

A Threshold for Discovery

New Architecture for Touristic Journeys

Marko Lojanica

Research-by-Design Journal
Public Building Graduation Studio 2025/26

INDEX

Research-by-Design Journal

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Group of Public Building
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Studio Title
Public Building Graduation Studio 2025-26
Re-Start the North (Ny Begun)
Leisure and revitalization of post gas Groningen

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Research by Design Mentor
Prof. ir. Nathalie de Vries

A Journal

This journal is a collection of material that is comprised of a critically selected drawings, images, diagrams, and outputs that map and describe the evolution of research by design process during the Graduation Studio. In that sense it operates as roadmap of the process and a final output at the same time. Although it is structured with a beginning and an end , it doesn't nessecerally constitute a curation of a linear proces. Instead, it preserves moments of controlled spontaneity, allowing the inherent fluidity of design to remain visible. In doing so, it offers a more nuanced and authentic representation of the design process as it unfolds.

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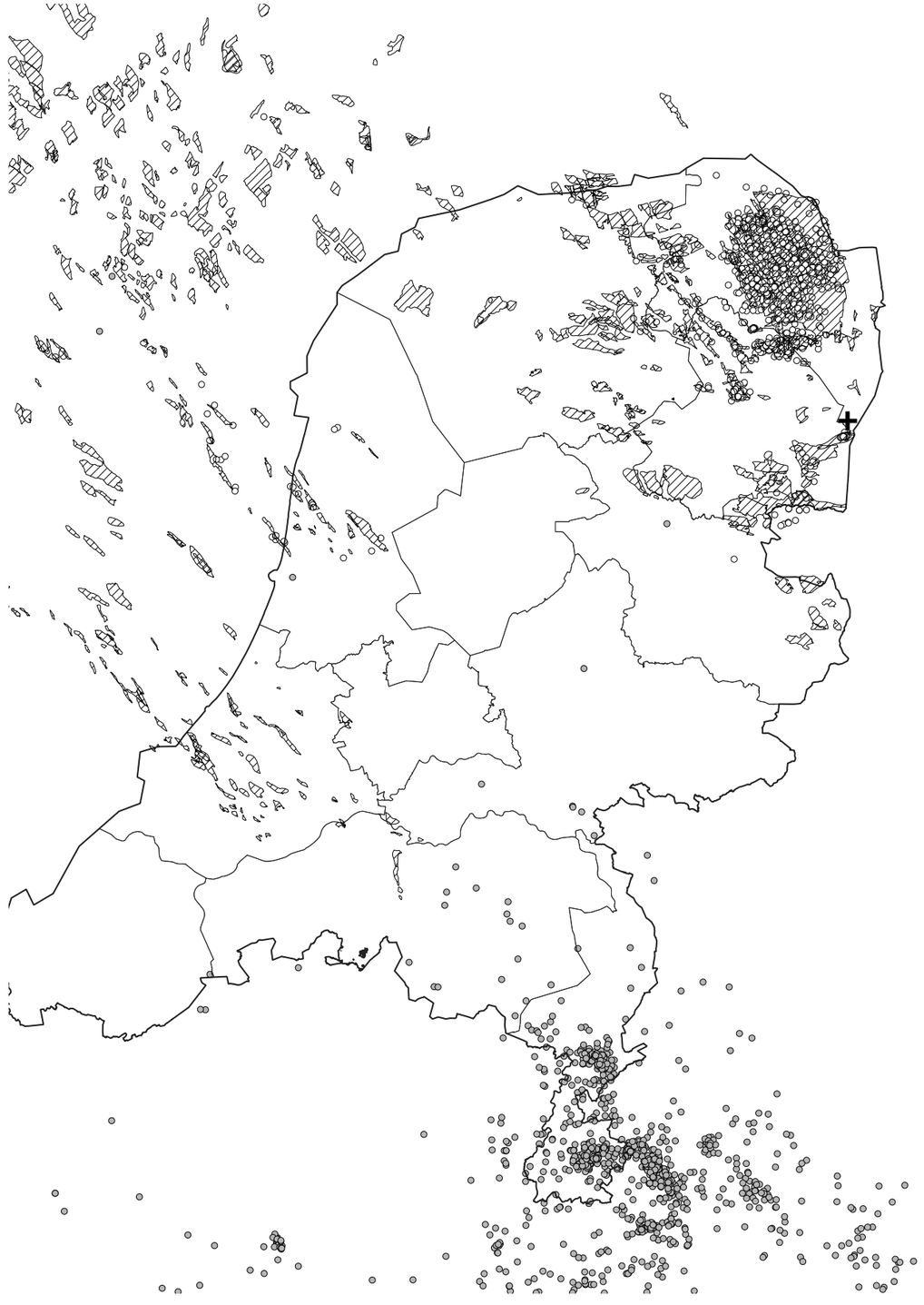
01 GROUP ANALYSIS

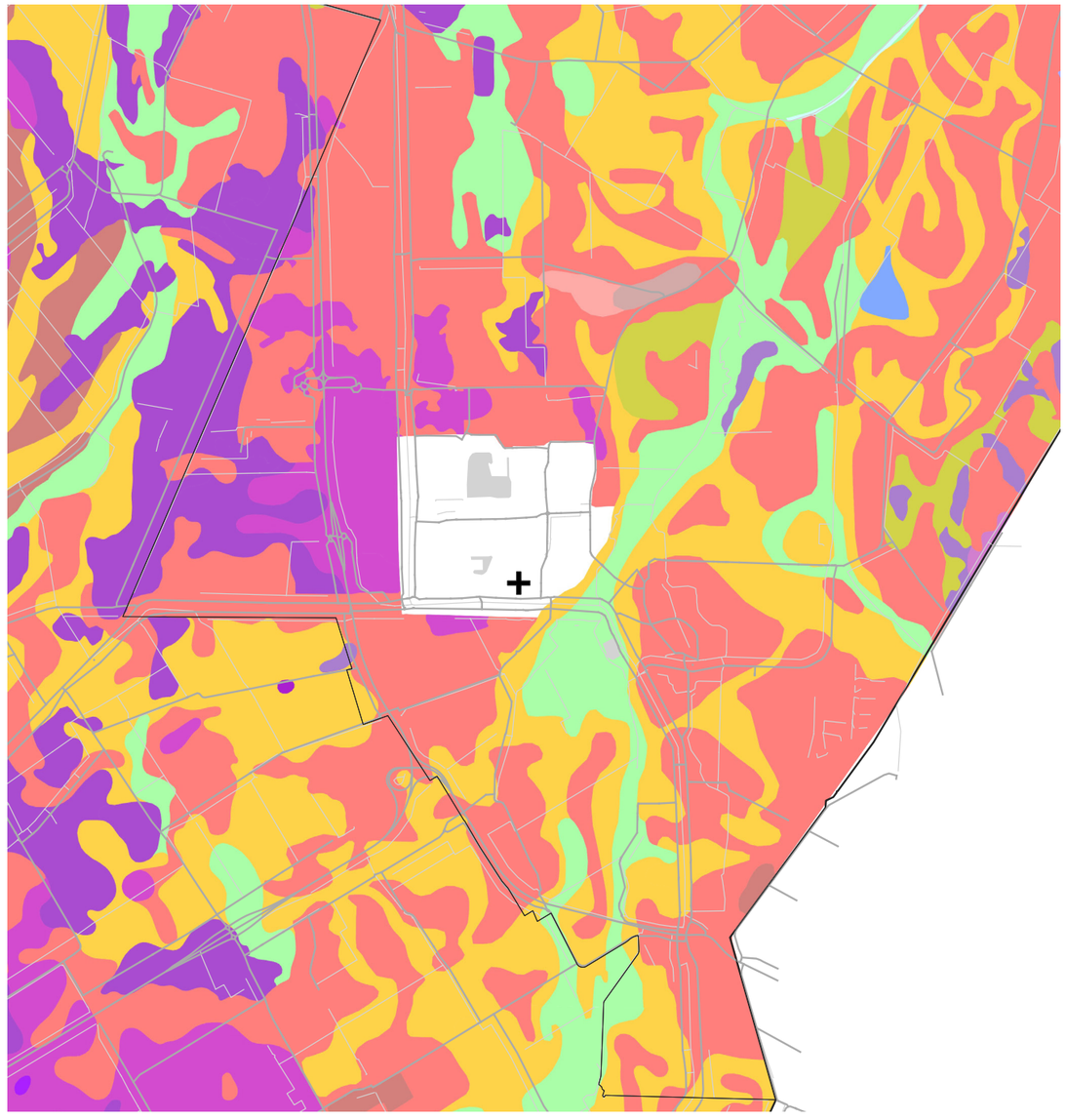
Map of extracting gas:
earthquakes, gasfields

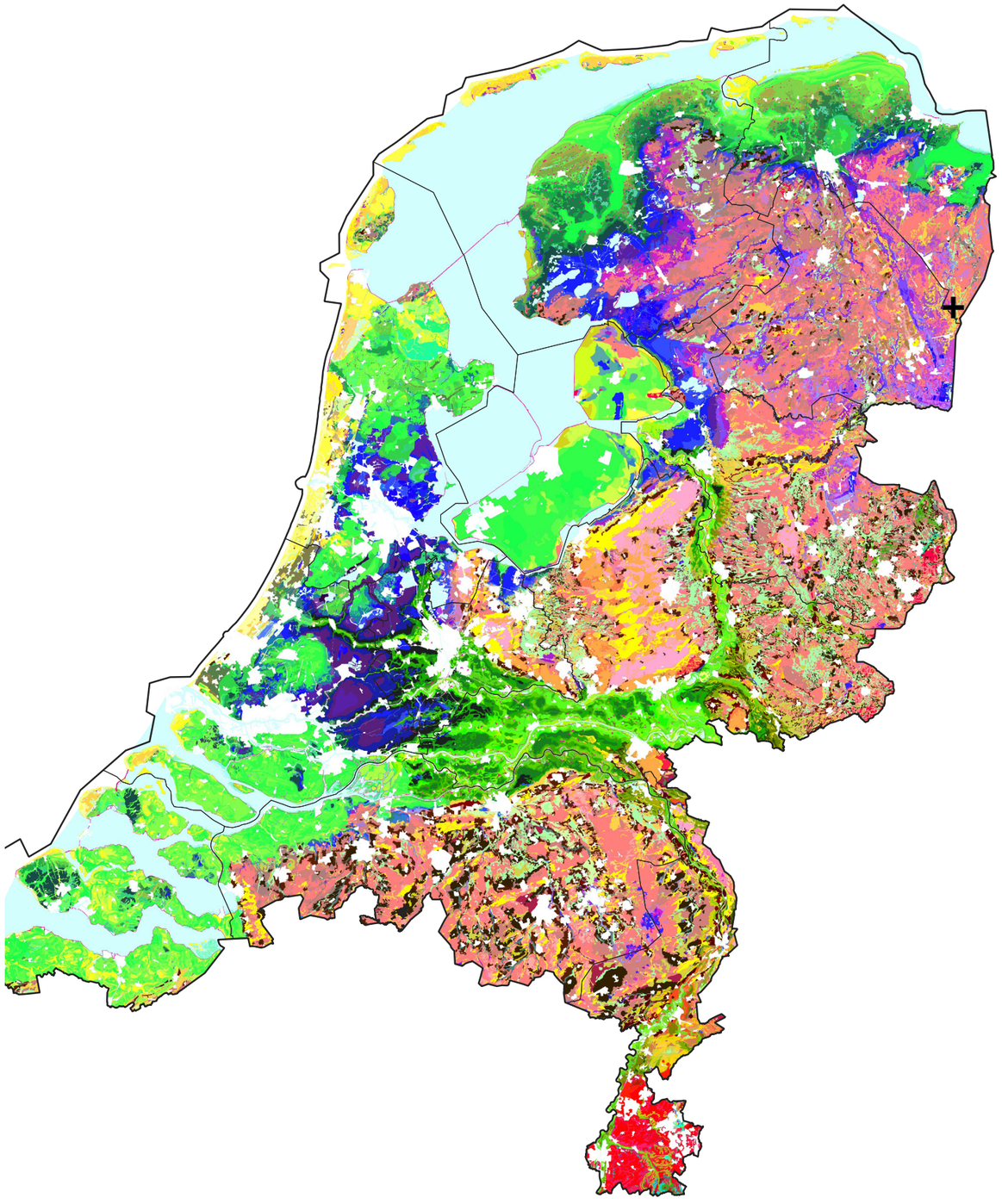




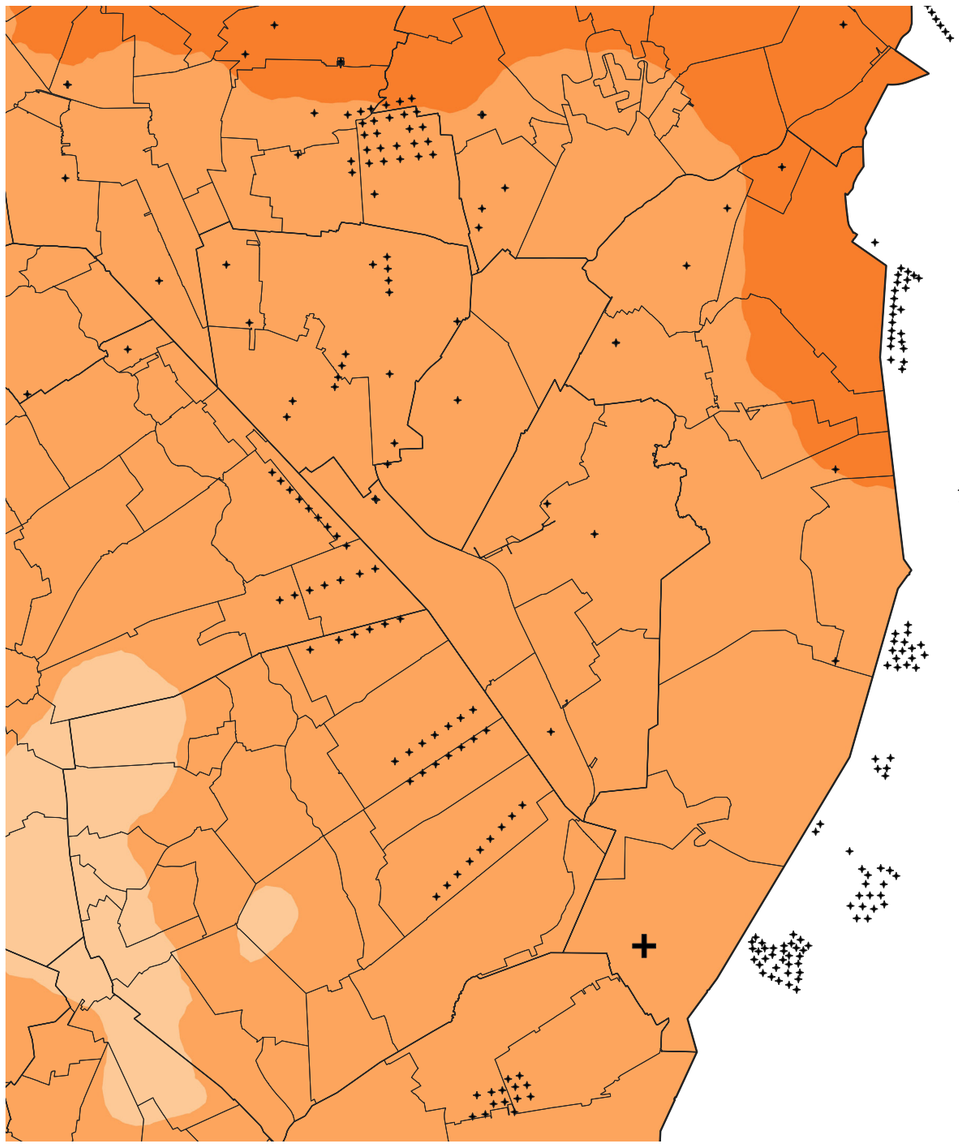
Soil types

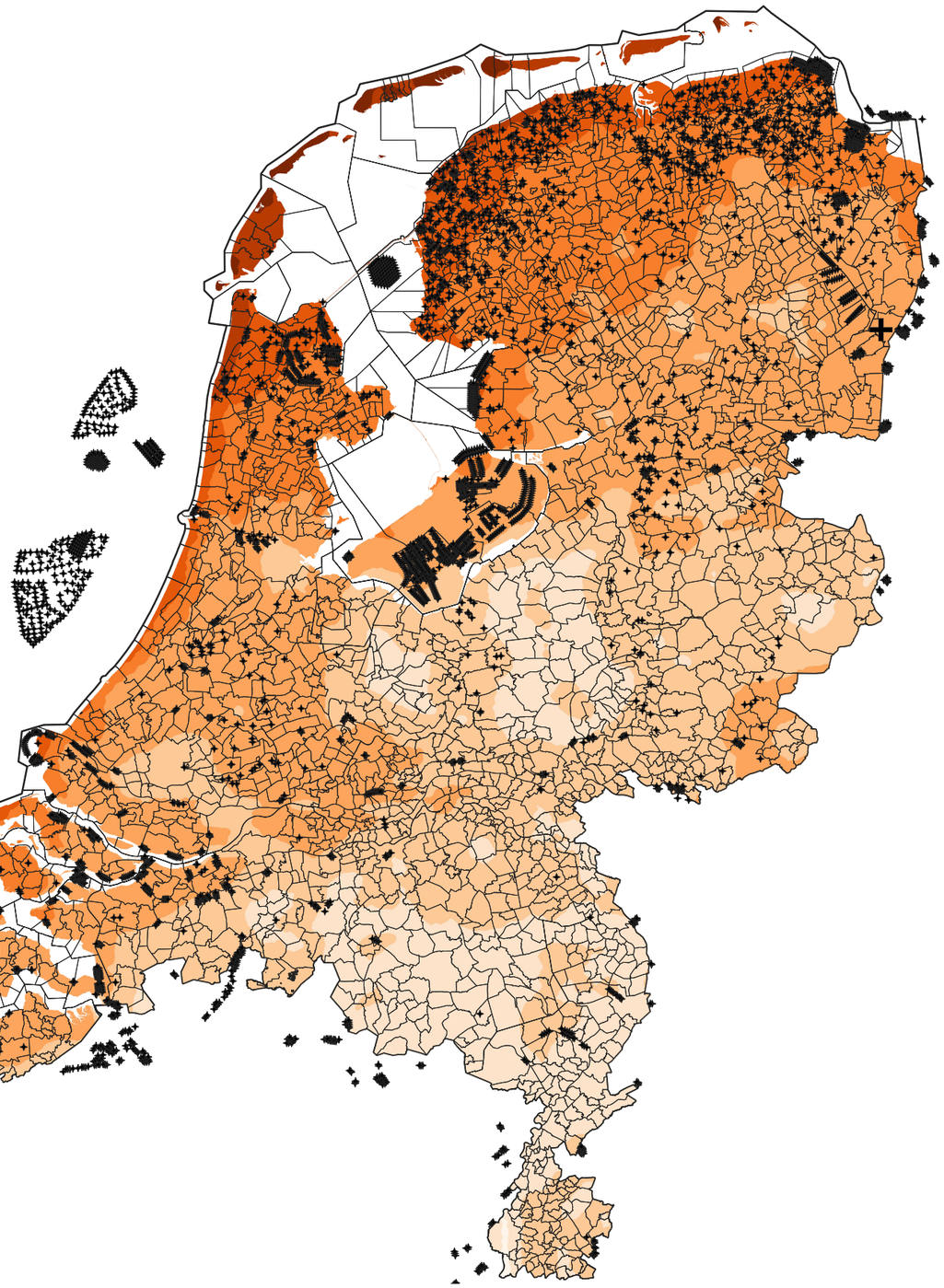
Ter Apel | Countrywide





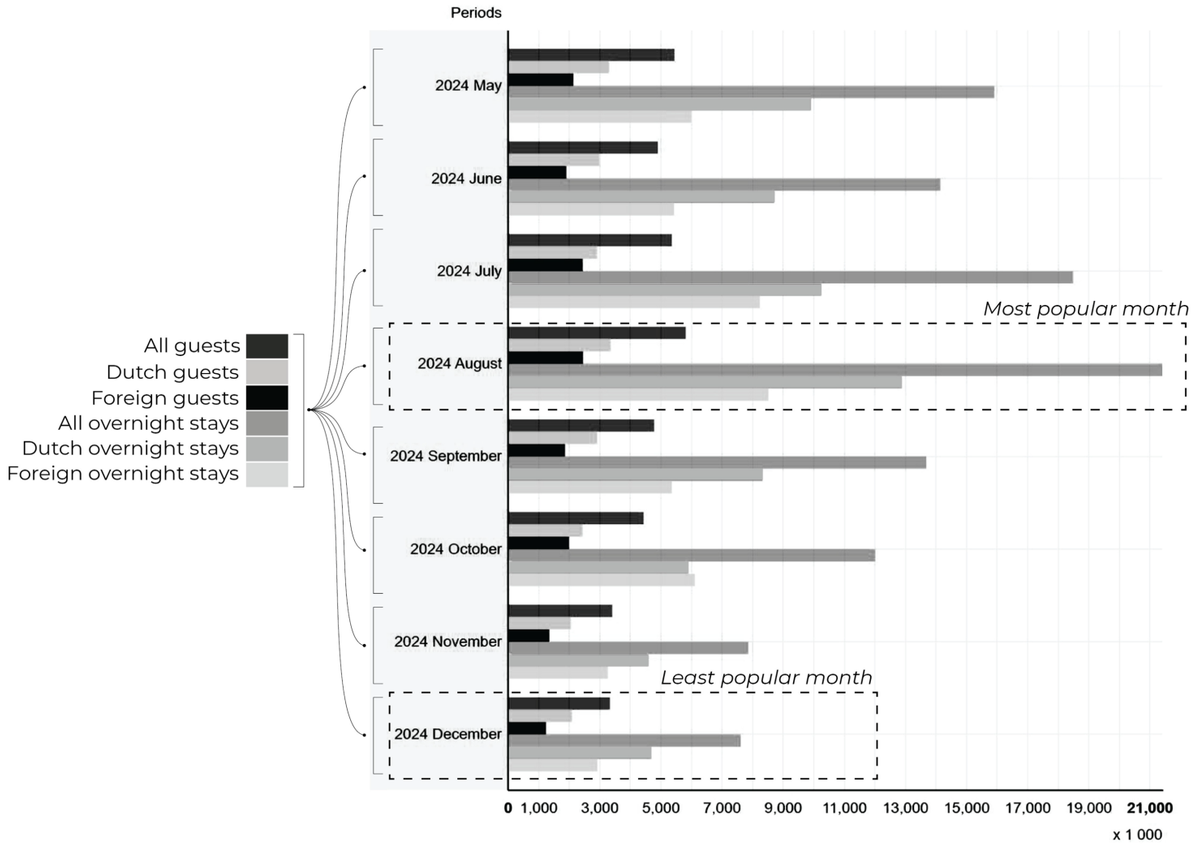
Windturbines:
Durable energy, Westerwolde



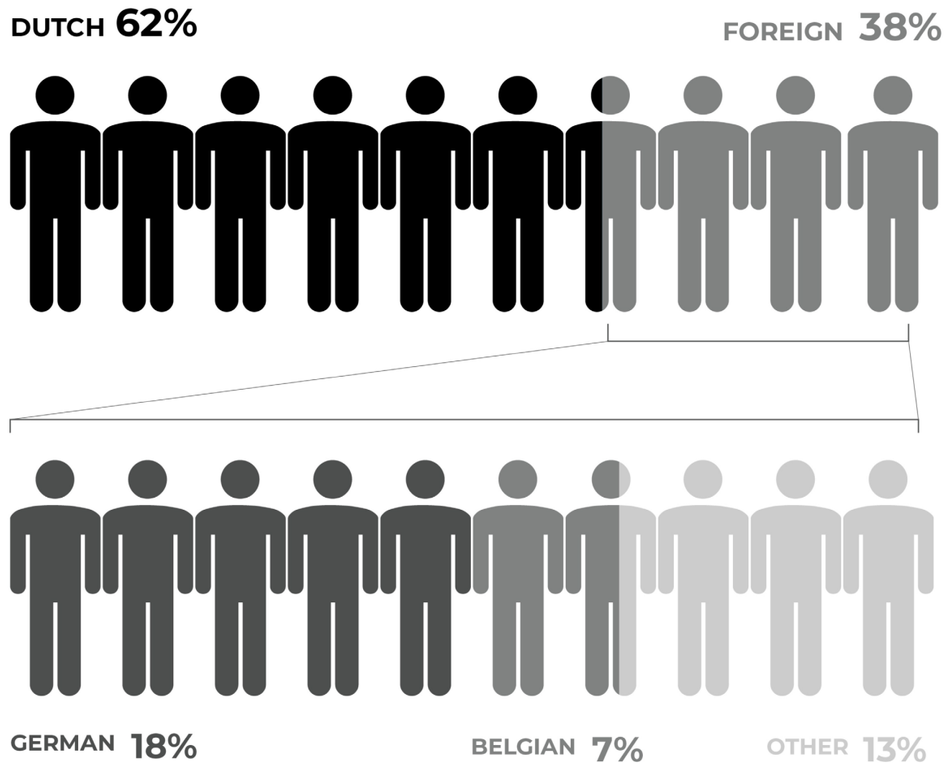


Tourist structure
Netherlands

Total overnight guests/accommodation in the whole Netherlasnds - per month



Origin: *overnight guests in the Groningen province - 2024*



Ambiance squencing:
Ter Apel, Groningen



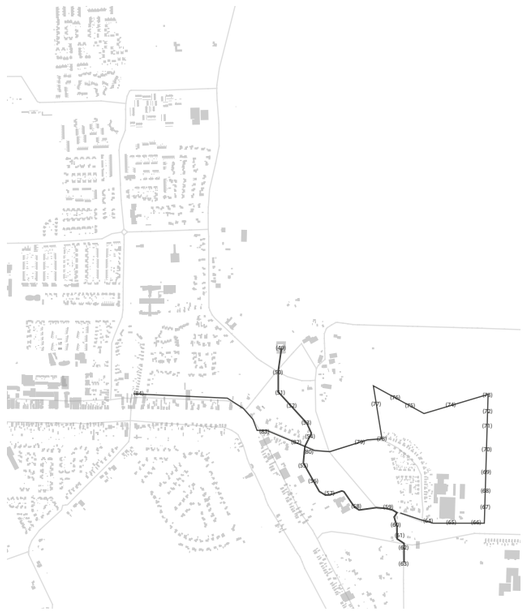








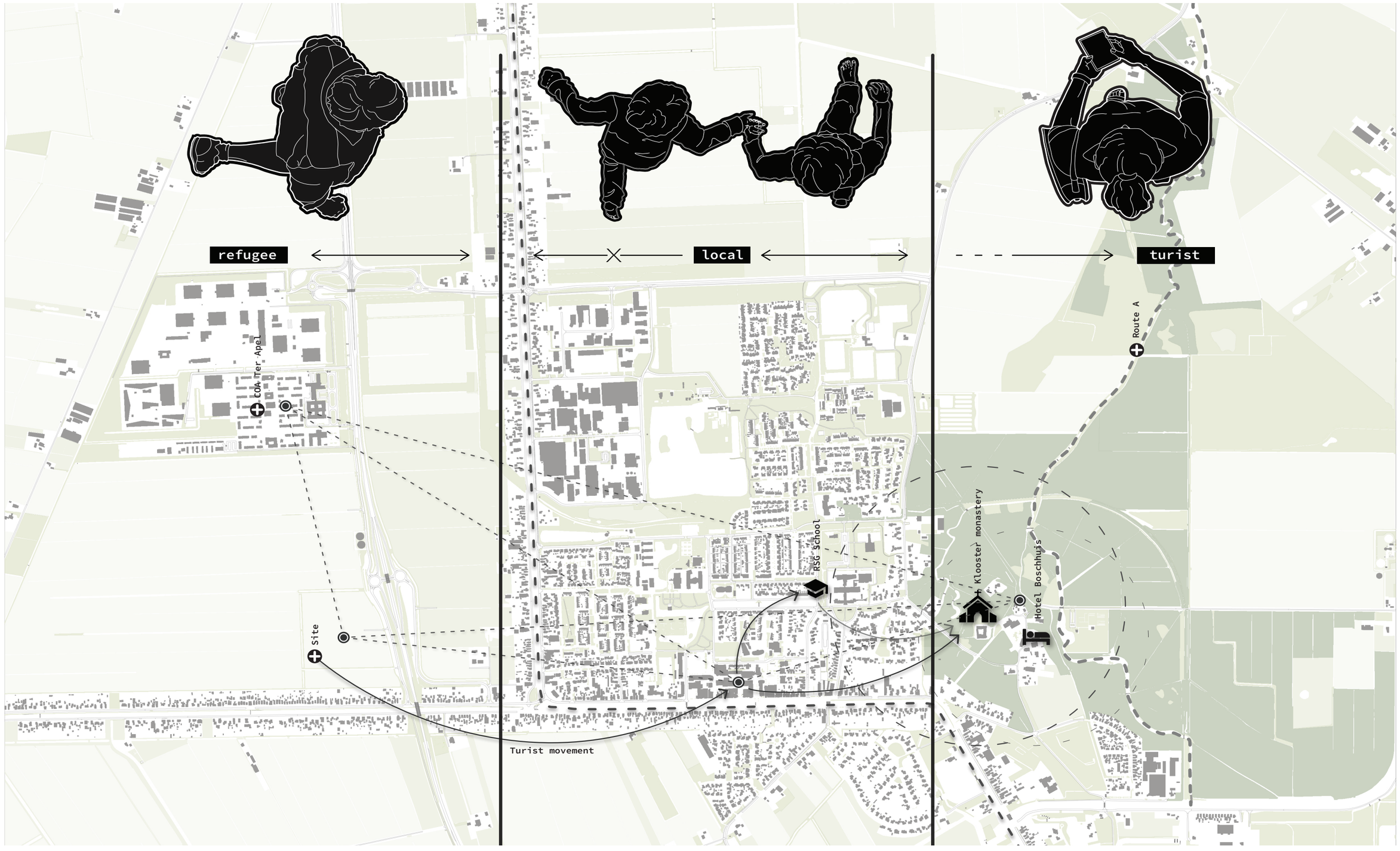






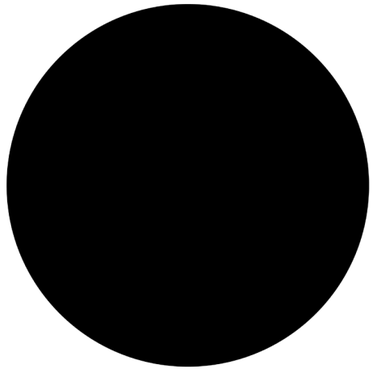


Ambiance distinction
Ter Apel, Groningen



Pollution:
Particular matter in kiloton

The Netherlands
13,4 kiloton pollution



agriculture
0,6 kiloton

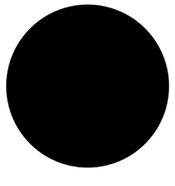


industry
3,5 kiloton



elektricity
0,1 kiloton

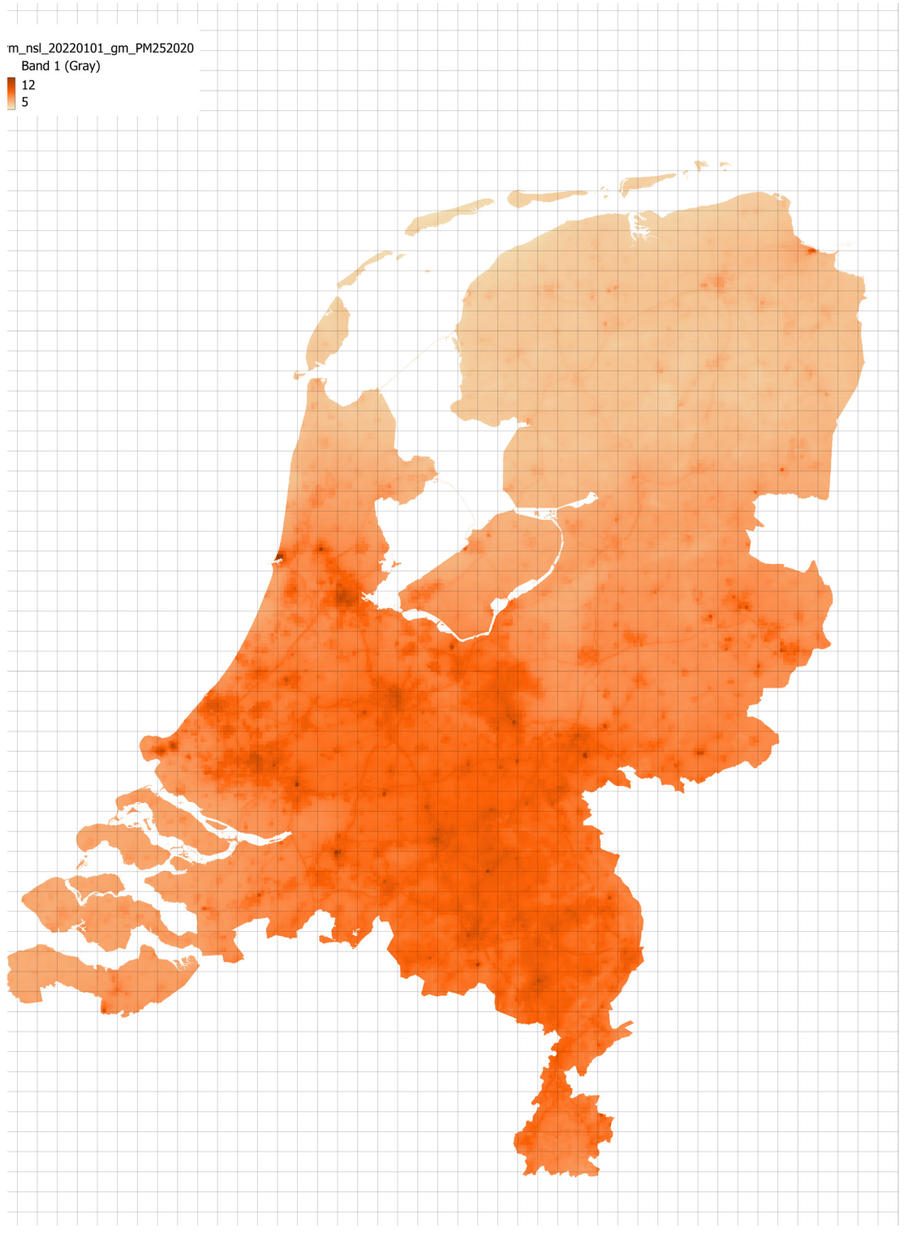
built environment
6,0 kiloton



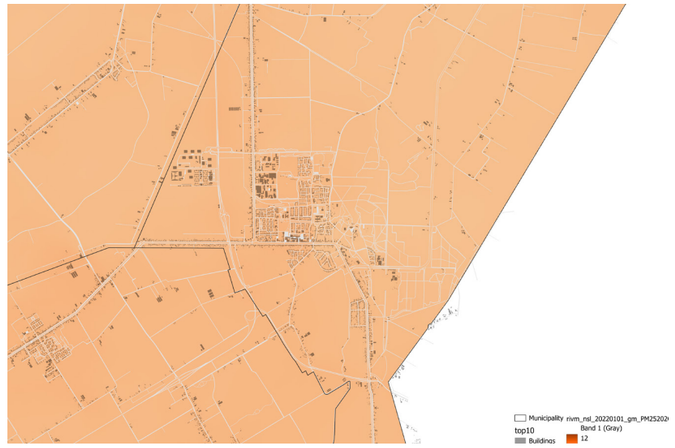
mobility
3,2 kiloton



The Netherlands

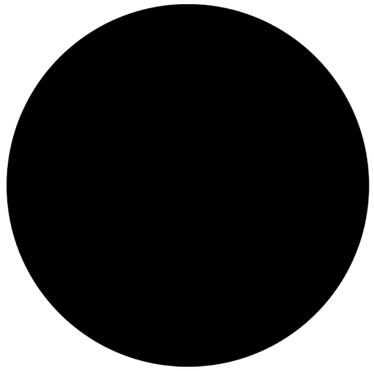


Ter Apel



Air pollution
Nitrogen in kiloton

The Netherlands
151 kiloton pollution



agriculture
4 kiloton

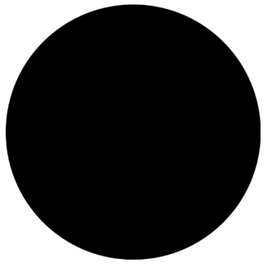
industry
27 kiloton



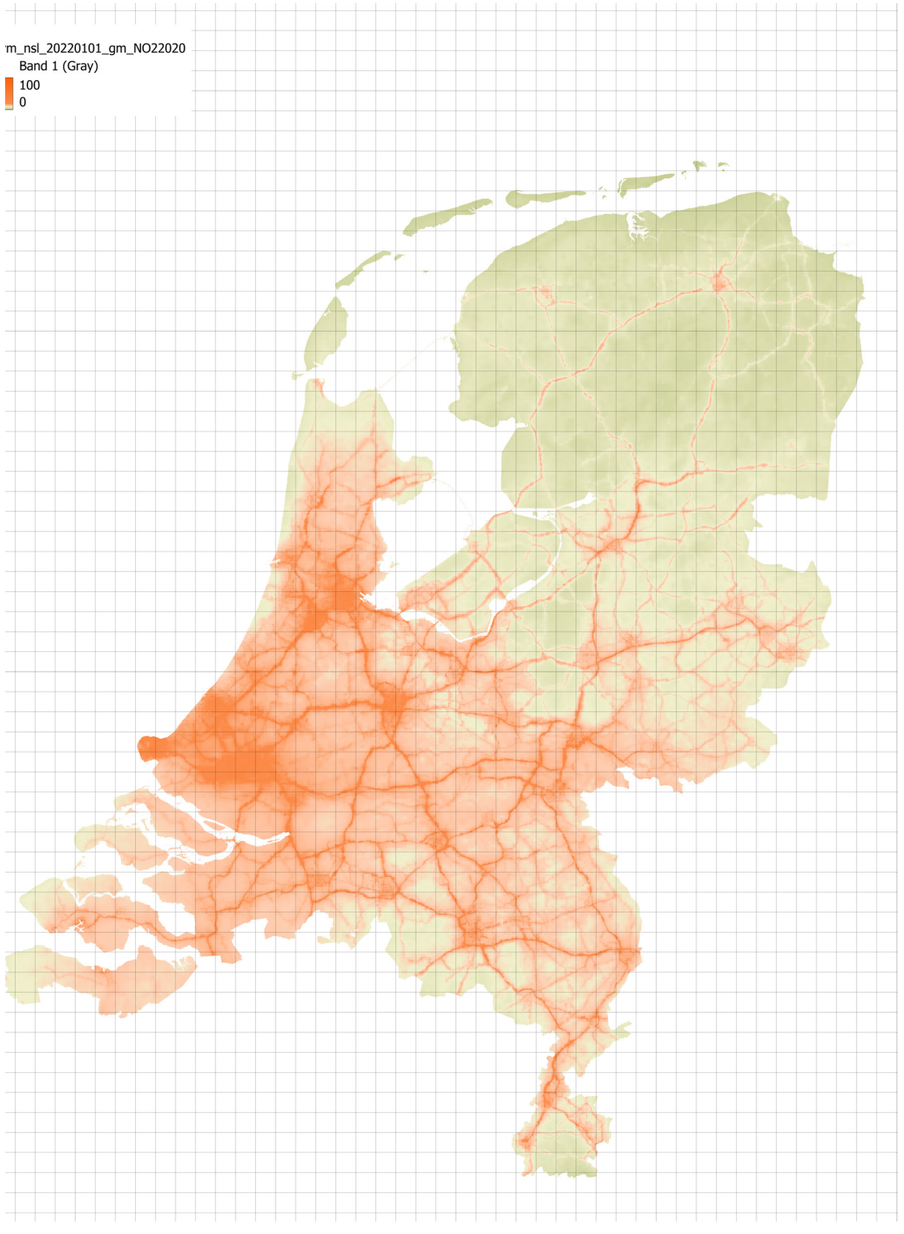
elektricity
7 kiloton

built environment
7 kiloton

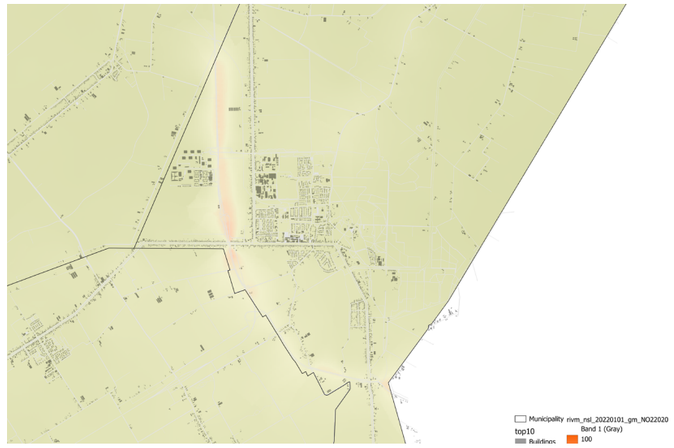
mobility
106 kiloton



The Netherlands

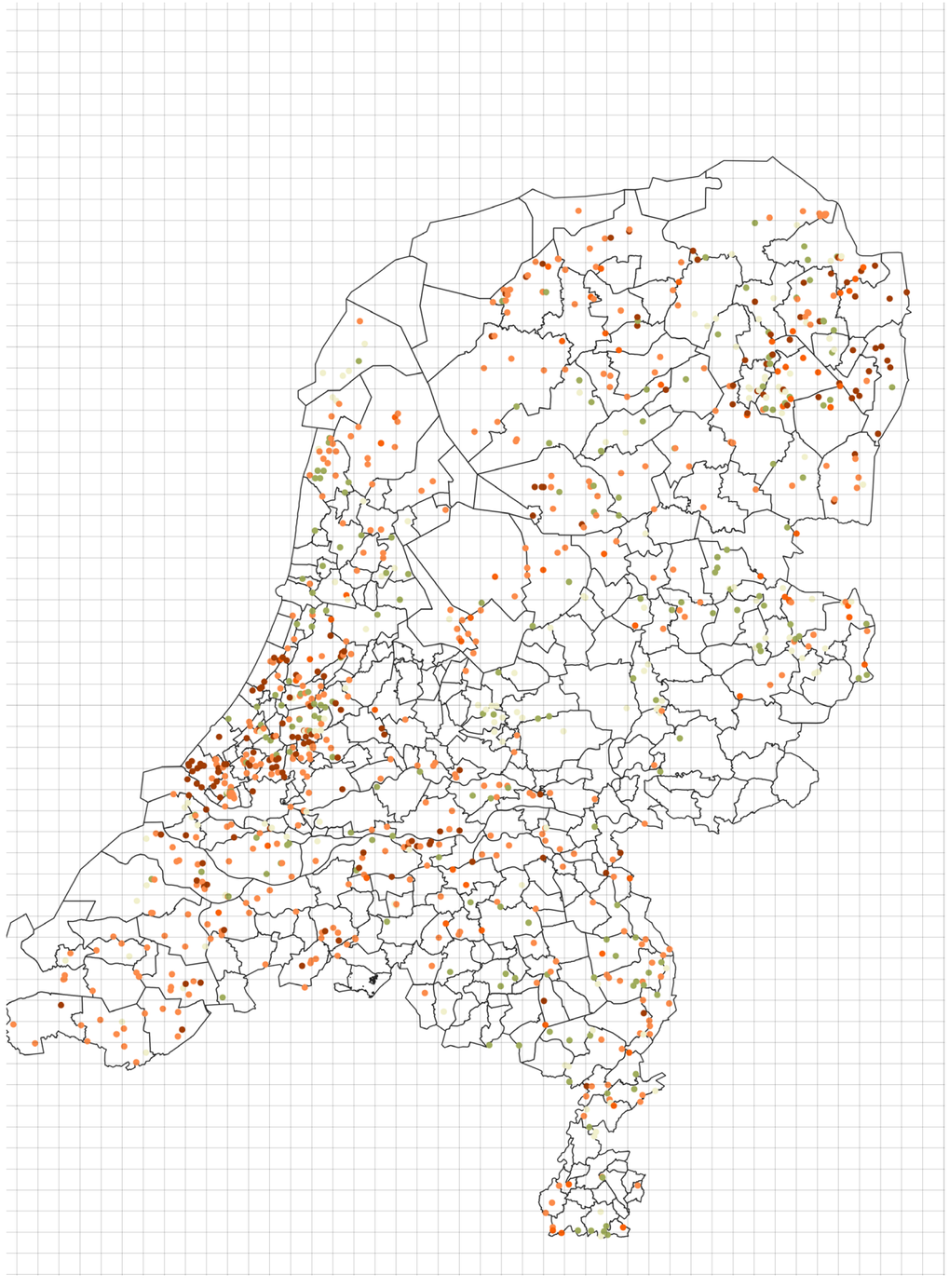


Ter Apel



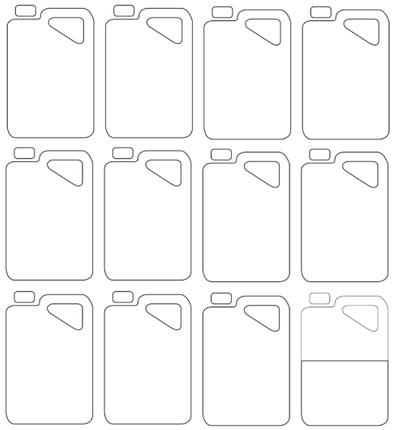
Water pollution:
Toxic pressure by pesticides





Air pollution
Ammonia in kiloton

114 kiloton pollution



agriculture
103 kiloton



industry
2 kiloton



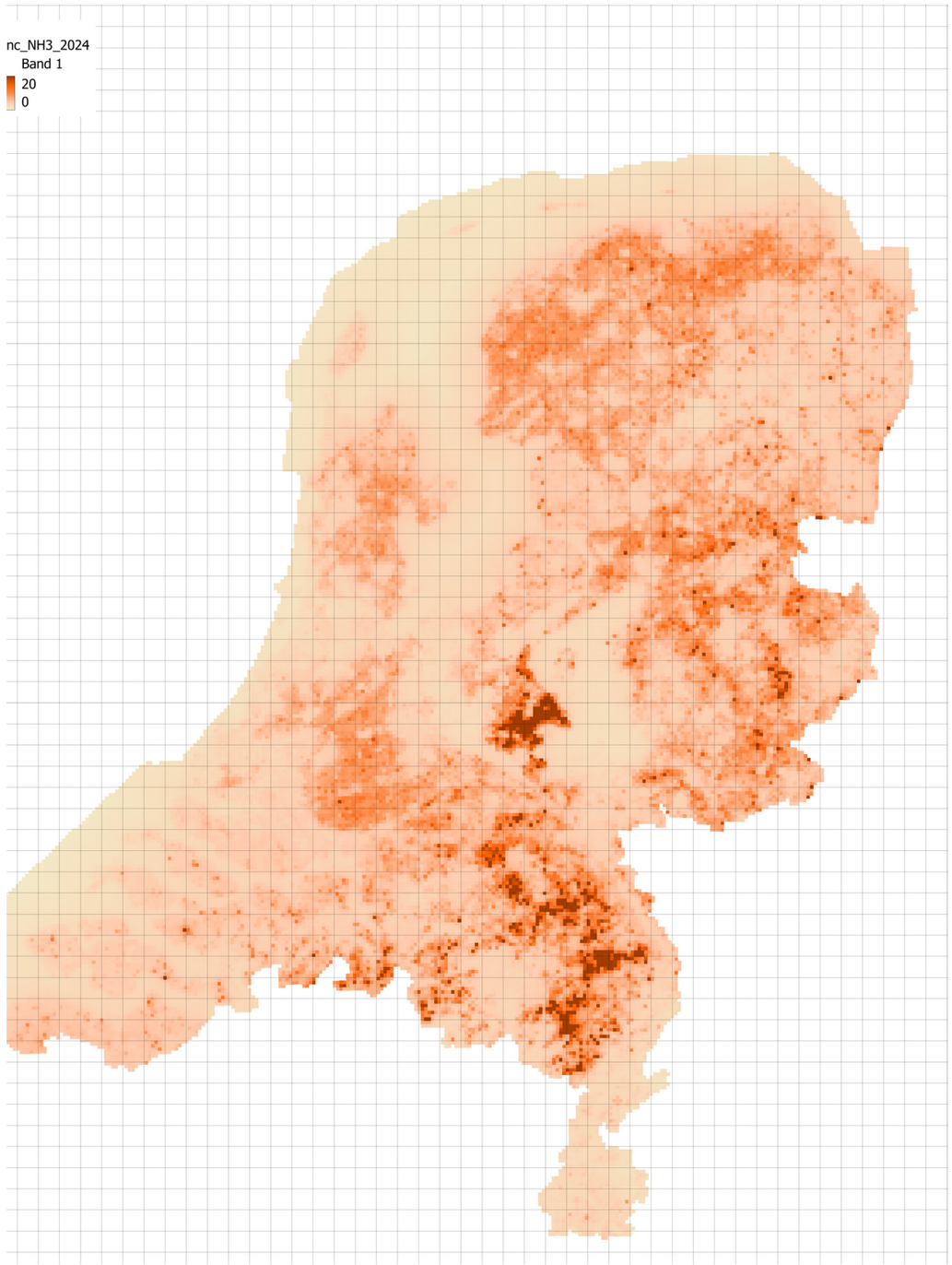
elektricity
0 kiloton

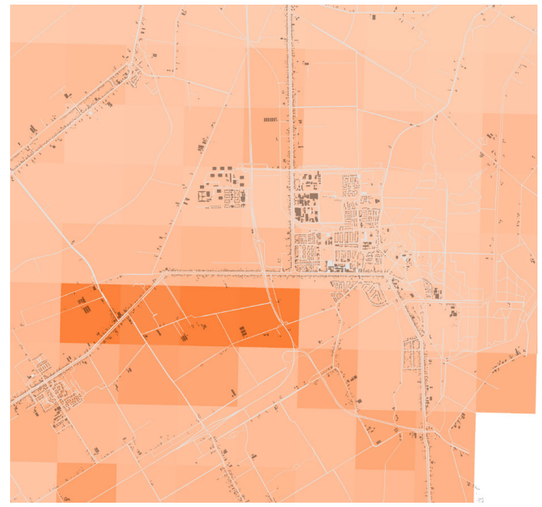
built environment
5 kiloton



mobility
4 kiloton





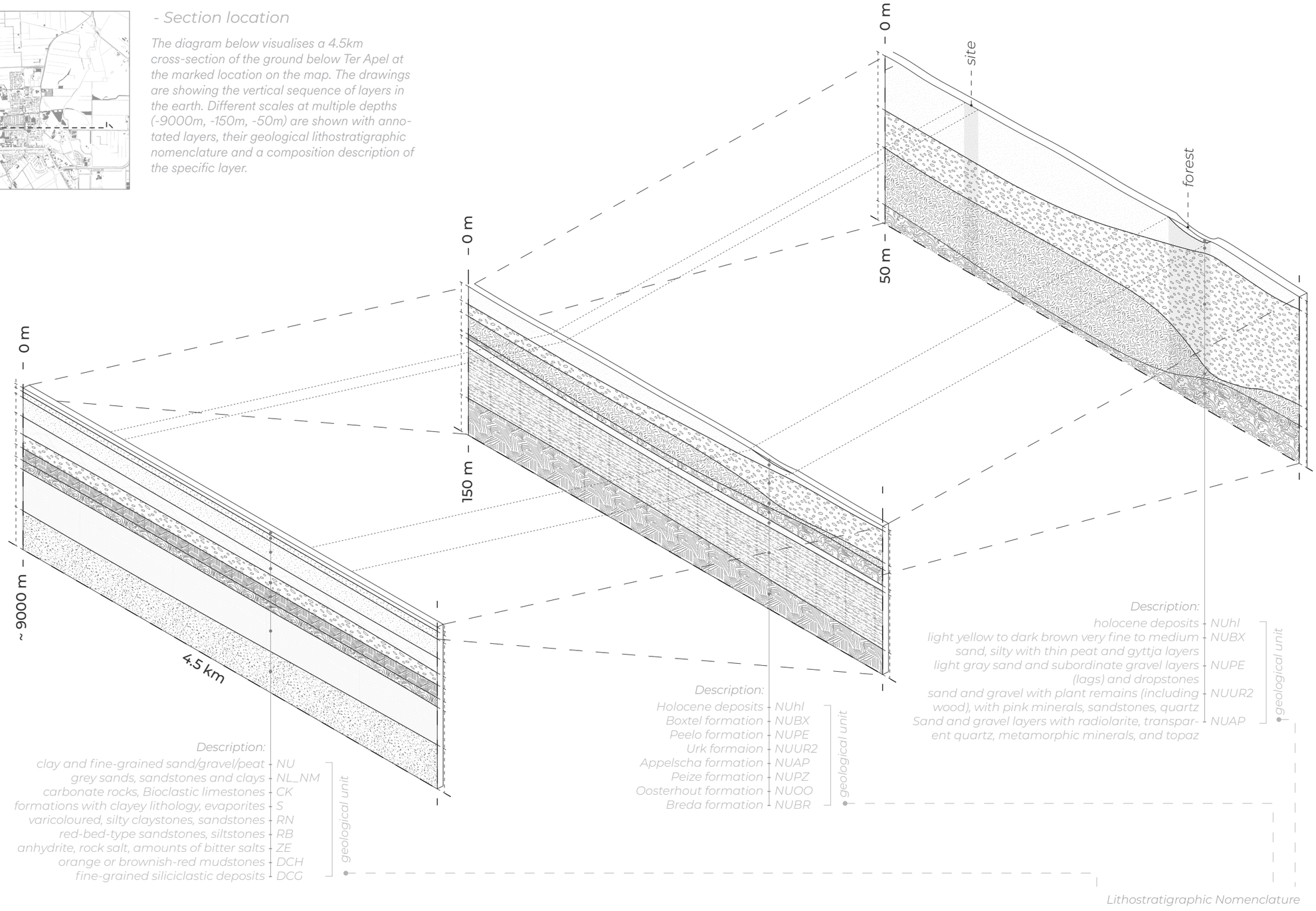


Earth geology:
Ter Apel, Groningem



- Section location

The diagram below visualises a 4.5km cross-section of the ground below Ter Apel at the marked location on the map. The drawings are showing the vertical sequence of layers in the earth. Different scales at multiple depths (-9000m, -150m, -50m) are shown with annotated layers, their geological lithostratigraphic nomenclature and a composition description of the specific layer.



TNO-GDN ([YEAR]). Upper North Sea Group. In: Stratigraphic Nomenclature of the Netherlands, TNO – Geological Survey of the Netherlands. Accessed on [DATE] from https://www.dinoloket.nl/en/stratigraphic-nomenclature/upper-north-sea-group.

Soil Geology
Ter Apel, Groningen

NUhl

- *Holocene deposits*

Holocene deposits are layers of sediment whose composition varies widely, from fine sands and silts to coarse gravels, often containing plant fossils, wood, shells, and archaeological traces.medium sand with granule lags. Palaeosols.

NUBX

- *Boxtel formation*

Light yellow to dark brown very fine to medium sand, silty. Greyish brown to dark grey loam, sandy. Thin peat and gyttja layers, commonly sandy, partly detritic. Locally, fine to medium sand with granule lags.

NUPE

- *Peelo formation*

Light grey, yellowish grey and brownish grey very fine to very coarse sand, micaceous, slightly calcareous, with subordinate gravel layers (lags) and dropstones. Grey to black or brownish black clay, (very) firm, silty or sandy, commonly calcareous, with local shells.medium sand with granule lags..

NUUR2

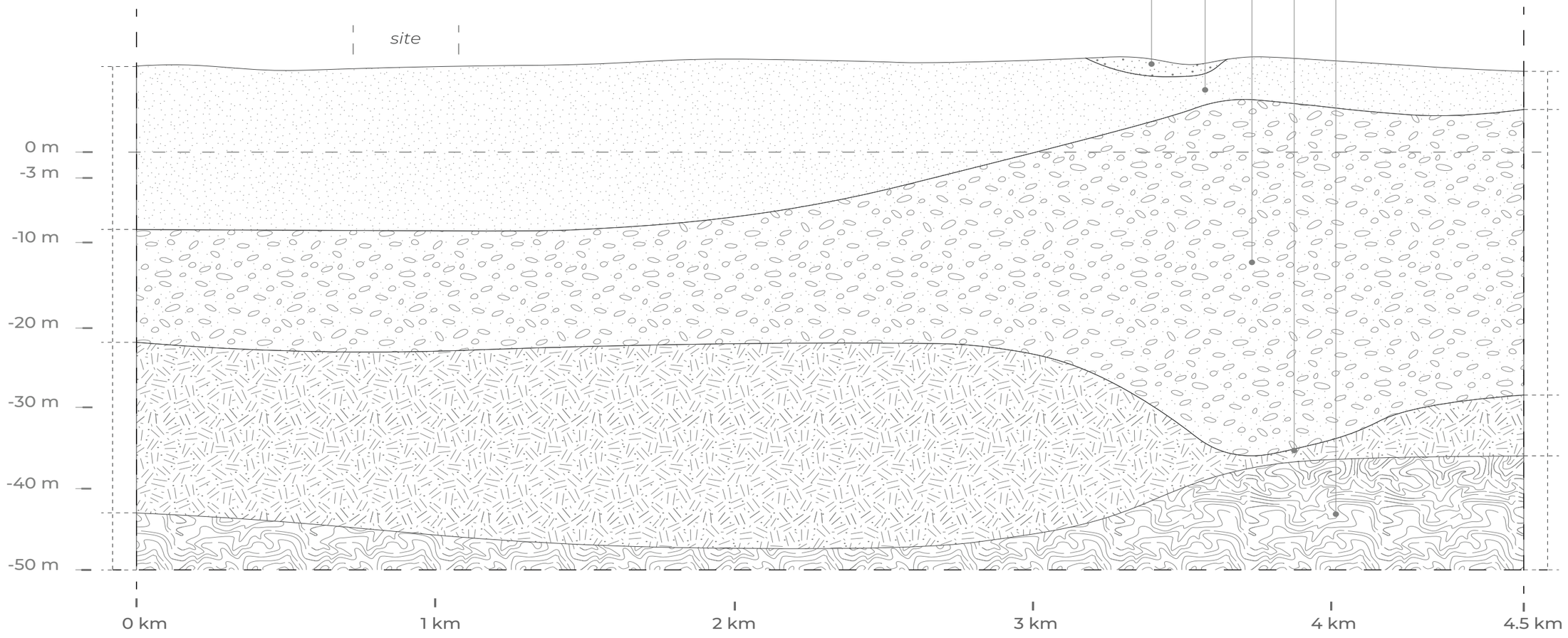
- *Urk formaion*

Grey to yellowish brown, fine to very coarse sand, slightly gravelly, slightly micaceous, non-calcareous (in ice-pushed ridges) to calcareous, with plant remains (including wood), with augite and abundant pink minerals. Subordinate clay layers, very sandy or silty and locally organic and red sandstones and white quartz.

