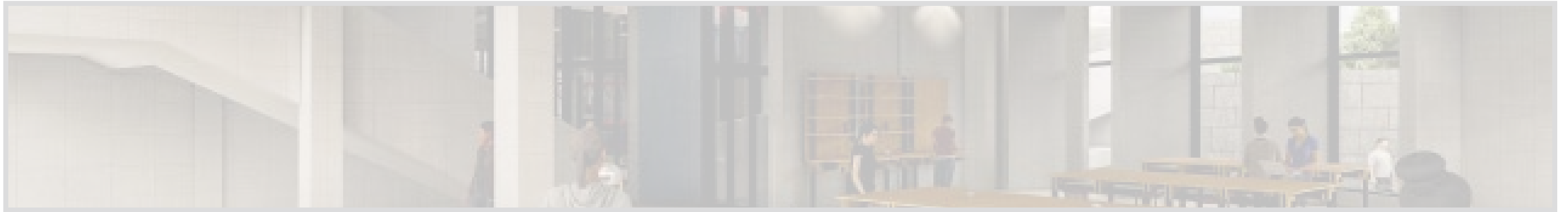
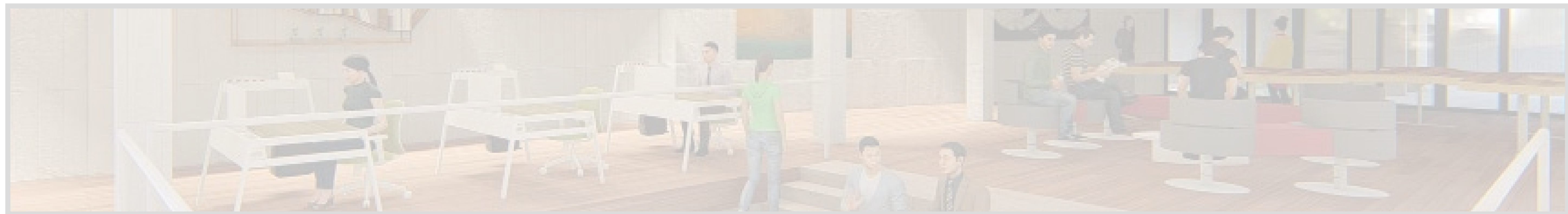


COLLABORATION HUB



FOR POST SECONDARY STUDENTS TO SHAPE THEIR IDEAS, KNOWLEDGE AND SKILLS INTO BUSINESS VENTURES



Ahsan Raza



“**Youth** have the power to transform a country's future. They could be the driving engines of development. Any country having maximum youth population is a great potential for the country.”

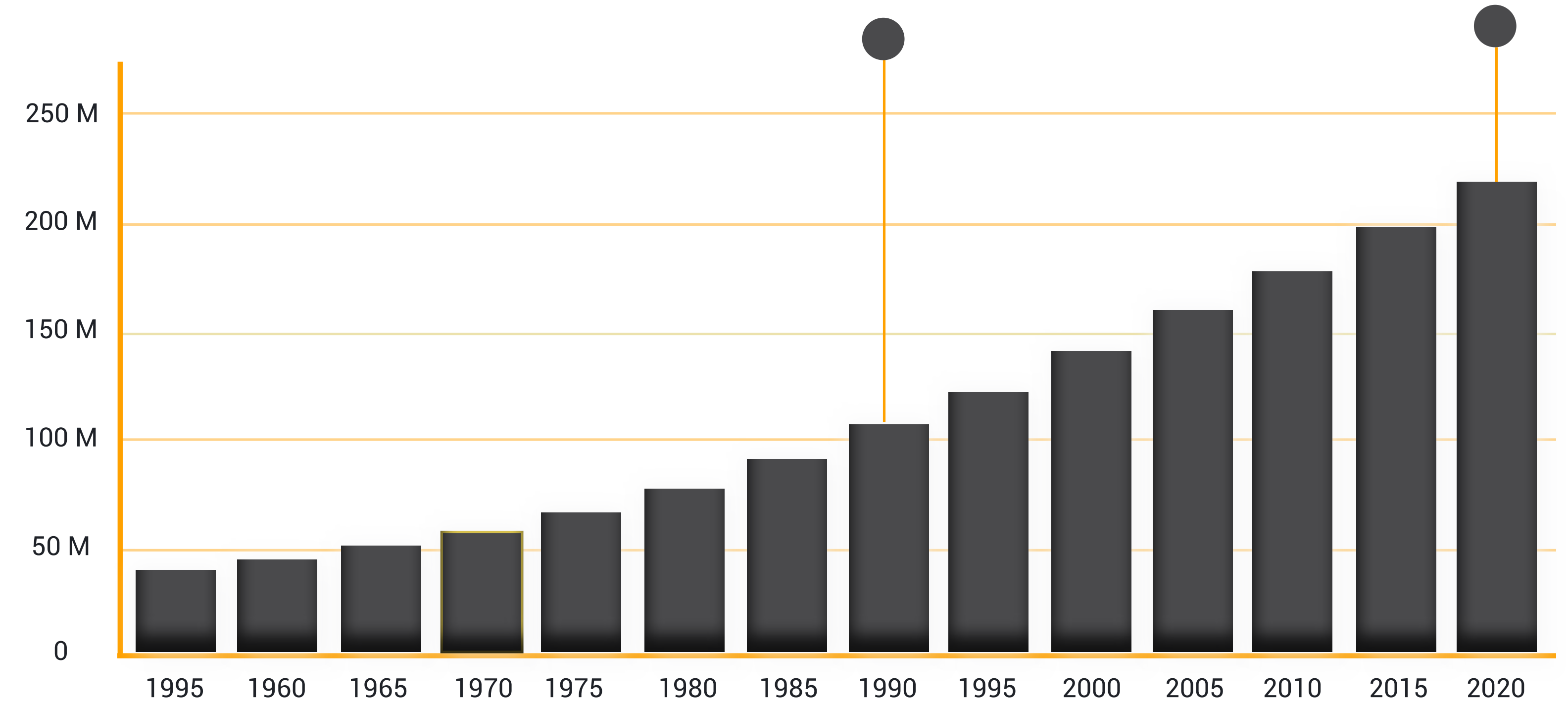
(Shakeel Ahmed, Assistant Country Director, UNDP Pakistan)

BACKGROUND

PAKISTAN POPULATION

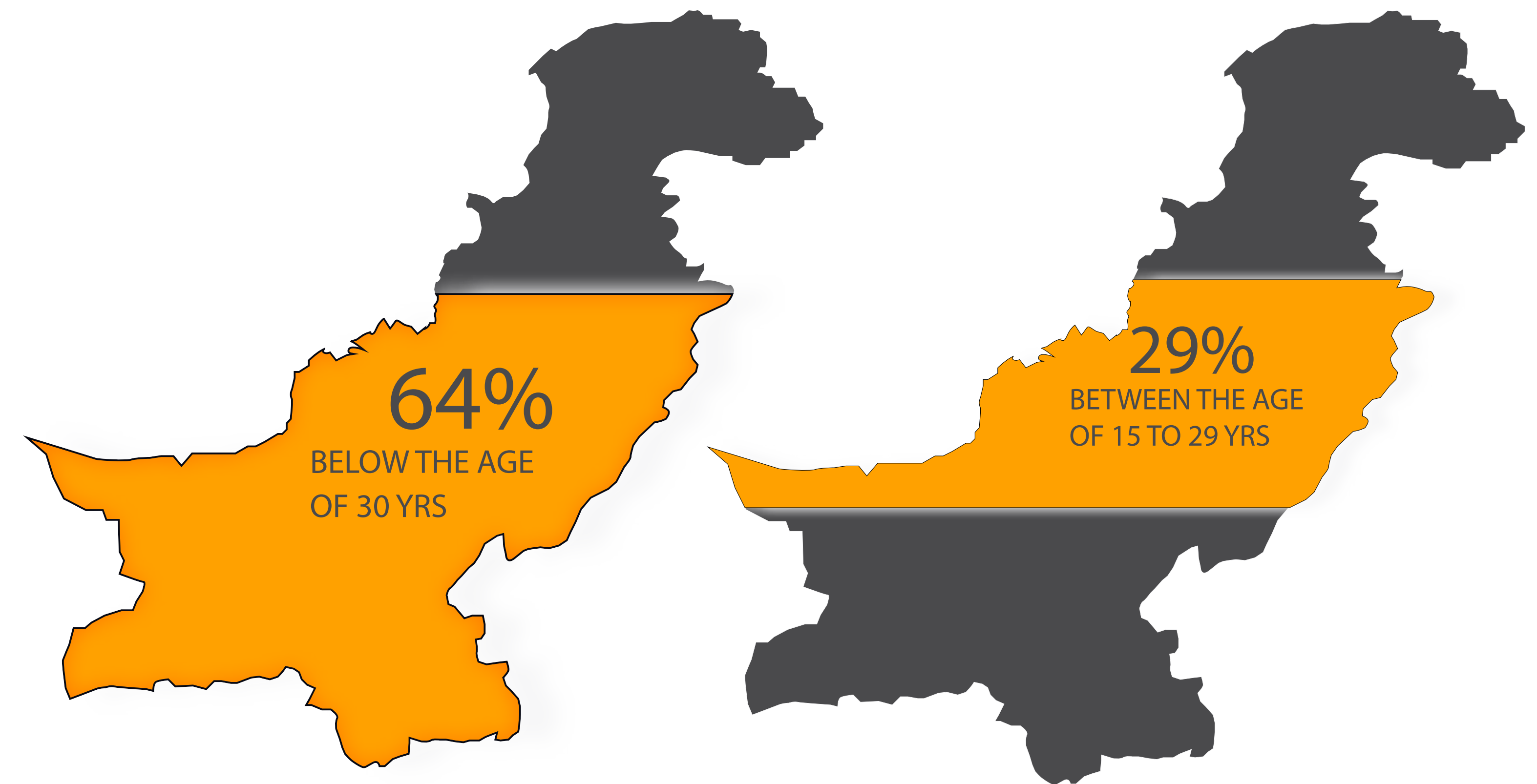
Pakistan's current population is **212.1 million (21.2 Cr)** which has been increased from 100 million (10 Cr, 1990).

One of Pakistan's greatest strengths lies in its youth which happens to be 64%, making Pakistan a **young country**.



Population Growth

Pakistan currently has the largest percentage of **young people** in its history.



BACKGROUND

PAKSITAN'S LITERACY RATE

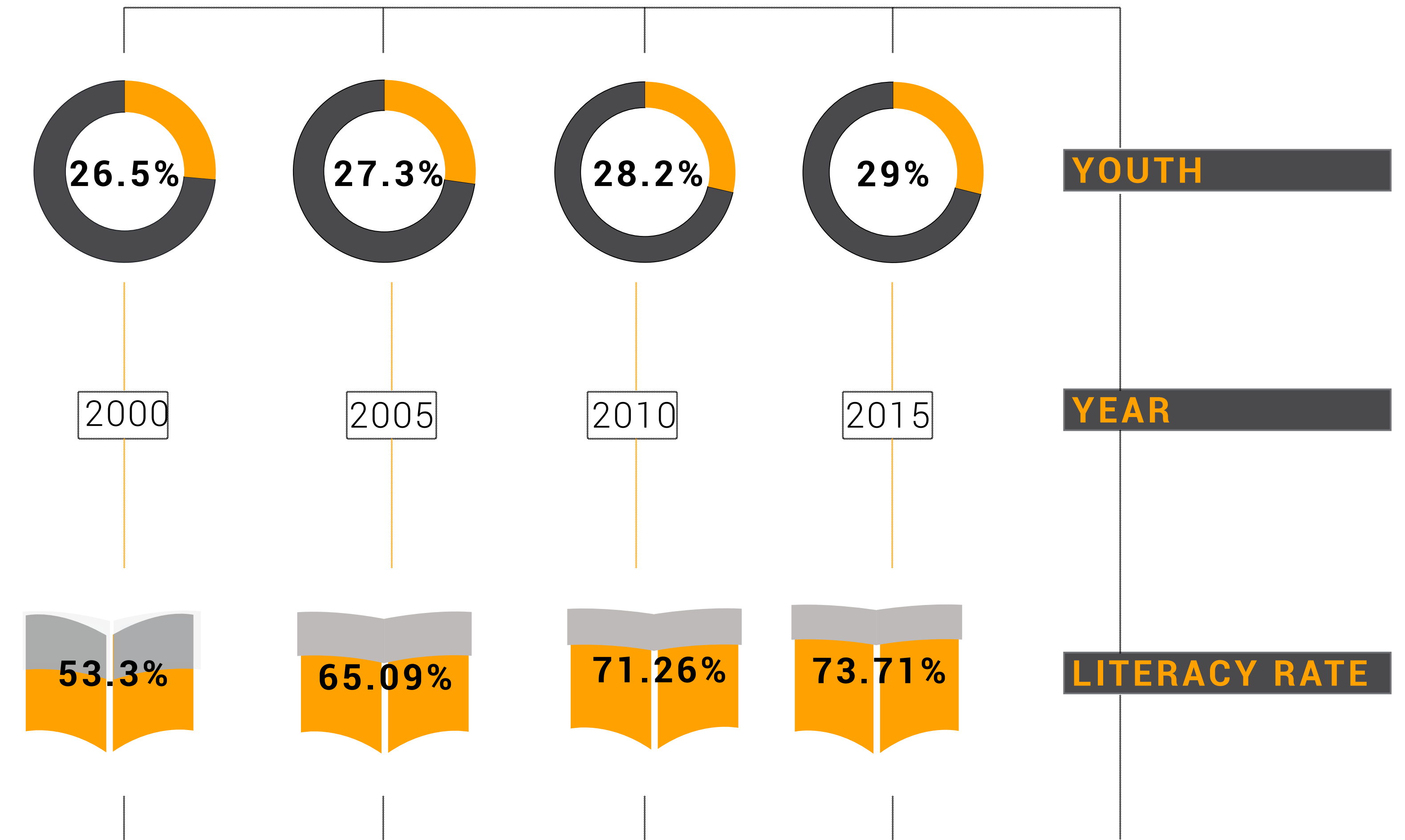
Along with the growth in the young population of Pakistan there has been a rapid increase in the its **literacy** rate too.

By literacy rate means, the ability to read and write the basic things and to understand the basic instructions

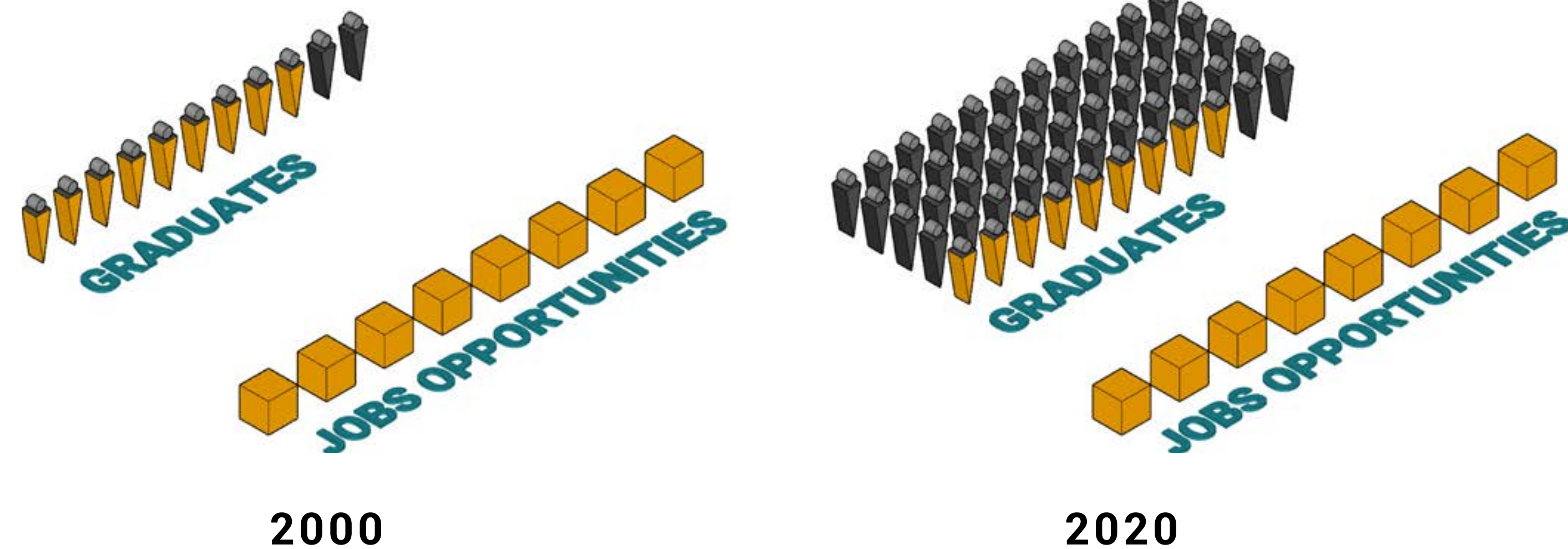
Issue

Pakistan produces about **455,000** graduates every year.

Although the young population of Pakistan is increasing, the employment opportunities are stagnant.



COMPARISON



There are currently **500,000** unemployed graduates



BACKGROUND

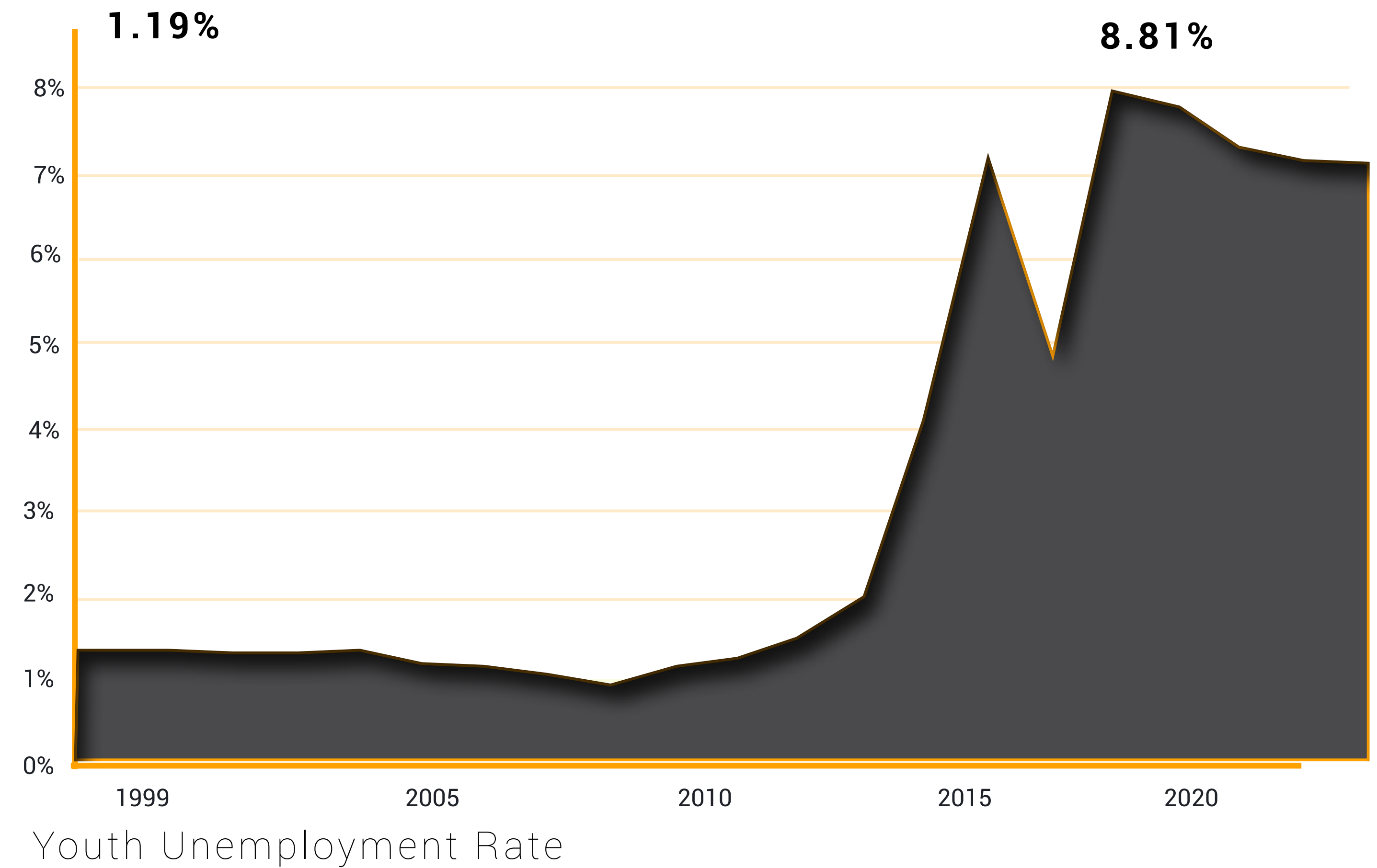
IMPACT

The annual increase in youth unemployment is estimated at **1.5 million** and about **4 million** people are unemployed. This number is expected to rise to **8.6 million by 2021**.

In 1999 the unemployment rate of youth was 1.19%, which has now in 2020 raised to 8.81%.

CAUSES OF UNEMPLOYMENT

- Lack of sufficient education
- **Proper training/skills**
- Lack of Awareness
- Skills Mismatching
- Over-Population
- Nepotism
- High Age Retirement
- **Limited Resources**



BACKGROUND

Students should be able to work not after four-five years of their undergrad but right when they are in the first semester.

“If the youth are not handled properly and not provided with meaningful engagement in society, it will be a disaster for the country”

Japanese Ambassador Takashi Hurai on global youth.

BACKGROUND

SOLUTION

Isn't it good to employ yourself in your own business/company by starting up with new ideas using yours and other's skills with **Collaboration** and generate opportunity for other people too?

OBJECTIVE

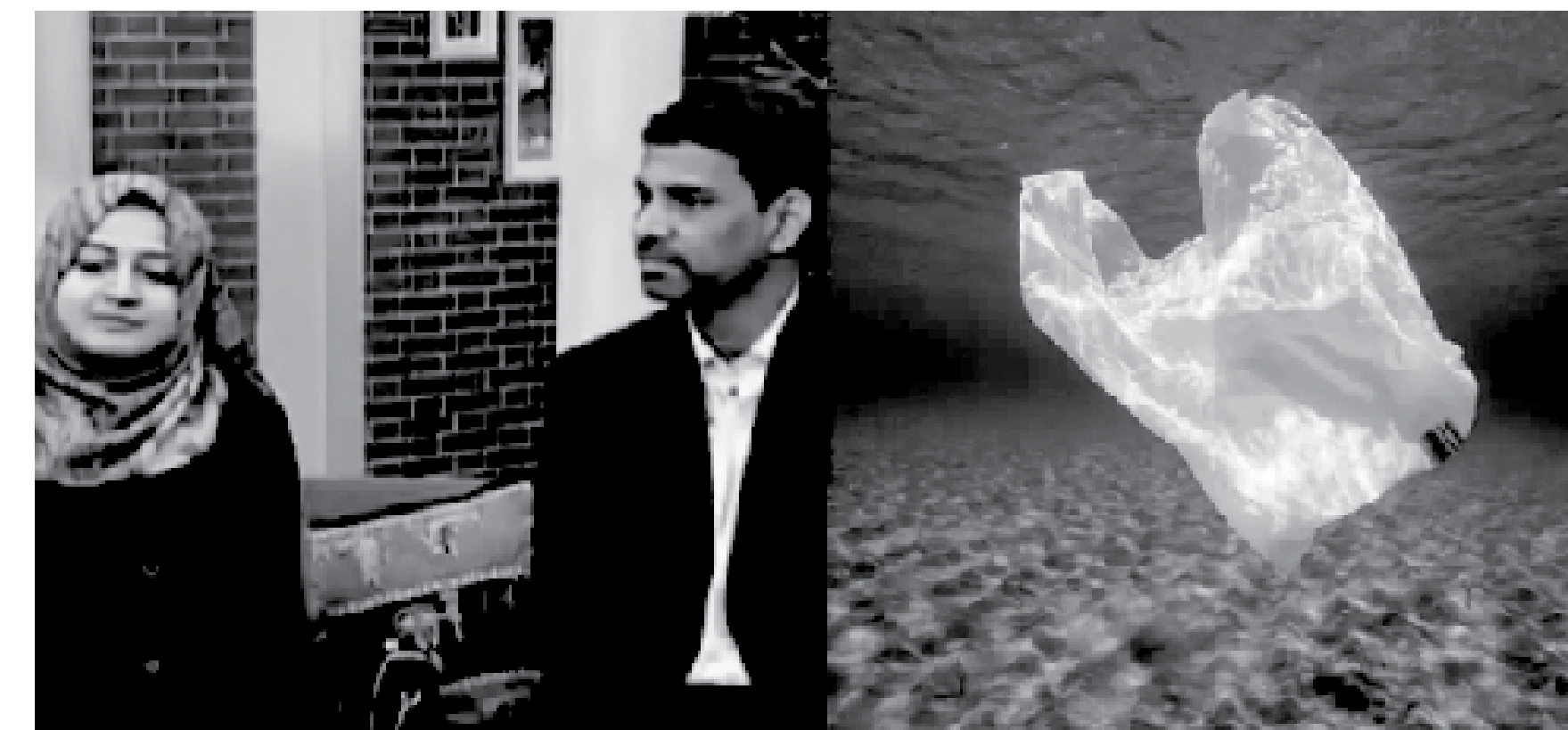
A space that can provide:

- Facilities to test new ideas along with the **RESOURCES**.
- An environment to **EXCHANGE** knowledge, experience and skills.
- Space with like minded people to work in **TEAMS**.
- Opportunity to generate business ideas with the **COLLABORATION** of researchers, entrepreneurs and organizations.
- People with variety of **TALENTS**.



Shanza Munir
IT student
University of Faislabad
14th Feb, 2020.

A Tech Student Who Invented **'Smart-shoes'** For The Blind!



Anjum Feroz & Instructor
Foods & Sciences
University of Karachi
27th OCT,2019.

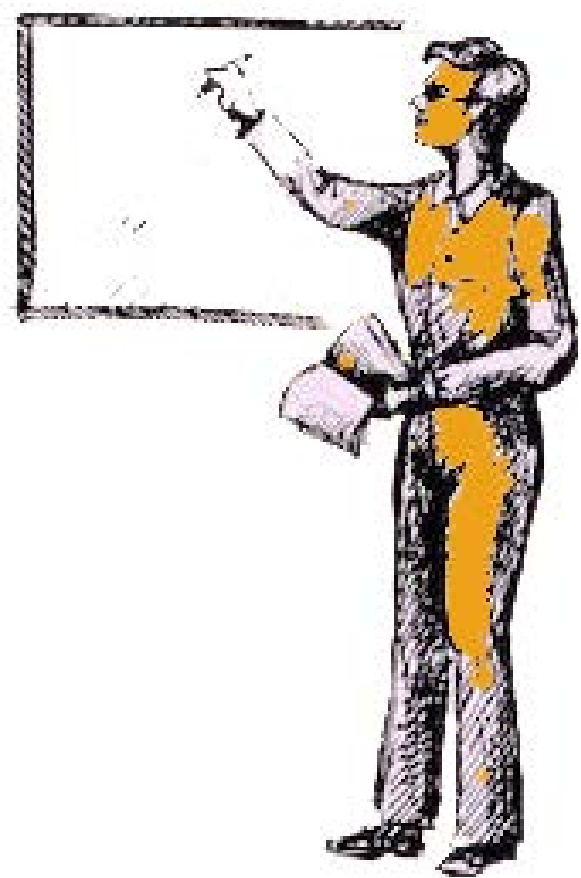
Karachi University Student Invented **Plastic Bags** That Can Be Eaten!

CONCLUSION

CONCEPT

The basic idea is to design an encouraging and interactive space that can enhance **collaboration and networking** in order to generate opportunities by using the potential of the skills one poses.

