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~~AUNG NAING WIN~~

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Personal Information

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22, 28th st, pabedan, Yangon

Education

Bachelor of architecture (WYU) (2019)

Work experience

Intern @ Atelier 46 (6 month)

Cloudcity project @ DeArch

Commercial projects @ AUIS architects

Collaborations with Blue Temple .org

Computer skill

Autocad	● ● ● ● ●
Sketchup+Vray	● ● ● ● ●
Rhino	● ● ● ● ●
Adobe suite	● ● ● ● ●
Microsoft office	● ● ● ● ●

Language skill

English (fluent)

Japanese (beginner)

Burmese (Native)

+skills

Hand sketching

Model Making



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PORTFOLIO CONTENTS

PROJECT NO 1

FLOR DA MANHÃ MOZAMBIQUE PRESCHOOL

(Archstorming competition 2019 with Blue Temple)

PROJECT NO 2

THE SKY SCRAP-PER

(skyhive skyscraper challenge 2019 with Blue Temple)

PROJECT NO 3

KWIN CHAUNG DRAINGAE UPGRADE

(with Myanmar Engineering Society & YCDC) (ongoing)

PROJECT NO 4

INSTITUTE OF ART

(Graduation project)

PROJECT NO 5

THE CLOUD CITY

(Hakha masterplan project with DeARCH)

FLOR DA MANHÃ

An Inclusive Rural School in Mozambique

Incubator for reintegration

A catalyst to imagine playful narratives and create new social links

Architecture has the ability to create memories, throughout a person's adulthood. A acts as a marker frozen in time. The experience the school will provide is subtle, carefully considering small details that would often otherwise go unnoticed: bright openings, insecticidal adult repellents, individual storage lockers, and the integrated building built for the children's imagination in a playful way. Kids will train in a "homestead" have their own space to safely experiment the wonders of childhood.

ARCHITECTURE EMANATING FROM THE TOPOGRAPHY

Following the curves of the terrain, the building sits harmoniously on the site. The design captures existing efforts to a good standard making the construction less conspicuous. The entrance to the building is at the same level as the road allowing for better accessibility.

ARCHITECTURE AS A FRAME FOR ITS CONTEXT

Integrated within the gap, the community comes closer up to the entrance of the site. The road that leads up to the property comes relaxing into the school.

ARCHITECTURE AS A PATHWAY TOWARDS THE LANDSCAPE

The enclosed school is centered towards the two open playgrounds, the hill and the valley.

ARCHITECTURE AS AN EXTENSION OF THE SURROUNDINGS

The building seems to be sitting on the site naturally, following the curves of the topography and its relationship with the surrounding natural landscape. Through a participatory construction process, the school team integrates with the community.



ADMINISTRATION

- 1 Principal and Secretary Office - 16m²
- 2 Management and Junior Office - 16m²
- 3 Teacher's room - 14m²
- 4 Library - 14m²

CLASSROOMS

- 1 Nursery Classrooms - 42m² / units
- 2 Pre school Classrooms / studies configuration - 42m² / units
- 3 Pre school Classrooms / napping configuration - 42m² / units

DINING

- 1 Dining room - 68m²
- 2 Closed kitchen - 42m²
- 3 Pantry - 32m²
- 4 Open kitchen - 35m²

BATHROOMS

- 1 Boys Bathrooms - 14m²
- 2 Girl Bathrooms - 14m²
- 3 Adult Bathrooms - 14m²

COVERED SCHOOLYARD

- 1 Playground pavilion - 50m²
- 2 Can pavilion - 20m²
- 3 Covered open area - 140m²

COMMUNITY

- 1 Multipurpose space - 98m²
- 2 Gathering pavilion

EQUIPMENT / TECHNICAL

- 1 Storage - 4m²
- 2 Water Tank
- 3 Septic Tank

GARDEN / OUTDOOR SPACES

- 1 "Valley"
- 2 "Hill"
- 3 Farming

VIEWS

- 1 Entrance
- 2 Classroom outlook



BAMBOO AND BATTAN

Traditional woven bamboo batten is used for the roof structure. The batten is made from bamboo and is woven together to create a strong, flexible structure. The batten is used for the roof structure and is woven together to create a strong, flexible structure.



LIMESTONE

The roof is covered with limestone tiles. The tiles are made from limestone and are used for the roof structure. The tiles are made from limestone and are used for the roof structure.

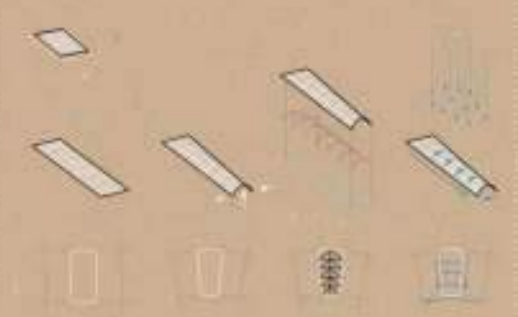


CEB ARCHES: A ZERO-WASTE PROCESS OF CONSTRUCTION

Using removable slabs as a 'formwork' to support the construction of the CEB arches is an exciting, low-wasteful, low-tech innovation.



UNFOLDING BEDS: THE FLEXIBLE AND INHABITED WALLS CONTAIN EMBEDDED AND OPTIMIZED ARCHITECTURAL DEVICES)
Hidden within the arches are devices that allow the space to be used as a separate classroom. The beds can be manually pulled out during the night.



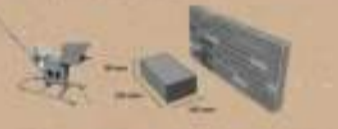
USING A GENERATIVE AND INNOVATIVE GEOMETRY TO CREATE A HIGH PERFORMING ROOF
By taking advantage of the material's flexible properties, the roof becomes very efficient in passive ventilation and rainwater collection.

THE ROOF

Using locally sourced materials, the ceiling and roof can be broken down into different layers. The first section and retained with here provide a pleasant looking feature when you look up inside the classroom. It creates a thermal buffer zone with the roof protecting the sun from overheating the space. The second layer consists of a rigid 20mm thick supports composed of steel plates, this is both and easy to assemble montage above the roof the fully collect the rainwater during the rainy season.

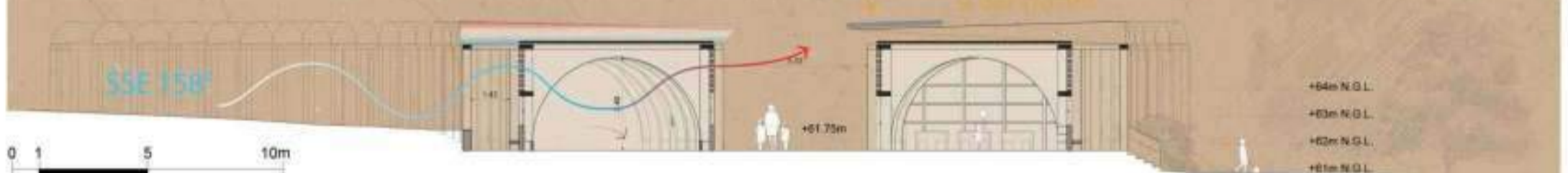
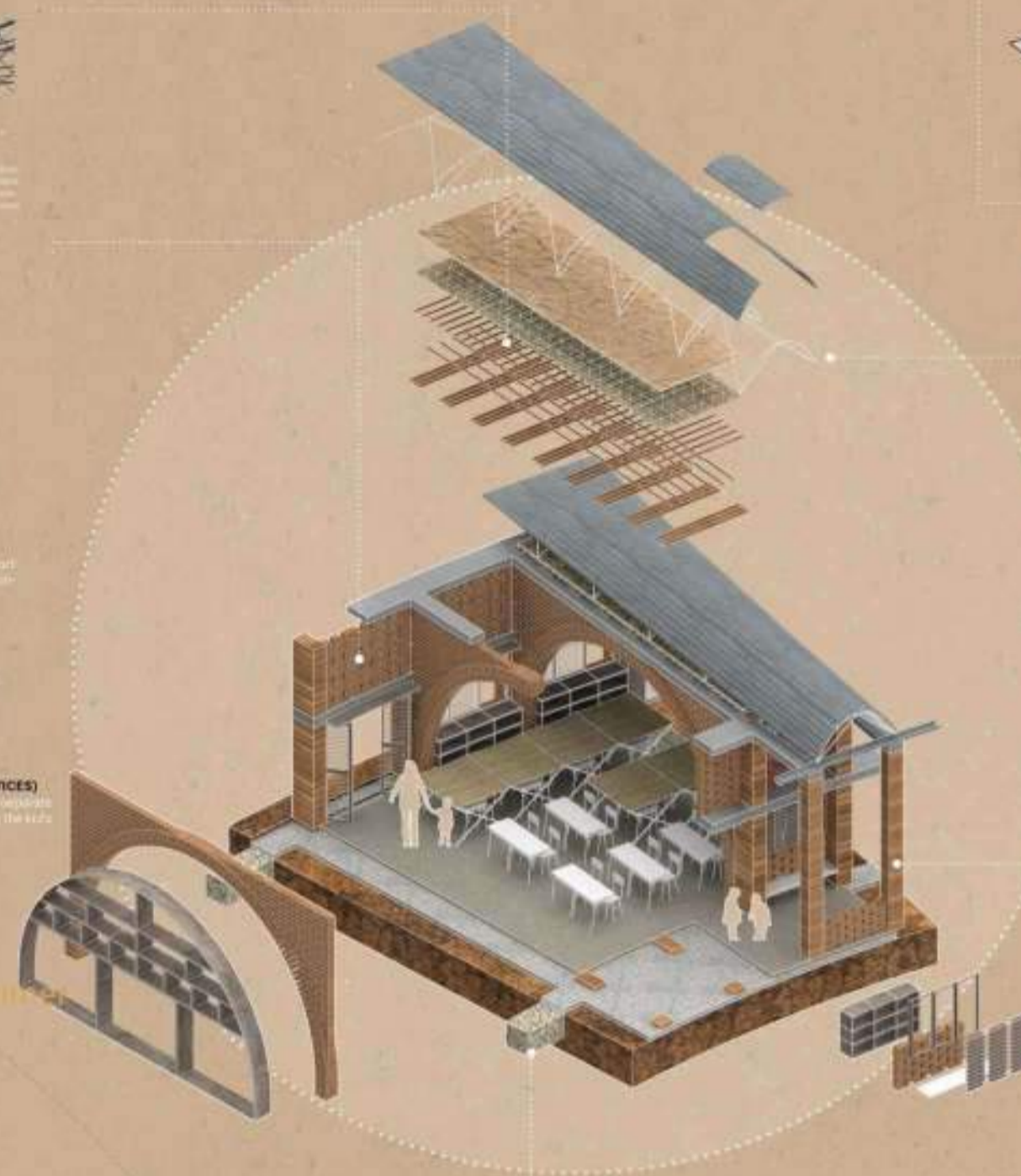
COMPRESSED EARTH BLOCKS - 0 cubic production

The blocks are made from compressed earth and are used for the construction of the walls. The blocks are made from compressed earth and are used for the construction of the walls.



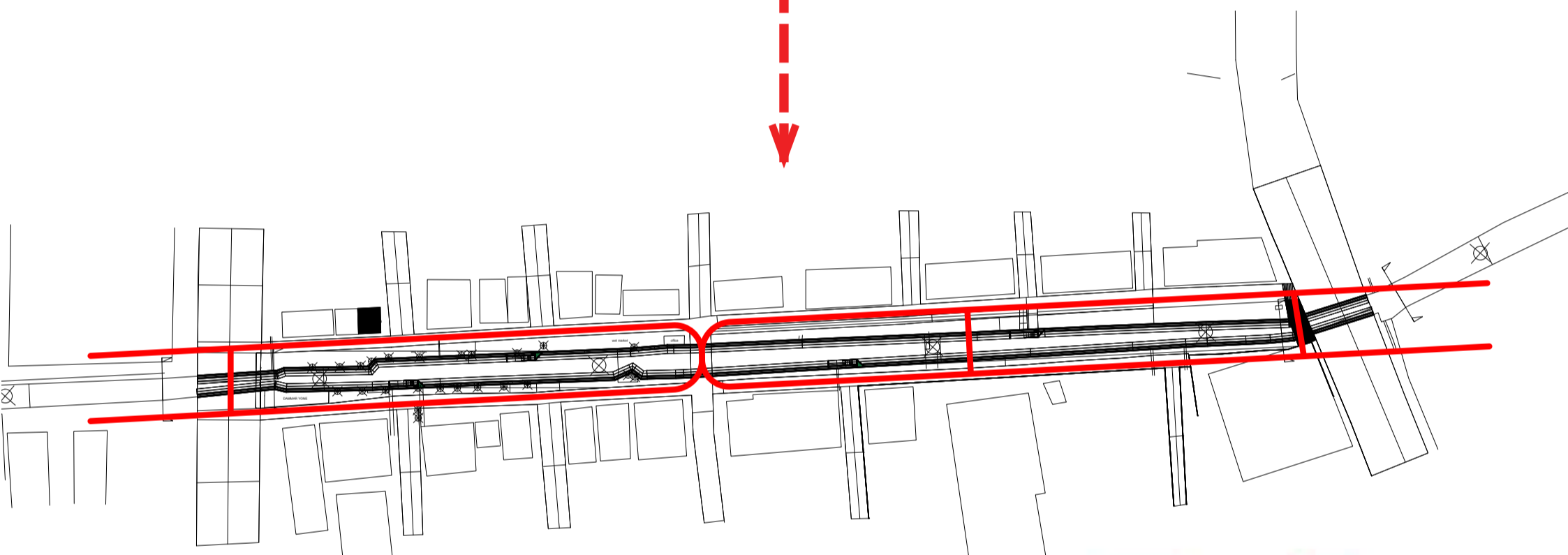
STONE - 0 cubic production

These blocks are used for the construction of the walls. The blocks are used for the construction of the walls.

