Needle Mover

Jon Stras

arch 517
Summer 2013

View of possible Needle Location and Downed Needle

Needle Mover Approaching Needle

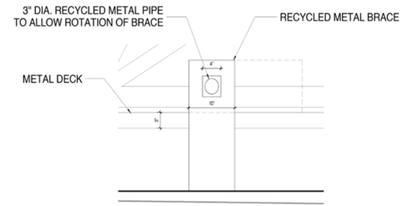
Needle Mover

The Cleopatra's Needle sculpture by Liz Glynn is a contempoary reconstruction of an obelisk, which histroically has stood for one civilization dominating another.

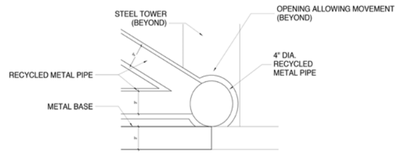
For my project I focused on the actual erection of the Needle, just like Liz Glynn, who used the obelisk as a critique of contemporary society, I too am providing an opportunity for people to go through the same engineering feat that the original peole did. By allowing it to move around the site, the only actual installation is a series of stone pediments for the needle to sit on.

The machine itself, the needle mover, is as light as possible, made of recycled metal, similarily to the needle being constructed of recycled shipping pallets, the lightness ensures that the import of the experience is the needle itself, not the machine doing the moving.

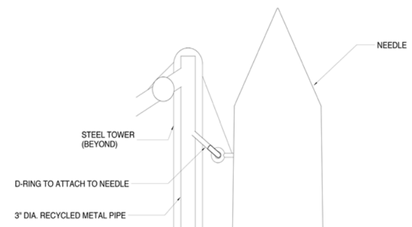
Setting up Progress



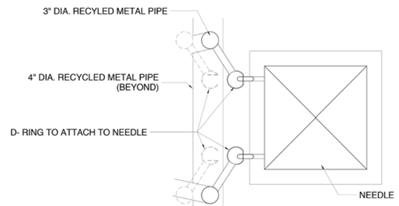
Metal Brace Detail



Rotator Detail



Connection Detail- Section



Connection Detail- Plan

Needle Mover

Needle Mover Instructions
1. Get 3 of your friends together for some fun moving Cleopatra's Needle

2. All 4 of you wheel the Mover up to the Needle

3. Each of you engage the metal brace closest to you

4. Everyone goes to a hand crank

5. In unison, raise the Mover

6. It will lock to the Needle automatically

7. Again, in unison, lower the Needle down

8. Everyone raises their metal brace

9. Wheel the Mover to desired location(see note)

10. Engage the metal braces

11. In unison, raise the Mover and Needle

12. When the Needle is safely on the ground, keep going till you hear the click of the Clip disengaging

13. In unison, lower the mover

14. Raise the braces

15. Sit back and enjoy your engineering feat

NOTE WHEN CHOOSING LOCATION: The curator of the park should have already had concrete bases installed all around the park, on relatively flat ground, and not too close to any trees (for safety's sake).

ADDITIONAL NOTE: The staff of the park should also make sure to rotate the downed needle to be oriented towards the erect needle.

Sub-Cordova

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arch 517
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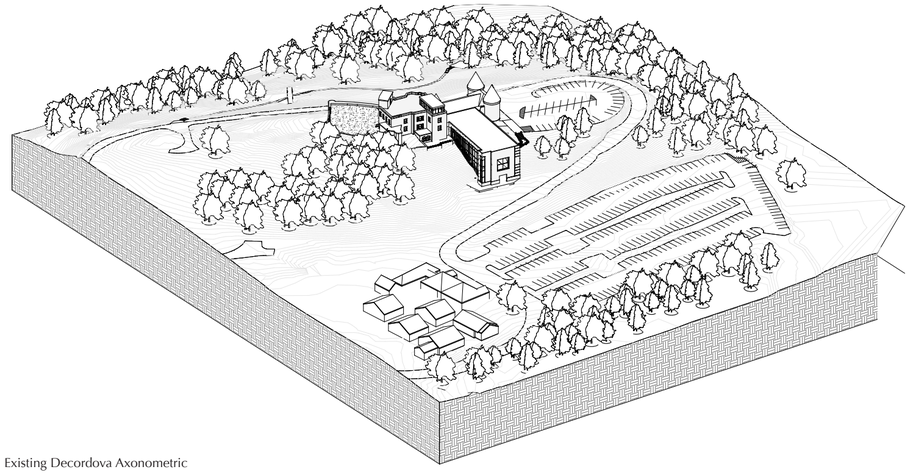
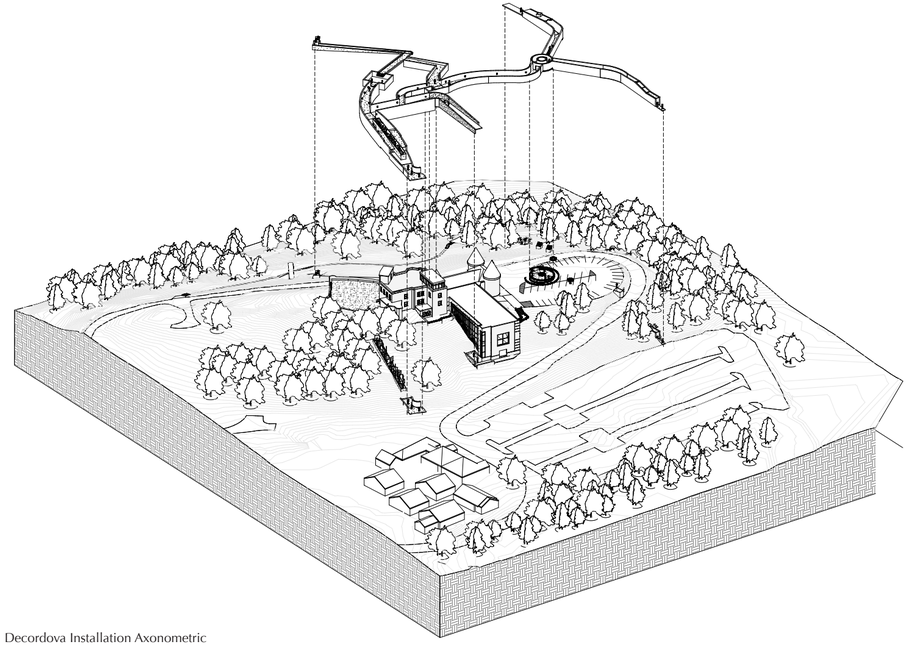


Existing Decordova Axonometric



Decordova Installation Axonometric

Sub-Cordova

Decordova was established as a public sculpture park and museum in 1950. Since it's inception it has always been organized as a series of different spaces where the patron can wander from one moment to another and experience the art as they please. Each particular experience helps to frame the interaction that one has with the sculpture.

