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verified.realestate

DIGITALLY VERIFIED RECORD

Anand Associates

Er. P. ANAND RAJU
M.E. (STRUCT), M.Sc. (REV), M.Sc (P&M), M.B.A., Ph.D., LLB, FIV, M.I.E.,
M.I.C.I, M.I.C.E, F.A.C.C.E, M.I.S.T.E, M.I.S.S.E, M.C.E, M.I.A.S.E, D.M.M.T.L.M.

Class-1A Panel of Private Practicing Engineer, Chennai Dist. (Structural Engineer)
Registered Valuer : Under Companies Act | Approved Valuer | Income Tax Valuer | Chartered Engineer | Licensed Surveyor

STABILITY CERTIFICATE

(To be furnished while filing application for registration of building)

The detailed engineering and structure design of the proposed building comprising of Stilt+3 Floor Commercial Building at Plot no.6PT, Door no.6, Secretarial Colony, Ambattur, Chennai-600 053. Comprised Old S.No.604/1B, Part T.S.No.28/2, Ambattur Village has been done by me based on the report of geotechnical investigation (soil test) done by Geo Build Engineering India Pvt Ltd Report No. GBEI/21-22/032. Dated 03.08.21 and considering the functional requirement of the building.

2. It is certified that among other factors, the proposed building has been designed to resist earthquake. I have checked various parameters and found that the proposed building would be safe.

3. I further certify that:

(i) The minimum grade of concrete is M25.

(ii) The design and analysis has been done using the code of practice for plain and reinforced concrete as per IS 456, design loads as per IS Codes No 875 Part (I-V) and design of earthquake resistant structure as per IS Code No 1893.

4. The building will be safe and sound when used for the purpose for which it is designed.

Stamp and Signature

Er. P. ANAND RAJU
Registered Structural Engineer Grade - I (SE)
CMDA No: SE/GR-I/2024/02/004
Flat No:2, First Floor, S-133, S-Block
6th Main Road, Anna Nagar, Chennai -600 040
Ph/Fax: 044 42643214, Cell: 9840488820,
E-Mail: aanandassociate@gamil .com

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CHENNAI METROPOLITAN DEVELOPMENT AUTHORITY
'ThalamuthuNatarajan Building', No.1, Gandhi Irwin Road,
Egmore, Chennai-600 008.

PROFESSIONAL REGISTRATION CERTIFICATE

This is to certify that the **Thiru P. ANAND RAJU** has enrolled as **Registered Structural Engineer Grade-I (SE)** with Chennai Metropolitan Development Authority (CMDA) who has the qualification of **M.E.,(Civil Engg.)** and experience in the relevant field for **19years**.

He has been given the Registration No.**SE/GR-I/2024/02/004** on **13.02.2024.** He shall be required to comply with the duties and responsibilities prescribed by the Government of Tamil Nadu in Part-V, "Registration of Professionals", Tamil Nadu Combined Development and Building Rules, 2019 approved vide G.O.(Ms) No.18 MAWS (MA1) Dept. dated 04.02.2019.

This Registration is valid upto **12.02.2029**.



13/2/2024

(A. MEGANATHAN)
Superintendent

STABILITY CERTIFICATE

PROPERTY AT:

THE PROPOSED BASEMENT FLOOR AND GROUND +2 FLOORS, COMMERCIAL (OFFICE) BUILDING AT PLOT NO.6, SECRETARIAR COLONY, REDHILLS ROAD, AMBATTUR, CHENNI-53, COMPRISED IN OLD S.NO: 604/1B, T.S.NO: 28/2, WARD-B, BLOCK NO.10, AMBATTUR VILLAGE, GREATER CHENNAI CORPORATION DIVITION:79, ZONE: 07.

Mobile : 9840488820
Phone : 044-42643214
044-42106868

Er. P. Anand Raju, B.E.,M.E(Stru..)., FIV
Chartered Engineer and Valuer
Flat No: 2, First Floor, Old No: S113,
New No: 67, S Block, 6th Main Road,
Anna Nagar, Chennai - 60004

Er. P. ANAND RAJU
M.E. (STRUCTURAL),FIV.,
STRUCTURAL CONSULTANT
Registered Structural Engineer Grade - I (SE)
CMDA No. SE/GR-I/19/02/004
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6th Main Road, Anna Nagar, Chennai-600 040.
Ph: 044 42643214, Cell: 9840488820
E-Mail : anandassociate@yahoo.co.in

STRUCTURAL STABILITY CERTIFICATE

STATEMENT ACCOMPANYING FORM "A"

1.	Door No. the Building	:	**THE PROPOSED BASEMENT FLOOR AND GROUND +2 FLOORS, COMMERCIAL (OFFICE) BUILDING AT PLOT NO.6, SECRETARIAR COLONY, REDHILLS ROAD, AMBATTUR, CHENNI-53, COMPRISED IN OLD S.NO: 604/1B, T.S.NO: 28/2, WARD-B, BLOCK NO.10, AMBATTUR VILLAGE, GREATER CHENNAI CORPORATION DIVITION:79, ZONE: 07..**
2.	Location/Address of the building	:	--DO—
3.	Name of Place, i.e corporation/ Muncipality/panchayat union/ Township/ Construction	:	--DO--
4.	Year of Construction	:	PROPOSED
5.	Approximate cost of Construction As per current rate	:	2,82,12,000
6.	Purpose for which the building is Being used or proposed to be used	:	Commercial Building
7.	Purpose for which the building has hither to been used	:	Commercial Building
8.	Total area of the Nursing Institution	:	34,265 Sq.Ft
9.	Details of construction of the building (Particulars of the foundations soil, Specification of various parts under)		
	a. Foundation	:	Open Foundation
	b. Basement	:	R.C.C framed beam slab structure
	c. Superstructure	:	Brick work
	d. Roof	:	RCC Slab
10.	Period for which license is required	:	**08.10.2021 to 07.08.2024 (**Three Years)
11.	Number of persons to be Accommodated	:	50 Nos

SIGNATURE OF THE OWNER OF THE BUILDING

ENGINEER

Er. P. ANAND RAJU
M.E. (STRUCTURAL),FIV.,
STRUCTURAL CONSULTANT
Registered Structural Engineer Grade - I (SE)
CMDA No. SE/GR-I/19/02/004
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6th Main Road, Anna Nagar, Chennai-600 040.
Ph: 044 42643214, Cell: 9840488820
E-Mail : anandassociate@yahoo.co.in

STRUCTURAL STABILITY CERTIFICATE

STATEMENT ACCOMPANYING FORM "B"

I certify that THE PROPOSED BASEMENT FLOOR AND GROUND +2 FLOORS, COMMERCIAL (OFFICE) BUILDING AT PLOT NO.6, SECRETARIAR COLONY, REDHILLS ROAD, AMBATTUR, CHENNI-53, COMPRISED IN OLD S.NO: 604/1B, T.S.NO: 28/2, WARD-B, BLOCK NO.10, AMBATTUR VILLAGE, GREATER CHENNAI CORPORATION DIVITION:79, ZONE: 07. Is structurally Sound to be used for the purpose noted in the statement based on the Design Calculation the structural Soundness of the Building has been verified taking into account the loading as per the latest Indian Standards IS 1895.

Signature of the Owner of the Building

ENGINEER

Er. P. ANAND RAJU
M.E. (STRUCTURAL),FIV.,
STRUCTURAL CONSULTANT
Registered Structural Engineer Grade - I (SE)
CMDA No. SE/GR-I/19/02/004
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STRUCTURAL STABILITY CERTIFICATE

STATEMENT ACCOMPANYING FORM "C"

Forum of certificate of structural soundness under sub section (4) of section 4 of the Tamil Nadu Public building (Licensing) Act 1965 (Tamil Nadu Act 13 of 1965) refers to in rule 4 of the Tamil Nadu Public building (Licensing) Act, 1966.

