

Artis Islands

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RAVB - Rotterdamse Academie van Bouwkunst

Flamingo Island
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Project book

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Monkey house - Artis zoo

Introduction

The zoo is both architectural and cultural project, it produces and represents shifting ideas of nature. Shifts in the relation between man and animal are reflected in how the zoo is organized and how the animal is framed. In its totality the zoo is an agglomeration of worlds, islands inhabited by animals, microcosms that recreate or reinterpret their natural habitats. Each island provides the visitor with a scene, stages the encounter between animal and human, frames the view of the visitor and opens up new perspectives. Each exhibit is a staged setting in which animal and human are central players, each scene united with and wholly distinct from nature.

The studio takes Artis, the oldest zoo of the Netherlands, as a model to consider the zoo as an architectural project. Artis was founded in 1838 and has recently been undergoing major renovations. The students are asked to select one of the existing animal exhibits and redesign it with consideration for animal inhabitant and human visitor. Each zoo exhibit includes an architecture that combines the scenic with the functional, backdrop with utility. Composition and form are central to the evolution of the designs. The absence of a dense urban context allows the student to form and depict their visual fascinations in relation to the zoo.

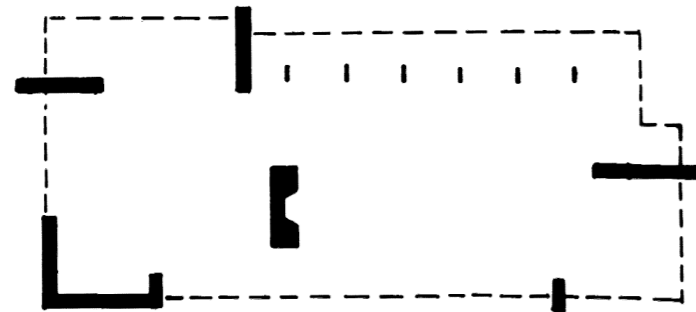
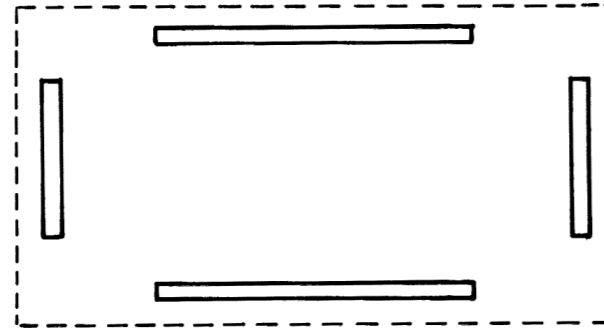
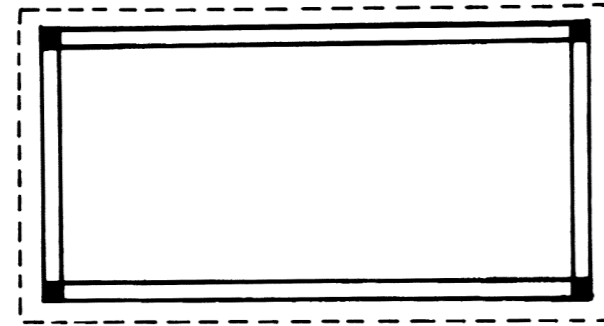
Text by Studio Verter

Personal Position

Far away from home, in a different county presented as a representative of their specie observed and documented by paying visitors. Staring at animals hardly moving, or not even visible enclosed in their new artificial habitat. Enclosures as single boxes, placed beside each other creating islands of habitats and animals surrounded and enclosed by walkways. Together shaping a gated community which is also known as a zoo.

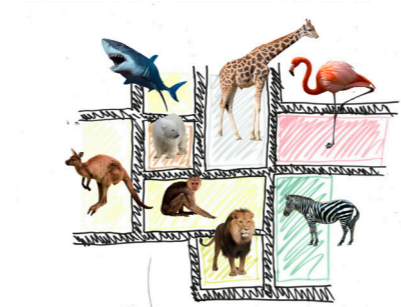
It is time to open up the zoo. Open up the enclosures, release the animals from their formal boundaries to be able to transform observation into participation (taken safety measures into account), representation into interpretation and segregation into including. Can architecture play a role in opening up the zoo?

Artis and their colony of Chilean Flamingos are the test location and laboratory animal for the future zoo enclosure. For this project the exiting colony will be enlarged to over 500 flamingos. The future habitat originates from the natural ones and should serve the flamingos in their natural behaviour. It blurs the boundaries between animal and visitor and between the zoo and city. The future enclosure has the aim to discover freedom, for both animal and visitor within the enclosure.



Usonian house Frank Lloyd Wright (author after Wright)

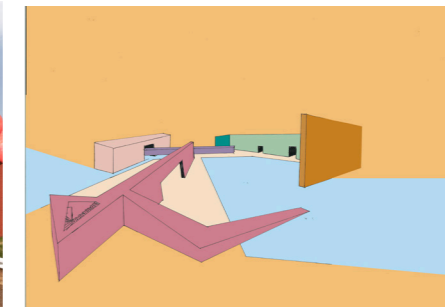
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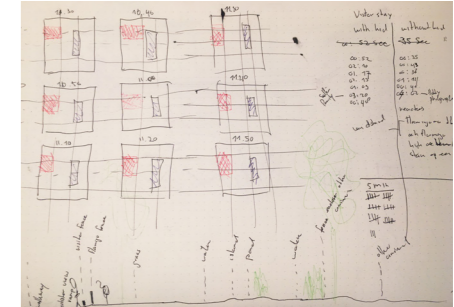
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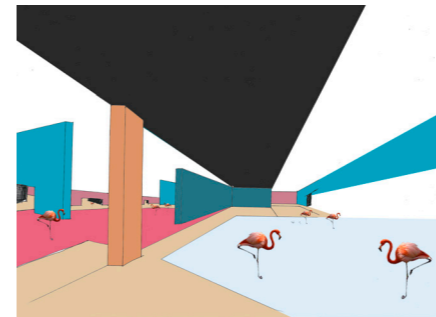
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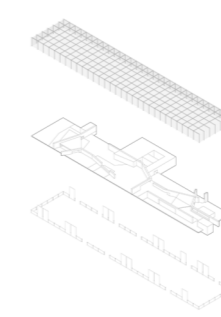
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Week 4



Week 5



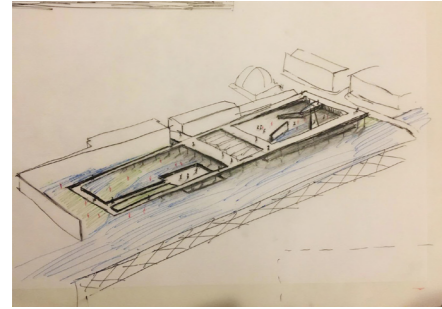
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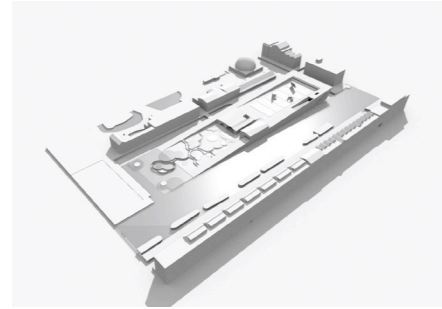
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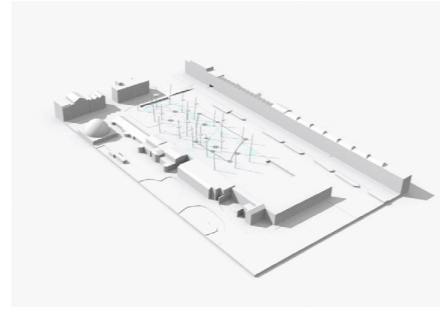
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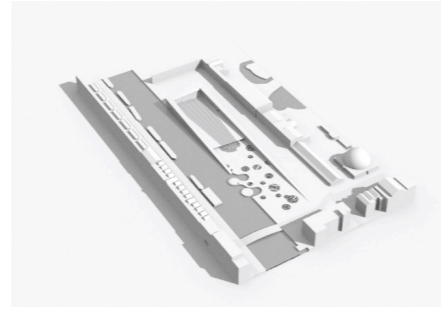
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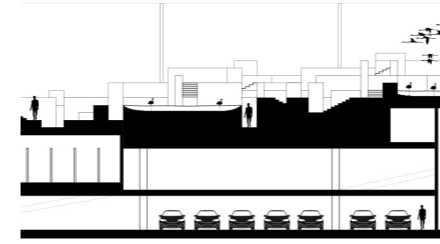
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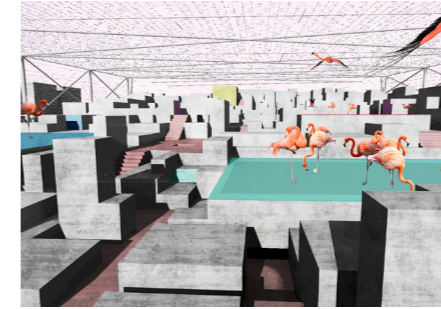
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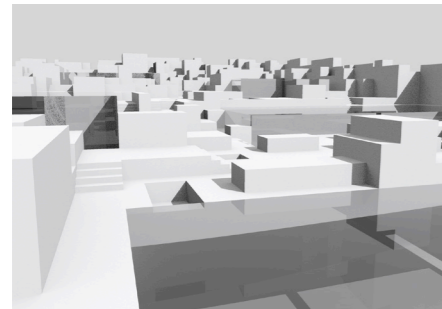
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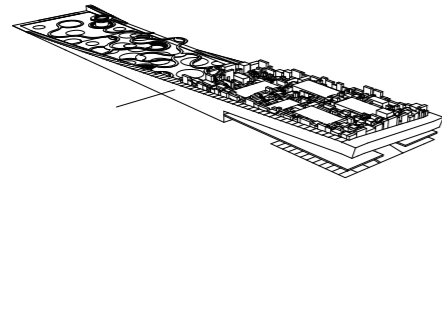
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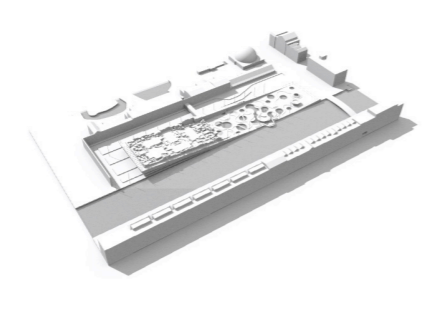
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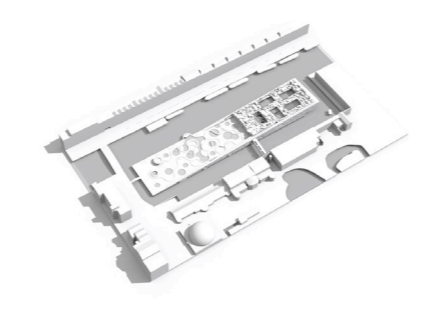
Week 13



Week 14



Week 15



Week 16

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Flamingo

Flamingos are large birds that can be recognized by their long necks, thin sticklike legs and pink or reddish feathers. Their famous color comes from eating pigments found in algae and invertebrates. Flamingos live in and around water. Flamingos are generally nonmigratory, but due to the climate change and rising water levels in their breeding areas they have to relocate themselves. Flamingos live in groups called colonies or flocks. The flock works together in protecting each other from predators and takes care of the young ones. There are six different flamingo species:

- The Greater Flamingo (*Phoenicopterus roseus*)
- The Caribbean Flamingo (*Phoenicopterus ruber*)
- The Chilean Flamingo (*Phoenicopterus chilensis*)
- The Lesser Flamingo (*Phoeniconaias minor*)
- The Andean Flamingo (*Phoenicoparrus andinus*)
- The Puna (or James's) Flamingo (*Phoenicoparrus jamesi*)

Although each flamingo species has their own typical characteristics they, as flamingos also have a lot in common.

Color

Flamingos feed themselves with algae and crustaceans which contain pigments called carotenoid. Specially brine shrimp and blue-green algae are full of carotenoid. Enzymes in the liver break down those carotenoids into pink and orange pigment molecules. The molecules are absorbed by fat and disposed in the feather, bill and legs of the flamingo. The main function of coloration is signaling their parental capability with the aim to be chosen as a mating partner. Next to that the color of the plumage indicates the quality of the foraging site. The amount and species of algae and crustaceans in a particular habitat influences the color of the animal. As nutrition influences the color, captive flamingos have a special diet including a lot of prawns.

Resting

When flamingos rest they stand almost motionless, on one leg and

with their neck curved along the back in the shape of an S is the typical flamingo for hours. By placing the neck either left or right from their center of gravity they are in perfect balance. By now there is no evidence whether the Chilean Flamingo prefers resting on their left or right leg. Next to be balance on one single leg, that same leg has another function. Standing on one leg in the water, what flamingos often do is also to regulate their own thermoregulation. On cooler days flamingos spend more time resting on one leg than on warmer days. To stabilize themselves flamingos use both legs on windy days. Resting in water also benefits the health of the animal by reducing the parasite load and risk of other infections.

Flocks

Flamingos can gather in mind-blowing numbers named flocks. While resting the flamingos on the edge of the flock stand with their bills orientated towards the rest of the flock to keep an eye on possible predators. Next to surveillance living in a flock has other positive benefits like greater choice of mates, thermoregulatory profits and effective foraging. Although they are with big numbers in one flock, the flamingo functions as in individual without investing in social bonds, they just simply at the same place. They lack of cohesive is evident and long relationships between flamingos are not common. The Lesser, Chilean and Puna flamingos are threatened due to their small (decreasing) numbers.

Natural habitat

The natural habitat of the flamingo can be described as raw and barren. Because the need of water Flamingos can be found around like soda lakes, salt lakes or lagoons which are often isolated in dry areas. This wetland like landscape has an ephemeral character. As long as these landscapes are safe and rich of food there is no reason to relocate. Once this changes the whole flock moves, searching for a new place to live. Flamingos have good developed flight and navigation skills, which is critical to find new habits. Typical migration journeys only appear in regions where there is a seasonal variation in climate.

Fly

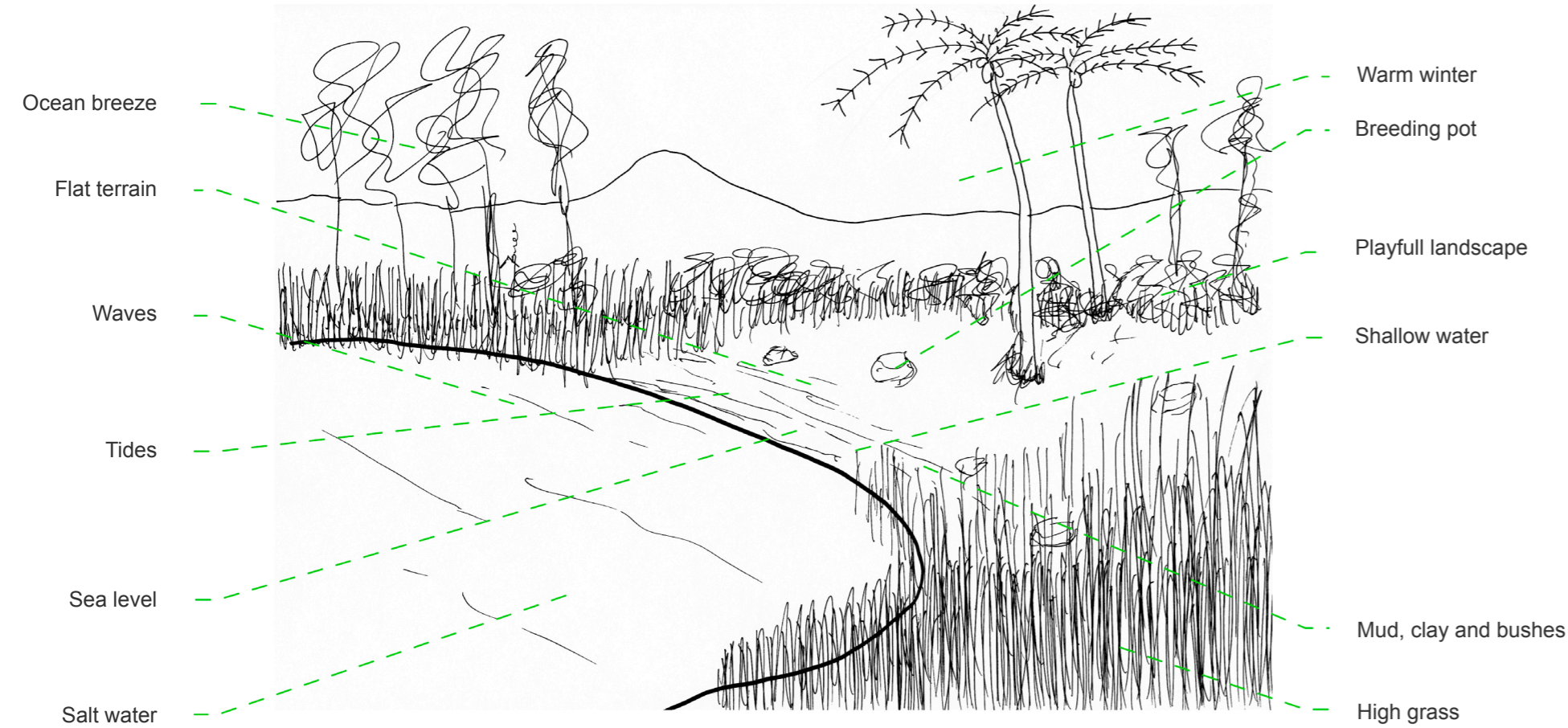
Flamingos often run on the water surface to take off. Once airborne they extend their neck forward, the feed backwards transforming in an aerodynamic arrow speeding thru the skies. To reduce energy flamingos cooperate within their flock and align in a rows or a V shape while flying. Flying in large flocks allows the flamingos to fly long distances at a decent pace. By tailwinds flamingos generally fly high, the opposite by headwinds. By heavy winds flamingo can take off by one single wing beat.

