

YOUTH CENTER
MANAMAJU, KATHMANDU

By:
SUSMITA MAHARJAN
750146

A thesis submitted in partial fulfillment.
of the requirements for the
Degree of Bachelor of Architecture



Purbanchal University
KHWOPA ENGINEERING COLLEGE
DEPARTMENT OF ARCHITECTURE
Libali, Bhaktapur, Nepal

AUGUST, 2024

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An Undertaking of Bhaktapur Municipality
KHWOPA ENGINEERING COLLEGE
(Affiliated to Purbanchal University)
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CERTIFICATE

This is to certify that the thesis entitled **YOUTH CENTER** at *Manamaiju, Kathmandu*, submitted to the Department of Architecture of Khwopa Engineering College by **Ms. Susmita Maharjan** of Class Roll No. 46 /B.Arch./075 has been declared successful for the partial fulfillment of the academic requirement towards the completion of the degree of Bachelor of Architecture of Purbanchal University.

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ABSTRACT:

A **youth center** is a crucial space where young individuals can gather and engage in a variety of activities, ranging from informal education to recreation. In the bustling Kathmandu Valley, renowned for its rich cultural heritage, there is a notable lack of spaces specifically designed to cater to the needs and aspirations of its dynamic youth population. Recognizing the gap, the vision for Youth center has emerged—vibrant centers of activity and opportunity for those aged **16 to 25**.

Youth centers are built on the understanding that young people play a pivotal role in shaping the future of their communities and the nation. As the torchbearers of progress, youth possess innovative ideas, boundless enthusiasm, and immense potential. However, without proper support and opportunities, this potential often remains untapped. It aims to bridge the gap by providing multifaceted platforms for development, where young individuals can come together to cultivate their talents, whether through artistic pursuits, entrepreneurial training, sports, or educational activities.

Central to the ethos of these centers is the creation of safe, supportive environments that encourage free expression, open dialogue, and collaboration. These spaces allow young people to voice their opinions, share experiences, and work on community projects without fear of judgment or discrimination. By fostering a sense of belonging and camaraderie, these hubs not only enrich the lives of individuals but also contribute to the broader fabric of society, lighting the way toward a brighter and more inclusive future for all.

Keywords: youth, centers, skills, entrepreneurial, collaborative

DECLARATION:

I, Susmita Maharjan, hereby declare that the architectural thesis titled “Youth Center” is the result of my original research and work. This thesis is being submitted in partial fulfillment of the requirements for the degree of Bachelor of Architecture at Khwopa Engineering College.

The content presented in this thesis is based on information obtained from various sources, including books, online publications, and interviews. All references and sources have been duly acknowledged in the bibliography.

I confirm that the ideas, concepts, and designs presented in this thesis are my own, and any contributions from external sources have been properly credited. I have not submitted this thesis or any part thereof for the award of any other degree.

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August ,2024

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740146/B.Arch.

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CHAPTER 1- INTRODUCTION

1.1 Project Introduction

Youth is the time of life when one is young.

The word youth can also mean the time between childhood and adulthood (maturity), but it can also refer to one's peak, in terms of health or the period of life known as being a young adult. Youth is also defined as **"the appearance, freshness, vigor, spirit, etc., characteristic of one who is young."**

"This world demands the qualities of youth: not a time of life but a state of mind, a temper of the will, a quality of imagination, a predominance of courage over timidity, of the appetite for adventure over the life of ease." – **Robert Kenned**

Youth center is a dynamic and inclusive space tailored to meet the multifaceted needs of young individuals. It supports opportunities for youth to develop their physical, emotional, social, and cognitive abilities and to experience achievement, leadership, recognition, enjoyment, and friendship.

1.2 Background of study

The United Nations defines youth as persons between the ages of roughly 15 and 24, with all UN statistics based on this range, the UN states education as a source for these statistics.

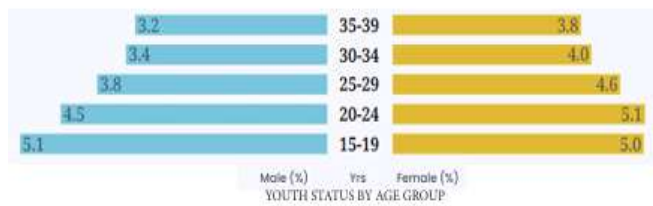
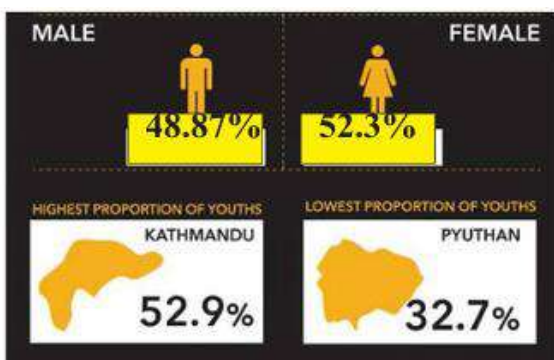
According to UNESCO, "Youth" is best understood as a period of transition from dependence. We of childhood to adulthood's independence and awareness of our interdependence as members of a community. Population of the 16-40 years age group is considered as the youth population in Nepal according to Ministry of Youth and Sports. It's a stage or collective youth strength, motivated, mobilized and channel their all-round development as well as of the society.



1.3 Youth status in Nepal

The size of the population of Nepal according to the latest population census 2078 is 2,91,92,480. Among them, 1,42,91,311(48.96%) and 1,49,01,169(51.04 %) numbers of people are male and female respectively. The annual population growth rate is 0.93%. The average density of Nepal is 198 per person per km². The density of population is highest in Kathmandu (5,108 persons per km²) and lowest in Manang (3 persons per km²) respectively. Similarly, Terai has the highest and mountain has the lowest density of population.

In Nepal, young people account for approximately 20.8 % of total population of the country (age group 16-25 years) while 40.68 % of the population lies in the age group 16-40. Population of the f first time in its history, Nepal is experiencing a demographic dividend - more specifically a ‘population dividend’ or ‘youth bulge’ which is a phenomenon where young people account for the largest segment of the population of a country.



POPULATION OF KATHMANDU



POPULATION OF TARAKESHWOR MUNICIPALITY

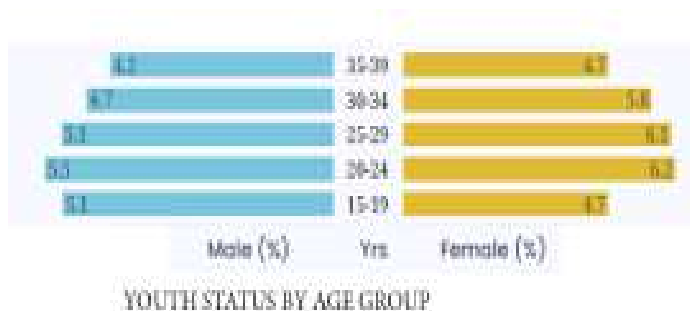


Figure1-1Bar graph of youth status (source: gov.np)

1.4 Problem statement:

In our community, there is a lack of dedicated spaces that cater to the diverse needs and interests of young people aged 15-25. This demographic segment faces challenges related to limited access to educational resources, recreational facilities, and opportunities for social engagement. As a result, there is a noticeable gap in support systems for youth development and empowerment. The absence of a centralized youth hub center hampers the ability of young people to connect, learn, and thrive in a safe and inclusive environment. Existing community centers and facilities do not adequately address the specific requirements and preferences of this demographic group, leading to disengagement and feelings of isolation among youth. According to census 2021, 23.2% of youth have migrated abroad for education, job, and other things.

1.5 Project justification:

- It will address a pressing economic challenge – youth unemployment. By providing a space dedicated to entrepreneurship, skill development, and collaboration, the hub becomes a catalyst for job creation and economic empowerment.
- Recently, a sipmela (skill festival) was conducted at Tudikhel under Kathmandu Metropolitan City with the slogan ‘Increase Employment and Income, Prosperity of Kathmandu, different training was provided for their skill development and so that they can self-employed themselves so this project will provide a proper platform to conduct these vocational training to increase their skills, talents, economic development.
- Many young individuals lack the platform to essential resources for starting and growing businesses.
- It addresses the gap by providing access to mentorship, funding, technology, and collaborative spaces.
- The Youth Center breaks down traditional silos by fostering collaboration among diverse individuals.
- It becomes a melting pot of ideas, skills, and talents, creating a dynamic environment that nurtures creativity and innovation.
- A thriving youth population positively contributes to the social fabric of a community.

- Artistic expression inspires creativity and critical thinking by integrating cultural and artistic elements.

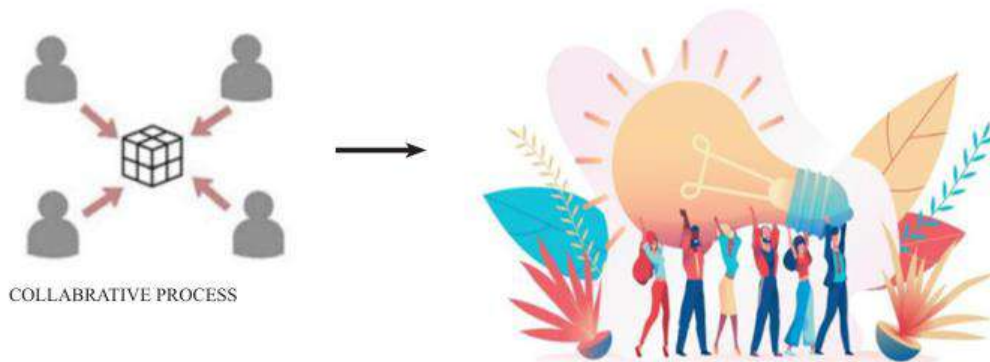


Figure 1-2 Collaborative process to enlighten the path of success.

1.6 Objectives: -

- To provide alternative ways of learning and expression.
- To provide a supportive environment for skill development and mentorship.
- To increase youth involvement in social and other activities.
- To promote personality development of youth by providing them special opportunities.
- To create a space where youth can interact with each other, share information, and build healthy bonds among the various groups.
- To foster entrepreneurial spirit and innovation

1.7 Scope and limitation

- It will cater to individuals aged 16-25, encompassing a diverse range of backgrounds, interests, and needs.
- Provides services and programs related to educational support by providing tutoring and workshops sessions.
- Can provide space related to recreational and cultural activities like arts and crafts workshops, music lessons, and cultural exchange events.
- Can provide career development programs like job readiness training and employment workshops, internship, and apprenticeship opportunities.

1.8 Methodology

Every designer has their own method and process to complete the project. For this project certain methods and design process are also carried out from initiation to design development. The internet browsing, books, magazines, related reports, documents, and case studies are supportive subject matters of this project. The methodology used in this project is illustrated below:

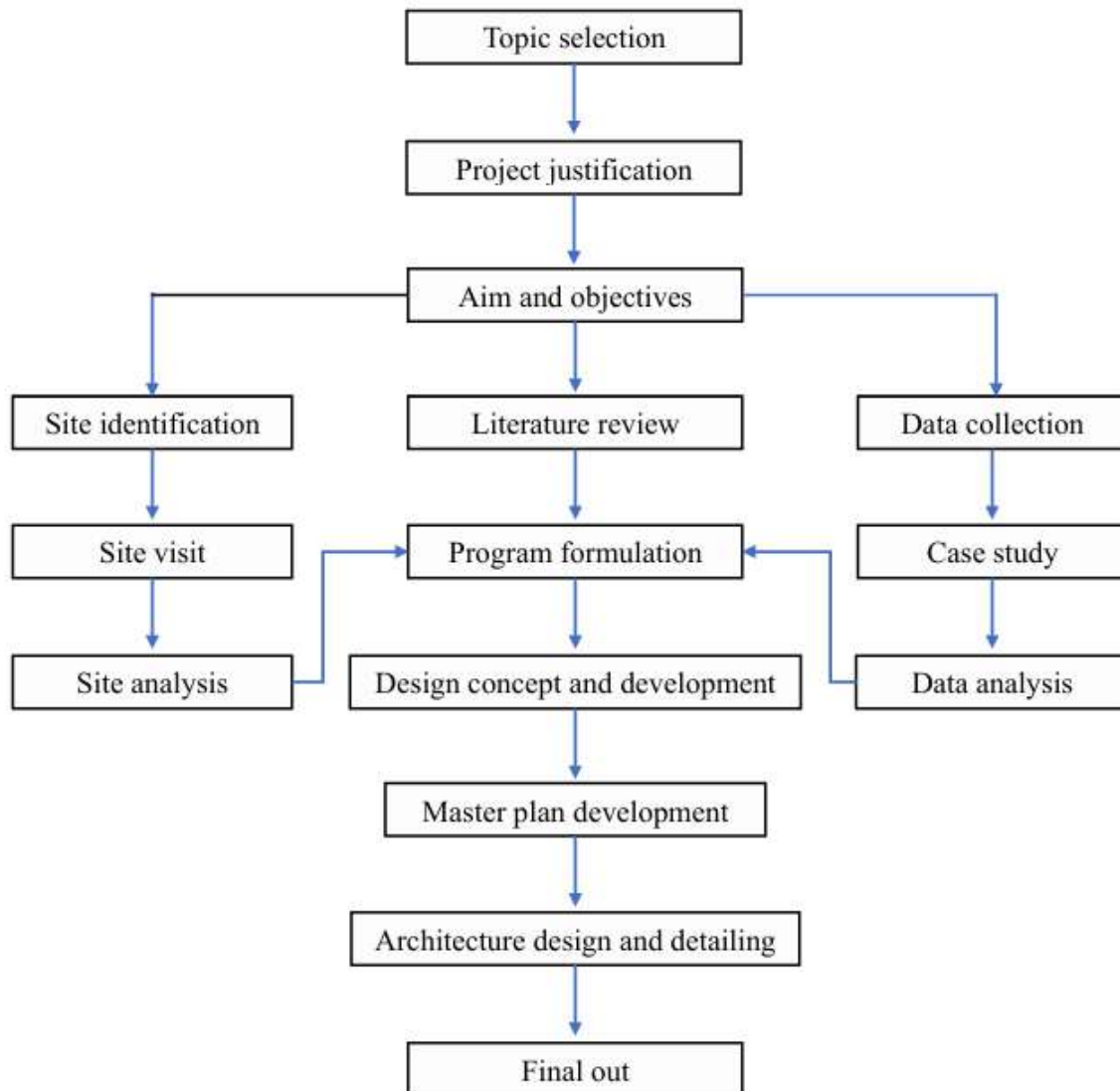


Figure 1-2 Flow chart of methodology

CHAPTER 2- LITERATURE REVIEW

2.1 Definition

A literature review provides an overview and synthesis of existing research, scholarly articles, and other relevant sources related to a particular topic. A literature review is a scholarly paper, which includes the current knowledge including substantive findings, as well as theoretical and methodological contributions to a particular topic. Literature reviews are secondary sources, and do not report new or original experimental work. Literature reviews are a basis for research in nearly every academic field.

Youth Centers are facilities designed to provide a safe, informal, and supervised environment for young people. They accommodate unstructured social interaction among different age groups and provide the space to offer more structured activities. By giving youth, the opportunity to take part in recreational and cultural activities or vocational counseling, these centers help them develop their physical, social, emotional, and cognitive abilities and to experience achievement, enjoyment, friendship, and recognition.

2.1.1 Proposed Activities and functional requirements

- Area of physical development
 - § Gym
 - § Basketball court
 - § Badminton court
 - § Indoor games
- Area of career development
 - § Library
 - § Trainings/ workshop rooms
- Area of interaction
 - § Youth lounge
 - § Multipurpose hall
 - § Exhibition gallery
 - § Cafeteria

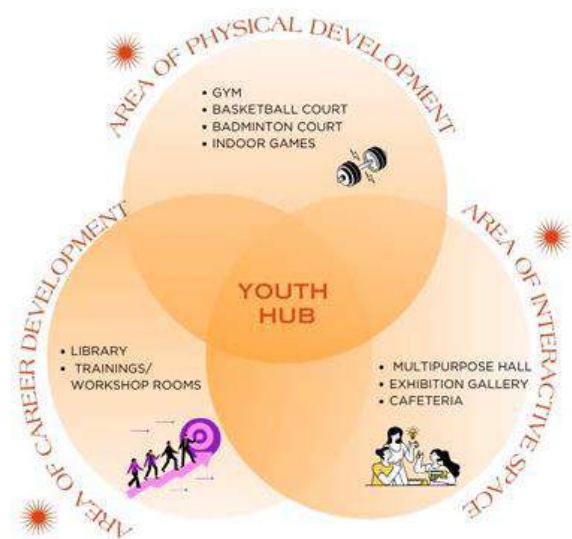


Figure 2-1 Three functional elements of programs.

2.1.2 Library

A library is a book station with a collection of books, files, documents, or any record needed for any educational process. Its size varies according to the number of students, varieties of courses, and the range of facilities it offers.

Planning Considerations:

- The library should be in an easily accessible location.
- The library should be quiet, planting vegetation placed around the building acts as a barrier for sound.
- Physical design should be governed by the functions of the library.
- Should be easy for library staff to supervise.
- There should be provision for future expansion.
- Good daylight and focused light are necessary.
- Entrance should be moderately spacious.
- Flooring should be done with fire resisting material.
- Area required = 1 to 1.2 m² per 200 books
- The height of stack should not be more than 7'-6" which gives access to all books without steps.
- Designing suitable windows and enclosing walls. Care should be taken regarding the safety of books as same as the natural lighting inside the library, while designing the window.

Circulation area:

Circulation is the most important factor for the design of a library. Control of the heavy traffic flow of the students should be made as easy as possible. Crossing or overlapping of routes should be avoided for students, staff, and book transport. Travelling distance should be minimized. Circulation route should be greater than 1.2 m wide and clear distance between the bookshelves should be 1.3-1.4 m wide.

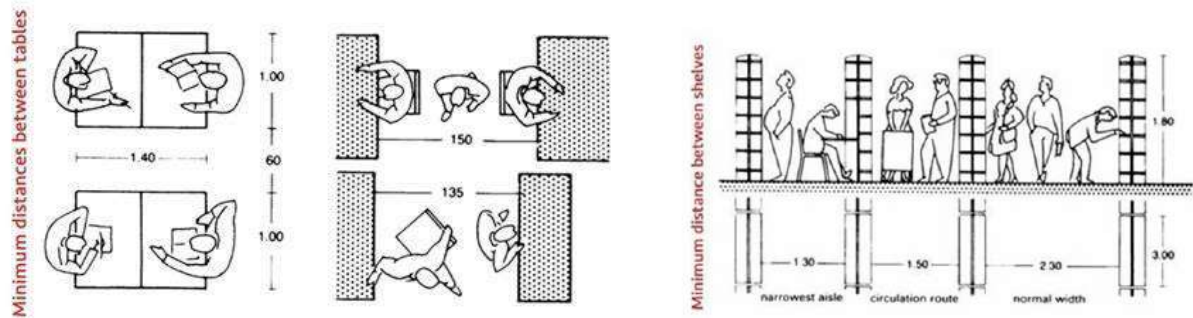
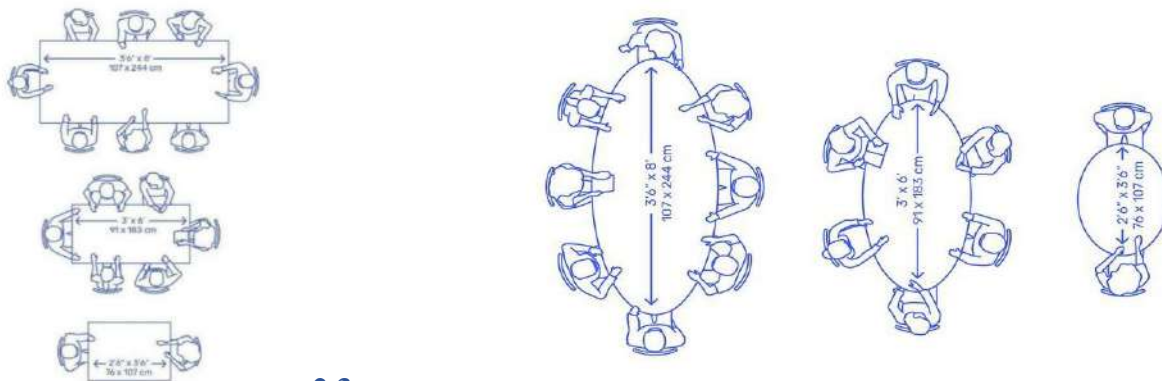


Figure 2-0-2 Dimension / distance of table book stacks

Reading area:

Reading areas should be easily accessible and placed on as few levels as possible. The reading areas should be satisfactory and should have sufficient privacy for mental concentration.

Area required for simple reading workplace = 2.5 sq.m
 Area required for PC or individual workplace = 4 sq.m



2.3

Figure 2-3 Different type of table size

Exhibition/Gallery Space

The gallery is a formal space for displaying various items of art and craft. Spaces provided can be for permanent, semi-permanent or special exhibits that are held from time to time. Care should be taken while fixing devices and furniture in walls, floors, and ceilings so that maximum space is left vacant.

For planning and designing of a gallery, the following considerations must be made.

- A clear idea of what would be exhibited.

- Number of exhibits planned per year.
- Change in the kind of exhibits.
- Number of pieces in view in case of permanent exhibits.
- Scale of displays 3-d objects to be displayed in cases or pedestal.

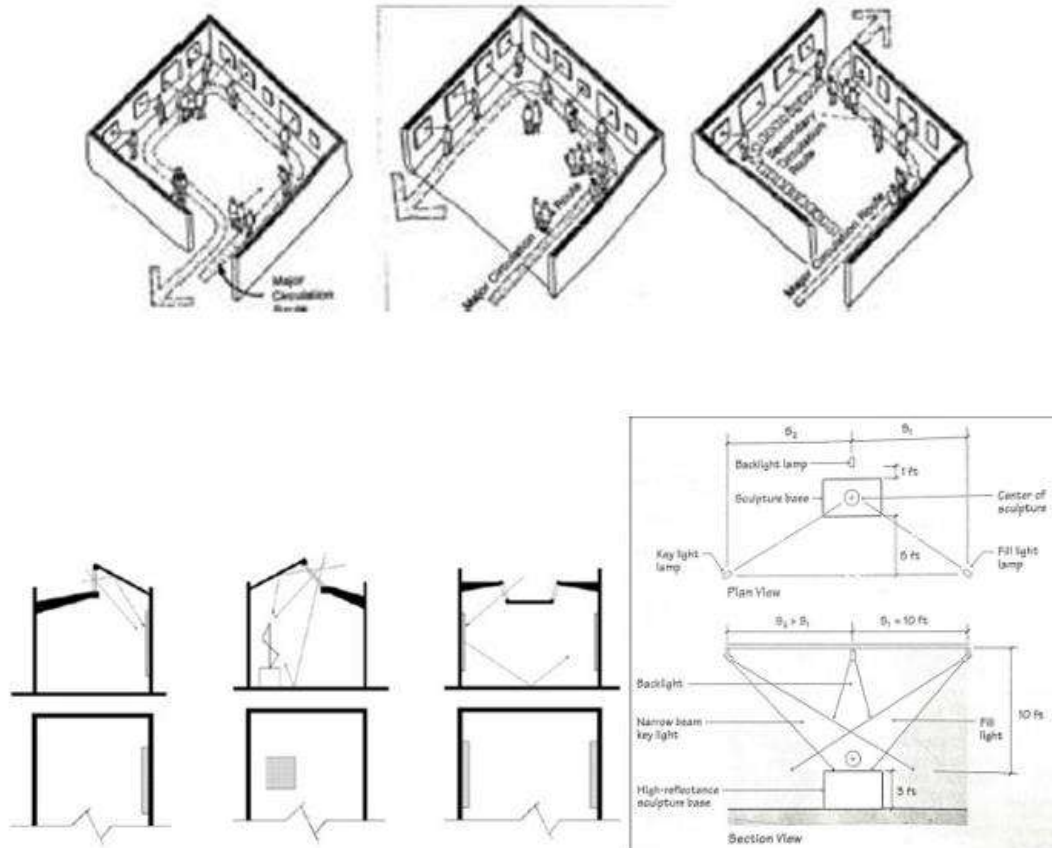


Figure 2-4 circulation for gallery

2.1.4 Fitness and Exercise Spaces

Fitness center and exercise space has become very important as a modern-day reaction to the inactive lifestyle and time pressures that our technological age has created, such facilities enjoy a strong market that seems to be constantly developing and diversifying.

Gym: The overall fitness gym area will depend upon the anticipated number of users and mix of equipment. The shape of the fitness gym area will inevitably be defined by the overall design of the building.

Design consideration:

- The room size of 200m²/ is required for 40-50 users.

The minimum room size of 40m²/ is required for 12 users.

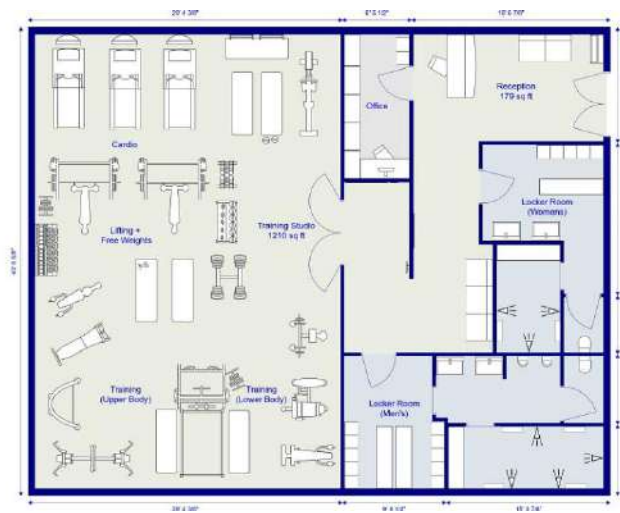


Figure 2-4 Workout layout

- Clear room height should be 3.5-4m.
- For the double-row arrangement of the equipment, at least a room size of 6m wide is recommended.
- To allow clear supervision of the trainers, the length of the room should not exceed 15m.
- Establish minimum center spacing for standing exercise in place i.e. minimum distance of 65 to 80 inches between two persons.
- The nature of the exercise and the intensity of the body movements involved should be taken into consideration.
- It is recommended that in establishing clearances, the person of larger body size be used as a model. The largest clearance distance required for large male is 91.5 inches (for sit-ups).
- The dimensions and general configuration of heavy equipment's vary with model and manufacturer, but the minimum volume occupied by equipment is 3ft x 5ft x 7ft.

