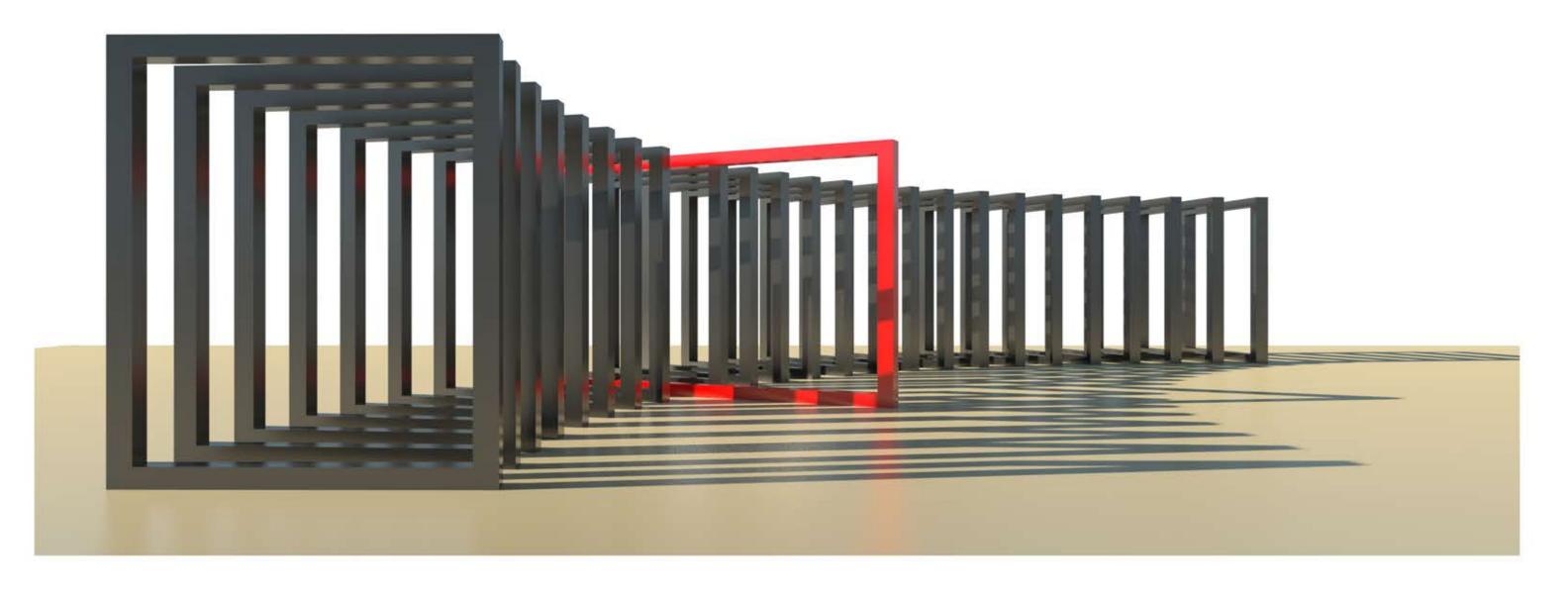
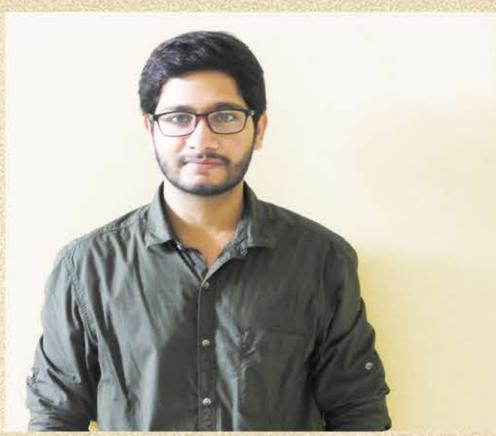
## Architecture Portfolio

Selected Work (2013 - 2018) By Ankit Verma





### Ankit Verma

Bachelor of Architecture School of Planning and Architecture, Bhopal

e-mail Ar.Ankit.v@gmail.com

Phone no. +91-9897977234, +91-9424998385

D.O.B 5, September 1994

Home Town Agra, Uttar Pradesh, India

Permanent 29, Yumnotri Colony Kamla Address Nagar, Agra, India

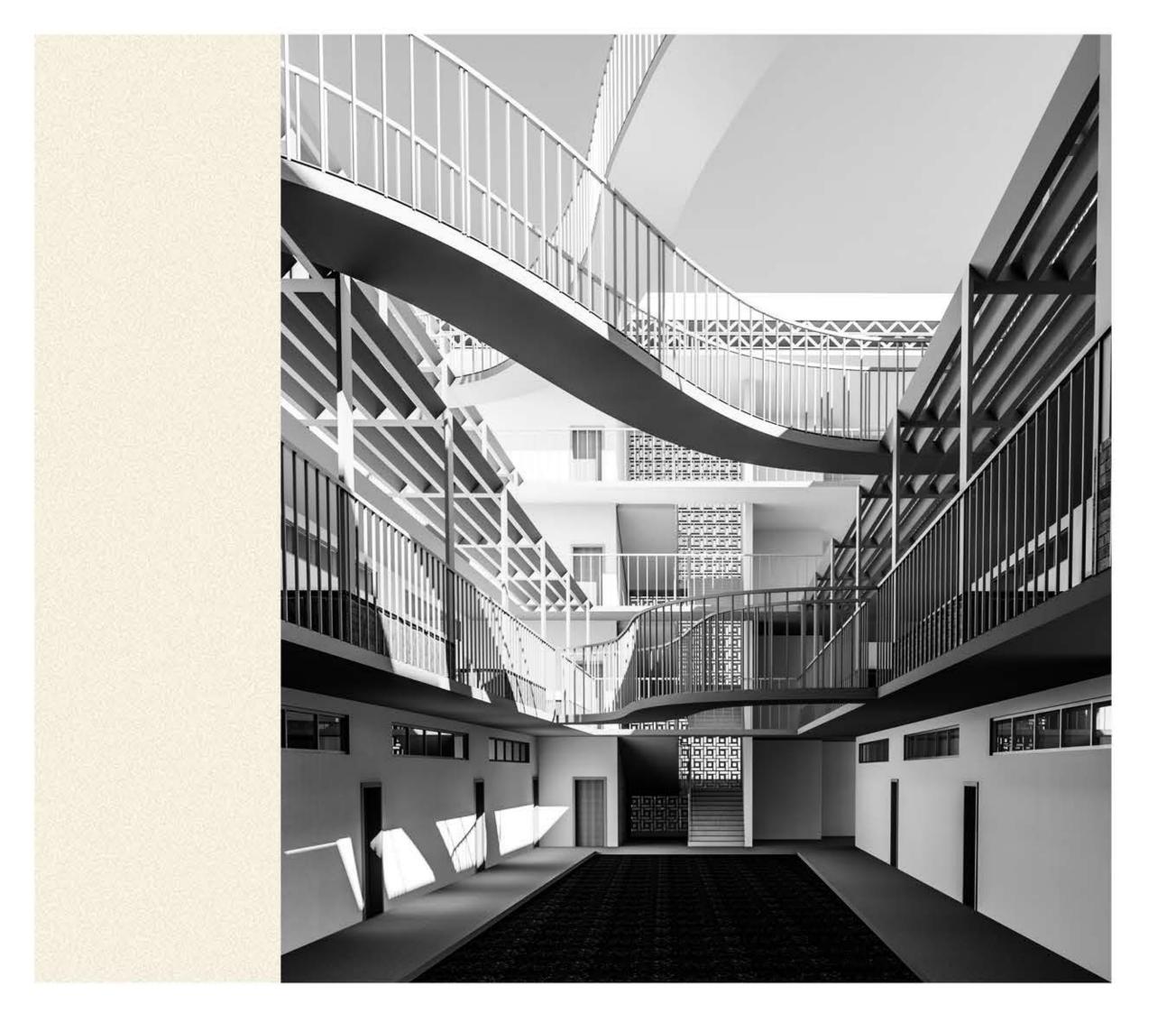
Extra-Curricular Etcetera, Film Club S.P.A Bhopal

> Rotaract Club S.P.A Bhopal

Film making, Sketching, Badminton

Educational	
2000 - 2011	Delhi Public School, Agra
2011-2013	S.R.G.M.Sr.Sec School, Agra
2013 - 2018	School of Planning and Architecture, Bhopal   B.arch
Lanuages	Hindi   English   French - A1 Level
Software	
BIM	Autodesk Revit Architecture
Modelling	Trimble Sketchup   3Ds Max
Drafting	Autodesk Autocad
Rendering	Revit renderer   Lumion   V-ray Sketchup
Graphics	Adobe Photoshop   Adobe Illustrator
Simulation	Autodesk Ecotech   Flow Design
Publications	
2016	Worked in a Book "Vernacular Settlements In Chanderi: Towards Innovation ar Sustenance"
Internship	
2017	Lichtvision Design, Berlin, Germany 21 Weeks Architecture Internship
Workshops	
2016	Illumination Workshop   Philips Lighting Academy
2015	South Asian Vernacular Architecture Workshop
2015	Design Thinking - Industrial Design Process   Integral Studio
2015	Revit Architecture   Cadd Center
2014	Understanding Building Services at 1:1 Scale   Plumbing
2013	Universal Design Workshop   Integral Studio

hievements	
2016	Integral studio-Redevelopement of Bhopal railway station FIRST PRIZE WINNER   School of Planning and Architecture, Bhopal
2015	South Asian Student Design Competition INTERNATIONAL FINALIST TOP 15   School of Planning and Architecture, Bhopal
2013	Integral Studio - Simhasth - Temporary Shelter for Simhasth Yatris at Ujjain BEST RESEARCH   School of Planning and Architecture, Bhopal
ompetitions	
2016	Integral Studio-Redevelopement of Bhopal Railway Station By School of Planning and Architecture, Bhopal
2015	Griha Trophy   Nasa India
2015	South Asian Student Design Competition By School of Planning and Architecture, Bhopal
2013	Integral Studio - Simhasth - Temporary Shelter For Simhasth Yatris at Ujjain By School of Planning and Architecture, Bhopal
Projects	
2018	Thesis - Mordernization of Baiyappanahalli Railway Station , Bangalore   5 <sup>th</sup> Year
2017	Urban Design - Central Library Precinct, Bhopal   5 <sup>th</sup> Year
2016	Housing Design For Slum, Bhopal   4 <sup>rth</sup> Year
2016	Hotel Design, Bhopal   3 <sup>rd</sup> Year
2015	Working Drawing   3 <sup>rd</sup> Year
2015	Cultural Center, Bhopal   3 <sup>rd</sup> Year
2015	Interpretation Center, Udaipur Fort   3 <sup>rd</sup> Year
2015	Primary School , Bhopal   2 <sup>nd</sup> Year
2015	Residence , Bhopal   2 <sup>nd</sup> Year
2014	Primary School Using Vernacular Techniques, Devalkho village   2 <sup>nd</sup> Year
2014	Documentation of Village Develkho   2 <sup>nd</sup> Year
2014	Residence + Office for an Architect (Charles Correa )   1st Year





