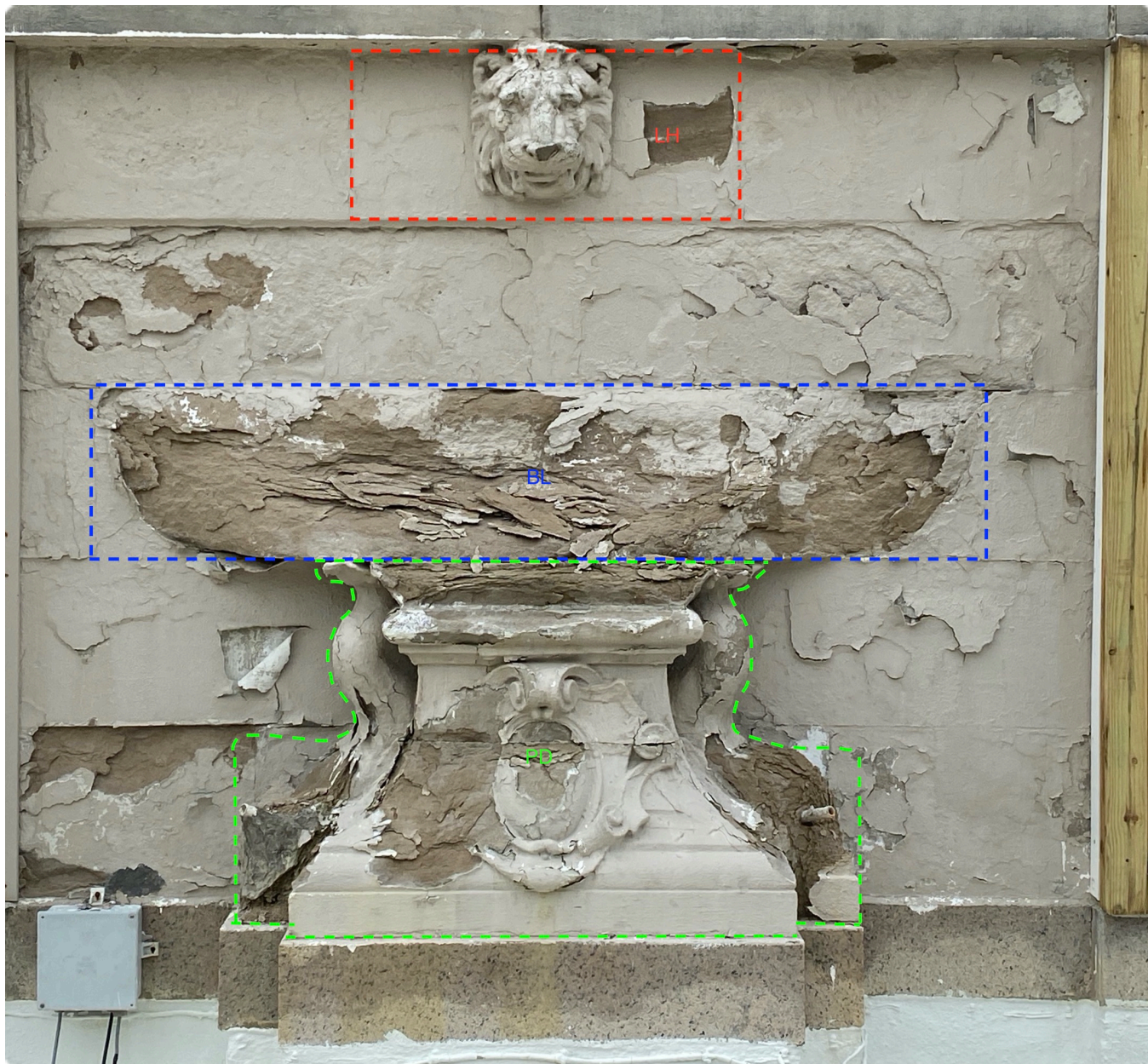


Hennessy Hall

# Carved Elements - Design Proposal



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**Prepared for Jeramie Muff, KNAPP MASONRY**

**Jan 2, 2023**

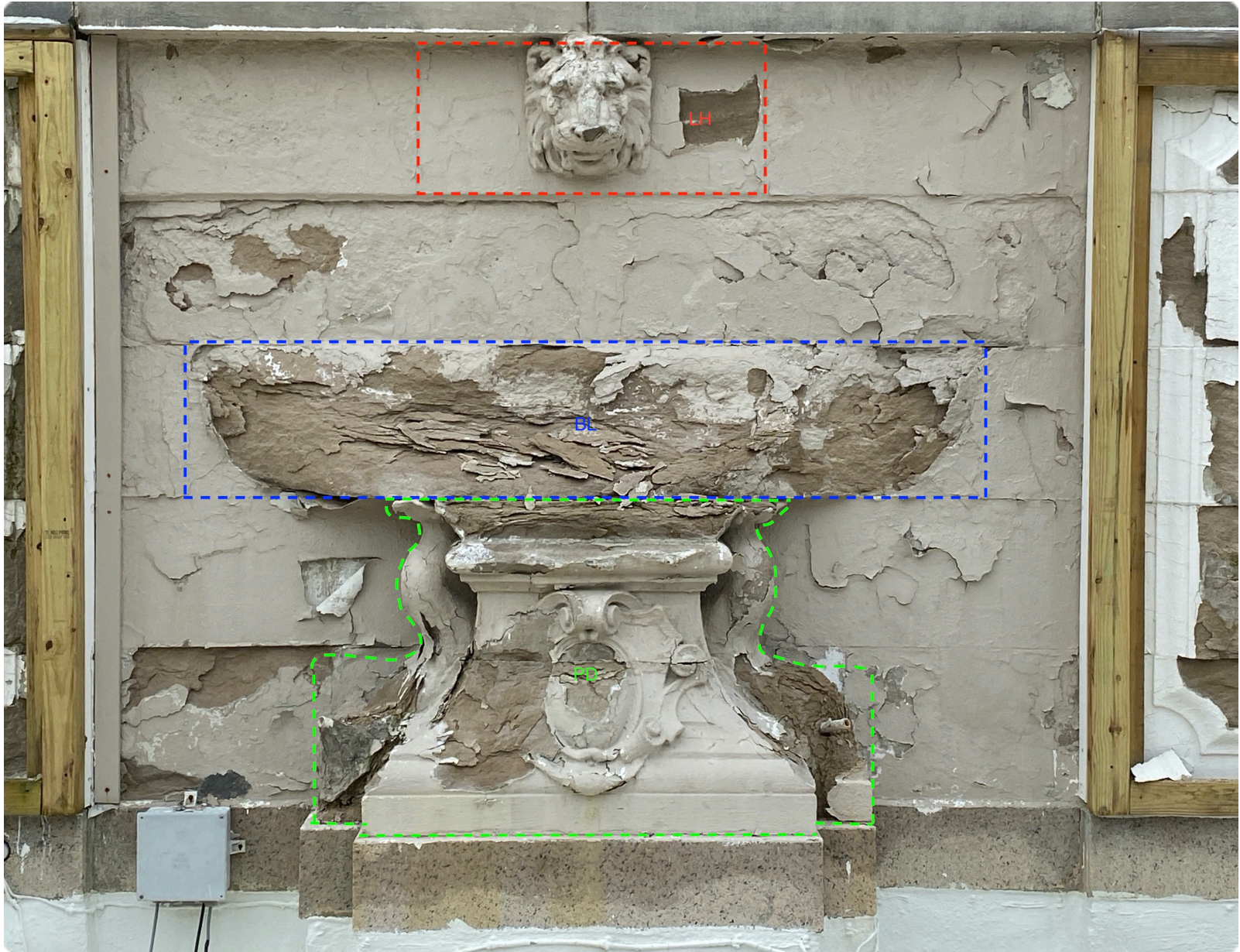
**Revised Jan 23, 2023**

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## SCOPE



- \* Replace three stones: Lion's Head (LH), Bowl (BL), Pedestal (PD)
- \* Document original measurements and design, where it exists.
- \* Recreate lost carved elements (dolphin fish) with the use of historic photographs.
- \* Offer design modifications to address presumed flaws in the original design.



