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DIGITALLY VERIFIED RECORD

GOVT. OF TAMILNADU

DIRECTORATE OF TOWN & COUNTRY PLANNING

DISTRICT TOWN & COUNTRY PLANNING OFFICE,COIMBATORE

Ground & first floor ,Door no -50, FCI Road,

Gandhimaa nagar ,Coimbatore-641004.

Phone : 0422-2380243 ,E- Mail : Kovaidisttcp@gmail.com

PROFESSIONAL REGISTRATION CERTIFICATE

This is to certify that the Thiru. **S.SAJEESH** has enrolled as **Structural Engineer Grade –I (SE)** with District Town and country Planning ,Coimbatore who has the qualification of **M.E(Structural Engineering)** and experience in the relevant field for 10 years.

He has been given the Registration No. **Coimbatore LPA/SE/GR-I /053/2024 on 01.07.2024.** He shall be required to comply with the duties and responsibilities prescribed by the government of tamilnadu 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 Certificate is valid upto **30.06.2029**



1/7/24

JOINT DIRECTOR (I/C)

DISTRICT TOWN AND COUNTRY PLANNING,

COIMBATORE

1.7.24

STABILITY CERTIFICATE

1. The detailed engineering and structure design of the proposed Reconstruction of 4 Blocks of High Rise Group Development – consisting of Block-A: Partly Stilt floor / Partly Ground floor + 12 floors – Residential Building with 237 Dwelling units, Block-B: Partly Stilt floor / Partly Ground floor + 13 floors – Residential Building with 432 Dwelling units, Block-C: Stilt floor + 3 floors – Residential Building with 18 Dwelling units; and Block-D: Stilt floor + 3 floors – Residential Building with 15 Dwelling units to the existing GF + 3 floors – 24 Dwelling units (Type-A1), GF + 3 floors – 24 Dwelling units (Type-A2), (Totally 702 + 48 = 750 Dwelling units) at R.K.Mutt Road, Venkatakrishnan Road, Andimanyamthottam, Mylapore, Chennai

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

3. I/We further certify that:

(i) The minimum grade of concrete used in Sub-Structure - M35.

(ii) The minimum grade of concrete used in Sub-Structure - M40.

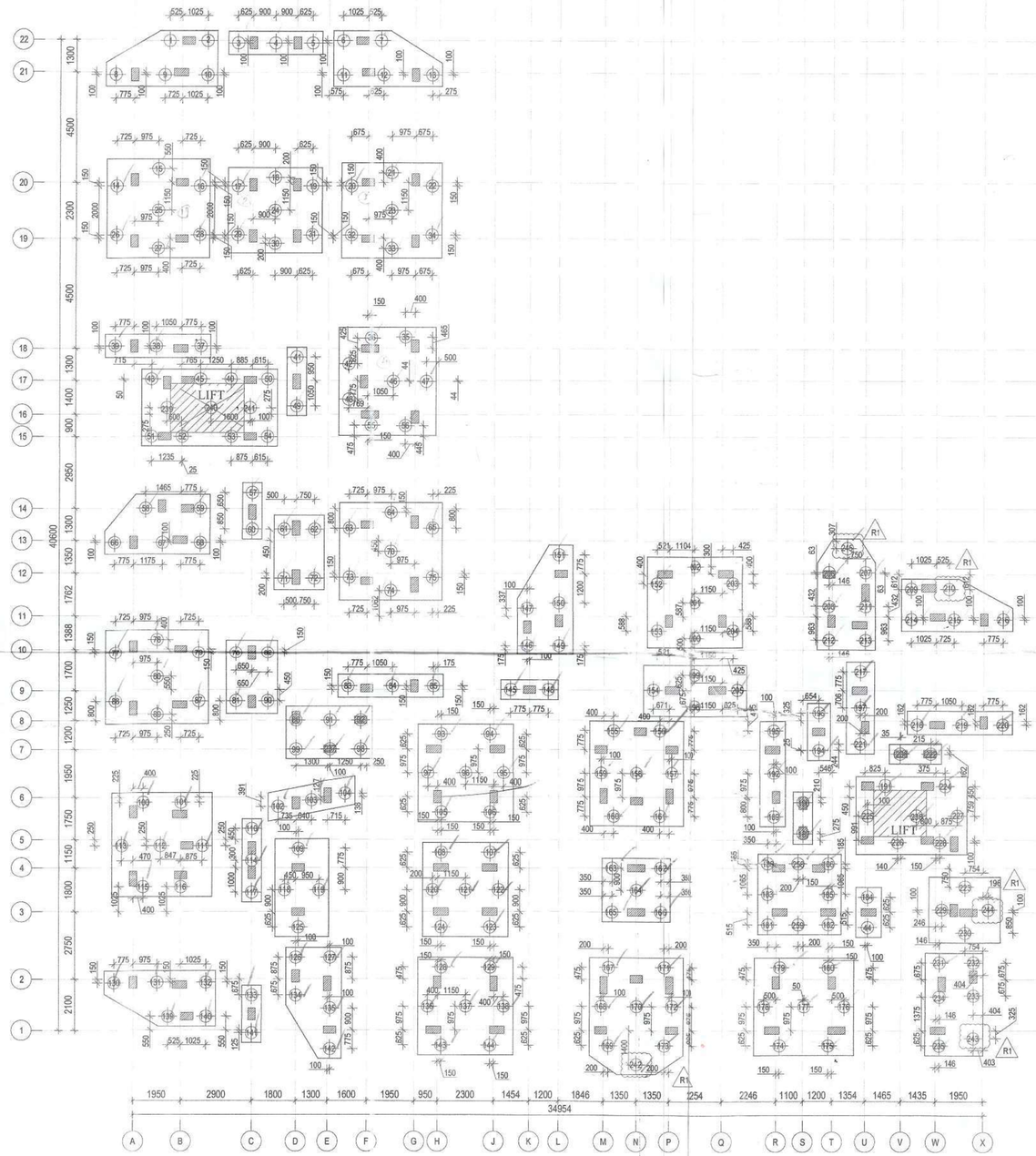
(iii) The design and analysis has been done using the code of practice for plain and reinforced concrete as per IS 456:2000, live load 2 KN/m^2 as per IS 875 Part II and designed for earthquake resistant structure as per IS Code 1893 (Part 1):2016.

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

Sincerely,



Sajeesh S. M.E.,MIE.,C.Engg.,
(Chartered Engineer M-1743885)
Principal Structural Engineer
MERAKI STRUCTURE
COIMBATORE
Mobile : +91 9566962488



-ALL PILES ARE 500MM DIAMETER

PILE LAYOUT-BLOCK-A

SCALE 1 : 300

R1 REVISION

PILE INTENT REFER SHEET NO P002A FOR PILE NO- 210, 242,244,245

PILE INTENT REFER SHEET NO P002 FOR REMAINING ALL PILES

5/9/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

5/9/24.

29.9.24
Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	30-08-2024
R0	ISSUED FOR APPROVAL	24-07-2024

CLIENT: TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD, No. 5 Kamarajar Salai, Chennai - 600005, Tamil Nadu. Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR: RAMALINGAM CONSTRUCTION COMPANY PVT LTD, #175/2 South Slate Bank Nagar, Chettipalayam, Erode - 638002, Tamil Nadu. Tel: 0424 2282388, Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT: METAPHOR

STRUCTURAL CONSULTANT: MERAKI STRUCTURE, COIMBATORE, TAMIL NADU 641035

PROJECT: CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK 01 (S+12),BLOCK 02(S+13),BLOCK 03 (S+03), BLOCK 04(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

DRAWN	DESIGN	CHECKED	APPROVED
MRY	SK	SJS	SJS

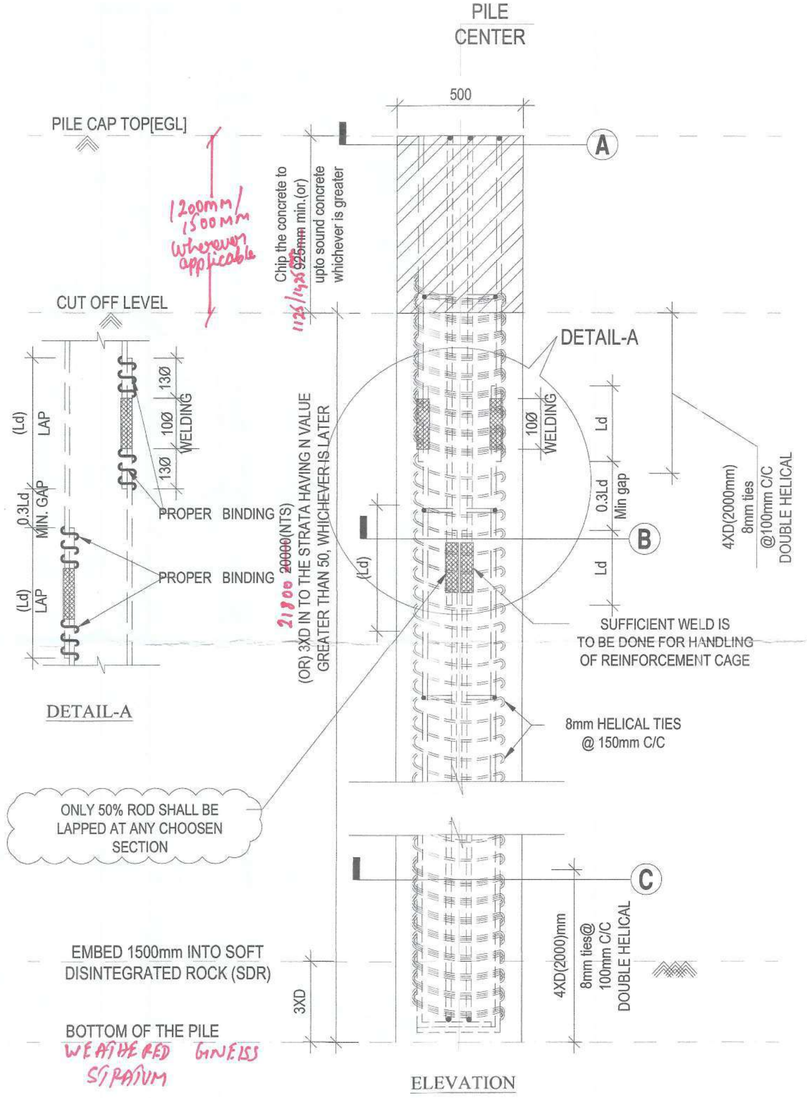
TITLE: PILE LAYOUT_BLOCK-A

PAPER SIZE:	A3
DRAWN DATE:	22-07-2024
PROJECT NO:	MS23035_AT_1
SHEET NO:	P001

8/30/2024 11:21:05 PM

GENERAL NOTE:

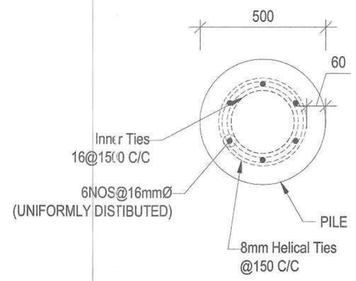
1. Ø - DIA. OF THE BAR(16mm)
2. D - DIA. OF THE PILE
3. Ld - 48*DIA OF THE BAR



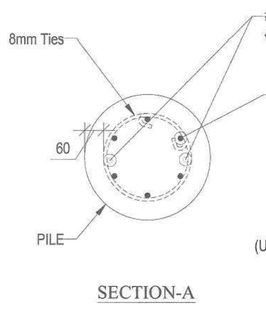
ELEVATION

PILE SECTION LAYOUT-BLOCK-A

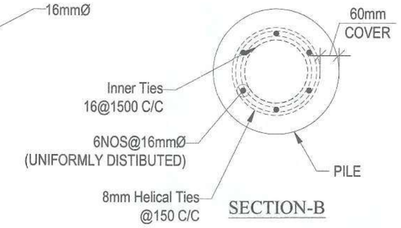
SCALE 1 : 35



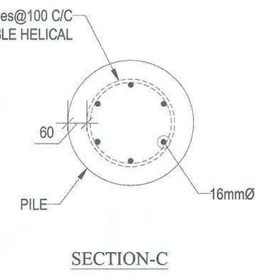
500mm Ø PILE PLAN



SECTION-A



SECTION-B



SECTION-C

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETER, UNLESS OTHERWISE SPECIFIED.
2. DRAWING SHOULD NOT BE SCALED, FOLLOW FIGURED DIMENSIONS.
3. ANY DISCREPANCY IN DRAWING SHALL BE BRING TO NOTICE OF STRUCTURAL CONSULTANT BEFORE EXECUTION OF WORK.
4. THIS DRAWING SHOULD BE READ ALONG WITH THE RELEVANT ARCHITECTURAL DRAWING.
5. IF THERE IS ANY REVISION IN DRAWING, FURTHER CONSTRUCTION SHALL BE EXECUTED AS PER THE LATEST REVISED DRAWING, ON THE ISSUE OF LATEST REVISION.
6. GRADE OF STEEL SHALL BE Fe550D, having minimum Elongation of 14.5%
   GRADE OF CONCRETE
   FOR SUPER STRUCTURE [BEAM,COLUMN,WALL,SLAB] - M40
   FOR SUB-STRUCTURE [PILE,PILE CAP,PLINTH & GRADE BEAM] - M35
7. CLEAR COVER FOR

PILE	:60mm
PILECAP	:60mm
COLUMN	:40mm
BEAM	:30mm
SLAB	:25mm

SAFE LOAD CARRYING CAPACITY OF **BORED CAST-IN SITU PILES** RESTING IN ~~COMPLETELY~~ WEATHERED ~~SOFT ROCK~~ GNEISS SYRAIUM IS AS FOLLOWS FOR **500mm DIA PILE***

VERTICAL LOAD CARRYING CAPACITY - 1100kN
LATERAL LOAD CARRYING CAPACITY - 89kN*

SOIL REPORT NO:SM&FE 149/CONSULTANCY/TNSCB/2019

R1 REVISION

PILE INTENT REFER SHEET NO P002A FOR PILE NO- 210, 242,244,245

PILE INTENT REFER SHEET NO P002 FOR REMAINING ALL PILES

8. LAP LENGTH OF BARS : 50Ø [M35],36Ø [M40]
   AT COLUMN LAPPING PROVIDE 100mm SPACING OF TIES.
9. IN CASE OF BEAM REINFORCEMENT, NO LAPPING SHALL BE ALLOWED IN FOLLOWING PLACES
(a) TOP ROD NEAR COLUMN, L/4 ON EITHER SIDES OF COLUMN
(b) TOP ROD OF CANTILEVER BEAM ALONG THE LENGTH AND ALSO DEVELOPMENT LENGTH, BEYOND COLUMN
(c) BOTTOM ROD AT MID SPAN OF BEAM
10. REMOVAL OF SHUTTERING / FORM WORK

(a)	COLUMN	: 24 HOURS
(b)	BEAM SIDES	: 24 HOURS
(c)	BEAM BOTTOM	: LESS THAN 6M SPAN : 14 DAYS
		: MORE THAN 6M SPAN : 28 DAYS
(d)	SLAB	: LESS THAN 6M SPAN : 14 DAYS
		: MORE THAN 6M SPAN : 28 DAYS

HOWEVER 7 DAYS STRENGTH OF CONCRETE SHOULD BE 65% OF THE TARGET STRENGTH, TO REMOVE FORM WORK.

