

RASAYANI OF TOMORROW



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PHCOA
PILLAI HOC COLLEGE
OF ARCHITECTURE

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The Brief

“Rasayani, once known for housing various famous chemical industries strives with a history that we are still unaware. From its strategic location being on the fringes of Panvel and the highways leading to Pune and Alibag, the place has been susceptible to various development extensions.

Being under various stake holders including NAINA, PMC, MIDC and MMR, future proposals are in the process of planning for building a new hub for educational, residential and social services.

This gives “Sanshodhan” the research and consultation cell of Pillai HOC College of Architecture a scope for developing the relatively needed infrastructure such as Redesigning HOCL Hospital, Chambharli crematorium and Rasayani Railway station considering the public proposals.

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III. RAILWAY STATION

RASAYANI: THE PLACE THAT MOULDED MANY IDENTITIES

'A village nestled amidst picturesque surroundings with a river flowing by'.
By this quote, Rasayani fits beautifully in a poet's imagination of a quaint little town.

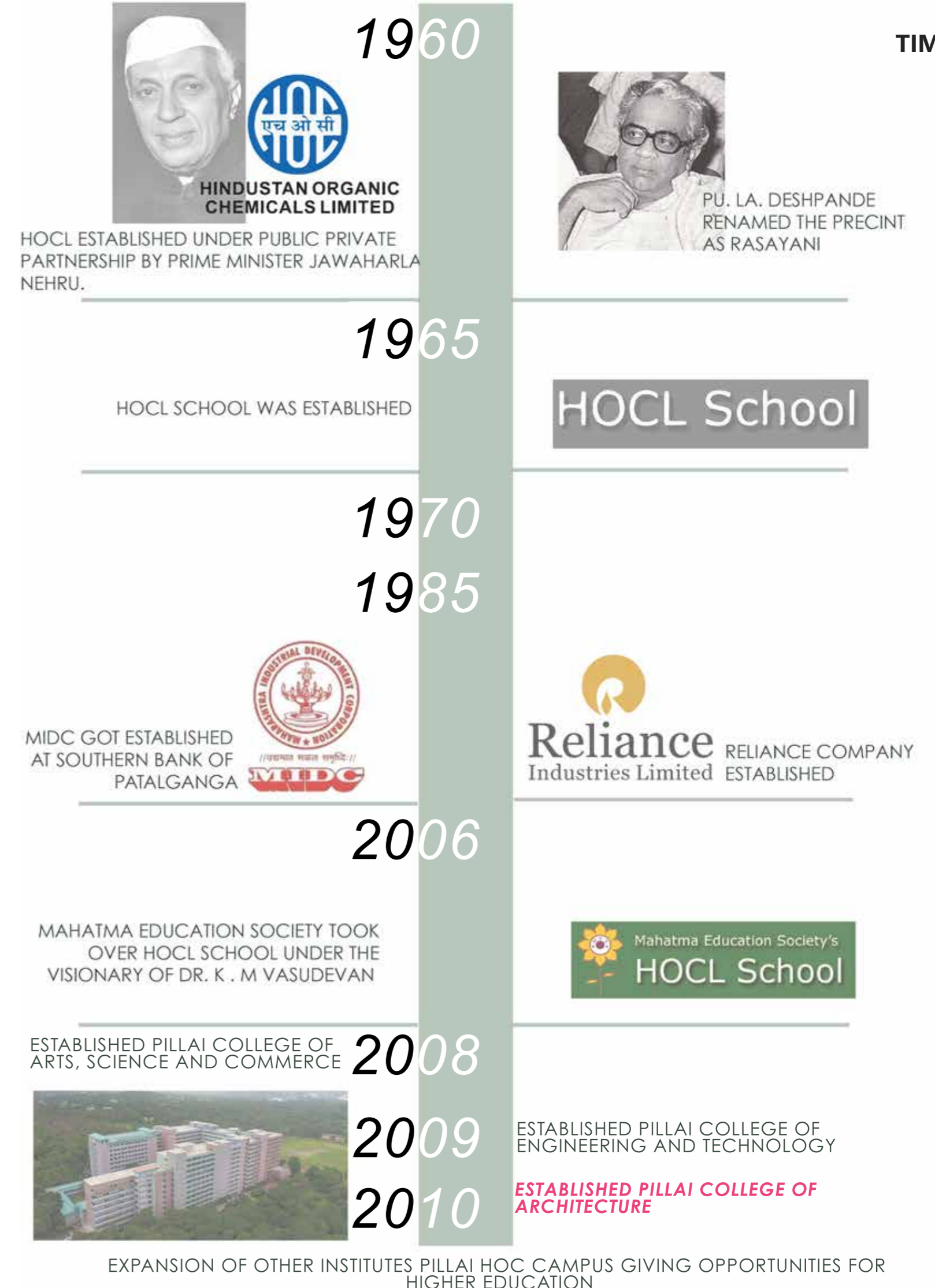
Rasayani is made up of a group of small hamlets constituting Rees, Kamba, Chambharli, Mohopada, Vashivali, Patalganga, Waveghar, and Rasayani itself. Patalganga, one of the major rivers in Raigad district meanders sneakily through this town which houses around three thousand people.

There's a funny anecdote about this town getting its name. Rasayani literally means 'An abode of chemicals' in Marathi. Around 1960, the name did not exist on the map until Hindustan Organic Chemical Company owned by the Central Government of India came into existence. With Dr Kasbekar, as the first CMD of the company. He was friends with the well-known Marathi literary figure, Pu. La. Deshpande who christened this town with the name Rasayani and the rest is history.

The HOC Colony also housed a library enriched with books in regional languages. At that time, it was a popular library in Raigad district. The school was managed by the Deccan Education Society trust from Pune. They had excellent educational standards with P.S. Joshi as the principal of the school. He was a Presidential award winning teacher and he taught Sanskrit in the school. That's not the only name from Literary world to be associated with this village. Well-known writer Dr. V.B Kolte lived here for a while. Playwright Suresh Khare had a house in Mohopada. Madhu Mangesh Karnik, a well-known litterateur and founder president of the Konkan Marathi Sahitya Parishad, also lived here for a while. Well-known singer Jaywant Kulkarni had worked here as a music teacher in HOC school for some time before beginning his film career.

There is an immense diversity in the flora and vegetation here. Karnala fort and Sanctuary lie in close vicinity of the town. In Karnala sanctuary, trees with glowing trunks and lit with fireflies were seen during the monsoons. These forests are home to the tribal community of Katkaris and Thakars.

Along with a rich natural heritage, Rasayani also bears historic precincts like ruins of a Peshwa-era palace near Jambhivli. More research needs to be done to throw light on significant remnants from the past. Forts like Karnala, Manik, Prabal built during the reign of Chhatrapati Shivaji Maharaj exist around Rasayani. Netaji Palkar, who was the first general to lead Shivaji Maharaj's army, came from the neighbouring Chowk village. Today, not much history is available about these forts or Palkar.





| HOSPITAL

PRECINCT STUDY

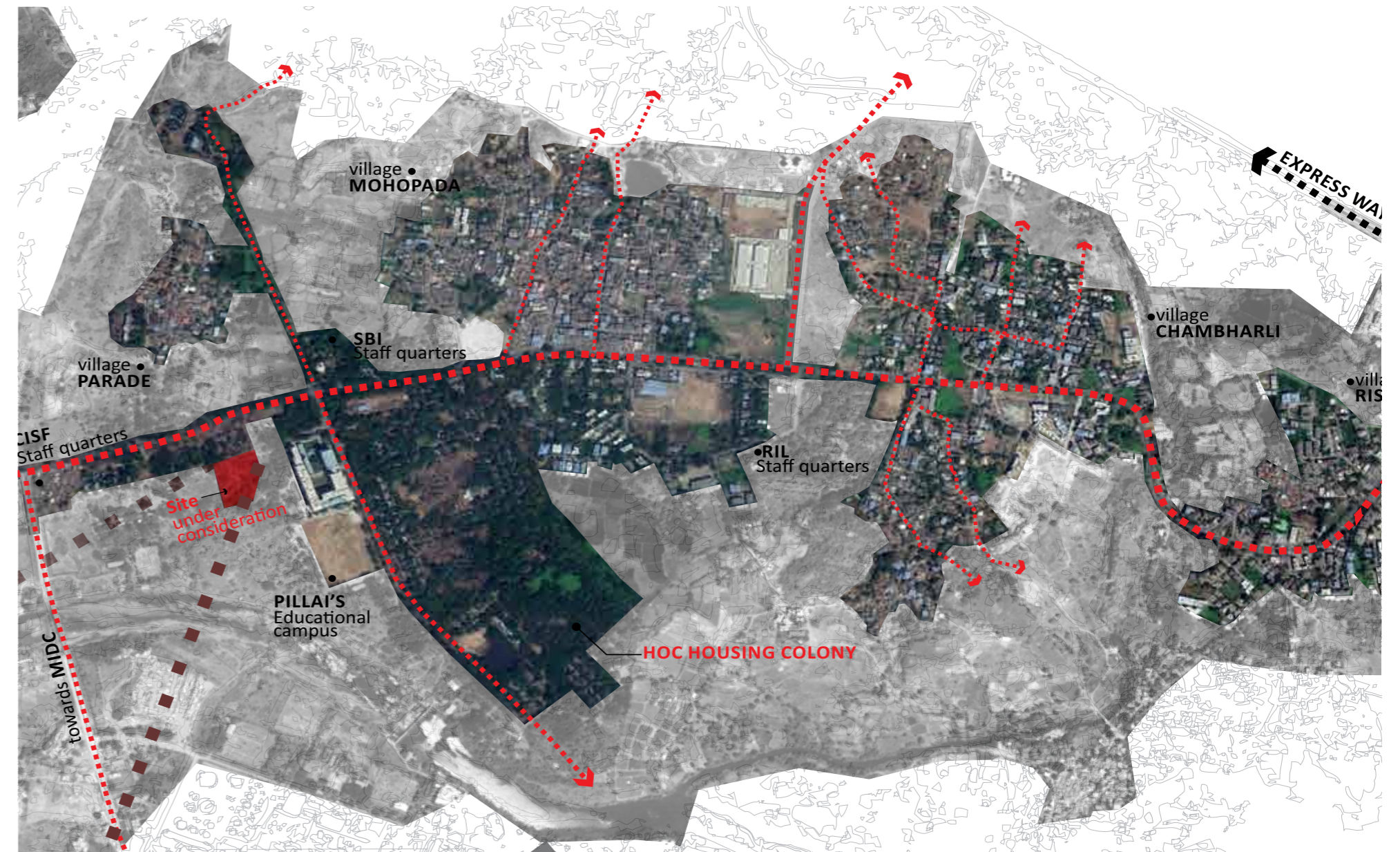
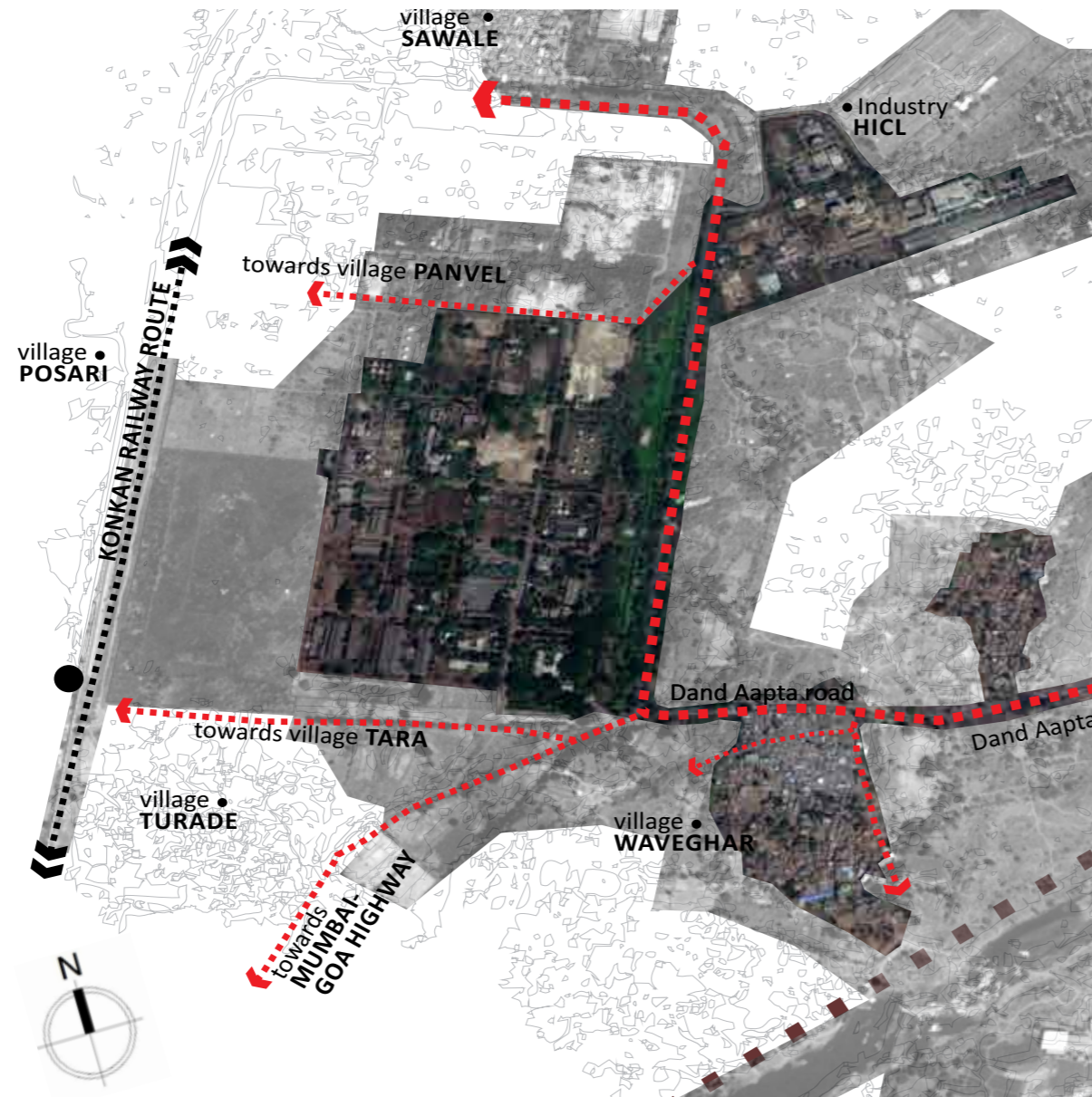
State: Maharashtra
 District: Raigad
 Taluka: Rasayani

Background Study :-

The broad objective is to design a 100 bedded General hospital with additional speciality facilities at the existing dilapidated building of the erstwhile HOC Hospital.

Proposed site is located near HOCL campus Rasayani, Raigad

Total Site area : 12,755 Sq.mt (FSI Factor 1.0)



Site Context



Site Images

Area Requirements

100 Bedded General Hospital

Space
General ward
Semi private (2 in 1)
Single room/ Private
Intensive care unit (ICU)
NICU
Obstretic ward
Operation theatre
Outpatient Department (OPD)
Pediatric ward
Radiology Department
Other diagnostic facilities
Minimal residual disease (MRD)
Pharmacy
Bloodbank
Physiotherapy department
Laboratory
CSSD (Central sterile Services department)
Emergency room/ ward
Laundry area
EDP area
Administation
Mortuary room
Electrical HVAC+ Water+ Boiler
Residential
Kitchen & Restuarant

	No. of units	Area (sq.m)	Circulation %	Total Area (sq.m)
	48	400	5	420
	32	500		500
	20	150		150
	10	300	15	345
	9	320	10	342
	1	290	15	335
	4	480	15	555
	10	250	10	275
	25	125		125
	1	155	15	180
		100	10	110
	2	100	10	110
	1	600	10	660
	1	100	10	110
	1	120	10	135
	1	144	10	160
	1	65	10	75
	1	640	10%	705
	1	200	15%	260
	1	520	10%	572
	1	450	10%	495
	1	180	10%	200
	1	350	10%	385
	1	Kitchen - 220	10%	245
		Dining - 290	15%	335

SPACE MATRIX

		1	2	3	4	5	6	7	8	9	10	11	
1	General Ward	Low	Med	Med	Med	Med	Med	Med	Med	Med	Low	Med	
2	Semi Private	Med	Low	High	Med	Med	Med	Med	Med	High	Low	Med	
3	Single Room	Med	Med	Low	Med	Med	Med	Med	Med	Med	Low	Med	
4	ICU	Med	Med	Med	Low	High	Med	High	Med	Med	Low	Med	
5	NICU	Med	Med	Med	Med	Low	Med	High	Med	Med	Low	Med	
6	Obstetric Ward	Med	Med	Med	Med	Med	Low	Med	Med	Med	Low	Med	
7	Operation Theatre	Med	Med	Med	High	High	Med	Low	Low	Med	Low	Low	
8	OPD	Med	Med	Med	Med	Med	Med	Low	Low	Med	Low	High	
9	Pediatric Ward	Med	High	Med	Med	Med	Med	Med	Med	Low	Low	High	
10	Radiology Department	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	
11	Other Diagnostic Department	Med	Med	Med	Med	Med	Med	Low	High	High	Low	Low	
12	MRD	Low	Low	Low	Med	Med	Low	Low	High	High	Low	High	Low
13	Pharmacy	High	Med	Med	Low	Low	Low	Low	Med	Med	Med	Med	
14	Blood Bank	Med	Med	Med	High	High	High	High	Med	Med	Med	Med	
15	Physiotherapy Department	Low	Low	Low	Low	Low	Low	Low	High	High	Low	High	
16	Laboratory	Med	Med	Med	Med	Med	Low	Low	High	High	Med	High	
17	CSSD	Med	Med	Med	High	High	High	High	Low	Low	Med	Low	
18	Emergency Ward	Low	Low	Low	Low	Low	Low	Med	Med	Med	Med	Med	
19	Laundry Area	High	High	High	High	High	High	High	Low	Low	Med	Low	
20	EDP Area	Low	Low	Low	Low	Low	Low	Med	Low	Low	High	Low	
21	Administration	Med	Med	Med	Low	Low	Med	Med	High	High	Med	High	
22	Mortuary Room	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	
23	Residential	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low

	12	13	14	15	16	17	18	19	20	21	22	23
12	Low	High	Med	Low	Med	Med	Low	High	Low	Med	Low	Low
13	High	Low	Med	Low	Low	Low	Low	Low	Low	High	Low	Low
14	Med	Med	Low	Low	Low	Low	Low	Low	Low	Med	Low	Low
15	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
16	Med	Low	Med	Low	Low	Low	Low	Low	Low	Med	Low	Low
17	Med	Low	Med	Low	Low	Low	Low	Low	Low	Low	Low	Low
18	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
19	High	High	High	High	High	High	High	High	High	High	High	High
20	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
21	High	High	Med	Med	Med	Low	Low	Low	Low	Low	Low	Low
22	Low	Low	Low	Low	Low	Low	Low	Low	Low	Med	Low	Low
23	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low

● - High proximity
 ● Medium Proximity
 ● - Low proximity

SPACE MATRIX FOR SEMI PRIVATE SPACES







	Reception	Waiting	Outpatient Department (OPD)	Other diagnostic facilities	Emergency room/ ward	Blood bank
Reception	High	High	High	High	High	Low
Waiting	High	High	High	High	High	Low
Outpatient Department (OPD)	High	High	High	Medium	Low	Low
Other diagnostic facilities	High	High	Medium	High	Low	Low
Emergency room/ ward	High	High	Low	Low	High	Medium
Blood bank	Low	Low	Low	Low	Medium	High
Laboratory	Low	Low	Low	Low	Low	Low
Minimal residual disease (MRD)	High	High	Medium	Medium	Low	Low
Physiotherapy department	High	High	Low	Low	Low	Low
Radiology Department	High	Low	Low	Low	Low	Low
Toilets	Medium	Medium	Low	Low	Low	Low
Service core-patient	High	High	Low	Low	Low	Low
Service core-staff	Medium	Medium	High	High	High	High



	Laboratory	Minimal residual disease (MRD)	Physiotherapy department	Radiology Department	Toilets	Service core-patient	Service core-staff
Laboratory	Low	High	High	High	Medium	High	Medium
Minimal residual disease (MRD)	Low	High	High	Low	Medium	High	Medium
Physiotherapy department	Medium	Medium	Low	Low	Low	Low	High
Radiology Department	Low	Medium	Low	Low	Low	Low	High
Toilets	Low	Low	Low	Low	Low	Low	High
Service core-patient	High	Low	Low	Low	Low	High	High
Service core-staff	Low	High	Low	Low	Low	Low	High

● - High proximity
 ● Medium Proximity
 ● - Low proximity

SPACE MATRIX FOR PRIVATE SPACES

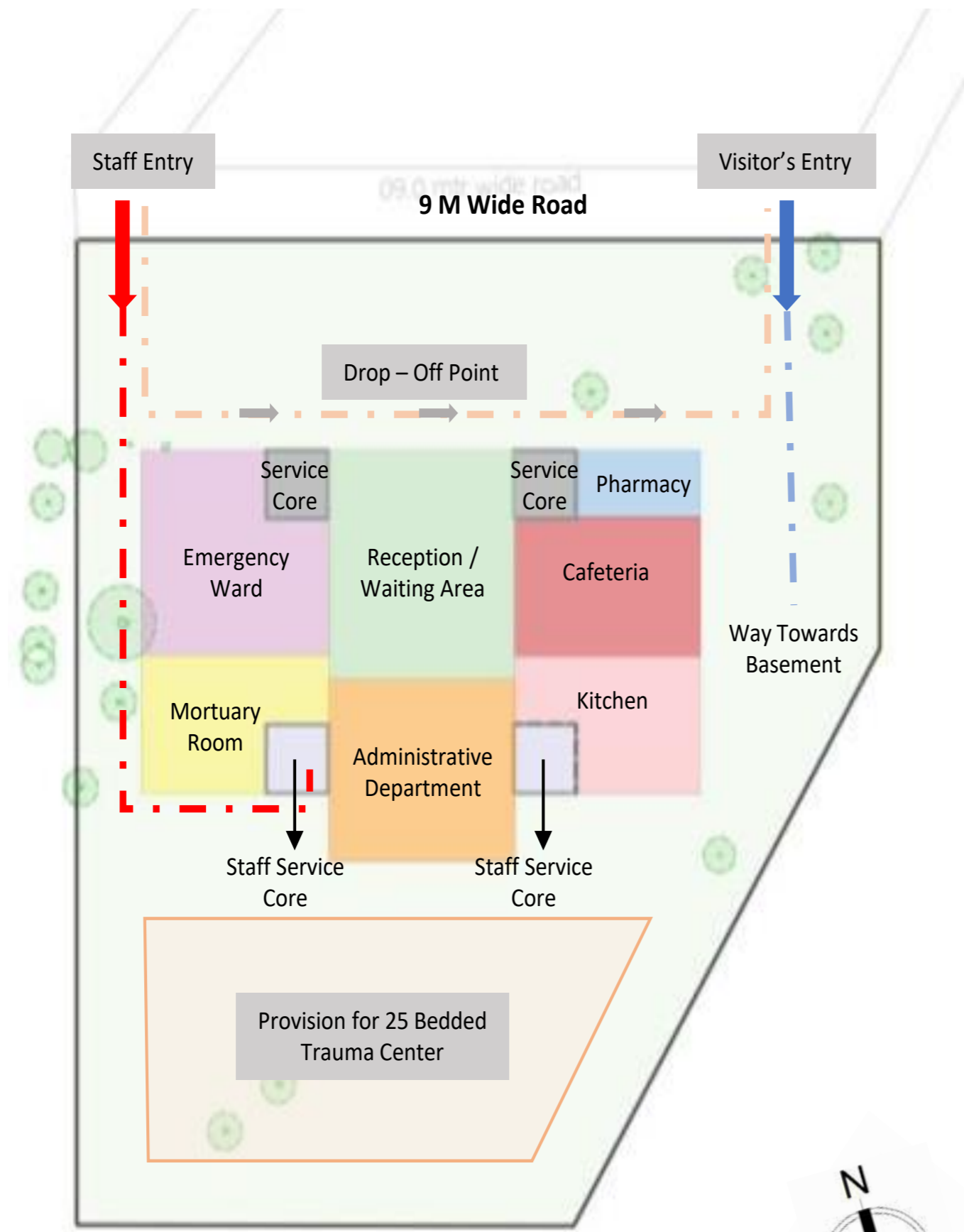
				
	Nurse station	Operation theatre	CSSD	Residential
Nurse station	High proximity	Medium Proximity	Medium Proximity	Low proximity
Operation theatre	Medium Proximity	High proximity	Medium Proximity	Low proximity
CSSD	Medium Proximity	Medium Proximity	High proximity	Low proximity
Residential	Low proximity	Low proximity	Low proximity	High proximity
Mortuary room	Medium Proximity	Low proximity	Low proximity	Low proximity
Laundry area	Medium Proximity	Medium Proximity	Medium Proximity	Low proximity
Toilets	Low proximity	Medium Proximity	Medium Proximity	Medium Proximity
Service core-patient	Medium Proximity	Medium Proximity	Low proximity	Low proximity
Service core-staff	Medium Proximity	Medium Proximity	Medium Proximity	Medium Proximity

					
	Mortuary room	Laundry area	Toilets	Service core-patient	Service core-staff
Mortuary room	High proximity	Medium Proximity	Medium Proximity	High proximity	High proximity
Laundry area	Low proximity	High proximity	High proximity	Low proximity	Low proximity
Toilets	Low proximity	High proximity	High proximity	Medium Proximity	Medium Proximity
Service core-patient	Low proximity	Low proximity	Low proximity	High proximity	Medium Proximity
Service core-staff	High proximity	Low proximity	Low proximity	Low proximity	High proximity