## LION'S HEAD

### Existing Condition

The Lion's Head is almost entirely intact. A small section of the nose has been lost. The carving was coated with a thick sealant that hides fine carving details. The sealant appeared to be cementitious. It was mechanically removed with fine chisels.





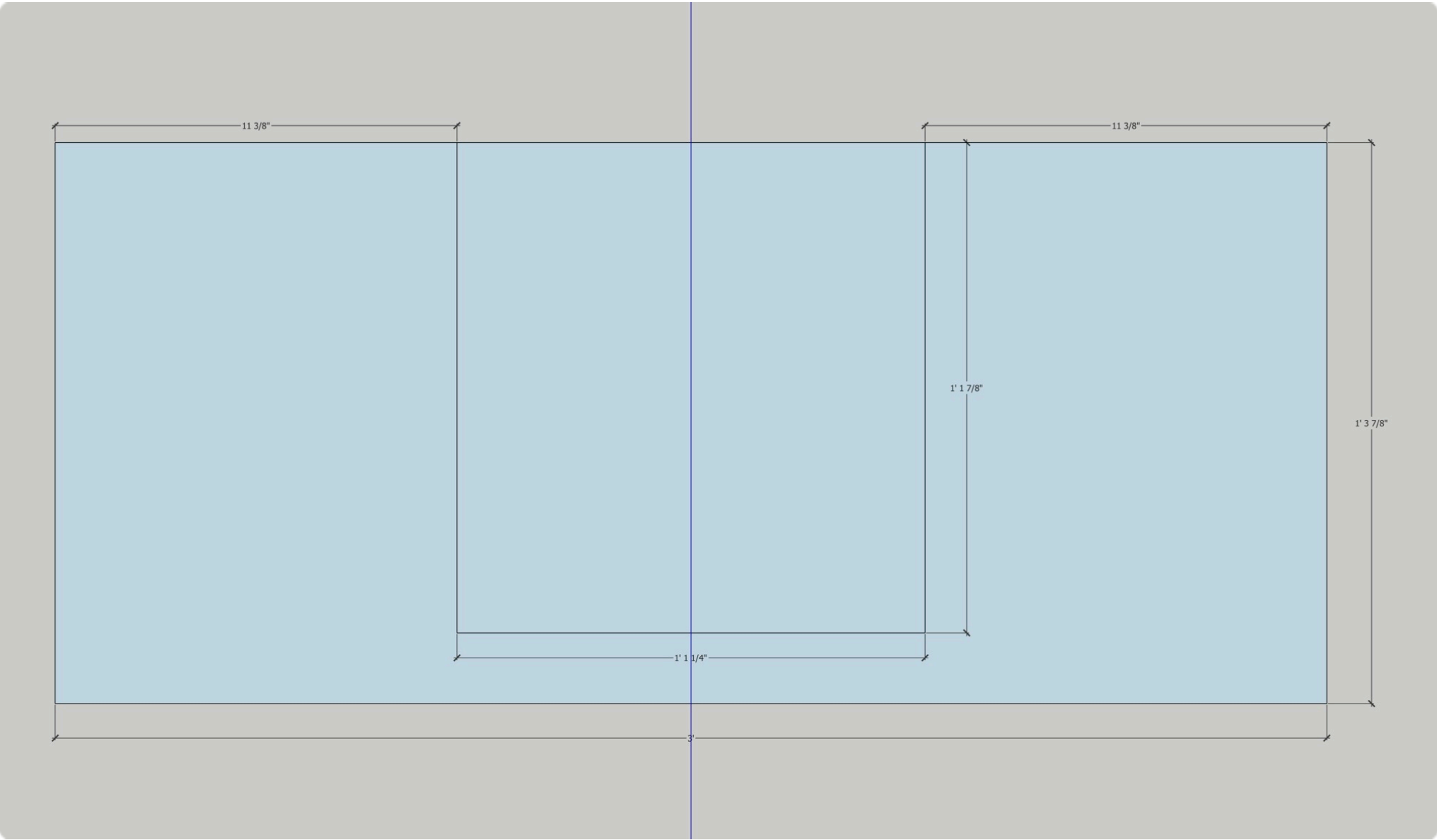




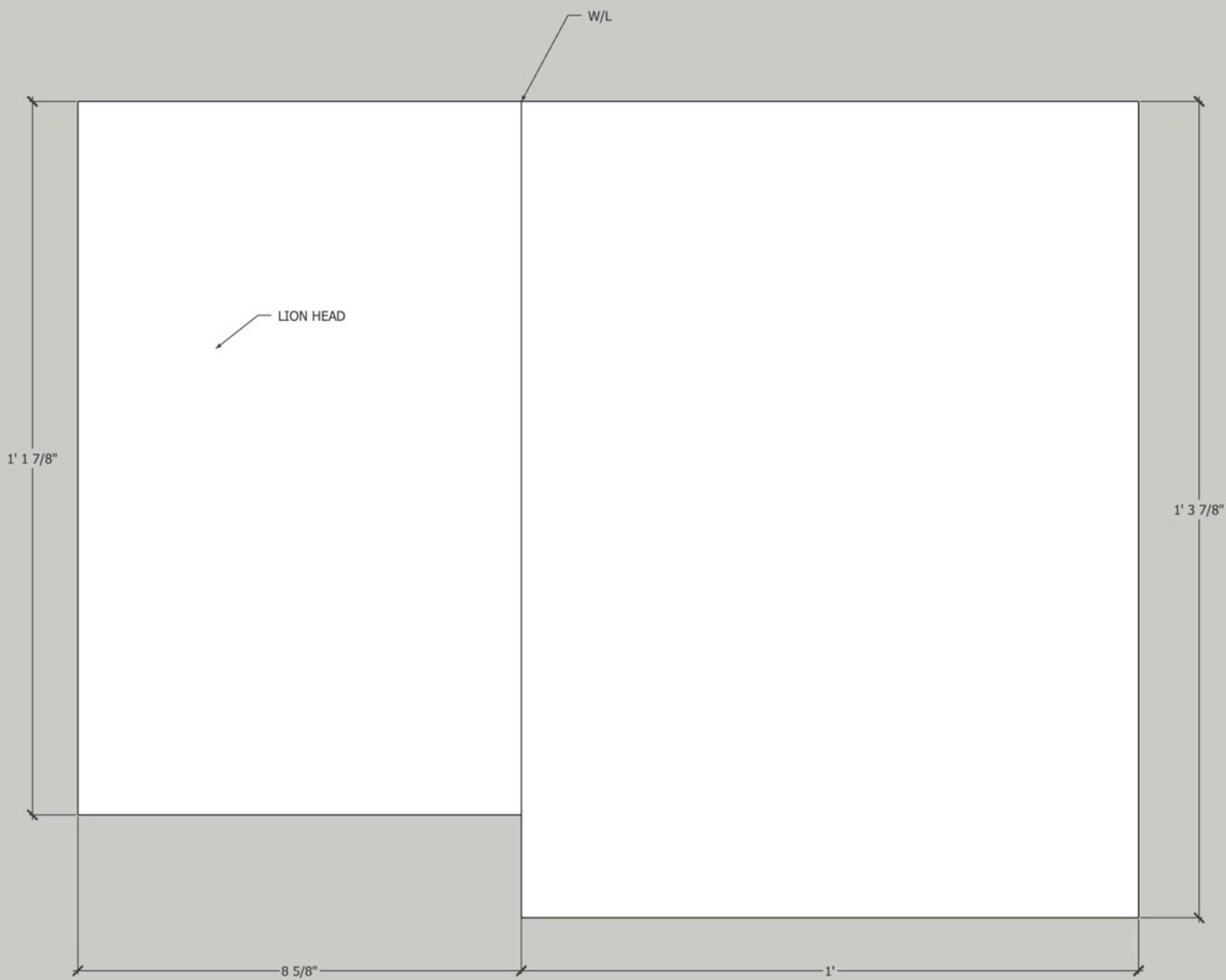




# Dimensions



Front Elevation



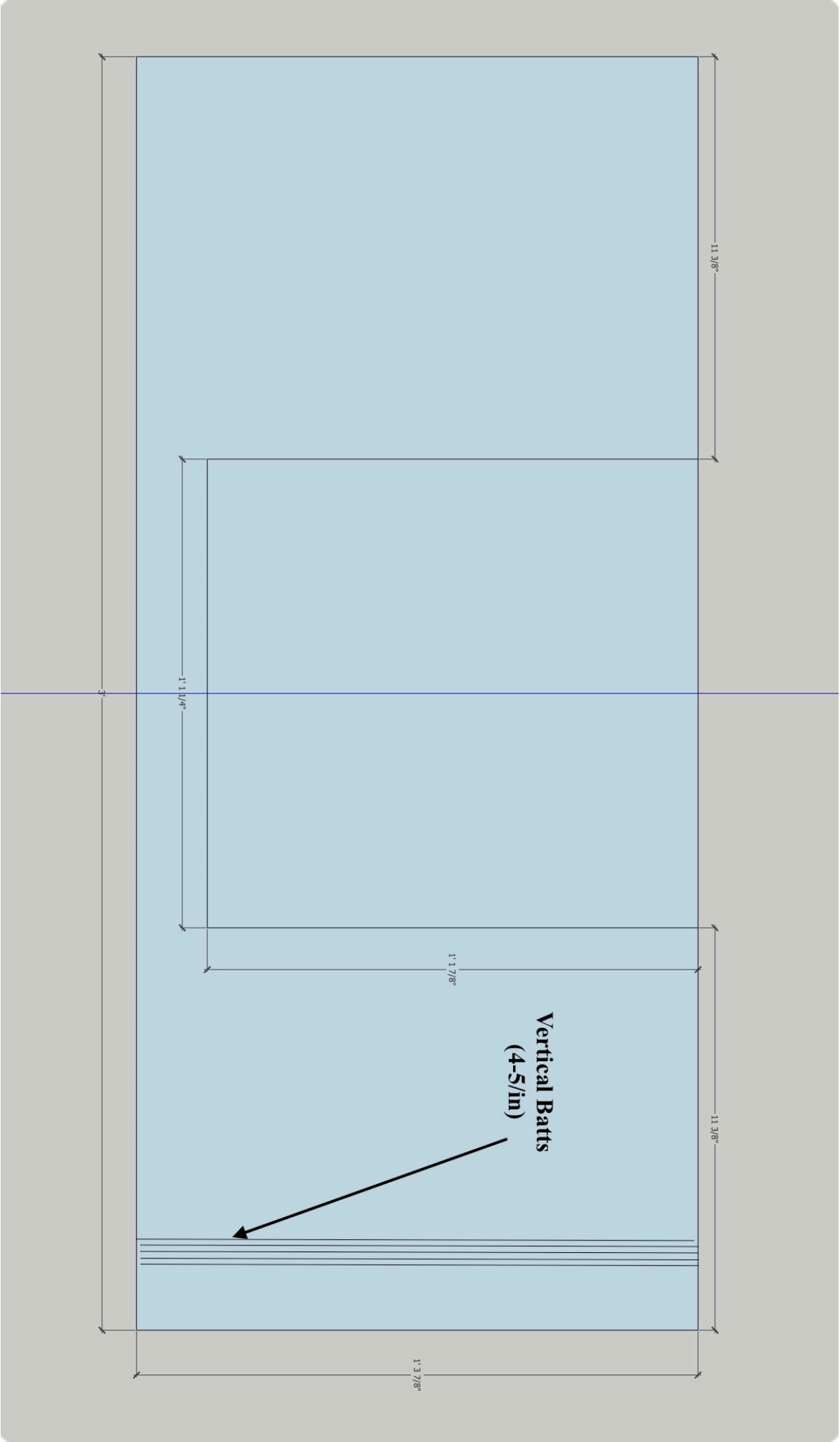
*Right Elevation*



# Tooling

The carving surface will have a chiseled finish. The ashlar surface will be vertically batted, 6 batts per inch.

Front Elevation (\*corrected to 6 batts/inch)



## Replacement Design

The lion's head will be recreated with the use of a manual pointing "machine" which will transfer dozens of