

# Urban Cliff

The politics of Brexit



## Purpose

Nature is neither an object nor an image. It is a diverse environment and space in which we have evolved and experienced thousands of years. It evolves with time and seasons; it is fragile and changeable, and has the ability to comfort and disturb us. Our built environment increasingly controls and minimizes the natural world, so that we are physically and even psychologically separated from it.

Under the background of Brexit, the meaning of immersive natural space in DOVER was explored, and the conditions of urban cliffs were realized. The artificial buildings and natural features formed a strong contrast, turning them into precious spectacles worth admiring; the resulting architecture Integrate with nature in novel ways, and these proposals explore the problems of Dover's mismanagement of natural resources, tourism, education, and other social services under the influence of negative politics.



Globalization and the European Union/globalization



Local(Dover)



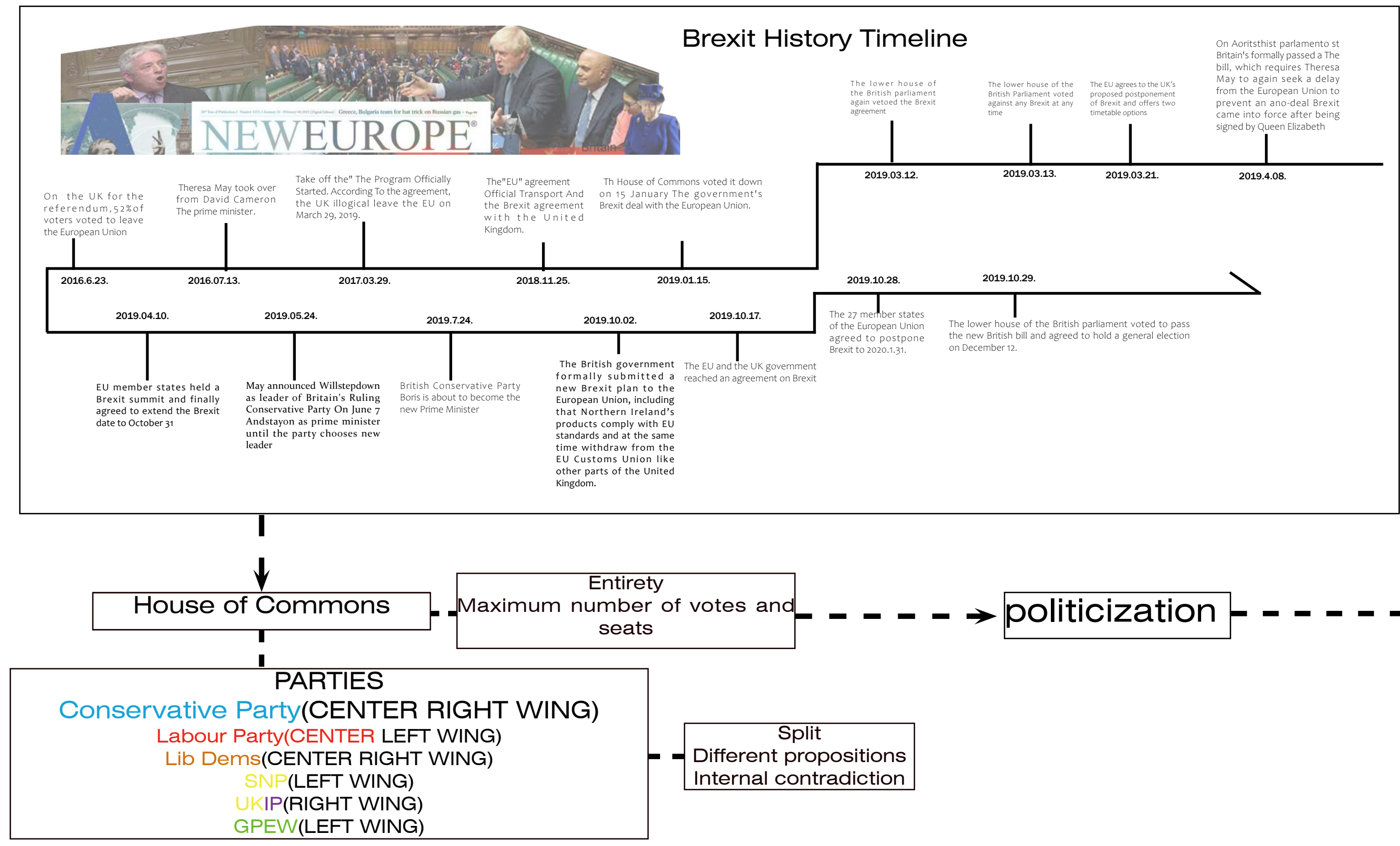
# Contextual Practice Development

**<<Abstract>>**  
 world war 2  
 UK between USA AND EUROPEAN  
 Selfish politicization  
 Refugee wave

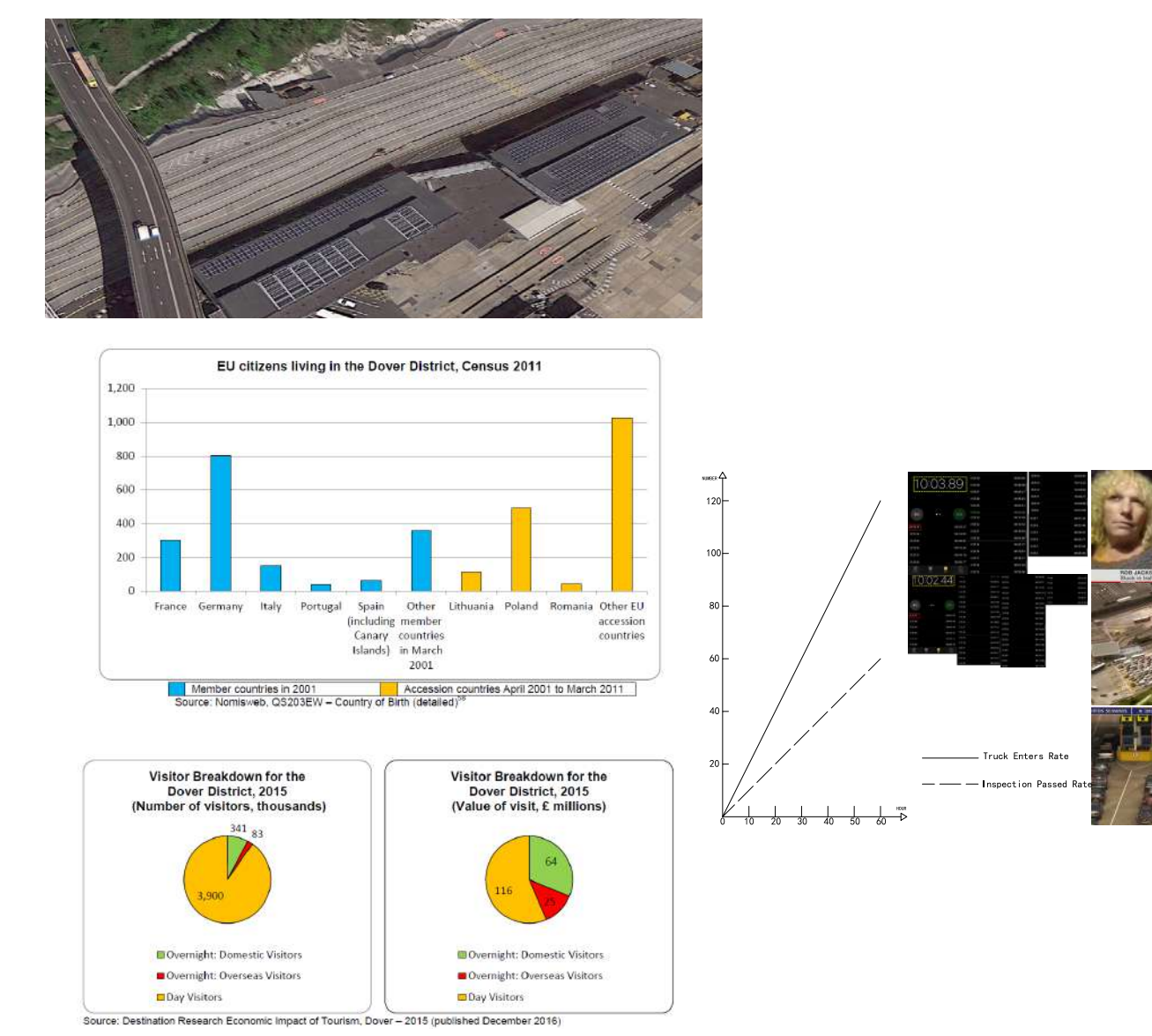
**Area (Dover PORT)**  
 As an important port and national border connecting the two countries, Dover has become a victim of politics.

**Dover Port Expansion**  
 ISSUE: Annual forecast growth at the Port of Dover is between 2% and 4% so capacity is needed to support increasing freight movements and the resilience of the Port.  
 Action: Work with Dover Harbour Board and other port operators to support their development.  
 Outcome: Job creation, regeneration and the redistribution of freight traffic.

## Research concept development



**What happen after Brexit?**  
 Industry change  
 1. Economic  
 2. Population  
 3. Tourism  
 4. Traffic  
 5. Fish Industry

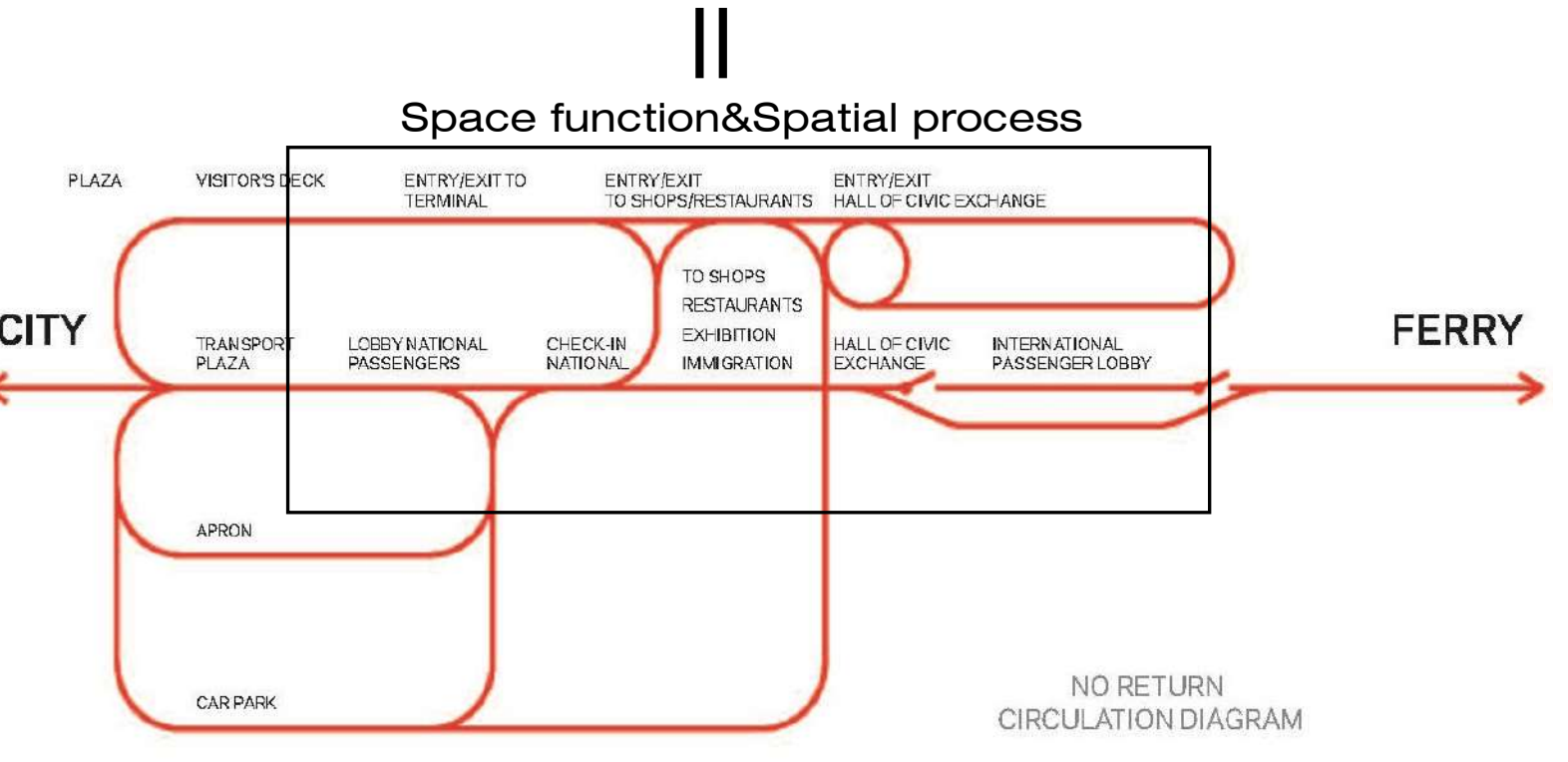


**Local and EU issues**

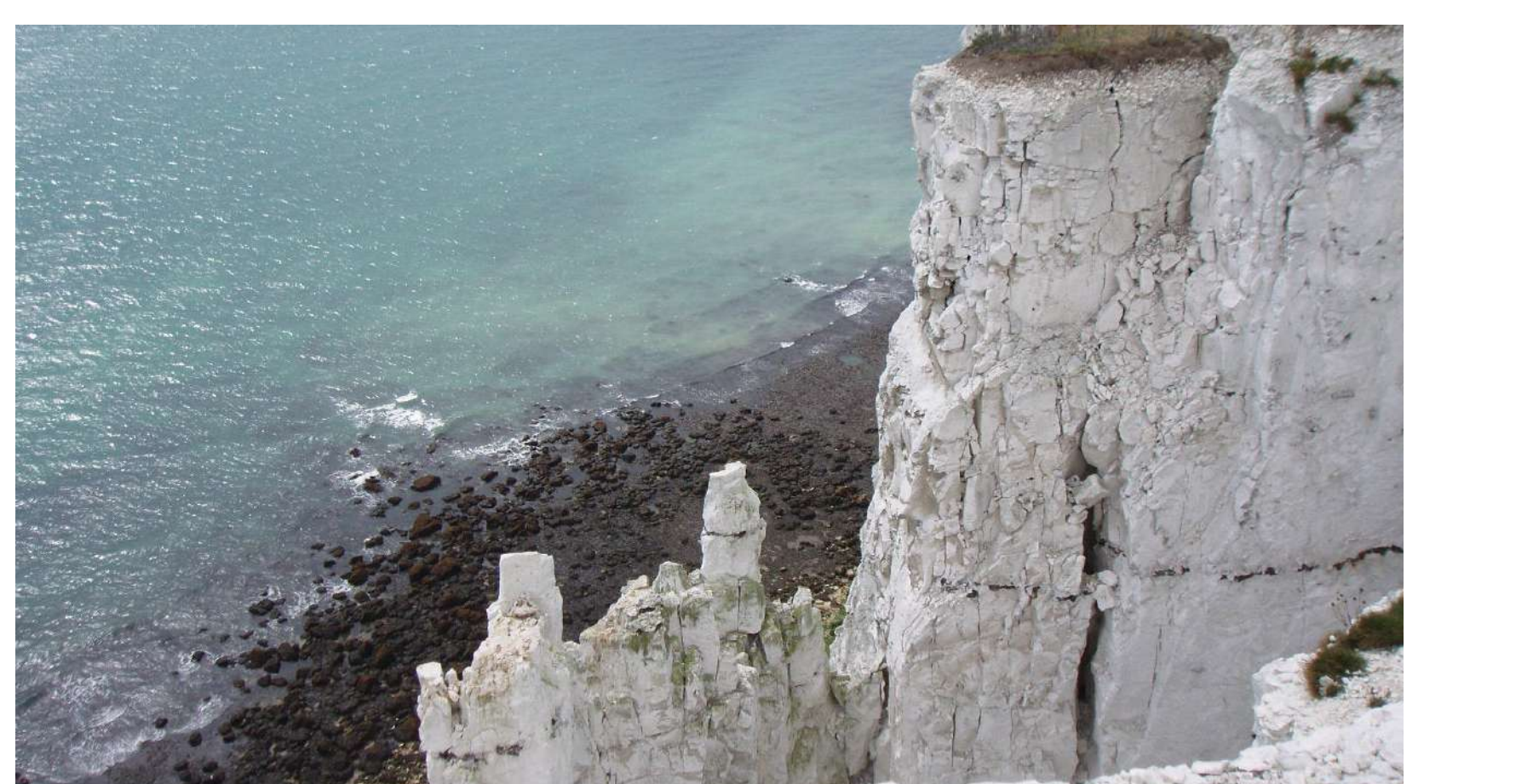
- ECONOMY ISSUE**: Dover has become a city with a low economy. The visitor economy lost over 1m per day.
- LABOR ISSUE**: Most of the labor force comes from the European Union (Over 68.1%).
- TOURISM ISSUE**: The tourism industry relies heavily on European and migrant labour.
- TRANSPORTATION ISSUE**: a traffic jam occurred in Dover for more than 14 hours.
- LOCAL-TRADE IN EU**: Time and labor costs increase. The transaction is cancelled and the goods are stranded at the port.

**Original Space**  
 LOBBY PASSENGERS/TERMINAL (ENTRY&EXIT)  
 CHECK IN NATIONAL  
 SHOPS/RESAURTANT//IMMIGRATION (ENTRY&EXIT)  
 CIVIC HALL EXCHANGE (ENTRY&EXIT)  
 INTERNATIONAL PASSENGER LOBBY

**New Space**  
 Duty-free market  
 TRANSPORT PLAZA+CAR PARK  
 The cable car station+VISITOR DECK



## Geological research



The cliffs are made from **chalk**, a soft white, very finely grained pure limestone, and are commonly 300-400m deep. The chalk layers built up gradually over millions of years. They're formed from the skeletal remains of minute planktonic green algae that lived floating in the upper levels of the ocean.



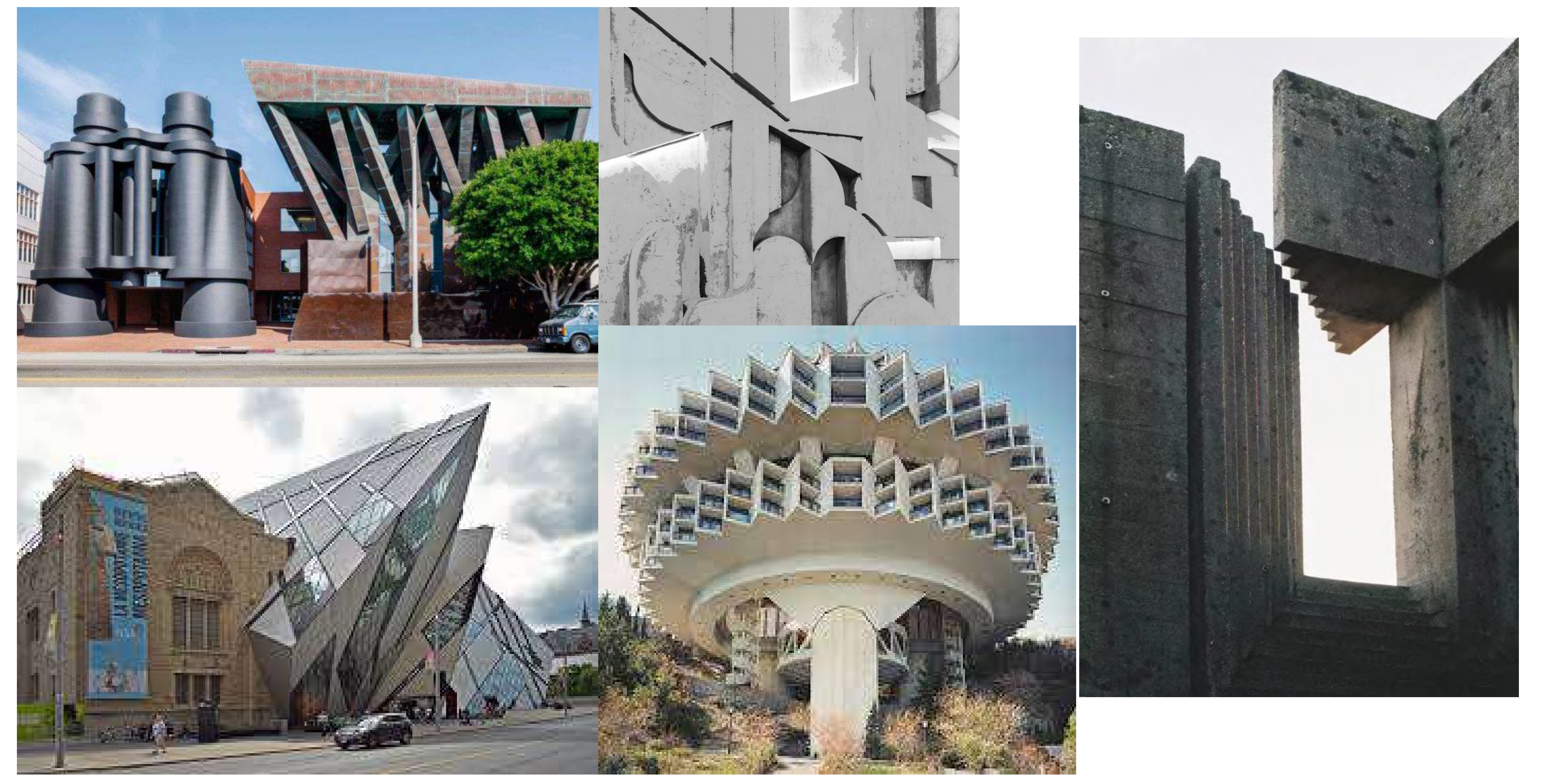
The cliffs' chalk face shows horizontal bands of dark-coloured flint which is composed of the remains of sea sponges and siliceous planktonic micro-organisms that hardened into the microscopic quartz crystals. Quartz silica filled cavities left by dead marine creatures which are found as flint fossils, especially the internal moulds of Micraster echinoids. Several different ocean floor species such as brachiopods, bivalves, crinoids, and sponges can be found in the chalk deposits, as can sharks' teeth.



