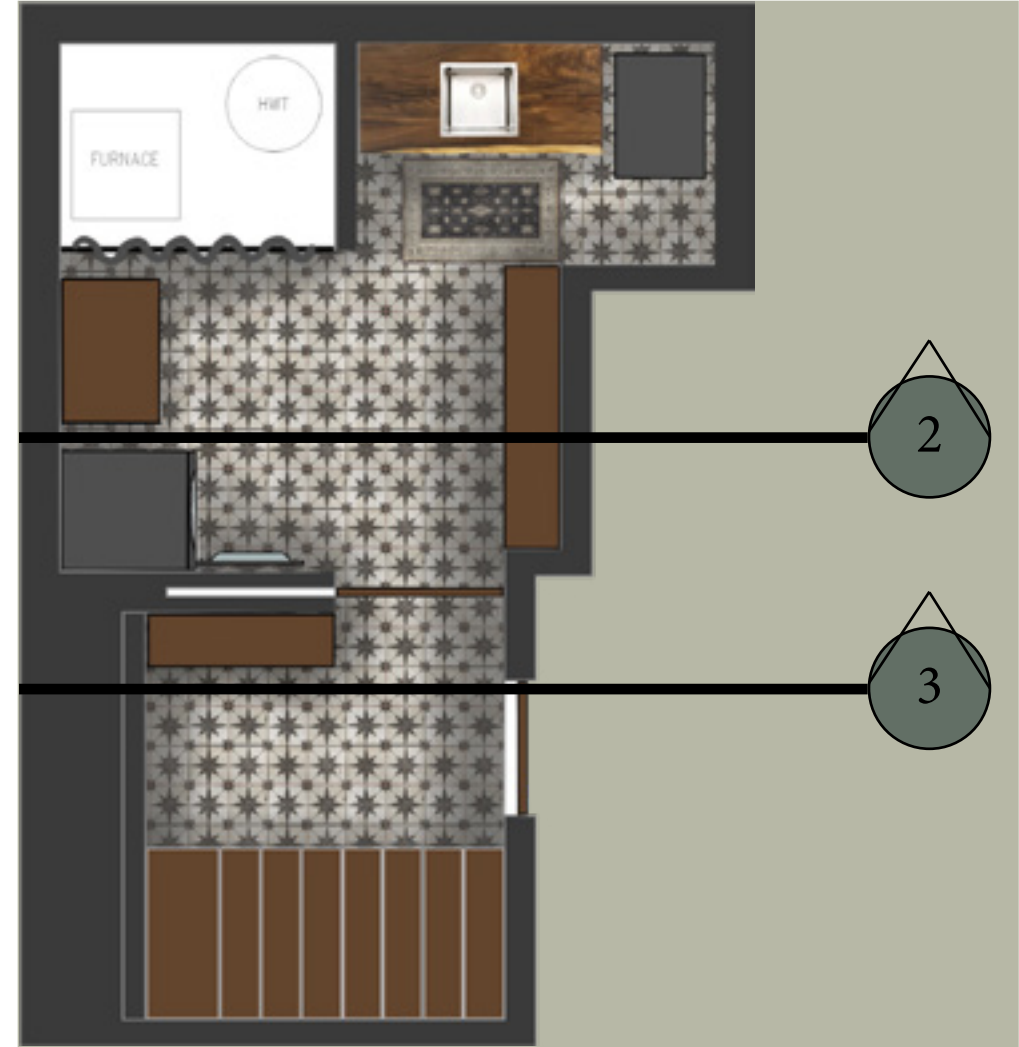


Elevation 1



General Elevation Notes:

- Please see the key floor plan on the left of each page to understand which wall elevation you are looking at.
- Floor tiling are also used for wall tiles as a backsplash behind sink.
- Peel and stick wallpaper will be used throughout the space. If you are not a fan of wallpaper, we can rework the space with paint/tiling instead.
- Either LED strip lighting or Monios grow lighting can be used, though we will lose 1.36" if we use the grow lights. Let me know what you would prefer, depending on the size of the plants you decide to use. With the current design, we have 8-9" of space in between the shelving.
- Apothecary jars and plants do not need to be used everywhere, these are just fillers for any cleaning products or decorations you would like to use instead.
- Many of the decor items sourced can be found elsewhere/ thrifted. These are merely suggestions.