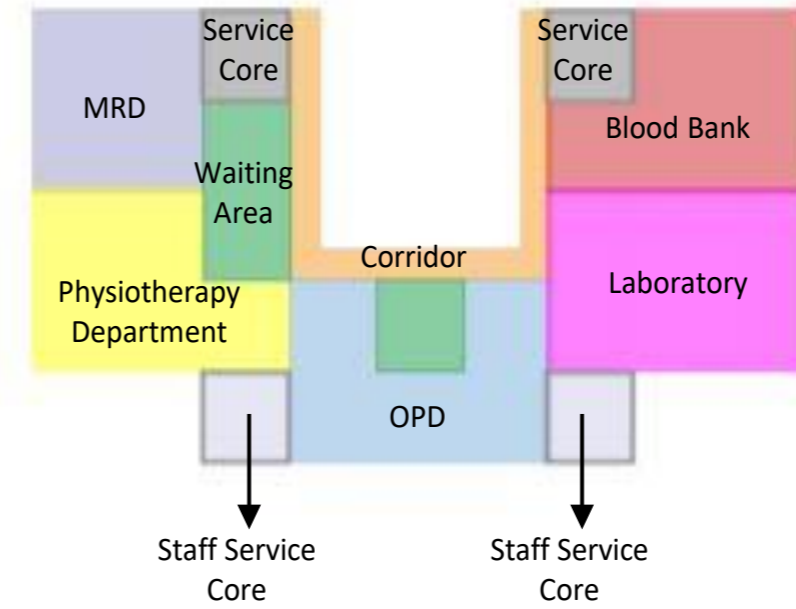
● - High proximity
 ● Medium Proximity
 ● - Low proximity

CONCEPTUAL ZONING

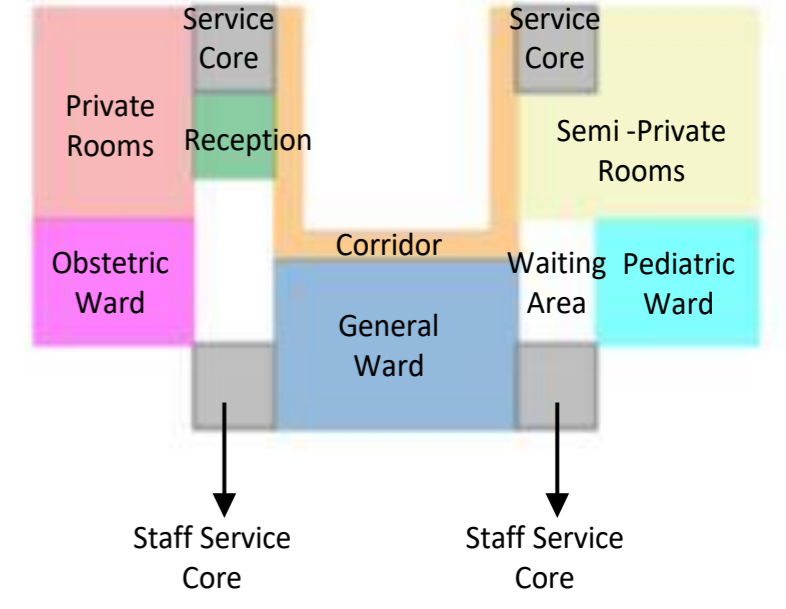
- Plot Area 11948 sq.mt
- 100 Bedded General Hospital
- 25 Bedded Trauma Centre
- Design Grid 8.5m X 8.5 m



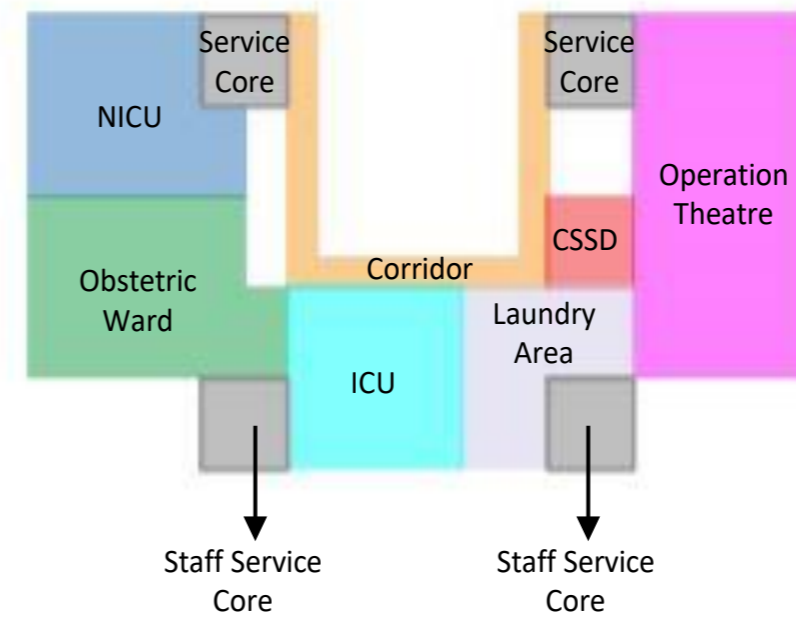
Ground Floor Plan



First Floor Plan

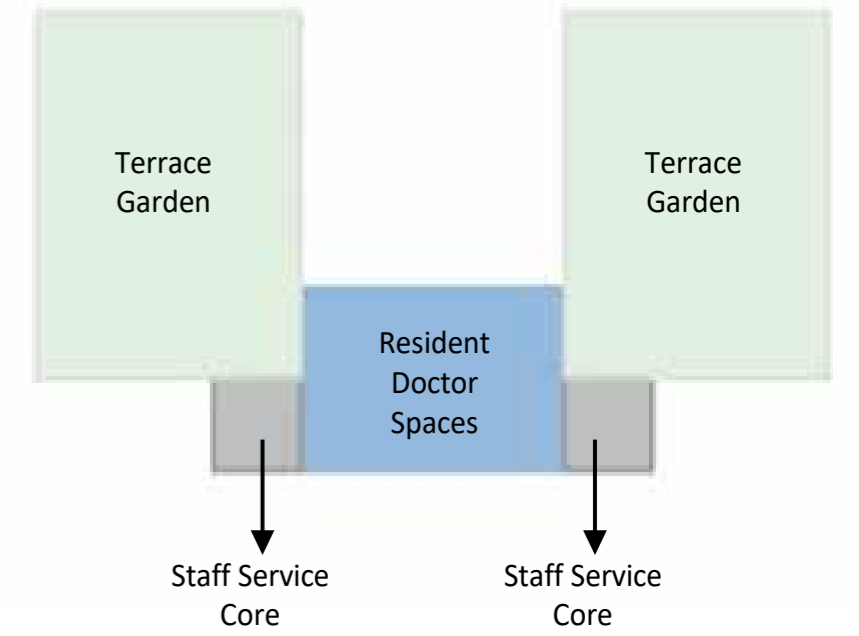


Fourth Floor Plan



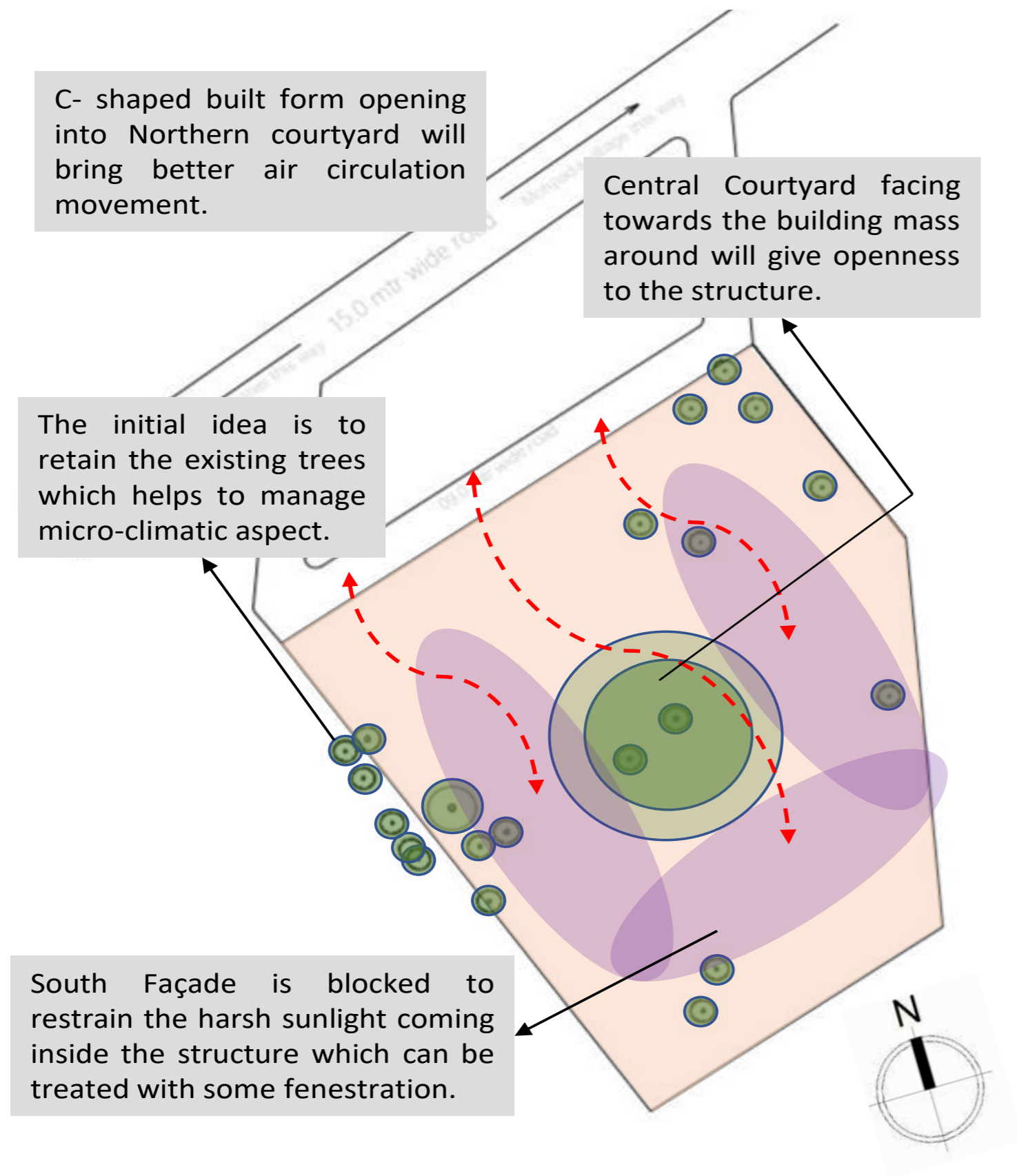
Second Floor Plan

Third floor is reserved as service floor.

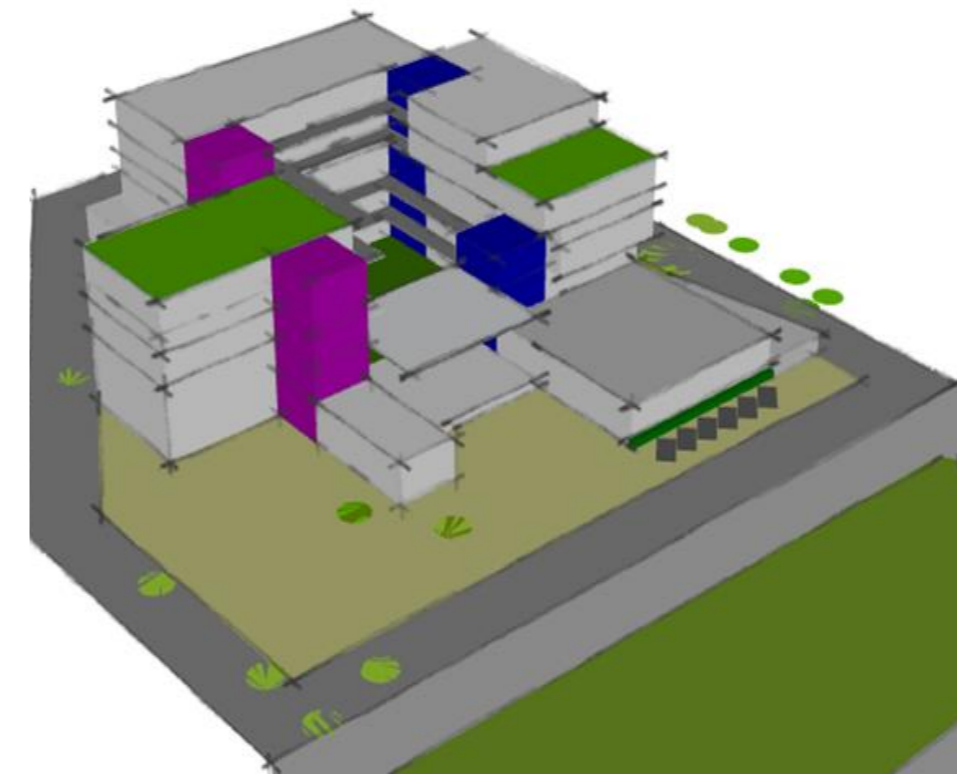


Fifth Floor Plan

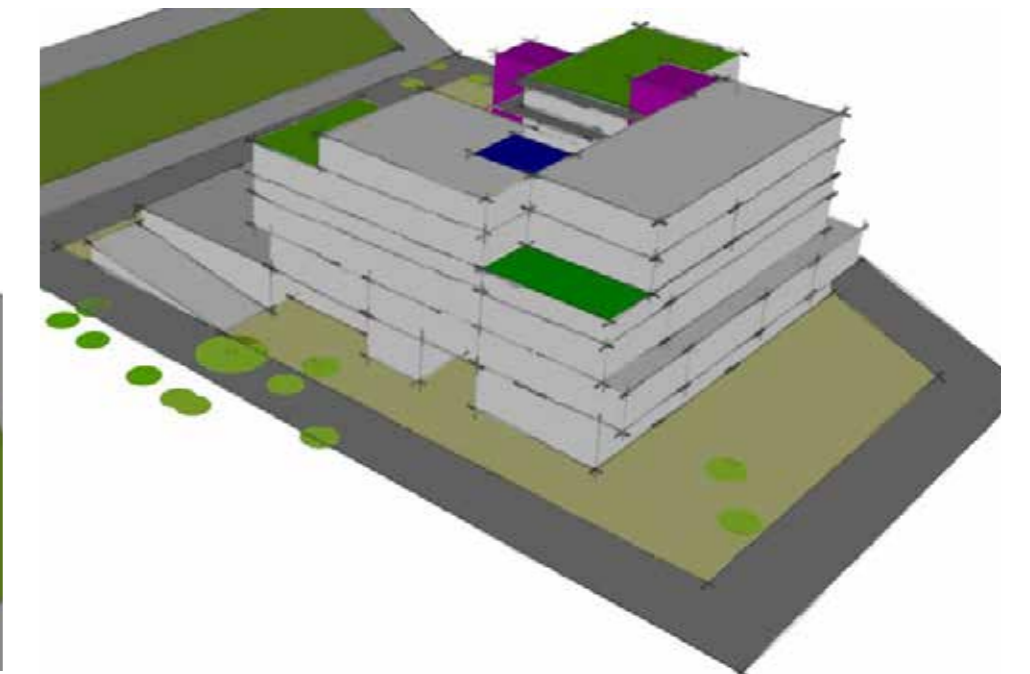
ZONING DEPENDING UPON CLIMATIC ASPECTS



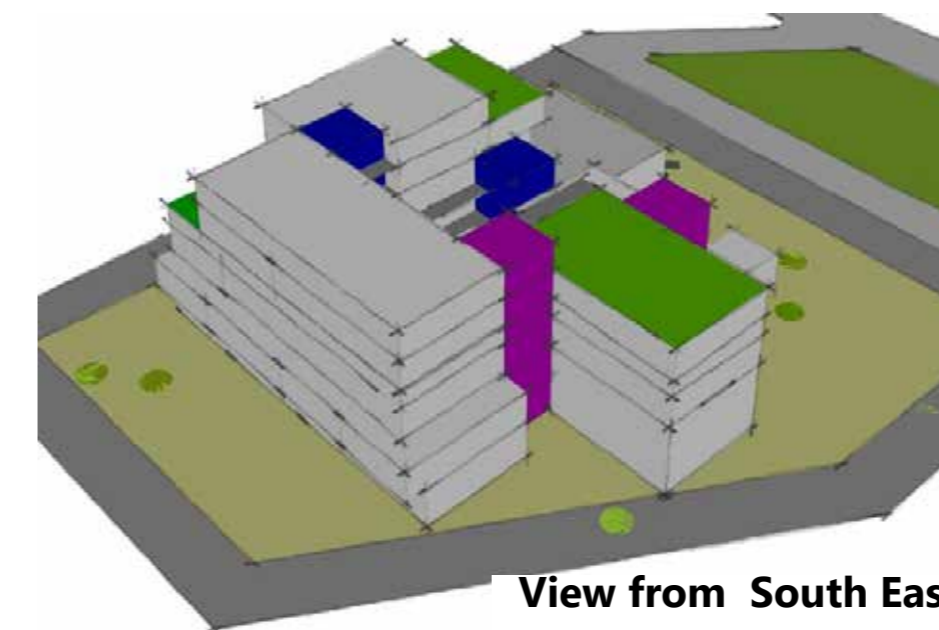
MASSING STRATEGIES



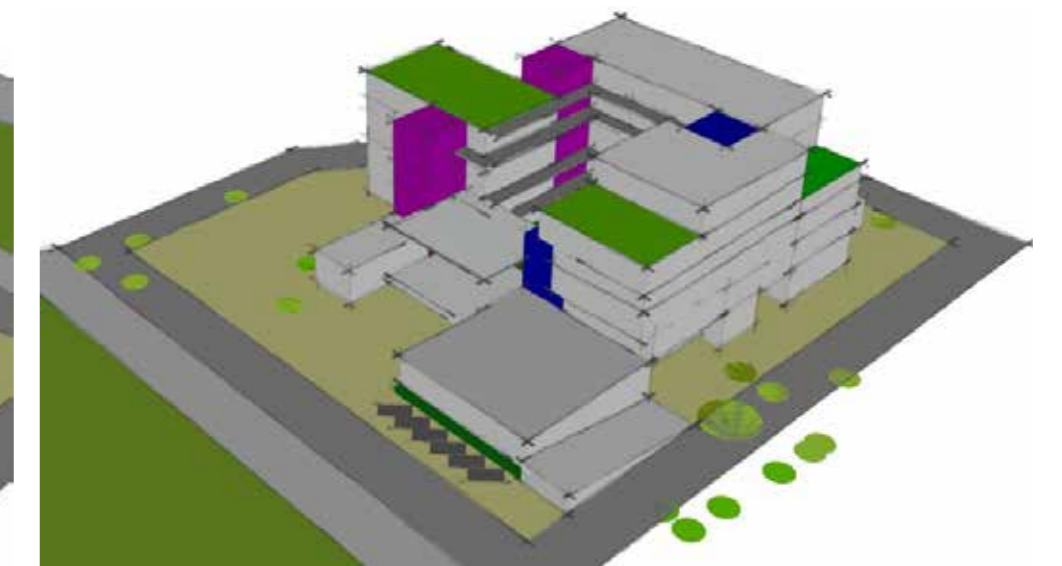
View from North East



View from South West



View from South East



View from North West

PASSIVE COOLING STRATEGIES

Passive cooling is a building design approach that focuses on heat gain control and heat dissipation in a building in order to improve the indoor thermal comfort with low or no energy consumption.

- All passive cooling strategies rely on daily changes in temperature and relative humidity.
- The applicability of each system depends on the climatic conditions.

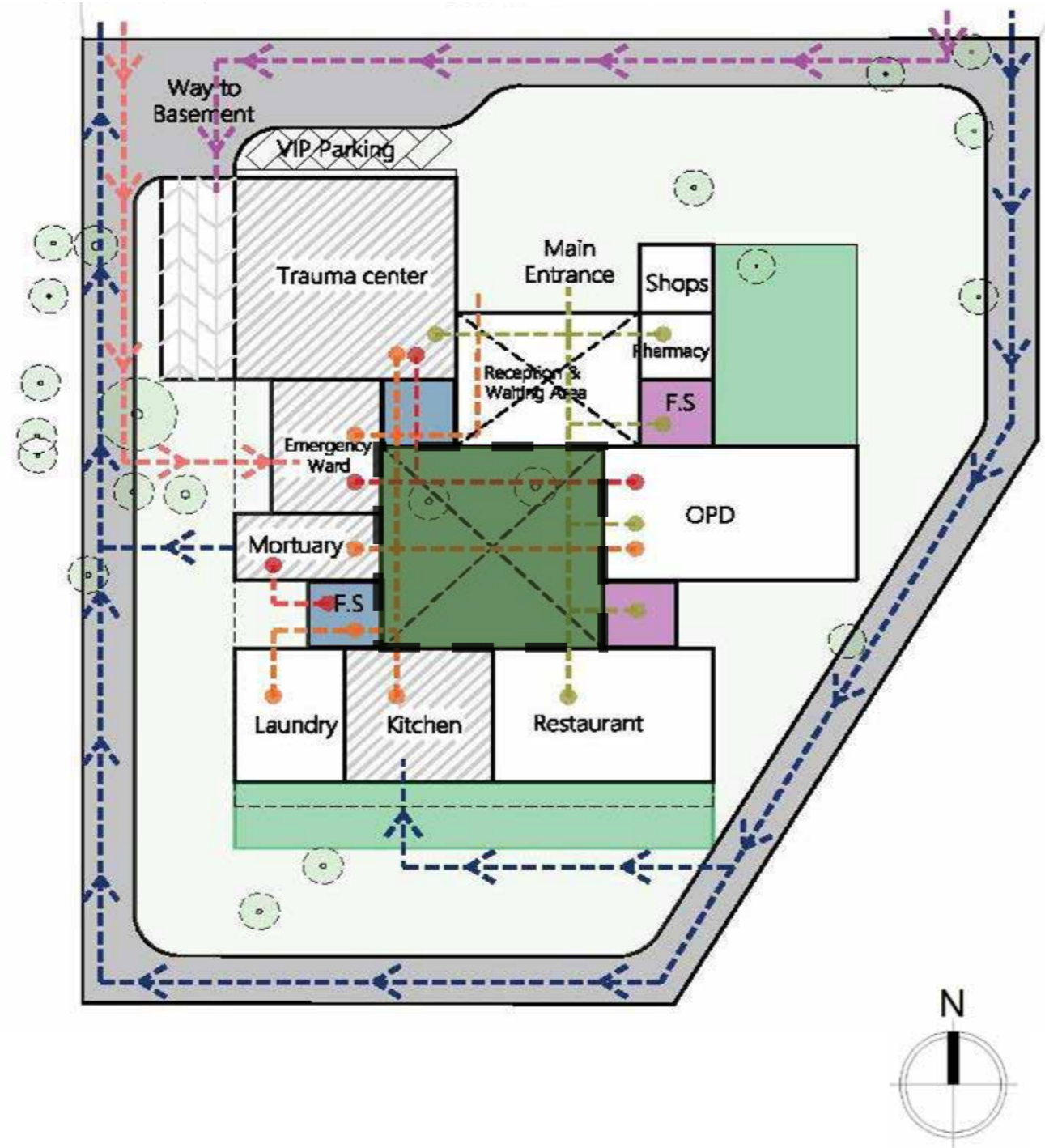
Courtyard Effect

Cool air from the ground level flows through the louvered openings of the rooms surrounding the courtyard, thus providing airflow.

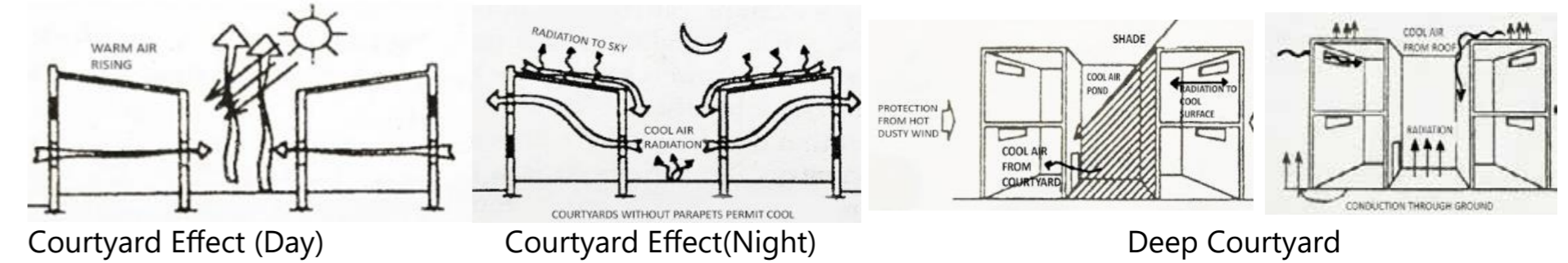
Due to the incident of solar radiation in the courtyard, the air gets warmer and cooler.

At night the warm roof surfaces get cooled by convection and radiation.