It occurs chiefly as nodules and masses in sedimentary rocks, such as chalks and limestones. Inside the nodule, flint is usually dark grey, black

Flint is a sedimentary cryptocrystalline form of the mineral quartz, categorized as the variety of chert that occurs in chalk or marly limestone.

## Postmodernism + Constructivist theme + Carlo Alberto Scarpa



# Cases

Ferry Terminal F451 Arquitectura



Fig.1.

**Features:**

Flexible connection with surrounding traffic  
Close contact with the surrounding landscape  
Very bright field of view  
Rich greenery on the first floor  
Varying floor height

**Material:**

Unknow

**Space:**

Passenger Center  
Aisle  
Office

Al Fayah Park Abu Dhabi



Fig.2.

**Features:**

Naturally shaped platform  
Bionic terrain

**Material:**

Local Material

**Space:**

Park  
Square  
Plant Garden  
Office  
Shopping

Yokohama International Passenger Terminal



Fig.3.

**Features:**

Huge landscape platform  
Flexible connection with surrounding traffic  
Enrich shared urban spaces  
Conceived primarily in section  
Indoor space with horizontal span without pillars  
Strong architectural language

**Material:**

Wooden Floor+Steel structure

**Space:**

Station  
Transportation  
landscape Platform  
shopping area  
Parking

The Flinders Street Station



Fig.4.

**Features:**

The huge arch forms a wide interior space and makes the architectural form a symbol of the city  
Flexible connection with surrounding traffic

**Material:**

Fusion of new and old materials

**Space:**

Station  
Market  
Museum  
landscape Platform  
shopping area

International Cable Car China to Russia



Fig.5.

**Features:**

Building blocks dominated by the cable car route are interspersed to form  
Building appearance with clear directionality

**Material:**

unknow

**Space:**

Passenger Center  
Shopping area  
Landscape Platform

Hereford Community



Fig.6.

**Features:**

Natural appearance  
The heaviness of the body

**Material:**

Unknow

**Space:**

Church  
Night Club  
Public Area



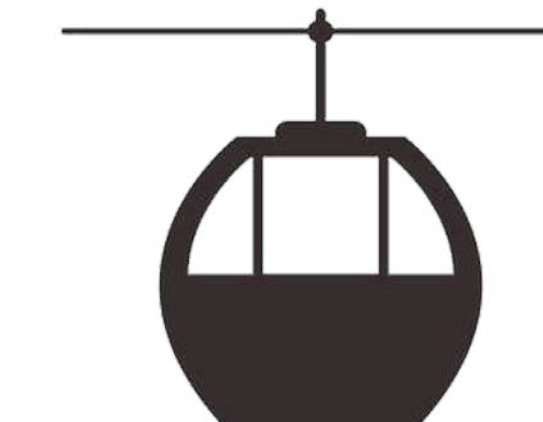
Huge atrium space



Architecture and Landscape



Transportation of buildings



Cable car



Huge natural volume

3xn-australia seaside market



Fig.7.

**Features:**

The new roof design allows sunlight and wind to pass through  
Graceful floor curve  
Sustainable design such as rainwater harvesting

**Material:**

an undulating timber and aluminium roof

**Space:**

Fish Market  
Waterpool for seafood  
Gallery  
Church

Markthal Rotterdam



Fig.8.

**Features:**

Huge atrium market  
Sustainable design  
Continuity  
A complex of civic activities and residence

**Material:**

an undulating timber and aluminium roof

**Space:**

Flat  
Market

Riga-central-market



Fig.9.

**Features:**

Combination of decorativeism and industry  
Material reuse

**Material:**

Zippling matel

**Space:**

market

Kariakoo Market



Fig.10.

**Features:**

Modernist  
Huge atrium market  
Special roof  
Distinct concrete structure

**Material:**

Cement

**Space:**

market



Constructivist theme

Biodome Musuem

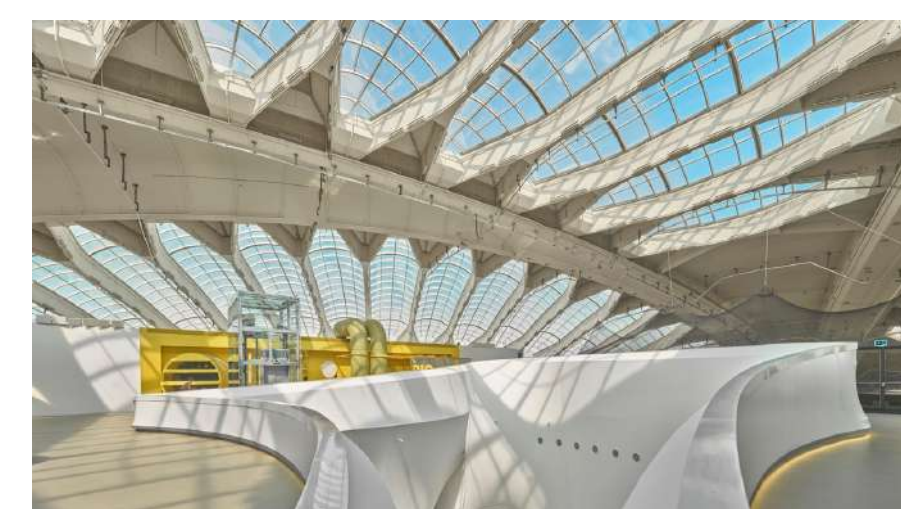


Fig.11.

**Features:**

Uniquely shaped huge skylight  
The influence of architectural language on interior space, the transformation of interdisciplinary blending space  
Visual impact brought by architectural form language

**Material:**

Unknow

**Space:**

Five different natural system

Brutalist Bus Terminal in the Czech



Fig.12.

**Features:**

Tough architectural language  
Steel structure support system  
Smooth traffic route

**Material:**

Metal and cement

**Space:**

Traffic Station

Duudee Musuem



Fig.13.

**Features:**

Bionic building exterior  
A unified and strong architectural language

**Material:**

Stone

**Space:**

Display Area  
Office  
Landscape Platform

Miami Collage Garage



Fig.14.

**Features:**

Rich colors  
Structuralist building facade  
Interesting art device  
Constructivist theme

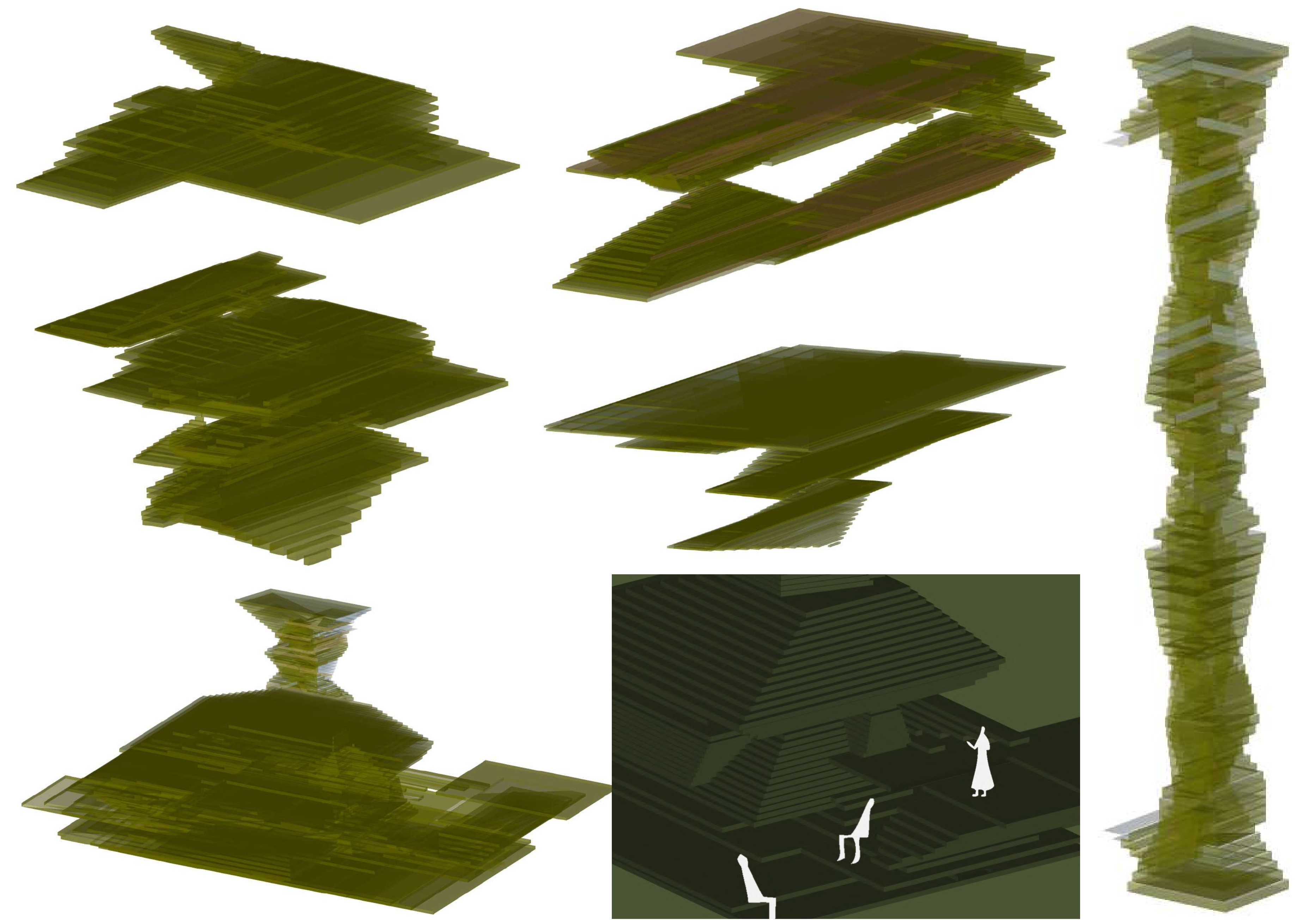
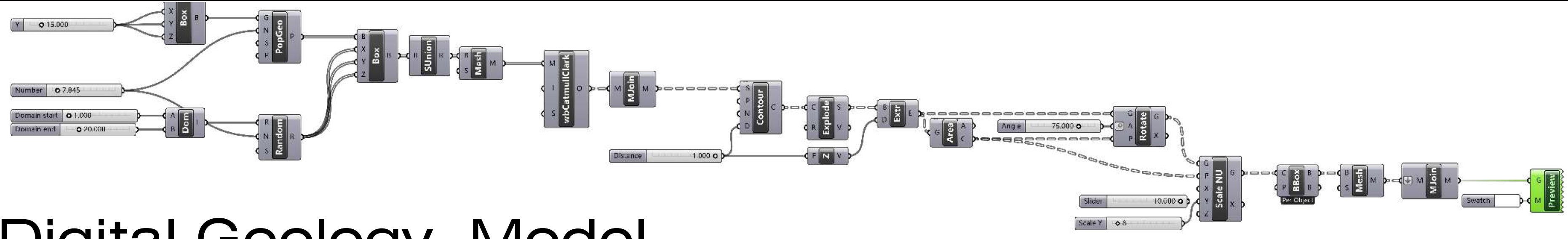
**Material:**

Matel cement

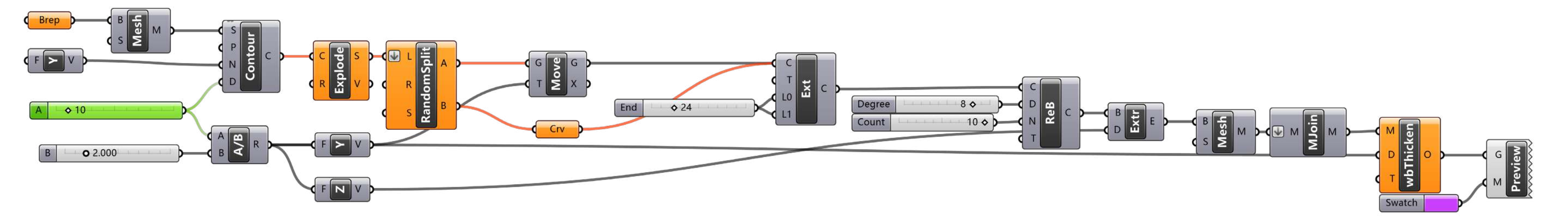
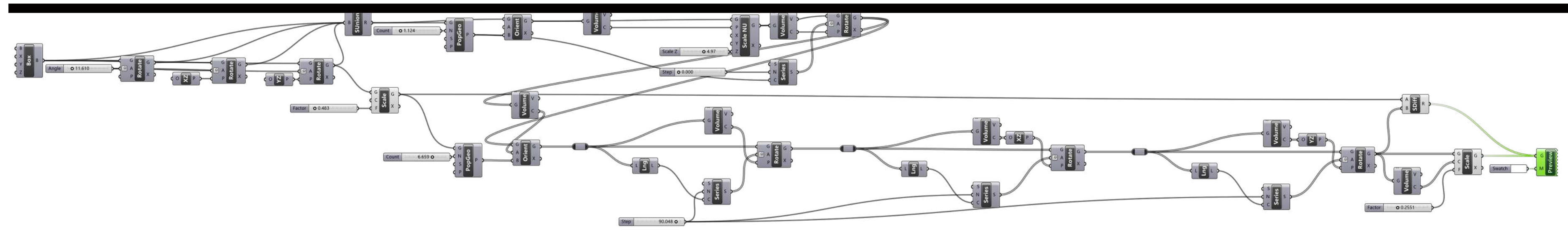
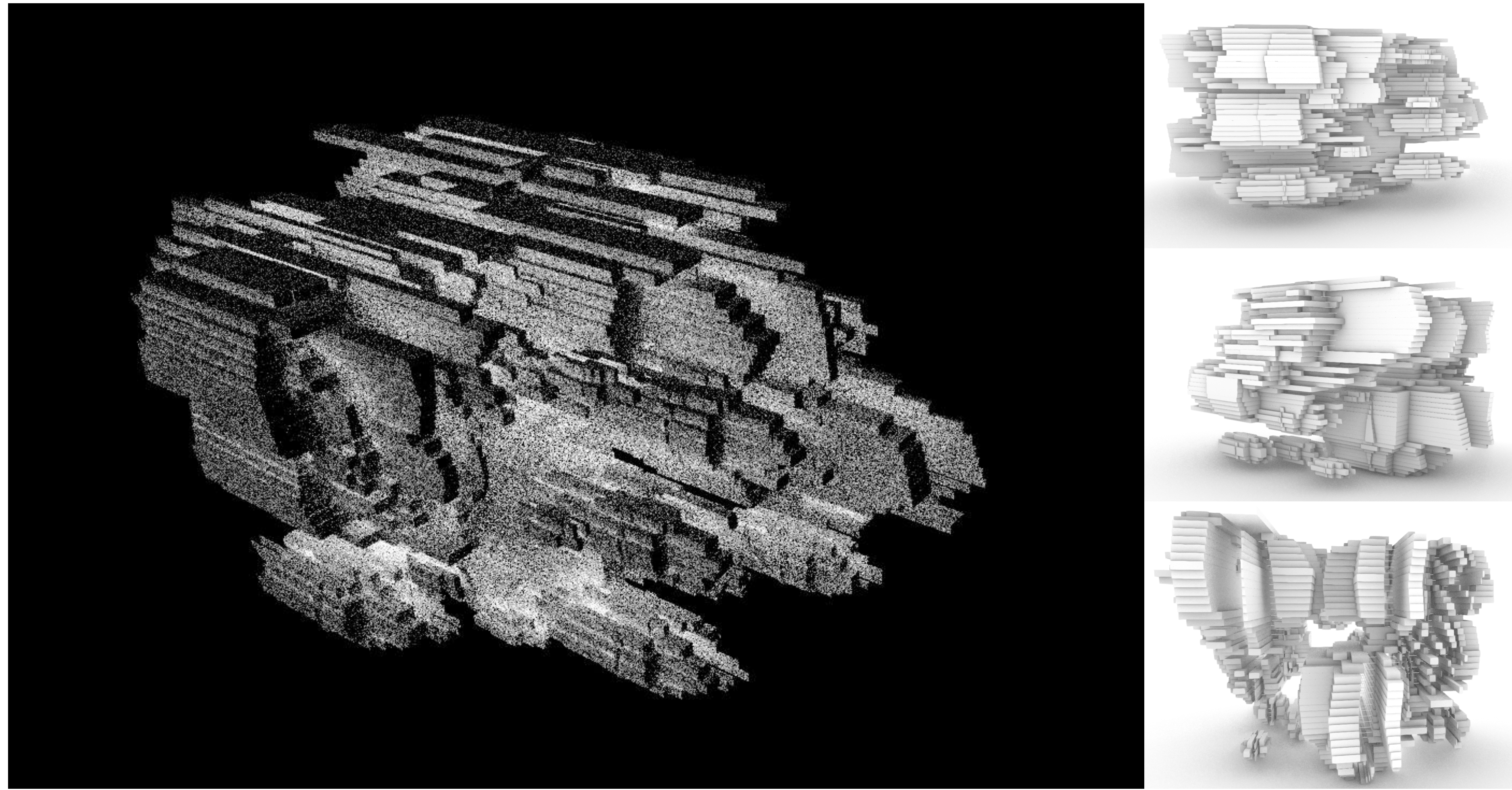
**Space:**

Parking  
shopping area  
children area  
landscape platform

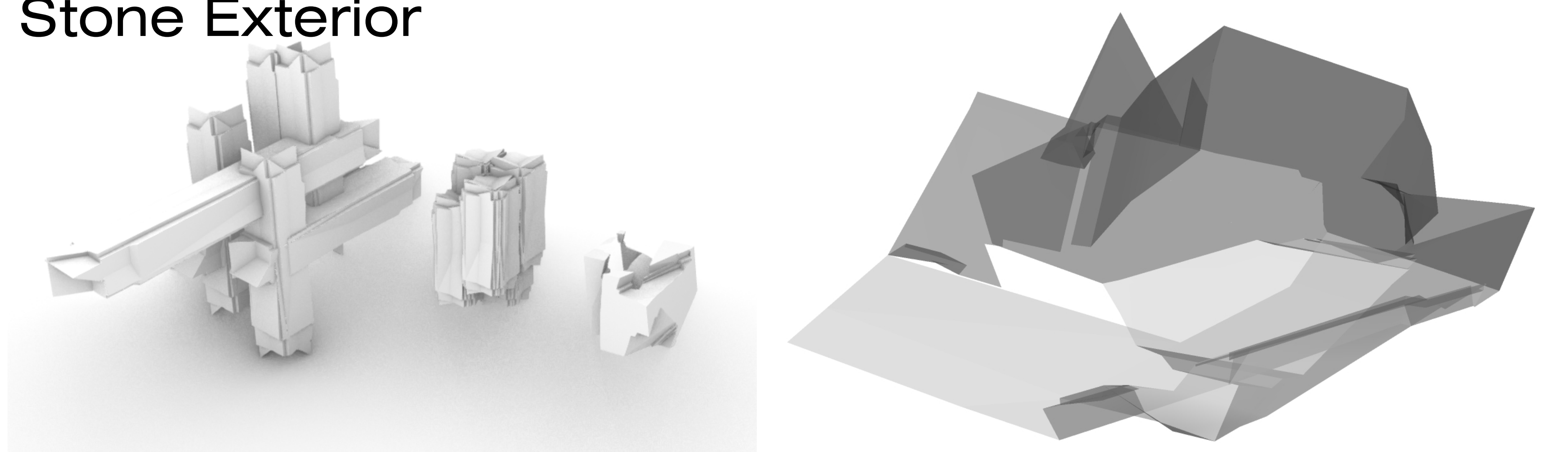
# Digital model test



# Digital Geology Model



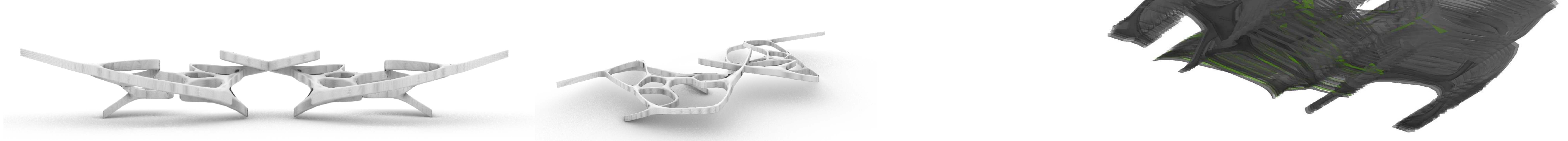
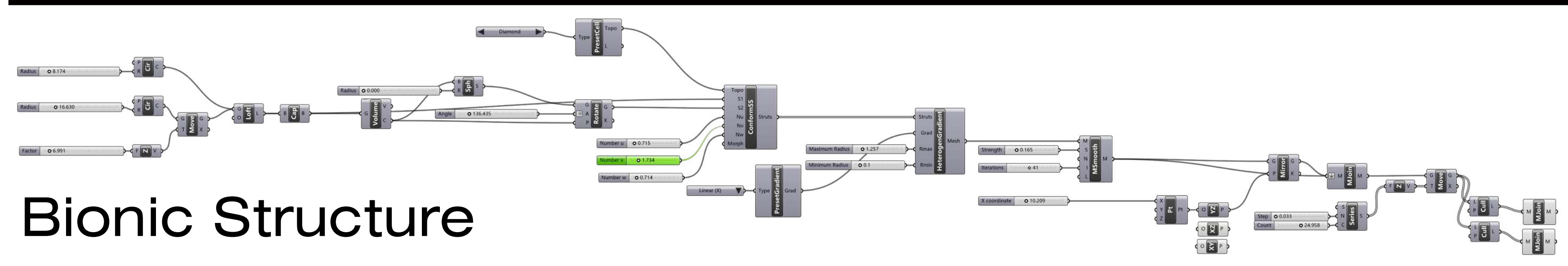
# Stone Exterior