Chilean Flamingo

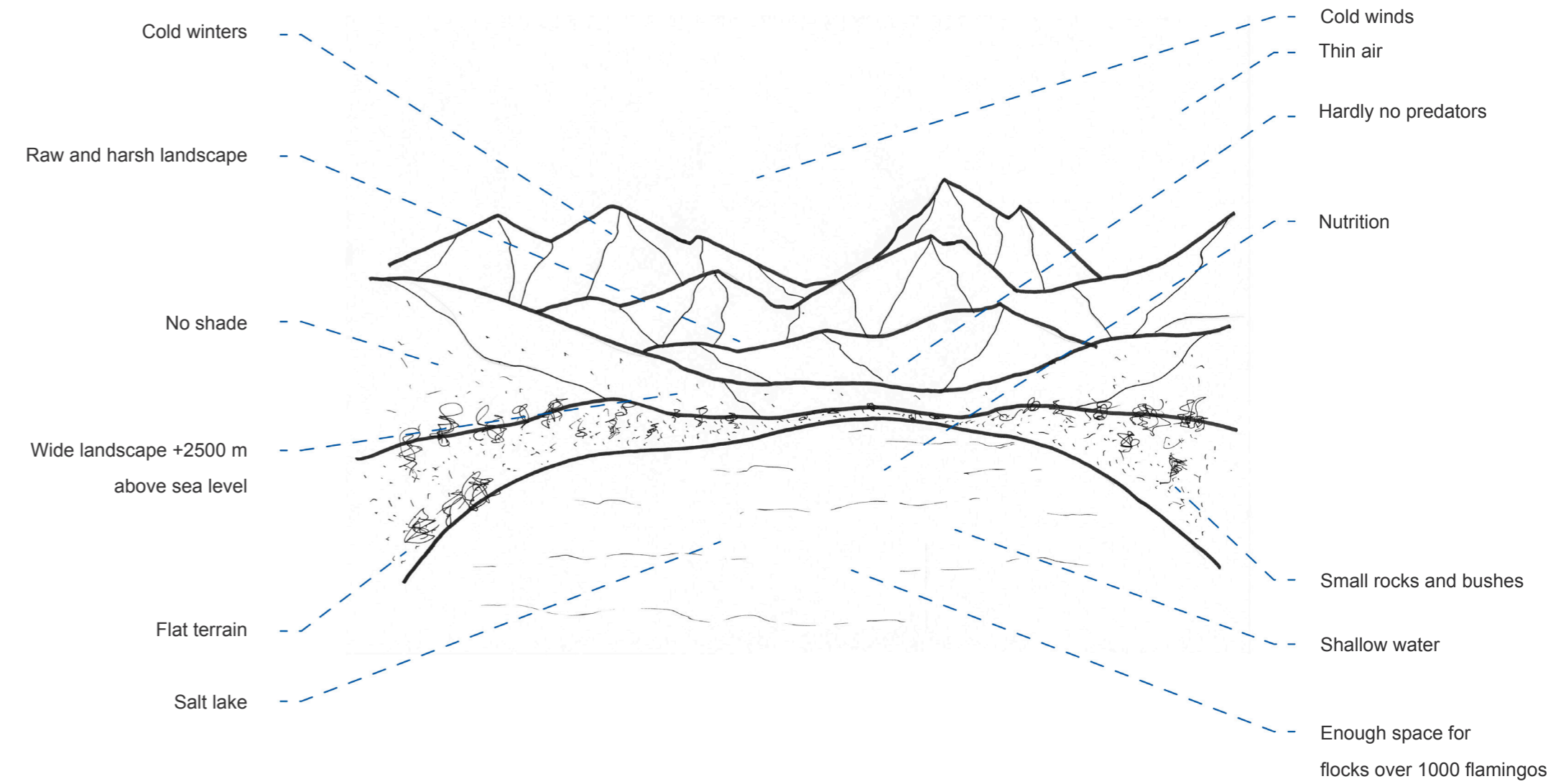
The Chilean Flamingo can be admired in Artis. Therefore I have chosen to design an enclosure for this specific species within the flamingo family. Like the other flamingo species the adult Chilean Flamingo have a small head, bare faces, long necks, even longer legs and webbed front toes. Chilean flamingos have a white plumage fading into pink and black wings. The wings have a span of 127cm to 153cm. This species flamingo weights between 2.5 and 3.5 kg and are 79cm to 145cm tall. A wild Chilean Flamingo live expectancy of circa 50 years. In captivity the average life span is around 40 years. Chilean Flamingos have a good eyesight and sense of hearing, but poorly developed senses for taste and smell. The Chilean Flamingo can obviously be found in Chile, but also in other parts of South America. Within the range from sea level to heights up to 4.500m in the Andes, in coastal mud ponds, estuaries, lagoons and salt lakes. Chilean Flamingos live in large flocks, containing more than thousands of fellow Chilean Flamingos. The Chilean Flamingo is a decline species, various breeding programs have been implemented in zoos. In 1871 the first Chilean Flamingo was kept in the London Zoo. According to ZIMS (International database for animals in captivity) the total amount of Chilean Flamingos in captivity by 2016 was 4.842.



Natural habitat: Lagoon landscape analysis



Natural habitat: Andes landscape analysis



Flamingos in captivity

The flamingo is a very popular animal in a zoo. Their amazing colors and unique behavior are an spectacular welcome to visitors. Although their natural habitat is raw and barren flamingos are often be showed in extreme green enclosures. Which of course creates a nice and visual attractive contrast. As long the flamingos are provided in their needs the unnatural landscape doesn't influence them. This also counts for the interaction with humans. Flamingo's are amendable to human interaction and are nod dangerous. In various zoos it's possible to come close, feed and mingle with the flamingo. Sometimes they are used as photo models in photography workshops, in

stage shows, as living decoration during weddings or a part of an education program. This doesn't mean the flamingo need their own, more private space. During history various flamingo's escaped their captivity. To prevent these escapes the wings of the flamingos are getting clipped. Trimming the primary flying feathers, when done by a trained veterinarian is painless. For wild or untamed flamingo's the process of capturing and losing their flight capability can be a traumatic experience. Flamingo's in captivity have a stronger social bonds then wild flamingo's, this because of the smaller flocks. Current flamingo enclosures house on average between 20 and

60 flamingos. These flamingos are wing-clipped and can't fly away. Across the world the appearance of a flamingo enclosure is very generic. Most enclosures exists out of a water pond, sometimes with an island surrounded by a mud and grass landscape. Some bushes and trees provide calm and shady breeding spots.

without wing-clipping an aviary is needed. The zoos of Sacramento, San Antonio, Basel, Kobe and Heerlen are examples of zoos which exhibit full-winged flamingos. Although those flamingo are able to fly, due to the size of the enclosure flying is not really possible. To keep full-winged flamingos has an other reason; during mating the flamingo uses his wings to stay balanced.

There are also some zoos which do have full-winged flamingos. Throughout history various heroic flamingos escaped from captivity. To prevent this,

Antwerpen Zoo, Antwerpen, Belgium



Bioparc Valencia, Valencia, Spain



Chester Zoo, Chester, UK



Disney Animal Kingdom Lodge, Orlando, USA



Taronga Zoo, Sidney, Australia by 1916



Flamingo Hotel, Las Vegas, USA



Gaiazoo, Heerlen, The Netherlands



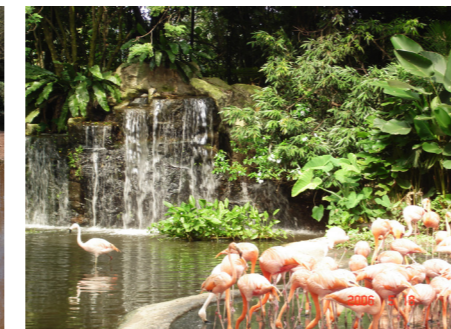
La Palmyre Zoo, La Palmyre-Les Mathes, France



Memphis Zoo, Memphis, USA



Paignton Zoo, Paignton, UK



Singapore Zoo, Singapore



Ardastra Gardens, Bahamas, Bahamas



Kadoorie Farm, HongKong

Flamingo husbandry guidelines

The following pages give an overview of flamingo enclosure guidelines.

Outdoor enclosure measurements

- Recommended size for land is 1.4sqm per flamingo
- Recommended size for water is 1.4sqm per flamingo
- Recommended size for nesting area is 9sqm per flamingo

Indoor enclosure measurements

- Recommended size for dry land and water combined is 1.4 sqm per flamingo
- The indoor enclosure doesn't need to have the size of the outdoor enclosure. It should be large enough to allow the flamingo's to move freely and separate them from aggressive members of the flock.

Outdoor facilities

- The enclosure should facilitate in land, water, nesting, feeding area's
- Each specific area should be separated from the other area's

Land

- Recommended size for land is 1.4sqm per flamingo
- Flamingo's should move unobstructed a flat landscape is advised
- Planting should be placed in areas which do not disrupt flock movement
- Large area's should be free of plants
- Boulders and rocks are not advisable
- Problem plants (flax, palms, coral and Osier) are proven to be problematic with flamingo's
- Land surface possibilities:
 - o Grass: very good for flamingo feet. Requires frequent maintenance
 - o Soil/clay: can contribute to foot problems.
 - o Mulch: can contribute to foot problems. Frequent replacement
 - o Sand and decomposed granite: can contribute to foot problems.
- Tall grass works well
- General reduce as much as possible abrasive materials
- The enclosure should provide in shaded areas and in areas protected from the wind
- Recommend height of a fence is 1m
- Any fence should be constructed with the posts on the outside of the enclosure

- Fence possibilities:
 - o Chain link: flexibility in installation. Wings might get stuck.
 - o Pipe fence: requires considerable amount of work
 - o Wooden rail fence: natural material
 - o Brick: effective boundary. Reduced view for small kids
 - o Foliage: naturalistic barrier. Low bushes are not recommended.
 - o Water: naturalistic barrier in form of a lake or moat

Water

- Recommended size for water is 1.4sqm per flamingo
- Flamingo's heavily rely on water for courting, copulating and sleeping
- Water is probably the most important feature of the enclosure
- A greater proportion of water to land is advised
- Design should allow the water to flow freely
- Water flow adjustments should be built into the water
- Dead ends where sediments can build up should be avoided
- Raise and lower of the water level around the nest side is advisable
- Recommended depth of the water is between 46 and 70 cm
- Water should be accessible via a gentle slope
- Pool surface possibilities:
 - o Natural bottom: clay, sand and or mud
 - o Concrete: Easy to clean. Abrasive and slippery to the flamingo
 - o Fiberglass
 - o Rocks and concrete: have a naturalistic look and feel. Abrasive to the flamingo
 - o Formed concrete: can have a naturalistic look and feel. Abrasive to the flamingo
 - o Plastic liner: often seen in pools to operate without routine cleaning. Can be slippery for both flamingo's and keeper's
- Salt water is a possibility which includes the need fresh water availability
- Fountains are possible flamingo's enjoy bathing in them

Nesting

- Recommended size for nesting area is 9sqm per flamingo
- Natural suitable substrate should be moister
- By no natural substrate concrete lined pits filled with mud and clay can be created as nests

- Nesting materials must be kept wet
- Regularly floods thru raising and lowering the water level is advised
- Area should always be located to the water and have the possibility to soak in the water
- Adjusting of water levels is recommend, sprinklers
- Nesting area should offer flamingo's a choice which they prefer to use
- Area should facilitate in shrubs and trees and as well in open sunny spots
- Enough space for the keepers should be provided for their daily routine without disturbing the nesting flamingo's which can be achieved by a nesting area on an island
- Nesting area should be located out of the general traffic around the enclosure
- Visitors should not be able to access the nesting area
- Audiotapes of flamingo vocalizations and mirrors are both used to stimulate breeding

Feeding

- Separate area set aside within the enclosure
- Area must be separated from the main water with its own drainage system and water source
- Should be accessible from all sides
- Approach should be comfortable
- Recommended a pond with a diameter of 1.5m and a depth of 15cm
- Feeding should be possible around the day to the free choice of the individual flamingo

Indoor facilities

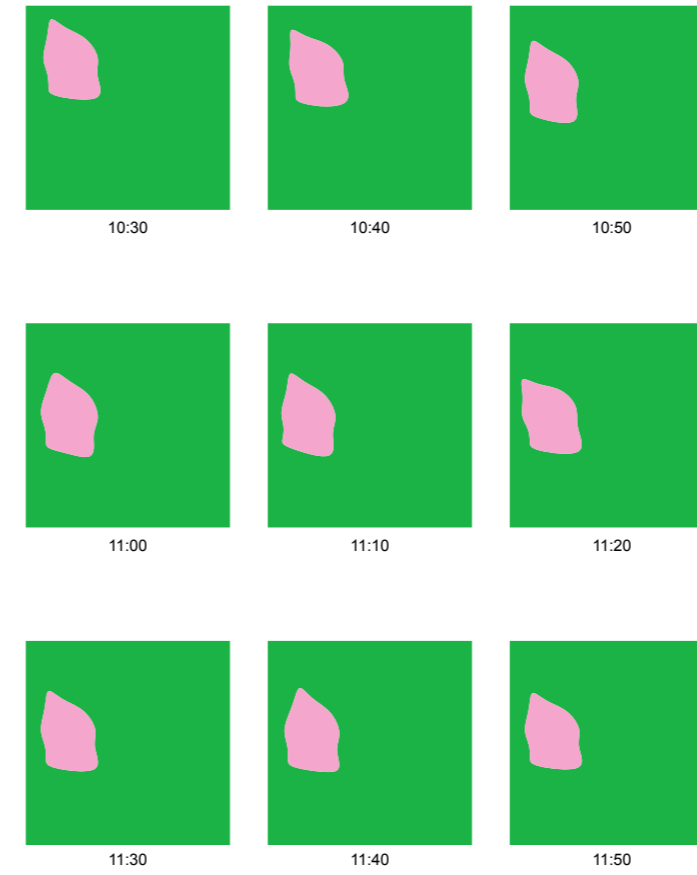
- Northern zoo's should have facilities to house the flamingo during the winter months
- Recommended size for dry land and water combined is 1.4 sqm per flamingo
- Recommended water depth is 30-60 cm
- The indoor enclosure doesn't need to have the size of the outdoor enclosure. It should be large enough to allow the flamingo's to move freely and separate them from aggressive members of the flock.
- Recommended separation between flamingo area and keeper service area
- Public viewing area's should be limited to max 3 sides of the building

- Recommended to have shift stalls to allow the flock to be shifted during cleaning
- Avoid direct contact to concrete floor
- Fast drying matting on the concrete layer is recommended, this could be rubber, soft synthetic material or vinyl
- Soil and clay can also be used, includes a lot of labour
- Good fresh air circulation is a must
- Direct access to the outdoor area's is essential to enjoy a sunny day and adjust to the outdoor temperatures (A acclimated flock will be able to spend more time outside)
- Doors to the outside should be as wide as possible to prevent injuries
- Integrated saltwater footbath placed in front of the door is recommended to treat foot disorders
- Supplemental lightning can be used during short winter days to stimulate a even day/night rhythm
- A pool should be provided for birds in quarantaine

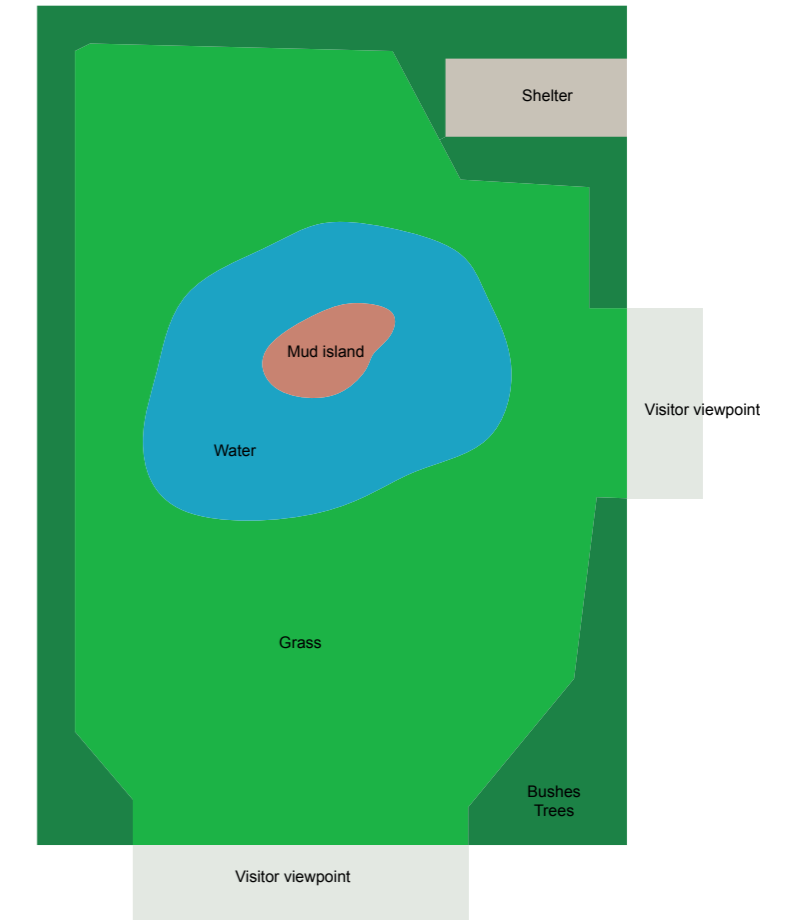
Analysis flamingo enclosure Burgers Zoo



Flamingo movement



Enclosure



Average stay flamingo enclosure

With kids: 1.3 minutes Without kids: 50 seconds

Average amount of visitors flamingo enclosure

32 visitors within 5 minutes

Visitor reactions on the flamingo

Flamingooooo! / Wow he stands on one leg / Beautiful colour / Can we go?