2.1.5 Table Tennis

Table tennis, also known as Ping-Pong, is a sport in which two or four players hit a lightweight, hollow ball back and forth using table tennis rackets. The game takes place on a hard table divided by a net. Except for the initial serve, players must allow a ball played toward them only one bounce on their side of the table.



Figure 2-5 Showing dimension of table tennis

Table tennis standard dimension and must return it so that it bounces on the opposite side. Points are scored when a player fails to return the ball within the rules. Play is fast and demands quick reactions.

2.1.6 Basketball

In basketball, the basketball court is the playing surface, consisting of a rectangular floor with tiles at either end. In professional or organized basketball, especially when played indoors, it is usually made from some wood, often maple, and highly polished. Outdoor surfaces are generally made from standard paving materials such as concrete, asphalt or outdoor suspended modular court. Basketball courts come in different shapes and sizes and colors.

In the NBA, the court is 94 feet by 50 ft (28.65m by 15.24m). Under International Basketball Federation (FIBA) rules, the court is minutely smaller, measuring exactly 28 m by 15 m (91'10.4" by 49'2.6"). A high school court is slightly smaller, at 84' by 50' and some elementary schools have courts measuring 74' x 42'. The baskets are always 10' (3.05m) above the floor (except possibly in youth competition). Basketball courts have a three-point arc at both baskets.

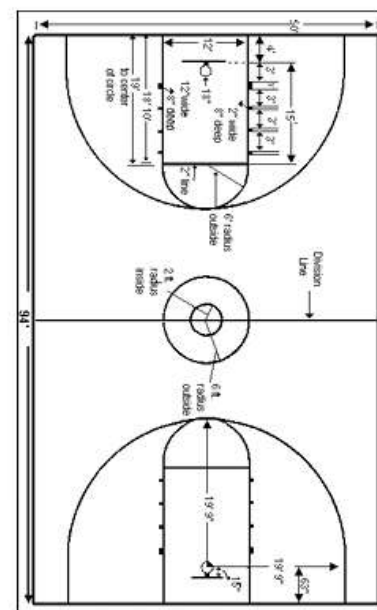


Figure 2-6 Layout of basketball

2.1.7 Workshops

Generally, a workspace includes three basic units of accommodation:

- Workspace area which includes various workspace such as machine room, planning and designing.
- Storage area for raw material, finished work, storage space for tools and small, moveable equipment, workers belongings.
- Services & amenities such as staff room, locker room, washroom.

General consideration:

Freedom and Flexibility of Space

Large, ventilated rooms, with high ceiling and transitional areas such as courtyard, or open to sky spaces should be well appreciated in the studios and work areas.

- The link between indoor and outdoor space should be maintained as far as possible.

Lighting

- Studios must have a good amount of natural daylight, with high level windows equal to at least 25-30% of the floor area.
- Artificial light comes into use in absence of natural light, where detailed work and displayed images are to be focused.
- Lighting should be such that it does not produce any glare, less maintenance, much saving of wall and ceiling space.

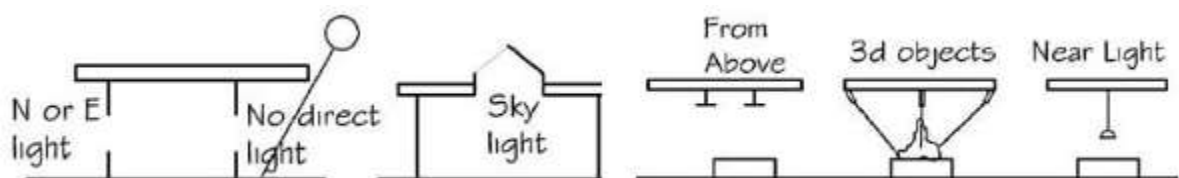


Figure 2-7 Different kinds of lighting in art gallery

2.1.8 Dance

Dance is a performing art form consisting of sequences of movement, either improvised or purposefully selected. This movement has aesthetic and often symbolic value. Dance can be categorized and described by its choreography, by its repertoire of movements, or by its historical period or place of origin.

According to Center for Educator Development in Fine Arts (CEDFA),

- Posts or columns should not be in the interior space
- Generally, the most common sizes of studios are:
 - 20 x 20 small- 16 students.
 - 20 x 30 medium-24 students
 - 30x 40 large-48 students
- There should be mirrors on the walls, mirrored sections should be at least 6’ X 8’ and strongly pinned to the wall approximately 6” from the floor.

2.1.9 Music

Music is the art of arranging sounds in time through the elements of melody, harmony, rhythm, and timbre. Music is observed to be the most widely and perhaps universally performed art. It is found in every culture, often associated as an integral part of other performing arts.

Acoustic considerations:

The requirements for good rehearsal facilities:

- good sound insulation should be ensured when built, as it is difficult to improve later without extensive repairs and proper background noise level
- enough absorption
- special requirements for instruments need to be met (floor, reflecting wall, etc.)
- other environmental controls were needed (ventilation, lighting, temperature).

2.1.10 Restaurant

Space Standards

- 1 person=600mmx400mm
- Table width=min.800mm to 500mm
- Minimum width=1000mmc/c aisles
- Height of dining should be 2.5m for area less than 50m²

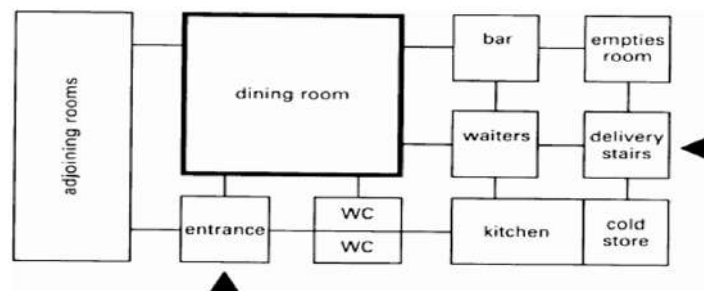


Figure 2-8 Functional diagram of restaurant.

- General walkway width=1.1m
- Chair distance=650mm c/c

2.1.11 Dining Room

In restaurants with greeting or waiting areas, these spaces are typically located near the entrance. However, they should be positioned far enough from the door and spacious enough to prevent waiting customers from obstructing traffic entering and exiting the restaurant.

- Waiting areas should offer comfort without being so inviting that customers are reluctant to move to their tables.
- Rooms with neatly arranged tables and booths in regular rows tend to feel formal. In contrast, randomly spaced tables with varying sizes and types of seating create a more informal, visually interesting atmosphere.
- Having the right mix of table sizes in a restaurant can reduce customer wait times and maximize seating capacity and profitability.
- Curved forms often attract people. Asymmetrical bars, counters, and table shapes encourage interaction between guests through face-to-face seating.
- Spatial arrangements should always be orderly, guiding customers in a logical flow from one area to the next.
- The layout and furnishings in the dining room significantly influence the efficiency of restaurant operations. Smooth operations enhance the customer experience, which can impact their decision to return.
- Fast and professional service depends on efficient traffic flow within the restaurant.
- It's also important to consider the cultural and ethnic background of the target market. Depending on the type of business, the desired length of time customers stay will vary.
- In fast-food dining rooms, primary colors and bright lighting can be used to emphasize the brand's identity and create a lively, high-energy environment.

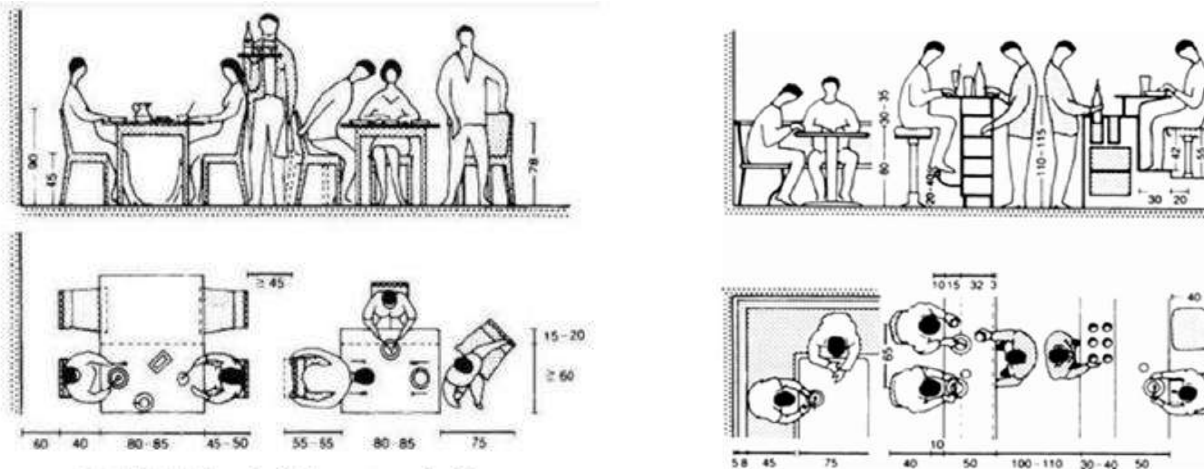


Figure 2-9 Different layout of dining area

2.1.12 Accessibility and Universal Design

Considered impairments:

- Wheelchair user
- Ambulant people
- Physical impairment

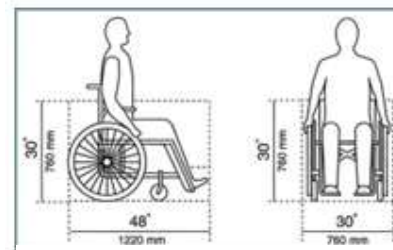
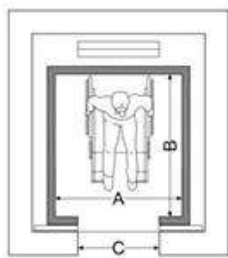


Figure 2-10 Wheelchair dimension



Min. dimensions of disabled accessible Lift

- A 1250 mm
- B 1400mm
- C 800mm

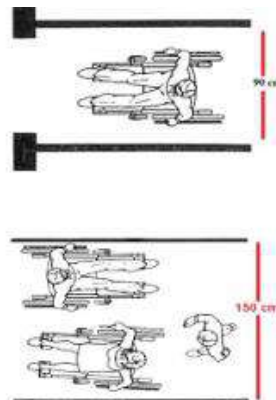


Figure 2-11 Disable accessible toilet

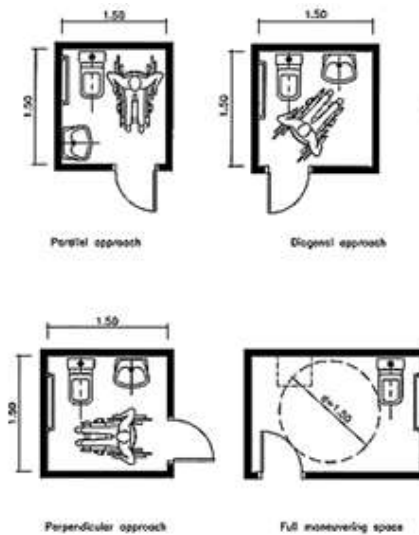


Figure 2-12 Disable accessible lift.

2.1.13 Parking

Youth centers should have modest parking. This parking would serve the building itself with city vehicles, some employee parking, trainers, trainee vehicles. Short term visitor should be a priority so that citizen can easily use the customer service functions.

Parking dimensions

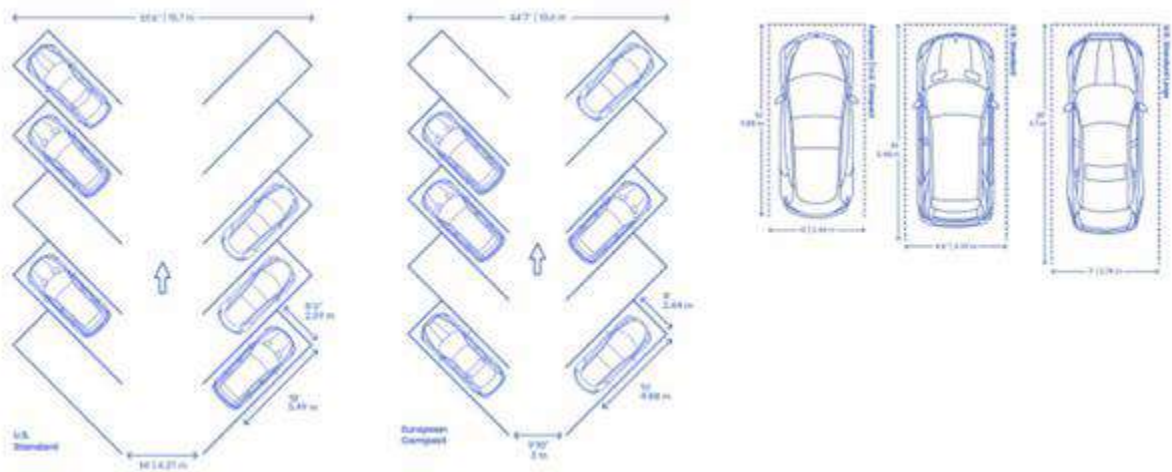
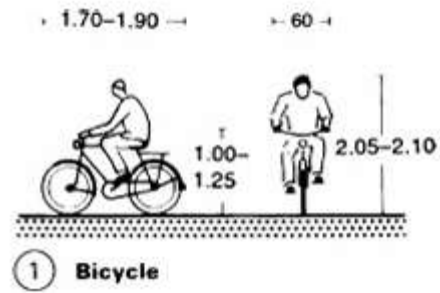


Figure 2-13 Parking dimensions for four-wheeler

CHAPTER 3 CASE STUDIES

3.1 NATIONAL CASE STUDIES

3.1.1. Handmade Paper Factory

- Location: Kapan, Kathmandu
- Specialization: Manufacturing paper and products of paperwork includes decorative items, notebooks, shopping bags, cards, etc.

Made up of fibrous inner bark of high elevation evergreen shrubs primarily from two species of Daphne (plant): Daphne bholua and Daphne papyracea, known collectively and vernacularly as Lokta bushes.

Historically the handcrafting of Lokta paper occurred in the rural areas of Nepal, most notably in the Baglung District.

- Today raw Lokta paper is produced in more than 22 districts in Nepal, but finished Lokta paper products are produced only in Kathmandu Valley and Janakpur.

Lokta Paper is great for book binding, block printing, and reusable gift wrap.

Characters of Lokta paper:

- Handmade
- Eco friendly
- Continues an honored tradition

The building is made up of truss, one storey

.

Lighting and Ventilation:

- Paper making workspace on outer ground and products making are on ground floor, so lights are through door openings for ground floor and thus found inadequate.

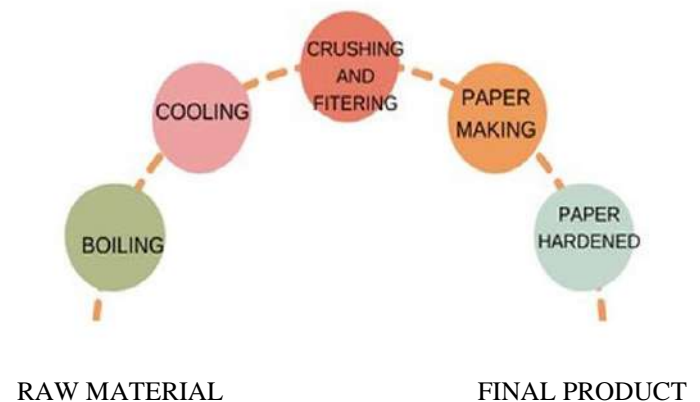


Figure3-1 Process of manufacture

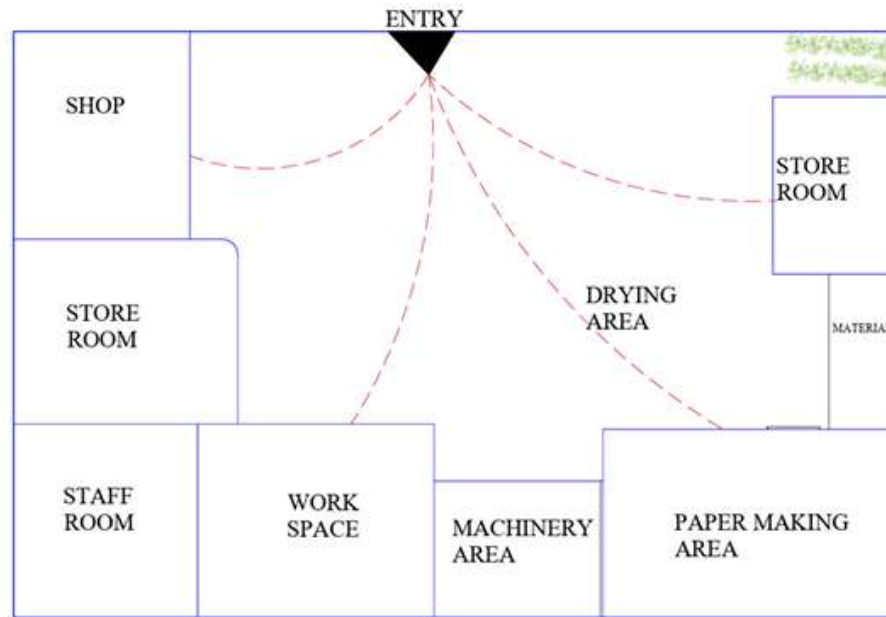


Figure 3-2 Zoning of the factory



Figure 3-3 Different products like diary



Figure 3-4 Process

3.1.3 Zoom Beauty Academy

- Location: Balaju, Kathmandu
- Established: 2058
- Owner: Zoonu Chakradhar, and Director, Krishap Twanabasu,

Total staff for teaching: 16

Students: 100-150

Zoom beauty academy is an academy with makeup studio with 21 years of experience which provides wonderful beauty training classes as per the requirement and quality training courses like different beauty courses, to build up new career in beauty. The ambience is often soothing and aesthetically pleasing, allowing clients to relax and enjoy the experience. The studio typically has well-lit mirrors, comfortable seating, and a clean and organized setup to facilitate the makeup application process.

Courses:

- Full Beauty Course: 9 months, 15 days
- Master in Hair Chemical/Nail Technician/Hair Designing: 30 days/ 120 days
- Self-Makeup/ Pro. Self-makeup: 7 days per day 2 hrs.
- Lashes Extension, Eyebrow Lamination, Perming & Tinting: 7 days / 2hrs per day,
- Korean Water shine BB Glow Treatment
- Master in Permanent Makeup
- Advance in Camouflage & Collagen Stimulation
- Master in Scalp Micropigmentation
- Master's in special in Areola reconstruction
- Time: 7am to 7pm

Circulation:

The client section and training section were separated for the convenience of both people. As for client /customer section spaces of different activities were separated like space for hair, nail, makeup etc. with the provision of drinks. As for training class, a group of students were divided circling around the table they learn, practice their work. Starting from simple drafts to inreal practices helps to broaden their skill and knowledge.

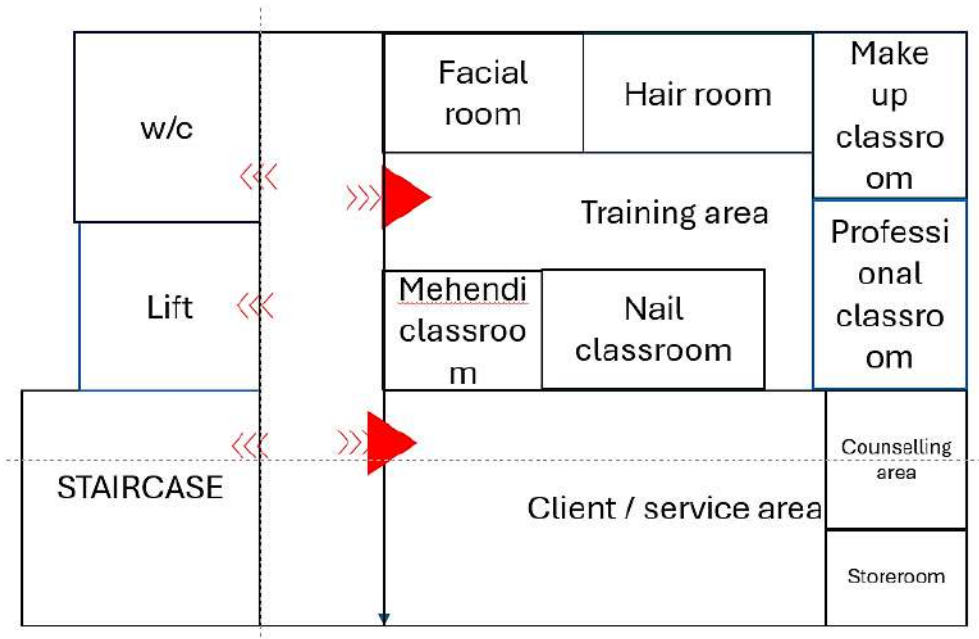


Figure3-5 Zoning of beauty academy.

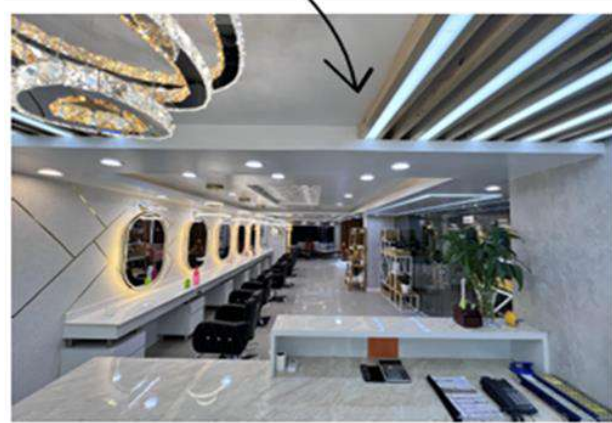


Figure3-6 interior of client section

3.1.4 Madan Puraskar Pustakalaya

- Location: Patan Dhoka, Lalitpur
- Materials Used: Bamboo, Mud tiles.
- Architectural Style: Vernacular
- Project Architect: ABARI
- Established: 1955
- Reconstruction: 2016
- Orientation: North-South (For maximum north light)



Figure 3-1 Front view

History

A public building of library and archives - structure continued to stand post-earthquake in 2015. The original structure was made up of brick, mud mortar and lime mortar with steel beams - weakened.

by the earthquake. Advised that the structure wasn't viable; structurally weak, was pulled down (ABARI, 2015)

Site Planning

- Placement: Building placed at the edge of the site.
- Plantation of trees: Trees to prevent summer sun rays inside the building.
- Flooring: Proper flooring to maintain water table

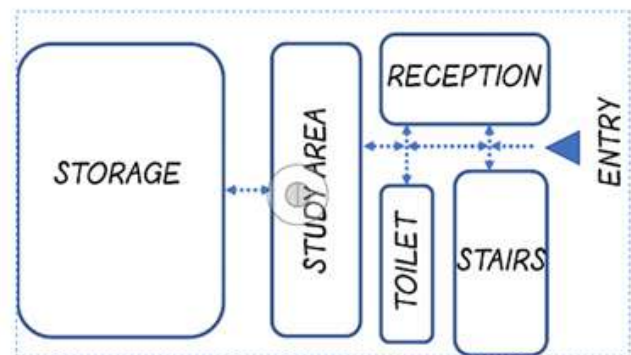


Figure 3-7 Bubble diagram showing planning of library

Architectural Planning

- Geometrical form in the shape of rectangle
- Stable from any external forces such as earthquake
- Functional open space
- Vertical Planning
- Split mezzanine floor
- Connects the floors through floating bamboo staircase.

Walls

- Rammed Earth Construction: Store solar radiation and slowly release it overnight garnering interiors cool in summers and warm in winters
- Thickness: 16 inches
- Wattle and Daub used as a binding material



Openings

- Large windows placed at the north
- Natural light enters the building throughout the daytime.
- 3ft roof overhang - Sun shading device

Roof

- Construction of roof using bamboo as primary support.
- Use of split bamboo wattles above purlins. • Mud Tiles above battens used to cover the roof.

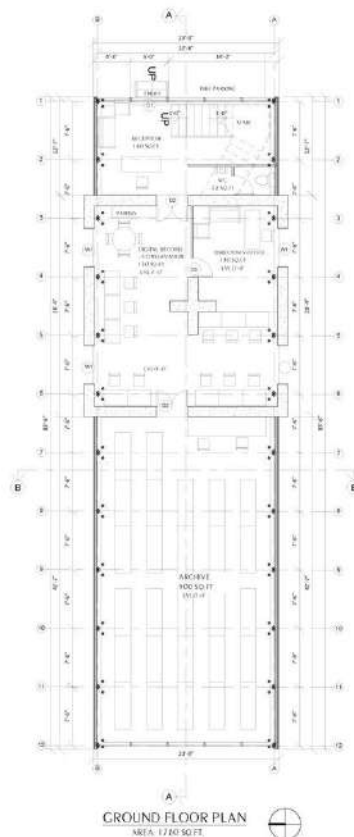


Figure 3-8 Ground Floor Plan

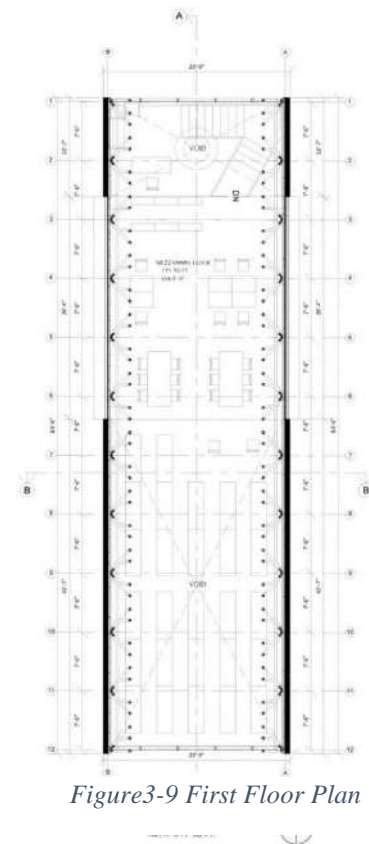


Figure3-9 First Floor Plan

3.1.5 ATC Fashion School

- Location: Charkhal, Dillibazar
- Established: 2062
- Founder: Tuyu Laxmi Shakya
- Categories: Design & fashion

This academy is dedicated to nurturing creativity, fostering innovation, and empowering aspiring fashion enthusiasts to embark on a journey of artistic excellence and professional success.

