ABHAY P. SINGH

ARCHITECTURAL PORTFOLIO

ABHAY P. SINGH

PERSONAL DETAILS

COLLEGE : APPASAHEB BIRNALE CLG. OF ARCHITECTURE

DOB : 22/05/1998

LANGUAGES : ENGLISH
HINDI
MARATHI.

CONTACT

7875485623

abhaysingh22051998@gmailcom

PARTICIPATIONS

PARTICIPATED IN ZONAL NASA FOR LIK TROPHY

CR OF THE CLASS FOR 2 YEARS

INTERESTS

BADMINTON ,SKETCHING , POETRIES , TRAVELLING , CHESS .

SEMINARS

SEMINARS OF AR.SUNIL PATIL, AR.PRASHANT DESHMUKH, AR.PRAMOD CHOUGULE, AR. DHANANJAY SHINDE, AR. PRAVIN MALI,ETC.

WORKSHOPS

ARCH MAKING , MODEL MAKING, FERROCEMENT, GANPATI MAKING,

MY LIFE PHILOSOPHY

PERMANENCE, PERSEVERANCE AND PERSISTANCE INSPITE OF ALL OBSTACLES, DISCOURAGEMENTS AND IMPOSSIBILITIES: IT IS THIS , THAT IN ALL THINGS DISTINGUISHES THE STRONG SOUL FROM THE WEAK.

ACADEMIC RECORD

- PURSUING B.ARCH. FROM A.B.C.A., SANGLI
- H.S.C FROM S.D.S.M. ,PALGHAR
- S.S.C. FROM TWINKLE STAR ENGLISH HIGH SCHOOL, PALGHAR

OBJECTIVE

- SEEKING OPPORTUNITIES THAT WOULD CHALLENGE ME TO UTILIZE AND IMPROVE MY KNOWLEDGE AND SKILLS IN PLANNING,DESIGNING AND VARIOUS SOFTWARES,

DESIGN STUDIO PROJECTS

FIFTH YEAR (2020-2021)

- THESIS ON BUILDING RESEARCH CENTRE, AT SURAT

FOURTH YEAR (2019-2020)

- SPORTS COMPLEX AT MIRAJ ,SANGLI
- MULTISPECIALITY HOSPITAL AT KUPWAD, SANGLI
- NEIGHBOURHOOD DESIGN AT BORWAD, SANGLI
- CLUSTER PLANNING , SANGLI

SECOND YEAR (2017-2018)

- PRIMARY HEALTH CARE (PHC), KUPWAD SANGLI.
- DOCTOR'S BUNGALOW,SANGLI

EXPERIENCE

- INTERNSHIP DURING PROFESSIONALPRACTICE OF 6 MONTHS AT AMBRE GANGUTULLA & ASSOCIATES, PALGHAR (WEST)

THIRD YEAR (2018-2019)

- JUNIOR COLLEGE AT CHIPRI,KOLHAPUR
- HOSTEL FOR ARCHITECTURE COLLEGE , SANGLI
- DOCTOR'S BUNGLOW INTERIOR DESIGN ,SANGLI
- LANDSCAPE DESIGN OF DOCTOR'S BUNGALOW , SANGLI

FIRST YEAR (2016-2017)

- KINDERGARTEN SCHOOL,SANGLI
- PRODUCT DESIN
- ANTHROPOMETRY

PERSONAL SKILLS

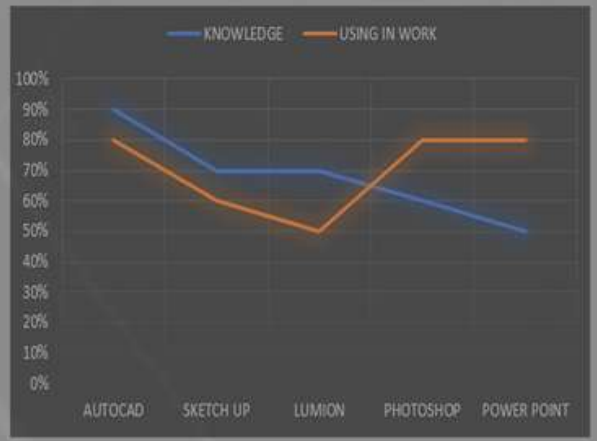
COMMUNICATION ●●●●●●●●●○○

TEAMWORK ●●●●●●●●●○

LEADERSHIP ●●●●●●●●●○

TIMING ●●●●●●●●○○

SOFTWARE SKILLS



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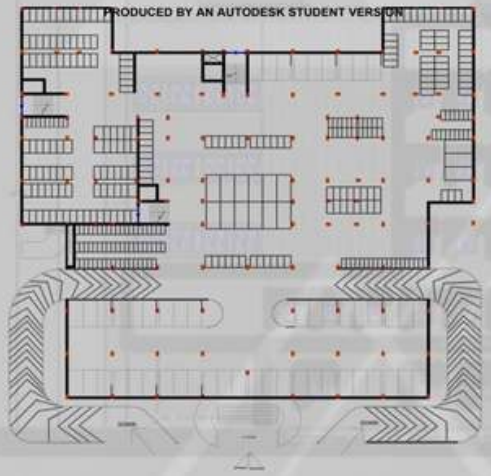
ARCHITECTURAL
DESIGN

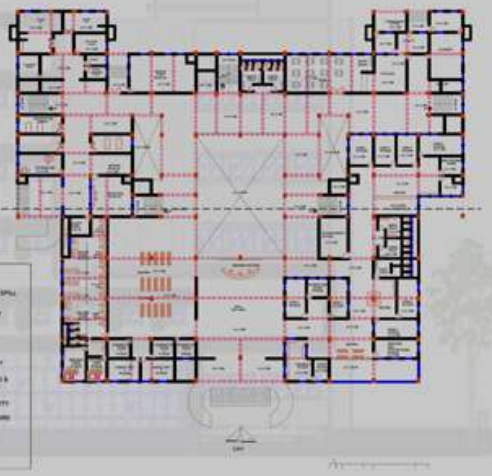
01. MULTISPECIALITY HOSPITAL , KUPWAD , SANGLI.