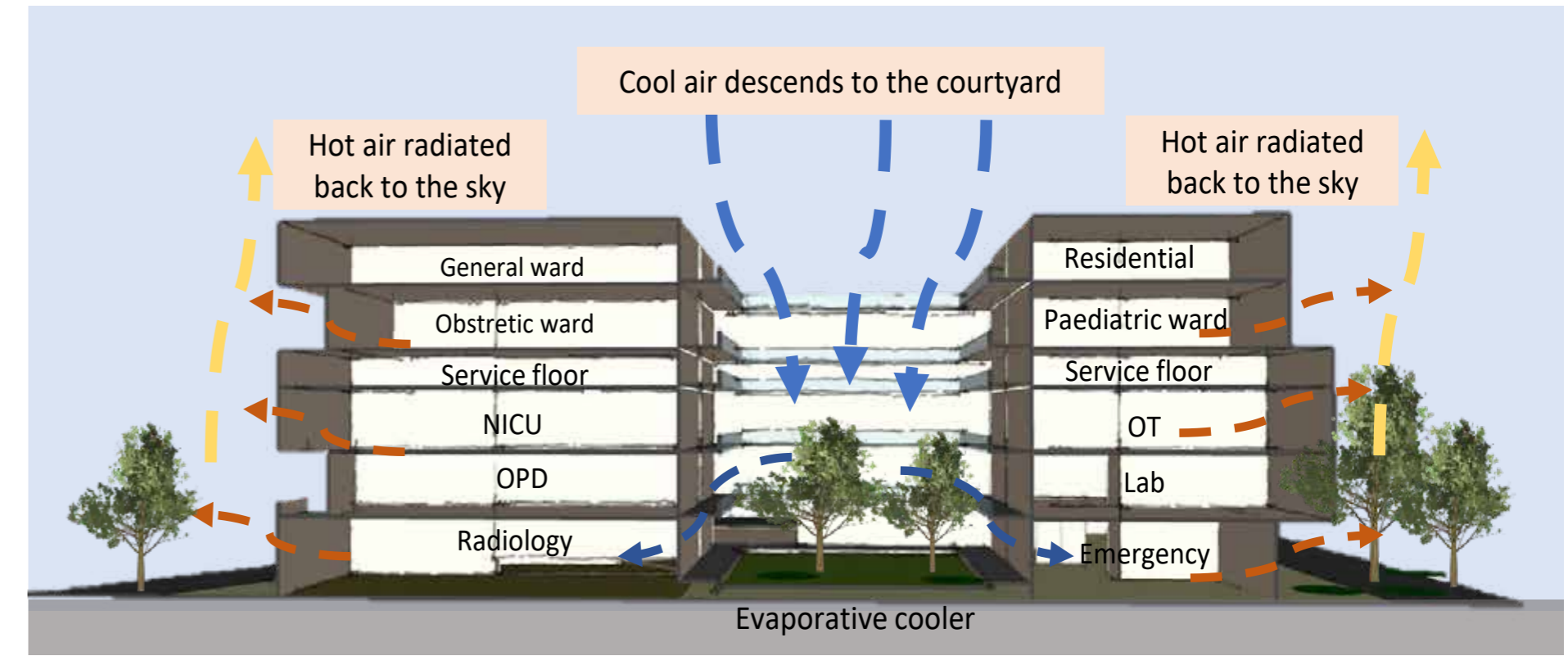
If the heat exchange reduces roof surface temperature to wet-bulb air temperature, condensation of atmospheric moisture occurs on the roof and the gain due to condensation limits further cooling.



Zoning based on concept of passive cooling



Implementation into Hospital design

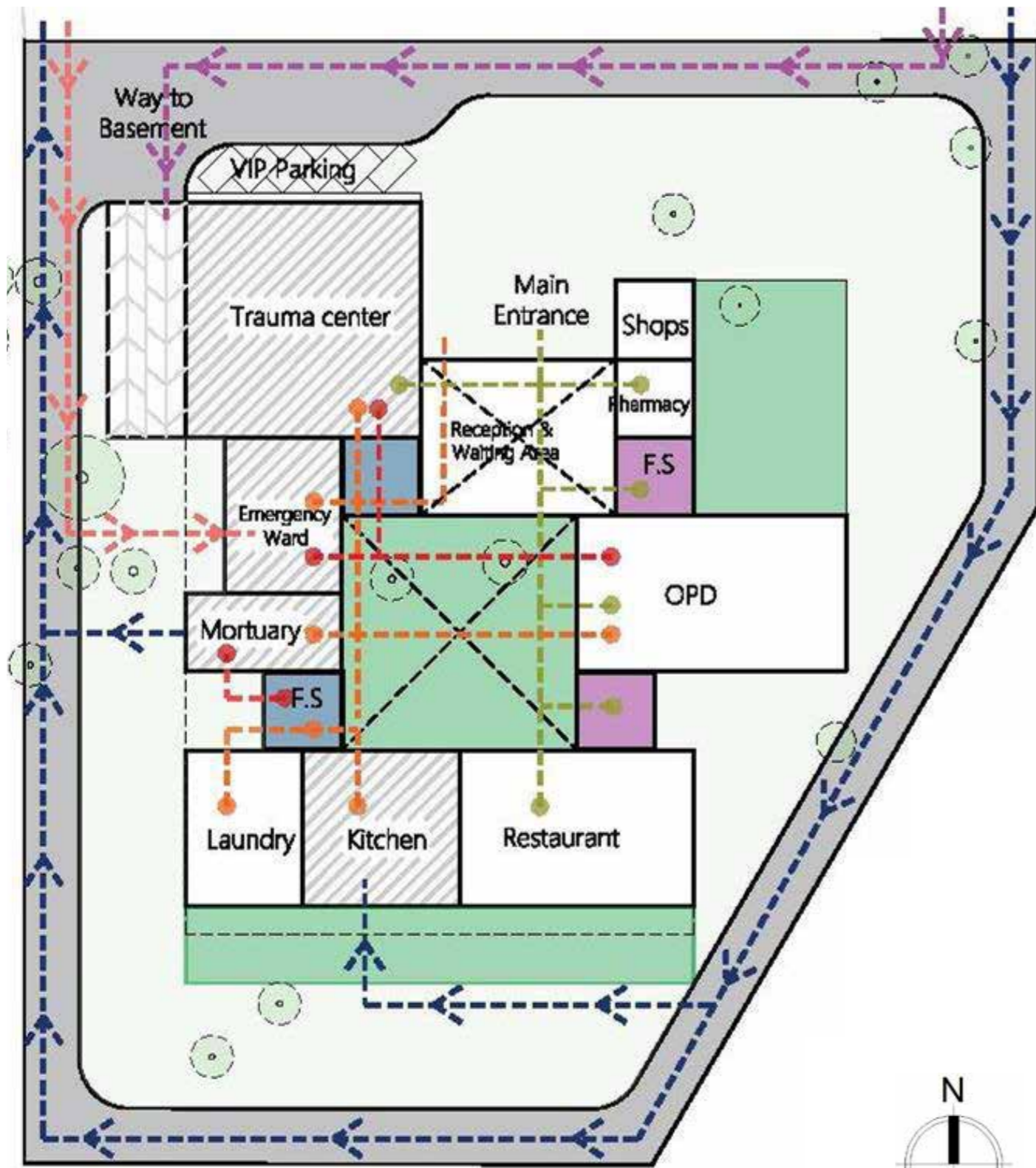


Courtyard Effect

Final Conceptual Zoning

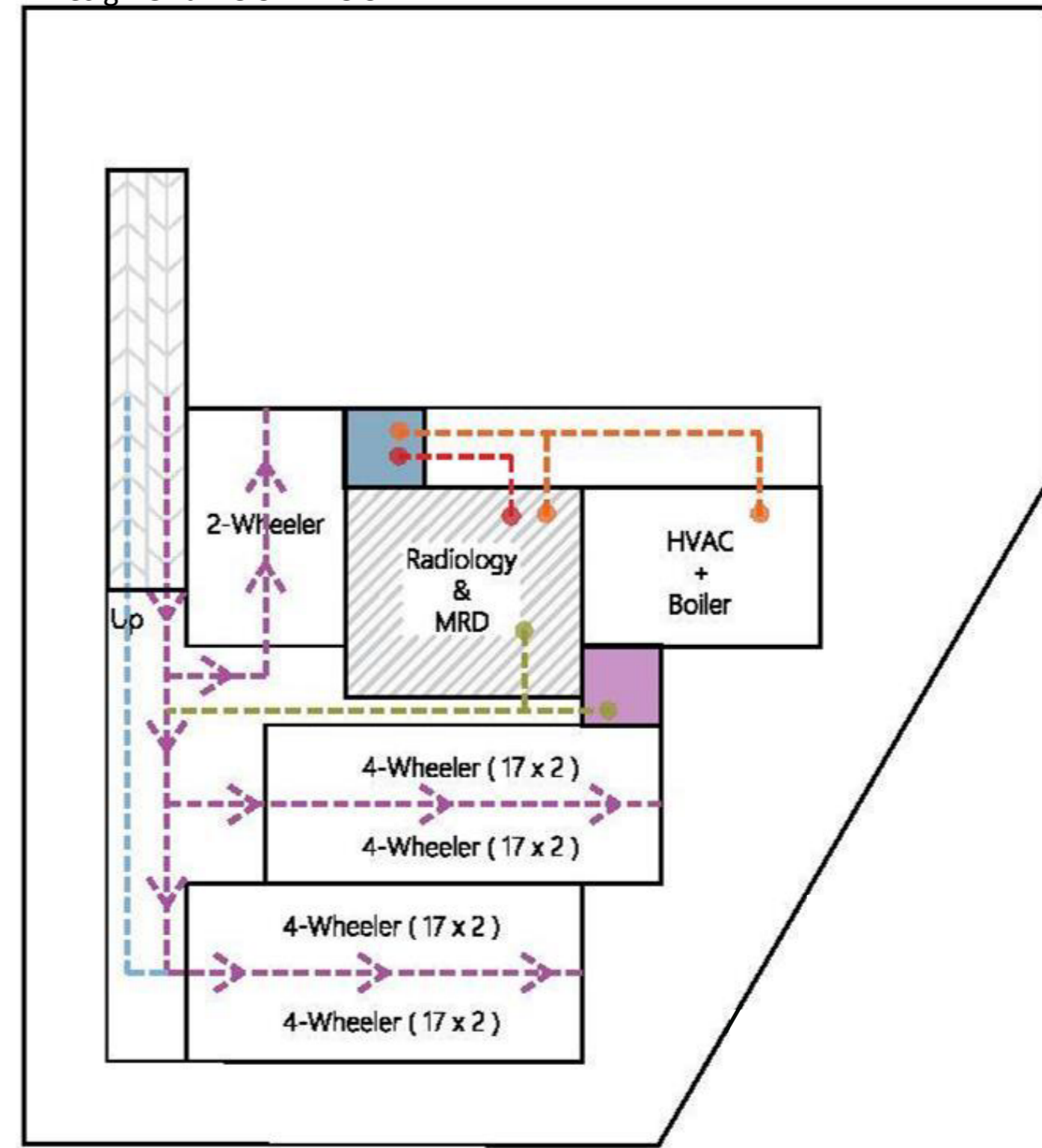
- Plot Area 11948 sq.m
- 100 Bedded General Hospital
- 25 Bedded Trauma Center
- Design Grid 8.5 M x 8.5 M

- Staff Service core
- Visitor's Service core
- Visitor's circulation
- Staff circulation
- Doctor's circulation
- Service Road
- Visitor's Entry
- Emergency Entry/Staff Entry



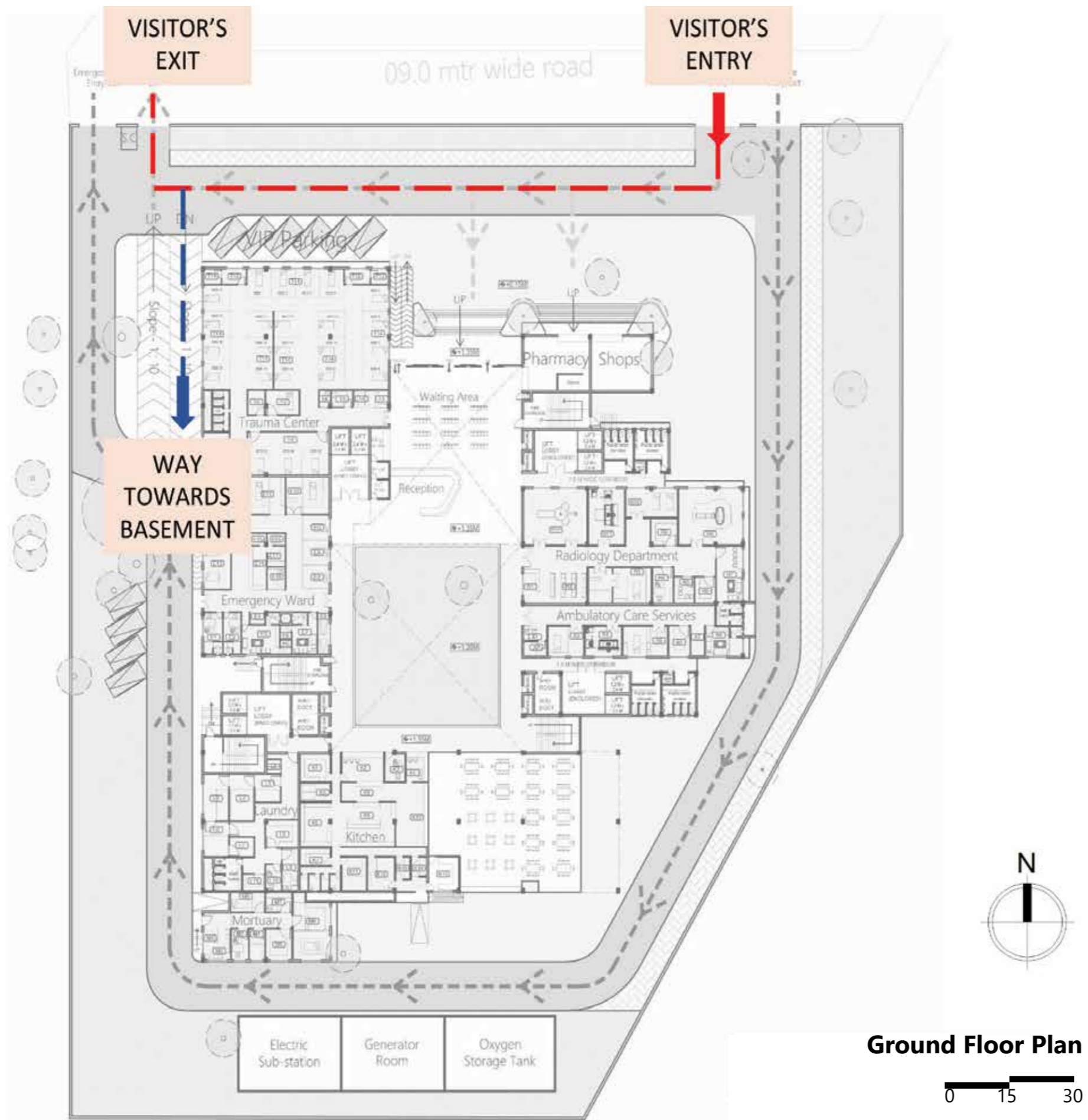
Ground Floor Plan

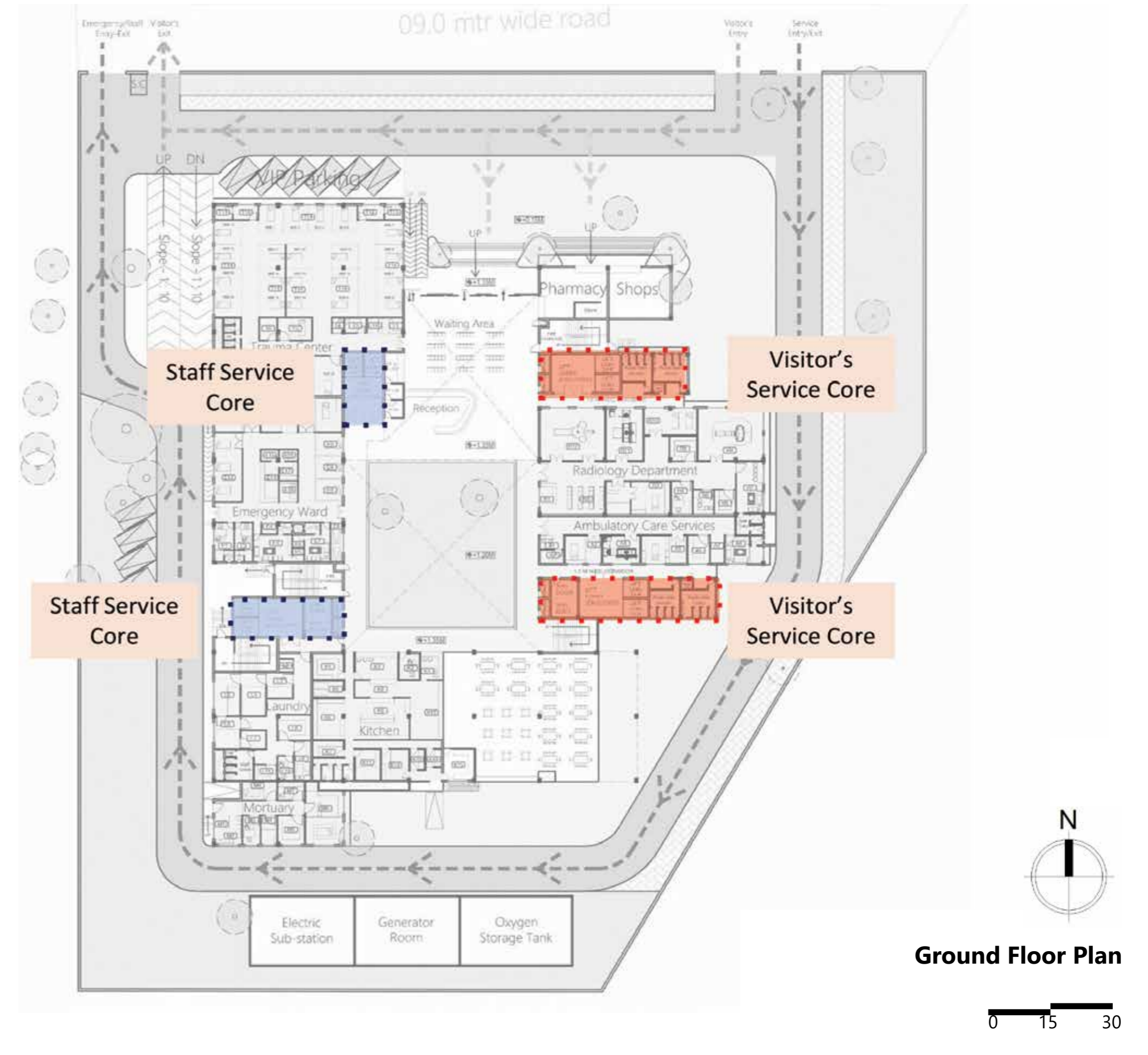
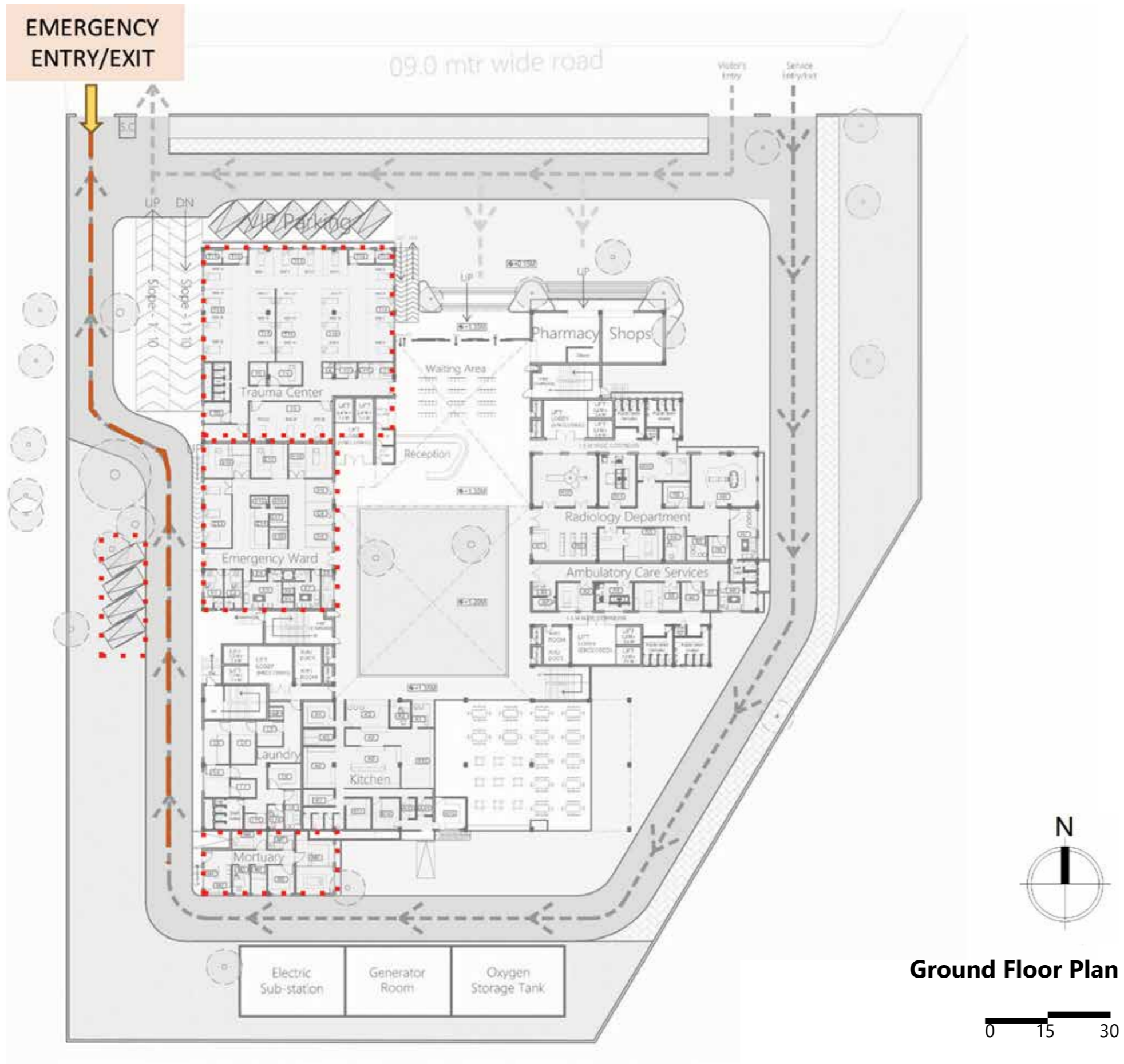
0 15 30