I certify that the building mentioned in the statement and its salient technical features are mentioned below:

1. **Foundation:**

a. Depth below ground level	: 2.0 M Depth
b. Nature of soil met with a foundation level.	: Brownish Silty Sand Mixed Gravel
c. Probable safe bearing capacity of the Strata met with at foundation	: 150 KN/m^2

2. **Superstructure:**

a. Maximum stress in the most critical Section of masonry and concrete	: Brickwork in CM : 1.0Kg/Sq.m RCC : 30Kg/Sq.m
b. Nature of masonry and concrete And its safe permissible stress	: Brickwork in CM : 5.0Kg/Sq.m RCC : 50Kg/Sq.m

The structural soundness of the building has been verified by me with referred to ISI loading standards is: 895 (latest version) and other relevant Indian Standards code of practice and I declare that the Building is Structurally Sound to be used for the purpose noted in the statement.

ENGINEER

Er. P. ANAND RAJU
M.E. (STRUCTURAL),FIV.,
STRUCTURAL CONSULTANT
Registered Structural Engineer Grade - I (SE)
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STAETEMENT TO ACCOMPANY THE CERTIFIACTE OF STRUCTURAL SOUNDNESS

Location of the building, Door No, Street Name & Name of the place (1)	Age of the building (2)	Value of the building in Rs. (3)	No. of Storeys (4)	Short description of Structure, Steel, R.C.C framed or Load Bearing Masonry (5)
THE PROPOSED BASEMENT FLOOR AND GROUND +2 FLOORS, COMMERCIAL (OFFICE) BUILDING AT PLOT NO.6, SECRETARIAR COLONY, REDHILLS ROAD, AMBATTUR, CHENNI-53, COMPRISED IN OLD S.NO: 604/1B, T.S.NO: 28/2, WARD-B, BLOCK NO.10, AMBATTUR VILLAGE, GREATER CHENNAI CORPORATION DIVITION:79, ZONE: 07.	PROPOSED	2,82,12,000	Basement , Ground + Two Floor only	RCC / Steel Structure with M25 concrete & Fe 500 grade steel.

Purpose for which the building is certified For use (6)	The period for which the building will be structurally sound (7)	No. of persons accommodated (8)	Remarks (9)
Commercial Building	**08.10.2021to 07.10.2024** (Three Years)	50 Nos	Is Structurally Sound

Signature of the Engineer / Designation

Er. P. ANAND RAJU
M.E. (STRUCTURAL),FIV.,
STRUCTURAL CONSULTANT
Registered Structural Engineer Grade - I (SE)
CMDA No. SE/GR-I/19/02/004
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Ph: 044 42643214, Cell: 9840488820
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REPORT ON THE PROPOSED BASEMENT FLOOR AND GROUND +2 FLOORS, COMMERCIAL (OFFICE) BUILDING AT PLOT NO.6, SECRETARIAR COLONY, REDHILLS ROAD, AMBATTUR, CHENNI-53, COMPRISED IN OLD S.NO: 604/1B, T.S.NO: 28/2, WARD-B, BLOCK NO.10, AMBATTUR VILLAGE, GREATER CHENNAI CORPORATION DIVITION:79, ZONE: 07.

AS BUILT SUBMITTED

Client:

ANAND ASSOCIATES
NO: S113, S-BLOCK, 6th MAIN ROAD,
ANNA NAGAR, CHENNAI – 600040 .

Er. P. ANAND RAJU
M.E. (STRUCTURAL),FIV.,
STRUCTURAL CONSULTANT
Registered Structural Engineer Grade - I (SE)
CMDA No. SE/GR-I/19/02/004
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REPORT ON THE PROPOSED BASEMENT FLOOR AND GROUND +2 FLOORS, COMMERCIAL (OFFICE) BUILDING AT PLOT NO.6, SECRETARIAR COLONY, REDHILLS ROAD, AMBATTUR, CHENNI-53, COMPRISED IN OLD S.NO: 604/1B, T.S.NO: 28/2, WARD-B, BLOCK NO.10, AMBATTUR VILLAGE, GREATER CHENNAI CORPORATION DIVITION:79, ZONE: 07.

INTRODUCTION

It has been proposed Commercial building at Secretariar Colony, Redhills Road, Ambattur. The "Detailed Analysis and Design work of the building to "ANAND ASSOCIATES, CHENNAI. This report deals with the detailed analysis and design Commercial building at Secretariar Colony, Redhills Road, Ambattur, Chennai-53.

GEOMETRY

These buildings are a R.C.C & Steel Structure. The building consists of Basement,Ground + Two Floor only. The usage of the building is for Commercial purpose.

MATERIAL

Reinforced cement concrete
Grade of concrete - M 25 (Deign Mix)
Grade of steel – Fe500

LOADINGS

a.Dead load

Unit weight of concrete = 25 kN/m3
Unit weight of solid block = 24 kN/m3

b.Live load

Live load on Floor = 4.00 kN/m2
Live load on toilet = 4.00 kN/m2
(Clause 4.1, Table 2, IS 875 – Part 2)

Er. P. ANAND RAJU
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ANALYSIS

The entire analysis is carried out using finite element package program Staad pro package for Commercial building as per approval drawing. The beams and columns are modeled as frame elements and the slabs are modeled as shell element. Since the Safe bearing capacity of the soil is 150kN/m2, the columns are assumed to be hinged at the base. Wind loads are considered as per IS 875 Part 3 and are given as joint loads. Seismic analysis is carried out for seismic forces corresponding to zone III of seismic zones of India map as per IS 1893 -2002. Auto generation of lateral loads is done by the program itself for the corresponding seismic factors.

