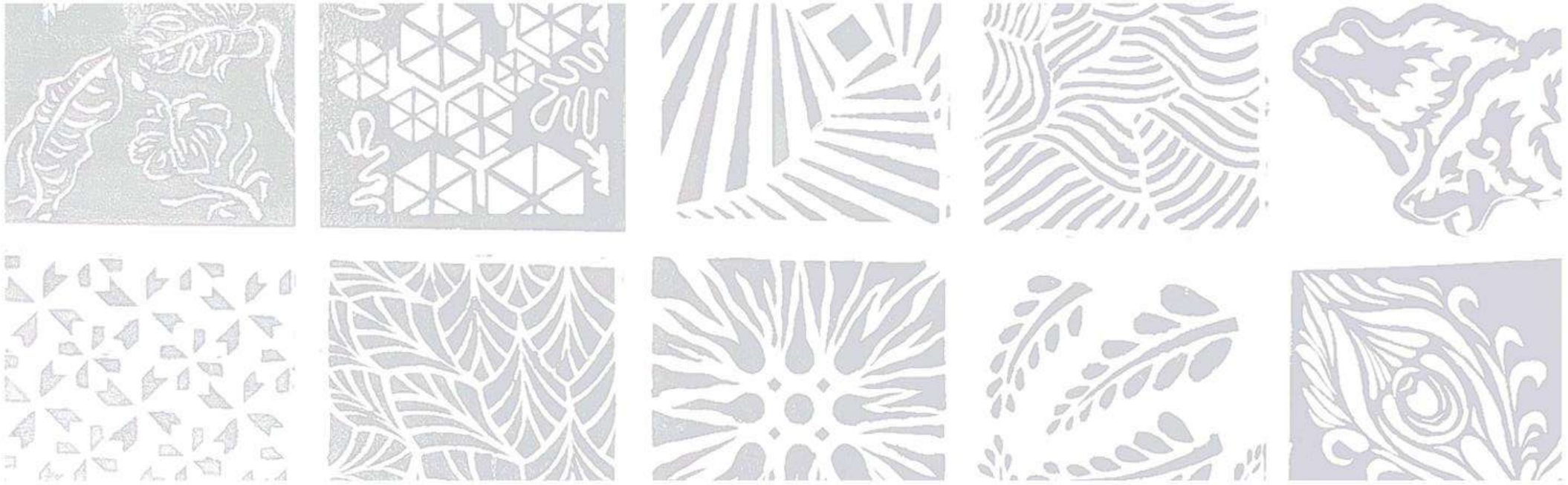
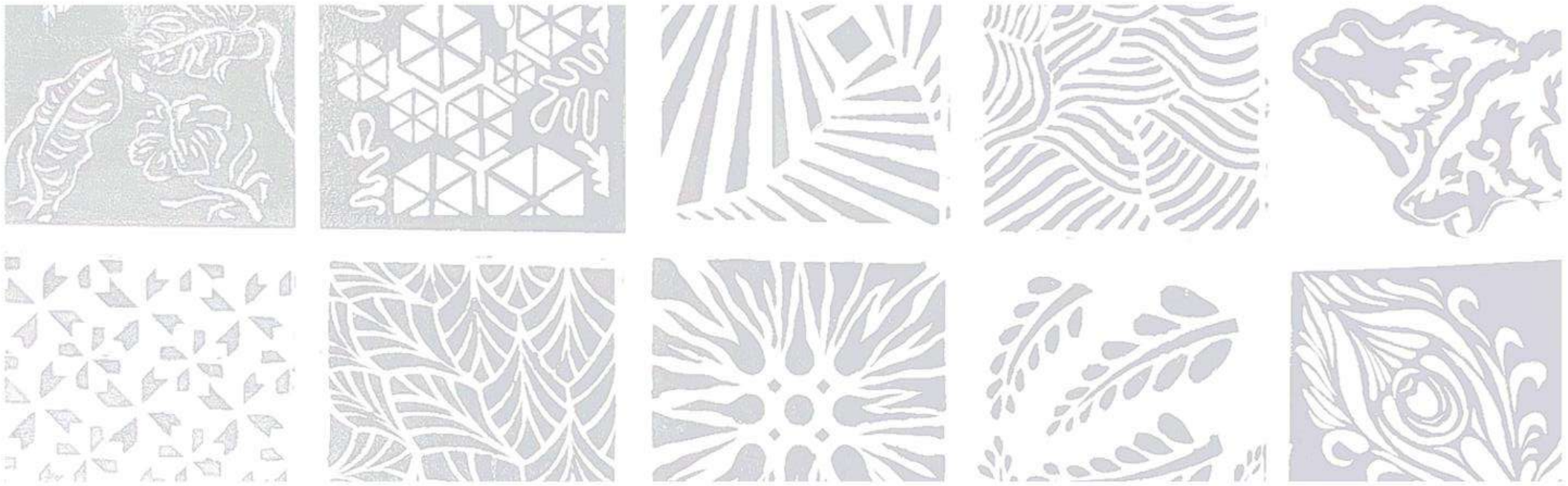


DSCA YEAR BOOK 2022-2023



1st Semester

Semester 1: Bistro Design
The sites chosen for the bistro are:
Site A – Building Frontage
Architecture Block, Dayananda Sagar Institutions, Bengaluru
Site area: 358 +81 sqm (including landscape)
Total capacity: 53 persons
Total Built-up-area (B.U.A): 165 sqm

Site B – Rock Garden
Dayananda Sagar Institutions, Bengaluru
Site area: 347 sqm
Total capacity: 65 persons
Total Built-up-area (B.U.A): 190 sqm

Schedule of progress
➢ Briefing with regard to site and design requirements.
➢ Visit to site; necessary analysis and inferences.
➢ Live Case study – Group work
➢ Literature Case study – Group work
➢ Assimilation of literature/case study into maps and graphics
➢ Bubble diagram
➢ Zoning
➢ Concept / Theme – Exploring forms
➢ Single line plan
➢ Block Model
➢ Masterplan (+Roof plan), all floor plans with furniture layout
➢ Sections (2#)
➢ Elevations (4#)
➢ Detailed model
➢ 3D views and details

ARCHITECTURAL DESIGN I
21 ARC 11

Studio Coordinators

Ar. Chetan S Garalapur

Ar. Surabhi Moharir

Studio Faculty

Ar. Nikhil Ravindra

Ar. Shruthi A Murthy

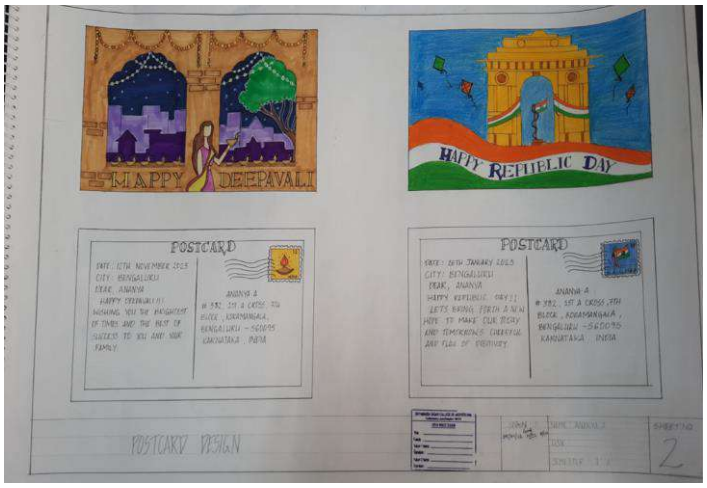
Ar. Vani Krishnamurthy

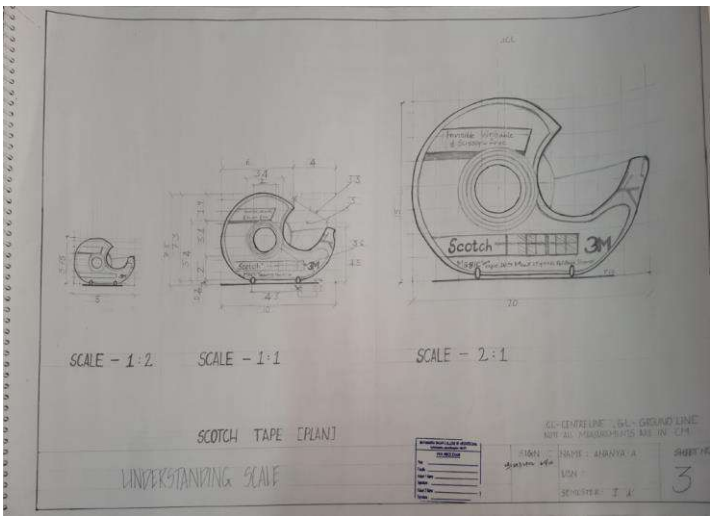
Ar. Gopi Krishna KV

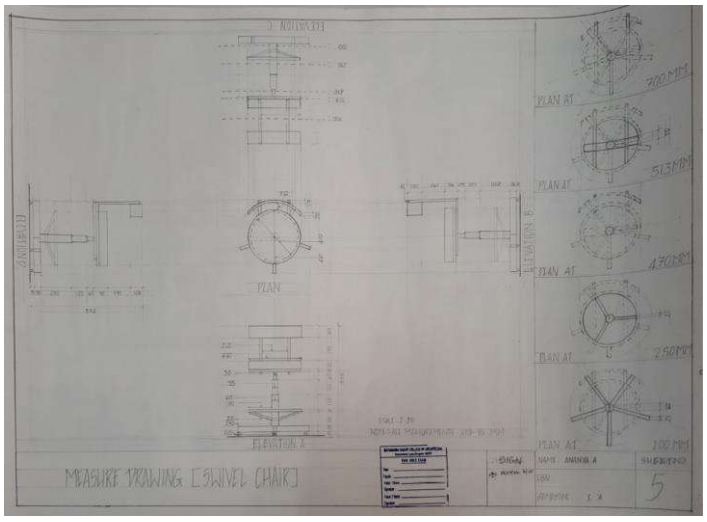
Ar. Chaitali Babar

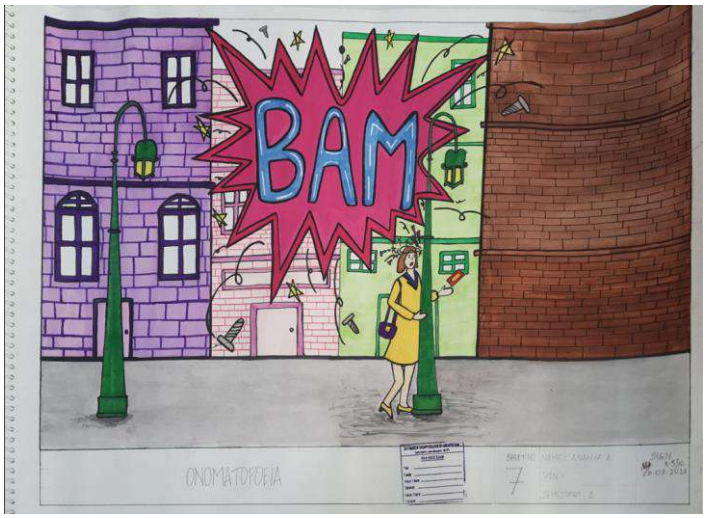
Architectural Design I
Faculty: Ar. Nikhil Ravindra, Ar. Chetan S Garalapur,
Ar. Shruthi A Murthy

Ananya A
1DC22AT009









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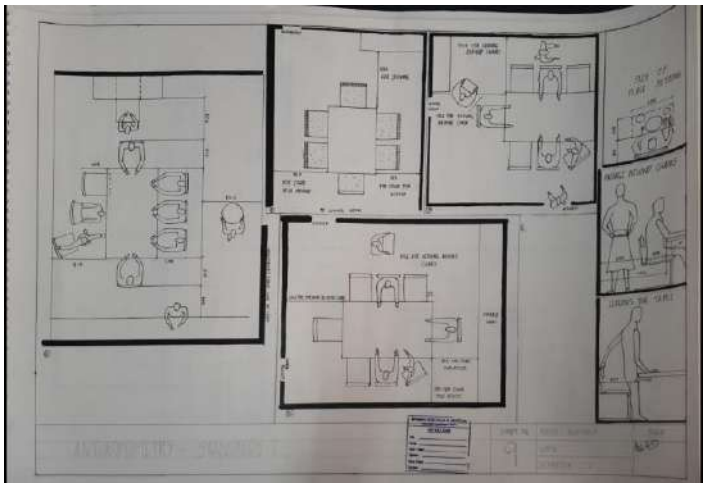
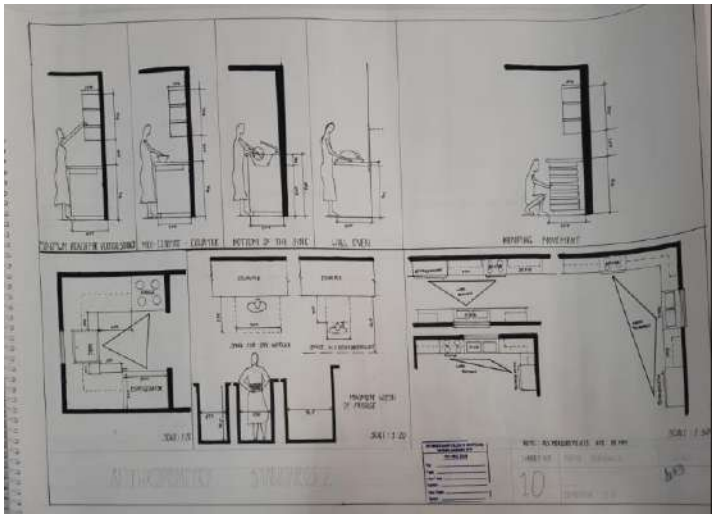
TILE DESIGN
TODO ITO
ABSTRACTION - TILE DESIGN
8

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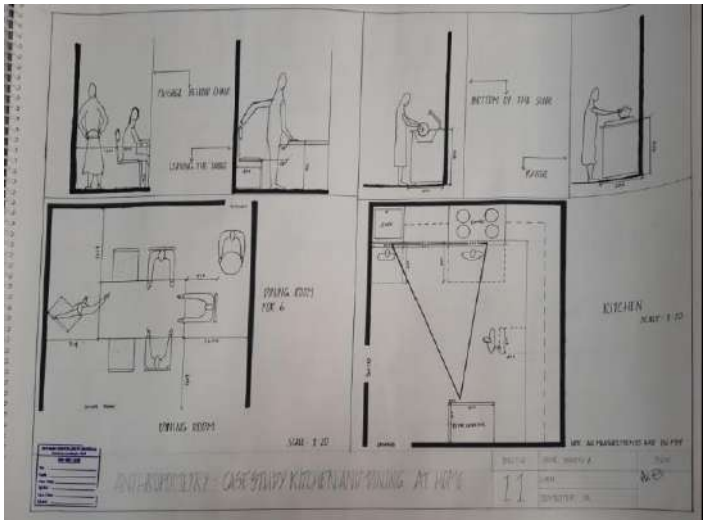
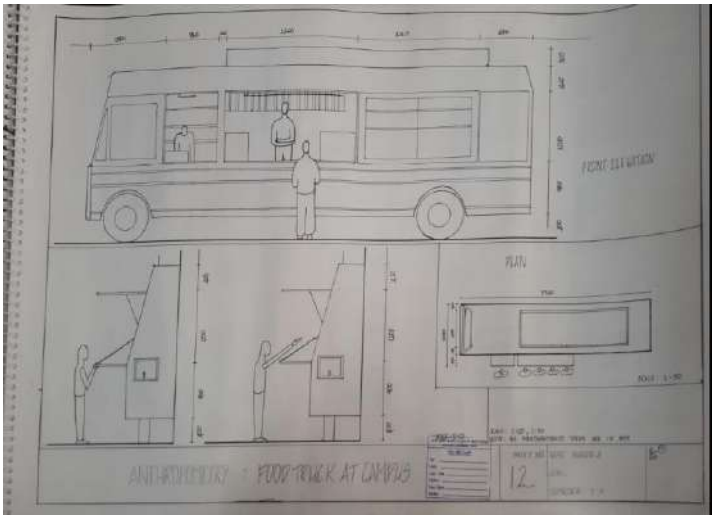
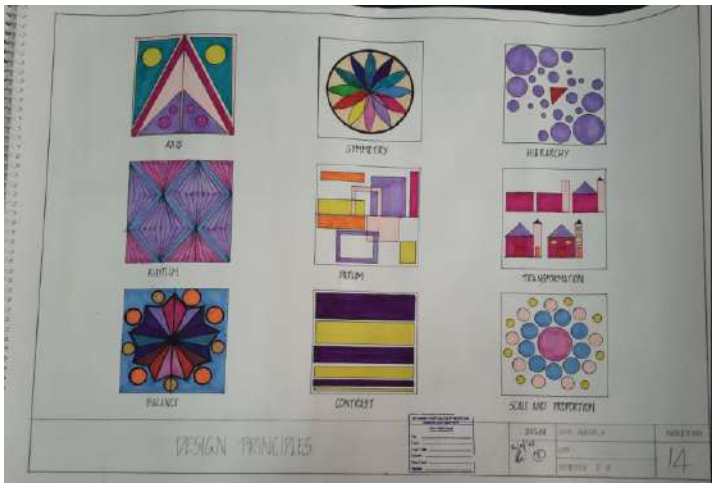
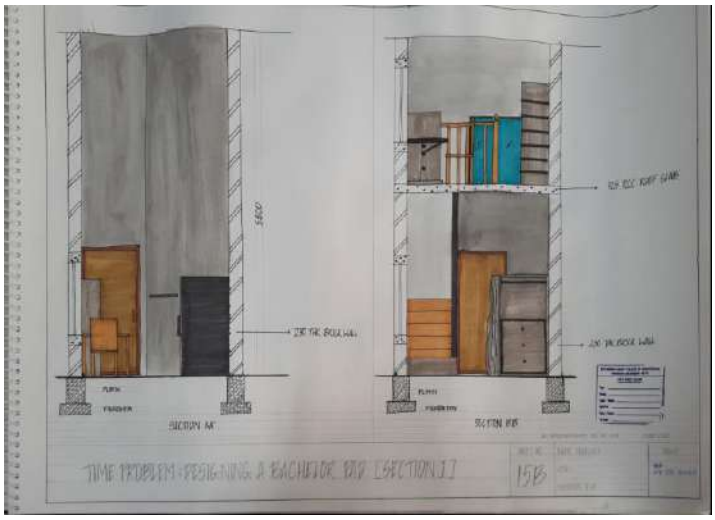

LIVING ROOM
KITCHEN
11


FRONT ELEVATION
PLAN
12


13

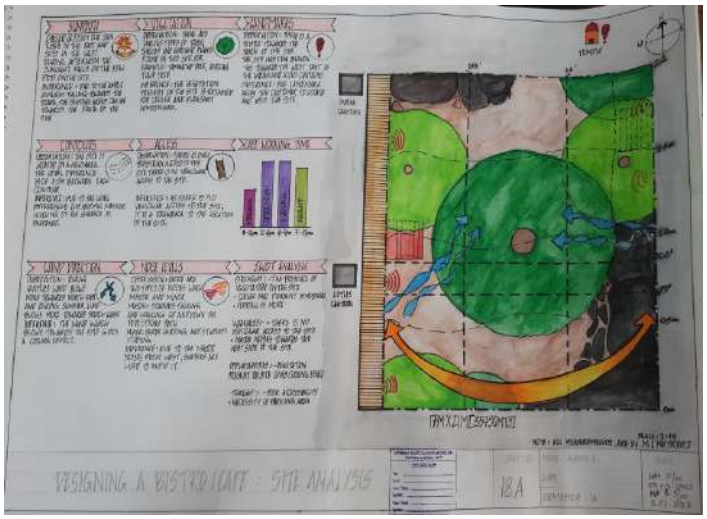

AXIS
SYMMETRY
HIERARCHY
RHYTHM
PATTERN
TRANSFORMATION
BALANCE
CONTRAST
SCALE AND PROPORTION
DESIGN PRINCIPLES
14

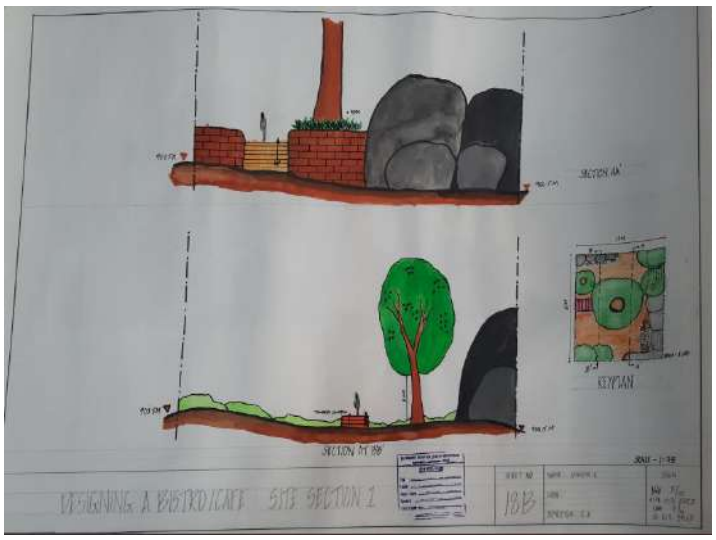

15A

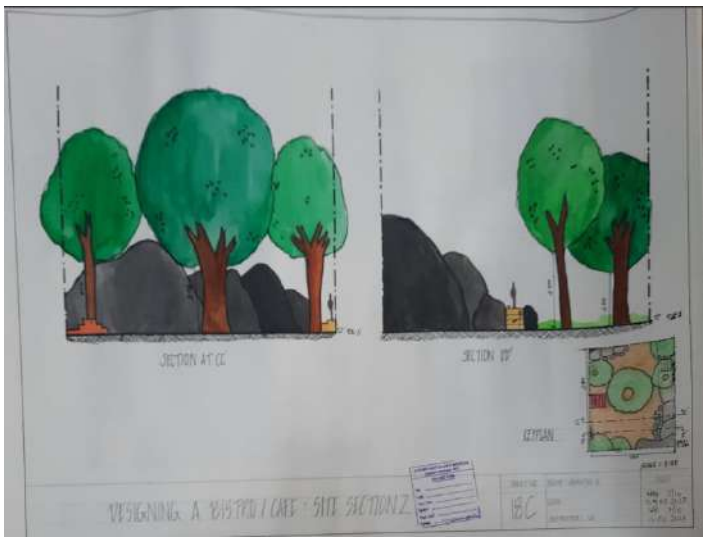

SECTION AA'
SECTION BB'
TIME PROBLEM: DESIGNING A BACHELOR PAD (SECTION 1)
15B


SECTION CC'
TIME PROBLEM: DESIGNING A BACHELOR PAD (SECTION 2)
15C

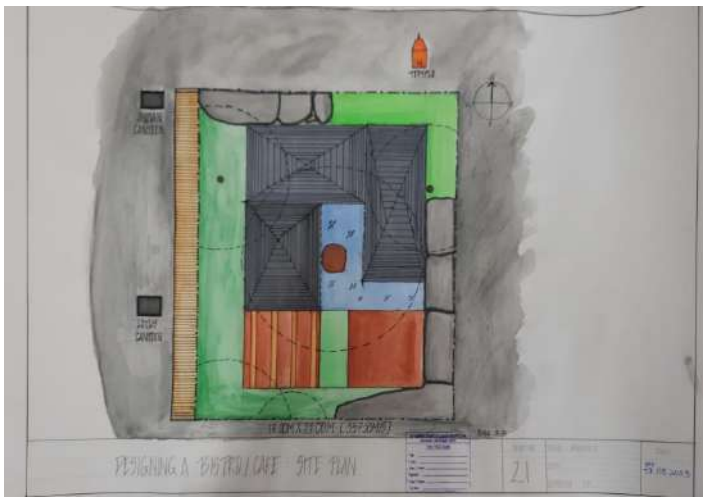

TIME PROBLEM: DESIGNING A BACHELOR PAD (SECTION 3)
15D


DESIGNING A BISTRO/CAFE - SITE ANALYSIS
18A


SECTION AA'
SECTION BB'
KEYPLAN
DESIGNING A BISTRO/CAFE - SITE SECTION 1
18B

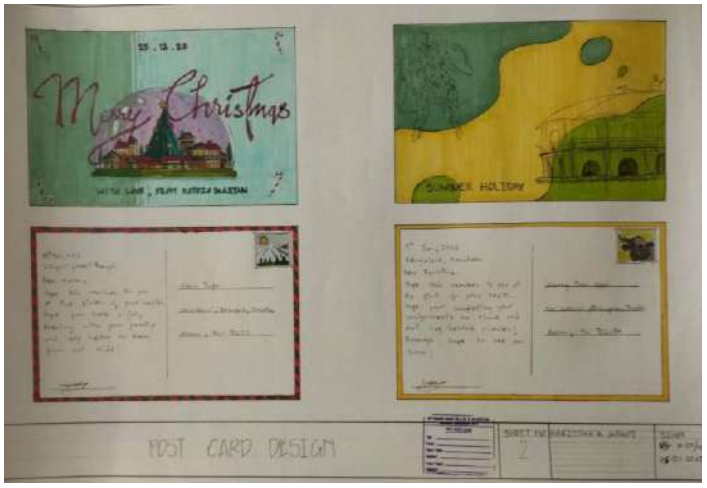

SECTION AA'CC
SECTION BB'
KEYPLAN
DESIGNING A BISTRO/CAFE - SITE SECTION 2
18C

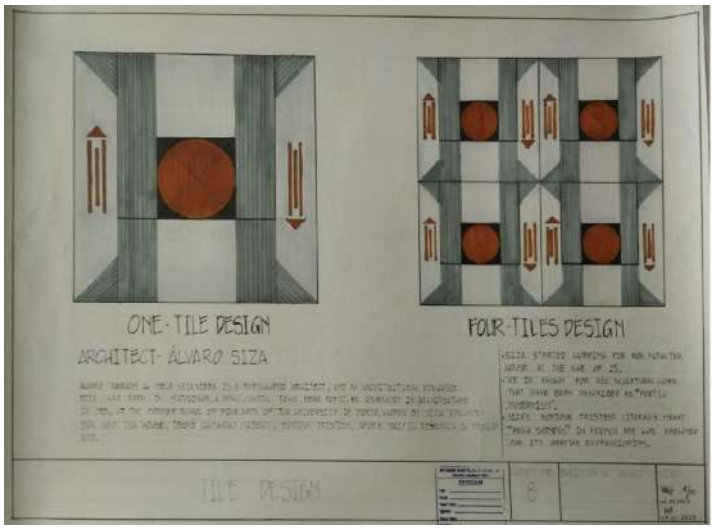

DESIGNING A BISTRO/CAFE - CONCEPT DEVELOPMENT/STORY
19

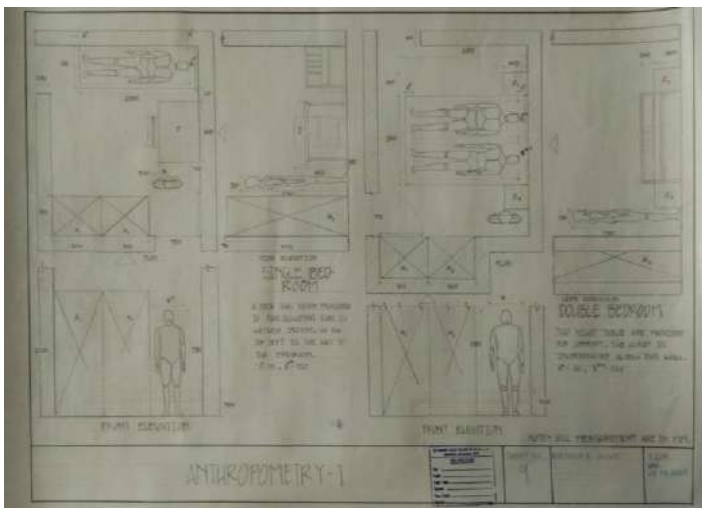

DESIGNING A BISTRO/CAFE - SITE PLAN
21

Architectural Design I
Faculty: Ar.

Baristha Bibav Gogoi
1DC22AT013







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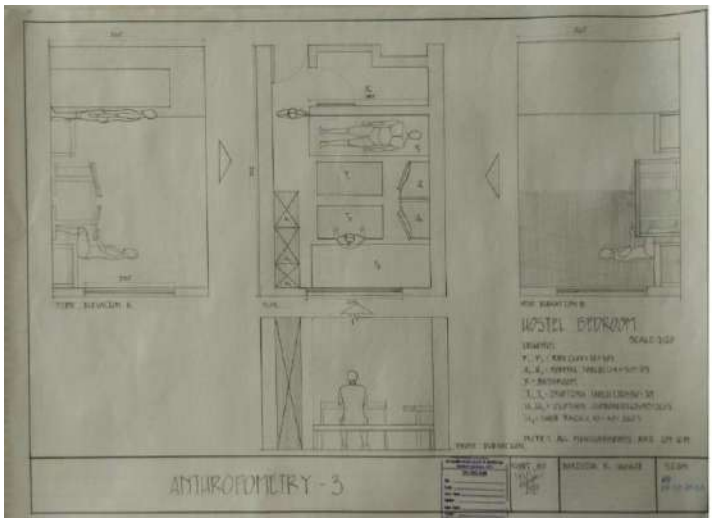
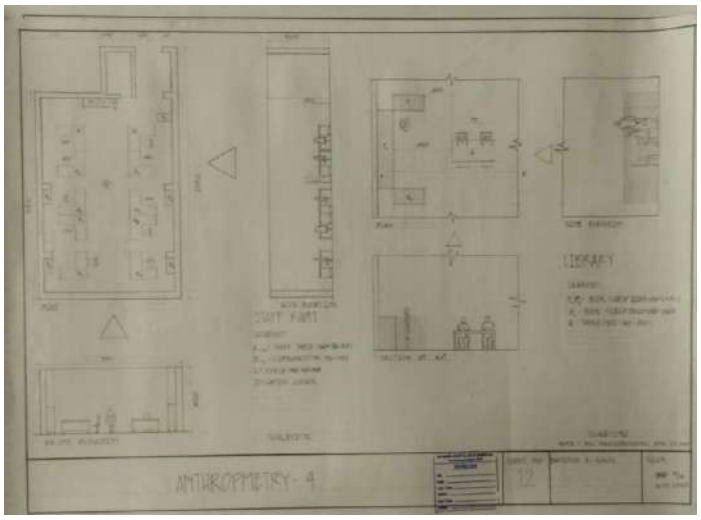
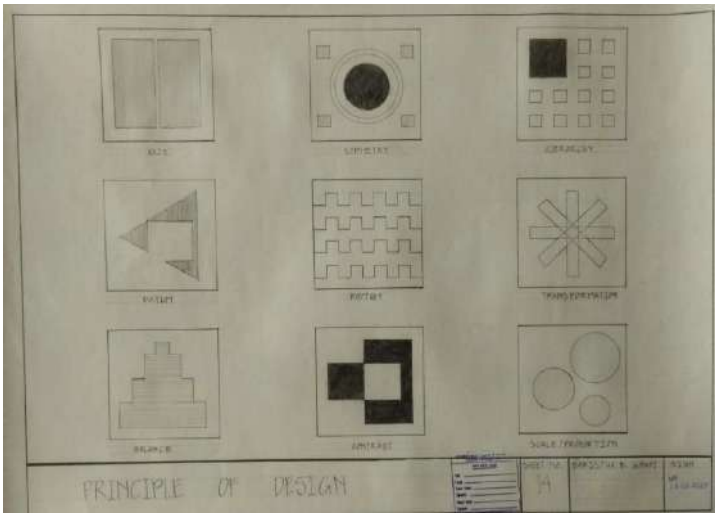
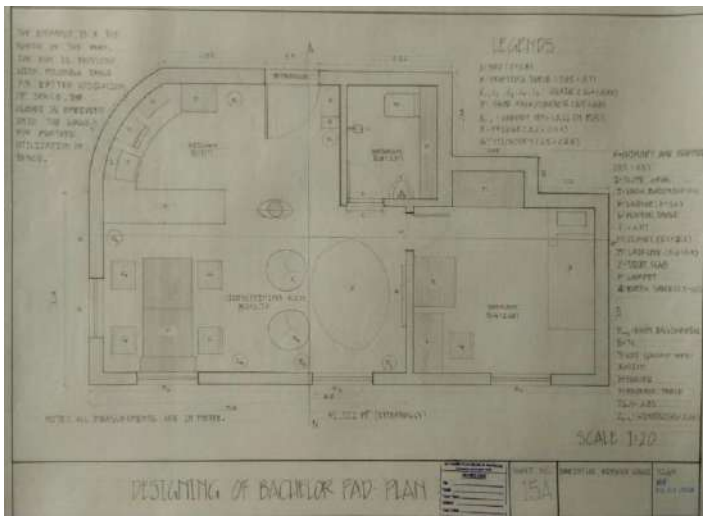
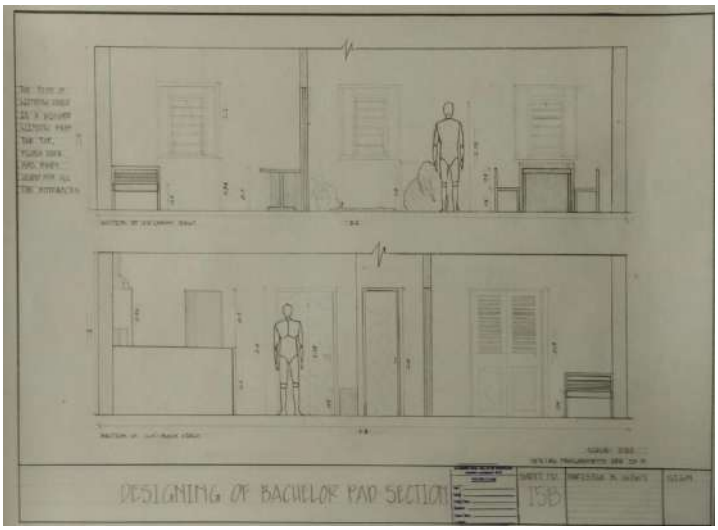
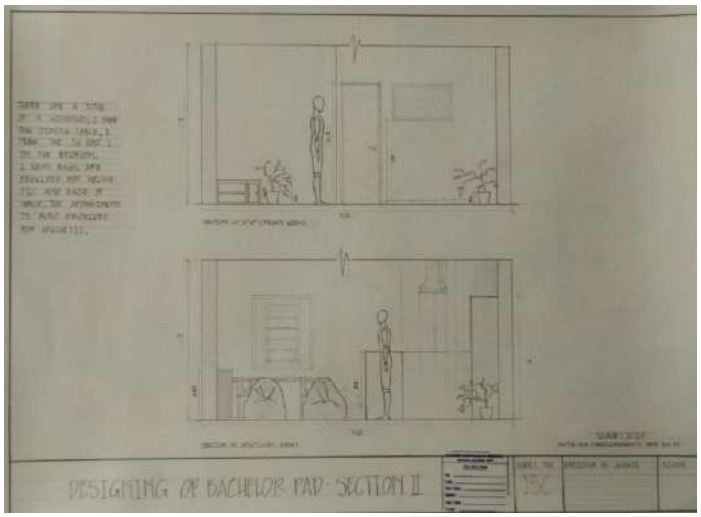

HOSTEL BEDROOM
ANTHROPOMETRY - 3

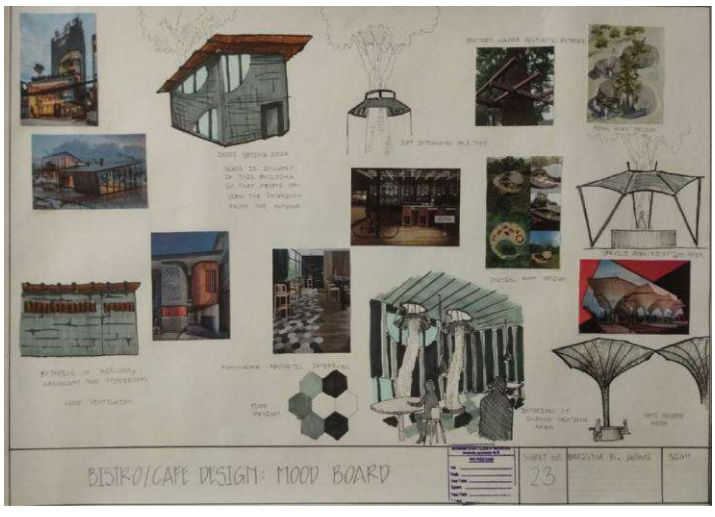

LIBRARY
ANTHROPOMETRY - 4

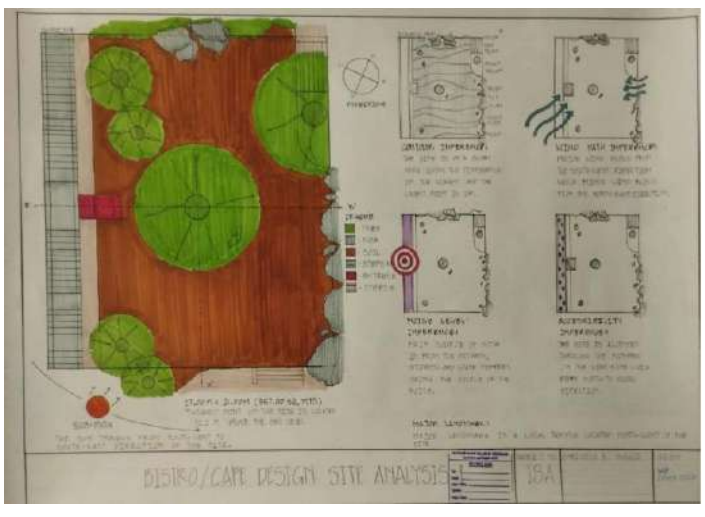

PRINCIPLE OF DESIGN


LEGENDS
SCALE 1:20
DESIGNING OF BACHELOR PAD PLAN

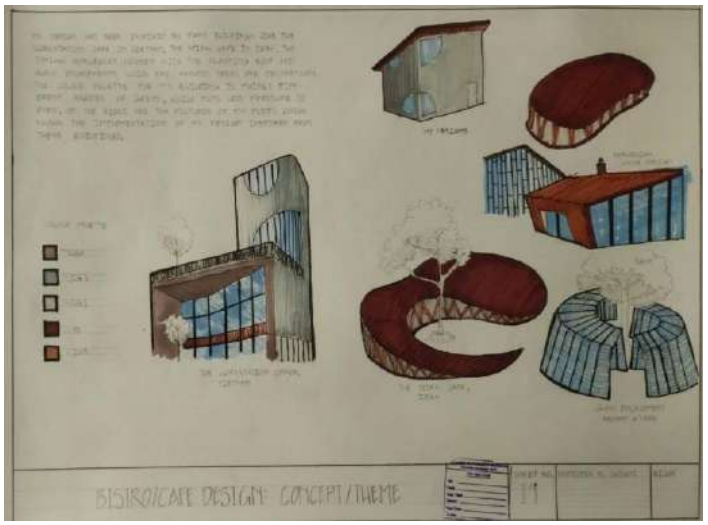

DESIGNING OF BACHELOR PAD SECTION


DESIGNING OF BACHELOR PAD SECTION II

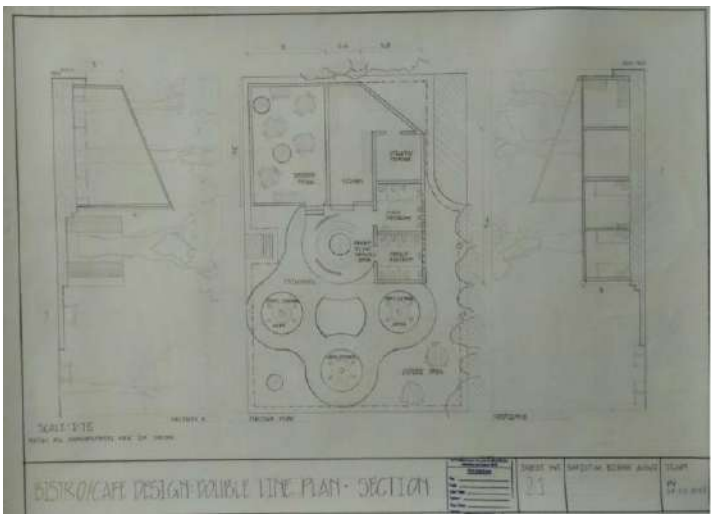

BISTRO/CAFE DESIGN: MOOD BOARD

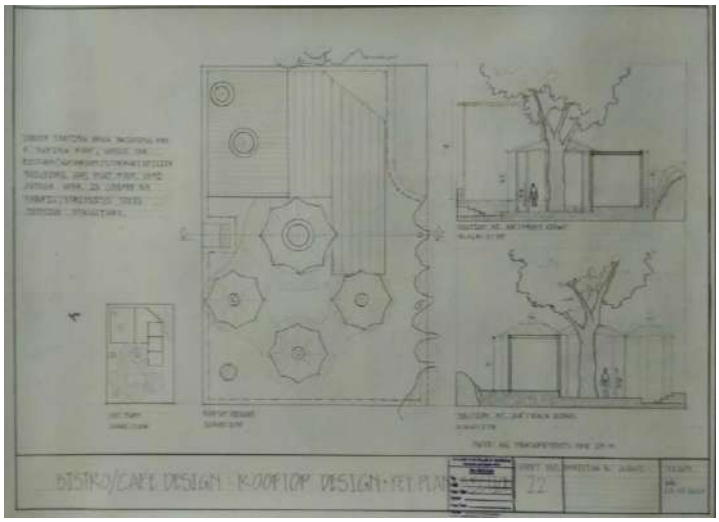

BISTRO/CAFE DESIGN SITE ANALYSIS


BISTRO/CAFE DESIGN SITE ANALYSIS I
18B


BISTRO/CAFE DESIGN CONCEPT/THEME


OUTDOOR AREA
BUBBLE DIAGRAM
CUSTOMER & STAFF MOVEMENT
STAFF ONLY MOVEMENT
SITE ZONING
SCALE: 1:175
BISTRO/CAFE DESIGN BUBBLE DIAGRAM - SITE ZONI
20B


BISTRO/CAFE DESIGN DOUBLE LINE PLAN - SECTION

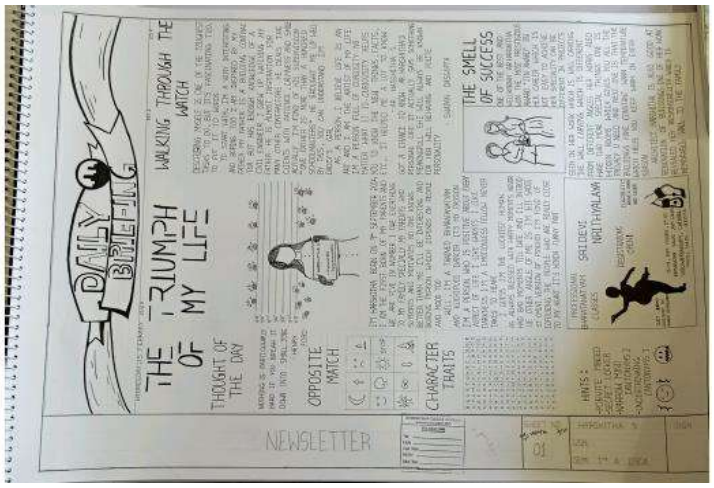

BISTRO/CAFE DESIGN : ROOFTOP DESIGN - PET PLA
22

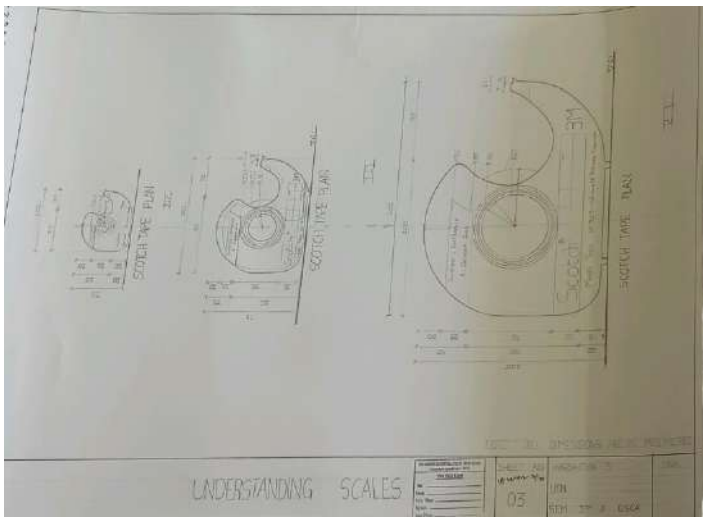

BUBBLE DIAGRAM
SITE ZONING
BISTRO/CAFE DESIGN BUBBLE DIAGRAM - SITE
20A

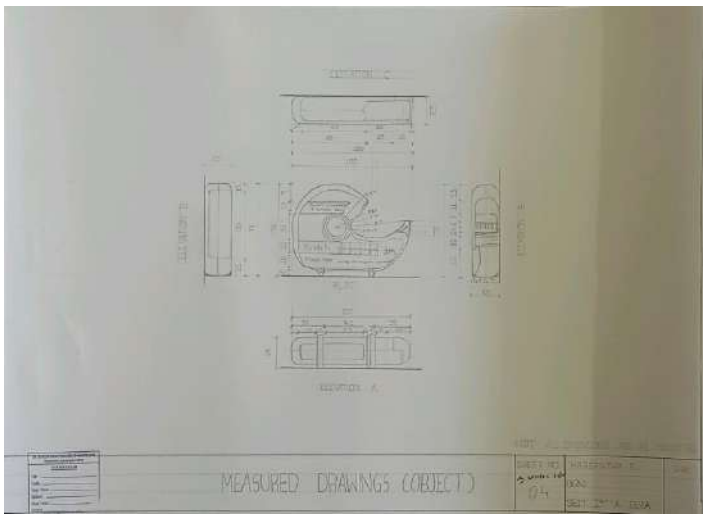

BUBBLE DIAGRAM
SITE ZONING
BISTRO/CAFE DESIGN BUBBLE DIAGRAM - SITE ZONI
20C

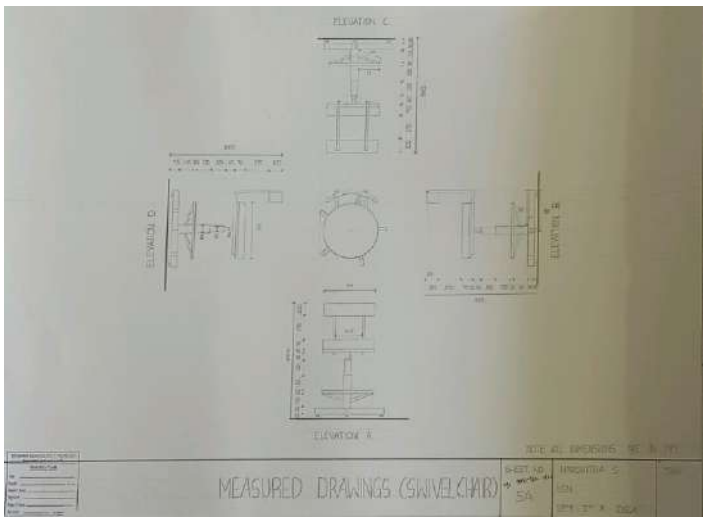
Architectural Design I
Faculty: Ar. Nikhil Ravindra, Ar. Chetan S Garalapur,
Ar. Shruthi A Murthy

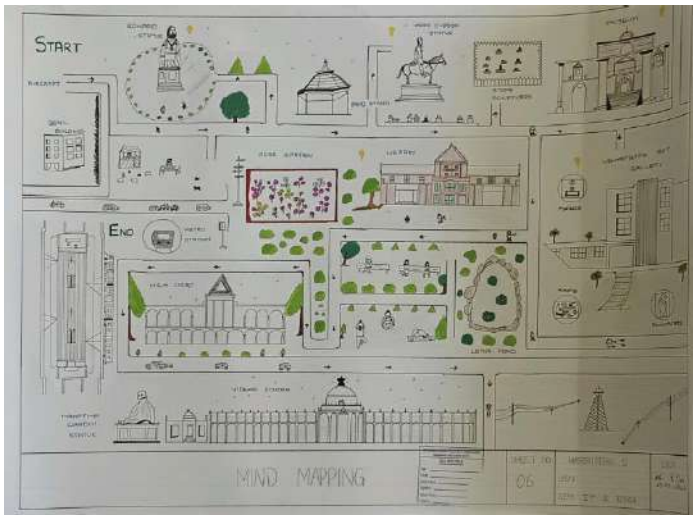
Harshitha S
1DC22AT026

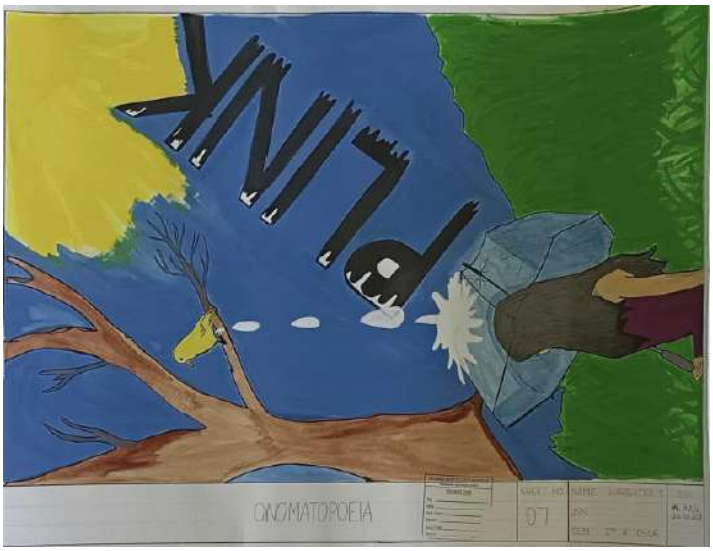


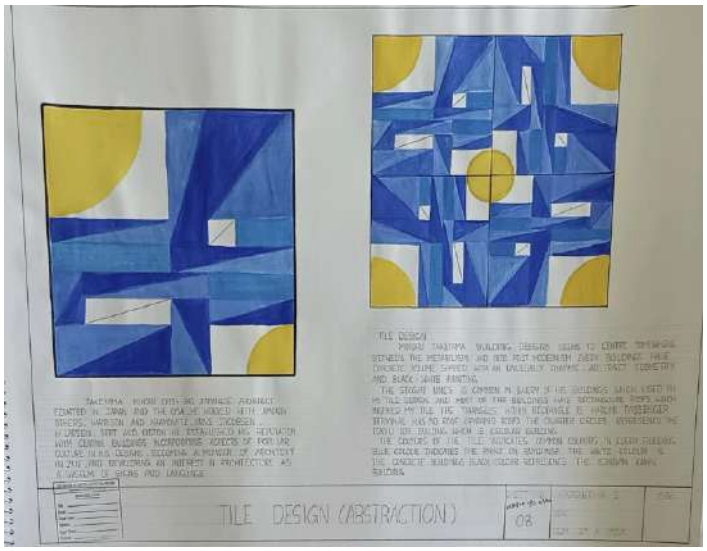


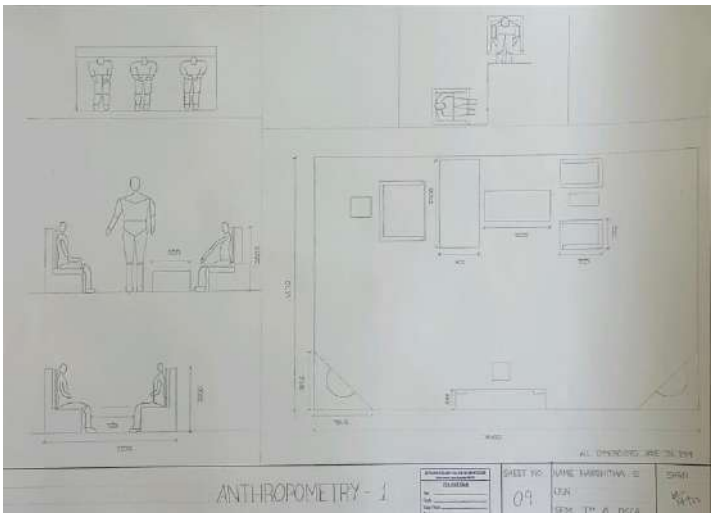


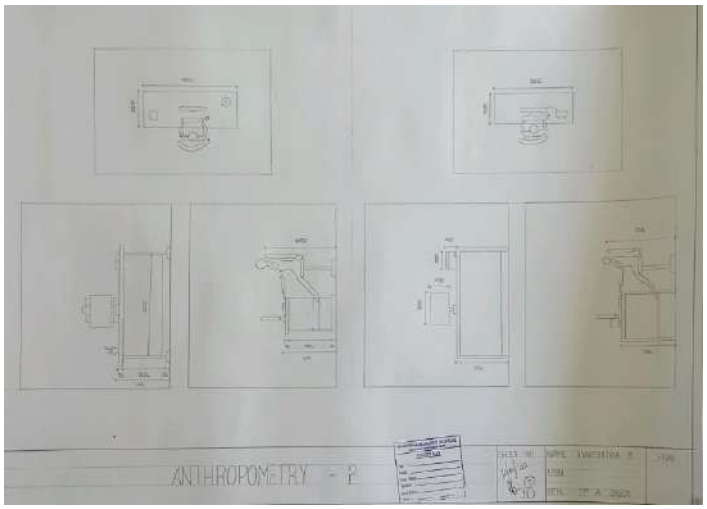


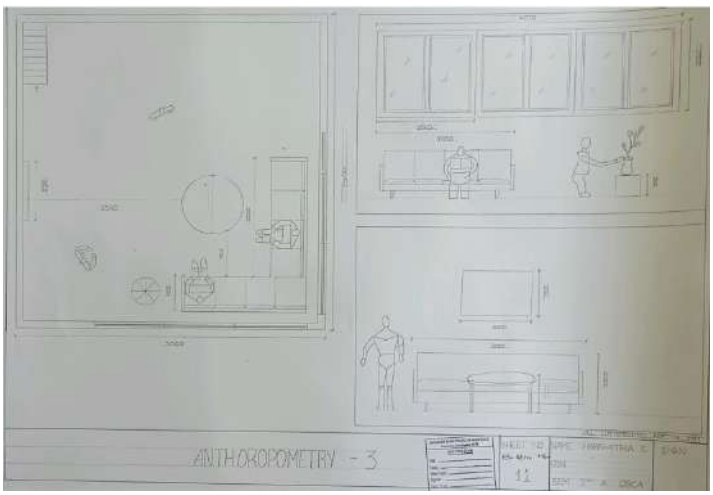


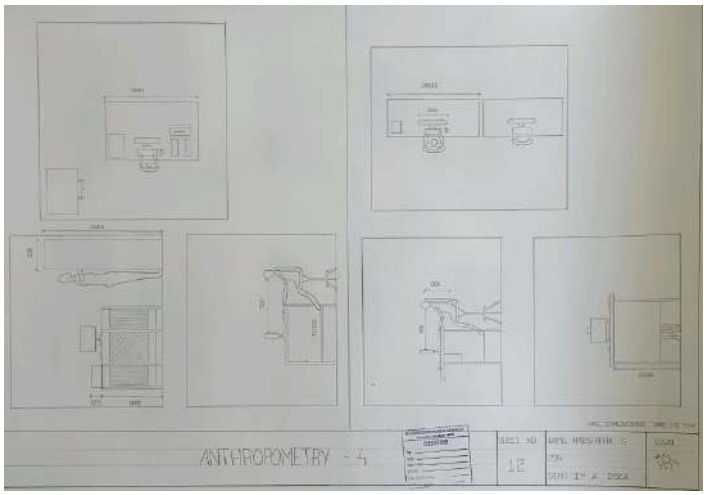

ONOMATOPOEIA

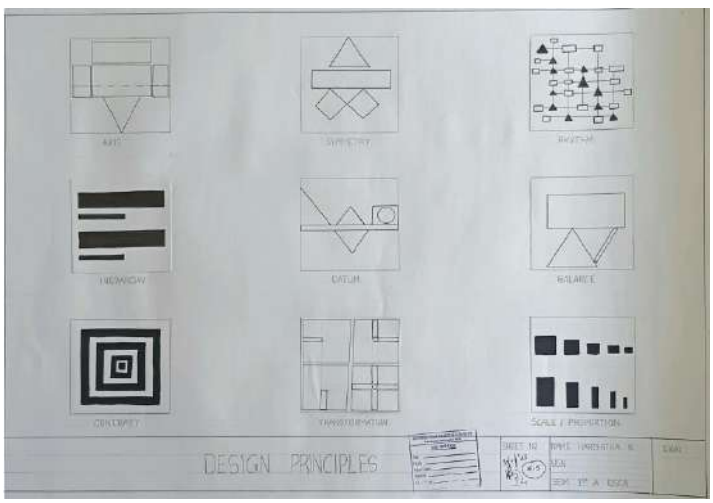

TILE DESIGN (ABSTRACTION)

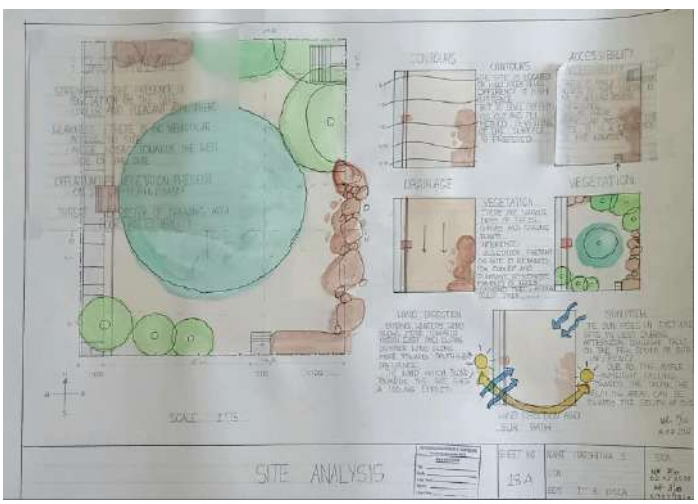

ANTHROPOMETRY - 1


ANTHROPOMETRY - 2


ANTHROPOMETRY - 3

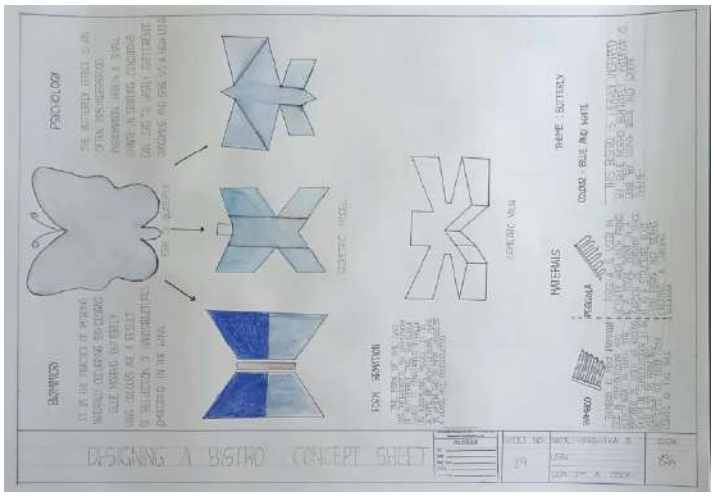

ANTHROPOMETRY - 4

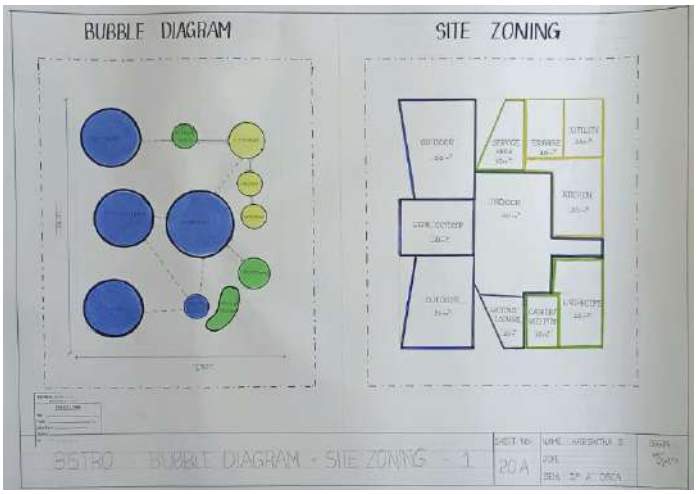

DESIGN PRINCIPLES

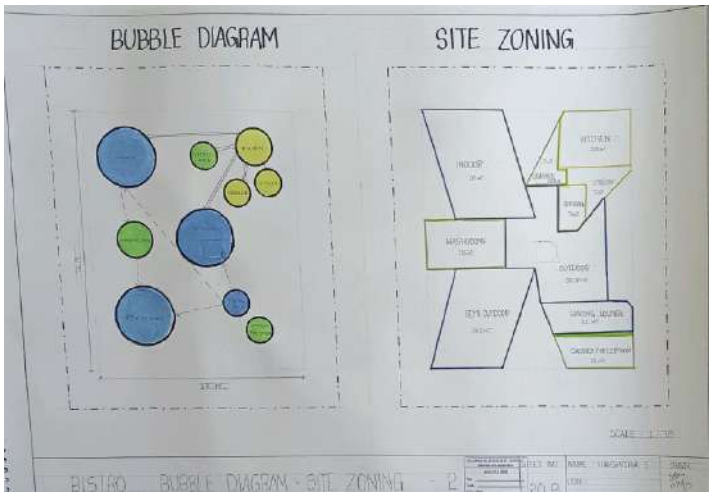

SITE ANALYSIS

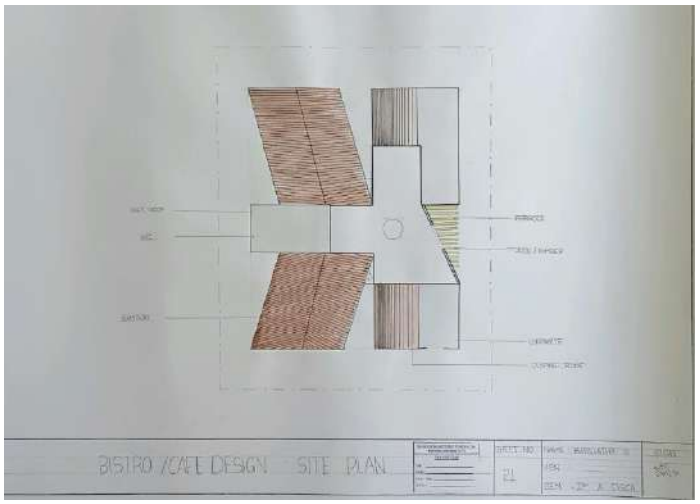

LONGITUDINAL SECTION AT BB'
LONGITUDINAL SECTION AT AA'
SITE ANALYSIS - SITE SECTIONS - 1

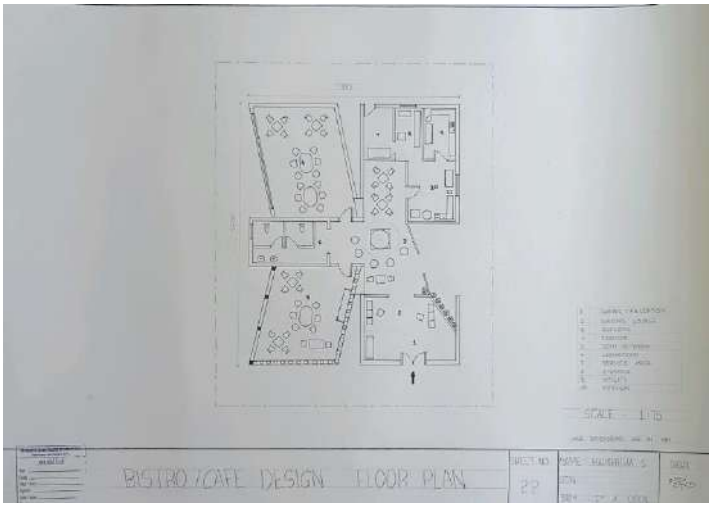

CROSS SECTION AT CC'
CROSS SECTION AT DD'
SITE ANALYSIS - SITE SECTIONS - 2


PSYCHOLOGY
THEME - BISTRO
COLORS - BLUE AND WHITE
MATERIALS
DESIGNING A BISTRO - CONCEPT SHEET


BUBBLE DIAGRAM
SITE ZONING
BISTRO - BUBBLE DIAGRAM - SITE ZONING - 1


BUBBLE DIAGRAM
SITE ZONING
BISTRO - BUBBLE DIAGRAM - SITE ZONING - 2


BISTRO /CAFE DESIGN - SITE PLAN


BISTRO /CAFE DESIGN - FLOOR PLAN


MOOD BOARD

BASIC DESIGN AND VISUAL ARTS
21 ARC 15

Course objectives:

- To encourage a critical orientation to design thinking and action.
- Develop observation skill in students towards design in various fields
- Appreciate art in various forms.
- Develop curiosity as how elements of design manifested in nature.

Definition of Art and role of Art in Society:

- Role and meaning of art, various types of arts-fine arts, performing arts, commercial arts, industrial arts, folk arts, abstract art, visual arts, spatial arts, temporal arts, pop art etc.
- Relationship of architecture with other arts like Painting and Sculpture.

Principles of Composition:

- Elements of Design & Principles of Design.
- Principles of Aesthetics and Architectural Composition -1 – Unity, Balance, Proportion, Scale in Architectural composition.
- Illustrations and its application to the practice of design with historical as well as contemporary buildings.

Patterns

- Study of pattern: Natural, Manmade and Geometric patterns
- Recognizing patterns, analyzing ideas, synthesizing information, solving problems, and creating things involving the process of abstraction.
- Appreciation of use of patterns in design

Subject Faculty

Umesh Kumar

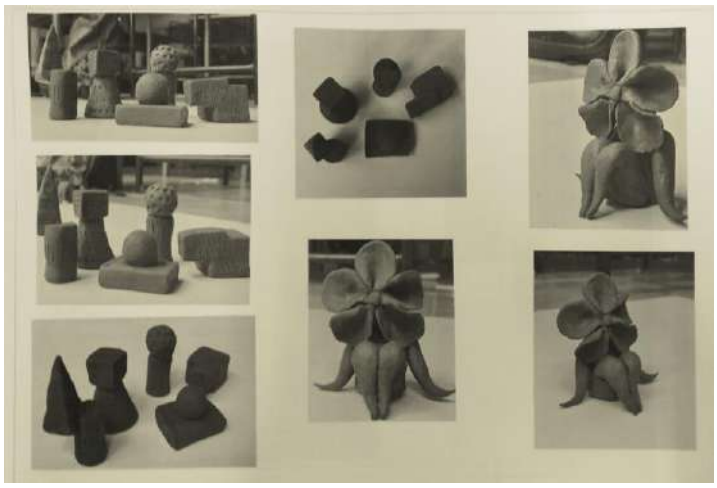
Promod Stephen

Bhartesh GD

GRAPHICAL EXPLORATIONS

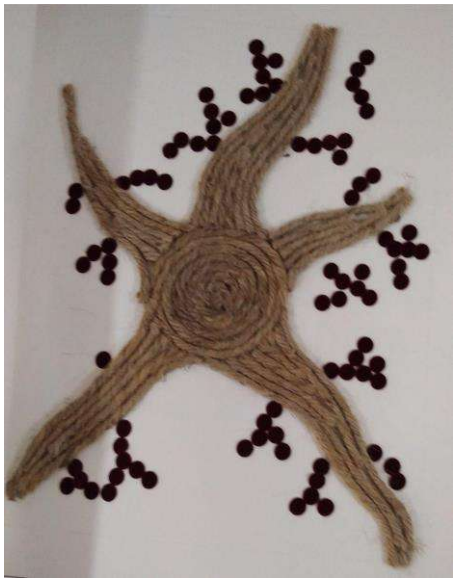
BDVA

Basic Design and Visual Arts
Faculty: Artists Umesh K, Pramod Stephen, Bhartesh GD



Disha Konkankar
1DC22AT022

Kolagani Rajeshwari
1DC22AT030



Disha Konkankar
1DC22AT022

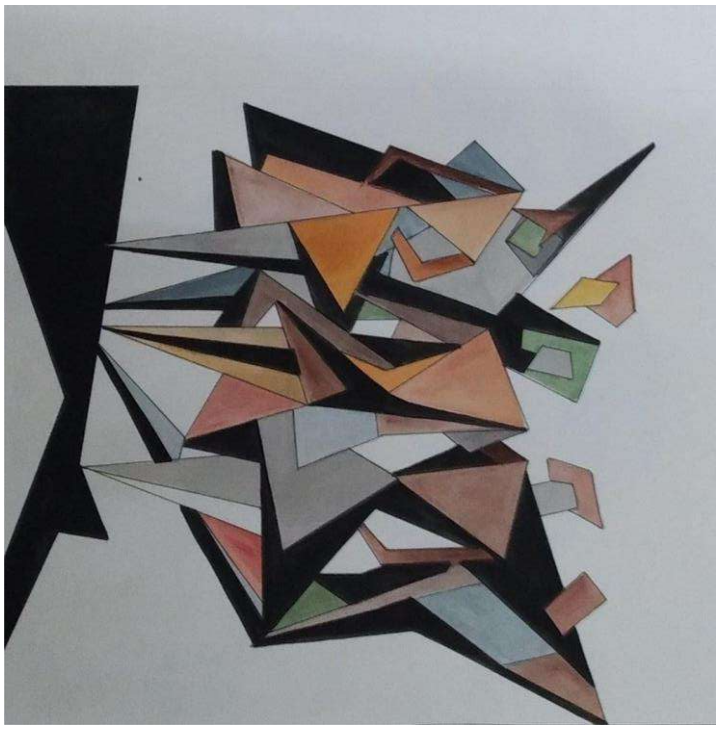
Disha Konkankar
1DC22AT022

Wall Art by students of 1st semester

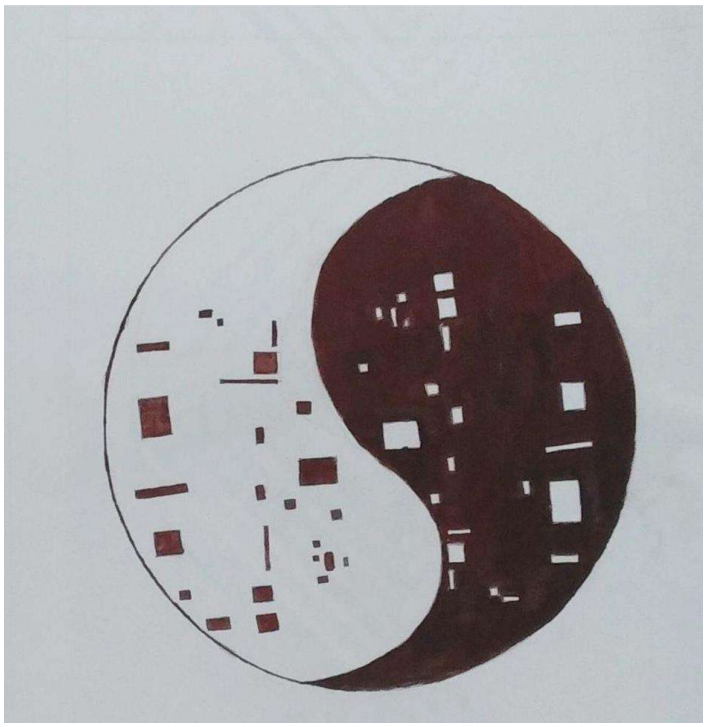
GRAPHICAL EXPLORATIONS

BDVA

Basic Design and Visual Arts
Faculty: Artists Umesh K, Pramod Stephen, Bhartesh GD



Nishchaya S. 1DC22AT044



Satwik S M 1DC22AT057

Ullas A H 1DC22AT077

Chaithra G 1DC22AT016

Materials and Methods in Building Construction
21 ARC 12

Course objectives:

To introduce students to primary building materials and simple construction techniques as applicable to a low-rise building- three to four-storied contemporary building.

To develop an understanding of brick bonding, foundation details, external wall section with flat roof and parapet.

Subject Faculty

Ar. Vani Krishnamurthy

Ar. B.B. Prakash

Ar. Srimathi Raja

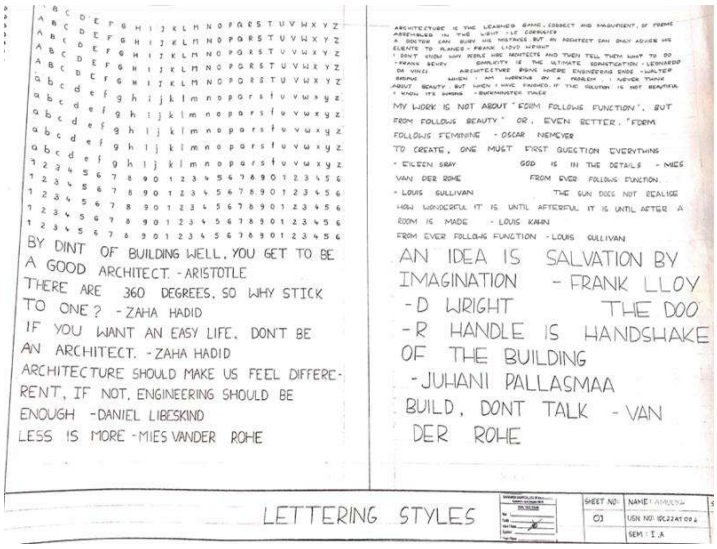
Ar. Pragathi Prassad S

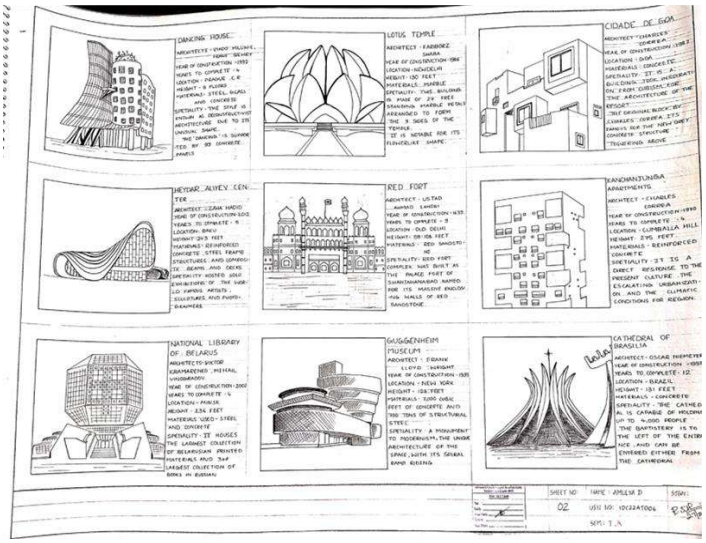
Ar. Ravindra Avinash

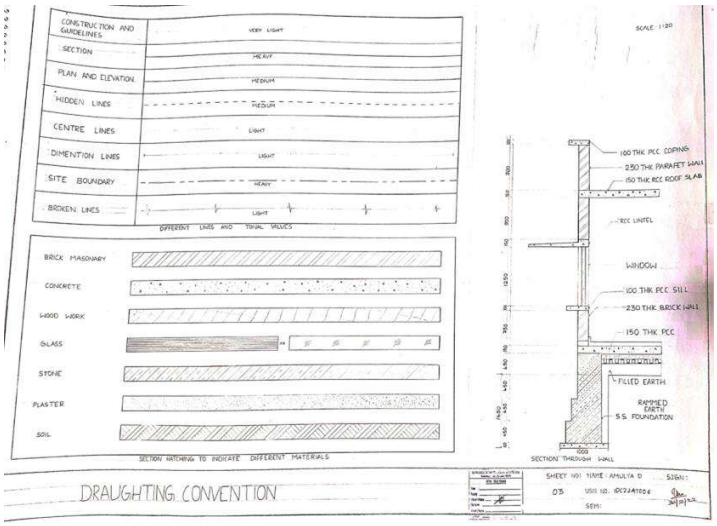
Ar. Chanchal Modi

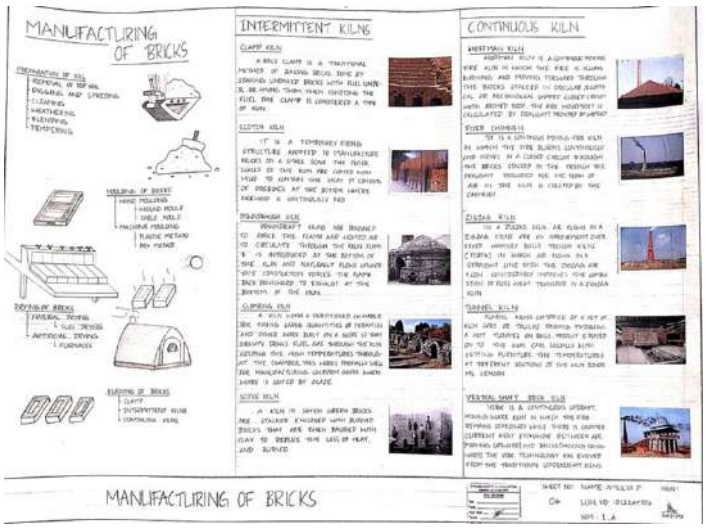
Methods and Materials in Building Construction - II
Faculty: Ar. Vani Krishnamurthy, Ar. Srimathi Raja,
Ar. Ravindra Avinash

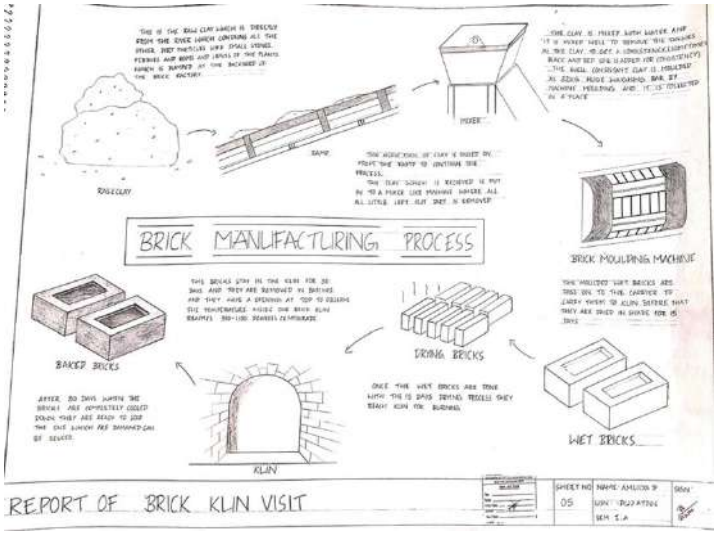
Amulya D
1DC22AT006

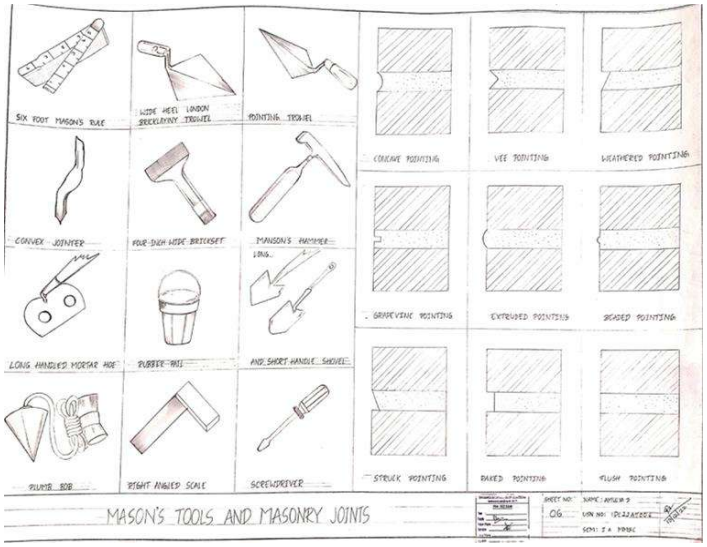


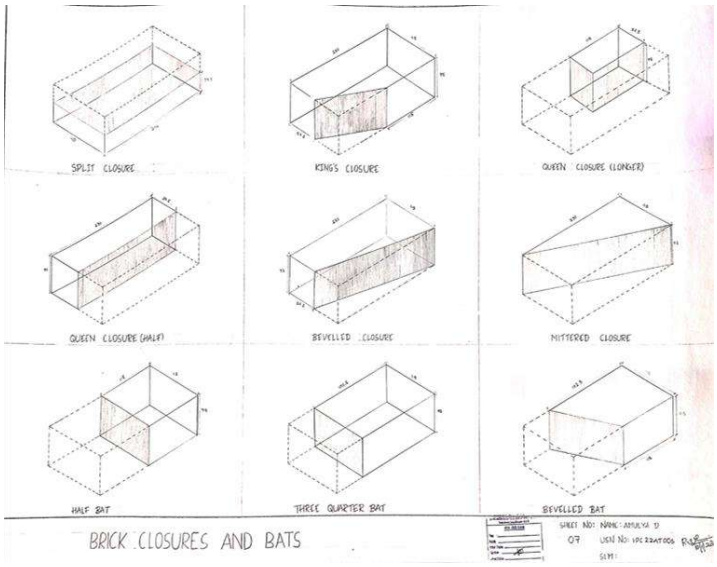


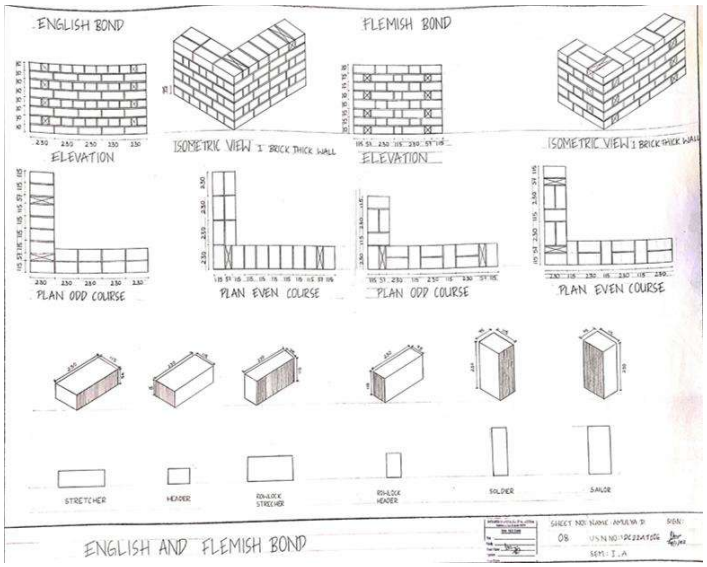


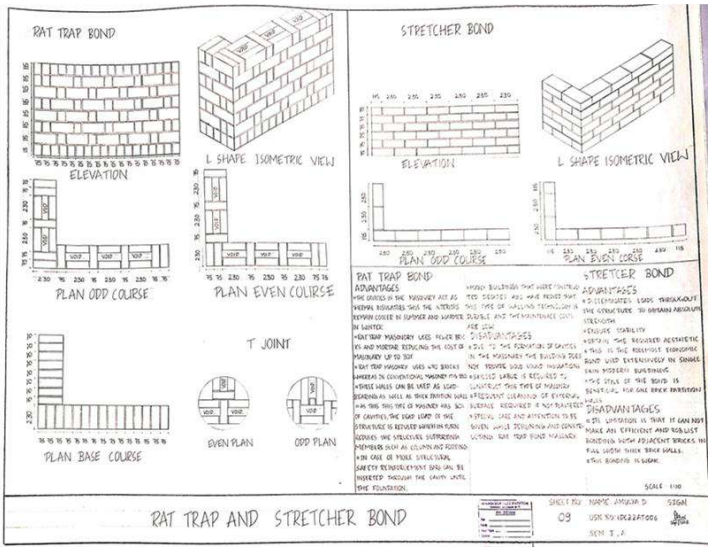




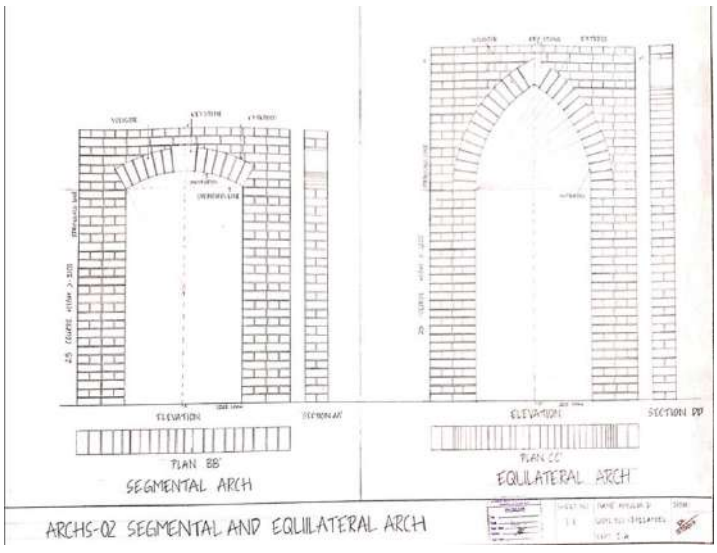



SPLIT CLOSURE
KING'S CLOSURE
QUEEN CLOSURE (LONGER)
QUEEN CLOSURE (HALF)
BEVELLED CLOSURE
MITTERED CLOSURE
HALF BAT
THREE QUARTER BAT
BEVELLED BAT
BRICK CLOSURES AND BATS

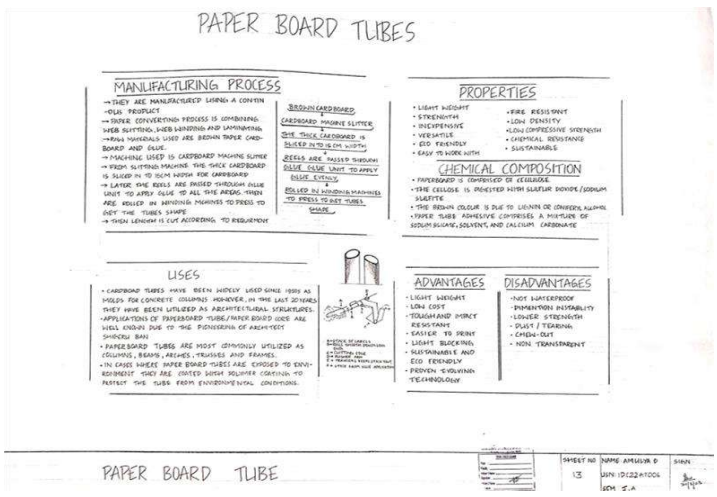

ENGLISH BOND
FLEMISH BOND
ELEVATION
ISOMETRIC VIEW 1 BRICK THICK WALL
PLAN ODD COURSE
PLAN EVEN COURSE
STRETCHER
HEADER
SOLDIER
SAILOR
ENGLISH AND FLEMISH BOND

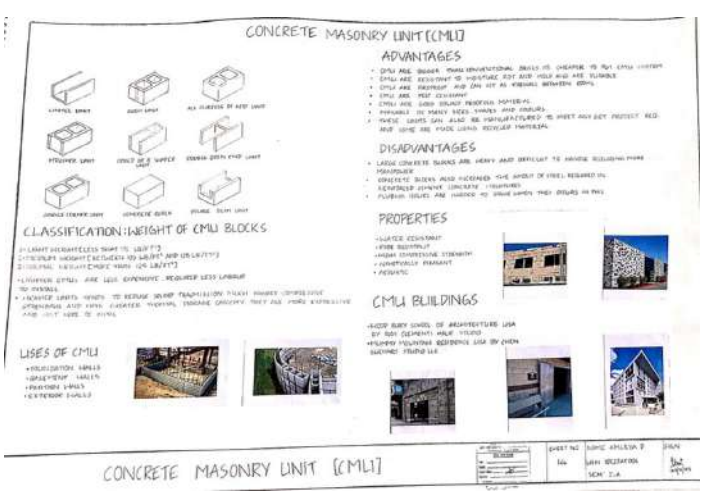

RAT TRAP BOND
STRETCHER BOND
L SHAPE ISOMETRIC VIEW
PLAN ODD COURSE
PLAN EVEN COURSE
T JOINT
PLAN BASE COURSE
EVEN PLAN
ODD PLAN
RAT TRAP AND STRETCHER BOND

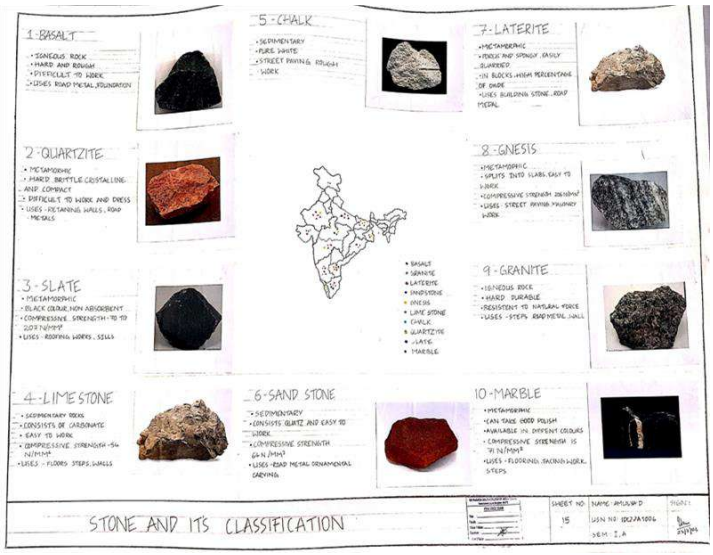

FLAT ARCH
SEMICIRCULAR ARCH
ARCHES 01 - FLAT AND SEMI-CIRCULAR ARCH

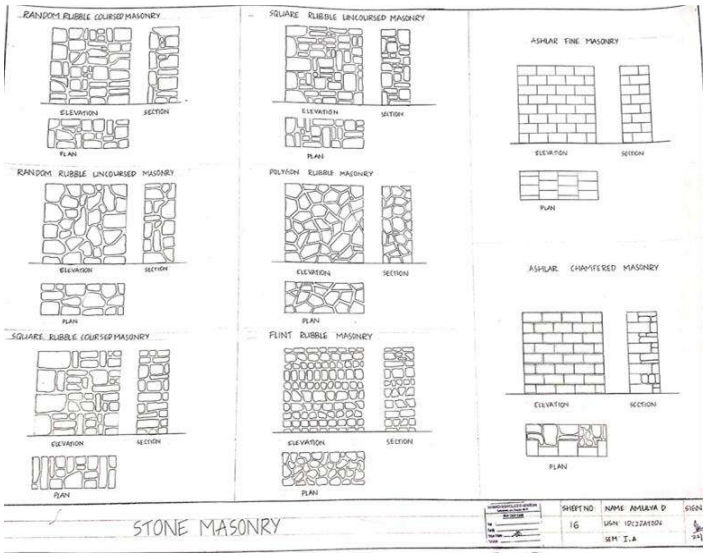

SEGMENTAL ARCH
EQUILATERAL ARCH
ARCHS-02 SEGMENTAL AND EQUILATERAL ARCH

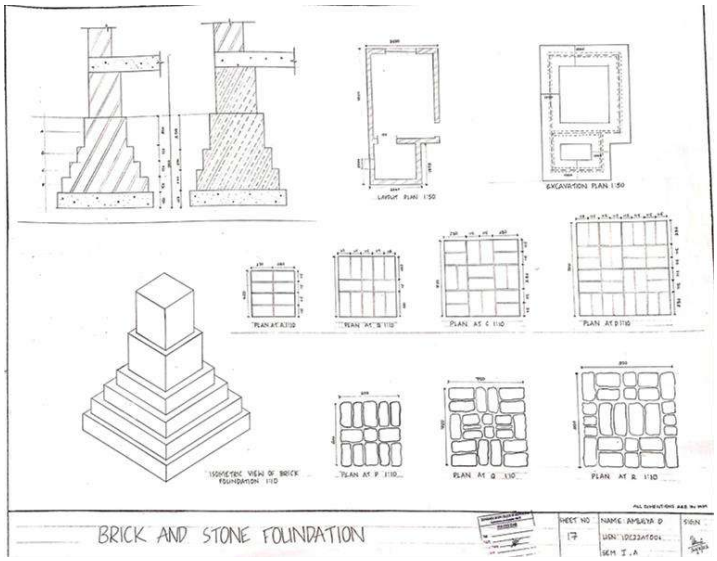

ALTERNATIVE BUILDING MATERIAL
FLY ASH BRICK
GLASS BLOCKS
BAMBOO
STABALIZED MUD BLOCKS
PAPER BOARD TUBES
HOLLOW CLAY BRICS
AERATED CONCRETE BLOCK
ALTERNATIVE BUILDING MATERIAL

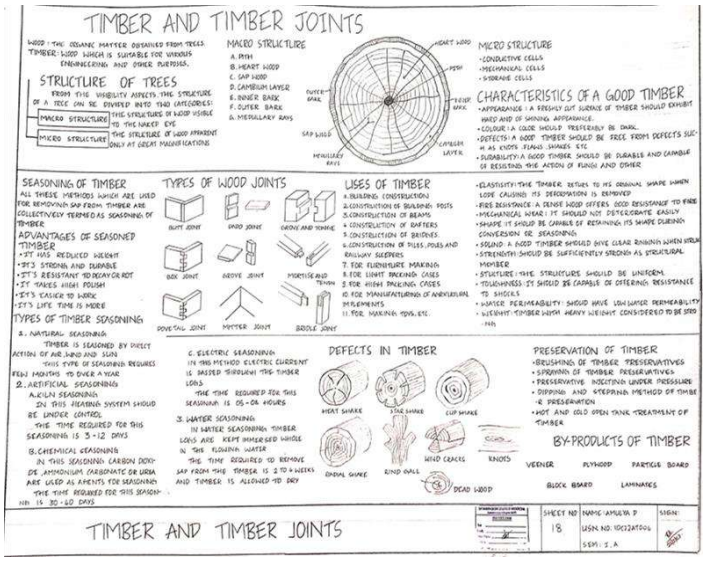

PAPER BOARD TUBES
MANUFACTURING PROCESS
PROPERTIES
USES
ADVANTAGES
DISADVANTAGES
CHEMICAL COMPOSITION
PAPER BOARD TUBE

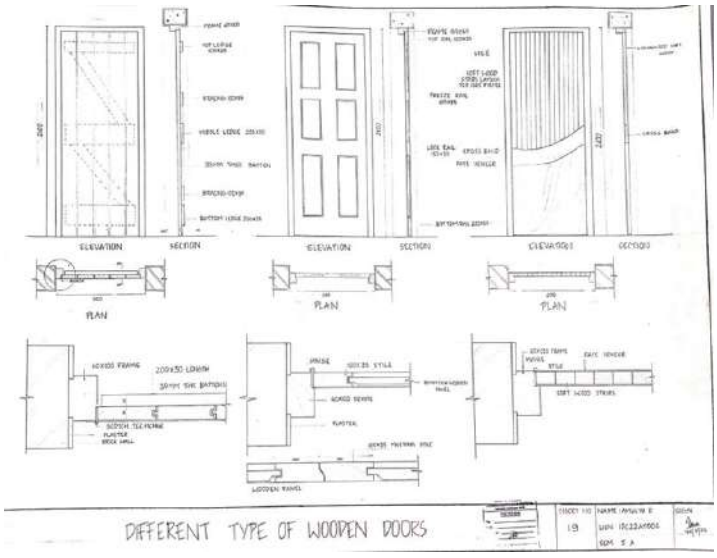

CONCRETE MASONRY UNIT (CMU)
ADVANTAGES
DISADVANTAGES
PROPERTIES
CLASSIFICATION : WEIGHT OF CMU BLOCKS
CMU BUILDINGS
USES OF CMU
CONCRETE MASONRY UNIT (CMU)

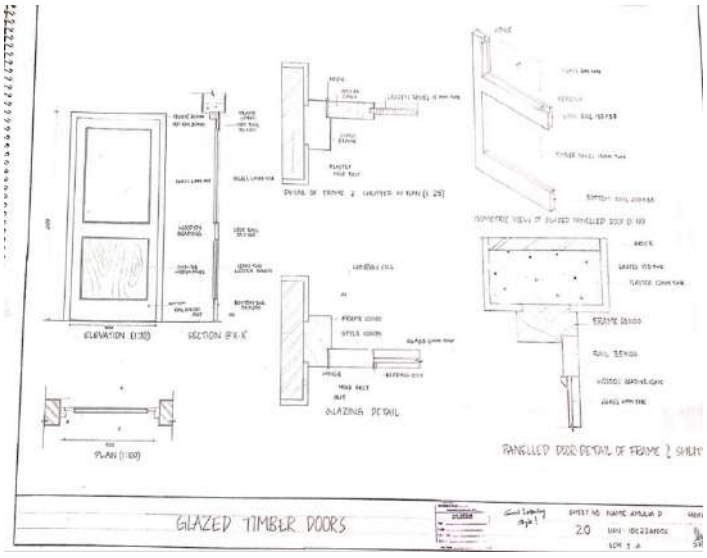

1-BASALT
• IGNEOUS ROCK
• HARD AND ROUGH
• DIFFICULT TO WORK
• USES ROAD METAL, FOUNDATION
2-QUARTZITE
• METAMORPHIC
• HARD, BRITTLE CRYSTALLINE AND COMPACT
• DIFFICULT TO WORK AND DRESS
• USES - RETAINING WALLS, ROAD METALS
3-SLATE
• METAMORPHIC
• BLACK COLOR, NON ABSORBENT
• COMPRESSIVE STRENGTH - 70 TO 200 N/mm²
• USES - ROOFING WORKS, STAIRS
4-LIME STONE
• SEDIMENTARY ROCKS
• CONSISTS OF CARBONATE
• EASY TO WORK
• COMPRESSIVE STRENGTH - 50 N/mm²
• USES - FLOORS, STEPS, WALLS
5-CHALK
• SEDIMENTARY
• PURE WHITE
• STREET PAINTING, ROUGH WORK
6-SAND STONE
• SEDIMENTARY
• CONSISTS QUARTZ AND EASY TO WORK
• COMPRESSIVE STRENGTH 66 N/mm²
• USES - ROAD METAL, ORNAMENTAL CARVING
7-LATERITE
• METAMORPHIC
• PORUS AND SPONGY, EASILY QUARRIED
• IN BLOCKS, HIGH PERCENTAGE OF SHAPE
• USES - BUILDING STONE, ROAD METAL
8-GNESIS
• METAMORPHIC
• SPLITS INTO SLABS, EASY TO WORK
• COMPRESSIVE STRENGTH 200 N/mm²
• USES - STREET PAVING MASONRY WORK
9-GRANITE
• IGNEOUS ROCK
• HARD, DURABLE
• RESISTANT TO NATURAL FORCE
• USES - STEPS, ROAD METAL, WALL
10-MARBLE
• METAMORPHIC
• CAN TAKE GOOD POLISH
• AVAILABLE IN DIFFERENT COLOURS
• COMPRESSIVE STRENGTH IS 70 N/mm²
• USES - FLOORING, FACING WORK, STEPS
• BASALT
• SANDSTONE
• LATERITE
• GNEISSTONE
• GNEISS
• LIME STONE
• CHALK
• QUARTZITE
• SLATE
• MARBLE
STONE AND ITS CLASSIFICATION
SHEET NO 15
NAME: AMULYA D
USN NO: 1DS23AM004
SEM: I.A


RANDOM RUBBLE COURSED MASONRY
SQUARE RUBBLE UNCOURSED MASONRY
ASHLAR FINE MASONRY
RANDOM RUBBLE UNCOURSED MASONRY
POLYGON RUBBLE MASONRY
ASHLAR CHAMFERED MASONRY
SQUARE RUBBLE COURSED MASONRY
FLINT RUBBLE MASONRY
ELEVATION
SECTION
PLAN
STONE MASONRY
SHEET NO 16
NAME AMULYA D
USN 1DS23AM004
SEM I.A


LAYOUT PLAN 1:50
EXCAVATION PLAN 1:50
PLAN AT A 1:10
PLAN AT B 1:10
PLAN AT C 1:10
PLAN AT D 1:10
ISOMETRIC VIEW OF BRICK FOUNDATION 1:10
PLAN AT P 1:10
PLAN AT Q 1:10
PLAN AT R 1:10
BRICK AND STONE FOUNDATION
SHEET NO 17
NAME: AMULYA D
USN: 1DS23AM004
SEM: I.A

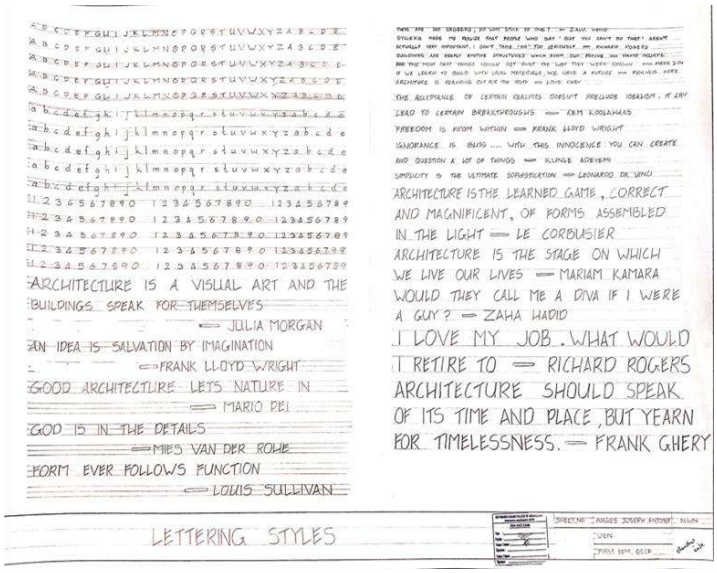

TIMBER AND TIMBER JOINTS
WOOD: THE ORGANIC MATTER OBTAINED FROM TREES
TIMBER: WOOD WHICH IS SUITABLE FOR VARIOUS ENGINEERING AND OTHER PURPOSES.
STRUCTURE OF TREES
MACRO STRUCTURE
MICRO STRUCTURE
A. PITH
B. HEART WOOD
C. SAP WOOD
D. CAMBIUM LAYER
E. INNER BARK
F. OUTER BARK
G. MEDULLARY RAYS
MICRO STRUCTURE
• CONDUCTIVE CELLS
• MECHANICAL CELLS
• STORAGE CELLS
CHARACTERISTICS OF A GOOD TIMBER
SEASONING OF TIMBER
TYPES OF WOOD JOINTS
USES OF TIMBER
DEFECTS IN TIMBER
PRESERVATION OF TIMBER
BY-PRODUCTS OF TIMBER
TYPES OF TIMBER SEASONING
VENEER
PLYWOOD
PARTICLE BOARD
BLOCK BOARD
LAMINATES
TIMBER AND TIMBER JOINTS
SHEET NO 18
NAME: AMULYA P
USN NO: 1DS23AT004
SEM: I.A

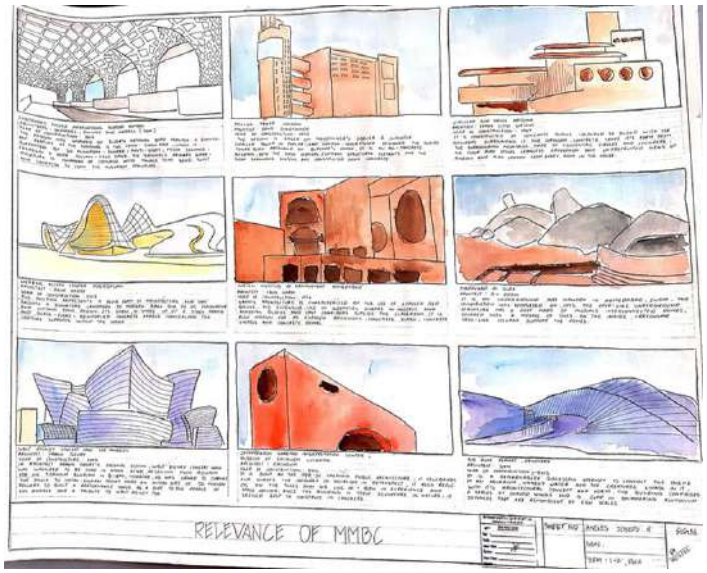

ELEVATION
SECTION
PLAN
DIFFERENT TYPE OF WOODEN DOORS
SHEET NO 19
NAME: AMULYA B
USN: 1DS23AM004
SEM: I.A

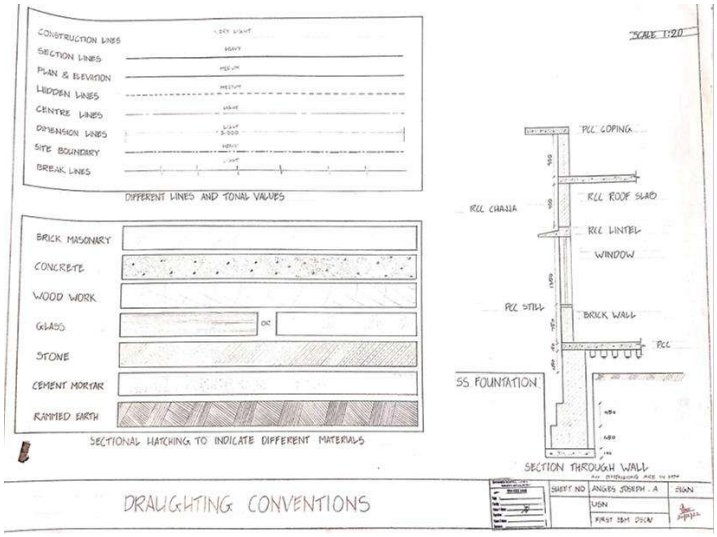

ELEVATION (1:10)
SECTION X-X
PLAN (1:10)
GLAZING DETAIL
GLAZED TIMBER DOORS
SHEET NO 20
NAME AMULYA D
USN 1DS23AM004
SEM I.A

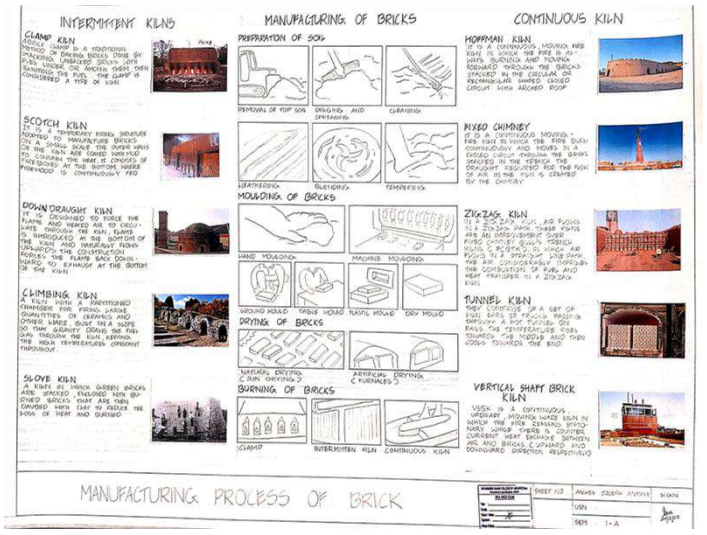
Methods and Materials in Building Construction - II
Faculty: Ar. Vani Krishnamurthy, Ar. Srimathi Raja,
Ar. Ravindra Avinash

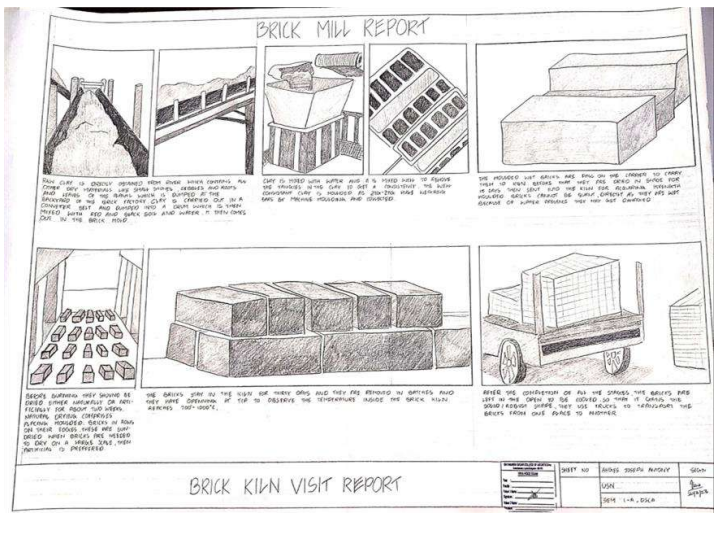
Anges Joseph Antony
1DC22AT010

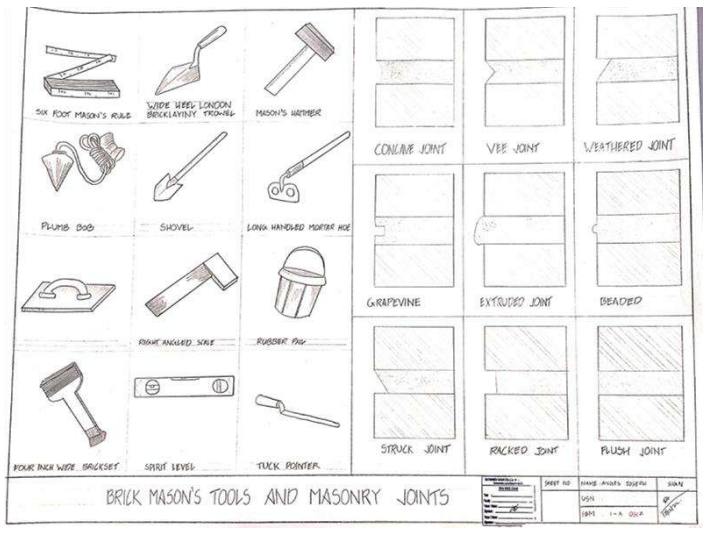


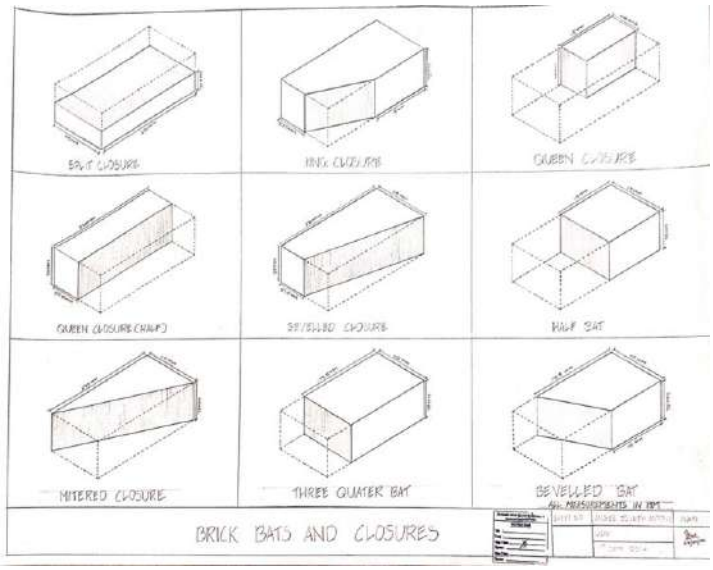


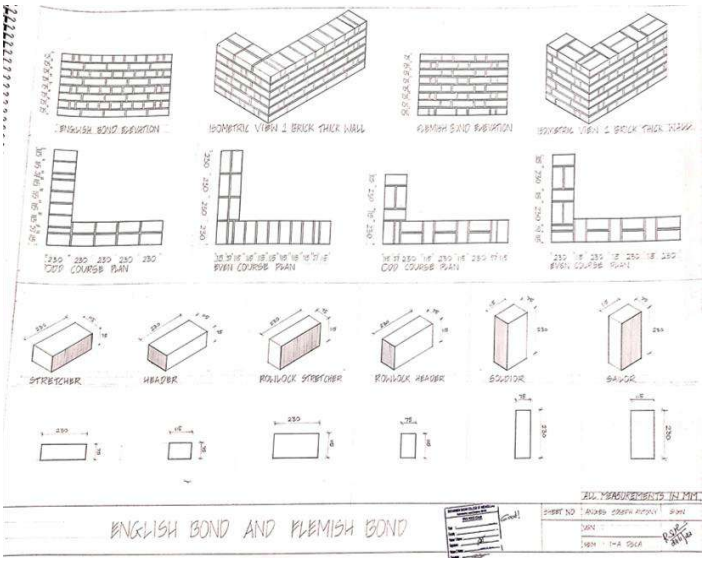


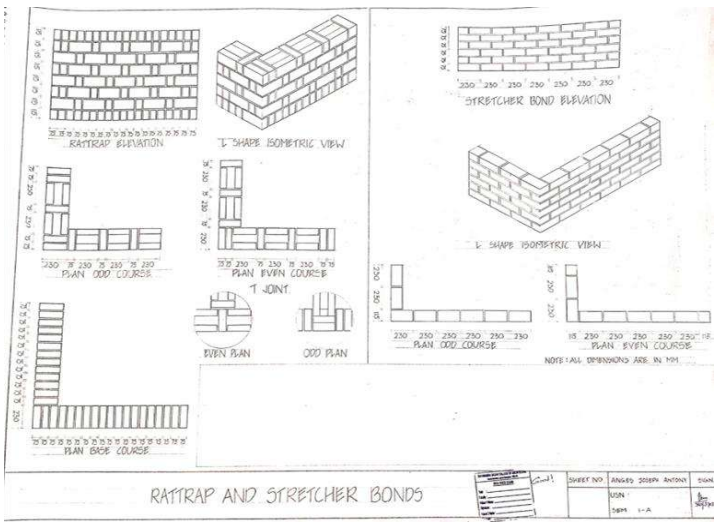


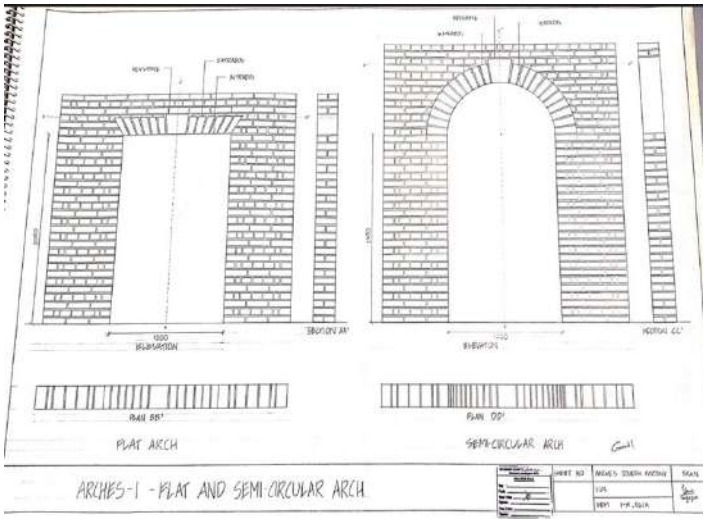


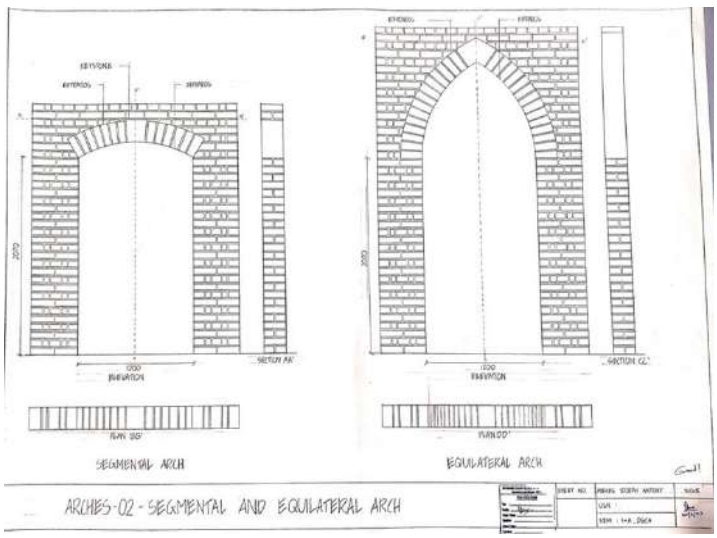


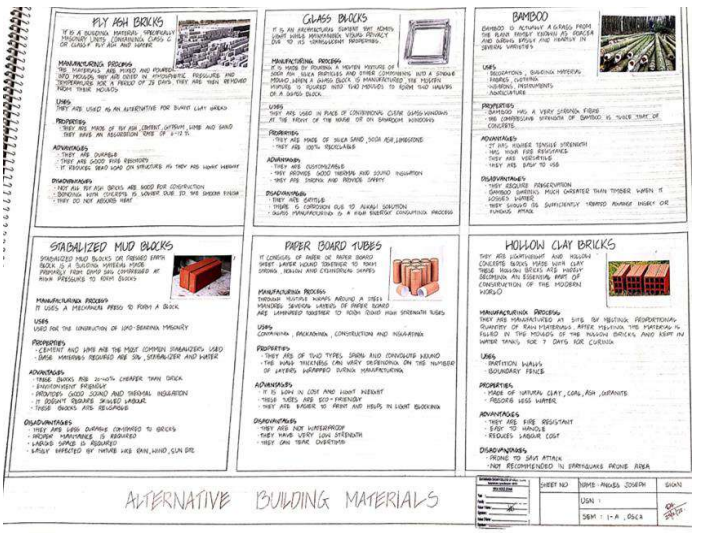

SPLIT CLOSURE
KING CLOSURE
QUEEN CLOSURE
QUEEN CLOSURE (HALF)
SEVENEIGHTH CLOSURE
HALF BAT
MITERED CLOSURE
THREE QUARTER BAT
BEVELLED BAT
BRICK BATS AND CLOSURES

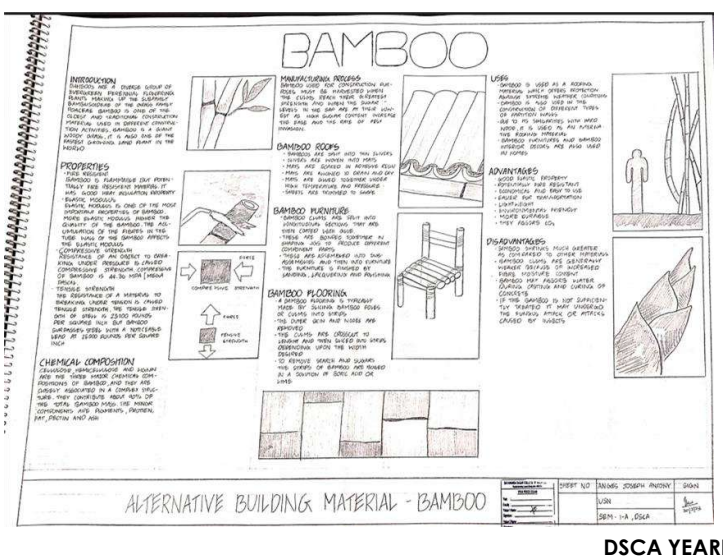

ENGLISH BOND ELEVATION
ISOMETRIC VIEW 1 BRICK THICK WALL
FLEMISH BOND ELEVATION
ISOMETRIC VIEW 1 BRICK THICK WALL
STRETCHER
HEADER
ROWLOCK STRETCHER
ROWLOCK HEADER
SOLDIER
SAILOR
ENGLISH BOND AND FLEMISH BOND

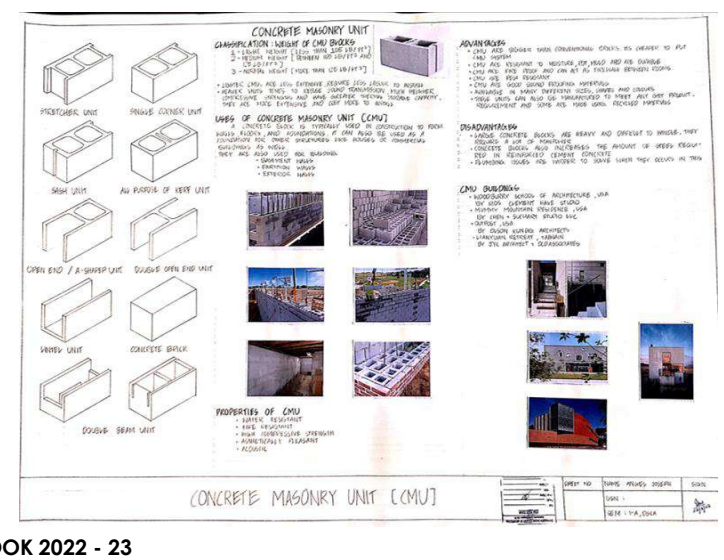

RATTRAP ELEVATION
'L' SHAPE ISOMETRIC VIEW
STRETCHER BOND ELEVATION
'L' SHAPE ISOMETRIC VIEW
PLAN ODD COURSE
PLAN EVEN COURSE
T JOINT
EVEN PLAN
ODD PLAN
PLAN ODD COURSE
PLAN EVEN COURSE
NOTE: ALL DIMENSIONS ARE IN MM
PLAN BASE COURSE
RATTRAP AND STRETCHER BONDS

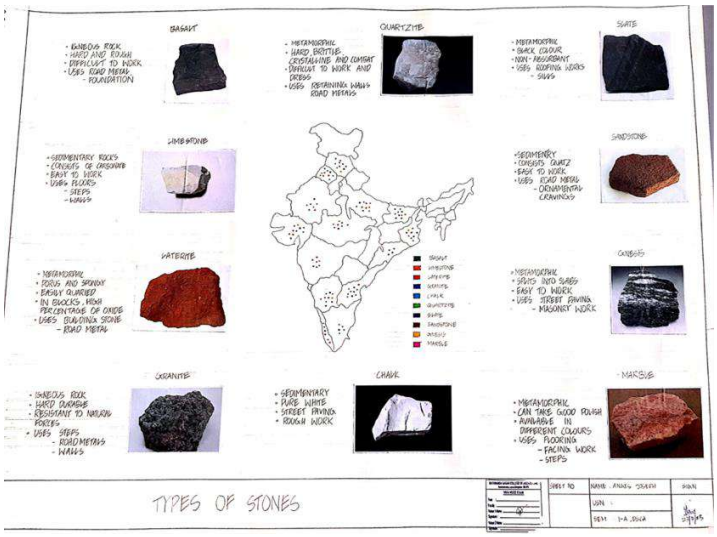

ELEVATION
SECTION AA'
ELEVATION
SECTION CC'
PLAN BB'
PLAN DD'
FLAT ARCH
SEMI-CIRCULAR ARCH
ARCHES-1 - FLAT AND SEMI-CIRCULAR ARCH