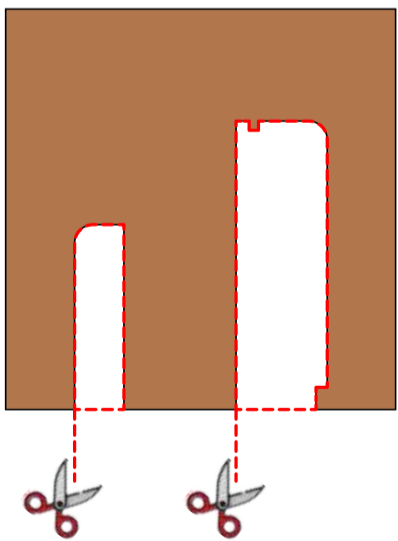
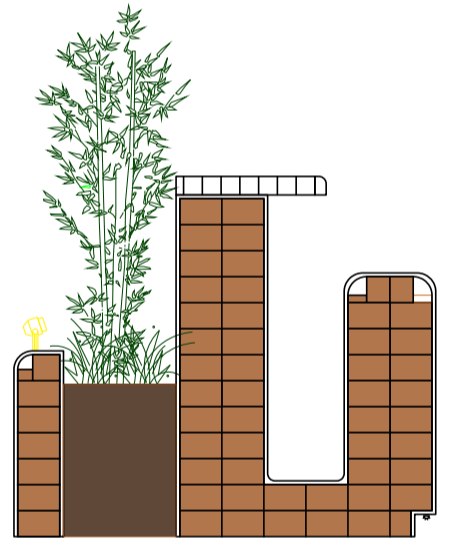
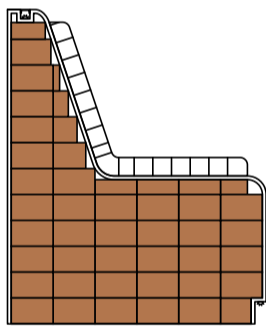
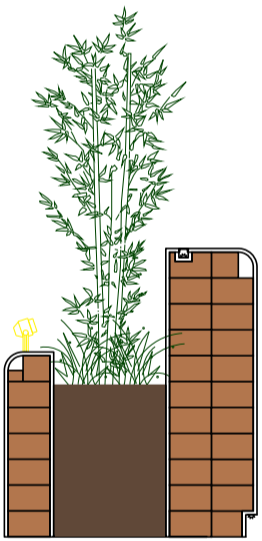
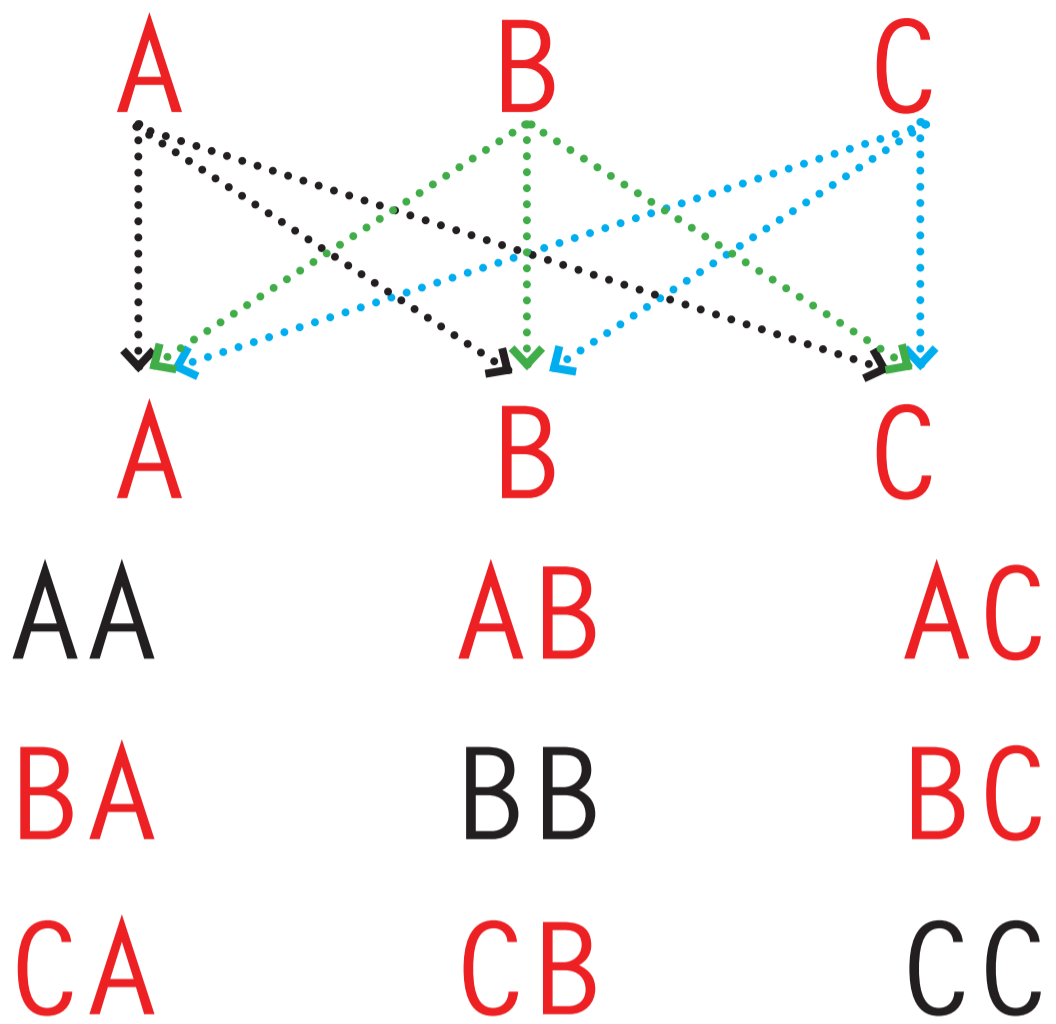


KWIN CHAUNG DRAINAGE UPGRADE

DCII

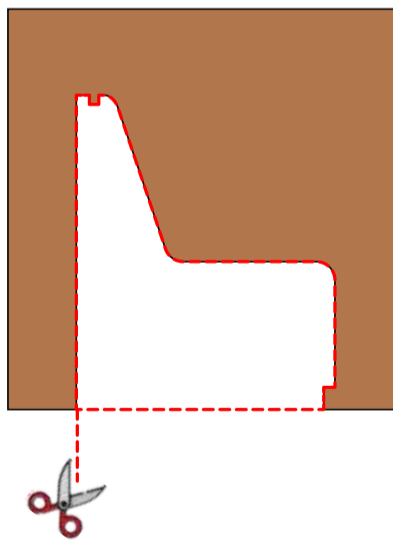


DNA AND SEQUENCES



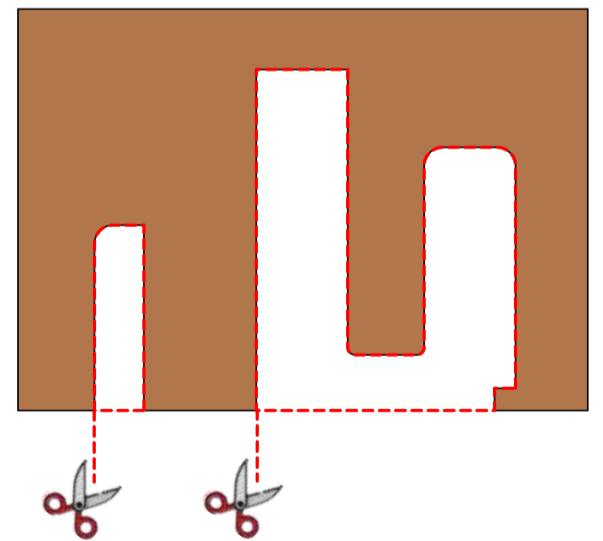
A

SIMPLE RETAINING RAILINGS



B

FOR SITTING



C

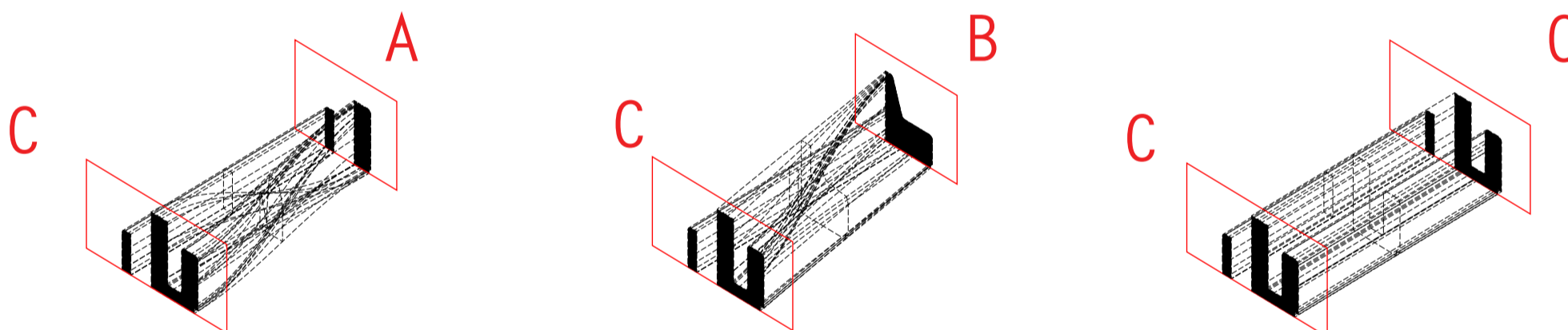
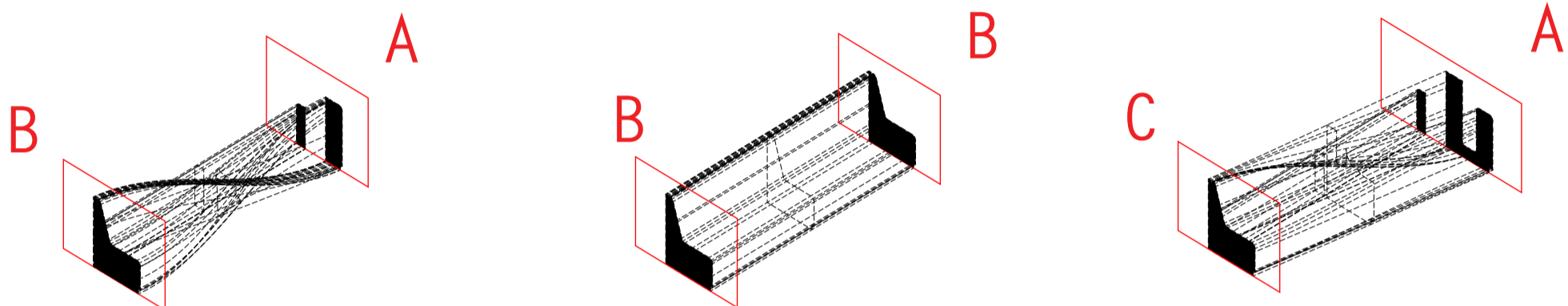
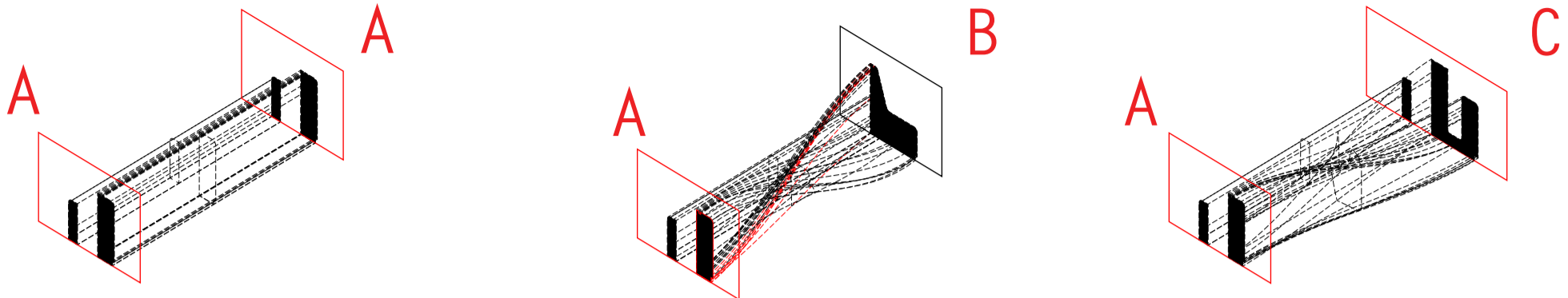
FOR INTERACTIVE ACTIVITIES

LESS INTERACTION

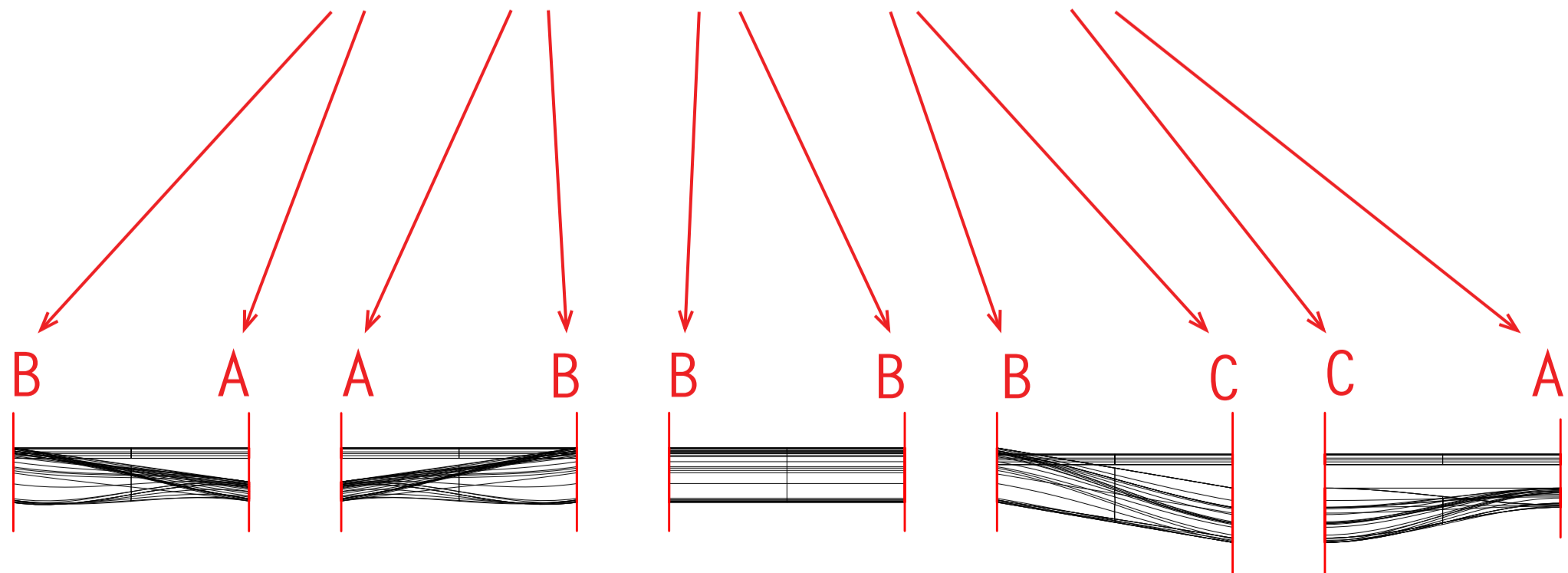
MORE INTERACTION



BUILDING HAND RAIL/SEATS

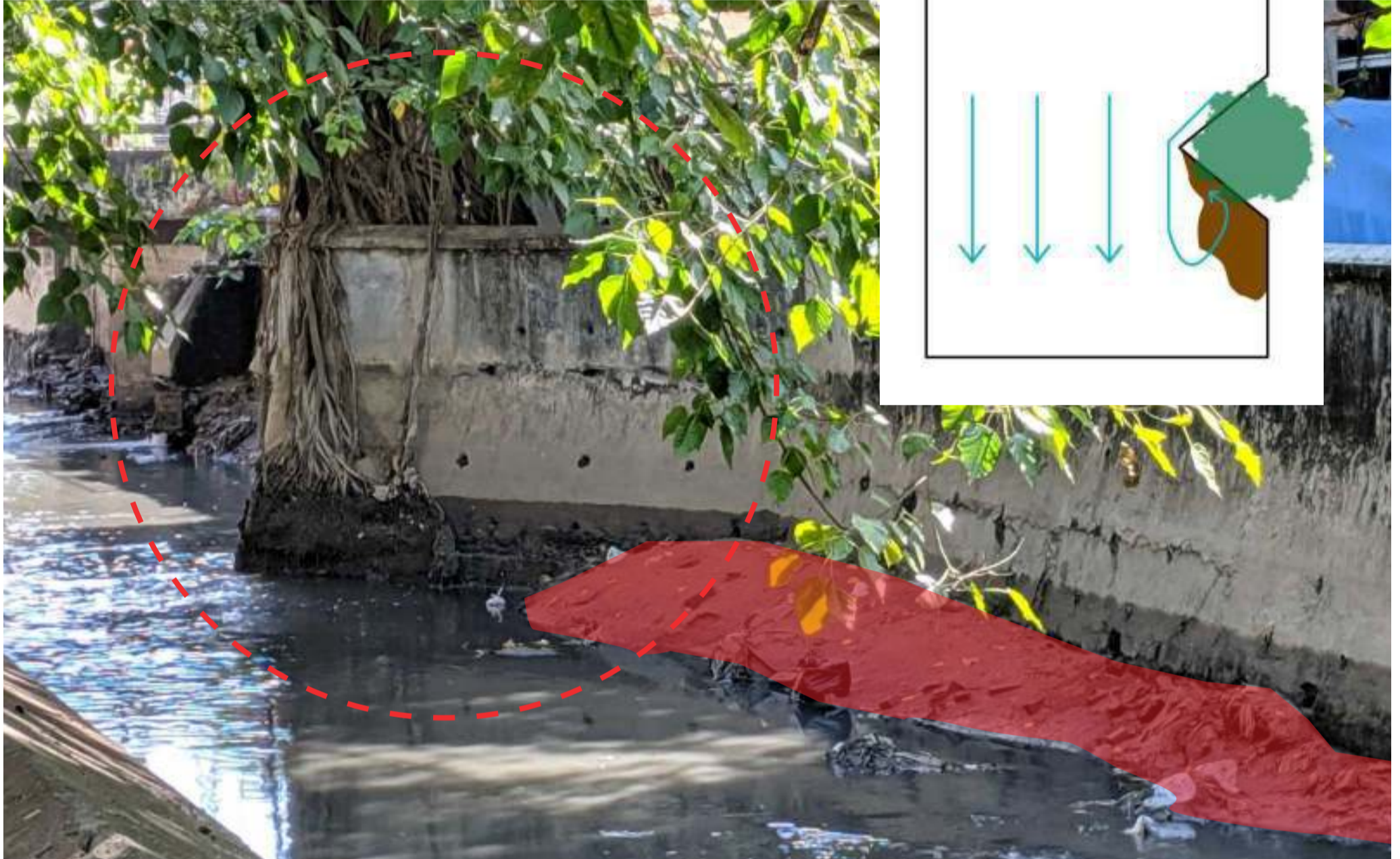


$BA + AB + BB + BC + CA + \dots$



BUILDING THE BARREIR

UPON ANALYZING THE EXISTING CONDITION OF THE DRAIN, WE FOUND A VERY INTERSTING DETAIL WHERE THE ORIGINAL RETAINING WALL EXTRUDING INTO THE DRAIN TO PROTECT A GIGANTIC BANYAN TREE, COLLECTING ALOT OF SEDIMENTS BEHIND AROUND THE CORNER WHERE THE FLOW OF THE WATER IS BROKE DOWN AND SEDIMENTS SETTLE... WE TRIED TO INCOOPERATE THE ACCIDENTAL DESIGN INTO OUR PROJECT BY RUNNING A SMALL SCALE TEST MODEL MANUALLY FOR DIFFERENT BARRIER SIZES AND LENGTH FOR 16 TIMES... THIS ALLOW THE CITY MUNI-CIPLE TO COLLECT ALL THE SEDIMENTS AT OUR DESIGNED BARRIERS SAVIN ALOT OF TIME AND ENERGY AND HELP THE FLOW O THE DRAIN...