Performance artists create one experience that an audience can have evoke an emotion or provoke thought. Decordova's sculpture park create a series of different performances that the patron is both the performer and audience. By circulating around the site, one has a series of different experiences that could be construed as a performance.

My intervention to the Decordova Sculpture Park and Museum is a continuation of that idea, separate spaces around the hill. However This installation continuing these separate experiences in the entrances to the tunnel network.

To continue Decordova's ideals, where these tunnels begin to intersect, it creates an opportunity to make a completely new experience, unique to being underground, adding to the lush array of experiences already being provided

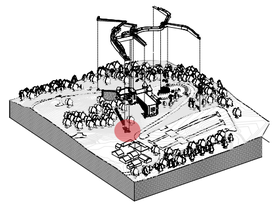
Day care Entrance

Entrance Section

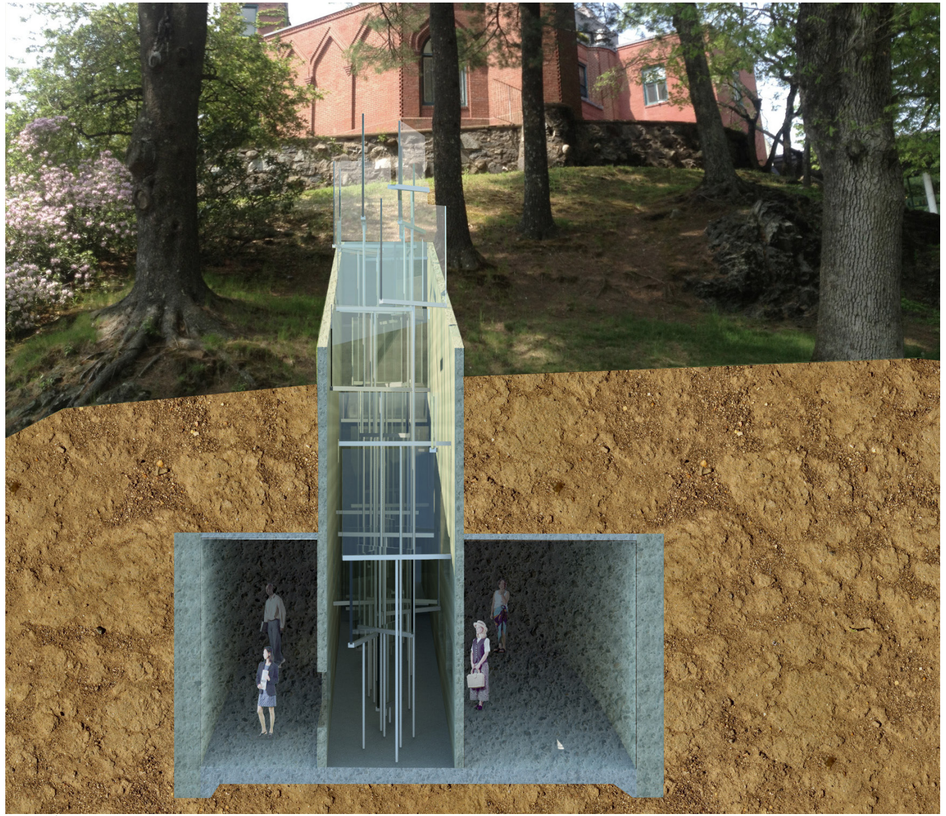
SUB-CORDOVA

The DeCordorva added a day care center in 1966, along with a series of workplaces for visiting artists. The curator then added a playful sculpture near this area so the children who attend the day care have something fun to do.

This particular entrance begins the translation of the entrance itself has curved walls and a clear view of the sculptural installation to bring light into the space.

