

AMSTERDAM *DECENTRAAL*

Re-imagining Architecture through an Ecofeminist lens

Graduation project
Explore lab 40

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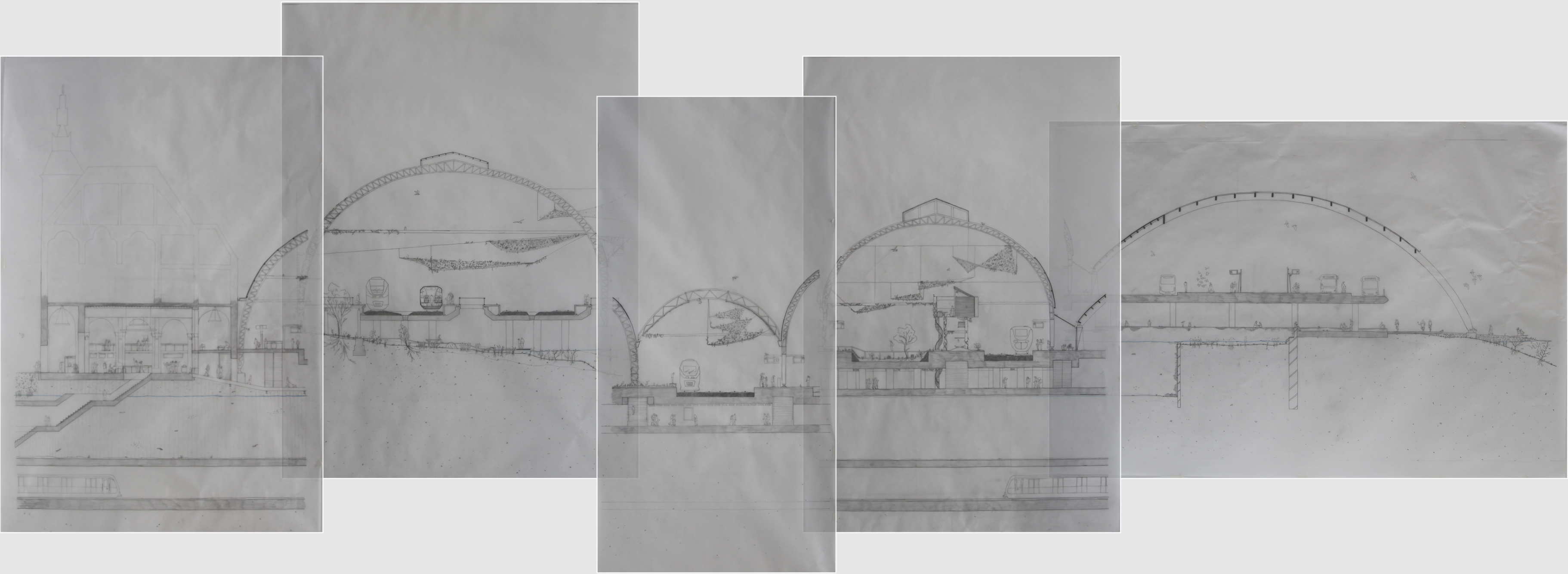


At my P5, I presented the project using a physical, large scale, section like drawing that was hung in the space (see image on the left).

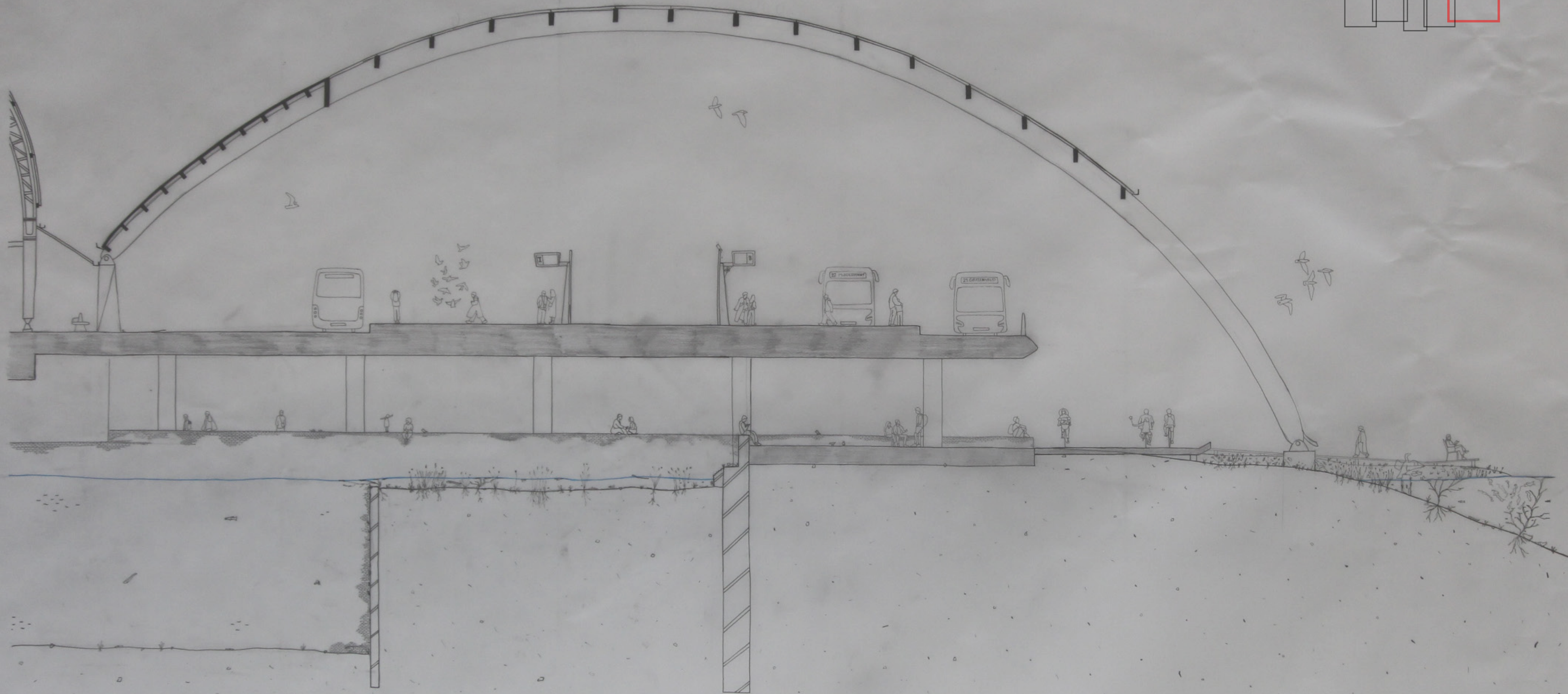
This document was assembled after the fact and contains close-ups of these drawings and some extra materials.

As in the presentation, the document follows the drawings (and the project) from right to left, moving from the IJ river toward the city centre of Amsterdam.

The notes on the side of these slides are there as an additional guidance, to explain the project in more depth and help you uncover how the 18 insights of my research and my critical ecofeminist lens have shaped the reimagination of this station



This is the collection of the drawings, or the image as a whole you could say.