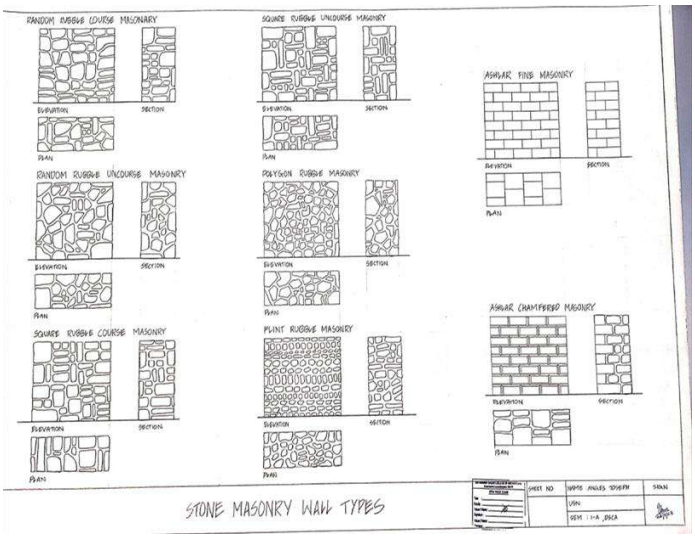

KEYSTONE
EXTRADOS
INTRADOS
SPRINGER
ELEVATION
SECTION AA'
ELEVATION
SECTION CC'
PLAN BB'
PLAN DD'
SEGMENTAL ARCH
EQUILATERAL ARCH
ARCHES-02 - SEGMENTAL AND EQUILATERAL ARCH

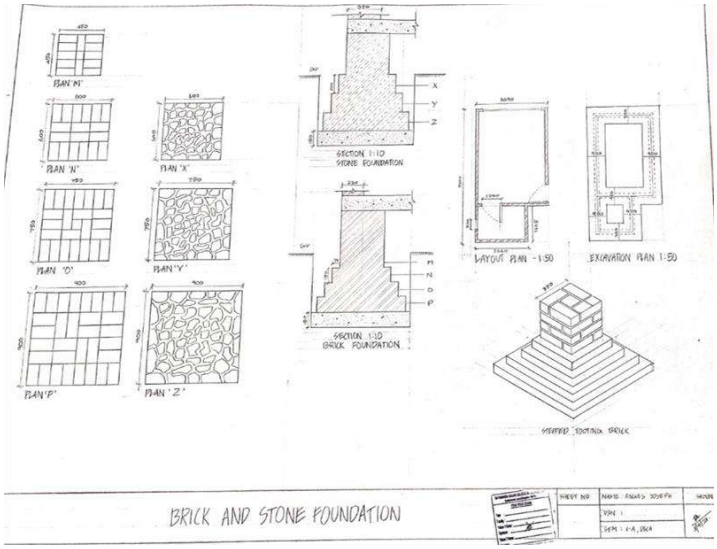

FLY ASH BRICKS
GLASS BLOCKS
BAMBOO
STABILIZED MUD BLOCKS
PAPER BOARD TUBES
HOLLOW CLAY BRICKS
ALTERNATIVE BUILDING MATERIALS

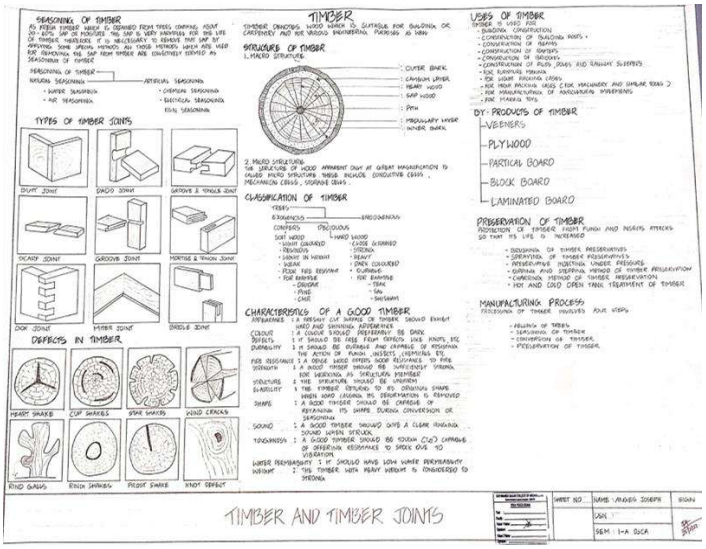

BAMBOO
INTRODUCTION
MANUFACTURING PROCESS
USES
PROPERTIES
BAMBOO ROOFS
BAMBOO FURNITURE
ADVANTAGES
BAMBOO FLOORING
DISADVANTAGES
CHEMICAL COMPOSITION
ALTERNATIVE BUILDING MATERIAL - BAMBOO

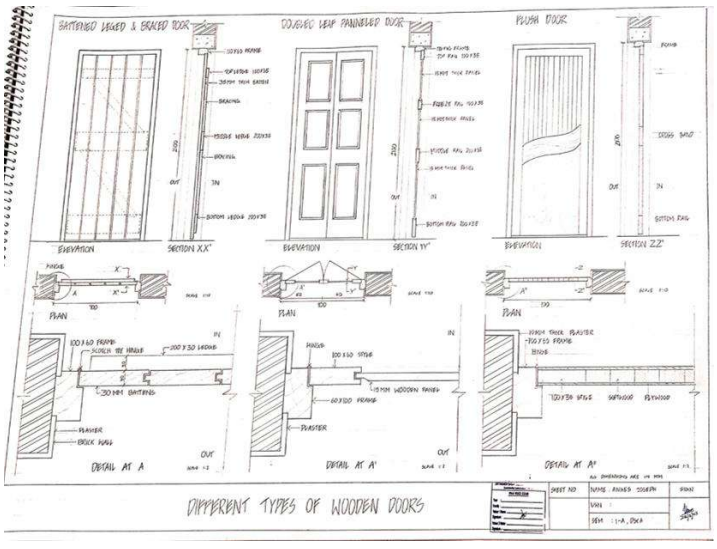

CONCRETE MASONRY UNIT
CLASSIFICATION : WEIGHT OF CMU BLOCKS
USES OF CONCRETE MASONRY UNIT (CMU)
ADVANTAGES
DISADVANTAGES
CMU BUILDINGS
PROPERTIES OF CMU
CONCRETE MASONRY UNIT [CMU]

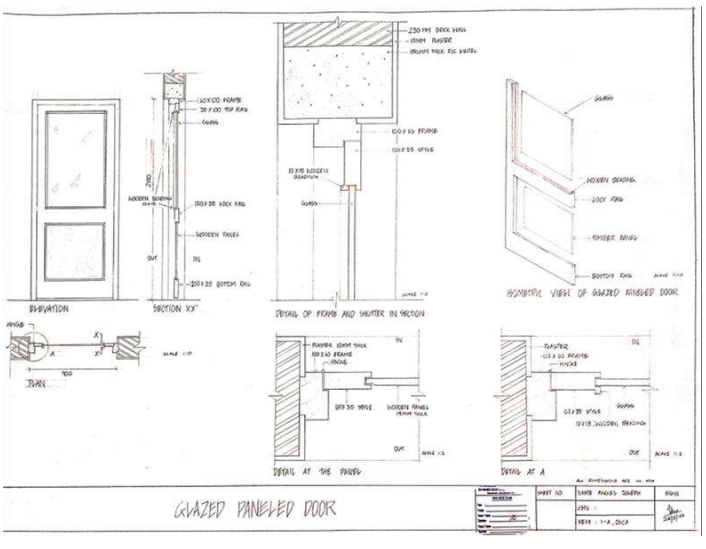

BASALT
QUARTZITE
SLATE
LIMESTONE
SANDSTONE
LATERITE
GNEISS
GRANITE
CHALK
MARBLE
TYPES OF STONES


RANDOM RUBBLE COURSE MASONRY
SQUARE RUBBLE UNCOURSE MASONRY
ASHLAR FINE MASONRY
RANDOM RUBBLE UNCOURSE MASONRY
POLYGON RUBBLE MASONRY
SQUARE RUBBLE COURSE MASONRY
FLINT RUBBLE MASONRY
ASHLAR CHAMFERED MASONRY
STONE MASONRY WALL TYPES


PLAN 'M'
PLAN 'N'
PLAN 'O'
PLAN 'P'
PLAN 'Y'
PLAN 'Z'
SECTION 1:10
STONE FOUNDATION
SECTION 1:10
BRICK FOUNDATION
LAYOUT PLAN - 1:50
EXCAVATION PLAN 1:50
STEPPED FOOTING BRICK
BRICK AND STONE FOUNDATION

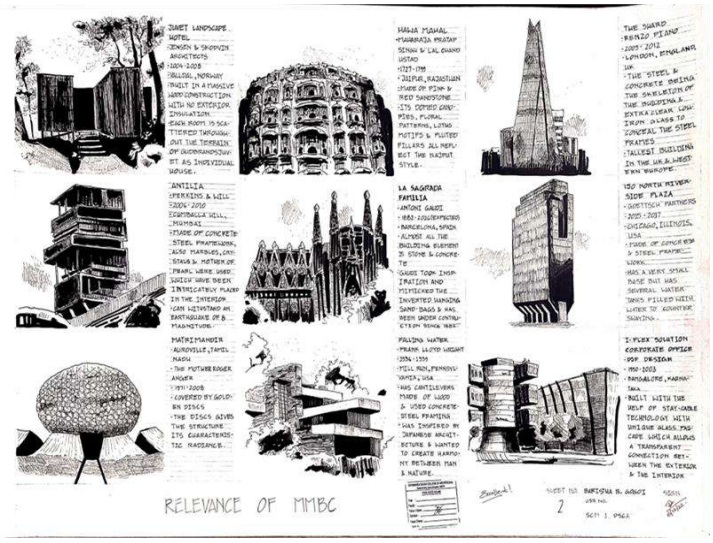

SEASONING OF TIMBER
TIMBER
USES OF TIMBER
STRUCTURE OF TIMBER
TYPES OF TIMBER JOINTS
BY-PROCESS OF TIMBER
PLYWOOD
PARTICAL BOARD
BLOCK BOARD
LAMINATED BOARD
CLASSIFICATION OF TIMBER
PRESERVATION OF TIMBER
CHARACTERISTICS OF A GOOD TIMBER
MANUFACTURING PROCESS
DEFECTS IN TIMBER
TIMBER AND TIMBER JOINTS

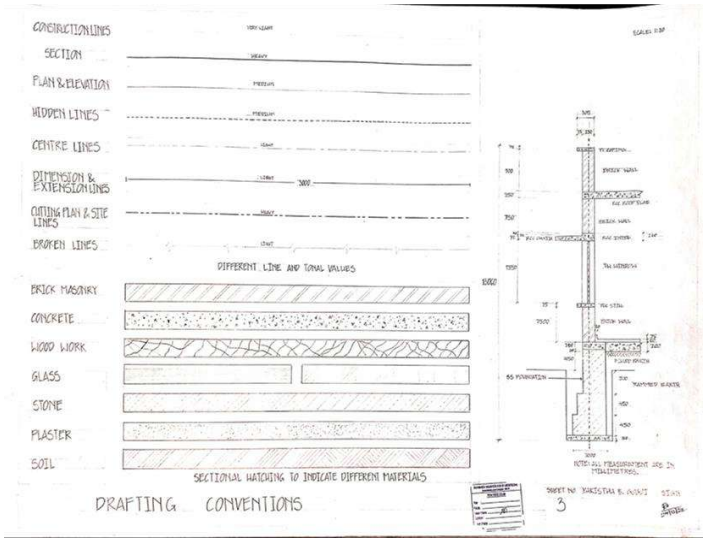

BATTENED HUNGED & BRACED DOOR
DOUBLE LEAF PANNELED DOOR
PLUSH DOOR
ELEVATION
SECTION XX'
SECTION YY'
SECTION ZZ'
PLAN
DETAIL AT A
DETAIL AT A'
DETAIL AT A''
DIFFERENT TYPES OF WOODEN DOORS

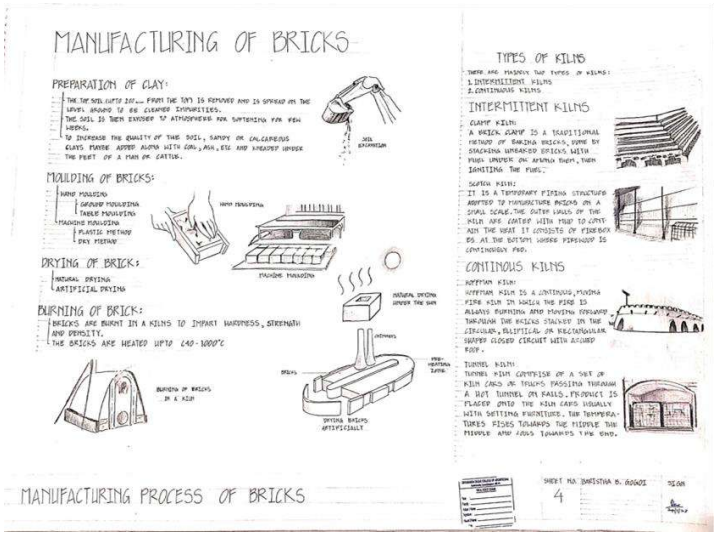

ELEVATION
SECTION XX'
PLAN
DETAIL OF FRAME AND SHUTTER IN SECTION
DETAIL AT THE PANEL
ISOMETRIC VIEW OF GLAZED BATTENED DOOR
DETAIL AT A
GLAZED PANELED DOOR

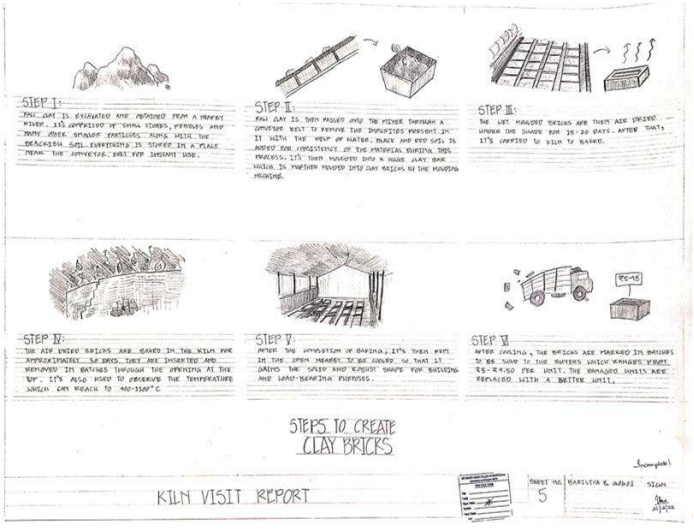
Methods and Materials in Building Construction - II
Faculty: Ar. Vani Krishnamurthy, Ar. Srimathi Raja,
Ar. Ravindra Avinash

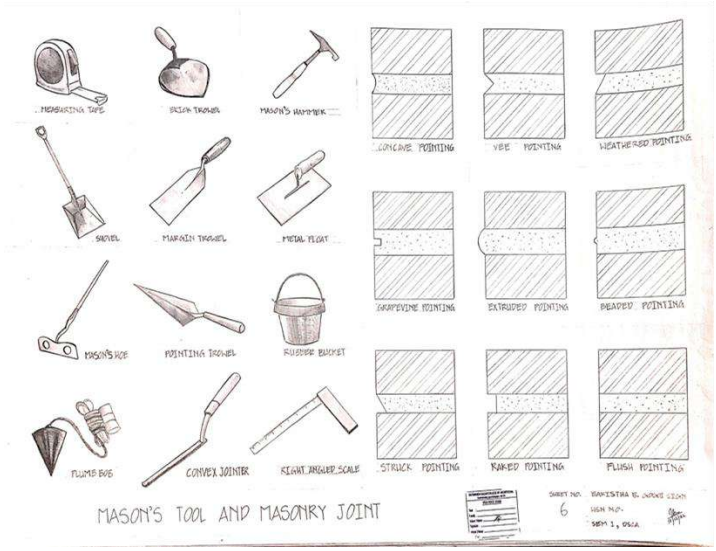
Baristha Bibhav Gogoi
1DC22AT013

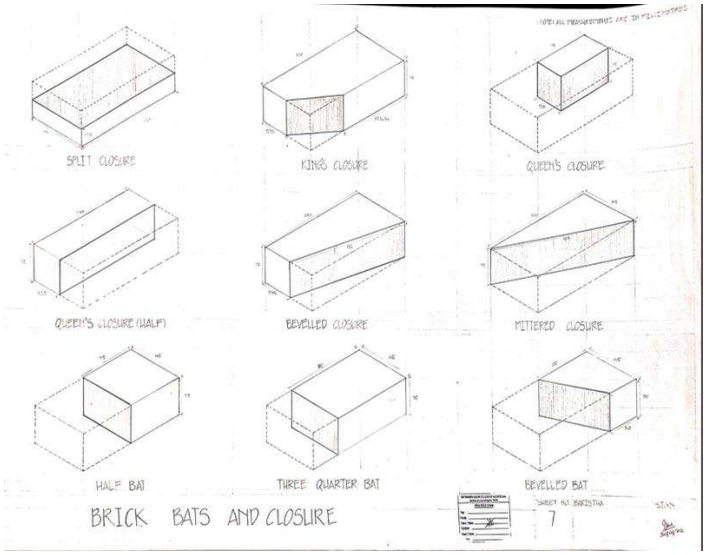


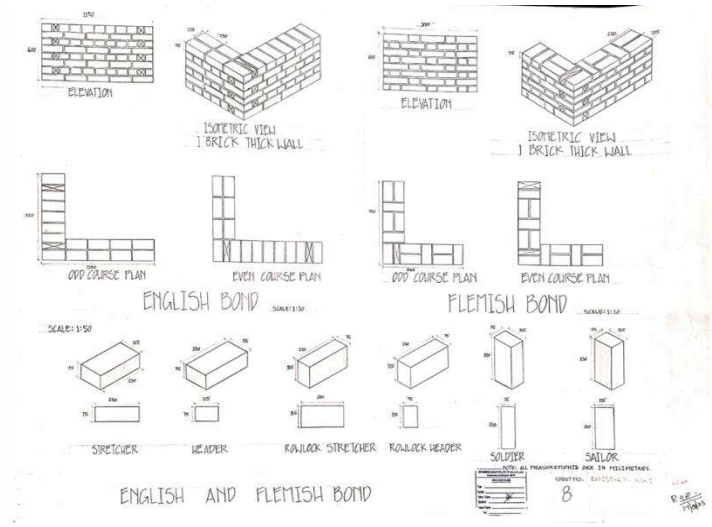


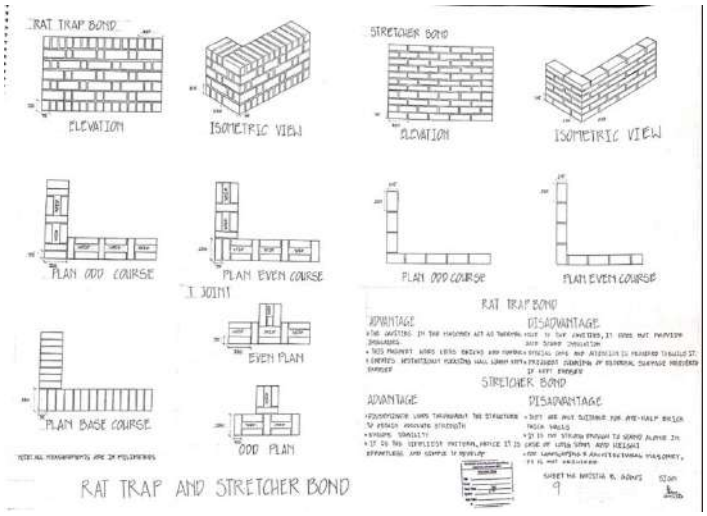


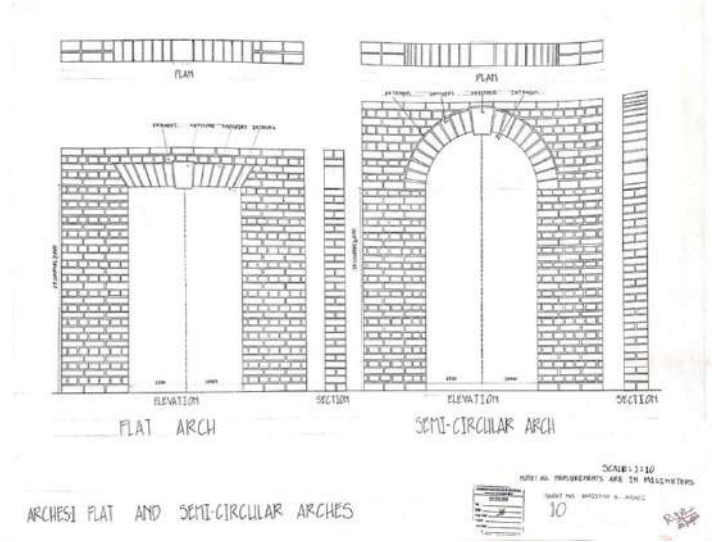


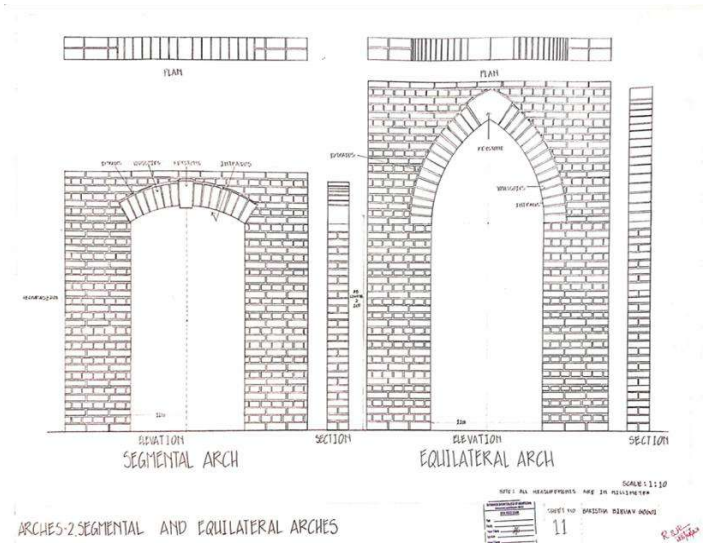


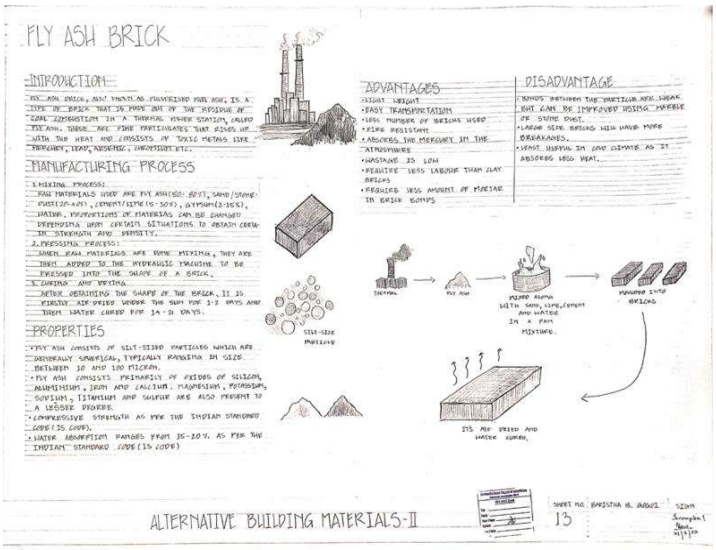


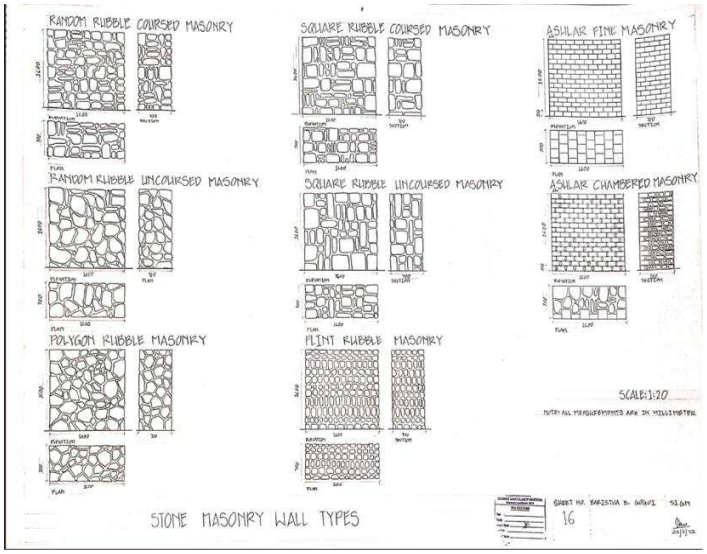

ELEVATION
ISOMETRIC VIEW
1 BRICK THICK WALL
ELEVATION
ISOMETRIC VIEW
1 BRICK THICK WALL
ODD COURSE PLAN
EVEN COURSE PLAN
ENGLISH BOND
ODD COURSE PLAN
EVEN COURSE PLAN
FLEMISH BOND
SCALE: 1:50
STRETCHER
HEADER
RAILOCK STRETCHER
RAILOCK HEADER
SOLDIER
SAILOR
ENGLISH AND FLEMISH BOND
8

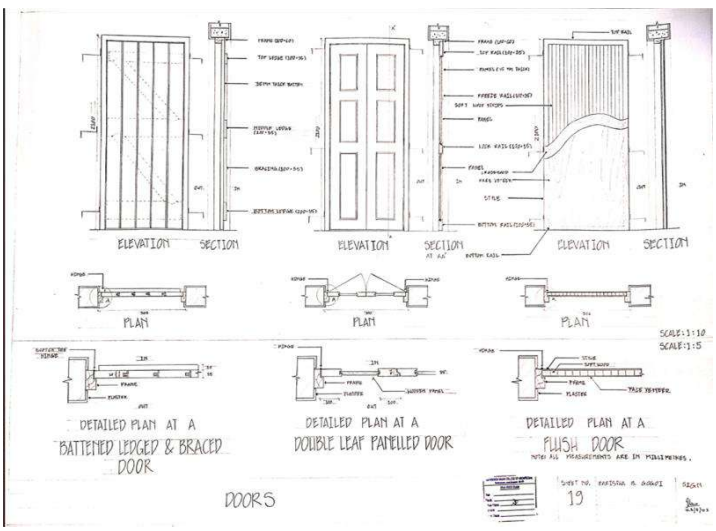

RAT TRAP BOND
ELEVATION
ISOMETRIC VIEW
STRETCHER BOND
ELEVATION
ISOMETRIC VIEW
PLAN ODD COURSE
PLAN EVEN COURSE
T JOINT
PLAN ODD COURSE
PLAN EVEN COURSE
PLAN BASE COURSE
EVEN PLAN
ODD PLAN
RAT TRAP BOND
ADVANTAGE
DISADVANTAGE
STRETCHER BOND
ADVANTAGE
DISADVANTAGE
RAT TRAP AND STRETCHER BOND
9

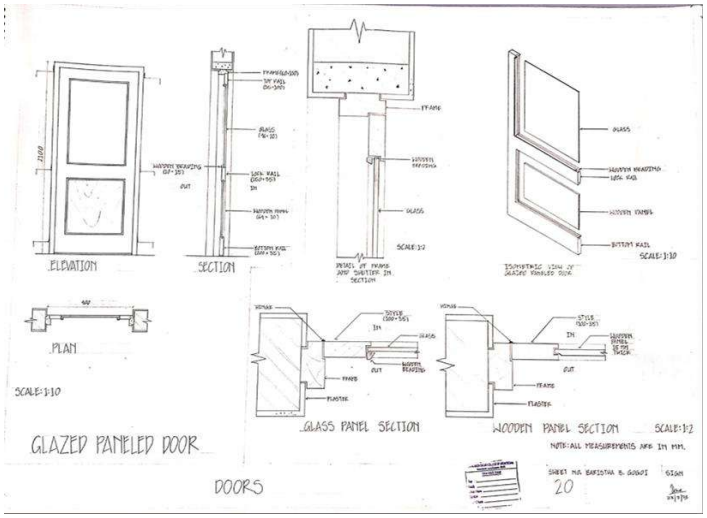

PLAN
PLAN
ELEVATION
SECTION
ELEVATION
SECTION
FLAT ARCH
SEMI-CIRCULAR ARCH
SCALE: 1:10
ARCHES1 FLAT AND SEMI-CIRCULAR ARCHES
10


PLAN
PLAN
ELEVATION
SECTION
ELEVATION
SECTION
SEGMENTAL ARCH
EQUILATERAL ARCH
SCALE: 1:10
ARCHES-2 SEGMENTAL AND EQUILATERAL ARCHES
11


FLY ASH BRICK
INTRODUCTION
MANUFACTURING PROCESS
PROPERTIES
ADVANTAGES
DISADVANTAGE
ALTERNATIVE BUILDING MATERIALS-II
15


RANDOM RUBBLE COURSED MASONRY
SQUARE RUBBLE COURSED MASONRY
ASHLAR FINE MASONRY
RANDOM RUBBLE UNCOURSED MASONRY
SQUARE RUBBLE UNCOURSED MASONRY
ASHLAR CHAMBERED MASONRY
POLYGON RUBBLE MASONRY
FLINT RUBBLE MASONRY
SCALE: 1:20
STONE MASONRY WALL TYPES
16


ELEVATION
SECTION
ELEVATION
SECTION
ELEVATION
SECTION
PLAN
PLAN
PLAN
SCALE: 1:10
SCALE: 1:5
DETAILED PLAN AT A BATTENED LEDGED & BRACED DOOR
DETAILED PLAN AT A DOUBLE LEAF PANELLED DOOR
DETAILED PLAN AT A FLUSH DOOR
DOORS
19


ELEVATION
SECTION
PLAN
SCALE: 1:10
GLAZED PANELLED DOOR
GLASS PANEL SECTION
WOODEN PANEL SECTION
SCALE: 1:2
DOORS
20

Methods and Materials in Building Construction - II
Faculty: Ar. BB Prakash, Ar. Pragathi Prassad S,
Ar. Chanchal Modi

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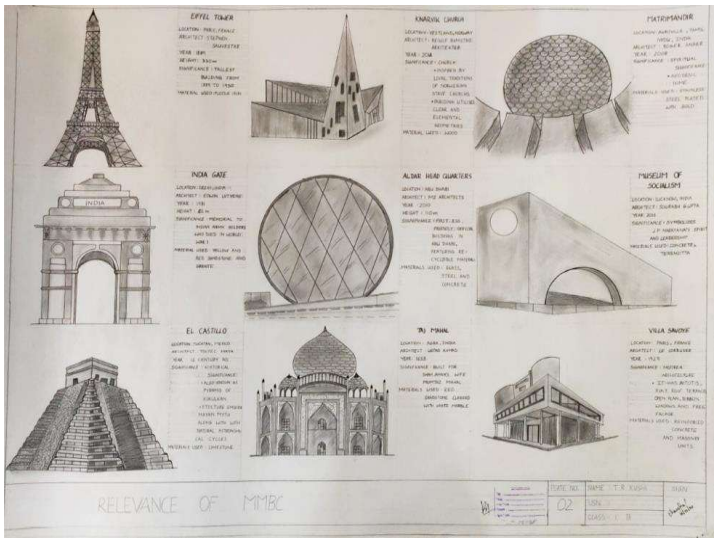

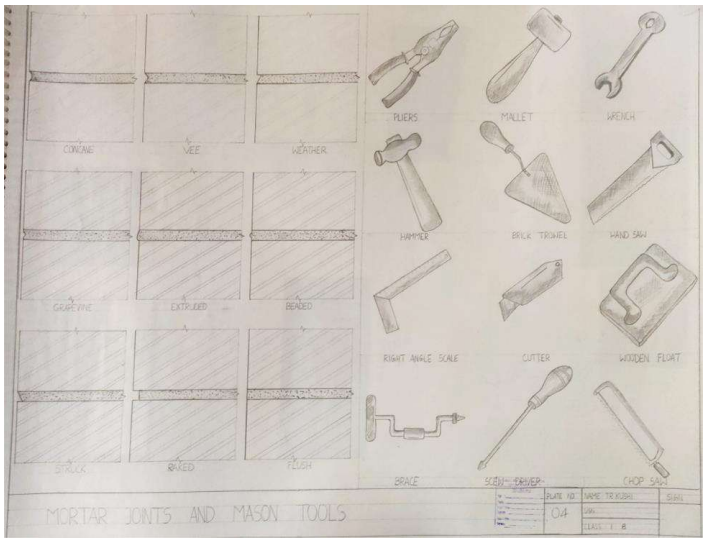

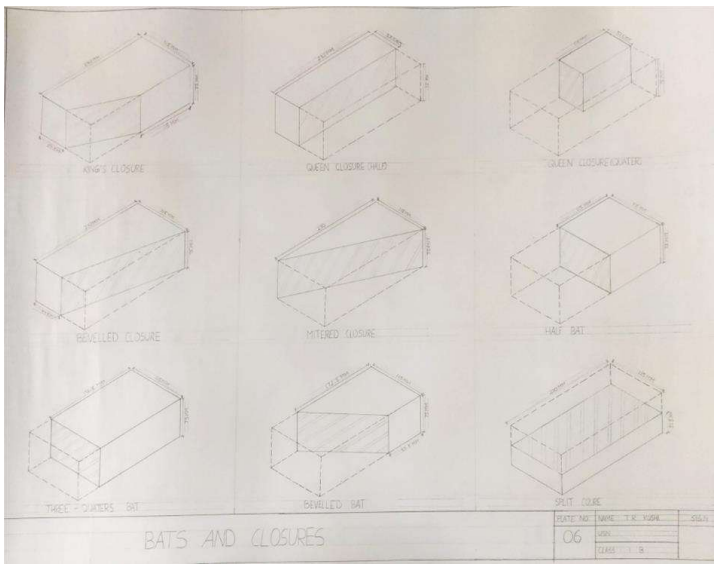

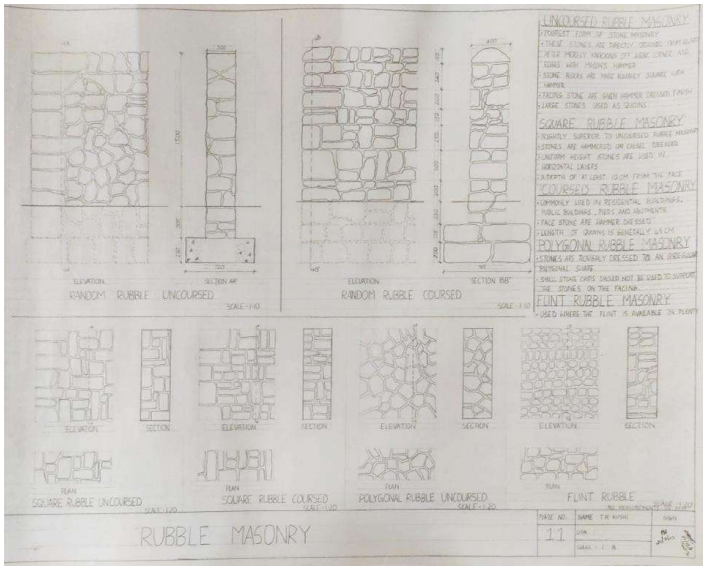

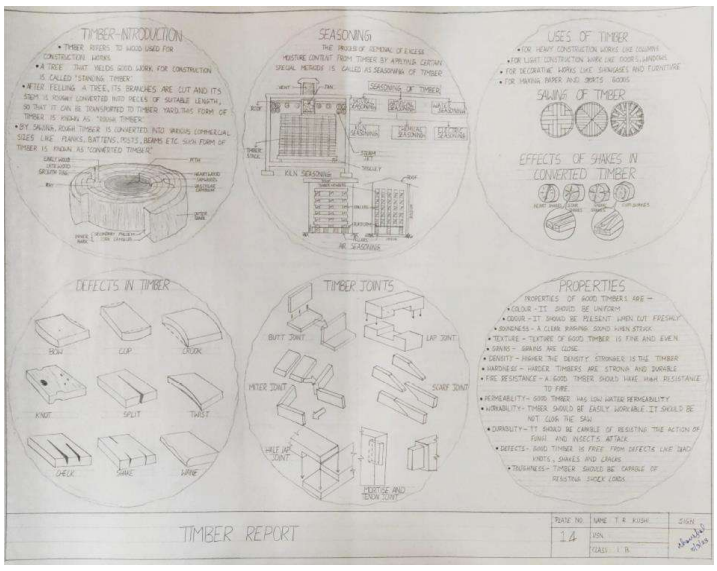

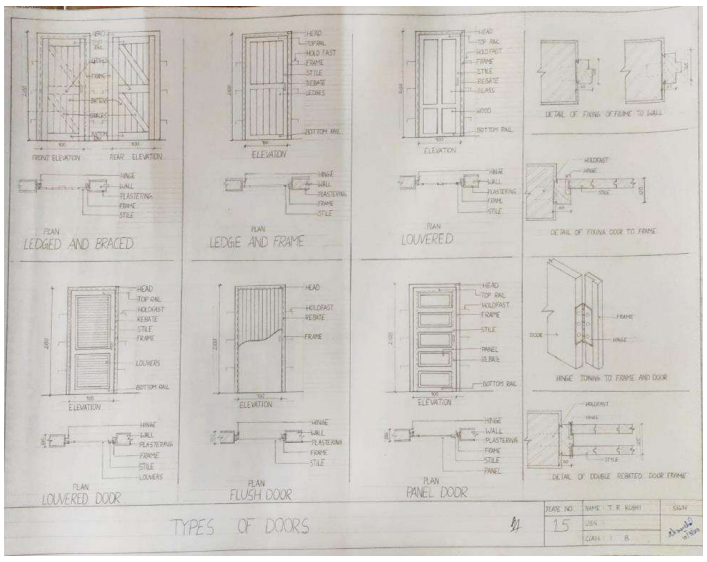

Methods and Materials in Building Construction - II
Faculty: Ar. BB Prakash, Ar. Pragathi Prassad S,
Ar. Chanchal Modi

Pragna G
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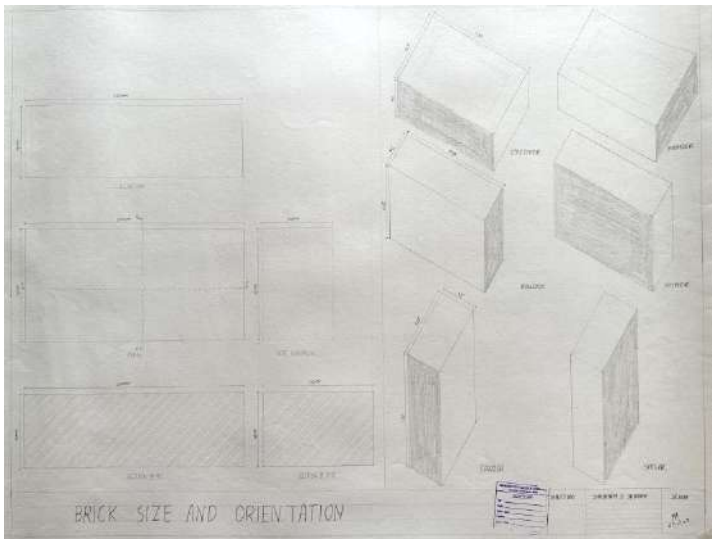
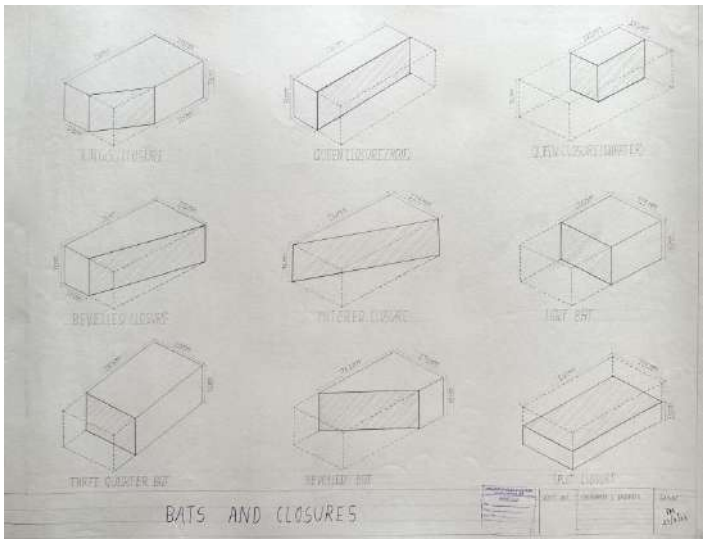
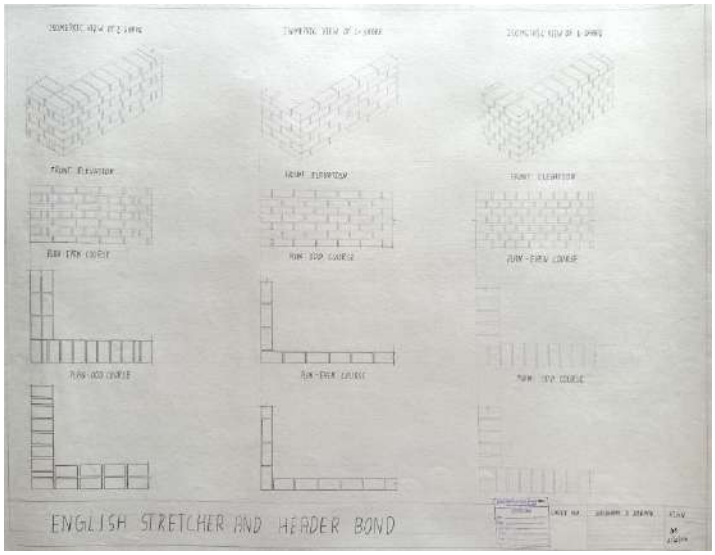
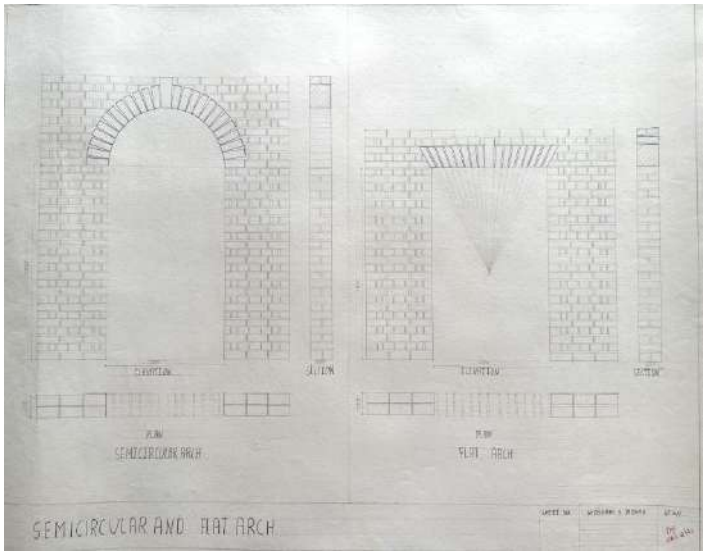
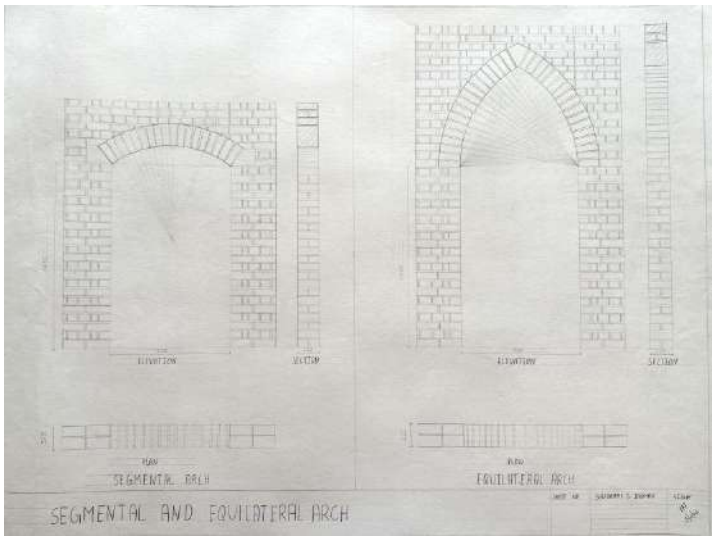
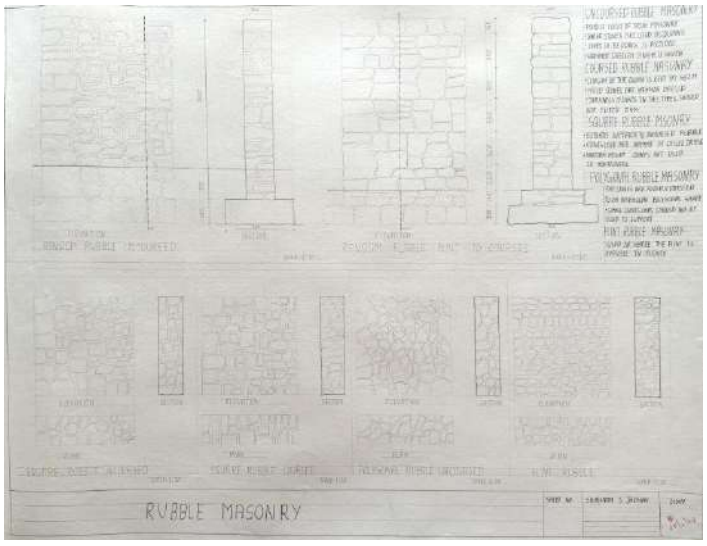






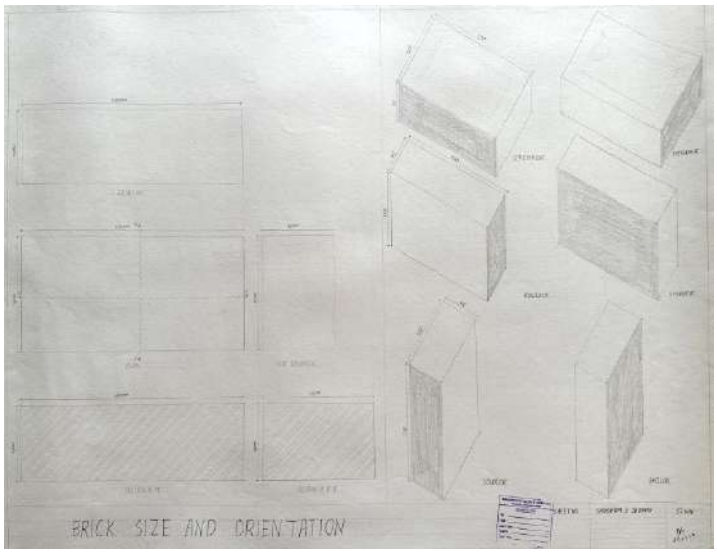


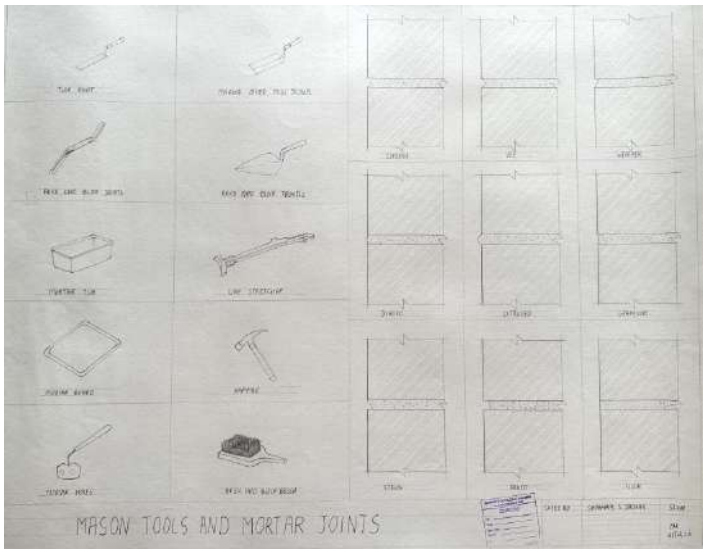


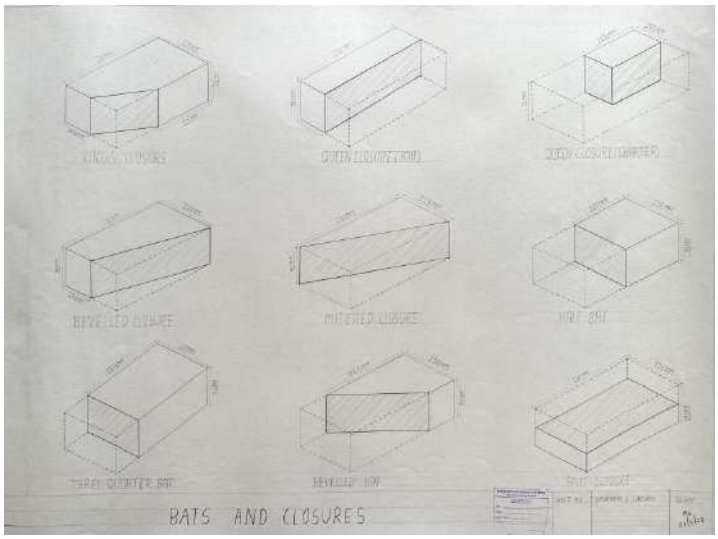


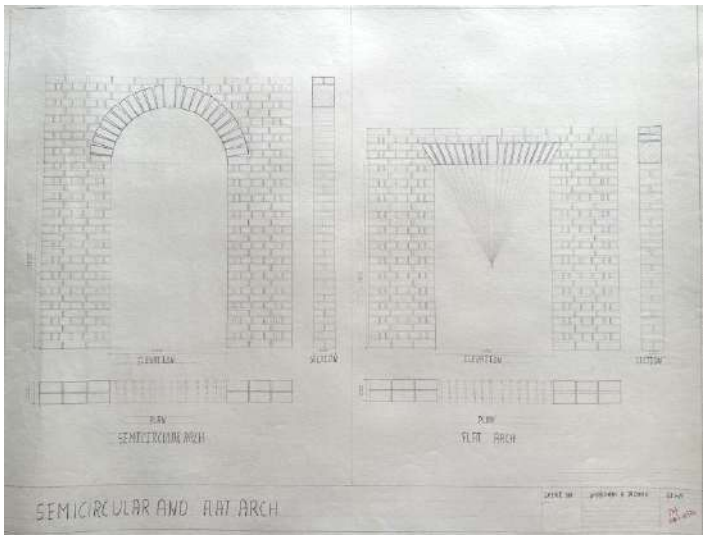
Methods and Materials in Building Construction - II
Faculty: Ar. BB Prakash, Ar. Pragathi Prassad S,
Ar. Chanchal Modi

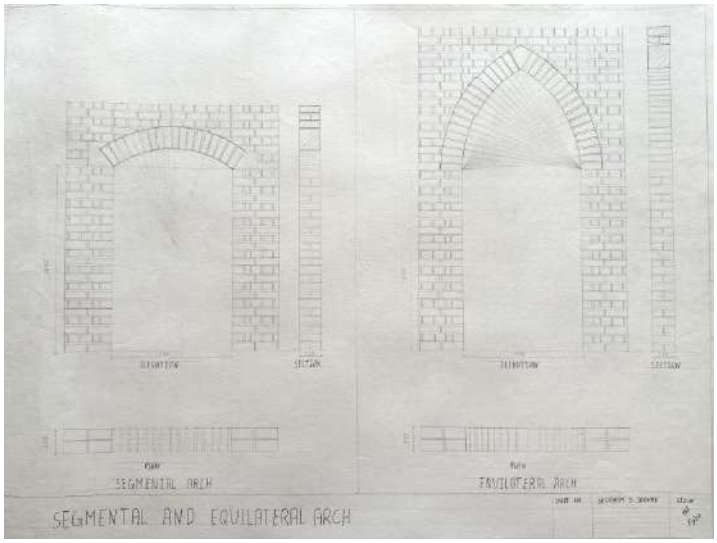
Shubham Jhadav
1DC22AT062

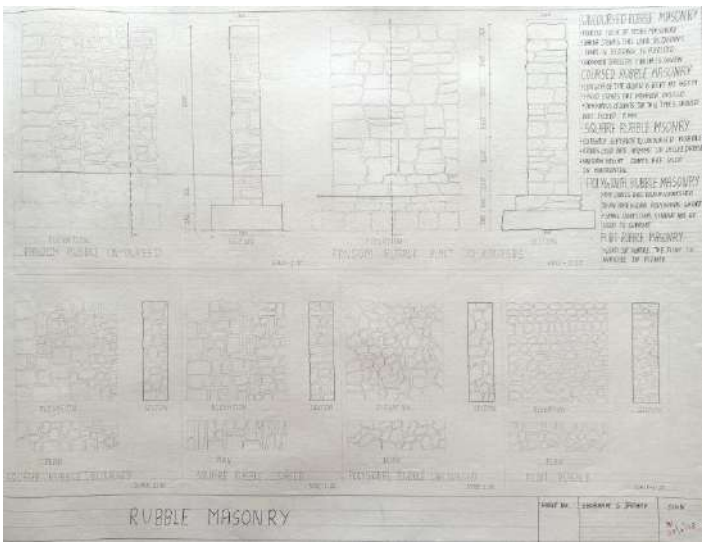


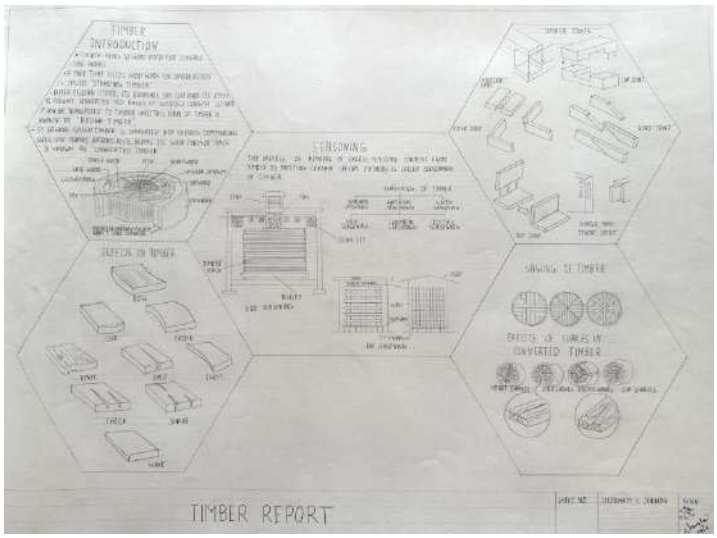


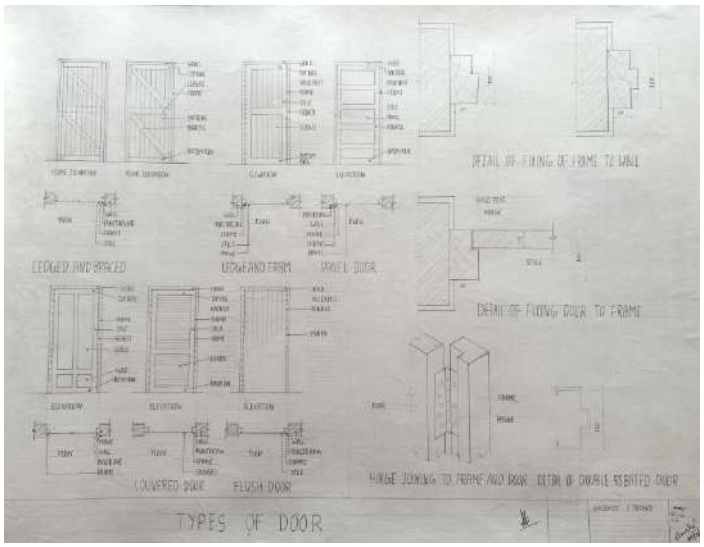


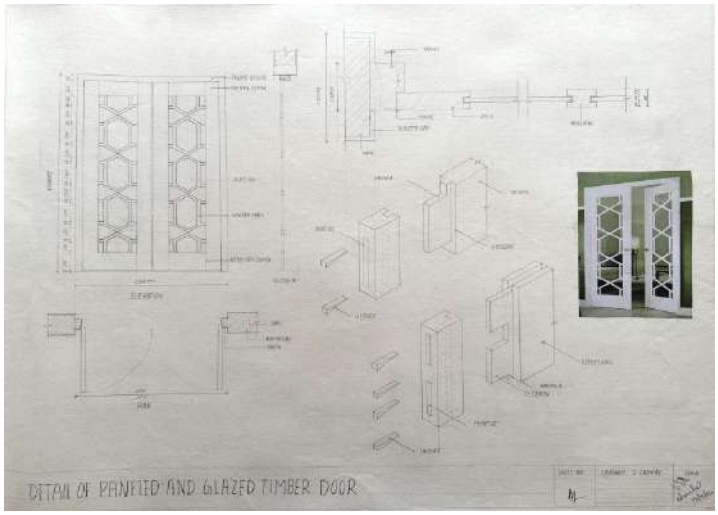


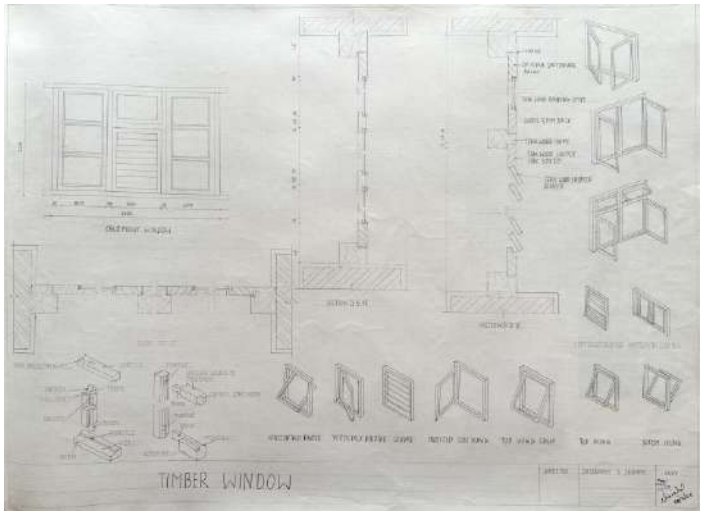


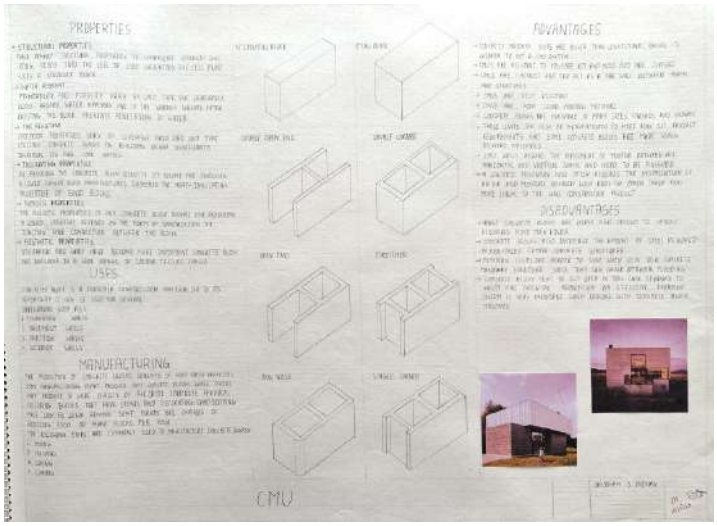


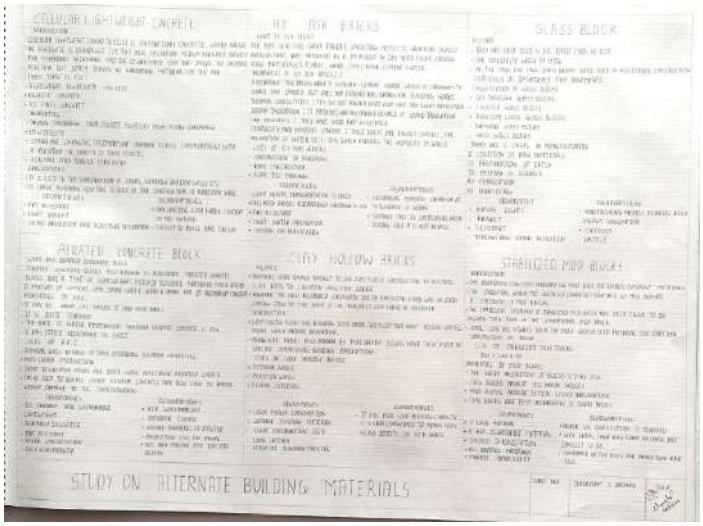

TIMBER
INTRODUCTION
SEASONING
SAWING OF TIMBER
TIMBER REPORT

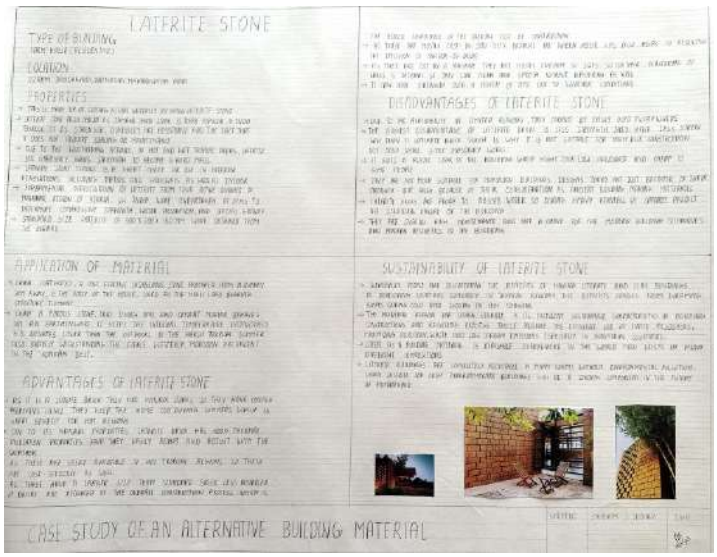

DETAIL OF FIXING OF FRAME TO WALL
LEGGED AND BRACED
LEG&BAND FRAME
PANEL DOOR
DETAIL OF FIXING DOOR TO FRAME
LOUVERED DOOR
FLUSH DOOR
HINGE JOINING TO FRAME AND DOOR
DETAIL OF DOUBLE REBATED DOOR
TYPES OF DOOR


DETAIL OF PANELED AND GLAZED TIMBER DOOR


TIMBER WINDOW


PROPERTIES
ADVANTAGES
DISADVANTAGES
USES
MANUFACTURING
CMU


CELLULAR LIGHTWEIGHT CONCRETE
CLAY HOLLOW BRICKS
GLASS BLOCK
AERATED CONCRETE BLOCK
STABILIZED MUD BLOCKS
STUDY ON ALTERNATE BUILDING MATERIALS


LATERITE STONE
TYPE OF BUILDING
LOCATION
PROPERTIES
DISADVANTAGES OF LATERITE STONE
APPLICATION OF MATERIAL
SUSTAINABILITY OF LATERITE STONE
ADVANTAGES OF LATERITE STONE
CASE STUDY OF AN ALTERNATIVE BUILDING MATERIAL

Model Making Workshop
21 ARC 16

Course objectives:
To train the students to experiment and manipulate materials leading to creative exploration of forms.

Module 1:
- Generation of basic forms-cube, cone, dome and arch.
- Generating of organic and geometrical forms/objects

Module 2:
- Generation of forms & material exploration: hands on skill by using wood, bamboo, metal wire, thread, balsa wood, clothe, paper board etc

Module 3:
- Composite forms: Experimental form generation by combining various materials and shapes.(rods, pipes, slabs, etc.)
- Free Forms: Tensile structures, Funicular Shells using wood, fabric, plastic etc.

Module 4:
- Architectural forms: making of windows, wall doors, roofs, trees, shrubs, roads, vehicles etc.

Module 5:
- Introduction to digital modelling like 3D printing and laser cutting.

Subject Faculty

Ar. Gopi Krishna KV

SJ Bhaskar

Ar. N Arun Chandran

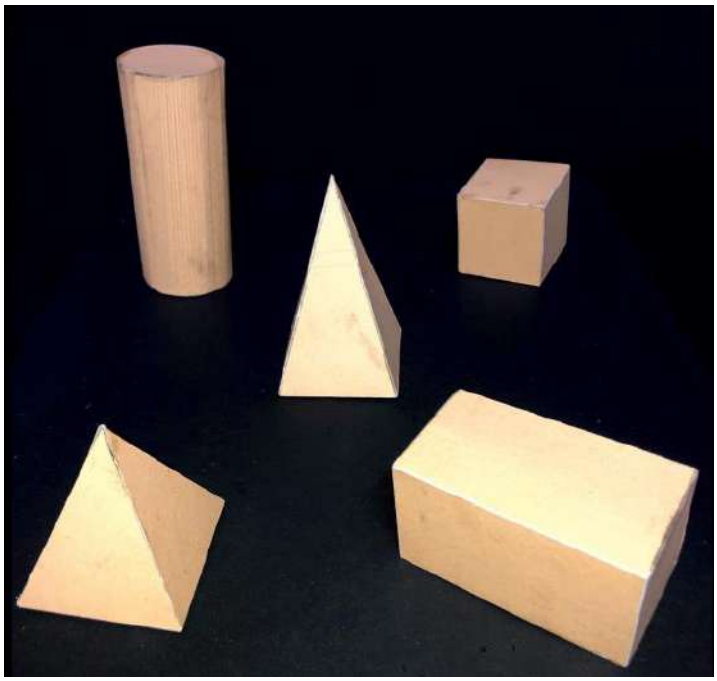
Ar. BB Prakash

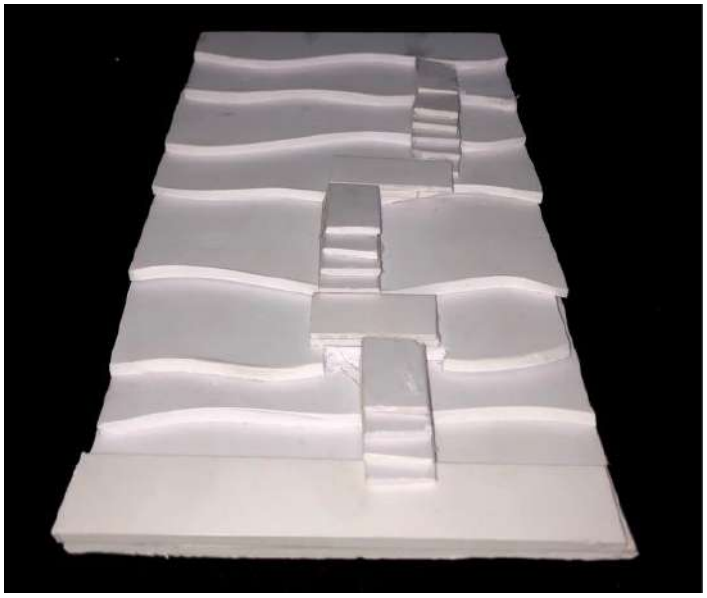
Multi Dimensional Spatial Explorations

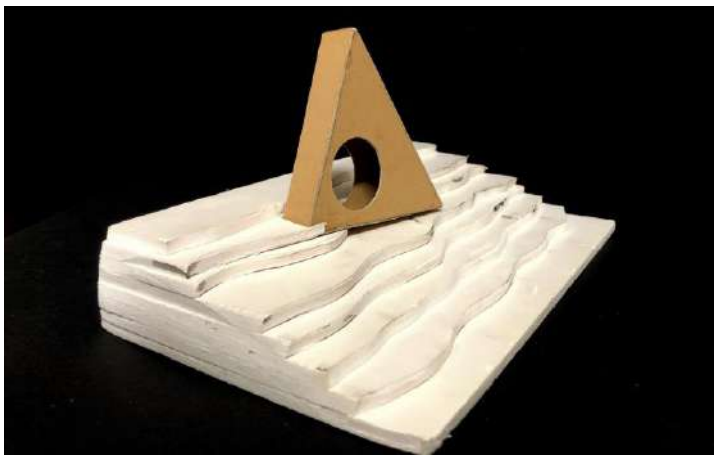
MMW II

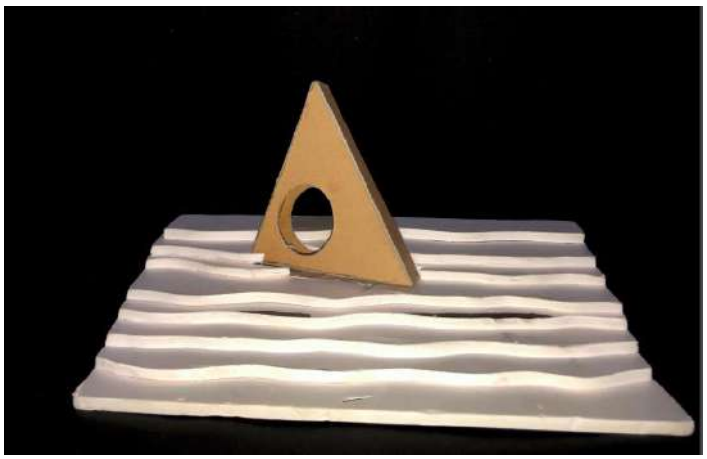
Model Making Workshop II
Faculty: Ar. Gopi Krishna KV, Ar. BB Prakash, SJ Bhaskar

Pragna
1DC22AT047







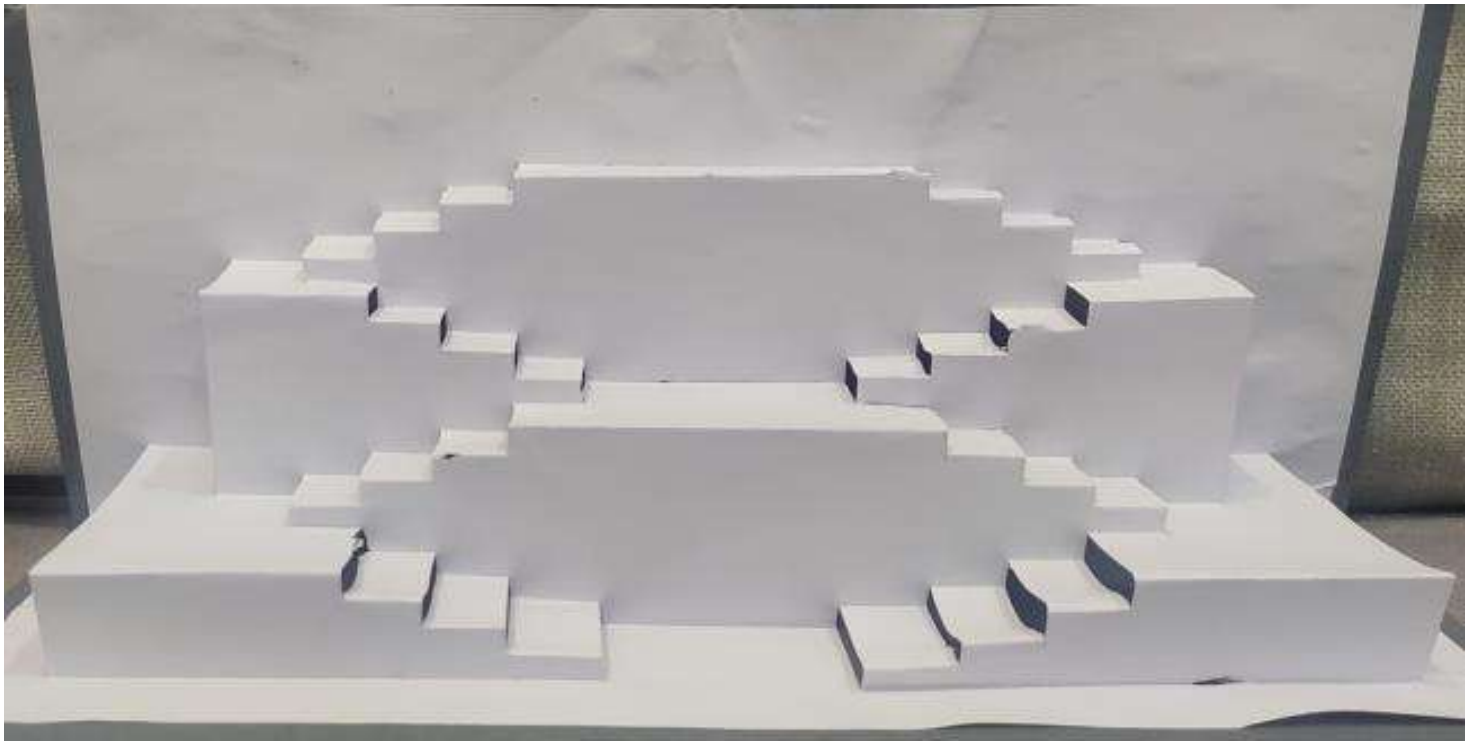


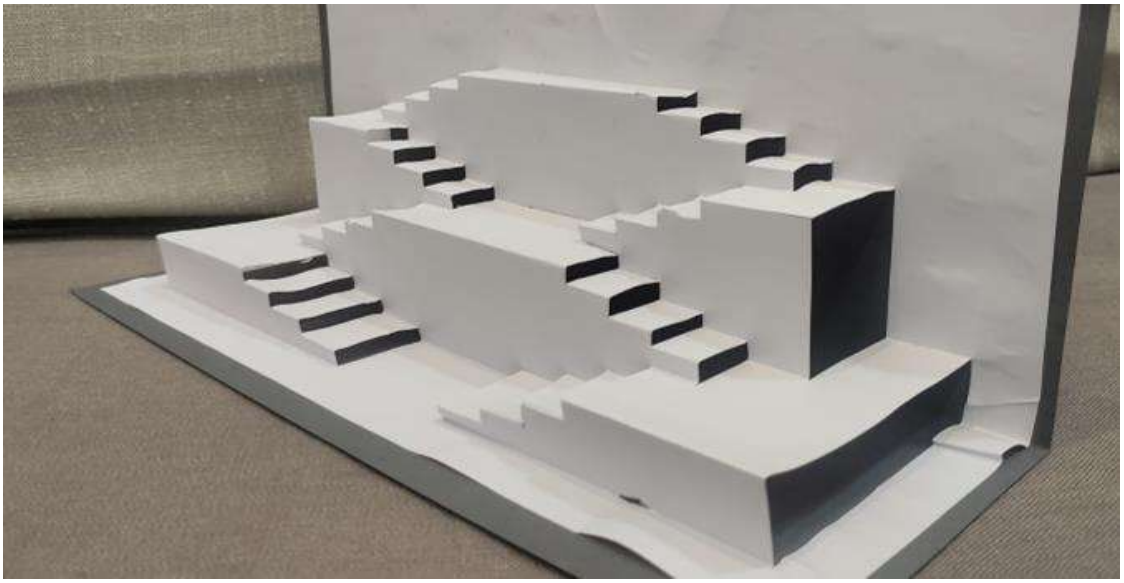
Multi Dimensional Spatial Explorations

MMW

Model Making Workshop II
Faculty: Ar. Gopi Krishna KV, Ar. BB Prakash, SJ Bhaskar

Pranav Arakere
1DC22AT049



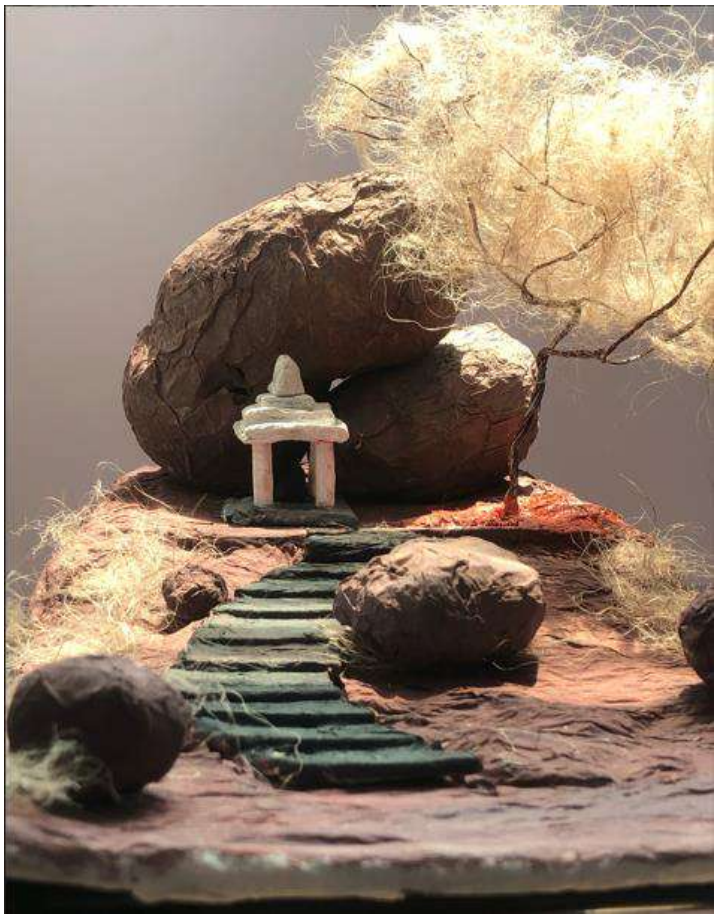


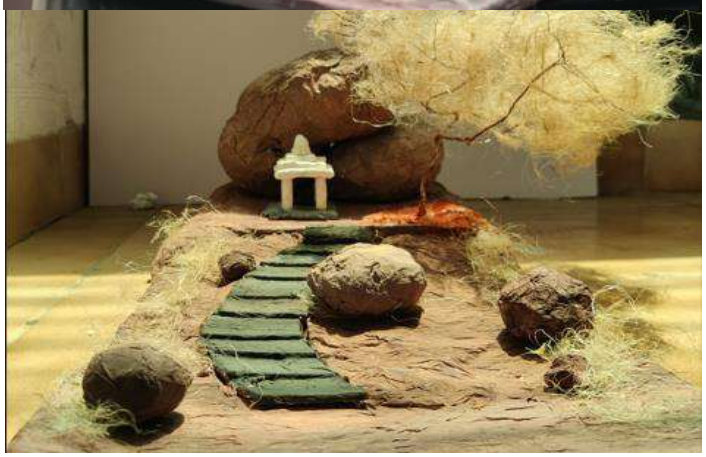
Multi Dimensional Spatial Explorations

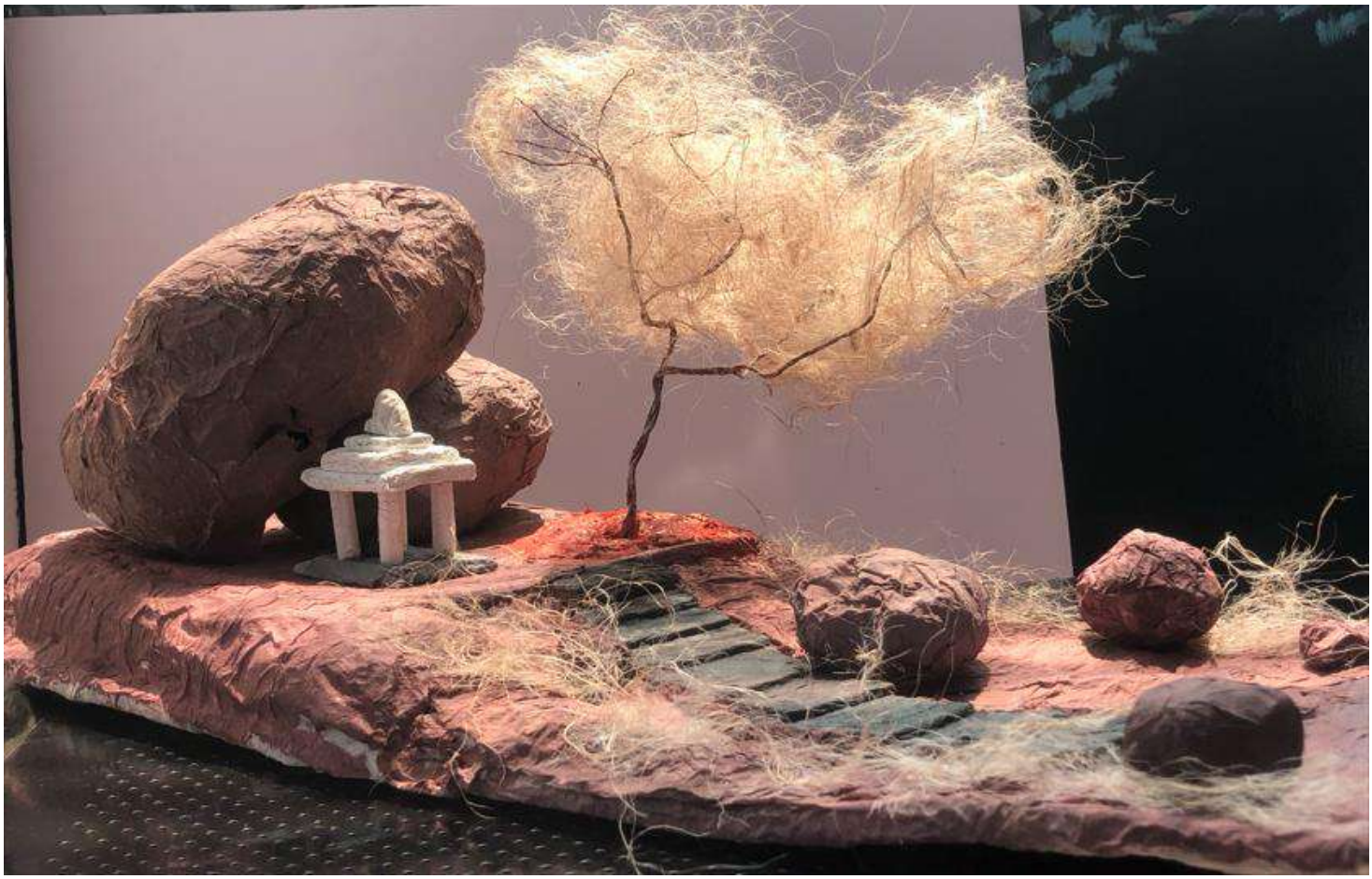
MMW

Model Making Workshop II
Faculty: Ar. Gopi Krishna KV, Ar. BB Prakash, SJ Bhaskar

Shubham S Jhadav
1DC22AT062





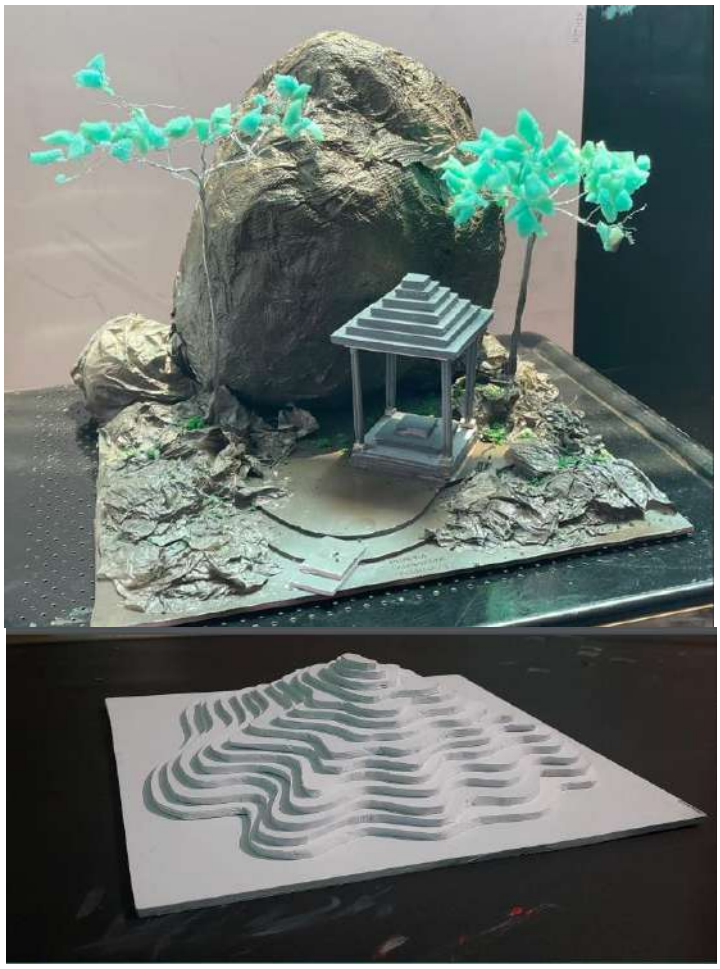


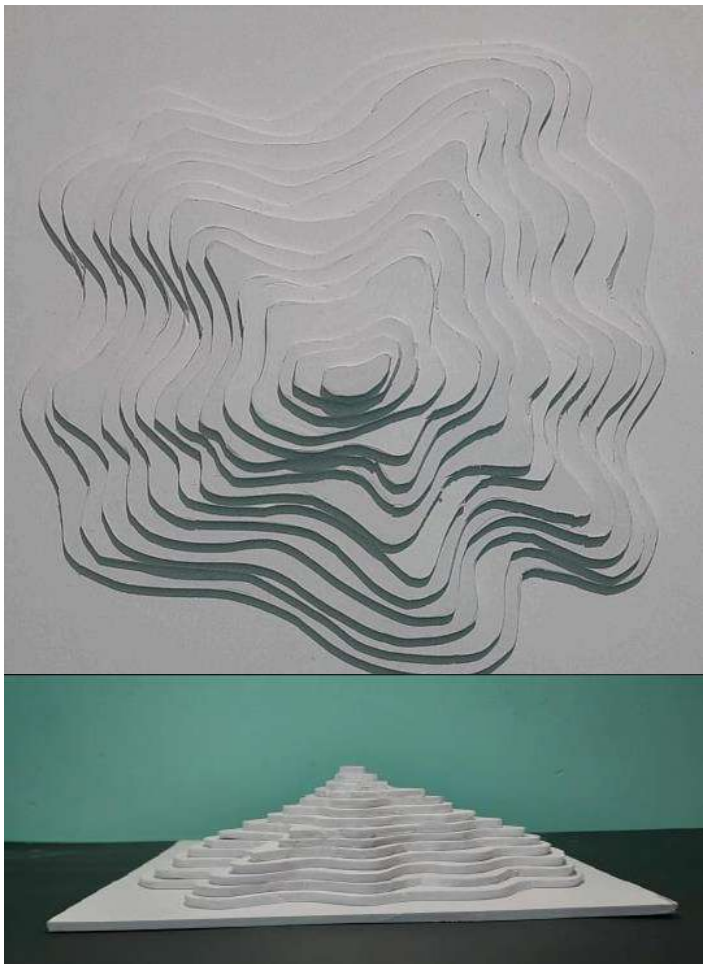
Multi Dimensional Spatial Explorations

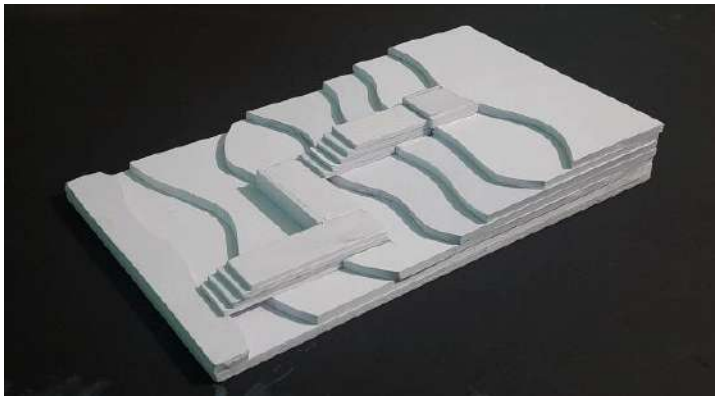
MMW

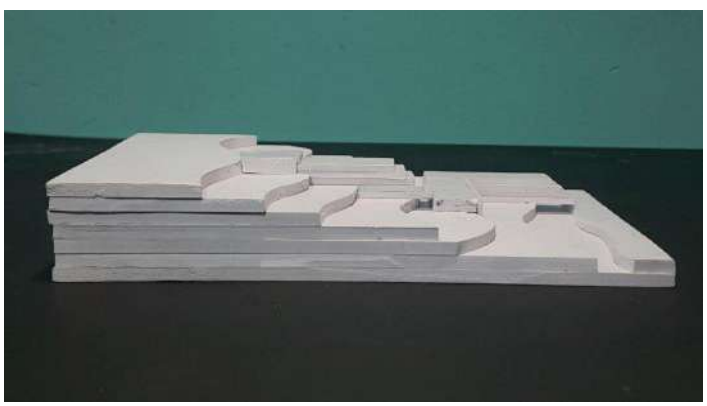
Model Making Workshop II
Faculty: Ar. Gopi Krishna KV, Ar. BB Prakash, SJ Bhaskar

Vyshnavy B
1DC22AT082









Multi Dimensional Spatial Explorations **MMW**

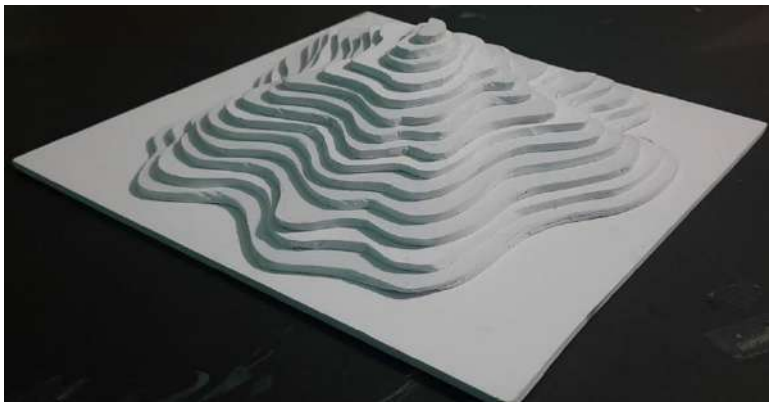
Model Making Workshop II
Faculty: Ar. Gopi Krishna KV, Ar. BB Prakash, SJ Bhaskar

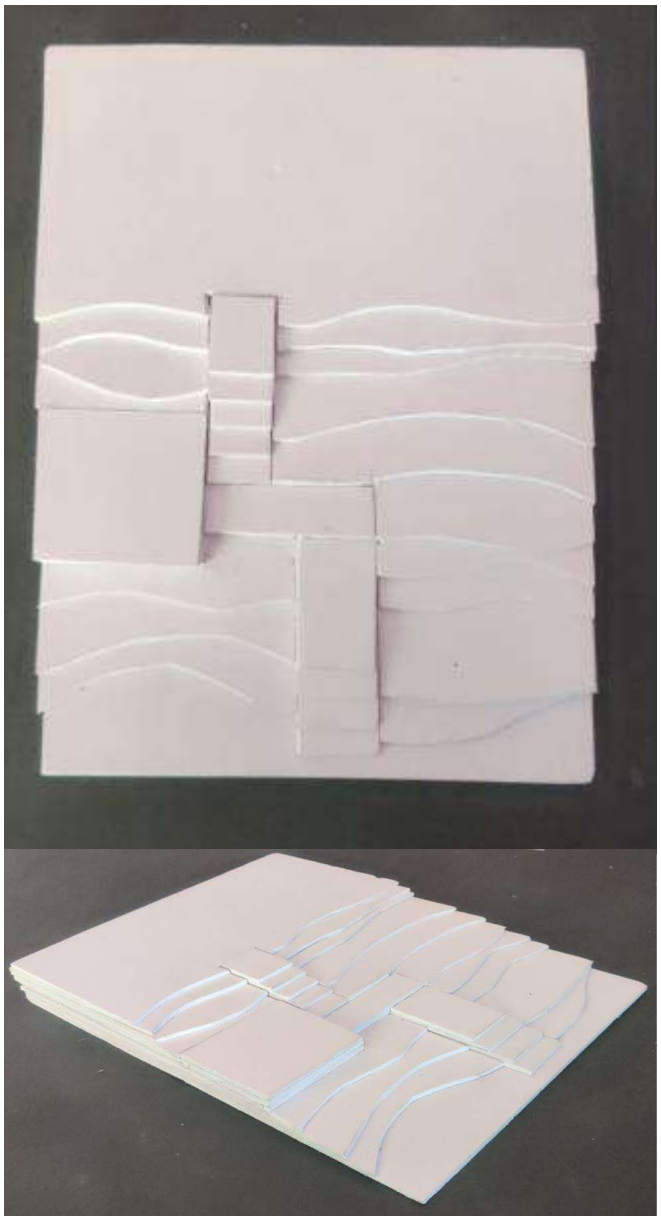
TR Kushi
1DC22AT074

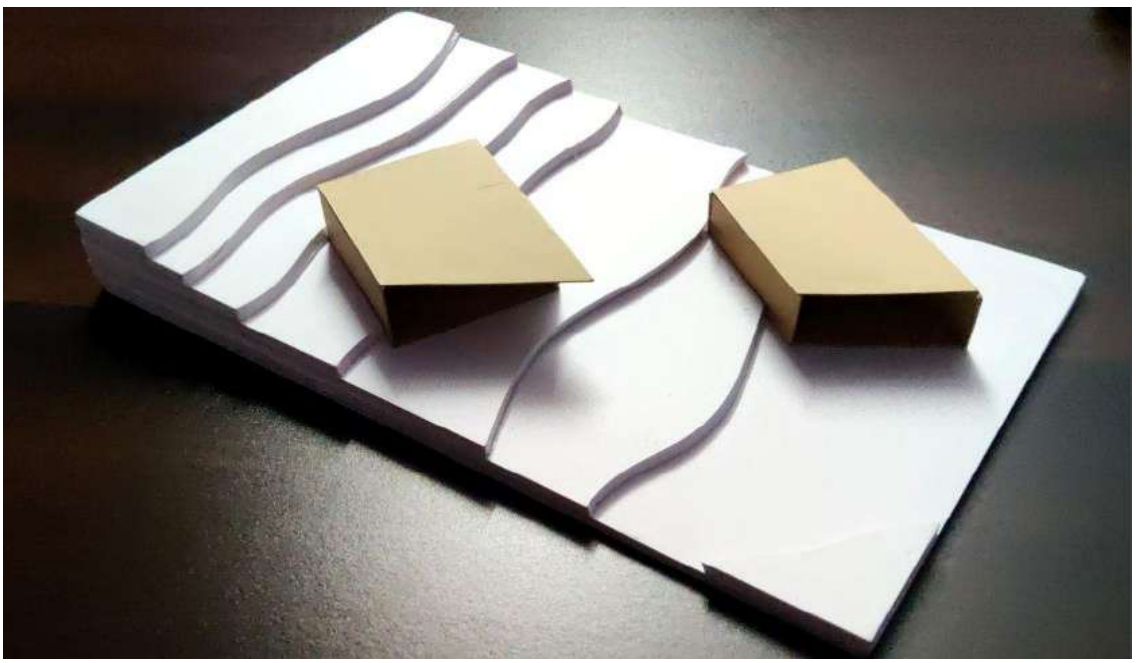
Multi Dimensional Spatial Explorations **MMW**

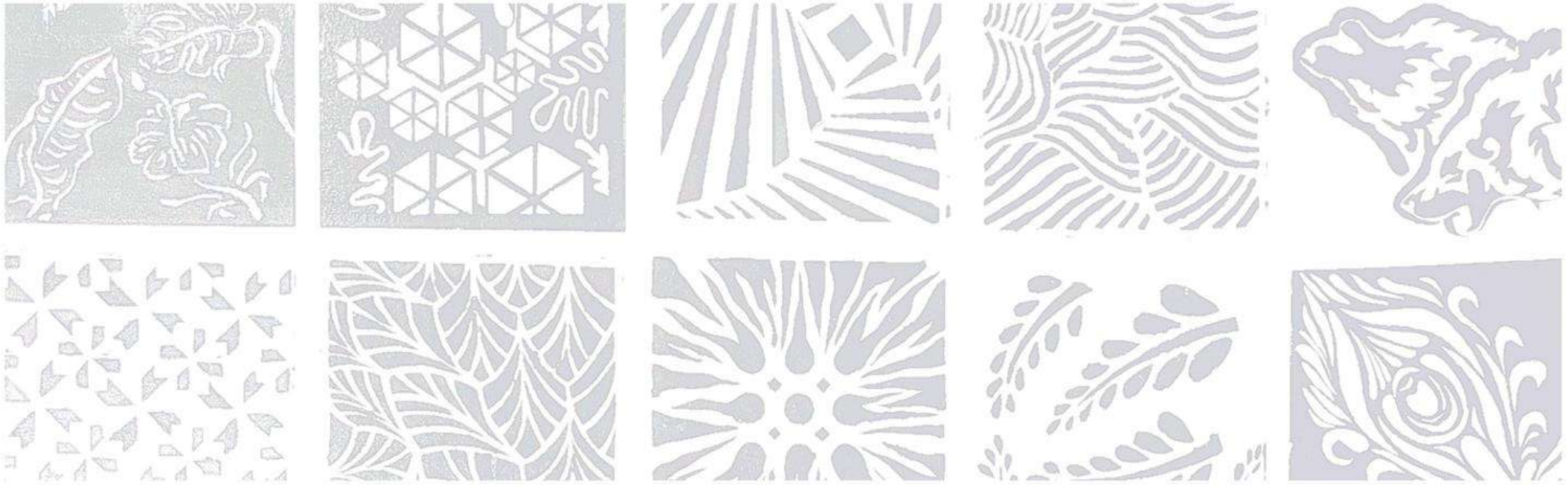
Model Making Workshop II
Faculty: Ar. Gopi Krishna KV, Ar. BB Prakash, SJ Bhaskar

Raju R
1DC19AT350









2nd Semester

Home is a place filled with coziness, affection, and warmth. A house will always have a special place in our hearts, and for Indians in particular, it is linked to family and close ties. A home is made up of places where individuals gather with their families and are at their most at ease. Despite the fact that people's lives are always changing, their homes store memories and give insight into the kind of people that reside there. Indians typically lived in joint families. Since there were many people living in the house, distinct rooms for various activities were required. Although there are various cultural, linguistic, climatic, and regional differences; there were few common things in the aesthetics of the homes. The central area of most homes was a courtyard; whereas gardens and study halls were a few other common spaces. These homes were built in a very sustainable manner using local building materials, Vaastu principles, and climate considerations. As they serve as the greatest guides for the construction customs of the era, our heritage and history offer a variety of types of architectural forms to interpret. A traditional Indian house also plays a significant role in family, festivals, and celebrations and unites everyone.

The sites chosen for the house design are:
Site A – ITI Employees Layout, Near Mallathahalli Lake, Bengaluru Family type : NRIs (2 adults, 2 children, 1 pet)Total Site Area: 800 sqm Total Built-up-area (B.U.A): 300 sqm

Site B – Mathias Nilaya, Rest House Road, Bengaluru Family type : Localities (Grandmother, 2 adults, 2 children, 1 pet)Total Site Area: 1000 sqm Total Built-up-area (B.U.A): 350 sqm

Note:
- Ground coverage : Maximum 30% of site area
- Must be a G+1 floors building
- Visit to site; necessary analysis and inferences.
- Concept / Theme – Exploring forms
- Block Model
- Bubble diagram
- Zoning
- Single line plan
- Masterplan (+Roof plan),
- All floor plans with furniture layout
- Sections (2#)
- Elevations (4#)
- Detailed model & 3D views

Architectural Design II
21 ARC 21

Studio Coordinators

Ar. Nikhil Ravindra

Ar. Surabhi Moharir

Studio Faculties

Ar. Chaitali M Babar

Ar. Mythrayi Harshavardhan

Ar. Vani Krishnamurthy

Umesh K.

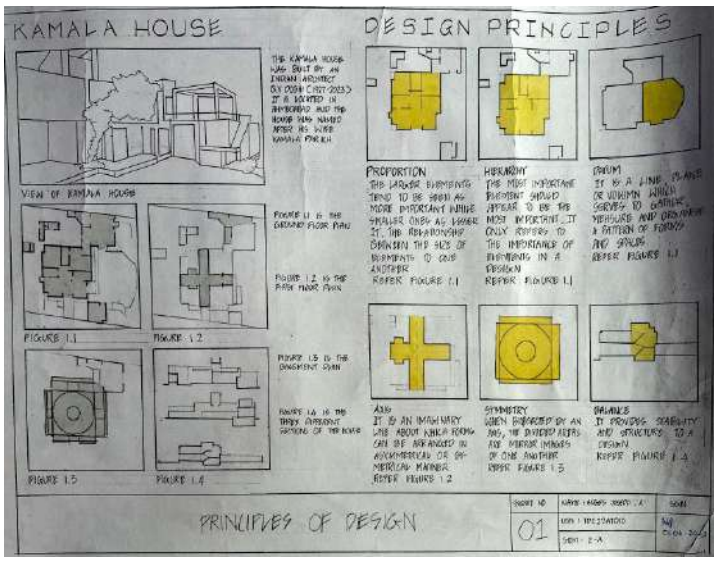
Ar. Pooja R Srinivas

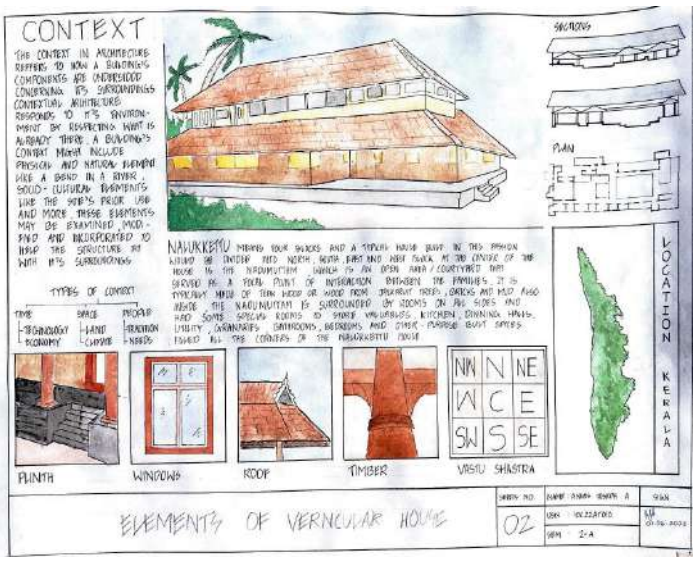
Ar Gopi Krishna

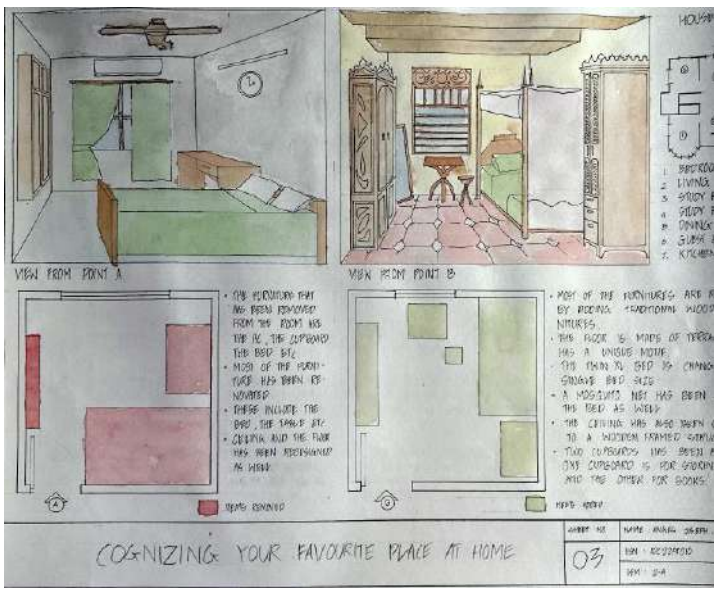
Pramod Stephen

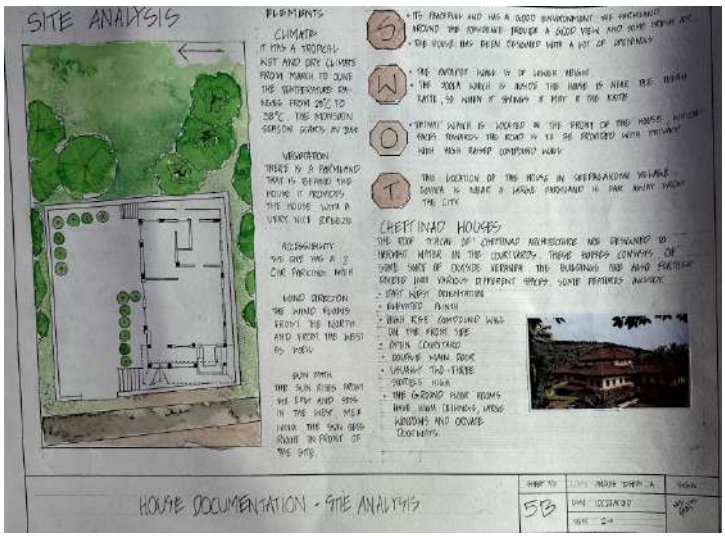
Architectural Design II
Faculty: Ar. Nikhil Ravindra, Ar. Chaitali M Babar,
Ar. Mythrayi Harshavardhan, Artist Pramod Stephen

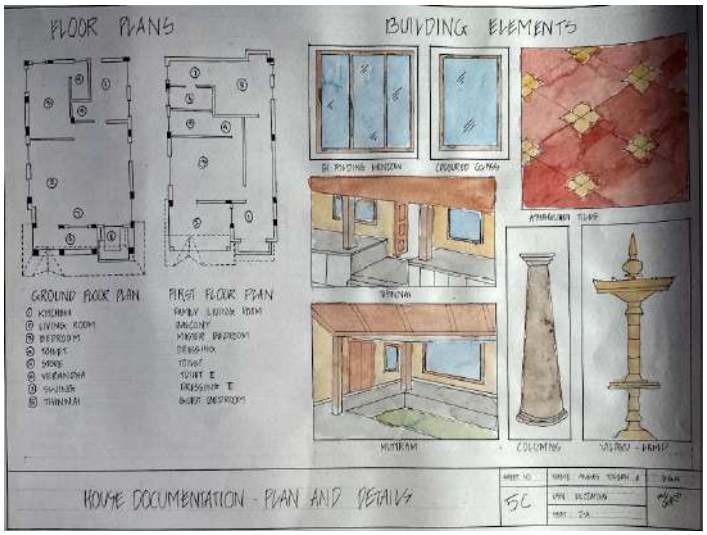
Anges Joseph A
1DC22AT010











Architectural Design II
Faculty: Ar. Nikhil Ravindra, Ar. Chaitali M Babar,
Ar. Mythrayi Harshavardhan, Artist Pramod Stephen

Anges Joseph A
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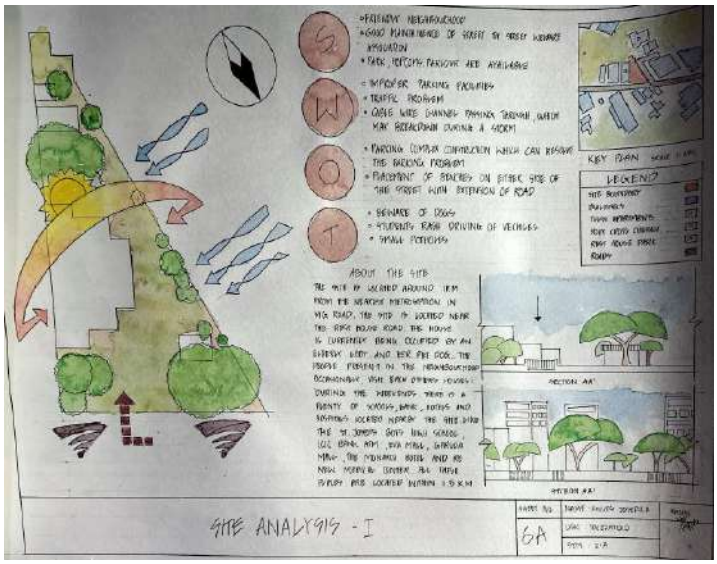

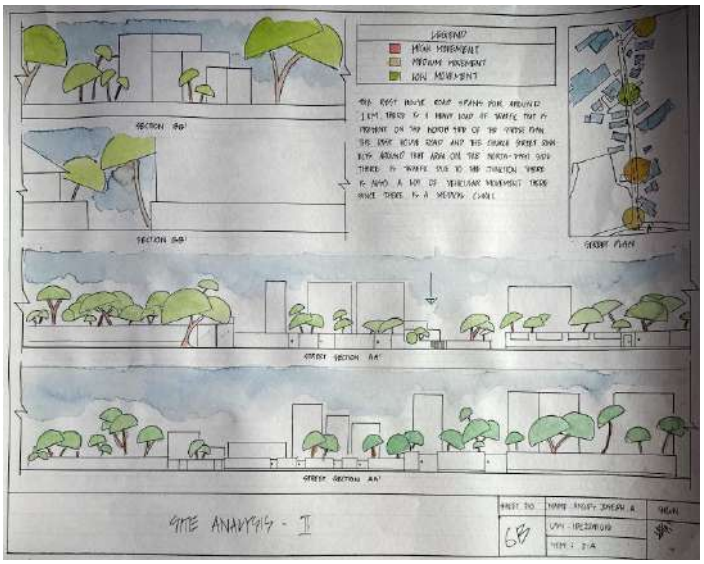

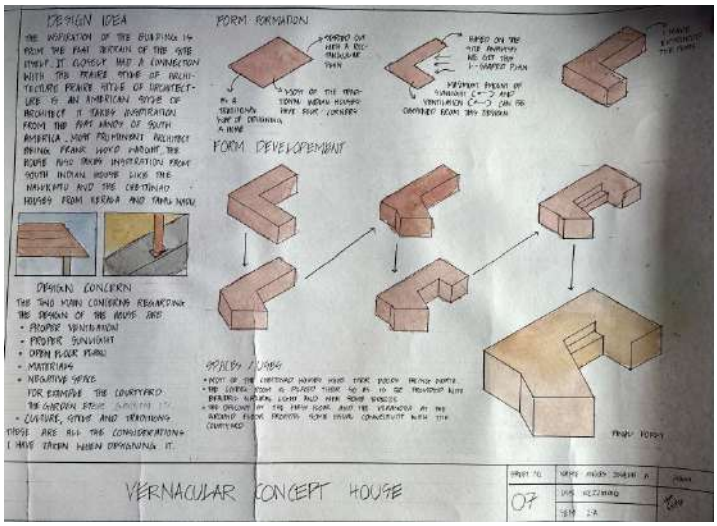

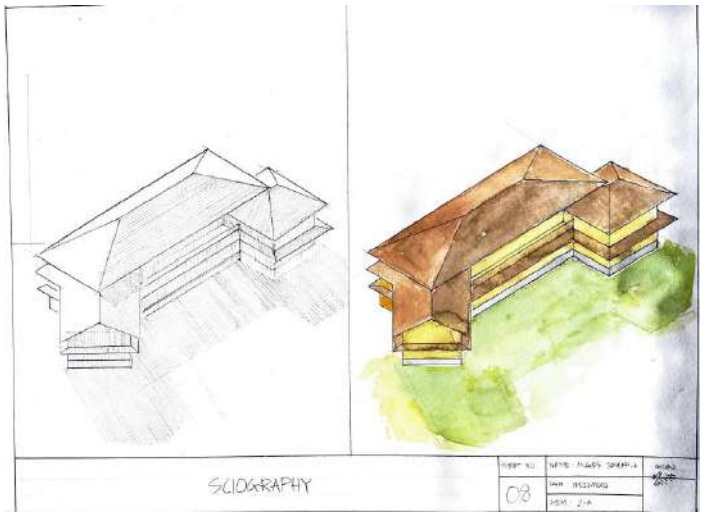

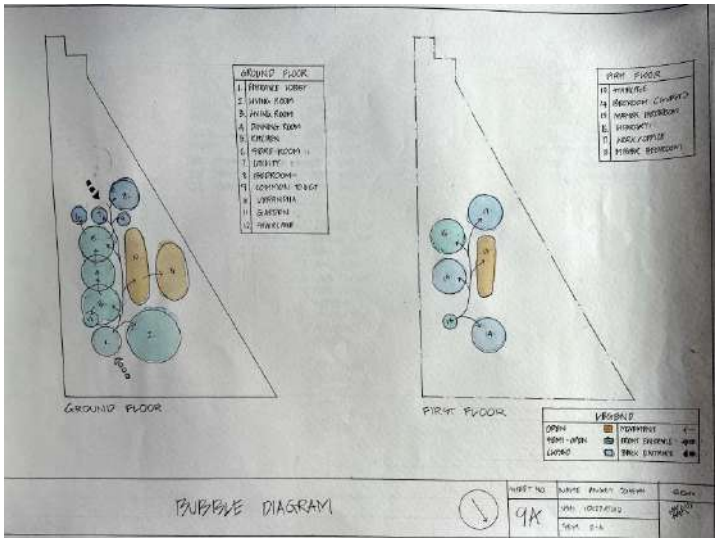

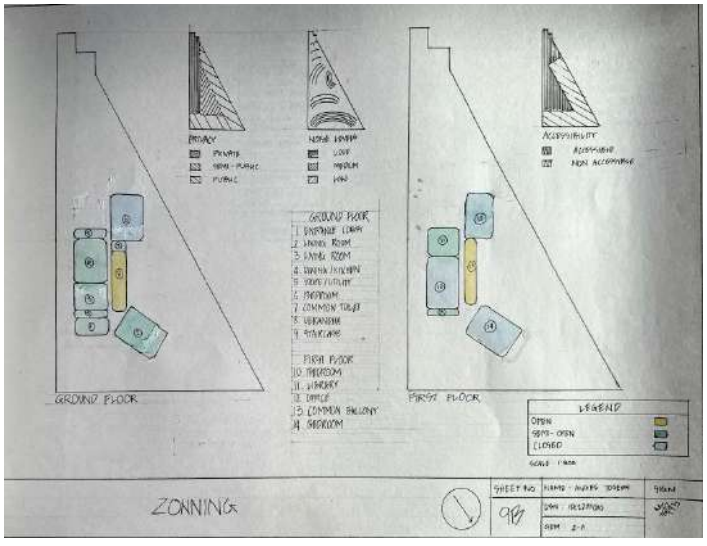

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Ar. Mythrayi Harshavardhan, Artist Pramod Stephen

Anges Joseph A
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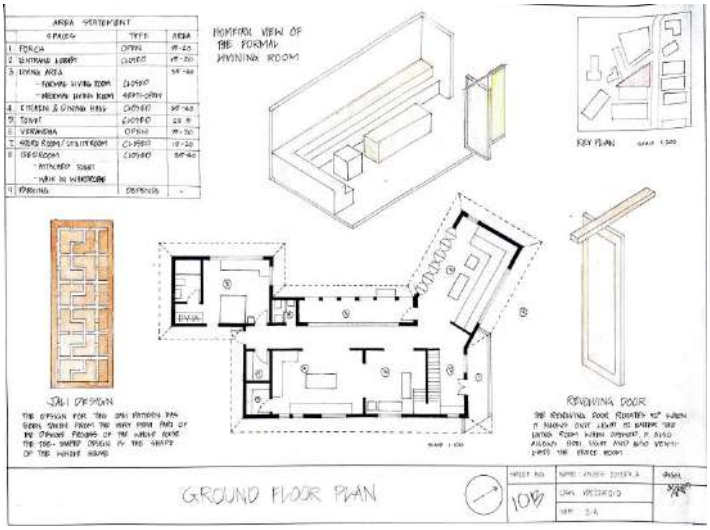
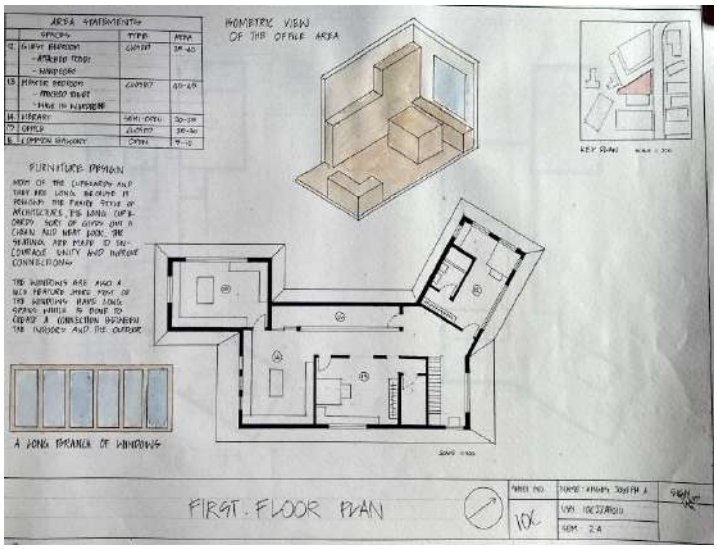
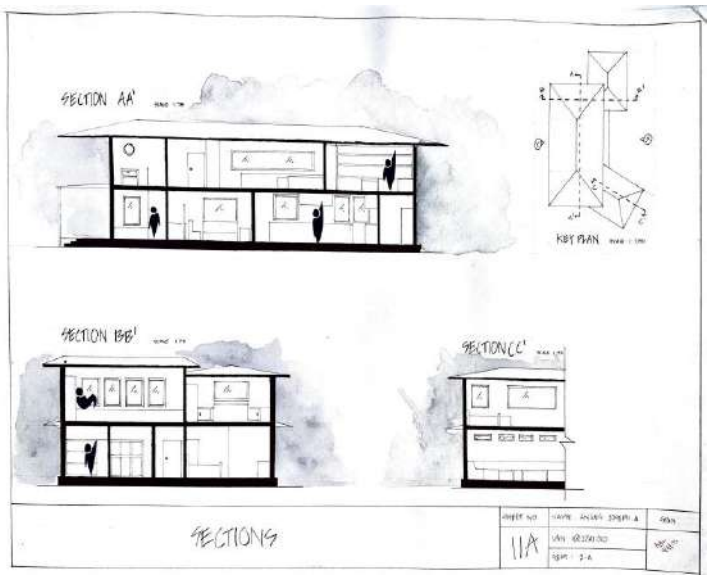


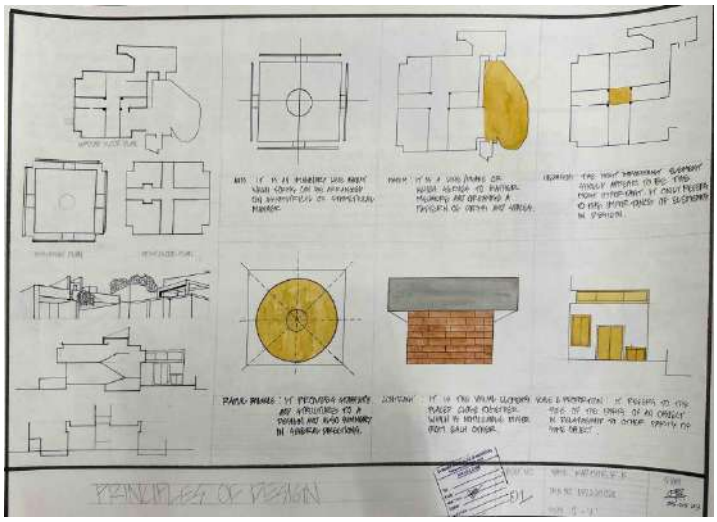


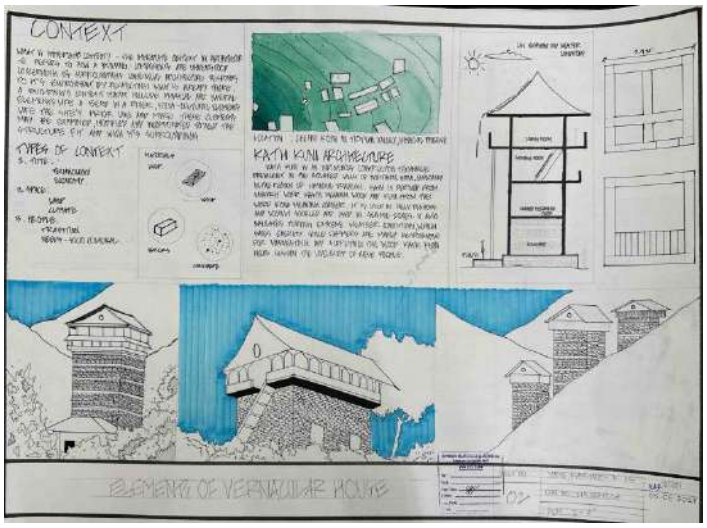


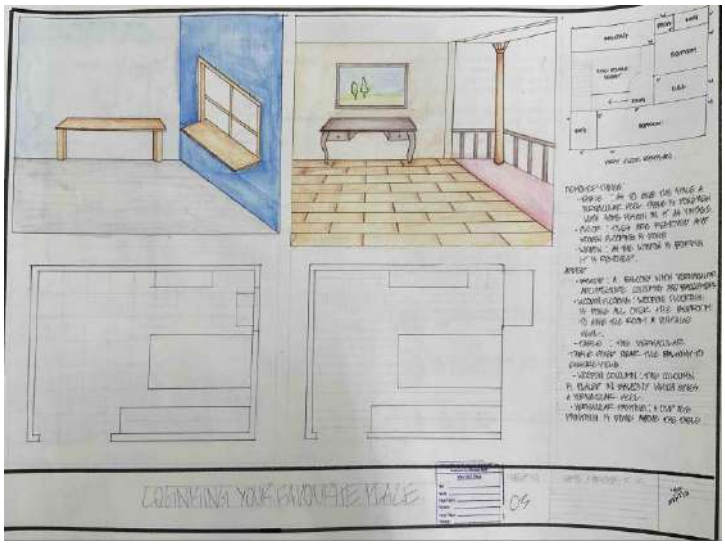
Traditional House Design **AD - II**

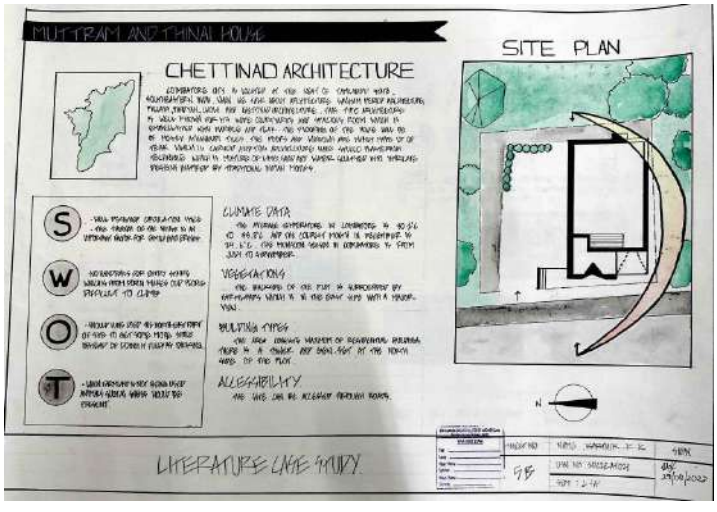
Architectural Design II
Faculty: Ar. Nikhil Ravindra, Ar. Chaitali M Babar,
Ar. Mythrayi Harshavardhan, Artist Pramod Stephen

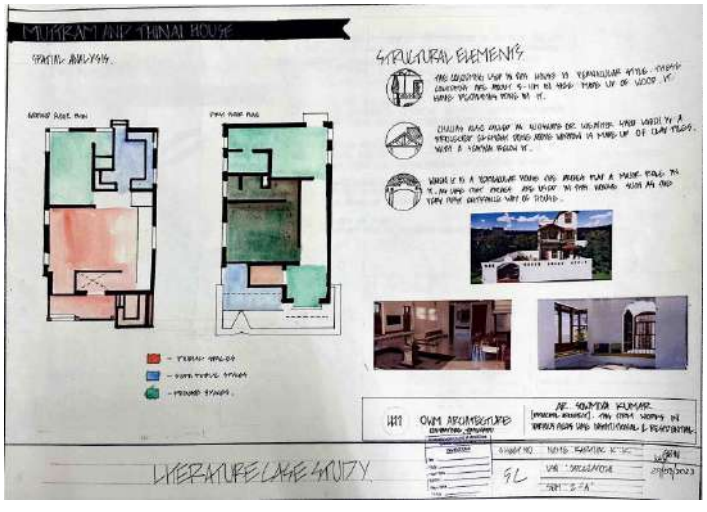
Karthik K.
1DC22AT028







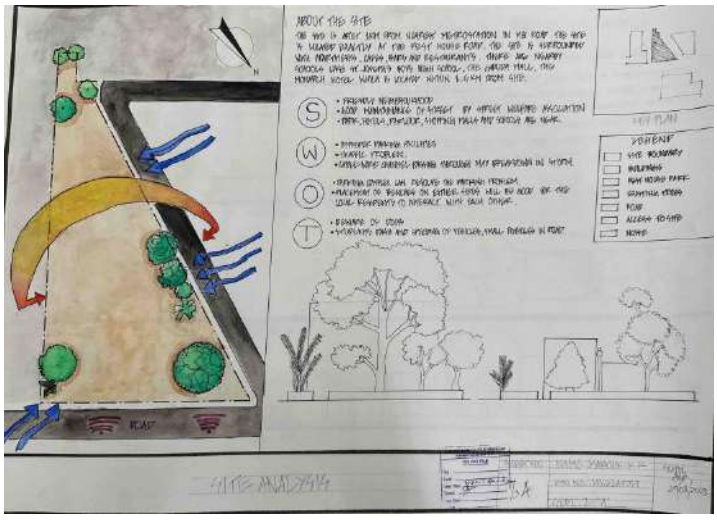


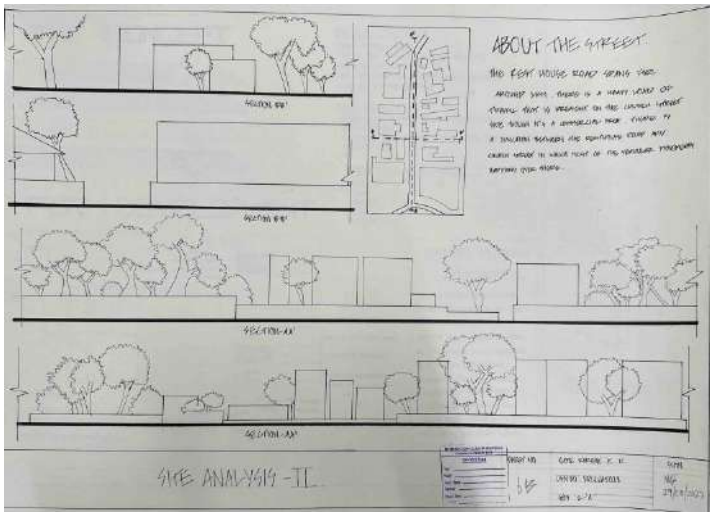


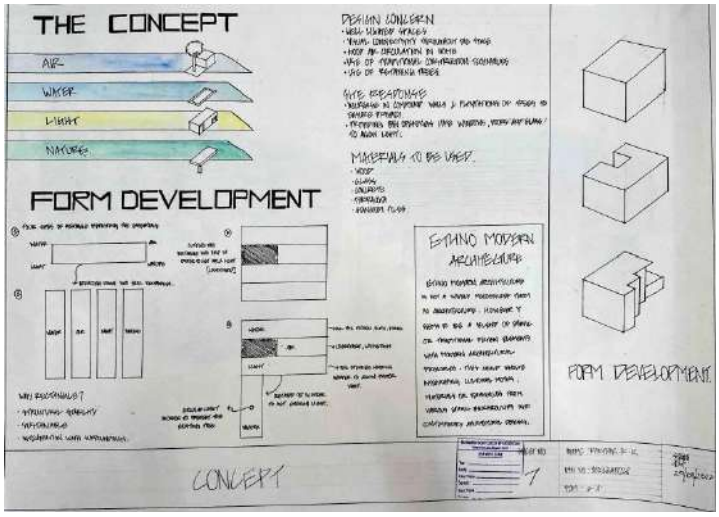
Traditional House Design **AD - II**

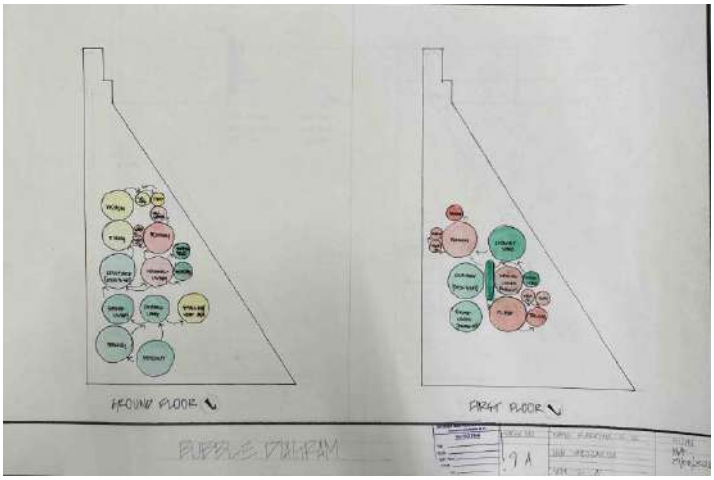
Architectural Design II
Faculty: Ar. Nikhil Ravindra, Ar. Chaitali M Babar,
Ar. Mythrayi Harshavardhan, Artist Pramod Stephen

Karthik K.
1DC22AT028









Traditional House Design

AD - II

Architectural Design II
Faculty: Ar. Nikhil Ravindra, Ar. Chaitali M Babar,
Ar. Mythrayi Harshavardhan, Artist Pramod Stephen

Karthik K.
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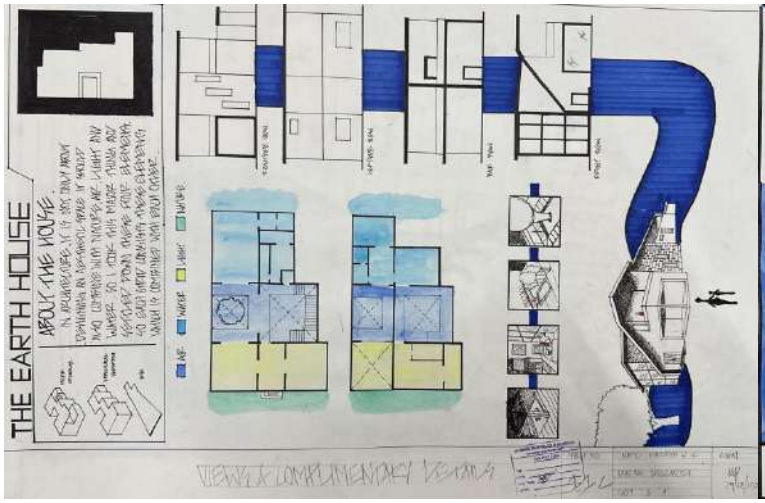

Architectural Design II
Faculty: Ar. Nikhil Ravindra, Ar. Chaitali M Babar,
Ar. Mythrayi Harshavardhan, Artist Pramod Stephen

Devishree B.S.
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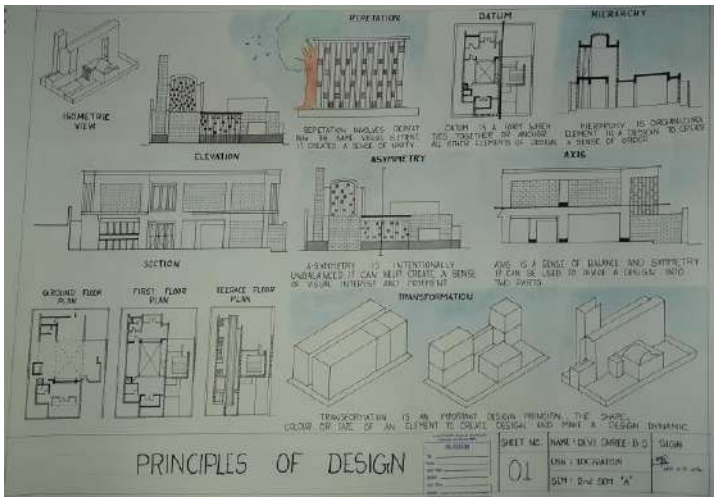

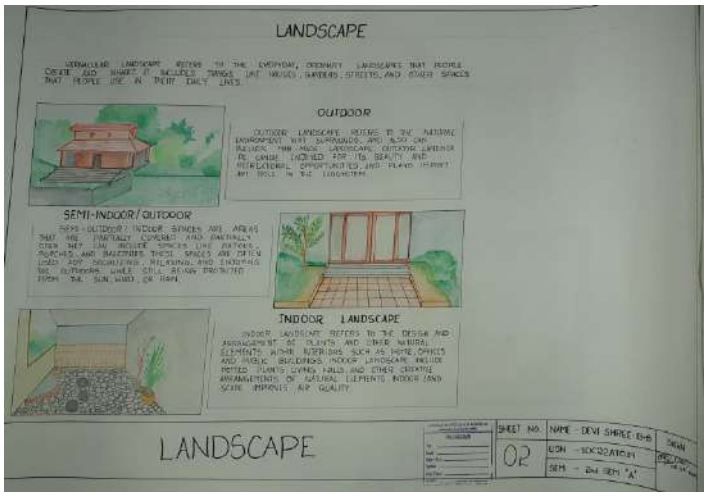

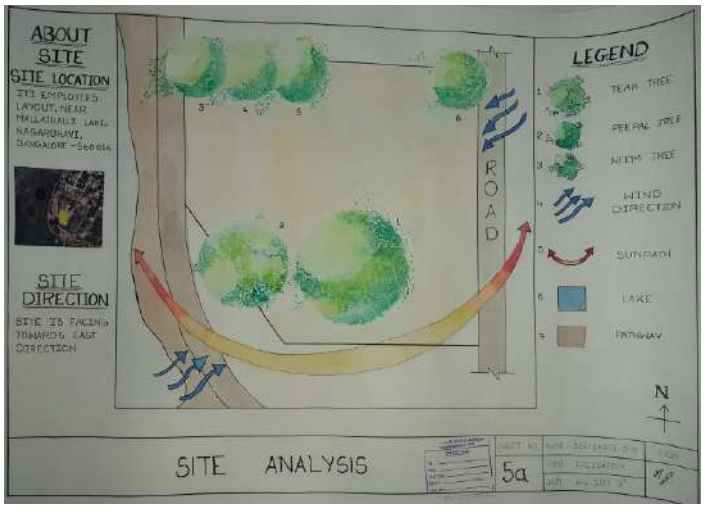

Traditional House Design

AD - II

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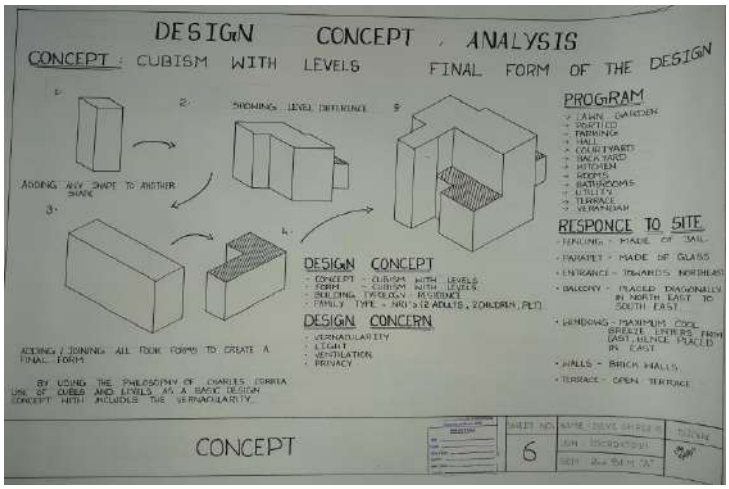
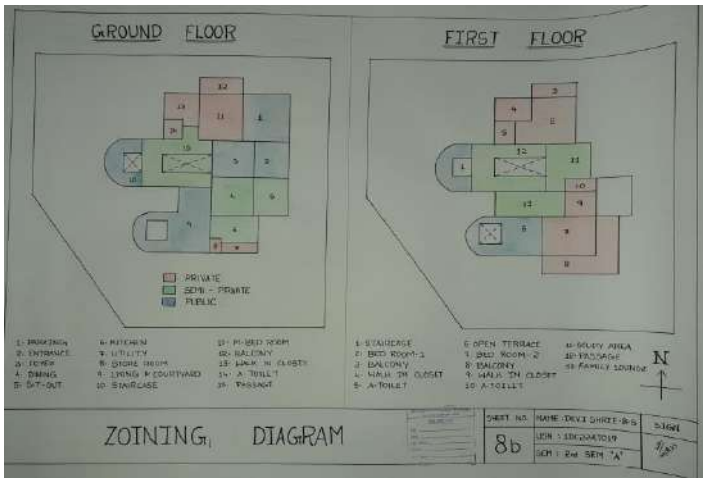
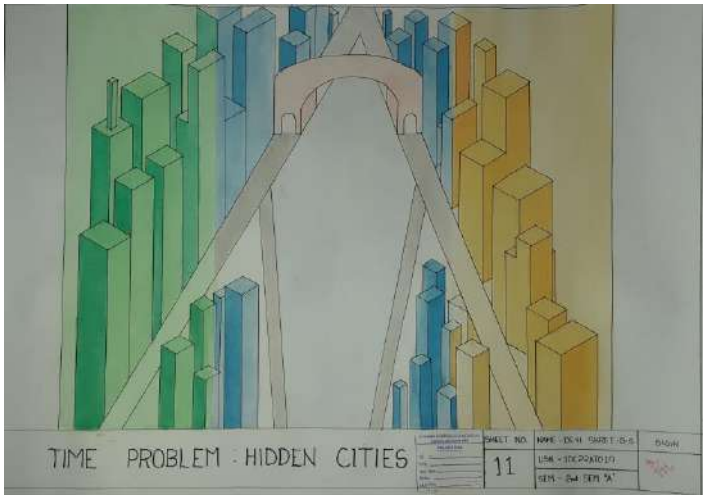
Devishree B.S.
1DC22AT019







MMBC – II

OBJECTIVES
- To understand Roofing systems using Timber, Steel Truss and Concrete. Cement, Steel and Reinforced Concrete.