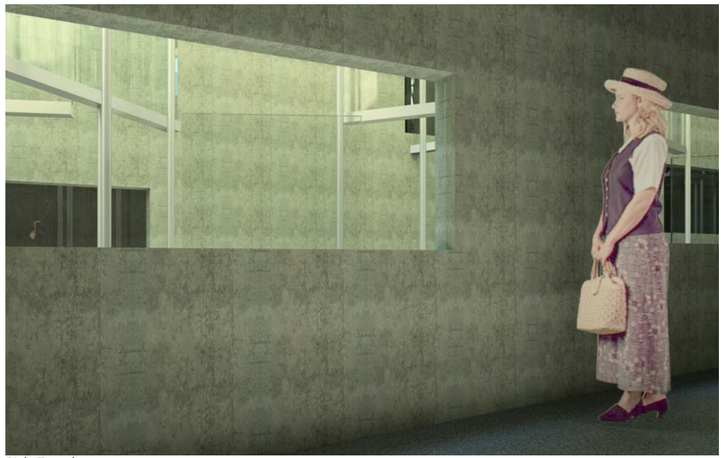


Day care Entrance



Sectional Perspective

Left Tunnel

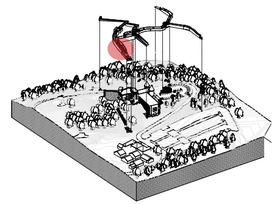


Right Tunnel

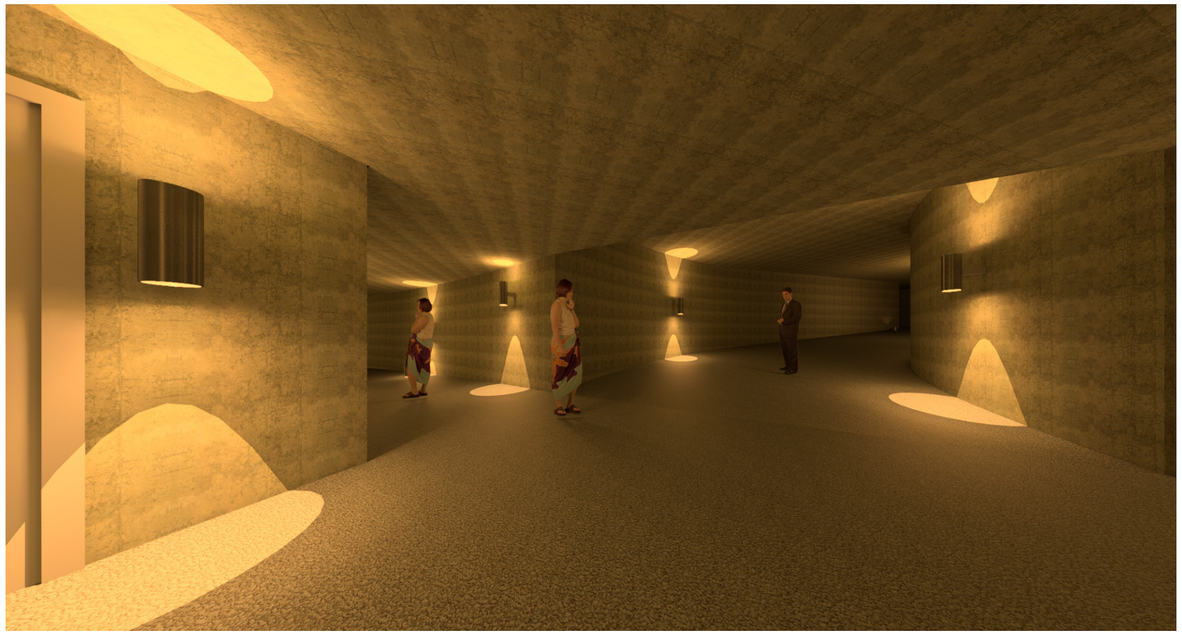
Sub-Cordova

The playfulness of the tunnel isn't apparent in the architecture itself but the spontaneous moments it allows to occur. The central Atrium forces the patrons to choose one side or another, then as the patron continues inwards the ceiling slant upward and windows into the central atrium allows both light to come in, and views of the atrium and the adjacent tunnel.

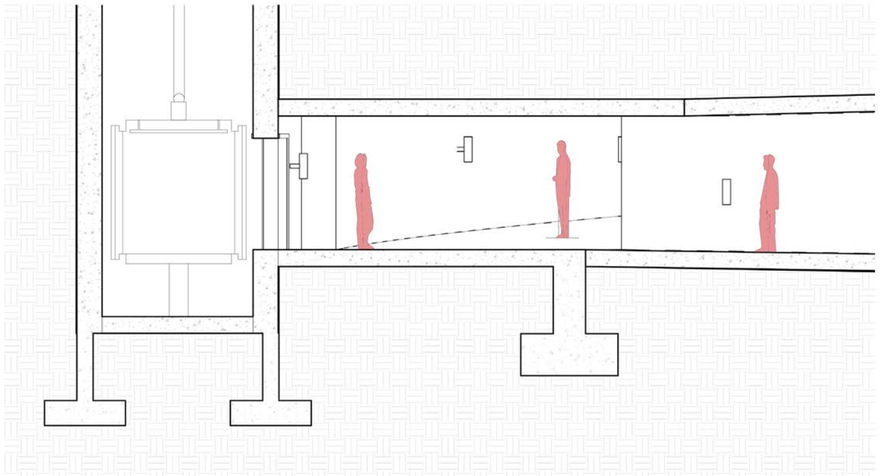
The playfulness occurs when there are multiple groups on either sides of the tunnels, there becomes moments when one can see the people on the other side or a reflection.



Day care Tunnel



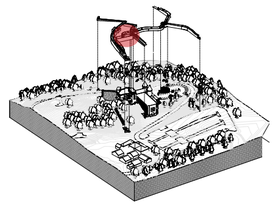
Perspective



Elevator Lobby Section

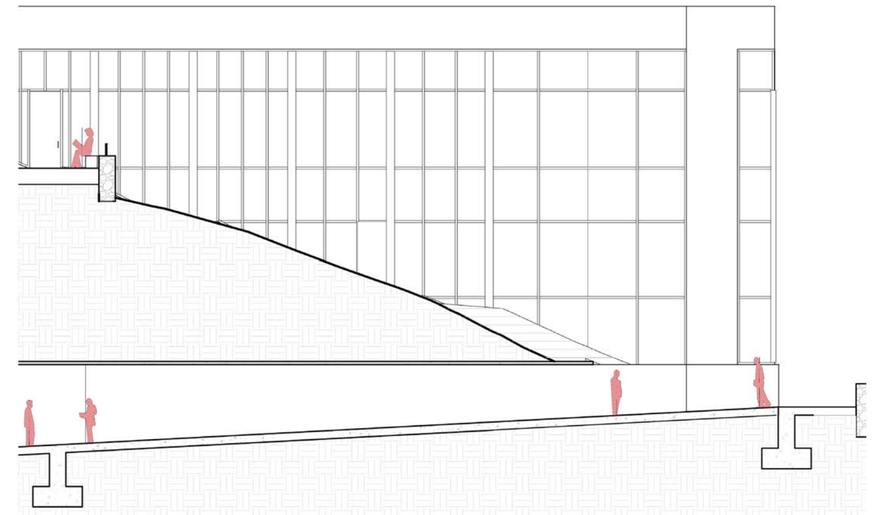
The elevator lobby both functions as an effective way to get from the roof terrace to the new tunnel spaces or the existing museum, but also allows the space itself to become a unique experience, by designing the artificial light for incandescent, the light naturally has a yellow tint to it, and by aiming it indirectly at the ceiling, floor, and wall, it allows the space to seem darker.

The tunnels themselves leading elsewhere around Decordova have higher ceilings, so when a patron steps off the elevator, the patron has the same threshold as walking into a tunnel, a low ceiling at the beginning to make the transition clear, then a high ceiling to ward off feelings of claustrophobia.



