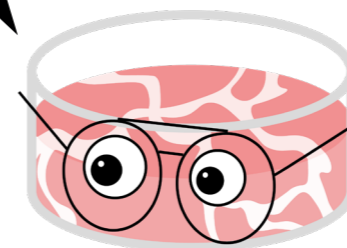


Transitional Territories  
2019/2020  
Alexander Scho

**Make Food,  
Great Again!**



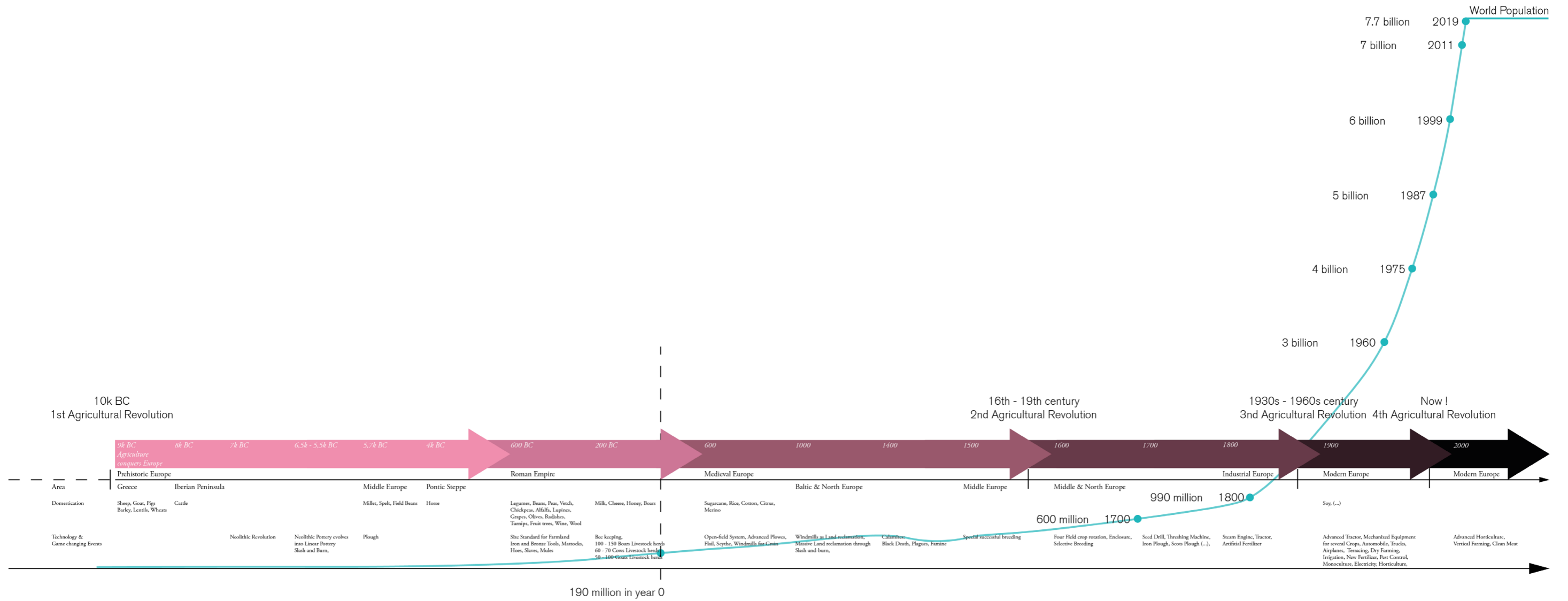
1. A Spatial Strategy
2. Integration in the Urban Fabric
3. Finding a new Type
4. Metabolic Performance

## 1. A Spatial Strategy

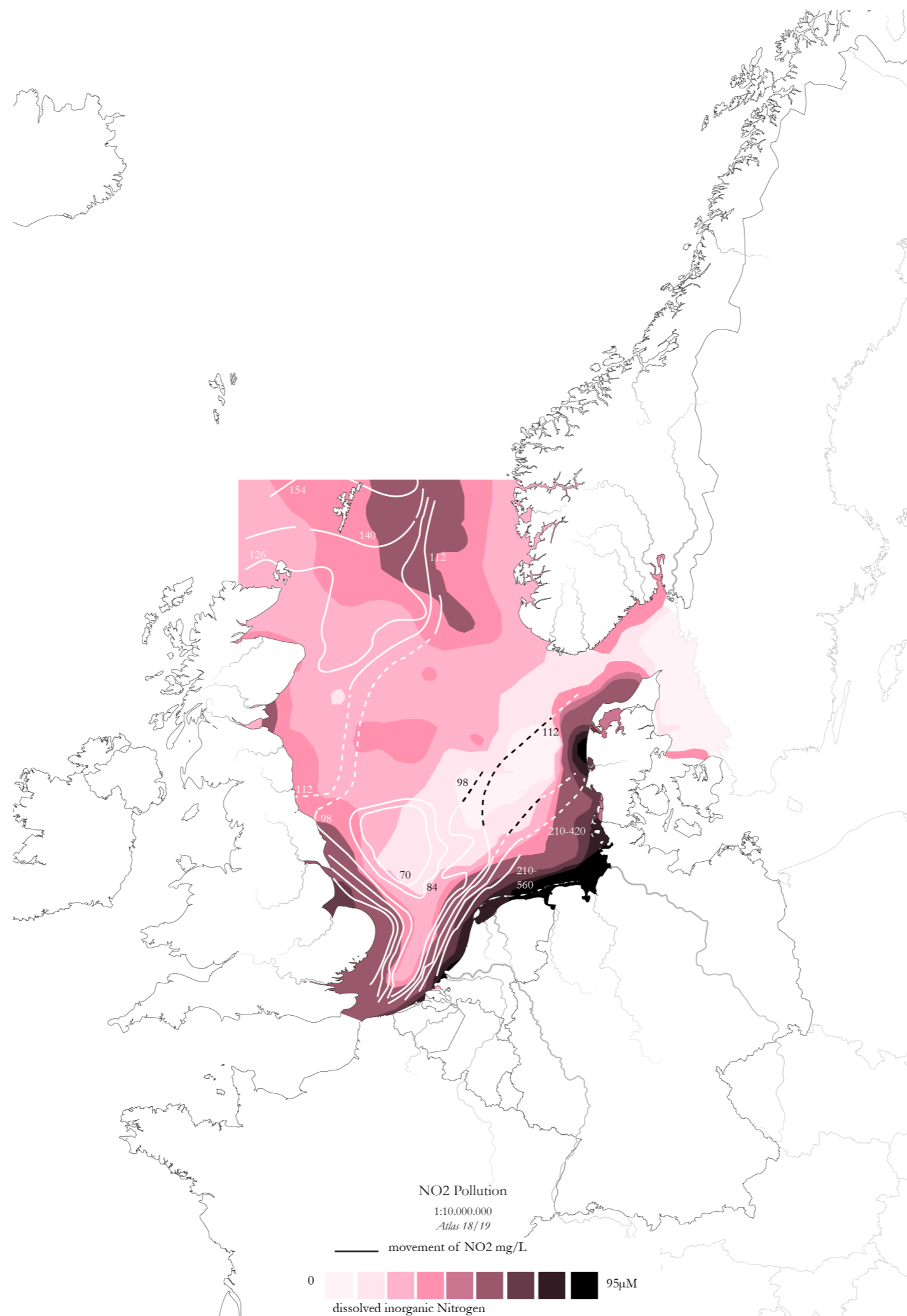


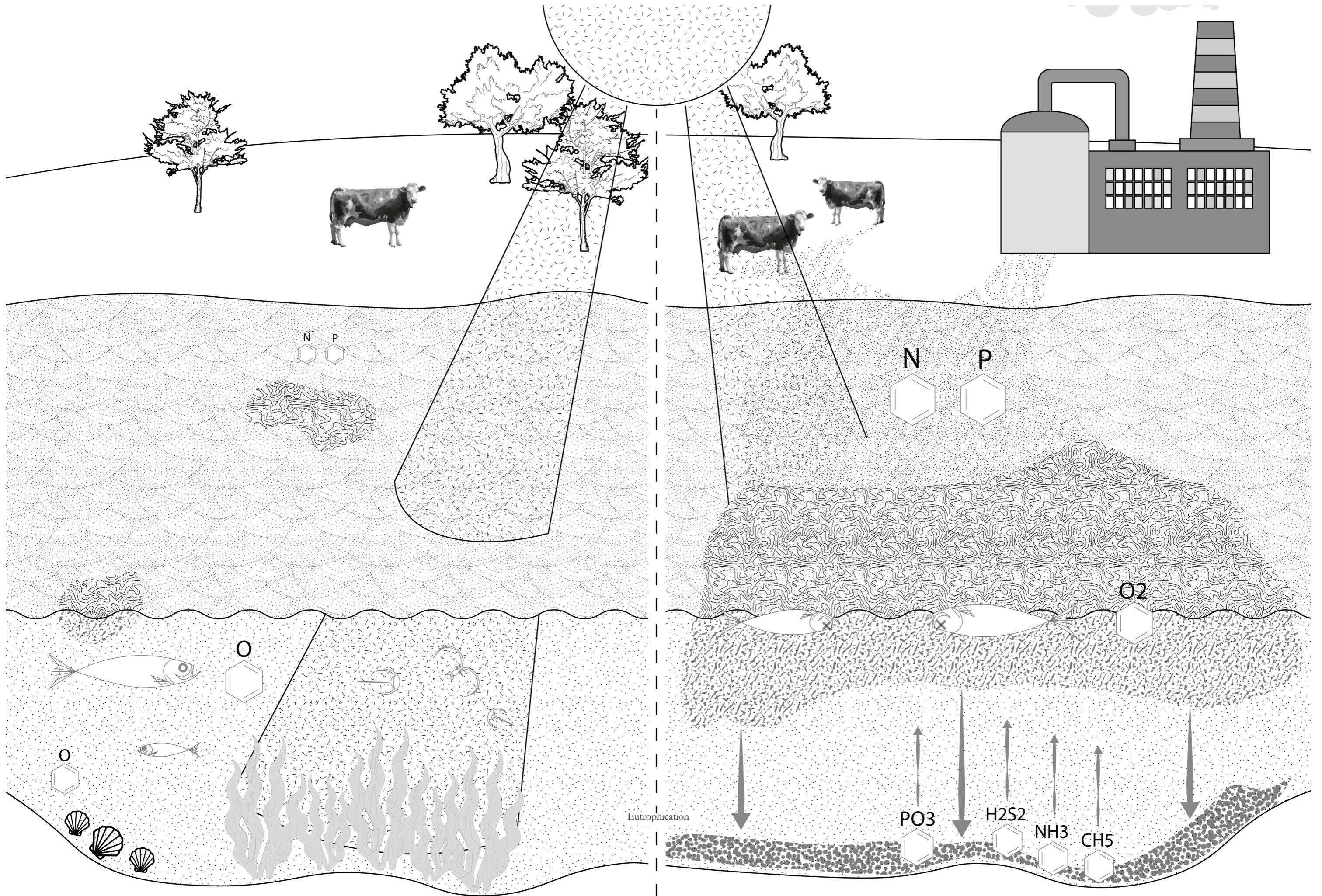
The Oxbow  
Thomas Cole, 1836

[https://en.wikipedia.org/wiki/The\\_Oxbow#/media/File:Colt\\_Thomas\\_The\\_Oxbow\\_\(The\\_Connecticut\\_River\\_near\\_Northampton\\_1836\).jpg](https://en.wikipedia.org/wiki/The_Oxbow#/media/File:Colt_Thomas_The_Oxbow_(The_Connecticut_River_near_Northampton_1836).jpg)

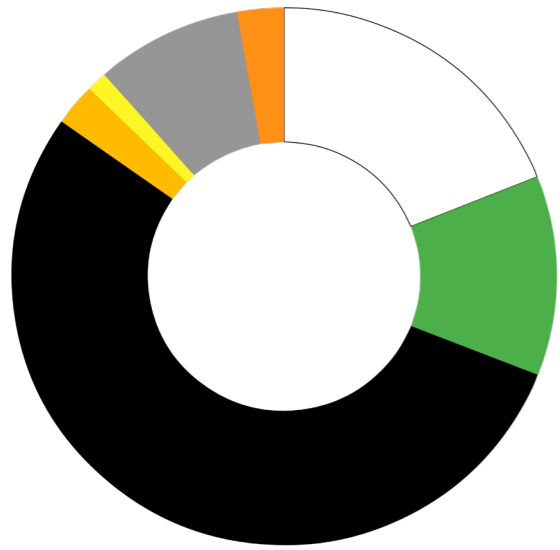


Agricultural Development



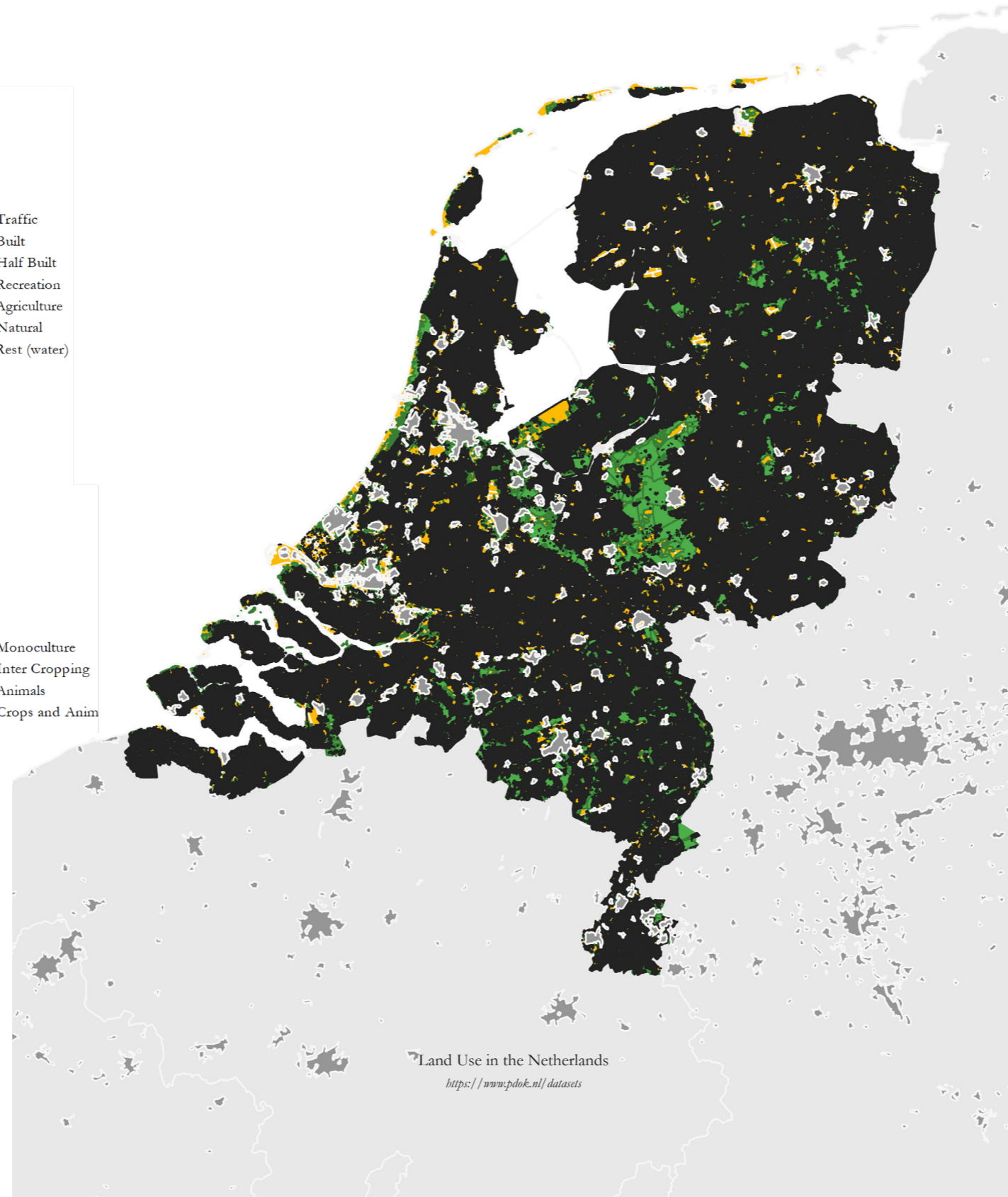


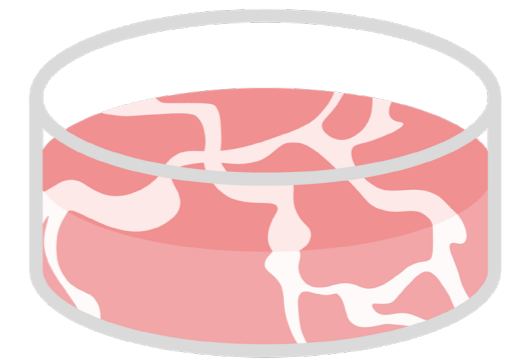
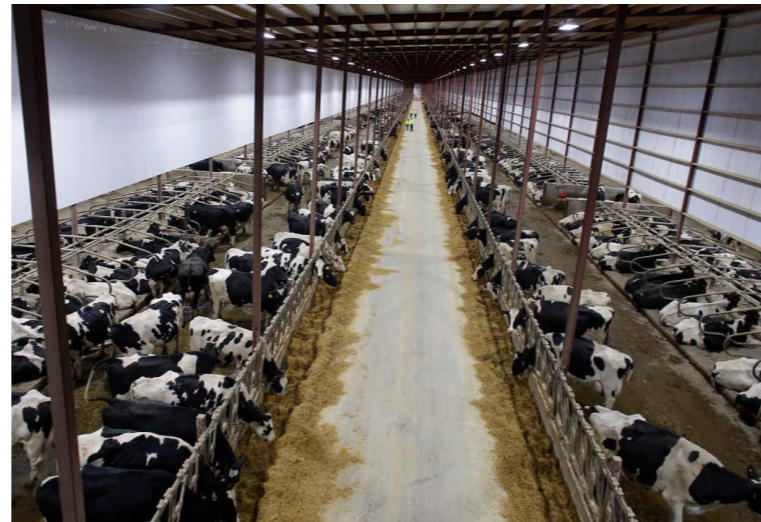




- 2,8% Traffic
- 8,7% Built
- 1,2% Half Built
- 2,5% Recreation
- 53,8% Agriculture
- 12% Natural
- 18,9% Rest (water)

- 31,3% Monoculture
- 3,1% Inter Cropping
- 61,7% Animals
- 4,0% Crops and Anim





Evolution of Technology

<http://www.arster-geschichte.de/dat-luetje-museum/die-landarbeit/>

<http://wisconsinreport.com/newsone/wisconsin-high-court-sides-with-attorney-general-to-let-dairy-farm-case-be-heard-in-waukesha-not-madison/>

News > World > Europe

## Campaigners rally against EU 'veggie burger' name ban

EU regulations could see veggie burgers and sausages renamed 'veggie disks' and 'veggie tubes'

**Jon Stone** Brussels | @joncstone | Monday 13 May 2019 17:27 |

41 comments



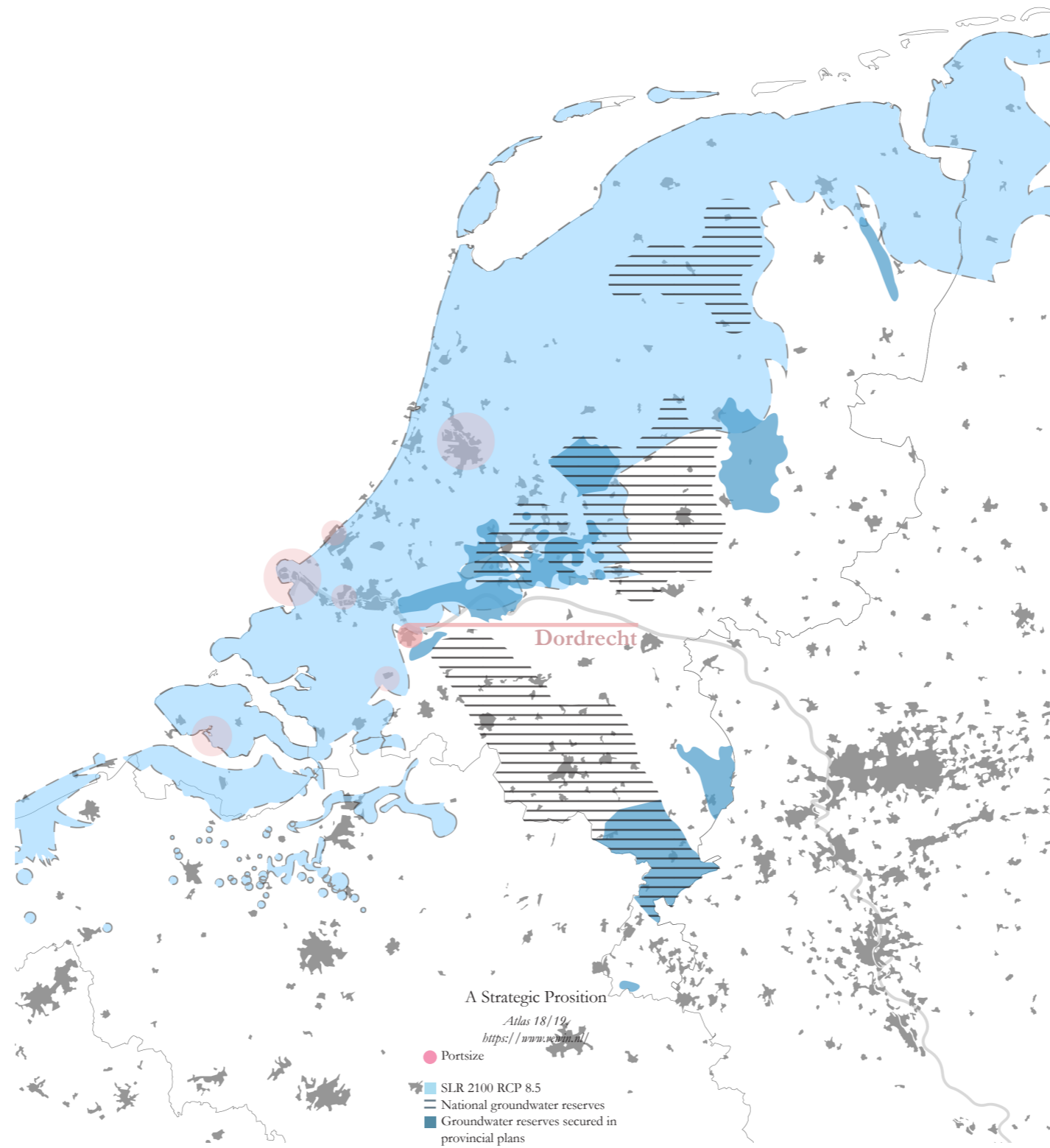
## Lab-made meat rebranded 'clean meat' to address 'yuck' factor

By **Oscar Rousseau** [↗](#)