MODULES
1. Timber Roof – Lean to roof, Collared Roof, King post roof, Queen Post Roof; details of joinery.
2. Steel Roof – Types of Steel Truss Roofs and method of construction.
3. Cement: Types, applications, Tests - laboratory and field.
4. Steel: Properties and uses of reinforced steel.
5. Concrete: Ingredients, grades, admixtures, properties, production, mix, proportioning and placing of concrete.
6. Reinforced Cement Concrete: Form work, placing, and compaction, curing of concrete, sampling and testing of concrete. Construction joints, expansion joints, finish in concrete, chemical admixtures.
7. RCC Foundations (Isolated footing) and Columns (Square and Round). Raft foundations, Grillage foundations and combined footing
8. Staircase: Anthropometry of stairs, types of Staircases.
9. Timber Stairs: Single and Double Stringer stairs: construction methods and joinery.
10. RCC Stairs: Waist slab, folded plate, stringer beam stairs, precast stairs: construction methods and joinery
11. Steel Stairs: Stringer stairs, Folded Type, Spiral stairs, Fire escape stairs: construction methods and joinery.
12. Composite Stairs: Brick/stone, Steel/Timber, Concrete/wood, steel/ glass: construction methods and joinery.

Materials and Methods in Building Construction 21ARC22

Subject Faculty

Ar. Chanchal Modi

Ar. Pragathi Prassad S

Ar. BB Prakash

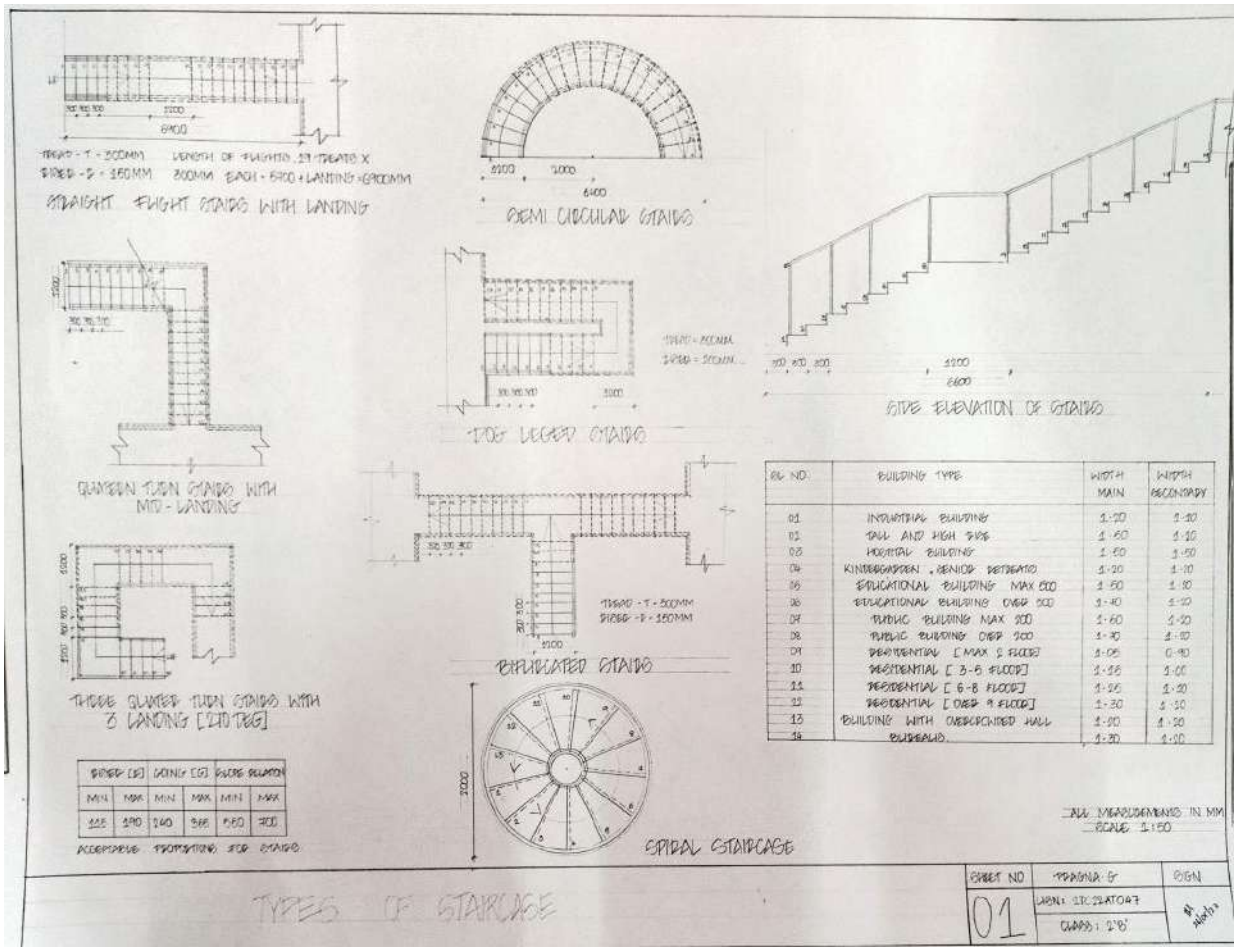
Ar Ravindra Avinash

Ar. Vani Krishnamurthy

Ar. Srimathi Raja

Materials and Methods in Building Construction II
Faculty: Ar. Chanchal Modi, Ar. BB Prakash, Ar. Pragathi Prassad S

Pragna G.
1DC22AT047

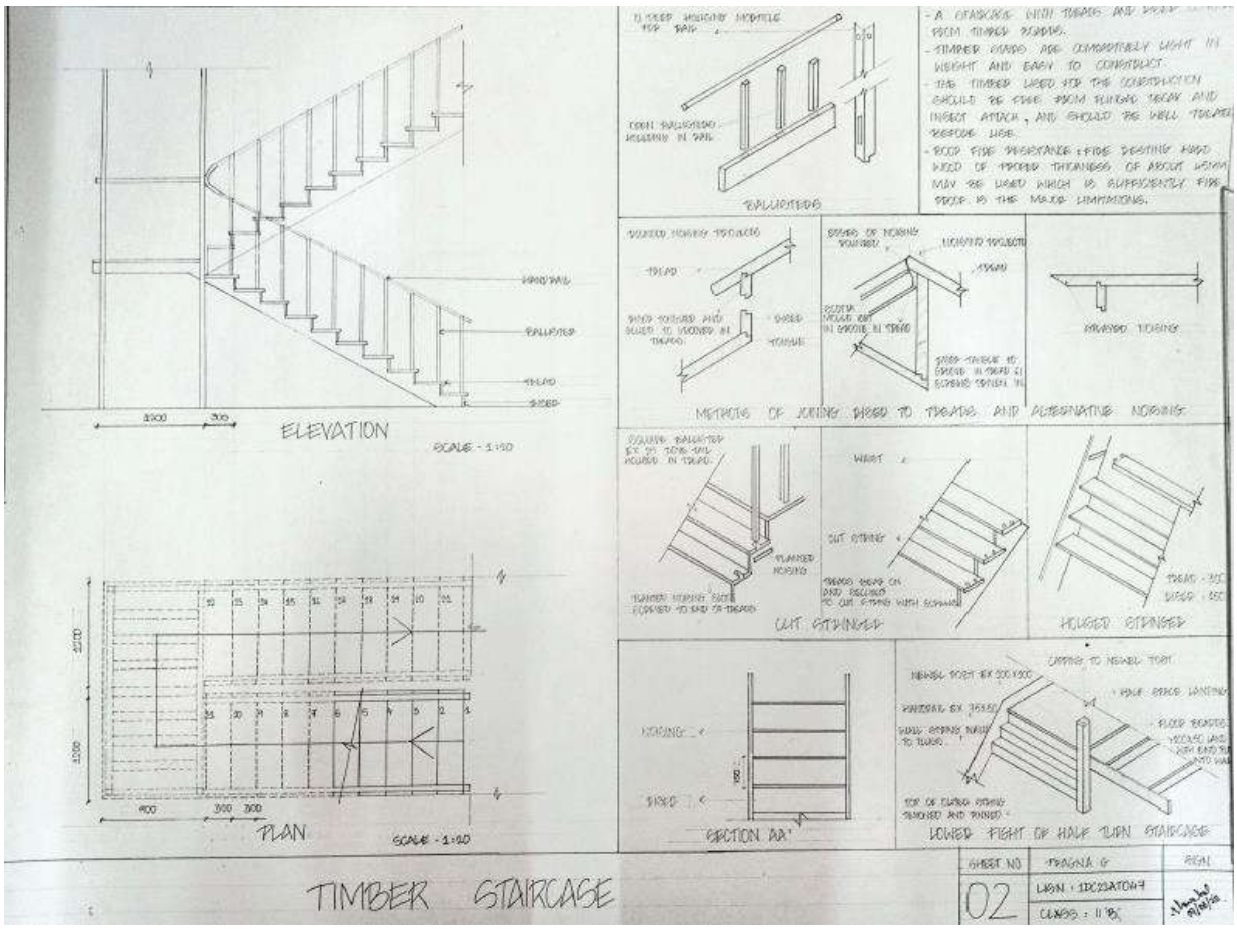


SL NO.	BUILDING TYPE	WIDTH MAIN	WIDTH SECONDARY
01	INDUSTRIAL BUILDING	1:20	1:20
02	TALL AND HIGH RISE	1:60	1:20
03	HOSPITAL BUILDING	1:60	1:60
04	KINDERGARTEN , SENIOR RESIDENTIAL	1:20	1:20
05	EDUCATIONAL BUILDING MAX 500	1:60	1:30
06	EDUCATIONAL BUILDING OVER 500	1:40	1:20
07	PUBLIC BUILDING MAX 300	1:60	1:30
08	PUBLIC BUILDING OVER 300	1:40	1:30
09	RESIDENTIAL [MAX 5 FLOOR]	1:05	0:90
10	RESIDENTIAL [3-5 FLOOR]	1:35	1:00
11	RESIDENTIAL [6-8 FLOOR]	1:50	1:30
12	RESIDENTIAL [OVER 9 FLOOR]	1:30	1:10
13	BUILDING WITH OVERCROWDED HALL	1:00	1:30
14	AUDITORIUM	1:20	1:00

RISER (R)		GOING (G)		FLOOR FINISH	
MIN	MAX	MIN	MAX	MIN	MAX
115	190	240	355	250	300

ACCEPTABLE PROPORTIONS FOR STAIRS

ALL MEASUREMENTS IN MM
SCALE 1:50



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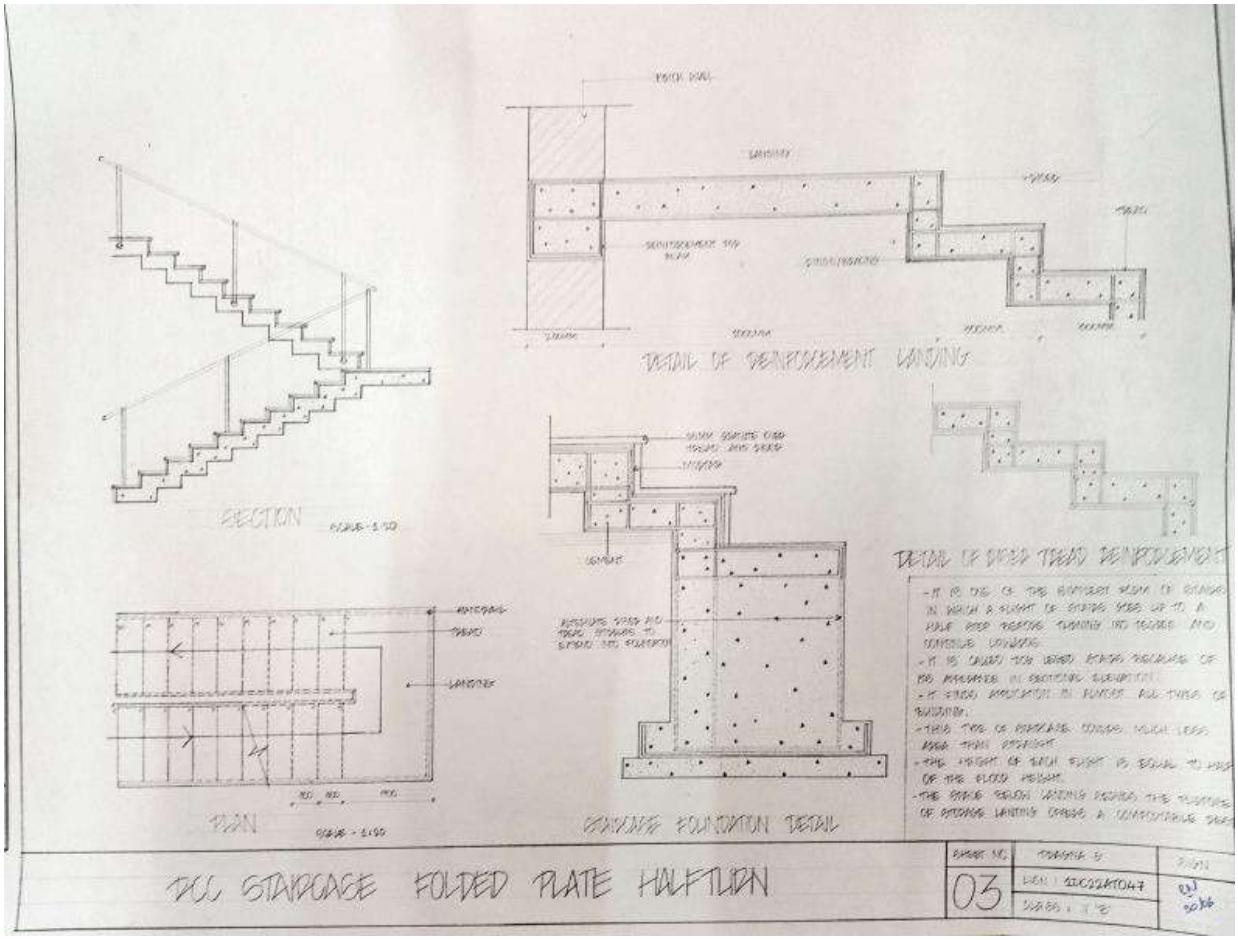
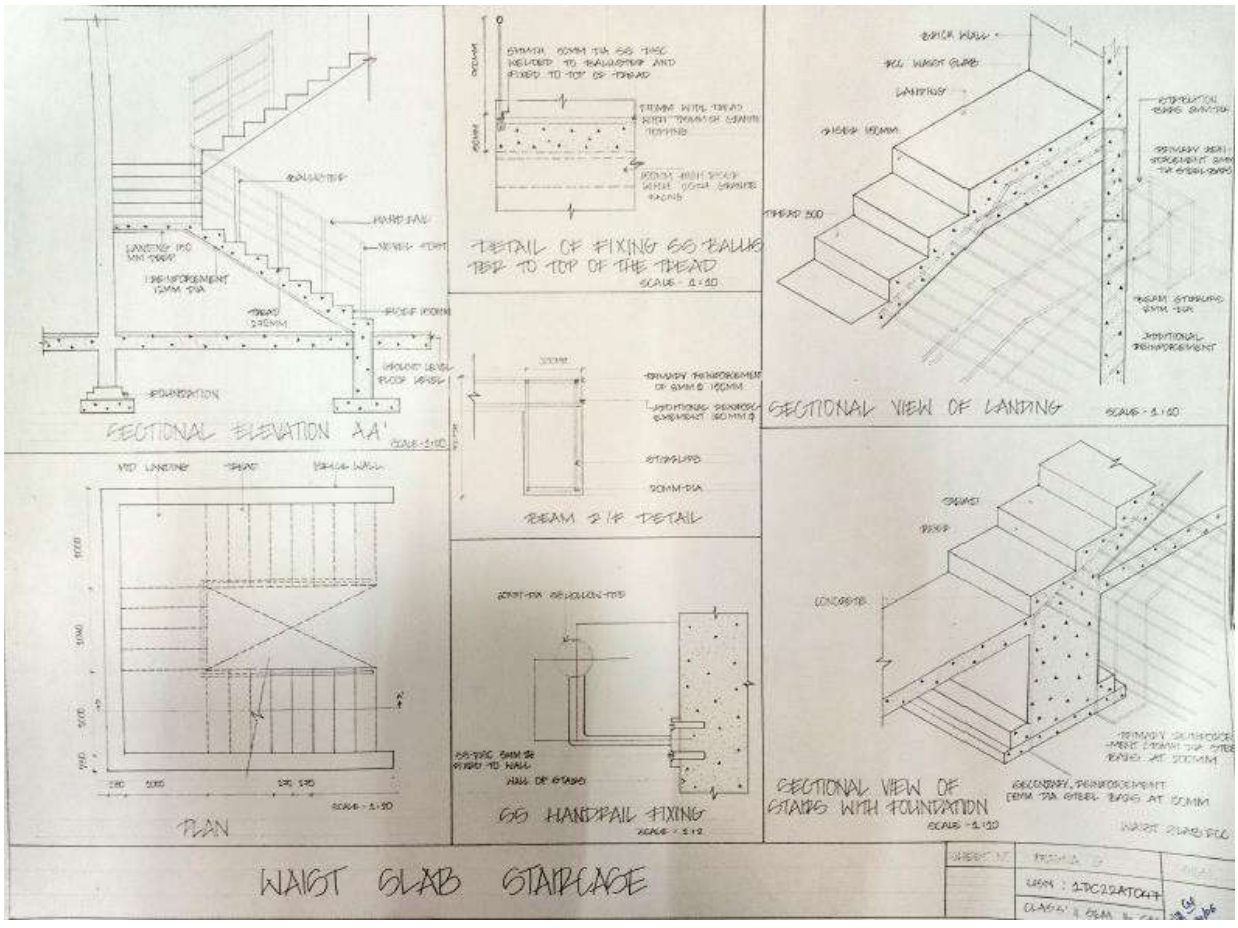
Pragna G.
1DC22AT047





Materials and Methods in Building Construction II
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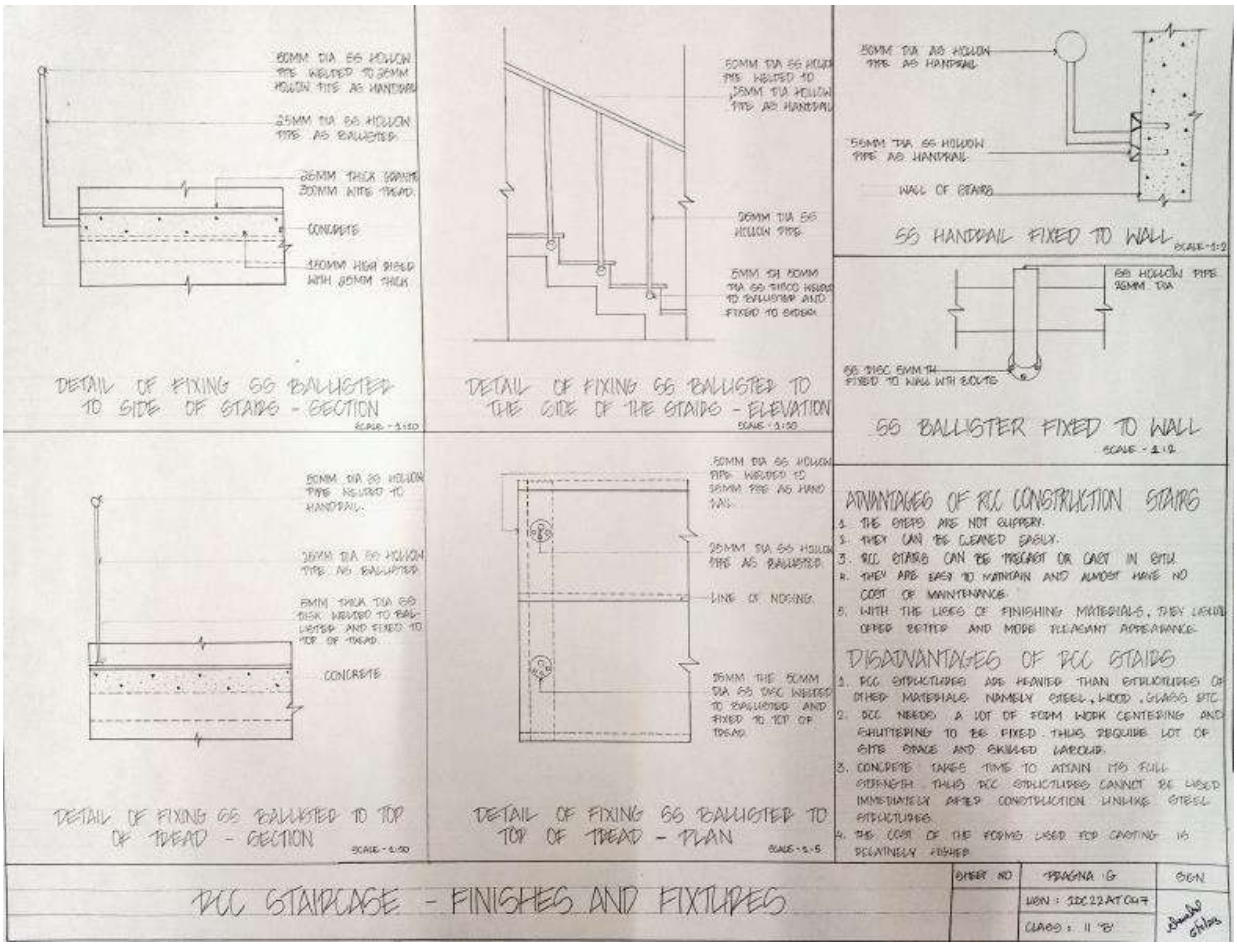
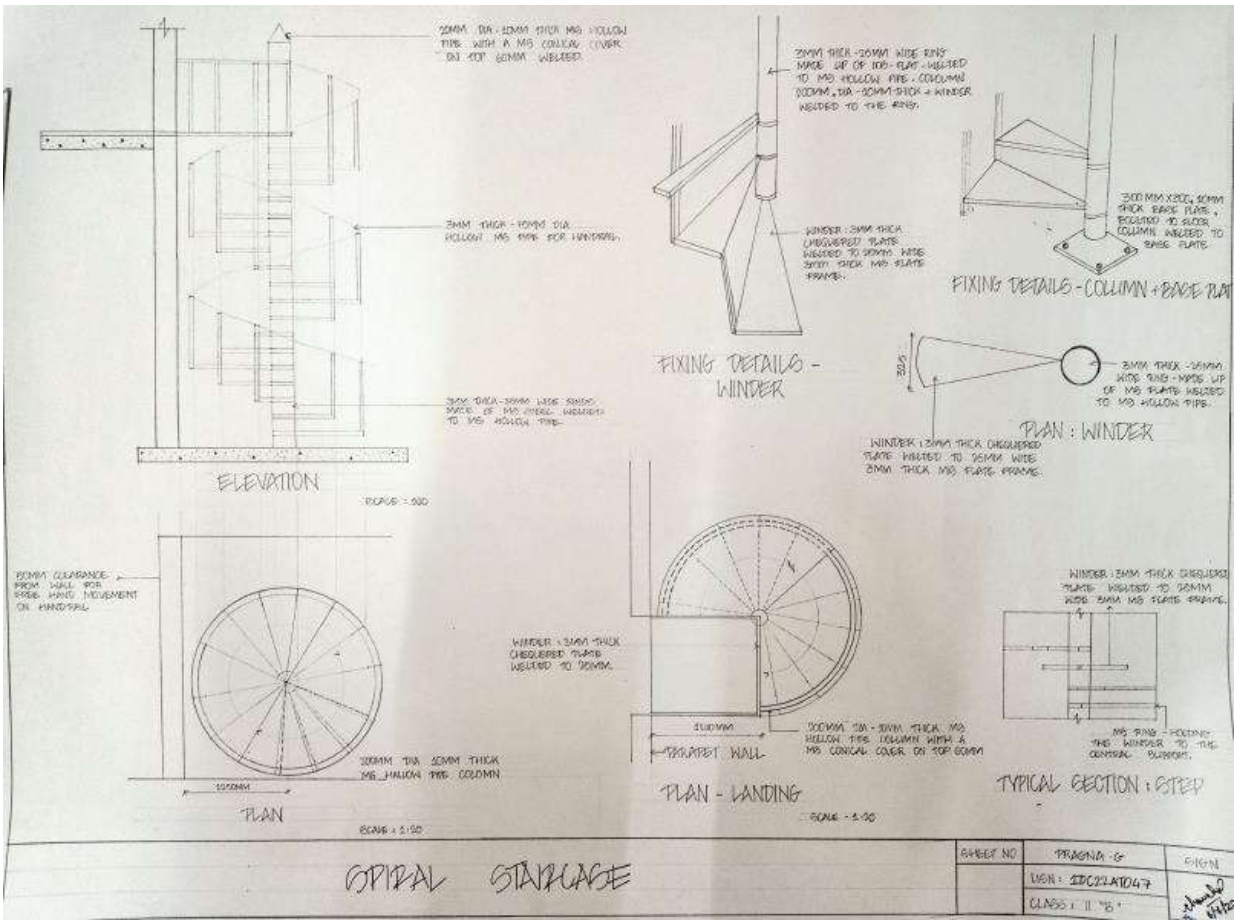
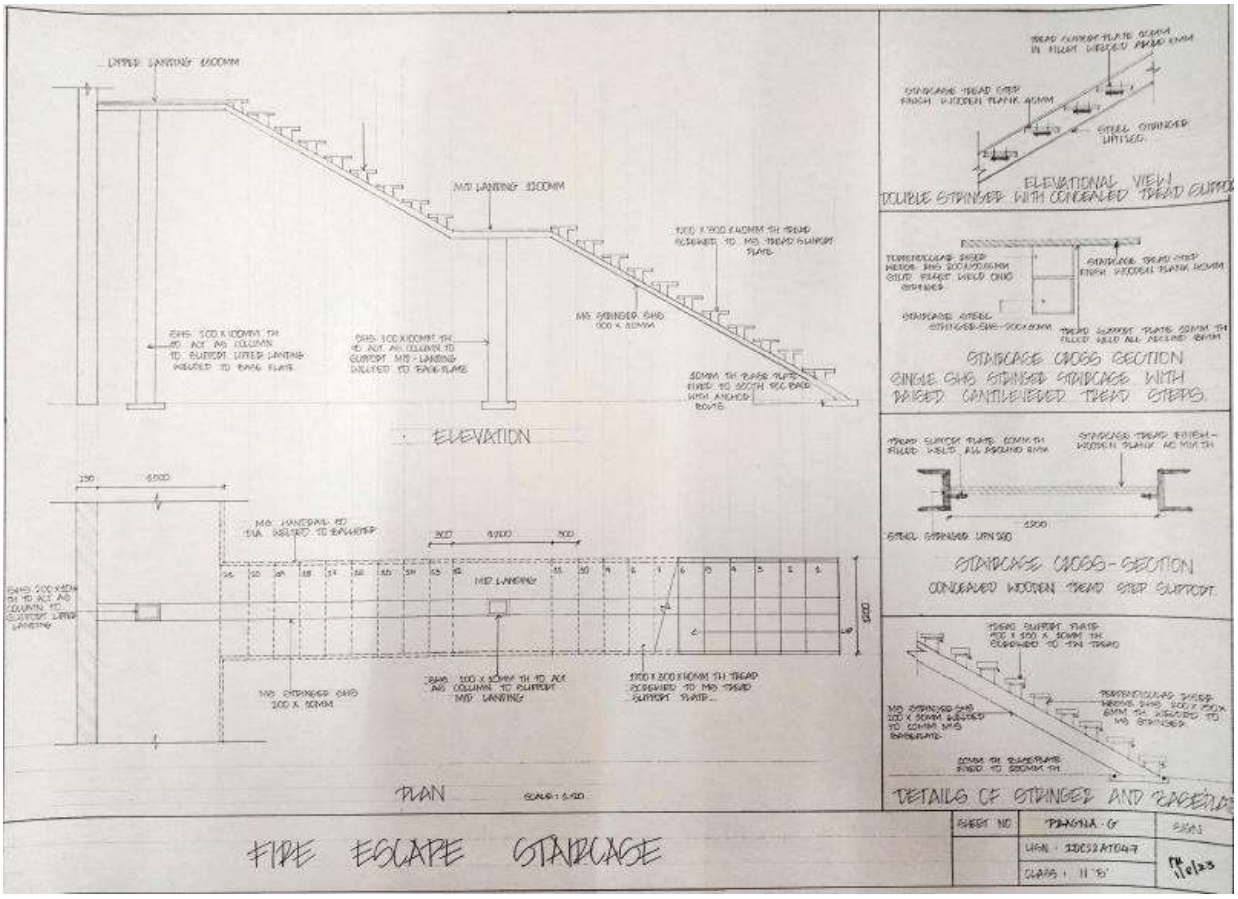
Pragna G.
1DC22AT047

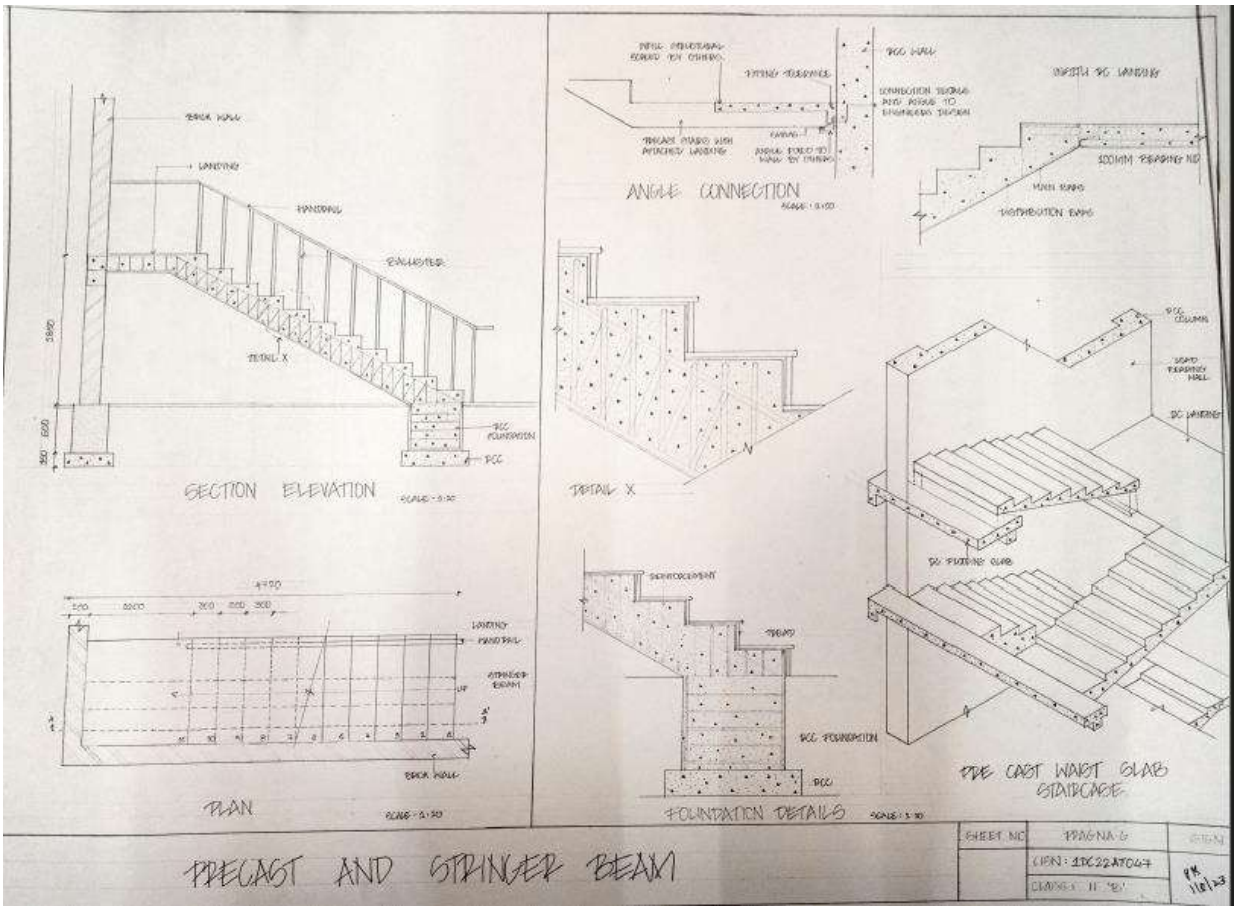


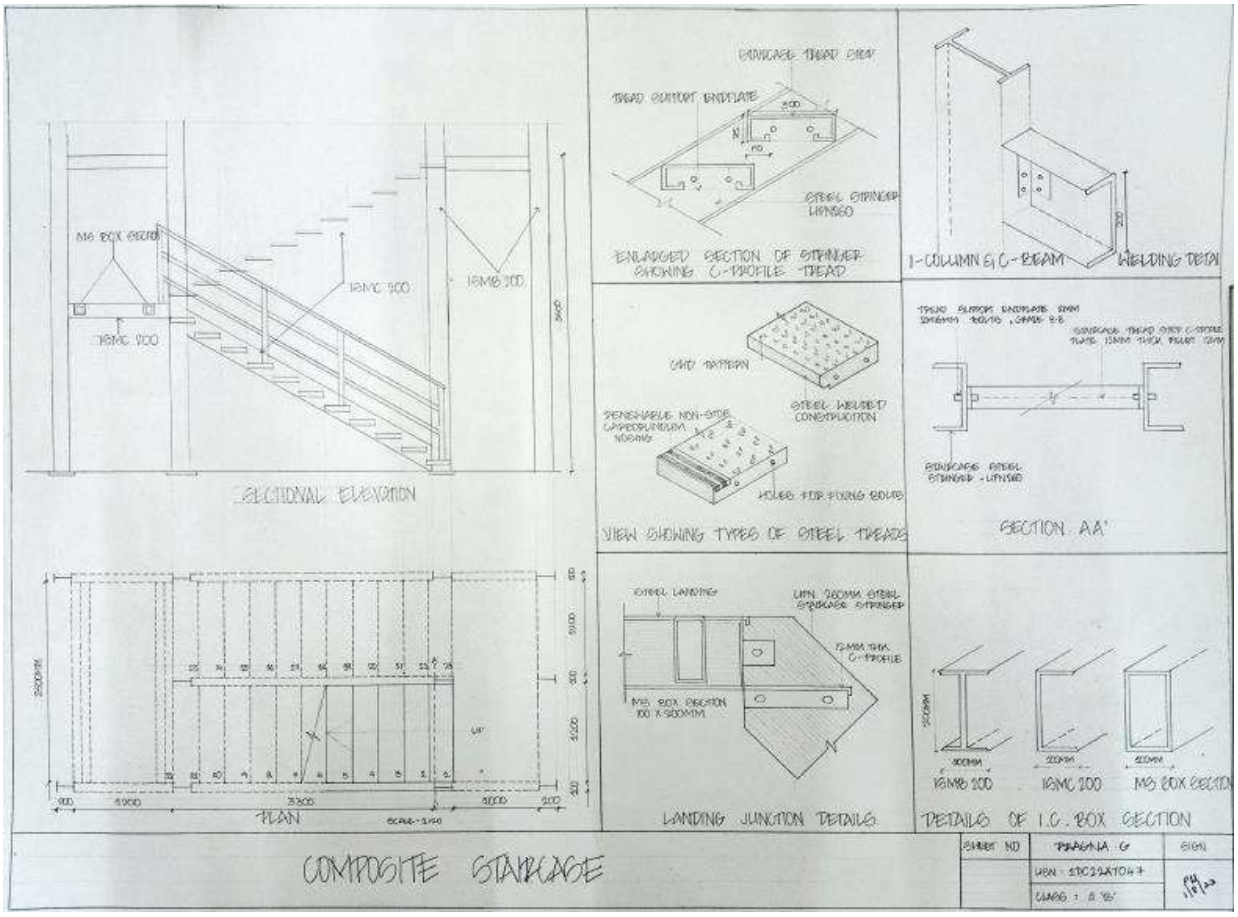


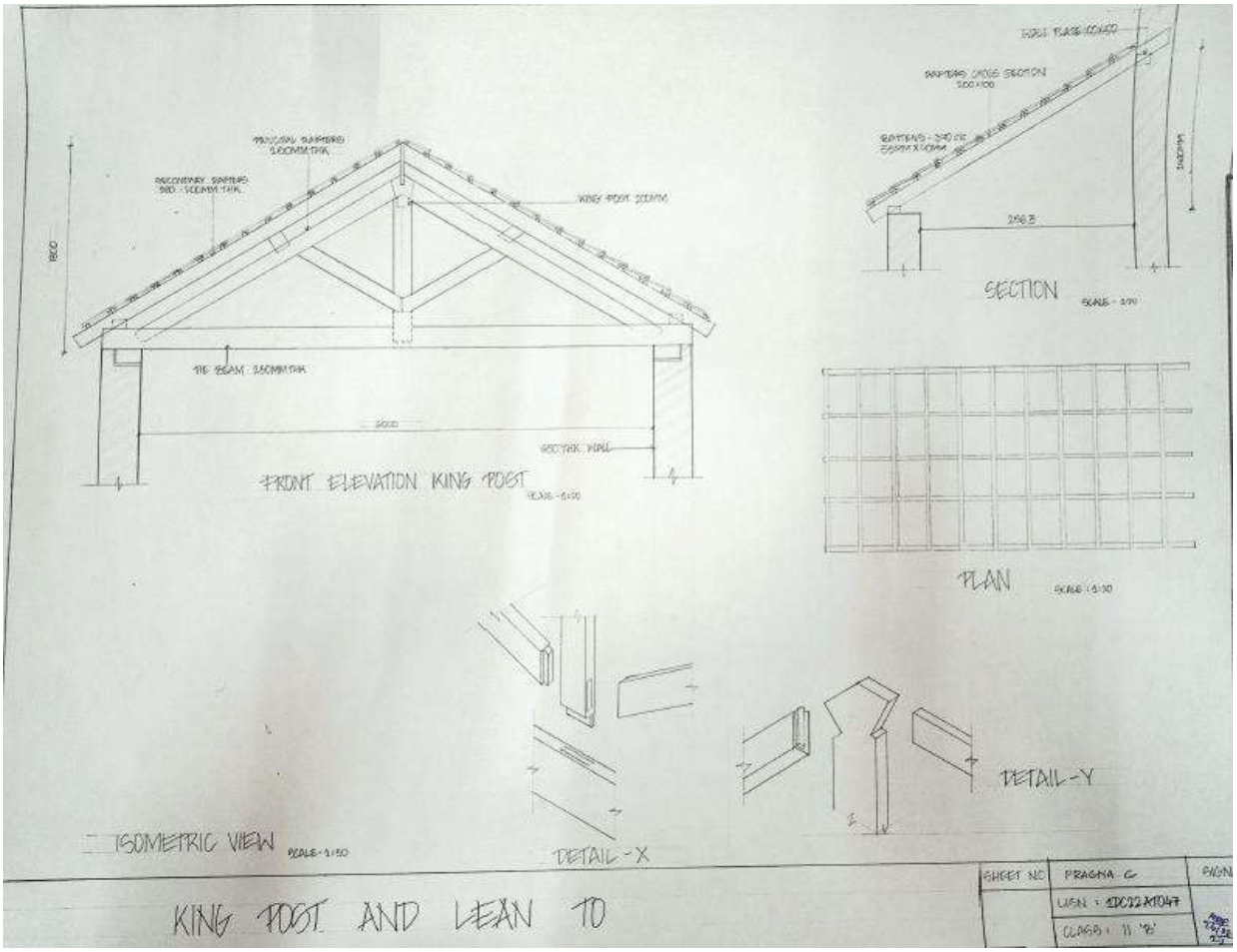
Materials and Methods in Building Construction II
Faculty: Ar. Chanchal Modi, Ar. BB Prakash, Ar. Pragathi Prassad S

Pragna G.
1DC22AT047



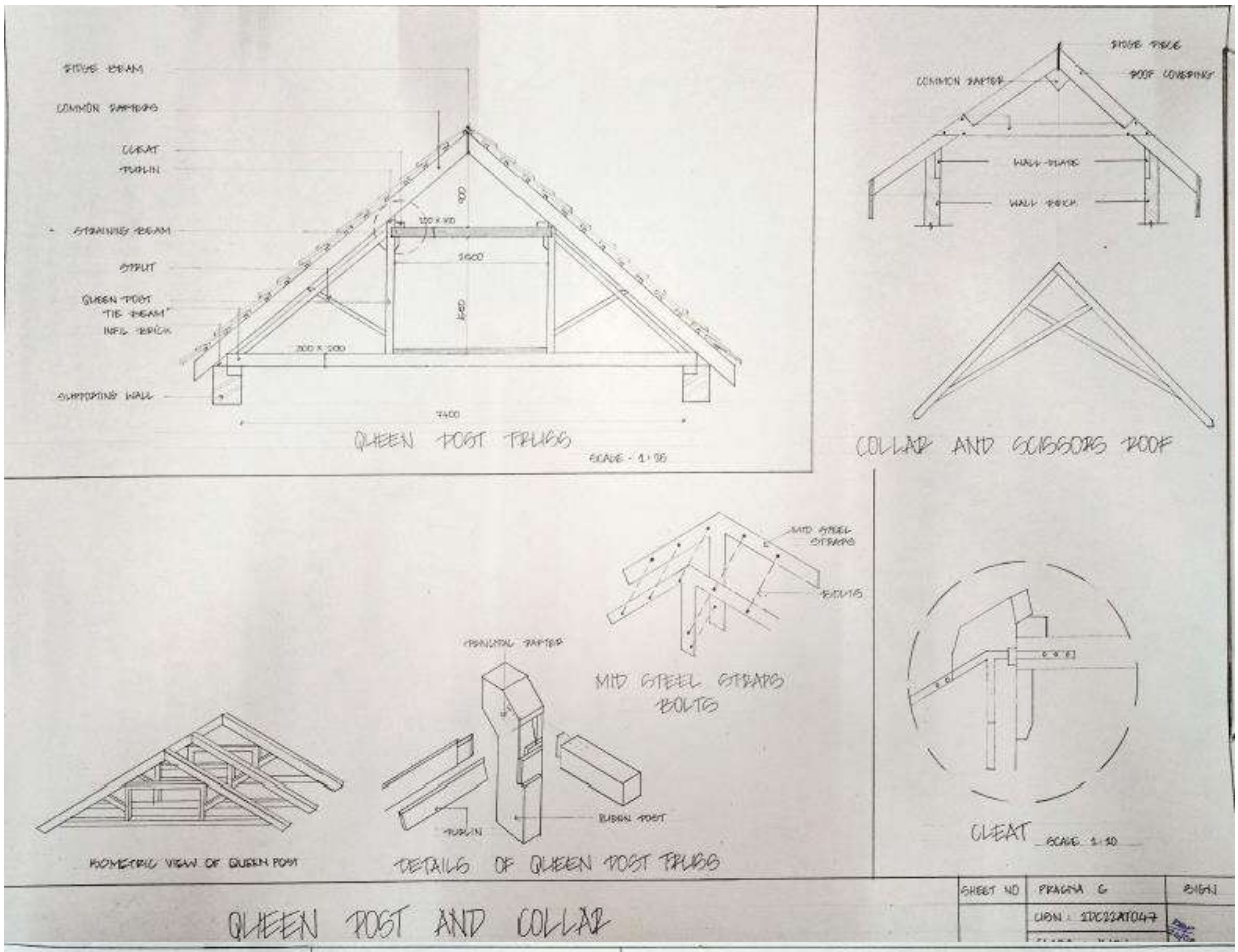


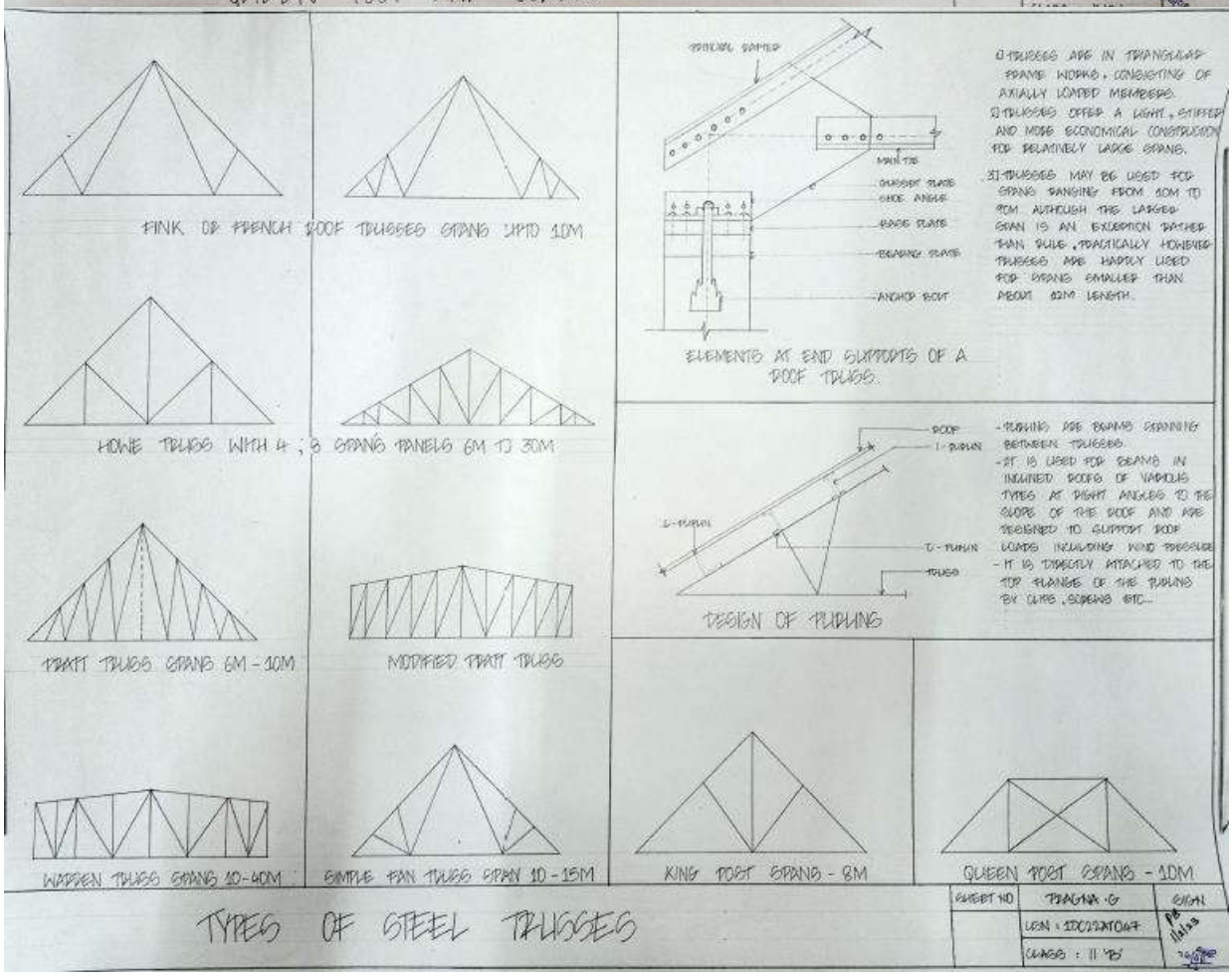

SECTIONAL ELEVATION
PLAN
ENLARGED SECTION OF STRINGER SHOWING C-PROFILE TREAD
VIEW SHOWING TYPES OF STEEL TREADS
I-COLUMN & C-BEAM WELDING DETAI
SECTION A-A'
LANDING JUNCTION DETAILS
DETAILS OF I.C. BOX SECTION
COMPOSITE STAIRCASE


FRONT ELEVATION KING POST
SECTION
PLAN
ISOMETRIC VIEW
DETAIL-X
DETAIL-Y
KING POST AND LEAN TO

Materials and Methods in Building Construction II
Faculty: Ar. Chanchal Modi, Ar. BB Prakash, Ar. Pragathi Prassad S

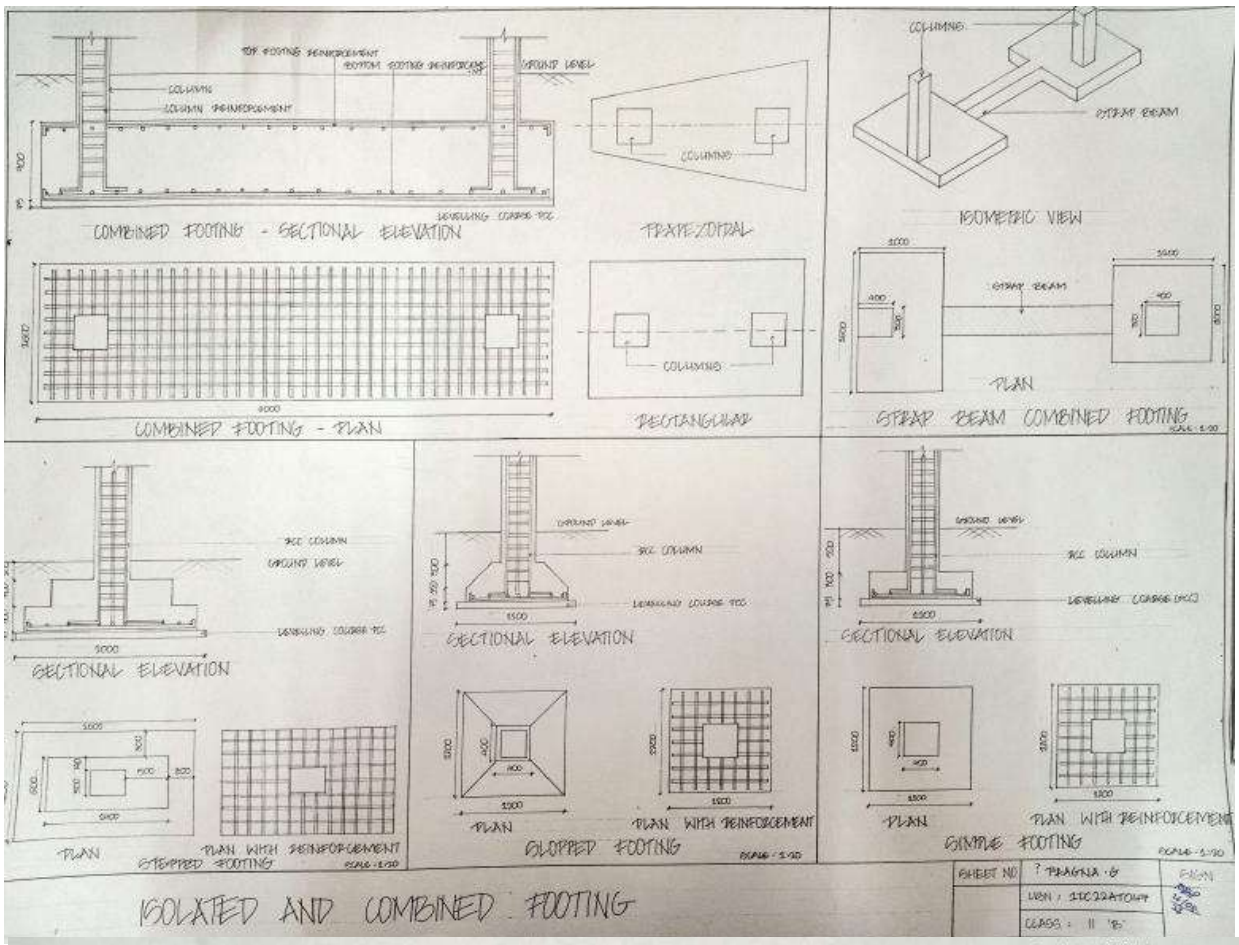
Pragna G.
1DC22AT047

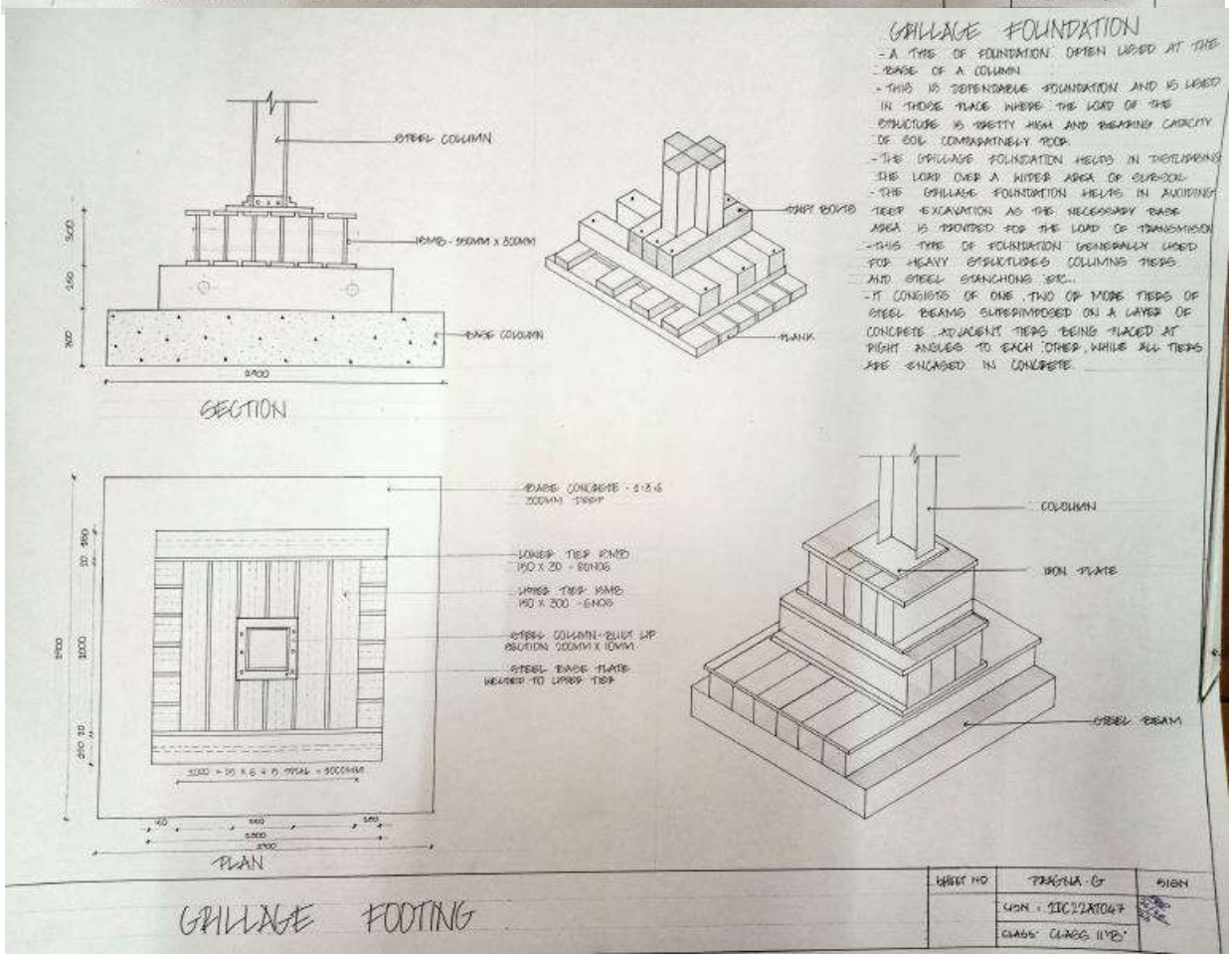




Materials and Methods in Building Construction II
Faculty: Ar. Chanchal Modi, Ar. BB Prakash, Ar. Pragathi Prassad S

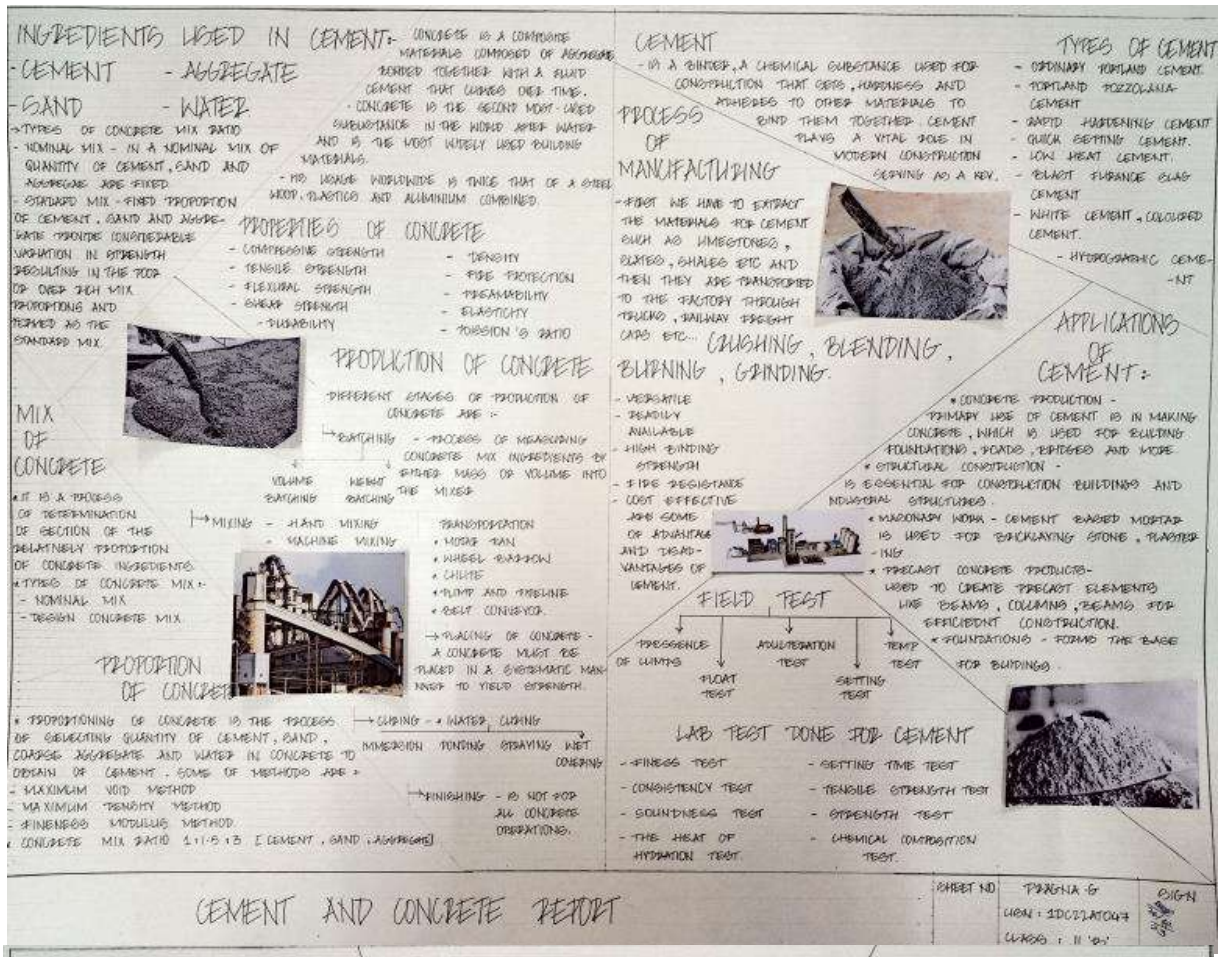
Pragna G.
1DC22AT047

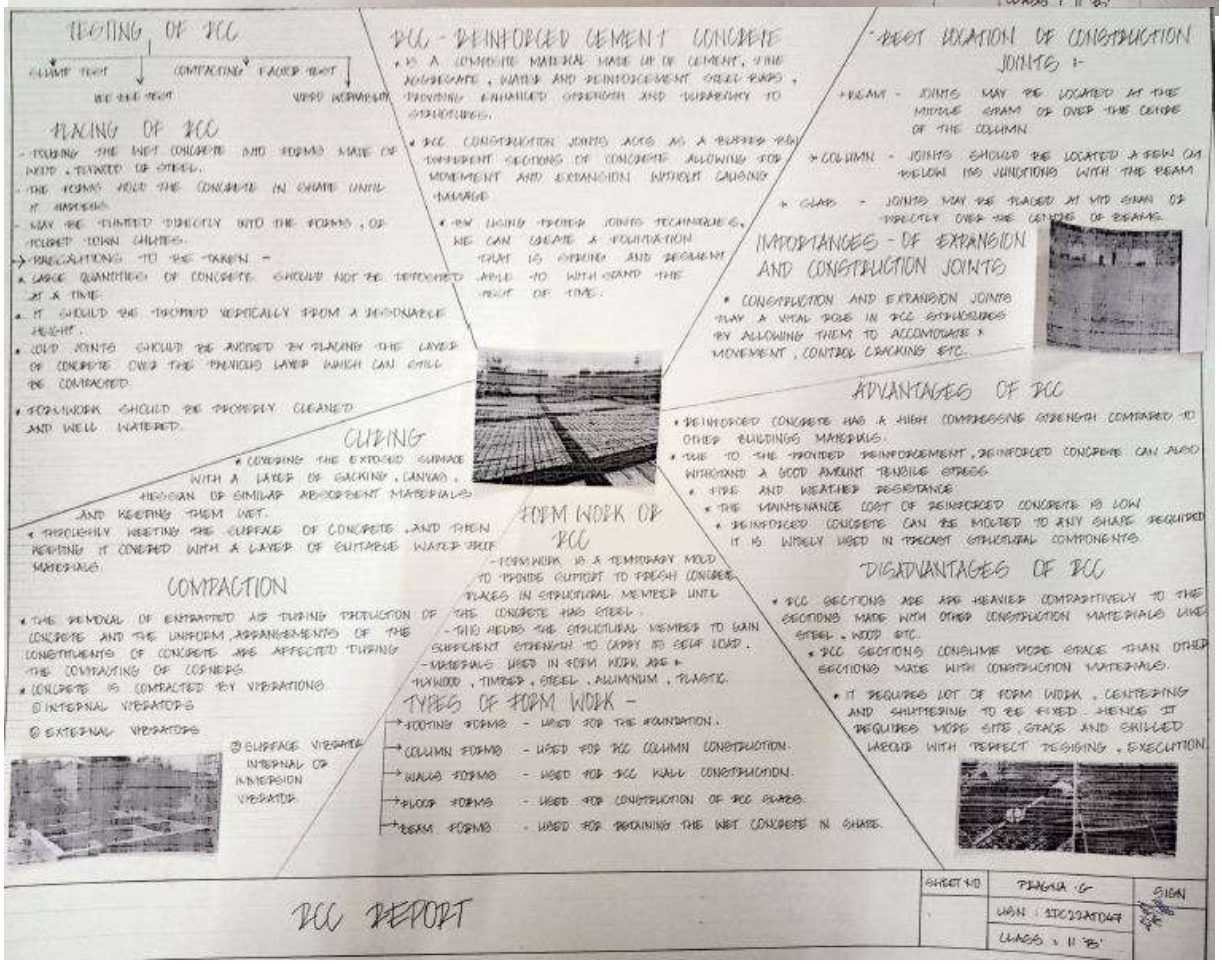




Materials and Methods in Building Construction II
Faculty: Ar. Chanchal Modi, Ar. BB Prakash, Ar. Pragathi Prassad S

Pragna G.
1DC22AT047





Architectural Graphics II 21ARC23

Course objectives:
To develop visual communication and representation skills and methods of presentation of spatial design through 3D drawing techniques.

MODULES:
1. 3D-Projections: exercises in 3D representation of exploded isometric and axonometric views of
objects, furniture and built forms.
2. Development of surfaces for architectural roof forms, built enclosures and envelopes
3. Section of geometrical solids and construction of true shapes.
4. Interpenetration of geometric solids, combination of different forms in architectural compositions.
5. Introduction to perspective drawing: Its importance in architectural drawings, principles of perspective drawing, visual perceptions and its limitations.
6. Studies in perspective drawing: Understanding the importance and purpose of picture plane,
station point, vanishing point, ground level, eye level, cone of vision and central line of vision -
their variations and resultant effects
7. One - point perspective drawings: Exercises of perspective drawings of simple built forms, interior views of a room with furniture.
8. Two-point perspective drawings: exercises of perspective drawings of simple built forms, architectural elements. Interior views of a room with furniture.
9. Free-hand perspective drawings of architectural elements, built forms. Exercises of rendering
techniques showing light, shade and shadow on built forms.
10. Introduction to Sciography: Principles of shade and shadow constructions for geometrical solids, architectural elements and built forms.

Subject Faculty

Ar. Pallavi Mukopadhyay

Ar. Nirzari Mehta

Ar. Gopi Krishna KV

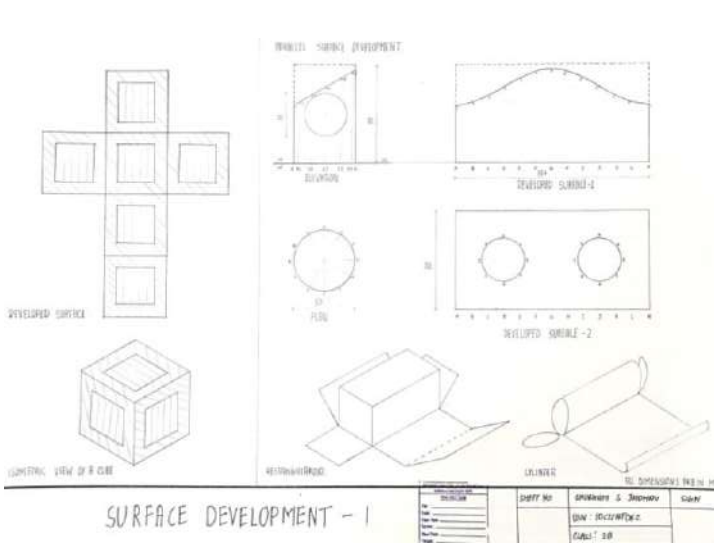
Ar. Pragathi Prassad S

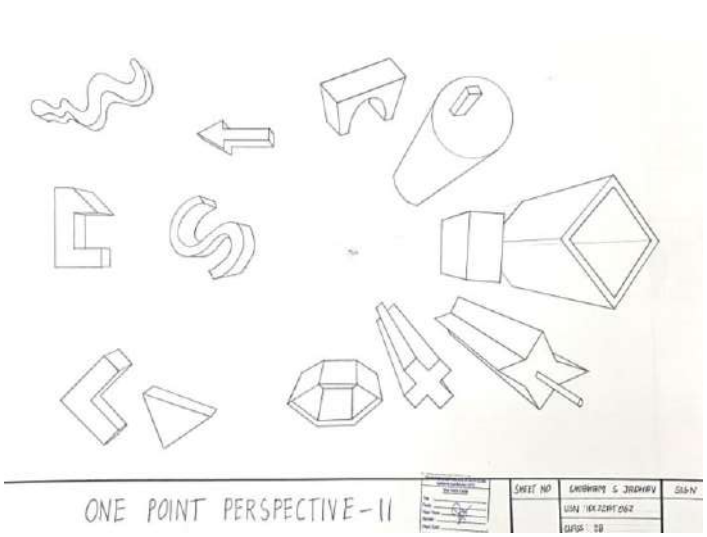
Ar. Chanchal Modi

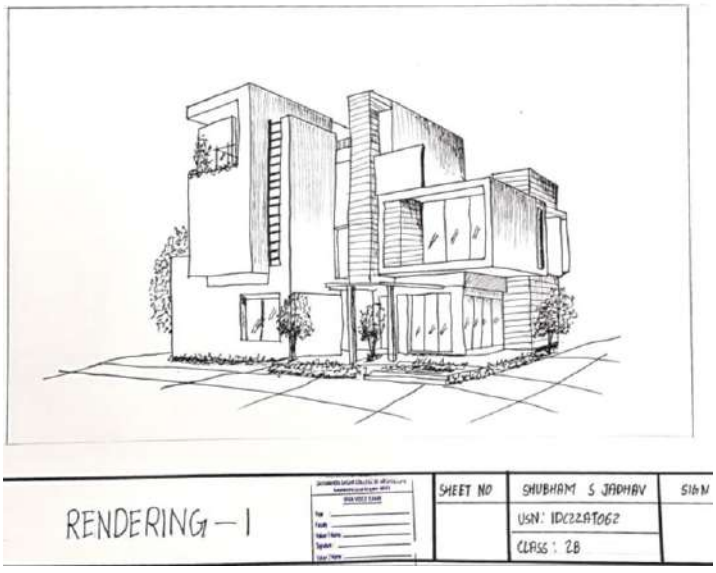
Ar. Shubham Kaushal

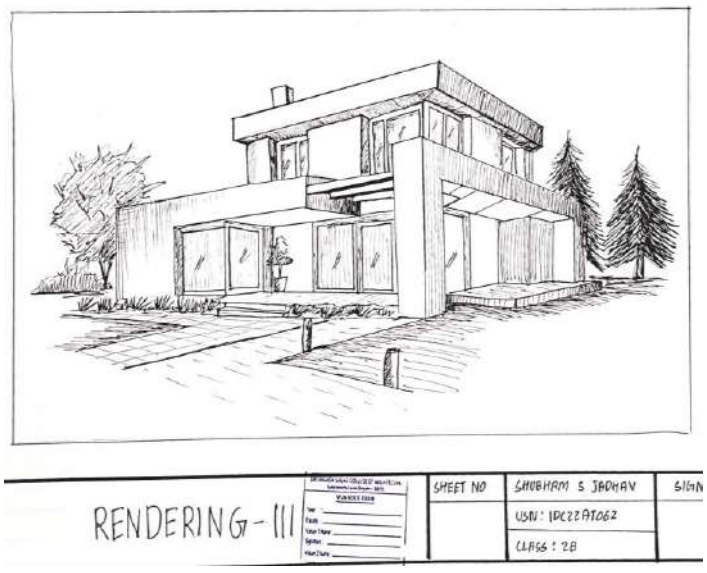
Architectural Graphics II
Faculty: Ar. Nirzari Mehta, Ar. Pragathi Prassad S,
Ar. Shubham Kaushal.

Shubham S Jadhav
1DC22AT062



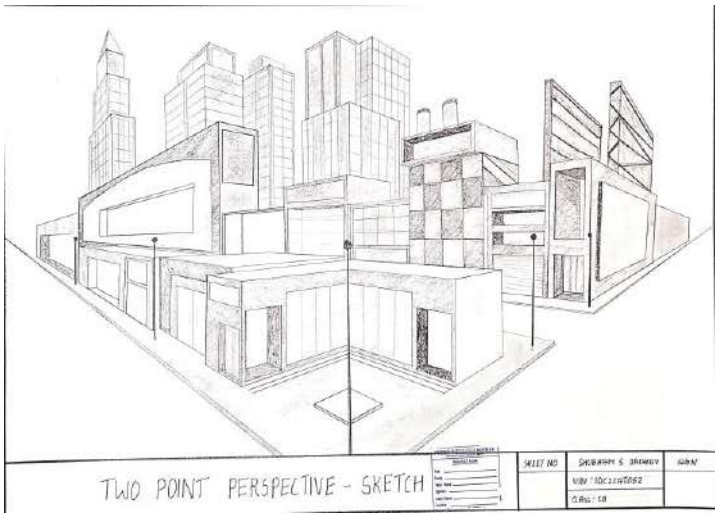


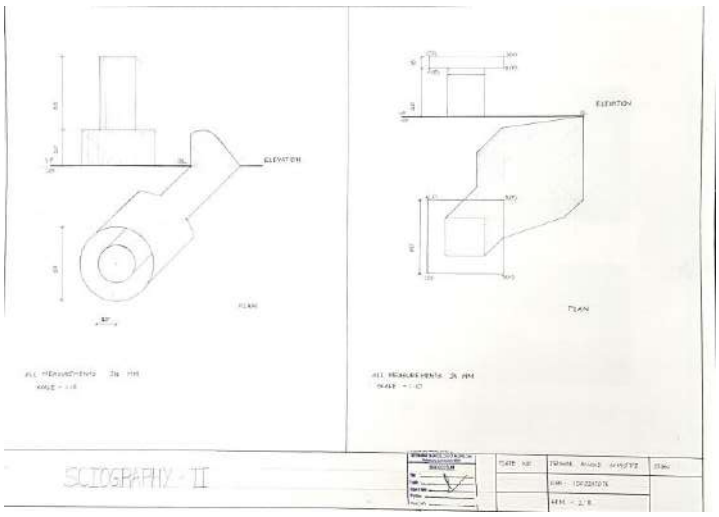


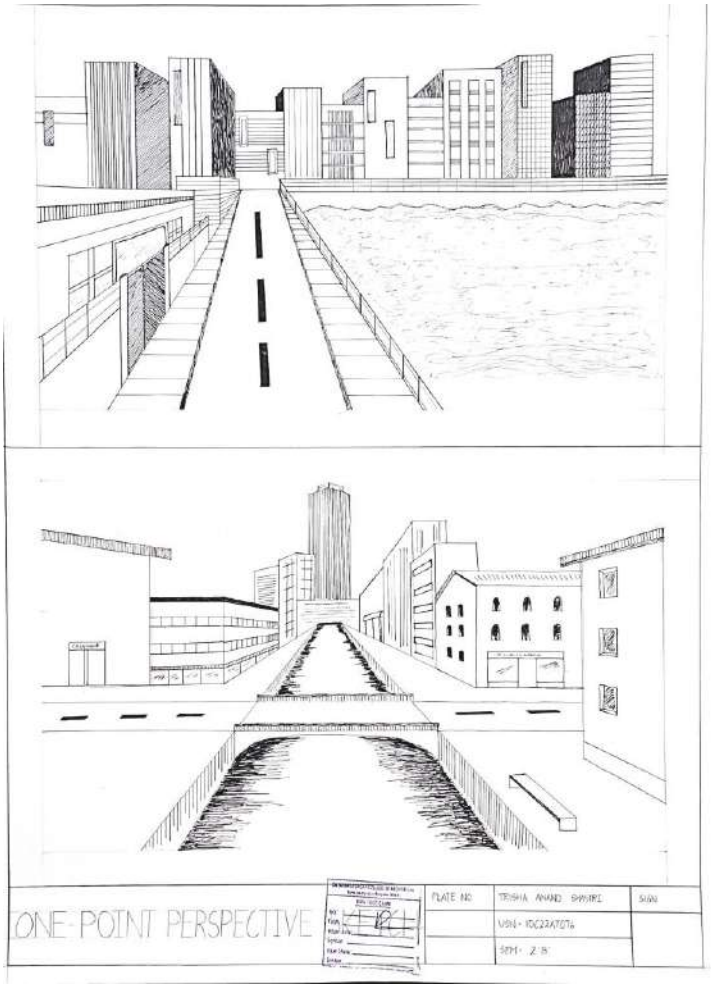


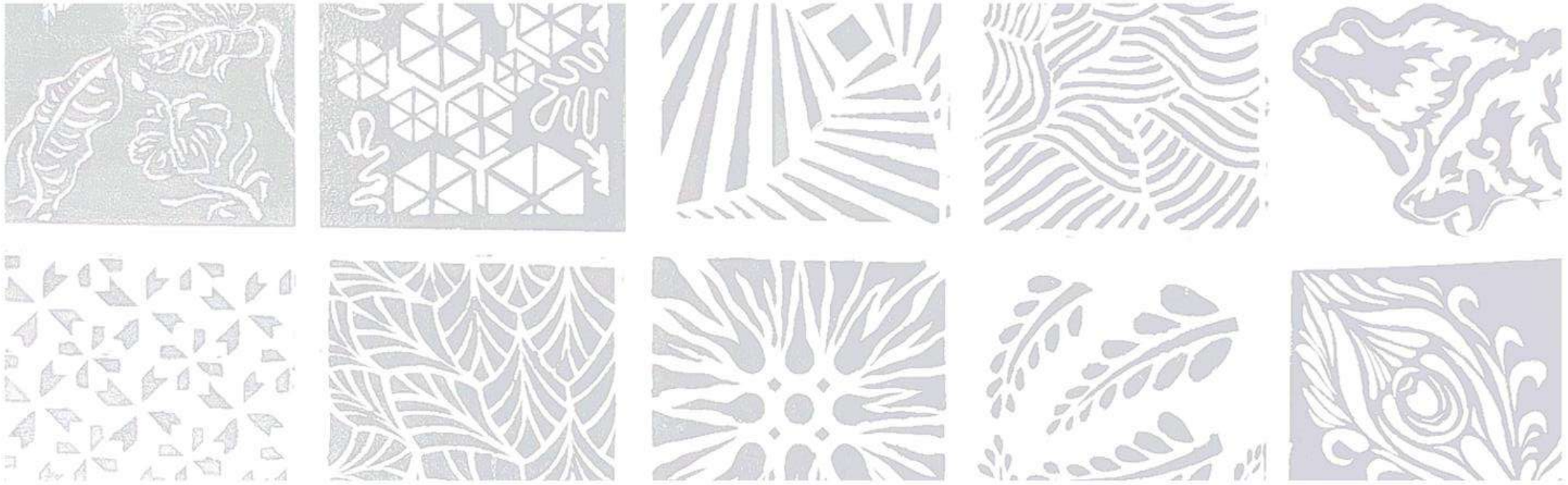
Architectural Graphics II
Faculty: Ar. Nirzari Mehta, Ar. Pragathi Prassad S,
Ar. Shubham Kaushal.

Shubham S Jadhav
1DC22AT062









3rd Semester

ARCHITECTURAL DESIGN III
SUBJECT CODE 18ARC31

Course Objectives:

1) To understand the different climatic zones.

2) To understand the different types of roofing systems

3) To understand how to tackle different types of topography and contours

4) To further develop various presentation skills

Studio Coordinators

Ar. Arun Chandhran

Ar. Nirzari Mehta

Studio Faculty

Ar. Sankara Sadhashivam

Ar. Ekta idnani

Ar. Preethi Revankar

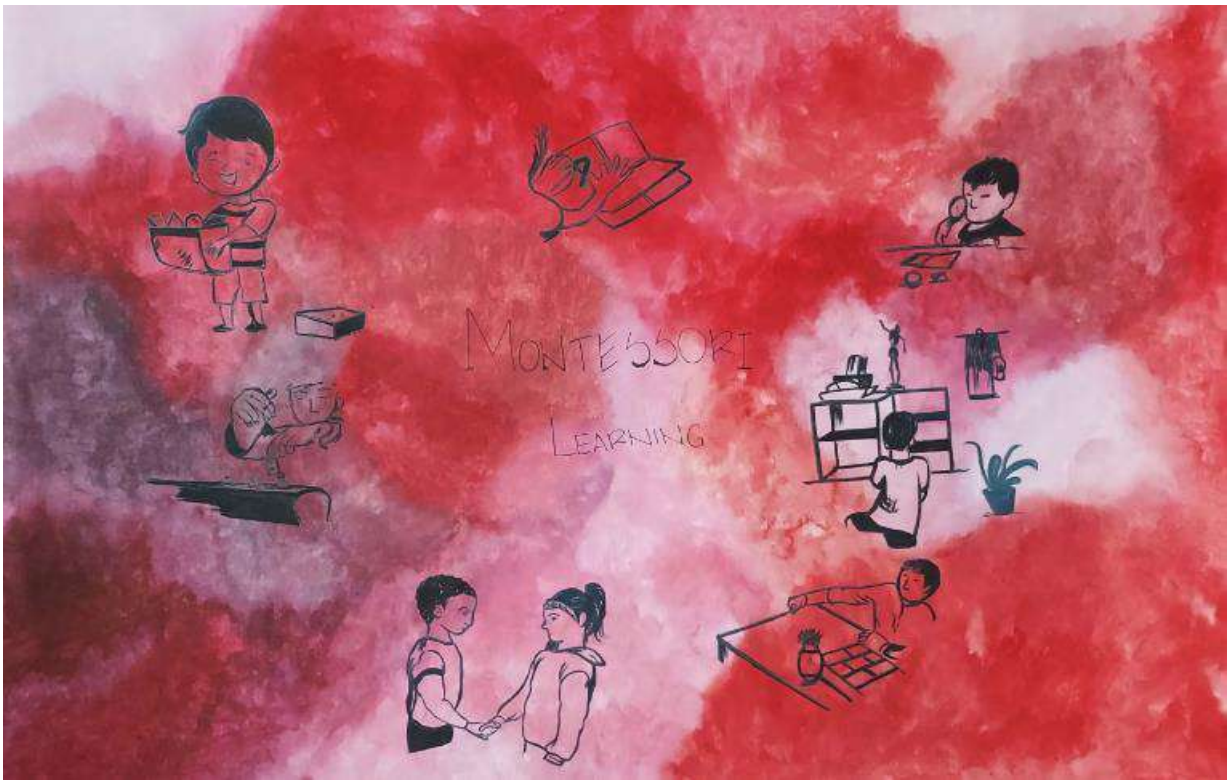
Ar.Kavita Pole

HOUSING COMPLEX

AD III

Architectural Design III
Faculty: Ar. N Arun Chandhran, Ar. Nirzari Mehta

Akshaya
1DC20AT027

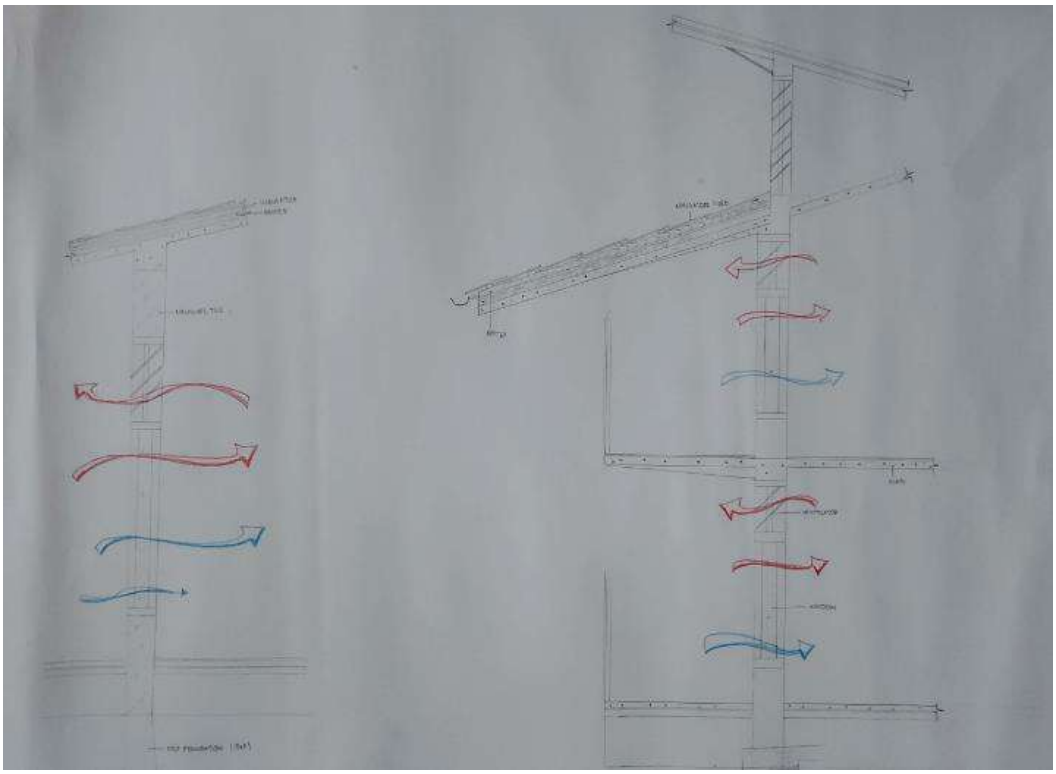


HOUSING COMPLEX

AD III

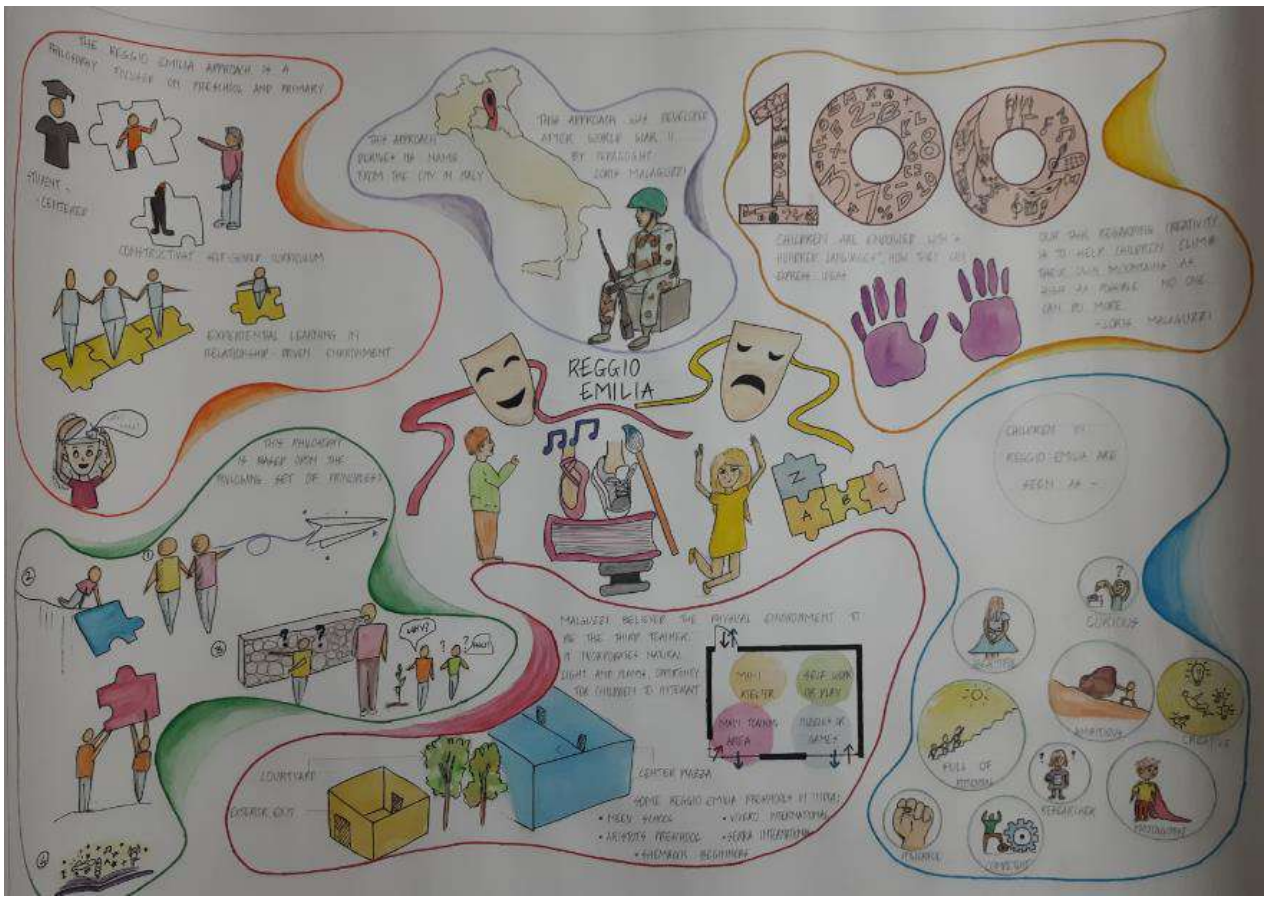
Architectural Design III
Faculty: Ar. N Arun Chandhran, Ar. Nirzari Mehta

Akshaya
1DC20AT027



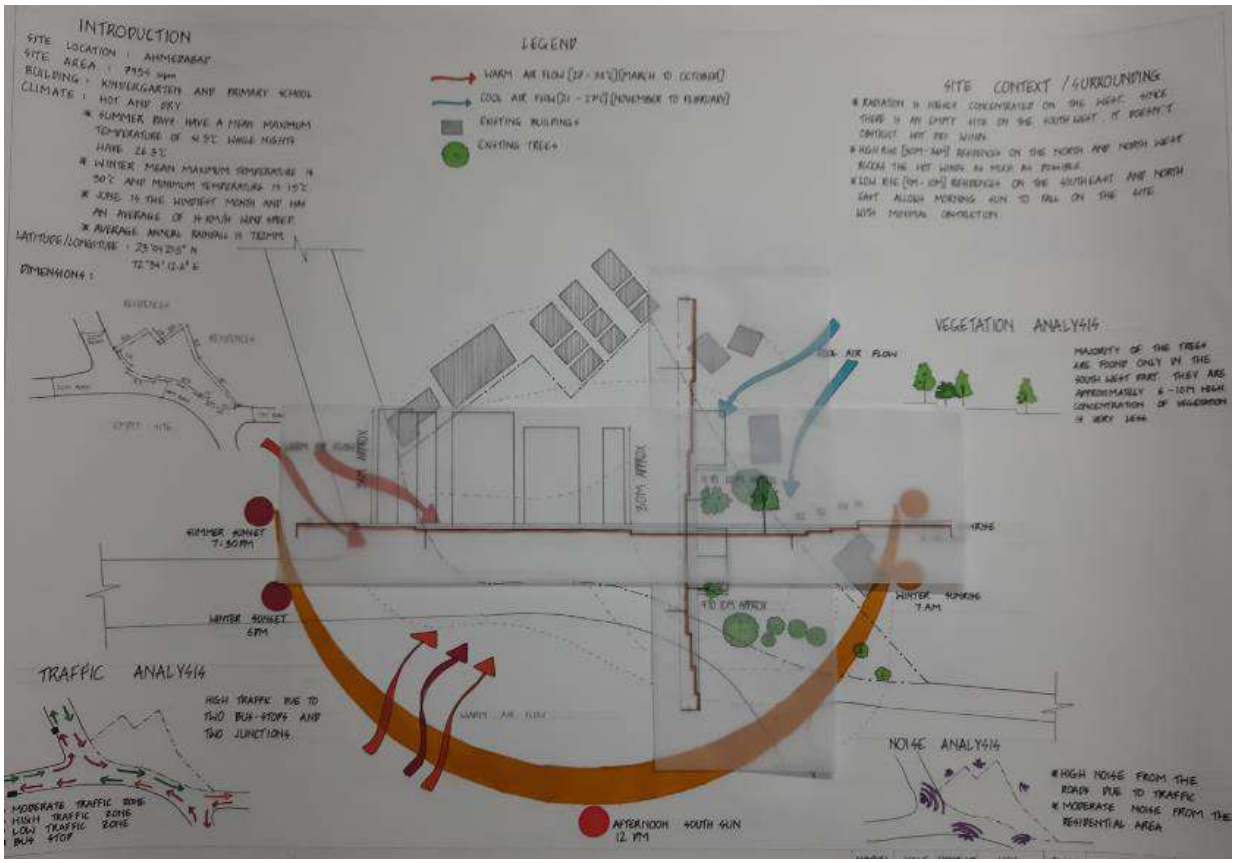
Architectural Design III
Faculty: Ar. N Arun Chandhran, Ar. Banu Chandrika
Ar. Kiran Baikidy

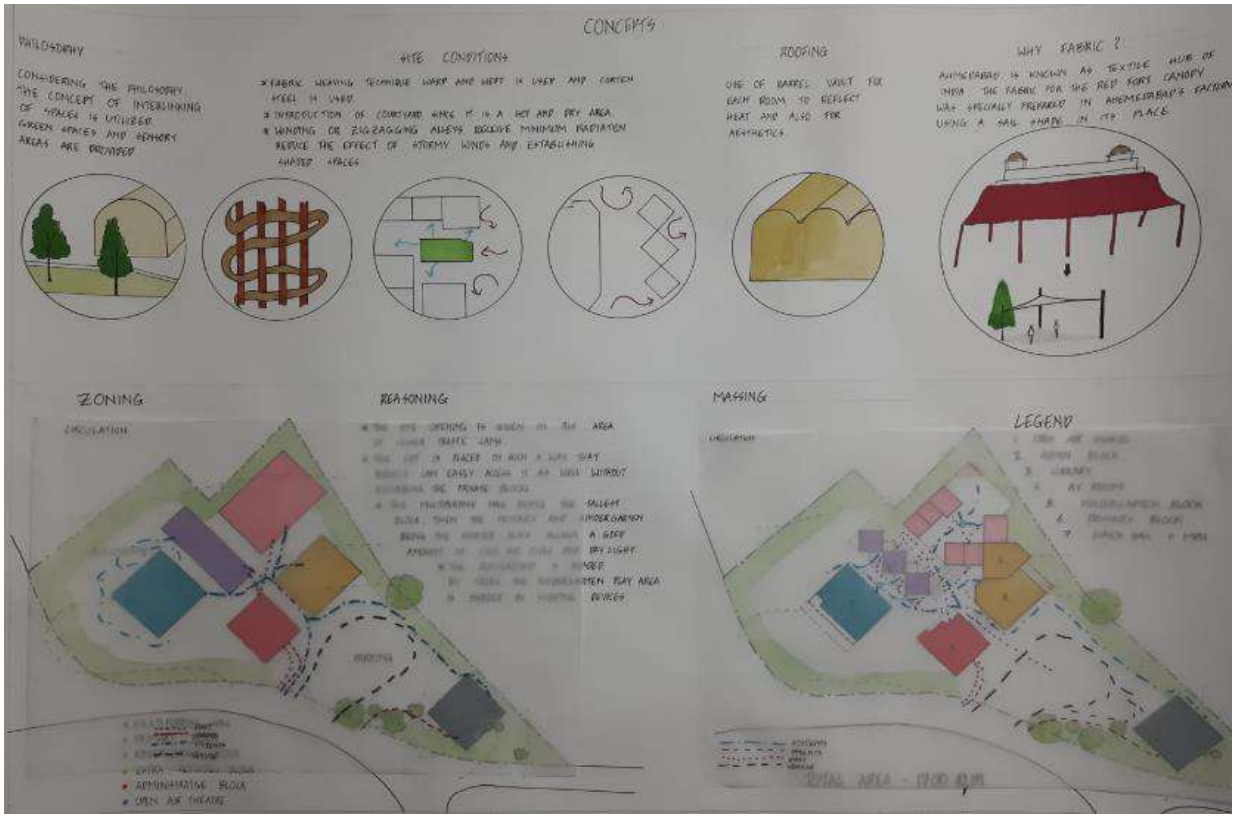
Diya Bijoor
1DC20AT027



Architectural Design III
Faculty: Ar. N Arun Chandhran, Ar. Banu Chandrika
Ar. Kiran Baikidy

Diya Bijoor
1DC20AT027





HOUSING COMPLEX

AD III

Architectural Design III
Faculty: Ar. N Arun Chandhran, Ar. Banu Chandrika
Ar. Kiran Baikidy

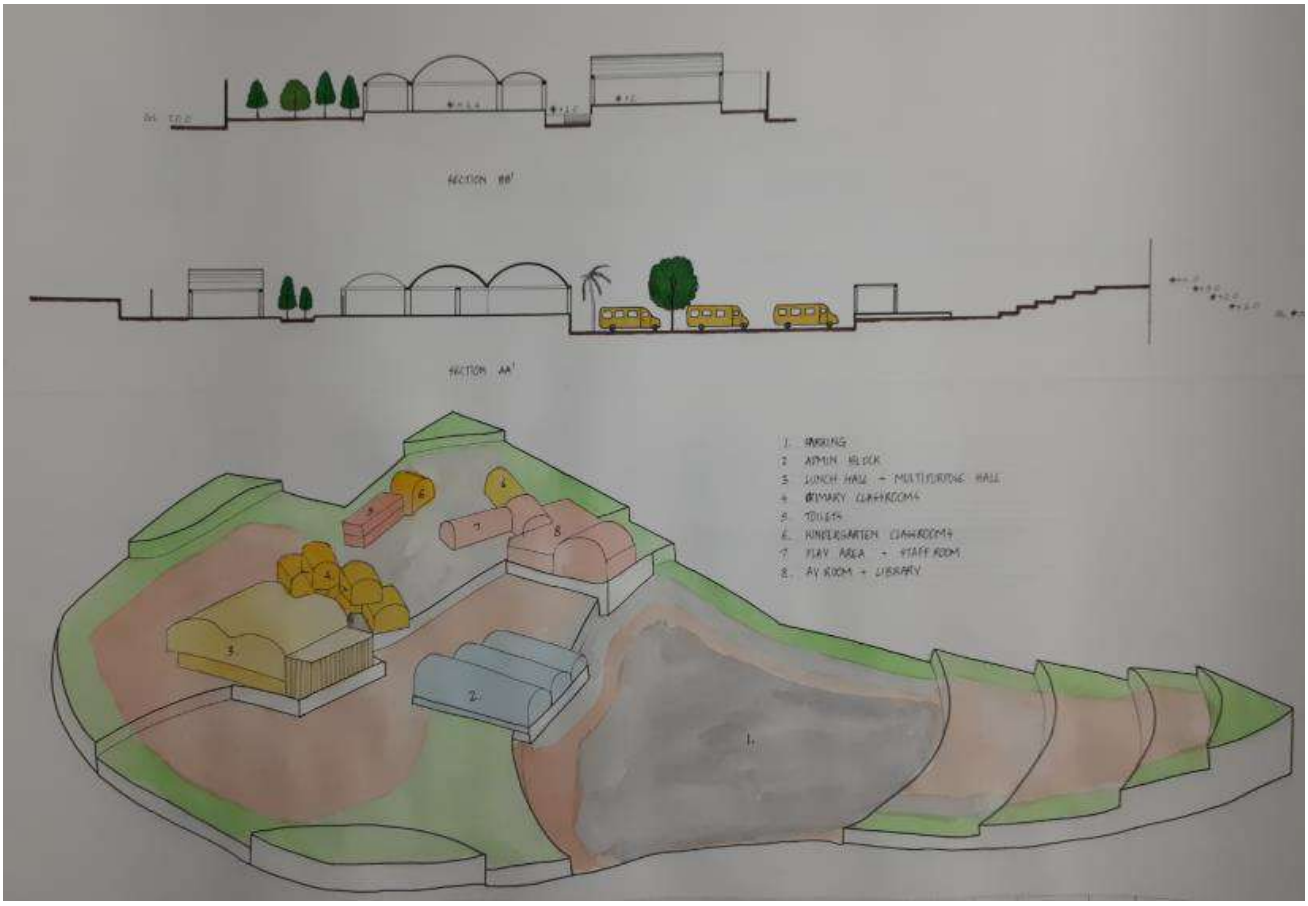
Diya Bijoor
1DC20AT027

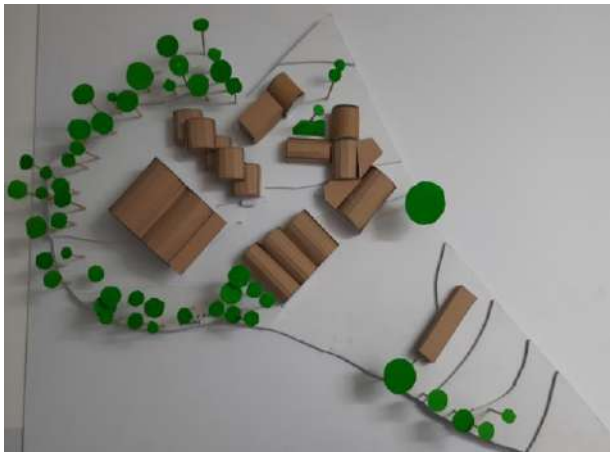
HOUSING COMPLEX

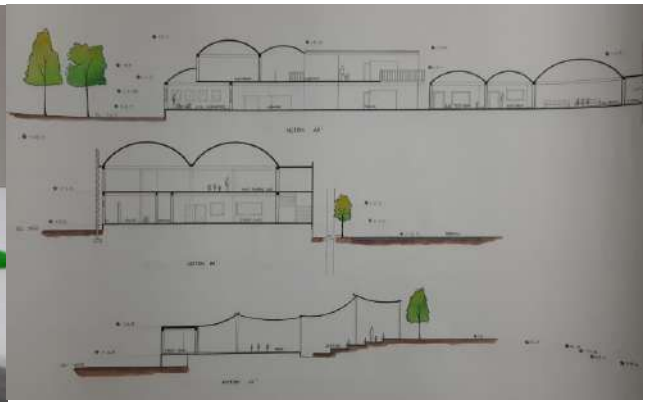
AD III

Architectural Design III
Faculty: Ar. N Arun Chandhran, Ar. Banu Chandrika
Ar. Kiran Baikidy

Diya Bijoor
1DC20AT027

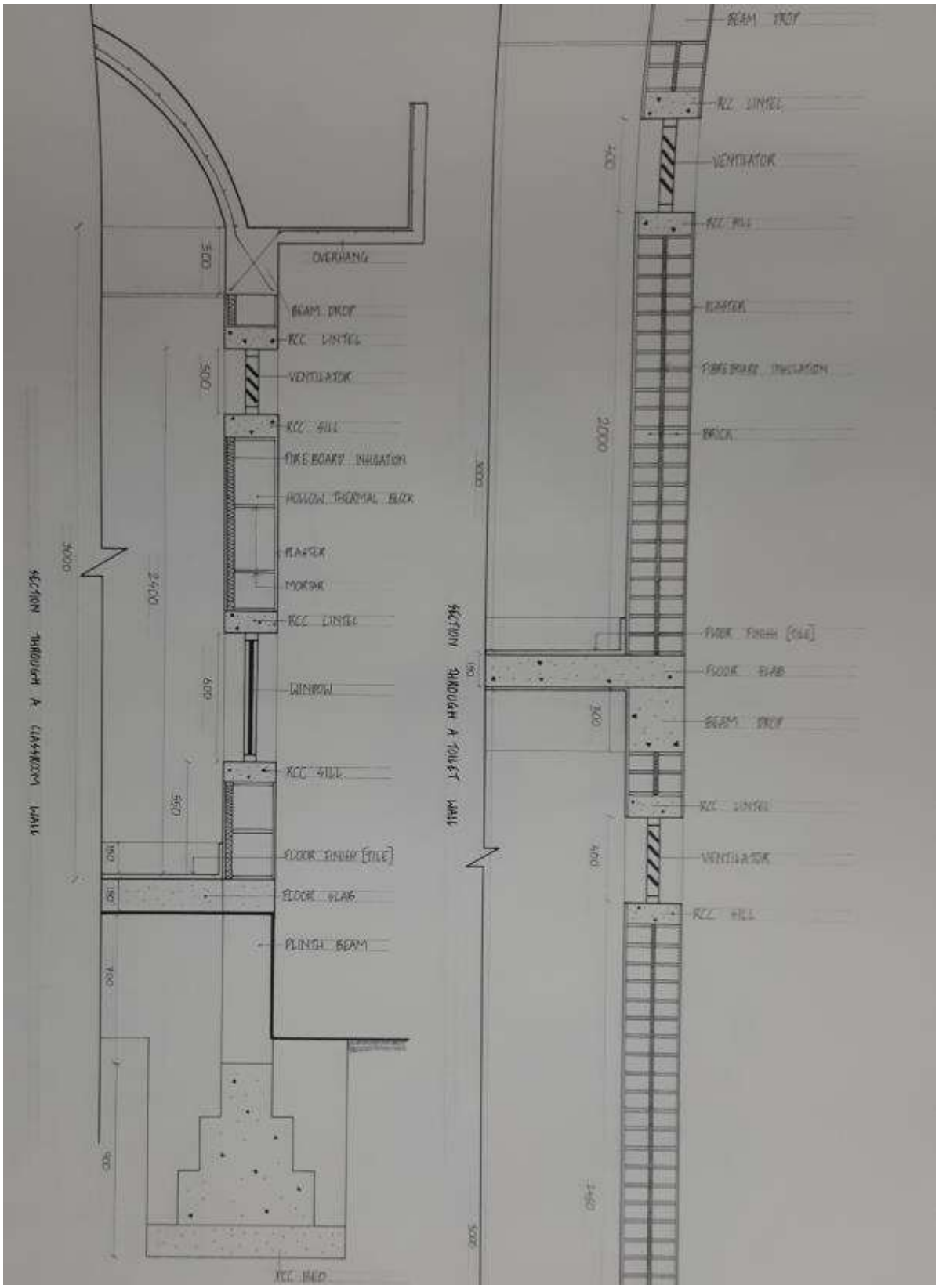






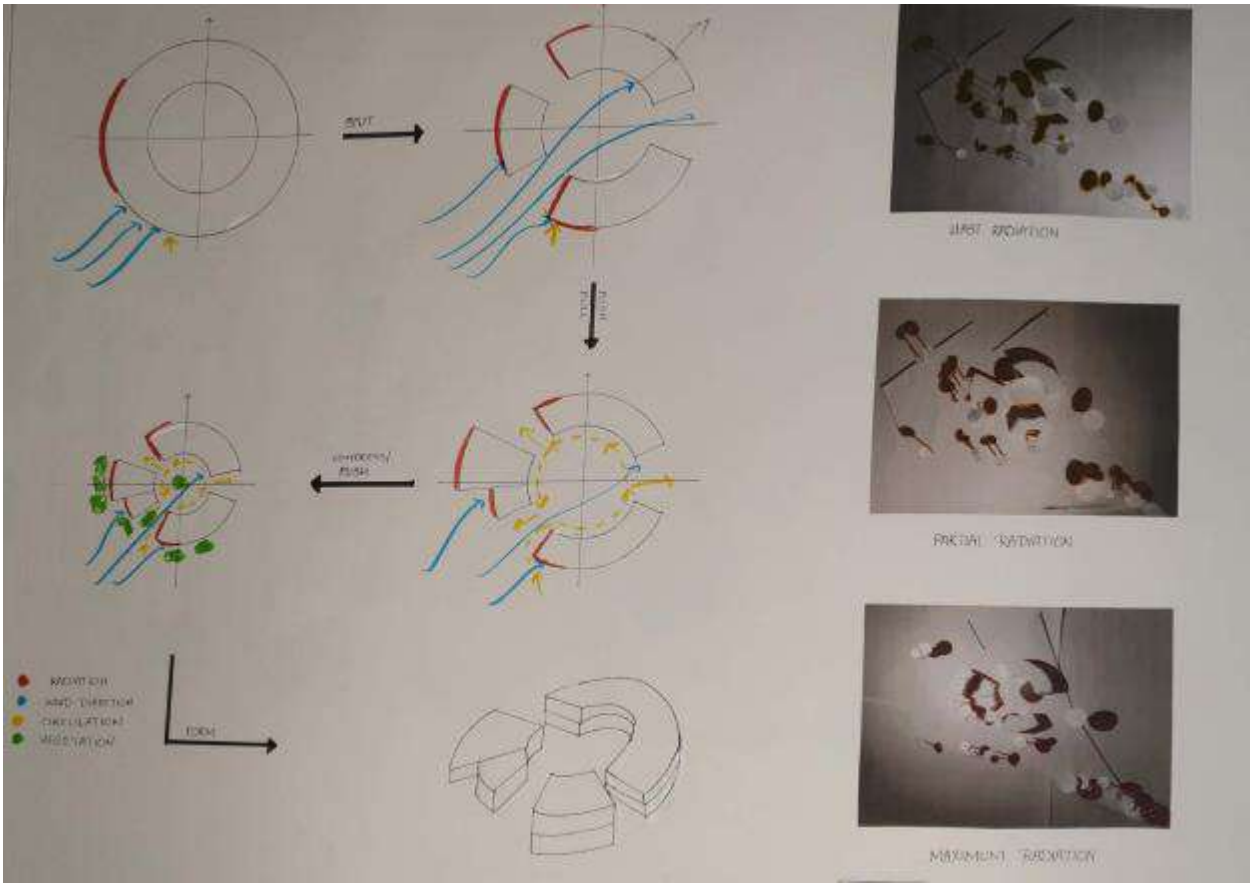
Architectural Design III
Faculty: Ar. N Arun Chandhran, Ar. Banu Chandrika
Ar. Kiran Baikidy