Baiyappanahalli Railway Station Bangalore - UG Thesis



Railway Station, Bhopal



Cultural Center, Bhopal



Lotus Valley School, Gurgaun



Slum Housing, Bhopal



Women Skill Development Centre, Bhopal



Miscellaneous

# Projects



# Modernization of

# Baiyappanahalli Railway Station

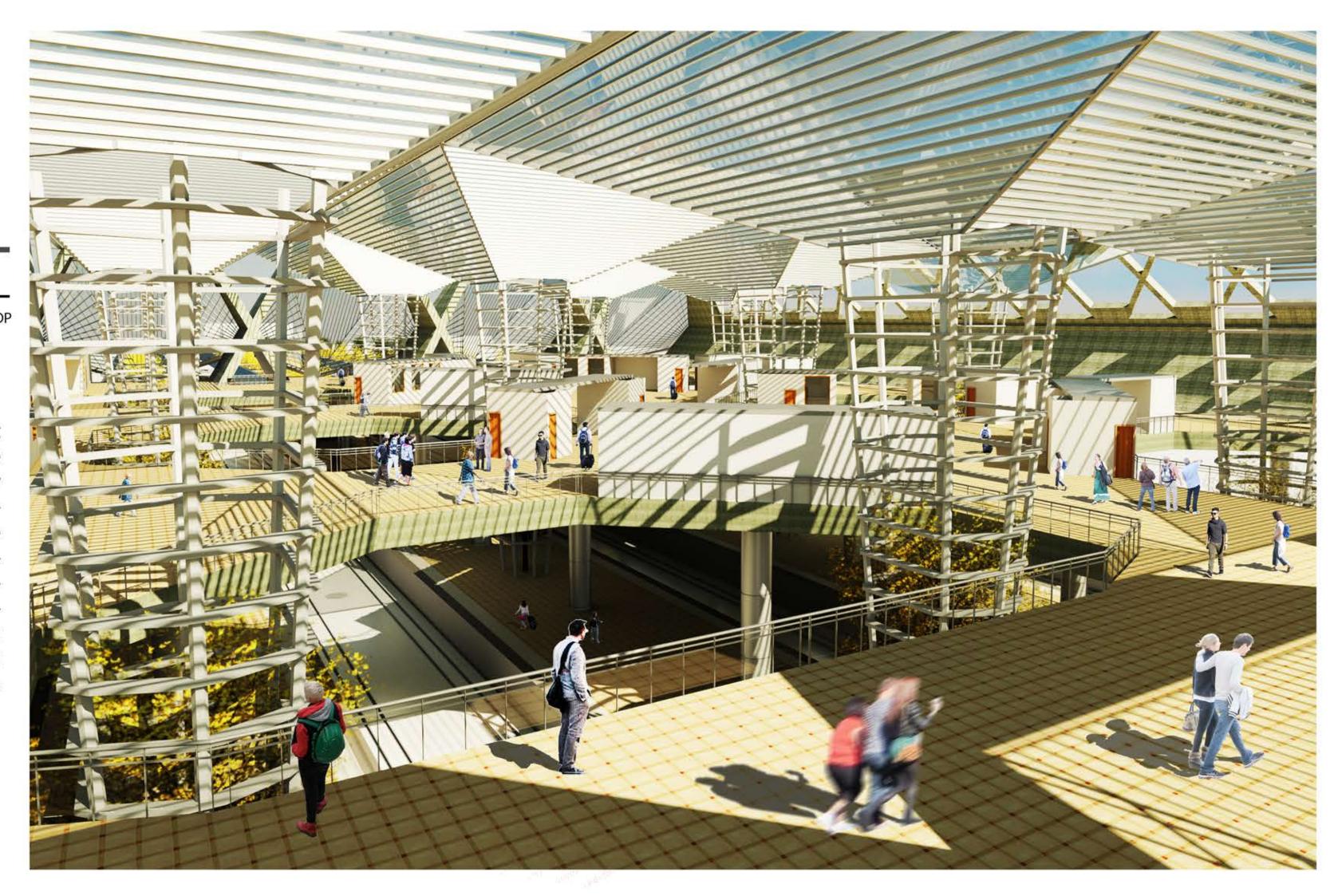
ARCHITECTURE UNDERGRAD THESIS PROJECT

YEAR: 2018

LOCATION: BENGALURU

SOFTWARE USED: REVIT, PHOTOSHOR

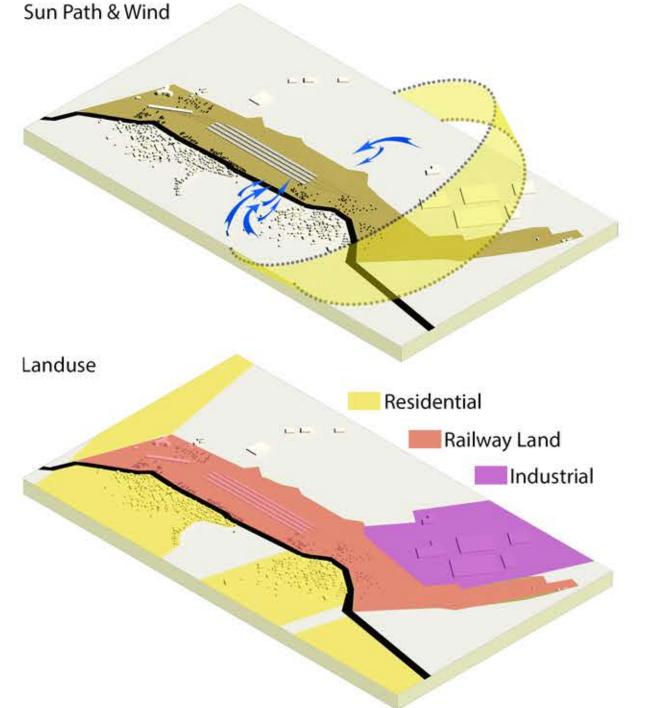
Transportation is the major part of the city and railway station one of the important building of transport in the city in terms of both image of the city and as well as the transportation hub with help to connect the city to the other city. The crowd in railway station is increasingly day by day and hence it need a change in the design of railway station to tackle the passenger's requirement as it is increasing. The ministry of railway have decide to use a world class station as a concept in development of present railway stations.so the statin can be constructed as a world class and also in development of commercial area with integrated urban spaces which will enhance the potential in surrounding areas and help the area in development. The thesis project is based on for proposing a design of railway station in baiyappanahalli, Bengaluru. The station project is proposed to develop by the Indian railways authority for making a third terminal in Bengaluru as a world class station.

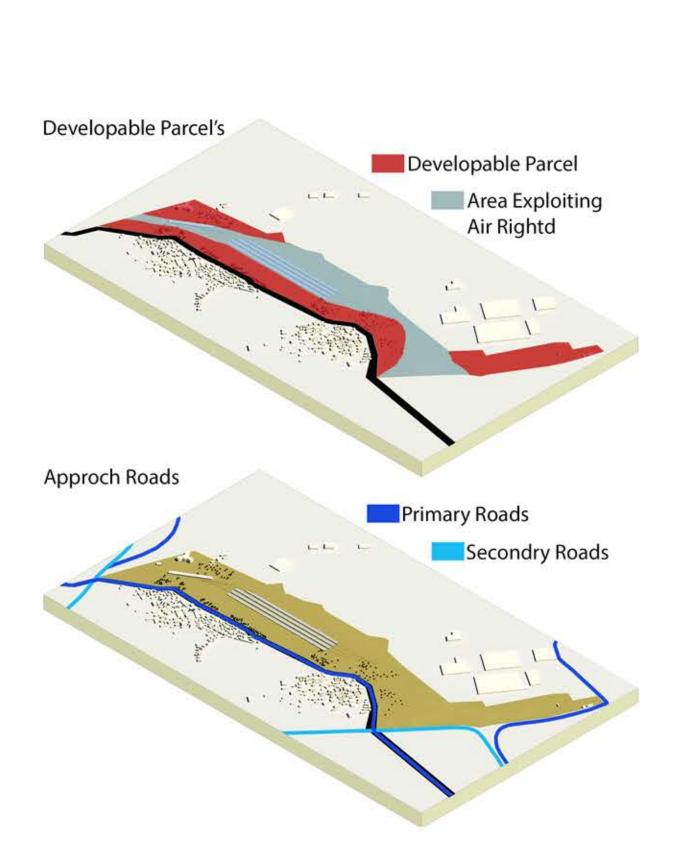


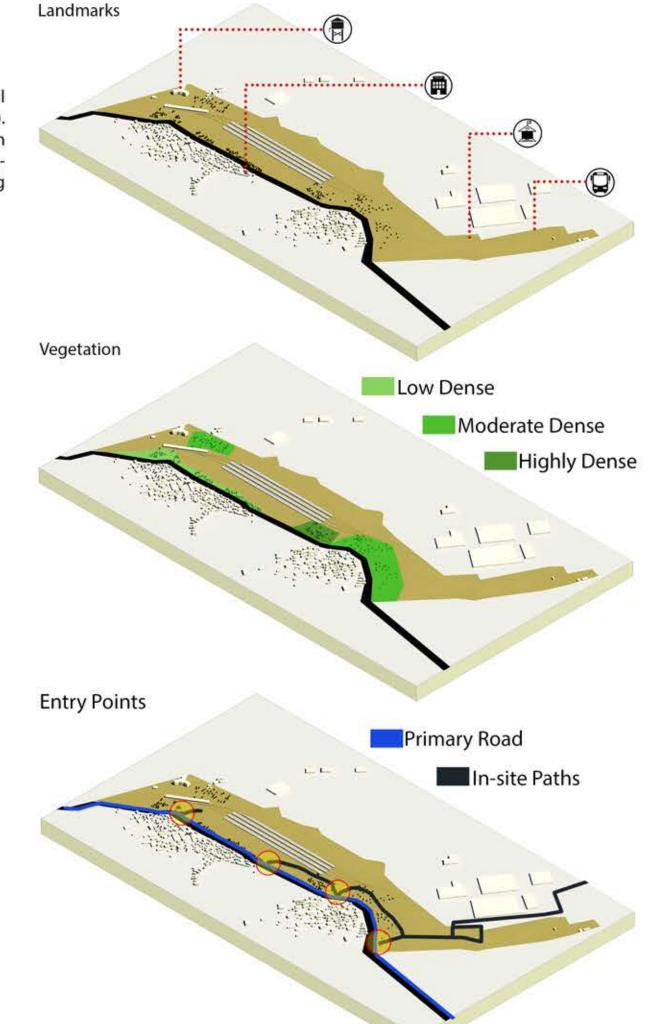


#### Site - Baiyappanahalli Railway station, Bangalore

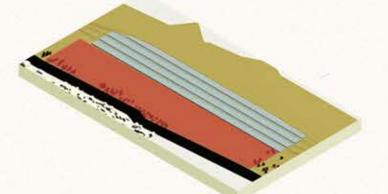
Bengaluru City founded by Kempegowda about four centuries ago is the current capital of Karnataka state. Baiyappanahalli will be the third coaching terminal. The proposed third terminal site is located towards east of Bengaluru city (about 10 km from CBD). The site is accessible through Baiyappanahalli road towards west, connecting Banaswadi road in north and old Madras road in south. Outer ring road of Bengaluru city is about 3 km from site towards east. Existing Baiyappanahalli Railway Station of Bengaluru has a small station building with only two platforms. Proposed third coaching terminal site is towards the north-west of existing station building. Presently this location is functioning as goods yard on main ChennaiBengaluru line.

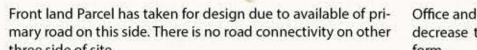


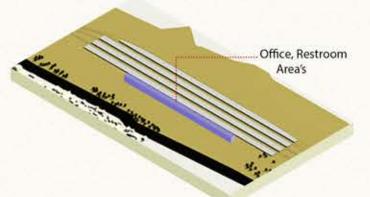




#### **Design Development Concept**

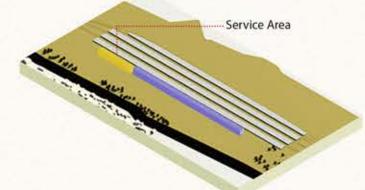




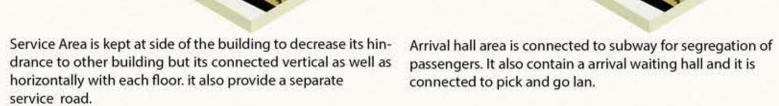


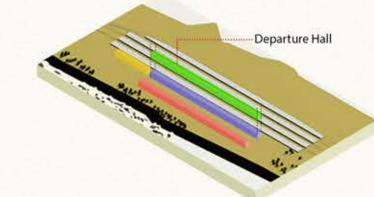
Office and Rest-room are design near to platform so to decrease the distance for passengers and officers to plat-

Arrival Hall Area

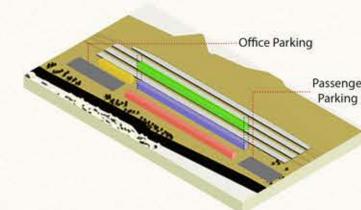


drance to other building but its connected vertical as well as passengers. It also contain a arrival waiting hall and it is horizontally with each floor. it also provide a separate service road.





Departure hall is placed in above level for segregation of crowd, it also connected to commercial area.



There are separate parking area's for service and for passengers. there are also two basement parking area which are connected to each floor with stairs and elevators,

three side of site.