08-Sep-2016 - Last updated on 09-Sep-2016 at 07:25 GMT



SuperMeat's CEO Koby Barak said he was 'supportive' of the clean meat term



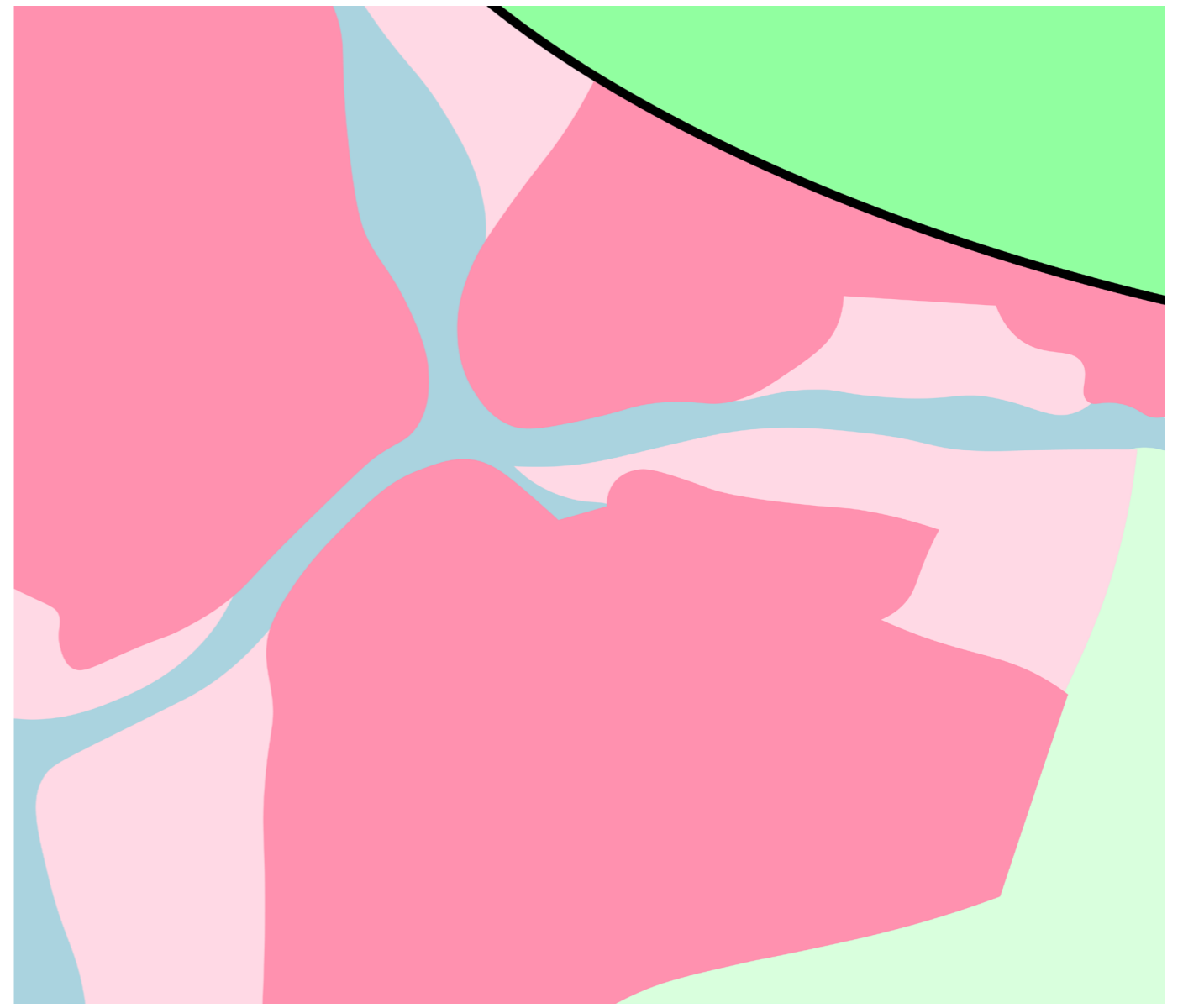
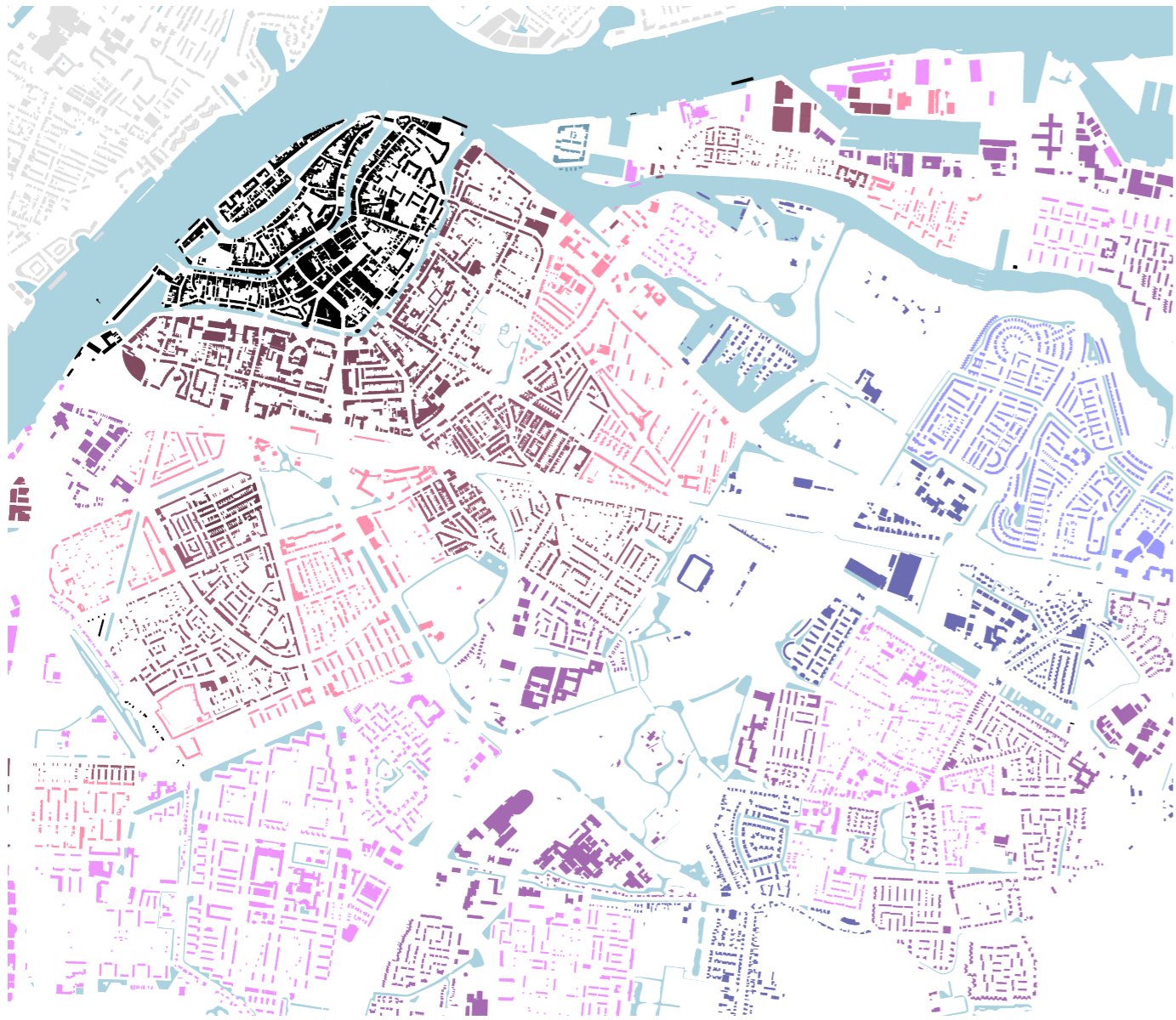
## 2. Integration in the Urban Fabric



Tower to the People

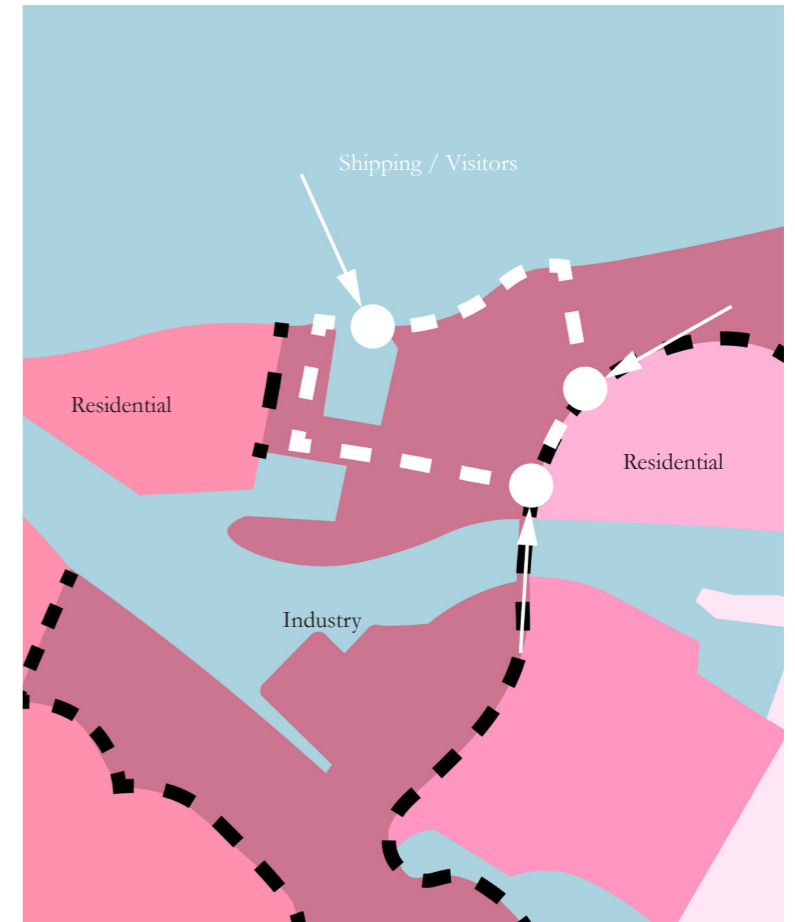
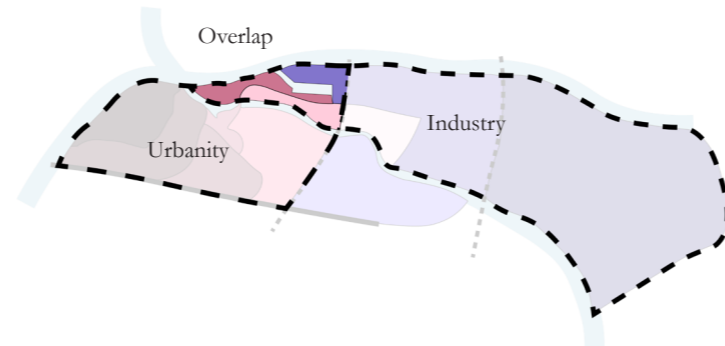
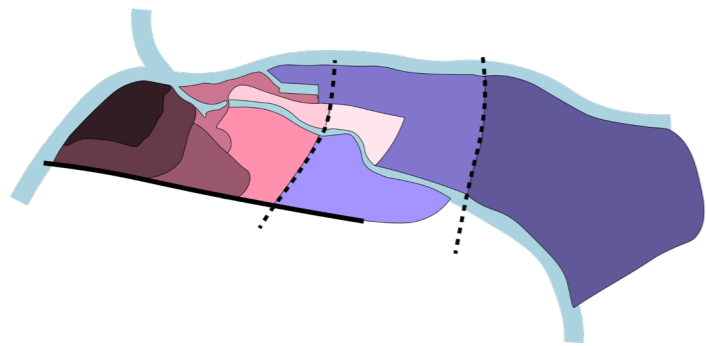


Dordrecht



Dordrecht Urban





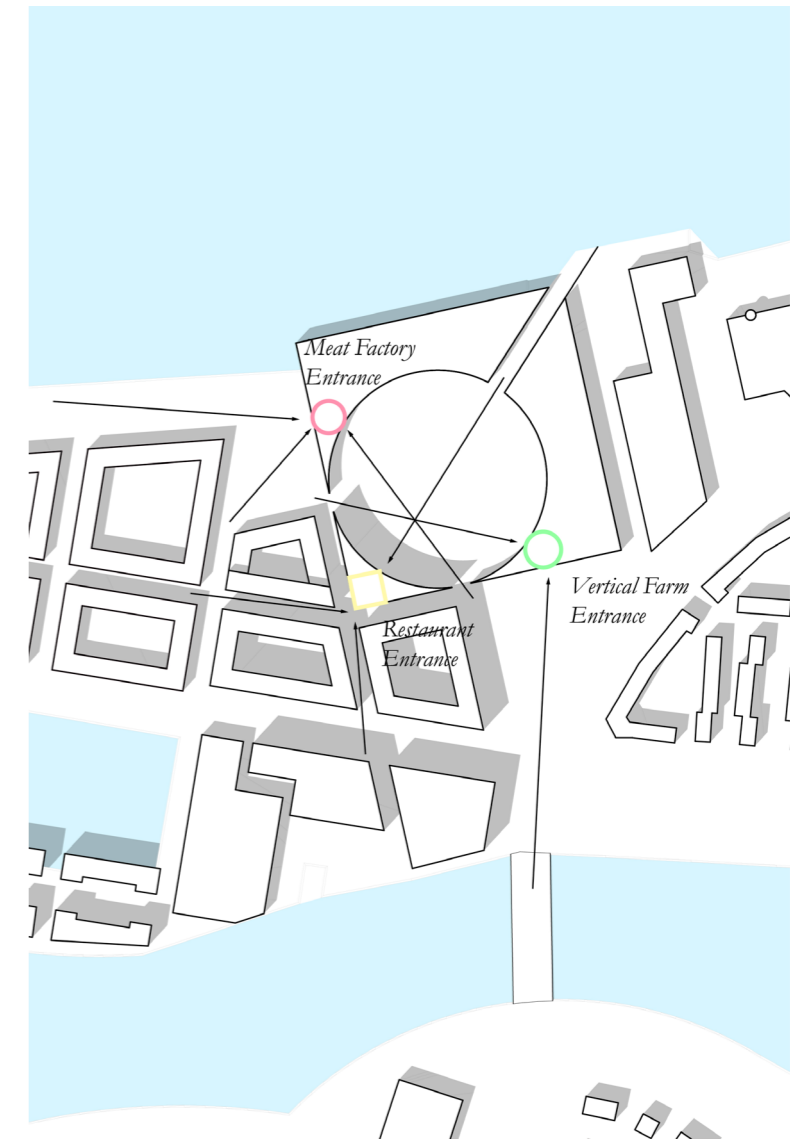
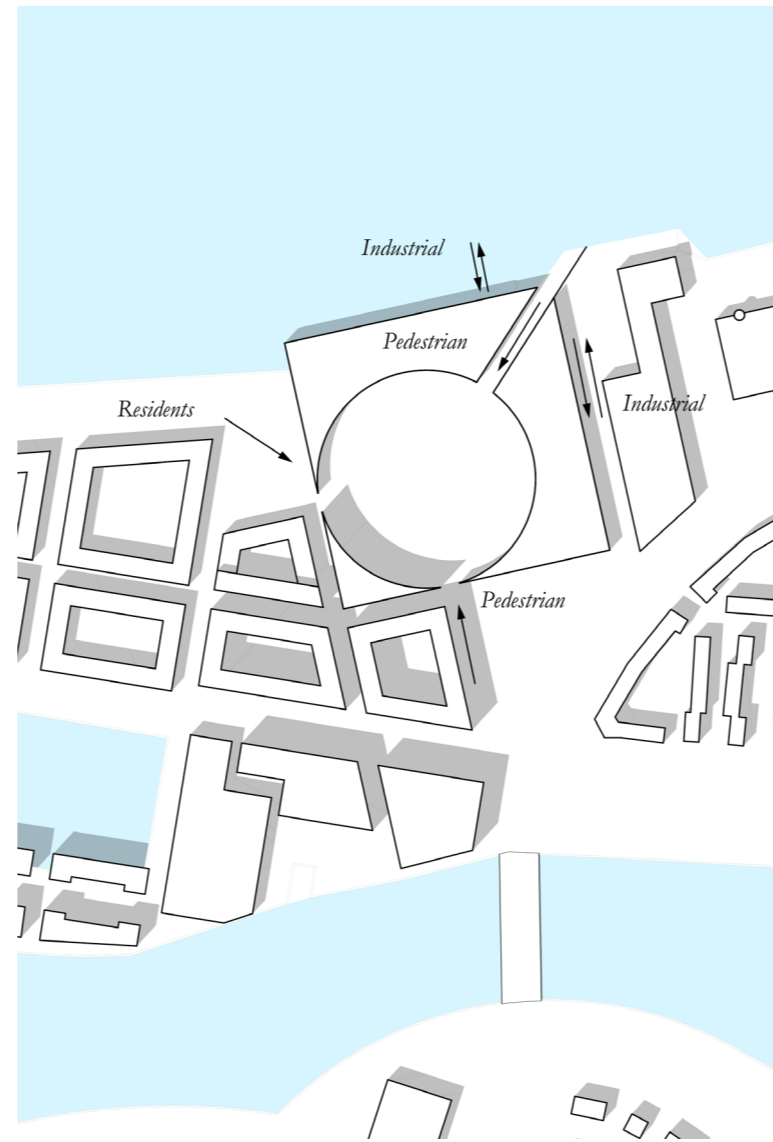
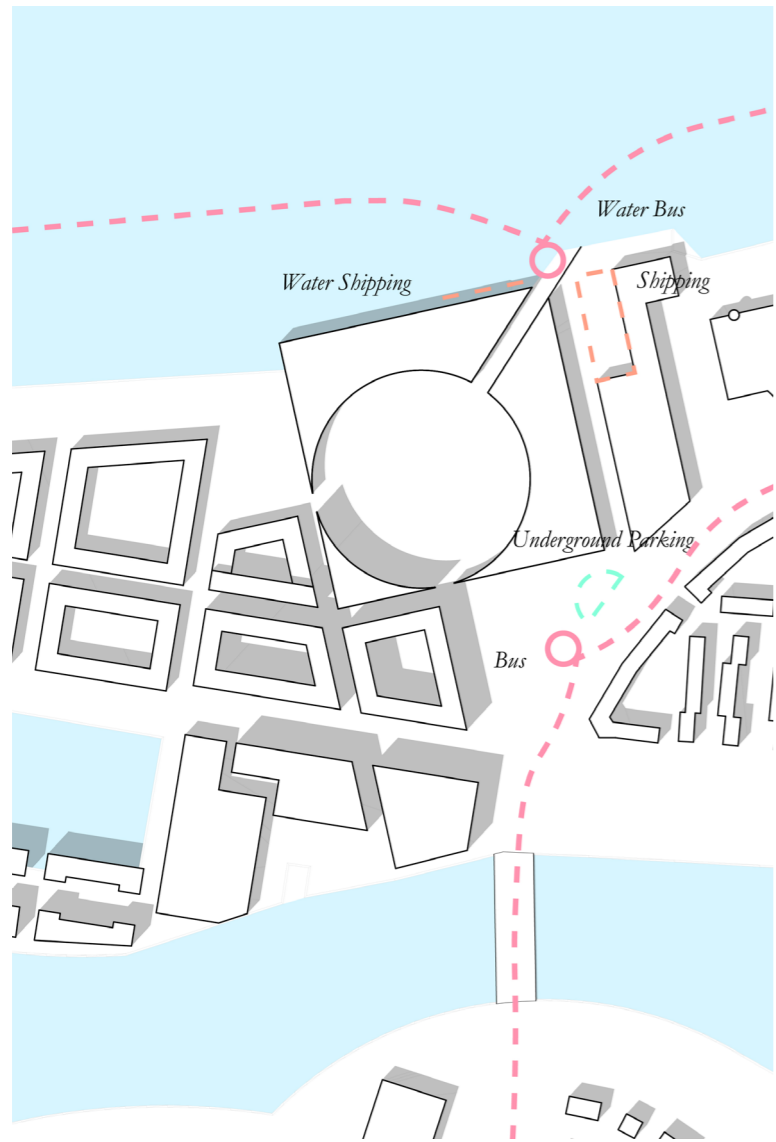
Layers of Dordrecht



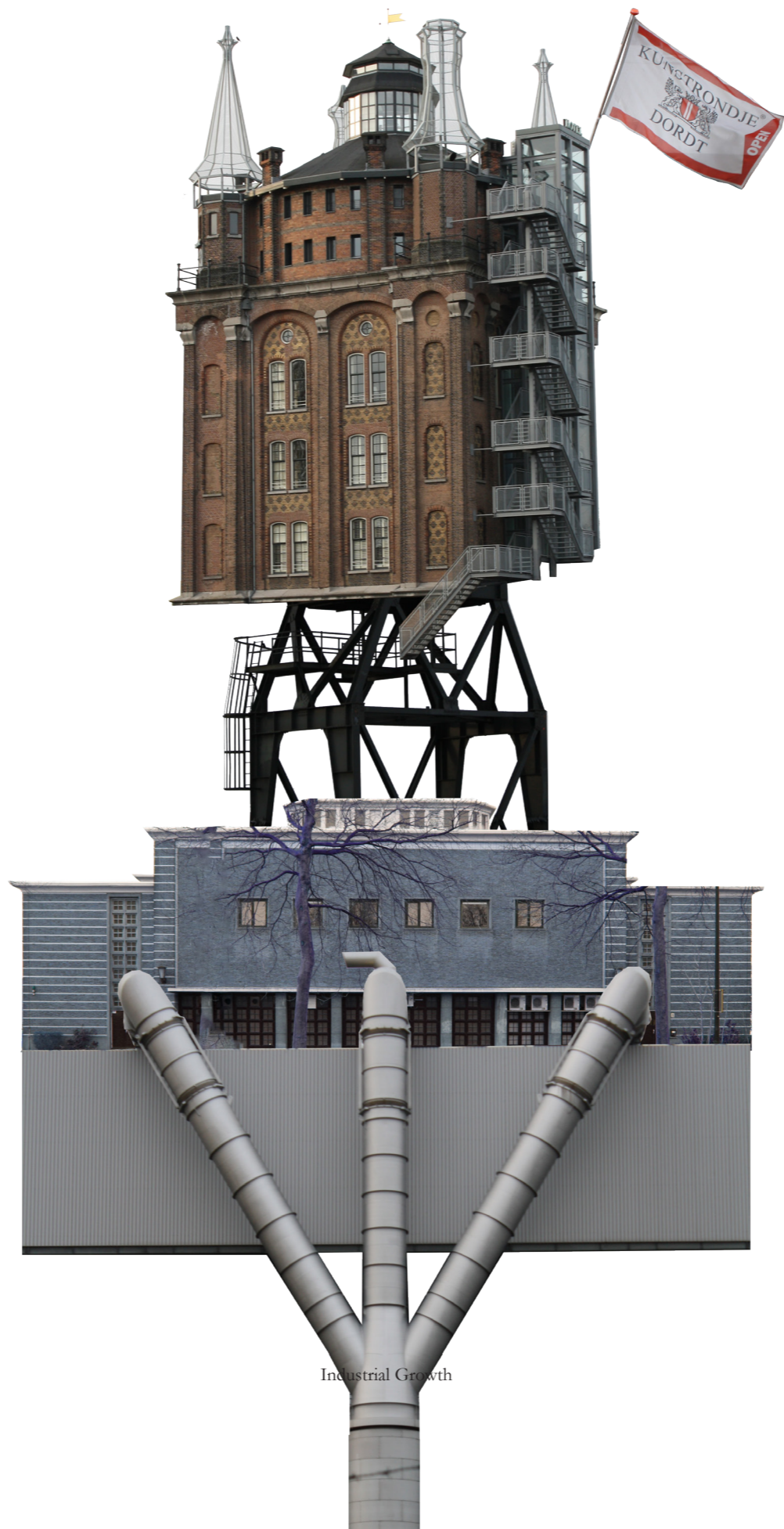
Dordrecht at Site



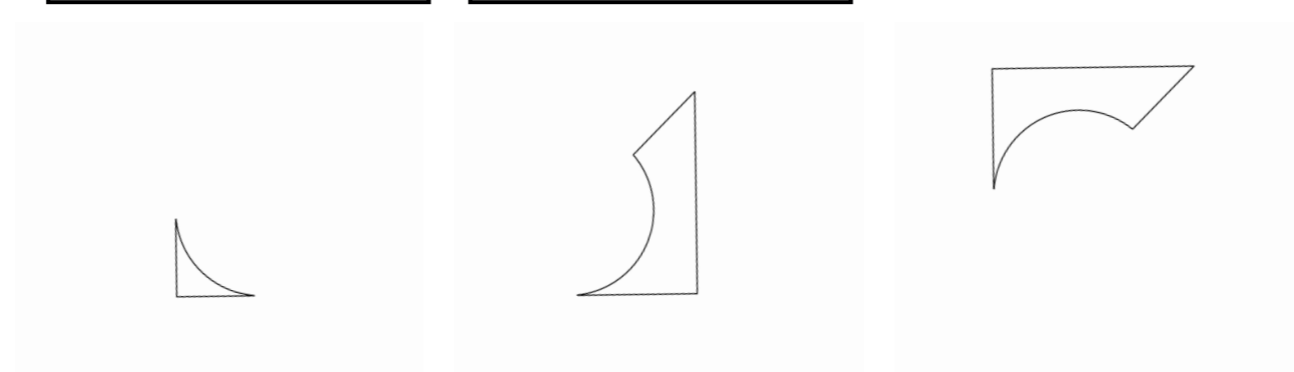
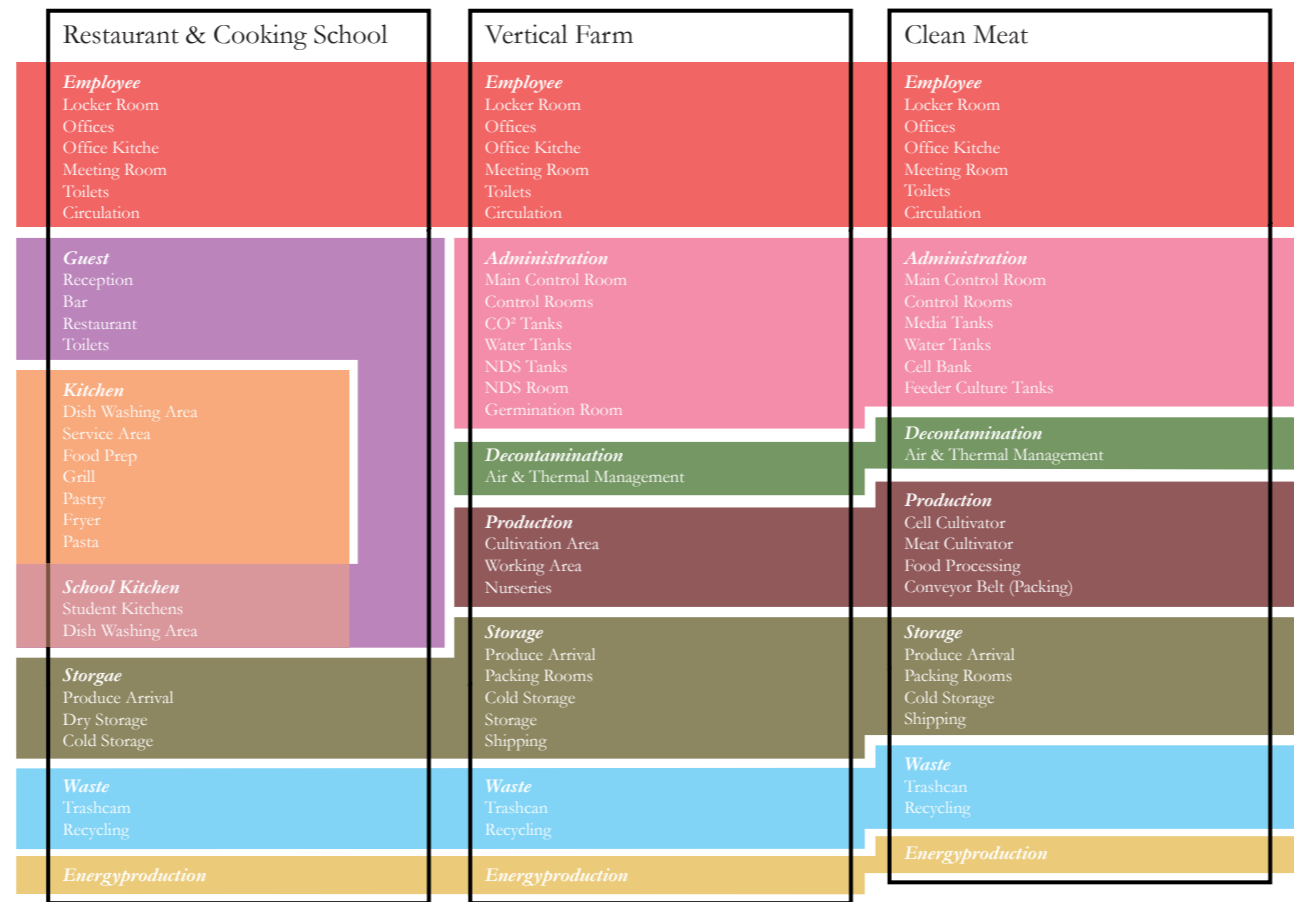
Masterplan