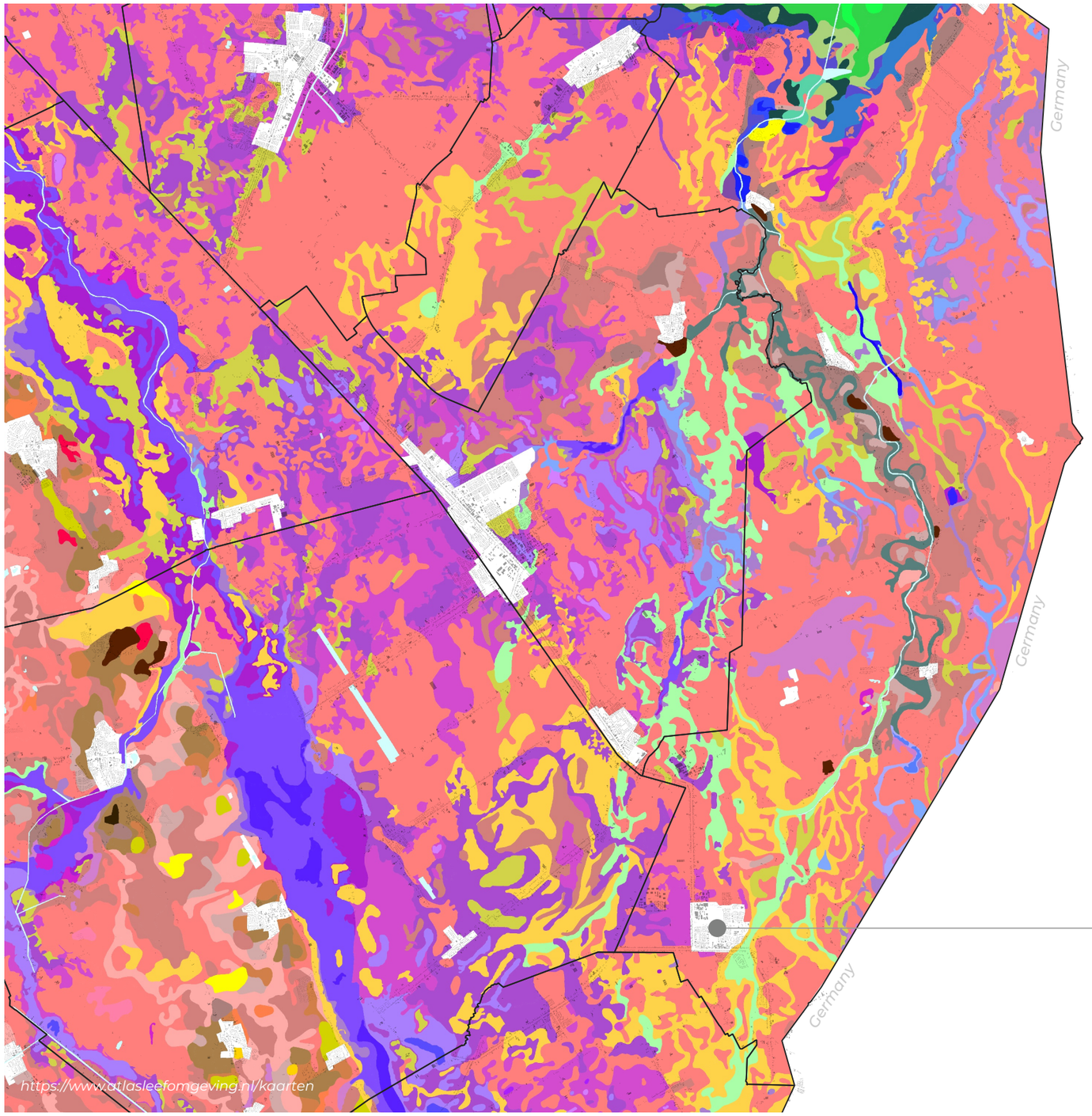
NUAP

- *Appelscha formation*

Light grey to light yellow fine to very coarse sand, non-calcareous, gravelly. Subordinate fine to very coarse gravel characterized by porphyry, lydite, radiolarite and transparent quartz. Small percentages of tourmaline and other metamorphic minerals, as well as topaz.



Soil Types
Ter Apel, Groningen



Soil code

Tep Apel

Peat
- Peaty podzol soils with a peat colony cover and a peat interlayer — iWz
- Peat-rich soils with a peat colony cover and interlayer on sand — iWp
- Field podzol soils; loamy and weak loamy fine sand — Hn21
- Beekeerd soils; loamy fine sand — fpZg23
- Gooreerd soils; poor loam and weak loamy fine sand — pZn21
- Gooreerd soils; loamy fine sand — pZn23

Sand
- Peat bogs on sand without humus podzol, <1.2 m — zVzi
- Peaty soils with a loam or clay cover and a peat interlayer on sand — kWz
- Field podzol soils; loamy fine sand — Hn23
- Elderberry peat soils on sand without humus podzol, <1.2 m — Vz
- Hoge zwarte enkeerdgronden; leemarm en zwak lemig fijn zand — zEZ21
- Calcareous polder soils; heavy clay, profile gradient 5 — Mn45A

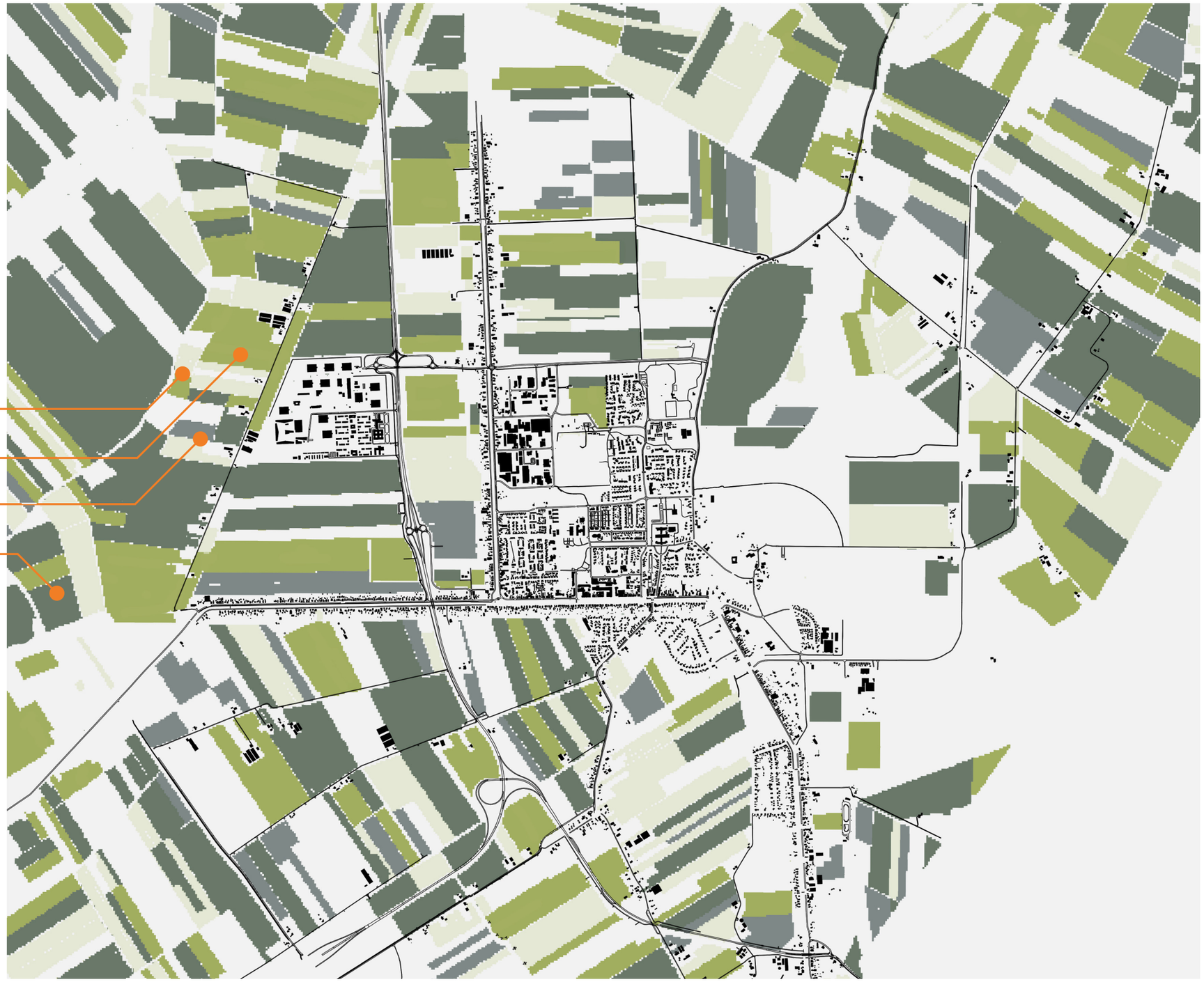
Agricultural land use
Ter Apel, Groningen

Wheat/Cereals -

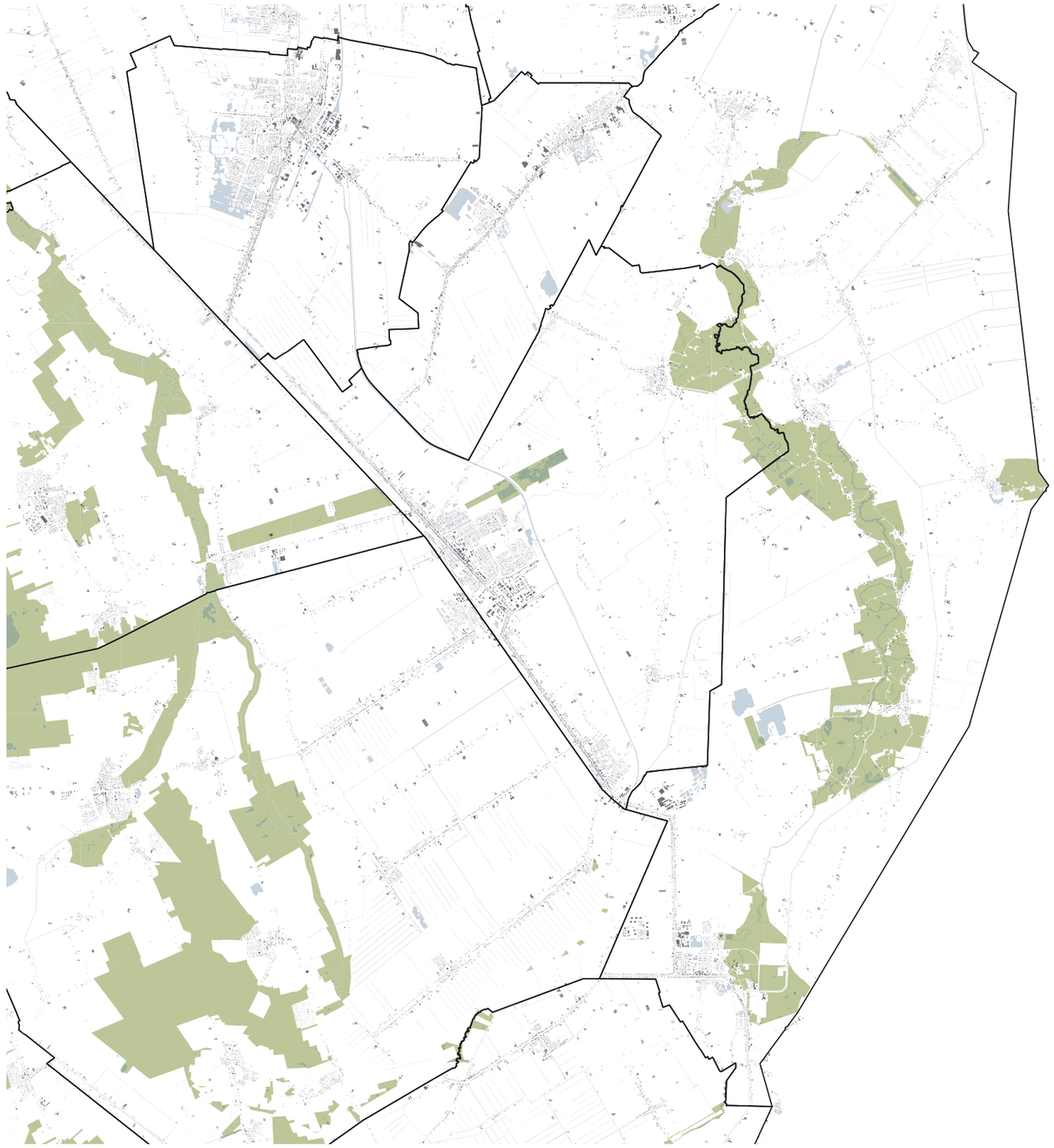
Beet -

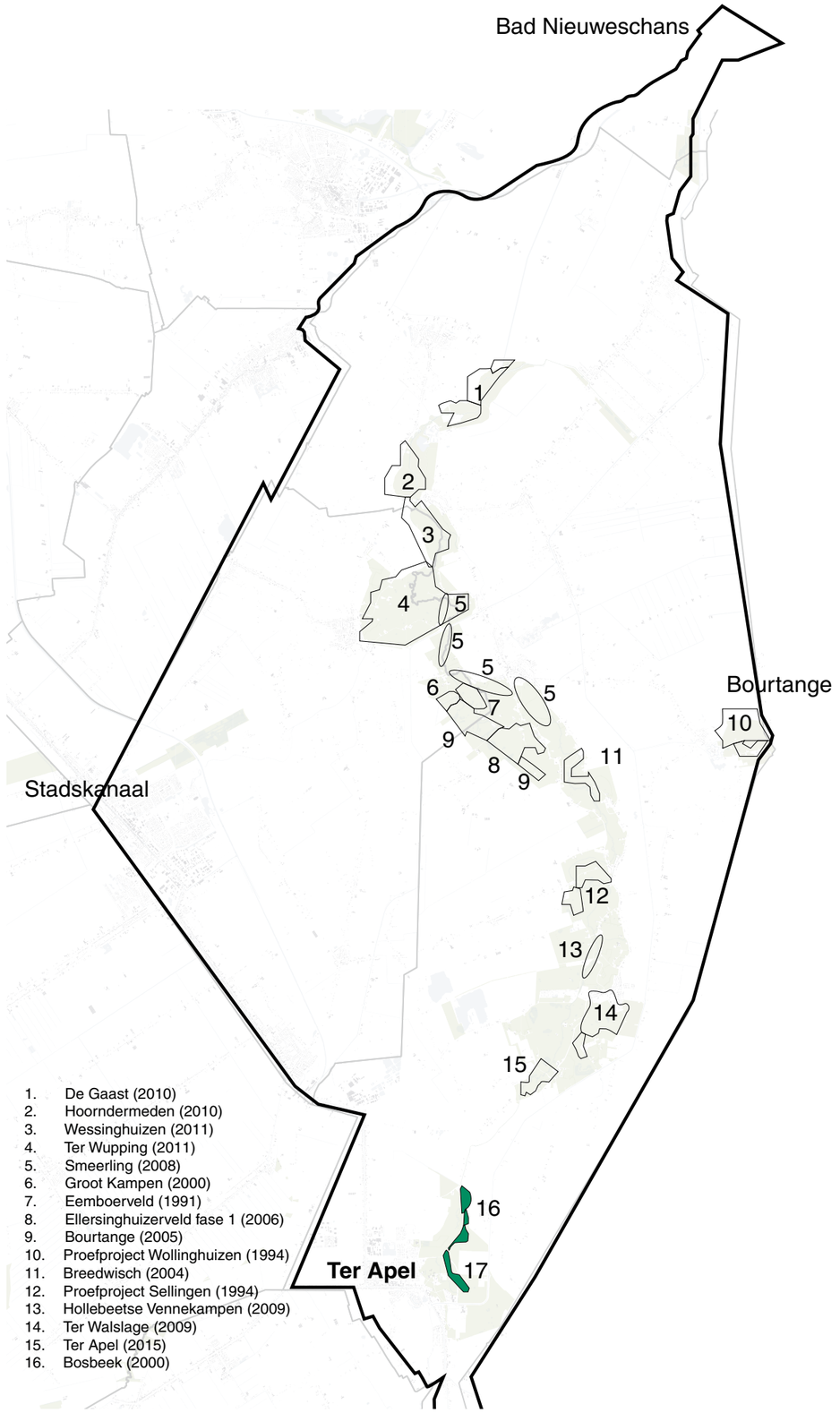
Corn -

Potatos -



Forests | Natuurnetwerk
Westerwolde, Groningen

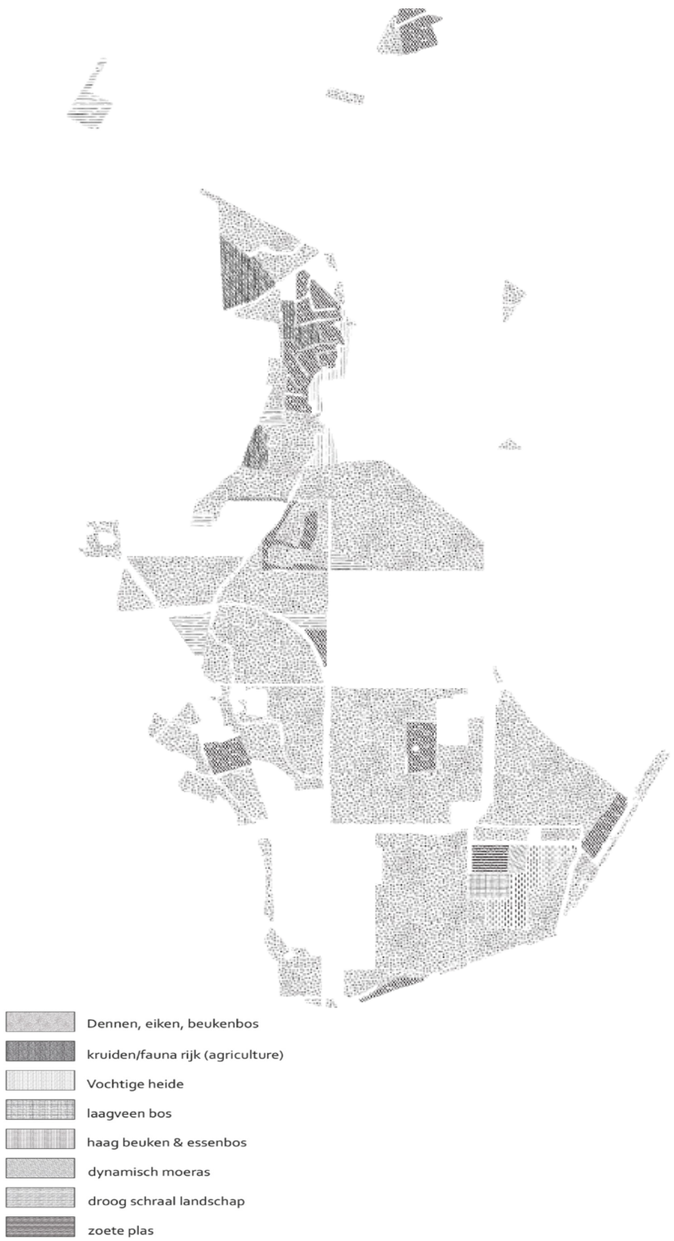




1. De Gaast (2010)
2. Hoorndermeden (2010)
3. Wessinghuizen (2011)
4. Ter Wupping (2011)
5. Smeerling (2008)
6. Groot Kampen (2000)
7. Eemboerveld (1991)
8. Ellersinghuizerveld fase 1 (2006)
9. Bourtange (2005)
10. Proefproject Wollinghuizen (1994)
11. Breedwisch (2004)
12. Proefproject Sellingen (1994)
13. Hollebeetse Vennekampen (2009)
14. Ter Walslage (2009)
15. Ter Apel (2015)
16. Bosbeek (2000)

Tourist structure
Netherlands

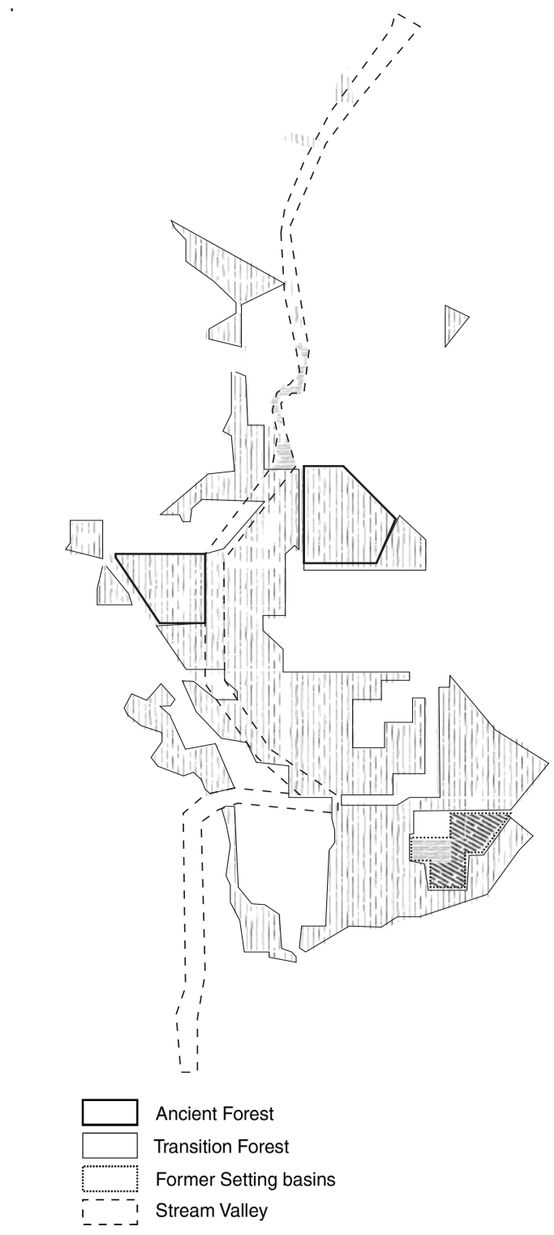
Landscape structuires
Nature target types from the Index Natuur en Landschap



Landscape in beekdal categories
The three beekdal categories



Local Habitat Types & Inventory Areas
Defining the four core micro-habitats:
Ancient Forests, Transition Forests, Stream Valley, Settling Basins,
that inform the specific requirements for species



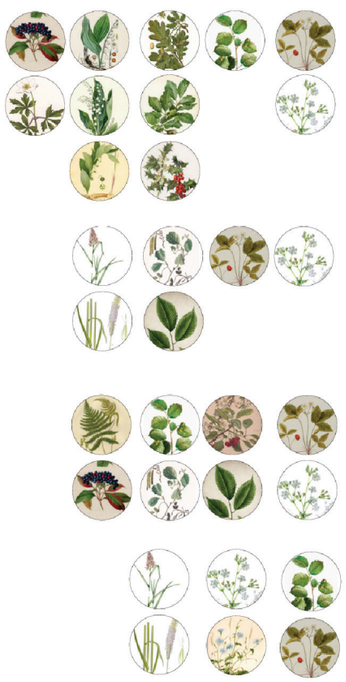
Flora and Fauna:
Ter Apel, Groningen

≈ 970 vascular plant species

Highest species richness concentrated along forest edges restored **wetland areas.**

≈ 60 bird pecies

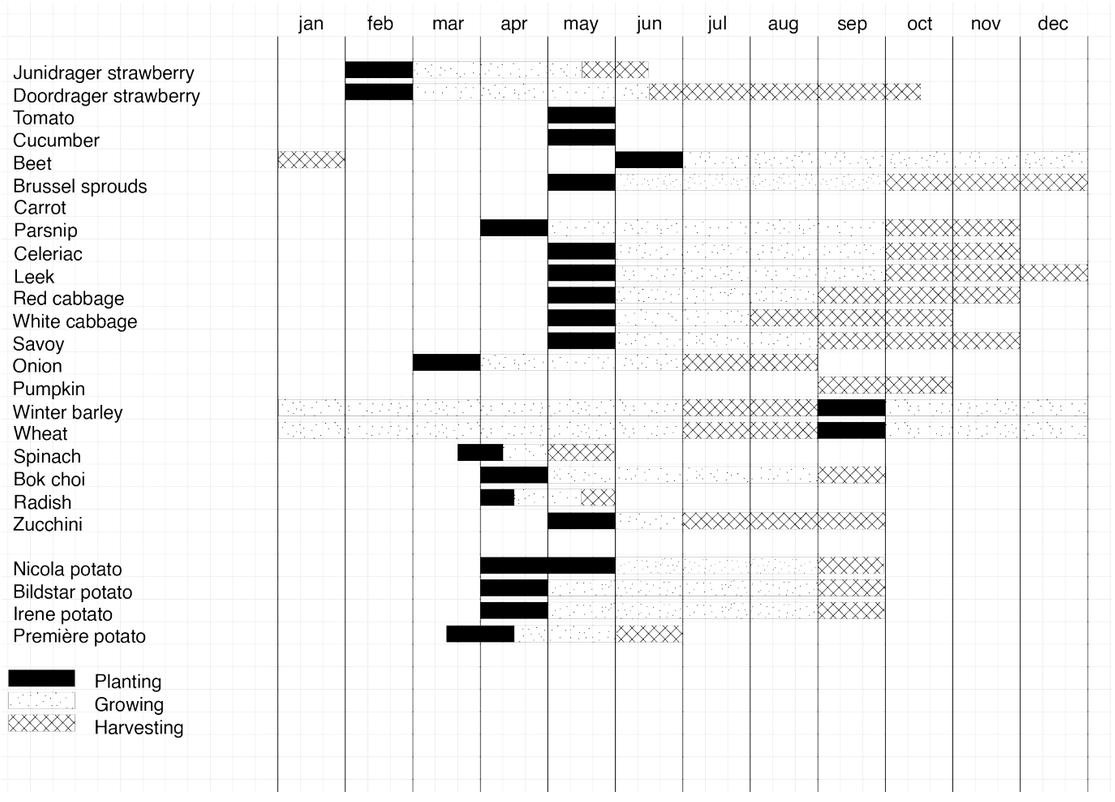
flower-rich zones at the **Ruiten Aa**

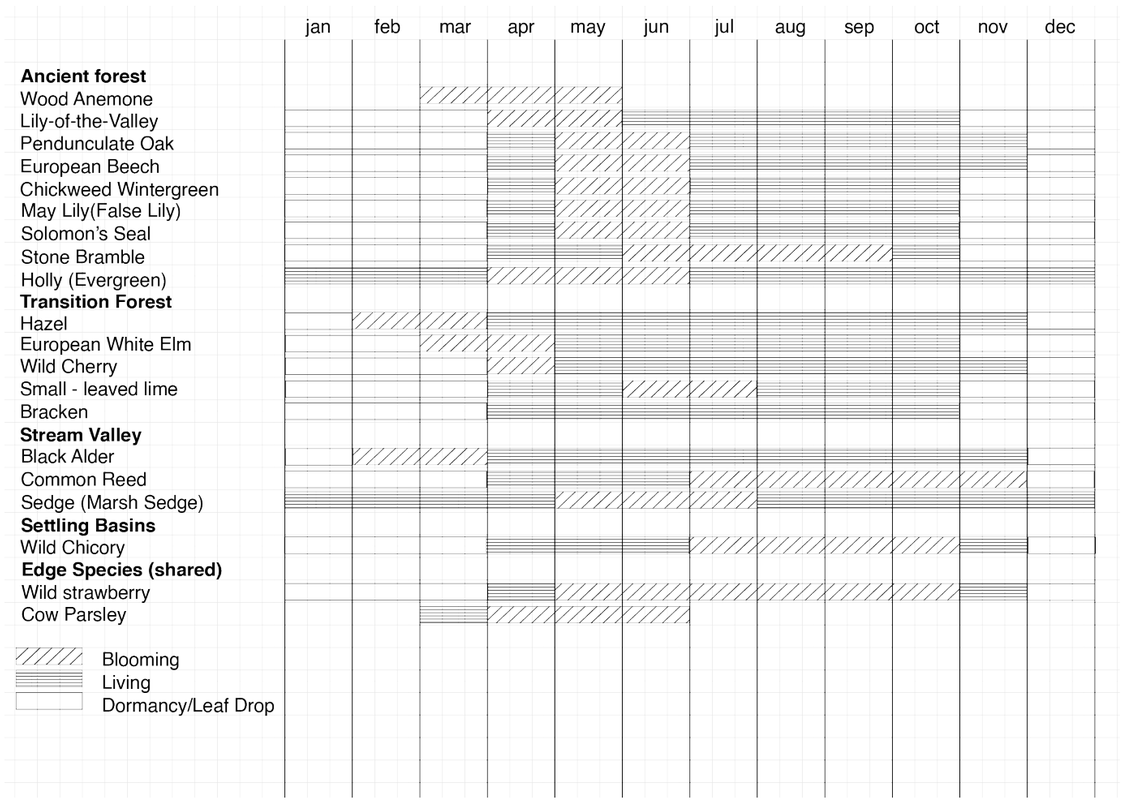






Agriculture | Fauna
Annual planning per type





02 TOURISTIC MAP

RESEARCH AND ANLYSIS CONTEXT

Since the early 1960s, the province of Groningen has undergone extensive natural gas extraction. In 1959, during oil exploration, the Nederlandse Aardolie Maatschappij (NAM) discovered the Groningen gas field, also referred to as the Slochteren field. Gas production began in 1963 and quickly became a cornerstone of the Dutch economy. Revenues generated from natural gas significantly contributed to post-war reconstruction and the development of the welfare state. Within a decade, Groningen gas transformed not only the national energy system but also expanded into European markets. By 1975, gas from Groningen was being exported to Belgium, France, Germany, Italy, and Switzerland.[1]

The exploitation of the Slochteren field brought profound changes to Groningen's physical, social, and economic environment. Infrastructure development and employment opportunities reshaped the region, but these benefits were accompanied by serious drawbacks. One of the most critical consequences has been the occurrence of earthquakes linked to gas extraction. Since production began, more than 1,000 seismic events have been recorded[2]. The connection between extraction activities and seismicity has been extensively studied. In 1993, the Begeleidingscommissie Onderzoek Aardbevingen (BOA) concluded that gas extraction weakens the reservoir and surrounding areas, potentially inducing earthquakes.[3]

As awareness of these risks grew, public perception gradually shifted. Gas extraction, once viewed as an economic asset, increasingly came to be seen as a threat to safety and well-being. This shift intensified after the earthquake in Huizinge on August 16, 2012, which had a magnitude of 3.6. Following this event, the Staatstoezicht op de Mijnen (SodM) warned that stronger earthquakes, potentially reaching magnitudes between 4 and 5, could occur and advised a rapid reduction in gas production.

The year 2013 marked a peak in seismic activity, with 133 earthquakes of magnitude 1.5 or higher, 119 of which occurred in Groningen. That same year, the Dutch Safety Board investigated the decision-making processes surrounding gas extraction. It concluded that, up to 2013, stakeholders had failed to adequately prioritize citizen safety, underestimating both the scale and risks of seismic impacts.[4] Although gas production was subsequently reduced on the advice of SodM, seismic activity in certain areas, such as Loppersum, continued to rise.

In response to growing concerns, a parliamentary inquiry was launched in 2021 to examine the consequences of gas extraction. The inquiry reported over 250,000 claims for physical damage and identified approximately 11,000 homes that remain unsafe. It emphasized the need for comprehensive investment in physical repairs as well as psychological and economic recovery, recognizing that material damage has been closely linked to stress and mental health issues among residents.

In June 2023, the Dutch government announced the termination of gas extraction from the Groningen field by October 1, 2023, with some facilities remaining operational until 2024. On April 19, 2024, legislation was passed to permanently and unconditionally close the gas field. Around this time, the government introduced the Nij Begun initiative, a multi-level program aimed at revitalizing earthquake-affected regions, including Groningen and Drenthe. This initiative combines economic and social strategies, emphasizing not only structural repairs but also broader regional development.

The Nij Begun agenda prioritizes investments in education, labor markets, business development, digitalization, and regional identity. It also focuses on five key sectors: sustainable energy, healthcare, agriculture, industry, and leisure. Funding allocations include €150 million for education, €180 million for commercial development, and €200 million for tourism and leisure.

Historically, Groningen's reliance on gas production led to the neglect of other sectors such as tourism. In contrast, neighboring provinces like Friesland and Drenthe have spent decades developing their tourism industries. Under the Nij Begun framework, tourism is now seen as a key driver for Groningen's future.[5]

[1] Source: *The Rise and Fall of the Dutch Groningen Gas Field, European Gus Hub, https://europeangashub.com/the-rise-and-fall-of-the-dutch-groningen-gasfield.html*

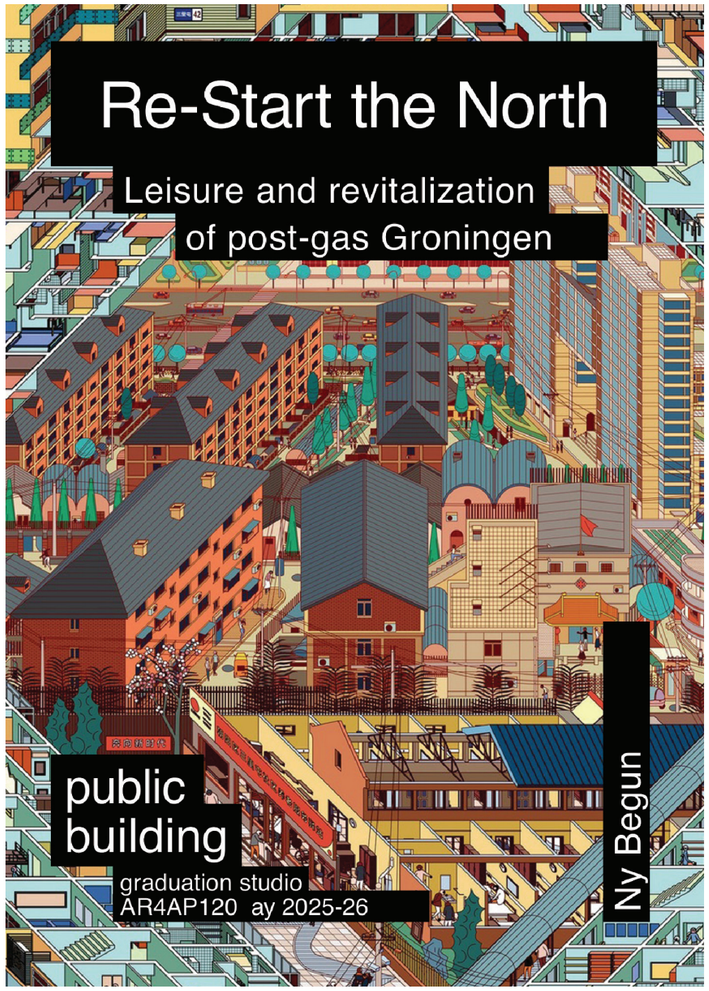
[2] Source: *Nick van der Voort, Frank Vanclay, "Social impacts of earthquakes caused by gas extraction in the Province of Groningen," Environmental Impact Assessment Review, Volume 50, 2015, Pages 1-15, https://doi.org/10.1016/j.eiar.2014.08.008.*

[3] Source: *Begeleidingscommissie Onderzoek Aardbevingen (BOA), Eindrapport multidisciplinair onderzoek naar de relatie tussen gaswinning en aardbevingen in Noord-Nederland, 1993.*

[4] Source: *Dutch Safety Board, Earthquake risk in Groningen. An investigation into the role of safety of citizens during the decision-making process on gas extraction (1959-2014), 2013.*

[5] Source: *Public Building Graduation Studio 2025/26 Syllabus*

TOURISTIC MAP



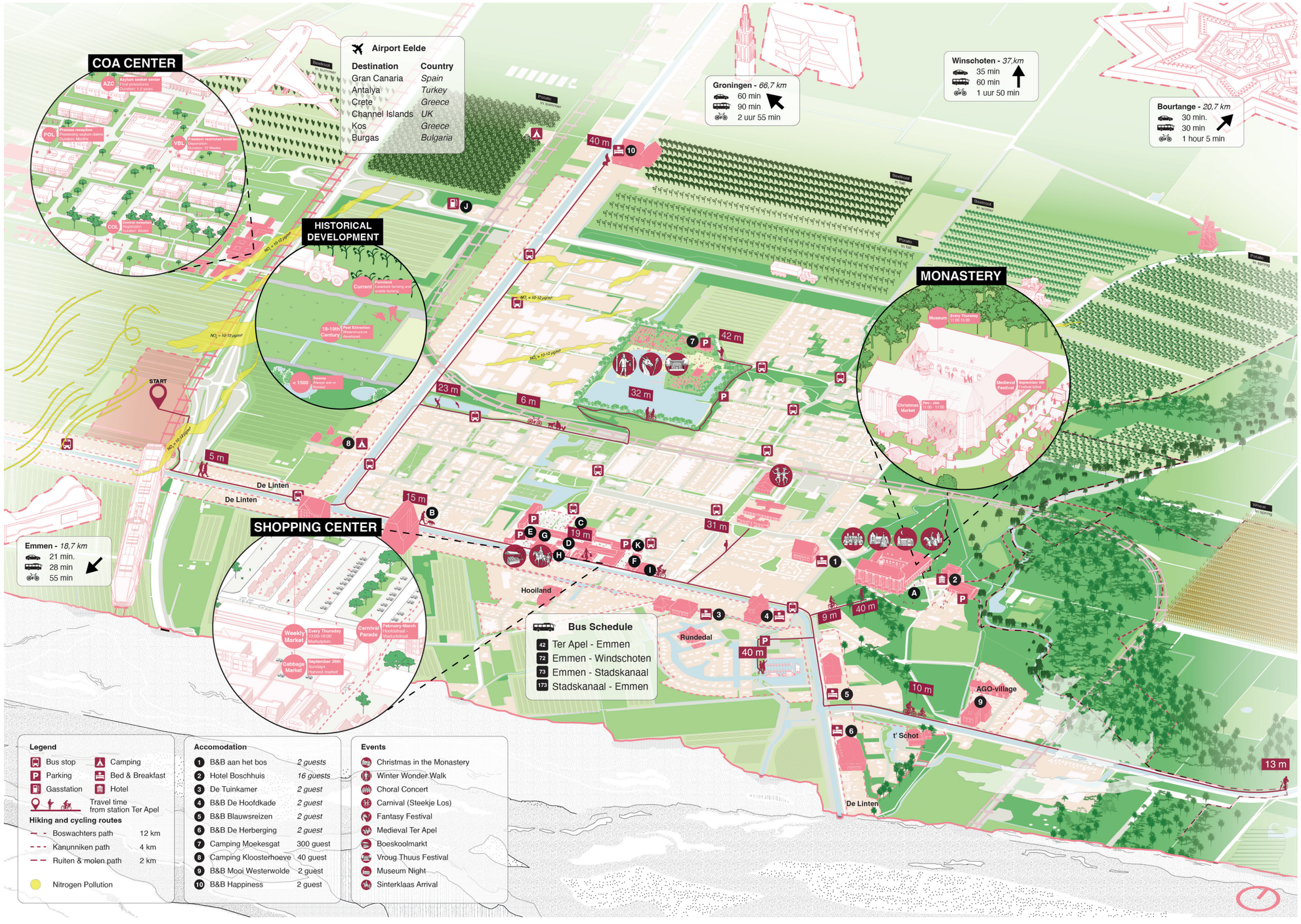


Through time and place, across geological layers and through the air, Ter Apel reveals itself as a complex and layered landscape. By mapping the historical, social, and cultural context of Ter Apel, located in Westerwolde, Groningen, an interconnected ecosystem begins to emerge. This ecosystem is shaped by the city center, the surrounding agricultural landscape, and the Ter Apel forest, each contributing to the identity of the area and influencing how people and nature interact.

The map zooms in on specific stories and locations, highlighting annually, or weekly events and activities in the shopping center, the monastery, and the COA center.

It features links between themes that reveal Ter Apel as a complex, interconnected system, supported by in-depth information on specific topics. At the same time, it offers an overall, zoomed-out view, showing how Ter Apel is embedded within wider landscapes, histories, and networks, and how local practices connect to broader spatial and ecological contexts.

Tourist map
Front side



Tourist map
Back side

Beyond Ter Apel



Ter Apel layers uncovered

The Map

Through time and place, across geological layers and through the air, Ter Apel reveals itself as a complex and layered landscape. By mapping the historical, social, and cultural context of Ter Apel, located in Westerwolde, Groningen, an interconnected ecosystem begins to emerge. This ecosystem is shaped by the city center, the surrounding agricultural landscape, and the Ter Apel forest, each contributing to the identity of the area and influencing how people and nature interact.

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It features links between themes that reveal Ter Apel as a complex, interconnected system, supported by in-depth information on specific topics. At the same time, it offers an overall, zoomed-out view, showing how Ter Apel is embedded within wider landscapes, histories, and networks, and how local practices connect to broader spatial and ecological contexts.

Spatial Development

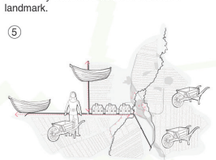
In this first phase, Ter Apel was an untouched landscape of raised bogs crossed only by the natural course of the Ruiten Aa. The area was isolated with almost no permanent habitation. This changed when the monastery was founded in 1465, accompanied by a church and living quarters with facilities.



Around 1857, large-scale peat extraction began on the raised bog. With the canal reaching Ter Apel, the previously isolated Westerwolde became accessible from the south, and the village developed into a canal settlement with characteristic linear housing.



The landscape evolved from peat exploitation toward village development, with industry emerging along the waterways and railway further boosting connectivity and economic growth. Later, new neighborhoods developed and the monastery became a cultural and tourist landmark.

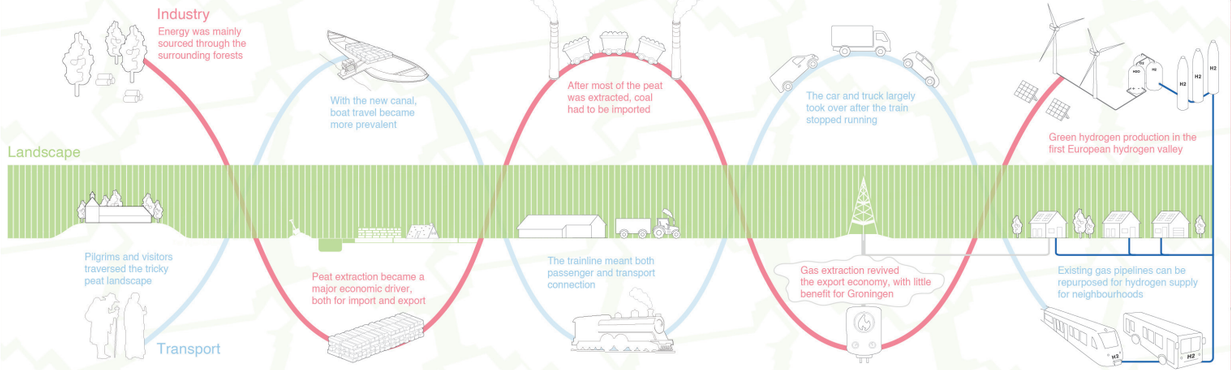


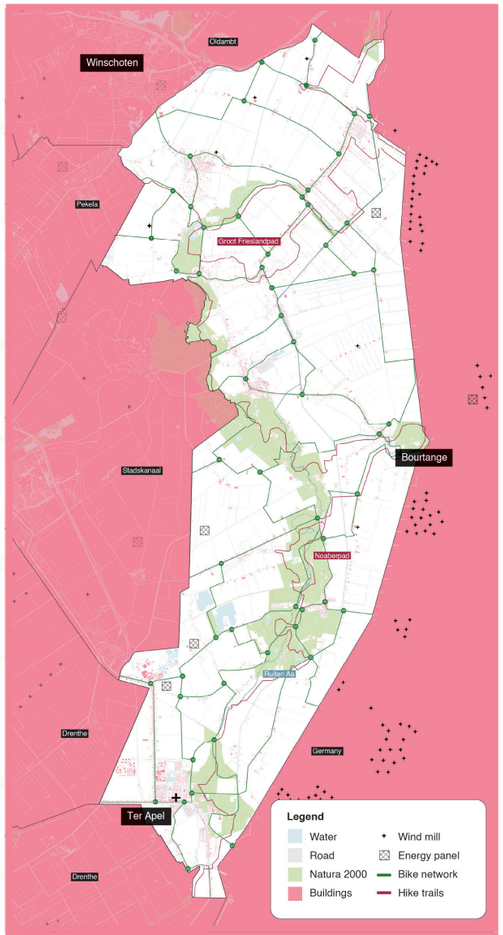
From 1980 to 2010, a NATO depot brought military presence, jobs and improved infrastructure to the village, adding an industrial character. Since 2010, Ter Apel is nationally known for the Asylum Reception Centre (ACZ), giving the village a prominent role in migration alongside its traditional village identity.



In the future, Ter Apel has planned a new railway station on the Nedersaksenlijn to strengthen its regional connectivity. Together with Westerwolde's energy transition and plans for a greener and more pedestrian-friendly city centre, Ter Apel aims to improve its accessibility, liveability and long-term sustainability.

Intersecting Timelines





Events

Christmas in the Monastery
December and January

A Christmas fair, atmospheric lighting, and hundreds of nativity scenes on display.

Winter Wonder Walk
December 12th

A 6.5km illuminated walk through the village and forests with lights, music, and fires.

Choral Concert
December 21th

Christmas concert by Vocal Ensemble Chaverim featuring Scandinavian composers.

Carnival (Steekje Los)
February 14th &15th

Ter Apel (renamed Kloosterwieke) hosts the largest carnival in the North. Includes a massive parade and tent parties.

Fantasy Festival
December 4th & 5th

A festival where you "dream with your eyes open," featuring bands (like SEED), workshops, and entertainers.

Medieval Ter Apel
Sept 5th & 6th

The most authentic medieval festival in the Netherlands. Re-enactors, battles, and a 1465-style market.

Habitat Types

Ancient Forest



Fauna: Red Squirrel, Wood pasque
Flora: Wood Anemone, Holly, Oak, Beech

Transition Forest



Fauna: Roe Deer, Viviparous Lizard, Wild Bee, Gold
Flora: Wild Pear, Pine, Birch, Cherry, Spruce, Cornus Sibiss, Bracken

Stream Valley



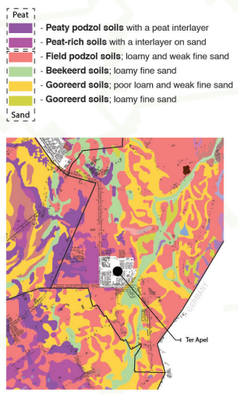
Fauna: Kingfisher, Banded Demoiselle
Flora: Reed, Alder, Willow, Oak, Wild Anemone, Wild Chicory, Wild grasses

Settling Basins



Fauna: Common Toad, Broad-bodied Chaser
Flora: Round-leaved Sundew, Hawthorn, Wild Grasses

Soil



- **Peaty podzol soils** with a peat interlayer
- **Peat-rich soils** with a interlayer on sand
- **Field podzol soils**; loamy and weak fine sand
- **Beekeerd soils**; loamy fine sand
- **Gooreerd soils**; poor loam and weak fine sand
- **Gooreerd soils**; loamy fine sand

Opening Times

Attractions

A Museum Monastery
4.5★ Museum
Boslaan 3, 9561LH

+31 0599581370
https://www.kloosterapel.nl/

H Arends Cafe & Lunchroom
4.4★ €1-10
Hoofdstraat 59, 9561JC

I Vistaria't Scholletje
4.6★ €1-10
Nederveen Cappelstraat 160, 9561 KW

Groceries

D Omar Market
Nearest groceries from new train station

Hoofdstraat, 9561JE

Supermarkets
In Shopping Center

C Jumbo **D** Lidl
Nederveen Cappelstraat
E Aldi *Marktstraat*
F Coop *De Omloop*

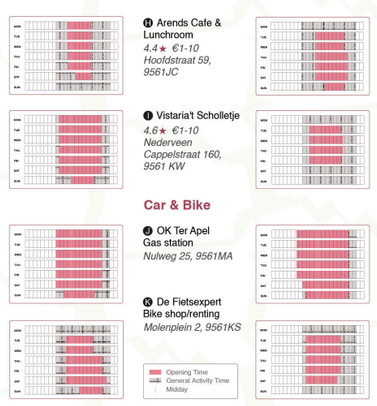
Car & Bike

J OK Ter Apel Gas station
Nulweg 25, 9561MA

K De Fietsexpert Bike shop/renting
Molenplein 2, 9561KS

Restaurants

G Enjoy - Lunchroom & Brasserie
4.4★ €10-20
Nederveen Cappelstraat 160, 9561KW



Nearby Places

Groningen
Groningen is the largest city as well as the economic and cultural centre of the northern part of the country. The lively city centre offers historic architecture, museums, shops, cafés and a vibrant nightlife.

Winschoten
Located north of Ter Apel, Winschoten is a regional town known for its shopping centre, historic market square and green surroundings.

Bourtange
Bourtange is one of the most recommended places to visit in Westerwolde. This star-shaped fortress village dates back to the 16th century and offers a unique glimpse into Dutch military history, canals and open landscapes.

Emmen
Emmen holds the closest hospital near Ter Apel, is home to the popular Wildlands Adventure Zoo and has a modern city centre.

Colofon

Ter Apel, Westerwolde, Groningen Province

Graduation Studio Public Building
Department Architecture, TU Delft

Tutors
Stefan Witteman
Stefano Corbo

Students
Acelya Ocalan
Sharon Boer
Jim van Dongen
Fenna Dortmans
Wanja Franssen
Deimjanas Gološčiapovas
Kaj Hartsuiker
Marko Lojanica
Chris van der Maas
Celina van der Raaf
Isa van Wezep
Zhuoran Zhang

January 2026

03 CASE STUDIES

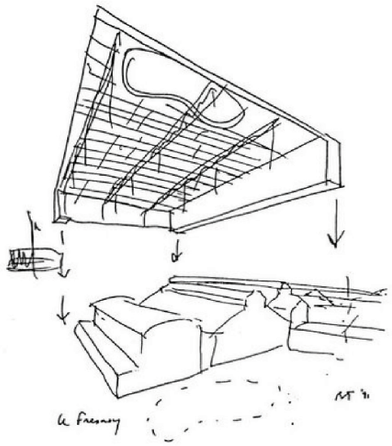
Case Study A
Le Fresnoy Art Center

Design: Bernard Tschumi
Location: Tourcoing, France
Completion: 1997.
Size 10,000m2

Le Fresnoy (the National Studio for Contemporary Arts) is a center for crossover artists, such as a video artist who is also a musician or a musician who is a painter. The site holds buildings from a 1920s leisure complex that included cinema, ballroom dancing, skating, and horseback riding. Although the existing structures could have been demolished to make way for new construction, they contained extraordinary spaces whose large dimensions exceeded what the limited project budget could supply. The aim was to develop a new model of a center through combinations of old and new, development and artistic practice and public exhibition.

The project suspends a large, ultra-technological roof, pierced by cloud-like glass openings and containing all necessary ductwork for heating, ventilation, and air conditioning, over many of the existing 1920s structures. The format of the project is a succession of boxes inside a box. First, a new, resolutely contemporary facade encloses the ensemble of buildings in a rectangular box. The spaces between the two roofs contain places for installations and film projections located along a dramatic sequence of walkways.

Within the container-box are the boxes of the existing Fresnoy facilities, supplemented by newly-designed ones, including exhibition spaces, sound studios and assorted production facilities, a library, a cinema, a restaurant, and apartments for faculty and students—all of them protected from inclement weather all-encompassing umbrella of the new roof.