three dimensional points from the original carving to the new stone. The remaining carving will be shaped with visual reference to the original.



Source: *Wikipedia.org*



## Water Detail



*The original water supply pipe with a fan-shaped spout.*



# BOWL

## Existing Condition

The bowl had been fractured by blunt force many years prior. Only a few inches from the wall face remains. What remains shows the exterior profile of the bowl, including the rim moulding.



*The rim moulding is an ovolo measuring 3 3/4" H, 1 1/2" W.*

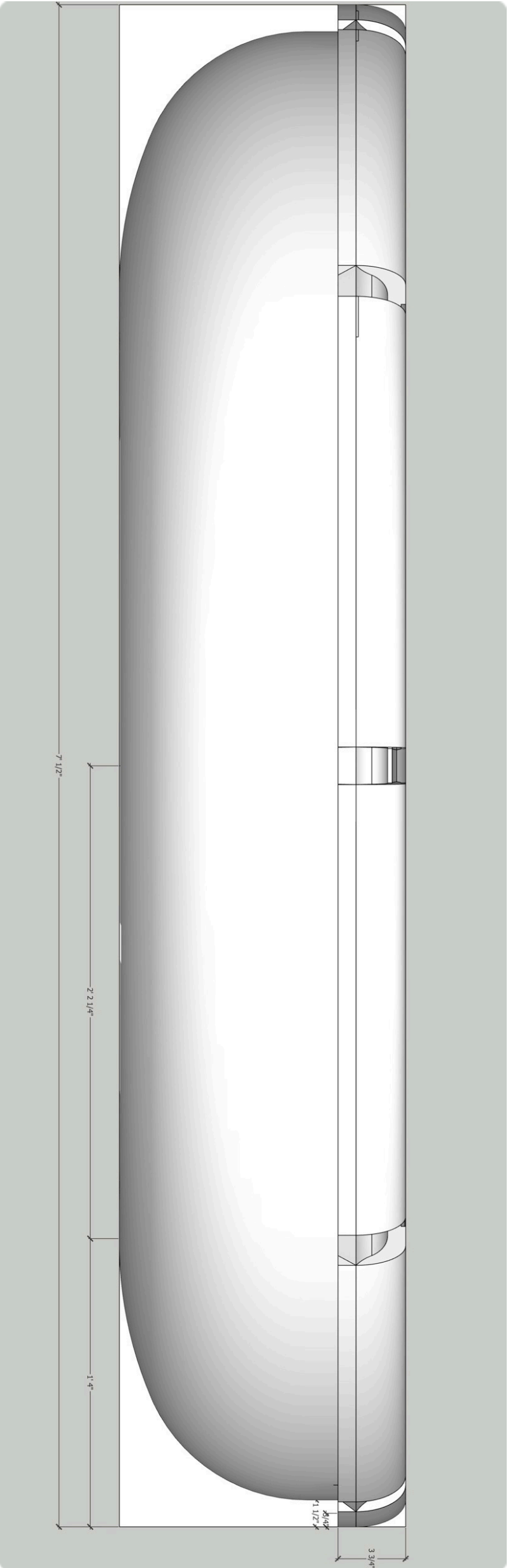
*The drip edge appears flat and measures 1" deep*

*Below the rim moulding the exterior bowl appears circular with approximately a 10" radius. Tangents extend the circle to 16" from the left and right arris.*