SITE PLAN



BASEMENT PLAN

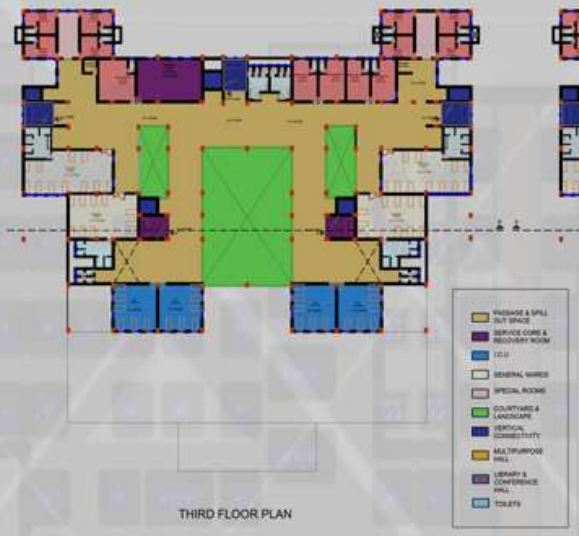
GROUND FLOOR PLAN



GROUND FLOOR
BEAM & COLUMN DESIGN

FIRST FLOOR PLAN

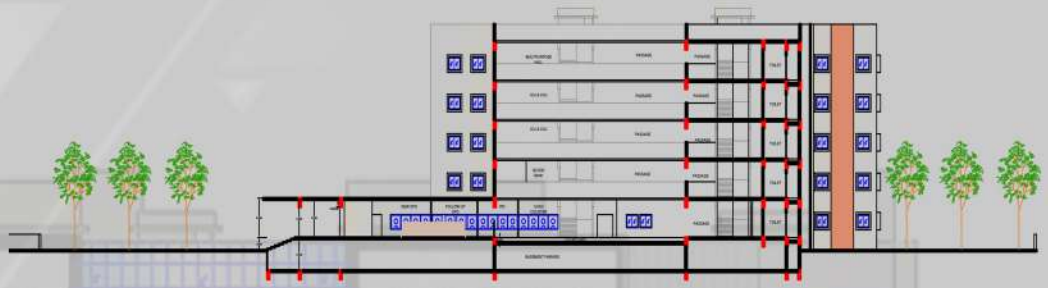
SECOND FLOOR PLAN



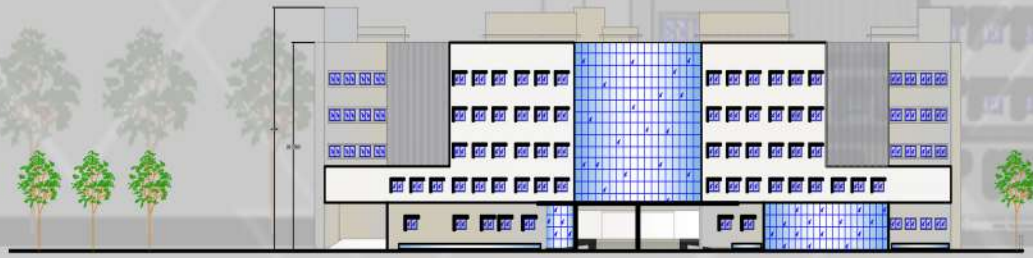
THIRD FLOOR PLAN

FOURTH FLOOR PLAN

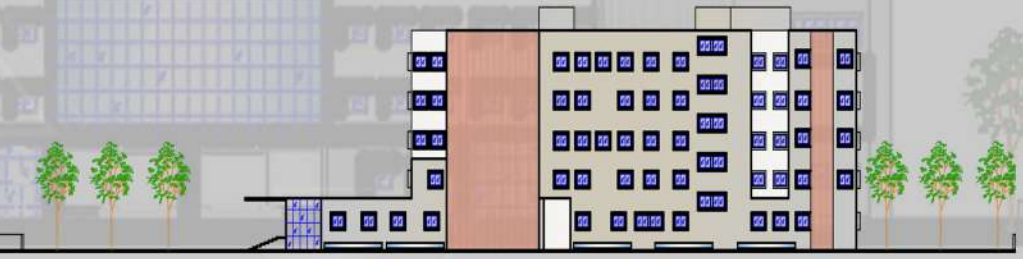
SECTION A-A'



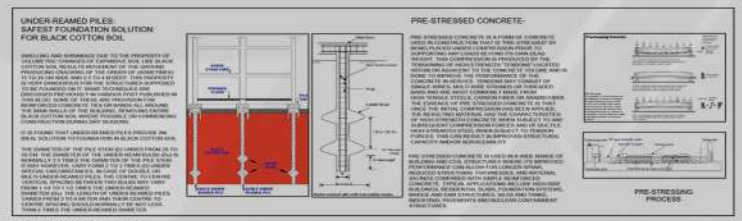
SECTION B-B'

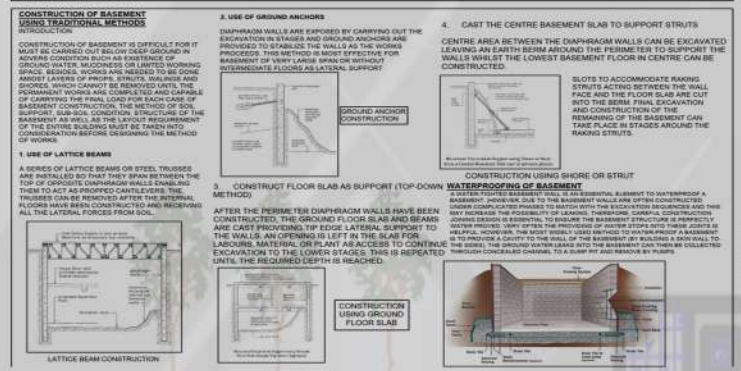


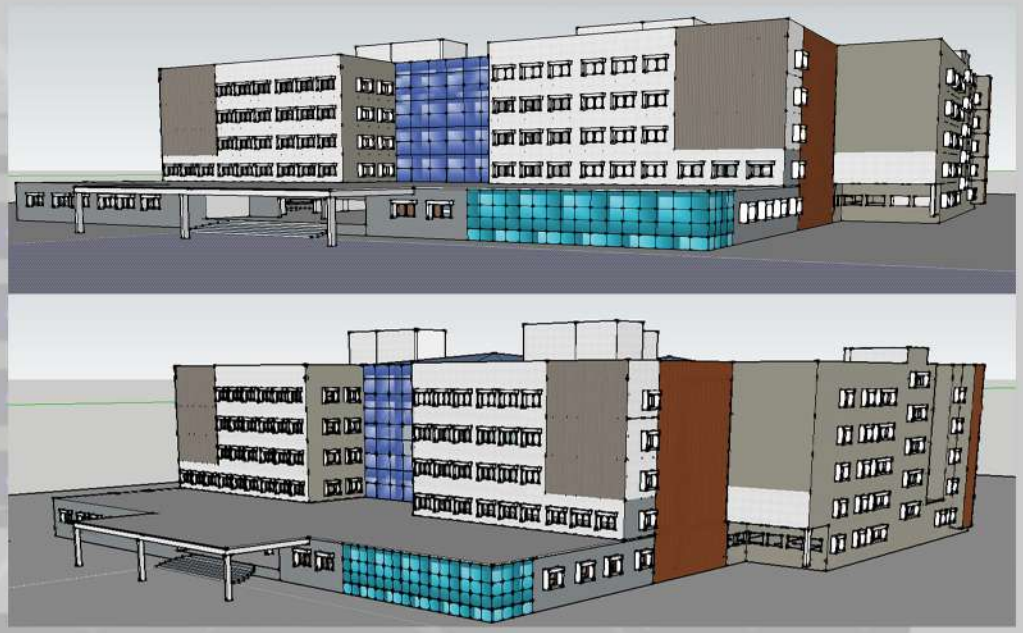
EAST SIDE ELEVATION



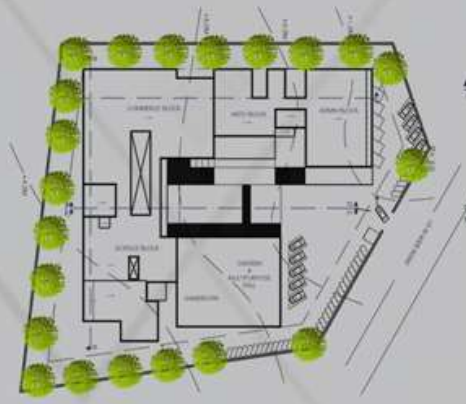
NORTH SIDE ELEVATION



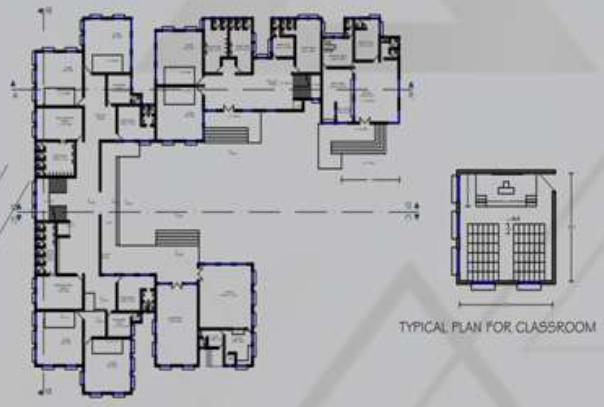




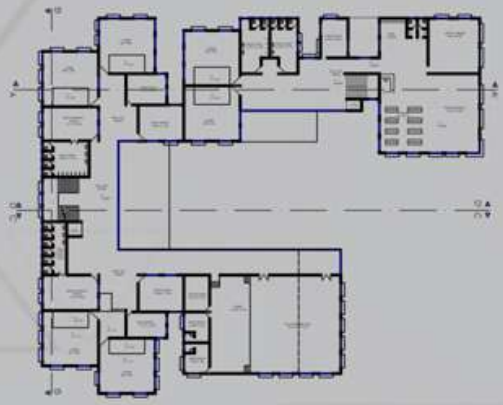
03. JUNIOR COLLEGE, CHIPRI, KOLHAPUR.