Crafting
Drawing
Mechanics
Electronics
Repairing
Renovating
B logging
App Design
Cooking
Sewing
Photography
Software
Designing
Beautification
Painting



Academic Skills
Writing
Communication
Practical knowledge
Interpreting
Tutoring
Test Preparation
instructor
Documentation
Research
Presentation



CASE STUDY

EMINENCE SCHOOL EDHUB



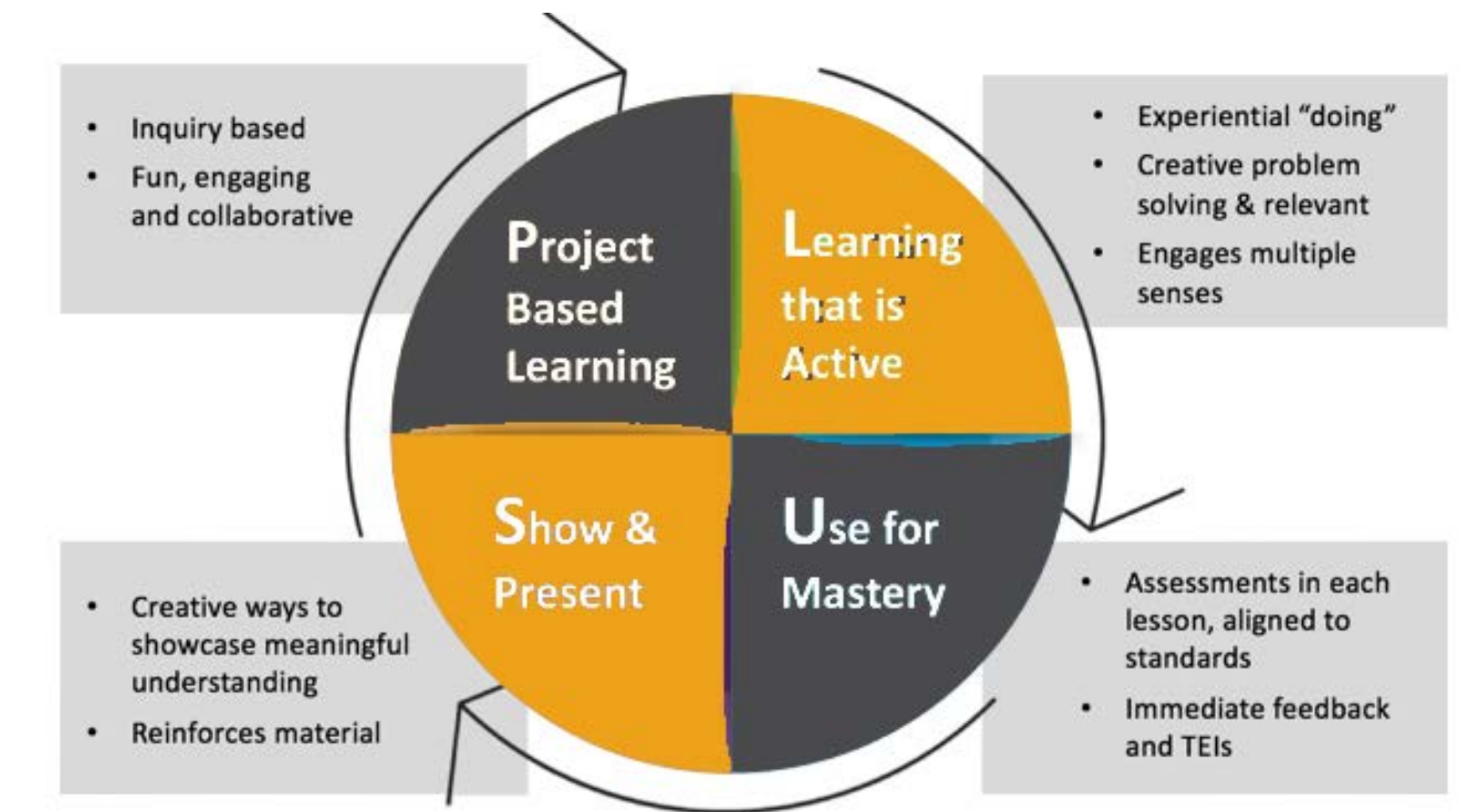
by **Kremer Architects**
Eminence, Kentucky, U.S.
EXPERIMENTAL DAVINCI HYBRID ULTRA BIBLTHECA
(EDHUB)

1 PROGRAM ANALYSIS

An innovative 30,000-square-foot facility complete with 8 maker-spaces and learning labs.

- Bio Lab
- Robotics Lab
- TV broad cast lab
- Library
- Power tools lab
- Communal space
- Workspaces

PBL (PROJECT BASED LEARNING)



2 SPATIAL ANALYSIS



- TO MAKE THE SPACE FULL OF LEARNING EXPERIENCE

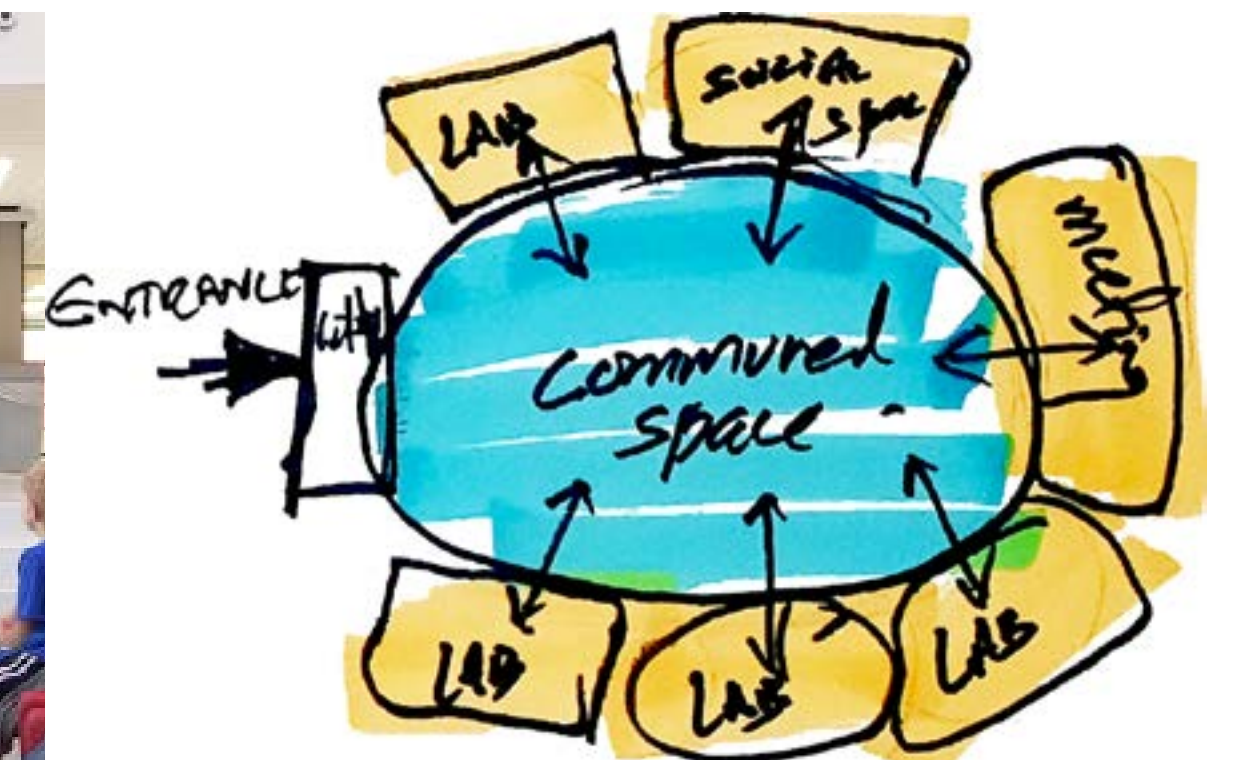


- TO CATCH MAXIMUM DAY LIGHT AND TO PROVIDE VIEWS



WALL AS SCREEN

- FLEXIBLE SPACE



INTERLOCKING SPACE

- CONNECTED SPACES

CASE STUDY

MYHAL CENTER FOR ENGINEERING , INNOVATION AND ENTREPRENEURSHIP



Feilden Clegg Bradley Studios, Montgomery Sisam Architects
Area : 3.7 Acre
MCEIE AS A CROSS DISCIPLINARY RESEARCH TEACHING HUB
UNIVERSITY OF TORONTO, TORONTO



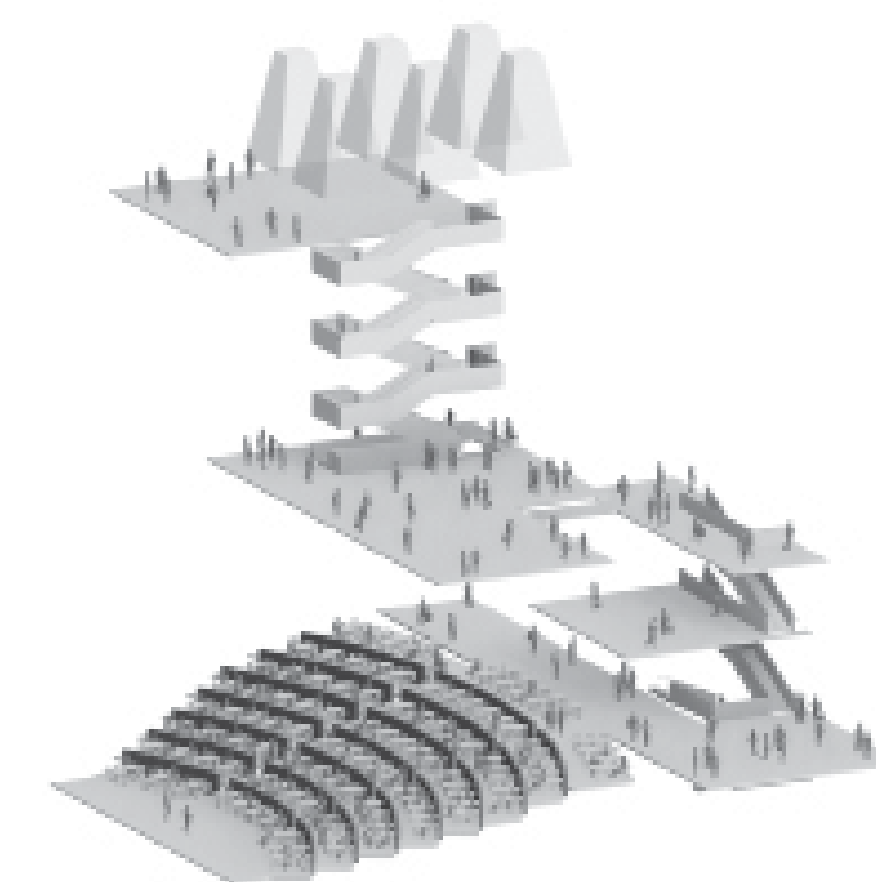
1 PROGRAM ANALYSIS

Goal: Dynamic, flexible environments will break down artificial barriers between people, foster collaboration, encourage active learning and accelerate innovation.

- 500 seat collaborative lecture,
- Workshop and Lab spaces,
- TEAL rooms, (Teaching Excellence in Adult Literacy)
- Innovation incubator suites allied to industry presence rooms,
- Versatile design studios,
- The Arena
- Communal facilities

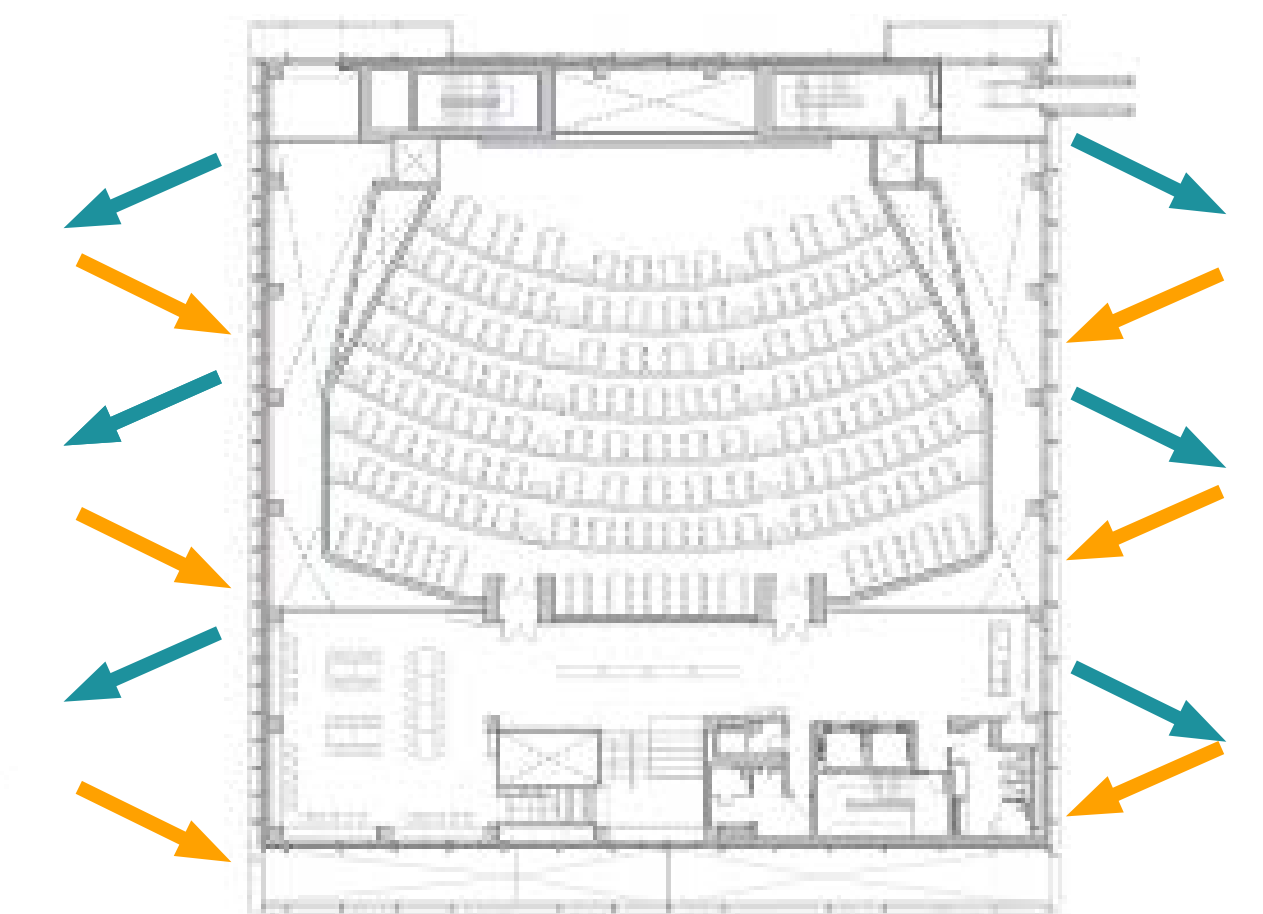
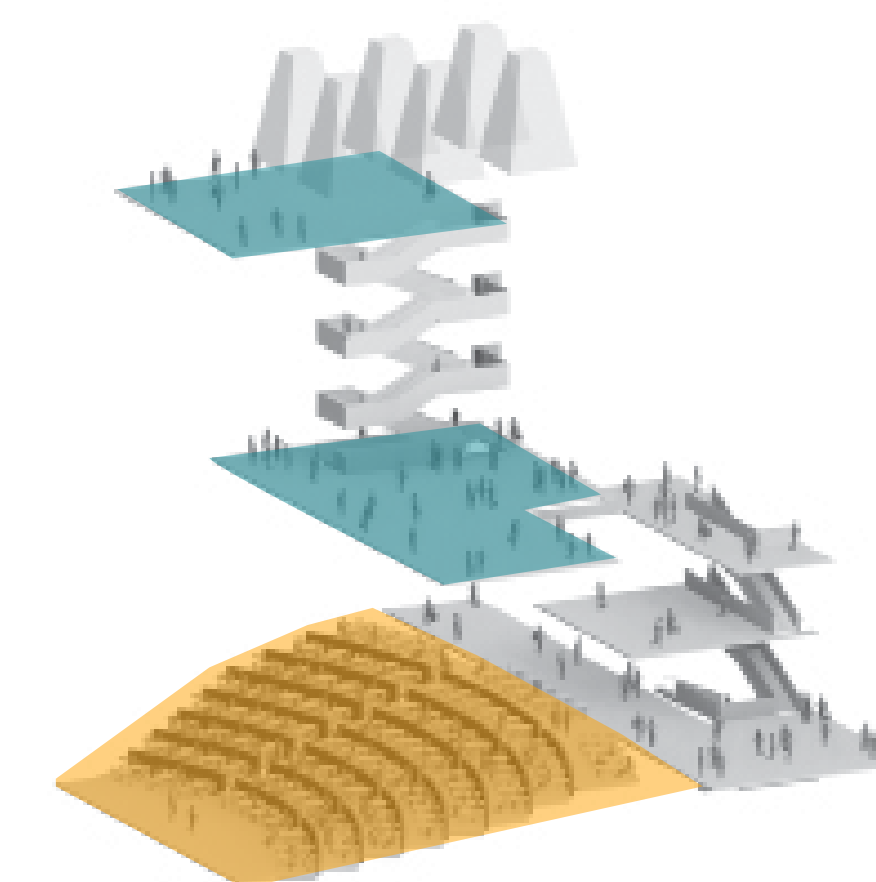


2 SPATIAL ANALYSIS



CHANGE OF LEVELS

- DIFFERENT EXPERIENCES AT DIFFERENT LEVELS



GLASS WINDOWS

- VISUAL CONNECTION

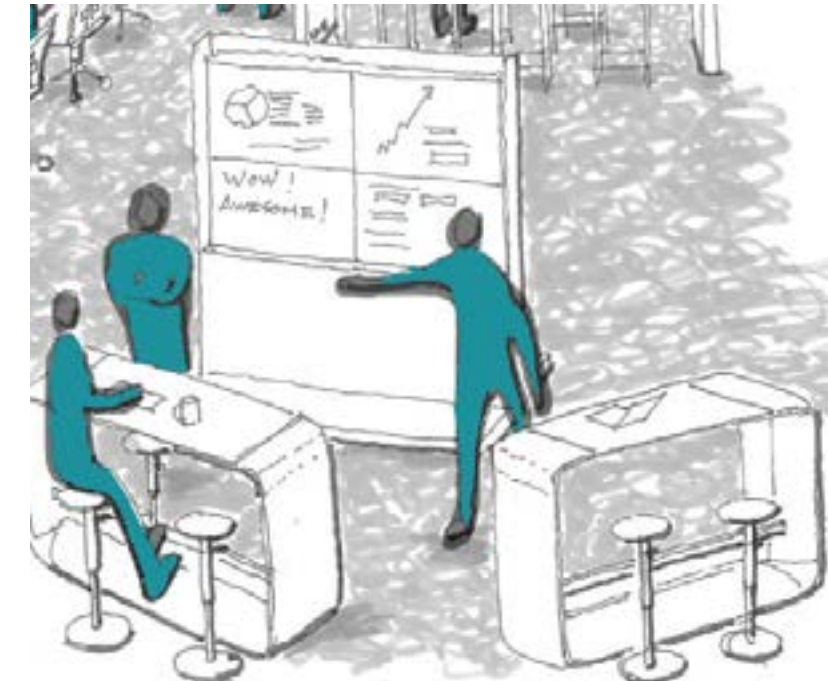
CONCLUSION

FUNCTIONAL CHARACTERISTICS OF THE PROJECT

- 1 • TO LEARN AND TEACH: SEMI-PRIVATE
Makerspace + Studios (hard/soft skills)



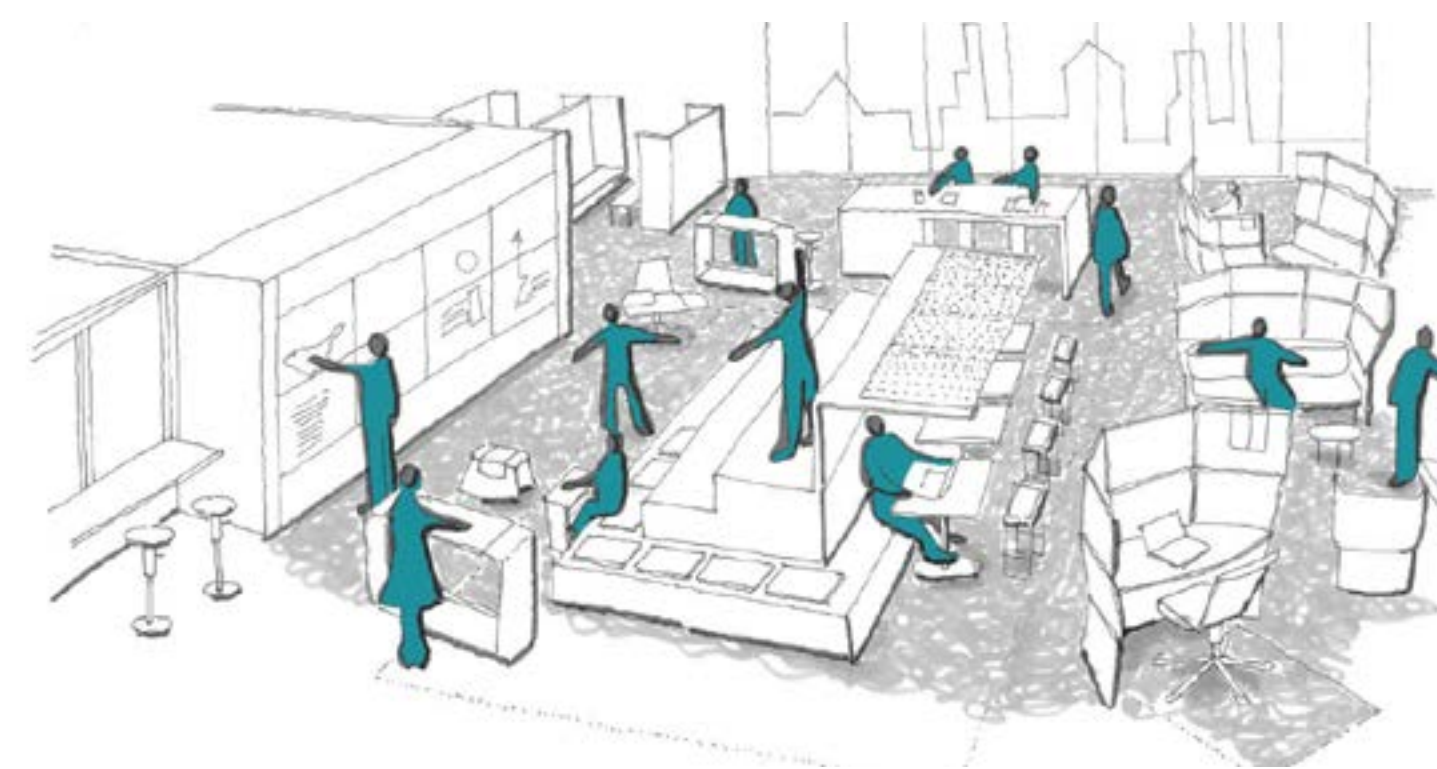
- 2 • FOR GUIDANCE AND COUNCELLING: PRIVATE
Lecture/Training rooms



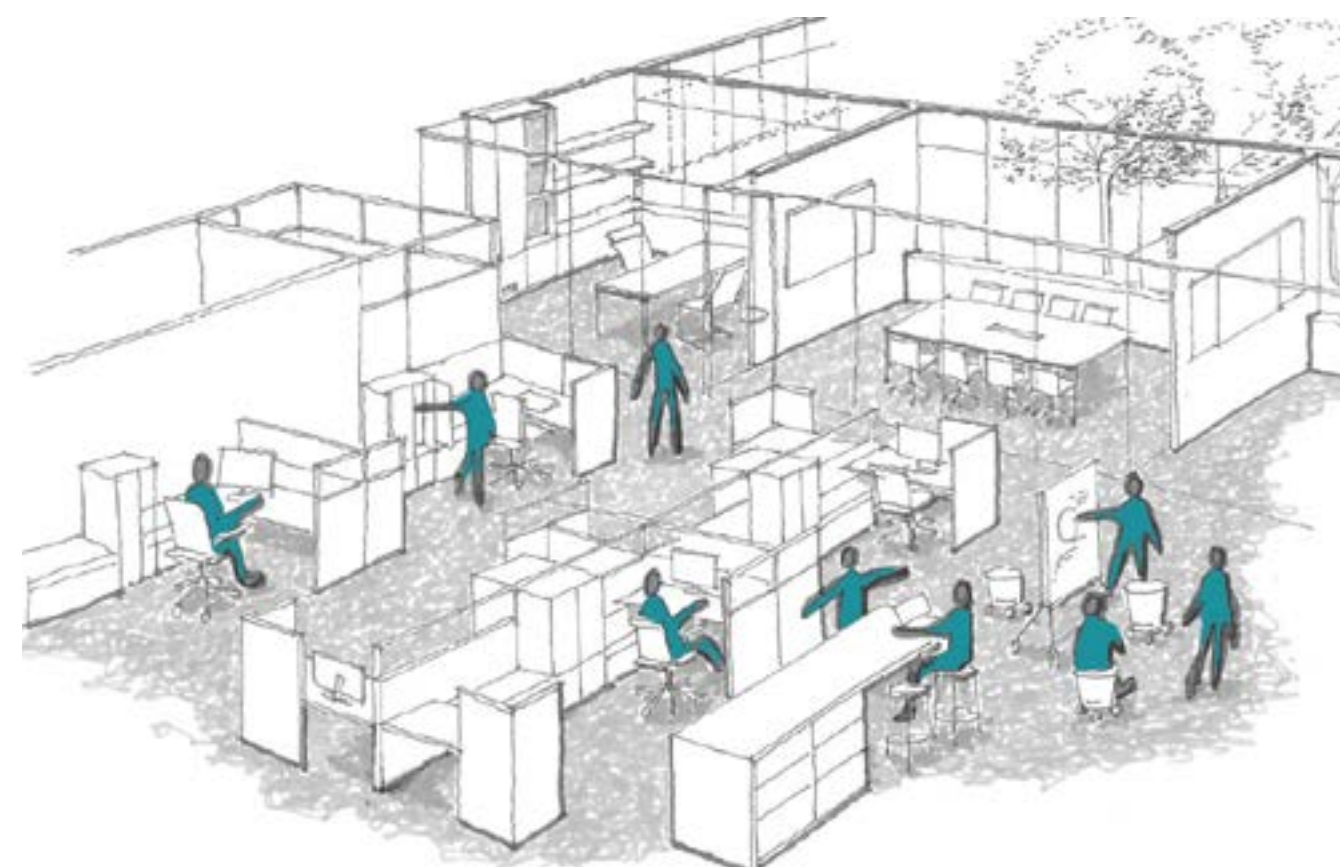
- 3 • TO EXHIBIT THE WORK: PUBLIC
Gallery Space



- 4 • FOR GATHERING AND RECREATION: SEMI-PUBLIC
Communal Space



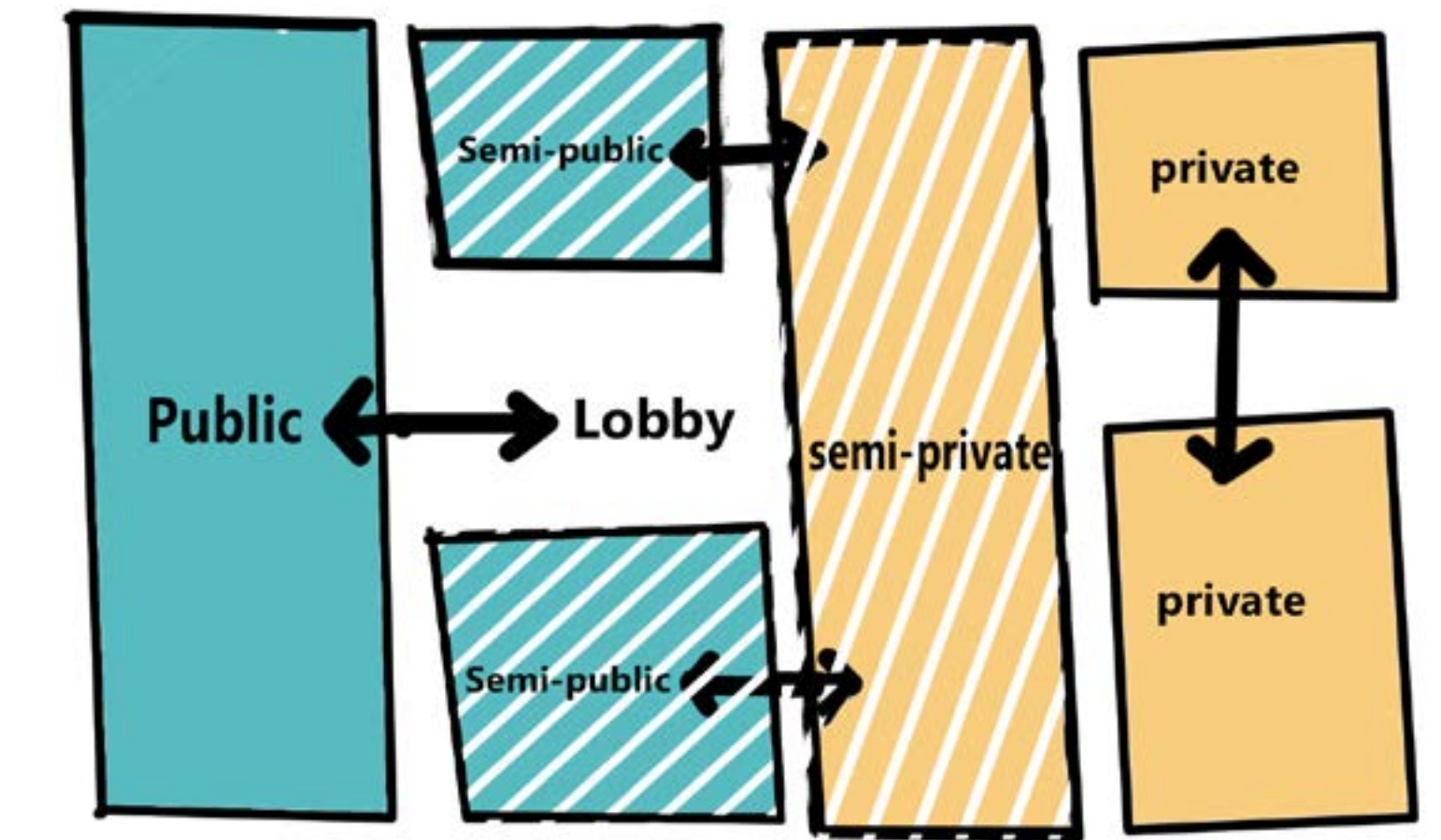
- 5 • FOR WORKING IN GROUP: PRIVATE
Co-working Space



