

# SIXTY FEET UNDER

*“Every tradition stems  
from rethinking its origin”*

Jan Willy Løken, director of Jølstad.



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A thorough investigation on graveyard issues of Oslo revealed an ineffectiveness in burial traditions and handling of graveyard property. Contradictory laws poses huge spatial problems for the future and surprisingly enough, a generation very open for change.

Another investigation on Oslo's largest shelters from the cold war, revealed sites without a sustainable strategy for reuse. Oslo municipality are now desperate on to get rid of them, as they rent most of them for free and half of them could pose considerable toxic threat without the necessary renovation.

Although these two problems does not correlate, by combining them as site and program, they prove beneficial for each other in terms of reuse, tradition and interpretation of law.

There is one fact of interest which changed the trajectory of the project: when Oslo adopted cremation in 1898, it applied old burial traditions which was only meant for the decomposition of the remains. This means both remains and cremains has to be "six feet under", covered by soil on all sides, unnecessary costing a considerable amount of land. There is a 80% cremation rate in Oslo (only 35% in Norway), this amounts to 66% of land used for graves. In other words, there is a potential of saving 400 000 m2 which is needed by 2030.

Using the underground shelters the environment becomes "soil" allowing columbariums in Norway, one of the oldest and most efficient ways of storing cremains. "Sixty Feet Under" provides 6 different approaches through different underground sites. Dealing with a variety of subjects such as context, typology, efficiency, exploitation, tradition, law, dignification, reinterpretation, associations and scepticism, they comprise a complete picture of ongoing discussions in the field of burial traditions. The project makes its mark as a necessary paradigm shift in an industry desperate for it.

**architect** Tin Phan, Phittawat Chittapraneerat **course** Recycling Oslo **location** Oslo, Norway **program** underground columbarium **duration** 2 months



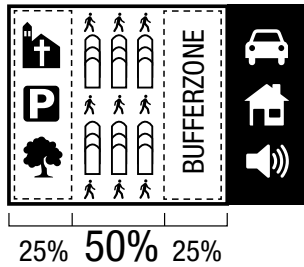
## GRAVEYARDS (WHITE):

1. Alfaset Gravlund, 2. Bekkelaget Urnelund, 3. Gamle Aker Kirkegård, 4. Gamlebyen Gravlund, 5. Grefsen Kirkegård, 6. Grorud Kirkegård, 7. Høybråten Kirkegård, 8. Klemetsrud Kirkegård, 9. Nordre Gravlund, 10. Nordstrand Kirkegård, 11. Ris Urnelund, 12. Sørkedalen Kirkegård, 13. Ullem Kirkegård, 14. Vestre Aker Kirkegård, 15. Vestre Gravlund, 16. Vestre Krematorium, 17. Voksen Kirkegård, 18. Østre Aker Kirkegård, 19. Østre Gravlund

## SHELTERS (BLACK):

1. Bygdøy, 2. Smestad, 3. Bjørnebo, 4. Svenstua, 5. Frognerparken, 6. Fjellet, 7. Stensparken, 8. St. Hanshaugen, 9. Diakonissehuset, 10. Bakkehaugen, 11. Havnejordet, 12. Myrer, 13. Grefsenkollen, 14. Arvoll, 15. Skryta, 16. Smalvoll, 17. Kampen park, 18. Brannfjellet, 19. Svartdaisveien, 20. Østmarksetra kommando, 21. Langerud, 22. Ljanskollen

**DISTRIBUTION OF PLOT**



FAD's current laws also dictates a typology similar to a park, which has led to a divided view and a certain change on how to conduct in graveyards. There is the issue of a certain waste of land too.

**SHIFT IN HOW TO CONDUCT**



Result: Split views on how to conduct in these parklike graveyards, both by visitors and those passing through. The church are desperate on how to solve this issue, not knowing either if the certain change is good or bad.

**SHIFT IN RELIGIOUS BELIEF**

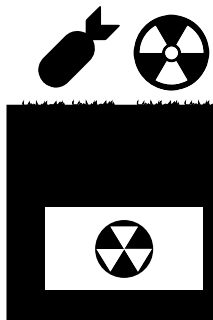


ACCEPTANCE: Buddhism, Sikh, Hindu, Holism  
 FROM DENIAL TO ACCEPTANCE: Christianity, Judaism, Protestantism, Catholicism  
 DENIAL: Islam, Bahai'i, Orthodox

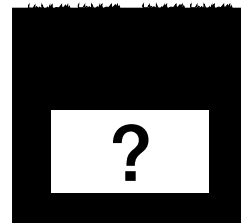
Religions has reversed their views on denying cremation as a response to the spatial problems.