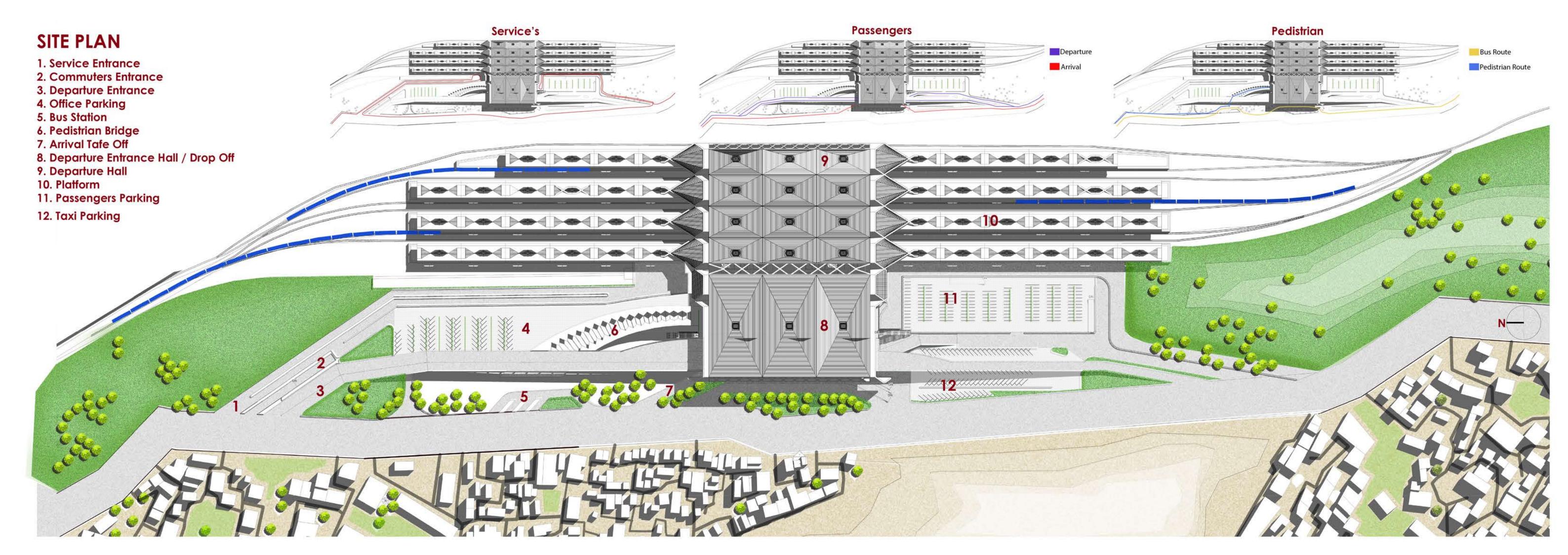
#### **Schematic Section**

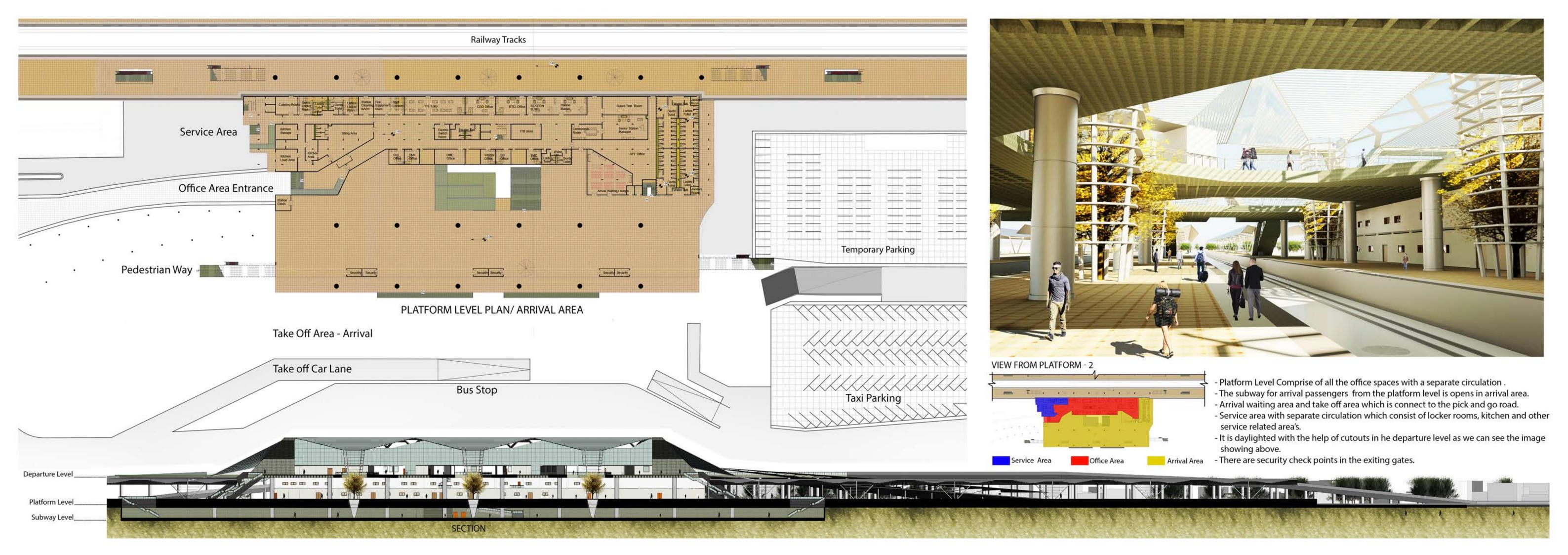


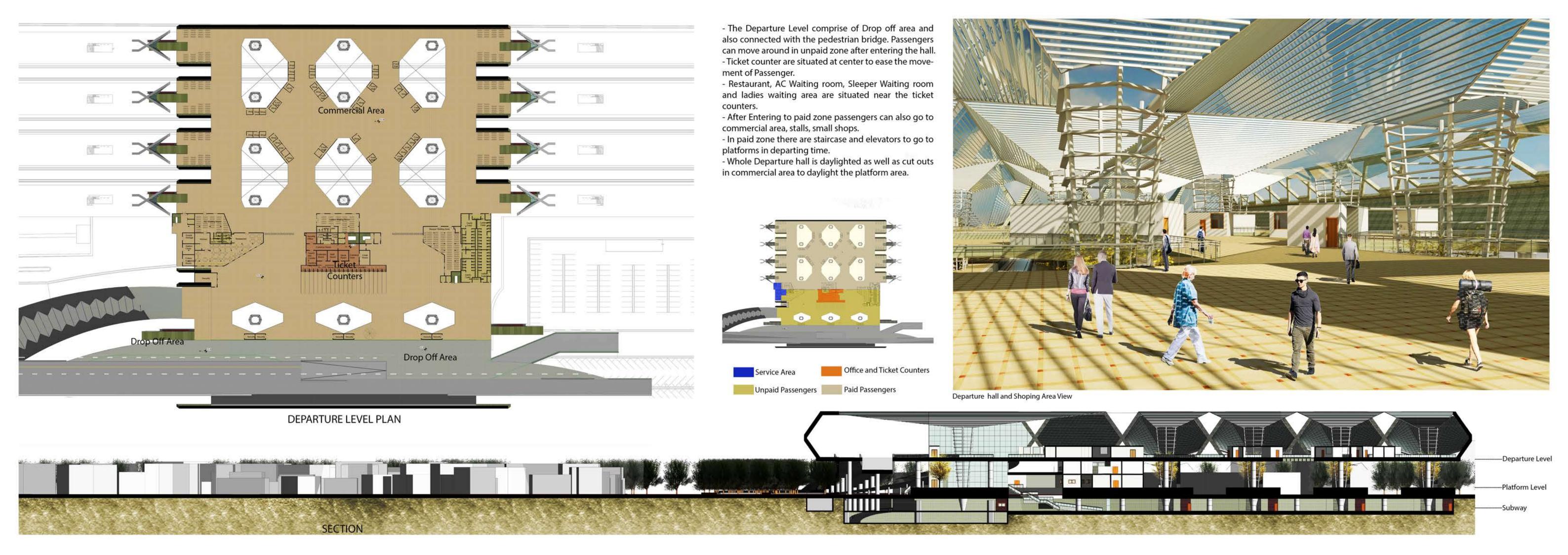
#### Key Points of Design



Ecofriendly



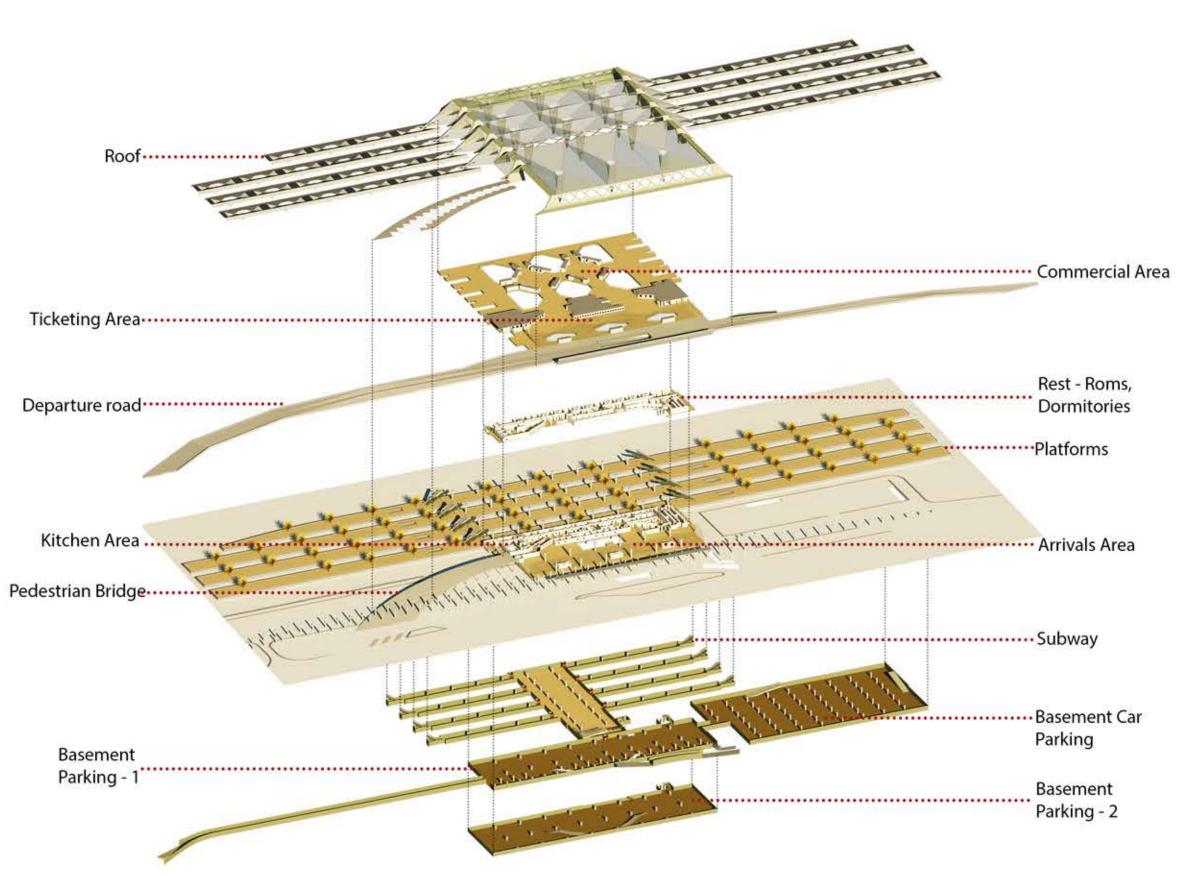




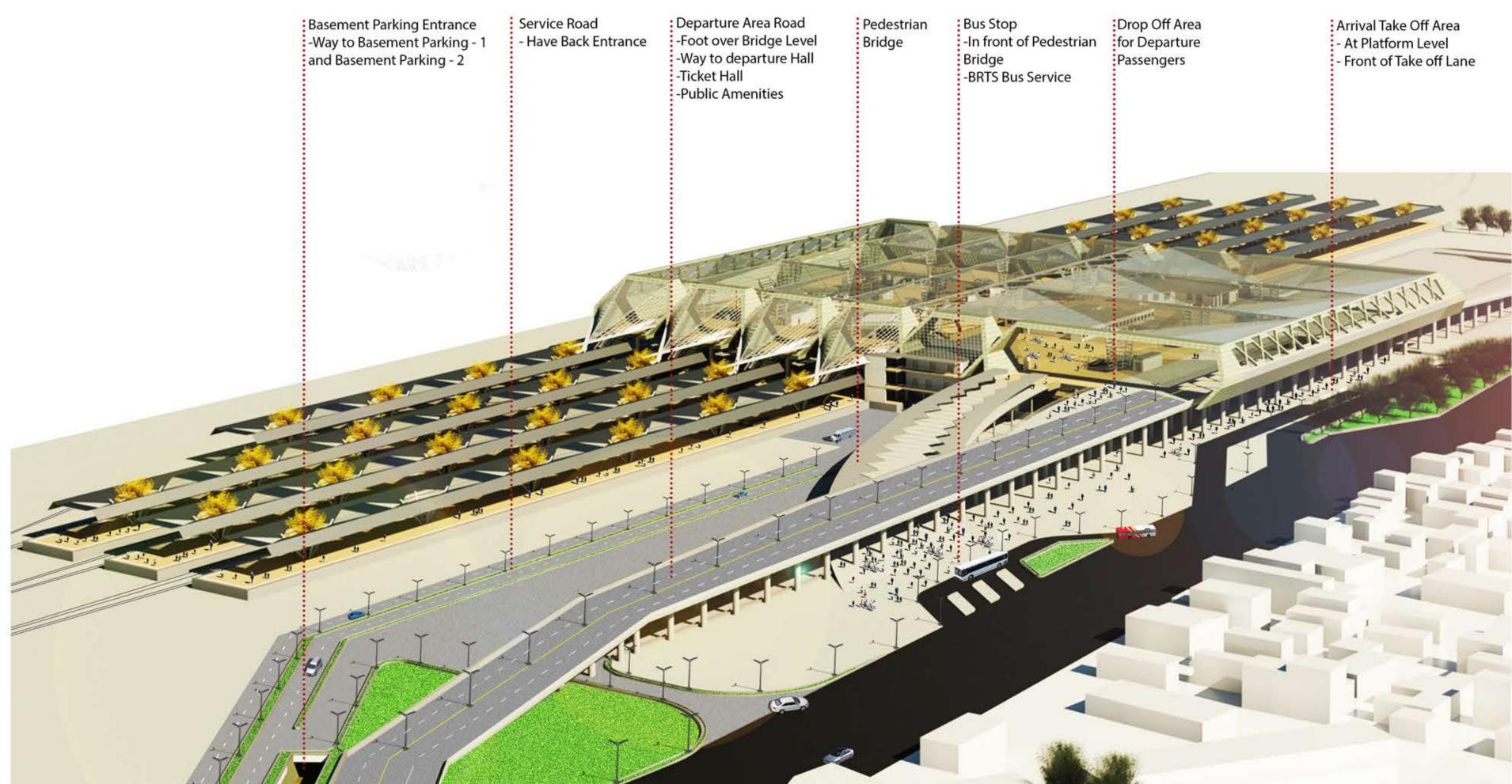


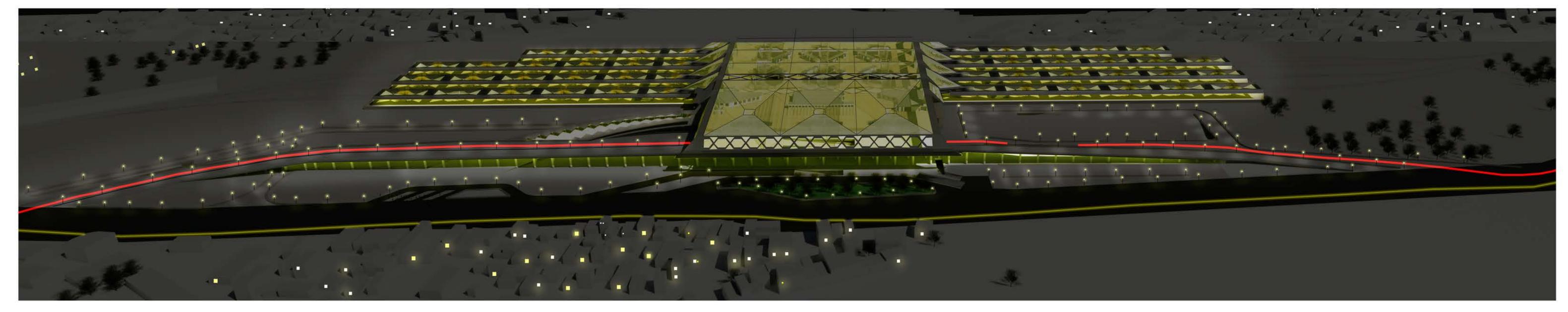


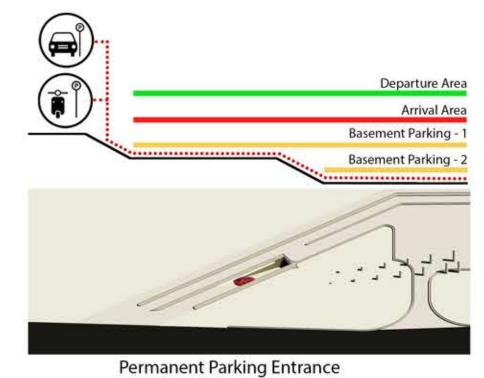
View of Arrival hall and subway. Subway is used by arriving passengers for exiting the platform and connect to the take off lane and to arrival waiting hall It is daylighted by the cut outs in departure hall.

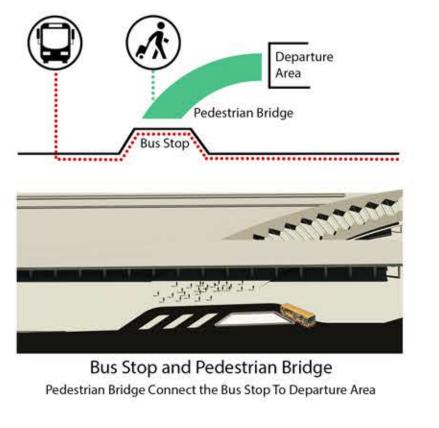


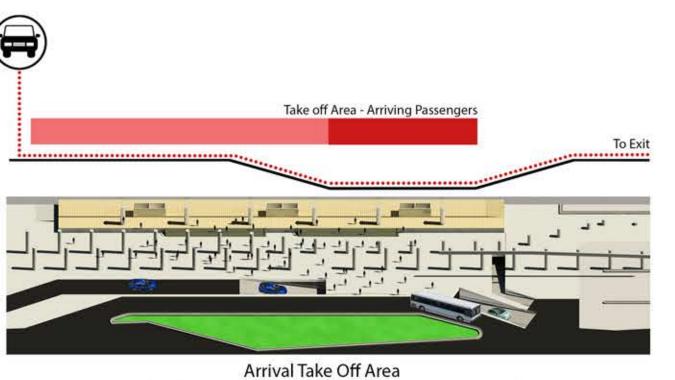
**EXPLODED VIEW OF RAILWAY STATION** 



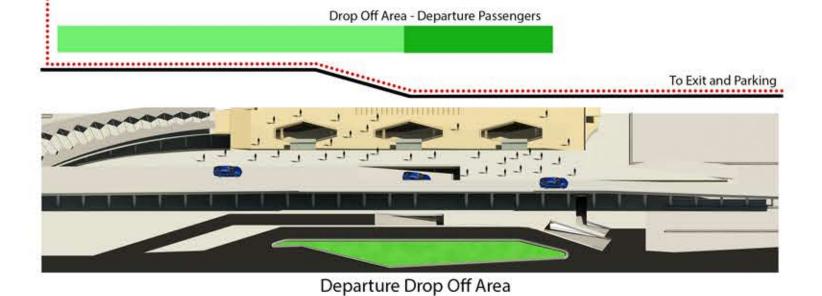




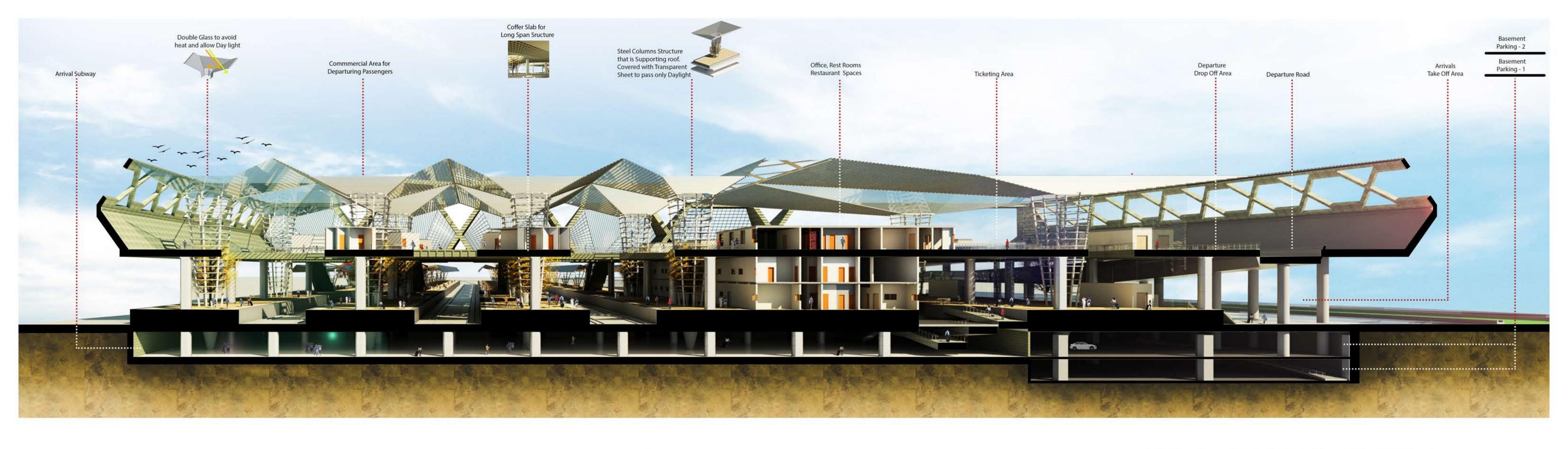


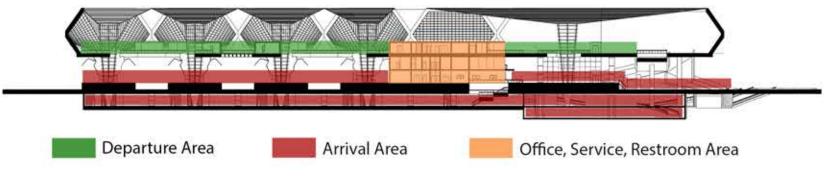


Design To Avoid Road Crossing for Arriving Passengers and to connect with Arrival Bus Stop

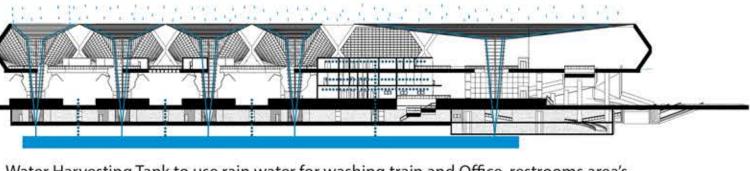


Design To Avoid Road Crossing for Departure Passengers to Connect Drop Off Area To Different Lanes











# Redevelopment

# **Bhopal Railway Station**

ACADEMIC COMPETION BY,

INTEGRAL STUDIO - SCHOOL OF PLANNING AND ARCHITECTURE BHOPAL

CITATION: FIRST PRIZE

YEAR: AUGUST 2016 LOCATION: BHOPAL,INDIA SOFTWARE USED: REVIT, PHOTOSHOP

Transportation structures have traditionally been the great buildings of urban society. There is a clear awareness of the importance and value with a clear vision of the future. Railway Station is major gateway and entrance to a city. The station reflects the character, lifestyle or background of the city or community in which it is located. Hence, a Station building in the design reflects the historical background and lifestyle of the people of that area.

#### Form Formation

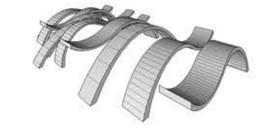
The form that we have selected for the station represents Bhopal. Instead of incorporating characters from regional heritage sites we have incorporated the differents level of topography and social mix that constitutes BHOPAL.