Objective:

> To provide a dynamic and inclusive learning environment.

>To instill confidence, creativity, and a strong work ethic in our students, equipping them with the tools needed to excel in a competitive industry.

COURSES:

1. Fashion Designing: 1 year
2. Boutique Course: 6 month
3. Advance Course: 3 months

Capacity:

Students: 25 per class

Teachers: 3

Spaces Include: reception, fashion designing classroom, boutique classroom, advance classroom, office, kitchen.

Material/ equipment used: sewing machine, measuring tape, scale, brown paper, sketch book.

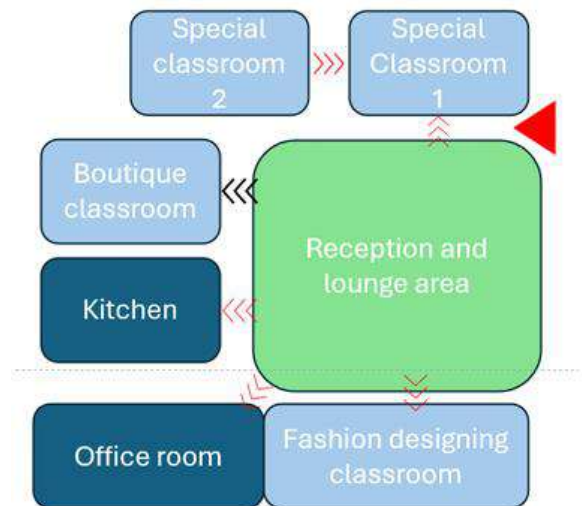


Figure3-10 Zoning showing planning of fashion designing



Figure 3-11 Training classroom showing sewing machine, cutting table.

3.1.6 De' Gym

- Location: Tokha Road, Dhapasi, Kathmandu, Nepal, 44600
- Agency: GYM
- Established: 2076

Objective: To study the spaces involved in the fitness area.

>A full-service gym featuring high-end exercise equipment, Zumba, cardio, aerobics, sauna, and more.

Opening hours- 5:30- 9:30

Trainer: 6

people: 100 per day

>> spaces include reception, front shop for equipment, cafe, sauna, Zumba, training space.



Figure 3-12 Location map

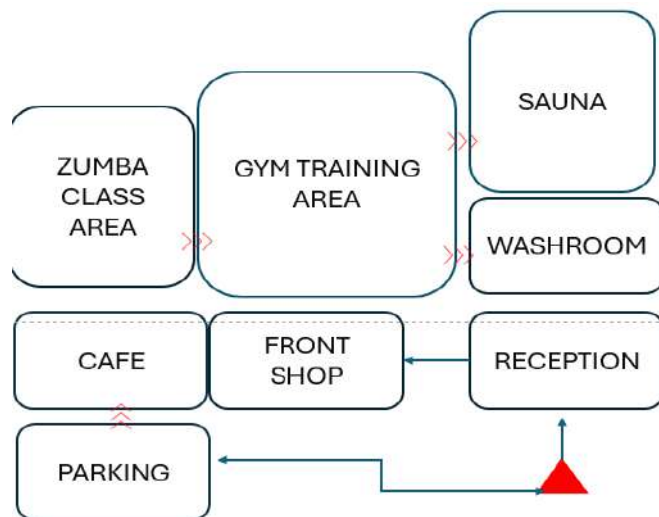


Fig. training space containing

Figure 3-13 Zoning showing layout of gym.

3.2 INTERNATIONAL CASE STUDY

3.2.1 Amman Youth Hub- Arab Youth Center

- Architect: Bitra Consultant
- Address: Amman- Jordon
- Year built under construction.
- Client: Arab Youth Center - Abu Dhabi
- Area: NA
- Target Audience: youth between 15-35 years old



The Amman youth hub center has been selected as a precedent case study, where it aims to encourage and ignite hope for youth’s life through empowering its brightest youth to become the future leaders of their world. The Amman youth hub combines educational and entertainment fields.

Site analysis

The Amman youth hub is in Amman, Jourdan. In one of the main streets in the city of Amman, surrounded by schools, shopping centers, restaurants, and governmental buildings.

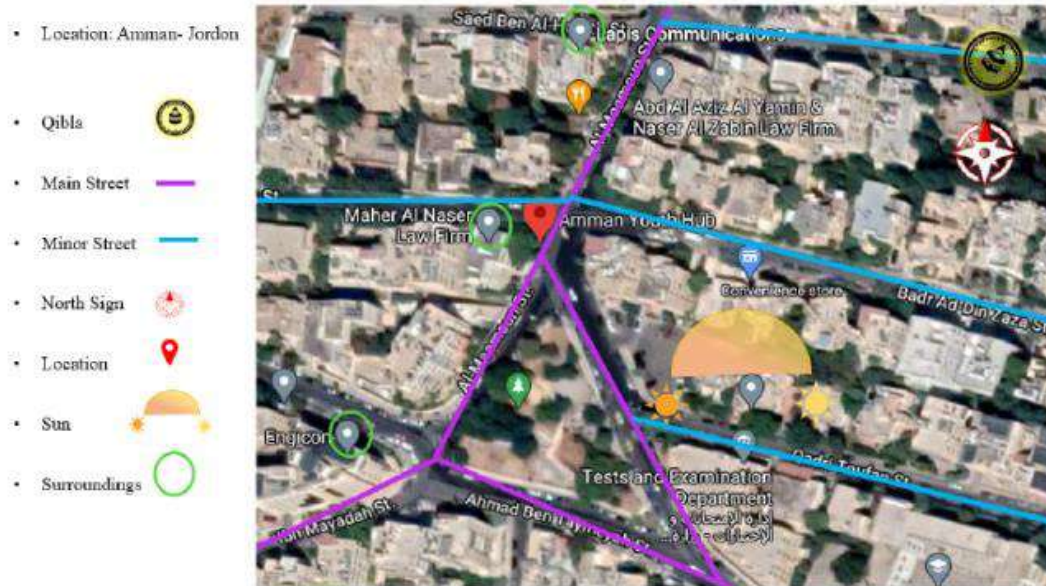


Figure 3-14 Site analysis

Floor plan analysis:

Amman youth hub center is a three-story building split into a ground, first, and second floor. Divide its functions between the three floors in an organized and functional way.

- The ground floor starts with main entrance, then the reception area, reception lobby, exhibition area, the creative space, seating stairs, elevators, male and female W.C, Co-working space, cafeteria, administration and offices, game room, auditorium, fire scape stairs, shaft, electrical room, and a back entrance.
- Move up to the first floor where it include the incubation area, relaxation area, male and female pray rooms, meeting rooms, offices area, computer labs, elevators, male and female W.C, casual seating areas, fire escape stairs, shaft, and electrical room.
- Then on the second floor the maker lab, art studio, music studio, library, lecture rooms, outdoor main and side terrace, skylight, elevators, male and female W.C, fire escape stairs, shaft, and electrical room.



Figure 3-15 Ground floor plan - Amman Youth Hub



Figure 3-16 First floor plan - Amman Youth Hub



Figure 3-17 Second floor plan - Amman Youth Hub

Zoning:

The zoning in Amman Youth Hub is divided into three parts private, semi-public, public. Private areas like offices, and electrical room. Semi- the creative room, co working space, and auditorium. Entrance, and hallways are considered as a public area.

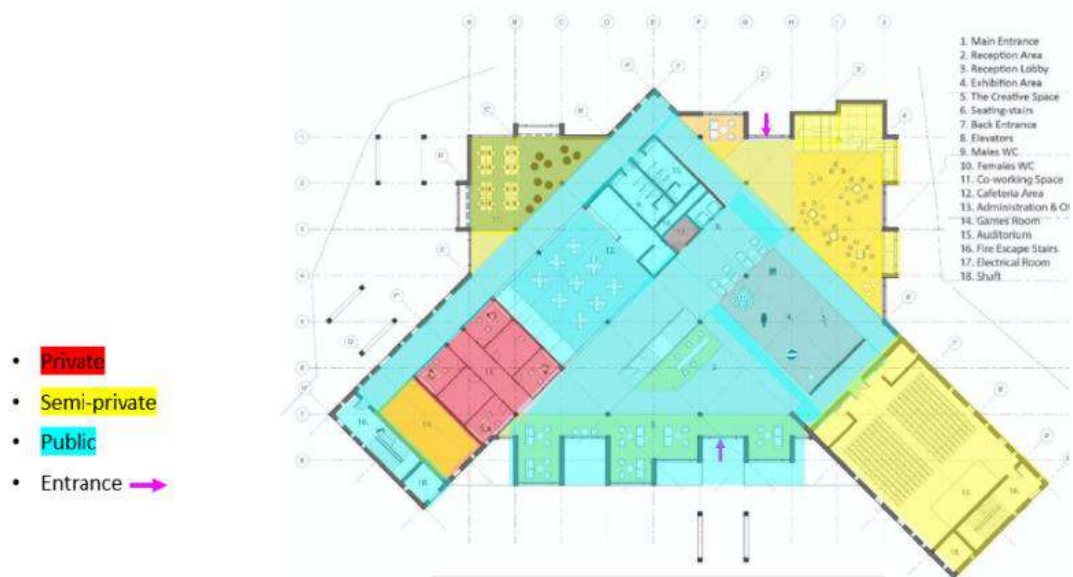


Figure 3-18 Zoning in Ground floor plan - Amman Youth Hub



Figure 3-19 Zoning in First floor plan - Amman Youth Hub



Figure 3-20 Zoning of second floor plan - Amman Youth Hub

Circulation

The circulation in Amman youth hub is considered horizontal and vertical circulation between the functions. Wide open layout that makes the movement easy and flexible.



Figure 3-21 Circulation of second floor plan - Amman Youth Hub

Design approach:

The contemporary design concept with the colored three-dimensional grid, and the fresh colour theme selected white, green, all these concepts reflect the taste for targeted audience for the project. In addition, the materials that are selected is to connect the design with the function and the context, such as the local travertine stone is reflect the Jordanian style in terms of the colour and the pattern. The words used as an inspiration in the designing concept is dreaming, thinking, innovating, to be reflected in the design of the building.



Figure 3-22 Seating area

“Youth Center at Manamaiju”



Figure 3-22 Cafeteria



Figure 3-23 Reception



Figure 3-24 Seating area- Amman Youth Hub

3.2.2 Youth Hub X

- Architect: Bluehaus Group
- Address: Corniche Rd - Al Zahiyah - Abu Dhabi - United Arab Emirates
- Year built: 2009.
- Client: Dubai Government
- Area: 4,500 m²
- Target Audience: students, employees, or entrepreneurs from age 15-35



The Youth Hub X is a platform to connect youth to each other. The aim is to connect and generate opportunities for collaboration and recreation. It is related to the chosen project. It has plenty of space for meetings, lectures, workshops, and study groups. The neutral color used in the space is nice. It is beautiful how the exterior is surrounded by nature; it gives a nice look from the interior. It is important to know how to match colors in a space, and how to design the layout of the space.

Site Analysis

The Youth Hub X is in Abu Dhabi, United Arab Emirates. It is located near the corniche. By looking at the google map it shows that the hub is surrounded by nature.



Figure 3-25 Site analysis

Floor Plan Analyses:

Youth Hub X consists of 3 floors, the main entrance is on the ground floor. On every floor, there are different functions for the users.

Ground Floor



Figure3-26 Youth Hub X ground floor

First Floor

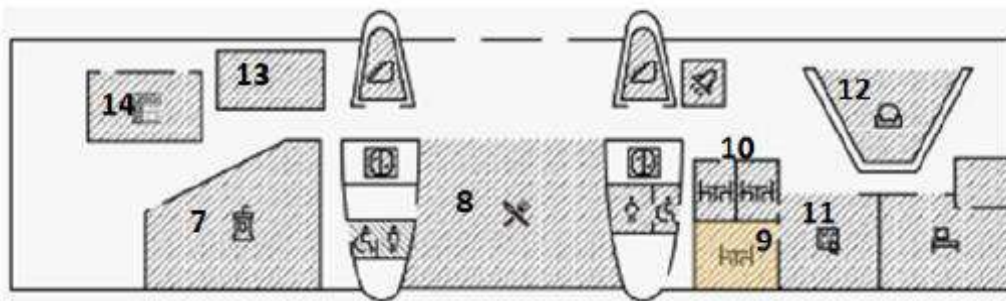


Figure3-27 Youth Hub X first floor

Second floor

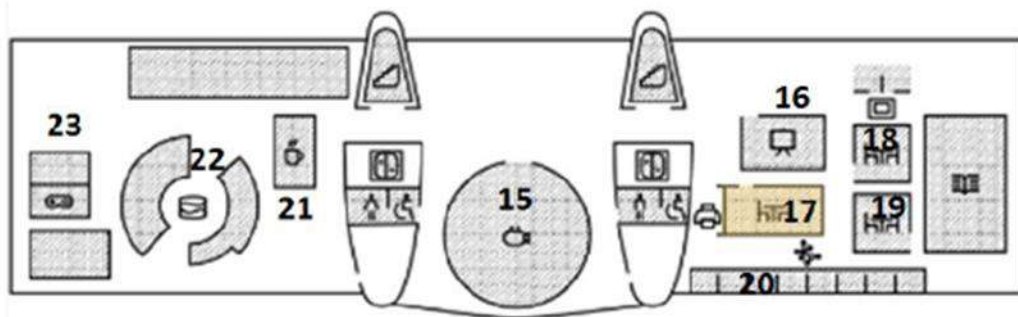


Figure3-28 Youth Hub X second floor

Legend:

- | | | |
|-----------------------|-----------------------------|------------------|
| 1. Lab | 9. Zayed Hall | 17. Library |
| 2. Studio | 10. Mission | 18. The capital |
| 3. Store | 11. Lab | 19. Corner |
| 4. Workshop | 12. Majlis | 20. Incubator |
| 5. Platform | 13. Reception | 21. Culture café |
| 6. Stair and elevator | 14. The professional school | 22. The wave |
| 7. Platform | 15. Theater | 23. Arcade |
| 8. Fae Restaurant | 16. Canvas | |

Zoning

In the zoning, it shows the public, private, and semi-private of the functions. On the ground floor, there are public, private, and semi-private zones. On the first and second floors, there are only public and semi-private zones.

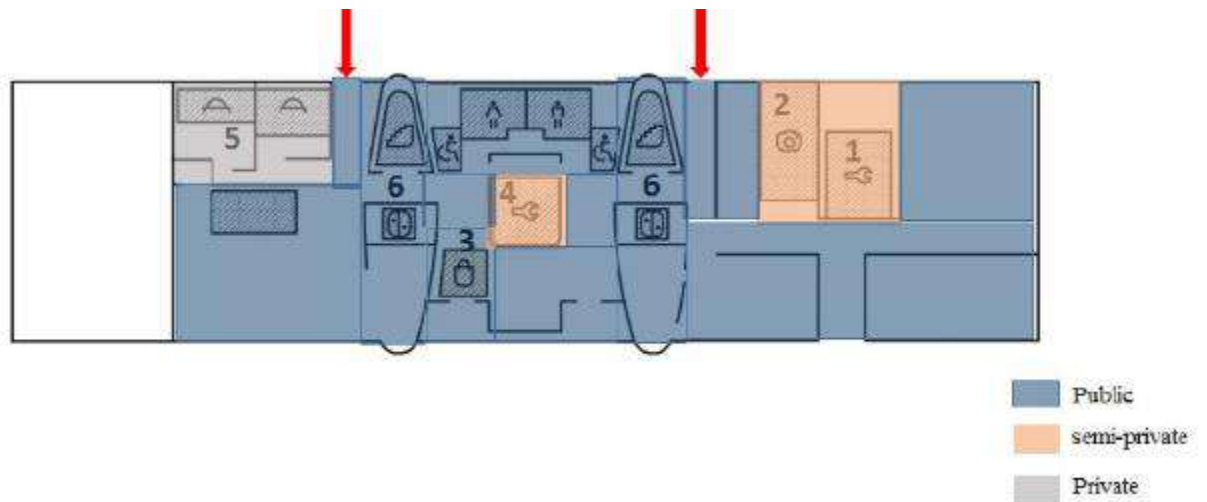


Figure3-29 Youth Hub X zoning ground floor

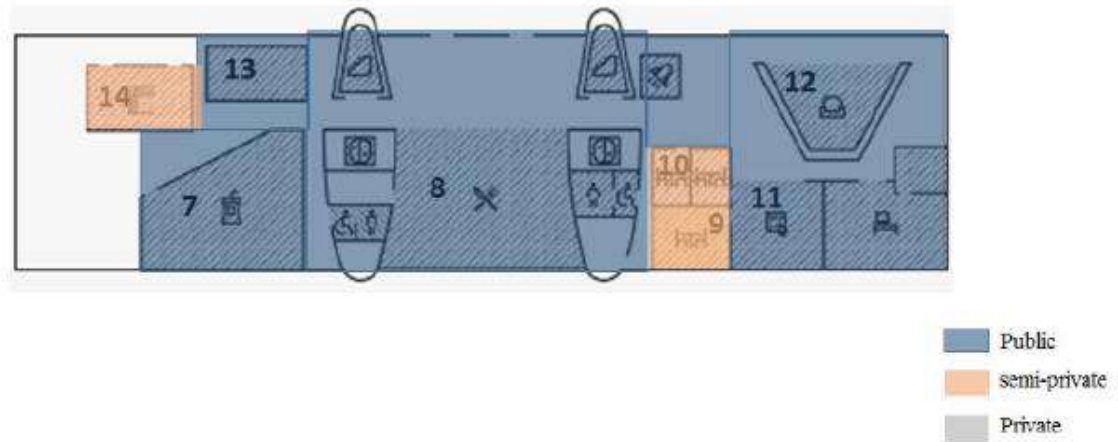


Figure3-30 Youth Hub X zoning first floor

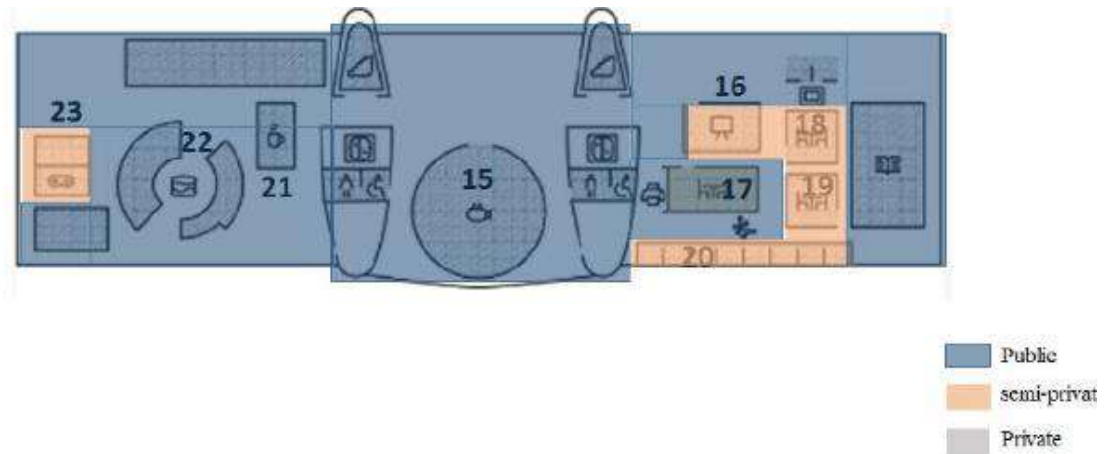


Figure3-31 Youth Hub X zoning second floor

Circulation

The circulation in Youth Hub X is clear. It shows a smooth flow between the different zones. The movement in the hub is shown clearly.

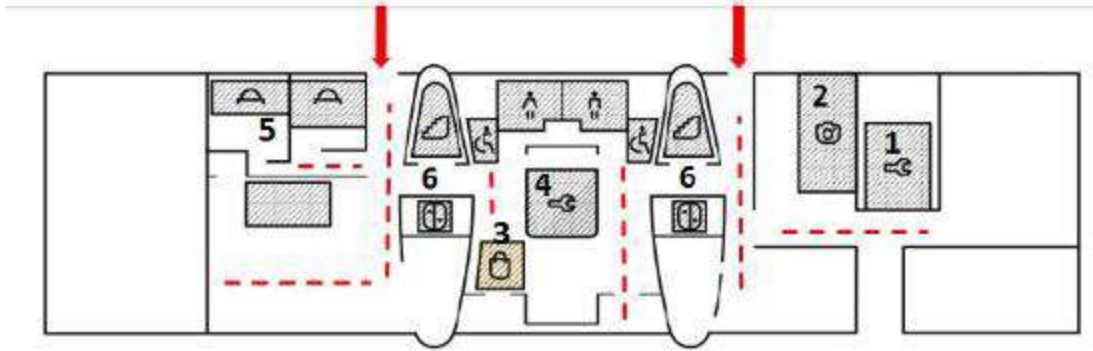


Figure3-32 Youth Hub X circulation ground floor

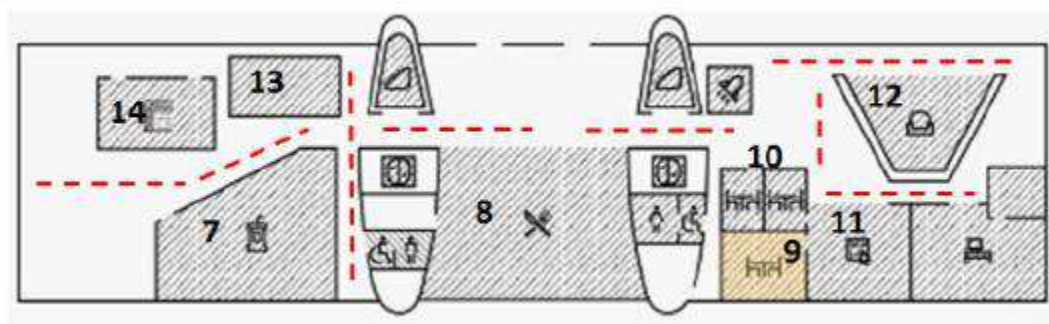


Figure3-32 Youth Hub X circulation first floor

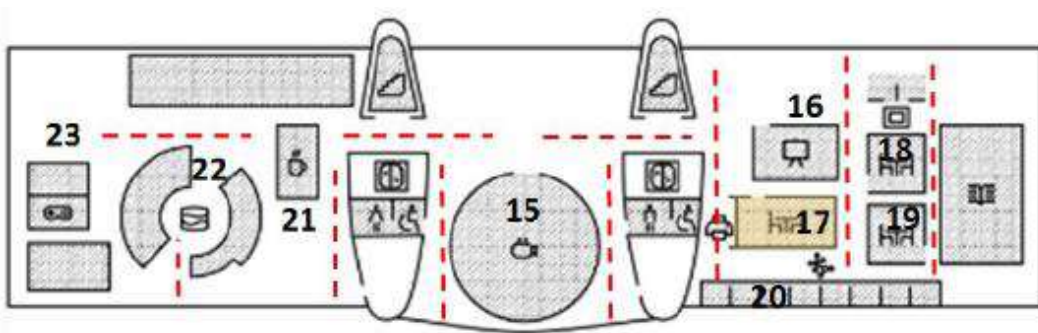


Figure3-33 Youth Hub X circulation second flo

Design Approach

Interior

The floor layout includes a theater, a music room, along with different collaboration and functional areas to organize conferences, meetings, and events. The complex task of installing seamless custom terrazzo flooring to complement the open design concept, having the flooring

“Youth Center at Manamaiju”

precast, polished, and ground without joints. There are different types of space partitions, sourced, and built custom-made joinery items of specific size and shape



Figure 3-34 Youth Hub X interior analysis

Exterior

The exterior of the architecture is made of white concrete, glass, and steel. The use of white paint and the white steel in the building gives the feeling of purity and cleanliness. The use of glass and steel to expose the interiors to the outside. Greenery, which is applied all over the building makes the surrounding pleasant.



Figure 3-35 Youth Hub X exterior analysis.

Conclusion

Utilize a neutral color in the space to make the users feel calm. Designing the space in an industrial style. Using a different style of partition in the space. Adding plants in the space to improve the quality of indoor air. Allowing sunlight to enter the space by designing a glass facade.

3.2.3 The Gary Comer Youth Center

- Location: Chicago, United States
- Architects: John Roman Architects
- Building Typology: Educational, Recreational Center
- Project Area: 6958 sq.m
- Completed year: 2006.
- Client: Corner Education Campus

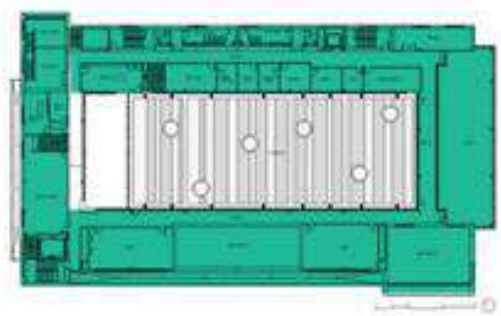


Fig. Front View

This youth center, located in the Grand Crossing neighborhood on Chicago’s south side, provides a constructive environment for area youths to spend their after-school hours. The center provides support for the programs of the South Shore Drill Team and Performing Arts Ensemble, a 300-member dance performance group for children aged eight to eighteen that performs in parades and on stage about 50 times per year. In addition, the center provides space for various youth educational and recreational programs.