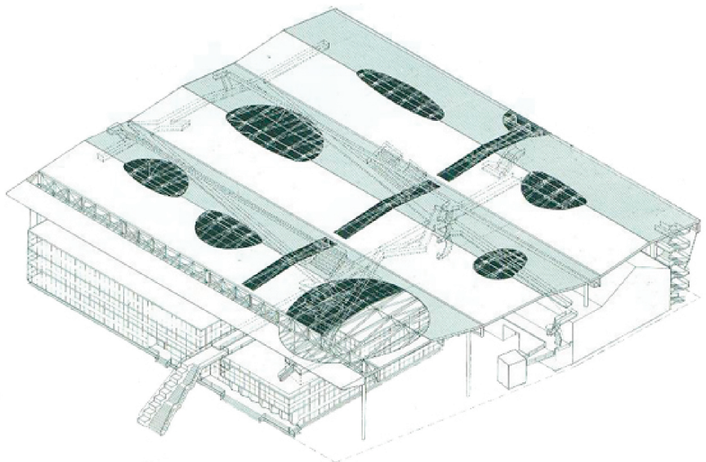




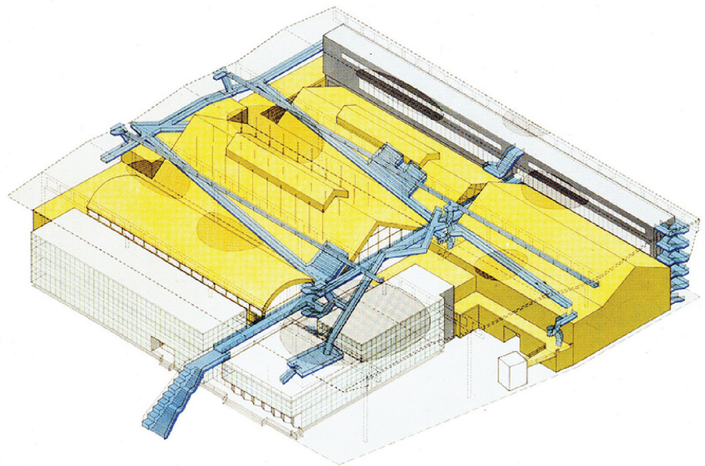




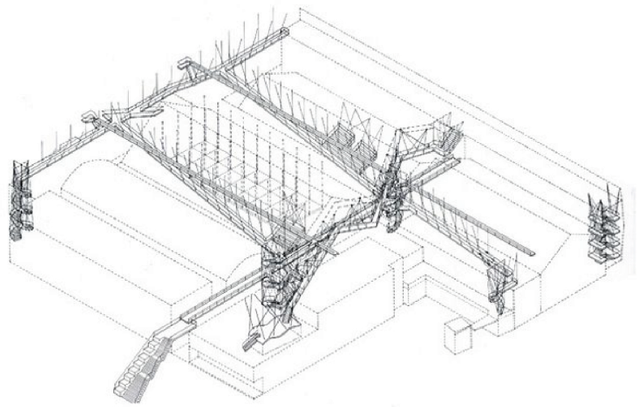
Case Study A
Le Fresnoy Art Center



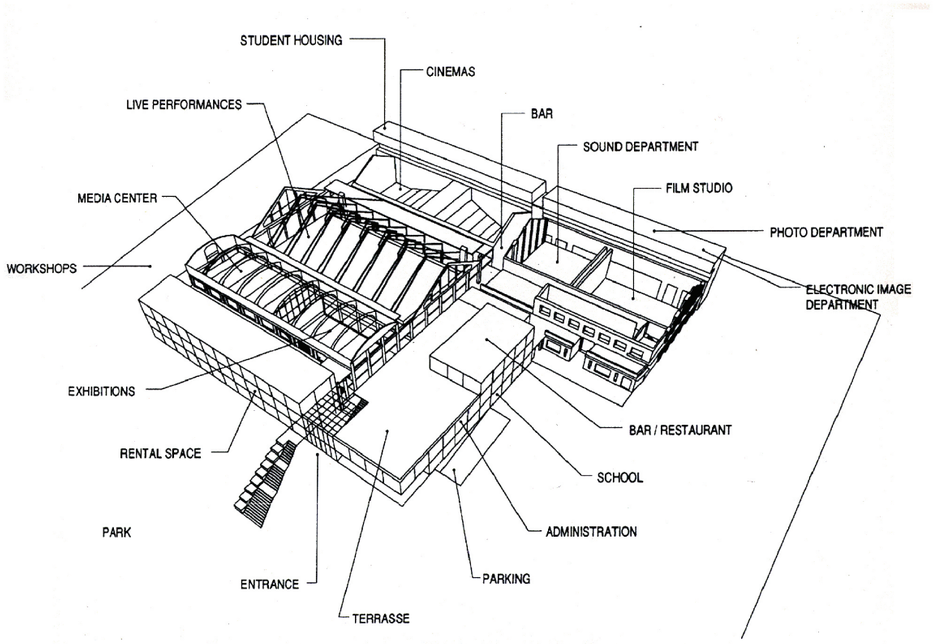
Roof



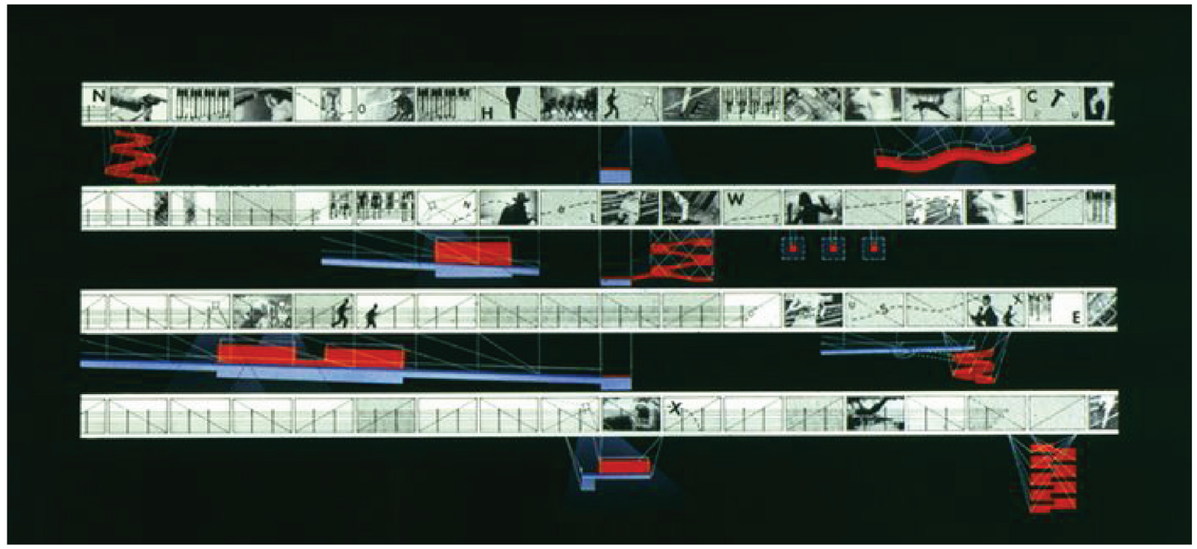
The in-between space



The in-between commmunication

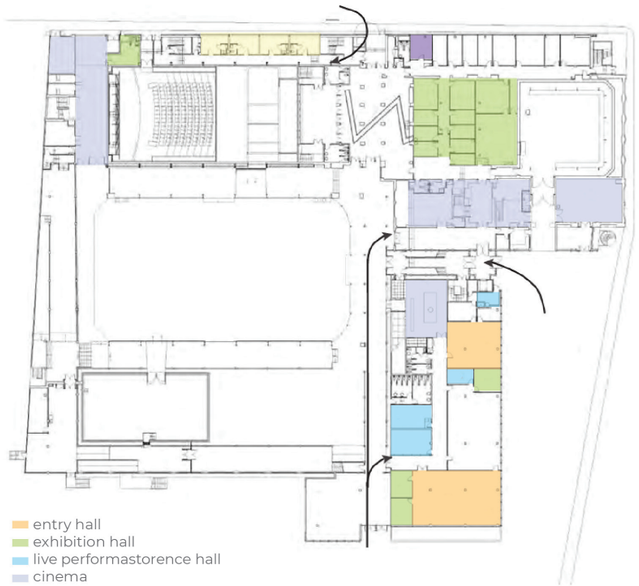


Programme

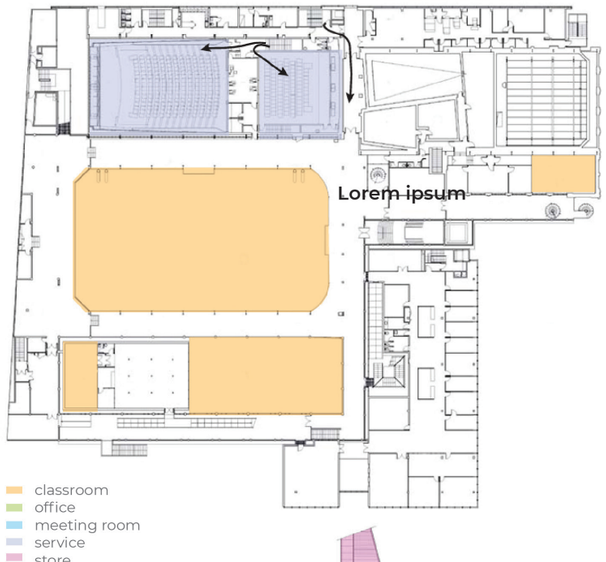


Collage elevation communications

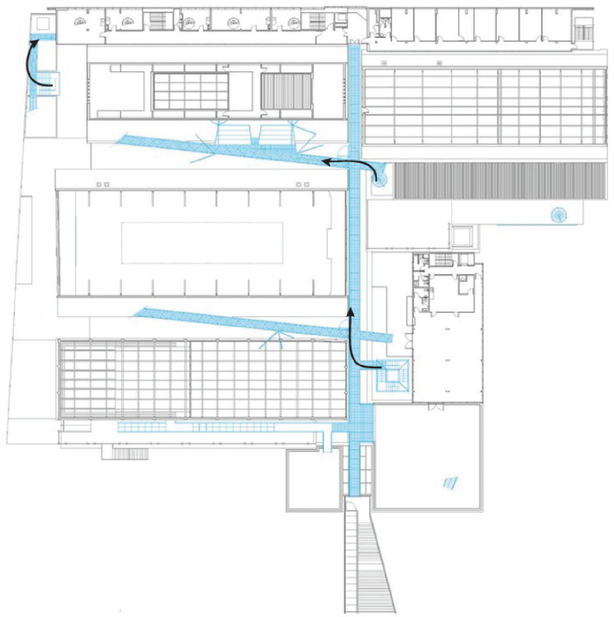
Case Study A
Le Fresnoy Art Center



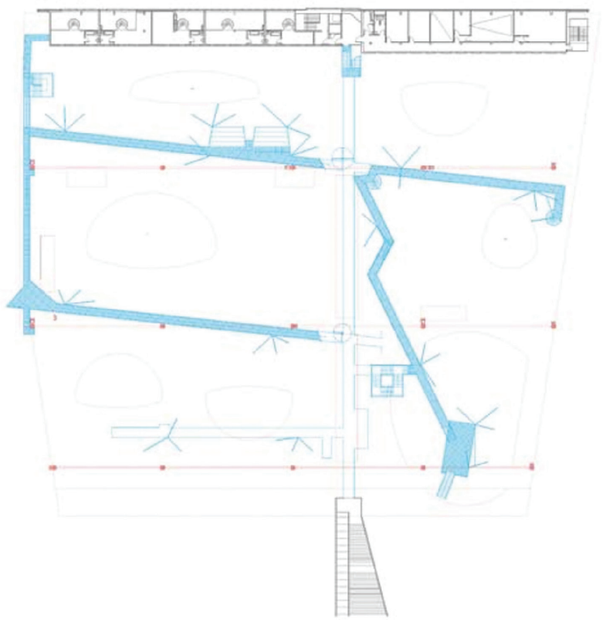
Ground floor



First floor



Lower in-between

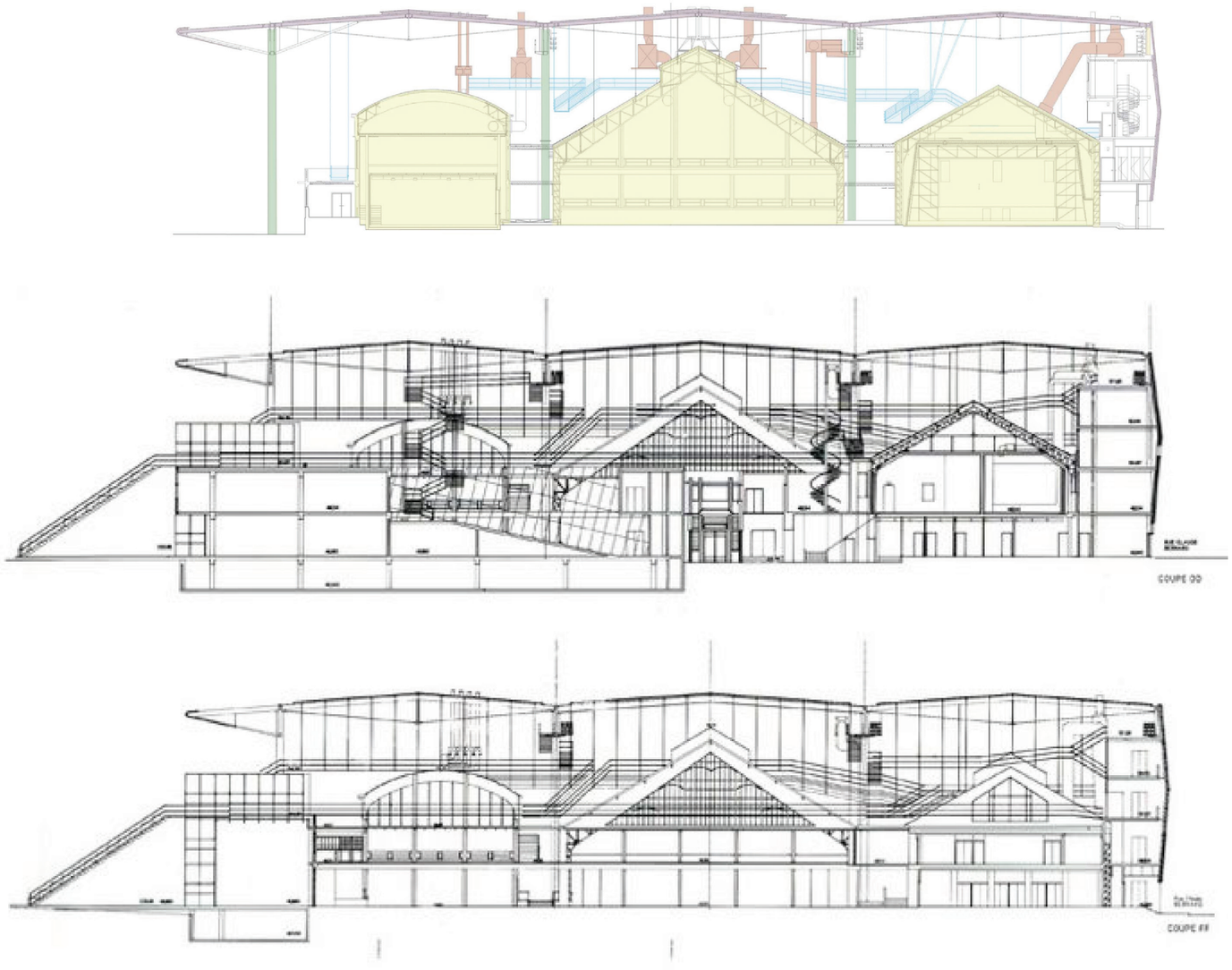


Upper in-between

Case Study A
Le Fresnoy Art Center



View from the stairs



Sections

Case Study B
Yangshuo Sugar Hotel

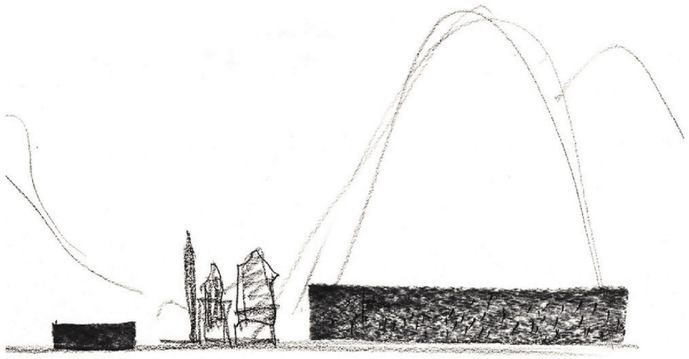
Design: Vector Architects
Location: Yangshuo, China
Completion: 2017.
Size 16000m2

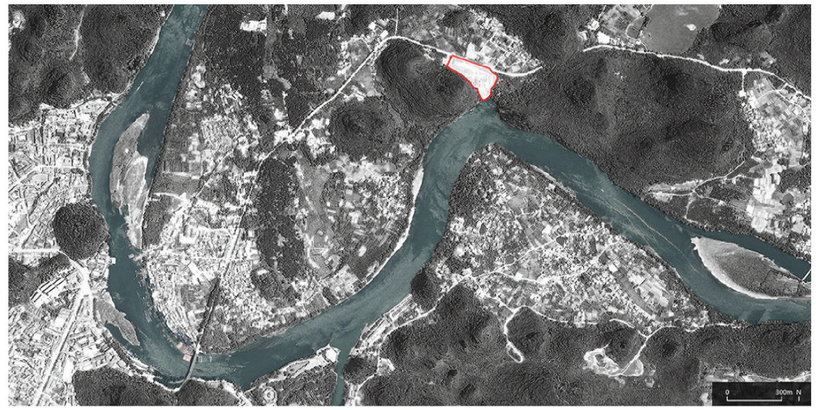
Yangshuo Sugarhouse Hotel is located in a col near the Li River in Yangshuo, Guangxi, within a classic karst landscape. An old sugar mill from the 1960s is preserved on site, including its industrial truss once used to transport sugar cane. The project treats this industrial heritage as the representation of the older generation's spirit and as the premise of the design.

Old and New. The preserved sugar mill and truss occupy the center of the complex, flanked by new suite buildings and villas. A sunken plaza and reflecting pond emphasize the old structure's symbolic role. Rather than copying historic materials, the design adopts contemporary construction while retaining the tone and masonry logic of the original. Building profiles remain simple to avoid distracting from the old mill, and roof slopes match the original, forming a cluster of pitched roofs to ensure continuity between new and old.

Promenade Experience. The site is conceived as a garden of spaces defined by the mill, truss, new volumes, water, and paths. Two circulation systems pass through the suite building: a functional corridor and a public walkway linking three cave-like nodes, extending the ground-level promenade and offering shifting light, framed views, distance, and elevation.

Man-made and Natural. The site faces the Li River to the south, a busy road to the north, and surrounding karst peaks, contrasting architectural horizontality with mountain verticality. The geometric walkway abstracts historic mountain paths and caves, with cave nodes visually linking architecture and landscape.





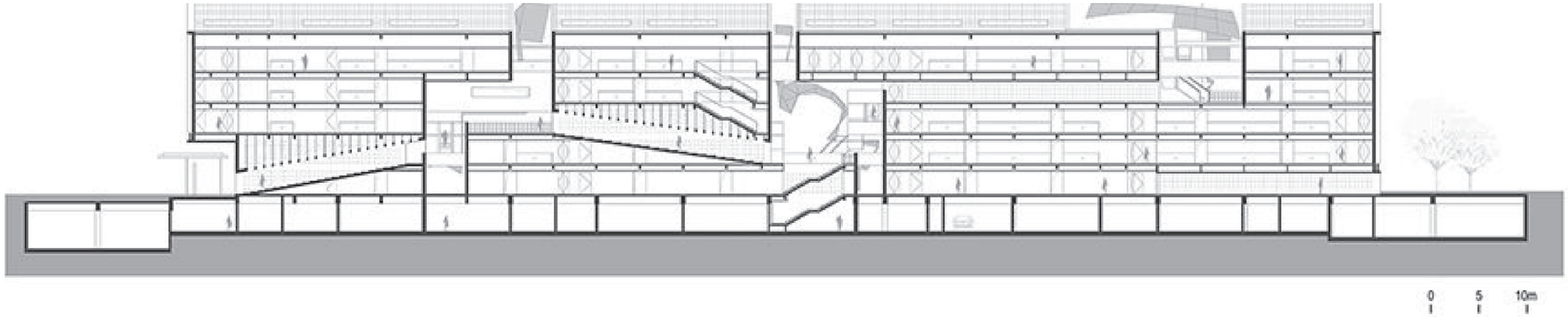




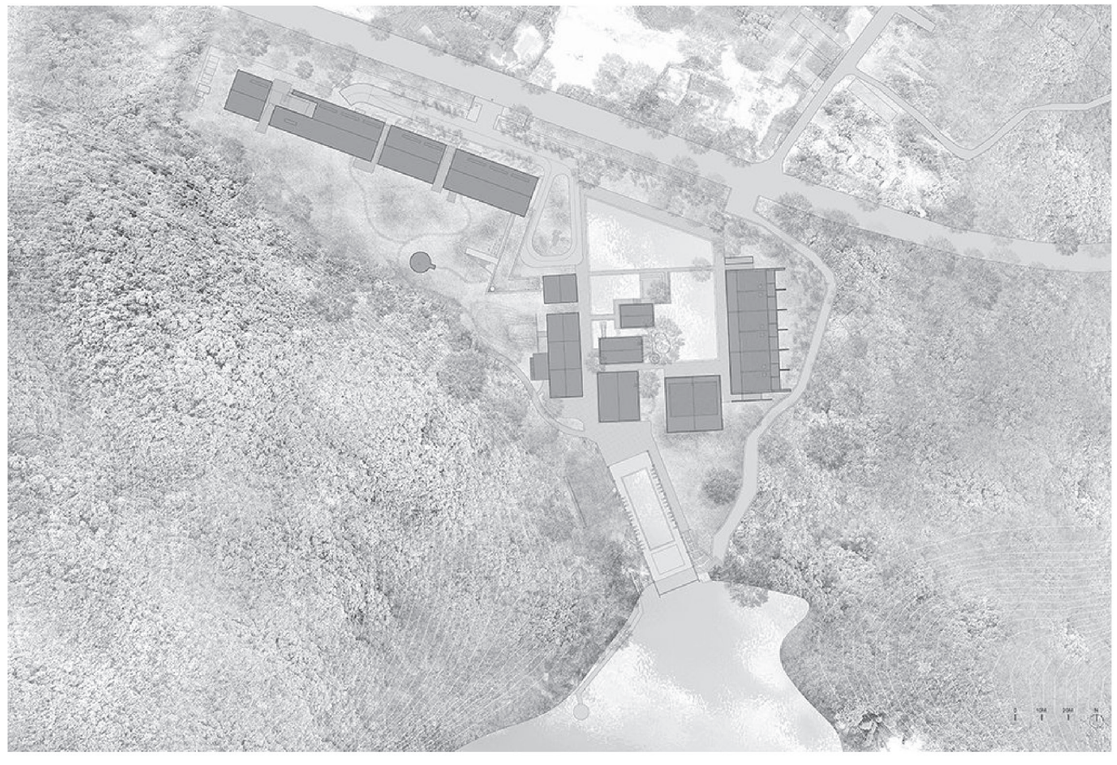


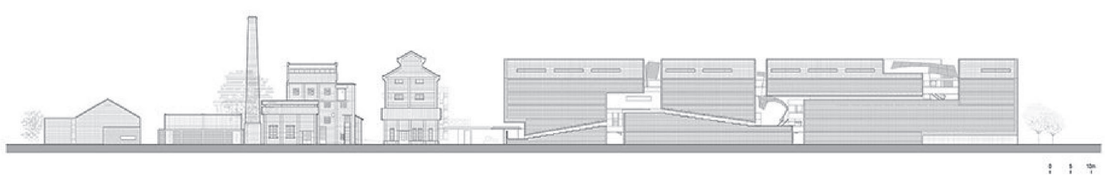


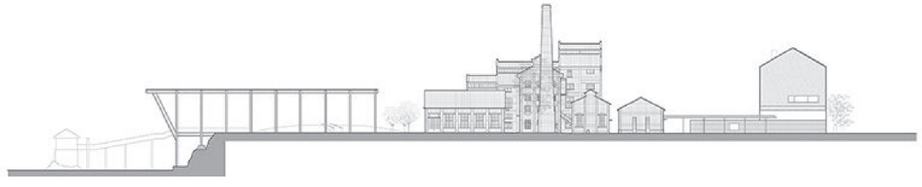
Case Study B
Yangshuo Sugar Hotel









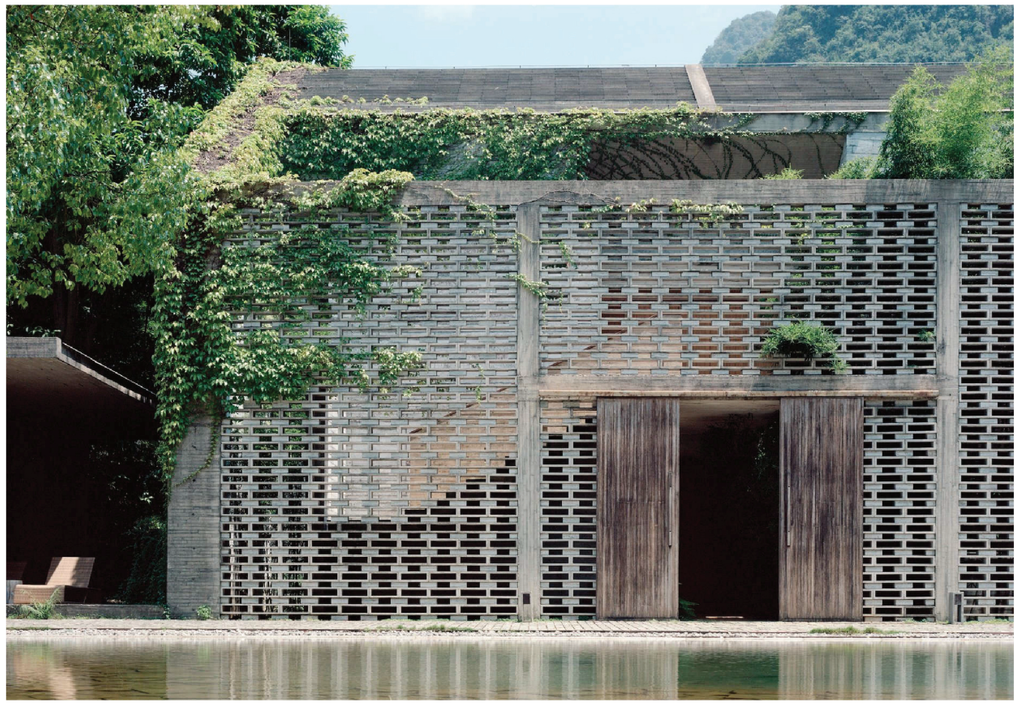


Case Study B
Yangshuo Sugar Hotel







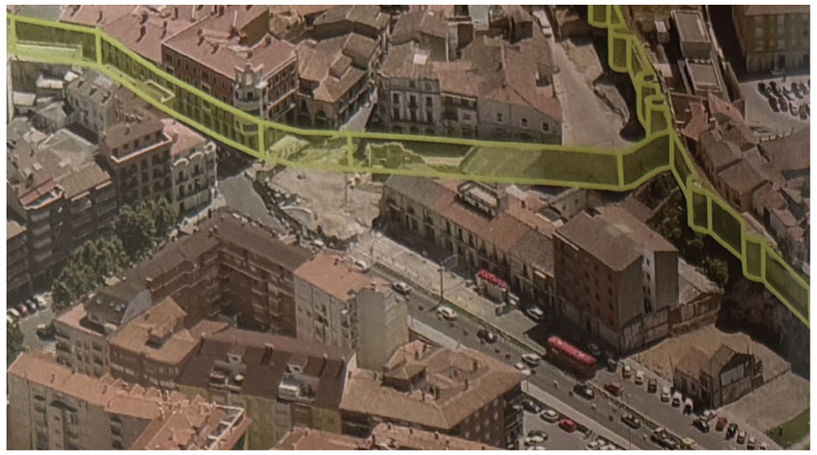


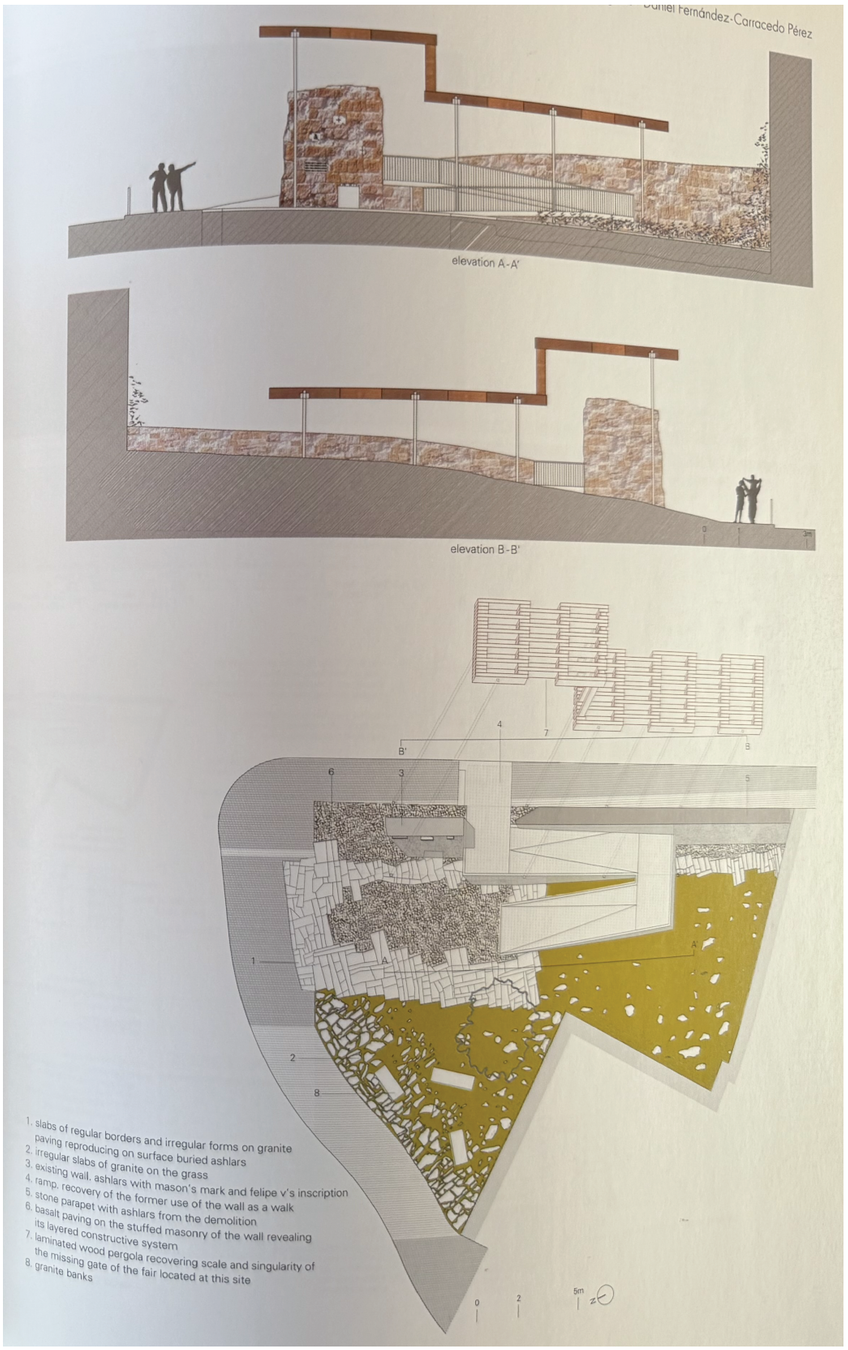


Case Study C
The Medieval City Walls

Zamora Julio Perez Dominguez, Daniel Fernandez + Carracedeo Perez









Case Study D
Pinnacle Mountain Park Visitor Center

Design: Polk-Stanley-Wilcox
Location: Arkansas, US
Completion: 2023.
Size 1300m2

Of Arkansas's 52 State Parks, Pinnacle Mountain State Park is unique because it sits beside the capital city of Little Rock, which has grown to border the park. With over 750,000 people in the metro area, Pinnacle Mountain may be many visitors' only experience with a state park; it receives about 600,000 visitors each year. The park's most prominent feature is the mountain itself. Reaching the summit is a rite of passage for many children and families, and its trails are heavily used daily.

Unlike Ozark and Ouachita parks that feature historic Civilian Conservation Corps lodges that define their architecture, Pinnacle Mountain had no such precedent. Its urban connection and younger users—who canoe, kayak, hike, climb, and bike—suggested a different approach. State Parks wanted a building that felt like part of the mountain and served not only as a gateway to Pinnacle, but to all Arkansas State Parks.

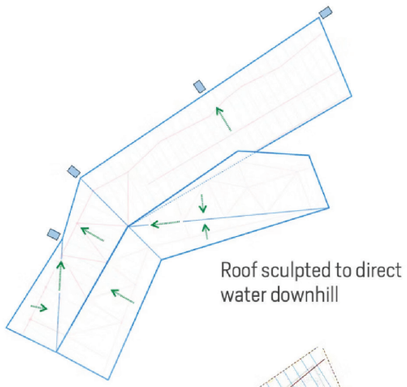
Site study revealed a vein of rock running from the peak to a clearing that connects trails, lower amenities, and Highway 300. The design responds with three functional rock "outcroppings" placed along this vein beneath one undulating roof canopy that follows terrain and weaves through tree canopy. Two buildings form a gateway to the mountain and lobby, with reception, gifts, and exhibits facing the mountain through continuous glass for inside-out education and connection. The Loblolly Outpost sits under the canopy as an outdoor café celebrating summit achievements. The roof aligns with slope to open views, manage water, and minimize visibility, while glass reflects nature by day and creates a glowing pavilion at night.

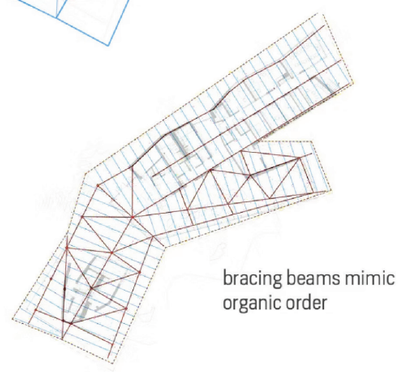






Case Study D
Pinnacle Mountain Park Visitor Center

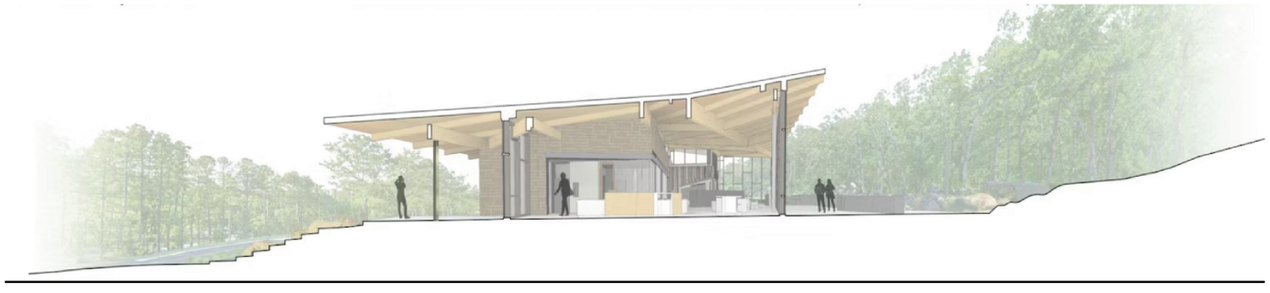






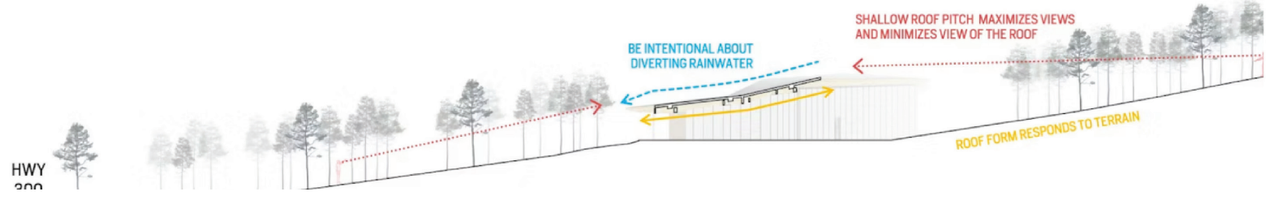








The Center coalesces perfectly with the mountainside as a response to the terrain and views.



04 INITIAL ANALYSIS

RESEARCH STATEMENT

Ter Apel is the largest village in the municipality of Westerwolde, situated in the province of Groningen, the Netherlands. It is located in the far south of the Westerwolde region and lies on the Ruiten Aa river, close to the border with Germany. It represents a unique village of architectural and medieval heritage and protected ecological reserves. At the east of this village lies the Monastery of Ter Apel, founded in 1464. As the only remaining rural monastery in north-western Europe and a 'top '100' monuments[1] in the Netherlands approved by UNESCO[2], it stands as a singular survivor of the Reformation in Groningen. The monastery remains in a recognizable, original state, nestled within the Kloosterenclave—a 200-hectare forest that serves as both a spiritual and recreational area. Today, it functions as a registered museum and a botanical sanctuary, housing over 200 plant species.

Another village's unique architectural landmark is the Standerdmolen (post mill) and its single rotary wooden trunk. This structure represents the oldest and most original form of windmill construction in the region. Complementing the mill on the south lies a school the "Schoolgebouw" on Oudeweg, built in 1924. Designed by G. Westerhout for the Rijks Hogere Burger School, it is one of Groningen's earliest examples of Amsterdam School architecture. Similarly, the Ol Graitje hand-powered cable car is the first of its kind in the Netherlands and connects the banks of the Ruiten Aa water canal, serving as a vital link for long-distance hikers. Walking and hiking are popular activities in the municipality of Westerwolde as a whole, but are particularly prominent in Ter Apel. Specifically, in the natural landscape on the east side of the village that is equally exceptional. The Monastery Woods, dating back to 800 AD, are home to massive, centuries-old oaks and beeches and multiple rare animal species. As a protected nature zone registered within the national network of reserves, it is the only site in the Netherlands where the rare "stone bramble" (steenbraam) grows wild, in addition to the other 970 identified plant species in the forest. (Roelevink, 2018) Furthermore, the area is a sanctuary for the Middle-Spotted Woodpecker, a species found nowhere else in Groningen region.

Aditionally to the historical and natural landmarks, Ter Apel maintains a characteristic cultural life expressed through a range of distinctive annual events. These include the "Choral Concert", traditional "Carbid Shooting", and the "De Maten Annual Market", a large-scale event featuring approximately 120 market stalls alongside old-timer tractors and live music. The village also hosts Carnival ("Steekje Los"), renamed Kloosterwieke, the largest carnival in northern Netherlands, characterized by an large scale parade and tent celebrations. Furthermore, Ter Apel is home to the "Medieval Ter Apel" festival, regarded as the most authentic medieval festival in the Netherlands, featuring 14th-century re-enactors, historical battles, and period markets.
Despite the remarkable concentration of cultural, architectural, and natural assets, Ter Apel remains relatively underrepresented in broader touristic narratives and regional promotion. Many of its landmarks, while historically significant and ecologically rare, are not fully integrated into a cohesive identity or celebrated to their full potential. This disconnect between the village's richness and its visibility raises questions about how Ter Apel's identity is perceived, communicated, and experienced by future visitors and local residents alike.

Generally speaking, tourism plays an important role in the economy of the Netherlands, accounting for approximately 4.0% of the national GDP, according to the Centraal Bureau voor de Statistiek (CBS). In 2024, a total of 51.7 million guests stayed at hotels, campsites, and holiday parks in the Netherlands. Out of this number, more than 20 million were international visitors. Almost 30% of these international tourists came from Germany, followed by Belgium and United Kingdom. (Statistics Netherlands [CBS], 2025) Within this context, the province of Groningen recorded the largest increase in overnight tourist stays of any Dutch province in 2024. A total of 900 thousand guests stayed there, an increase of 11 percent compared to 2023. In 2024, around 21 000 people visited Ter Apel, primarily to see the Monastery Museum, to camp, and to attend the village's annual events. (Museum Klooster Ter Apel, 2024) However, the majority of these visitors stayed for less than a day and did not spend the night.

The entire current accommodation offer in Ter Apel is devided between only 12 locations, that include eight B&B's, three camp sites, and only one hotel. The Moekesgat camping area and the Kloosterhoeve campground allow a stay of up to around 340 guests between them, the Boschhuis hotel next to the monastery can accommodate a maximum of 16 guests, while each of the B&B's are available for only 2 guests. This makes the village's total bed capacity to approximately 400, which is relatively small, especially considering that most of this capacity is concentrated in the camping sector. The resulting lack of sufficient visitor infrastructure presents a major obstacle to the perception of tourism in Ter Apel. Furthermore, the imbalance among accommodation types directly affects the variety of visitors the village can attract. Campsites primarily serve groups and families who travel with specific equipment, the hotel mainly hosts business-related guests, and B&Bs are mostly oriented toward couples. As a result, other visitor groups, as well as solo travelers, lack appropriate accommodation options in Ter Apel.

DutchNews. (2024, August 2).

Council heads back to court over refugee centre overcrowding. https://www.dutchnews.nl/2024/08/council-heads-back-to-court-over-refugee-centre-overcrowding/

DutchNews. (2024, June 19).

Safety situation at Ter Apel refugee centre is "very serious". https://www.dutchnews.nl/2024/06/safety-situation-at-ter-apel-refugee-centre-is-very-serious

Ginder. (2025, February).

ONDERZOEK VRIJETIJDSECONOMIE PROVINCIE GRONINGEN: In opdracht van de provincie Groningen en de tien gemeenten die de provincie rijk is. https://www.provinciegroningen.nl/fileadmin/user_upload/Documenten/Beleid_en_documenten/Documentenzoeker/Werken_en_ondernemen/Toerisme/Rapportage_Onderzoek_Vrijetijdseconomie_provincie_Groningen__februari_2025__WCAG.pdf

Inspectie Justitie en Veiligheid. (2024, June 19).

Zeer ernstige veiligheidssituatie AZC Ter Apel voor bewoners en medewerkers. https://www.inspectie-jenv.nl/actueel/nieuws/2024/06/19/zeer-ernstige-veiligheidssituatie-azc-ter-apel-voor-bewoners-en-medewerkers

Museum Klooster Ter Apel. (2024).

Beleidsplan 2024–2028. https://kloosterterapel.nl/website/wpcontent/uploads/2024/03/MuseummKloosterTerApel-Beleidsplan-2024-2028.pdf

NL Times. (2025, January 15).

Inspectorate says the situation at asylum seekers centre in Ter Apel is still unsafe. https://nltimes.nl/2025/01/15/inspectorate-says-situation-asylum-seekers-center-ter-apel-still-unsafe

Roelevink, B. H. (2018).

De flora van Westerwolde: Het voorkomen en de verspreiding van planten binnen de ecologische hoofdstructuur van Westerwolde, FLORON.

Statistics Netherlands (CBS). (2025, March 6).

Over 50 million holiday guests in 2024. https://www.cbs.nl/en-gb/news/2025/10/over-50-million-holiday-guests-in-2024

Moreover, the visitor economy of the region is constrained by a prevailing “short-stay” dynamic, with visits typically limited to a single night. (Ginder, 2025) Ter Apel lacks the hospitality infrastructure needed to encourage tourists to extend their stay beyond a day trip, further limiting the village’s ability to convert its assets into appropriate tourism locations.

Furthermore, Ter Apel is often misrepresented in wider media narratives because coverage is dominated by stories about the refugee reception center and associated problems. In Dutch and international reporting, the name “Ter Apel” has become almost synonymous with overcrowding, safety concerns, fines against the asylum agency, and systemic asylum-processing issues, rather than the Ter Apel’s community and the village itself. (DutchNews, 2024) News about the reception center frequently highlights overcapacity, legal actions against the Central Agency for the Reception of Asylum Seekers (COA), and warnings from government inspectors about unacceptable risks of poor conditions, with the Inspectorate for Justice and Security calling the situation “severe” and highlighting prolonged stays well beyond the intended registration period. (NL Times, 2025) In one report the center was described as “very serious” with rising numbers and overcrowded conditions that inspectors say should be resolved urgently. (DutchNews, 2024) Another account noted legal disputes tied to exceeding the agreed capacity limit. (Inspectie Justitie en Veiligheid, 2024) These stories, while important for asylum policy and rights, indirectly define the public perception of the village. By continually associating “Ter Apel” mainly with COA difficulties, the media narrative overshadows Ter Apel’s unique features and keeps misrepresenting the village’s identity.

Additionally, the accessibility conditions of transport to Ter Apel from the other parts of the region or the Netherlands are very limited. The village can only be reached by public transport with a bus, and it doesn’t have train connection. Four bus lines pass through Ter Apel: line 42, making a direct connection with Emmen, line 72 going between Emmen and Winschoten), and lines 73 and 173 (Emmen–Stadskanaal). According to Qbuzz timetables[3] , lines 42, 72, and 73 operate only once per hour, although on weekdays, line 73 runs only at night, while lines 42 and 72 aren’t available after six o’clock. The line 72, which provides the only public transport connection between Ter Apel and Bourtange, has a limiting capacity of only eight people, additionally contributing to the village’s weak visibility within regional tourism network. Differently to the other routes, line 173 runs only three times per day, offering a very restricted service. A direct bus travel from Groningen city to Ter Apel does not exist. Travelers must first transfer in Stadskanaal, Emmen, or Winschoten before continuing to Ter Apel , resulting in relatively long travel times. A trip from Emmen or Stadskanaal takes about 25 minutes, but reaching Ter Apel from Groningen requires an additional 45 to 60 minutes due to transfer and waiting times. These conditions significantly reduce the attractiveness and perception of Ter Apel as a convenient destination for day-trippers and tourists, limiting spontaneous visits and further isolating the village.

Consequently, the misperception of Ter Apel’s identity is not due to a lack of valuable assets, but to infrastructural, and narrative constraints. Insufficient and unbalanced accommodation, poor transport accessibility, short-stay tourism patterns, disregarded landmarks, and a media image massively dominated by the refugee reception center all restrict the village’s touristic potential. These factors prevent Ter Apel from forming and promoting a unique and captivating destination identity. Addressing these issues is crutial for revitalising the village, developing its visitor economy, and allowing its cultural, historical, and natural features to be appropreately recognized and experienced.

This project explores how architecture can promote this unique identity. Specifically, the influence of architecture in facilitating the cultural tourism that promotes the rich touristic landmarks and events of Ter Apel in order to revitalize and re-identify it as a prominent tourist destination in Westervolde and as a touristic hotspot of the Groningen province. The study investigates how a public building can synthesize and catalyze the regional identity of Ter Apel that honors and celebrates its rich history and exceptional natural landscape by promoting cultural tourism. A type of tourism activity, that can be defined by the visitor’s essential motivation to learn, discover, experience and consume the tangible and intangible cultural attractions/products in a tourism destination. The research further questions how touristic walking and sightseeing can be understood as a ritual, specifically how movements guided by architecture can subsequently form different special atmospheres and produce immersive touristic ambiences.

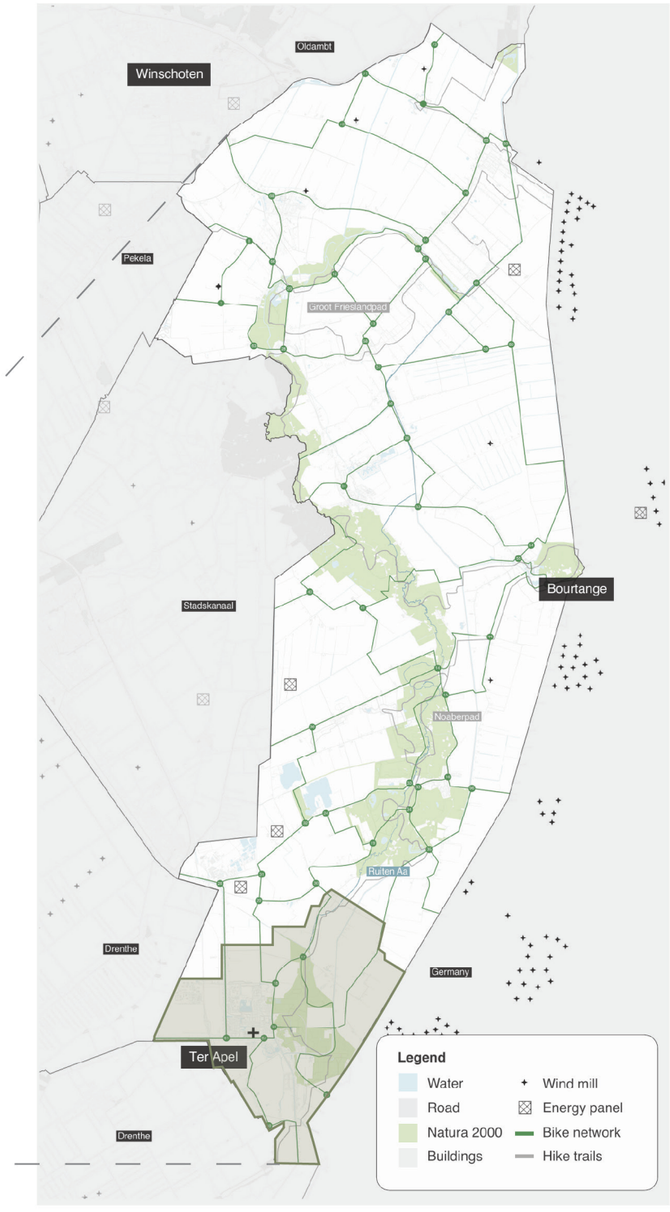
[1] *Source: https://www.visitholland.nl/index.php/history/689-top-100-heritage-sites-in-the-netherlands*

[2] *Link: https://grokipedia.com/page/top_100_dutch_heritage_sites*

[3] *Source: https://busgd.nl/*

Location Map
Groningen | Ter Apel



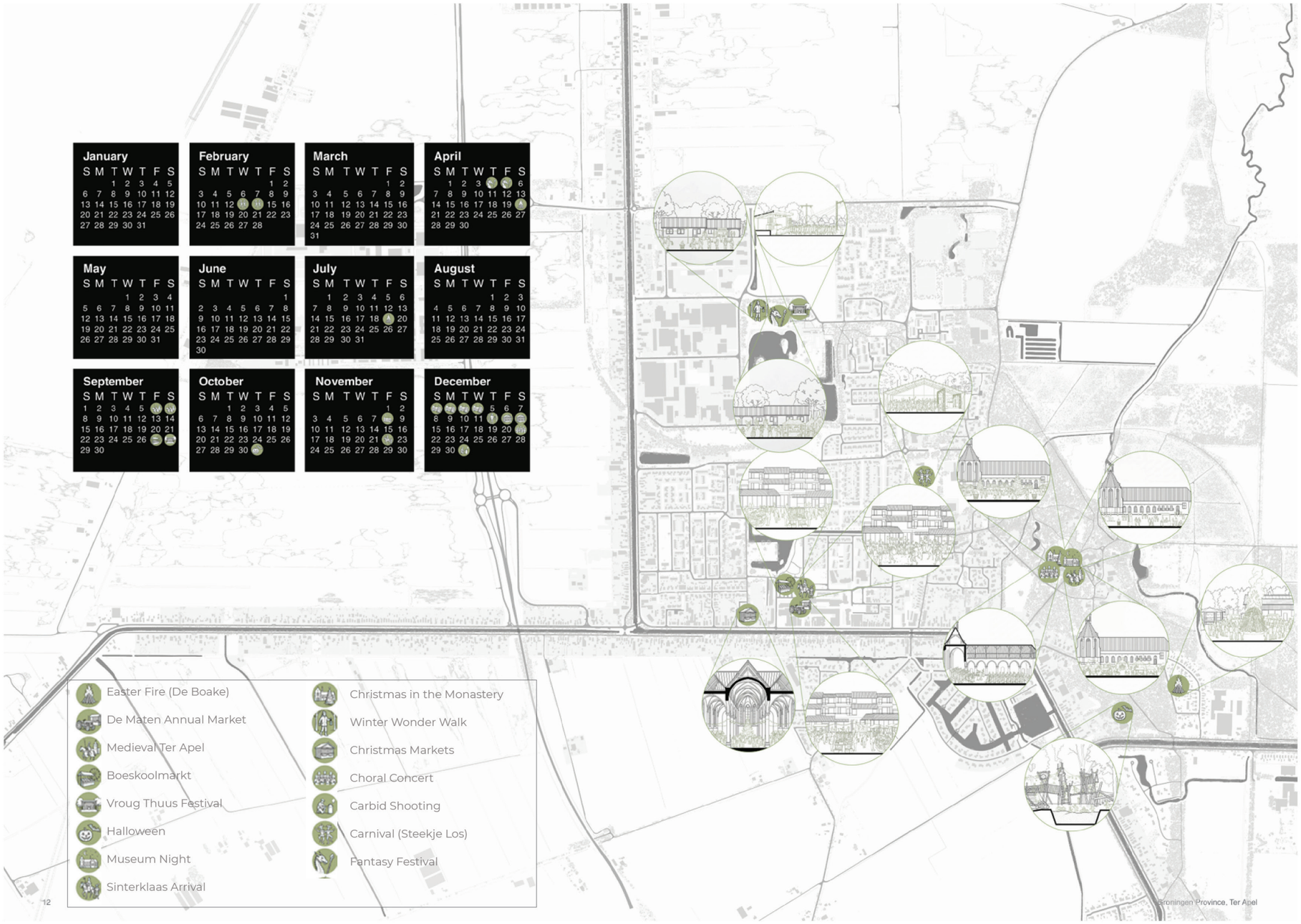


Groningen Province map.
source: kaartenenatlassen.nl/

Protected Buildings
Ter Apel



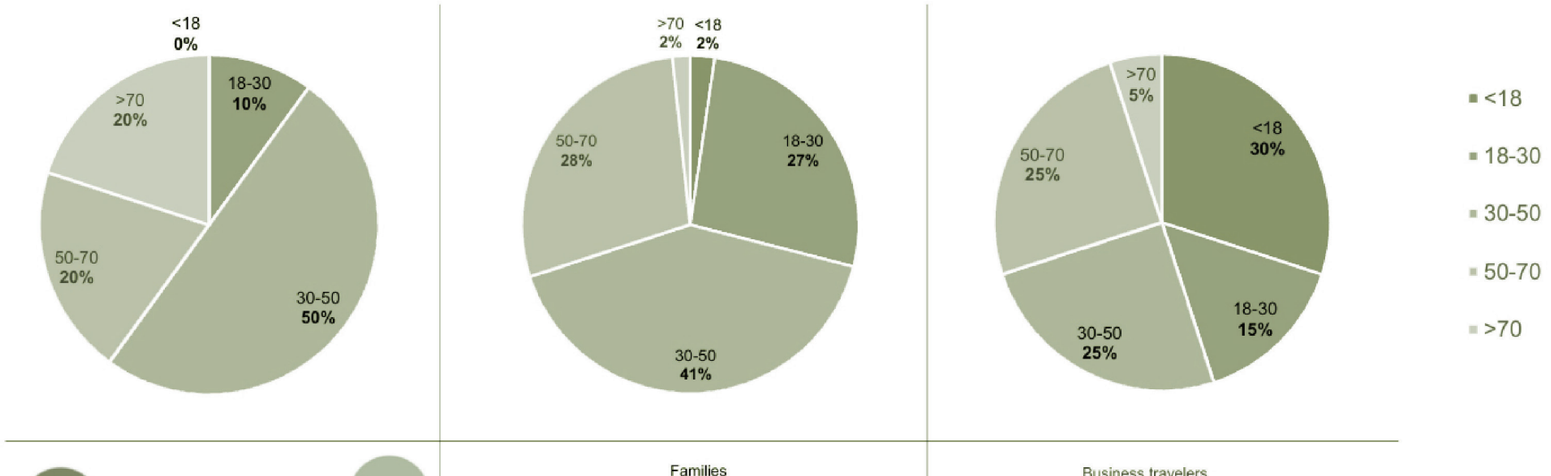
Events
Ter Apel, Groningen



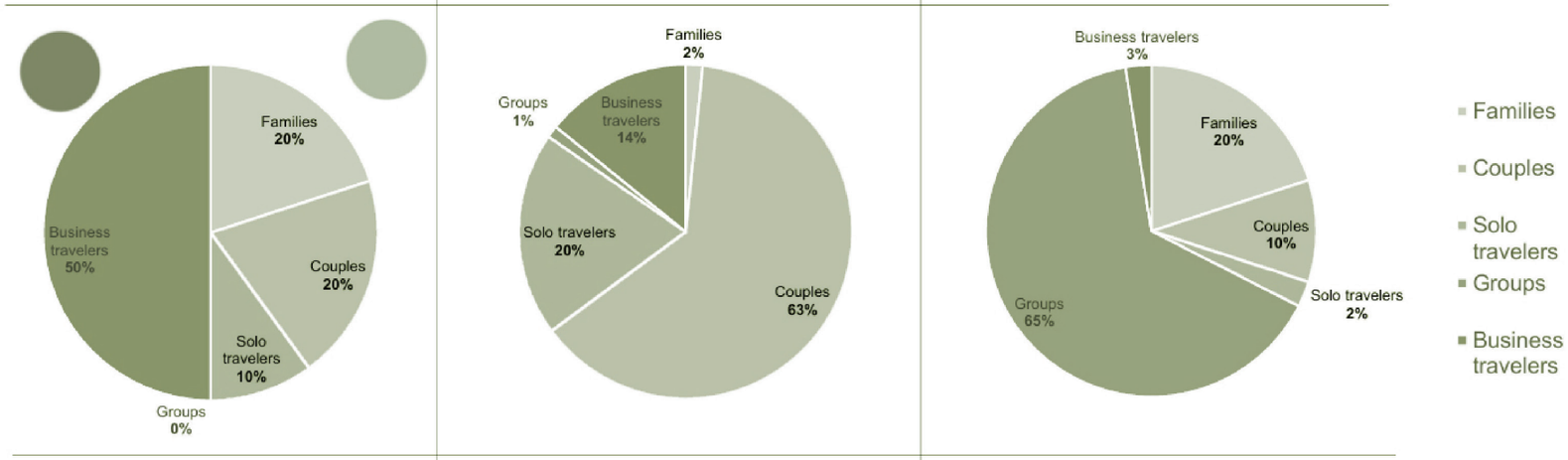
Accommodation options
Ter Apel, Groningen

HOTEL | B&B | CAMPSITE

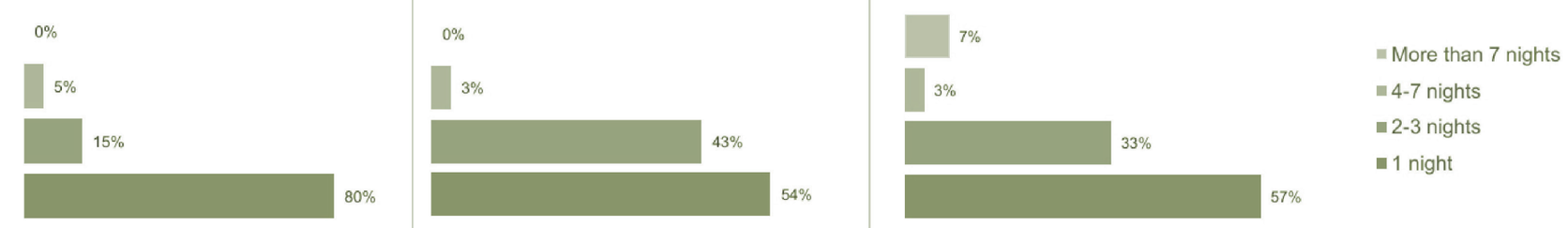
AGE DISTRIBUTION



VISITOR TYPE



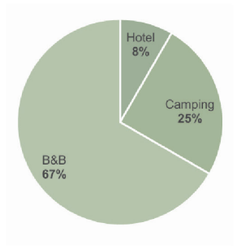
DURATION OF STAY



Source: Group D - on site survey

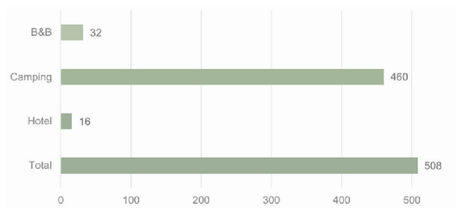
Accommodation Capacity
Ter Apel, Groningen