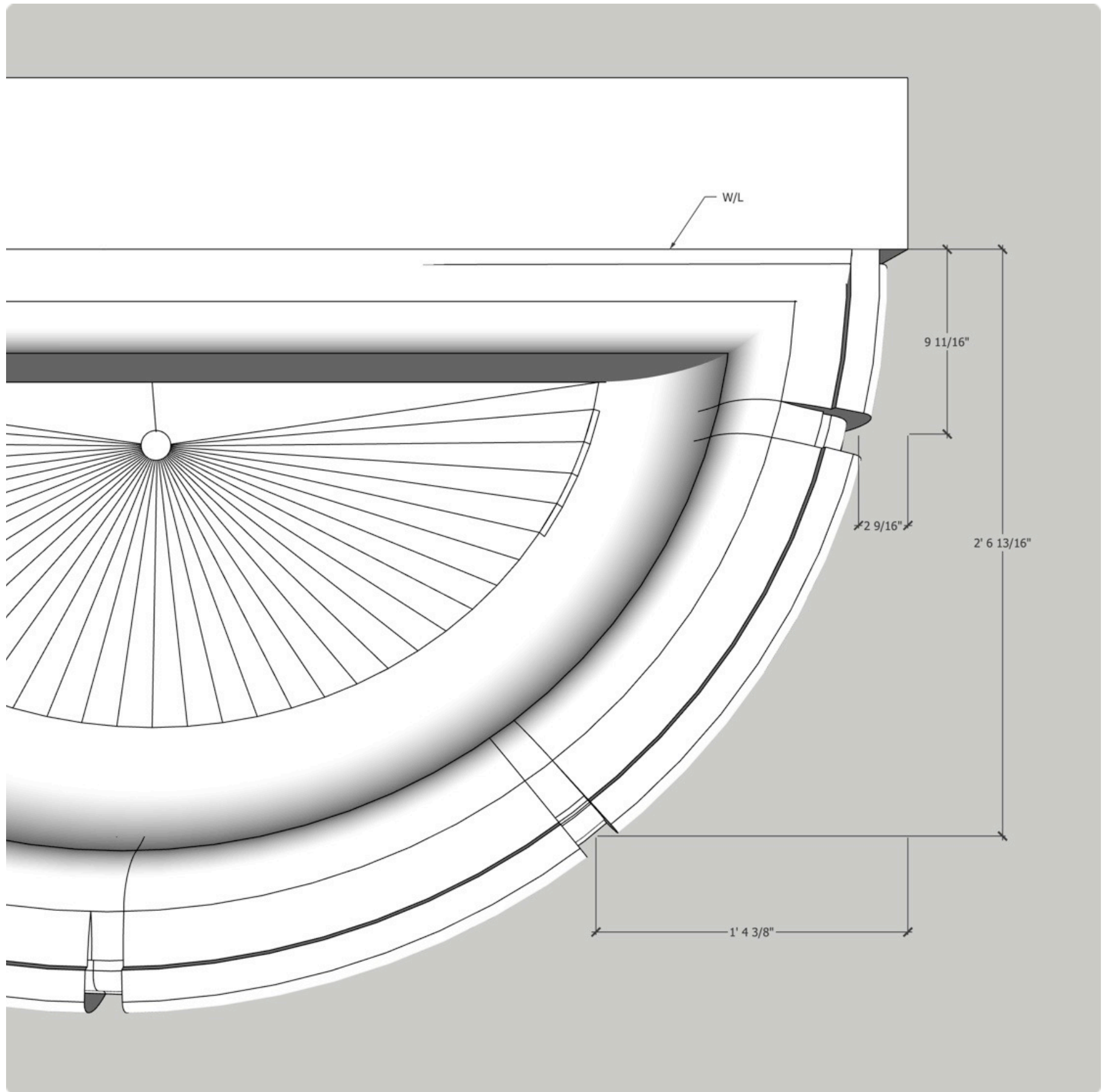




## Dimensions

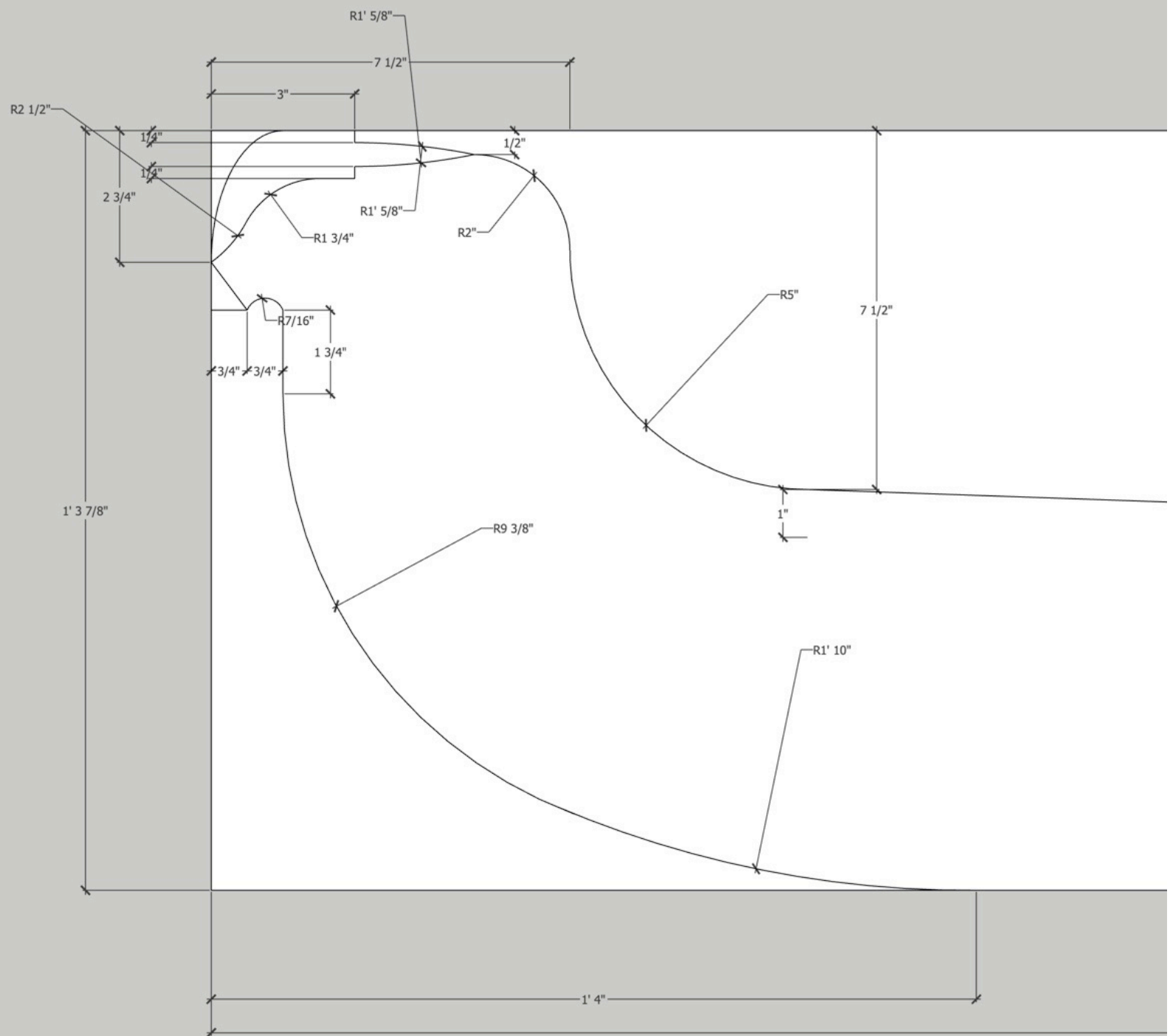


Front Elevation (overall height is 15 7/8") \*note design modification to scuppers on page 19