Diya Bijoor
1DC20AT027



Architectural Design III
Faculty: Ar. N Arun Chandhran, Ar. Banu Chandrika
Ar. Kiran Baikidy

Neethu
1DC20AT027



MATERIALS AND METHODS OF BUILDING CONSTRUCTION V SUBJECT CODE 18ARC32

Studio Faculty

Ar. Tejas Karay

Ar. Dominic L Harper

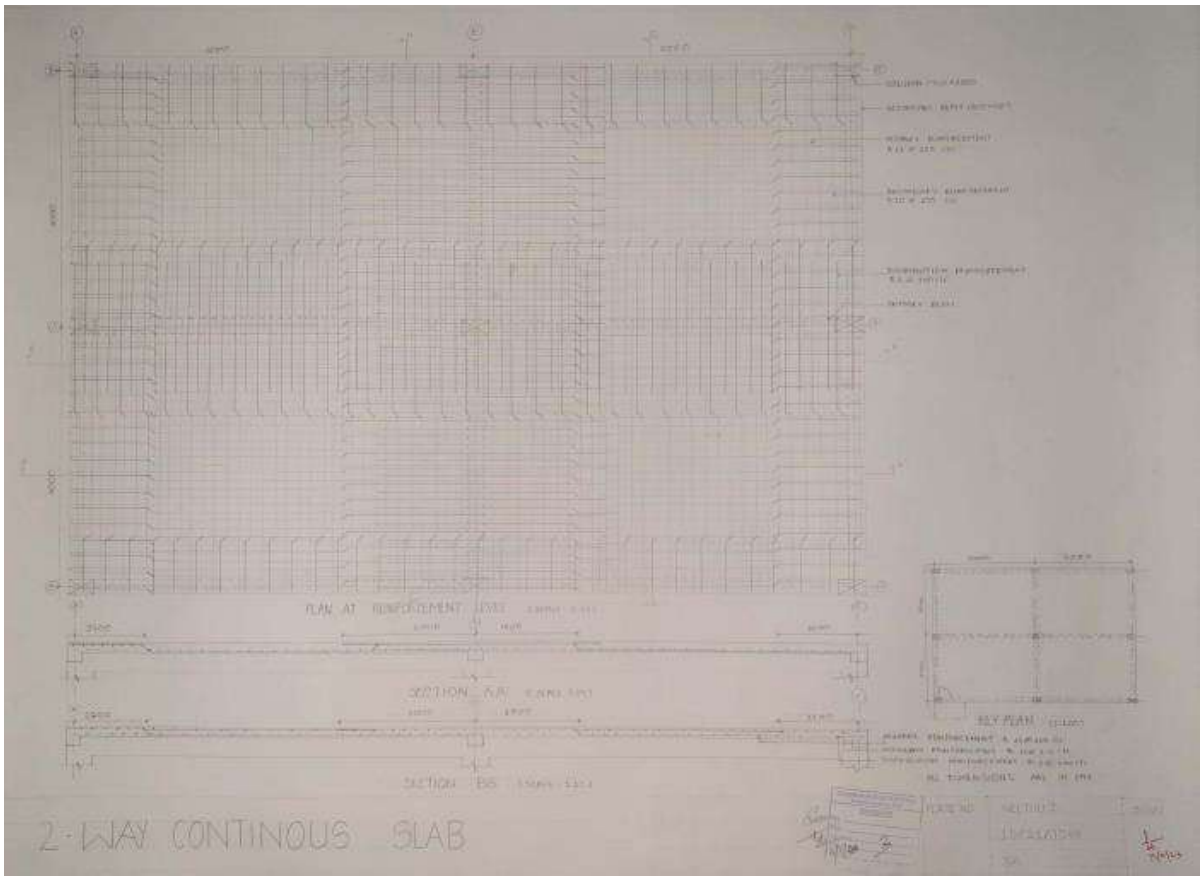
3 rd Semester MMBC is largely about RCC structures, one way slab and two way slabs

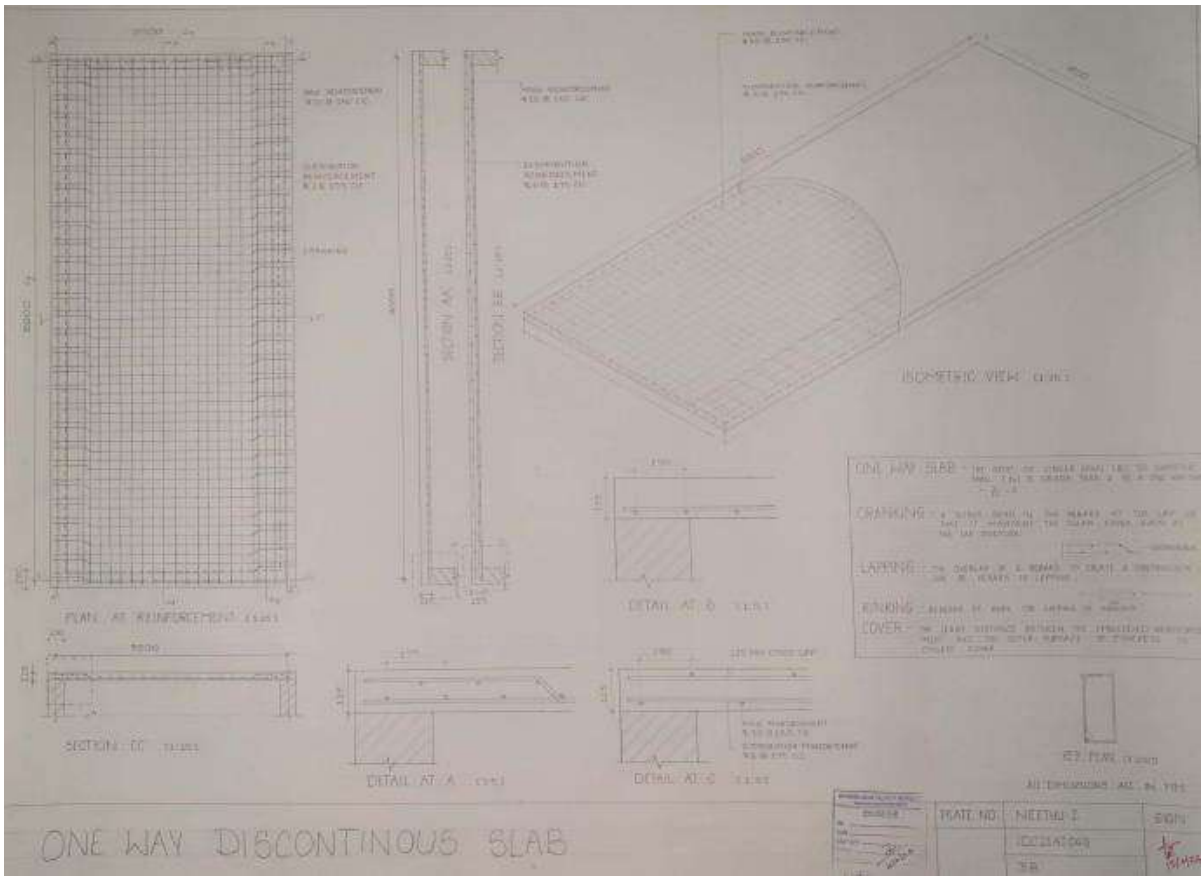
The syllabus also deals with RCC domes and Vaults

Additionally toilet details and specifications Of materials are taught to the students

Site Visits are an essential part of learning in the third semester

Neethu
1DC20AT053





Neethu
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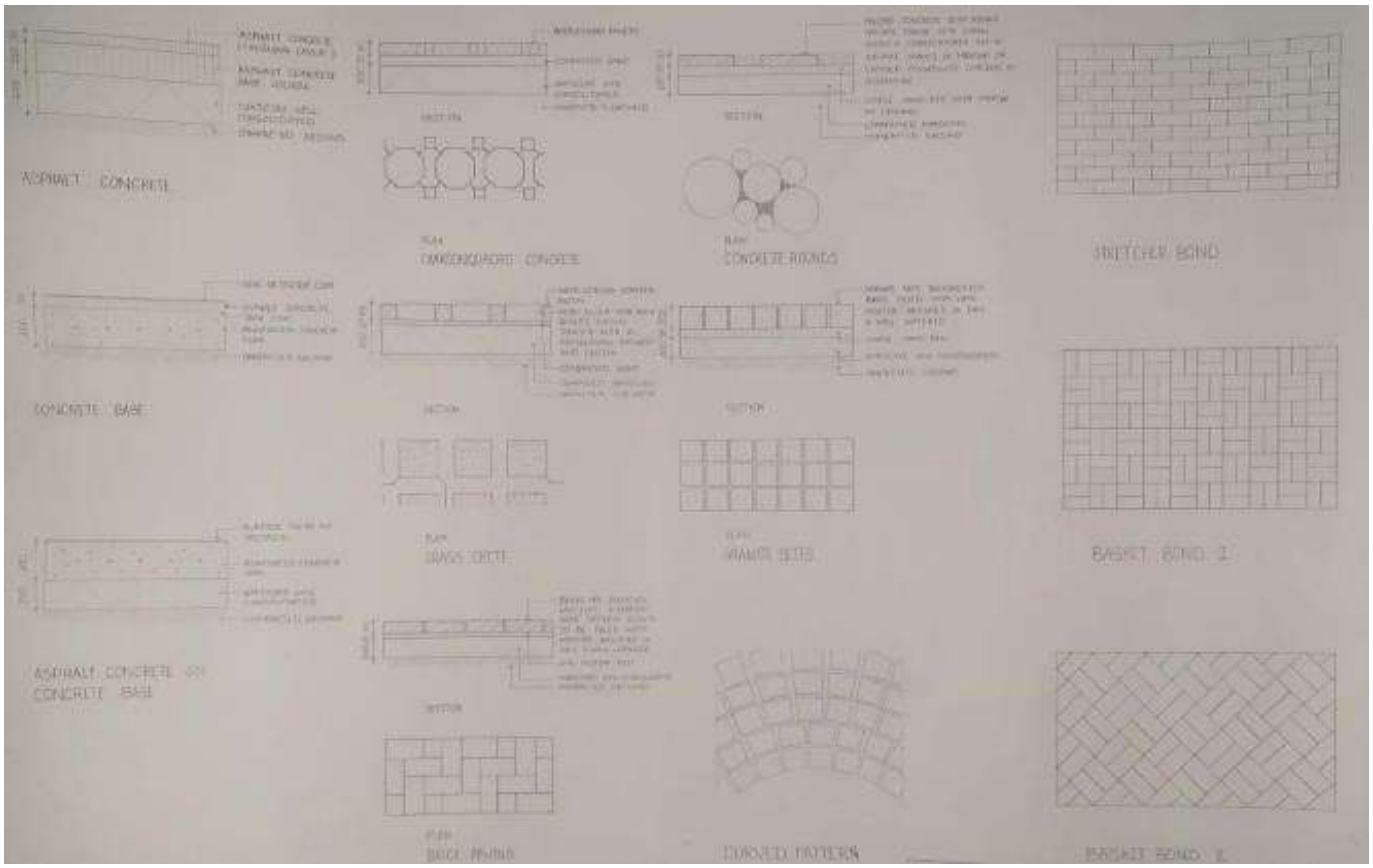
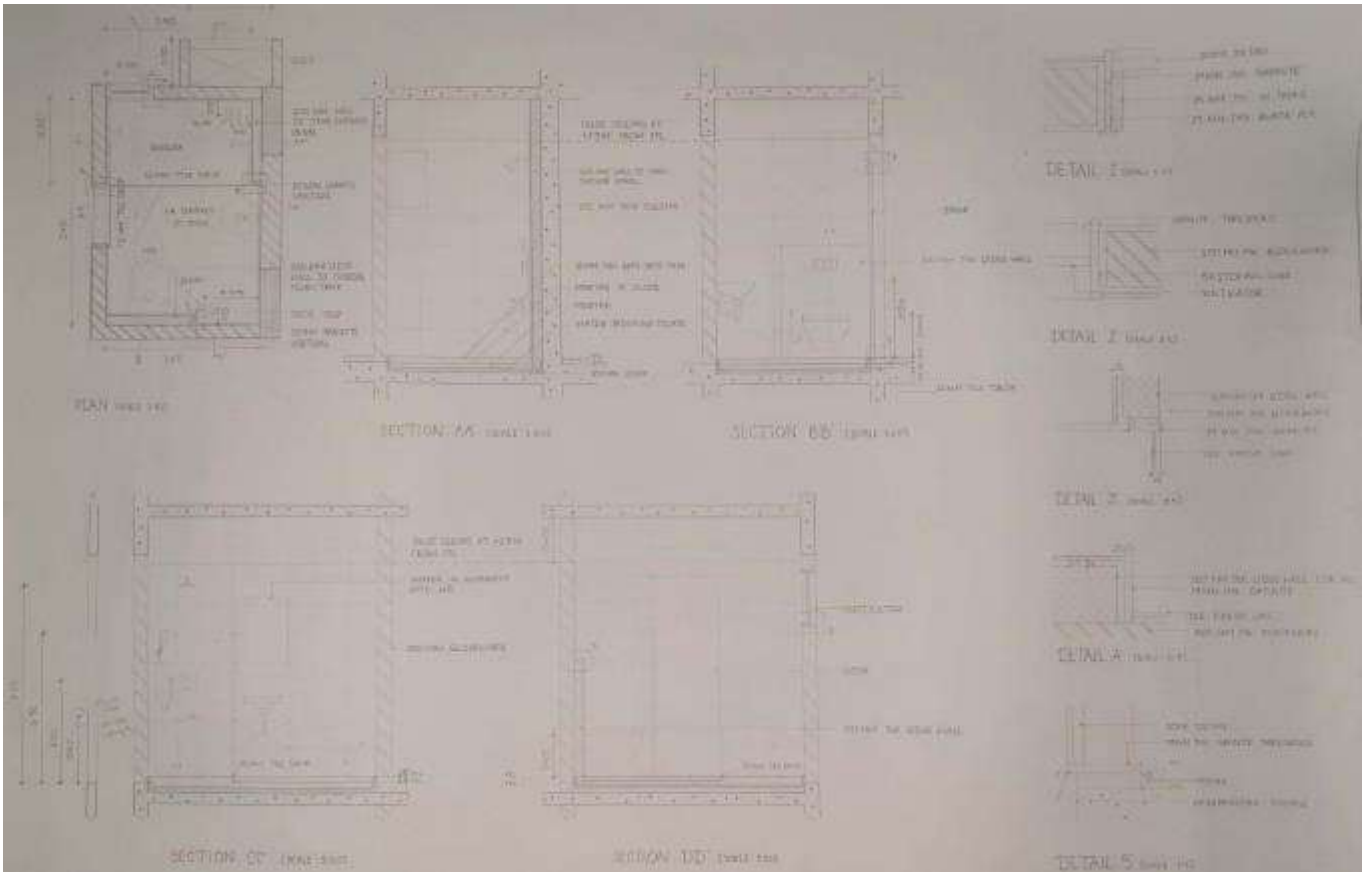
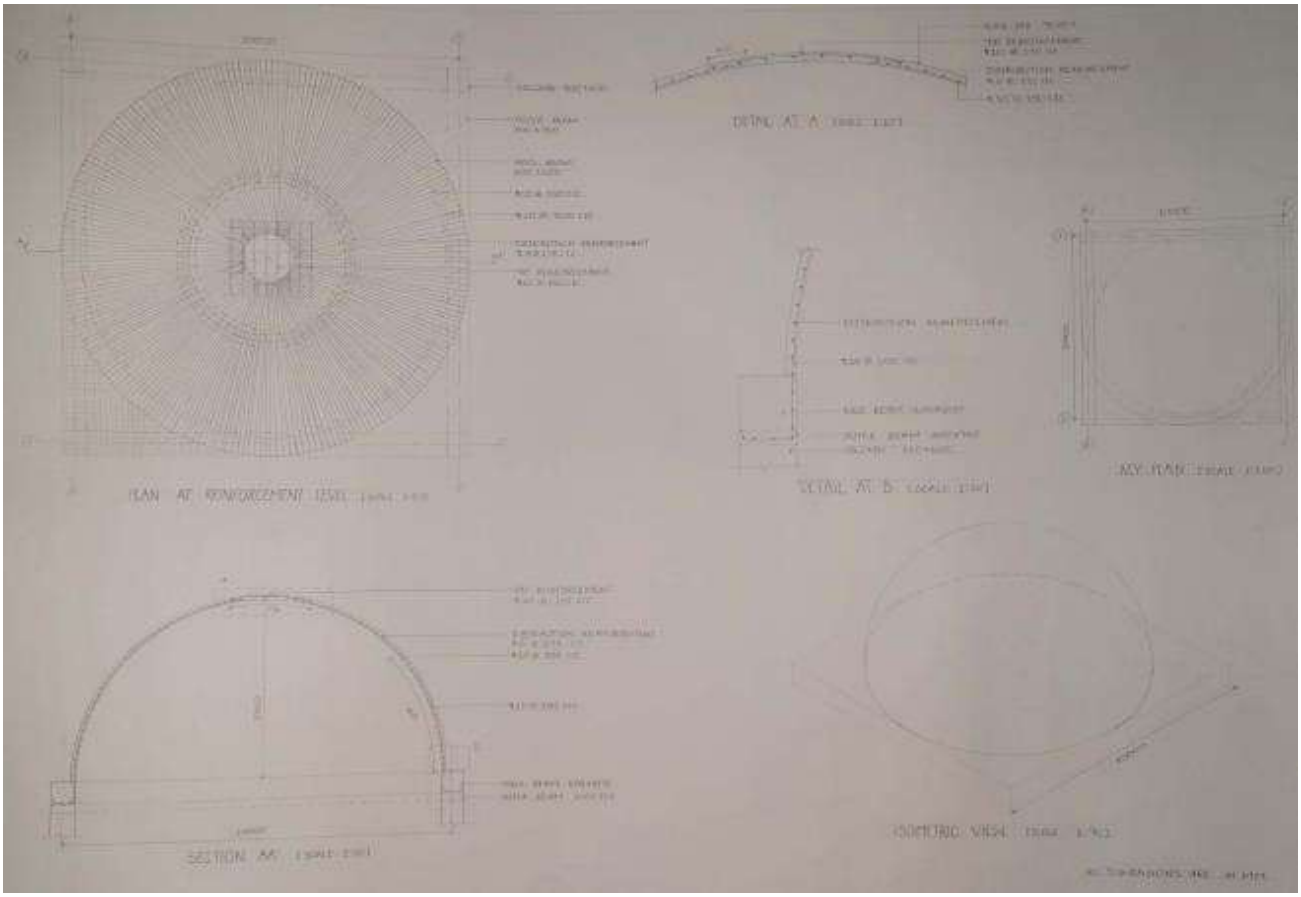
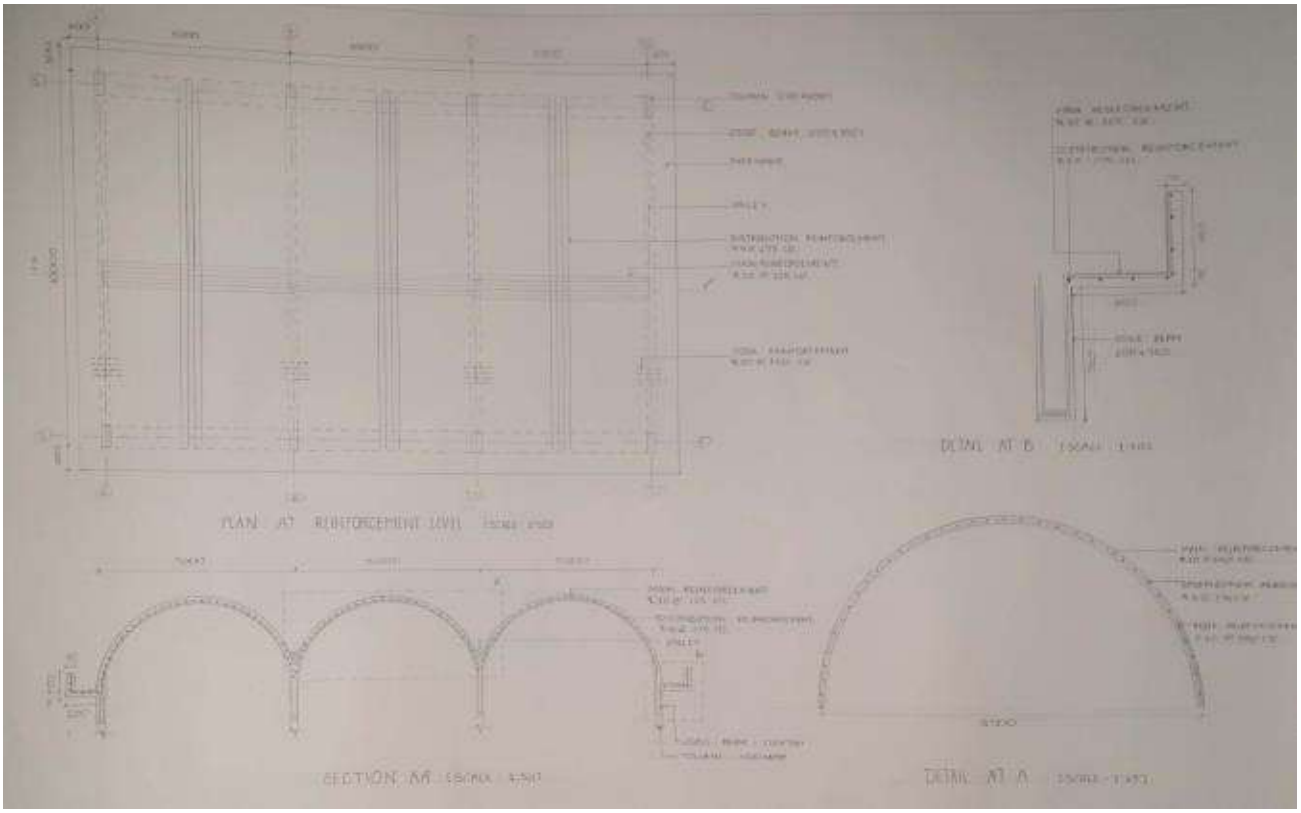




Israth K
1DC20AT037





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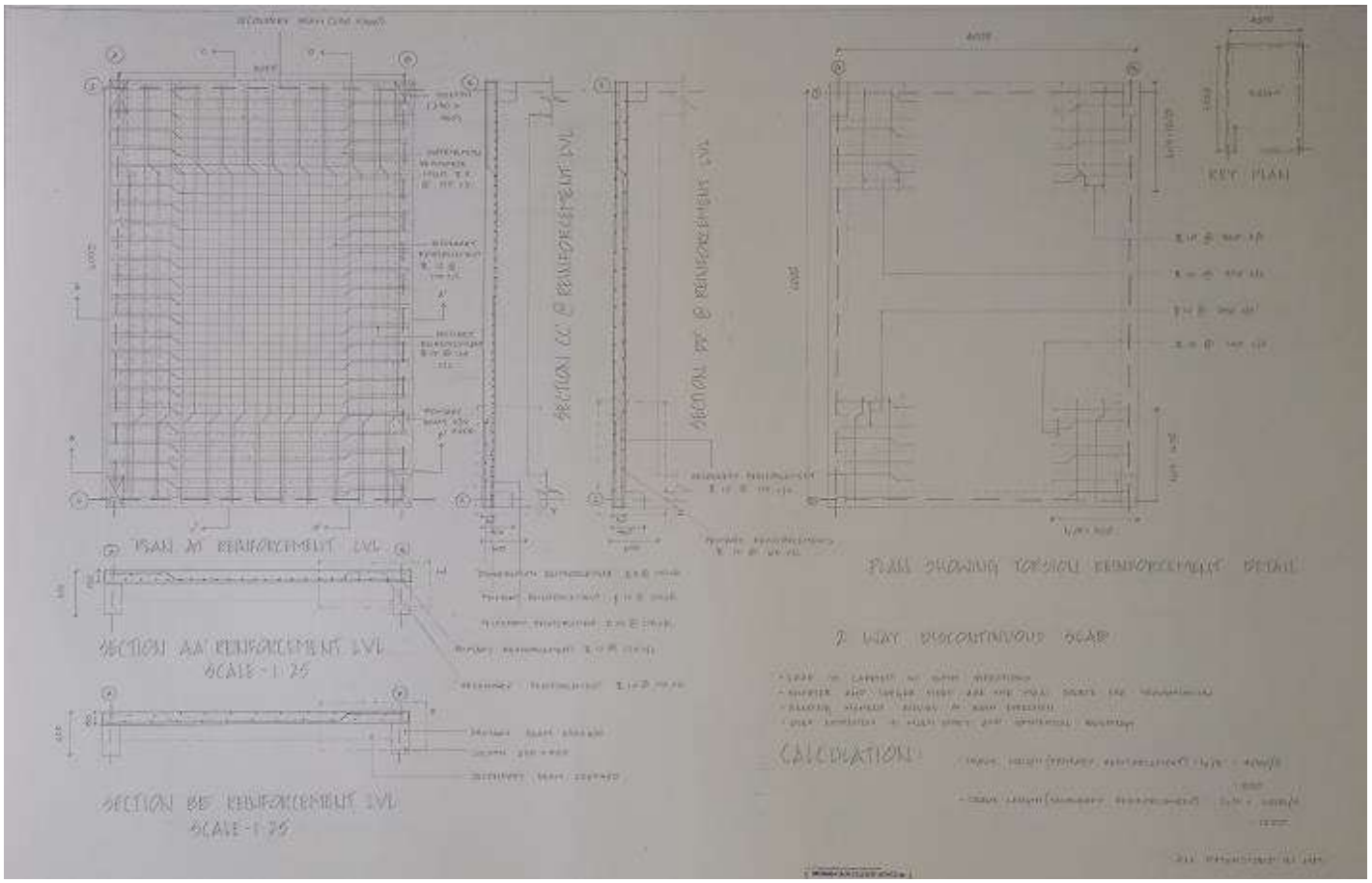

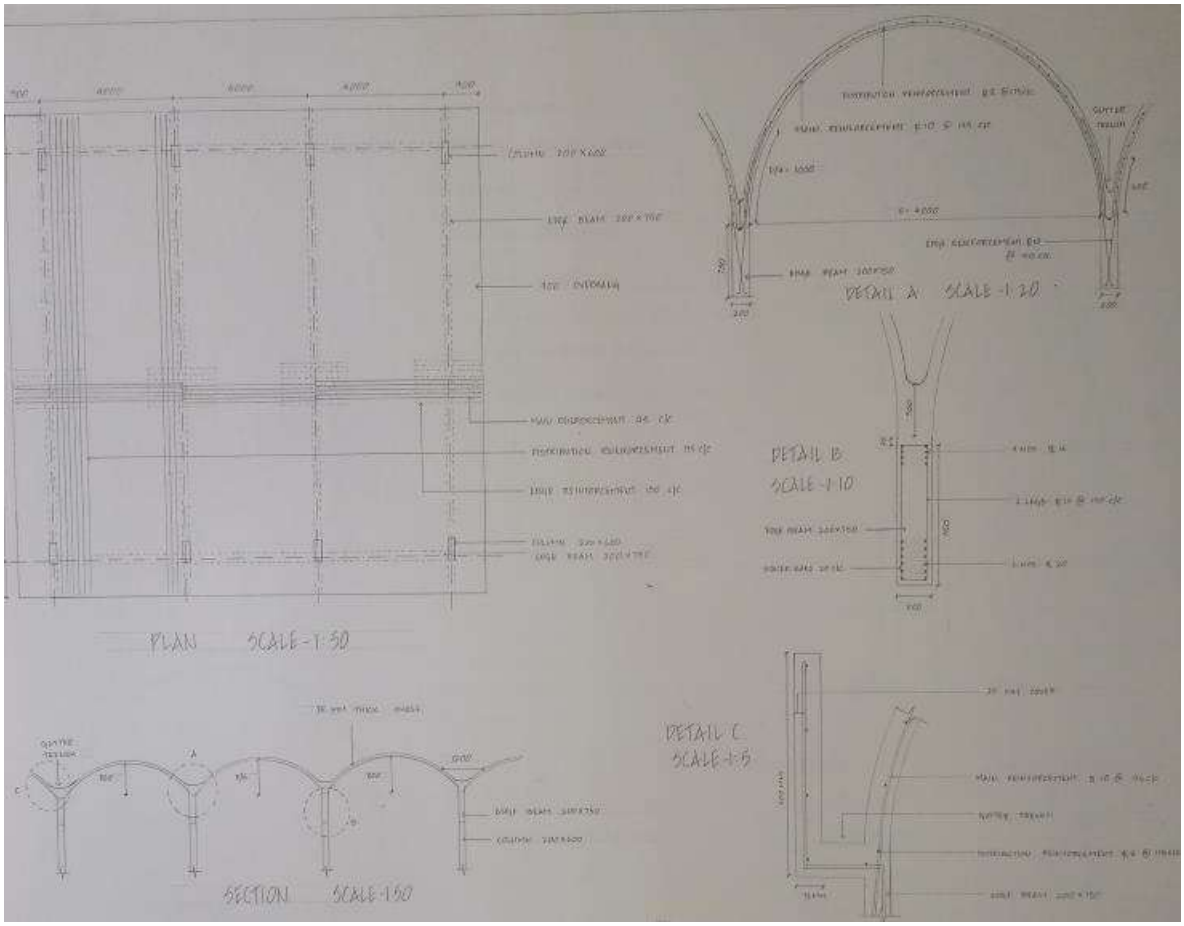

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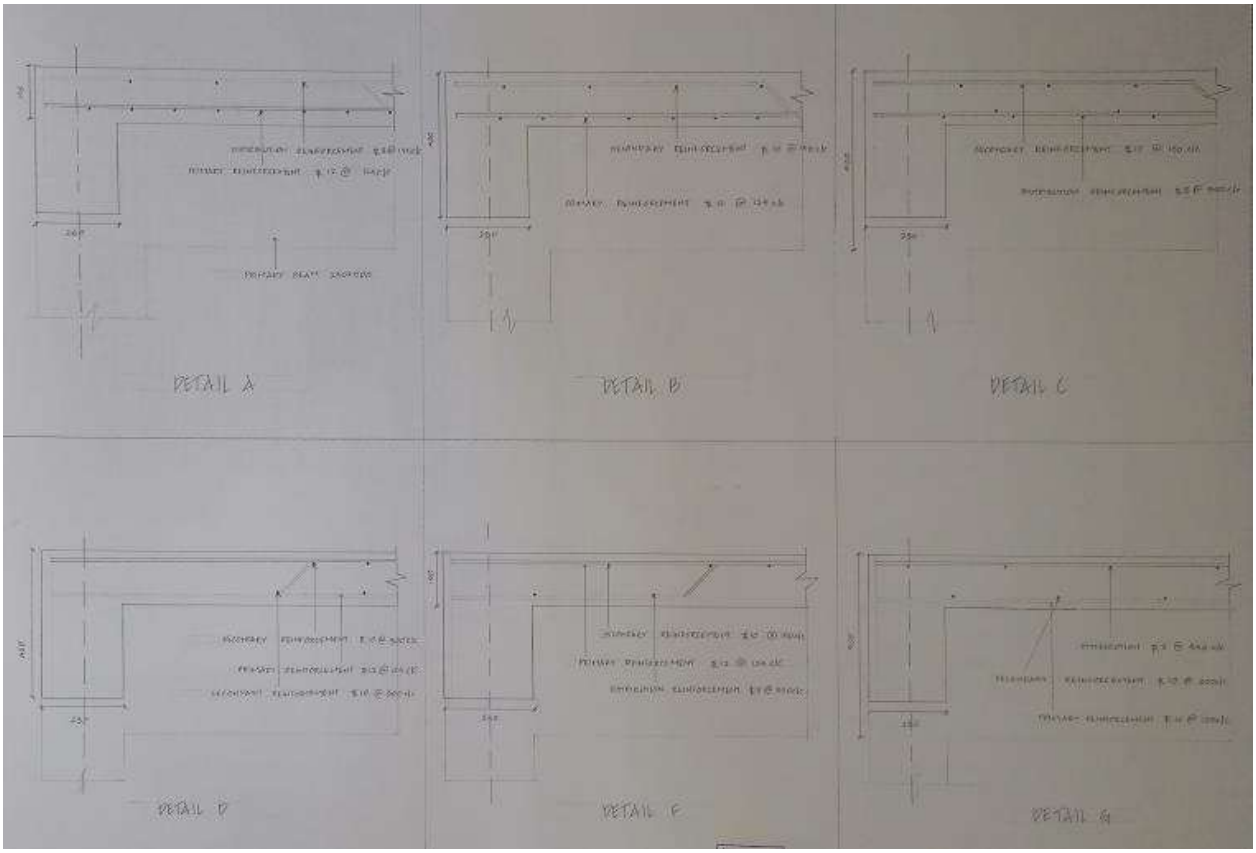

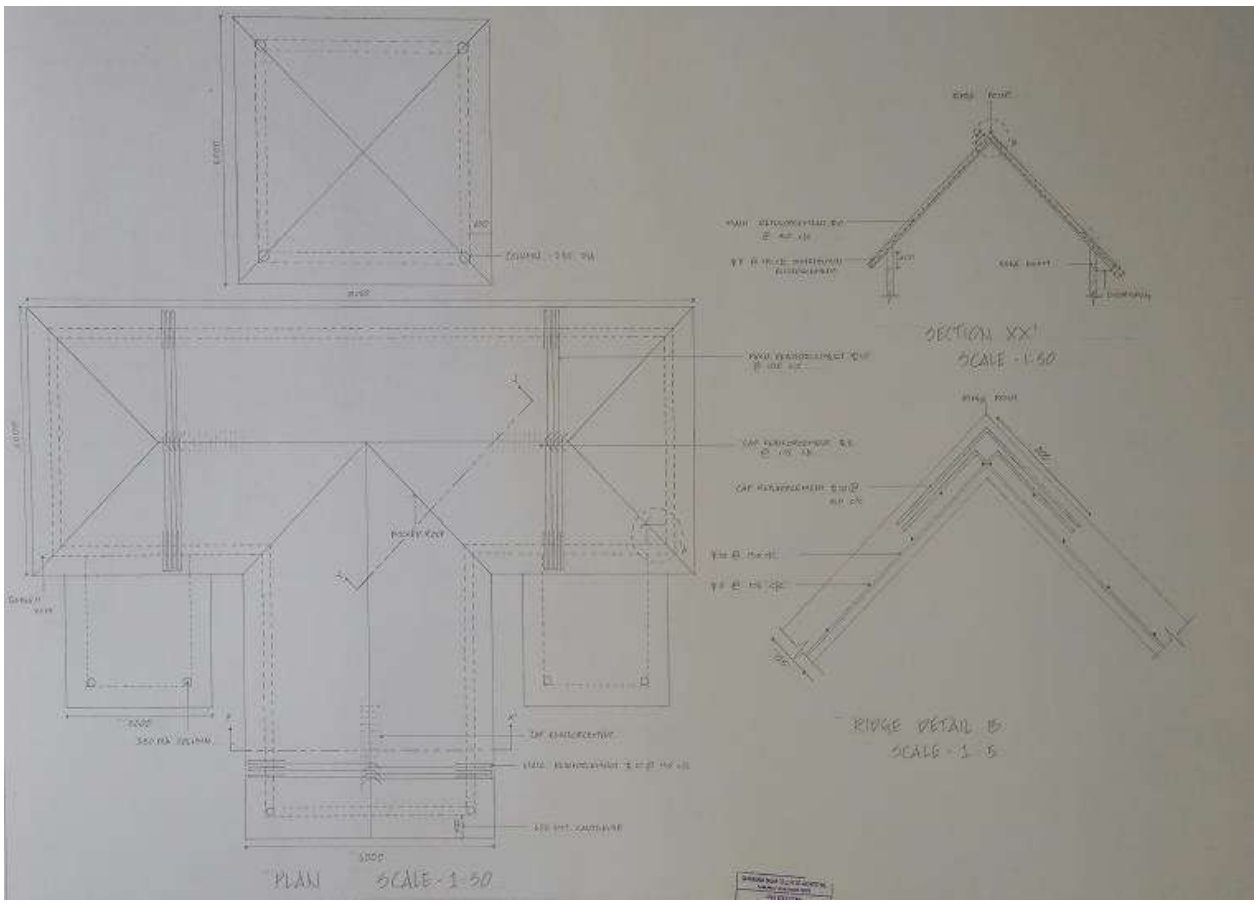

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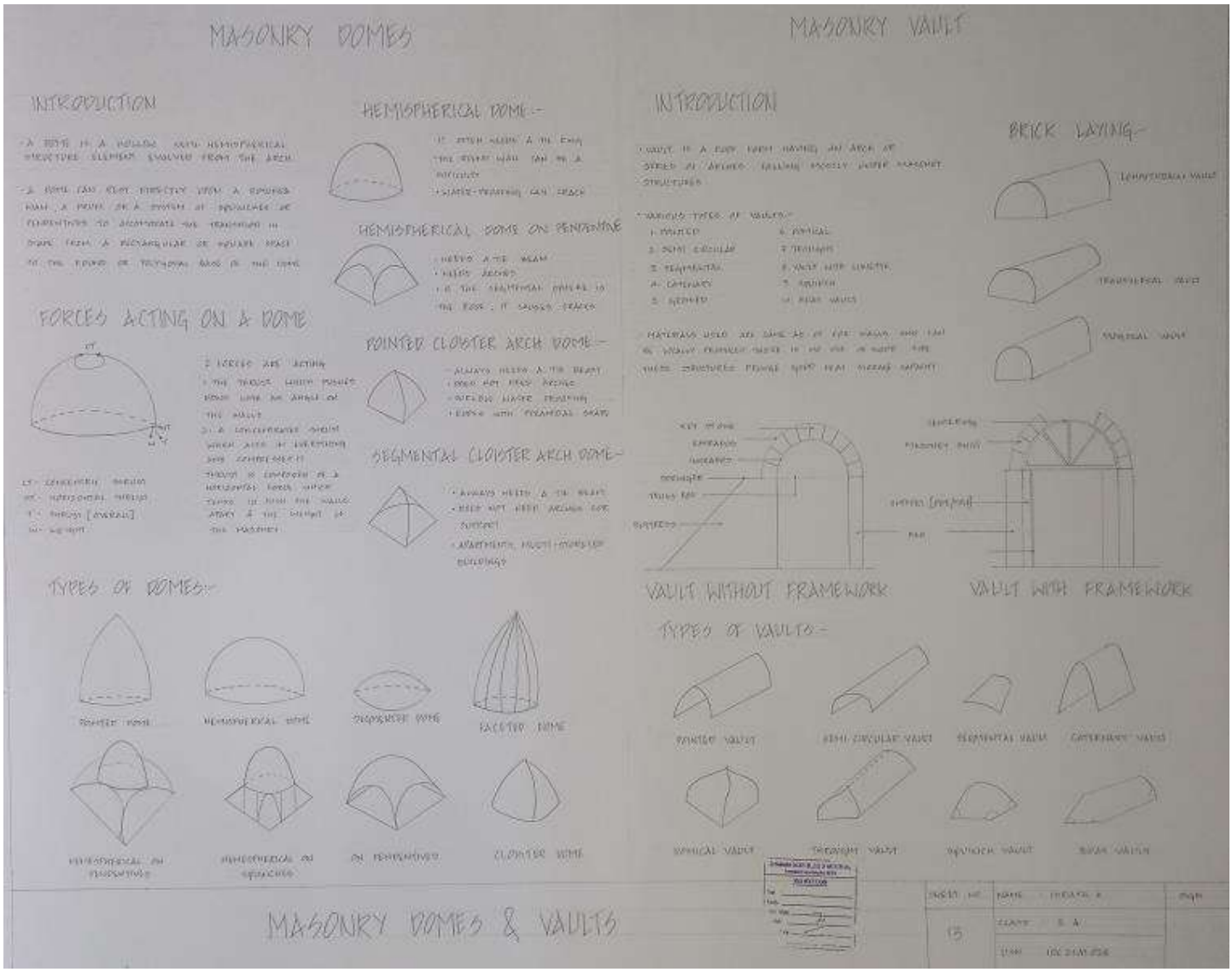
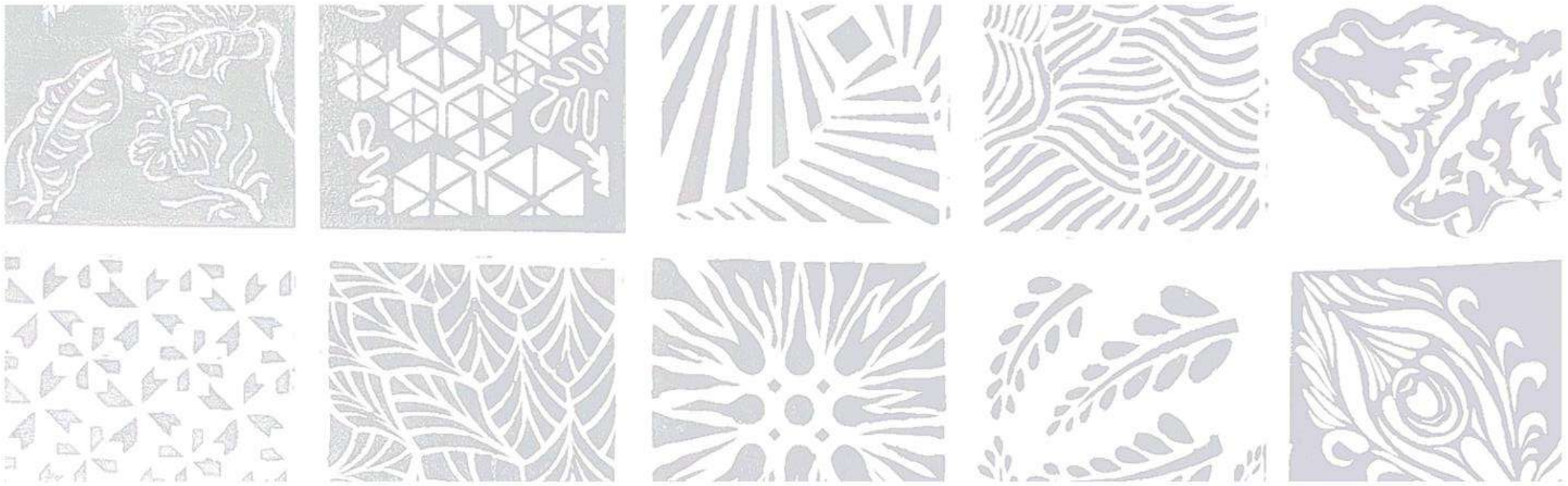




4th Semester

ARCHITECTURAL DESIGN V
SUBJECT CODE 18ARC41

Course Objectives:

1) To understand the need for creating a sustainable living space which responds to a specific climatic context.

2) To understand the different typologies within the spectrum of housing

3) To identify and understand the role of services in the design of buildings; significance of material and construction techniques; climatic factors.

4) Introduction to bye laws and site planning.

5) To explore Computer Aided Design techniques (CAD) to generate drawings to better understand the overlay of different floor plan configuration

6) To understand the influence of socio-cultural, economic aspects such as LIG and MIG

Studio Coordinators

Ar. Arun Chandhran

Ar. Nirzari Mehta

Studio Faculty

Ar. Sankara Sadhashivam

Ar. Banu Chandrika

Ar. Kiran Baikidy

Ar. Jaypakash

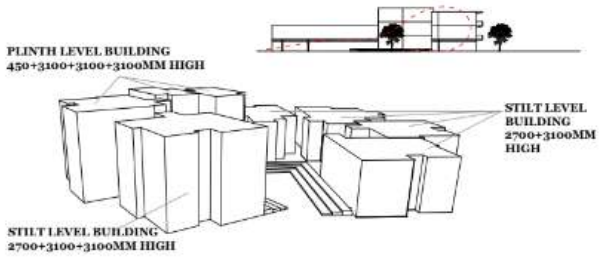
Architectural Design IV
Faculty: Ar. N Arun Chandhran, Ar. Banu Chandrika
Ar. Kiran Baikidy

Diya Bijoor
1DC20AT027

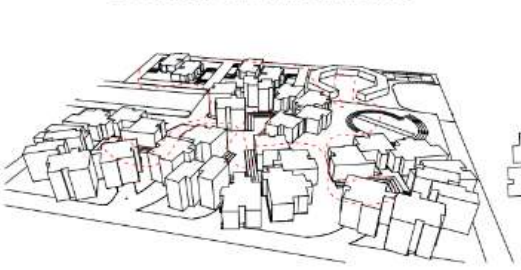
ZONING AND CONCEPT

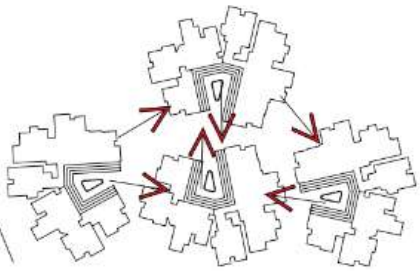
CONCEPT:

1. HIERARCHY

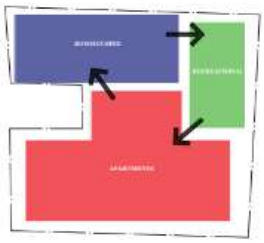


2. JOURNEY, MOVEMENT AND CONNECTIVITY





ZONING:



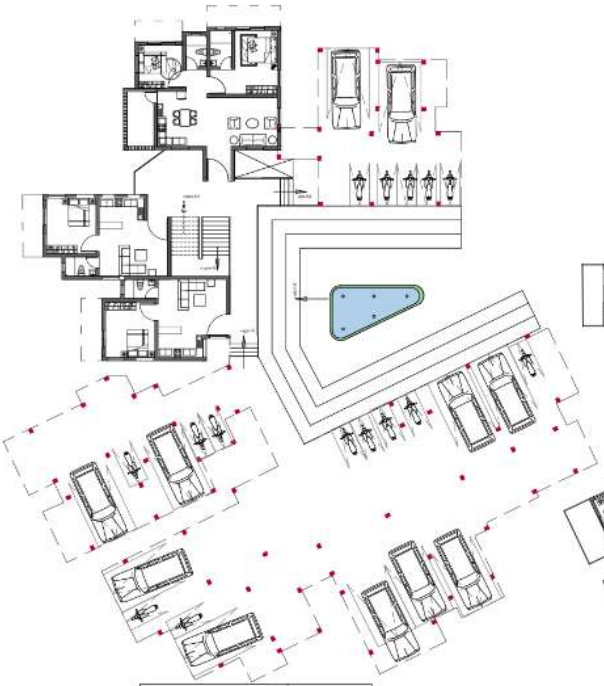
1. HIERARCHY: BY PLAYING WITH HEIGHTS AND MAKING EACH BLOCK HAVE THREE DIFFERENT LEVELS.
2. JOURNEY: A JOURNEY FROM ENCLOSED SPACE TO AN OPEN SPACE AND THEN TO A LARGER OPENING. THERE IS A CHANGE IN THE SURROUNDINGS, THE AIR MOVEMENT, THE FUNCTIONALITY.
3. MOVEMENT: A LARGER OPEN SPACE TO A COMPACTED OPENING AND THEN TO THE RECREATIONAL SPACES. ALSO FROM A DECK TO GREEN SPACES AND THEN TO ROADS. MOVEMENT IS NOT OBSTRUCTED AND IS CONTINUOUS.
4. CONNECTIVITY: ALL THE SPACES ARE CONNECTED BY MEANS OF ROADS OR PATHWAYS OR GREEN SPACES OR VISUALLY. MAKING IT SAFER AND A COMMUNITY BASED LIVING

NAME: DIYAA Y BIJOOR	SIGN
USN: 1DC21AT016	
CLASS: 4A	

CLUSTER PLAN

SCALE- 1:100

STILT LEVEL



FIRST FLOOR LEVEL

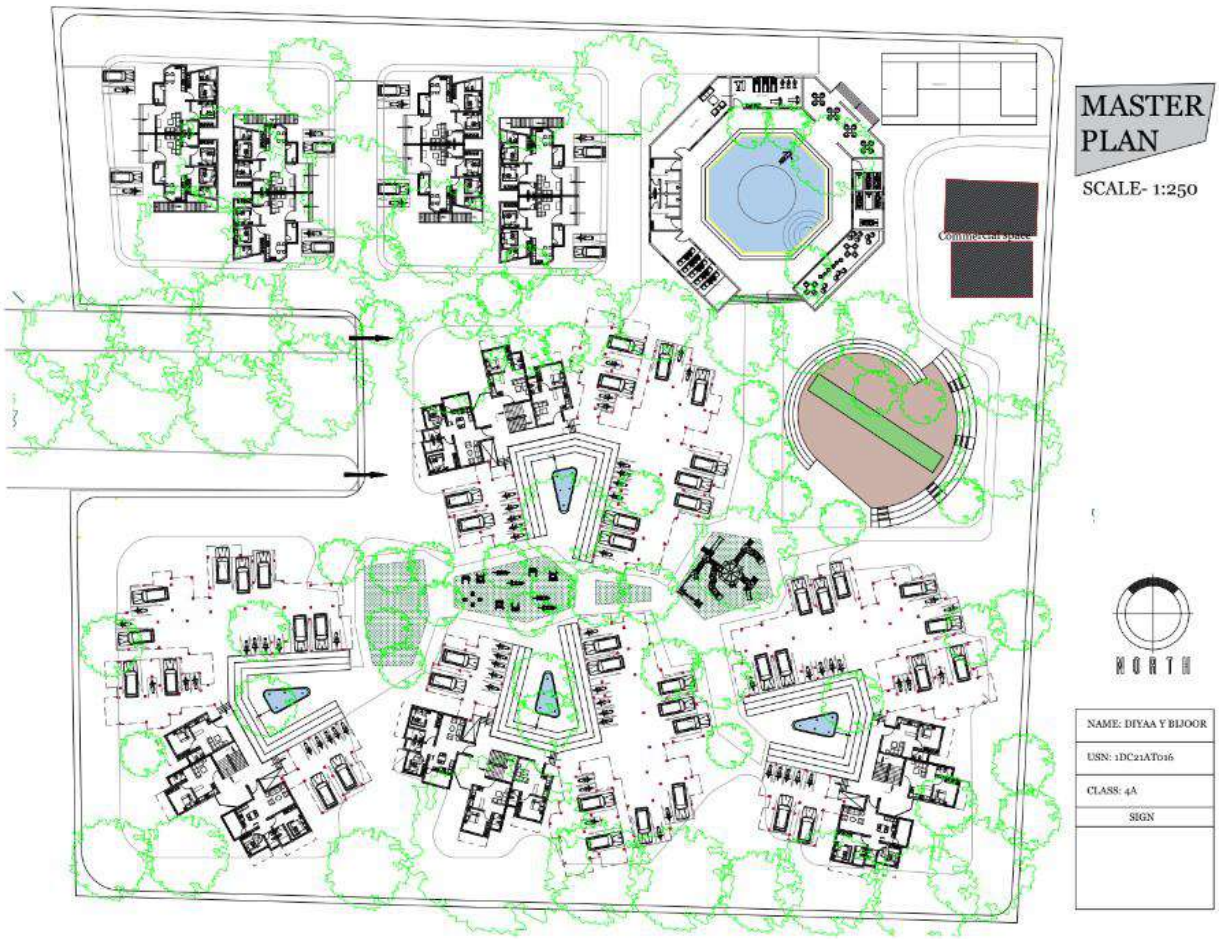
NAME: DIYAA Y BIJOOR	SIGN
USN: 1DC21AT016	
CLASS: 4A	

HOUSING COMPLEX

AD IV

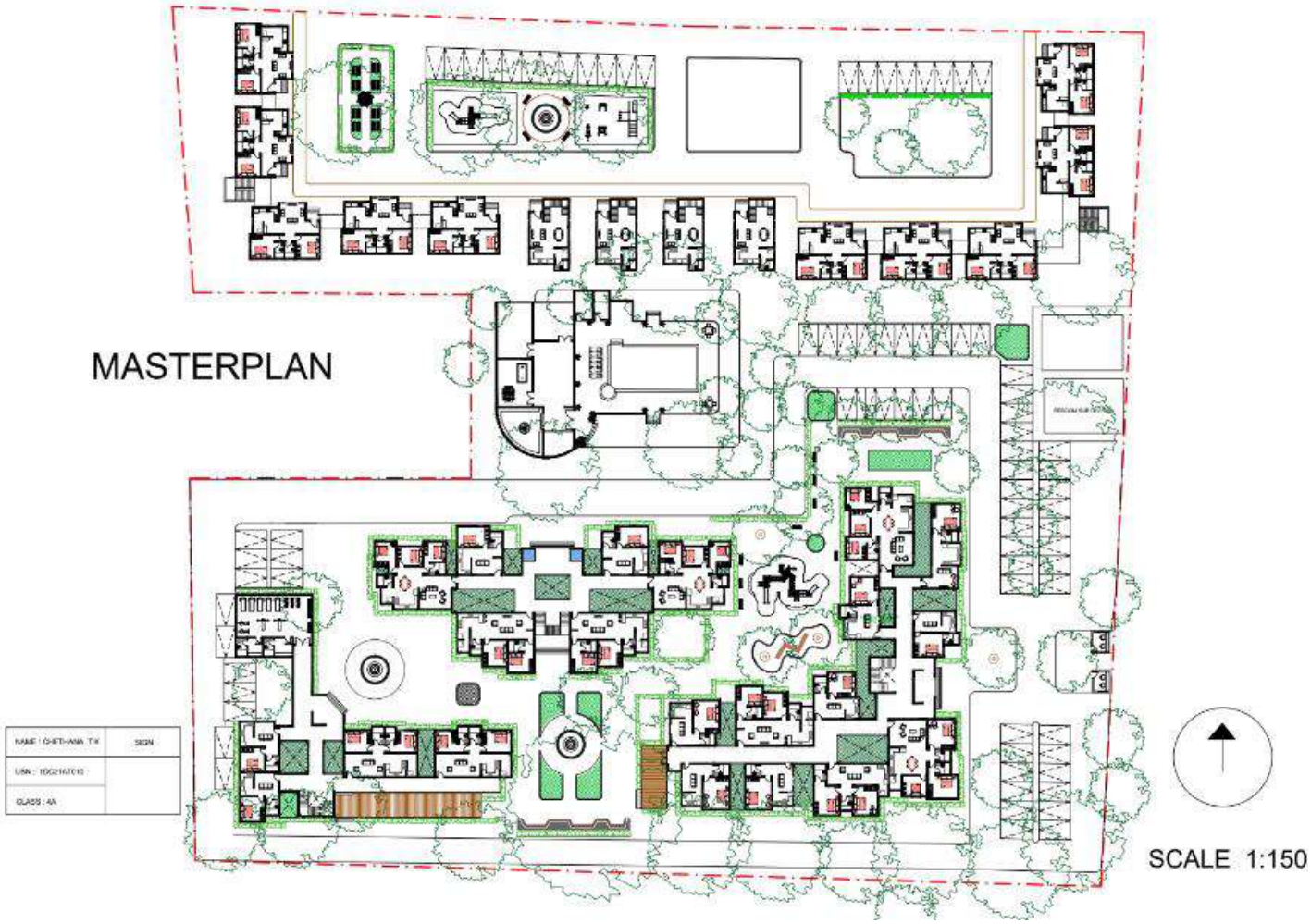
Architectural Design IV
Faculty: Ar. N Arun Chandhran, Ar. Banu Chandrika
Ar. Kiran Baikidy

Diya Bijoor
1DC20AT027



Architectural Design IV
Faculty: Ar. N Arun Chandhran, Ar. Banu Chandrika
Ar. Kiran Baikidy

Chetana
1DC20AT027



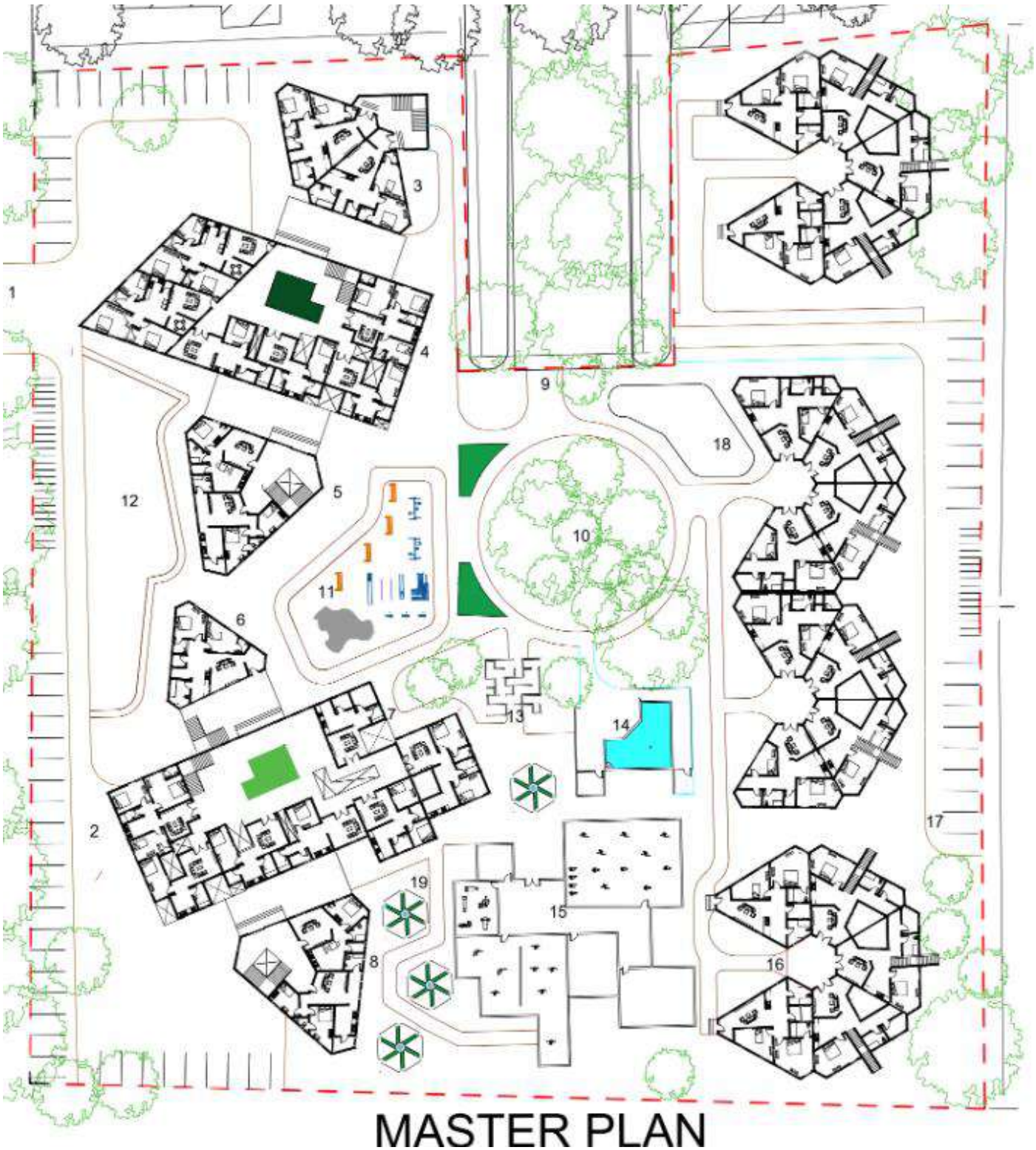
SITE SECTIONS
SCALE 1:200

HOUSING COMPLEX

AD IV

Architectural Design IV
Faculty: Ar. N Arun Chandhran, Ar. Banu Chandrika
Ar. Kiran Baikidy

Chetana
1DC20AT027



MASTER PLAN

Architectural Design IV
Faculty: Ar. N Arun Chandhran, Ar. Banu Chandrika
Ar. Kiran Baikidy

Chetana
1DC20AT027

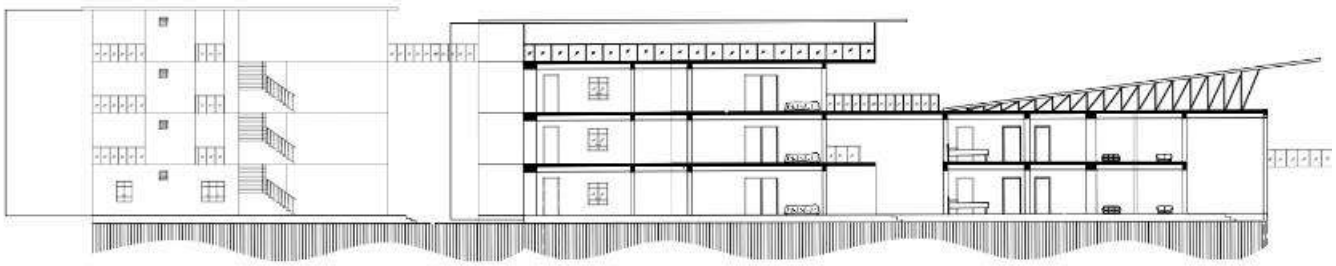
FLOOR PLANS

SCALE
1:100

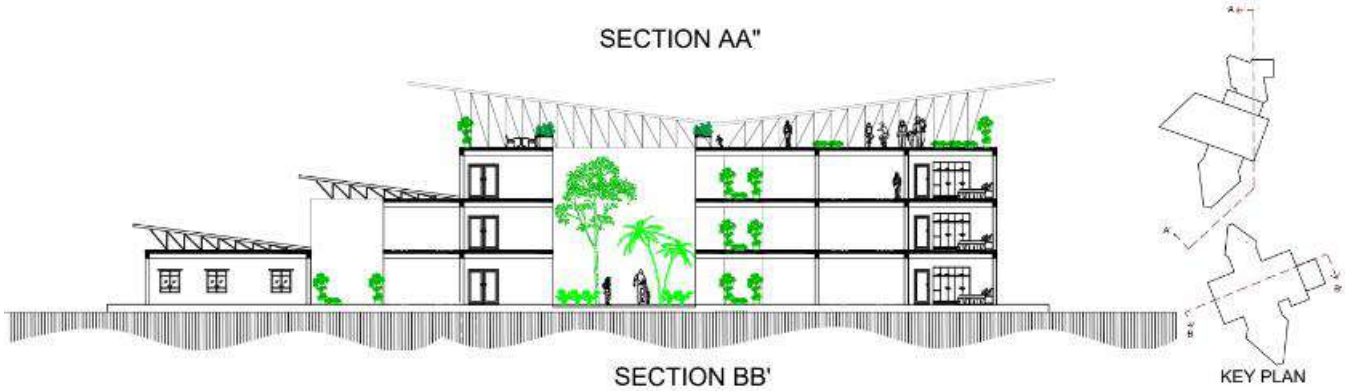
NAME : ISRATH K
CLASS : 4 A
USN : 1DC21AT028

Architectural Design IV
Faculty: Ar. N Arun Chandhran, Ar. Banu Chandrika
Ar. Kiran Baikidy

Israth
1DC20AT027

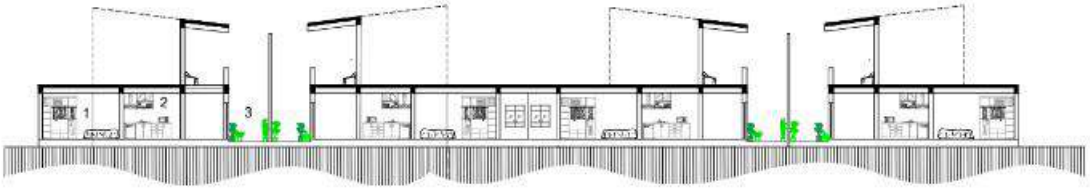


SECTION AA"



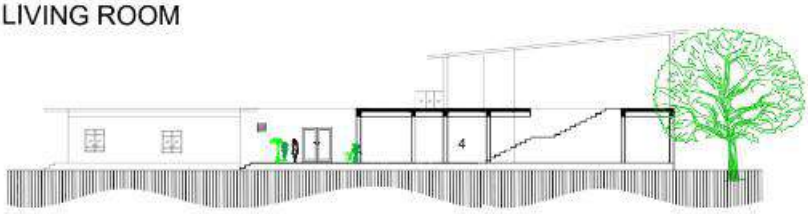
SECTION BB'

KEY PLAN

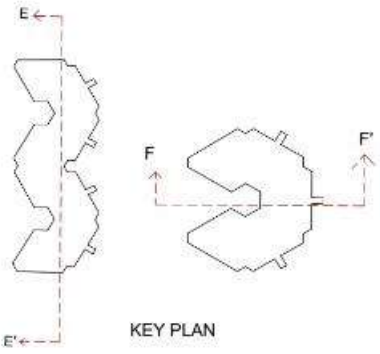


LEGEND
1. BEDROOM
2. KITCHEN
3. OPEN COURTYARD
4. LIVING ROOM

SECTION EE'



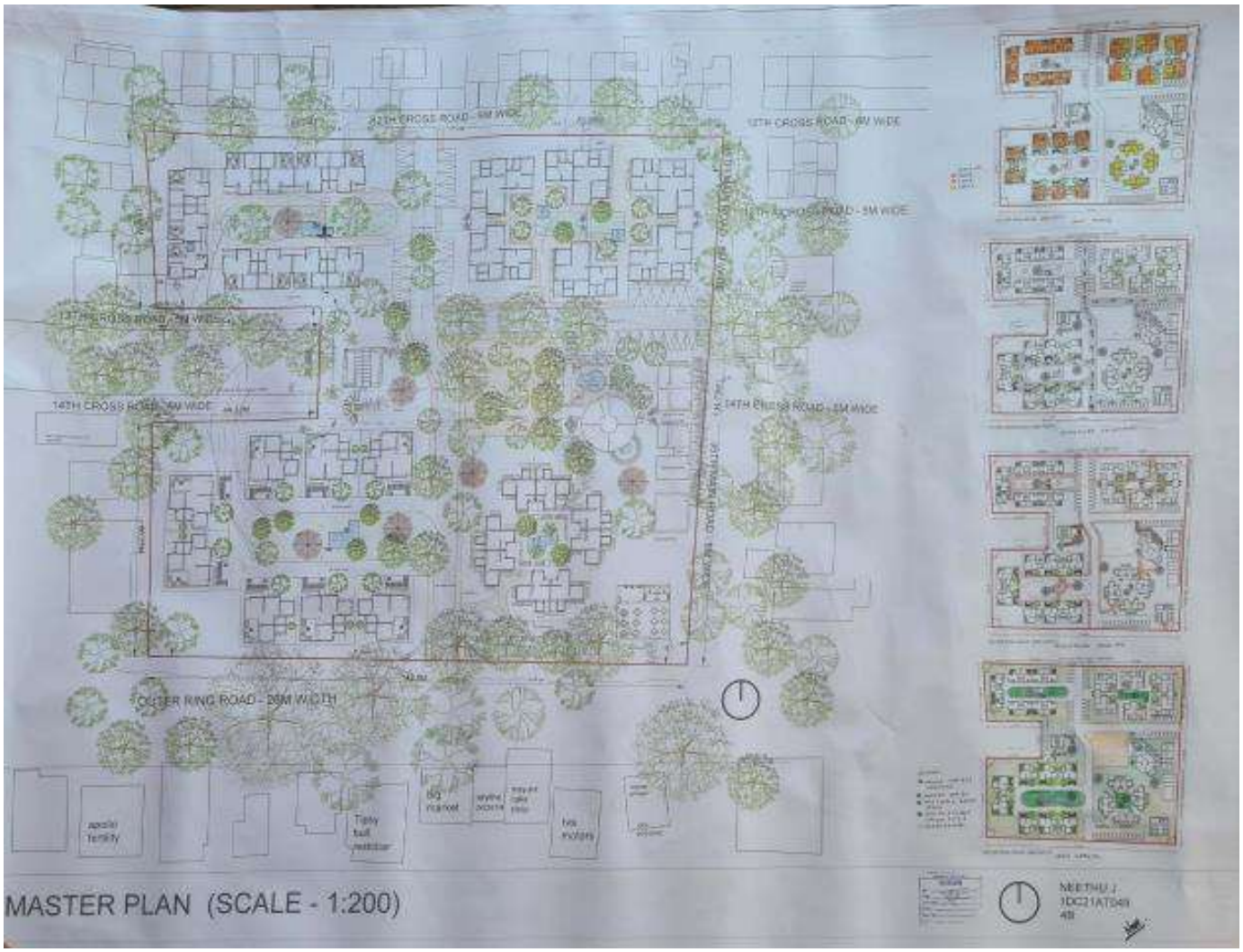
SECTION FF'

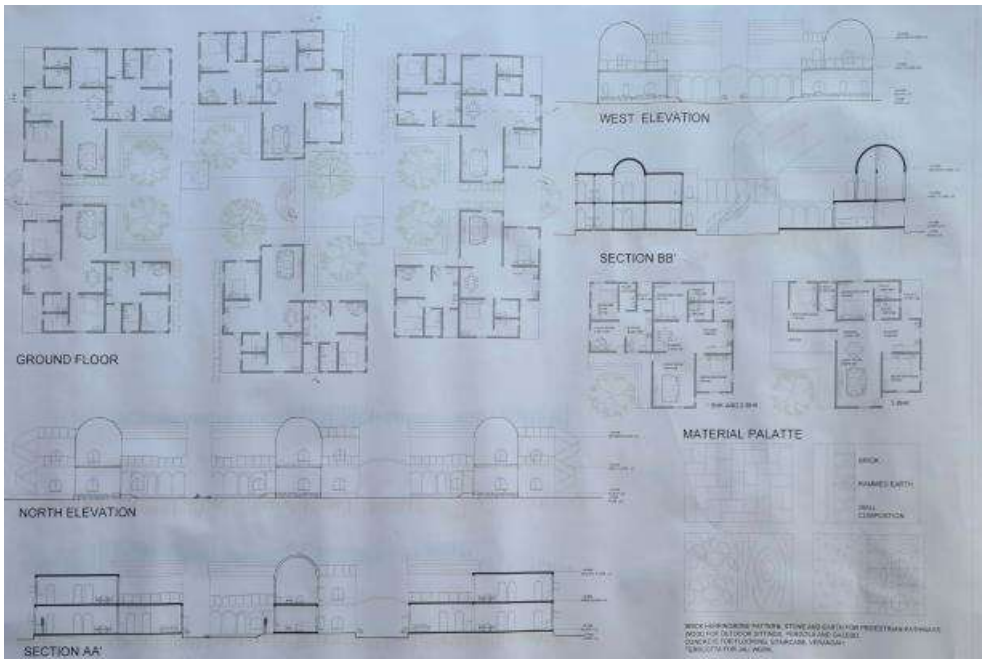


KEY PLAN

Architectural Design IV
Faculty: Ar. N Arun Chandhran, Ar. Banu Chandrika
Ar. Kiran Baikidy

Neethu
1DC20AT027





MATERIALS AND METHODS OF BUILDING CONSTRUCTION V SUBJECT CODE 18ARC42

Studio Faculty

Ar. Tejas Karay

Ar. Dominic L Harper

4th Semester MMBC is largely about RCC structures

The studio was based on a practical/hands on or experiential learning approach by encouraging the students to build models for all the topics under the large RCC structures such as flat slab, waffle slab and two way slab.

The syllabus also deals with collapsible gate, rolling shutters and aluminium partitions

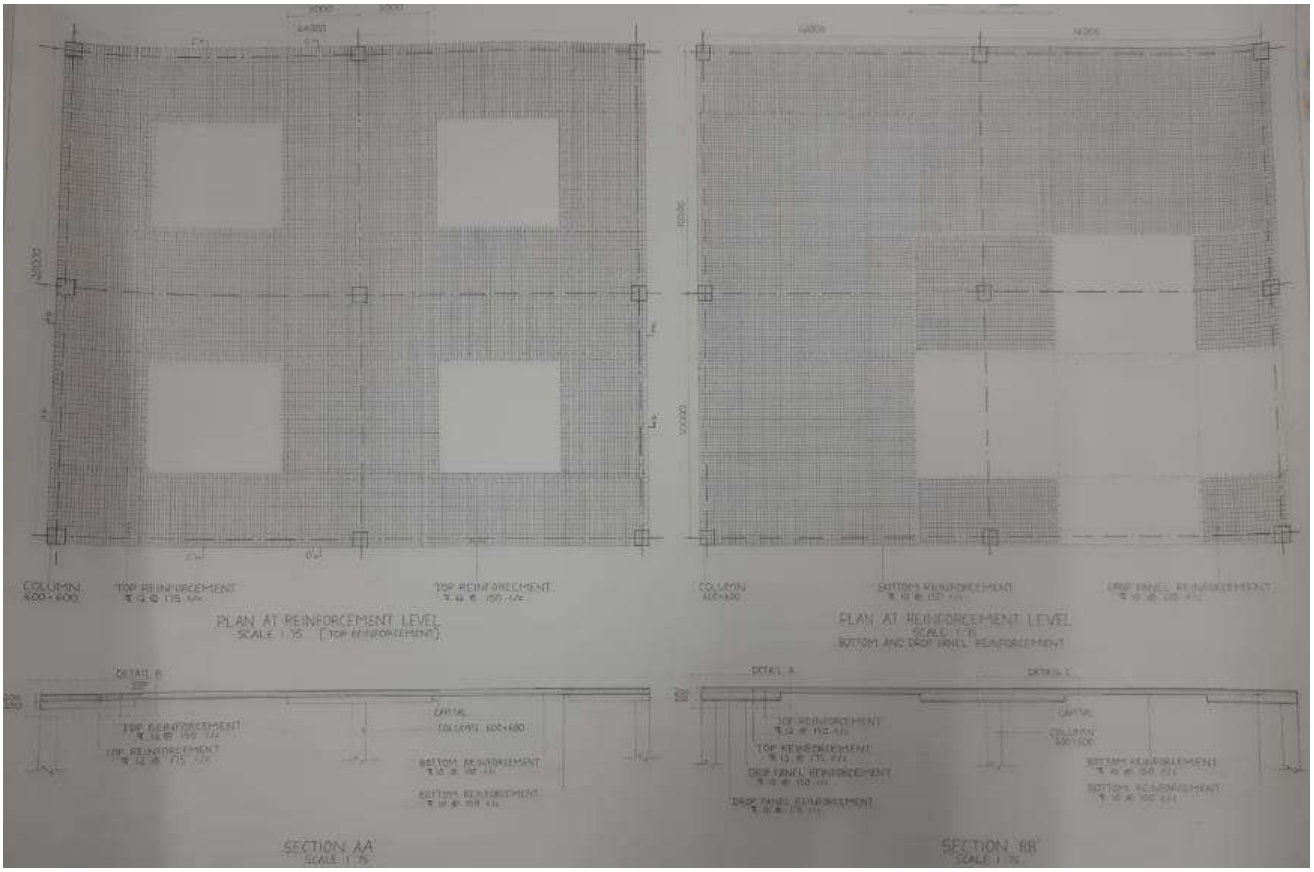
Large scale live models were constructed by the students using different materials and joinery detailing.

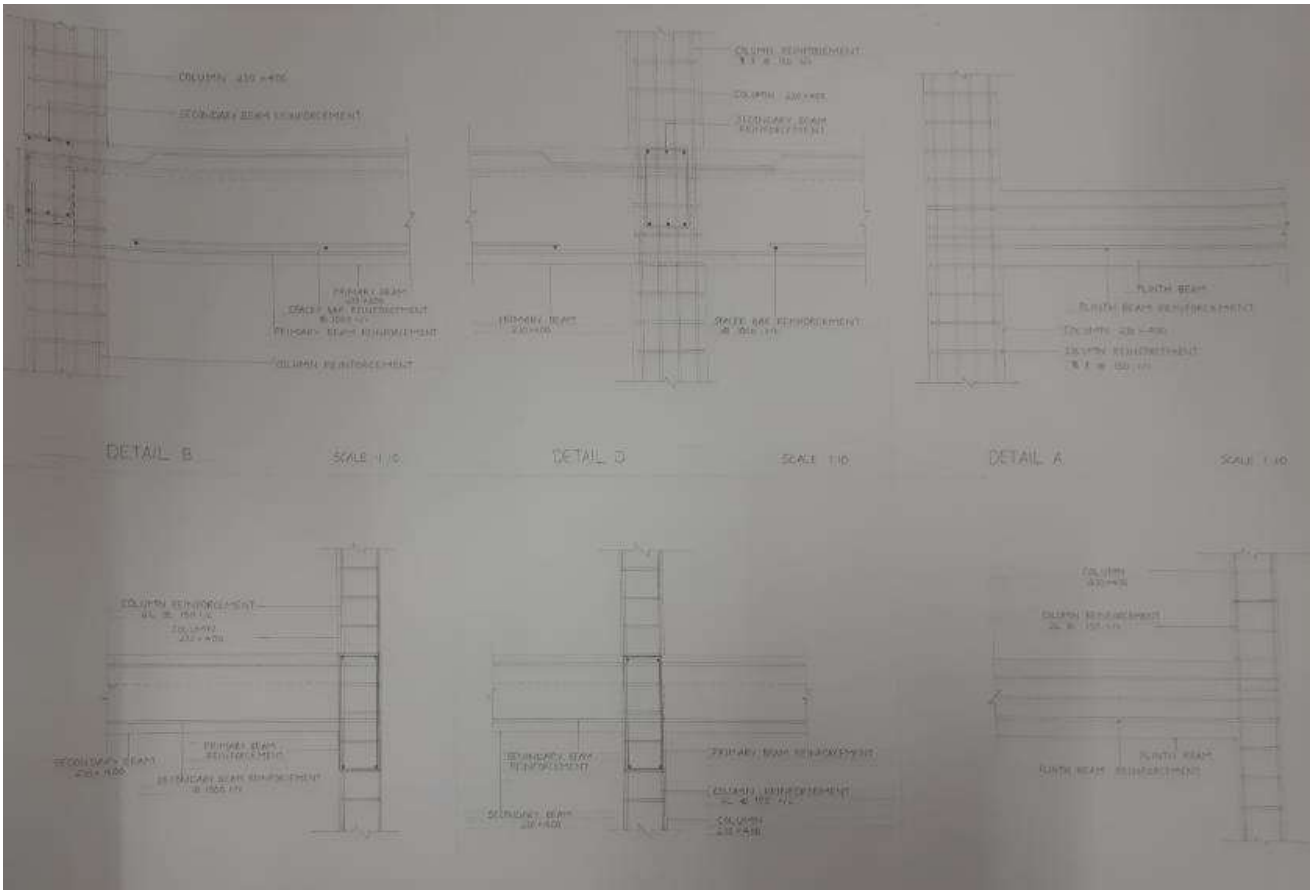
Barrel vault shell roof and Angular Truss

MMBC IV.

Materials and Methods in Building Construction
Faculty: Ar. Aparna Shastri, Ar. Divya S

Kaarthik N
1DC20AT033



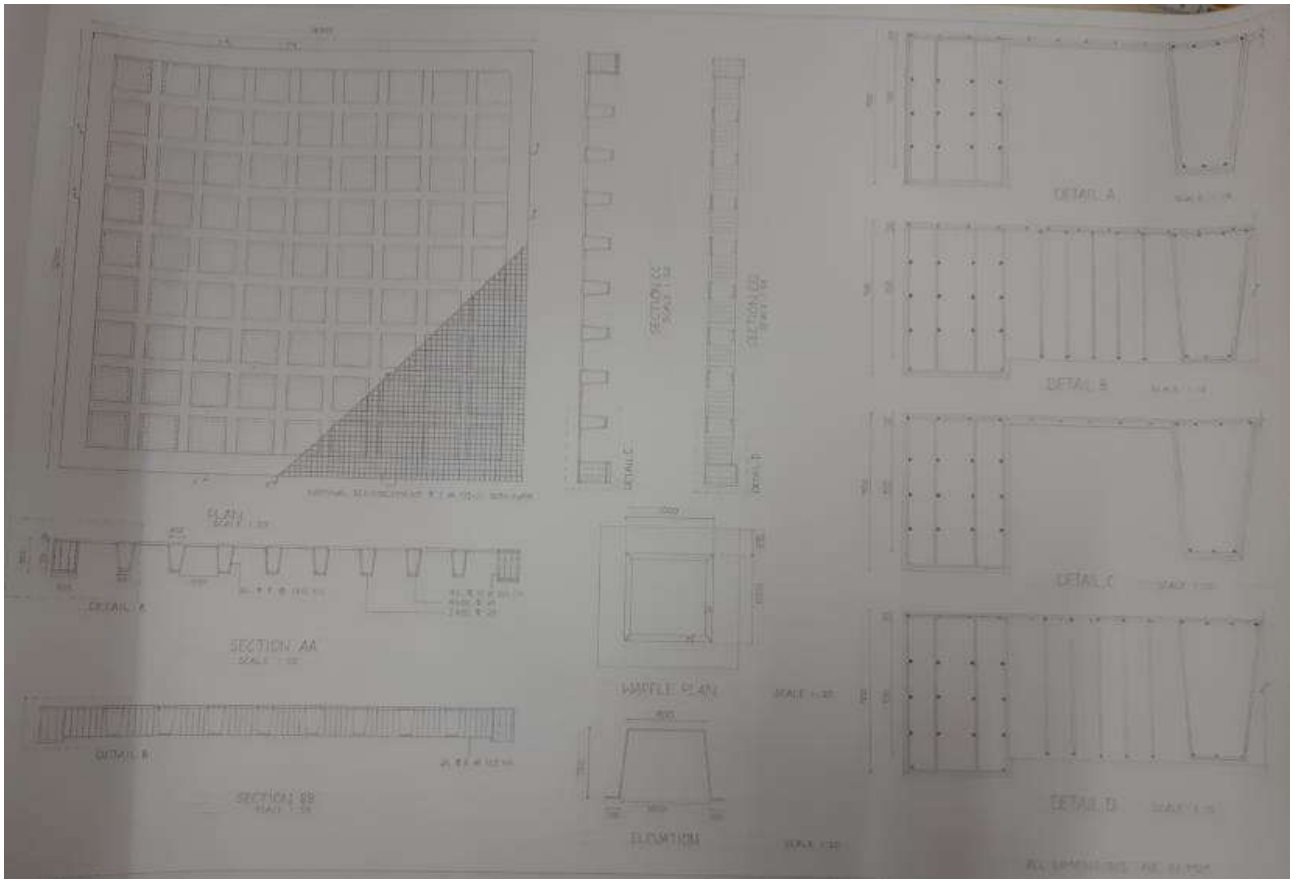


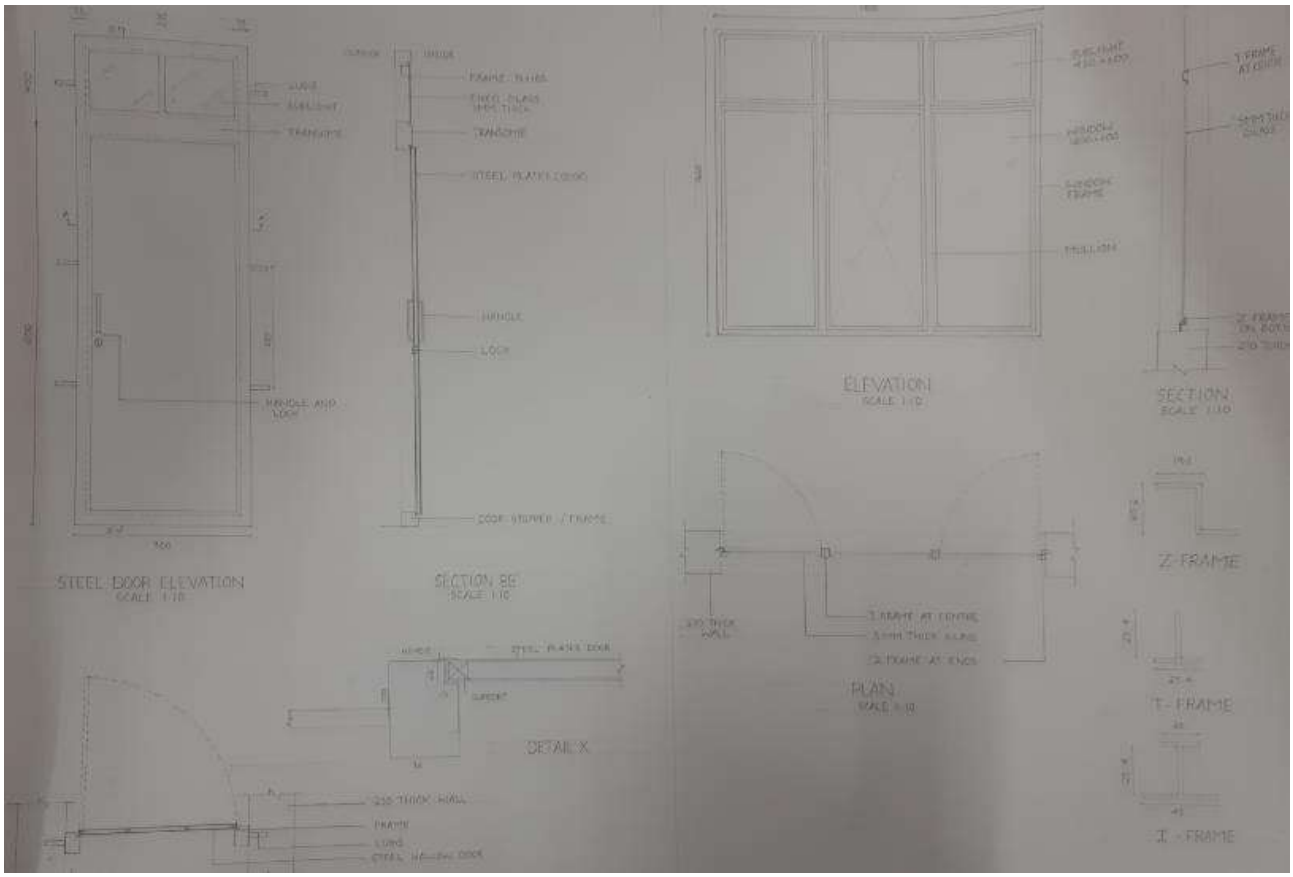
Barrel vault shell roof and Angular Truss

MMBC IV.

Materials and Methods in Building Construction
Faculty: Ar. Aparna Shastri, Ar. Divya S

Kaarthik N
1DC20AT033



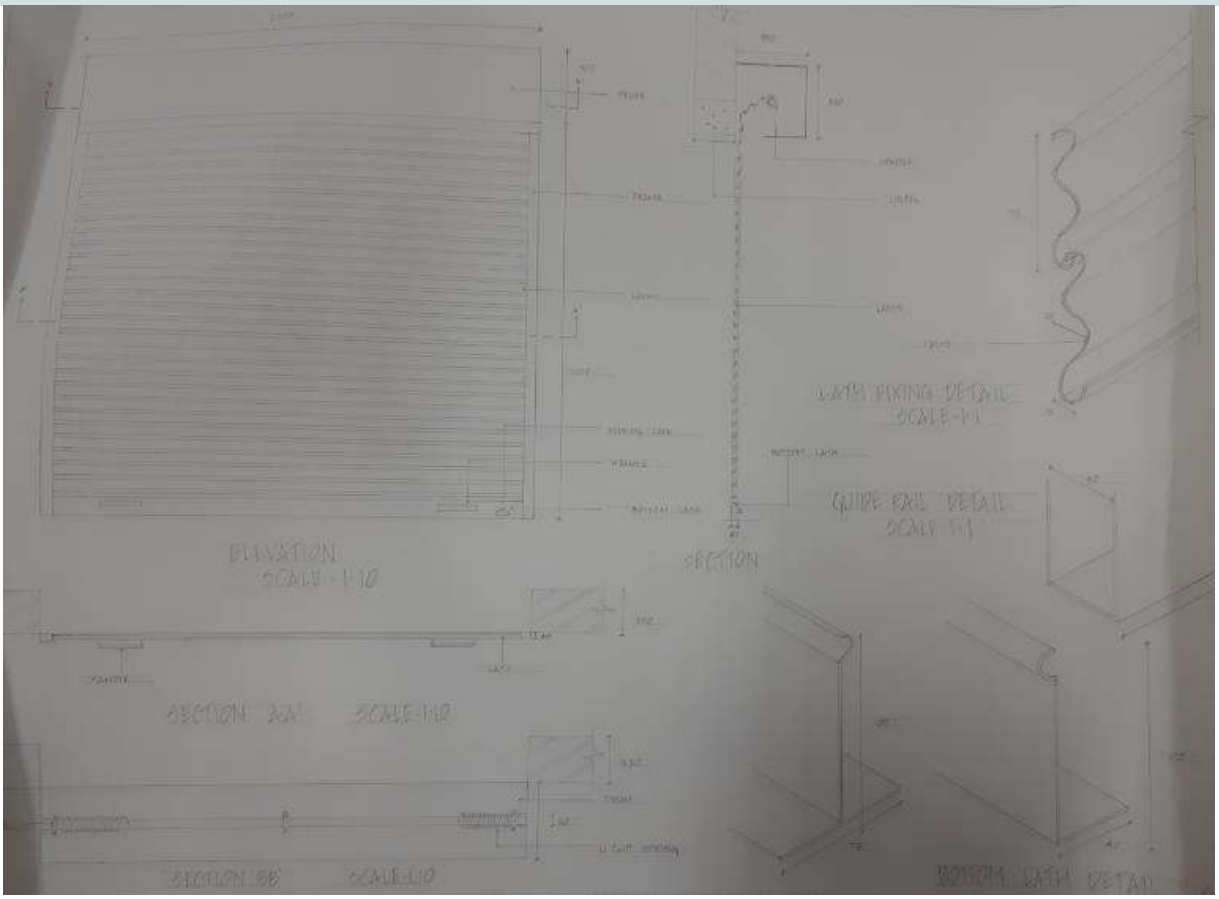


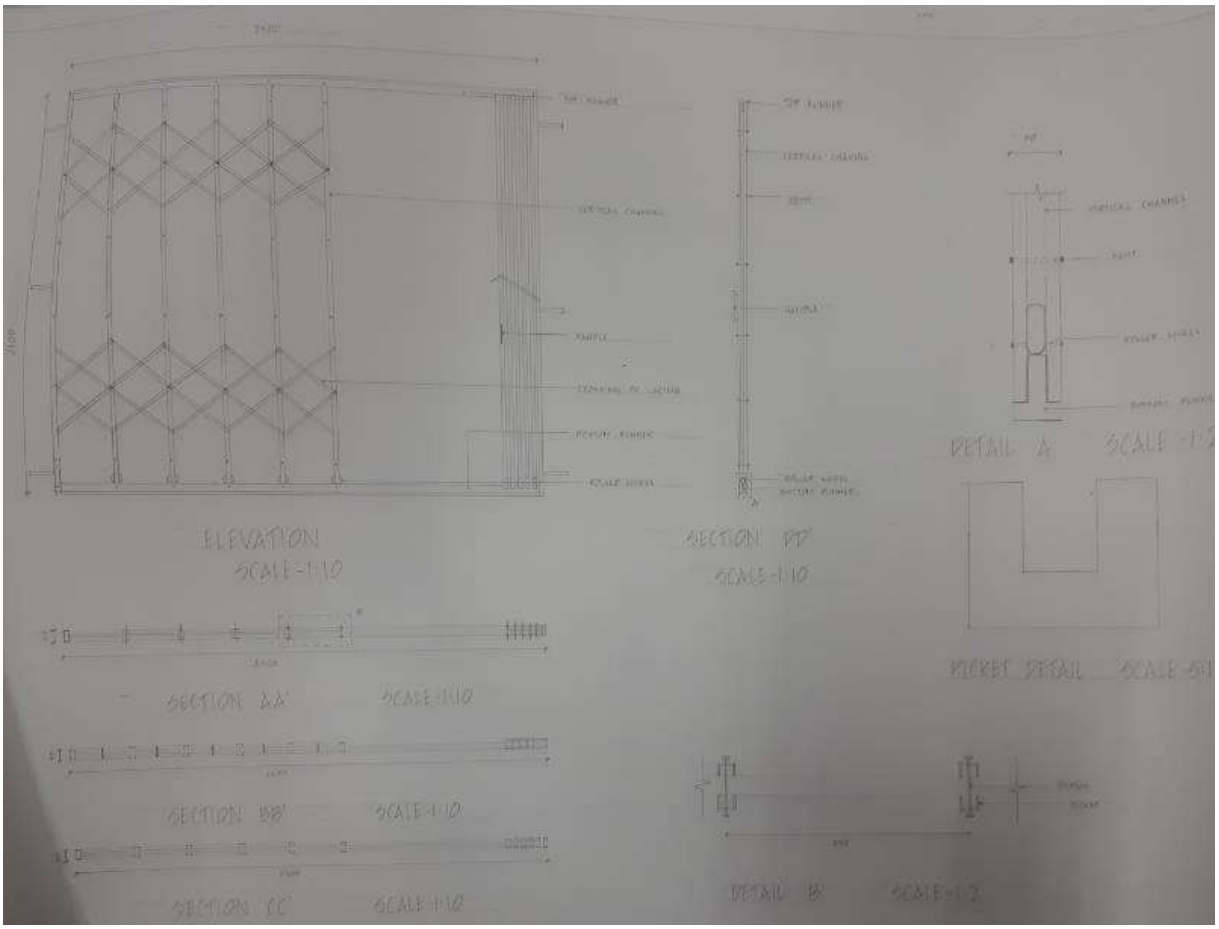
Barrel vault shell roof and Angular Truss

MMBC IV.

Materials and Methods in Building Construction
Faculty: Ar. Aparna Shastri, Ar. Divya S

Kaarthik N
1DC20AT033



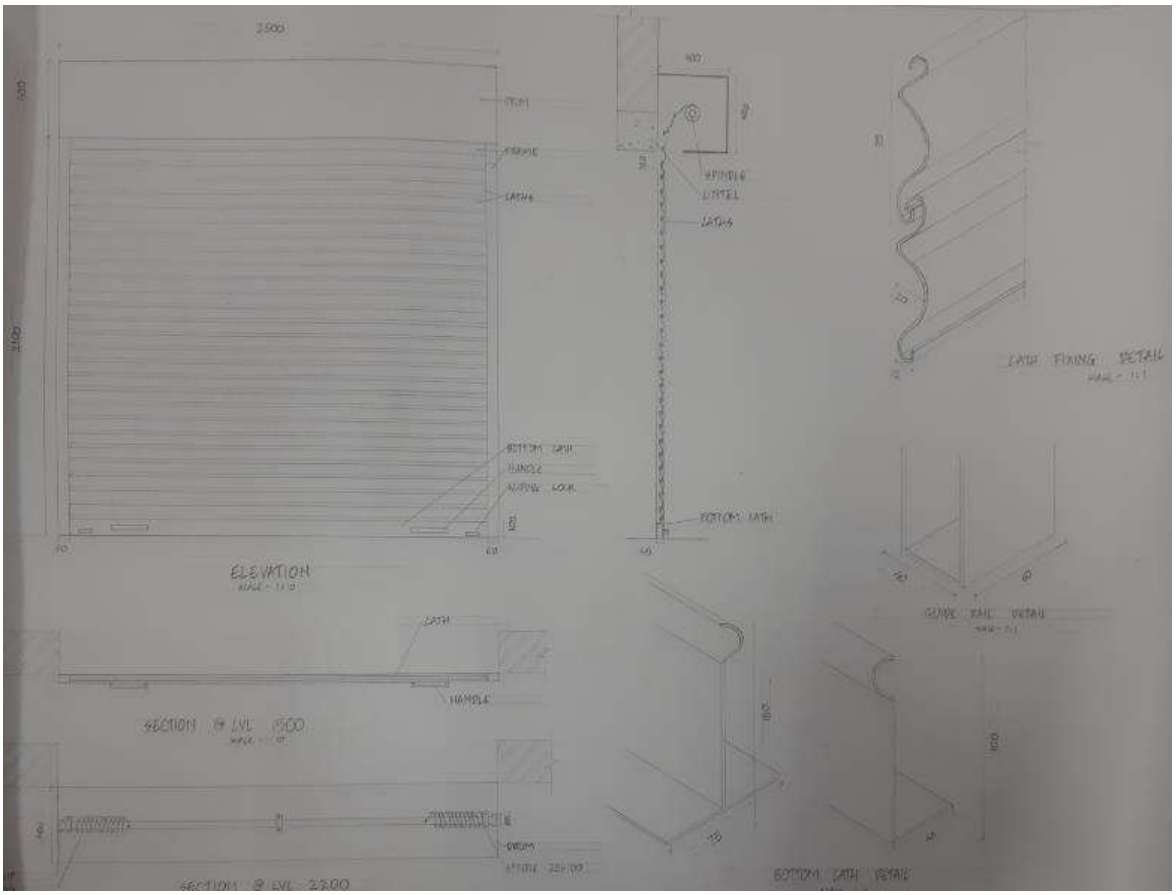


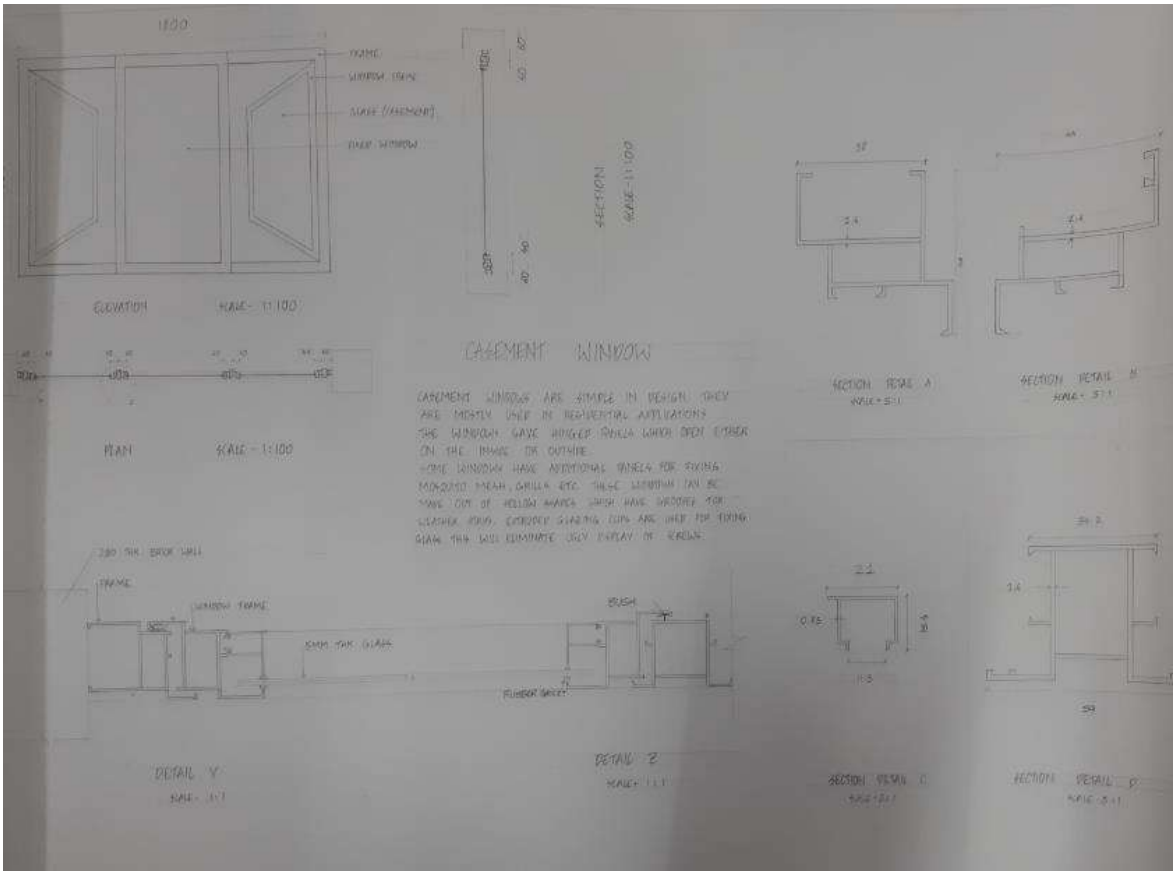
Barrel vault shell roof and Angular Truss

MMBC IV.

Materials and Methods in Building Construction
Faculty: Ar. Aparna Shastri, Ar. Divya S

Kaarthik N
1DC20AT033





ELECTIVE
Product design
Graphic design

Studio Faculty

Ar. Arun Chandhran

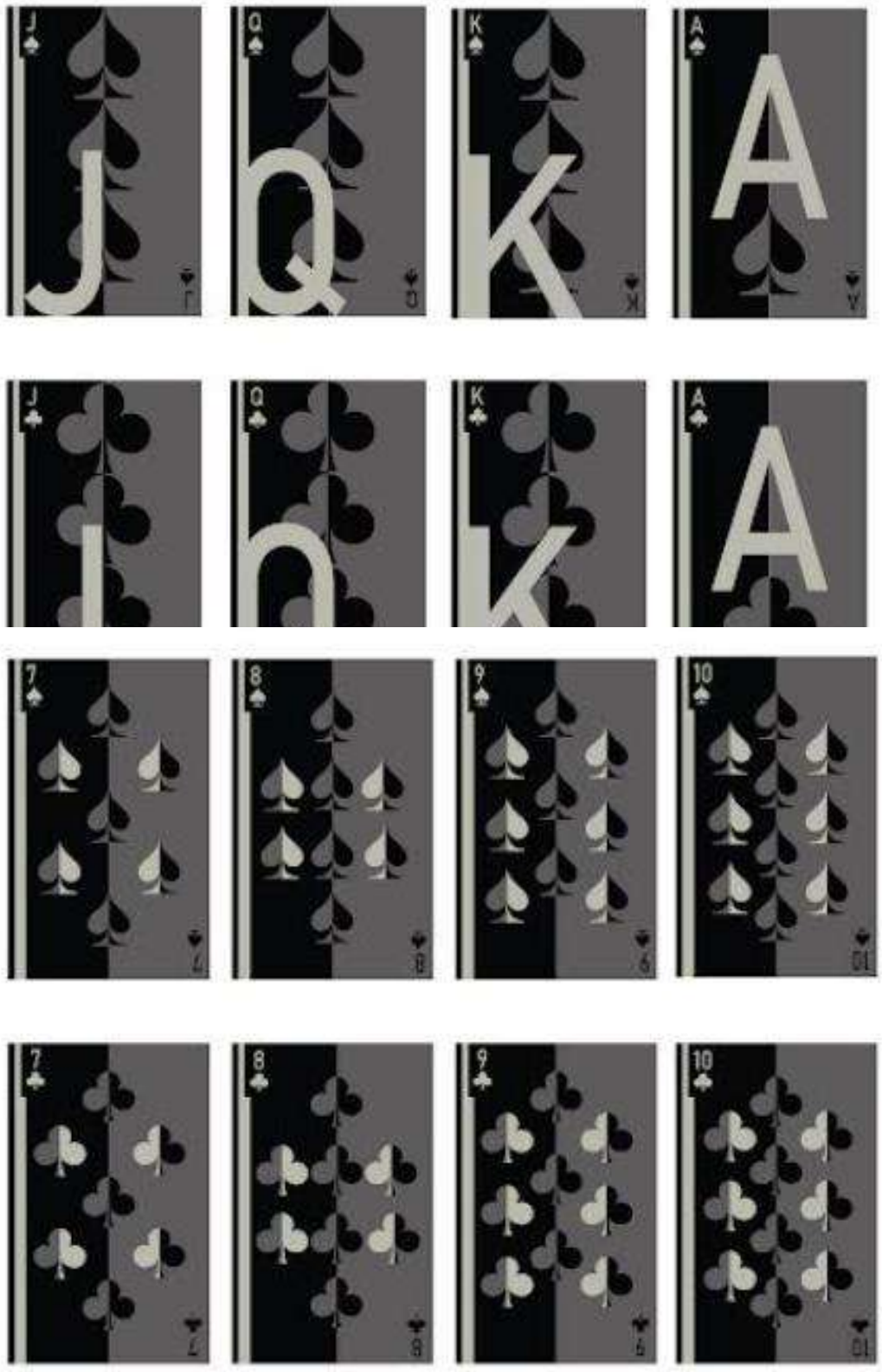
Course Objective
To familiarize students with the basic concepts of typography and layout design

To understand the different materials available in the market for product design

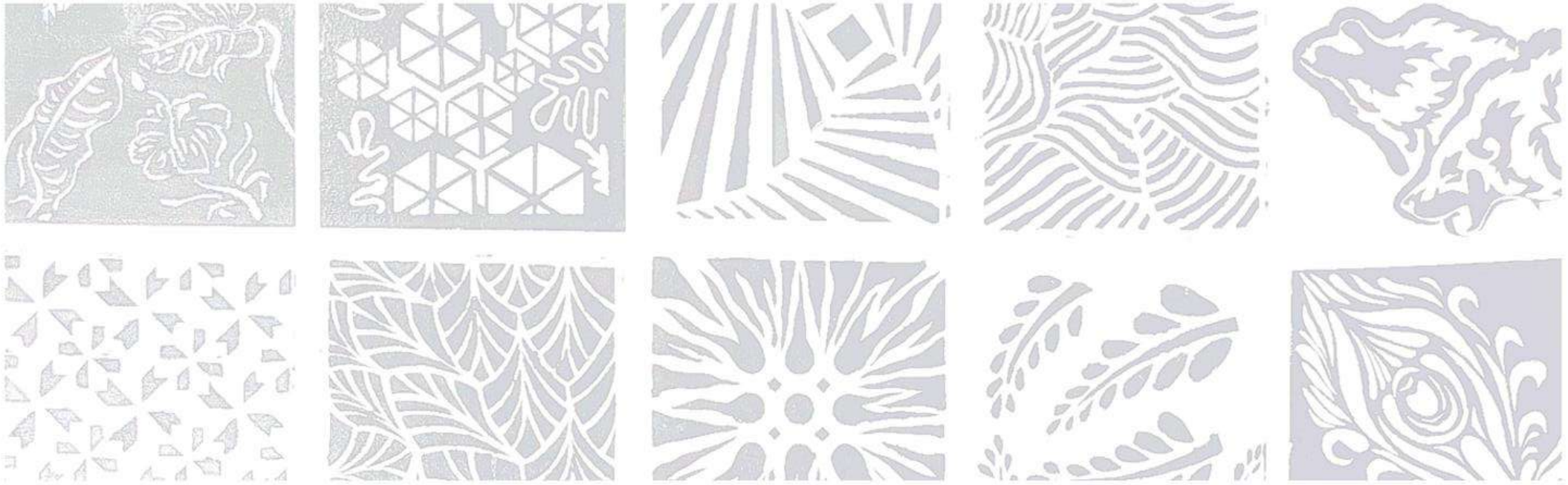
Introduction to 3d printing

Understanding the role of a theme, concept in developing once own unique style of design in the field of graphic/product design

Elective: Product design
Faculty: Ar. Arun Chandhran



Elective: Product design
Faculty: Ar. Arun Chandhran



5th Semester

ARCHITECTURAL DESIGN V
SUBJECT CODE 18ARC51

Course Objectives:

1) To understand the need for creating architecture as an envelope to system dependent
program.
2) To understand the use of technologies developed in other fields as a precursor to creating
architecture.
3) To identify and understand the role of services in the design of buildings; significance of material and construction techniques; climatic factors.
4) Introduction to development Regulations (building byelaws and rules); circulation networks (people, vehicular access), site planning.
5) To explore Computer Aided Design techniques to generate drawings and models to better understand envelopes and systems in architecture.
6) To understand the (thematic) abstract character of architecture (symbolism, aesthetics, identity) in the public domain; influence of socio-cultural, economic dimensions; user perception.

Studio Coordinators

Ar. Dominic Harper

Ar. Shubham Kaushal

Studio Faculty

Ar. Vasavi Ranganathan

Ar. Preethi Revankar

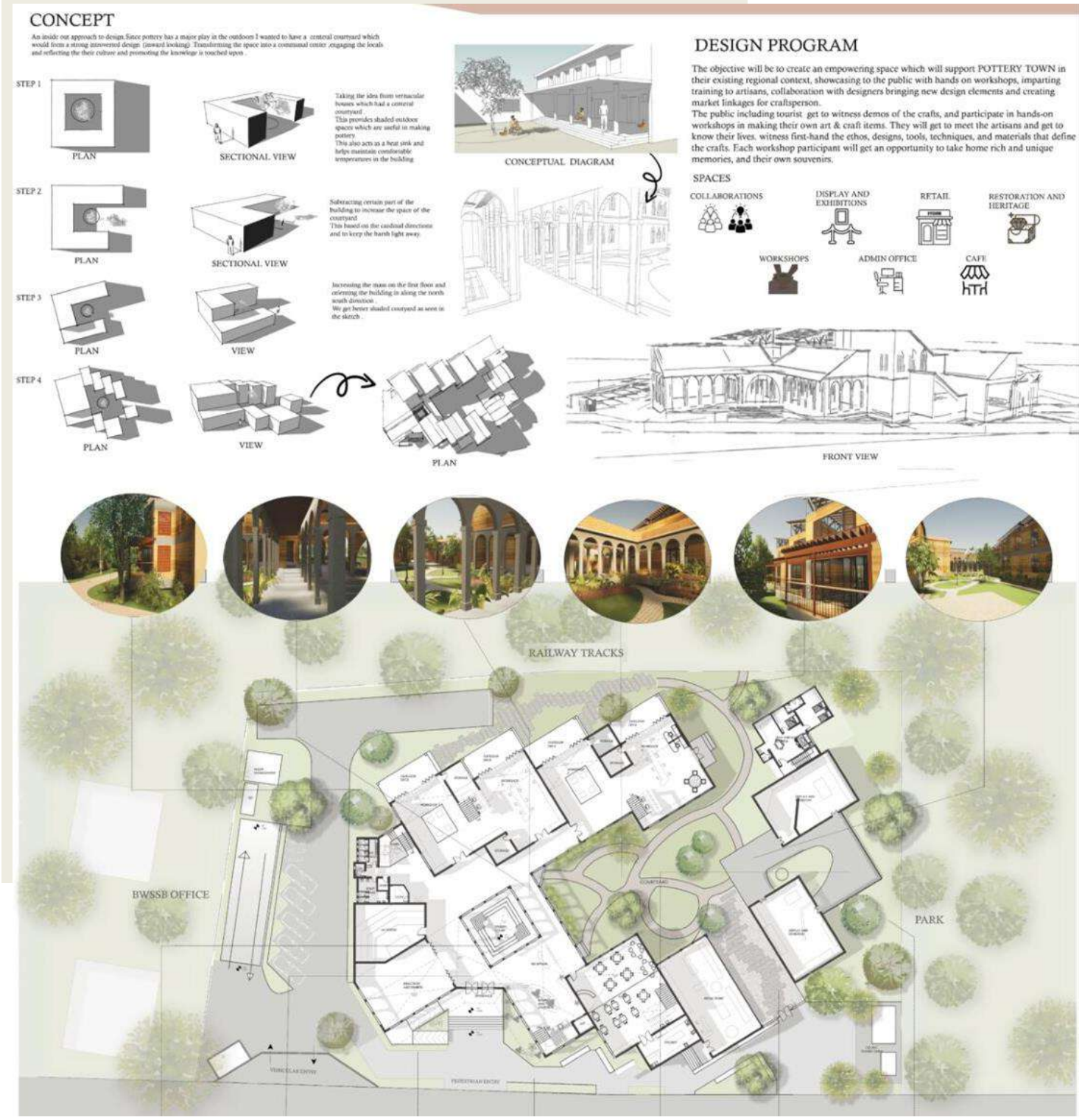
Ar. Kiran Baikidy

Ar. Kavitha Pole

Ar. Sushmitha Paul

Architectural Design V
Faculty: Ar. Dominic L Harper, Ar. Kavitha Pole, Ar. Kiran Baikidy, Ar. Sushmitha Paul

Harsh S Kothari
1DC20AT027

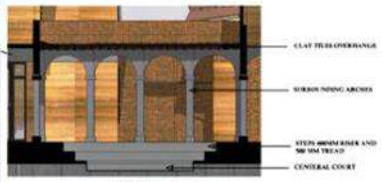


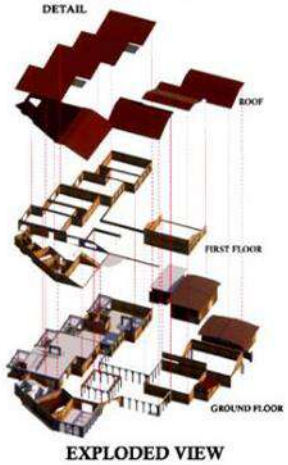
Art and Craft Development Centre

AD V

Architectural Design V
Faculty: Ar. Dominic L Harper, Ar. Kavitha Pole, Ar. Kiran Baikidy, Ar. Sushmitha Paul

Harsh S Kothari
1DC20AT027



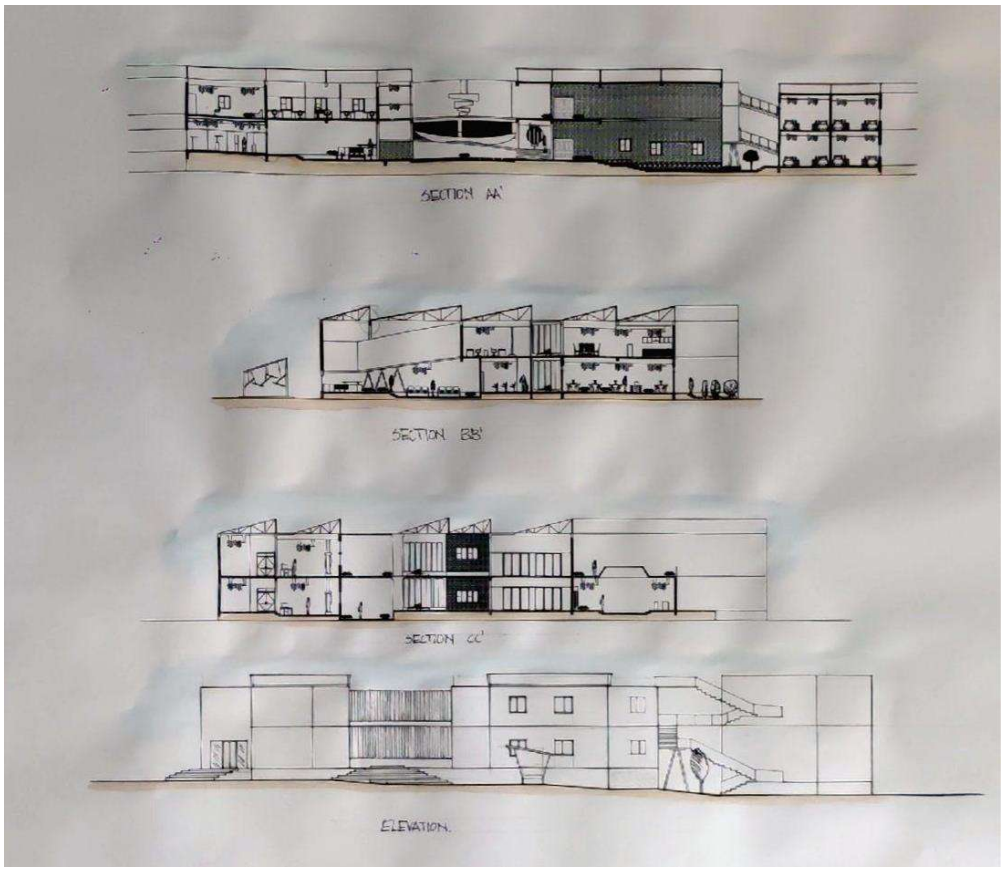


Art and Craft Development Centre

AD V.