3.2.3.1 Architecture appearance

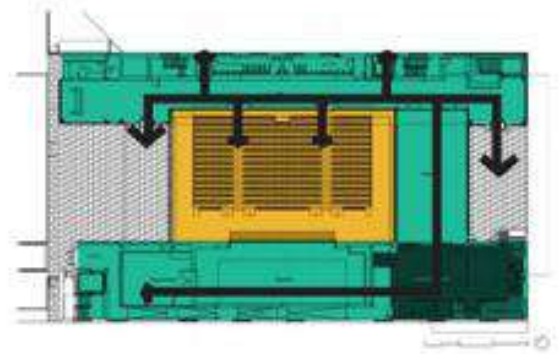
- > Advertise the activity on the building exterior to the community.
- > allow visual access between the different program’s spaces.
- > Spaces can be modified over time as programs in the youth center evolve.



3.2.3.2 Building spaces:

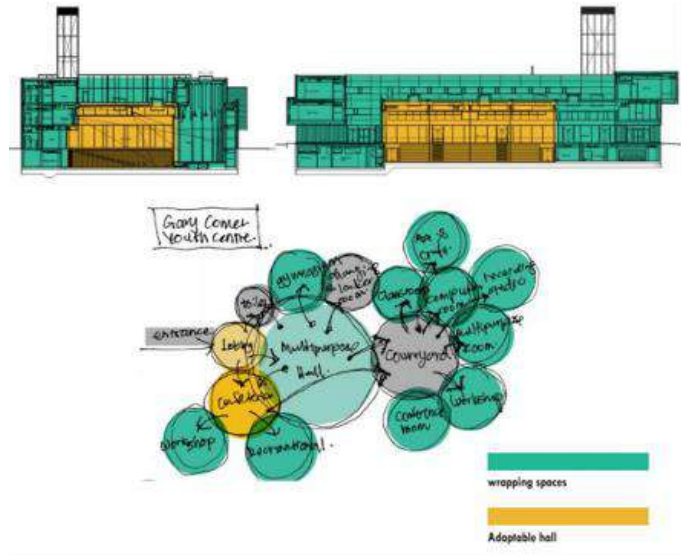
This wrapping space contains spaces that are organized inside flexible bars that can be modified over time as programs in the youth center evolve, to maintain the building’s programmatic sustainability.

Performative Spaces



- > Adaptable Hall
- > computer labs
- > Costume design shop
- > Tutoring and study spaces
- > office

The building’s main space, an adaptable gymnasium that serves as a daily practice space for the Drill Team, converts to a 600-seat performance venue via a deployable theater seating system, deployable curtains and stage



doors that open to reveal an 80 foot by 30-foot performance stage. This space, together with the adjacent cafeteria that overlooks the gymnasium, comprises the center of energy for the complex.

Wrapping space contains educational and recreational youth programs, including arts and crafts rooms, computer labs, dance rooms, a recording studio, costume design shop, tutoring and study spaces, classroom, office and exhibition space, organized inside flexible bars that can be modified over time as programs in the youth center evolve, to maintain the building’s programmatic sustainability. On the exterior, a rainscreen cladding system of brightly colored fiber cement panels reference the brightly colored flags and uniforms of the drill team and speak to the center’s youthful orientation.



3.3 COMPARISON

3.3.1 National Case Study

Basis of analysis	Zoom beauty academy	Handmade paper factory	ATC Fashion School	Madan Puraskar Pustakalaya	De' Gym
Location	Balaju, Kathmandu	Kapan, Kathmandu	Dillibazar, Kathmandu	Patan Dhoka, Lalitpur	Tokha, Kathmandu
Type	Beauty training center	paper manufacturer	Fashion training center	Public library	Fitness training center
Material	Concrete	Trust	Concrete	Bamboo	Trust, prefab
Spaces involved	Zoned in client section and training section	Divided in paper manufacture and product, shop	Training classrooms	Study area and book stack	Fitness training area, sauna and cafe
Light and ventilation	Have more lightings (artificial), and adequate ventilation	Provision of more natural light for drying paper	Natural lightings from large window	<ul style="list-style-type: none"> • Natural light enters the building throughout the daytime. • 3ft roof overhang - Sun shading device 	Natural lights from the large windows.

Table 3-1 Comparison chart of national case study

3.3.2 International case study

Basis of analysis	Amman Youth Hub	Youth Hub X	The Gary Comer Youth Center
Location	Amman- Jordon	Corniche Rd, United Arab Emirates	Chicago, United States
Area	NA	4,500 m2	6958 sq.m
Target audience	youth between 15-35 years old	students, employees or entrepreneurs from age 15-35	Students, youth of age group 14 - 30
Type	Educational and entertainment fields.	Entrepreneur and recreation	Educational, Recreational Center
Material / color used	fresh colour theme selected white, green	white concrete, glass, and steel	rainscreen cladding system of brightly colored fiber cement panels

Table 3-2 Comparison chart of international case study

CHAPTER 4 SITE ANALYSIS

4.1 Introduction

A site analysis in architecture refers to the process of evaluating a specific location to understand its various characteristics and constraints.

Site analysis is a vital part of the design process, influencing everything from project feasibility to architectural choices. It involves assessing factors like topography, climate, and visual appeal to understand how they impact the design. By carefully analyzing these aspects, designers can make informed decisions that maximize the project's potential and its integration with its environment. The site analysis includes:

4.2 Site Location

- Location: Lakhedol, Samudayik Nagar, Manamaiju, Kathmandu
- Between New bus park and Bhatkeko pool (North South)
- Between Baniyataar and core area.
- Blend of traditional and modern community.
- Its latitude is 27.74956° or $27^{\circ} 44' 58''$ N and longitude is 85.31509° or $85^{\circ} 18' 54''$ E
- Site Area: 10174.74 sq.m (20 Ropani)

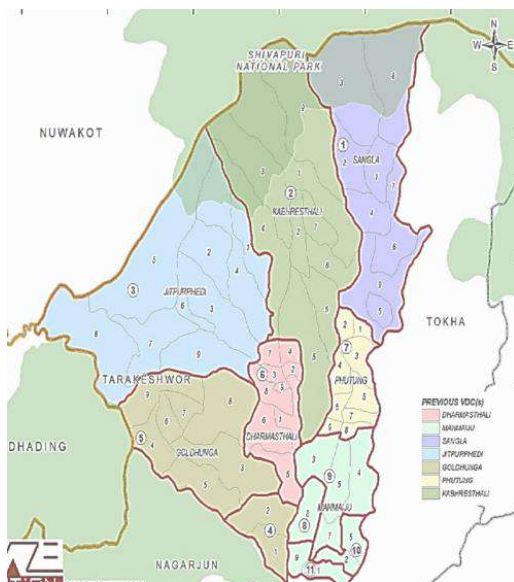
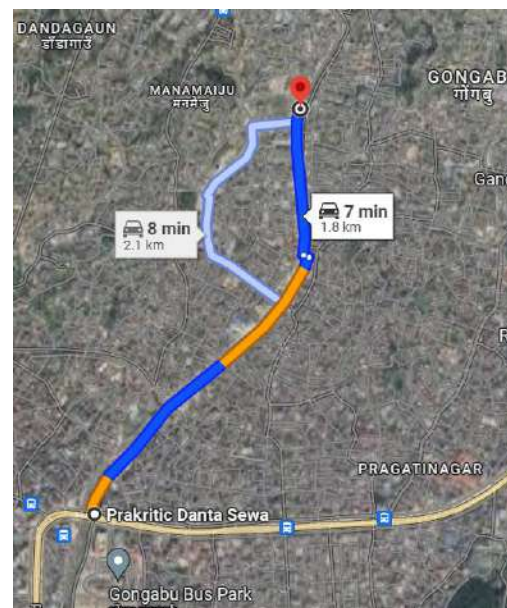


Figure 4-0-1 Location map



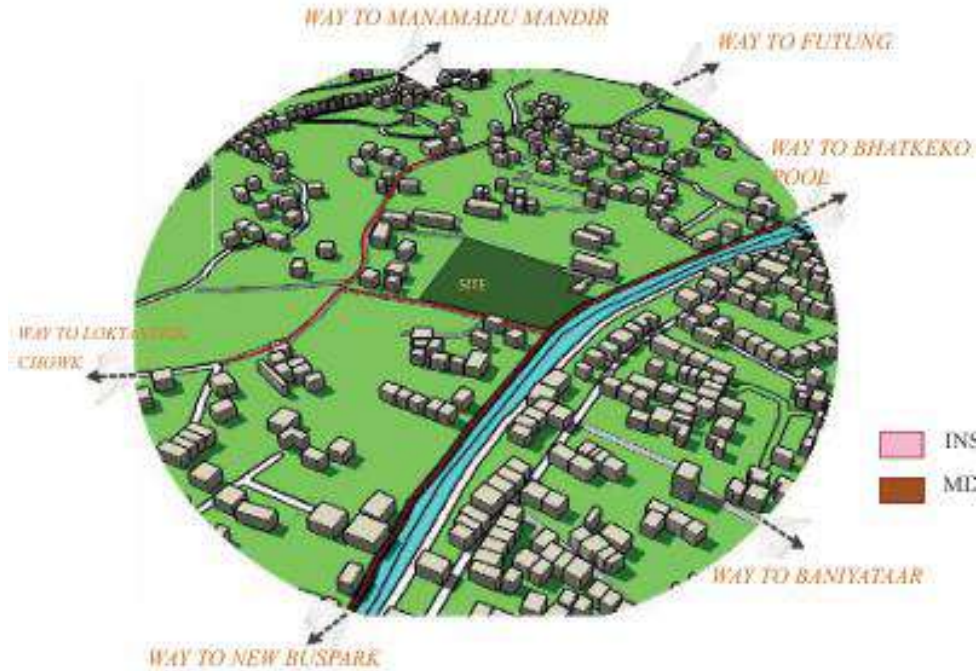


Figure 4-0-2 Site location and nearby area.

4.3 Site Justification

1. Site is located at easily accessible distance from main road and bus top.
 - No any youth center at the surrounding which can be positive aspect for design
 - The proposed site is appropriate for the project as it is surrounded by the institutional building and development of its surroundings.
2. Site Feature:
 - Flat Land
 - Site is trapezoidal and flat.
 - Oriented toward South- East.
3. Access and approach:
 - Easy access through public transportation.
 - Site relates to the road 8m in east and 6m in south, 4m dead end road in north.
 - Easy to attend youth center for youth.

4.4 Site Accessibility:

The site lies in the central zone between the core area and institutional area. It is a slow transition from commercial to slow mixed used buildings, institutional (where the site lies) to core area.



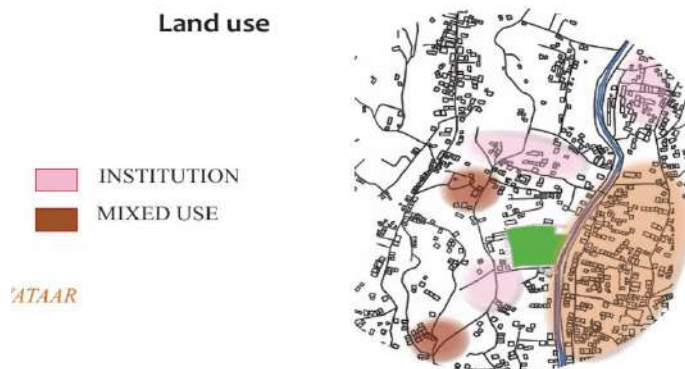
Figure 4-3 Nearby nodes from site.



Figure 4-4 vegetation near site.



Figure 4-5 temples around site.



4.5 Existing site condition:

The site topography is flat and used as agricultural farmland. The site is surrounded by Shangla khola (Bishnumati river) at east, north by institution, south -west by residential, mixed, commercial building. Near site there is a water supplier called Dupcheshwori Water supplier.



Figure 4-5 Manamaiju height seen from the site.



Figure 4-6 Shangla khola presently filled with garbage



Figure 4-7 Bridge connecting two sides



Figure 4-8 view of southwest side from site



Figure 4-9 view of site from east side



Figure 4-10 8m road at east

4.6 Nearby places and services

200m

- Angel Heart sec, School: 50m from site
- Royal Janta Banquet: 300m
- Gurung driving center.

500m

- North pole Academy
- Malpot: 600m
- Parijat party events: 600m
- National Judiciary Academy: 700m
- Prabhu bank: 800m
- Lotse boutique: 900m

1km

- Tarakeshwor ward office: 2.6km
- Kinder Garten Sec, School: 1.2km from site
- Subham Hospital 1.3km from site
- Police station: 1.4 Km
- Grande villa: 1.4km
- Angel mart: 1.1 Km
- Jalpa Park: 1 km

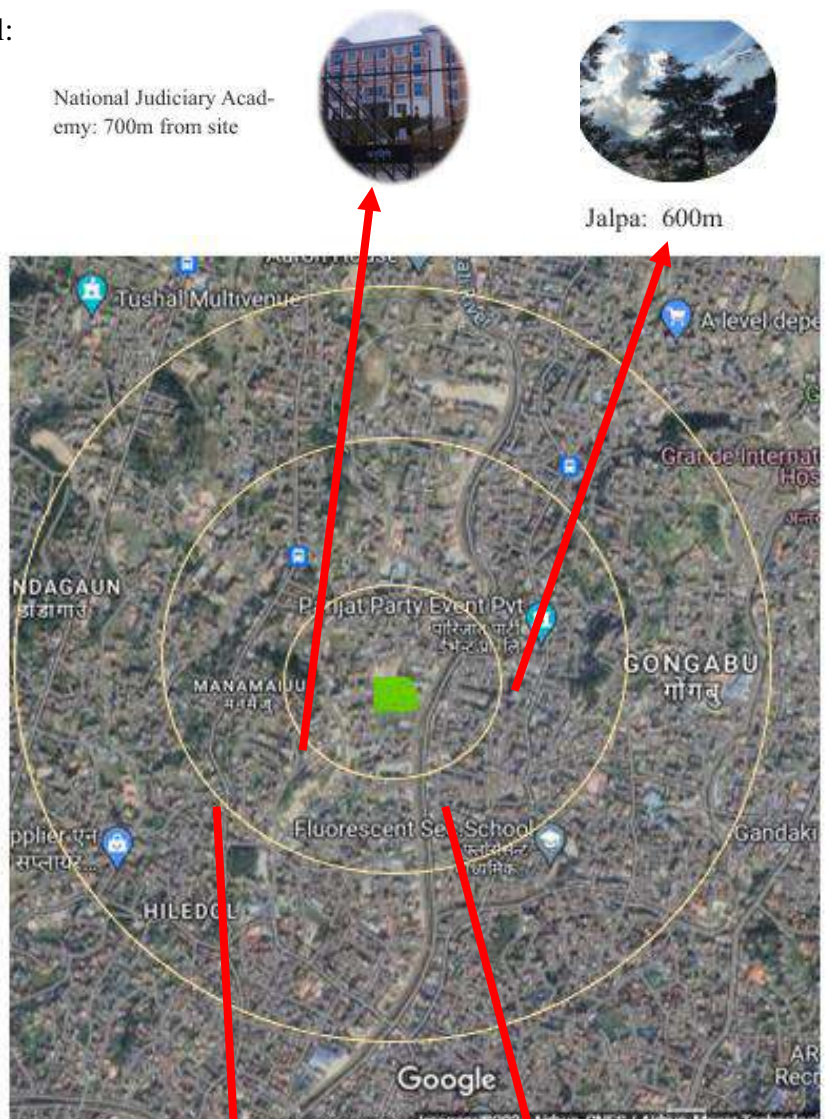


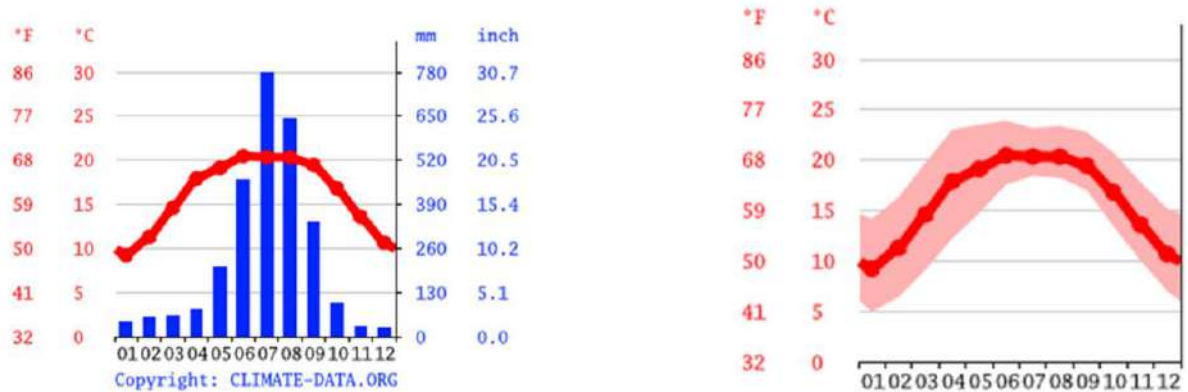
Figure 4-11 Nearby services from site



Tarakeshwor ward office
2.6km from site



4.7 Climate Scenario



	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temperature °C (°F)	9.2 °C (48.6) °F	11.3 °C (52.4) °F	14.6 °C (58.3) °F	17.9 °C (64.2) °F	19.1 °C (66.4) °F	20.5 °C (68.8) °F	20.3 °C (68.6) °F	20.3 °C (68.6) °F	19.5 °C (67) °F	16.8 °C (62.2) °F	13.6 °C (56.4) °F	10.7 °C (51.2) °F
Min. Temperature °C (°F)	4.9 °C (40.9) °F	6.4 °C (43.5) °F	9.1 °C (48.4) °F	12.2 °C (54) °F	14.8 °C (58.6) °F	17.6 °C (63.6) °F	18.4 °C (65.2) °F	18.2 °C (64.8) °F	17 °C (62.7) °F	13.4 °C (56.2) °F	10 °C (50.1) °F	7 °C (44.6) °F
Max. Temperature °C (°F)	14.2 °C (57.5) °F	16.3 °C (61.4) °F	19.7 °C (67.5) °F	23 °C (73.4) °F	23.5 °C (74.3) °F	23.9 °C (75) °F	23.2 °C (73.7) °F	23.4 °C (74.1) °F	22.8 °C (73) °F	20.7 °C (69.3) °F	17.8 °C (64.1) °F	15.2 °C (59.4) °F
Precipitation / Rainfall mm (in)	44 (1)	56 (2)	59 (2)	79 (3)	205 (8)	460 (18)	778 (30)	643 (25)	334 (13)	98 (3)	30 (1)	26 (1)
Humidity(%)	73%	69%	57%	54%	72%	85%	92%	91%	88%	80%	75%	76%
Rainy days (d)	5	7	8	10	16	19	22	22	20	12	6	4
avg. Sun hours (hours)	7.1	7.6	9.3	10.0	8.6	6.0	4.3	4.8	5.6	7.0	6.5	6.5

Data: 1991 - 2021 Min. Temperature °C (°F), Max. Temperature °C (°F), Precipitation / Rainfall mm (in), Humidity, Rainy days. Data: 1999 - 2019: avg. Sun hours

Figure4-12 Showing climate chart of Kathmandu valley

The climatic conditions are categorized as mild and moderate. In Kathmandu, the quantity of rainfall during summers surpasses that of winters. The month of maximum warmth in a year is June. The average temperature during this period reaches up to 20.5 °C | 68.8 °F, making it the hottest time of the year. On average, the month of January is considered to be the coldest time of year with temperatures averaging at around 9.2 °C | 48.6 °F.

Most relative humidity :July (54.28 %).

Lowest amount of relative humidity : April (54.28 %).

Highest amount of rainfall :July (28.97 days),

Lowest precipitation level :December (4.87

4.8 Site analysis:

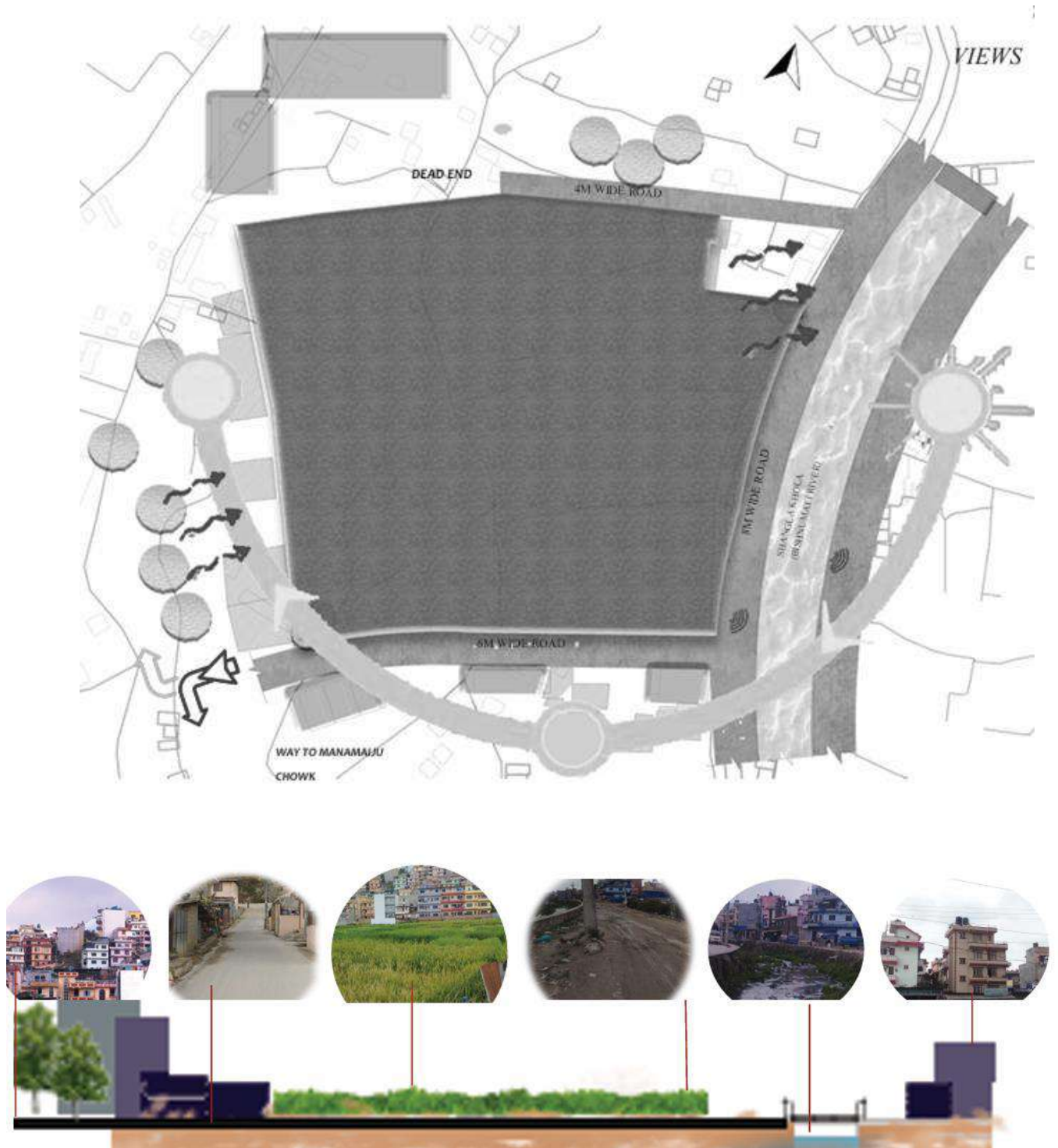


Figure 4-13 Showing sun path diagram and section

4.9 By- Laws

According to the byelaws of Tarakeshwor Municipality, the site lies in the institutional sub zone. The regulations for the project as per byelaws are as follows:

- F.A.R – 2.5
- G.C.R – 40 %
- Setback – 3m and 20m from river

4.10 SWOT Analysis

Strength:

- Easy linkage to nearby infrastructures and institutions.
- Feeling as a part of community.

Weakness

- Noise pollution from the busy road.

Opportunity:

- Potential zone for youth center.
- Needed by youth.
- Mix residential, institutional, and commercial zone, Hospitals and other facilities are in the vicinity.
- River frontage design opportunity.

Threat:

- Threats of seasonal flood.

CHAPTER 5 PROGRAM FORMULATION

The space can be divided into 3 zone:

- a. Entrepreneurial zone
- b. Physical development zone
- c. Interactive space

Entrepreneurial zone	Physical development zone	Interactive zone
1. Workshops / trainings I. Hard skills II. Soft skills	Gym	Multipurpose hall
I. Hard skills: a. Paper craft b. Beautician trainings c. Fashion trainings d. Computer graphic designing training e. Art/ painting class	Basketball court	2.Exhibition gallery
II. Soft skills a. Leadership training b. General mental and psychological consultant c. Positive staff practice/training	Badminton court	3.Youth lounge
	Indoor games	4.Cafeteria 5. Library

Can be divided into 3 zone:

Public zone	Semipublic zone	Private zone
<ul style="list-style-type: none"> • Cafeteria Gym Indoor games Multipurpose hall Parking Shops 	<ul style="list-style-type: none"> Art gallery Workshops Youth lounge 	<ul style="list-style-type: none"> Administration section Meeting rooms

Paper craft:

Components	Area (sq.m. Per person)	No. of people	Units	Total Area (sq.m)
a. Raw material store			1	20
b. Machinery			1	40
c. Drying			1	60
d. Products Store			1	30
e. DIY area		20	1	120
f. Classroom	1.5	16	2	50
Total		8		350

Beautician training:

Components	Area (sq.m. Per person)	No. of people	Units	Total Area (sq.m)
a. Reception and lounge	1.5	3	1	4.5
b. Hair classroom (includes spaces like shampoo, styling, dummy hair cutting section)	2	20	1	40 + 20
c. Manicure classroom (includes classroom, styling)	1.5	15		22.5+ 20
d. Facial classroom e. (Includes rooms like classroom, massage)	3	10	1	30+ 20
f. Office room	2.5	3	2	30
g. Storage				15
Total				202

Classroom are conducted in 2 shifts.