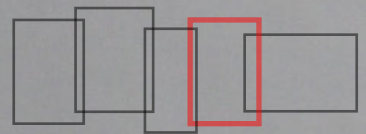
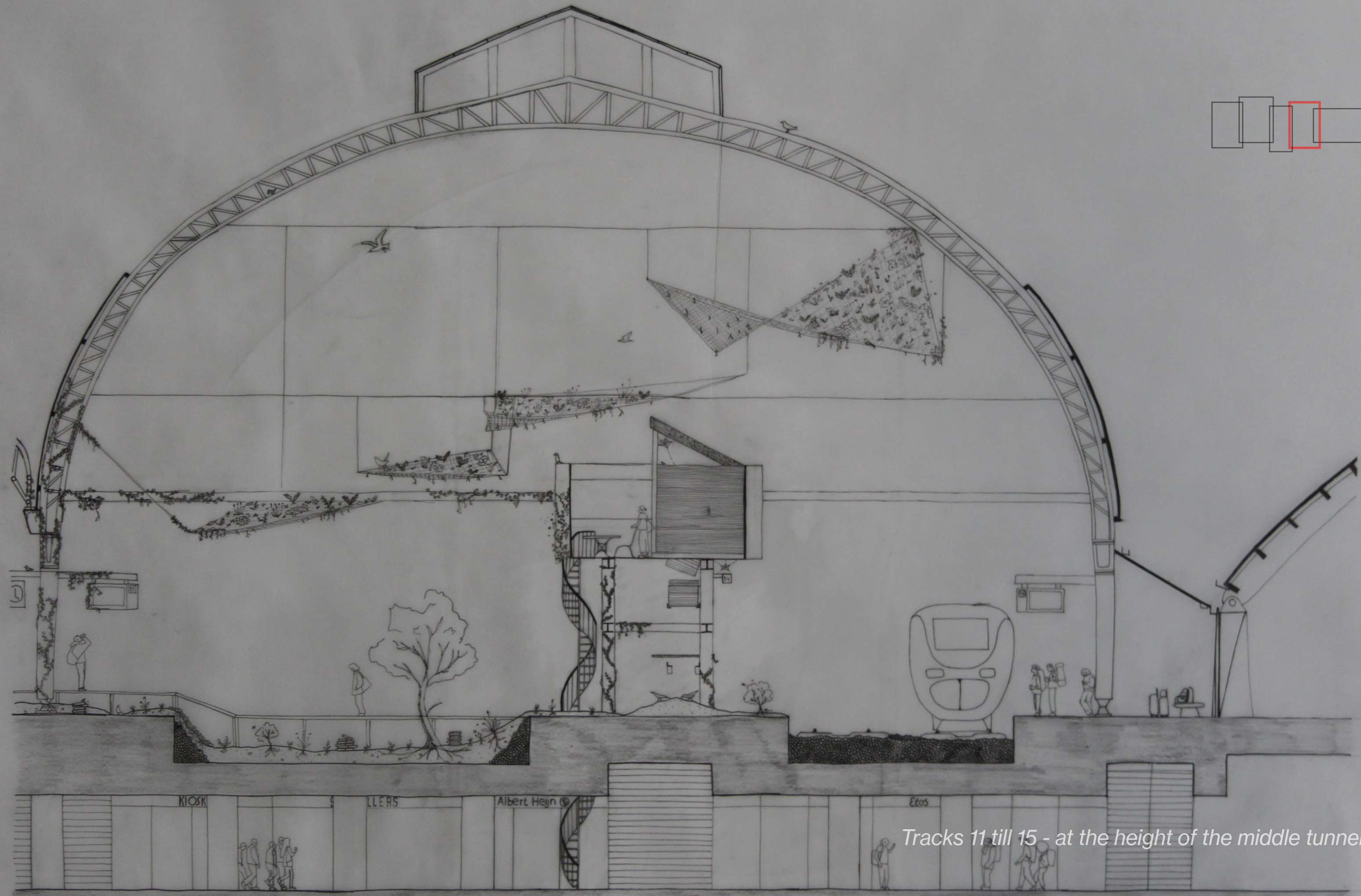
In this first zoom-in we find ourselves at the edge of the river IJ. The harsh, barren quay of the contemporary station is replaced with a natural shoreline, a wavy shoreline that creates diverse and dynamic environments, letting the river 'breathe' and allowing diverse forms of life to shelter or take hold.

The river plays an important role in my project. It actually cuts into the building itself, as you can see here on the left. With this, it reclaims a space where it was dampened a few centuries ago.

This cut, this new flow of the river, extends all the way through the station; it runs right through the commercial IJ passage and finds itself underneath the busy middle tunnel. Taking space for the water right through the heart of the station is a response to the aggressive placement of the station and a critique on the human colonialism of this water.

The orientation of this cut reflects the historical watery connection of Amstel and IJ, which used to be an important migratory route for fish. Throughout the whole station, the deeper water is at all times accompanied by a shallower landscape and access to a dry walkway; this way, the aquatic connection also hosts a wide range of amphibians and other forms of semi-aquatic life.

IJhal/ Busplatform - at the height of the west tunnel

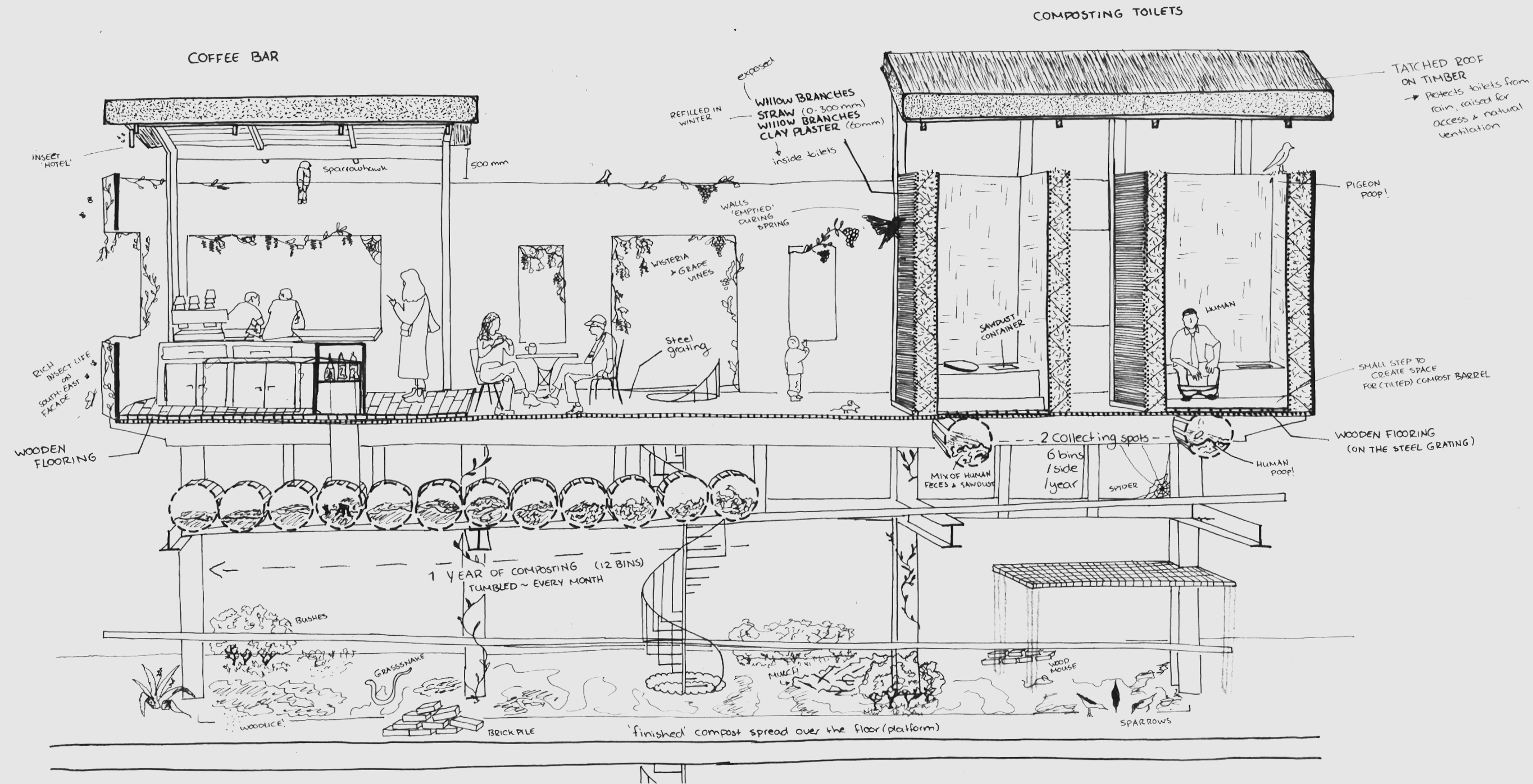


As we move further into the station itself, we find ourselves at platform 15 with the international trains to Paris and London. Here we also find the monumental signal box, right in between platforms 13 and 14.

At Amsterdam Decentraal this signal box functions as a place to celebrate human value to the system. Here, two classic station activities (pooping and drinking coffee) are reshaped into productive acts.