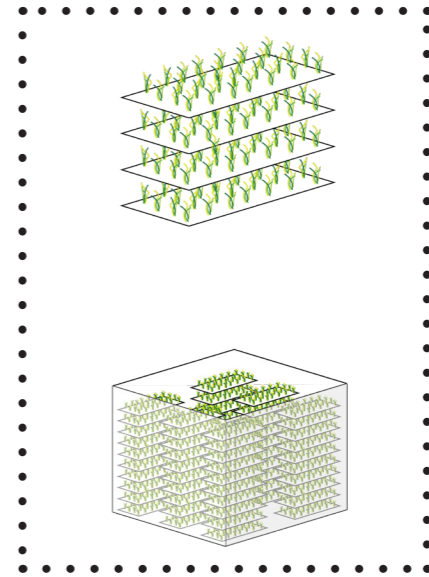
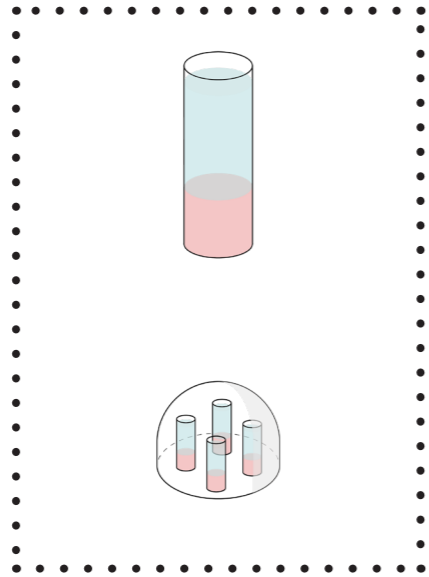
3. Finding a new Type



Industrial Growth

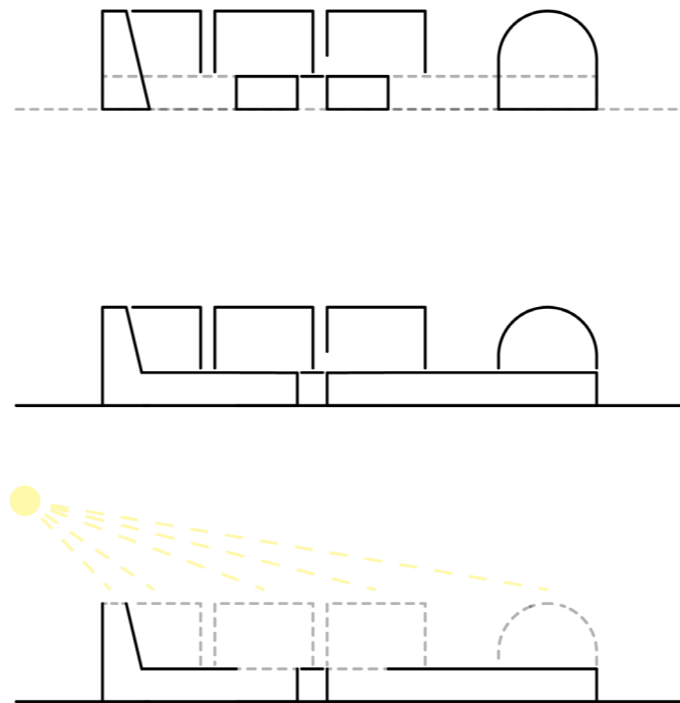


Program

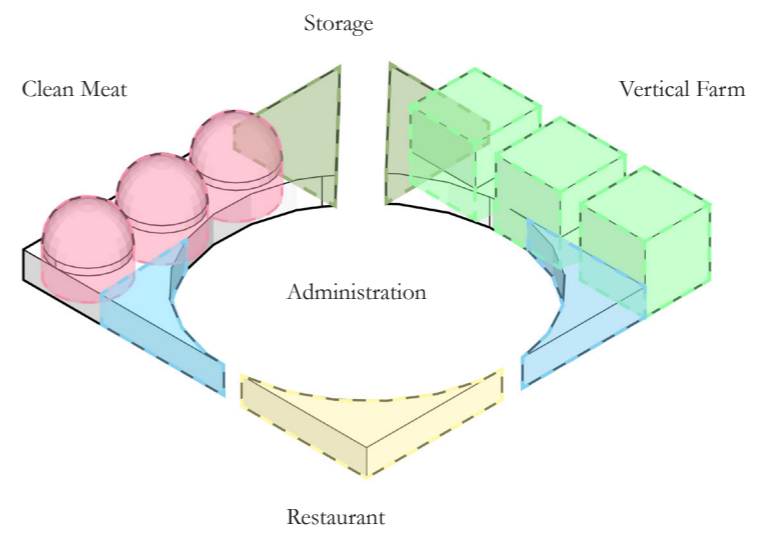
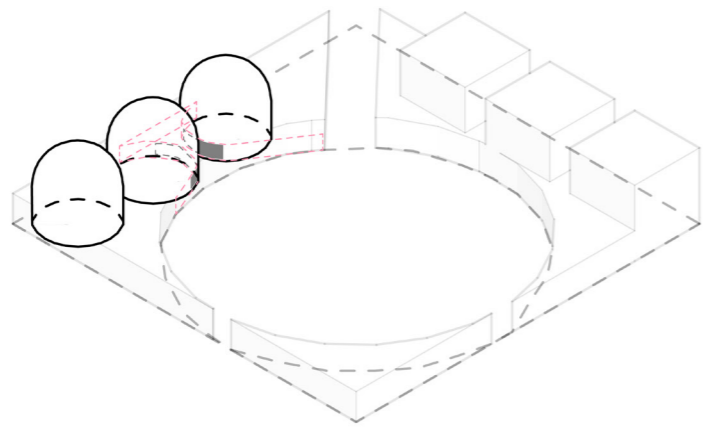


Form Finding

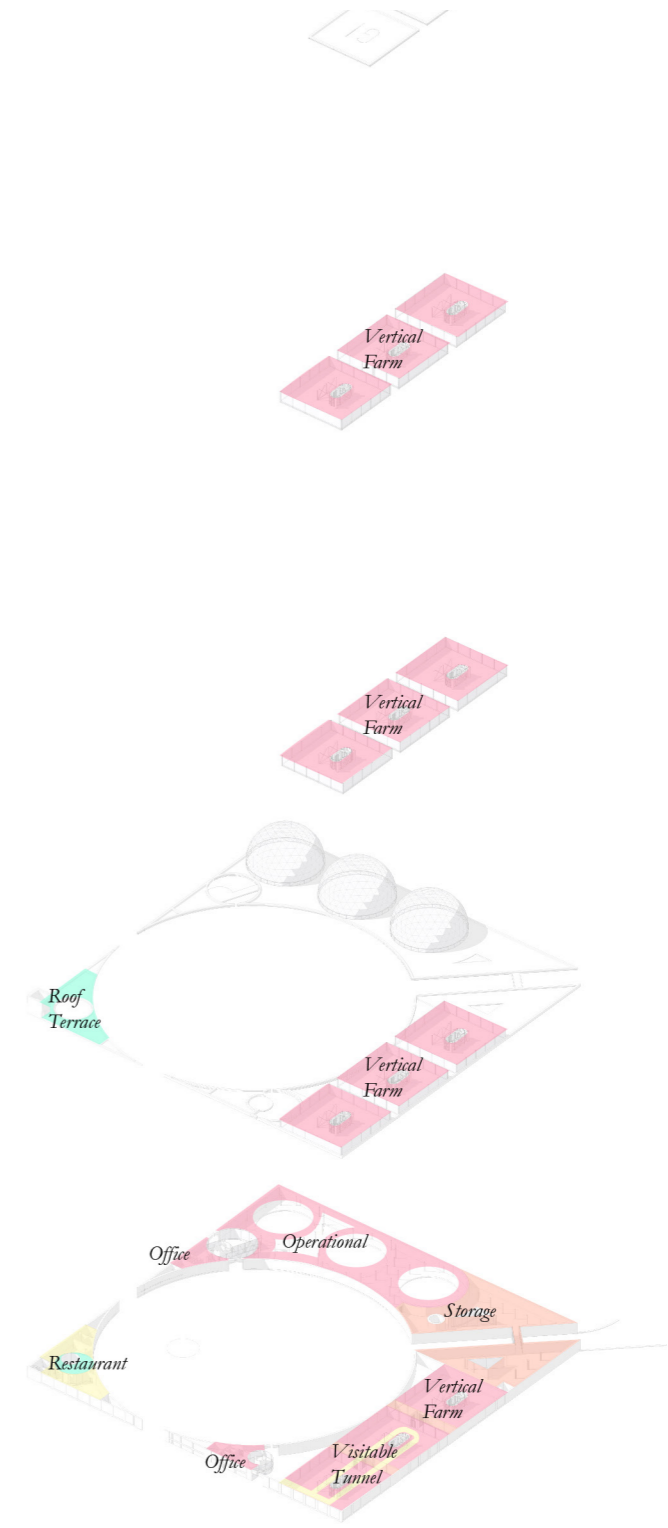
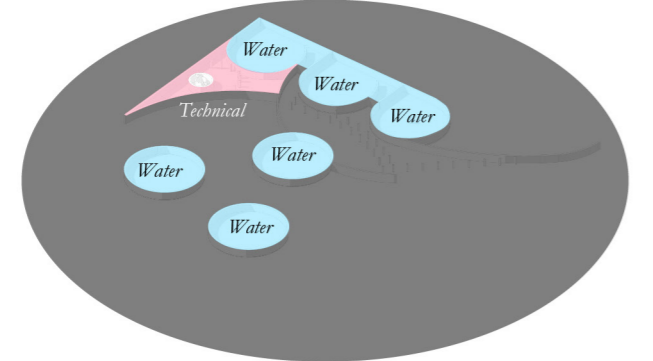
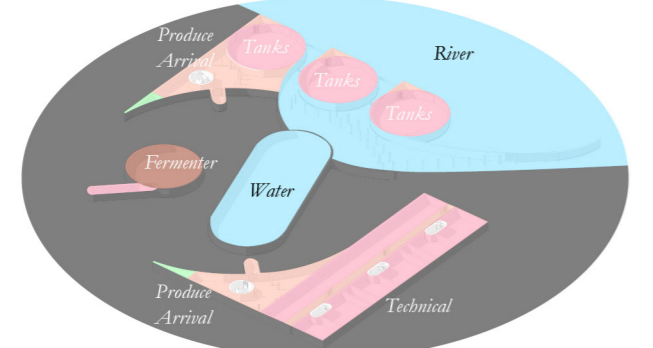
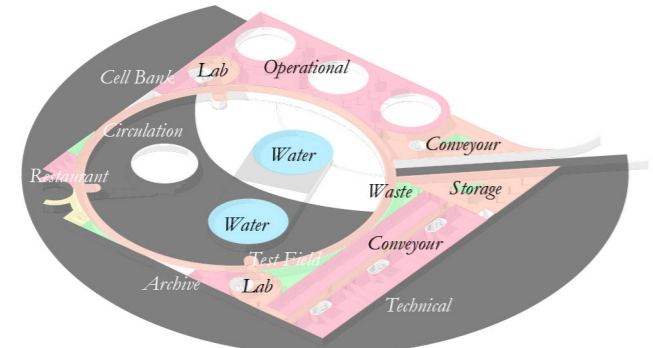
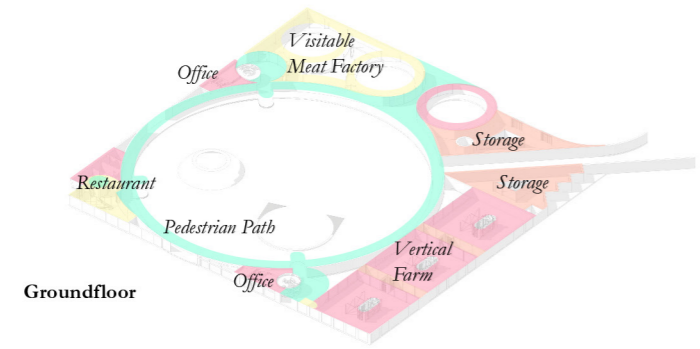




Architectural Concept

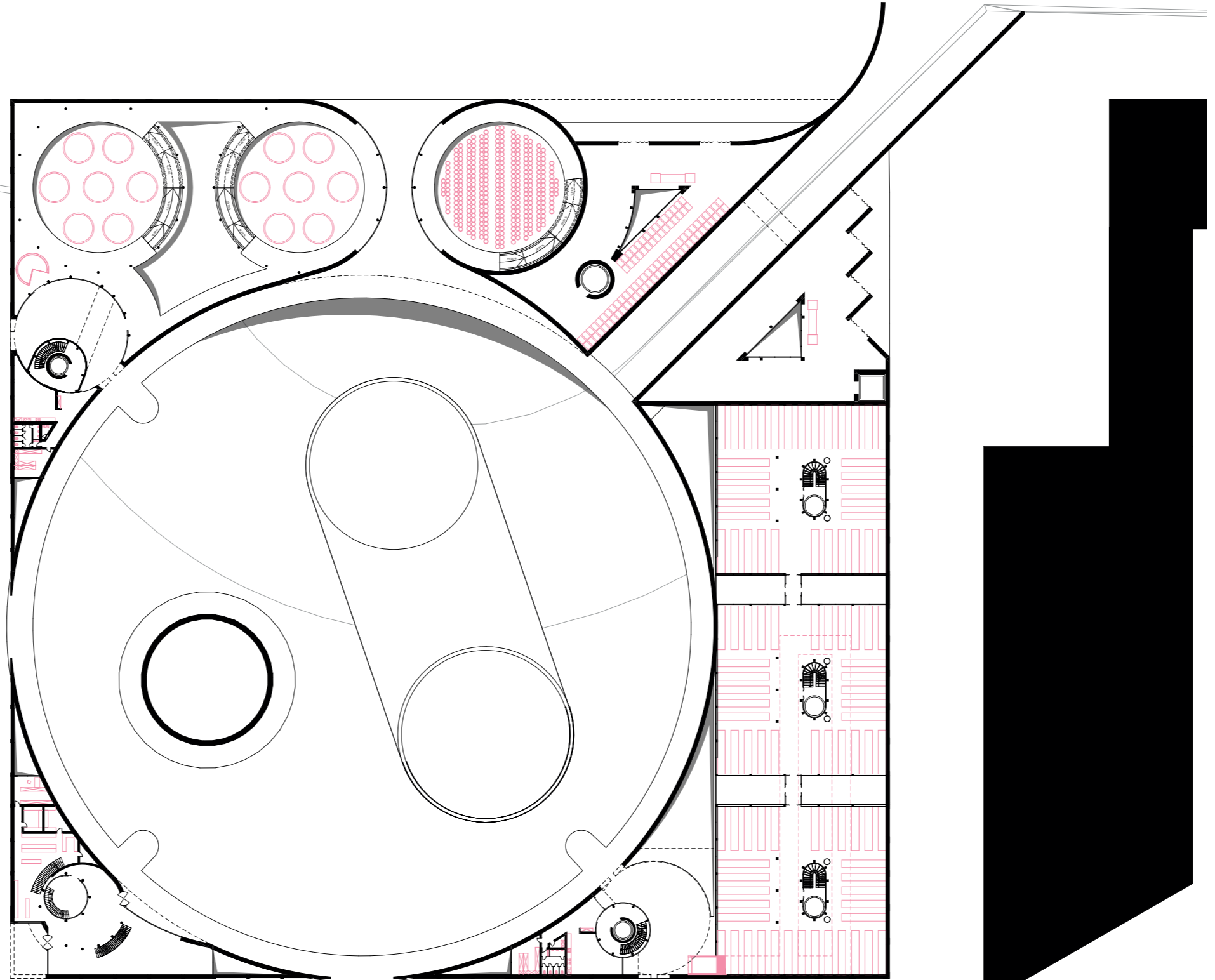


Volumetric Concept



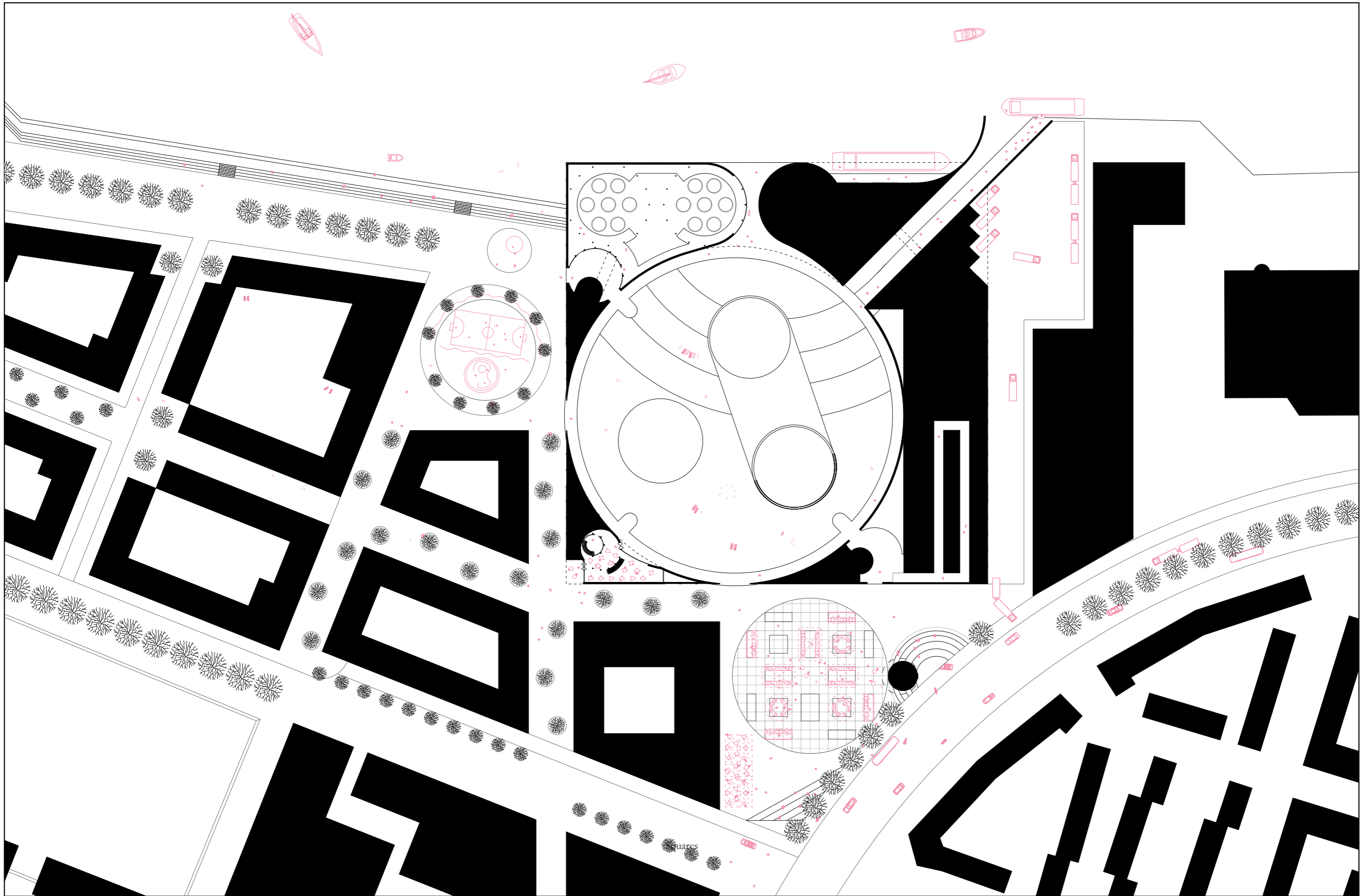
Floorplan Diagrams

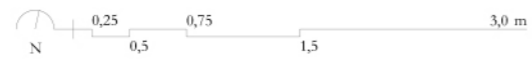
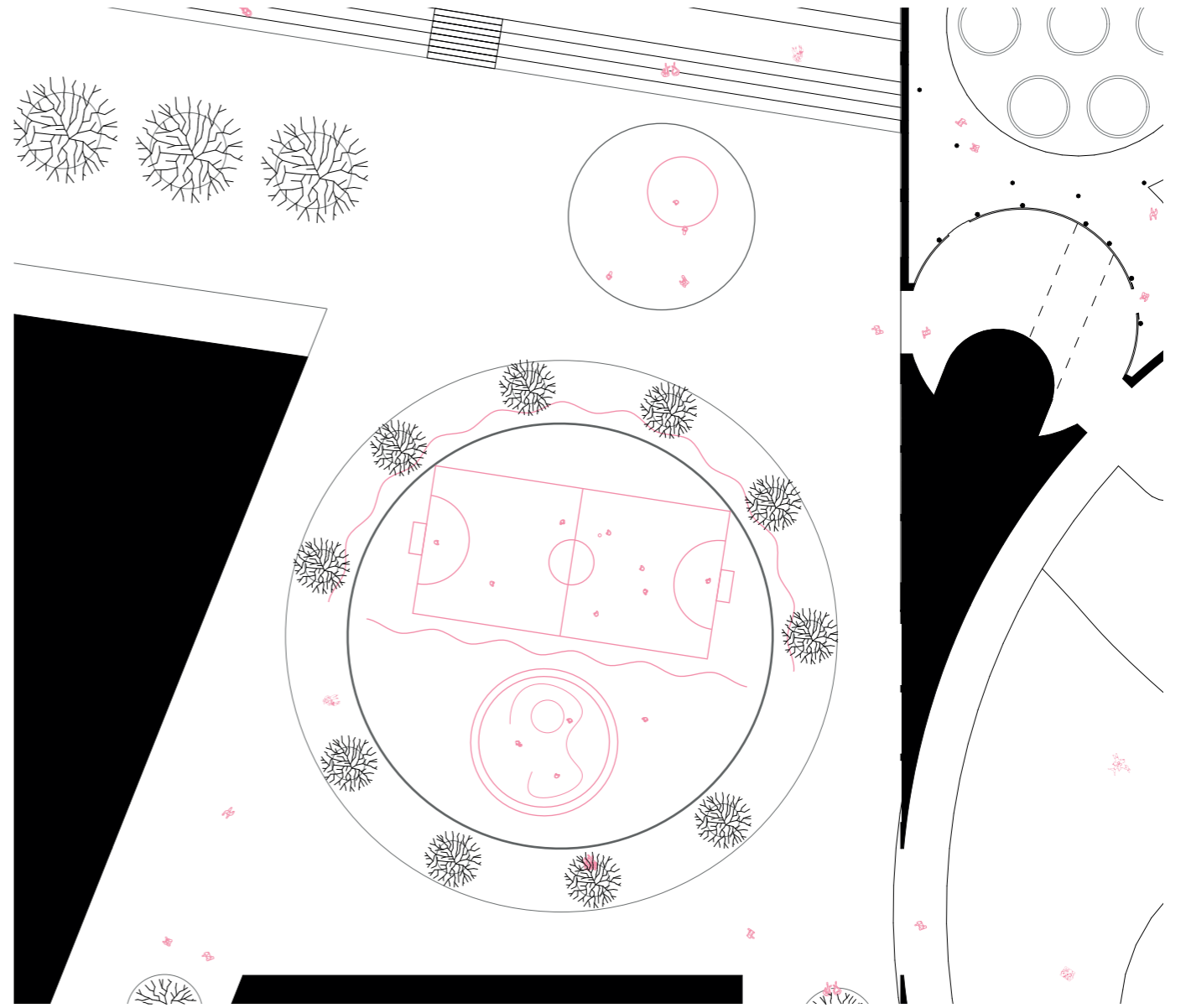
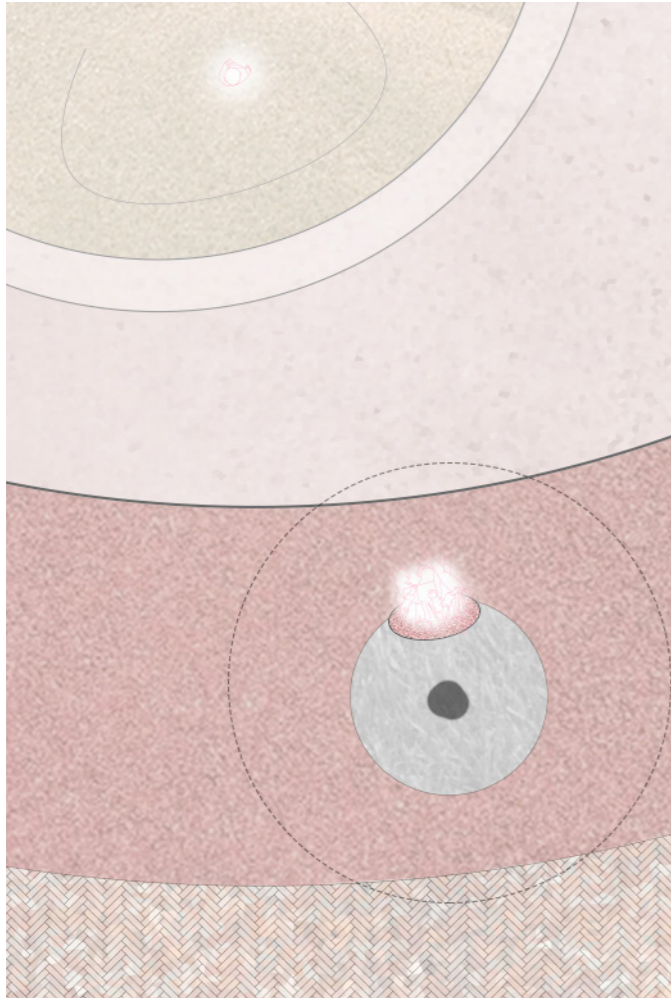
1A