Elevator Lobby

Museum Entrance

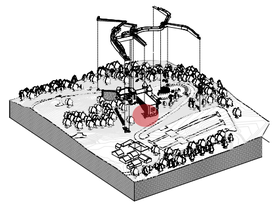


Entrance Section

Sub-Cordova

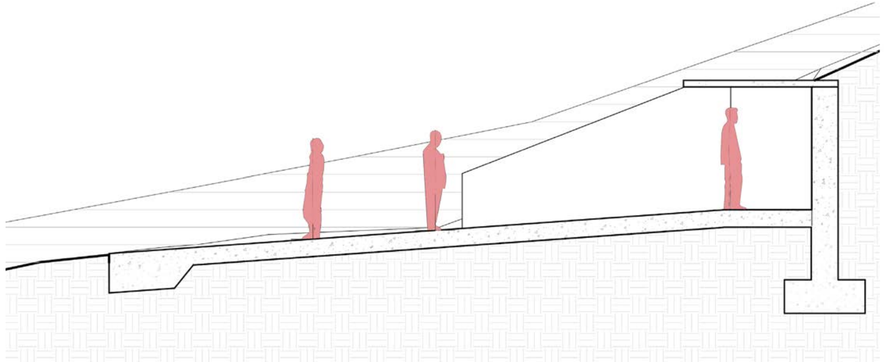
The entrance to the tunnel network adjacent to the museum is a translation of a museum gallery space. By having a polished floor, the steps of a patron echo, immediately evoking a feeling of quiet, and suggesting a patron to do the same. The artificial light is not only because of the difficulty of bringing natural light into this depth, but because the artificial lights continue this translation. By using simple incandesced wall-washers, it is the similar to the same lighting one would experience at a gallery.

The link to the museum continues with the retaining walls themselves, as they come out of the ground, they terminate at the same elevation that the stone base terminates around the museum. Being located behind the simple bearing wall, it creates a similar jog around a wall as the museum entry itself.

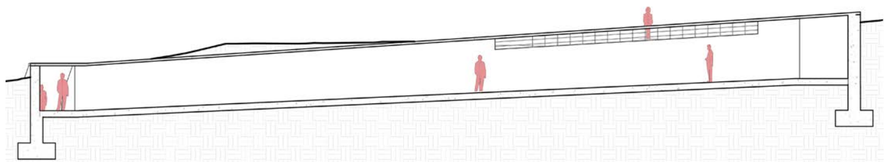


Museum Entrance

Entrance and Adjacent Sculpture



Entrance Section

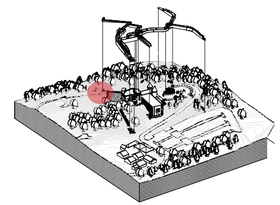


Section Looking Northeast

Sub-Cordova

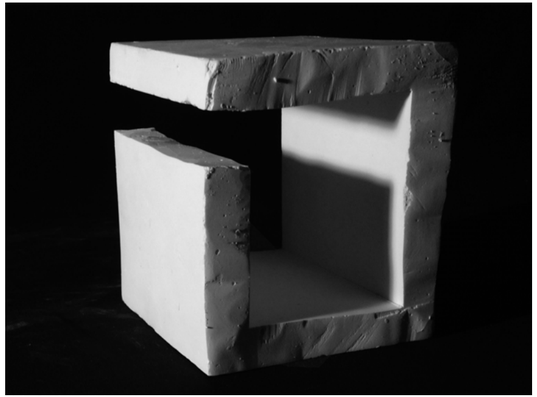
On the north side of the Decordova hill there is a path that proceeds down the hill and out of view from the north museum entrance. These steps are made of large pieces of granite that require the patron to slow down their pace as they descent. This is translated into the entrance by showing the form work on the concrete in the tunnel and entrance.

There is also a statue in the middle of these steps, that work on an axis, with huge stones on either side of it. The axis of this particular sculpture begins to orient the axis of the entrance, and provides an excellent location for the entrance itself.

