

PROFESSIONAL TRAINING REPORT

Submitted in partial fulfillment of the requirements for the award of
Master of Architecture degree in Sustainable Architecture

by

SHWETHA M 40890017



**SCHOOL OF BUILDING AND ENVIRONMENT
DEPARTMENT OF ARCHITECTURE**

SATHYABAMA
INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
Accredited with Grade "A" by NAAC
JEPPIAAR NAGAR, RAJIV GANDHI SALAI, CHENNAI - 600 119

JAN 2022



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

(Est U/s(3) of UGC Act,1956) Accredited with Grade "A" by NAAC (A Christian Minority Institution)

JEPPIAAR NAGAR, RAJIV GANDHI SALAI, CHEMMENCHERY, CHENNAI – 600119. TAMILNADU.

PHONE: 2450 1443/9941912481 INTERNET: www.sathyabama.ac.in

E-mail: archhod@sathyabama.ac.in



SCHOOL OF BUILDING AND ENVIRONMENT
DEPARTMENT OF ARCHITECTURE
M. Arch (Sustainable Architecture)

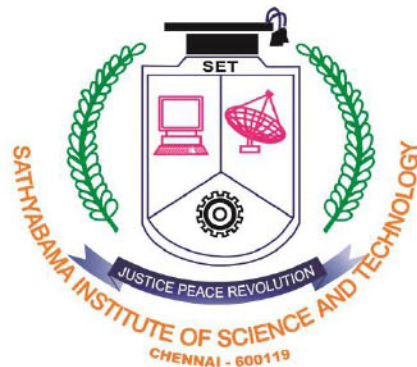
PROFESSIONAL TRAINING PORTFOLIO (S89A PT)
JAN 2022

Name of the Student : Shwetha M

Semester : III

Reg No. : 40890017

Batch : 2020-2022



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

(Est U/s(3) of UGC Act, 1956) Accredited with Grade "A" by NAAC (A Christian Minority Institution)

JEPPIAAR NAGAR, RAJIV GANDHI SALAI, CHEMMENCHERY, CHENNAI – 600119. TAMILNADU.

PHONE: 2450 1443/9941912481 INTERNET: www.sathyabama.ac.in

E-mail: archhod@sathyabama.ac.in



SCHOOL OF BUILDING AND ENVIRONMENT

DEPARTMENT OF ARCHITECTURE

M. Arch (Sustainable Architecture)

BONAFIDE CERTIFICATE

This is to certify that the professional training (S89A PT) is the work of Shwetha M **40890017** who had undergone training in Nanda Green Associates and has been monitored by the continuous assessment during **Dec 2021 to Jan 2022.**

DR. DEVYANI GANGOPADHYAY

DEAN,

School of Building and

Environment

Department of Architecture

Submitted for Viva voce Examination held on 07/02/2022

Internal Examiner

External Examiner



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

(Est U/s(3) of UGC Act,1956) Accredited with Grade "A" by NAAC (A Christian Minority Institution)

JEPPIAAR NAGAR, RAJIV GANDHI SALAI, CHEMMENCHERY, CHENNAI – 600119. TAMILNADU.

PHONE: 2450 1443/9941912481 INTERNET: www.sathyabama.ac.in

E-mail: archhod@sathyabama.ac.in



DECLARATION

I SHWETHA M hereby declare that the Professional Training Report 1ST Dec 2021-11th Jan 2022 done by me under the guidance of Ar.S. NANDAGOPAL is submitted in partial fulfillment of the requirements for the completion of practical training session.

DATE : 20th Jan 2022

PLACE : Chennai

SIGNATURE OF CANDIDATE

ACKNOWLEDGEMENT

I am pleased to acknowledge my sincere thanks to Board of Management of **SATHYABAMA** for their kind encouragement in doing this project and for completing it successfully. I am grateful to them.

I convey my thanks to **Dr. Devyani Gangopadhyay**, Dean and Head of Department, School of building and Environment, Dept. of architecture for providing me necessary support and details at the right time during the progressive training session.

I would like to express my sincere and deep sense of gratitude to **Ar.S. NANDAGOPAL/Chief Architect/Nanda Green Associates** for his valuable guidance, suggestions and constant encouragement paved way for the successful completion of my project work. My sincere thanks to **Ar.Sheetal Amraotkar** Professional Training Coordinator for her motivation and guidance.

I wish to express my thanks to all Teaching and Non-teaching staff members of the Department of Architecture who were helpful in many ways for the completion of the project.

JOINING LETTER AND COMPLETION LETTER



25/10/2021

To,
Head of Department
Sathyabama Institute Of Science & Technology,
Chennai, Tamil Nadu - 600097

Respected Sir/ Madam,

Sub: Practical training/ Master of Architecture Internship Program - confirmation.

We hereby accept, Miss. Shwetha. M , 2nd year, M. Arch student of your institution to undergo her practical training in our office as trainee architect from November 25th 2021 to January 11th 2022.

Thanking you,

Regards,

NANDAGOPAL.S
(PRINCIPAL ARCHITECT)

S.NANDA GOPAL
B.Arch. M.Sc, Sustainable Building (UK), AIIA
LICENCED SURVEYOR No : RA 591
Class 1, Corporation of Madras
CA / 2008 / 42643
IIA No : 16792
No.980,TNHB Colony Main Road,
Erikarai,Velachery, Chennai - 600 042.
Phone : 044 - 42716159

M.I.G. 980, T.N.H.B Colony Main Road, Erikarai, Velachery, Chennai - 600 042. Tamilnadu, India
+91 98401 45917 | nanda_architect@yahoo.co.in | www.ngreenarchitects.com



To
The Head of the Department,
Sathyabama Institute of Science and Technology,
Chennai - 600119

Respected Sir/Madam,

Subject: Completion letter

This is to inform that Ms. Shwetha M (Reg.No. 40890017), pursuing M.arch - sustainable architecture in sathyabama Institute of Science and Technology, has completed her internship successfully at our firm from 01-12-2021 to 11-01-2022.

Thanking You,

Regards,

S.NANDA GOPAL
B.Arch. M.Sc, Sustainable Building (UK), AIIA
LICENCED SURVEYOR No : RA 591
Class 1, Corporation of Madras
CA / 2008 / 42643
IIA No : 16792
No.980,TNHB Colony Main Road,
Erikarai,Velachery, Chennai - 600 042.
Phone : 044 - 42716159

M.I.G. 980, T.N.H.B Colony Main Road, Erikarai, Velachery, Chennai - 600 042. Tamilnadu, India
+91 98401 45917 | nanda_architect@yahoo.co.in | www.ngreenarchitects.com

WEEKLY REPORT



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

Accredited with 'A' grade by NAAC
Jepiaar Nagar, Rajiv Gandhi Salai, Chennai - 600 119.

Phone: 044 - 2450 3150 / 3151 / 3152 / 3154 / 3155 Fax: 044 - 2450 2344
www.sathyabama.ac.in



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

Accredited with 'A' grade by NAAC
Jepiaar Nagar, Rajiv Gandhi Salai, Chennai - 600 119.

Phone: 044 - 2450 3150 / 3151 / 3152 / 3154 / 3155 Fax: 044 - 2450 2344
www.sathyabama.ac.in



DEPARTMENT OF ARCHITECTURE M. Arch (Sustainable Architecture)

Continuous Assessment Report for Professional training

(Continuous progress report of the trainee architect/Project Manager for the period of 30 working days in the office to be submitted to HOD by the Trainee attending the training session)

1. Name of the office / organization : Nanda Green Associates

2. Address & Contact Number : M.I.G. 980, T.N.H.B Colony main road, Erikarai,
Velachery, Chennai - 600042 Tamilnadu,

3. Name of the student : Shwetha M

4. Duration : From 01-12-2021 To 04-12-2021

5. Total No. of days : 4

6. Evaluation of Performance criteria shall be on

* Note: Kindly grade the student as per his/her overall performance in the office during the assessment month; which will be converted to the allotted 200 marks by the department.

Description of works	Excellent	Good	Fair	Poor	NA
Understanding of office culture and methodology	✓				
Active Participation in the Project activities		✓			
Documentation and tracking of project		✓			
Presentation Skills developed		✓			
Understanding of construction details & techniques		✓			
Participation and contribution in project meetings		✓			
Understanding of codes and standards		✓			
Schedule preparation & tracking activities		✓			
Preparation / Management of drawings		✓			
Learning / Application of software in Projects		✓			
Preparation of concept for projects		✓			
Site Management / Discussion with clients		✓			

Overall Grading*

(A - 80, B - 70, C - 60, D - 55, E - 50, F - <5)

7. Any other Remarks :

8. Signature of the
Head of the Office /
Organization (With Seal)

S.NANDA GOPAL

B.Arch. M.Sc. Sustainable Building (UK),

LICENCED SURVEYOR No : RA 591

Class I, Corporation of Madras

CA / 2008 / 42643

HA No : 16792

No.980, TNHB Colony Main Road,

Erikarai, Velachery, Chennai - 600 042.