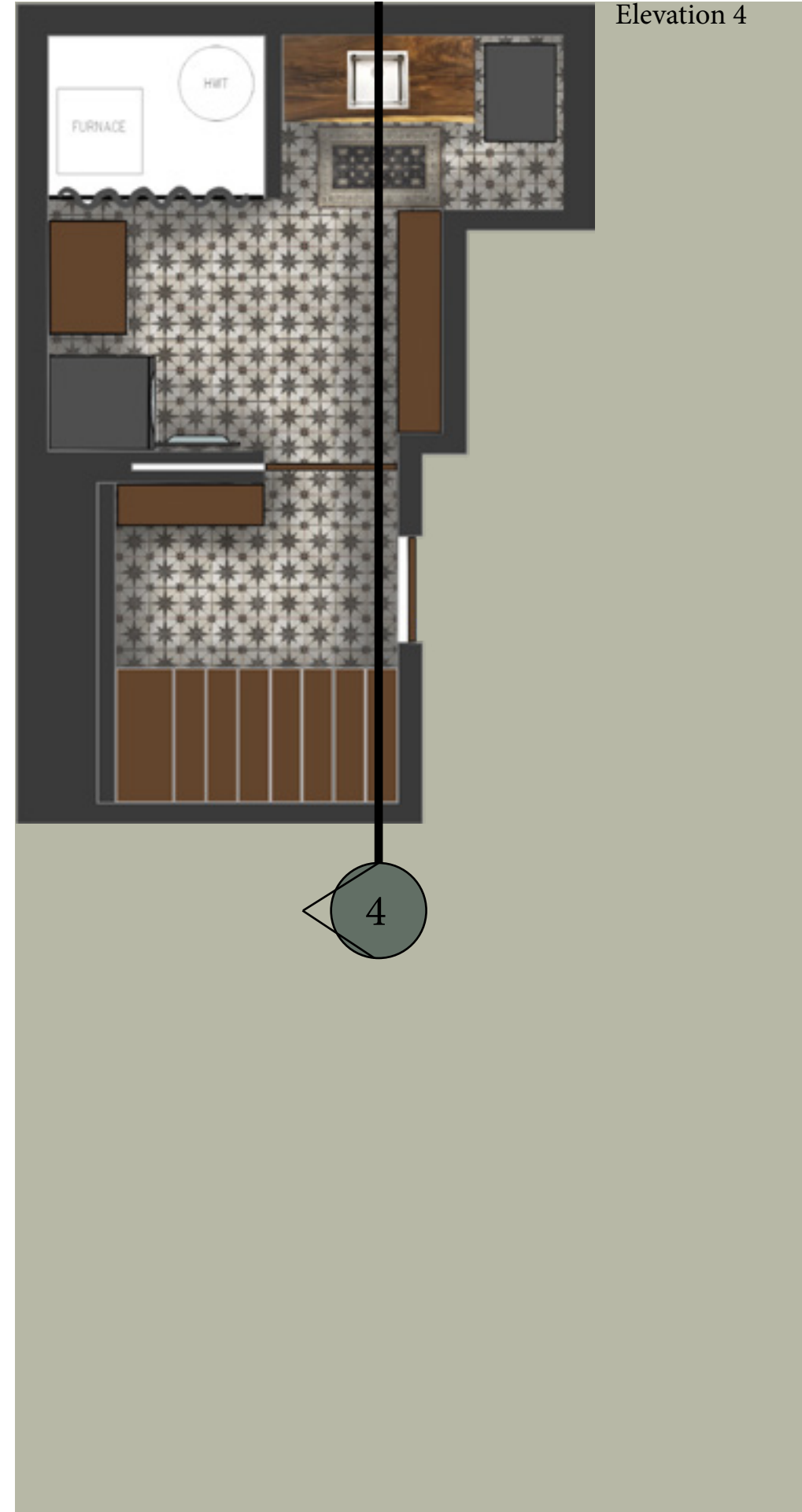


Elevation 2



Elevation 3

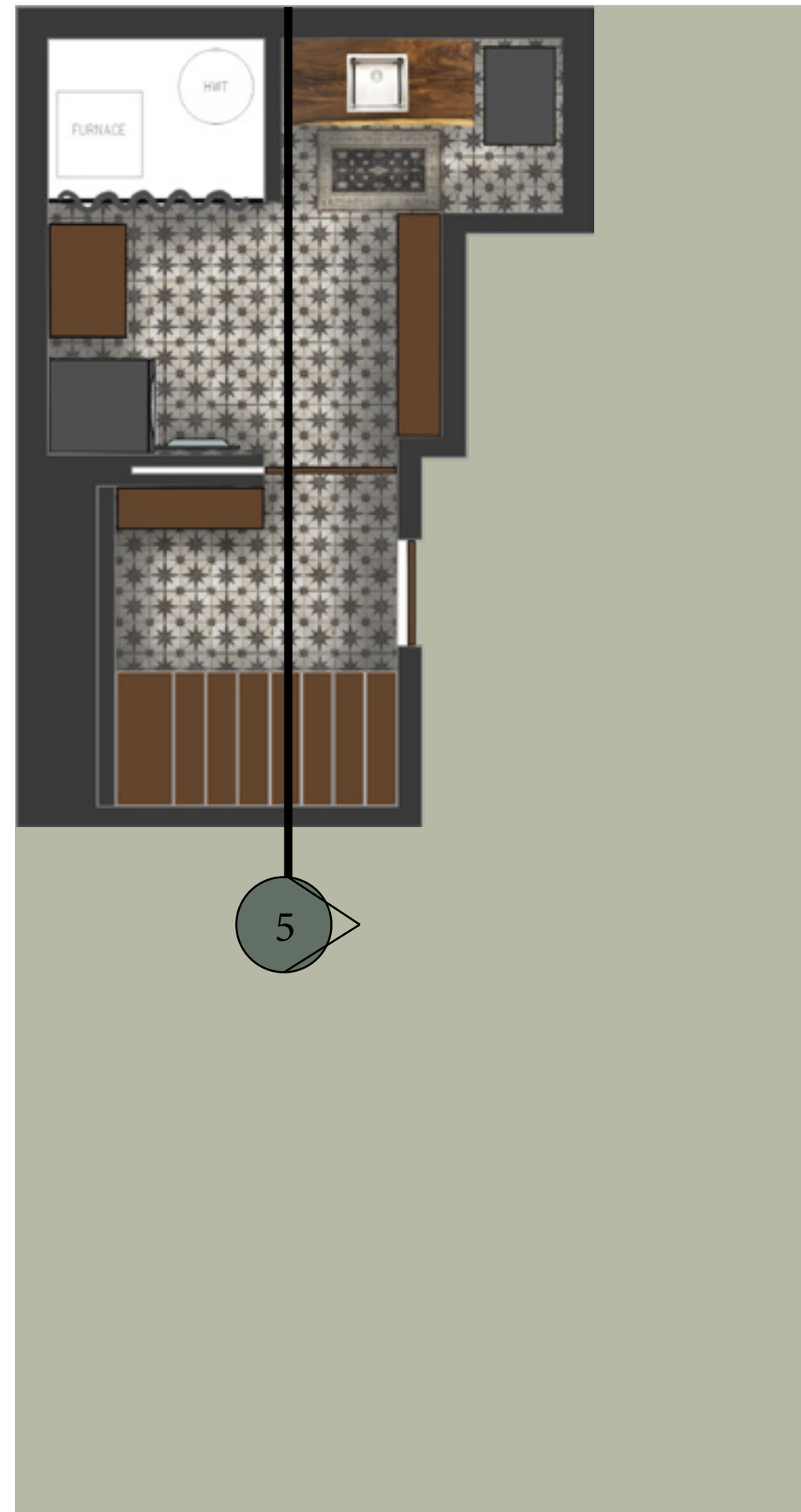




Elevation 4

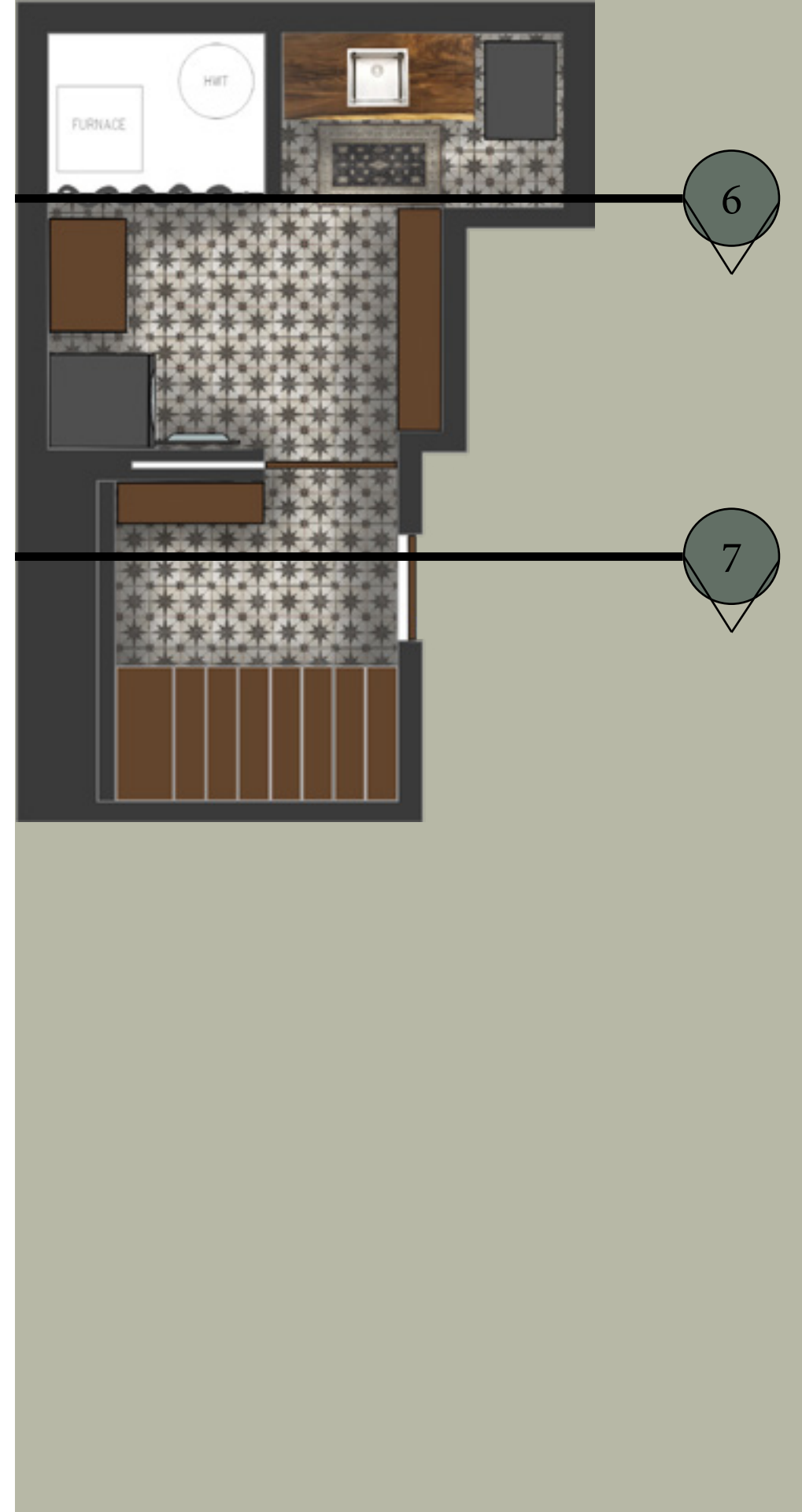