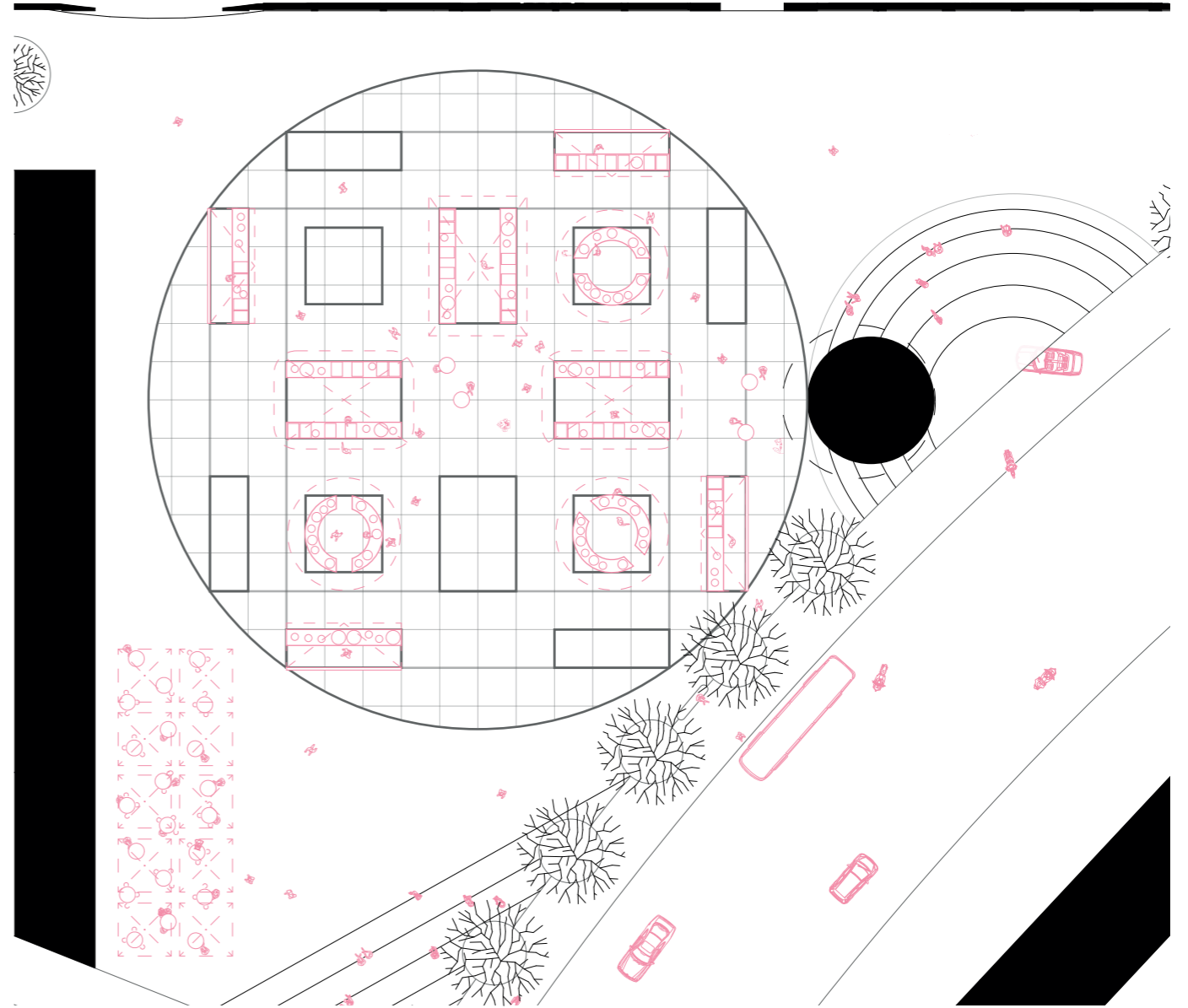
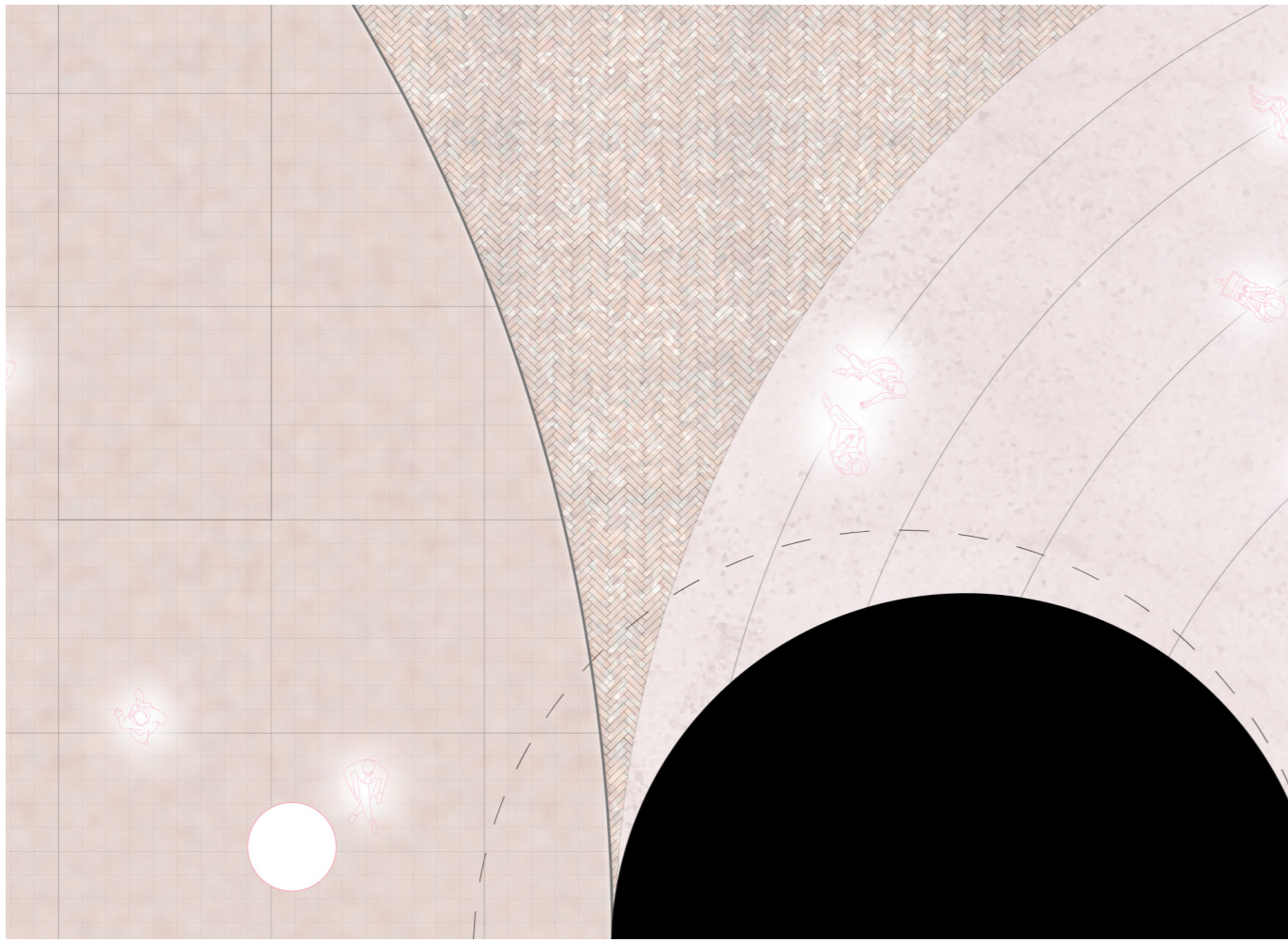
Groundfloor







Residential Square



Market Square



Allee von Middelbarnis, Meindert Hobbema, 1689.



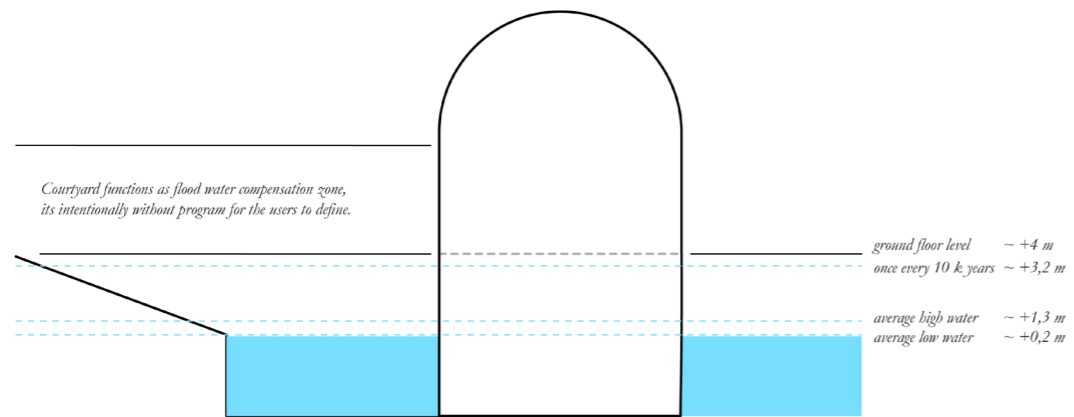
Tall Dutch Trees After Hobbema (Useful Knowledge), David Hockney, 2017.

#### Dutch Landscape

[https://en.wikipedia.org/wiki/The\\_Avenue\\_at\\_Middelbarnis#/media/File:Meindert\\_Hobbema\\_001.jpg](https://en.wikipedia.org/wiki/The_Avenue_at_Middelbarnis#/media/File:Meindert_Hobbema_001.jpg)

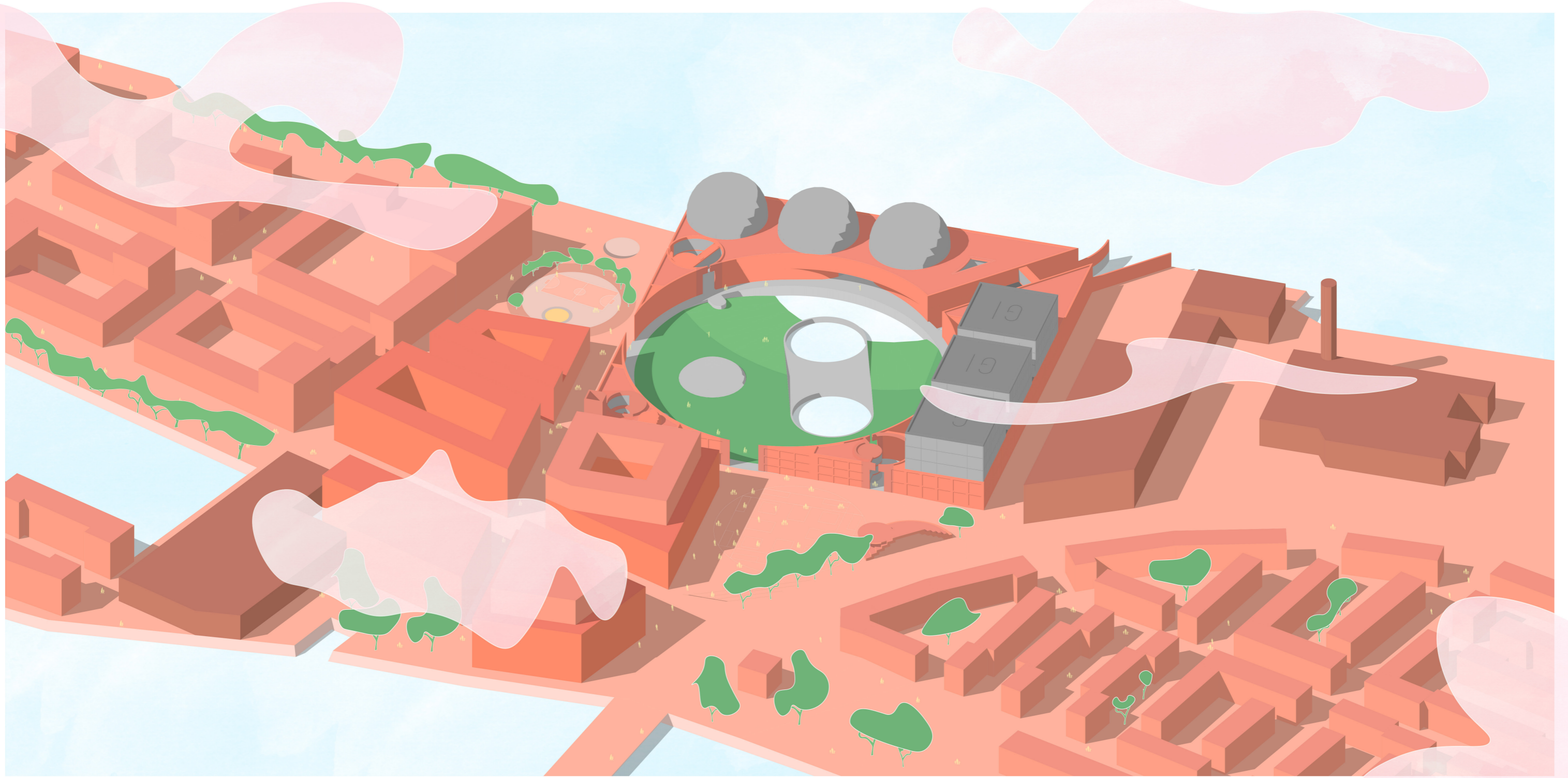
<https://www.newyorker.com/culture/cover-story/cover-story-2018-04-23>



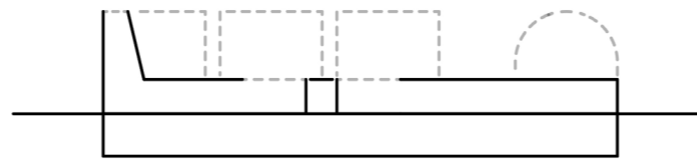


if

Courtyard



Birdseye



*Steel Glass - option to grow or shrink*

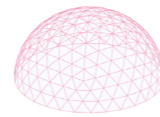
*Brick Facade - long life time*

*Solid Base - longest life time*



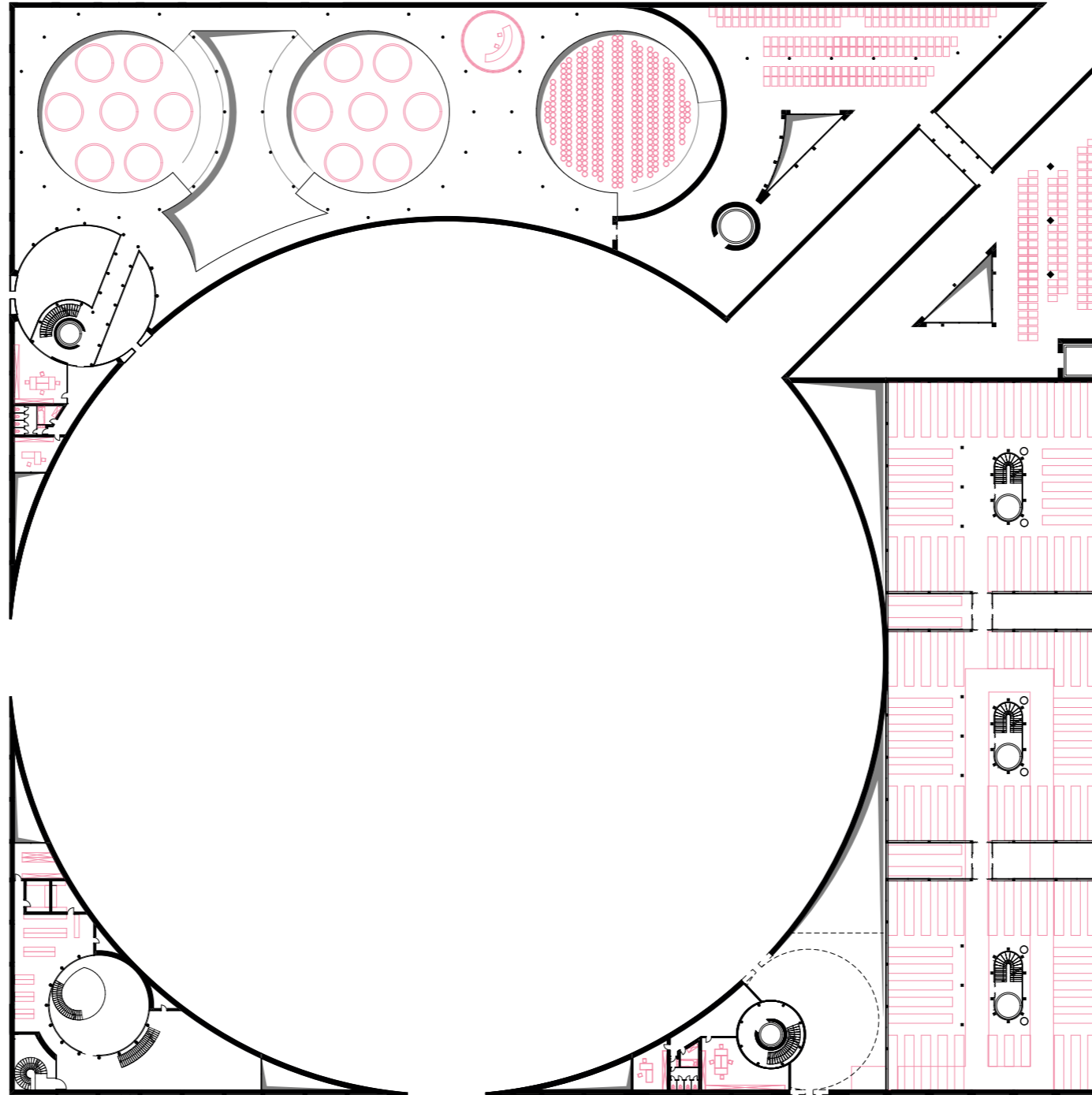
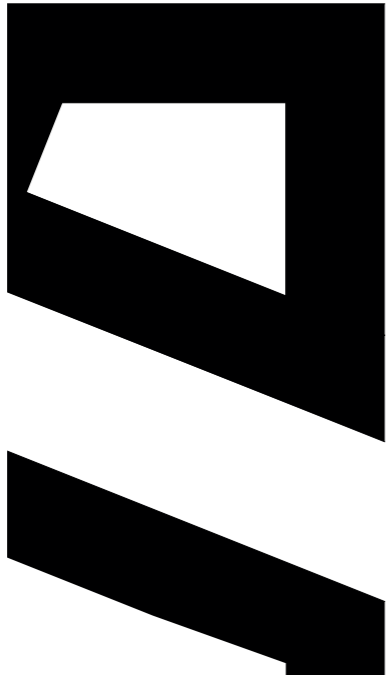
*Domes - temporary structures to increase adaptability*

*Tunnel - possibly temporary*

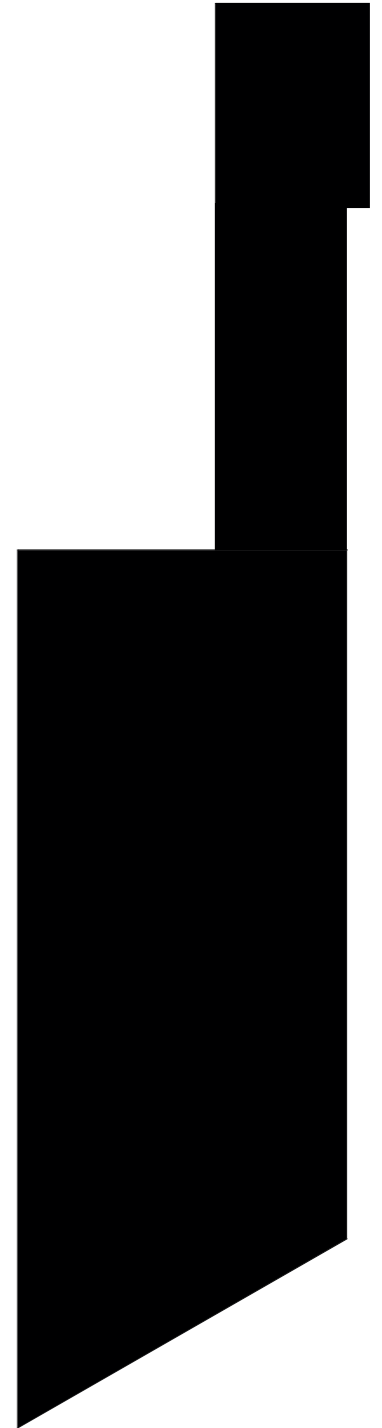


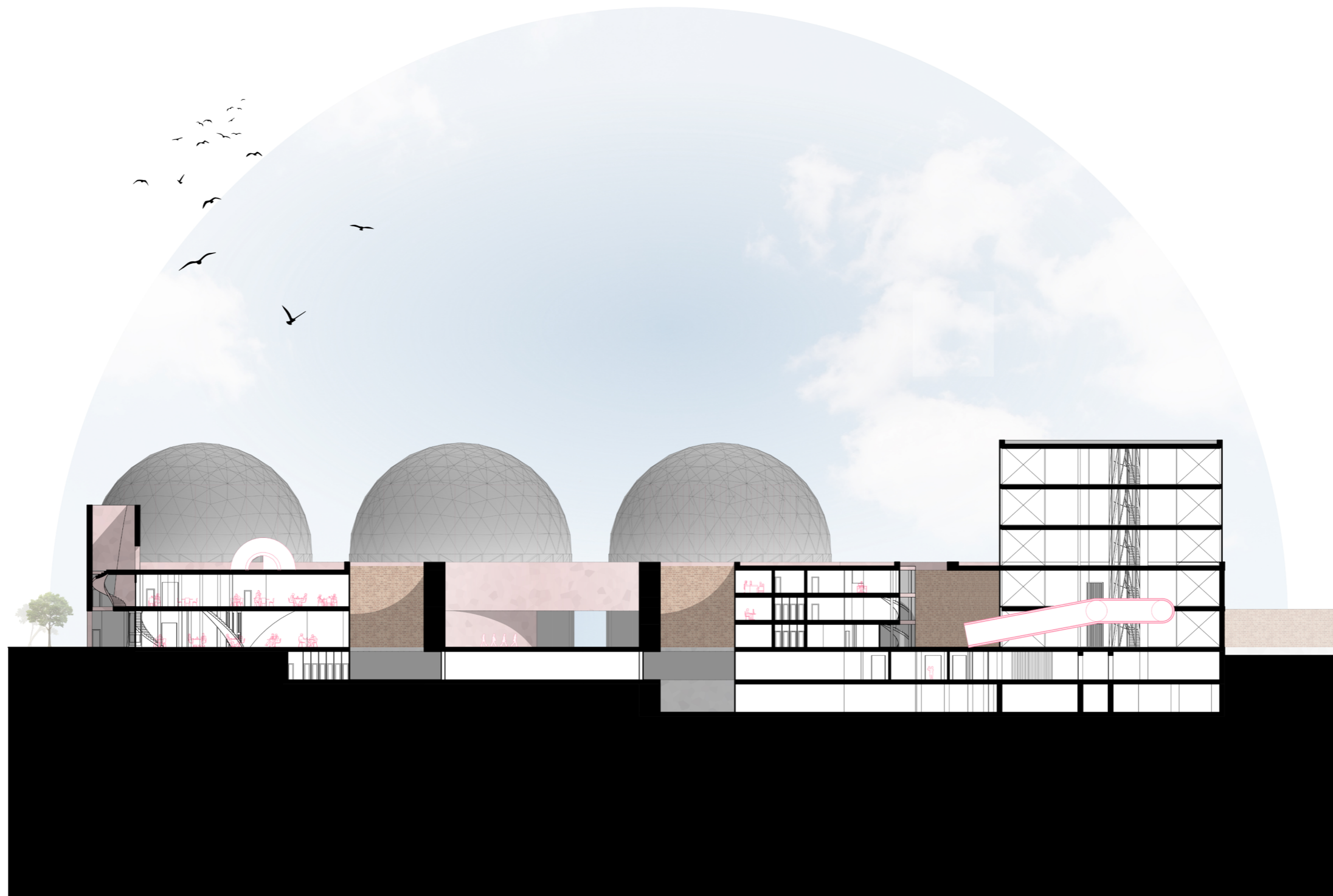
*temporary geodesic dome structure  
built from pre fab panels*