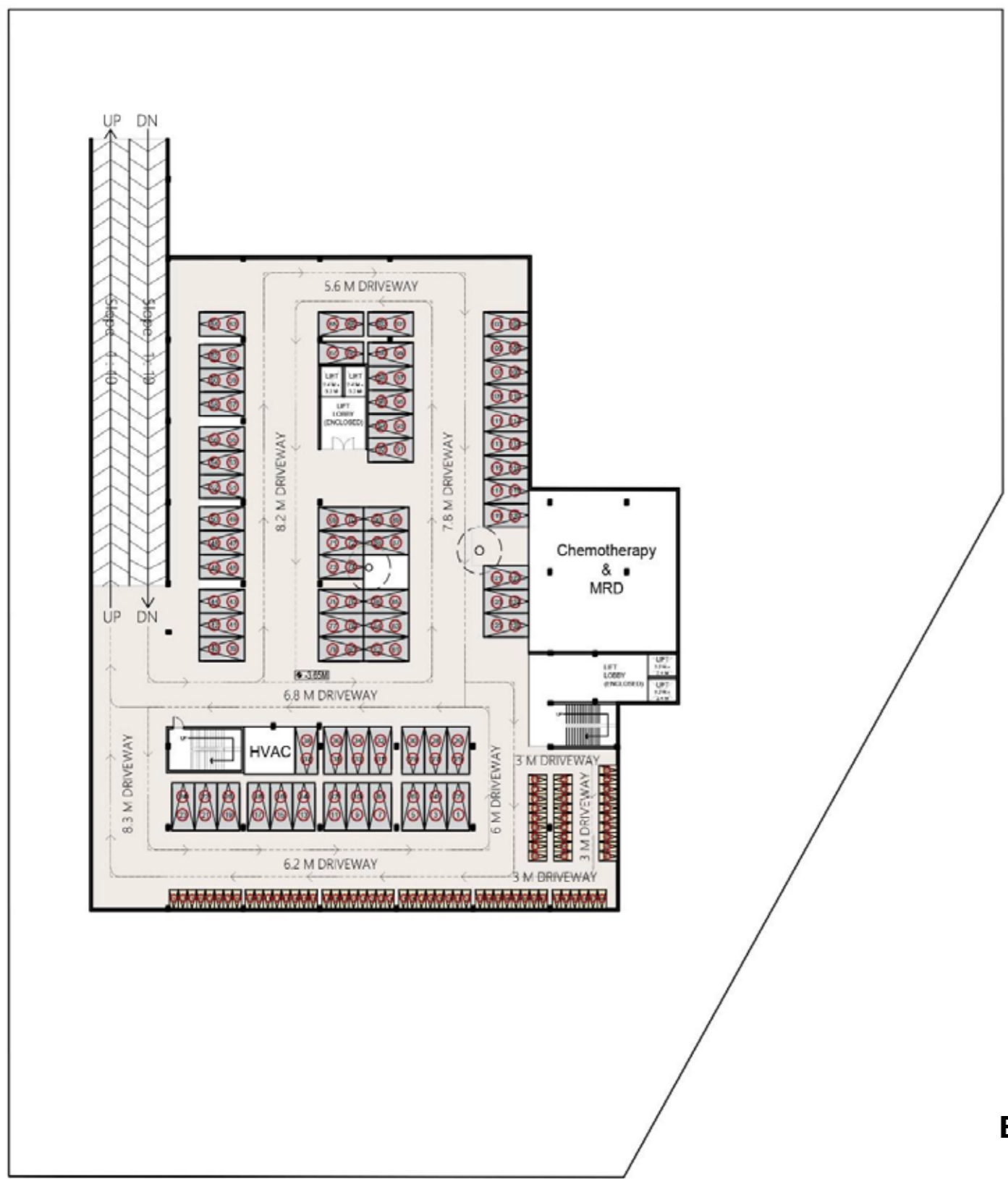
Basement Floor Plan

0 15 30

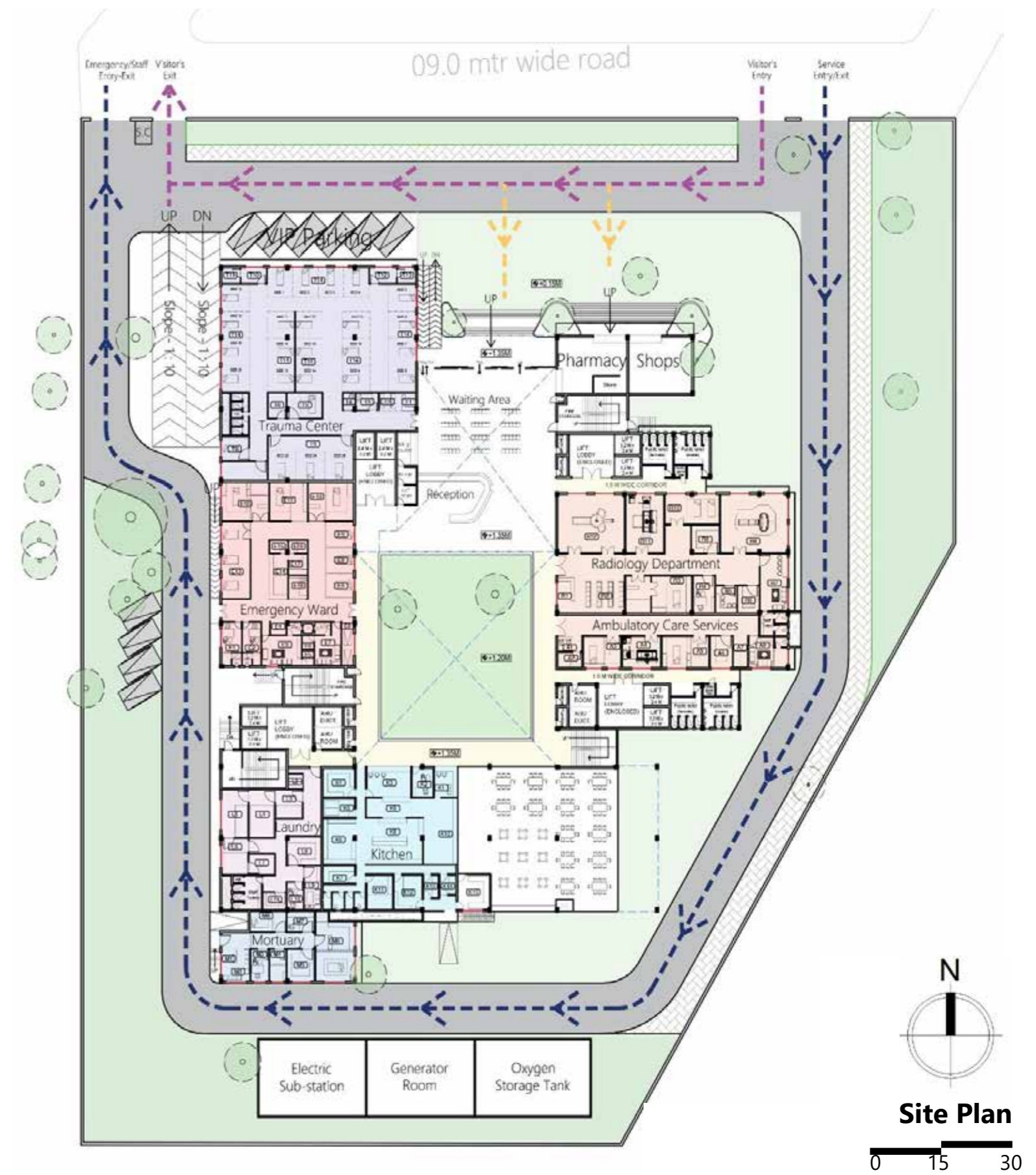




Car Parking – 130
2-Wheeler Parking - 68



N
Basement Plan
0 15 30

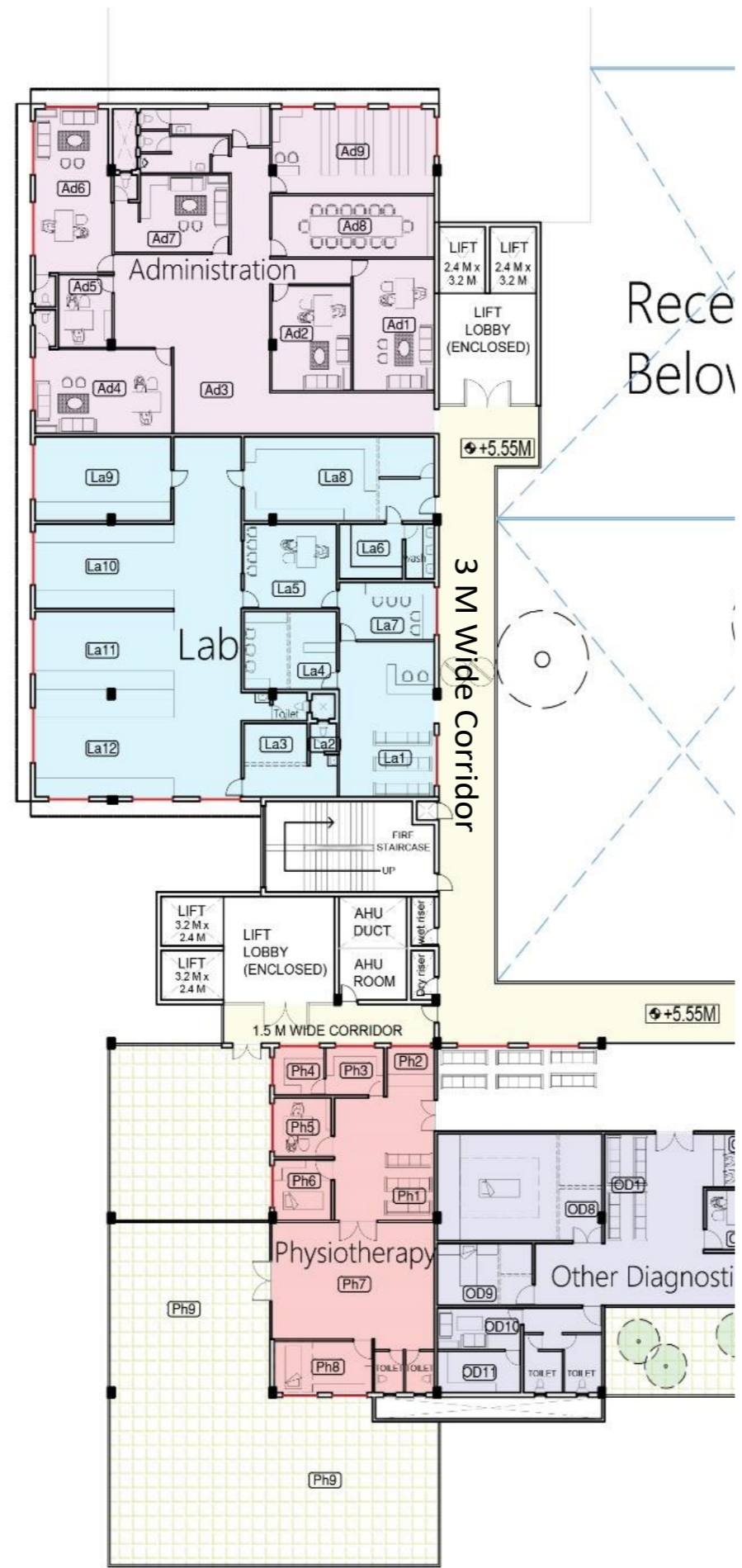


N
Site Plan
0 15 30

Administration Department		Carpet Area
Ad1	Clerical Office	27 sq.m
Ad2	Manager Office	21 sq.m
Ad3	Waiting Area	15 sq.m
Ad4	MD CEO Office	29 sq.m
Ad5	Office Secretary	9.7 sq.m
Ad6	MS Office	32 sq.m
Ad7	Nursing Super Interim	21 sq.m
Ad8	Staff Super Interim	25 sq.m
Ad9	Record Room	35 sq.m

Laboratory		Carpet Area
La1	Waiting Area	13.0 sq.m
La2	Specimen Toilet	1.85 sq.m
La3	Venipuncture Cubicle	6.25 sq.m
La4	Exam Tests	18.0 sq.m
La5	Pathologist Office	19.8 sq.m
La6	Technicians Lockers	8.2 sq.m
La7	Secretary Clerk Typist	18.6 sq.m
La8	Glasswashing Sterilizing	40.2 sq.m
La9	Serology Bacteriology	28.7 sq.m
La10	Histology	29.4 sq.m
La11	Urinalysis Biochemistry	27.2 sq.m
La12	Hematology	34.2 sq.m

Physiotherapy Department		Carpet Area
Ph1	Waiting Area	13 sq.m
Ph2	Issue Counter	5.0 sq.m
Ph3	Utility Room	6.9 sq.m
Ph4	Store Room	6.9 sq.m
Ph5	Consultation Room	8.4 sq.m
Ph6	Exam Room	8.7 sq.m
Ph7	Indoor Exercise Area	48.5 sq.m
Ph8	Whirlpool	12.6 sq.m
Ph9	Outdoor Exercise Area	205 sq.m



First Floor Plan

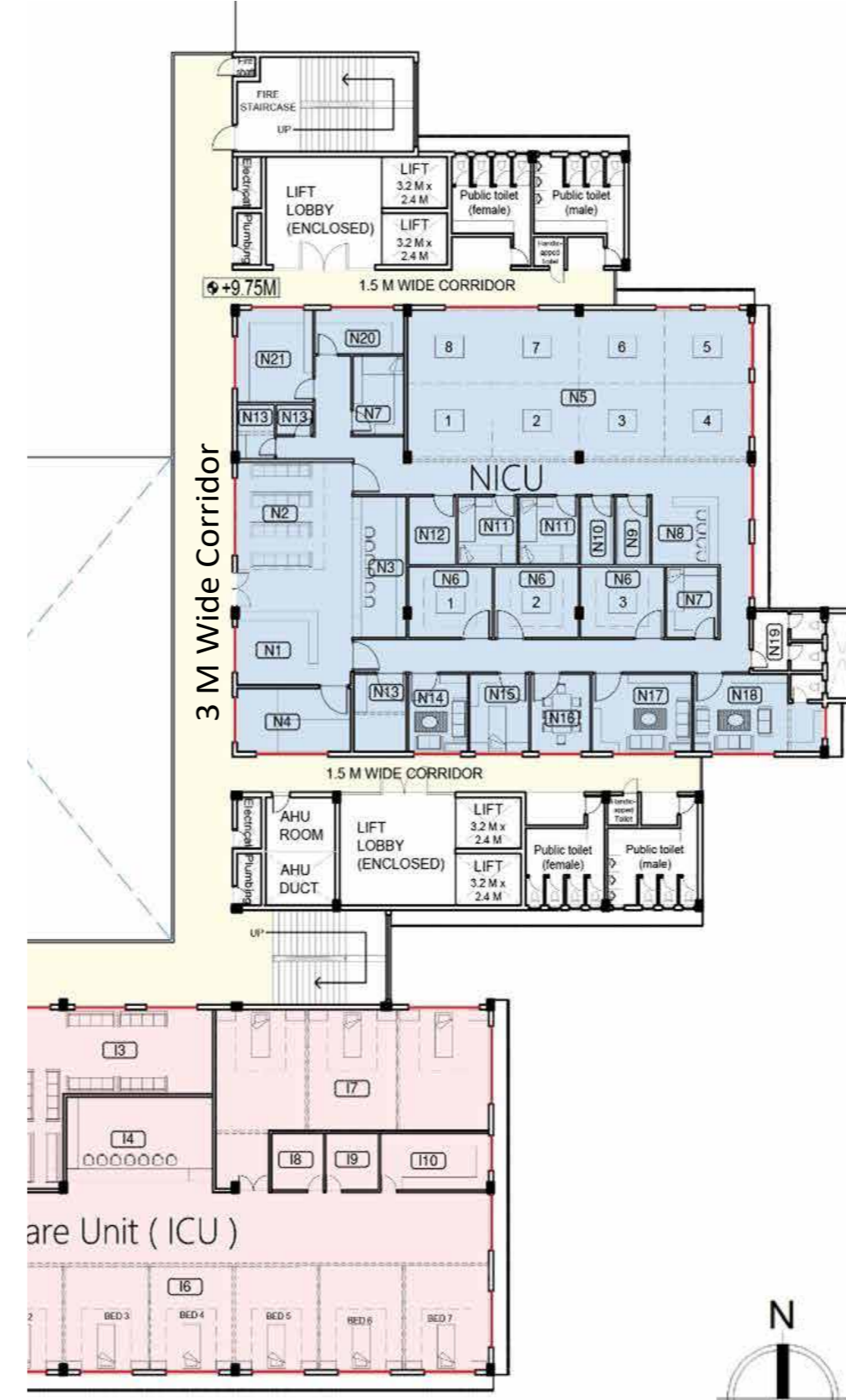
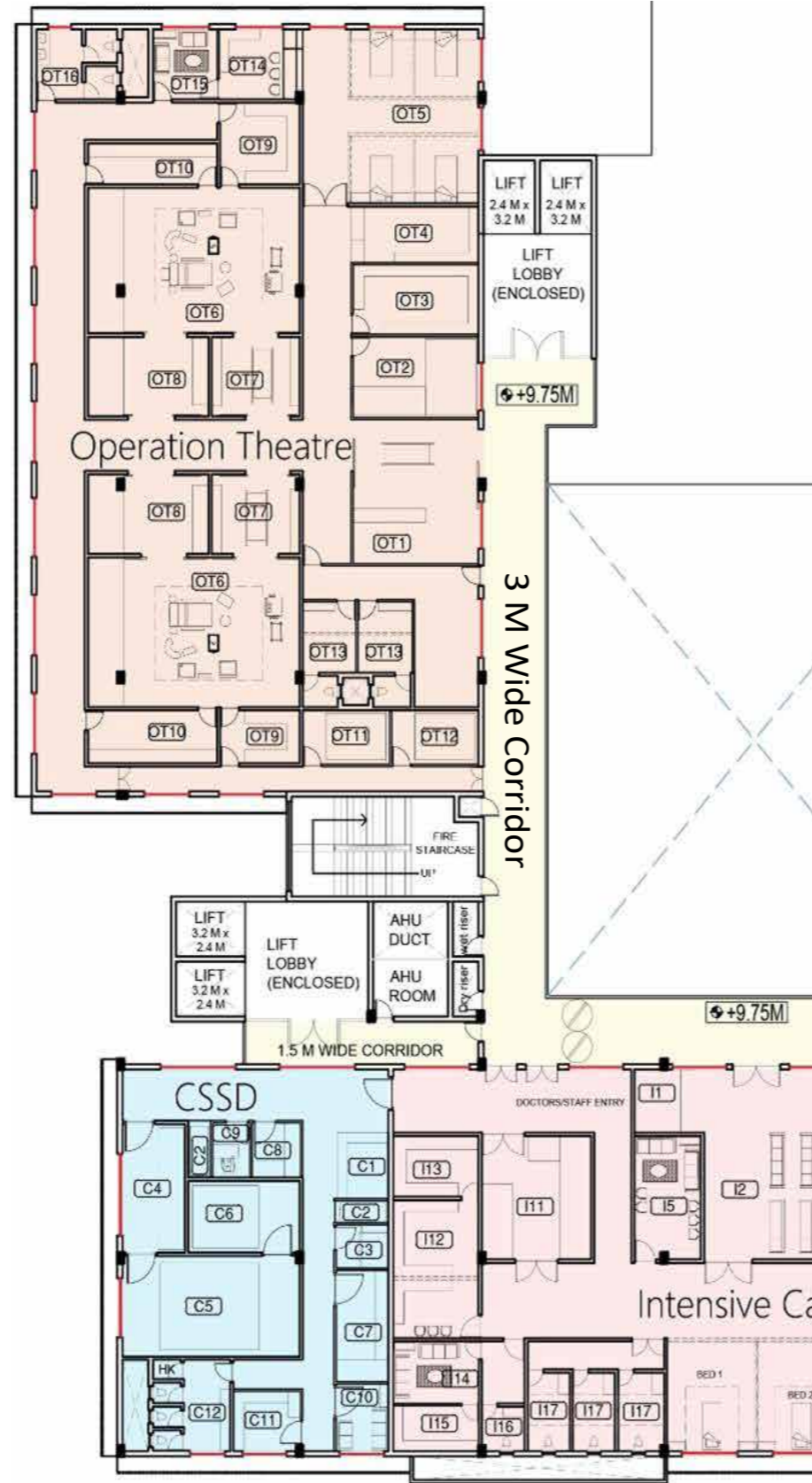
OPD		Carpet Area
O1	Reception	16.0 sq.m
O2	Registration & Billing	30.0 sq.m
O3	Waiting area	70.0 sq.m
O4a	Consultation room	14.3 sq.m
O4b	Consultation room	13.5 sq.m
O4c	Consultation room	19.38 sq.m
O4d	Consultation room	25.77 sq.m
O4e	Consultation room	16.10 sq.m
O4f	Consultation room	15.26 sq.m
O5	Procedure room	8.77 sq.m
O6	Treatment room	28.31 sq.m
O7	Doctors room	9.8 sq.m
O8	Doctors changing room with toilet	7.5 sq.m
O9	Nurse room	19.1 sq.m
O10	Nurse changing room with toilet	10.0 sq.m
O11	Pantry	5.00 sq.m
O12	Clean utility	3.77 sq.m
O13	dirty utility	3.77 sq.m
O14	storage	3.77 sq.m
O15	Staff changing room	5.63 sq.m

Blood Bank		Carpet Area
B1	Issue Counter	9.6 sq.m
B2	Waiting Area	10.0 sq.m
B3	Exam Room	6.9 sq.m
B4	Recovery Area	20.6 sq.m
B5	Bleeding Area	21.65 sq.m
B6	Component Separation Room	41.5 sq.m
B7	Staff Room	7.4 sq.m
B8	Store Room	16.7 sq.m
B9	Blood Bank Incharge	8.2 sq.m
B10	Pantry	3.5 sq.m

Other Diagnostic Facilities		Carpet Area
OD1	Waiting Area	12.5 sq.m
OD2	Reception	8.0 sq.m
OD3	Consultation Room	8.6 sq.m
OD4	ECG Room	23 sq.m
OD5	EEG Room	25.3 sq.m
OD6	Stress Test Room	23.5 sq.m
OD7	2D Echo Room	21.0sq.m
OD8	Endoscopy Room	44.0 sq.m
OD9	Sonography Room	14.7 sq.m
OD10	Staff Room	8.6 sq.m
OD11	Pantry	8.5 sq.m

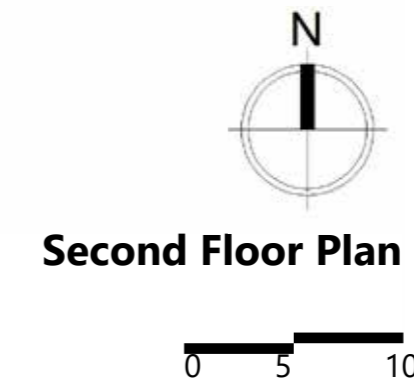
OPERATION THEATER		Carpet Area
OT1	Bed to bed transfer	34 sq.m
OT2	equipment room	19 sq.m
OT3	Sub Sterilization	16.5 sq.m
OT4	Pharmacy	13.4 sq.m
OT5	Pre and Post Operation	58 sq.m
OT6	Operation Theater - 2	50 sq.m
OT7	Anesthesia Room - 2	13 sq.m
OT8	Discharge Room - 2	13.2 sq.m
OT9	Sterile Goods - 2	12.2 sq.m
OT10	Wash - 2	7.4 sq.m
OT11	Clean Utility	9 sq.m
OT12	Dirty Utility	9 sq.m
OT13	Dress - 2	9.3 sq.m
OT14	Nurse Station	10.2 sq.m
OT15	Nurse Room	8.7 sq.m
OT16	Toilets	10.6 sq.m

CSSD		Carpet Area
C1	Reception Area	7 sq.m
C2	Trolley	2 sq.m
C3	Changing Room	4 sq.m
C4	Collection of Dirty Utility	15 sq.m
C5	Central sterilization Room	34 sq.m
C6	Clean Area for Packing	15 sq.m
C7	Sterile Store Area	11 sq.m
C8	Clean Utility Dispatch	5 sq.m
C9	Supervisor Room	4 sq.m
C10	Staff Rest Room	6.5 sq.m
C11	Pantry	8 sq.m
C12	Staff Toilets	13 sq.m

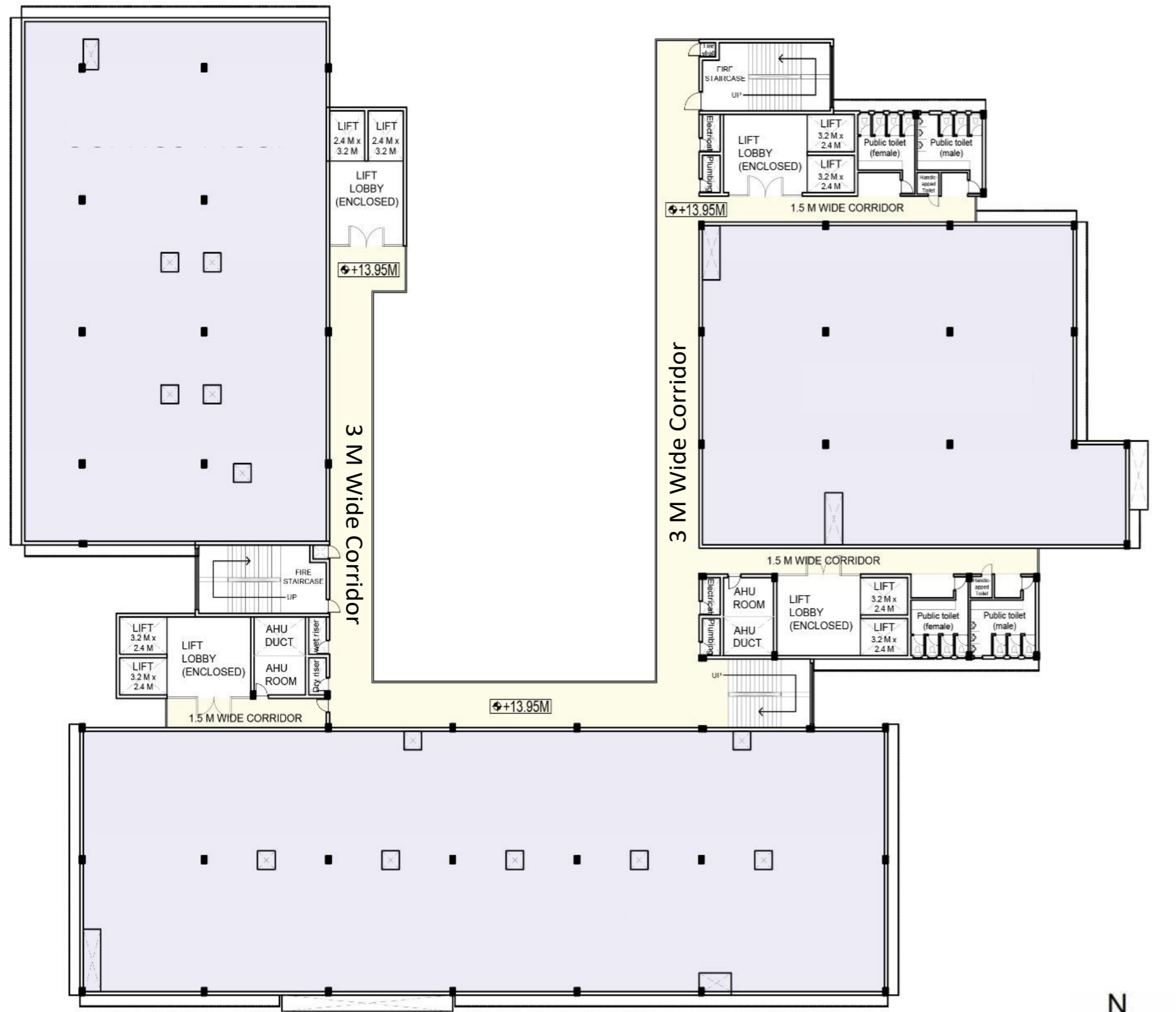


NICU		Carpet Area
N1	Admin	13 sq.m
N2	Waiting	20 sq.m
N3	Nurse Station	16.4 sq.m
N4	Equipment Room	15 sq.m
N5	NICU Beds - 8	111 sq.m
N6	Isolation beds - 3	13 sq.m
N7	Nurseing Area	8 sq.m
N8	Nurse station	10 sq.m
N9	Clean Utility	5 sq.m
N10	Dirty Utility	5 sq.m
N11	Feeding Room	9 sq.m
N12	Milk Formula Room	7 sq.m
N13	Scrub and Cleaning Area - 2	9 sq.m
N14	Doctor's Room	10 sq.m
N15	Procedure Room	10 sq.m
N16	Discussion Room	10 sq.m
N17	Nurse Room	16.5 sq.m
N18	Doctor's Resting Area	21 sq.m
N19	Staff Toilet	9.2 sq.m
N20	Storage	8.2 sq.m
N21	Pantry	15 sq.m