Elevation 4





Elevation 5

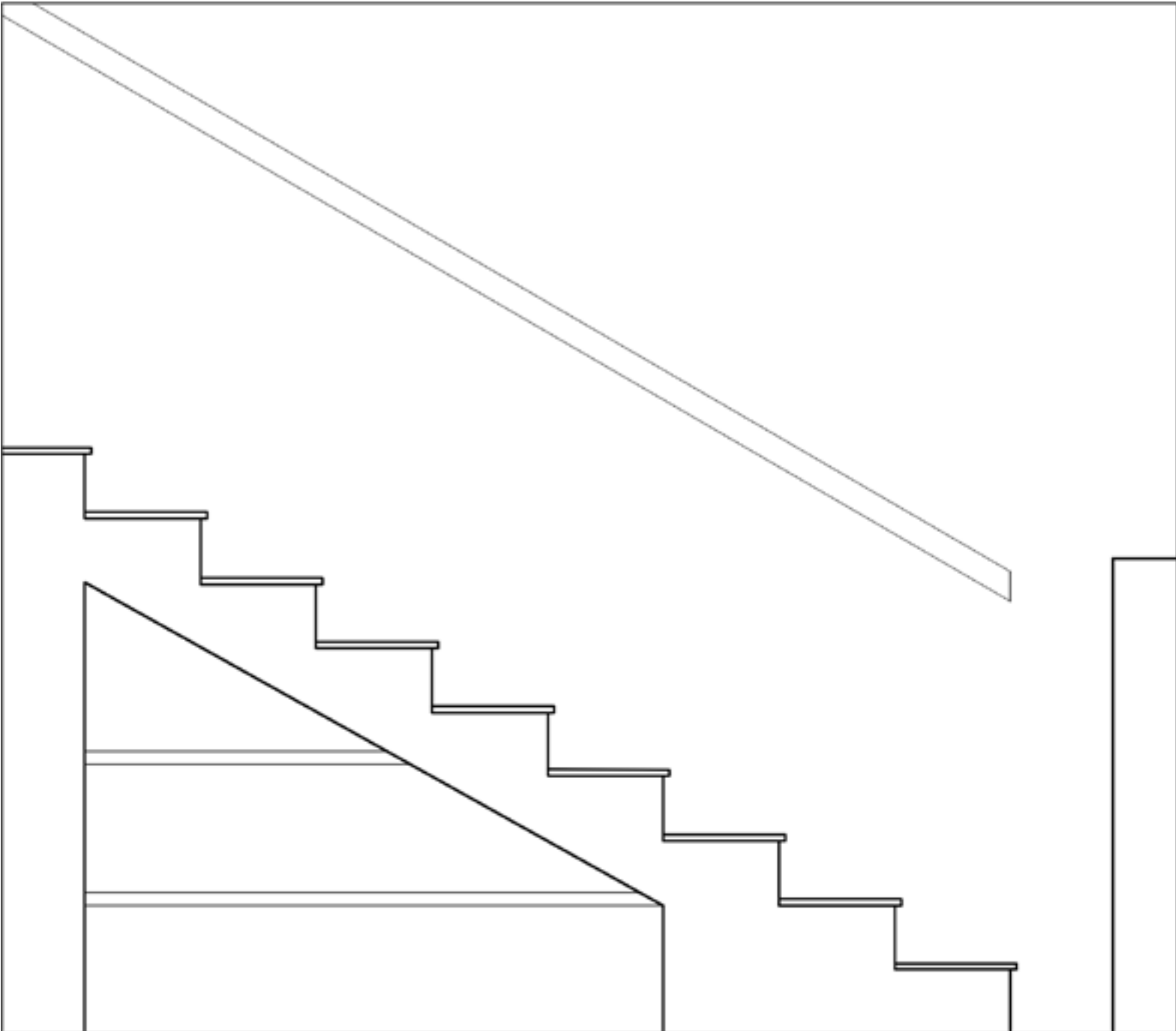




Elevation 6



Elevation 7



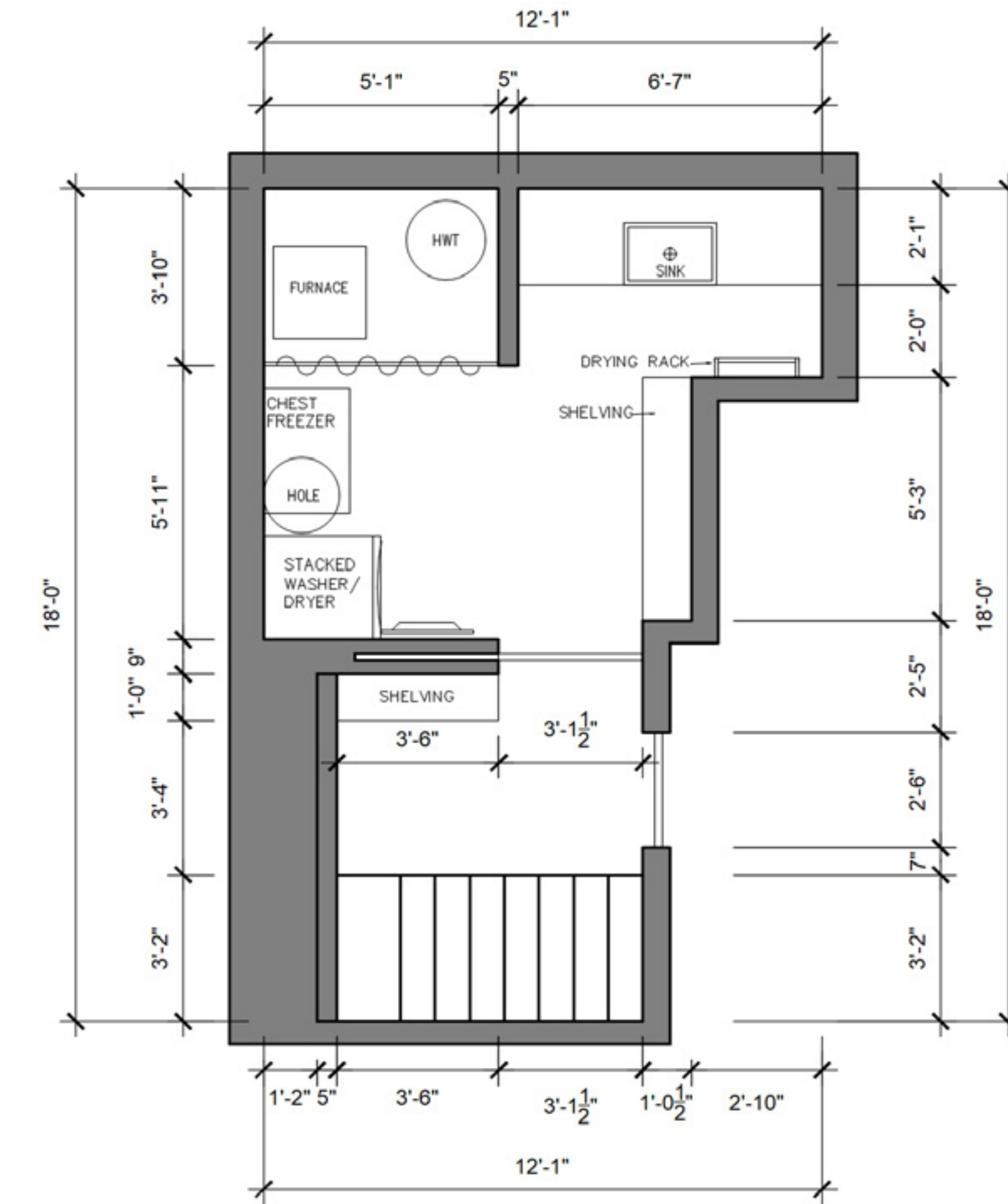
This is not an accurate drawing of the staircase. Because of tight clearances at the landing and no railing on the open side of the staircase, we would likely have to redo them. I'm not sure if this is something you are interested in doing, but if you are, we can add storage underneath. This drawing is just a quick ideation with storage added.