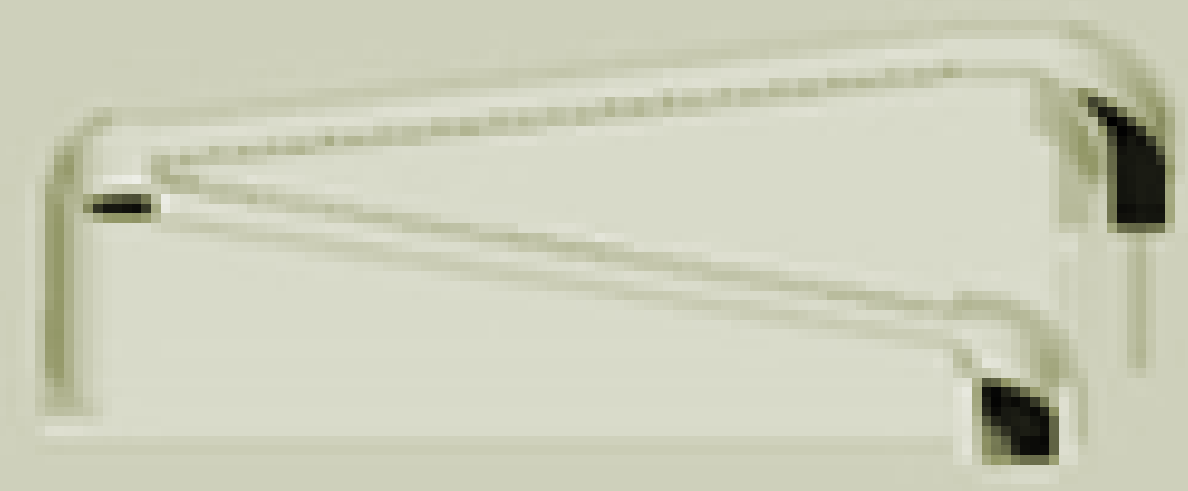
# Bionic Floor



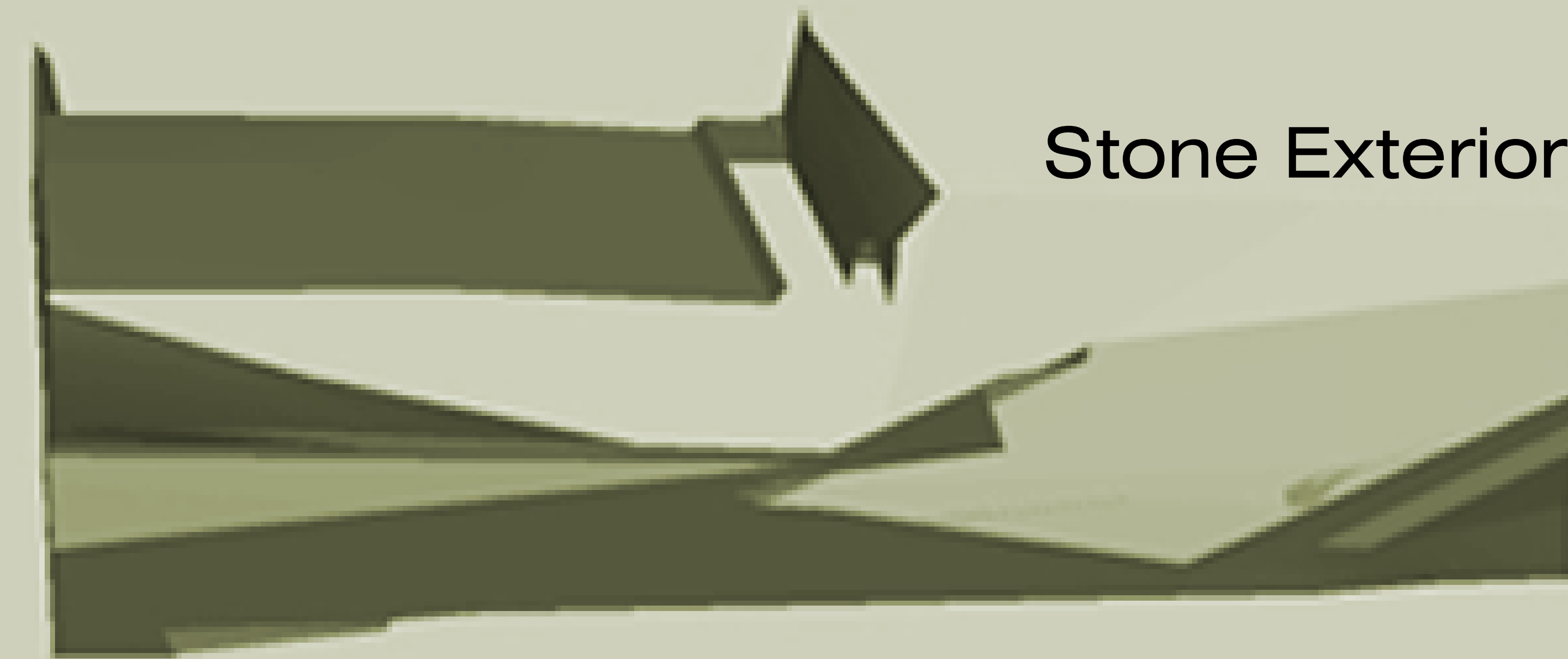
# Bionic Structure



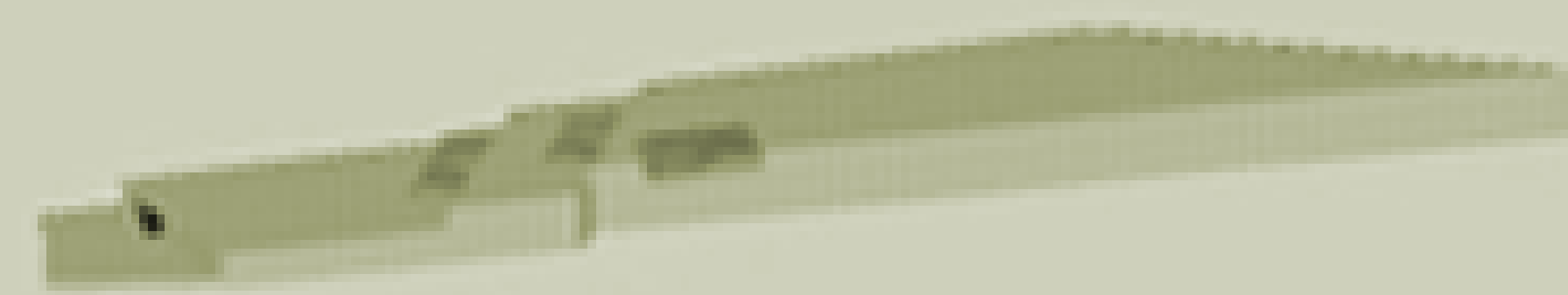
# Dismantling diagram



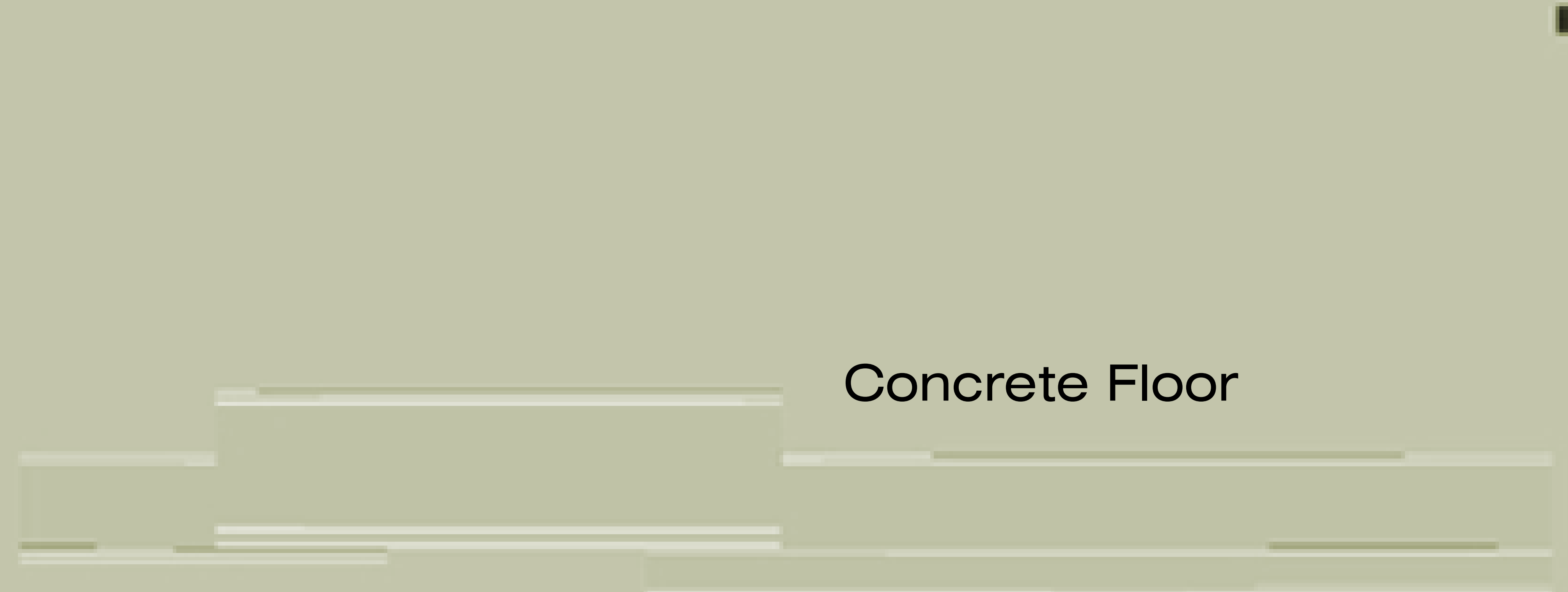
Parking Model



Stone Exterior



STAIR MODEL

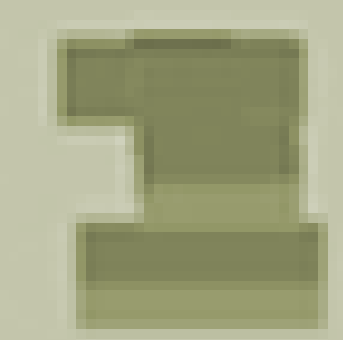


Concrete Floor

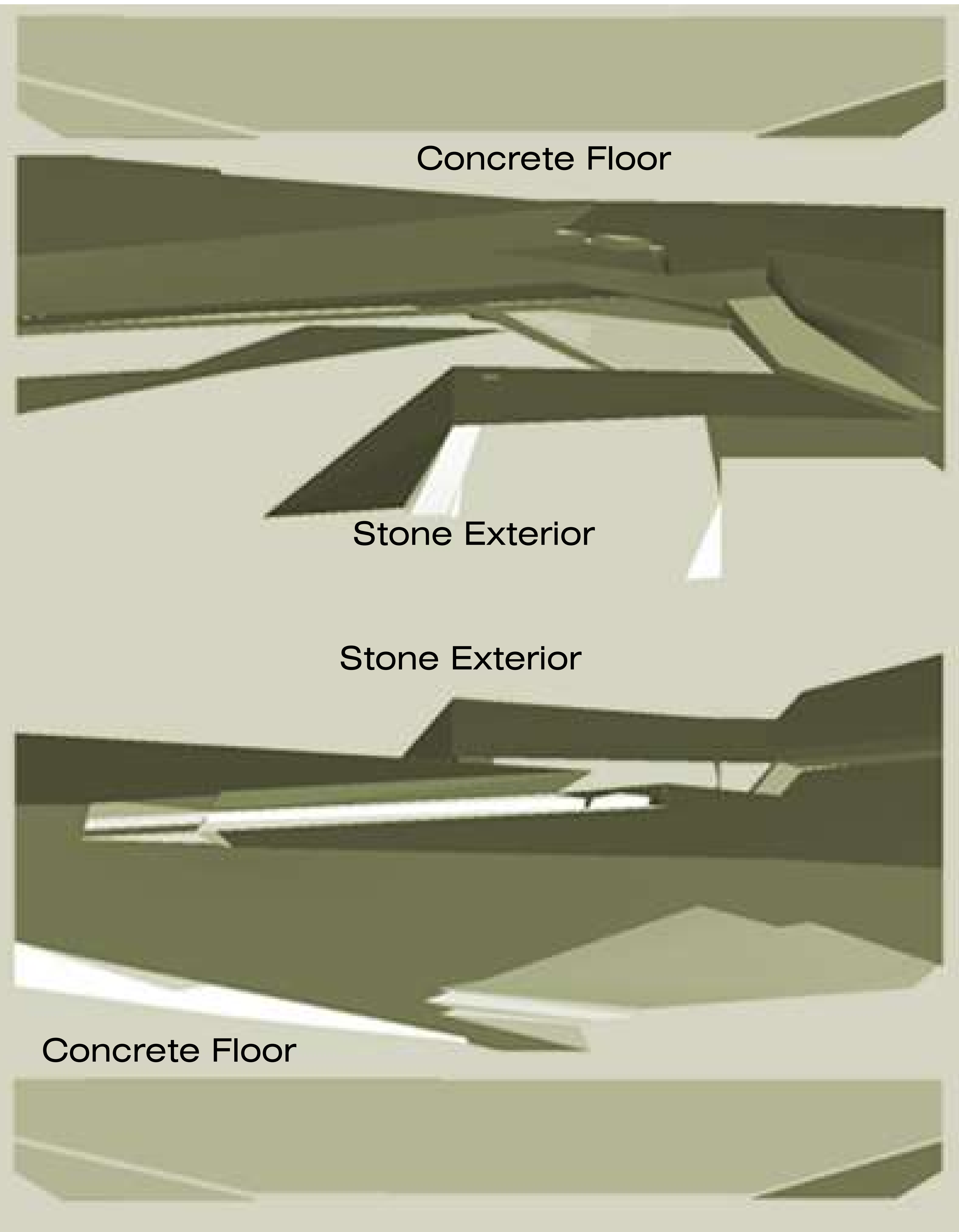
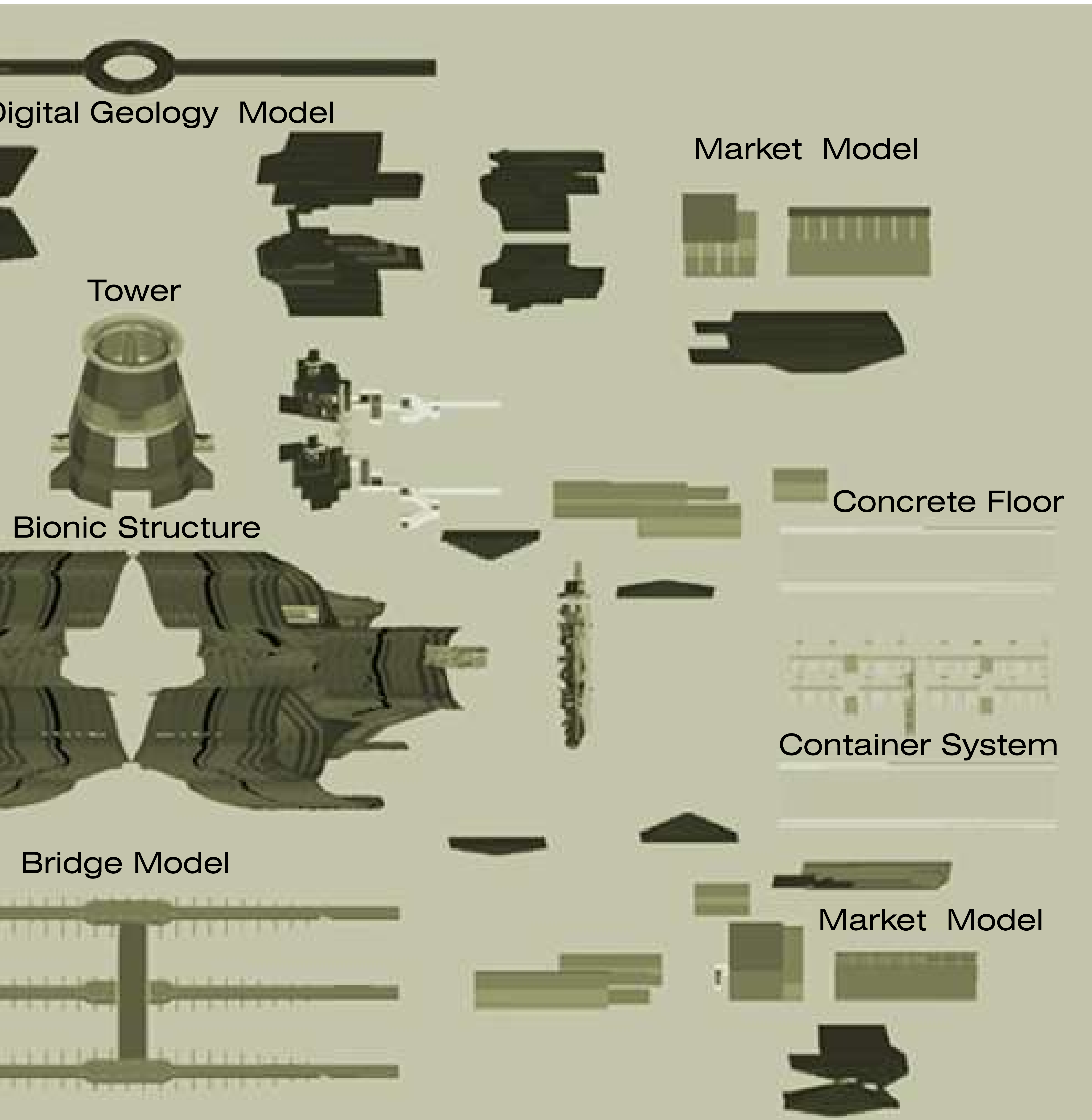
Digital Geology Model