Boundary materials

Mesh ca 1.5m high / Wooden slats fence ca 0.4m high / Pole rope boundary ca 0.4m high

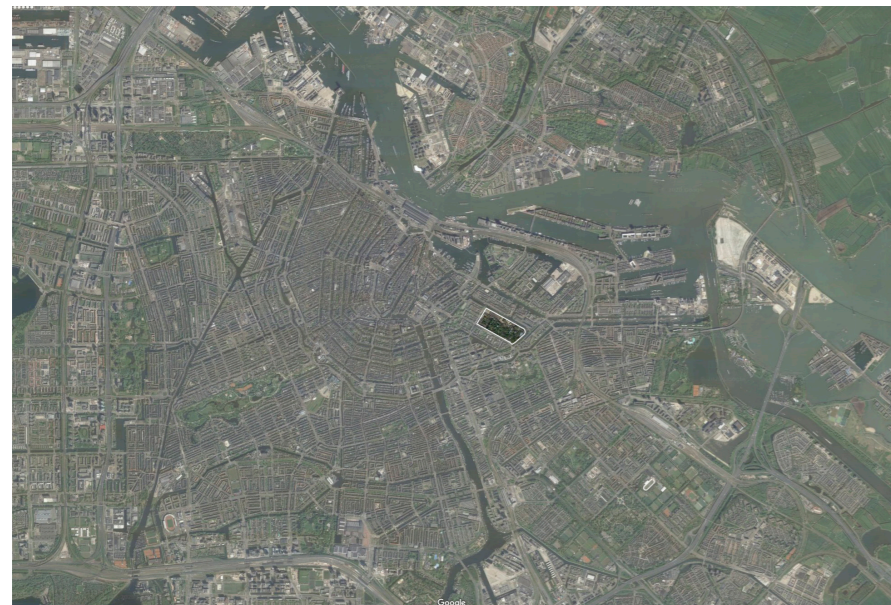
Shelter

Ca 3x2x8m / Badly maintained / Access via walkway

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Location overview



Amsterdam



Artis



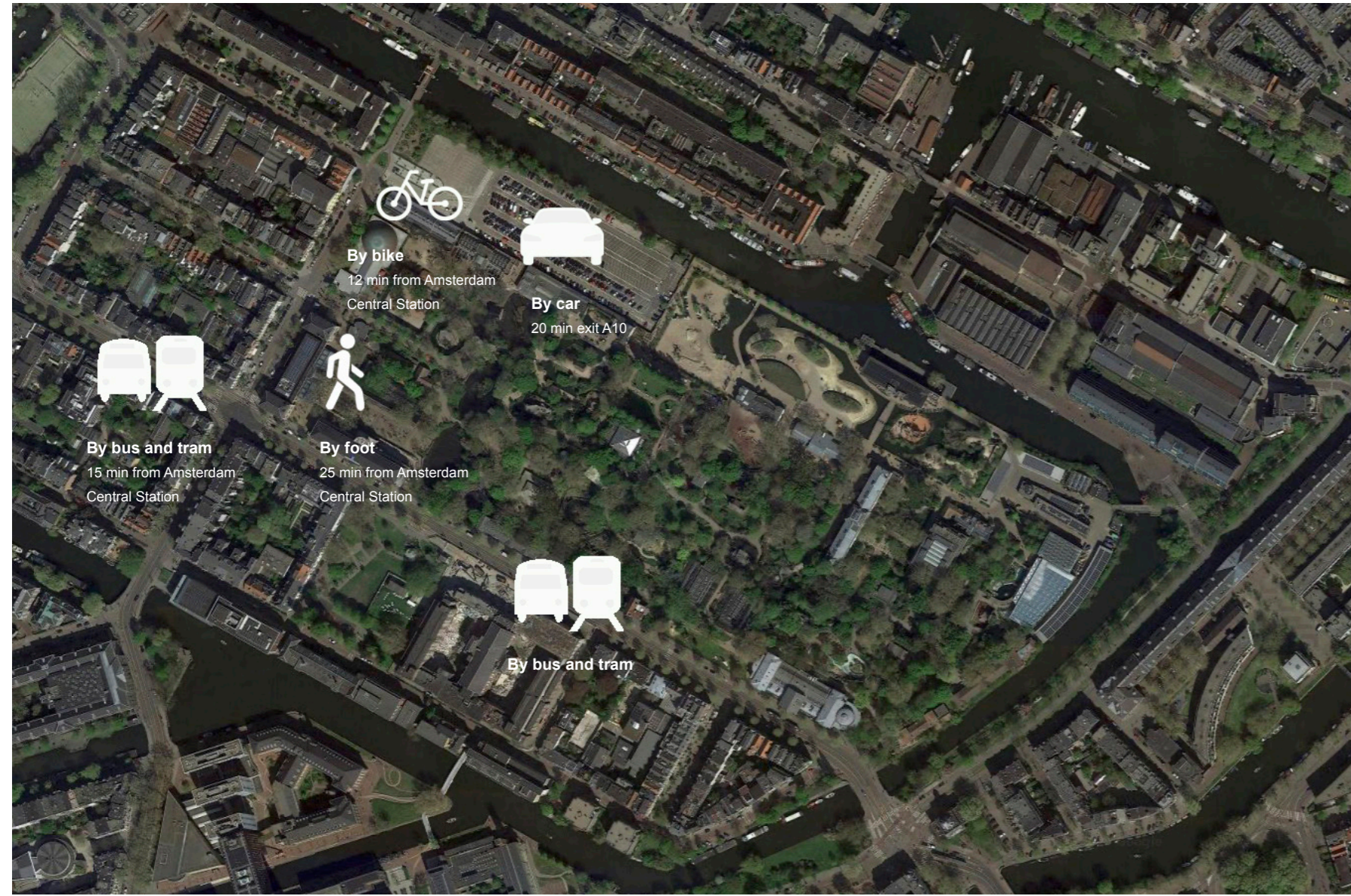
Parking area future Flamingo Gallery

Parking area

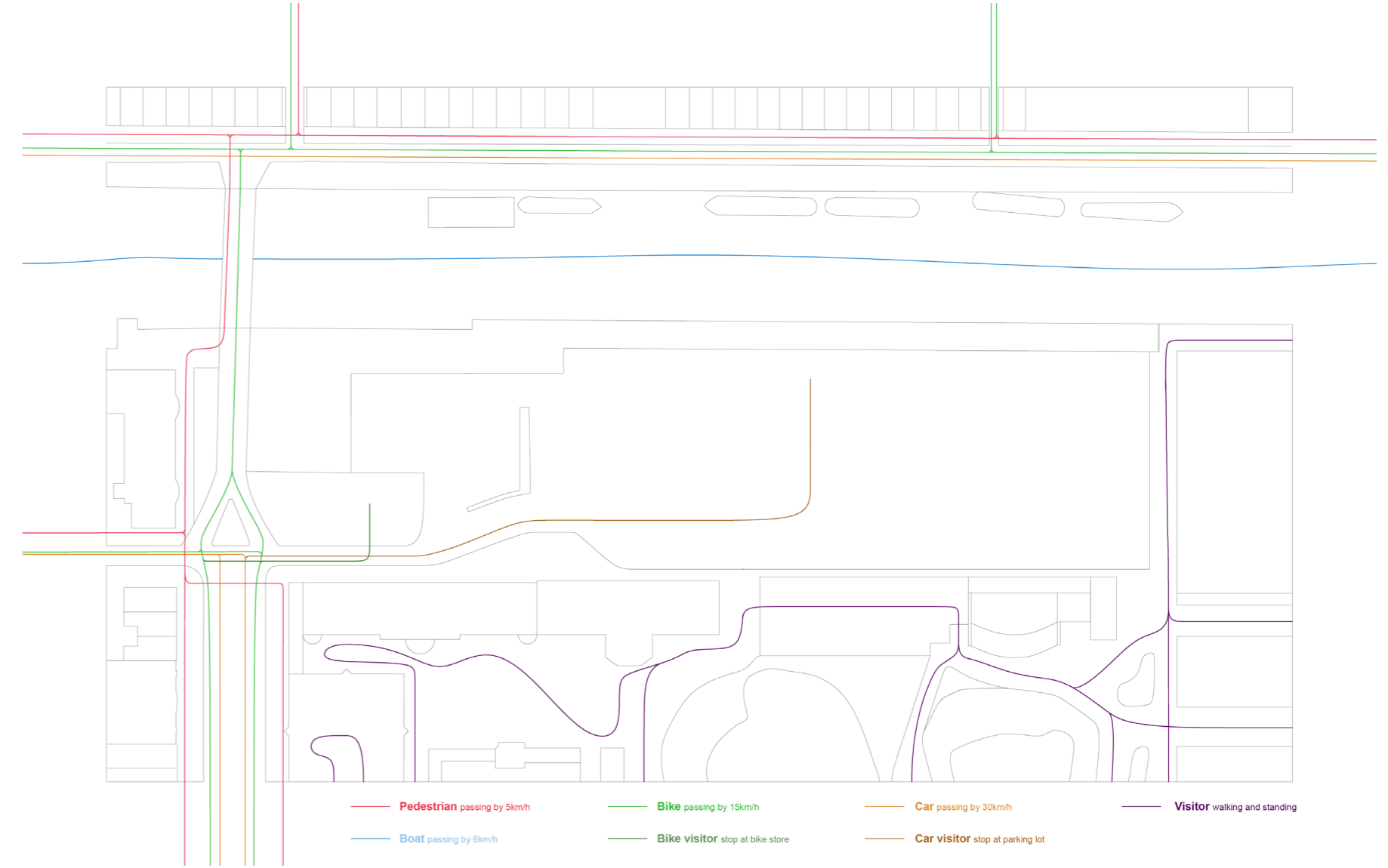
Artis includes a large parking area on the north side of the complex. The parking field offers space for over 400 cars. It is doubtful whether this is a quality. In a zoo where it is about cultivating nature, sustainable travel should be advisable. Hereby the parking field loses most of its purpose. What remains is a hard, undulating piece of asphalt that has no connection with Artis or contributes in a positive way to its context.



Accessibility Artis

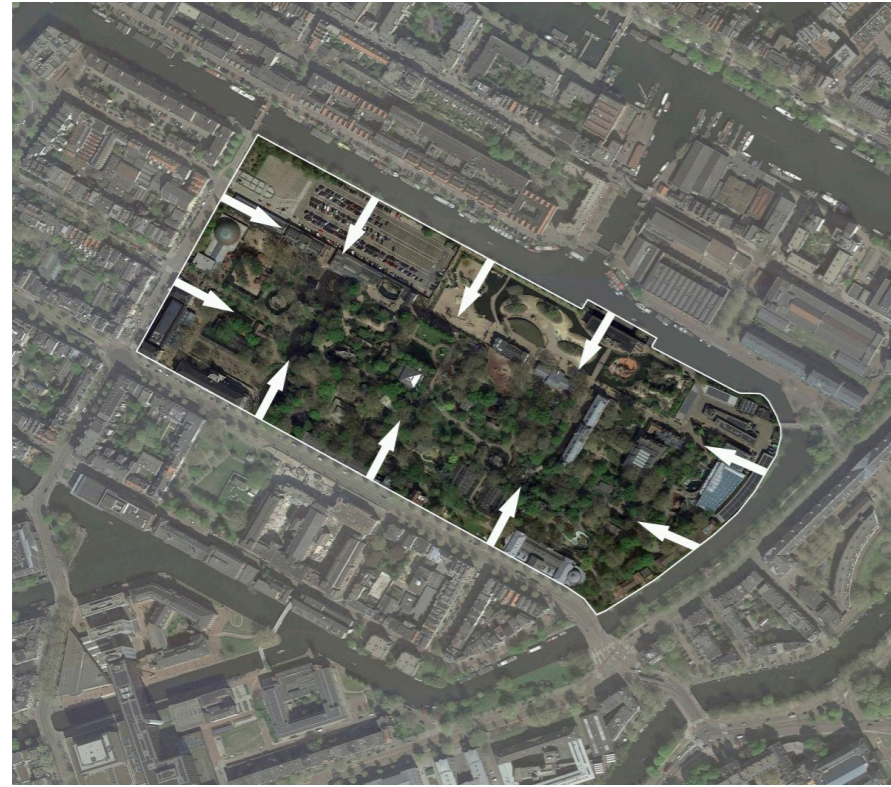


Traffic flow location



Introvert zoo

Swallowed up by the growth of city Artis is now part of the city center of Amsterdam. Like for example the Zoo of Antwerpen the location of Artis within the city is unique. Although Artis is enclosed in an urban context the zoo has no connection to the surrounded buildings. From the streets around Artis the animals are almost invisible (see images). This introvert character is a missed opportunity for Artis and the city itself. Opening up the Artis, connecting the zoo with this urban context and make the animals visible would lead to a more diverse, surprising and dense cityscape. Artis would be reconnected with the city, making both animal and human citizens of Amsterdam.



Flamingo Island Narrative



Chapter one: Excitement

Excitement of getting there

Visitor (V): I know what it looks like. I have seen it in pictures. I have heard enthusiastic stories of friends who have been there. Those stories convinced me to make that trip to Amsterdam. It's the excitement to see something, you have wanted to visit for a long time. Today is the day. Finally! At the Central station I exchange the train for the bike. It is not that far, at least if I don't go too far in my enthusiasm. I know what it looks like, it must be somewhere here. I see tubes sticking up in the air as beacons from a day out. Getting closer. Yes! There it is, present but invisible, transparent and fading away in the buildings around. I can see them, I see them flying around.

Flamingo (F): They always look so happy when they see us. I think that is quite strange as they know what to expect. We have been in the news, have been a trending topic on Twitter and we have our own Instagram account with ten thousands of followers. We even had prominent visitors like various influencers, sport stars and even your king wanted to see us. Apparently, it's a big thing to come here and see us. But we are fine with that and we love to see their enthusiasm. We give them a nice memory of a day out!

Excitement of seeing it

V: It is busy, cars mingle with bikes and pedestrians. Cyclists take a quick look to get a glimpse. In the park, in front of the enclosure a group of students gathered together. An elderly couple is standing at the fence next to families stopped by the view on their way for a day at the zoo. There is so much going on there, it looks like rush-hour. They stand, walk, feed, breed and fly. A boat passes and moors a little further. Rich of colours, balanced in shape, even without animals it would look great. Like a park to hang out on a sunny Wednesday afternoon. I see zoo keepers, cleaning out a pool next to visitors passing them. People climb a huge stair and they wave down to them from the top. A car honks and a cyclist swears, I realize I'm not even in the zoo yet, I'm still in the city. The zoo is part of the city. Here I can see it from the outside, but I want to go there; inside.

F: It is busy, they walk, run, bike, drive cars or boats. Luckily they can't fly! Great to watch them moving around. Incredible how they are able to move next to each other without hardly any accidents or incidents. Sometimes we hear them shout out loud, swear and honking. We like to be part of the urban bustle and not being

enclosed in a typical zoo. A flight allows us great views. We see the Rijksmuseum, the Oude Kerk, the A'DAM tower and even the tops of the high-rises along the Zuidas. How amazing would it be to fly over the city? From Amsterdam-Noord over the IJ, Leidseplein, Vondelpark down towards Amsterdam-Zuid to finally land on one of Schiphol's landing strips!

Excitement of going in

V: Luckily the line at the entrance is relatively short. Number 14 on the map: I want to go there first. To get there I pass along camels, donkeys, various birds and monkeys and also a strange astronaut standing in a window. Out of space. A pink carpet brings me to the bridge that leads towards Flamingo Island. Getting closer makes me more and more excited. I'm wondering what it is like to be inside? Can you really be together with the flamingos? Windows provide a view into the enclosure which intuitively made me go left down the stairs. They guide me down into the lagoon area. A lot of flamingos fly from left to right and the other way around. I'm in! I'm in Flamingo Island, the domain of the flamingo.

F: We always have to laugh when we see the visitors looking around and amazed. Probably thinking: where did I end up? Well in our world! Our own island in the centre of Amsterdam. Great isn't it? We already see them coming from far. Almost rushing towards us! They don't seem to be interested in the camels, donkeys, birds, monkeys and a weird astronaut who lost its direction.

The entrance is a total misrepresentation. Disgusting architecture, disgusting materials and above all: a disgusting pink colour. It looks like a strip club entrance somewhere in downtown Miami. This is the way we flamingos are shown everywhere around the world. It's a joke and has nothing to do with us. This is about an animal which became an animal without existing.



Chapter two: Experience

Experience the Lagoon

V: In front of me pathways meander into the Lagoon. The pathways twists and winds like an Ocean breeze through the Flamingo Island. Changing from wide to narrow, undulating and occasionally disappearing in the canal. The route is clearly marked and at my discretion allowing full attention to the landscape and the flamingos. I go and take, drawn by the energy of the landscape, a random pathway further into the Lagoon. I'm wondering how many flamingos are around? They are everywhere, active as I've never seen them before. There are round pools in various shades of blue. At the other side the pool perfectly fades into a mud and grass landscape surrounded by bushes and higher trees.

F: The Lagoon is landscape where our progeny are put on earth. Always a great and joyful moment to see a small flamingo take his first steps around. The grass and mud landscape is a great place to grow up! The only predator is maybe a flamingo who has a bad day. In real life that is different. This Lagoon is a five star environment to live in. We have various pools in various depth to our disposal. All have a perfect sloping entrance. Nothing to hurt or worse damage our feet. We can even take a swim in the canal. Breeding can be done in more hidden areas. Bushes provide nice protection from your cold Dutch winds. Totally different then the cooling Ocean breeze we enjoy at the other side of the world. There is good balance in open and private areas. Sometimes it's nice not to have ten staring eyes of family on you whilst breeding. On the other side we of course like to stare as well. What kind of thing visitors do to make a good selfie with us is totally ridiculous. Mostly we just let them. Sometimes we irritate them by turning around or flying away. You have to see their reactions!