Phone : 044 - 42716159

DEPARTMENT OF ARCHITECTURE M. Arch (Sustainable Architecture)

Continuous Assessment Report for Professional training

(Continuous progress report of the trainee architect/Project Manager for the period of 30 working days in the office to be submitted to HOD by the Trainee attending the training session)

1. Name of the office / organization : Nanda Green Associates

2. Address & Contact Number : M.I.G. 980, T.N.H.B Colony main road, Erikarai,
Velachery, Chennai - 600042 Tamilnadu,

3. Name of the student : Shwetha M

4. Duration : From 06-12-2021 To 10-12-2021

5. Total No. of days : 5

6. Evaluation of Performance criteria shall be on

* Note: Kindly grade the student as per his/her overall performance in the office during the assessment month; which will be converted to the allotted 200 marks by the department.

Description of works	Excellent	Good	Fair	Poor	NA
Understanding of office culture and methodology	✓				
Active Participation in the Project activities	✓				
Documentation and tracking of project		✓			
Presentation Skills developed		✓			
Understanding of construction details & techniques		✓			
Participation and contribution in project meetings		✓			
Understanding of codes and standards		✓			
Schedule preparation & tracking activities		✓			
Preparation / Management of drawings		✓			
Learning / Application of software in Projects		✓			
Preparation of concept for projects		✓			
Site Management / Discussion with clients		✓			

Overall Grading*

(A - 80, B - 70, C - 60, D - 55, E - 50, F - <5)

7. Any other Remarks :

8. Signature of the
Head of the Office /
Organization (With Seal)

S.NANDA GOPAL B

B.Arch. M.Sc. Sustainable Building (UK), AHA

LICENCED SURVEYOR No : RA 591

Class I, Corporation of Madras

CA / 2008 / 42643

HA No : 16792

No.980, TNHB Colony Main Road,

Erikarai, Velachery, Chennai

Phone : 044 - 42716159



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

Accredited with 'A' grade by NAAC
Jepiaar Nagar, Rajiv Gandhi Salai, Chennai - 600 119.

Phone: 044 - 2450 3150 / 3151 / 3152 / 3154 / 3155 Fax: 044 - 2450 2344
www.sathyabama.ac.in



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

Accredited with 'A' grade by NAAC
Jepiaar Nagar, Rajiv Gandhi Salai, Chennai - 600 119.

Phone: 044 - 2450 3150 / 3151 / 3152 / 3154 / 3155 Fax: 044 - 2450 2344
www.sathyabama.ac.in



DEPARTMENT OF ARCHITECTURE

M. Arch (Sustainable Architecture)

Continuous Assessment Report for Professional training

(Continuous progress report of the trainee architect/Project Manager for the period of 30 working days in the office to be submitted to HOD by the Trainee attending the training session)

1. Name of the office / organization : Nanda Green Associates

2. Address & Contact Number : M.I.G. 980, T.N.H.B Colony main road, Erikarai, Velachery, Chennai - 600042 Tamilnadu,

3. Name of the student : Shwetha M

4. Duration : From 13-12-2021 To 18-12-2021

5. Total No. of days : 6

6. Evaluation of Performance criteria shall be on

* Note: Kindly grade the student as per his/her overall performance in the office during the assessment month; which will be converted to the allotted 200 marks by the department.

Description of works	Excellent	Good	Fair	Poor	NA
Understanding of office culture and methodology	/				
Active Participation in the Project activities	/				
Documentation and tracking of project		/			
Presentation Skills developed		/			
Understanding of construction details & techniques		/			
Participation and contribution in project meetings		/			
Understanding of codes and standards		/			
Schedule preparation & tracking activities		/			
Preparation / Management of drawings		/			
Learning / Application of software in Projects		/			
Preparation of concept for projects		/			
Site Management / Discussion with clients		/			

Overall Grading*

B

S.NANDA GOPAL

B.Arch. M.Sc, Sustainable Building (UK), AIIA

LICENCED SURVEYOR No : RA 591

Class I, Corporation of Madras

CA/2008/42643

HA No : 16792

No.980,TNHB Colony Main Road,
Erikarai,Velachery, Chennai - 600 042.

Phone : 044 - 42716159

7. Any other Remarks :

8. Signature of the
Head of the Office /
Organization (With Seal)

[Signature]

DEPARTMENT OF ARCHITECTURE

M. Arch (Sustainable Architecture)

Continuous Assessment Report for Professional training

(Continuous progress report of the trainee architect/Project Manager for the period of 30 working days in the office to be submitted to HOD by the Trainee attending the training session)

1. Name of the office / organization : Nanda Green Associates

2. Address & Contact Number : M.I.G. 980, T.N.H.B Colony main road, Erikarai, Velachery, Chennai - 600042 Tamilnadu,

3. Name of the student : Shwetha M

4. Duration : From 20-12-2021 To 24-12-2021

5. Total No. of days : 5

6. Evaluation of Performance criteria shall be on

* Note: Kindly grade the student as per his/her overall performance in the office during the assessment month; which will be converted to the allotted 200 marks by the department.

Description of works	Excellent	Good	Fair	Poor	NA
Understanding of office culture and methodology	/				
Active Participation in the Project activities	/				
Documentation and tracking of project		/			
Presentation Skills developed	/				
Understanding of construction details & techniques		/			
Participation and contribution in project meetings		/			
Understanding of codes and standards		/			
Schedule preparation & tracking activities		/			
Preparation / Management of drawings		/			
Learning / Application of software in Projects		/			
Preparation of concept for projects		/			
Site Management / Discussion with clients		/			

Overall Grading*

B

S.NANDA GOPAL

B.Arch. M.Sc, Sustainable Building (UK), AIIA

LICENCED SURVEYOR No : RA 591

Class I, Corporation of Madras

CA/2008/42643

HA No : 16792

No.980,TNHB Colony Main Road,
Erikarai,Velachery, Chennai - 600 042.
Phone : 044 - 42716159

7. Any other Remarks :

8. Signature of the
Head of the Office /
Organization (With Seal)

[Signature]



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

Accredited with 'A' grade by NAAC
Jepplaar Nagar, Rajiv Gandhi Salai, Chennai - 600 119.

Phone: 044 - 2450 3150 / 3151 / 3152 / 3154 / 3155 Fax: 044 - 2450 2344
www.sathyabama.ac.in



DEPARTMENT OF ARCHITECTURE

M. Arch (Sustainable Architecture)

Continuous Assessment Report for Professional training

(Continuous progress report of the trainee architect/Project Manager for the period of 30 working days in the office to be submitted to HOD by the Trainee attending the training session)

1. Name of the office / organization : Nanda Green Associates

2. Address & Contact Number : M.I.G. 980, T.N.H.B Colony main road, Erikarai, Velachery, Chennai - 600042 Tamilnadu,

3. Name of the student : Shwetha M

4. Duration : From 27-12-2021 To 31-12-2021

5. Total No. of days : 5

6. Evaluation of Performance criteria shall be on

* Note: Kindly grade the student as per his/her overall performance in the office during the assessment month; which will be converted to the allotted 200 marks by the department.

Description of works	Excellent	Good	Fair	Poor	NA
Understanding of office culture and methodology	/				
Active Participation in the Project activities	/				
Documentation and tracking of project	/				
Presentation Skills developed		/			
Understanding of construction details & techniques		/			
Participation and contribution in project meetings		/			
Understanding of codes and standards		/			
Schedule preparation & tracking activities		/			
Preparation / Management of drawings		/			
Learning / Application of software in Projects		/			
Preparation of concept for projects	/	/			
Site Management / Discussion with clients		/			

Overall Grading*

B

(A - 80, B - 70, C - 60, D - 55, E - 50, F - <5)

S.NANDA GOPAL

B.Arch. M.Sc, Sustainable Building (UK), AIIA

LICENCED SURVEYOR No : RA 591

Class I, Corporation of Madras

CA / 2008 / 42643

IIA No : 16792

8. Signature of the
Head of the Office /
Organization (With Seal)

No.980, TNHB Colony Main Road,
Erikarai, Velachery, Chennai - 600 042.
Phone : 044 - 42716159

7. Any other Remarks :



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

Accredited with 'A' grade by NAAC
Jepplaar Nagar, Rajiv Gandhi Salai, Chennai - 600 119.

Phone: 044 - 2450 3150 / 3151 / 3152 / 3154 / 3155 Fax: 044 - 2450 2344
www.sathyabama.ac.in



DEPARTMENT OF ARCHITECTURE

M. Arch (Sustainable Architecture)

Continuous Assessment Report for Professional training

(Continuous progress report of the trainee architect/Project Manager for the period of 30 working days in the office to be submitted to HOD by the Trainee attending the training session)

1. Name of the office / organization : Nanda Green Associates

2. Address & Contact Number : M.I.G. 980, T.N.H.B Colony main road, Erikarai, Velachery, Chennai - 600042 Tamilnadu,

3. Name of the student : Shwetha M

4. Duration : From 03.01.2022 To 11.01.2022

5. Total No. of days : 7

6. Evaluation of Performance criteria shall be on

* Note: Kindly grade the student as per his/her overall performance in the office during the assessment month; which will be converted to the allotted 200 marks by the department.