Tracks 11 till 15 - at the height of the middle tunnel

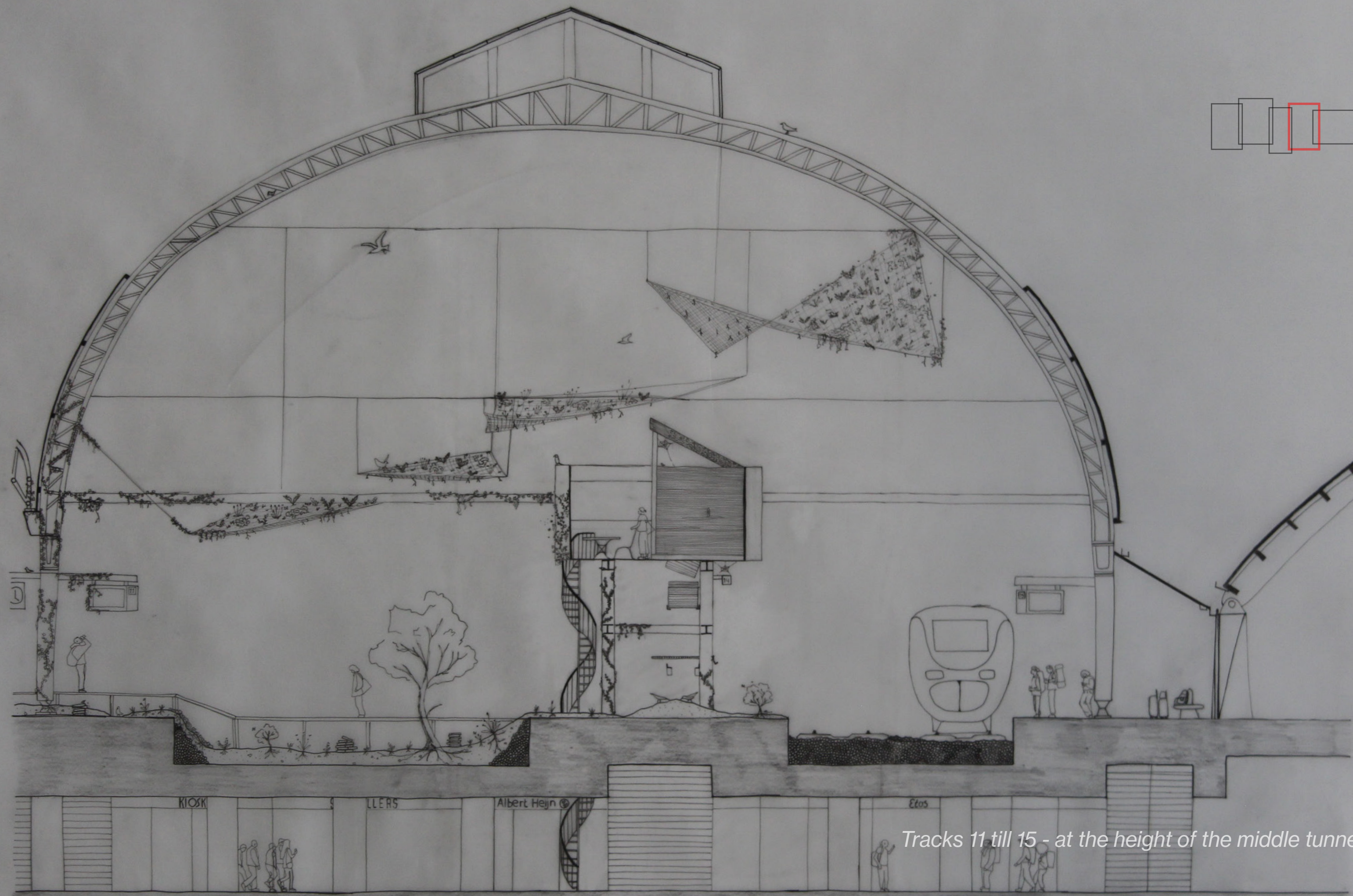
The Composting House



I have added an additional drawing here to show the cross-section of the compost house. Here you can see how human waste is collected in bins underneath the composting toilets. Once they're full, the bins are lowered onto rails where the composting process starts.

Over a year's time they slowly process down along the rails, turning and moving every time a bin is replaced. Once they arrive underneath the coffee bar, the bins are topped off with organic materials and coffee grounds; these enrich the compost but need less composting time. Once the worms, insects and bacteria within the bins have completed the composting process, the rich soil is spread out over the platform beneath.

With the introduction of the coffee bar and the toilet, the signal box is transformed into a multi-species habitat where every element supports diverse forms of life. The hay inside the walls provides insulation for toilet guests in the winter and nesting material for birds in the summer; construction elements extrude to provide lookout spots for birds of prey like the sparrowhawk, and all throughout there are cracks and spaces for insects and birds to nest.



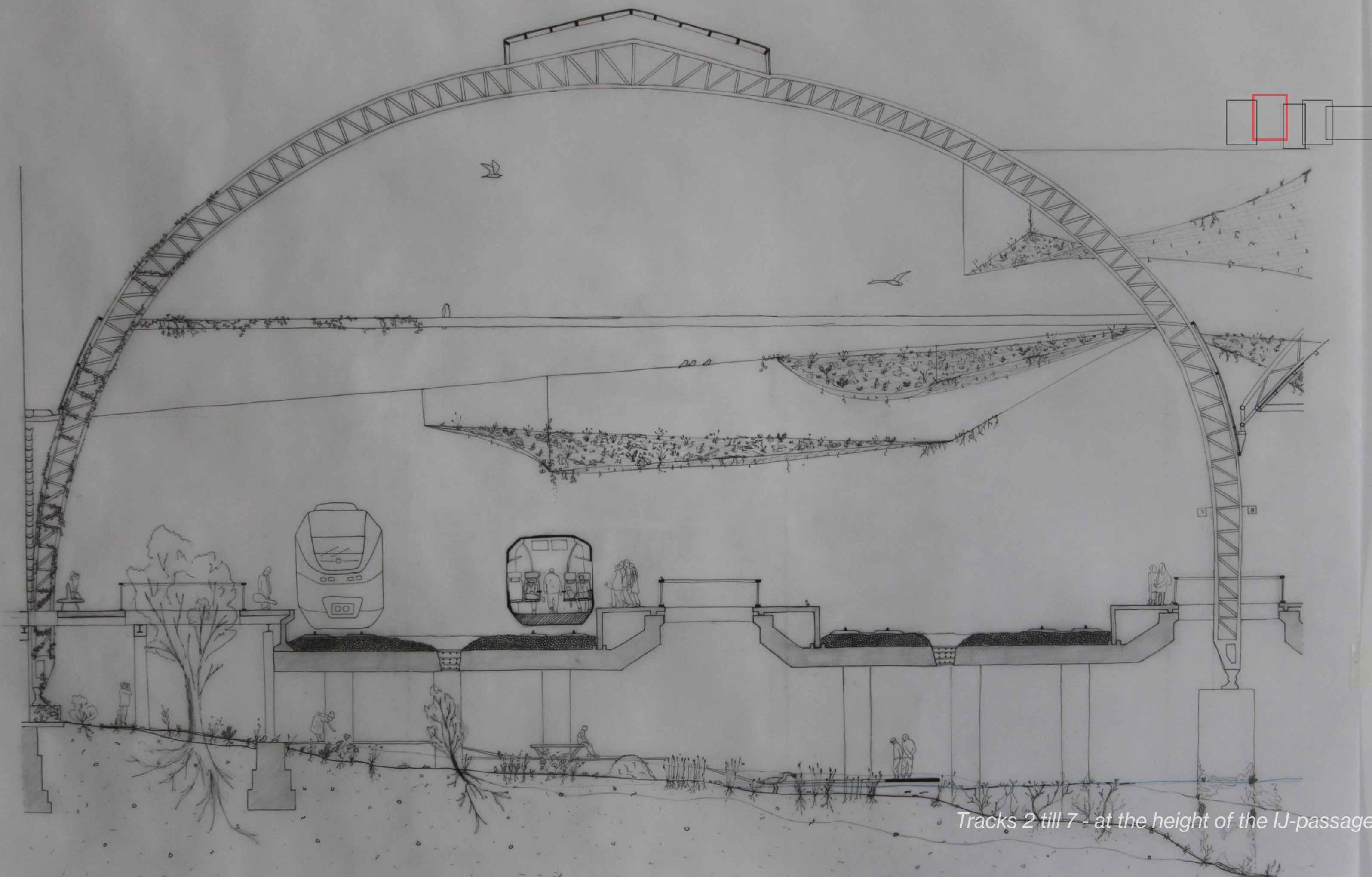
Human access to this composting house happens from the travellers- tunnel beneath. Right in the middle of a completely untouched, 'normal' middle tunnel, between the Etos and the Appie to Go, there is this whimsical staircase that takes you, past the soil at eye level, all the way up.

On the left side of this drawing you can also see how some of the tracks and platforms have been uprooted and hard, impenetrable surfaces (such as the crushed rocks and railway sleepers) have been replaced with soil to facilitate (emerging) ground life. Here, human movement is redirected onto steel grating boardwalks or removed altogether. The rubble taken from the platforms and tracks is reused to form linear elements and hiding places, a function that, over time, will be taken over by the maturing vegetation.

To allow for all uprooted areas to benefit from the compost that is made at the compost house, the pile of compost that starts to form on the platform needs to be spread across the other exposed soil areas. Human travellers do this by carrying soil under their shoes as they move through the station, while the wind and other users of the station help bring the compost into the areas the walkways don't reach.

As you can imagine, the uprooting of tracks and platforms affects the functioning of the station as a train-transport hub. By uprooting the middle of tracks 8 to 13, these tracks can no longer host trains that run through the station, and the A and B sides have to operate separately. Given the exceptionally long platforms, the fact that Amsterdam Centraal already functions largely as a final destination, and the fact that tracks 2-7 and 14 will still be continuous, this shift is very feasible. Platforms 7 to 14 are also split at their centre, which means that human travellers that have to transfer from A to B will have to utilise the middle tunnel to do so.