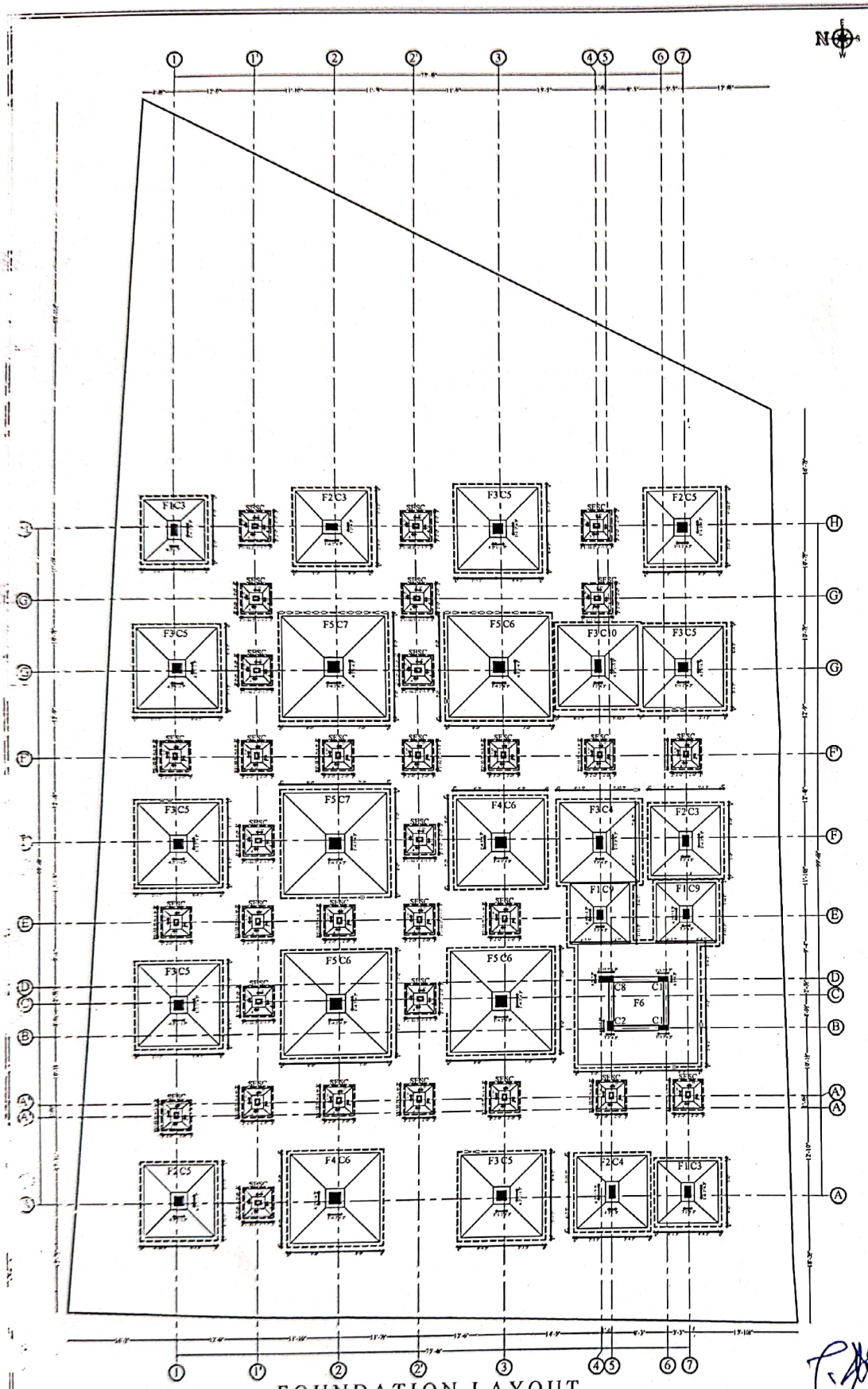
Your's sincerely,

For

Anand Associates

(P.ANAND RAJU M.E)

Er. P. ANAND RAJU
M.E. (STRUCTURAL),FIV.,
STRUCTURAL CONSULTANT
Registered Structural Engineer Grade - I (SE)
CMDA No. SE/GR-I/19/02/004
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FOUNDATION LAYOUT

Notes:

1. This drawing should be read along with architectural drawings.
2. Grade of R.C.C. Items shall be M25 (1:1:2) by design mix confirming to I.S.456-2000 unless otherwise specified.
3. Y Denotes TOR40 Steel confirming to I.S. 1786 – 1985. Grade – Fe 415
4. Clear cover to the main steel
   2" for Footings , Raft Beam , Raft Slab.
   1.5" for Columns.
   1" for Plinth beam, Lintel & Beams.
   0.5" for Sunshade & Slab.
5. Lap length shall be 50 d (Max.dia) for all bars.
6. ———— Bottom Reinforcement
7. - - - - - - - - - - Top Reinforcement
8. Provide Continuous Chairs to keep the top Reinforcement in position
9. Provide Y8 at 12" as Distribution steel for all top Reinforcement.
10. Spacer Bar to be Provided in Between Two Layers Of Reinforcement of Same Dia at Every 3'-0" C/ C.
11. Not more than 40% of Reinforcement shall be Lapped at any particular junction.
12. Foundation is designed for ST&LT Plus THREE Floor Only .
13. S.B.C.of Soil is taken as 15 t/m^2 at 6'-7" depth from N.G.L.
14. Cantilever props should not be released until the roof is concreted.
15. Removal of formworks :

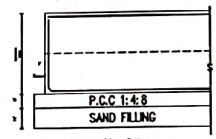
I) for slabs :

a. Slabs spanning upto 4.5 m (15'-0") – 7 days
b. Slabs spanning over 4.5 m (15'-0") > 14 days

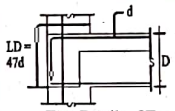
II) for beams and arches :

c. Beams and arches spanning upto 6 m (20'-0") – 14 days
d. Beams and arches spanning over 6 m (20'-0") – 21 days

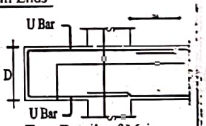
16. For all Window openings 2" Th Sill Plate Should be Provided at Sill Lvl with 12" Bearing on either side of opening.
17. The Structure is not designed for Seismic Load analysis.



Typ.Detail of Bottom Reinforcements at Raft Beam Ends



Typ. Details of Top Reinforcement At Beam Ends



Typ. Details of Main Reinforcement At Cantilever Beam Ends

Revision	Date	Description	Chd
B			
A			

PROPOSED COMMERCIAL BUILDING
BOULEVARD , AT AMBATTUR.

Details of Foundation Layout.

(Dwg No, 1a&b)

Dwg No : 1a	Date : 20 - 04 - 2022
Scale : 1" = 5'-0"	Drawn :
Designed : P. ANAND RAJU , M.E.,	Checked : P. ANAND RAJU , M.E.,

Structural Consultants: Mobile : 95511 91188
Ph : 044 - 42643214

M/s. ANAND ASSOCIATES
NO: 113 , S-BLOCK 6th MAIN ROAD,
ANNA NAGAR ,CHENNAI - 600 040.
E-Mail: anandassociate@yahoo.co.in

Er. P. ANAND RAJU
Registered Structural Engineer Grade - I (SE)
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Footing Schedule :

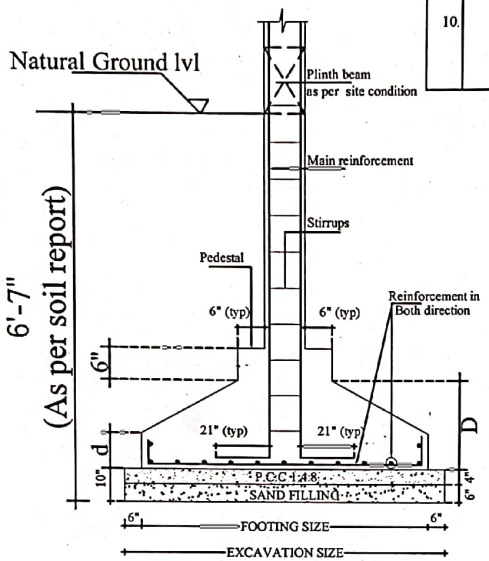
S.No.	Footing Details	Excavation Size	Footing Size	Depth D	Depth d	Footing Reinforcements
1.	F1	10'-0" x 10'-0"	9'-0" x 9'-0"	18"	9"	Y12 at 4.5" c/c Both ways
2.	F2	11'-6" x 11'-6"	10'-6" x 10'-6"	24"	9"	Y16 at 5" c/c Both ways
3.	F3	13'-0" x 13'-0"	12'-0" x 12'-0"	33"	12"	Y20 at 6 c/c Both ways
4.	F4	14'-0" x 14'-0"	13'-0" x 13'-0"	36"	12"	Y20 at 5 c/c Both ways
5.	F5	16'-0" x 16'-0"	15'-0" x 15'-0"	39"	12"	Y20 at 4 c/c Both ways
6.	F6	19'-0" x 19'-0"	18'-0" x 18'-0"	24"	-	Refer Lift Section
7.	SF	4'-6" x 4'-6"	4'-0" x 4'-0"	12"	9"	Y8 at 5" c/c Both ways

Column Schedule :

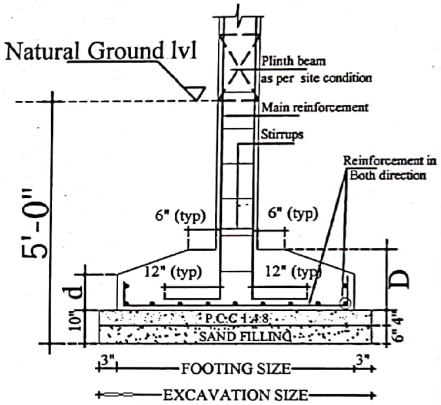
S.No.	Column Details	Column Size	Column Shape	Column Reinforcement	Binders	Mix of Concrete
1.	C1	9" x 18"	Y20	10 Y 20	Y8 at 8" c/c	M25 (1:1:2)
2.	C2	12" x 18"	Y25, Y20	4 Y 25 + 8 Y 20	Y8 at 8" c/c	M25 (1:1:2)
3.	C3	12" x 21"	Y20	10 Y 20	Y8 at 8" c/c	M25 (1:1:2)
4.	C4	12" x 24"	Y20, Y8 Link Bar	12 Y 20	Y8 at 8" c/c	M25 (1:1:2)
5.	C5	18" x 18"	Y20, Y8 Link Bar	14 Y 20	Y8 at 8" c/c	M25 (1:1:2)
6.	C6	21" x 21"	Y25, Y8 Link Bar	14 Y 25	Y8 at 8" c/c	M25 (1:1:2)
7.	C7	21" x 21"	Y25, Y8 Link Bar	16 Y 25	Y8 at 8" c/c	M25 (1:1:2)
8.	C8	12" x 27"	Y25, Y8 Link Bar	4 Y 25 + 8 Y 20	Y8 at 8" c/c	M25 (1:1:2)
11.	SC	9" x 12"	Y12	6 Y 12	Y8 at 8" c/c	M20 (1:1.5:3)