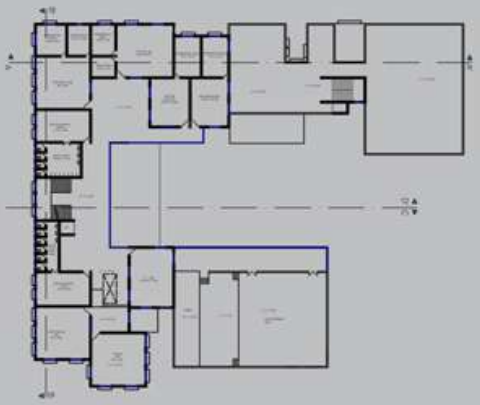
SITE PLAN



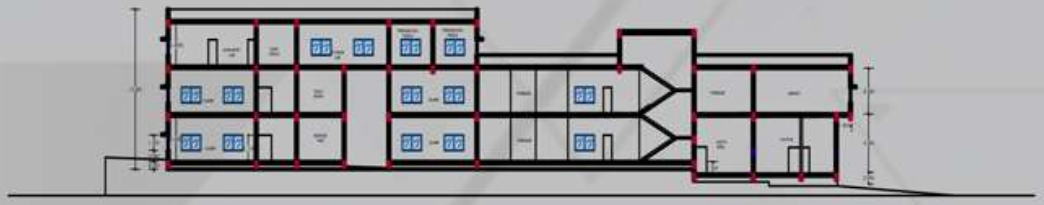
GROUND FLOOR PLAN



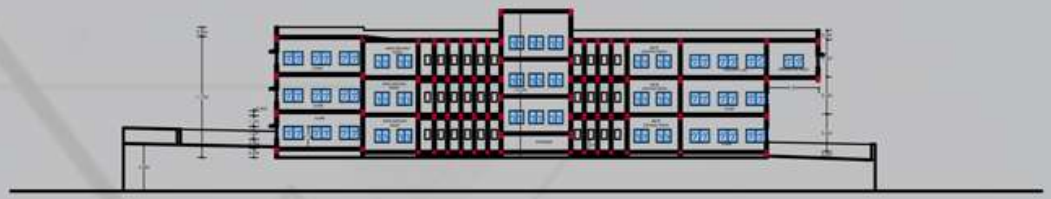
FIRST FLOOR PLAN



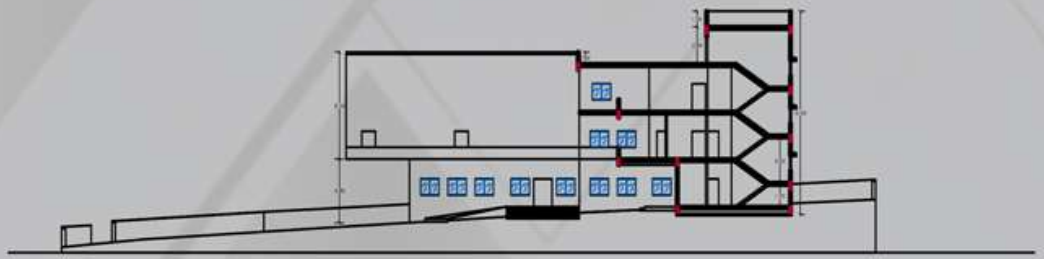
SECOND FLOOR PLAN



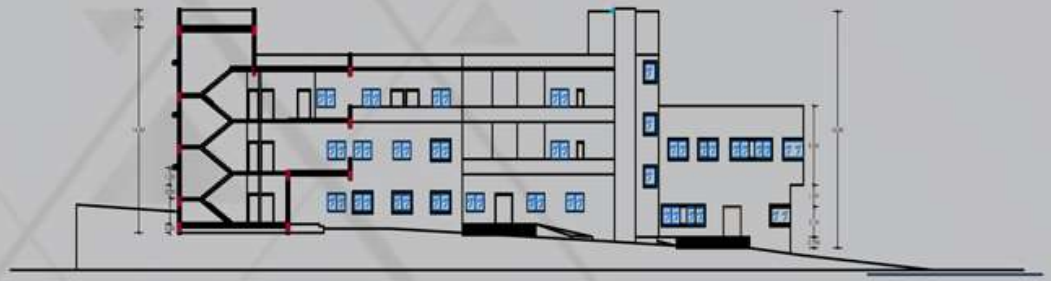
SECTION A-A'



SECTION B-B'



SECTIONAL ELEVATION C-C'

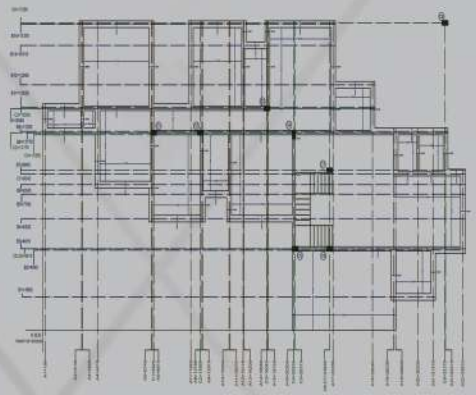


SECTIONAL ELEVATION D-D'