Tracks 11 till 15 - at the height of the middle tunnel



Tracks 2 till 7 - at the height of the IJ-passage

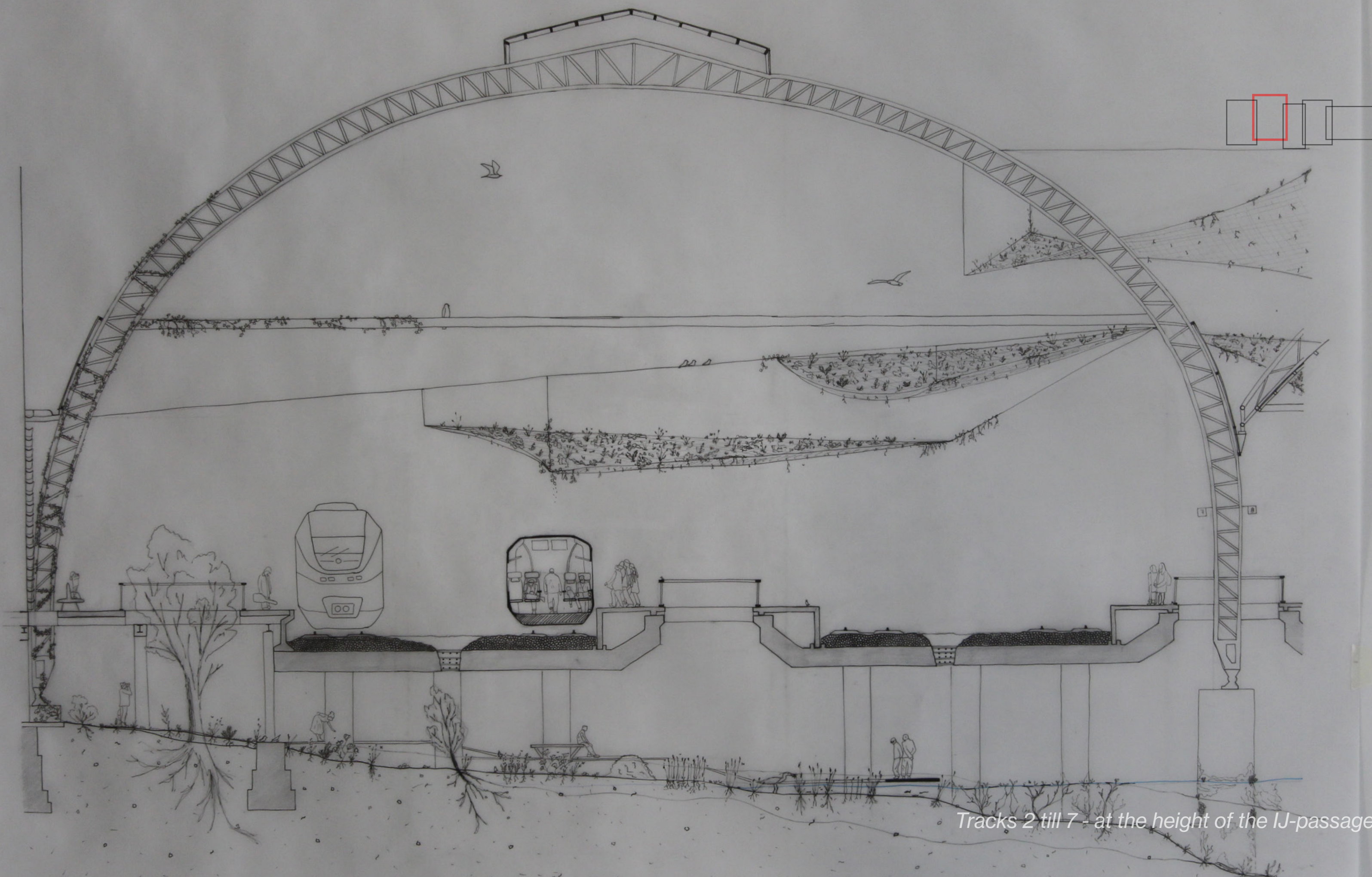
Next, we find ourselves in the IJ-passage of the station, where we are reunited with our river. At Amsterdam DeCentraal the commercial IJ-passage has been transformed into a watery landscape with a gradual quay that slopes into our new waterway.

Introducing a landscape into this space is a statement about replacing commerce with nature, about re-appropriating the IJ-passage, actually turning it into a passageway for the river IJ. It is also about transforming one of the only places of 'rest' inside the station into a space that is actually calming and pleasant to be in, not just centred around consumption.

In order to introduce sunlight into this tunnel, which is essential to the emergence of a landscape, various interventions had to be done. First of all, holes had to be made into the concrete slabs of the tracks and platforms.

At the platforms, the centre of the slabs can simply be removed (this is an intervention similar to what happens when space is made for the stairs to get to the platforms in the passenger tunnels). Holes in the track slabs are trickier because of the structural integrity and the train loads. Here the middle train track is taken out of the running to allow for holes to be made along that line. By carefully removing the concrete using hydro-demolition, holes can be precisely created, and structural damage to the slabs is minimised.

While this maximises the structural integrity for a while, decay, weathering and erosion will happen over time. At Amsterdam Decentraal these are not factors that have to be avoided. Rather, time could be seen as a material that is designed with. A degradation zone is included in the design of these holes which acknowledges the slow transformations of the materials under water, light and use. And the necessary regular checkups are celebrated, as they provide a role for humans in this emerging landscape.



Tracks 2 till 7 - at the height of the IJ-passage

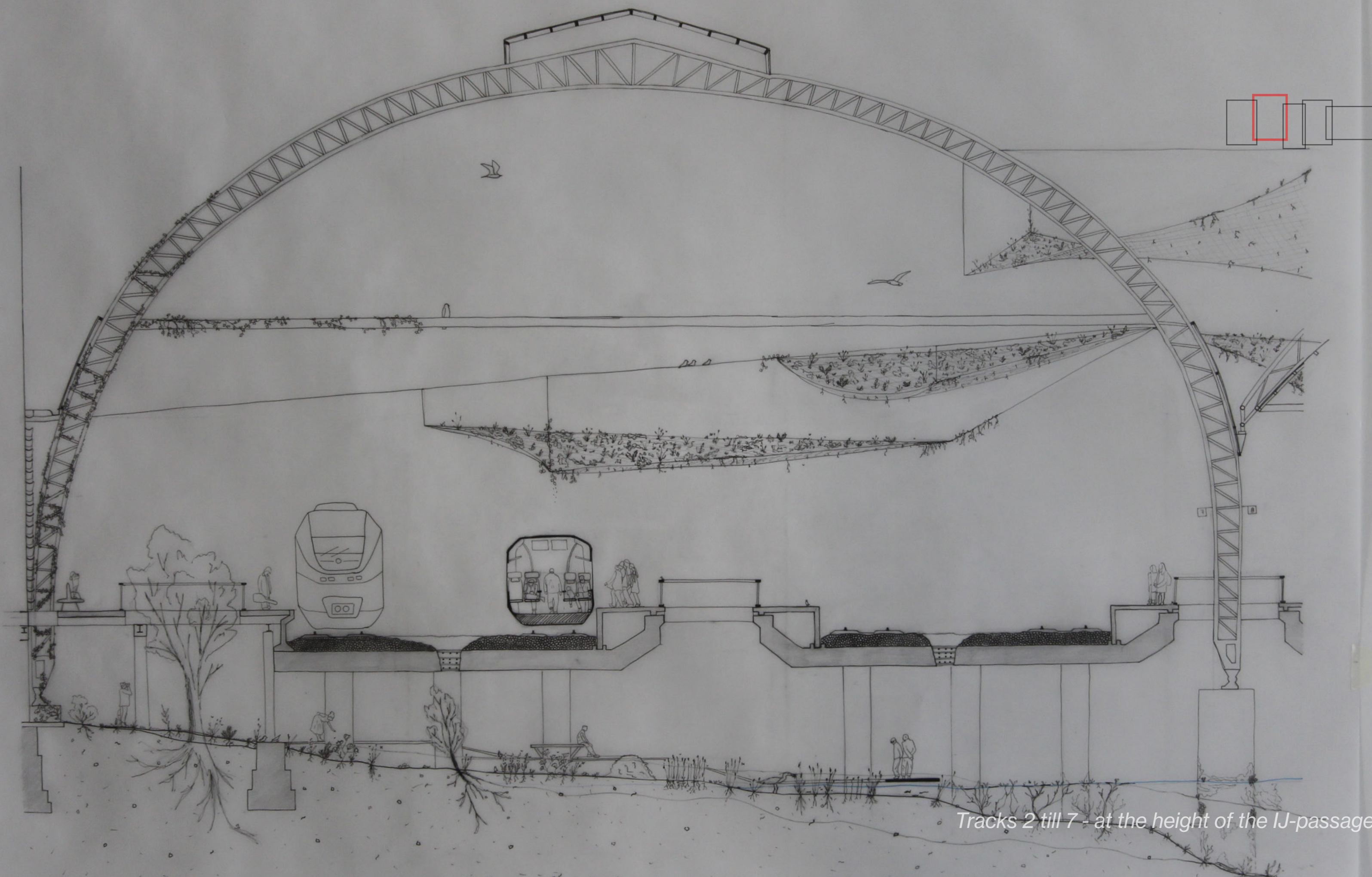
The contemporary roofs of Amsterdam CS are relatively closed, keeping out tremendous amounts of potential sunlight, which is why at Amsterdam Decentraal roof segments are removed above both the uprooted tracks as well as the reappropriated IJ-passage, ensuring that light can effectively reach these habitats and life can flourish.