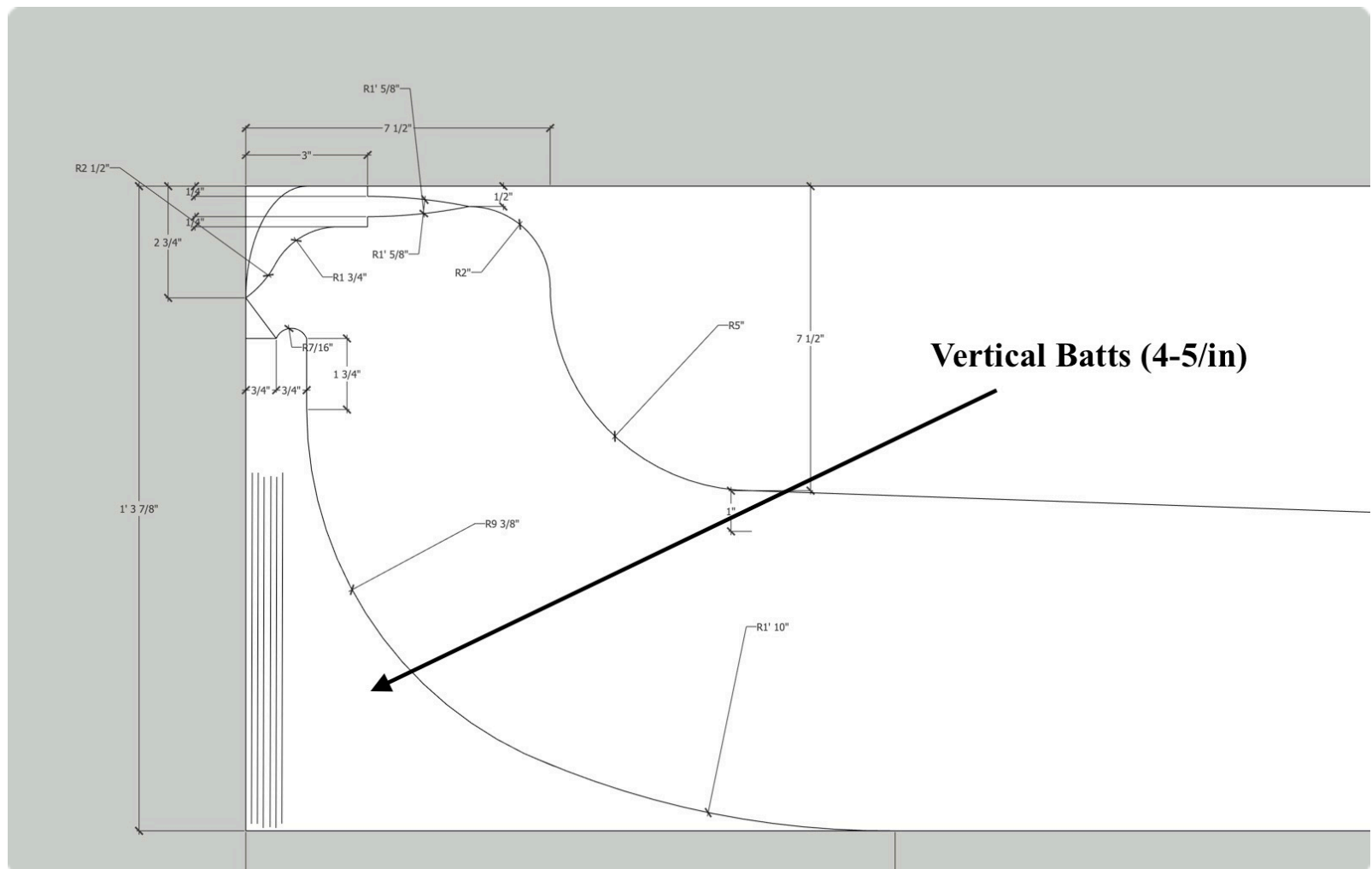
*Plan View - showing location of scuppers \*note design modification to scuppers on page 19*





*Detail of mouldings: the rim moulding (top left corner) copies the original ovolo but with a 1.5" drip edge (3/4" flat, 3/4" undercut); the scupper moulding is a cyma recta, which water enters 3/4" below the top of the rim moulding; the walls of the bowl are a minimum of 6" thick and depth is 7.5", draining to a maximum of 8" at the location of the drain. \*note design modification to scuppers on page 19*

## Tooling



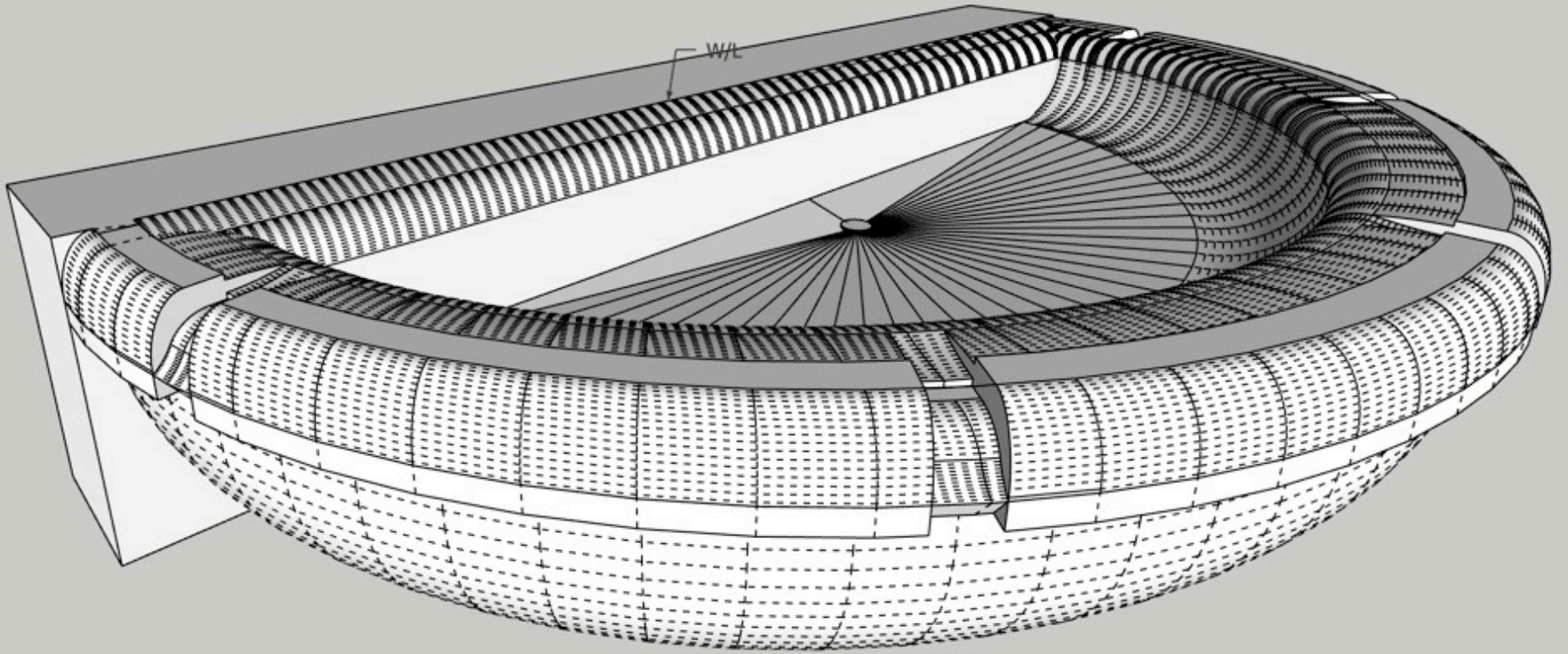
*The ashlar surface will be vertically batted, 4-5 batts/in (\*corrected to 6 batts/inch)*



*The flat underside of the bowl will be battled along the depth of the stone 4-5 batts/in (\*6 batts/inch). The rounded exterior surface will be sanded.*



