

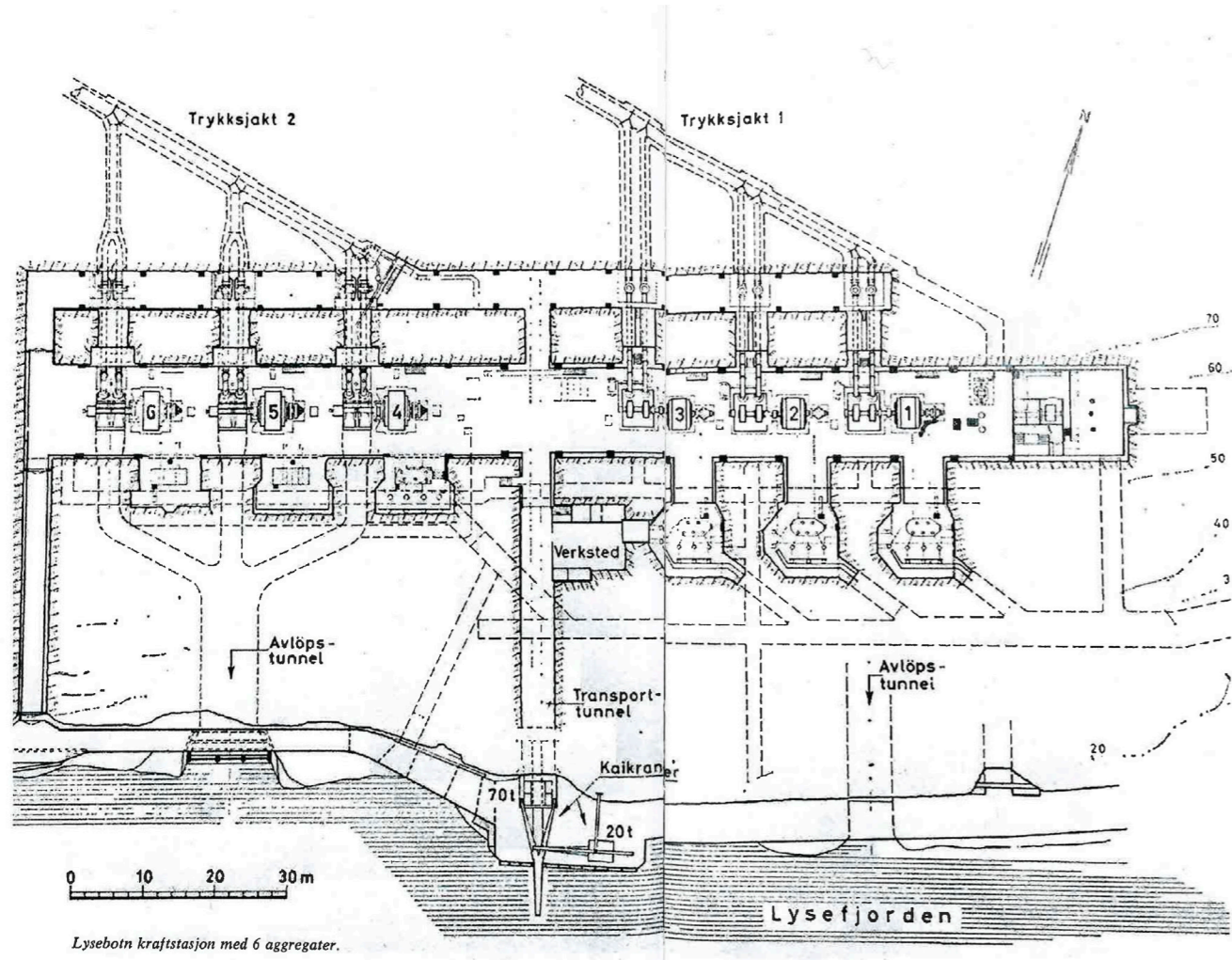
LYSEBOTN 1

Imagine yourself being in a completely dark space. A space with walls so thick that it is impossible for the sun to infiltrate the heavy and foglike darkness. You cannot see the end of it and you cannot recognize the size of it. If you took your hand on the wall you would feel a cold and uneven surface, just like the one you are standing on. Sometimes the sound of dripping water echoes around you and slowly disappears. The attempt to stretch out your arms above you fails and the height of the room remains a mystery.

You could try to navigate by sliding your hand against the wall as you move, but you wouldn't know where you were going, for how long you would be walking and if the ground beneath your feet at one point would disappear.

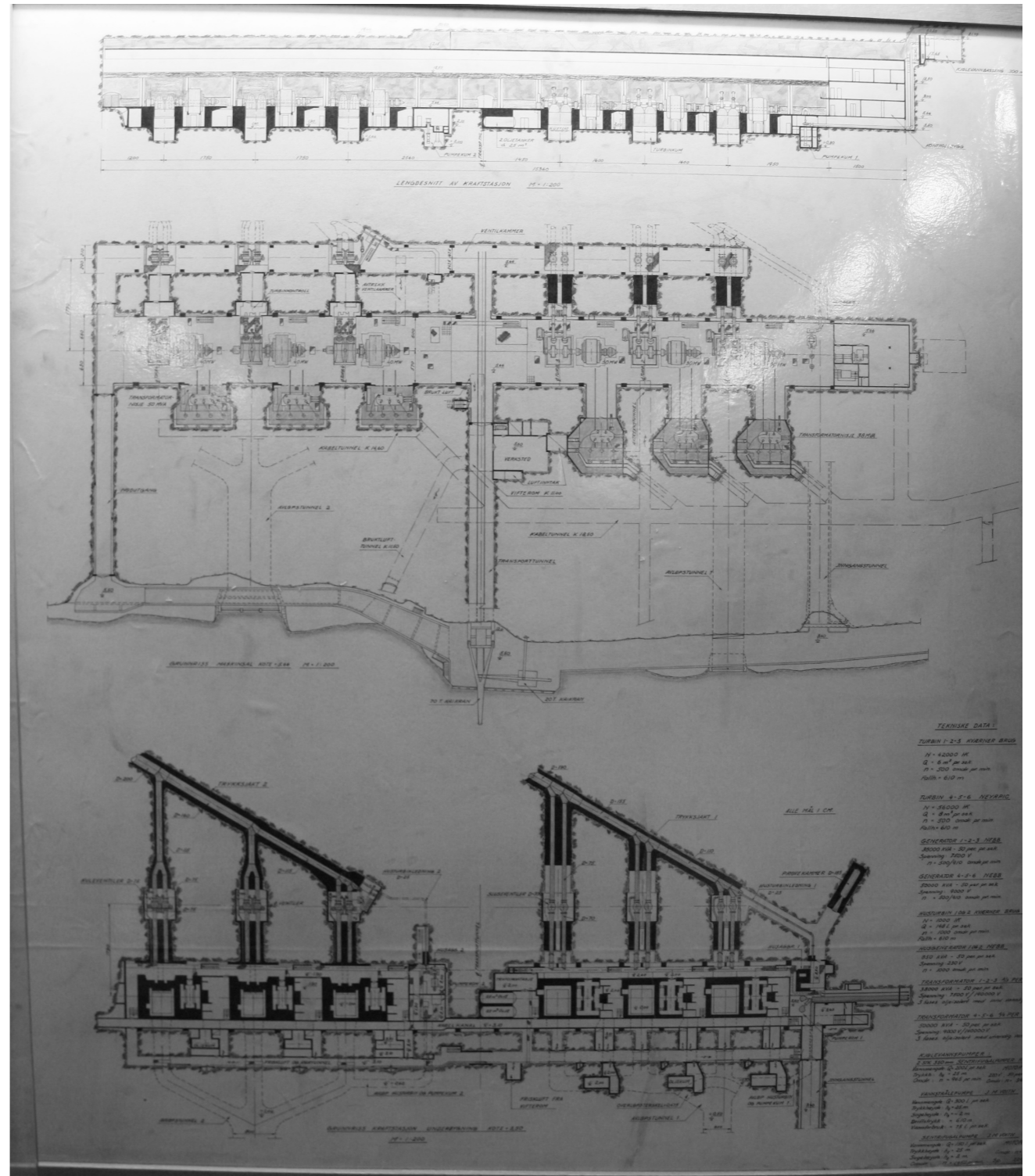
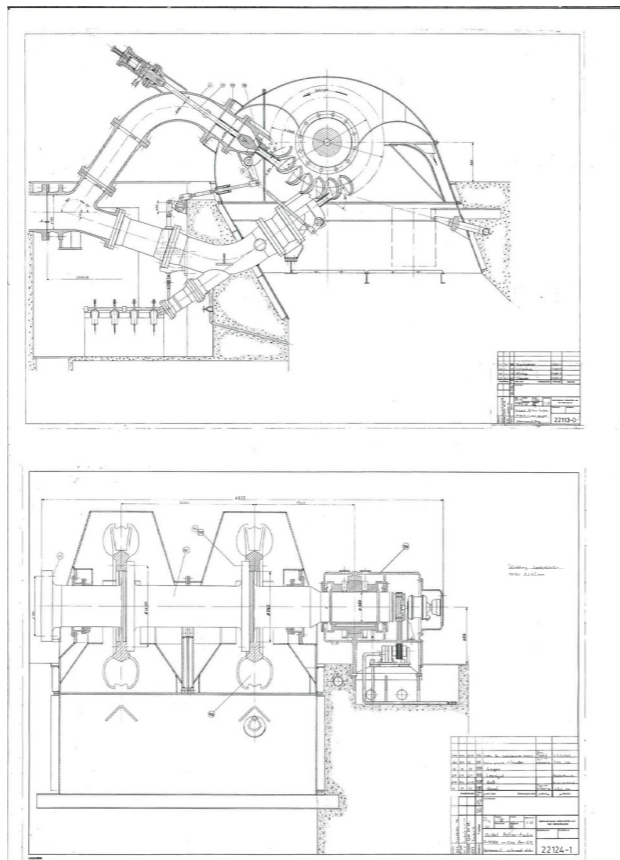
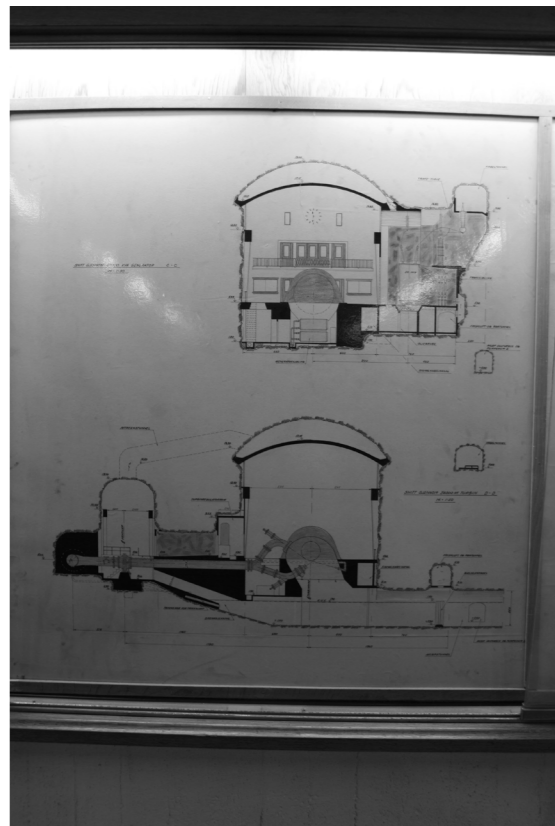