TYPE OF ACCOMMODATION



- *1/1 Hotel*
- *2/3 Campings*
- *4/8 B&Bs*

CAPACITY ACCOMMODATIONS



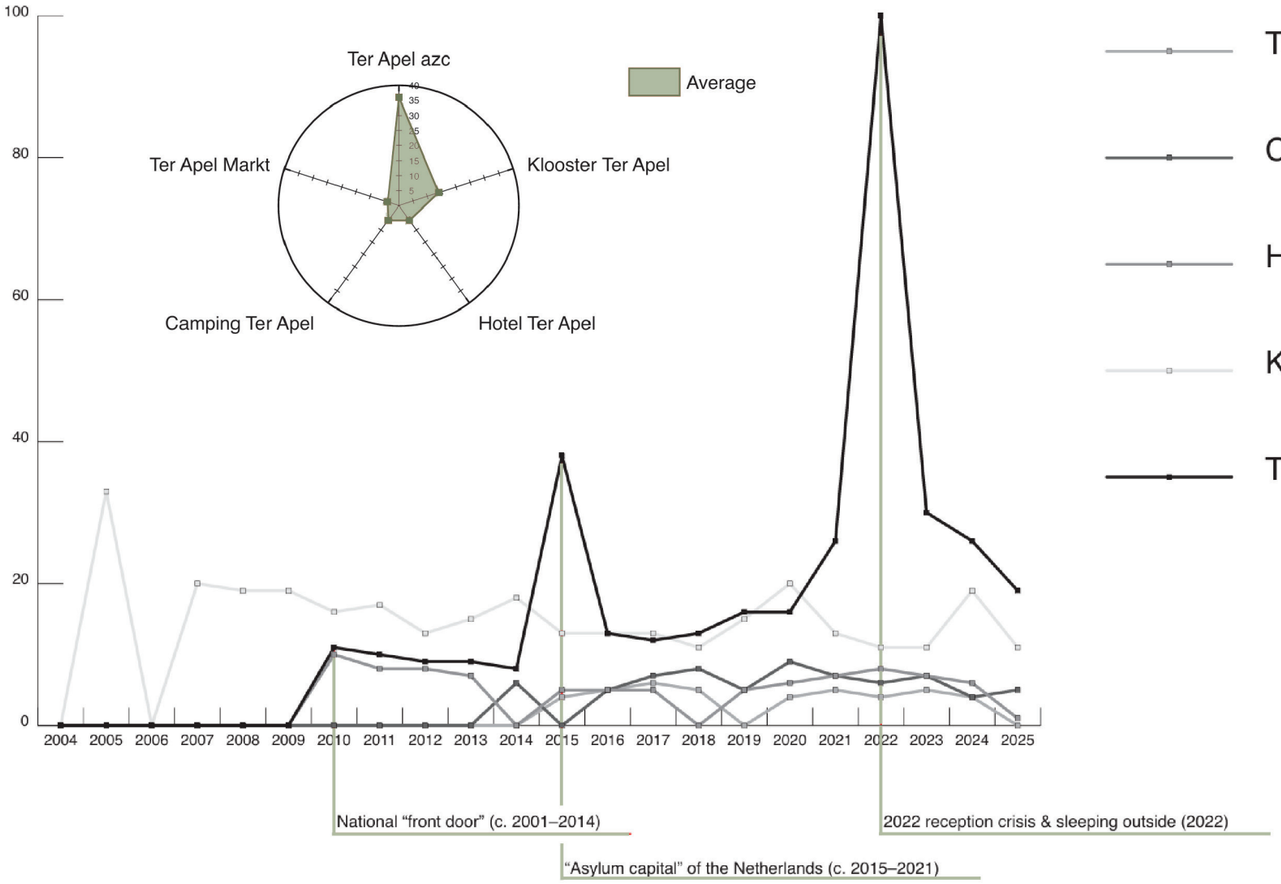
**The capacity of missing responses has been estimated.*



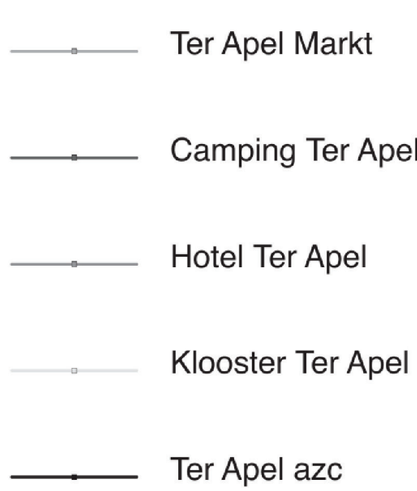
Source: Group D - on site survey

Online popularity
Googlle searches

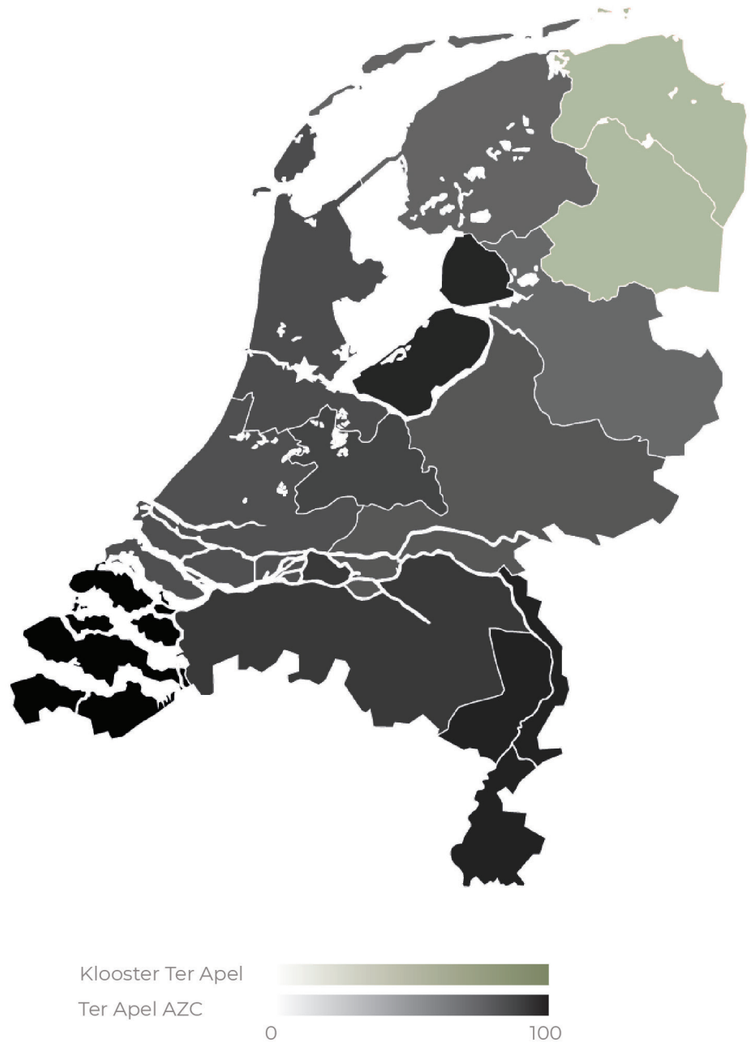
SEARCHES 2020 - 2025



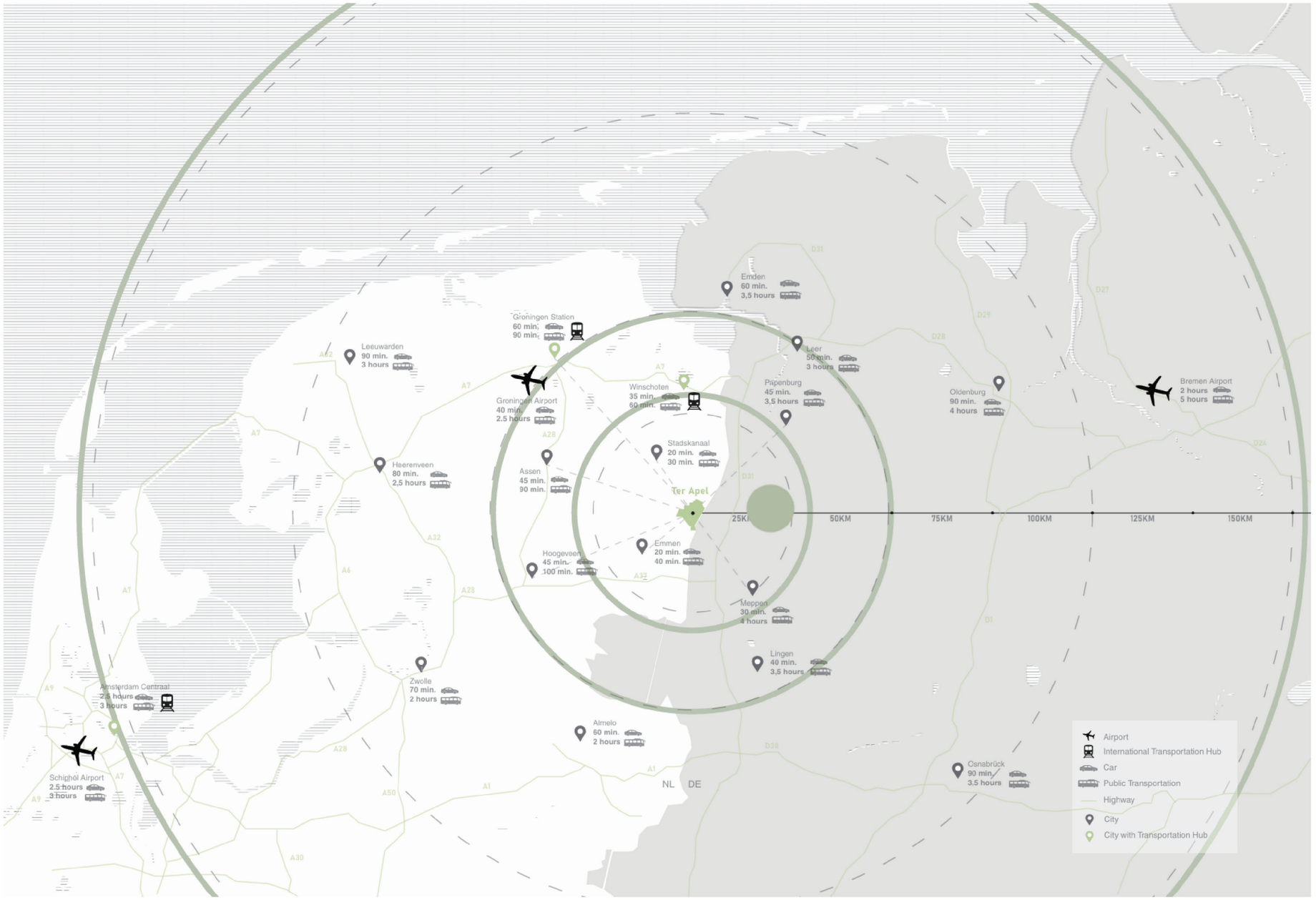
SEARCHES 2004 -



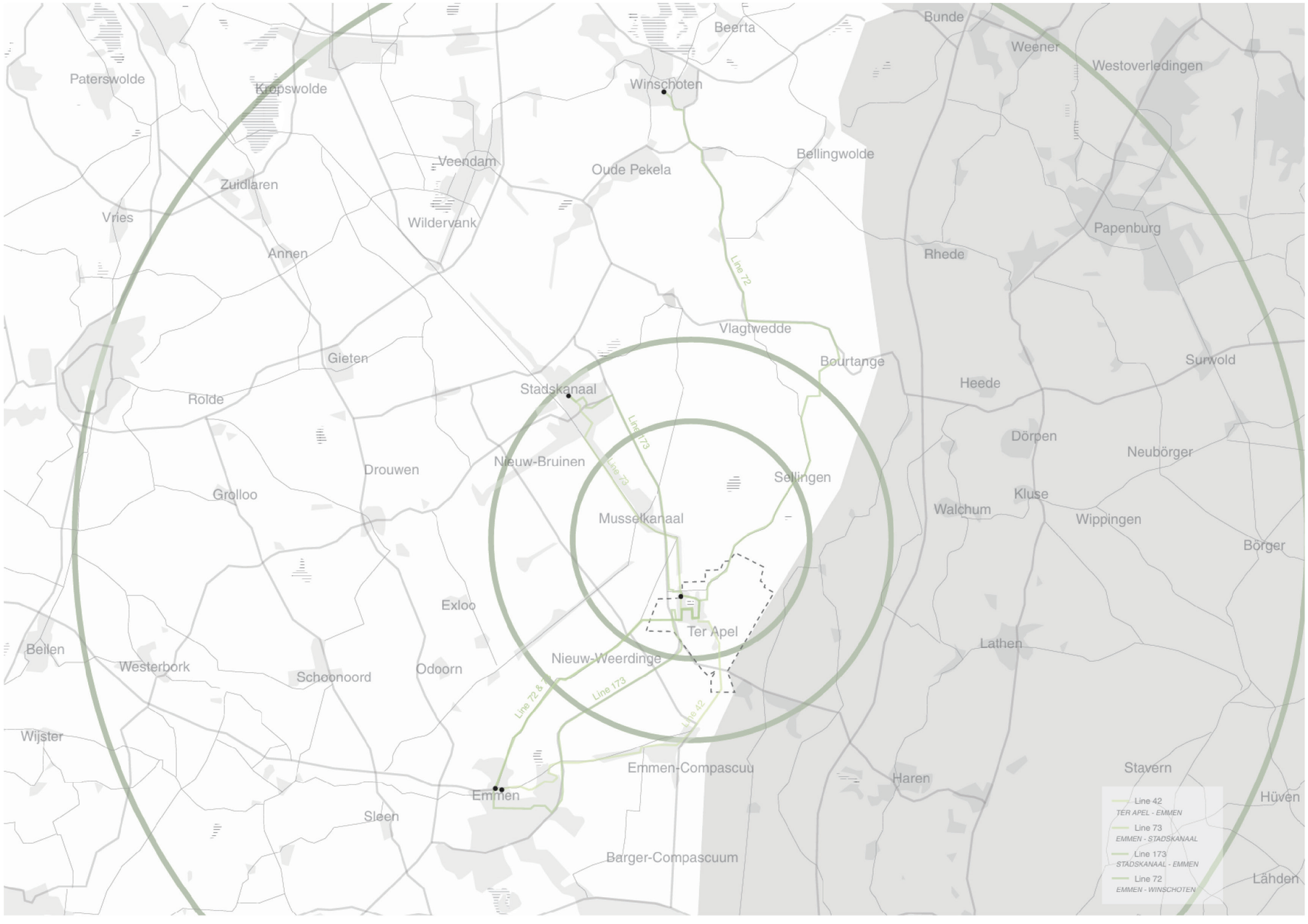
SEARCHES 2025



Accessability
Ter Apel, Groningen



Bus lines
Ter Apel, Groningen



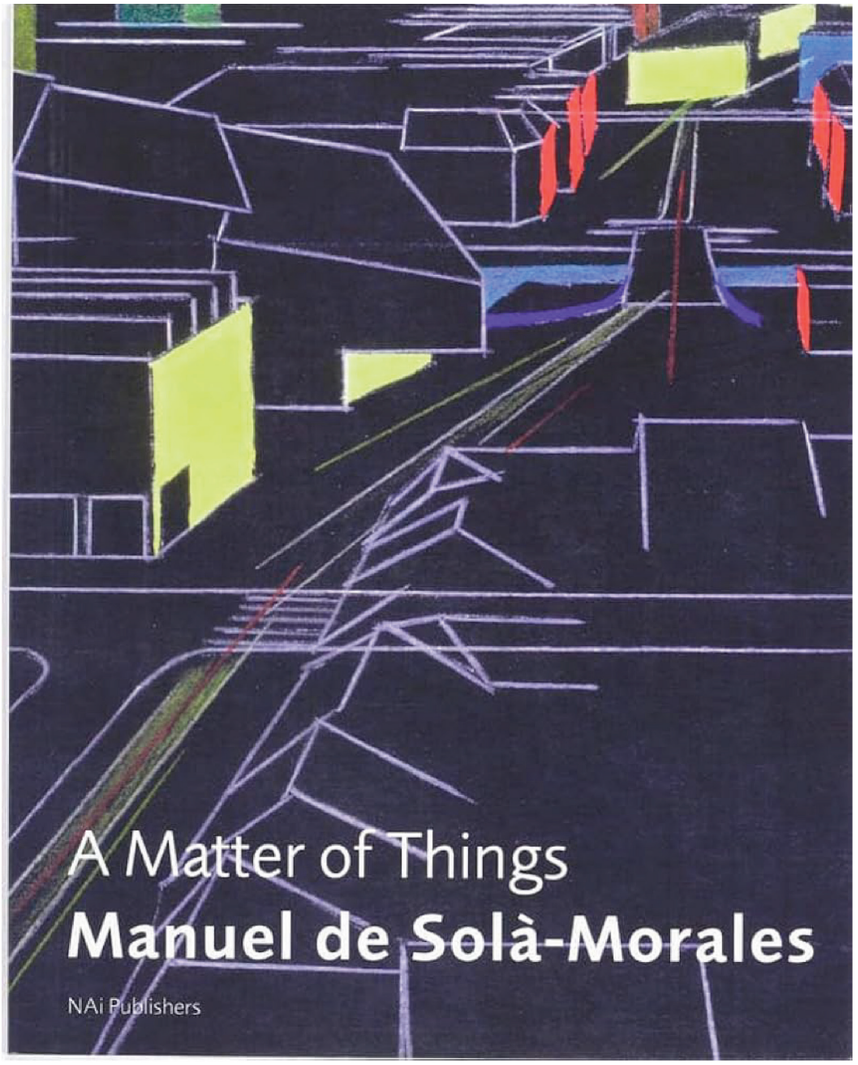
Book review
Urban Acupuncture

Urban Acupuncture:

The art of Urban Acupuncture is the manipulation of power that is held within the city skin.

"It is the urban matter that transmits to us, at its most sensitive points and neutral zones, the qualitative energy that accumulates collective character on certain spaces, charging them with complex significance and cultural references ..."

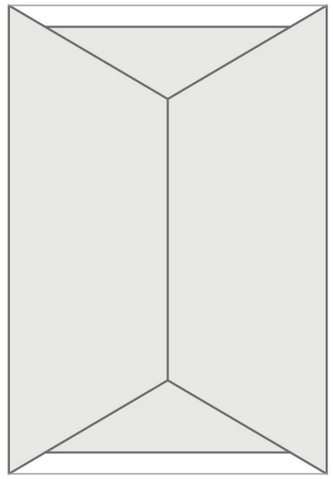
Manuel De Sola Morales

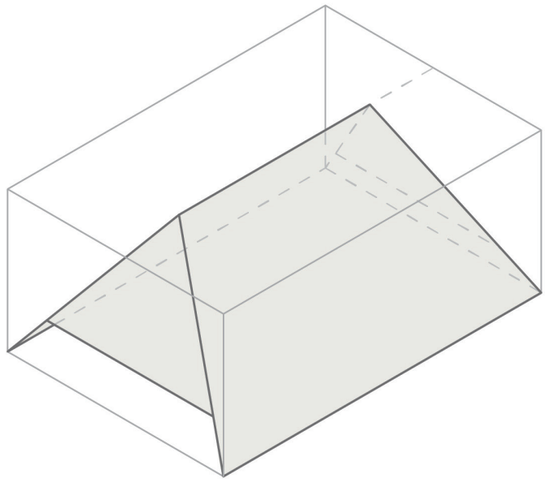


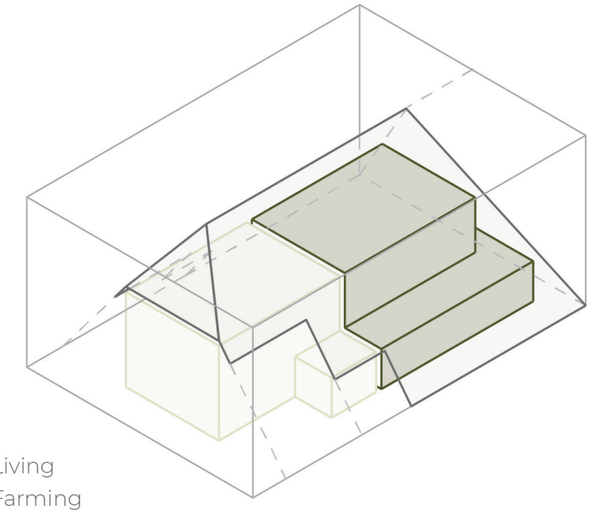
Book cover: De Sola Morales, M. (2008) A Matter of Things, Rotterdam, NAi Publishers

Roof Analysis
Groningen Farms





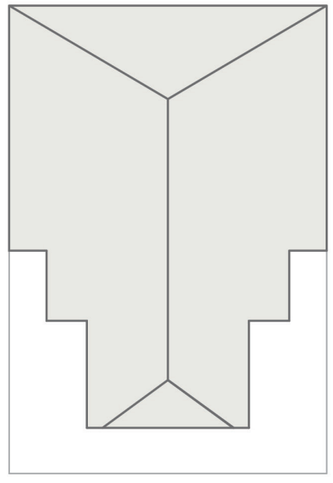


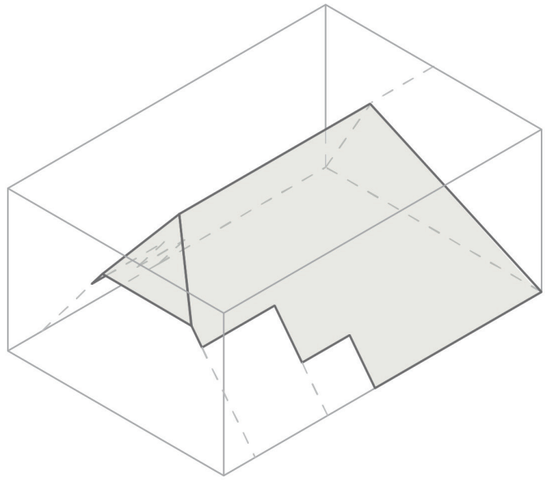


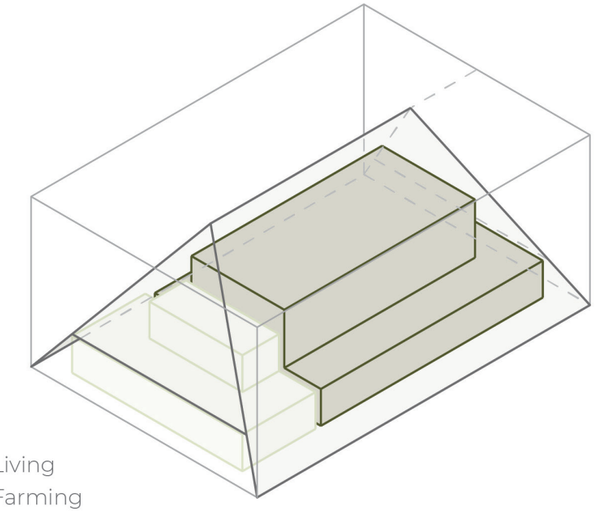
Living
Farming
Farm-house No. 2 space usage

Groningen farm-house roof analysis No. 1









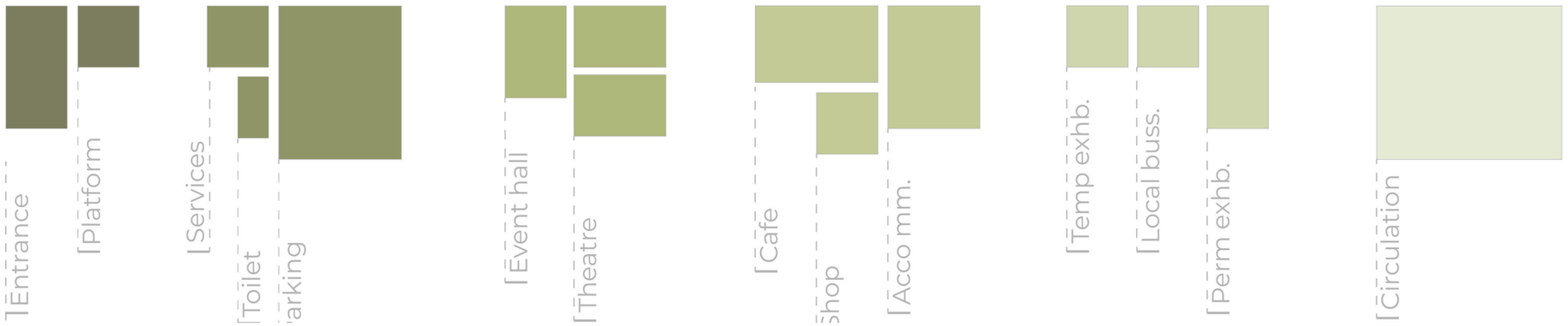
Living
Farming
Farm-house No. 1 space usage

Program Brief
Total Areas

TOTAL AREA: 3050 m²

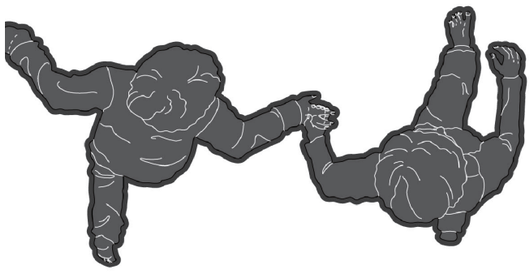
200m² | 650m² | 450m² | 600m² | 350m² | 800m²

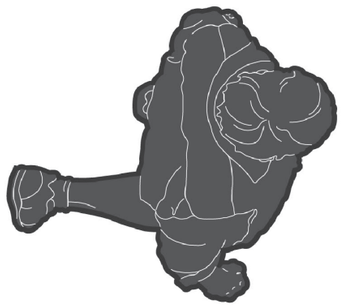
⌈Entrance
⌈Service
⌈Events
⌈Accomm.
⌈Exhibition
⌈Circulation



Additional analiysis

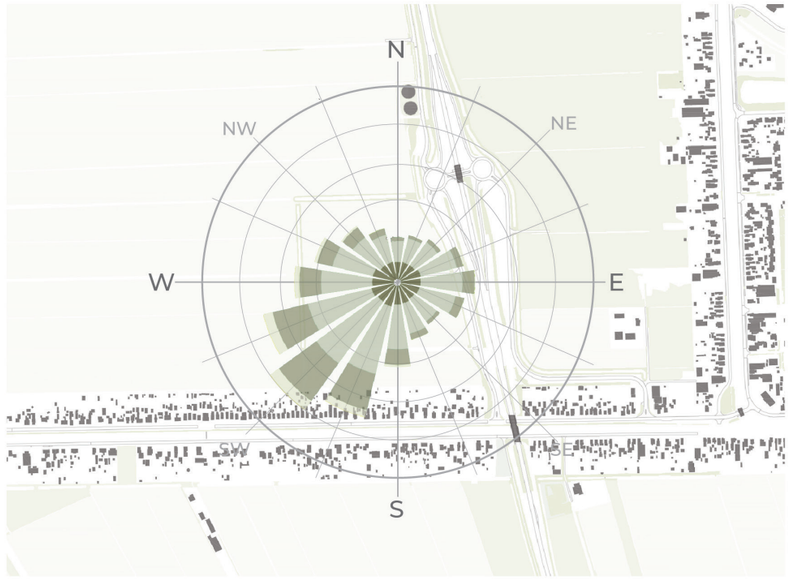
User Groups | Platform Disposition | Sun and Wind Diagrams



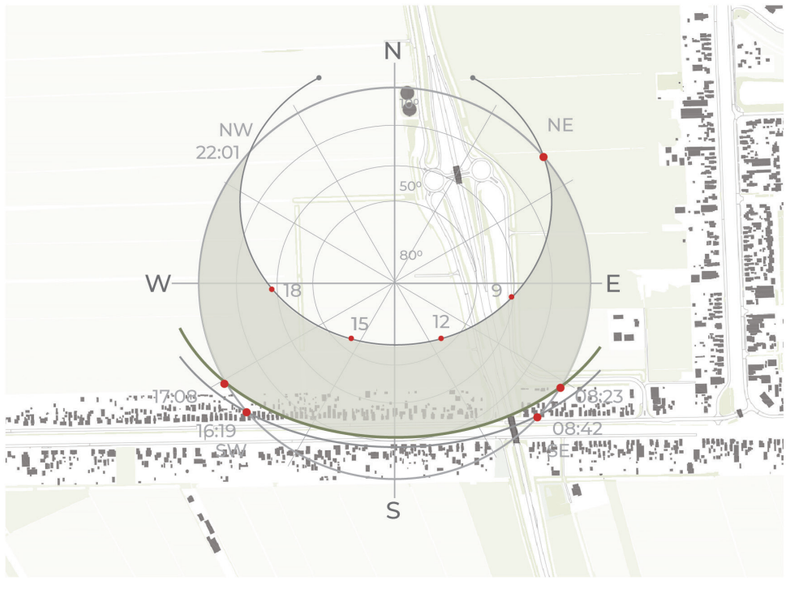








Wind rose



PROJECT AIM

This project aims to explore how public architecture can actively promote cultural tourism and reframe a place identity as a distinctive tourism destination. It inspects a touristic journey as an activity initialized, captivated, and guided by architecture. It explores how architectural design can synthesize segregated cultural, historical, and natural assets into a cohesive spatial narrative. The research further aims to change and reframe the misperceived image of Ter Apel, consequently assigning it a new identity, amplifying its visibility, stimulating new visits, and extending visitor stays.

Moreover, the project should initially propose a plan of a network of architectural interventions that target specific landmarks and features in Ter Apel and compile them into a connected system. In this sense, the interventions would aim to amplify the landmarks that already exist, in a way comparable to urban acupuncture. Manuel de Solà-Morales, in The Matter of Things, describes urban acupuncture as the manipulation of the power that is held within the city skin. In the similar manner, the proposed network would recognize the potential of landmarks in Ter Apel and approach the sites with attentive and cautious intention to their richness, both the existing richness and more importantly, the potential richness. Secondly, the designed public building will be positioned as the main node of the network, serving as an initiator and a starting point of the touristic journey to Ter Apel and the region.

On the broader scale, by analyzing the potential specific features of a destination, organizing them into a conceivable whole, and developing a public building in a form of a tourist hub, this project proposes a framework of how architecture can contribute to a touristic image and potential of a destination. In that sense, the framework has a potential to further be applied in different contexts and environments other than Ter Apel in order to achieve similar effects.

METHODOLOGY

This project utilizes a mix of qualitative methods based on the research by design approach, the systematic selection, review, and comparison of literature, case studies, and spatial mapping. The review of literature includes sources such as: academic publications, journal articles, books, essays, and recent reports, with a focus on works that mainly address how architecture preserves cultural features, how public buildings accommodate tourism or how spaces can influence movement.

Additionally, mapping is used as an analytical tool to synthesize the findings and compare relations on a local and regional scale. In parallel, relevant architectural and urban case studies are selected based on comparable scale, function, and spatial challenges, allowing strategies and design principles to be critically compared across different projects. The case studies are analyzed through drawings and diagrams in order to identify possible conveyable spatial concepts.

Furthermore, within the research by design framework, theory and practice, as well as analysis and imagination, are treated as inseparable components of architectural inquiry, positioning design itself as a form of research. Rather than focusing solely on describing existing conditions, research is understood as a projective and speculative act that supports the exploration of unknown spatial possibilities and unexpected design directions. Ultimately, this study anticipates research and design as symbiotic and iterative, and uses sketching, diagramming, and modeling as active tools to test, develop, and refine ideas throughout the process

De Sola Morales, M. (2008)

A Matter of Things, Rotterdam, NAi Publishers. p11.

RESESARCH QUESTIONS

Main research question:

How can public architecture promote cultural tourism, by accommodating experiences, rituals, and cultural spatialities that stimulate and enhance the perception of Ter Apel's identity?

Sub-questions:

1. How can the architecture of a public building serve as a protective and celebratory catalyst that honors the local culture and history through a designed spatial narrative, while dictating the beginning and progression of a tourist's journey?

2. In what ways can architectural interventions act as "sensory lenses," filtering, focusing and connecting specific fragmented landmarks into a single, cohesive network?

3. Can the choreography of movement through a building indicate and interpret historical pilgrimage routes, effectively preserving intangible heritage through physical action?

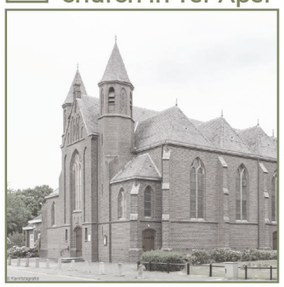
4. Can cultural tourism be manifested as an activity defined by the visitor's motivation to learn, discover and experience the tangible and intangible cultural attractions in a tourism destination?

Scattered landmarks
Ter Apel, Groningen

1 Restant Spoorbrug



2 St Willibrordus church in Ter Apel



3 Schoolgebouw



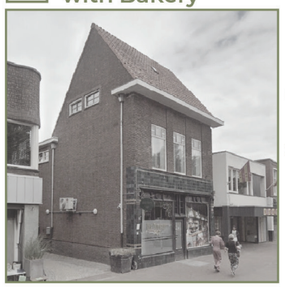
10 Doctor's Villa - Medical Practice



11 The Bank Building



12 Shop-House with Bakery



4 A.G.O Dorp



5 't Schot



6 Sluis en sluiswachterwoning



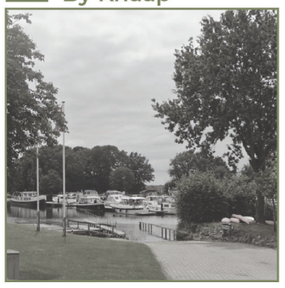
13 Convent / Religious Care



14 Moekesgat campsite



15 Jachthaven By Knaap



7 Kapel Laudermarke



8 Standerdmolen Ter Apel



9 Kabelbaan Ter Apel



16 Kloosterenclave Monastery



17 The Ancient Woods



18 Potato Factory/ Ecodorp



Type:
building
monument
place
feature

Significance:
up

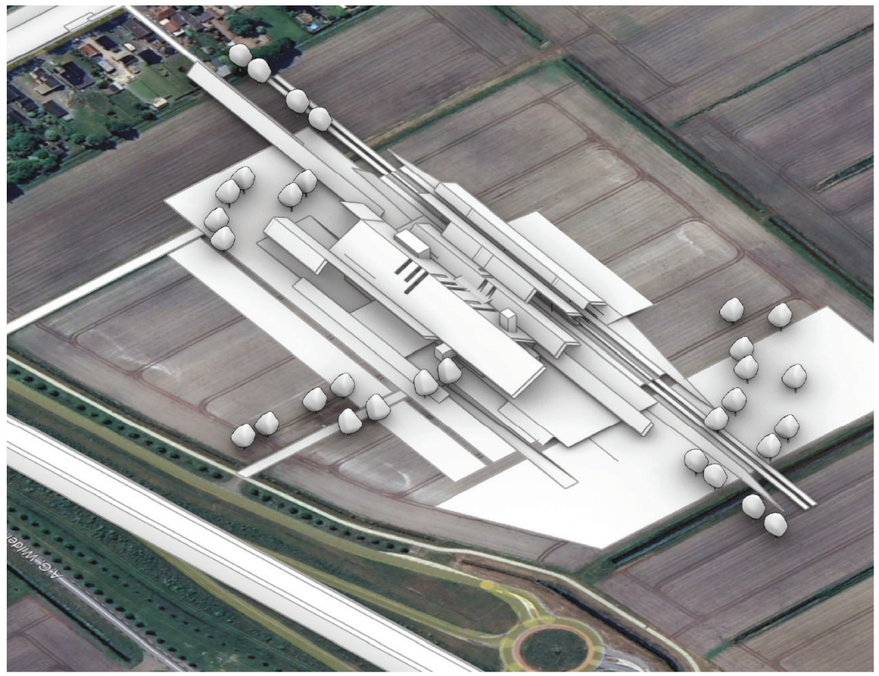
Period:
XV in centuries

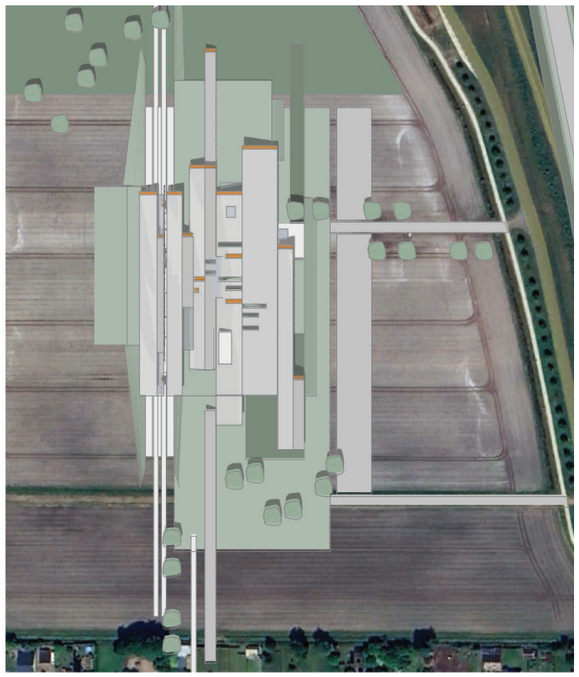
Map of landmarks
Ter Apel, Groningen



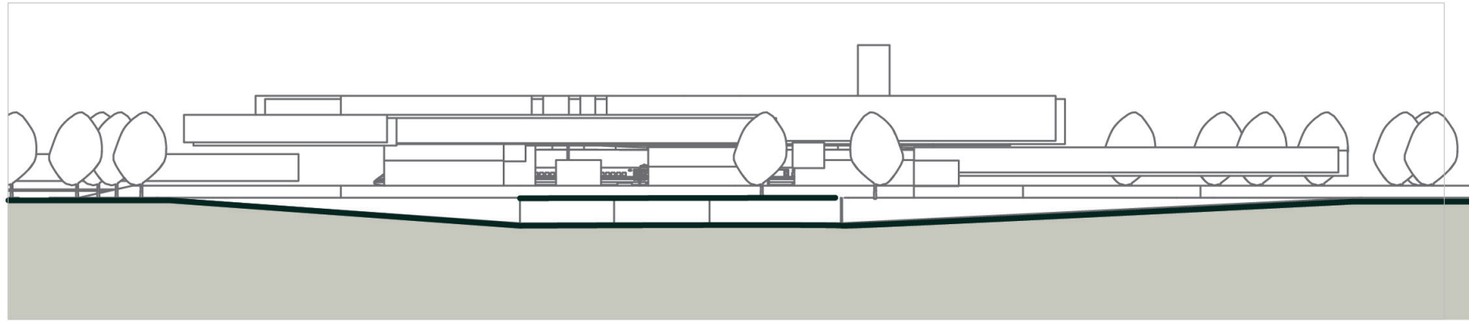
05 MASSING TESTING

Massing option A

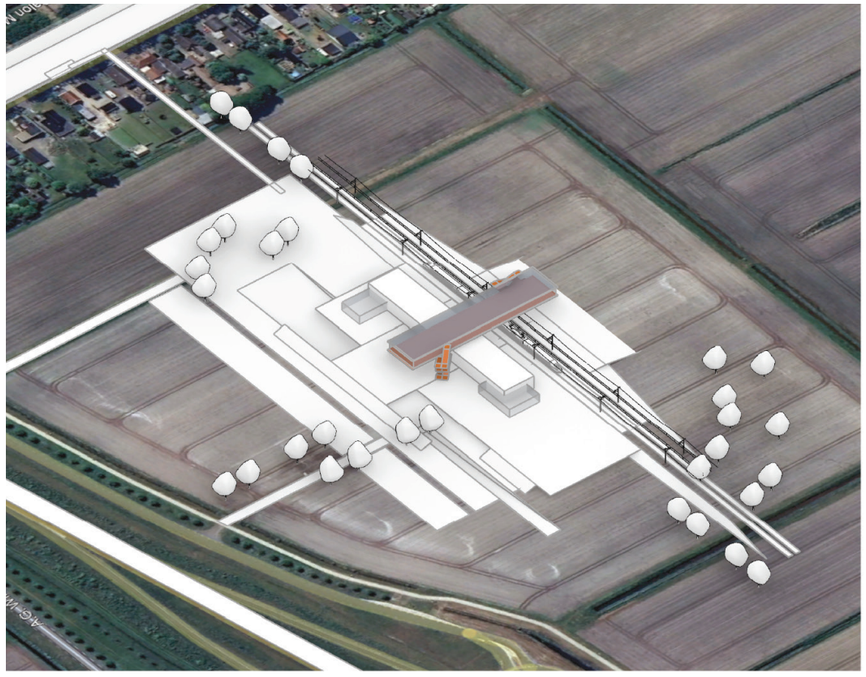




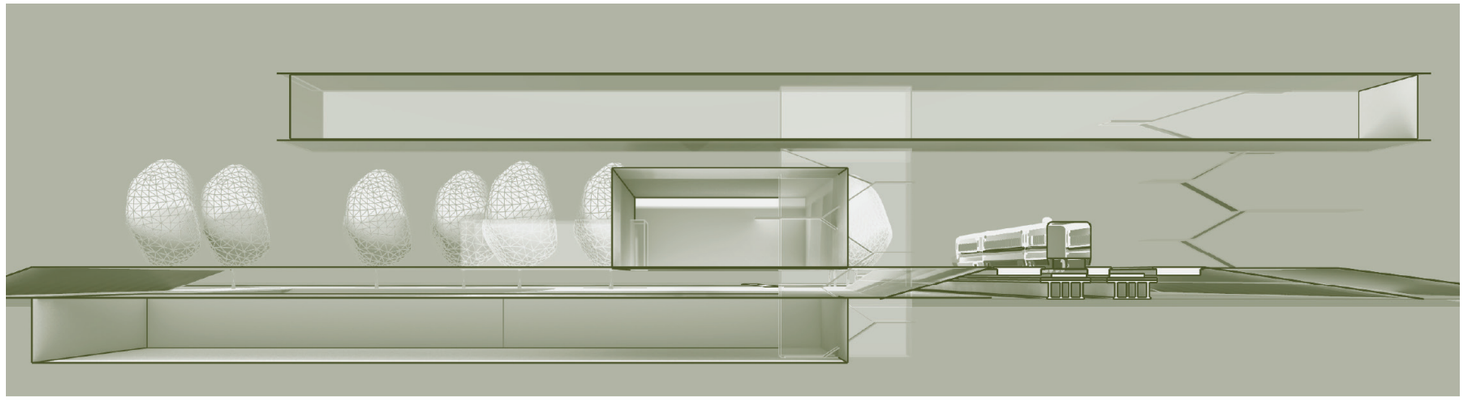


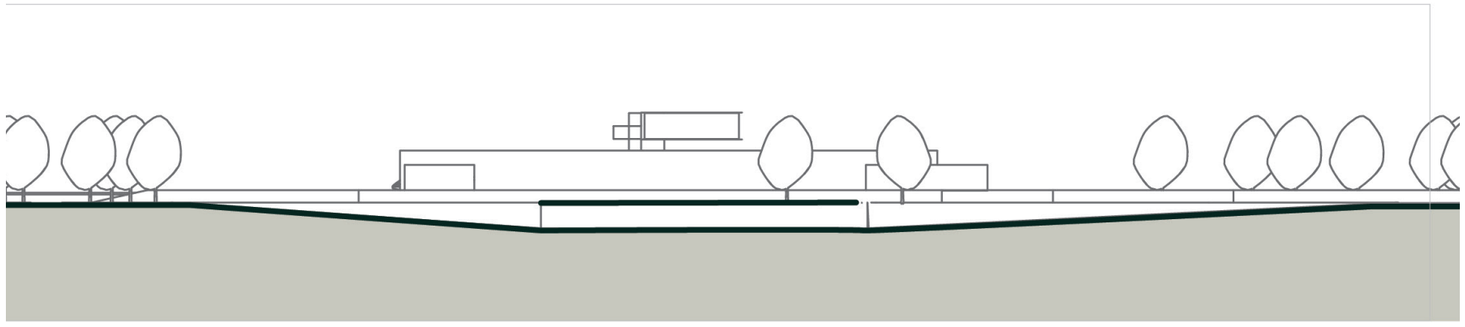


Massing option B

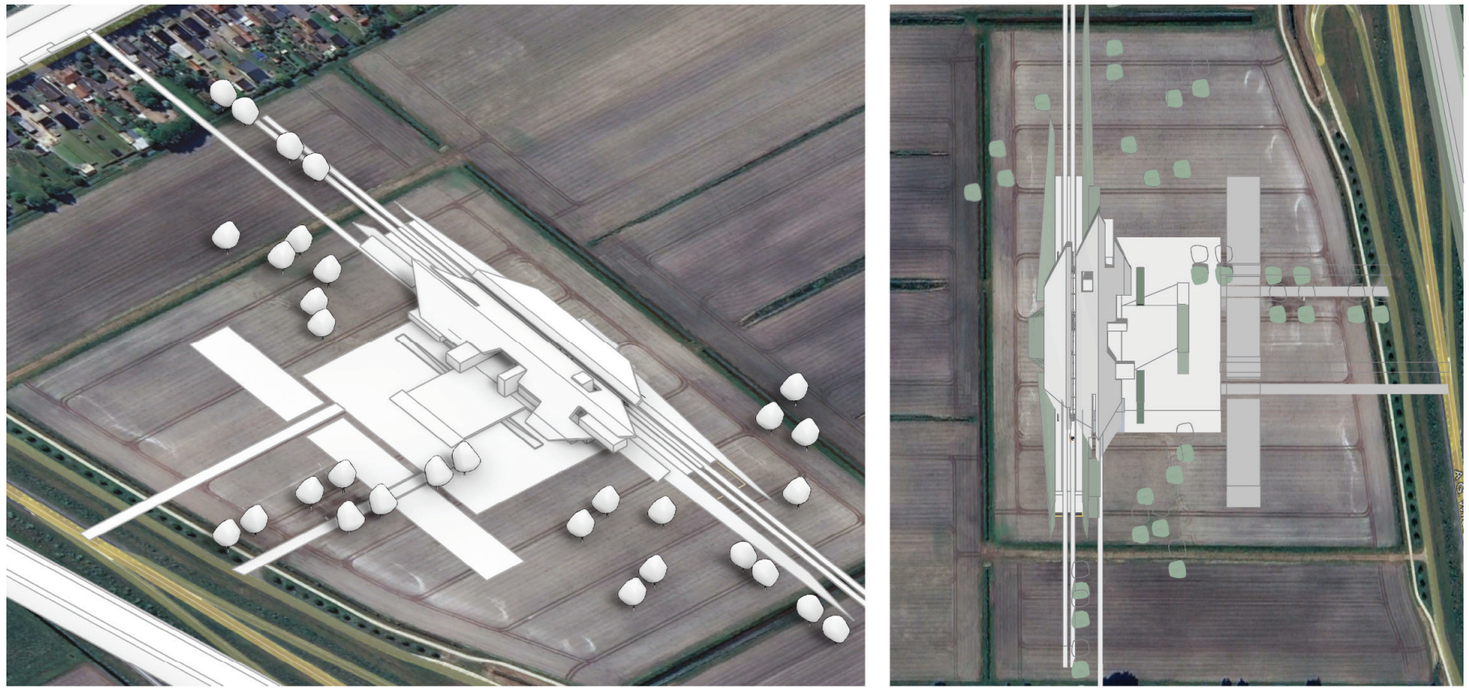


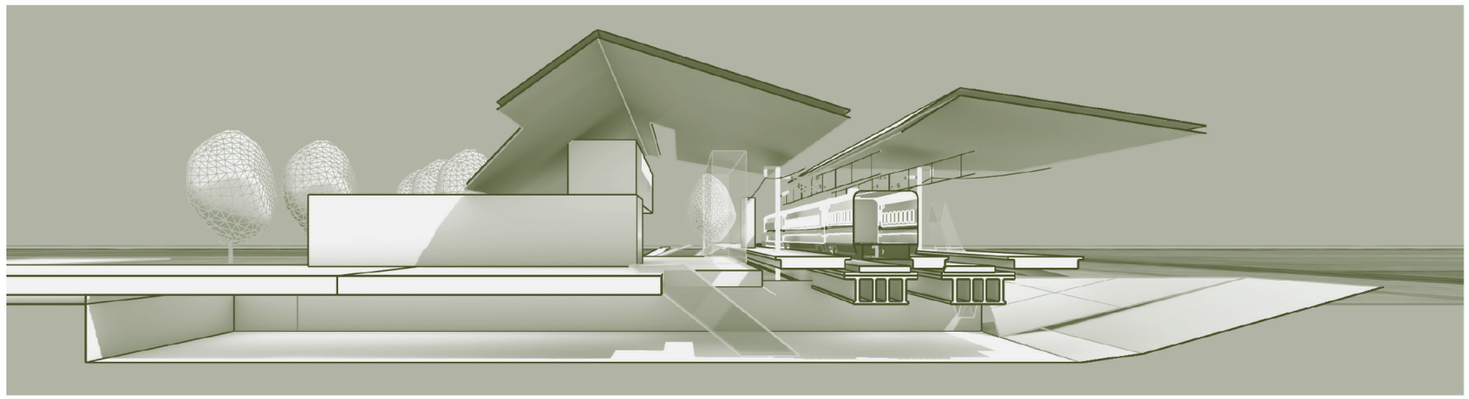


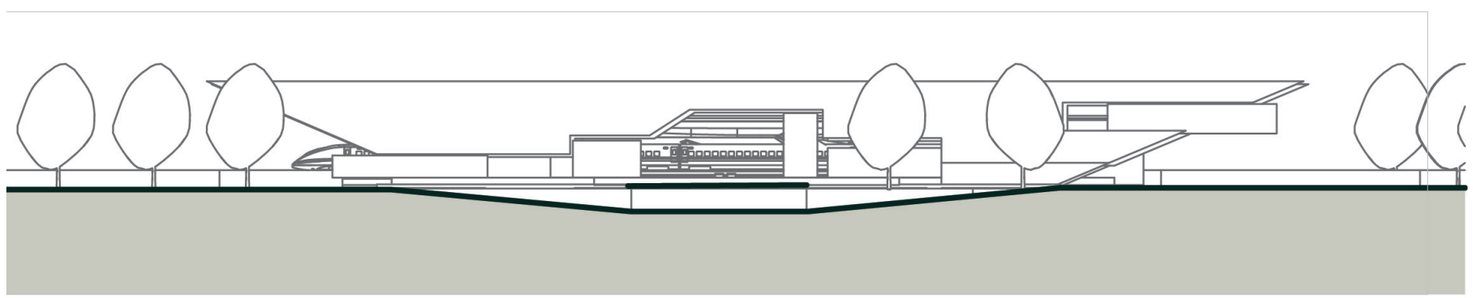




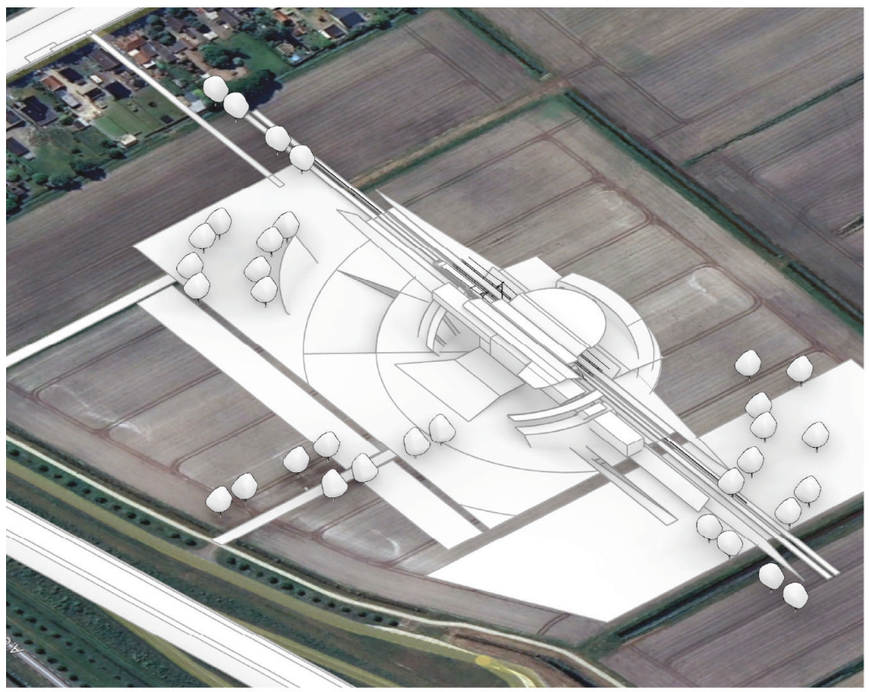
Massing option C

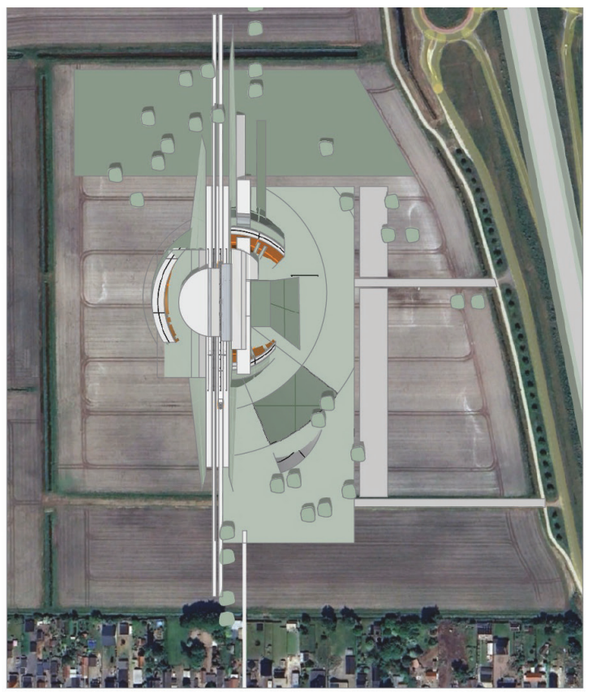




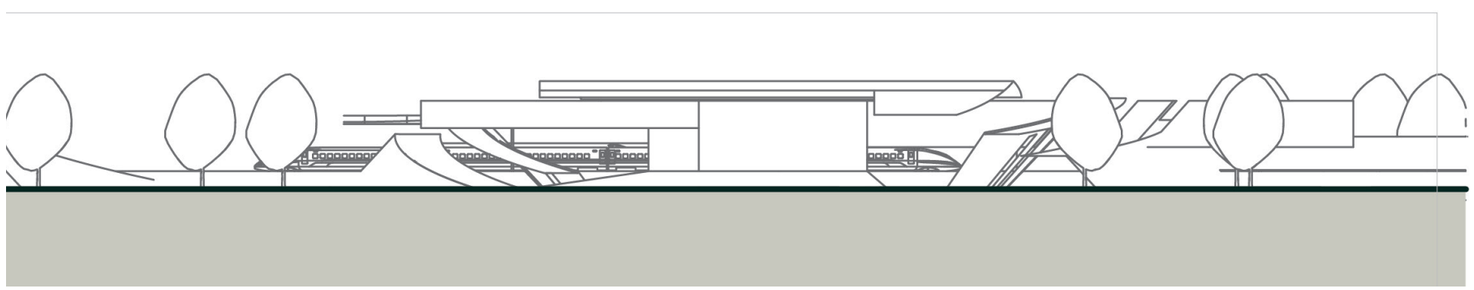


Massing option D



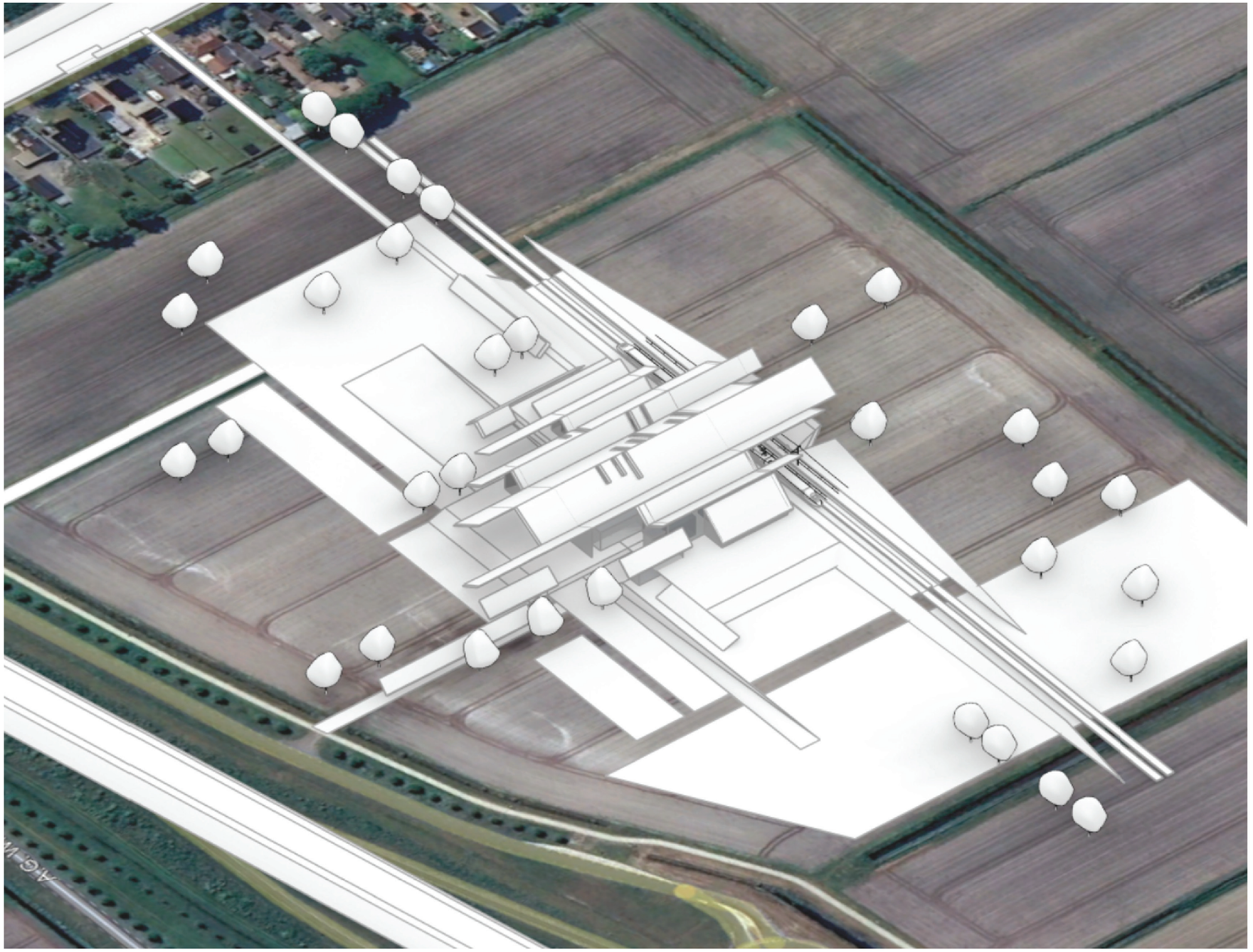


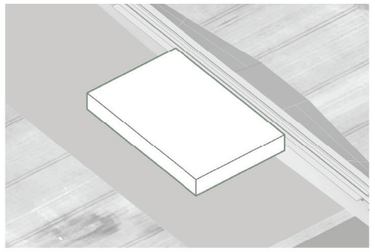


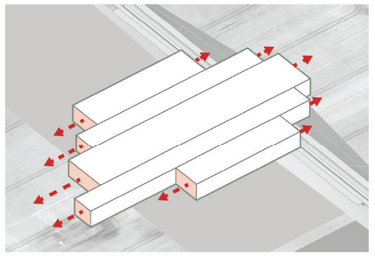


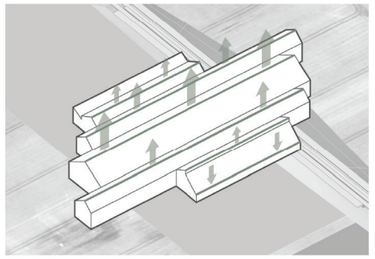
Massing option E

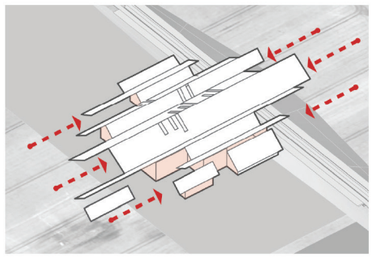
Axonometric Projection | Massing Sequence