## Replacement Design



*See modification to scupper on page 19*

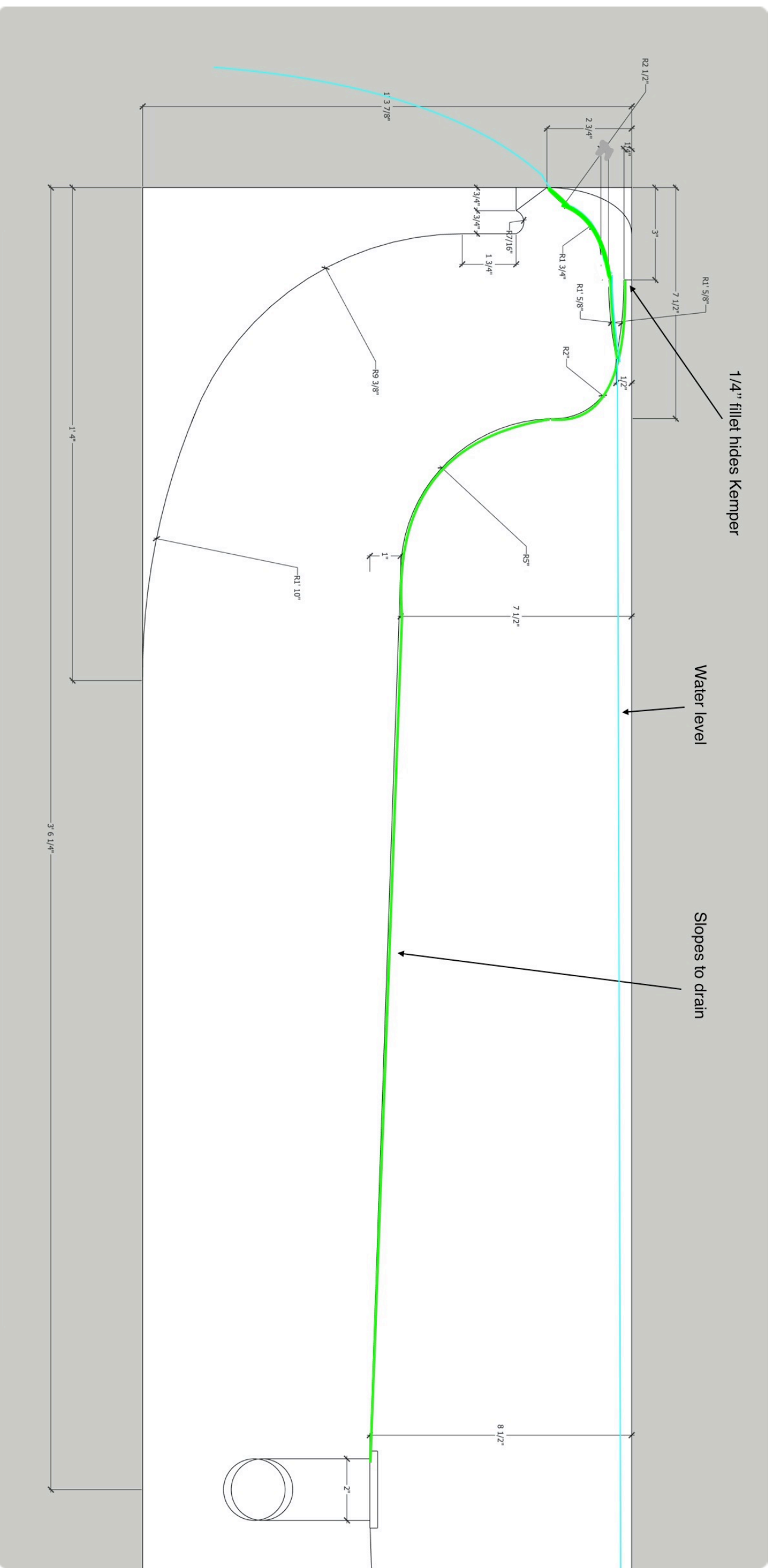


## Water Detail



*Clay maquette showing modification to scupper design*





*Detail of water level and movement: the water enters the scupper 1/2" below the top of the rim. The cyma recta moulding should slightly project the water as it exists the scupper.*



# PEDESTAL

## Existing Condition

Although severely worn, the pedestal still provided all moulding dimensions and all the required dimensions of the cartouche. The existing condition of the dolphins provided information on the body, tail fin, and some outline of the pectoral fin.









## Historical Photographs

Photos provide a front and side elevation of the dolphin's head, albeit deteriorated and coated. These photos show the style of "dolphin" that was originally carved, which wildly strays from the architect's design - more of a dog-like fish than an anatomically correct dolphin. It is the original carving that I am attempting to replicate, not the architect's drawing, and to limit original design to elements that are completely missing. We can assume from these photographs that what originally existed had greater detail which had either deteriorated or been muted by the coating.