Layers of Flexibility

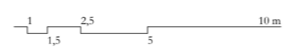


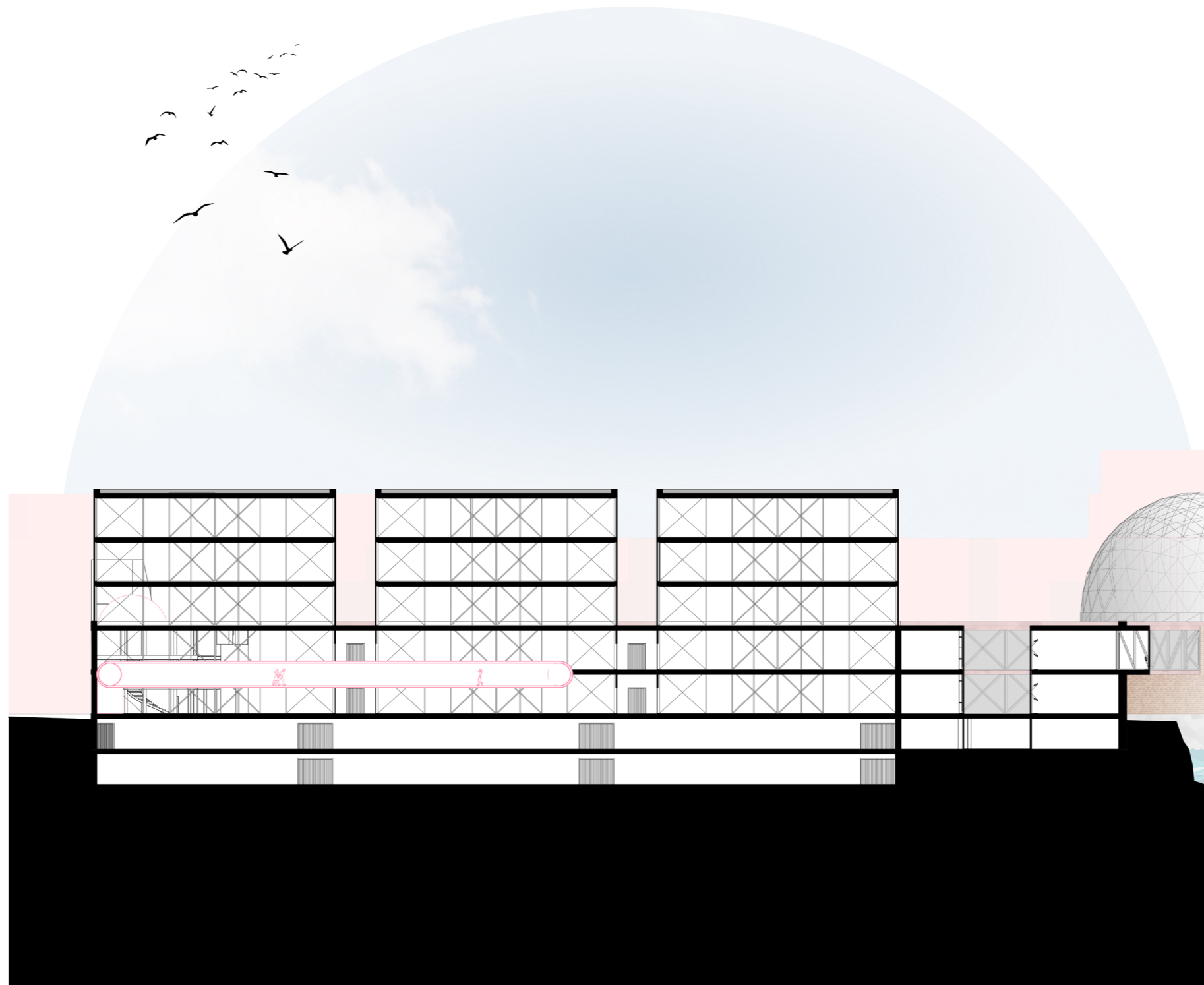
Firstfloor



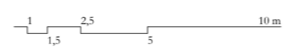


Section South



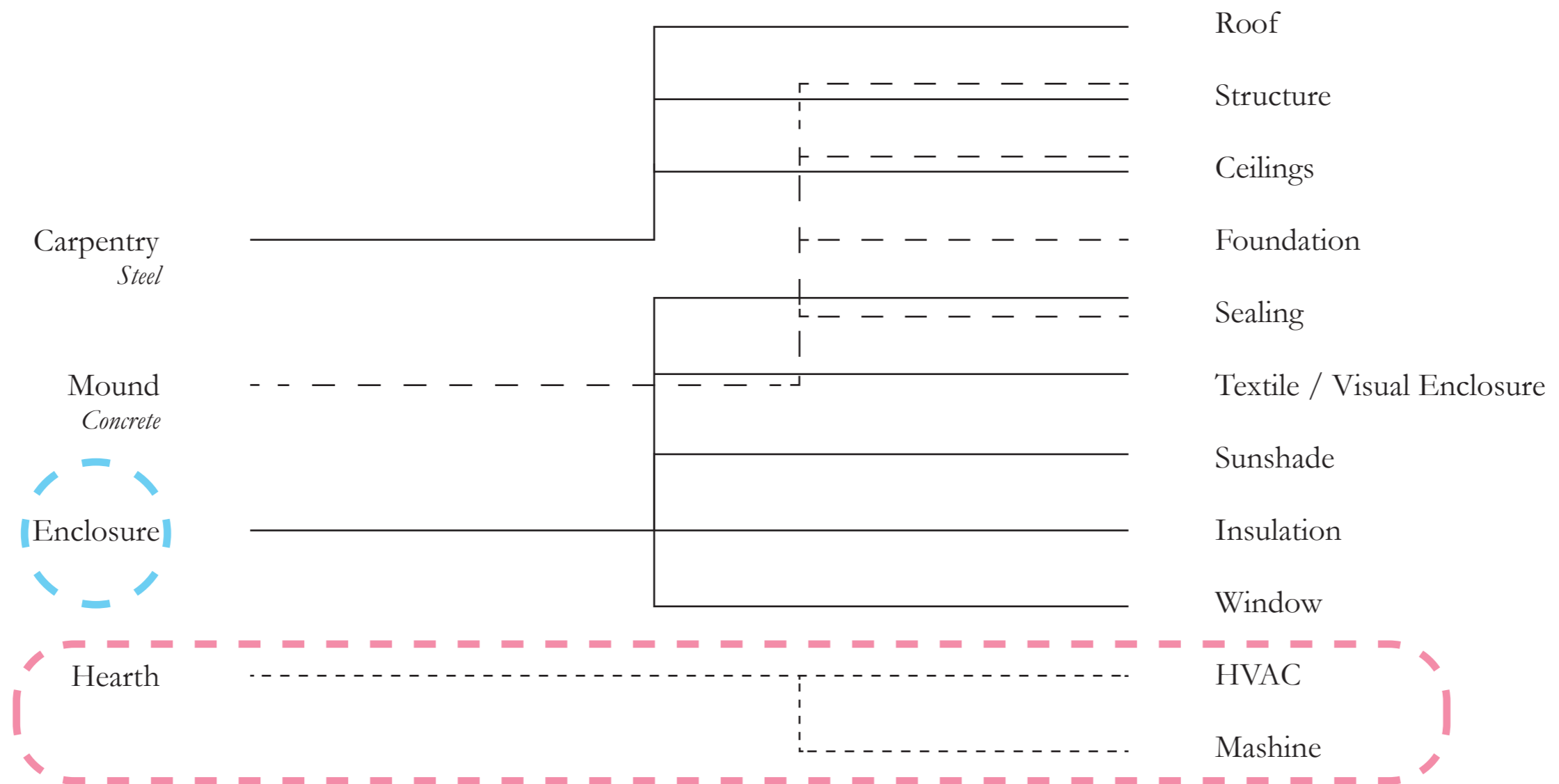


Section East





Tunnel of Veg





Textile



Textile -

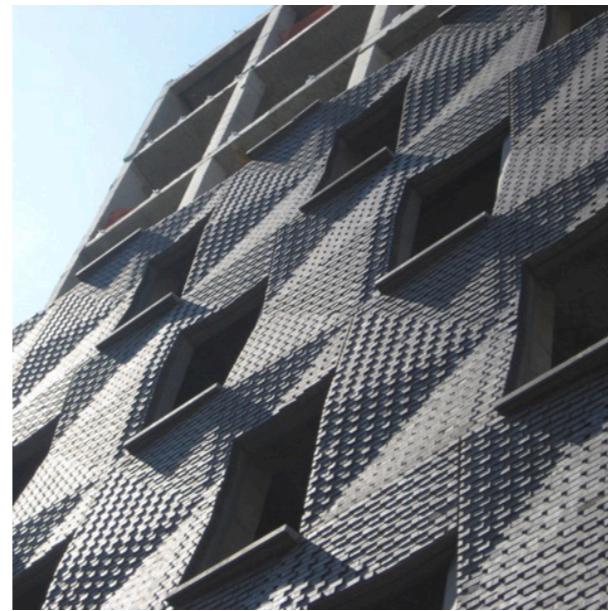
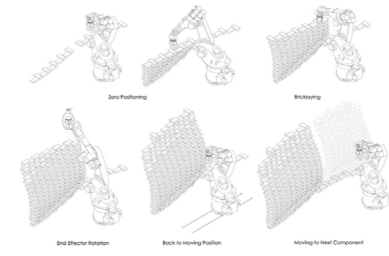
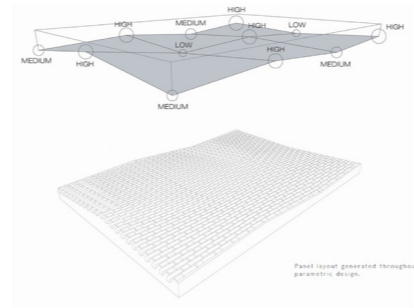
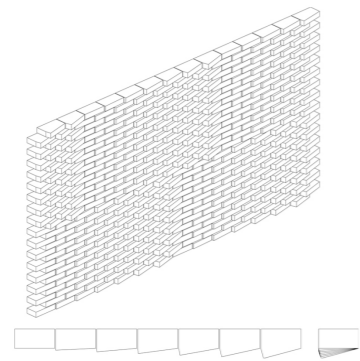
Semper refers with the element of textile to the tectonics of dressing which is represented through the art of weaving. The textile thereby is the divider of space.

*„Wickerwork, the original space divider, retained the full importance of its meaning, actually or ideally, when later light mat walls transformed into clay, tile, brick or stonewalls. Wickerwork was the essence of the wall.“(Semper)*

Considering the nature of brick facades being a cladding which fulfill the concept of dressing, I will further investigate how i can built a *textile* brickfacade.

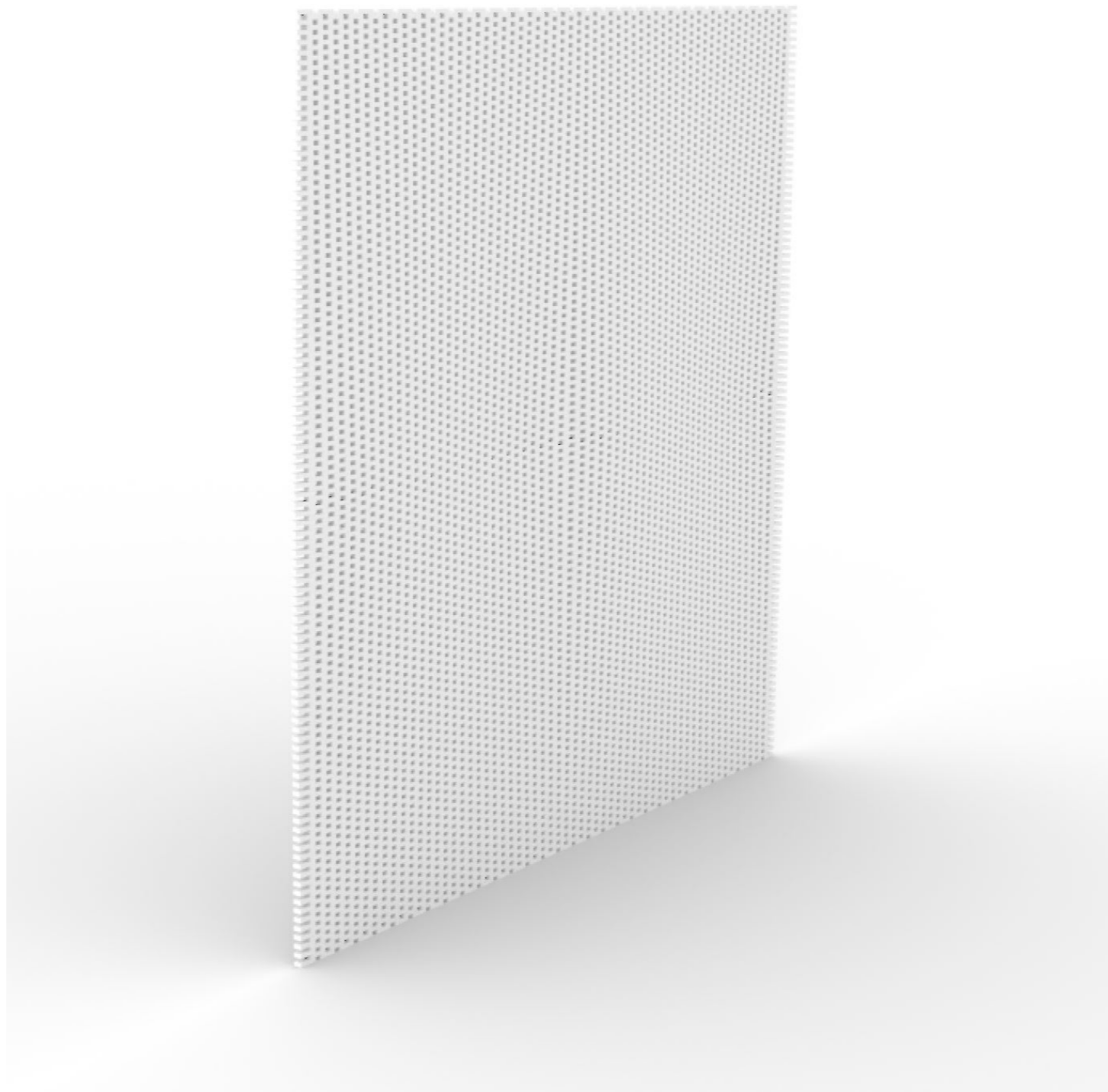
Semper, G., (1851). *Die Vier Elemente der Baukunst*, p. 104

Garritzmann, U 2016, The Tectonics of Brick Architecture: Between the Tectonics of Load-bearing and the Tectonics of Dressing. in JP Wingender (ed.), *Brick: An Exacting Material*. Architectura & Natura Press, pp. 113-132.

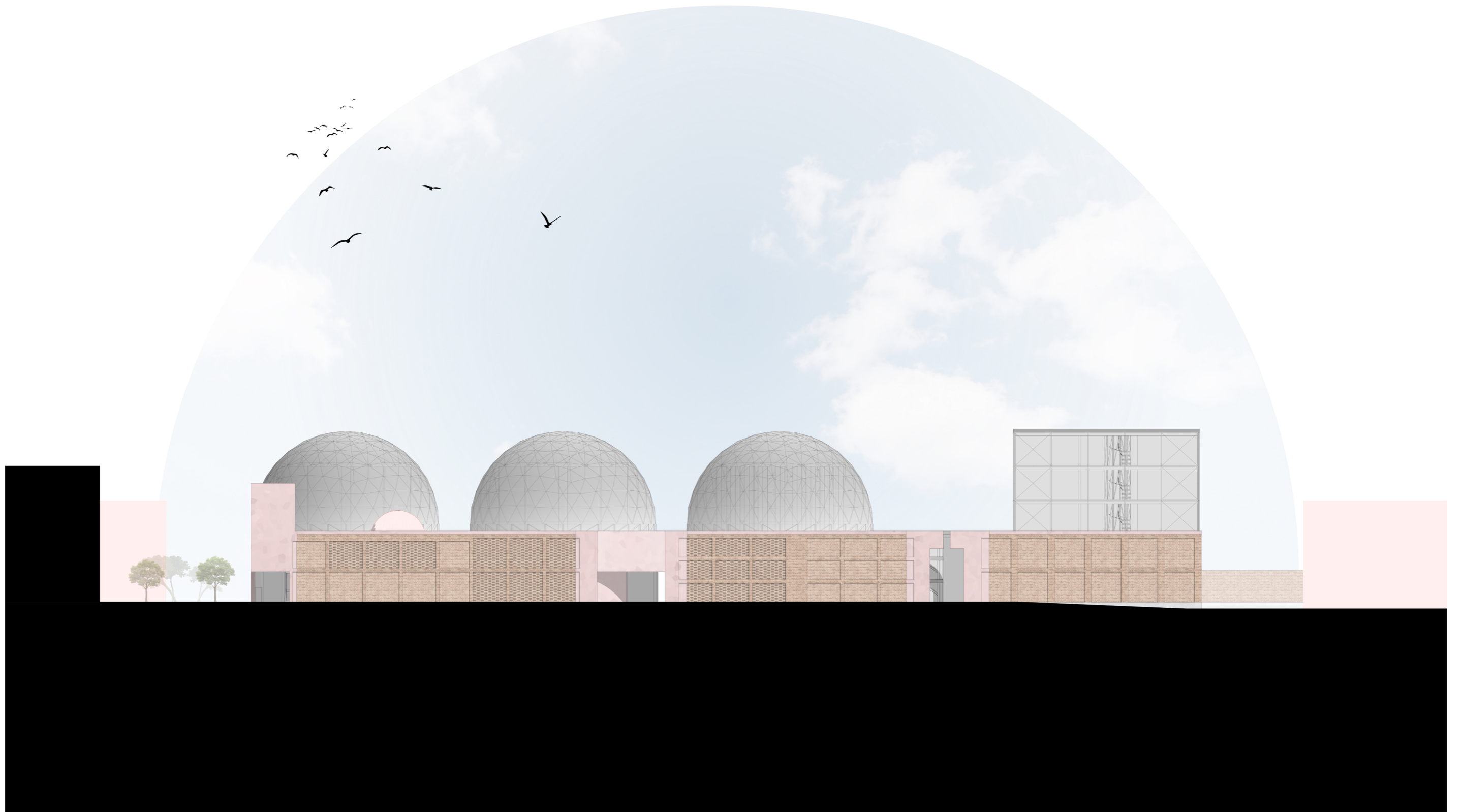


Textile Brick Expression

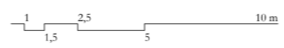
[https://www.zq-online.info/imgs/1/2/4/2/0/7/5/AF\\_800\\_533-476a7b05e3e12349.jpg](https://www.zq-online.info/imgs/1/2/4/2/0/7/5/AF_800_533-476a7b05e3e12349.jpg)  
<https://www.archdaily.com/9028/in-progress-290-mulberry-slop-architects>  
<http://www.archi-union.com/Homes/Projectshow/index?pageid/6/id/40>

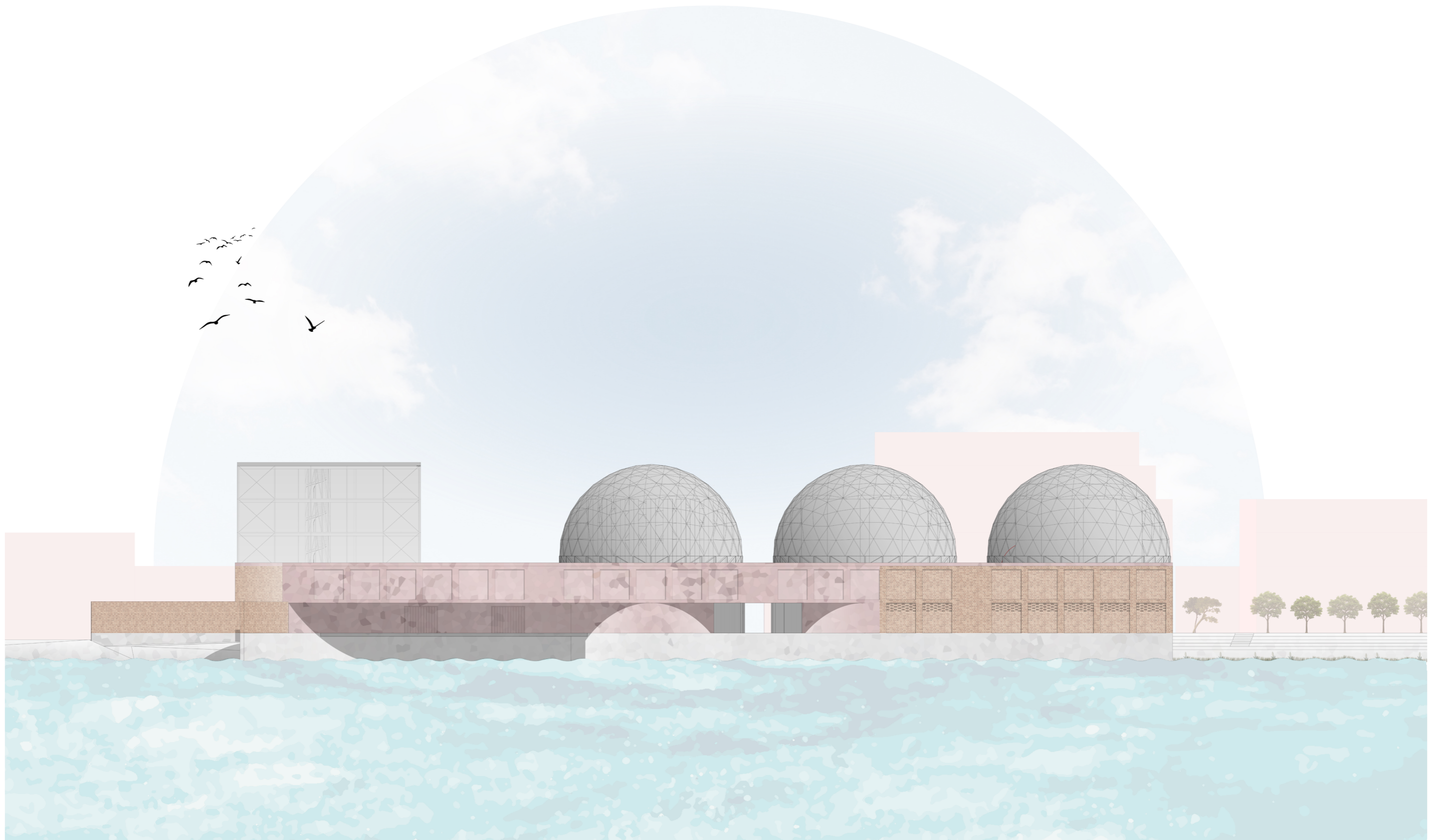


Textile Brick Expression



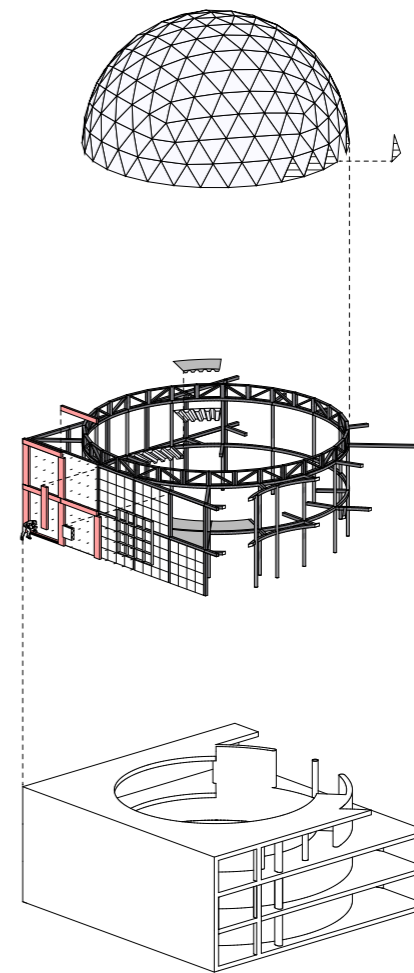
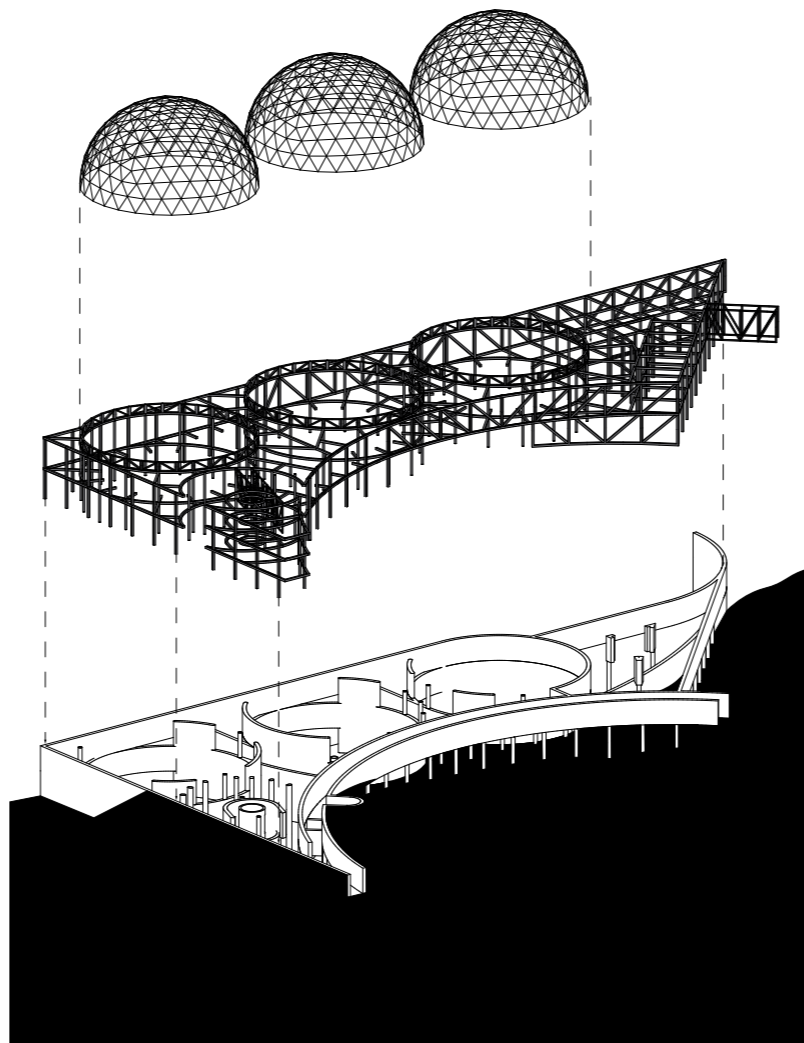
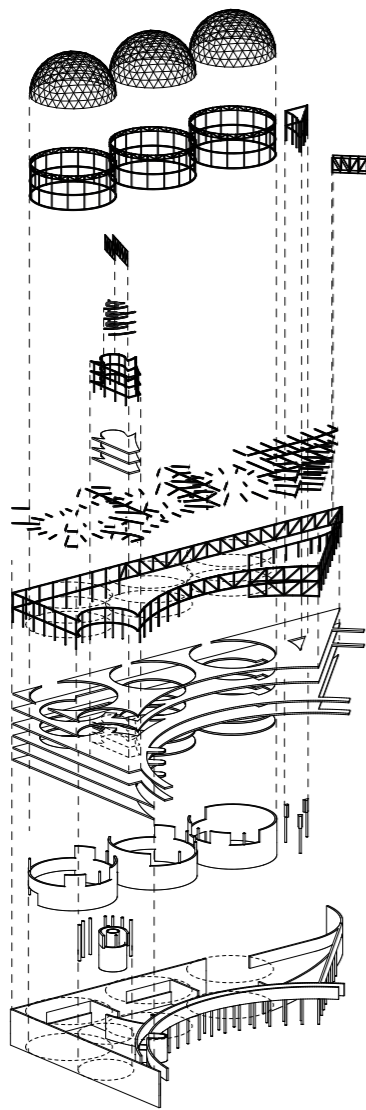
Facade South