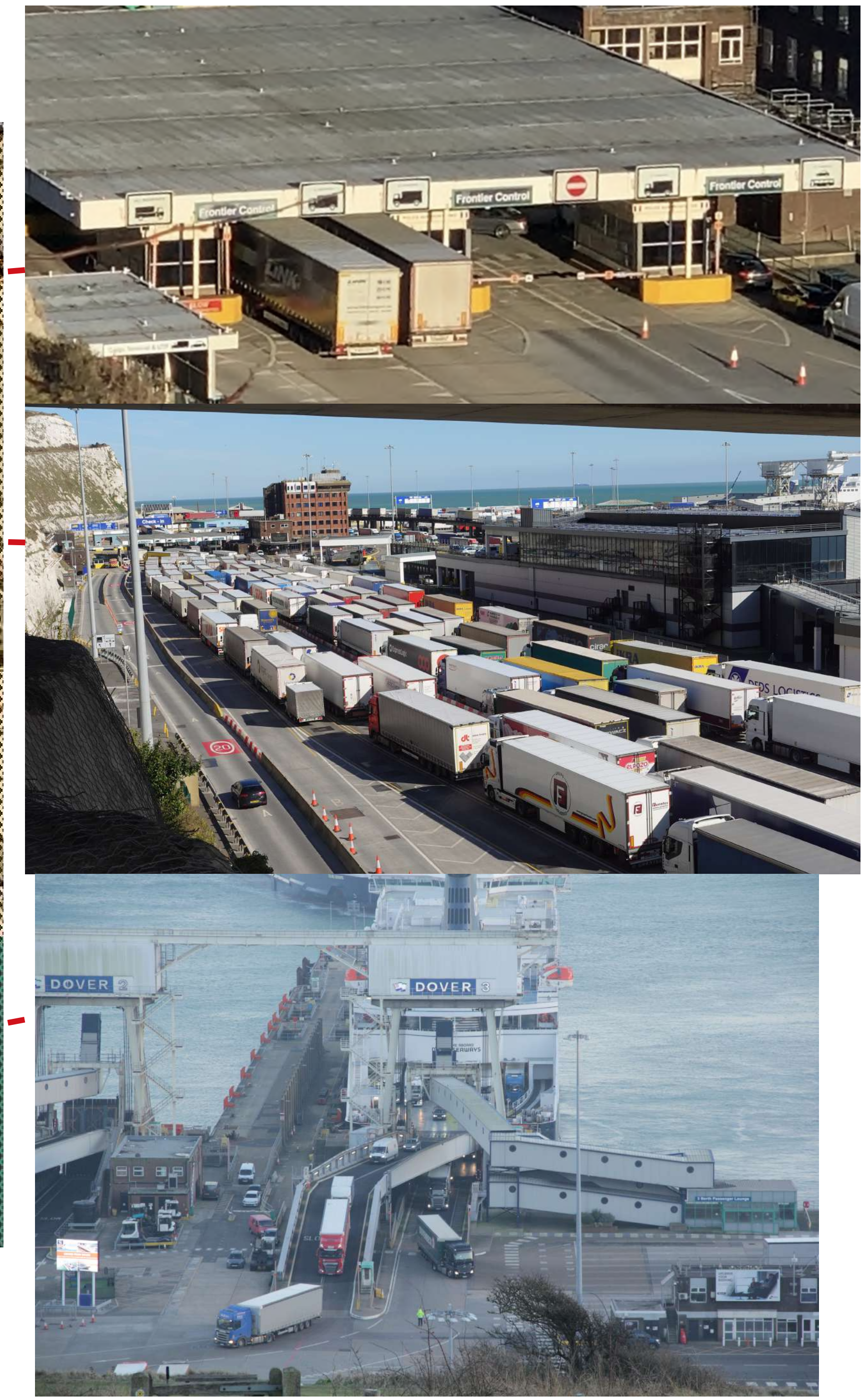
Bionic Floor



Concrete Floor



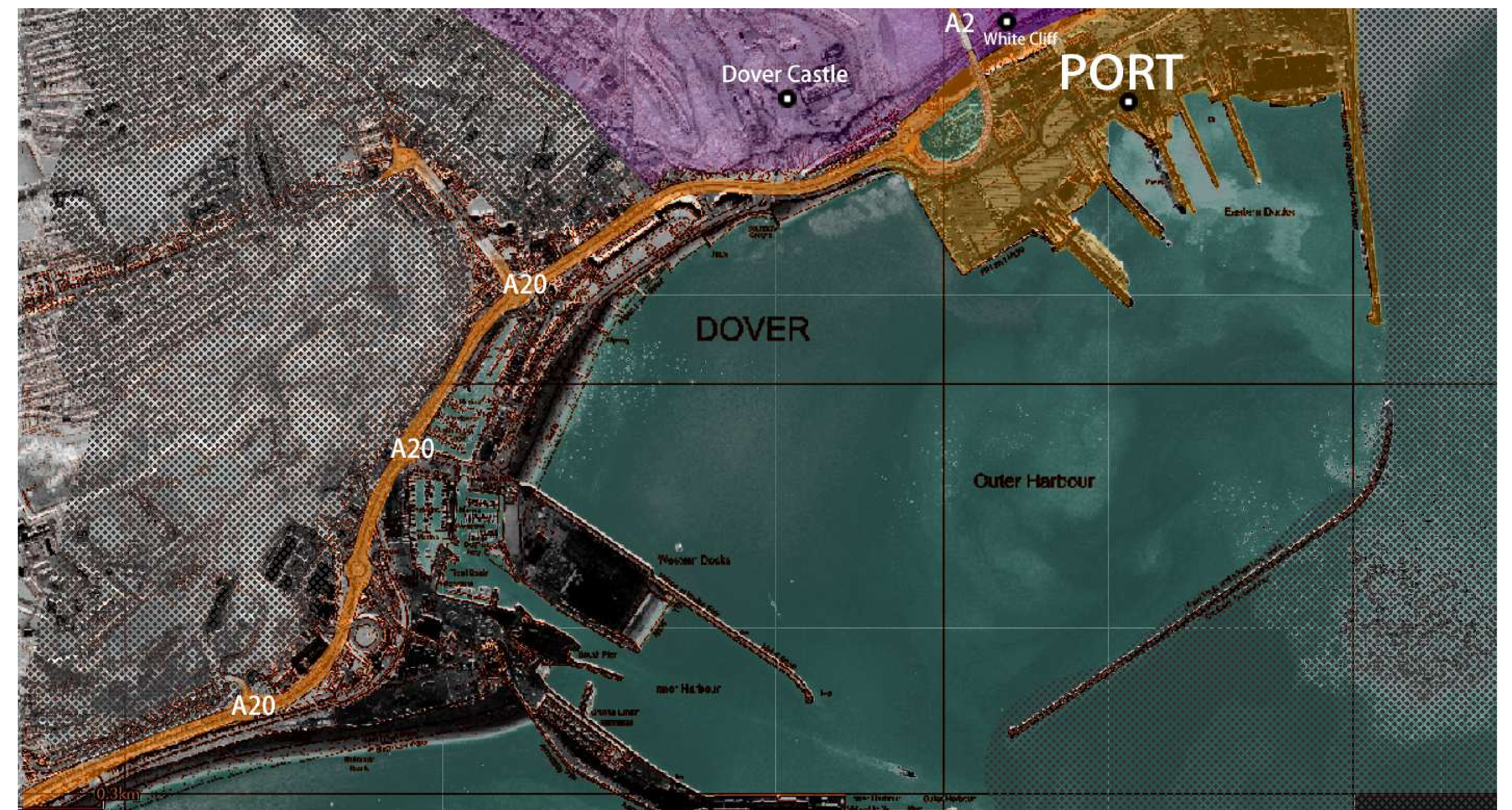
# Map



1. The building is at the junction of the port and external traffic, facing the white cliffs and the sea  
 2. The unique location, original function and post-Brexit environment have made this building change



Dover is located at an important linking location for trade between the UK and the EU



The negative effects after Brexit mainly started with port trade and spread to other regions through the A20 highway.