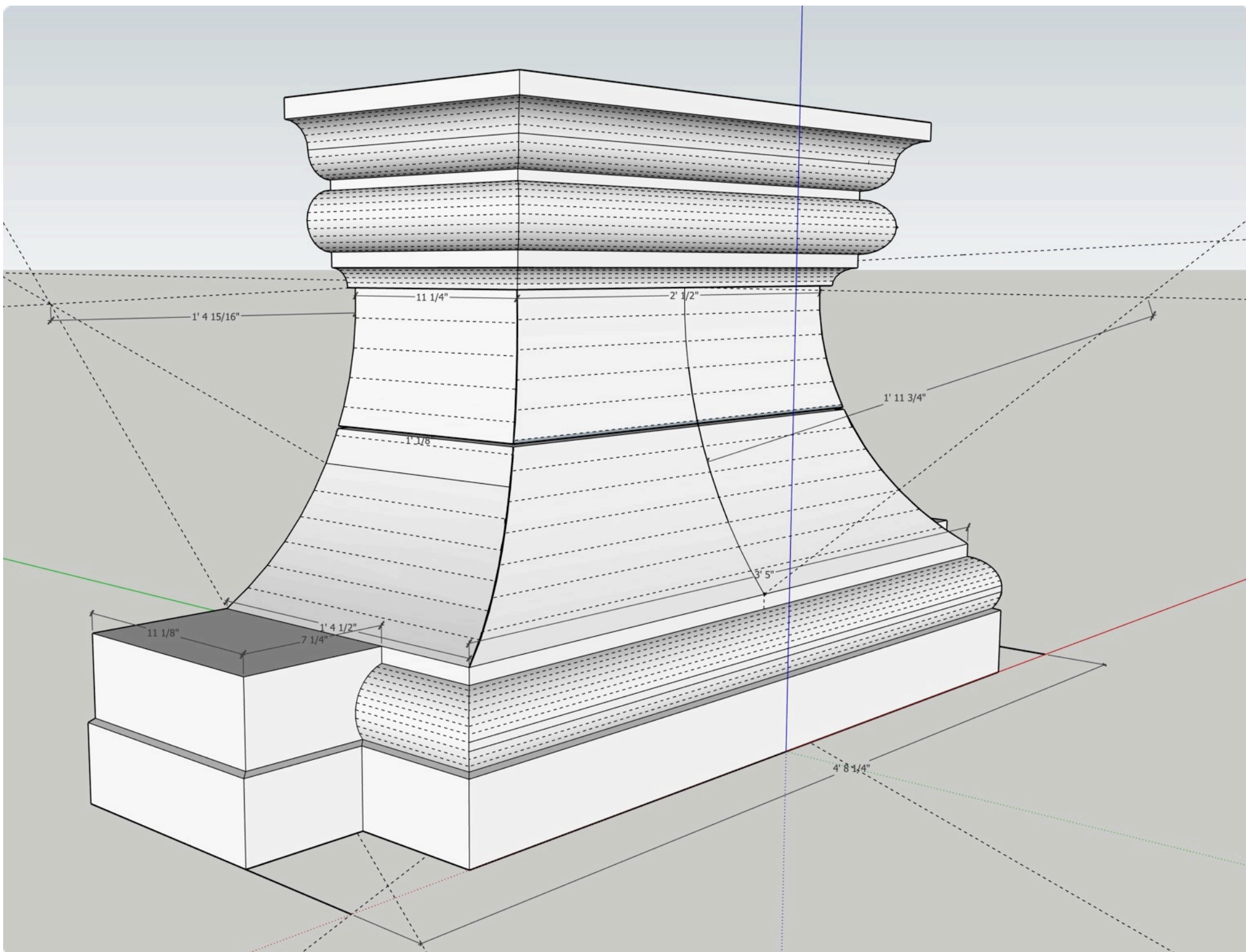




## Replacement Design - Geometric

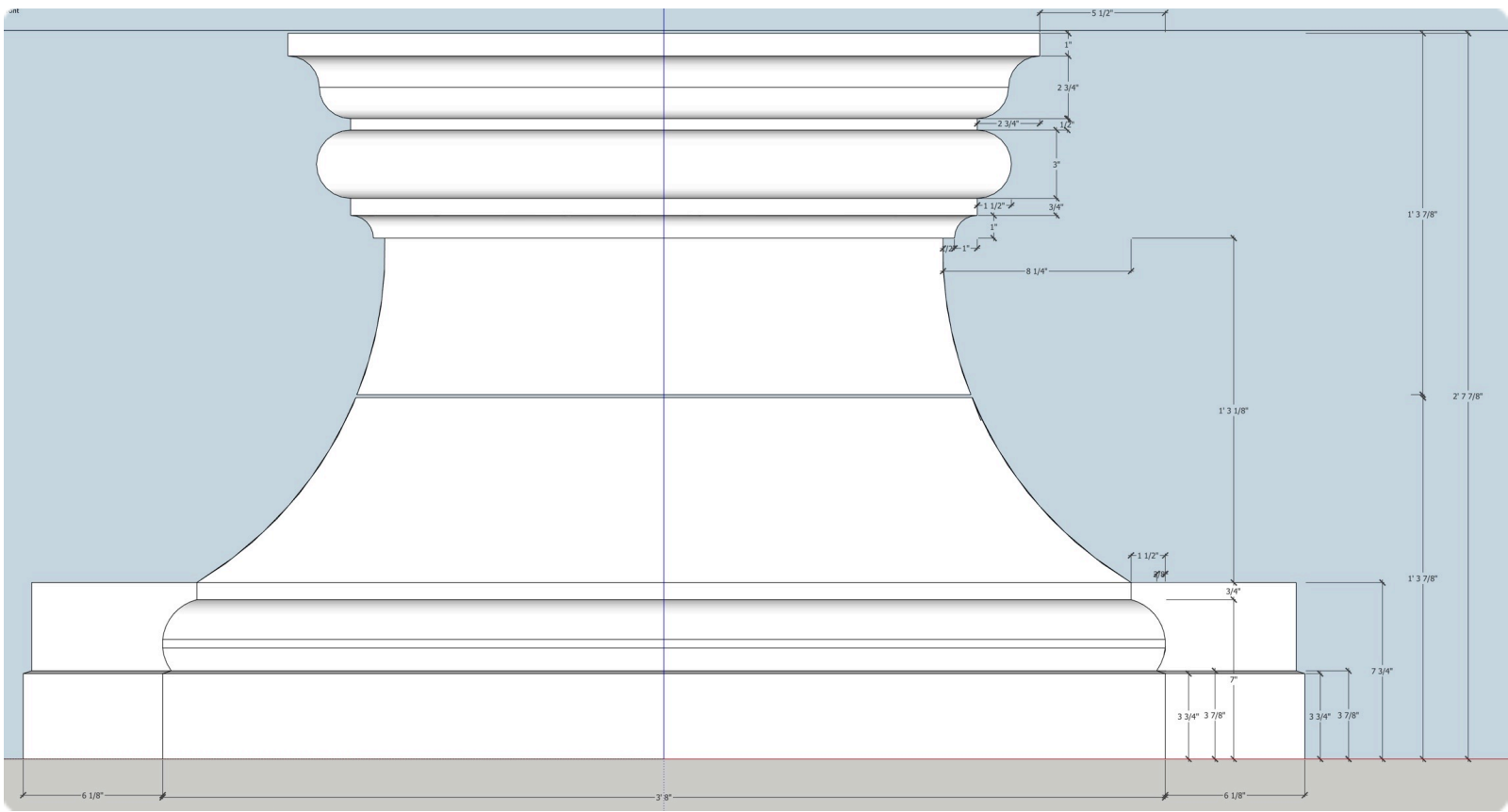
The replacement design is communicated through geometrical design (mouldings) and clay moquettes (artistic design) for the cartouche and dolphins.

The original pedestal was constructed of two stones, each  $15 \frac{7}{8}$ " high, with a horizontal joint through the cartouche and dolphins. This presents a risk during carving, shipping, and installation of chipping the vulnerable arris along the carvings. If the material is available, it was agreed on by the client and architect to combine these stones into one  $31 \frac{7}{8}$ " high stone.