Fashion designing (cloth):

Components	Area (sq.m. Per person)	No. of people	Units	Total Area (sq.m)
a. Classrooms	2	8	2	35
b. Storage			1	15
c. Cutting and sewing		8	1	30
Total				80

Computer graphic designing :

Components	Area (sq.m. Per person)	No. of people	Units	Total Area (sq.m)
a. Computer classroom	8	10	1	80
b. Projector space			1	30
c. Total				110

Art classroom

Components	Area (sq.m. Per person)	No. of people	Units	Total Area (sq.m)
a. Classroom	3.5	15	1	52.5
b. Suppliers store			1	12

Soft skills training

Components	Area (sq.m. Per person)	No. of people	Units	Total Area (sq.m)
a. Classrooms (for leadership, Positive staff practice/training)	2	20	1	45
b. General mental consult			1	20
c. Pvt . room				
d. Group consults classrooms	2	10	1	20
e. Office room		4		30
f. Men’s room	2	8		16
g. Women’s room	2	8		16
h. Guest dormitory+ guest room	35 per room	4	4	175
Total:				322

Physical development zone:

Components	Area (sq.m. Per person)	No. of people	Units	Total Area (sq.m)
Basketball				400
GYM with lobby + reception				250

“Youth Center at Manamaiju”

Self defense/ zumba			2	200
w/c				
men’s room	2.5	10		25
women’s room	2.5	10		25
changing room (men+ women)				30
Total				930

Interactive spaces:

Components	Area (sq.m. Per person)	No. of people	Units	Total Area (sq.m)
1. Multipurpose Hall with dance and music room	1.5	100	1	150+ 60
2.Youth lounge	1	45	1	45
3.Library	1.2	30	1	36
4. Café	1.4	16	1	23
4.Art gallery with store , shops				300
5.Washroom				
a. men’s	2.5	8		20
b. women’s	2.5	8		20
Total				654

Administrative section:

Components	Area (sq.m. Per person)	No. of people	Units	Total Area (sq.m)
1. Reception	5	3	1	15
2. Waiting lobby	2	10	1	20
3. Director office	25	1	1	25
4. Accountant	3	4	2	24
5. Meeting room	1.5	20	1	30
5. Manager room	6	2	5	60
7. Pantry	-	-	1	14
Staff room	3	10	1	30
9. Restroom with urinals	1.5	4	2	20
Total				236

Parking:

Area for 2-wheeler	Area for 4 wheelers	No. of 2-wheeler	No. of 4-wheeler	Total area
1.5	6	60	40	330
30% circulation				144
Total				474

Total area: 3422 sq.m+ 1368(40% of circulation) = 4790.8

Site area: 10174.74 sq.m

Parking: 414sq.m

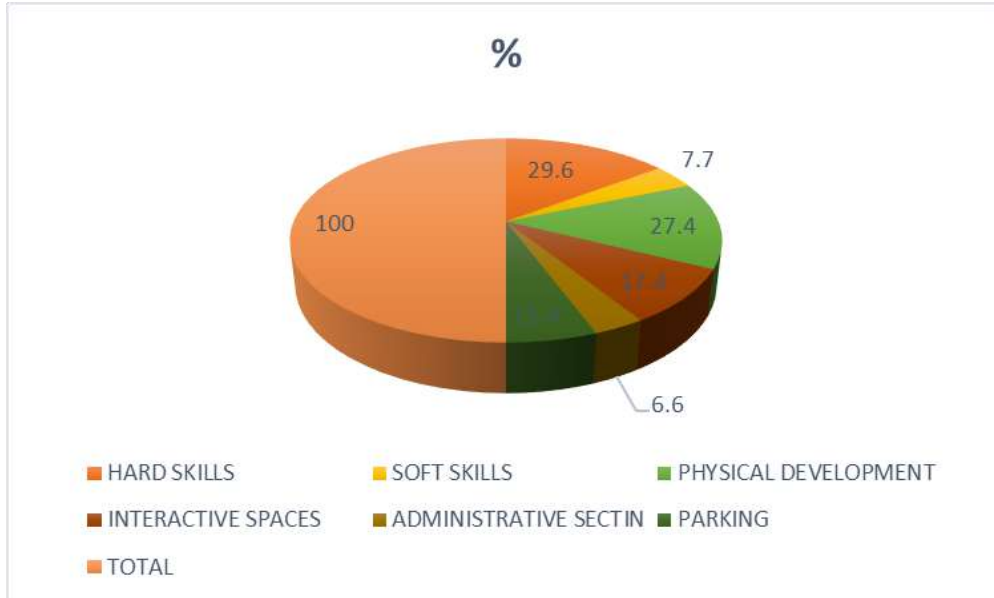


Figure 5-1 Pie chart showing the percentage of programs.

CHAPTER 6 - CONCEPT AND DEVELOPMENT

6.1 Concept and Design Development

6.1.1 Role of literature review and case study

Literature review regarding the youth space and center has been instrumental in developing a robust understanding of relevant academic discourse. This process has provided a solid foundation for comprehending various aspects pertinent to the design of a youth center. This has helped us to figure out what kind of spaces we'll need and got ideas for how to organize programs and activities. This research has made us more familiar with the topic and helped us plan out the youth center's design better.

Analyzing case studies has provided valuable insights into understanding people's preferences and thoughts regarding the youth center project. It has shed light on factors crucial for the project's long-term success and potential drawbacks if not properly planned.

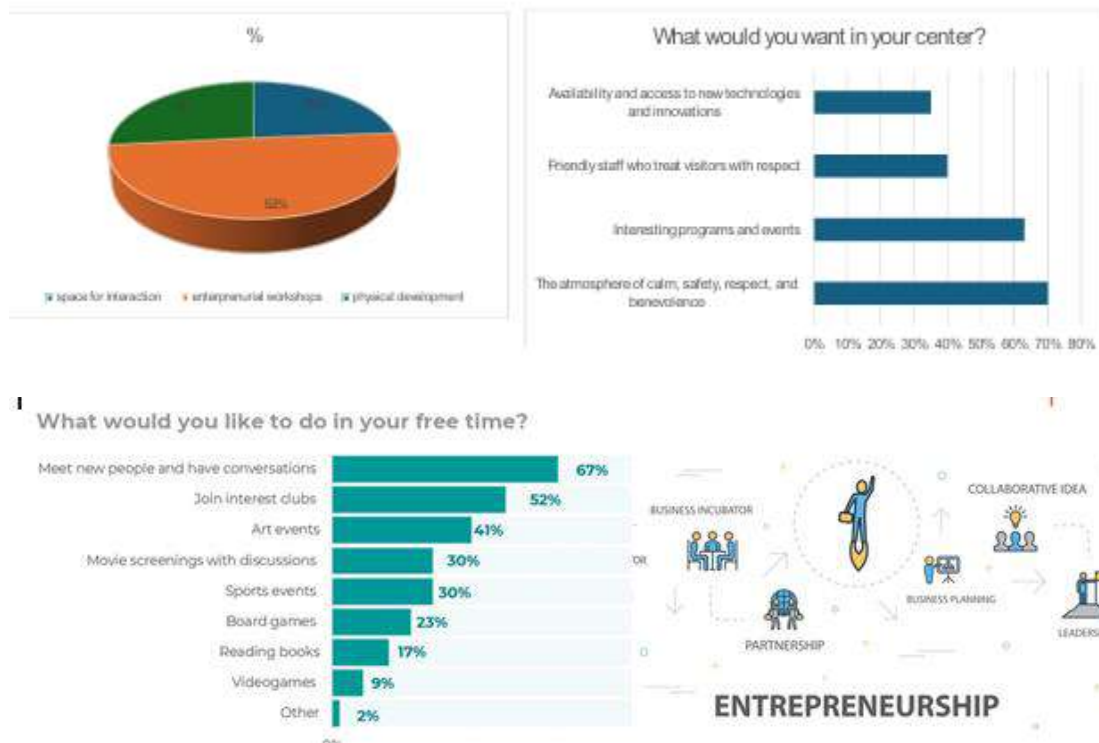


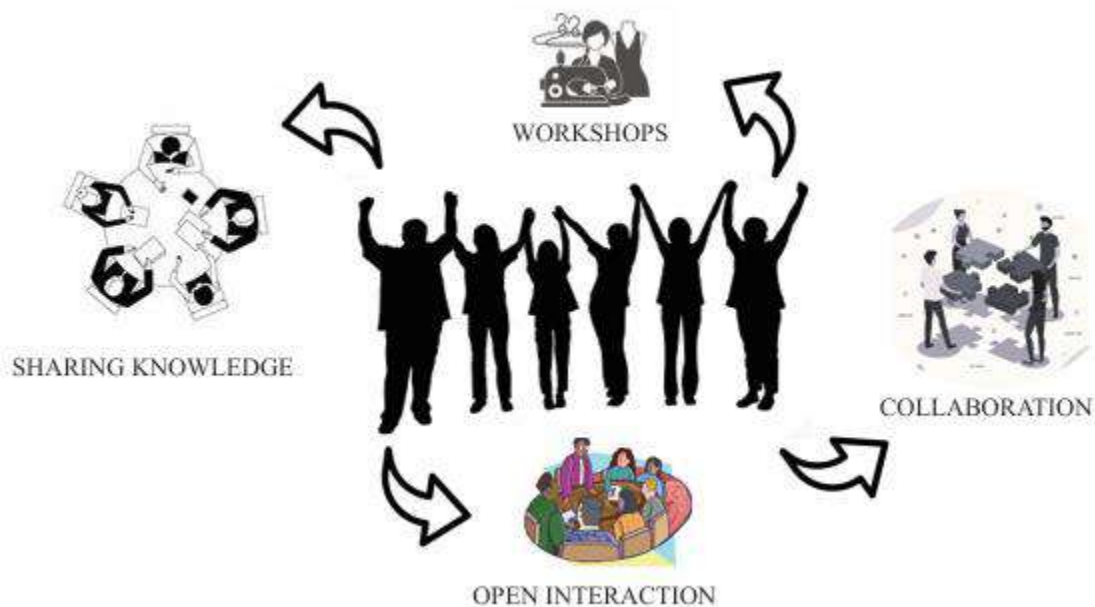
Figure 6-0-1 Data from literature review.

6.1.2 CONCEPT

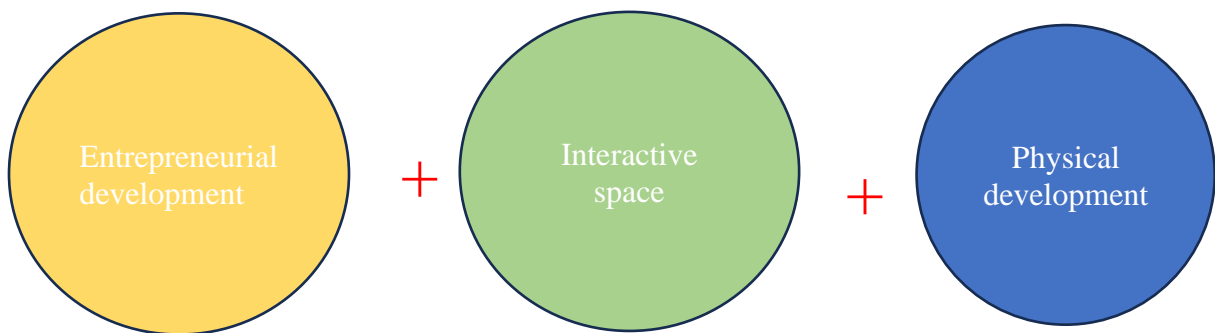
Youth Centers are facilities designed to provide a safe, informal, and supervised environment for young people.

Most important elements:

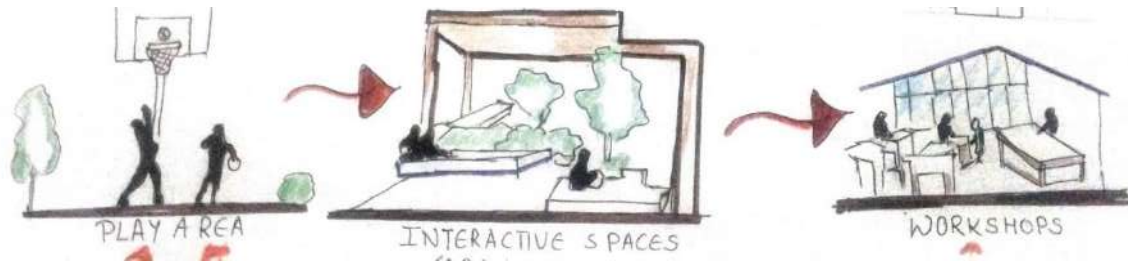
: “learn and lead programs, peace, respect, friendliness, safety.



Using three programs i.e.” area of career development, area of physical development and connecting through the interactive spaces.”



= YOUTH SPACE



Design parameters:

- Degree of openness
- Privacy factor in a workplace
- Flexibility in workspace
- Relaxation and recreation
- Reduction in disturbance

6.1.3 ZONING

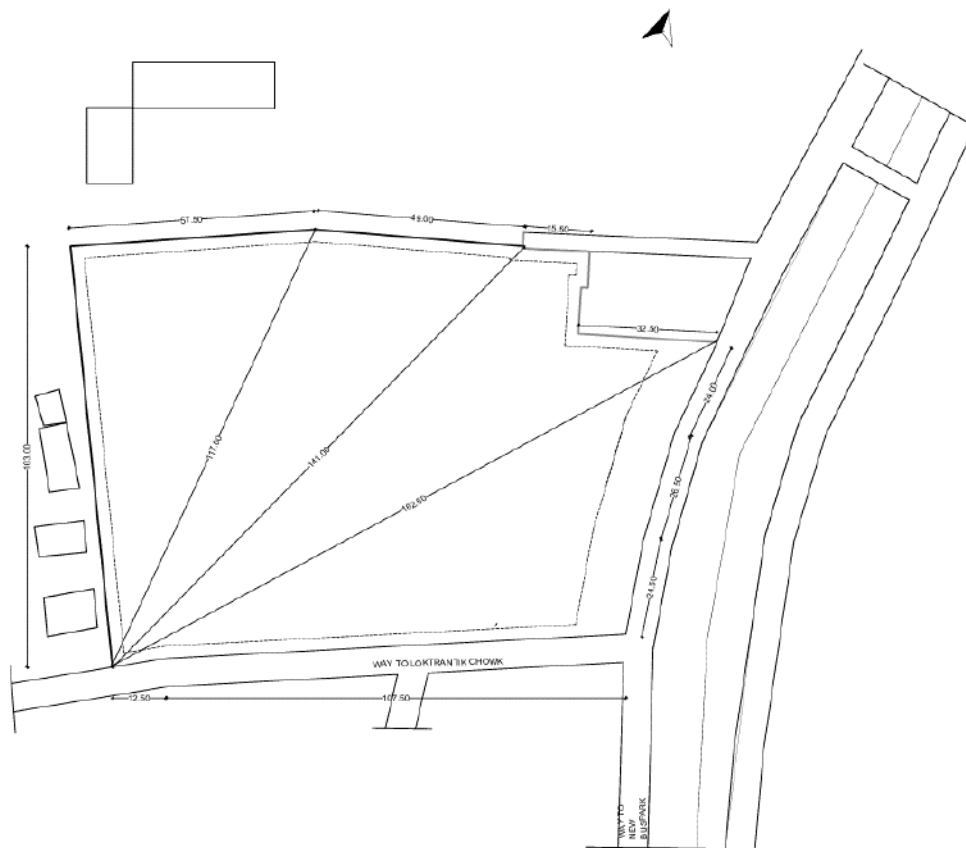


Figure 6-0-2 Site with dimension.

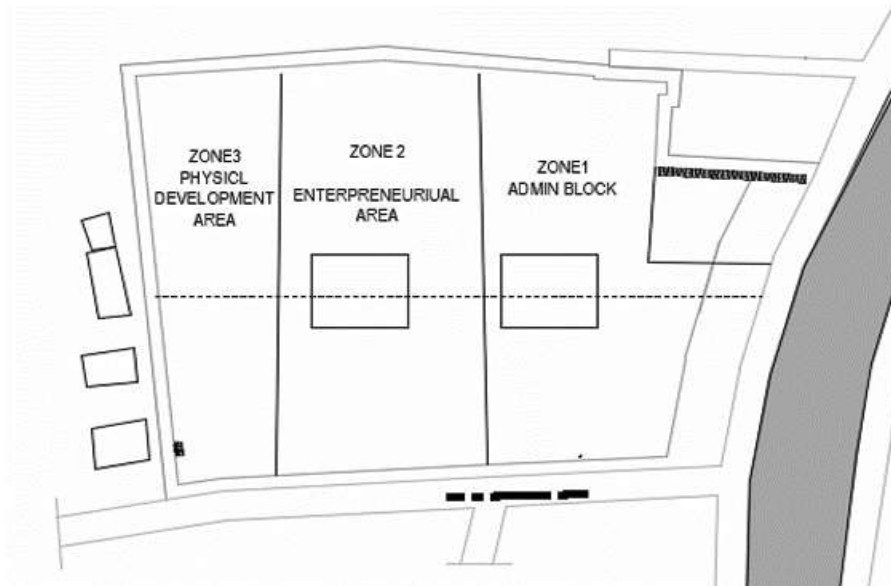


Figure6.0-3 Division of zones

Zone 1:

Zone 1 includes the Admin , library and art gallery block along with drop off and parking area. People who visit only for inquiry, exhibition , shops are allocated this area segregating from the other zones. The gallery spaces and shops are connected.

Zone 2 :

Zone 2 includes public and enterprenuirial areas such as **training, workshops , multipurpose hall, cafeteria, gym , sauna.**The multipurpose hall block and the restaurant is connected and entrance is given separately with parking service.

Zone 3:

This zone includes the whole open space for outdoor activities with jogging track and basketball court , also can be used for any outer programs were held, and for future expansion , it will be given access to local people also.

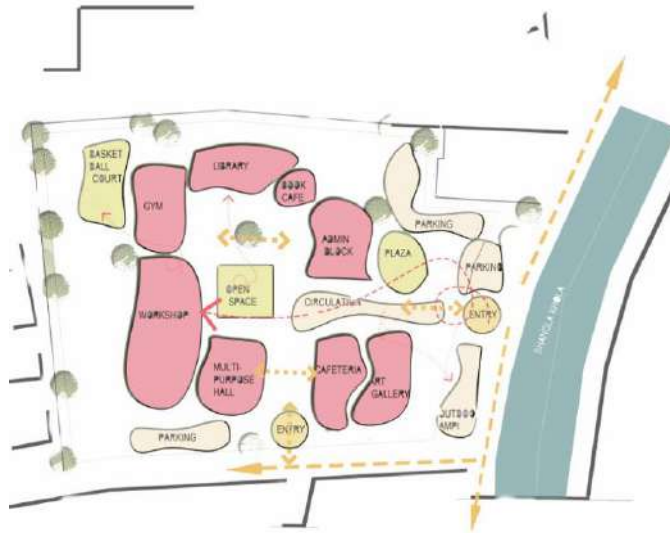


Figure 6-4 Zoning of the spaces.

6.1.4. Design development on site:

As per site analysis, the southern and western side of the site consists of residential areas, whereas the eastern side consists of a river. Road access is available at eastern side with width 8m and southern side with width 6m. as a river front area, an interactive plaza is placed to create an open, communal space for gatherings, and relaxation. Buildings are faced parallelly divided by a central axis which meets with the central open interactive courtyard. Main building to face eastern side for best observed.



Figure 6-5 Zoning of site (left) zone division following main axis (right)

Based on site analysis and zoning, the site is centrally divided into the respective zones where the front part is public spaces with plaza, amphitheater as interactive space and the third part is the main career developing workshops/ training block, last part as a open area where if any open health service program can be conducted and also for future expansion.

As for design form development, a central open space is connected through the central axis to the main building. on volumizing the blocks that cut through the axis is transformed into massing and voiding which will be connected to the interactive spaces linking with each other.

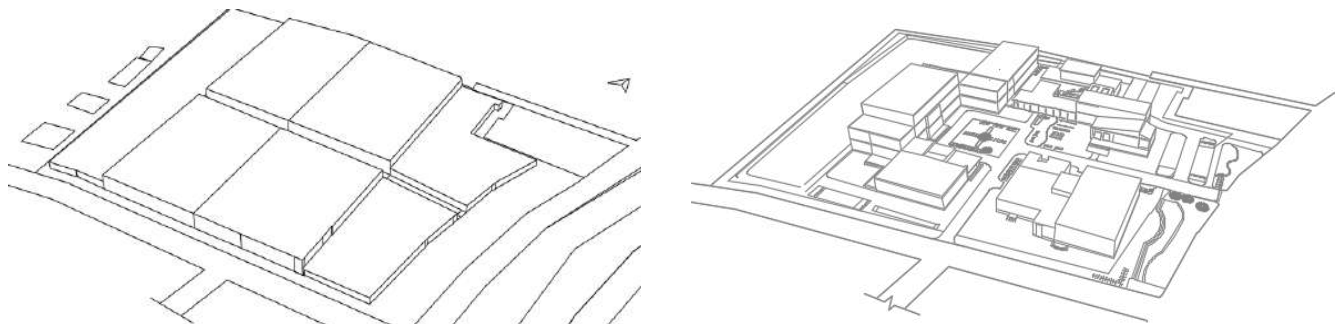


Figure 6-6 Volumization of zones (left) and massing and voiding of blocks (right)

As illustrated in Figure 6.5, the Volumization of the zones follows a design concept where buildings are positioned on either side of a central pathway. The main block, standing at four stories, is organized with a sense of hierarchy. To the east, blocks are designed with open spaces oriented in the same direction, providing tranquil areas for events. The main block features central courtyards, enhancing the design with open, communal spaces.

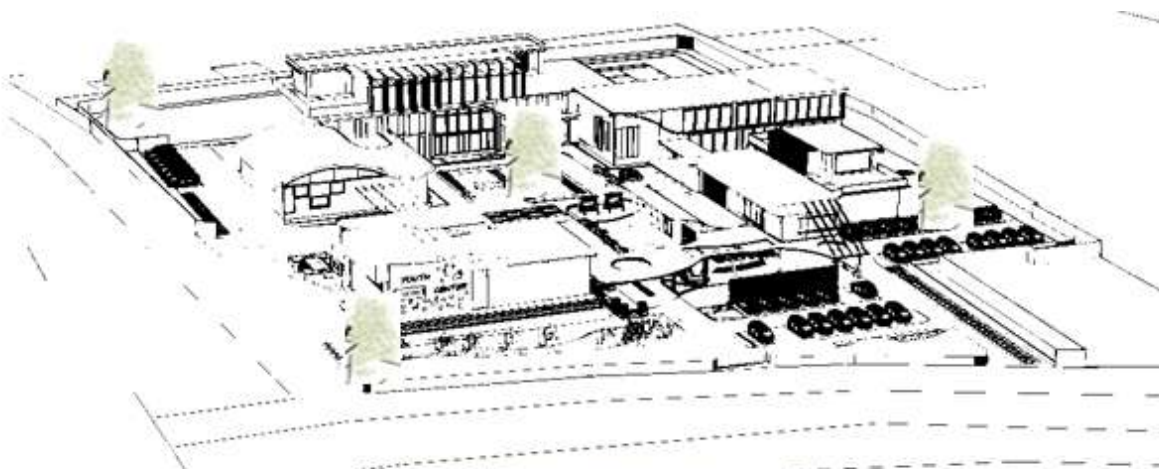


Figure 6.7 Visualization of the form of the complex

6.1.5 Master plan



Figure 6.8 Masterplan

The master plan, informed by site analysis and design concepts, outlines the arrangement of various blocks with a conceptual layout. It includes pathways, parking, circulation spaces, recreation areas, and a central courtyard for interaction. Functional spaces are created from simple geometric forms, both indoors and outdoors, such as a courtyard, game hall, book café, and multipurpose hall.

To prevent traffic congestion, there are two entry points: a main entry from the east, leading to a grand plaza, and a secondary entry from the south. The site features distributed open spaces,

courtyards, and landscaped areas, with greenery maintained through plants and landscapes. The central and other open spaces help separate different functional areas.

Planning of spaces:

1. Entrance space:

The main entrance is given at east side. On entering a central pathway- parking for bike, car and bicycle are provided, a guard house is placed for any inquiry and security and a plaza is provided where one can relax, rest interact which includes benches for seating purposes, water bodies for relax, quiet purpose at northern east side.

At the southern east side, an earth berm leading to amphitheater is provided for seating purpose for any interaction and events.

2. Admin block:

After a plaza, an admin block is placed which includes spaces like inquiry space, reception, washroom, office rooms, meeting rooms, pantry. If one must know about any program / training related information one can inquire in the inquiry section. And for further information about related workshops one can go to the related office manager’s room via reception. The admin block is connected to the library and gym block through columnated structure.

3. Library:

Library block consists of helpdesk, storeroom, reading area, book stack, book café, computer section on ground floor and office space at first floor.it has the capacity of 35 reading area. For group study, interaction, queries can be used.

4. Art gallery:

Art gallery block is placed at southeast side near to roadside. It consists of shops, a storeroom, reception, and an office room for managing the arts. It displays the product of works which learned from workshops like sketches, paintings, products from art and craft class, handmade Nepali paper products like lanterns, boxes. They ae the temporary displays which may change seasonally in terms of their workshops. It has a capacity of 50-60 people.

5. Cafeteria:

The cafeteria block can be accessed from secondary entrance which is placed near to multipurpose hall and workshops block. It includes a dining area, kitchen, changing room, storeroom, washroom and outdoor seating area. It has a capacity of 60 dining seating.

6. Multipurpose hall:

The multipurpose hall block includes green room, storeroom, washroom and hall with the capacity of 150 seating. It is used for any events or programs. Local people also can access or will be given access to multipurpose halls if they must conduct the programs.

7. Gym:

The gym includes reception, washroom, changing room, locker room, lifting running dumbbell lifting area on the ground floor while at upper floor Zumba, self-defense training area, sauna is provided. The users can take training based on weekly, daily, and monthly courses.

8. Main block: entrepreneurial block

Main block i.e. entrepreneurial blocks are welcomed by a open lounge on which one side a notice board is given for any information, beauty designing, art and craft, washrooms, store room as per training workshops are provided at ground floor. The lounge area is given double height for openness, computer room, fashion designing room, painting rooms are provided on the first floor, and on upper floor a dormitory guest room are provided in case the trainee who come from far or has the training session for a little longer session the rooms are provided for them. The training classes are conducted on different shifts to avoid a crowd clash.