Revisions

Revised Floor Plan

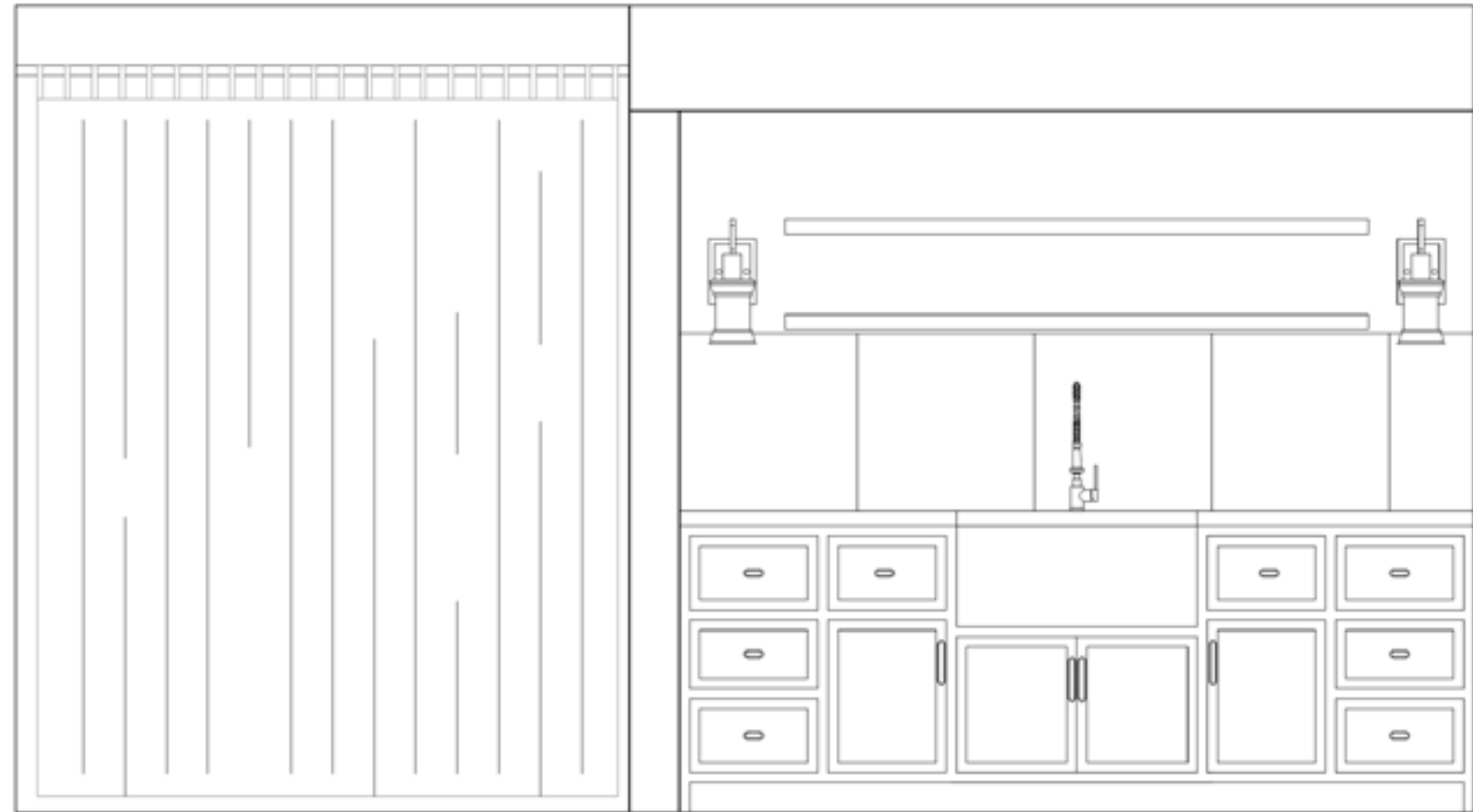
Changes and Adjustments to New Floor Plan:

- Drying rack added
- Wider and longer sink replaces the smaller sink
- Countertop extended to the end of the wall
- Storage bin area removed