These spatial interventions are highlighted by hanging vegetal canopies. These canopies trace the northern edges of all the areas where roof segments have been removed. They offer everything from additional habitats to sensory experiences, while also functioning as spatial mediators that make the over-dimensioned cast-iron domes explicitly visible.

These cast-iron domes, so central to the spatial experience of the station, are a direct reflection of its industrial past and the capitalist values that underpin the station's original architecture. As the excessive use of cast iron is directly connected to damaging extractivist practices, these domes show how the exploitation of our natural environment was considered subordinate to the industrial ambitions (showing off human innovation and progress).

In their orientation the canopies mirror the sun's path; this way they do not obstruct light from reaching the relevant spaces and simultaneously maximise their own sunlight exposure. In contrast to the existing harsh and smooth surface areas of the roofs, these canopies are designed to welcome and host life. Jute is sewn into large pouches that hold a layer of wool, functioning as a substrate. The existing bird nets, designed to prevent birds from landing in the construction, are repurposed to support the canopies, as the natural fibres might start to decay.

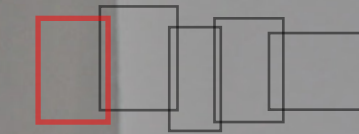
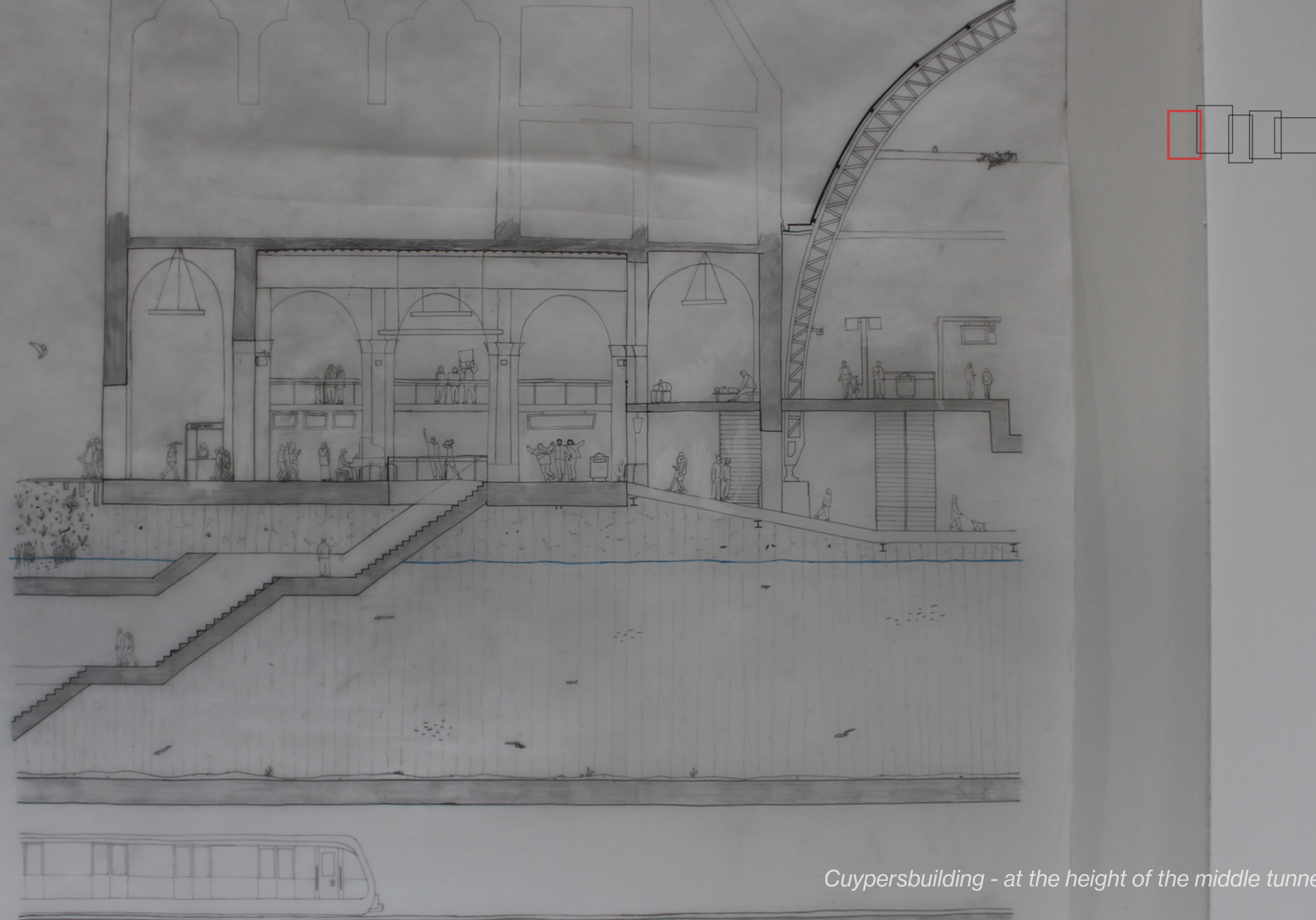
Like the leaf canopy of a tree, these vegetal canopies provide a rich habitat for many birds and insects while casting shifting dappled light over the platforms and producing a tree-like delay in rainfall: shelter during the shower, followed by endless dripping once the sky has already cleared.



In addition to light, a watery landscape needs water, and in this landscape that goes beyond the presence of the river IJ itself. A careful redesign of the roof's gutter systems allows for rainwater to come and play its part.

With regular amounts of rain, water from the southernmost roof is guided into the building along the gutter system mounted onto the brick wall here on the left. In case of extreme rainfall, the roof gutters that have been moved away from the Cuypers building will overflow, creating a waterfall event across this whole section of the building (the section above the IJ passage). This drainage system is explicitly designed as an open system to facilitate dynamic microclimates along the wall and to highlight the different flows of water through this changed boundary. Once water arrives underneath the platform, little streams will start to take shape in the landscape as the water gradually flows into the bigger body of the IJ.

Tracks 2 till 7 - at the height of the IJ-passage



In this last part of the drawing, we find ourselves in the Cuypers hall, the central entrance to the station. Here, or actually, underneath this hall, the river IJ intersects with the north-south metro line construction. An immense concrete presence that is unknown to most of the current users of the station.

At Amsterdam De-Centraal, this massive concrete construction becomes a part of the reimagined IJ-passage, the concrete walls and metro tunnel holding the water like a bathtub. Not in this section, but at around the centre of the middle tunnel, part of one of the jet-grout walls is removed so that the river can enter and fill the construction.

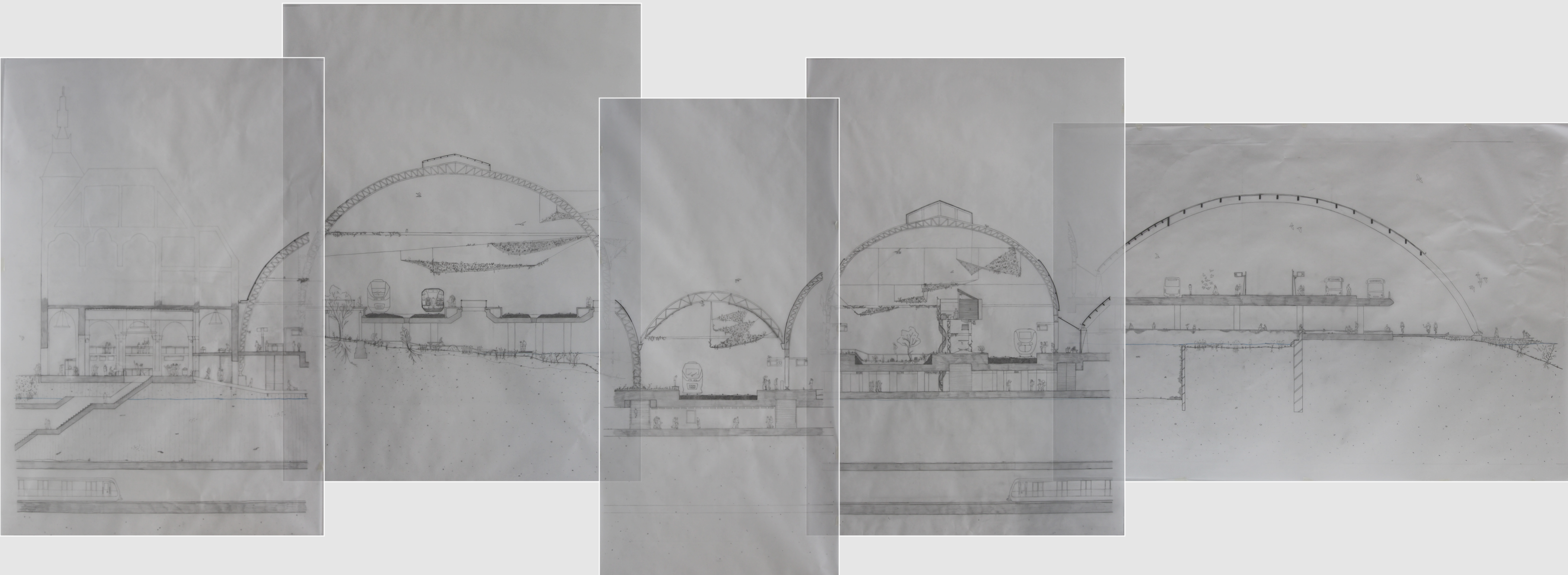
Opening up the floor in parts of the middle tunnel exposes human travellers to this impressive meeting of river and construction and confronts them with the enormity of both. Coming down from the platforms here, people are guided along the edge of the water, and as they walk in the direction of the city centre, they get to look into the Cuypers cave.