The concept for this project has developed during the process, and is a result of a study on spaces inside the mountain constructed for machines. In the first phase of the diploma i spent a lot of time mapping and analyzing the existing functions and understanding the system built around them. As this picture is my main fascination and inspiration, i decided to remove all the interior except the concrete vault and work with this system and how to adapt new functions to these dramatic and extreme surroundings without destroying the distinctive feel.

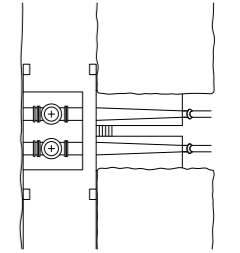
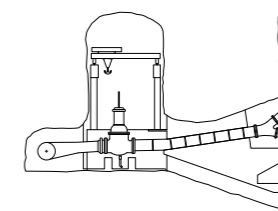
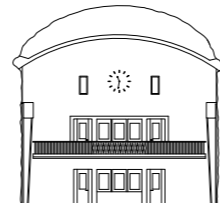
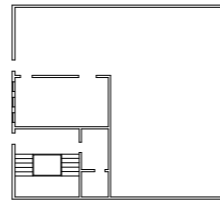
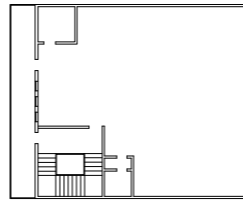
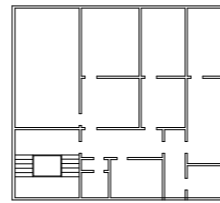
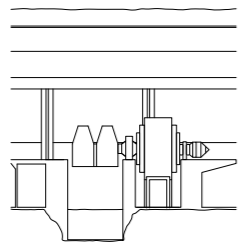
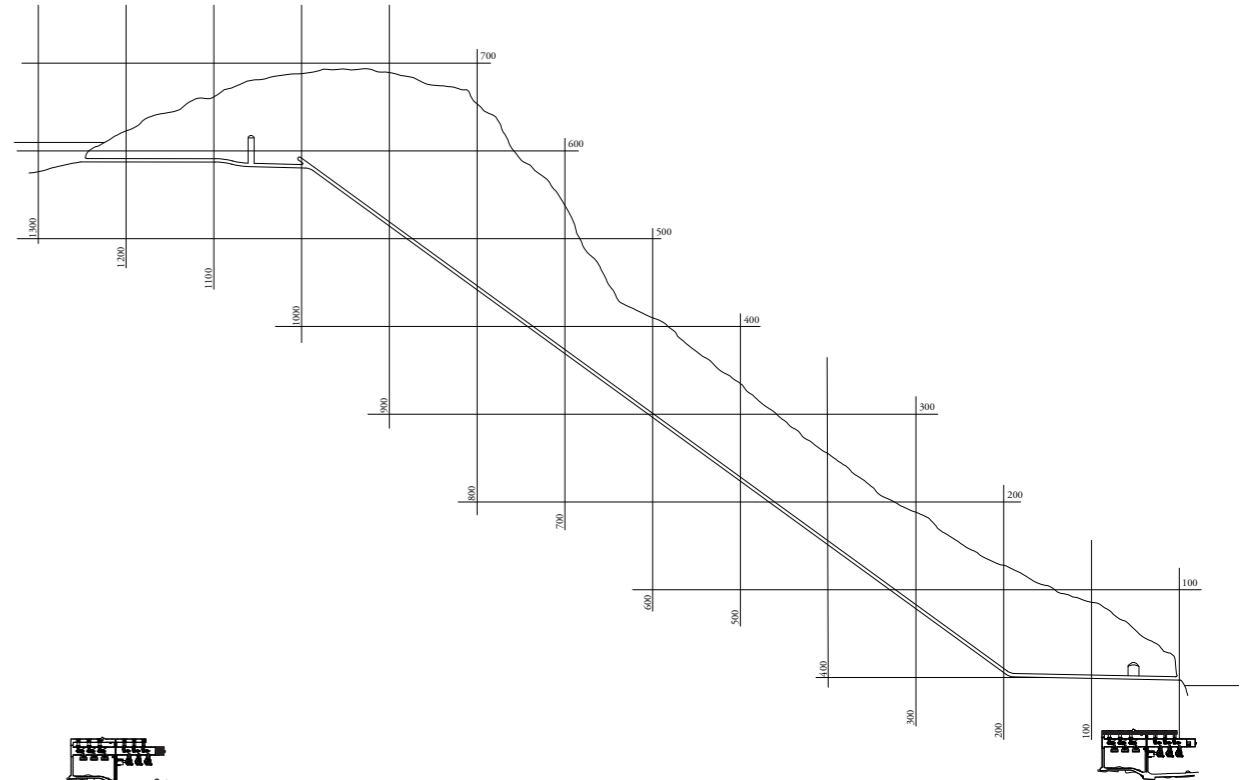
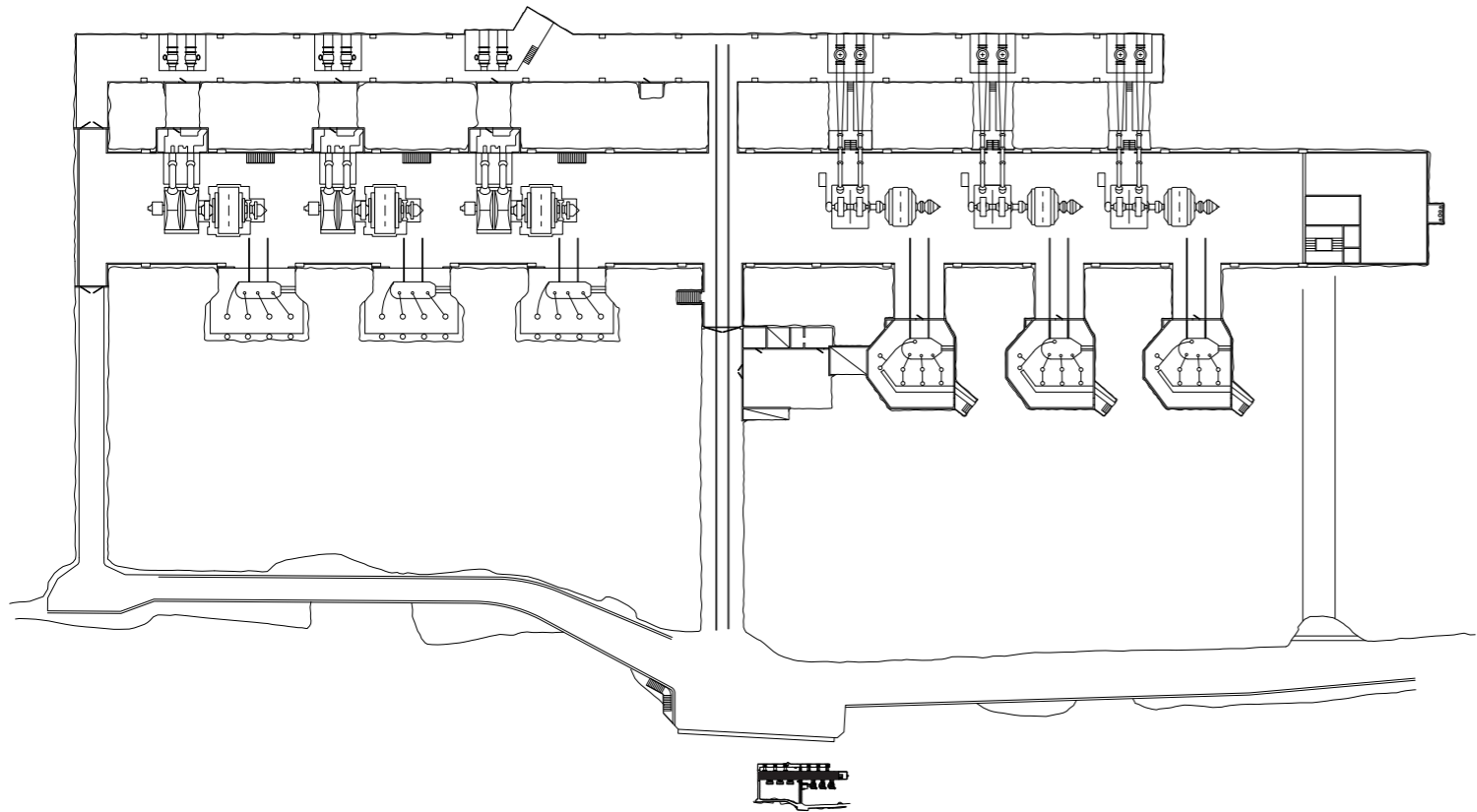


Lysebotn kraftstasjon med 6 aggregater.