9. Open spaces:

A centrally open courtyard, plaza, interactive space is provided, at near colonnade structure a space like Chautara is provided, at the back of main block a large open space is provided with basketball court for a large outdoor event, game events, competition and for future expansion purpose also.



Figure 6.9 Central open spaces(left) and basketball court(left)

Exterior:

The exterior of the buildings is given the touch of modern style with the mix of light-colored brick, white plaster, with bands as light orange indicates creativity, youth and enthusiasm and white for simplicity and minimalism. Curve structure in the room of some blocks are used in response to river.

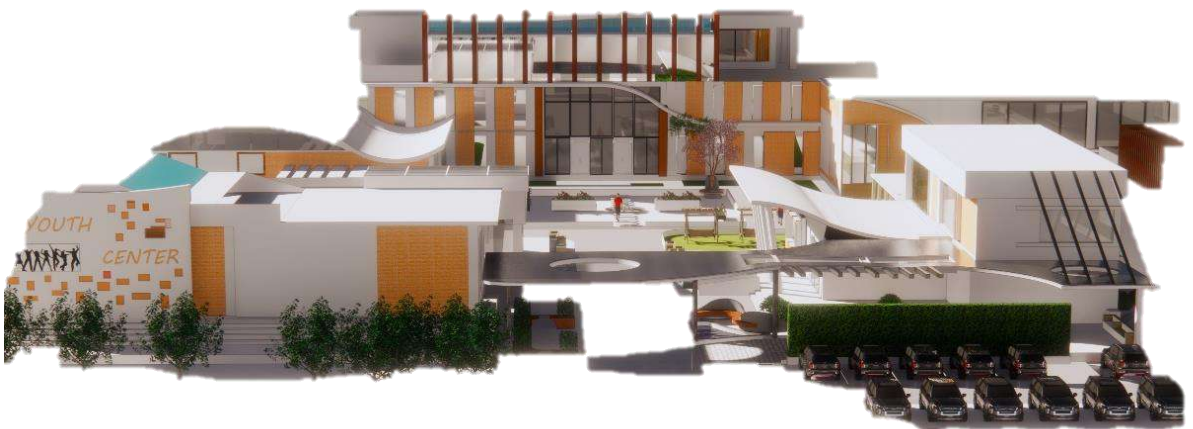


Figure6-10 3d form

CHAPTER 7 Conclusion

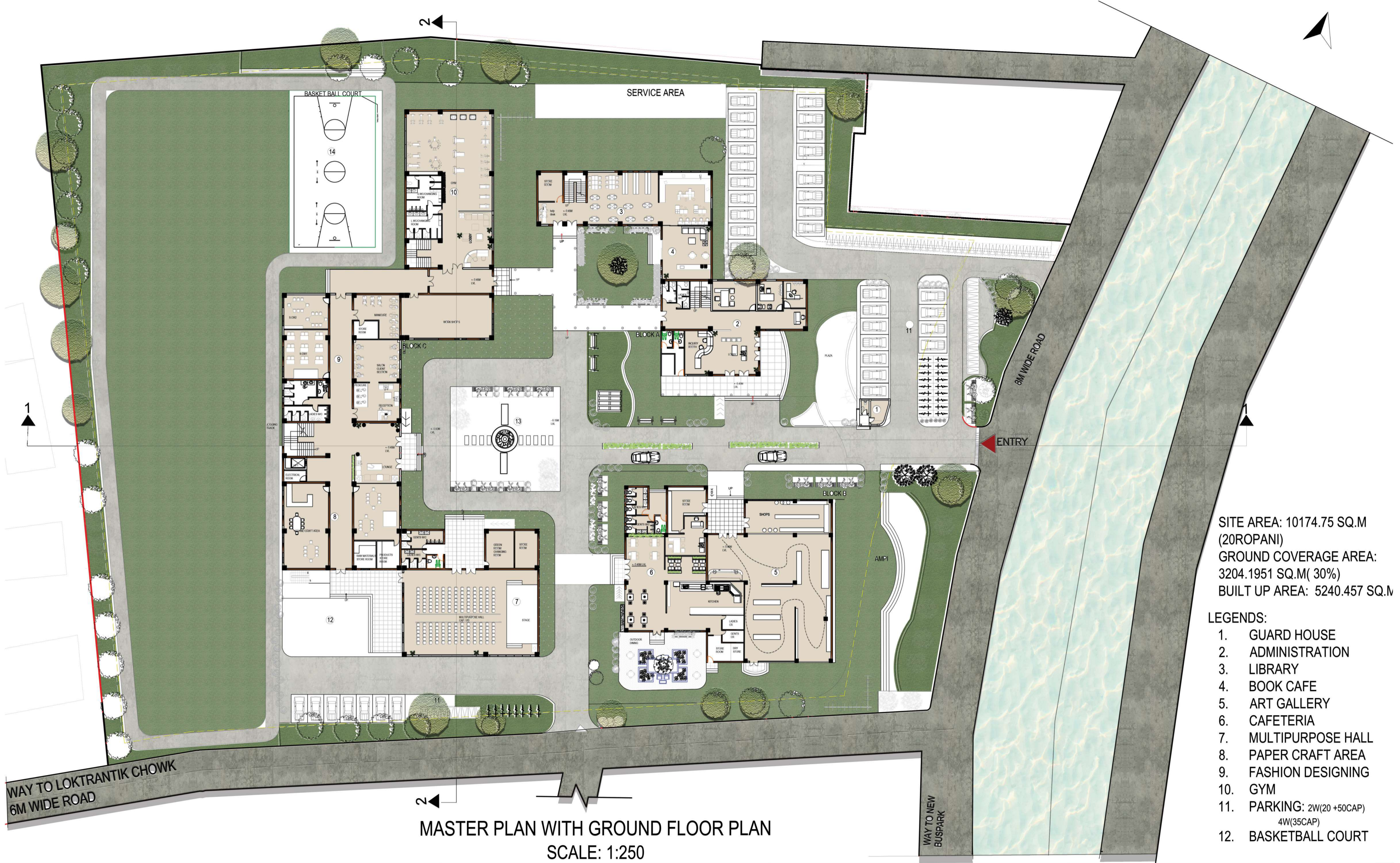
The need for a youth center is urgently needed to meet the diverse needs of young people. The primary goal of this center is to provide spaces where youth can express and showcase their creativity in various fields, engage in social interactions, and develop essential entrepreneurial skills. Recognizing that each young individual possesses unique potential and creativity, this project aims to serve the community in multiple dimensions—socially, physically, personally, and mentally—focusing particularly on youth groups.

Designing a center specifically for youth is a critical step that must be taken seriously, as it will have both direct and indirect impacts on their development. Therefore, my thesis proposes a comprehensive program to create dedicated spaces for youth, which will support their growth and flourishing in meaningful ways.

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ANNEX



SITE AREA: 10174.75 SQ.M
 (20ROPANI)
 GROUND COVERAGE AREA:
 3204.1951 SQ.M (30%)
 BUILT UP AREA: 5240.457 SQ.M

- LEGENDS:
1. GUARD HOUSE
 2. ADMINISTRATION
 3. LIBRARY
 4. BOOK CAFE
 5. ART GALLERY
 6. CAFETERIA
 7. MULTIPURPOSE HALL
 8. PAPER CRAFT AREA
 9. FASHION DESIGNING
 10. GYM
 11. PARKING: 2W(20 +50CAP)
4W(35CAP)
 12. BASKETBALL COURT

MASTER PLAN WITH GROUND FLOOR PLAN
 SCALE: 1:250

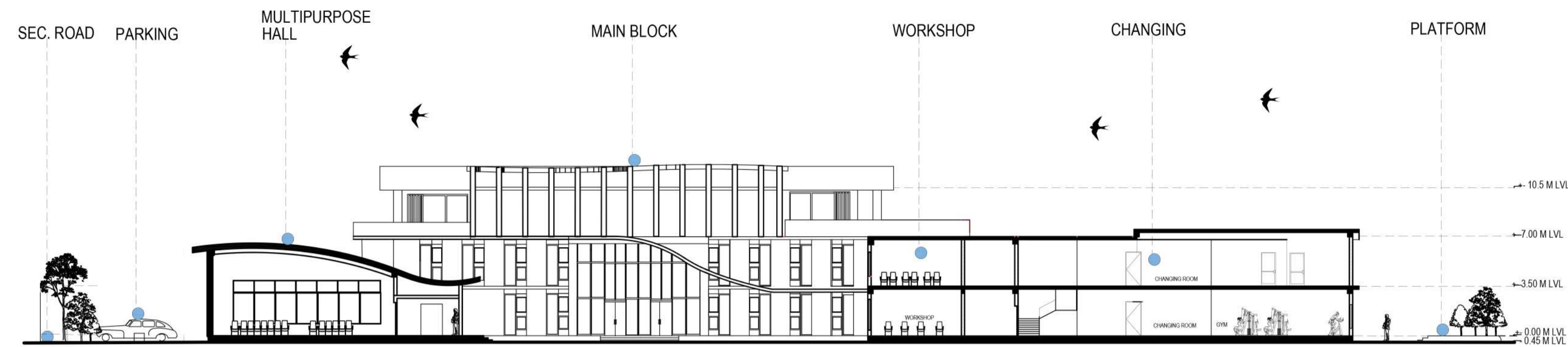


SITE AREA: 10174.75 SQ.M
 (20ROPANI)
 GROUND COVERAGE AREA
 3204.1951 SQ.M(30%)
 BUILT UP AREA: 5240.457 S

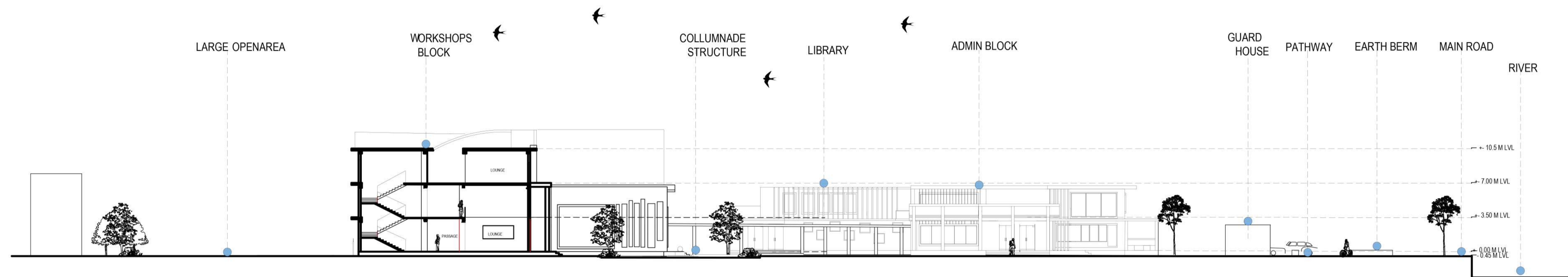
- LEGENDS:
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 3. LIBRARY
 4. BOOK CAFE
 5. ART GALLERY
 6. CAFETERIA
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MASTER PLAN WITH GROUND FLOOR PLAN
 SCALE- 1:250

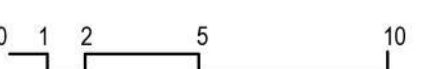
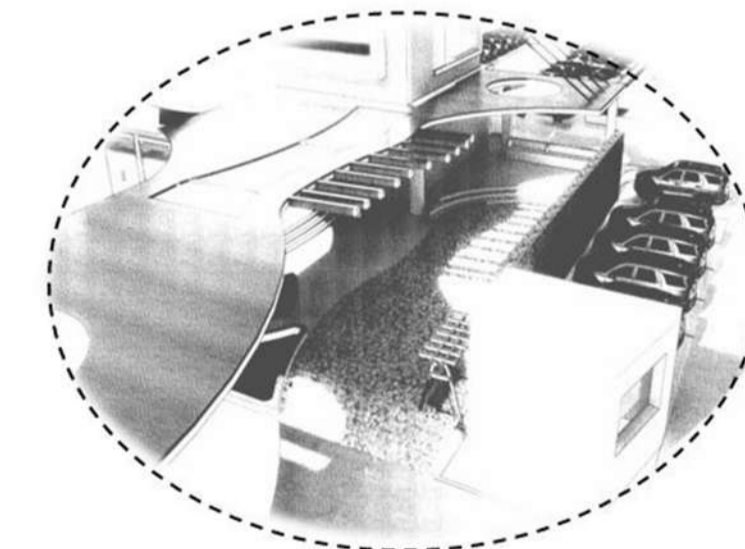
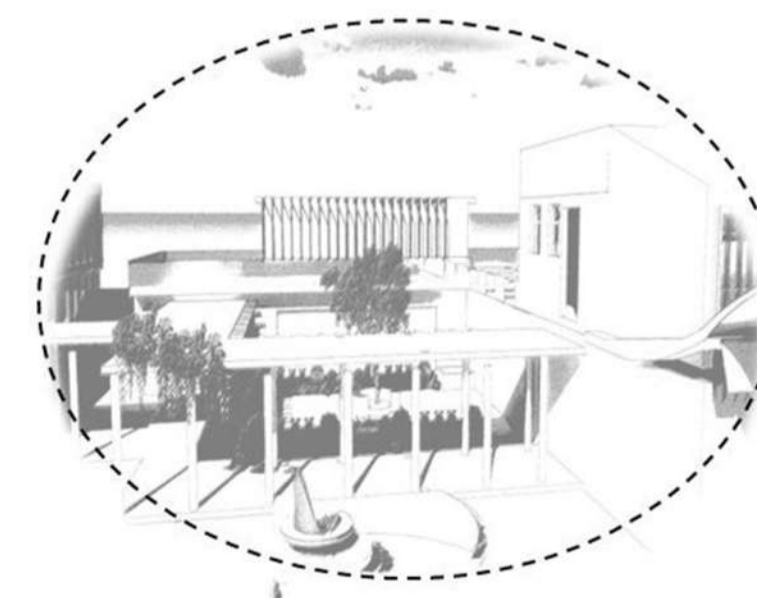
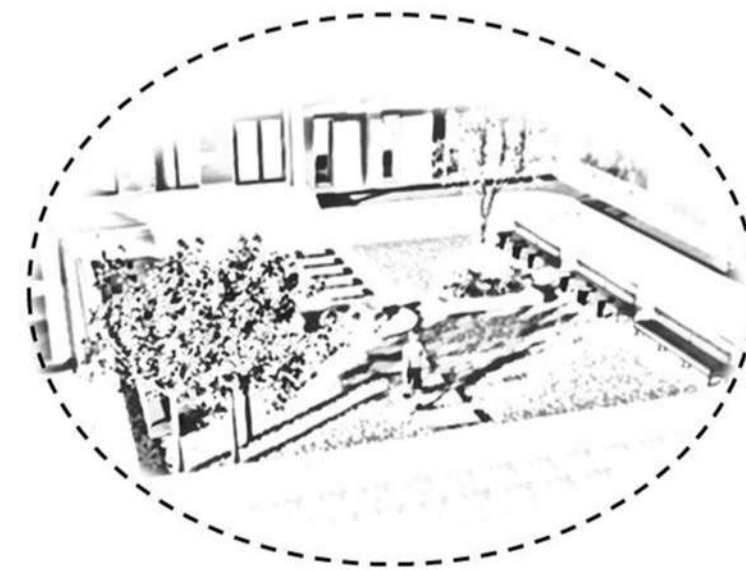
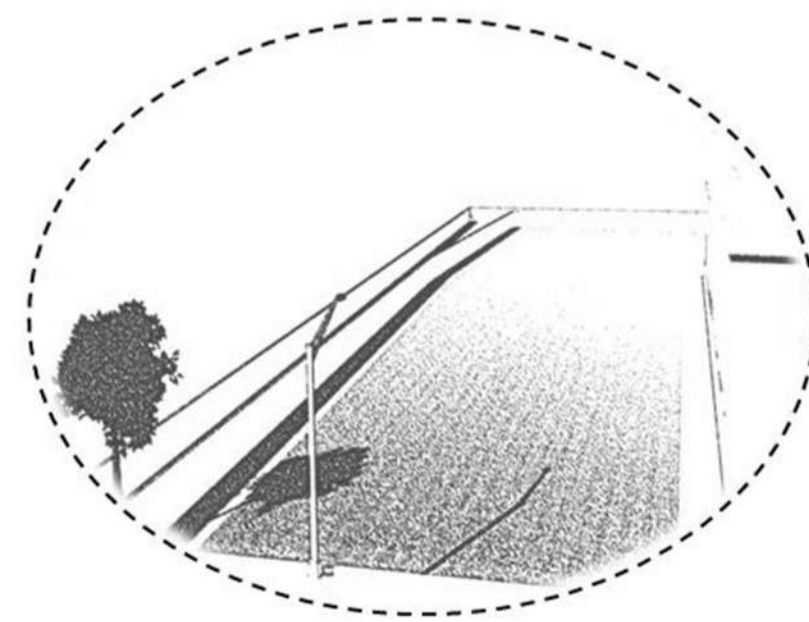
YOUTH CENTER, MANAMAJU



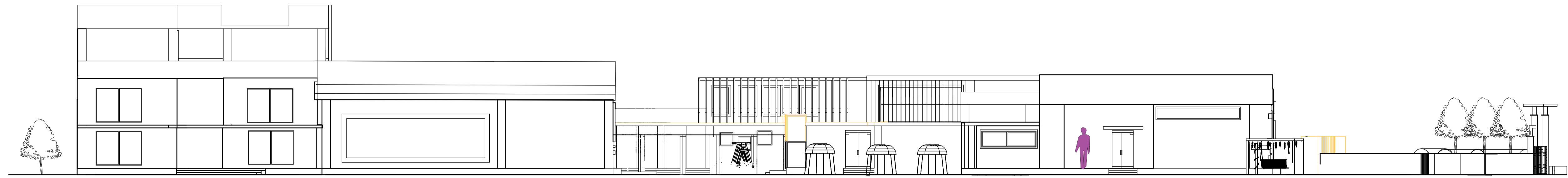
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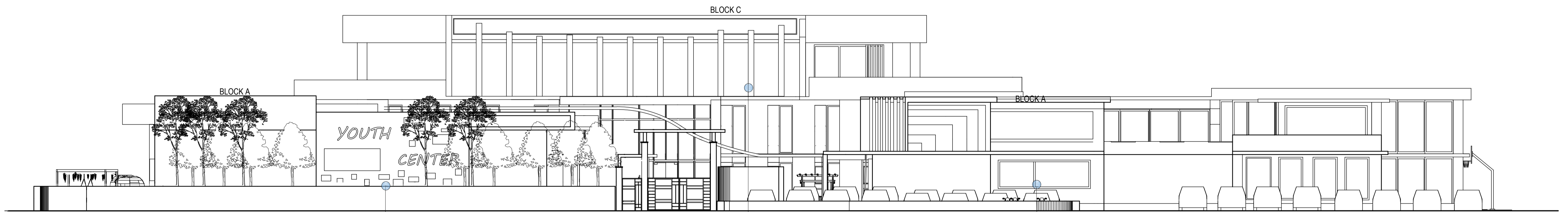
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SCALE: 1:250



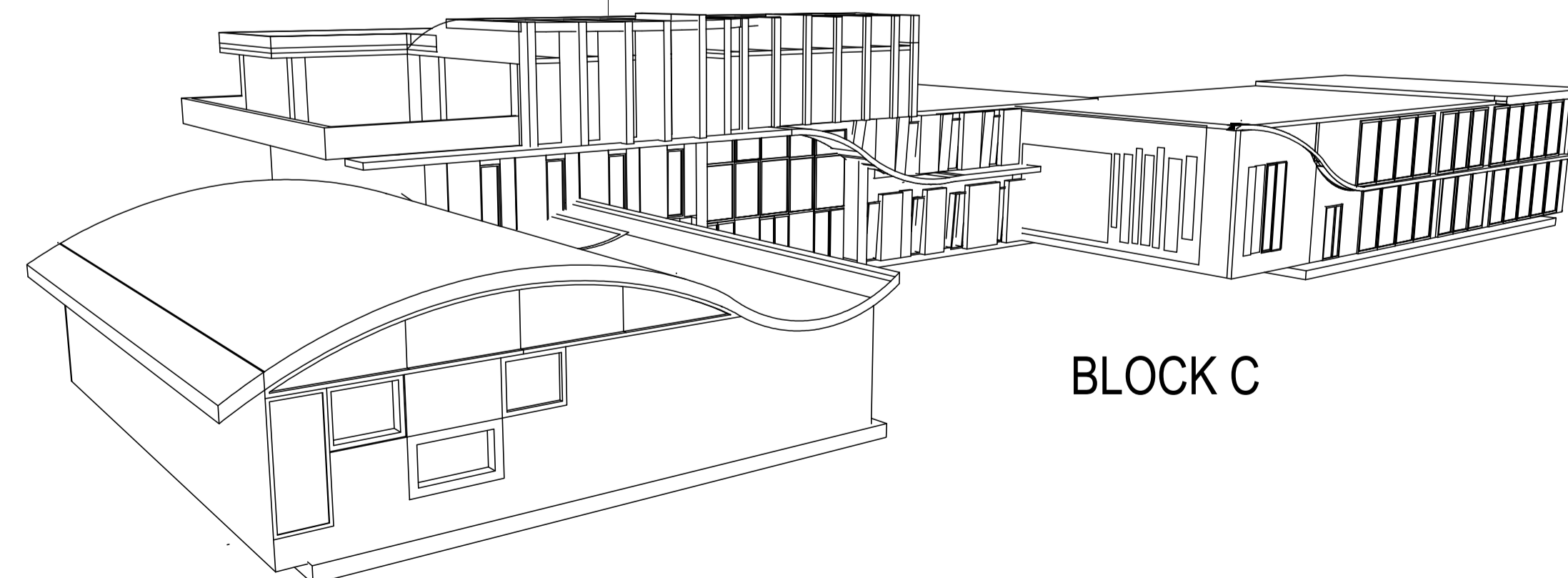
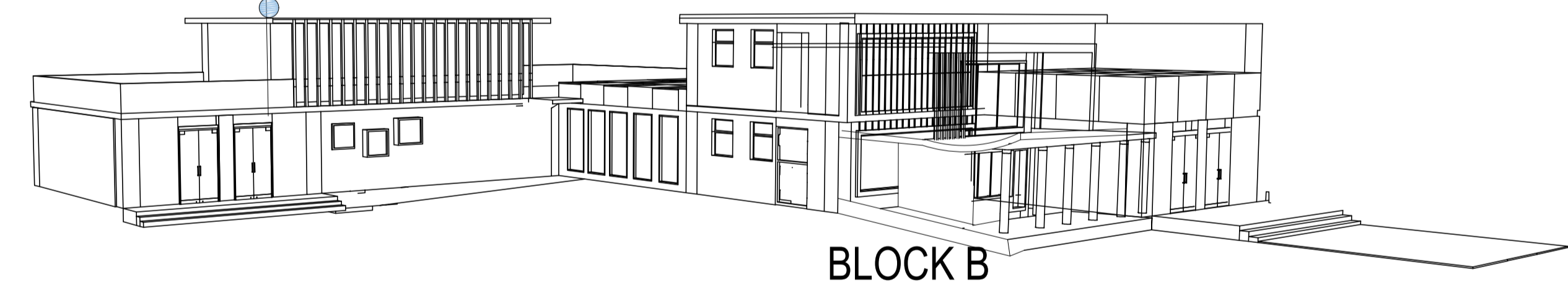
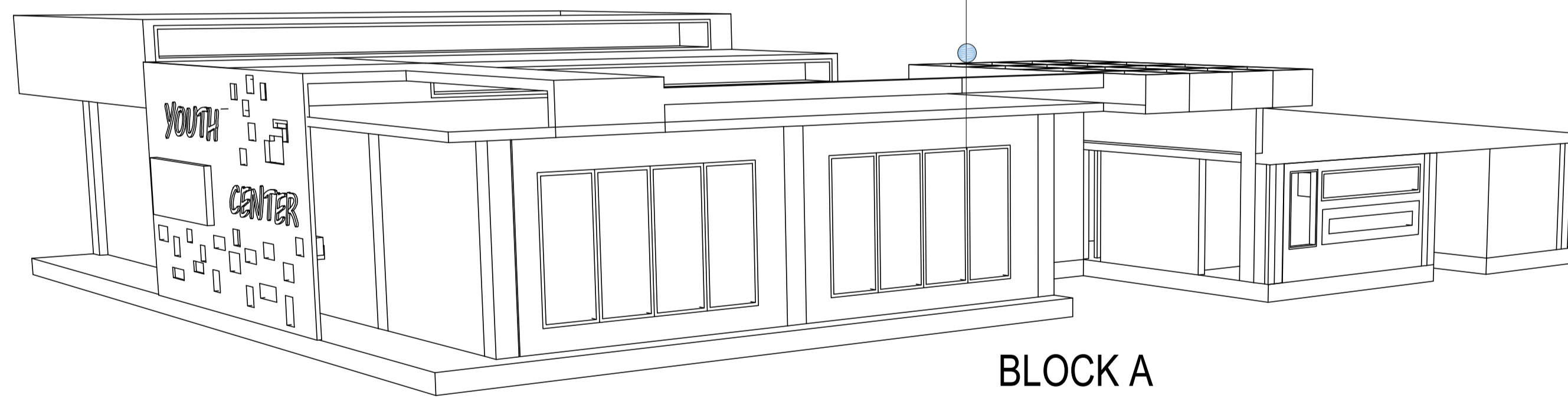
YOUTH CENTER, MANAMAIJU