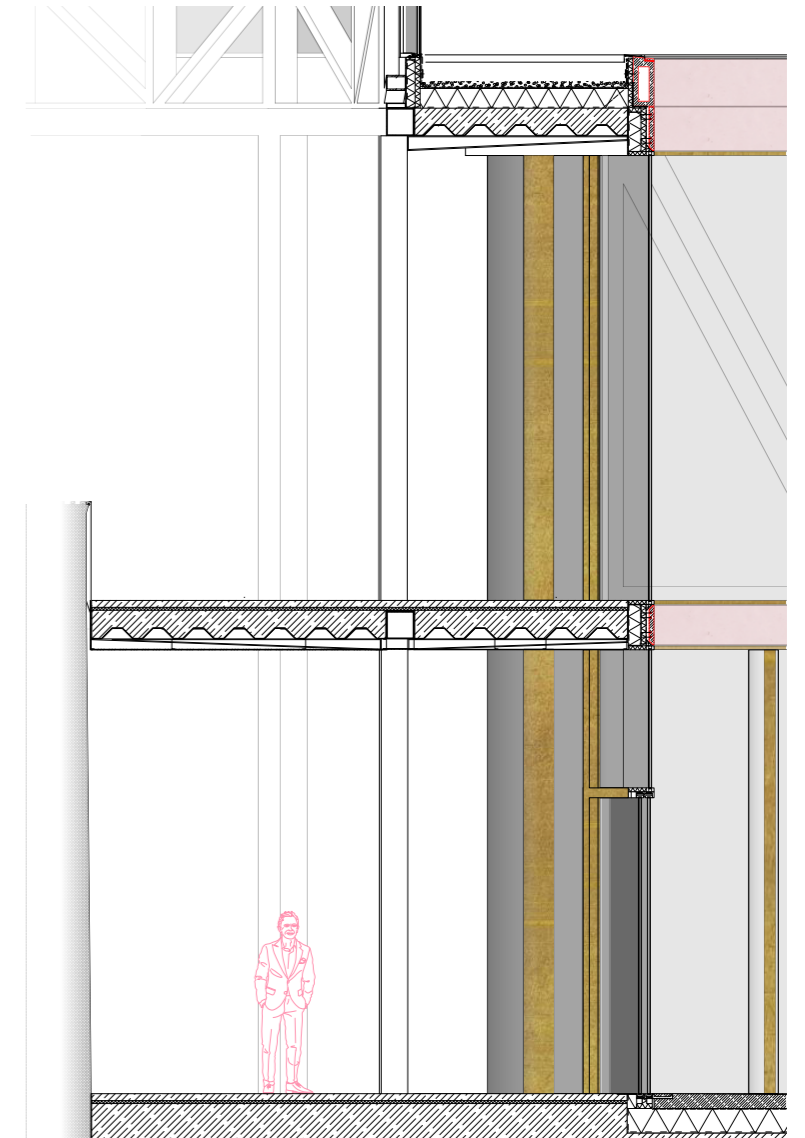
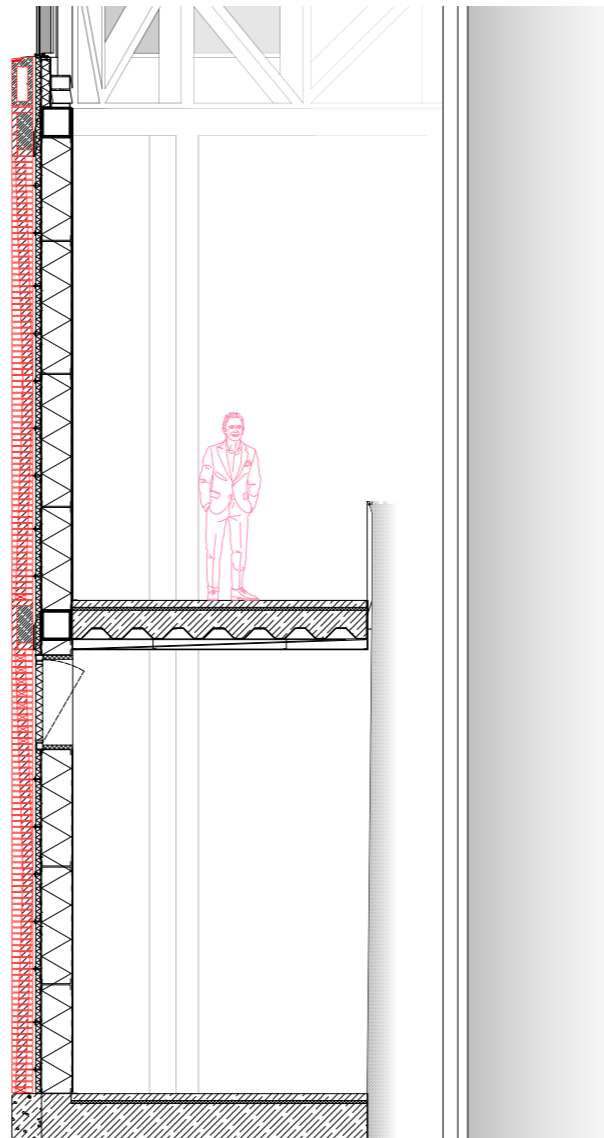
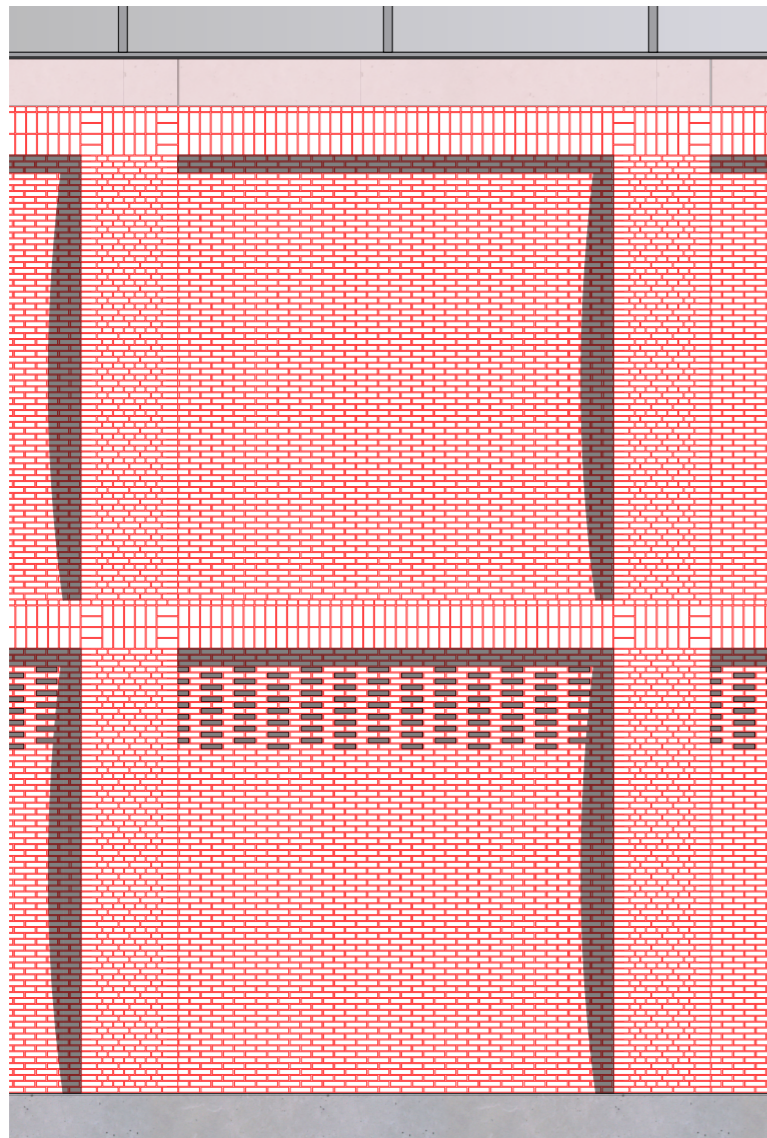


Facade North

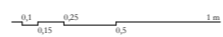




Structure

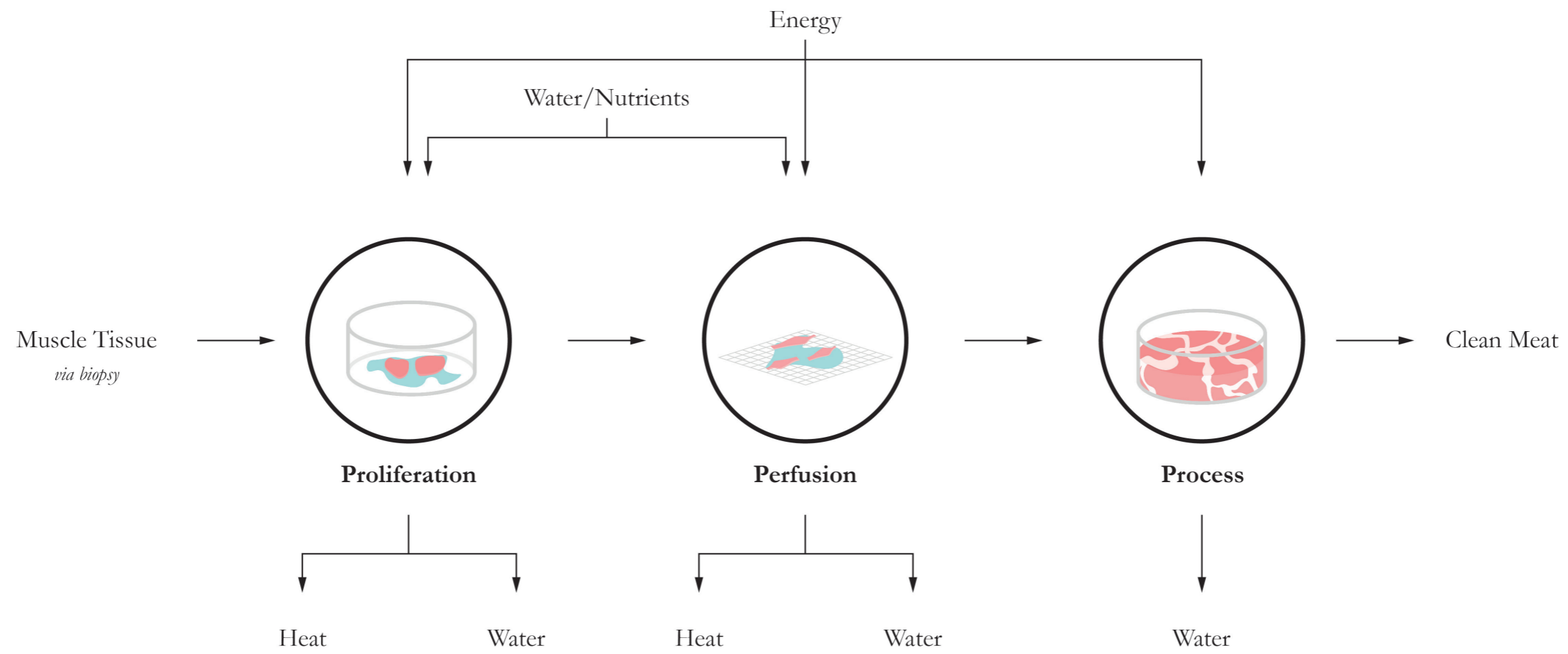


Detailed Section / Facade

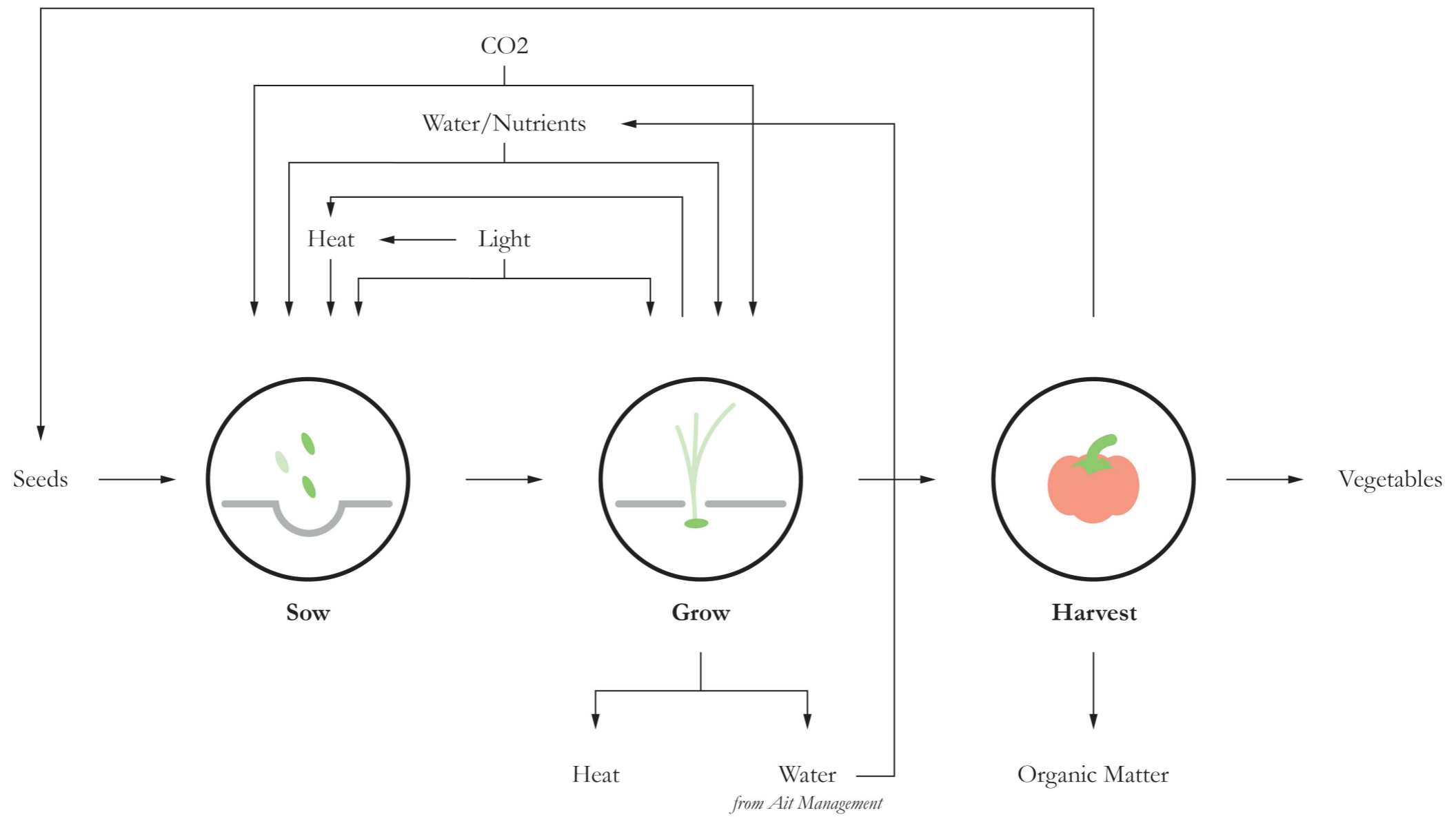


#### 4. Metabolic Performance

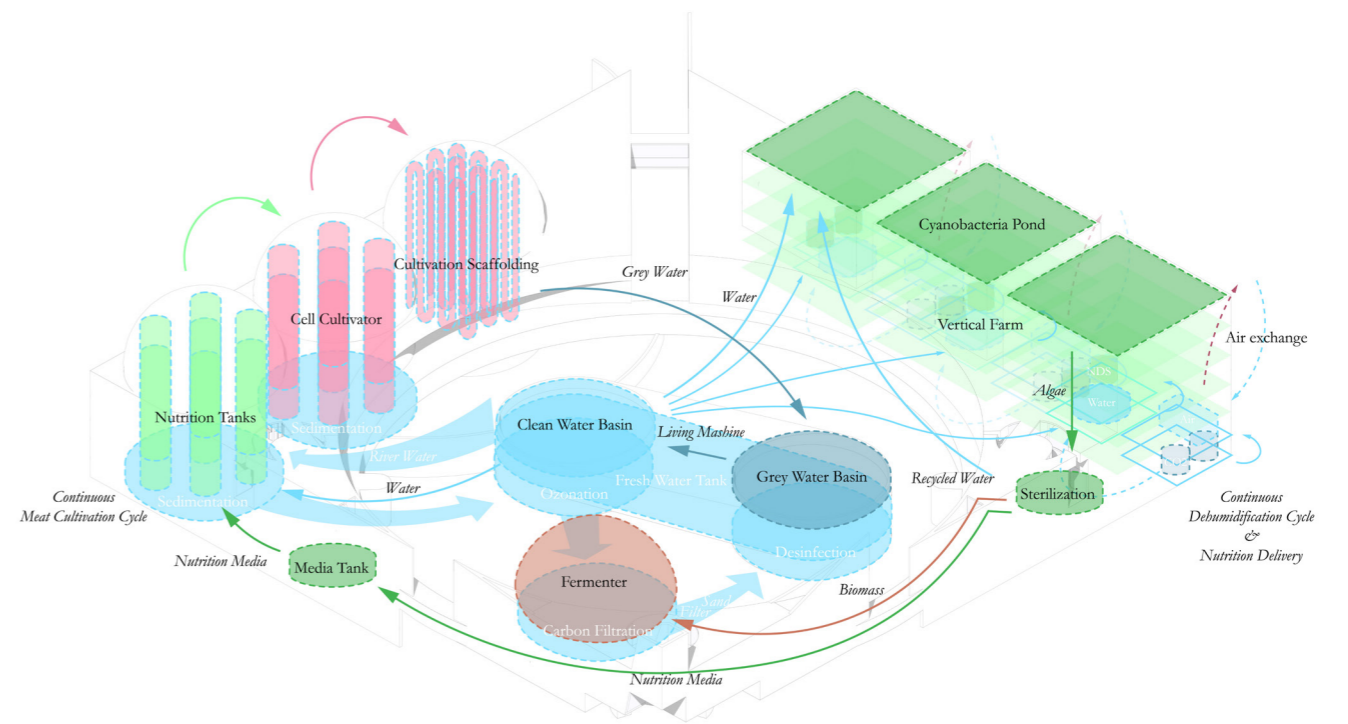
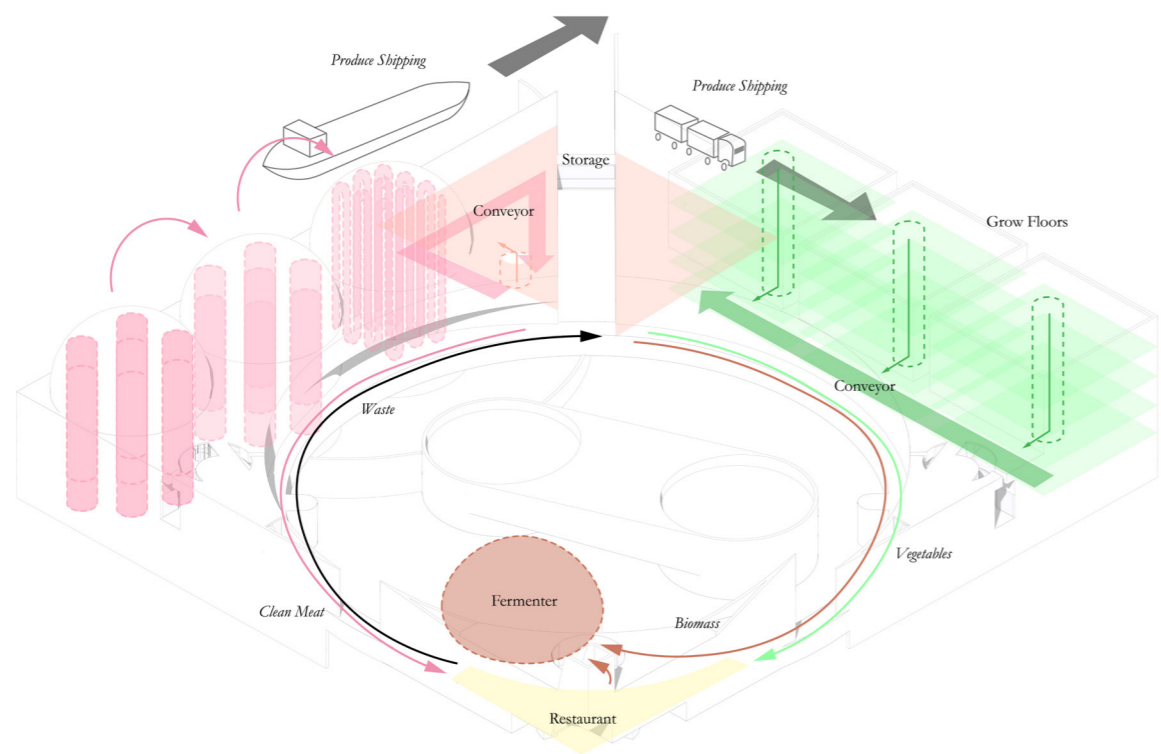