**SITE: UNDERGROUND SHELTERS**

POTENTIAL: Missing a strategy for sustainable reuse. As 50% of them stands empty they can pose considerable toxic threat to Oslo without the necessary renovation.



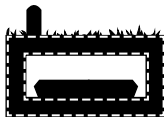
40-60's - Reasons for existence: WWII, Cold War, natural disasters.



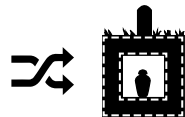
2013 - Reasons for existence: Unclear, Oslo still has to pay for maintenance and lost revenue as they rent out half of the sites for free.

**PROGRAM: PROPER BURIALS**

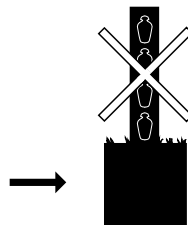
POTENTIAL: FAD's current law and regulations on graves poses major spatial problems as they are yearning for a renaissance in their legislation.



The law states that all graves must be "6 feet under" and all sides covered by soil.



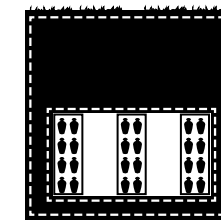
1898, Norway adopts cremation but applies old burial customs.



This law eliminates columbariums as an alternative. This is one of the oldest traditions that actually is efficient.

**PROPOSAL: UNDERGROUND COLUMBARIUM**

We propose a reinterpretation in the 115 year old law of handling cremains in Norway, as there is no direct link between handling ashes the same way as remains. By using the underground structures the environment becomes "soil" and will save Oslo for a lot of space in the future. We want to reinterpret what is "proper", "tradition" and "dignified" to address the upcoming problems of expanding graveyards for the 80% that is cremated.



Combining the two enables columbariums, which still dignifies Norwegian tradition of being in the ground. A more spatial effective site is also enabled, allowing stacking and compression increasing the number of cremains/area ratio (CAR). Buffer zones on the other hand is not required since the site is soundproof and sheltered. This solution applies to the 80% that cremates, trying to solve 66% of the land space needed.

Ultimately we are talking about an efficiency of 141-201 times. The 400 000m<sup>2</sup> that the 80% consist of can be compressed down to 2000-2800m<sup>2</sup> (not considered pathways and walkways).

## EMBRACING THE SITE

Out of its original context, the site seems misplaced. Brannfjellet alarmplass is located along E6 with a stairwell leading directly to a random private house, connecting the suburbs of Oslo. We propose to take the site for what it is and intervene as less as possible. By embracing its anonymity and the dark cave in itself one can avoid disrupting its existing context.

Upon arrival at the entrance the visitor is met with a pitch dark cave. It can only be navigated through a controlboard system. By entering the name of the specific person you are visiting, the exact location of the loved ones will be lit up, creating its own private space. The site is a straight corridor, so the visitors is not disrupted when "following the light", a poetic way of coming closer to the deceased.



## SHAPELESS ENTITIES

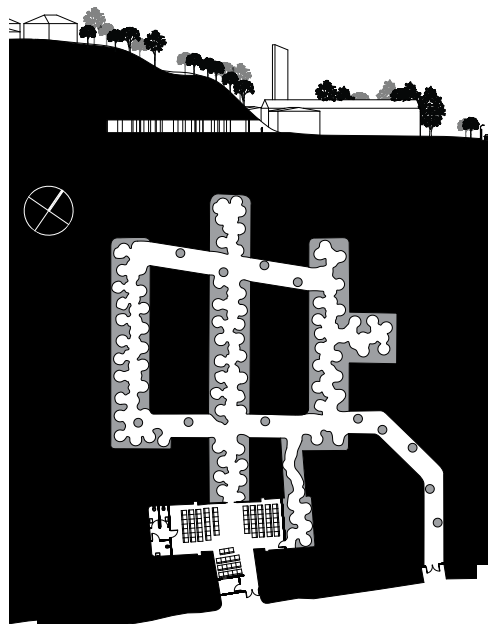
Smestad alarmplass can be found along Ring 3, behind Ullernchausséen 28. The buildings in front are set for demolition this year, opening the entire space. We propose a complete facility for burial tradition, dealing directly with the conception of the columbarium typology using the essence of funeral business as a parameter.

Cremains is shapeless, yet the urn takes on a specific shape and the columbarium typology only come in one form (wall) with fixed nichés. Meanwhile the service the funeral agencies provides us is a cover up of the natural process

of death. A beautifully carved coffin to cover decay, an urn to hide fact about the hideous process of cremation. In reality the entire funeral business is based on a curtain wall. The agencies also provides a hierarchy in graveyards between commoners, royalties and celebrities by zoning them in different wings.