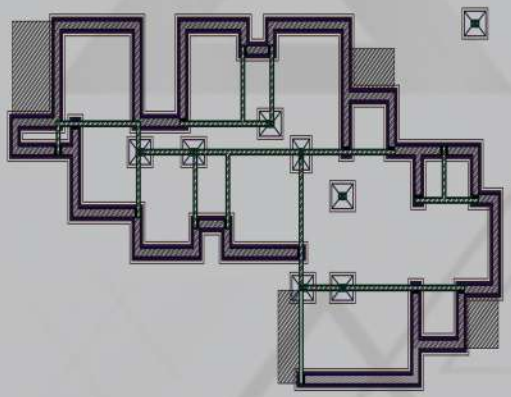
WORKING

DRAWING

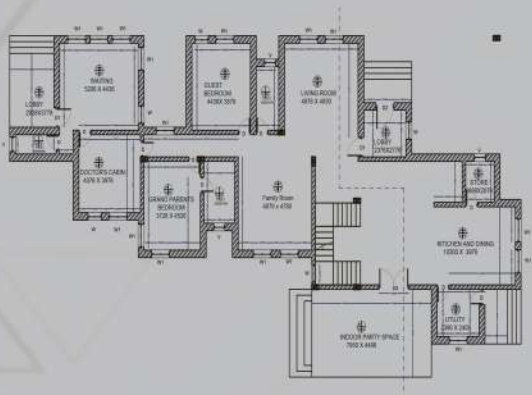
04 .WORKING DRAWING , DOCTOR'S BUNGALOW



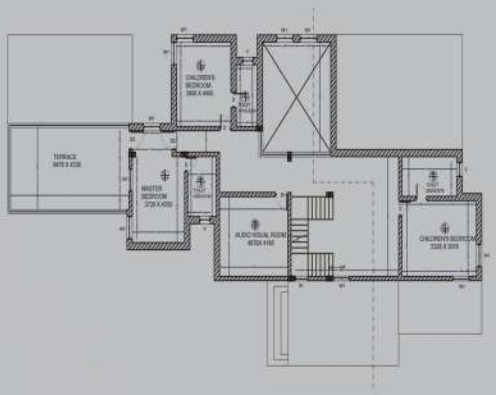
CENTRE LINE PLAN



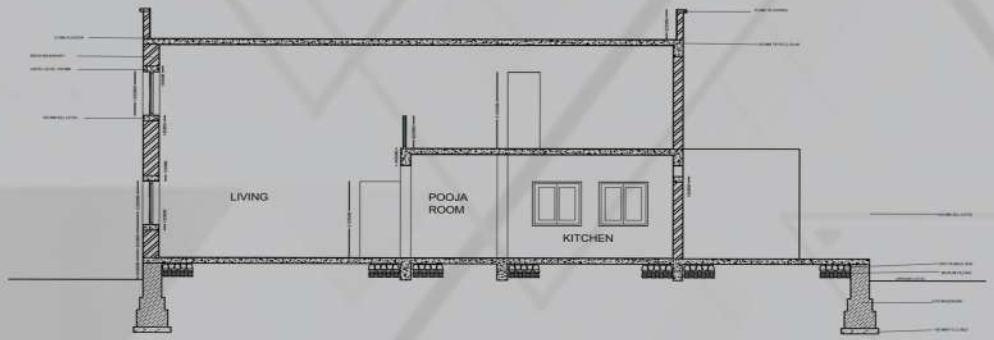
FOUNDATION PLAN



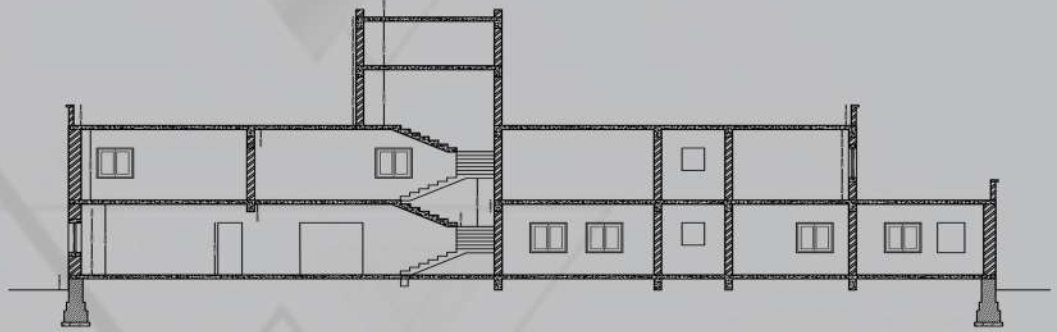
GROUND FLOOR PLAN



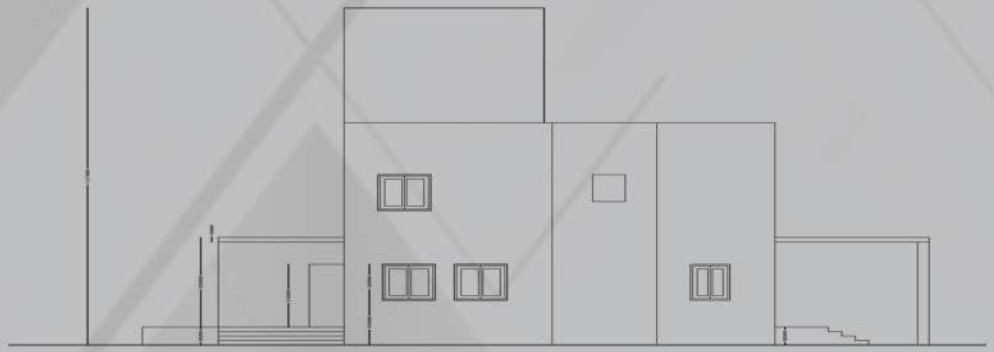
FIRST FLOOR PLAN



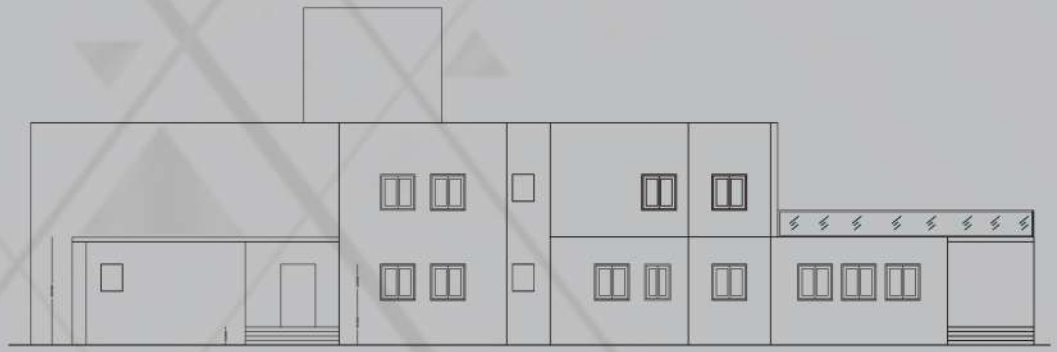
SECTION A-A'



SECTION B-B'