11. THIS BULDING IS DESIGNED FOR S+12 FLOORS
12. AS PER SOIL REPORT PILE FOUNDATION IS ADOPTED.
13. AAC BLOCKS TO BE USED FOR ALL MASONRY WORKS.
14. FLY ASH BRICKS TO BE USED FOR ALL MASONRY WALL BELOW BASEMENT

5/9/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005

5/9/24
2.9.24
Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.
5/9/24

MERAKI STRUCTURE COIMBATORE

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	30-08-2024
R0	ISSUED FOR APPROVAL	24-07-2024

CLIENT: TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD, No. 5 Kamarajar Salai, Chennai - 600005, Tamil Nadu. Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR: RCCL — RAMALINGAM CONSTRUCTION COMPANY PVT LTD, #1752 South State Bank Nagar, Chettipalayam, Erode - 638002, Tamil Nadu. Tel: 0424 2282389, Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT: METAPHOR Architects Private Limited

STRUCTURAL CONSULTANT: MERAKI STRUCTURE, COIMBATORE, TAMIL NADU 641035

PROJECT: CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK 01 (S+12),BLOCK 02(S+13),BLOCK 03 (S+03), BLOCK 04(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

DRAWN	DESIGN	CHECKED	APPROVED
MRY	SK	SJS	SJS

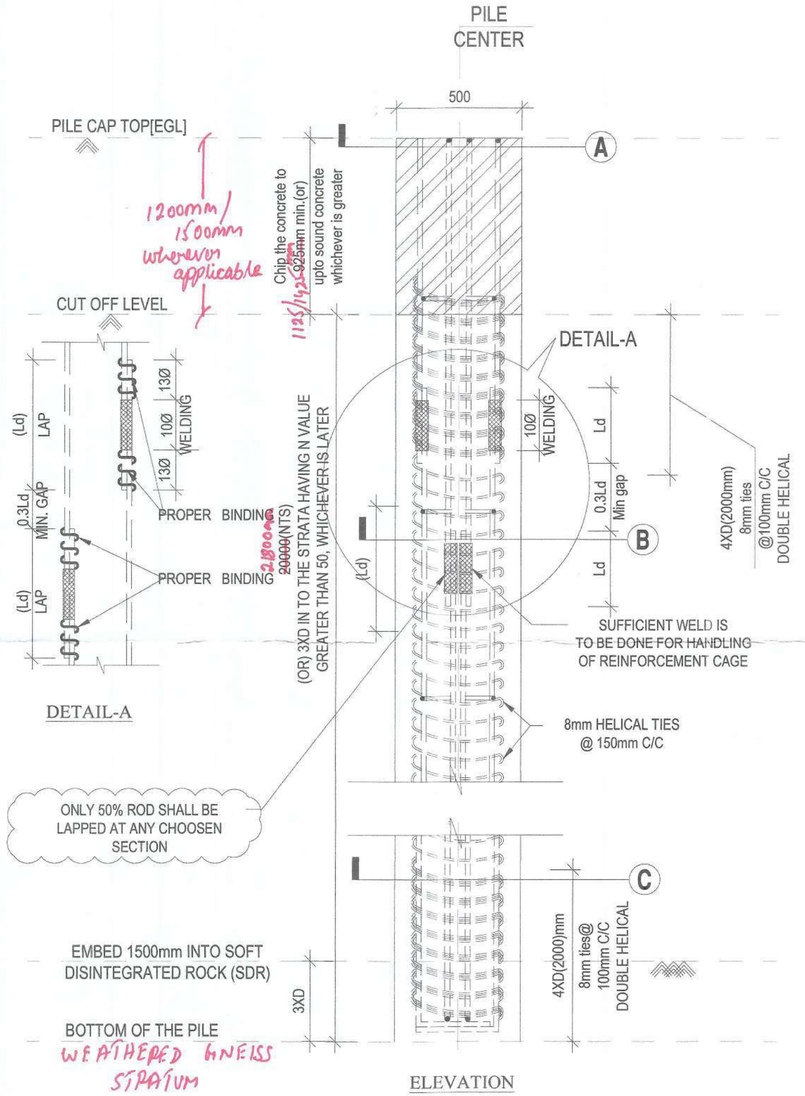
TITLE: PILE SECTION LAYOUT_BLOCK-A

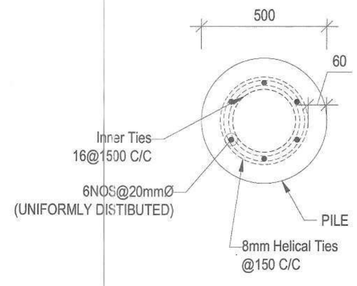
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DRAWN DATE:	22-07-2024
PROJECT NO:	MS23035_AT_1
SHEET NO:	P002

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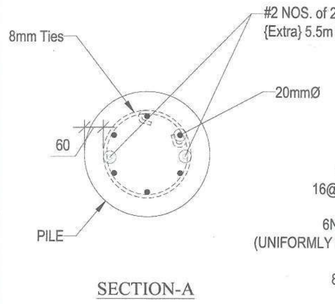
GENERAL NOTE:

1. Ø - DIA. OF THE BAR(16mm)
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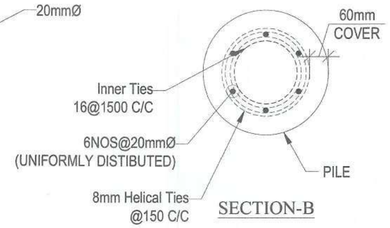




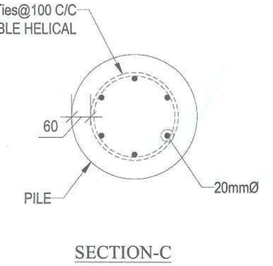
500mm Ø PILE PLAN



SECTION-A



SECTION-B



SECTION-C

NOTES:

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6. GRADE OF STEEL SHALL BE Fe550D , having minimum Elongation of 14.5%.
   GRADE OF CONCRETE
   FOR SUPER STRUCTURE [BEAM,COLUMN,WALL,SLAB] - M40
   FOR SUB-STRUCTURE [PILE,PILE CAP,PLINTH & GRADE BEAM] - M35
7. CLEAR COVER FOR

PILE	:60mm
PILECAP	:60mm
COLUMN	:40mm
BEAM	:30mm
SLAB	:25mm

SAFE LOAD CARRYING CAPACITY OF **BORED CAST-IN SITU PILES** RESTING IN ~~COMPLETELY~~ WEATHERED ~~SOFT ROCK~~ GNEISS STRATUM IS AS FOLLOWS FOR **500mm DIA PILE***

VERTICAL LOAD CARRYING CAPACITY - 1100kN
LATERAL LOAD CARRYING CAPACITY - 89kN*

SOIL REPORT NO:SM&FE 149/CONSULTANCY/TNSCB/2019

R1 REVISION

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HOWEVER 7 DAYS STRENGTH OF CONCRETE SHOULD BE 65% OF THE TARGET STRENGTH, TO REMOVE FORM WORK.

11. THIS BUILDING IS DESIGNED FOR S+12 FLOORS
12. AS PER SOIL REPORT PILE FOUNDATION IS ADOPTED.
13. AAC BLOCKS TO BE USED FOR ALL MASONRY WORKS.
14. FLY ASH BRICKS TO BE USED FOR ALL MASONRY WALL BELOW BASEMENT

5/9/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

5/9/24.
2.9.24
Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

MERAKI STRUCTURE COIMBATORE

PILE SECTION LAYOUT-BLOCK-A

SCALE 1 : 35

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	30-08-2024
R0	ISSUED FOR APPROVAL	24-07-2024

CLIENT: TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD, No. 5 Kamarajar Salai, Chennai - 600005,Tamil Nadu. Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR: RCCL — RAMALINGAM CONSTRUCTION COMPANY PVT LTD #175/2 South State Bank Nagar, Chettipalayam,Erode - 638002,Tamil Nadu. Tel: 0424 2282389,Email ID: info@ramalingam.in

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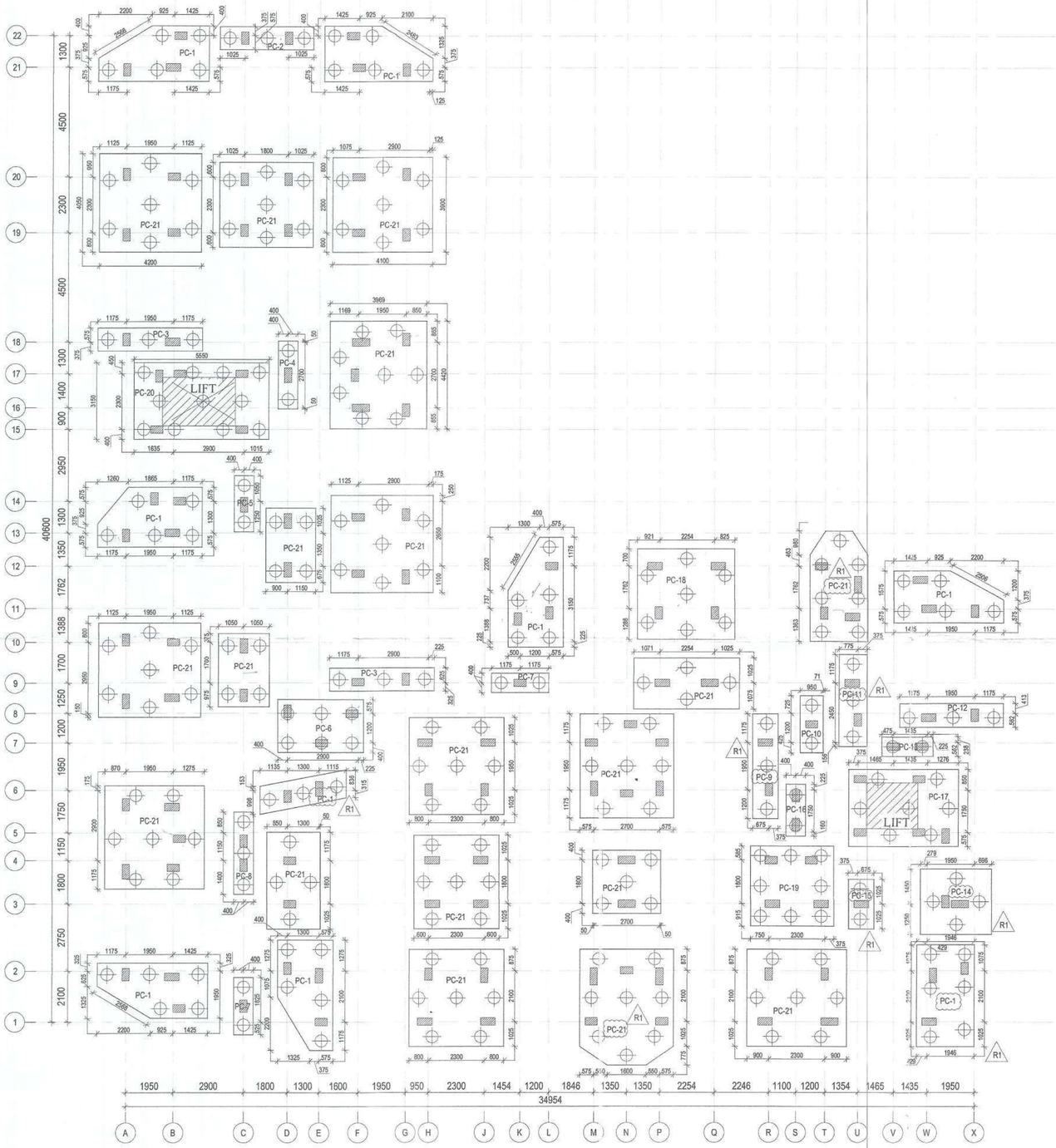
PROJECT: CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK 01 (S+12),BLOCK 02(S+13),BLOCK 03 (S+03), BLOCK 04(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

DRAWN	DESIGN	CHECKED	APPROVED
MRY	SK	SJS	SJS

TITLE: PILE SECTION LAYOUT_BLOCK-A

PAPER SIZE:	A3
DRAWN DATE:	22-07-2024
PROJECT NO:	MS23035_AT_1
SHEET NO:	P002A

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PILECAP LAYOUT-BLOCK-A

SCALE 1 : 300

R1 REVISION

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETER, UNLESS OTHERWISE SPECIFIED.
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   GRADE OF CONCRETE
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   FOR SUB-STRUCTURE [PILE,PILE CAP,PLINTH & GRADE BEAM] - M35
7. CLEAR COVER FOR
   PILE :60mm
   PILECAP :60mm
   COLUMN :40mm
   BEAM :30mm
   SLAB :25mm
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14. FLY ASH BRICKS TO BE USED FOR ALL MASONRY WALL BELOW BASEMENT

Pile cap ID	PILE CAP SIZE			NO OF BARS	SHORTER SPAN		LONGER SPAN		SIDE FACE REINFORCEMENT
	LENGTH(L)	BREADTH(B)	DEPTH(D)		BOTTOM REINFORCEMENT	TOP REINFORCEMENT	BOTTOM REINFORCEMENT	TOP REINFORCEMENT	
PC-1	ASP	ASP	1500	-	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC-2	3850	950	1500	8	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC-3	4300	950	1500	8	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC-4	2800	800	1500	6	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC-5	ASP	ASP	1500	-	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC-6	3525	2175	1500	17	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC-7	ASP	ASP	1500	-	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC-8	3400	800	1500	6	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC-9	4325	1050	1500	8	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC-10	2350	950	1500	8	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC-11	3780	1150	1500	9	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC-12	4300	975	1500	8	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC-13	2785	800	1500	6	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC-14	ASP	ASP	1500	-	20@100mm C/C	20@125mm C/C	20@100mm C/C	20@125mm C/C	12@150mm C/C
PC-15	2050	1050	1200	7	20@150mm C/C	20@175mm C/C	20@150mm C/C	20@175mm C/C	12@150mm C/C
PC-16	2135	800	1200	5	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C
PC-17	4550	3175	1200	25	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC-18	4000	3750	1200	25	20@150mm C/C	20@175mm C/C	20@150mm C/C	20@175mm C/C	12@150mm C/C
PC-19	3425	3300	1200	22	20@150mm C/C	20@175mm C/C	20@150mm C/C	20@175mm C/C	12@150mm C/C
PC-20	5550	3150	1200	21	20@150mm C/C	20@175mm C/C	20@150mm C/C	20@175mm C/C	12@150mm C/C
PC-21	ASP	ASP	1200	-	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C

Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

18/10/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

MERAKI STRUCTURE COIMBATORE

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	30-08-2024
R0	ISSUED FOR APPROVAL	24-07-2024

CLIENT:
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
No. 5 Kamarajar Salai,
Chennai - 600005,Tamil Nadu.
Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR
RAMALINGAM CONSTRUCTION COMPANY PVT LTD
#175/2 South State Bank Nagar,
Chettipalayam,Erode - 638002,Tamil Nadu.
Tel: 0424 2282369,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT
METAPHOR Architects Private Limited

STRUCTURAL CONSULTANT
MERAKI STRUCTURE,
COIMBATORE,
TAMIL NADU 641035

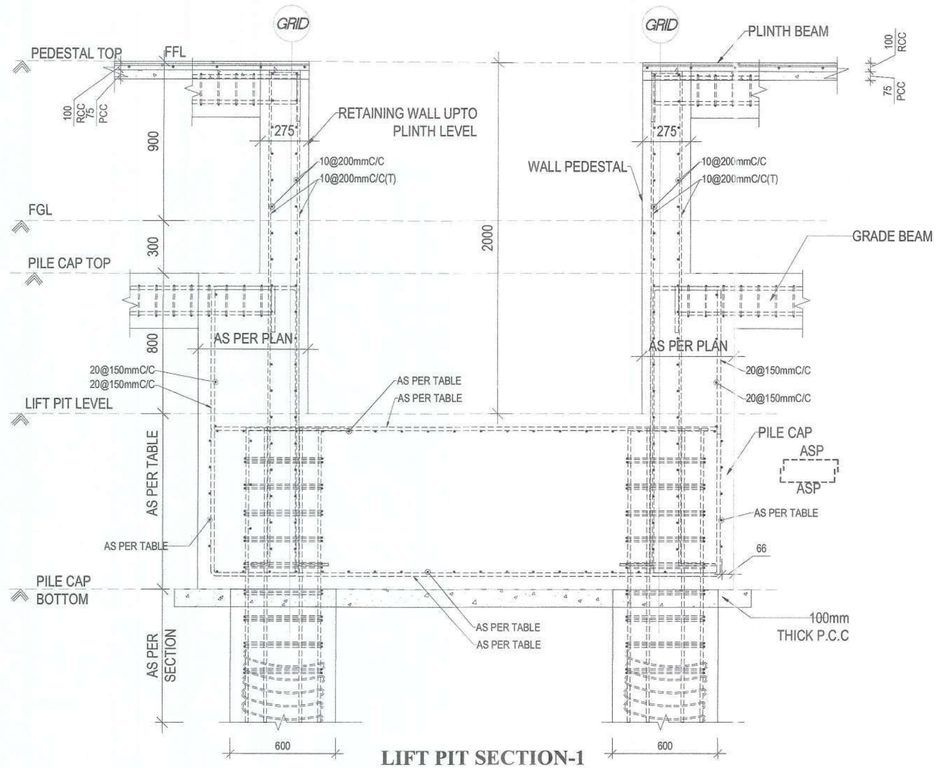
PROJECT:
CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK 01 (S+12),BLOCK 02(S+13),BLOCK 03 (S+03), BLOCK 04(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 128.