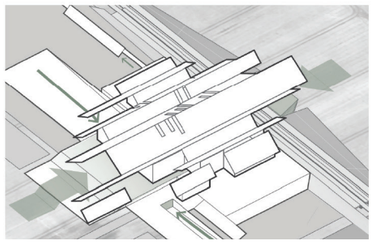






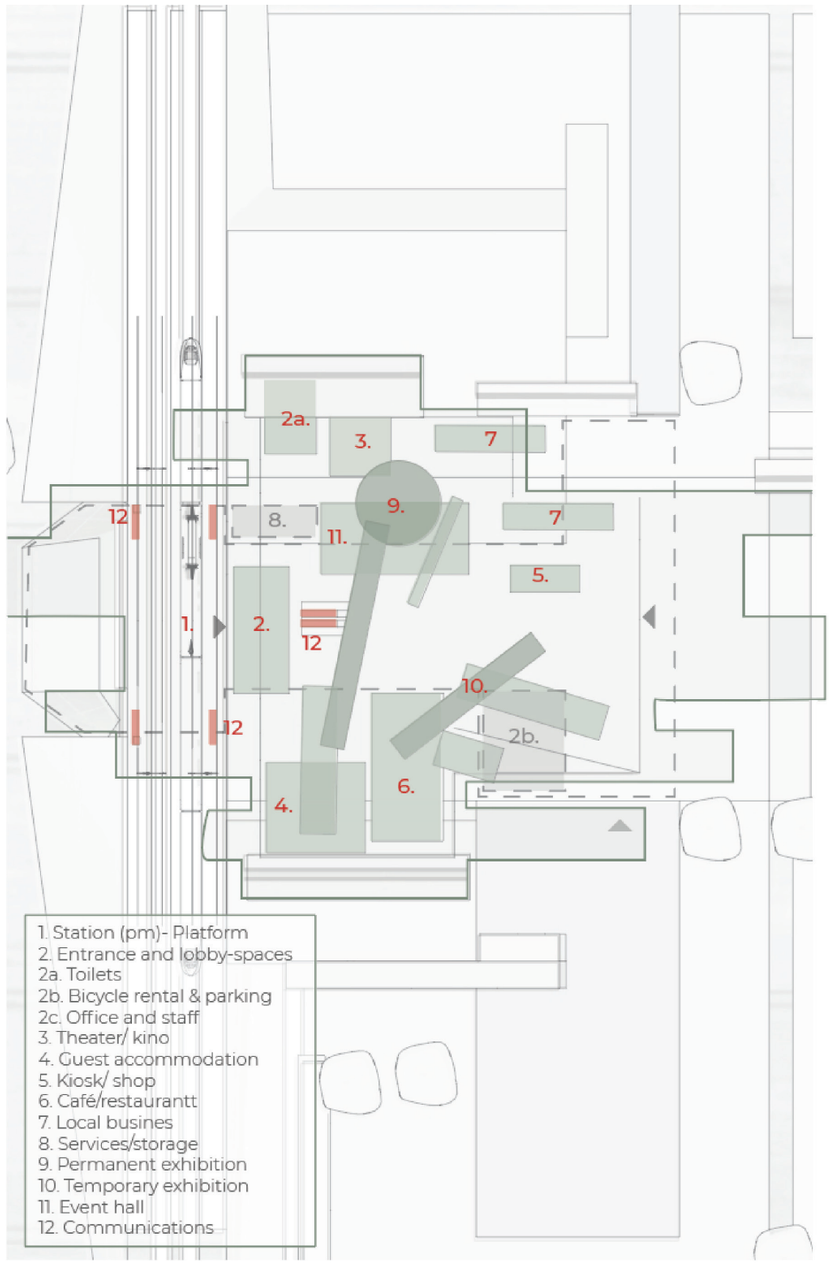




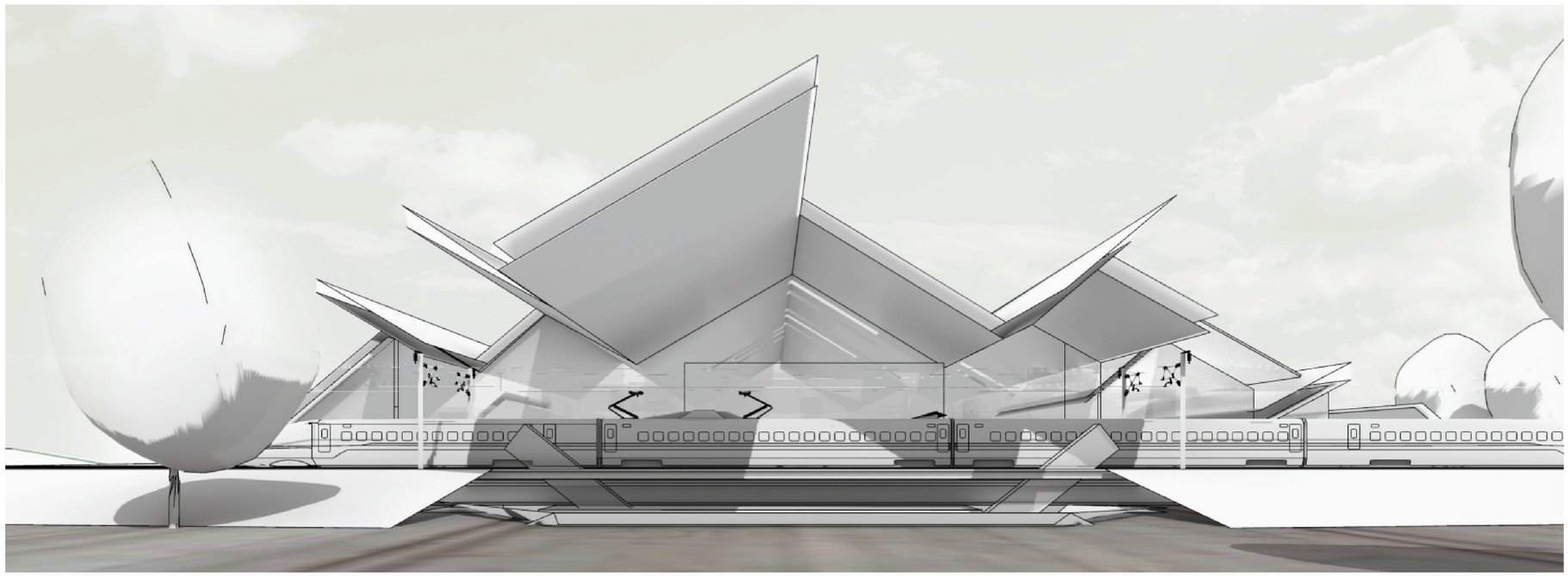


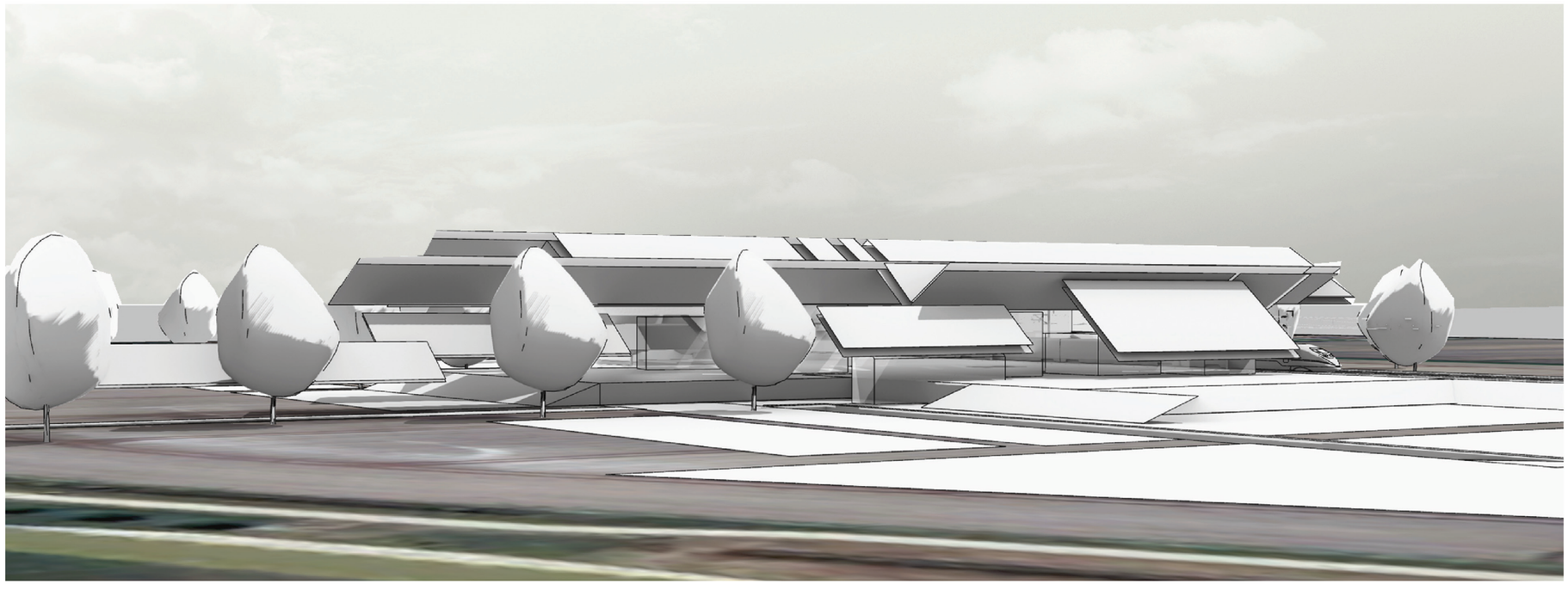
Massing option E
Site Plan | Plan Diagram



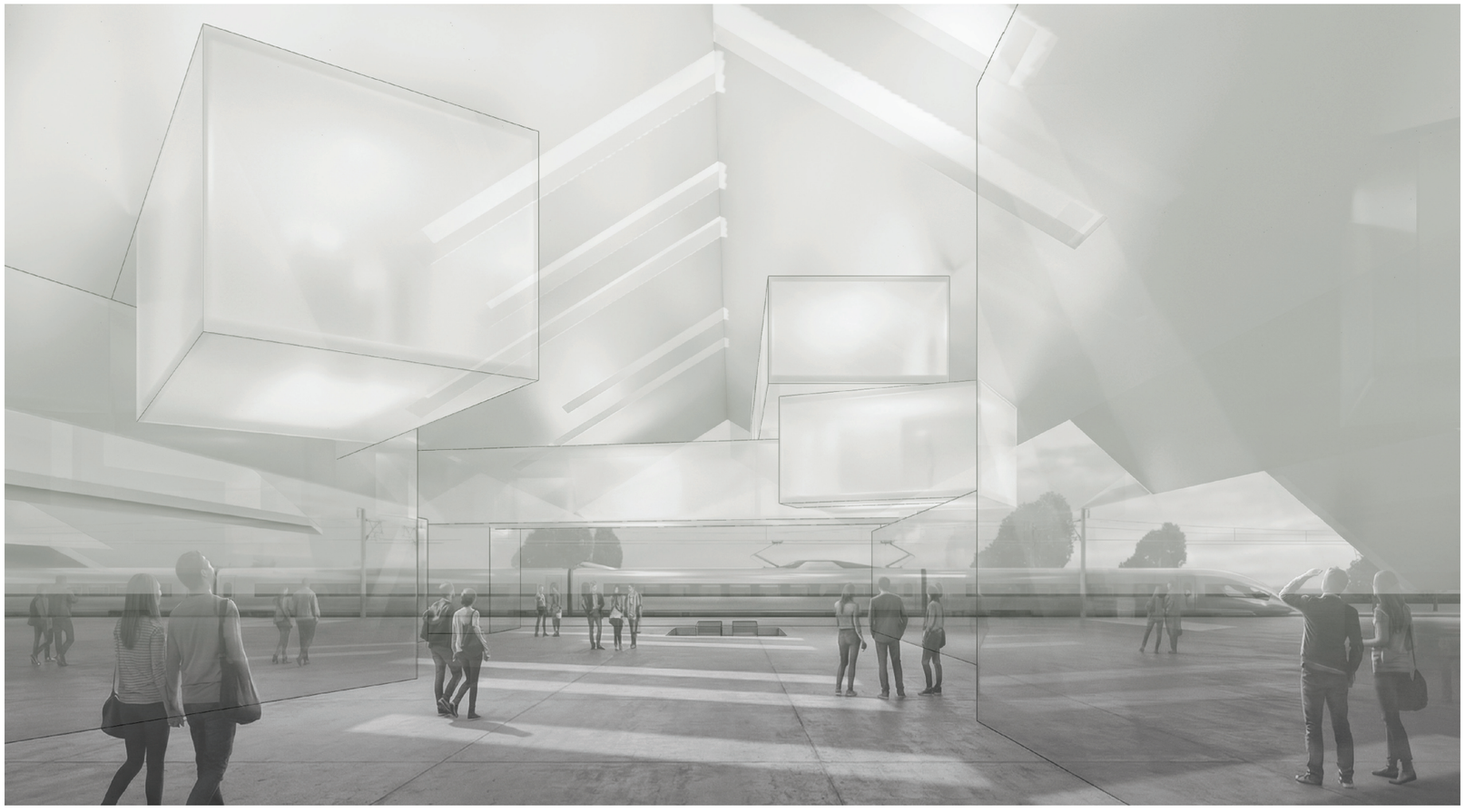


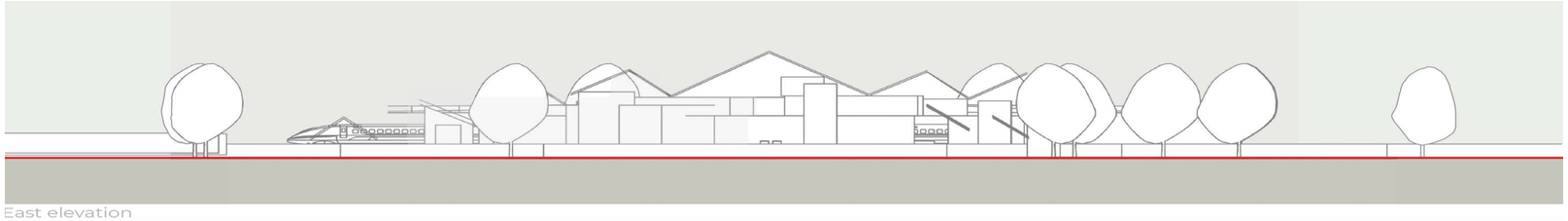
Perspectives
Landscape Side | Village Side



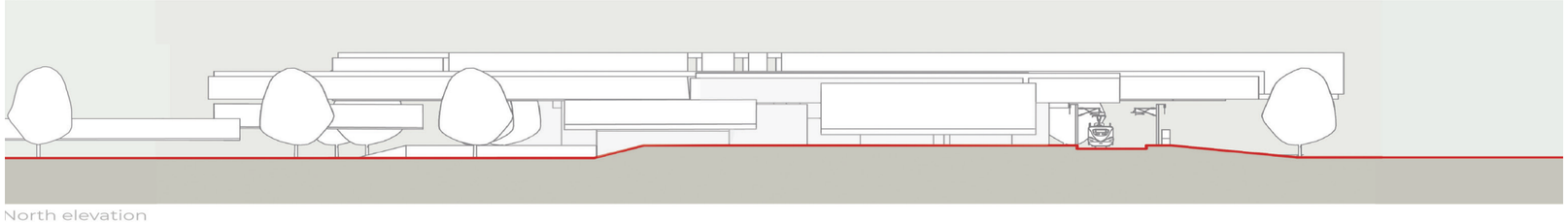


Ambience and Elevations





East elevation



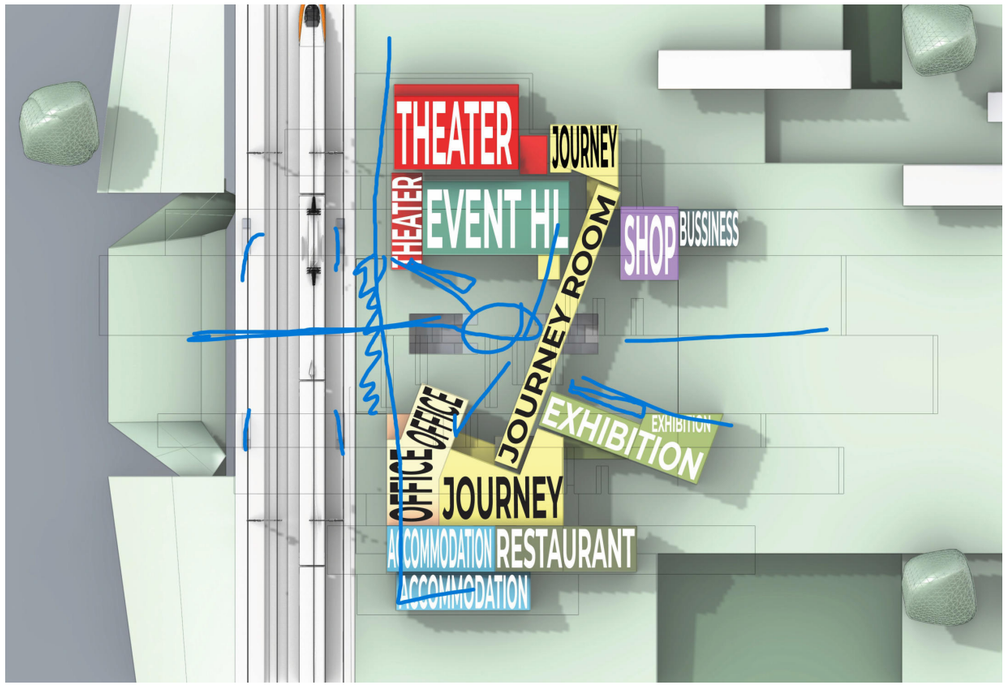
North elevation

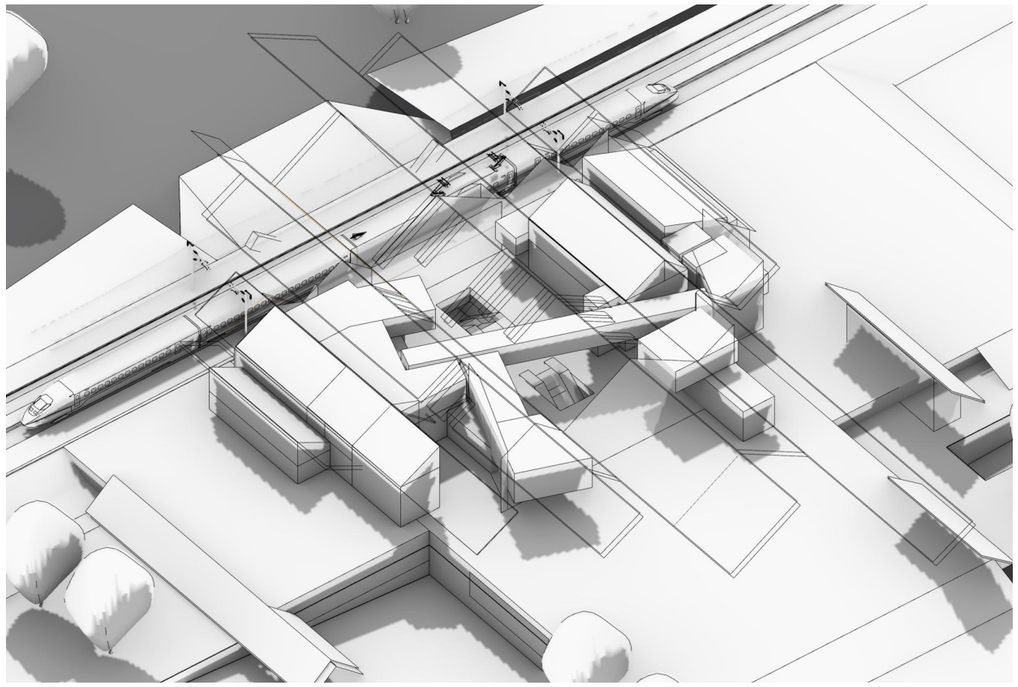
06 PROJECT DESIGN

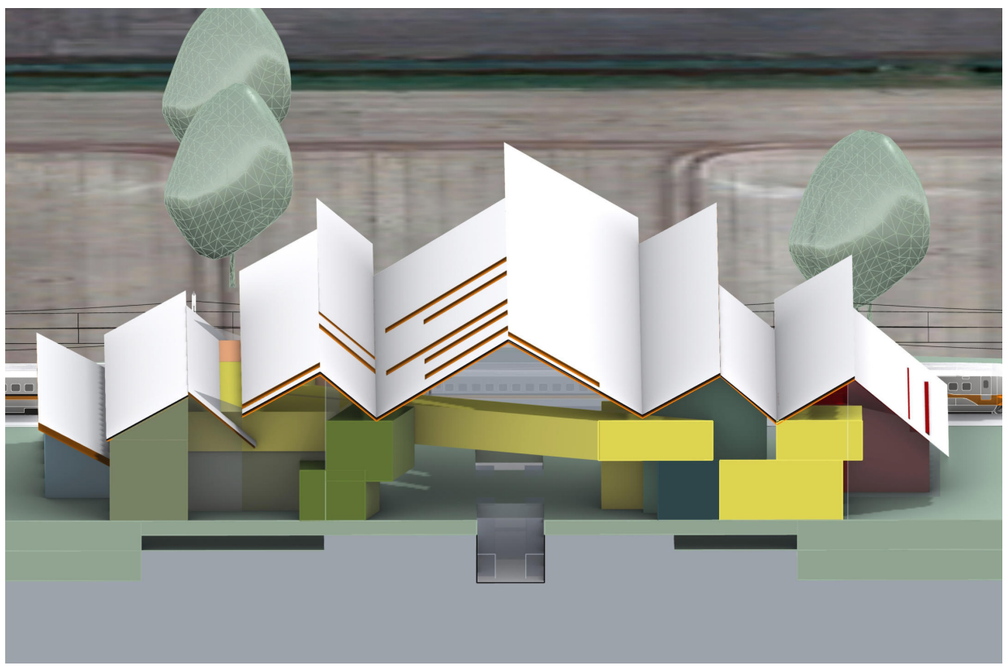
Program Distribution

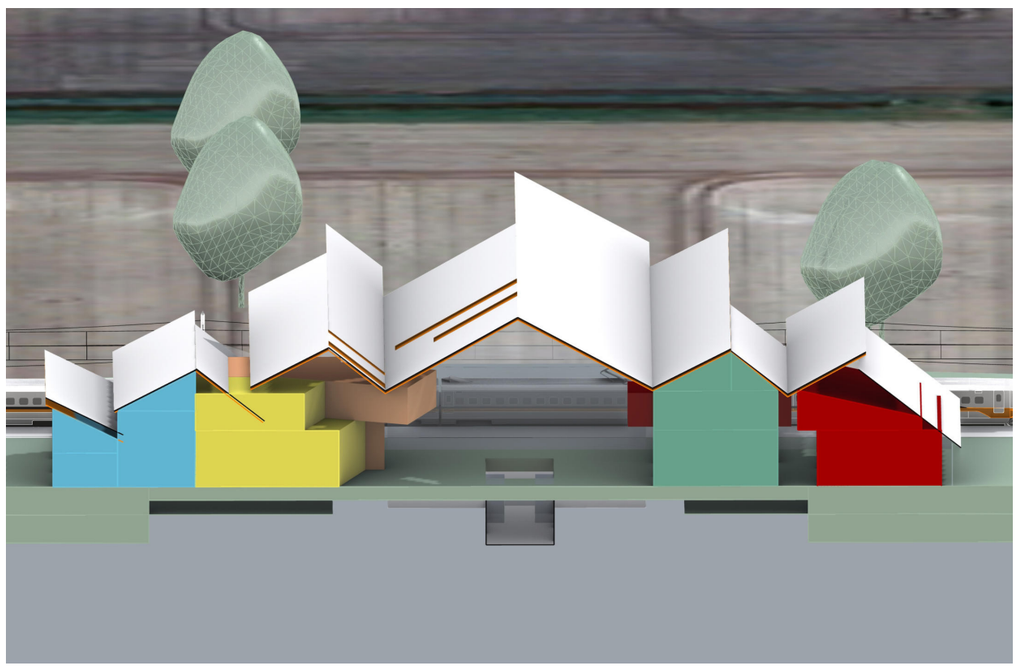
Plan Diagram | Axonometric View - roof excluded

Initial Section cuts

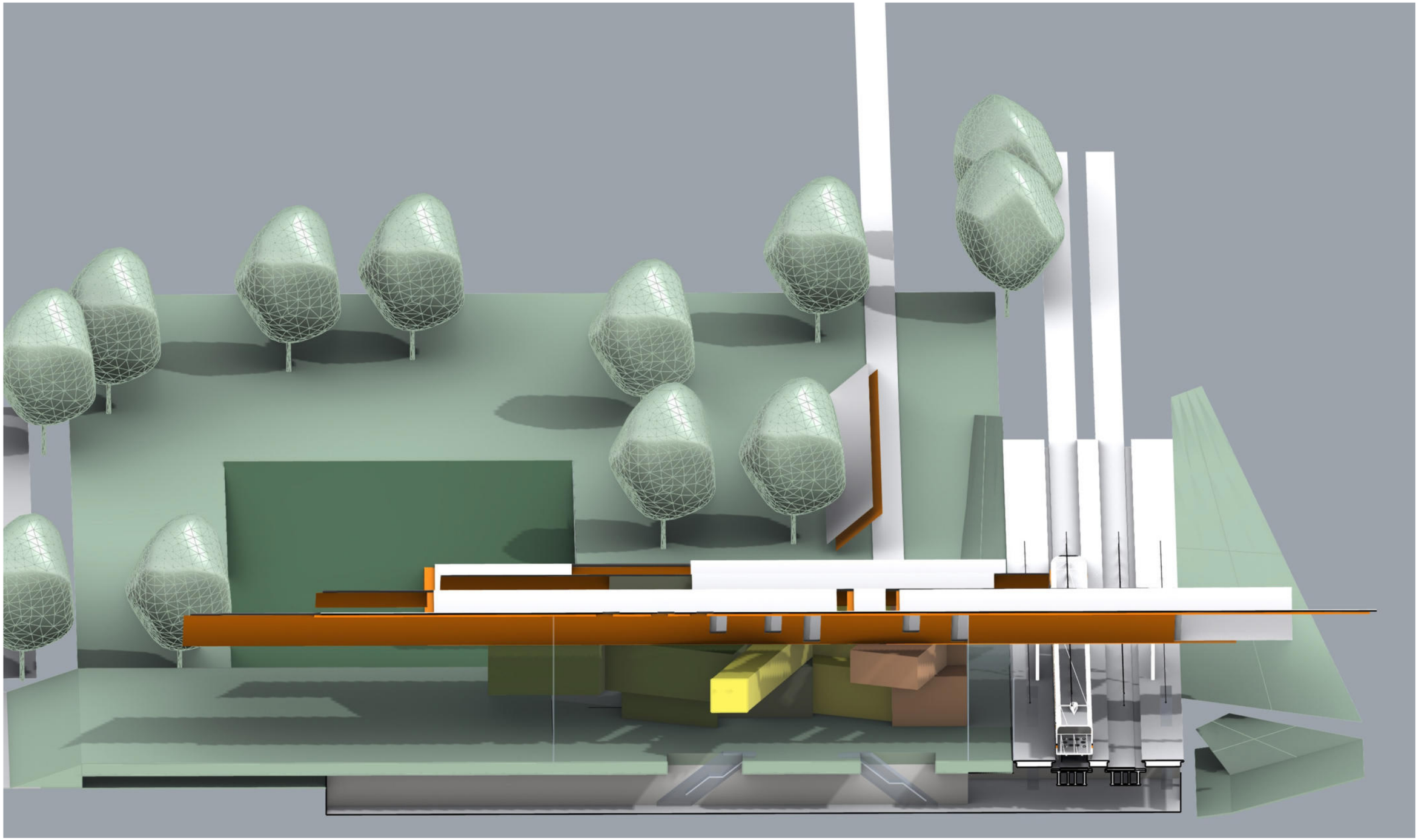




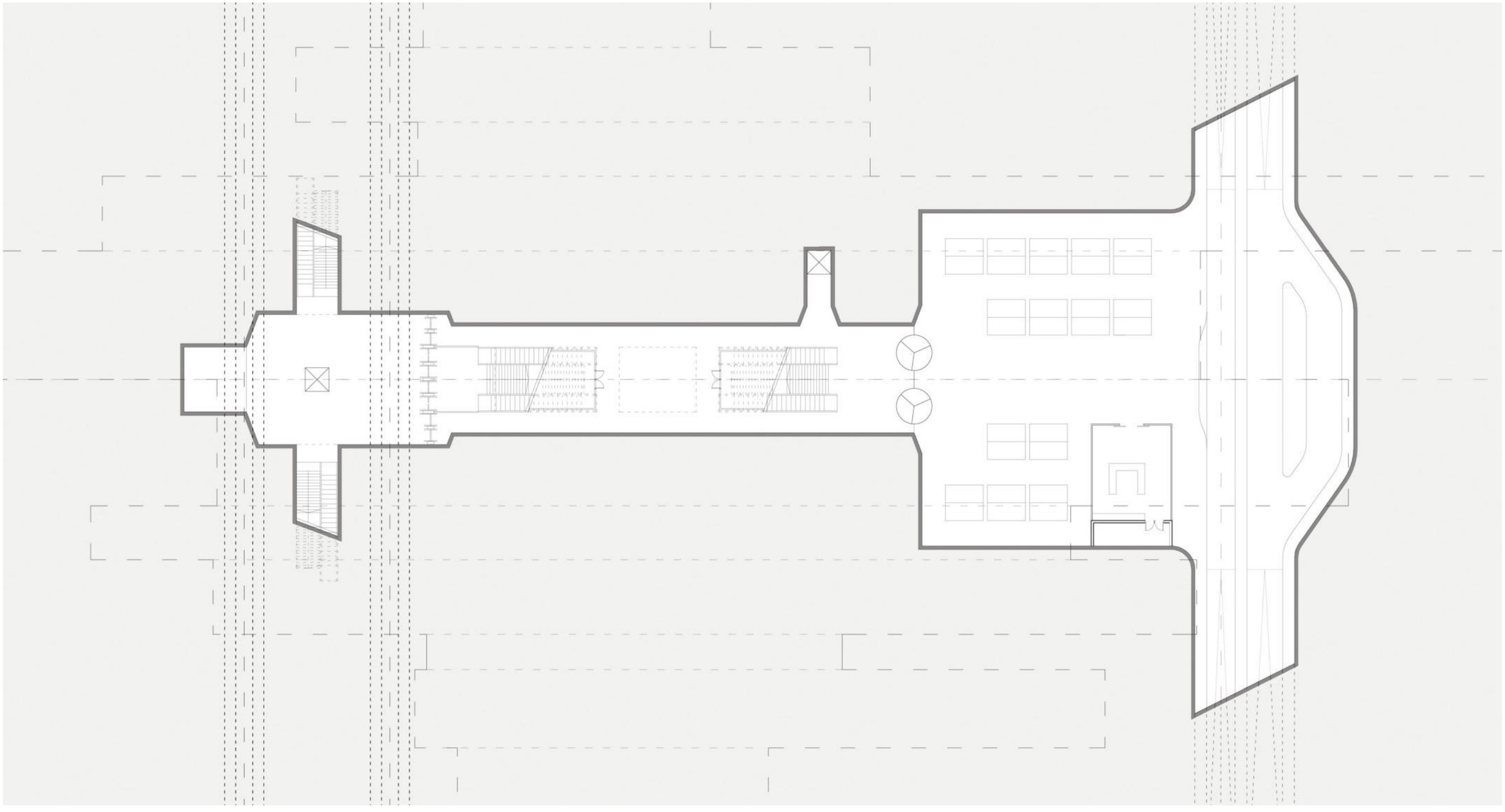




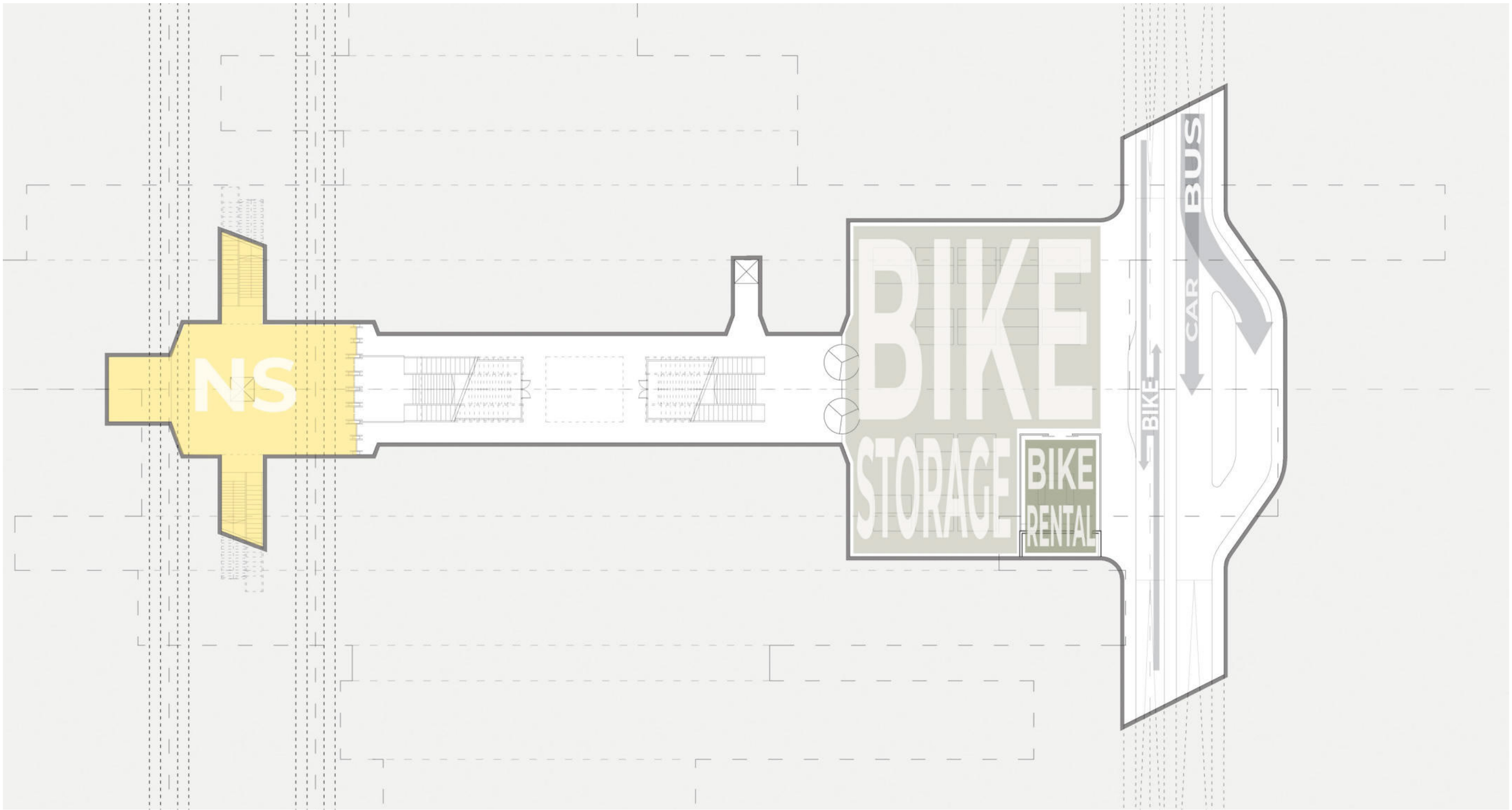
Initial Section B



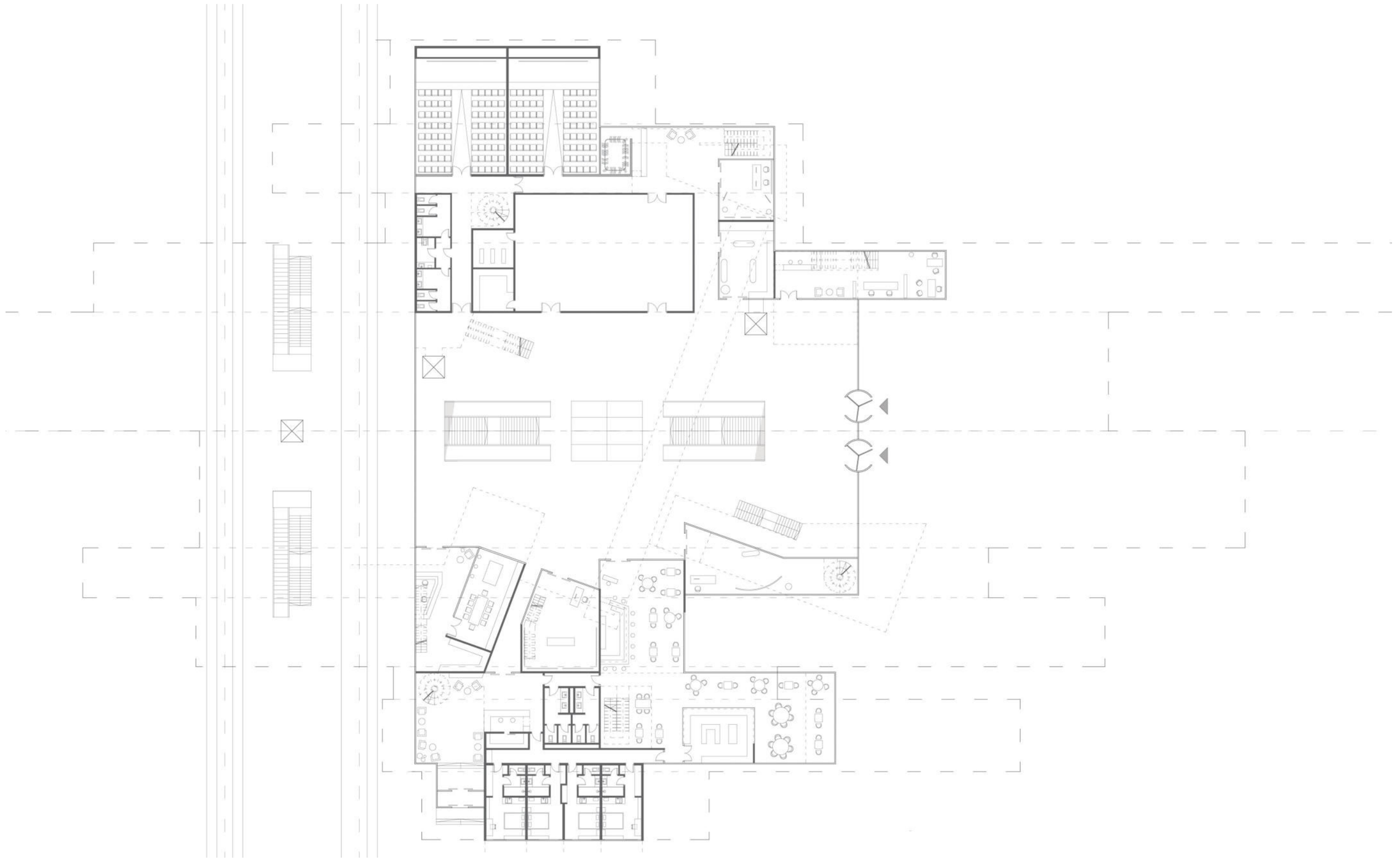
Level -1



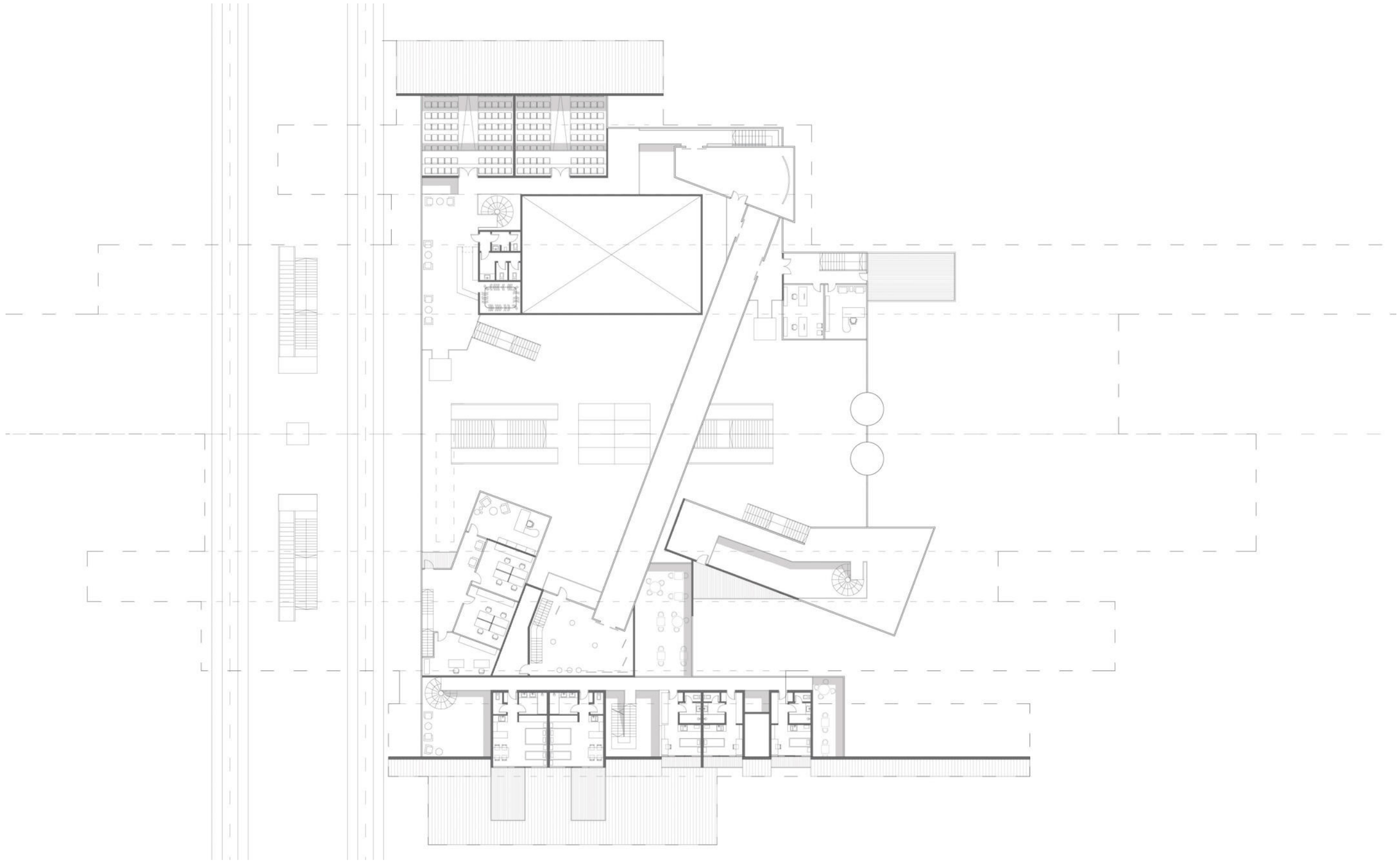
Level -1
Acces and Area Diagram



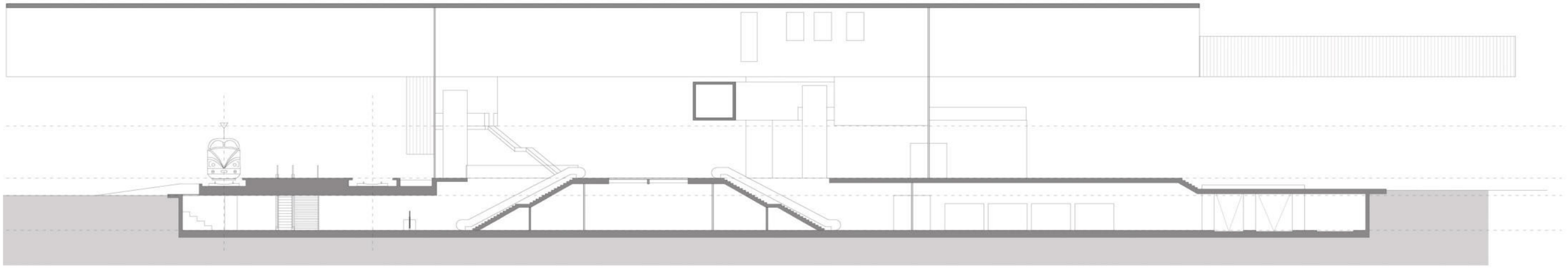
Ground Plan
Without structure



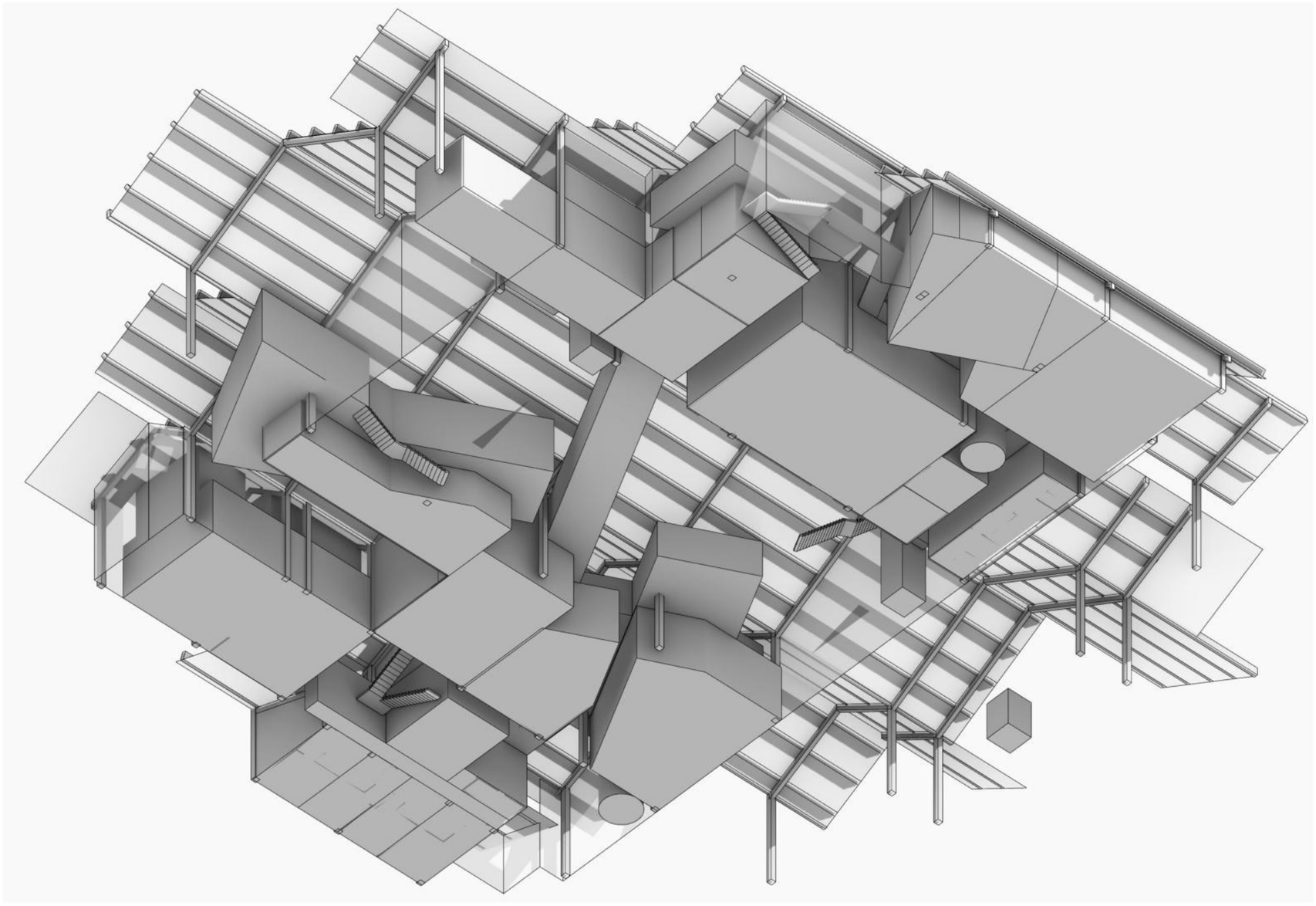
First Level Plan
Without structure



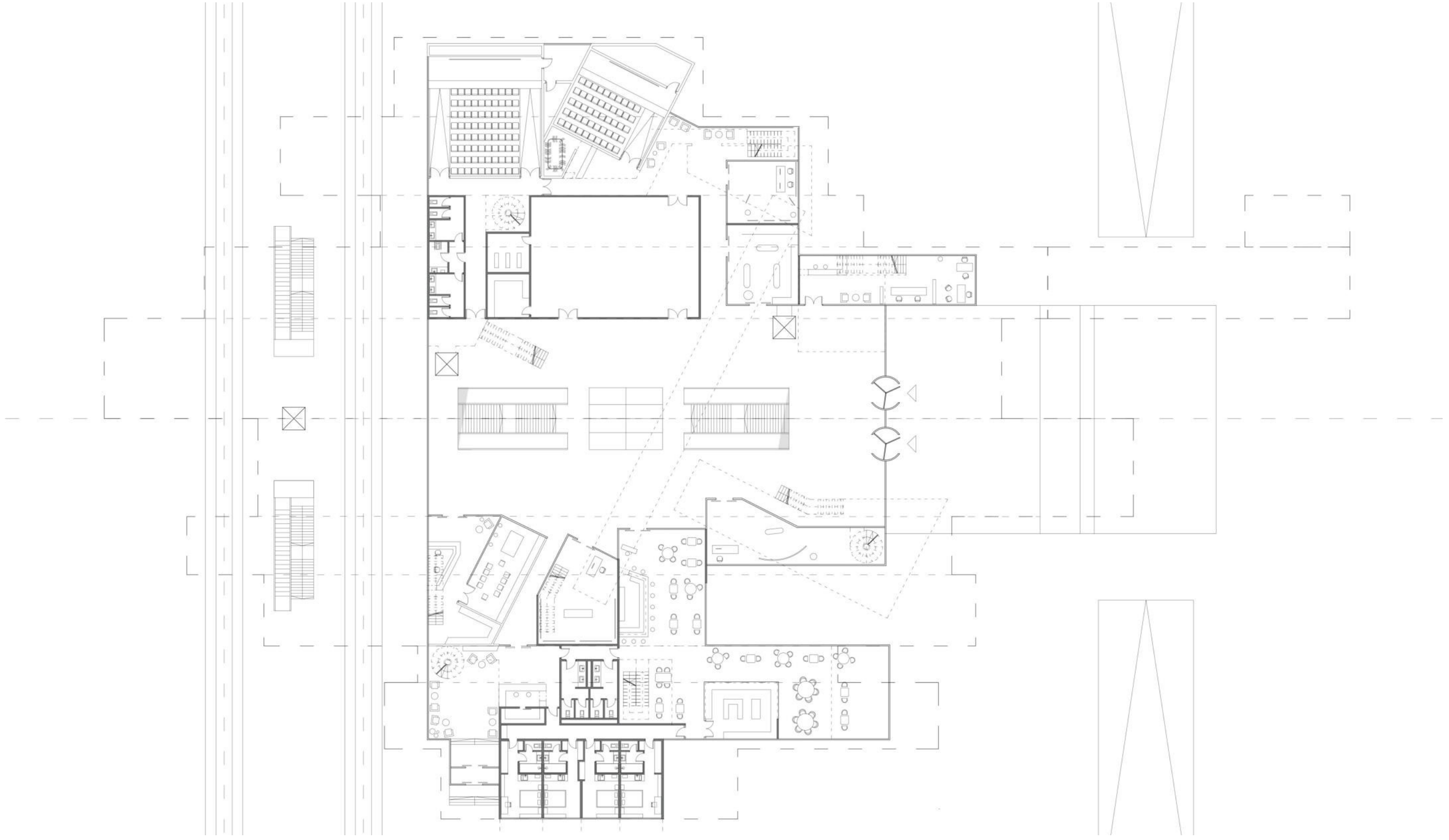
Longitudinal Section
Without Structure



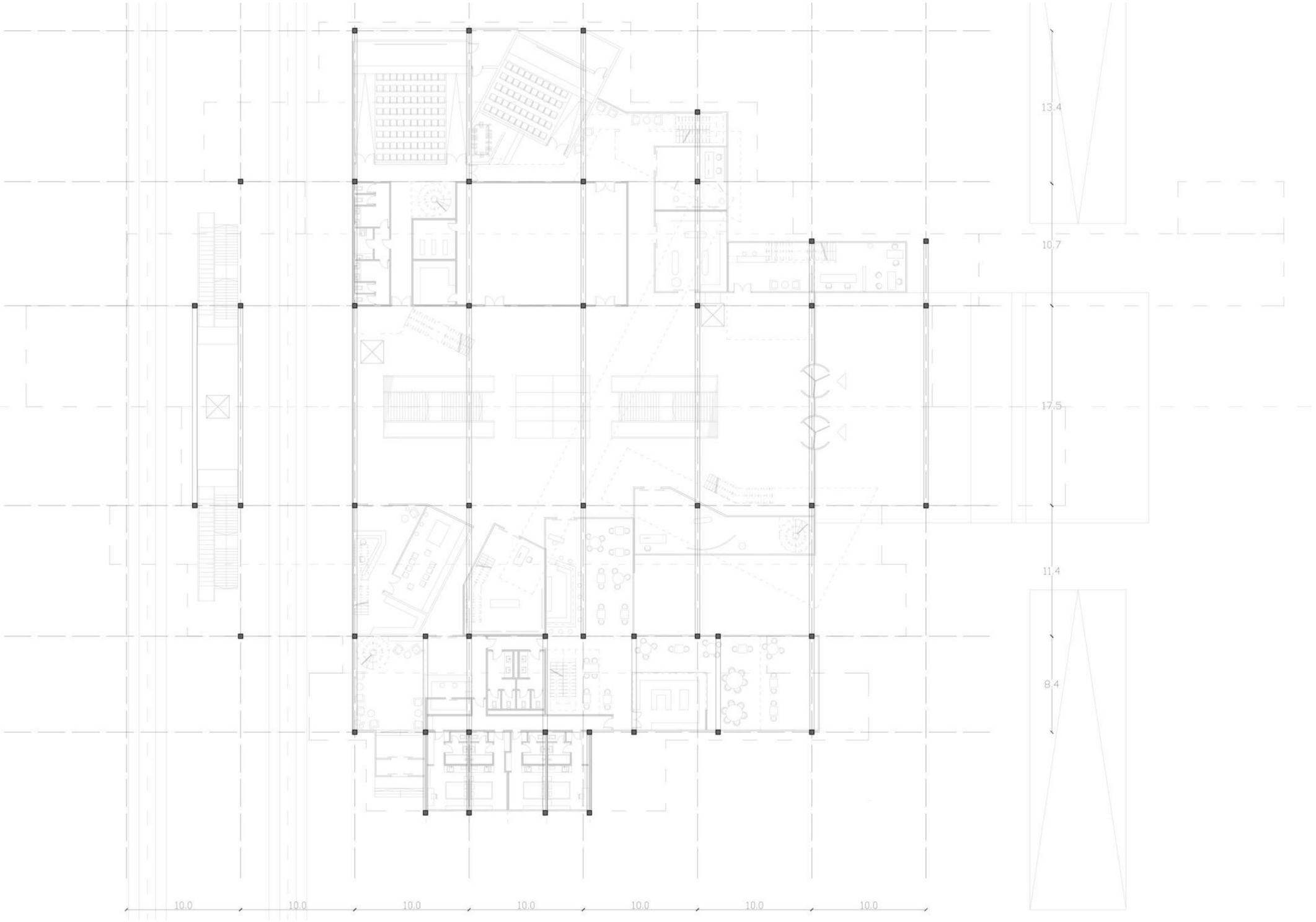
Upside-down axonomtric
Structure proposal