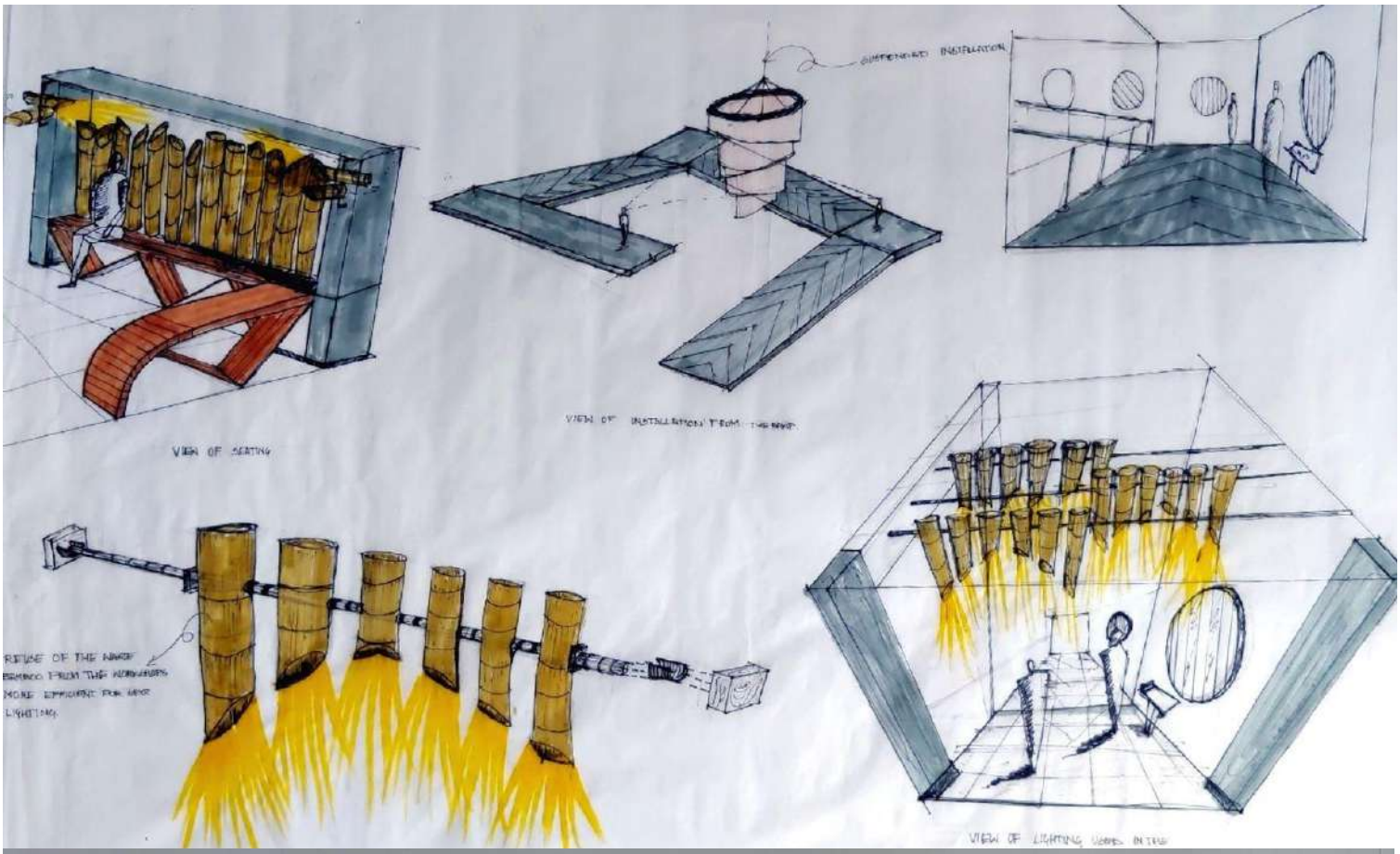
Architectural Design V
Faculty: Ar. Dominic L Harper, Ar. Kavitha Pole, Ar. Kiran Baikidy, Ar. Sushmitha Paul

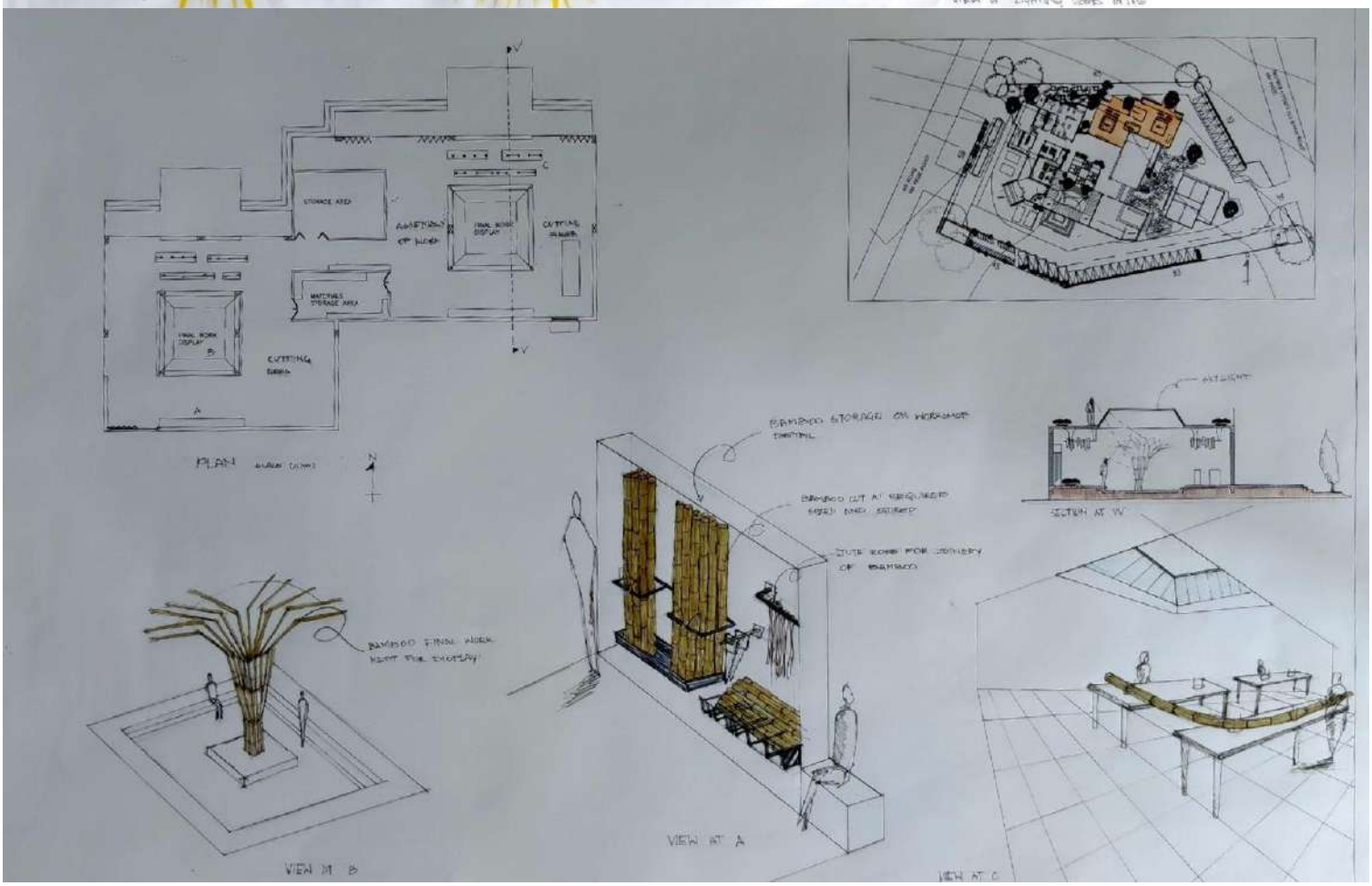
K B Lelith Aditya
1DC20AT030



Architectural Design V
Faculty: Ar. Dominic L Harper, Ar. Kavitha Pole, Ar. Kiran Baikidy, Ar. Sushmitha Paul

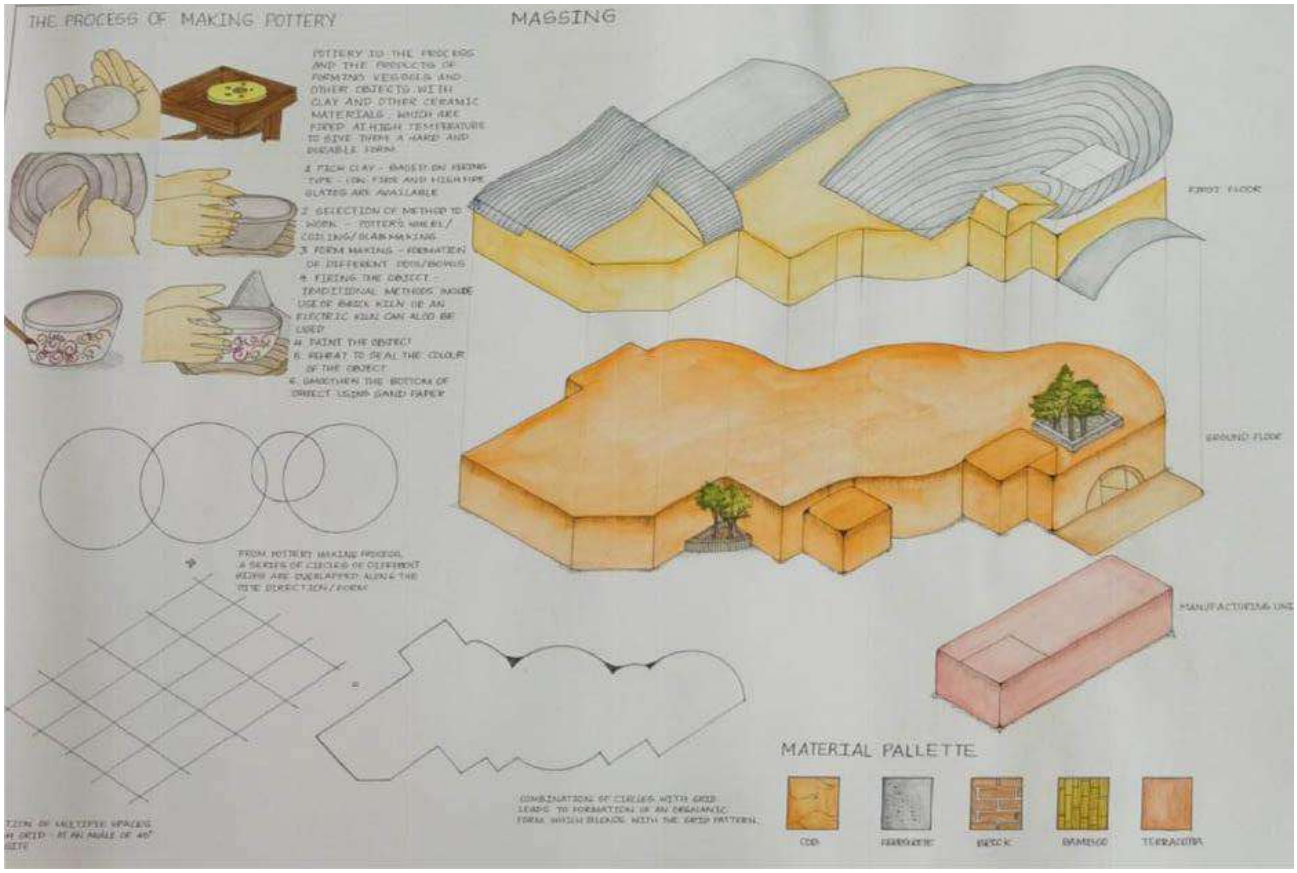
K B Lelith Aditya
1DC20AT030





Architectural Design V
Faculty: Ar. Shubham Kaushal, Ar. Preethi Revankar, Ar. Vasavi Ranganathan

Manasvi M Shetty
1DC20AT038

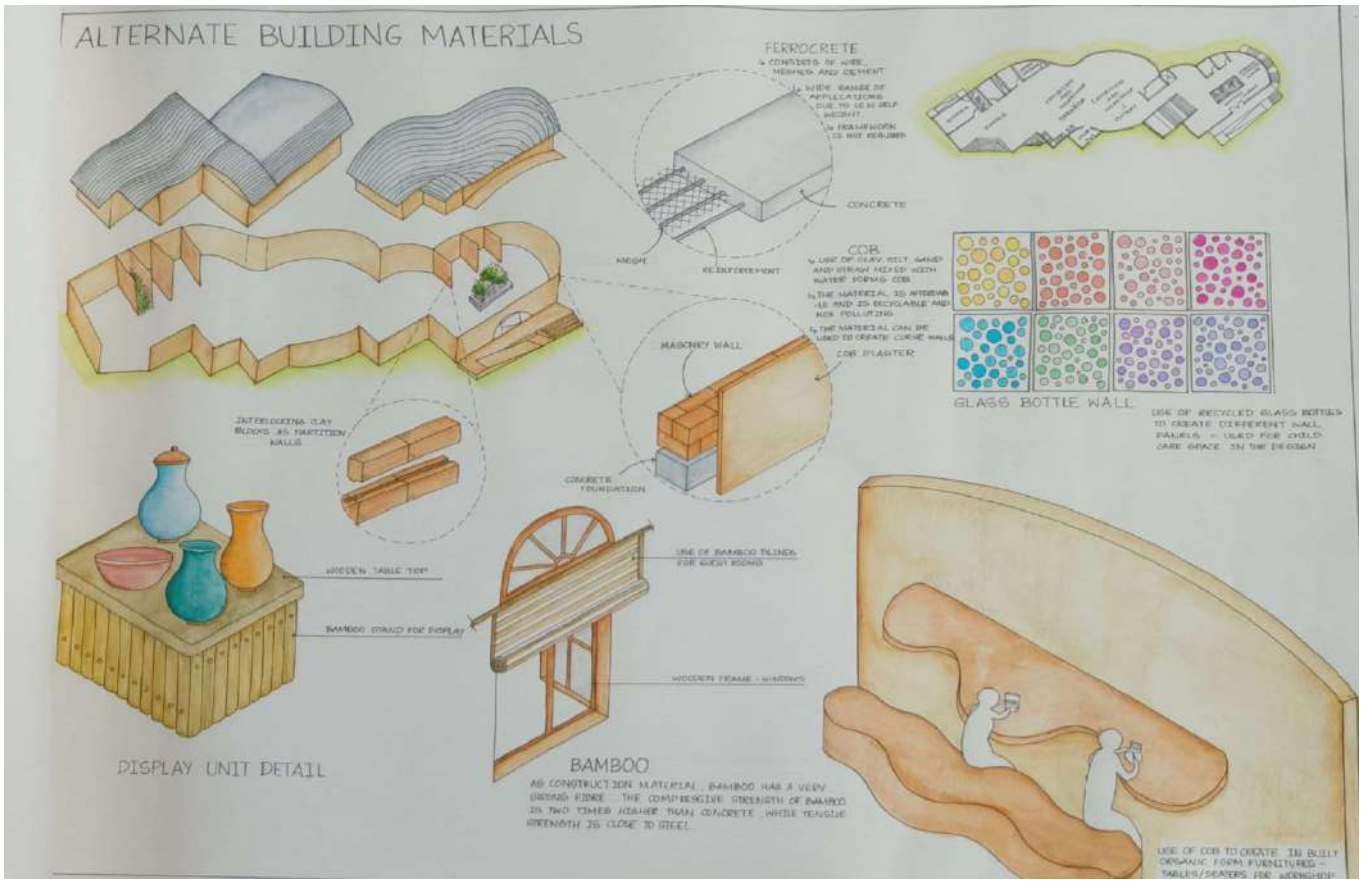


Art and Craft Development Centre

AD V

Architectural Design V
Faculty: Ar. Shubham Kaushal, Ar. Preethi Revankar, Ar. Vasavi Ranganathan

Manasvi M Shetty
1DC20AT038

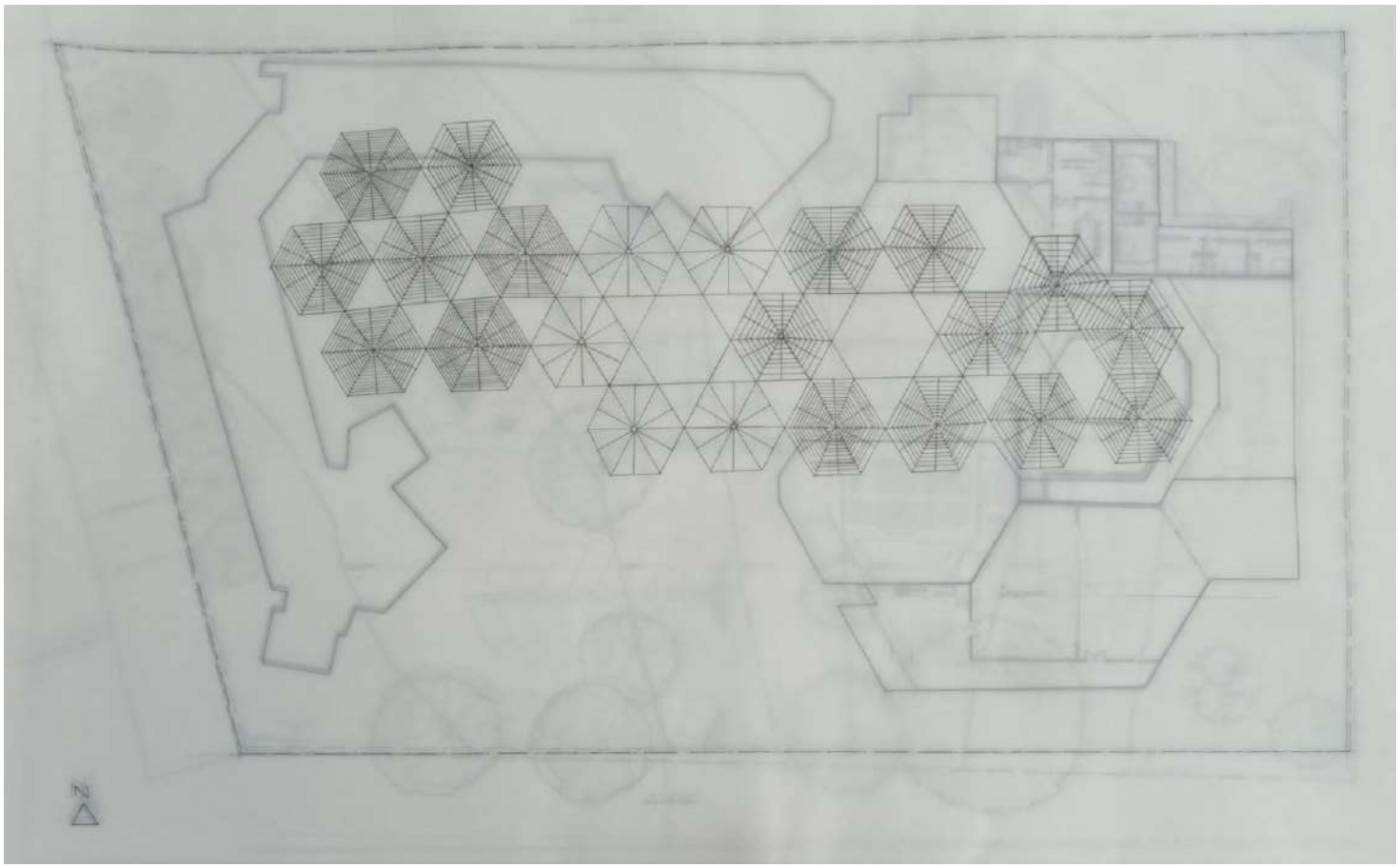


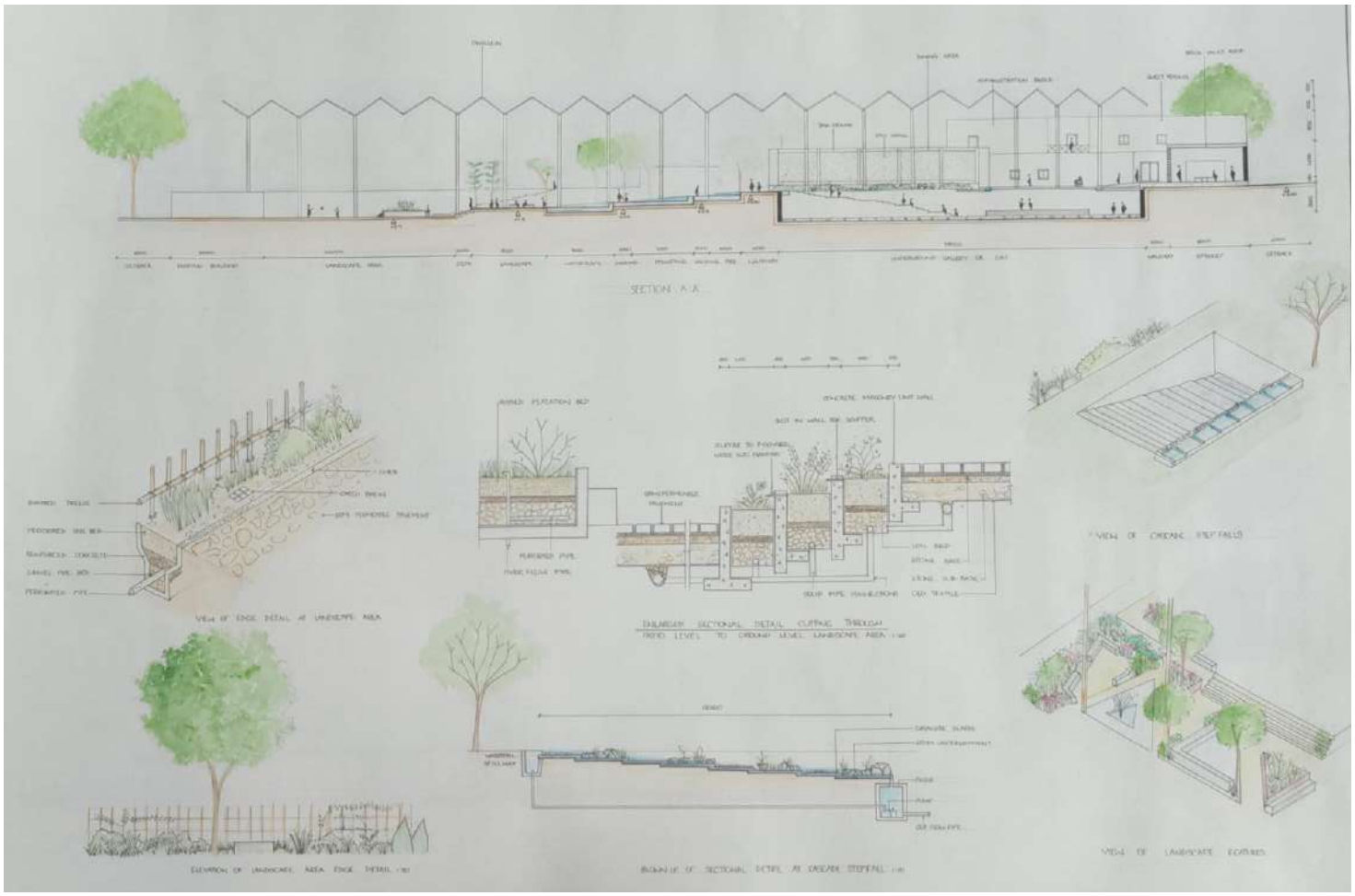
Art and Craft Development Centre

AD V.

Architectural Design V
Faculty: Ar. Shubham Kaushal, Ar. Preethi Revankar, Ar. Vasavi Ranganathan

M K Roopika
1DC20AT044



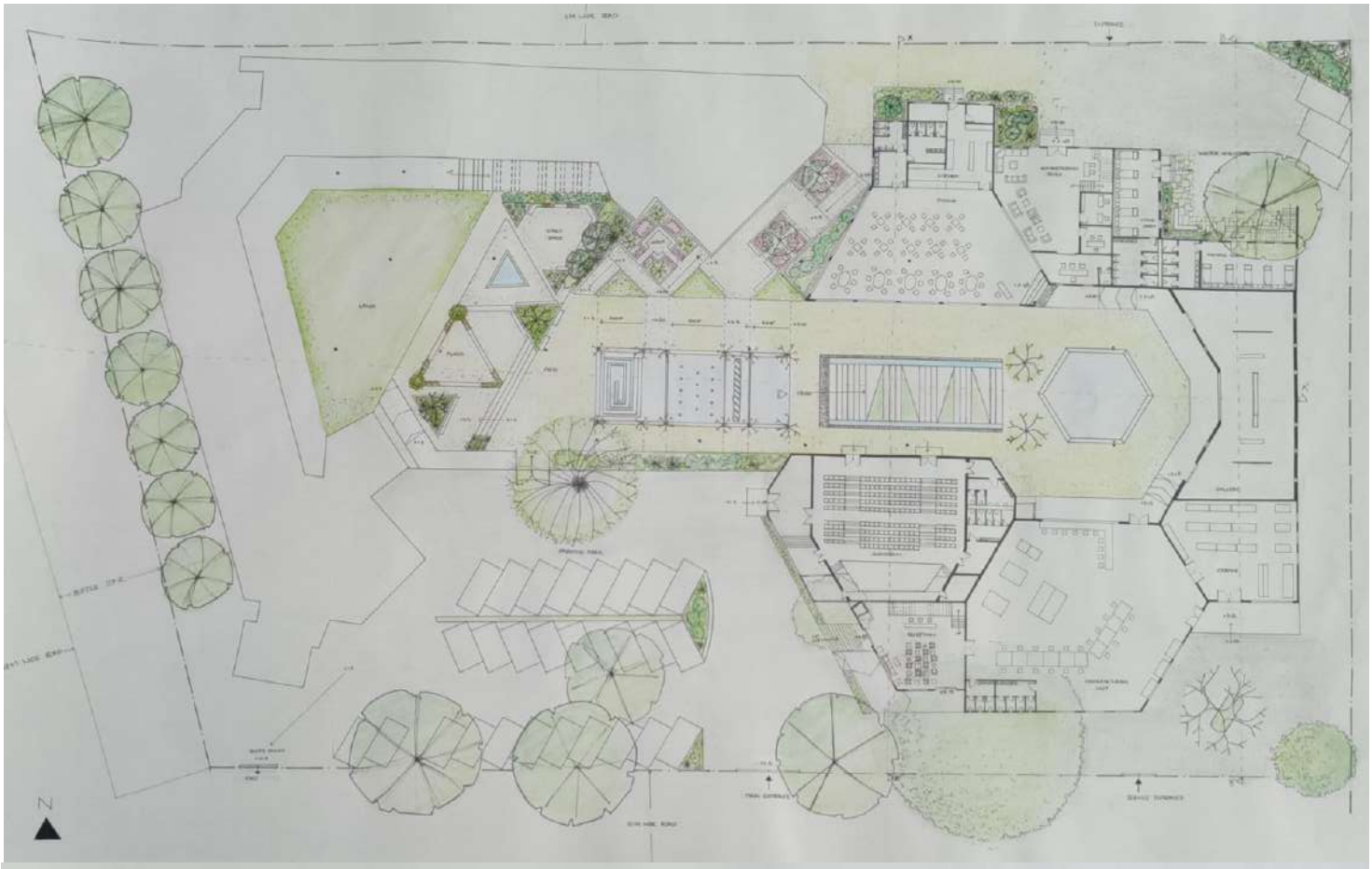


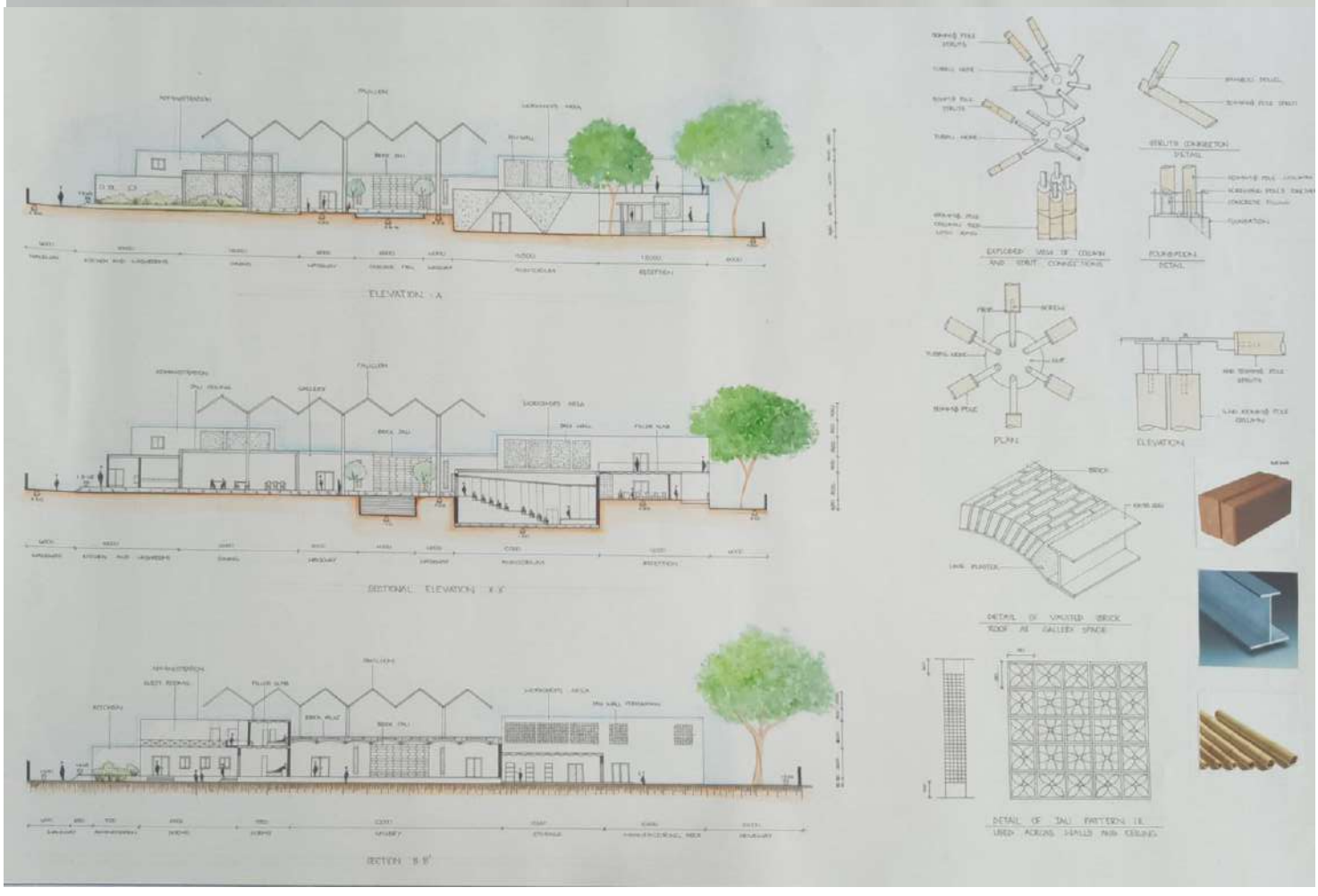
Art and Craft Development Centre

AD V.

Architectural Design V
Faculty: Ar. Shubham Kaushal, Ar. Preethi Revankar, Ar. Vasavi Ranganathan

M K Roopika
1DC20AT044





MATERIALS AND METHODS OF BUILDING CONSTRUCTION V SUBJECT CODE 18ARC52

Studio Coordinators

Ar. Aparna Shastri

Ar. Dominic L Harper

Studio Faculty

Ar. Surabhi Moharir

Ar. Divya S

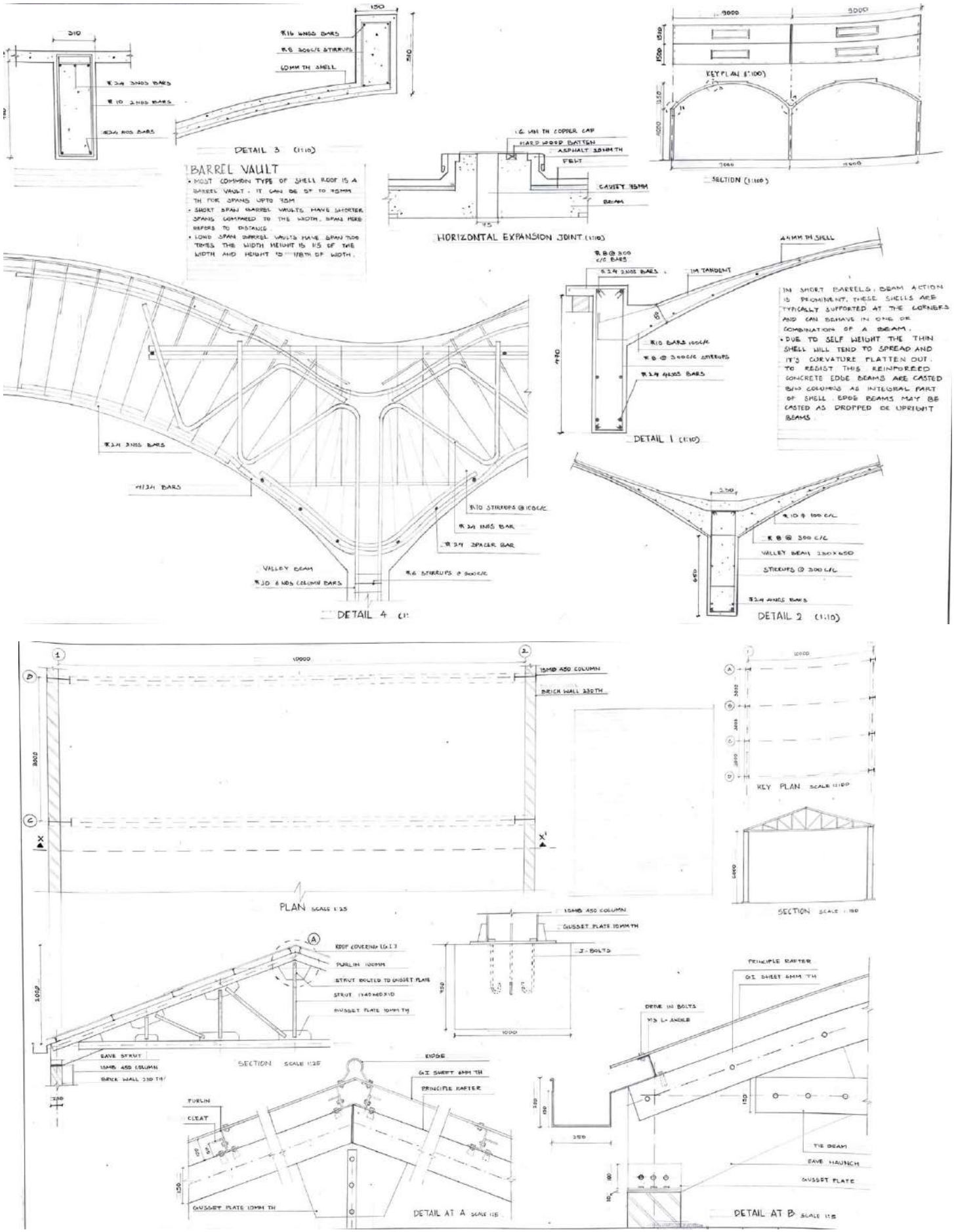
5th Semester MMBC is largely about long span structures and plastic as a building material
The large span structures include, steel trusses, portal frames and pre engineered buildings, shell structures including barrel shells, hyperbolic paraboloids and folded plate structures and geodesic domes and space frames. The topic concludes with tensile and pneumatic structures.
Plastic as a building material is the second topic of the semester and has components like adhesives and additives in building construction, waterproofing is the third and last topic of the semester.
The studio was based on a practical/hands on or experiential learning approach by encouraging the students to build models for all the topics under the large span structures heading. Large scale live models were constructed by the students using different materials and joinery detailing. Thus models for each subtopic like steel trusses, shell structures, space frames and tensile structures were constructed by the students.
A long span workshop with bamboo was also conducted by Er Manjunath BL. The students were taken to site visits to the nearby Kumaraswamy temple campus and KAVIKA factory campus for Trusses and Portal frames. They also had an around the campus introductory visit to understand the long span structures within the campus

Barrel vault shell roof and Angular Truss

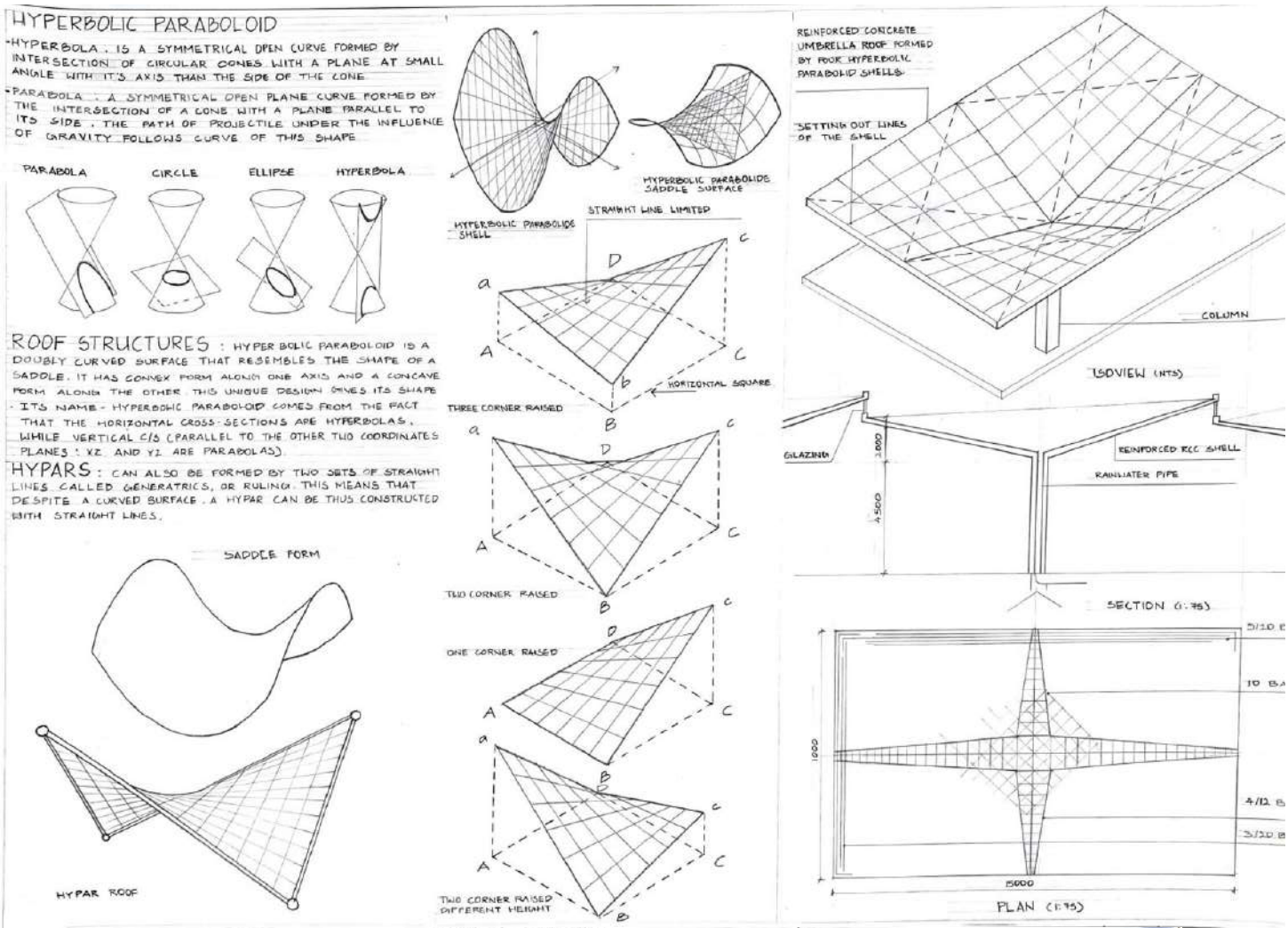
MMBC V.

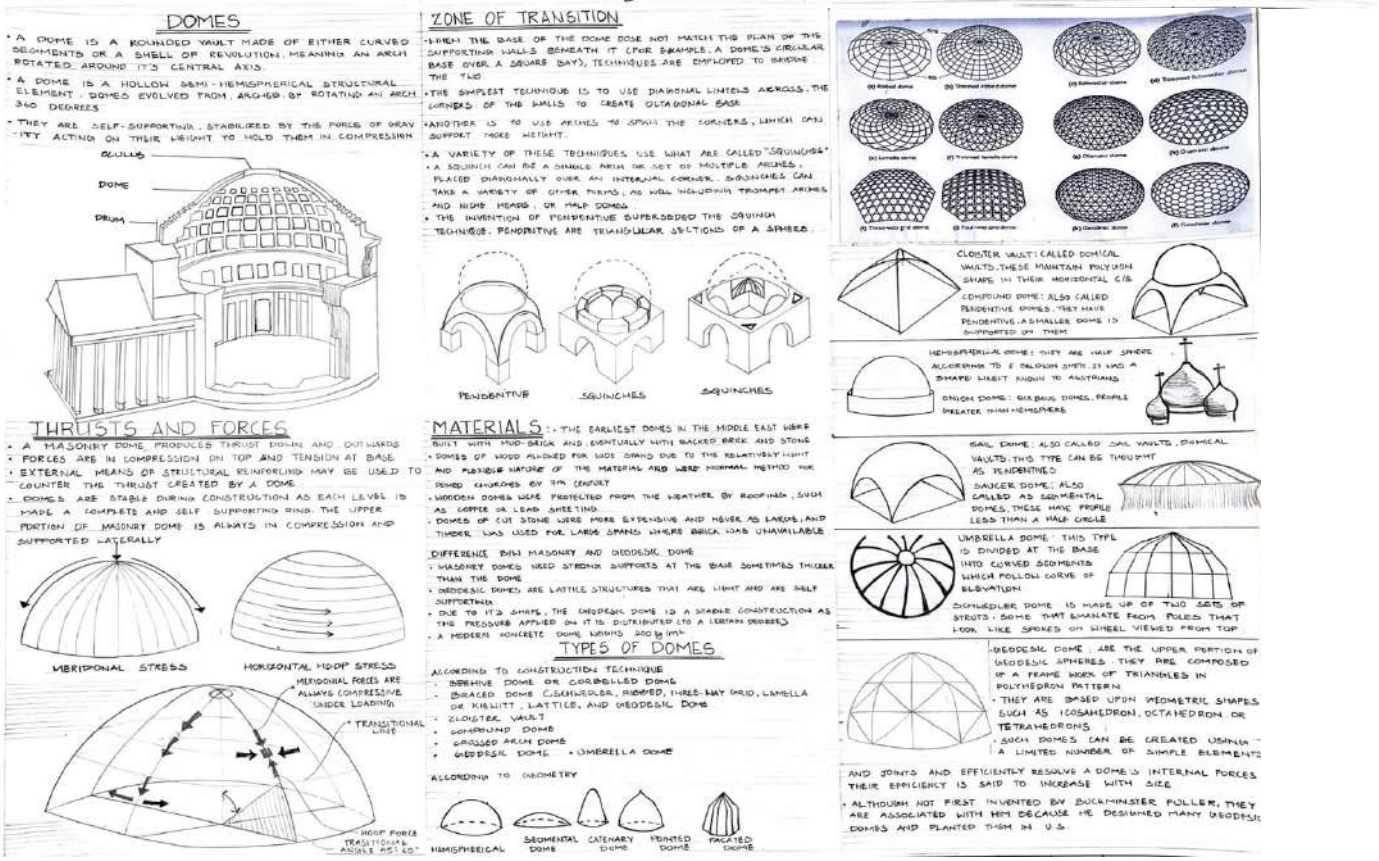
Materials and Methods in Building Construction
Faculty: Ar. Aparna Shastri, Ar. Divya S

Kaarthik N
1DC20AT033

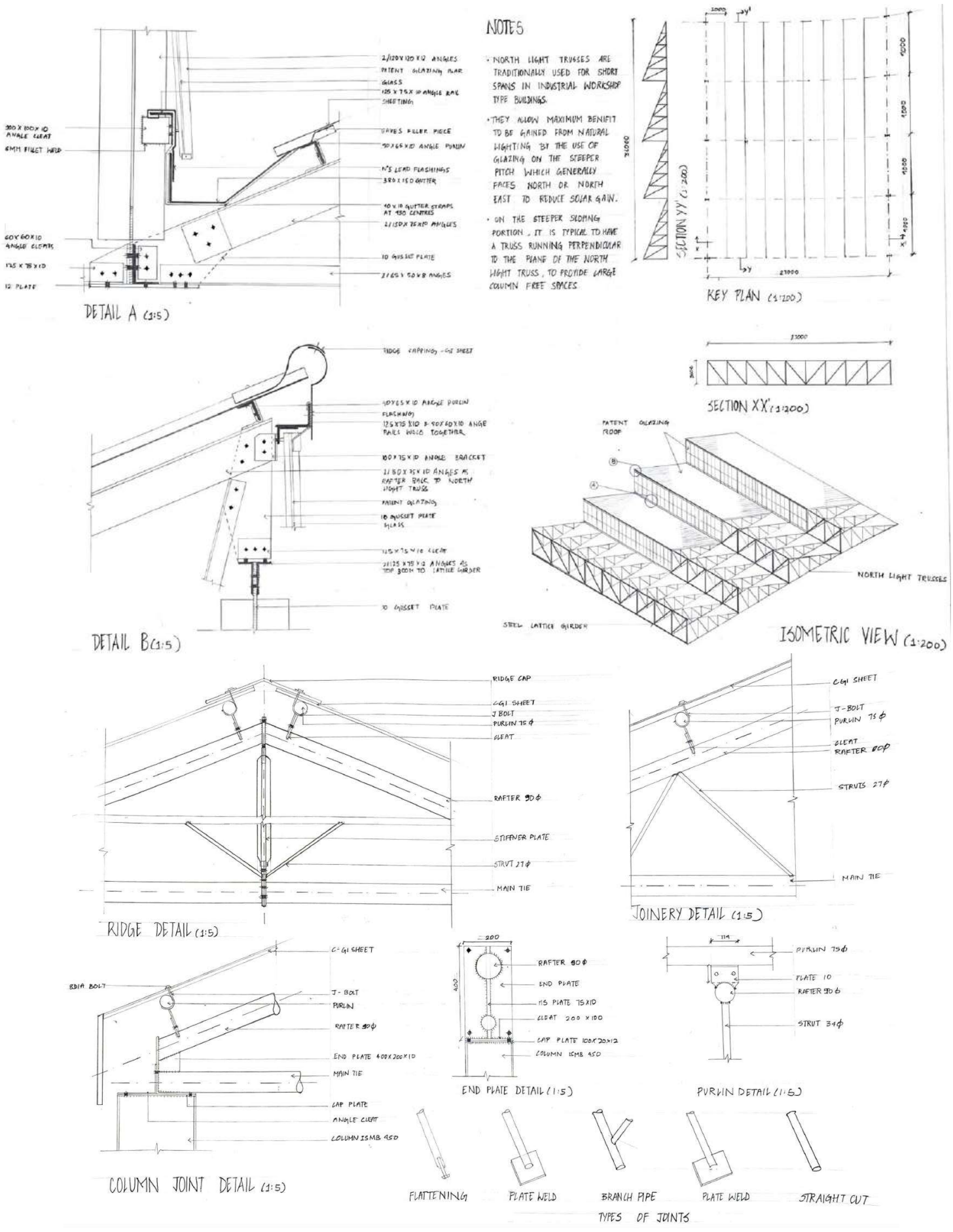


Kaarthik N
1DC20AT033

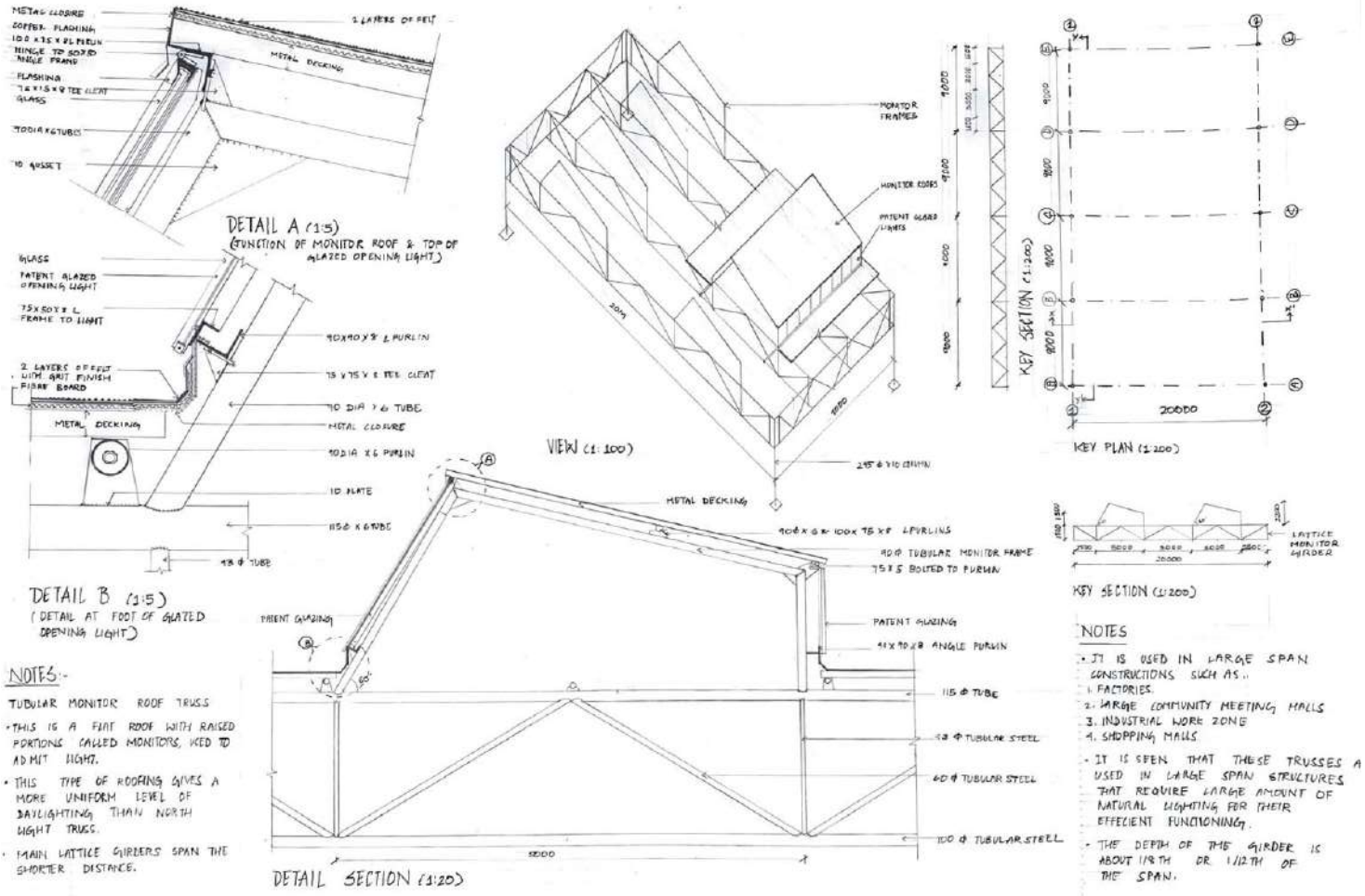




Likitha S
1DC20AT036

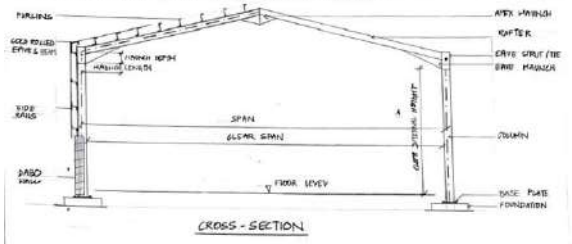


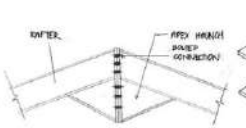
Likitha S
1DC20AT036

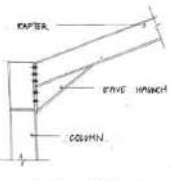


PORTAL FRAME

• A RIGID STRUCTURAL FRAME CONSISTING ESSENTIALLY OF TWO UPRIGHTS CONNECTED AT THE TOP BY A THIRD MEMBER.
• PORTAL FRAMES ARE GENERALLY LOW RISE STRUCTURES, COMPRISING COLUMNS AND HORIZONTAL OR PITCHED RAFTERS, CONNECTED BY MOMENT- RESISTING CONNECTIONS.

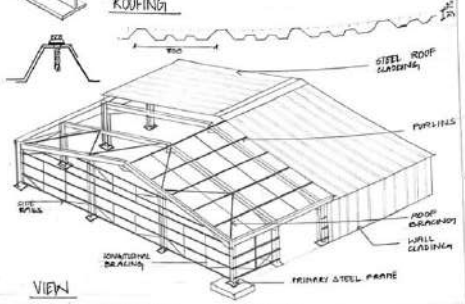






PURLOIN FIXING
• PURLOINS ARE ATTACHED TO RAFTERS USING CLEATS THAT ARE USUALLY WELDED TO THE RAFTER IN THE FABRICATION SHOP BEFORE DELIVERY TO SITE. HOWEVER THE USE OF BOLTED CLEATS IS BECOMING POPULAR DUE TO SAVINGS IN TRANSPORTATION & THE OPPORTUNITY THEY PRESENT TO ADJUST THE ALIGNMENT OF THE PURLOINS ON SITE.

ROOFING



TYPES OF PORTAL FRAMES

PITCHED ROOF SYMMETRICAL PORTAL FRAME
• 25M - TO 35M ARE THE MOST EFFICIENT SPANS.

PORTAL FRAME WITH INTERNAL MEZZANINE FLOOR
• OFFICE ACCOMODATION IS OFTEN PROVIDED WITHIN A PORTAL FRAME STRUCTURE USING A PARTIAL WIDTH MEZZANINE FLOOR.

MONO PITCH PORTAL FRAME
• USUALLY CHOSEN FOR SMALLER SPANS OR BECAUSE OF ITS PROXIMITY TO OTHER BUILDINGS.

CELLULAR BEAM PORTAL FRAME
RAFTERS MAY BE FABRICATED FROM CELLULAR BEAMS FOR AESTHETIC REASONS OR WHEN PROVIDING LONG SPANS.

TIED PORTAL FRAME
IN TIED PORTAL FRAME THE HORIZONTAL MOVEMENT OF EAVES & THE BENDING MOMENTS IN COLUMNS & RAFTERS ARE REDUCED. A TIE MAY BE USEFUL TO LIMIT SPREAD IN A CRANE SUPPORTING STRUCTURE.

CRANE PORTAL FRAME WITH COLUMN BRACKETS
WHERE A TRAVELLING CRANE OF RELATIVELY LOW CAPACITY (UPTO 20TONNES) IS REQUIRED, BRACKETS CAN BE FIXED TO THE COLUMNS TO SUPPORT THE CRANE RAILS.

PROPPED PORTAL FRAME
WHERE THE SPAN OF A PORTAL FRAME IS LARGE & THERE IS NO REQUIREMENT TO PROVIDE A CLEAR SPAN, A PROPPED PF CAN BE USED TO REDUCE RAFTER SIZE & ALSO HORIZONTAL SHEAR AT FOUNDATIONS.

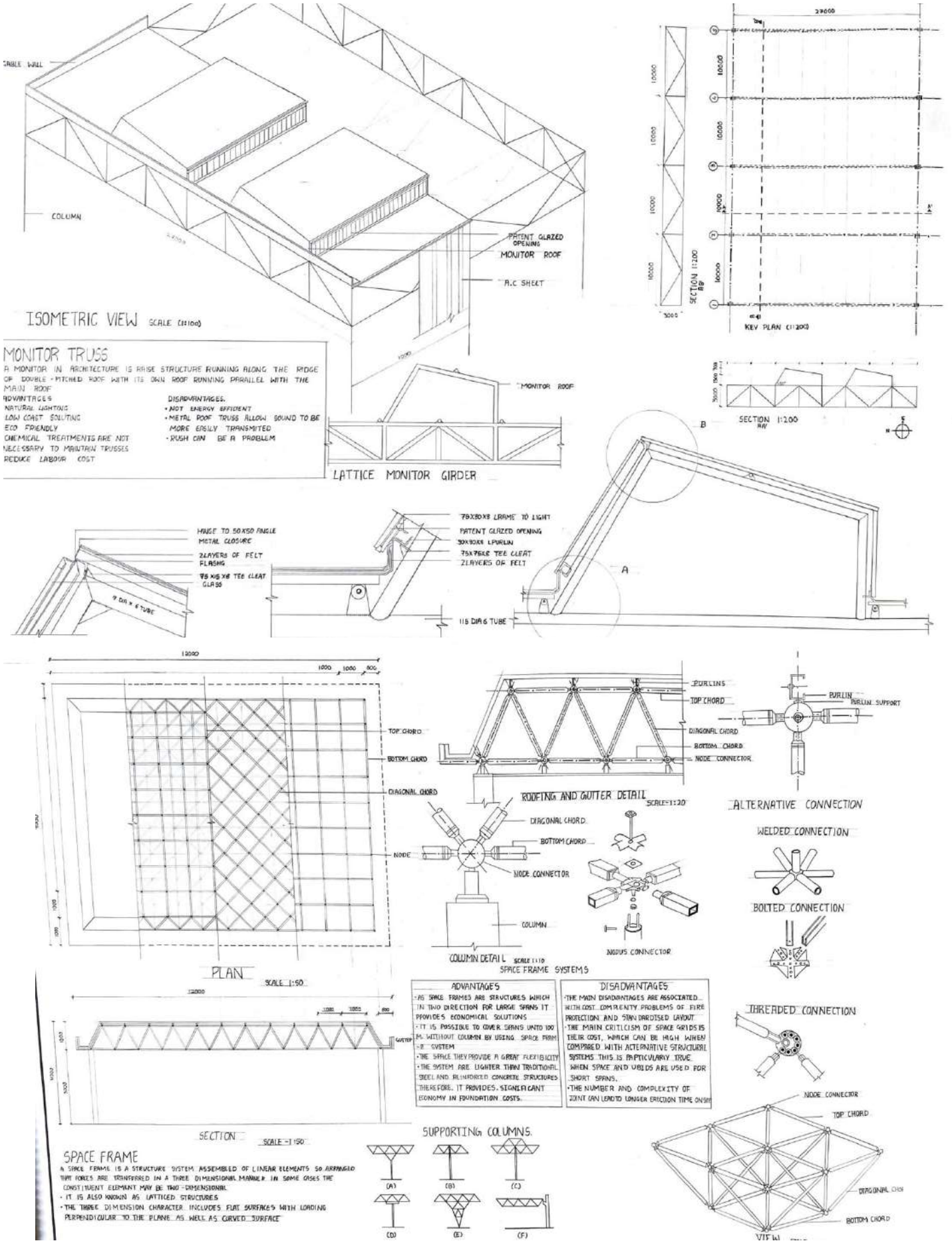
MANSARD PORTAL FRAME
A MANSARD PF CAN BE USED WHERE A LARGE CLEAR HEIGHT AT MID SPAN IS REQUIRED BUT THE EAVES HEIGHT OF BUILDING HAS TO BE MINIMIZED.

BRACING
• BRACING IS REQUIRED TO RESIST LONGITUDINAL ACTIONS DUE TO WIND & CRANES, & TO PROVIDE RESTRAINT TO MEMBERS.
• IT IS COMMON TO USE HOLLOW SECTIONS AS BRACING MEMBERS.
• TWO TYPES OF BUILDINGS
1. VERTICAL BRACING / LONGITUDINAL BRACING
2. PLANE BRACING / ROOF BRACING.

ADVANTAGES
• SPEED & EASE OF ERECTION.
• BUILDING CAN BE QUICKLY CLOSED IN & MADE WATER TIGHT.
• FRAMEWORK PREFABRICATED IN A WORKSHOP AND AFFECTED BY WEATHER.
• NO WEATHER HOLD UP DURING ERECTING THE FRAMEWORK.
• CONNECTED TOGETHER IN FACTORIES BY WELDING & SITE CONNECTIONS SHOULD BE BOLTED.

DISADVANTAGES
• ALTHOUGH STEEL IS INCOMBUSTIBLE IT HAS A POOR RESISTANCE TO FIRE AS IT BENDS EASILY WHEN HOT.
• SUBJECT TO CORROSION.

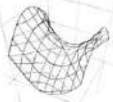
Darshan R S
1DC20AT015



Tharun J
1DC20AT074

INTRODUCTION

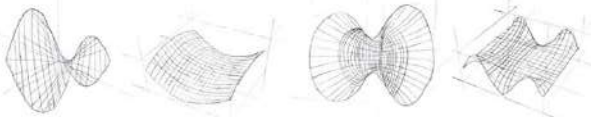
- HYPERBOLIC PARABOLOID IS A DOUBLY CURVED SURFACE THAT RESEMBLES THE SHAPE OF A SADDLE. IT HAS A CONVEX FORM ALONG ONE AXIS AND A CONCAVE FROM ALONG THE OTHER. THIS UNIQUE DESIGN GIVES IT A SOARING SHAPE
- THESE SHELL STRUCTURES WERE DESIGNED AND CONSTRUCTED BY FELIX CANDELLA IN MEXICO DEMONSTRATED THAT DRAMATIC SHAPES AND STRUCTURAL POSSIBILITIES OF DOUBLY CURVED SHELLS
- IN GEOMETRY, THE HYPERBOLIC PARABOLOID IS A SURFACE IN THREE DIMENSIONS FORMED BY TRANSLATING (PARALLEL DISPLACEMENT) A DOWNWARD CURVING PARABOLA ALONG AN UPWARD CURVING PARABOLA, PRODUCING A SADDLE SURFACE. FOR THIS REASON, THE HYPAR COUNTS AS A TRANSLATIONAL SURFACE



- ITS NAME - HYPERBOLIC PARABOLOID, ARISES FROM THE FACT THE HORIZONTAL CROSS SECTIONS ARE HYPERBOLAS, WHILE VERTICAL CROSS-SECTIONS (PARALLEL TO THE OTHER TWO COORDINATE PLANES : XZ AND YZ PLANES) ARE PARABOLAS.
- THE TRAILS, AS SHOWN IN THE IMAGE BELOW, ARE SIMPLY THE INTERSECTIONS OF A SURFACE WITH PLANES.
- WHEN A HYPERBOLIC PARABOLOID BEING SLICED BY HORIZONTAL PLANES WE GET HYPERBOLIC TRACES.
- THE HORIZONTAL CROSS SECTIONS ARE ALSO CALLED LEVEL CURVES.

- HYPAR IS BOTH A TRANSLATION AND A RULED SURFACE
- HYPARS CAN ALSO BE FORMED BY TWO SETS OF STRAIGHT LINES CALLED GENERATRICES, OR RULINGS. THIS MEANS THAT DESPITE BEING A CURVED SURFACE, A HYPAR CAN BE TRULY CONSTRUCTED WITH STRAIGHT LINES.
- A SURFACE THAT CONTAINS TWO SETS OF STRAIGHT LINES, OR RULINGS, IS CALLED A DOUBLY RULED SURFACE.
- AN IMPORTANT REASON FOR THE USE OF HYPARS IN CONSTRUCTION IS THAT THEY CAN BE FORMED USING STRAIGHT LINES. CONSEQUENTLY, THE HYPERBOLIC PARABOLOID IS AN IDEAL SHELL FORM, ALLOWING THE USE OF STRAIGHT BOARDS FOR FORMWORK.

HYPERBOLIC PARABOLOID SHELL

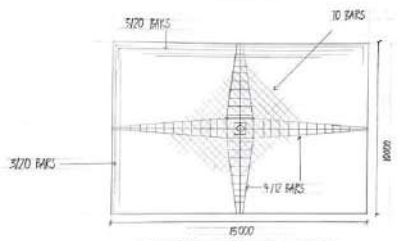


TYPES OF HYPERBOLIC PARABOLOID SHELL

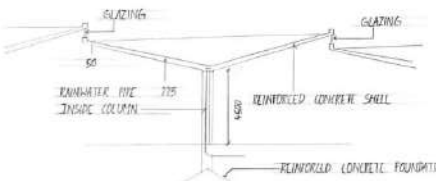
- DOUBLY RULED MEANS THAT THEY ARE EASY TO CONSTRUCT USING A SERIES OF STRAIGHT STRUCTURAL MEMBERS
- THIN SHELL ROOFS GAIN STRENGTH THROUGH THEIR SHAPE, THE CURVATURE OF THE SHAPE RESISTS ITS TENDENCY TO BUCKLE IN COMPRESSION.
- HYPERBOLIC PARABOLOID SHELL ROOFS CAN BE CONSTRUCTED USING REINFORCED CONCRETE WITH A SHELL THICKNESS OF JUST 50MM FOR SPANS UP TO 35M

LOS MANANTIALES / FELIX CANDELA

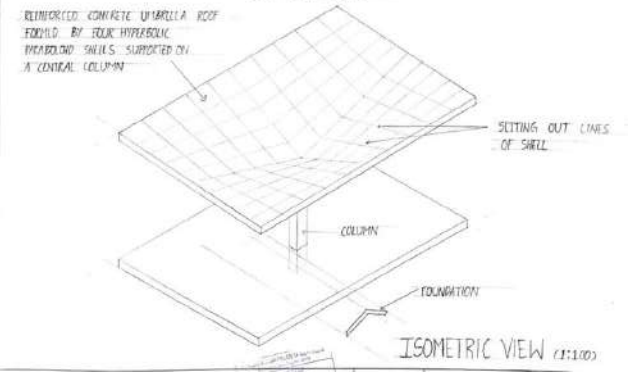
- CANDELLA INVERTED HIS UMBRELLA FORM FOR THE FOOTINGS, A MATERIAL SAVING STRATEGY TO DISTRIBUTE THE WEIGHT OF THE STRUCTURE OVER THE POOR QUALITY SOIL OF MEXICO CITY



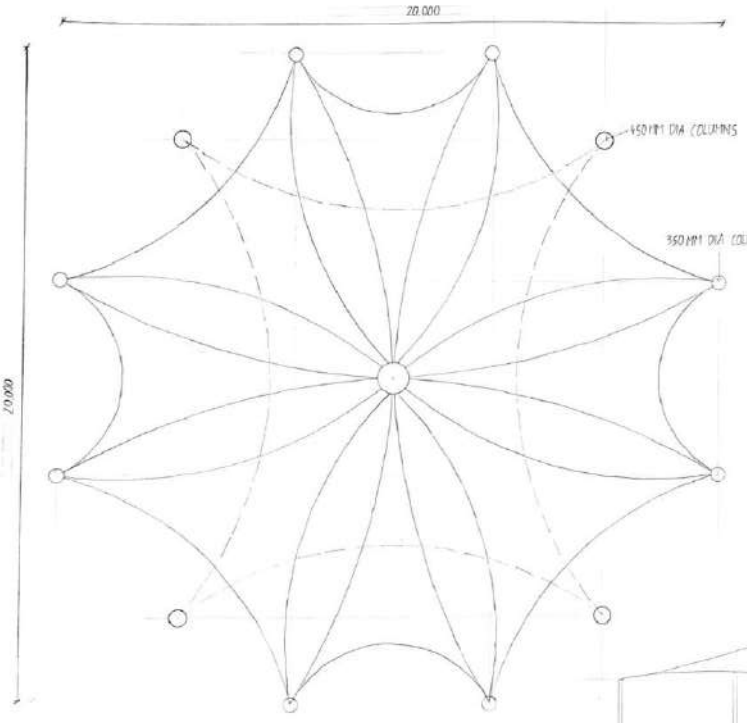
PLAN OF UMBRELLA ROOF (1:100)



SECTION (1:100)

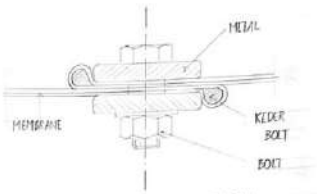


ISOMETRIC VIEW (1:100)

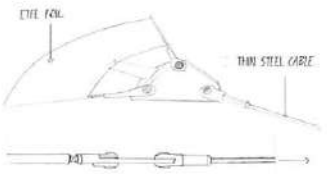


PLAN (1:50)

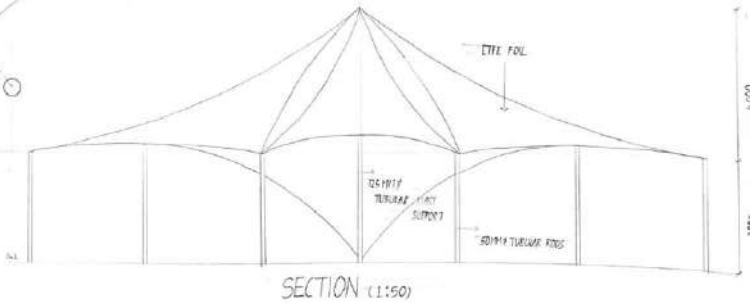
FOUNDATION



MEMBRANE CONNECTION



CORNER PLATE DETAIL



SECTION (1:50)

Geodesic Dome Structure

MMBC V.

Materials and Methods in Building Construction
Faculty: Ar. Dominic L Harper, Ar. Surabhi Moharir

Students of 5B

SOCIOLOGY & BUILDING ECONOMICS
SUBJECT CODE 18HUM56

Course Objective:
To familiarize students with the basic concepts of sociology and economics and their influence on architecture.

Studio Faculty

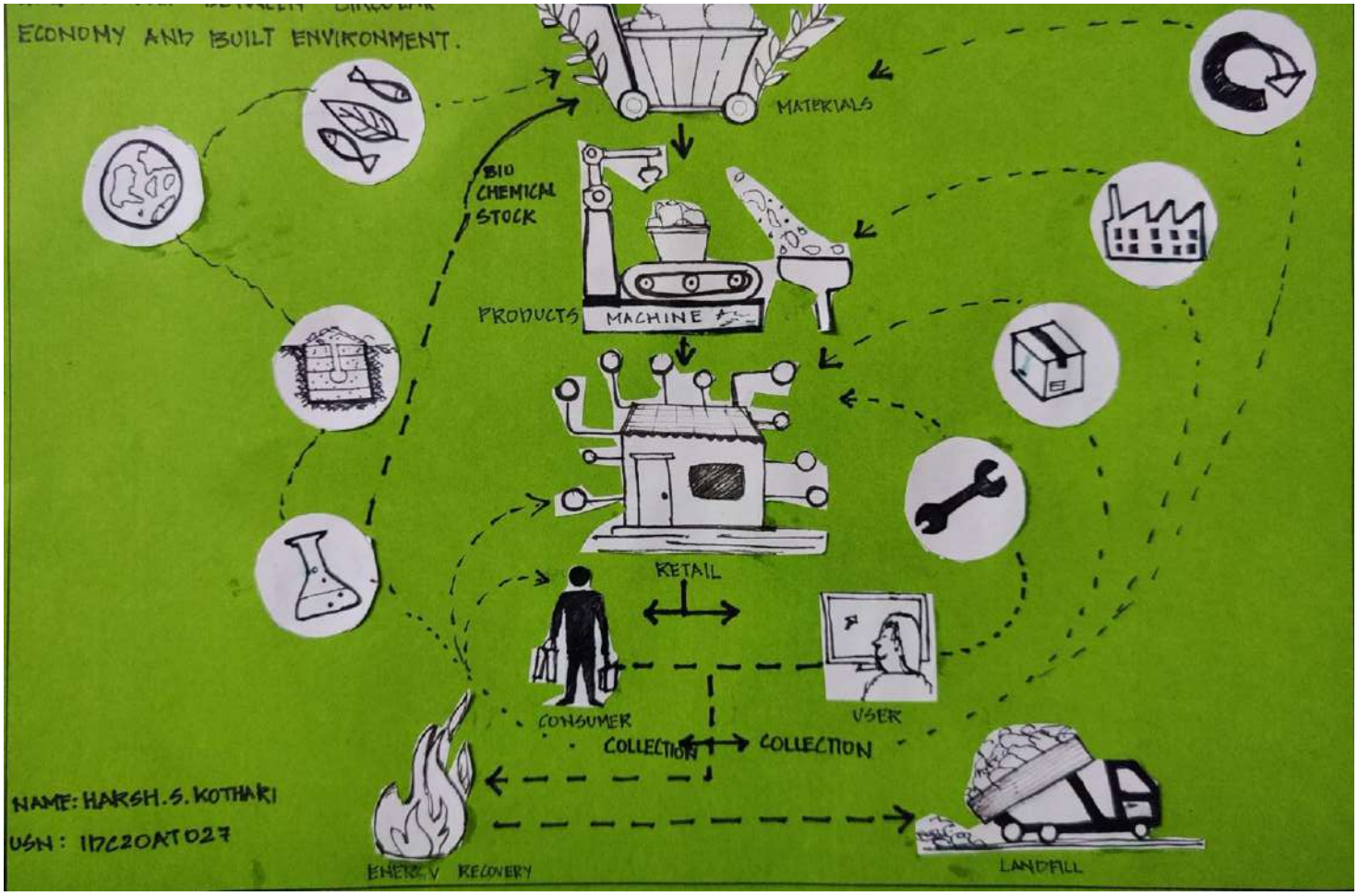
Ar. Nikhil Ravindra

Circular economy in the built environment

S&BE.

Sociology & Building Economics
Faculty: Ar. Nikhil Ravindra

Harsh S Kothari
1DC20AT027

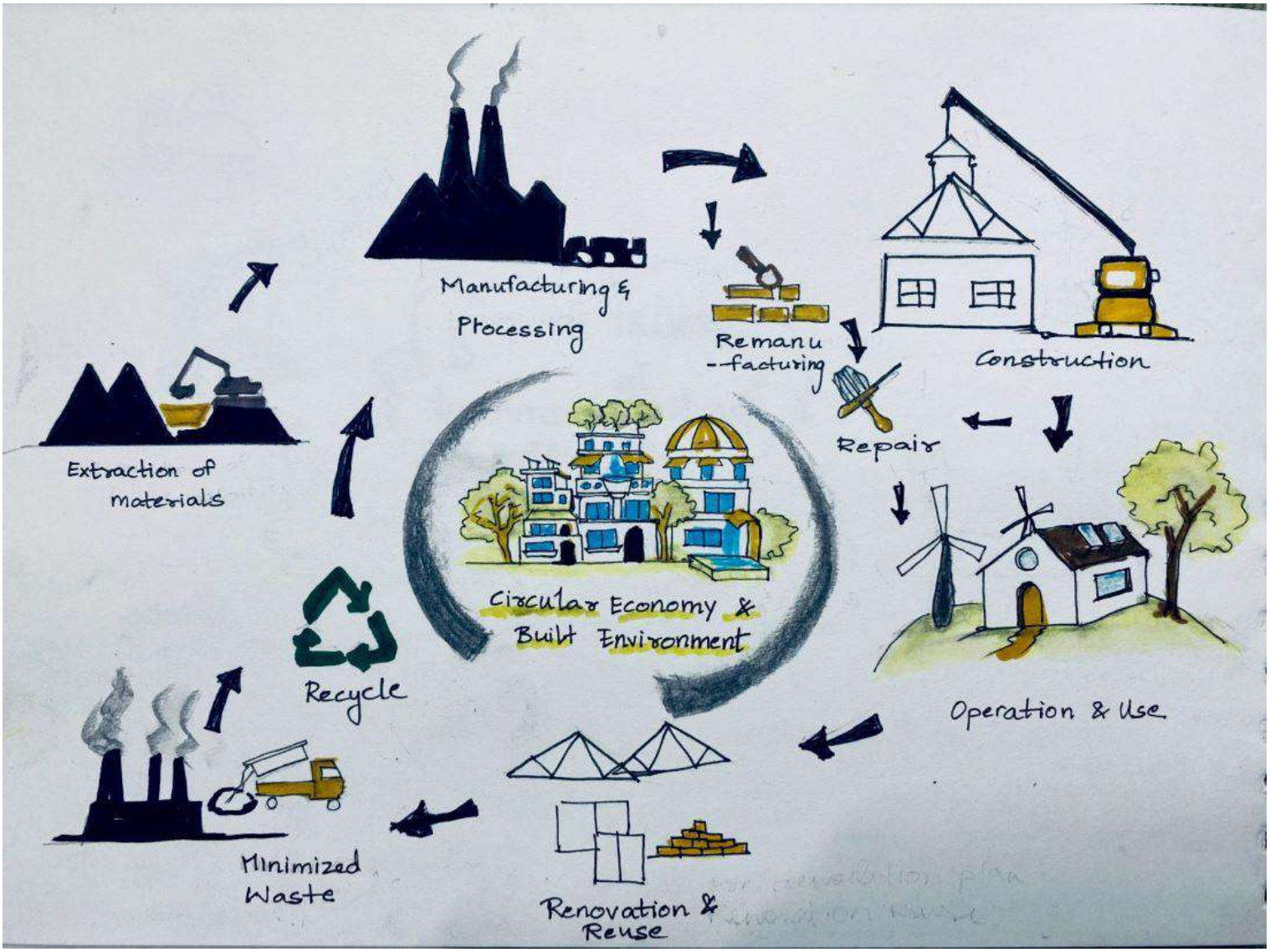


Circular economy in the built environment

S&BE.

Sociology & Building Economics
Faculty: Ar. Nikhil Ravindra

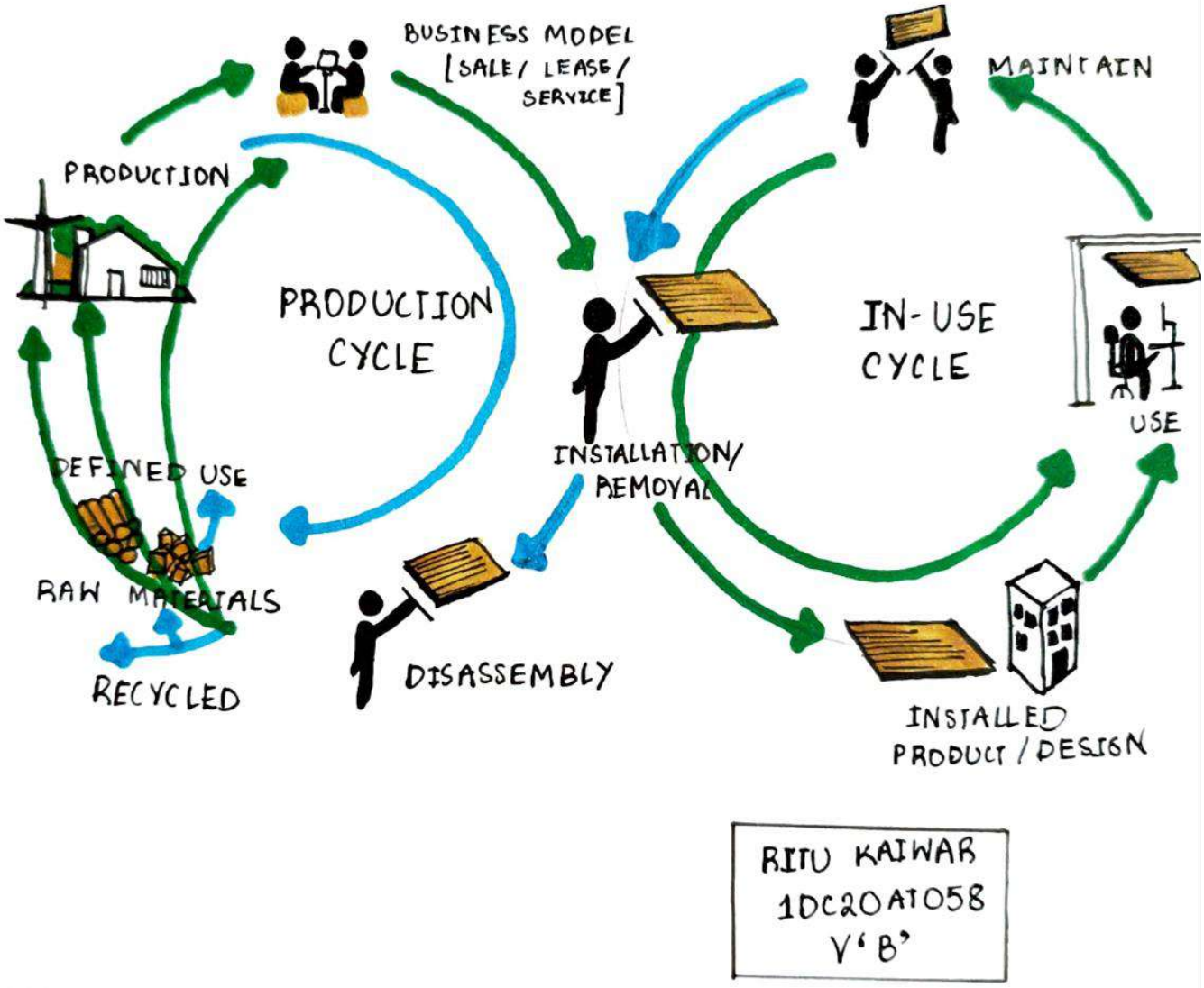
Likitha S
(USN)



Ritu Kaiwar
1DC20AT058

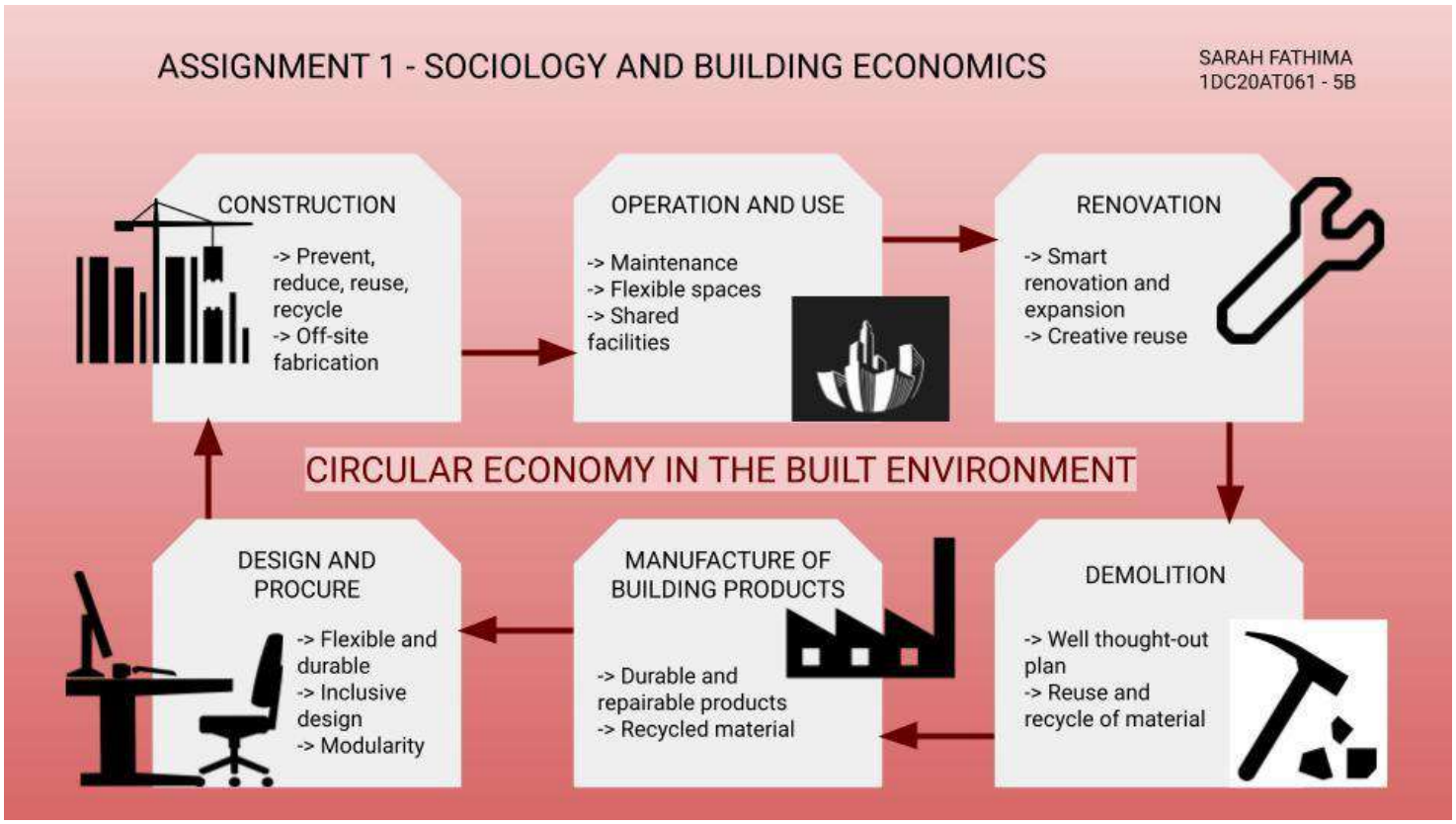
S&E Assignment - 1

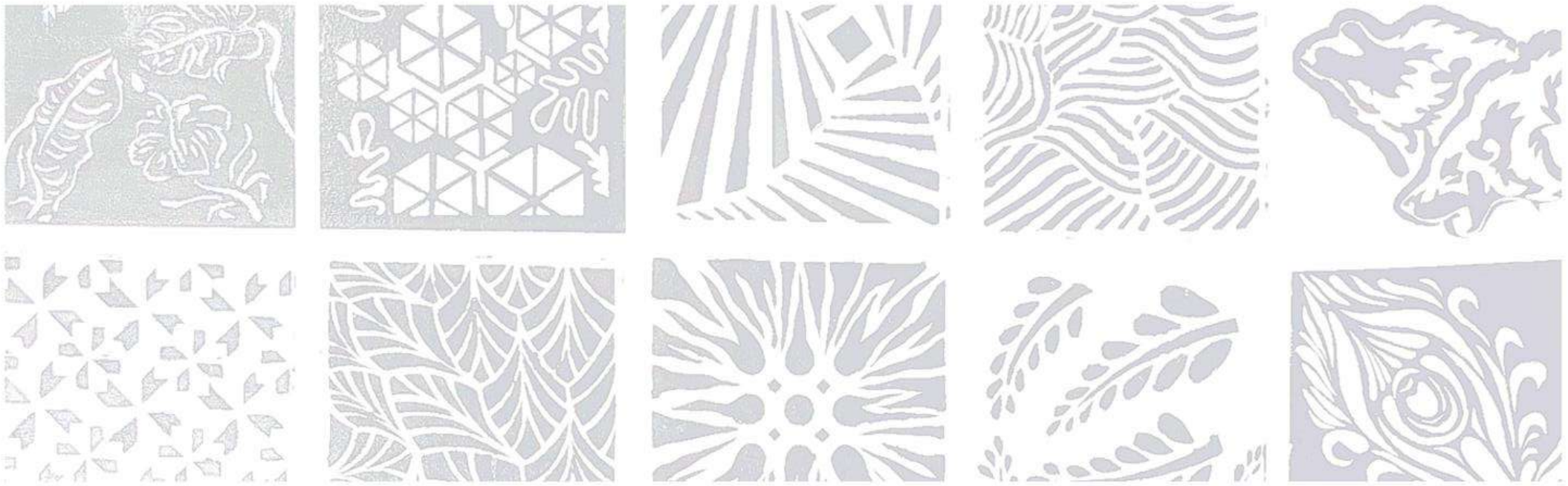
Relationship between Circular Economy and Built Environment



Sociology & Building Economics
Ar. Nikhil Ravindra

Sarah Fathima
1DC20AT061





6th Semester

18 ARC 6.1 ARCHITECTURAL DESIGN VI
Even Semester Major Design Project
Institute of Integrated Urban Water Management (IUWM), Bengaluru
Course objective (as per syllabus)
• To enable the students to integrate design with history, theory, building construction and material science in a more informed way.
Outline:
To understand the role of built environments of increasing complexity by:
a) Intrinsic factors: Size, volume, levels, functional spaces or zones, structural possibilities
b) External factors: site, approach, traffic, ecology, services
c) Constraints: bye-laws, budget, ideology, attitudes
d) Create an ‘ Identity’ to the Campus through integration of the above.

Studio Aim :

To focus on Campus Design Principles and Key considerations like site studies, Landscape strategies to
address the ecological issues, Architectural vocabulary - Buildings that promote Intellectual and social
exchange, understanding and planning for site services, sustainable development strategies - response to and
responsible use of energy and natural resources etc

Studio objective :

Understanding the importance of sites topography and context, to anticipate, propose and design appropriate
functions based on the site understanding and analysis.
The design proposal would be a resultant understanding and the identification of the ecological issues that
persist in the locality.

ARCHITECTURAL DESIGN I
SUBJECT CODE 21 ARC 11
A Division

Studio Coordinators

Ar.Dominic Harper

Studio Faculty

Ar.Steny John

Ar.Kavita Pole

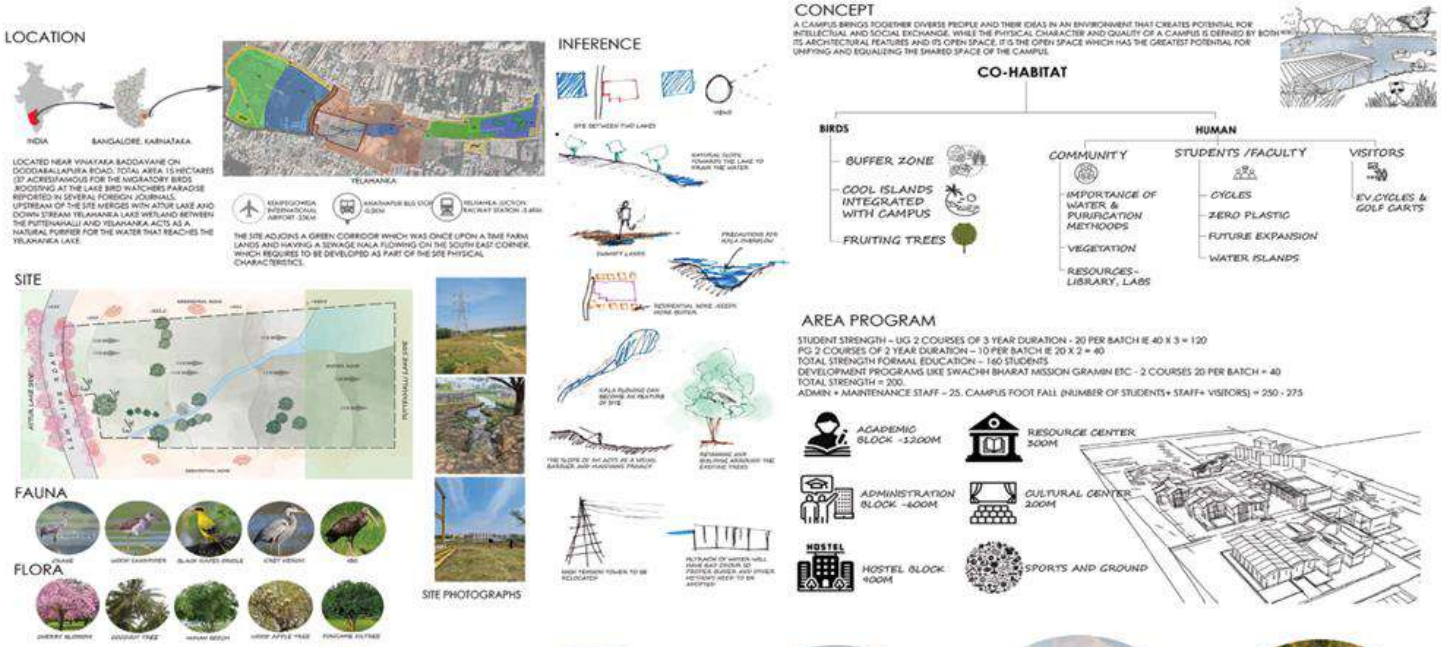
Ar. Vasavi S R

TITLE :CAMPUS DESIGN

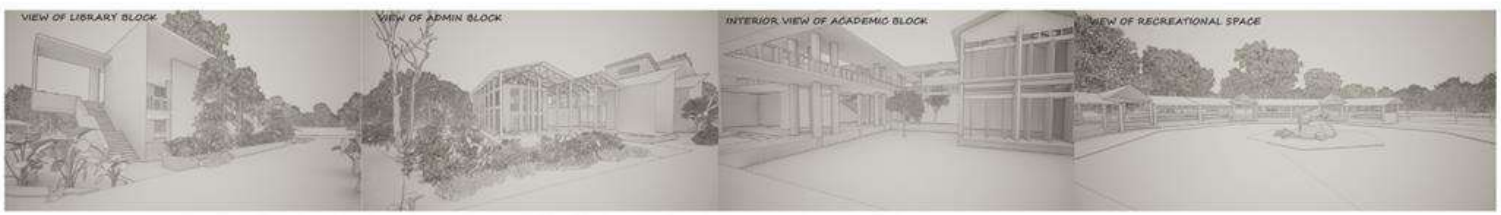
AD VI

Architectural Design Studio VI
Faculty: Ar. Dominic Leonard Harper

Harsh S Kothari
1DC20AT027



MASTER PLAN (1:400)



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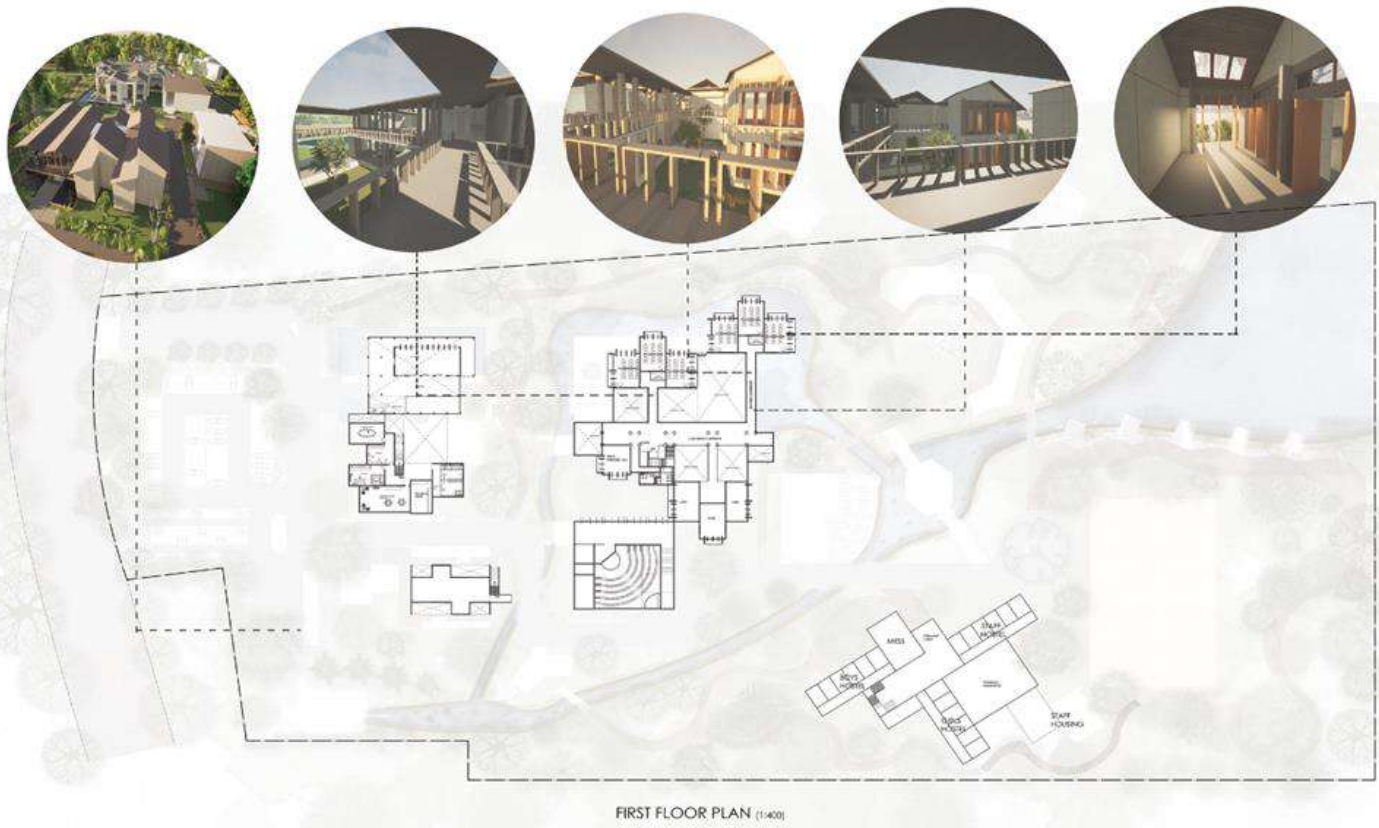
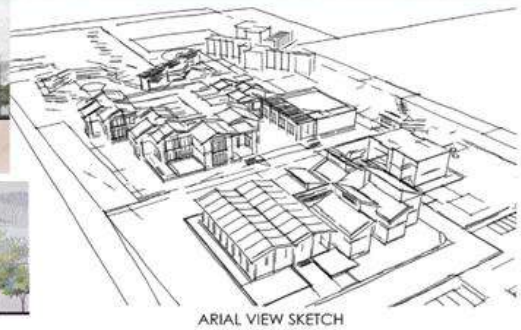


FIRST FLOOR PLAN (1:400)

SITE SECTION AA' (1:400)

SITE SECTION BB' (1:400)



ARIAL VIEW SKETCH

NORTH ELEVATION (1:400)

EAST ELEVATION (1:400)

BRIDGE SKETCH

ACADEMIC BLOCK SKETCH

ACADEMIC BLOCK VIEW

KEY PLAN

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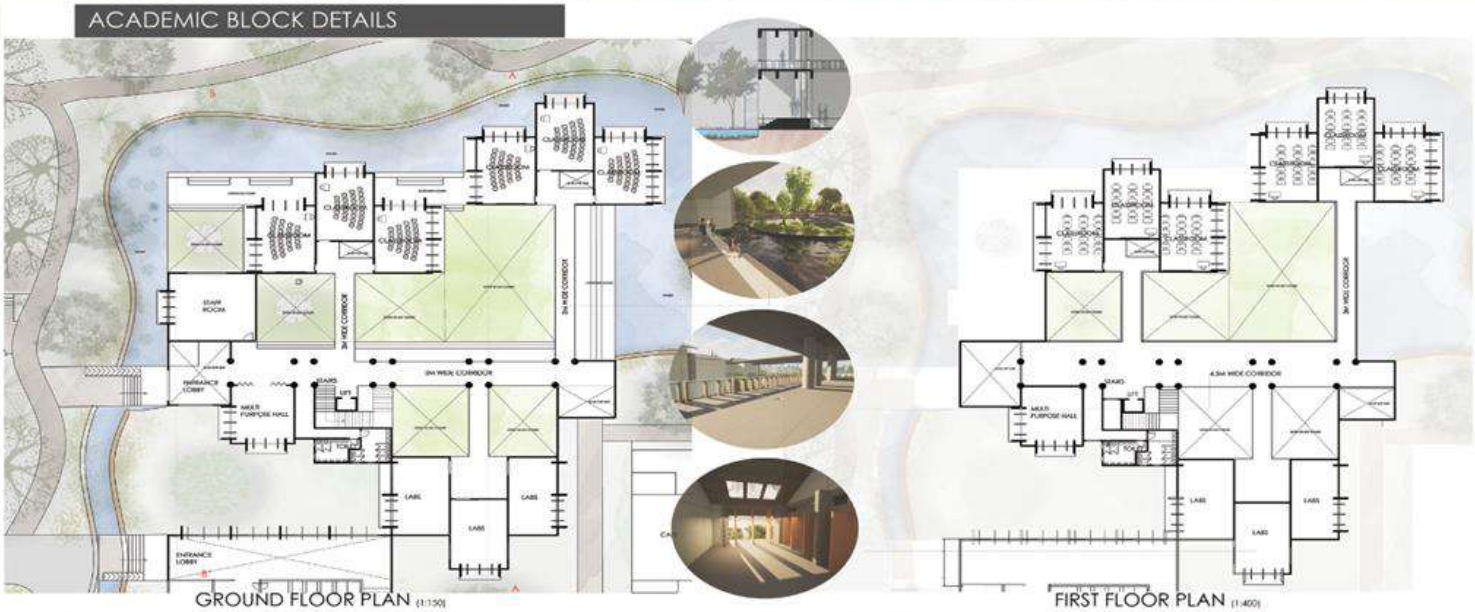
ROOF PLAN (1:400)

ACADEMIC BLOCK DETAILS



GROUND FLOOR PLAN (1:150)

FIRST FLOOR PLAN (1:400)

SECTION AA' (1:150)

SECTION BB' (1:150)

VIEWS OF ACADEMIC BLOCK

KEY PLAN

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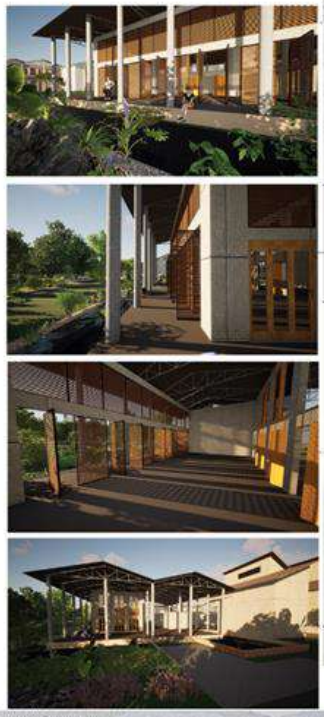
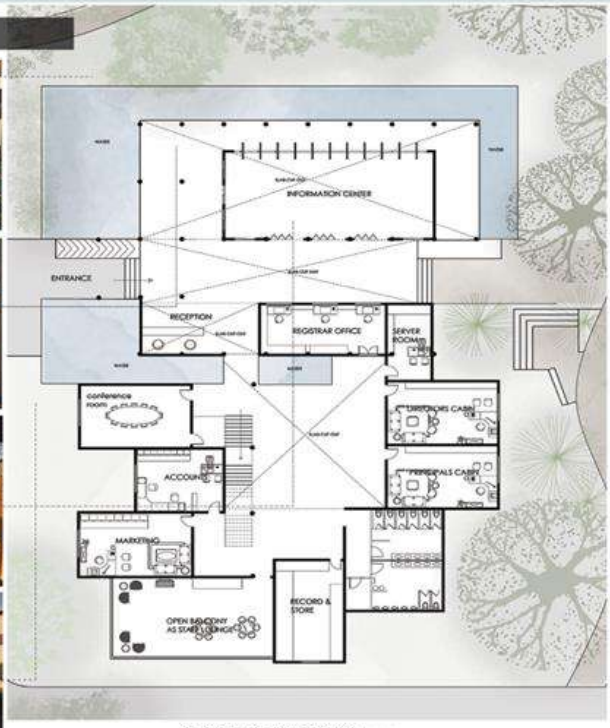
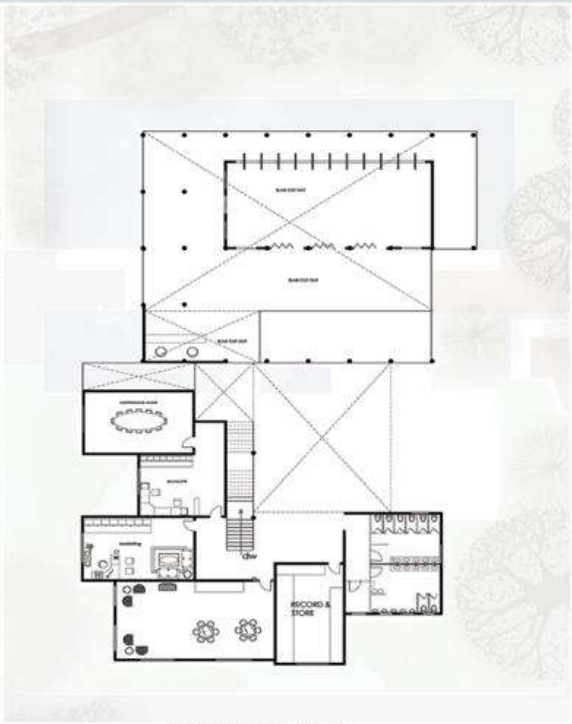
ADMIN BLOCK DETAILS





GROUND FLOOR PLAN (1:150)

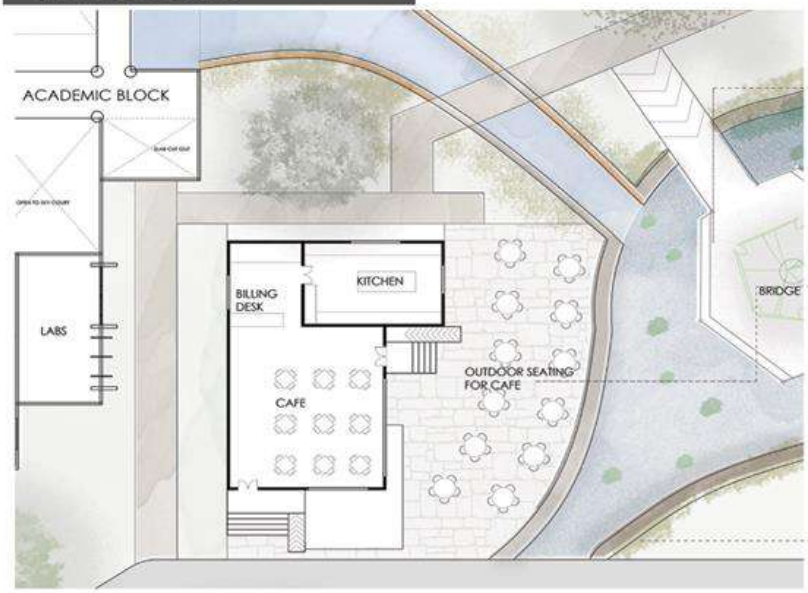


FIRST FLOOR PLAN (1:150)

SECTION AA' (1:150)

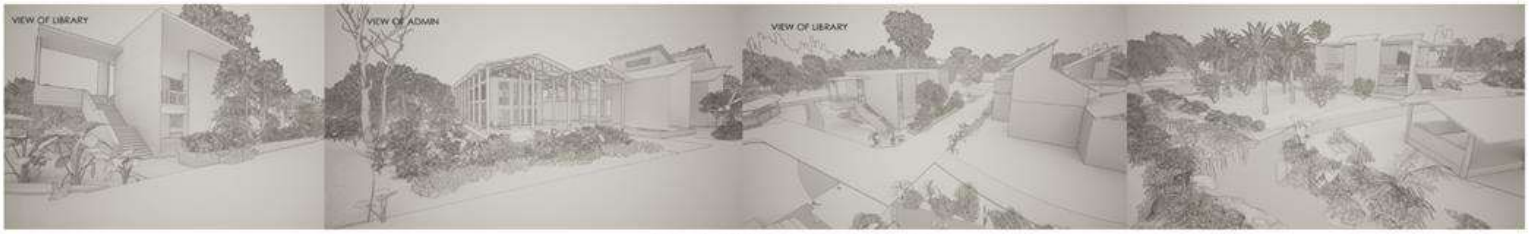
ADMIN VIEW SKETCH

CAFE BLOCK DETAILS



LIBRARY BLOCK DETAILS

KEY PLAN



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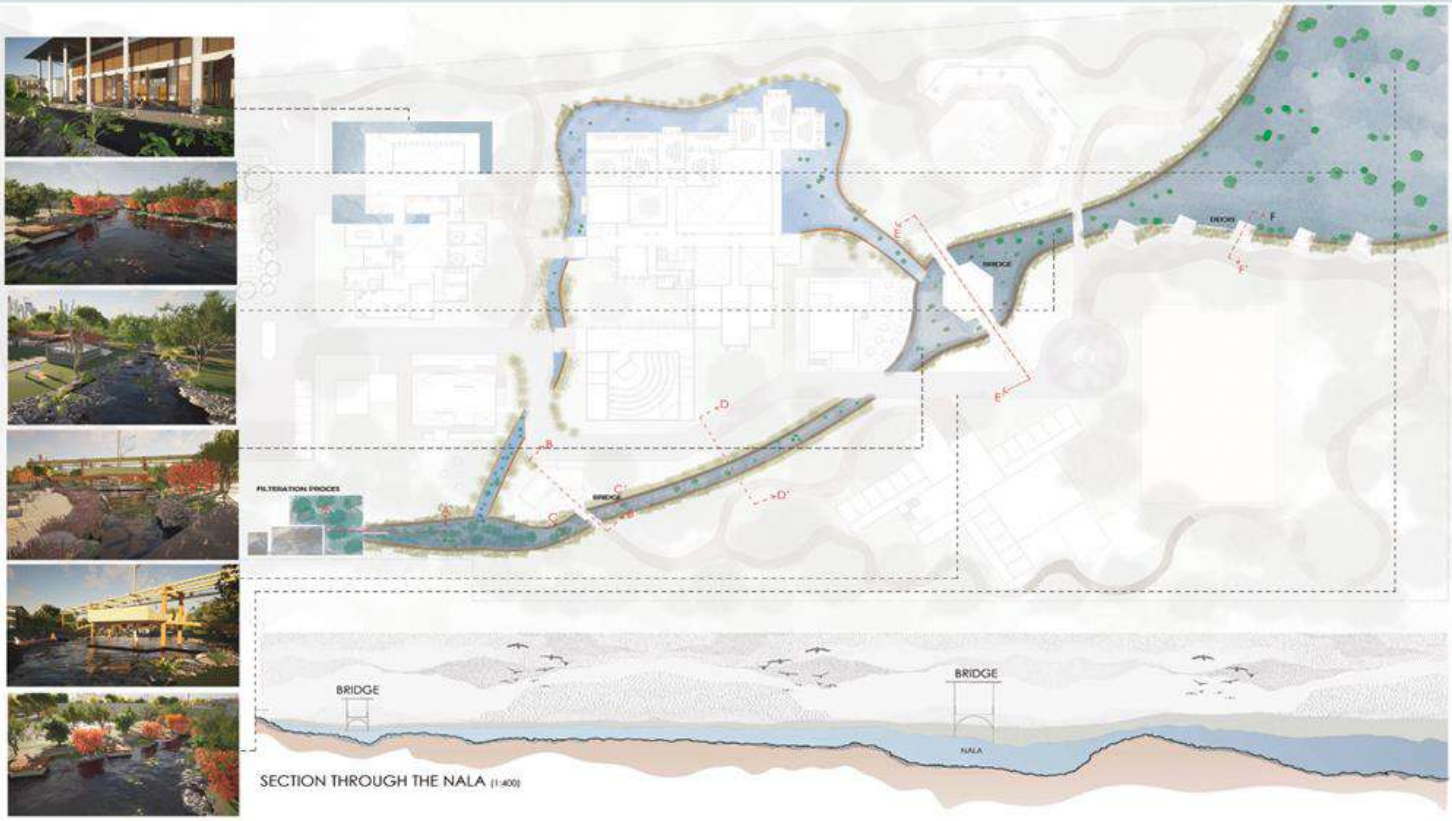
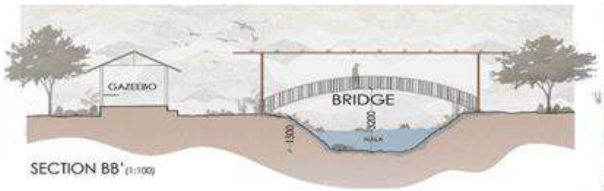
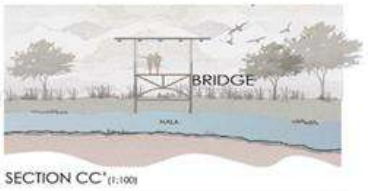
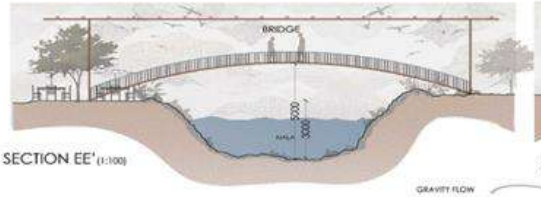
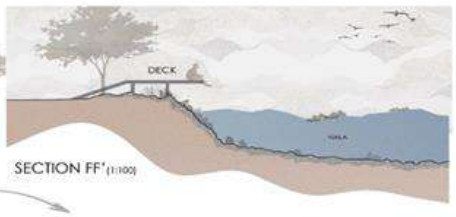


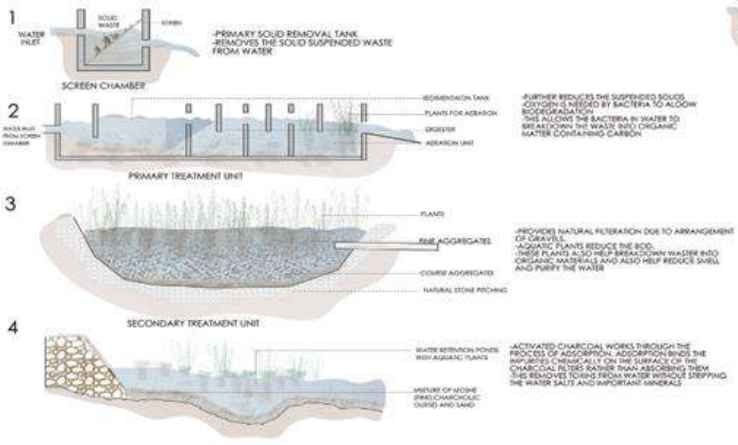


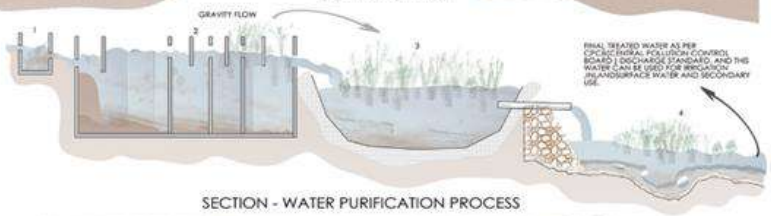






PURIFICATION OF WATER BY NATURAL PROCESS





TITLE :CAMPUS DESIGN

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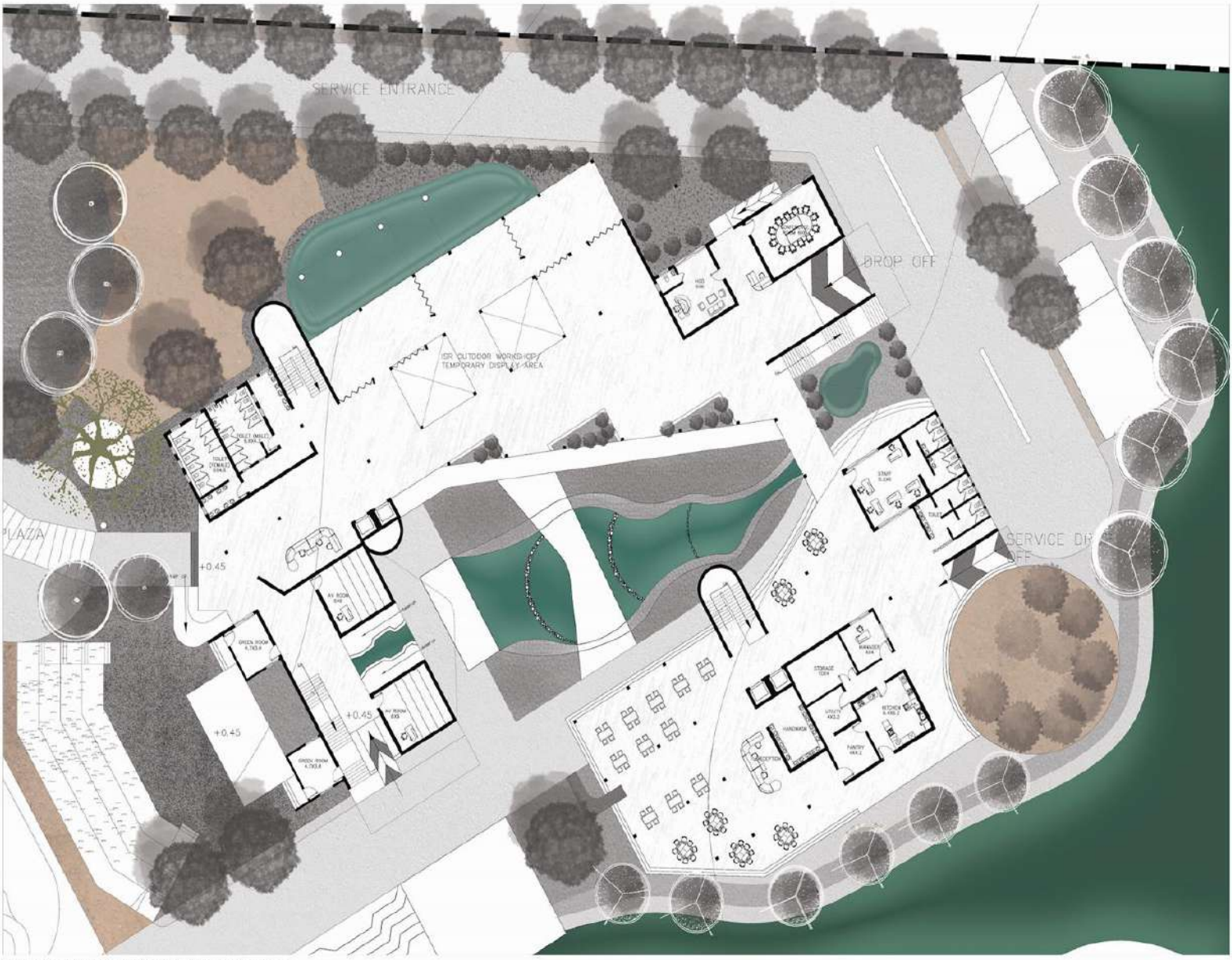

ACADEMIC BLOCK GROUND FLOOR CLUSTER PLAN (1:150)

SECTION X-X' (1:150)

SECTION Y-Y' (1:150)

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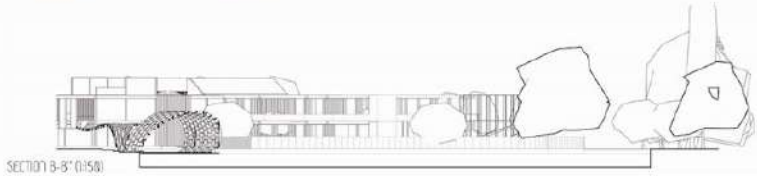

ACADEMIC BLOCK FIRST FLOOR/STILT FLOOR CLUSTER PLAN (1:150)

INSTITUTE OF INTEGRATED URBAN WATER MANAGEMENT (IUWM), YELAHANKA, BENGALURU- ARCHITECTURE DESIGN-VI

KAARTHIK N 1DC20AT033 GA JULY 2023

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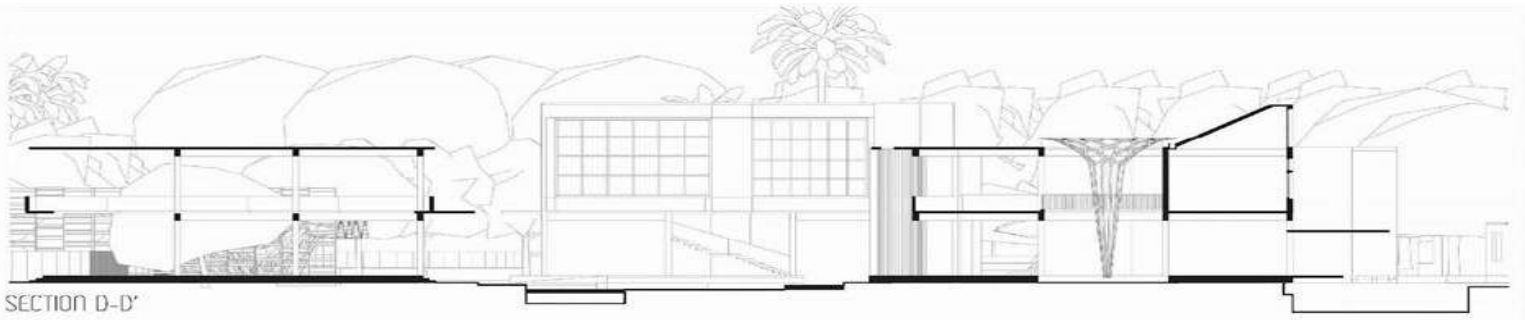

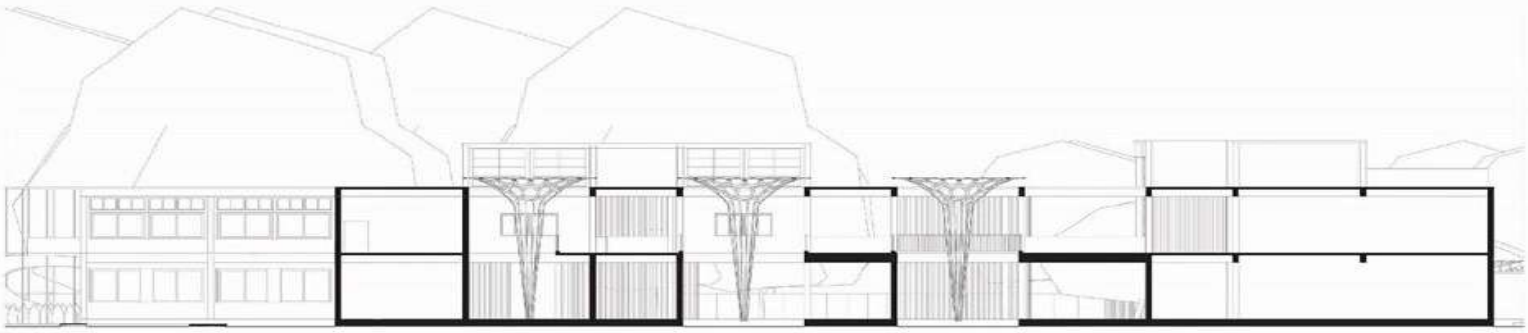

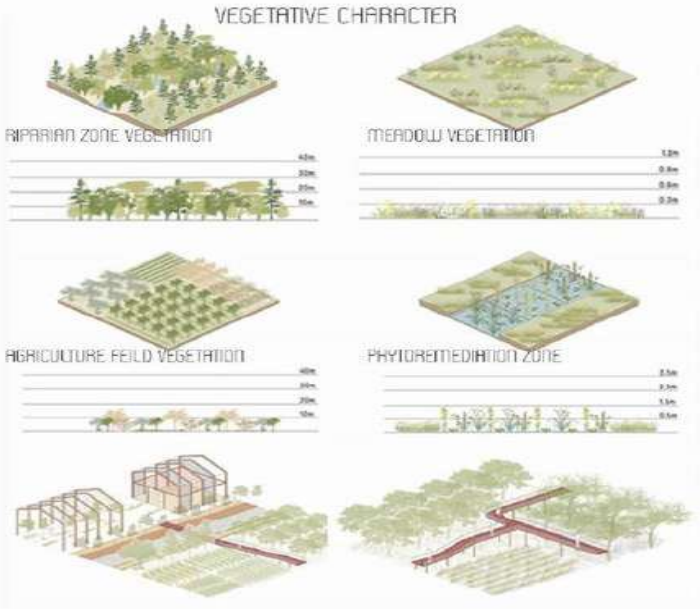

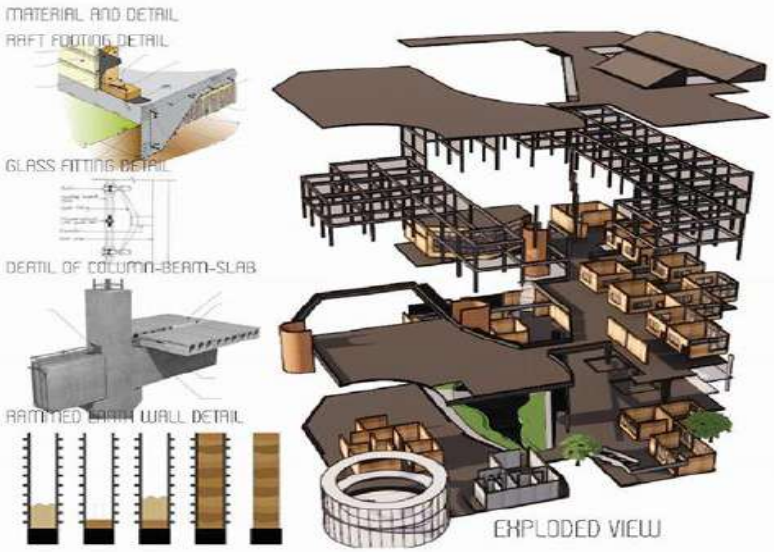

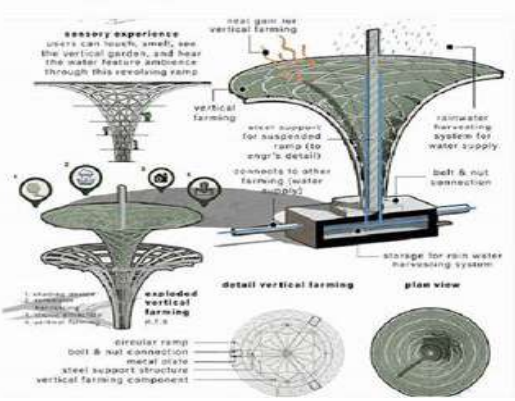

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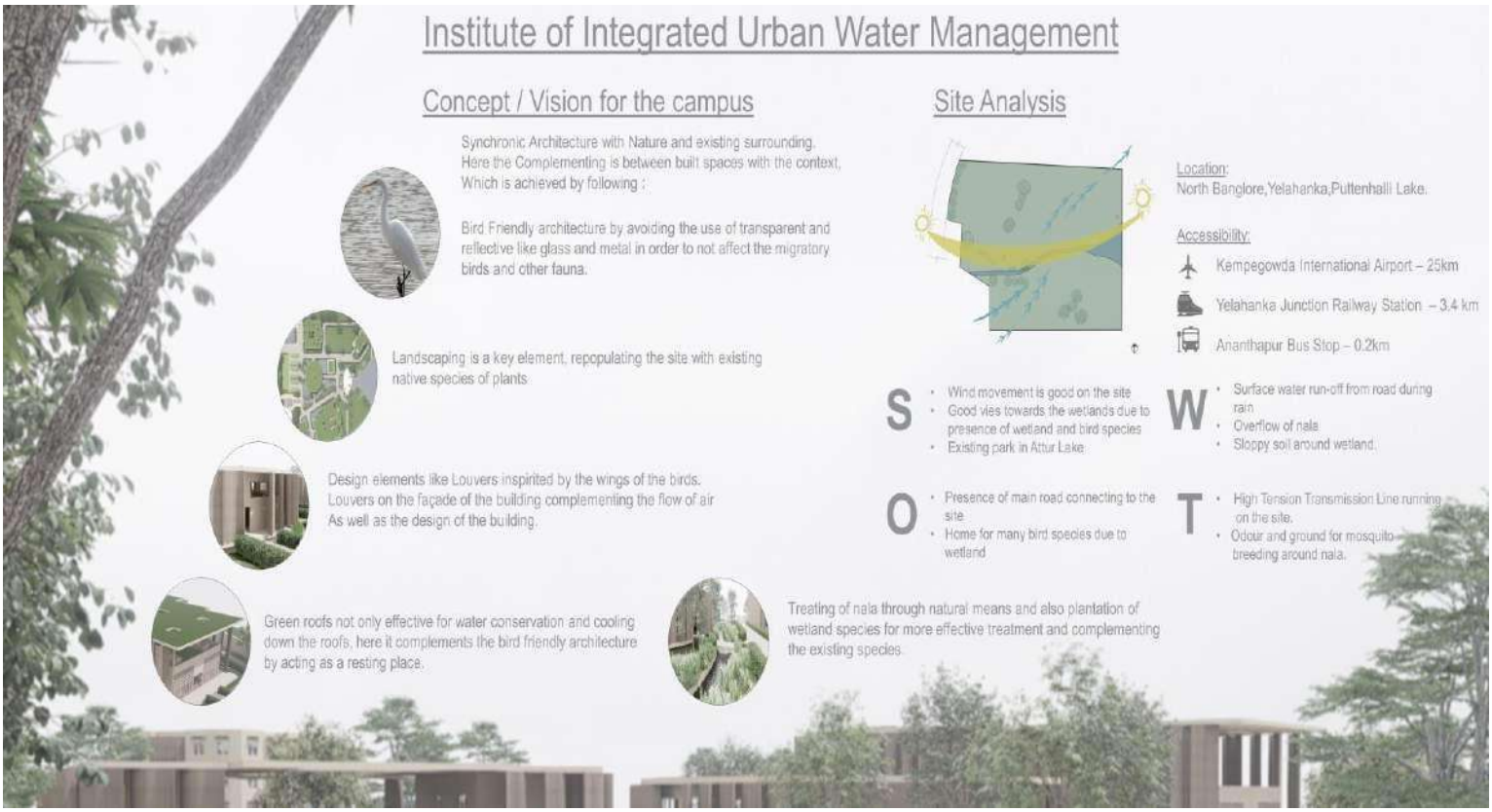