Because the Cuypers Hall has a slightly elevated floor, the area underneath it starts functioning as a cave-like habitat. It naturally has stable climates, and the existing texture of the jet grout walls provides fitting grip for bats, centipedes, fungi, algae and the like.

While this cave is not really a human habitat, travellers that enter the metro station from Cuypers Hall do get to experience it as they descend down into the tunnel.

All the way on the left of this drawing you can see how the water flows into the landscape that replaces the currently harsh square in front of the station. The renewed softness of this area creates yet another set of diverse habitats as the water freely moves in the direction of the Amstel.

Cuypersbuilding - at the height of the middle tunnel



Together, all these interventions form a unique system of messy, interconnected entanglements, a reimagination of Amsterdam Central Station not just as a multi-species landscape or a project on ecological continuity, but as a place that fundamentally questions our relationship with our environment.

I believe that it is projects like this one – personal, radical and possibly controversial – that we will need to break free from our patterns. Projects like this one are powerful and important not because they contain the perfect solution but because they spark conversation, because they question our 'status quo', and because they make us think and reflect. By making the structures we take for granted and the borders we have normalised visible, it encourages us to question, to reimagine and ultimately to begin creating a world differently.

Now please close your eyes...

So I ended my presentation with this imagination exercise. Maybe you will enjoy it too; it works best if you close your eyes, but if you have no one to read this to you, just try it with your eyes open:

*Imagine you're on a train, final destination
Amsterdam De-Centraal:*

*As you arrive at the platform and the doors
open, you realise something is different.
The wide platform, that once, efficiently
guided you forward, is replaced by a narrow,
steel-grating walkway, now congested with
your fellow passengers.*

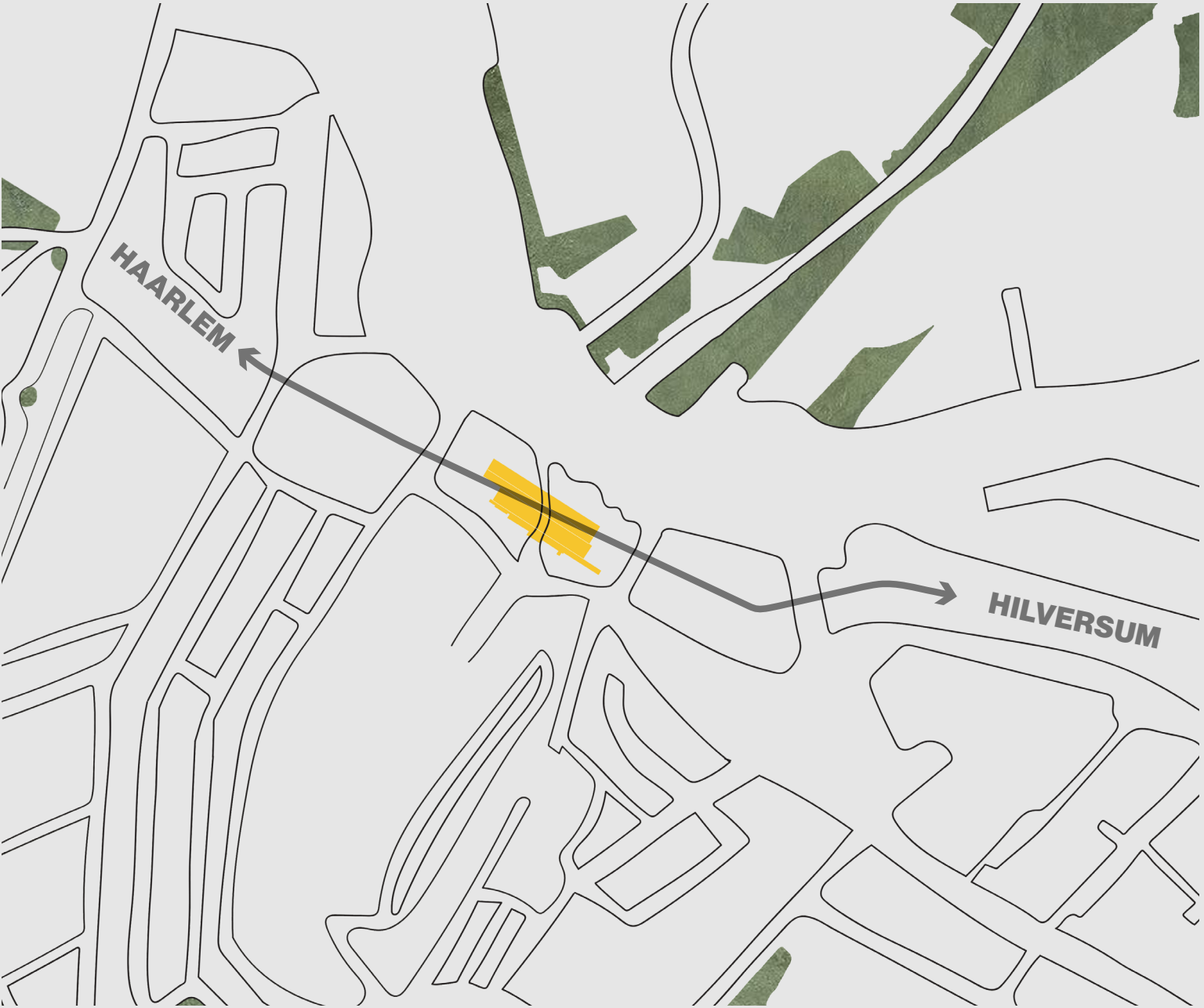
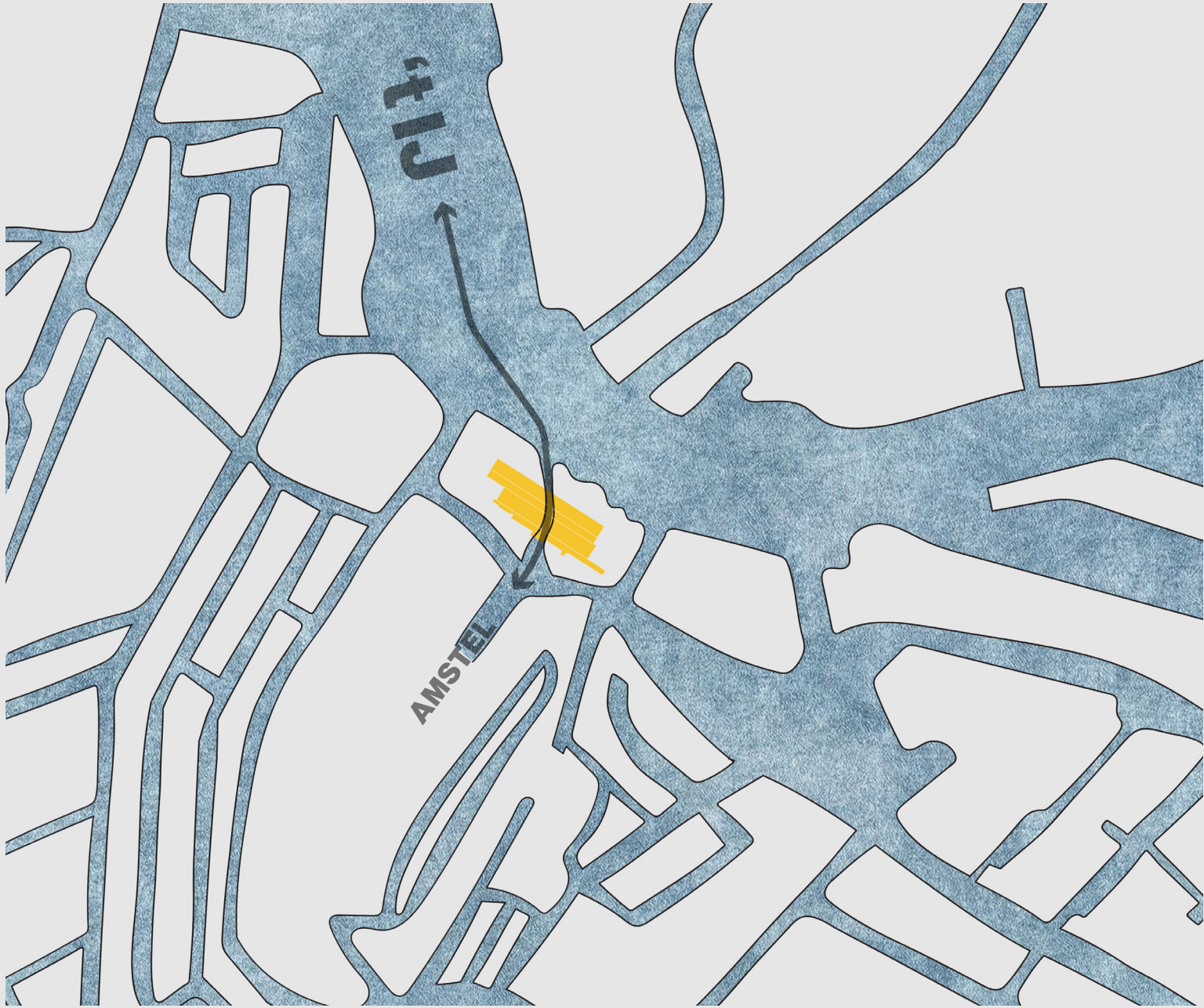
*You might feel annoyed as your tempo is
disrupted.
But in this moment of pause, you start to
notice.*