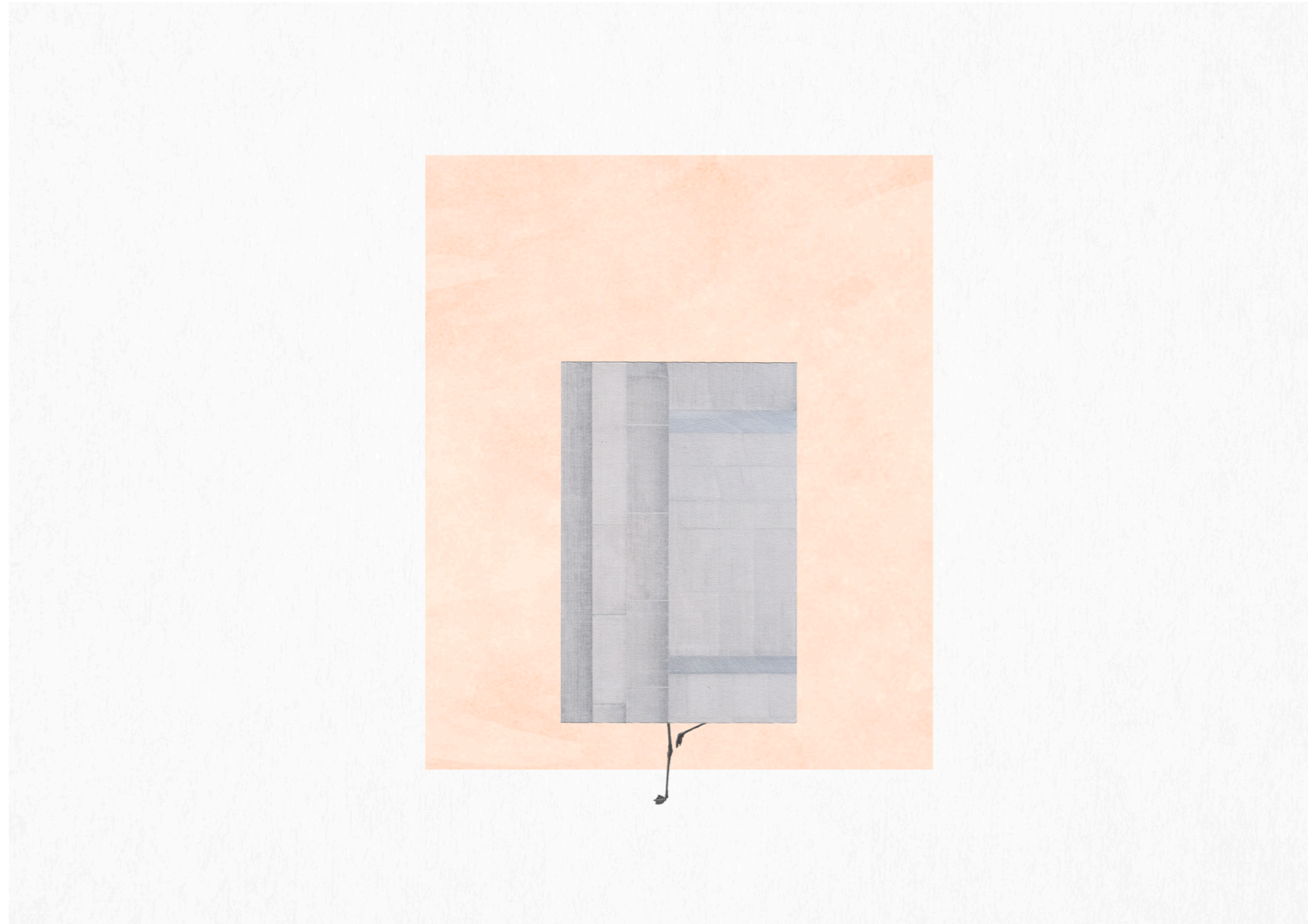


Experience migration

V: There is more to discover! I take the climb, via the long staircase up to the Andes. Towards the Andes my condition is being tested and I slowly start to pant. How great would it be, right now to be able to fly. The Lagoon and the Andes landscape, have nothing to do with each other. Apart from the fact that the flamingo lives in both. They are separated by thousands of kilometres. The staircase connects both landscapes for us visitors. The flamingo makes the journey flying.

F: These steps are the best part of our Flamingo Island. The visitors have to put some effort in getting up to the Andes. Now they know how it feels to fly thousands of kilometres during our migration! You should see them pant, sweat and give angry looks while we fly above them.

We take the journey from the Lagoon up to the Andes more than once a day. Migrating between the landscapes gives us the best of both within a couple of minutes and as many times a day as we want. It's always great to spread your wings. Most of our fellow flamingos in captivity are wing-clipped. They can't fly anymore and next to that wing-clipping has negative effect on our mating. It must be a traumatic experience. Pure torture! Our high and long aviary gives us the possibility to fly as much as we want on full speed. Mostly we aren't taking the direct route up but circle around. Enjoying the views and the simple fact that we are lucky to be able to fly!



Experience the Andes

V: A couple of more steps to go before a narrow path invites me to enter the Andes. It reveals an architectural landscape made out of blocks in various heights. Pathways are guidelines. Those blocks become rocks free to climb on. A maze without a defined exit. A place to get lost. An inviting harsh landscape which requires effort to be discovered. Stairs take me up and down. As soon as I climb the rocks the view it offers is stunning. A greyish landscape with pathways cutting through rectangular blocks stands in contrast to five deep coloured pools. In there a lot of flamingos, standing, eating and resting. My perspective changes with every step up. I feel the height and see the panorama unfolding in front of me once I reached the highest point. A moment to sit down.

The flamingos elegance becomes visible in this harsh environment. Standing undisturbed on one leg surrounded by climbing, panting and selfie-taking visitors. A spectacle that is watched almost disinterested by the flamingo. Who is who? Who views who? Who is amazed and amused by whom? Who belongs here and who is a guest? This flamingo enclosure is a weird island in the zoo. Away from the other animals, shaping its own world. Its own experience, different from the zoo experience we are used to. It is part of, no it is the building environment. Nothing natural in the Flamingo Island except the behaviour of the flamingo itself. With a few firm strokes, a flamingo takes off and migrates to the Lagoon. At the end of Flamingo Island, at the fence over there people are watching this wicked landscape.

F: We call the Andes our buffet. Here we feed ourselves. We have five pools to enjoy five different mixtures of food. Except for the pools, this landscape has nothing to offer us flamingos. It's not flat enough. Some tried and still try to discover other places of this landscape. Nine out of ten they end up in medical isolation in the shelter. Most of the visitors never knew we live in these kinds of harsh and raw conditions. Although, what is harsh if the water is full of nutrition just like in the salt lakes high up in the Andes mountains? The altitude is something we miss. These eight metres the Andes area is above ground level is nothing compared to the 2.500 metres above sea level we originally live in. But it's a nice try to let the visitors experience both our natural habitats. Although we can use the landscape, it's nice to see the visitors making use of it by climbing the blocks. They really interact with the landscape. For us it's just a perfect place to feed and relax before taking off to the Lagoon.



Chapter three: Dreaming

Dreaming reality

V: What a place! I'm overwhelmed by its flow, colour and size. Luckily a bench, integrated in the shape of the path offers me the possibility to sit down and absorb the world around me. I wonder whether this landscape is a better place to live than their natural habitat. It looks like the landscape serves the flamingos to perfection. And the great thing is I'm in the centre of that landscape; part of the same landscape: flamingo and I. I notice the cyclists on the other side of the enclosure. A duck enters the Flamingo Island via the canal, while a starling leaves via air. Probably both regular guests. Just like the robin hidden in the bush in front of me. Two brightly coloured butterflies play around. Fresh mud is enjoyed by various insects. Suddenly I discover a couple of flamingos breeding. Sitting, waiting, breeding. Once in a while the flamingo is relieved of his duty by the other one. I have time to observe the flamingos, their little movements, their colour and feathers. In the corner of my eye a flamingo takes off, as it would be the most natural thing in the world towards the Andes. For a moment my thoughts drift away beyond the nets of the enclosure. I hear the waves rustle, see flamingos resting in the orange sunset, feel the Ocean breeze cooling my sun burnt skin, enjoying life in an exotic country on the other side of the world. In reality a flamingo on approach is nearly missing my head. Thanks to the good navigation skills of the flamingo a crash has been avoided. It's time to move on, back in the hustle of the Flamingo Island.

F: What a great place! There are various ways of captivity. I think we got lucky having the space and landscape our enclosure offers us. There are enough spaces to land and get away from the Flamingo Island bustle. No visitors with their camera's or screaming kids. Just tranquillity. A moment to let thoughts drifting away. I feel the cold wind chasing through my feathers. Fortunately, the flock offers me protection. Together we can survive here. The red water of the Laguna Colorada offers more food than we can eat all together. Together we are alone, only surrounded by snowy mountain peaks. The fear of the fascinating rock formations, the harsh landscape far away from civilization, offers us protection. Until a group of excited teenagers shouts when they see a successful selfie, which has been photo bombed by a fellow flamingo. The Andes is far away, the desire is sometimes great, but life in this place is unique.

Dreaming fantasy

V: Walking towards the exit of Flamingo Island, I start to appreciate the contrast between the Lagoon and the Andes. Both have their own experience. Once I visited both, the experience is complete and both landscapes are one. My day at the zoo ends. On the way home I pass along the park in front of the Flamingo Island. The length of the staircase, all the way up to the Andes is even more impressive now; I conquered this steps. In the Lagoon life is still busy. For a split second I think I recognize the flamingo which almost flew into me. Probably it was his brother, uncle or grandpa. As dark falls over Amsterdam, the Flamingo Island fades away. What if dark opens the Flamingo Island? Allowing the flamingos to take over the canals of Amsterdam? What if other animals would join them and the zoo becomes the city?

F: Imagine that would happen.... Flamingos in town. Amazing!

Flamingo Island

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View over Flamingo Island	91

Key elements design



Large flock



Space to fly



Presentation of both habitats

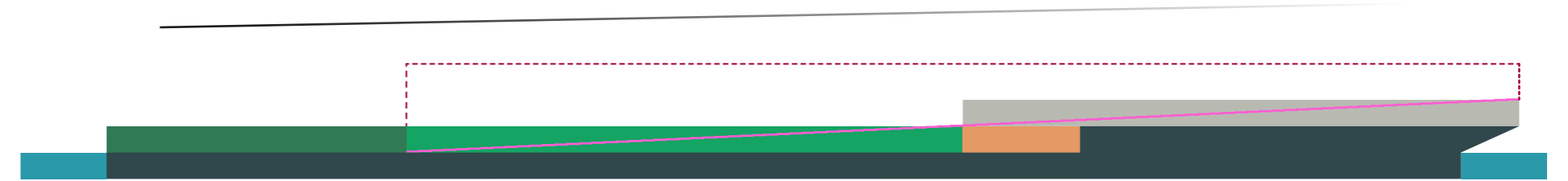


Part of the city

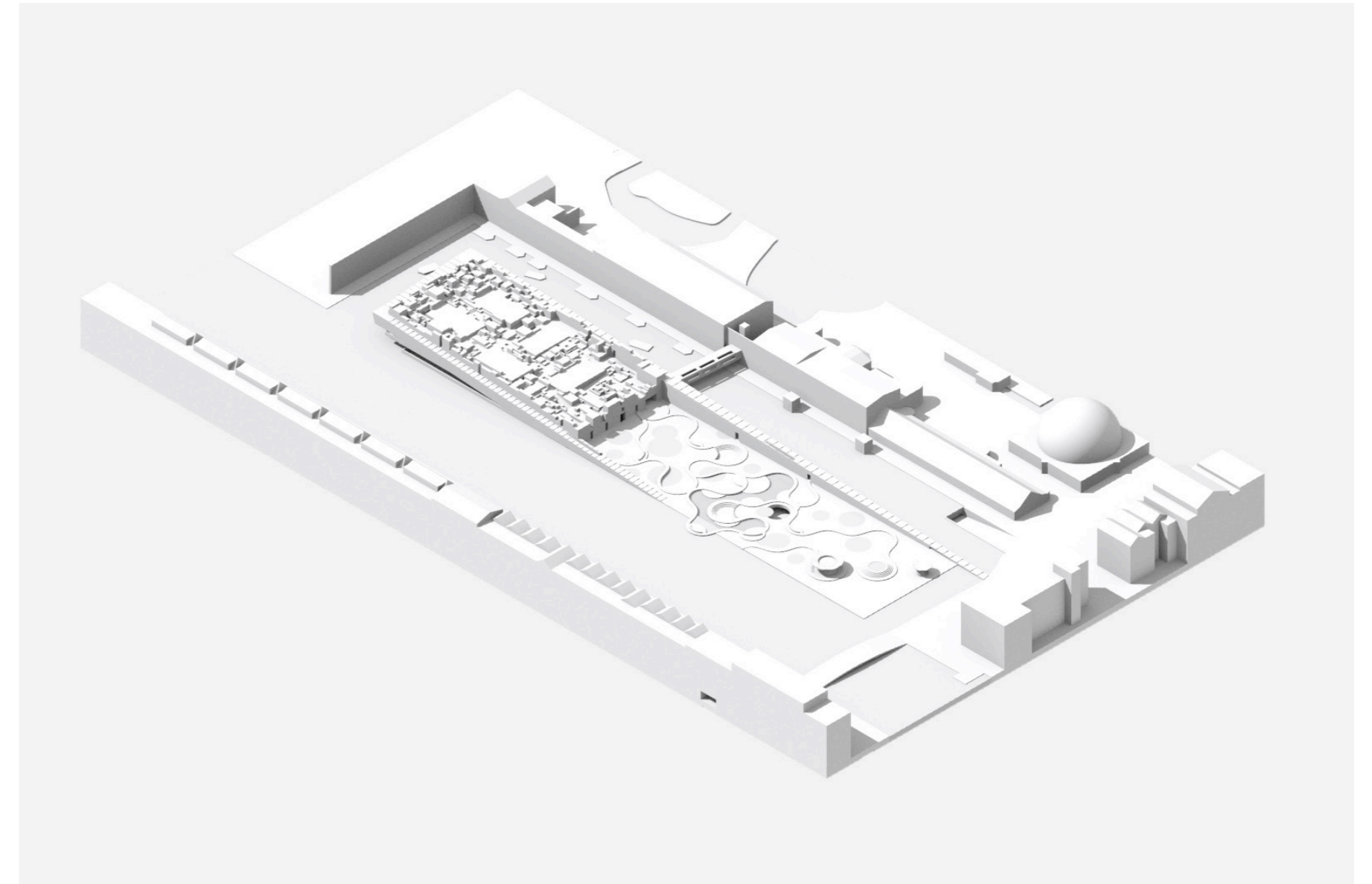
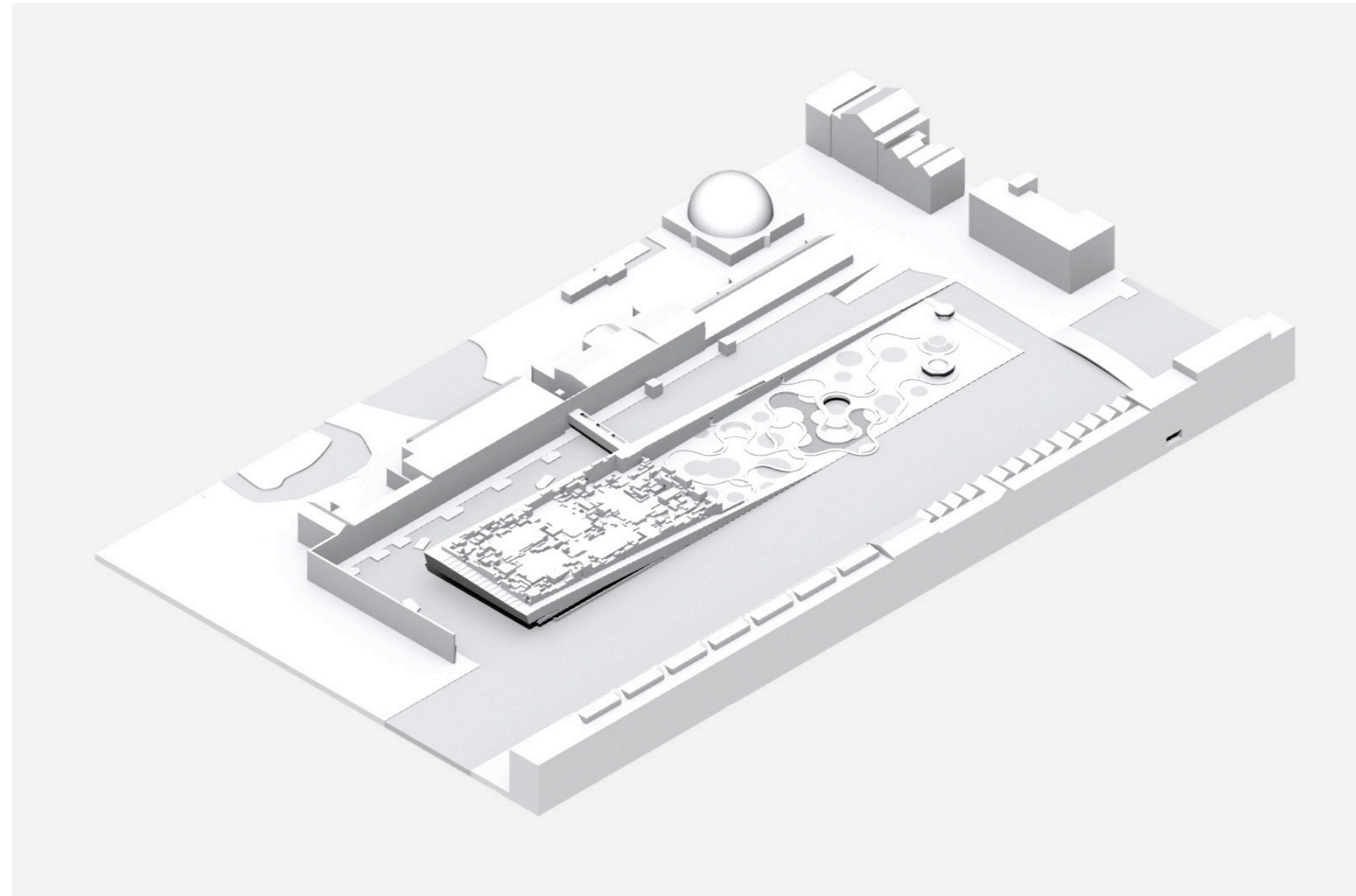