Column Schedule :

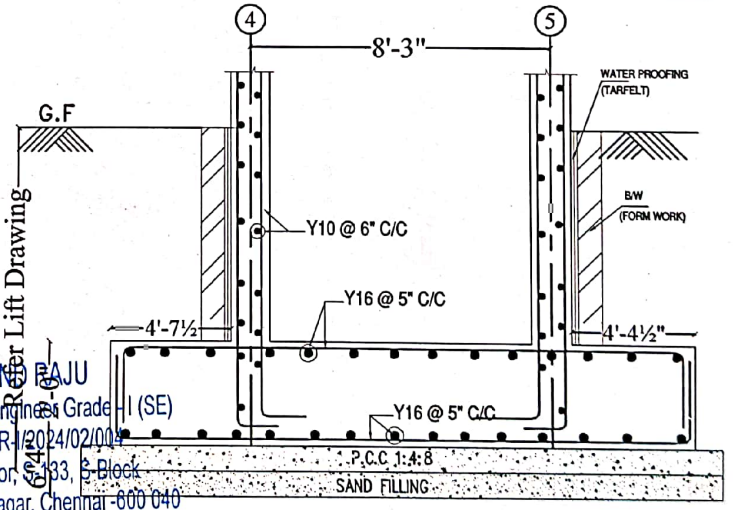
S.No.	Column Details	Column Size	Column Shape	Column Reinforcement	Binders	Mix of Concrete
9.	C9	12" x 18"	Y16	12 Y 16	Y8 at 8" c/c	M25 (1:1:2)
10.	C10	12" x 24"	Y20, Y8 Link Bar	14 Y 20	Y8 at 8" c/c	M25 (1:1:2)



Typical Details of Isolated Footing



Typical Details of STUB Isolated Footing



LIFT SECTION

Er. P. ANAND RAJU
Registered Structural Engineer, Grade-I (SE)
CMDA No: SE/GR-I/2024/02/001
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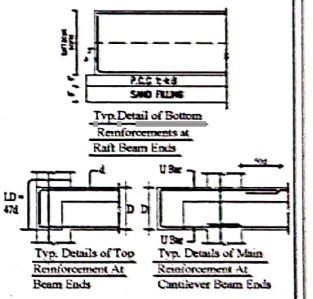
Notes:

1. This drawing should be read along with architectural drawings.
2. Grade of R.C.C. Items shall be M25 (1:1:2) by design mix confirming to I.S.456–2000 unless otherwise specified.
3. Y Denotes TOR40 Steel confirming to I.S. 1786 – 1985. Grade – Fe 415
4. Clear cover to the main steel 2" for Footings , Raft Beams , Raft Slab. 1.5" for Columns. 1" for Plinth beam, Lintel & Beams. 0.5" for Sunshade & Slab.
5. Lap length shall be 50 ϕ (Max.dia) for all bars.
6. ——— Bottom Reinforcement
7. — — — — Top Reinforcement
8. Provide Continuous Chairs to keep the top Reinforcement in position
9. Provide Y8 at 12" c/c Distribution steel for all top Reinforcement.
10. Spacer Bar to be Provided in Between Two Layers Of Reinforcement of Same Dia at Every 3'-0" C/ C.
11. Not more than 40% of Reinforcement shall be Lapped at any particular junction.
12. Foundation is designed for STILT Plus THREE Floor Only .
13. S.B.C.of Soil is taken as 15 t/m² at 6'-7" depth from N.G.L.
14. Cantilever props should not be removed until the roof is concreted.
15. Removal of formworks :

i) for slabs :
a. Slabs spanning upto 4.5 m (15'-0") – 7 days
b. Slabs spanning over 4.5 m (15'-0") – 14 days

ii) for beams and arches :
c. Beams and arches spanning upto 6 m (20'-0") – 14 days
d. Beams and arches spanning over 6 m (20'-0") – 21 days

16. For all Window openings 2" Th Sill Plate Should be Provided at Sill Lvl with 12" Bearing on either side of opening.
17. The Structure is not designed for Seismic Load analysis.



Revision	Date	Description	Ckd.
B			
A			

PROPOSED COMMERCIAL BUILDING
BOULEVARD , AT AMBATTUR.

Details of Foundation Layout.

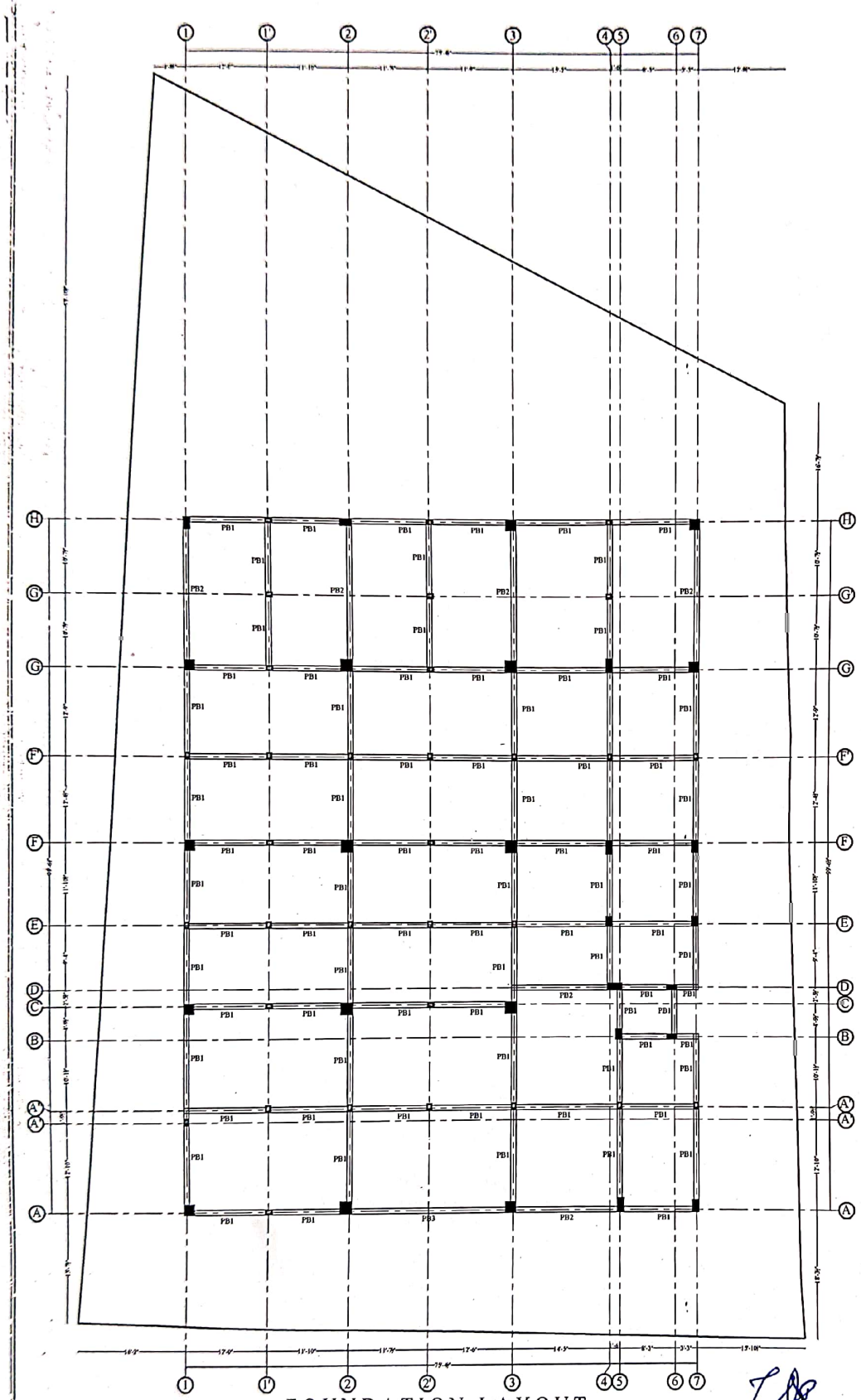
(Dwg No. 1a&b)