DRAWN	DESIGN	CHECKED	APPROVED
MRY	SK	SJS	SJS

TITLE: PILECAP LAYOUT_BLOCK-A

PAPER SIZE:	A3
DRAWN DATE:	22-07-2024
PROJECT NO:	MS23035_AT_1
SHEET NO:	P003

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LIFT PIT SECTION-1

SCALE 1 : 100

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETER, UNLESS OTHERWISE SPECIFIED.
2. DRAWING SHOULD NOT BE SCALED, FOLLOW FIGURED DIMENSIONS.
3. ANY DISCREPANCY IN DRAWING SHALL BE BRING TO NOTICE OF STRUCTURAL CONSULTANT BEFORE EXECUTION OF WORK.
4. THIS DRAWING SHOULD BE READ ALONG WITH THE RELEVANT ARCHITECTURAL DRAWING.
5. IF THERE IS ANY REVISION IN DRAWING, FURTHER CONSTRUCTION SHALL BE EXECUTED AS PER THE LATEST REVISED DRAWING, ON THE ISSUE OF LATEST REVISION.
6. GRADE OF STEEL SHALL BE Fe500D/550D ,
   GRADE OF CONCRETE
   FOR SUPER STRUCTURE [BEAM,COLUMN,WALL,SLAB] - M40
   FOR SUB-STRUCTURE [PILE,PILE CAP,PLINTH & GRADE BEAM] - M35
7. CLEAR COVER FOR

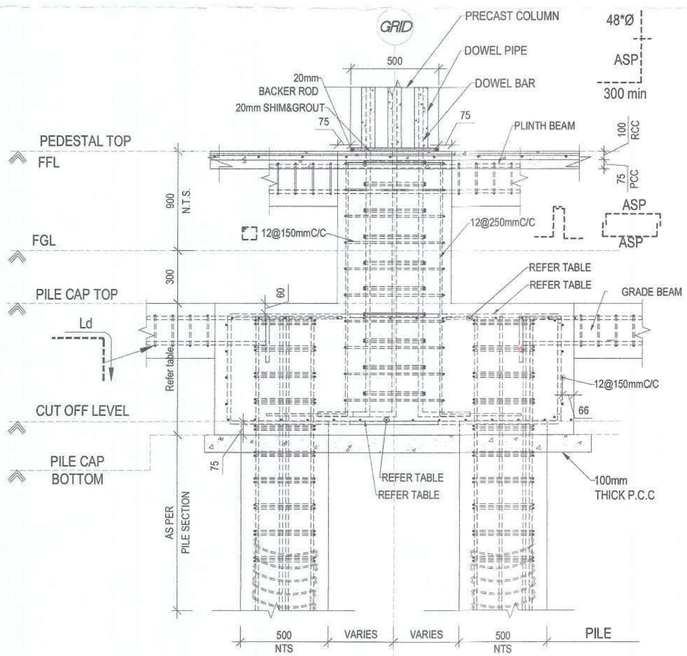
PILE	:60mm
PILECAP	:60mm
COLUMN	:40mm
BEAM	:30mm
SLAB	:25mm

8. LAP LENGTH OF BARS : 50Ø [M35],36Ø [M40]
   AT COLUMN LAPPING PROVIDE 100mm SPACING OF TIES.
9. IN CASE OF BEAM REINFORCEMENT, NO LAPPING SHALL BE ALLOWED IN FOLLOWING PLACES
(a) TOP ROD NEAR COLUMN, L/4 ON EITHER SIDES OF COLUMN
(b) TOP ROD OF CANTILEVER BEAM ALONG THE LENGTH AND ALSO DEVELOPMENT LENGTH, BEYOND COLUMN
(c) BOTTOM ROD AT MID SPAN OF BEAM
10. REMOVAL OF SHUTTERING / FORM WORK

(a)	COLUMN	: 24 HOURS
(b)	BEAM SIDES	: 24 HOURS
(c)	BEAM BOTTOM	: LESS THAN 6M SPAN : 14 DAYS
		: MORE THAN 6M SPAN : 28 DAYS
(d)	SLAB	: LESS THAN 6M SPAN : 14 DAYS
		: MORE THAN 6M SPAN : 28 DAYS

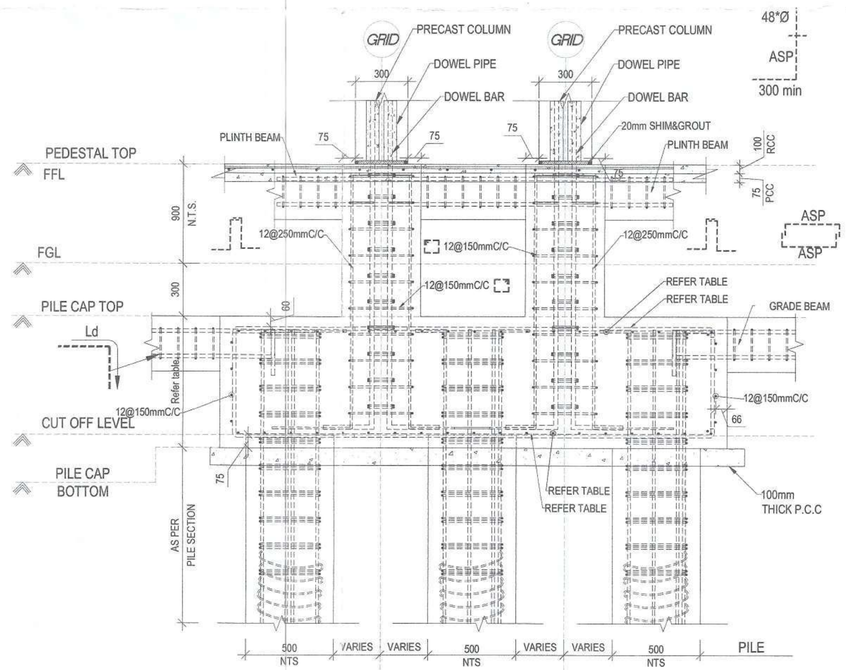
HOWEVER 7 DAYS STRENGTH OF CONCRETE SHOULD BE 65% OF THE TARGET STRENGTH, TO REMOVE FORM WORK.

11. THIS BUILDING IS DESIGNED FOR S+12 FLOORS
12. AS PER SOIL REPORT PILE FOUNDATION IS ADOPTED.
13. AAC BLOCKS TO BE USED FOR ALL MASONRY WORKS.
14. FLY ASH BRICKS TO BE USED FOR ALL MASONRY WALL BELOW BASEMENT



TYPICAL PILE CAP SECTION

SCALE 1 : 60



TYPICAL PILE CAP SECTION

SCALE 1 : 60

PILECAP SECTION LAYOUT-BLOCK-A

Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

18/10/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

18/10/24

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	30-08-2024
R0	ISSUED FOR APPROVAL	24-07-2024

CLIENT:
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
No.5 Kamarajar Salai,
Chennai - 600005,Tamil Nadu.
Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR
RAMALINGAM CONSTRUCTION COMPANY PVT LTD
#175/2 South State Bank Nagar,
Chatipalayam,Erode - 638002,Tamil Nadu.
Tel: 0424 2282369,Email ID: info@ramalingam.in
RCCL

COMPREHENSIVE CONSULTANT
METAPHOR Architects Private Limited
33/PG6 2nd Floor, Mogappair West, Chennai - 37.
Tel:+91 44 4205 1341 | info.metaphor@gmail.com

STRUCTURAL CONSULTANT
MERAKI STRUCTURE,
COIMBATORE,
TAMIL NADU 641035
MERAKI

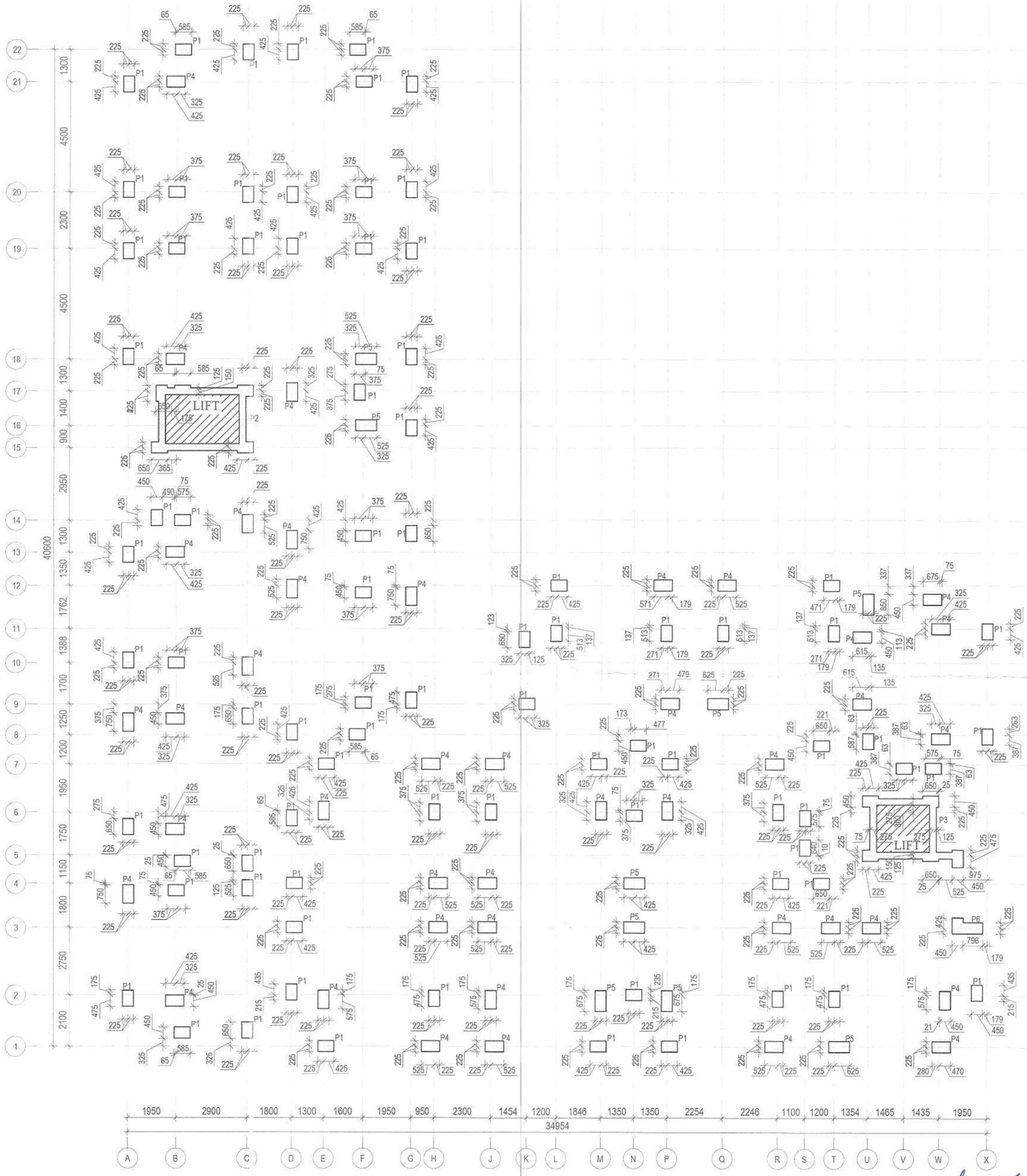
PROJECT:
CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK 01 (S+12),BLOCK 02(S+13),BLOCK 03 (S+03), BLOCK 04(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

DRAWN	DESIGN	CHECKED	APPROVED
MRY	SK	SJS	SJS

TITLE: PILECAP SECTION LAYOUT_BLOCK-A

PAPER SIZE:	A3
DRAWN DATE:	22-07-2024
PROJECT NO:	MS23035_AT_1
SHEET NO:	P004

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PEDESTAL LAYOUT -BLOCK-A

SCALE 1 : 300

18/10/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

1/10-24
Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	17-09-2024
R0	ISSUED FOR APPROVAL	24-07-2024

CLIENT:
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
No. 5 Kamarajar Salai,
Chennai - 600005,Tamil Nadu.
Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR
RAMALINGAM CONSTRUCTION COMPANY PVT LTD
#175/2 South State Bank Nagar,
Chettipalayam,Erode - 638002,Tamil Nadu.
Tel: 0424 2282369,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT
METAPHOR

STRUCTURAL CONSULTANT
MERAKI STRUCTURE,
COIMBATORE,
TAMIL NADU 641035

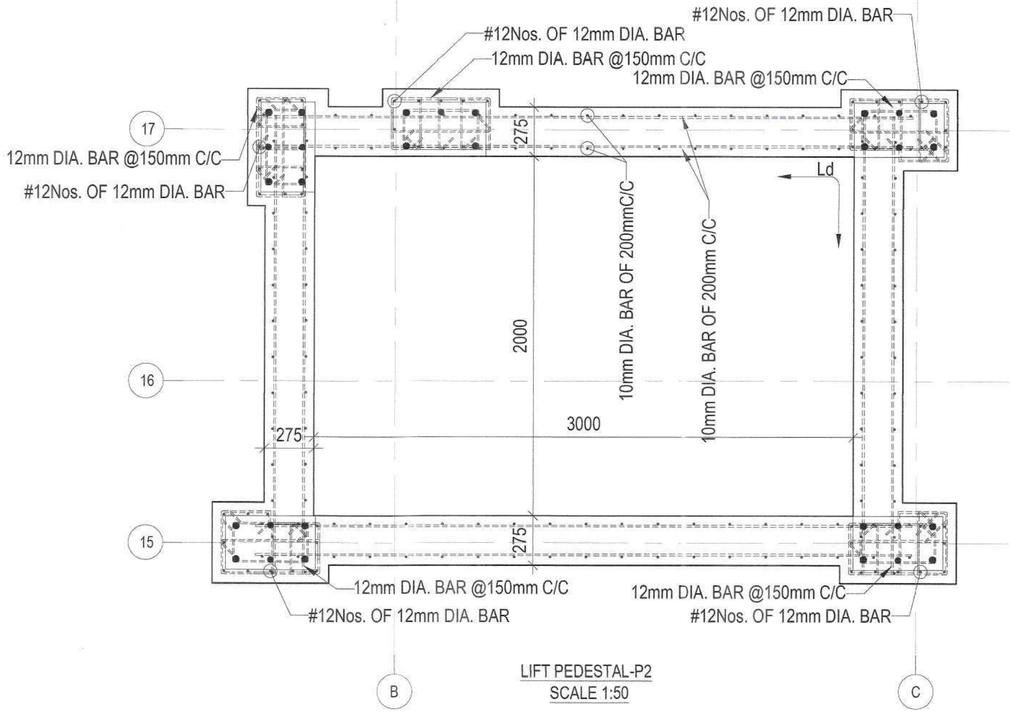
PROJECT:
CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK 01 (S+12),BLOCK 02(S+13),BLOCK 03 (S+03), BLOCK 04(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

DRAWN	DESIGN	CHECKED	APPROVED
MRY	SK	SJS	SJS

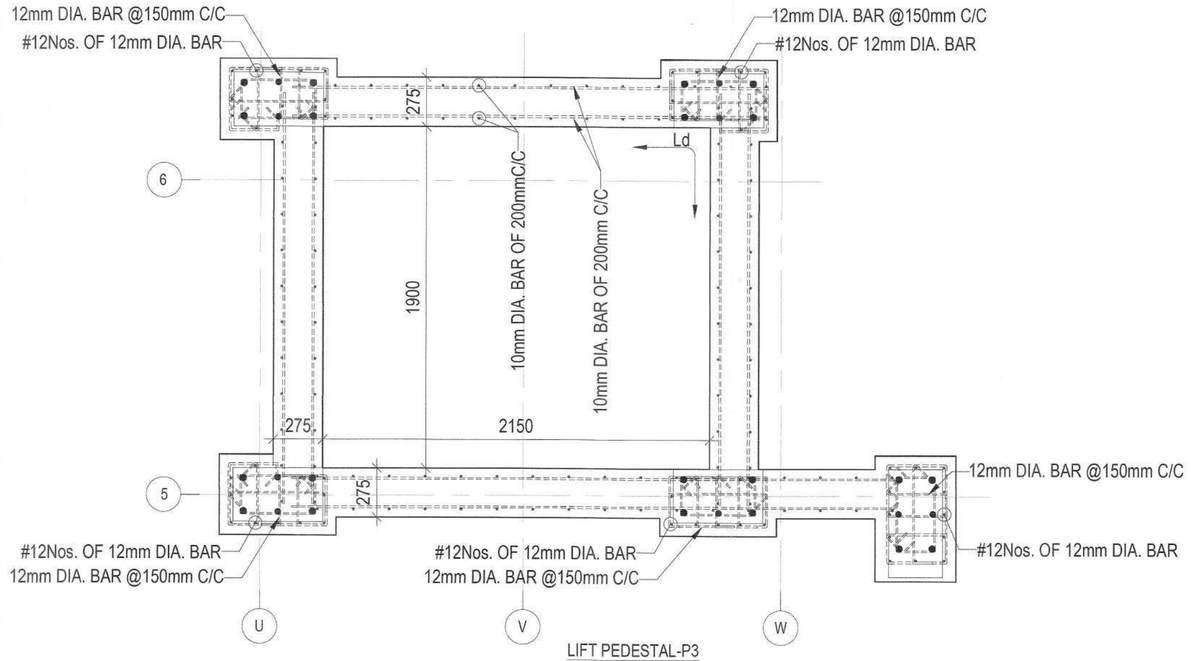
TITLE: PEDESTAL LAYOUT_BLOCK-A

PAPER SIZE:	A3
DRAWN DATE:	22-07-2024
PROJECT NO:	MS23035_AT_1
SHEET NO:	P005

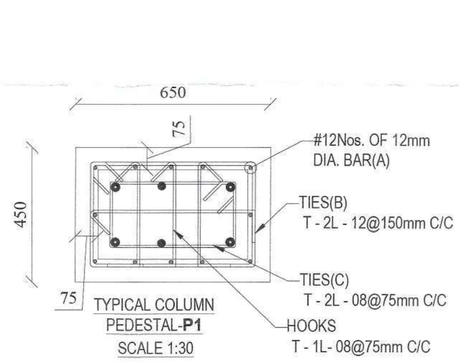
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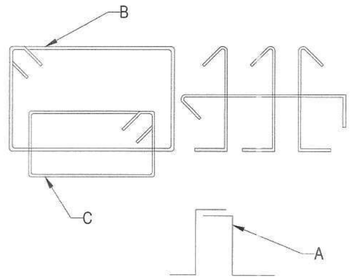
LIFT PEDESTAL-P2
SCALE 1:50