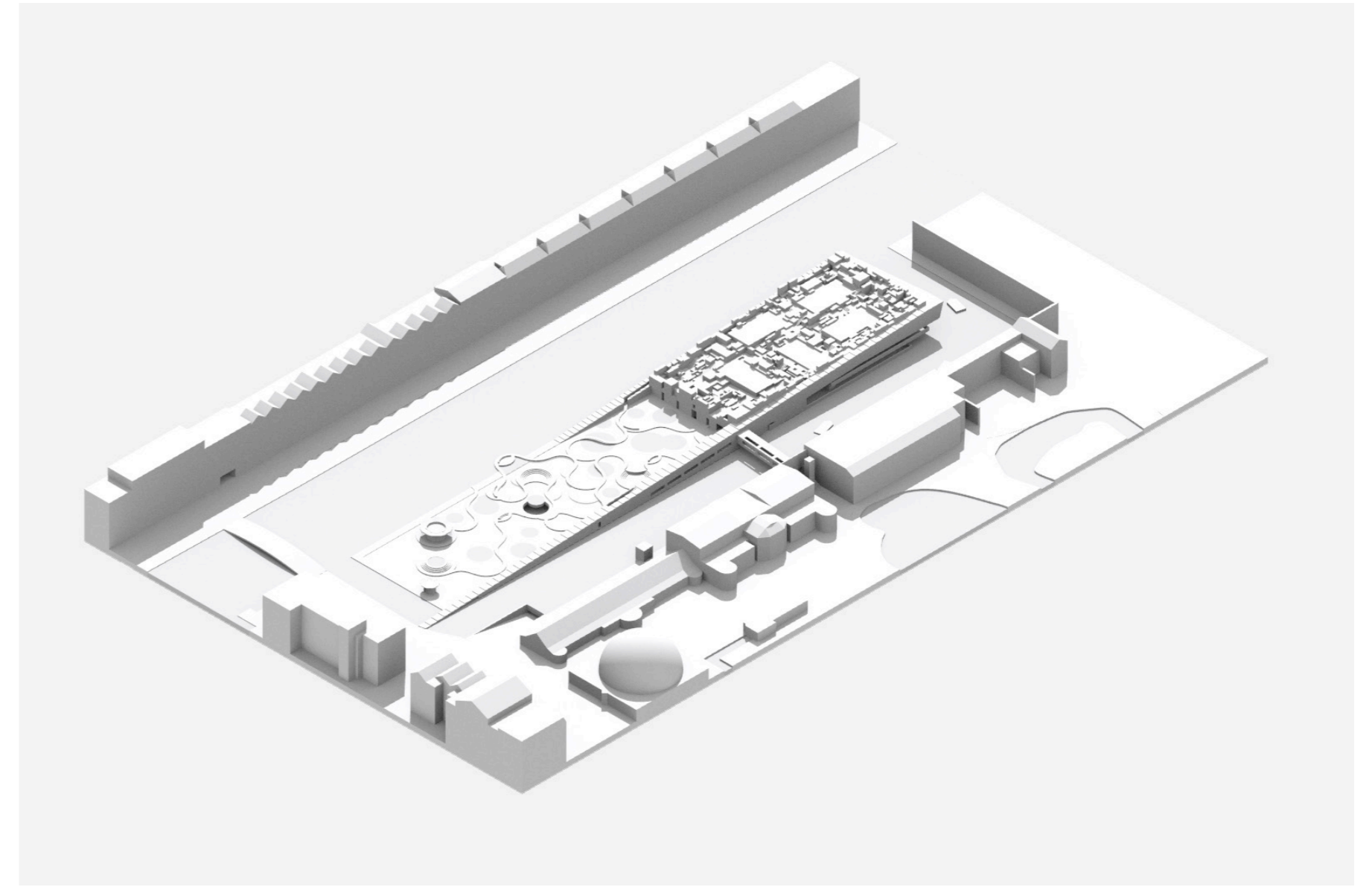
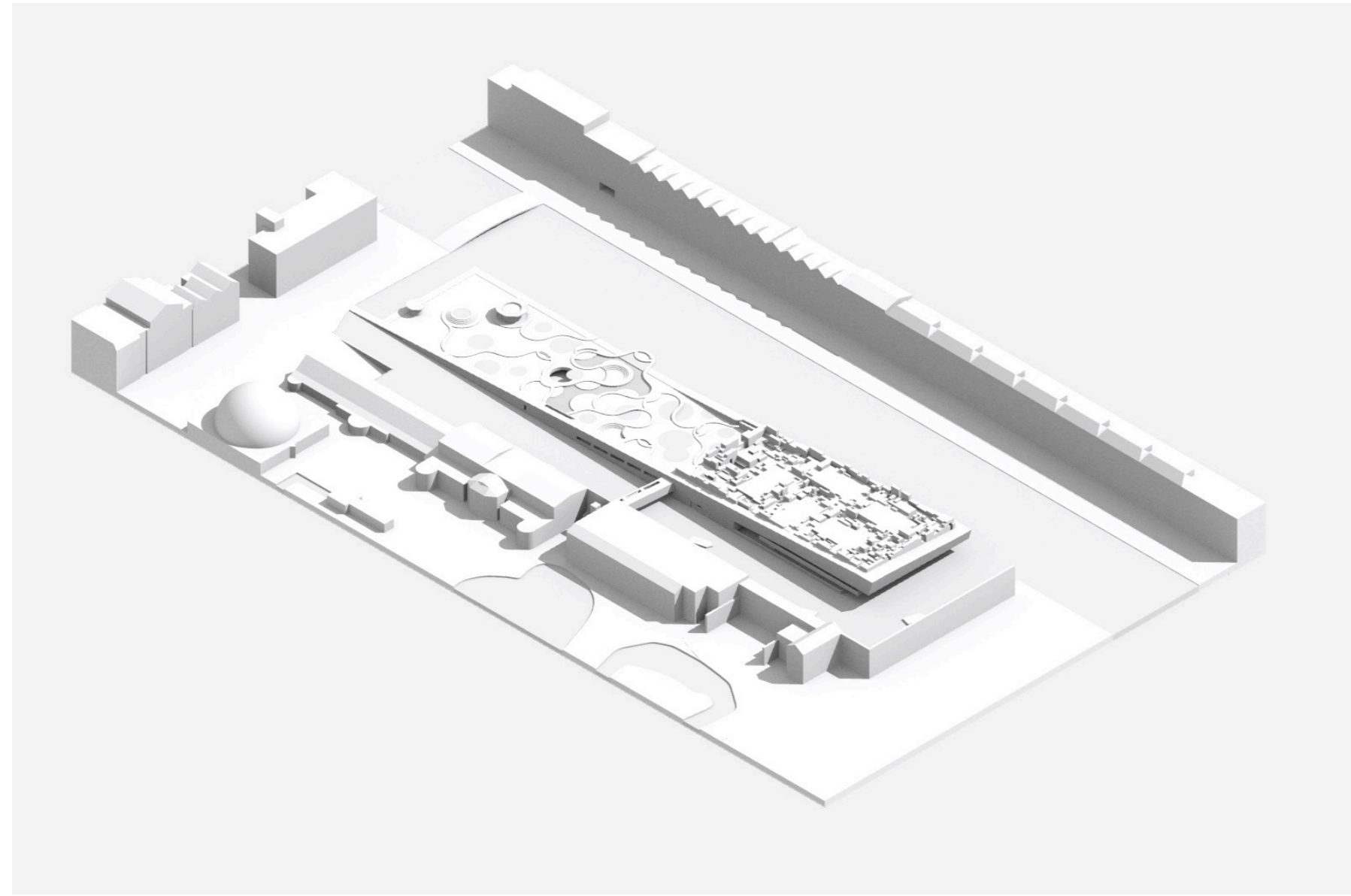
Positive outdoor space

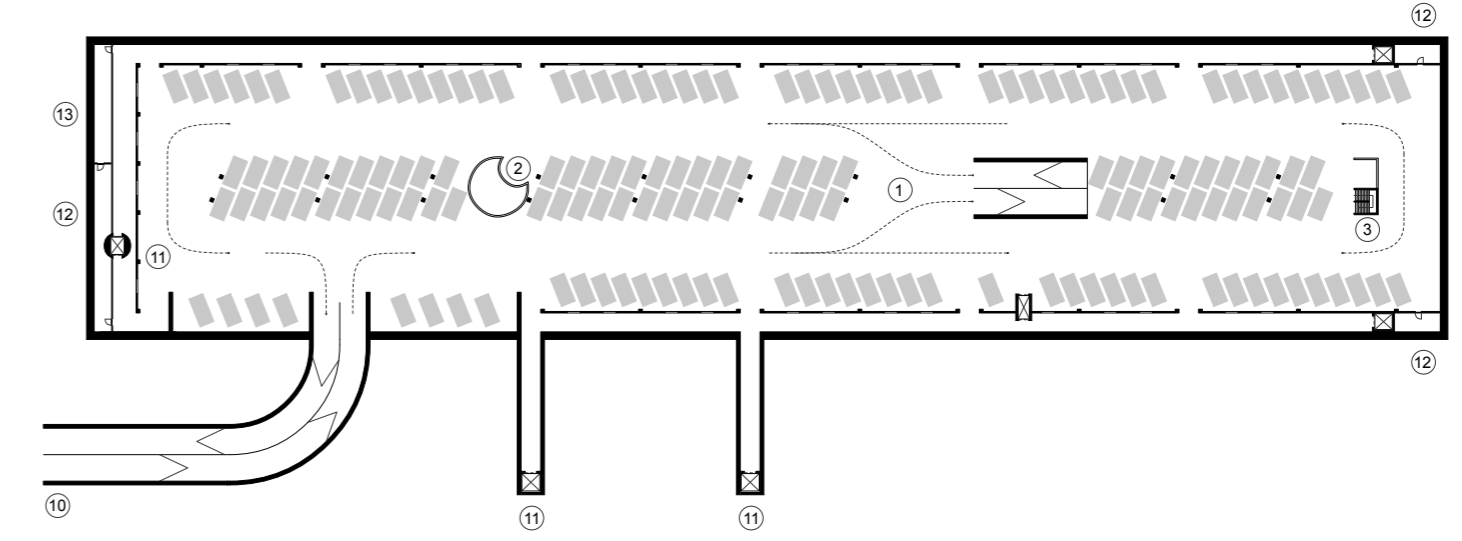
Concept



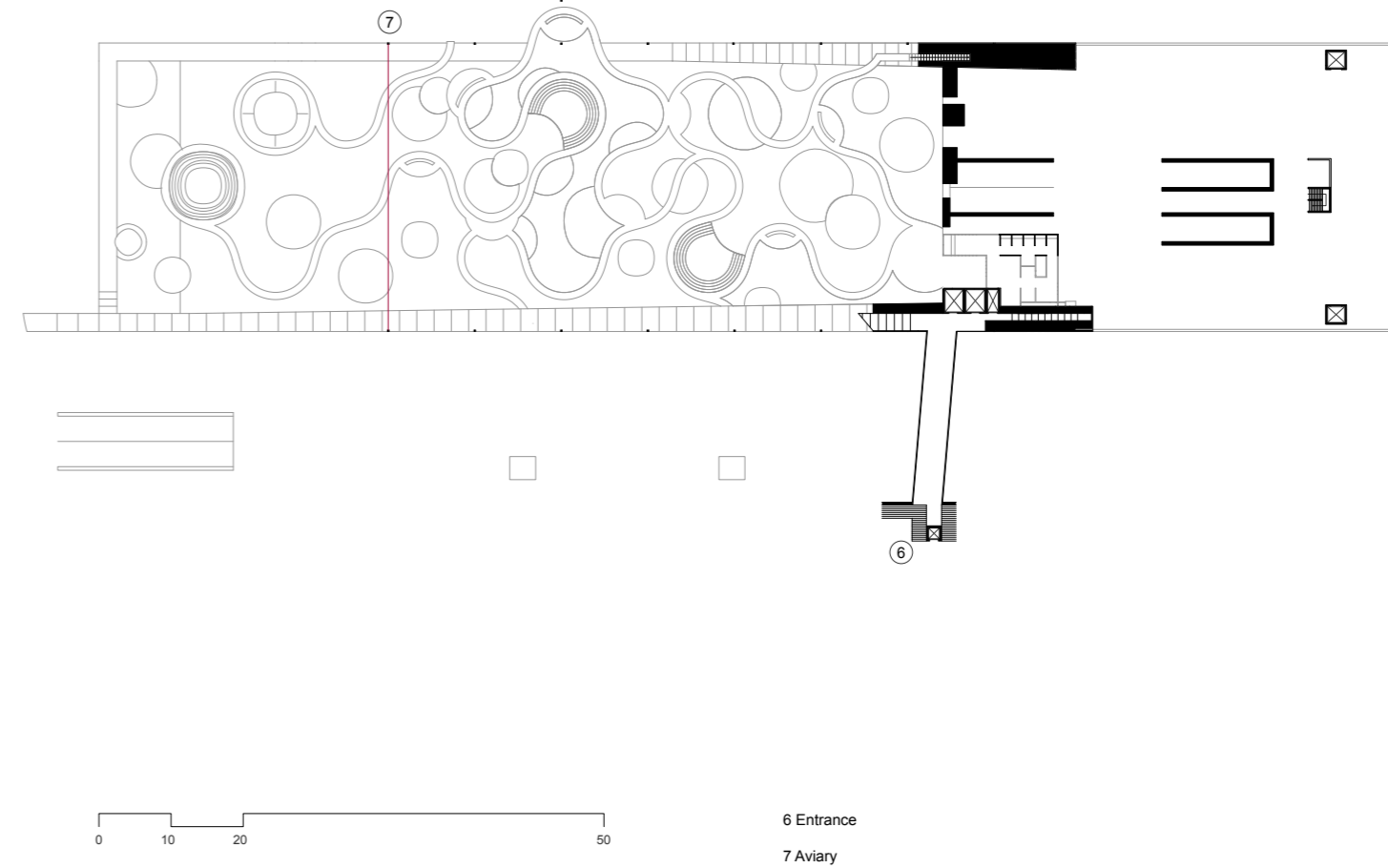
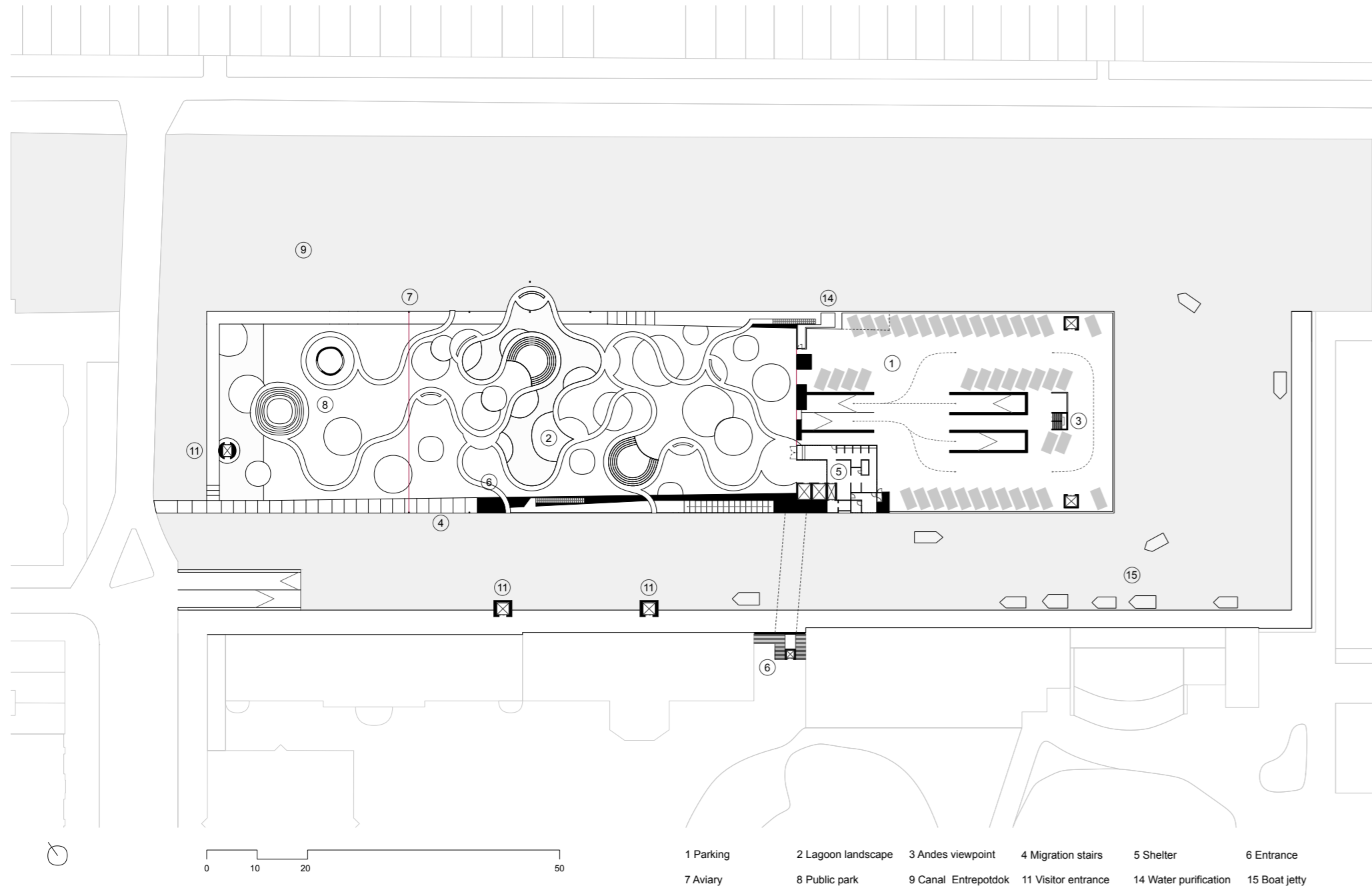
Lagoon landscape Andes landscape Shelter Migration stairs Aviary
 Public park Parking Canal Entrepotdok Gradient in accessibility and visibility