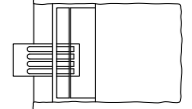
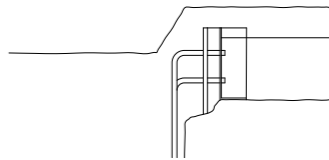
De detaljerte tekniske tegningene ble utført med penn og linjat som hjelpemidler.



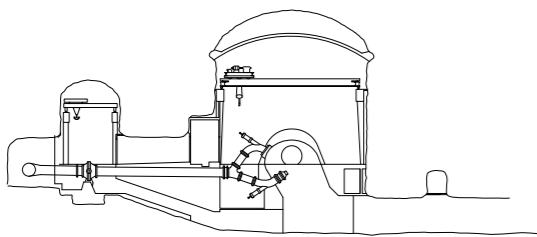
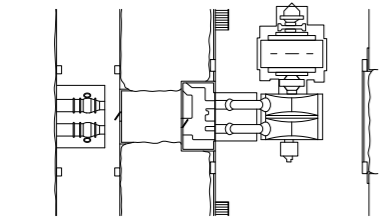
It does not exist digital drawings of the facility itself, only the turbines. I have studied the original drawings from 1946 to understand the system.



Ventilhøll / Bredd: 5,3M / Lengde: 130M / Høyde: 7,3 M / Areal: 698M² / Ventilene er plassert i en separat hall, plassert parallellt med hovedhallen. Det er en ventil per generator, og totalt 6 stk. Disse elementene kontrollerer tilgangen av vann til generatorene, og kan overstyres manuelt.

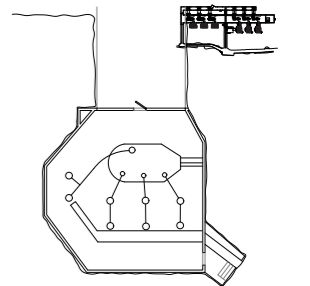
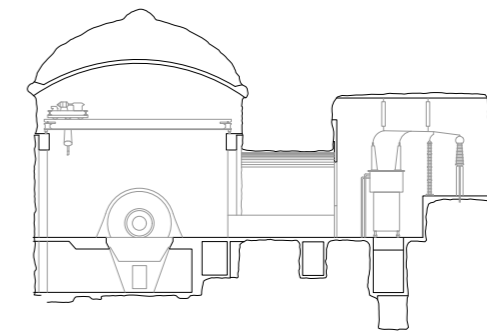


Kjølevannsbasseng / Bredd: / Lengde: / Høyde: / Kjølevannsbassenget leverer avkjølt vann til diverse utstyr som trenger kjøling. Hovedsakelig generator og transformator. Pumpes ut gjennom renner hakket ut i fjellet.



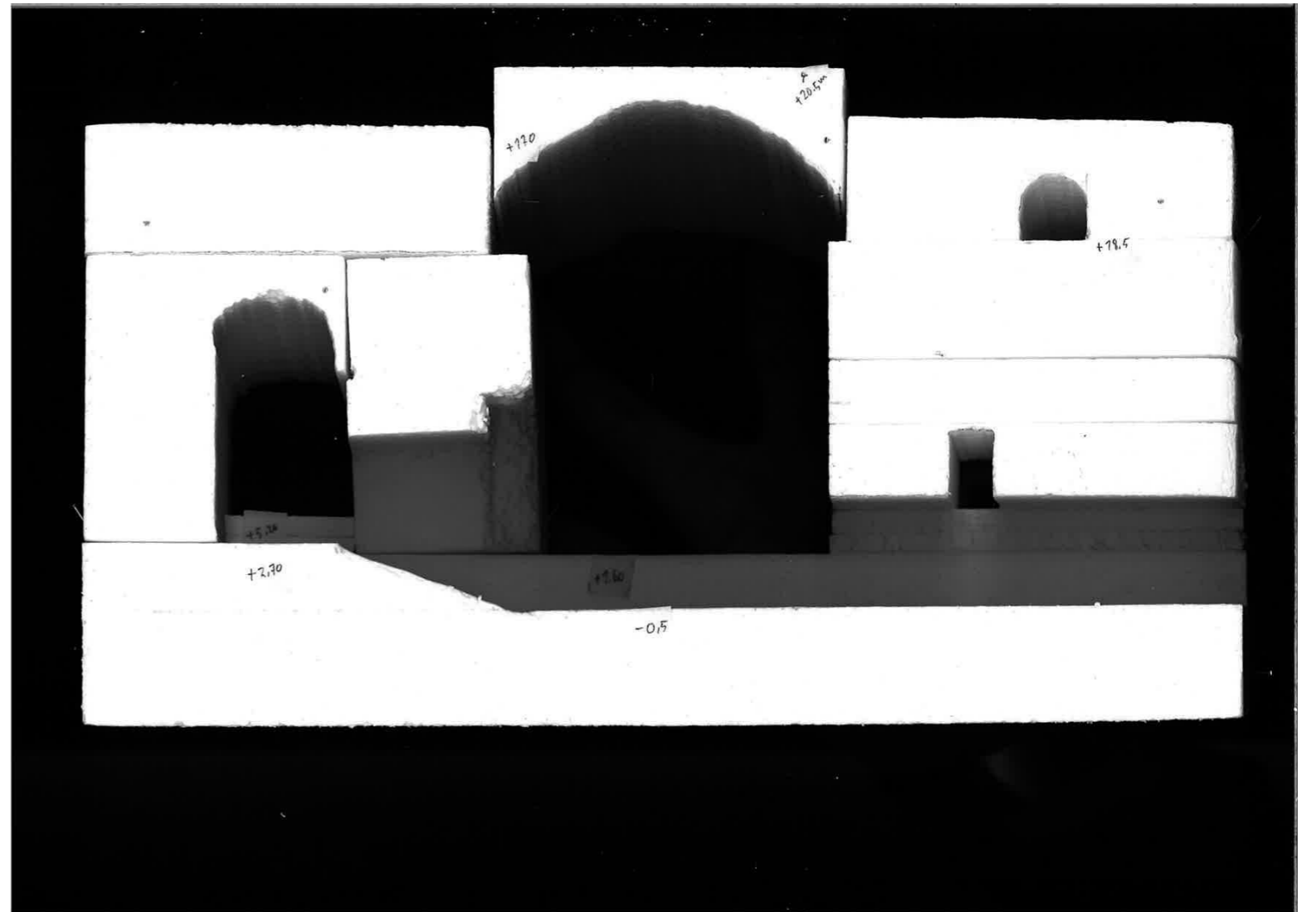
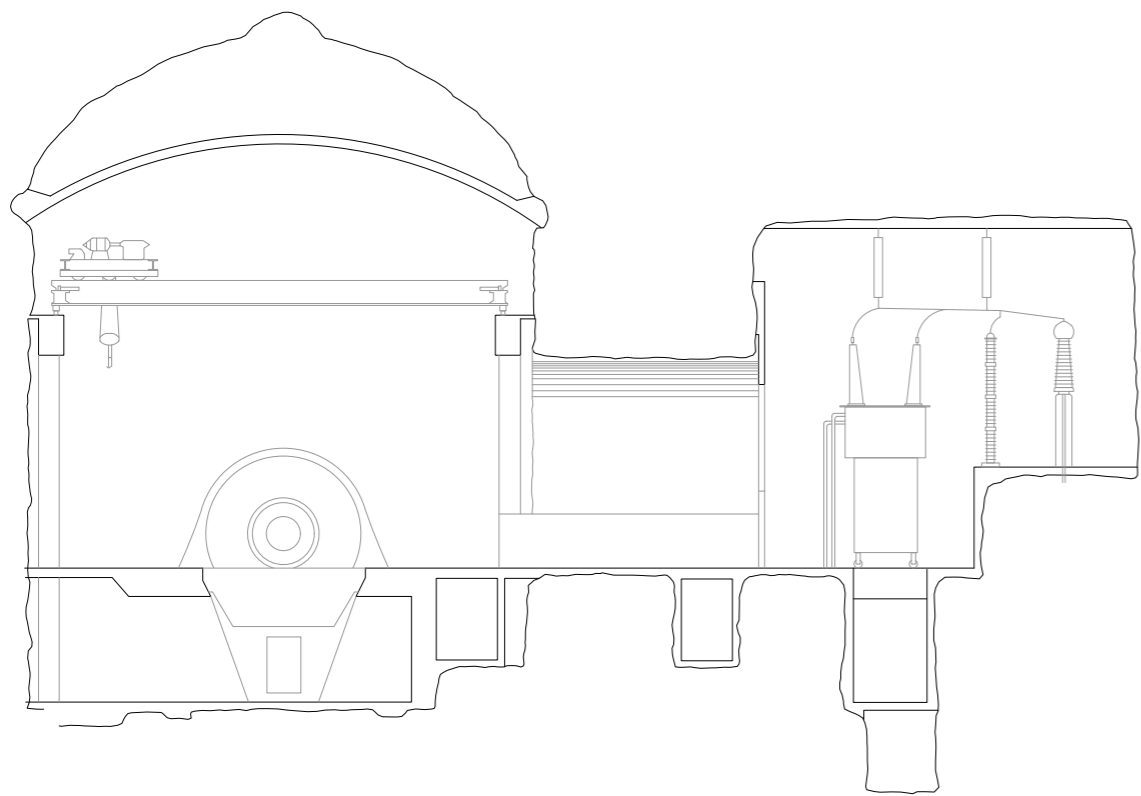
Generatorhall / Bredd: 13,5M / Lengde: 160M / Høyde: 20,5M / Areal: 2000M²