Dwg No : 1b	Date : 20 - 04 - 2022
Scale : 1" = 5'-0"	Drawn :
Designed : P. ANAND RAJU , M.S.	Checked : P. ANAND RAJU , M.S.

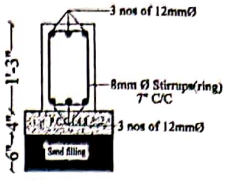
Structural Consultants: Mobile : 95511 91188, Ph : 044 - 42643214

M/s. ANAND ASSOCIATES
NO. 11/1, S-BLOCK 6TH MAIN ROAD,
ANNA NAGAR , CHENNAI - 600 040.
Email : anandassociate@yahoo.co.in

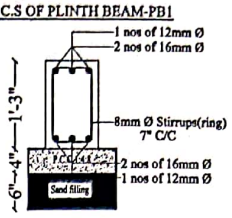
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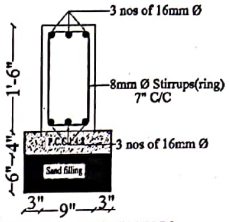
FOUNDATION LAYOUT



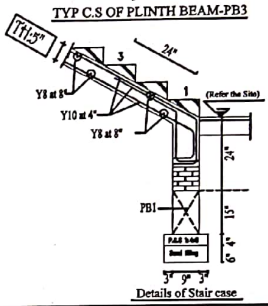
TYP C.S OF PLINTH BEAM-PB1



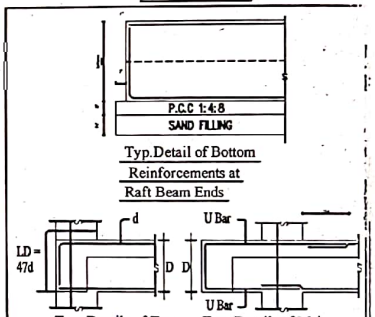
TYP C.S OF PLINTH BEAM-PB2



TYP C.S OF PLINTH BEAM-PB3



Details of Stair case



Typ.Detail of Bottom Reinforcements at Raft Beam Ends

Typ. Details of Top Reinforcement At Beam Ends

Typ. Details of Main Reinforcement At Cantilever Beam Ends

Revision	Date	Description	Cld
B			
A			

PROPOSED COMMERCIAL BUILDING
BOULEVARD , AT AMBATTUR.

Details of Plinth Beam Layout.

(Dwg No. 2)

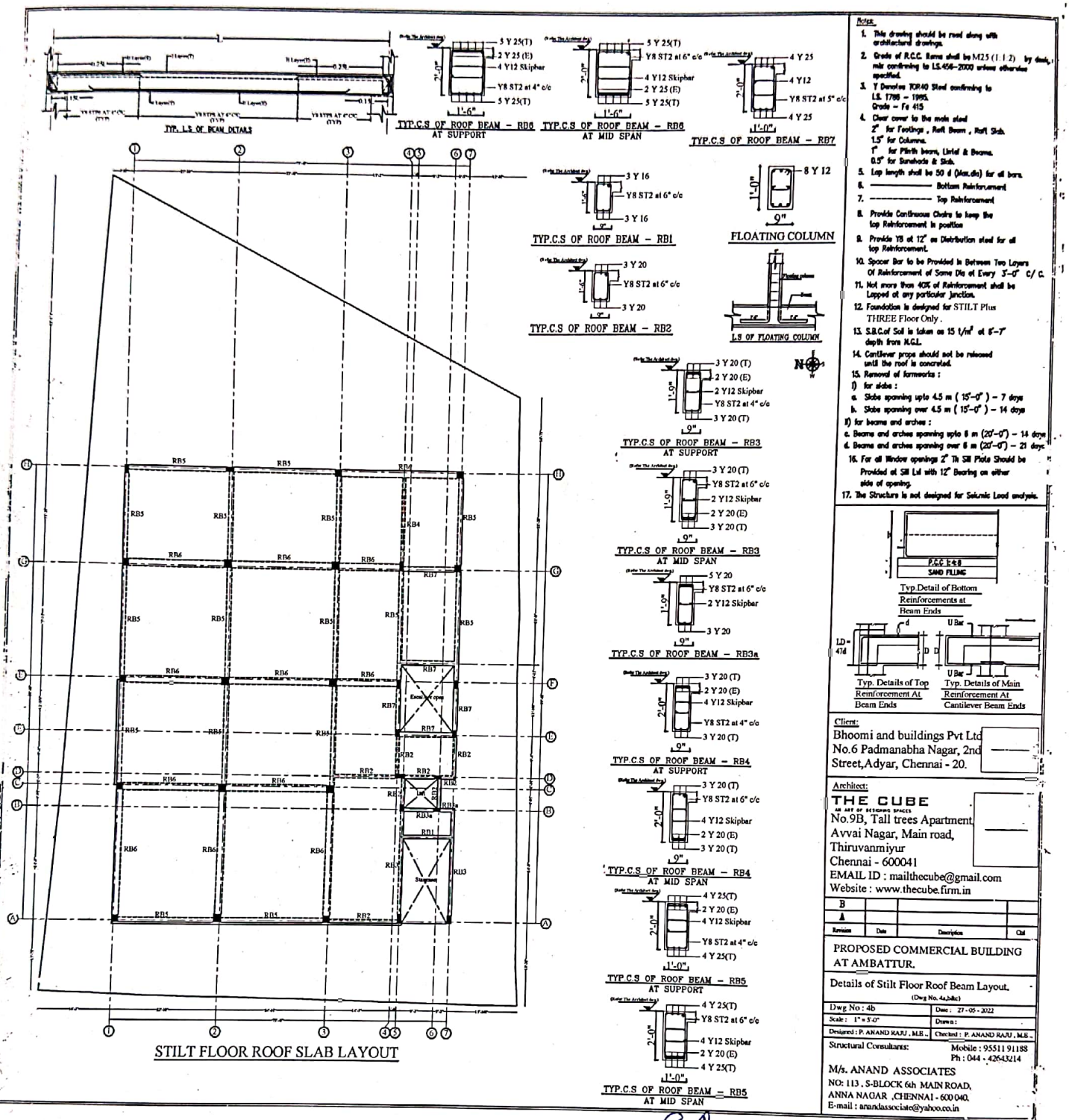
Dwg No : 2	Date : 02 - 05 - 2022
Scale : 1" = 5'-0"	Drawn :
Designed : P. ANAND RAJU , M.E.,	Checked : P. ANAND RAJU , M.E.,

Structural Consultants: Mobile : 95511 91188
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Er. P.ANAND RAJU
Registered Structural Engineer Grade - I (SE)
CMDA No: SE/GR-I/2024/02/004
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6th Main Road, Anna Nagar, Chennai -600 040
Ph/Fax: 044 42643214, Cell: 9840488820,
E-Mail: aanandassociate@gamil .com

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Notes:

1. This drawing should be read along with architectural drawings.
2. Grade of R.C.C. Items shall be M25 (1:1:2) by design mix confirming to I.S.456–2000 unless otherwise specified.
3. Y Denotes TOR40 Steel confirming to I.S. 1786 – 1985. Grade – Fe 415
4. Clear cover to the main steel
   2" for Footings , Raft Beam , Raft Slab.
   1.5" for Columns.
   1" for Plinth beams, Lintel & Beams.
   0.5" for Sunshade & Slab.
5. Lap length shall be 50 d (Max.dia) for all bars.
6. ———— Bottom Reinforcement
7. ———— Top Reinforcement
8. Provide Continuous Chairs to keep the top Reinforcement in position
9. Provide Y8 at 12" c/c Distribution steel for all top Reinforcement.
10. Spacer Bar to be Provided in Between Two Layers Of Reinforcement of Same Dia at Every 3'-0" C/ C.
11. Not more than 40% of Reinforcement shall be Lapped at any particular junction.
12. Foundation is designed for STILT Plus THREE Floor Only .
13. S.B.C.of Soil is taken as 15 t/m² at 6'-7" depth from N.G.L.
14. Cantilever props should not be released until the roof is concreted.
15. Removal of formworks :
    i) for slabs :
    a. Slabs spanning upto 4.5 m (15'-0") – 7 days
    b. Slabs spanning over 4.5 m (15'-0") – 14 days
    ii) for beams and arches :
    a. Beams and arches spanning upto 6 m (20'-0") – 14 days
    b. Beams and arches spanning over 6 m (20'-0") – 21 days
16. For all Window openings 2" Th Sill Plate Should be Provided at Sill Lvl with 12" Bearing on either side of opening.
17. The Structure is not designed for Seismic Load analysis.

Client:
Bhoomi and buildings Pvt Ltd
No.6 Padmanabha Nagar, 2nd Street,Adyar, Chennai - 20.

Architect:
THE CUBE
AN ART OF DESIGNING SPACES
No.9B, Tall trees Apartment,
Avvai Nagar, Main road,
Thiruvanmiyur
Chennai - 600041
EMAIL ID : mailthecube@gmail.com
Website : www.thecube.firm.in

Revision	Date	Description	Ckd
B			
A			

PROPOSED COMMERCIAL BUILDING AT AMBATTUR.

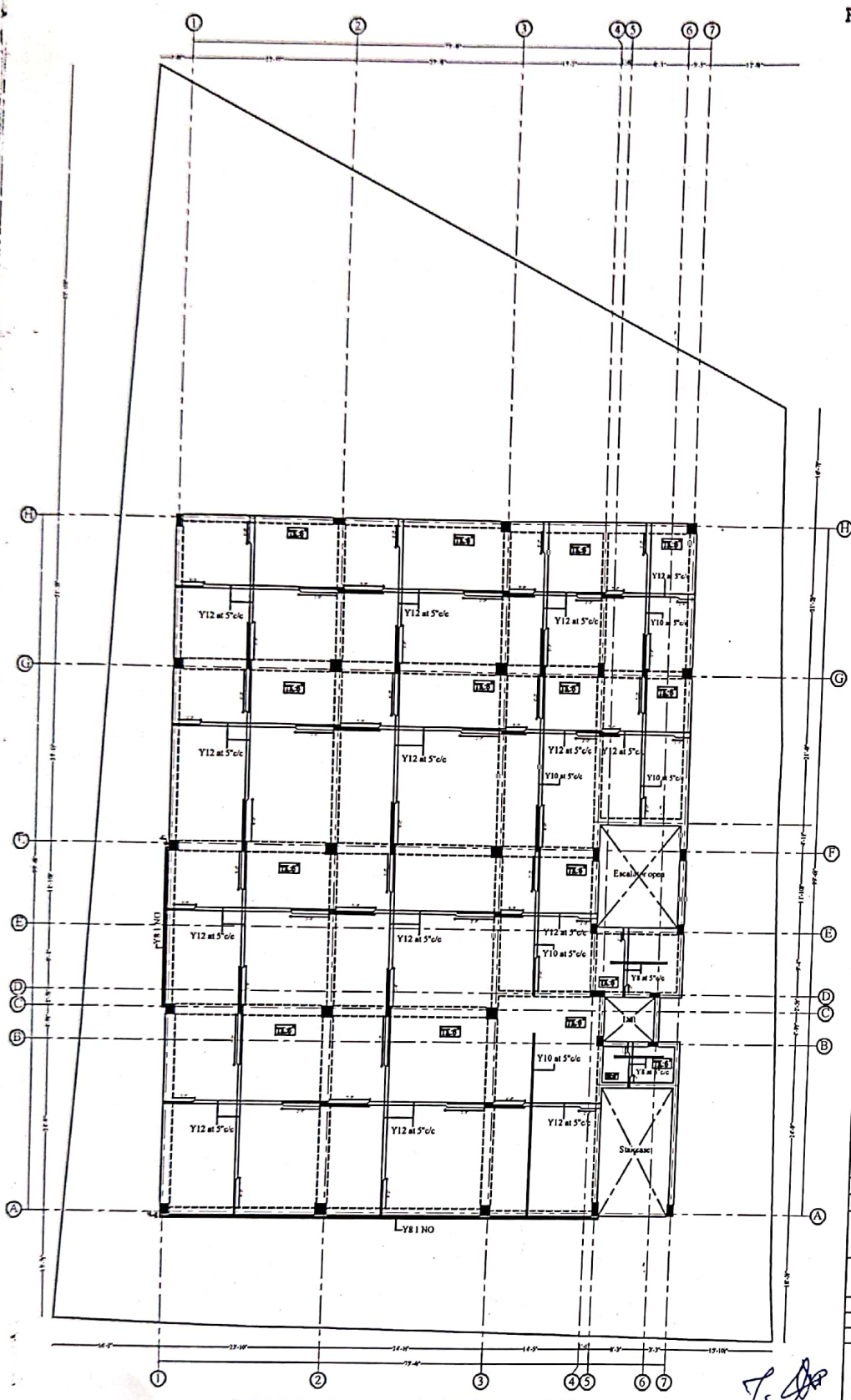
Details of Stilt Floor Roof Beam Layout.
(Dwg No. 4a,2dtc)

Dwg No : 4b	Date : 27 - 05 - 2022
Scale : 1" = 5'-0"	Drawn :
Designed : P. ANAND RAJU , M.E .,	Checked : P. ANAND RAJU , M.E .,

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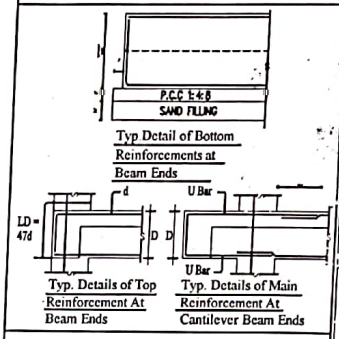
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STILT FLOOR ROOF SLAB LAYOUT

Notes:

1. This drawing should be read along with architectural drawings.
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   1" for Plinth beam, Lintel & Beams.
   0.5" for Sunshade & Slab.
5. Lap length shall be 50 d (Max.dia) for all bars.
6. ———— Bottom Reinforcement
7. – – – – – – – – – – Top Reinforcement
8. Provide Continuous Chairs to keep the top Reinforcement in position
9. Provide Y8 at 12" as Distribution steel for all top Reinforcement.
10. Spacer Bar to be Provided in Between Two Layers Of Reinforcement of Same Dia at Every 3'–0" C/ C.
11. Not more than 40% of Reinforcement shall be Lapped at any particular Junction.
12. Foundation is designed for STILT Plus THREE Floor Only .
13. S.B.C.of Soil is taken as 15 t/m² at 6'–7" depth from N.G.L.
14. Cantilever props should not be released until the roof is concreted.
15. Removal of formworks :
    i) for slabs :
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    b. Slabs spanning over 4.5 m (15'–0") – 14 days
    ii) for beams and arches :
    c. Beams and arches spanning upto 6 m (20'–0") – 14 days
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Website : www.thecube.firm.in

Revision	Date	Description	Cld
B			
A			

PROPOSED COMMERCIAL BUILDING AT AMBATTUR.