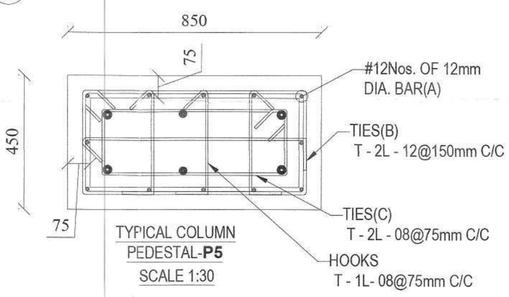


LIFT PEDESTAL-P3
SCALE 1:50

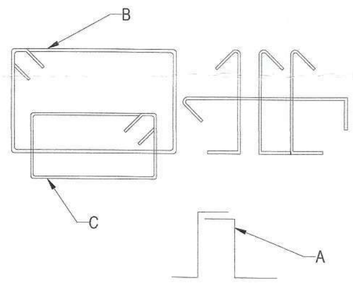


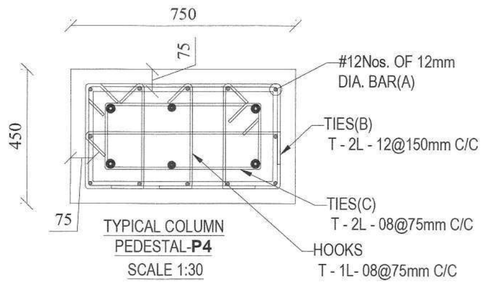
TYPICAL COLUMN
PEDESTAL-**P1**
SCALE 1:30



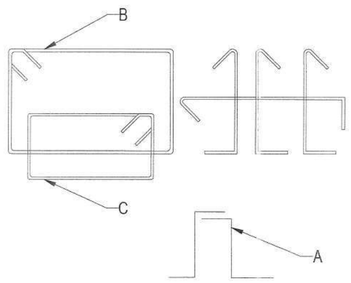


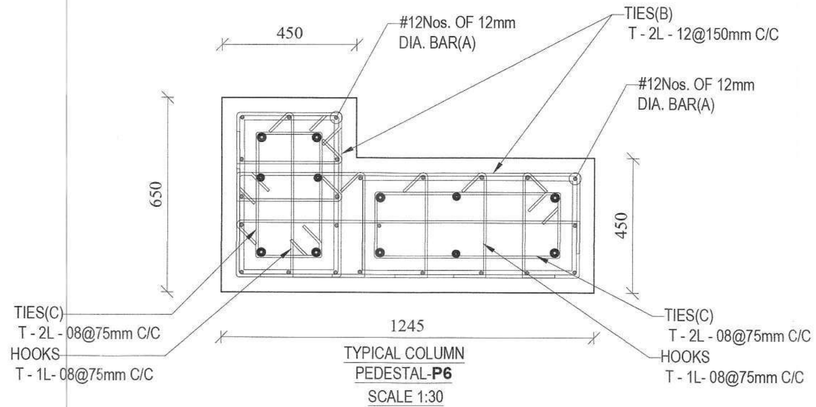
TYPICAL COLUMN
PEDESTAL-**P5**
SCALE 1:30





TYPICAL COLUMN
PEDESTAL-**P4**
SCALE 1:30





TYPICAL COLUMN
PEDESTAL-**P6**
SCALE 1:30

PEDESTAL DETAIL -BLOCK-A

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	17-09-2024
R0	ISSUED FOR APPROVAL	24-07-2024

CLIENT:
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
No. 5 Kamarajar Salai,
Chennai - 600005,Tamil Nadu.
Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR
RAMALINGAM CONSTRUCTION COMPANY PVT LTD
#175/2 South State Bank Nagar,
Chettipalayam,Erode - 638002,Tamil Nadu.
Tel: 0424 2282389,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT
METAPHOR

STRUCTURAL CONSULTANT
MERAKI STRUCTURE,
COIMBATORE,
TAMIL NADU 641035

PROJECT:
CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK 01 (S+12),BLOCK 02(S+13),BLOCK 03 (S+03), BLOCK 04(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

DRAWN	DESIGN	CHECKED	APPROVED
MRY	SK	SJS	SJS

TITLE: PEDESTAL DETAIL LAYOUT_BLOCK-A

PAPER SIZE:	A3
DRAWN DATE:	22-07-2024
PROJECT NO:	MS23035_AT_1
SHEET NO:	P006

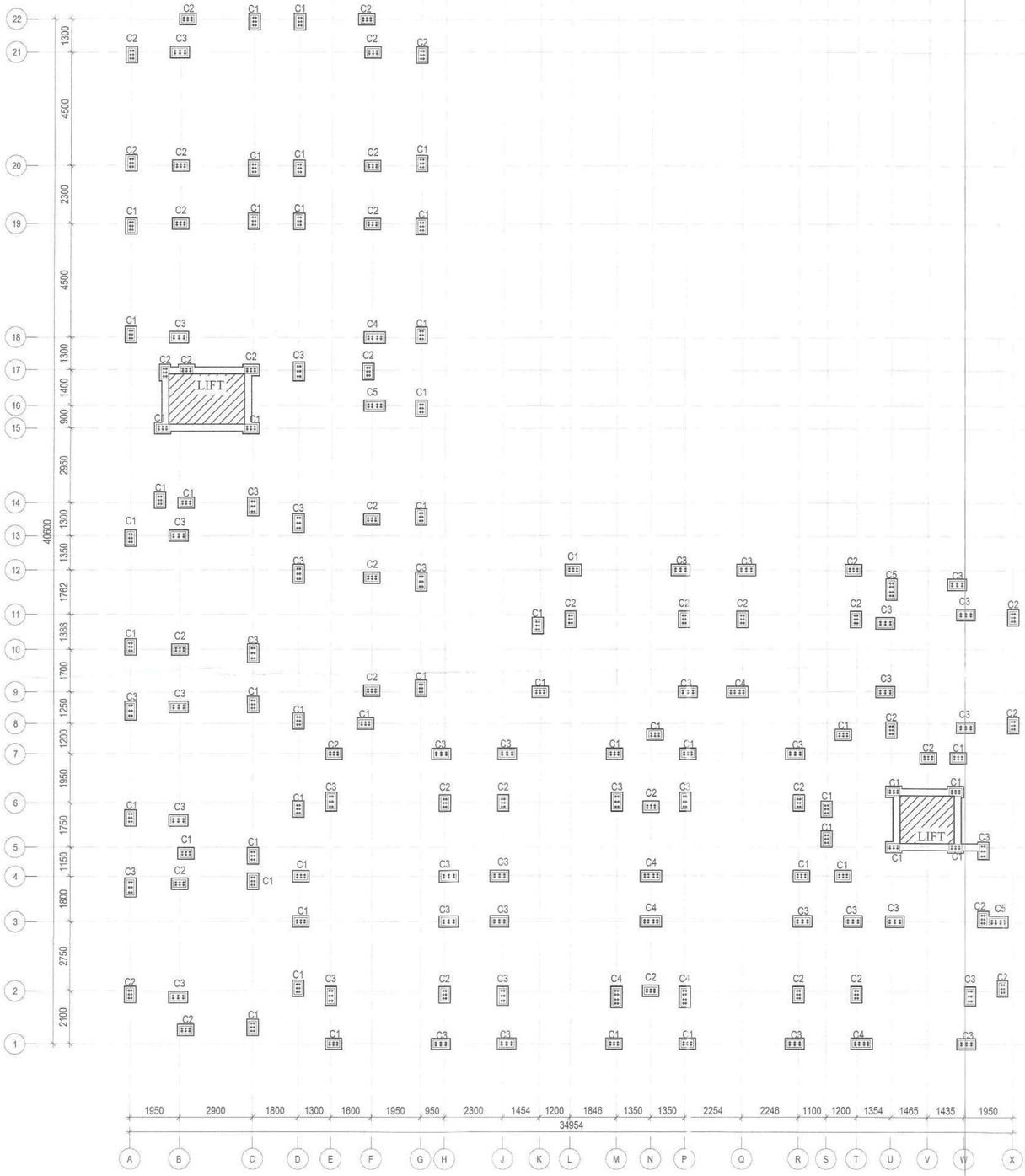
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18/10/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

1/10/24
18/10/24

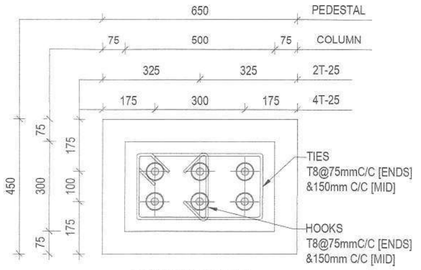
Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai-600 025.

MERAKI STRUCTURE COIMBATORE

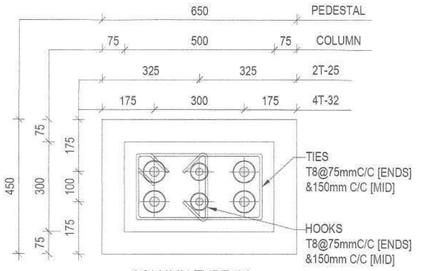


DOWEL LAYOUT -BLOCK-A

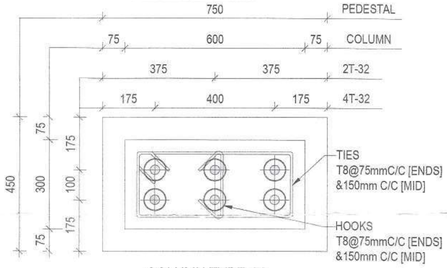
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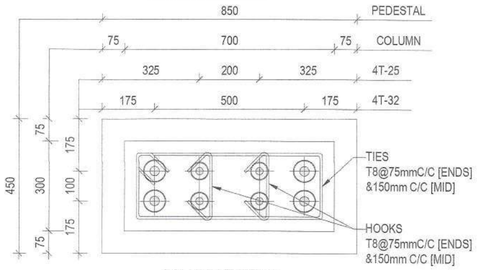
COLUMN TYPE-C1



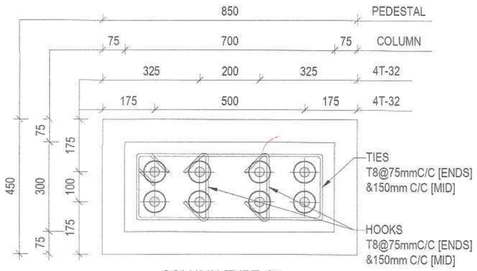
COLUMN TYPE-C2



COLUMN TYPE-C3



COLUMN TYPE-C4



COLUMN TYPE-C5



18/10/2024
EXECUTIVE ENGINEER (A/P)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

18/10/24
1/10-24
Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	17-09-2024
R0	ISSUED FOR APPROVAL	24-07-2024

CLIENT:
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
No. 5 Kamarajar Salai,
Chennai - 600005, Tamil Nadu.
Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR
RCCL
RAMALINGAM CONSTRUCTION COMPANY PVT LTD
#175/2 South State Bank Nagar,
Chettipalayam,Erode - 638002,Tamil Nadu.
Tel: 0424 2282389,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT
METAPHOR

STRUCTURAL CONSULTANT
MERAKI STRUCTURE,
COIMBATORE,
TAMIL NADU 641035

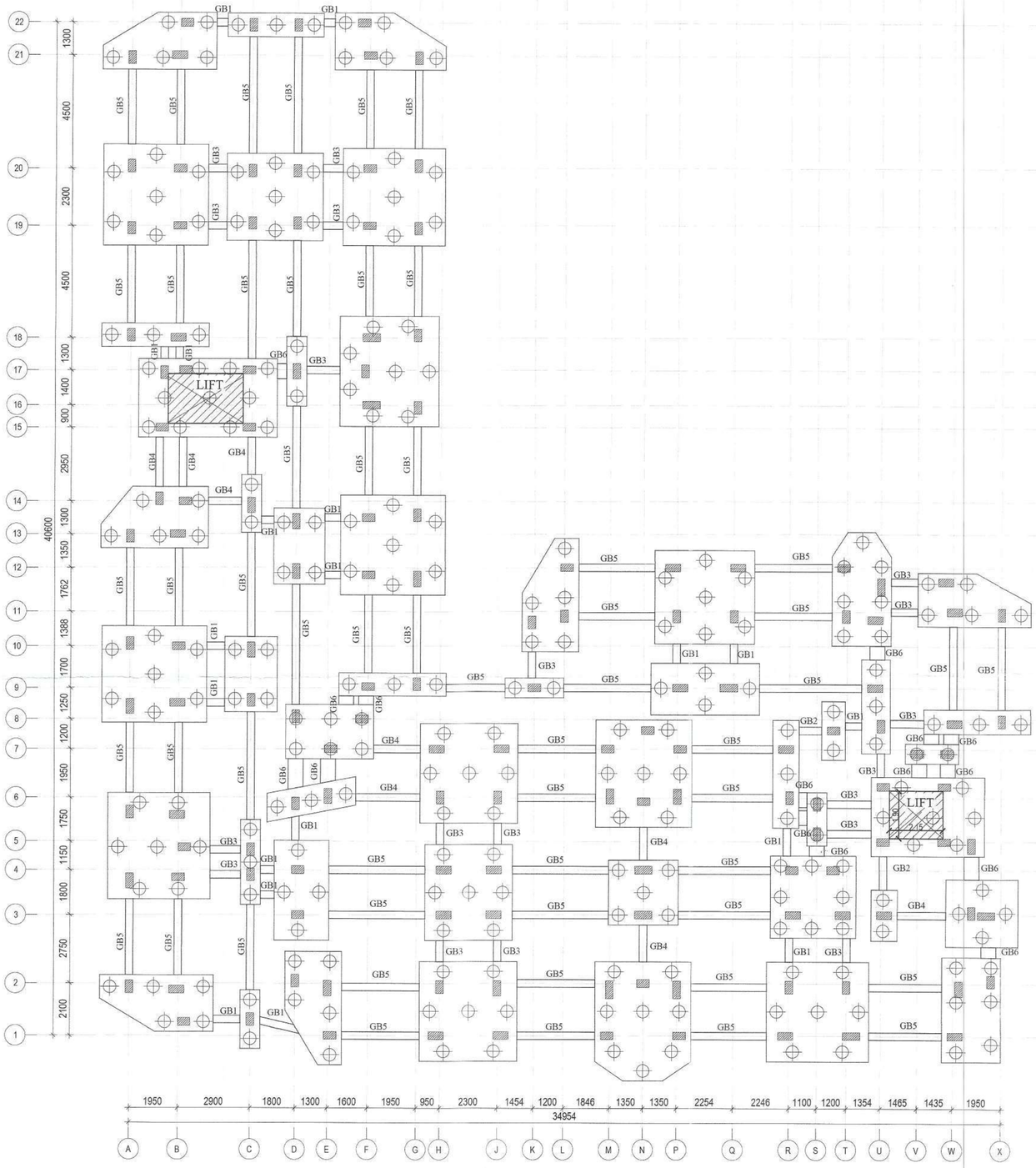
PROJECT:
CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK 01 (S+12),BLOCK 02(S+13),BLOCK 03 (S+03), BLOCK 04(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

MRY	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

TITLE: DOWEL LAYOUT_BLOCK-A

PAPER SIZE:	A3
DRAWN DATE:	22-07-2024
PROJECT NO:	MS23035_AT_1
SHEET NO:	P007

9/18/2024 4:35:17 PM



GRADE BEAM LAYOUT -BLOCK-A

SCALE 1 : 300

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETER, UNLESS OTHERWISE SPECIFIED.
2. DRAWING SHOULD NOT BE SCALED, FOLLOW FIGURED DIMENSIONS.
3. ANY DISCREPANCY IN DRAWING SHALL BE BRING TO NOTICE OF STRUCTURAL CONSULTANT BEFORE EXECUTION OF WORK.
4. THIS DRAWING SHOULD BE READ ALONG WITH THE RELEVANT ARCHITECTURAL DRAWING.
5. IF THERE IS ANY REVISION IN DRAWING, FURTHER CONSTRUCTION SHALL BE EXECUTED AS PER THE LATEST REVISED DRAWING, ON THE ISSUE OF LATEST REVISION.
6. GRADE OF STEEL SHALL BE Fe500D/550D ,
   GRADE OF CONCRETE
   FOR SUPER STRUCTURE [BEAM,COLUMN,WALL,SLAB] - M40
   FOR SUB-STRUCTURE [PILE,PILE CAP,PLINTH & GRADE BEAM] - M35
7. CLEAR COVER FOR

PILE	:60mm
PILECAP	:60mm
COLUMN	:40mm
BEAM	:30mm
SLAB	:25mm

8. LAP LENGTH OF BARS : 50Ø [M35],36Ø [M40]
   AT COLUMN LAPPING PROVIDE 100mm SPACING OF TIES.
9. IN CASE OF BEAM REINFORCEMENT, NO LAPPING SHALL BE ALLOWED IN FOLLOWING PLACES
(a) TOP ROD NEAR COLUMN, L/4 ON EITHER SIDES OF COLUMN
(b) TOP ROD OF CANTILEVER BEAM ALONG THE LENGTH AND ALSO DEVELOPMENT LENGTH, BEYOND COLUMN
(c) BOTTOM ROD AT MID SPAN OF BEAM
10. REMOVAL OF SHUTTERING / FORM WORK

(a)	COLUMN	: 24 HOURS
(b)	BEAM SIDES	: 24 HOURS
(c)	BEAM BOTTOM	: LESS THAN 6M SPAN : 14 DAYS
		: MORE THAN 6M SPAN : 28 DAYS
(d)	SLAB	: LESS THAN 4.5M SPAN : 14 DAYS
		: MORE THAN 4.5M SPAN : 28 DAYS

HOWEVER 7 DAYS STRENGTH OF CONCRETE SHOULD BE 65% OF THE TARGET STRENGTH, TO REMOVE FORM WORK.