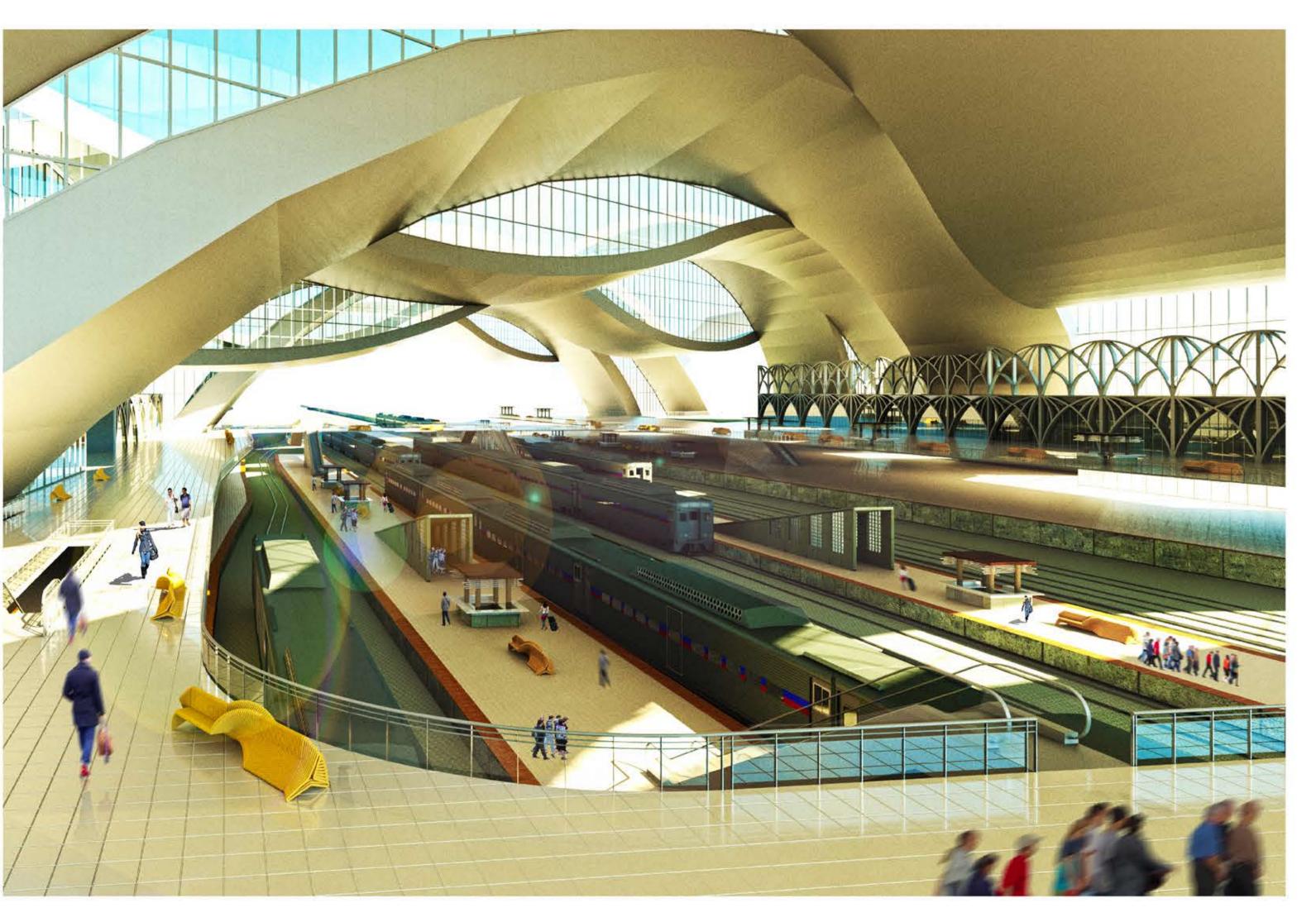
Push the plan surface to form a curved roof as well as to form voids on surfaces.



The roof form has interpreted the topography of Bhopal.

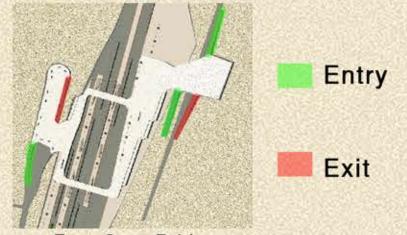


After combining many such-curved roofss the intersection space is creating a daylight source for the railway station.



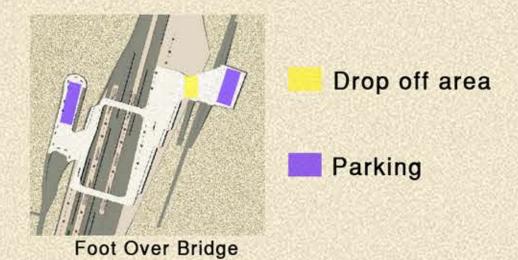
### Planning and Zoning

The core idea of design is to separate the arriving public and departing public by giving two levels i.e foot over bridge and subway. The entrance for public is given from foot over bridge and exit for departing public is given from subway. From this idea, we will able to decrease conflict between arriving and departing public.



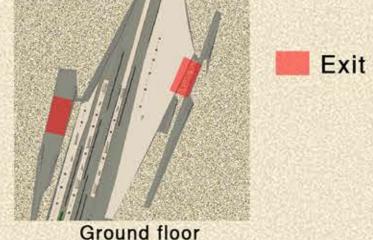
Foot Over Bridge

Entry and Exit for the Arriving public for the train are from the foot over bridge.

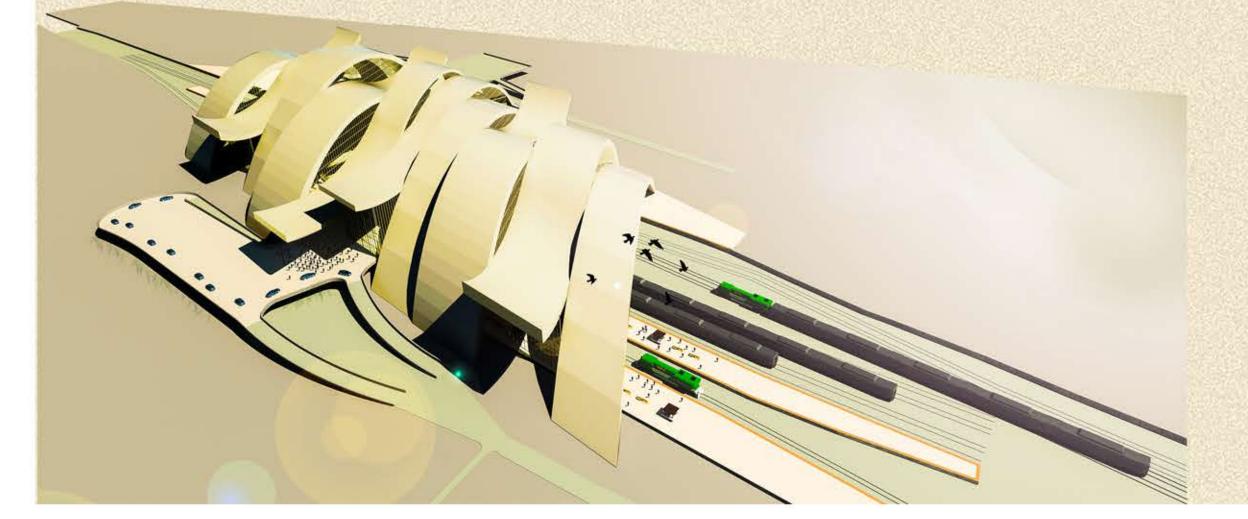


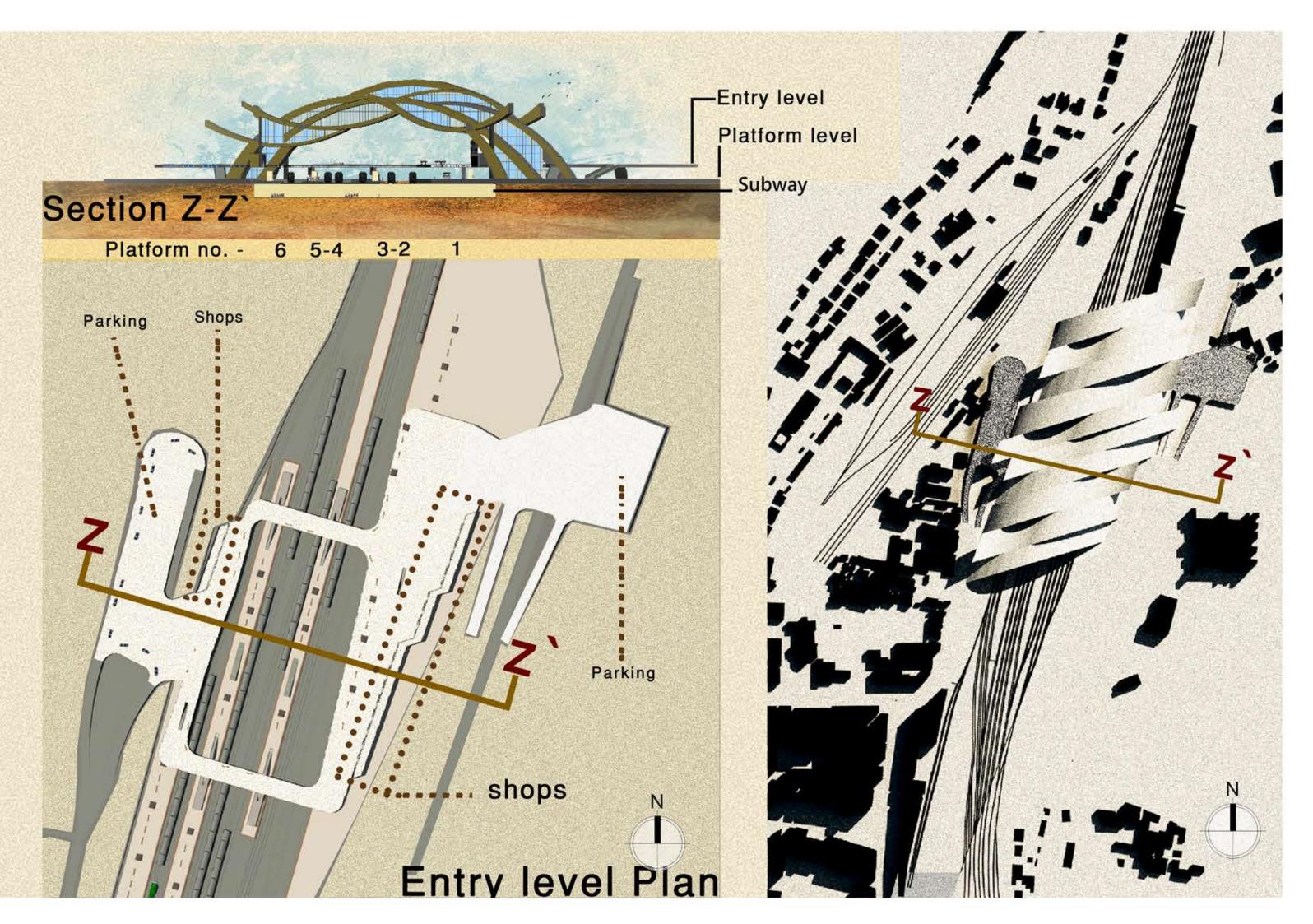
Parking is also available on foot over bridge for those who are

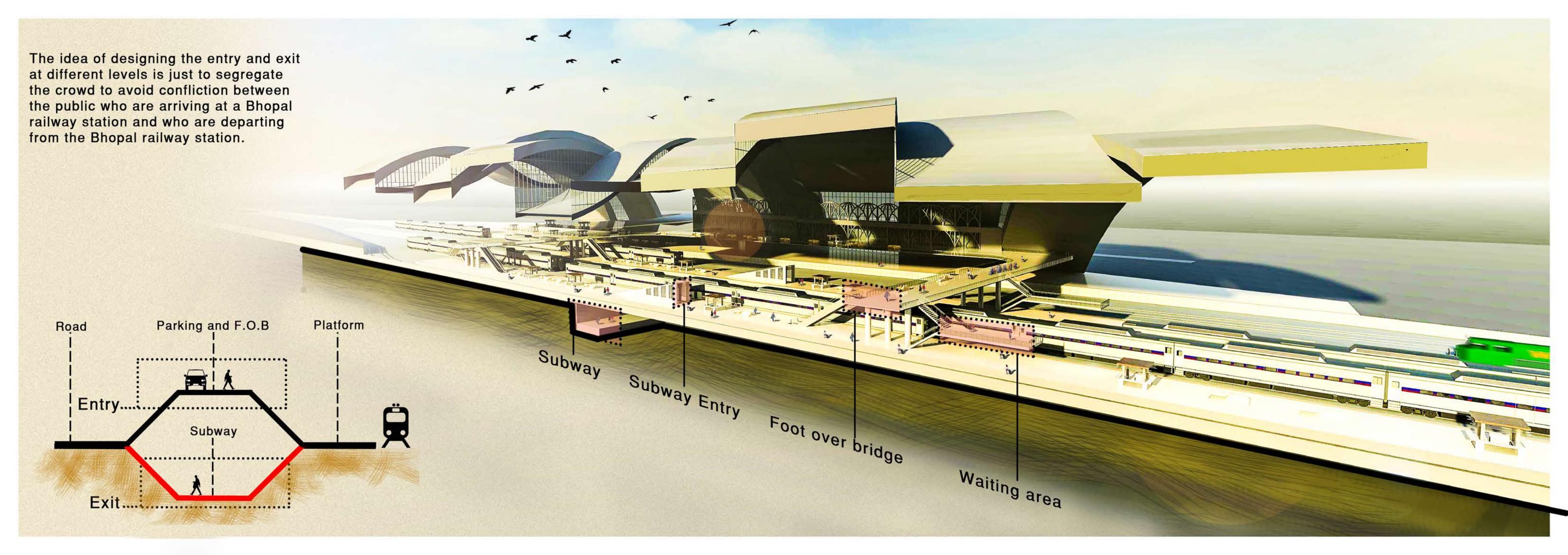
coming with their vehicle.