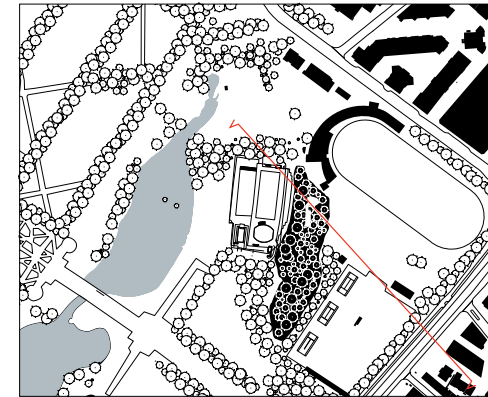


We propose putting the cremains in more elastic units, where the shapes can change at any given time. By changing the unit of cremains, it opens the columbariums to take any shape. Using a thin curtain wall to beautify this approach, the hierarchy is shown through a font with different size, as cremains of different background are placed altogether. In reality the curtain wall hides the fact that all cremains are treated equally.

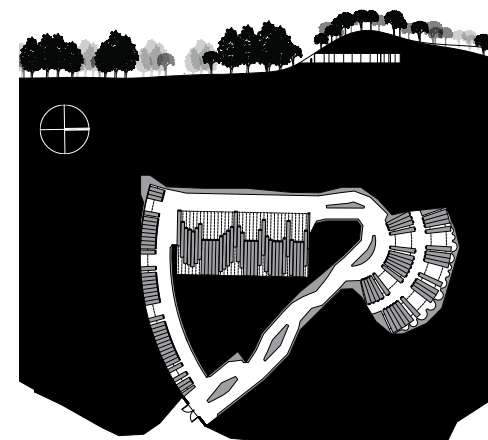


## THE BUSINESS PLAN

There is no hiding the fact that the funeral business is a billion kroner industry. This approach tries to speculate on how to exploit and maximize the space and profit off our proposal and ultimately increasing the CAR. By doing so the cost for each single mourner will be lower and the profit for the graveyards will be higher. All these factors taken into consideration we try to balance how to dignify these solutions.



The site has accessibility to public transport, making the site a prominent test for this approach. Using old storing systems commonly seen in libraries, the columbarium takes its most effective form. By rethinking its shape, use and mechanic, this mobile shelving system also creates flexible and private mourning spaces between the shelves.



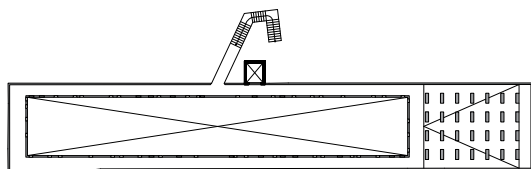
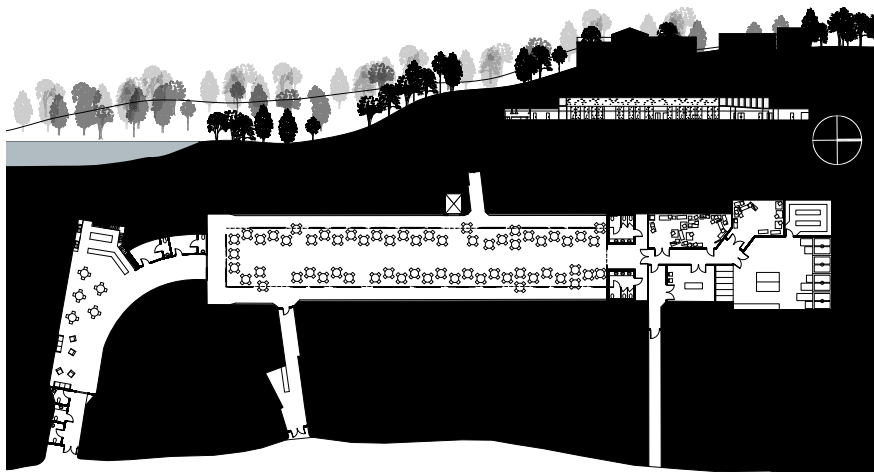
## THE INVERTED HOLY SPACE

Østmarksetra Kommandoplass, is the only site over 2 storeys and on the Marka border in the forest. With no nearby church and being far away from the city center, the site opens possibilities for establishing a common ceremonial space and a crematory. By removing the buffer zones of the typical church plot, all the holy components becomes more condensed creating frictions between ceremony, crematory and burial. It becomes a question of how to interpret the border between what is in demand and what is dignified without the buffer zones.