11. THIS BUILDING IS DESIGNED FOR S+12 FLOORS
12. AS PER SOIL REPORT PILE FOUNDATION IS ADOPTED.
13. AAC BLOCKS TO BE USED FOR ALL MASONRY WORKS.
14. FLY ASH BRICKS TO BE USED FOR ALL MASONRY WALL BELOW BASEMENT

- GRADE BEAM
- LIFT PIT

18/10/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

1/10.24
Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	17-09-2024
R0	ISSUED FOR APPROVAL	24-07-2024

CLIENT: TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD, No.5 Kamarajar Salai, Chennai - 600005,Tamil Nadu. Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR: RAMALINGAM CONSTRUCTION COMPANY PVT LTD, #175/2 South State Bank Nagar, Chatipalayam,Erode - 638002,Tamil Nadu. Tel: 0424 2282389,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT: METAPHOR

STRUCTURAL CONSULTANT: MERAKI STRUCTURE, COIMBATORE, TAMIL NADU 641035

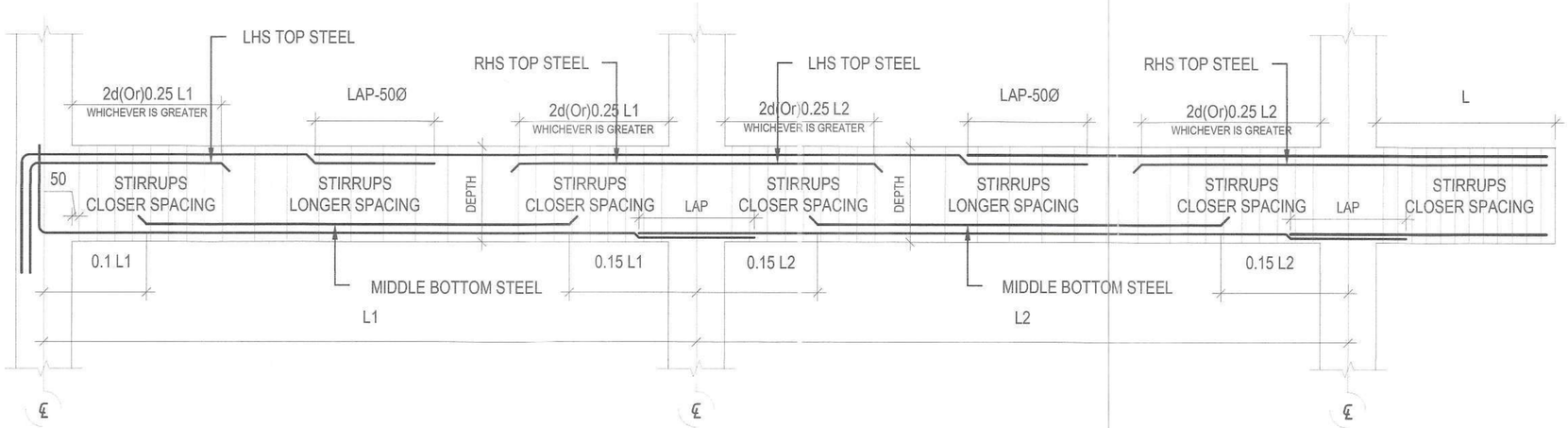
PROJECT: CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK 01 (S+12),BLOCK 02(S+13),BLOCK 03 (S+03), BLOCK 04(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

DRAWN	DESIGN	CHECKED	APPROVED
MRY	SK	SJS	SJS

TITLE: GRADE BEAM LAYOUT_BLOCK-A

PAPER SIZE:	A3
DRAWN DATE:	22-07-2024
PROJECT NO:	MS23035_AT_1
SHEET NO:	P008

9/18/2024 4:35:17 PM



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETER, UNLESS OTHERWISE SPECIFIED.
2. DRAWING SHOULD NOT BE SCALED, FOLLOW FIGURED DIMENSIONS.
3. ANY DISCREPANCY IN DRAWING SHALL BE BRING TO NOTICE OF STRUCTURAL CONSULTANT BEFORE EXECUTION OF WORK.
4. THIS DRAWING SHOULD BE READ ALONG WITH THE RELEVANT ARCHITECTURAL DRAWING.
5. IF THERE IS ANY REVISION IN DRAWING, FURTHER CONSTRUCTION SHALL BE EXECUTED AS PER THE LATEST REVISED DRAWING, ON THE ISSUE OF LATEST REVISION.
6. GRADE OF STEEL SHALL BE Fe500D/550D ,
   GRADE OF CONCRETE
   FOR SUPER STRUCTURE [BEAM,COLUMN,WALL,SLAB] - M40
   FOR SUB-STRUCTURE [PILE,PILE CAP,PLINTH & GRADE BEAM] - M35
7. CLEAR COVER FOR
   PILE :60mm
   PILECAP :60mm
   COLUMN :40mm
   BEAM :30mm
   SLAB :25mm
8. LAP LENGTH OF BARS : 50Ø [M35],36Ø [M40]
   AT COLUMN LAPPING PROVIDE 100mm SPACING OF TIES.
9. IN CASE OF BEAM REINFORCEMENT, NO LAPPING SHALL BE ALLOWED IN FOLLOWING PLACES
(a) TOP ROD NEAR COLUMN, L/4 ON EITHER SIDES OF COLUMN
(b) TOP ROD OF CANTILEVER BEAM ALONG THE LENGTH AND ALSO DEVELOPMENT LENGTH, BEYOND COLUMN
(c) BOTTOM ROD AT MID SPAN OF BEAM
10. REMOVAL OF SHUTTERING / FORM WORK
(a) COLUMN : 24 HOURS
(b) BEAM SIDES : 24 HOURS
(c) BEAM BOTTOM : LESS THAN 6M SPAN : 14 DAYS
: MORE THAN 6M SPAN : 28 DAYS
(d) SLAB : LESS THAN 4.5M SPAN : 14 DAYS
: MORE THAN 4.5M SPAN : 28 DAYS

HOWEVER 7 DAYS STRENGTH OF CONCRETE SHOULD BE 65% OF THE TARGET STRENGTH, TO REMOVE FORM WORK.

11. THIS BUILDING IS DESIGNED FOR S+12 FLOORS
12. AS PER SOIL REPORT PILE FOUNDATION IS ADOPTED.
13. AAC BLOCKS TO BE USED FOR ALL MASONRY WORKS.
14. FLY ASH BRICKS TO BE USED FOR ALL MASONRY WALL BELOW BASEMENT

GRADE BEAM DETAILS

S.NO.	BEAM ID	BEAM SIZE(mm)		TOP REINFORCEMENT		BOTTOM REINFORCEMENT		SIDE FACE	STIRRUPS	
		WIDTH	DEPTH	STRAIGHT BAR	CURTAILMENT	STRAIGHT BAR	CURTAILMENT		END	MIDDLE
1	GB1	300	450	#3-T16		#3-T16		-	3L-T12@100mmC/C	3L-T12@100mmC/C
2	GB2	300	450	#3-T20		#3-T20		-	3L-T12@100mmC/C	3L-T12@100mmC/C
3	GB3	300	450	#3-T16		#3-T16		-	2L-T10@100mmC/C	2L-T10@100mmC/C
4	GB4	300	450	#3-T16		#3-T16		-	2L-T08@100mmC/C	2L-T08@100mmC/C
5	GB5	300	450	#3-T16		#3-T16		-	2L-T08@100mmC/C	2L-T08@150mmC/C
6	GB6	600	450	#4-T20		#4-T20		-	4L-T12@75mmC/C	4L-T12@75mmC/C

18/10/2024
EXECUTIVE ENGINEER (P/C)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

18/10/24

1/10/24
Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025

GRADE BEAM DETAIL -BLOCK-A

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	17-09-2024
R0	ISSUED FOR APPROVAL	24-07-2024

CLIENT:
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
No. 5 Kamarajar Salai,
Chennai - 600005,Tamil Nadu.
Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR
RAMALINGAM CONSTRUCTION COMPANY PVT LTD
#175/2 South State Bank Nagar,
Chattipalayam,Erode - 638002,Tamil Nadu.
Tel: 0424 2282389,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT
METAPHOR

STRUCTURAL CONSULTANT
MERAKI STRUCTURE,
COIMBATORE,
TAMIL NADU 641035

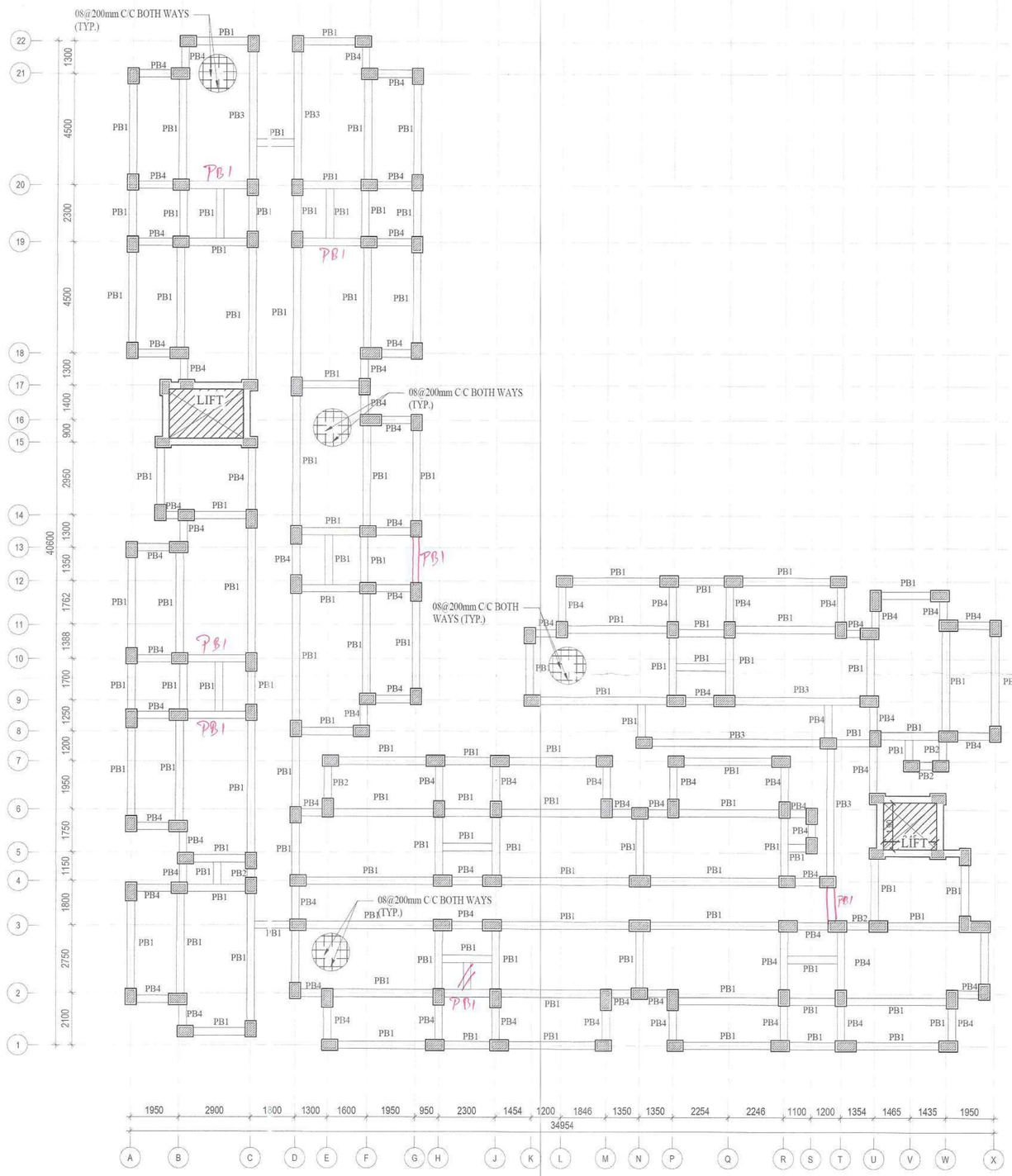
PROJECT:
CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK 01 (S+12),BLOCK 02(S+13),BLOCK 03 (S+03), BLOCK 04(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

DRAWN	DESIGN	CHECKED	APPROVED
MRY	SK	SJS	SJS

TITLE:
GRADE BEAM DETAIL_BLOCK-A

PAPER SIZE:	A3
DRAWN DATE:	22-07-2024
PROJECT NO:	MS23035_AT_1
SHEET NO:	P009

9/18/2024 4:35:17 PM



- PLINTH BEAM

- LIFT PIT

PLINTH BEAM LAYOUT -BLOCK-A

SCALE 1 : 300

18/10/2024
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

1.10.24

18/10/24

Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	17-09-2024
R0	ISSUED FOR APPROVAL	24-07-2024

CLIENT:
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
No. 5 Kamarajar Salai,
Chennai - 600005,Tamil Nadu.
Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR
RAMALINGAM CONSTRUCTION COMPANY PVT LTD
#175/2 South State Bank Nagar,
Chettipalayam,Erode - 638002,Tamil Nadu.
Tel: 0424 2382389,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT
METAPHOR

STRUCTURAL CONSULTANT
MERAKI STRUCTURE,
COIMBATORE,
TAMIL NADU 641035

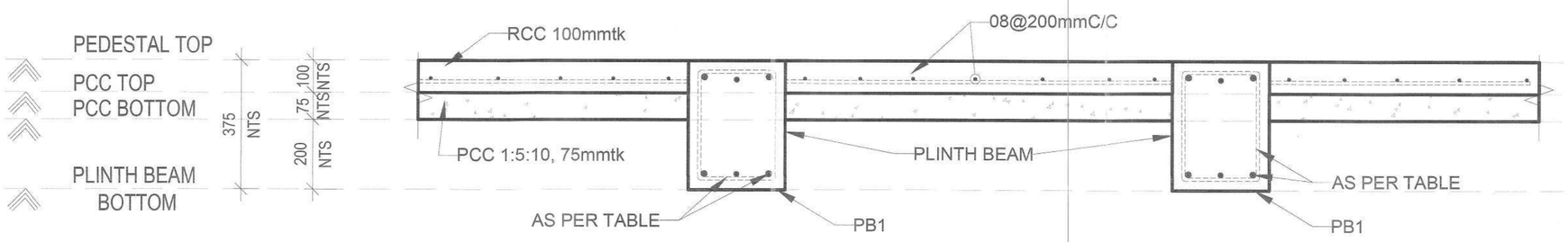
PROJECT:
CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK 01 (S+12),BLOCK 02(S+13),BLOCK 03 (S+03), BLOCK 04(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