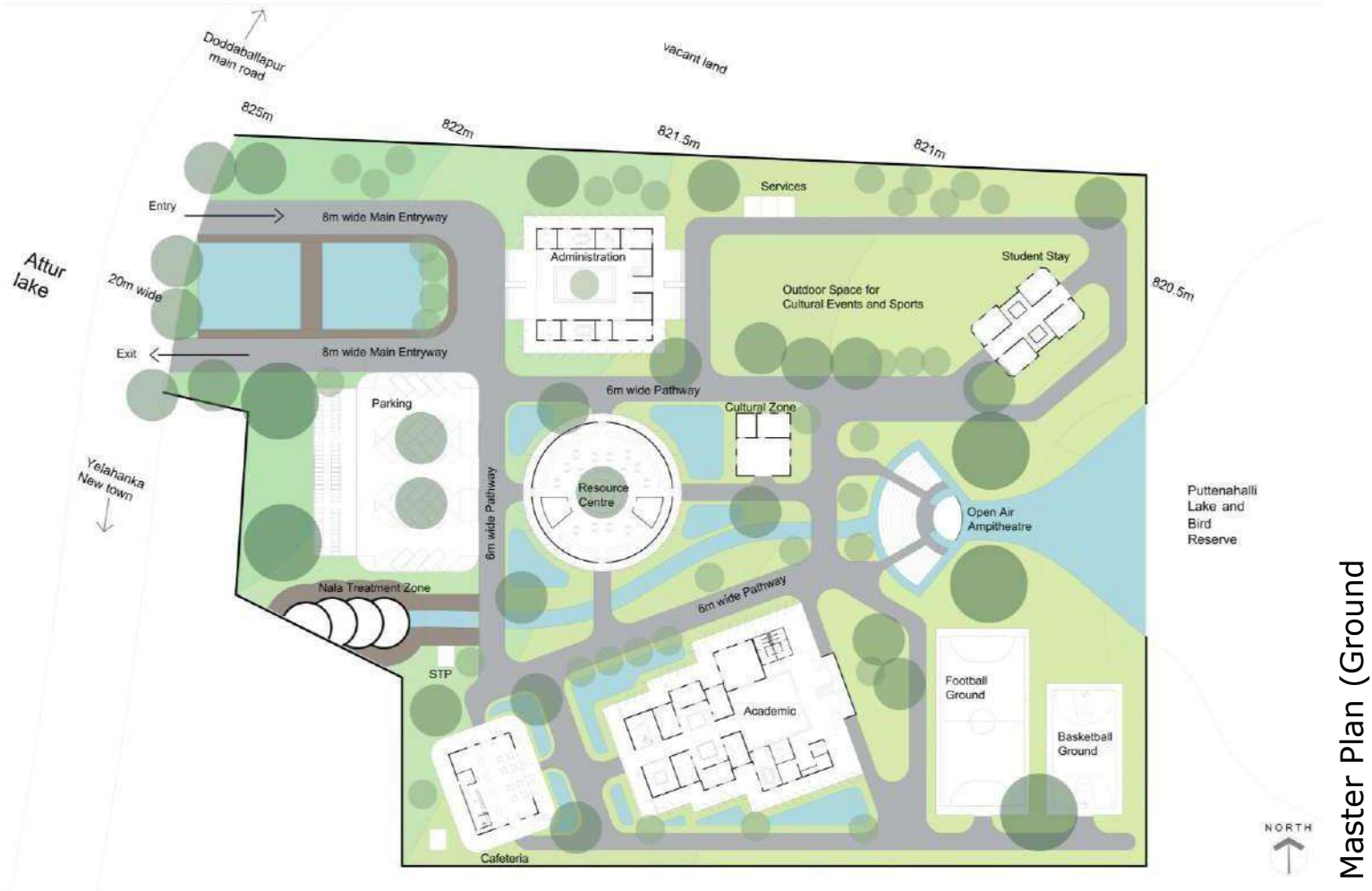

Master Plan (Ground Level)

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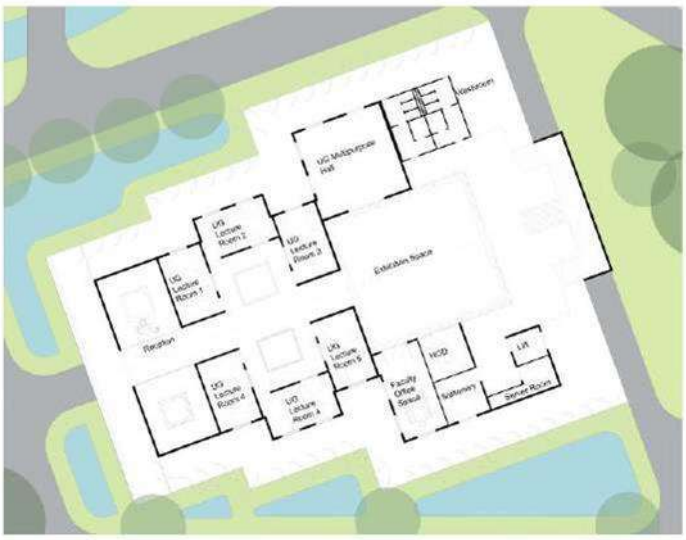
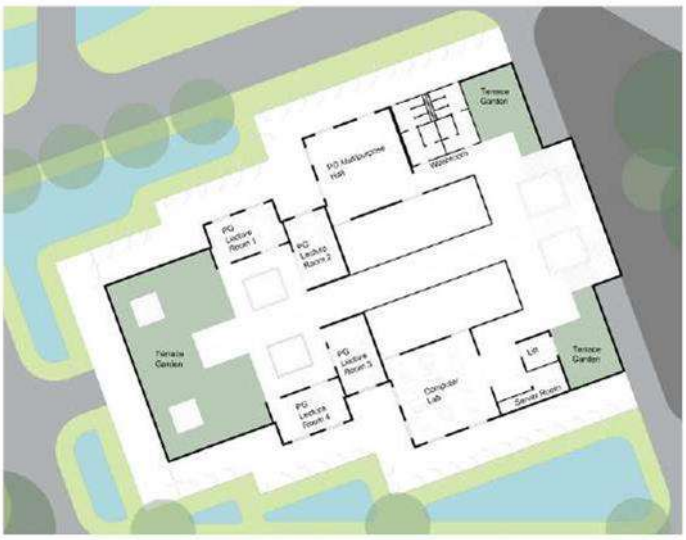
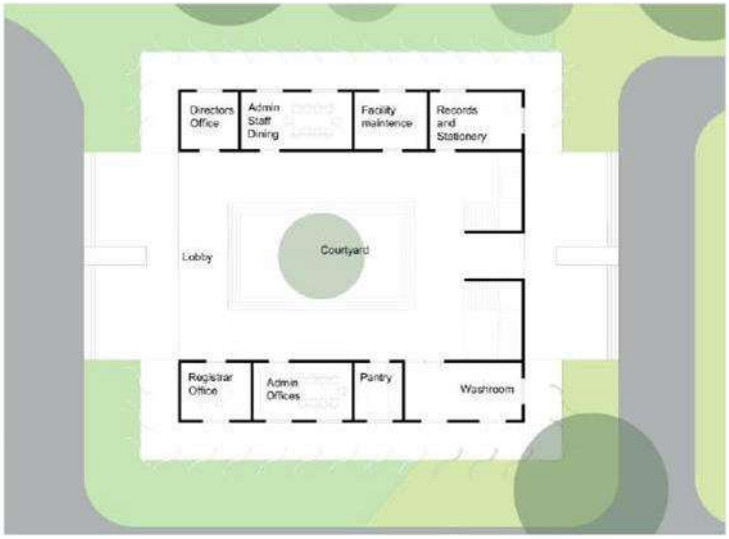


Academic Plan (Ground Level) (1:200)

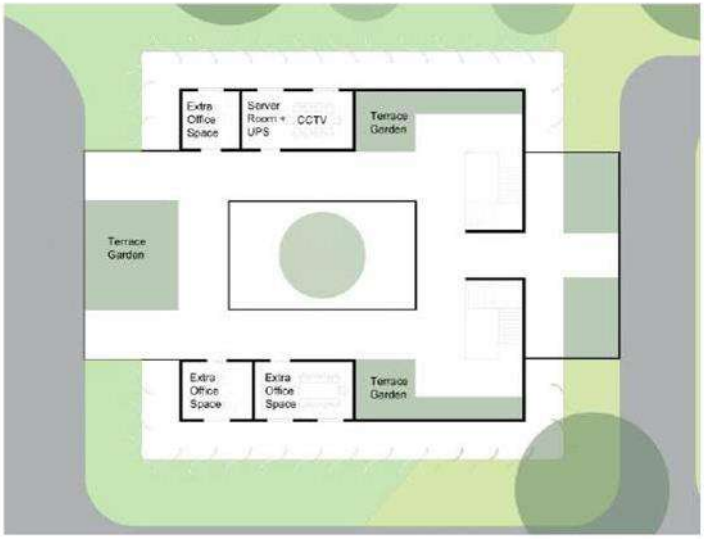


Academic Plan (First Level) (1:200)

Academic Section (1:200)



Admin Plan (Ground Level) (1:150)



Admin Plan (First Level) (1:150)

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Tharun J
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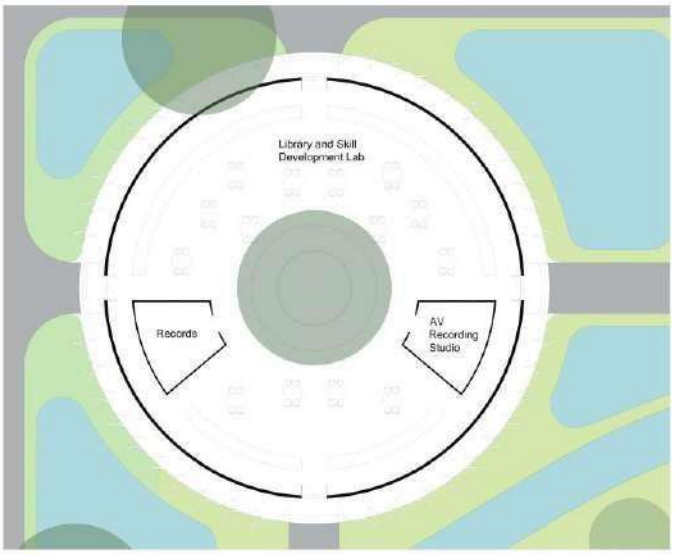
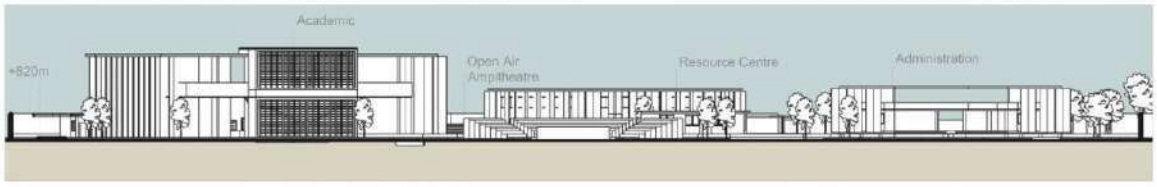
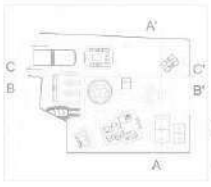


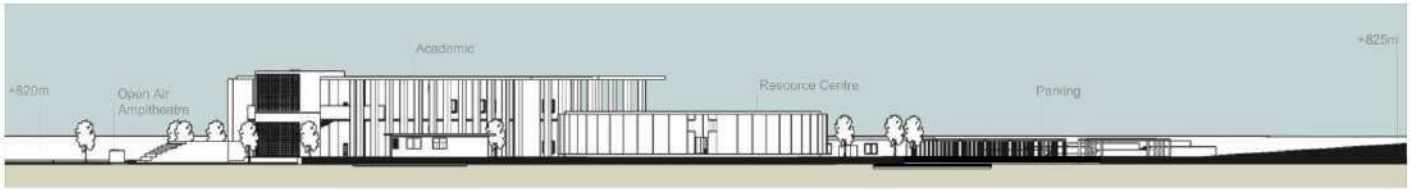
Resource Centre Plan (Ground Level) (1:150)



Section AA (1:250)



Key Plan



Section BB (1:250)

Section CC (1:250)

CAMPUS DESIGN
Architectural Design Studio
VI Faculty: Ar. Steny K John

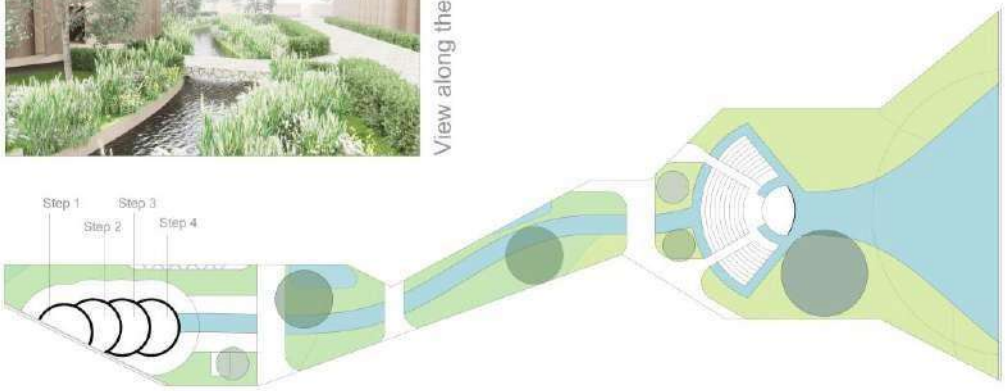
AD VI

Tharun J
1DC20AT074

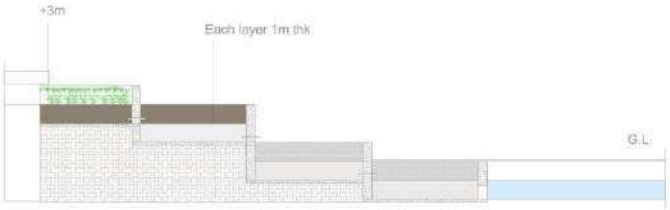
Nala Treatment Through Natural mean

View of Nala Treatment

View along the Nala

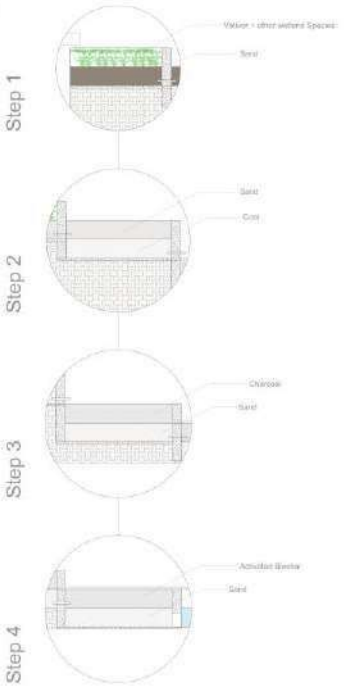


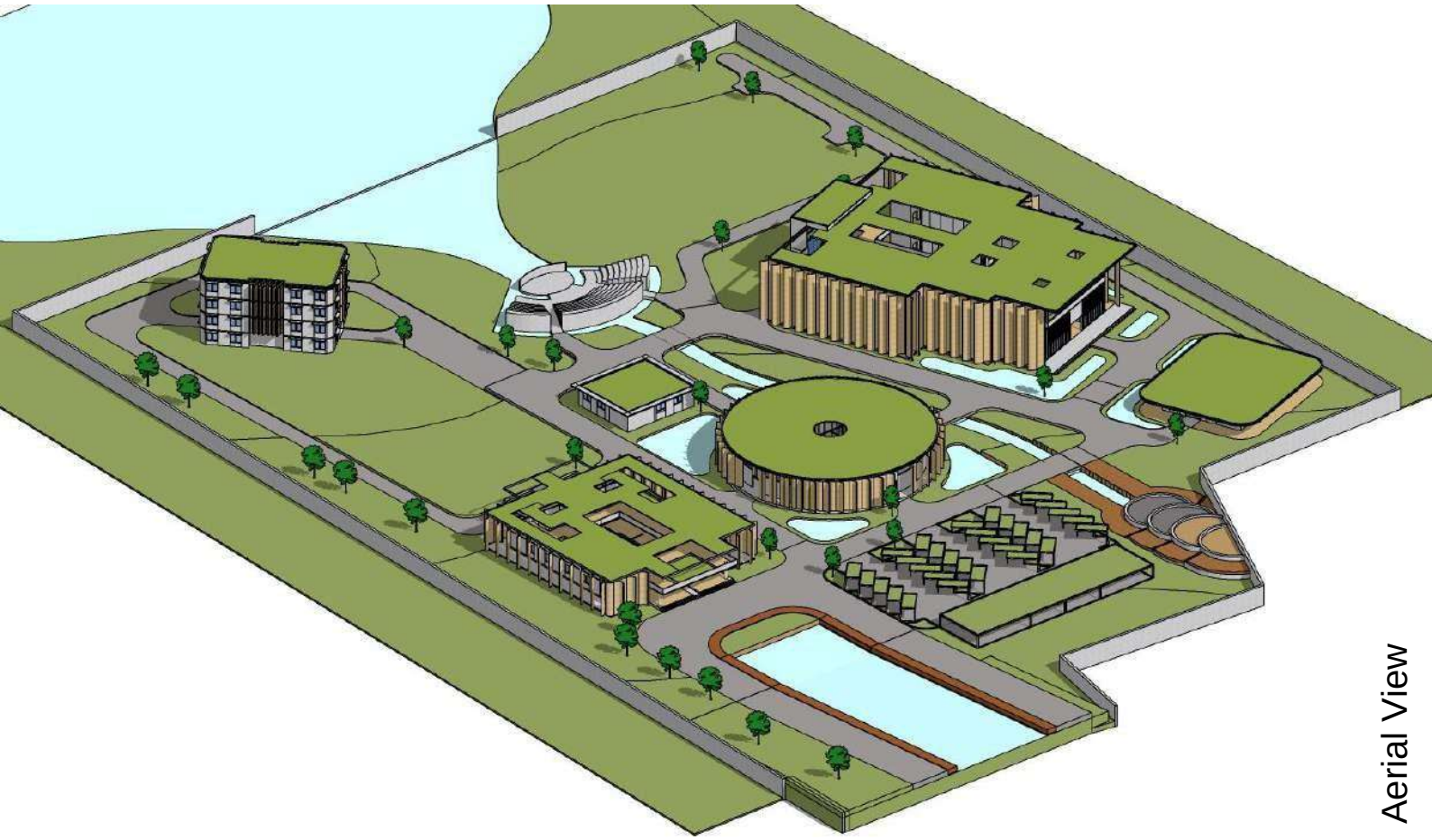
Nala Treatment Plan (1:400)



Section of Nala Treatment (1:100)

Step 5 :
The treated water is diverted towards wetland and can also be used for watrering and other purposes





Aerial View

CAMPUS DESIGN

Architectural Design Studio VI Faculty: Ar. Steny K John

AD VI

Tharun J
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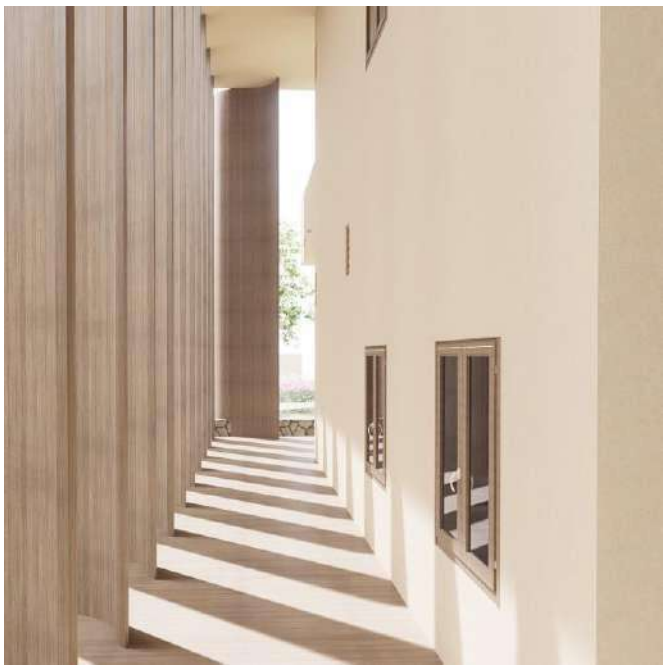


18 ARC 6.1 ARCHITECTURAL DESIGN VI
Even Semester Major Design Project
Design brief Architectural Design - 18 ARC 61

Studio Mentor- Dhruva Prasad Session: March-July 23 (Even Sem) Studio Faculty-Ar. Ekta | Ar. Kushi |Ar. Litty |Ar. Shubham Studio: 6th sem 'B' Section

"Earth and sky, woods and fields, water bodies and rivers, the mountain and the sea, are excellent schoolmasters, and teach some of us more than what we could learn from books."
Introduction
India is likely to face a major challenge in the management of freshwater in view of rapidly rising population and increasing agricultural, industrial and other requirements. As the economy of the country is currently witnessing rapid growth, management of freshwater resources becomes all the more important. A series of actions that are necessary for a long-term solution of the problem are suggested with a view that scarcity of freshwater does not become a hindrance in national economic development and food security.
The Methodology to be followed here is:
● Think and Understand
1) Understanding Site Study and the Process.
2) Site Study through primary and secondary survey and analysis
3) In Depth understanding and site analysis
4) Analysis here talks about different layers and aspects of the site and surrounding like the physical aspects ie. Relief, Buildable slopes, Hydrology, Demographics and social connections, Flora Fauna, Morphology, Activity Mapping, etc. This also talks about the tangible and intangible aspects of all the aspects.
Site Area- Master Plan Level - approx 35 acres. Campus -approx 6 Acres.
Built Up- 30-35% considering the eco sensitive area and NGT Lake Buffer. - Hardscape and transition area to be limited to 10%- various other combinations of materials and techniques will be appreciated which encourages water percolation and reduces the need of the hardscape area.

ARCHITECTURAL DESIGN I
SUBJECT CODE 21 ARC 11
A Division

Studio Coordinators

Ar.Shubham

Studio Faculty

Ar.Litty Salas

Ar. Shruti A Murty

Ar. Khusi Rai

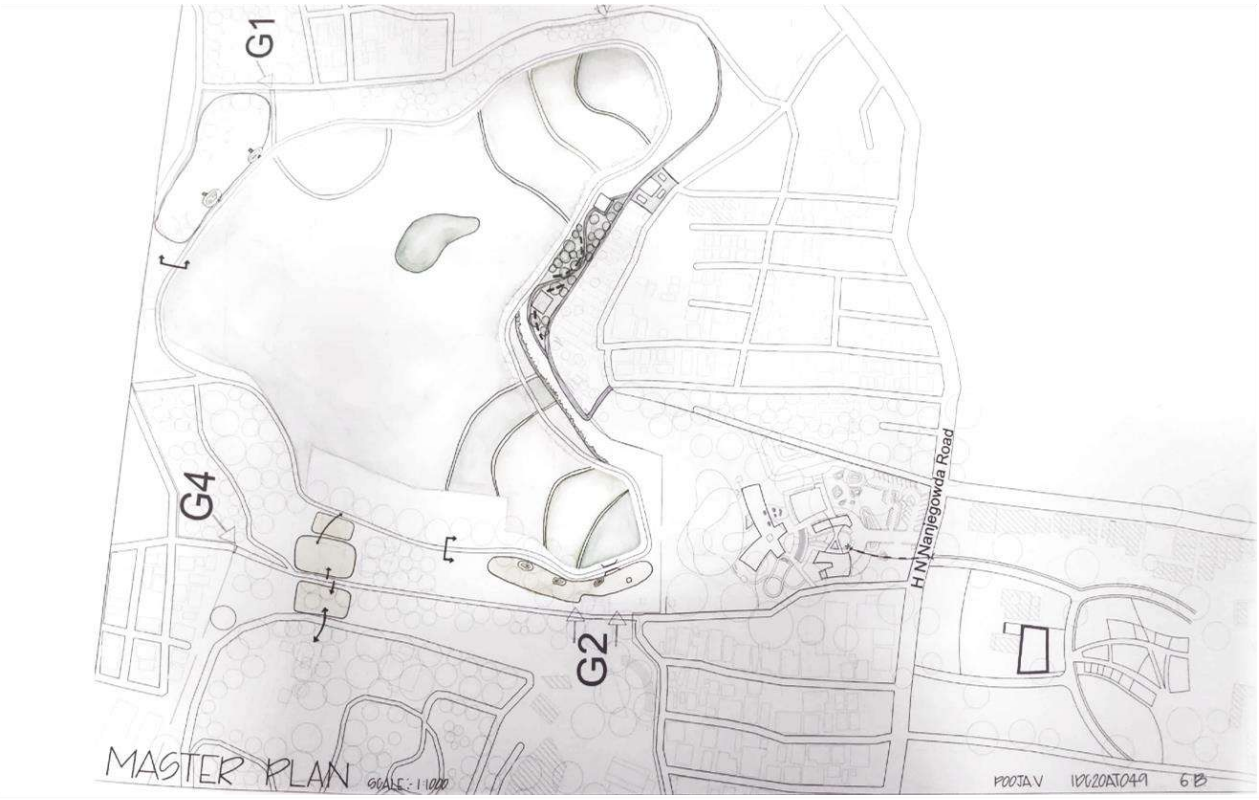
Ar. Ekta Idnany

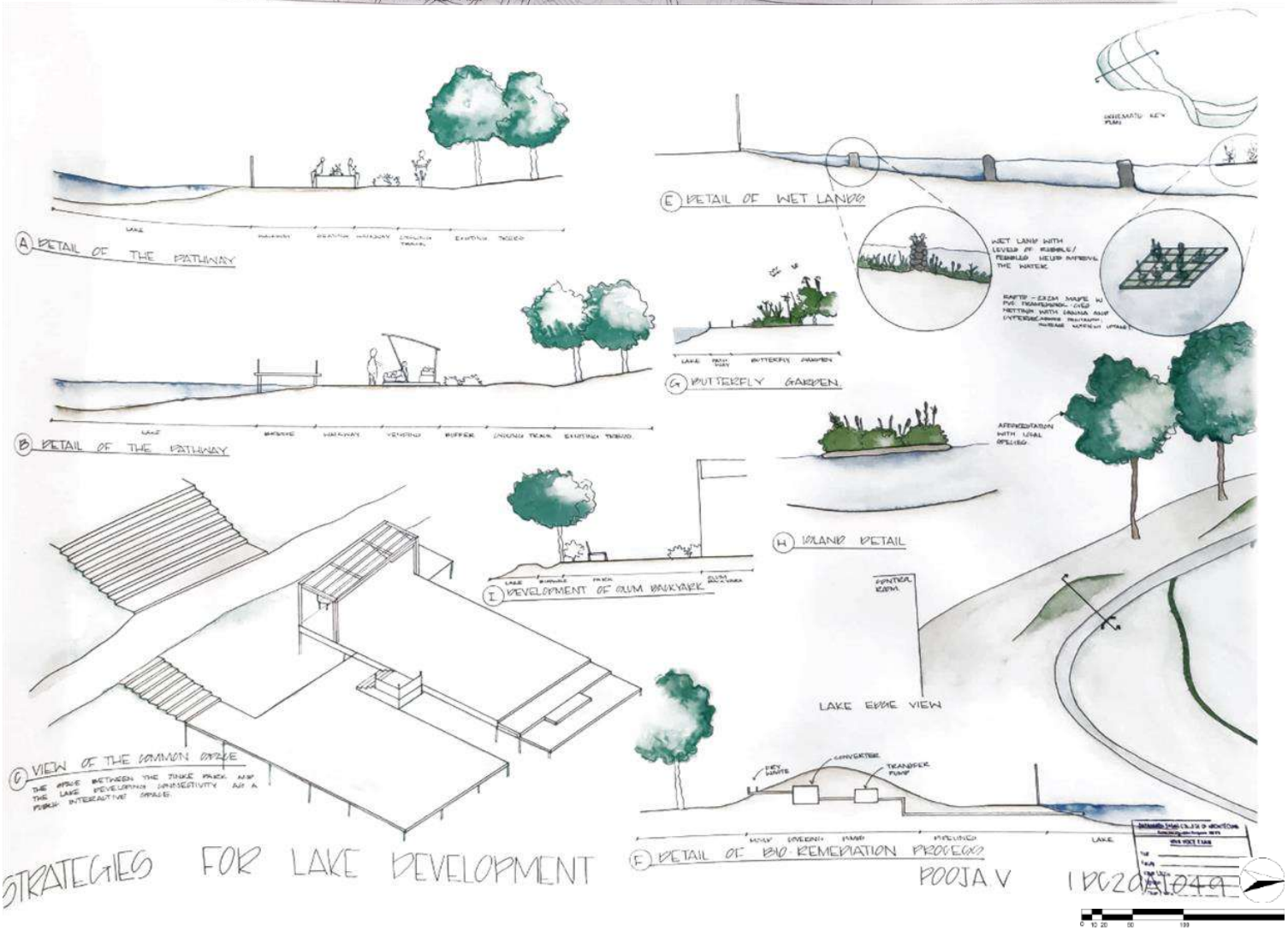
TITLE :CAMPUS DESIGN

AD VI

Subject Name
Faculty: Ar. Shubham Kaushal

Pooja V
1DC20AT049



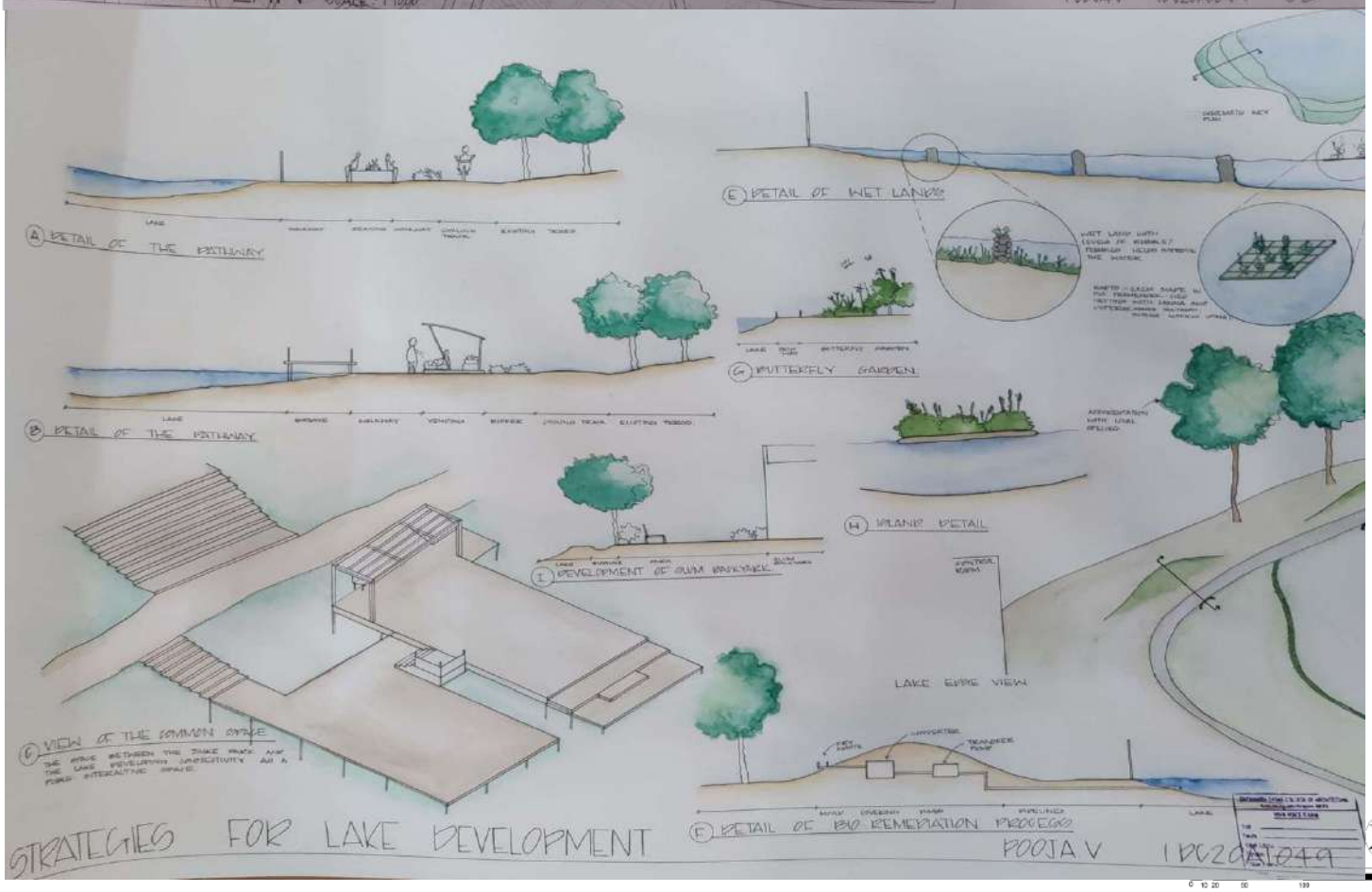


TITLE :CAMPUS DESIGN

ABBRV.

Subject Name
Faculty: Ar. Shubham Kaushal

Pooja V
1DC20AT049

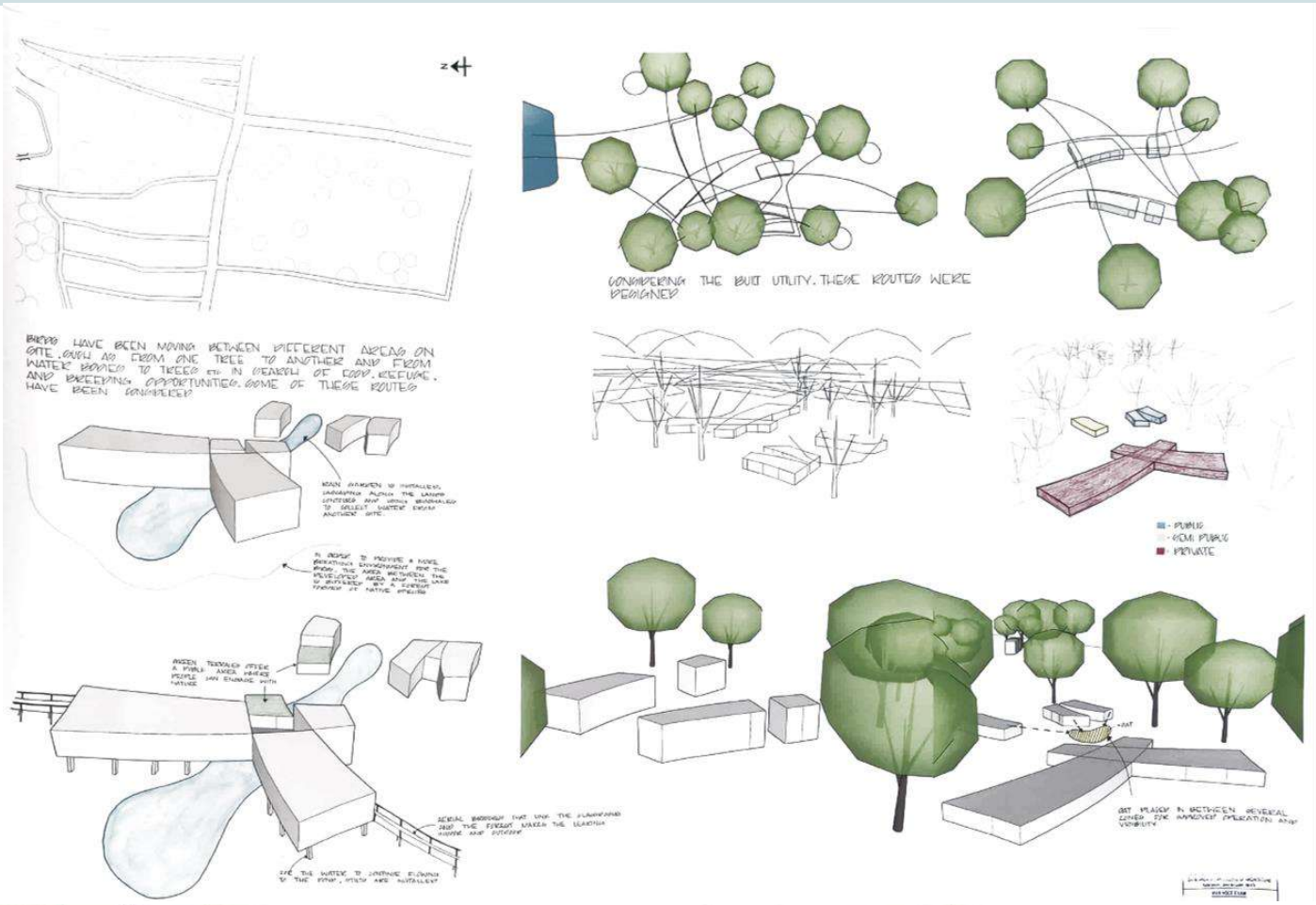


TITLE :CAMPUS DESIGN

AD VI

Subject Name
Faculty: Ar. Shubham Kaushal

Pooja V
1DC20AT049

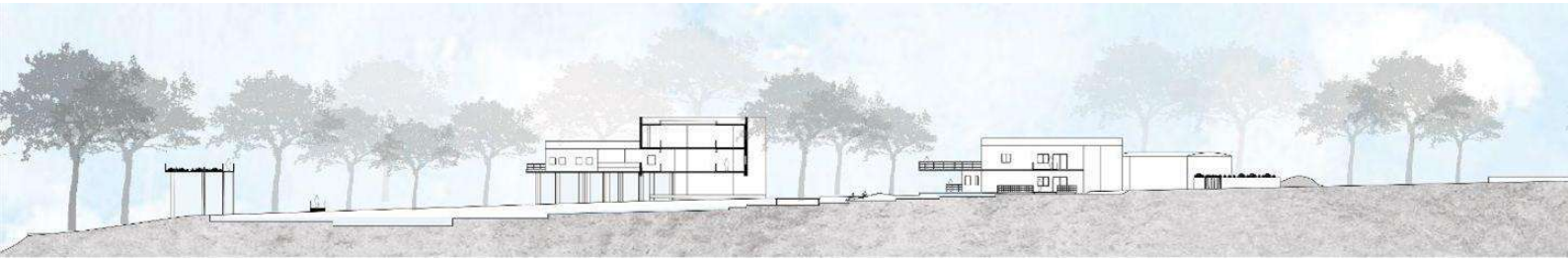


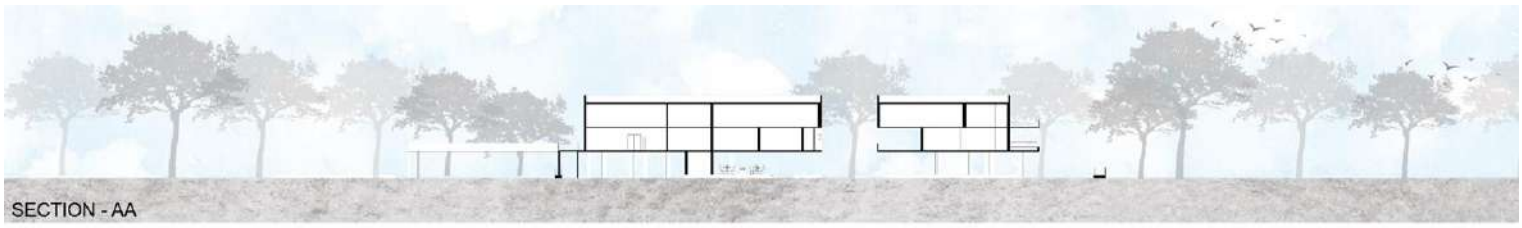
TITLE :CAMPUS DESIGN

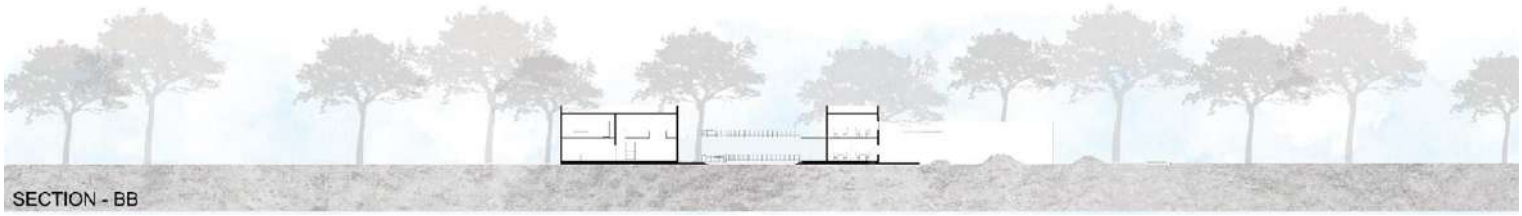
AD VI

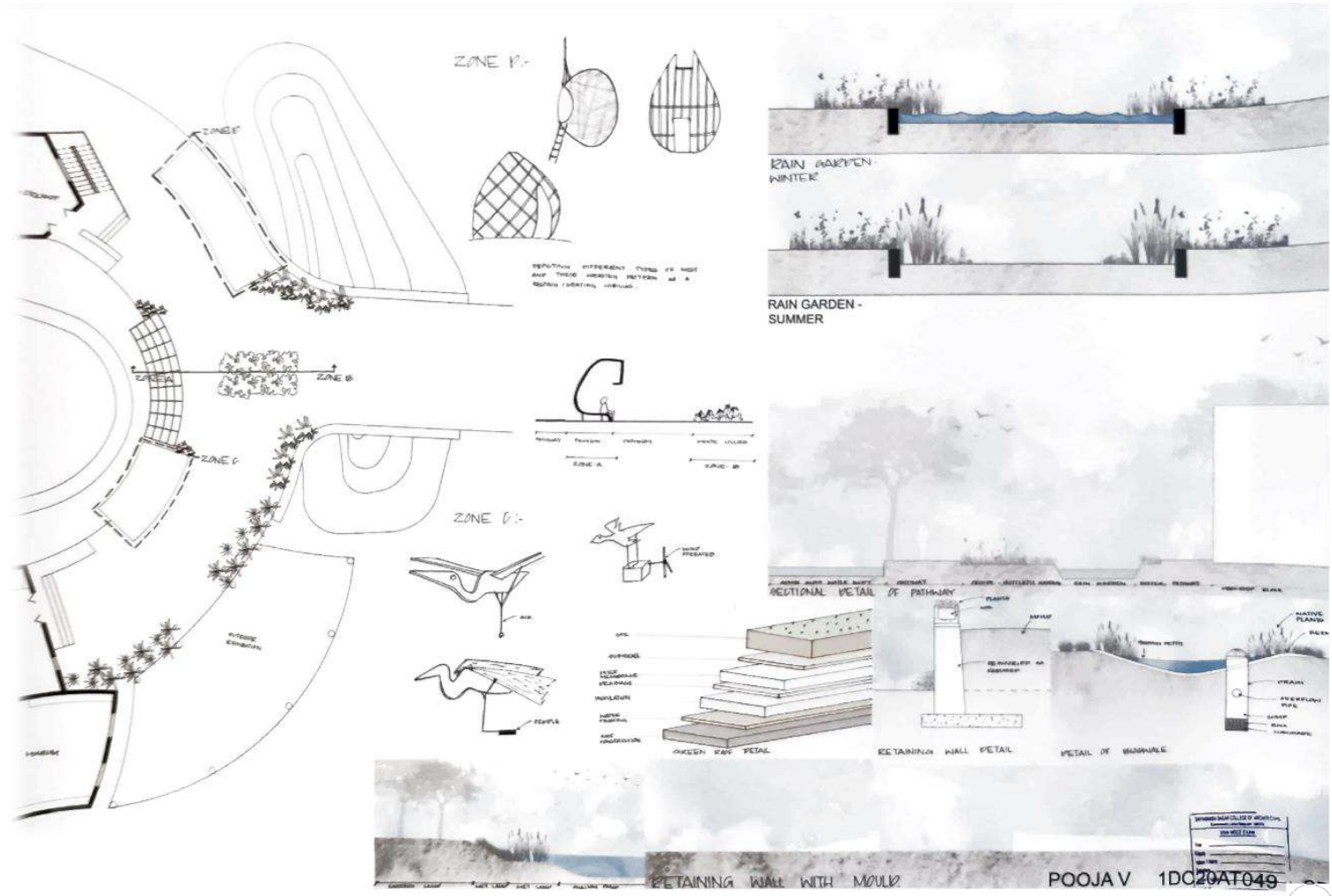
Subject Name
Faculty: Ar. Shubham Kaushal

Pooja V
1DC20AT049







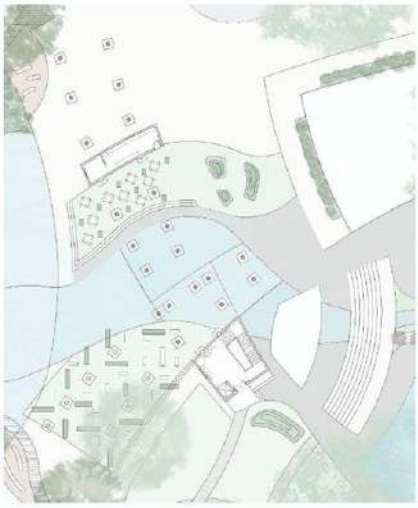


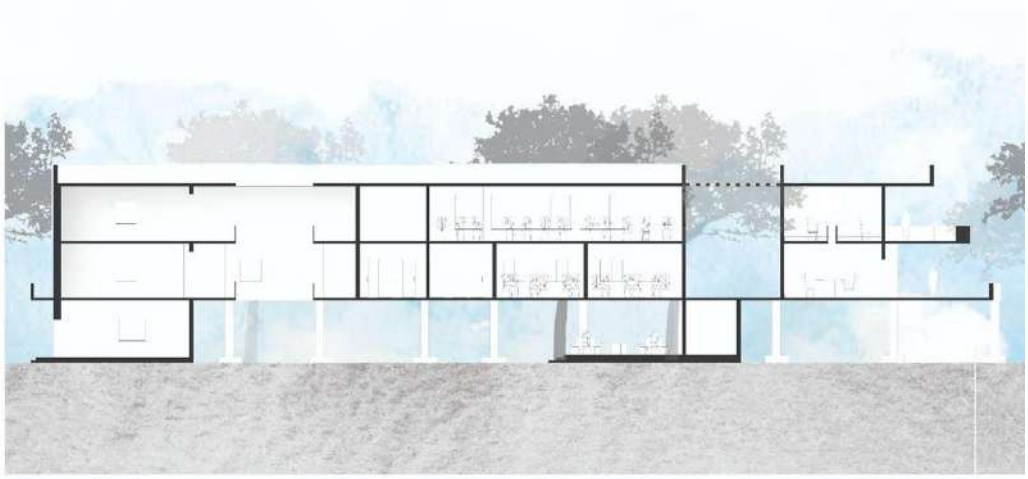
TITLE :CAMPUS DESIGN

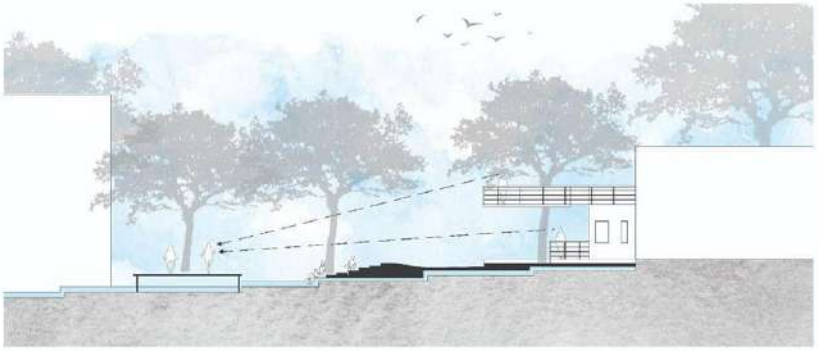
AD VI

Subject Name
Faculty: Ar. Shubham Kaushal

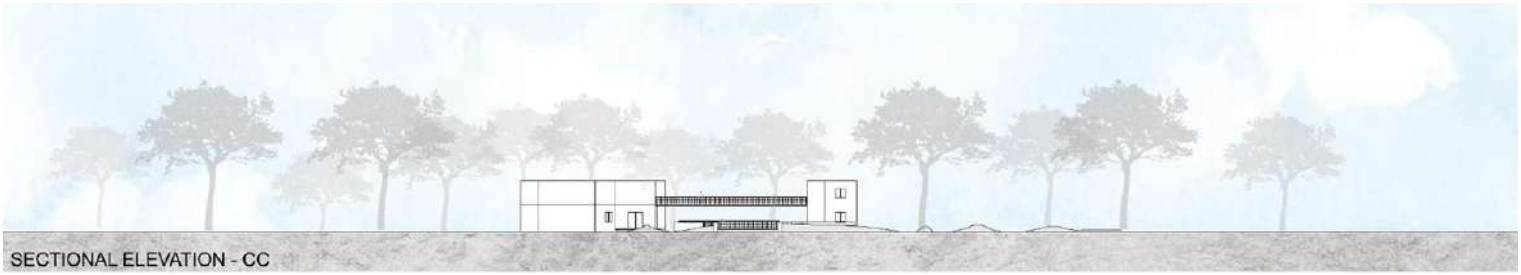
Pooja V
1DC20AT049

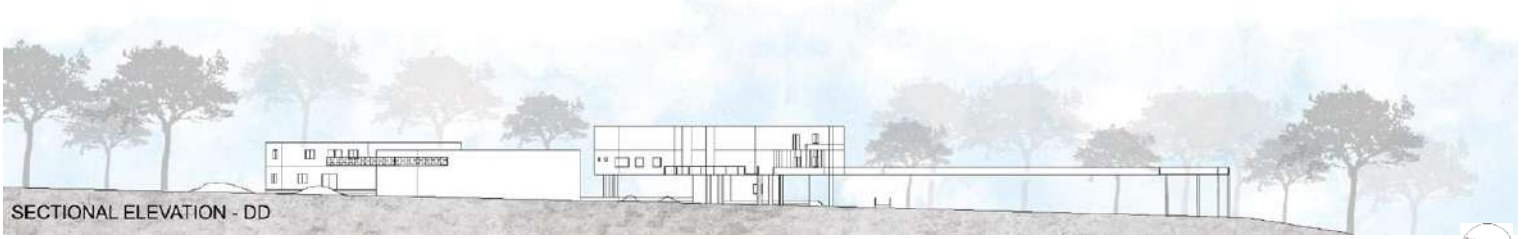






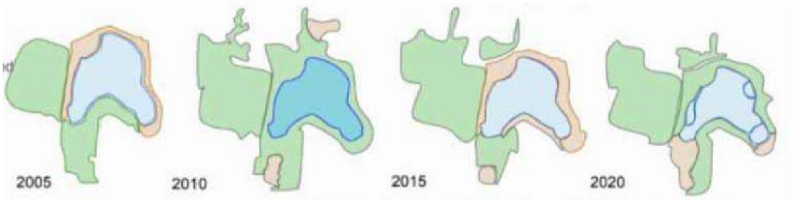
MAIN BLOCK





Manasvi M Shetty
1DC20AT038

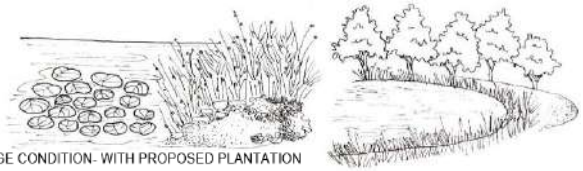
Strategies for lake development and restoration



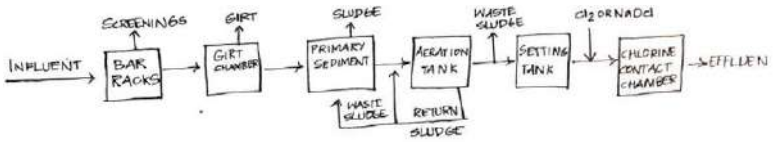
The lake was built by Kempegowda for his family deity Kempamma in 16th century, and Immadi Kempe Gowda established water supply network that connected lake and residential localities nearby.
The lake became hotspot for swimming lesson in 1920s as it was the only deep water body in Bengaluru with clean water.
However, 4 decades later, untreated sewage water started flowing into the lake.
The lake has become a dump, choked with weeds, hyacinth, silt and sewage.
Two gutters empty themselves into the lake. The sewage comes from Bull Temple Road, Hanumanthanagar, Chamarajpet and other areas in the vicinity.
The sewage also comes from houses directly connected to the drains.

Steps to treat and maintain the Lake :

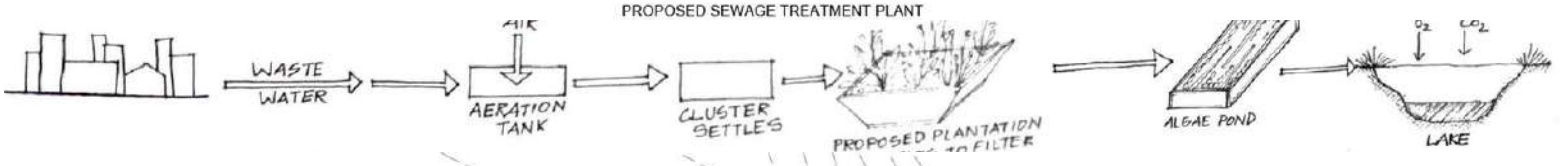
- Only treated sewage will enter the lake combined with wetlands and algae ponds.
- Distillation to enhance storage capacity and also to remove contained sediment.
- Wet dredging to remove deposited sediments.
- Remove macrophytes (covered on the water surface) regularly.
- Vegetation, reeds and leaves of native species can be proposed at the lake. edge- filters the lake along with crating pathways.
- No direct connection between people and lake.
- Plant species of various scales helps in regulation of water levels.



LAKE EDGE CONDITION- WITH PROPOSED PLANTATION

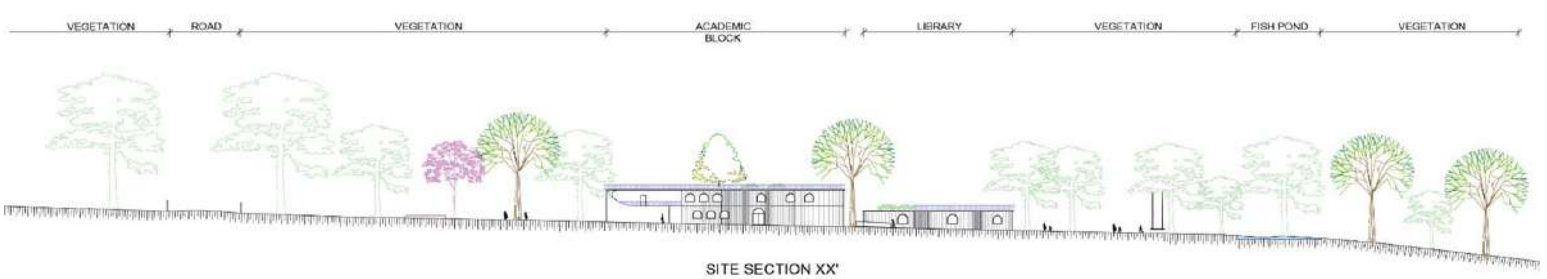


PROPOSED SEWAGE TREATMENT PLANT

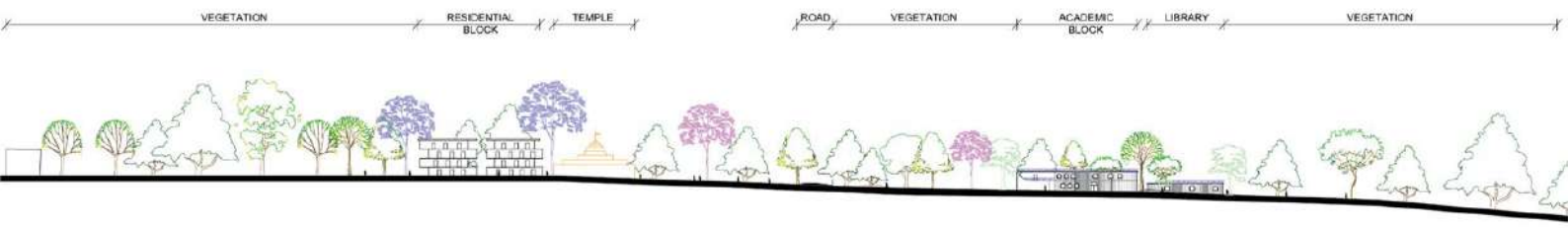


LEGEND:

1	RECEPTION & LOBBY AREA	119 m²
2	FACILITY & MAINTENANCE	18 m²
3	RECORDS & STATIONARY	21 m²
4	PANTRY	29 m²
5	SERVER ROOM	14 m²
6	DIRECTOR'S OFFICE	32 m²
7	WASHROOM	24 m²
8	ADMIN OFFICE	47 m²
9	CONFERENCE ROOM	50 m²
10	RECEPTION & WAITING AREA	202 m²
11	PRINCIPAL'S OFFICE	30 m²
12	MULTIPURPOSE HALL	194 m²
13	STAFF ROOM	42 m²
14	INDOOR WORKSHOP	75 m²
15	OUTDOOR WORKSHOP	96 m²
16	SEMI OPEN READING SPACE	73 m²
17	LIBRARY	118 m²
18	SKILL DEVELOPMENT LAB	24 m²
19	LOBBY AREA	236 m²
20	HOD OFFICE	30 m²
21	PANTRY 1	24 m²
22	STORAGE AND STATIONARY	27 m²
23	CLASSROOM 1	90 m²
24	CLASSROOM 2	66 m²
TOTAL BUILT UP AREA:		1693 m²



SITE SECTION XX'



SITE SECTION YY'

TITLE :CAMPUS DESIGN

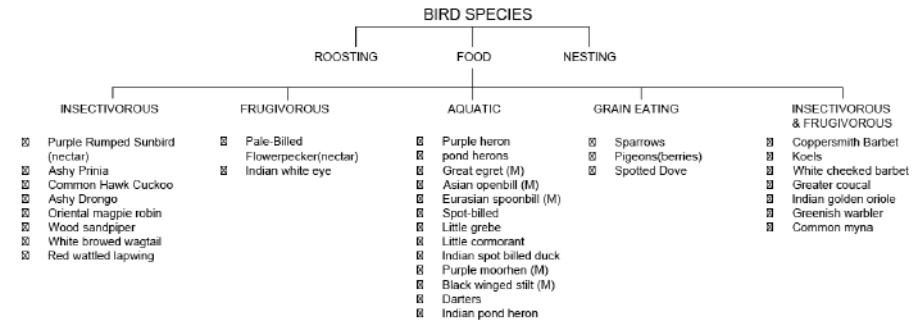
AD VI

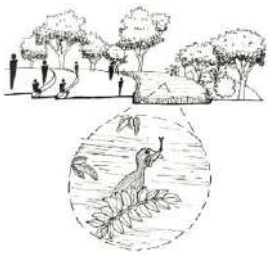
Subject Name
Faculty: Ar. Shubham Kaushal

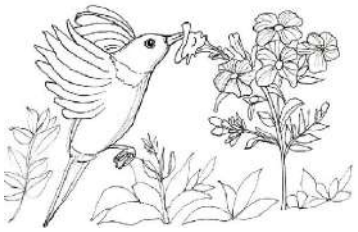
Manasvi M Shetty
1DC20AT038

Urbanization has taken a heavy toll on many of Bengaluru's lakes and Kempambudhi kere is no exception.

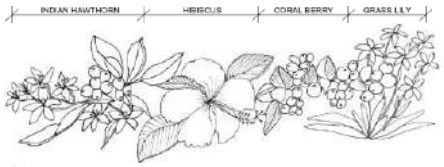
- Once serving as a lifeline that developed the city around it has seen a lot of changes throughout the decades
- Despite of all the changes that the lake has gone through, it still attracts birds, though the percentage of these birds is less in the city
- The following design strategies proposed is based on the types of birds that visit, their eating and nesting habitats, on a hope that more birds come to the lake.

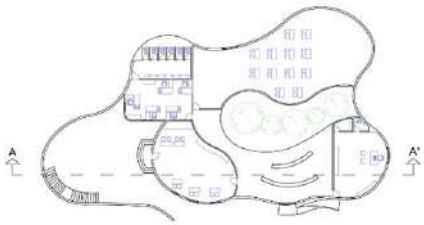




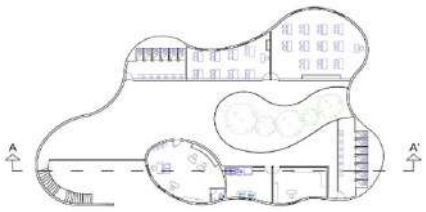


- Introducing native flowers and fruits on to the site benefits various bird species.
- Various types of flower gardens are provided to the site that attracts various insects on which several insectivorous birds feed on.
- A fish pond is added to the site that consists of native fish species such as mrigal and rohu which serves as food for various aquatic and migratory birds.



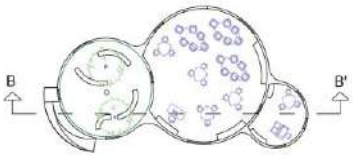


GROUND FLOOR- ACADEMIC BLOCK

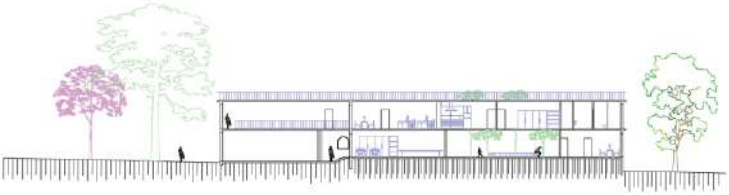


FIRST FLOOR- ACADEMIC BLOCK

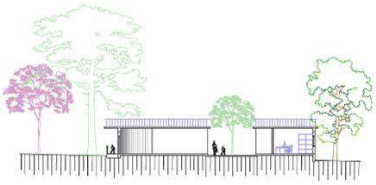
GROUND FLOOR- ADMIN BLOCK



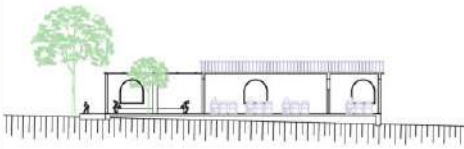
GROUND FLOOR- LIBRARY



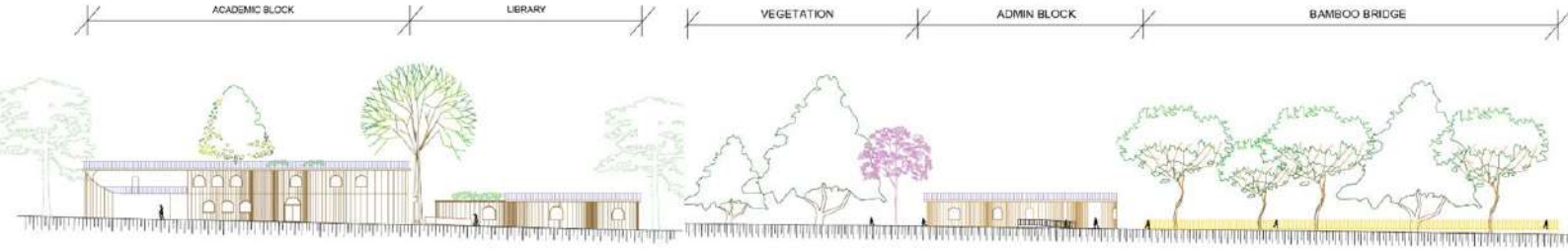
ACADEMIC BLOCK- SECTION AA'



ADMIN BLOCK- SECTION CC'

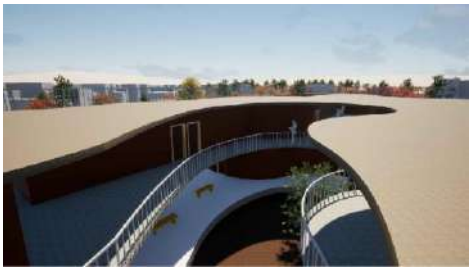


LIBRARY-SECTION BB'



ELEVATION- ACADEMIC BLOCK AND LIBRARY

ELEVATION- ADMIN BLOCK



TITLE :CAMPUS DESIGN

AD VI

Subject Name
Faculty: Ar. Shubham Kaushal

Manasvi M Shetty
1DC20AT038

OBJECTIVE: To acquaint the students with construction practices pertaining to structural glazing,
Metal Cladding and roofing systems and to study constructional systems and detailing of alternative material doors, windows and partition.
OUTLINE:

1) Glass as a building material: Glass manufacturing in various types like plate, tinted, decorative, reinforced, laminated glass block, fiberglass, glass murals, partially colored glass, etching of glass and its applications in building industry for both exteriors and interiors. Glass fabrication techniques, fiber reinforced composite materials and products.
2) Frameless glass doors and windows and partitions: Fixing and fabrication details.
3) Structural Glazing and cladding: Fixing and fabrication details.
4) Point supported glazing: Fixing and fabrication details.
5) Introduction to metal cladding: ACP, Aluminum louvers; Fixing and fabrication details.
6) Metal cladding of facades and building envelopes: Fixing and fabrication details.
7) UPVC, PVC & FRP: Doors and windows and partitions (Detailing and study of joinery).
8) Wooden sliding and folding doors and partitions: Principles and methods of construction and detailing.
9) Steel sliding and folding doors and partitions: Principles and methods of construction and detailing.
10) Aluminum sliding and folding doors and partitions: Principles and methods of construction and detailing.
11) Skylight in steel and glass: Principles and methods of construction and detailing.
12) Alternative wall technologies: Sandwich panel walls, PUF panels etc.

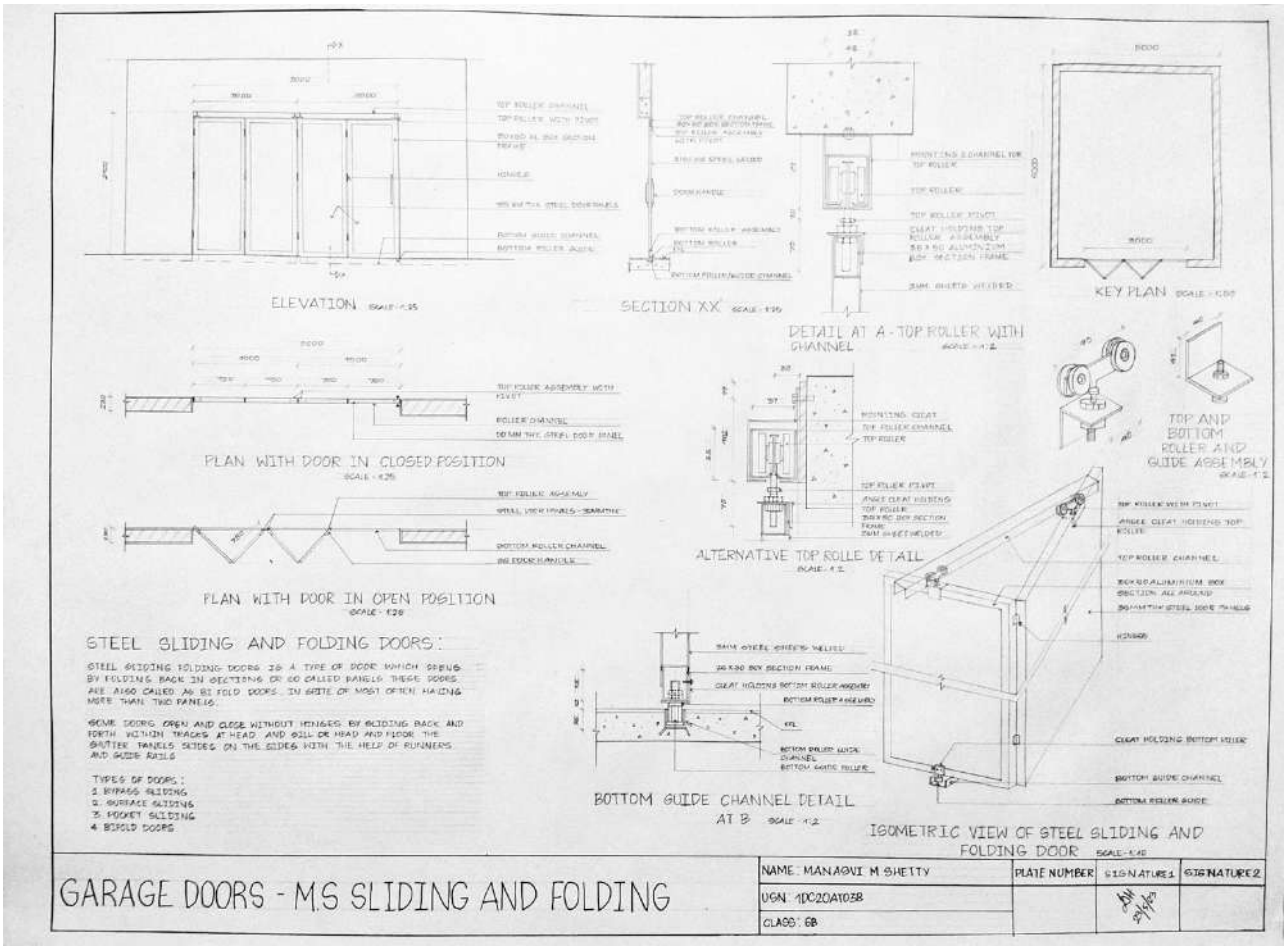
MATERIALS AND METHODS IN BUILDING CONSTRUCTION–VI SUBJECT CODE 18ARC62

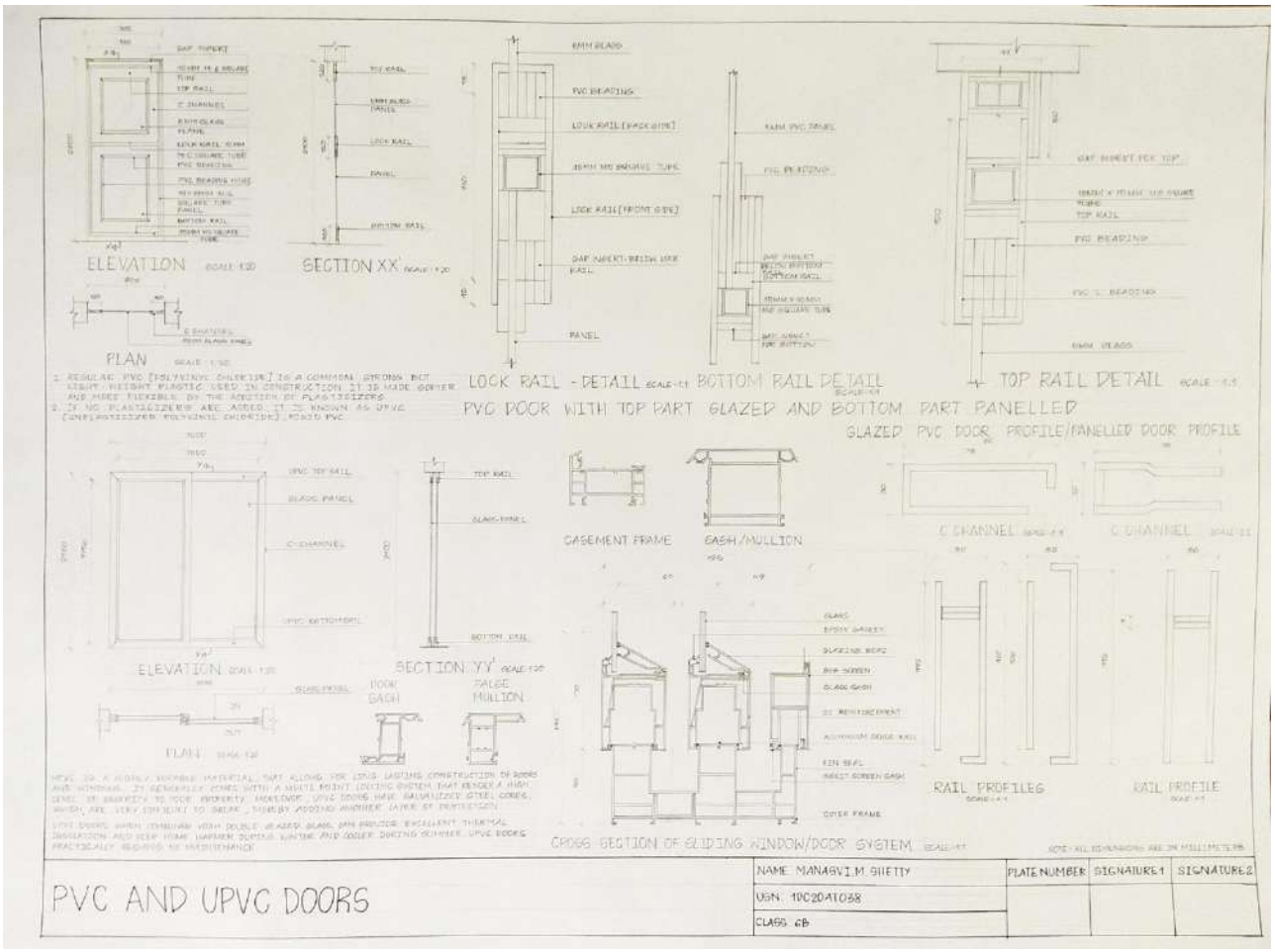
Studio Coordinators

Ar.Dominic Harper

Studio Faculty

Ar.Surabhi Moharir


ELEVATION
SECTION XX
KEY PLAN
DETAIL AT A - TOP ROLLER WITH CHANNEL
PLAN WITH DOOR IN CLOSED POSITION
PLAN WITH DOOR IN OPEN POSITION
ALTERNATIVE TOP ROLLE DETAIL
TOP AND BOTTOM ROLLER AND GUIDE ASSEMBLY
STEEL SLIDING AND FOLDING DOORS :
STEEL SLIDING FOLDING DOORS IS A TYPE OF DOOR WHICH OPENS BY FOLDING BACK IN SECTIONS OR SO CALLED PANELS. THESE DOORS ARE ALSO CALLED AS BI FOLD DOORS. IN SPITE OF MOST OFTEN HAVING MORE THAN TWO PANELS.
SOME DOORS OPEN AND CLOSE WITHOUT HINGES BY SLIDING BACK AND FORTH WITHIN TRACKS AT HEAD AND SILL OR HEAD AND FLOOR THE SHUTTER PANELS SLIDES ON THE SIDES WITH THE HELP OF RUNNERS AND GUIDE RAILS
TYPES OF DOORS :
1. BYPASS SLIDING
2. SURFACE SLIDING
3. POCKET SLIDING
4. BIFOLD DOORS
BOTTOM GUIDE CHANNEL DETAIL AT B
ISOMETRIC VIEW OF STEEL SLIDING AND FOLDING DOOR
GARAGE DOORS - M.S SLIDING AND FOLDING
NAME: MANASVI M SHETTY
USN: 1DC20AT038
CLASS: 6B
PLATE NUMBER
SIGNATURE1
SIGNATURE2

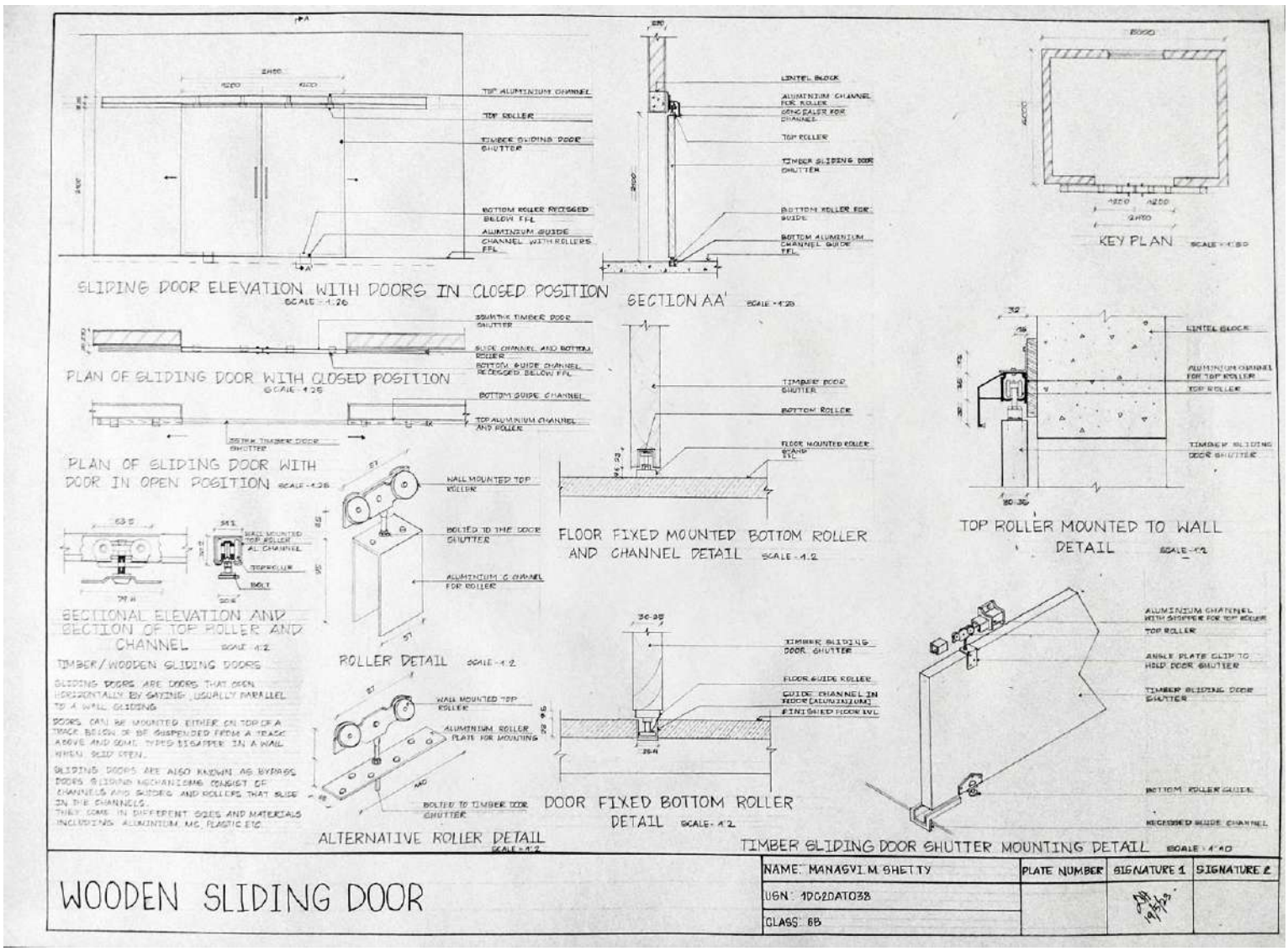

ELEVATION
SECTION XX
PLAN
LOCK RAIL - DETAIL
BOTTOM RAIL DETAIL
TOP RAIL DETAIL
PVC DOOR WITH TOP PART GLAZED AND BOTTOM PART PANELLED
GLAZED PVC DOOR PROFILE/PANELLED DOOR PROFILE
CASEMENT FRAME
SASH/MULLION
C CHANNEL
ELEVATION
SECTION YY
PLAN
RAIL PROFILES
CROSS SECTION OF SLIDING WINDOW/DOOR SYSTEM
PVC AND UPVC DOORS
NAME: MANASVI M SHETTY
USN: 1DC20AT038
CLASS: 6B
PLATE NUMBER
SIGNATURE1
SIGNATURE2

TITLE :WOODEN SLIDING DOOR

MMBC

Subject Name:Materials and Methods in Building Construction
Faculty: Ar. Dominic Harper , Ar. Surabhi Moharir

Manasvi M Shetty
1DC20AT038



1 OBJECTIVE:
1. To introduce the students to the discipline of Landscape Architecture.
2. To advance analytical and planning skills for Architectural project sites.
3. To develop design skills for small landscape projects.
Course Outline:
Introduction, design philosophies and contemporary approaches to landscape architecture and
design are reviewed through various landscape design projects over time while modules on site analysis, site planning, elements of landscape architecture and landscape design process are supported with theoretical inputs.
Mode of study:
i. Lecture component: Various landscape design projects to explain the design philosophies, theoretical aspects of site analysis and site planning, element of landscape architecture and design process will be delivered as lecture component.
ii. Literature study: Exercise on 'relating architecture and landscape' may be undertaken as a
literature study exercise.
iii. Studio component:

18ARC66 – LANDSCAPE ARCHITECTURE

Studio Coordinators

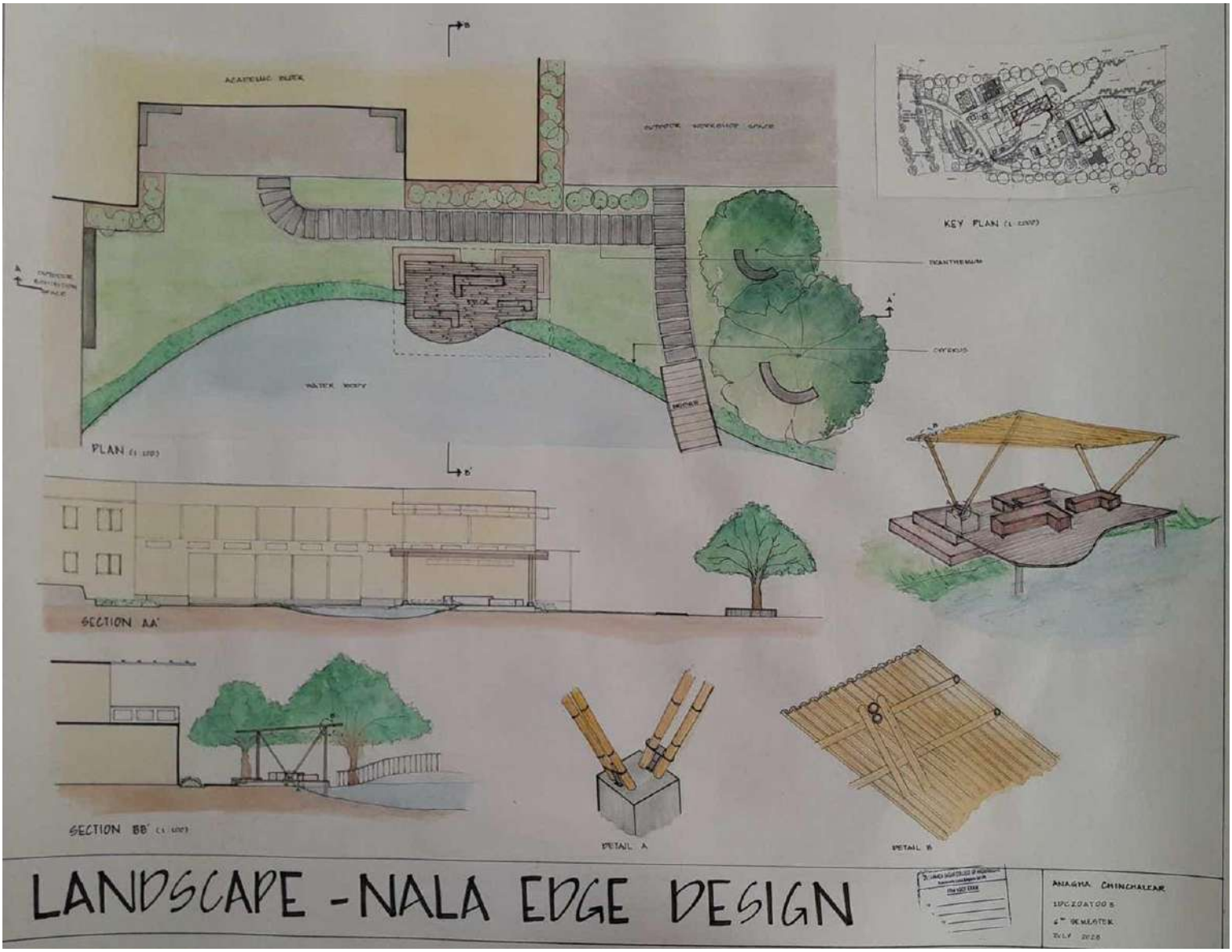
Ar. Vasavi S R

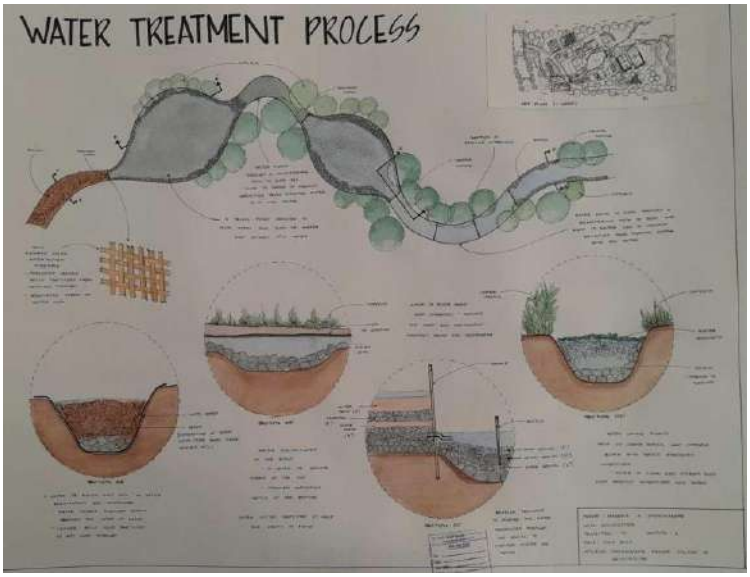
Ar.Shubham Kaushal

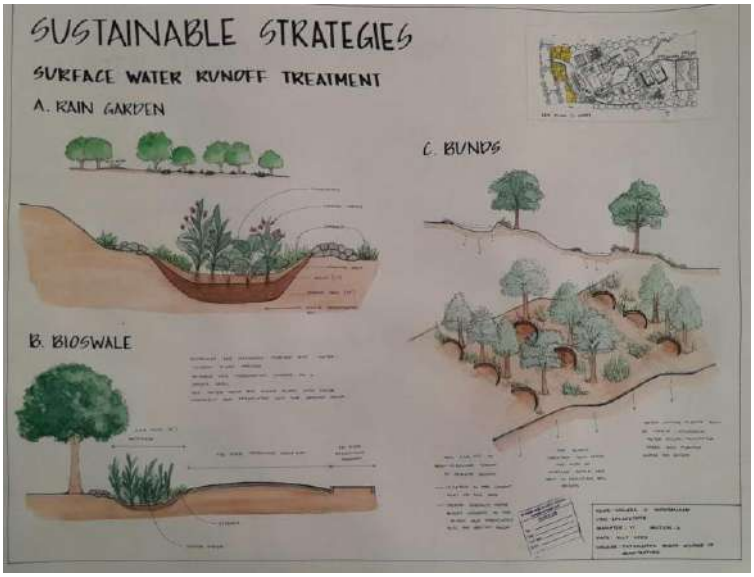
CAMPUS NALA EDGE

18ARC66 – LANDSCAPE ARCHITECTURE
Faculty: Ar. Vasavi S R

Anagha Chinchalkar
1DC20AT003





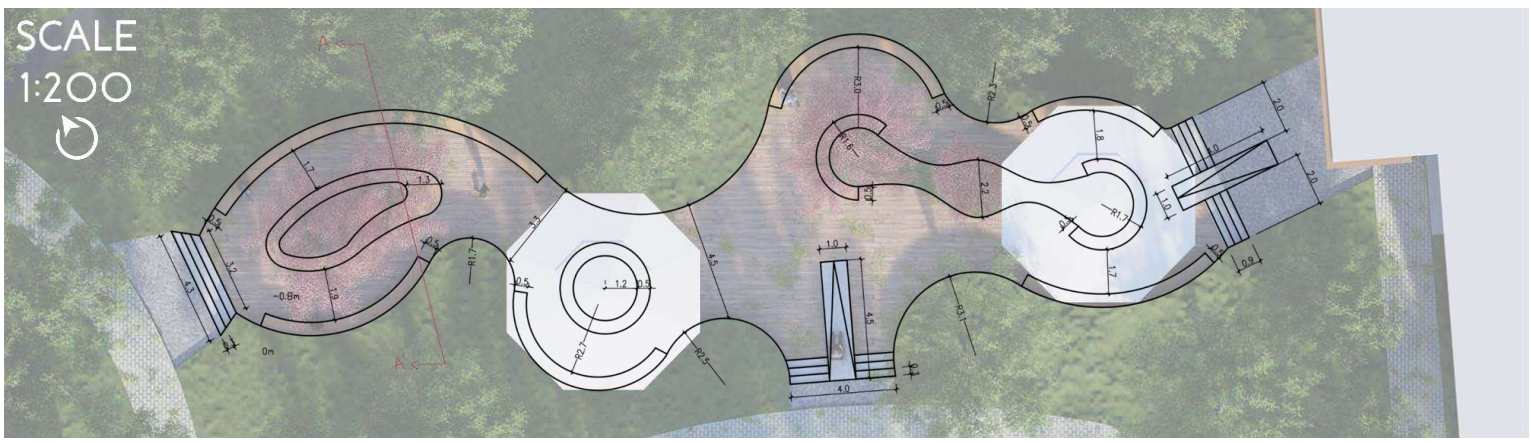


LANDSCAPE DESIGN

18ARC66 – LANDSCAPE ARCHITECTURE
Faculty: Ar. Vasavi S R

Ayan Kumar
1DC20AT009

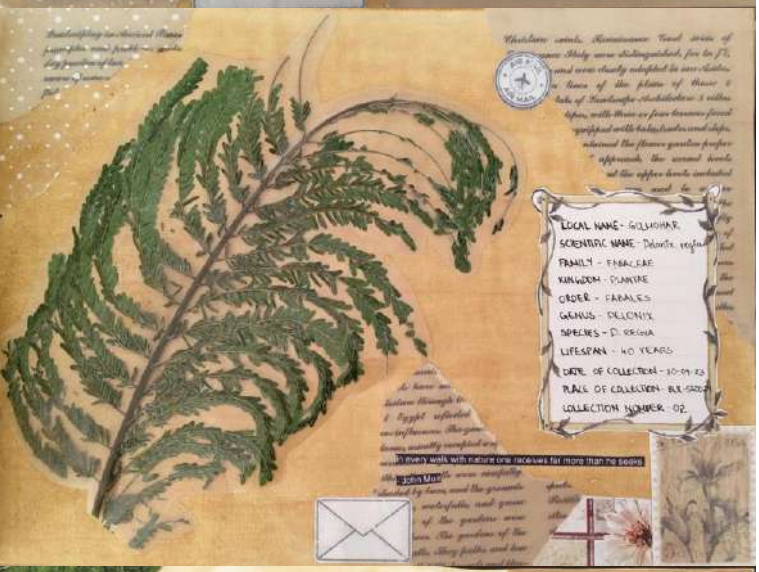
The landscape embodies a versatile haven, catering to relaxation, productivity, and connectivity, all while prioritizing inclusivity and ensuring accessibility for everyone.

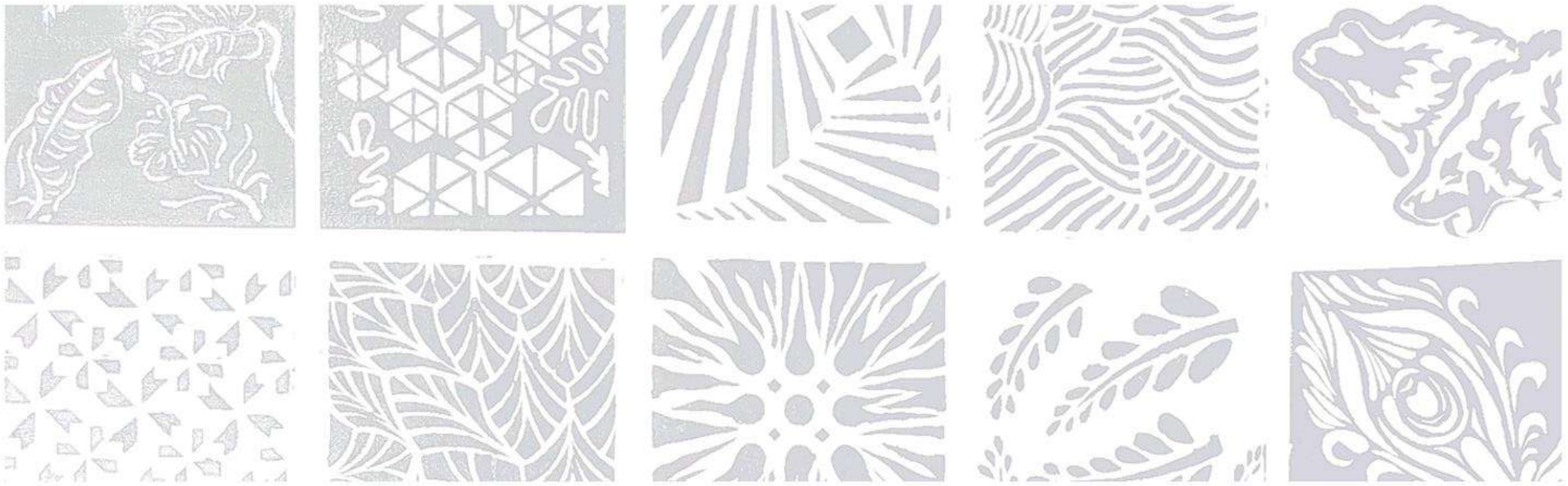


LANDSCAPE DESIGN

18ARC66 – LANDSCAPE ARCHITECTURE
Faculty: Ar.Shubham Kaushal

Nishath Mubeen
1DC20AT047





7th Semester

Ramanagara - The city and town

Ramanagara, the district was carved out of the erstwhile Bengaluru district in 2007, which comprises of Ramanagara, Channapatna, Kanakpura and Magadi taluks. a subdivision of a district; a group of several villages organized for revenue purposes. Ramanagara is a town and a city municipal council in Karnataka. It is also the headquarter of Ramanagara district. The town was known as Shamserabad at the ruling time of the Tippu Sultan. It was then called Closepet, after Sir Barry Close in pre-independence time period. It was renamed Ramanagara by the former chief minister of Karnataka state Mr Kangal Hanumanthayya. The district has a population of nearly 11 lakhs (10,82,739) according to Census 2011 and is about 50 km from Bengaluru and Bangalore-Mysore State Highway No.17. The average rainfall is 622.80 metres above sea level and 931.58 mm annually.

Economy

Ramanagara is well known for its sericulture and is nicknamed Silk Town and Silk City. The silk produced in this region forms the input for the famous Mysore Silk. Ramanagara is the largest market for silk cocoons in Asia. 50 tonnes of cocoons a day arrive at the town. Ramanagara also has extensive granite quarry sites.
Ramanagar district is famous for traditional toys and cultural activities and is the largest market in Asia.
Ramanagara district can be reached by road from Karnataka and Karnataka State Road and Train within one hour. The nearest airports in Mysore and Kepegowda International Airport are about 85 km away. Ramanagar district has modern office buildings such as Panchayat Bhavan, Kandaya Bhavan, Mini Vidhana Soudha, Taluk Office, Deputy Commissioner's Office, Sub-Deputy Offices, Police Department and District Court, and Police Buildings.

Industrial Area

The Bidadi Industrial Area of Ramanagar District has manufacturing units for Toyota and Coca-Cola and includes a 1400 MW gas-based power plant.

Tourism

The famous Hindi film SHOLAY has been shot around these hills and so is the name Sholay hills. The magnificent stones of the pig-gundi reserve forest in Ramanagar are very old and famous for their landscape. Ramdevara Betta, Revanna Siddheswara Betta, Kangal Anjaneya Swami, Sri Brahmana Theertha Brindavan, Sri Ranganathaswamy Temple, Maganchanbele Dam, Harobele Dam Chunchi Falls, Kanakapura, Mekedatu, Savandurga, Thippagondanahalli Reservoir, Janapada Loka are famous.

ARCHITECTURAL DESIGN I
SUBJECT CODE 21 ARC 11

Studio Coordinators

Ar Anshu Darbari

Prof Aurobindo Gupta

Studio Faculty

Ar Sudeep Bhoopalam

Ar Sindhu Jagannath

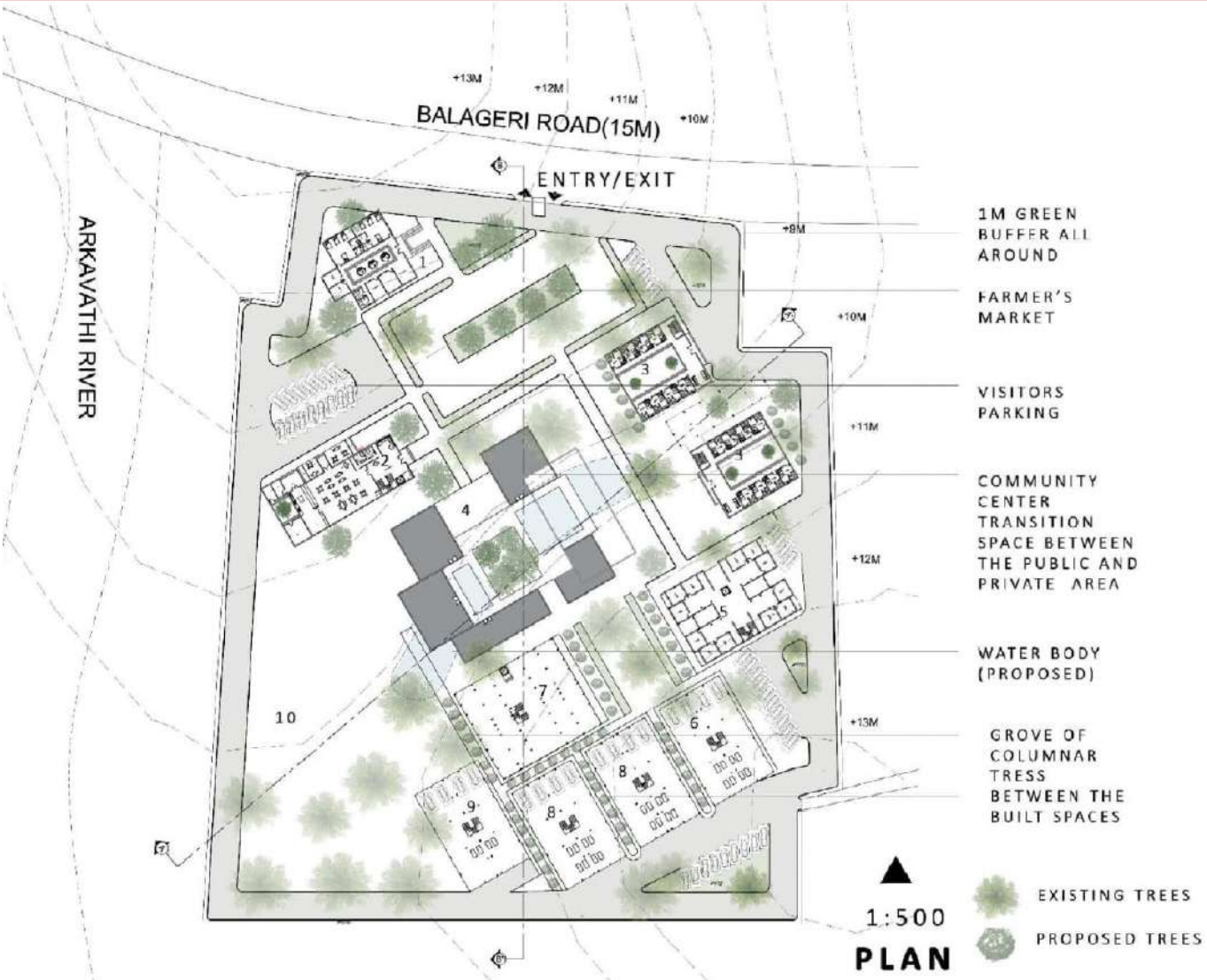
OBJECTIVES

1. To understand the subject of Architecture as an integrated field which works in tandem with Technology, Design, Economy, Ecology, Geography and Sociology etc.
2. To rethink architecture as a man-made ecosystem, which is self-contained and sustainable.
3. To be able to identify and augment the right set of knowledge kit (from the learnt courses and electives) that will steer the approach to the brief in a strong direction

A geometrical intervention rooted in the contemporary **AD VII C**

Architectural Design
Faculty: Ar Anshu Darbari, Prof Arobindo Gupta, Ar Sudeep Bhoopalam, Ar Sindhu Jagannath

YASHASWINI L GOWDA
1DC19AT101



BUILTUP - GROUND COVER -

VEHICULAR PATHWAY - 6M WIDE

EXISITING VEGETATION - COCONUT TREE

PROPOSED VEGETATION - EX.COLUMNAR TREES

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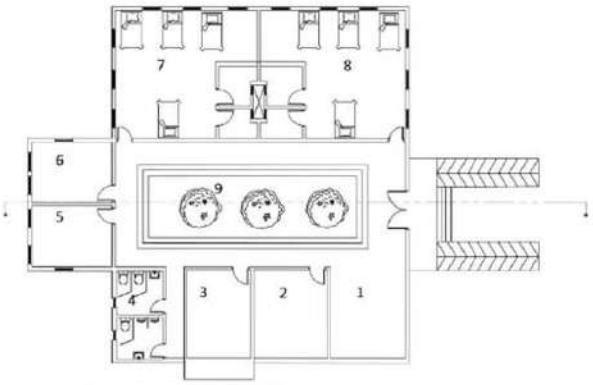
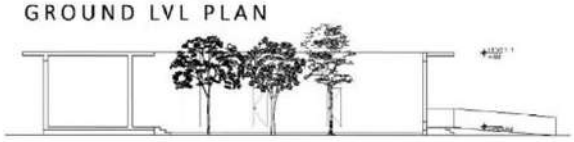
YASHASWINI L GOWDA
1DC19AT101

PHC

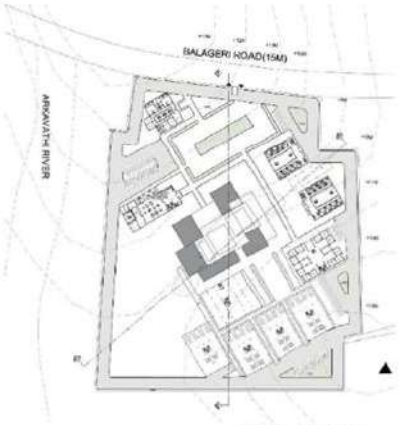


GROUND LVL PLAN

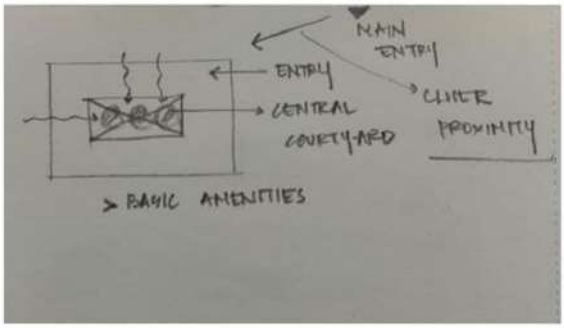


SECTION AA'

1. RECEPTION
2. UTILITY/STORAGE
3. PHARMACY
4. PUBLIC TOILET
5. DOCTOR'S ROOM
6. STAFF ROOM
7. GENERAL WARD - MALE
8. GENERAL WARD - FEMALE
9. OPEN TO SKY COURTYARD

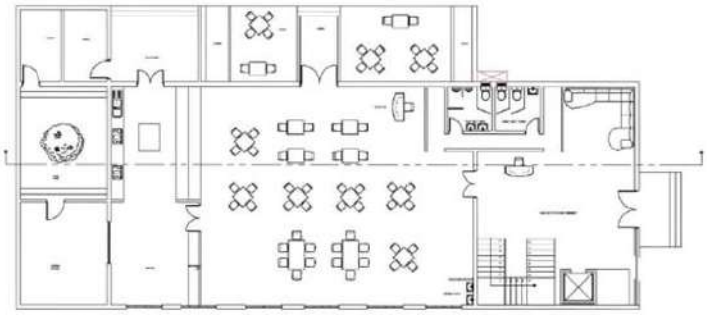


KEY PLAN

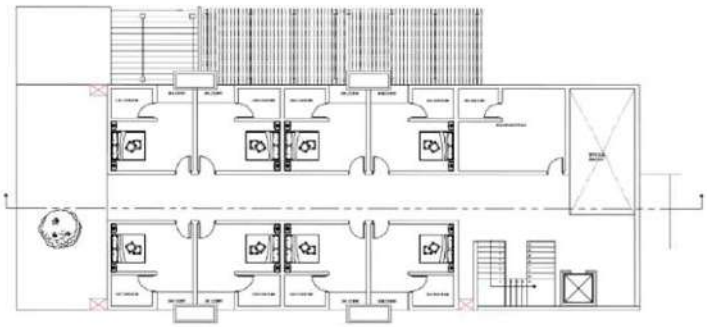


DESIGN ITERATION

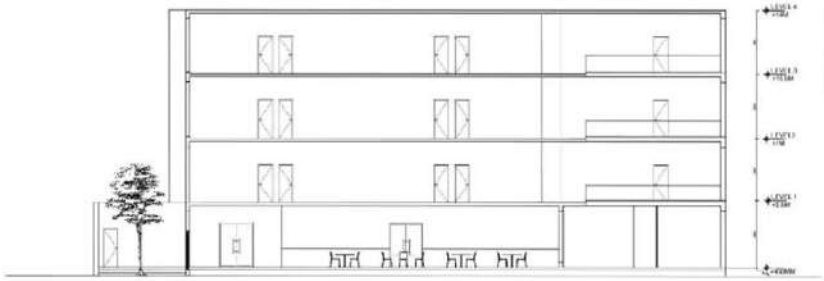
RESTAURANT / LODGE



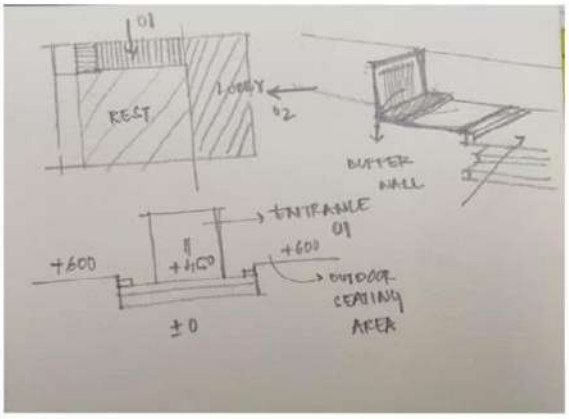
GROUND LVL PLAN - RESTAURANT AND LOBBY



SECOND , THIRD AND FOURTH LVL PLAN - LODGE



SECTION BB'



VIEW

SCALE 1:100

A geometrical intervention rooted in the contemporary **AD VII C**

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YASHASWINI L GOWDA
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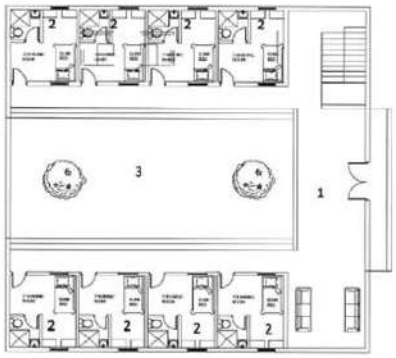
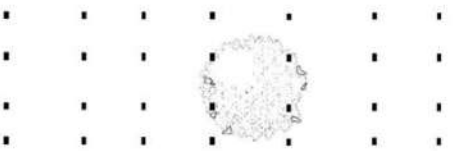
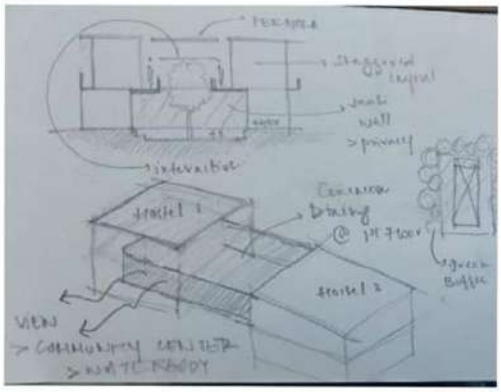


VIEWS

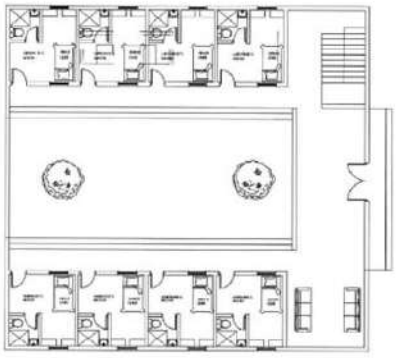
KEY PLAN



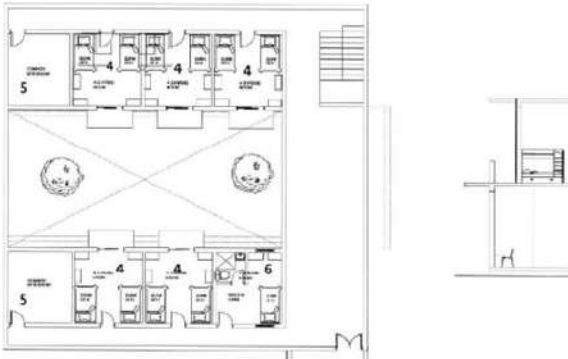
1. LOBBY
2. 2 SHARING ROOM
3. OPRN TO SKY COURTYARD
4. 4 SHARING ROOM
5. COMMON BATHROOM
6. WARDEN ROOM
7. COMMON DINING AREA
8. KITCHEN
9. BALCONY

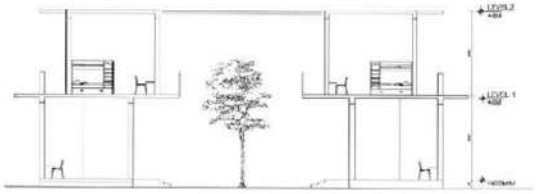


DESIGN ITERATION

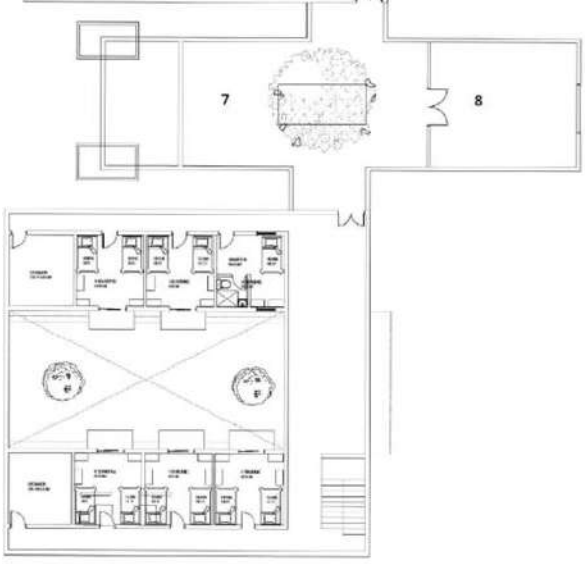


GROUND FLOOR PLAN





SECTION AA'



FIRST FLOOR PLAN

SCALE 1:100

A geometrical intervention rooted in the contemporary **AD VII C**

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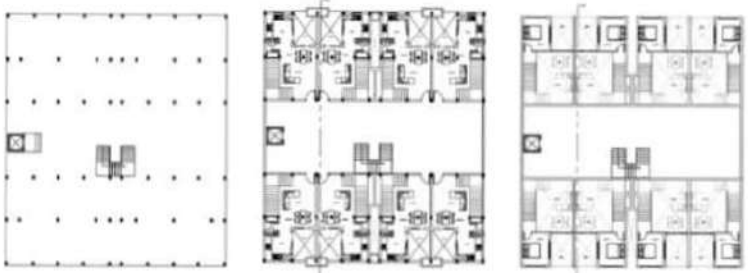
YASHASWINI L GOWDA
1DC19AT101

PLANS 1:200

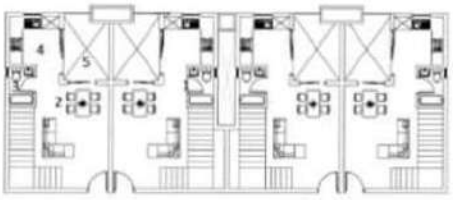


STILT PARKING

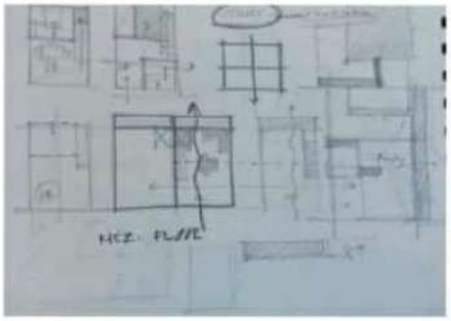
FIRST AND THIRD LVL

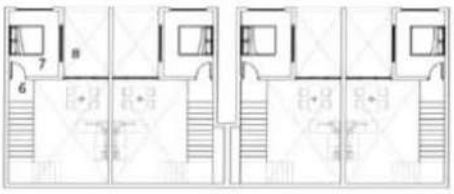
SECOND AND FOURTH LVL

KEY PLAN



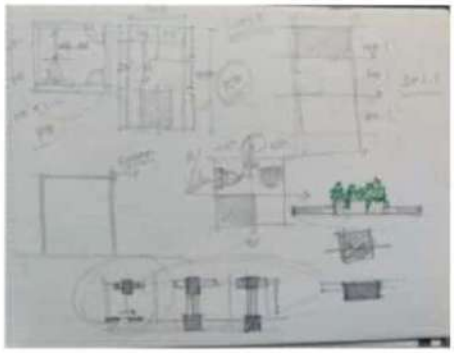
FIRST AND THIRD LVL FLOOR PLAN



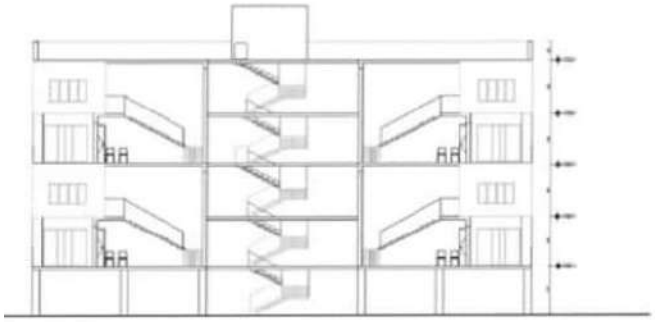


1. LIVING ROOM
2. DINING ROOM
3. COMMON BATHROOM
4. KITCHEN
5. DOUBLE HEIGHT SIT OUT
6. MEZZANINE FLOOR
7. BEDROOM 1
8. SIT OUT BELOW

SECOND AND FOURTH LVL FLOOR PLAN



DESIGN ITERATIONS



SECTION AA'

ELEVATION

VIEWS

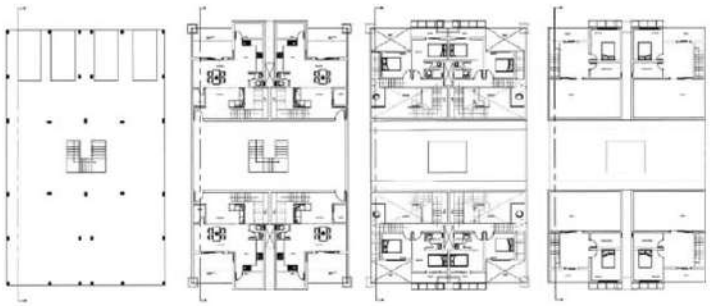
SCALE 1:100

A geometrical intervention rooted in the contemporary **AD VII C**

Architectural Design
Faculty: Ar Anshu Darbari, Prof Arobindo Gupta, Ar Sudeep Bhoopalam, Ar Sindhu Jagannath

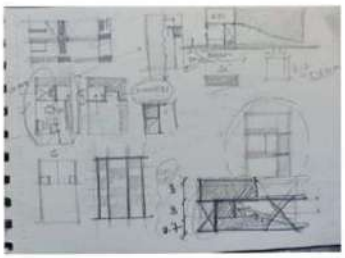
YASHASWINI L GOWDA
1DC19AT101

PLANS 1:200



STILT PARKING | FIRST FLOOR LVL | SECOND FLOOR LVL | THIRD FLOOR LVL

KEY PLAN



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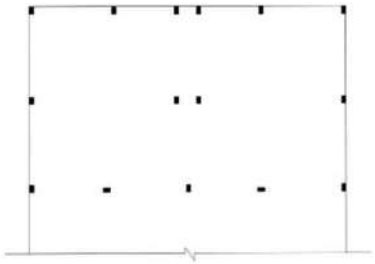
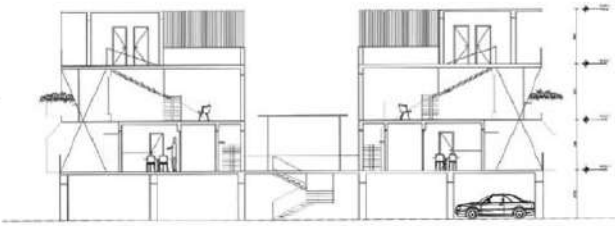
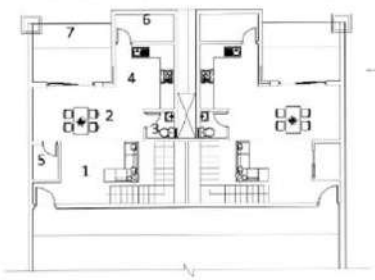


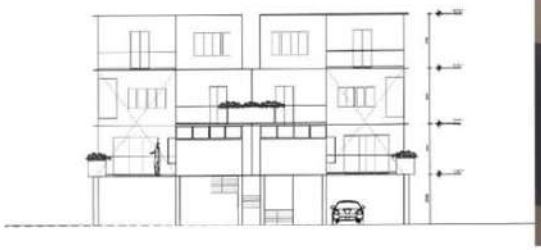
GROUND FLOOR PLAN



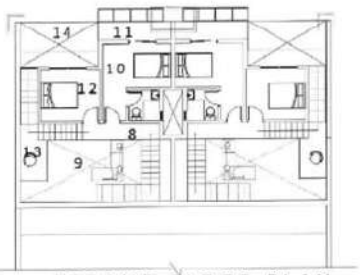
SECTION AA'