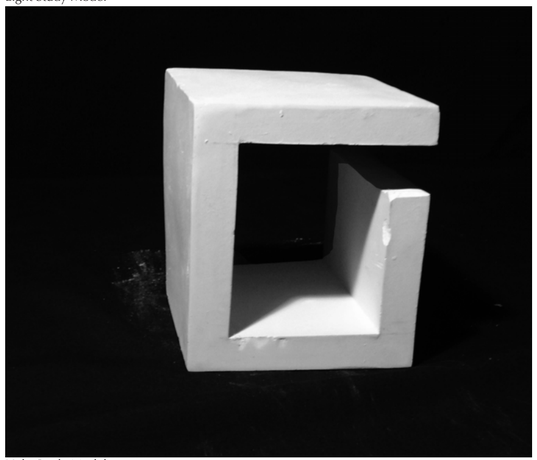


Granite Steps Entrance

Sectional Perspective



Light Study Model

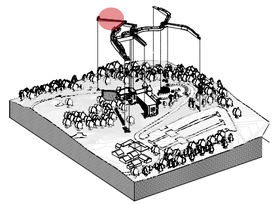


Light Study Model

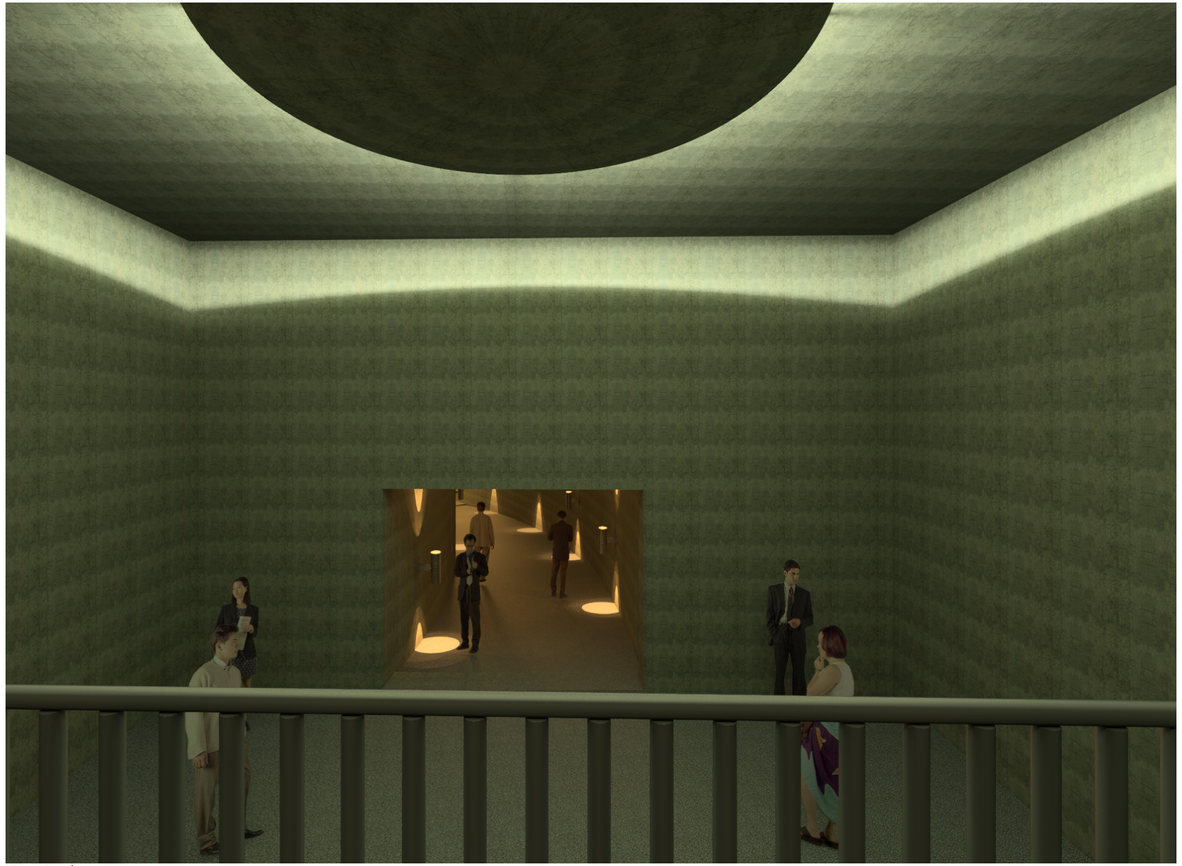
Sub-Cordova

The north side of the Decordova hill has the circulation on both the top and bottom of the hill itself. There is not much interaction of the patron and the hill itself. This tunnel provides ways for the patron both above, and below, the ground a place to actually see the view from the middle of the hill.

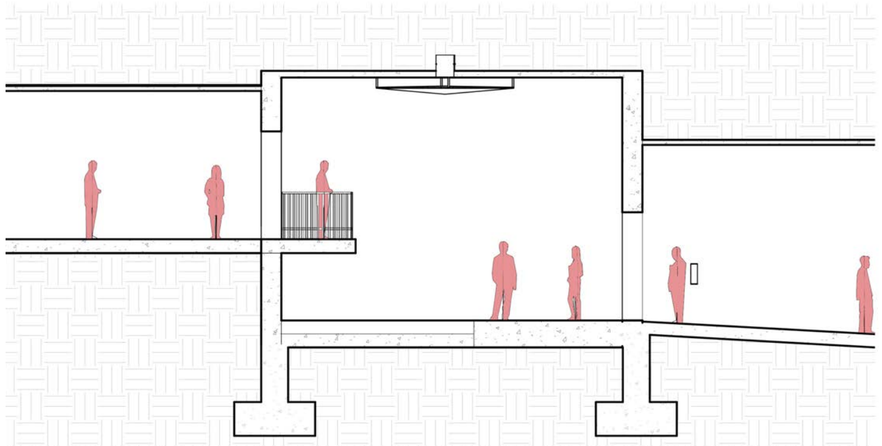
The subterranean patron gets only a glimpse of the view, which can slow down their pace, a translation of the steps outside. The patron above the tunnel is provided a place to sit and witness this view.



Granite Steps Tunnel



Upper Level

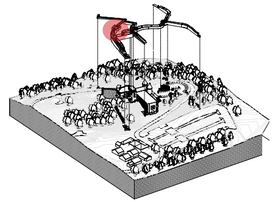


Northwest Section

Where the day care and granite steps tunnels meet, there is an opportunity for a less scripted experience to occur, where the previous two tunnels dictate how one experiences with it.

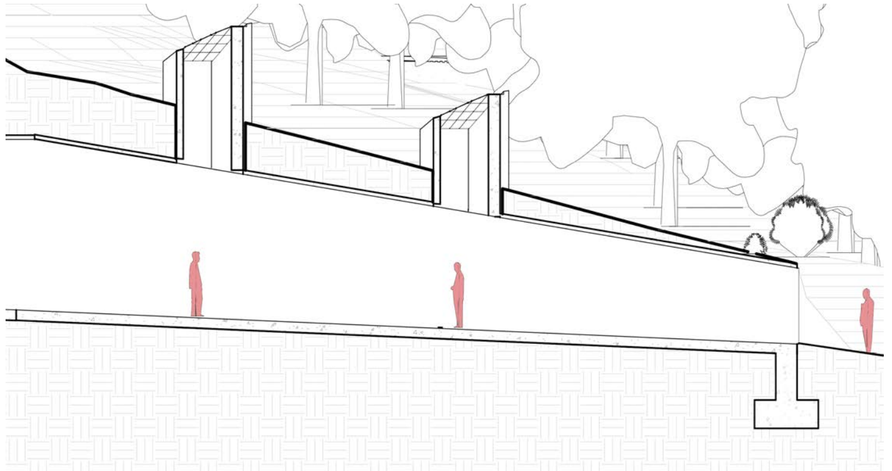
Because of the elevation change between the two entrances, it becomes difficult to have them meet at one elevation. Instead of including difficult circulation gymnastics, this space embraces this separation, just as one can see the other spaces on Decordova but not get to them easily, this curiosity is translated architecturally in this separation space.

Because of the location of this space (underneath the existing building) bringing natural light into it becomes nearly impossible. The light is artificial, however introduced in a way that suggests natural light, to continue this unscripted experience, by not allowing the patron to see where the light is coming from, it is unclear where exactly one is underneath the sculpture park.