Revised Elevations

Elevation 1



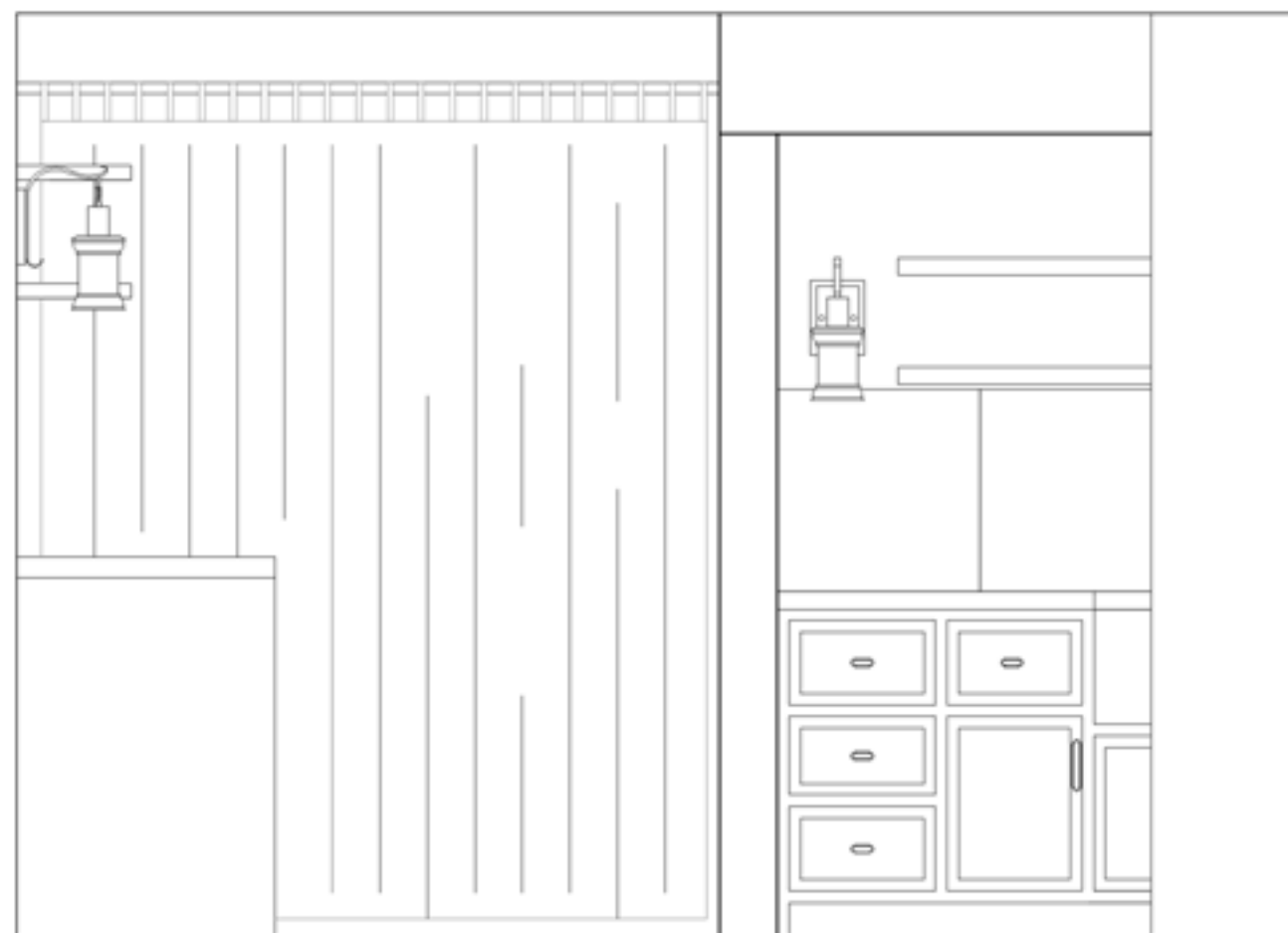
Countertop extended to the end of the wall.

Storage bin area removed.

Floating shelves extended.