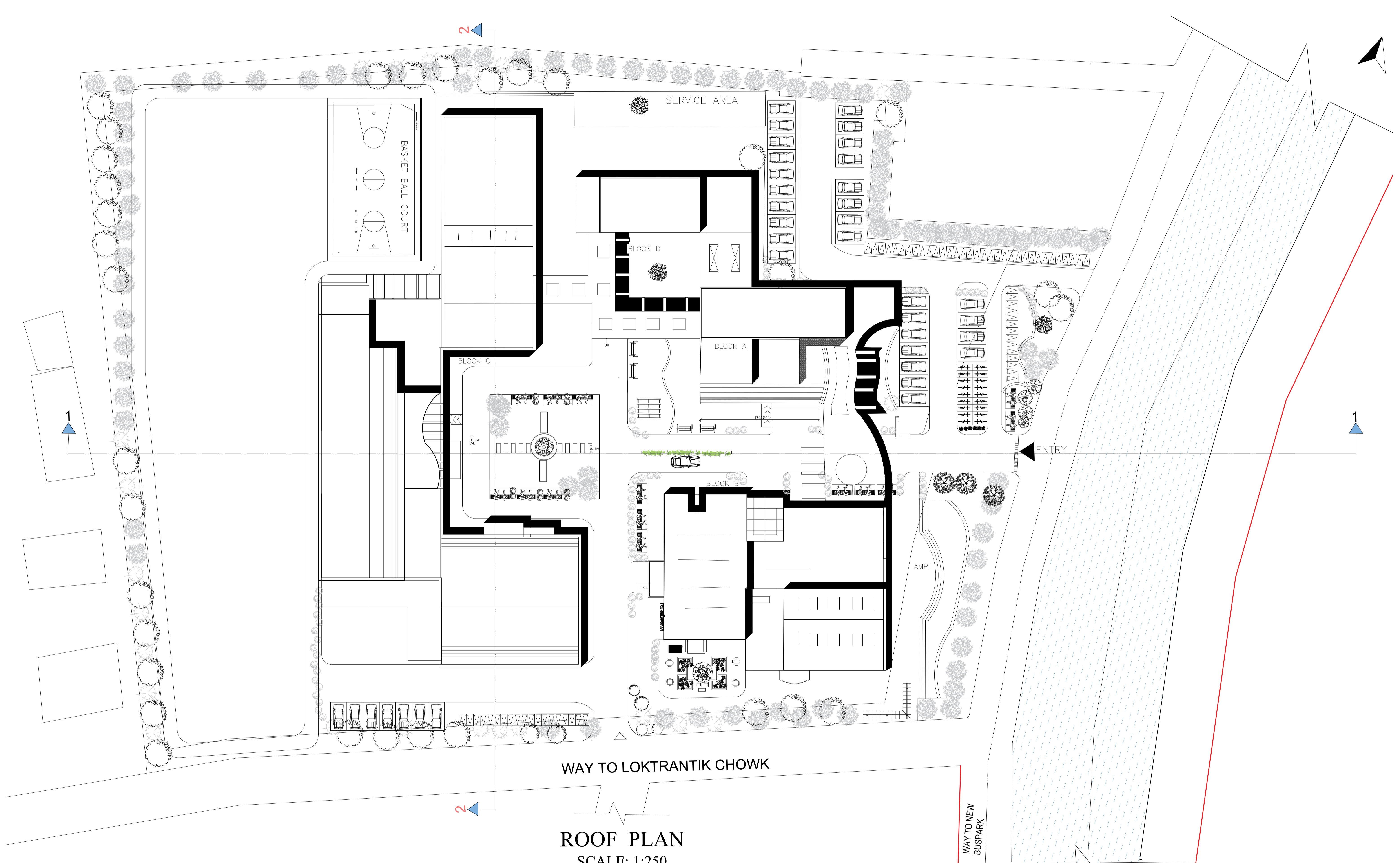


SOUTH PROFILE ELEVATION



EAST PROFILE ELEVATION





ROOF PLAN
SCALE: 1:250

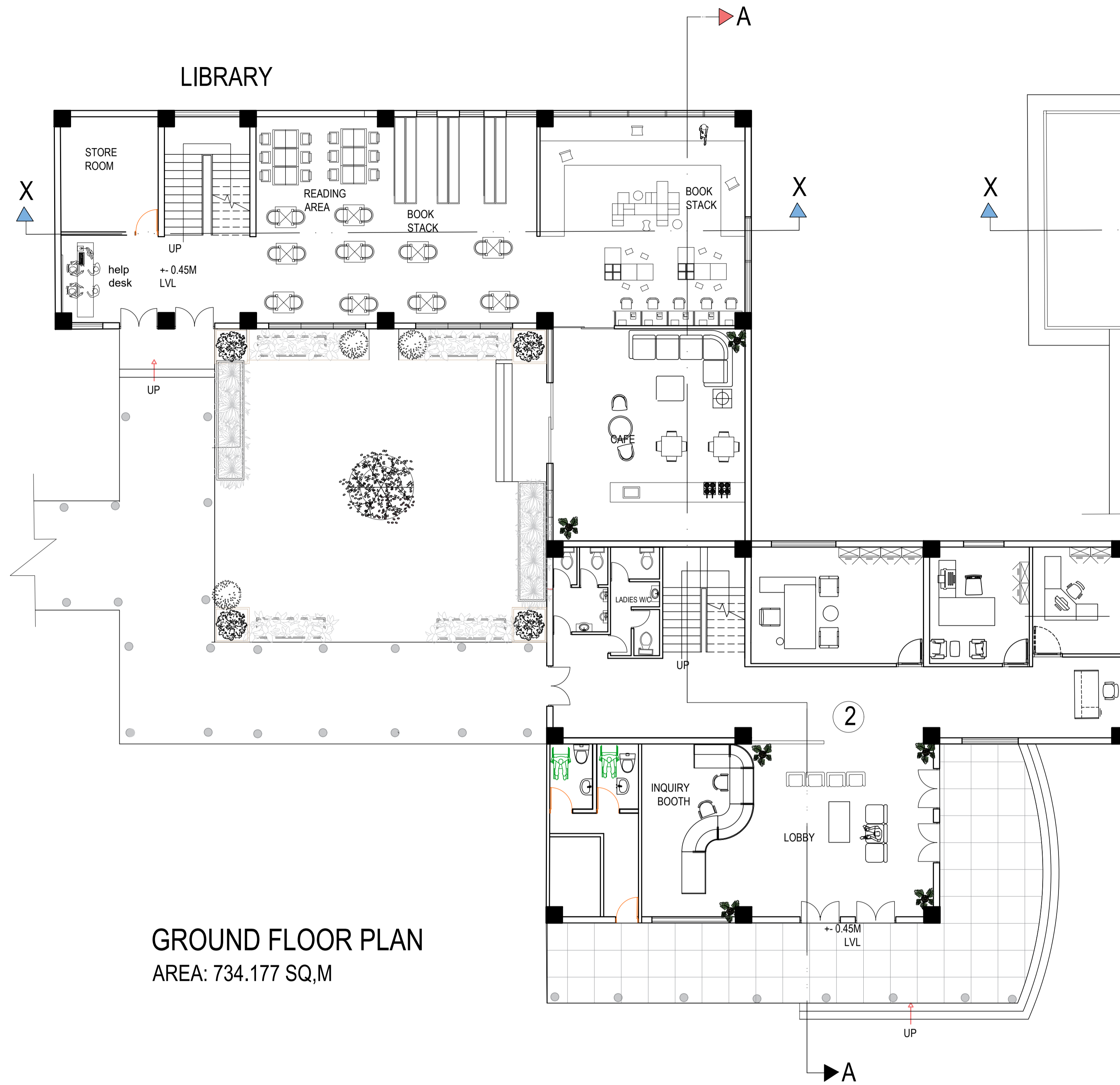
AFFILIATED TO PURBANCHAL UNIVERSITY
KHWOPA ENGINEERING COLLEGE
 DEPARTMENT OF ARCHITECTURE
 LIBALI, BHAKTAPUR

FINAL PRESENTATION
 B. ARCH THESIS

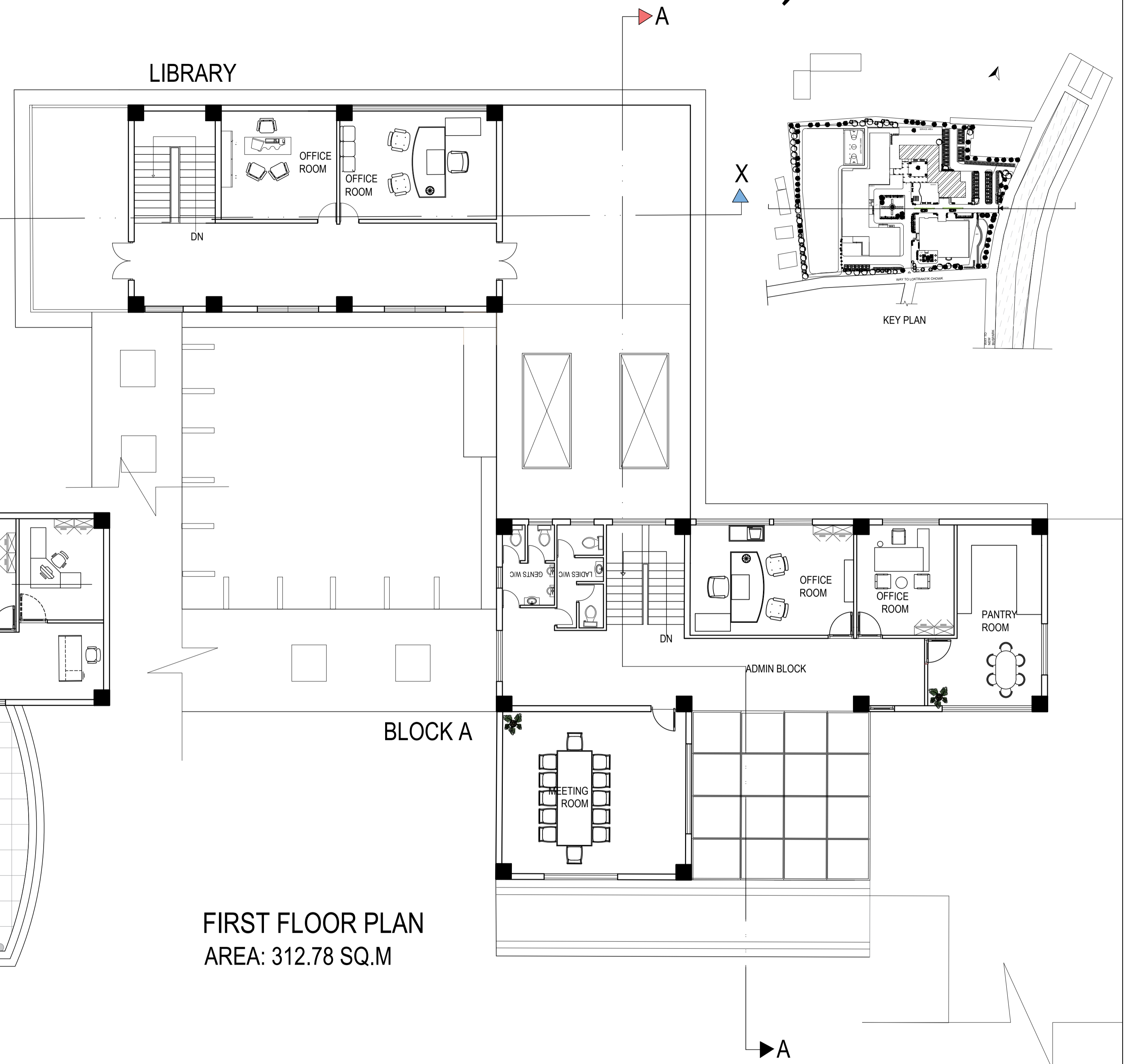
NAME: SUSMITA MAHARJAN
 ROLL NO: 750146

DATE: 2081/05/06

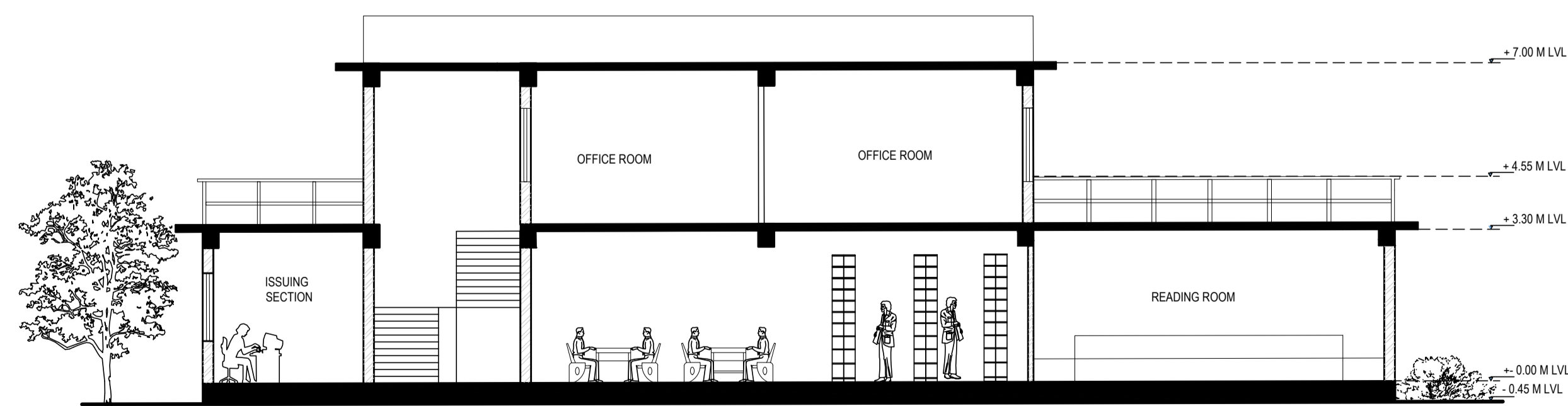
YOUTH CENTER, MANAMAJU



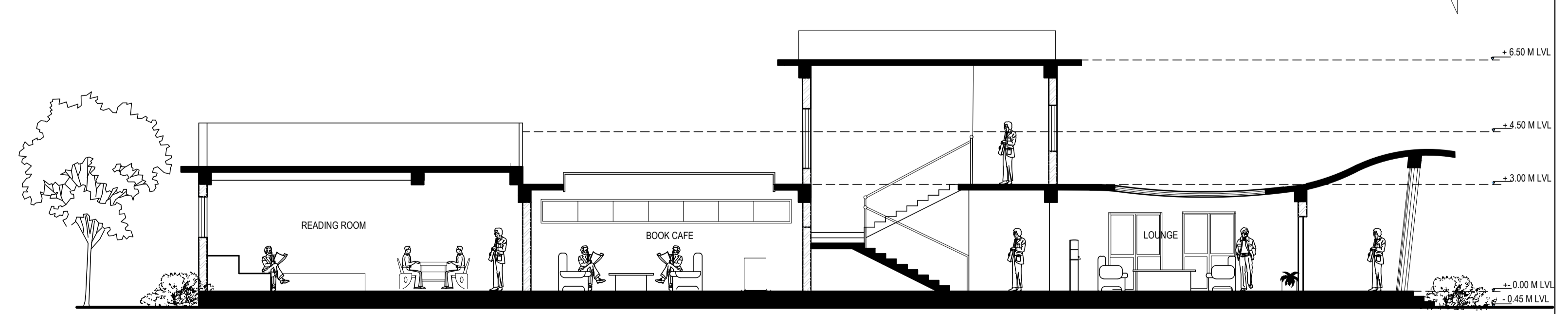
GROUND FLOOR PLAN
AREA: 734.177 SQ.M



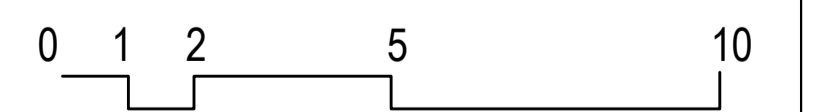
FIRST FLOOR PLAN
AREA: 312.78 SQ.M



SECTION AT XX



SECTION AT AA

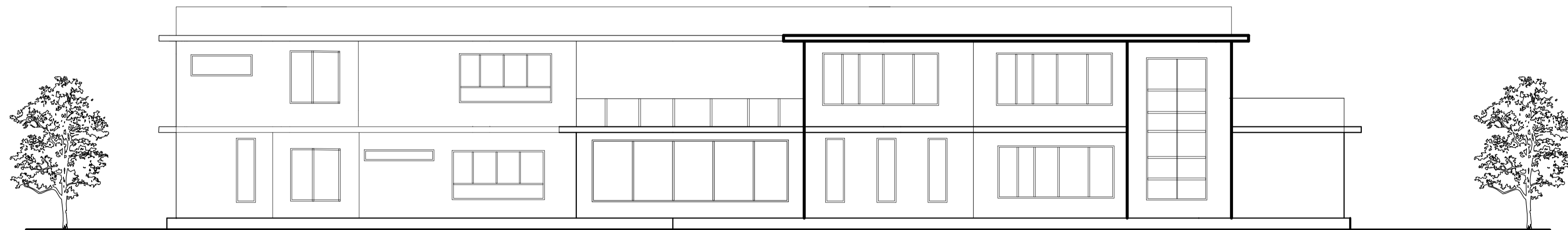


YOUTH CENTER, MANAMAJU

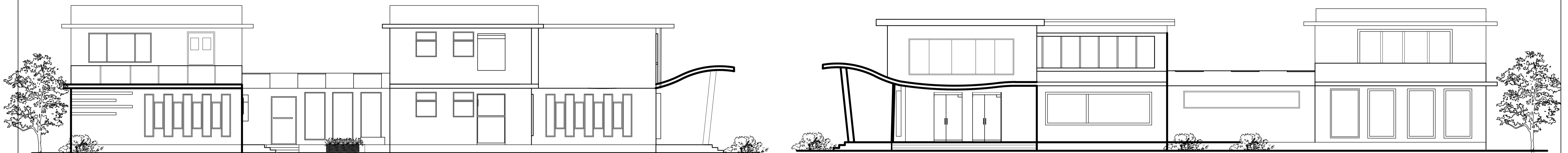
BLOCK A



SOUTH ELEVATION



NORTH ELEVATION



WEST ELEVATION

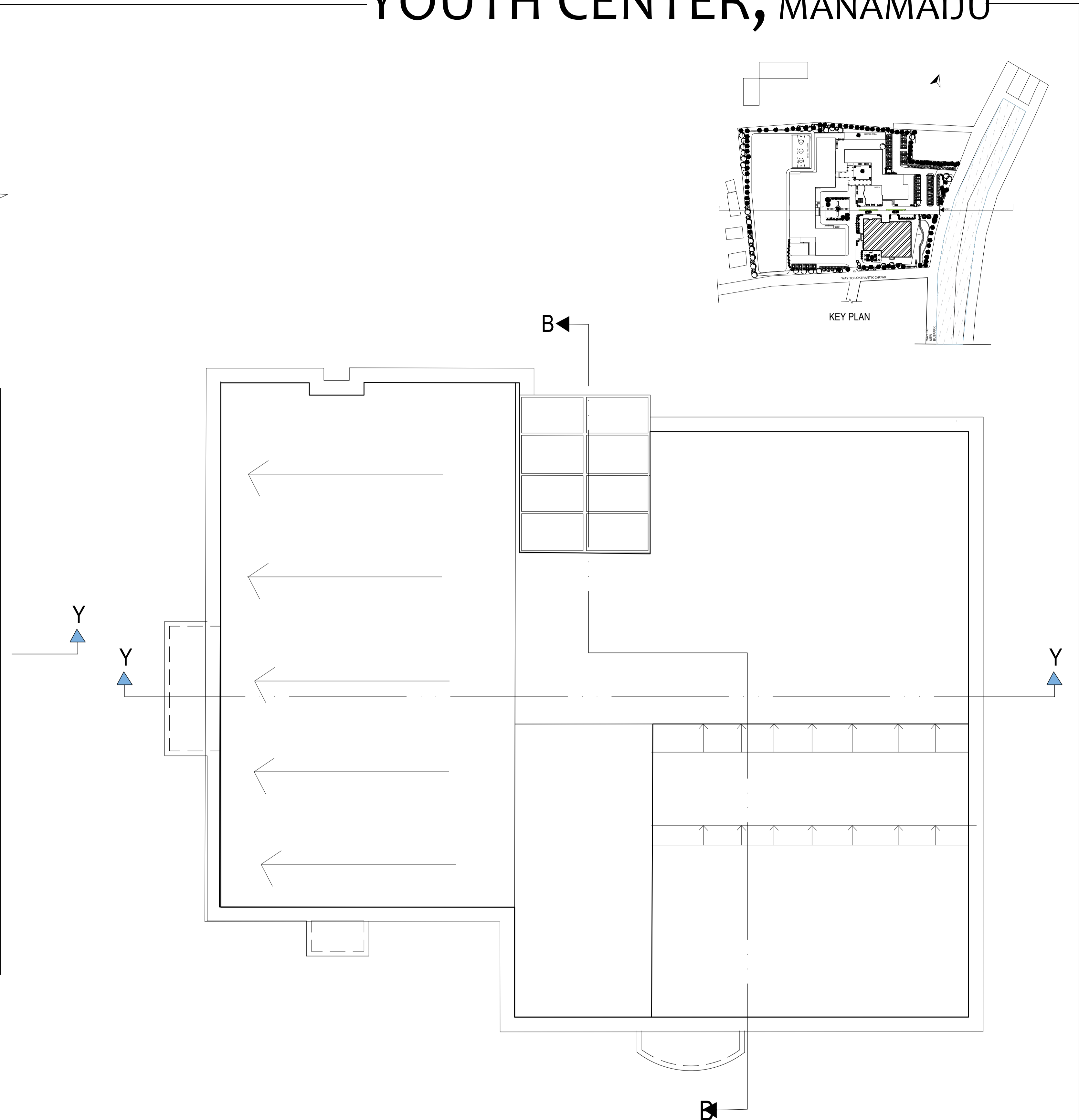
EAST ELEVATION

0 1 2 5 10

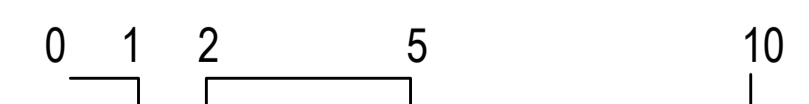
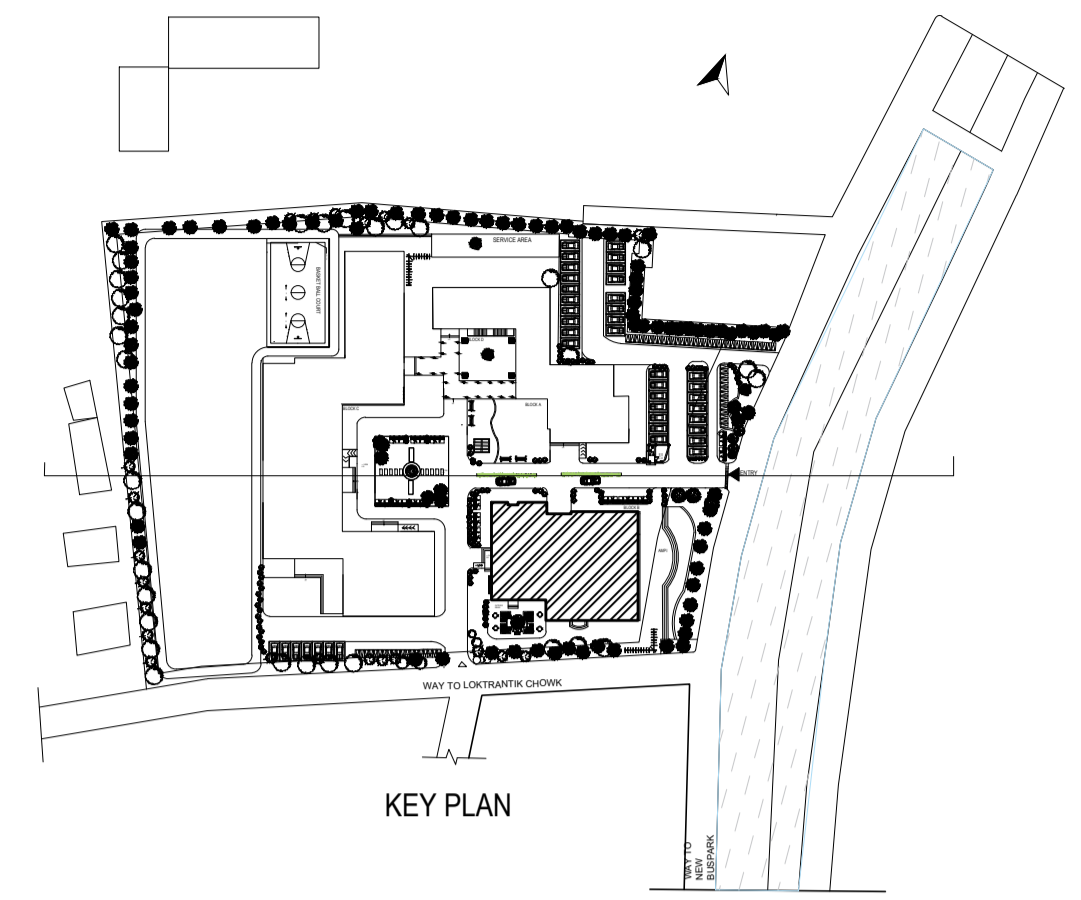
YOUTH CENTER, MANAMAIJU