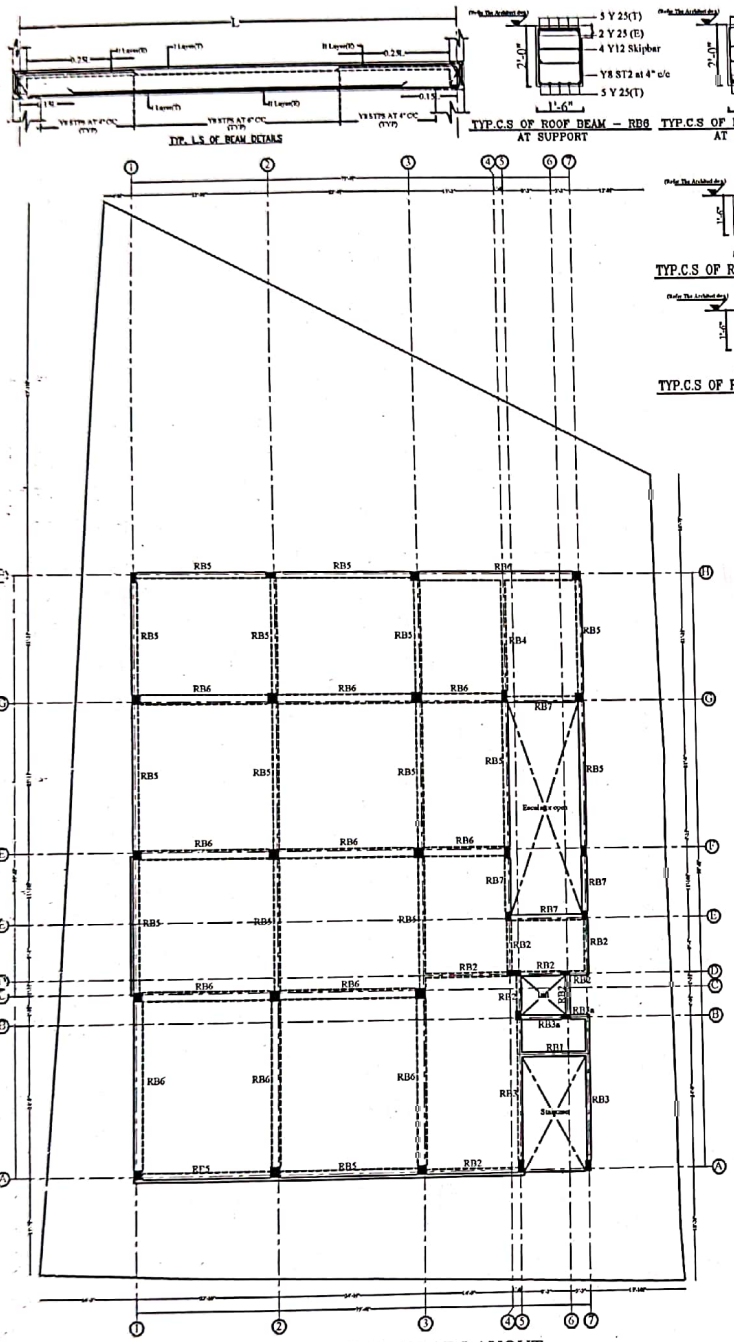
Details of Stilt Floor Roof Slab Layout.
(Dwg No. 4a,b&c)

Dwg No : 4a	Date : 09 - 09 - 2022
Scale : 1" = 5'-0"	Drawn :
Designed : P. ANAND RAJU , M.E.,	Checked : P. ANAND RAJU , M.E.,

Structural Consultants:
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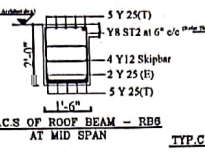
Er P ANAND RAJU
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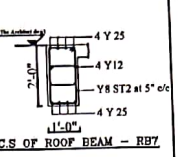


TYPICAL FLOOR ROOF SLAB LAYOUT
(First & Second Floor)

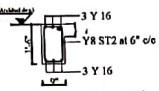
TYP.C.S OF ROOF BEAM – RB6
AT SUPPORT



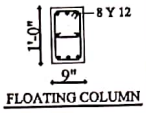
TYP.C.S OF ROOF BEAM – RB6
AT MID SPAN



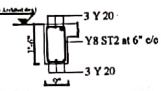
TYP.C.S OF ROOF BEAM – RB7



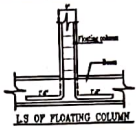
TYP.C.S OF ROOF BEAM – RB1



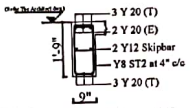
FLOATING COLUMN



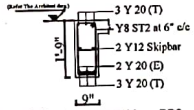
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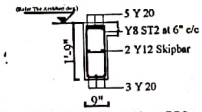
L.S OF FLOATING COLUMN



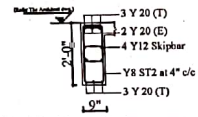
TYP.C.S OF ROOF BEAM – RB3
AT SUPPORT



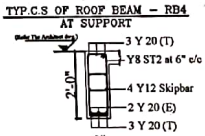
TYP.C.S OF ROOF BEAM – RB3
AT MID SPAN



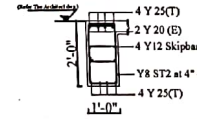
TYP.C.S OF ROOF BEAM – RB3a



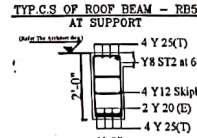
TYP.C.S OF ROOF BEAM – RB4
AT SUPPORT



TYP.C.S OF ROOF BEAM – RB4
AT MID SPAN



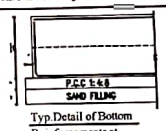
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AT SUPPORT



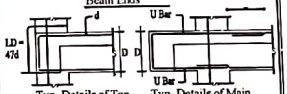
TYP.C.S OF ROOF BEAM – RB5
AT MID SPAN

Notes:

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2. Grade of R.C.C. Items shall be M25 (1:1:2) by design mix conforming to I.S.456–2000 unless otherwise specified.
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   2" for Footings , Raft Beam , Raft Slab.
   1.5" for Columns.
   1" for Plinth beam, Lintel & Beams.
   0.5" for Sunshade & Slab.
5. Lap length shall be 50 d (Max.dia) for all bars.
6. ———— Bottom Reinforcement
7. – – – – – – – Top Reinforcement
8. Provide Continuous Chairs to keep the top Reinforcement in position
9. Provide Y8 at 12" as Distribution steel for all top Reinforcement.
10. Spacer Bar to be Provided in Between Two Layers Of Reinforcement of Same Dia at Every 3'-0" C/ C.
11. Not more than 40% of Reinforcement shall be Lapped at any particular junction.
12. Foundation is designed for STILT Plus THREE Floor Only .
13. S.B.C.of Soil is taken as 15 t/m² at 6'–7" depth from M.G.L.
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15. Removal of formworks :
    i) for slabs :
    a. Slabs spanning upto 4.5 m (15'–0") – 7 days
    b. Slabs spanning over 4.5 m (15'–0") – 14 days
    ii) for beams and arches :
    c. Beams and arches spanning upto 8 m (20'–0") – 14 days
    d. Beams and arches spanning over 8 m (20'–0") – 21 days
16. For all Window openings 2" Th Sill Plate Should be Provided at Sill Lvl with 12" Bearing on either side of opening.
17. The Structure is not designed for Seismic Load analysis.



Typ.Detail of Bottom Reinforcements at Beam Ends



Typ. Details of Top Reinforcement At Beam Ends

Typ. Details of Main Reinforcement At Cantilever Beam Ends

Client:
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EMAIL ID : mailthecube@gmail.com
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Revision	Date	Description	Chd
B			
A			

PROPOSED COMMERCIAL BUILDING AT AMBATTUR.