*You notice how sunlight filters through holes
in once impenetrable roofs.
How shadows, dance on the platform.
You notice how birds and insects fly in
through the opened sky and flutter between
the canopies and tracks.
You look down at your feet, and through the
steel grating, you see plants and flowers pop
up through the newly uncovered soil.*

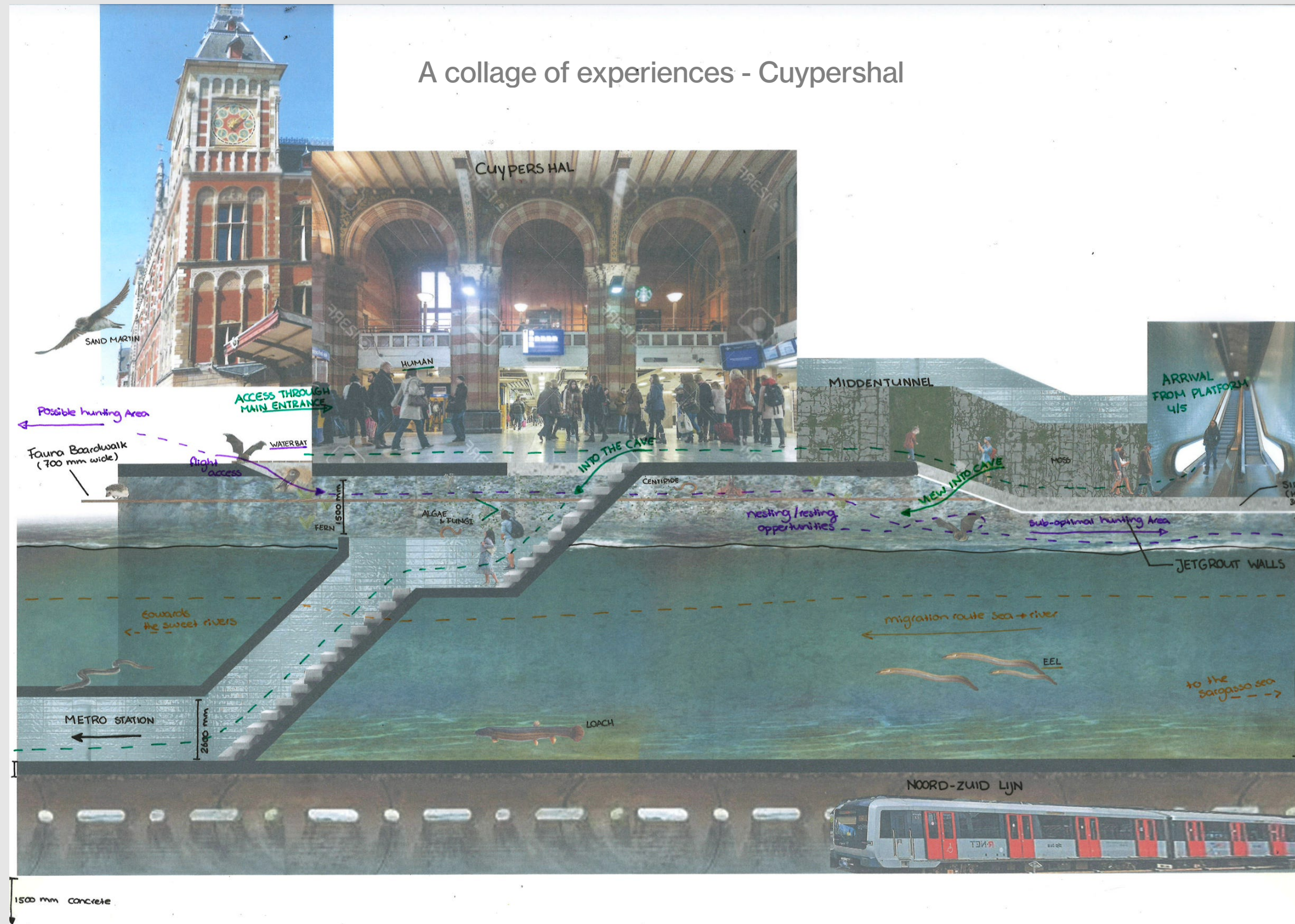
*It begins to rain, and as water begins to
trickle down, muddy, unevenly through the
jute of the hanging canopies, you realise that
you have no place to hide.
But as drops land on your arm, you become a
part of this station, a part of this whole, a part
of this collage of messy entanglements.*