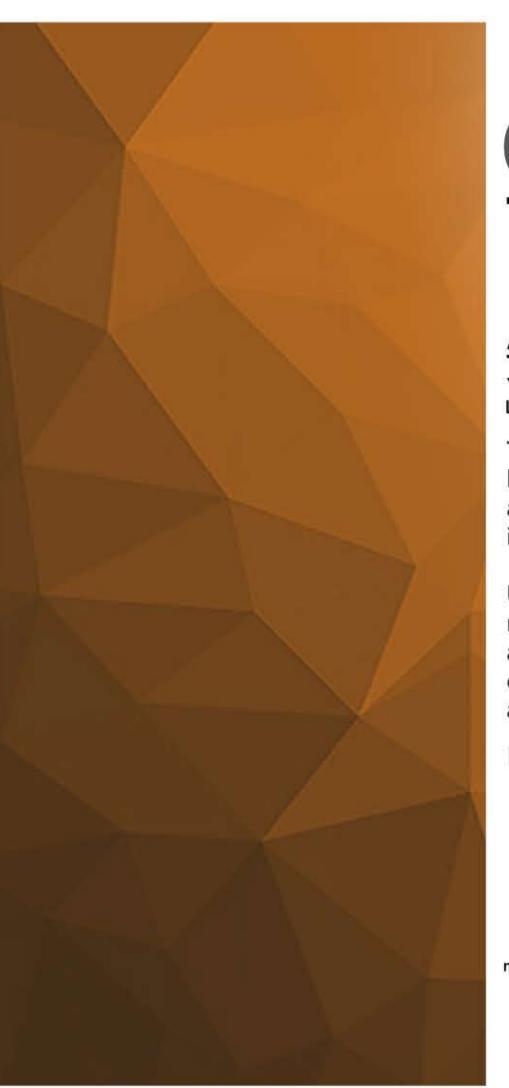


Exit for those who are departing from station by using subway.









# Cultural

# Center

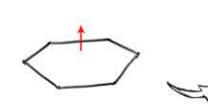
#### **ACADEMIC PROJECT IN 5TH SEMESTER**

YEAR: 2015 LOCATION: BHOPAL SOFTWARE USED: REVIT, PHOTOSHOP

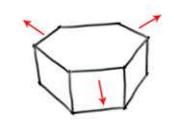
The aim is to design a building which interprets its surrounding. The site is located in the heart of city Bhopal i.e the site was near to the upper lake. The site was surrounded by roads and pathways The form of the cultural center is interpreting its surrounding as well it is also interpreting the topography of Bhopal.

Upper lake was an inspiration behind the form formation of the mountain as it reflects mountain range near the lake. moreover, it was aimed to build a space to hold a workshop and another exhibit area under a similar type of roof to maintain the context of the cultural centre. The base is taken from hexagon to increase the corner spaces and wall for exhibit areas.

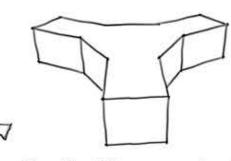
#### Form Formation



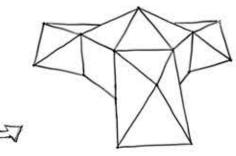
Hexagon plan provides more corners to explore extrude it form a space



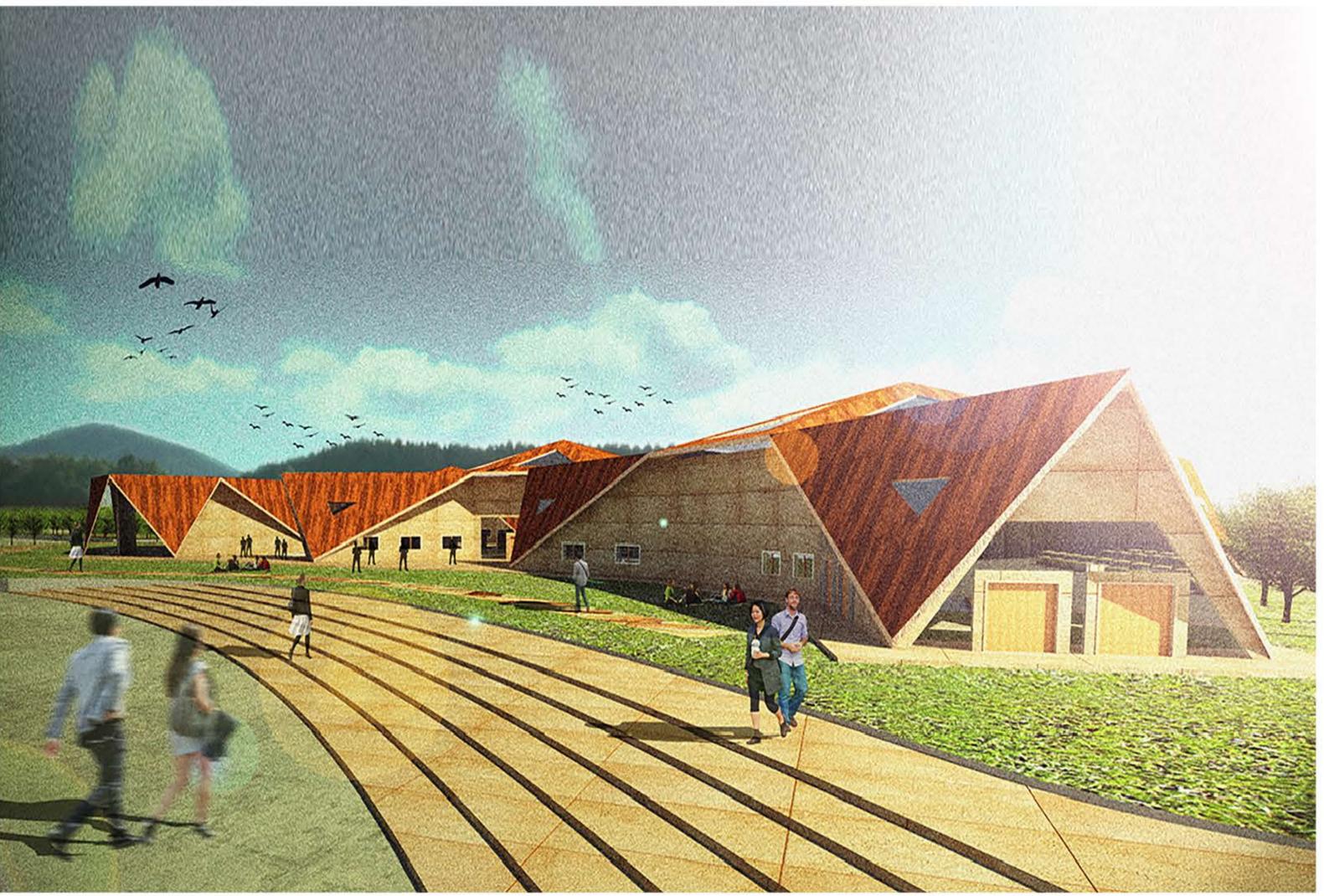
Extrude in horizontally to three directions for circulation passages

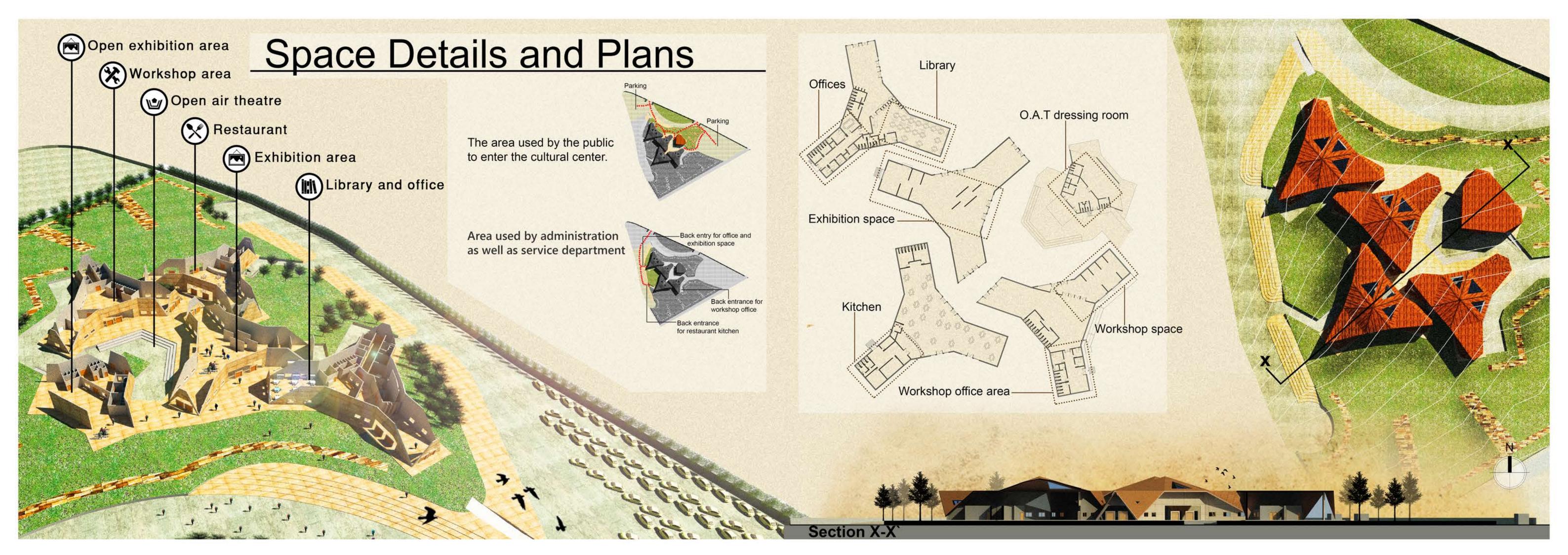


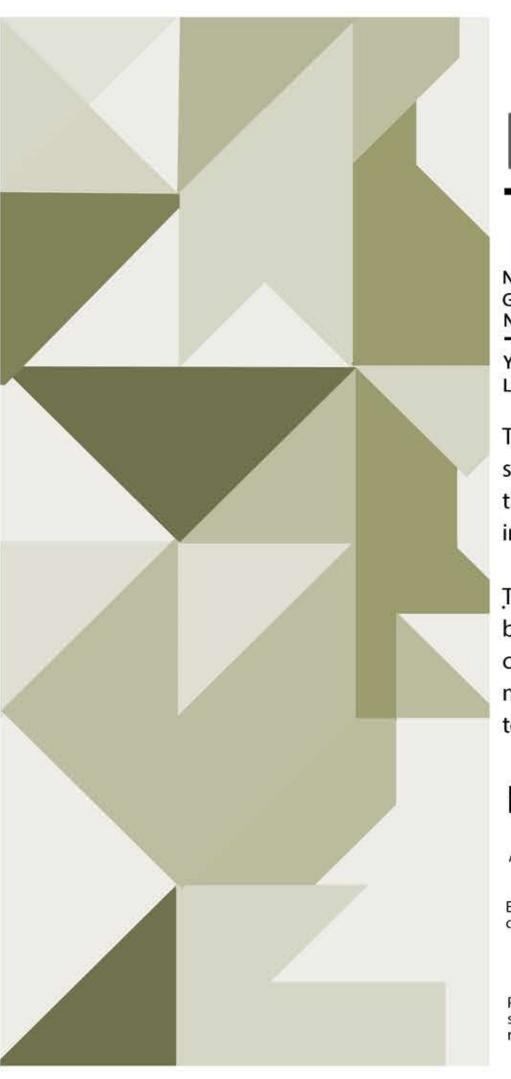
Chamfered the corner edges to create a entrance path way and uplift the middle part of roof to provide grand space for exhibition



The final form reflects the topography of Bhopal as well also maintain the inner space for exhibition







# Lotus Valley

### School

NATIONAL COMPETITION -GRIHA TROPHY - 2015, BY NATIONAL ASSOCIATION OF STUDENT OF ARCHITECTURE (NASA India)

YEAR: 2015 LOCATION: GURGAUN SECTOR 89

SOFTWARE USED: REVIT, PHOTOSHOP

The role of architecture reaches far beyond the creation of passive vessels of learning. The knowledge-based links between learning, critical thinking, architecture and building technologies have been established in the concept of "buildings that teach".