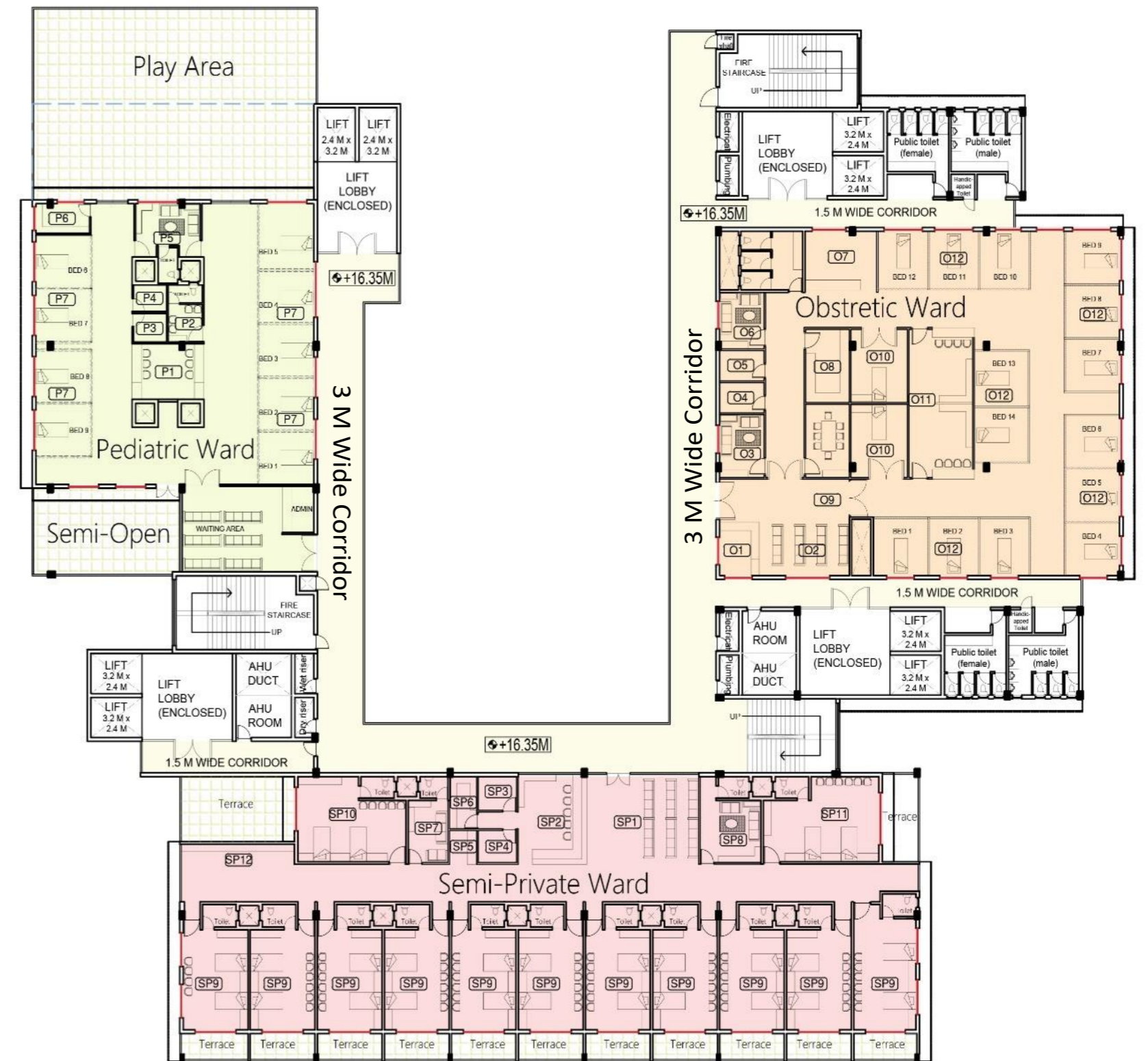
INTENSIVE CARE UNIT (ICU)		Carpet Area
I1	Admin	7 sq.m
I2	Waiting Area	35 sq.m
I3	Visitors Pantry	27 sq.m
I4	Nurse Station	30 sq.m
I5	Doctor's Room	15 sq.m
I6	ICU Beds - 10	167 sq.m
I7	Isolation Beds - 3	70 sq.m
I8	Clean Utility	6 sq.m
I9	Dirty Utility	6 sq.m
I10	Storage	13 sq.m
I11	Equipment Room	25 sq.m
I12	Stat Lab	22 sq.m
I13	Storage	10 sq.m
I14	Nurse Room	10 sq.m
I15	Staff Pantry	7 sq.m
I16	Staff Toilet	3.7 sq.m
I17	Toilet cum Bath -3	21 sq.m



Second Floor Plan



Third Floor Plan (Service Floor Plan)

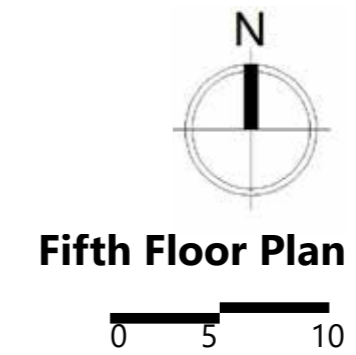
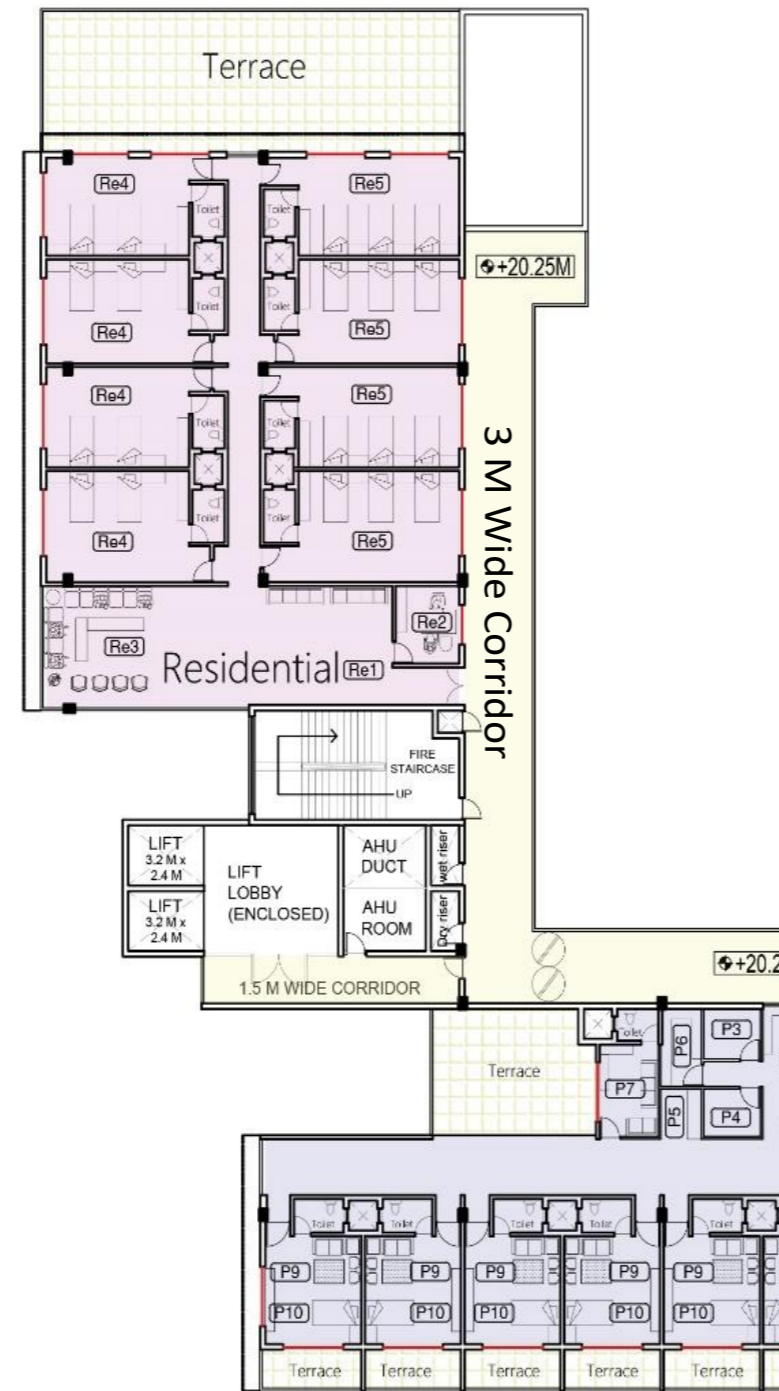


Fourth Floor Plan



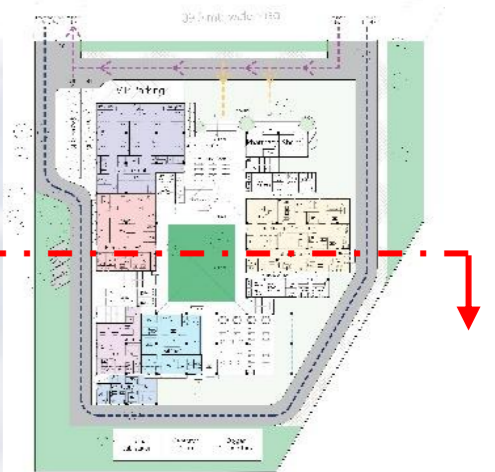
RESIDENTIAL		Carpet Area
Re1	Waiting	25 sq.m
Re2	Office	8 sq.m
Re3	Gathering Space	33 sq.m
Re4	2 Bed Dormitory	22.5 sq.m
Re5	3 Bed Dormitory	27.4 sq.m

Private Ward		Carpet Area
P1	Waiting Area	35.3 sq.m
P2	Nurse Station	21.5 sq.m
P3	Clean Utility	4.4 sq.m
P4	Dirty Utility	4.2 sq.m
P5	Pantry	3.15 sq.m
P6	Storage	5 sq.m
P7	Nurse Room	10.8 sq.m
P8	Doctor's Room	18.3 sq.m
P9	Rooms - 10	16.5 sq.m each
P10	Rooms - 10	25.5 sq.m
	(Including individual toilet and terrace)	
P11	Room - 1	20 sq.m
	(Including individual toilet and terrace)	28.5 sq.m



Fifth Floor Plan

Sections



Section A-A'

- Terrace Floor lvl +24 m
- Fifth Floor lvl +20.1 m
- Fourth Floor lvl +16.2 m
- Service Floor lvl +13.8 m
- Second Floor LVL +9.6 m
- First Floor lvl +5.4 m
- Plinth lvl +1.2 m
- Basement Floor lvl -3.85 m

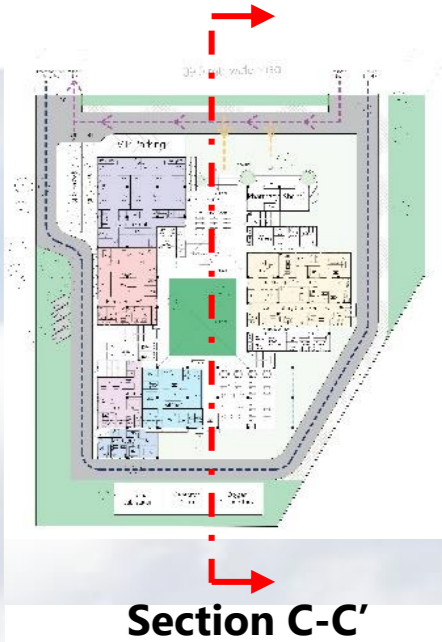
Sections



Section B-B'

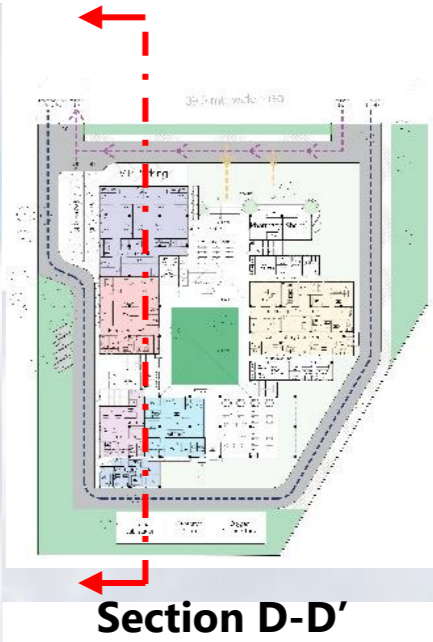
- Terrace Floor lvl +24 m
- Fifth Floor lvl +20.1 m
- Fourth Floor lvl +16.2 m
- Service Floor lvl +13.8 m
- Second Floor LVL +9.6 m
- First Floor lvl +5.4 m
- Plinth lvl +1.2 m
- Basement Floor lvl -3.85 m

Sections



- Terrace Floor lvl +24 m
- Fifth Floor lvl +20.1 m
- Fourth Floor lvl +16.2 m
- Service Floor lvl +13.8 m
- Second Floor LVL +9.6 m
- First Floor lvl +5.4 m
- Plinth lvl +1.2 m
- Basement Floor lvl -3.85 m

Sections



- Section D-D'**
- Terrace Floor Lvl +24 m
 - Fifth Floor Lvl +20.1 m
 - Fourth Floor Lvl +16.2 m
 - Service Floor Lvl +13.8 m
 - Second Floor LVL +9.6 m
 - First Floor Lvl +5.4 m
 - Plinth Lvl +1.2 m
 - Basement Floor Lvl -3.85 m

Elevations



North Elevation

Elevations



- Terrace Floor lvl +24 m
- Fifth Floor lvl +20.1 m
- Fourth Floor lvl +16.2 m
- Service Floor lvl +13.8 m
- Second Floor LVL +9.6 m
- First Floor lvl +5.4 m
- Plinth lvl +1.2 m

East Elevation

Elevations



- Terrace Floor lvl +24 m
- Fifth Floor lvl +20.1 m
- Fourth Floor lvl +16.2 m
- Service Floor lvl +13.8 m
- Second Floor LVL +9.6 m
- First Floor lvl +5.4 m
- Plinth lvl +1.2 m

West Elevation

Views

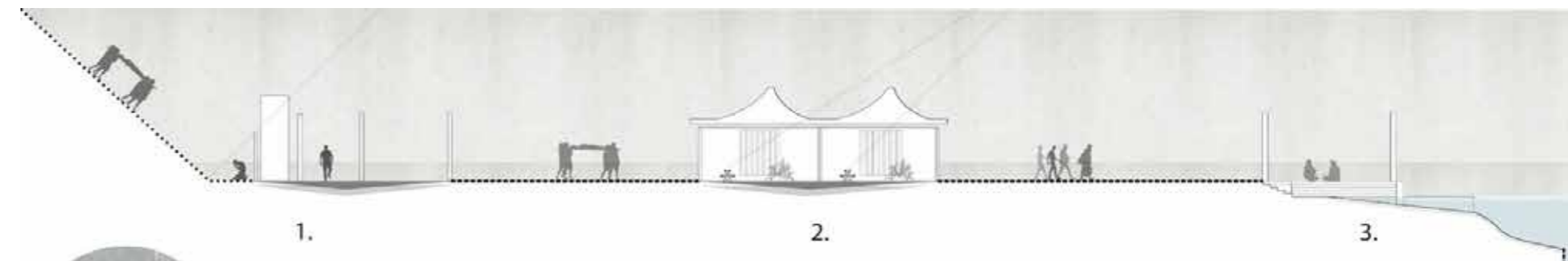
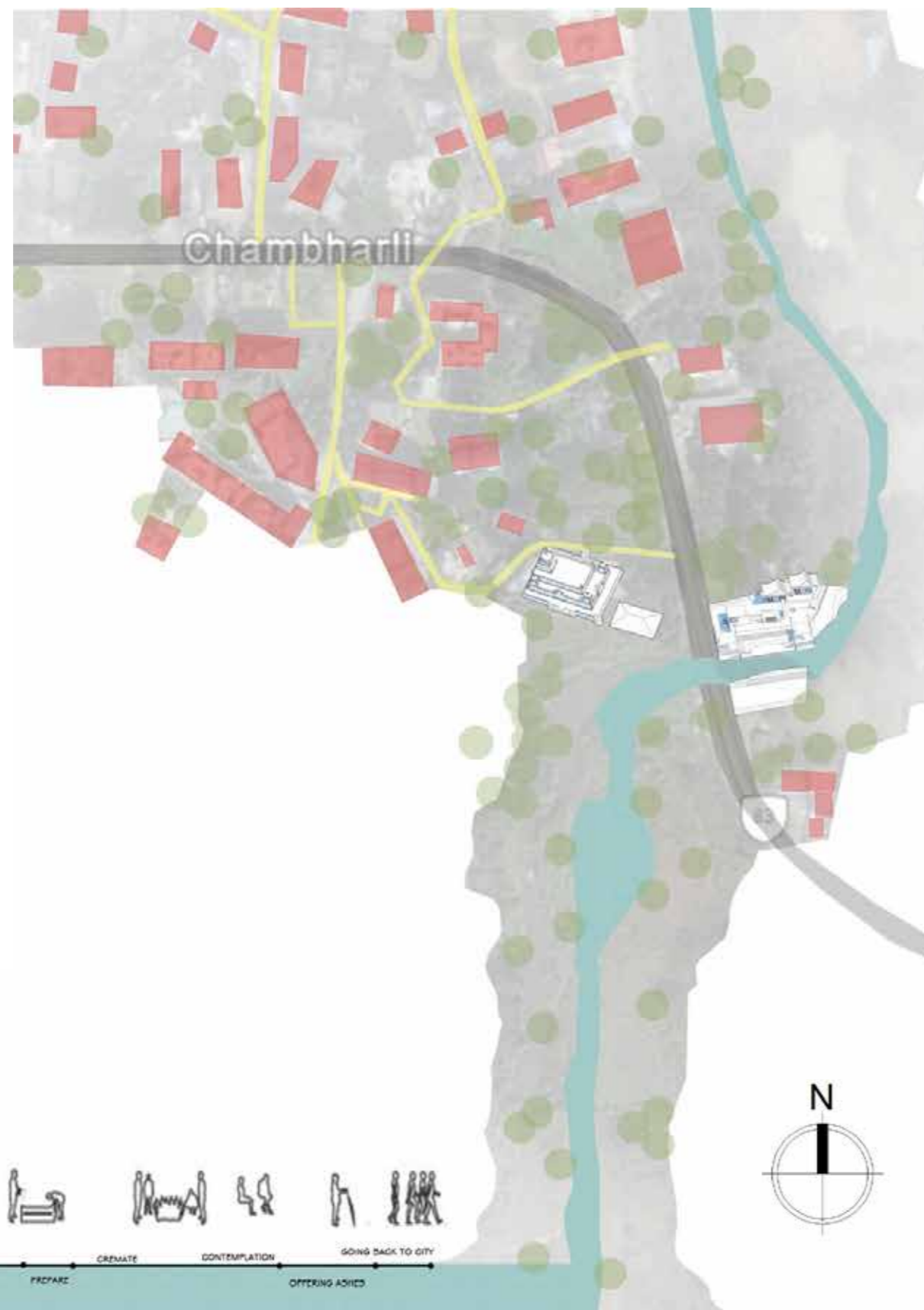




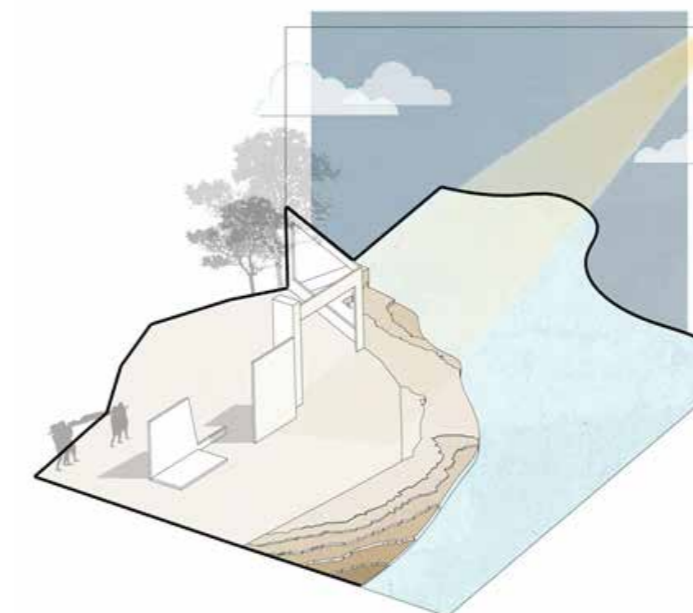
| CREMATORIUM

Vaikunth Dhaam

To create a logical design catering to the emotional final journey of a soul. Also understanding the need and nature of various elements and integrating them as one is the main objective of redesigning the crematorium at Rasayani.

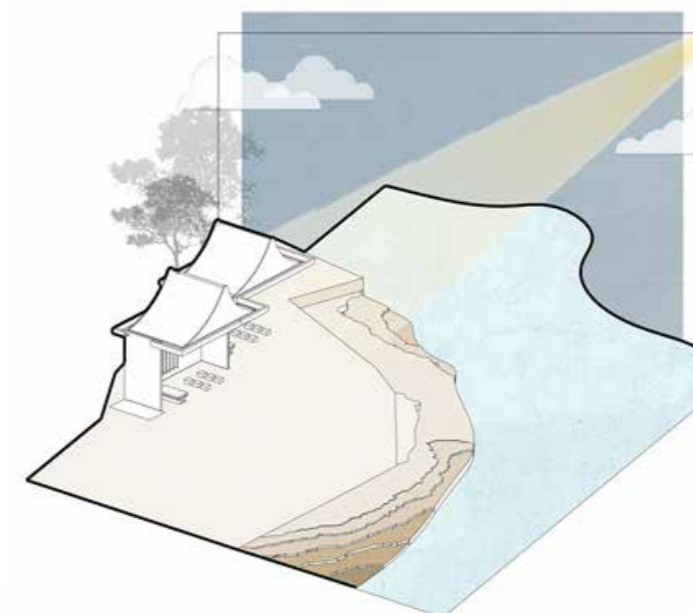


1. WALLS DEFINING PATHWAYS



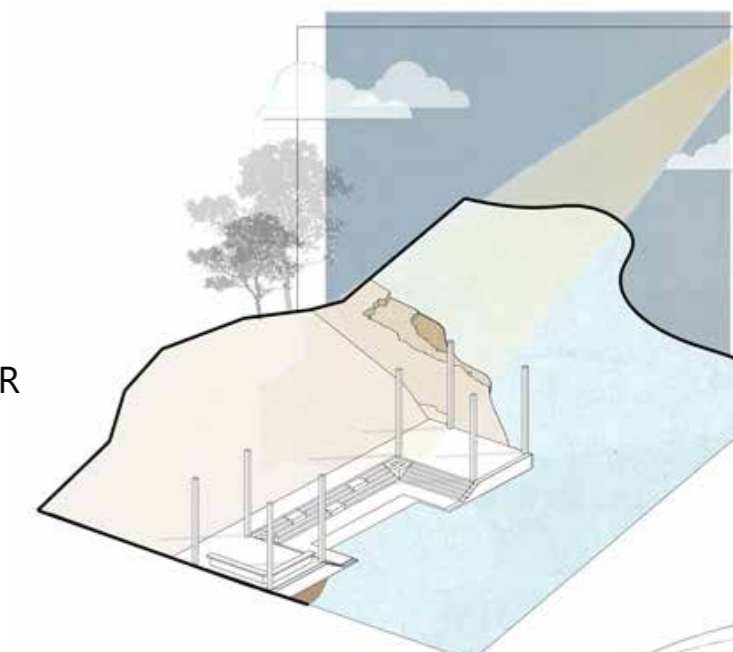
Walls are emerging as a defining pathway to follow ritual of hindu cremation and to move forward from path denoting as life when user exiting space after completion of all rituals.

2. CEMETERY - SEMICOVERED SPACE FOR CREMATION

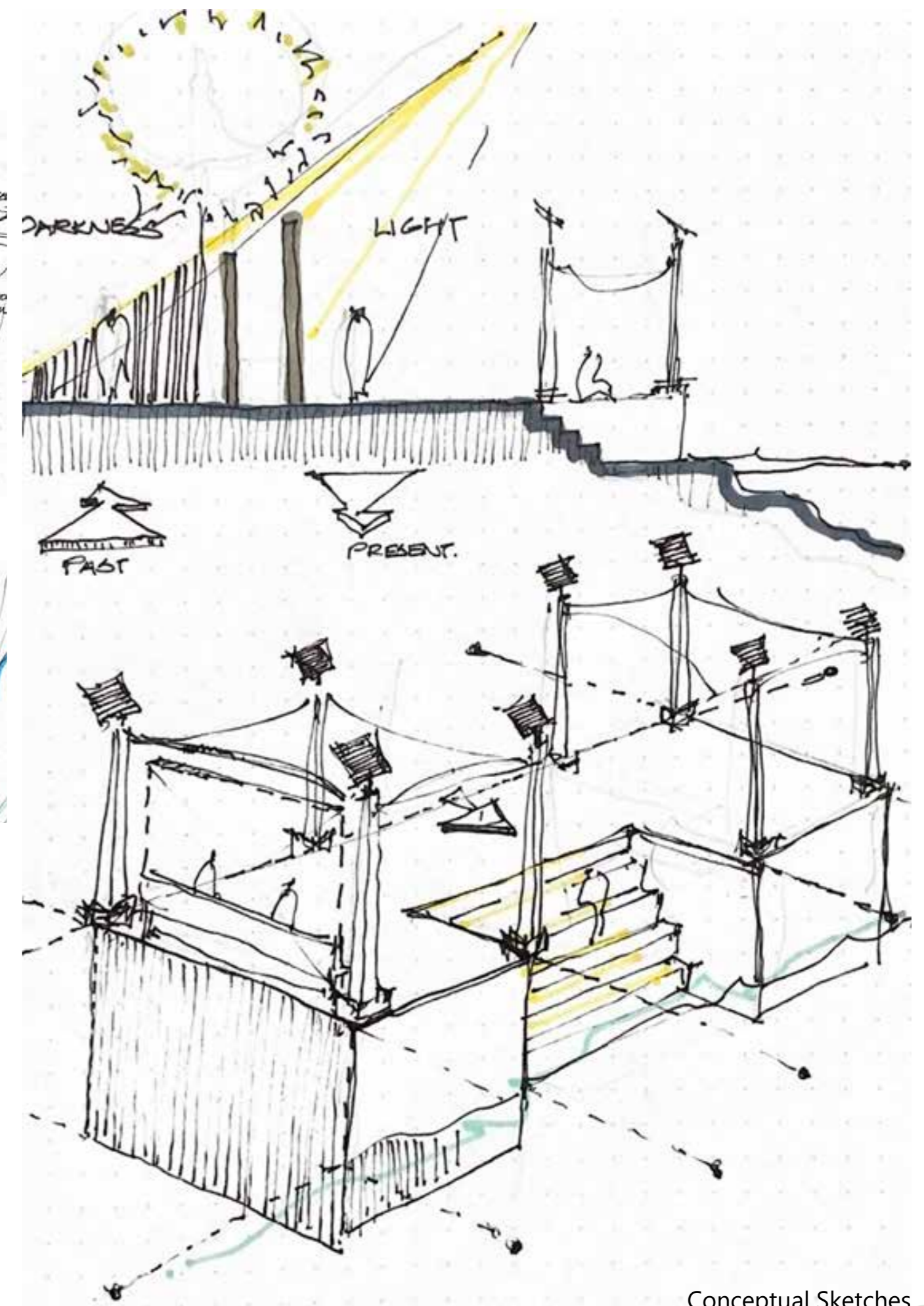
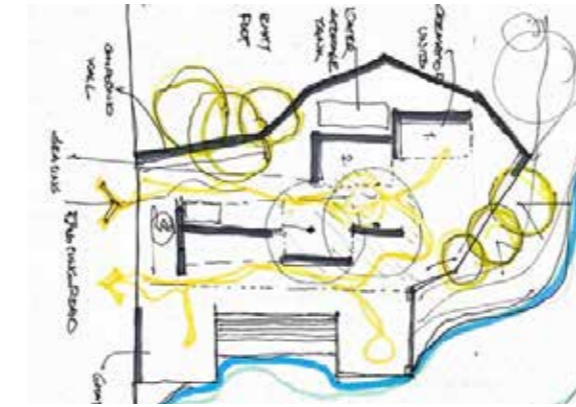
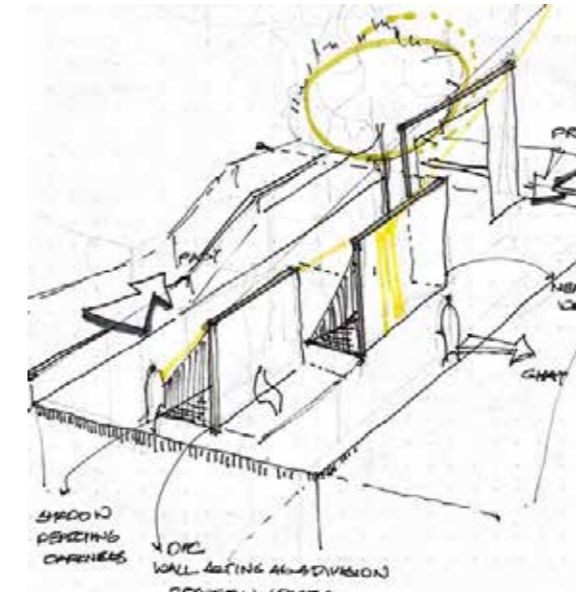


Ghat and water front have platforms to perform rituals also its is adaptable according to users need and one can perform ghat ritual thereitself as water is flowing.