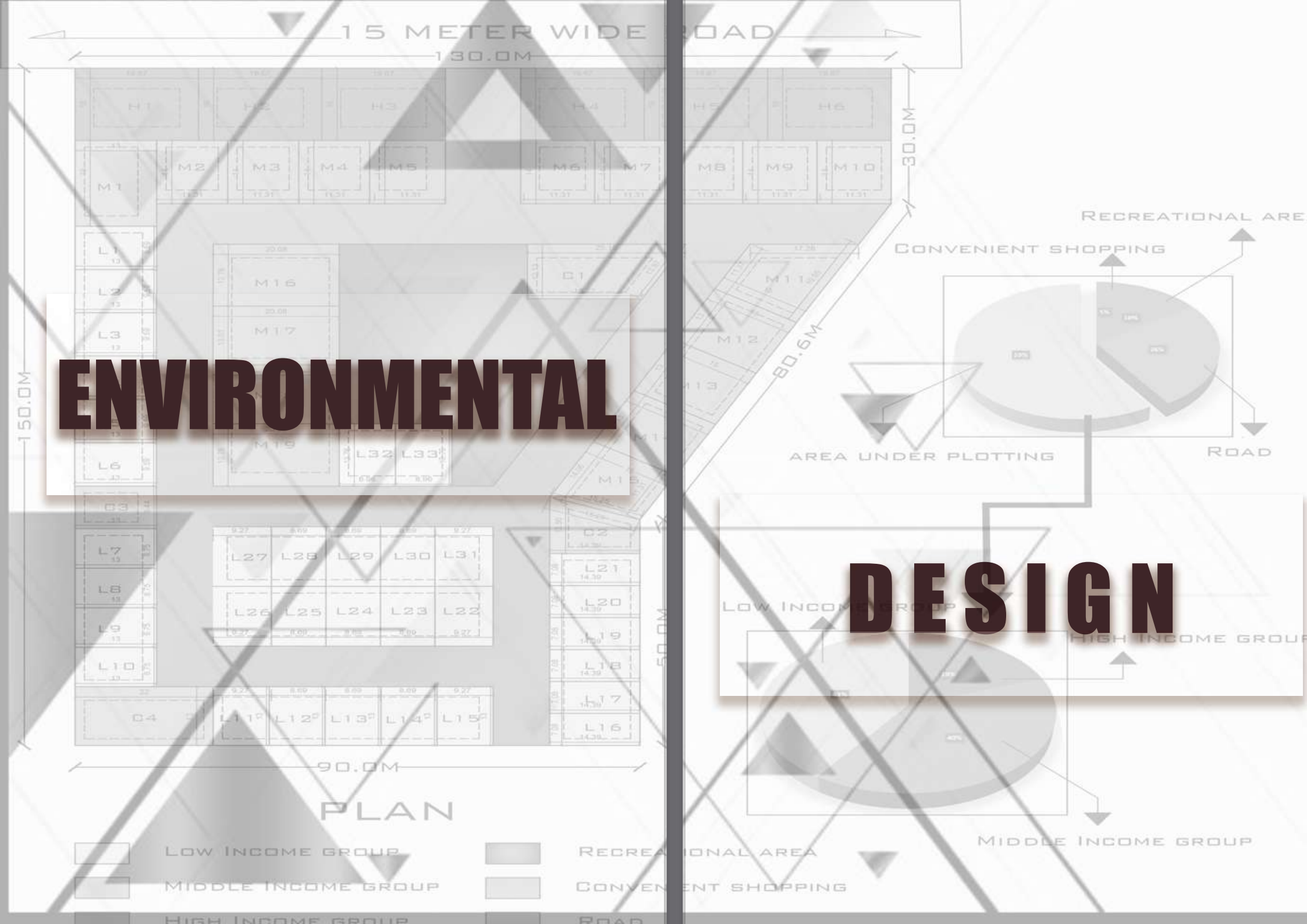


ELEVATION

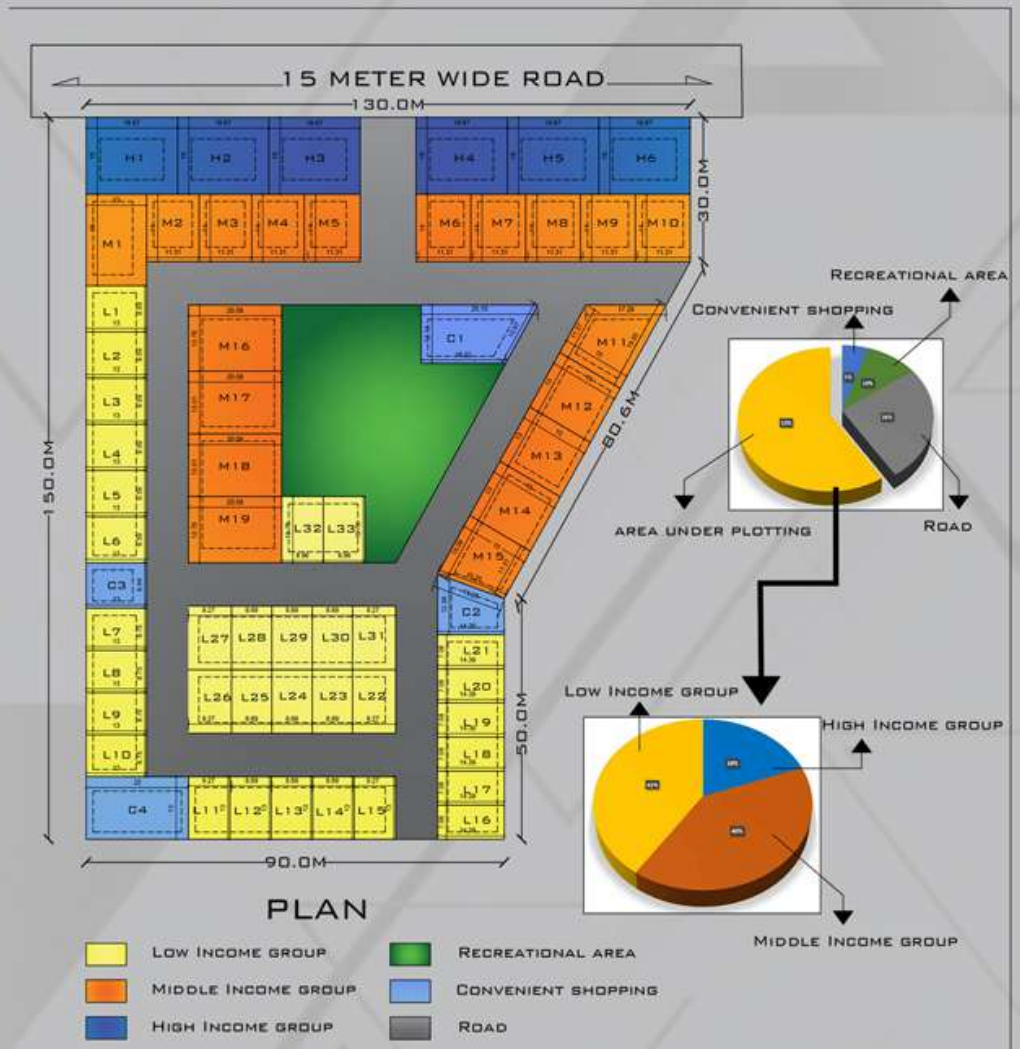


ELEVATION

ENVIRONMENTAL DESIGN

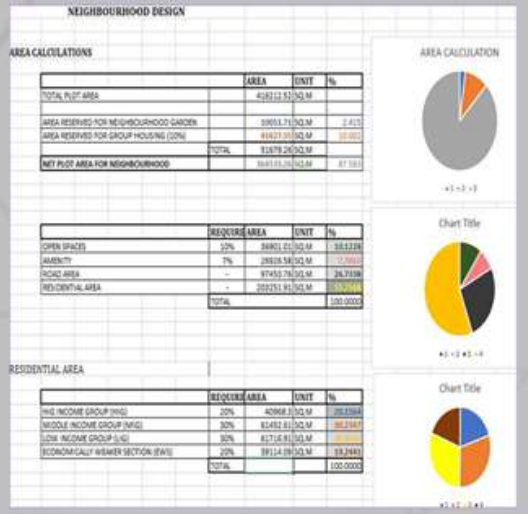


05 . CLUSTER PLANNING



SR	TYPE OF LAYOUT	TYPE OF RESIDENCE	NO OF PLOTS	REQUIRED		PROVIDED	
				AREA(SQ.M)	%	AREA(SQ.M)	%
1)	AREA UNDER ROAD	-		4025	25	4149.63	25.77
2)	AREA UNDER OPEN SPACE	-		1610	10	1623.44	10.08
3)	AREA UNDER CONVENIENT SHOPPING	-		805	5	816.26	5.07
4)	AREA UNDER PLOTTING	-	-	TOTAL -9600	60	TOTAL -9511.67	59.08
A)	LOW INCOME GROUP (LIG)	ROW HOUSE/SEMI DETACHED	33	3804.67	40	3820.77	40.17
B)	MIDDLE INCOME GROUP (MIG)	SEMI DETACHED/DETACHED	19	3804.67	40	3802.90	39.96
C)	HIGH INCOME GROUP (HIG)	DETACHED	6	1902.33	20	1888.00	19.85