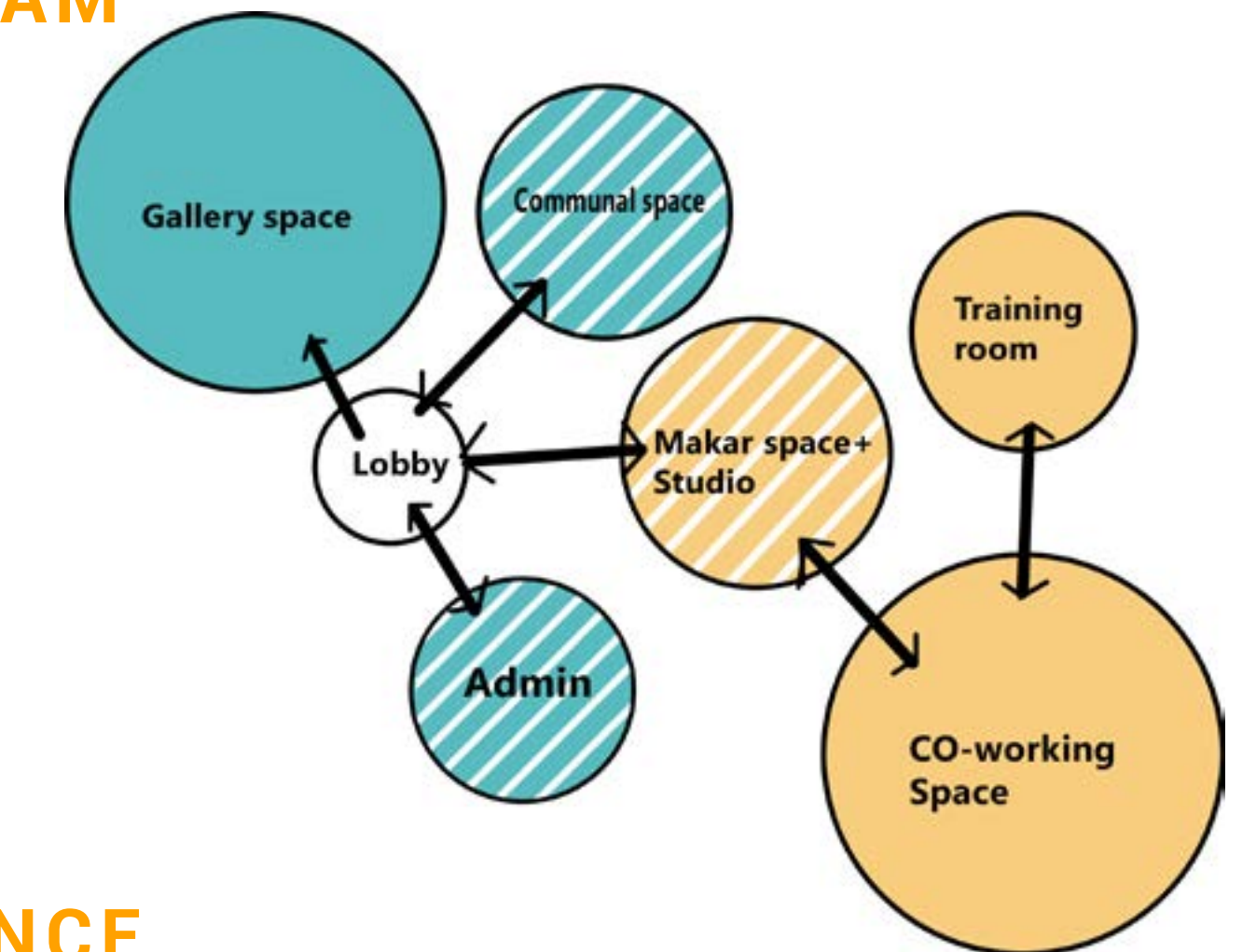
- 6 • FOR ADMINISTRATIVE WORK: SEMI-PUBLIC
Admin



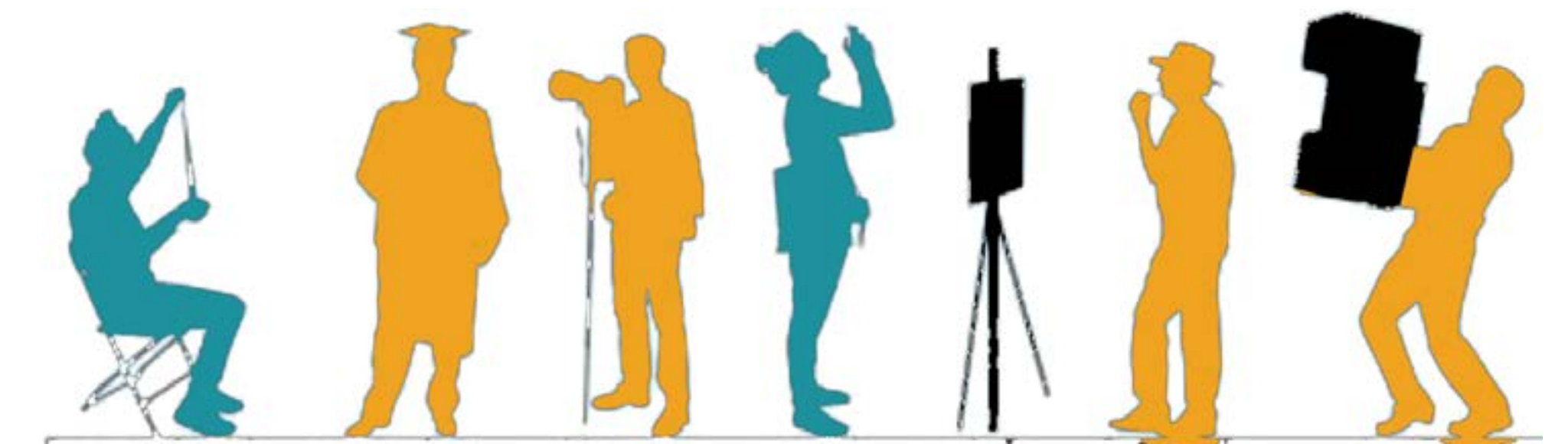
RELATIONSHIP DIAGRAM



BUBBLE DIAGRAM



TARGET AUDIENCE Post Secondary Students



SITE LOCATION

SITE SELECTION CRITERIA

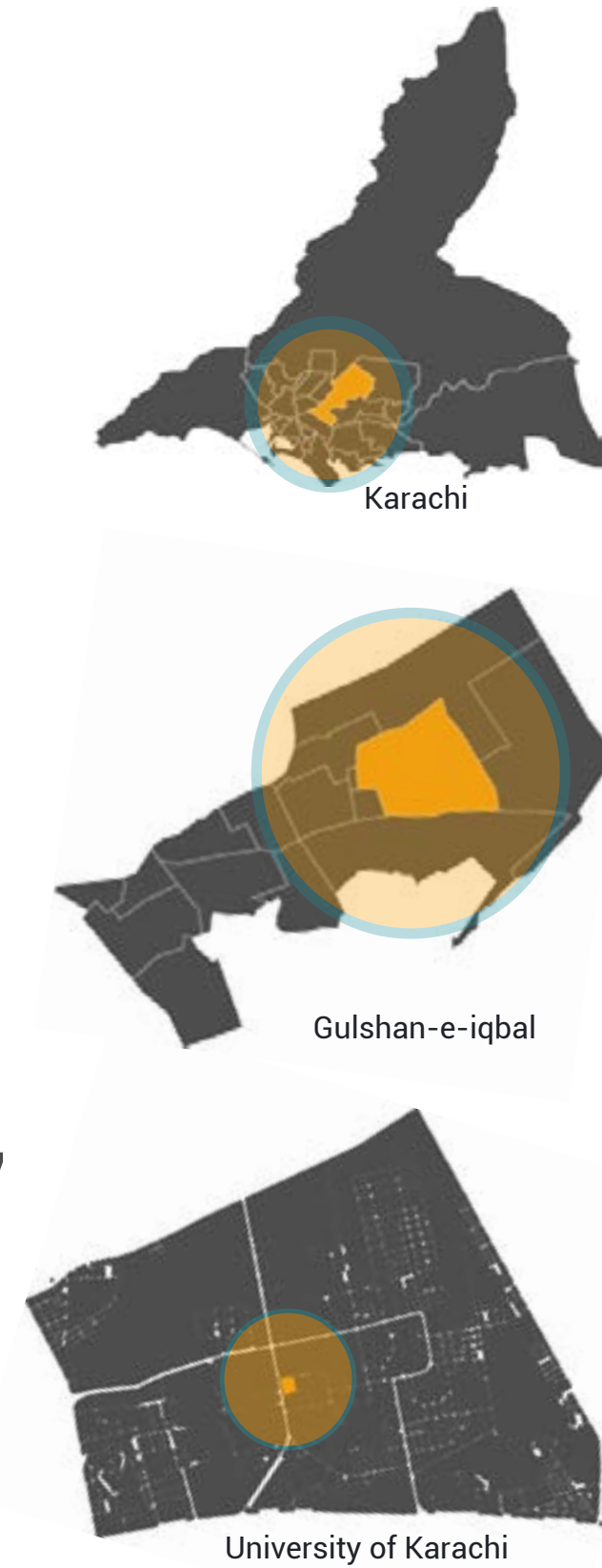
EDUCATIONAL HUB

University Road which is in Gulshan-e-Iqbal, is known as the "Educational Hub" of Karachi because of the number of public & private institutes situated on it.

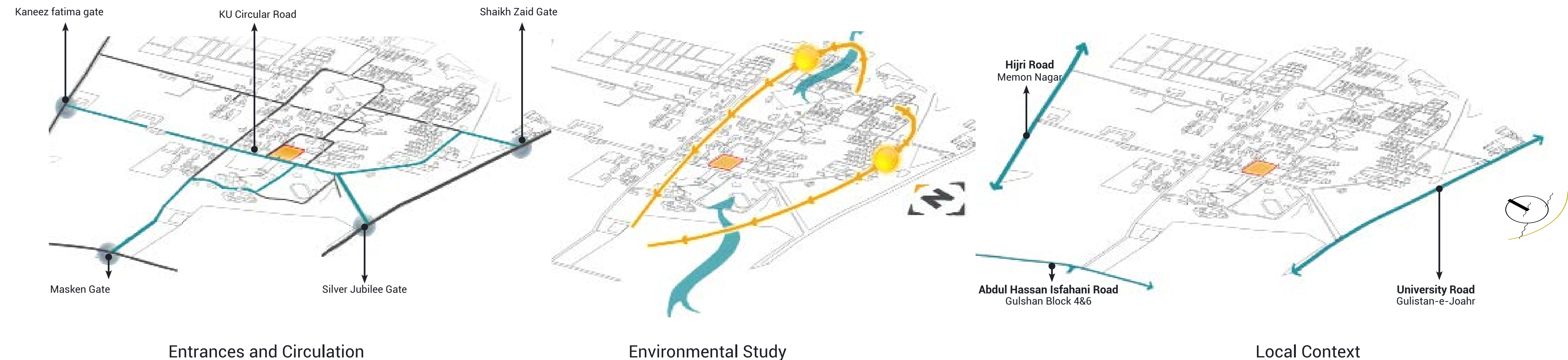
Among them the most well known institute is "**The University of Karachi**"

WHY UNIVERSITY OF KARACHI?

- **Multidisciplinary University** with 54 different departments.
- **Maximum Enrollment** with 20000 both national & international students every year.
- **Mehmood Hussain Library** as a resource used by the students from all over the Karachi.



University Road from Civic Center to Malir Cantt



SITE ANALYSIS

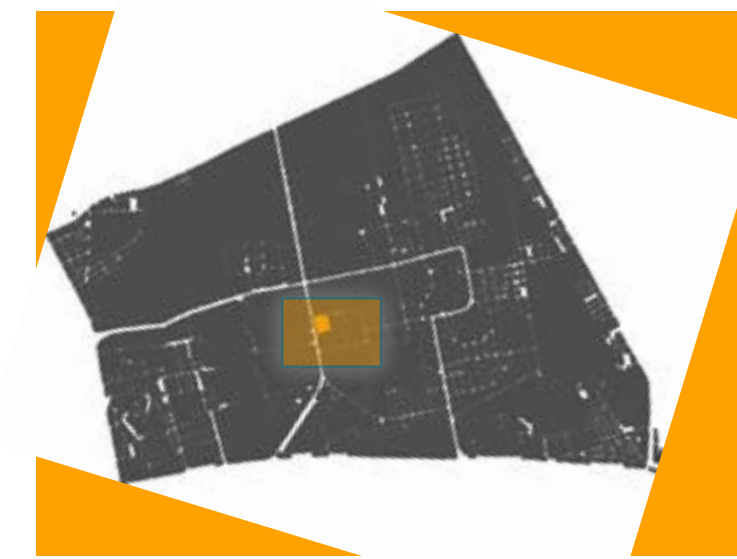
SITE CONTEXT

Selected site is a vacant land with the area of **3 Acres (430' x 320')**, surrounded by institutional as well as administrative buildings making it a Central Hub.

It can be accessed by the main central road Of University of Karachi known as **KU Circular Road**.

Students usually pass through the site for the purpose of leisure time activity, making an opportunity for the project to develop by using shared resources. like parking, library & food street.

SITE PICTURE



University of Karachi



Science Department



Mosque



Food Street (PG)



Mehmoed Hussain Library



HBL Bank



Gymnasium



UBL Bank



Parking



Admin



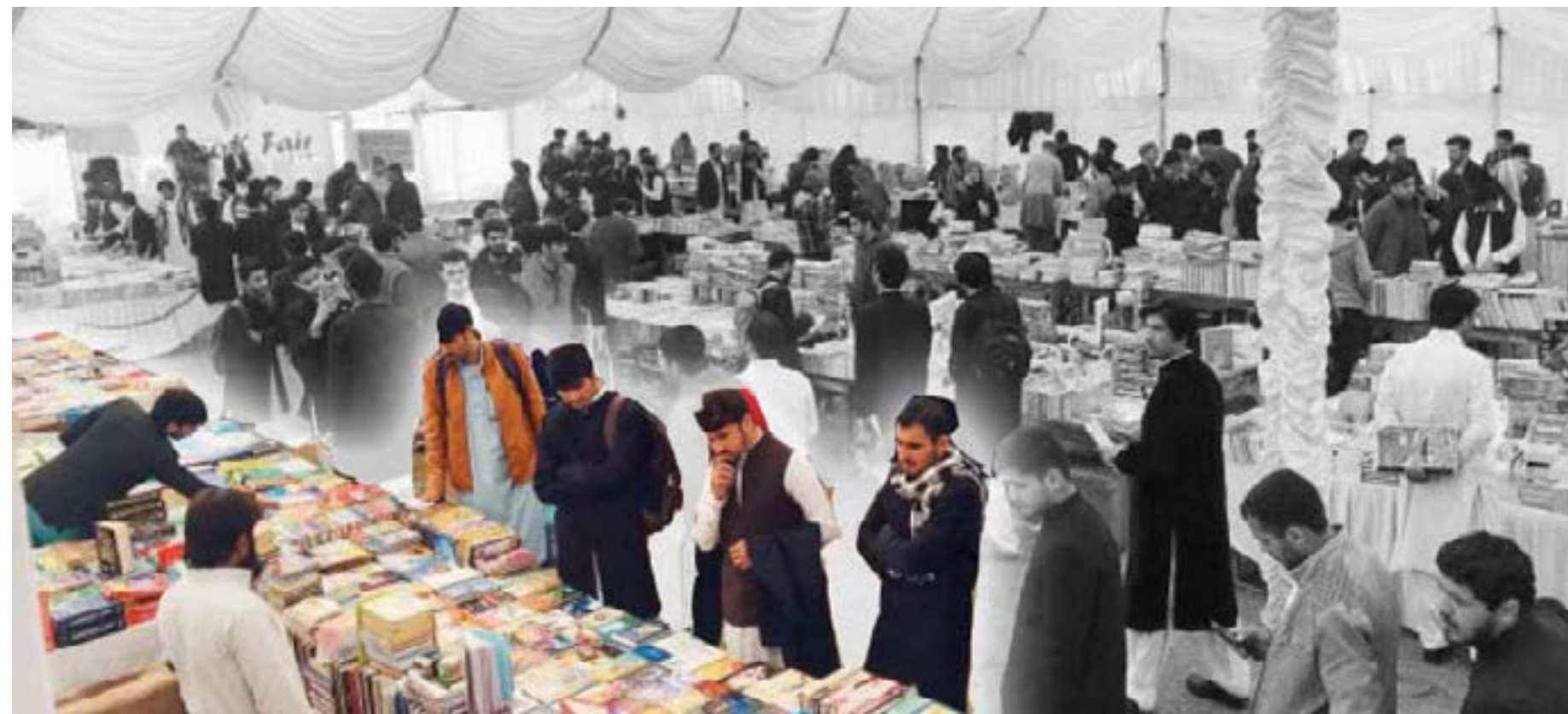
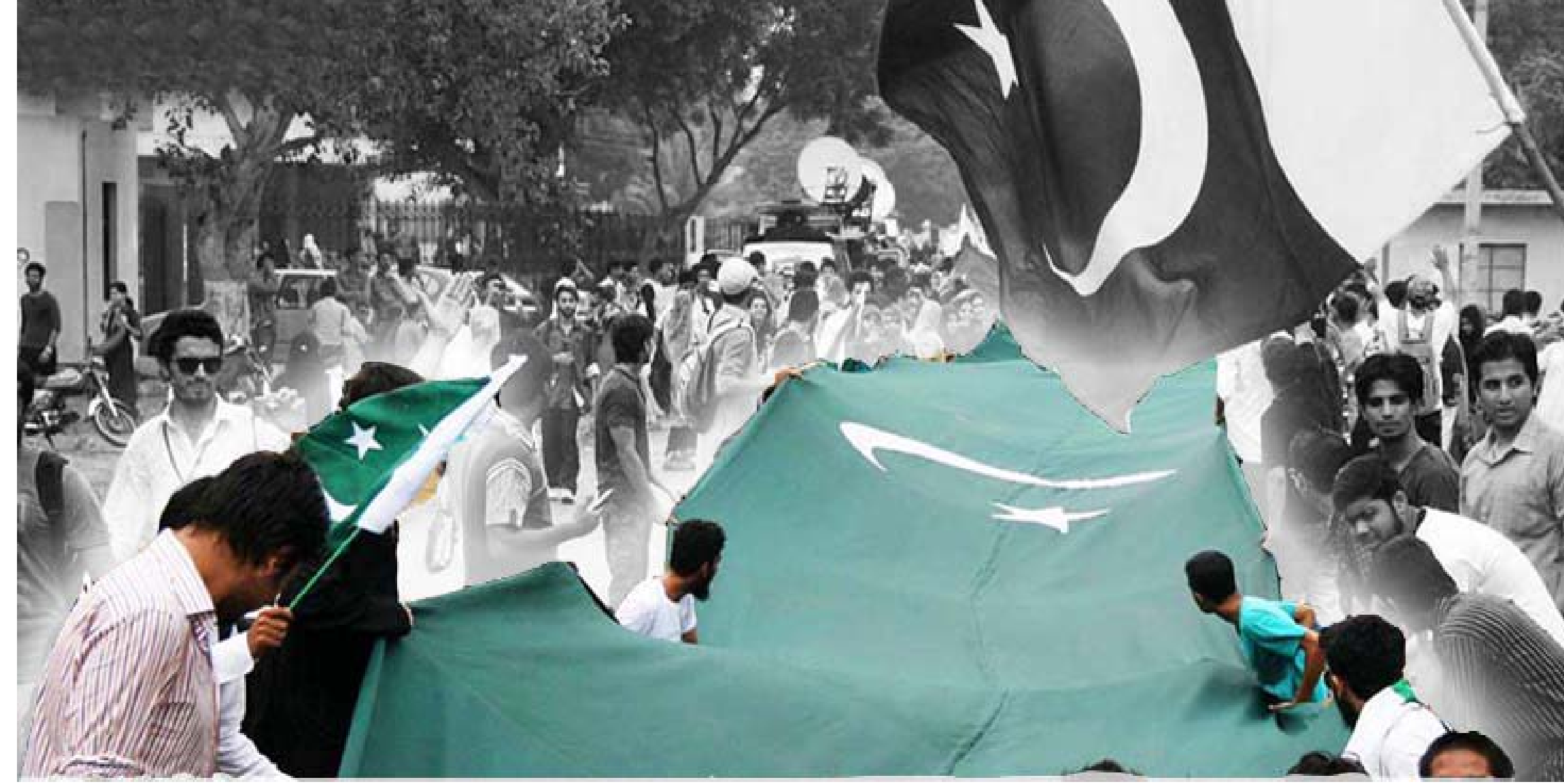
Arts Lobby



Auditorium

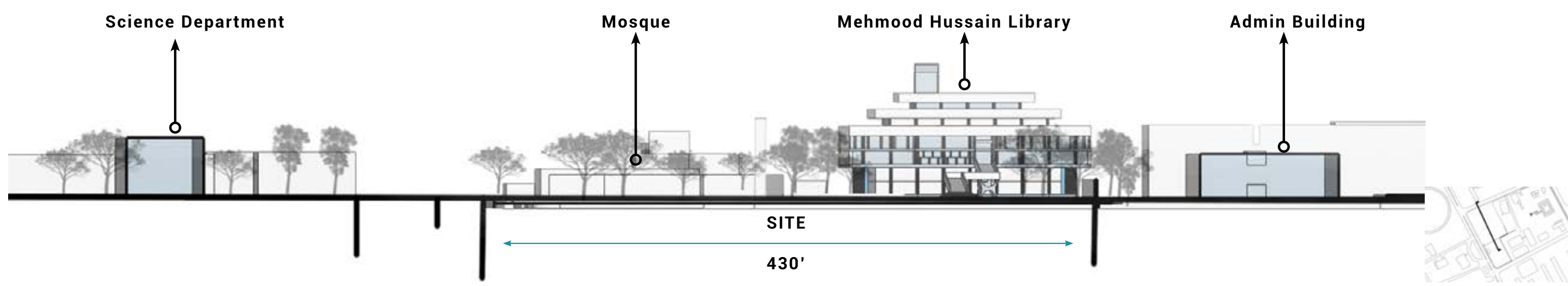
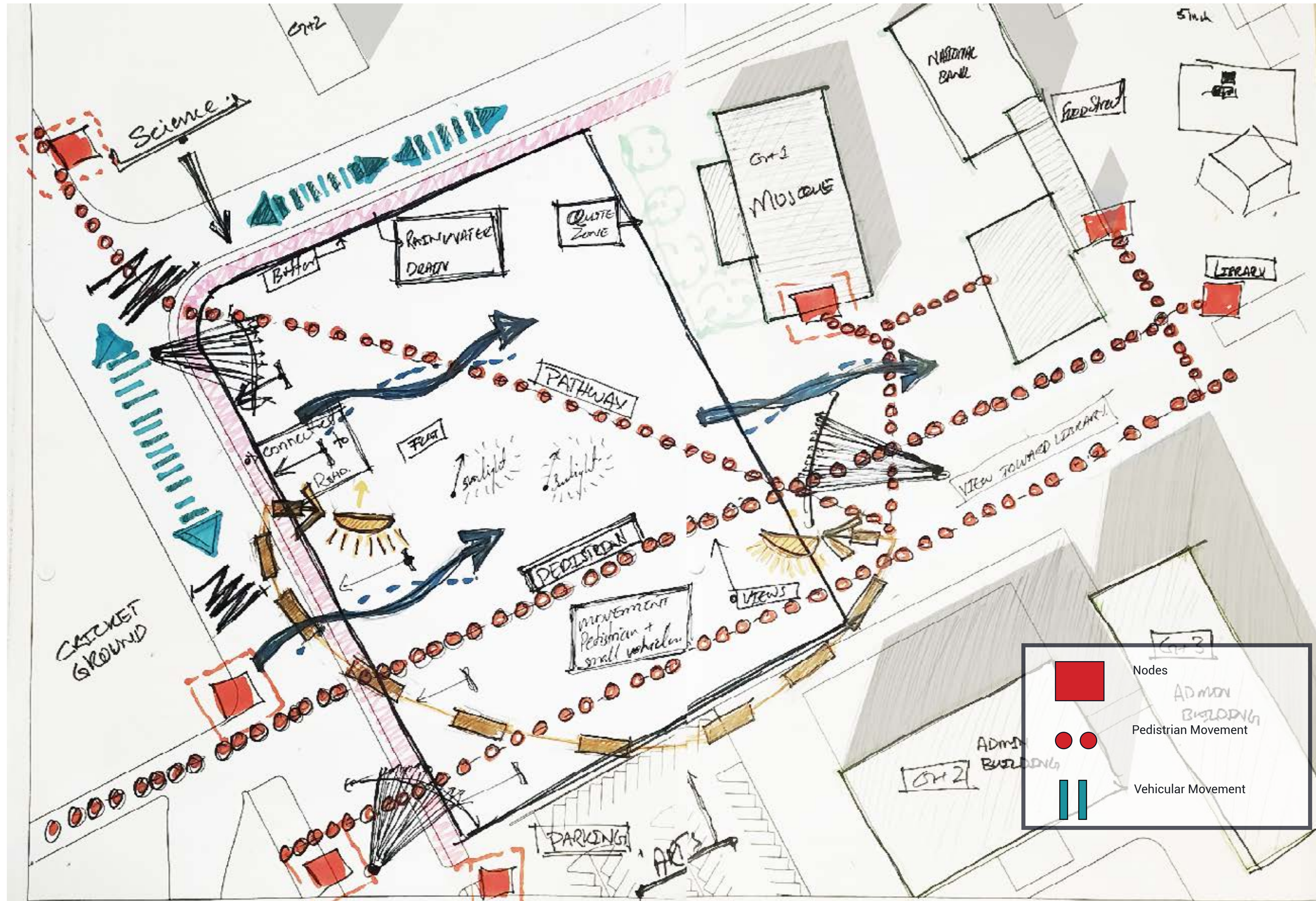
SITE ANALYSIS

SITE ACTIVITIES



SITE ANALYSIS

SITE STUDY



SITE POTENTIALS

1- INTERSECTION

Site act as a pass through space for both students and faculty members.

2- SHARED RESOURCES

Site is surrounded by the resources

- Auditorium
- Library
- Mosque
- Visitor's parking
- Food street
- Recreational sports facilities

3- HIGHLY ACCESSIBLE

Site is connected with the main KU Circular road which makes it easily accessible for both private and KU's transport.

4- VISIBILITY

Site is easy to find as it situated in the center of the University's amenity land.