A2

# White Cliff

Cable car  
Station

A2

Site

Park

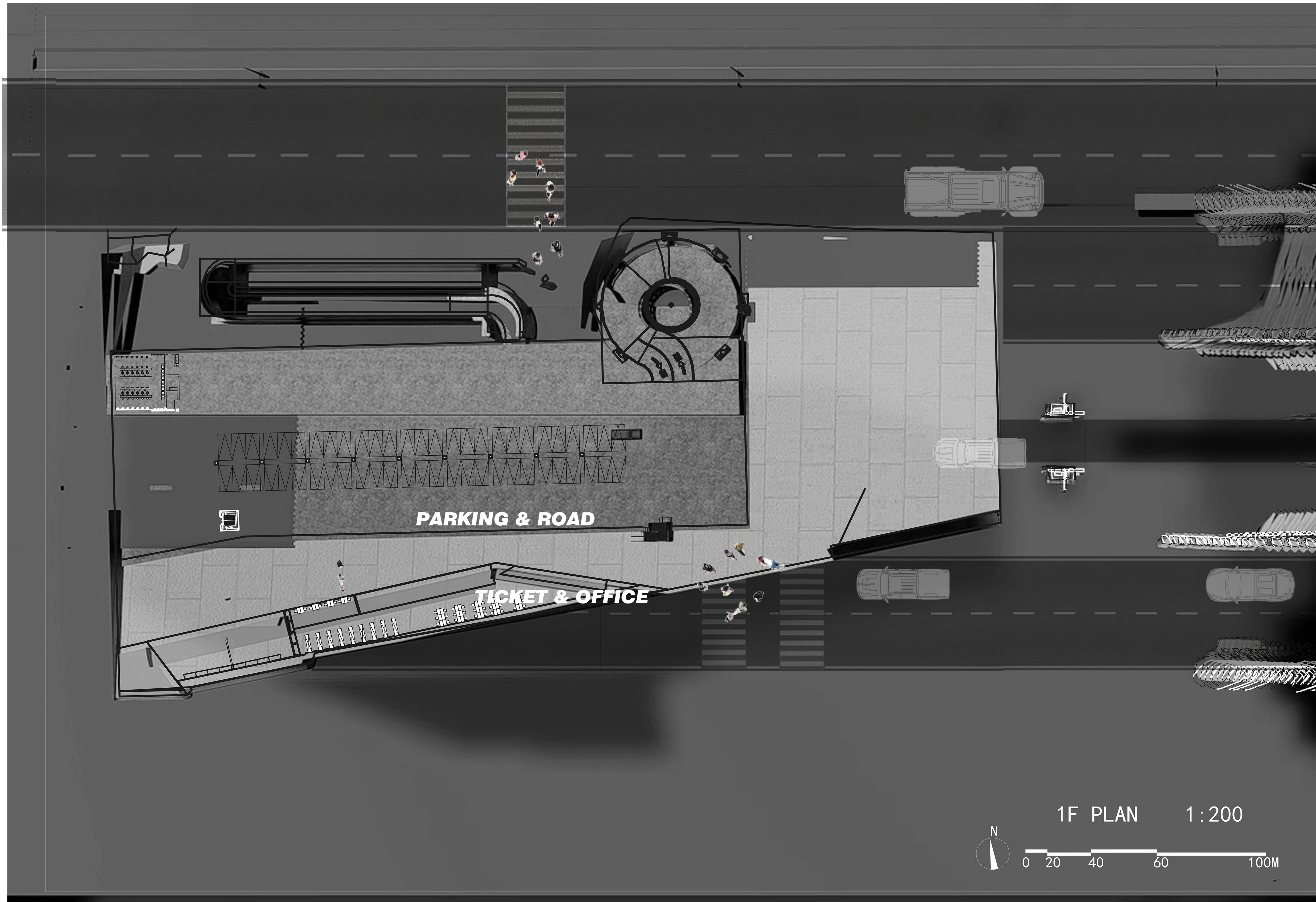
Park

Park





# Layout Plan

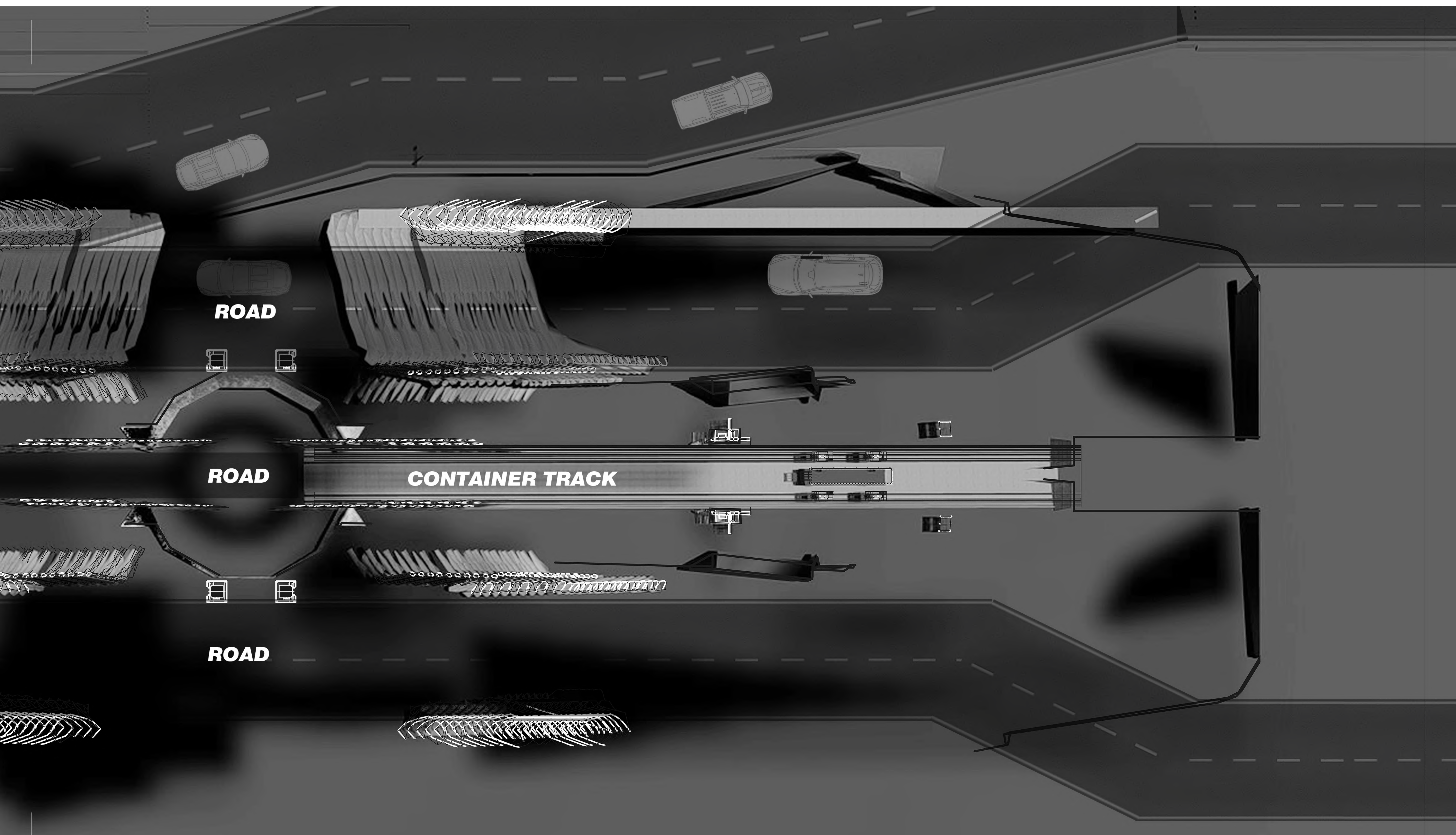


1F PLAN

1:200



0 20 40 60 100M



**ROAD**

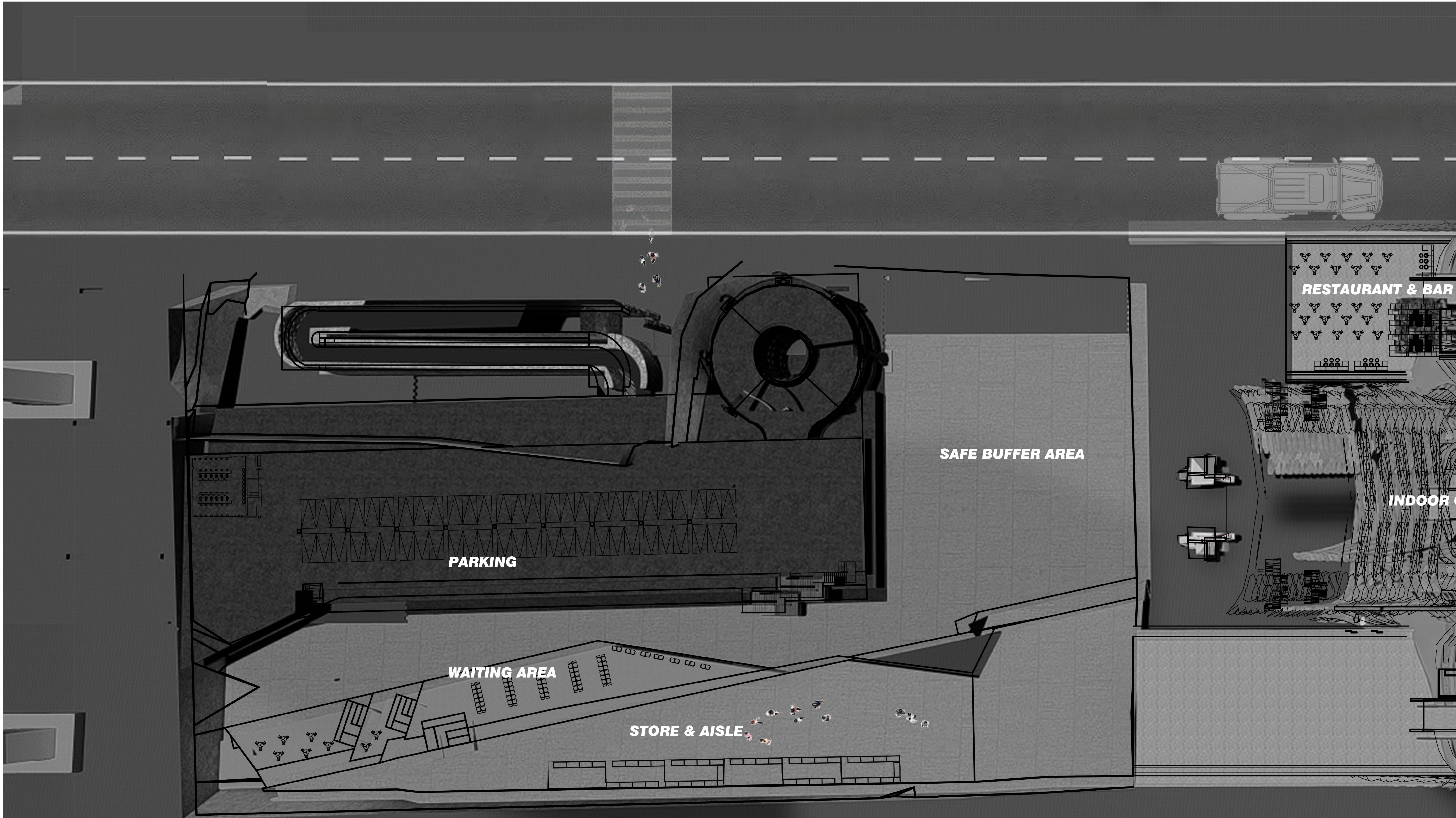
**ROAD**

**CONTAINER TRACK**

**ROAD**

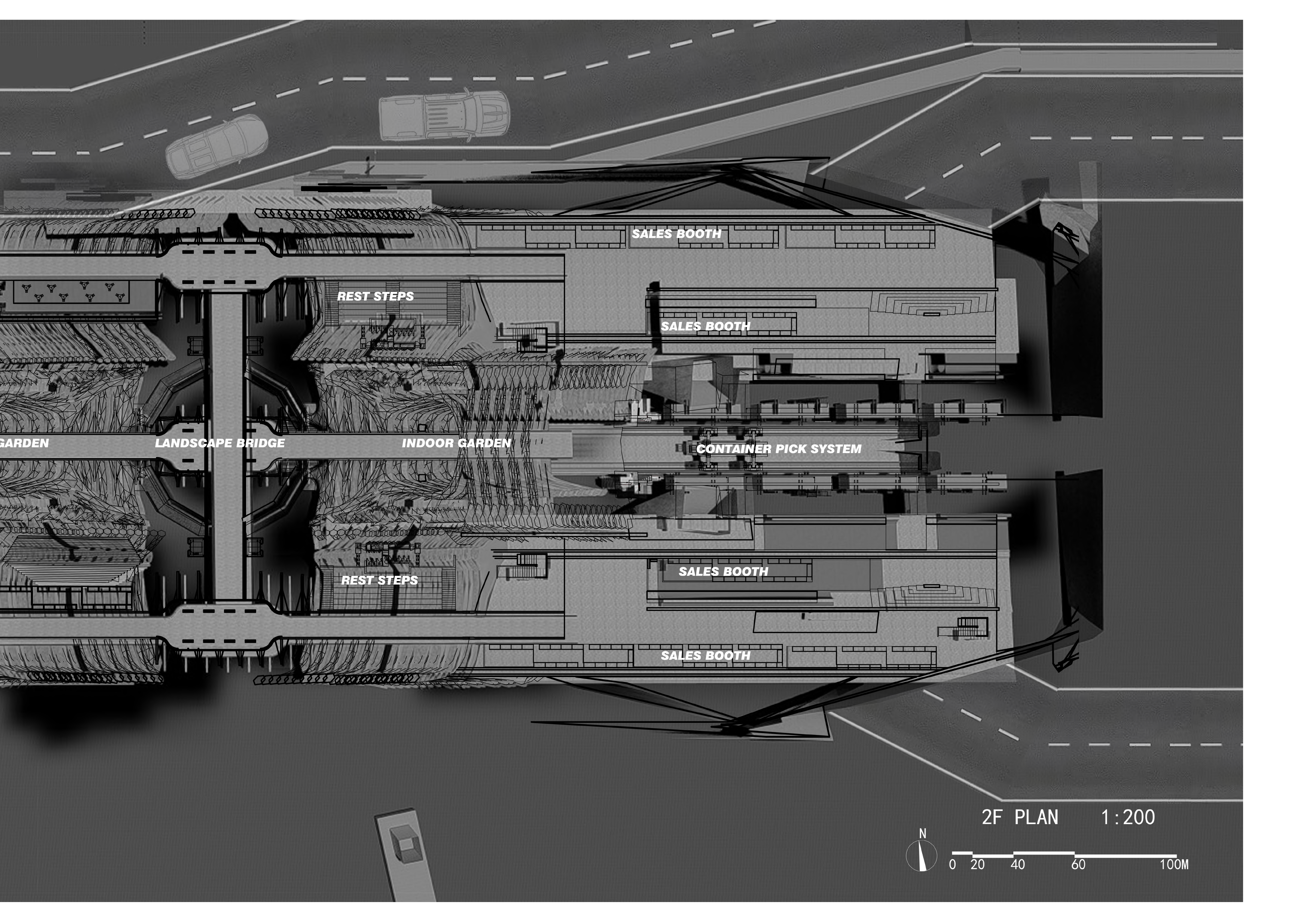
1F PLAN 1:200





2F PLAN 1:200





SALES BOOTH

REST STEPS

SALES BOOTH

GARDEN

LANDSCAPE BRIDGE

INDOOR GARDEN

CONTAINER PICK SYSTEM

REST STEPS

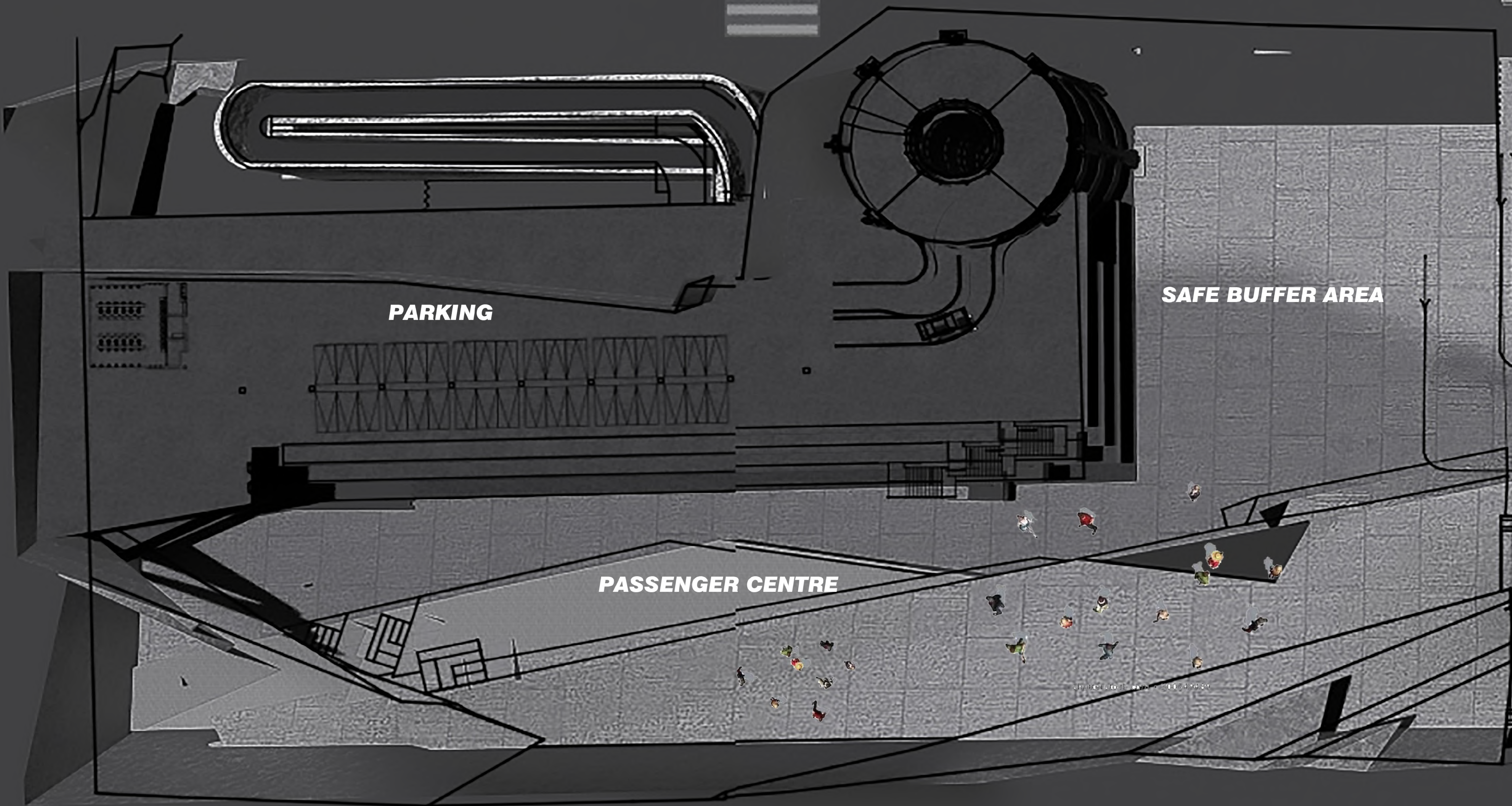
SALES BOOTH

SALES BOOTH

2F PLAN 1:200



0 20 40 60 100M



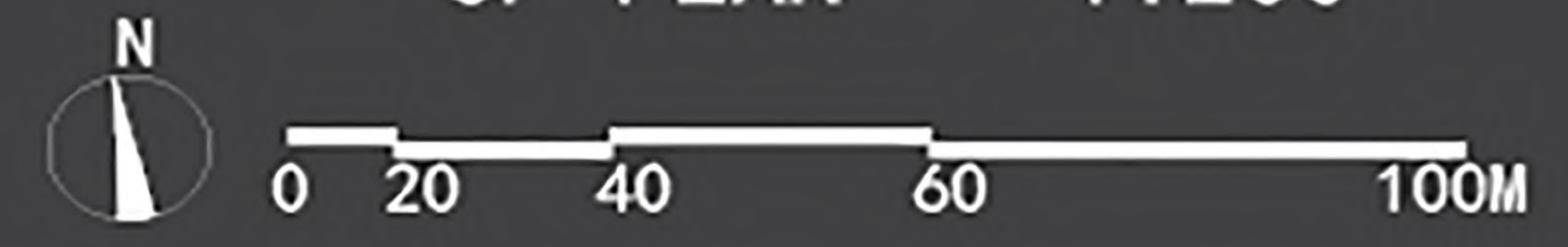
**PARKING**

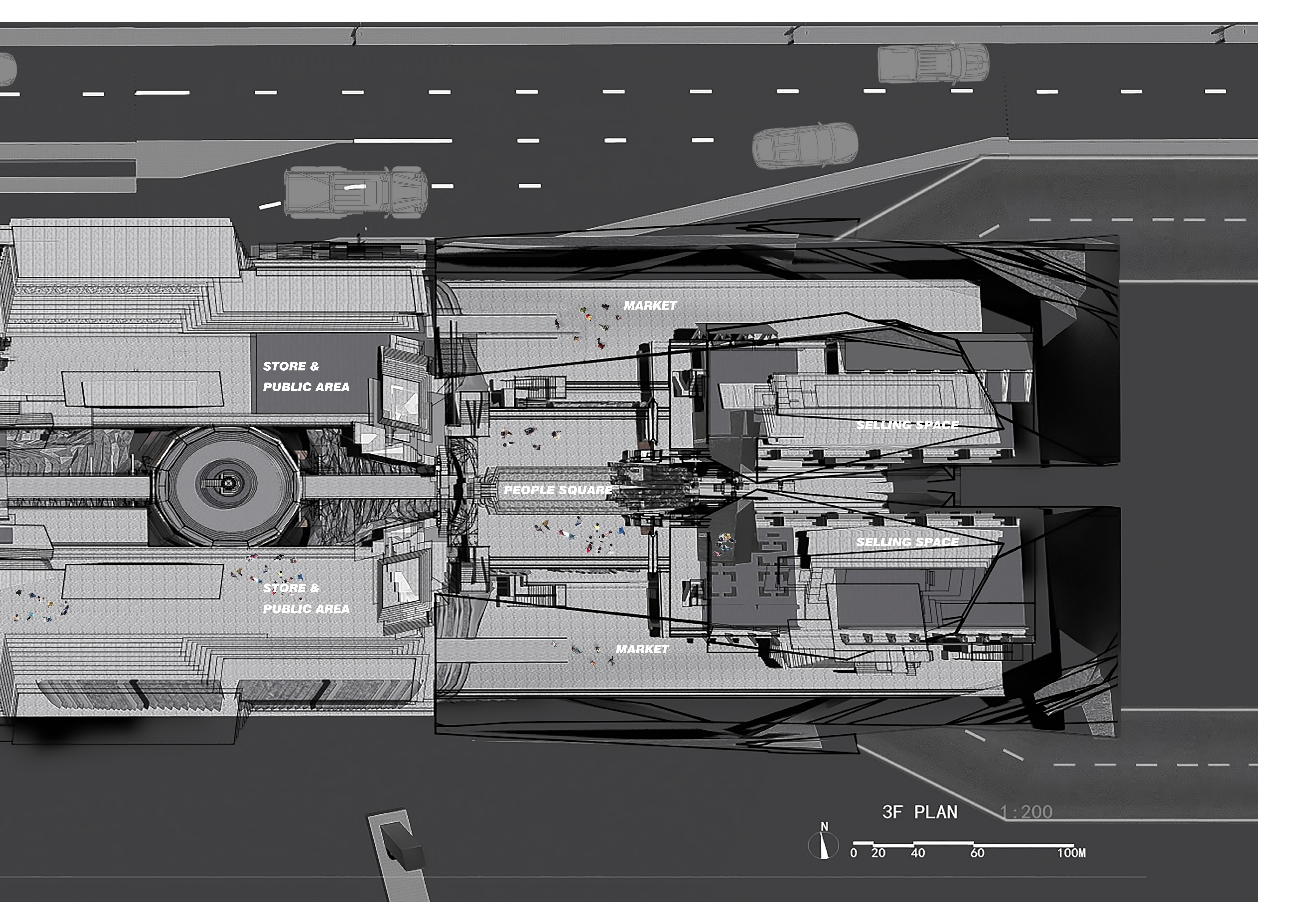
**SAFE BUFFER AREA**

**CABLE CAR STATION**

**PASSENGER CENTRE**

**3F PLAN 1:200**





STORE &  
PUBLIC AREA

MARKET

SELLING SPACE

PEOPLE SQUARE

SELLING SPACE

STORE &  
PUBLIC AREA

MARKET

3F PLAN

1:200



0 20 40 60 100M

# Elevation

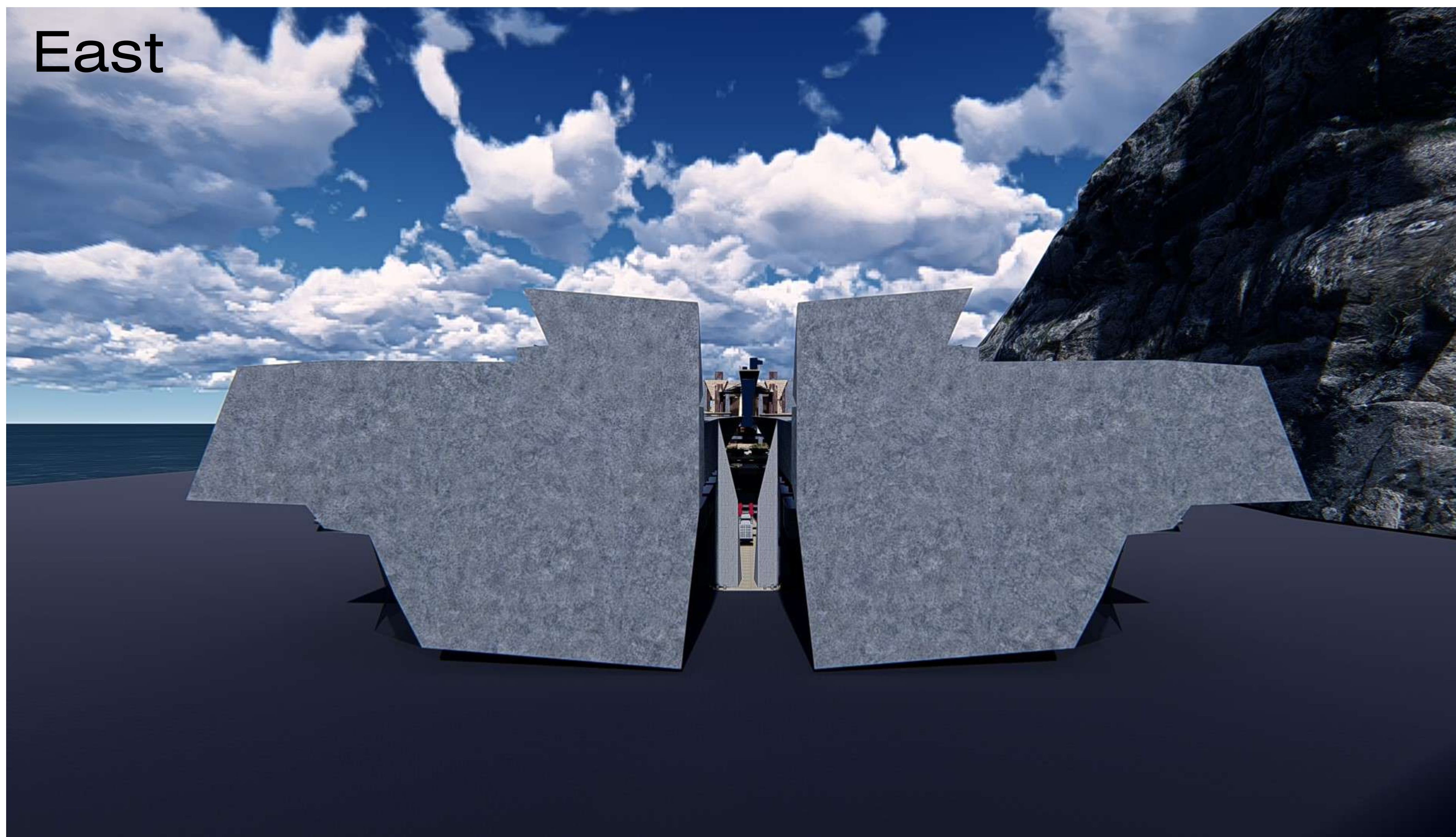
North



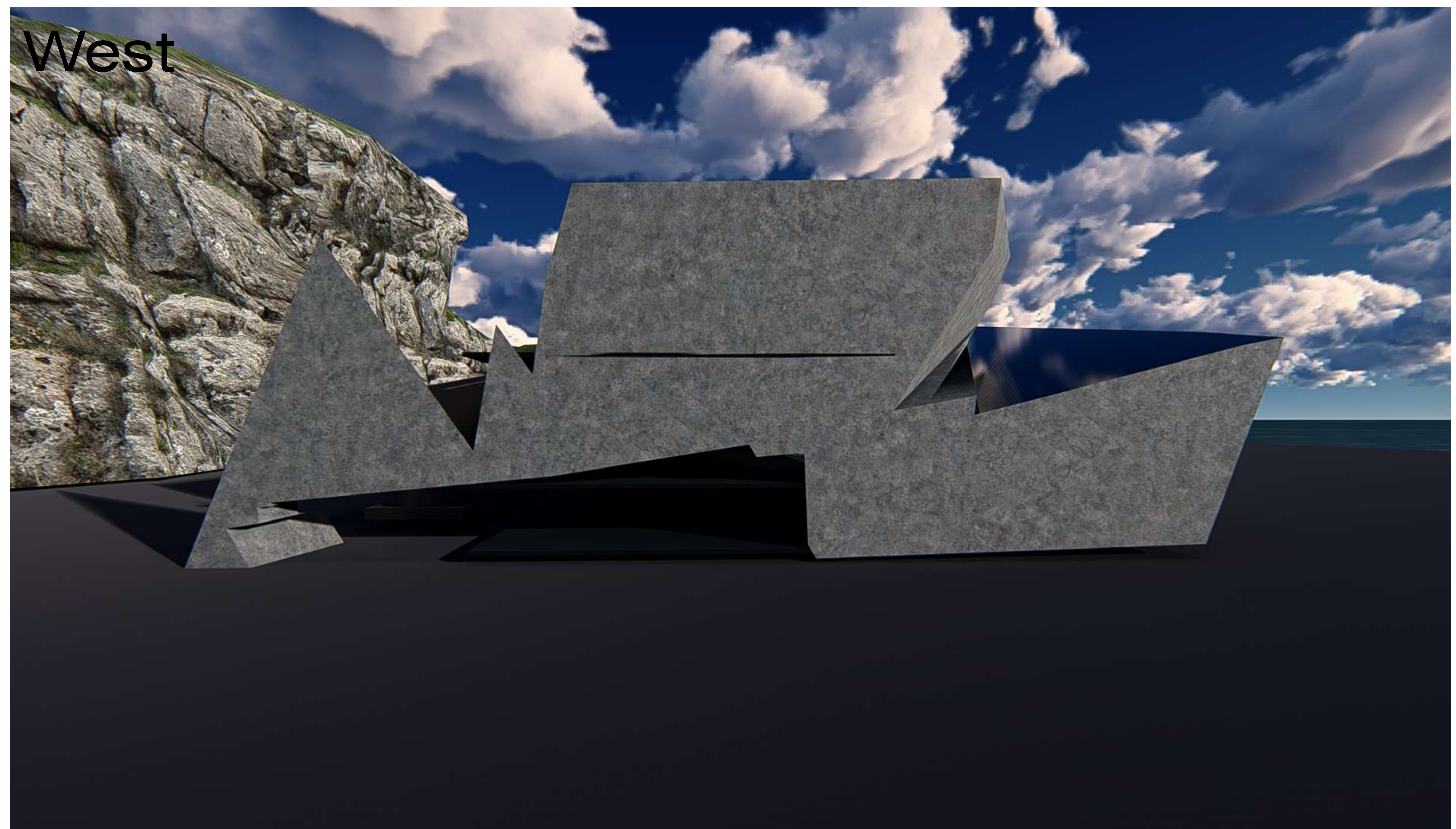
South



East

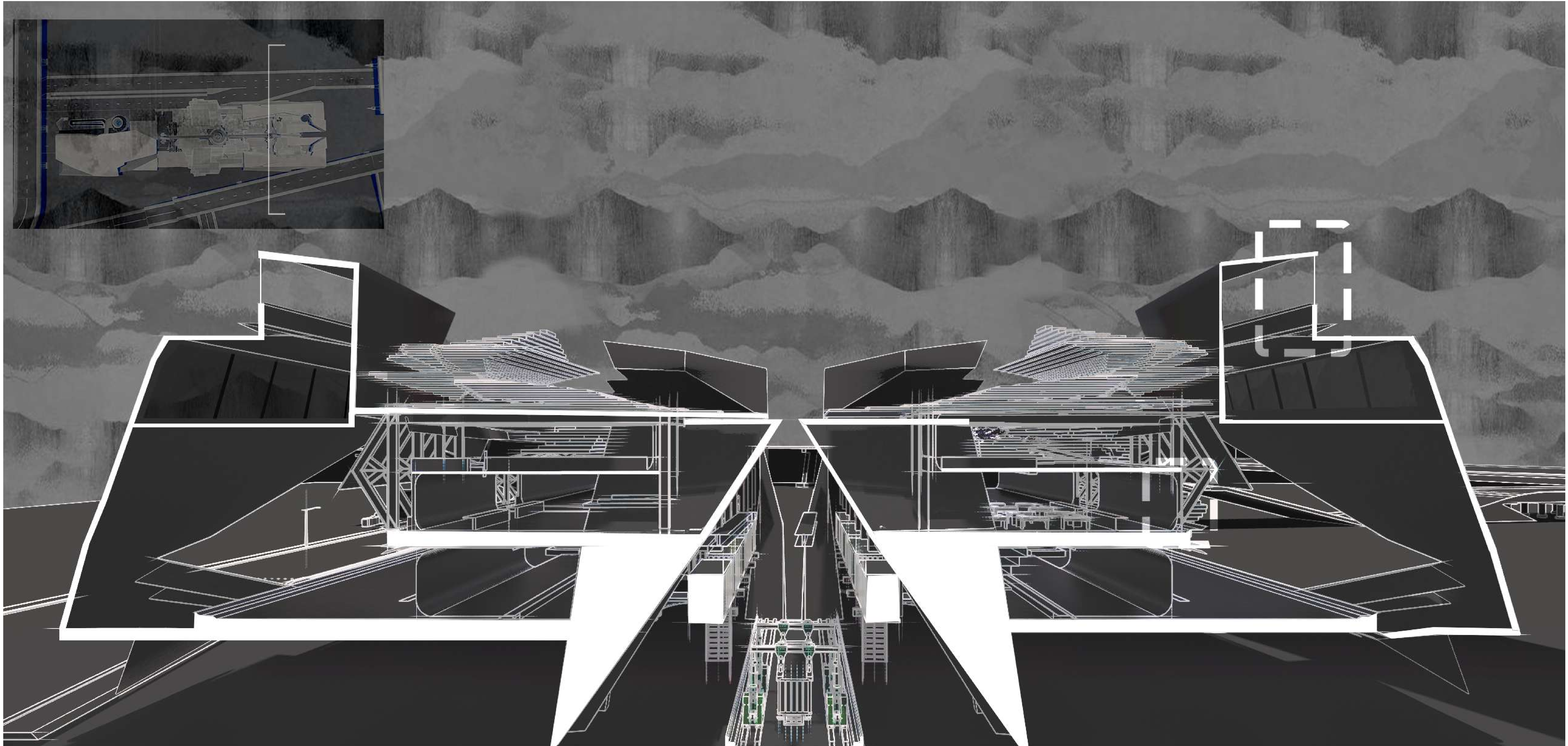


West



# Section

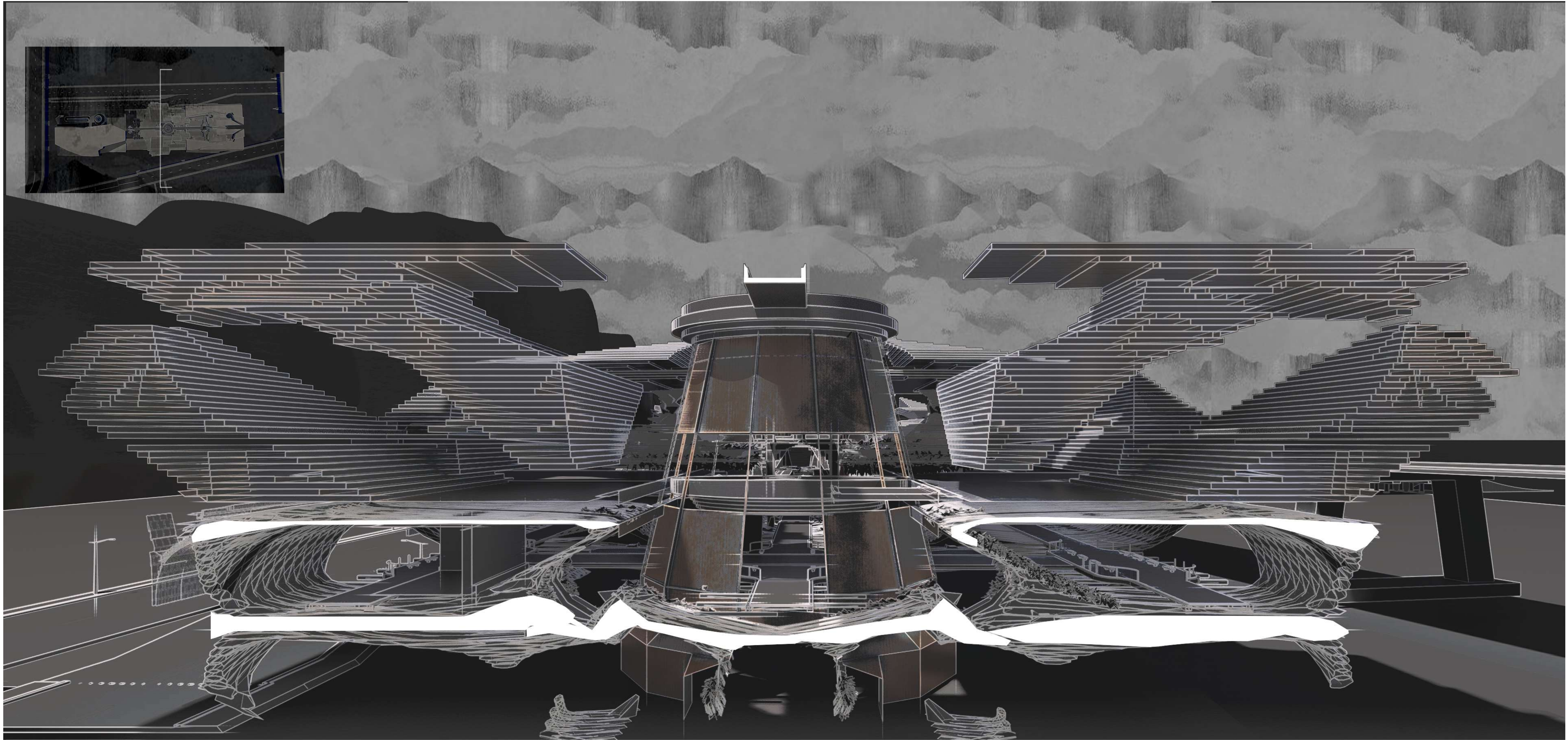
## Market + Container recycle system+ Office