Separation Space

Perspective of Entrance

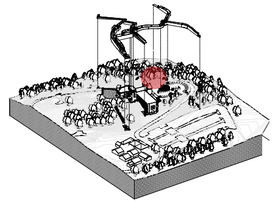


Entrance Section

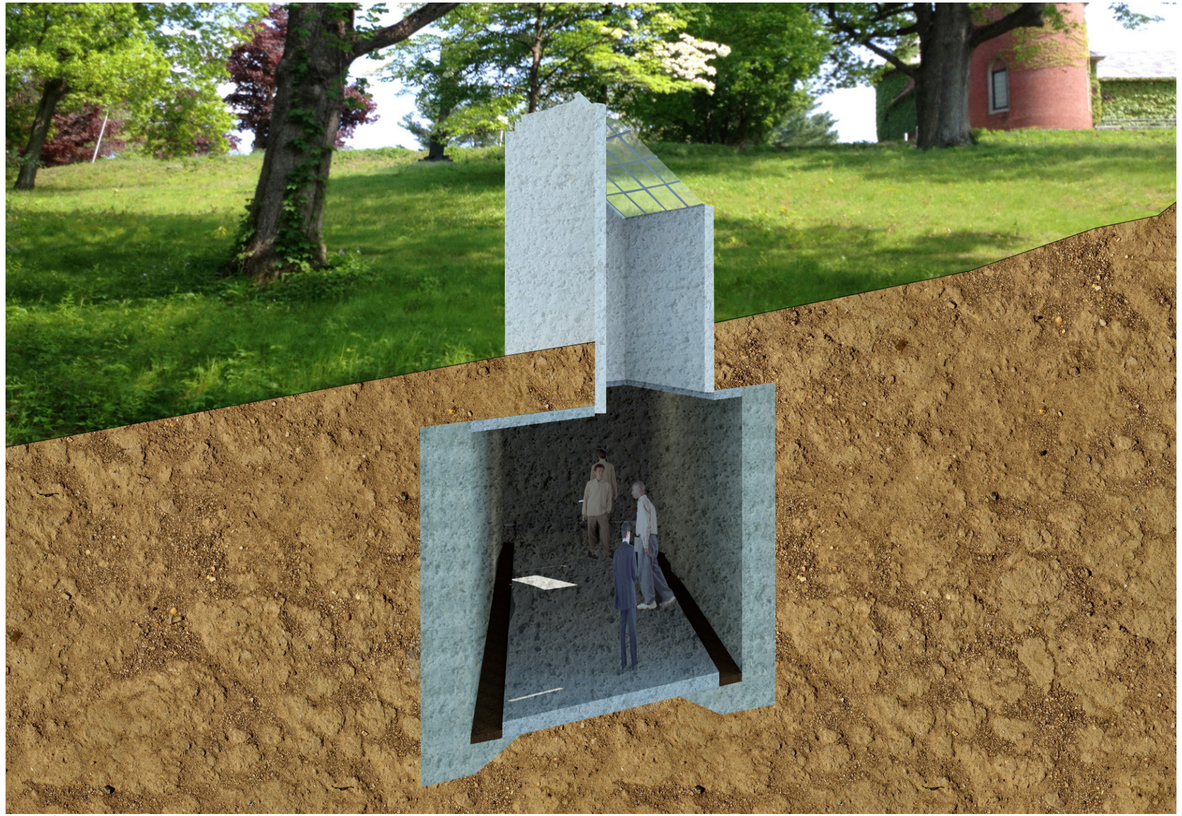
Sub-Cordova

The aforementioned granite steps lead down and away from the rest of the sculpture park, they lead to a dirt clearing that sometimes houses a wooden structure. The entire situation is not visible from the top of the hill. The tunnel and entrance become a continuation of this. The concrete structure of the entrance is as recessed as possible from the exposed world. This entrance is like a sleight-of-hand trick. The entrance being as hidden as possible from view.

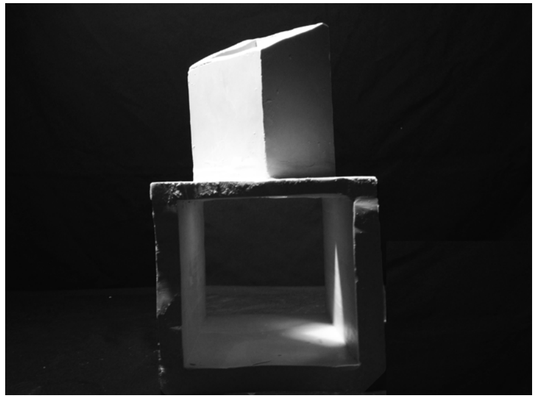
The other important part of this particular area is the proximity to the lake to the north. Although the lake is visible from the roof terrace or the granite patio, the climate of it is only experienced here. The humidity of this is continued by having dirt on the sides of the tunnel, where water can drip down and continue this humid atmosphere.



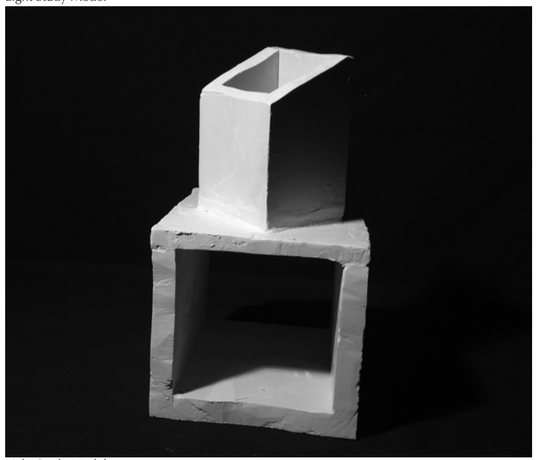
Hidden Entrance



Sectional Perspective



Light Study Model



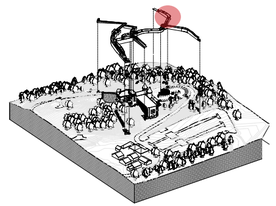
Light Study Model

Sub-Cordova

The important part of a sleight-of-hand trick is misdirection. The hidden entrance is more successful if there is something else to look at from the top of the hill. The skylight provides this. By being concrete, and almost monolithic, the skylights draw the eye away from the entrance.