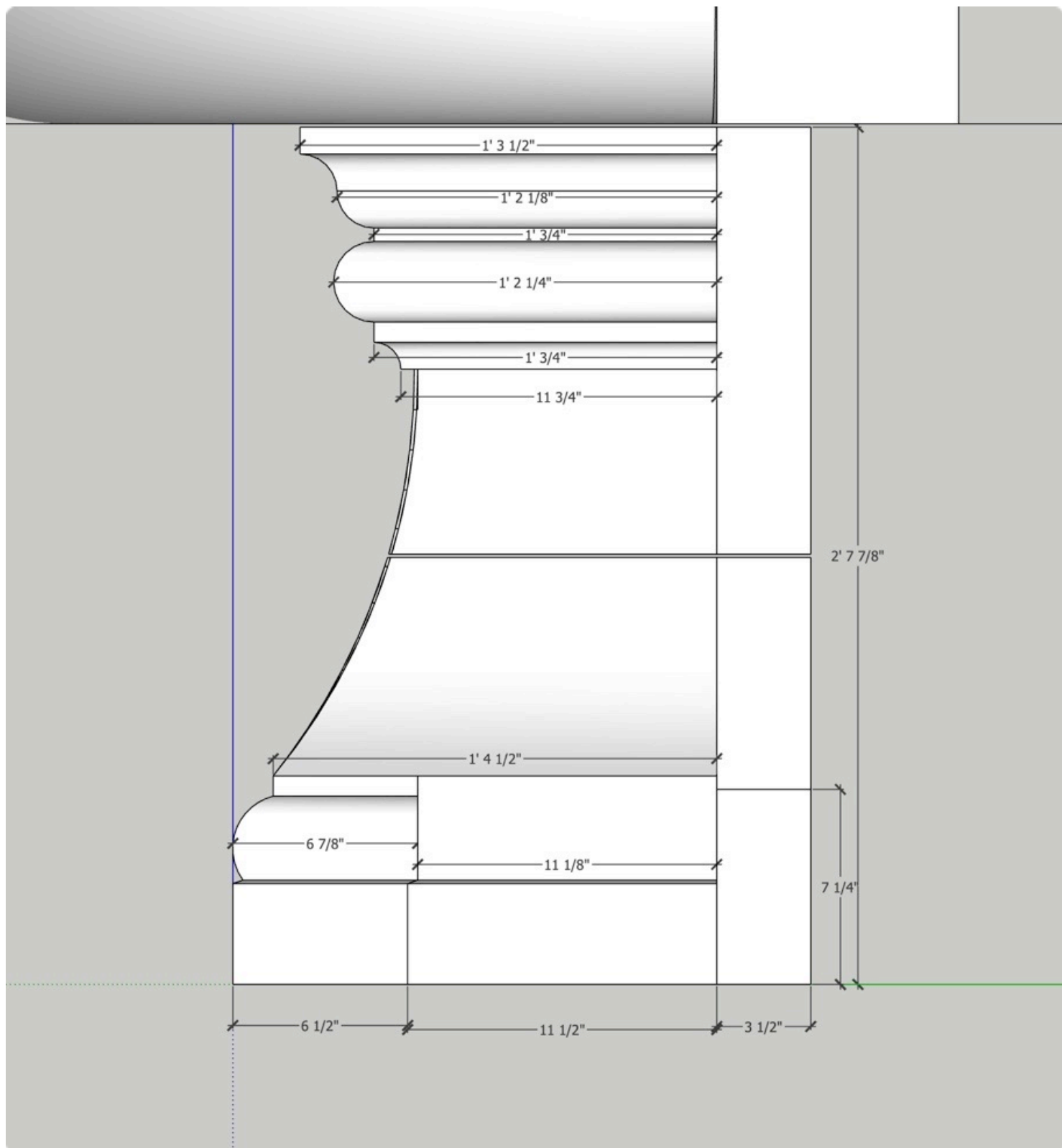


*Perspective - geometric design*



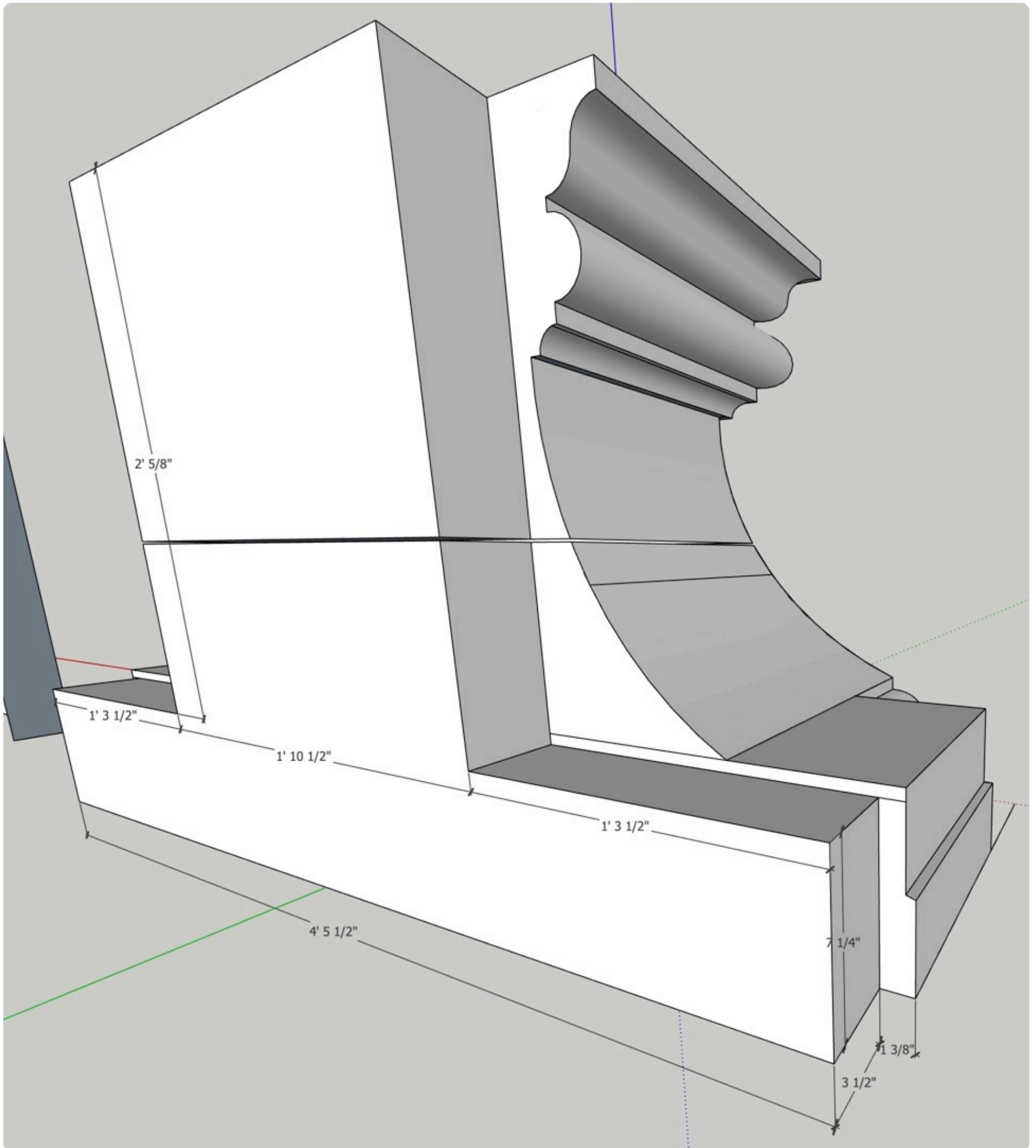


Front elevation - geometric design



Side elevation - geometric design





Rear perspective - showing dimensions of stone beyond wall line



## Replacement Design - Artistic

The cartouche maquette was designed based solely on on-site measurements. The construction of one half of the maquette provides all required dimensions and profiles for the complete carving.









## Dolphin Maquette

The photos below pair the maquette with the historical reference that I find most descriptive. Following the last critique, the tail fin was thinned, scales were added and the body was thickened. The rows of scales will be adjusted to be more dense on the stone carving than on the maquette.



*The historical reference photo has been adjusted to highlight the shadows of the nostrils, dorsal fin, and some ornament on the snout and upper lip. The lower lip and jaw is entirely deteriorated.*















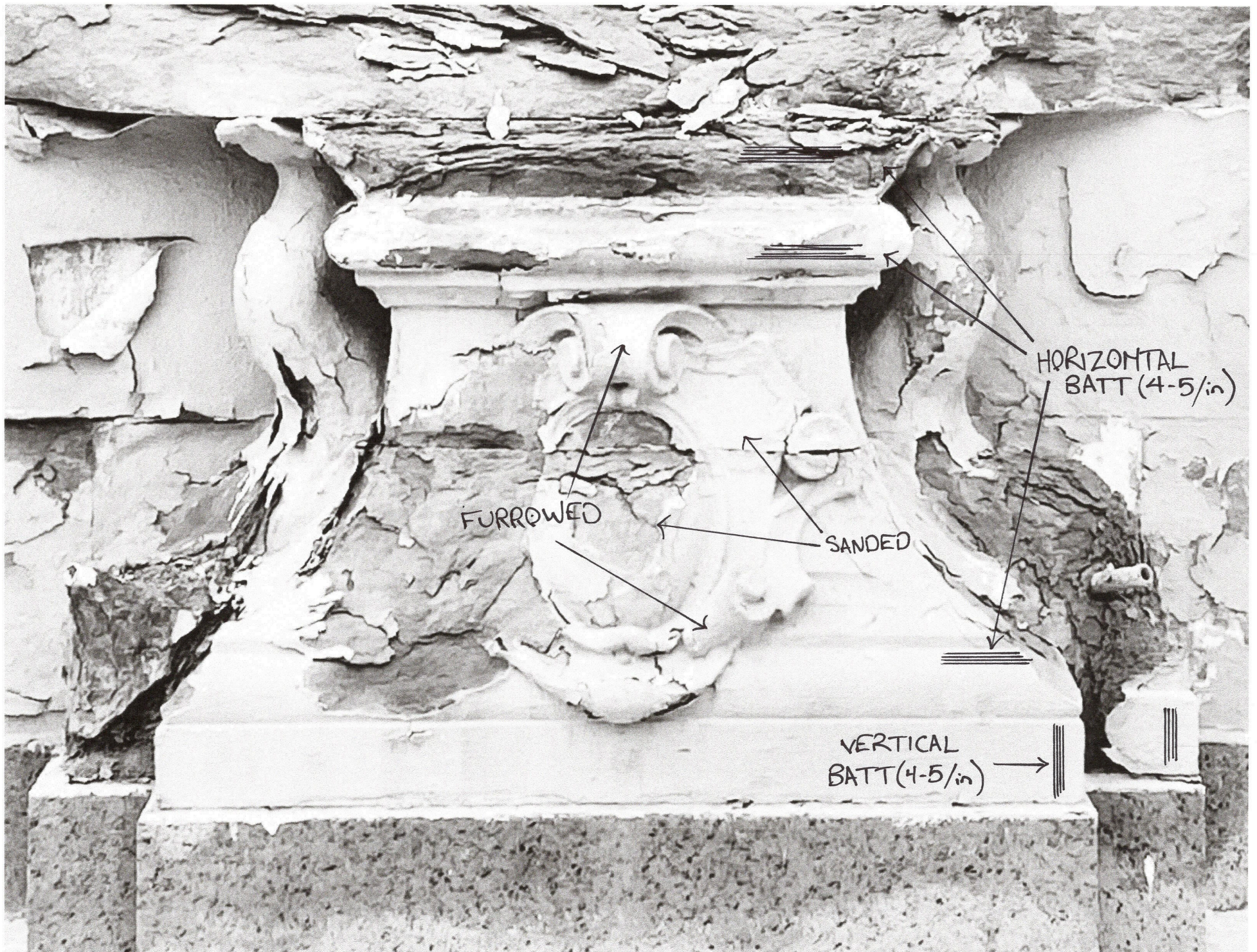


*Right Elevation showing curvature of spine*



## Tooling

All surfaces have a chiseled finish unless otherwise indicated. Batting density is measured at 4-5/inch (\*corrected to 6 batts/inch), same as was measured on the ashlar wall surface. Two surfaces within the cartouche will be sanded to a 50 or 100 grit in order to make distinct from chiseled surfaces.







*The fish scales measure approximately 1 1/2" wide by 1' high. They appear as though they had deteriorated prior to the application of the sealant.*



## Design Reference

The remaining details on the original dolphins show small indications of a certain styles that are repeated in many other examples. By identifying common styles of mouth, nostrils, pectoral and dorsal fins and aligning them with the indications of the original, I've approximated the original design without much creativity.



*Dorsal Fin, Nostrils, Scales*



*Mouth*





*Dorsal Fin, Mouth, Bottom Lip*





*Nostrils*



## Water Detail



*Showing 1" pipe terminating within dolphins' mouth. I would suggest angling the pipe 2 degrees downward toward the mouth and redirect the water upward out of the mouth with a spout, if possible. This will keep any drips within the mouth, which will drain off the face of the stone.*





*The original water lines were 1" exterior diameter and sloped about 30 degree upward toward the spout. Considering that the Lion's Head had a spout formed into the pipe, it is possible that this pipe also originally had a spout to spray or angle the water to the desired effect.*