3. GHAT - ALLOWING WATER SIDE RITUALS



Ritual bed and pyre is placed in a manner to receive more of filtered natural light throughout day, hence connecting life and death as light and shadow.



DESIGN SYNOPSIS

- The presence of absence Shiva-Shmashana Adhipati
- Yama sheath -N-S body orientation
- Canopy-Trees with dense foilage
- Pathway -Past and Present
- Walls-Light and Shadow
- Gateways-Frames within frames
- Ghats-Final rituals at water body

Conceptual Sketches

Elevated Plans and Views

Elevated plan showing the spaces, immediate context and the fabric of the structure, and how it fits in the context.

LEGEND

- 1. Entrance
- 2. Reception Counter
- 3. Crematory unit 1
- 4. Crematory unit 2
- 5. Deck 1
- 6. Deck 2
- 7. Ghat



Elevated plan



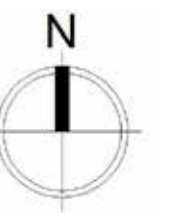
Elevated plan



South Side View



North Side View



Views



Cremation place



Sitting area



South side



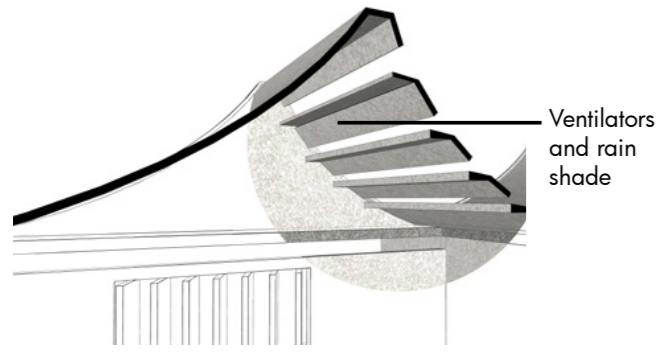
Crematorium, Rees
Type:Public

East side

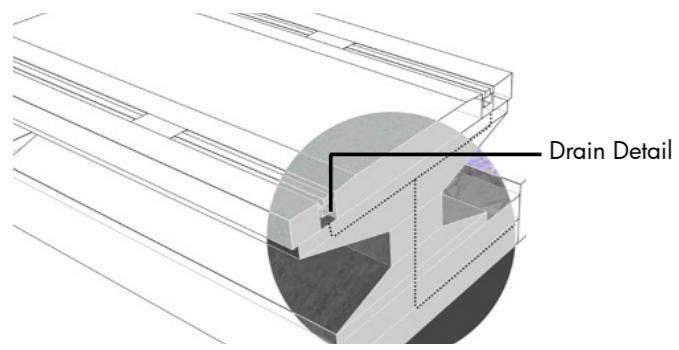


South side

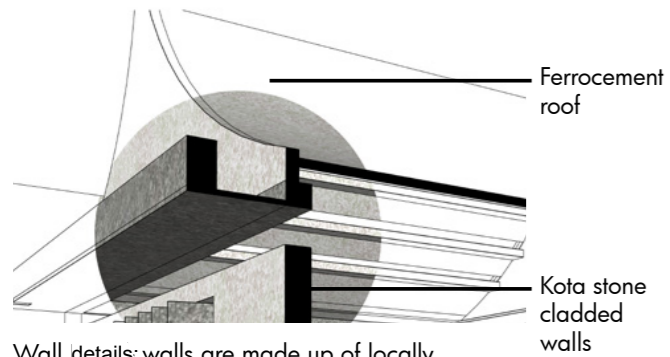
Section with Details



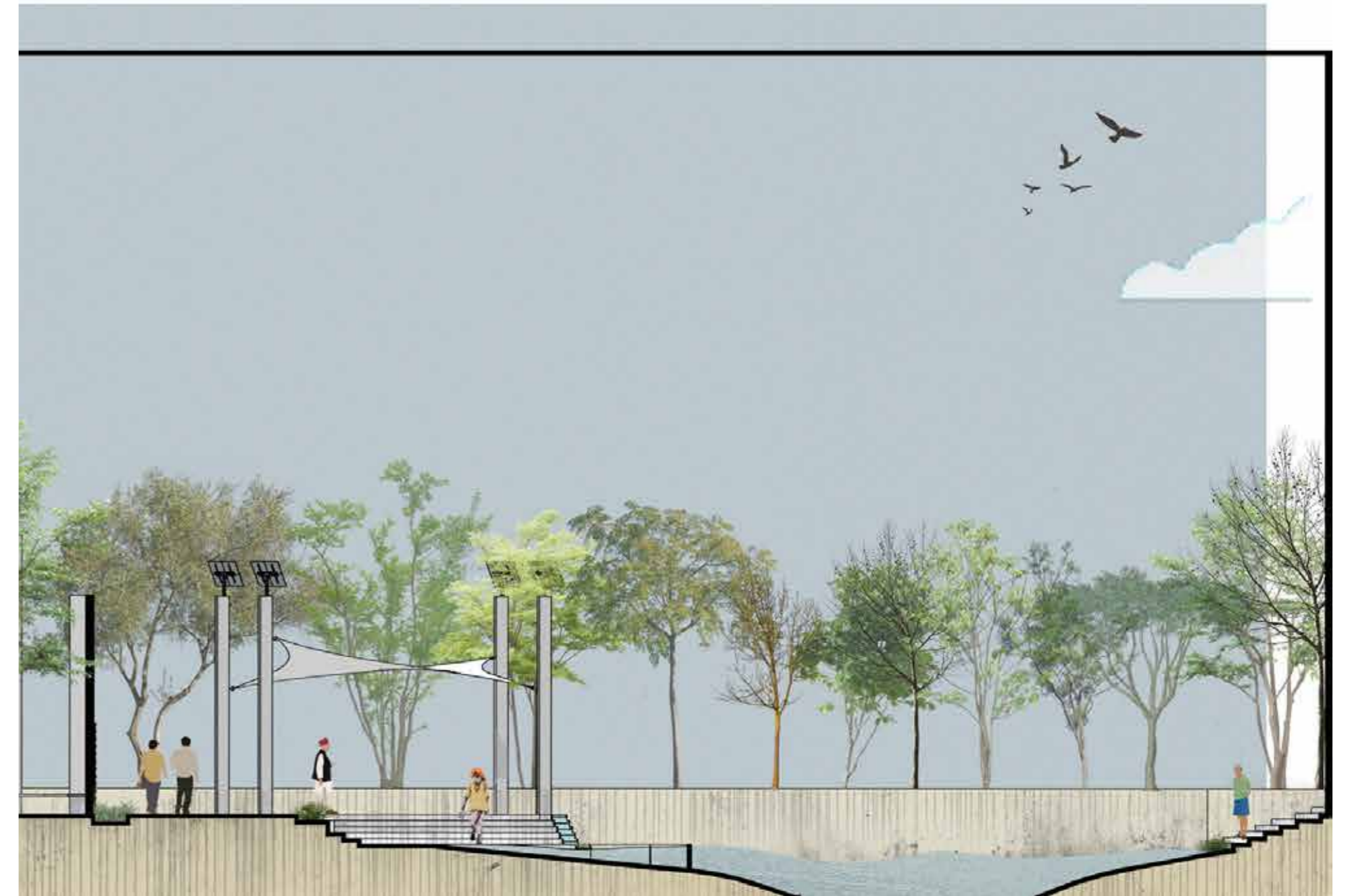
Roof Detail- Allowing light to enter the cremation space also acting as a ventilator and preventing cremation space from rain water.



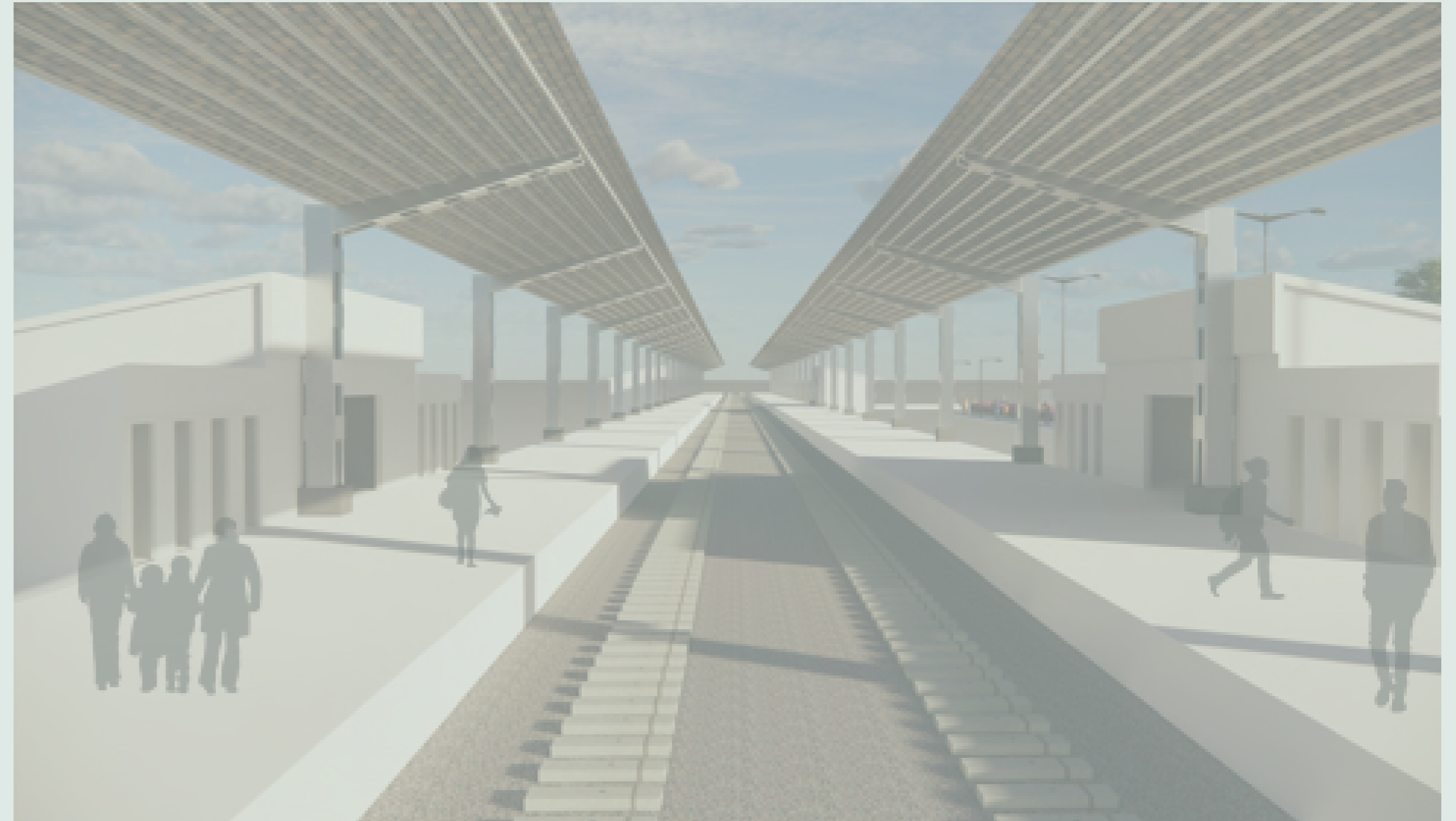
Cut isometric view of pedestal- Black polished solid granite 6"Thk on form finished concrete base with drain



Wall details: walls are made up of locally available bricks and cladded with white kota stone

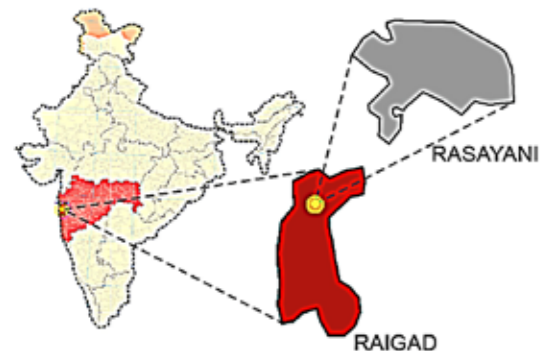


Section AA'



| RAILWAY STATION

PRECINCT STUDY



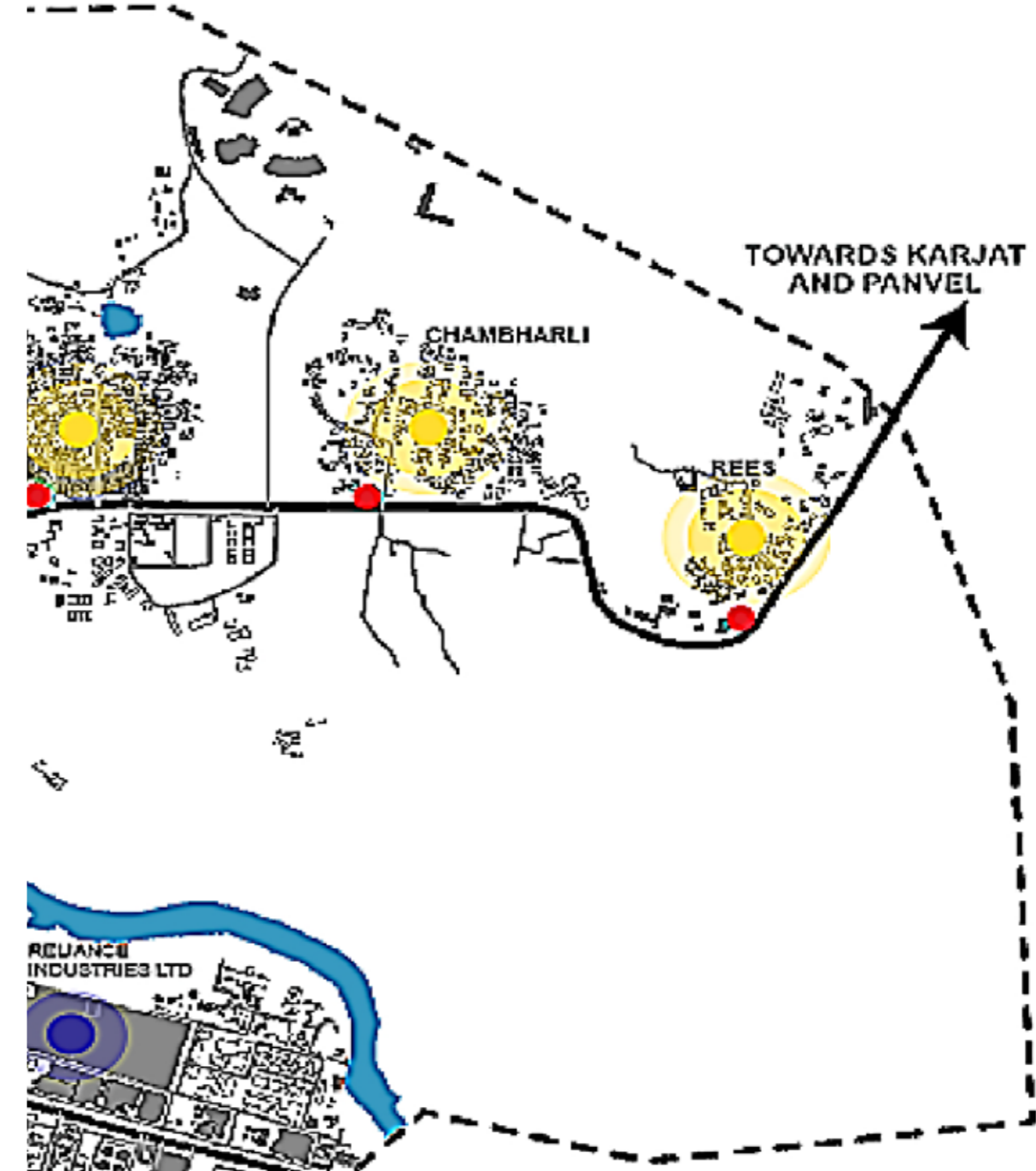
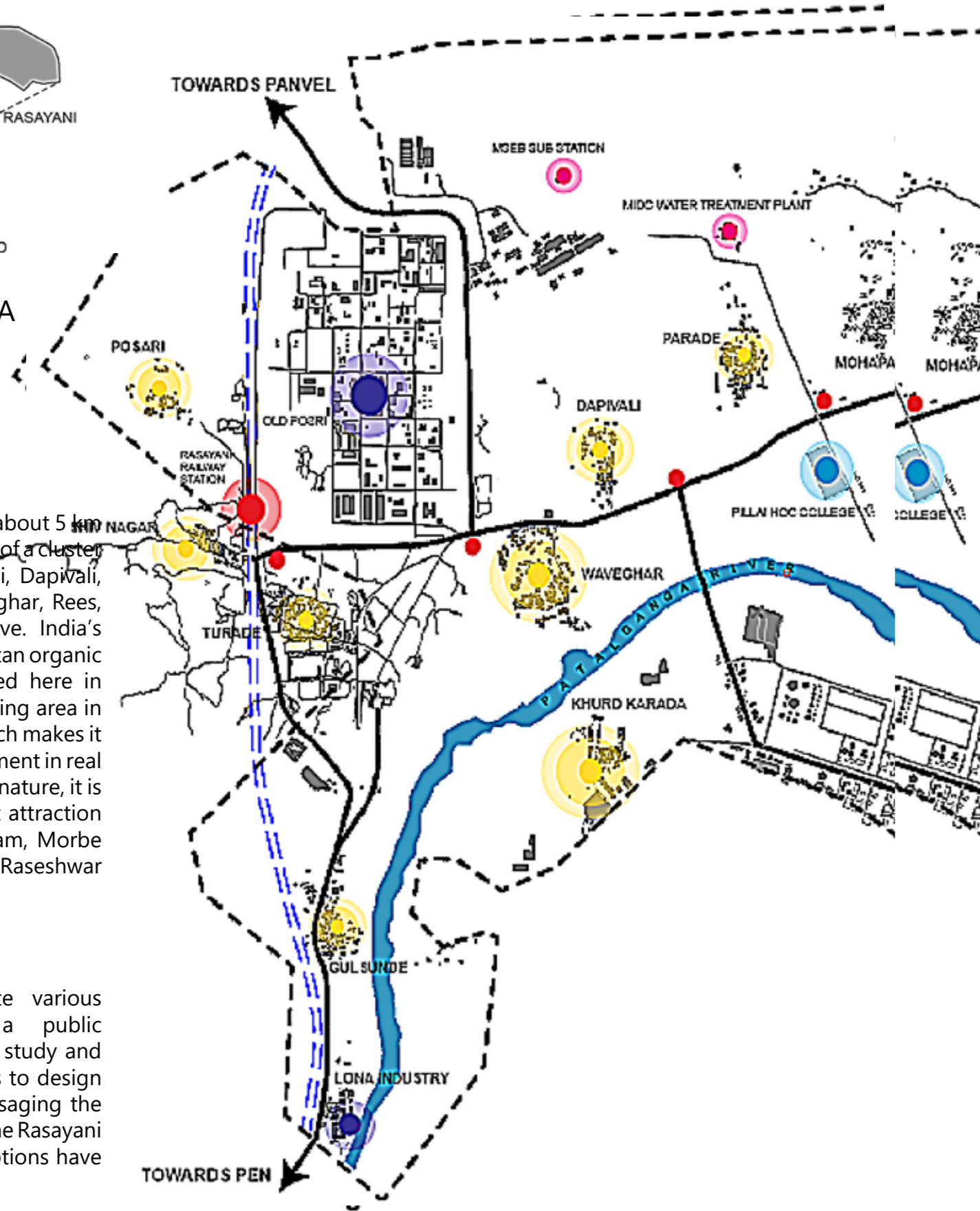
STATE: MAHARASHTRA
DISTRICT: RAIGAD
TALUKA: RASAYANI

INTRODUCTION :-

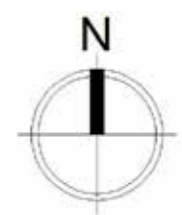
Rasayani is located on SH-83, about 5 km off NH4. Rasayani is composed of a cluster of villages named as Ambivali, Dapwali, Mohopada, Chambharli, Vaveghar, Rees, Karade, Gulsund, Turade, salve. India's first chemical industry "Hindustan organic Chemicals Ltd" was established here in 1960's. Rasayani is a fast growing area in extension of Navi Mumbai which makes it a favourable location of investment in real estate. Rasayani is close to the nature, it is connected with several tourist attraction like MIDC hills, Patalganga dam, Morbe dam, Karnala fort, Manik fort, Raseshwar temple and many more.

BACKGROUND STUDY :-

To understand and evaluate various parameters involved in a public transportation based precinct study and planning. The end objective is to design a multi-transport layout envisaging the future developments around the Rasayani railway station. Two design options have been proposed for the same.



	RASAYANI RAILWAY STATION
	RESIDENTIAL ZONE
	INDUSTRIAL ZONE
	GOVERNMENT BODIES
	BUS STOPS AND AUTO STANDS
	EDUCATIONAL ZONE
	RASAYANI BOUNDARY
	MAIN ROAD CONNECTIVITY
	SECONDARY ROAD CONNECTIVITY
	RAILWAY TRACK
	WATER BODIES



Site context

RAILWAY STATION

PRECINCT STUDY

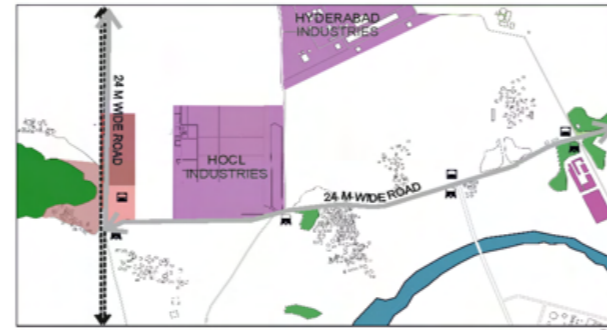
EXISTING LAND USE MAP



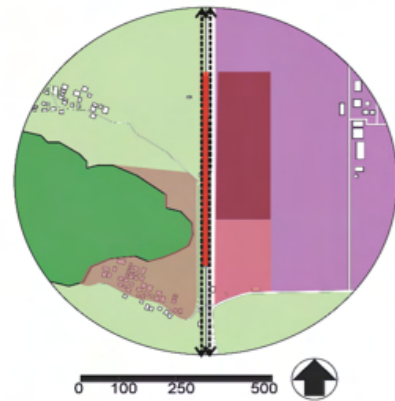
PROPOSED LAND USE MAP BY NAINA



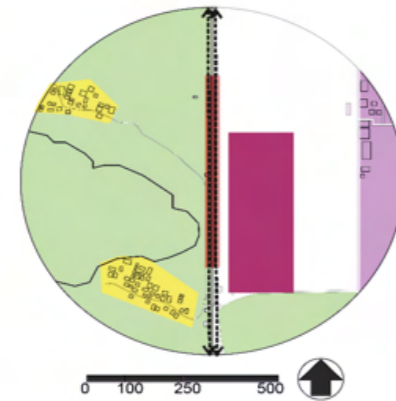
FUTURE PROPOSALS BY DP



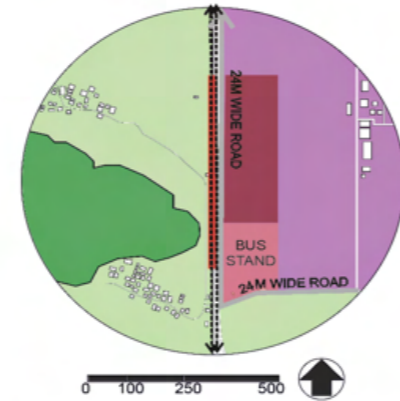
1 KM RADIUS PRECINCT



MAJORITY OF LAND ARE PRIVATELY OWNED. REMAINING LAND COMES UNDER AGRICULTURAL LAND OR OPEN SPACE.



AS AREAS ARE DECLINING UNDER VARIOUS GOVERNING AUTHORITIES, AND THE SHIFT IN LAND USE GIVES A SCOPE IN FUTURE EXPANSION OF RAILWAY STATION, SIMULTANEOUSLY SHOWS THE PROPOSAL FOR BUS DEPO, AND EXPANSION OF NATIONAL HIGHWAY.

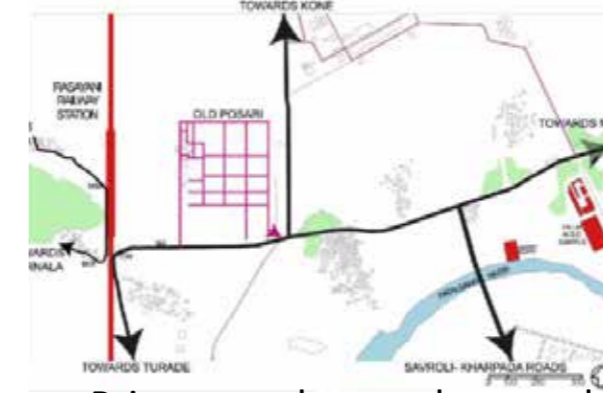


UNLIKE NAINA THE EXPANSION ARE VISIBLE, AND HELPS THE IMMEDIATE IDENTIFY ATTACHMENT AREA AND USER GROUP.