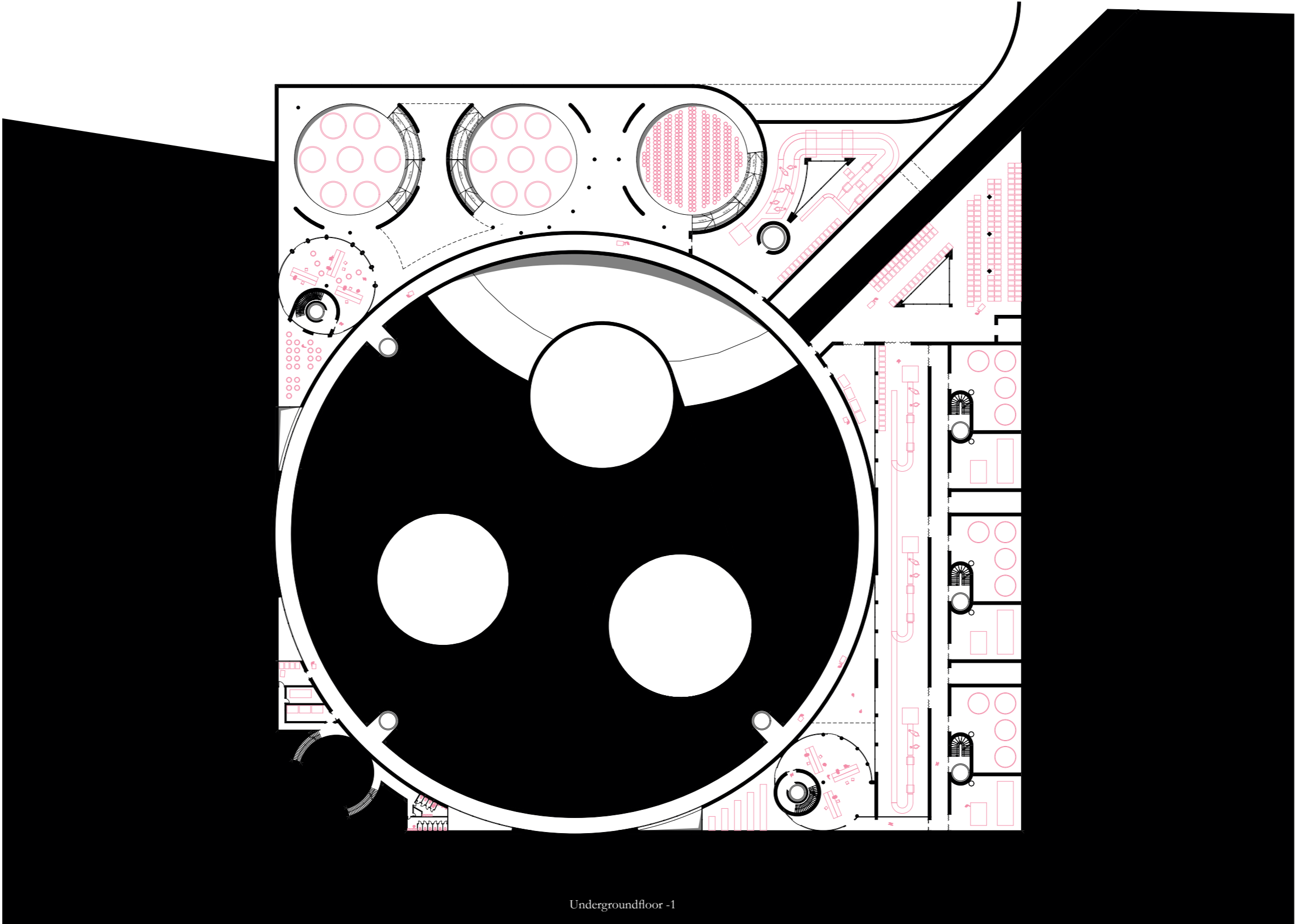
Clean Meat Cultivation



Vertical Farming Process



Matter & Water Cycle

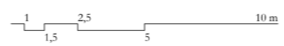


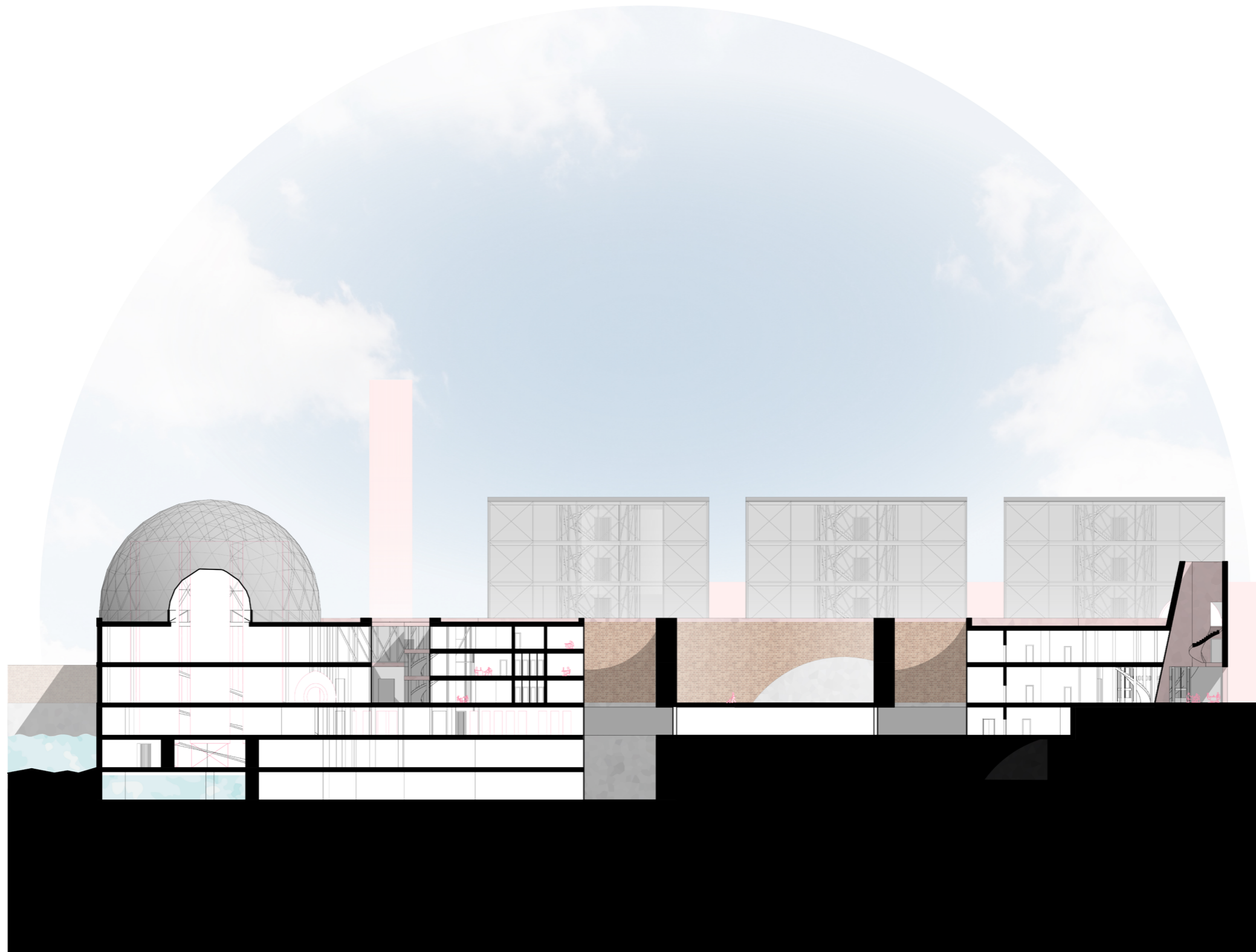
Undergroundfloor -1



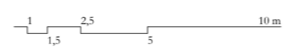


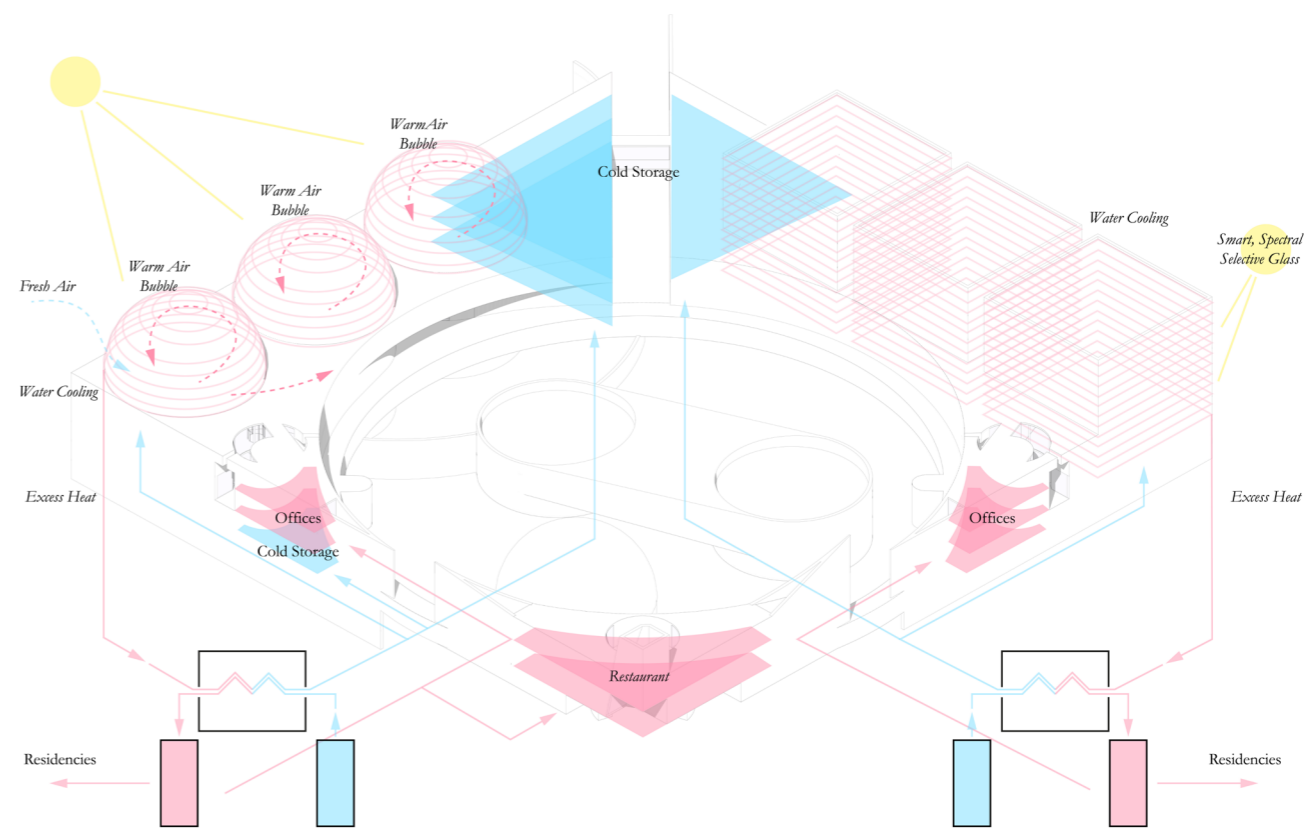
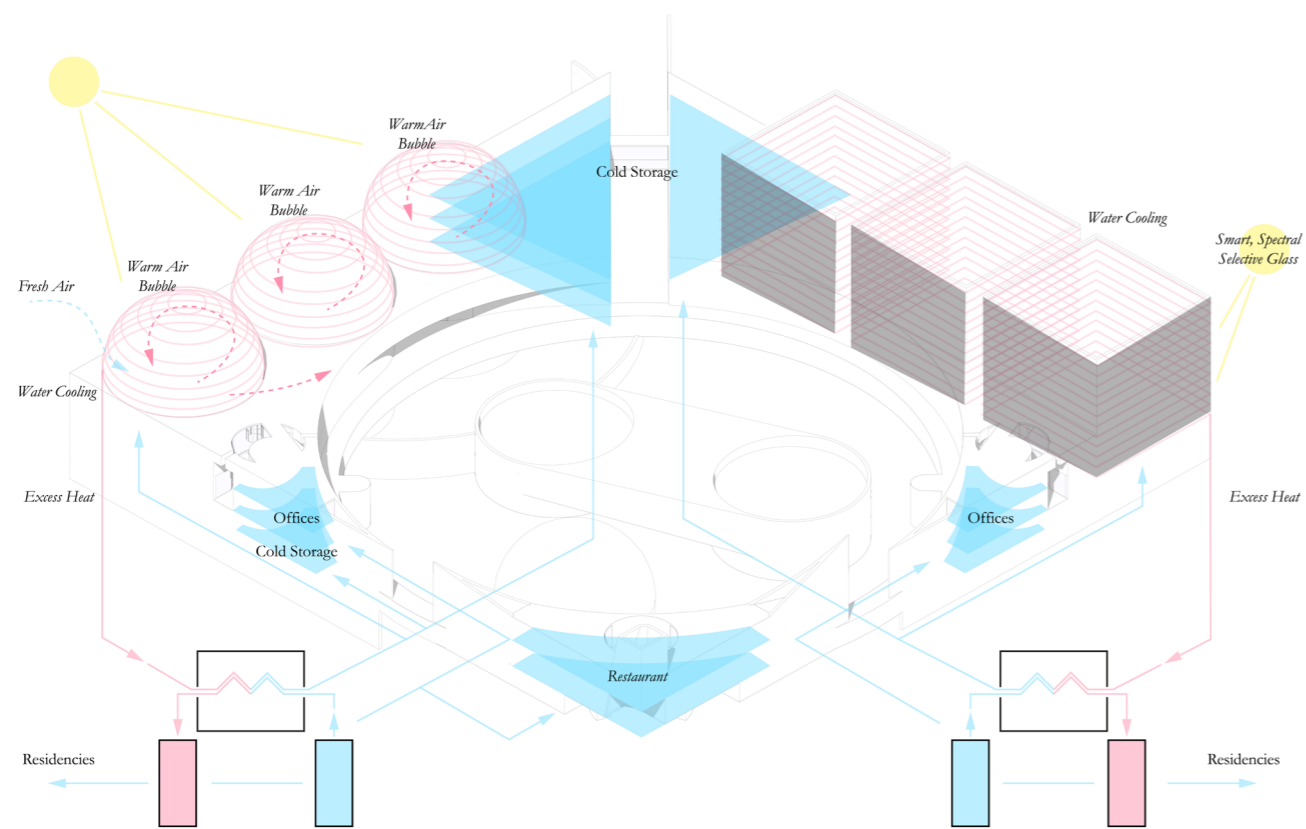
Section North



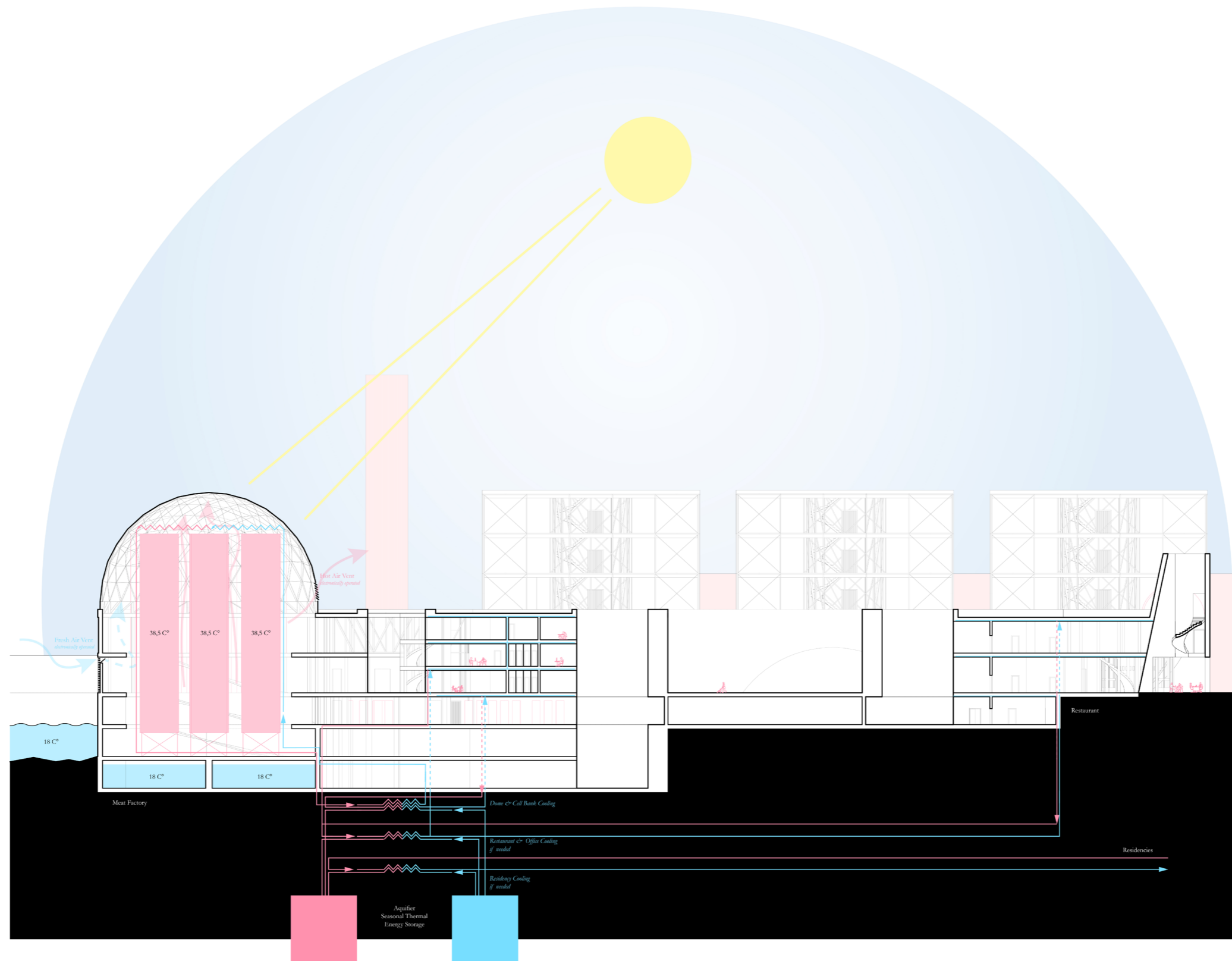


Section West

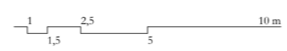




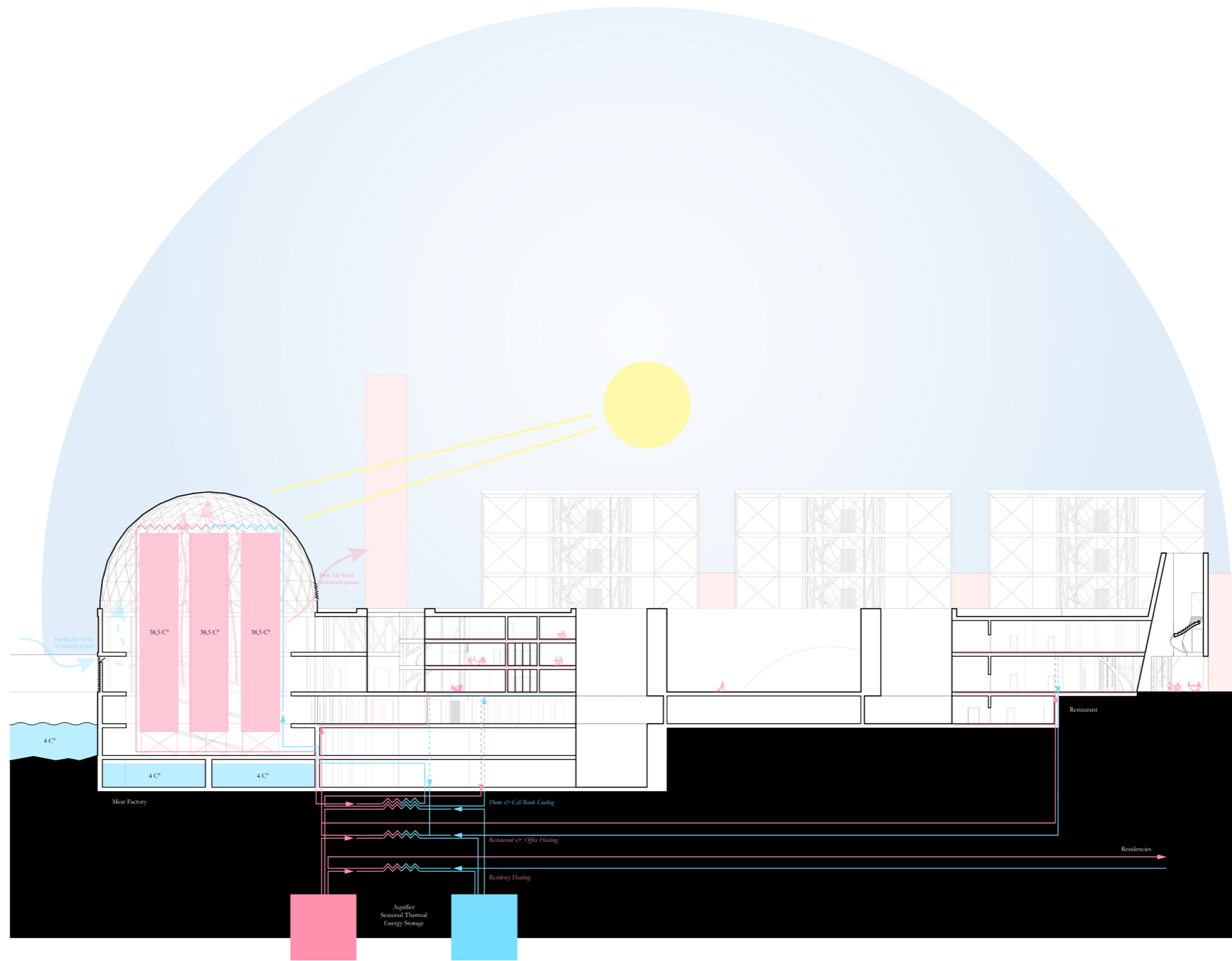
Summer & Winter Climate



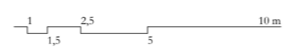
Summer Climate

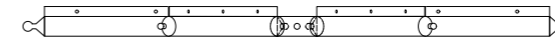
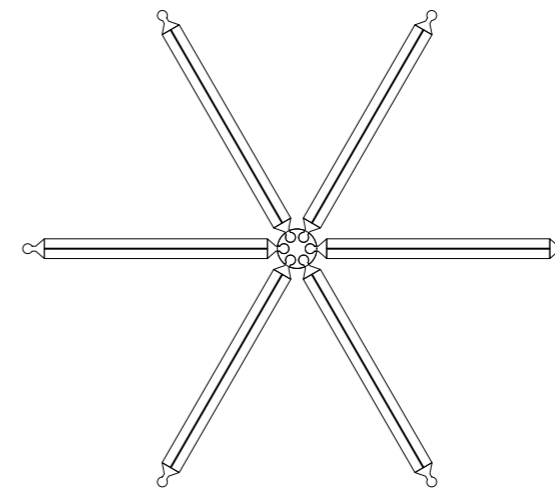
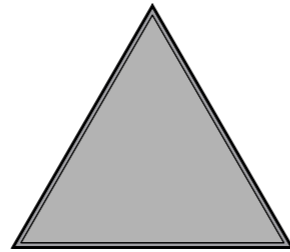
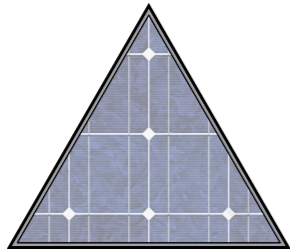
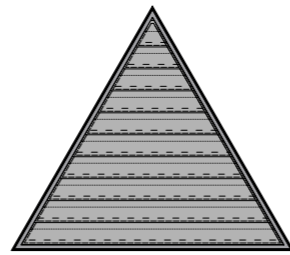
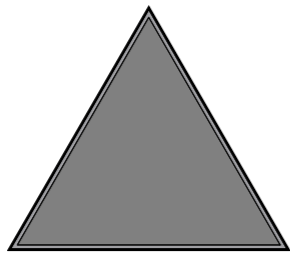