Kontrolltårn / Bredd: 12,5M / Lengde: 14,5M / Høyde: 14M / Areal: 543m² / Kraftverkets hjørne. Alle hallens elementer styres fra dette rommet ved hjelp av elektroniske apparater og måleapparater.



Transformatorhall 2 / Bredd: 10m / Lengde: 16,5m / Høyde: 9,2 (+/-) / Areal: 396m²

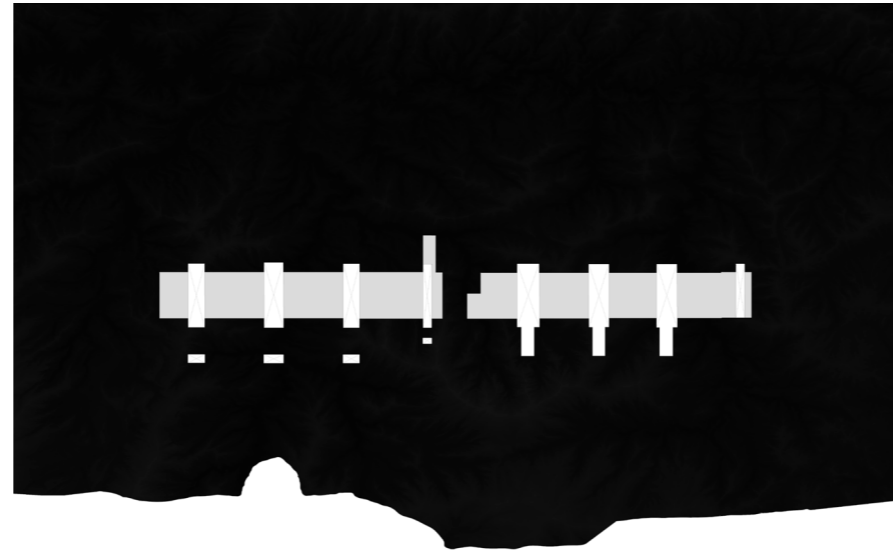
Machines and functions, what spaces they require.