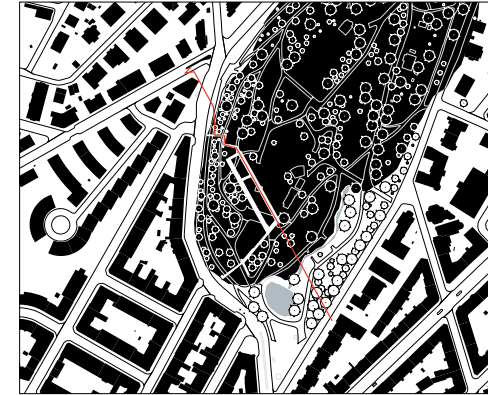
Without the buffer zones, the distribution of plot becomes drastically different as all of the square meters are programmed. Here we propose to maximize the ceremonial part (50%), as the context is one of the kind among these sites. We propose to cut a hole in the 2nd floor so the main room has a ceiling height of 7 meter. The columbarium is minimized as corridors packed

around the main hall room in both the 1st and 2nd floor. In addition there exist a lobby to support the ceremonial room, and a crematory (14%) to support the columbarium (37%). The sliding doors works as a buffer, between the ceremonial hall room and the columbarium. This solution provides an informal and a formal solution in how to utilize the room. On the end of the second floor is a reinterpreted piece of the traditional graveyards. The tombstones here is actually containing urns as they have been resized from ground to ceiling. The slope hill downwards is a nod to one of the graveyards most important characteristics.

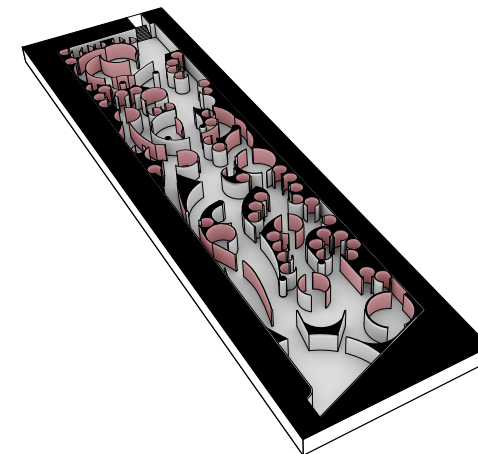


### UNFORESEEN ENCOUNTERS

Obviously the belief in todays society have changed on how to conduct in graveyards. The removal of buffer zones gives an opportunity to program every square meter, ultimately controlling more in a columbarium/graveyard. We want to capitalize on these unforeseen encounters, using it as a tool to develop a rather large space.



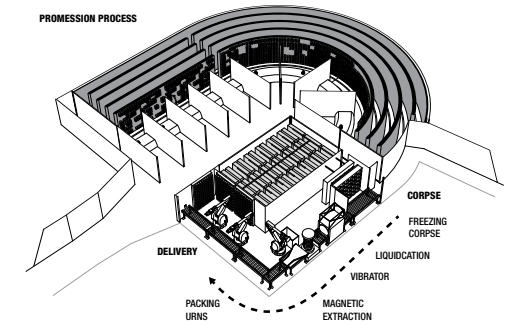
St. Hanshaugen alarmplass is one of the larger shelters of 1250 m2, situated beneath St. Hanshaugen park. The main concern is how to differentiate and embrace the variety of emotions between the daily life, the mourners and the passing through. The spaces inside the columbarium is defined by thin curve walls defining the private space for the mourners and the outside of the curved walls defines an organic space encouraging flow. The walls



creates intersections and directions that vistors can explore and follow. Two different trajectories defines how the mourner and the others utilize the space as their paths overlap in the intersections.

### WHAT THE FUTURE MAY HOLD

Fjellet alarmplass is situated under Vestre Aker Menighet, the church itself provides services that are old and ineffective. Using current technology in the field this approach raise questions about todays standard. Technology today can enhance the funeral process to be more effective. This approach introduces a more contemporary and interactive alternative opposite of the century old traditions of the church above.



In the columbarium there are two entrances one is the main entrance where visitor enters and the other is for the remains. The remains is handled through an mechanically driven promession conveyer. This is an eco friendly way of disposing remains where the body is frozen and then shaken into cremains and ashes. At the delivery you will get a neatly packed urn. When a mourner visits their love ones they swipe the card which a mechanical arm then finds the urn and brings it to the private viewing room. Once placed memories and pictures related to the urn is projected on the digital wall for viewing. The photos and memories can be collected and updated into the server room which is next to to the promession freezing facility using the same cooler.