Best 3 Options for Sediment Collection

Attempt 16 (Final)



Option 1

- Maximum efficiency
- Ease of sediment pick up at a point
- All three structures work for sediment collection
- Costly but cost effective

Attempt 15



Option 2

- Moderate efficiency
- Ease of sediment pick up
- Two straight barriers serves only for support but not for collection
- Sediments left behind them
- Costly but not as option 1

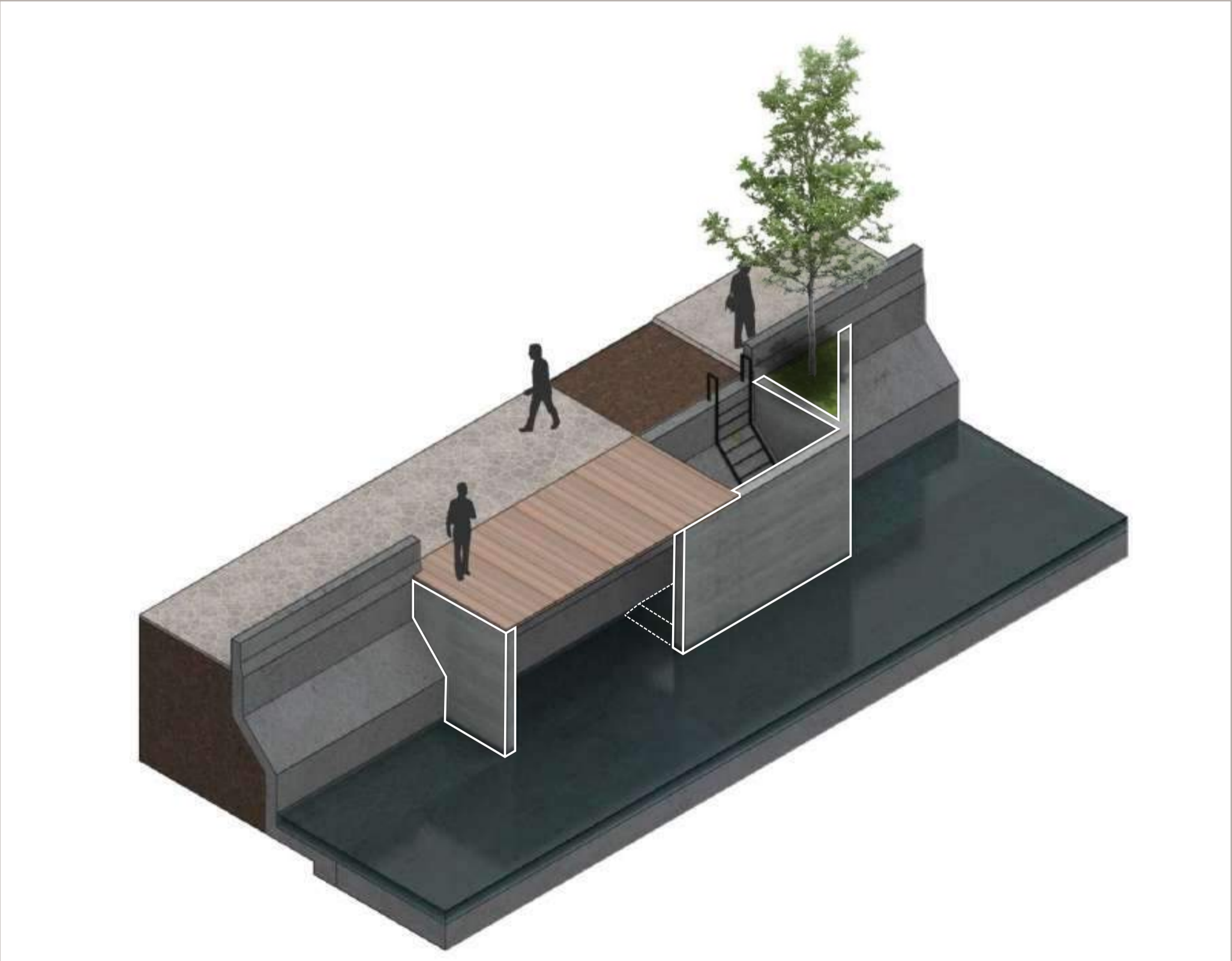
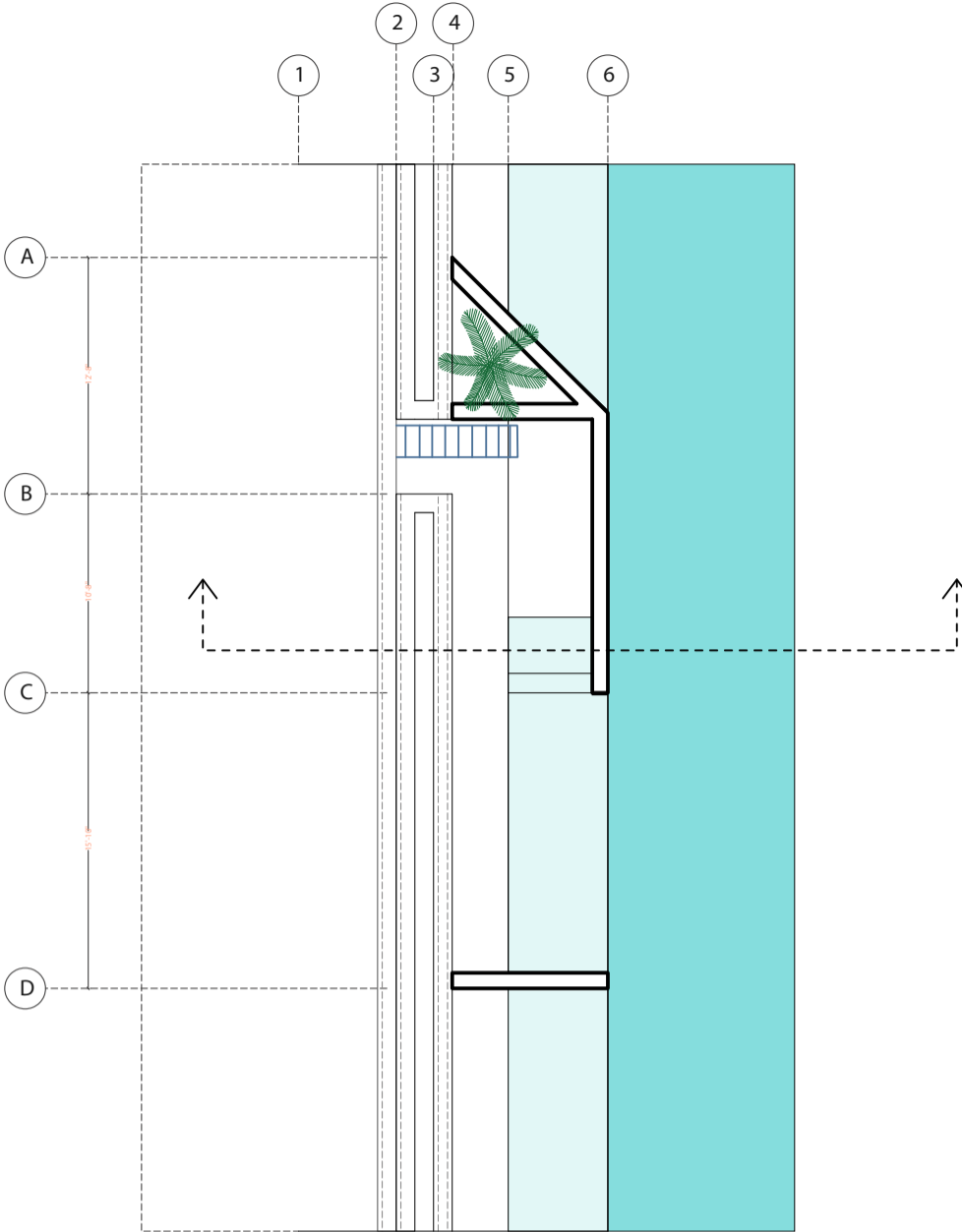
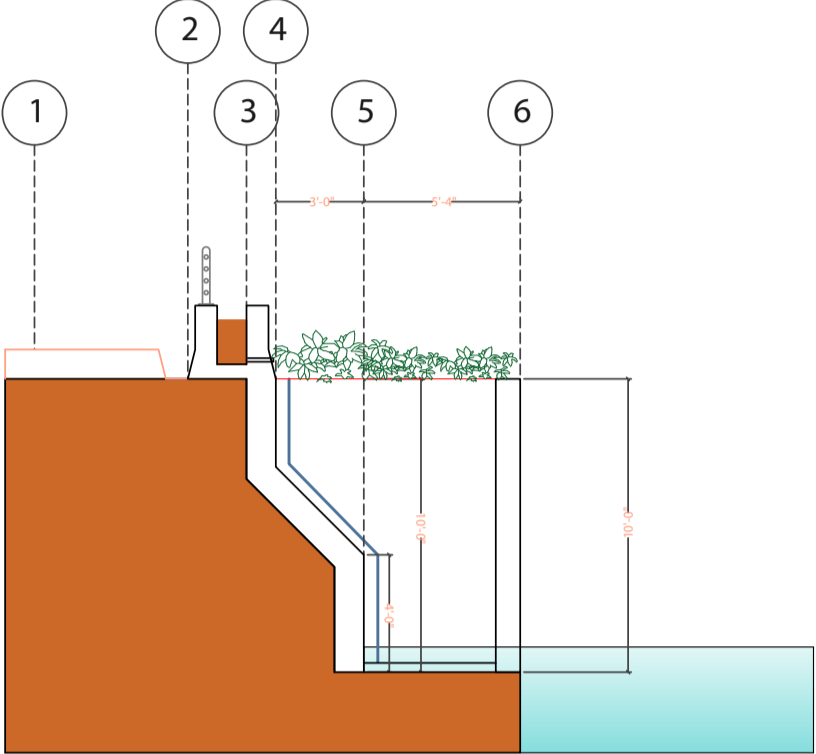
Attempt 14

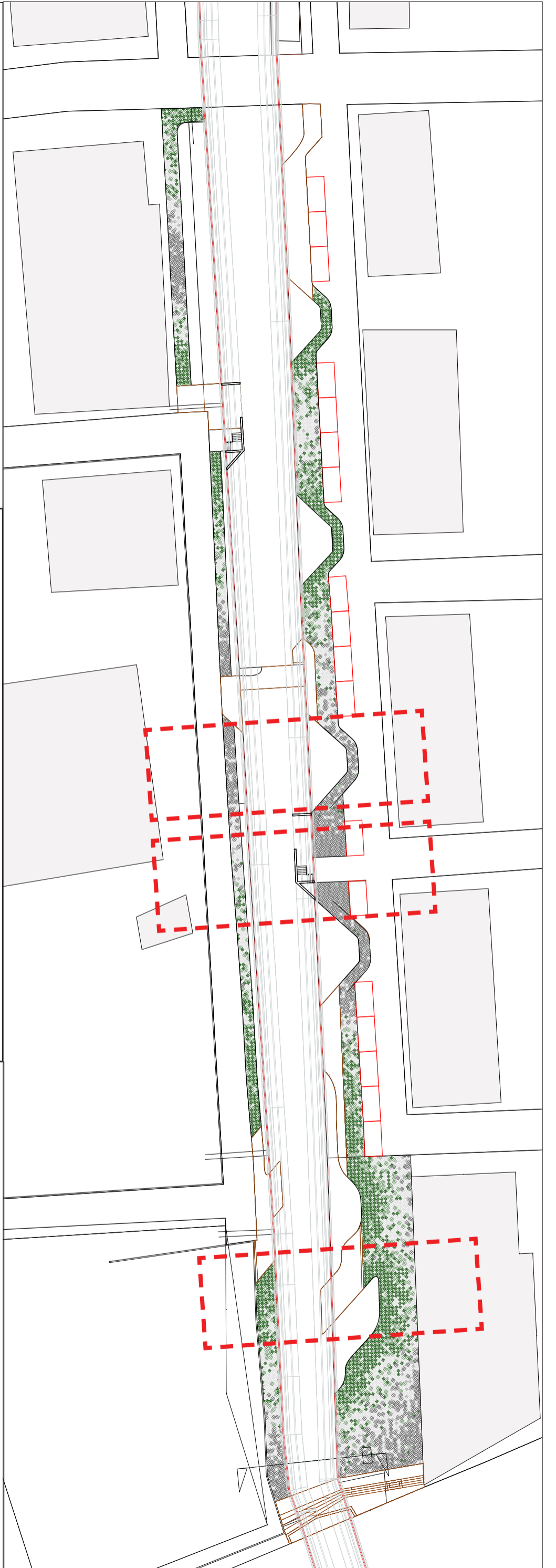
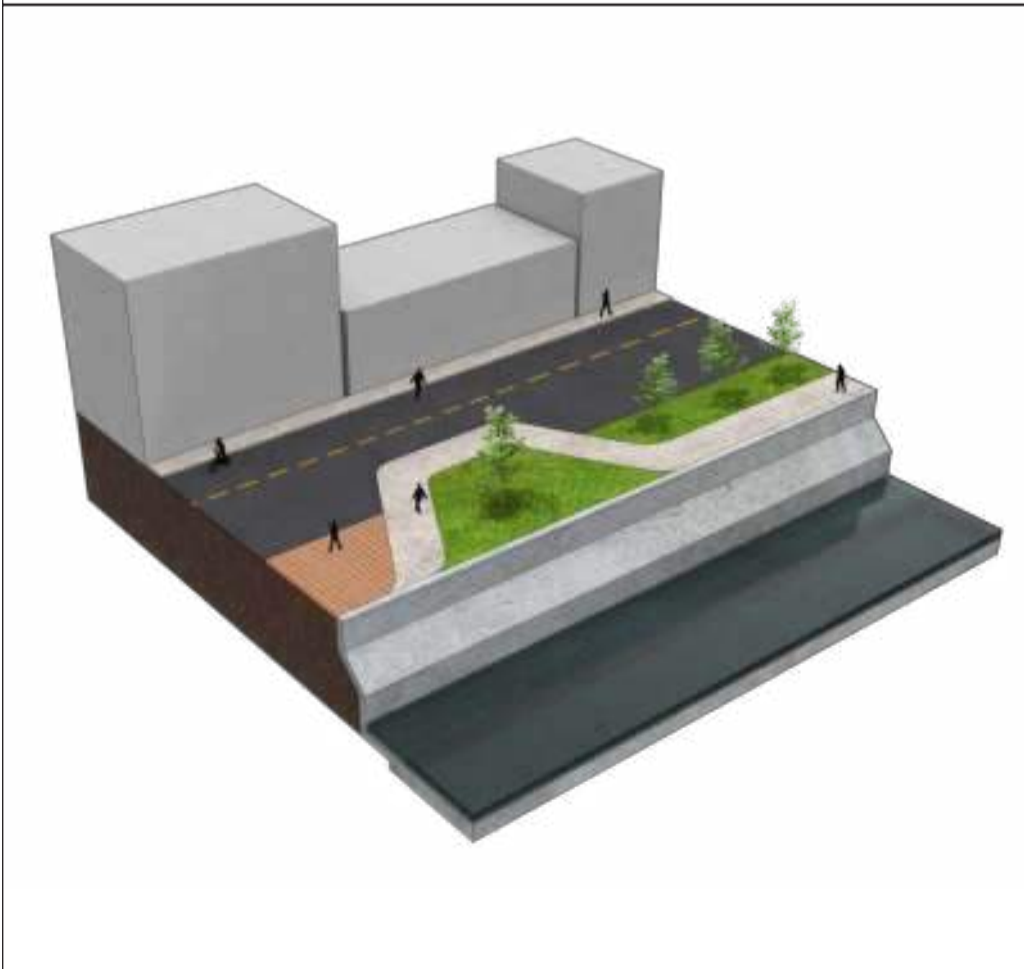
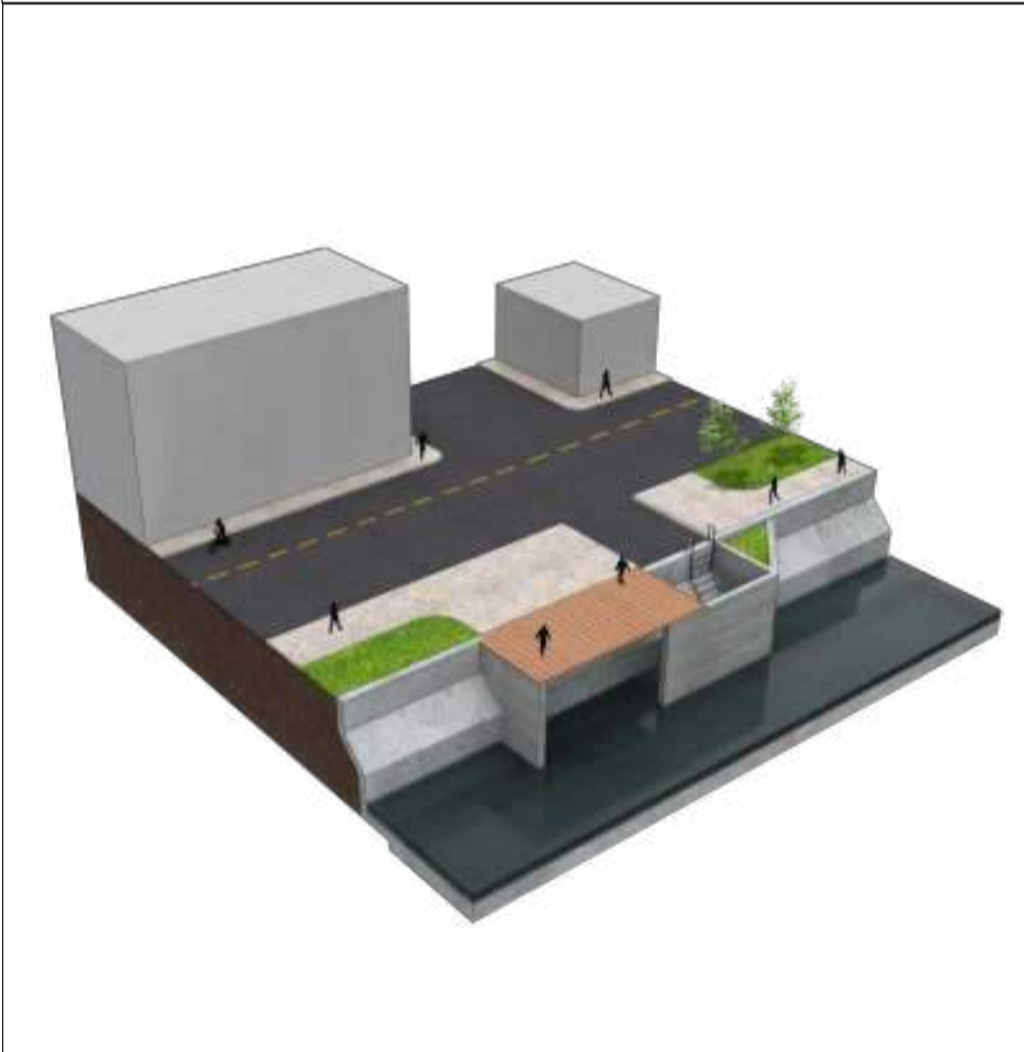