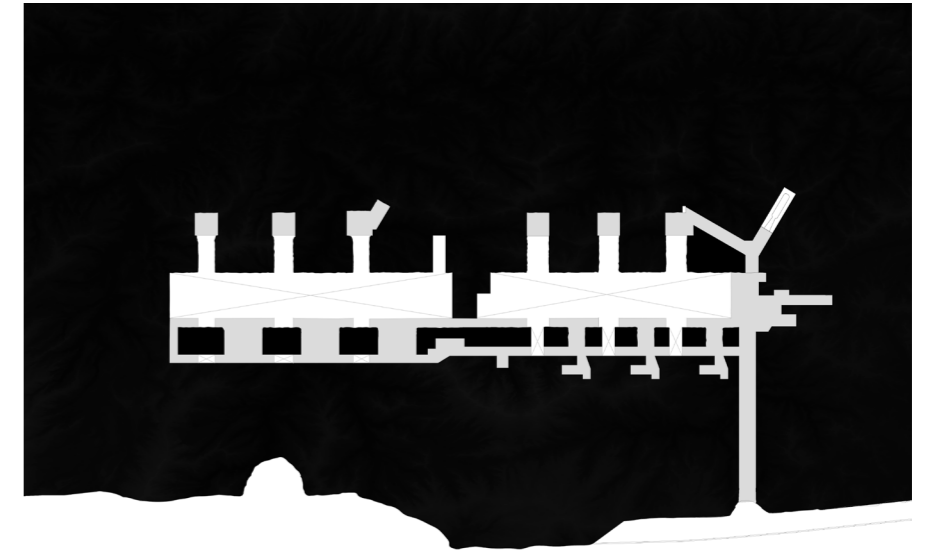
Elevations



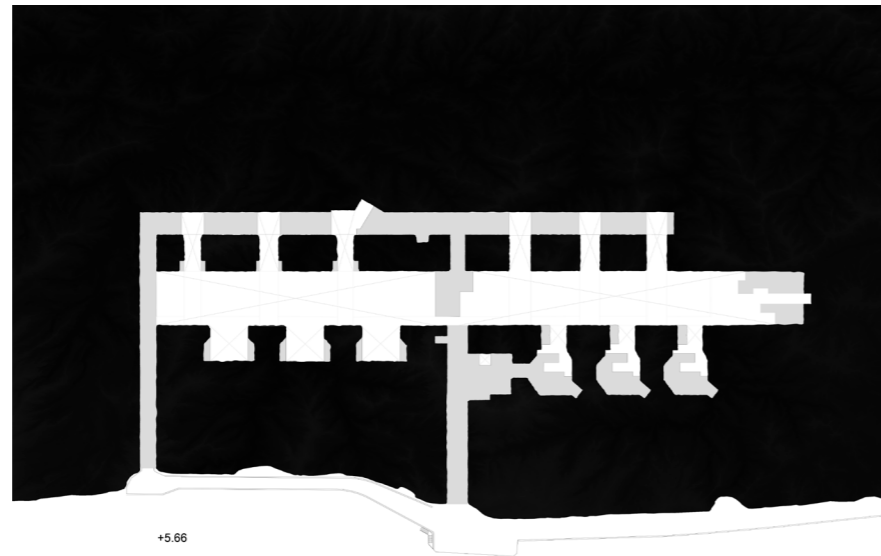
-0.5



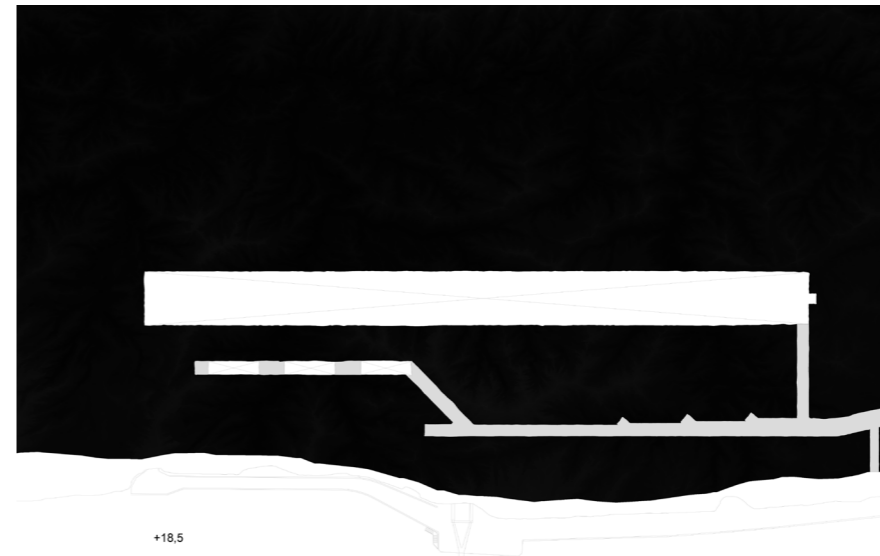
+2.0



+3.10

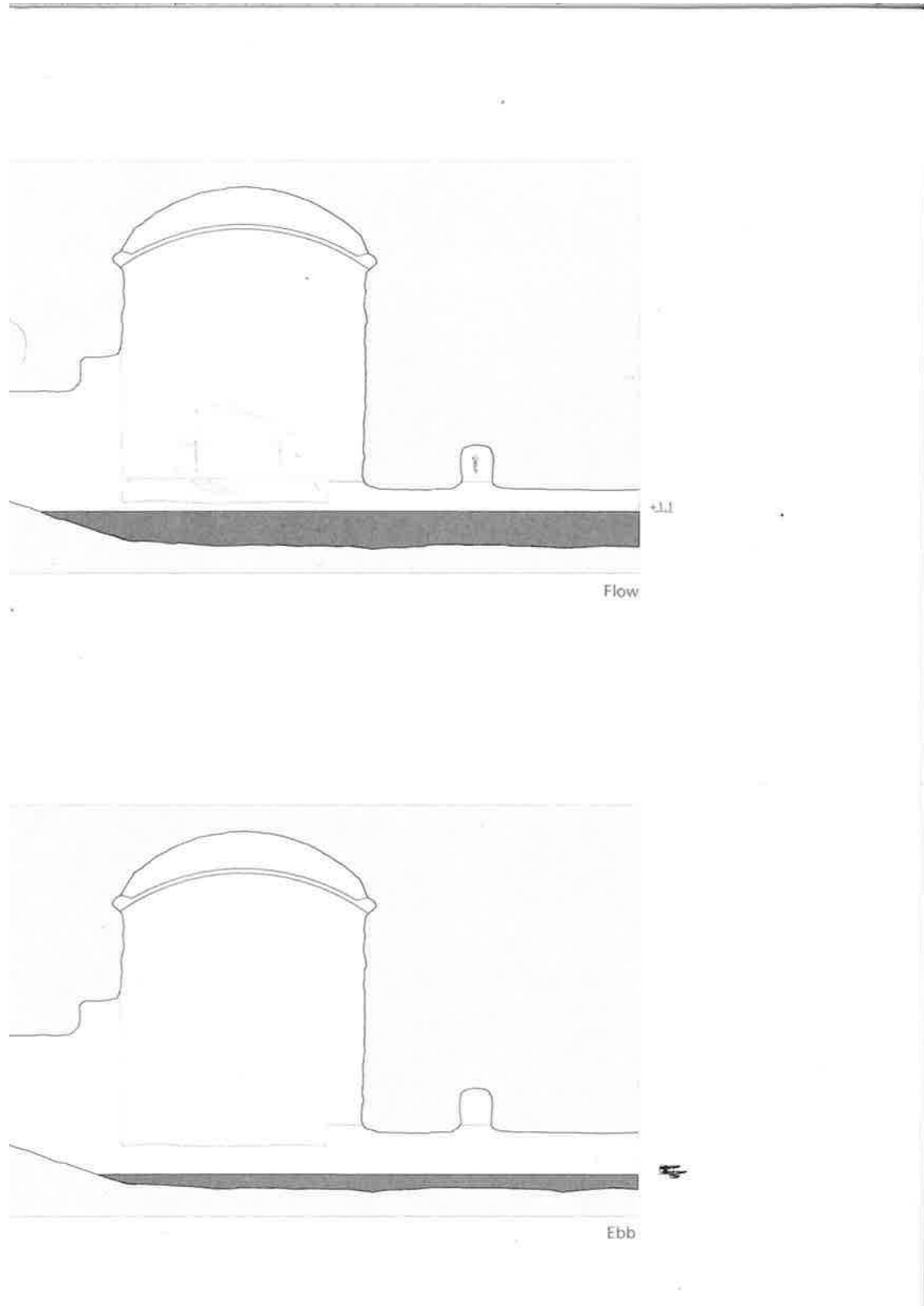


+5.66

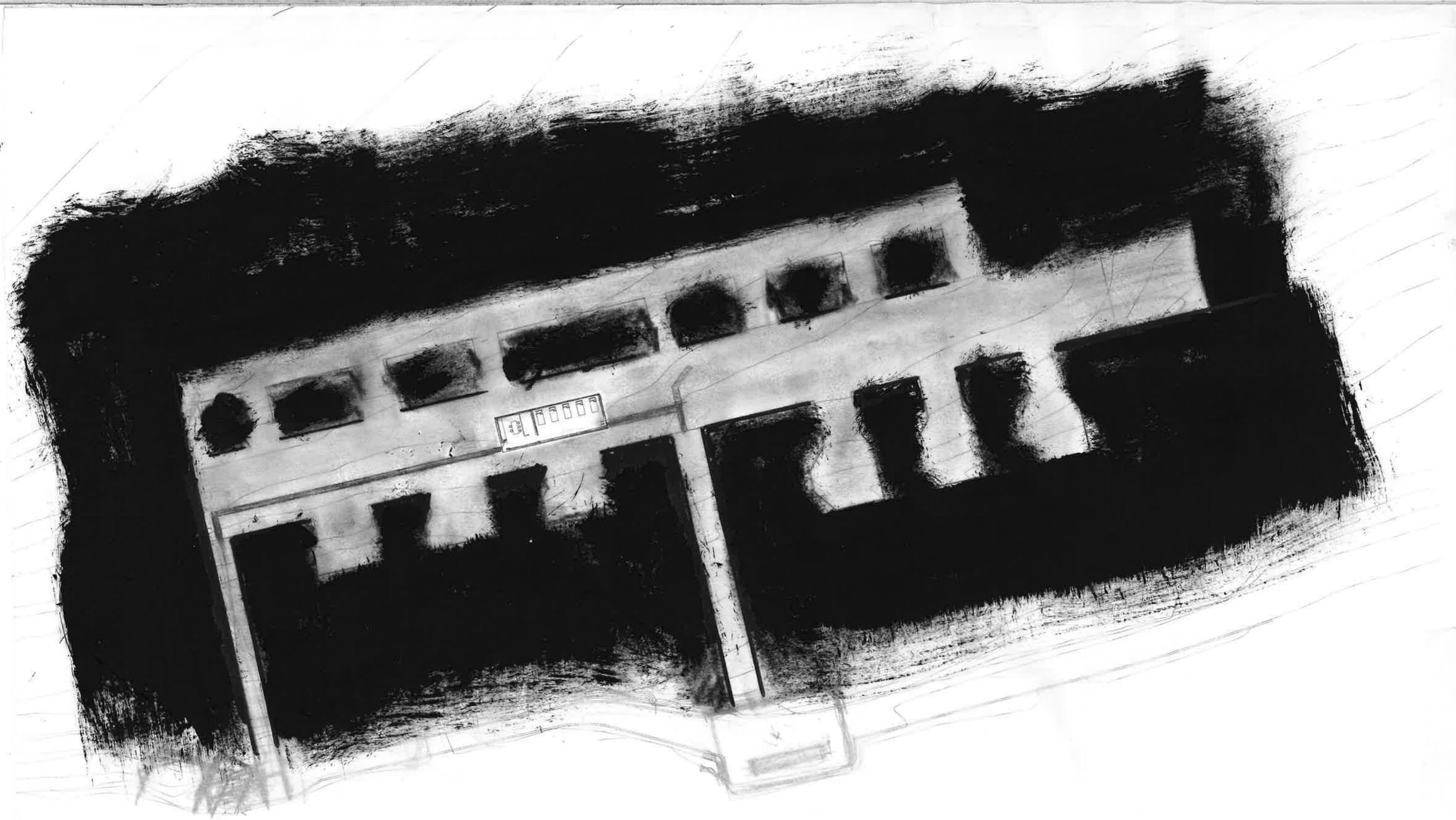


+ -18.5

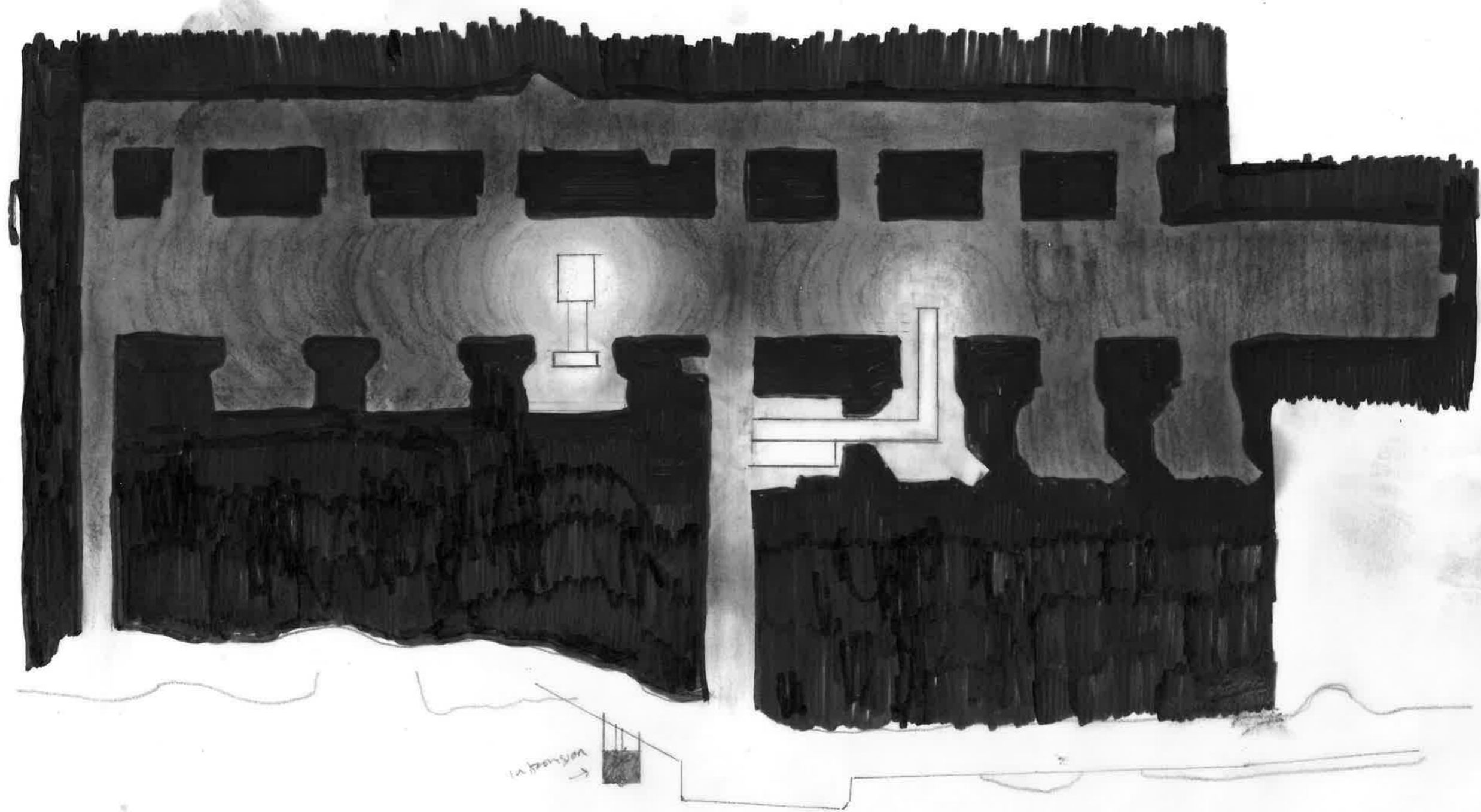
The levels of the facility.