Description of works	Excellent	Good	Fair	Poor	NA
Understanding of office culture and methodology	/				
Active Participation in the Project activities		/			
Documentation and tracking of project		/			
Presentation Skills developed	/				
Understanding of construction details & techniques		/			
Participation and contribution in project meetings		/			
Understanding of codes and standards	/				
Schedule preparation & tracking activities		/			
Preparation / Management of drawings	/				
Learning / Application of software in Projects	/	/			
Preparation of concept for projects		/			
Site Management / Discussion with clients		/			

Overall Grading*

S.NANDA GOPAL

(A - 80, B - 70, C - 60, D - 55, E - 50, F - <5)

B.Arch. M.Sc, Sustainable Building (UK), AIIA

LICENCED SURVEYOR No : RA 591

Class I, Corporation of Madras

CA / 2008 / 42643

IIA No : 16792

8. Signature of the
Head of the Office /
Organization (With Seal)

No.980, TNHB Colony Main Road,
Erikarai, Velachery, Chennai - 600 042.
Phone : 044 - 42716159

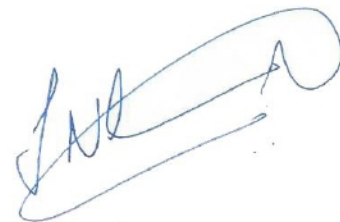
7. Any other Remarks :

WORK DIARY

(Annexure –VIII)

DATE	PROJECT NAME	WORK DONE
1 st – 4 th December	Residence	Schematic Drawing of the residence
6 th - 7 th December	Residence 1 & 2	3D Modelling - Residence
8 th – 10 th December	Mixed Use Development	Understanding of the project and scale Area Calculation
13 th -18 th December	Mixed Use Development	Parking calculation and 2D Parking drawings
20 th -24 th December	Mixed Use Development	Hotel Schematic Drawings
27 th – 28 th December	Tiny House - option - 1	Container House – 2D drawings
29 th December	Tiny House – Option 2	Bamboo House – 2D drawings
30 th – 31 st December	Mixed Use Development	Mixed use – parking Layout modifications
3 rd – 6 th January	Mixed Use Development	Apartment – module Design 2 BHK & 3 BHK
8 th – 11 th January	Residence 1	Lighting analysis for residence

Chief Architect Signature:



Office seal:

S.NANDA GOPAL

B.Arch. M.Sc, Sustainable Building (UK), AIIA

LICENCED SURVEYOR No : RA 591

Class 1, Corporation of Madras

CA / 2008 / 42643

IIA No : 16792

No.980,TNHB Colony Main Road,

Erikarai,Velachery, Chennai - 600 042.

Phone : 044 - 42716159

TABLE OF CONTENT

S.NO	TITLE	PAGE NO.
1.	ABOUT THE FIRM	1
2.	RESIDENCE 1 - MR. VENKATRAMANAN	2
3.	3D VIEWS OF THE RESIDENCE 1	3
4.	MIXED USE DEVELOPMENT	4
5.	TINY HOUSE – OPTIONS	7
6.	MIXED USE DEVELOPMENT – RESIDENCE MODULE	9
7.	LIGHTING ANALYSIS – RESIDENCE 1	10

NANDA GREEN ASSOCIATES

Nanda Green Associates is an integrated Architecture and design firm founded by principal architect – Mr. S. Nandagopal whose experience in this field spans for 13 years in dealing with both small- and large-scale projects, well experienced in India and abroad and has handled a variety of projects in Residential, commercial and Industrial sectors.

As the name Green suggests, this firm is an association who also contribute to the environment apart from fulfilling the client needs. They explore the energy and cost saving methods, which is directly and indirectly minimizes the burden on the client and environment.

Less energy used = Less Money spent = Less impacts towards the environment

Green Projects



SERVICE OFFERING:

Sustainable Building consultancy, Interior design, Master planning, Landscaping, Structural, Building approval, Electrical, plumbing.

N A N D A
GREEN ASSOCIATES

Proposed Residential scheme for Mr. Venkatramanan @ Chennai

Project description:

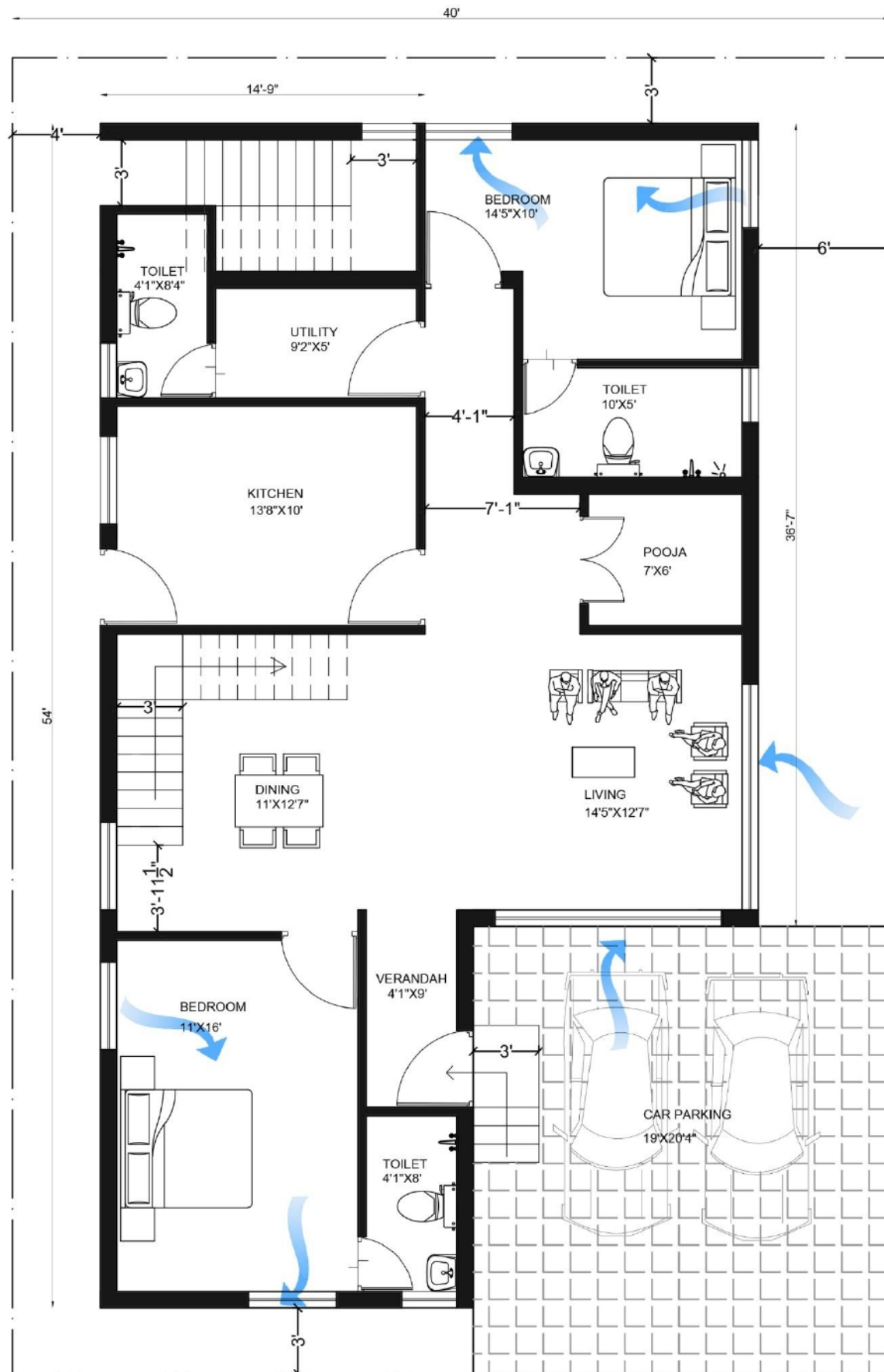
Site area: 2400 Sq.ft

Ground Floor: 1395 Sq.ft

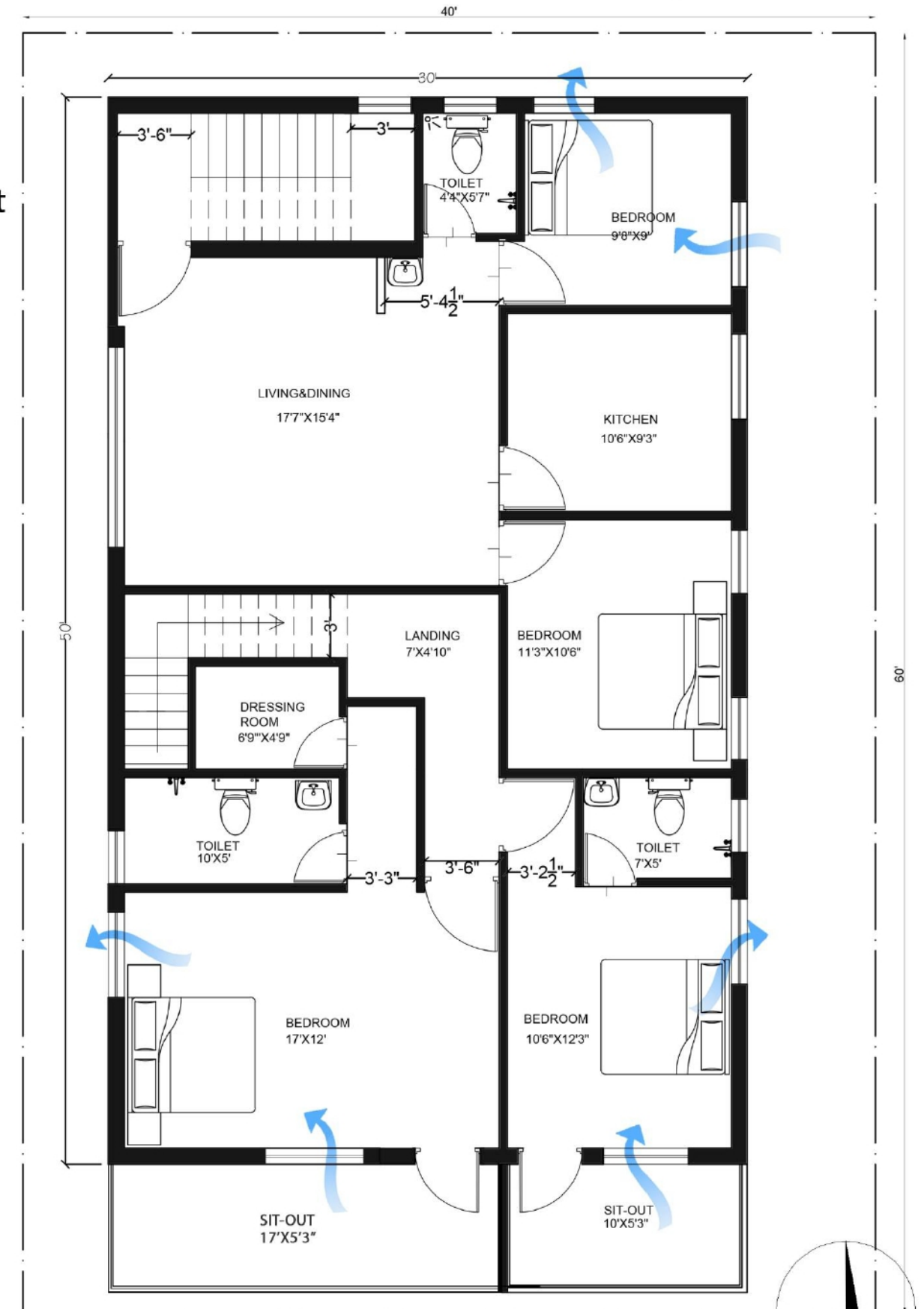
First Floor: 1680 Sq.ft

Planning has been done
focusing more on the
natural lighting and
ventilation.

This schheme tried to
achieve ample lighting
and ventilation.



Ground floor



First floor

Topics Covered:
2D scheme drawing of the residence, 3D Interior views



Living area in the North west - 2 windows in the living gets maximum of the natural lighting, reduces the use of artificial lighting

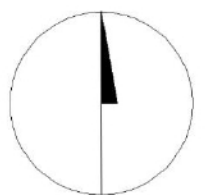


First floor Sitout area - This space is located in the south, which acts as a buffer space for the Bedroom. This cuts down the direct radiation reaching the Bedroom.

3D views for Venkatramanan residence @ Chennai



Exposed brick wall in the Interiors



Site & Site surroundings



Flyover in the east -
Velachery - Medavakkam



Mixed Use Development @ chennai Site details

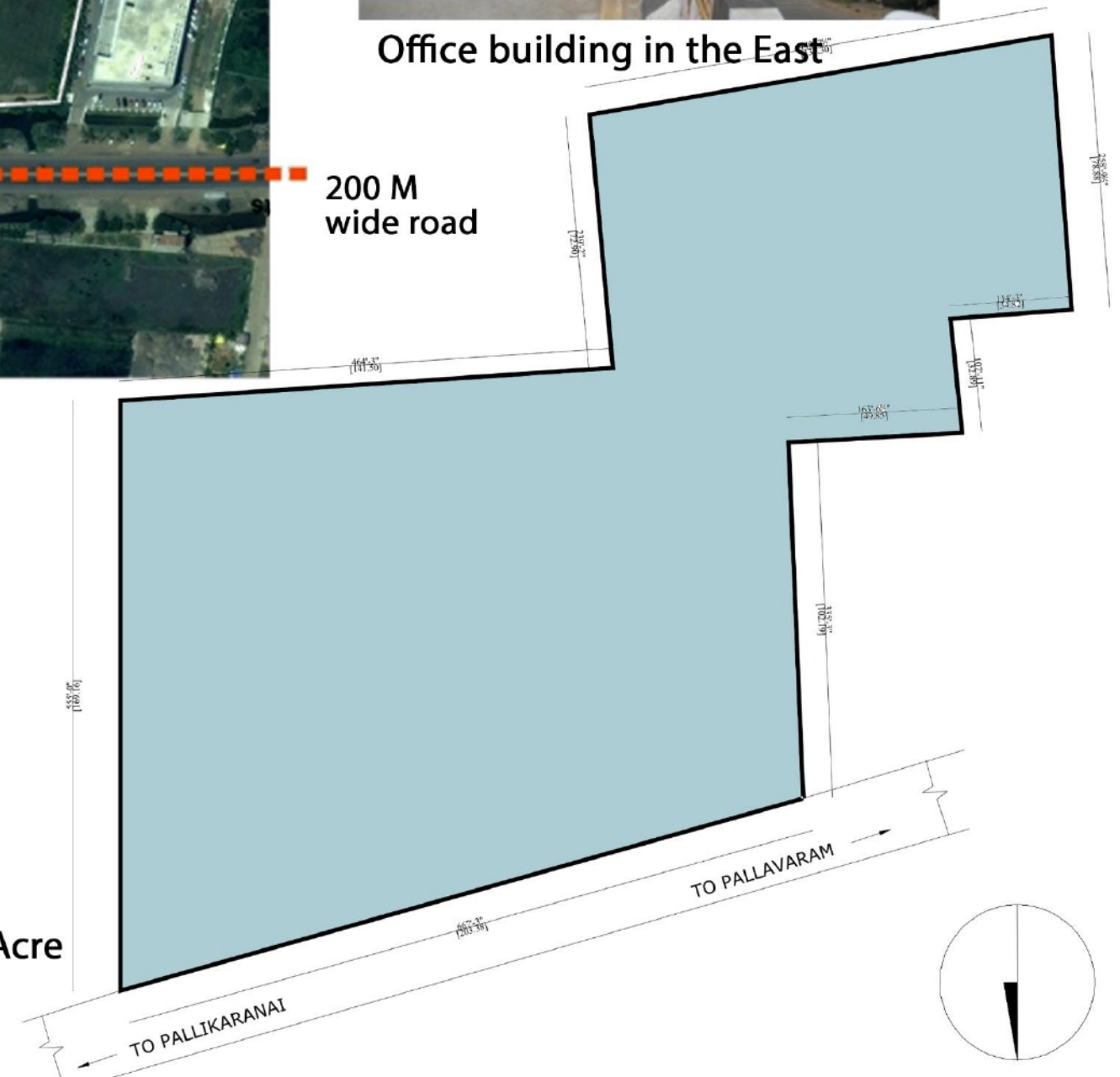


Office building in the East



Kamatchi Hospital in the
North

Total Plot area - 9.942 Acre
FSI - 2



Project Description:

Pallikaranai Mixed development covers 3 major projects consisting of Shopping mall, Hotel and Residential.