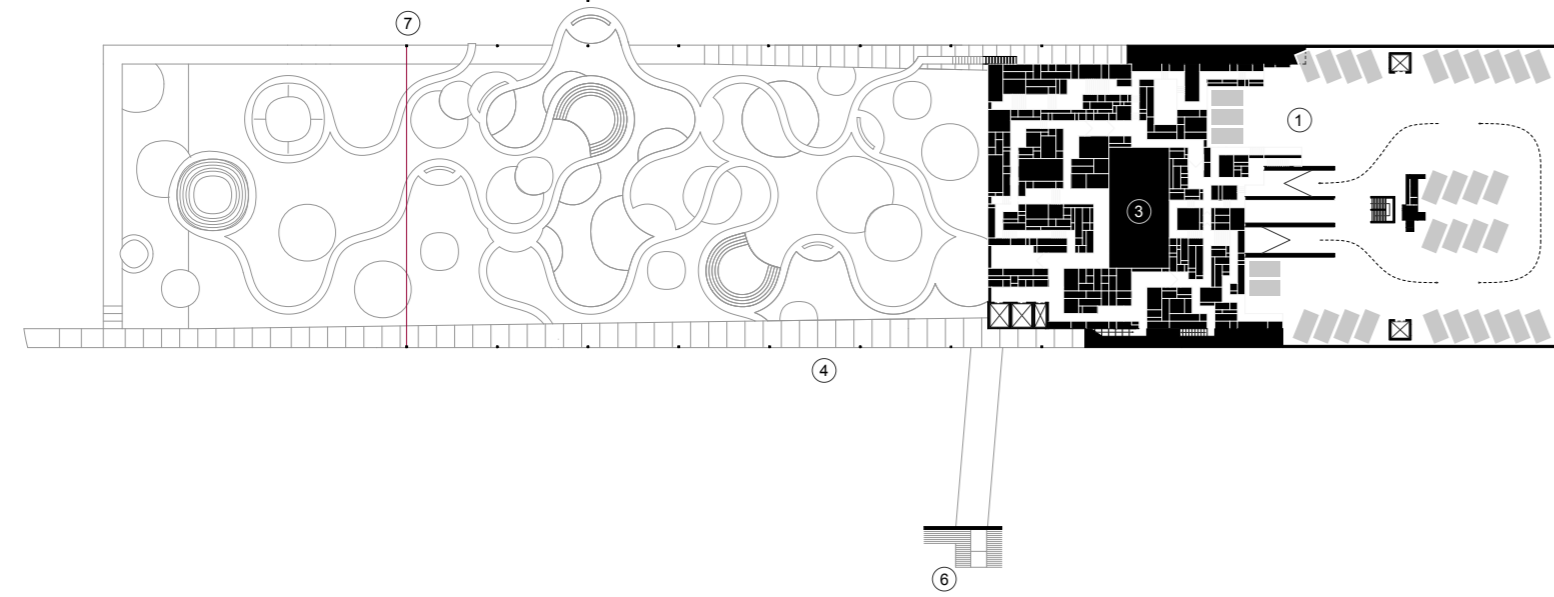




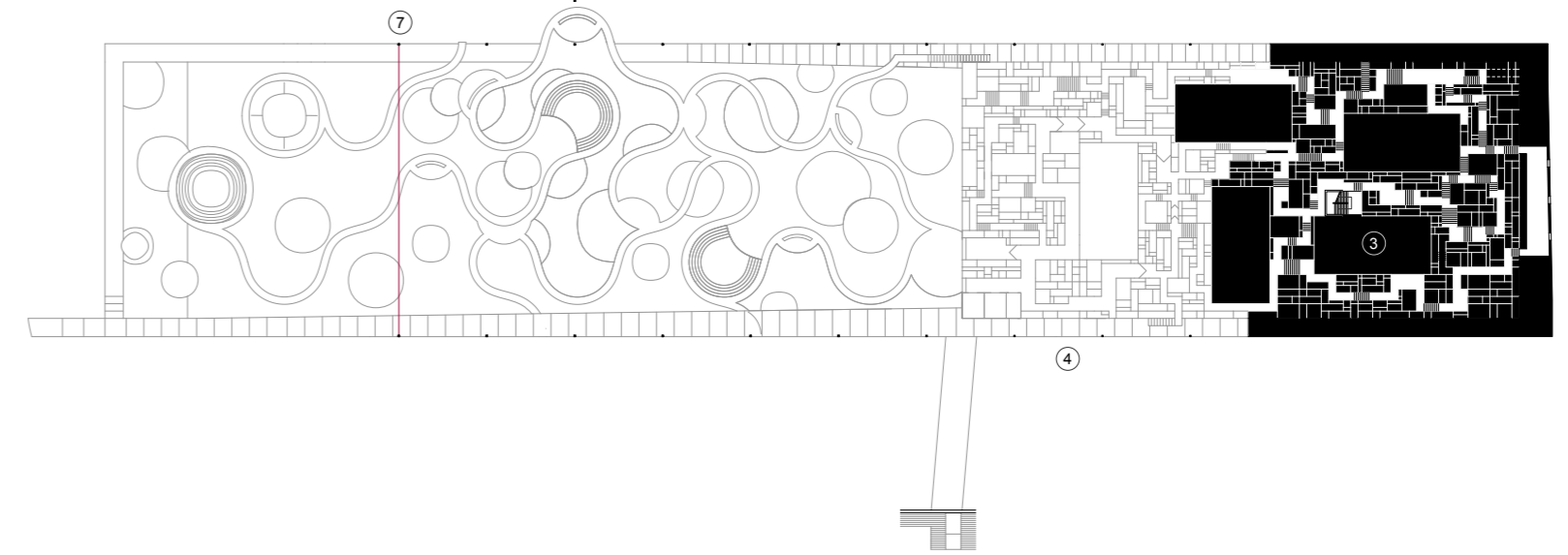


- 1 Parking
- 2 Lagoon pool
- 3 Andes viewpoint
- 10 Car entrance
- 11 Visitor entrance
- 12 Technical space
- 13 Ventilation



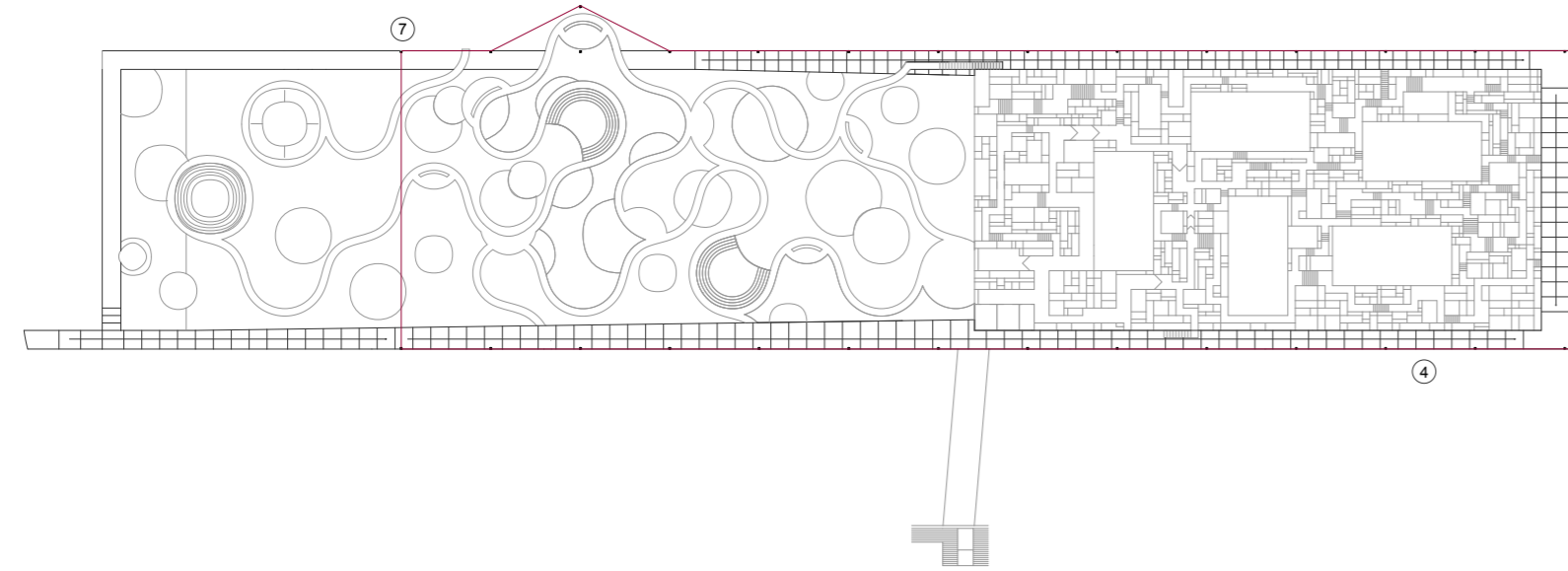


- 1 Parking
- 3 Andes landscape
- 4 Migration stairs
- 6 Entrance
- 7 Aviary

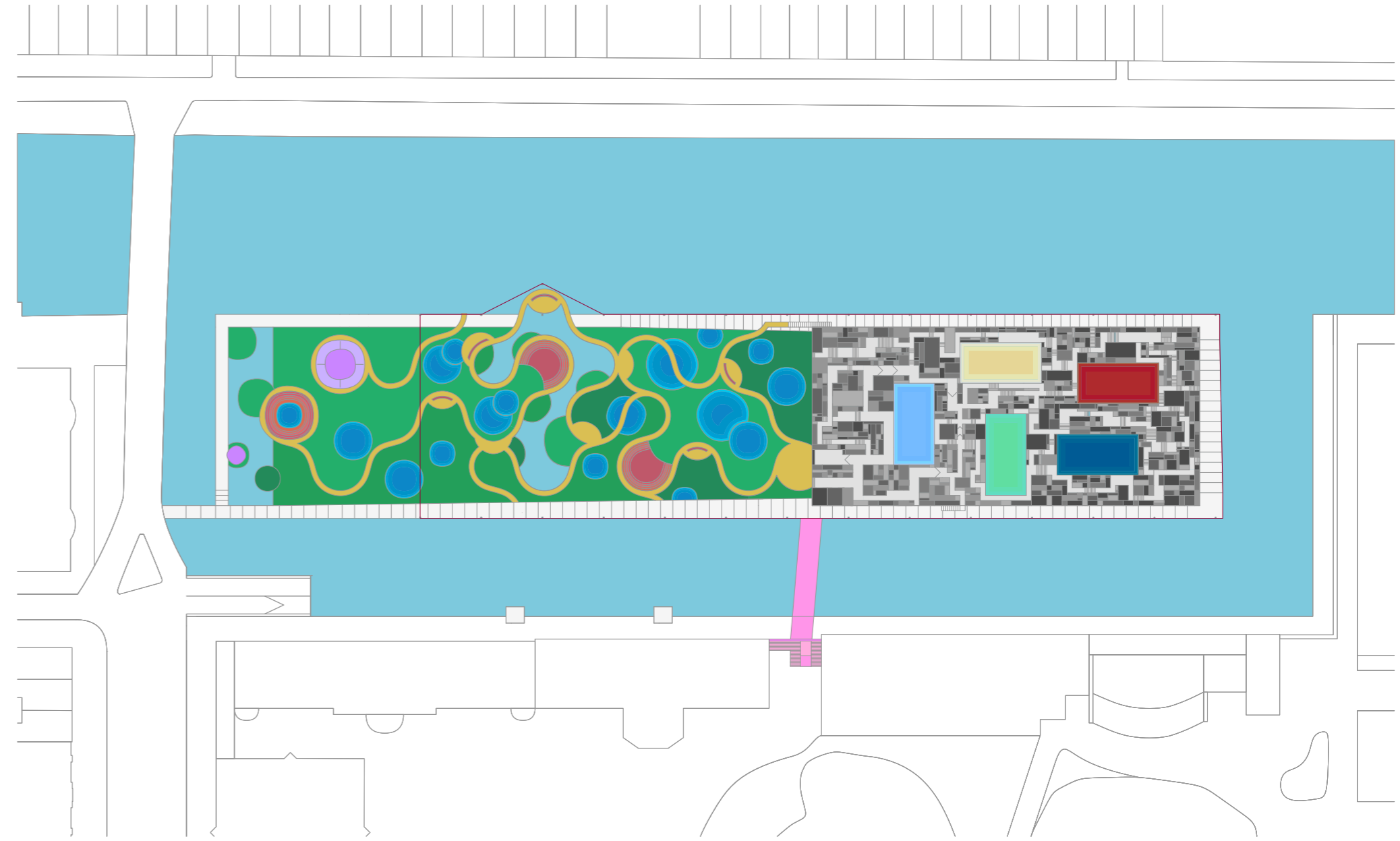


- 3 Andes landscape
- 4 Migration stairs
- 7 Aviary



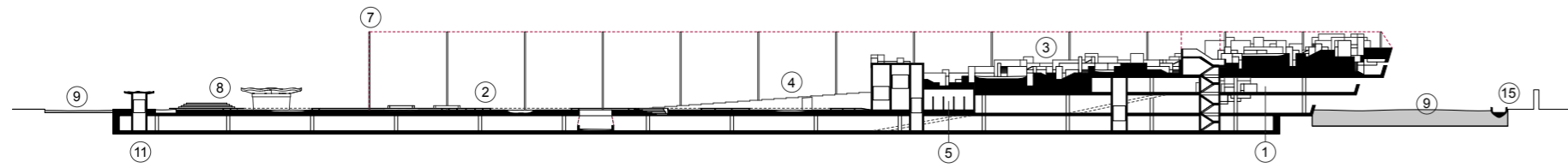


4 Migration stairs
7 Aviary

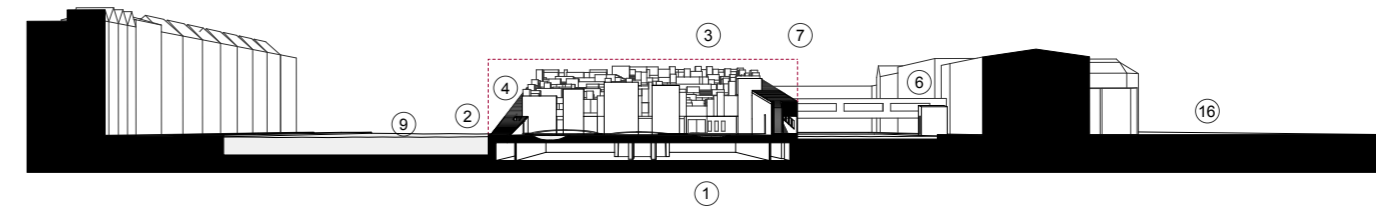


Artis Islands - RAVB

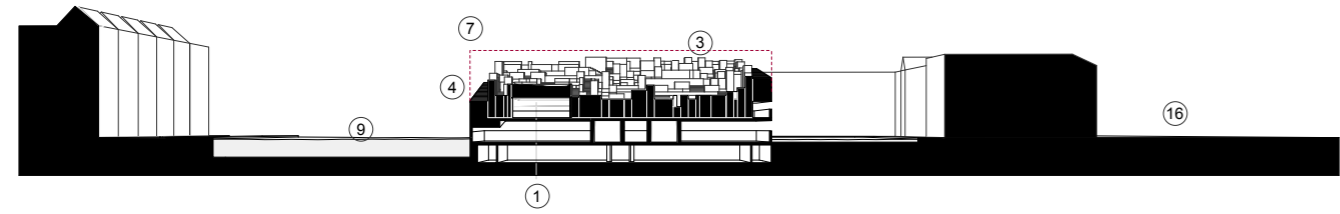
Artis Islands - RAVB



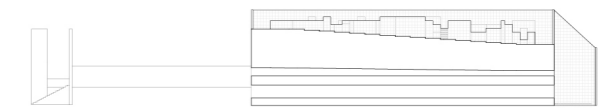
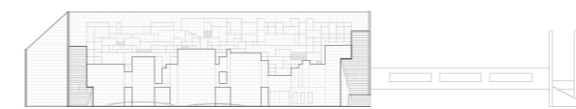
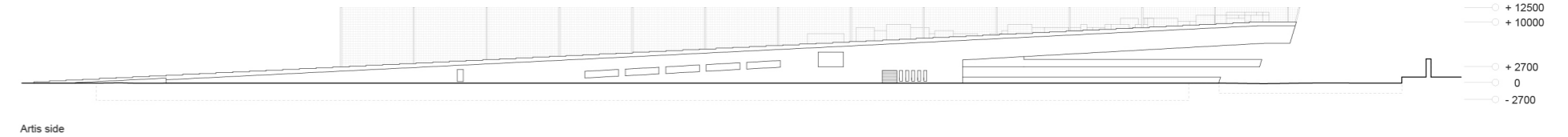
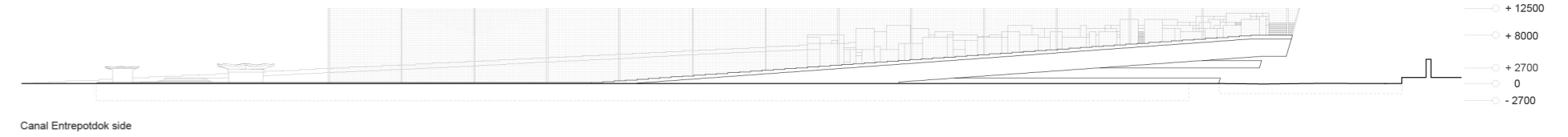
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|-----------|--------------------|---------------------|---------------------|---------------|
| 1 Parking | 2 Lagoon landscape | 3 Andes viewpoint | 4 Migration stairs | 5 Shelter |
| 7 Aviary | 8 Public park | 9 Canal Entrepotdok | 11 Visitor entrance | 15 Boat jetty |