06 . NEIGHBOURHOOD PLANNING


NEIGHBOURHOOD DESIGN

AREA CALCULATIONS

	AREA	UNIT	%
TOTAL PLOT AREA	416212.51	SQ.M	
AREA RESERVED FOR NEIGHBOURHOOD GARDEN	10053.71	SQ.M	2.415
AREA RESERVED FOR GROUP HOUSING (10%)	41621.25	SQ.M	10.002
TOTAL	51674.96	SQ.M	
NET PLOT AREA FOR NEIGHBOURHOOD	364537.55	SQ.M	87.585

AREA CALCULATION

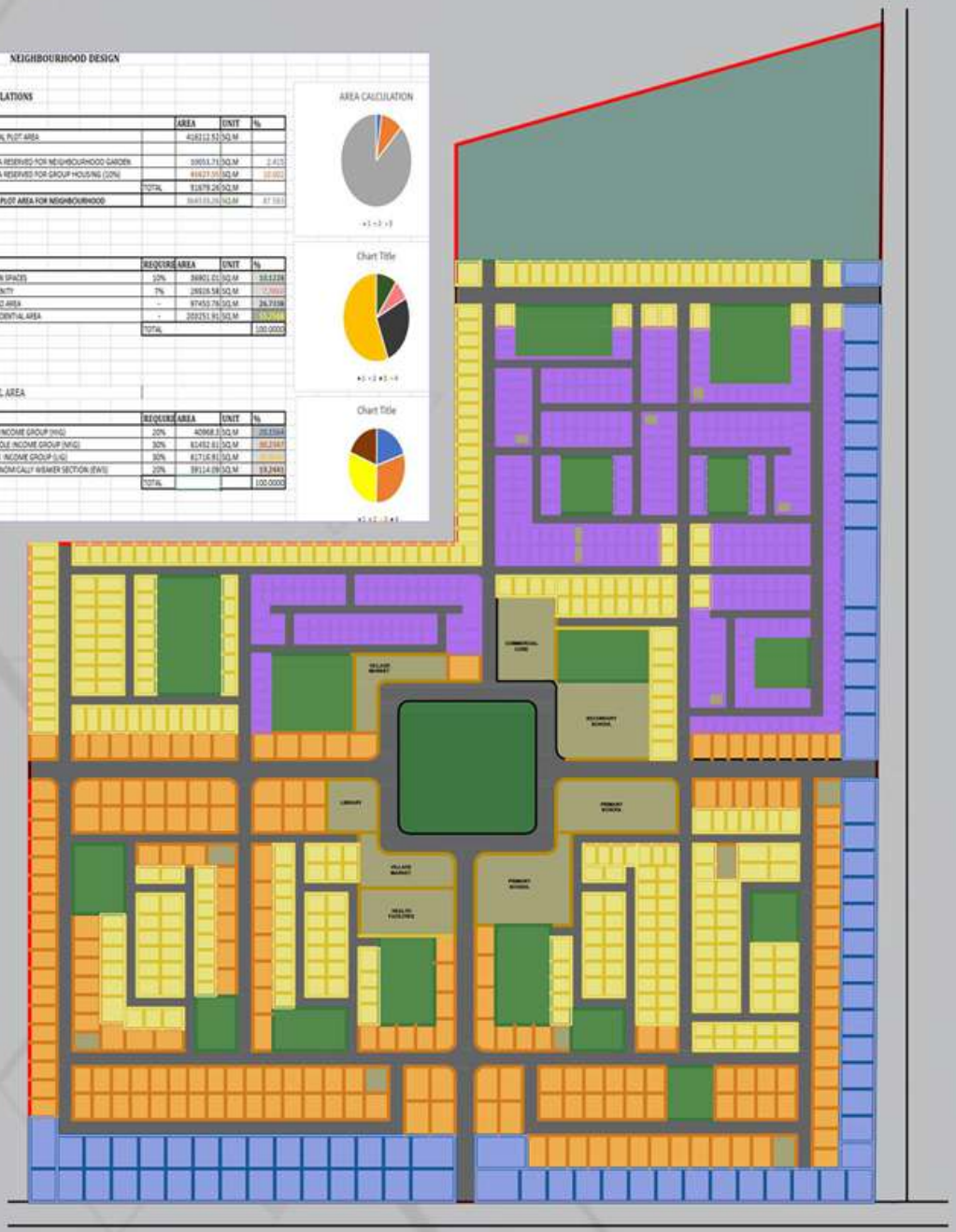
	REQUIRED	AREA	UNIT	%
OPEN SPACES	10%	36801.01	SQ.M	10.1228
AMENITY	7%	25818.58	SQ.M	7.1000
ROAD AREA	-	97455.78	SQ.M	26.7938
RESIDENTIAL AREA	-	203751.91	SQ.M	56.0234
TOTAL				100.0000

Chart Title

RESIDENTIAL AREA

	REQUIRED	AREA	UNIT	%
HIG INCOME GROUP (HIG)	20%	40968.3	SQ.M	20.1164
MIDDLE INCOME GROUP (MIG)	30%	61452.81	SQ.M	30.1747
LOW INCOME GROUP (LIG)	30%	61716.91	SQ.M	30.3045
ECONOMICALLY WEAKER SECTION (EWS)	20%	39114.09	SQ.M	19.2043
TOTAL				100.0000

Chart Title




ARCHITECTURAL
THESIS

SITE PLAN

SHEET NO.

BUILDING RESEARCH CENTRE , AT SURAT.

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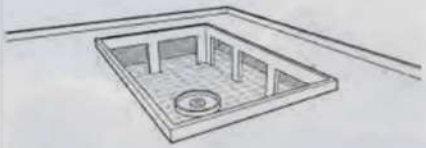
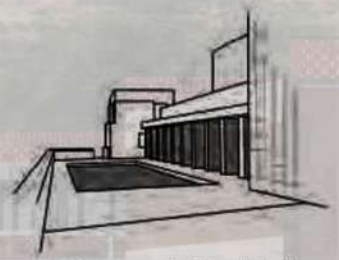
FLOOR PLANS

SHEET NO.

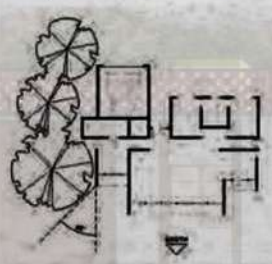
OPENING, PROJECTION & PUNCTURES



Traditional homes in hot climates used enclosed courtyards with a small fountain to provide cool microclimate.



Use most glass on north side ,shaded by vertical fins in hot climates because there are essentially no passive solar needs



Use plants especially on West side to minimize heat gain

FIRST FLOOR PLAN

LEGEND

- ENTRANCE
- PASSAGE & SPACE SPILL OUT
- OFFICE / CENTRE WORKSHOPS/RESOURCE
- DISCUSSION ZONES / LABS / STUDIOS
- LIBRARY
- TRADING CENTRE/CONFERENCE HALL
- COURTYARD LANDSCAPE &
- VERTICAL CONNECTIVITY
- GALLERY/ EXHIBITION CENTRE / A.V. ROOMS
- AV. ROOMS
- TOILETS

GROUND FLOOR PLAN

Buildings can be ventilated and/or cooled by taking advantage of naturally occurring wind currents.
Window openings located perpendicular to prevailing winds, and coupled with openings on the opposite side of a space or building, will provide natural ventilation for fresh air and/or space cooling. Adequate cross ventilation will remove heat from a space or building and maintain indoor air temperatures approximately 1.5 C° (2.7 F°) above the outdoor air temperatures.

Guidelines for cross ventilation:

Locate inlet openings perpendicular to (or at most ±45° from) the prevailing winds.
Locate outlet openings on the opposite side of inlet openings, and make them equal to, or greater in size than, the inlet openings.
Maintain an unobstructed path between inlet and outlet openings for adequate airflow.