DRAWN	DESIGN	CHECKED	APPROVED
MRY	SK	SJS	SJS

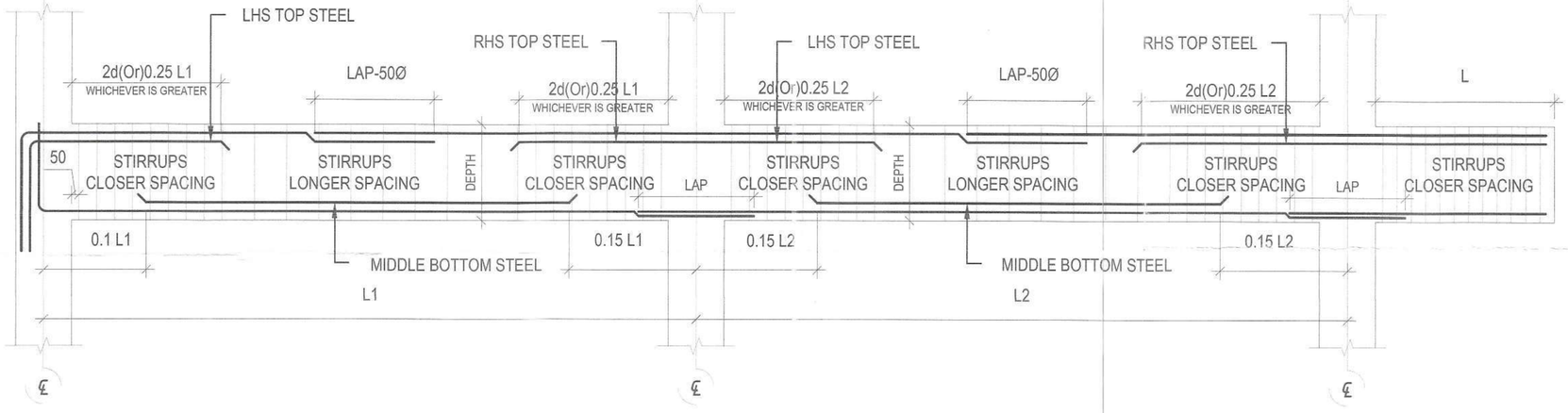
TITLE: PLINTH BEAM LAYOUT_BLOCK-A

PAPER SIZE:	A3
DRAWN DATE:	22-07-2024
PROJECT NO:	MS23035_AT_1
SHEET NO:	P010

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SCREEDING DETAIL



TYPICAL LAPPING & CURTAILMENT DETAILS OF BEAM

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETER, UNLESS OTHERWISE SPECIFIED.
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5. IF THERE IS ANY REVISION IN DRAWING, FURTHER CONSTRUCTION SHALL BE EXECUTED AS PER THE LATEST REVISED DRAWING, ON THE ISSUE OF LATEST REVISION.
6. GRADE OF STEEL SHALL BE Fe500D/550D ,
   GRADE OF CONCRETE
   FOR SUPER STRUCTURE [BEAM,COLUMN,WALL,SLAB] - M40
   FOR SUB-STRUCTURE [PILE,PILE CAP,PLINTH & GRADE BEAM] - M35
7. CLEAR COVER FOR
   - PILE & PILE CAP :60mm
   - COLUMN :40mm
   - BEAM :30mm
   - SLAB :25mm
8. LAP LENGTH OF BARS : 50Ø [M35],36Ø [M40]
   AT COLUMN LAPPING PROVIDE 100mm SPACING OF TIES.
9. IN CASE OF BEAM REINFORCEMENT, NO LAPPING SHALL BE ALLOWED IN FOLLOWING PLACES
   (a) TOP ROD NEAR COLUMN, L/4 ON EITHER SIDES OF COLUMN
   (b) TOP ROD OF CANTILEVER BEAM ALONG THE LENGTH AND ALSO DEVELOPMENT LENGTH, BEYOND COLUMN
   (c) BOTTOM ROD AT MID SPAN OF BEAM
10. REMOVAL OF SHUTTERING / FORM WORK
    (a) COLUMN : 24 HOURS
    (b) BEAM SIDES : 24 HOURS
    (c) BEAM BOTTOM : LESS THAN 6M SPAN : 14 DAYS; MORE THAN 6M SPAN : 28 DAYS
    (d) SLAB : LESS THAN 4.5M SPAN : 14 DAYS; MORE THAN 4.5M SPAN : 28 DAYS

    HOWEVER 7 DAYS STRENGTH OF CONCRETE SHOULD BE 65% OF THE TARGET STRENGTH, TO REMOVE FORM WORK.
11. THIS BUILDING IS DESIGNED FOR GROUND + 7 FLOORS
12. AS PER SOIL REPORT PILE FOUNDATION IS ADOPTED.
13. AAC BLOCKS TO BE USED FOR ALL MASONRY WORKS FOR SUPERSTRUCTURE.
14. FLYASH BRICKS SHALL BE USED FOR MASONRY WALLS BELOW BASEMENT.

PLINTH BEAM DETAILS

S.NO.	BEAM ID	BEAM SIZE(mm)		TOP REINFORCEMENT		BOTTOM REINFORCEMENT		SIDE FACE	STIRRUPS	
		WIDTH	DEPTH	STRAIGHT BAR	CURTAILMENT	STRAIGHT BAR	CURTAILMENT		END	MIDDLE
1	PB1	300	375	#2-T16	-	#2-T16	-	-	2L-T8@100mmC/C	2L-T8@150mmC/C
2	PB2	300	375	#2-T16	-	#2-T16	-		2L-T12@100mmC/C	2L-T12@100mmC/C
3	PB3	300	375	#2-T16 + #1-T12	-	#2-T16 + #1-T12	-		2L-T8@100mmC/C	2L-T8@150mmC/C
4	PB4	300	375	#2-T16	-	#2-T16	-		2L-T8@100mmC/C	2L-T8@100mmC/C

18/10/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

18/10/24
1/10/24
Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025

PLINTH BEAM DETAIL -BLOCK-A

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	17-09-2024
R0	ISSUED FOR APPROVAL	24-07-2024

CLIENT:
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
No. 5 Kamarajar Salai,
Chennai - 600005,Tamil Nadu.
Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR
RAMALINGAM CONSTRUCTION COMPANY PVT LTD
#175/2 South State Bank Nagar,
Chattipalayam,Erode - 638002,Tamil Nadu.
Tel: 0424 2262369,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT
METAPHOR

STRUCTURAL CONSULTANT
MERAKI STRUCTURE,
COIMBATORE,
TAMIL NADU 641035

PROJECT:
CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK 01 (S+12),BLOCK 02(S+13),BLOCK 03 (S+03), BLOCK 04(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

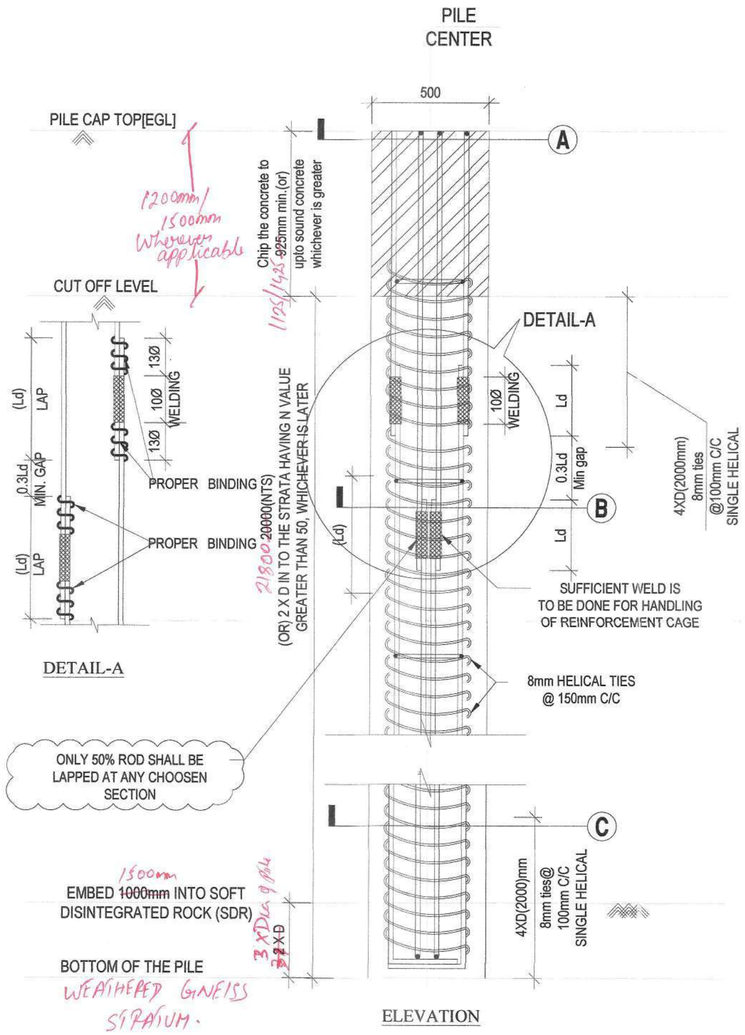
MRY	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

TITLE: PLINTH BEAM DETAIL_BLOCK-A

PAPER SIZE:	A3
DRAWN DATE:	22-07-2024
PROJECT NO:	MS23035_AT_1
SHEET NO:	P011

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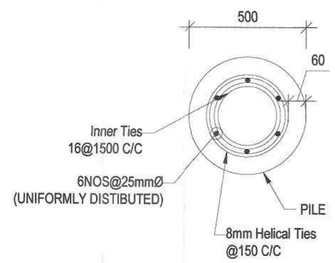
GENERAL NOTE:
1. Ø - DIA. OF THE BAR
2. D - DIA. OF THE PILE
3. Ld - 50*DIA OF THE BAR



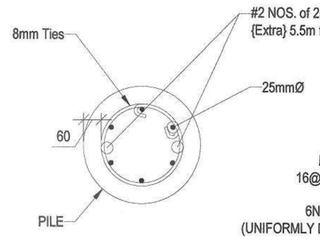
DETAIL-A

ELEVATION

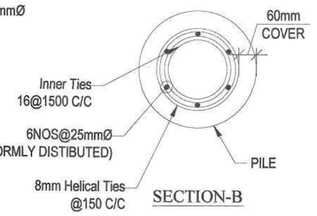
PILE SECTION LAYOUT-BLOCK-B
SCALE 1 : 35



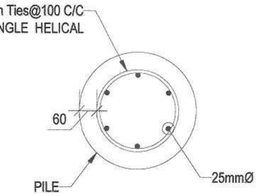
500mm Ø PILE PLAN



SECTION-A



SECTION-B



SECTION-C

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETER, UNLESS OTHERWISE SPECIFIED.
2. DRAWING SHOULD NOT BE SCALED, FOLLOW FIGURED DIMENSIONS.
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4. THIS DRAWING SHOULD BE READ ALONG WITH THE RELEVANT ARCHITECTURAL DRAWING.
5. IF THERE IS ANY REVISION IN DRAWING, FURTHER CONSTRUCTION SHALL BE EXECUTED AS PER THE LATEST REVISED DRAWING, ON THE ISSUE OF LATEST REVISION.
6. GRADE OF STEEL SHALL BE Fe550D, Lowing min % Elongation @ 14.5%.
   GRADE OF CONCRETE
   FOR SUPER STRUCTURE [BEAM,COLUMN,WALL,SLAB] - M40
   FOR SUB-STRUCTURE [PILE,PILE CAP,PLINTH & GRADE BEAM] - M35
7. CLEAR COVER FOR

PILE	:60mm
PILECAP	:60mm
COLUMN	:40mm
BEAM	:30mm
SLAB	:25mm

SAFE LOAD CARRYING CAPACITY OF **BORED CAST-IN SITU PILES** RESTING IN COMPLETELY WEATHERED SOFT ROCK IS AS FOLLOWS FOR **500mm DIA PILE***

VERTICAL LOAD CARRYING CAPACITY - 1100kN
LATERAL LOAD CARRYING CAPACITY - 89kN*

SOIL REPORT NO:SM&FE 149/CONSULTANCY/TNSCB/2019 Dt: 30/10/2019.

PILE INTENT REFER SHEET NO F P002A FOR PILE NO- 1, 2, 3, 4, 5, 6, 7, 9, 10, 15, 16, 21, 23, 24, 25, 26, 28, 29, 32, 39, 40, 43, 45, 66, 414, 415, 416, 437, 70 & 67.

PILE INTENT REFER SHEET NO F P002 FOR REMAINING ALL PILES

8. LAP LENGTH OF BARS : 50Ø [M35],36Ø [M40]
   AT COLUMN LAPPING PROVIDE 100mm SPACING OF TIES.
9. IN CASE OF BEAM REINFORCEMENT, NO LAPPING SHALL BE ALLOWED IN FOLLOWING PLACES
(a) TOP ROD NEAR COLUMN, L/4 ON EITHER SIDES OF COLUMN
(b) TOP ROD OF CANTILEVER BEAM ALONG THE LENGTH AND ALSO DEVELOPMENT LENGTH, BEYOND COLUMN
(c) BOTTOM ROD AT MID SPAN OF BEAM
10. REMOVAL OF SHUTTERING / FORM WORK

(a)	COLUMN	: 24 HOURS
(b)	BEAM SIDES	: 24 HOURS
(c)	BEAM BOTTOM	: LESS THAN 6M SPAN : 14 DAYS
		: MORE THAN 6M SPAN : 28 DAYS
(d)	SLAB	: LESS THAN 4.5M SPAN : 14 DAYS
		: MORE THAN 4.5M SPAN : 28 DAYS

HOWEVER 7 DAYS STRENGTH OF CONCRETE SHOULD BE 65% OF THE TARGET STRENGTH, TO REMOVE FORM WORK.
11. THIS BUILDING IS DESIGNED FOR S+13 FLOORS
12. AS PER SOIL REPORT PILE FOUNDATION IS ADOPTED.
13. AAC BLOCKS TO BE USED FOR ALL MASONRY WORKS.
14. FLY ASH BRICKS TO BE USED FOR ALL MASONRY WALL BELOW BASEMENT

21/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

21/12/24.

23/12/24

Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	09-12-2024
R0	ISSUED FOR APPROVAL	17-09-2024

CLIENT: TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD, No. 5 Kamarajar Salai, Chennai - 600005,Tamil Nadu. Tel: 044-28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR: RAMALINGAM CONSTRUCTION COMPANY PVT LTD, #175/2 South State Bank Nagar, Chettipalayam,Erode - 638002,Tamil Nadu., Tel: 0424 2282369,E-mail ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT: METAPHOR

STRUCTURAL CONSULTANT: MERAKI STRUCTURE, COIMBATORE, TAMIL NADU 641035

PROJECT: CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK A (S+12),BLOCK B(S+13),BLOCK C (S+03), BLOCK D(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

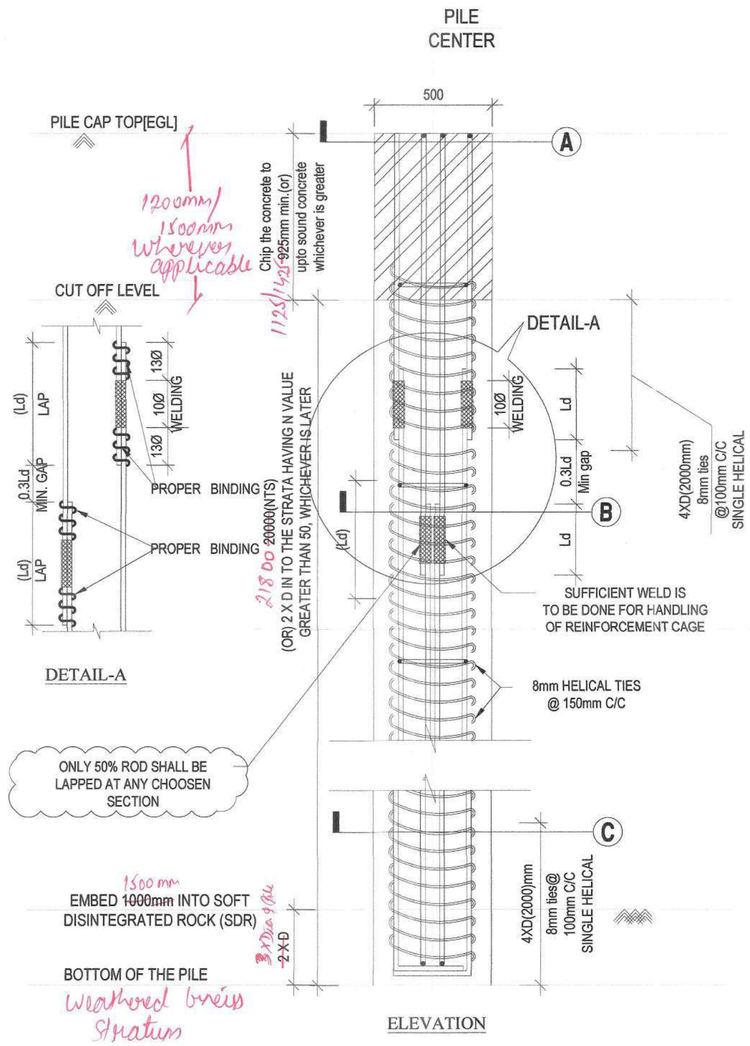
TITLE: BLOCK -B
PILE SECTION LAYOUT (BLOCK-B)

PAPER SIZE:	A3
DRAWN DATE:	17-09-2024
PROJECT NO:	MS23035_AT_B
SHEET NO:	F002A

12/16/2024 9:26:56 PM

GENERAL NOTE:

1. Ø - DIA. OF THE BAR
2. D - DIA. OF THE PILE
3. Ld - 50*DIA OF THE BAR

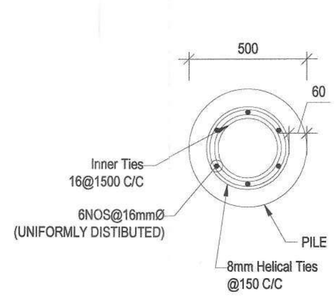


DETAIL-A

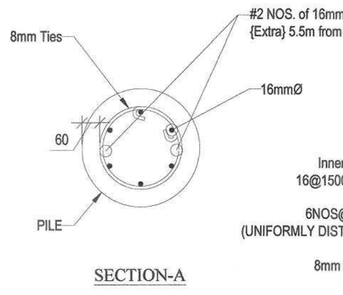
ELEVATION

PILE SECTION LAYOUT-BLOCK-B

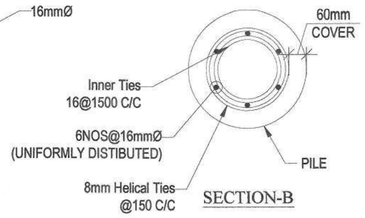
SCALE 1 : 35



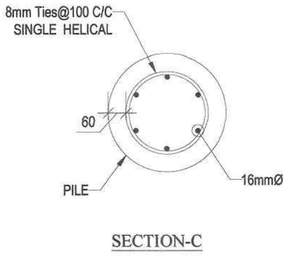
500mm Ø PILE PLAN



SECTION-A



SECTION-B



SECTION-C

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETER, UNLESS OTHERWISE SPECIFIED.
2. DRAWING SHOULD NOT BE SCALED, FOLLOW FIGURED DIMENSIONS.
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5. IF THERE IS ANY REVISION IN DRAWING, FURTHER CONSTRUCTION SHALL BE EXECUTED AS PER THE LATEST REVISED DRAWING, ON THE ISSUE OF LATEST REVISION.
6. GRADE OF STEEL SHALL BE Fe550D, having min Elongation of 14.5%
   GRADE OF CONCRETE
   FOR SUPER STRUCTURE [BEAM,COLUMN,WALL,SLAB] - M40
   FOR SUB-STRUCTURE [PILE,PILE CAP,PLINTH & GRADE BEAM] - M35
7. CLEAR COVER FOR

PILE	:60mm
PILECAP	:60mm
COLUMN	:40mm
BEAM	:30mm
SLAB	:25mm

SAFE LOAD CARRYING CAPACITY OF **BORED CAST-IN SITU PILES** RESTING IN ~~COMPLETELY~~ WEATHERED ~~SOFT ROCK~~ GNEISS STRATUM IS AS FOLLOWS FOR **500mm DIA PILE***

VERTICAL LOAD CARRYING CAPACITY - 1100kN
LATERAL LOAD CARRYING CAPACITY - 89kN*

SOIL REPORT NO:SM&FE 149/CONSULTANCY/TNSCB/2019, Dt: 30/10/2019.

PILE INTENT REFER SHEET NO F P002A FOR PILE NO- 1, 2, 3, 4, 5, 6, 7, 9, 10, 15, 16, 21, 23, 24, 25, 26, 28, 29, 32, 39, 40, 43, 45, 66, 414, 415, 416, 437, 70 to 67.

PILE INTENT REFER SHEET NO F P002 FOR REMAINING ALL PILES

8. LAP LENGTH OF BARS : 50Ø [M35],36Ø [M40]
   AT COLUMN LAPPING PROVIDE 100mm SPACING OF TIES.
9. IN CASE OF BEAM REINFORCEMENT, NO LAPPING SHALL BE ALLOWED IN FOLLOWING PLACES
(a) TOP ROD NEAR COLUMN, L/4 ON EITHER SIDES OF COLUMN
(b) TOP ROD OF CANTILEVER BEAM ALONG THE LENGTH AND ALSO DEVELOPMENT LENGTH, BEYOND COLUMN
(c) BOTTOM ROD AT MID SPAN OF BEAM
10. REMOVAL OF SHUTTERING / FORM WORK
(a) COLUMN : 24 HOURS
(b) BEAM SIDES : 24 HOURS
(c) BEAM BOTTOM : LESS THAN 6M SPAN : 14 DAYS
: MORE THAN 6M SPAN : 28 DAYS
(d) SLAB : LESS THAN 4.5M SPAN : 14 DAYS
: MORE THAN 4.5M SPAN : 28 DAYS

HOWEVER 7 DAYS STRENGTH OF CONCRETE SHOULD BE 65% OF THE TARGET STRENGTH, TO REMOVE FORM WORK.

11. THIS BUILDING IS DESIGNED FOR S+13 FLOORS
12. AS PER SOIL REPORT PILE FOUNDATION IS ADOPTED.
13. AAC BLOCKS TO BE USED FOR ALL MASONRY WORKS.
14. FLY ASH BRICKS TO BE USED FOR ALL MASONRY WALL BELOW BASEMENT

21/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

21/12/24.

23/12/24
Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

MERAKI STRUCTURE COIMBATORE

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	09-12-2024
R0	ISSUED FOR APPROVAL	17-09-2024

CLIENT: TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD, No. 5 Kamarajar Salai, Chennai - 600005,Tamil Nadu. Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR: RCCL — RAMALINGAM CONSTRUCTION COMPANY PVT LTD, #175/2 South State Bank Nagar, Chattipalayam,Erode - 638002,Tamil Nadu. Tel: 0424 2282389,Email ID: info@rcmailing.com.in

COMPREHENSIVE CONSULTANT: METAPHOR

STRUCTURAL CONSULTANT: MERAKI STRUCTURE, COIMBATORE, TAMIL NADU 641035

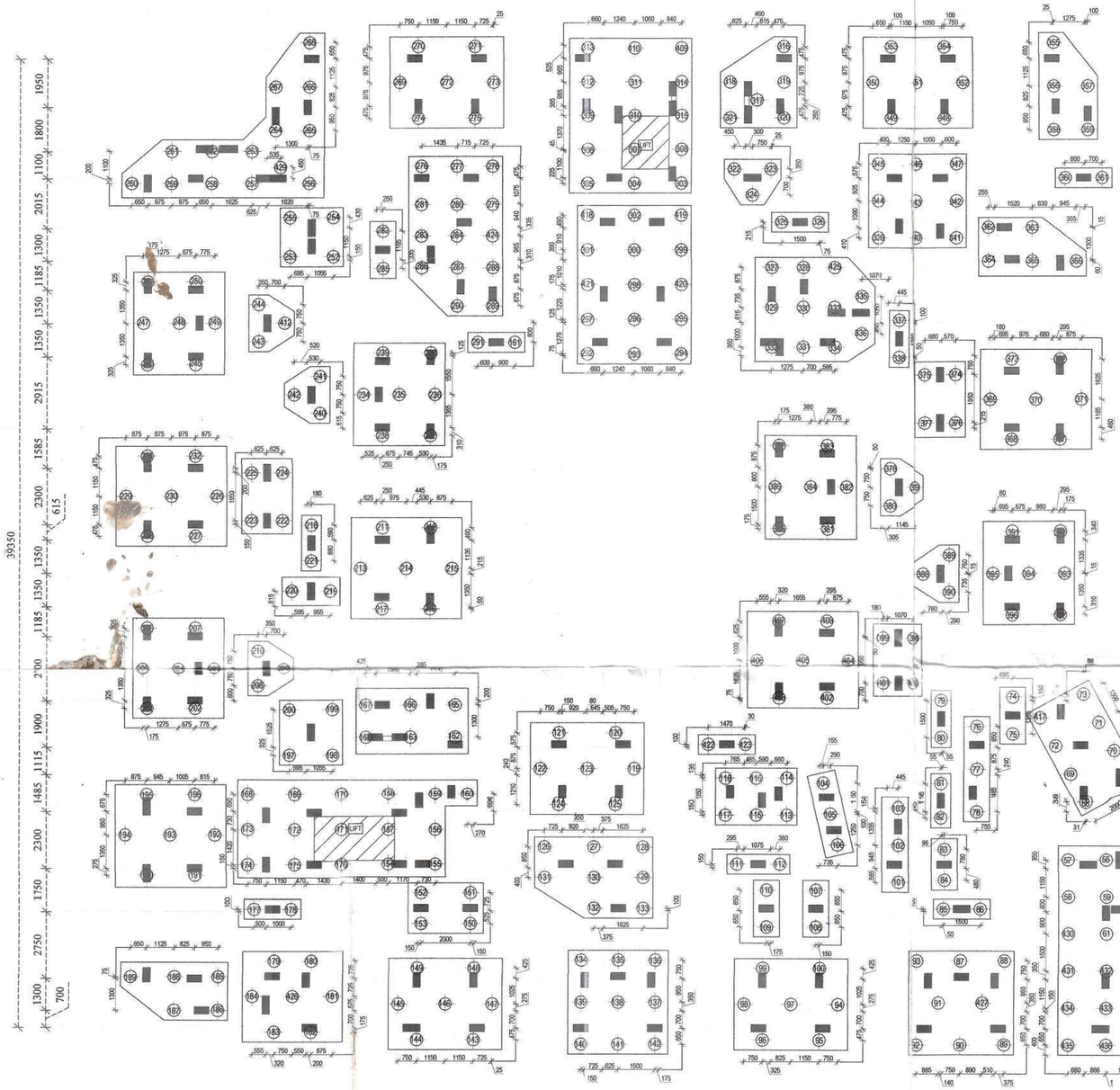
PROJECT: CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK A (S+12),BLOCK B(S+13),BLOCK C (S+03), BLOCK D(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

TITLE: BLOCK -B — PILE SECTION LAYOUT (BLOCK-B)

PAPER SIZE:	A3
DRAWN DATE:	17-09-2024
PROJECT NO:	MS23035_AT_B
SHEET NO:	F002

12/16/2024 9:26:56 PM



NOTES:-

PILE INTENT REFER SHEET NO P002A FOR PILE NO- 1, 2, 3, 4, 5, 6, 7, 9, 10, 15, 16, 21, 23, 24, 25, 26, 28, 29, 32, 39, 40, 43, 45, 66, 414, 415, 416, 437 ,70467.

PILE INTENT REFER SHEET NO P002 FOR REMAINING ALL PILES

-ALL PILES ARE 500MM DIAMETER

- LIFT PIT

21/12/2024
EXECUTIVE ENGINEER (P/C)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

21/12/24

23/12/24
Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

MERAKI STRUCTURE COIMBATORE

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	09-12-2024
R0	ISSUED FOR APPROVAL	17-09-2024

CLIENT:
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
No. 5 Kamarajar Salai,
Chennai - 600005,Tamil Nadu.
Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR
RCCL
RAMALINGAM CONSTRUCTION COMPANY PVT LTD
#175/2 South State Bank Nagar,
Chattipalayam,Erode - 638002,Tamil Nadu.
Tel: 0424 2282366,E-mail ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT
METAPHOR

STRUCTURAL CONSULTANT
MERAKI STRUCTURE,
COIMBATORE,
TAMIL NADU 641035

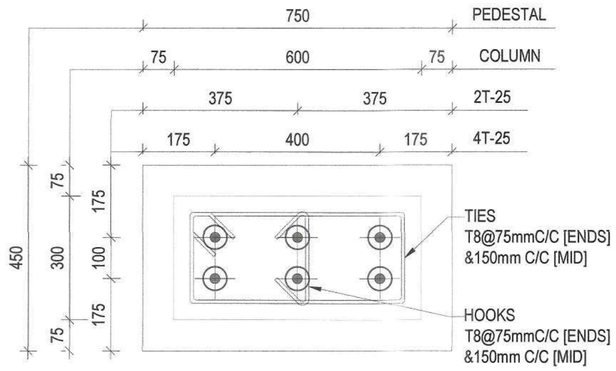
PROJECT:
CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK A (S+12),BLOCK B(S+13),BLOCK C (S+03), BLOCK D(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

TITLE: BLOCK -B
PILE LAYOUT
(BLOCK-B)
(SCALE 1:300)

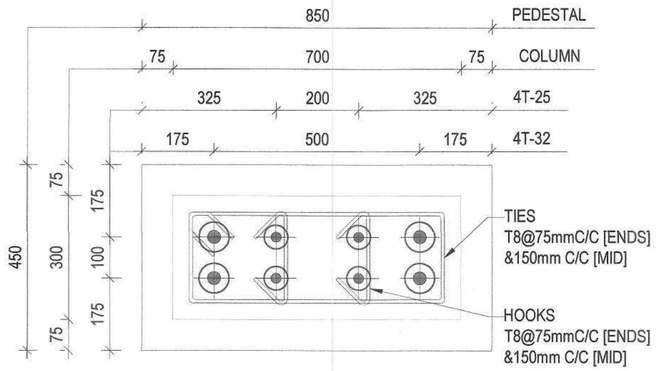
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DRAWN DATE:	17-09-2024
PROJECT NO:	MS23035_AT_B
SHEET NO:	F001

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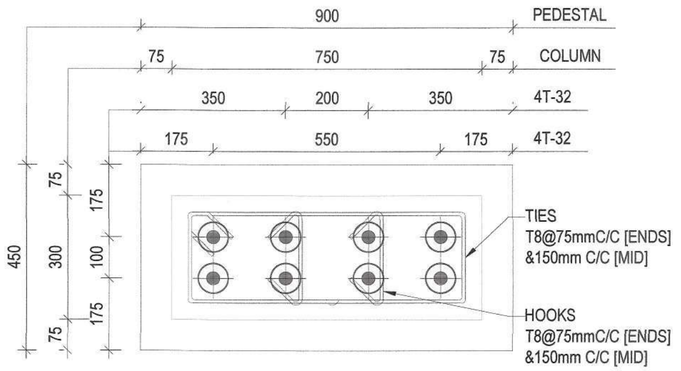
COLUMN TYPE-C1

SCALE 1:43



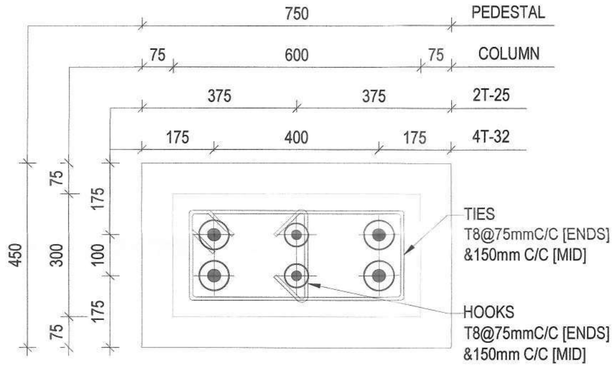
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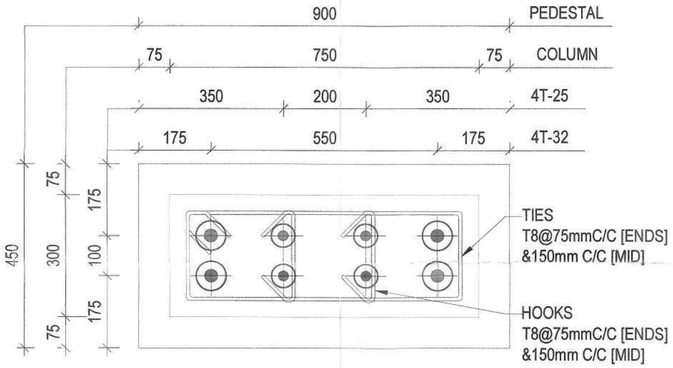
COLUMN TYPE-C5

SCALE 1:43



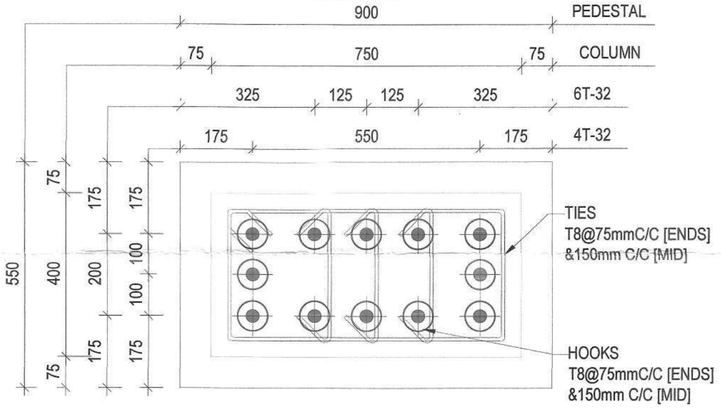
COLUMN TYPE-C2

SCALE 1:43



COLUMN TYPE-C4

SCALE 1:43



COLUMN TYPE-C6

SCALE 1:43



Thiagarajan 05/03/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

4/3/25

23.12.24
Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	09-12-2024
R0	ISSUED FOR APPROVAL	17-09-2024

CLIENT:
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
No.5 Kamarajar Salai,
Chennai - 600005,Tamil Nadu.
Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR
RAMALINGAM CONSTRUCTION COMPANY PVT LTD
#175/2 South State Bank Nagar,
Chettipalayam,Erode - 638002,Tamil Nadu.
Tel: 0424 2262369,Email ID: info@ramalingam.in
RCCL