Plot area: 40237.42 Sq.m

Open space reservation: 10% - 4023.74 Sq.m

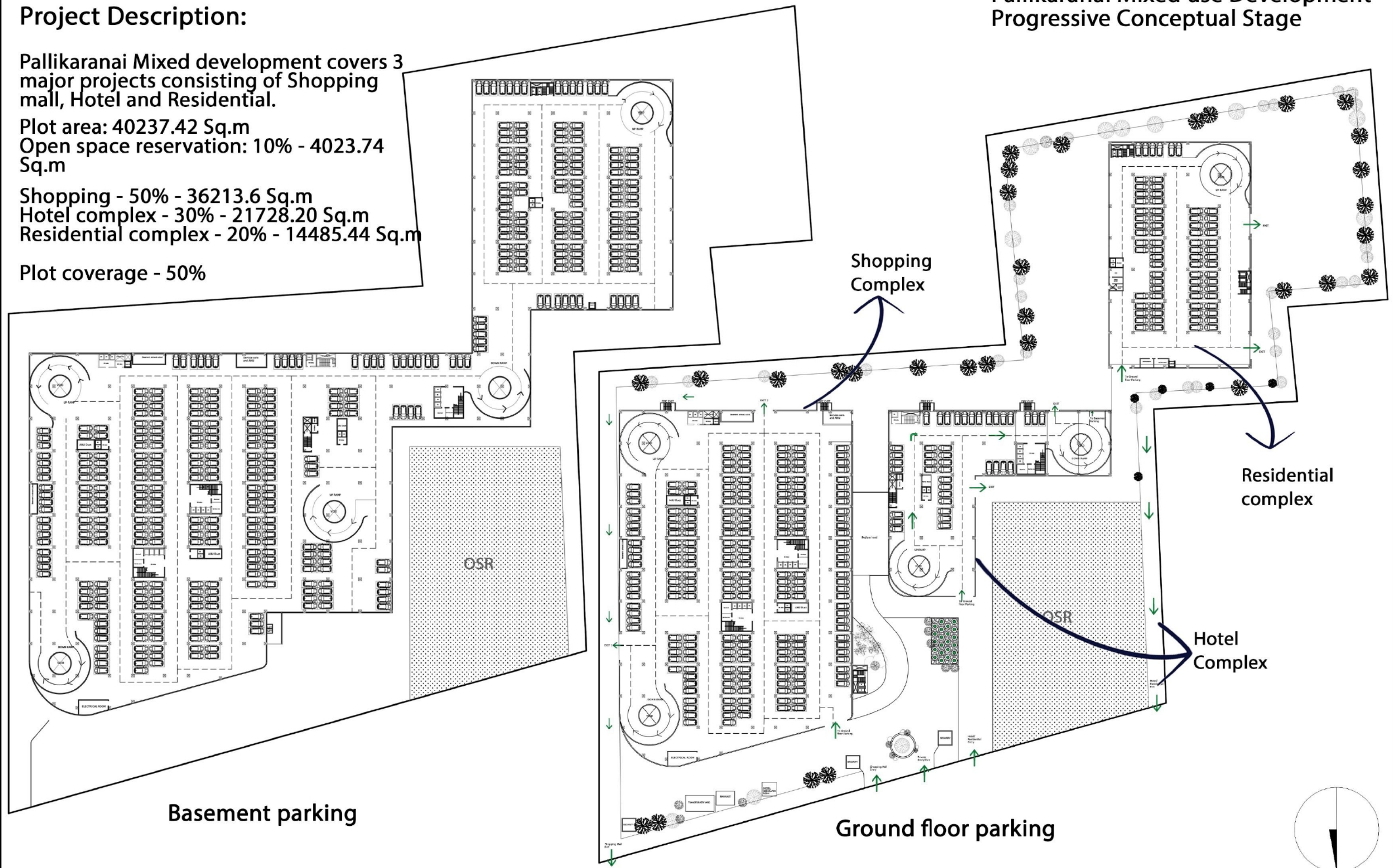
Shopping - 50% - 36213.6 Sq.m

Hotel complex - 30% - 21728.20 Sq.m

Residential complex - 20% - 14485.44 Sq.m

Plot coverage - 50%

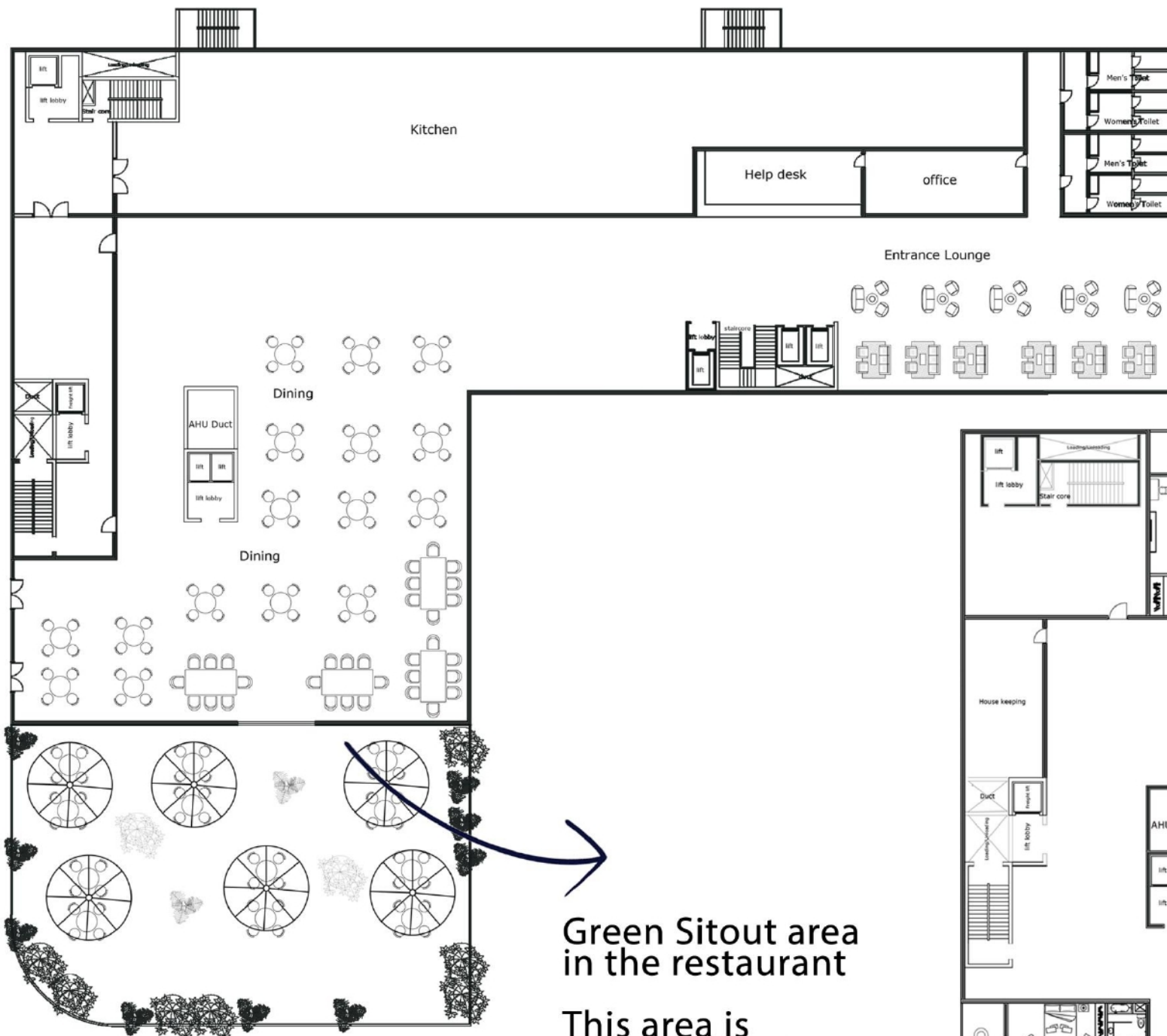
Pallikaranai Mixed use Development - Progressive Conceptual Stage