SECTION  
1:50

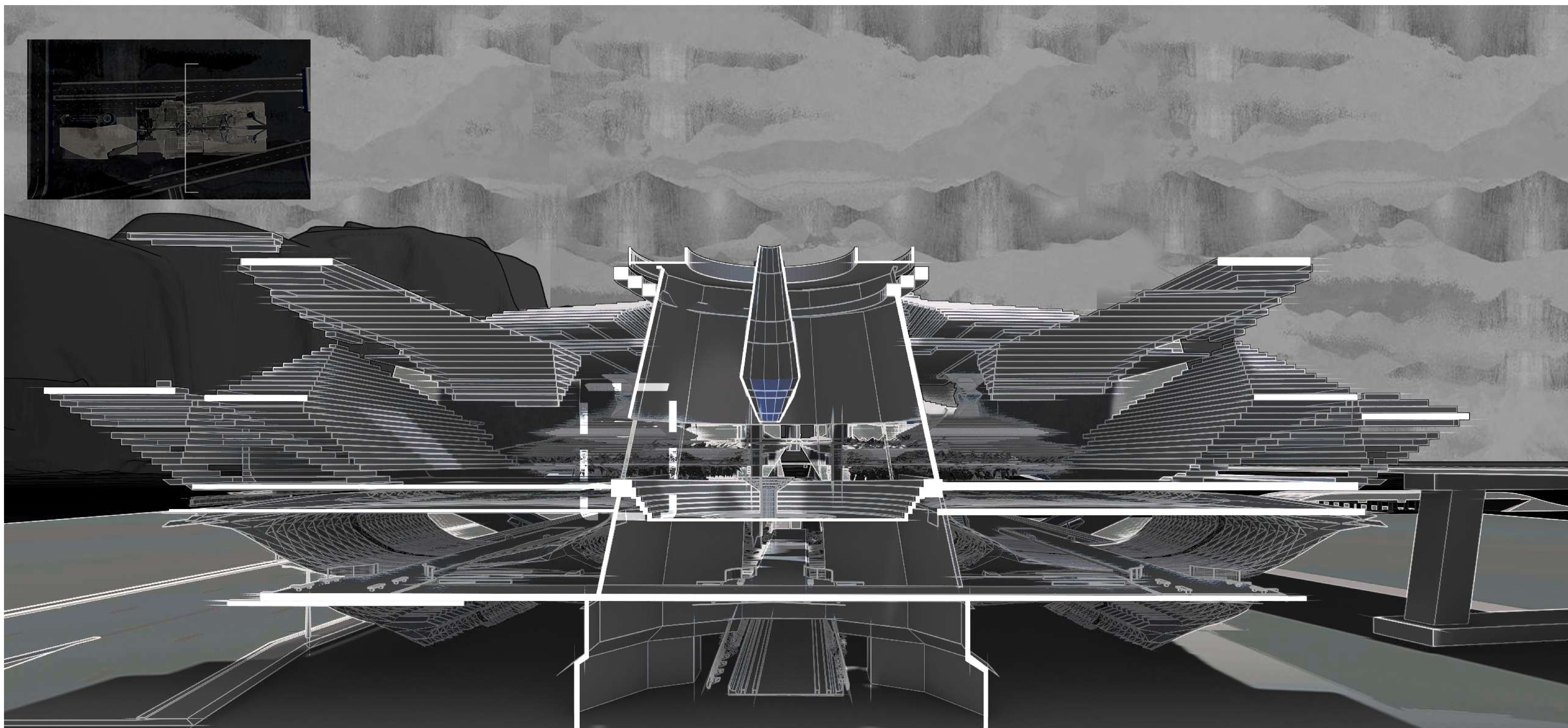


# Tower center



SECTION  
1:50

# Tower Feeling Space



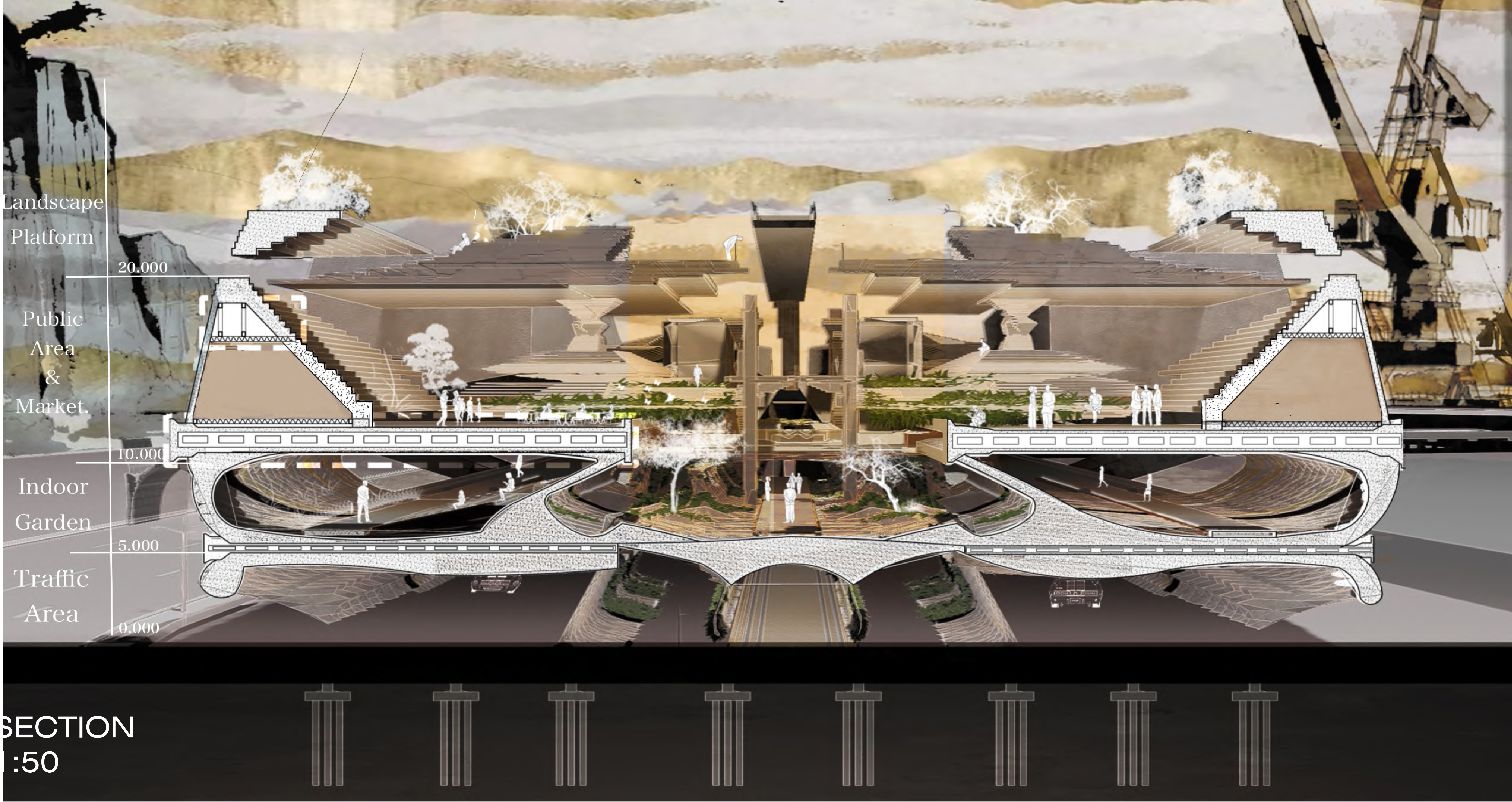
SECTION  
1:50

Parking + Passenger Center

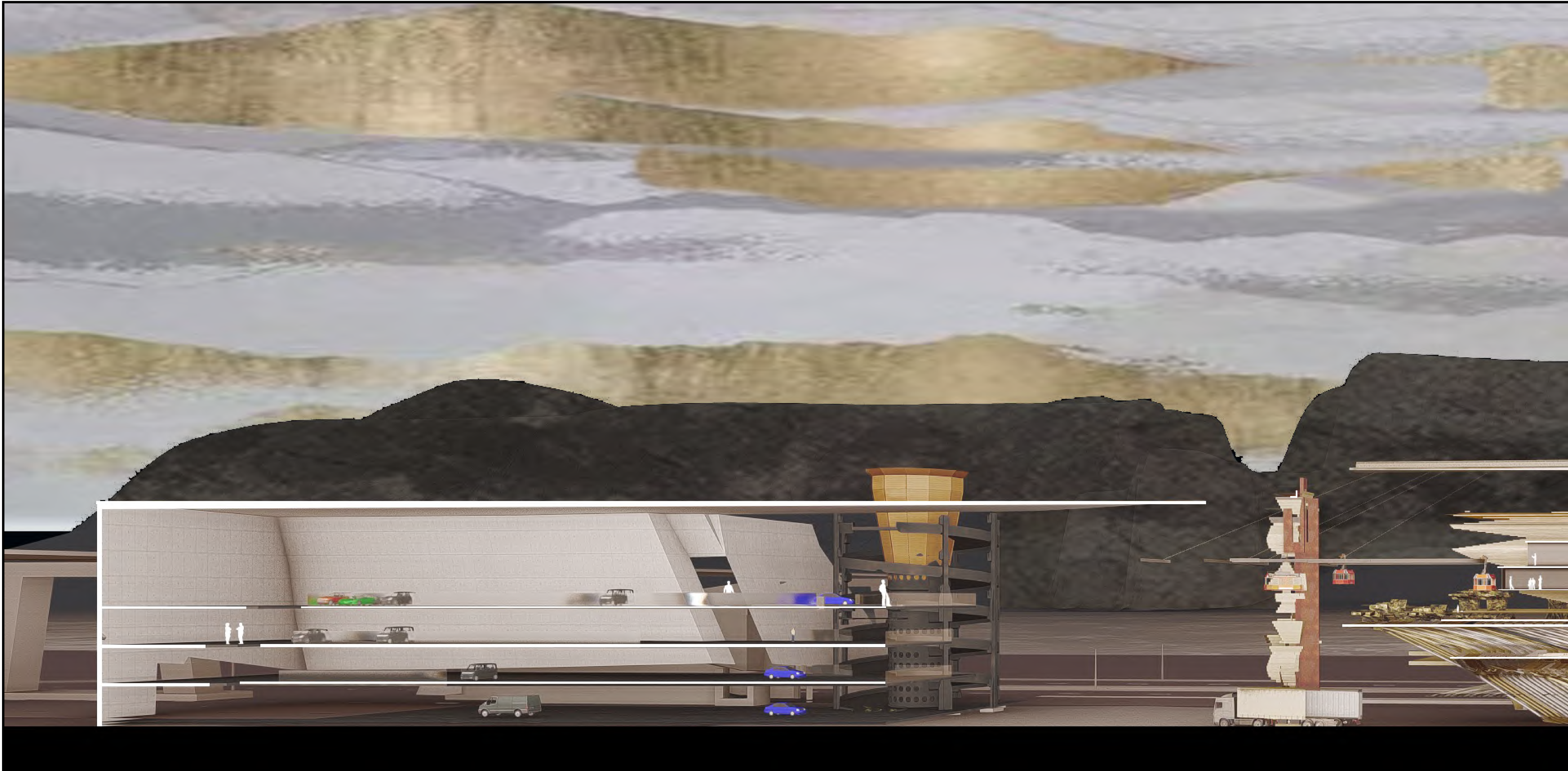


SECTION  
1:50

# People Square

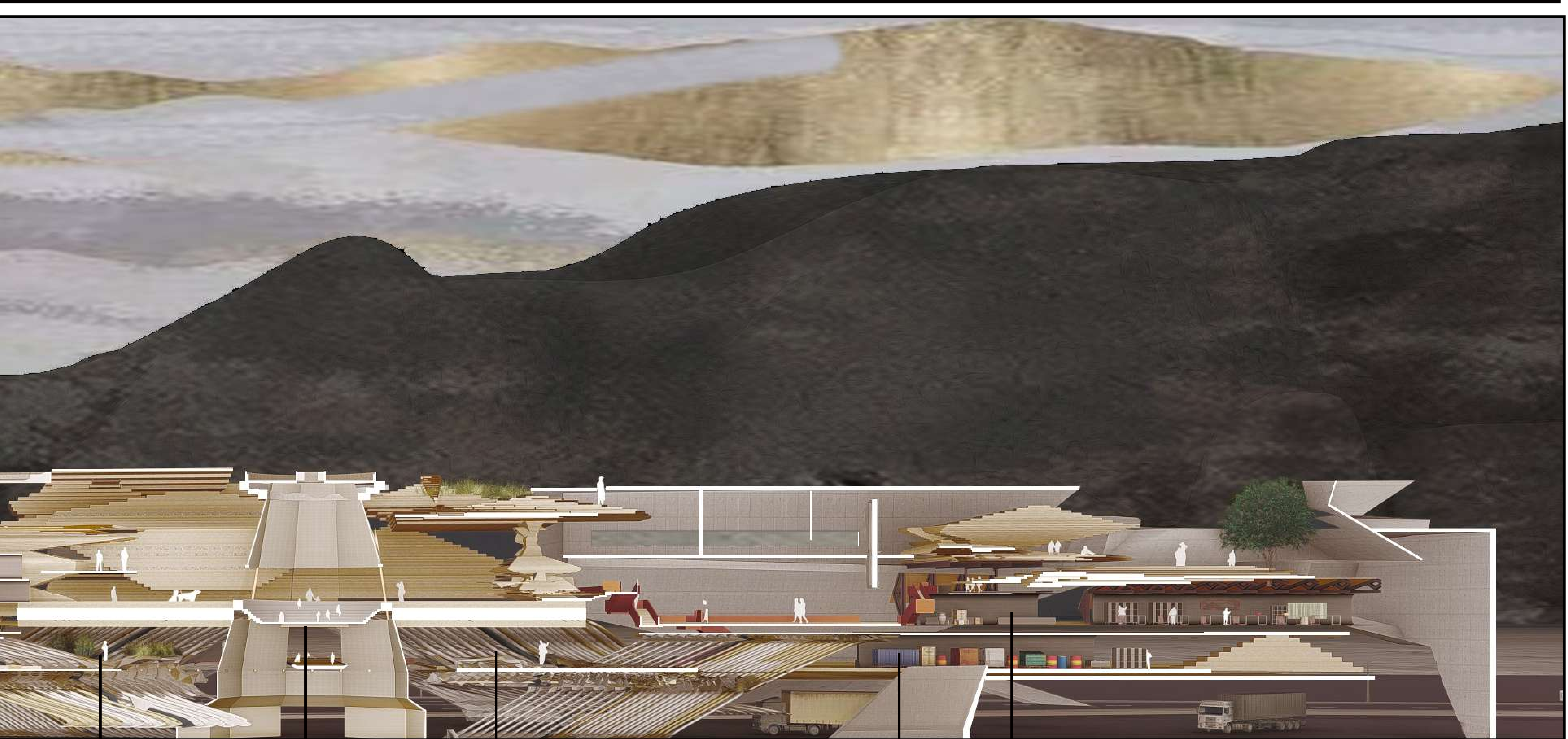


# Long Section



Passenger Center  
& Parking

Cable Car Station



Indoor Garden

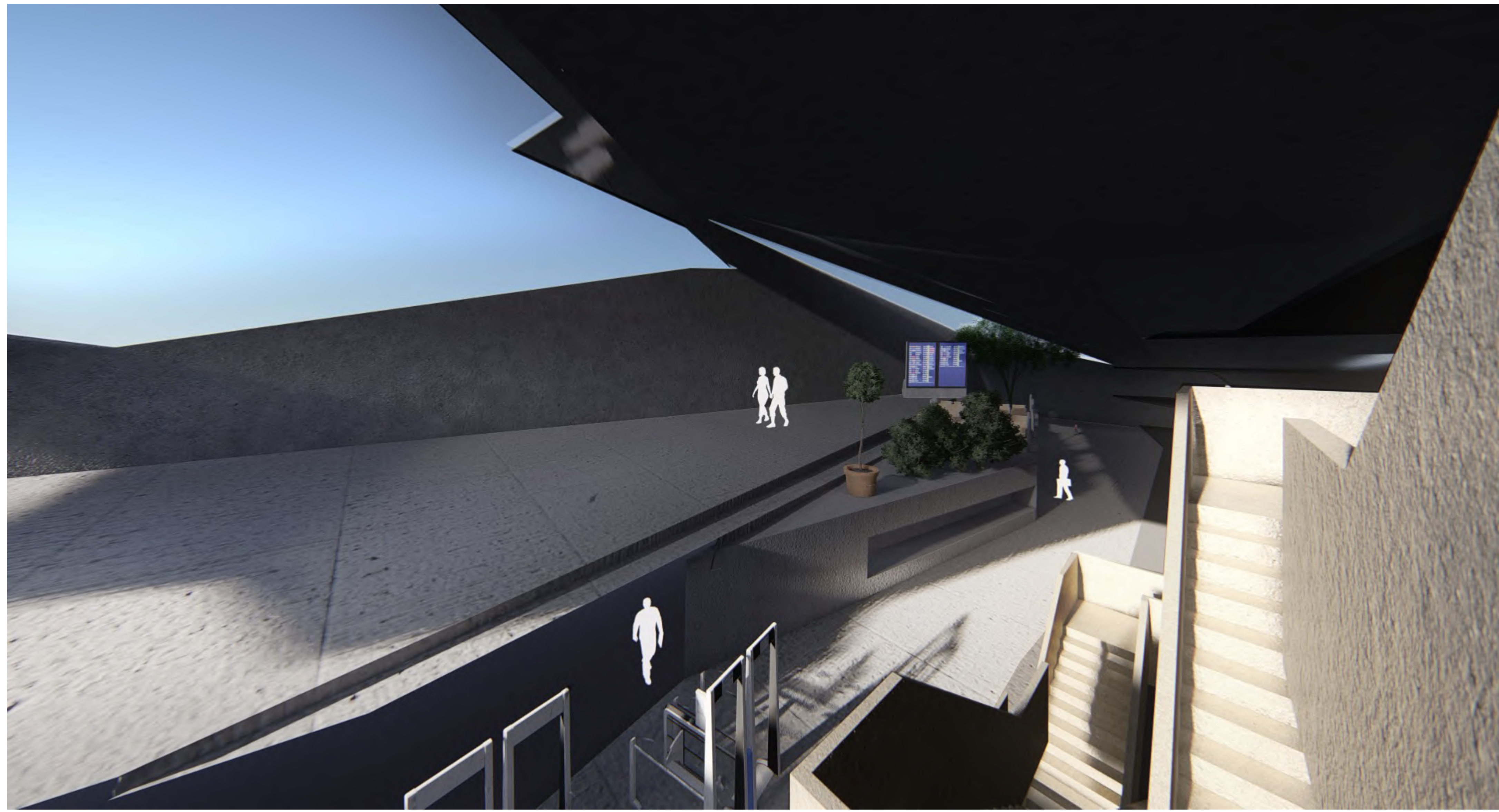
Prey Space

Feeling Space

Warehouse

Market

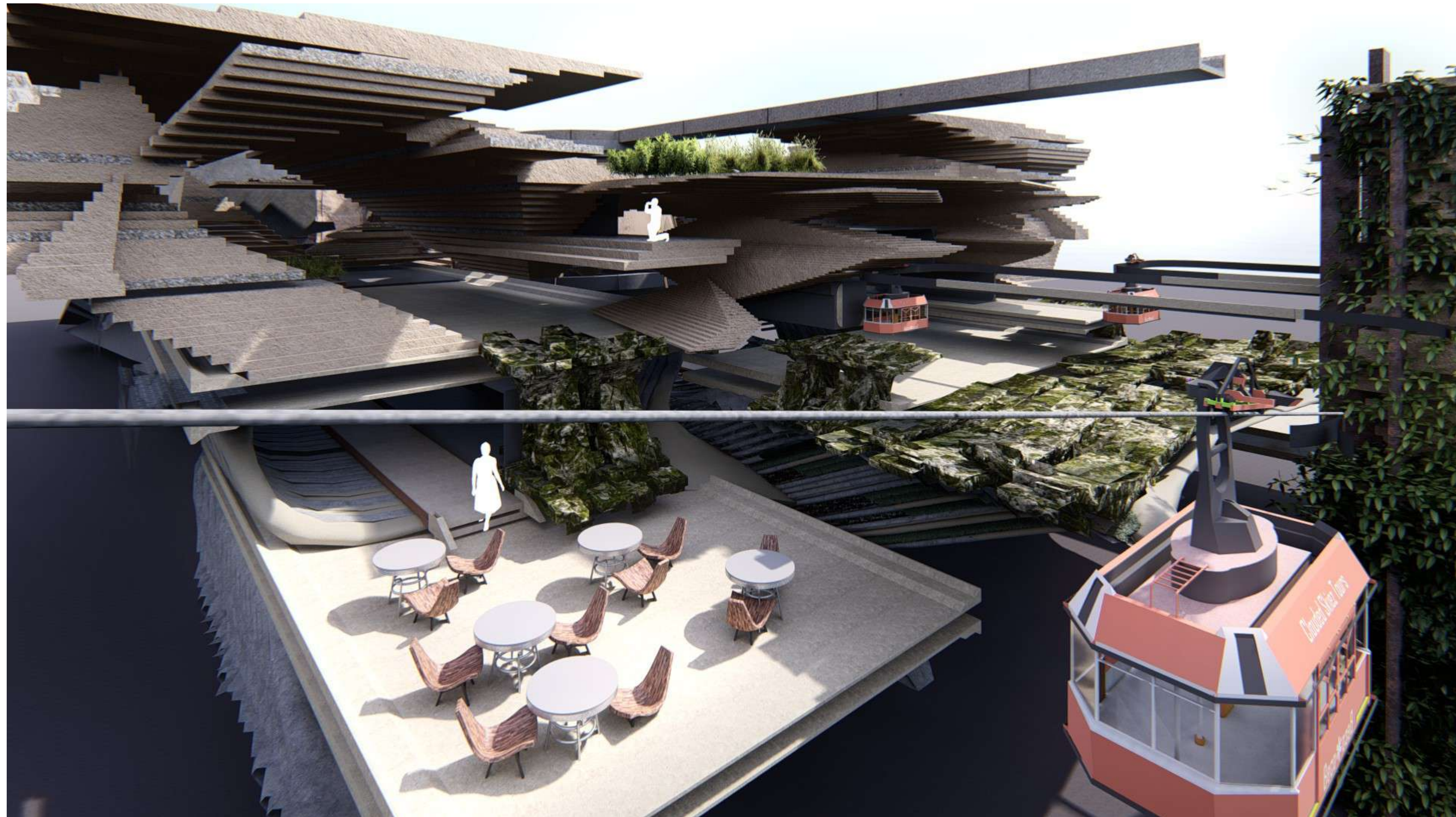
Effect Picture



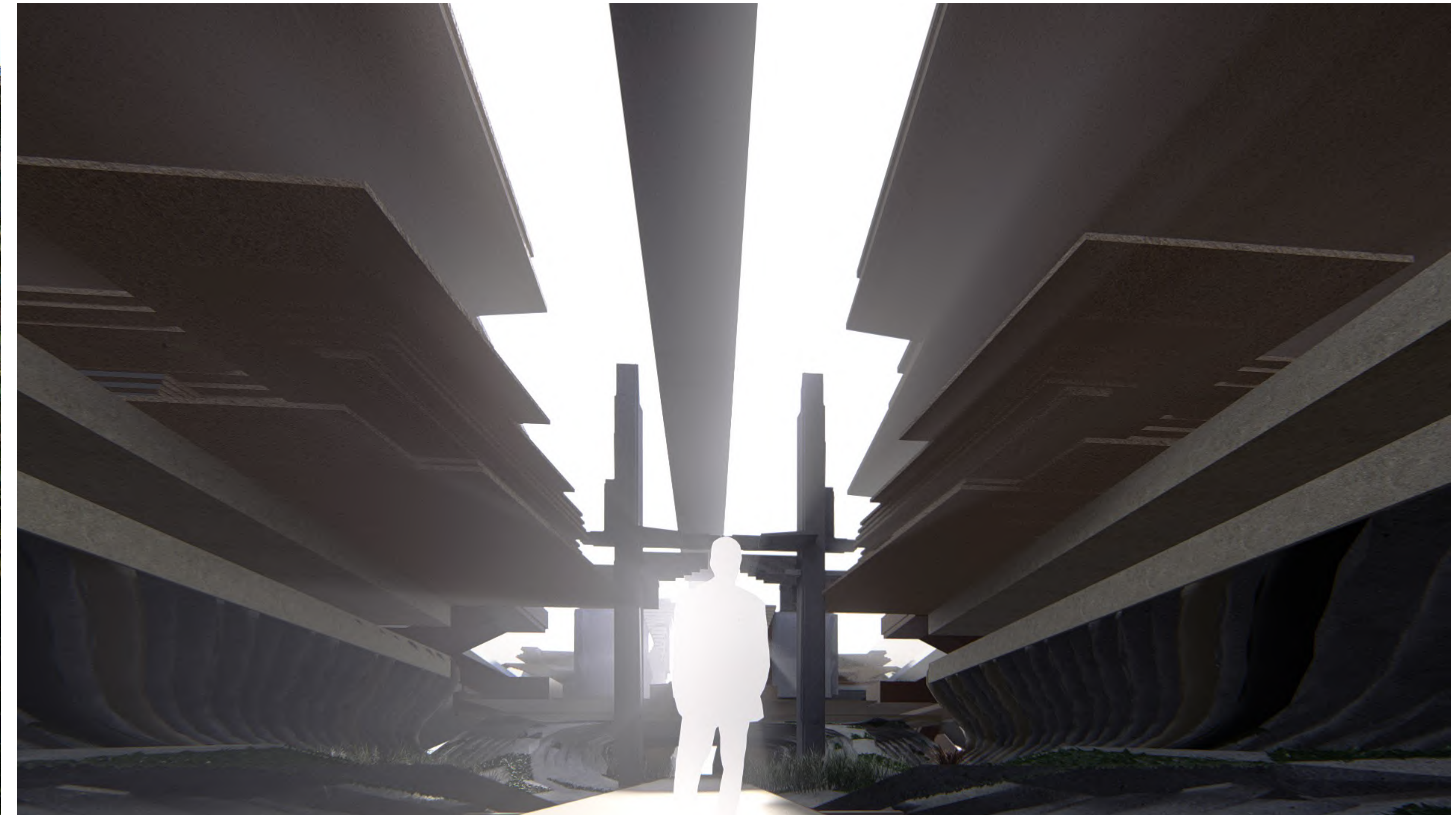