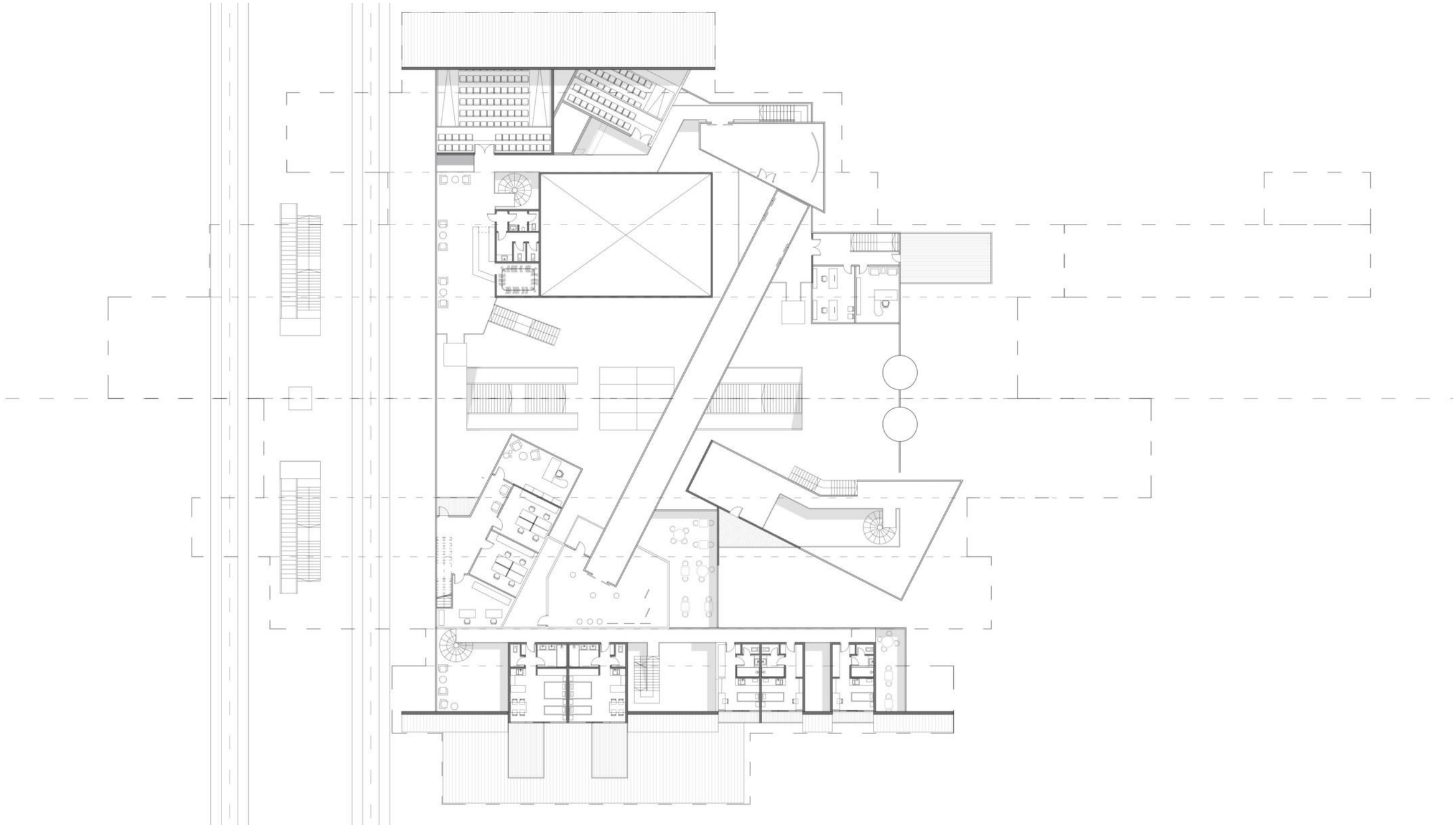
Ground Plan V2
Without structure



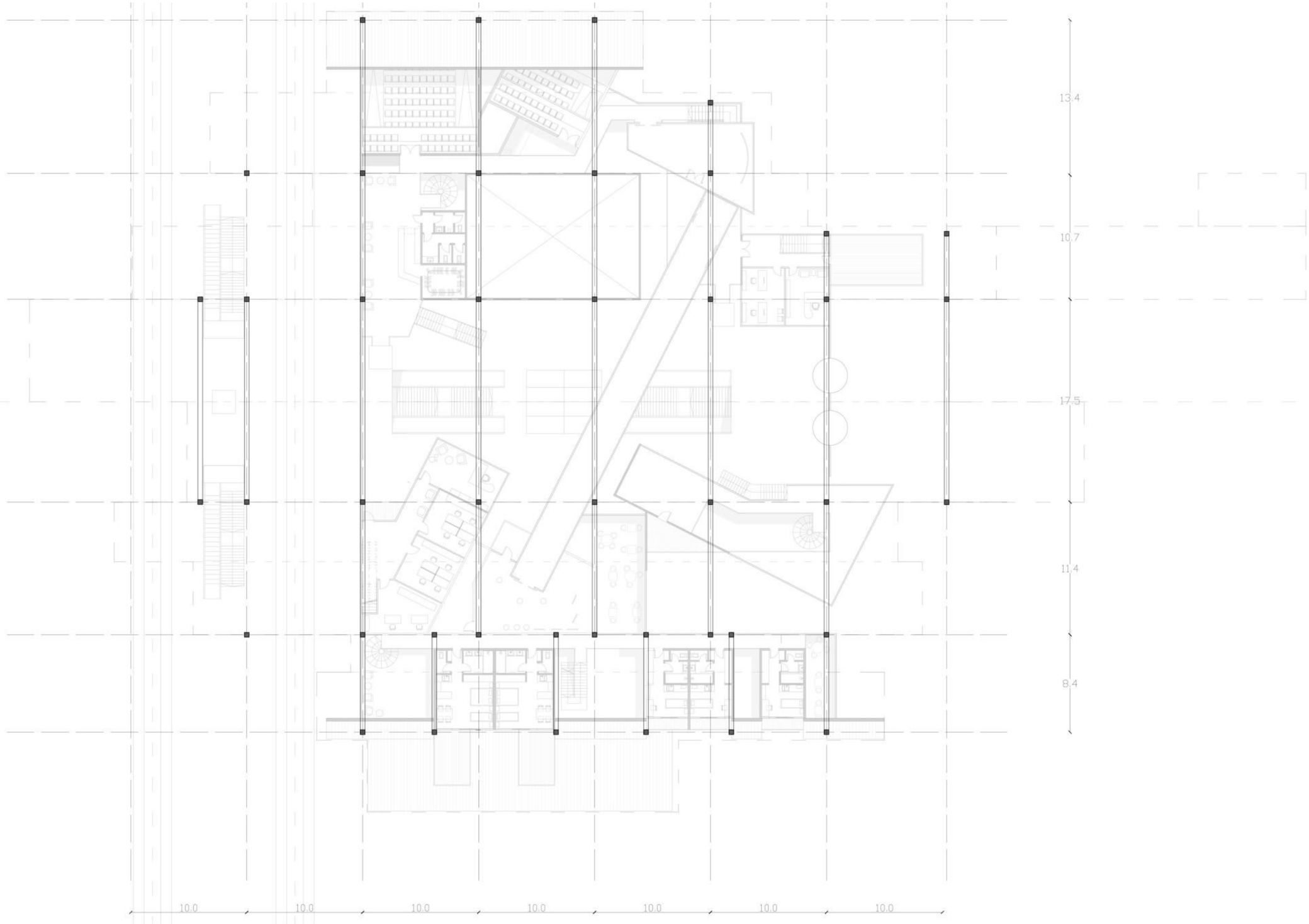
Ground Plan V2 Structure



First Level Plan V2
Without structure



First Level V2 Structure



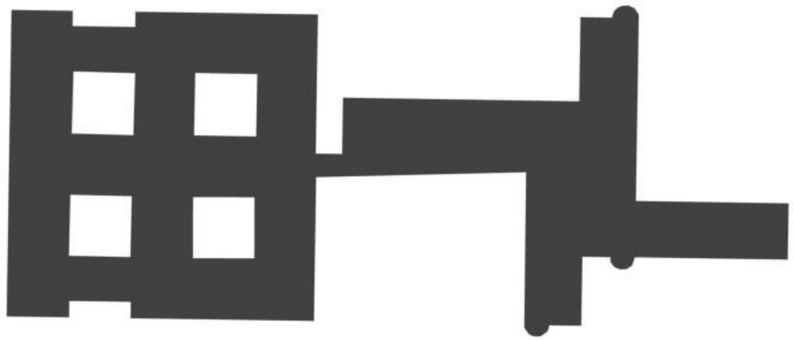
Scale Comparison
Diagram



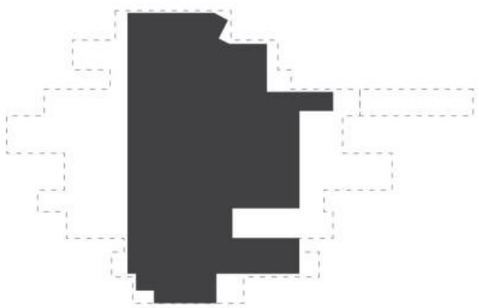
Ter Apel Library



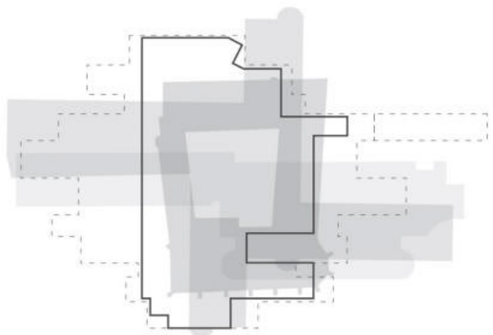
Ter Apel Monastery



AZC Main Building



Threshold

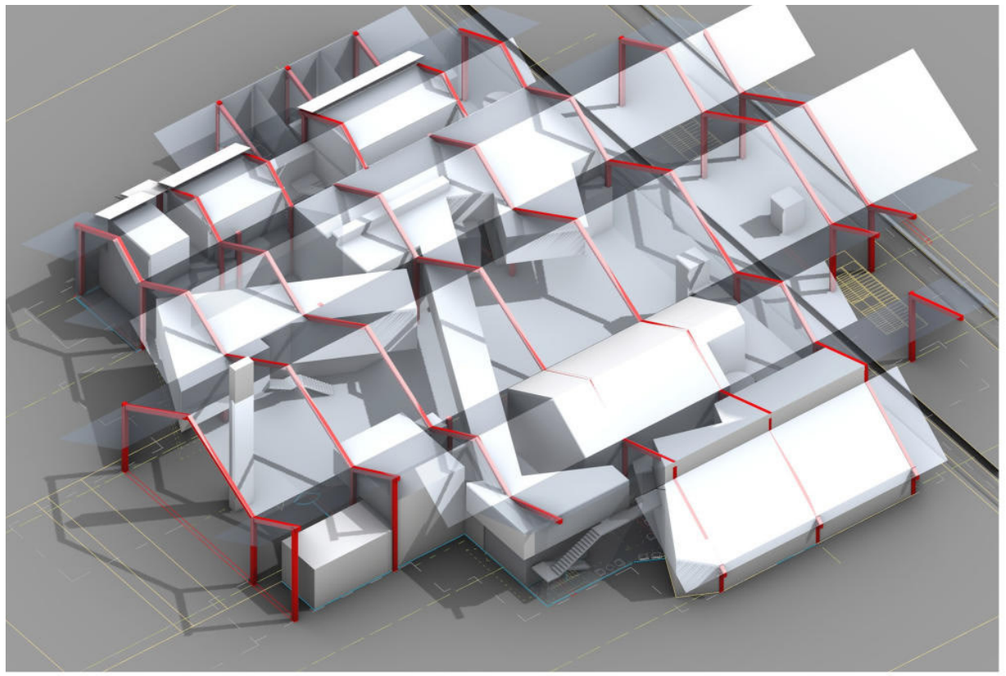


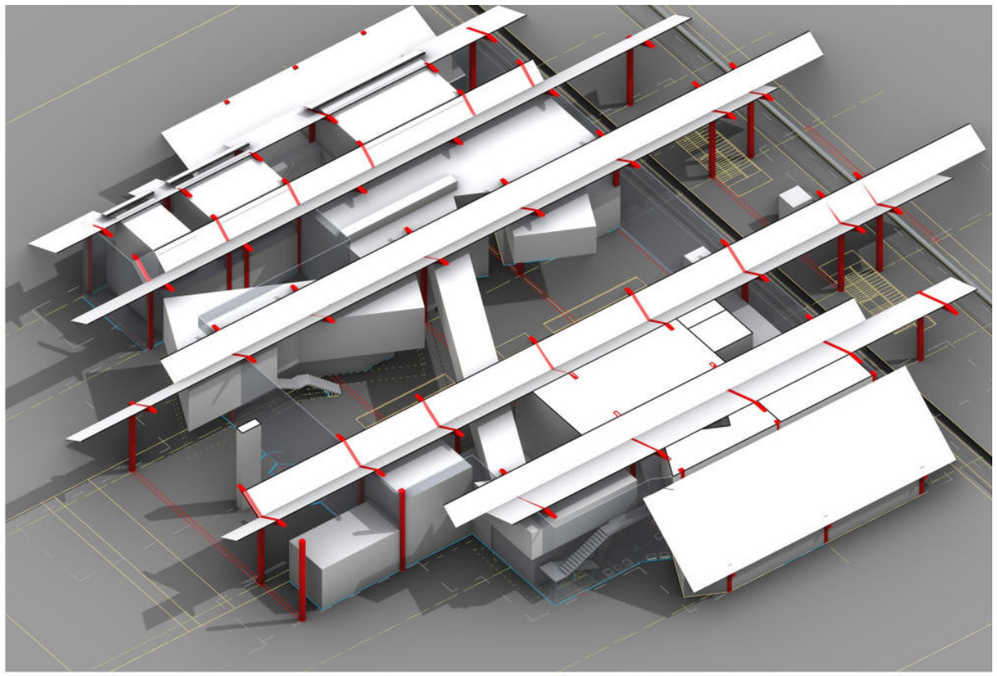
Overlapped

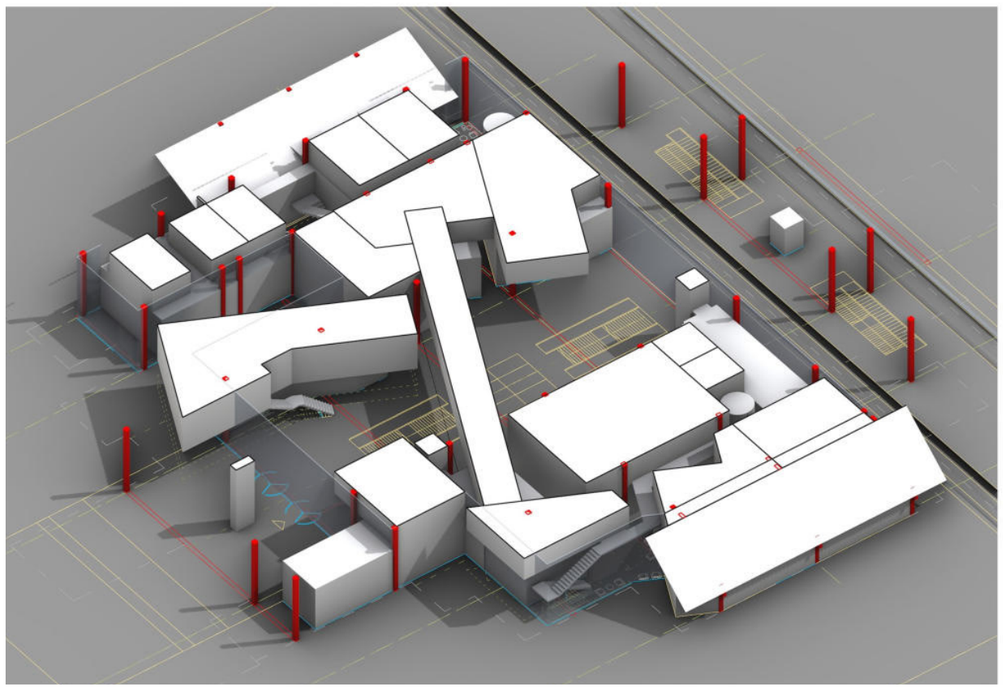


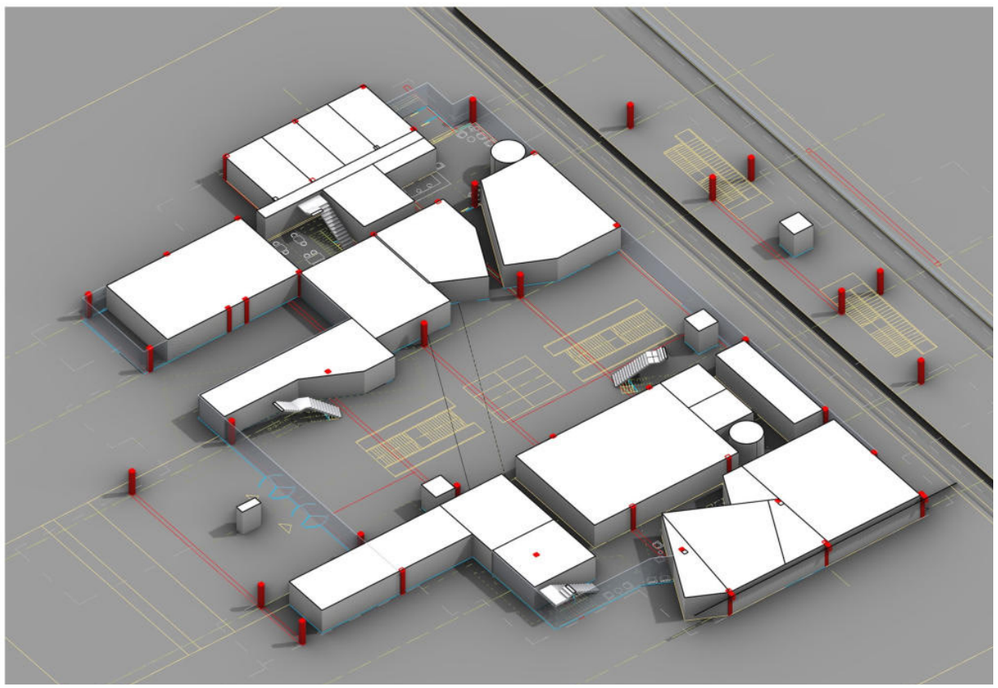
Ter Apel Center Square

Structure axonometric
Diagram

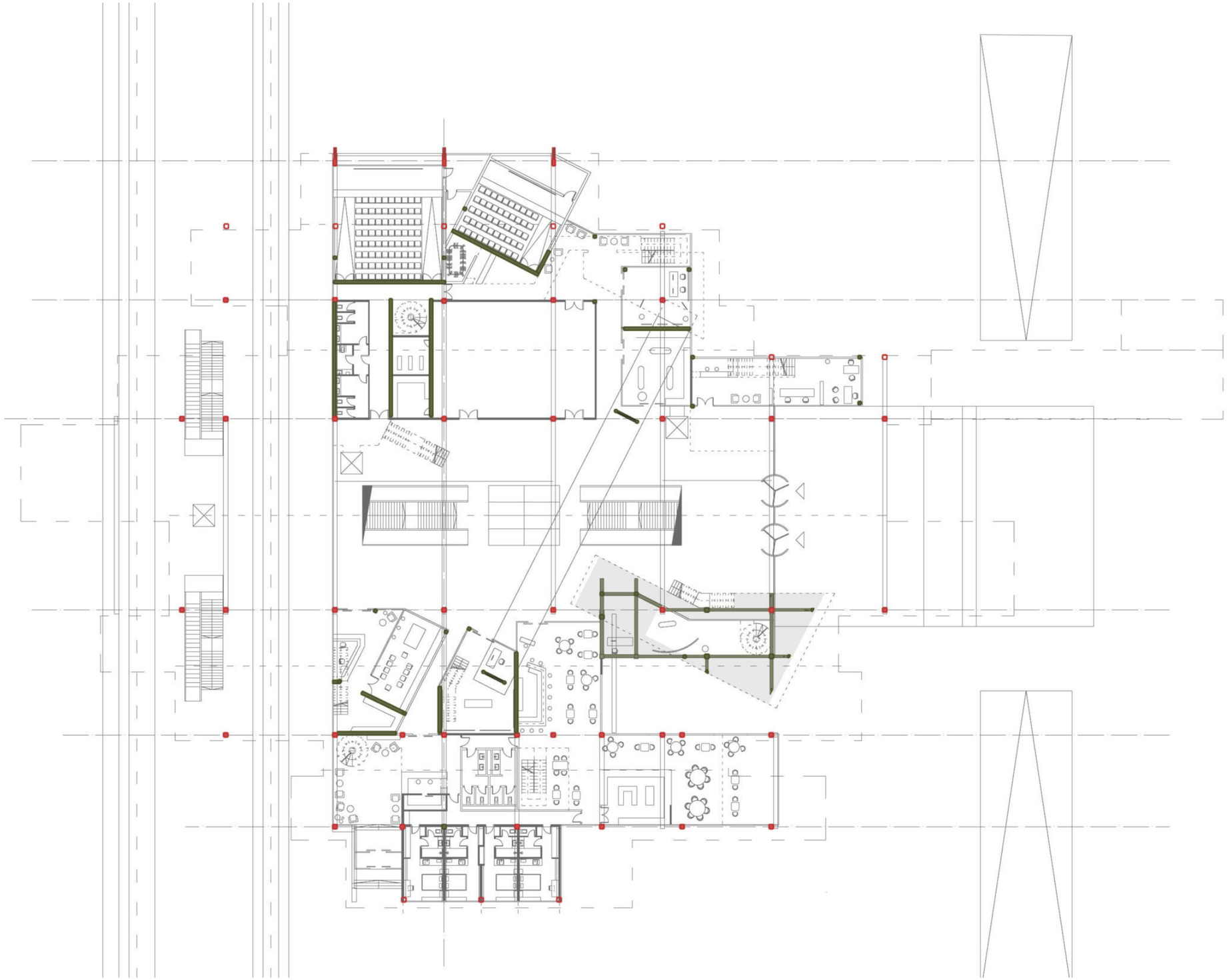




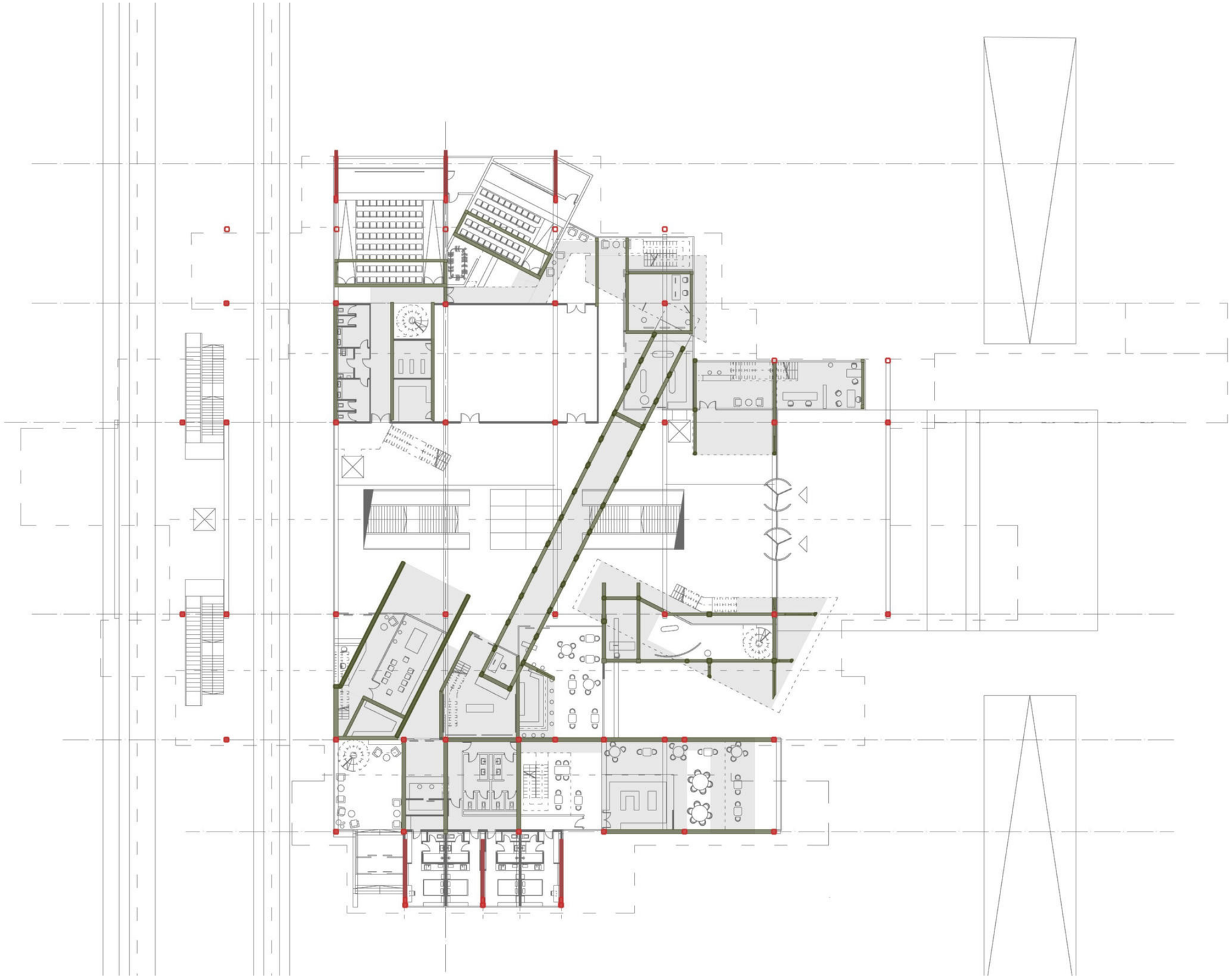




Volume Structure
Groound Plan

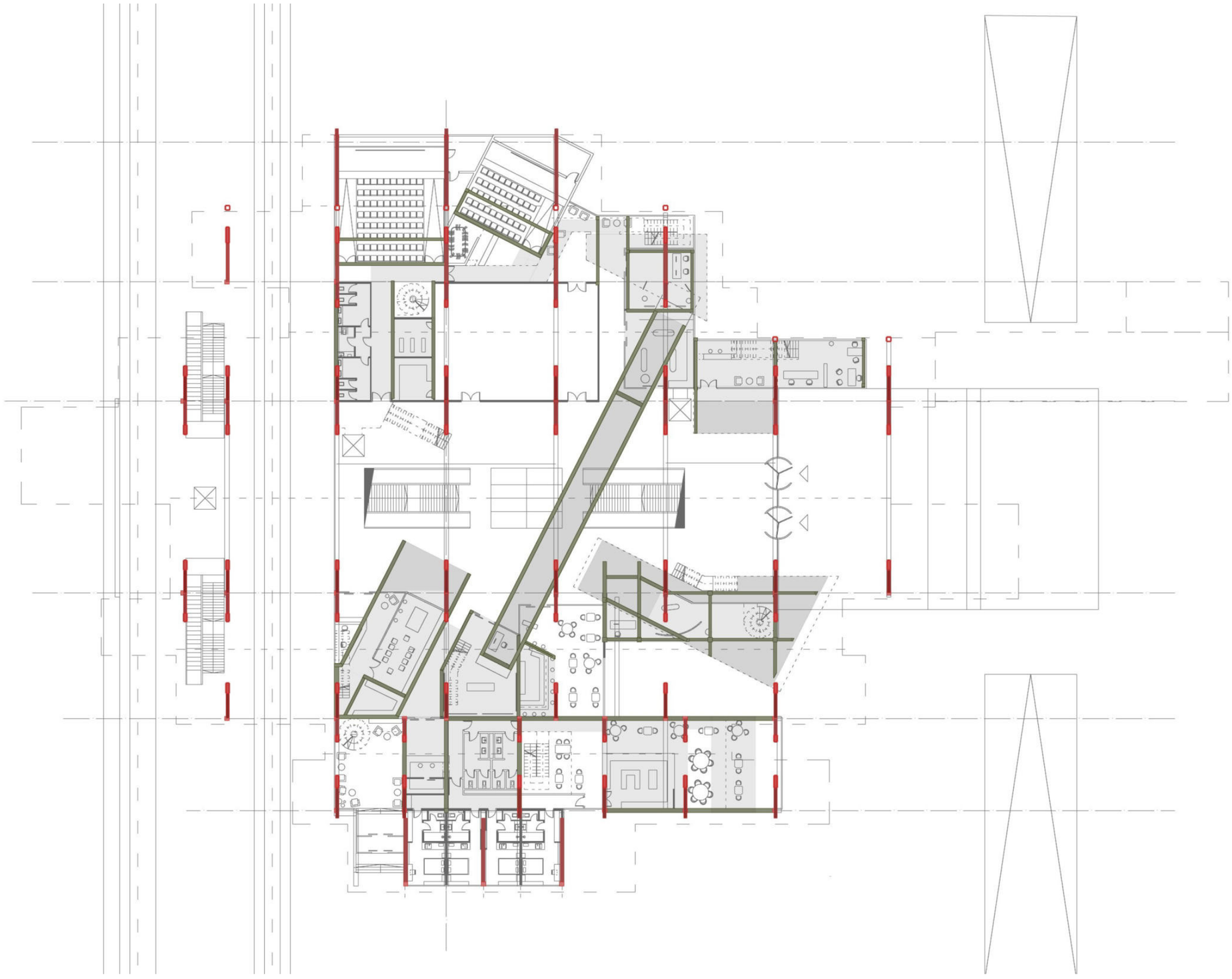


Volume Structure
First Level Plan

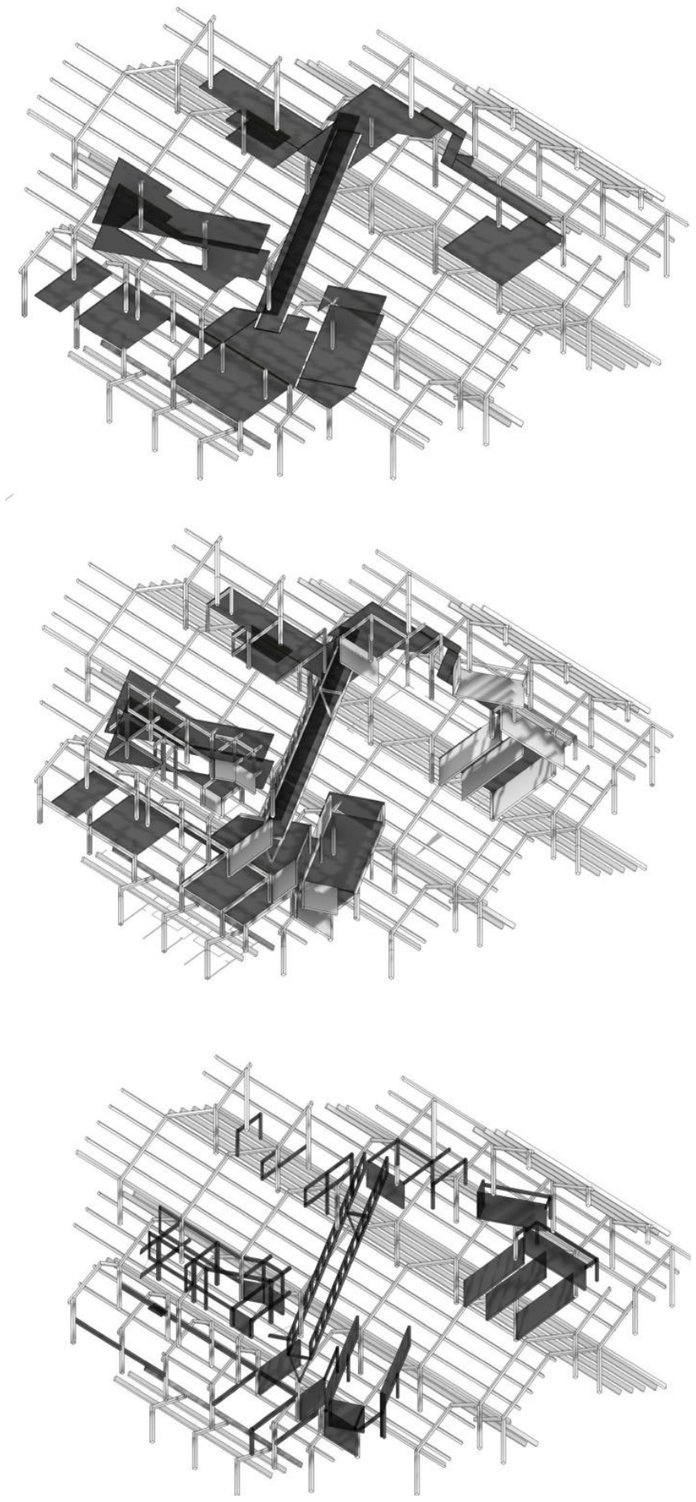


Volume Structure

Above First Level - Under Roof

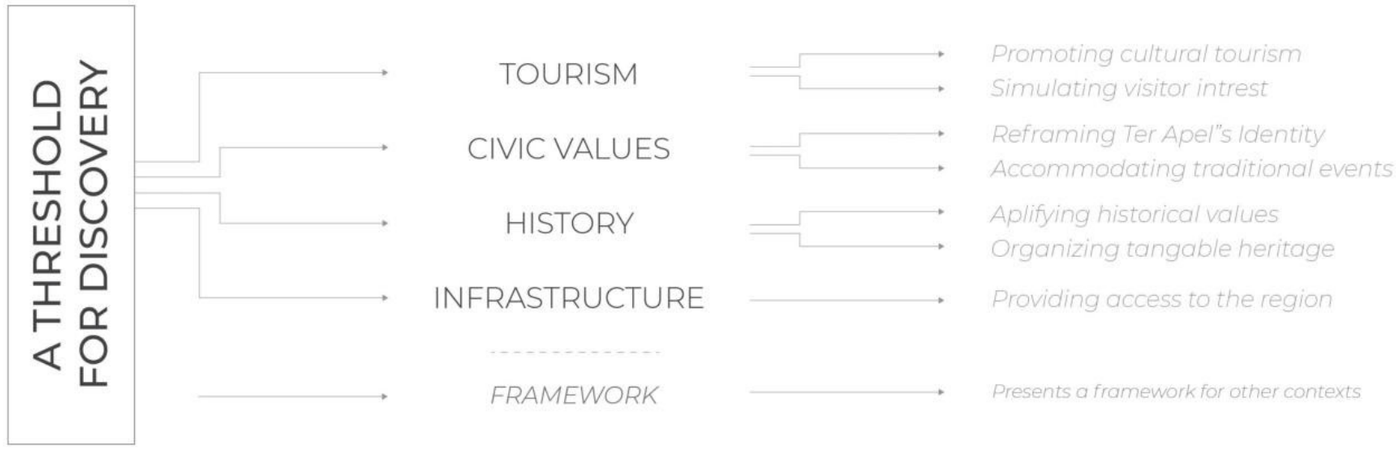


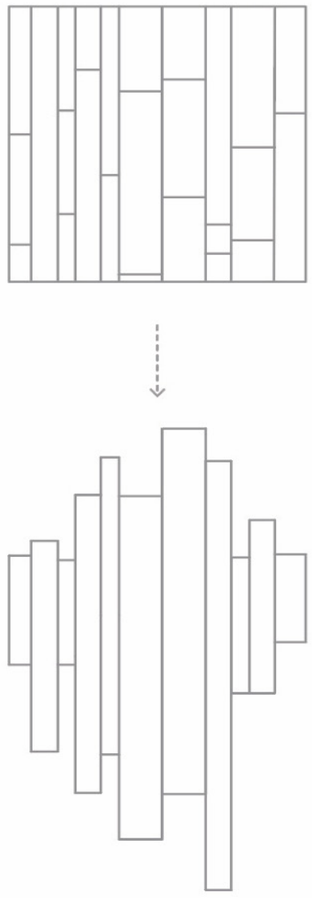
Volume Structure
Upside down Axonometric



Additional Diagrams

Project Influence scope | Form Generation Diagram

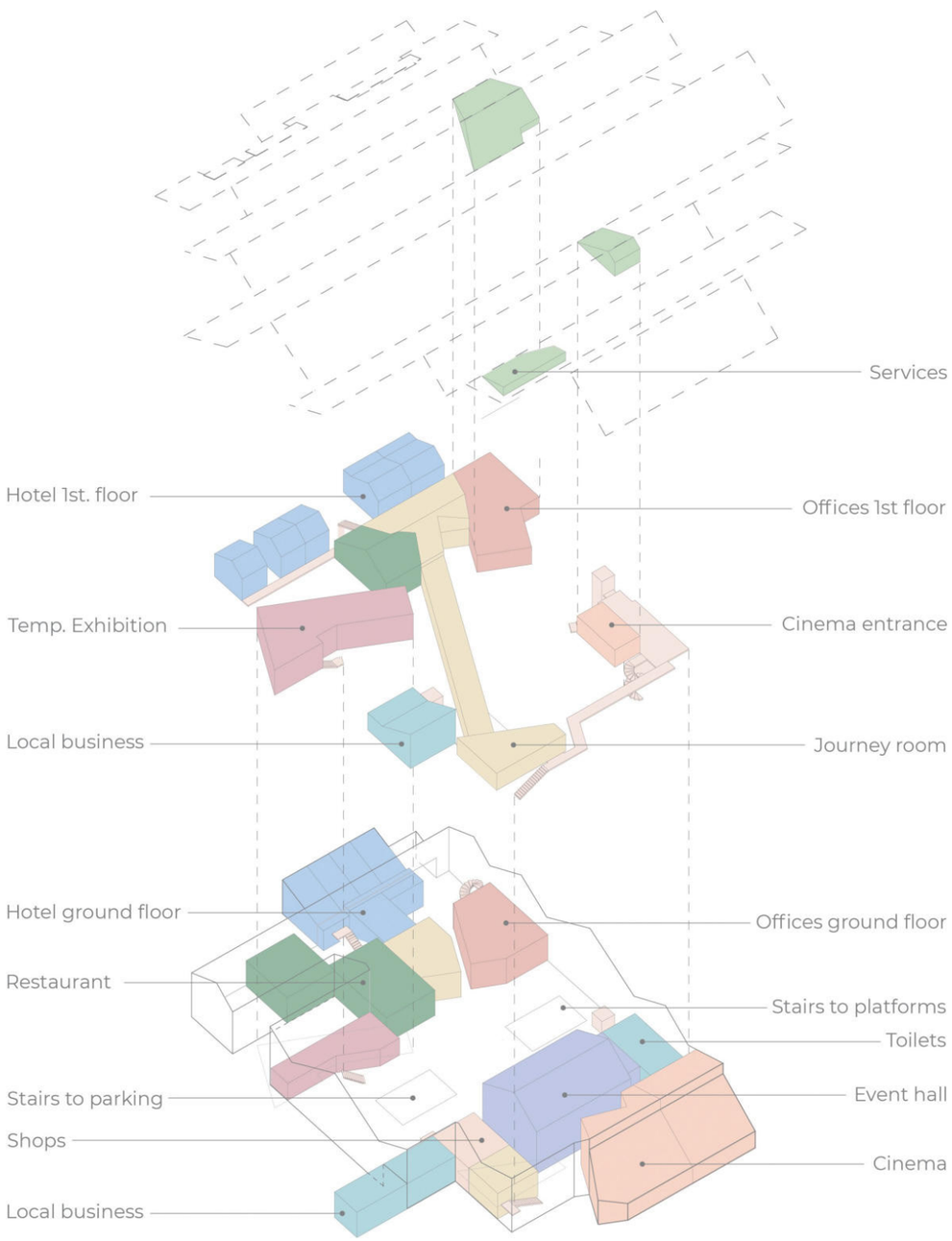


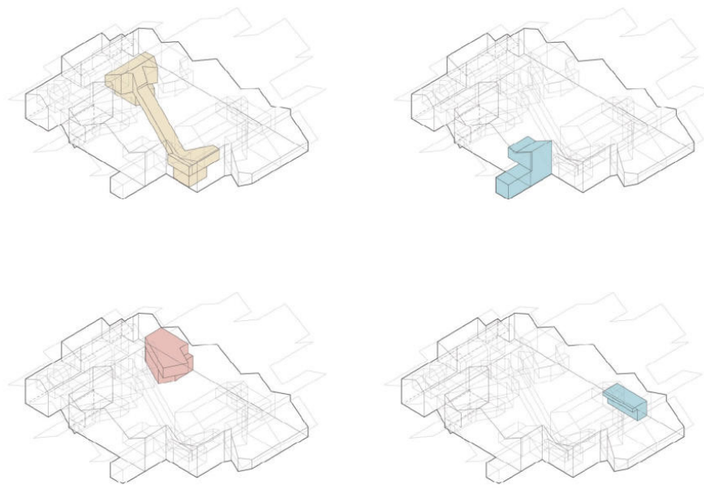




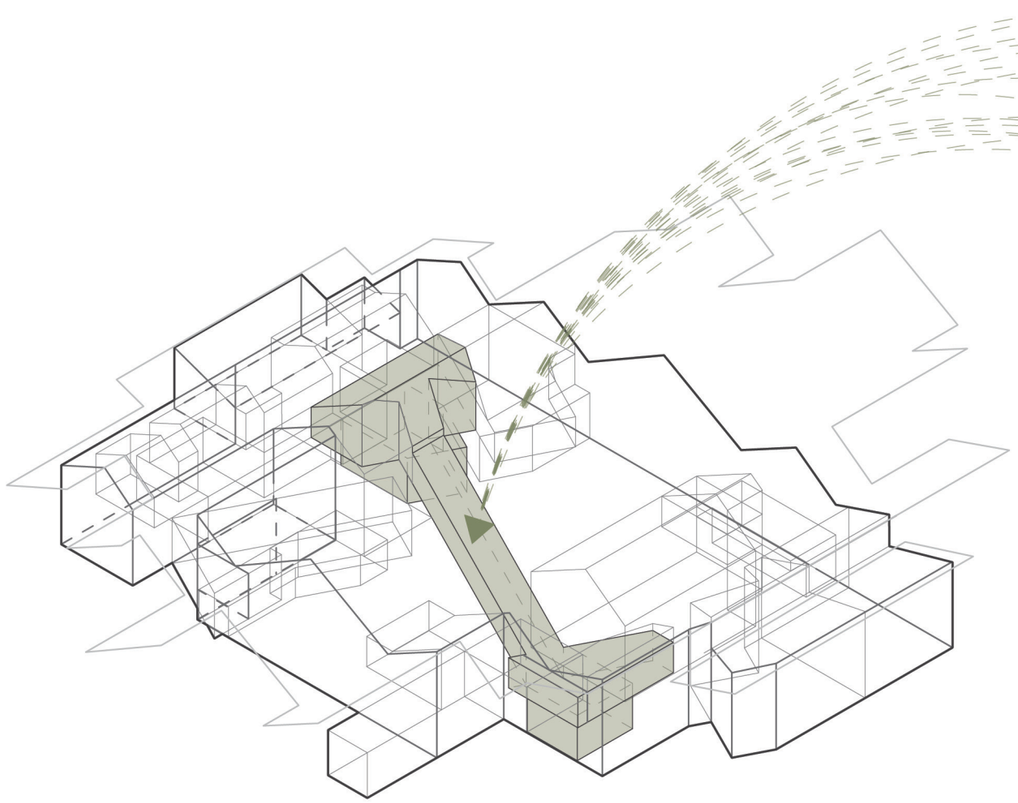
Programme Diagram

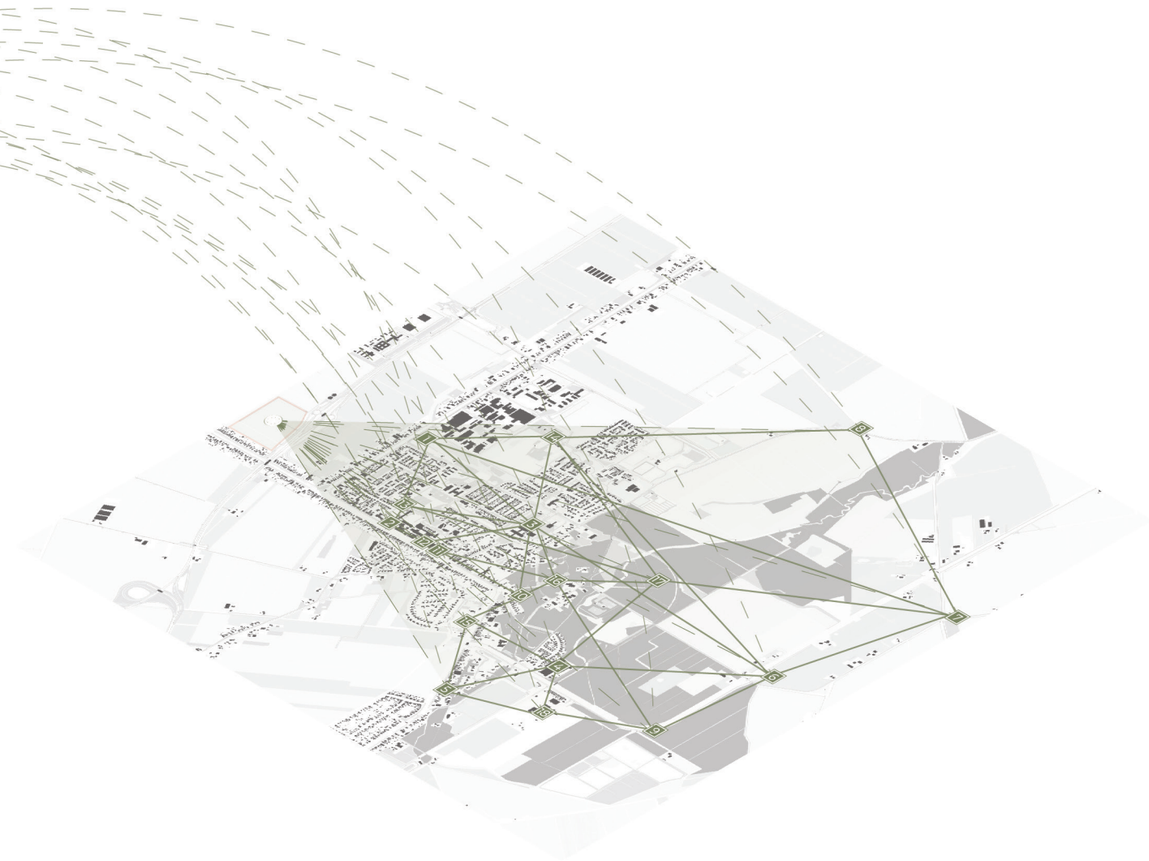
Exploded Axonometric | Extrapolated Functions





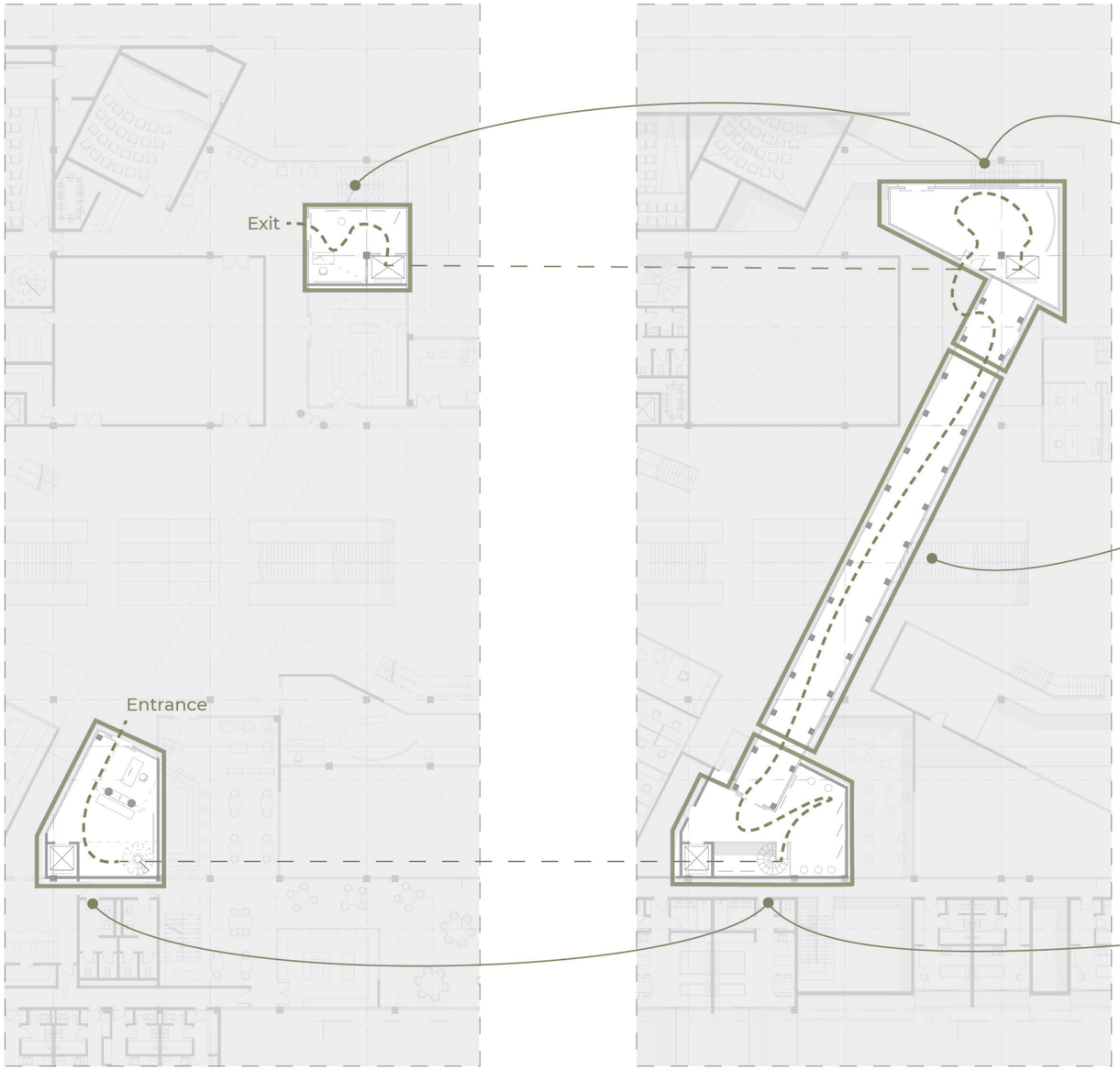
Additional Digrams
Journey Room Augmentation