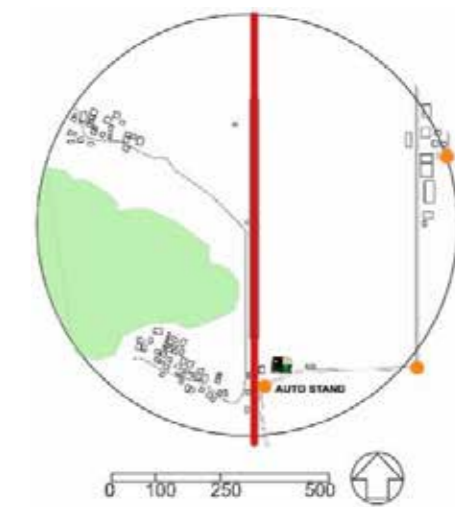
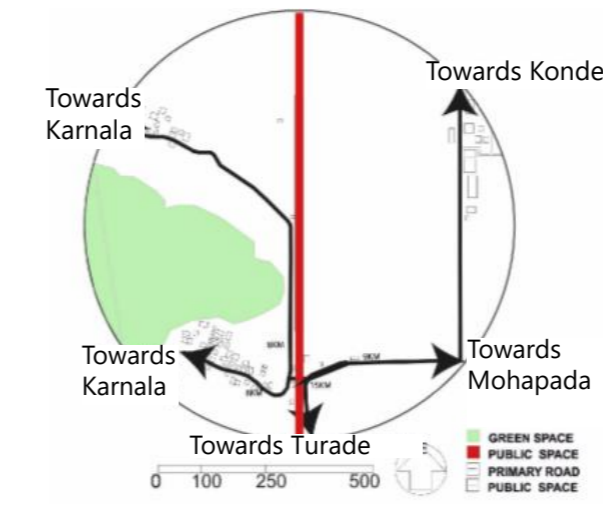
Legend

- Industrial area
- Open space
- Extension of Railway
- Bus Stand
- Railway station
- River
- Residential area
- Reserved area

PRIMARY / SECONDARY



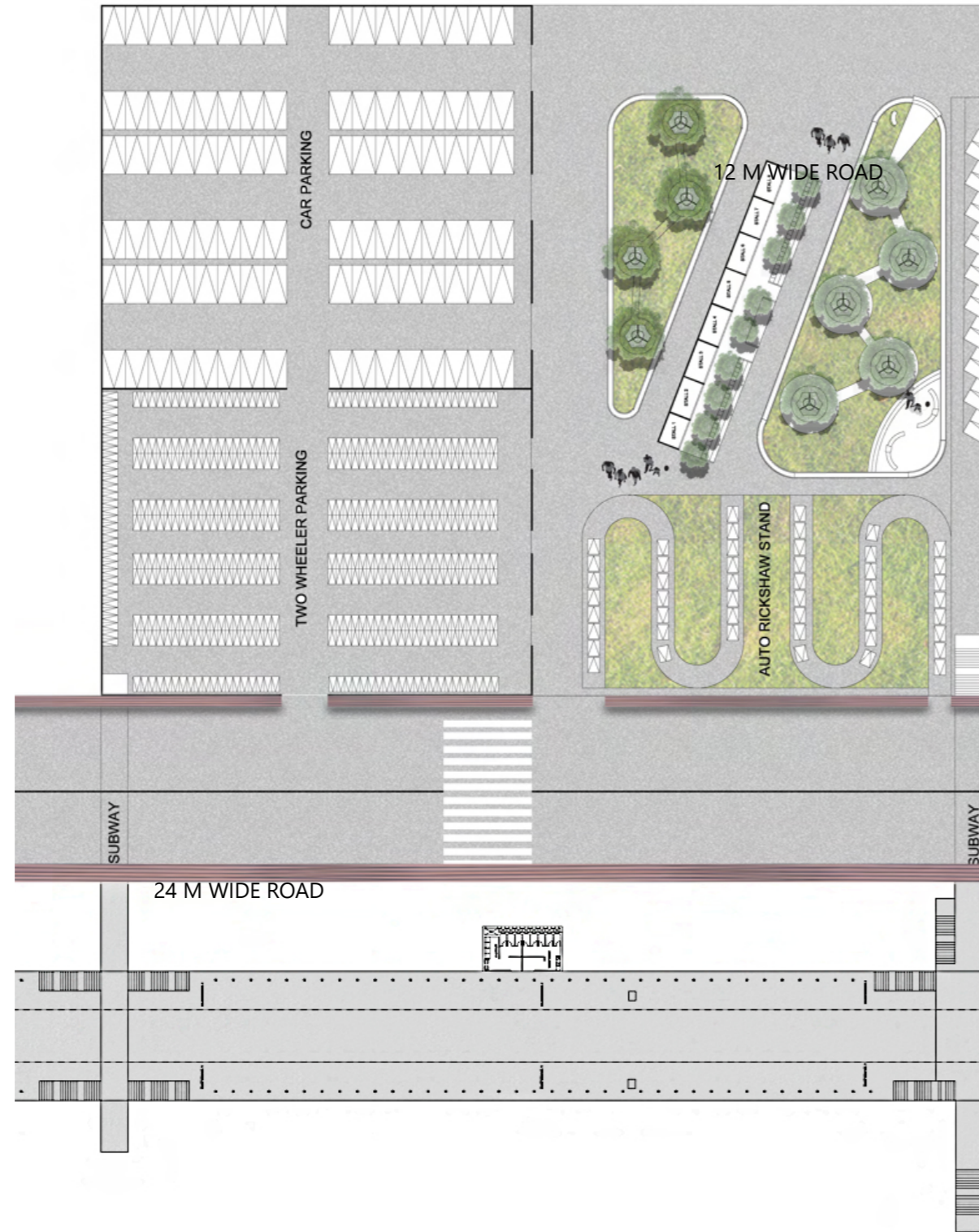
BUS ROUTE



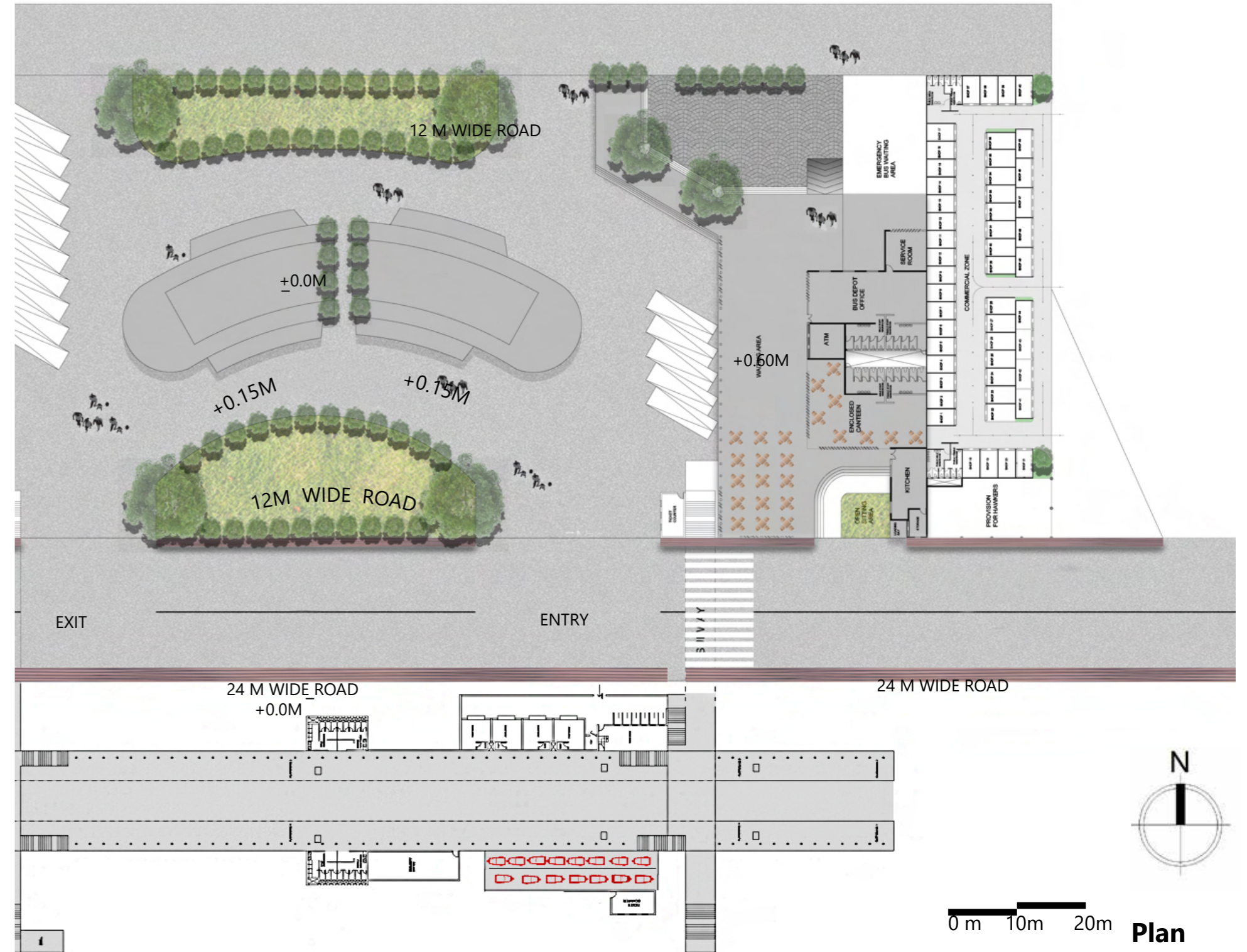
WELL-ESTABLISHED WITH IMMEDIATE VILLAGES AND NEIGHBOURING CITIES WITH STATION AND LOCAL ROADS. PROPOSAL OF 25M WIDE ROAD AS A PART OF EXPANSION OF RAILWAY STATION TO OTHER NEARBY PLACE GIVES LARGER SCOPE OF DEVELOPMENT.

LIMITED NUMBER OF BUSES AND BUS ROUTES. AS THERE IS A PROPOSAL FOR BUS DEPO ESTABLISHMENT OF INDUSTRIES AND WIDE ROAD MAKES A SCOPE FOR INTRODUCTION OF INCREASE IN NO. OF BUSES TO VARIOUS ROUTES ENHANCING PUBLIC TRANSPORT.

OPTION 1



View towards the Parking



View towards the food plaza

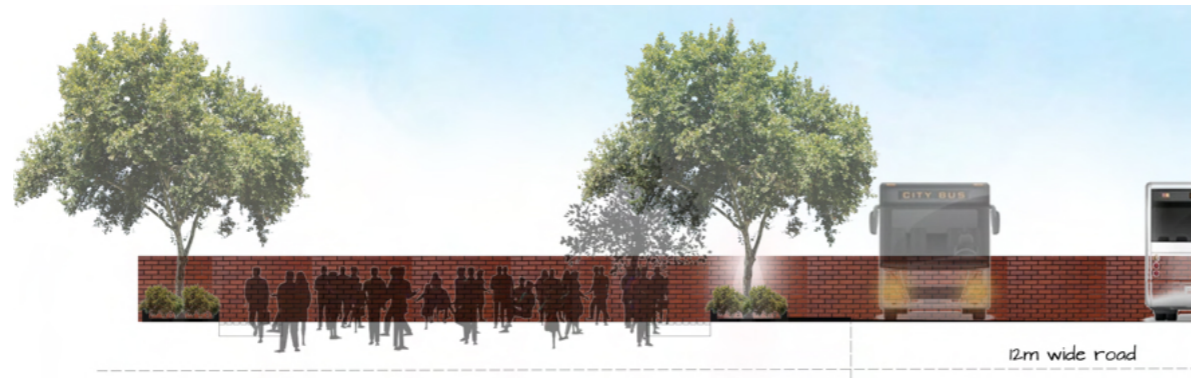


View of the food plaza

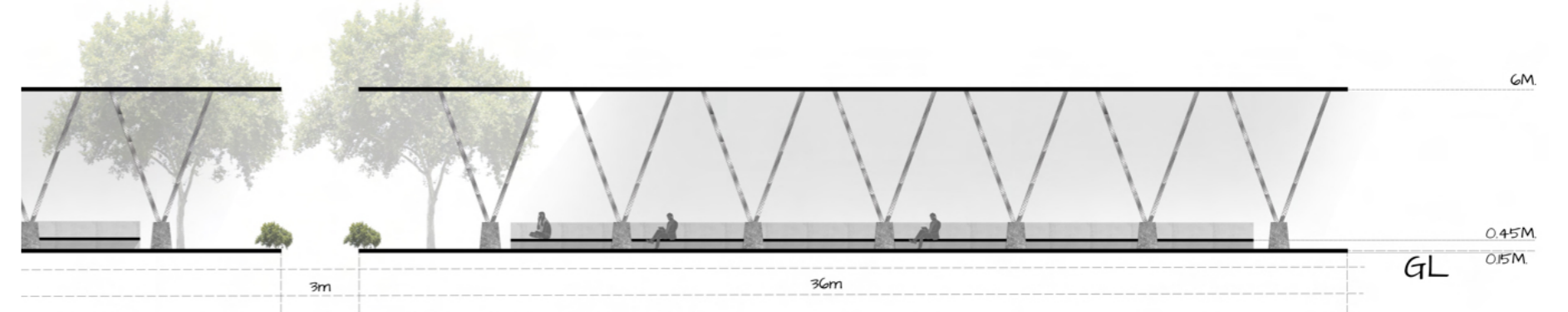
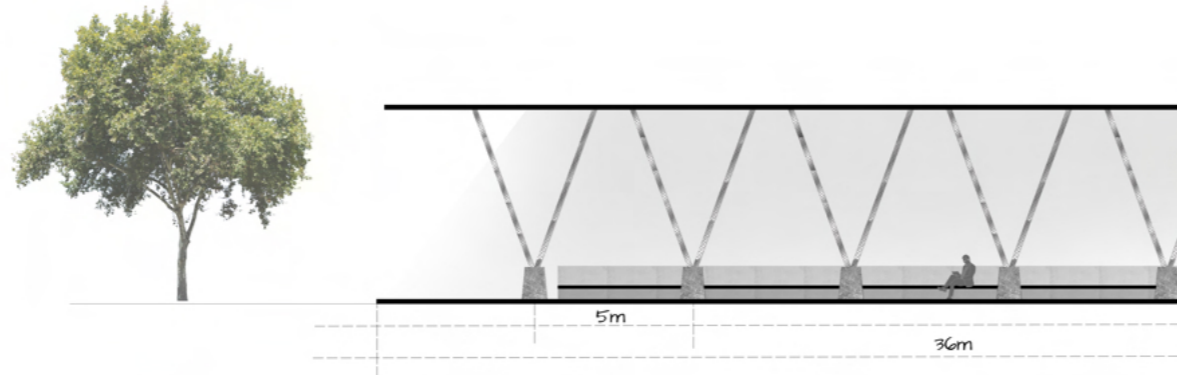
OPTION 1



Key Plan



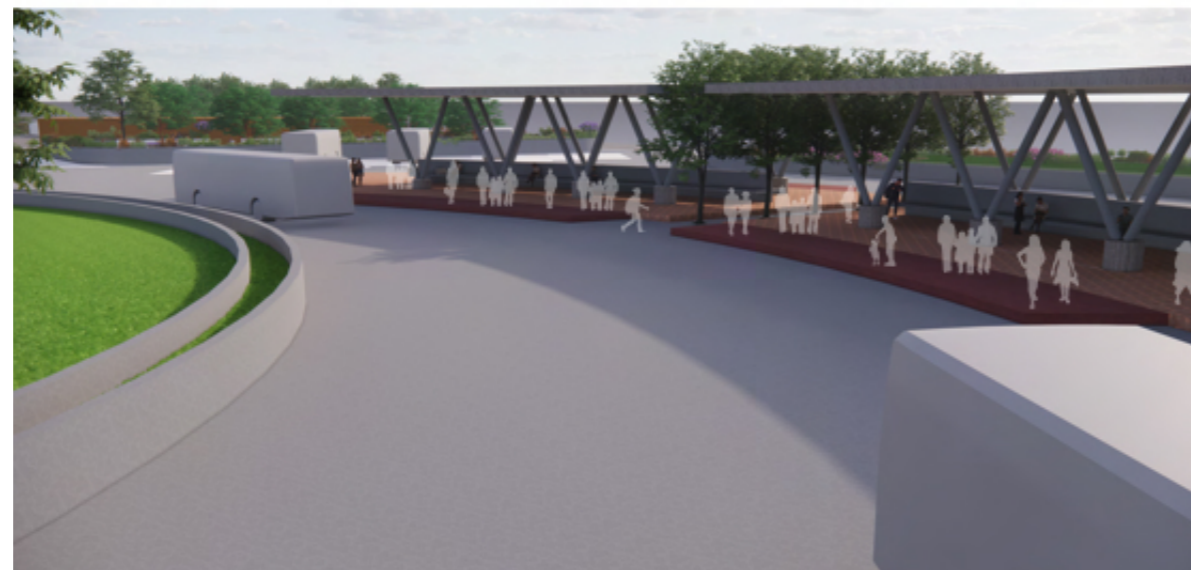
BUS DEPOT ELEVATION



SECTION AA' (BUS DEPOT)



Views of the Recreation space



View towards the Bus Depot



View of the Bus Depot

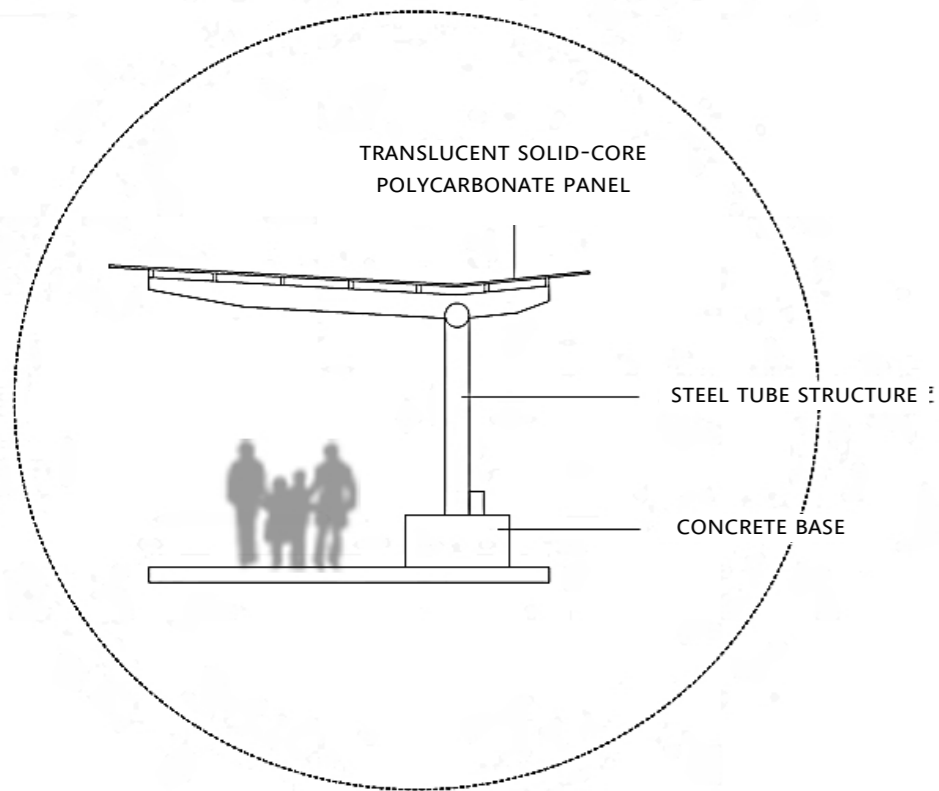
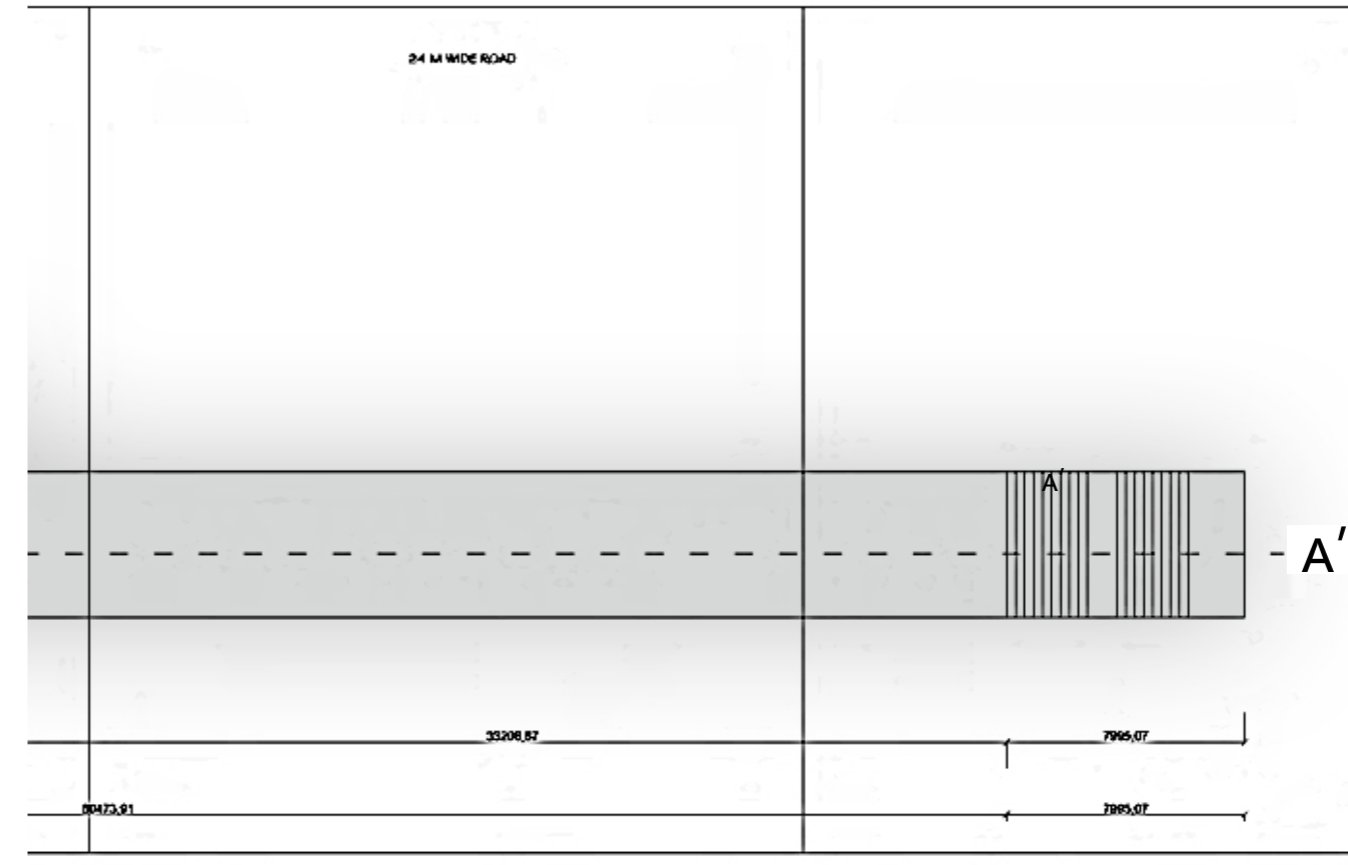
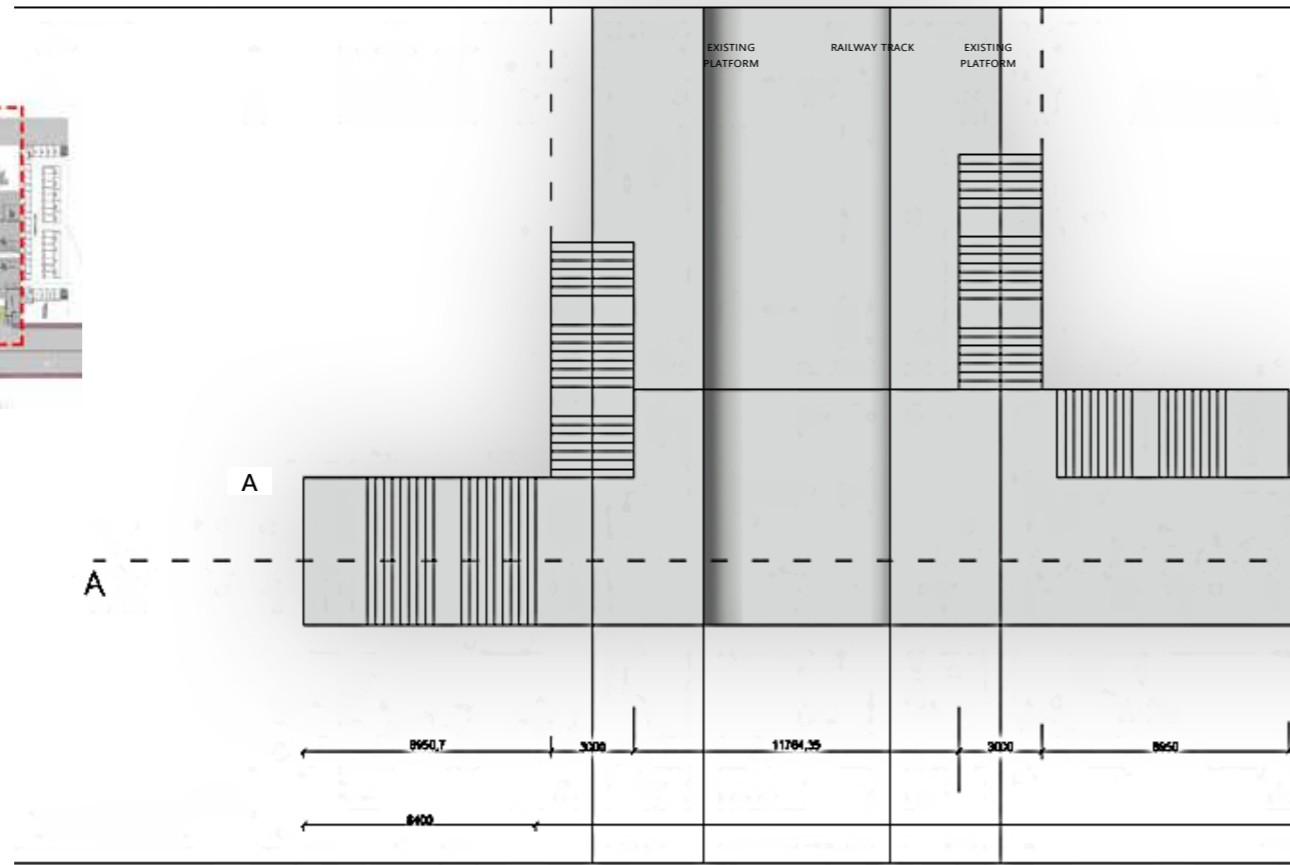