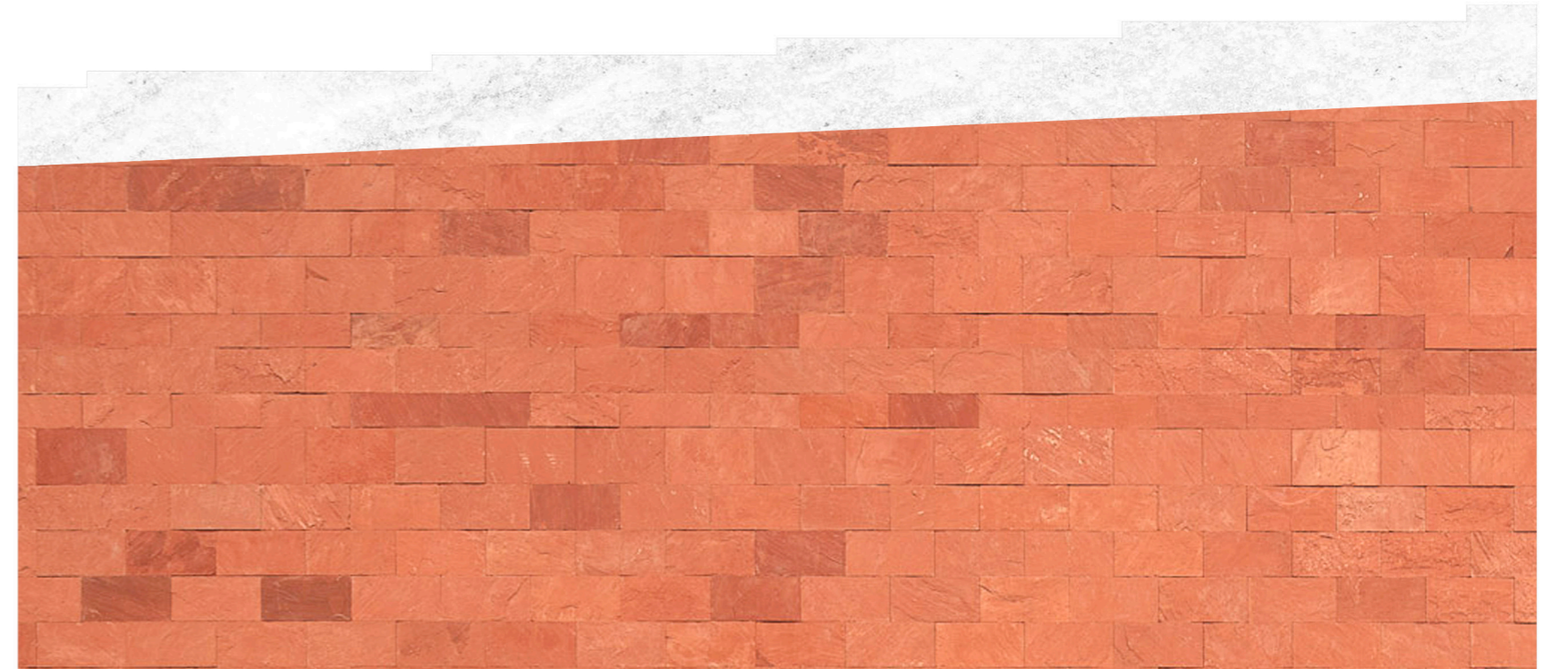


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|-------------------|--------------------|---------------------|--------------------|
| 1 Parking | 2 Lagoon landscape | 3 Andes landscape | 4 Migration stairs |
| 6 Entrance bridge | 7 Aviary | 9 Canal Entrepotdok | 16 Artis |



- 1 Parking
- 3 Andes landscape
- 4 Migration stairs
- 7 Aviary
- 9 Canal Entrepotdok
- 16 Artis





Base orange/red sandstone facade
Migration stairs white sandstone

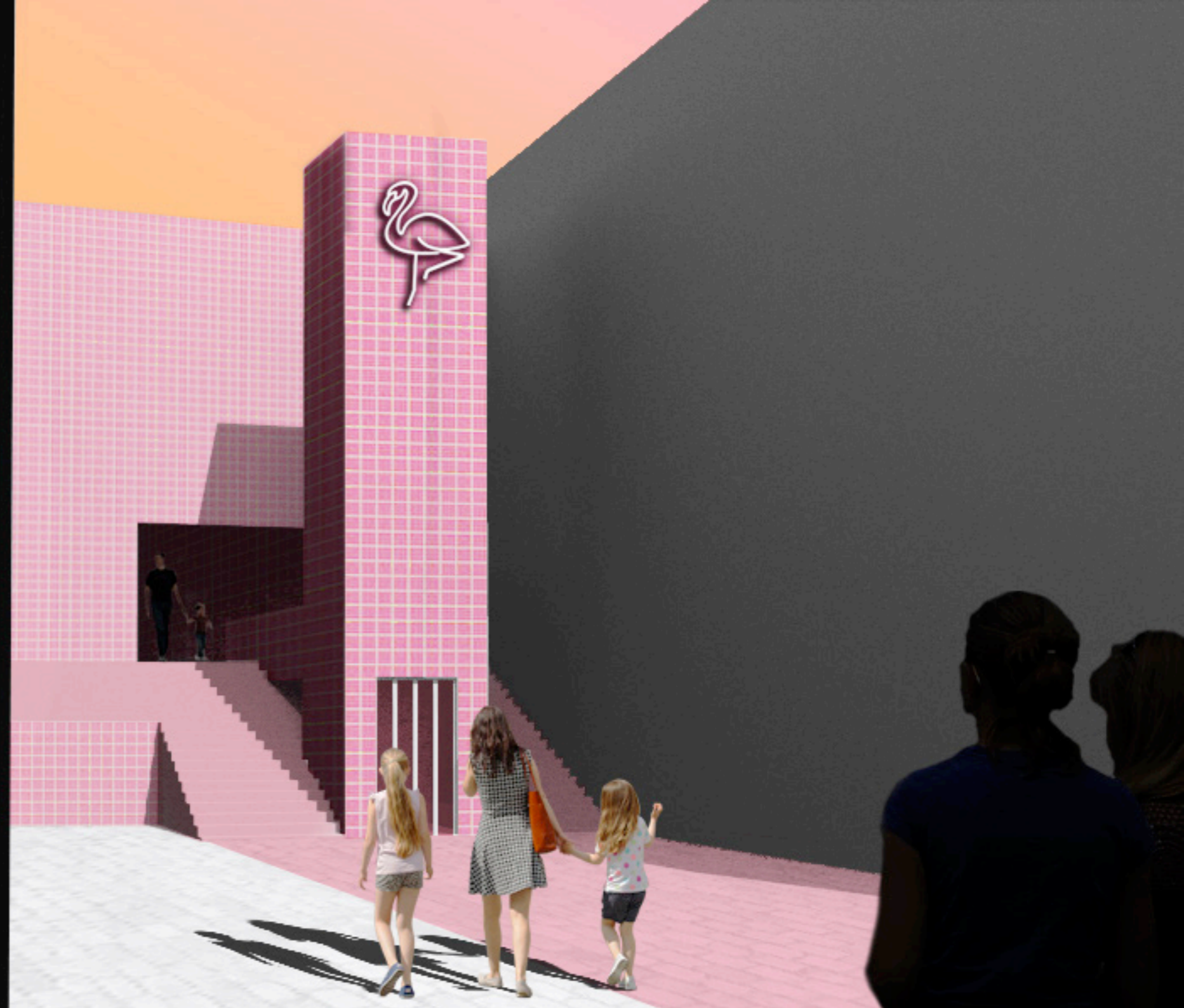
Lagoon landscape nature
Andes landscape concrete

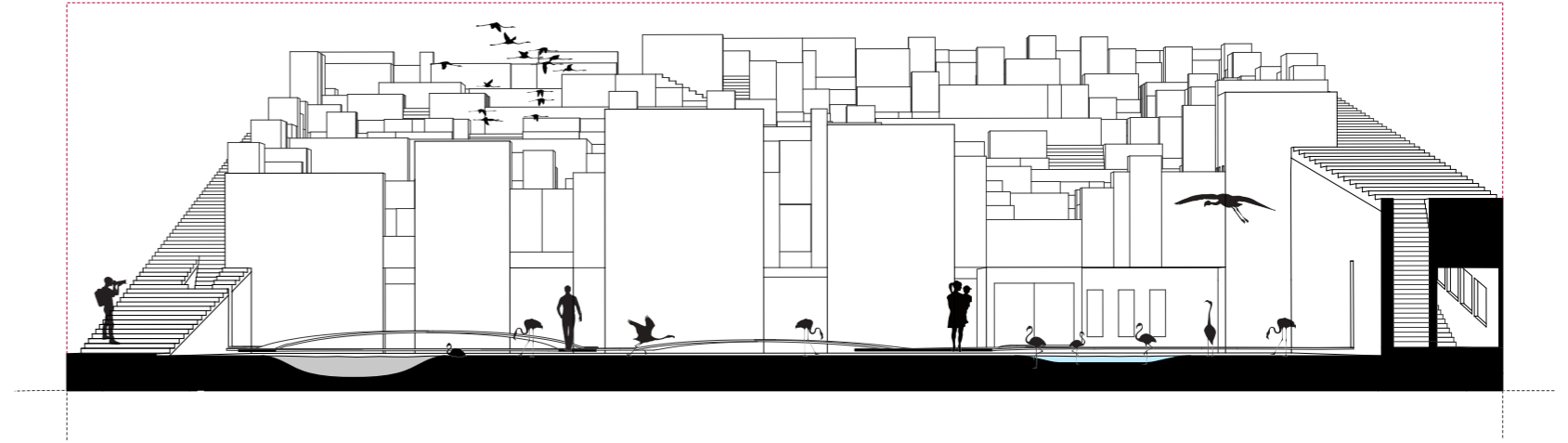
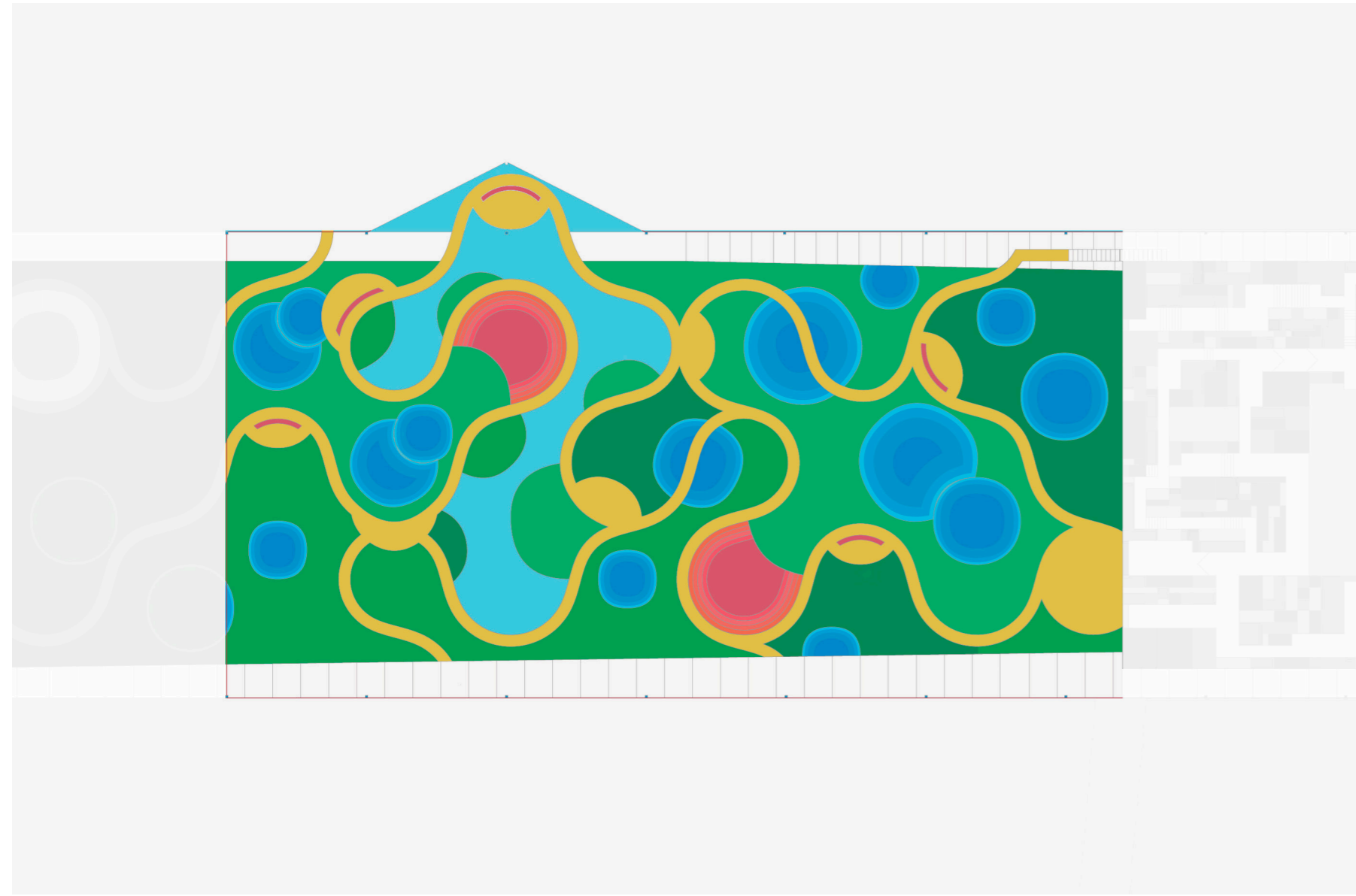
Base orange/red sandstone facade
Migration stairs white sandstone

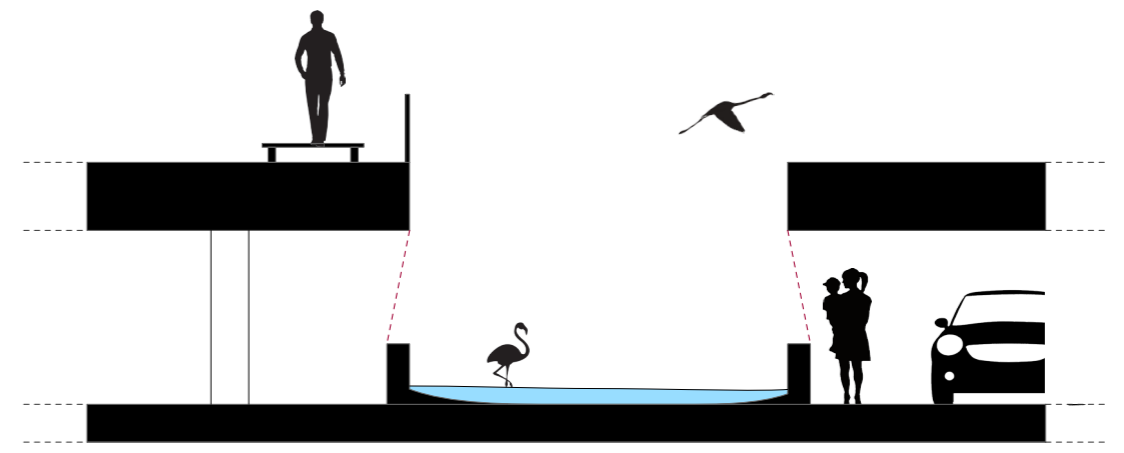
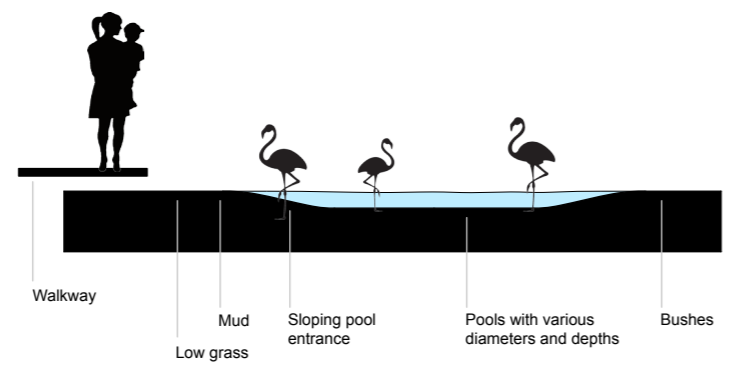
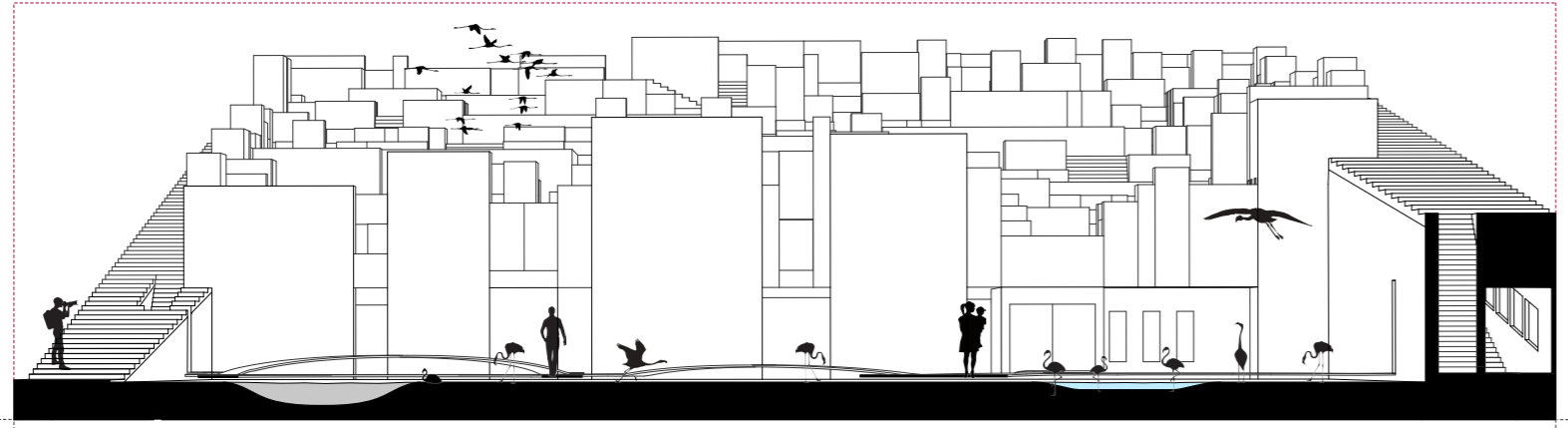
Flamingo Island