The lowest level of the hall is -0.5, and when the machines stop the water comes in through the tunnel system. This water regulated with ebb/flow.

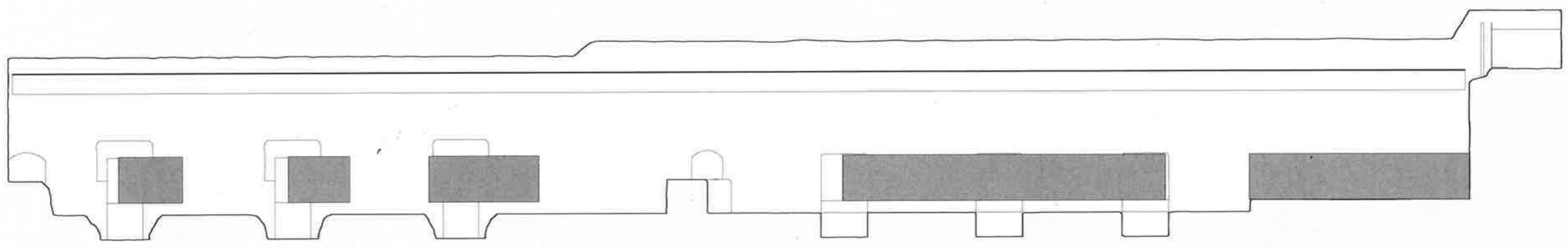


How to experience the spaces?

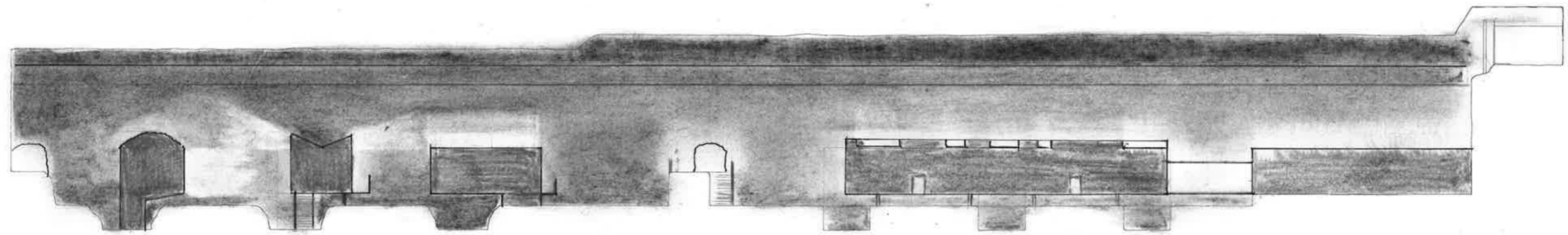


la transition
→

+ 3.0
* 5.65
+ 2.00
-0.5



Adding new structures.



As i remove everything, darknes occure. How to build something in complete darkness and how can the new structures affect their surrounding? How to navigate, sleep and eat in a completely dark space?

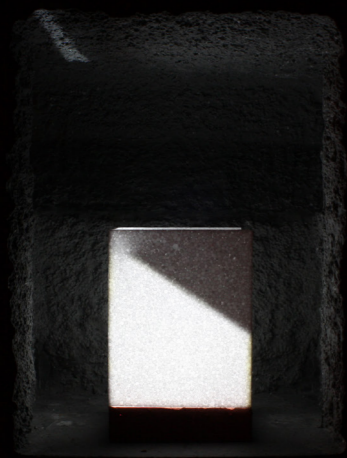


Building the spaces in model to explore with structures, solid/translucent surfaces and what capacity the existing rooms have regarding new structures. Don't want to destroy the extraordinary and dramatic quality of the existing halls. I decide to use the measure for the machines as a boundary for my new program.









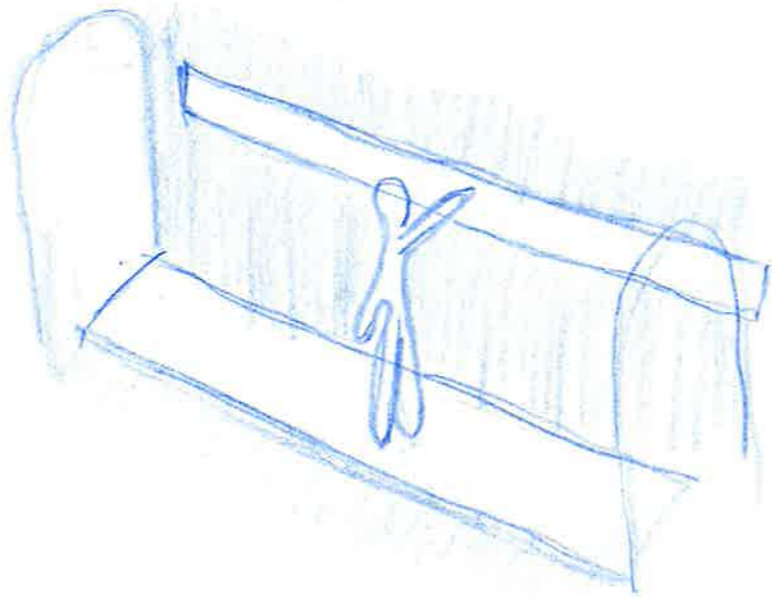


Walkway

The darkness and the shadows in the hall makes it hard to navigate between the different functions.

The rooms with functions are large and work as something you navigate towards, as something bright you see as a target. The hallways you use to walk between is usually low, dark and narrow. Here you use your eyes on a target, your hand on something that guides you, and your feet on something smooth and familiar. This narrow space is slightly lit up with a linear light towards the function. It is important that the guest don't look directly at the light and gets blinded.

Following is different concept on how to solve this.



Two underlays / walkway

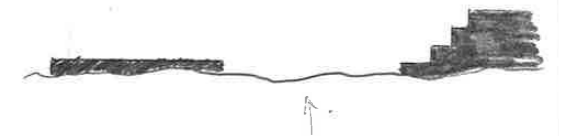
①



- Flat concrete in dark areas where you need a steady underlay.
- In areas where you are guided around the complex.

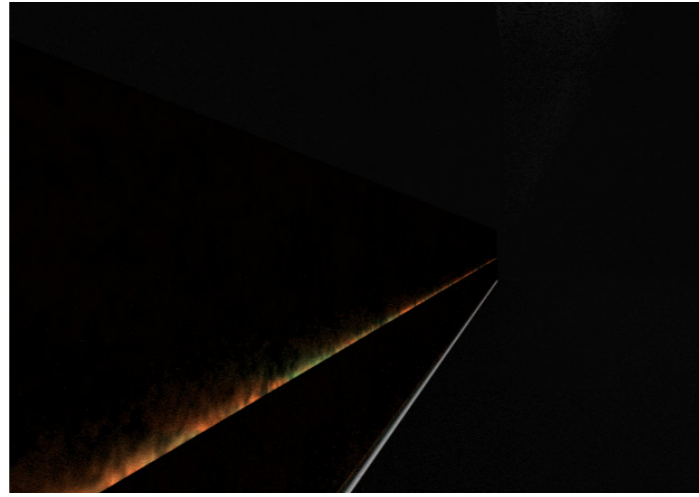
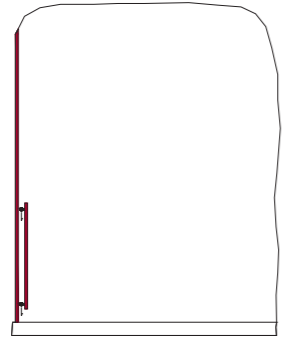
②

- Natural rock ground existing.
- used between walkway and functions.
- in areas with more light.

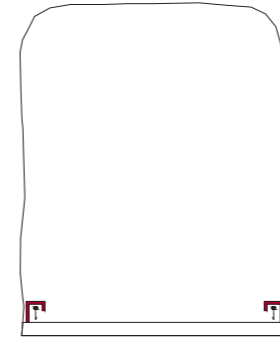


Navigating in the darkness between new functions.