Mixed use development @ Chennai Hotel Floor plans

Restaurant floor area : 3067 Sq.m

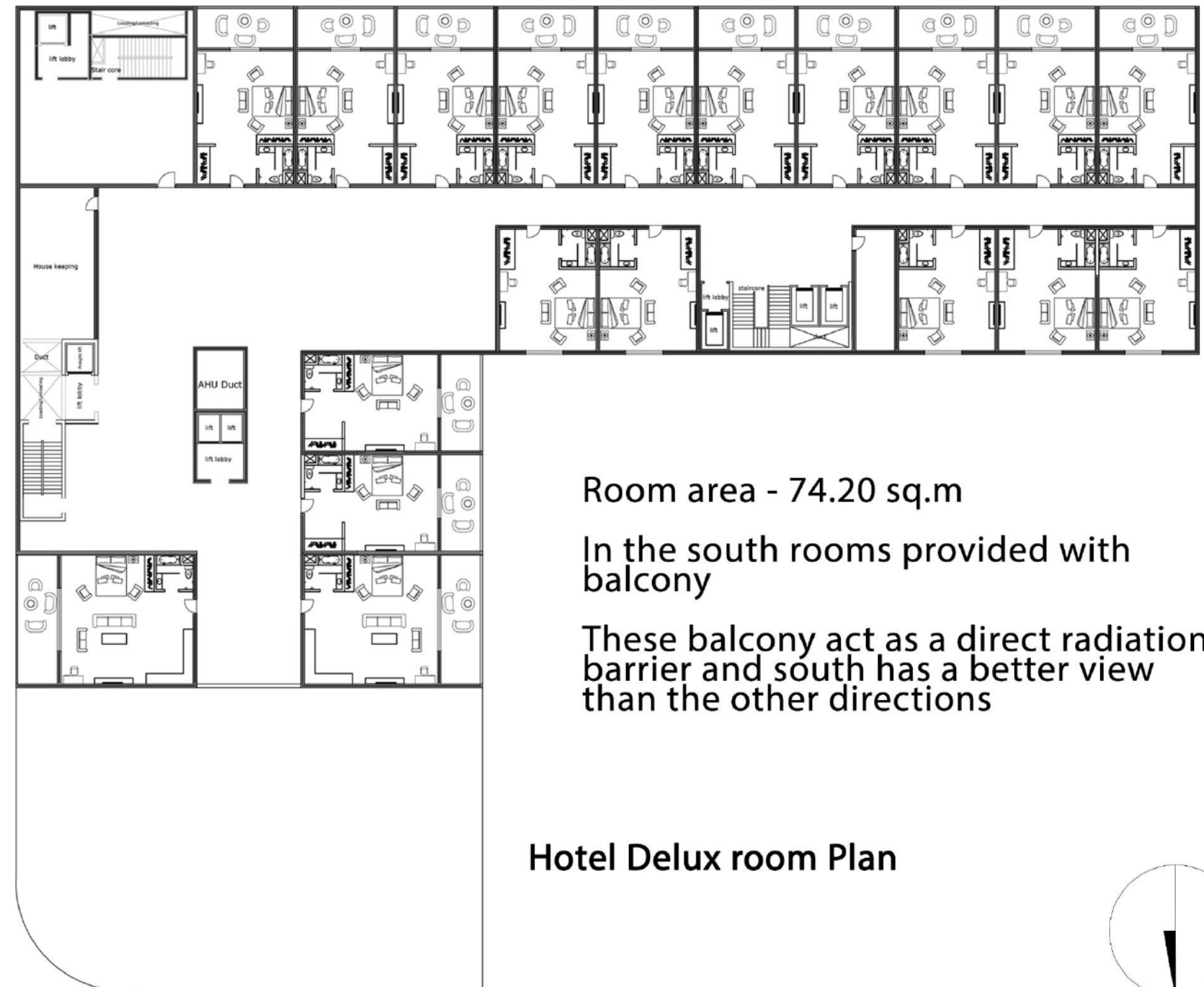
3rd (rooms) floor area : 2653 Sq.m



Hotel Restaurant plan

Green Sitout area
in the restaurant

This area is
designed in the
north which has
less exposure to
radiation and has
better ambience
than the other
orientations

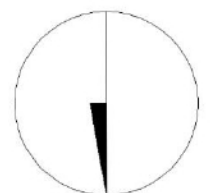


Room area - 74.20 sq.m

In the south rooms provided with
balcony

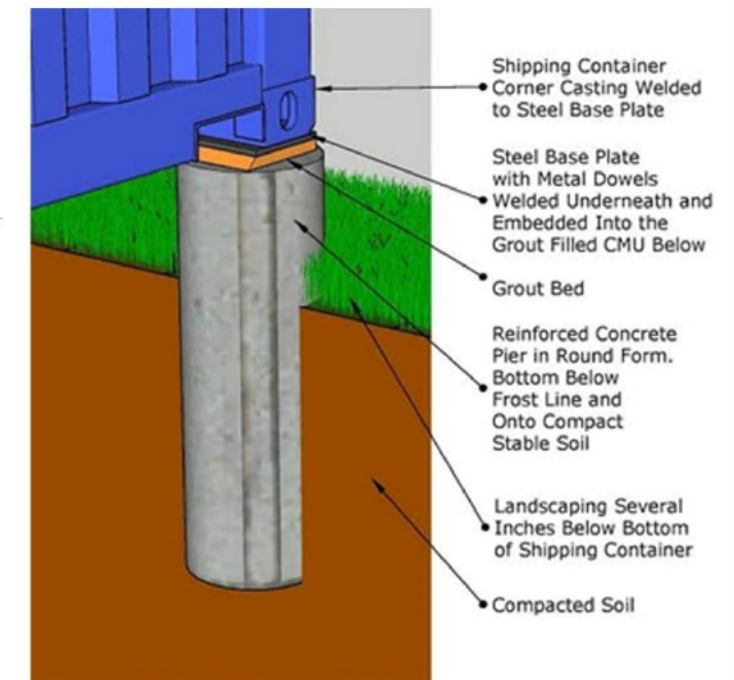
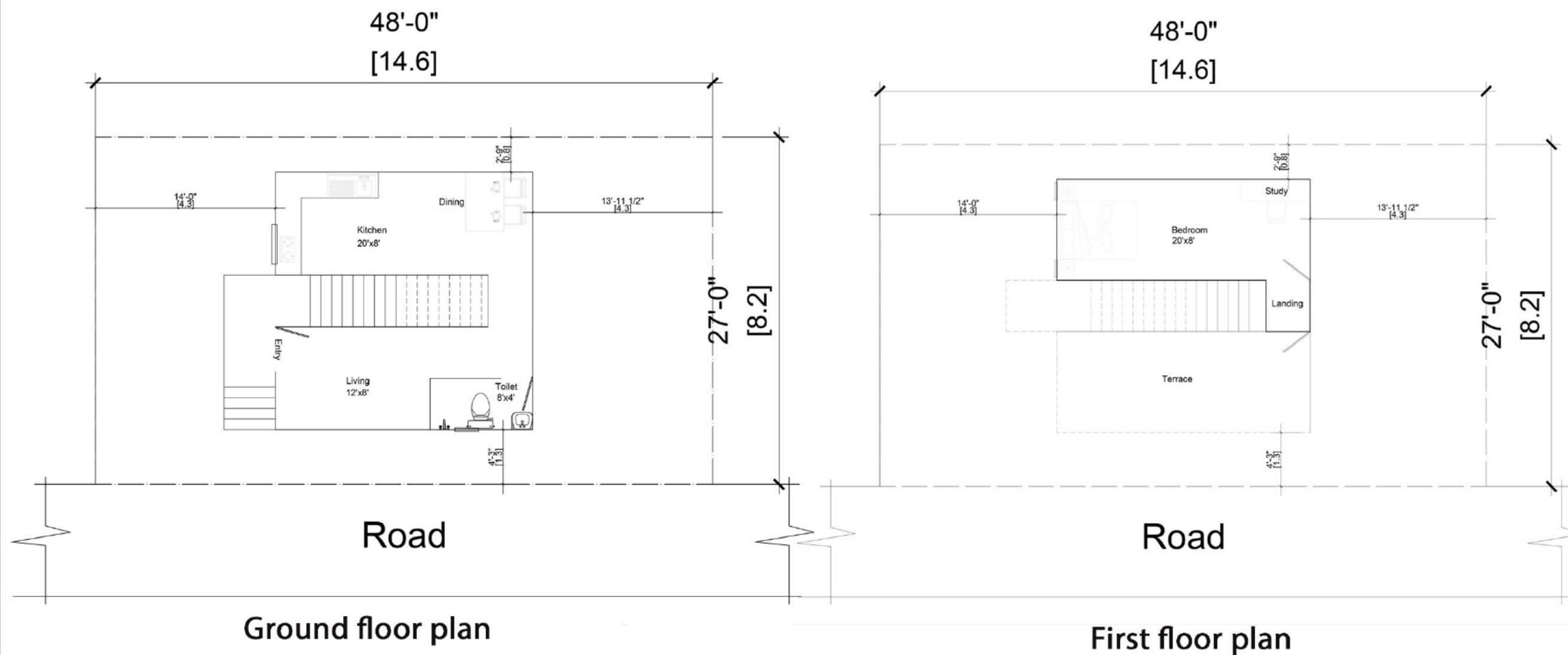
These balcony act as a direct radiation
barrier and south has a better view
than the other directions

Hotel Delux room Plan



Project Description :
Location: Coimbatore, **Site area:** 1296 Sq.ft
Built up area: 400sq.ft

Tiny House - Container - Option 1



Pier foundation are the most popular choice for a shipping container homes as they're relatively inexpensive, easy and quick to construct.

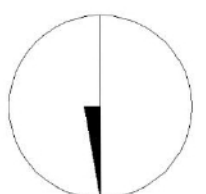
Pier is comprised of 50cmx50cm concrete block and is reinforced with steel inside to improve concretes strength in tension.

Concrete pier is generally laid on the each corner of the container and in the center of the container.

Only need to excavate the ground for the pier which is of 50cmx50cmx50cm



Views of the container house



Tiny house - Bamboo - Option 2

Project Description :
Location: Coimbatore, **Site area:** 1296 Sq.ft
Built up area: 600.39 sq.ft



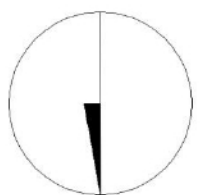
Bamboo can replace the use of wood for nearly every materials, like flooring, furnitures, building materials and much more.

Bamboo fibres are far stronger than other wood and much less likely to warp from changing atmospheric conditions.