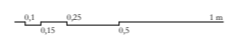


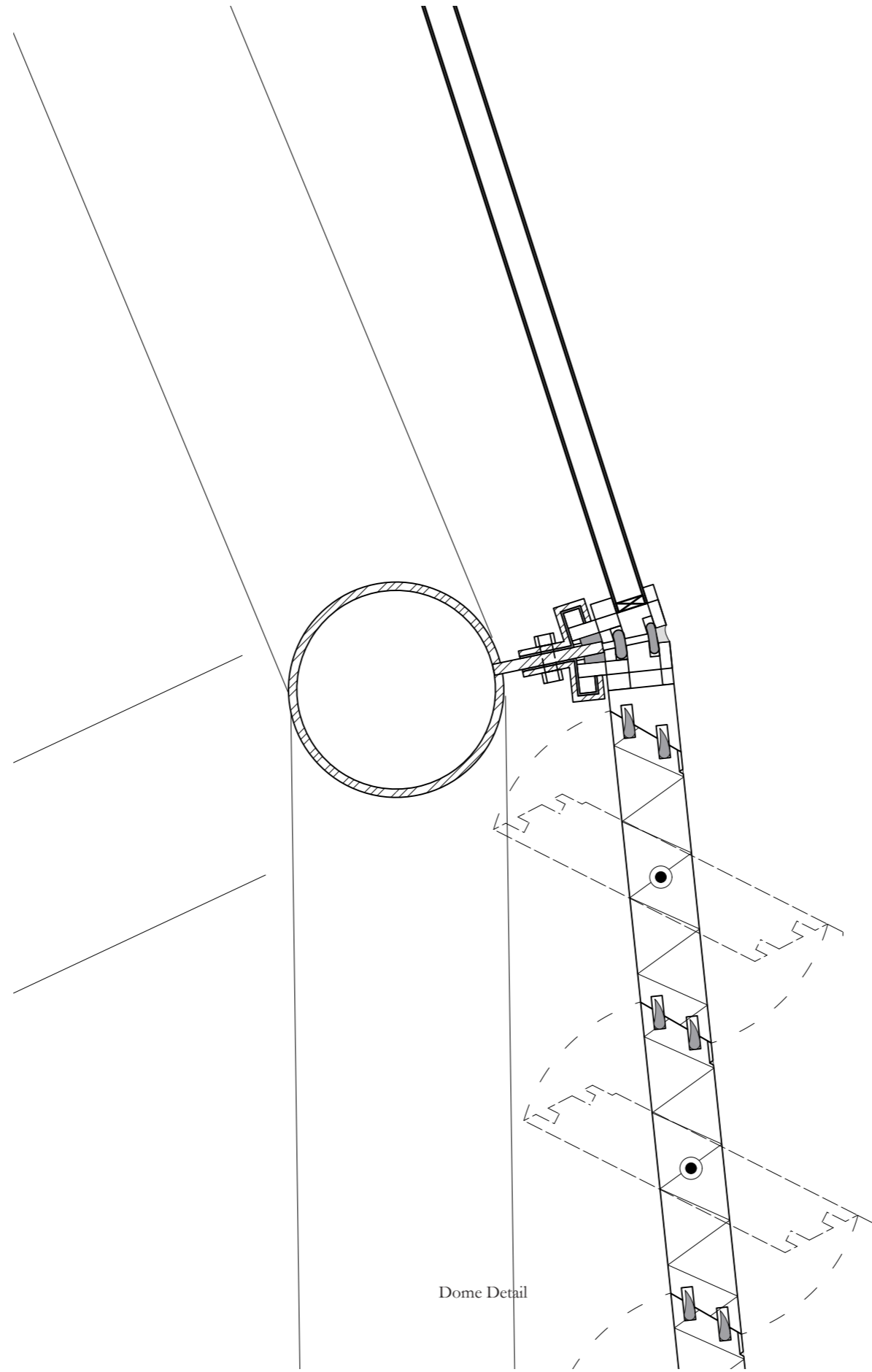
Winter Climate



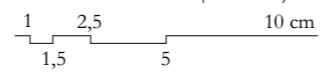


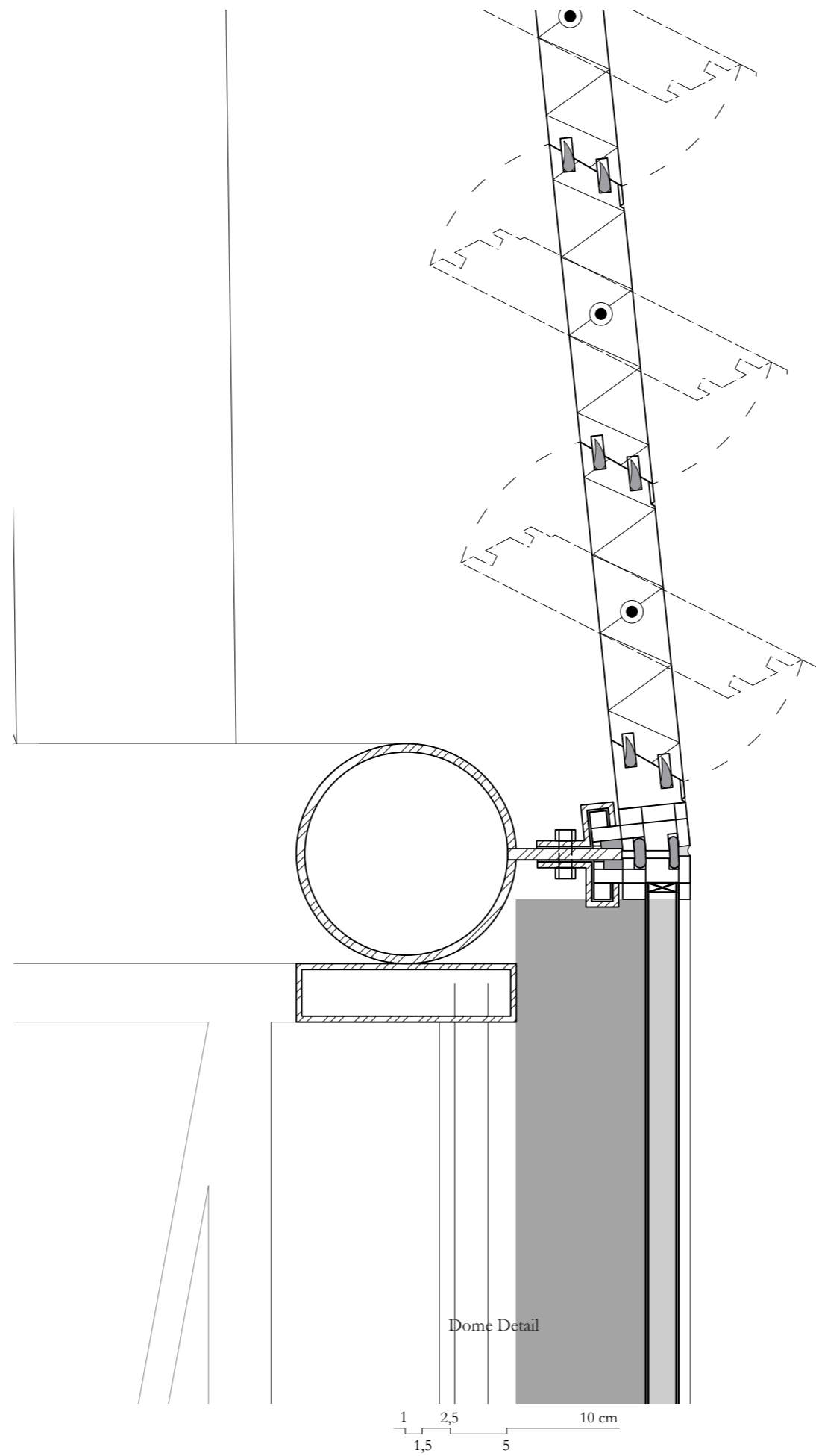
Dome Panels

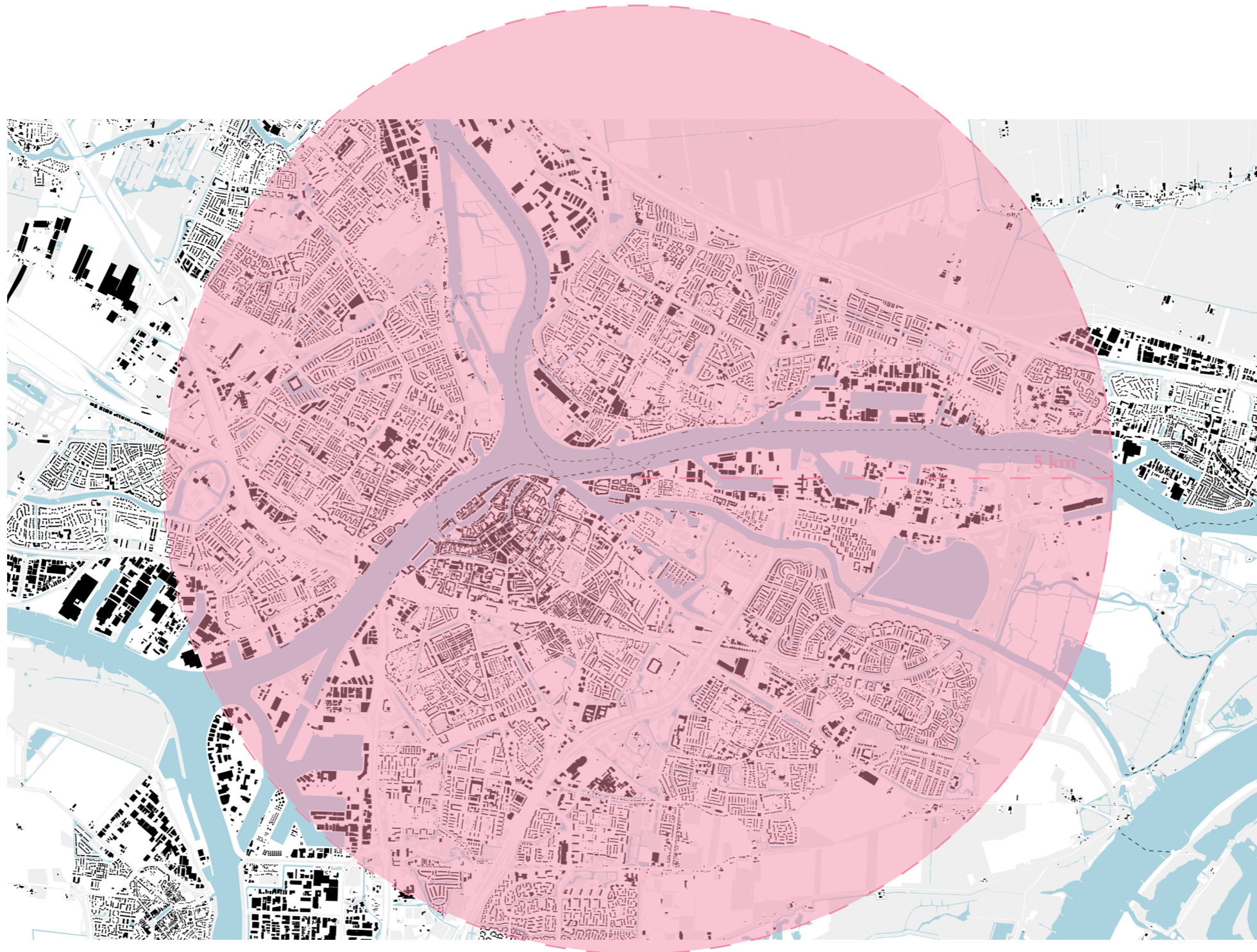




Dome Detail

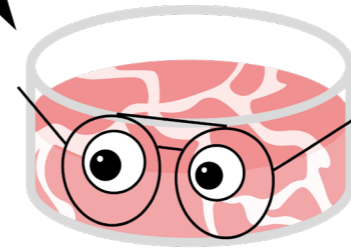


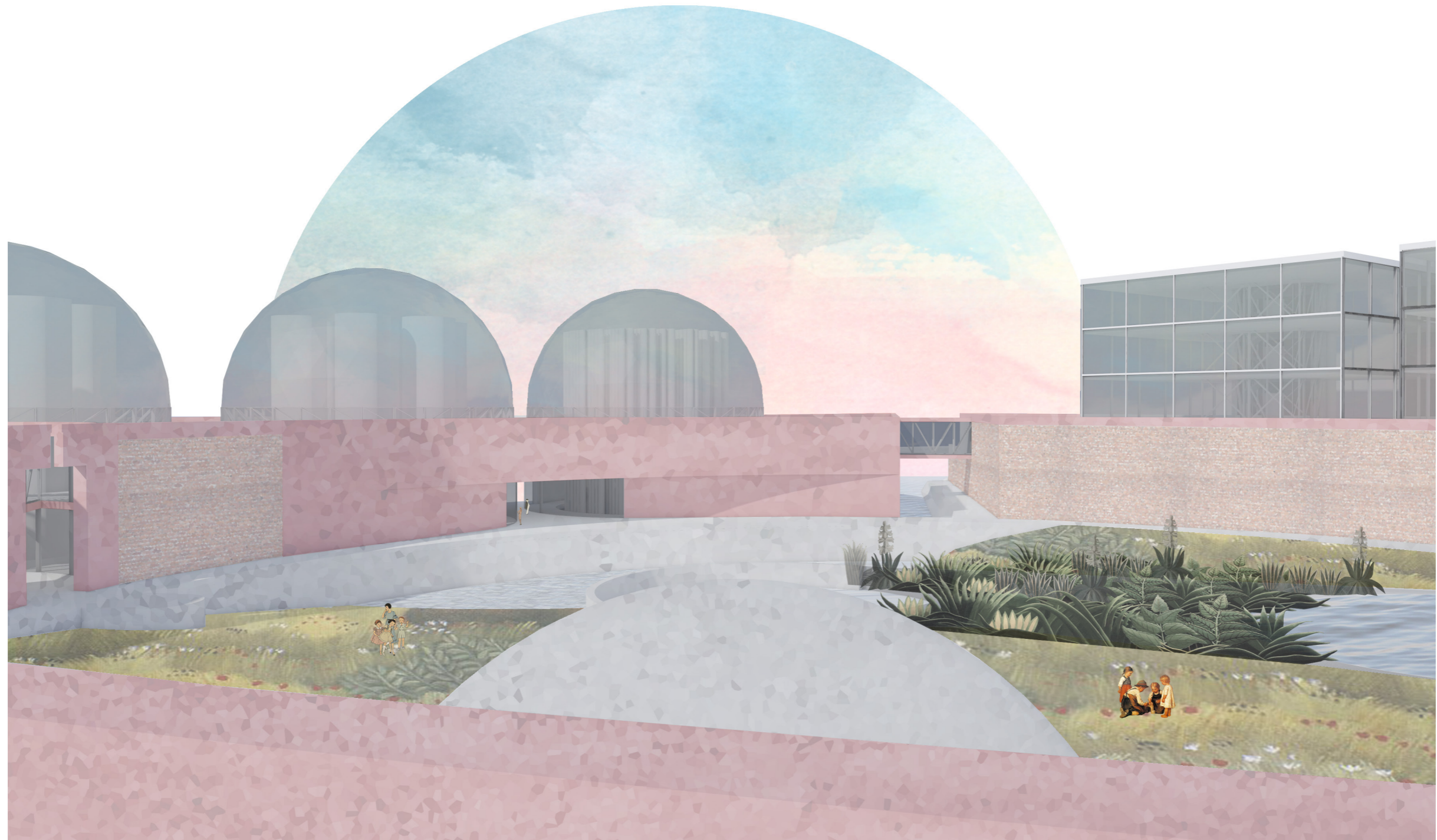




Industrial Ecology Heat

**Film**

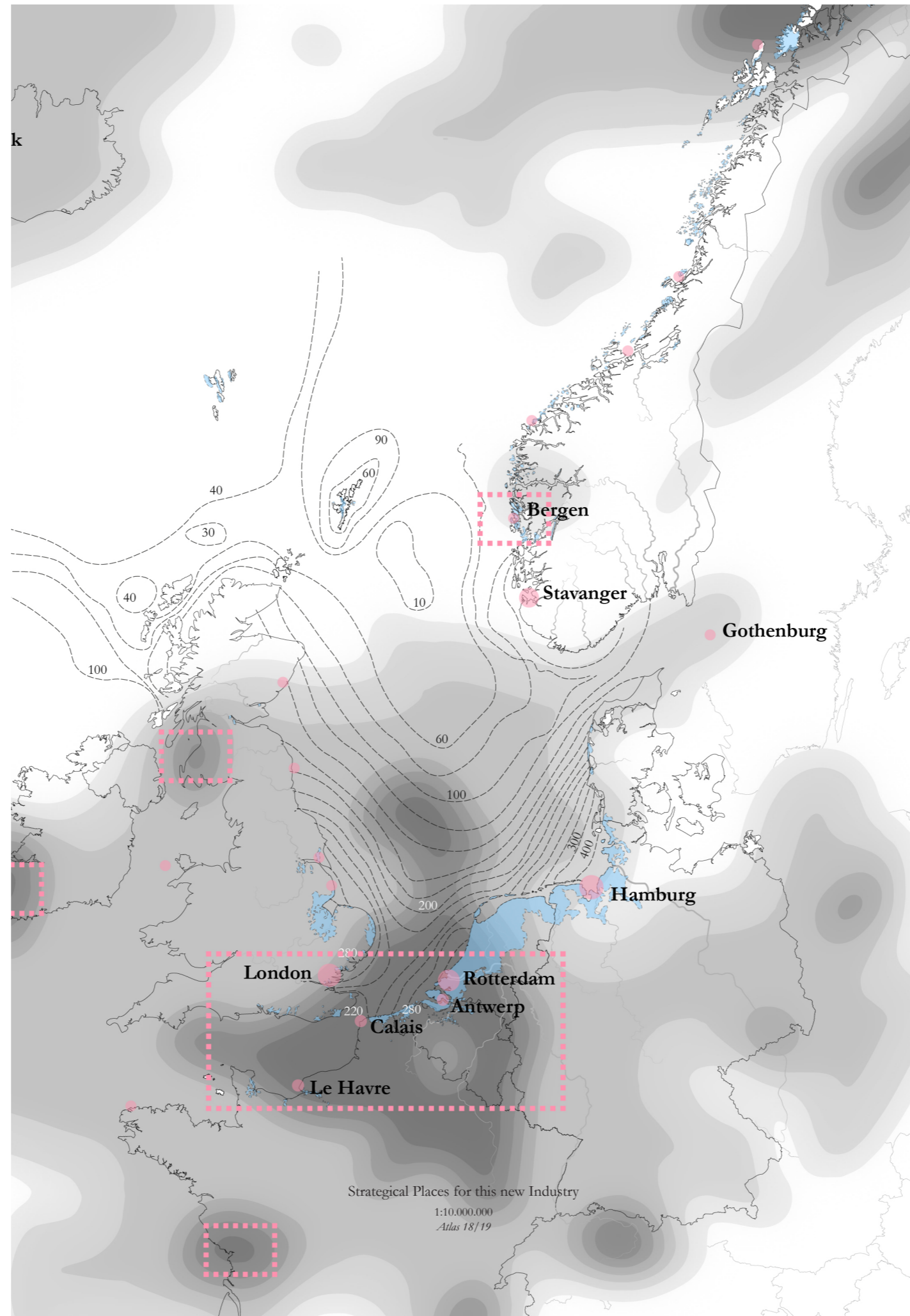




Court Perspective

Conclusion





Future daily maximum wind speed

-20 -10 -5 -2.5 +2.5 +5 +10 +20



Long term extreme surge prediction

Surge height and the uniform wind/pressure field

60



SLR 2100 RCP 8.5



1.



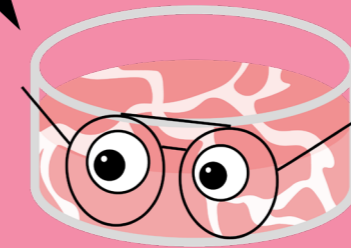
2.



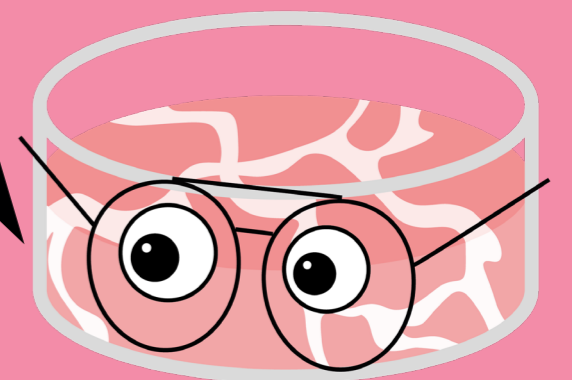
3.

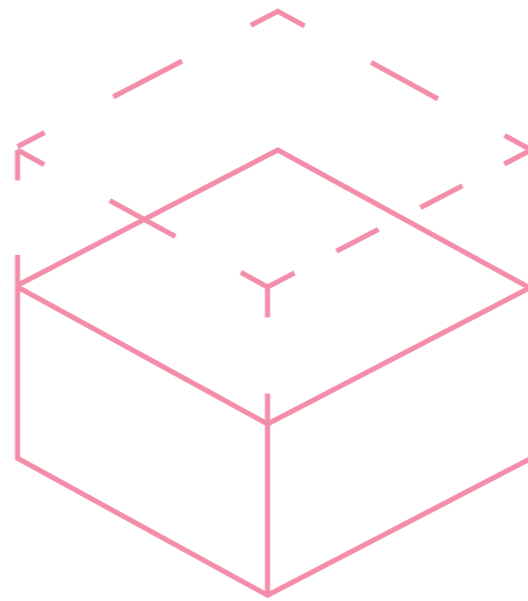
Site specific Qualities

**Thanks!**

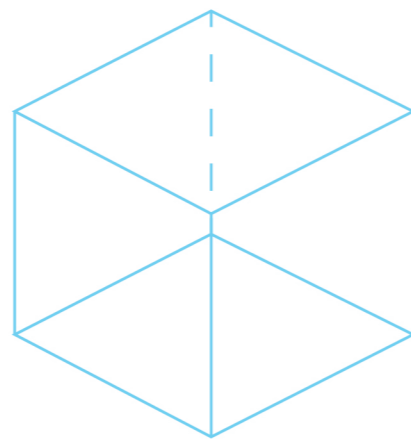


**The facility produces  
1.095.000 kg Vegetables  
&  
336.000 kg Meat  
per year!**



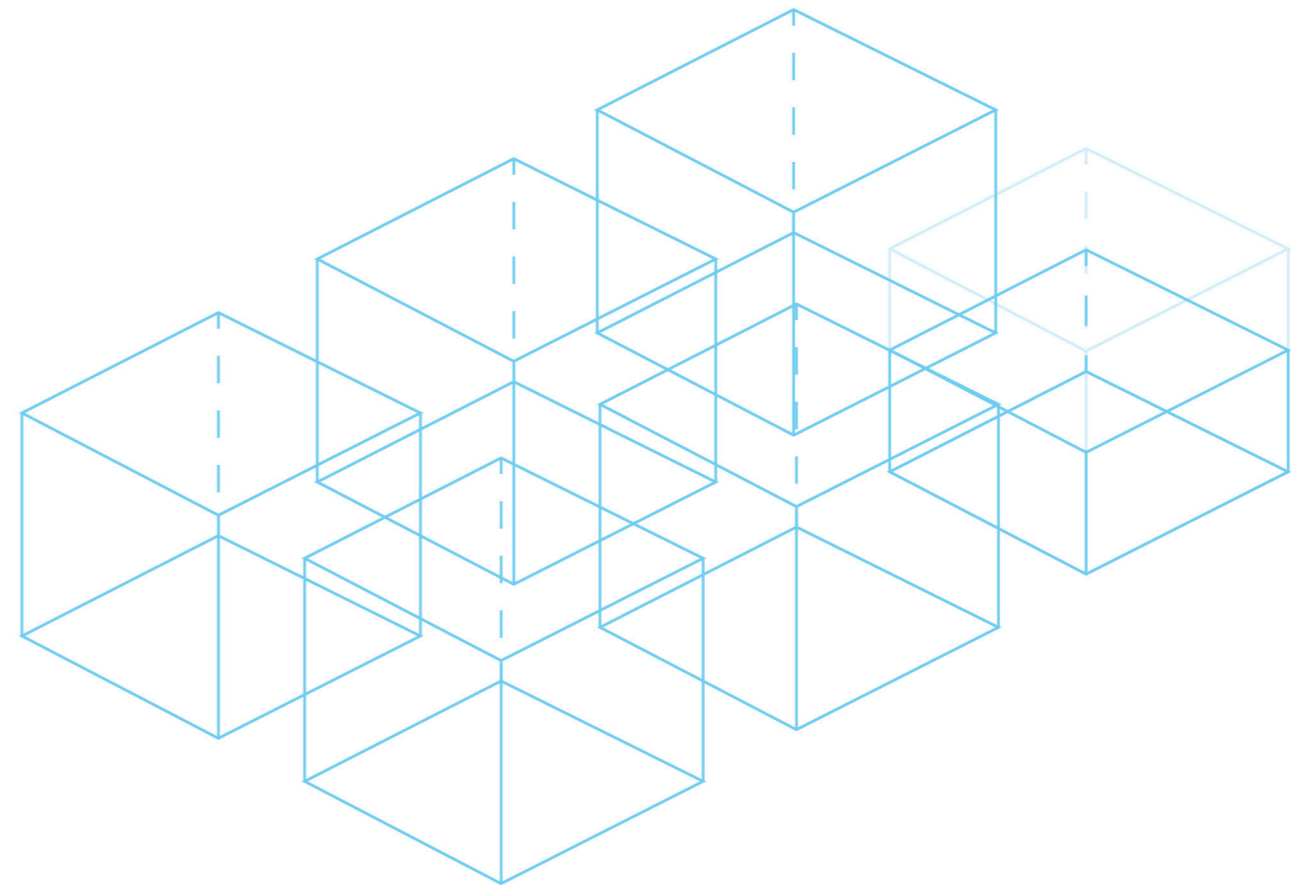


*$\sim 14.700 \text{ m}^3$  Manure saved =  $0,6 \times$  Volume of the Modelball*



*~32.400 m<sup>3</sup> Water used*  
Vertical Farm

*~ 1x Model ball*



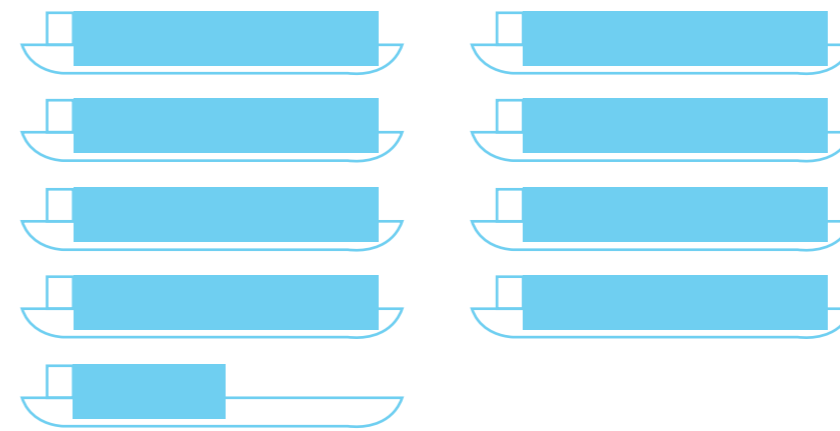
*183.600 m<sup>3</sup> Water used*  
Conventional

*~ 5,4 x Model ball*



*175.056 m<sup>3</sup> water used*  
Clean Meat

*1/5 Containership filled*



*8.052.576 m<sup>3</sup> water used*  
Convventional

*8,5 Containerships filled*