Option 3

- Normal efficiency
- Sediment collection is one-sided
- The smaller obstacle helps water flow change its direction and make collection in larger one
- Straight barrier for support
- Less structure and thus cheaper

THE BARRIER DESIGN



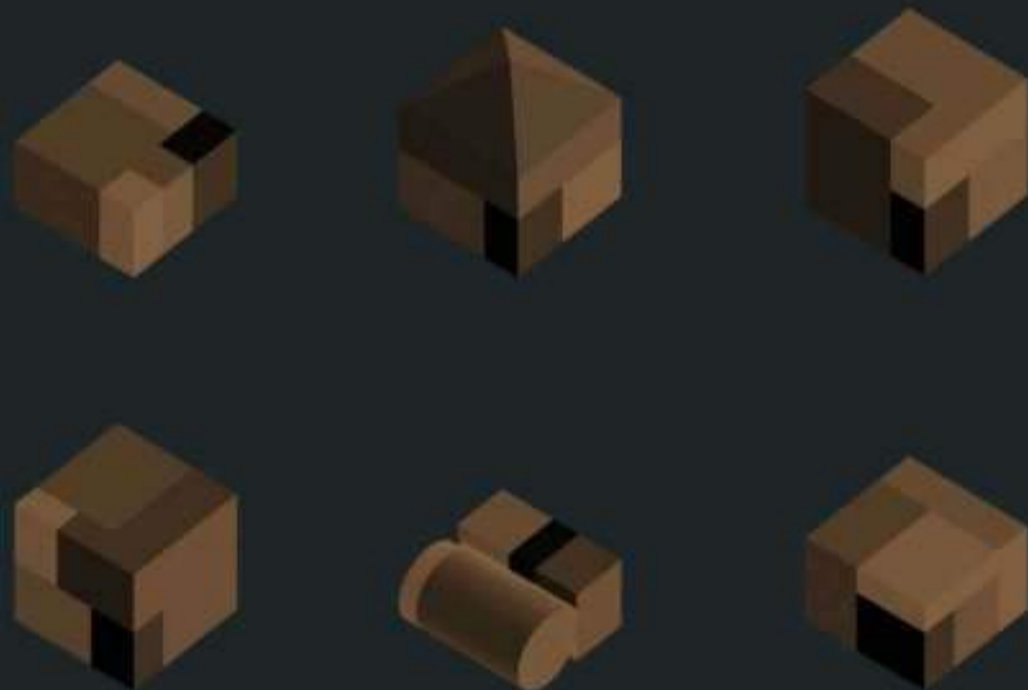


THE SKY SCRAP-PER

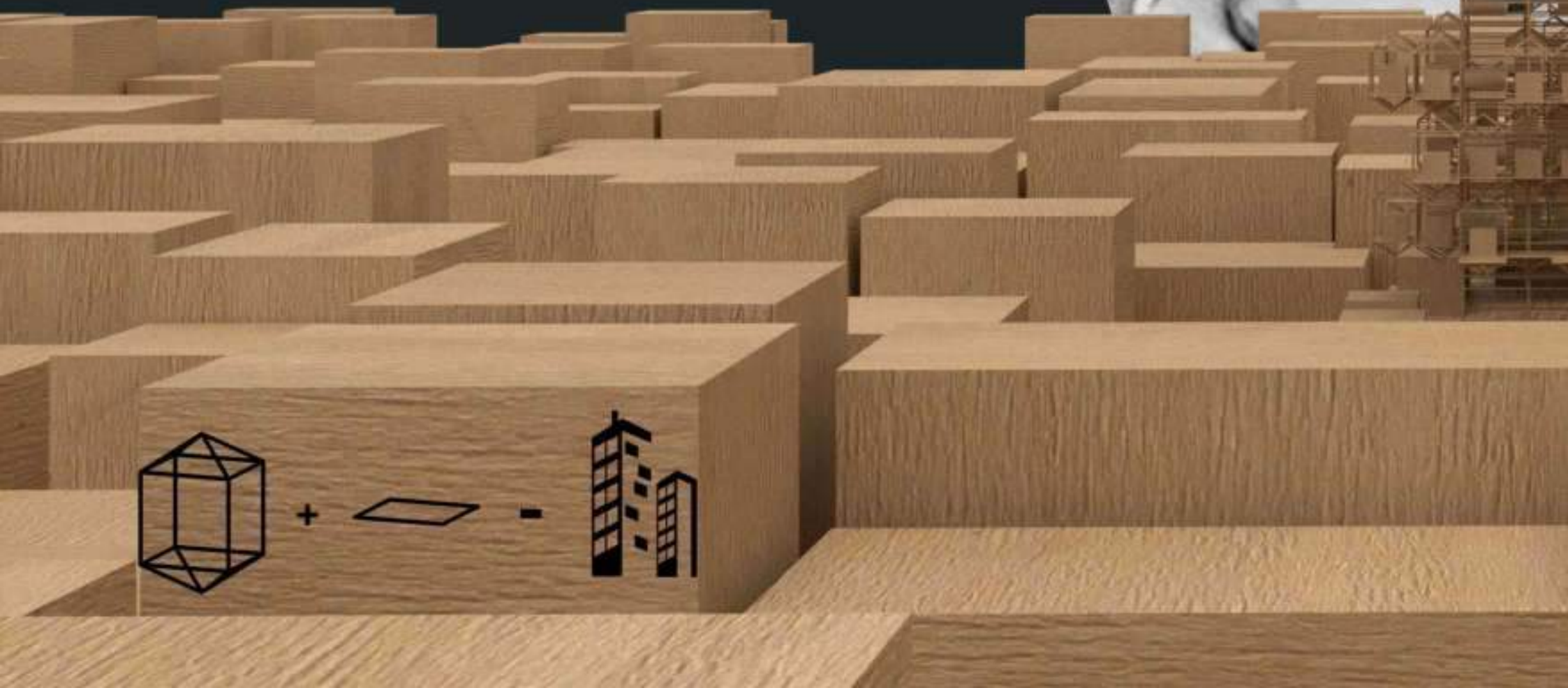
VERSION 1.0

The project is based on the very idea of the organic urban growth where we can build vertical structures with certain freedom of choice for one's lifestyle and community. The project also explores on how we can reuse certain recycled materials in the building. This type the architecture is heavily relied on how communities can improvise, adapt and overcome difficulties and grow as a better community in every aspect of livehood...

SPATIAL COMPOSITION REFERENCES



■ BED ROOM ■ LIVING AREA ■ BATH AND WC ■ UTILITY ■ OUTDOOR



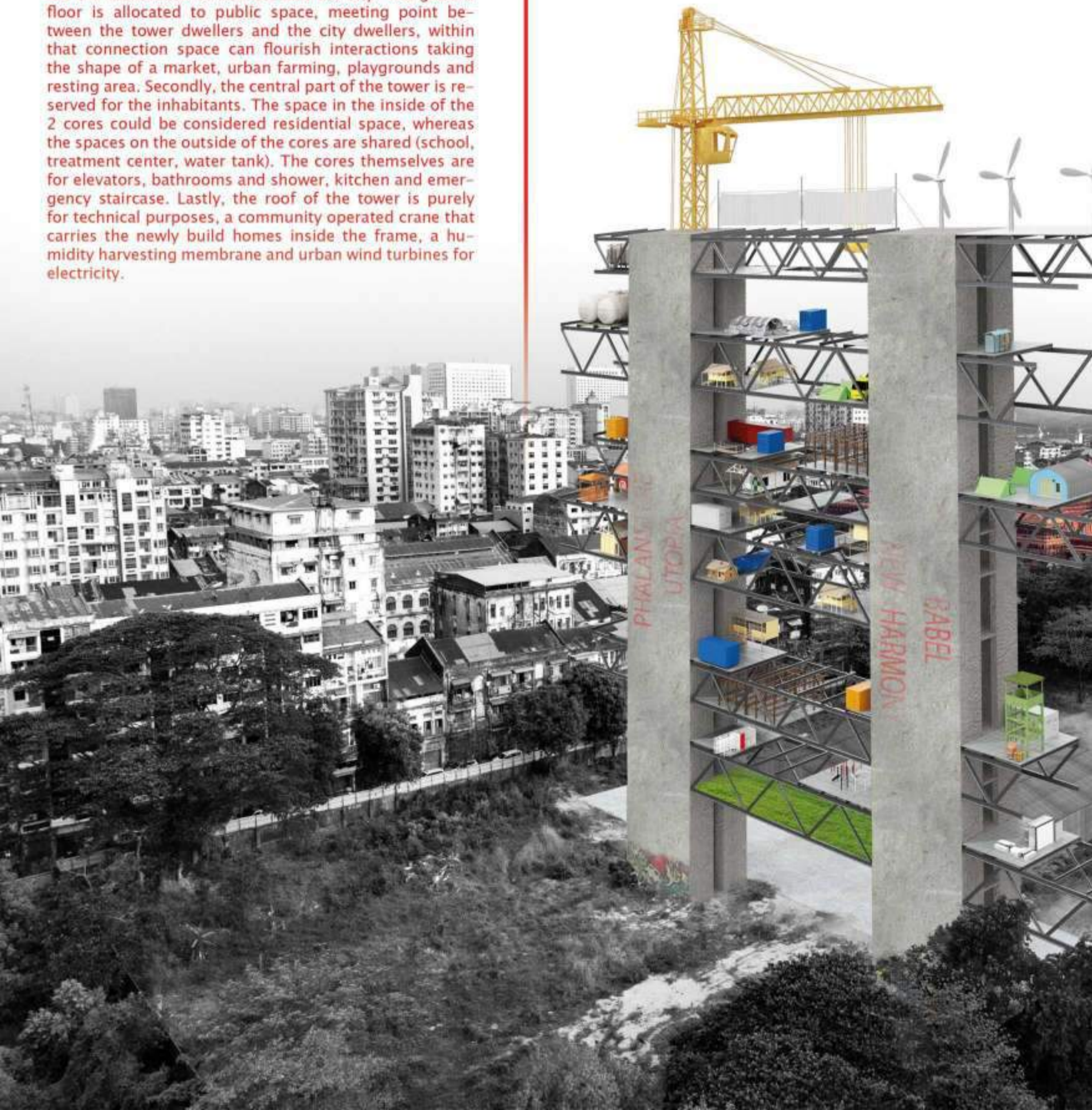
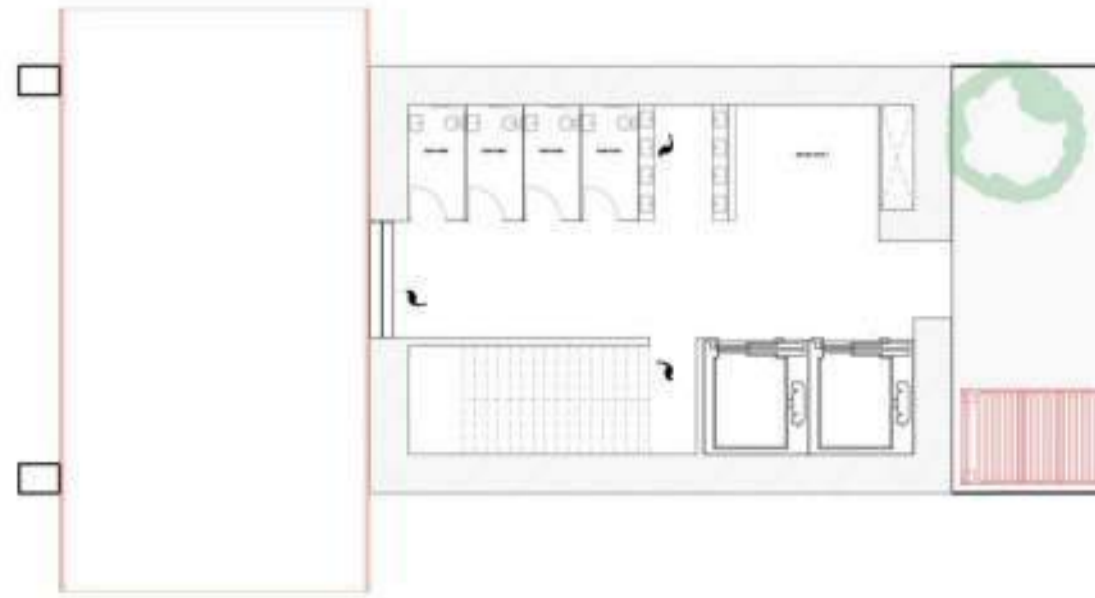