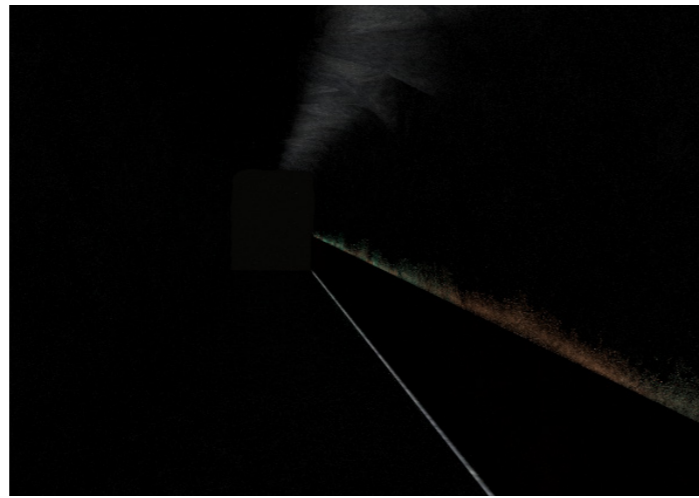
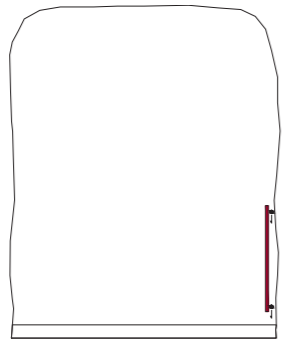
Ground: Flat concrete, easy to navigate.
 Rail: A flat surface of steel, in contrast to the uneven rock wall. Another steel wall behind to give reflection.
 Light: Two types of linear light, pointing down, giving reflection over and under the rail.



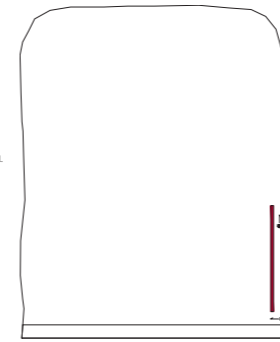
Ground: Flat concrete, easy to navigate.
 Rail: No rails, but two low structures to navigate between.
 Light: Linear lights under the structures, with the light facing down on the concrete ground.



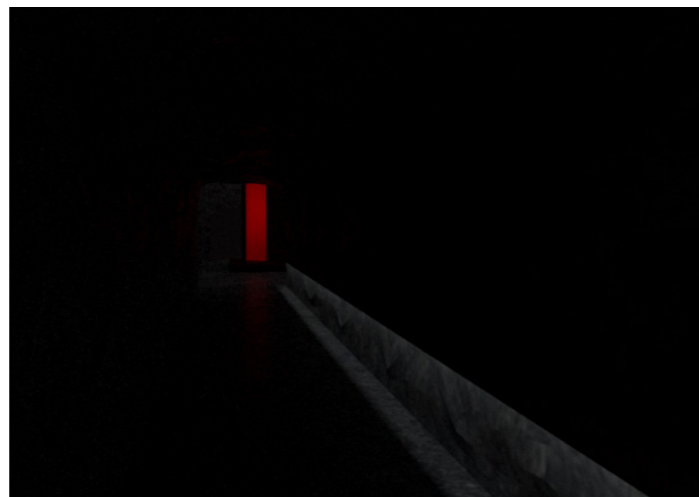
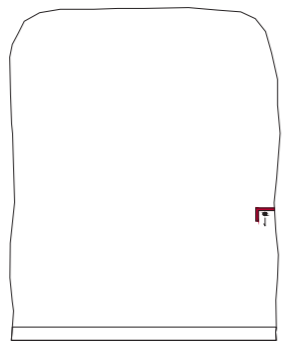
Ground: Flat concrete, easy to navigate.
 Rail: A flat surface of steel, in contrast to the uneven rock wall.
 Light: Two linear lights facing down, that lights up the rock wall and the concrete floor.



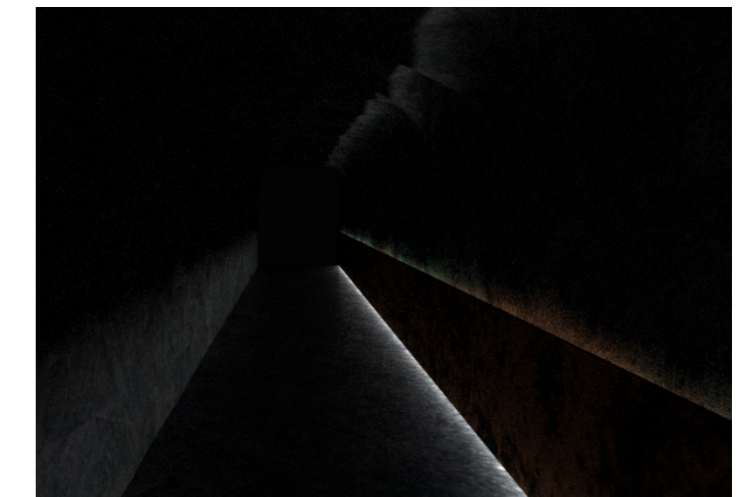
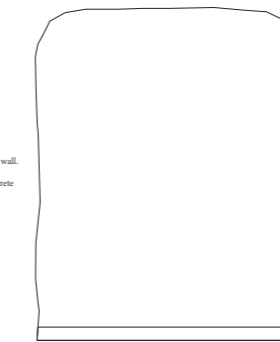
Ground: Flat concrete, easy to navigate.
 Rail: A flat surface of steel, in contrast to the uneven rock wall.
 Light: Two linear lights, one that lights up the whole concrete floor, the other light up the upper part of rail and the rock wall.
 Facing toward a function.

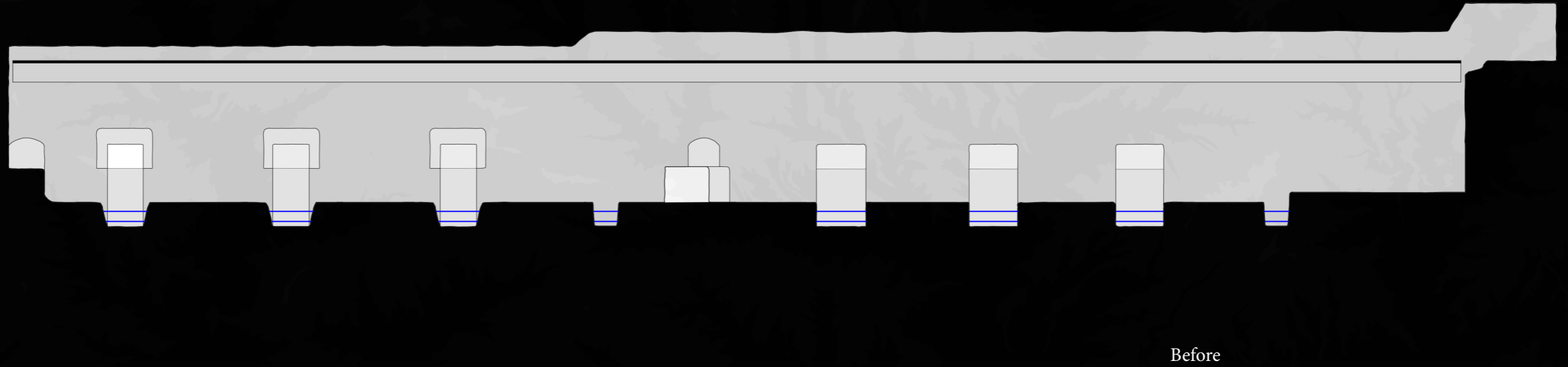


Ground: Flat concrete, easy to navigate.
 Rail: A structure of steel or wood, constructed to prevent directly facing the light.
 Light: Linear light under the rail, facing down and lighting up the lower part of rock wall and concrete floor.



Ground: Flat concrete, easy to navigate.
 Rail: A flat surface of steel, in contrast to the uneven rock wall.
 Light: Two linear lights, one that lights up the whole concrete floor, the other light up the upper part of rail.





Before



After

The lower levels of the hall consist of many different elevations. To prevent this of destroying the movement, i build the floor up, creating one floor the visitors can navigate freely on. I wish to open one of the canals of the water for bathing.

2. Sleep



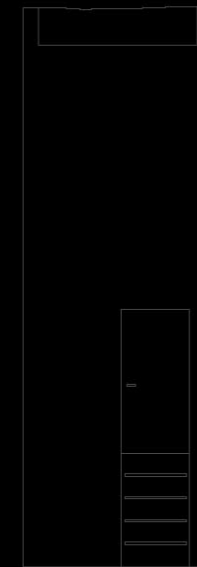
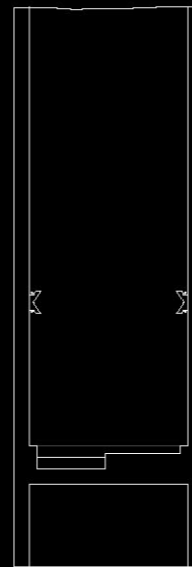
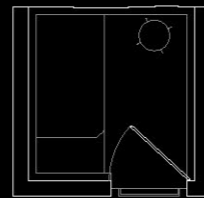
Each guest is given a room to sleep in.

The room is small in size and generously lit up without being too bright. The rocky wall and roof is reflecting the lights. It offers a private bed, a stool to sit on and a knot to hang the clothes on.

Next to the bed is two switches, one for the lamp next to the bed, and one to the lamp on the wall.