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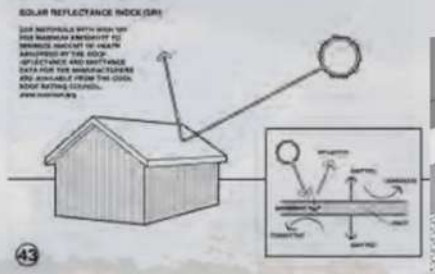
BUILDING RESEARCH CENTRE , AT SURAT.

FLOOR PLANS

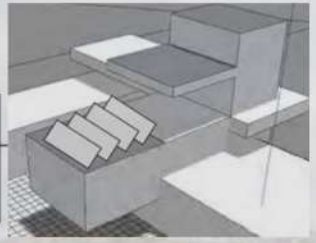
SHEET NO.

INSULATION AND COVERING



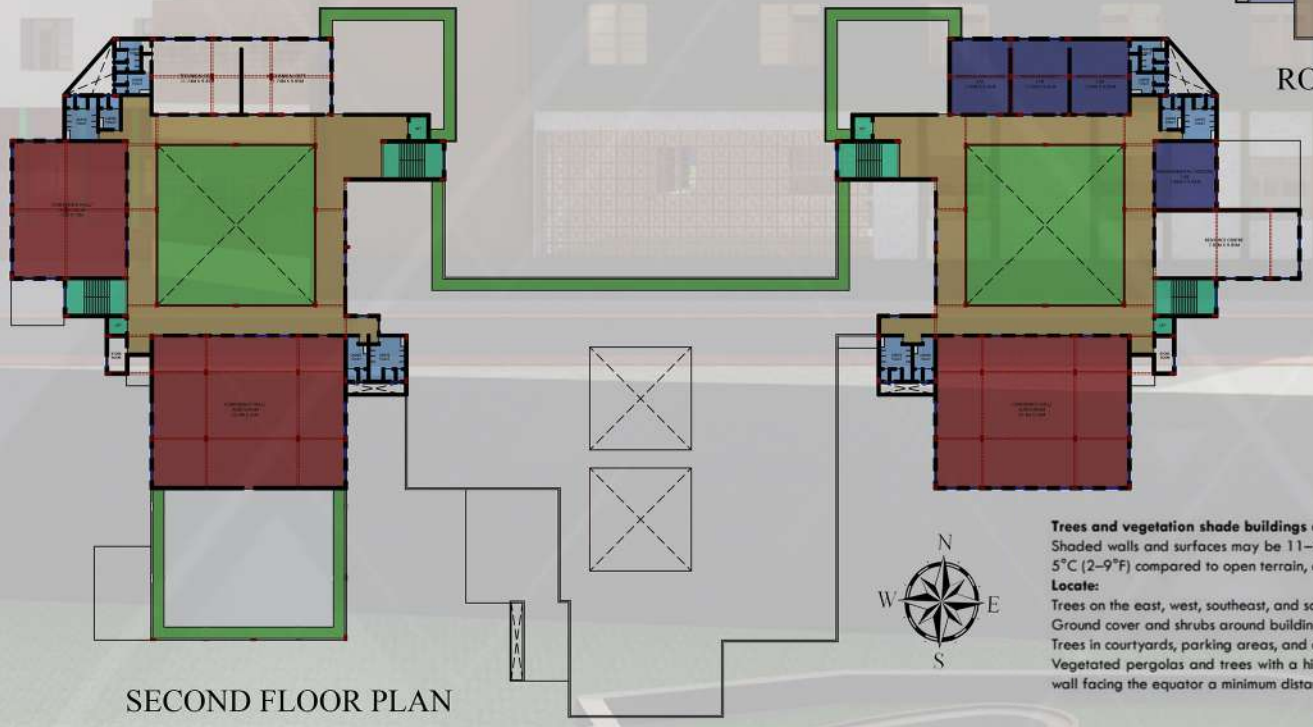
light colour building materials and roofing to minimize conducted heat gain.

Terrace covering with solar panels, and terrace gardens.



Flat roofs works well in hot dry climate.

ROOF PLAN



SECOND FLOOR PLAN

LEGEND

- ENTRANCE
- PASSAGE & SPACE SPILL OUT
- OFFICE / CENTRE WORKSHOPS/RESOURCE
- DISCUSSION ZONES / LABS / STUDIOS
- LIBRARY
- TRADING CENTRE/CONFERENCE HALL
- COURTYARD LANDSCAPE &
- VERTICAL CONNECTIVITY
- GALLERY/ EXHIBITION CENTRE / A.V. ROOMS
- AV. ROOMS
- TOILETS

Trees and vegetation shade buildings and surfaces, while water evaporating through their leaves lowers nearby air temperatures.
Shaded walls and surfaces may be 11–25°C (20–45°F) cooler than unshaded surfaces. Temperatures under a canopy of shade trees may be reduced 1–5°C (2–9°F) compared to open terrain, and 11–17°C (20–30°F) compared to parking lots.

Locate:
Trees on the east, west, southeast, and southwest sides of a building (east, west, northeast, and northwest in southern latitudes).
Ground cover and shrubs around buildings to lower air temperatures and reduce reflected sunlight.
Trees in courtyards, parking areas, and adjacent to walkways.
Vegetated pergolas and trees with a high canopy provide shade and allow in beneficial winds. In climates with cold winters, locate trees away from the wall facing the equator a minimum distance of twice the height of tree.

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BUILDING RESEARCH CENTRE , AT SURAT.

SECTION & ELEVATION

SHEET NO.






VEGETATIVE COOLING

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SHADING DEVICES

Intercepting sunlight before it reaches the walls and glazing of a building dramatically reduces the amount of heat entering that building.
External shading devices can reduce solar heat gain through glazing by up to 80%. By designing shading devices according to the sun's seasonal path, both summer shading and winter solar gain can be achieved in climates with seasonal variations.

Incorporate the following shading strategies:
Horizontal overhangs or louvers for solar orientations (facing the equator); and
Vertical fins and egg-crate designs for other orientations.
Adjustable shading devices can be repositioned to allow for seasonal temperature variations or user control during unusually warm or cool periods. Additional shading strategies include recessing glazed openings, and incorporating porches, balconies, and mature vegetation to shade east and west walls as well as outdoor areas.



NORTH SIDE ELEVATION

SECTIONAL ELEVATION

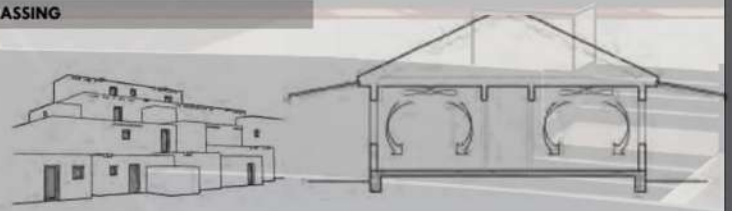

NIGHT VENTILATION

Thermal mass (e.g., concrete, masonry, adobe, etc.) located in a space and cooled at night, absorbs heat and provides cool indoor surfaces and temperatures the following day.
In dry climates with a diurnal temperature difference of 11°C (20°F) or more, and where summer nighttime temperatures fall at least 5.5°C (11°F) below the desired indoor daytime temperature, use cool night air to flush heat from a space and cool interior thermal mass. A space will then remain cool during the daytime without the use of off-site energy sources.

Incorporate thermal mass in the walls, floor and/or ceiling:
•A minimum of 10.2 cm (4 inches) in thickness, with
•An exposed surface area of 1 to 3 times the floor area.
The more surface area of mass in a space, the more stable the indoor temperature. Use cross or stack ventilation to cool the mass at night.