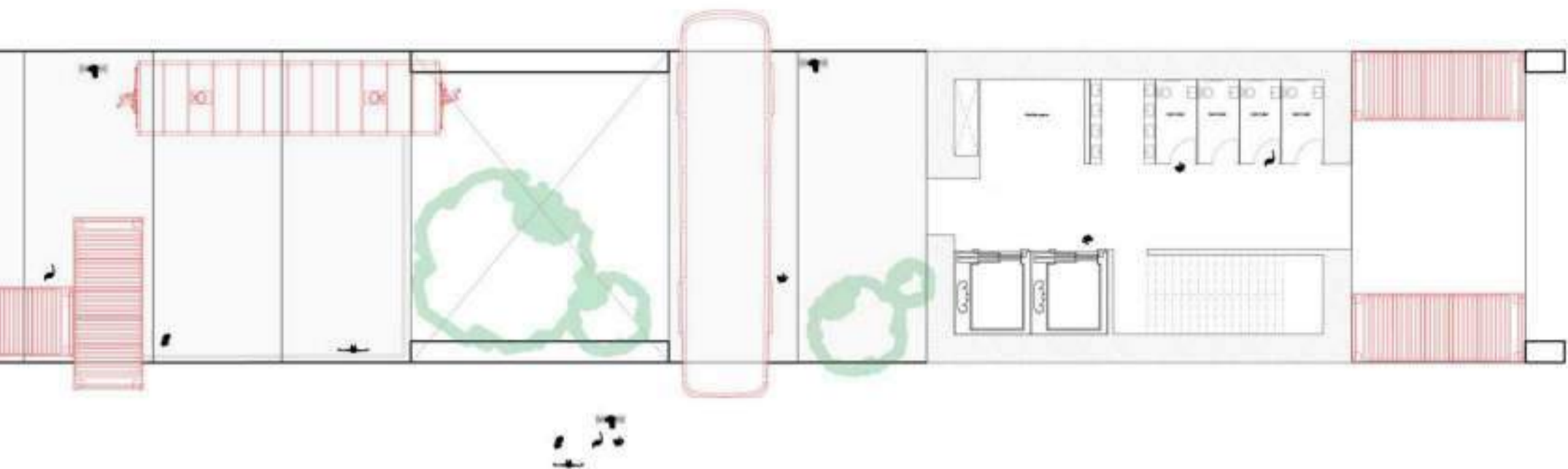
The Skyscrap-per

Myanmar, Yangon

The tower acts as a shelter for homeless community living in the streets of downtown Yangon. Proposing a radical solution for new inclusive development scheme to the city, the tower positions itself as the start of a questioning regarding a currently growing urban problem. The housing shortage is real, and homelessness is increasing every year. Community led housing projects are scarce and need to be encouraged. The Skyscrap-per provides a flexible frame the community can self-appropriate and accommodate into building themselves their homes. The frame itself was designed simply to limit the construction cost as much as possible.

The tower is divided into 3 zones. Firstly; the "feet"; they are the connection to the site and the city. The ground floor is allocated to public space, meeting point between the tower dwellers and the city dwellers, within that connection space can flourish interactions taking the shape of a market, urban farming, playgrounds and resting area. Secondly, the central part of the tower is reserved for the inhabitants. The space in the inside of the 2 cores could be considered residential space, whereas the spaces on the outside of the cores are shared (school, treatment center, water tank). The cores themselves are for elevators, bathrooms and shower, kitchen and emergency staircase. Lastly, the roof of the tower is purely for technical purposes, a community operated crane that carries the newly build homes inside the frame, a humidity harvesting membrane and urban wind turbines for electricity.



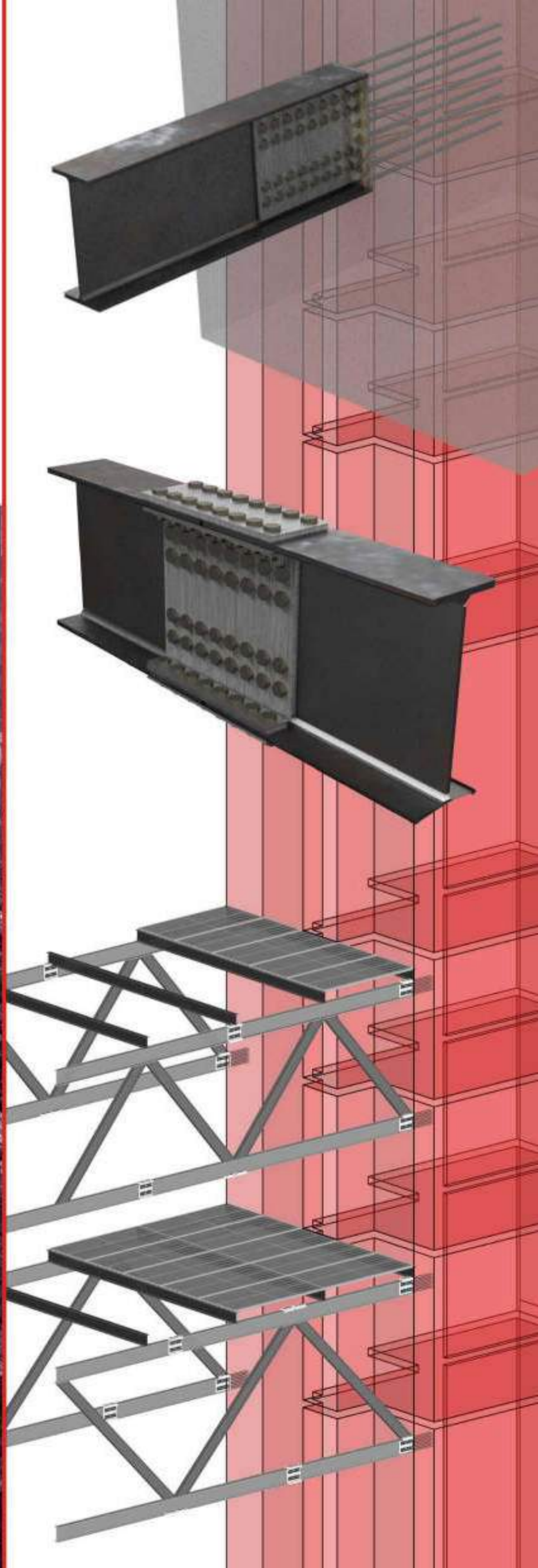


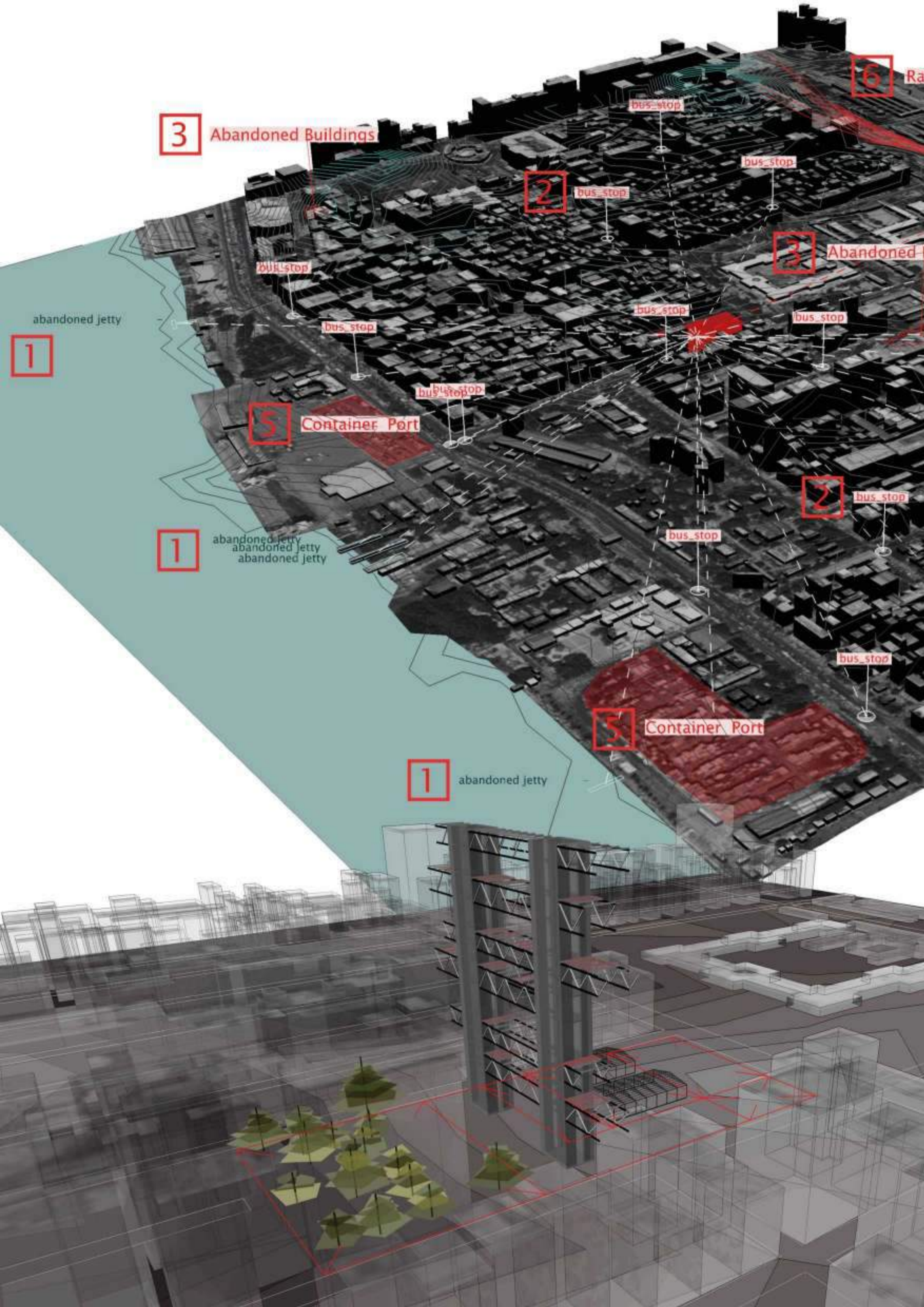


PHALANSTERE
UTOPIA



NEW HARMONY
BABEL





3

Abandoned Buildings

2

bus_stop

3

Abandoned

1

abandoned jetty

5

Container Port

1

abandoned jetty
abandoned jetty
abandoned jetty

1

abandoned jetty

5

Container Port

6

Ra

bus_stop

bus_stop

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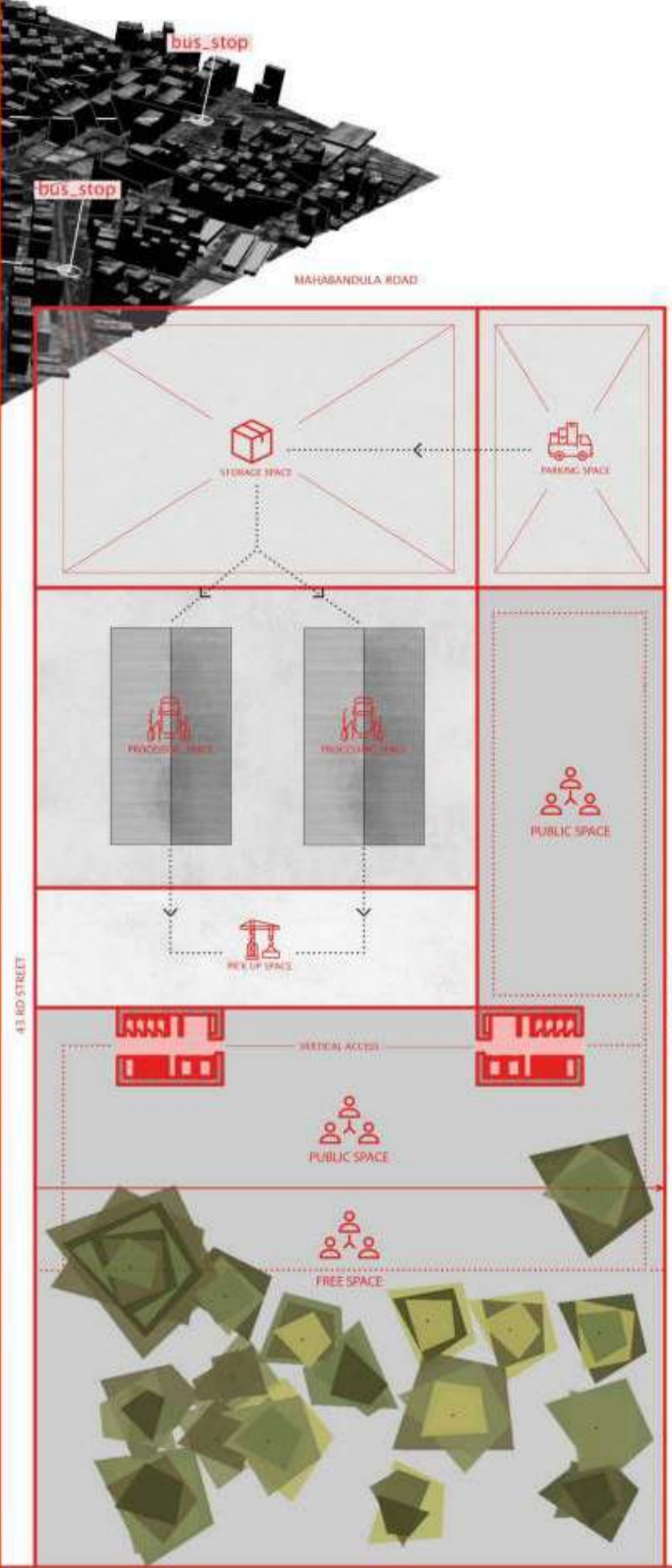
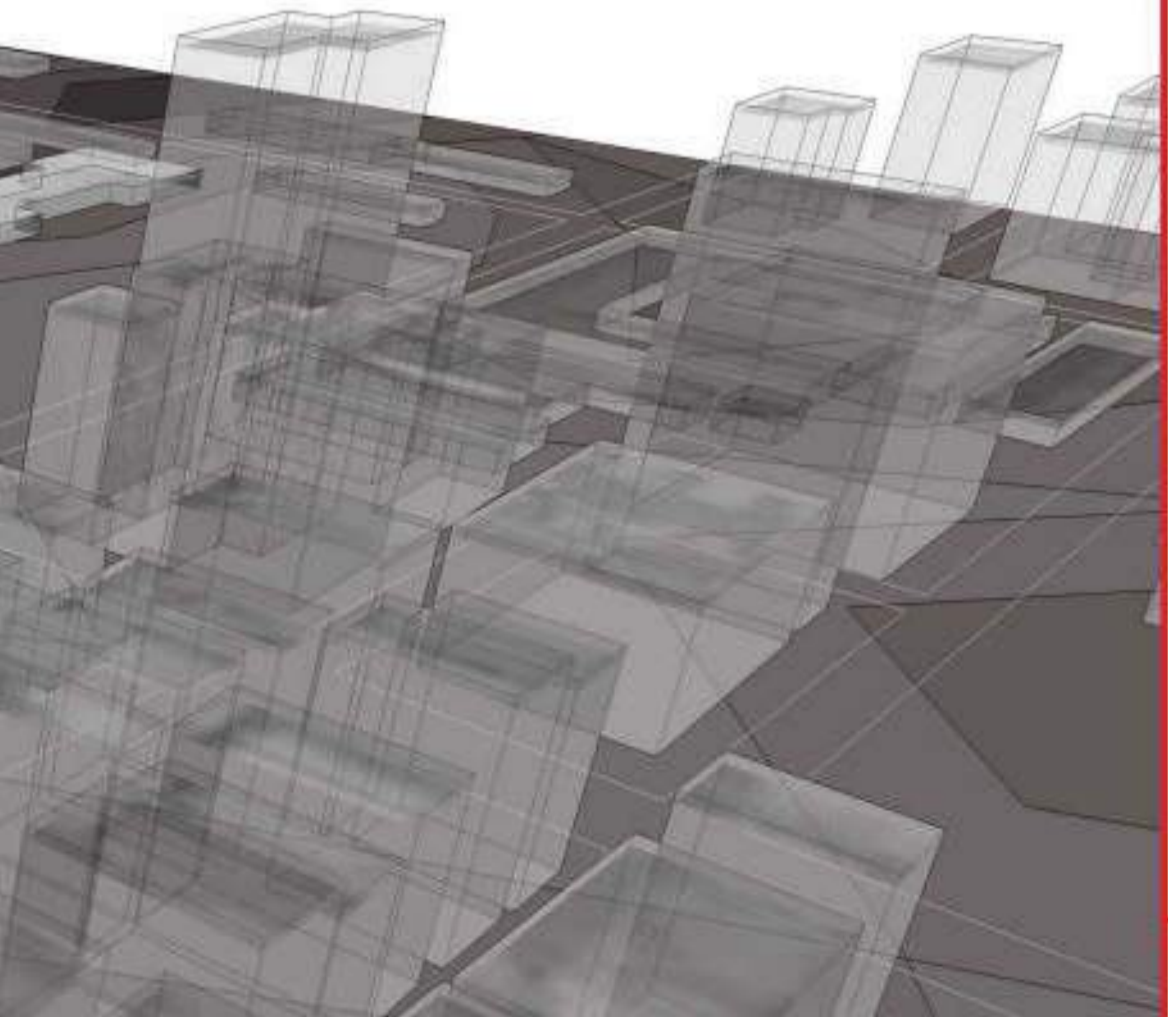
bus_stop

bus_stop

7 Railway Tracks Pipeline Cemetery



The process of bringing the scraps on the site, parking the truck, sorting the elements, storing them, assembling them together is carefully choreographed in a methodological path on the final masterplan. The public space is juxtaposed along the more "industrial zone" making the whole process witnessed and observed by the city dwellers. This collective effort in building a community led housing project downtown Yangon is therefore being showcased and promoted for other communities to be inspired from. The southern part of the site has been allocated to free space, empowering citizens in actively taking part in the shaping of the city itself.