Passenger Center



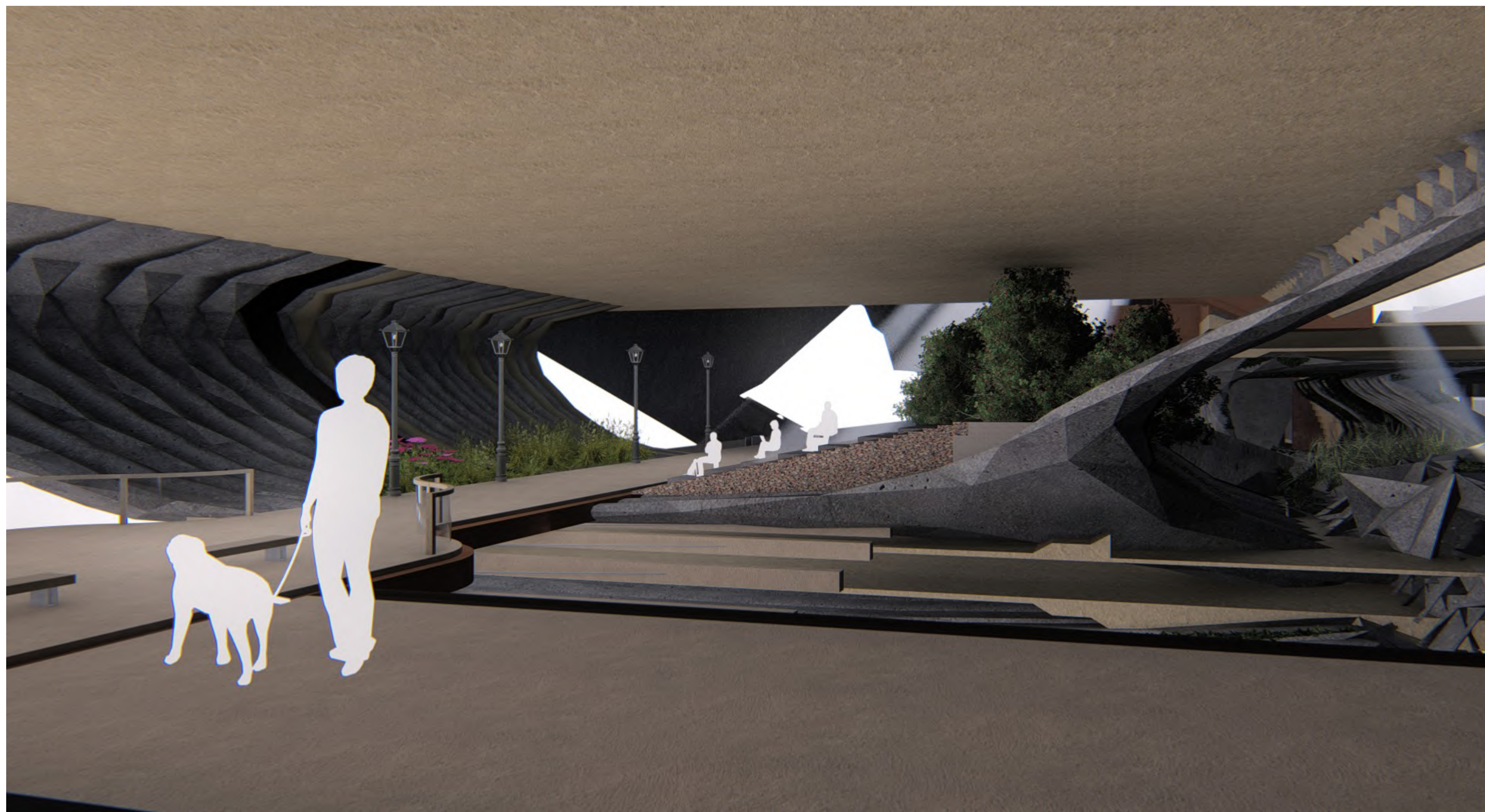
Cable Car Station



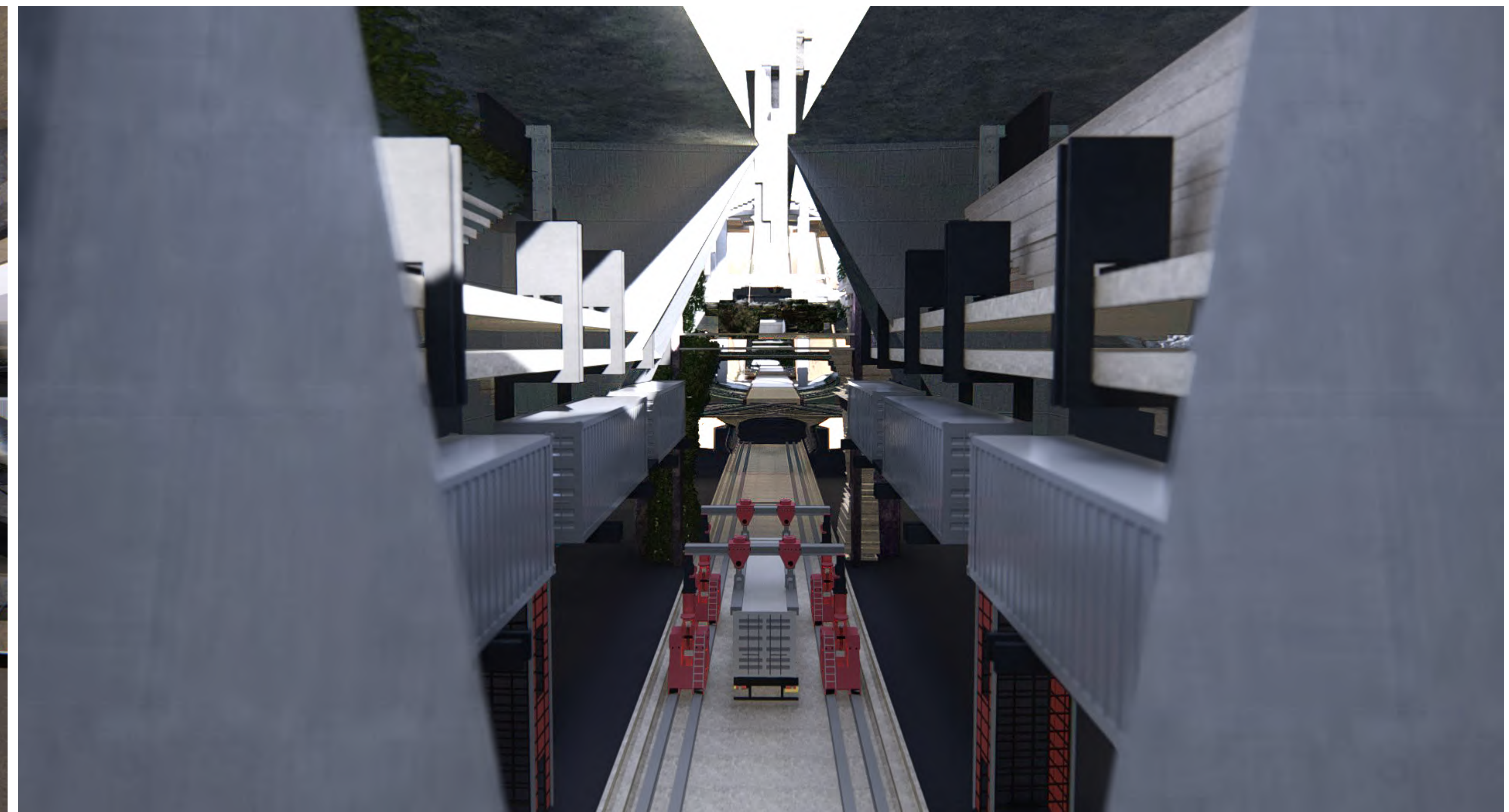
Restaurant & Bar



Feeling Space



Indoor Garden



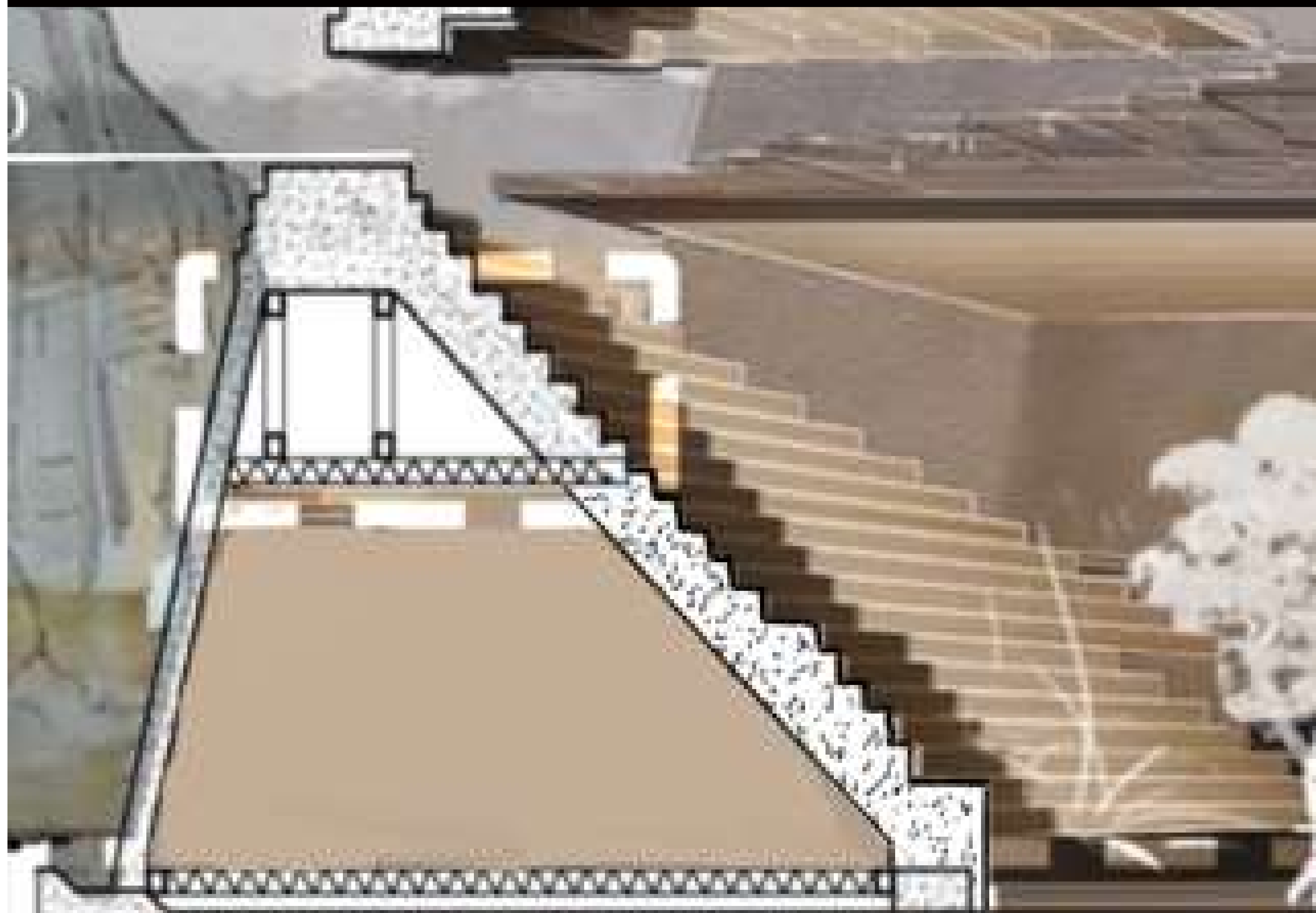
Container Recycle System



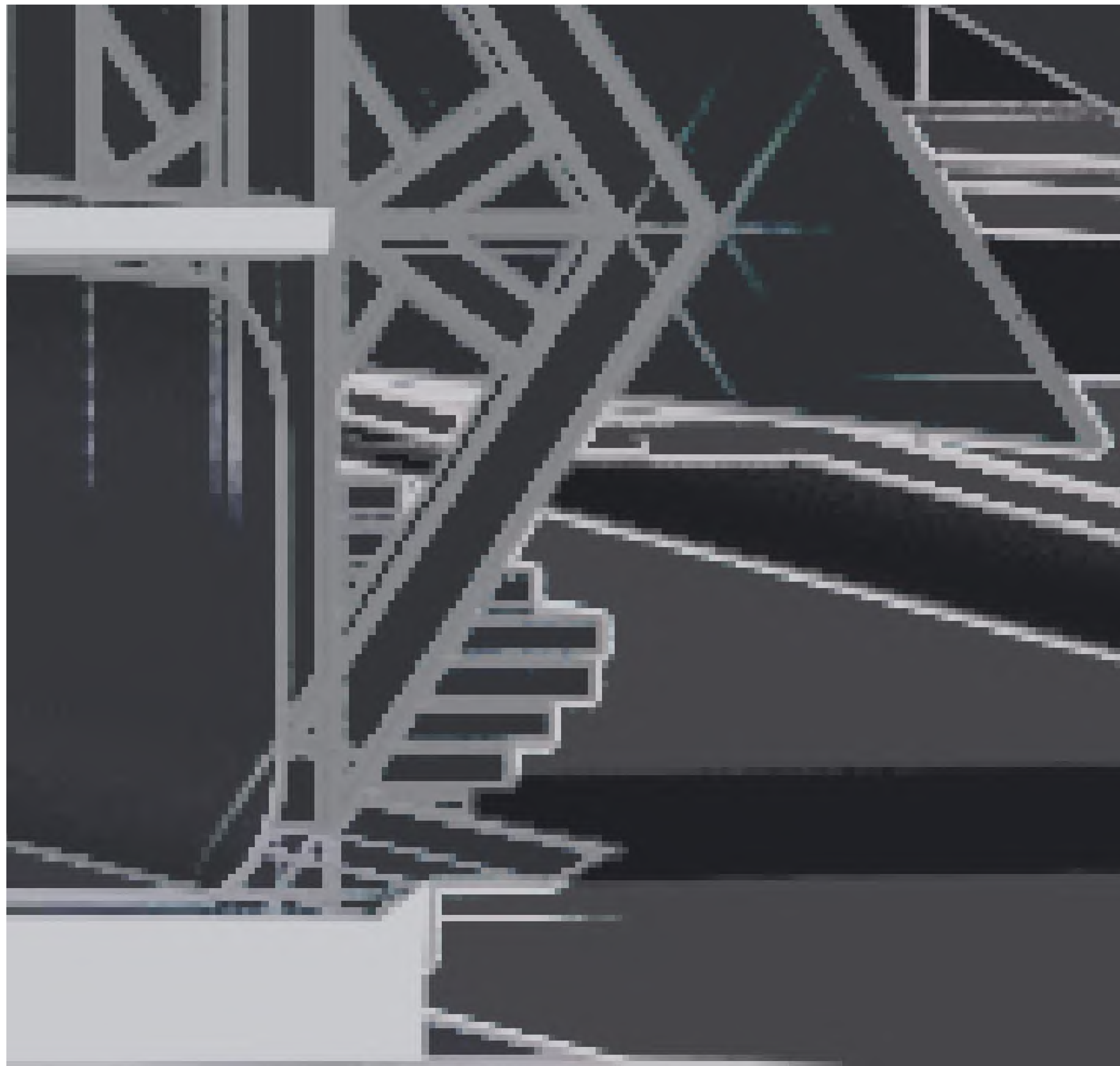
Market



# Section Detail

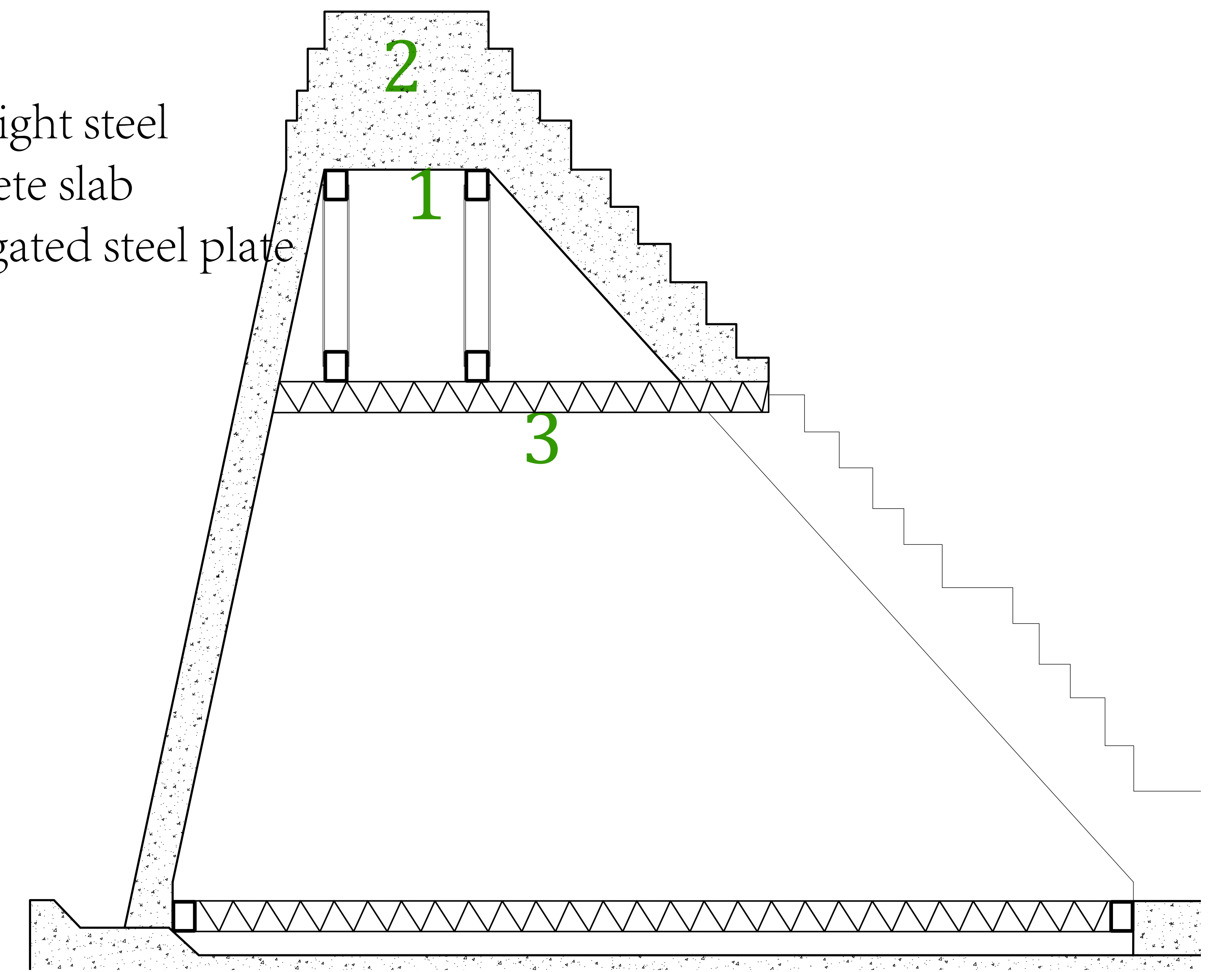


Concrete Detail 1:5

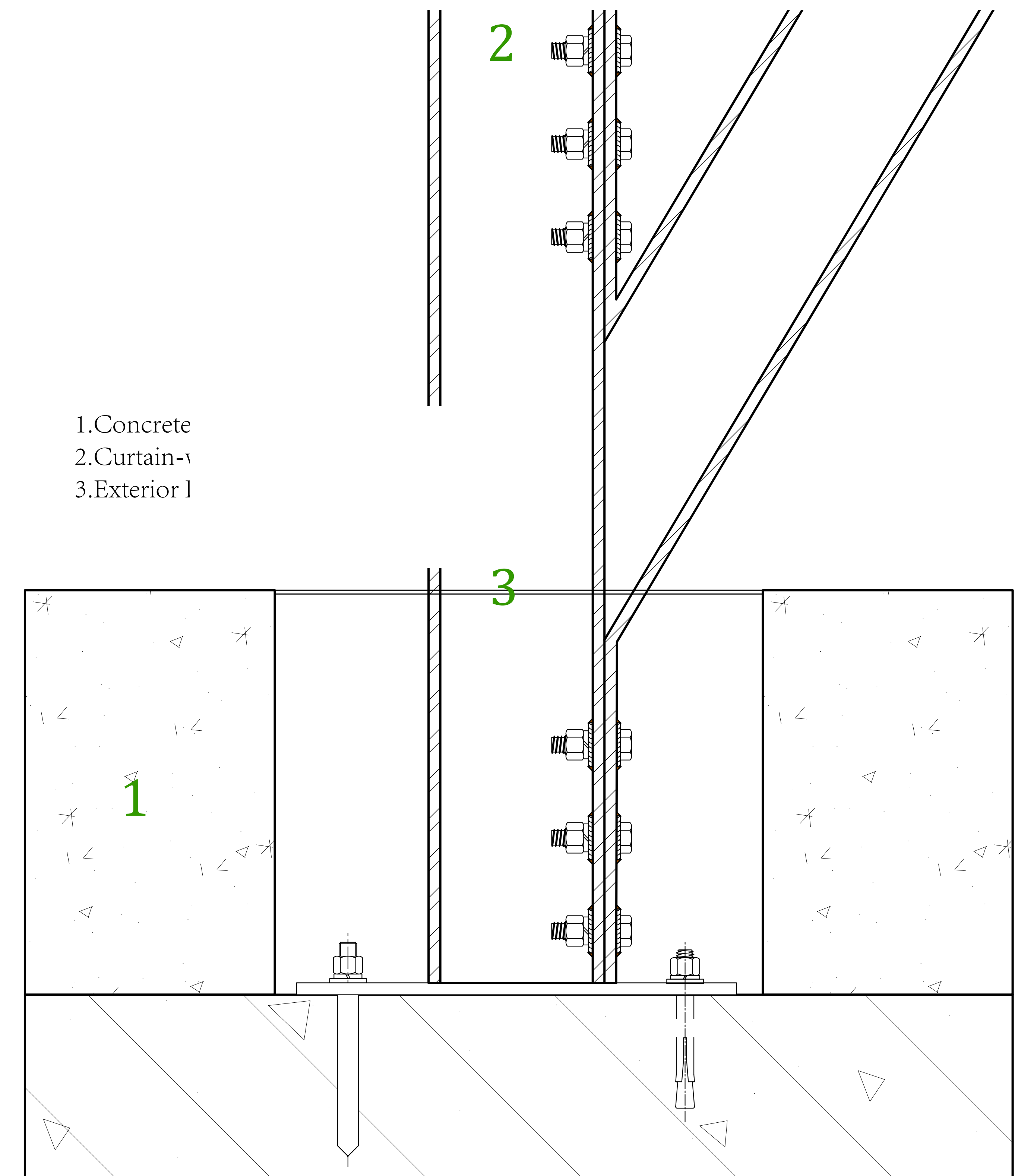


Steel Structure Detail 1:5

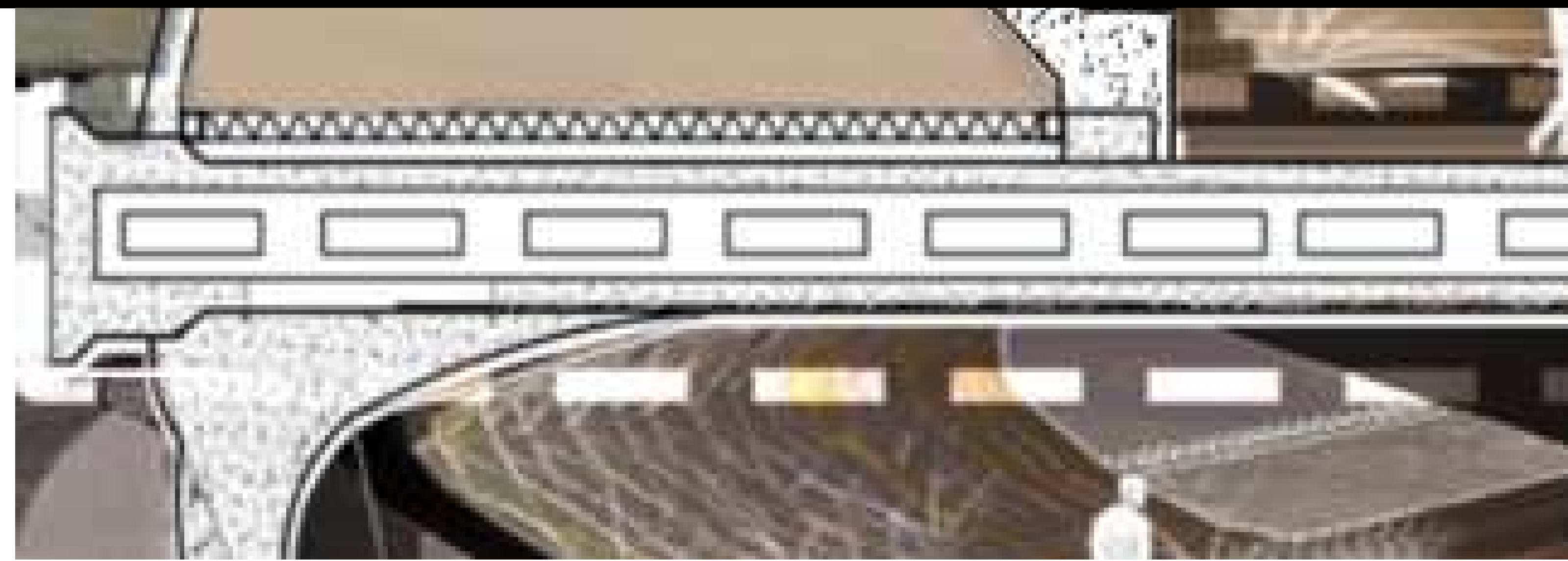
- 1. Light eight steel
- 2. Concrete slab
- 3. Corrugated steel plate



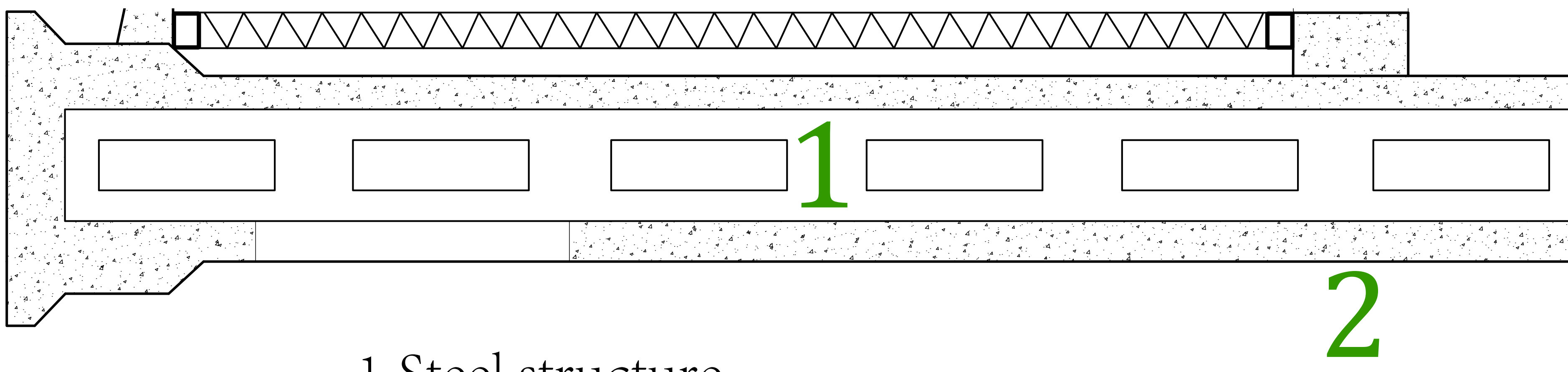