GROUND FLOOR PLAN
AREA: 780.62 SQ.M

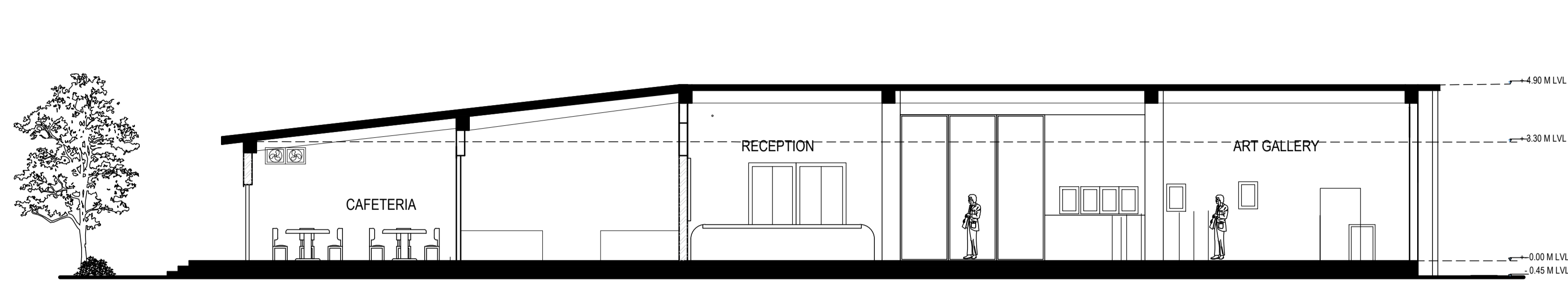


TOP FLOOR PLAN

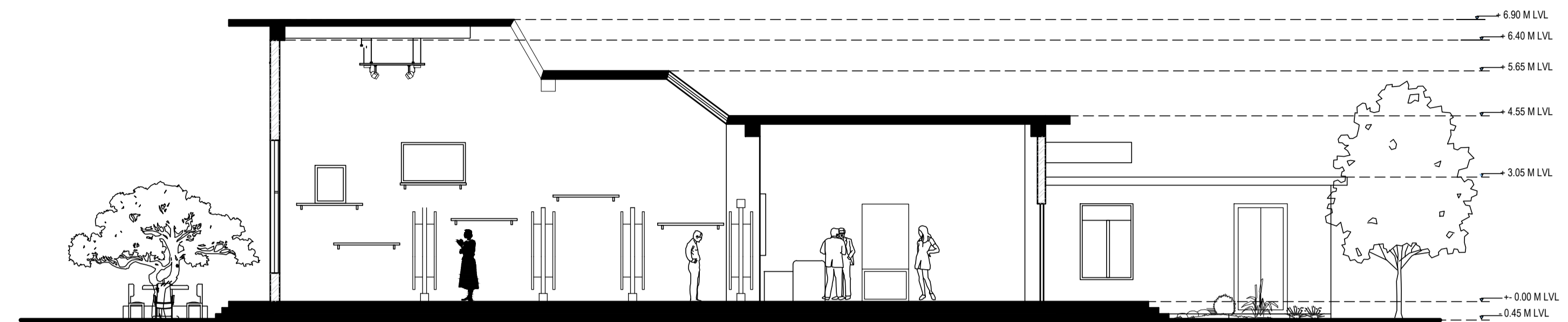


YOUTH CENTER, MANAMAIJU

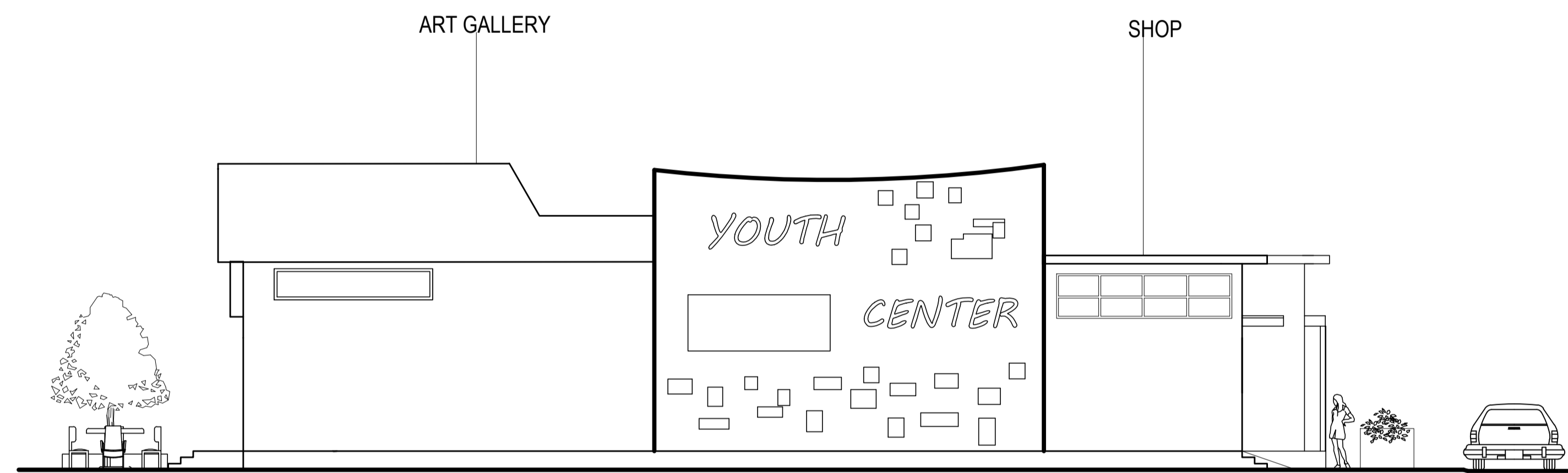
BLOCK A



SECTION AT XX



SECTION AT BB



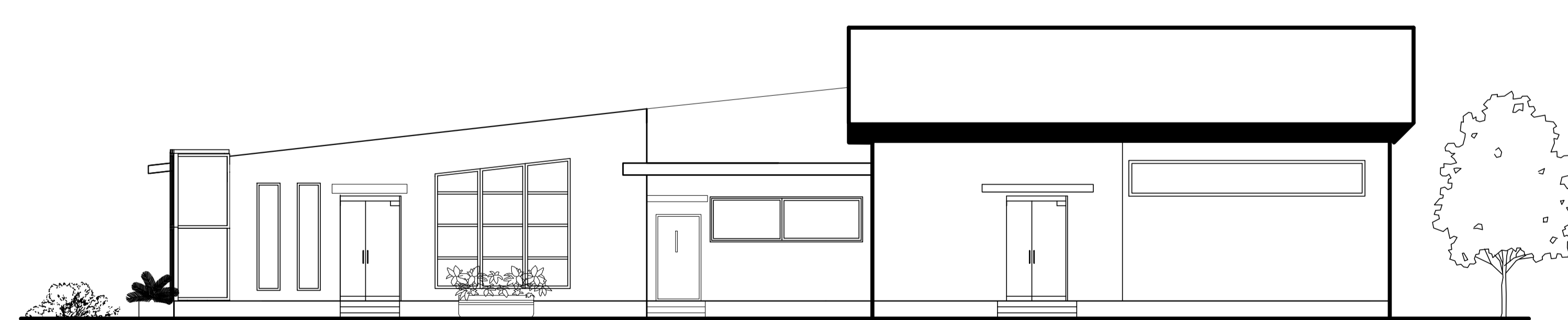
EAST ELEVATION



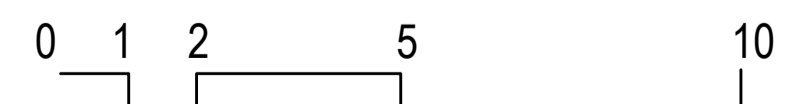
WEST ELEVATION



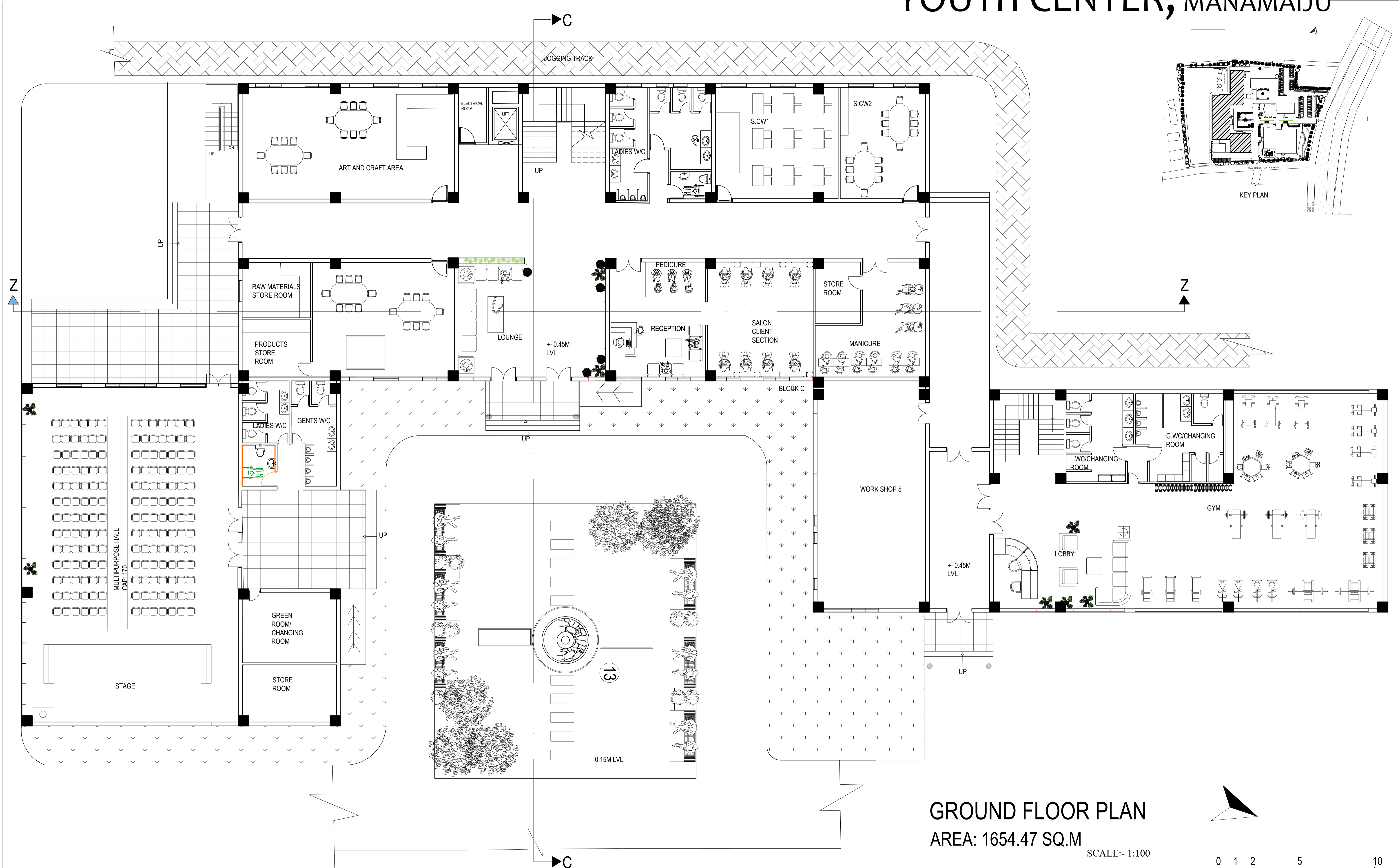
NORTH ELEVATION



EAST ELEVATION

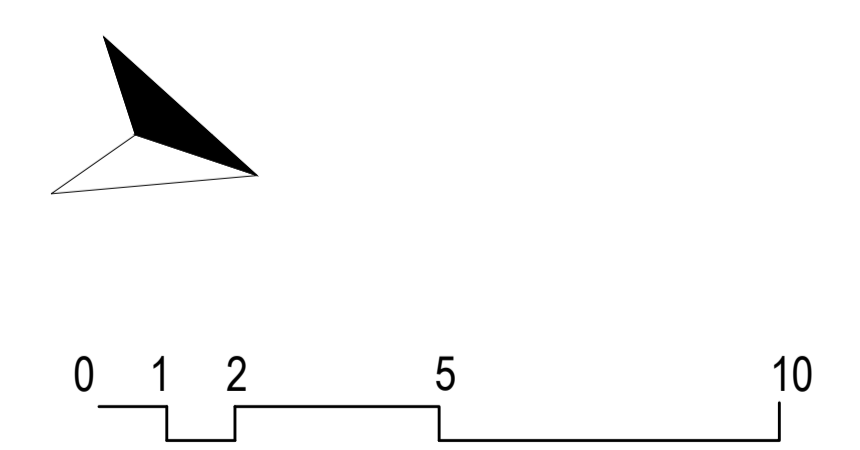


YOUTH CENTER, MANAMAIJU

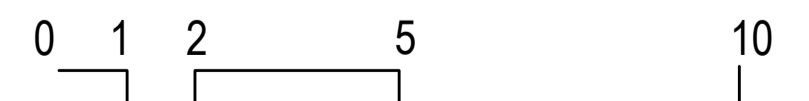
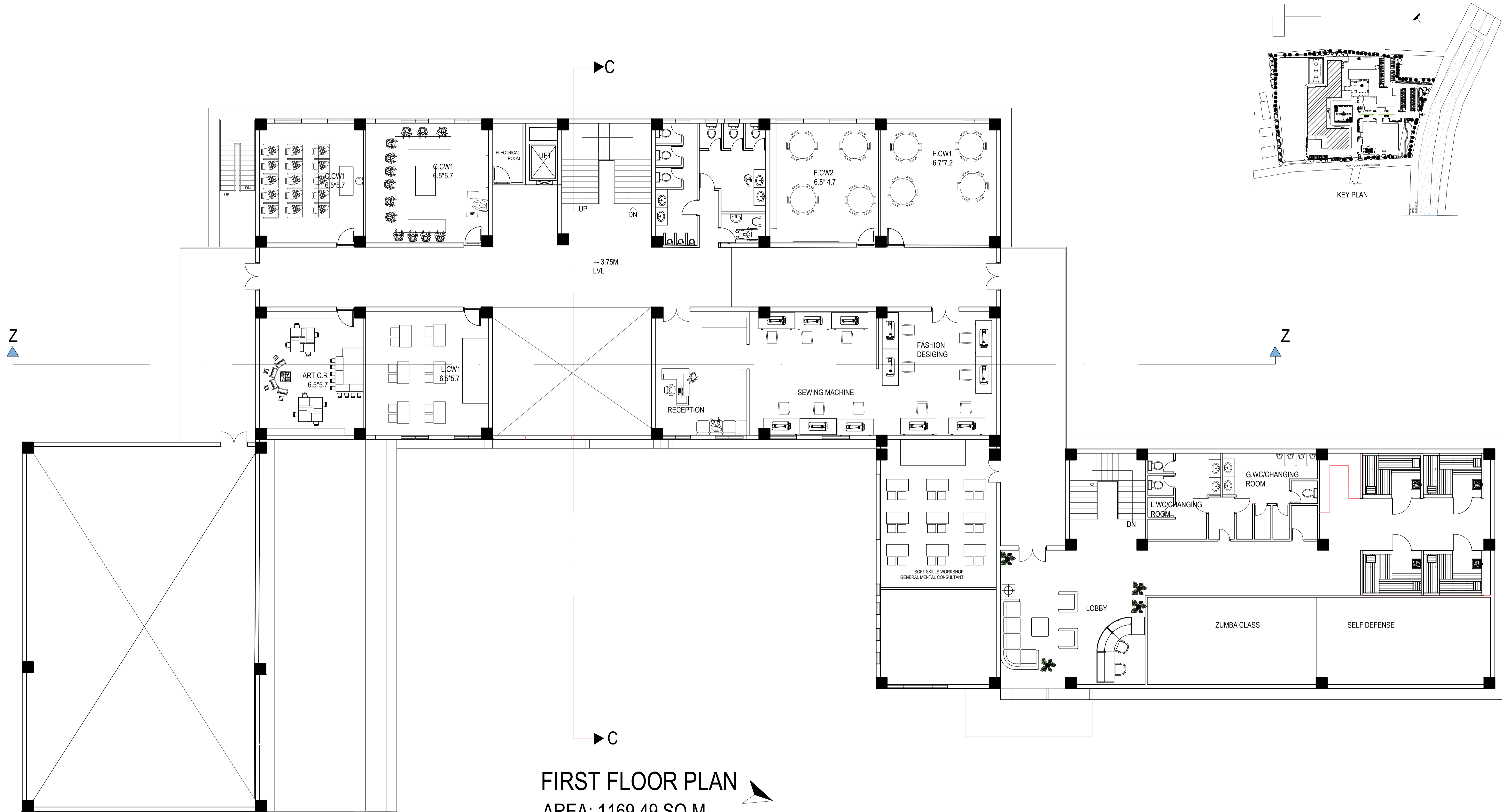


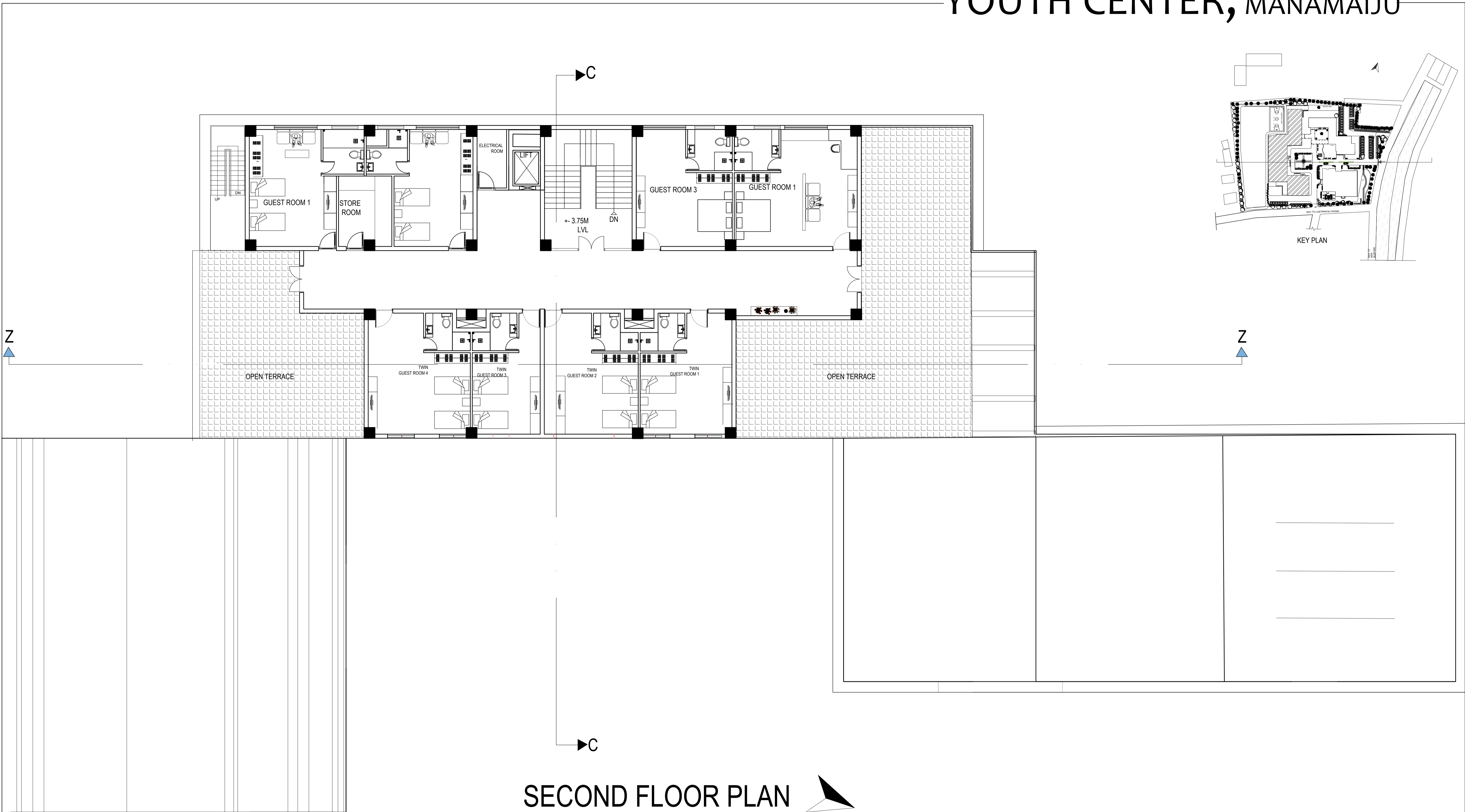
GROUND FLOOR PLAN
 AREA: 1654.47 SQ.M

SCALE:- 1:100

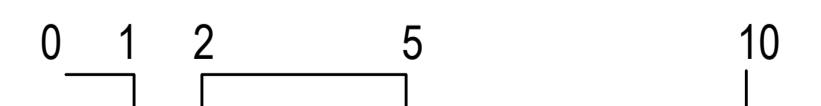


YOUTH CENTER, MANAMAJU

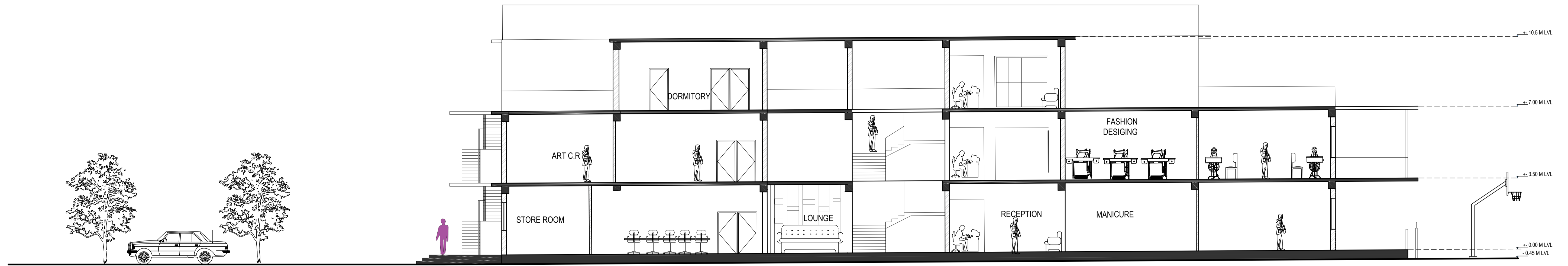




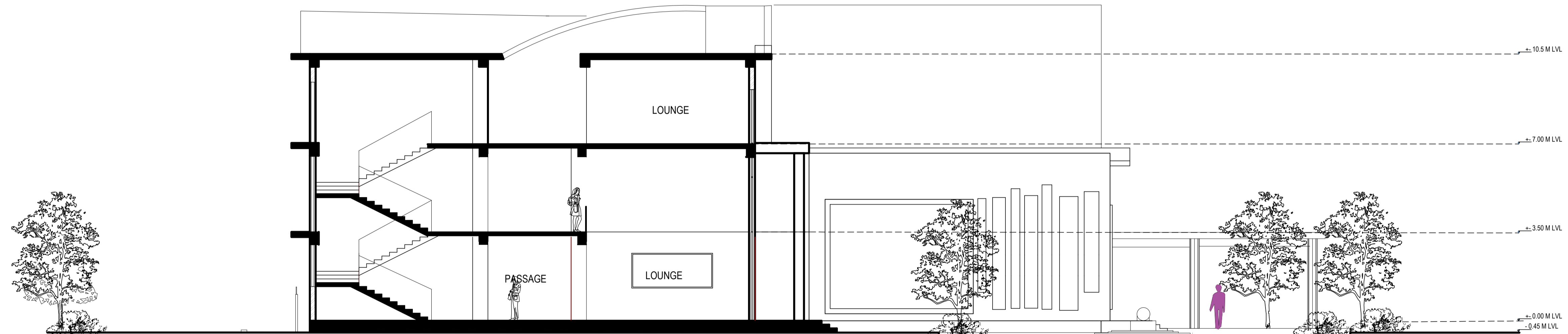
SECOND FLOOR PLAN
 AREA: 511.49 SQ.M



YOUTH CENTER, MANAMAIJU

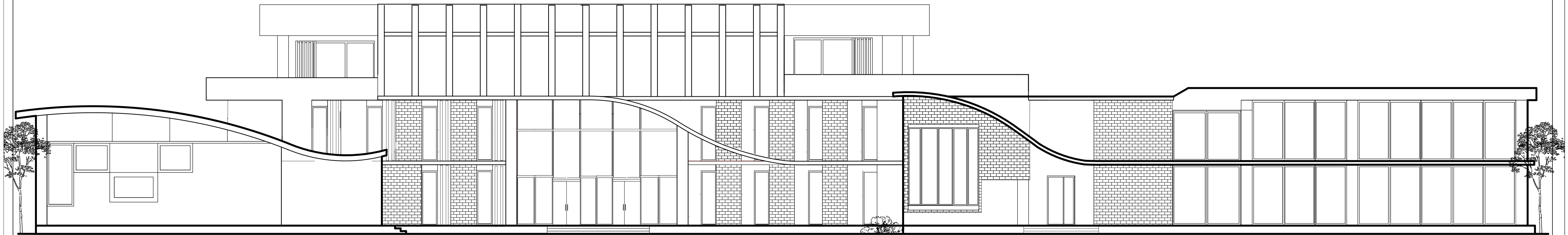


SECTION AT Z-Z



SECTION AT C-C

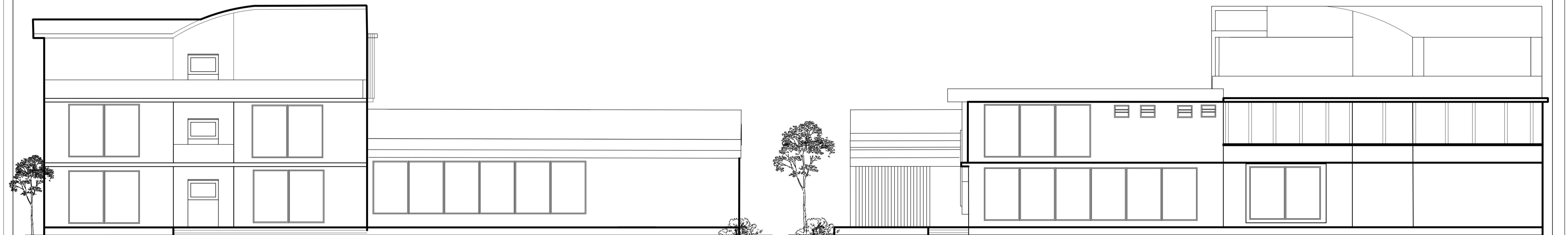
YOUTH CENTER, MANAMAJU



EAST ELEVATION



WEST ELEVATION



SOUTH ELEVATION

NORTH ELEVATION



Showing 3d view of open interactive sapce

Showing 3d view of mainblock

Showing 3d view from front view



Showing the bird's eye view from the south-east corner of the site

Showing the entrance movement

Showing 3d view of plaza



Showing 3d view of ampitheatre

Showing 3d view of open basketball courtyard

Showing 3d view of collumnade structure

Showing entrance plaza

YOUTH CENTER, MANAMAIJU



3D MODEL