1



Bridge

With the "Korea Friendship Bridge" connecting Dala and Yangon planned to finish in 2021, there are more and more abandoned local jetties along the Irrawaddy waterfront



2



Bus Stop

FMIDecaux has recently won and Transfer (BOT) contract of bus stops with YCDC (Yangon City Development Committee)

3



Building

Many former warehouses are abandoned in downtown Yangon since the creation of shipping container ports along the riverfront.



4



Bus

YCDC (Yangon City Development Committee) has recently bought 1000 yellow buses from China, trying to replace the old Korean and Japanese buses for the city

5



Container

As the shipping container port is relocating to the Ahlone township south east of the city, many containers are left abandoned in the old one.



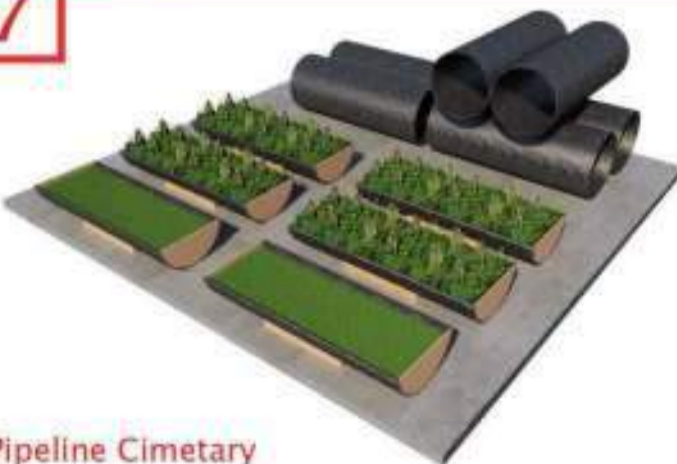
6



Train

JICA (Japan International Cooperation Agency) has just started the Yangon Railway Line Upgrading Project, replacing former train wagons by faster ones as the old ones obsolete

7



Pipeline Cimetary

Build in 1940 during the colonial times, the water pipeline is being upgraded by JICA (Japan International Cooperation Agency) with a large scale project called the Greater Yangon Water Supply Improvement Project.



8



Railway Tracks

JICA (Japan International Cooperation Agency) has just started the Yangon Railway Line Upgrading Project. New tracks are seen laying along the old ones



Build, Operate
over 500 bus
Development



ment Committee)
low buses from
old second-hand
ormely used in



peration Agen-
on Circular Rail-
replacing the
r ones, making



peration Agen-
on Circular Rail-
Former railway
the paths.



Our site size: 176m x 89m
Total area: 15,470 sqm
Township: Botahtaung Township
Ward: No (8) Ward

Inclusive development is crucial for a city's well being, this proposal is making a statement to welcome back the "leftover" people of our society into our cities as recognized citizens with basic human rights to decent housing. Architecture has the ability to address social concerns and change the shape of a city to resolve these conflicts through design. Architects should be catalyst to participatory processes for solution finding instead of patronizing technocrats who impose their vision of the world and subjective perception of beauty.

Experimenting different forms of aesthetics gives us the changes to explore new possibilities in architecture outside the conventional frame of academic standards and textbook definitions. The same thought process can also be pushed into space organization and program. Challenging the current skyline in Yangon with new buildings proposes a new symbol for the city, as a new vision for development. In the context of emerging capitalist architecture portrayed by the overwhelming number of shopping centers and high-end condominiums popping out of the ground like daisies, a new typology of building is much needed to address local concerns and needs. Squatters have been living on the margins of society in Yangon, benefiting from the abandoned colonial buildings downtown to seek refuge. However the struggle is real, they lack human basic rights that include access to school, a roof and food. This project represents an opportunity to explore radical ideas that would change this status quo and provide new frontiers for Yangon.

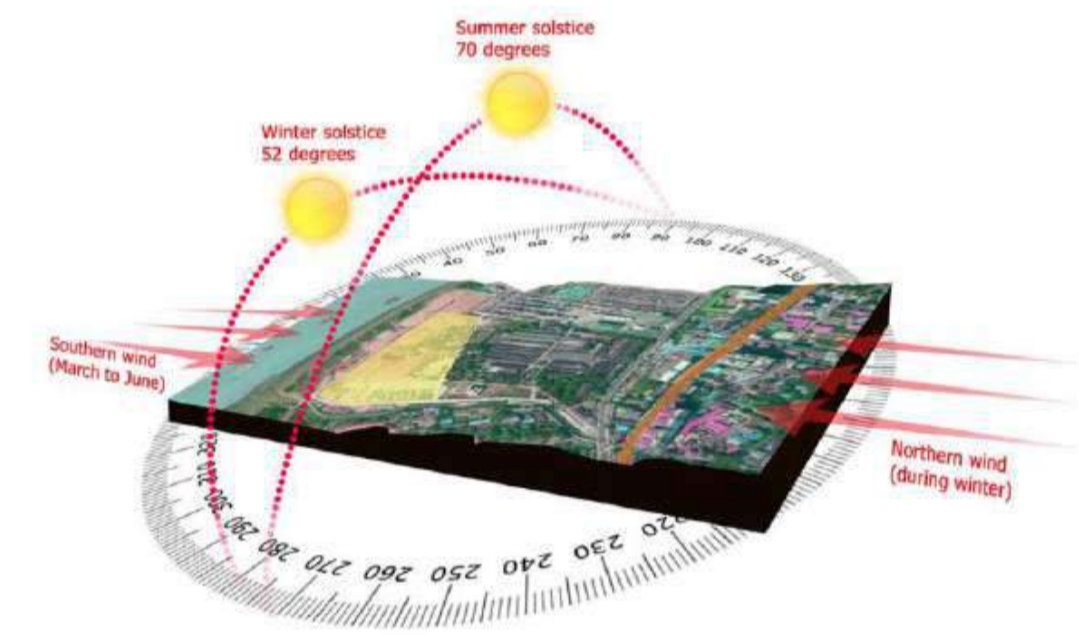
Our site, facing the "Secretariat", south-east asia's largest colonial building, home to the English colonial administration where General Aung San got assassinated in 1947 could today be understood as one of the symbols of authority in Yangon. Our juxtaposition creates a confrontation, challenging the authority in proposing a new social hierarchy through architecture. Often perceived in sci-fi dystopian depictions of social order, as a distorted reflection of our own society, vertically is reserved for the wealthy and powerful, while horizontally is reserved for the people operating the towers. Allowing a flip to be made through the accessibility to vertical structure by homeless communities promotes new forms of inclusive urban development in city centers.

This same process could be applied to architecture itself, upcycling the abandoned materials and artifacts from the city into homes. It underlines the idea of a community-led housing project where the architect is providing a flexible frame within which would be custom created by community members their own dwellings. Creating a library of abandoned "raw materials" found at a radius of 1 mile from the site, they could be assemble together into compositions, as a collection assemblages. This could be understood as an act of self-determination, independence, citizenship and hope.

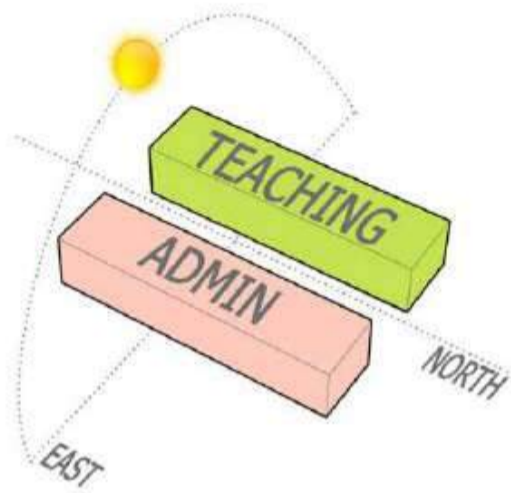
- Some of the references we used are:
- "100 Towers, 100 Architects" Hong Kong Pavilion at the Venice Biennale 2018
 - SCI-Arc's "Homelessness Charrette"
 - "Promenade des Artistes" Quartier des spectacles in Montreal, Canada
 - Kowloon Walled City: "City of Anarchy"
 - "Torre de David" in Caracas, Venezuela
 - "Half A House" in Chile by Alejandro Aravena

INSTITUTE OF ART

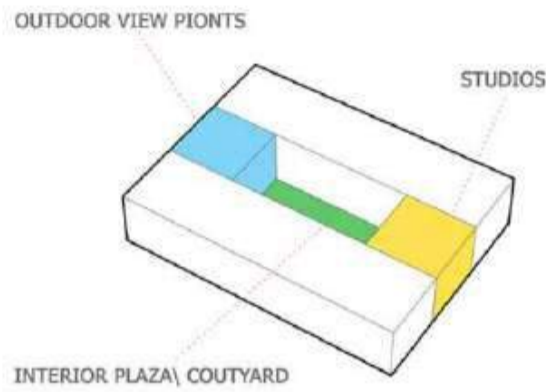
The site is located on the ahlong river bank with its two main sides facing north and south and the smaller sides facing east and west respectively. Its closed to the main road from downtown and the residential and service zones are also close by. The neighbourhood of the site have alot of greens and the yangon river cools the site temperature down...



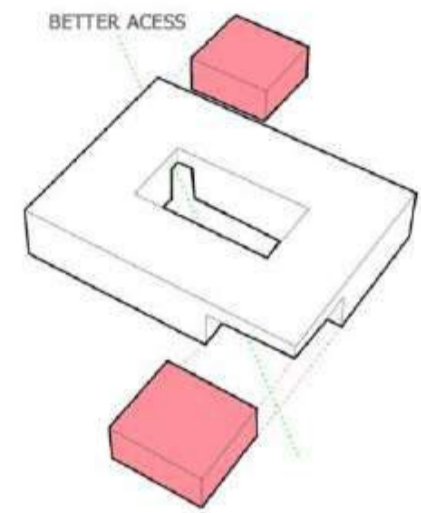
The concept of the main building



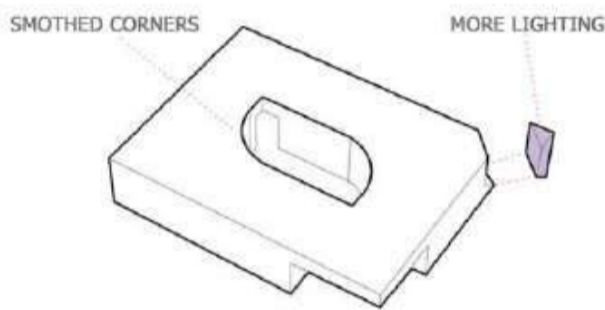
The form is started with two traditional rectangular forms parallel to each other and oriented perpendicular to the sun path. This maximize the amount of sunlight received and easier to prevent direct sunlight.



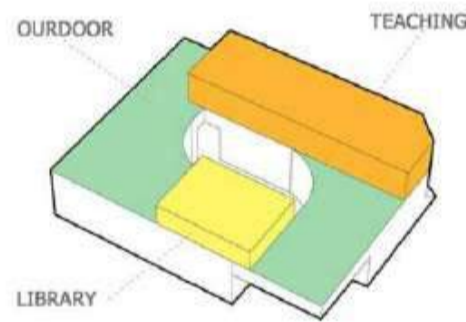
The studios are added at the north side to avoid direct sunlight exposure and the corridors are added at south side where people can have an open look into the river forming an interior plaza for people from both sides.



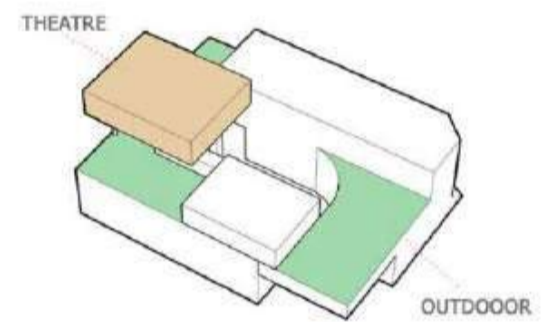
Two double volume of spaces are subtracted at the two corner of building creating a more defined entrance into the building. It create a better connection between interior courtyard and the exterior podium.



A portion of volume is subtracted at the north west side of the building, letting more light into the building. The interior corners are rounded off to reduce the stiffness of the space and to connect easier between zones.

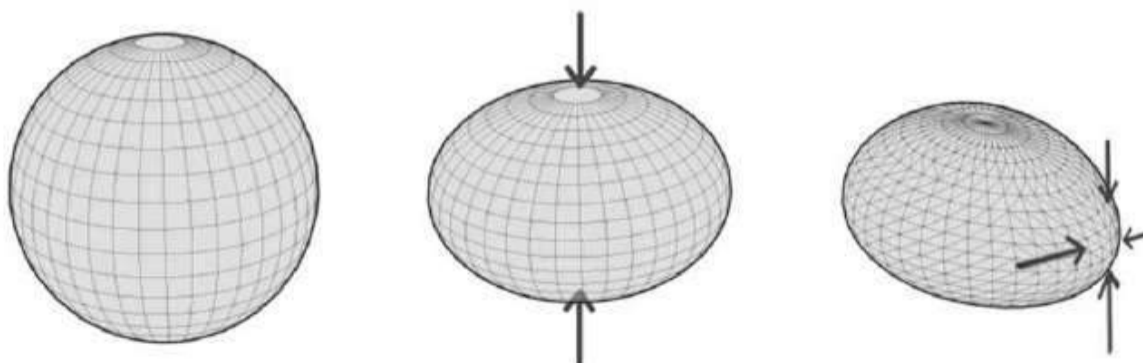


library is added at east side where the light is plenty and other teaching facilities are extended at the back raising more building height at the west side. This allows more sunlight into the back side of the building. The courtyard connects the library and teaching facilities.



The theatre is added on top of building and overhang at both sides facing the river. The height advantage of the theatre allows it to be the best viewpoints to the surrounding areas.

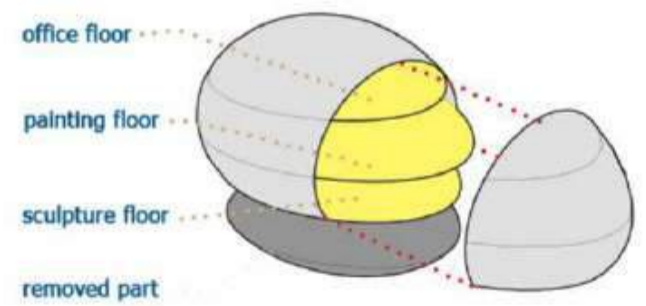
The concept of the gallery



The design is based the form of the sphere which represent free form and unstability. The high ratio between the human propotion and the size of the sphere make the form iconic.

To achieve the a better floor to ceiling ratio, the form is pressured at both top and bottom resulting in an oval shape.