Additional products

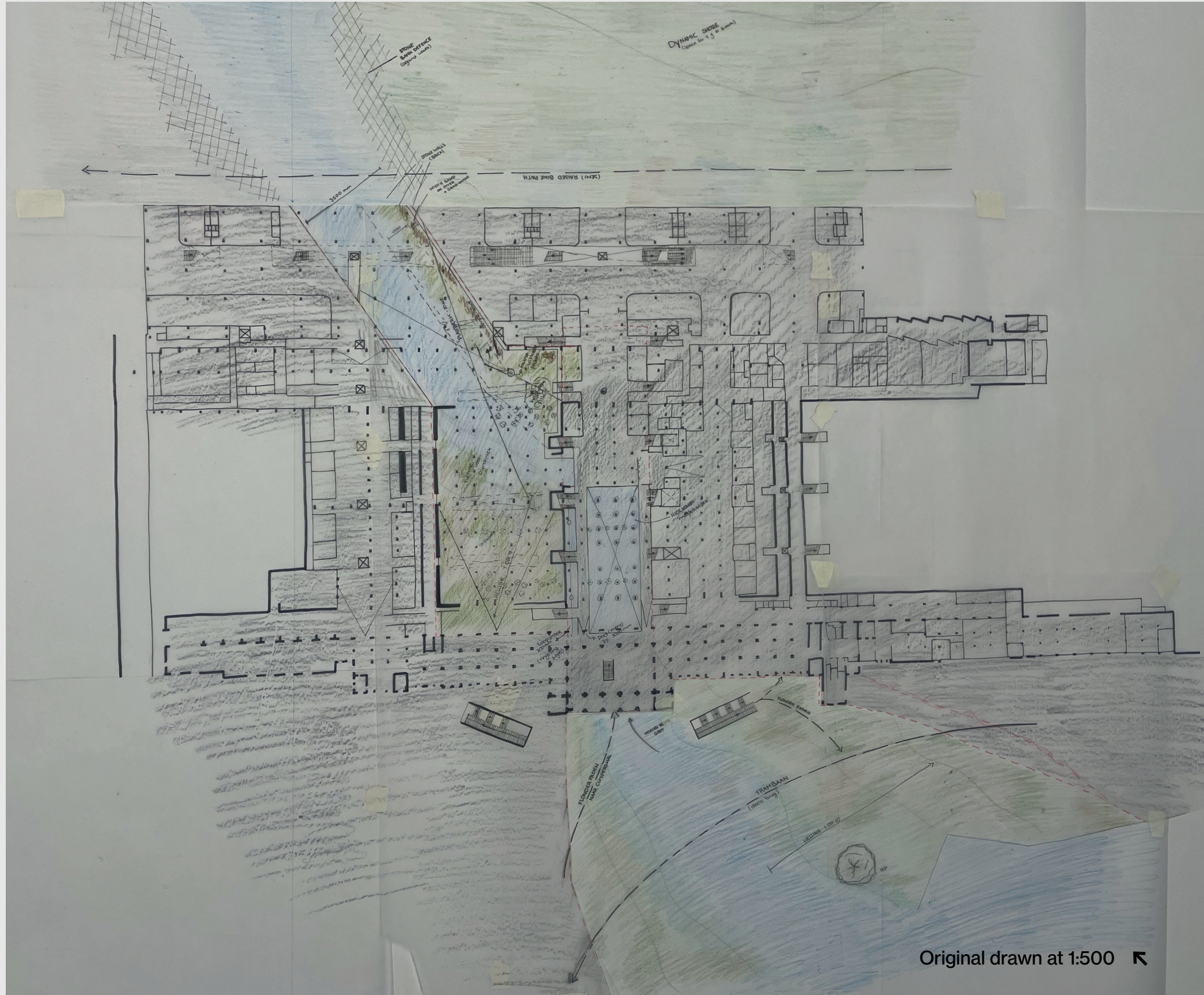
Connecting (to) the wider context



A collage of experiences - Cuypershal

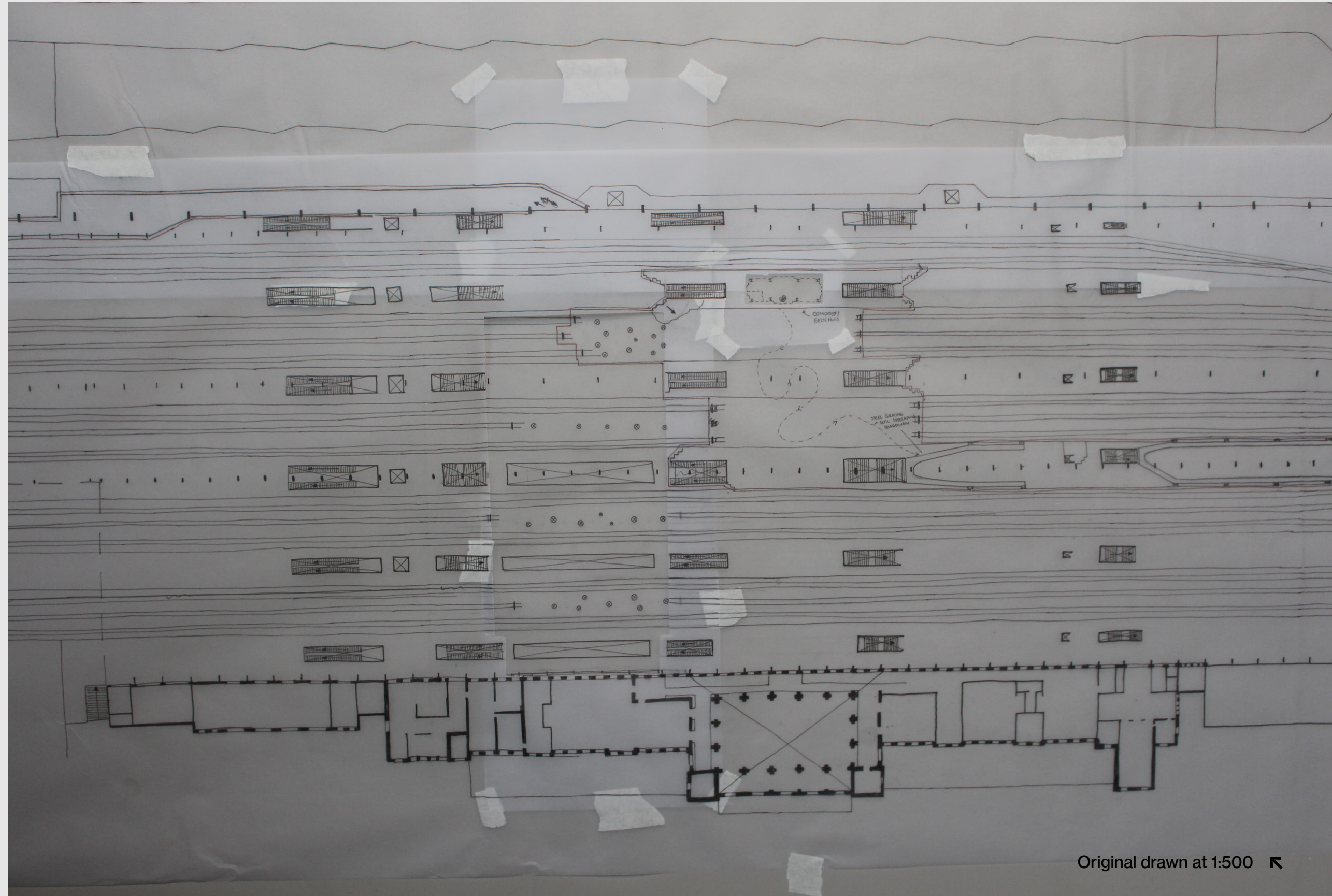


Plandrawing - Tunnels

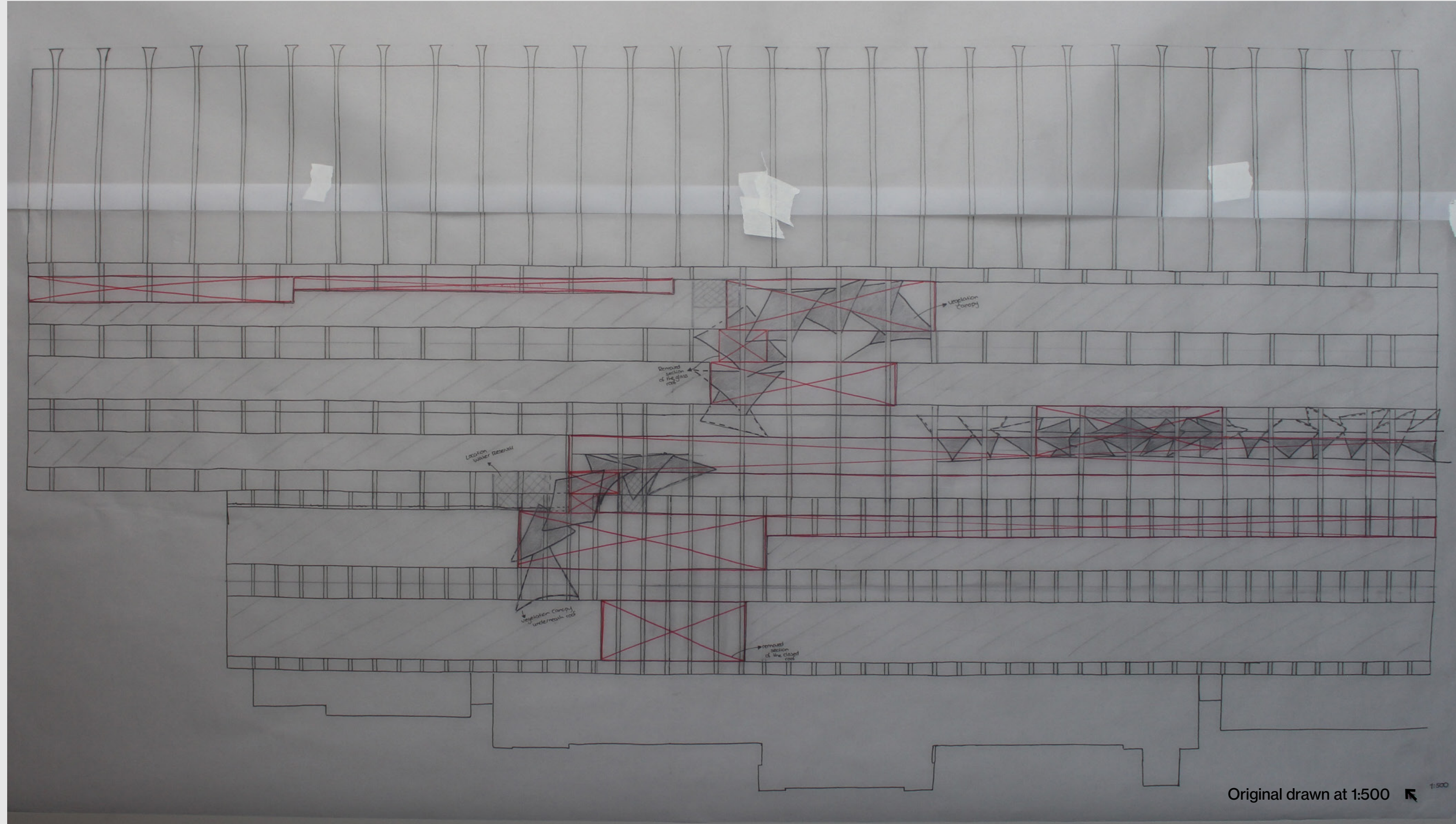


Original drawn at 1:500 ↖

Plandrawing - Tracks & Platforms



Original drawn at 1:500 ↖



Original drawn at 1:500 1:500