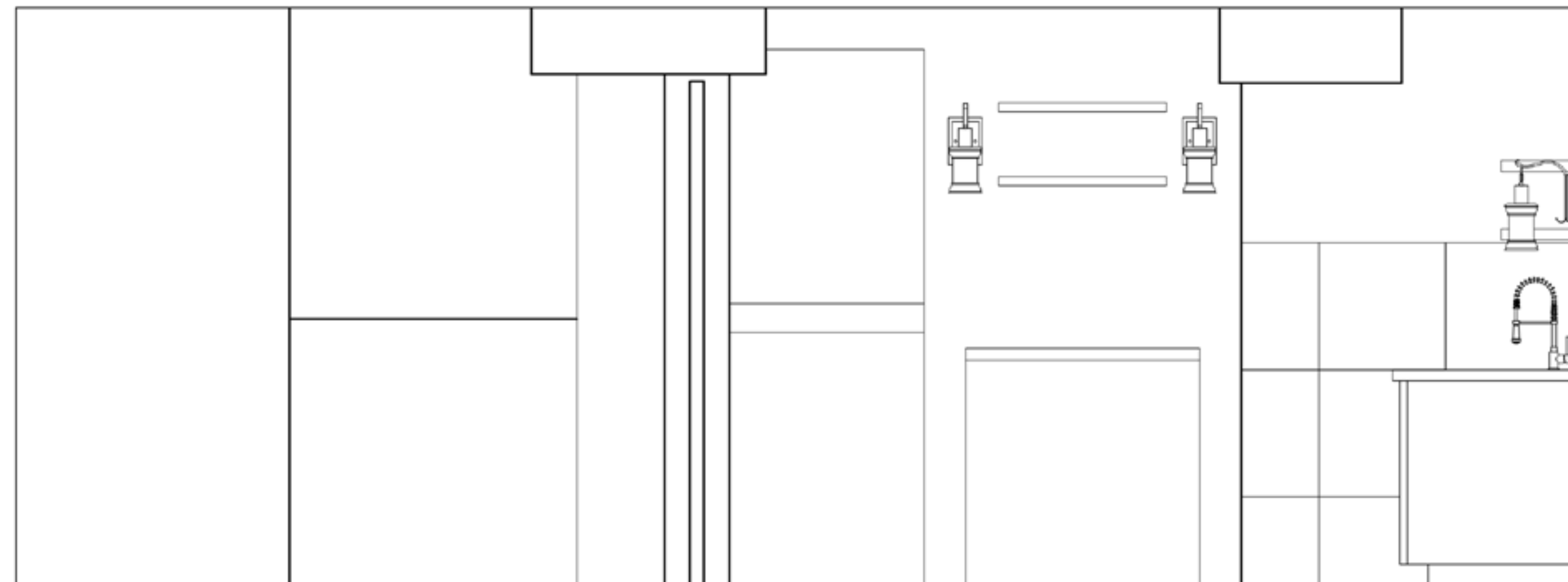
Larger Farmhouse style sink replaces smaller sink.

Elevation 2

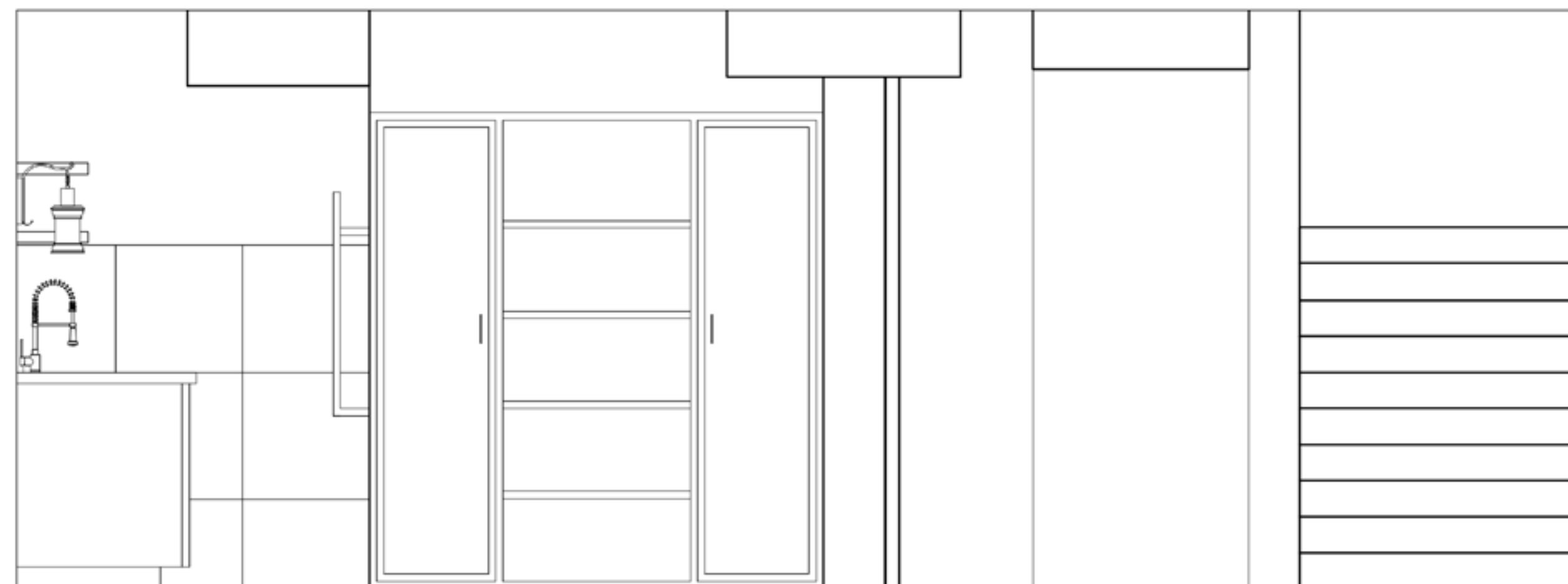


Revised Elevations

Elevation 4



Elevation 5



Tiling and wallpaper added to wall where storage bins were once located.