MASSING



Traditional homes in hot dry climate used high mass construction with small recessedr openings . operable for night ventilation to cool the mass.

On hot days ceiling fan or inside air motion can make it feel 5 degrees F or more thus less air conditioning is needed.

BUILDING RESEARCH CENTRE , AT SURAT.

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SUBJECT - THESIS ON BUILDING RESEARCH CENTRE.

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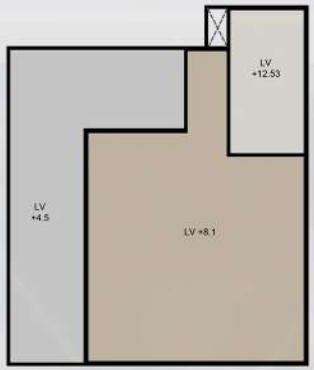
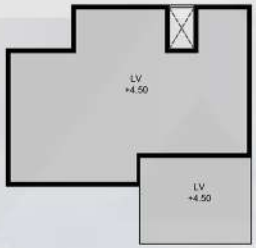
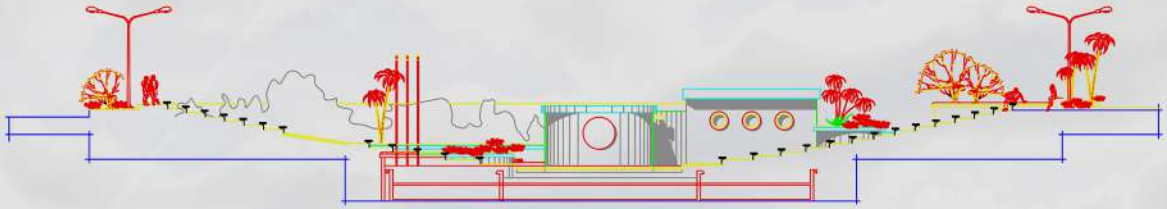


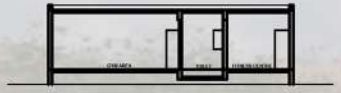
CANTEEN ROOF PLAN



GYM ROOF PLAN



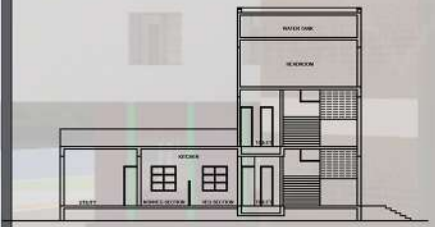
AMPHITHEATRE SECTION



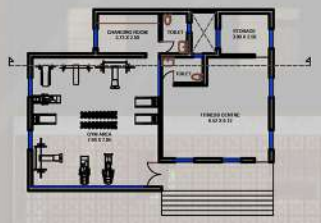
GYM SECTION

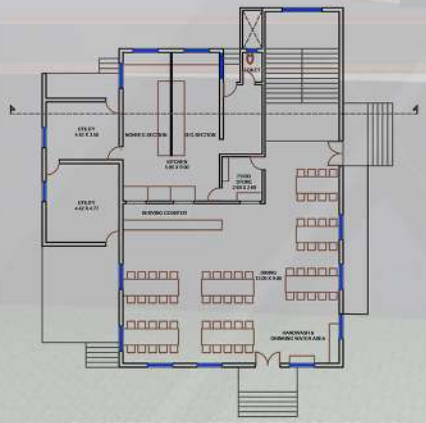
CANTEEN ELEVATION

GYM ELEVATION

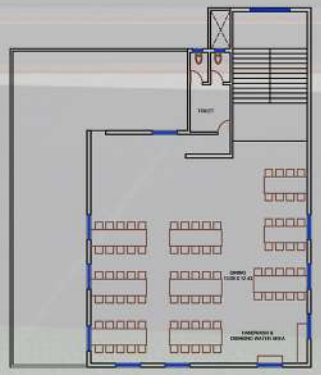


CANTEEN SECTION

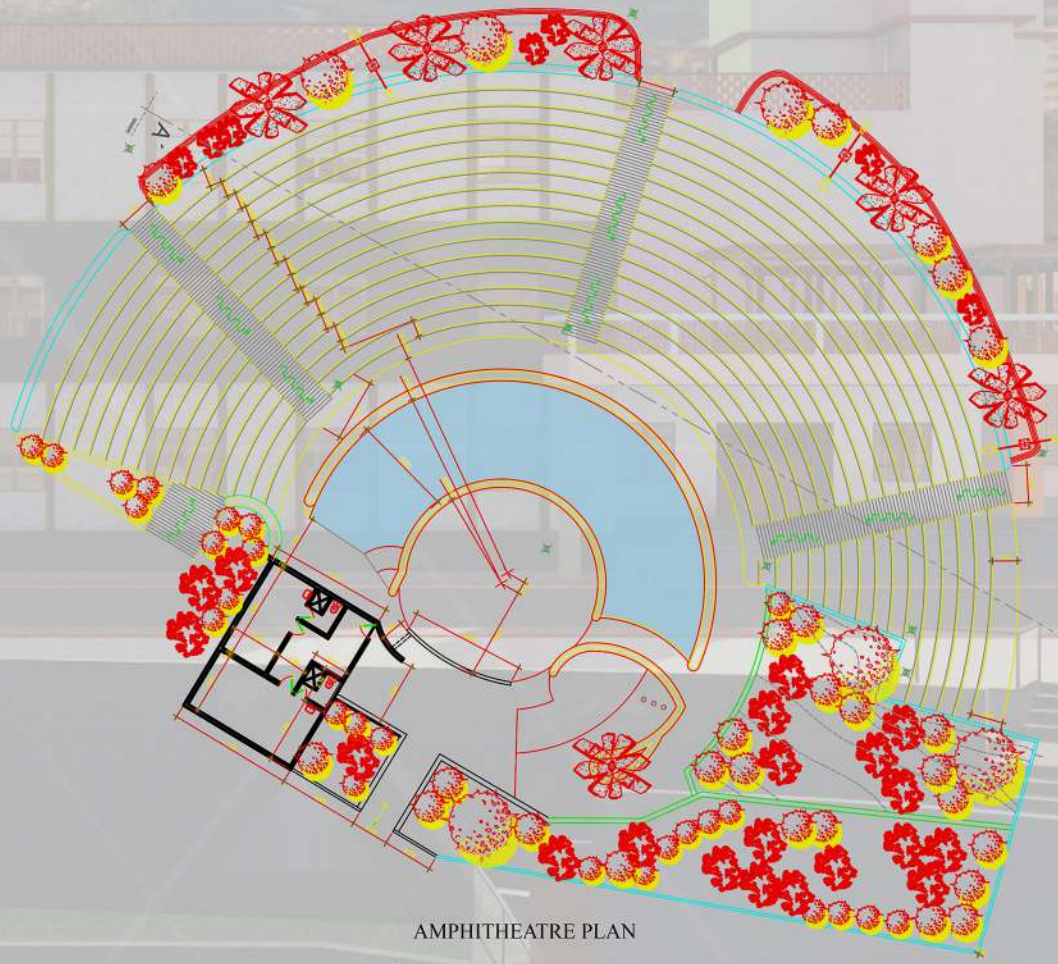




CANTEEN GROUND FLOOR PLAN



CANTEEN FIRST FLOOR PLAN



AMPHITHEATRE PLAN

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VIEWS

SHEET NO.

ENTRANCE & GATE

AMPHITHEATRE

BUILDING RESEARCH CENTRE , AT SURAT.

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