- 1. Concrete
- 2. Curtain-wall
- 3. Exterior I



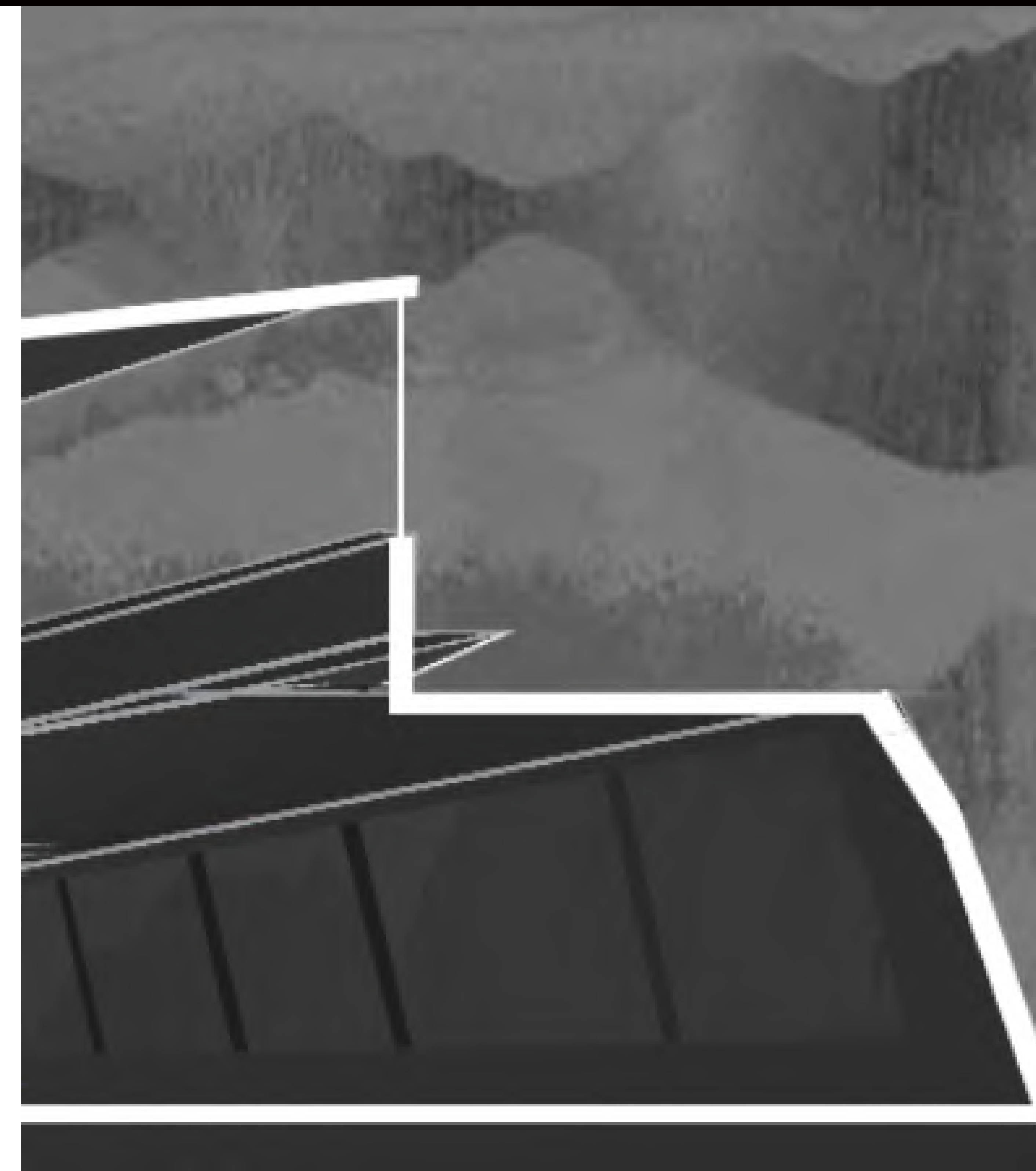
- 1. Concrete slab
- 2. Curtain-wall System
- 3. Exterior Deck



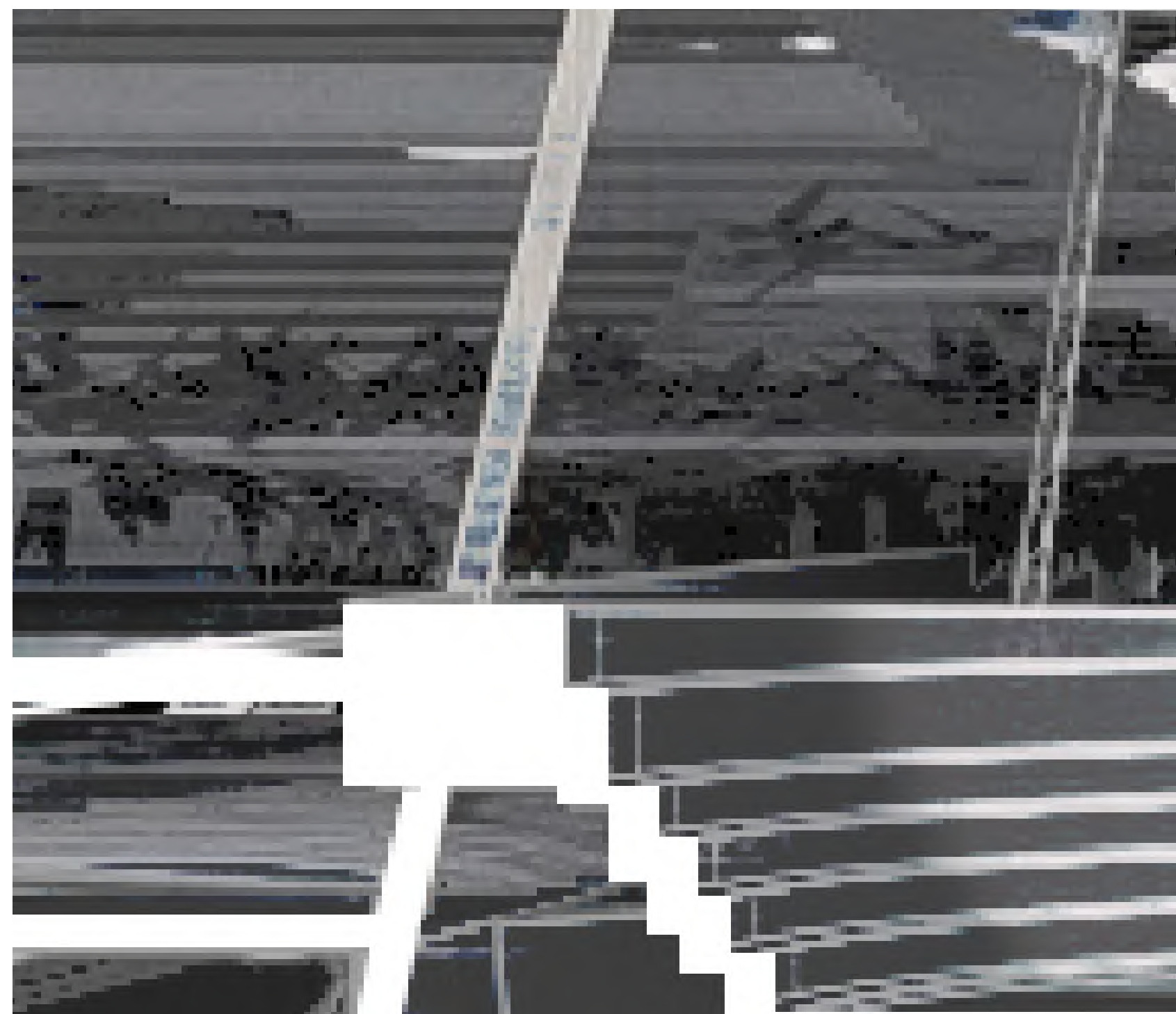
Floor Detail  
1:5



- 1. Steel structure
- 2. Concrete slab

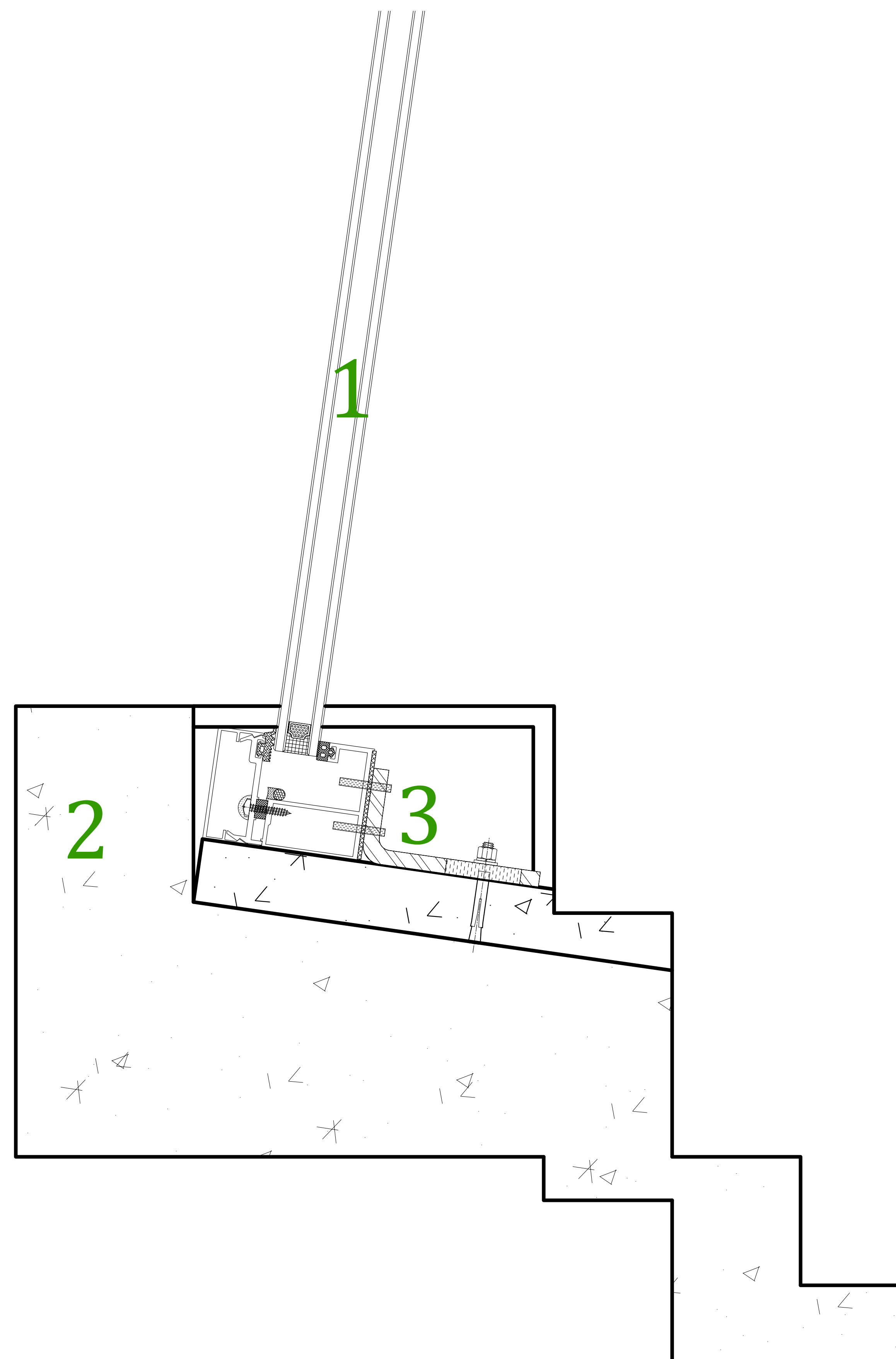


Concrete with Window Detail 1:5



Tower Glass Wall Detail  
1:5

- 1. Double-layer soundproof glass
- 2. Concrete slab
- 3. Aluminum glass frame system
- 4. Steel Structure



- 1. Double-layer soundproof glass
- 2. Concrete slab
- 3. Exterior deck
- 4. Aluminum glass frame system