ACCESSIBILITY



PEDISTRIAN FLOW



ROAD NETWORK

SITE ANALYSIS

ARCHITECTURAL EXPERIENCE IN THE CONTEXT



OPEN TO SKY SPACES



RAMPS



PROMENADE



CORRIDORS



INTERSECTING PATHWAYS



PILOTIS



OPEN STAIRCASE



COVERED RAMPS

SITE ANALYSIS

STUDENT HAPPENING EXPERIENCE

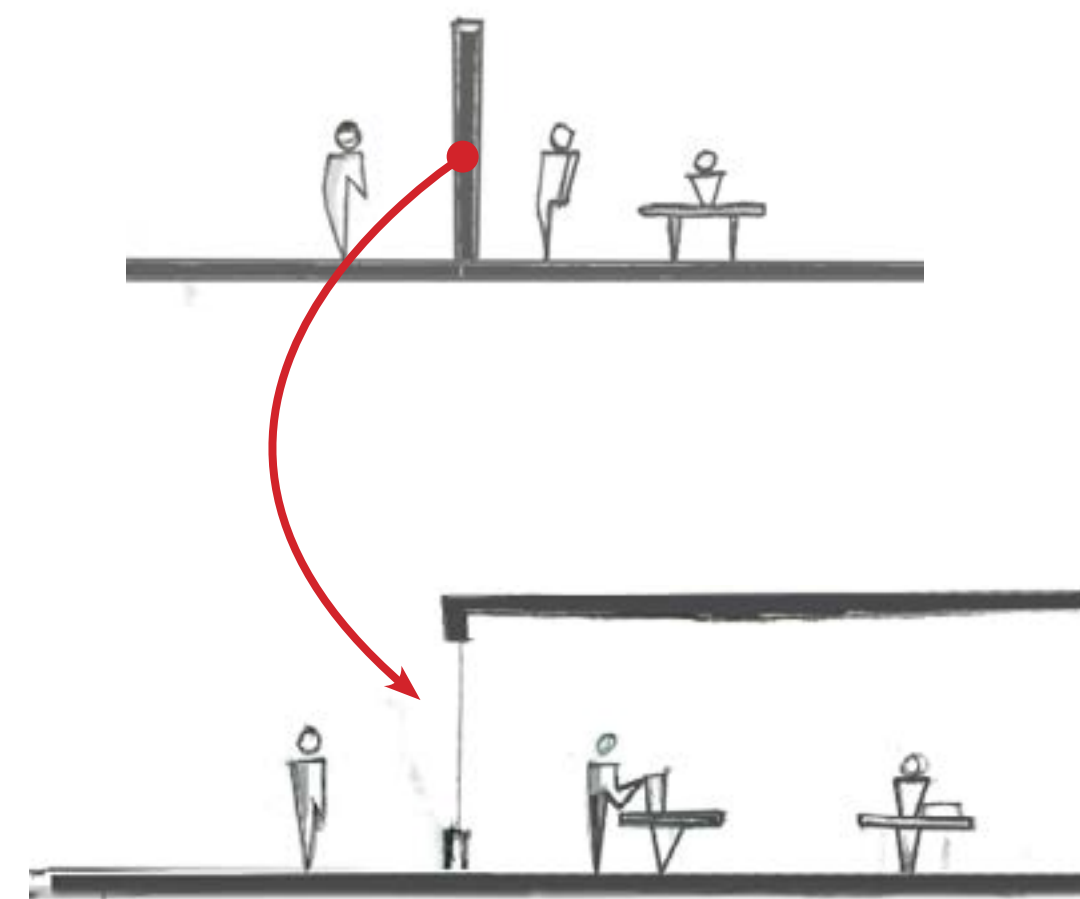


DESIGN DEVELOPMENT

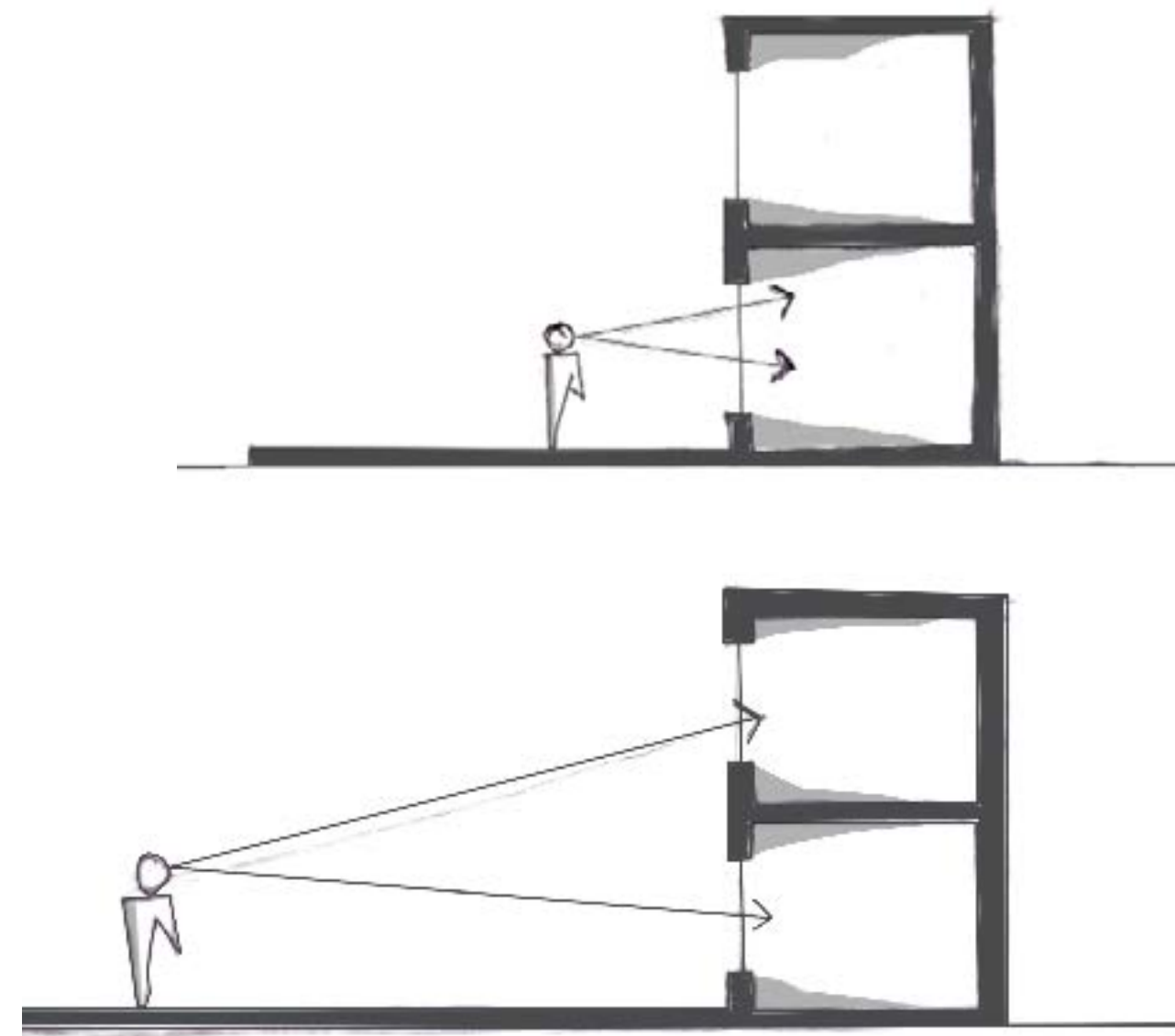
DESIGN APPROACH

1 VISUAL CONNECTION

- Through
- Transparency
 - Buffer



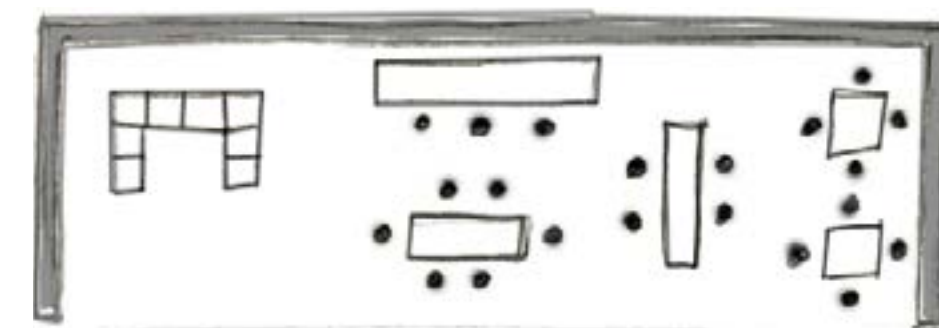
By adding the glass feature into the wall can help to **connect** the user and passerby by providing views within the space.



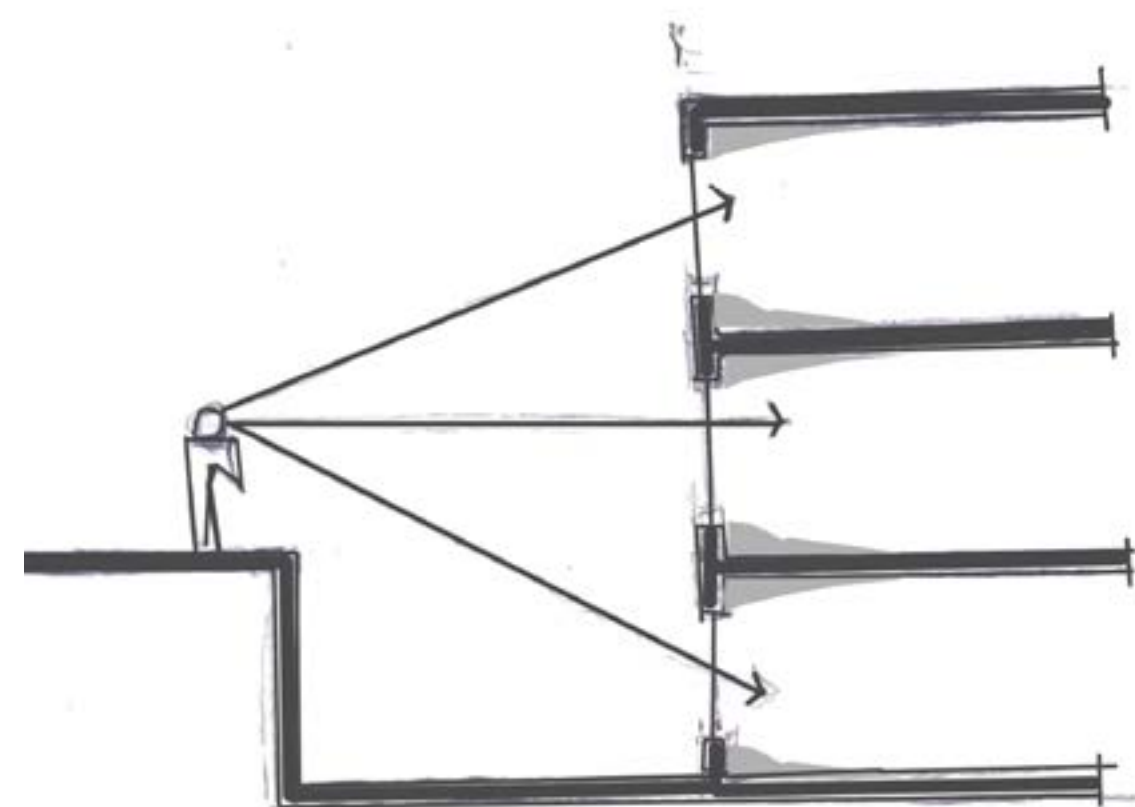
By adding buffer, cone of vision can be increased.

2 SPATIAL DIVERSITY

- Through
- Nature of the programs
1. Private Spaces
 2. Common Spaces
 3. Indoor/Outdoor
- Levels



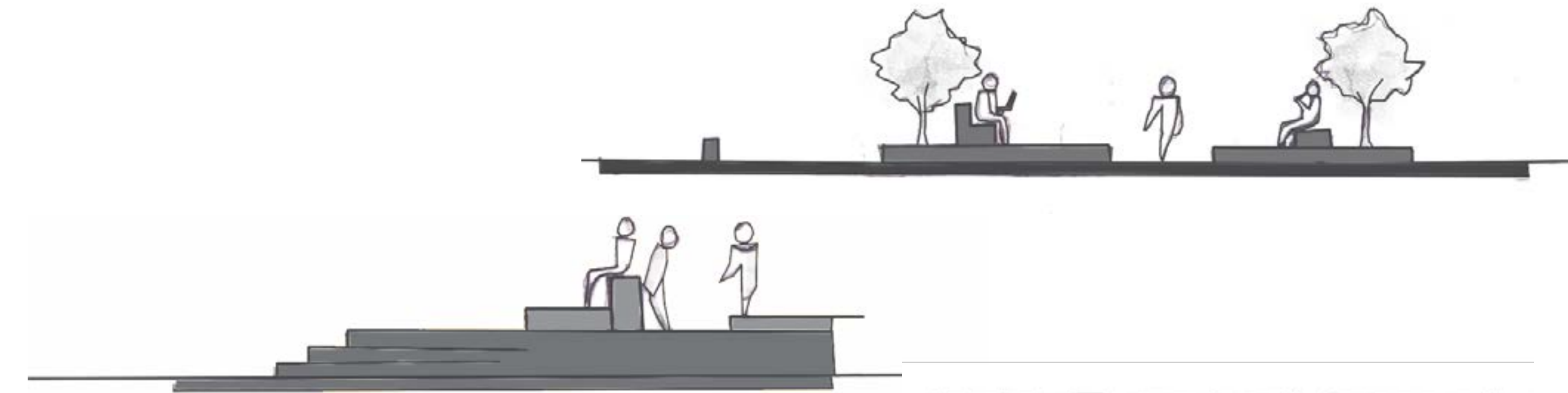
Different environment (**introverted, extroverted & social**) helps you give you to think creatively.



Levels can help to diversify the user's experience as well as it creates **curiosity** by providing hte glimpse of the space.

3 FLEXIBLE SPACES

Open and Versatile multipurpose spaces

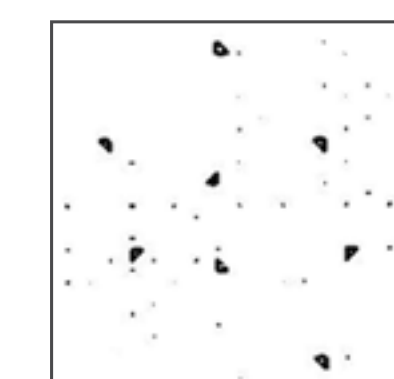
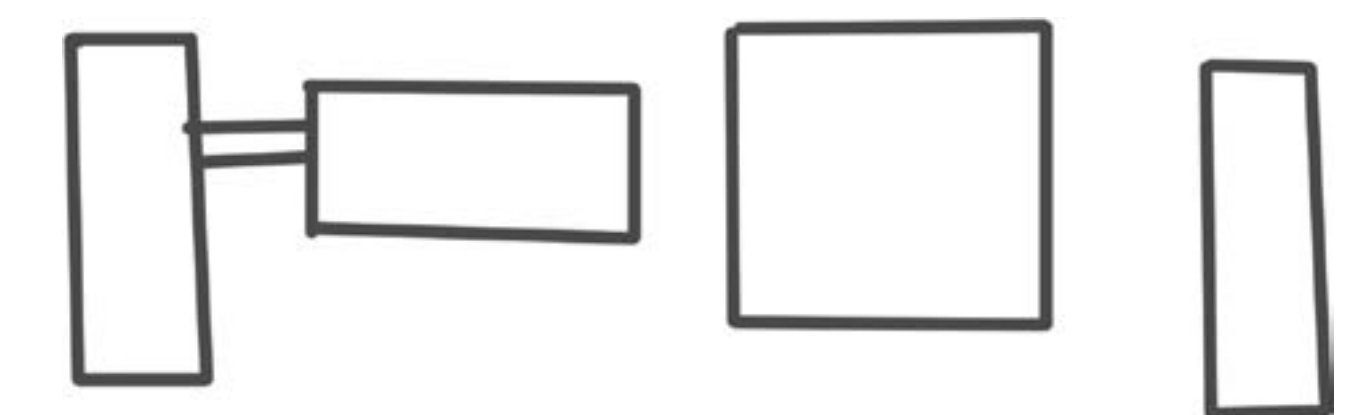


Spaces which are mold-able according to user need: **path becomes means of interaction**

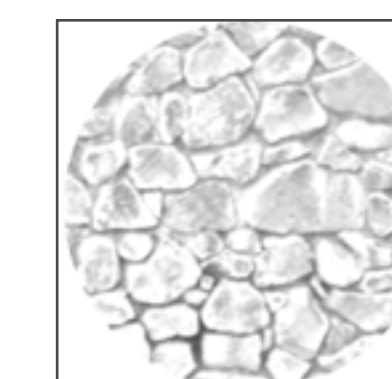


4 RESPECTING THE SURROUNDING ARCHITECTURE

- Through
- Building form
 - Scale
 - Material



Reinforced concrete



Jumshi Stone



The idea is to focus on innovation while at the same time, give respect the design philosophy of Ecochard.

DESIGN PROPOSAL

PROPOSED PROGRAM

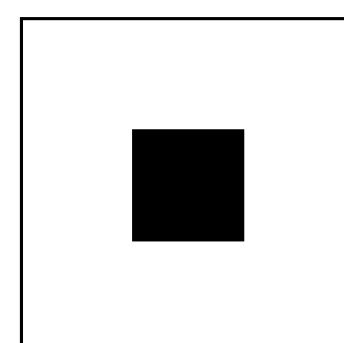
Following programs should be included in order to support the idea of collaboration hub.

Co working space	5760 sq-ft	
Co working space	4032 sq-ft	
Training Room	864 sq-ft	x4
Studio spaces	216 sq ft	x8
IT office/ maintenance office	108 sq-ft	x4
Seminar/Training hall	1728 sq-ft	
Tech facility	2160 sq-ft	
Tools facility	1728 sq-ft	
Makerspace	1728ft	
Admin	1728 sq-ft	
Medical facilities	144 sq-ft	
Storage space	288 sq-ft	x3
Toilets	570 sq-ft	x2

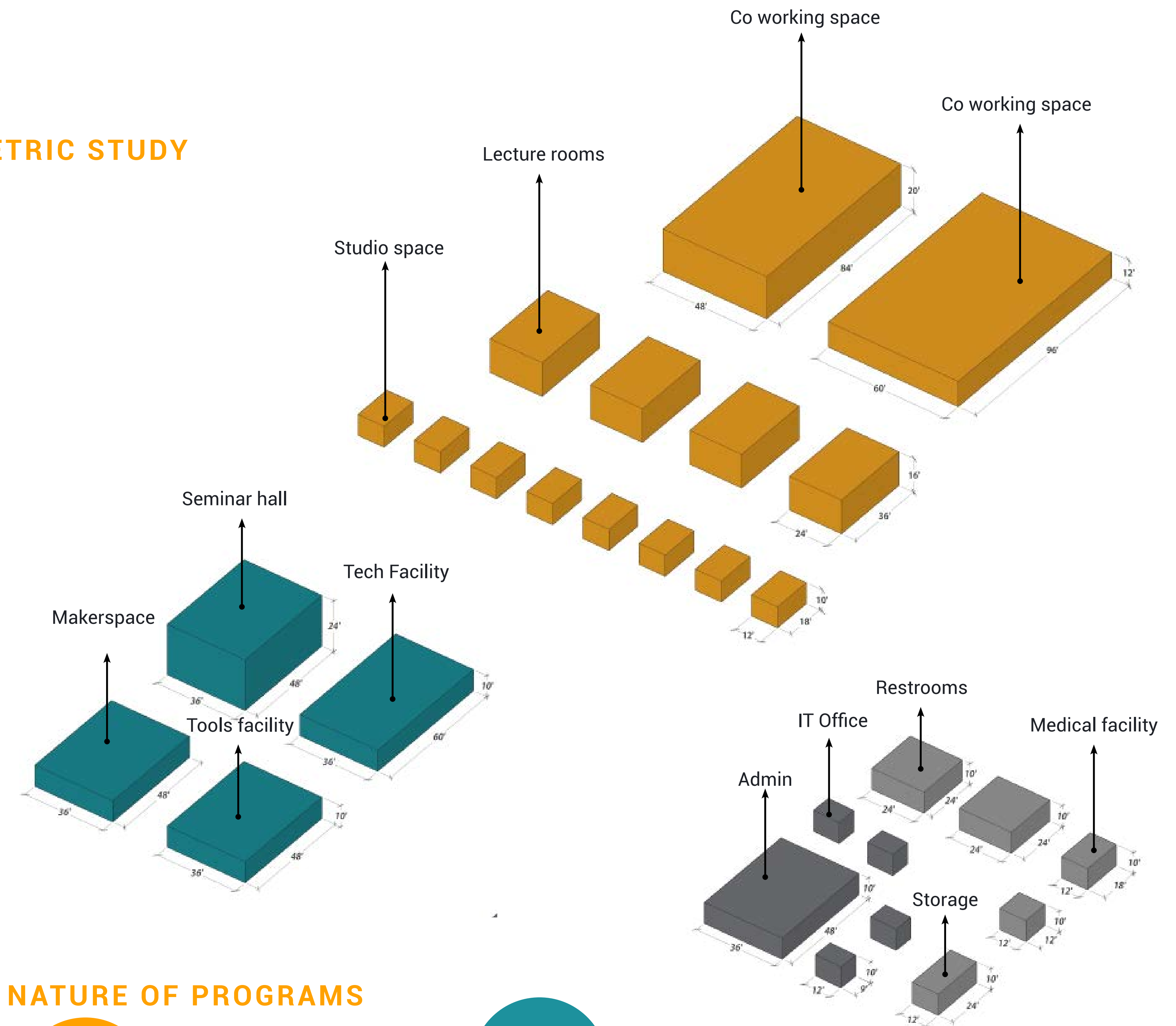
Total Build Area: **25,332 Sq.ft**

Built Footprint: **15,000Sq.ft**

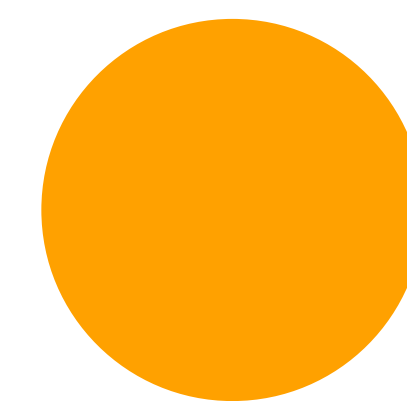
Solid Void Ratio: 1 : 9



VOLUMETRIC STUDY

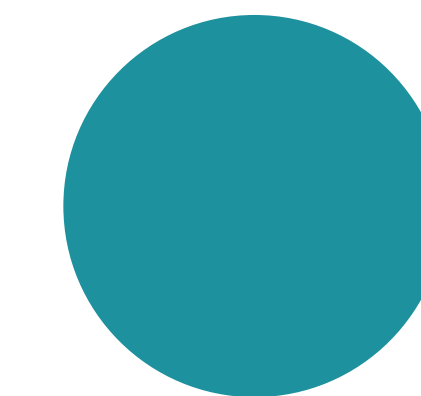


NATURE OF PROGRAMS



INTROVERTED SPACES

- Private Working Spaces
- Versatile spaces
- Required focus Environment
- Privacy consideration is must



EXTROVERTED SPACES

- Shared Space
- Spaces for Practical and digital Skills
- Sometimes noisy
- Need maximum day light to work
- Visually transparent for public to get inspired