Cement platforms if the house is built on the ground floor

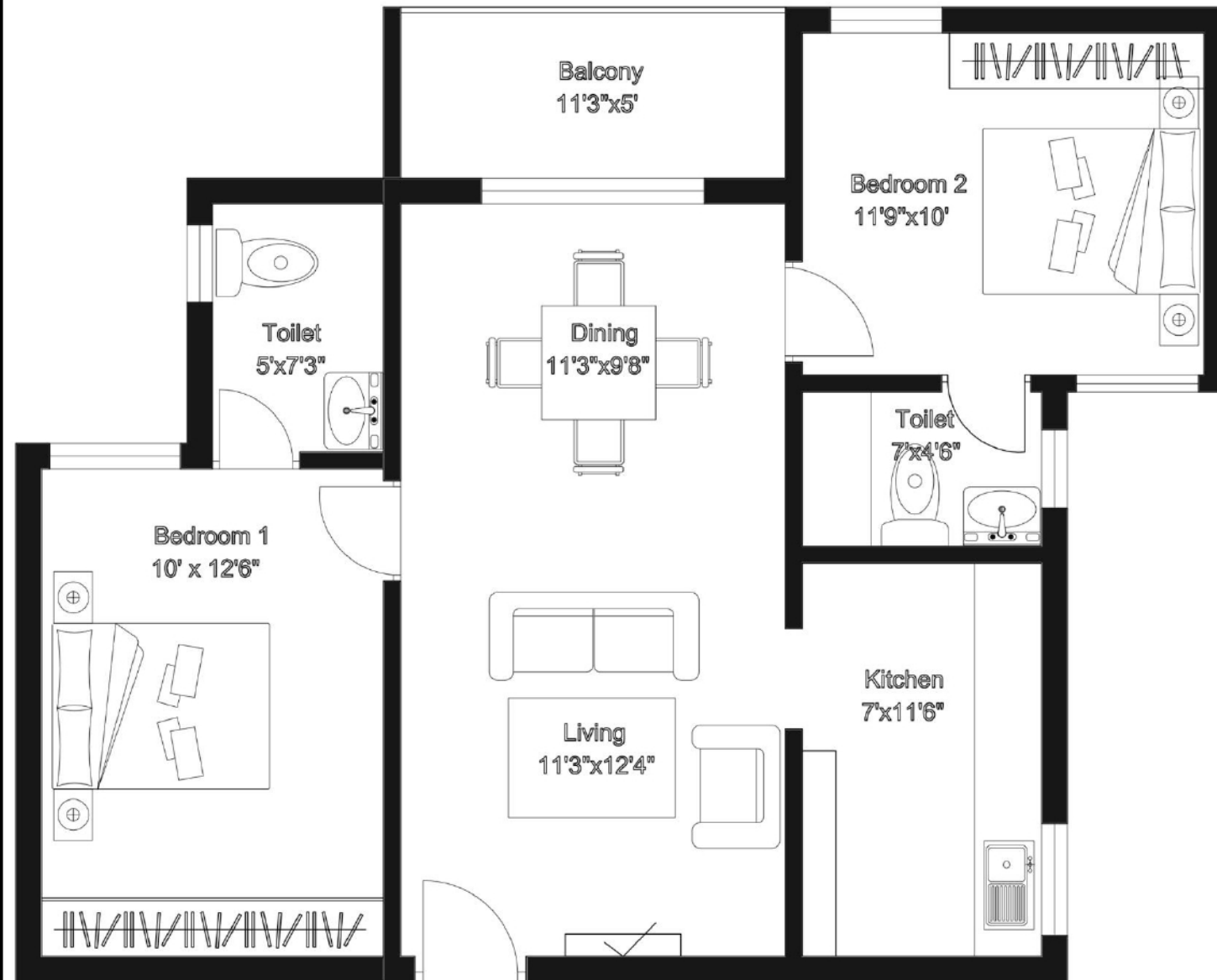
Wall and false ceiling of the house is done with engineered bamboo flat boards also called as bamboo ply.

Roofing is done with heat resistive Zinc aluminium sheets.



Mixed Use Development @ Chennai Apartment Module Scheme Drawing

Project Description:
2D drawings of 2BHK and 3BHK
module for the apartment design in Mixed use development
Total number of floors - 4