Additional Diagrams

Jiourney Room Exposition Organization



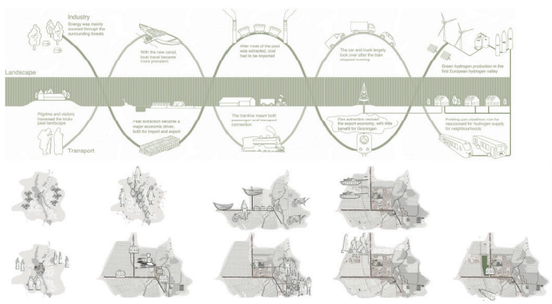
Monastery and the woods



Landmarks



History and context

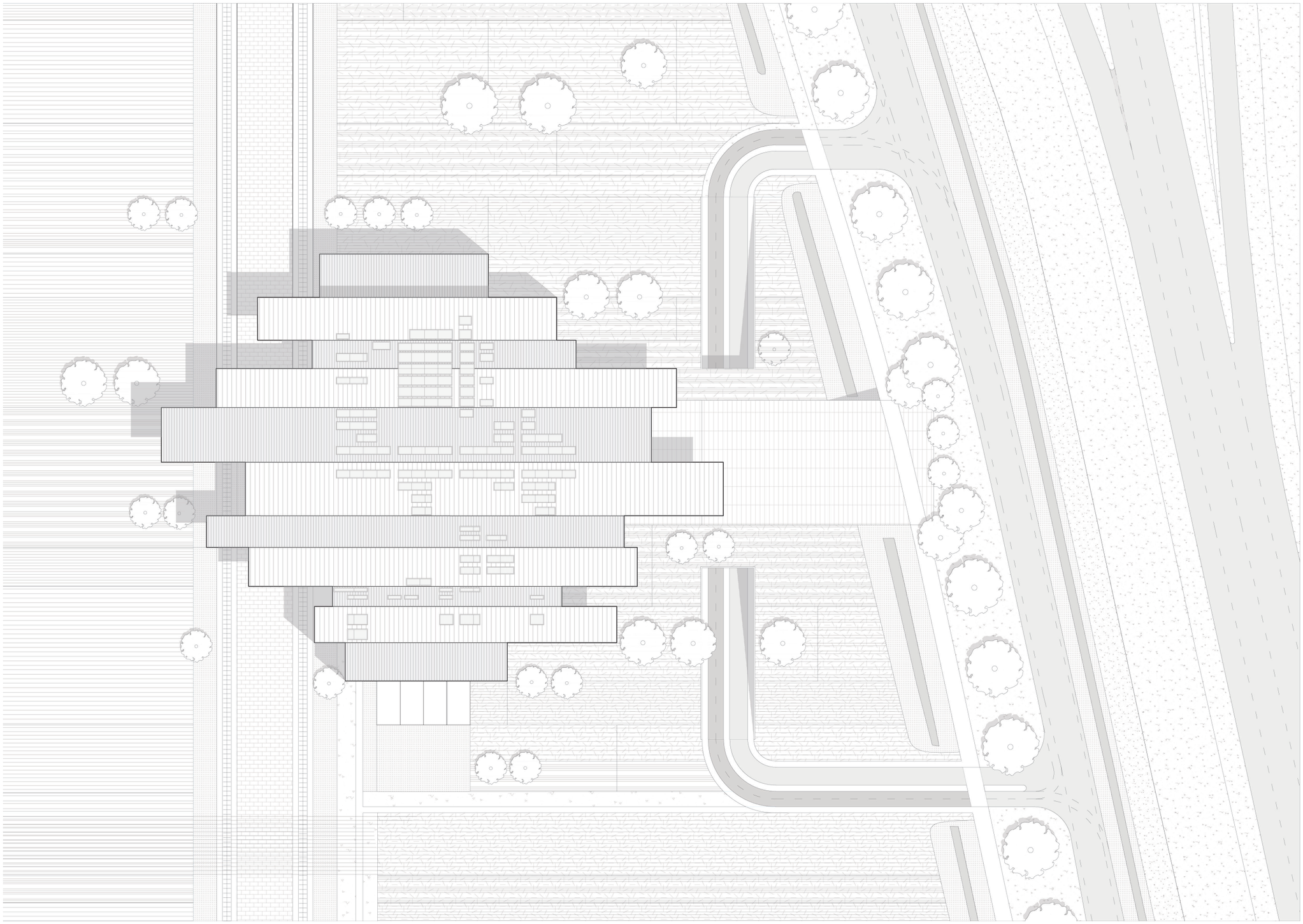


07 FINAL PROJECT DESIGN

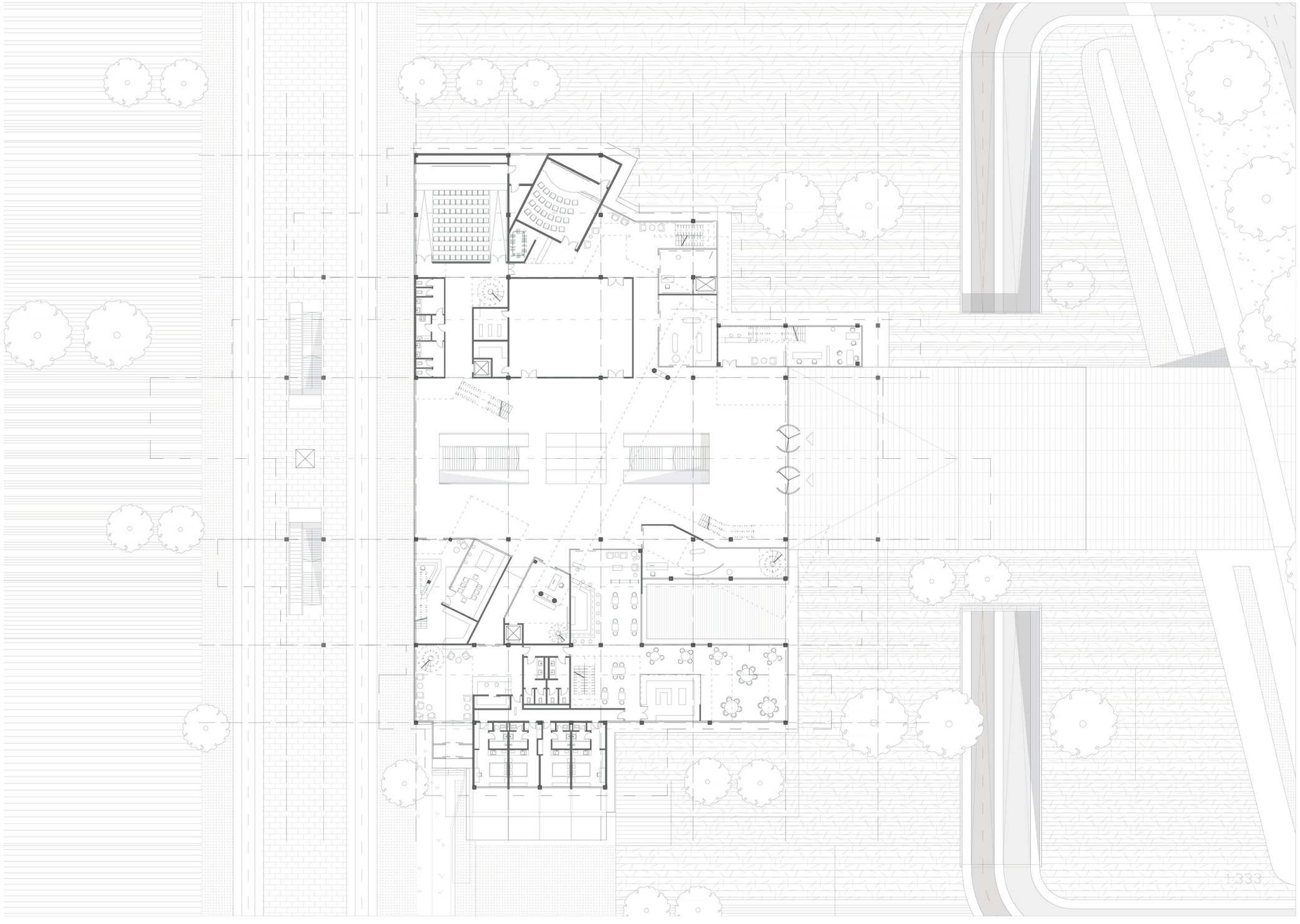
Site Plan
Village Context 1:15000



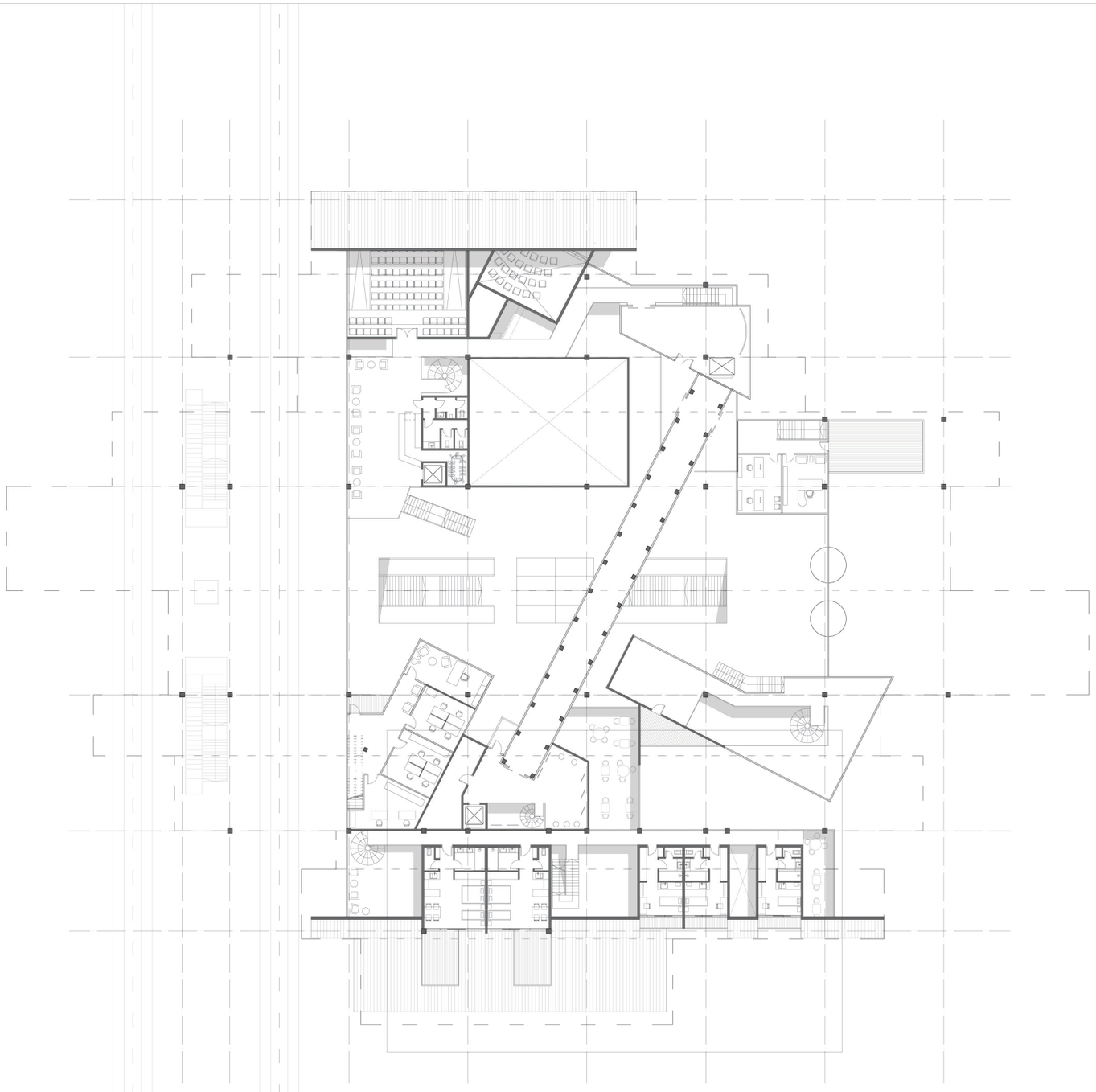
Site plan
1:500



Ground Plan

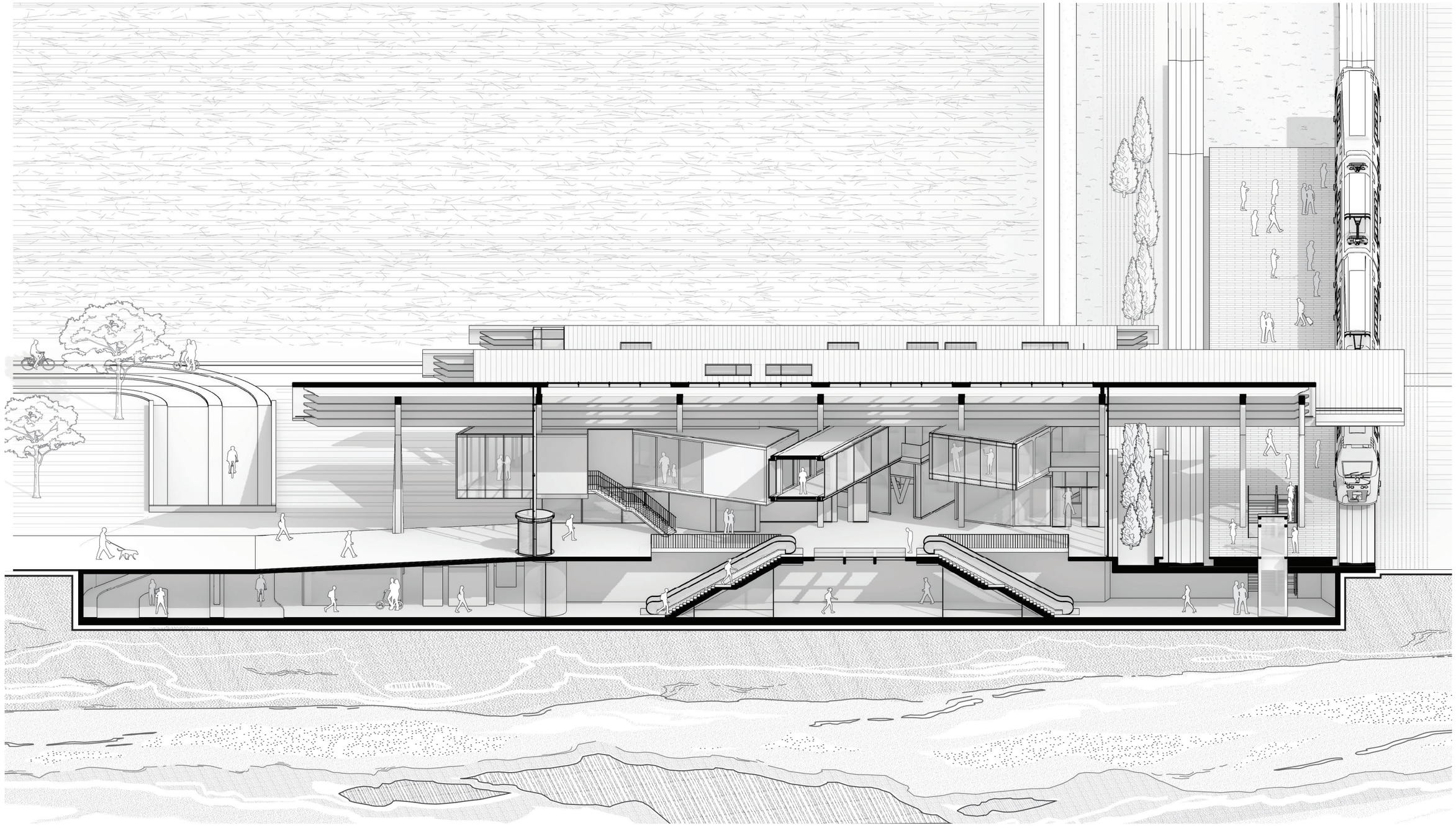


First Level Plan

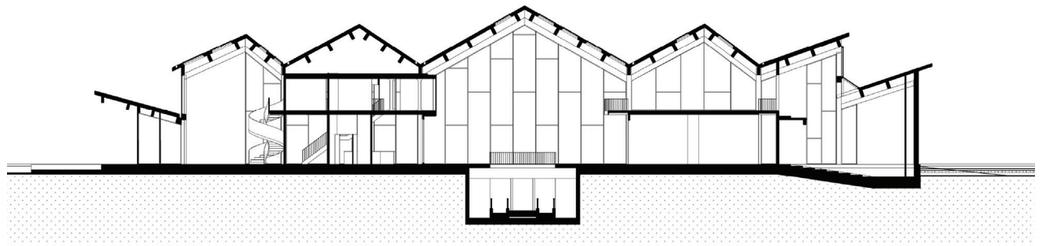


1:333

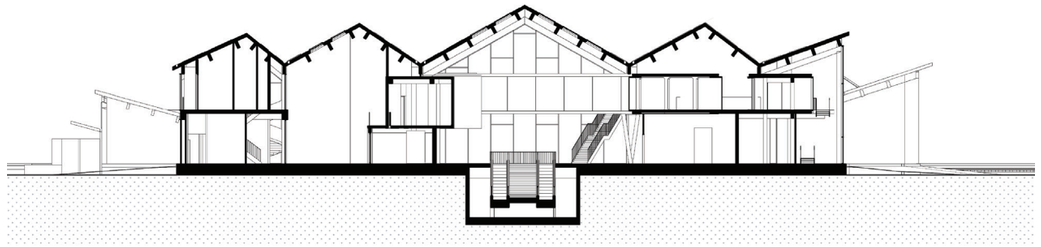
Section A
Single Cut



Section B
Multiple Cuts



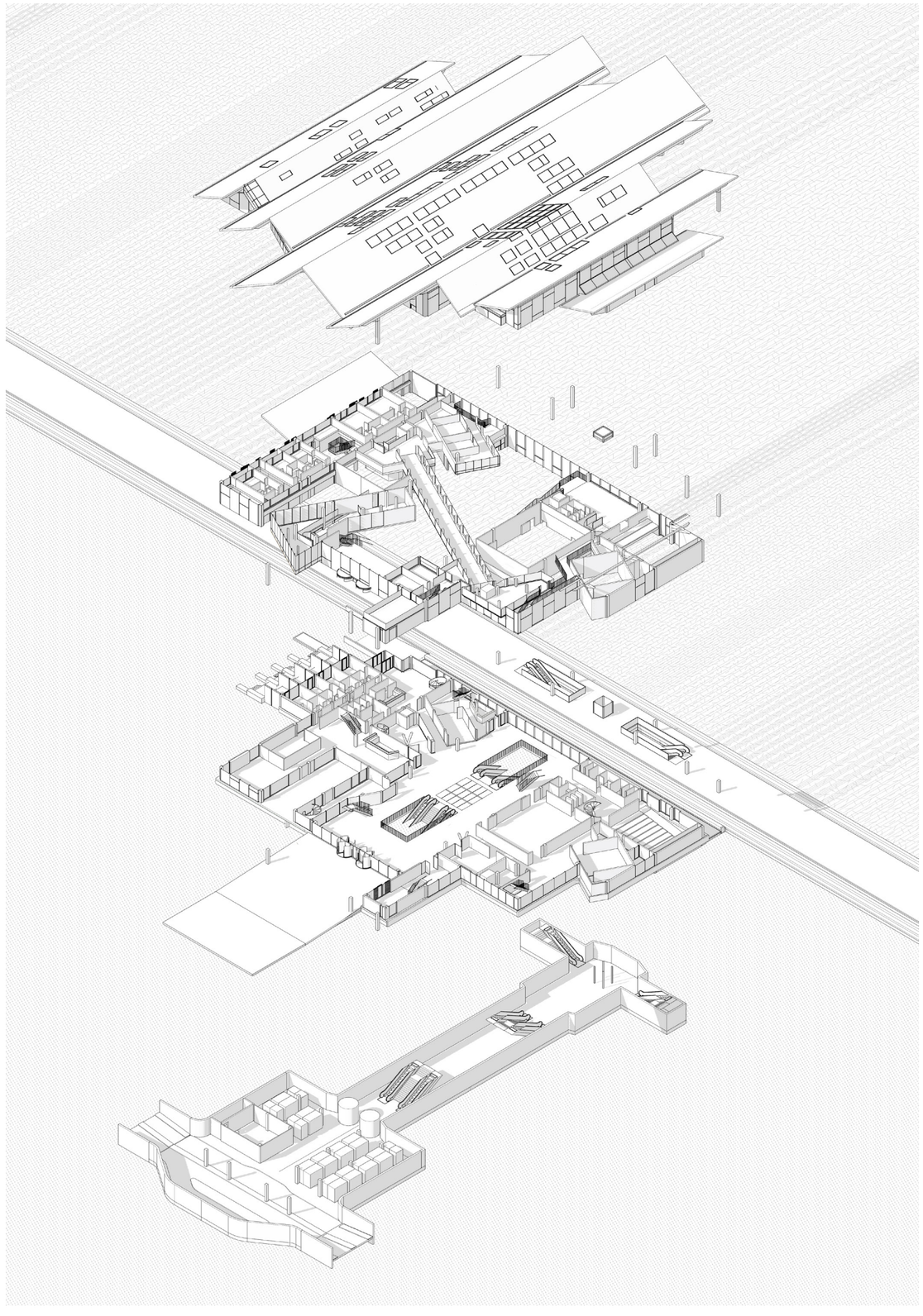






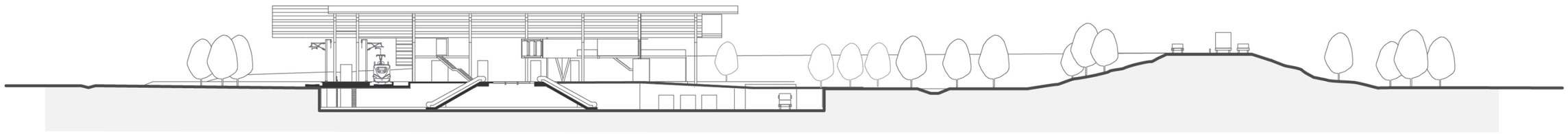


Exoploded Axonometric



Urban Sections



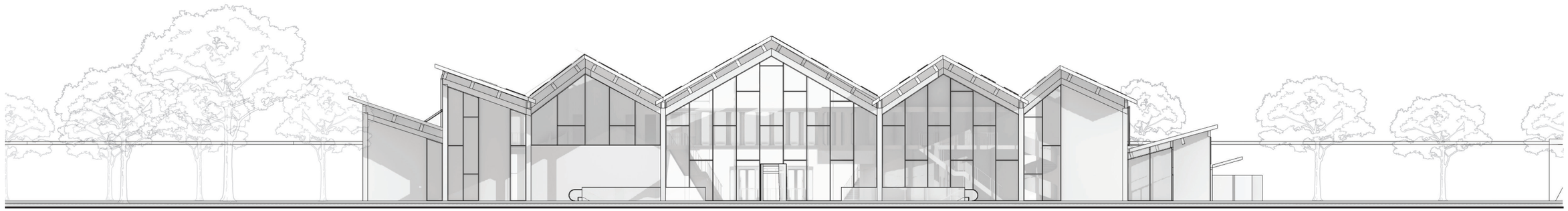


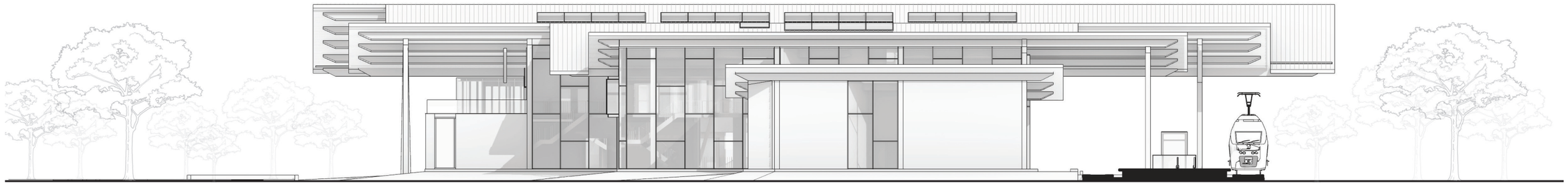
Elevations
East | South



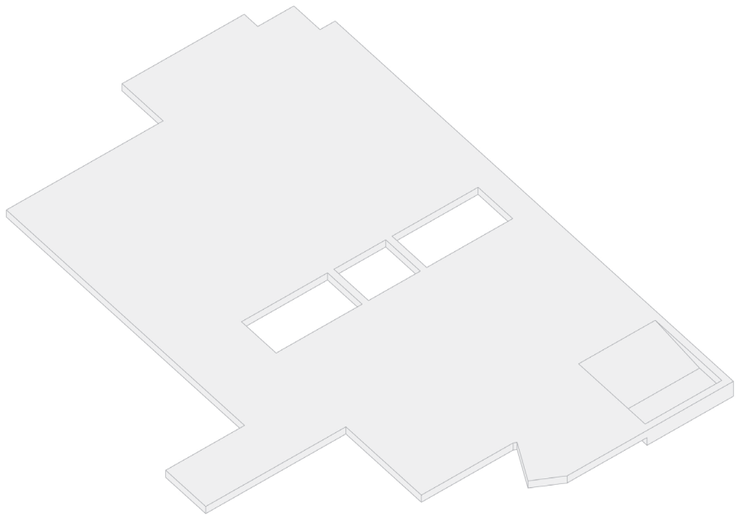


Elevations
West | North

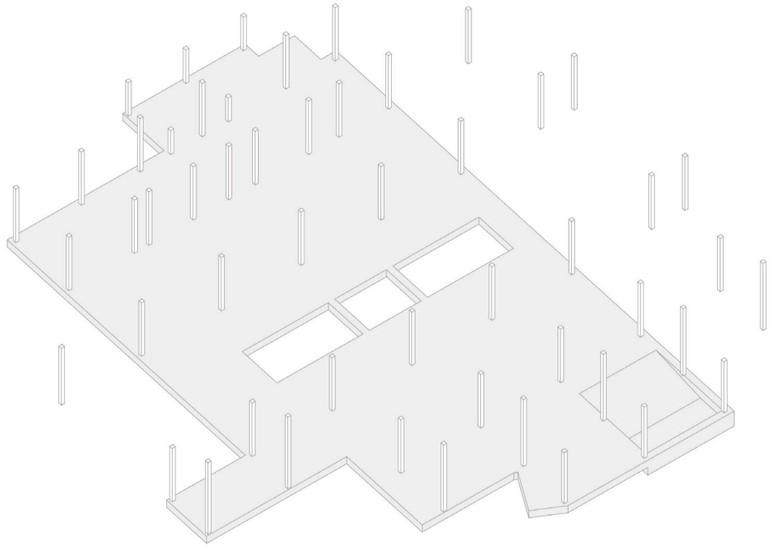




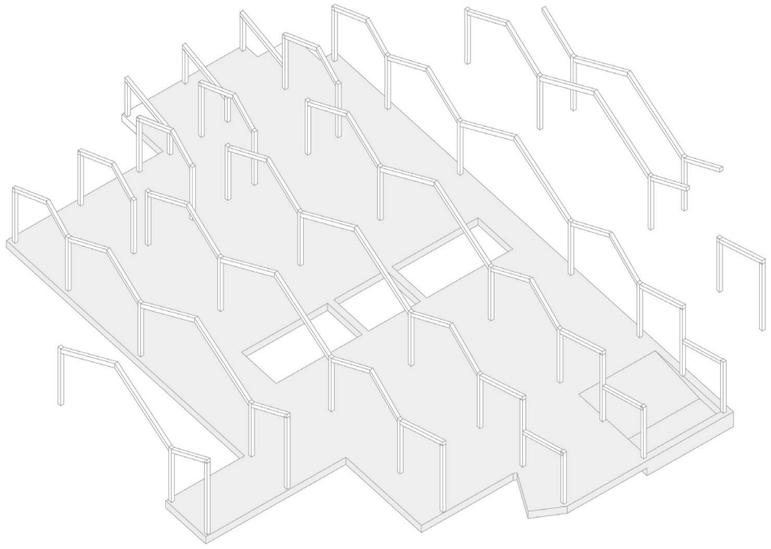
Construction element sequence



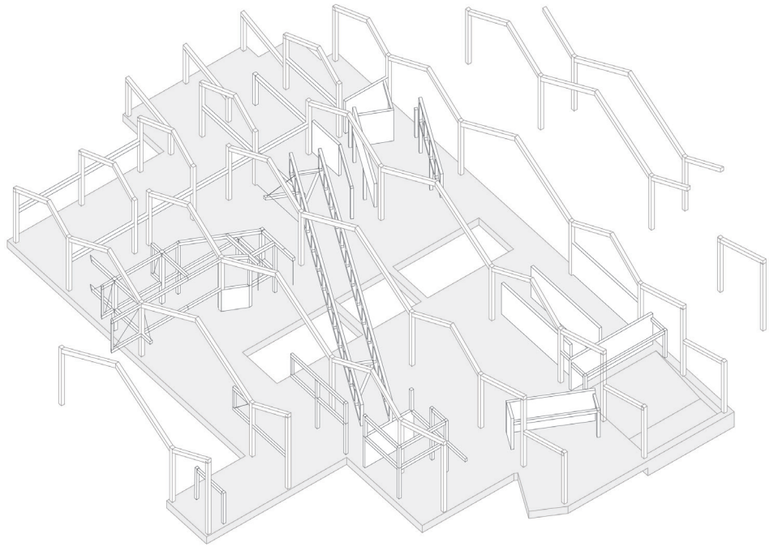
Foundation plate



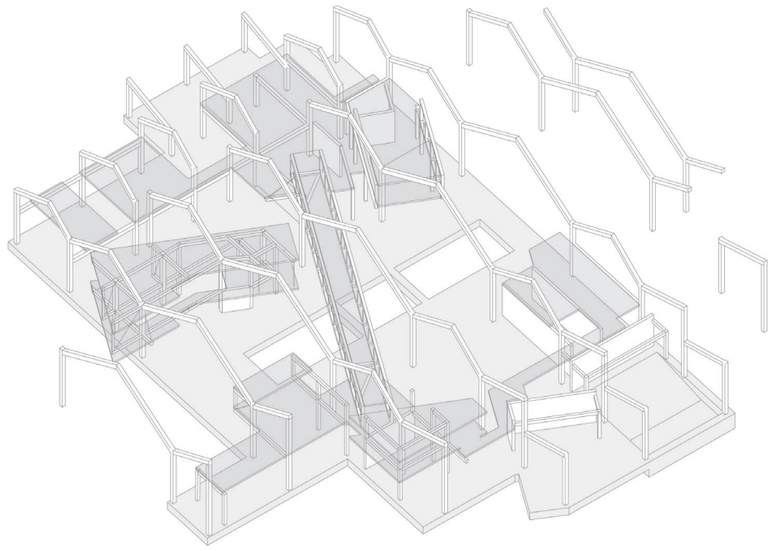
Columns



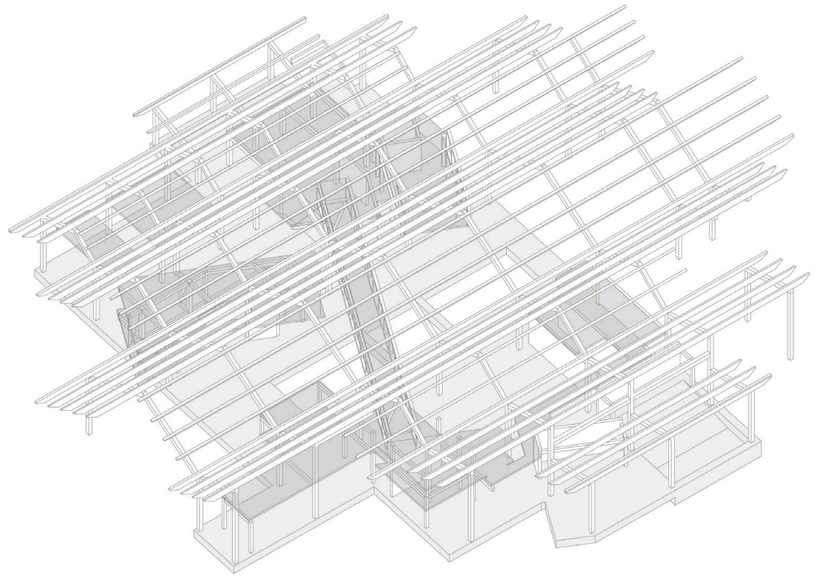
Portal Beams



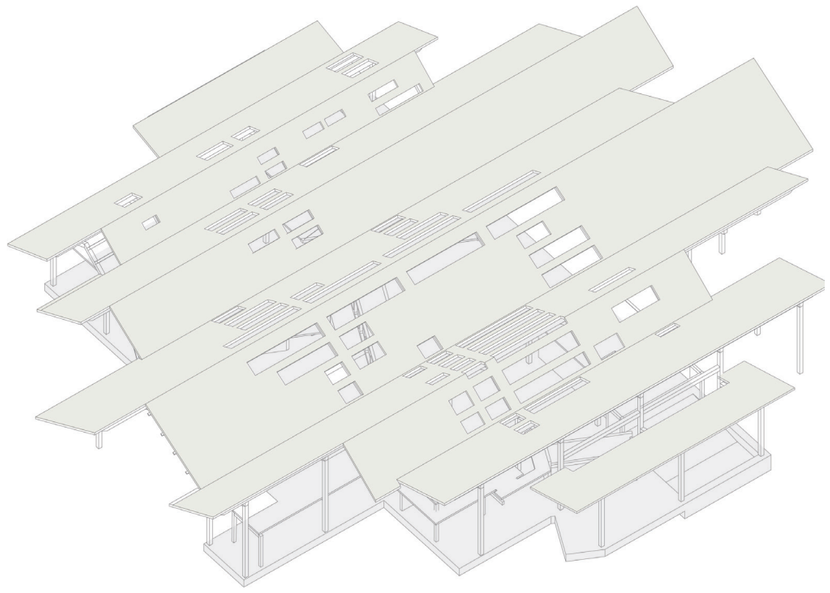
Interior volume structure



Level 1 slabs



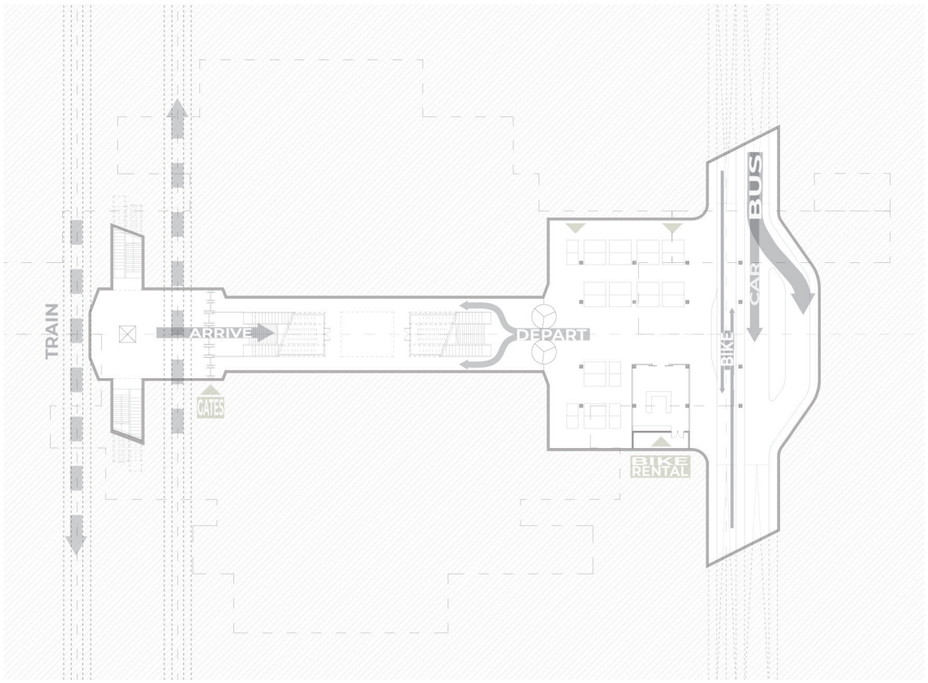
Ribs

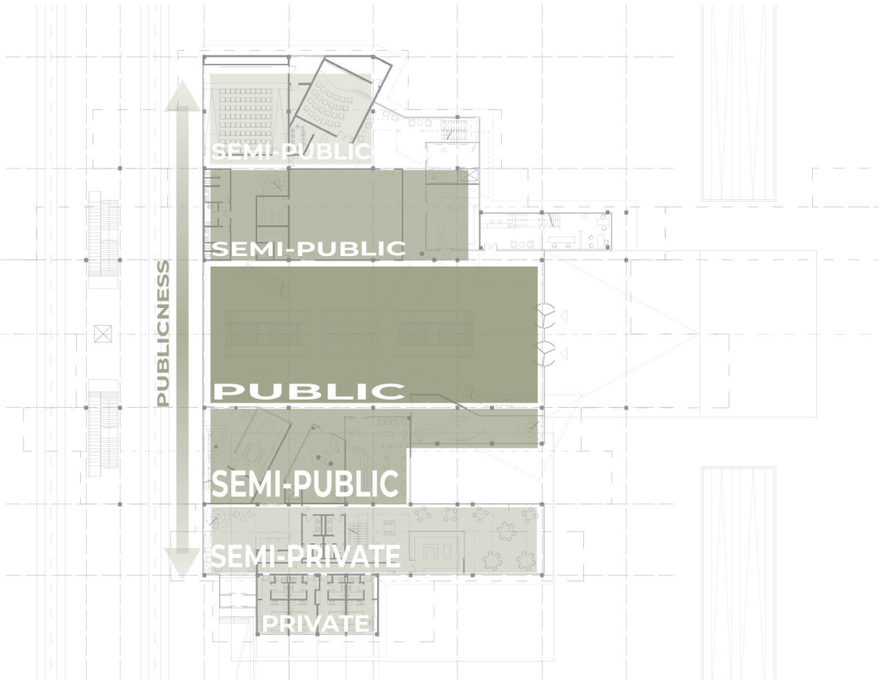


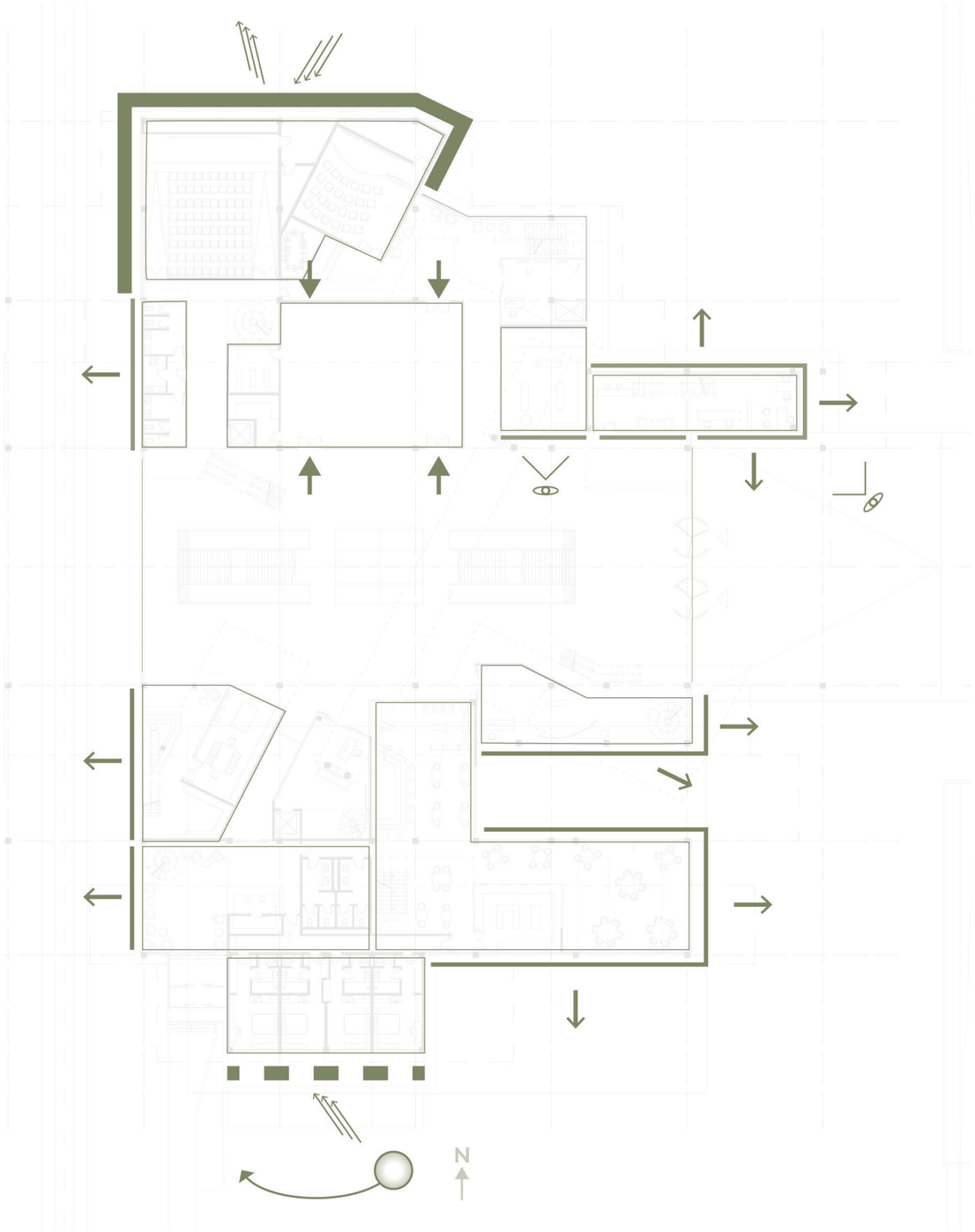
Roof Cladding

Additional Diagrams

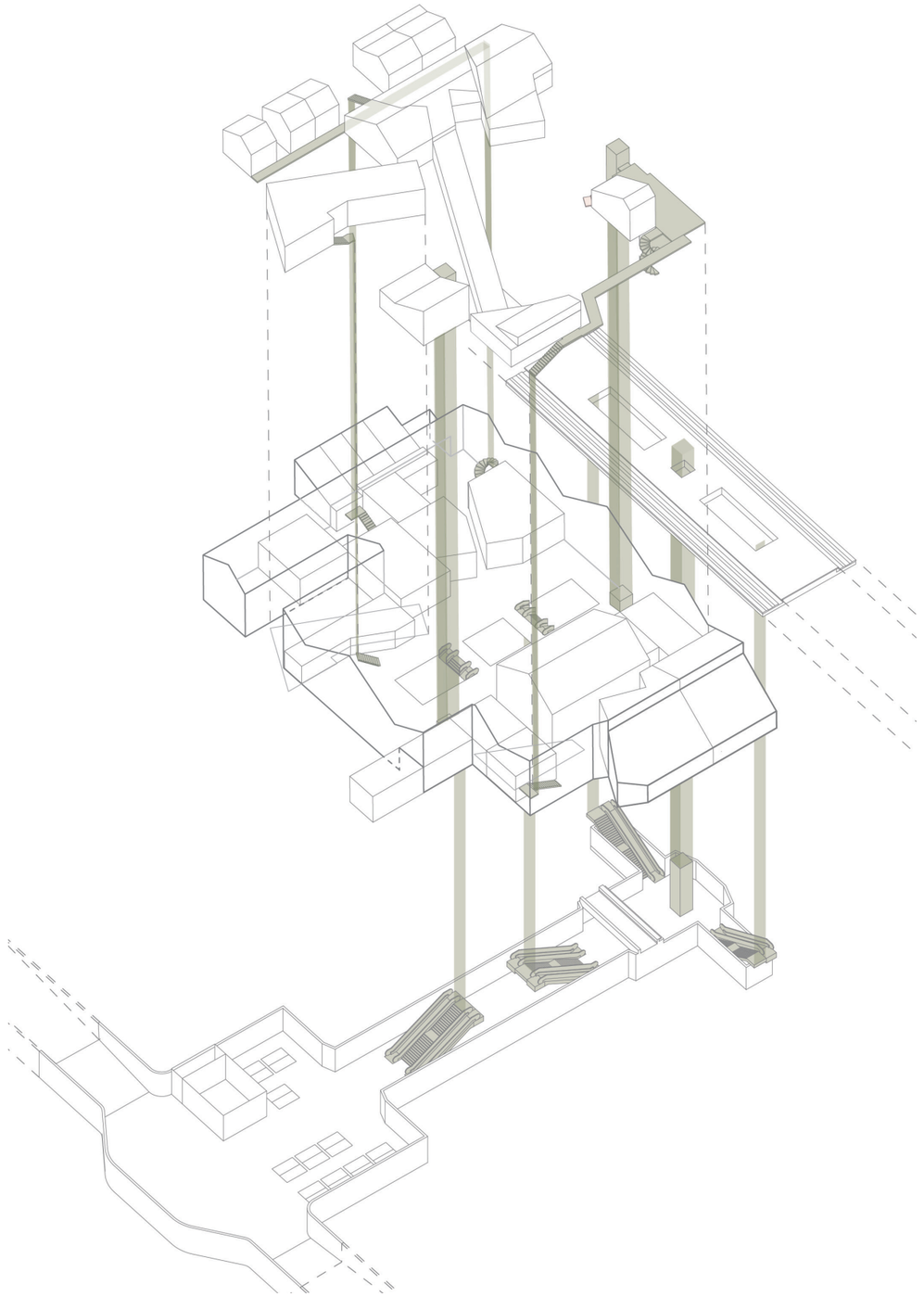
Accessability | Publicness | Function Disposition





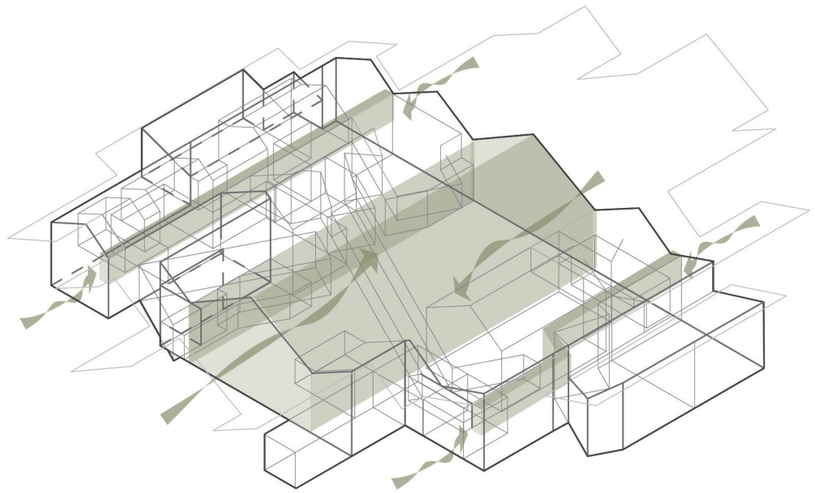


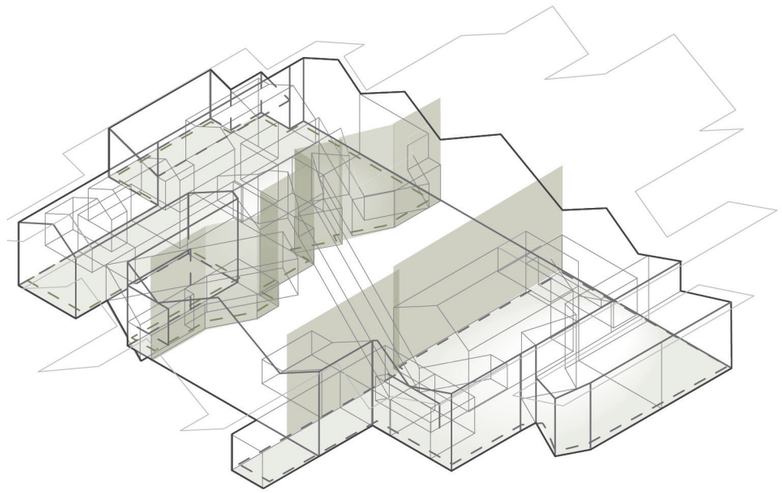
Additional Diagrams
Circulation Diagram

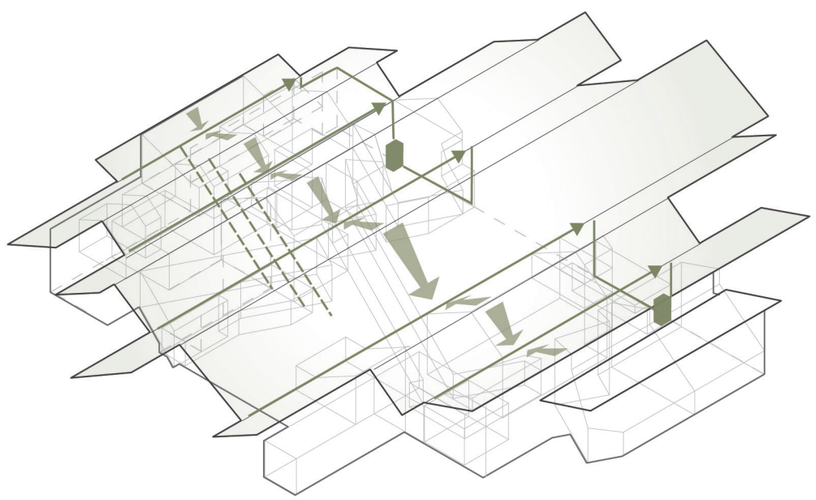


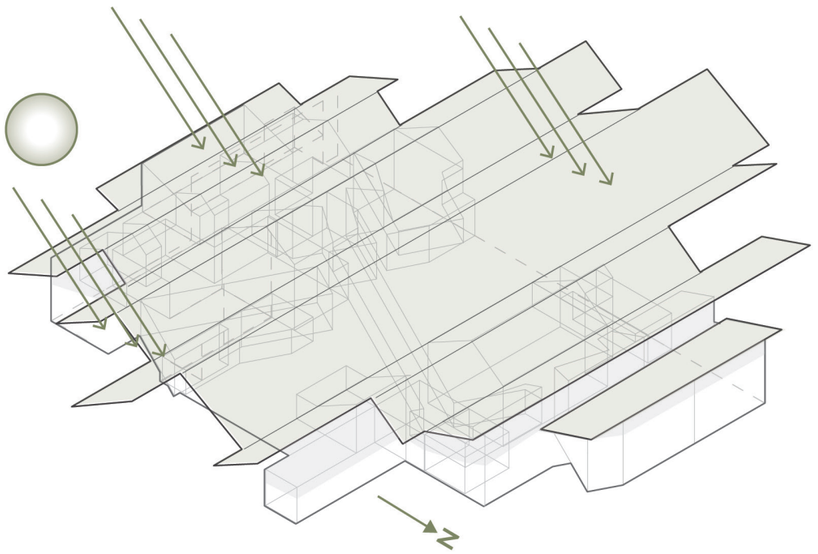
Sustainability Diagrams

Natural Ventialtion | Heated Zones
Water Collection | Sun shading
PV Energy Calculation











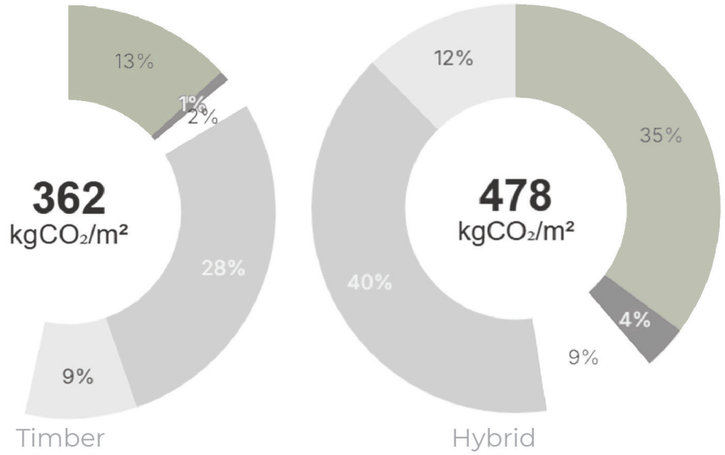
PV covered roof area: ~ 1910m²

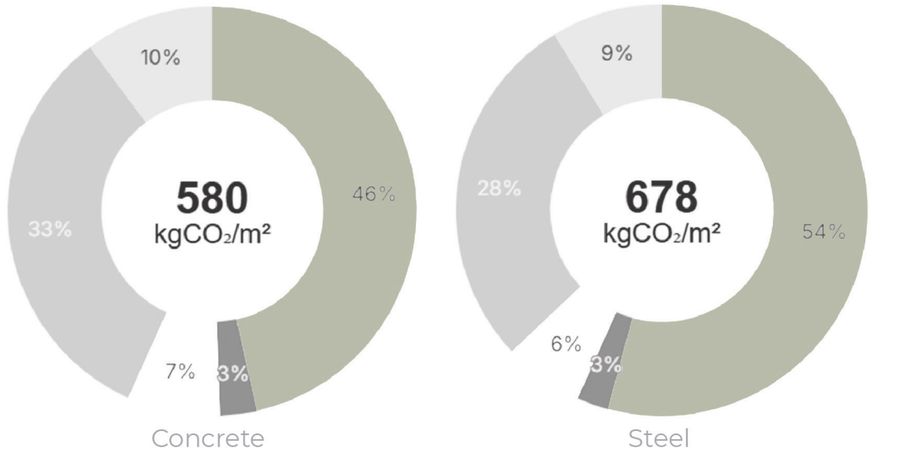


Roof slope: 30°

1800 PHOTOVOLTAIC PANELS
↓
1M² AND TILTED **30** DEGREES
↓
SOUTH ORIENTATION
↓
SOLAR IRRADIANCE AVG.
3.2 – 3.6 kWh/m² per day
↓
ENERGY OUTPUT:
3.4×0.16≈**0.54 kWh/day per m²** (16% eff.)
↓
~ 354,000 kWh OF ELETRICITY PER YEAR

Carbon Space
Diagrams | Table





Superstructure
Substructure
Skin
Space plan

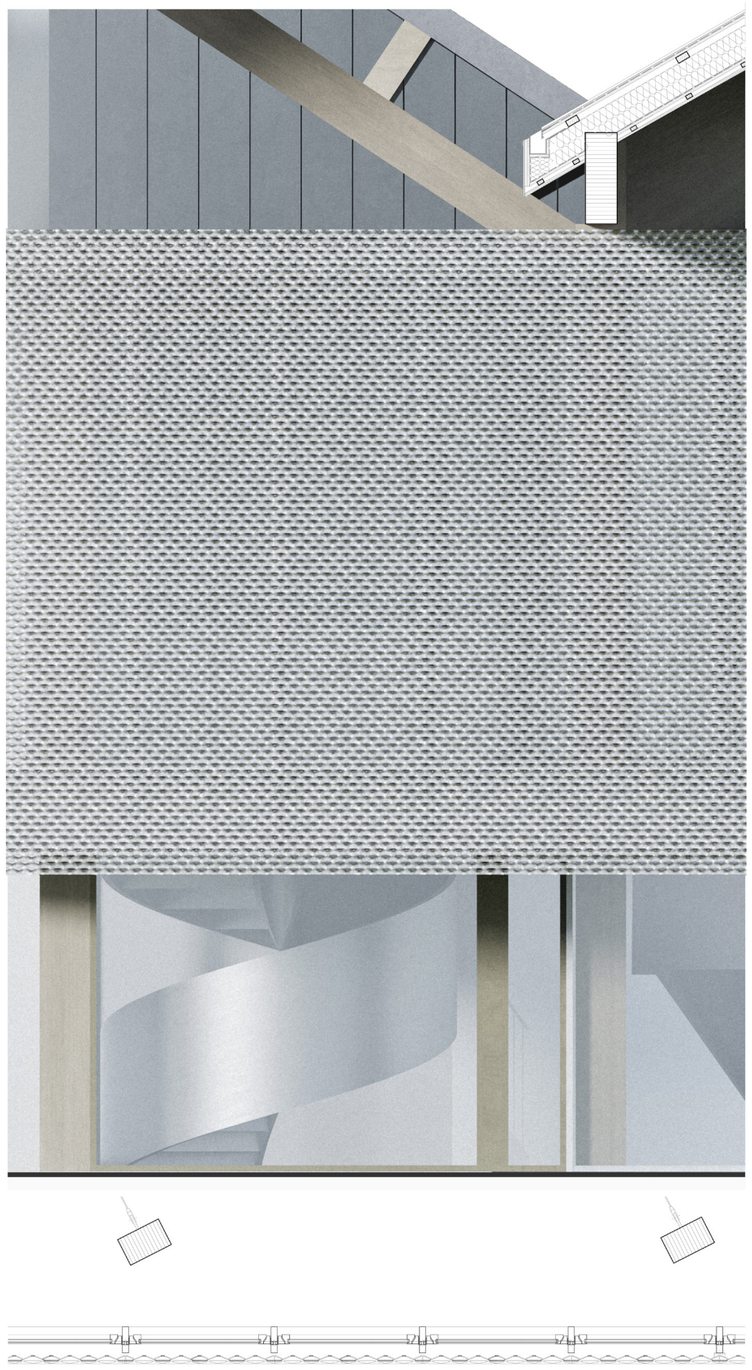
Building part	Mass in kg/m2	Total CO2eq/m2
Building	2642 - 4017	**362 - 678**
Superstructure	452 - 1739	**89 - 367**
Structure	404 - 1451	**77 - 325**
Roof	47 - 288	**12 - 42**
Substructure	2152	**192**
Foundation	1650	**142**
Basement	502	**49**
Skin	12 - 59	**16 - 42**
Facade opaque	14 - 59	**18 - 42**
Facade transparent	13 - 18	**24 - 37**
Roof	12	**16**
Space Plan	23 - 64	**5.8 - 17**
Separating walls	23 - 64	**5.8 - 17**
Services	2.9	**59**
Other	0.0	**0.0**
Climate installations	2.9	**34**
Circulation	0.0	**25**
PV Cells	0.0	**0.0**