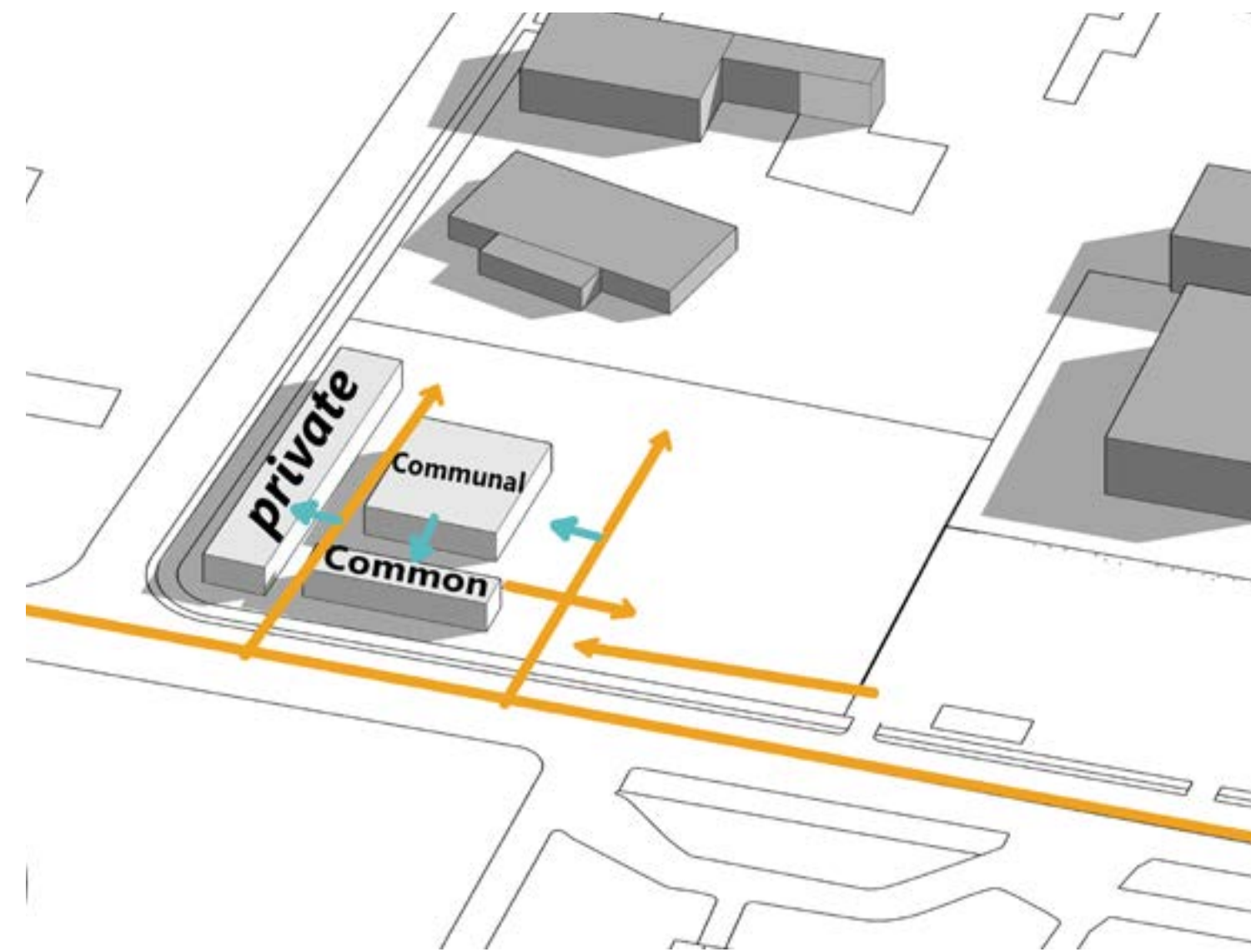
Supporting Facilities

DESIGN DEVELOPMENT

DESIGN APPROACHES

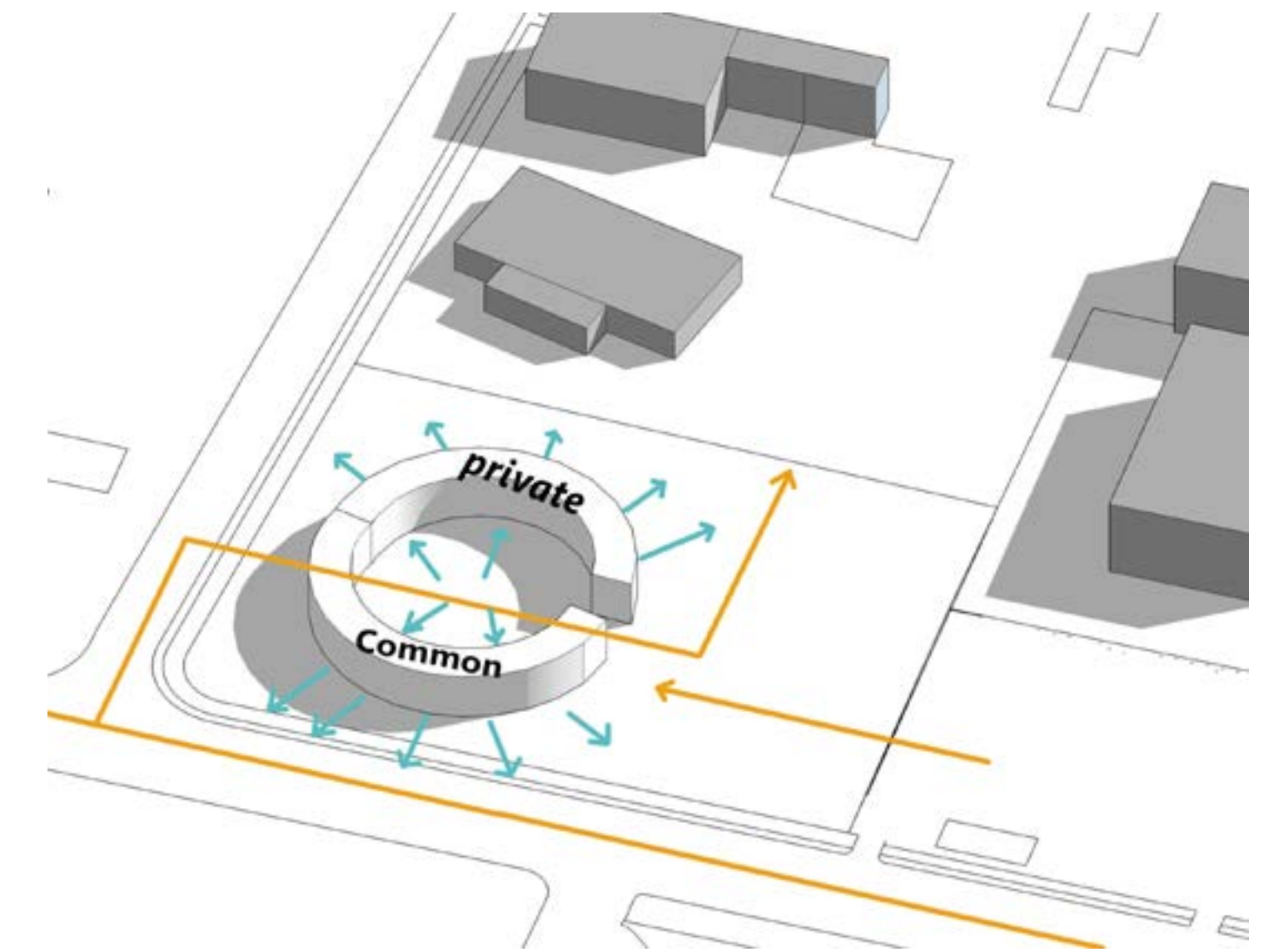
PHASE A

- Consider the language of the context with respect to the Michael Echochard



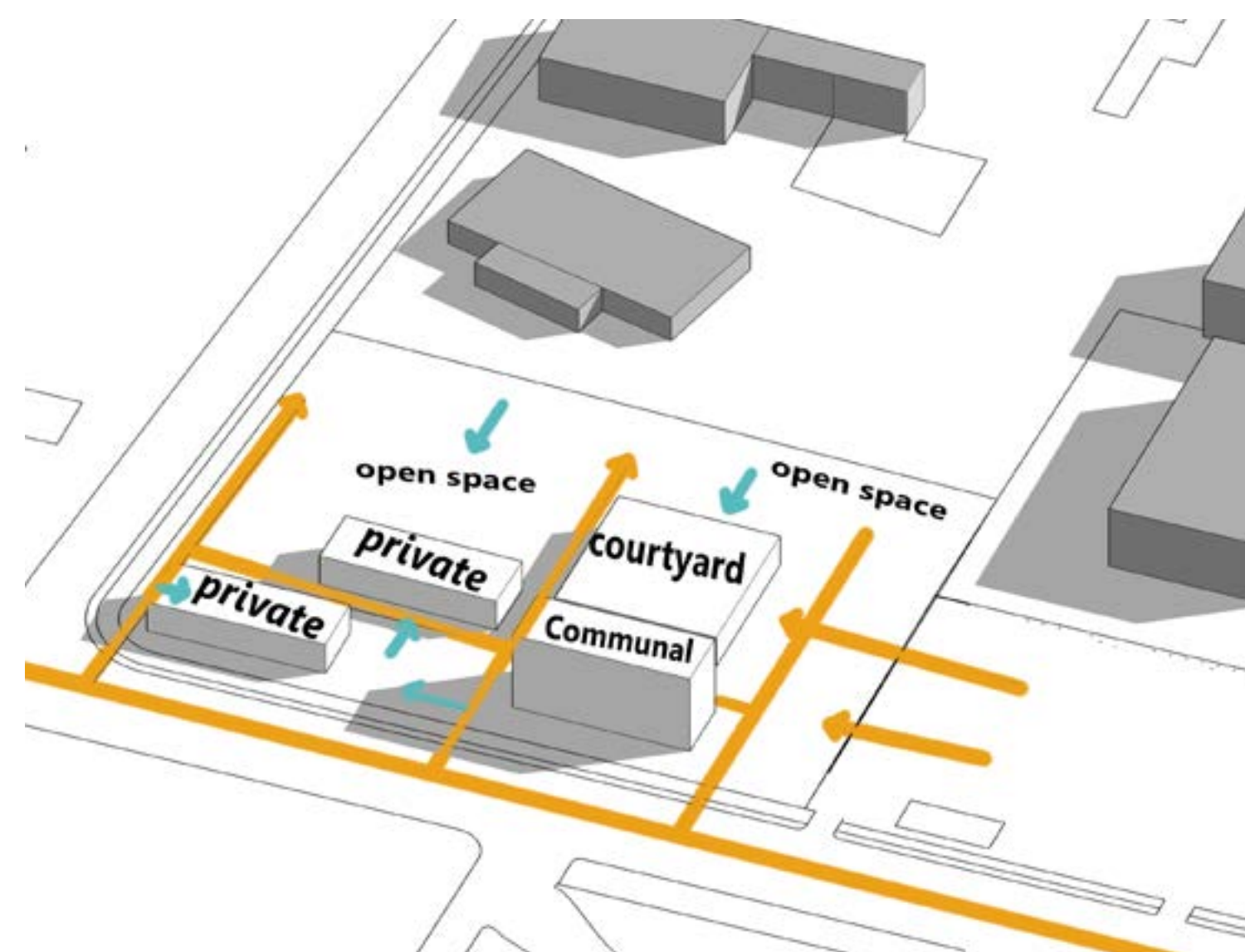
PHASE B

- By going out of the context to leave a statement through the shape of the building, representing youth as a statement.
- Introducing one path
- One communal space



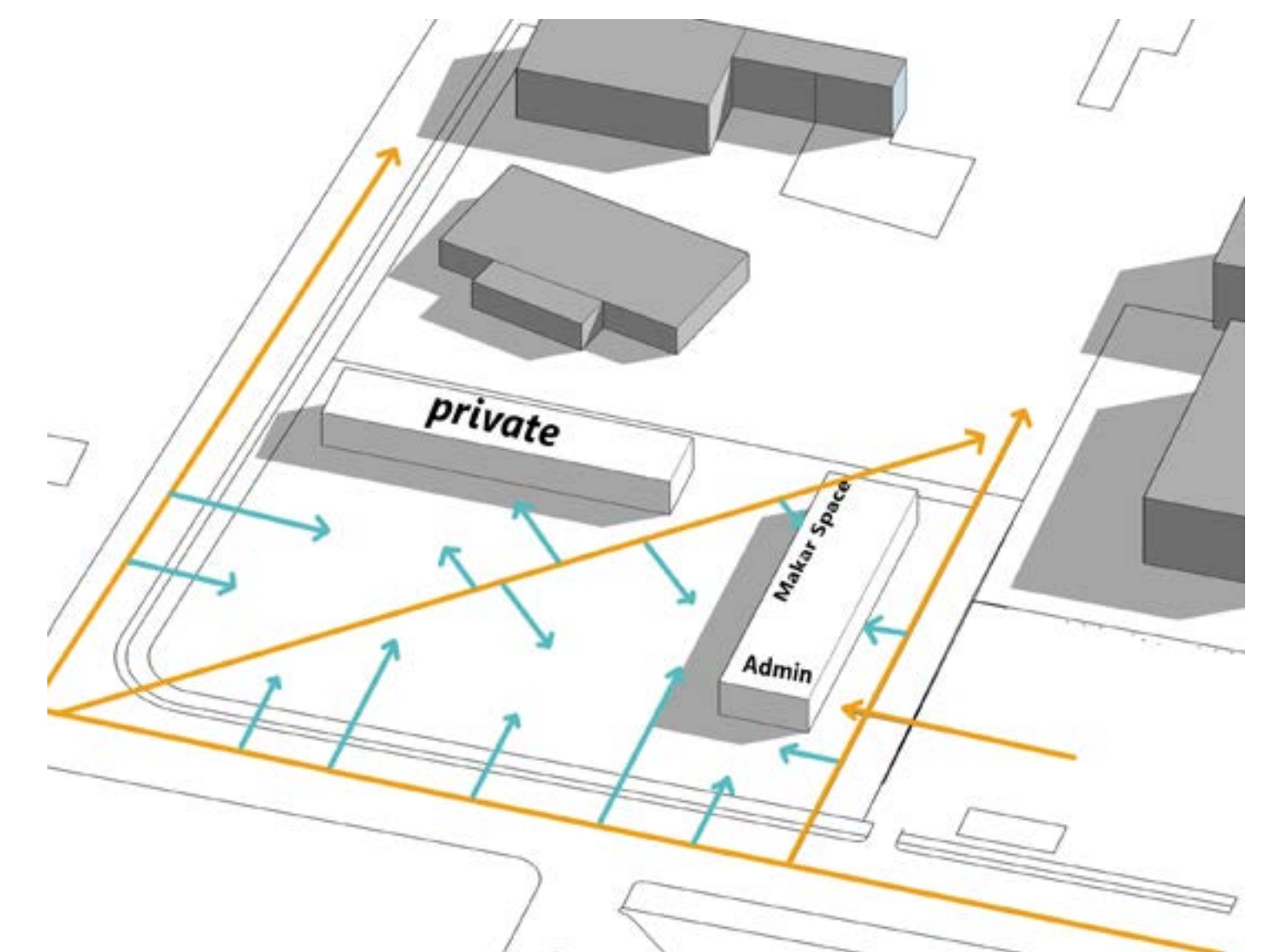
PHASE C

- Making public and private spaces separated through paths to cross through the space



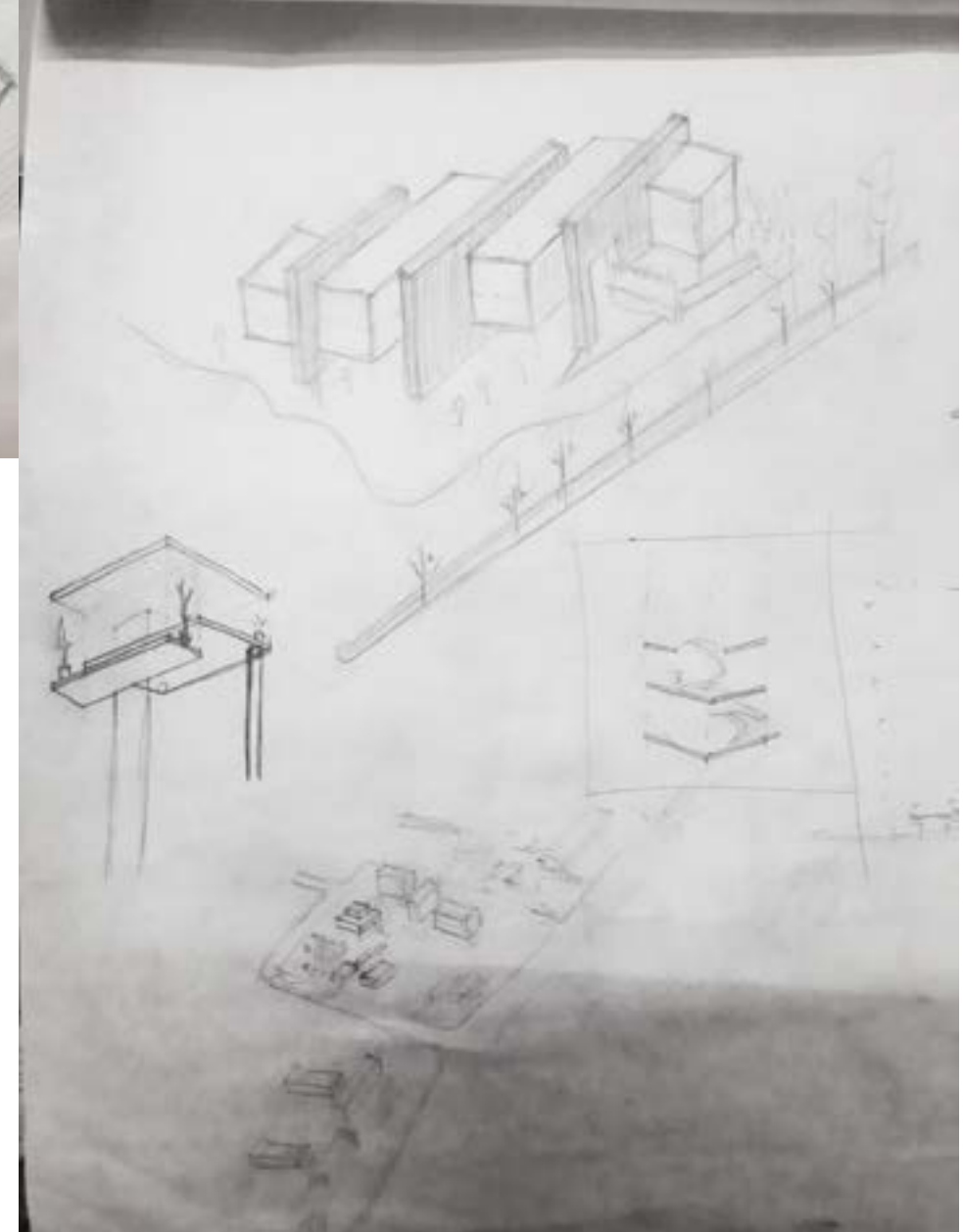
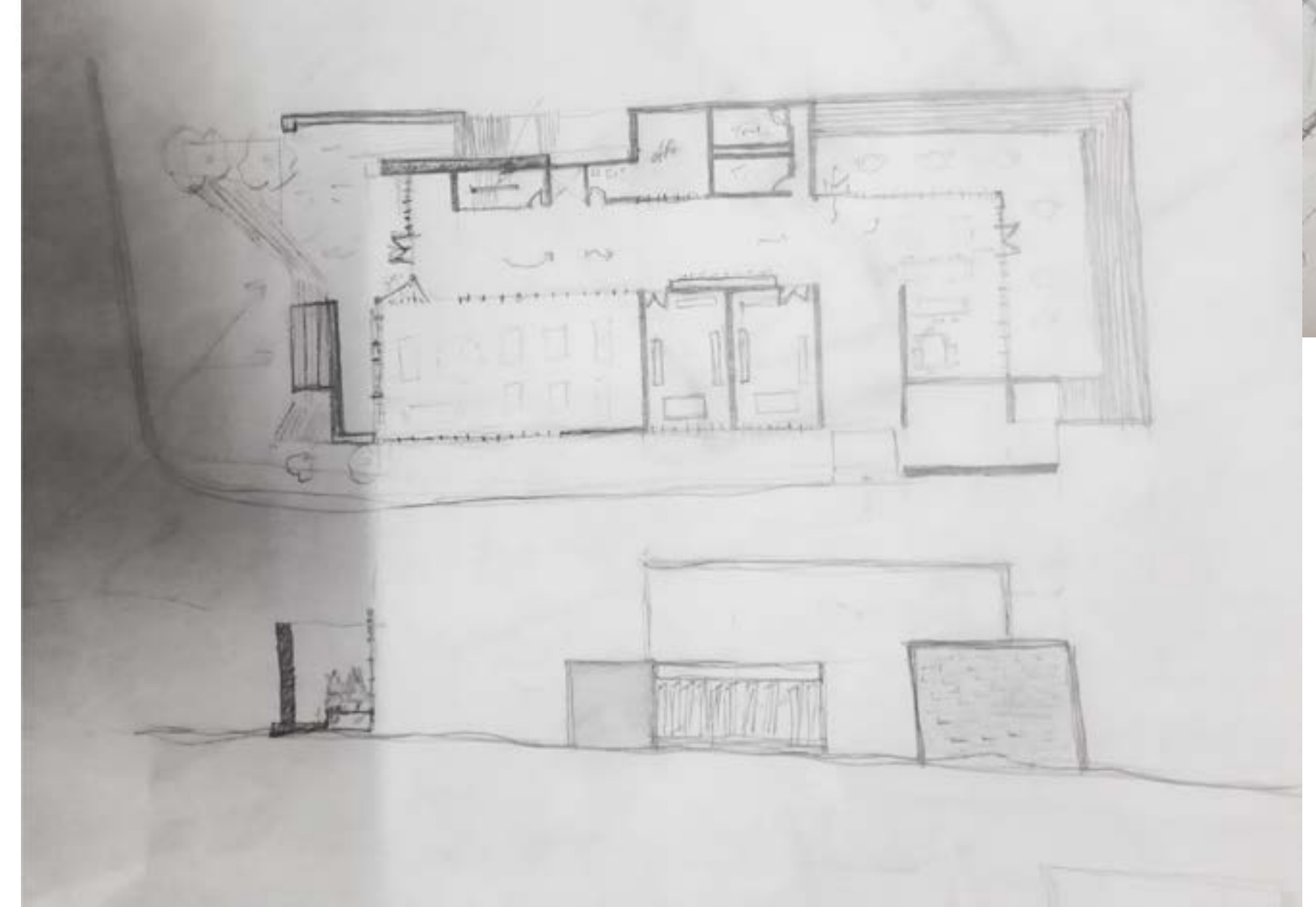
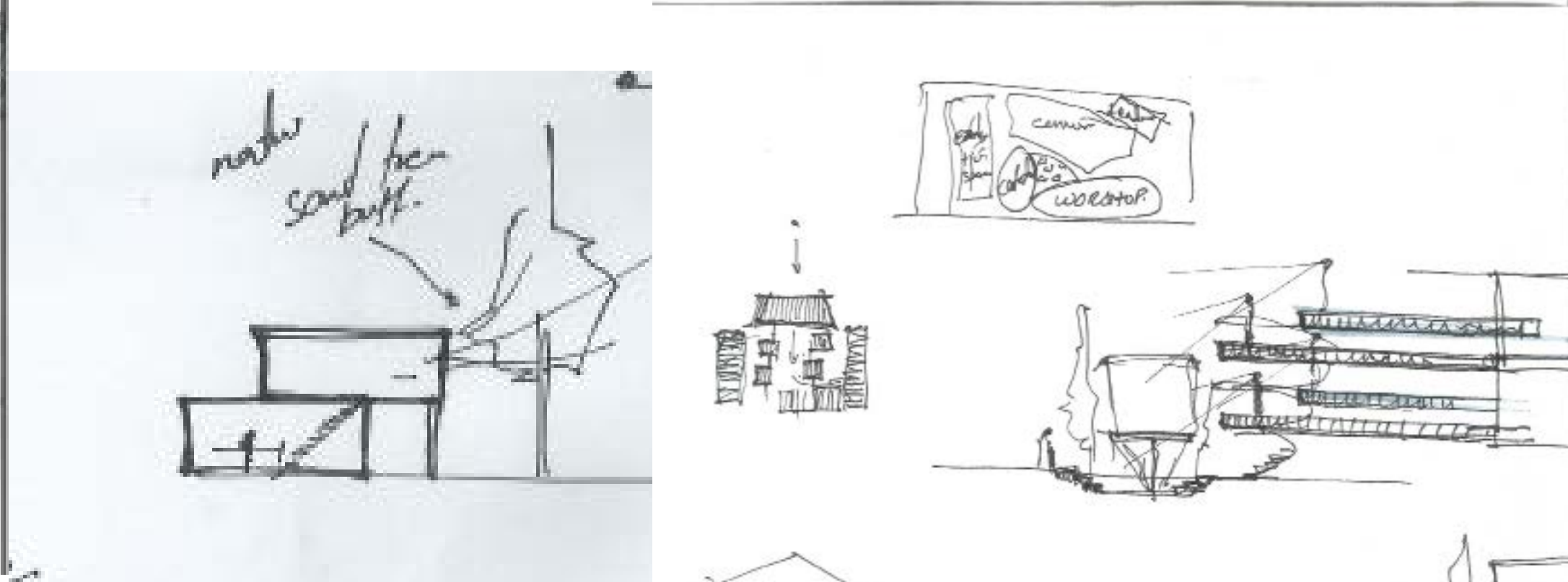
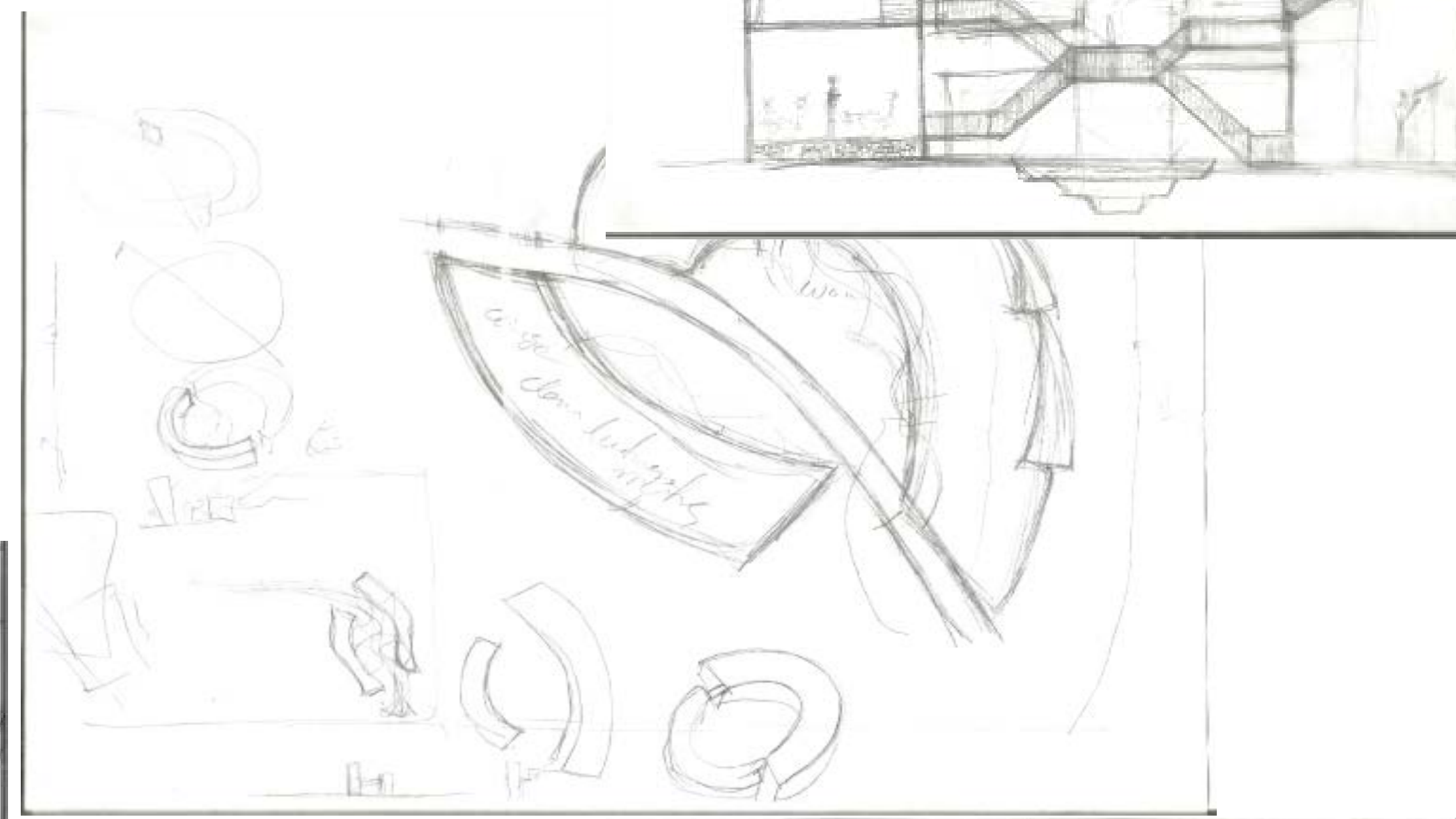
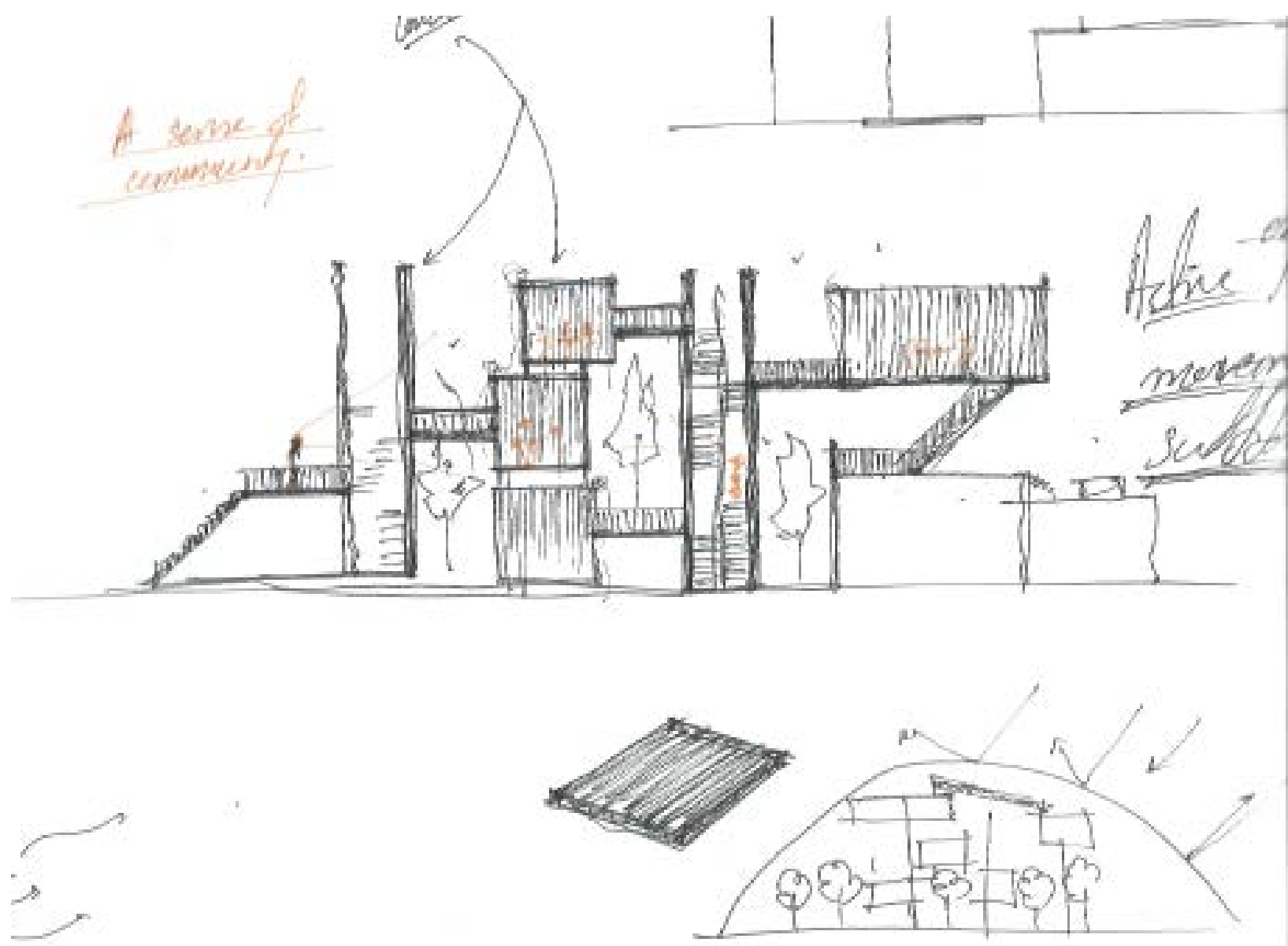
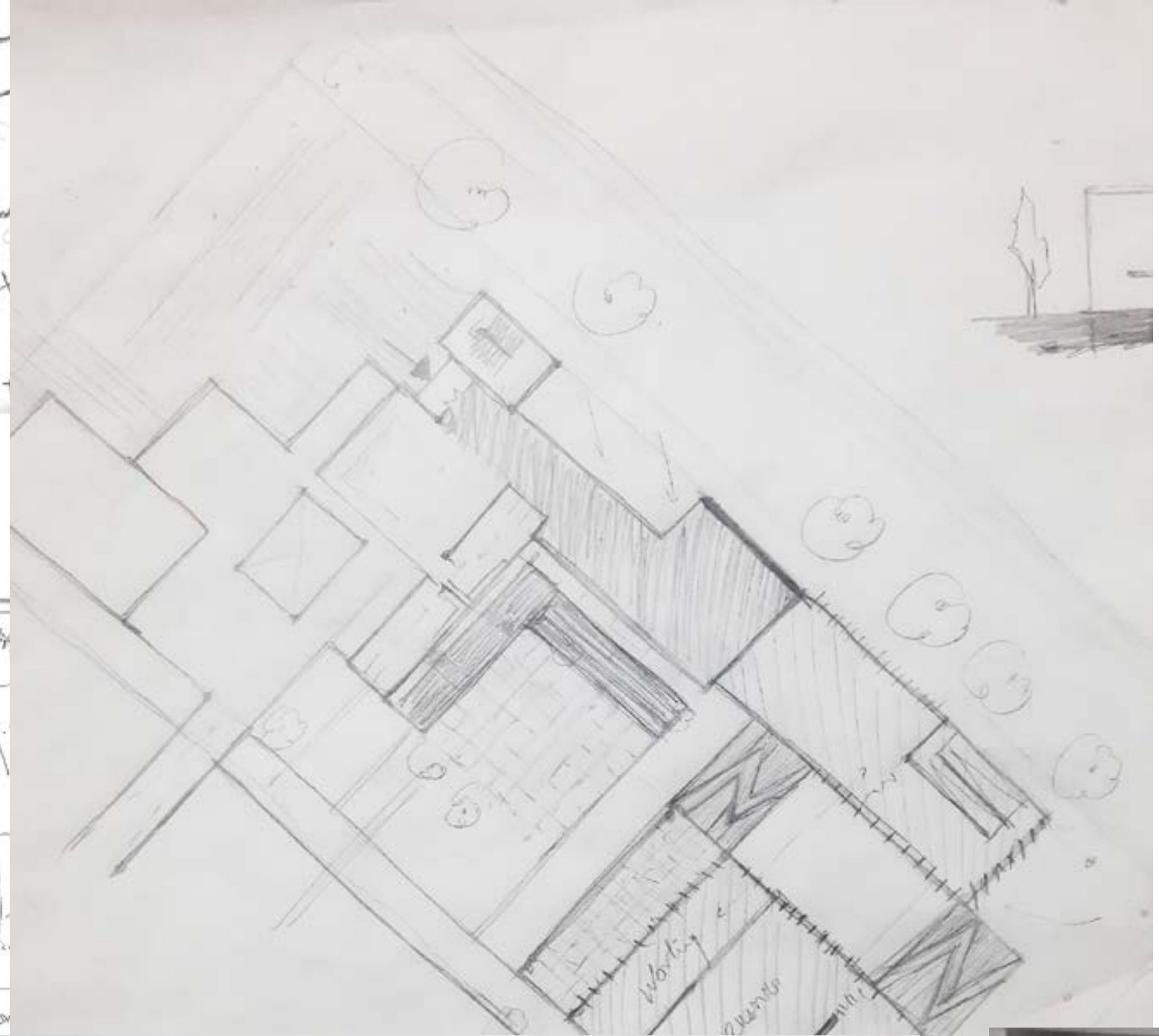
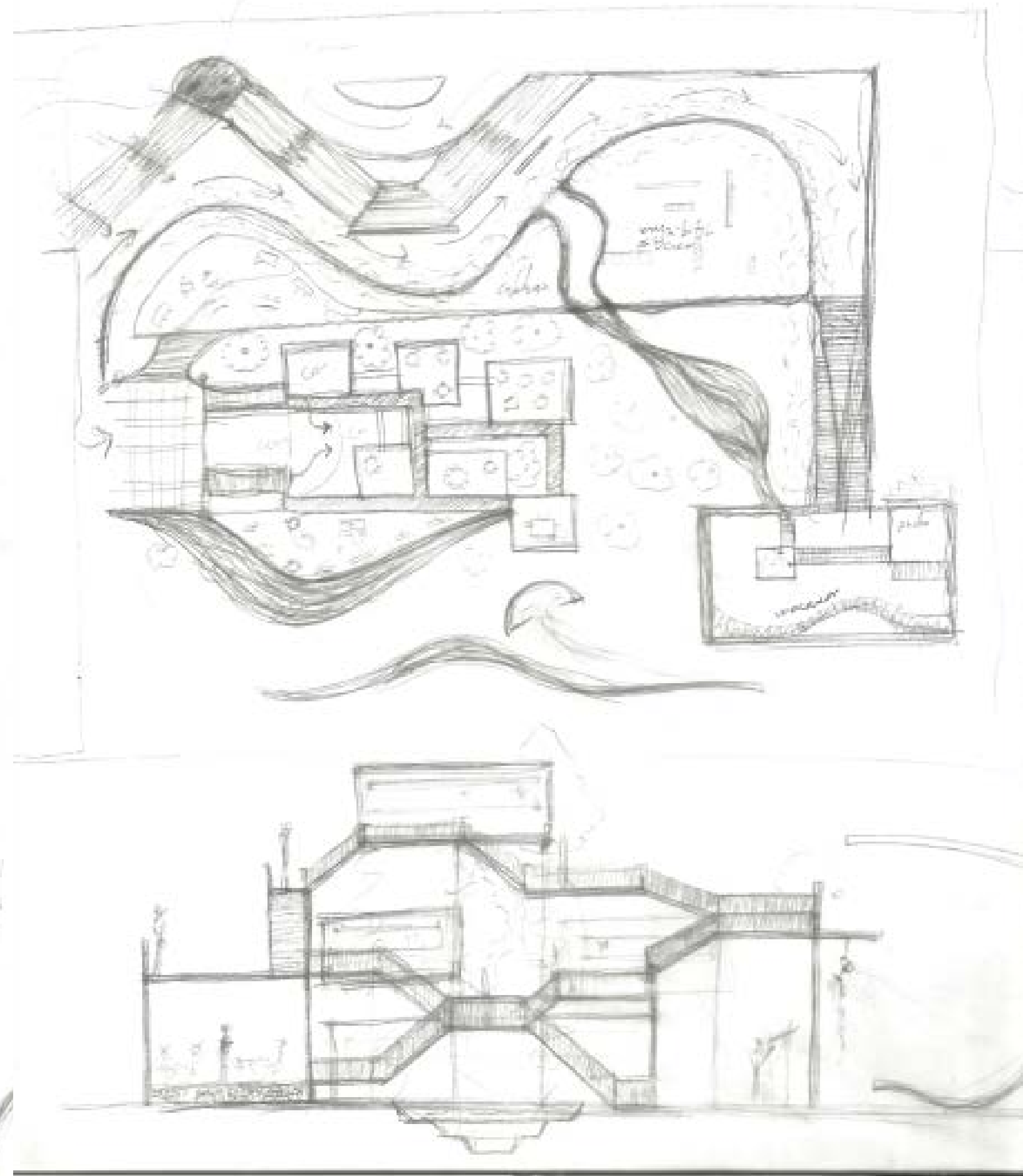
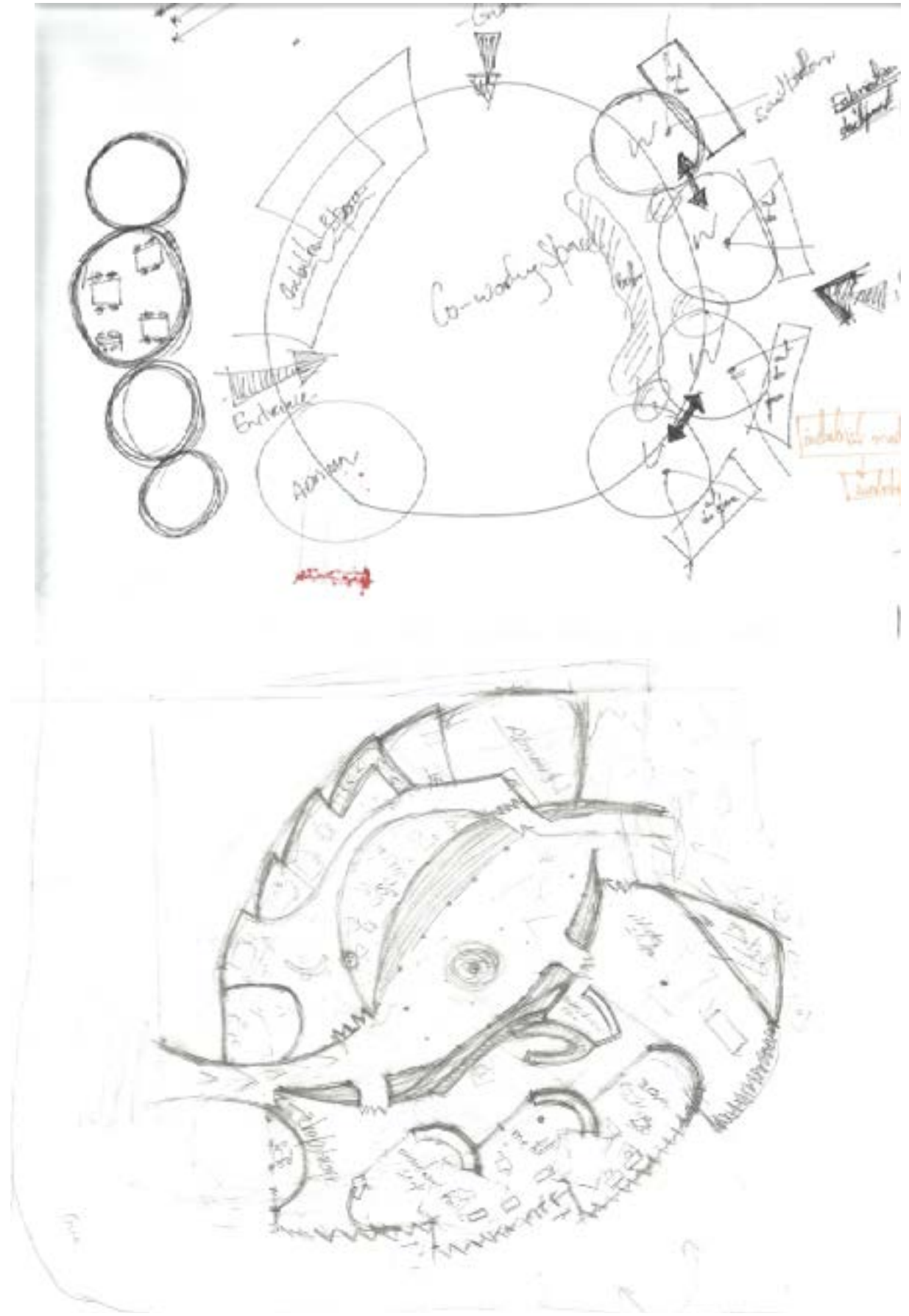
PHASE D