The floor of the room is elevated, with a ladder on the outside to use, giving a room for storing equipment underneath.

The small window in front shows if someone is in the rooms next to you.





Concept of bedrooms. Mountainwall. Do as little as possible. What is required to sleep in the dark?

4. Eat

To be together

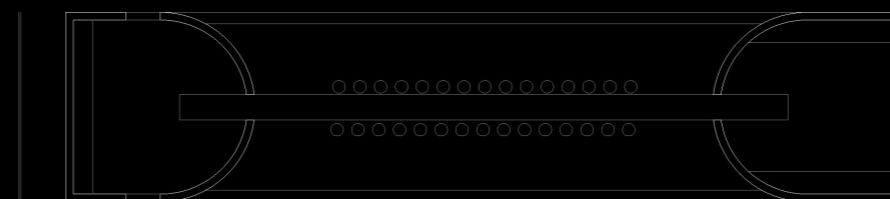
A long and narrow table is dimly lit up. The light is placed so the food on the table is clearly visible, but the lamp floating in the darkness above the table prevent blurring from the eyes as they slowly have started to adapt to the dark surroundings.

The two persons sitting in front of each other can see the reflection of the light in each others eyes as they talk.

A soothing calmness embrace the situation.

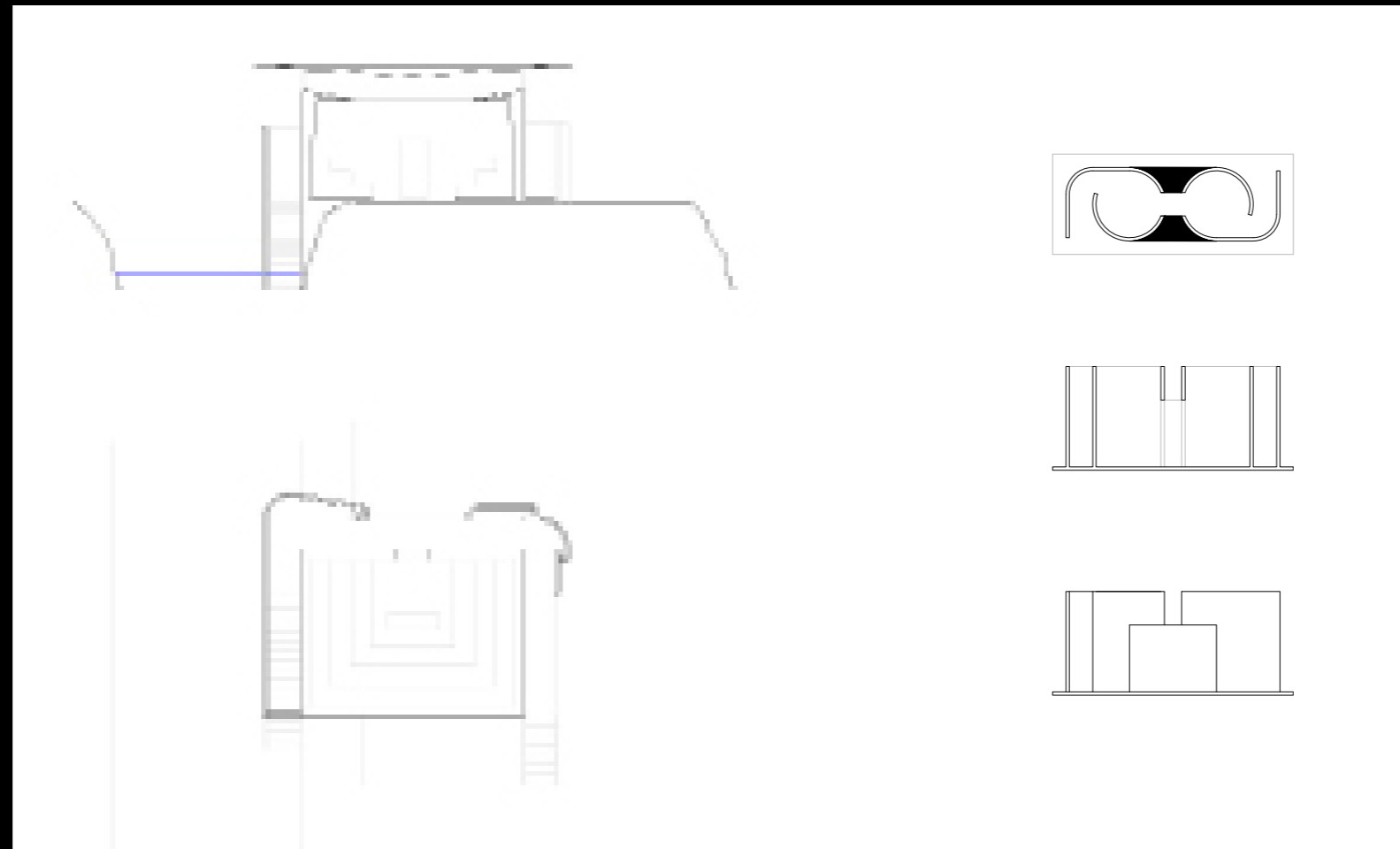
The long and narrow table make it possible for the guests to meet and eat together at the same time every day. The room has a floor and walls on two sides, but no roof. 17 meters above the guests is the curved concrete ceiling of the main hall slightly visible, protecting them from falling rocks.

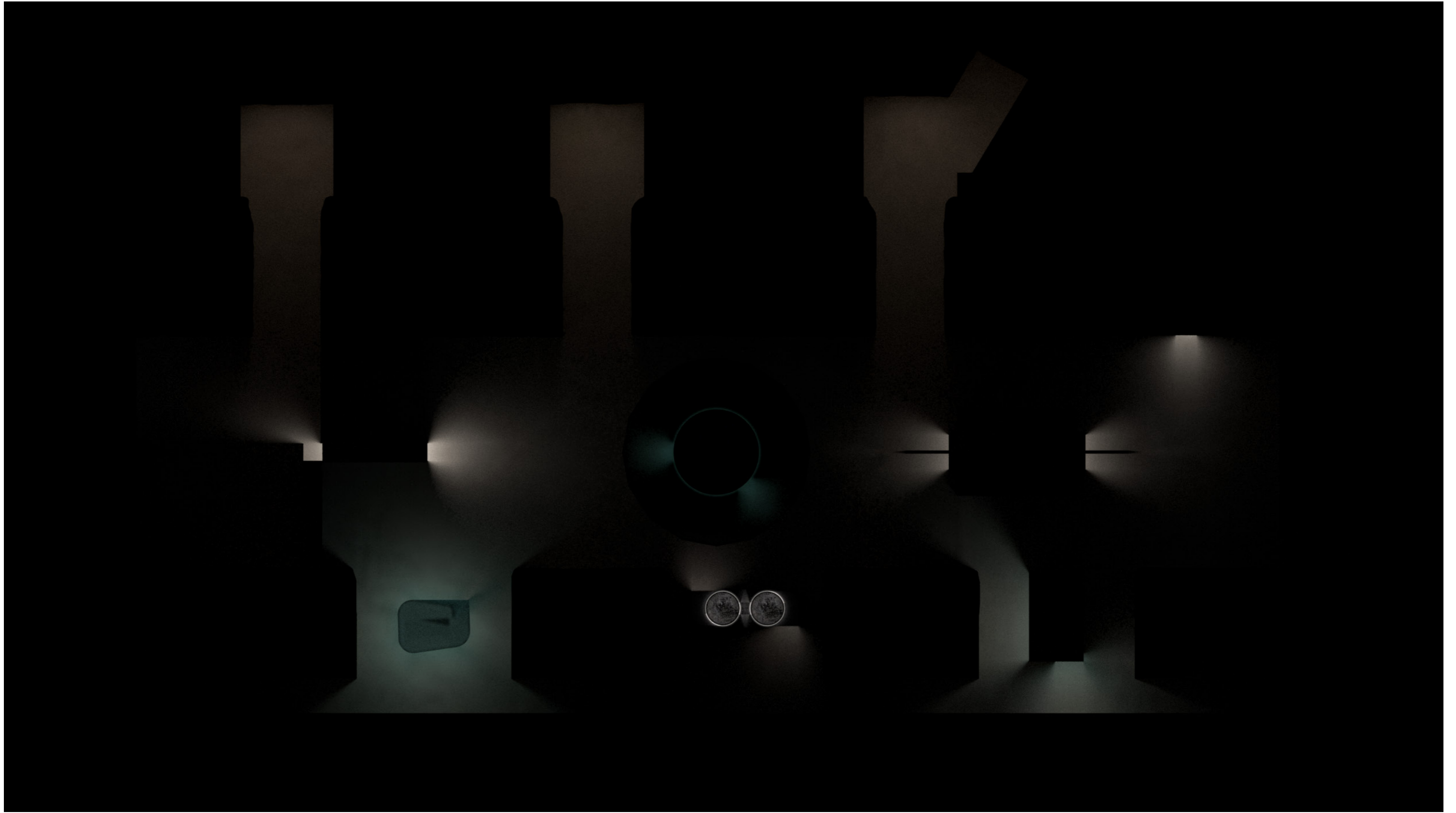
The table is the main object in the room and consist of a long continuous surface that stretches between the kitchen on one side and the bar on the other. The guests eat in the middle part. Besides the light to help navigate, this is the only object that is illuminated.





3. Hygiene





Working on how the lights from the functions affects in plan.

FINAL