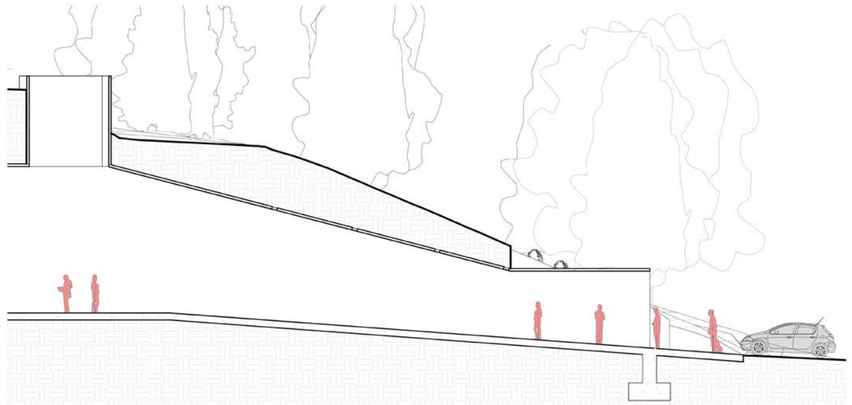
The skylights are oriented so that the maximum amount of light can enter. Oriented on the cardinal directions with the northern wall arched concavely to dissipate the light in the tunnel.

The glass at the top of the skylight also distracts the patron at the top of hill. At an angle, the light makes the glass opaque and brighter, and more difficult to look at much else.



Hidden Tunnel

Parking Lot Entrance

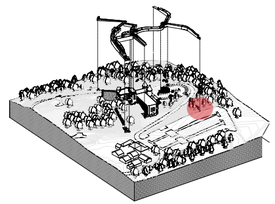


Entrance Section

Sub-Cordova

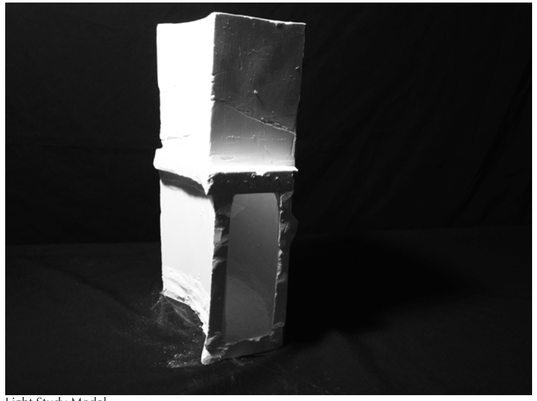
The wonderful part of having no clear circulation is that each patron decides their own path. However when one arrives at the Decordova, because of the circulation, there is no clear way finding which way to go or begin. The entrance at the parking lot solves this, drenching the interior of the tunnel with a view of the natural light coming down from above and adding to this with artificial lights.

The entrance itself becomes a clear way finding device, by pulling the entrance perpendicular to the parking lot asphalt, the rectangular shape pronounces itself.



Parking Lot Entrance

Sectional Perspective



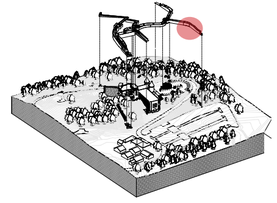
Light Study Model

Light Study Model

SUB-CORDOVA

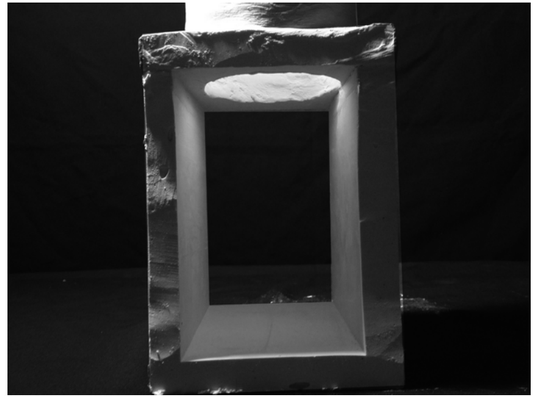
The intention of the parking lot tunn is to utilize light as a wayfinding device. The location of the skylight itself becomes important so that it doesn't adversely affect the world above.

This provides two important factors. One the specific location of the skylight itself, on the side of the hill between the upper parking lot and the road leading up to it, and the bend in the tunnel below dictating the shape of the skylight above.