Approach over water





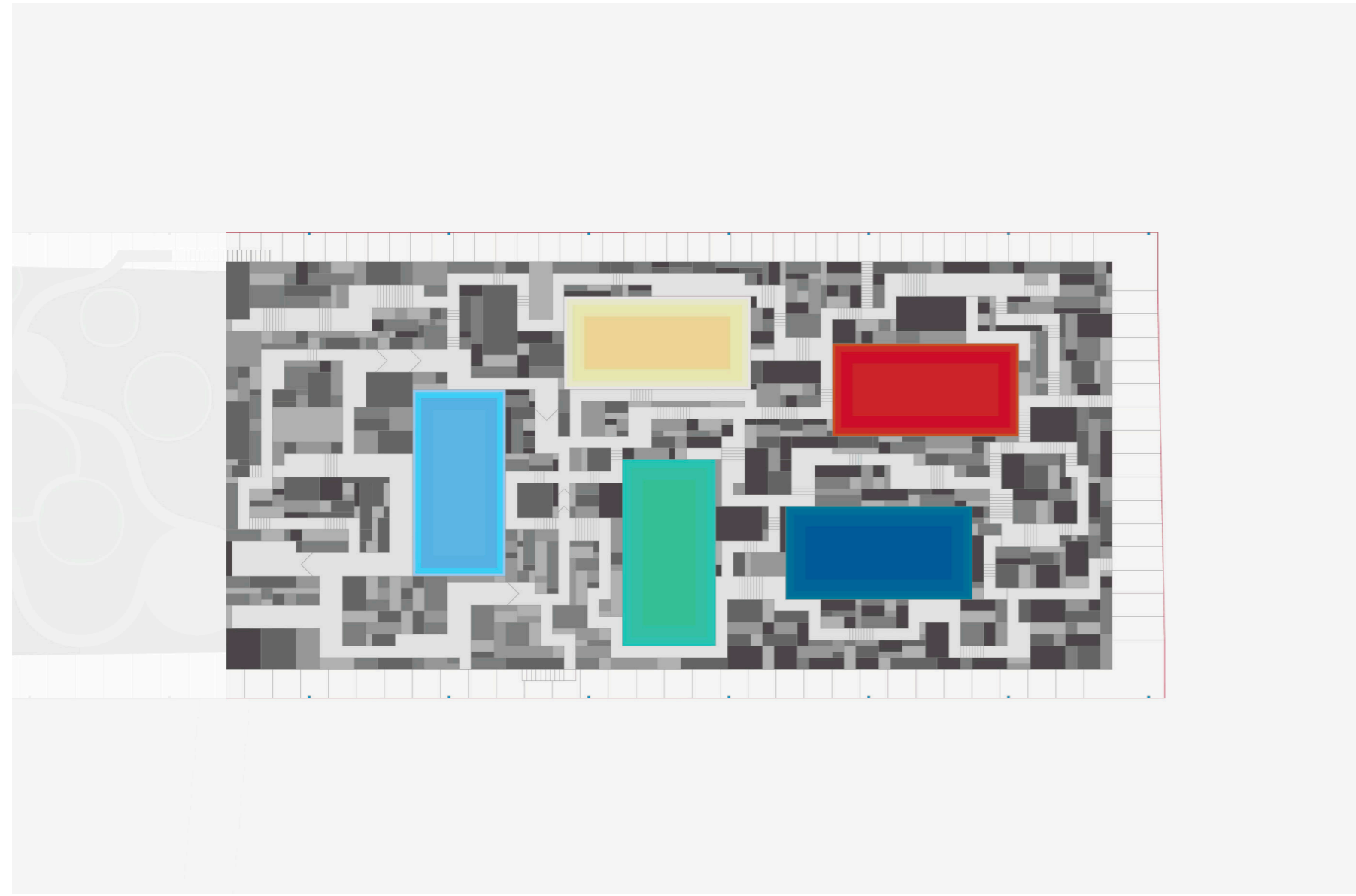




Flamingo Island

Lagoon landscape





Laguna Atacama



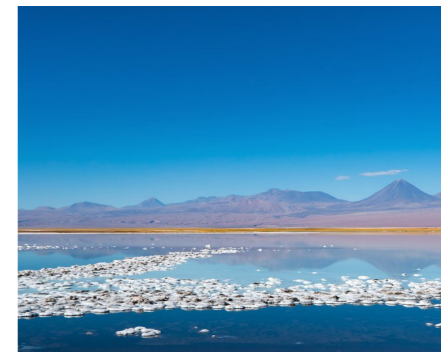
Laguna Uyuni



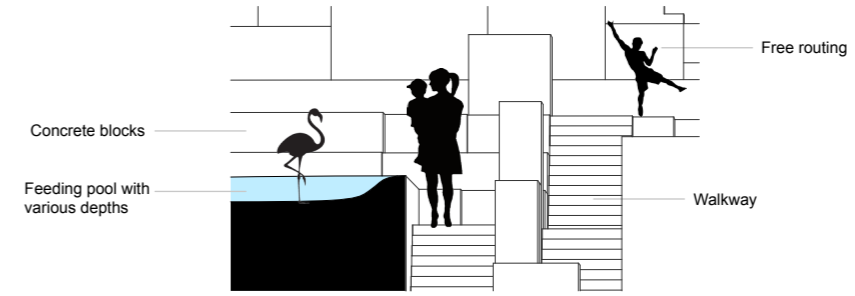
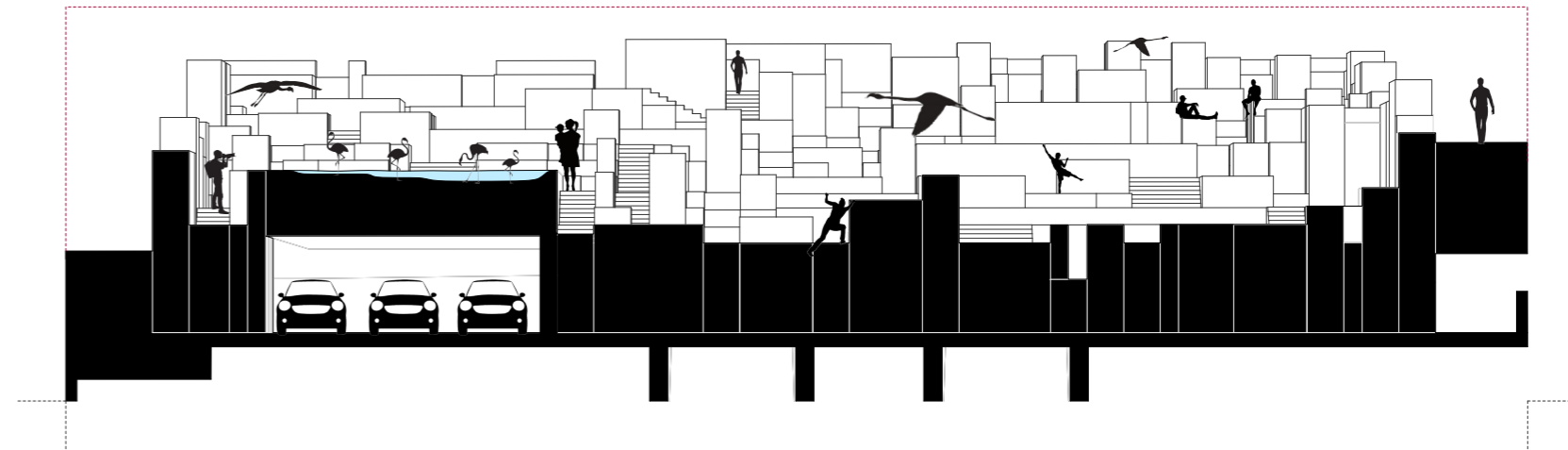
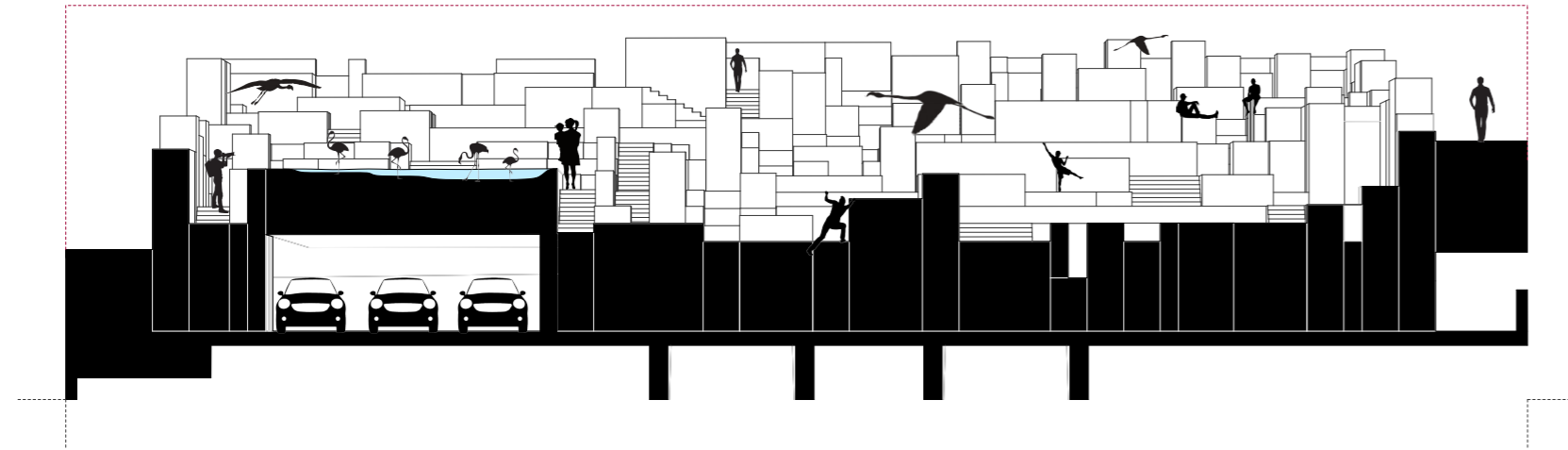
Laguna Colorado

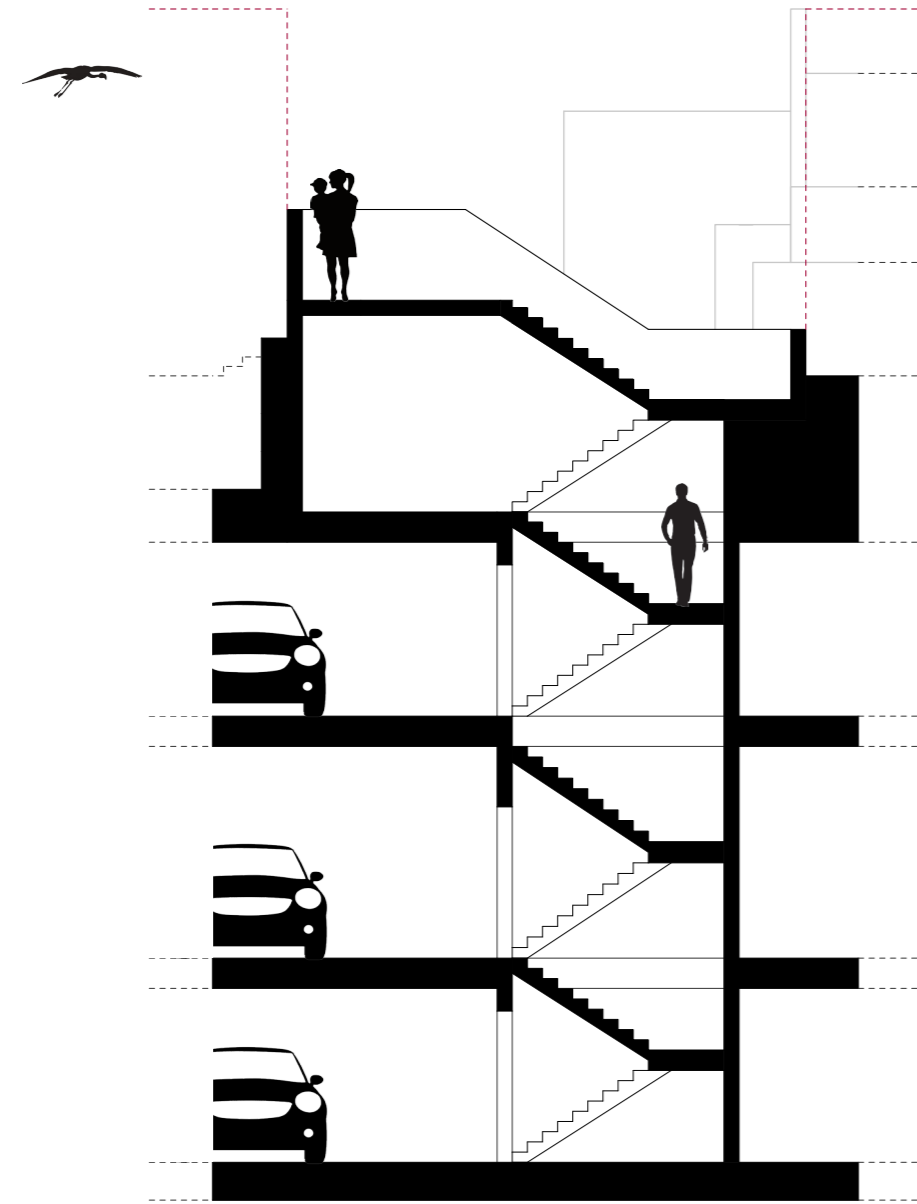


Laguna Verde

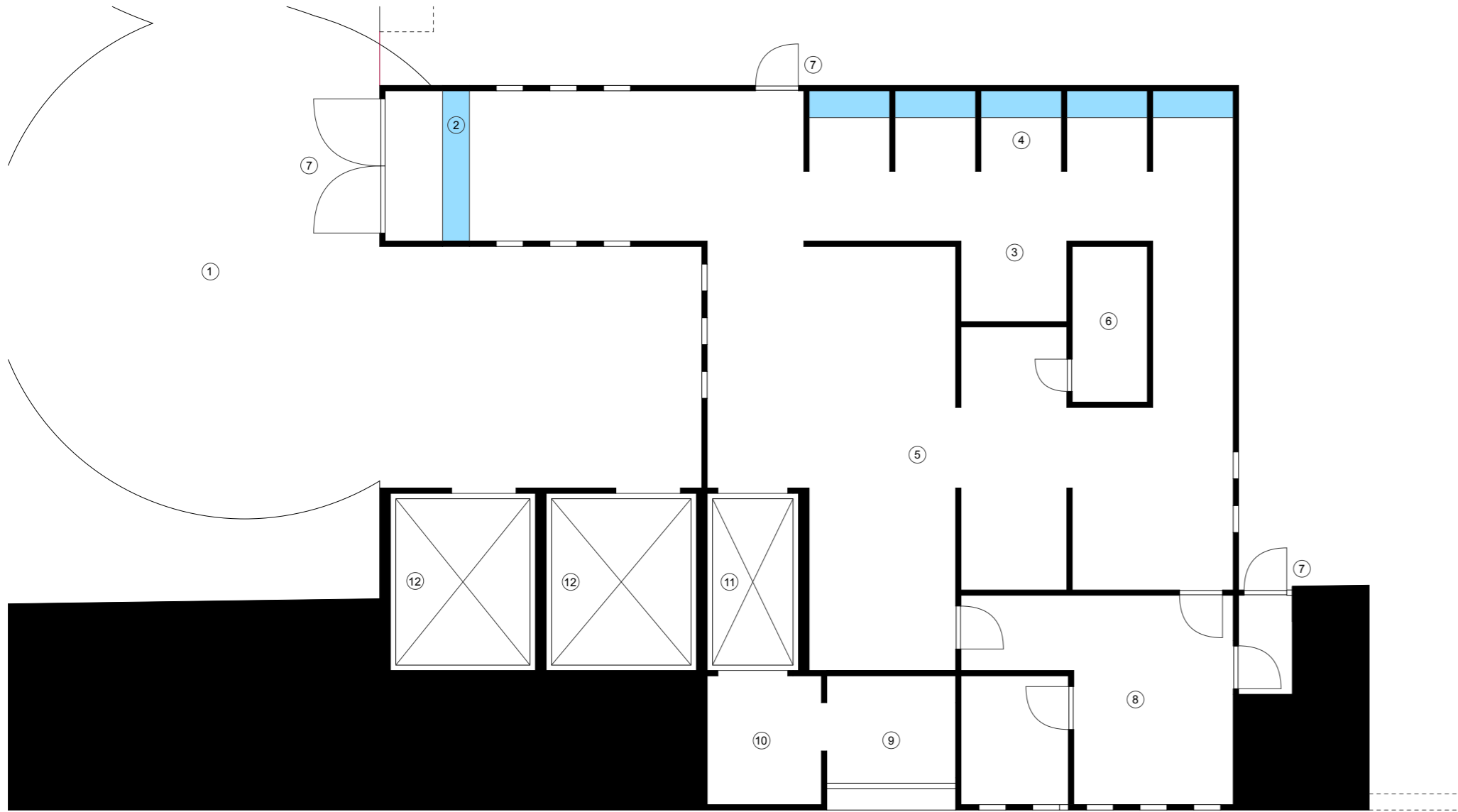


Laguna Cejar









- 1 Shelter plaza
- 2 Entrance foot bath
- 3 Medical area
- 4 Isolation rooms
- 5 Storage
- 6 Cold storage
- 7 Entrance shelter
- 8 Keeper room
- 9 Delivery via water
- 10 Garbage
- 11 Keeper elevator
- 12 Visitor elevator



Flamingo Island

View over Flamingo Island



Flamingo Island

Ties Kweekel

Artis Islands

2019/20 2nd Semester studio at:
RAVB - Rotterdamse Academie van Bouwkunst