- Considering the site context for zoning
- Considering the existing pedestrian pattern



DESIGN DEVELOPMENT

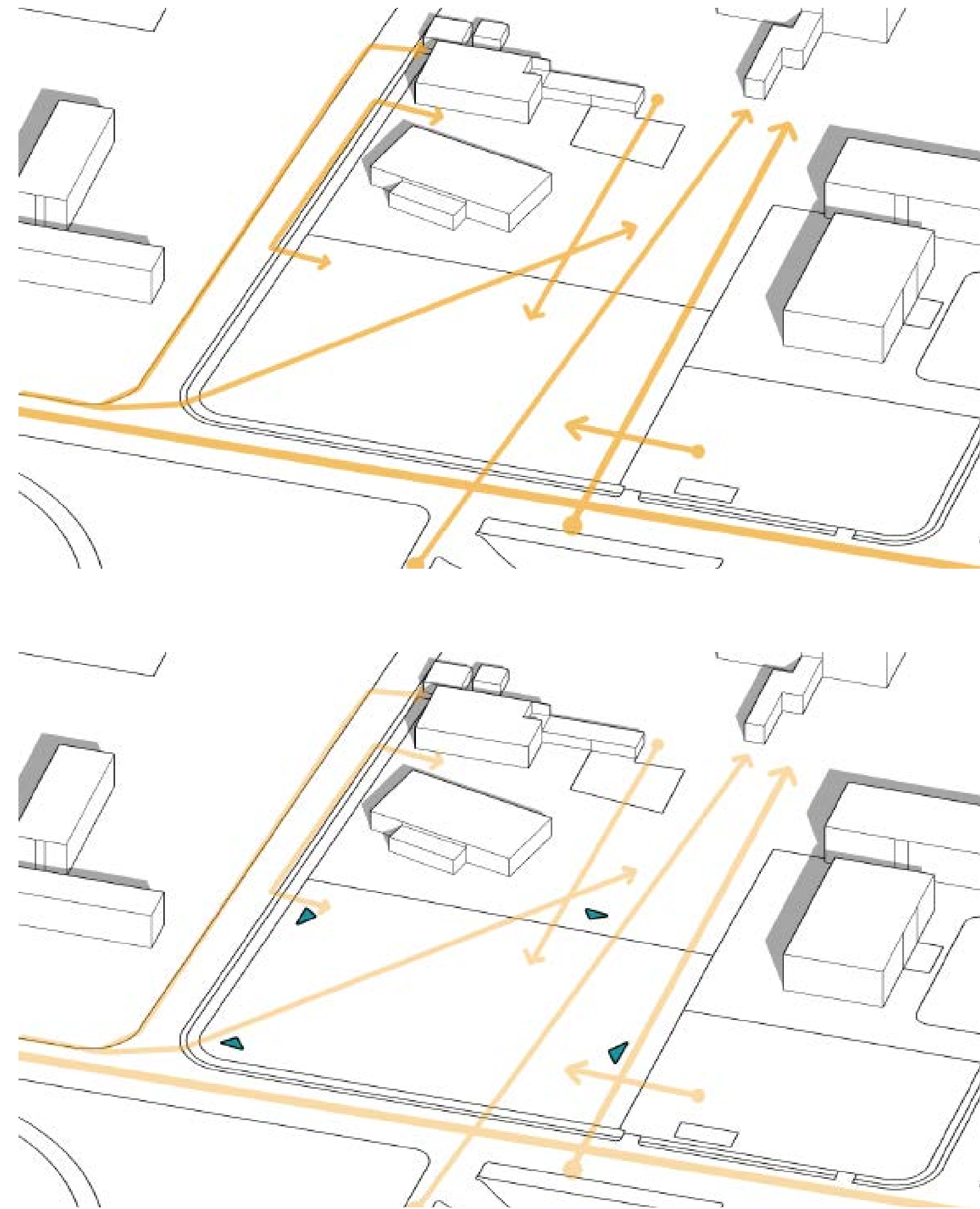
DESIGN EXPLORATION



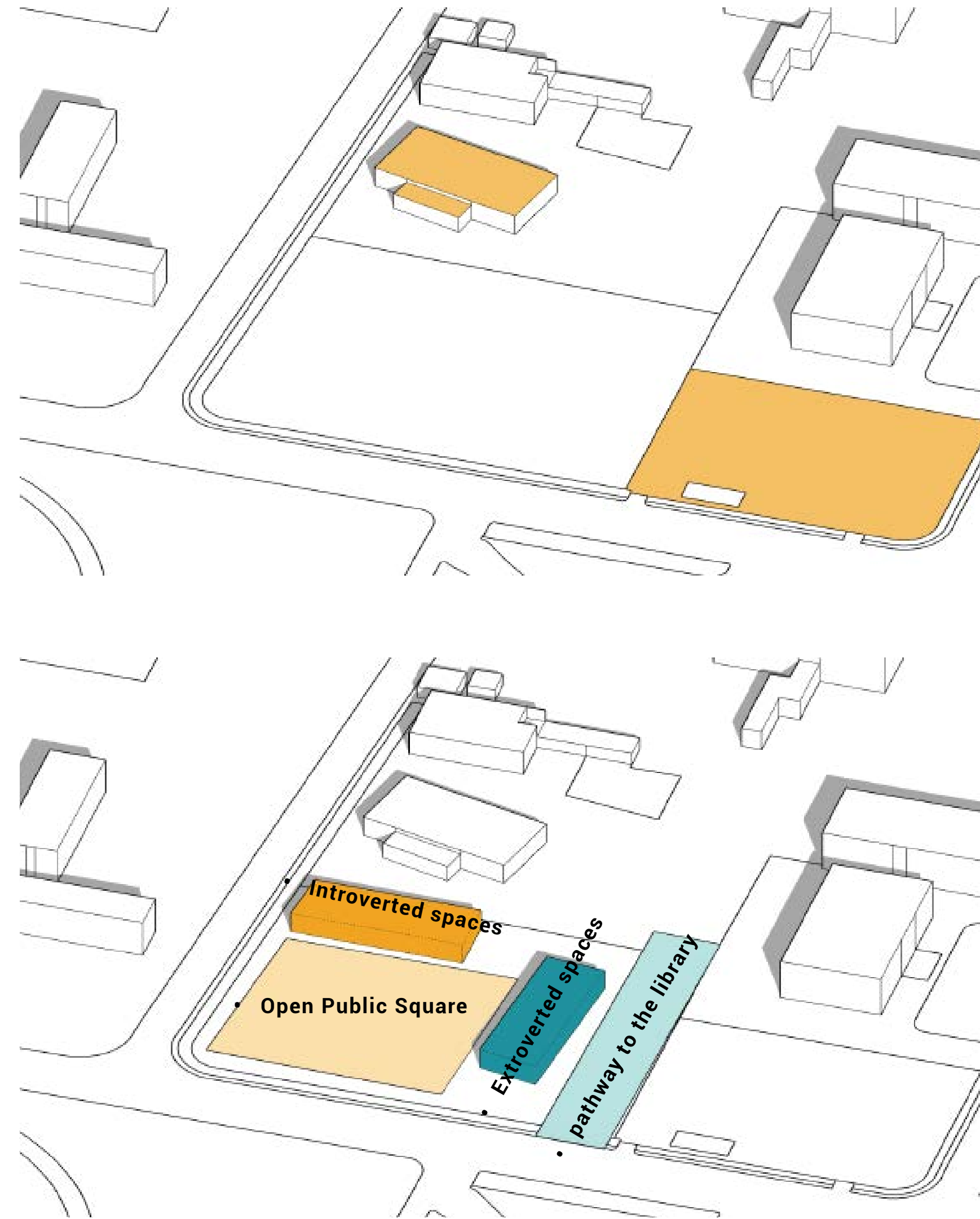
DESIGN DEVELOPMENT

DESIGN STRATEGY

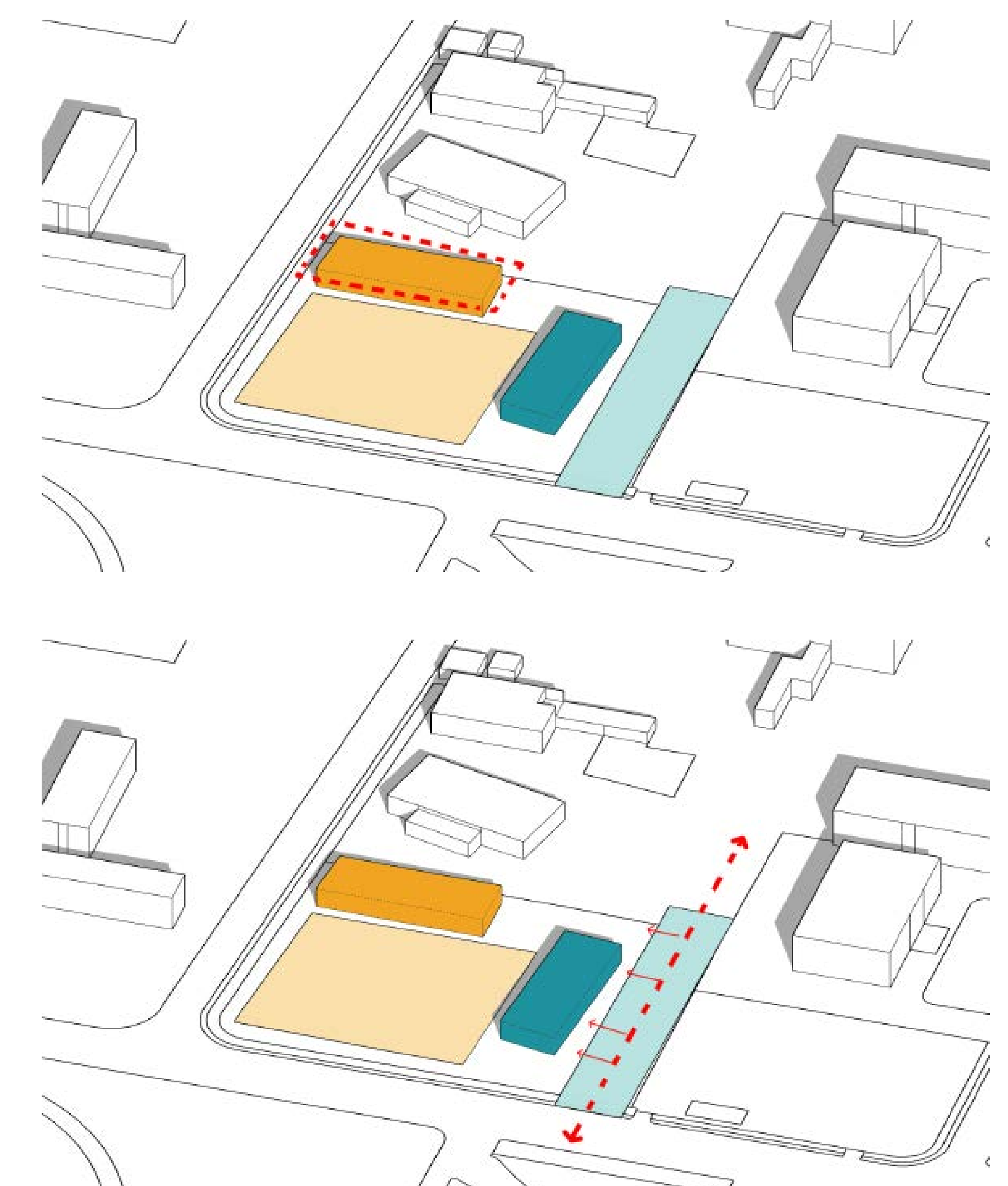
ACCESSIBILITY & ZONING



- A** • By considering the existing pedestrian pattern, Site is accessible from all sides



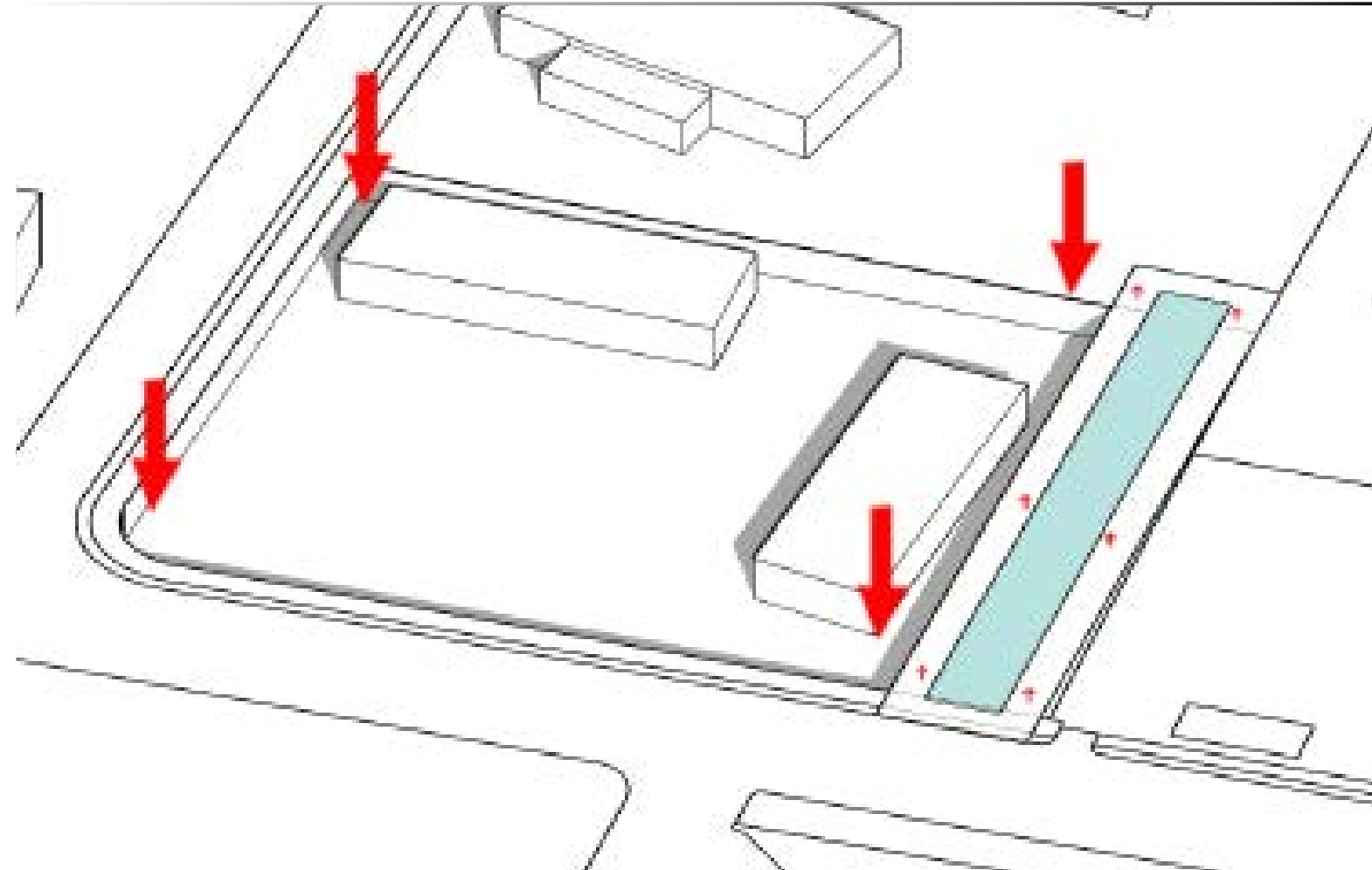
- B** • Zoning has been done by looking at the immediate context (mosque, path & administration) introverted spaces are near to mosque & extroverted spaces are kept along with existing pathway



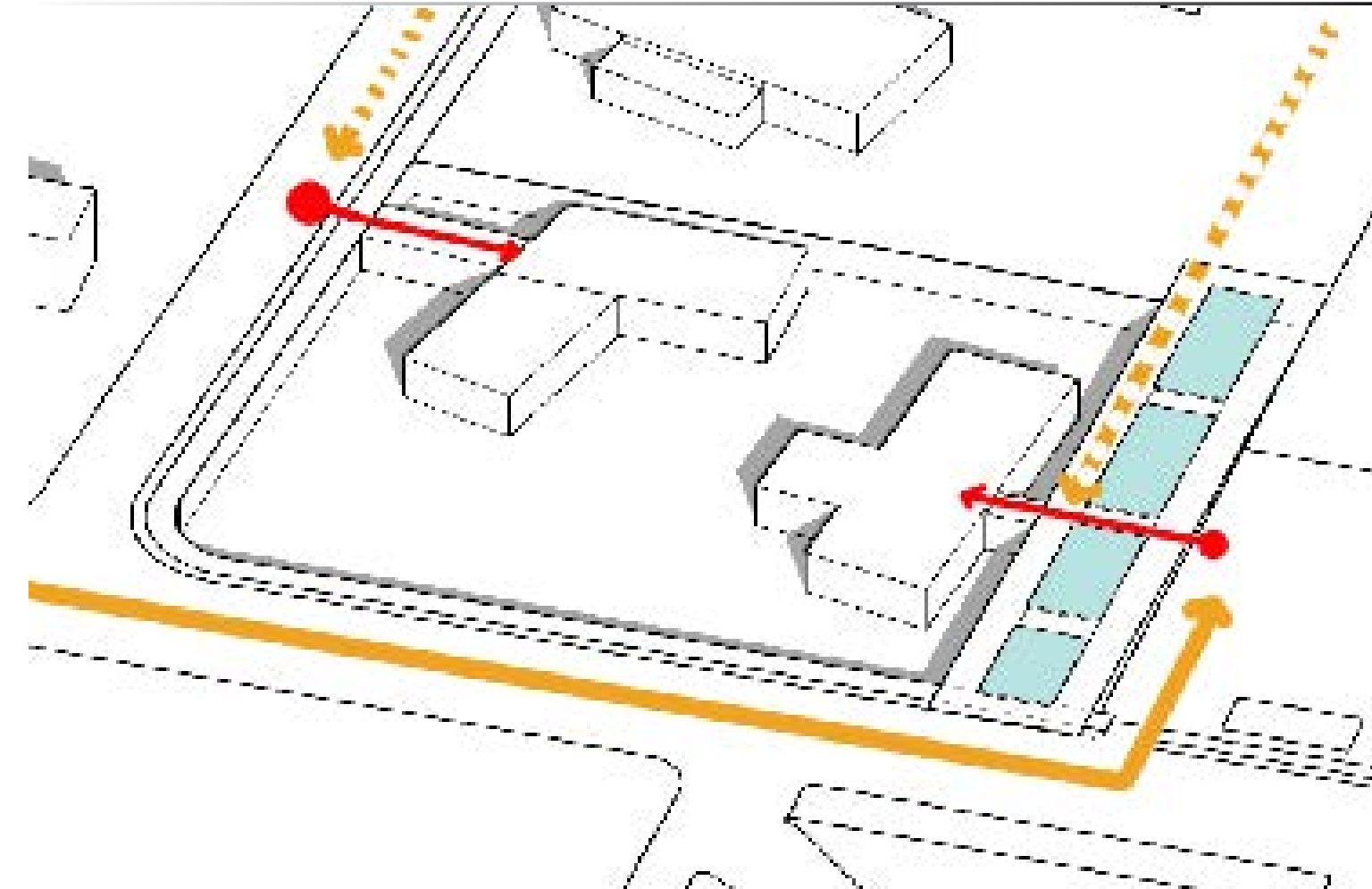
- C** • Introverted spaces act as a buffer between mosque and open public square & extroverted spaces act as a source of visual connection for extroverted space (Makerspaces).