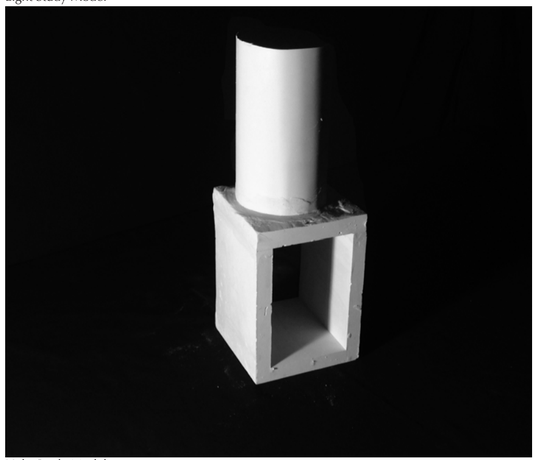


Parking Lot Tunnel

Sectional Perspective

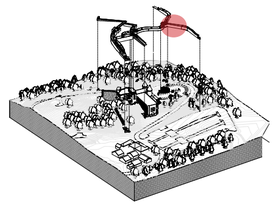


Light Study Model

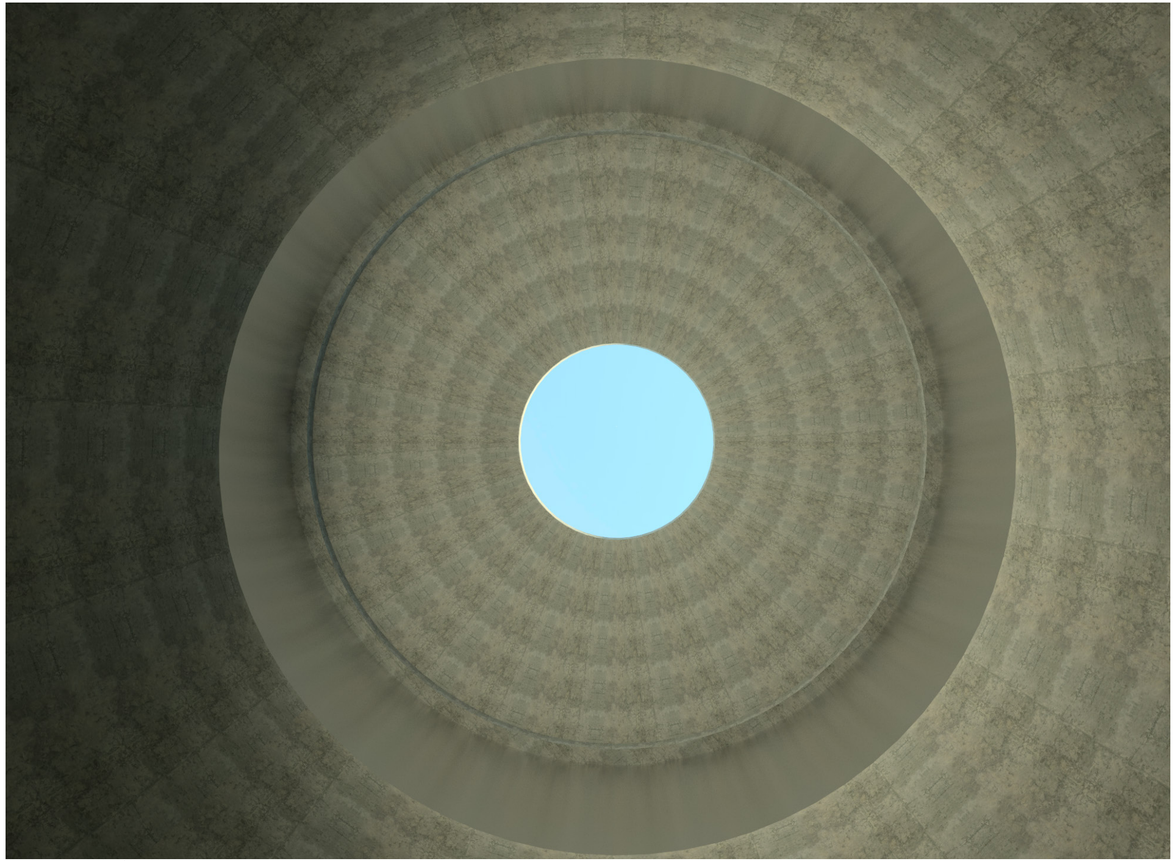


Light Study Model

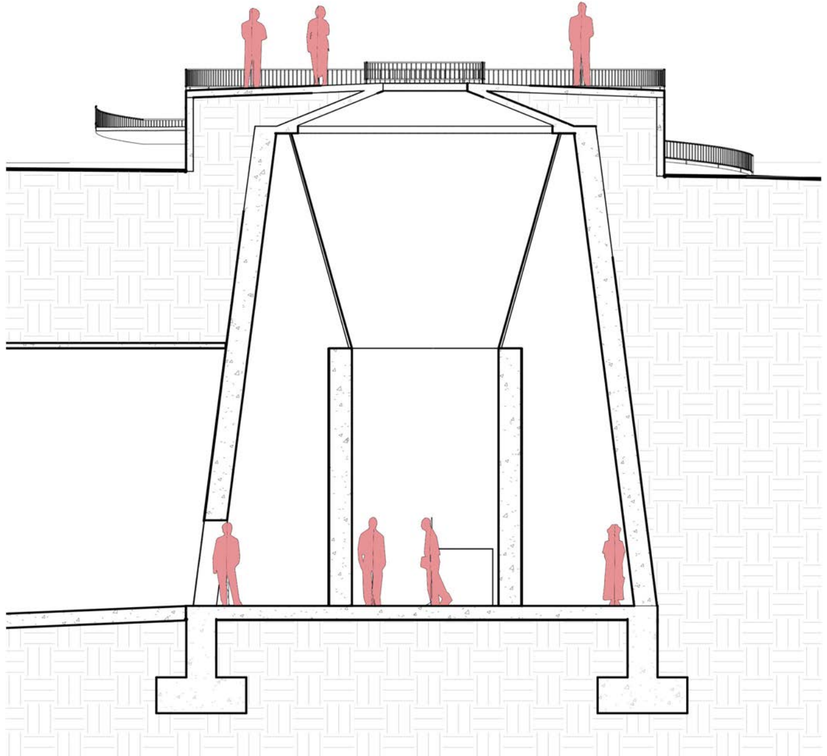
The oculus tunnel condition unites the hidden or parking lot entrance with the upcoming sanctum. By having the same form as the sanctum and the same intention of the parking lot and hidden tunnel conditions it unites them. The orientation also becomes important so that they are specifically located to not alter the parking scheme.



Oculus Tunnel



Interior Sanctum Looking Up



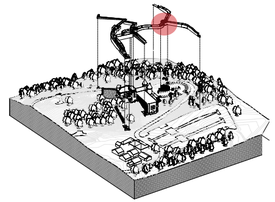
Sanctum Section

The Sanctum is composed of two circular walls, the exterior walls have openings that are smaller than the tunnels they connect with, making the entry into the space more prominent.

The inner circular sanctum is barely big enough for two people to stand in comfortably. In order to get from the exterior to the interior sanctum, one must get through the four foot tall wall opening, forcing the patron to crouch down. The interior sanctum walls only reach fifteen feet high. The rest of the separation is created by frosted glass, giving the exterior sanctum light, but not directly.

The view from the interior sanctum is only of the oculus directly above, and through that, only the sky, by pulling the railing back from the hole itself, the above space cannot infringe on the experience.

This contemplative space requires on more than just the visual, because of the lack of glass in the opening or oculus, a patron inside can still hear what is going on around them, but cannot visually interact, to affirm the unique experience that one can only get thirty feet underground.



Above the Sanctum