The site was located in Gurgaon sector 89. The design should make the best use of the site to improve the thermal performance in the climatic conditions of Gurgaon. The design should give special attention to massing, solar orientation, wind movement and passive cooling systems.

#### **Form Formation**

Area selected on site

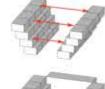
Extrude vertically to create classroom

Pushed along to create space for more class-room

Passive design: Create a sense of entry courtyard planning

Passive design: Staggered arrangement to let light in courtyard thus resulting in more exposure to open to sky area

Passive design : Service and circulation space on south facade







# Concept

Zoning

Even when one little stone in thrown in still water, it creates multiple waves of ripples. Similarly, every new building constructed will have multiple effects on its surrounding context, climate and nature. Keeping the ripple at the core of the design, a green oat spreads out from the centre of the site and the buildings are designed in the subsequent ripples. The idea of the ripple effect is to spread the message of sustainability, which is the central design philosophy.

PARKING AREA

ADMIN + AUDI

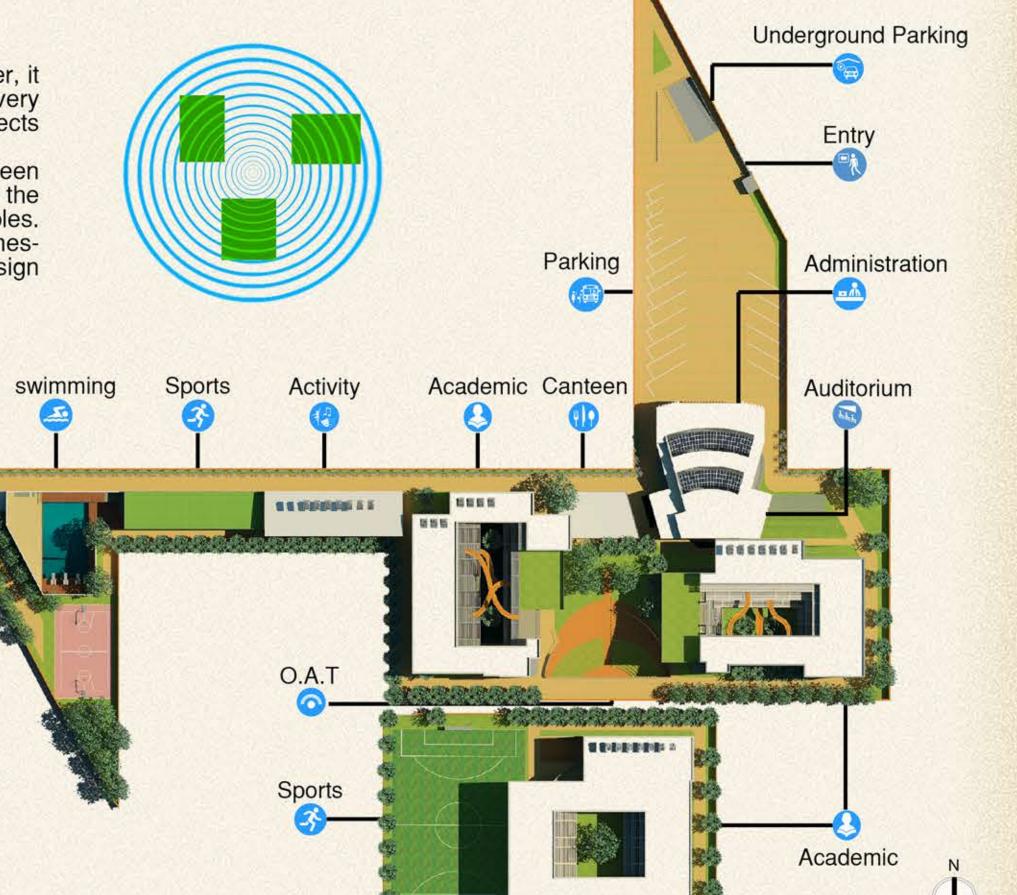
OPEN AIR THEATRE

ACADEMIC BLOCK

ACTIVITY BLOCK

SPORTS BLOCK

GREEN SPACES



#### **BUILT FORM**

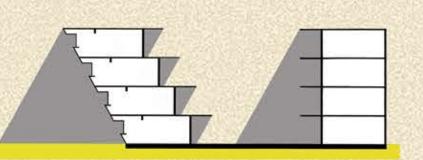
The built form provides shade in the courtyard, corridors and the surrounding spaces, thus reducing the heat intensity in summers. In turn, the shaded areas act as a soothing atmosphere.

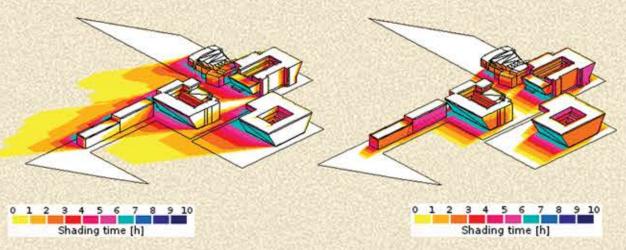
As classes are arranged in a staggered form, they are not in direct influence of sunlight, thus reducing the heat gain.

#### **SHADOW ANALYSIS**

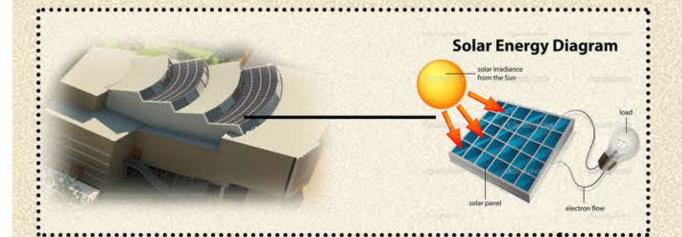
The built form is Developed and analysed by Considering different shadow pattern formed in spaces used as interactive and play area.

The concept of mutual shading is considered. West facade remain shaded most of the time, reducing direct heat gain and maintain thermal comfort.









#### POLLUTION CONTROL IN PARKING

: The air polluted by vehicular emissions in the basement is forced through ventilation shafts by the use of exhaust fans into a surface plantation. This polluted air is absorbed by the plants and the fresh air is then released into the atmosphere. : The surface air is purified by filter gardens present in( and surrounding) the parking lot.

PLANTS: Peace lily, English Ivy, Dracaena



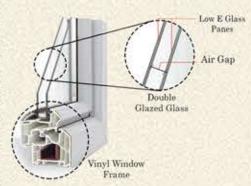
#### **CLC BLOCKS**

Exposed Cellular Lightweight Concrete blocks are used in the building instead of conventional concrete blocks to reduce the carbon emissions of the building and the effort of the workers during construction.

Composition

#### DOUBLE GLAZED GLASS

Double glazed glass is used to reduce emissivity and provide thermal as well as sound insulation to the interiors.

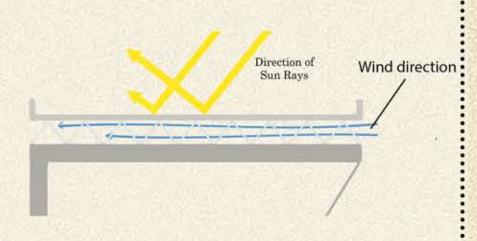


#### VINYL WINDOW FRAME

Vinyl window frames are cost-effective : and environment-friendly. The even provide thermal and sound insulation to the interiors and are easy to maintain.

# BUILDING SECTION AND RAINWATER DOUBLE ROOF HARVESTING- ACADEMIC BLOCKS

Double roof is provided on the three academic blocks. It acts as an insulator and temperature regulator for the air flowing through the gap between the two roofs. This buffer space above the roofs of the classroom provides thermal comfort and further reduces heat gain. It also helps in sustainable learning of the students.



#### RAMMED EARTH WALLS

Rammed earth walls are provided at the boundary of the complex to blend it with nature and give an earthy feeling to the students.

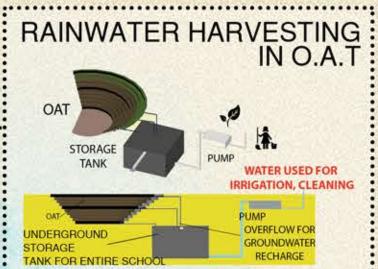


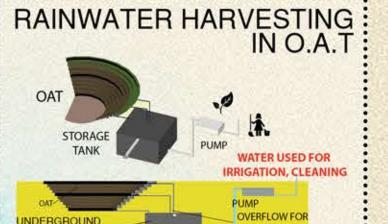
: THROUGH THE CORRIDORS

INTO THE COURYARD

#### FILLER SLAB

Filler slab is used for the roofing to: reduce the dead weight and provide a certain level of insulation: against direct sunlight from the: top. Less concrete is used so it is: a cost-effective and environment-friendly solution.







# SLUM

# HOUSING

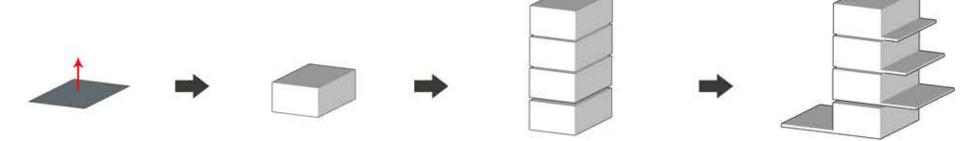
ACADEMIC PRJECT IN 7TH SEMESTER

YEAR: 2016 LOCATION: BHOPAL, INDIA

SOFTWARE USED: REVIT, PHOTOSHOP

Slums have been defined as mainly those residential areas where dwellings are in any respect unfit for human habitation by reasons of dilapidation, overcrowding, faulty arrangements and designs of such buildings, narrowness or faulty arrangement of streets, lack of ventilation, light, sanitation facilities or any combination of these factors which are detrimental to safety, health and moral. The site is located at idgah hills, Bhopal. Slum rehabilitation program is already executed there under the program JNNURM by UIG(Urban Infrastructure & Governance) which is shown in site plan below.

#### **Form Formation**



Habitable site area for a user

Extrude to form space for living

Adding more space for more user in vertical direction

Giving them a incremental space for future expansion



#### **UNIT DESIGN**

The units are designed keeping the needs of slum dwellers in mind. Open and flexible spaces have been provided with the option of increment. The cost has been cut by stacking of services, sharing of major walls and simple column layout.

Units in elongated orientation. For the people who don't need open spaces. Roof above can be used for intervention.

Units in elongated orientation. Open space on the floor itself.

Same as a ground floor with no gaps. openings on both side. Open space facing the street.

Ground floor units open to the lower side incremental open space facing the street.