Details of First & Second Floor Roof Beam Layout.
(Dwg No. 5a,5bb)

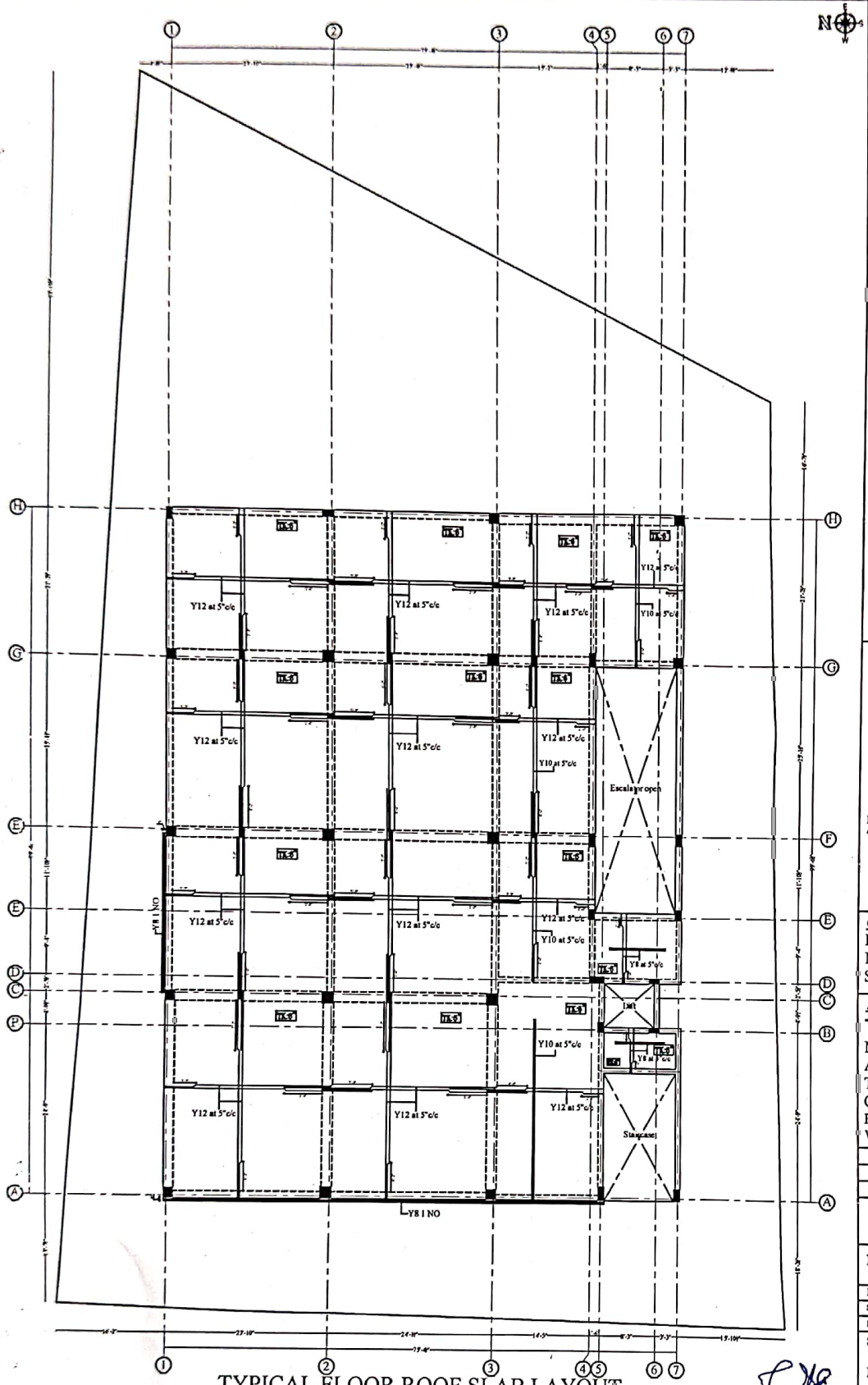
Dwg No : 5b	Date : 14 - 09 - 2022
Scale : 1" = 5'-0"	Drawn :
Designed : P. ANAND RAJU , M.E .,	Checked : P. ANAND RAJU , M.E .,

Structural Consultants:
Mobile : 95511 91188
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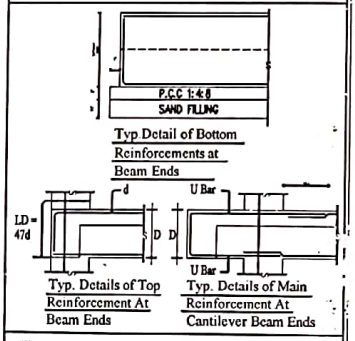
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TYPICAL FLOOR ROOF SLAB LAYOUT
(First & Second Floor)

Notes

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15. Removal of formworks :
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    b. Slabs spanning over 4.5 m (15'–0") – 14 days
    II) for beams and arches :
    c. Beams and arches spanning upto 6 m (20'–0") – 14 days
    d. Beams and arches spanning over 6 m (20'–0") – 21 days
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Revision	Date	Description	Ckd
B			
A			

PROPOSED COMMERCIAL BUILDING AT AMBATTUR.

Details of Stilt Floor Roof Slab Layout.
(Dwg No. 5a,&b)

Dwg No : 5a	Date : 14 - 09 - 2022
Scale : 1" = 5'-0"	Drawn :
Designed : P. ANAND RAJU , M.E.,	Checked : P. ANAND RAJU , M.E.,

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THE LANDLENS SUITE

Eight ways to know a piece of land before you pay for it.

This report covers one part of the picture. These cover the rest, drawn from the same government records, for any property in Tamil Nadu.

LandLens One
Ask anything about a property and get an answer grounded in live government records, with the sources shown.
/landlens/one

Verify My Land
Every record check run on one property and returned as a single report.
/landlens/verify-my-land

Legal Opinion
An advocate's written opinion on the title, built on the records we pull for it.
/landlens

One Map
Every layer on one map: the parcel, its boundary, zoning, water bodies and what sits around it.
/landlens/one/map

PriceMap
What land actually changed hands for around this plot, taken from the registered deeds.
/landlens/pricemap

Build Scope
What you are allowed to build here: floor space, height, coverage and setbacks.
/landlens/build-scope

Property Tracker
Watch a property and hear about it when something new is registered against it.
/landlens/property-tracker

Deal Room
Run the transaction in one place: documents, stamping, signatures and the parties.
/landlens/deal-room

FREE TOOLS · NO ACCOUNT NEEDED

Twenty-four checks you can run yourself, at no cost.

Records and verification

The registers themselves, read for you.

- Encumbrance Certificate
- Patta and Chitta
- Field Measurement Sketch
- EC Analyzer
- Bank charge check
- Court case search
- Seller background check
- Approval check by survey

Value and duty

What it is worth and what it costs to register.

- Guideline value by street
- Guideline value by survey
- Stamp duty and registration fees
- Capital gains
- Floor space index
- Area unit converter

Zoning and land use

What the plan says can happen on this land.

- Land use zone finder
- CMDA land use check
- Coastal regulation zone
- Master plan check
- Water bodies finder
- Airport height clearance

Registers and directories

Who holds it, and which office keeps the record.

- Find your registering office
- Temple property check
- Waqf property check
- RERA register

Every free tool
/tools

Services we run for you
/services

The LandLens suite
/landlens/one

Verified RealEstate™

Every claim in this document traces back to a government record.

- Legal opinions, due diligence and title verification
- Building plan, layout and sub-division approvals
- Completion and occupancy certificates, regularisation
- Escrow, negotiation and NRI property management
- Land survey, soil testing, architecture and construction

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Prepared from the registers named on the page each finding sits on. Where a register could not be read, this document says so in its place rather than leaving the gap to be read as a clean result.