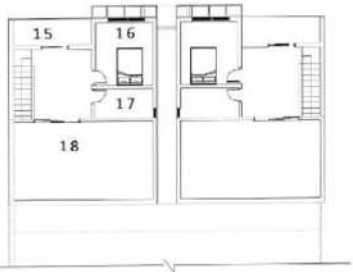
FIRST FLOOR PLAN



ELEVATION



SECOND FLOOR PLAN



THIRD FLOORPLAN

1. LIVING ROOM
2. DINING ROOM
3. POWDER ROOM
4. KITCHEN
5. STORAGE
6. UTILITY
7. DOUBLE HEIGHT SIT OUT
8. MEZZANINE FLOOR
9. DOUBLE HEIGHT
10. BEDROOM 1 WITH BATH
11. BALCONY 1
12. BEDROOM 2
13. STUDY
14. SIT OUT BELOW
15. BALCONY 2
16. BEDROOM3
17. COMMON BATHROOM
18. TERRACE

VIEWS

SACLE 1:100

A geometrical intervention rooted in the contemporary **AD VII C**

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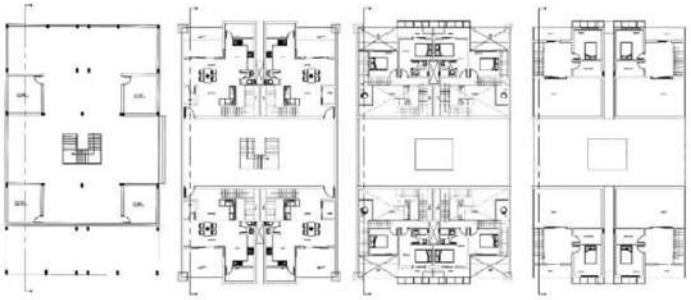
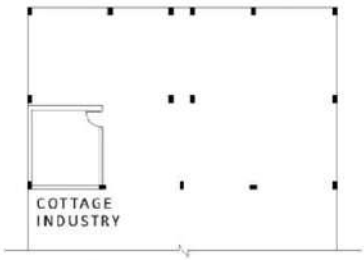
YASHASWINI L GOWDA
1DC19AT101

PLANS 1:200

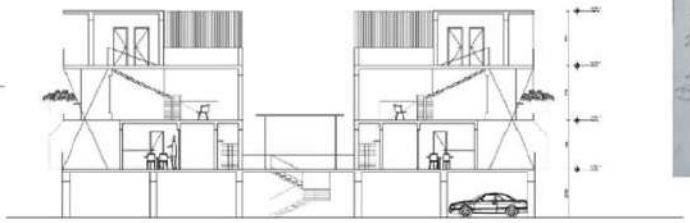


COTTAGE INDUSTRY | FIRST FLOOR LVL | SECOND FLOOR LVL | THIRD FLOOR LVL

KEY PLAN



GROUND FLOOR PLAN



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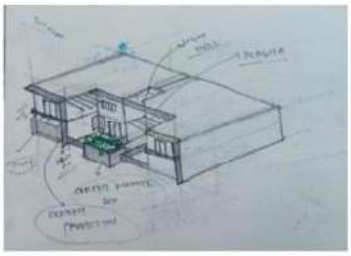
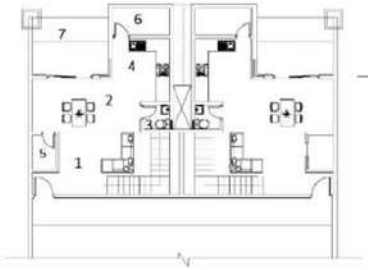
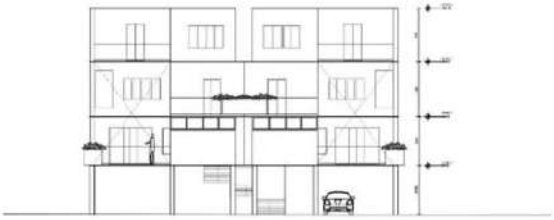
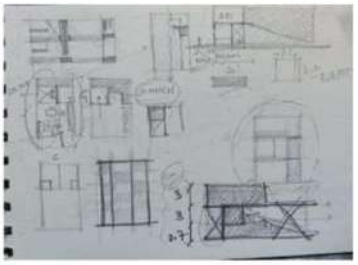




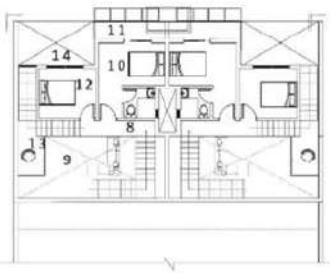
FIRST FLOOR PLAN



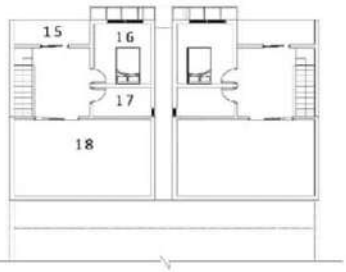
ELEVATION



DESIGN ITERATIONS



SECOND FLOOR PLAN



THIRD FLOORPLAN

1. LIVING ROOM
2. DINING ROOM
3. POWDER ROOM
4. KITCHEN
5. STORAGE
6. UTILITY
7. DOUBLE HEIGHT SIT OUT
8. MEZZANINE FLOOR
9. DOUBLE HEIGHT
10. BEDROOM 1 WITH BATH
11. BALCONY 1
12. BEDROM 2
13. STUDY
14. SIT OUT BELOW
15. BALCONY 2
16. BEDROOM3
17. COMMON BATHROOM
18. TERRACE

VIEWS

SCALE 1:100

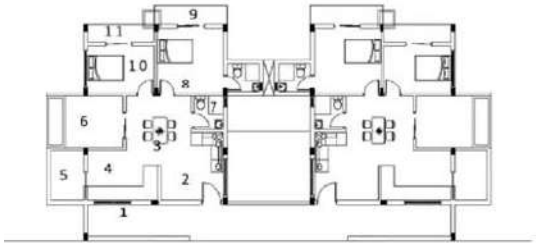
A geometrical intervention rooted in the contemporary **AD VII C**

Architectural Design
Faculty: Ar Anshu Darbari, Prof Arobindo Gupta, Ar Sudeep Bhoopalam, Ar Sindhu Jagannath

YASHASWINI L GOWDA
1DC19AT101

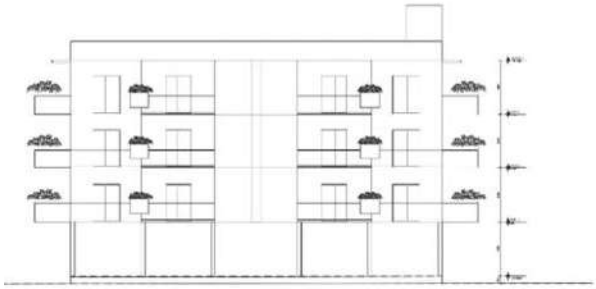
1:200

KEY PLAN

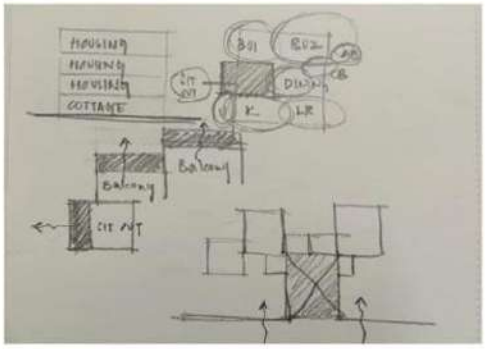


1.VERANDHA
2.LIVING ROOM
3.DINING ROOM
4.KITCHEN
5.UTILITY
6.SIT OUT
7.COMMON BATHROOM
8.BEDROOM 1 WITH BATH
9. BALCONY 1
10.BEDROOM 2
11.BALCONY 2

SIMILAR LAYOUT PLANS FOR FIRST , SECOND AND THIRD FLOORS



ELEVATION



DESIGN ITERATION

VIEWS

SCALE 1:100

A geometrical intervention rooted in the contemporary **AD VII C**

Architectural Design
Faculty: Ar Anshu Darbari, Prof Arobindo Gupta, Ar Sudeep Bhoopalam, Ar Sindhu Jagannath

YASHASWINI L GOWDA
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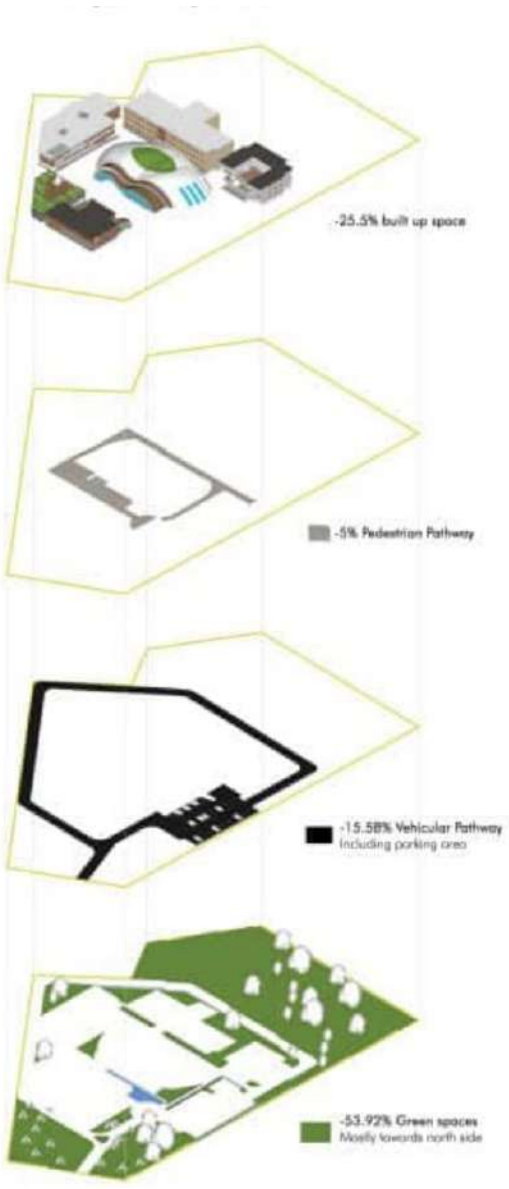
A geometrical intervention rooted in the contemporary **AD VII C**

Architectural Design
Faculty:

Tushar Setiya
1DC19AT005

MASTER PLAN
SCALE-1:500



A geometrical intervention rooted in the contemporary **AD VII C**

Architectural Design
Faculty:

Tushar Setiya
1DC19AT005

SITE SECTIONS AND ELEVATION SCALE-1:200

ELEVATION-AA'

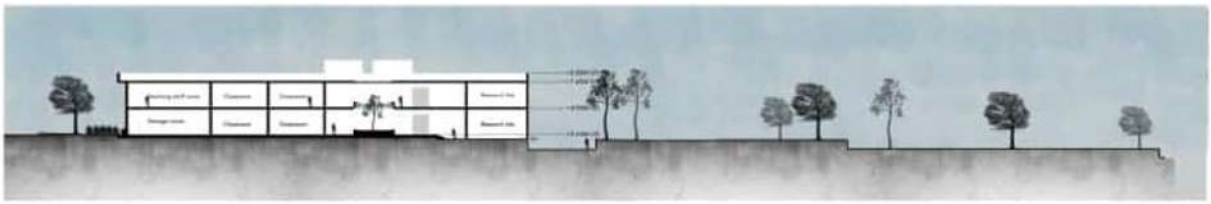
Sit-out courtyard space for people to relax after shopping

Internal courtyard in restaurant-encourages natural ventilation and light

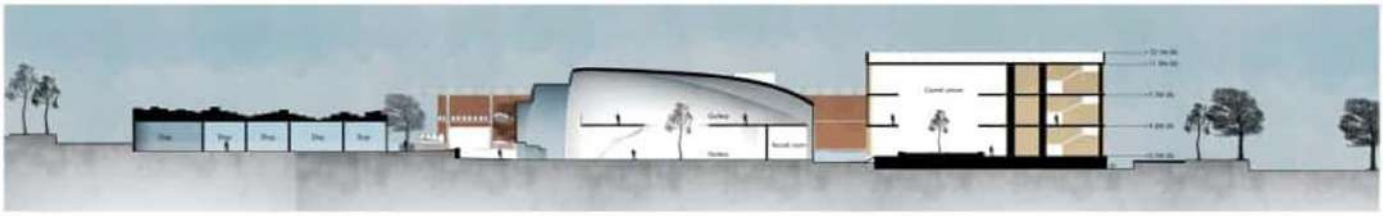
KEY PLAN SCALE-1:1000

SECTION-AA'

ELEVATION-BB'



SECTION-BB'



SECTION-CC'

ELEVATION-DD'

Outdoor dining area with the view of water body

Pedestrian pathway across the museum with outdoor furniture

Pedestrian pathway across the office

SECTION-DD'

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Faculty:

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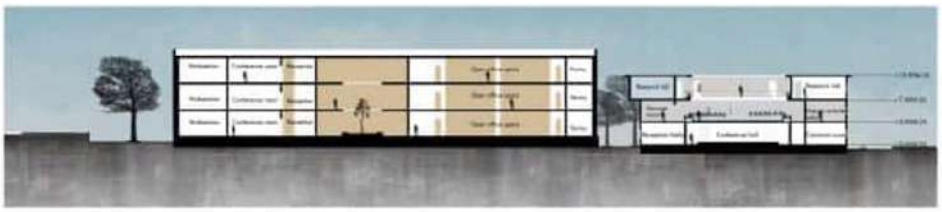
SITE SECTIONS AND ELEVATION SCALE-1:200

ELEVATION-EE'

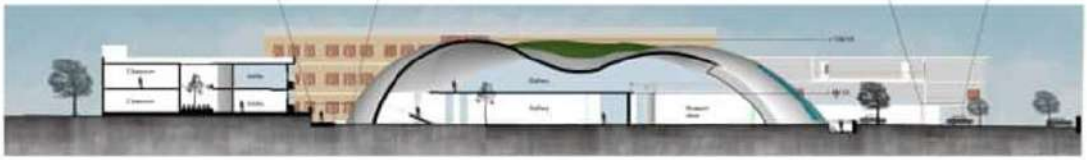
KEY PLAN SCALE-1:1000



SECTION-EE'

Pedestrian pathway across the Research Institute

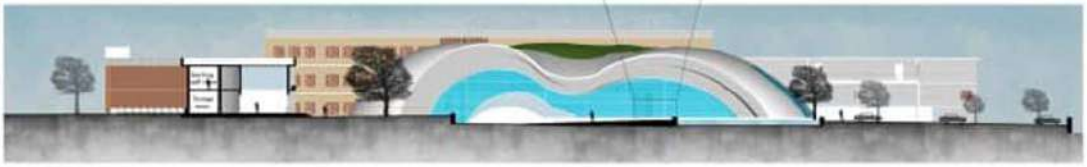
Parking area which can roughly accomodate 50 cars and 30+ bikes



SECTION-FF'

ELEVATION-GG'

Entry to the museum with slope 1:15



SECTION-GG'

Pedestrian pathway across the museum

Balcony view from the sth board office

SECTION-HH'

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Faculty:

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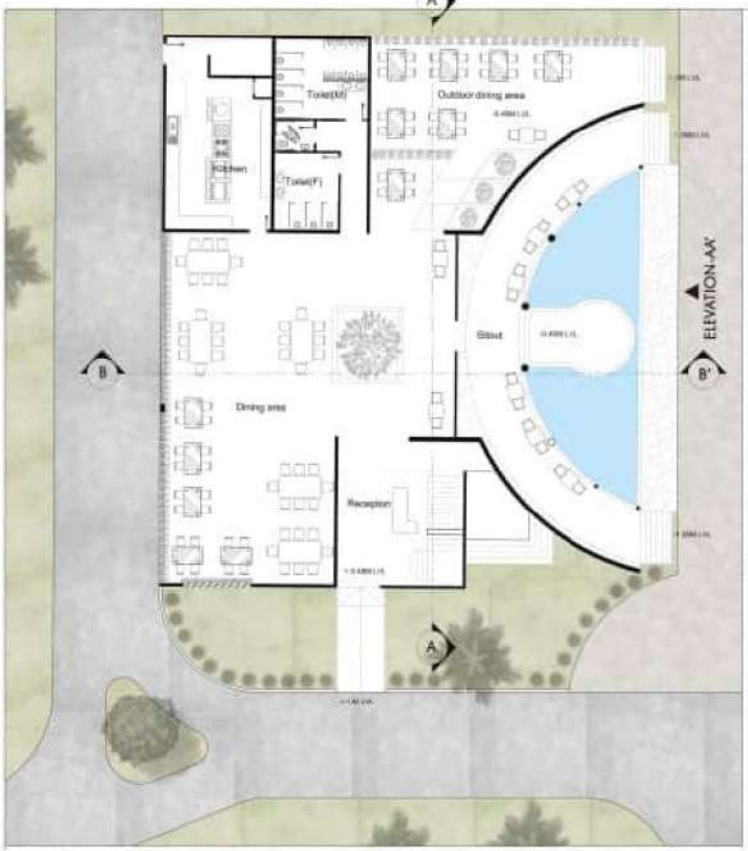
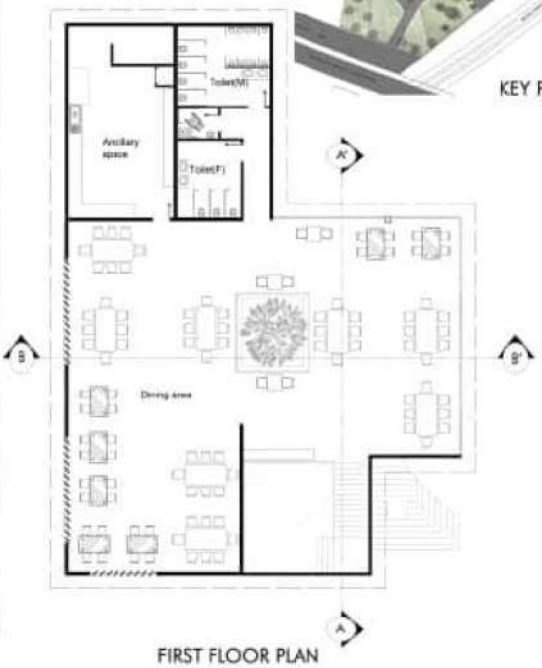
Restaurant Floor plans SCALE-1:100



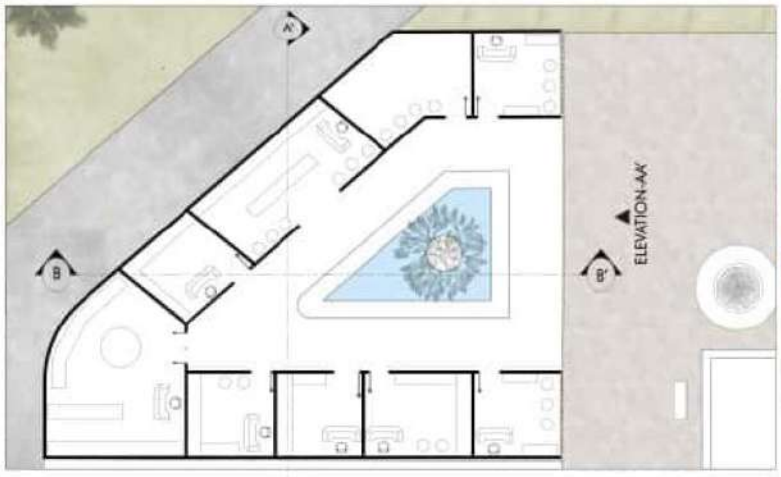
GROUND FLOOR PLAN

KEY PLAN SCALE-1:1000



FIRST FLOOR PLAN

Retail Shop Floor plan SCALE-1:100



GROUND FLOOR PLAN

ELEVATION-AA'

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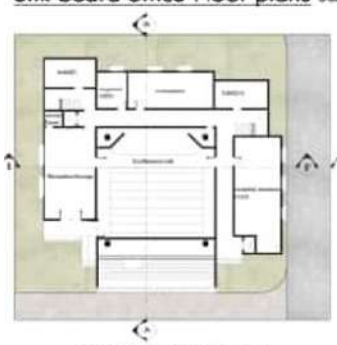
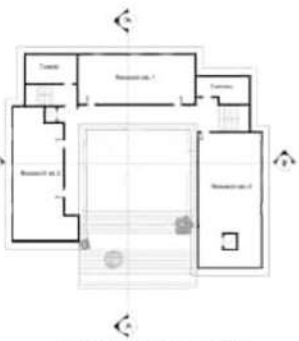
Silk board office Floor plans SCALE-1:200



GROUND FLOOR PLAN

FIRST FLOOR PLAN

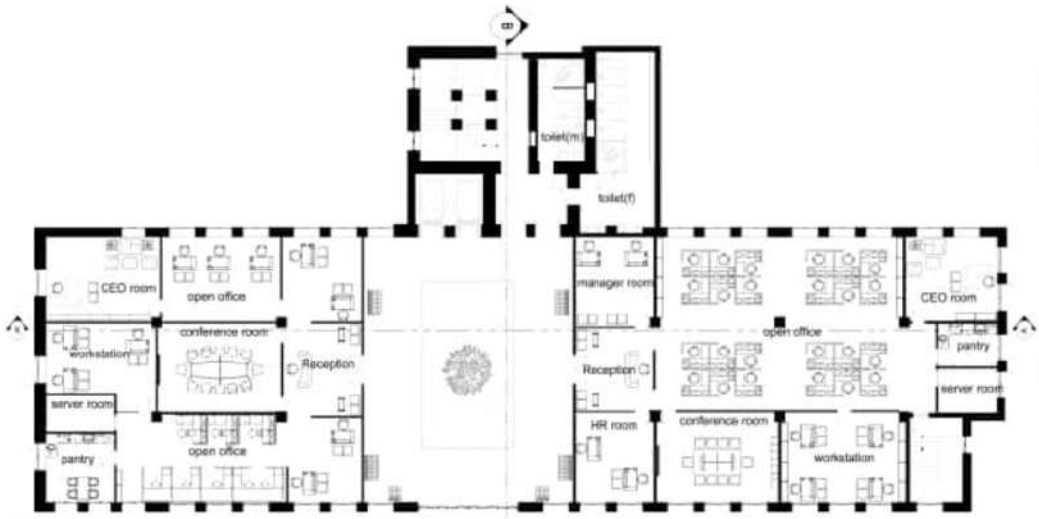


SECOND FLOOR PLAN

KEY PLAN SCALE-1:1000

Retail office Floor plans SCALE-1:100

GROUND FLOOR PLAN



TYPICAL FLOOR PLAN

Entrance of the silk board office which acts as a sitout space also

A geometrical intervention rooted in the contemporary **AD VII C**

Architectural Design
Faculty:

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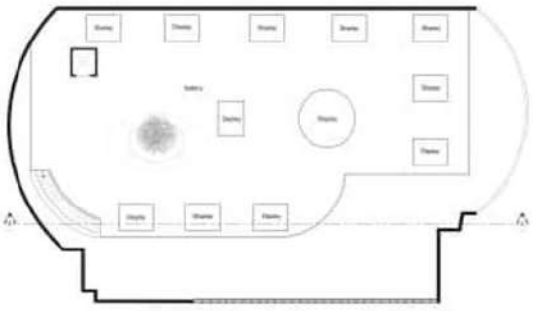
Museum Floor plans SCALE-1:200

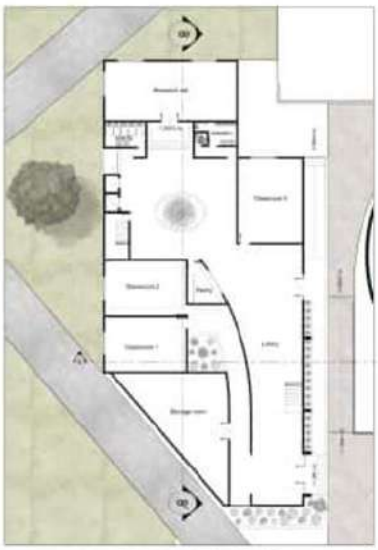
GROUND FLOOR PLAN



FIRST FLOOR PLAN

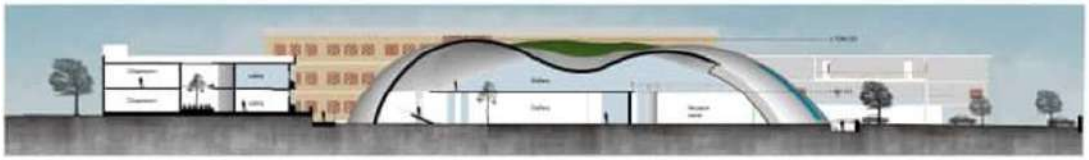
KEY PLAN SCALE-1:1000

Research Institute Floor plans SCALE-1:200

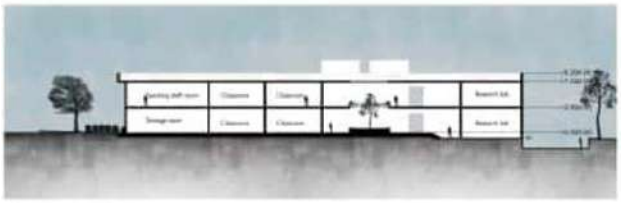


GROUND FLOOR PLAN

FIRST FLOOR PLAN



SECTION-AA'



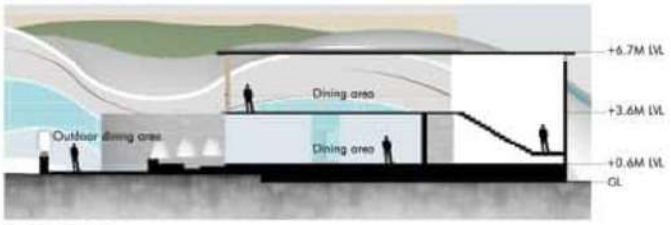
SECTION-BB'

Site model
SCALE-1:500

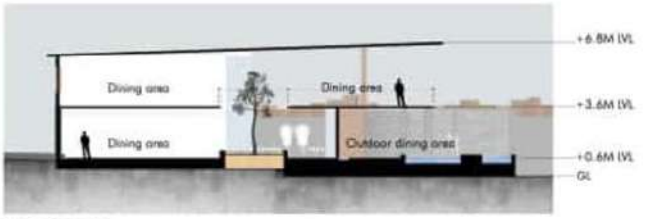
ROOF PLAN SCALE-1:500

Individual block sections

Restaurant SCALE-1:100



SECTION-AA'



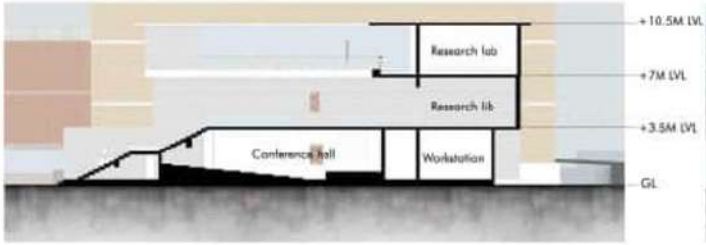
SECTION-BB'

Retail shops SCALE-1:100

SECTION-AA'

SECTION-BB'

Silk board office SCALE-1:100



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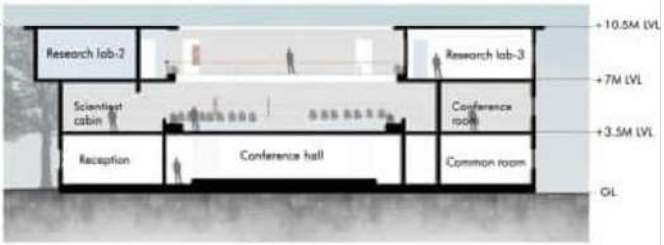
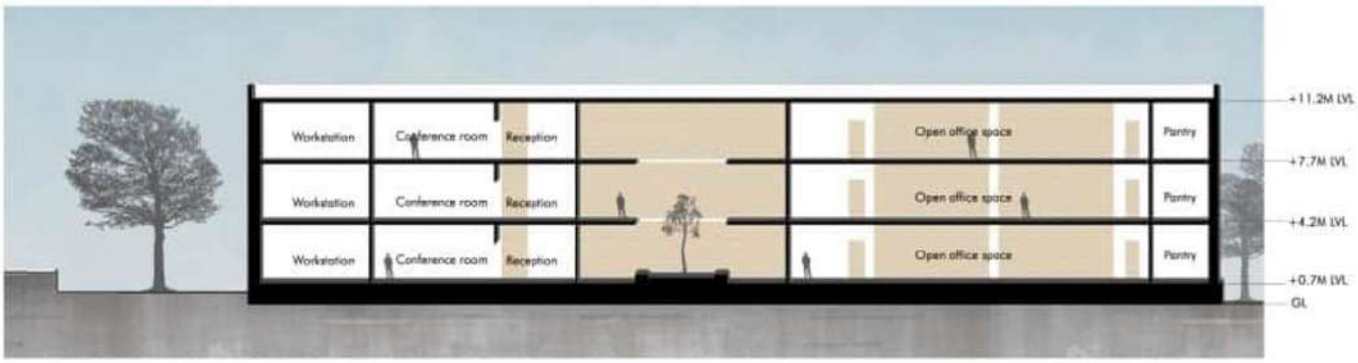


SECTION-BB'

Retail office SCALE-1:100



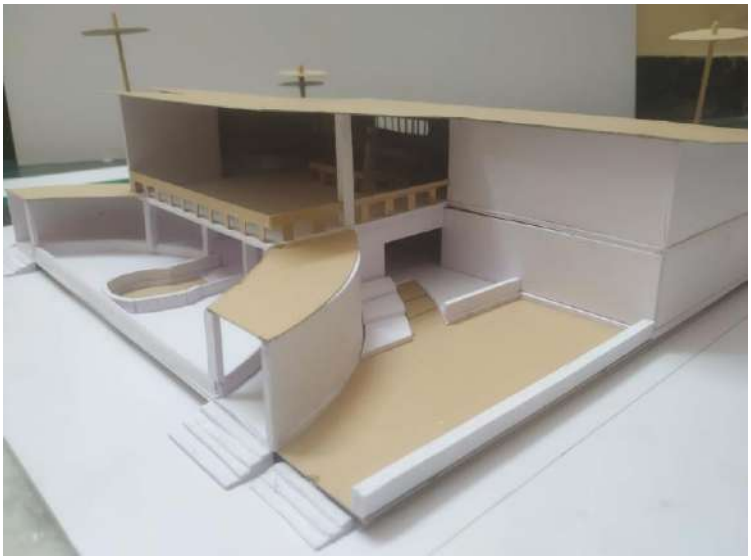
SECTION-AA'

SECTION-BB'

A geometrical intervention rooted in the contemporary **AD VII C**

Architectural Design
Faculty: Anshu Darbari, Arobindo Gupta, Sudeep Bhooplam, Sindhu Jagannath

Tushar Setiya
1DC19AT005



A geometrical intervention rooted in the contemporary **AD VII C**

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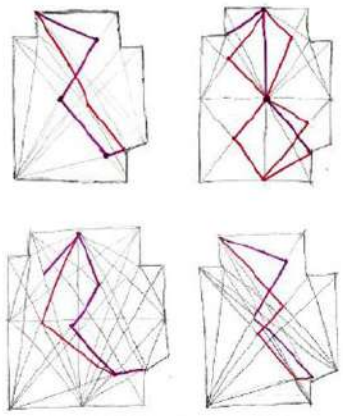
Vindhya AH
1DC19AT101

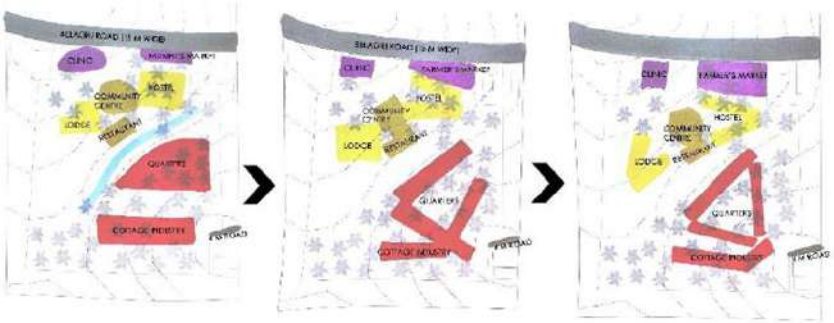
SITE ANALYSIS AND INFERENCE

ACCESS DERIVATION

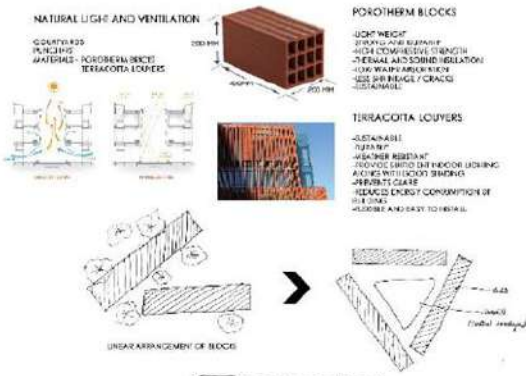


CONCEPT - CONNECTING THE TWO ACCESS POINTS OF THE SITE.

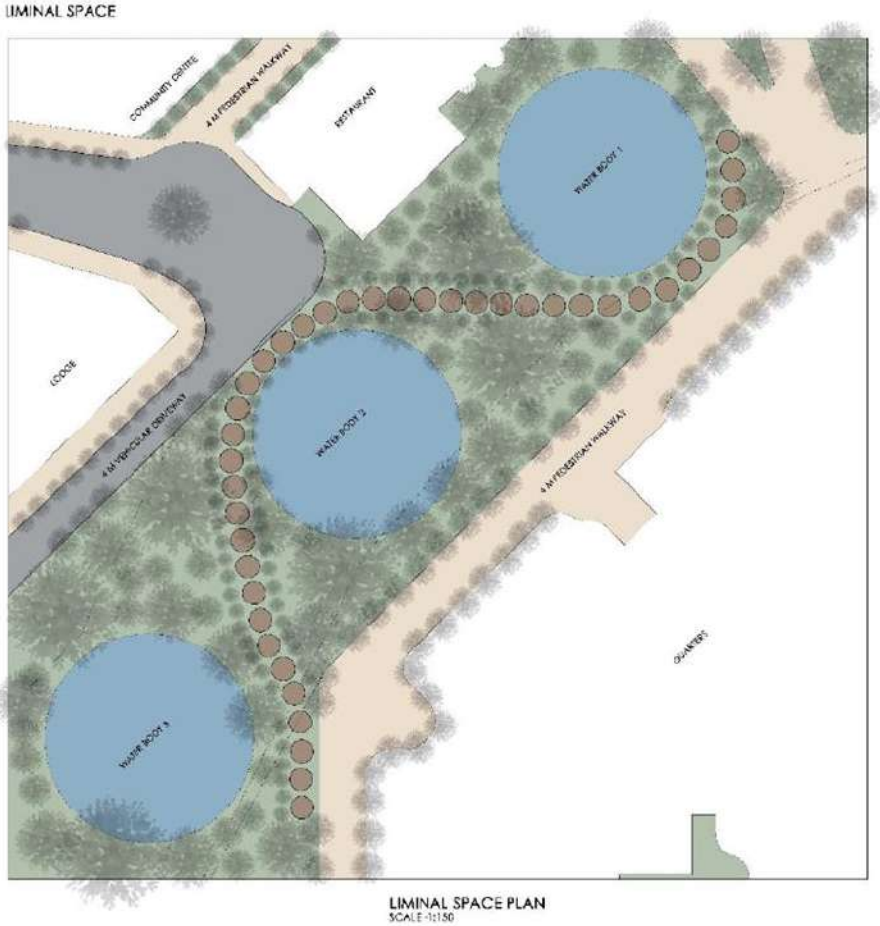
ZONING



DESIGN GUIDLINES

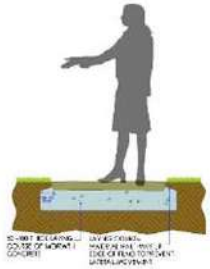


LIMINAL SPACE



LIMINAL SPACE PLAN
SCALE -1:150

KEYPLAN



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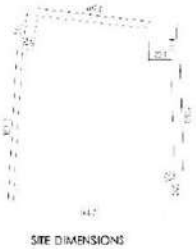
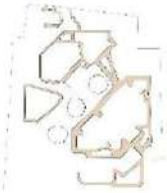
MASTERPLAN



SITE DIMENSIONS

VEHICULAR DRIVEWAY

BUILT - UNBUILT SPACES



PEDESTRIAN WALKWAY

SECTION AA'

SECTION BB'

SECTION CC'

SECTION DD'

ROOF PLAN

SECTION EE'

SECTION FF'

KEYPLAN

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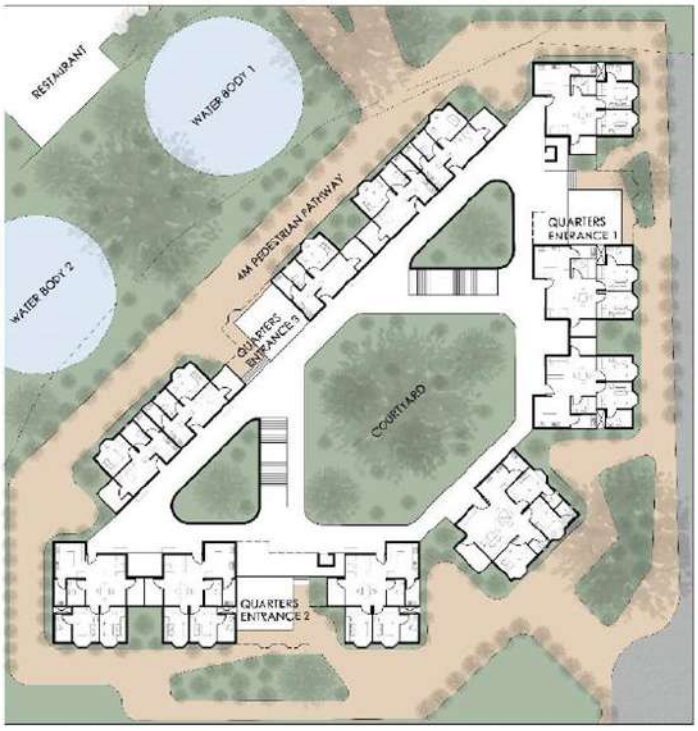
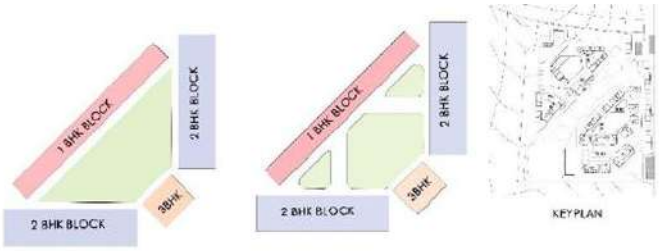
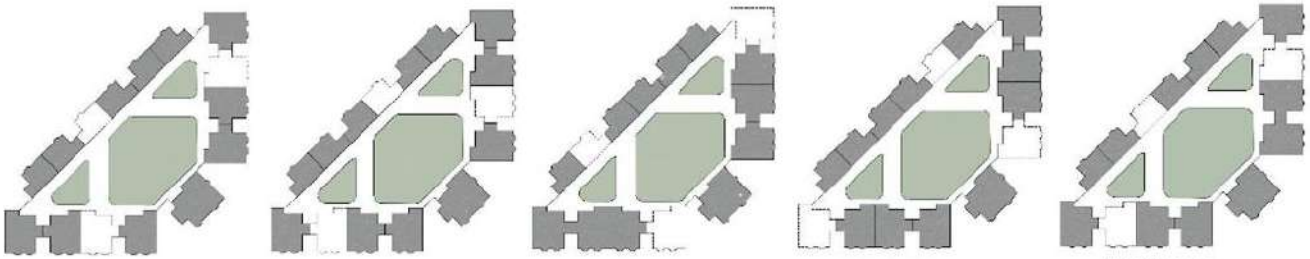
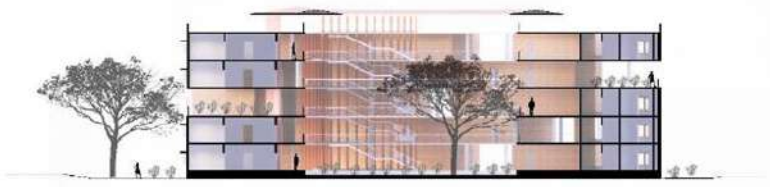


QUARTERS GROUND FLOOR PLAN

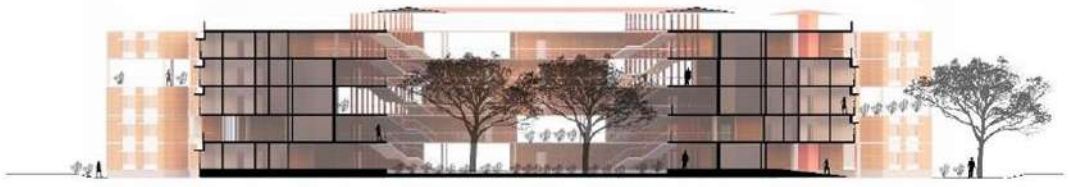






SECTION AA'

KEYPLAN



SECTION BB'

ELEVATION A

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Vindhya AH
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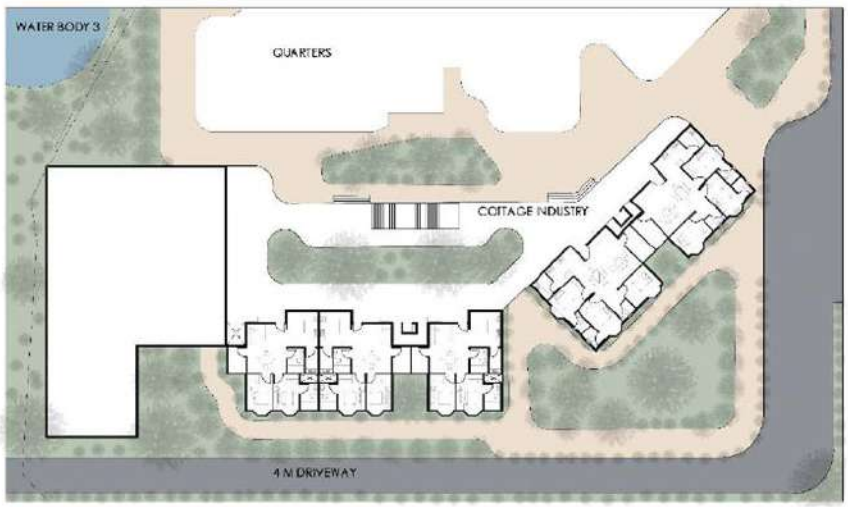
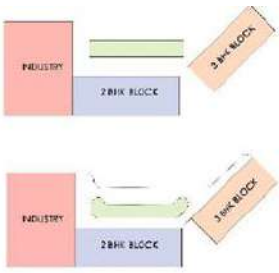


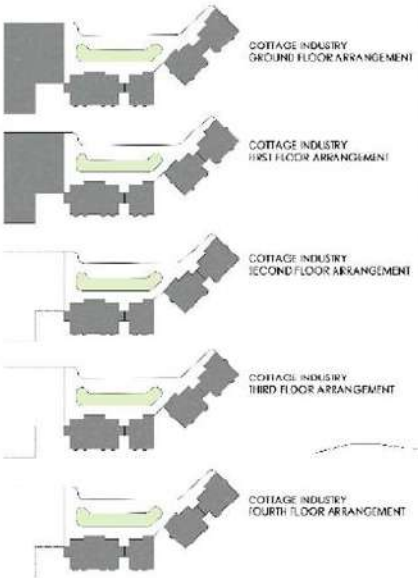
COTTAGE INDUSTRY GROUND FLOOR PLAN

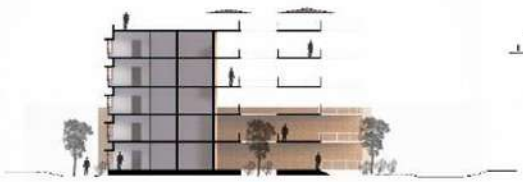


KEYPLAN

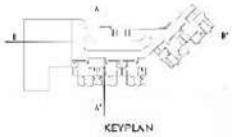
2 BHK HOUSE PLAN

3 BHK HOUSE PLAN





SECTION AA'



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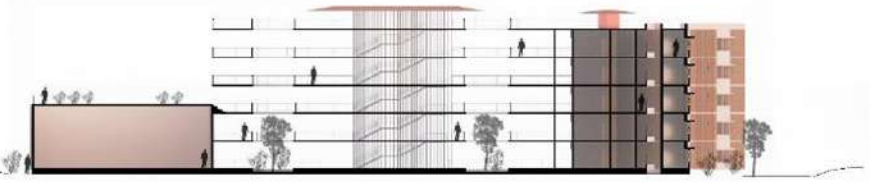
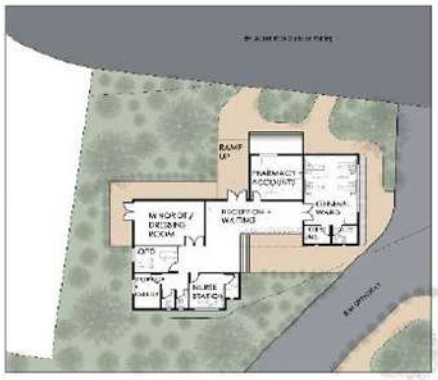


SECTION BB'

ELEVATION A



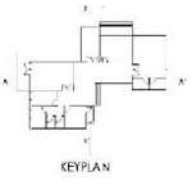
CLINIC FLOOR PLAN

KEYPLAN

FARMER'S MARKET PLAN

SECTION AA'

SECTION BB'



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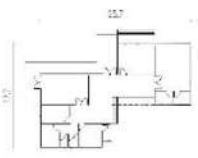
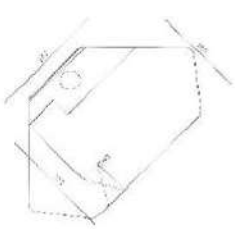


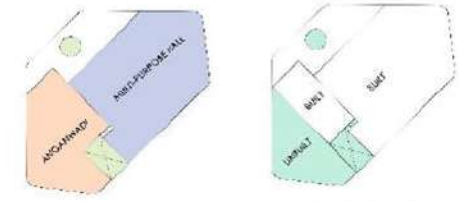
A geometrical intervention rooted in the contemporary **AD VII C**

Architectural Design
Faculty: Anshu Darbari, Arobindo Gupta, Sudeep Bhooplam, Sindhu Jagannath

Vindhya AH
1DC19AT101

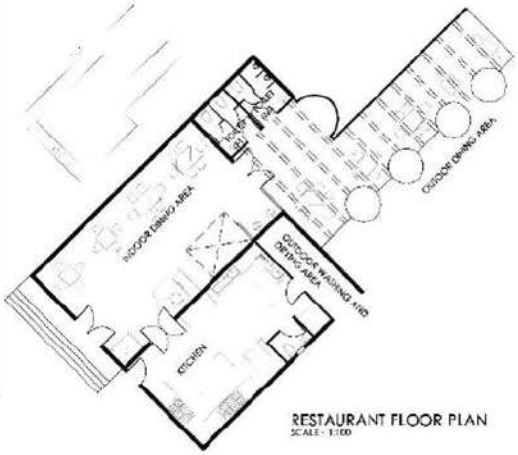
GROUND FLOOR PLAN



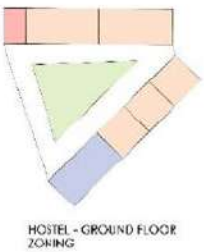


COMMNITY CENTRE - ZONING

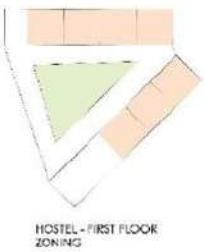
COMMNITY CENTRE - BUILT AND UNBUILT ZONES



RESTAURANT FLOOR PLAN



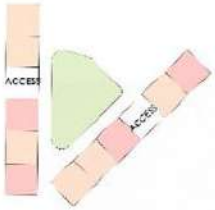
HOSTEL - GROUND FLOOR ZONING



HOSTEL - FIRST FLOOR ZONING

HOSTEL - FINAL GROUND FLOOR ZONING

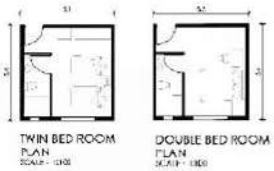
TWO SHARING HOSTEL ROOM PLAN



LODGE - GROUND FLOOR ZONING

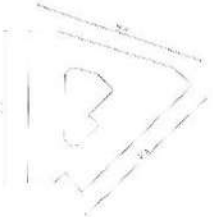
LODGE - FIRST FLOOR ZONING

LODGE - SECOND FLOOR ZONING



TWIN BED ROOM PLAN

DOUBLE BED ROOM PLAN



SECTION AA'

KEYPLAN

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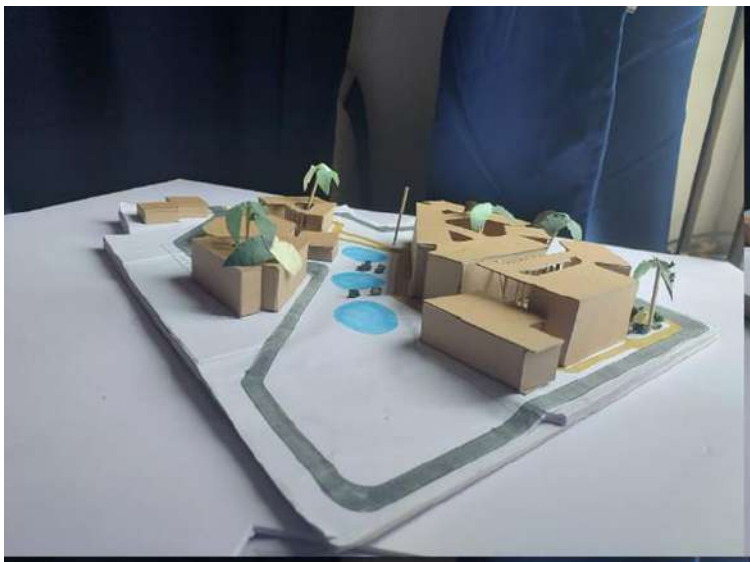
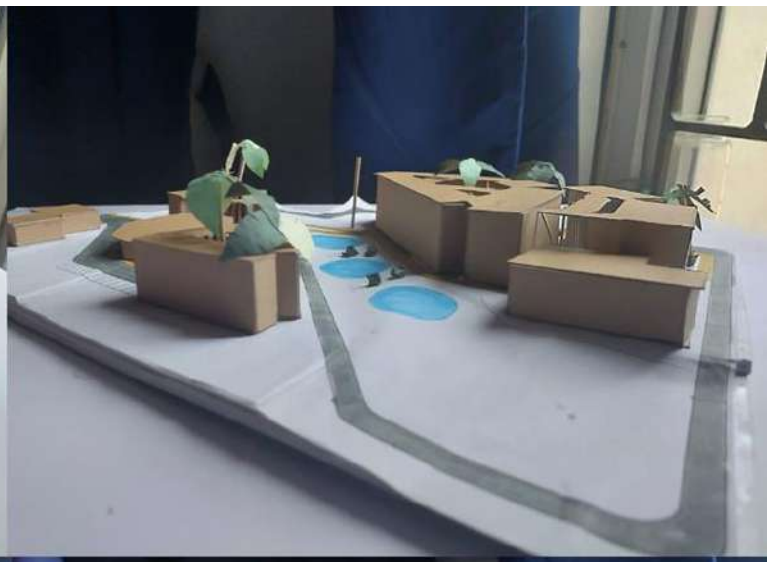
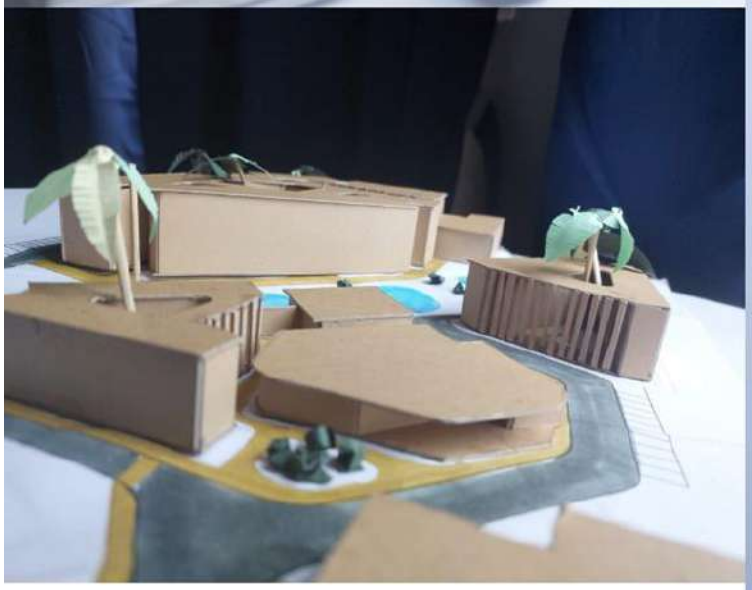
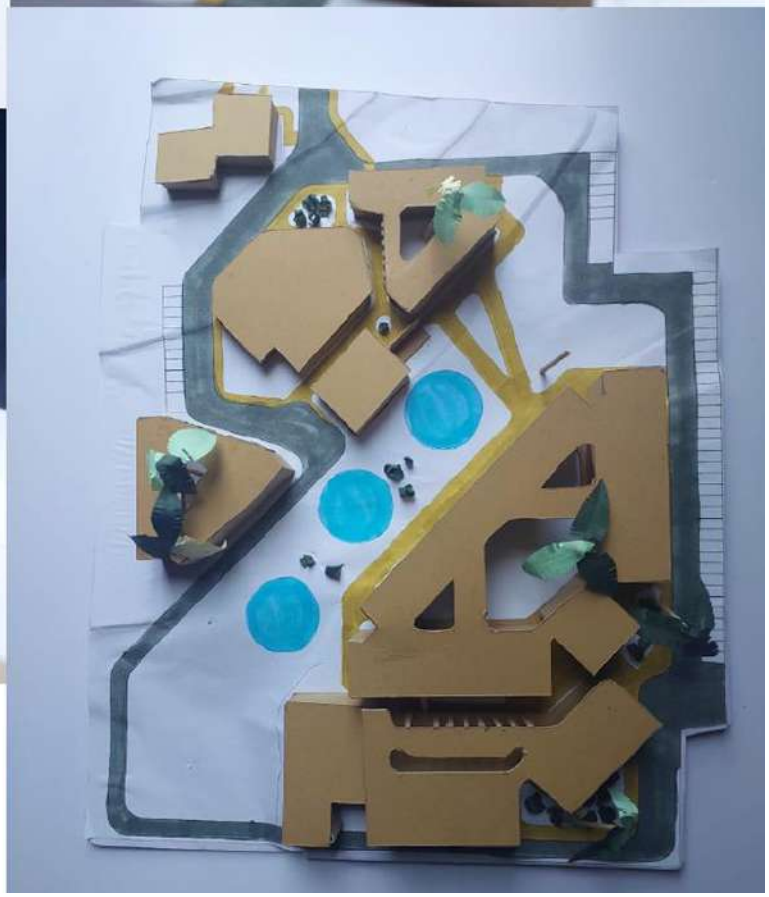



Design Brief
Enhance the experience of the users by adding Liminal spaces to existing identified cultural hubs
Integrate the performative aspects of architecture into the design
To generate and iconic architectural addition to enhance and boost the cultural identity of the cisty.
To generate the form that can link the past to the future.
The form generated to pay homage to the existing structure of while at the same time be compatible to the present context.

ARCHITECTURAL DESIGN 7
SUBJECT CODE 21 ARC 11

Studio Coordinators

Ar Aparna Shastri

Studio Faculty

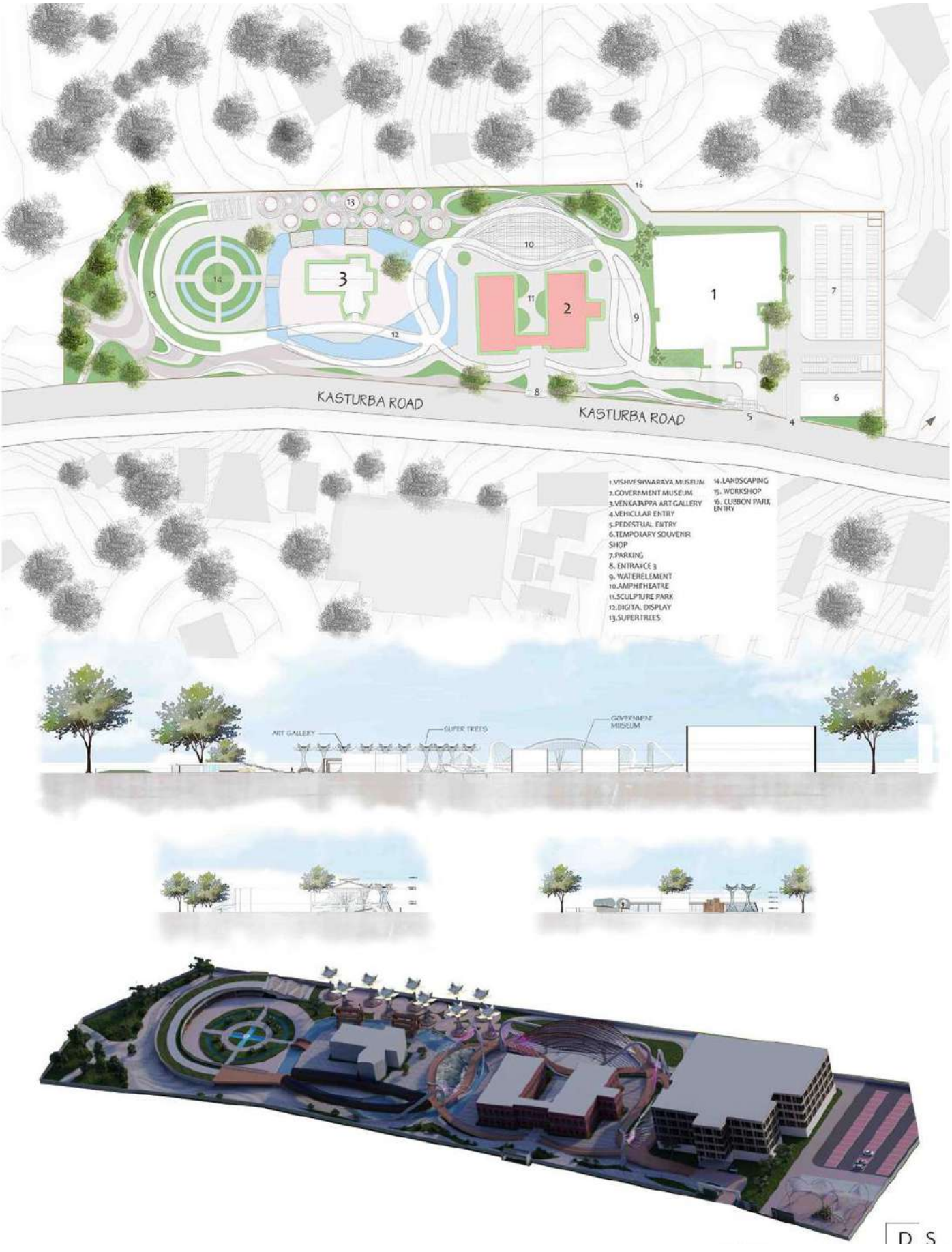
Ar Vinay Shekhar

Ar Madan Kumar

A geometrical intervention rooted in the contemporary **AD VII-SEC B**

Architectural Design
Faculty: Ar Aparna Shastri, Ar VInay Shekhar, Ar Madan Kumar

Kruthi Rasayam
1DC19AT039



A geometrical intervention rooted in the contemporary **AD VII-SEC B**

Architectural Design
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Kruthi Rasayam
1DC19AT039

Text to be written here, as less as possible, in Century Gothic - 12 point.

A geometrical intervention rooted in the contemporary

AD VII-SEC B

Architectural Design
Faculty: Ar Aparna Shastri, Ar VInay Shekhar, Ar Madan Kumar

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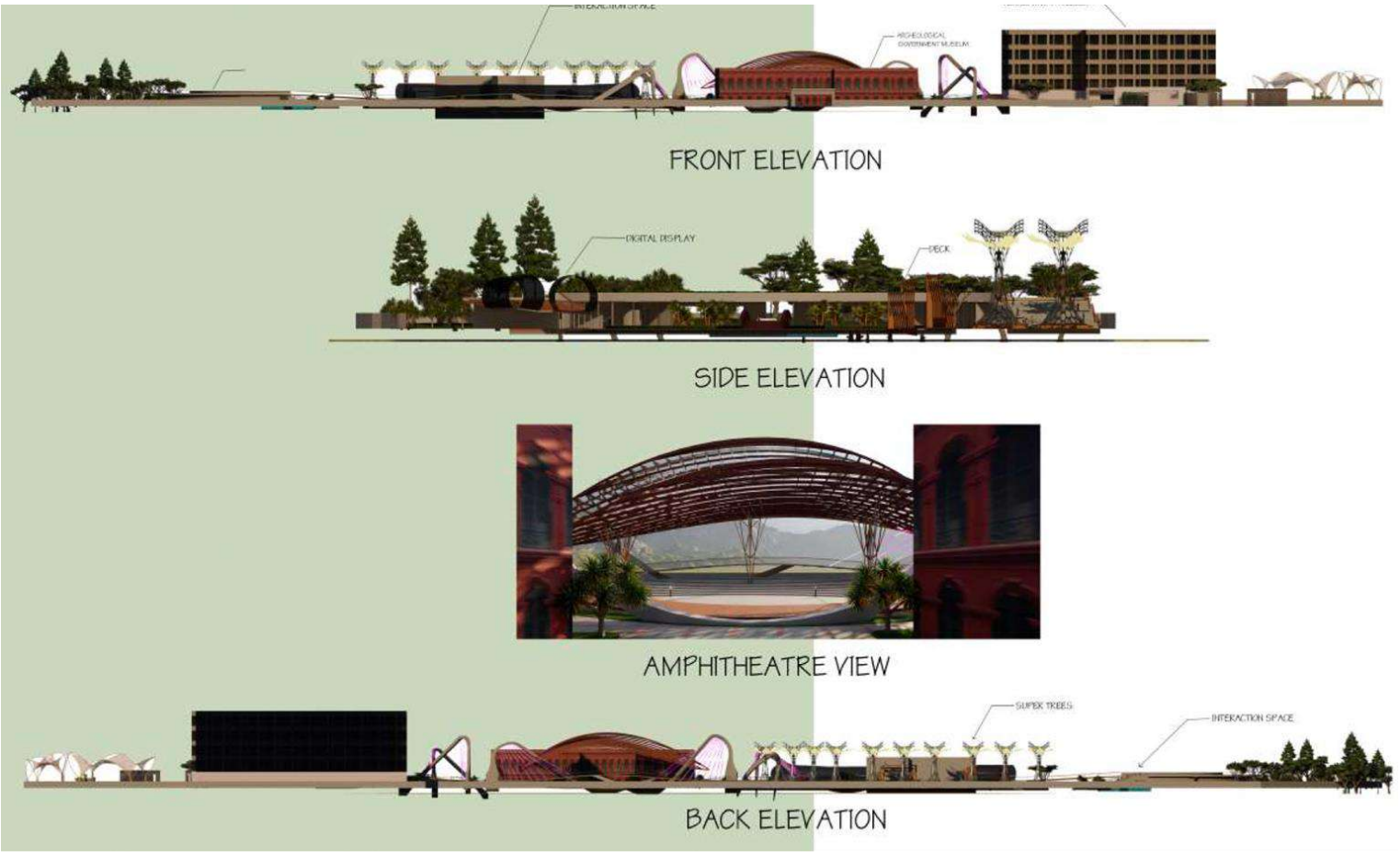

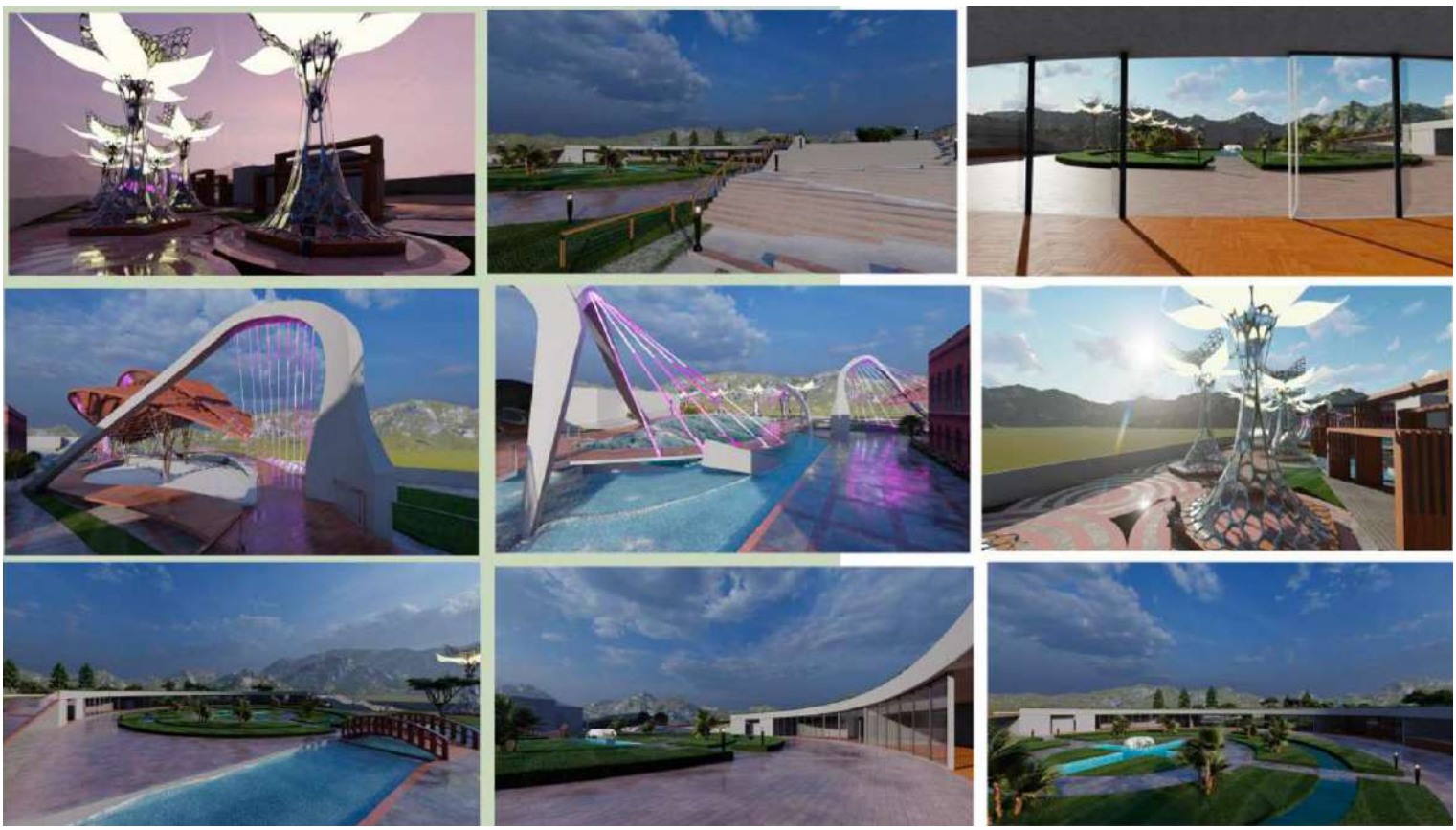

Kruthi Rasayam
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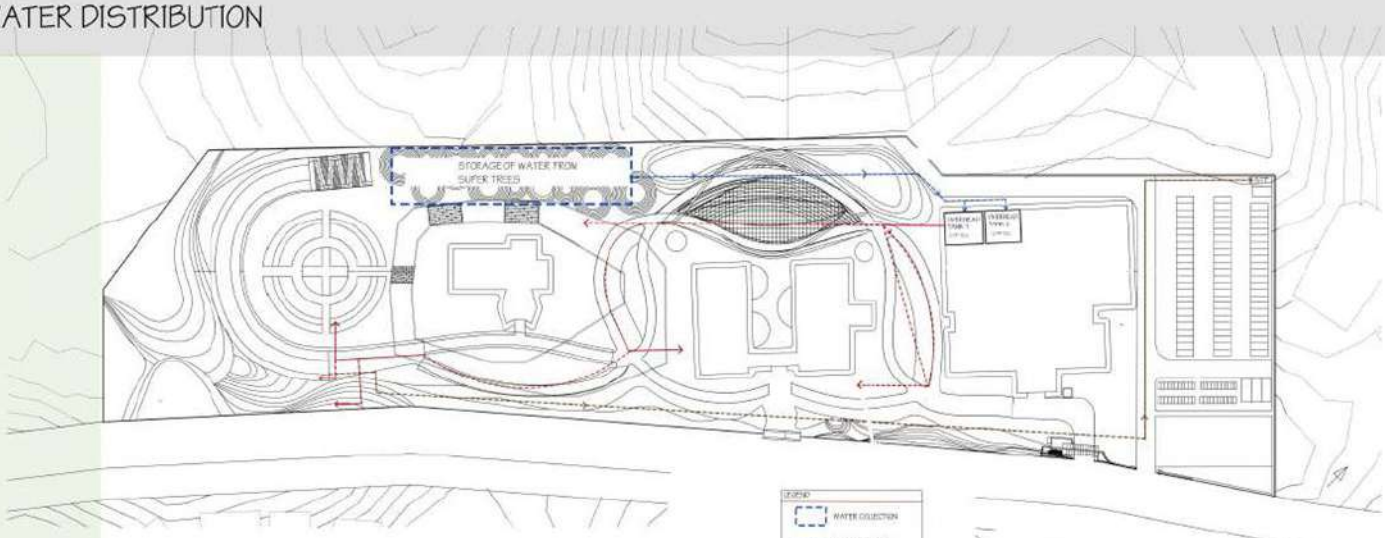
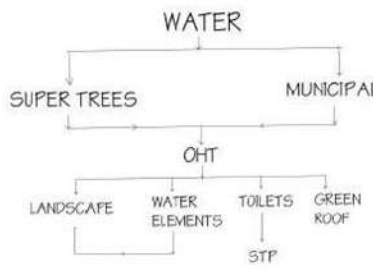
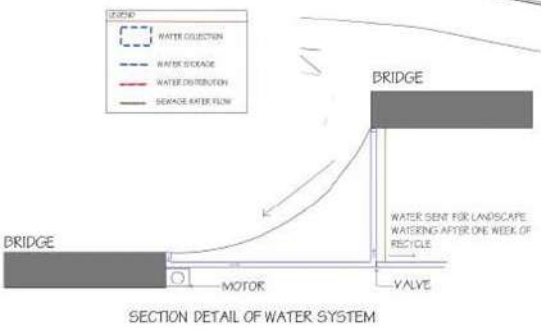
SERVICES

WATER DISTRIBUTION

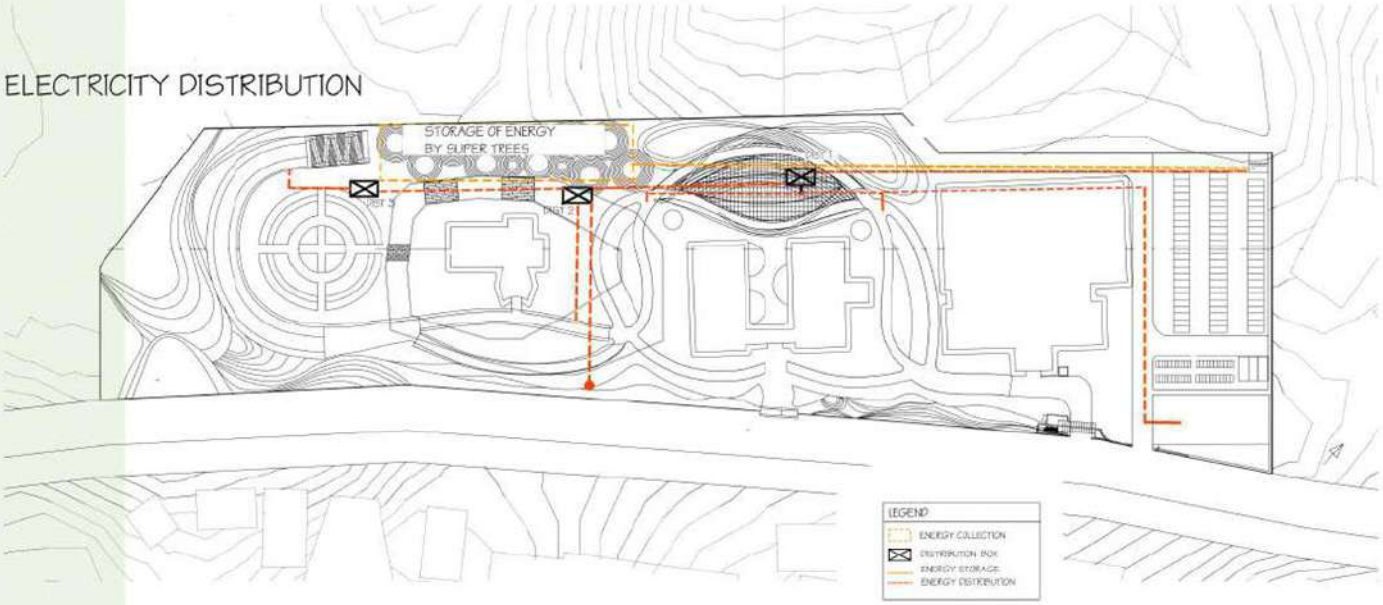


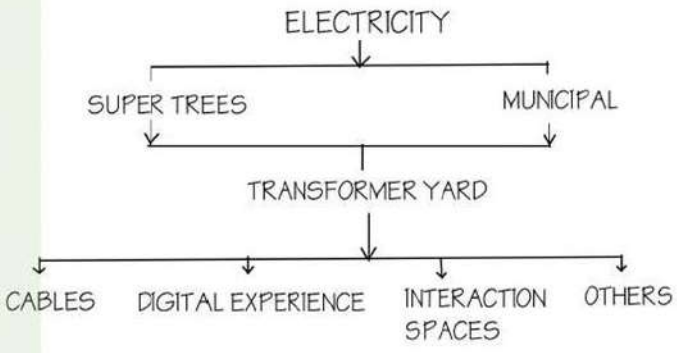


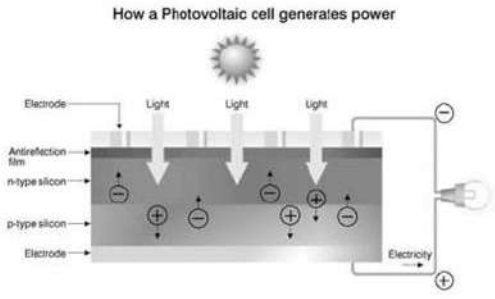


SECTION DETAIL OF WATER SYSTEM

ELECTRICITY DISTRIBUTION







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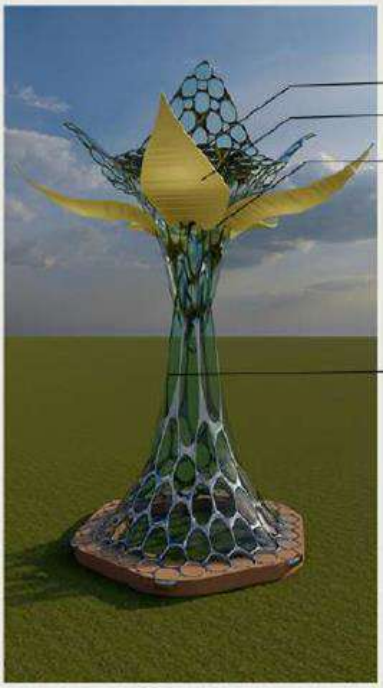
PERFORMATIVE ASPECTS

SUPERTREES ABSORBS THE SUN'S RADIATION AND CAPTURES HEAT AND LIGHT IN ORDER TO PRODUCE SOLAR ENERGY REQUIRED TO CREATE AN ENVIRONMENT WHERE PEOPLE CAN PARTAKE IN VARIOUS ACTIVITIES TAKING PLACE ON SITE.



SUPER TREE
HEIGHT-10M

1. SUPER TREES

PETALS OF THE STRUCTURE FORM A SLOPE- ALLOWS FOR RAIN WATER TO FLOW INTO THE CYLINDRICAL STEM. THE STEM ACTS AS A STORAGE UNIT FOR THE RAIN WATER FROM WHICH IT CAN BE FILTERED AND USED .

BETWEEN THE PETALS ARE LONG THIN SEPALS WHICH IN TURN ACT AS SPOTLIGHT WITH LED AT THE TIP.

THE BODY OF THE SEPAL IS COATED WITH ORGANIC PHOTOVOLTAIC SHEET.
TOP-OPV OR OSC ABSORBS SUNLIGHT AND TRANSMIT ELECTRICAL CHARGES.

THE STAMEN OF THE FLOWER IS DEPICTED BY THE SOLAR CELLS PRESENT IN THE CENTER ON THE TREE WHICH ARE CONNECTED TO AN INNER CYLINDRICAL ROD WHICH TRANSPORTS THE SOLAR ENERGY UNDERGROUND FROM WHERE IT CAN BE STORED OR DISTRIBUTED.

PVC CELLS/PANELS CONVERTS SOLAR ENERGY TO ELECTRICAL ENERGY. SUNLIGHT IS ABSORBED WHICH CHANGES ANGLES AS THEY FOLLOW THE SUN PATH.

OPV-TYPE OF SOLAR CELLS WHICH ABSORBS SUNLIGHT AND IN TURN CONVERT INTO ELECTRICAL CHARGES.

THE RAIN WATER COLLECTED IS STORED IN A PIT UNDERGROUND WITH A LAYER OF PLASTIC TRAMPAULIN SHEET WHICH PREVENTS IT FROM SEEPING INTO THE SOIL.

CALCULATIONS-

1. PHOTOVOLTAIC SOLAR CELLS - NUMBER OF PHOTOVOLTAIC CELLS IN ONE STRUCTURE=80
ENERGY PRODUCED BY 80 CELLS =7600 WATTS PER STRUCTURE.

EFFICIENCY IS CONSIDERED 40% BASED ON THE FIELD GUIDE -TOTAL ENERGY PRODUCED BY THE STRUCTURE =40% OF 7600= 3040 WATTS

TOTAL NUMBER OF STRUCURES ON SITE=10

TOTAL ENERGY PRODUCED = 10X3040=30,4000 WATTS= 30.4 KW

2. ORGANIC PHOTOVOLTAIC (OPV)
AREA OF ONE PETAL=2X4=8 SQM

NUMBER OF PETALS IN ONE STRUCTURE=6
NUMBER OF PETALS IN 10 STRUCTURES=6X10=60

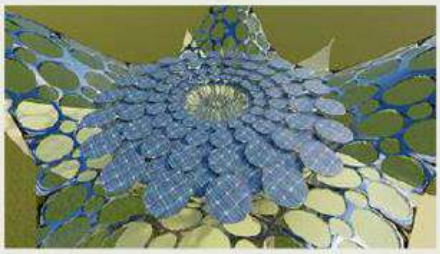
AREA OF 60 PETALS= 8X60= 480 SQM = 480 KW

EFFICIENCY IS 20% OF 480= 96KW

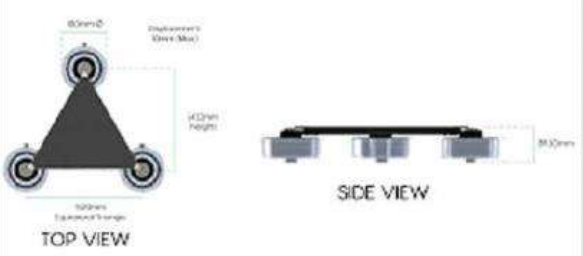
3. PHOTOVOLTAIC CELLS+OPV=96+30.4= 126.4 KILOWATTS PRODUCED PER DAY

TOTAL STORAGE CAPACITY OF SUPER TREES-
LOWER DIA OF CYLINDER-6M
UPPER DIA OF CYLINDER-2M
HEIGHT OF THE CYLINDER-7M
VOLUME PER TREE=95.5 M^3
VOL FOR 10 TREES WITH EFFICIENCY= 60% OF TOTAL = 5.71,800L

CYLINDRICAL WATER STORAGE



PVC CELLS/PANELS



2.KINETIC PAVEMENTS/PANELS

TOTAL NUMBER OF PANELS PRESENT -2860
1 FOOT STEP= 15 JOULES OF ENERGY
CONSIDERING 350 STEPS PER PERSON , TOTAL ENERGY PRODUCED BY KINETIC PAVEMENTS PER DAY= 6.5 KW

TOTAL ENERGY PRODUCED ON SITE= 126+6.5=132.5 KW PER DAY

Creative explorations in contemporary form and functions

AD VII B

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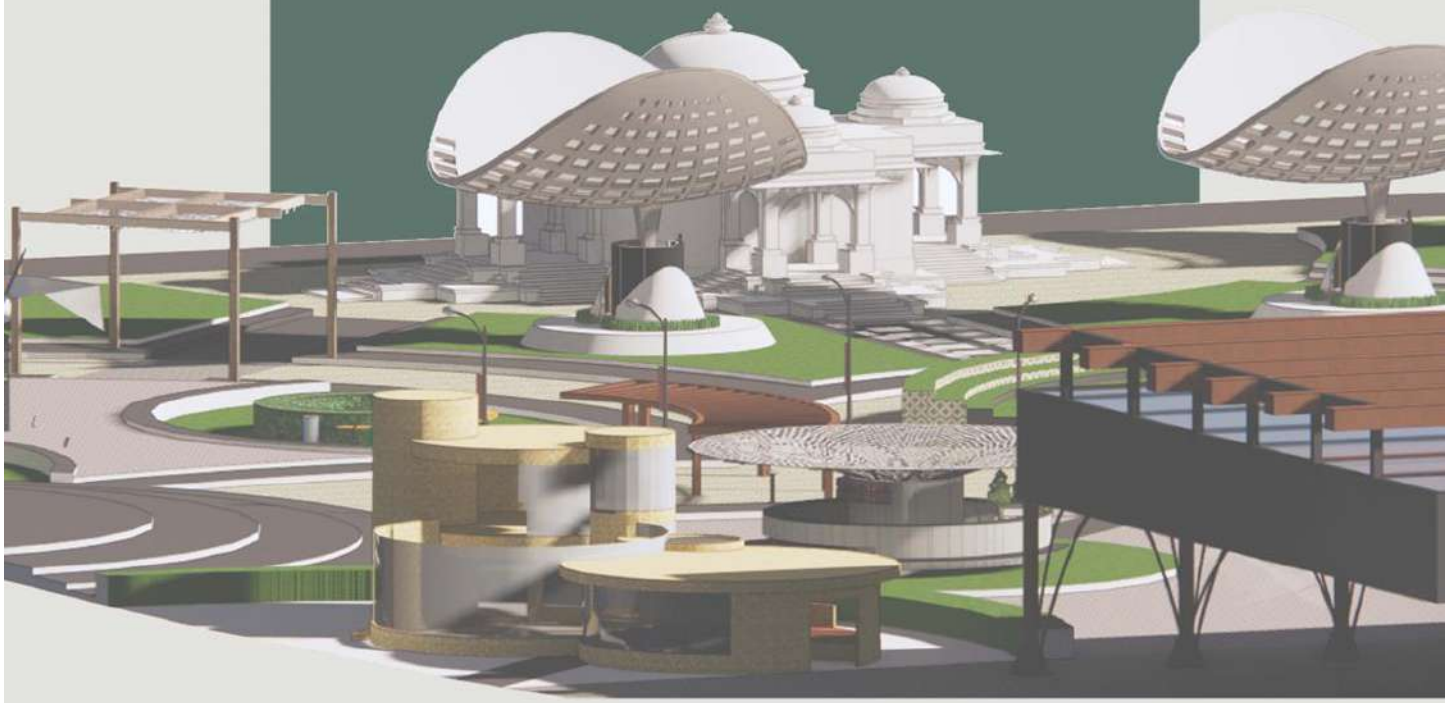
M Adit
1DC19AT041i

liminal space

BRIEF

[BRIDGING THE GAP]

Enhance the experience of the users by adding liminal spaces to existing identified cultural hubs
Integrate the performative aspects of architecture into the design
Generate an iconic architectural addition to enhance and boost the cultural identity of the city
Have generated a form that can link the past to the future.
the form generated will have to pay homage to the existing structure while at the same time be relevant to the present context.



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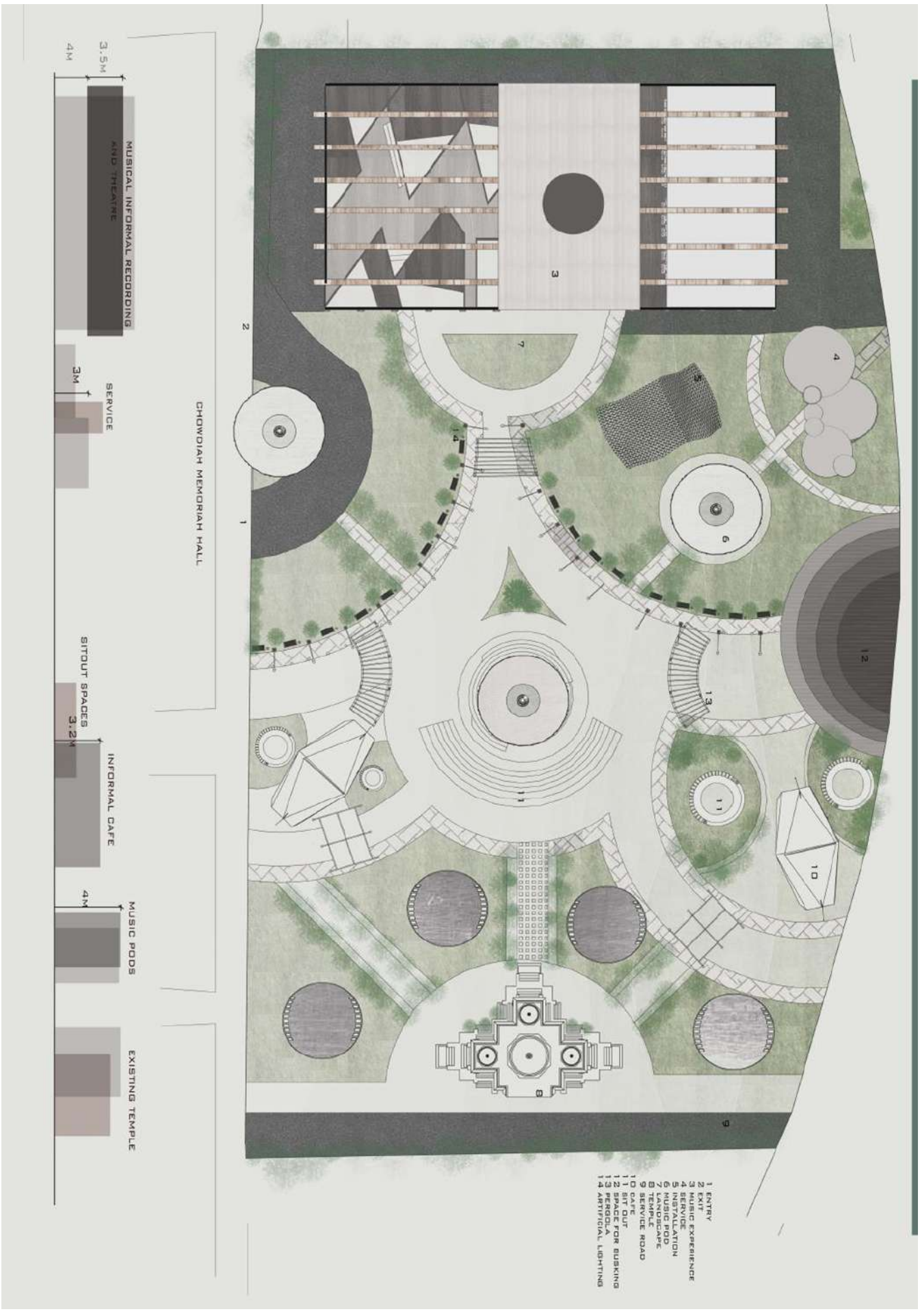

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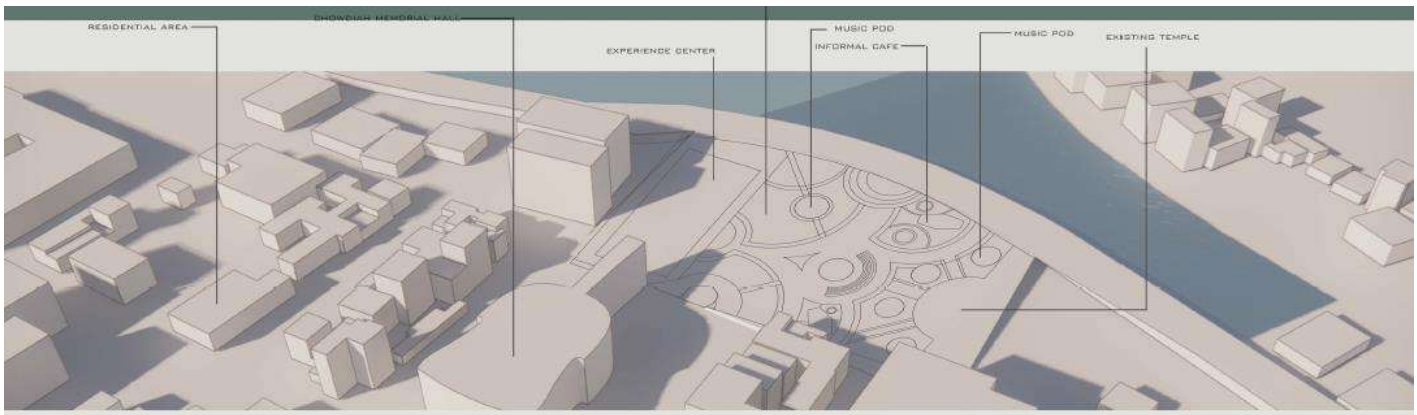
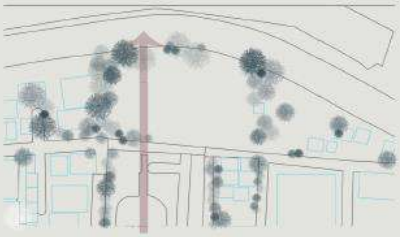


DERIVATION OF INSTALATION

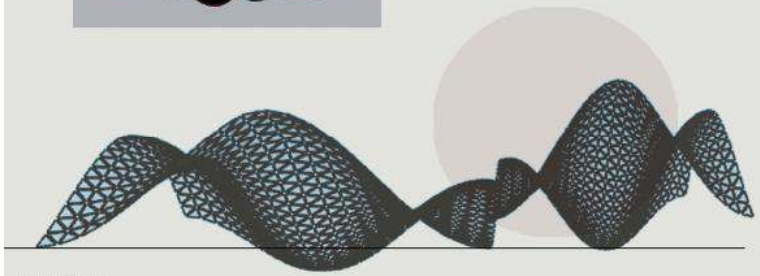
MUSICAL WAVE DERIVED FROM ONE OF THE VERY EARLY MUSICS PLAYED IN THE MEMORIAL HALL.

INSPIRD FROM THE SHAPE PRODUCED IS AN INSTALLATION PLACED DURING THE START OF THE EXPERIENCE AREA.
WHICH IS ALSO MULTIFUNCTIONAL, WHERE PEOPLE GET TO SIT BELLOW IT TO ENJOY THE MUSIC IN OPEN SPACE.

CONCEPT



FOLLOWING THE AXIS ALONG THE CHOWDIAH



THE SKIN OF THEN STRUCTURE IS INSPIRED FROM THE MUSIC NOTES.

INSTALLATION

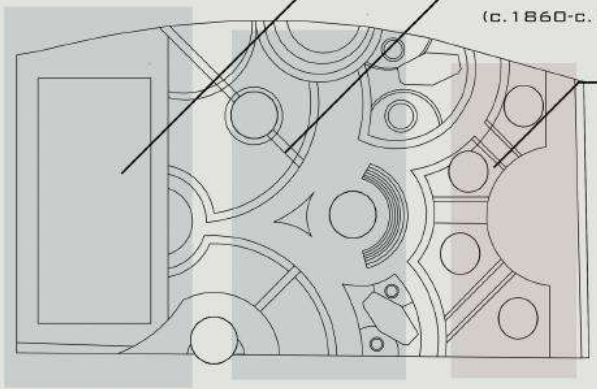
BUILT UP SPACE

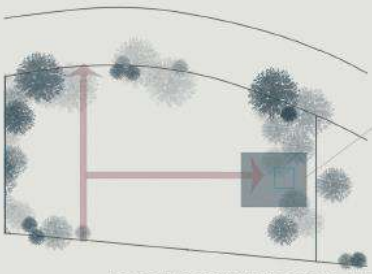
EXAGGERRATING THE SLOPE AND ALSO KEEPNG THE GROUND EXTREMELY LIGHT WITHOUT ANY STRUCTURES AND MAKING IT AN INTERACTIVE SPACE FOR THE PUBLIC

20TH AND 21ST CENTURY EXPERIENCE AND MUSIC

LATE ROMANTIC MUSIC (c.1860-c.1920)

CLASSICAL (c. 1750-c. 1830)





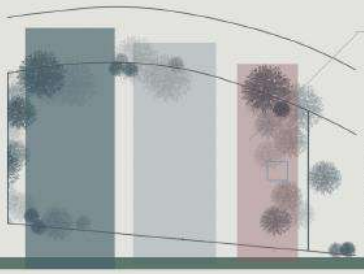
EXISTING TEMPLE ON THE SITE

AN ARCHITECTURAL MARVEL

DISCOVERED AROUND 7000 YEARS UNDER THE EARTH WITHOUT ANY MAJOR DAMAGE.

HENCE THIS BECAME THE SECOND AXIS OF GUIDANCE

EACH SPACE ACTS AS AN EXPERIENCE.
THE SCAN WILL LET THE PUBLIC EXPERIENCE HAVE A MUSICAL TREAT FROM THE START OF THE SITE TILL THE END WITH THE PERIODS OF MUSIC AT EVRY INTERVAL.



THE ENTIRE SITE IS DIVIDED INTO ZONES WHICH WOULD LEAD TO THE TEMPLE BY PROVIDING A EXPERIENCE AT EVRY STAGE.

EXAMPLES OF MUSIC ERAS

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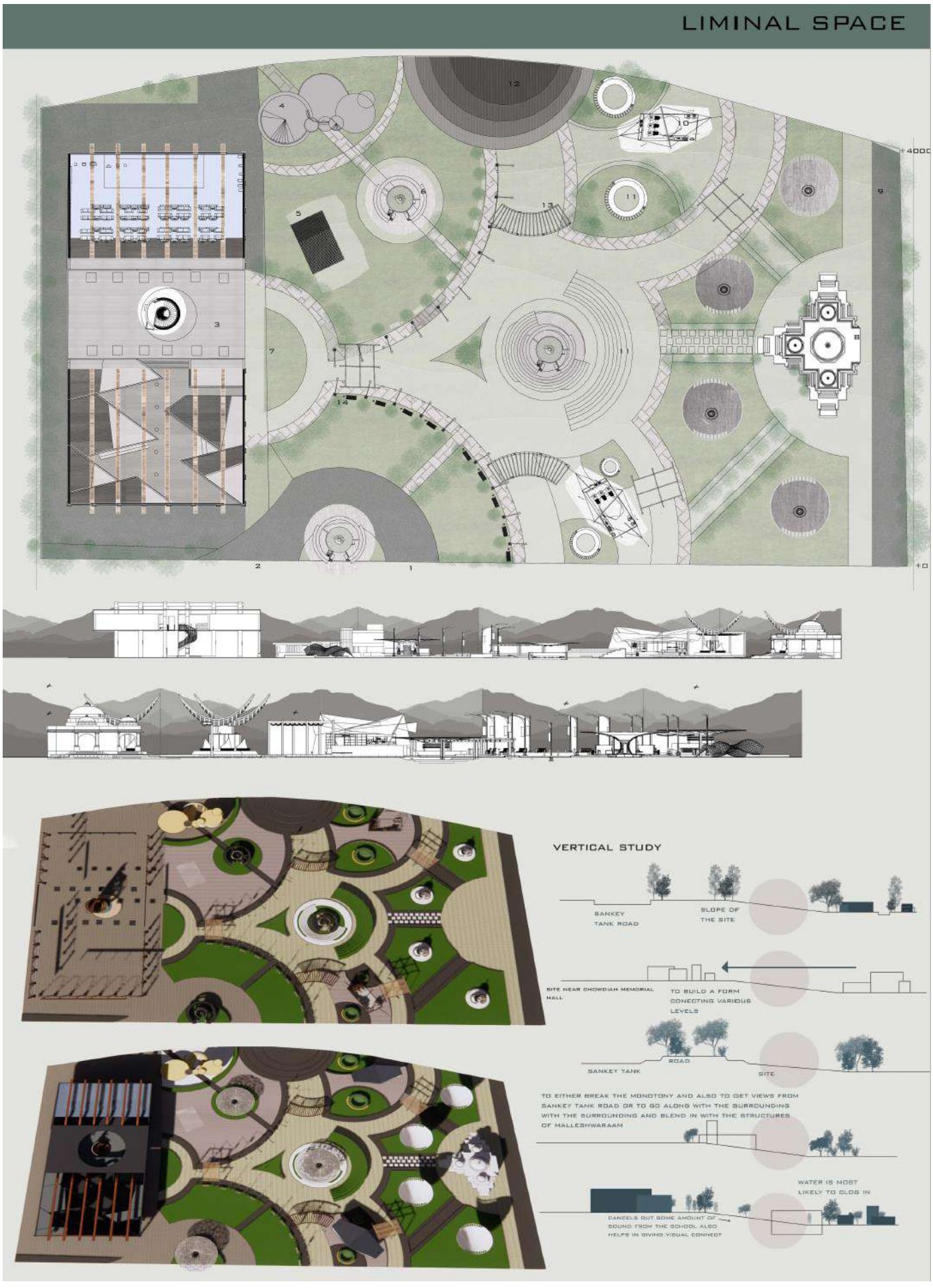

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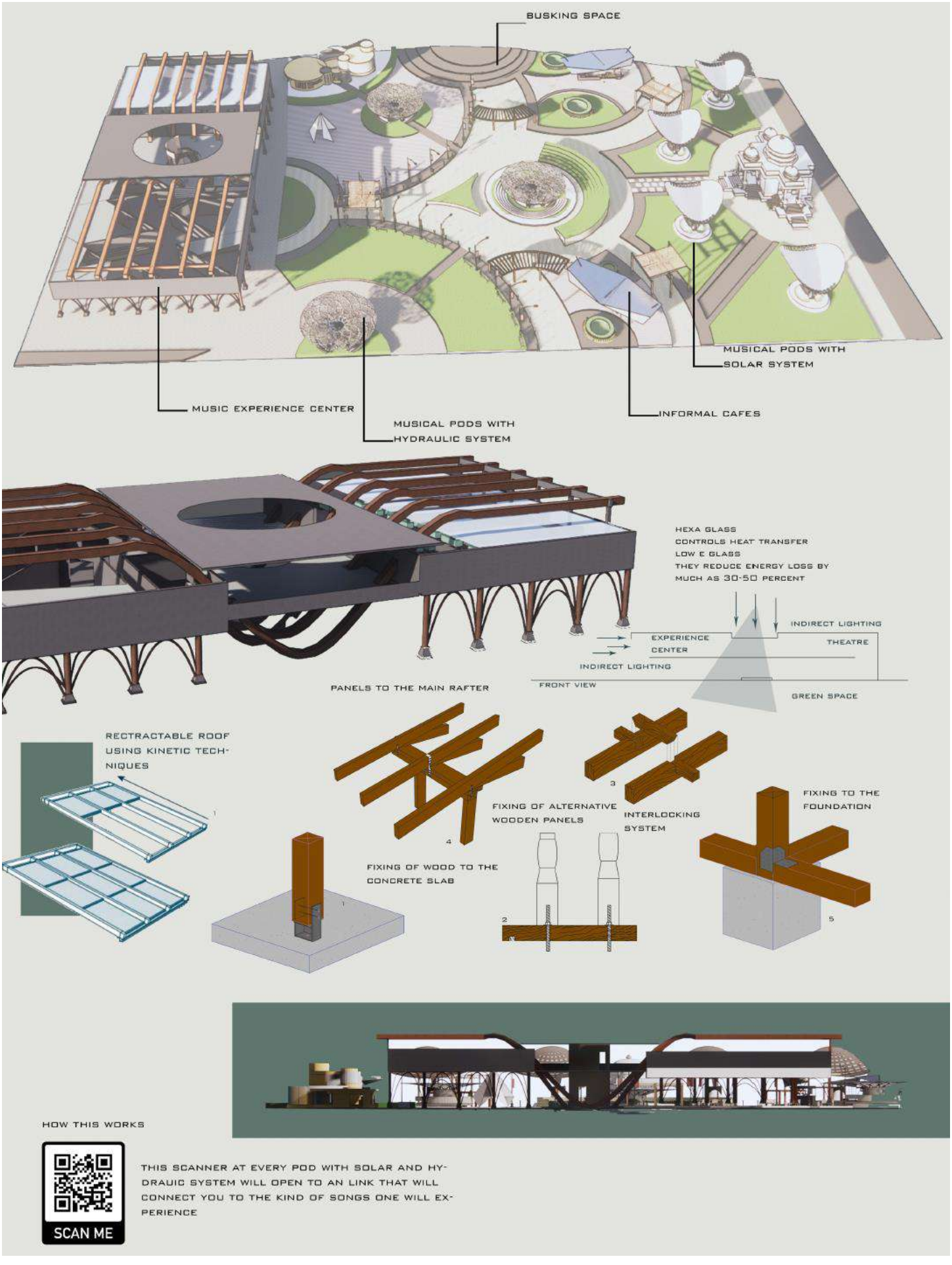

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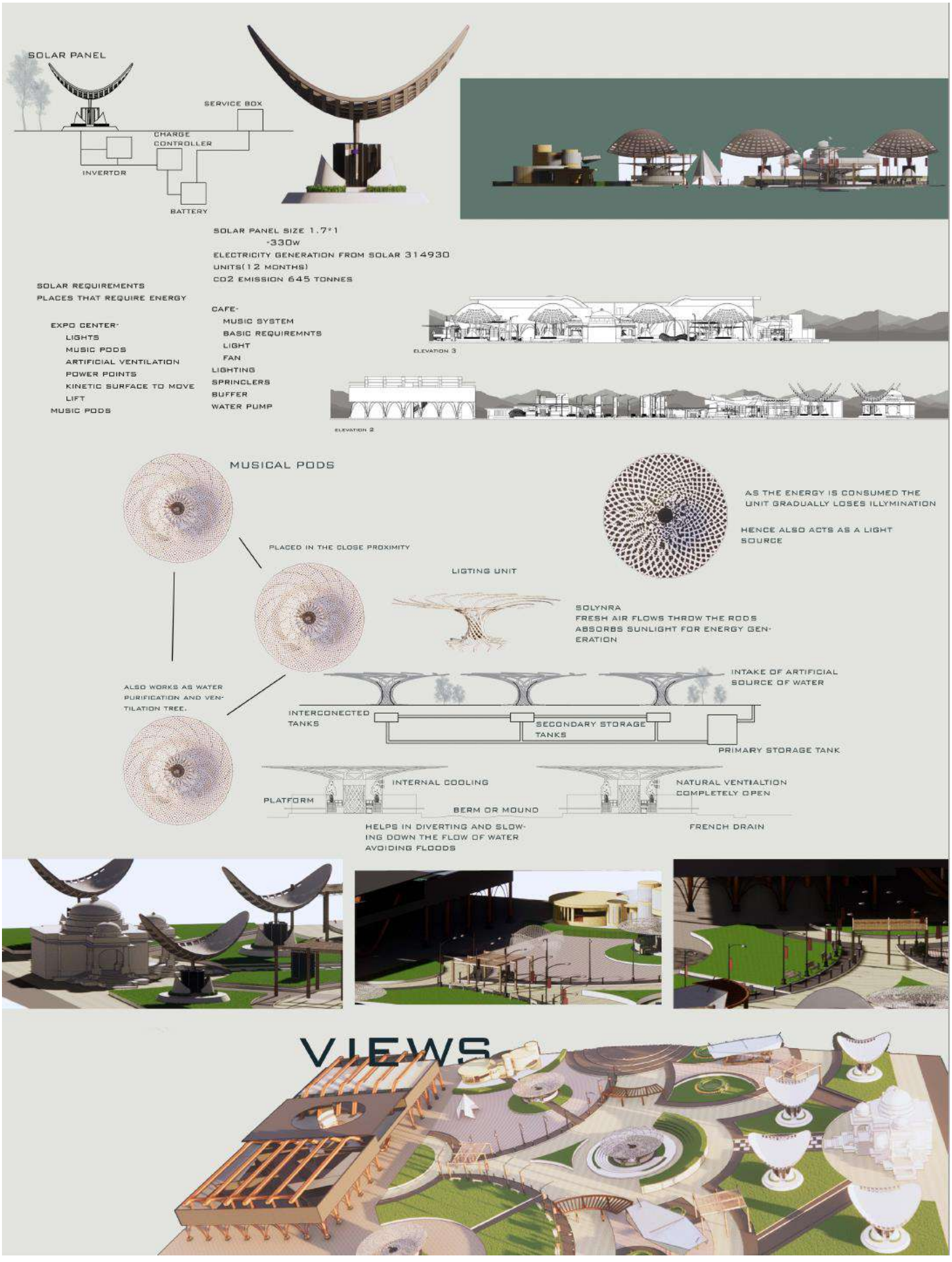

Creative explorations in contemporary form and functions

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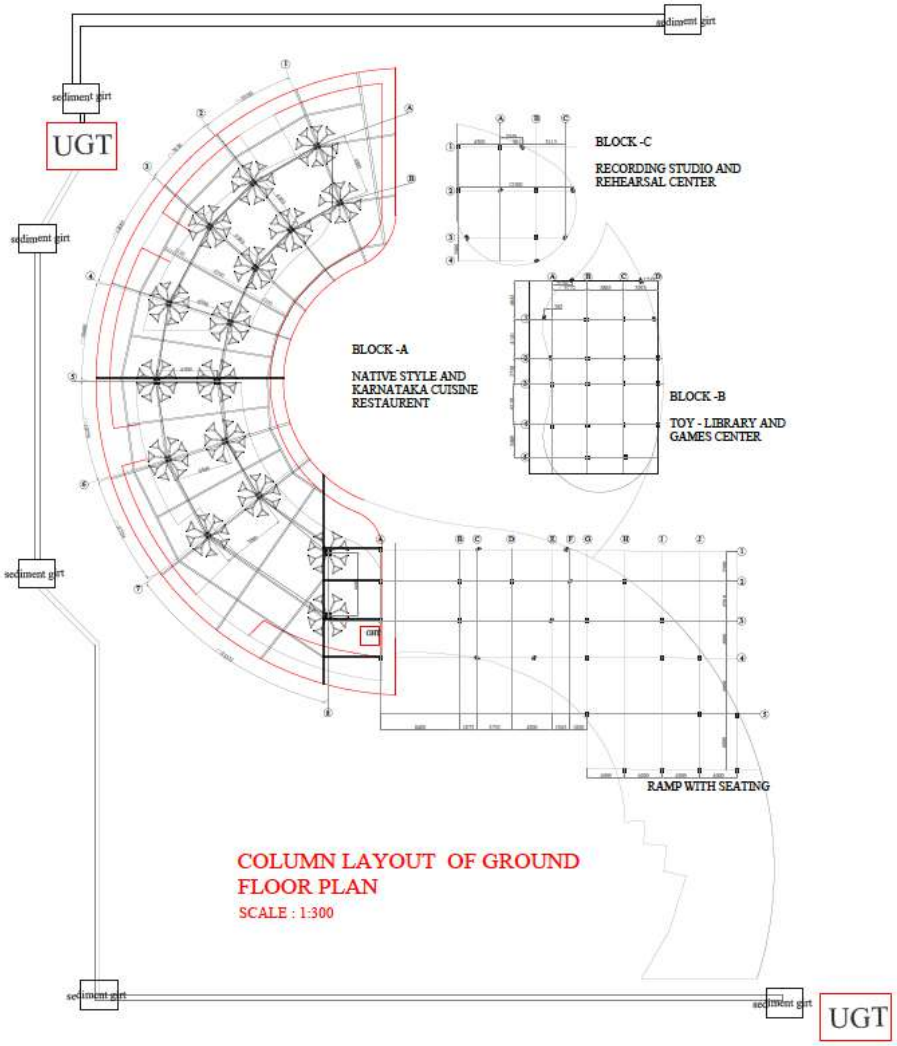
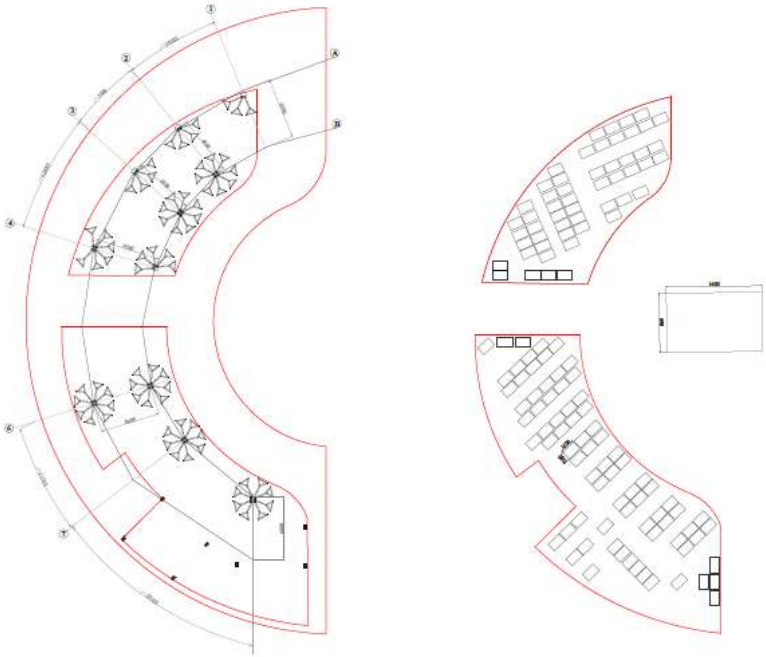
Architectural Design
Faculty: Ar Aparna Shastri, Ar VInay Shekhar, Ar Madan Kumar

Hritik Raj
1DC19AT003



COLUMN LAYOUT OF GROUND FLOOR PLAN
SCALE : 1:300

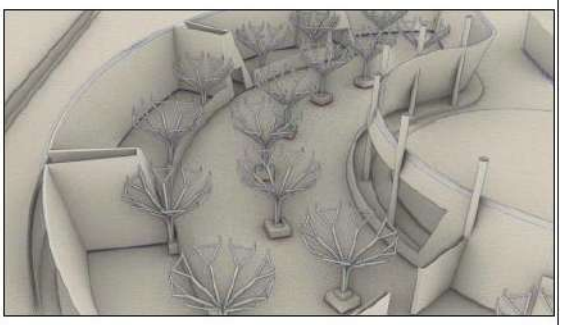


COLUMN LAYOUT OF FIRST FLOOR PLAN
SCALE : 1:300

SOLAR PANEL LAYOUT

BLOCK -A

1. TREE COLUMN [4 x250 mm dia M.S Hollow cylindrical sections
2. secondary struts of 200 mm
3. BASE DIM. 600 X600
4. TOTAL SPREAD OF 4.35M Dia
5. TOTAL SPAN = 20M
6. NO. OF COLUMNS = 16



VIEW OF THE COLUMN LAYOUT

RAIN WATER HARVESTING
rain water harvesting tank and its capacity

the gradient of the site is 14 M.
formula to calculate the amount of water is

AX R X Co. efficient.

A =area of surface. R. amt . of water (Rain) in mm

Co. cff. of the material. or reduction loss =20%
banglore rain fall per annual of 10 years. 970 MM.
Area: 1409 +821 + 143.27 +272.35. +300 = 2,945.62 M²
970 x 2,945.62 x 80% x. $\frac{1}{96}$ = x.=23810 liter ≈ 25,000 lit. ≈ 50,000 lit.
note : 20% of evaporation charges and 2 times a week is 96 divisions
2 U. G. T provided = 4m x 4m x 2
= 32 cum = capacity of 30,000lit x 2
= 60,000 lit capacity for every 4 -3days
O. H T = DIM. = 2M X2M X 2M = 8 cum =8,000 lit of fresh water

CALCULATION

TOTAL ROOF AREA =600 Sqm

TOTAL N0. of PANELS = 135
each has the capacity to produce 900 watts per day (8-10 hrs of sunlight

= 900 X 135 =121,500 watts = 121.5kvh

Proposed building being a restaurant uses 50 watts per Sqft.

TOTAL BUILT SPACE ~ 23000 Sqft
22000 X 45 = 990,000Watts=990 kwh

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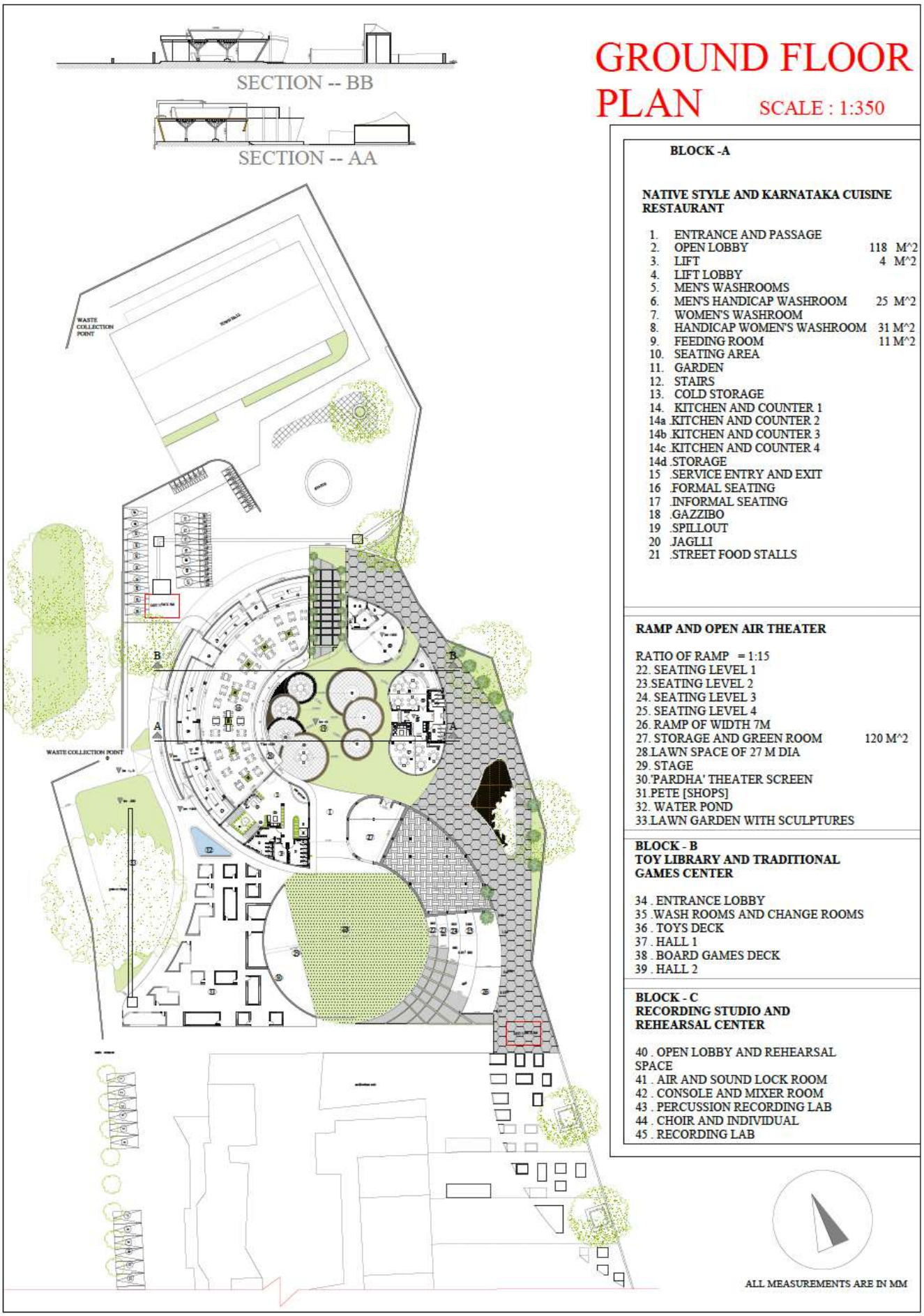
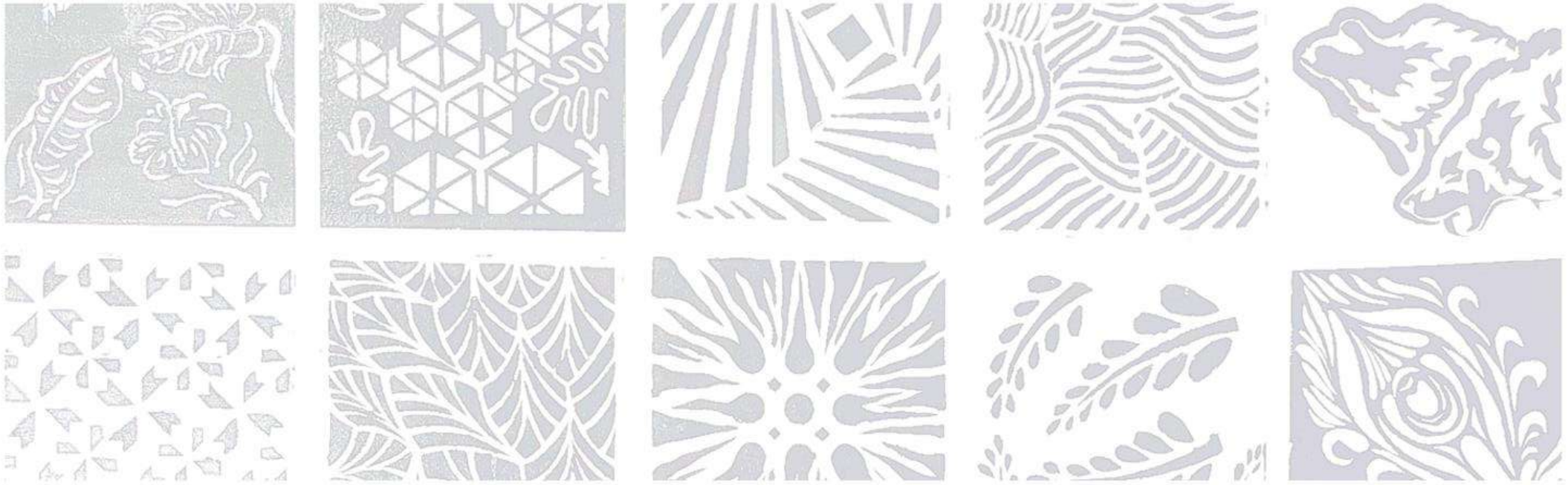
Hritik Raj
1DC19AT003





8th Semester

Identity and the city
The notion of place and placelessness in urban intervention
INTRODUCTION

Edward Relph in his seminal book *place and placelessness* talks about how indispensable place is in the human life experience. In his pursuit of a better and deeper understanding of place, the geographer identified different modes of spatial experience, namely pragmatic space, perceptual space and existential space which he equates with instinctive, bodily and immediate experiences and another set of spatial experiences that are cerebral, ideal and tangible which he then equates with the planning space, cognitive space and abstract space. According to Relph all these modes of spatial experiences are not mutually exclusive but part of the holistic human experience of a place [Seamon & Sowers, 2008]

JOHNSON MARKET
Extensions to the old Bangalore Pete and the growing population mandated the formation of newer markets towards the end of the 19th Century. Named after a former British civil servant, Johnson Market was initially called Richmond Town Market since it served that locality. Close on the heels of the Russell Market, built in 1927 and City Market in 1928, Johnson Market was established in 1929. It was commonly referred to as Russell Market's "poor cousin".
The land where Johnson Market was formed is said to have been a huge horse shelter belonging to Aga Ali Asker, a rich businessman (from Persia) who owned large tracts of land around Richmond Town. Asker's home 'Arab Lines' was located right opposite Fatima Bakery. Situated at the junction of Hosur road and Leonard lane, Johnson market is now facing an existential crisis due to the upcoming metro line on Hosur road, and the metro station situated opposite to the market.

OBJECTIVES

Enhance the identity and legibility of the place through interventions

- Identify and address the needs of the informal city through socio-economic, socio-cultural interventions
- Identify lacunae in existing amenities and infrastructure and suggest solutions.

APPROACH

Studying the city through the lens of the various dimensions of urban design the students will collect and analyse the data with respect to these dimensions namely.

- Morphological Dimension
- Social Dimension
- Functional Dimension
- Temporal Dimension
- Environmental dimension
- Perceptual or Visual Dimension

The two verticals of the studio would be:

- To understand the various data collection, mapping, surveying techniques and using them rigorously to derive maps, sketches, graphs and other pictograms Info graphics to analyze and infer the spatial patterns, the socio-economic and socio-cultural aspects and the historical aspects.
- The second aspect would be to propose interventions that could be under the verticals:, redevelopment proposals or adaptive reuse or urban inserts.