View of the Bus Depot

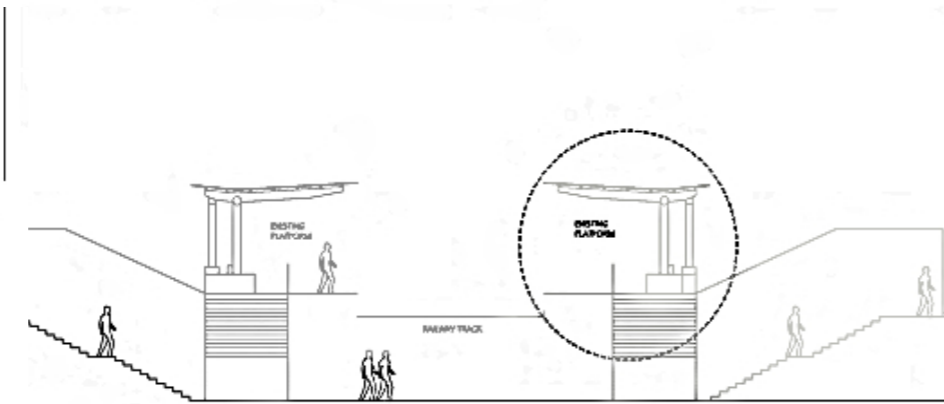
OPTION 1



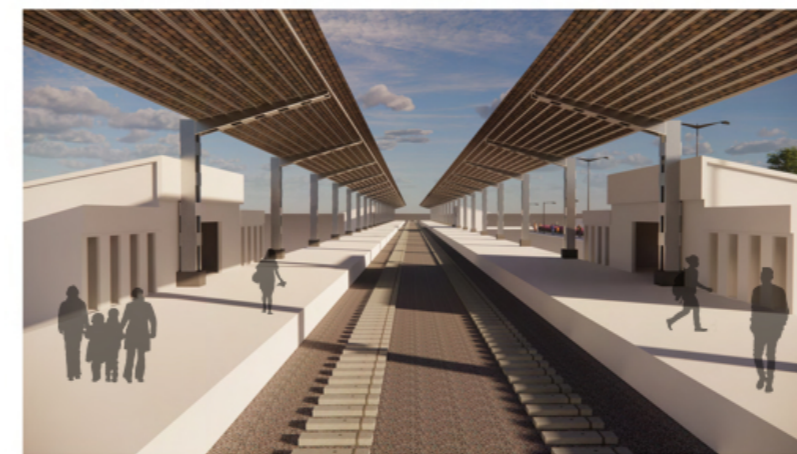
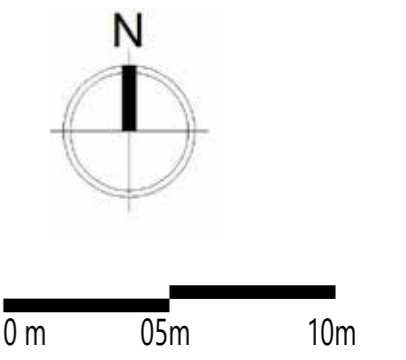
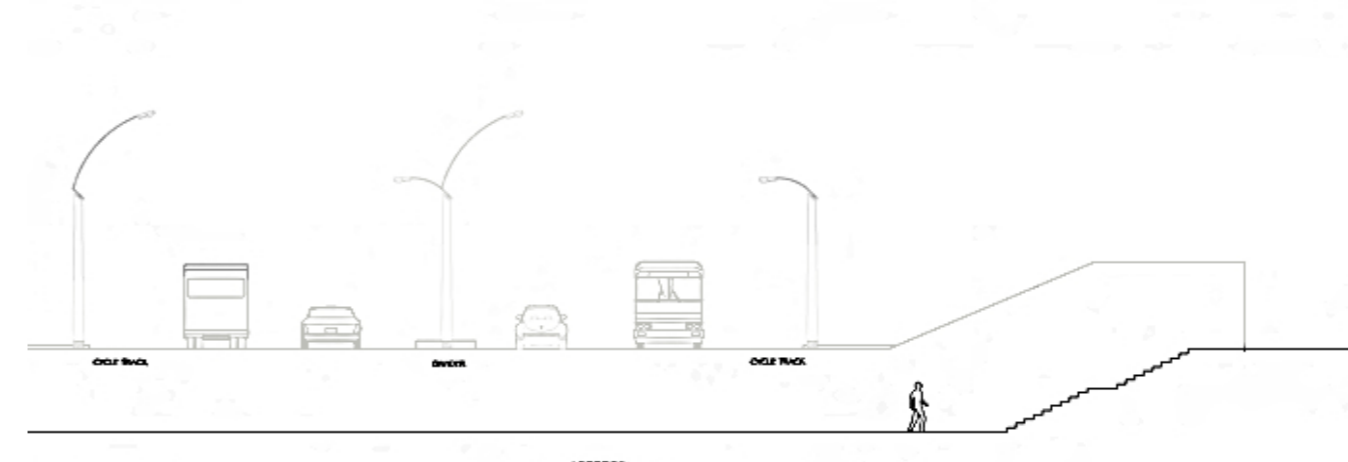
Key Plan-Subway



DETAILS AT A

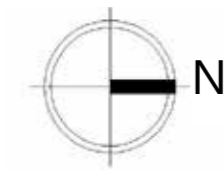
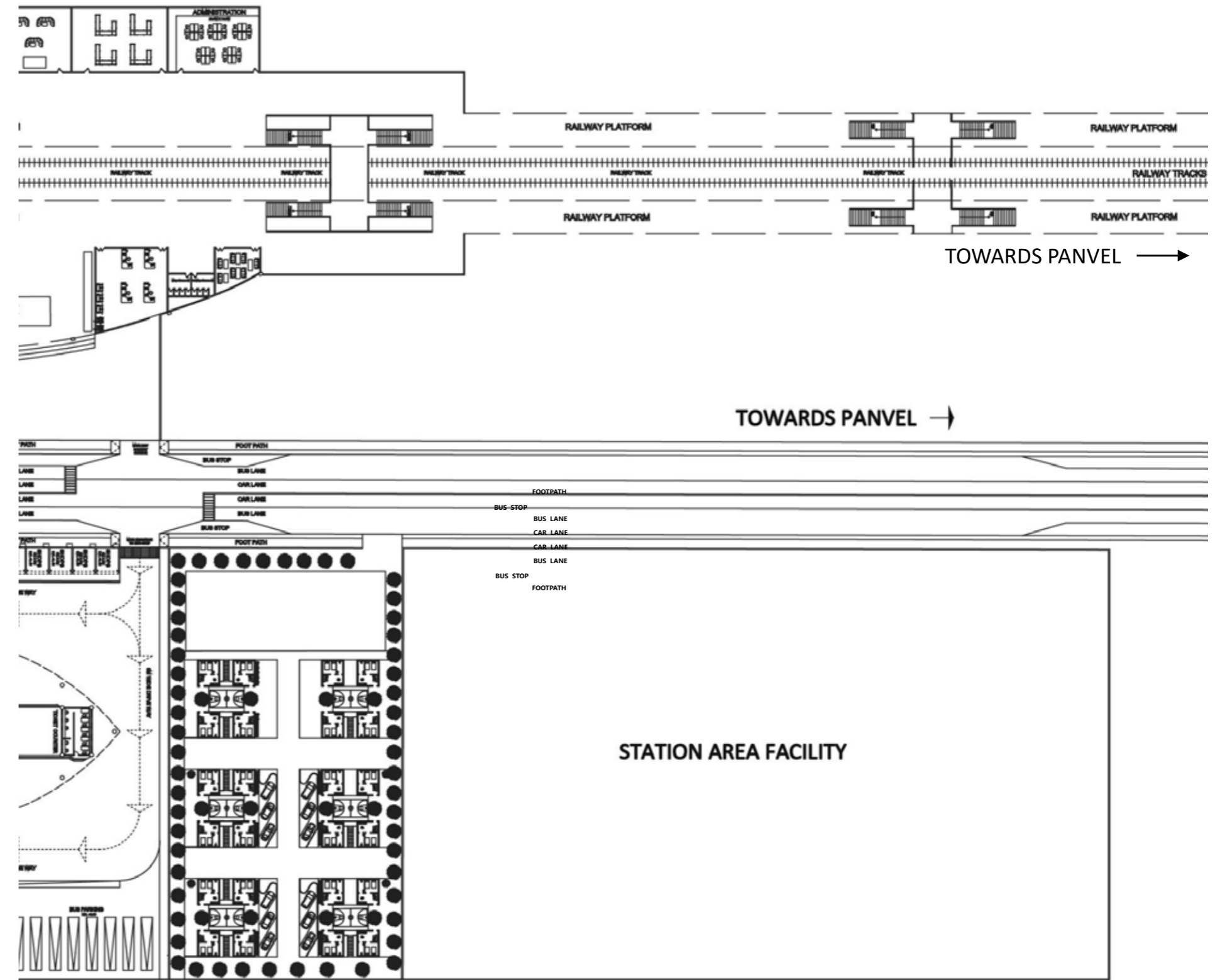
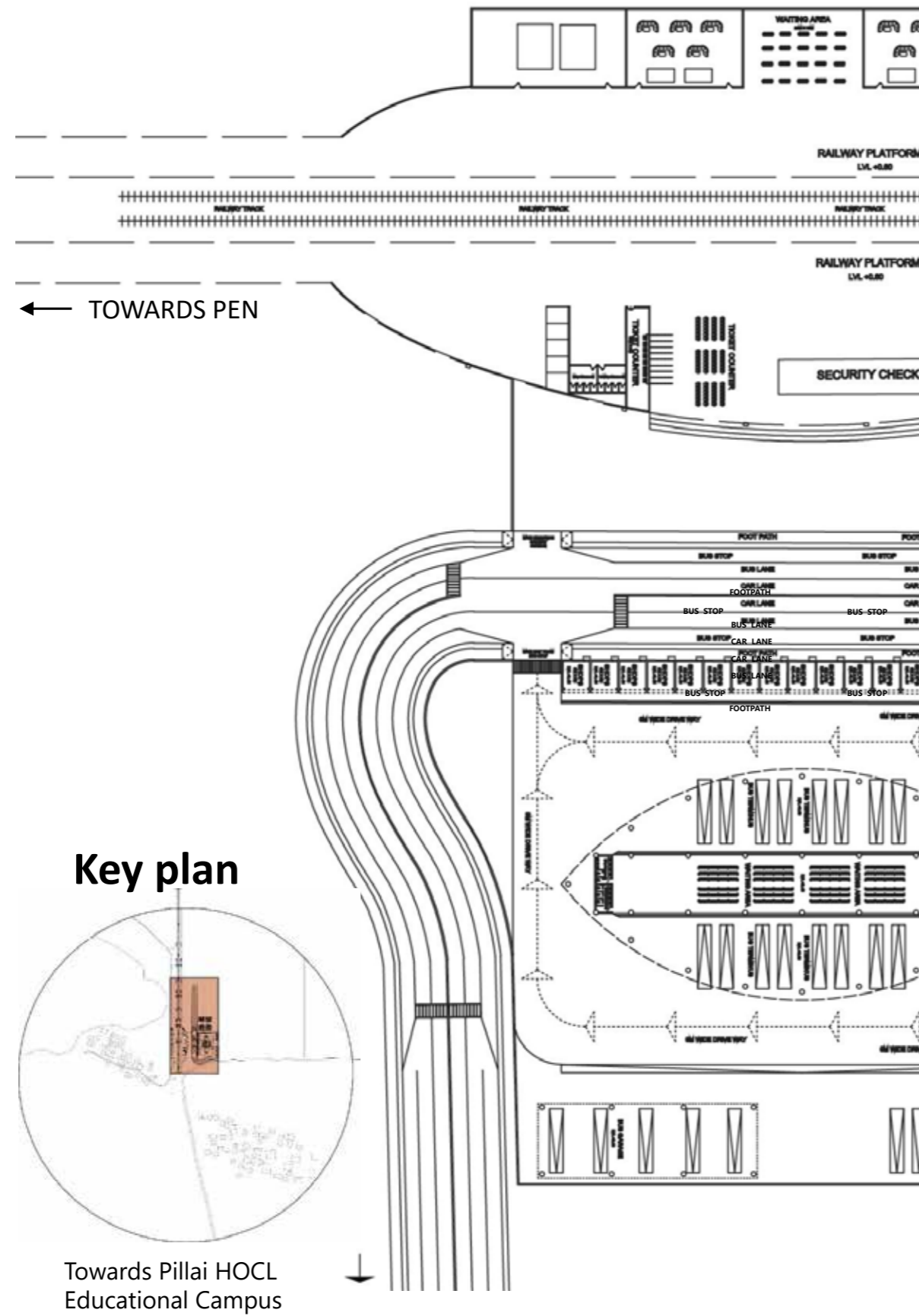


SECTION AA'



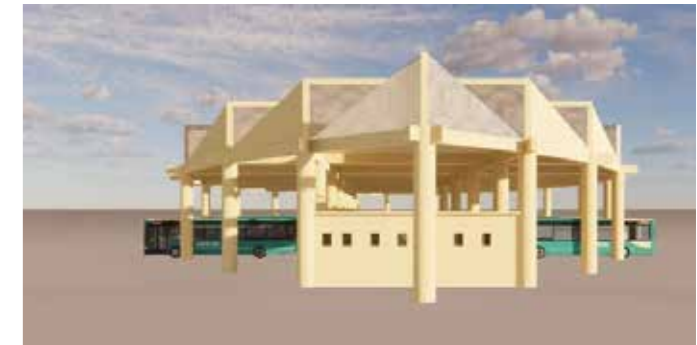
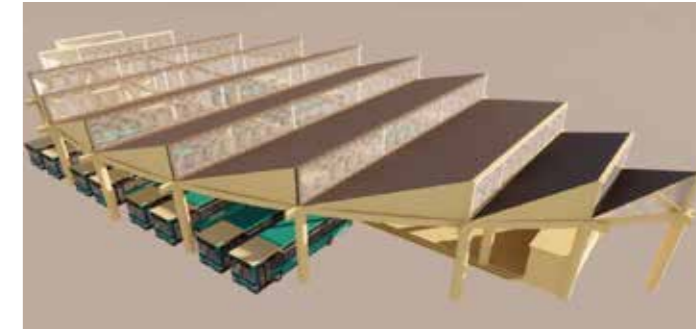
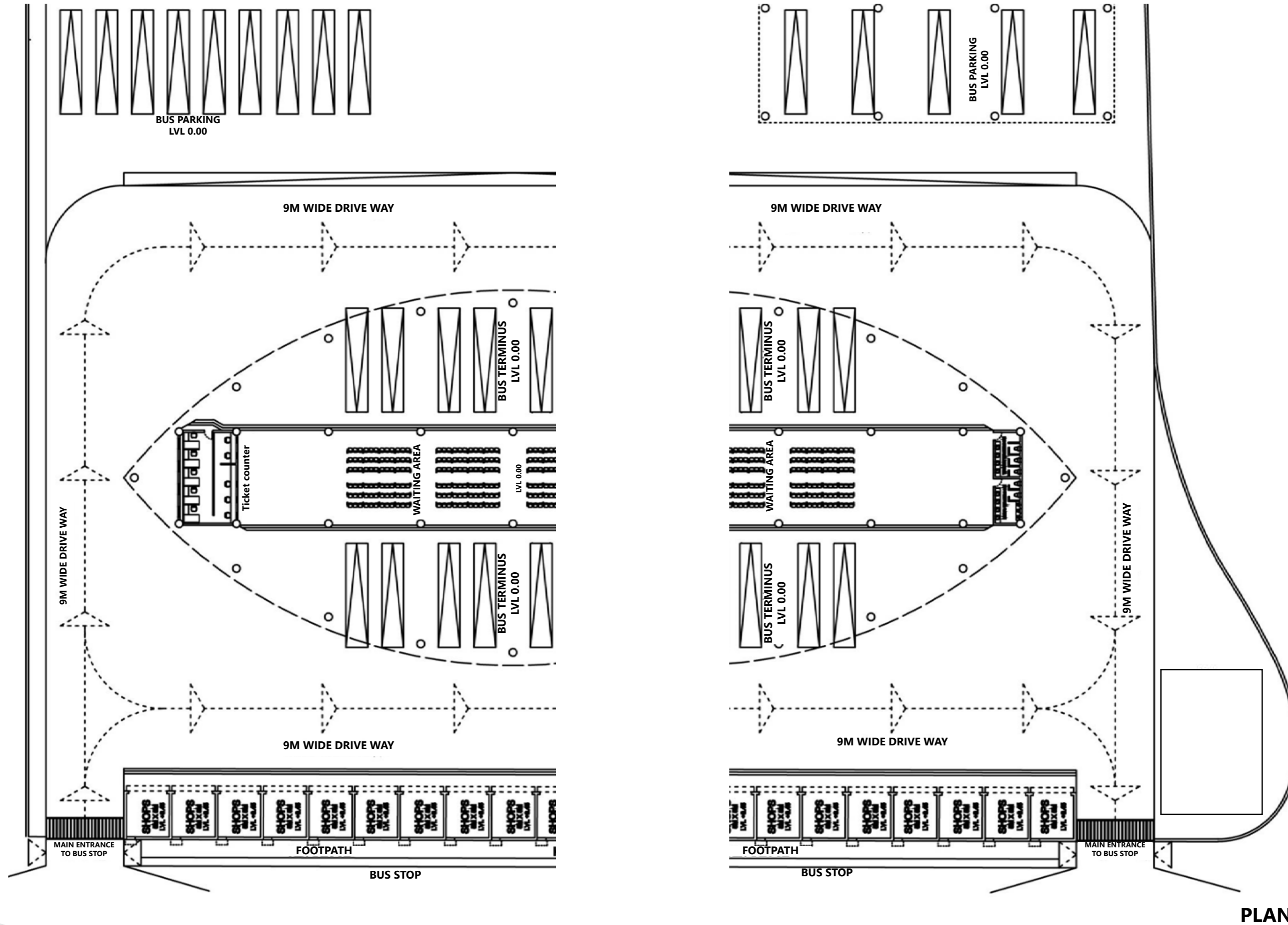
Views of the Railway Station

OPTION 2



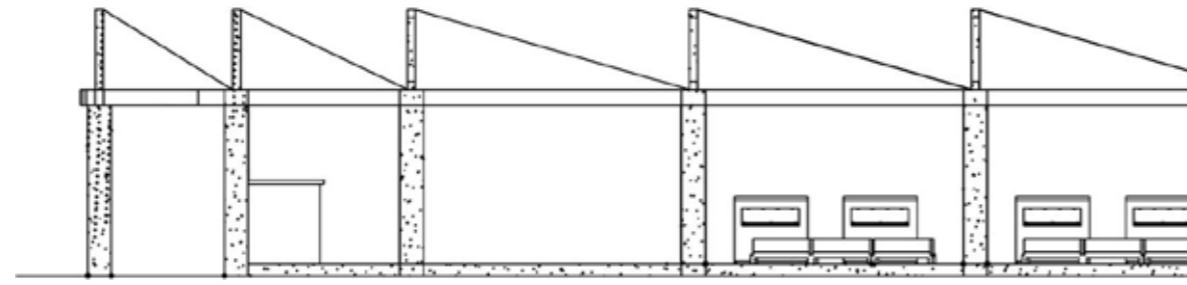
Masterplan
0 m 15m 30m

OPTION 2

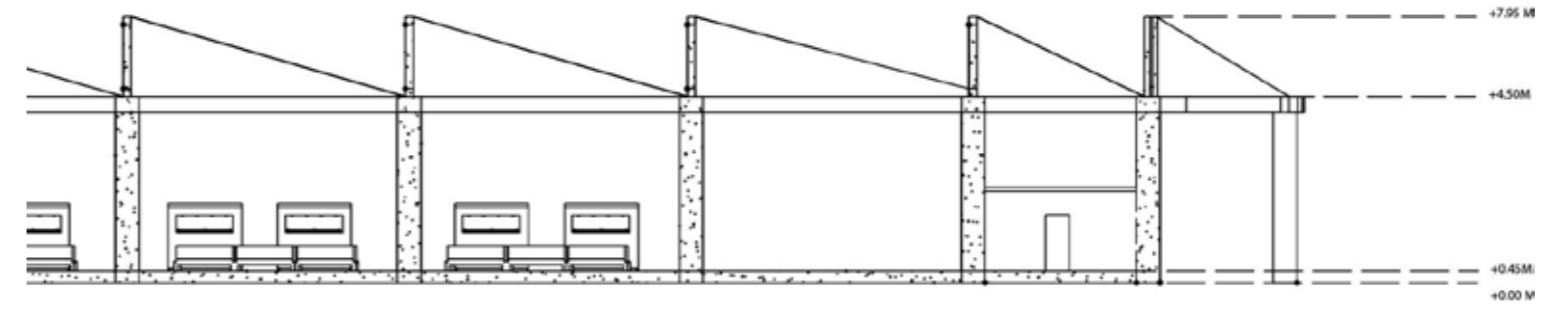


Views of the Bus stop

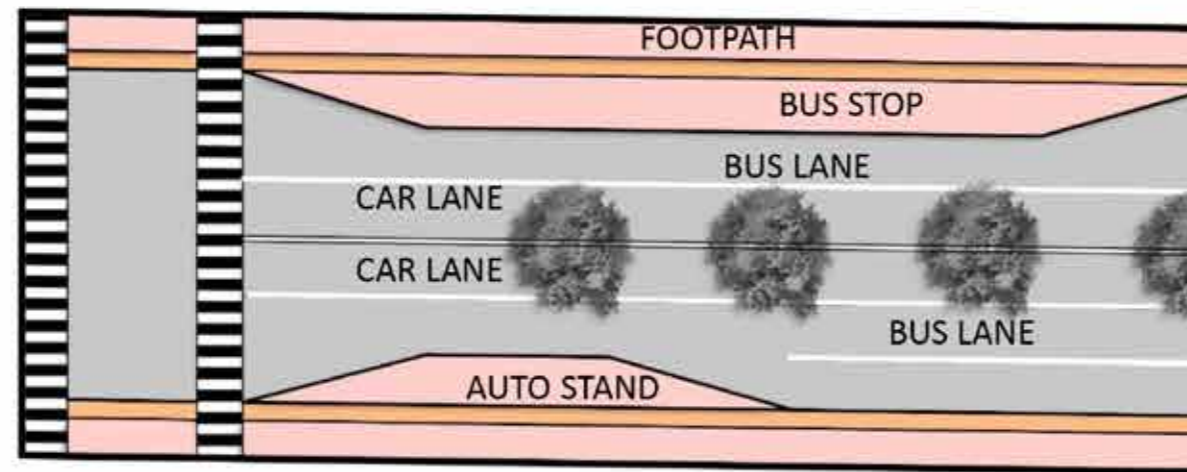
OPTION 2



SECTION



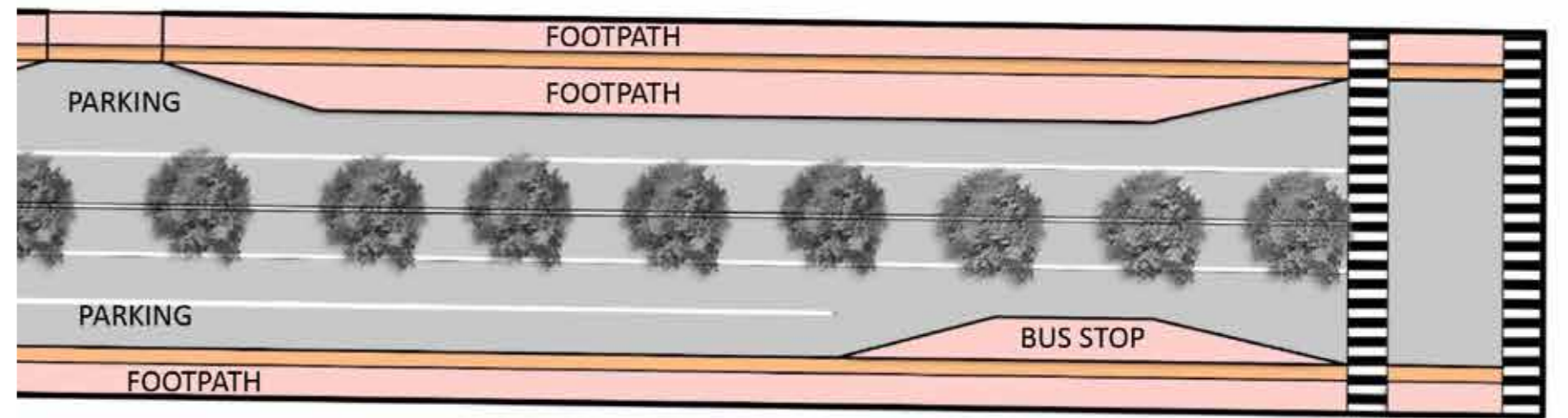
TOWARDS RAILWAY STATION



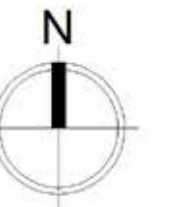
TOWARDS BUS STOP



Views of the main street



Views towards the bus stop





Pillai

PHCCA
PILLAI HOC COLLEGE
OF ARCHITECTURE