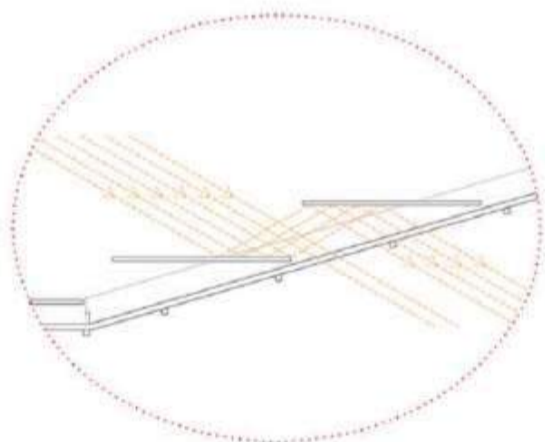
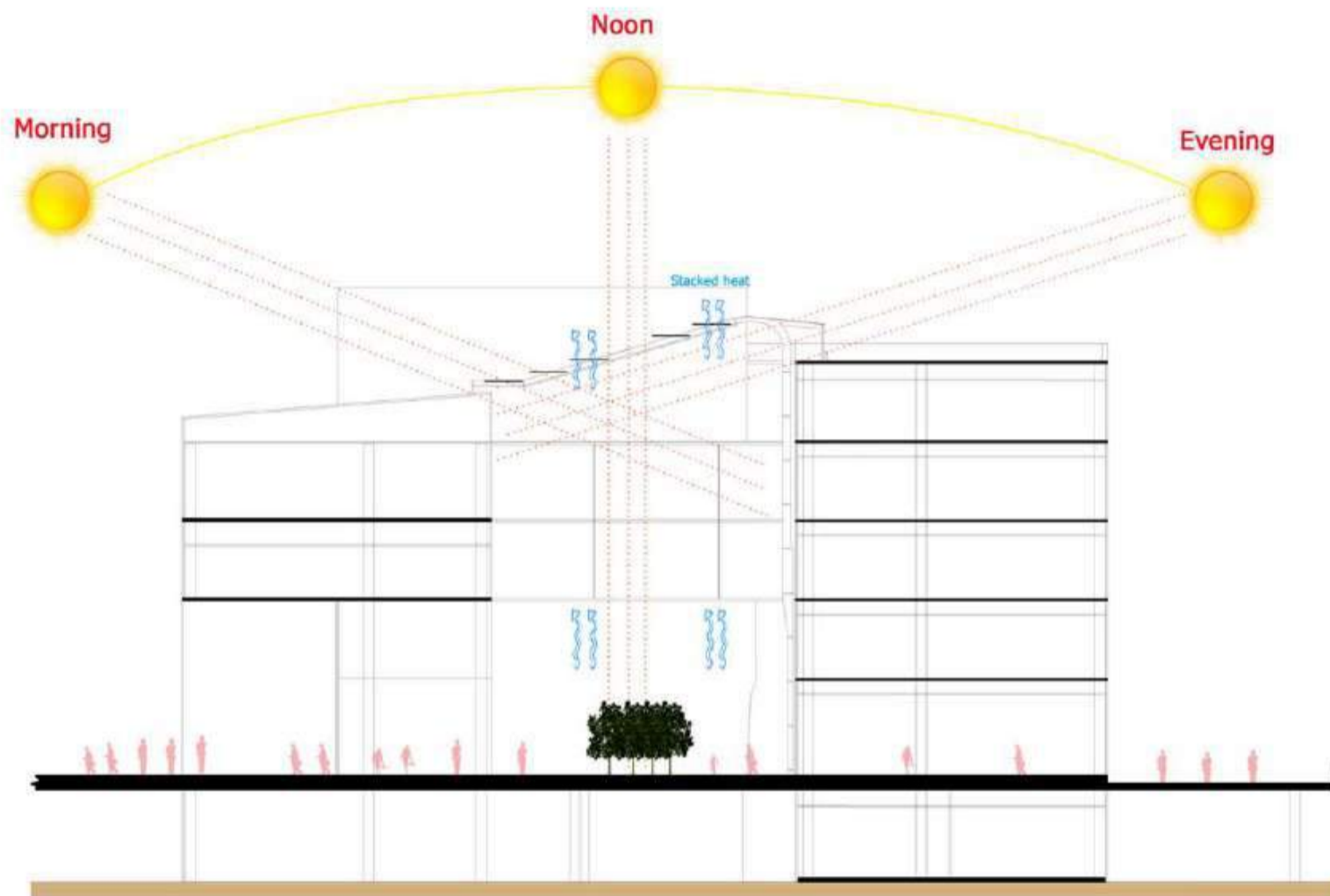
The oval shaped shell is then pressured at a certain corner from all side to deform into a more organic form.



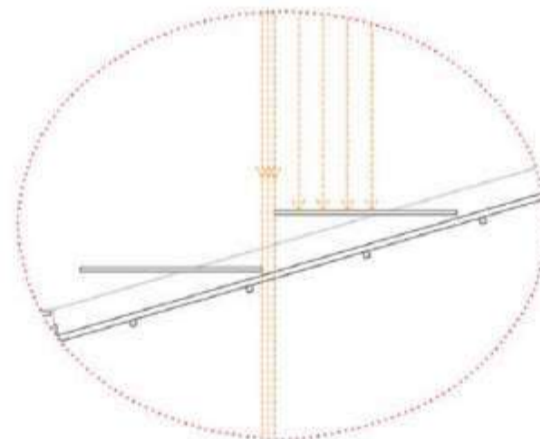
The form is divided into 4 slices horizontally and the bottom part is removed. The upper 3 floors are turned into functional floors.







Inclined sun rays during morning



Direct sun ray during mid-day

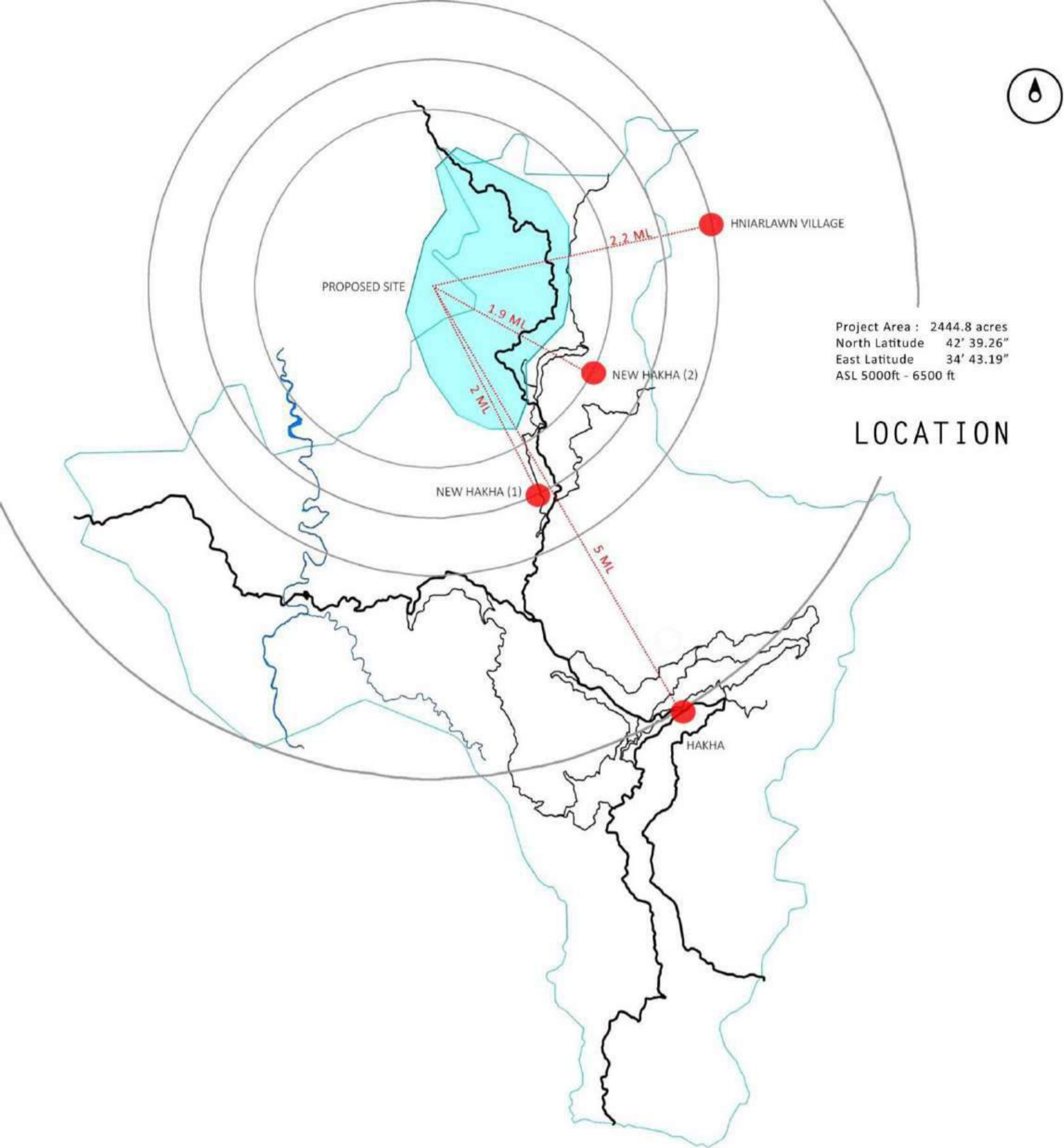
The atrium roof is designed in a way that the interior facade of the bigger building extended into the atrium and connected to the library on the other side. The top of the roof is covered by solar cells to buffer direct sunlight into the atrium. Since the roof is inclined to the east, the gaps between the solar cells allows morning sunlight into the atrium. As the sun is higher, the gap become smaller to limit high intensity sunlight.



- | | | | |
|--|--|--|---|
|  THE PARKING LOT |  THE LIBRARY |  THE CLASSROOMS |  THE GREEN ROOF |
|  LOBBY AND RECEPTION |  THE THEATRE |  THE PUBLIC PLACES |  THE SOLAR ROOF |
|  THE OFFICES |  THE CAFETERIA |  THE M&E ROOMS | |

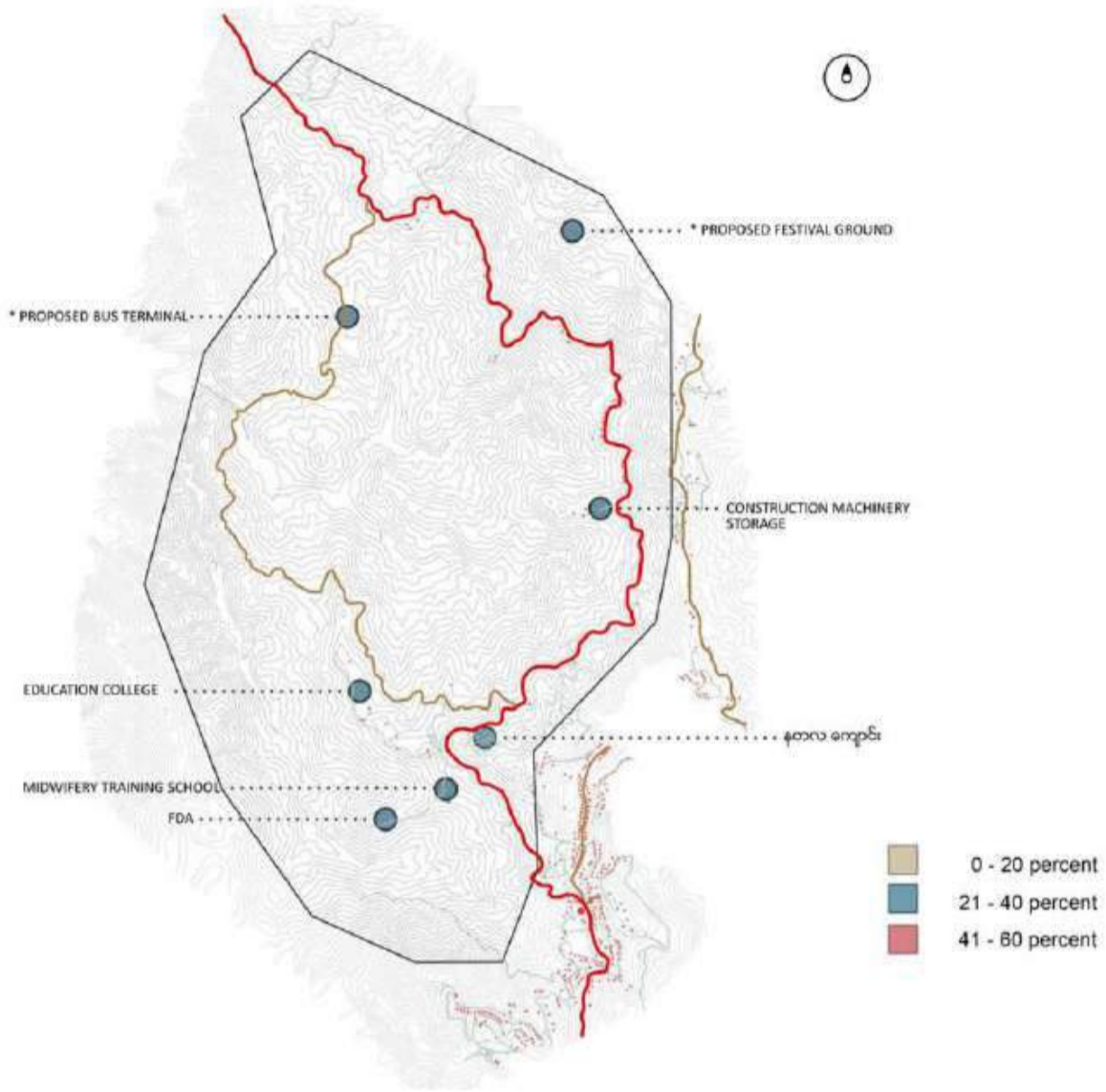






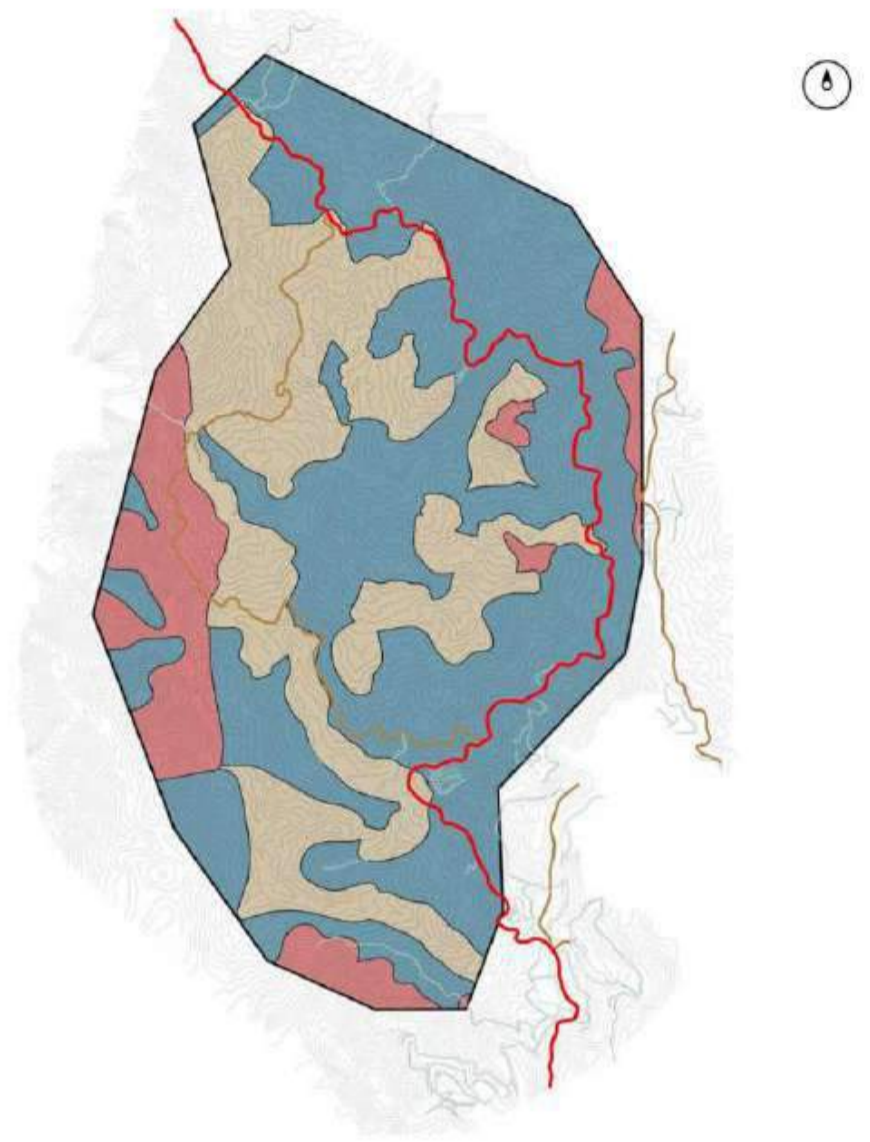
THE CLOUD CITY

The very west corner of Myanmar is covered by spectacular hills along the border of India, where a lot of Chin traditional heritage and their century-long historical memories and the city is by the unfortunate landslide in 2015. After the tragedy, the Chin government attempted to reshape the city into a more of a culturally interactive tourist city to boost their economy and their ways of living ...