ARCHITECTURAL DESIGN VIII -SEC B
SUBJECT CODE 21 ARC81

Studio Coordinators

Ar. Aparna Shastri

Studio Faculty

Ar. Sheeraz Zaidi

Ar. Madan Kumar

Ar. Raveena Nayar

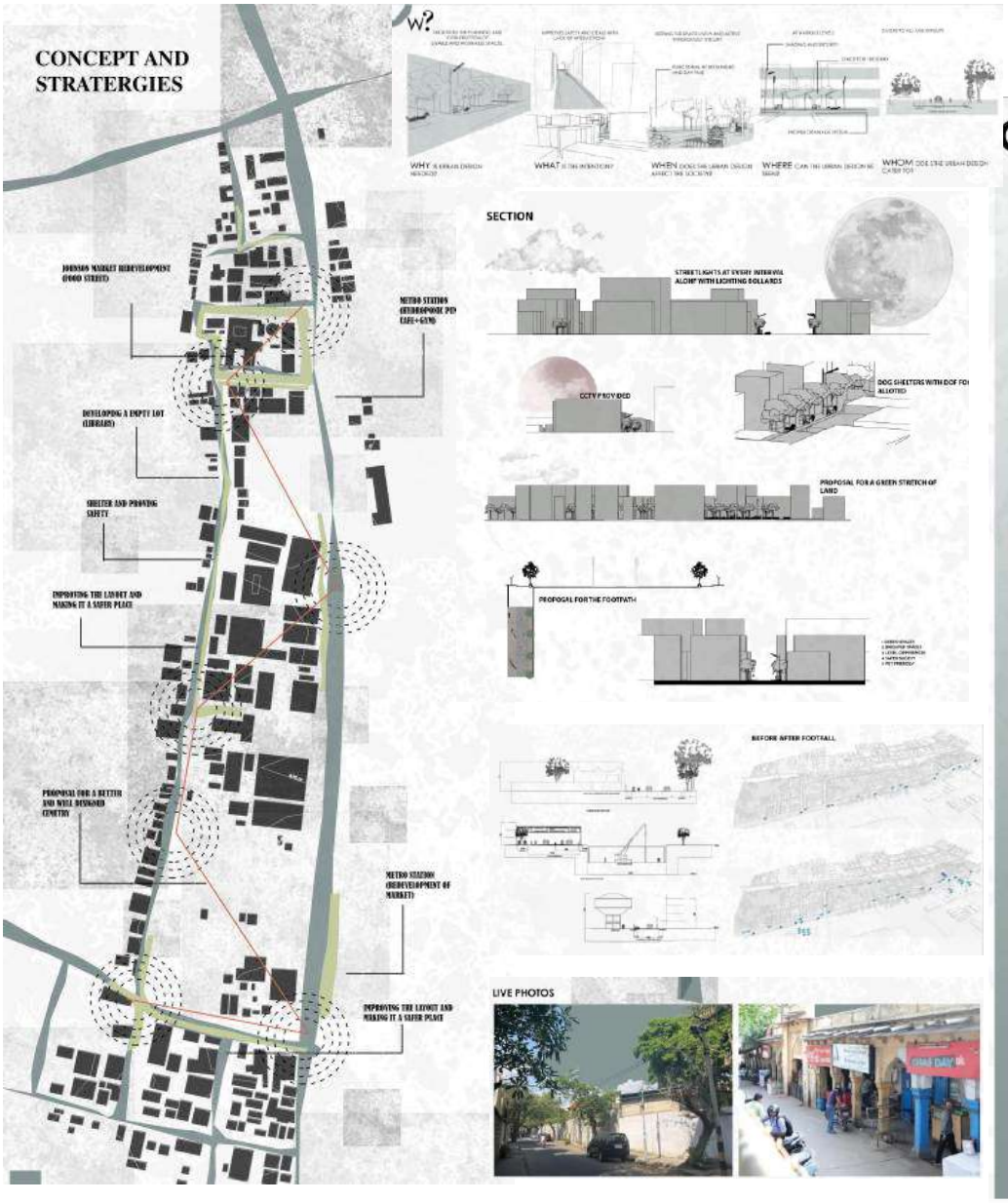
Ar. Veena Choudhary

IDENTITY AND THE CITY

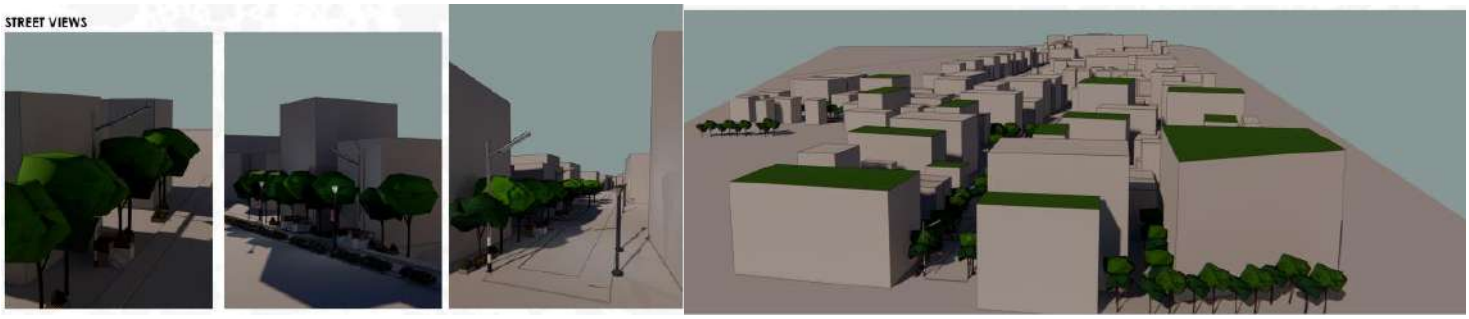
AD VIII

ARCHITECTURE DESIGN STUDIO VIII
Faculty: Ar.Aparna Shastri, Ar. Sheeraz Zaidi, Ar. Madhan Kumar, Ar. Raveena Nayar, Ar. Veena Choudhary

M. Aditi
1DC19ATO41



SITE -JOHNSON MARKET



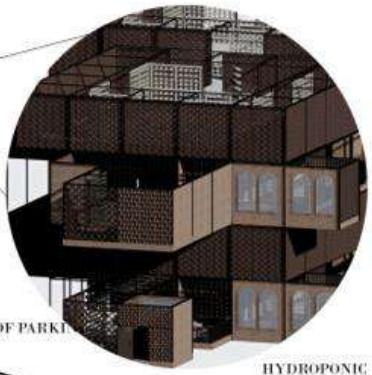
IDENTITY OF THE CITY - JOHNSON MARKET

GRID SYSTEM-

THROUGHOUT THE SITE WITH MIXED USED WHICH IS DEPENDANT ON EACHOTHER

HAVING SOME INFLUCENCE OF ISLAMIC ARCHITECTURE

STREET FOOD



NUMBER OF PARKI

HYDROPONIC STATION+GYM +NURSERY

LIBRARY

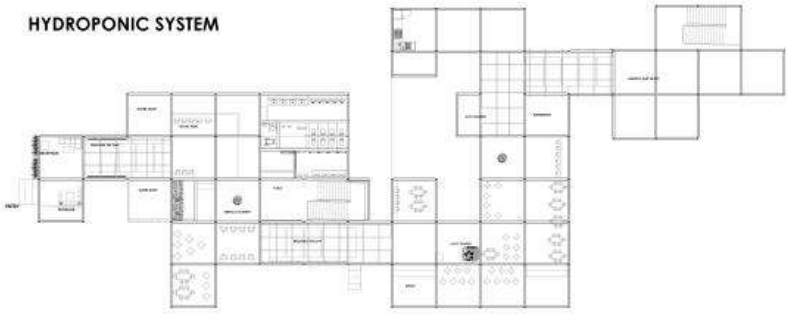
MARKET+ SHOPPING COMPLEX

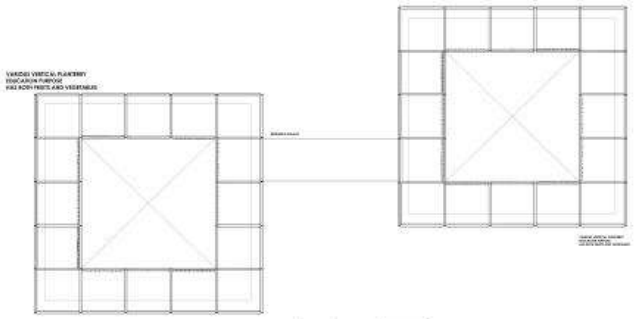
STRATERGIES IMPLEMENTED

CYCLE STOPS
CYCLE TRACK
MULTIPLE SHADED AREAS ALONG WITH INTERACTIVE SPACES FOR SAFETY
GREEN VISUALS
STREET LIGHTS
LAMPS
WIDENED PATHWAYS
DOG SHELTER
CCTV INSTALLED
SIGN BOARD AT INTERVALS
MULTIPLE TENSILE ROOFS
SPACE FOR ALL AGE GROUPS
SPACE ALLOTED FOR BIRDS TO CONSUME FOOD OR WATER

NAME: M. ADITI
USN: 1DC19AT041
CLASS: 8 B

HYDROPONIC SYSTEM





HYDROPONIC SYSTEM

REQUIREMENT OF HYDROPONICS STRUCTURE

ADEQUATE PPLACE -
6077.5 SQM (AVAILBLE LAND)
420SQM OF LAND CAN PRODUCE 2600 PLANTS

TOTAL AREA FOR THE PLANTS ALLOCATED AIRE 520 SQM
PLANT SPACING+ 0.3M

COMMONLY USED HYDROPONIC SYSTEM AREA
NUTRIENT FLM TECHNIQUE
VERTICAL TOWER

LIGHTENING -
PLACEMENT OF THE STRUCTURE
THIS METOD REQUIRES A LOT OF ARTIFICIAL LIGHTING AS WELL
SUCH AS LED GROW LIGHTS FOR CONSISTANT AND UNIFORM ILLUMINATION

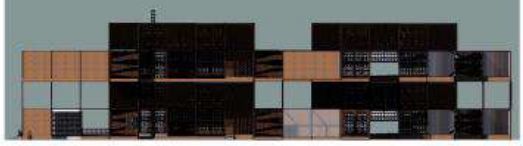
VENTILATION AND AIR CIRCULATION -
STRUCTURE SHOULD INCLUDE VENTILATIONSYSTEM OR FANS FOR CONTINOUS AIR

WATER SUPPLY -
HYDROPONICS SYSTEM USE LESS WATER
AS MUCH AS 10 PERCENT USUAGE COMPARED TO NORMAL CULTIVATION

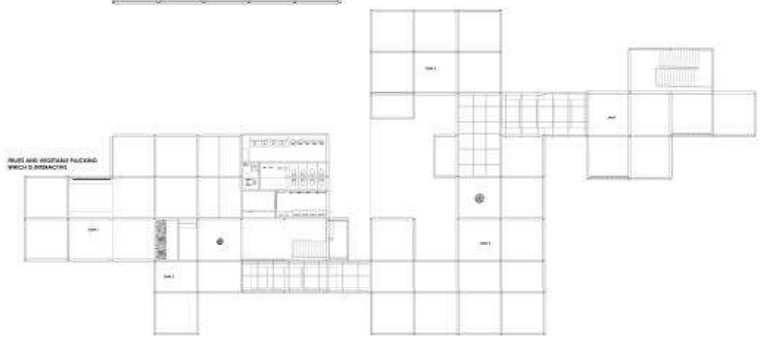
SPACE FOR FUTURE EXPANSION

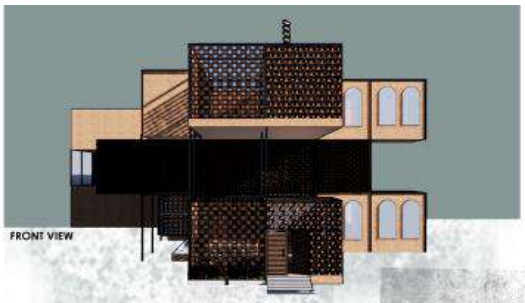
WHAT PURPOSE WILL IT SERVE

PLACE WHERE KIDS PLAY , LEARN AND EAT
WILL ACT AS A CENTER OF SCIENCE CONSISTING OF VEGGETABLE AND PLANT BREEDING
NEW FORM OF CULTURE
SHOP FRESH AND EAT FRESH
SOCIAL GATHERING
SOCAL ENTERTAINMENT

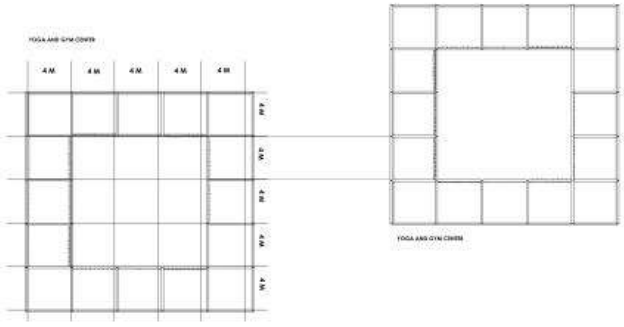


SIDE ELEVATION





FRONT VIEW



NAME: M. ADITI
USN: 1DC19AT041
CLASS: 8 B

CONCEPT -

GRID SYSTEM

BEFORE THE INTERVENTION

PROPOSAL FOR THE FUTURE

WHY 4 BY 4 GRID

The 4 by 4 grid provides a balanced and visually pleasing structure. It helps architects establish a proportional relationship between different elements of the design

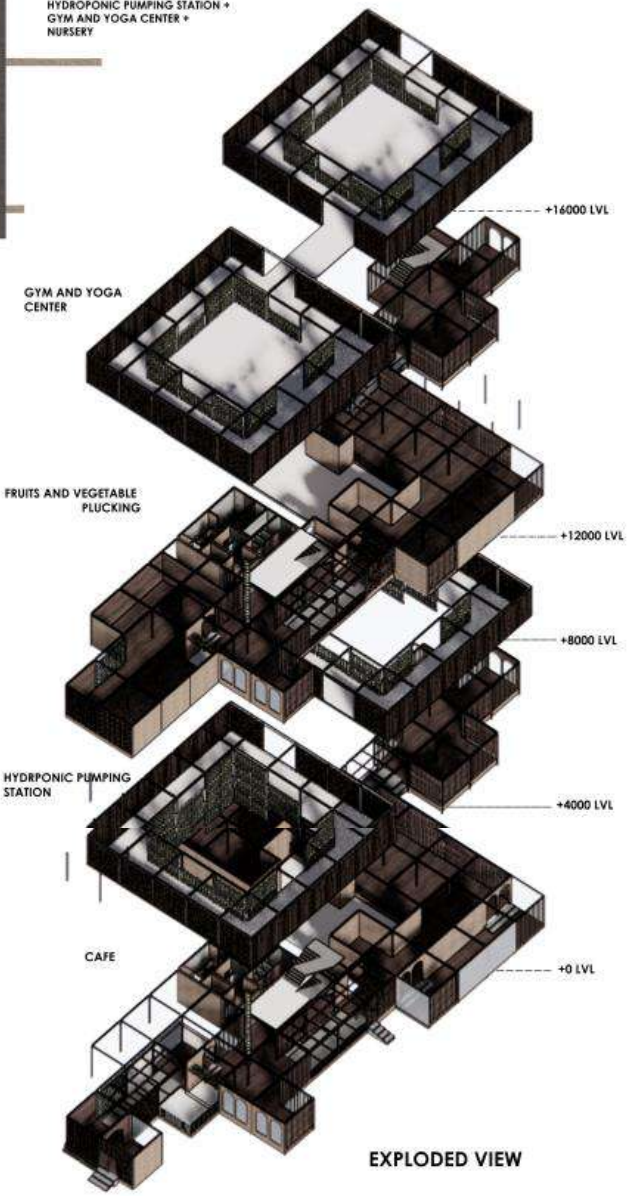
The grid allows for flexibility in organizing the space. The 4 by 4 grid provides enough divisions to create distinct zones or areas within a larger space while maintaining a cohesive design.

The 4 by 4 grid aligns with modular construction systems, making it easier for construction teams to implement the design.

The 4 by 4 grid simplifies the visualization of the design concept. It provides a clear framework for arranging elements and helps architects and clients better understand the spatial relationships within the building.

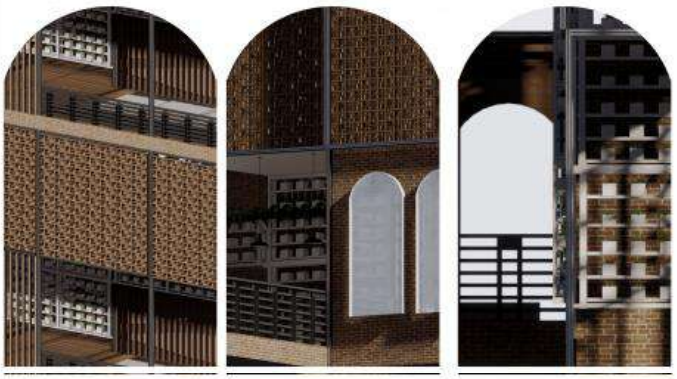
-LOCATION: METRO STATION

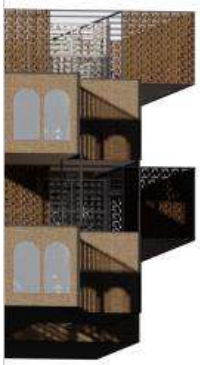
BUILDING TYPOLOGY: CAFE + HYDROPONIC PUMPING STATION + GYM AND YOGA CENTER + NURSERY



EXPLODED VIEW

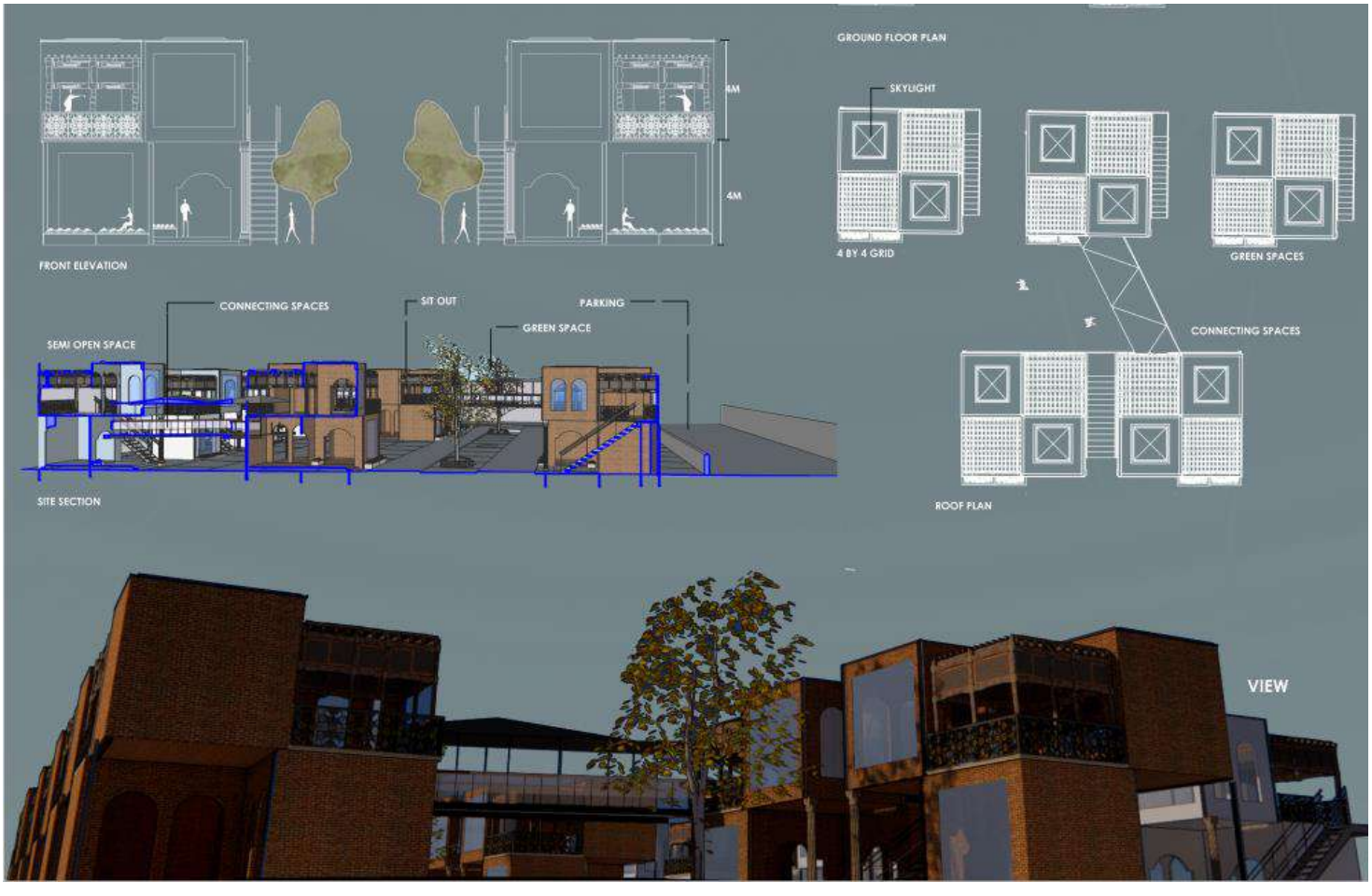
VIEWS

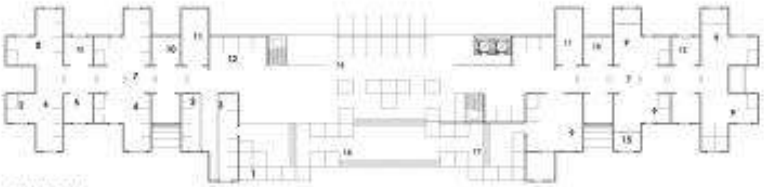




MATERIAL


USN: 10CI9AT041
CLASS: B B
TO MAKE THE TRANSPORTATION OF GOODS EASIER A CONNECTING BRIDGE IS PROVIDED FROM METRO STATION SITE TO JOHNSON MARKET SITE
FOOD THAT IS PREPARED FROM THE HYDRO PONIC STATION IS SENT TO THE JOHNSON MARKET.
65 PERCENT OF THE SITE IS UNBUILT.
STREET FOOD TO RETAIN THE ESSENCE OF THE EXISTING JOHNSON MARKET ATMOSPHERE.
STYLE OF BUILDING- ISLAMIC ARCHTECTURE
4 BY 4 GRID STRUCTURE
MASTER PLAN
LOCATION: JOHNSON MARKET
ENTRY
MATERIAL USED
I SECTION COLUMNS
GLASS
BAMBOO ROOF FOR SEMI OPEN SPACE
BRICK CLADDING
JAALI
ACP CLADDING


4M
4M
FRONT ELEVATION
GROUND FLOOR PLAN
SKYLIGHT
4 BY 4 GRID
GREEN SPACES
CONNECTING SPACES
SIT OUT
PARKING
GREEN SPACE
SEMI OPEN SPACE
SITE SECTION
CONNECTING SPACES
ROOF PLAN
VIEW



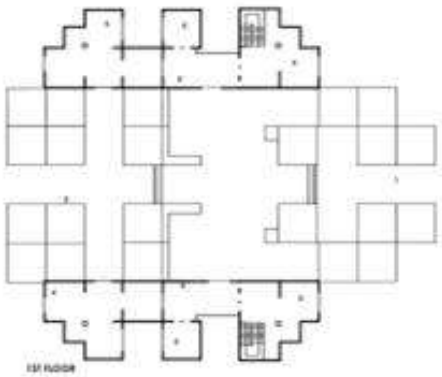
GROUND FLOOR

FIRST FLOOR

MARKET

TO RETAIN THE VALUES AND THE PRESENCE OF MARKET IN THE LOCALITY.
JOHNSON MARKET'S SITE IS OPENED UP AND IS SHIFTED TO A
PLACE LESS THAN 700 RADIUS
WHICH MAKES IT EASIER FOR THE VENDORS TO COMMUTE FROM THE MATROOMS
CONSISTING OF HYDROPONIC SHELF TO SUPPLY VEGETABLE AND FRUITS WITHOUT
ANY MEDIATOR

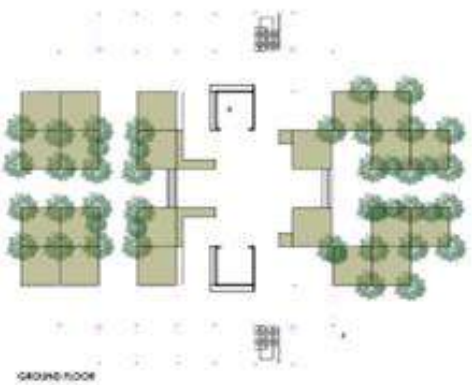
STUDY SPACES



1ST FLOOR

LIBRARY

THE SITE THAT WAS UPSCALE WITHOUT ANY USAGE IS AT PRESENT
ONE OF THE LEAST SAFE SITE IN THAT STRETCH OF LAND.
HENCE GIVING A PURPOSE WHICH IS STABLE FOR ALL AGE GROUPS AND
GENDER THAT GOES ALONG WITH THE SOCIETY IMPROVES SAFETY AND
ADDS VALUE.



GROUND FLOOR

ARCHITECTURE DESIGN STUDIO VIII
Faculty: Ar. Aparna Shastri, Ar. Ar. Sheeraz Zaidi, Ar. Madhan Kumar, Ar. Raveena Nayar, Ar. Veena Choudhary

Anikethan S J
1DC18AT005

SITE -BANASHANKARI MARKET

Banashankari Street Market:

The Banashankari street market is an informal market of vendors that stretches from the Kanakapura road and the Subramanyapura road junction just after the Banashankari TTMC up to the Sarakki market. The market that initially came up to serve the temple needs is now a permanent feature along the stretch. One of the most chaotic street stretches of Bengaluru, this stretch houses a Bus terminus and TTMC, a metro station, the entryway to the Banashankari temple, the designated Banashankari and Sarakki market areas. Owing to its proximity to the peri-urban areas in comparison to KR Market, a part of it also functions as a wholesale market for the surrounding neighbourhood vegetable vendors.

5. TEMPLE COMPLEX

DESIGN CONSIDERATIONS

- Temple is THE Identity of the place
- Hapazard Market place around is kills the 'Calm' a Temple is meant to have
- The Temple complex can be designed more effectively.
- Visibility in an issue , an attempt must be made to tackle it.

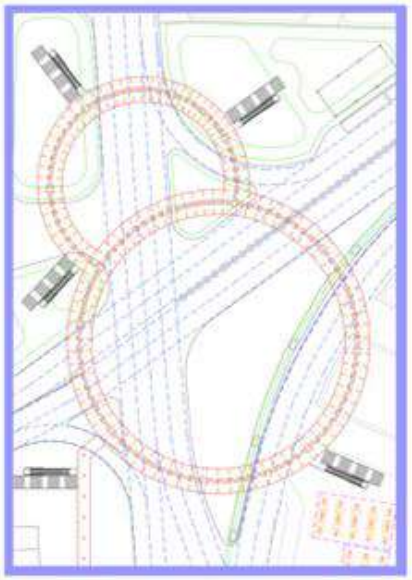
DESIGN PROGRAM

- Separate Entrance to the Temple
- Fence the Footpath
- Green Spaces at the Temple Complex
- Redesign the Temple complex
- Accommodate Market and Parking
- Try to bring a bit of calm in the otherwise busting neighbourhood

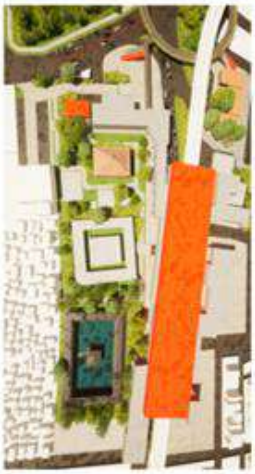
AREA PROGRAM

- Area of Market = 900 sqm
- Area of Parking = 1800 sqm
- Area of complex = 18000 sqm
- Area of Temple building = 1660 sqm

1. BANASHANKARI SIGNAL



TEMPLE COMPLEX PLAN AND TOP VIEW



TEMPLE COMPLEX PLAN AND TOP VIEW

BASSE MAP :- SCALE - 1:3000

1. BANASHANKARI SIGNAL

DESIGN CONSIDERATIONS

- Sarakki signal pushing the traffic north increasing the pressure on Sarakki market junction and the Banashankari signal.
- 2 signals in less than 100m wreck havoc.
- No right turn allowed from the Kadirenahalli cross road.
- Very unsafe for pedestrians.

DESIGN PROGRAM

- Skywalk shall connect all corners of the Junction
- Shall connect the bus stops & metro
- The skywalk shall have seating spaces
- Escalators to move up and down

DESIGN CONSIDERATIONS

- Design consideration
- Safety of pedestrians neglected currently
- The location is a fantastic place for people watching
- Metro and bus stop are gate disconnected currently

Enhancing human experience of city
Place making in dense Urban Fabric

INTRODUCTION

Cities are places, where people live, form communities, and establish their own identities. With urban growth and development most of the cities in India are experiencing chaos and bottle neck in few of the existing nodes and junctions due to unplanned and uncontrolled growth of both population and built density. For such junctions and nodes, the Identity with which it was conceived is lost. The new identity should enhance human experience, which is one of the contemporary theories of urban design. However, most of the Junctions and Nodes have reduced to just a chaotic traffic junction particularly Outer ring road and highway junctions in Bengaluru cities.

SILK BOARD JUNCTION - A STUDY , ANALYSIS AND ARCHITECTURAL PROPOSAL

Bangalore city that we now best known for the Information Technology industry and start-ups, and for gardens for ages can well be the Silk City of India. Bengaluru-Mysuru corridor is indeed dotted with the key players of the value chain of the silk industry. In 1948 Central Silk Board was established under the Ministry of textiles, it has its regional office working at Bangalore at this junction, and the junctions own its name from this building.The the Silk board junction is that it is an important road junction in Bengaluru City on the Outer Ring Road - Hosur Bengaluru highway junction. This place is also called Madiwala; a washer mans community settlement with one the biggest lake of Bangalore in its vicinity. It is an important landmark for travelers, cabs and those new to Bengaluru as they enter from Tamil Nadu and Kerala using Hosur Road. It is also a well-known bus stop to travel out of Karnataka. The Silk Board junction acts as a gateway to the two important IT clusters in Bangalore–the Outer Ring Road cluster(Marathahalli, Whitefield and Bellandur) towards the east and Electronic City to the south. This place and its surroundings have a rich historic cultural importance as described by many stone inscriptions found near the place.

The proximity to these two major hubs in the city, known as the "IT capital of India", has led to bottleneck of vehicular movement at the junction.In 2017 the Flyover was made operational near to ease the traffic, but it became futile as it intensified the bottleneck effect. Past two and half years the junction is experiencing the disturbance from the Metro-phase two construction activities too.**, Enhancing human experience in such situation is a challenge. This studio aims to realise the placemaking opportunities in the neighbourhood area around this Junction and propose possible interventions which either aids the existing activities to perform better or new activities which could thrive here and bring considerable human experience into neighbourhood.**

OBJECTIVES

Architectural interventions, which have an ability to shape an apt Urban fabric through design solutions.

Place making elements, which aims to reintroduce the identity of this area through its contextualization.

Designed public spaces that can be used for various activities such as open-air markets, performance venue, and leisure space.

Re-aligning, re-imagining the existing transportation networks. All four of them together will enhance the Human experience.

ARCHITECTURAL DESIGN VIII SEC A SUBJECT CODE 18ARC81

Studio Coordinator

Ar. Kalpana Manchali

Studio Faculty

Ar. Bhavesh Mehta

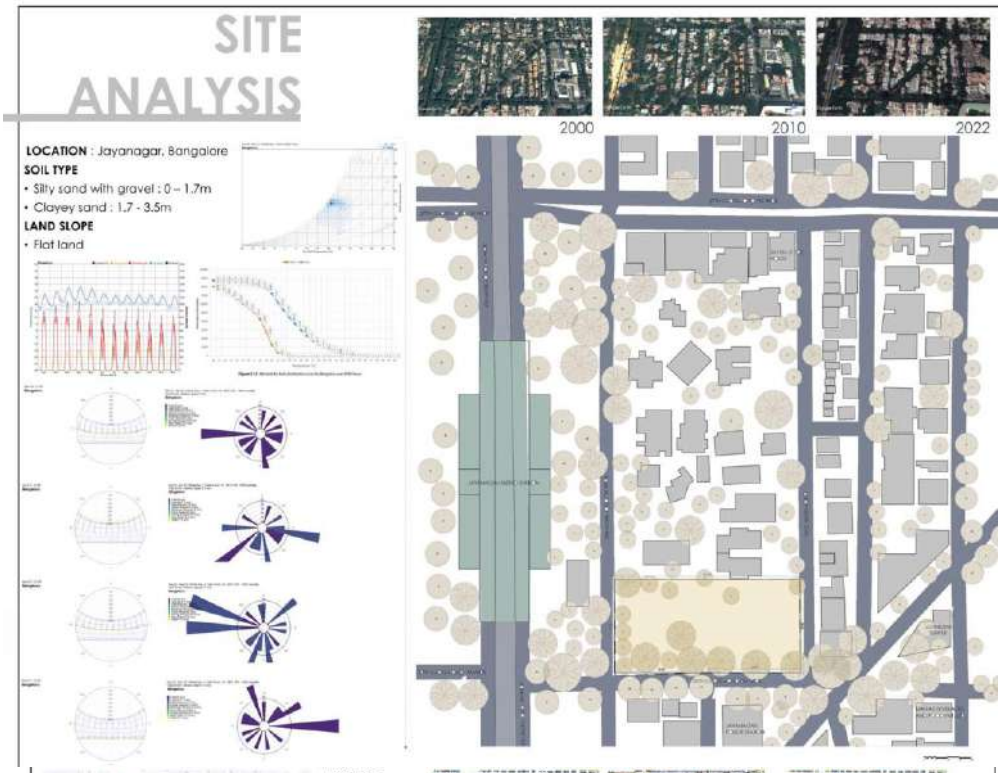
Ar. Sindhu Jagannath

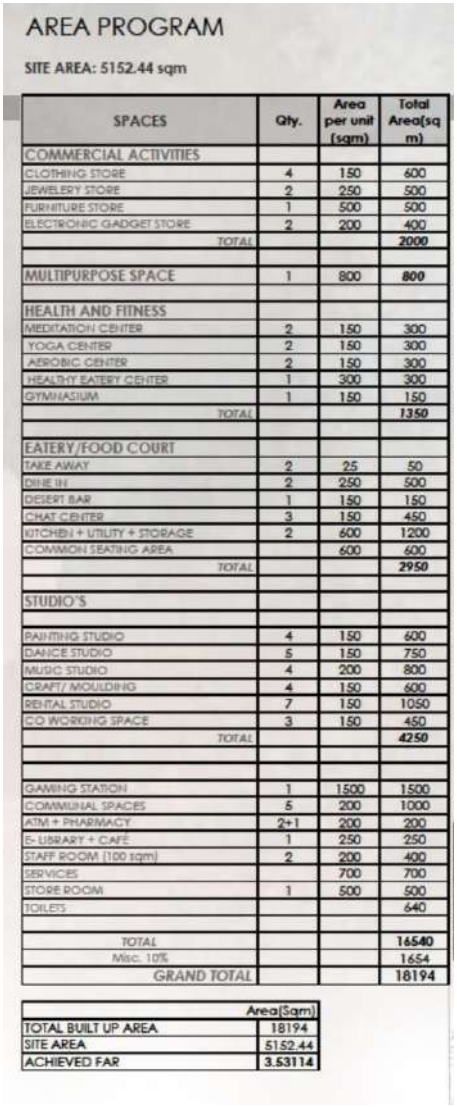
PLACEMAKING IN DENSE URBAN FABRIC

AD VIII

ARCHITECTURE DESIGN STUDIO VIII
Faculty: Prof Kalpana Manchali, Prof Bhavesh Mehta,
Ar. Sindhu Jagannath

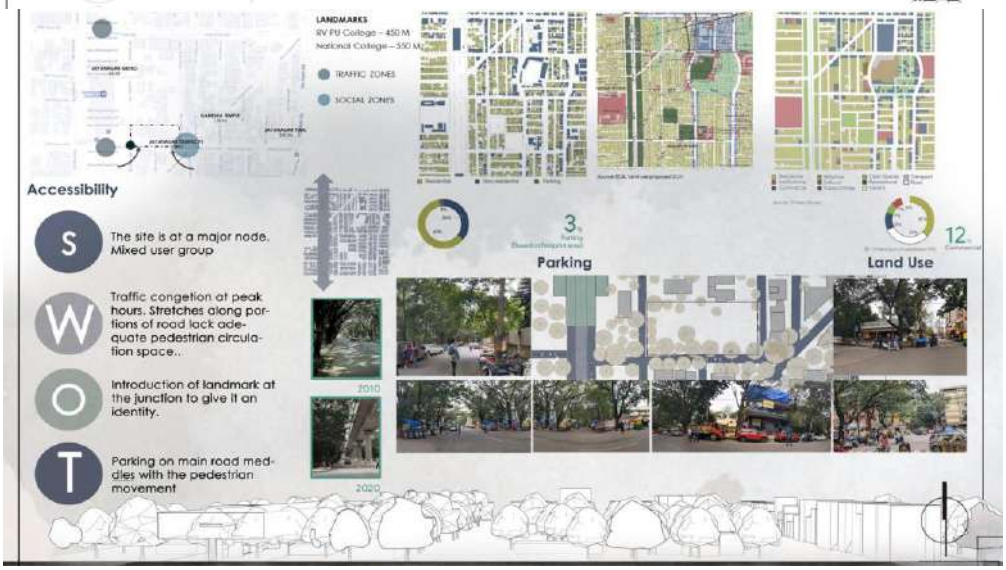
Harini B
1DC19AT030

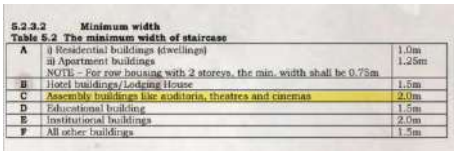




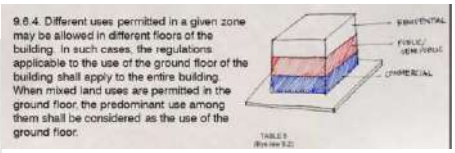
SPACES	Qty.	Area per unit (sqm)	Total Area(sq m)
COMMERCIAL ACTIVITIES			
CLOTHING STORE	4	150	600
JEWELERY STORE	2	250	500
FURNITURE STORE	1	500	500
ELECTRONIC GADGET STORE	2	200	400
TOTAL			2000
MULTIPURPOSE SPACE	1	800	800
HEALTH AND FITNESS			
MEDITATION CENTER	2	150	300
YOGA CENTER	2	150	300
AEROBIC CENTER	2	150	300
HEALTHY EATERY CENTER	1	300	300
GYMNASIUM	1	150	150
TOTAL			1350
EATERY/FOOD COURT			
TAKE AWAY	2	25	50
DINE IN	2	250	500
DESERT BAR	1	150	150
CHAT CENTER	3	150	450
KITCHEN + UTILITY + STORAGE	2	600	1200
COMMON SEATING AREA		600	600
TOTAL			2950
STUDIO'S			
PAINTING STUDIO	4	150	600
DANCE STUDIO	5	150	750
MUSIC STUDIO	4	200	800
CRAFT/ MOULDING	4	150	600
RENTAL STUDIO	7	150	1050
CO WORKING SPACE	3	150	450
TOTAL			4250
GAMING STATION	1	1500	1500
COMMUNAL SPACES	5	200	1000
ATM + PHARMACY	2+1	200	200
E- LIBRARY + CAFE	1	250	250
STAFF ROOM (100 sqm)	2	200	400
SERVICES		700	700
STORE ROOM	1	500	500
TOILETS			640
TOTAL			16540
Misc. 10%			1654
GRAND TOTAL			18194

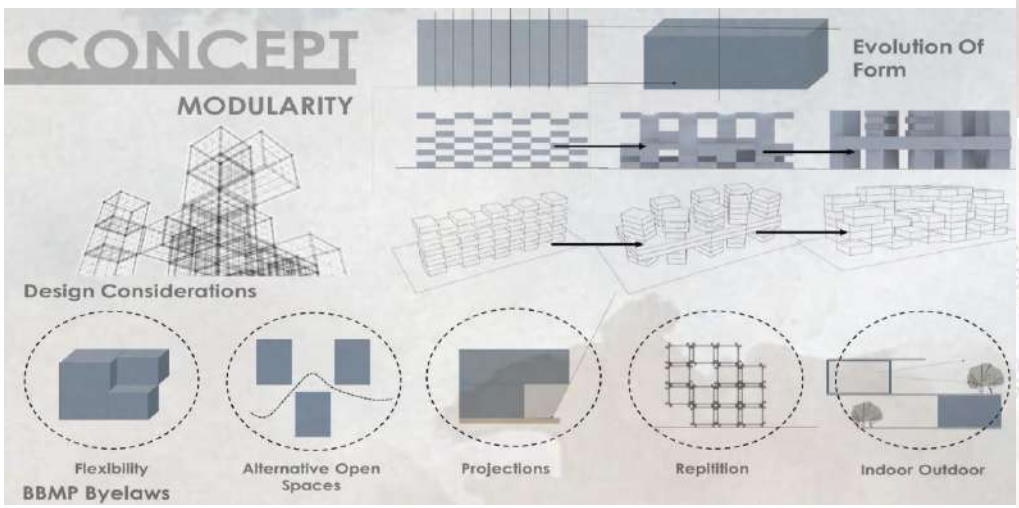
	Area(Sqm)
TOTAL BUILT UP AREA	18194
SITE AREA	5152.44
ACHIEVED FAR	3.53114

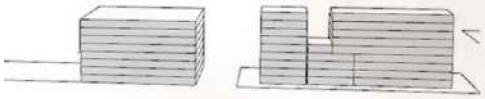




5.2.3.2 Minimum width		
Table 5.2 The minimum width of staircase		
A	i) Residential buildings (dwellings) ii) Apartment buildings NOTE – For row housing with 2 storeys, the min. width shall be 0.75m	1.0m 1.25m
B	Hotel buildings/Lodging House	1.5m
C	Assembly buildings like auditoria, theatres and cinemas	2.0m
D	Educational building	1.5m
E	Institutional buildings	2.0m
F	All other buildings	1.5m







FAR – 4 : 5152.44 X 4 = 20609.76 sqm

- The massing becomes very dense. Very less porosity – thereby reducing daylight and natural ventilation.
- In order to provide porosity, the height needs to be varired. Increase in the height leads to increase in setback area according to byelaws. Thus , it becomes very difficult to achieve FAR 4 in the given site.

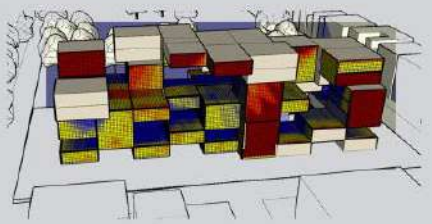
FAR – 3 : 5152.44 X 2.5 = 12881.1 sqm

- It provides an ideal condition for providing more porosity to the structure at the same time help in mutual shading and regulating the direction of wind flow with the help of staggering of masses.
- Proportion of height and setback is appropriate in this case.

FAR – 2.5 : 5152.44 X 2.5 = 12881.1 sqm

- In this case, massing with better porosity can be achieved that help in receiving daylight and also help in natural ventilation.
- But more porosity leads to more terraces and less mutual shading since the availability of mass is less.

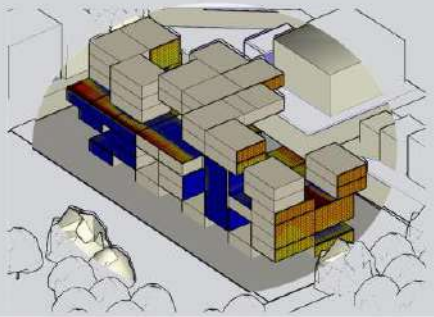
MARCH EQUINOX



These spaces can be used where the user activity is restricted to certain timings

Since this face is exposed to maximum daylight – service core can be provided in order to avoid heat gain into the space

SOUTH FACADE

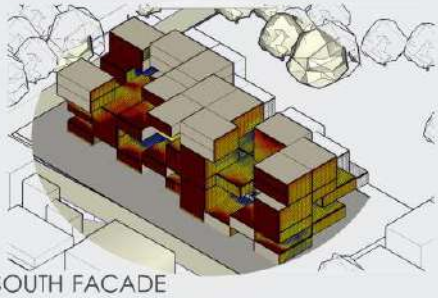


NORTH FACADE

Cut out needs to be provided in the upper blocks to allow daylight in since it's a terrace

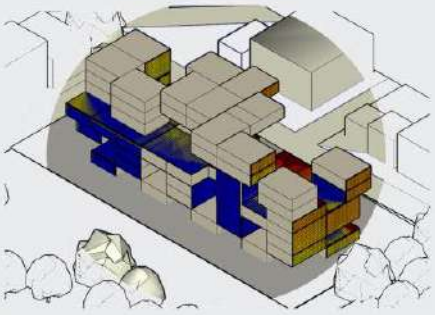
These dull lit spaces can be used for theatres or shops that require artificial lighting

DECEMBER SOLSTICE



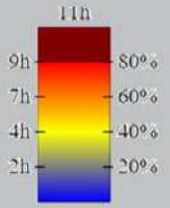
Daylight reaches into interiors during summer

SOUTH FACADE



NORTH FACADE

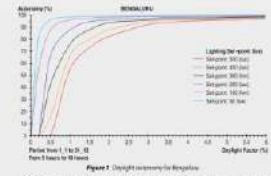
These voids needs to be covered

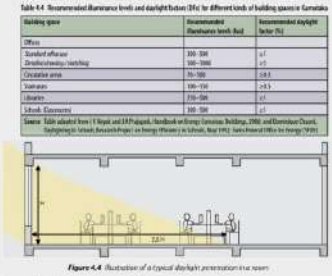


RADIATION ANALYSIS

Daylight should neither be too much nor too less; a certain optimal level should be reached as both conditions are uncomfortable for the user. Poor daylight will lead to poor visual comfort and, which, in turn, will prompt occupants to switch on electric lights. The excessive use of artificial lighting will not only lead to higher electricity consumption, but also generate additional internal heat gains, which, in turn, will require more energy to cool the building. Excessive daylight on the other hand will produce more glare.

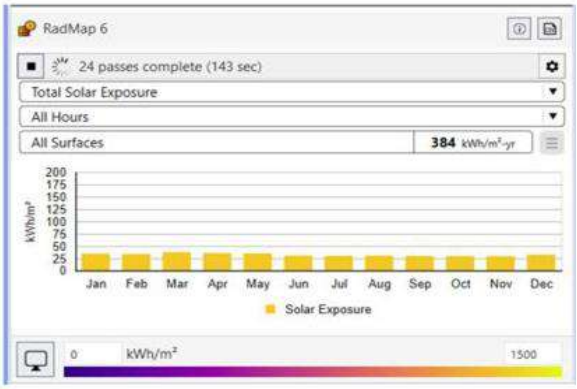
The curves give the level of autonomy of daylight, for given lighting set points, according to the daylight factors during one whole year. The percentage refers to the autonomy of daylight during the whole year, from 9 a.m. to 6 p.m.



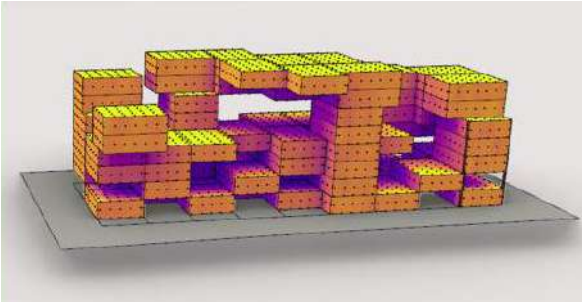


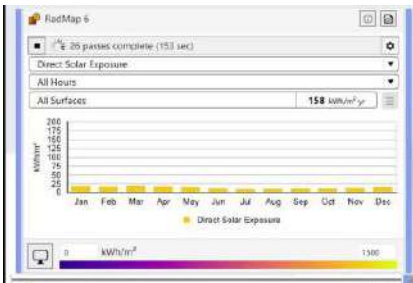
- Openings for daylight should be close to the ceiling as it ensures maximum penetration, limited heat gains, and glare control. The space depth should not generally exceed 2.5 times the floor to lintel height. Figure 4.4 illustrates this design principle.
- Usually, daylight is available up to 6 or 8 metres from the window.
- For good daylight, the visual light transmittance (VLT)6 of the glazing should be high. In most cases, the VLT of clear float glass is high. A balance has to be made in the daylight entering the building and the heat. This can be further controlled by the use of external movable shading (refer Section 4.6).
- The room finishes, i.e., ceilings, walls, etc., should be white or in light shades as light shades reflects light.

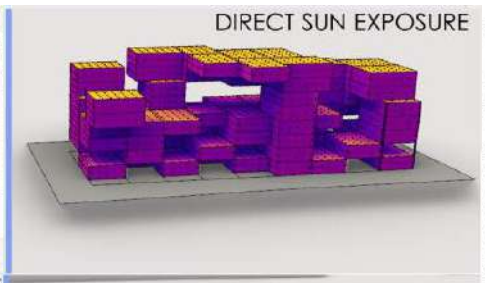
For achieving good daylight, the building should be linear-shaped (14–18 m width8) In which the longer sides are oriented towards the north and south and the windows are provided only on the north and south façades.

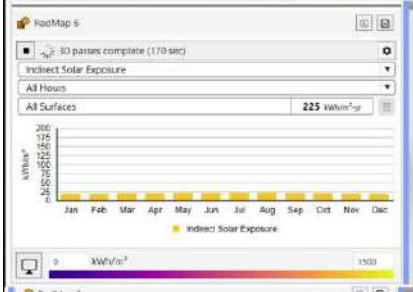


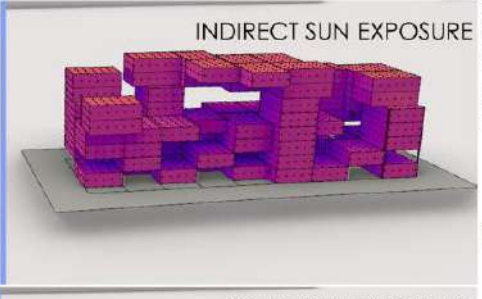
TOTAL SUN EXPOSURE , ALL HOURS

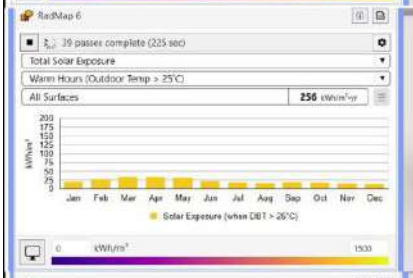


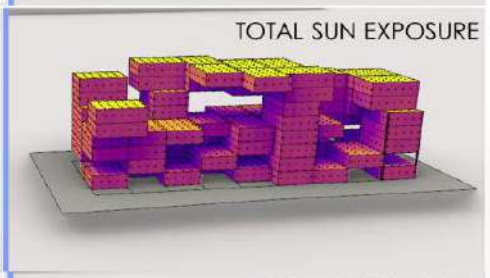


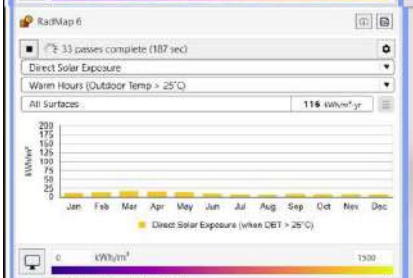


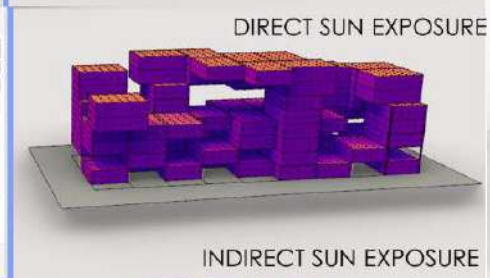


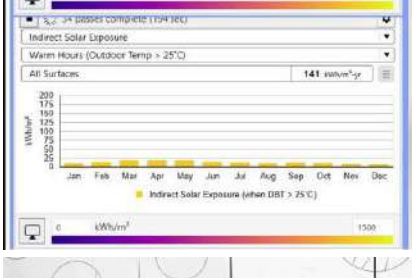


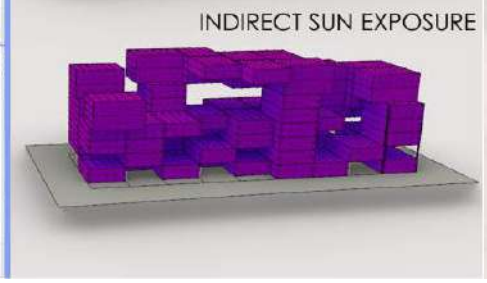








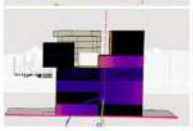




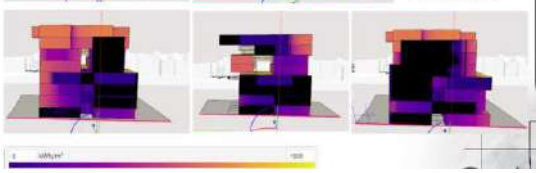
- South façade receives maximum radiation.
- Thus, South façade need to be treated with shading devices or with the help of vertical vegetation in order to avoid excess heat gain into the building.

WARM HOURS (OUTDOOR TEMP. < 25 deg. C)

SECTIONS ACROSS THE BUILDING



Interior of the massing receives very less radiation . Where heat gain is very important in winter months

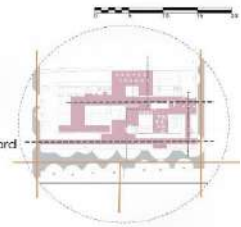


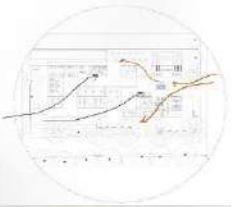
WALL ASSEMBLY

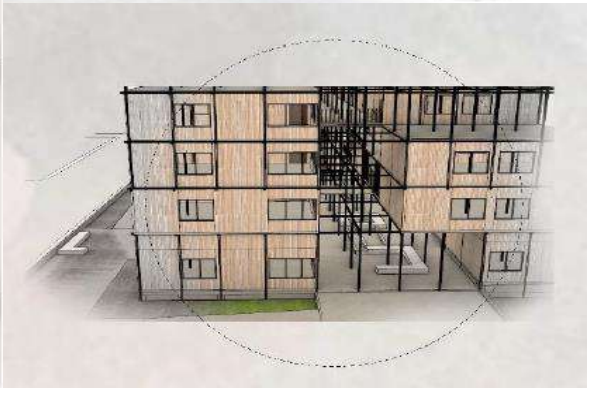
1 Cement Fiber Board 2 Cavity 3 Wall Board

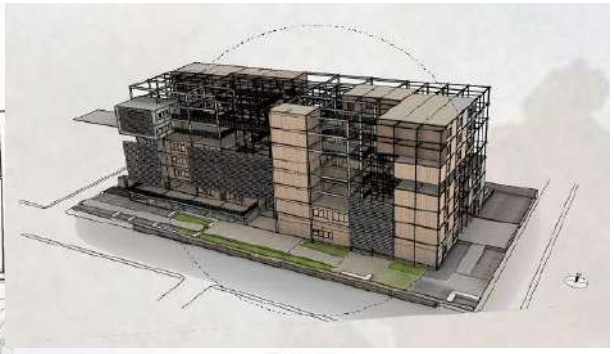
Materials	Thickness (m)	Resistivity (mK/W)	Resistance (m2k/W)
Cement Fiber Board	0.050	2.77	0.1385
Cavity	0.050	-	0.176
Wall Board	0.050	20	1
		Ro	0.076
		Ri	0.2175
			1.608

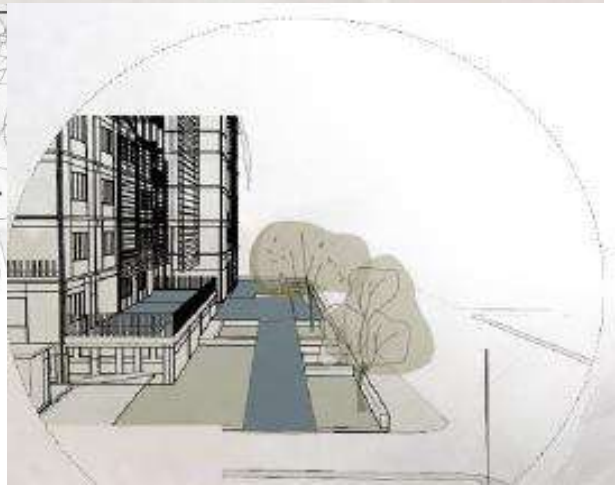
U value = 1/R = 1/1.608 = **0.62 (W/m2K)**

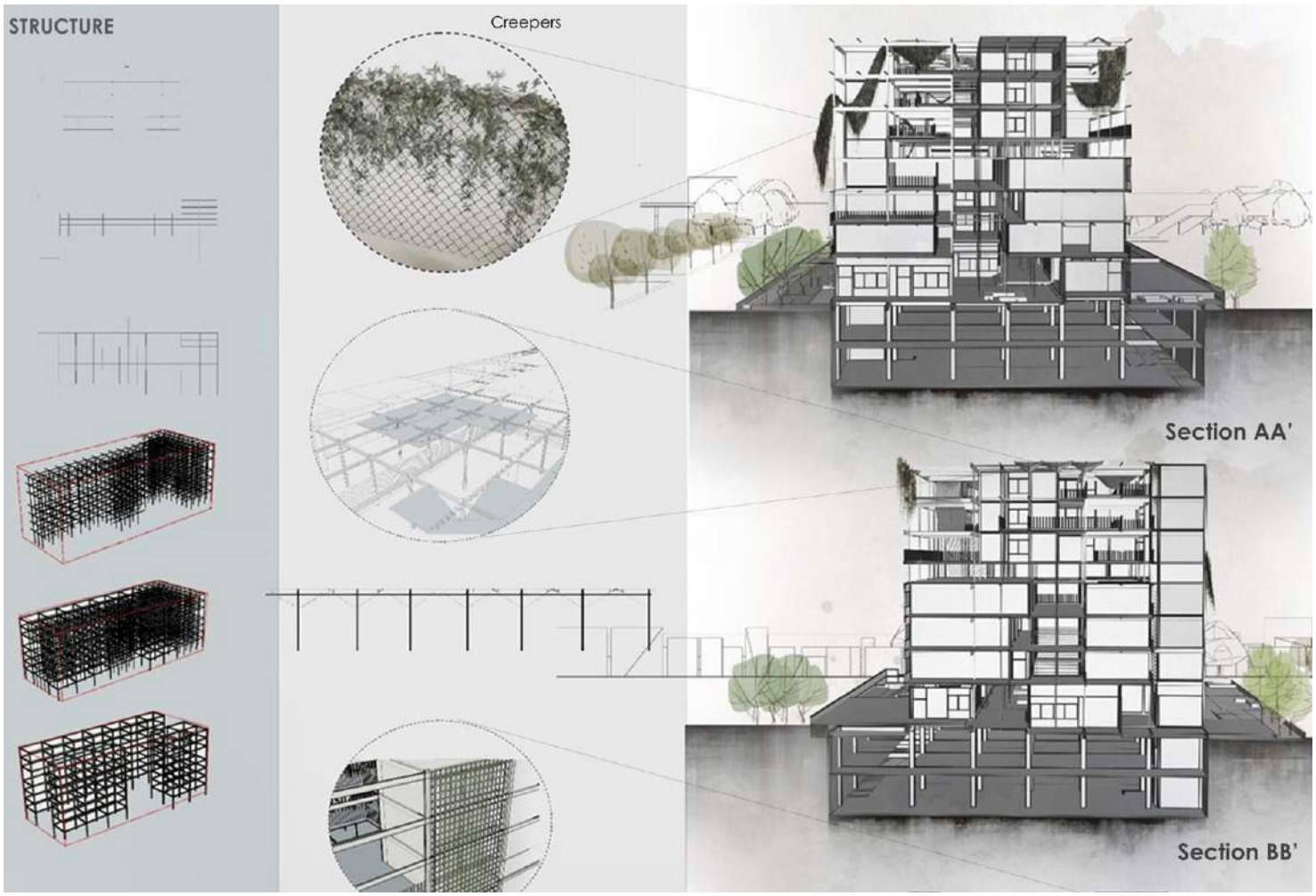


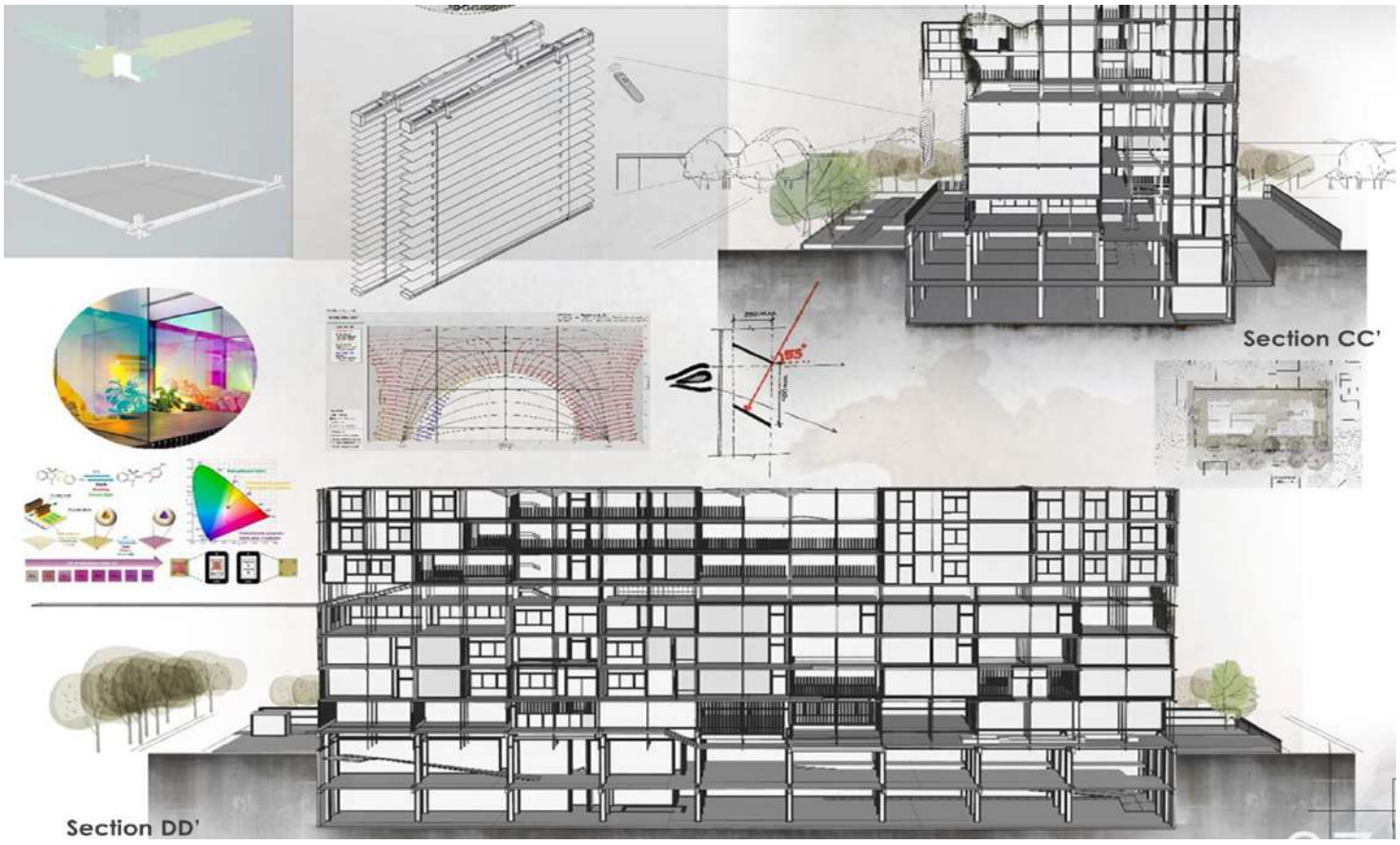









STRUCTURE
Creepers
Section AA'
Section BB'

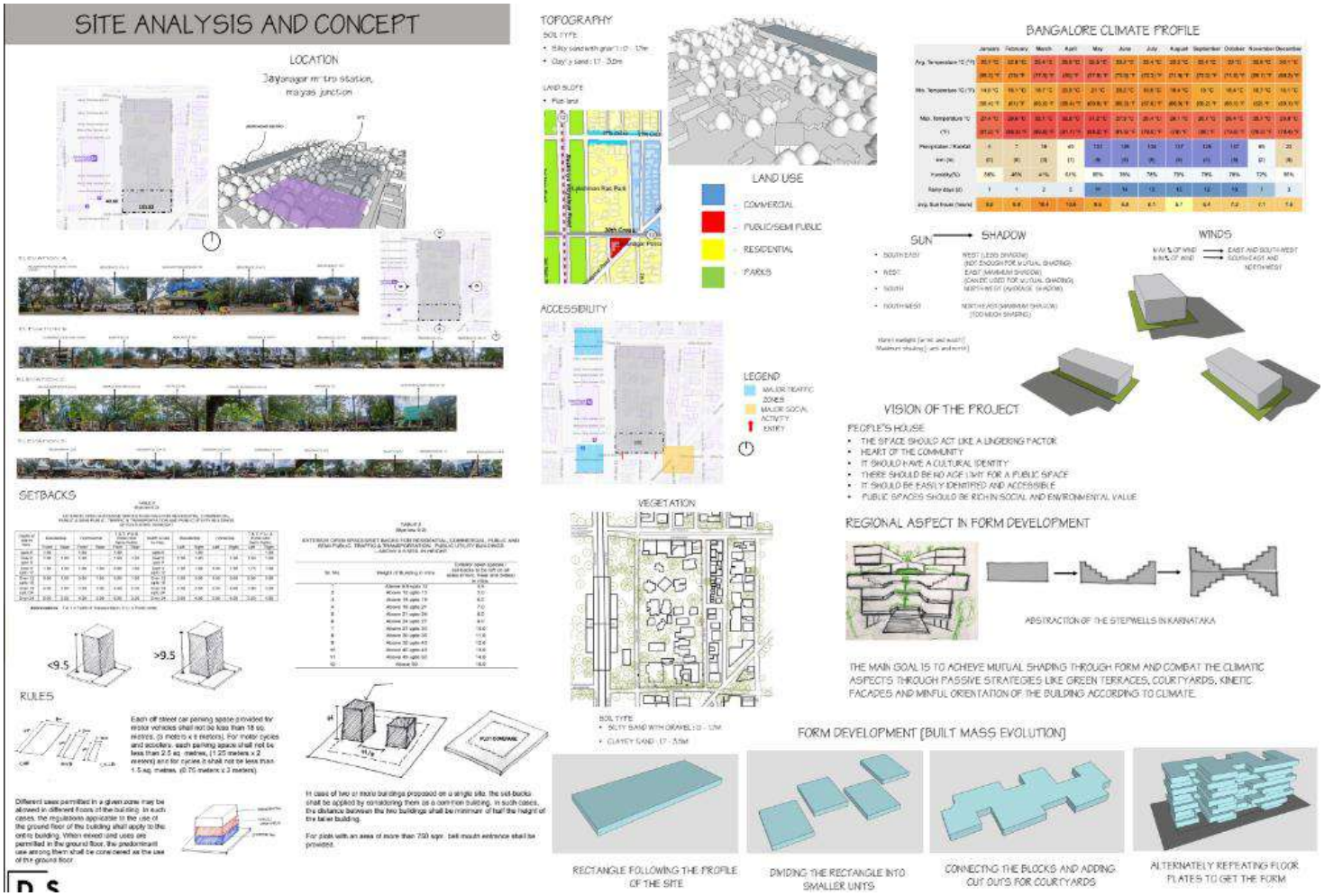

Section CC'
Section DD'

PLACEMAKING IN DENSE URBAN FABRIC

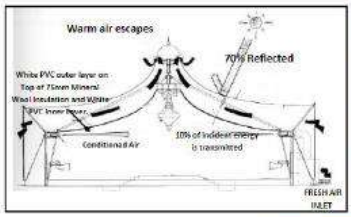
AD VIII

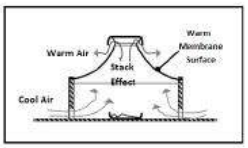
ARCHITECTURE DESIGN STUDIO VIII
Faculty: Prof Kalpana Manchali, Prof Bhavesh Mehta,
Ar. Sindhu Jagannath

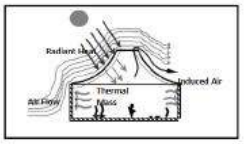
Bhoomika M Araga
1DC19AT015

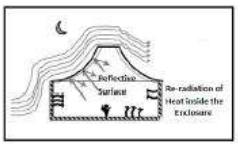


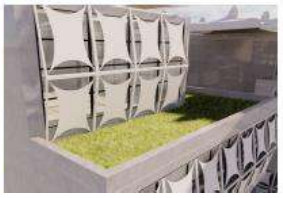
THERMAL BEHAVIOUR OF TENSILE FAÇADE AND ROOF



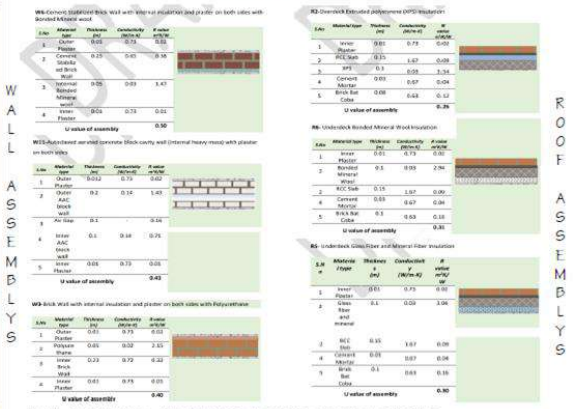








ECBC GUIDELINES

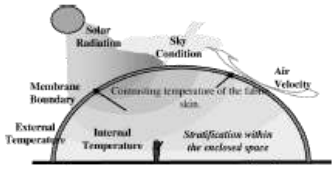


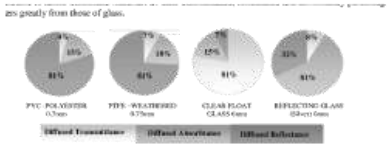
WALL ASSEMBLY – AUTOCLAVED AERATED CONCRETE BLOCKS
ROOF ASSEMBLY – OVERDECK EXTRUDED POLYSTYRENE

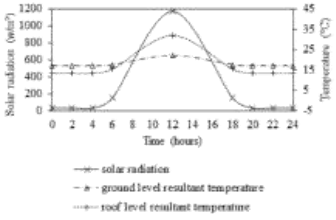
SECTION AA'

THERMAL BEHAVIOUR OF THE BUILDING

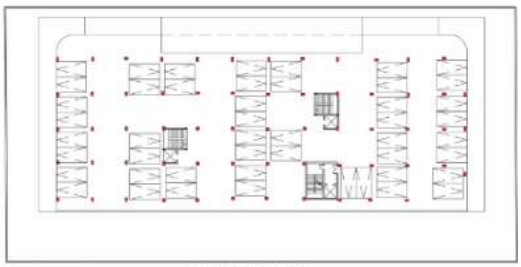
The thermal optical properties of a material distinguish its radiant behaviour within the thermal spectrum. The percentage of light transmittance in coated woven fabric typically ranges between 0 to 20%, with a transmittance of up to 50%, allowing daytime mechanical lighting to be dramatically reduced or eliminated. Glass tends to have much higher solar transmittance and lower reflectance than that of fabric membranes. This results in the tendency of fabric membrane properties to change more significantly at higher angles of solar incidence.







Tensile fabric external envelope can achieve U-Values up to 0.18 for virtually any building, overcoming the thermal limitations previously associated with tensile fabrics.



BASEMENT PLAN

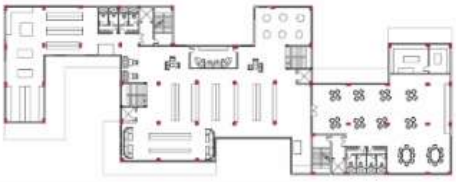
THIRD FLOOR PLAN

SIXTH FLOOR PLAN

FIRST FLOOR PLAN

FOURTH FLOOR PLAN

SEVENTH FLOOR PLAN



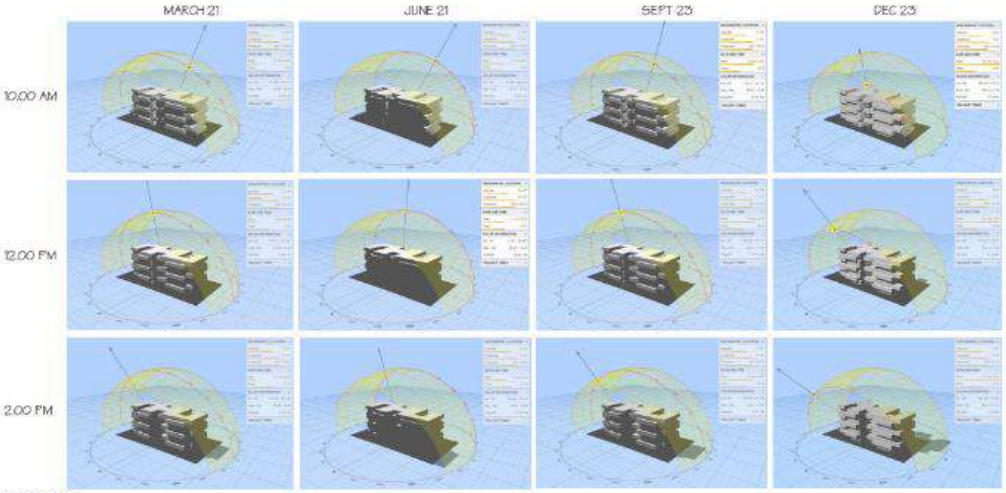
EIGTH FLOOR PLAN

SCALE - 1:200

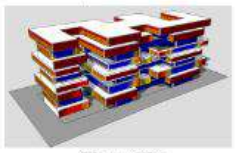
SITE - Silk board Junction - Neighbourhood

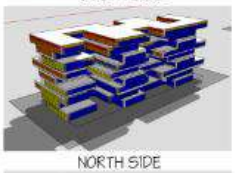
SIMULATIONS

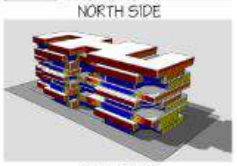
DAY LIGHTING – SHADOW MASK AND ORIENTATION

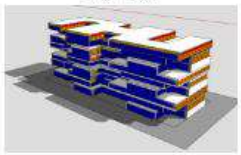


SUN HOURS (RADIATION INTENSITY)


SOUTH SIDE


NORTH SIDE


EAST SIDE

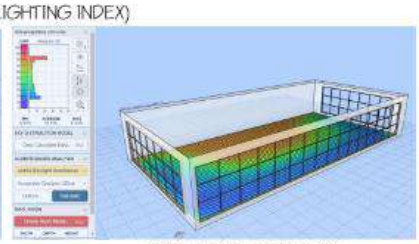

WEST SIDE

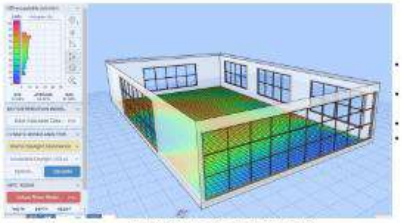
INFERENCES

- THE BUILDING ORIENTATION IS EAST – WEST.
- DURING EQINOX THE HORIZONTAL PROJECTIONS ARE RECEIVING MOST SUN LIGHT AND AS IT IS ALSO SHADING THE FLOOR PLATES BELOW IT.
- DURING SUMMER SOLSTICE THE ENTIRE SOUTH FACADE IS SHADED AND NORTH FACADE RECIEVES DIFFUSED SUNLIGHT.
- DURING THE AUTUMN EQINOX THE PROJECTIONS IN THE SOUTH FACADE SHADE THE BUILDING UNDERNEATH IT AND THE EAST FACADE IS COMPLETELY SHADED ALMOST THROUGHOUT THE DAY.
- DURING THE WINTER EQINOX THE SOUTH AND WEST FACADE RECIEVES SUNLIGHT WHICH IS NECESSIARY FOR BANGLORE IN WINTERS.
- IT IS IDEAL TO GIVE GREEN ROOFS ON THE PROJECTIONS SINCE IT CAPTURES MOST OF THE SUNLIGHT THROUGHOUT THE YEAR.
- KINETIC FACADE CAN BE GIVEN ON THE WEST FACADE AS IT RECEIVES HARSH SUNLIGHT FOR LONG HOURS.
- OFFICES AND WORKING SPACES CAN BE GIVEN ON THE NORTH AND EAST FOR COMFORT.

USEFUL DAYLIGHT ILLUMINANCE (DYNAMIC DAY LIGHTING INDEX)


WEST WING OF THE BUILDING


SOUTH WING OF THE BUILDING


EAST WING OF THE BUILDING

INFERENCES

- THE MINIMUM DAY LIGHT INDEX ACCORDING TO ECBC GUIDELINES IS 40%
- THE GLASS FAÇADE IN THE SOUTHERN FAÇADE OF THE BUILDING HELPS IN ACHIEVING THE REQUIRED UDI.
- THE MAXIMUM DAY LIGHT INDEX IS ACHIEVED MOSTLY ON THE SOUTHERN AND THE WESTERN SIDE OF THE BUILDING.

VIEWS OF THE BUILDING


SOUTH FACADE


NORTH FACADE

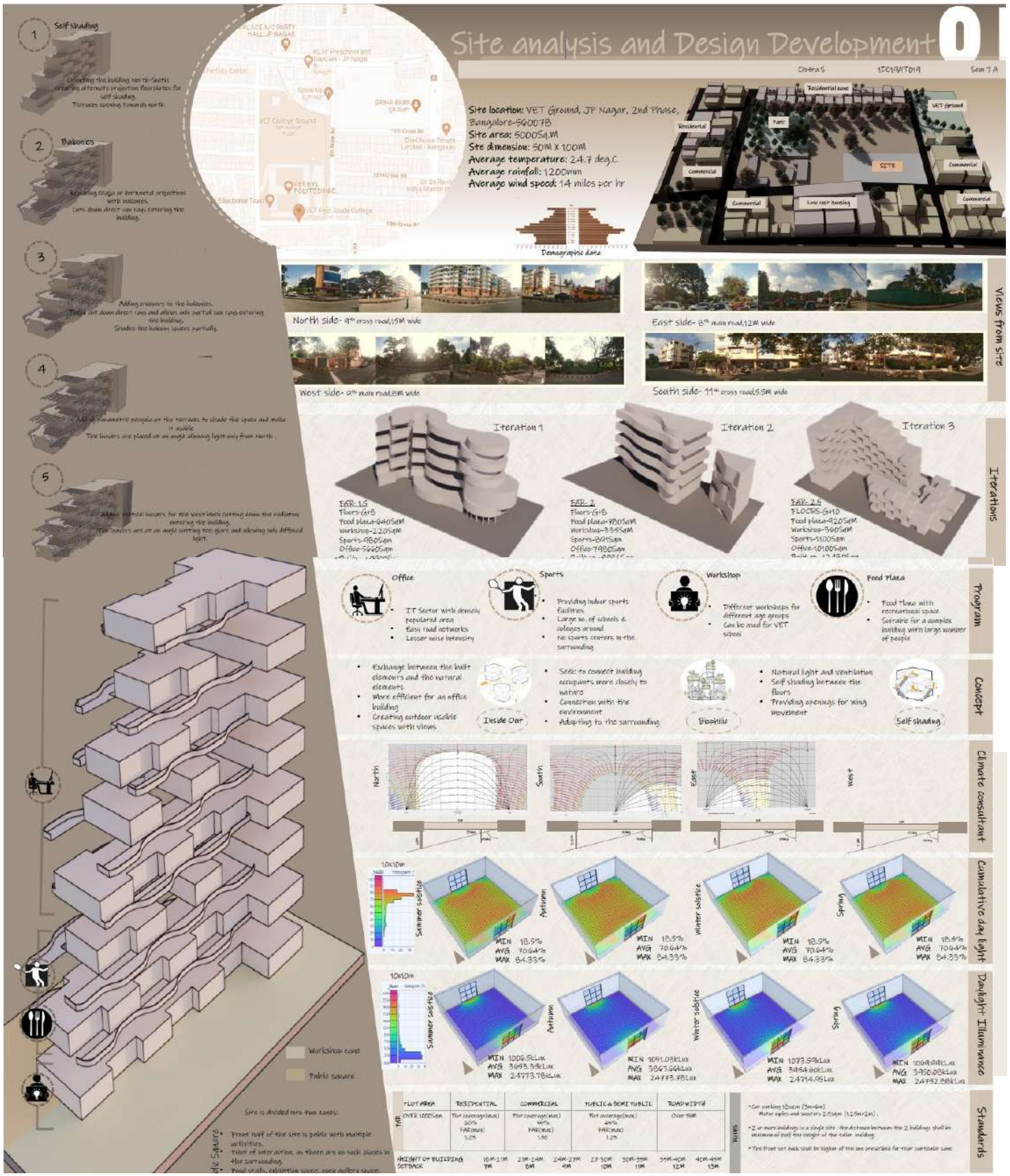

EAST FACADE


WEST FACADE

PARAMETRIC FAÇADE DESIGN

A tensile facade is a system of tensioned fabric or flexible membrane material that acts as a second skin to a building's exterior. It's an innovative and cost-effective alternative to the traditional metal mesh facade systems. Tensile facades come in custom shapes and sizes.

SITE - Silk board Junction - Neighbourhood



ARCHITECTURAL DESIGN VIII SEC C
SUBJECT CODE 18ARC81

Studio Coordinator

Ar. Arobindo Gupta

Studio Faculty

Ar. Anshu Darbari

Ar. Sudeep Bhoopalam

INTRODUCTION

In an increasingly urbanised world, architecture plays a vital role in shaping and influencing the complex urban environment (the design of cities) and creating meaningful places that enrich the lives of people. It is important to understand the many scales at which architecture can engage with the urban context, from building on the unique local character/form to enhance public spaces to urban development projects (infrastructure/transport interchanges/terminals) that impact larger geographic regions beyond the city. The Studio intent is to introduce the discipline of urban design (interdisciplinary premise, scope, techniques and best practices) and understand architecture as a part of implementing urban design projects, from gathering insights into urban fabric to understanding how communities use spaces.

OBJECTIVES:

(a) To introduce the key components, terms, actors, processes and aspects of urban environment and their inter-relationships; to explore specific themes/issues such as public spaces, physical infrastructure, socio-cultural aspects (heritage, gender, urban growth, informality, place identity, collective memory, walkability, livability, zoning regulations) and the role of architecture in shaping the urban fabric

(b) To learn basic methods/techniques to read, analyse and interpret (mapping, diagramming and theoretical premise) the dynamics of the urban environment.

(c) To create/design architecture that responds to the specific demands of the urban context; understand the processes that impact architecture and the implications of design decisions on the larger context.

Stage 2:

Each group was asked to study urban areas with a river and facing similar challenges to Ramnagara. They studied one Indian and one international city each. They had to emphasise how these urban areas faced the challenges for their layer of study. They had to arrive at conclusions and inferences at a group level.

Stage 3:

The students were asked to arrive at individual conclusions and inferences based on their understanding of the urban context.

Stage 4:

The students were asked to develop a matrix at the macro, meso and the micro level interventions needed based on their individual conclusions and inferences.

Stage 5:

The students were allotted research articles to study and arrive at conclusions and inferences for riverfront development. The students were asked to form groups of four and conduct a riverfront development for a river length of 2 km and a depth on each side of about 100 mts on each side or as available. They were instructed that:

- Demolishing existing structures for riverfront development would not be allowed.
- Minimal built intervention.

Stage 6:

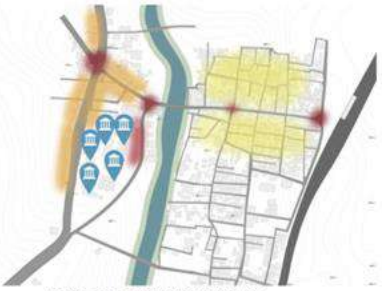
The students were asked to revisit the macro, meso and the micro level interventions proposed by them for Ramanagara town.

ARCHITECTURE DESIGN STUDIO VIII
Faculty: Ar. Arobindo Gupta, Ar. Anshu Darbari,
Ar. Sudeep Bhoopalam

Tushar Sethiya
1DC19AT095

Matrix of Macro, Meso & Micro level

	Definition	Justification for site	Architectural intervention
Macro level	Macro-level are often used in fields which describe large-scale trends and patterns that affect entire societies or global systems.	The percentage of vegetation is relatively less across the city. It lacks social and cultural interaction at public spaces. Hence, intervention at multiple spots of the city will enhance the social and ecological dimension.	Social gathering or recreational space like parks, market place, etc. for the people.
Meso level	Meso level are intermediate or middle-range level of analysis, situated between macro and micro levels. It focuses on the interactions between individuals, groups, or organizations within a particular social context.	The old BM road has high inflow and outflow of crowd. The stretch is heavily crowded on peak days and lacks facilities like public toilets, seating area, recreational space, vegetation, etc.	Providing these interventions like public toilets, seating area, recreational space, vegetation, etc. at street level will bring awareness among the people and increase social interaction.
Micro level	Micro level refers to the detailed study and analysis of a site or location at a small scale, focusing on specific features, details, elements, and characteristics of the site alone.	The site is located at the junction of old bm road, where it has high inflow and outflow of people. It has existing vegetation on site. It is easy for people to locate and interact.	A park-bazaar hybrid which includes a market place, public toilet and park. This intervention serves people to interact, socialize and spend leisure time. This is to provide social gathering and recreational space at micro level scale.



Traffic zones based on land use

Traffic zones based on economic zones

The Old BM Road, arterial road joins the bus stand and railway station on either end, making it the most value generative stretch, in terms of economy, religious movement and land use.

The Old BM Road bridge (8 m), acts like the only commercial collector path to the other bank of river Arkavathi, the hawker activity makes it insufficient for two-way movement. Lacks better connectivity to distribute the concentration

The pedestrian traffic is dependant on the commercial use of the space. Since the old BM road is a busy market place the footfall is higher than that of highway stretch.

Ramanagara city map -Macro level sites

Macro level intervention

There are multiple sites choosen around the city which are favorable for proposing social gathering or recreational spaces like **parks and markets.**

The city lacks public parks and vegetation which is a drawback both in social and ecological dimention of the city. Hence, proposing parks and markets around the city will increase chance of socio-cultural interaction and vegetation of the city.

The site locations are mostly surrounded by residential houses with major arterial roads connecting the site for ease of accessibility.

SITE -1 SITE -2 SITE -3 SITE -4

The park-bazaar hybrid

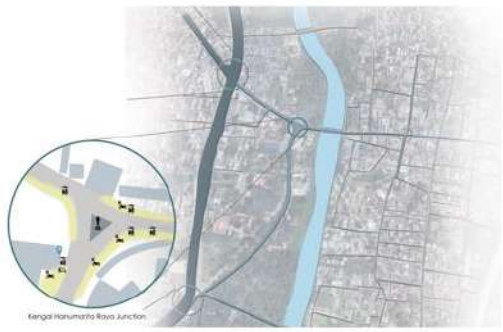
Site Area -1.05 acre (4250 sq.m)
Location- Near kengal hunumanthai junction
FAR - 1.50
Ground coverage - 647.55 sq.m
Total built-up area - 1389.2 sq.m

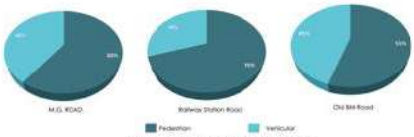
This intervention helps to revive the greenery of the city by providing park. It provides a space to spend leisure time by the side of the river.The market complex is built to relocate the enchochers from the bridge of old BM road and to relocate the temporary stores which are occupied on the pedestrian pathways which blocks the traffic and movement of the people.

The people can easily access the site as it is located on the junction of old BM road. The site is provided with minimal parking area, hence there is no blockage of traffic on the road. It provides space for social interaction and space to spend leisure time at the park.

Area program

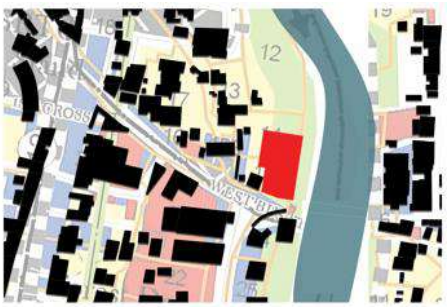
1.Market shops	-1346.65 sq.m	Retail stores/Commercial activity
2.Public toilet	-42.55 sq.m	Hawkers/Vegetable market
Total built-up	-1389.2 sq.m	Flower market





Pedestrian vs Vehicular Traffic Analysis

EXISTING STREET SECTIONS



Land-use map

Analysis For Kengal Hanumanthaiah Circle

-The Statue at the Kengal Hanumanthaiah circle acts as a Round-about and also as one of the major landmarks in Ramanagara.
-Most of the shopfronts have encroached most part of the pedestrian path.
-The Kengal Hanumanthaiah circle is one of the busiest and crowded junctions of Ramanagara town because of the Trisection of Old-BM road, Bridge and station road.
-Total ROW-Right of way for Kengal Hanumanthaiah Circle is 31.4m.
-Due to the extended shopfronts, the vendors sit on the pedestrian pathway.
-Most of the commercial buildings have basements, which may be hazardous during overflow of river/ flood.

Major Hot-spots of old BM road

A. Intersection of old highway

Since there is an intersection of old highway and the new highway it has a lot of potential for future development.

B.Flower market

Lack of pedestrian-friendly features can create physical barriers that limit social interaction and impede walkability.

C. The bridge

People use one side of it as vegetable market. The hawkers can be relocated so the bridge is less crowded to avoid traffic.

D. Commercial junction

When designing a small commercial area, it's essential to create a functional and attractive space that meets the needs of businesses.

E. MG road junction

The railway station road has buildings which are over 60-70 years, that can be restored or renovated. The buildings facing these two roads or in the closer proximity are informal spaces.

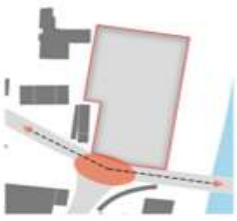
F. Railway junction

This intersection point has a lot of potential for social engagement since it is near to the community and railway station.

Meso level intervention

It is a street intervention for old BM road as it is the centre market street of ramanagara city. It was initially the old bangalore-mysore highway but now it has become peoples market street where daily household items and other shopping commodities are sold. With multiple shops on the strech there lies temples, small-scale silk factories, residential houses and complex buildings.

INFERENCE
By providing various street amenities like public toilets, pedestrian pathways, parking crea, vegetation, dustbins and street lamps, will help develop the street and enhance the social and functional aspect of the street.This will help city develop at meso level.



Traffic zone

The site is around the traffic zone as it is the circle with maximum footfall.

Existing Vegetation

Retaining the existing vegetation and building around it.

INTERACTIVE SPACES
Being a commercial, cultural and religious hub, there is an influx of pedestrian traffic which needs to be regulated at intervals. These intervals can improve the social aspect.

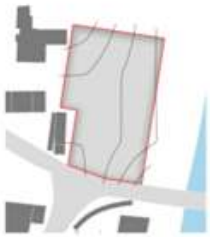
RECREATIONAL SPACES
Lot of public means a lot of activities which includes various age groups and with designated spaces with landscape to conduct activities.

HAWKERS
The hawkers can be provided with sheltered pods or can be relocated to complex.

SEATERS & PATHWAYS
As there is high influx of people public seaters are provided for resting with pedestrian pathways for easy movement.

Climate analysis

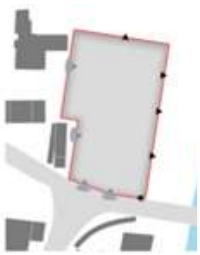
The maximum heat gain is towards the south with winter winds from the east and summer winds from south-west.



Topography

The site is almost flat with gradual slope towards west with 0.5m drop.

SITE PLAN



Noise & view analysis

Major noise is from the junction and the building adjecent to the site. Best view is towards the river.

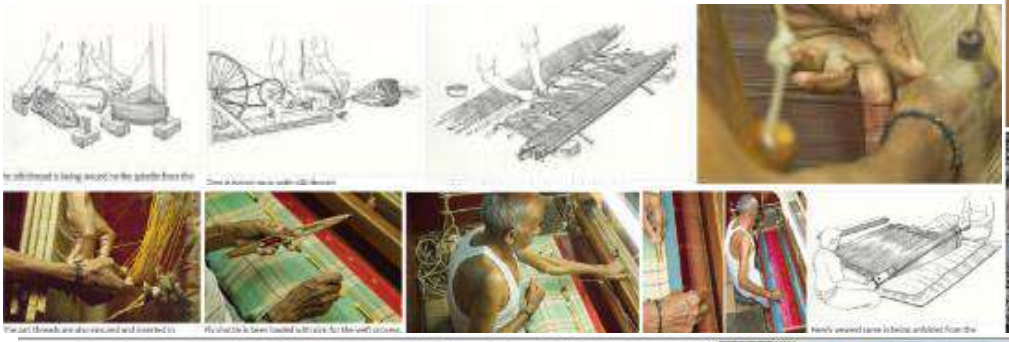
Access & Road wide

There is only one access to the site from the main juntion with the road wide of 12m

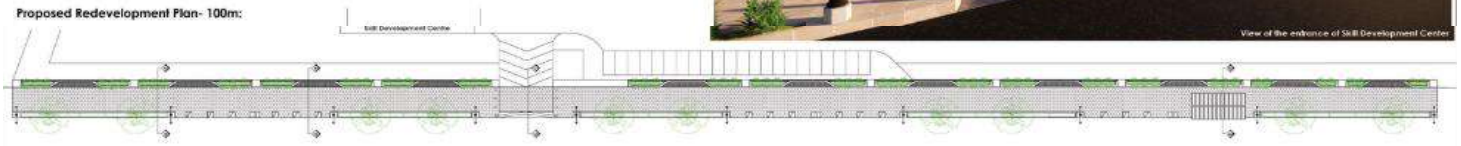
ARCHITECTURE DESIGN STUDIO VIII
Faculty: Ar. Arobindo Gupta, Ar. Anshu Darbari,
Ar. Sudeep Bhoopalam

Samyabrato Dey
1DC19AT079

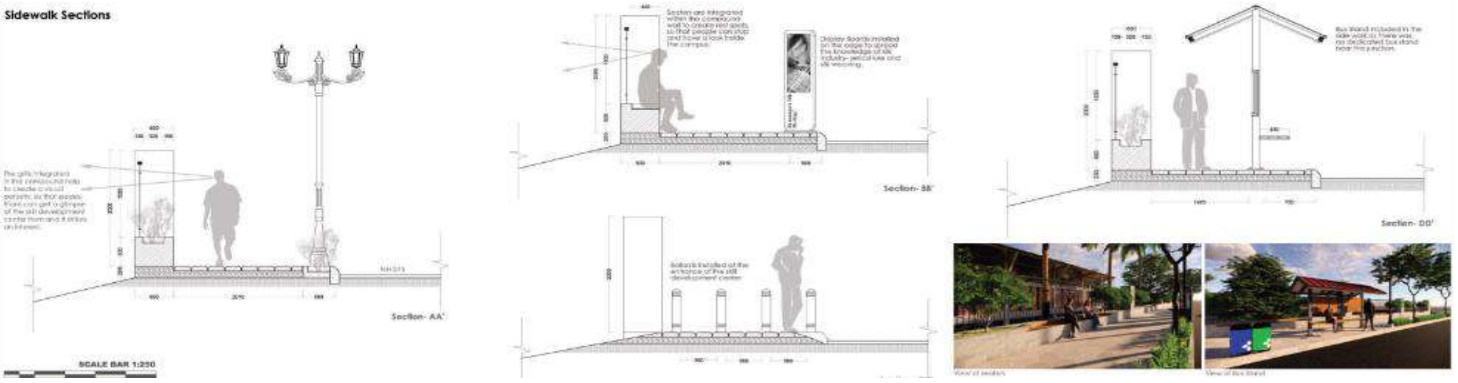
	DEFINITION	SITE	JUSTIFICATION	AREA STATEMENT
MACRO LEVEL	At a macro level the stretch chosen is on NH-275, Bangalore - Mysore highway which passes through Ramanagara. The stretch gives us a broad perspective of the town and its it connection in terms of network and access. It is one of the major roadway of Ramanagara.		NH-275 connects Bangalore to Mysore while passing through Ramanagara. It is the major spine that passes through the town and a healthy amount of traffic commutes on this road every day. 	The chosen stretch is of 910m . We can see that important buildings are situated on this stretch because it has the ease of connectivity. **Proposal:** Modules of skill development centre and heritage trail to be incorporated on the stretch of NH-275.
MESO LEVEL	At a meso level the neighbourhood study gives us the idea of the existing programmes near the site and helps us to plan the proposal of a new programme. For any new project, site context is important since it will help to define the success of the proposed project. The neighbourhood has mixed programmes which include residential, commercial and administration.		The area already has a high land value and recieves good amount of footfall since major administrative complexes are located here and also the frontage of NH-275 is lined with commercial activity and peddlars selling various items like spices, tender coconut, sugarcane juice, etc. 	The chosen area (red circle) is of 95 acres and the radius is of 350m. At a neighbourhood level, more awareness about the rich silk heritage of the town needs to be spread among the people. **Proposal- A heritage trail.**
MICRO LEVEL	At a micro level, the site is nestled at the junction of NH-275 and Old BM road. The parcel of land helps us to understand the heirarchy of the immediate context while keeping in mind the the existence of an important node and the convergence of two major roads.		The chosen site is currently a barren land with one side adjacent to the administrative complex and the other being close to the junction . It has the potential to grow as a major spot of learning and commerce since the context has an ambiance of discipline and decorum. 	The chosen site is of 2 acres. **Proposal- Skill Development Centre** Ramanagara is rich in silk production but the silk harvesters are not skilled enough to weave silk products. Thus a centre where they can learn, train, attend workshops, sell and exhibit work is proposed. 



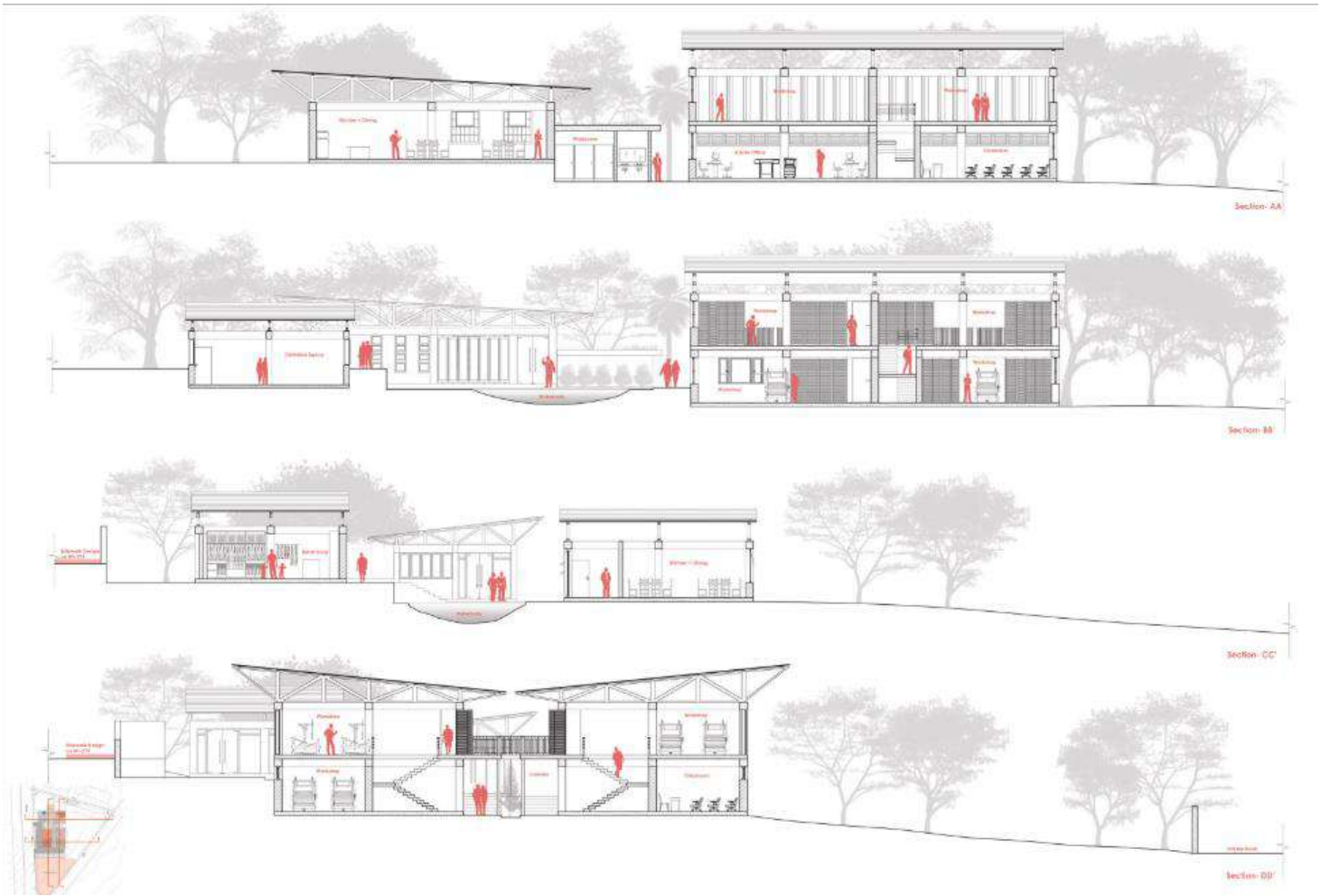
Proposed Redevelopment Plan- 100m:



Sidewalk Sections




Zoning
Facts
Massing
Exhibit
Canteen
Retail
Workshops
Admin
Classroom
Plot Area- 2 acre-s 4094 mt. sq
Built up Area- 1095 mt. sq
F.A.R- 0.14
View of waterbody in courtyard
Towards Bangalore
Mini Vidhansouda
Court Complex
NH- 275
Old BM Road
Future Development
Orchards
Towards Mysore
Legend:
1. Retail Store
2. Storage Space
3. Exhibition Space
4. Kitchen Storage
5. Kitchen
6. Dining Area
7. Artificial waterbody
8. Washrooms
9. Workshop (Handlooms)
10. Workshop (Powerlooms)
11. Classrooms
12. Admin Area
13. 2-wheeler Parking (20)
14. 4-wheeler Parking (10)
15. Mini-truck Parking (5)
16. Secondary Entry/ Exit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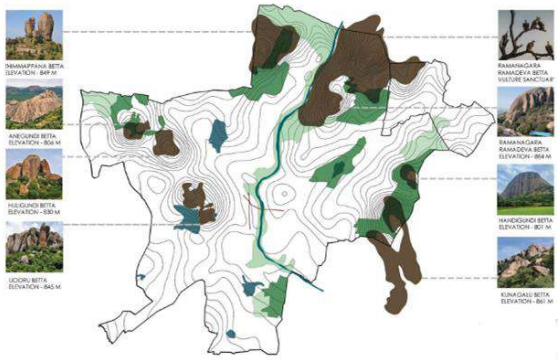
Section- DD

ARCHITECTURE DESIGN STUDIO VIII
Faculty: Ar. Arobindo Gupta, Ar. Anshu Darbari,
Ar. Sudeep Bhoopalam

Vindhya A H
1DC19AT100

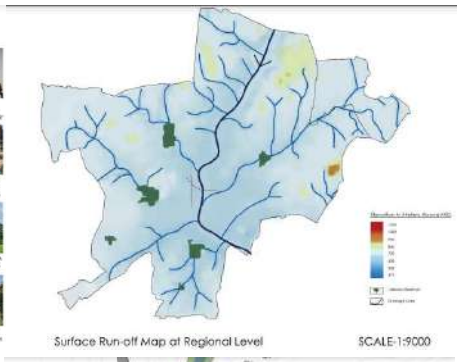
ARKAVATHI RIVER FLOW



Hills and Hillocks along with Vegetation Cover at Regional Level SCALE-1:9000

From the iconic Ramadevara Betta to the rolling slopes of Shivaramagiri, these hills create a backdrop for the region's charm. Ramanagara's hills, not only offer panoramic vistas but also a sanctuary for diverse flora and fauna.

Inference-
Incorporate green spaces,trees and landscaping elements to enhance the aesthetics and create a pleasant environment. Development of public spaces should happen in close association with environmental restoration.Create open public space that allows for flexibility in program, porosity, density of users, and adaptability to different seasons.



Surface Run-off Map at Regional Level SCALE-1:9000

Climate of Ramanagara

Fig.1 Dump yard along River Fig. 2 Water Condition Fig. 3 Water Condition

Encourage locals to clean up the solid/plastic waste and engaging locals in landscape manipulations that act as bio-swales,bio-filtration.

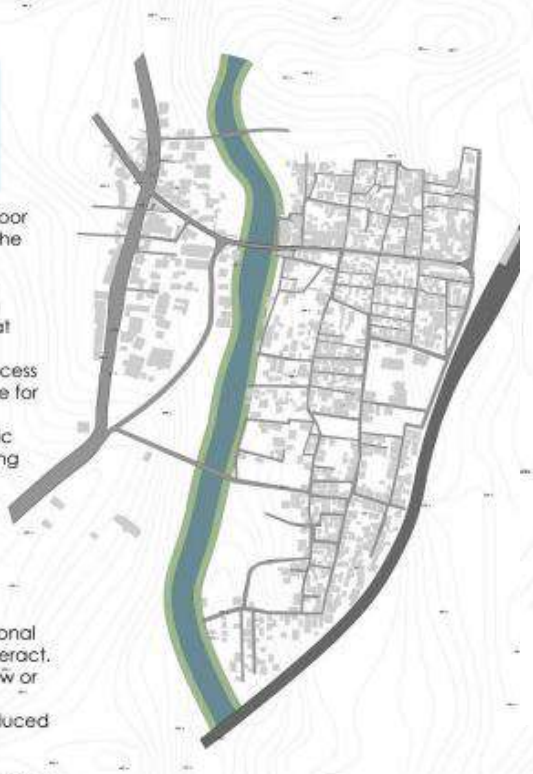
Micro transactions to macro change-small changes in rethinking necessities and enhancing micro economics can lead to big impacts like clean water, waste reduction and revitalized ecologies of the city.

Transforming the riverfront to create a recreational and cultural platform serving the city with new happiness and a place to get together.

The hills and hillocks and the Arakavathi river are the major natural features that help define the characteristics of Ramanagara. The city is surrounded by hills on all sides, this can be used to advantage as it can provide great vantage points.
The hills and hillocks provide a mesmerising view from multiple points throughout the city and the river has the potential for being a public gathering hub, if cleaned properly and provided with basic amenities.

The existing condition of the river is extremely poor and un-useable. Since it is a major element of the city, it's revival is self-justified.
The phase one of it's revival can include water treatment methods that start from the pollution source, i.e, the industries and drainage lines that are directioned towards the river.
Phase two can include providing views and access to the Arakavathi river, making it a public space for the people of Ramanagara.
Phase three can focus on making it into a public space that attracts tourists and help in increasing the economy of the place, by incorporating multiple functions along the riverfront.

Ramanagara lacks public spaces and recreational spaces where communities can gather and interact.
The neighboorhoods are highly dense with a few or no open spaces within them.
The city could have multiple green zones introduced to help improve the micro climate.
The pedestrian networks can be improved by providing shaded pathways, this would help with the walkability factor.



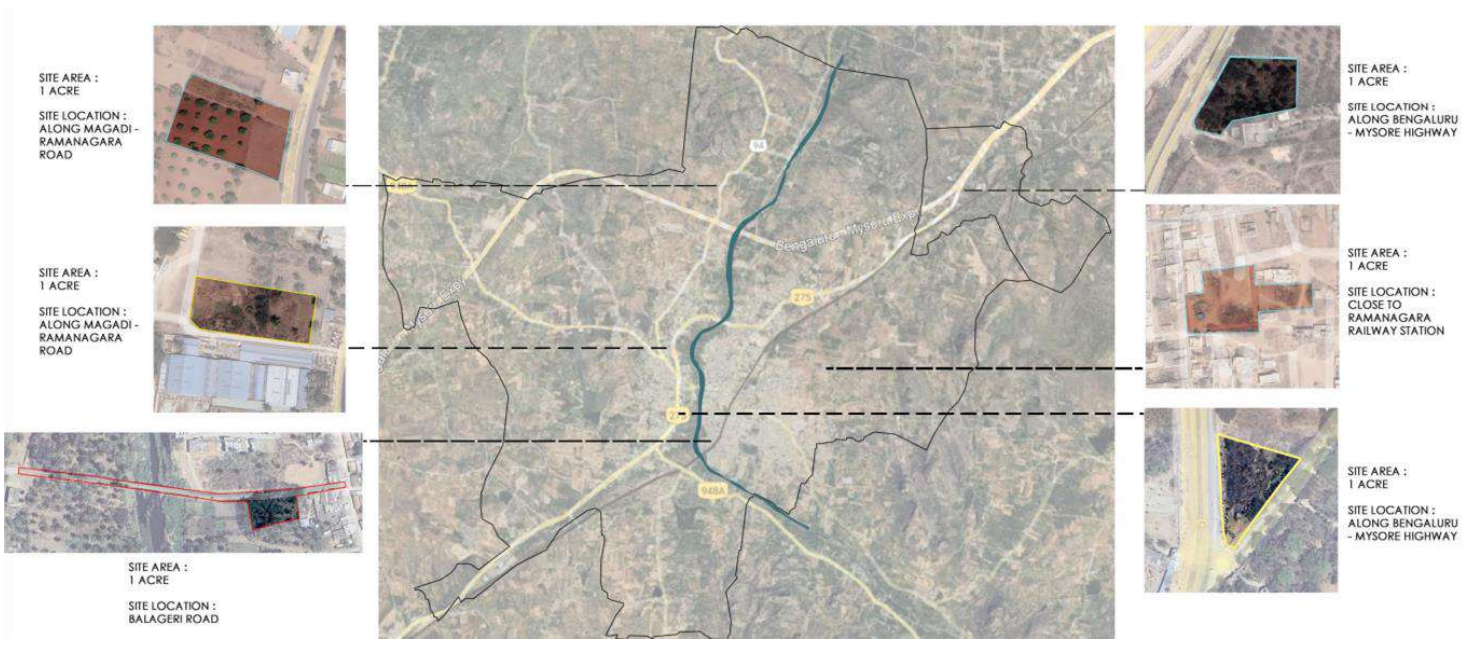
Vantage Points at Meso Level

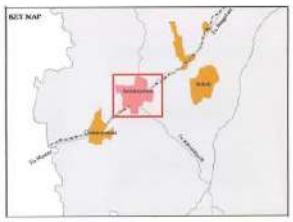
	DEFINITION	SITE SELECTED	JUSTIFICATION
MACRO	Interventions at macro level aim to provide multiple public gathering spaces throughout the city. This can be done by providing hospitality based spaces that can include restaurants, recreational spaces, etc. Macro level interventions also impove the overall connectivity, both vehicular and pedestrian. This in return helps boost the economy by attracting tourists.		Providing multiple recreational spaces and green spaces throughout the city can help in increasing the micro-climate of the region. The neighborhoods being dense have a few or no open spaces for the citizens . This would be a good use of urban vacant spaces. The program proposed at the vacant sites can focus on : 1. Restaurants 2. Recreational spaces 3. Tourism
MESO	Interventions at meso level aim to improve the different neighborhods within the region. This can be done by identifying dense neighborhoods and providing them a public space for recreation. The street level intervention can be done at major roads that require pedestrian connectivity along with vehicular networks. These interventions help in controlling the micro-climate as they increase the green cover.		Providing multiple recreational spaces and green spaces help in controlling the micro-climate and provide a public space within a neighborhod. The Balageri Road requires an intervention as it connects to the site from the previous project that is in a residential neighborhood that could use a green public place. The site could use an intervention that also connects it to the riverfront development.
MICRO	Interventions at micro level aim to provide for the localites as well as the tourists. The interventions can include: 1. Restaurants - Refreshments Fast Food Fine Dining 2. Recreation - Community parks Community gardens 3. Tourism - Lodges Information Centres		The proposal at this site of 1 acre would be a combination of a fast food restaurant with a fine dining area. Ramanagara has many small scale restaurants that only localites would go to. for a tourist, they'll have to travel to Channapatna for a good restaurant. providing a restaurant at this site is also beneficial for the public coming to the admistrative zone. it would also be helpful for the officials in the administrative zone.

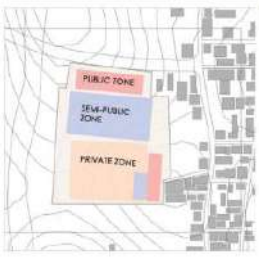
General Index

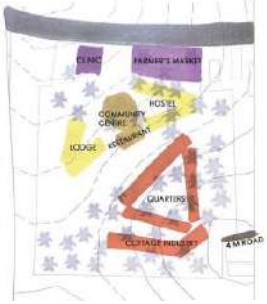
Regional Map Scale- 1:11000

Meso Scale Map Scale- 1:7000









HOSPITALITY

RESTAURANTS	RECREATION	TOURISM
REFRESHMENTS	COMMUNITY PARKS	LODGES
FAST FOOD	COMMUNITY GARDENS	RIVERFRONT
FINE DINING	RIVER FRONT DEVELOPMENT	INFORMATION CENTRE

Existing condition of Arkavathi River

Fig.1 Dump yard along River

Encourage locals to clean up the solid/plastic waste and engaging locals in landscape manipulations that act as bio-swales, bio-filtration.

Fig. 2 Water Condition

Micro transactions to macro change-small changes in rethinking externalities and enhancing micro economics can lead to big impacts like clean water, waste reduction and revitalized ecologies of the city.

Fig. 3 Water Condition

Transforming the riverfront to create a recreational and cultural platform serving the city with new happiness and a place to get together.

AREA PROGRAM

Site area – 1 acre = 4046.86 m2

Road width – 40m

Allowable FAR – 2 (Semi-public utility)

Permissible Built-up – Site area x FAR = 4046.86 x 2 = 8093.72 m2

Allowable Parking – 25 % of site area = 1012 m2

Allowable Ground Coverage – 15% of site area = 607 m2

No. of floors – G+2 = 4+4+5 = 13 m high

Setback – 5 m on all sides

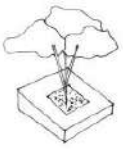
Restaurant Area Program

1. Kitchen – 250 m2
2. Storage – 80 m2
3. Dining – 800 m2
4. Restrooms – 160 m2
5. Circulation (built-15%) – 200 m2
6. Park / Open Spaces – 1565 m2 (2435-870)
7. Circulation (unbuilt -10%) – 870 m2
8. Parking (with circulation)– 1012 m2

Ground floor – 500 m2
First floor – 650 m2
Second floor – 400 m2
TOTAL built with circulation = 1550 m2
TOTAL unbuilt with circulation = 3447 m2

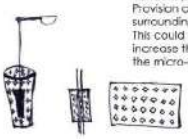
STREET SECTION

The streets of Ramanagara lack pedestrian pathways and vegetation.
Provision of pathways wide enough and with proper lighting enables people to use it efficiently during the day and in the evening.
Providing shaded walkways help in controlling the micro-climate of the immediate surroundings, and encourages people to use them.
Trees must be planted at frequent intervals. Providing a Katte around the tree, enables people to rest and carry on. They act like benches, but traditional, is economically cheaper, and environment friendly.
The streets of Ramanagara will slowly start becoming lively once these elements are incorporated and will have multiple activities which include having street vendors, play areas, etc., can take place.
Provision of dustbins at frequent intervals helps keep the surroundings clean.
This could create more public spaces within the city and increase the overall green cover, resulting in controlling the micro-climate.



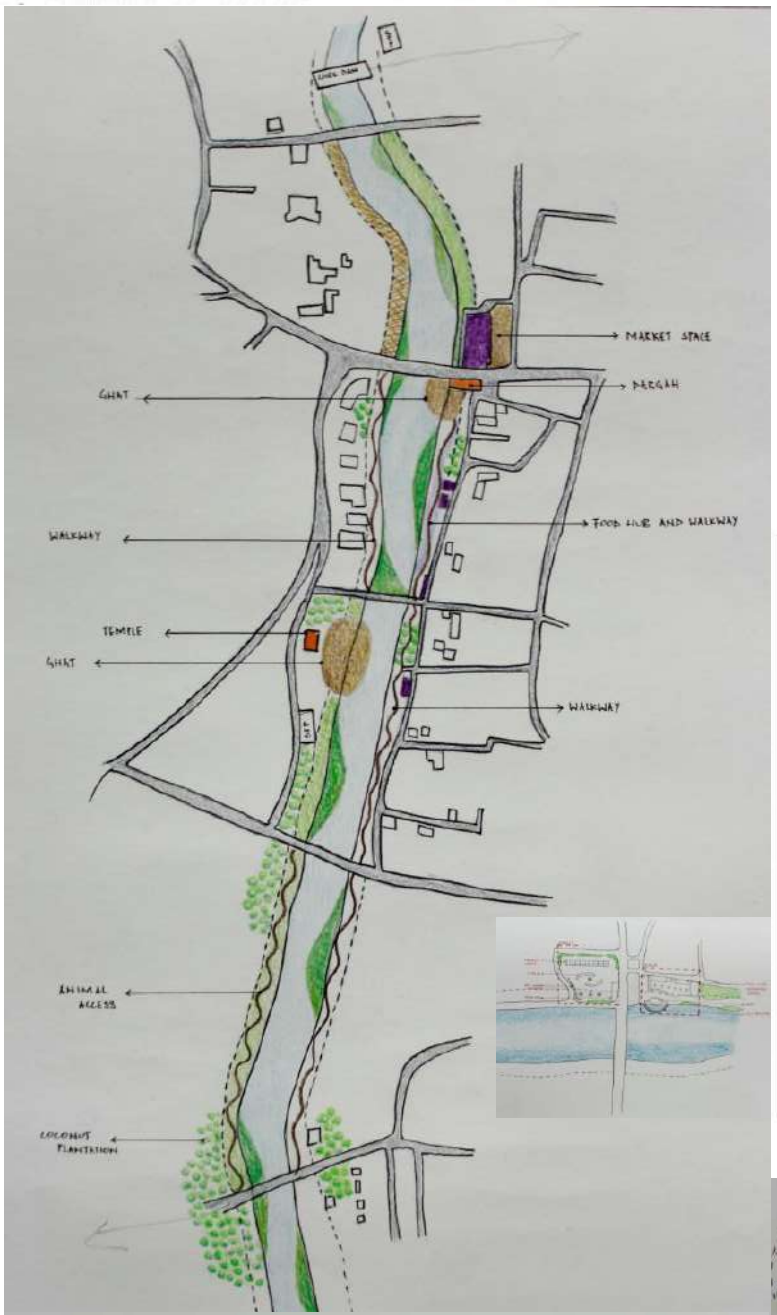
KATTE FOR PEDESTRIANS TO REST

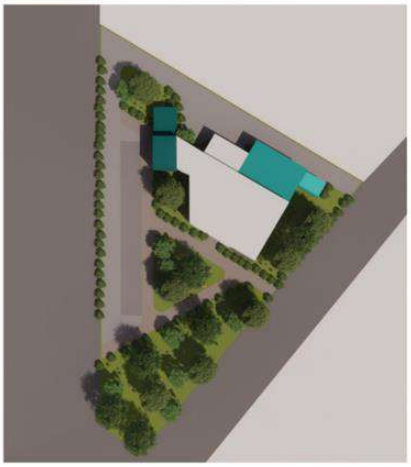
SHADED WALKWAYS WITH PERGOLA



LIGHTS ON WALKWAYS THAT SERVE BOTH PEDESTRIANS AND VEHICLES. LIGHT AROUND POLE WITH PERFORATED COVERING

DUSTBINS ON WALKWAYS TO KEEP THE SURROUNDINGS CLEAN

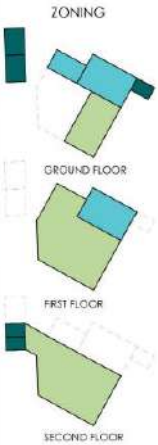


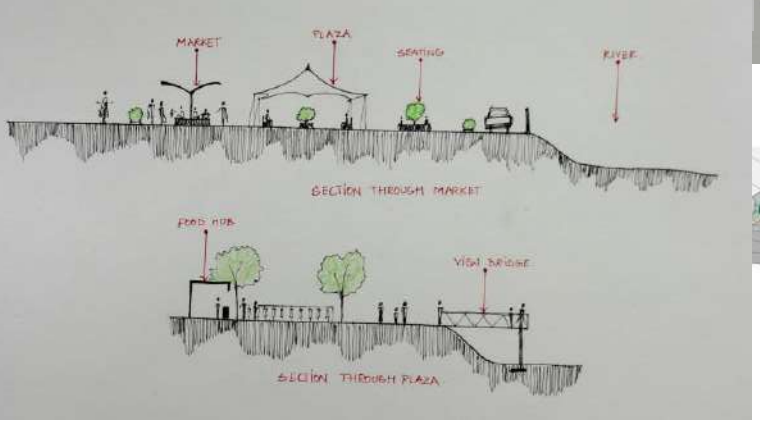


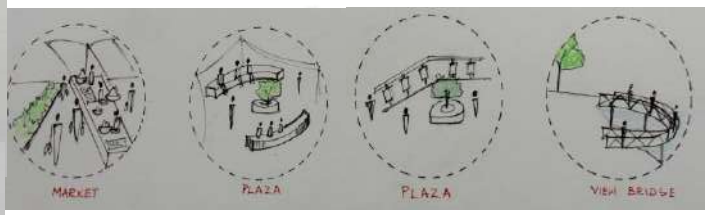
ROOF PLAN

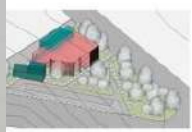
VIEWS

SITE PLAN
SCALE - 1:500









SECTION AA'
SCALE - 1:500

SECTION BB'
SCALE - 1:500