DESIGN DEVELOPMENT

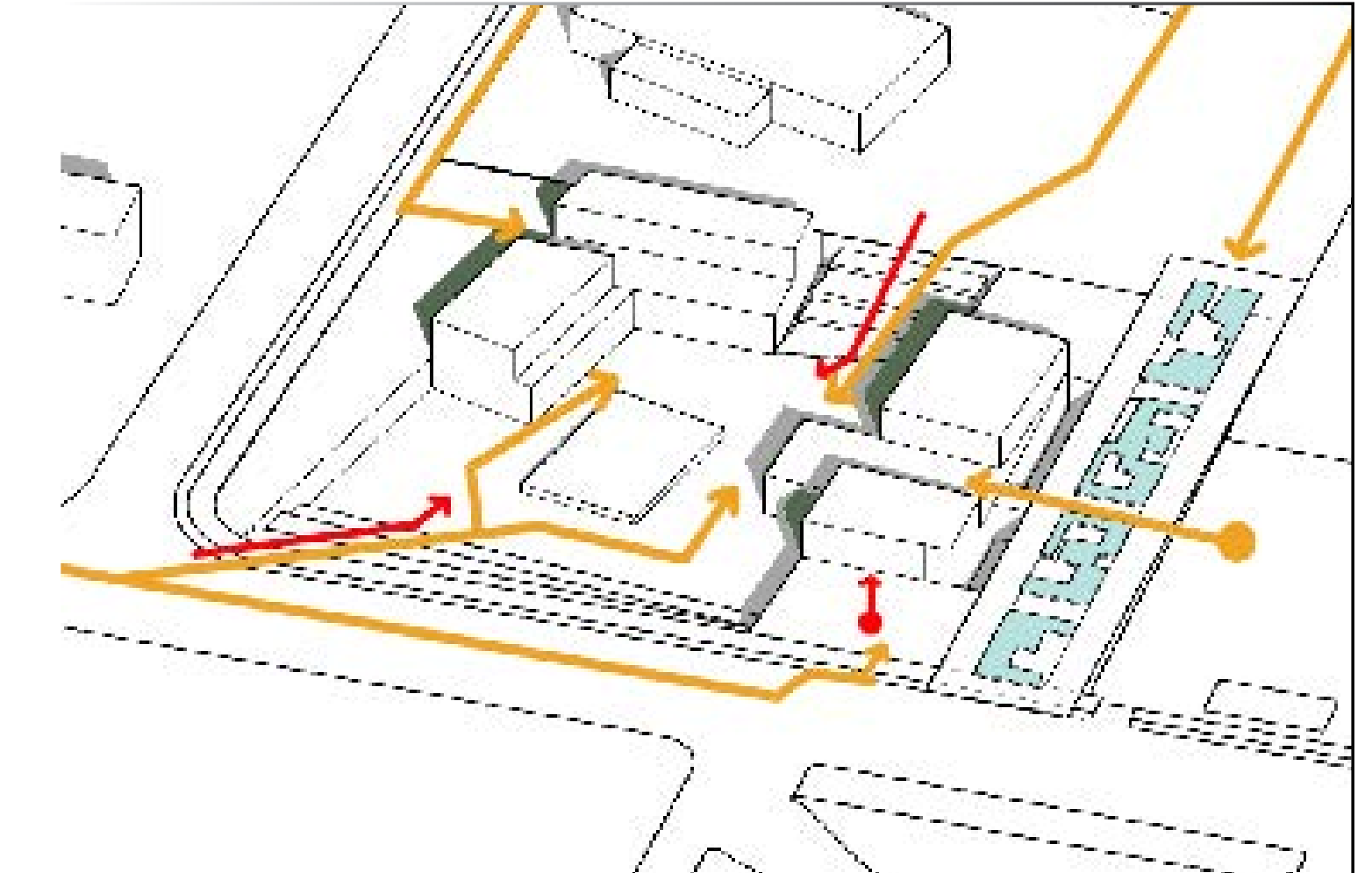
DESIGN PROCESS



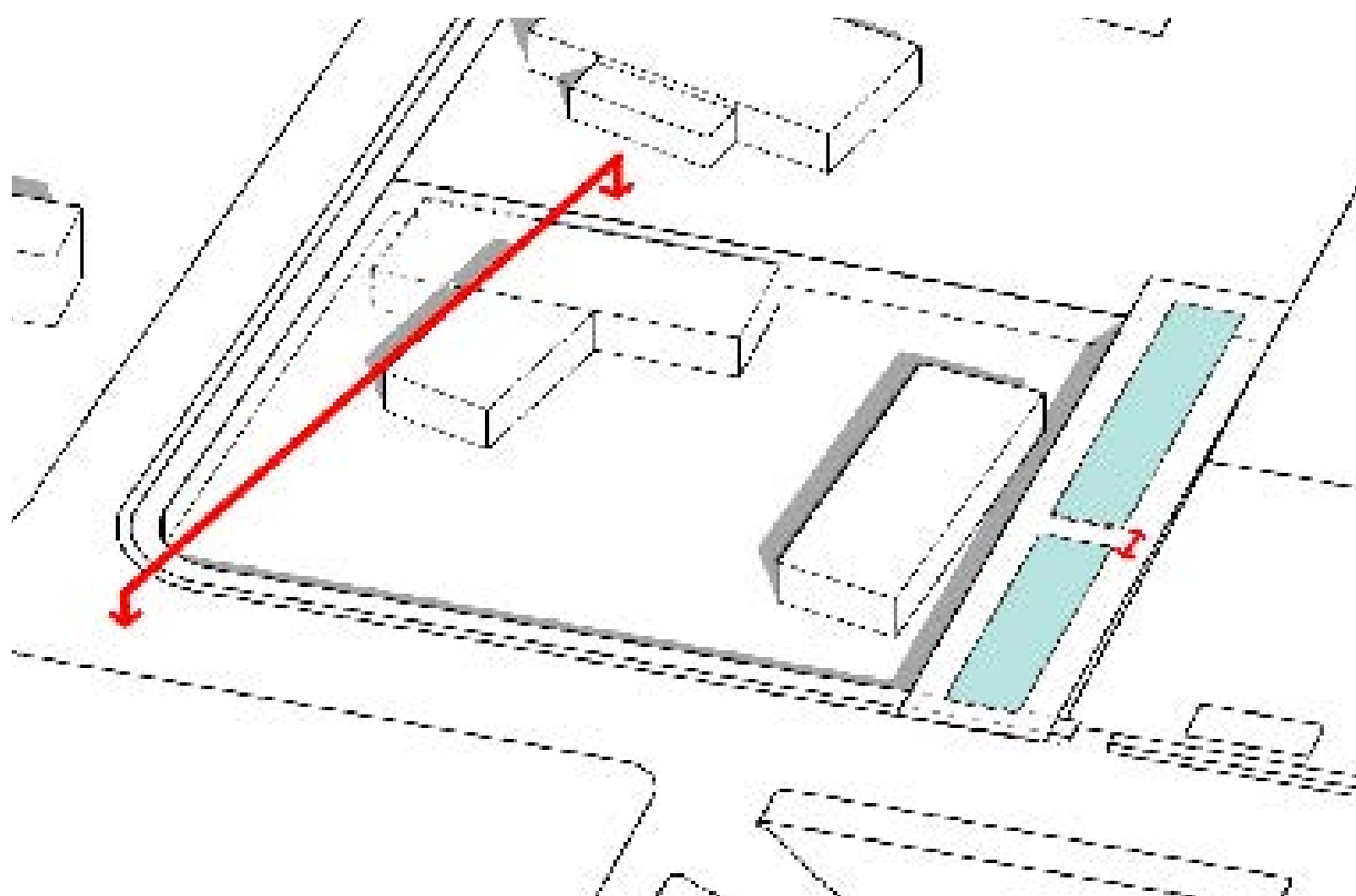
- 1 **Sunken-** to make the space inviting and humble with respect to context & and raised pathway to make platform.



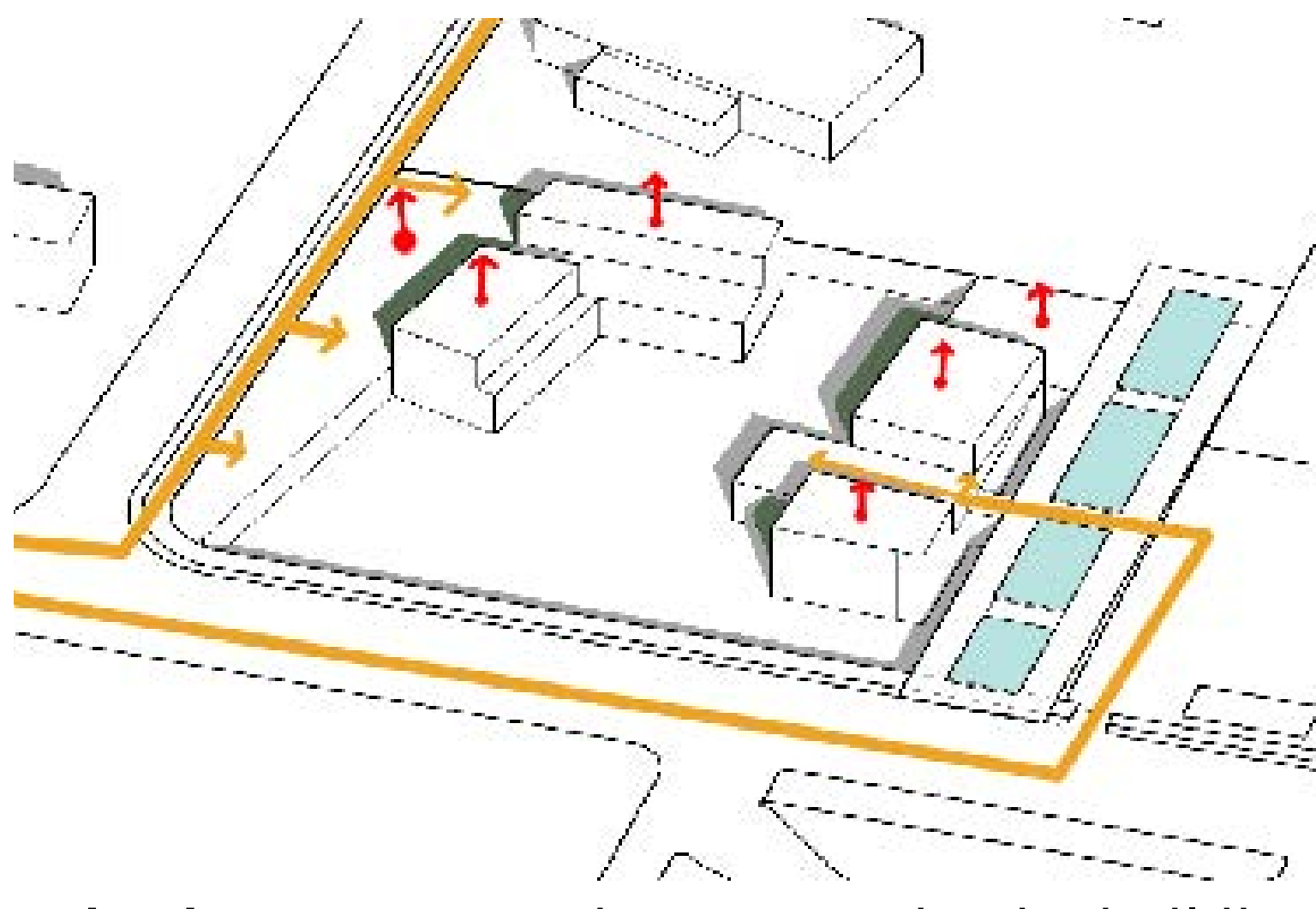
- 3 **Stretched-** to give access in the building from road and parking to ground level and split-ed the platform further to create harmony. Building horizontally is stretched w.r.t to the program.



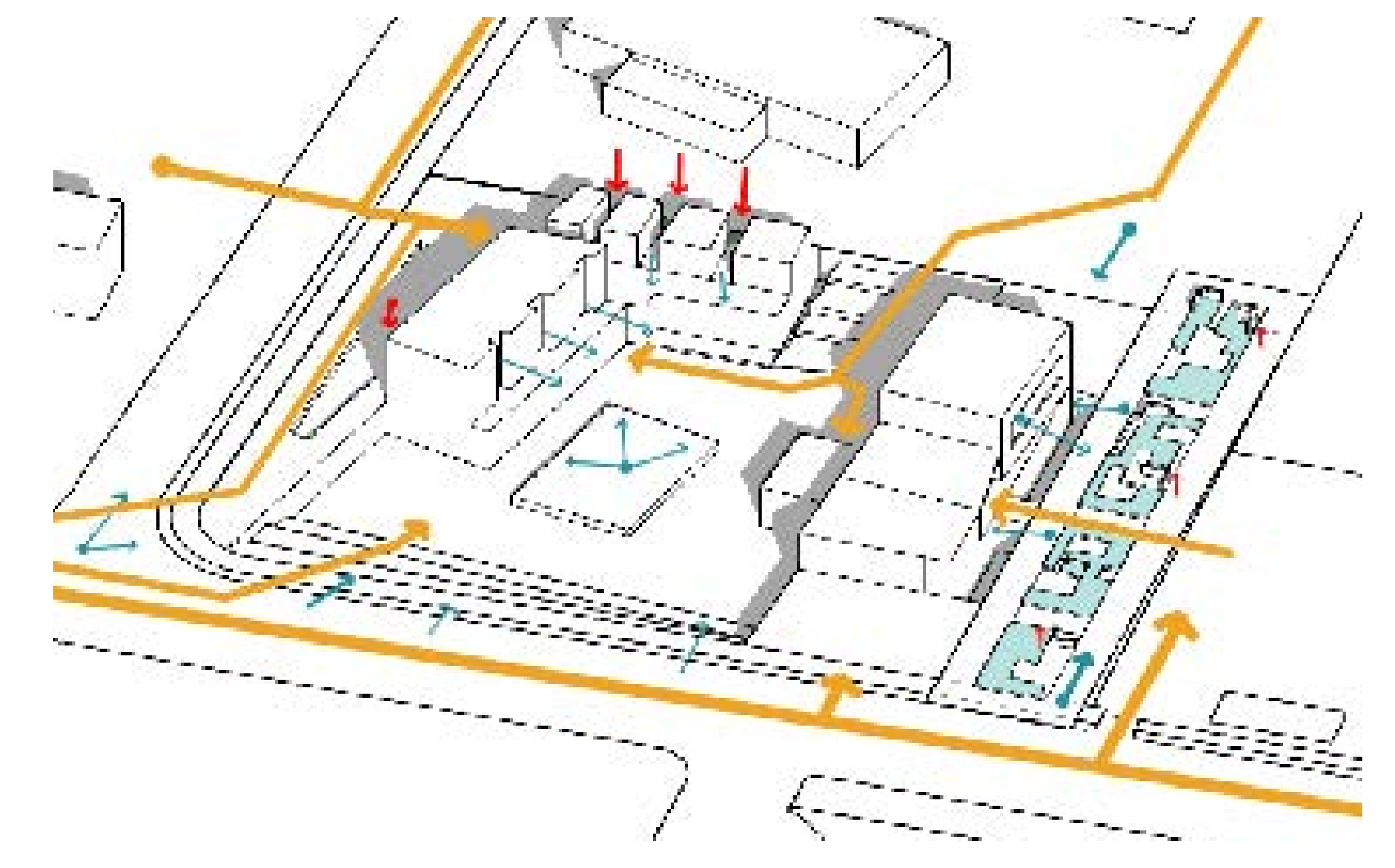
- 5 **Levels-** are created to make public square accessible from both sides of site.



- 2 **Sliced-** the building to make mosque visible from road, and split-ed the platform to give access from parking to the building.



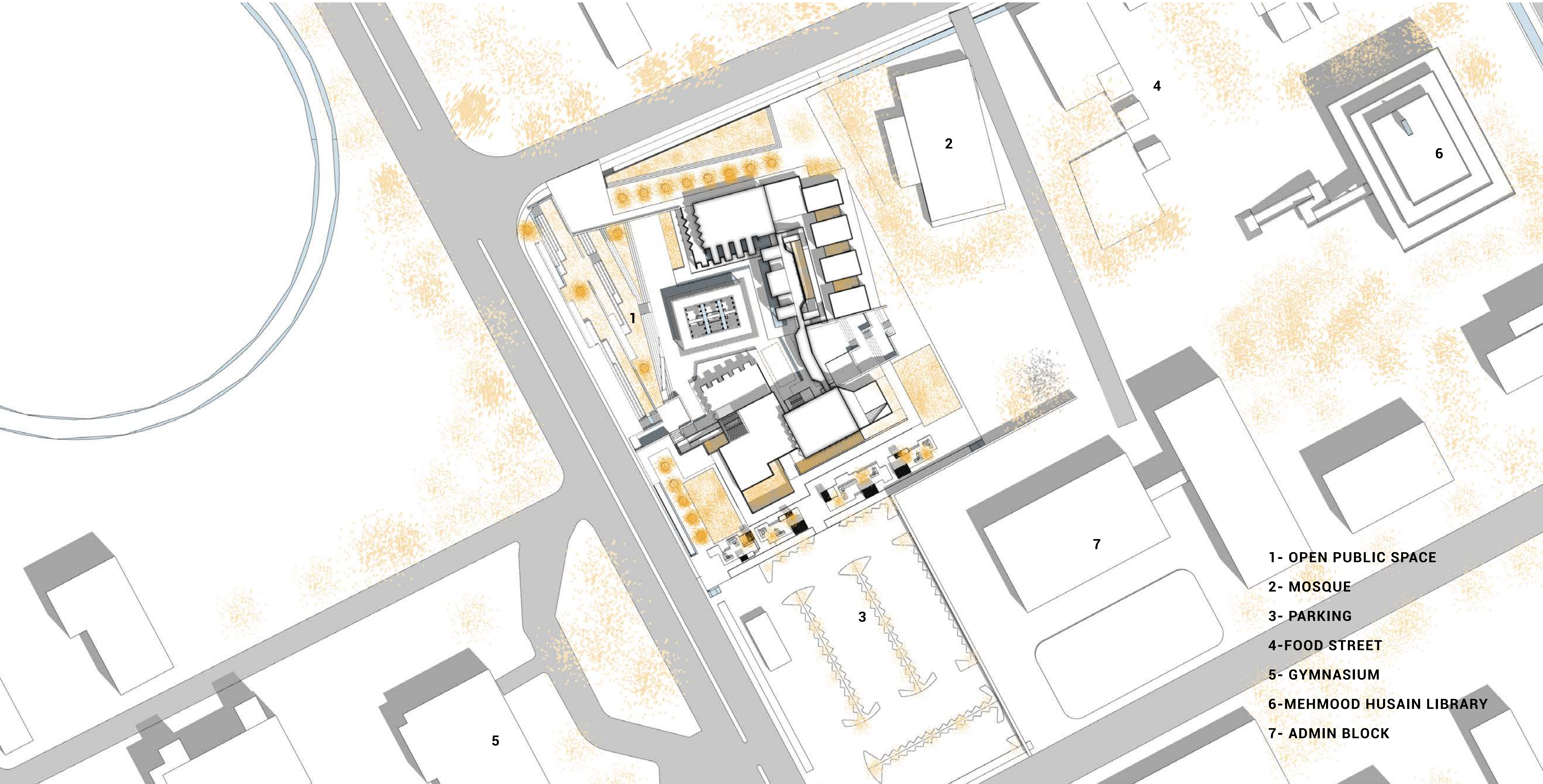
- 4 **Raised-** Some ground part to make the building accessible from the secondary road, and building is stretched vertically for more spaces.



- 6 **Multiple Accesses-** multiple accesses are made from both sunken part and from the ground floor part.

DESIGN PROPOSAL

LOCATION PLAN



- 1- OPEN PUBLIC SPACE
- 2- MOSQUE
- 3- PARKING
- 4-FOOD STREET
- 5- GYMNASIUM
- 6-MEHMOOD HUSAIN LIBRARY
- 7- ADMIN BLOCK

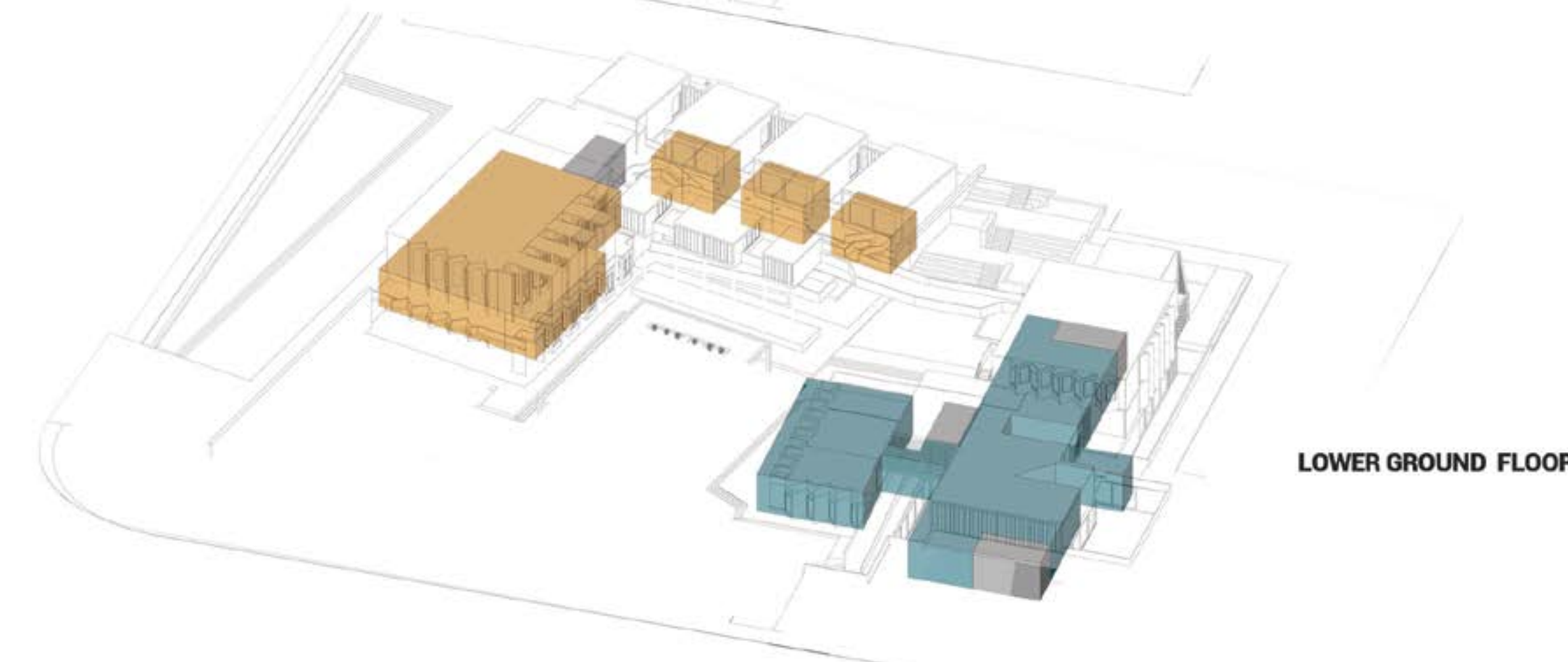
DESIGN PROPOSAL





FIRST FLOOR LEVEL



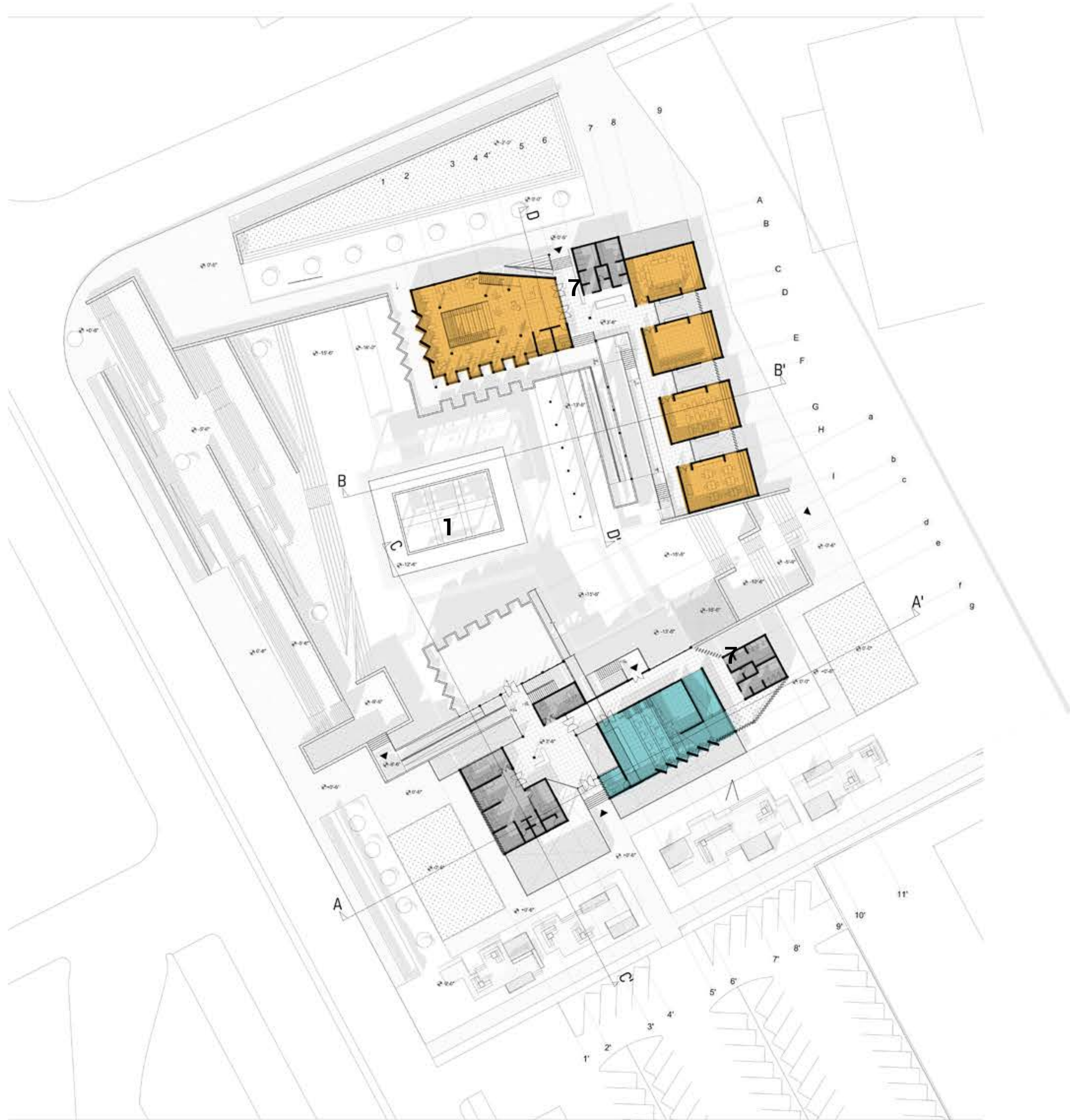
GROUND FLOOR LEVEL



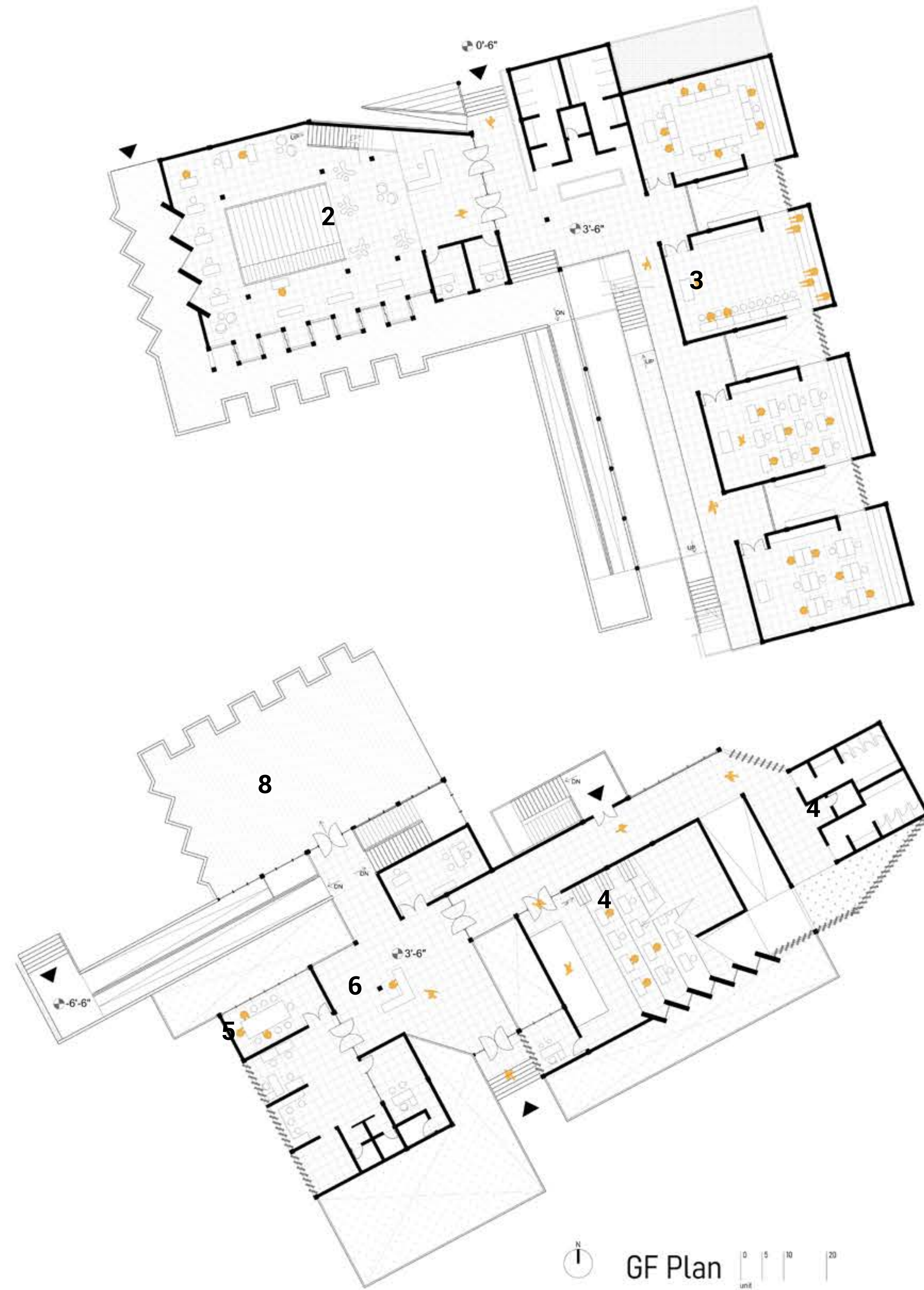
LOWER GROUND FLOOR LEVEL

-  INTROVERTED SPACES
-  EXTROVERTED SPACES
-  SUPPORTING FACILITIES

DESIGN PROPOSAL



Master plan



GF Plan



ENTRANCE FROM SCIENCE DEPARTMENTS



ENTRANCE FROM PARKING

- 1- OPEN PUBLIC SQUARE
- 2- CO WORKING SPACE
- 3- TRAINING ROOMS
- 4- SEMINAR ROOM
- 5- ADMIN BLOCK
- 6- RECEPTION
- 7- TOILETS
- 8- MEDICAL FACILITY
- 9- PATHWAY