#### INCREMENT OPTIONS

Increment option is given to the first 3 floors. The fourth Floor is not given that option keeping in mind that families with certain occupations may not need that space. Studying the population demographics the no. of each type of floor can be adjusted.

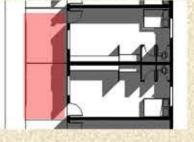
Third floor



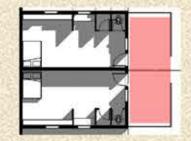
Second floor



First floor

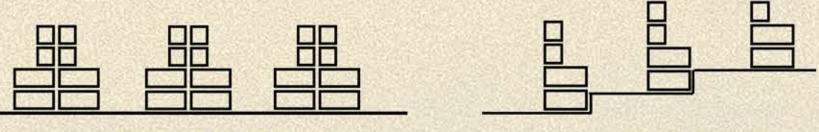


Ground floor

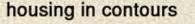


#### **CLUSTER OPTIONS**

The clusterisation can be done in two ways. On a sloping land, it can be placed in steps. On flat land, the unit can be inverted horizontally and stacked along a street.

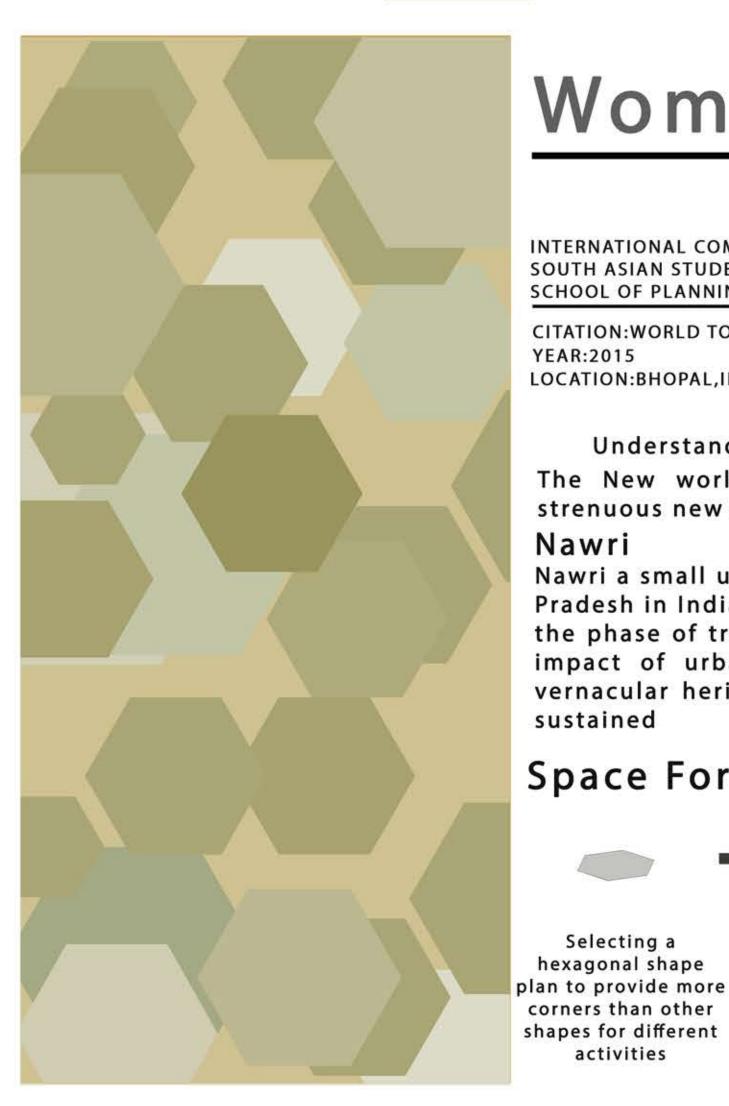


housing in flat land





**EMATIC SECTION** 



# Women Skill

### **Development Centre**

INTERNATIONAL COMPETITION -SOUTH ASIAN STUDENT DESIGN COMPETITION (SASDC), BY SCHOOL OF PLANNING AND ARCHITECTURE BHOPAL

CITATION:WORLD TOP 15 YEAR:2015 LOCATION:BHOPAL,INDIA

SOFTWARE USED: REVIT, PHOTOSHOP

"Retaining the Pertrichor"

Understanding & re-establishing Vernacular Architecture of Nawri

The New world order under the influence of globalisation has imposed strenuous new conditions upon the local vernacular settlements.

#### Nawri

Nawri a small urban village situated in Lalghati, Bhopal in the state of Madhya Pradesh in India. is an old vernacular settlement which is now passing through the phase of transformation due to the impact of urbanisation. The increasing impact of urbanisation on the village may lead to the extinction of its vernacular heritage in the near future, which is a need to be preserved and sustained

### **Space Formation**



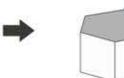
Selecting a

activities









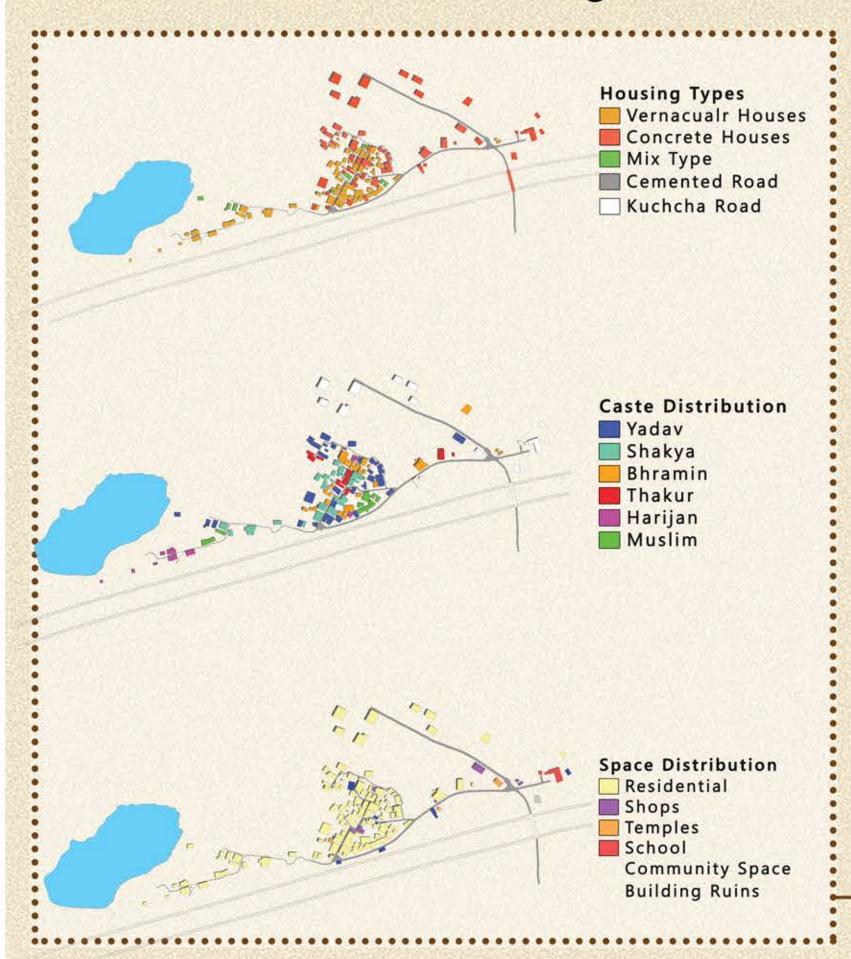


Adding more planes to increase the number of activities inside the build form and creating middle spacer as recreational space

Extruding first half as solid for indoor activities and other as semiopen for outdoor activities and it creates a buffer space in middle recreational space



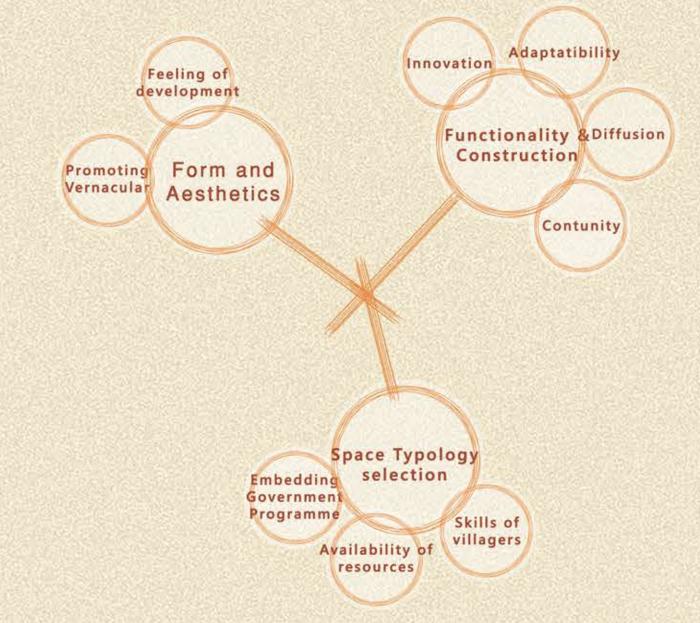
### Documentation of village NAWRI



### Problem

Unemployment is the major issue for the villages. Most of the men do daily wage labour work in the city.Women remain free at home whole day.

### Design Strategy



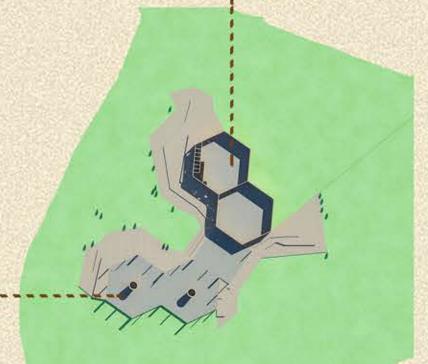
#### Proposal of

WOMEN SKILL DEVELOPMENT CENTRE NAWRI specialised for date palm products



Nawri village is losing its tradition of vernacular architecture due to unstability of houses, changing perspective towards development and low income. Date palm is available in the large area within the village surroundings. Villagers also have minor skills to work with date palm hand made products. Villagers have the skill to make their product using local material. Women Skill Development Center will not only provide opportunities for extra income but also change the perspective towards vernacular architectur.

Semi Open Hall



Workshop area

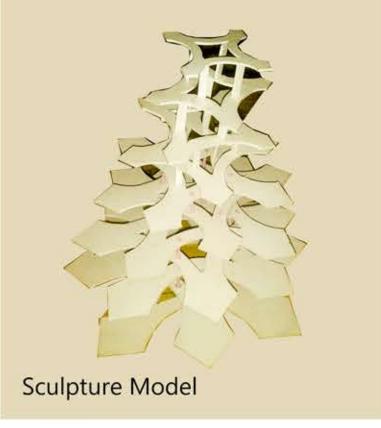


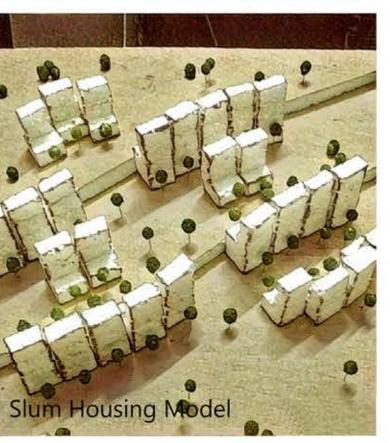


# Miscellaneous



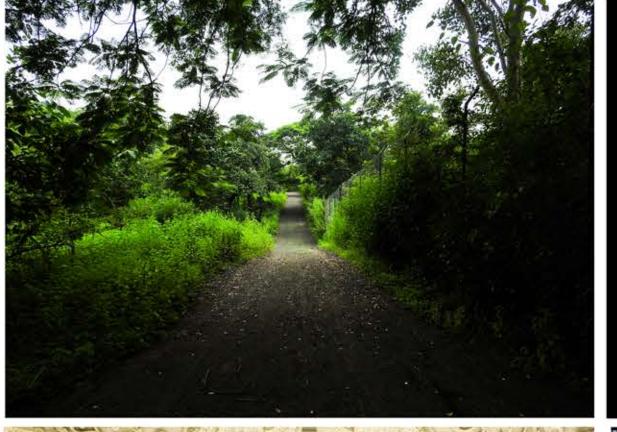


























# Thank you

Ph - +91-9897977234, +91-9424998385 Email - Ar.Ankit.v@gmail.com