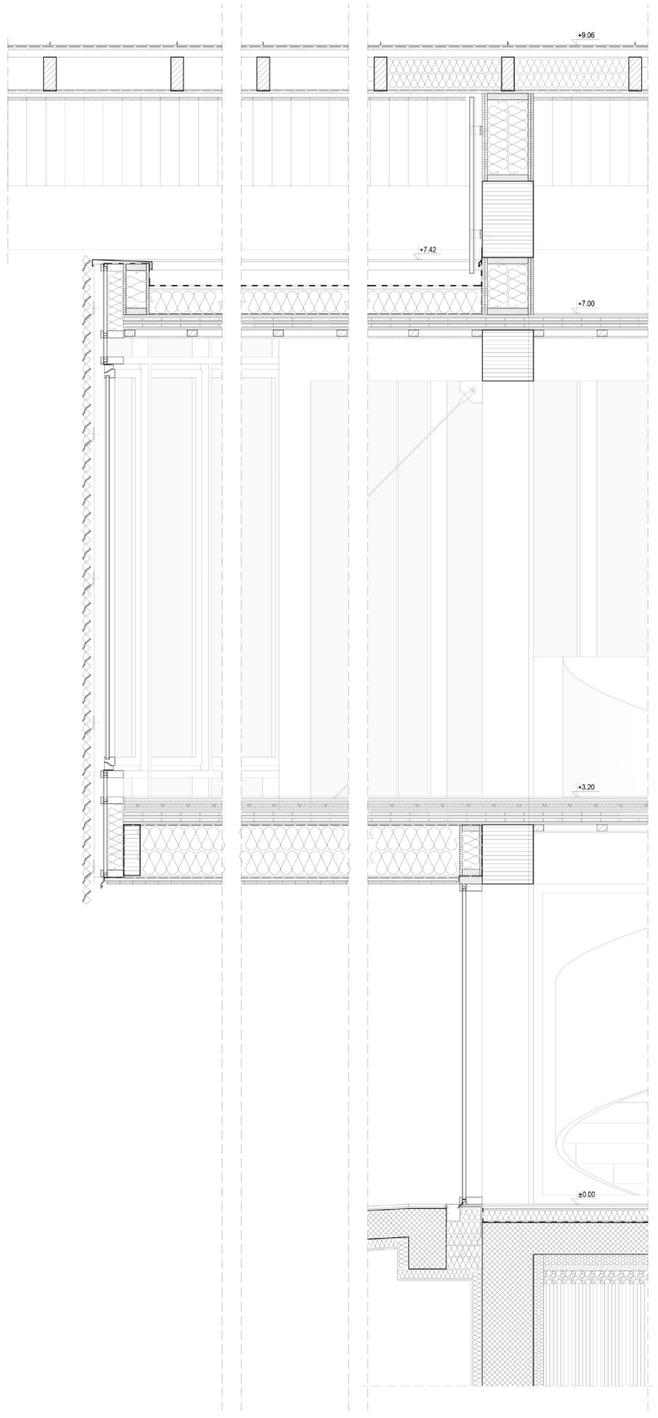
CO2 impact difference

Different superstructure emission impats - with Carbon Space

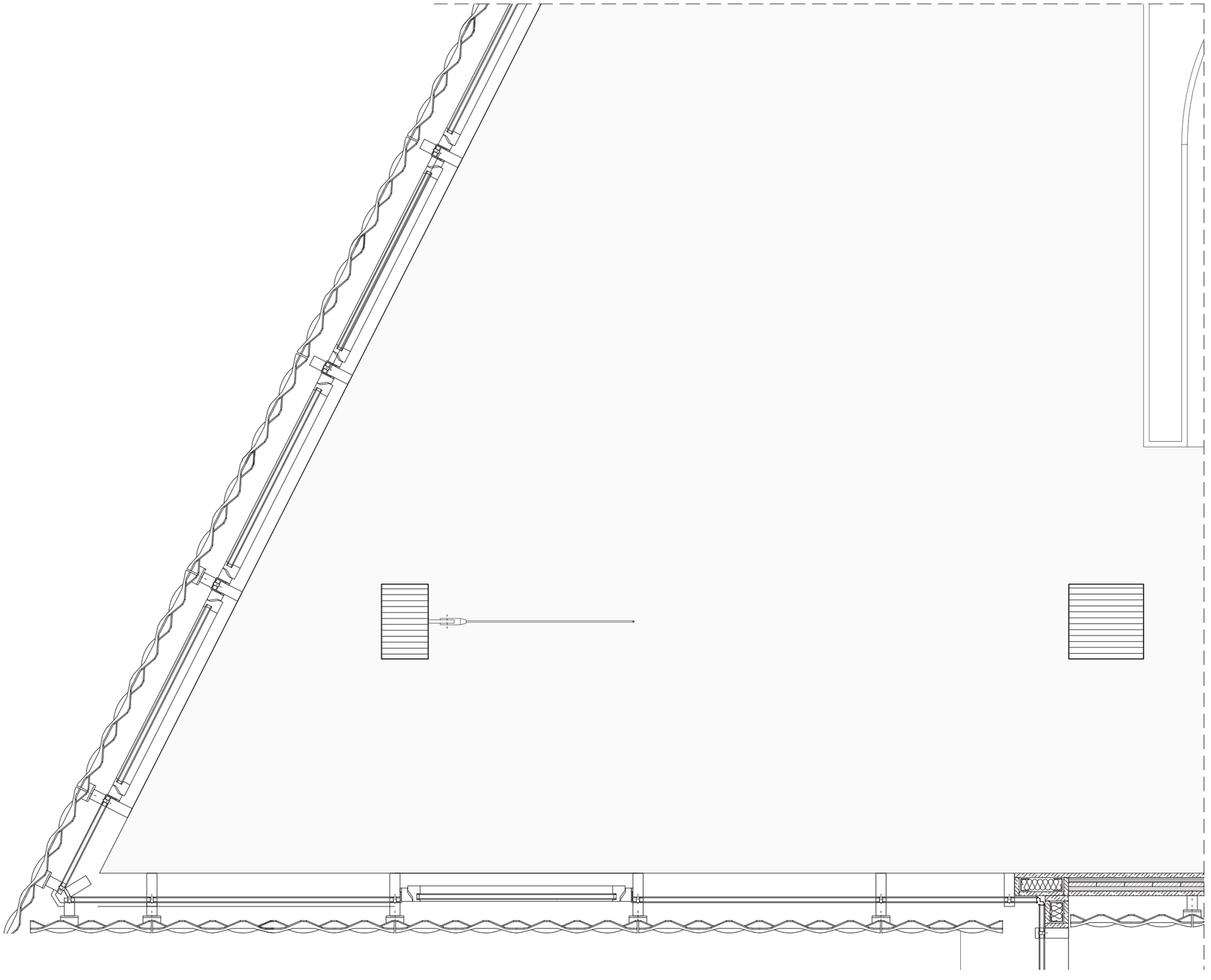
08 TECHNICAL DRAWINGS

FacadeSection
1 : 20

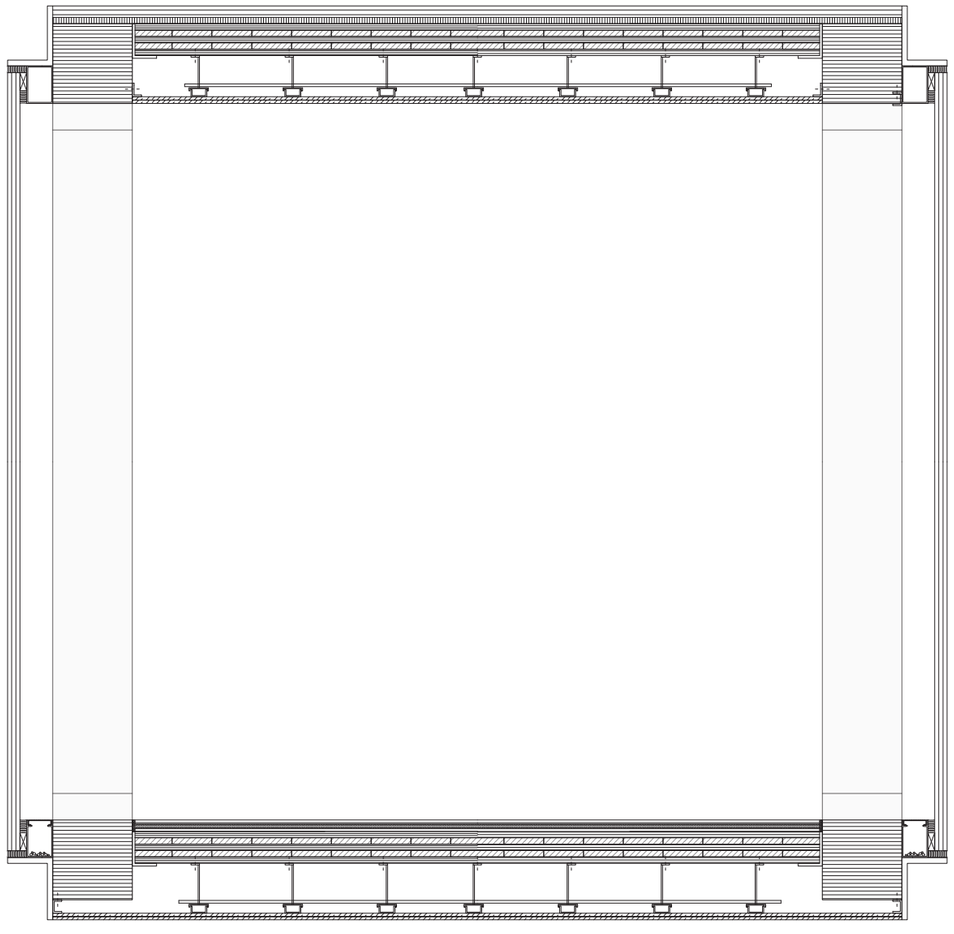




Temporary Exhibition Volume Plan
1:20

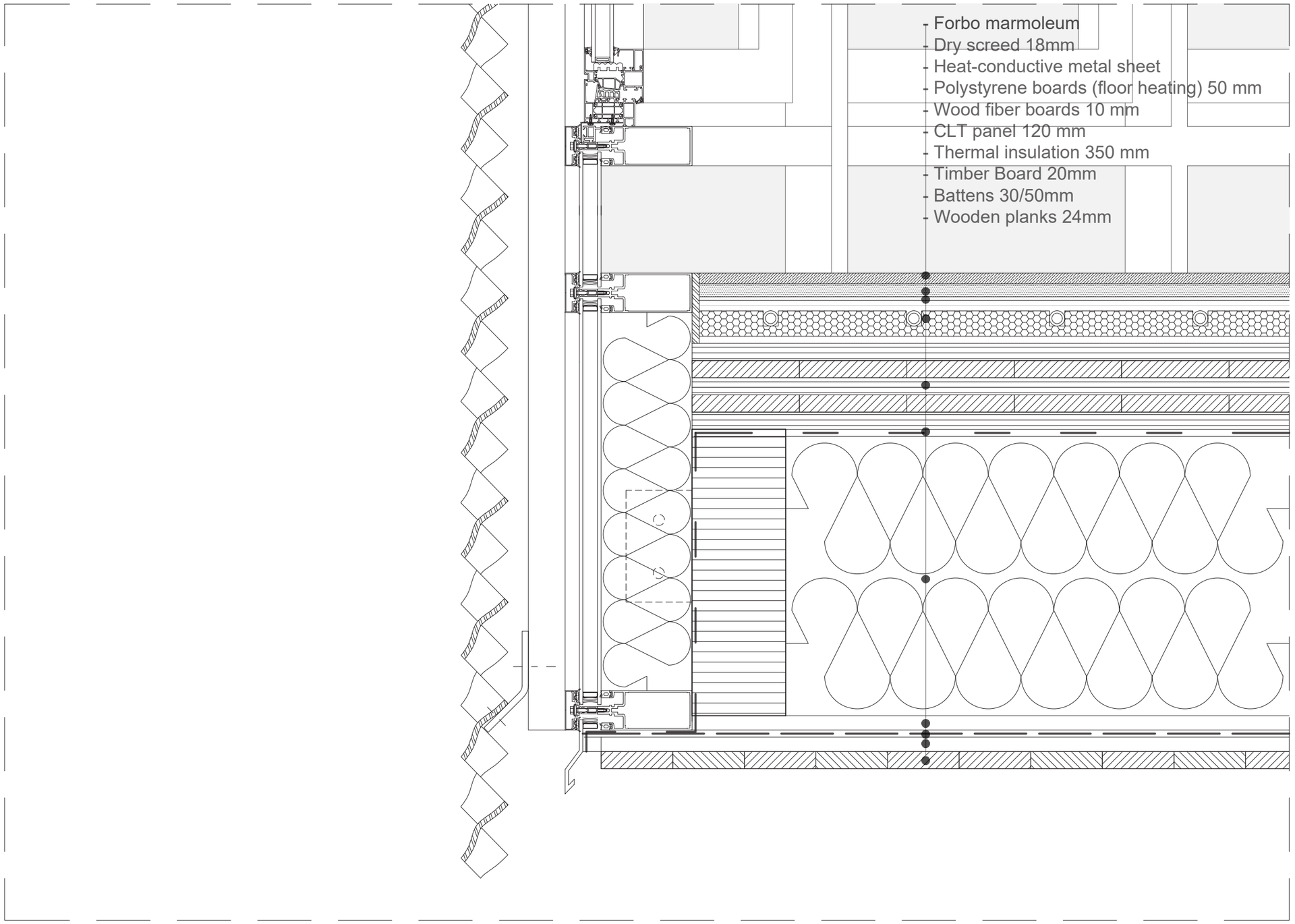


Journey Room Section
1 : 20



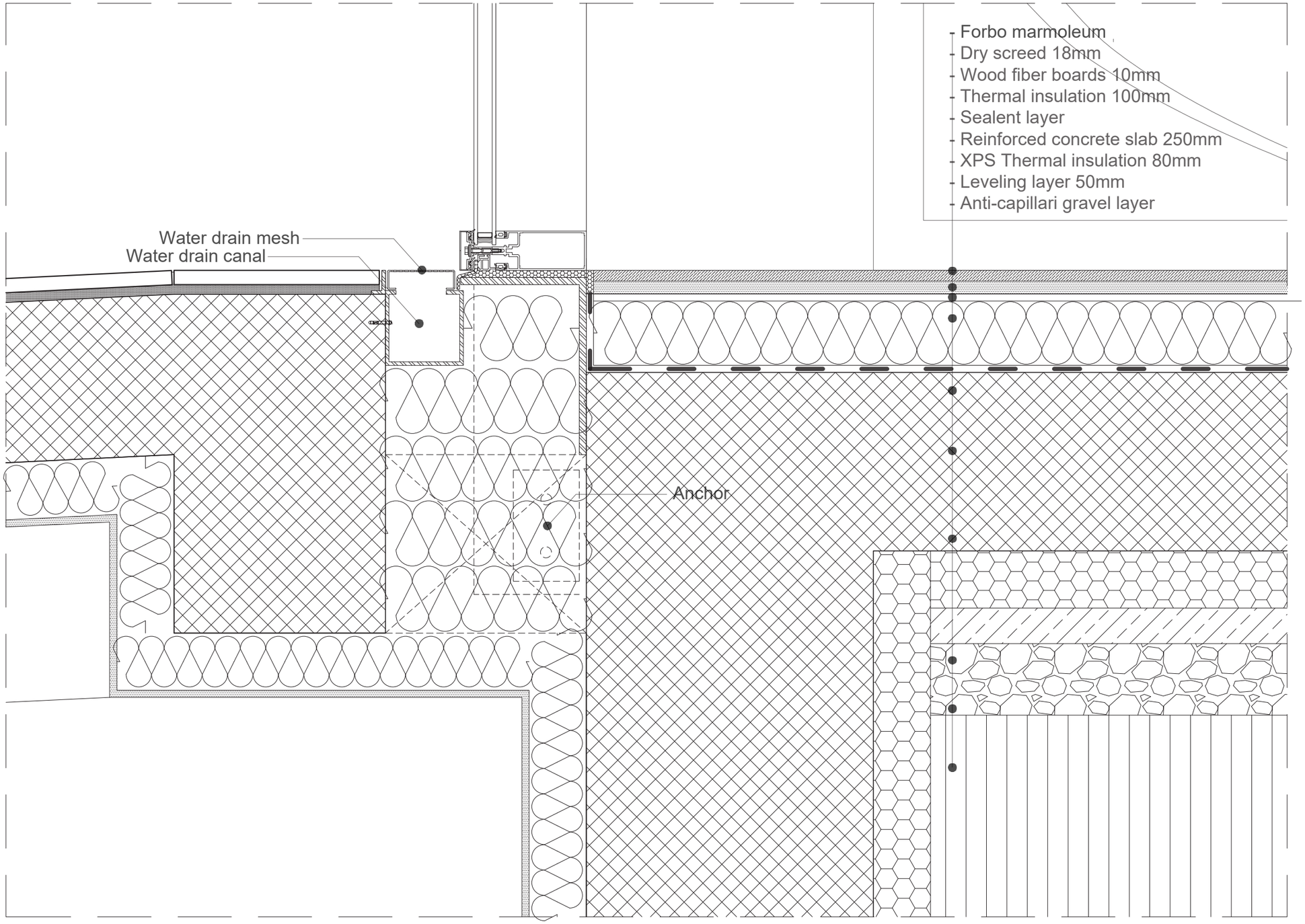
Temporary exhibition Volume Overhang

1 : 5



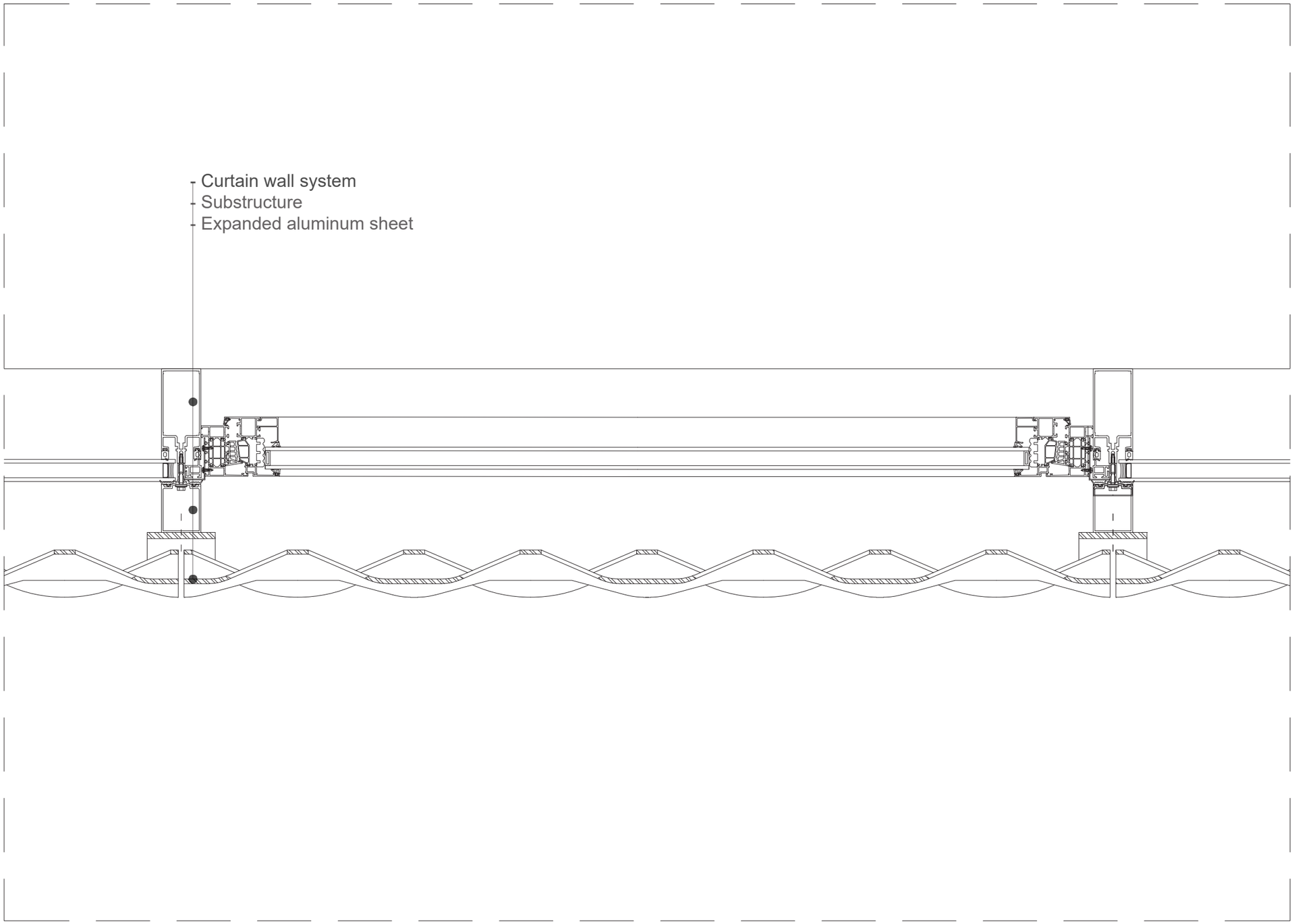
Site Plan

xt 1:15000



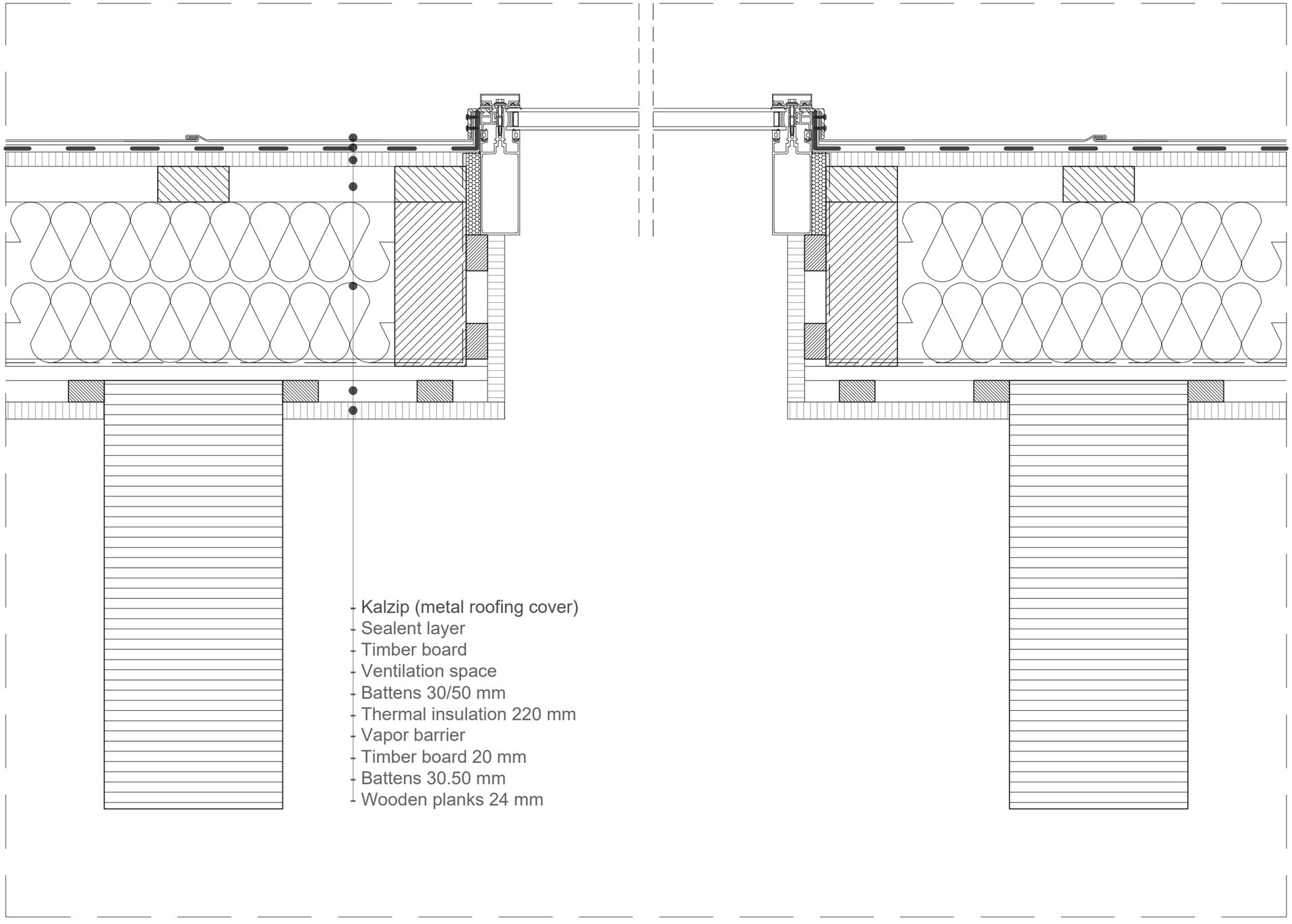
Temporary Exhibition Facade

1 : 5

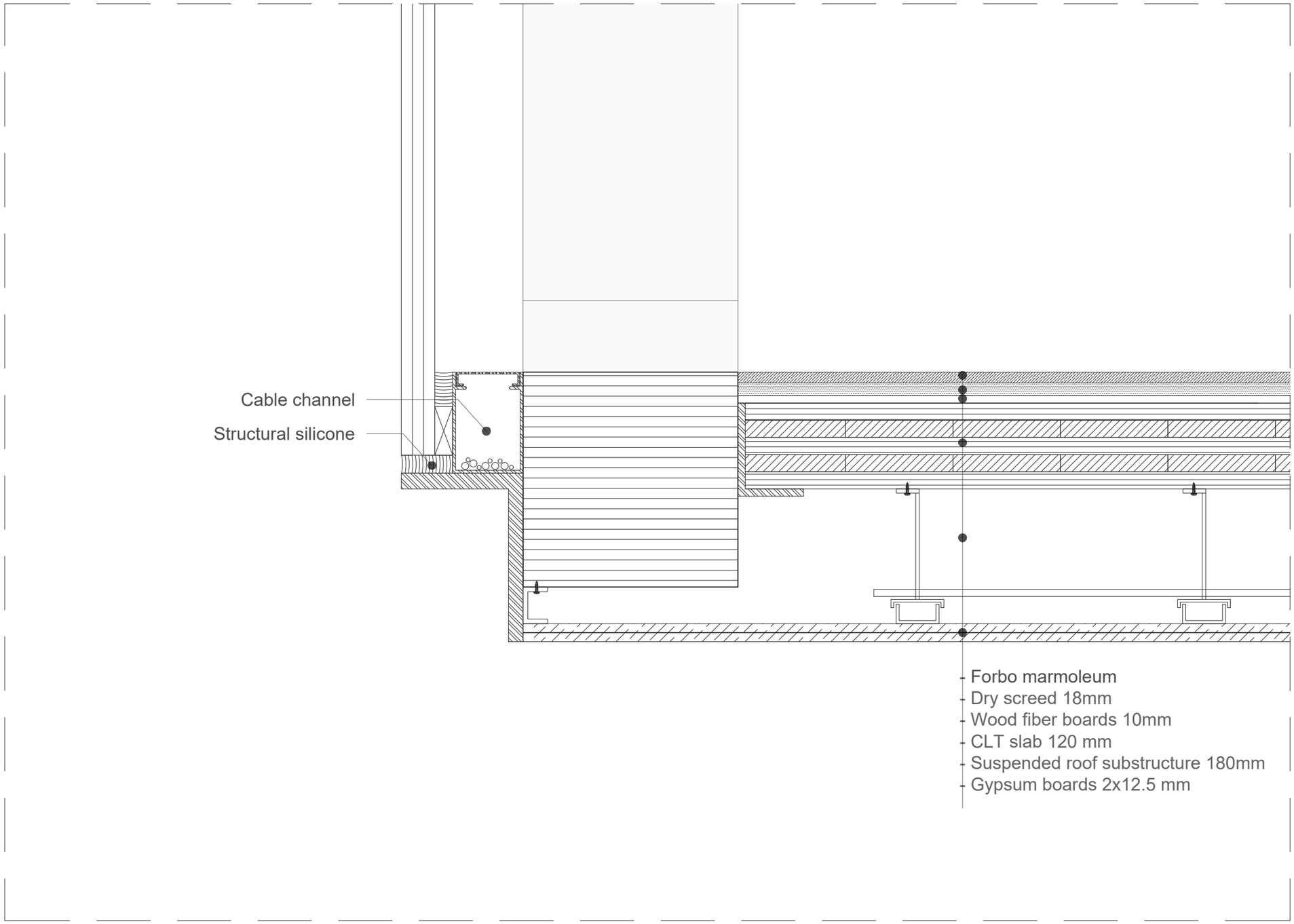


Roof Window

1 : 5



Journey Room
1 : 5



PROJECT DESCRIPTION

Form-finding process

In order to create an architectural proposal and contribute to the current and future contexts of Ter Apel and the broader region, this project begins with an attempt to respond and coincide with the area's rural surroundings, both spatially and historically. This response is primarily achieved through two concepts that draw from the existing landscape morphology and resonate with the historical architectural identity of the region. Firstly, the form of the building is inspired by the characteristic agricultural plots of the area, translating their linear pattern into a composition of shifted, merged, and elongated volumes. These volumes keep the scale of the surrounding fields, allowing the building to sit within the landscape, while breaking down its overall mass into a segmented composition. Secondly, the design references the sloped roof typology of traditional Groningen farmhouses, a salient and recognizable feature of the province's rural architecture. In reinterpreting this feature, on a larger scale, the project responds and connects to present and past contexts. Moreover, beyond its symbolic role, the sloped roof also holds key purposes for the project's construction principles, program organization, future flexibility, and climate design.

Programme

The project merges and combines a variety of different functions into a hybridized space that houses: a train station, restaurant, hotel, offices, temporary exhibition space, the journey room, an event hall, two cinema/theatre rooms, toilets, shops, local businesses, bike service, and bike parking. The functions are organized on the ground and first level around the central circulation space of the station, according to different degrees of publicness. Functions such as the hotel rooms or the hotel lobby are located farther away from the central circulation space, while the event hall and the temporary exhibition are positioned directly adjacent to it. In this way, the level of publicness gradually fades from the central axis outward. In addition to this sequencing, the dedicated functions that require access to natural light and ventilation, such as the hotel, offices, local business, shops, the restaurant, and the temporary exhibition space, are positioned on the building outskirts, with the contact to the facade.

The hotel comprises of a lobby space, luggage storage, a shared toilet with the restaurant and 10 separate hotel rooms. The rooms have a direct connection to the restaurant, and are of mixed capacity, the smallest having 20m2, the medium 25m2, and the large 35m2, in order to accommodate a wide range of tourist groups. Four two-person rooms are located at the ground floor, forming a connection to the outside with small separate gardens, while the other six units, three single and two three-person rooms, are located at the first floor.

The event hall is placed within the building volume without contact to the facade and surrounded by circulation hallways from three sides in order to allow large quantities of people to enter and exit it. Additionally, it is placed next to the theater and cinema rooms which allows them to be used independently and in unison depending on the occasion. The bigger cinema room can accommodate 100 people, while the capacity of the smaller one is 24. Both spaces can be used as small theater scenes, as there are storage spaces around the halls. Both rooms have a separate lobby and wardrobe spaces, which allows them to function independently in a scenario of double screening, or maintenance.

The most unique function of the project is the journey room, which presents a permanent exhibition space pointing out an exhibiting of all the curated tangible heritage landmarks in Ter Apel. It consists of a ground floor and first floor spaces on either side of the man hall that are connected with a bridge on the first floor. The bridge marks the main exhibition space and it stretches above the main interior plaza, exposing the exhibition to the bypassing tourists and visitors underneath.
The journey room is divided into 3 segments. The introduction segment where the general history and development of Ter Apel are displayed, followed by the main bridge exhibition showing all of the village's landmarks. The third and final segment, located at the north of the building, is displaying and elaborating in detail the two of the most prominent sites in Ter Apel, The Monastery and The Woods. With this sequencing, the tourists arriving to the station, are presented with an introduction, and initial overview of landmarks. Through the integration of this space and the visual exposure of exhibition elements within circulation paths, the building reenvisions initial touristic transit as an immersive introduction to the region. In this sense, it facilitates a ritual of arrival, orientation, and discovery.

Circulation

The project's circulation can be observed as 3 interconne cted wholes: the underground circulation and access, ground and first floor horizontal circulation, and the scattered vertical circulation. The central hall of the station presents the main circulation space of the building. It synthesizes all the other flows within the station or serves as a starting point for them. Four escalators connect the interior plaza with the underground level, two towards the west and two towards the east. Two mirrored staircases are also located within the space of the

central hall: one leading to the first floor of the temporary exhibition, orientated towards the south-east of the building, and the other to the lounge area for the cinema rooms on the first floor pointing the north-west direction. On both sides of the central hall, there are two additional parallel side hallways per side of the building. The horizontal circulation from the main hall to the other functions as well as the side hallways is provided through four narrow triple height passages. On the south side, the side hallways connect the hotel rooms with the hotel lobby and the restaurant, while on the north side, the side hallway connects the two cinemas and the event hall on the ground floor, and provides access to the first floor gallery of the big cinema room.
There are three elevators inside the building, one on each side of the journey room, and one for the cinema lounge space on the first floor, while the only external elevator is connecting the train station platforms with the underground passage. Furthermore, vertical circulation is also scattered around the side hallways in the form of spiral staircases forming small triple height voids around them that pass the light from the roof windows to the center of the building illuminating the surrounding hallways and functions.

Accessibility

The building is envisioned to be accessible primarily in two ways: through the ground floor and through the underground level. On the ground floor, there are two pedestrian entrances—one on the east side and one on the south side of the building, while the underground level is accessed from three separate points. Stretching along the main axis of the building, the underground level is connected with the train platforms on the west, the main interior plaza in the center, and the underground drop-off area on the east of the building.

The pedestrian entrance on the east side is the main central entrance for the building. This entrance marks the primary pedestrian connection with the plaza in front of the station and is composed of two revolving doors, allowing for efficient movement of people while maintaining a separation between outside and inside. This entrance plaza is partly covered by the overhanging station roof and presents a semi-open space that can be used to host a weekly Ter Apel market, or other events like gatherings or concerts.
The second pedestrian entrance is located on the south façade and is a semi-public entrance envisioned primarily for hotel guests using the access path to the canal.
The underground level accommodates arrivals and departures by vehicle. The underground passage for cars, bikes, and buses is located beneath the external main entrance plaza and features a one-directional lane for buses and cars, including a split lane for a bus stop, as well as a two-way bike lane. When arriving by train, on the other hand, the building is accessed from the west side using the underground connection, allowing passengers to bypass the tracks. By making the connection to the train station underground, the building's facade on the west is completely closed, maintaining only a visual connection between the station and the interior while blocking the dust, debris, and noise from the trains.

Construction

The main concept behind the construction of the station is based on creating smaller volumes under a large roof, independent of the roof structure. In this way, the building remains flexible for potential future programme changes, because the roof is a separate element from the volumes.
The roof structure consists of GLT columns with a side width of 40 cm and a sloped, double GLT beam sy stem forming portal frames which span varies between approximately 8m, at the area above the hotel and 17.5 meters above the main hall. These portals have a height of 2.5 meters, with each beam measuring 60 cm in height. On top of this primary structure, GLT ribs span in the opposite, perpendicular direction at intervals of 2 meters. These ribs have a height of 50 cm and span across 10 meters. Located beneath this roof structure are the different constructions for the other volumes with a first floor with the height of 5 meters, consisting of 30 × 30 cm GLT columns and beams supporting 20 cm thick CLT panels.

Climate control / Performance / Energy efficiency

The climate design of the station focuses on ventilation, insolation, zone heating, water management and power generation. The main hall together with the two surrounding smaller circulation halls connect the east and west facades and act as corridors for natural ventilation. The main hall is also separated from the functions on the north and south, which forms a different non-heated zone, significantly decreasing the volume load for heating.
The roof of the building also provides multiple integrated functions in regards to climate. The sides of the roof that are sloped toward the south at 30 degrees are covered with 1800 solar panels in total, in order to maximize the yearly energy yield. This configuration of panels bring the solar irradiance average to 3.2 kWh/m2 per day, which equals to around to 354,000 kWh of electricity yearly. The roof also acts as a water collection area, channeling water to toilet locations within the building. Additionally, the roof cantilevers from the facade of the station outwards in order to shade the building, and prevent overheating in the summer periods.

09 FINAL VISUALS

Arriving from the Village



View from the Canal



South Approach



North Approach



Arriving to Ter Apel



Interior Plaza
Towards the North



Main Entrance Interior Plaza



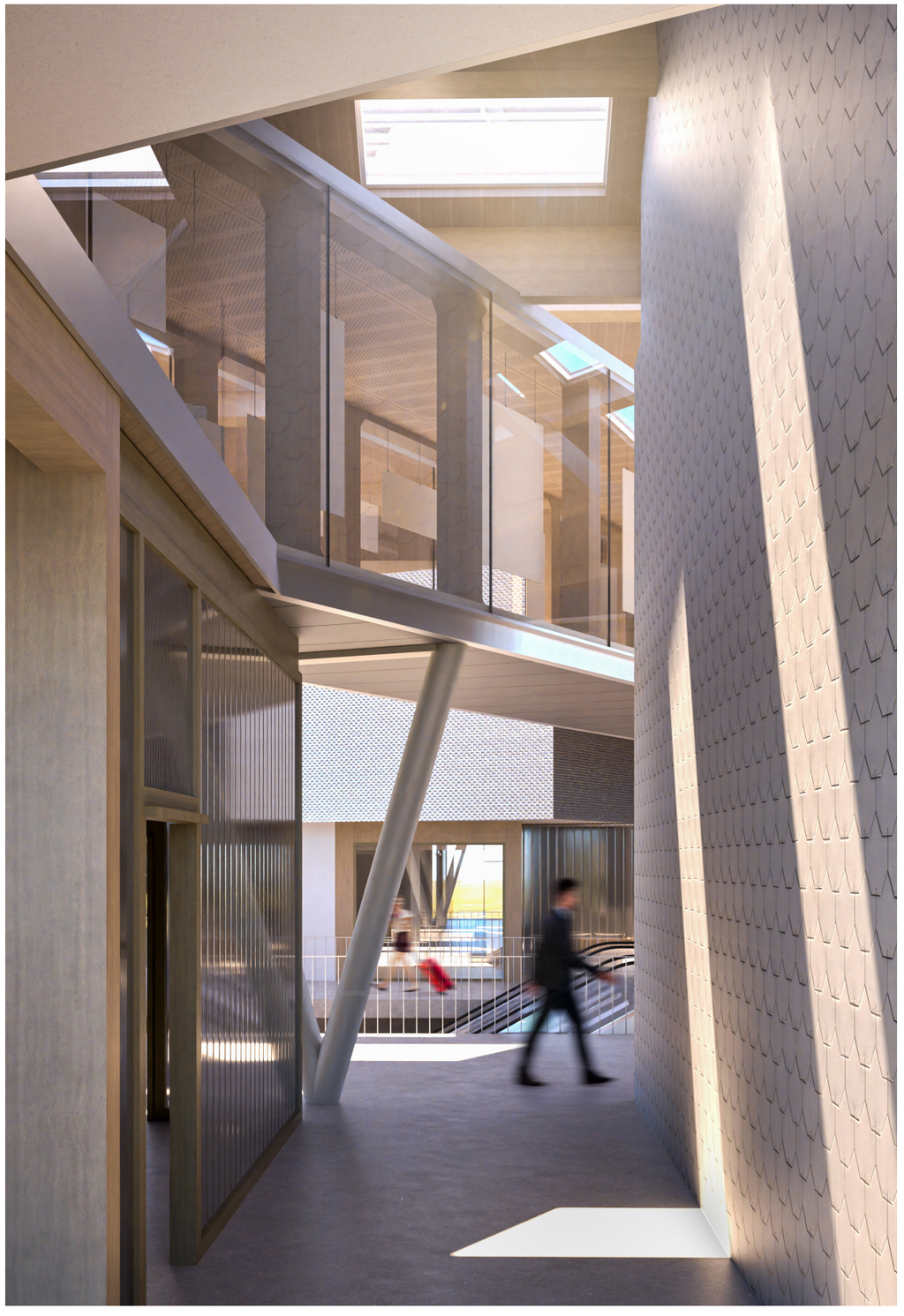
Interior Plaza
Towards the South



Journey Room Interior



Side Hallway



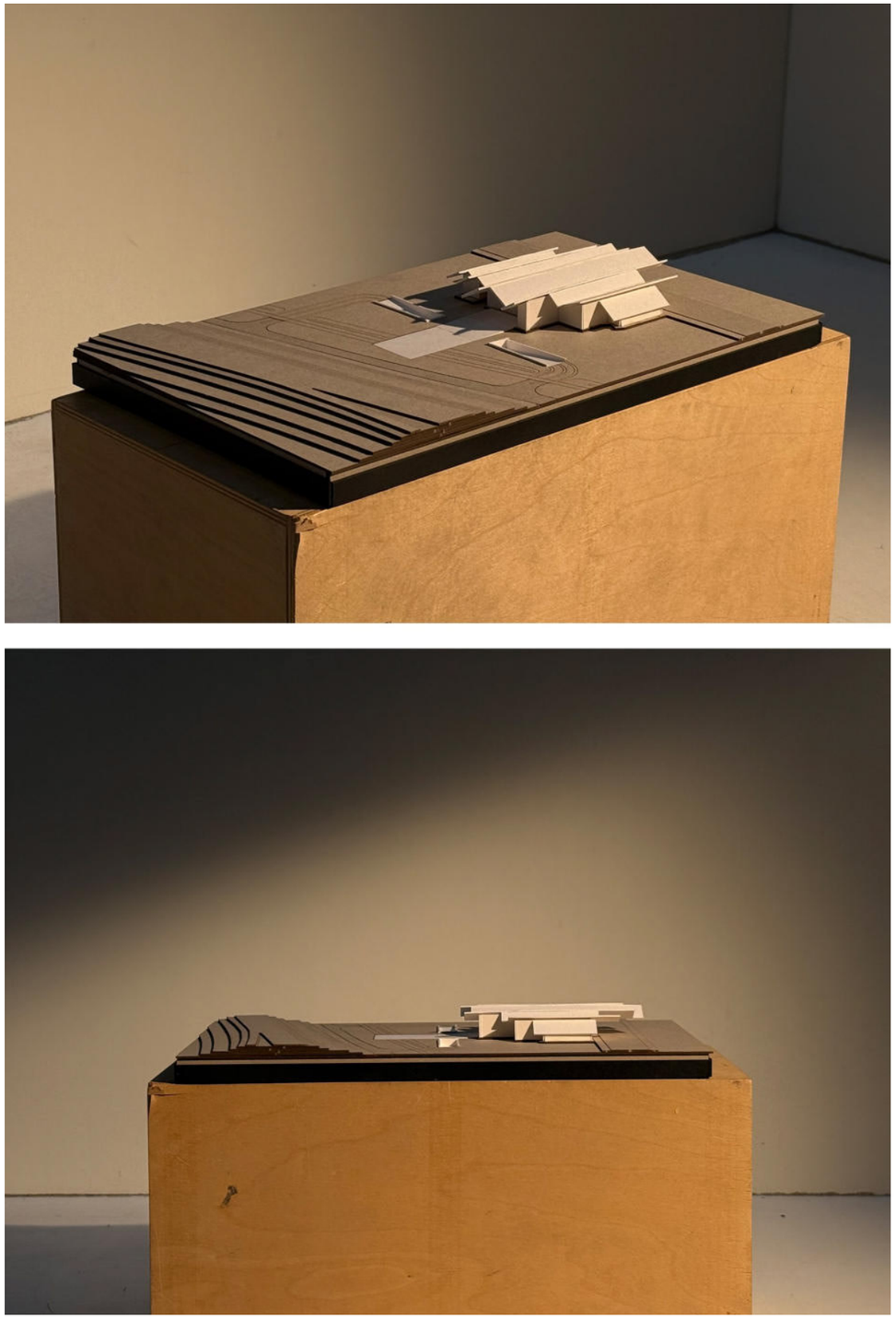
10 MODELS

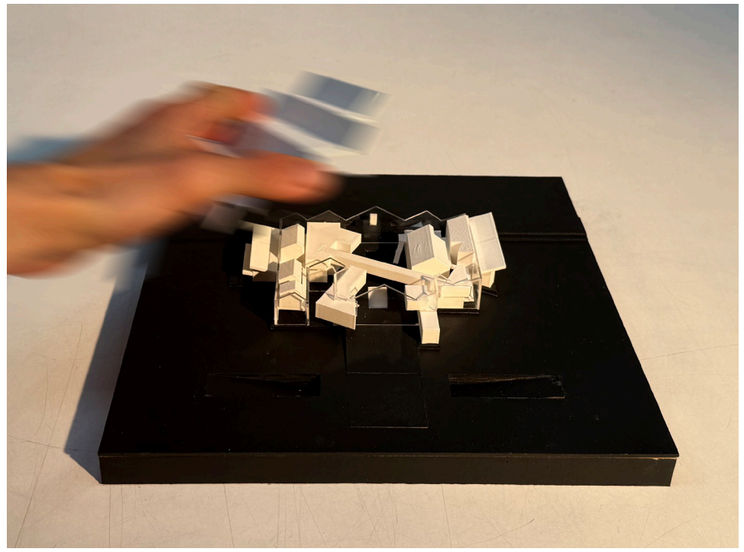
Model of Cionstruction
1:200



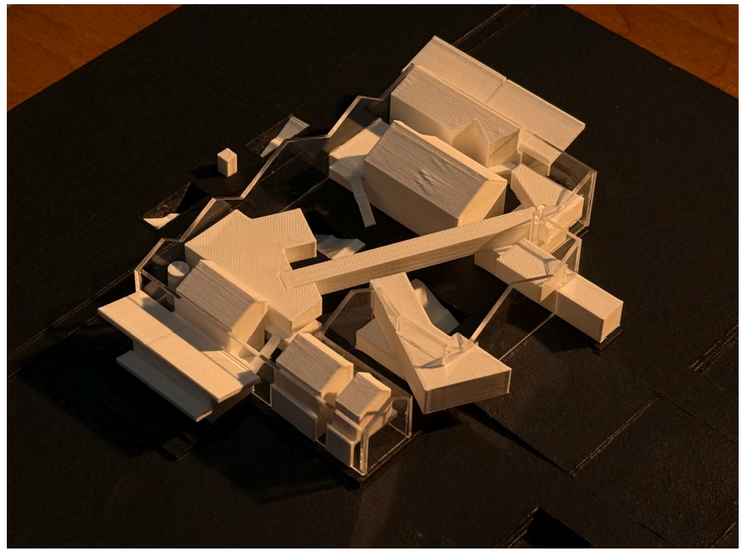
Model

Context Model 1:500 *(left)* | Interior Volumes Model 1:500 *(right)*





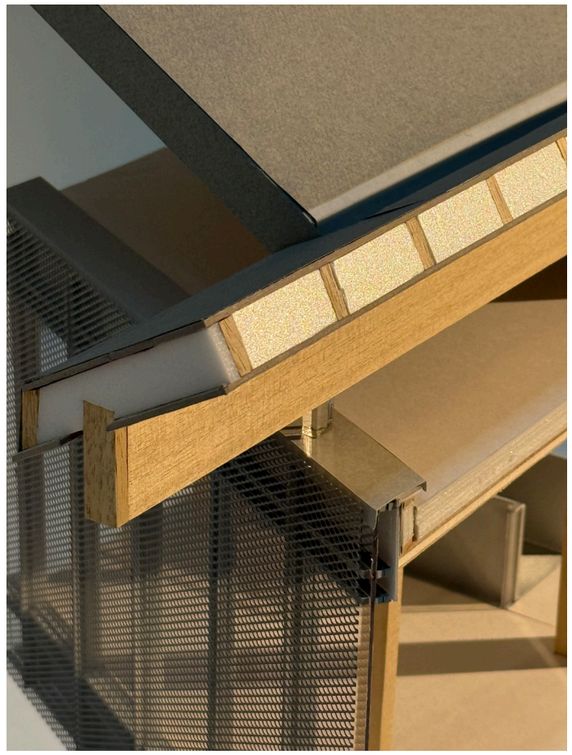




Segment Model
1:20









CONCLUSION

Ultimately, this project's main goal was to scrutinize and investigate how public architecture can promote cultural tourism by shaping experiences, rituals, and spatial narratives that enhance the perception of place identity. In response to the identified challenges in Ter Apel, primarily its fragmented identity, limited tourism infrastructure, and misrepresentation in broader narratives, the final design proposes a hybrid public building functioning as both a transport hub and a cultural instigator. The project demonstrates that architecture can have an influence and act an active agent in reframing and amplifying local identity.

The design primarily addresses the main research question by choreographing movement as a spatial and experiential sequence. The central hall, conceived as an interior plaza, becomes the starting point of a curated journey through Ter Apel's cultural and natural assets. Through the integration of the "journey room" and the visual exposure of exhibition elements within circulation paths, the building reenvisions initial touristic transit as an immersive introduction to the region. In this sense, architecture facilitates a ritual of arrival, orientation, and discovery, aligning with the concept of tourism as a culturally motivated experience

The project also responds to the posed sub-questions by functioning simultaneously as a protective and celebratory structure. The architectural appearance, that is derived from agricultural plot patterns and regional farm roof typologies, references the building within its rural context while reinterpreting it at an infrastructural scale. This establishes a dialogue between past and present, reinforcing local identity without resorting to literal direct historicism. Furthermore, the network strategy of smaller interventions across Ter Apel positions the building as a central node, acting as a "sensory lens" that connects and intensifies dispersed landmarks. Technically, the project meets its ambitions through a flexible structural system and climate-responsive design. The separation between the roof and internal volumes ensures adaptability over time, while passive ventilation, solar integration, and zoning strategies support the efficient energy performance of the building.

Ultimately, the project concludes that public architecture can meaningfully contribute to reshaping tourism dynamics and local identity. By synthesizing culture, civic values, history, and infrastructure, the design offers a model for transforming a damaged identity and short-stay visitation into longer, more engaged encounters. In doing so, it repositions Ter Apel not as a misrepresented location, consequently peripheral and marginalized, but as a coherent and resourceful destination within the regional and national context.

Implications

The implications of this project extend beyond the specific context of Ter Apel, offering broader insights into the role of architecture within the tourism sector and the shaping of place identity. At its core, the project argues that architecture can operate as a strategic tool in redefining how destinations are perceived, experienced, and inhabited. Rather than relying solely on marketing or policy-driven approaches, the design demonstrates how spatial interventions can actively construct narratives and influence visitor behavior.

As the subtitle states "New architecture for touristic journeys", it's suggesting a shift toward a more integrative and interdisciplinary role. Architecture and architects are positioned not only as designers of buildings, and buildings, but as curators of experiences and mediators between cultural heritage, infrastructure, and contemporary use. The project highlights the potential of hybrid typologies, such as the combination of a train station, cultural hub, and hospitality program, to address multiple challenges simultaneously. This approach is particularly relevant in smaller or underrepresented contexts, where limited resources require multifunctional and adaptable solutions.

The concept of a network of interventions, inspired by urban acupuncture, also presents a valuable framework. Rather than large-scale, singular developments, targeted and context-sensitive interventions can collectively produce significant spatial and perceptual impact. This strategy encourages a more incremental approach to development, respecting existing cultural and ecological systems amplifying their visibility and accessibility

From a tourism pattern perspective, the project emphasizes the importance of extending visitor engagement beyond short stays. By integrating accommodation, cultural programming, and mobility infrastructure within a single architectural system, the design creates conditions that encourage longer visits and more direct interaction with the destination. This has economic implications, as extended stays typically result in increased local spending and more stable tourism patterns.

However, the project also raises critical considerations. The introduction of new infrastructure and increased tourism must be carefully balanced with the preservation of local character and ecological sensitivity. Overexposure or overdevelopment could undermine the very qualities that make places like Ter Apel unique. Therefore, future applications of this framework can potentially incorporate participatory processes, ensuring that local communities remain active stakeholders in shaping development.

REFLECTION

The design and research process of this project was inherently iterative, reflecting the principles of the research-by-design methodology. Throughout the project, analysis and design were not treated as separate phases but as interconnected processes that continuously informed one another. This approach allowed for a gradual refinement of both the conceptual framework and the architectural proposal, while also accommodating unexpected insights and shifts in direction.

One of the key strengths of the process was the use of mapping and diagramming as analytical tools. By visualizing relationships between landmarks, movement patterns, and infrastructural constraints, it became possible to understand Ter Apel not as a collection of isolated elements but as a system. These mappings directly informed the concept of the intervention network and the positioning of the main building as a central node. Similarly, case study analysis provided valuable references for understanding how architecture can guide movement, frame experiences, and engage with cultural narratives.

The design development relied heavily on iterative massing, composing, and drawing. These tools enabled the exploration of spatial sequences, volumetric compositions, and structural strategies in parallel. In particular, the translation of landscape patterns into architectural form required multiple iterations to balance abstraction with contextual readability. The decision to separate the roof structure from the internal volumes also emerged through this iterative testing.

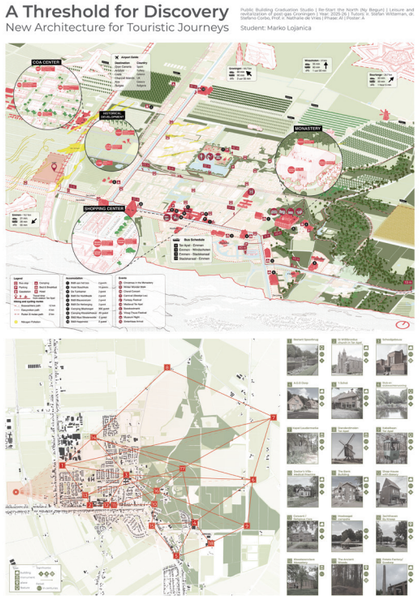
However, the speculative nature of the project means that some aspects economic feasibility, and long-term impact, remain hypothetical. While the design proposes a convincing spatial narrative, tits effectiveness in reshaping tourism patterns would require further validation through stakeholder engagement and real-world implications.

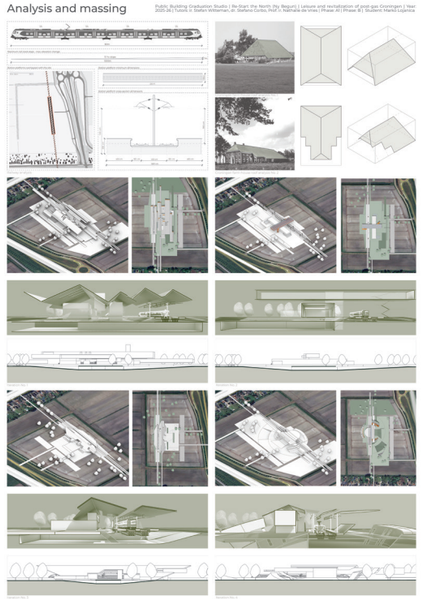
In retrospect, on a methodological level, the project embraced and valued a little uncertainty within the design process. Rather than seeking definitive answers from the outset, the research-by-design approach allowed questions to evolve alongside the project. This openness allowed for more creative and exploratory results, but it also required attentive incremental evaluation to keep direction and focus. Consequently, the project proved that architectural design can be used as a means of knowledge generation as well as a method of inquiry. The tools and techniques employed, that include: mapping, diagramming, drawing, modeling, and narrative construction, proved effective in addressing complex spatial and cultural questions, influencing the design problem, the design intention, and the final design outcome.

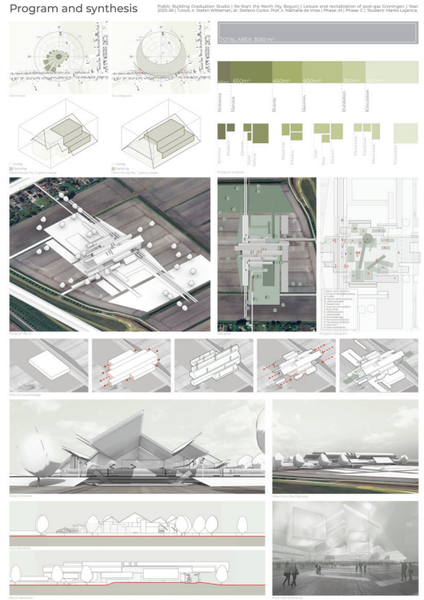
11 POSTERS CHRONOLOGY

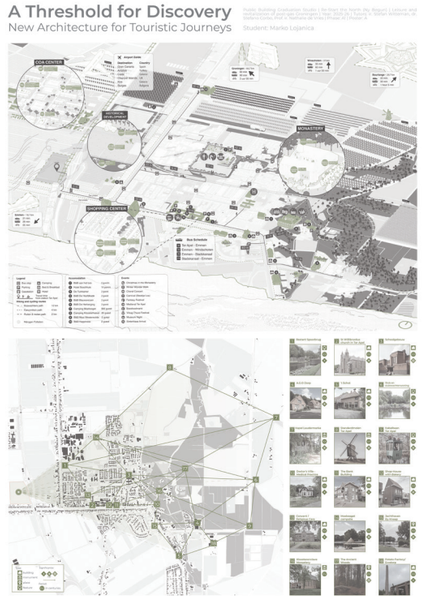
Posters

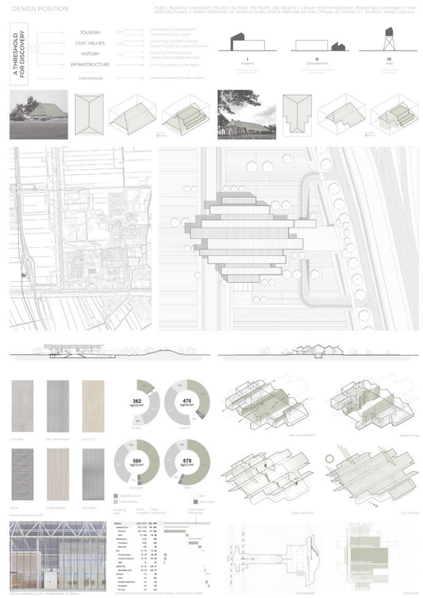
From A1 *(left)* to A3 *(right)*

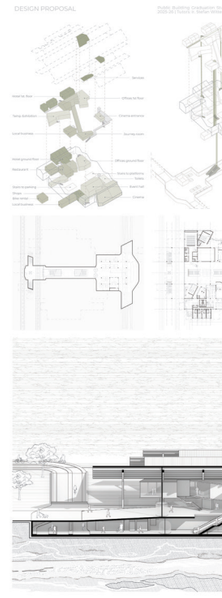


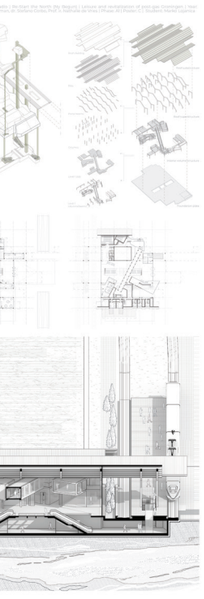


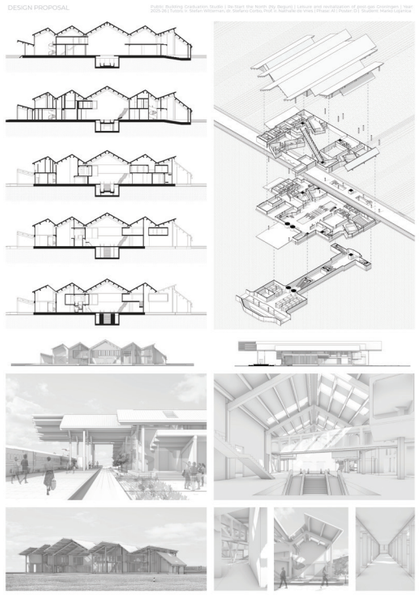


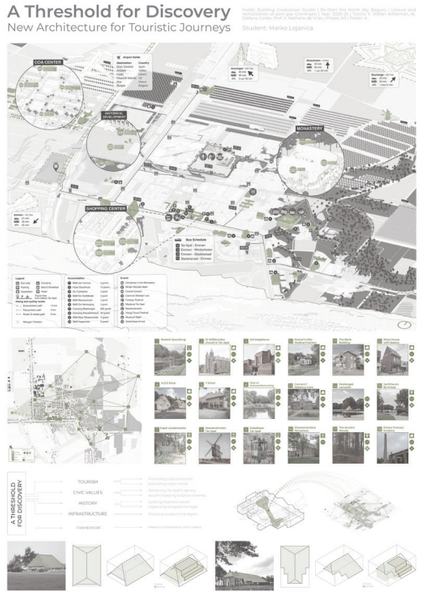


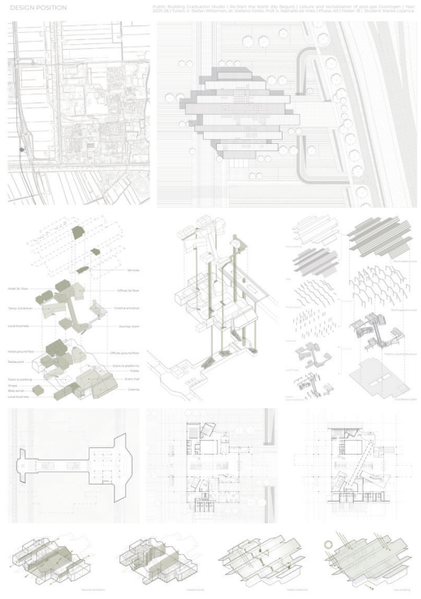




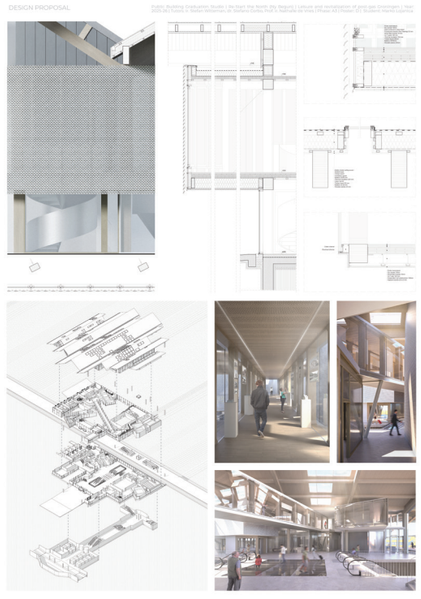





A Threshold for Discovery
New Architecture for Touristic Journeys
Student: Marko Lojanica
CIVIC CENTER
MONASTERY
SHOPPING CENTER
A THRESHOLD FOR DISCOVERY
TOURISM
CIVIC VALUES
HISTORY
INFRASTRUCTURE
FRAMEWORK







New Architecture for Touristic Journeys

A Threshold for Discovery

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