DESIGN PROPOSAL



Lower G.F. plan



Lower G.F. Plan



CO WORKING SPACE

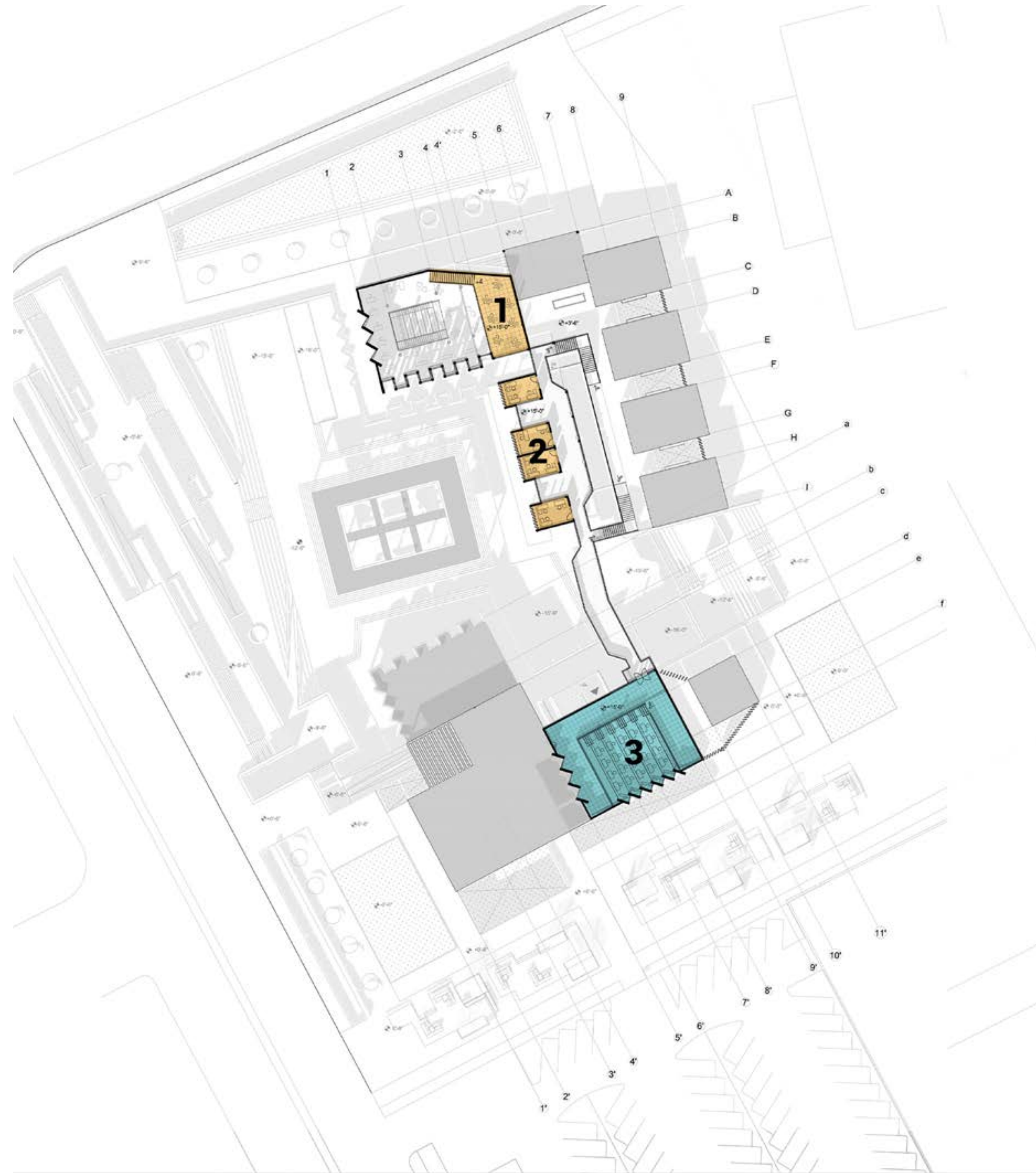


MAKERSPACE

- 1- OPEN PUBLIC SQUARE
- 2- CO WORKING SPACE
- 3- STUDIO SPACES
- 4-TECH FACILITIES
- 5- TOOLS FACILITIES
- 6-MAKERSPACE
- 7- STORAGE

DESIGN PROPOSAL

ISO VIEW



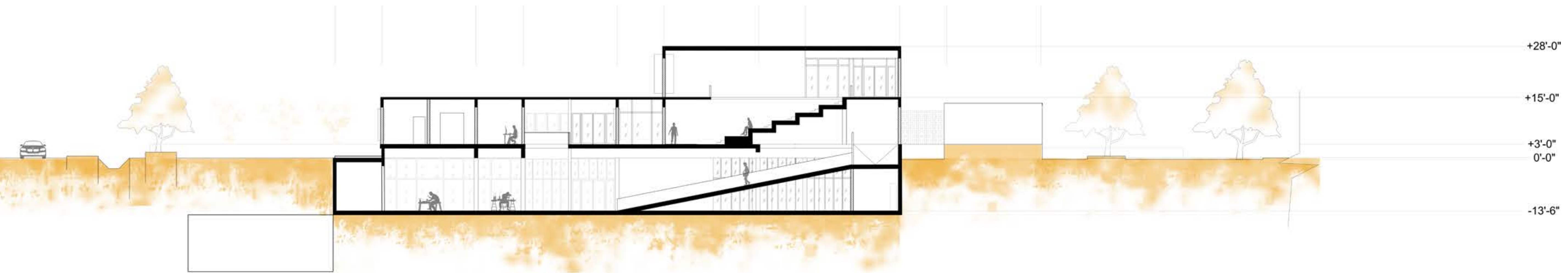
1- CO WORKING SPACE

2- STUDIO SPACE

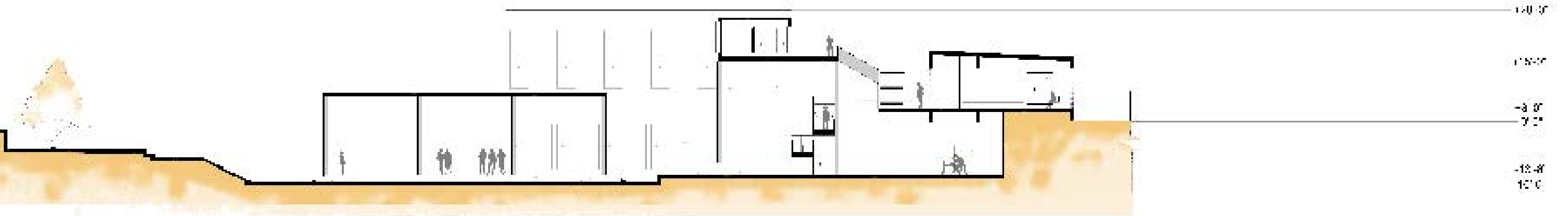
3- SEMINAR ROOM

DESIGN PROPOSAL

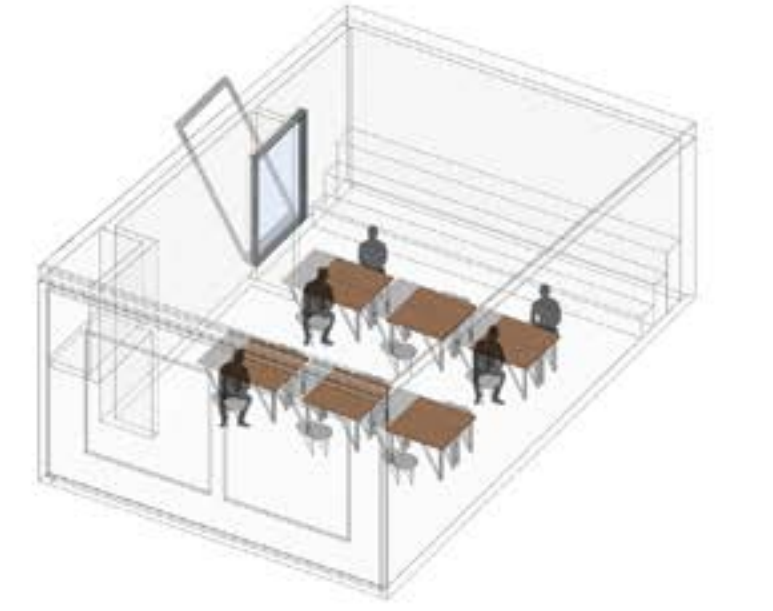
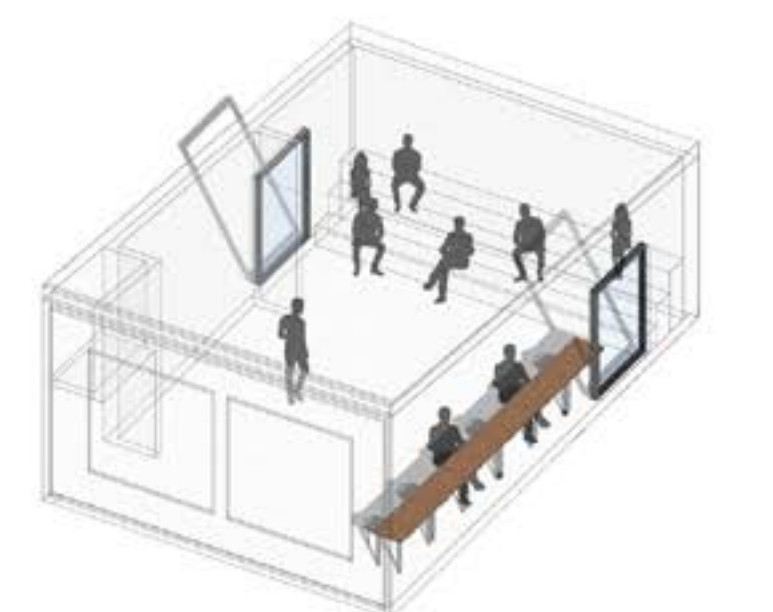
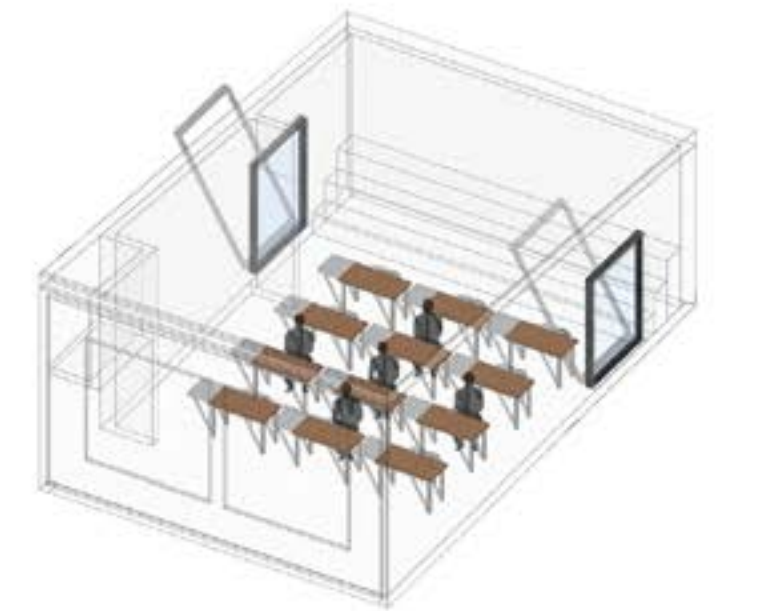
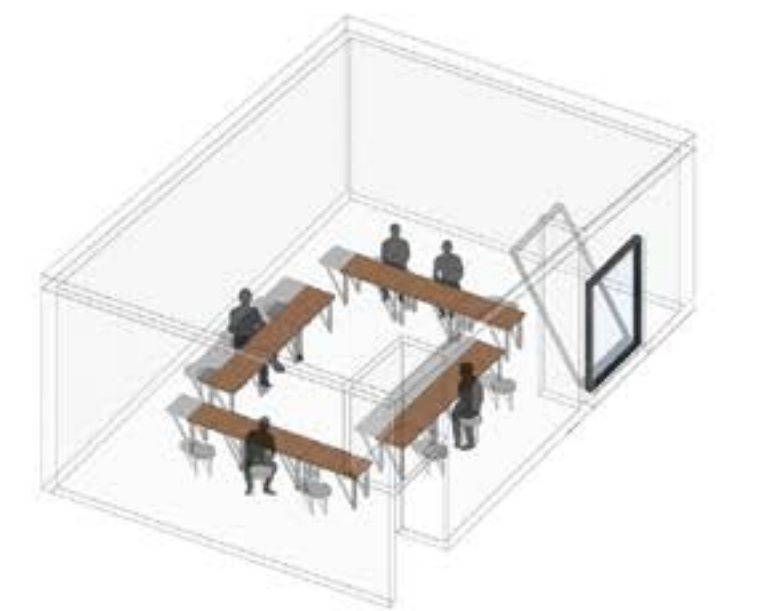
SECTIONS



A-A' Section
0 10 20 50 100
unit



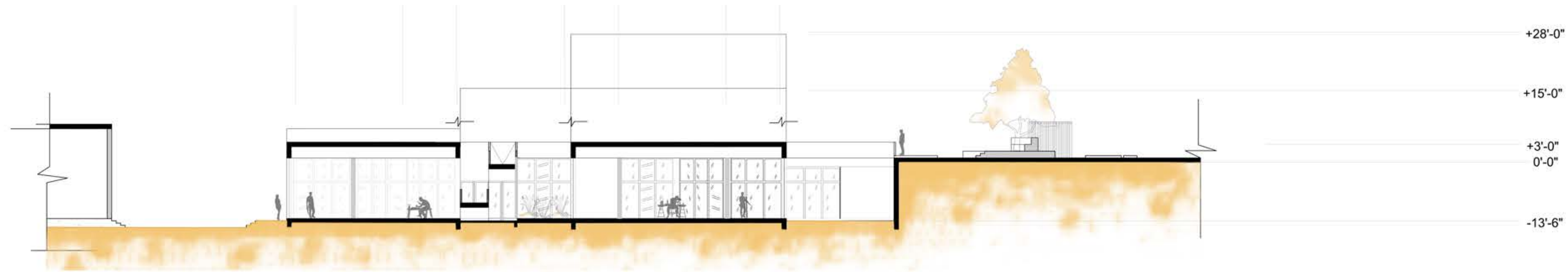
B-B' Section
0 10 20 50 100
unit



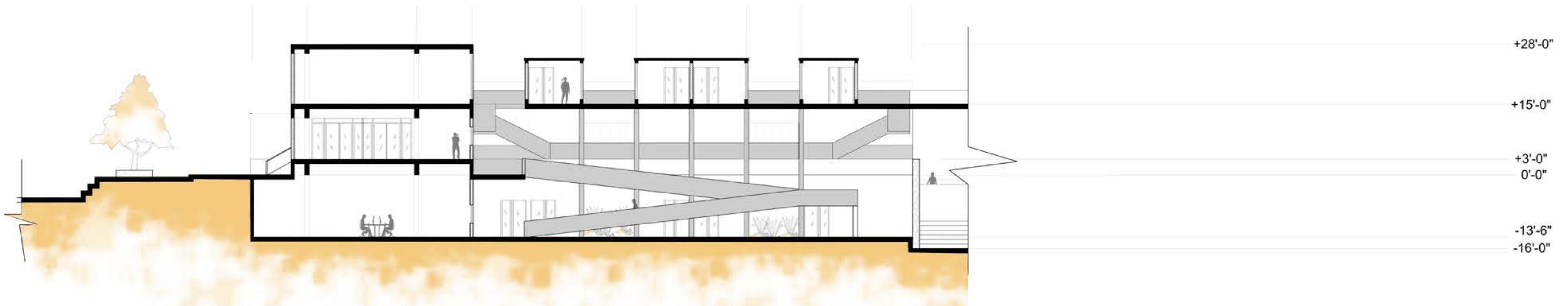
VERSTILE SPACES

DESIGN PROPOSAL

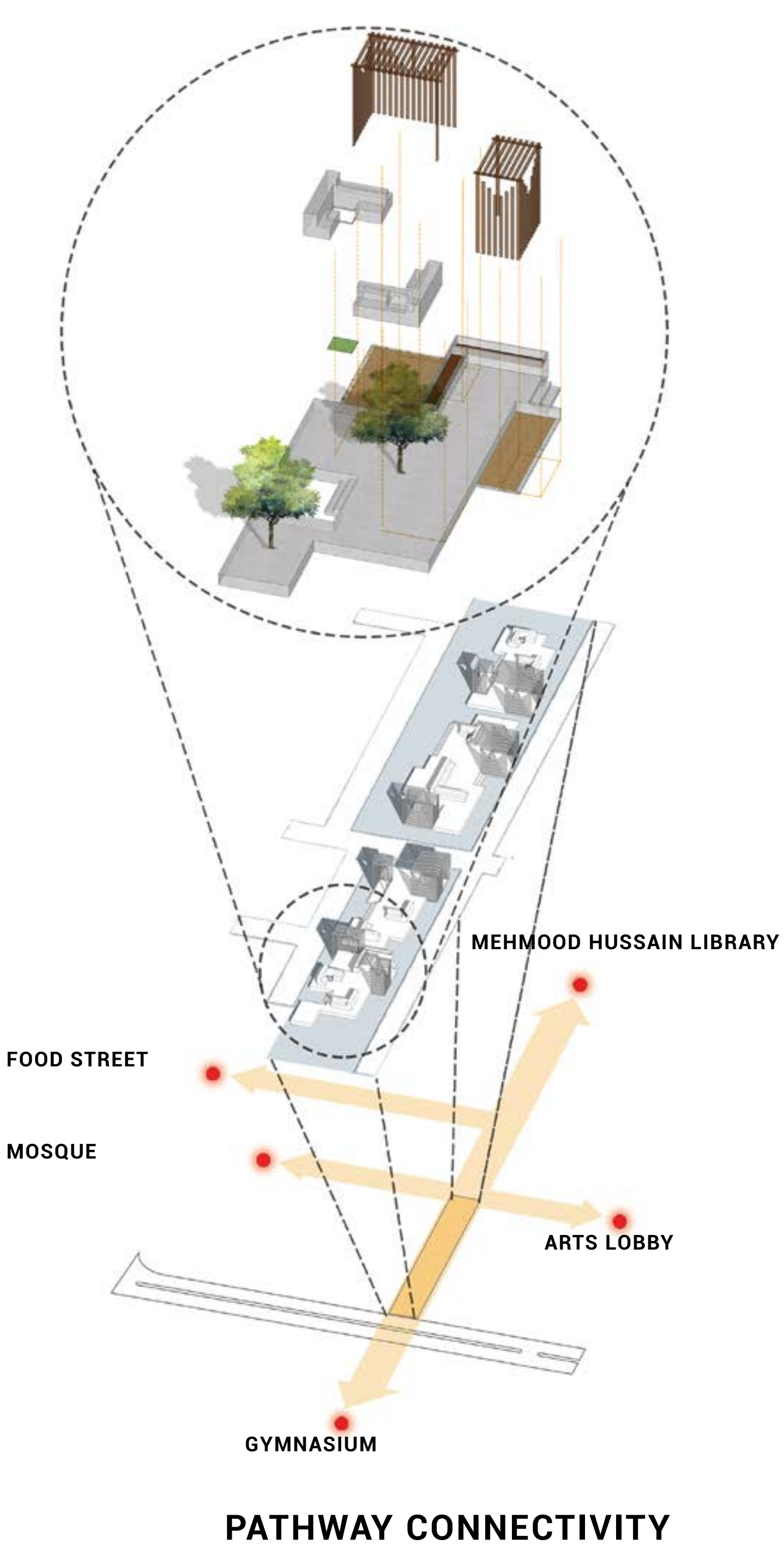
SECTIONS



C-C' Section
0 10 20 50 100
unit



D-D' Section
0 10 20 50 100
unit

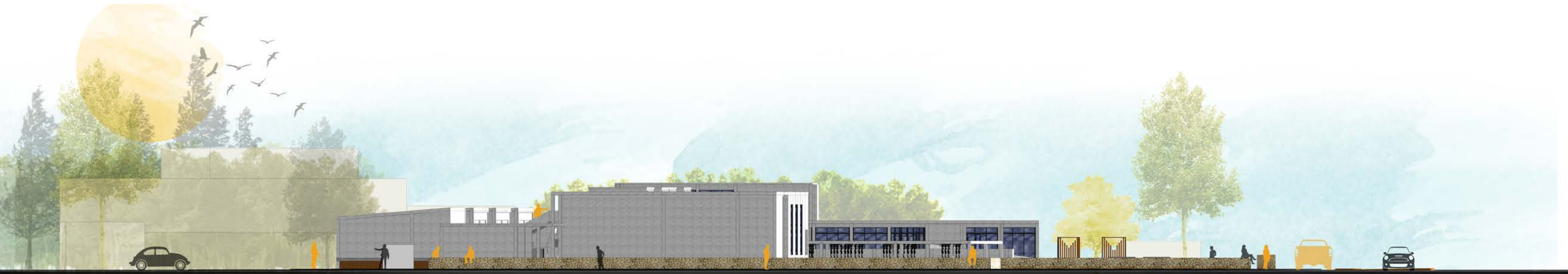


DESIGN PROPOSAL

ELEVATIONS



ELEVATION FROM KU CIRCULAR ROAD



ELEVATION FROM SCIENCE DEPARTMENT

DESIGN PROPOSAL

ELEVATIONS



ELEVATION FROM MEHMOOD HUSSAIN LIBRARY



ELEVATION FROM ARTS LOBBY

SPATIAL DIVERSITY



MAKERSPACE



TOOLS LAB



CO WORKING SPACE



MAKERSPACE

SPATIAL DIVERSITY



OPEN PUBLIC SPACE

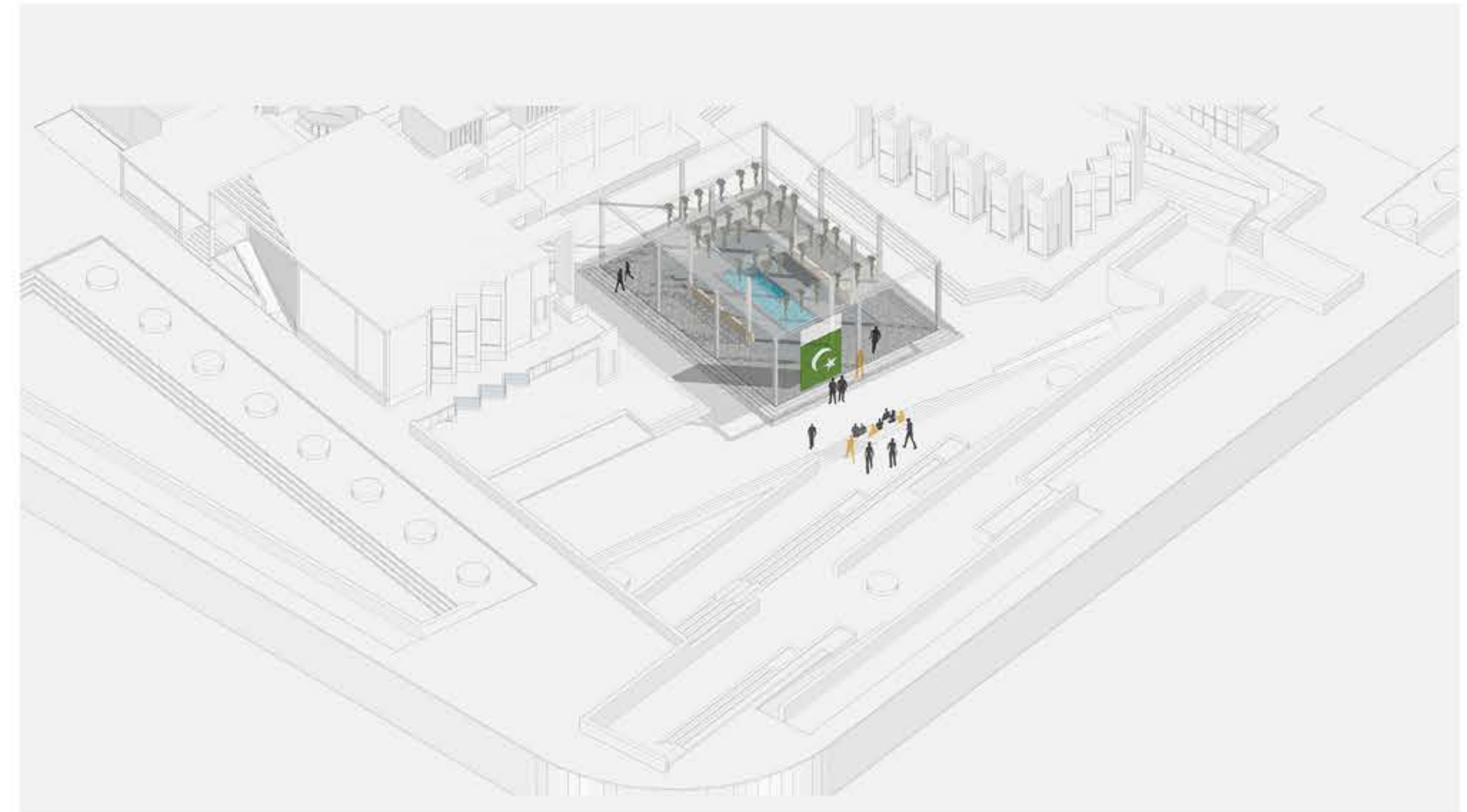


PATHWAY



PERFORMING PLATFORM

OPEN PUBLIC SPACE



TOP VIEW