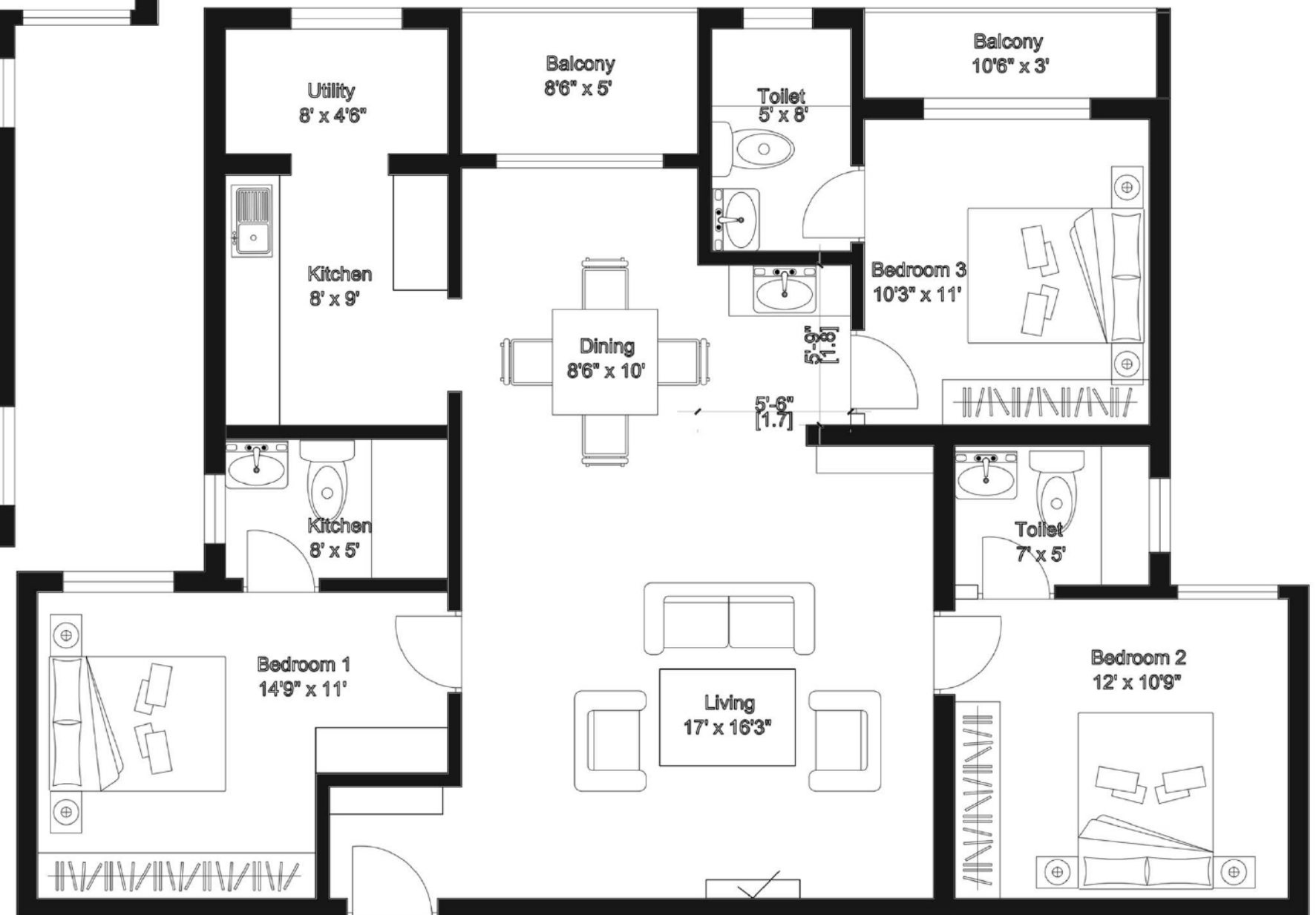
2 BHK Module

Apartment 2 and 3 BHK module

Focused mainly to get enough natural lighting

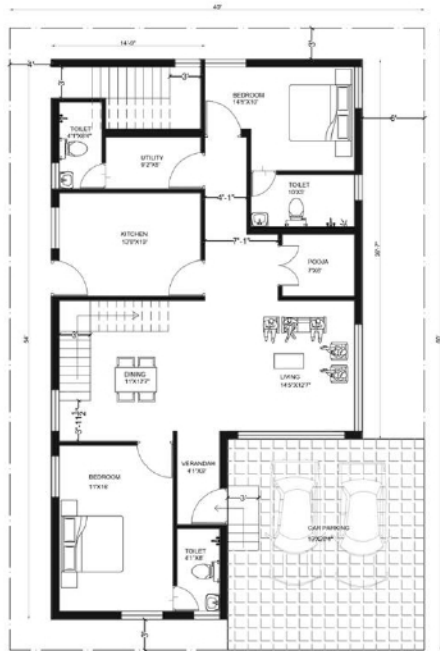
2BHK area: 754 Sq.ft

3BHK area: 1174 Sq.ft



3 BHK Module

Venkatraman residence

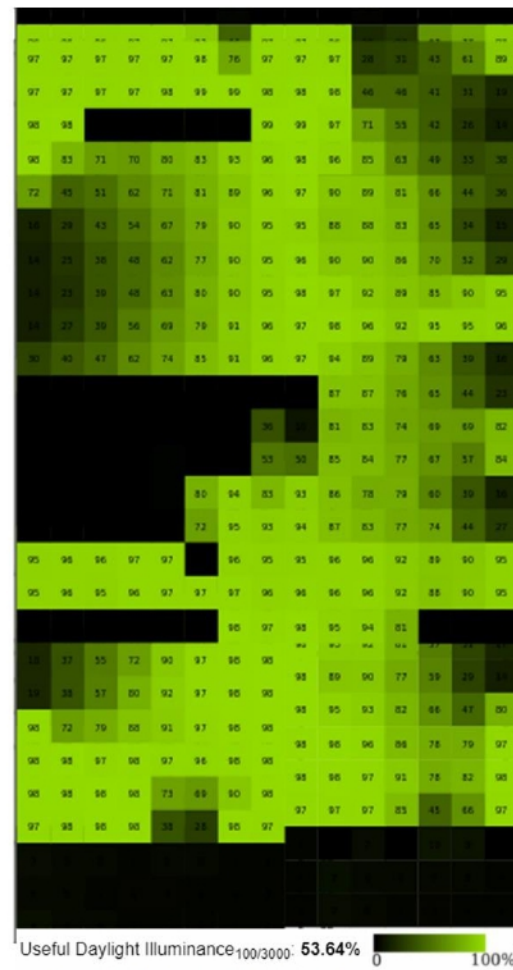
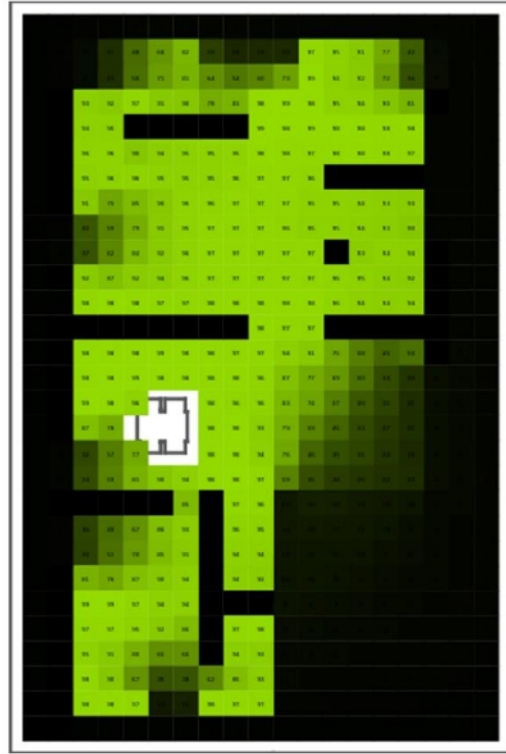


Ground floor



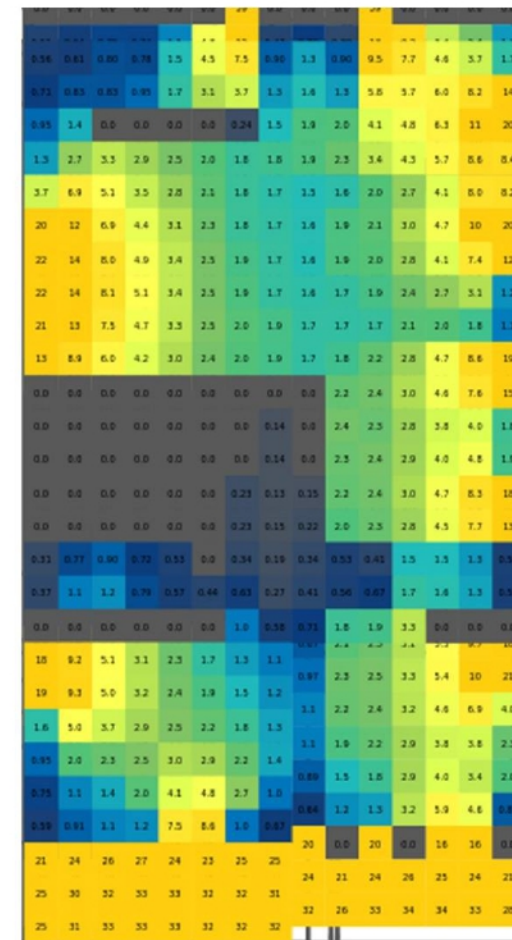
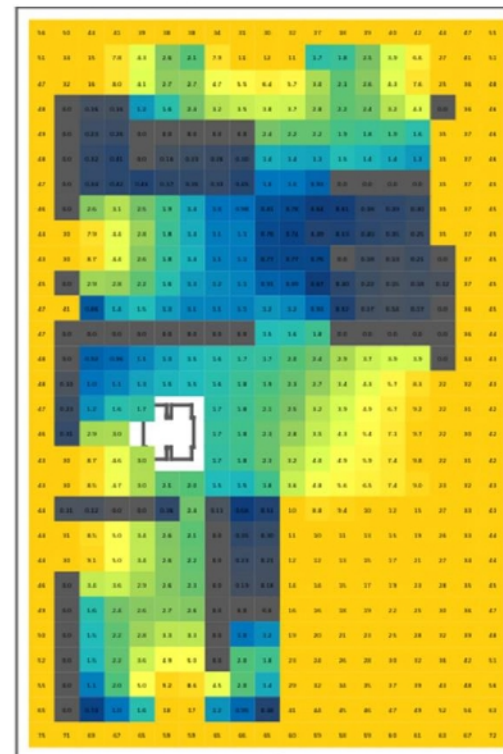
First floor

Useful Daylight Illuminance



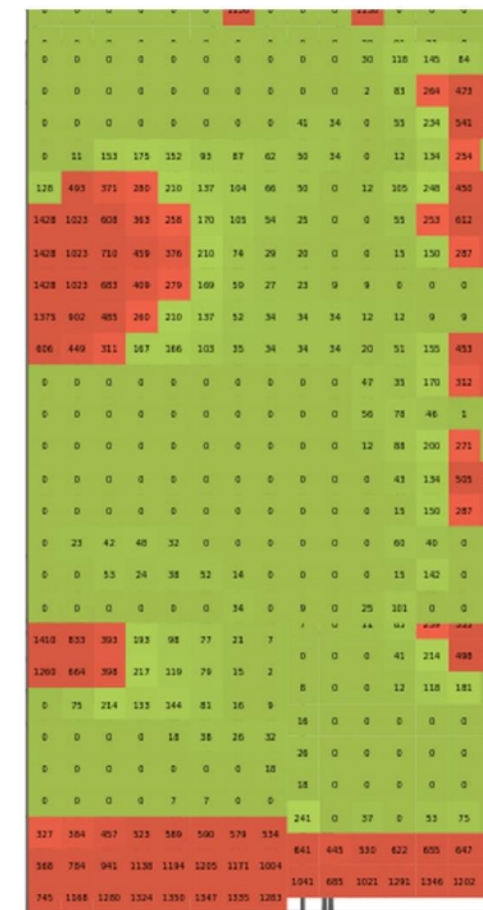
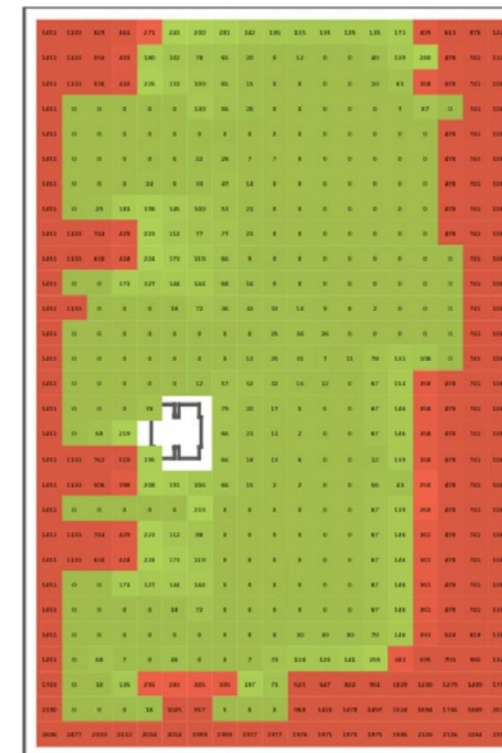
Useful Daylight Illuminance_{100/3000}: 53.64%
 Averages = UDI-a (100 - 3000 lux): 53.64%
 UDI-s (<100 lux): 14.26%
 UDI-e (>3000 lux): 32.10%

Daylight Factor



Daylight Factor: 6.62%
 0 2 5 10%+

Annual Solar Exposure



Annual Sunlight Exposure₂₅₀: 26.65%
 0 hr 250 hr

Daylight Analysis for Residence @ chennai

Daylight Factor:

Minimum DF of atleast 1.5% for the living, study area and 2% for kitchen can be acheived for a better performance.

The residence can able to acheive the required level.

Annual solar exposure:

This describes how much space is directly exposed to sunlight which can cause glare. therefore this residence is exposed to 26.65% annually and the chance to glare is less.

Useful daylight Illuminance:

UDI in the range 100 - 3000 lux are considered effective and here spaces has 53.54% of the UDI and is found effective

THANK YOU