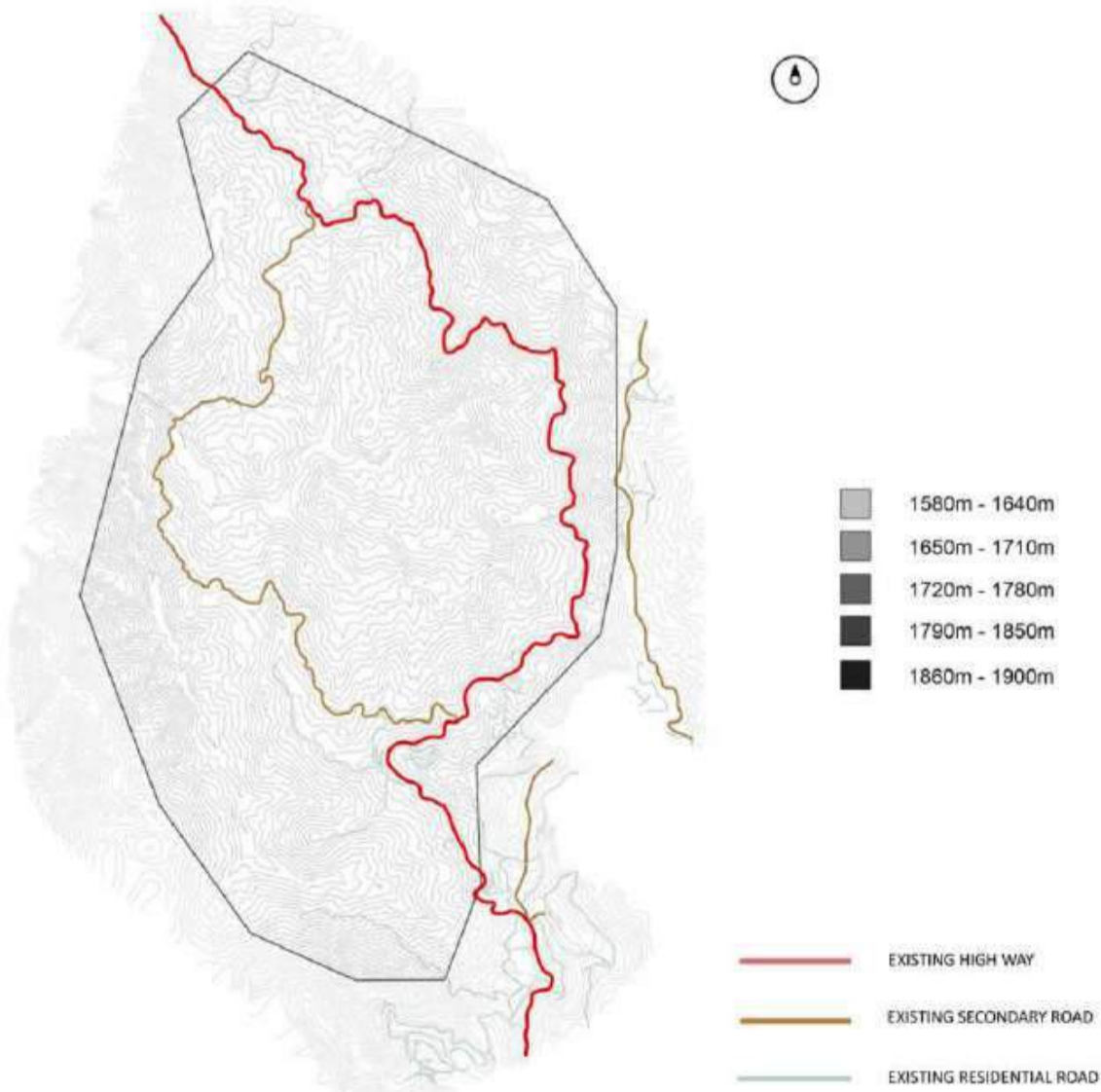


THE AREAS ARE PROPOSED BY THE CHIN GOVERNMENT ONLY

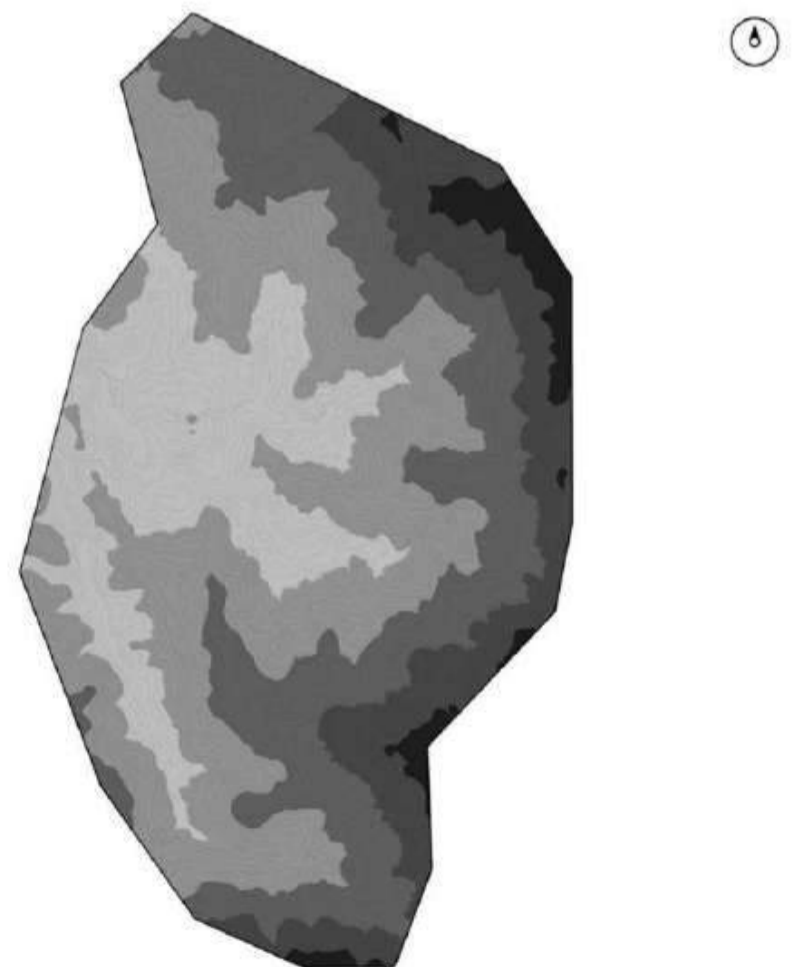
EXISTING SETTLEMENTS



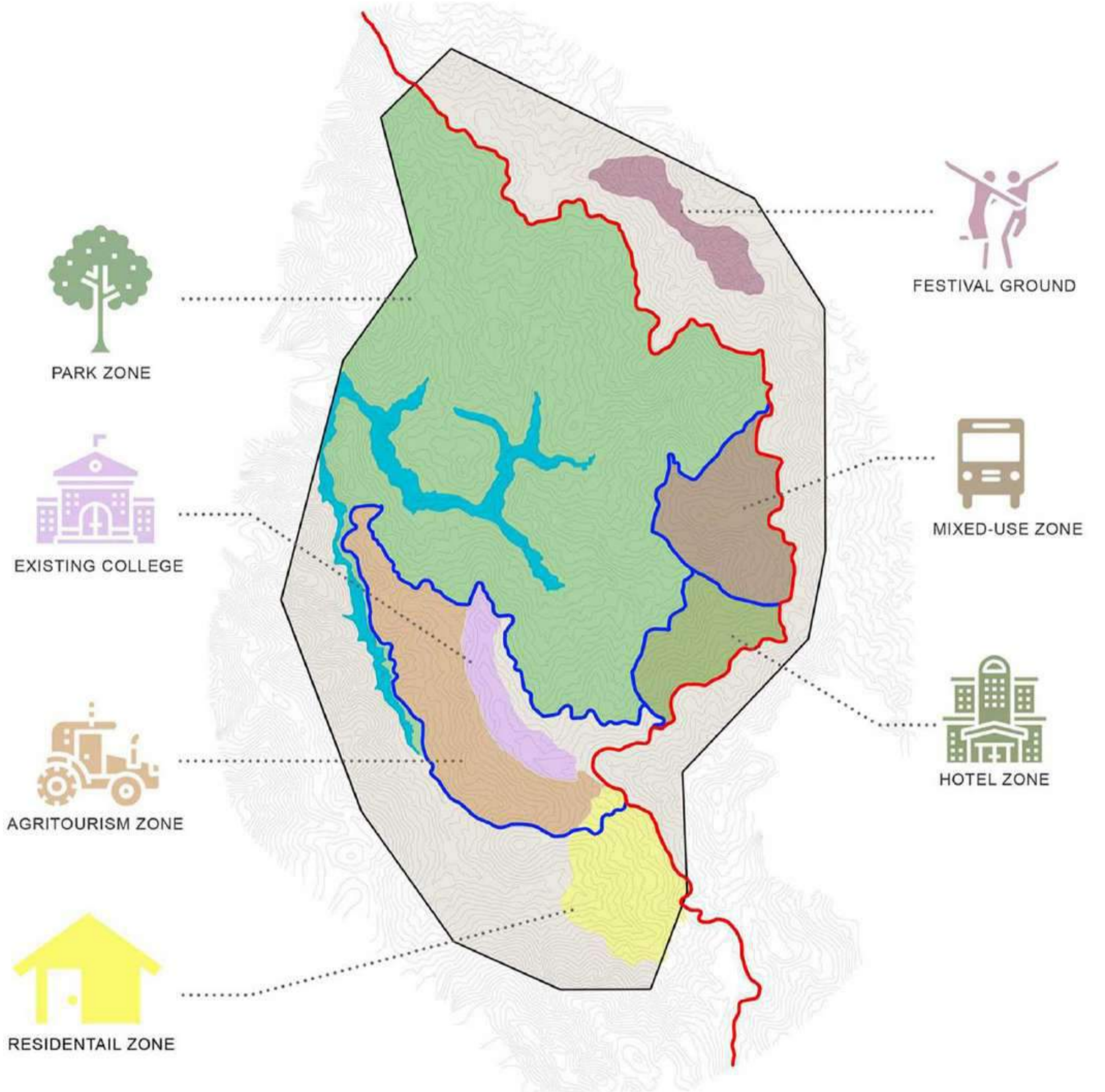
SLOPE PERCENTAGE



EXISTING ROADS



ELEVATION STUDY



-  Existing Main Road
-  Proposed Primary Road
-  Proposed Secondary Road
-  Proposed Connector Road

PROPOSED LAND-USE ZONING PLAN



- Festival Ground (44 Acre)
- Event Space (20 Acre)
- Admin Area (45 Acre)
- Playground (20 Acre)
- Park Area (600 Acre)
- Petting Zoo (18 Acre)
- Botanical Garden (136 Acre)
- Camping Ground (50 Acre)
- Cultural Village (120 Acre)

PARK ZONE



- Residential Area (393 Plot)
- School (3 Acre)
- Hospital (2.2 Acre)
- Market (1.5 Acre)
- Existing Settlements

RESIDENTIAL ZONE



- Terrace Farming (60 Acre)
- Crops Farming (40 Acre)
- Farm Stay (10 Acre)
- Admin Area (10 Acre)
- Training Center (4 Acre)

ARGRIOURISM ZONE



- Shop House (166 nos)
- Bus Terminal (33 Acre)
- Pocket Park (2 Acre)

MIXED-USE ZONE



PARK



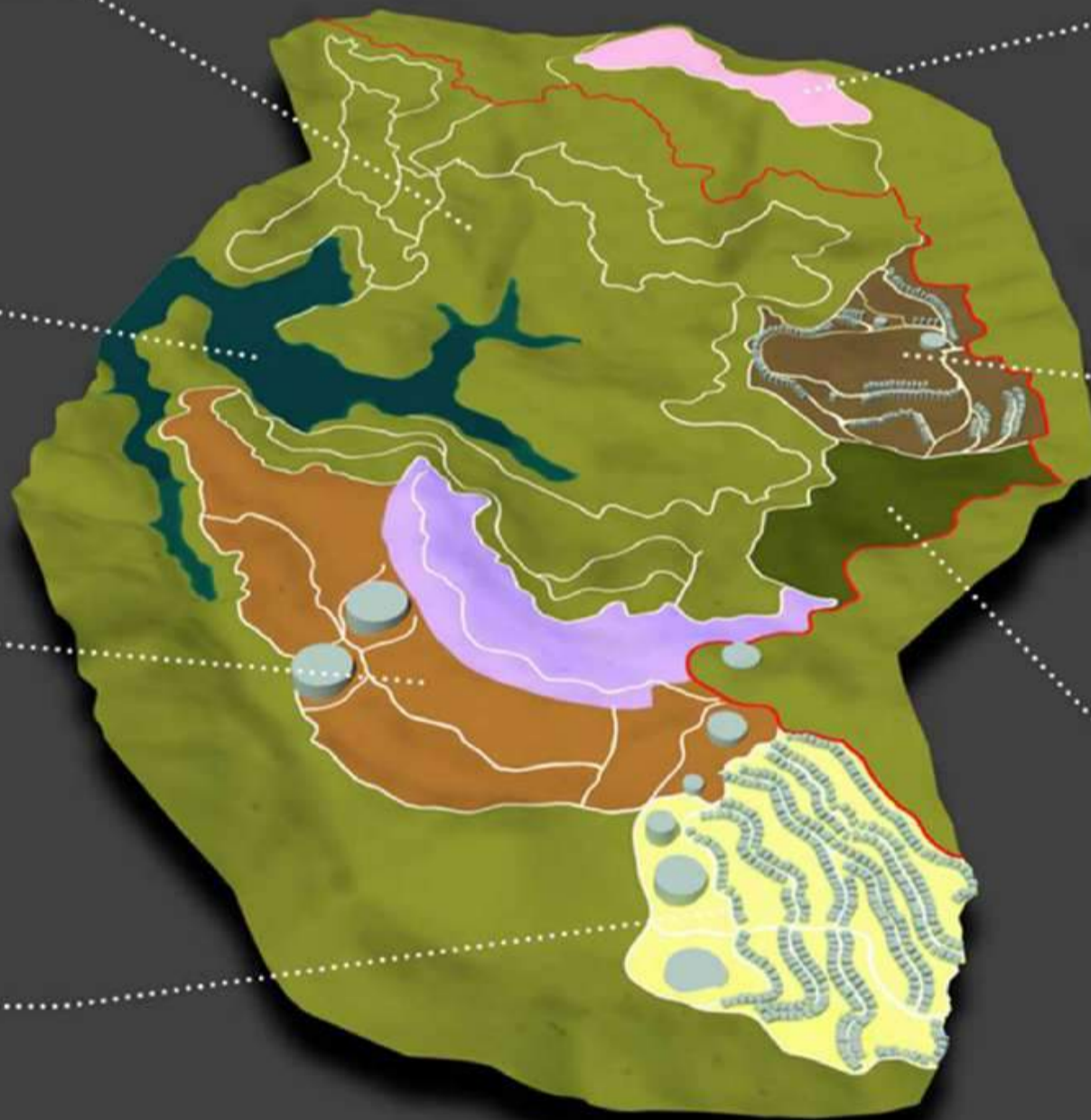
LAKE



FARMLANDS



RESIDENTAIL



FESTIVAL GROUND



MIXED-USE



HOTELS

PROPOSED 3D MODEL

PROJECTS WITH AUIS ARCHITECTS





NATURAL WETHEBY SUN LIGHT

A PANDORIC WITH

ENTRY AND OPEN PARKING

GREEN SPACE FOR TRANQUILITY