COMPREHENSIVE CONSULTANT
METAPHOR

STRUCTURAL CONSULTANT
MERAKI STRUCTURE,
COIMBATORE,
TAMIL NADU 641035

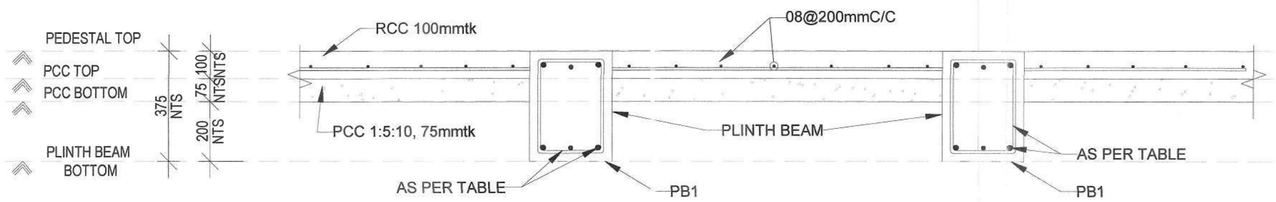
PROJECT:
CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK A (S+12),BLOCK B(S+13),BLOCK C (S+03), BLOCK D(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

TITLE: BLOCK -B
DOWEL LAYOUT
(BLOCK-B)
(SCALE 1:20)

PAPER SIZE:	A3
DRAWN DATE:	17-09-2024
PROJECT NO:	MS23035_AT_B
SHEET NO:	F007A

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SCREEDING DETAIL

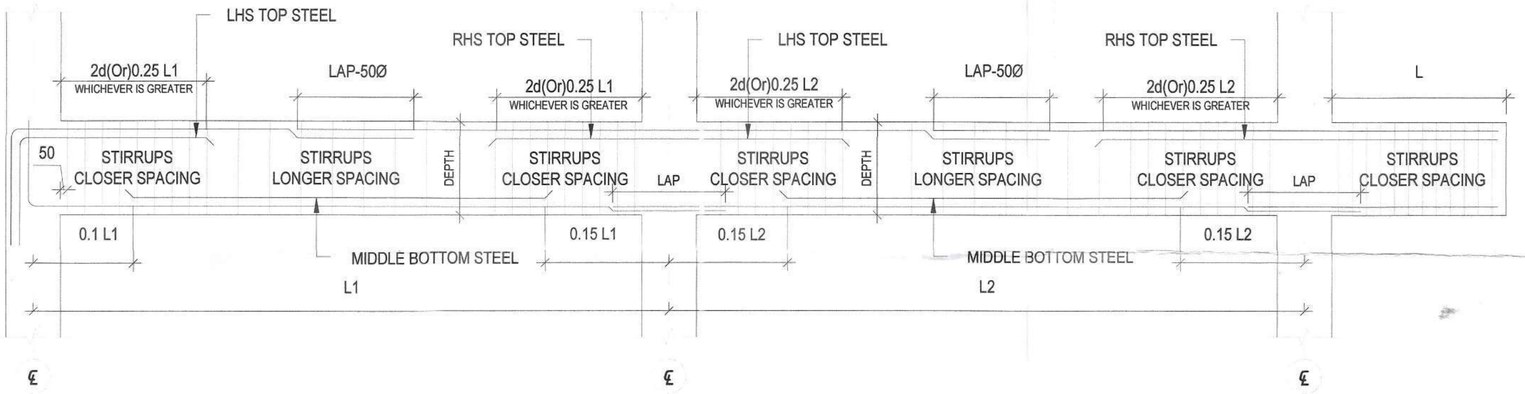
(SCALE 1:20)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETER, UNLESS OTHERWISE SPECIFIED.
2. DRAWING SHOULD NOT BE SCALED, FOLLOW FIGURED DIMENSIONS.
3. ANY DISCREPANCY IN DRAWING SHALL BE BRING TO NOTICE OF STRUCTURAL CONSULTANT BEFORE EXECUTION OF WORK.
4. THIS DRAWING SHOULD BE READ ALONG WITH THE RELEVANT ARCHITECTURAL DRAWING.
5. IF THERE IS ANY REVISION IN DRAWING, FURTHER CONSTRUCTION SHALL BE EXECUTED AS PER THE LATEST REVISED DRAWING, ON THE ISSUE OF LATEST REVISION.
6. GRADE OF STEEL SHALL BE Fe500D/550D ,
   GRADE OF CONCRETE
   FOR SUPER STRUCTURE [BEAM,COLUMN,WALL,SLAB] - M40
   FOR SUB-STRUCTURE [PILE,PILE CAP,PLINTH & GRADE BEAM] - M35
7. CLEAR COVER FOR
   PILE :60mm
   PILECAP :60mm
   COLUMN :40mm
   BEAM :30mm
   SLAB :25mm
8. LAP LENGTH OF BARS : 50Ø [M35],36Ø [M40]
   AT COLUMN LAPPING PROVIDE 100mm SPACING OF TIES.
9. IN CASE OF BEAM REINFORCEMENT, NO LAPPING SHALL BE ALLOWED IN FOLLOWING PLACES
(a) TOP ROD NEAR COLUMN, L/4 ON EITHER SIDES OF COLUMN
(b) TOP ROD OF CANTILEVER BEAM ALONG THE LENGTH AND ALSO DEVELOPMENT LENGTH, BEYOND COLUMN
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: MORE THAN 6M SPAN : 28 DAYS
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HOWEVER 7 DAYS STRENGTH OF CONCRETE SHOULD BE 65% OF THE TARGET STRENGTH, TO REMOVE FORM WORK.

11. THIS BUILDING IS DESIGNED FOR S+13 FLOORS
12. AS PER SOIL REPORT PILE FOUNDATION IS ADOPTED.
13. AAC BLOCKS TO BE USED FOR ALL MASONRY WORKS.
14. FLY ASH BRICKS TO BE USED FOR ALL MASONRY WALL BELOW BASEMENT



TYPICAL LAPPING & CURTAILMENT DETAILS OF BEAM

PLINTH BEAM DETAILS

S.NO.	BEAM ID	BEAM SIZE(mm)		TOP REINFORCEMENT		BOTTOM REINFORCEMENT		SIDE FACE	STIRRUPS	
		WIDTH	DEPTH	STRAIGHT BAR	CURTAILMENT	STRAIGHT BAR	CURTAILMENT		END	MIDDLE
1	PB1	300	375	#2-T16	-	#2-T16	-	-	2L-T8@100mmC/C	2L-T8@150mmC/C
2	PB2	300	375	#2-T16	-	#2-T16	-		2L-T10@100mmC/C	2L-T10@100mmC/C
3	PB3	300	375	#2-T16	-	#2-T20+#2-T16	-		3L-T10@75mmC/C	3L-T10@75mmC/C

Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	09-12-2024
R0	ISSUED FOR APPROVAL	17-09-2024

CLIENT: TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD, No. 5 Kamarajar Salai, Chennai - 600005,Tamil Nadu. Tel: 0442-28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR: RAMALINGAM CONSTRUCTION COMPANY PVT LTD, #175/2 South State Bank Nagar, Chattipalayam,Erode - 638302,Tamil Nadu. Tel: 0424 2282389,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT: METAPHOR

STRUCTURAL CONSULTANT: MERAKI STRUCTURE, COIMBATORE, TAMIL NADU 641035

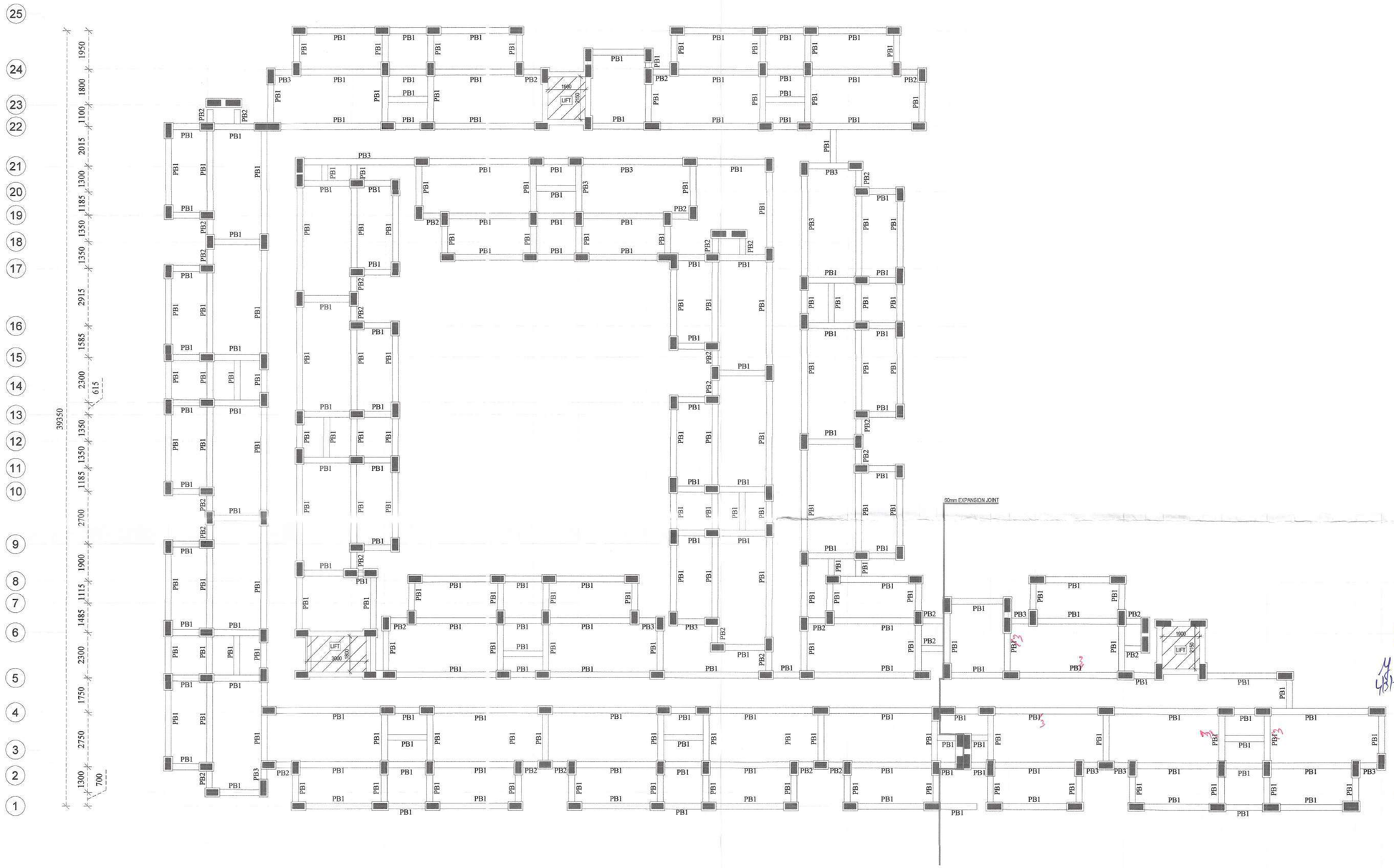
PROJECT: CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK A (S+12),BLOCK B(S+13),BLOCK C (S+03), BLOCK D(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

TITLE: BLOCK -B
PLINTH BEAM DETAILS LAYOUT (BLOCK-B)
(SCALE 1:300)

PAPER SIZE:	A3
DRAWN DATE:	17-09-2024
PROJECT NO:	MS23035_AT_B
SHEET NO:	F008A

12/19/2024 9:26:56 PM



EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005

Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	09-12-2024
R0	ISSUED FOR APPROVAL	17-09-2024

CLIENT:
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
No.5 Kamarajar Salai,
Chennai - 600005,Tamil Nadu.
Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR
RCCL
RAMALINGAM CONSTRUCTION COMPANY PVT LTD
#1752 South State Bank Nagar,
Chettipalayam,Erode - 638002,Tamil Nadu.
Tel: 0424 2262389,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT
METAPHOR

STRUCTURAL CONSULTANT
MERAKI STRUCTURE,
COIMBATORE,
TAMIL NADU 641035

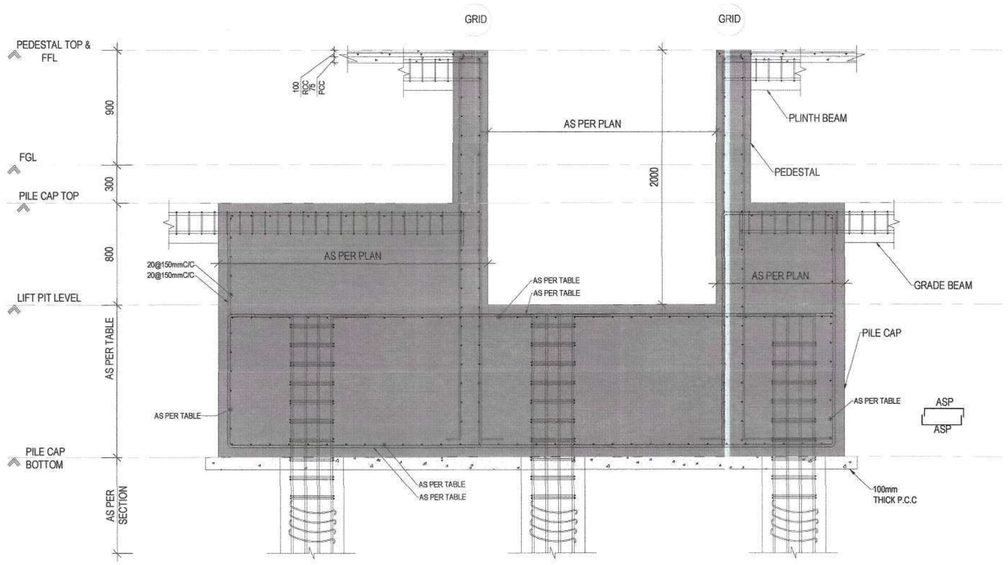
PROJECT:
CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK A (S+12),BLOCK B(S+13),BLOCK C (S+03), BLOCK D(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

TITLE: BLOCK -B
PLINTH BEAM LAYOUT (BLOCK-B)
(SCALE 1:300)

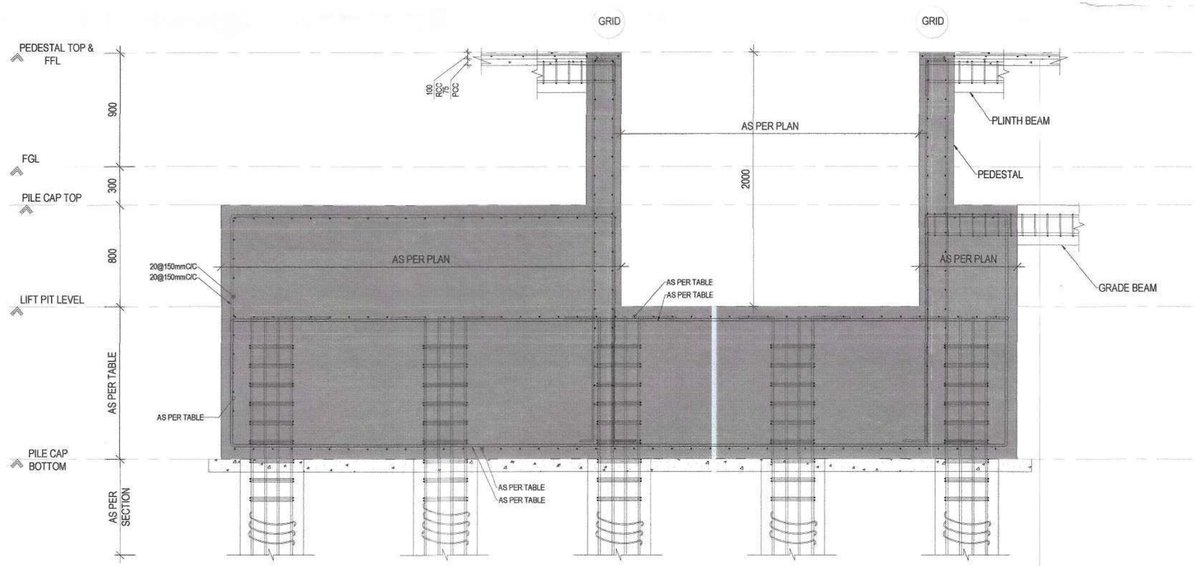
PAPER SIZE:	A3
DRAWN DATE:	17-09-2024
PROJECT NO:	MS23035_AT_B
SHEET NO:	F008

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LIFT PIT SECTION-1

SCALE 1:65



LIFT PIT SECTION-2

SCALE 1:65

Dr.K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	09-12-2024
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TURNKEY DESIGN AND BUILD CONTRACTOR: RAMALINGAM CONSTRUCTION COMPANY PVT LTD, #17/52 South State Bank Nagar, Chettipalayam,Erode - 638302,Tamil Nadu. Tel: 0424 2282389,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT: METAPHOR

STRUCTURAL CONSULTANT: MERAKI STRUCTURE, COIMBATORE, TAMIL NADU 641035

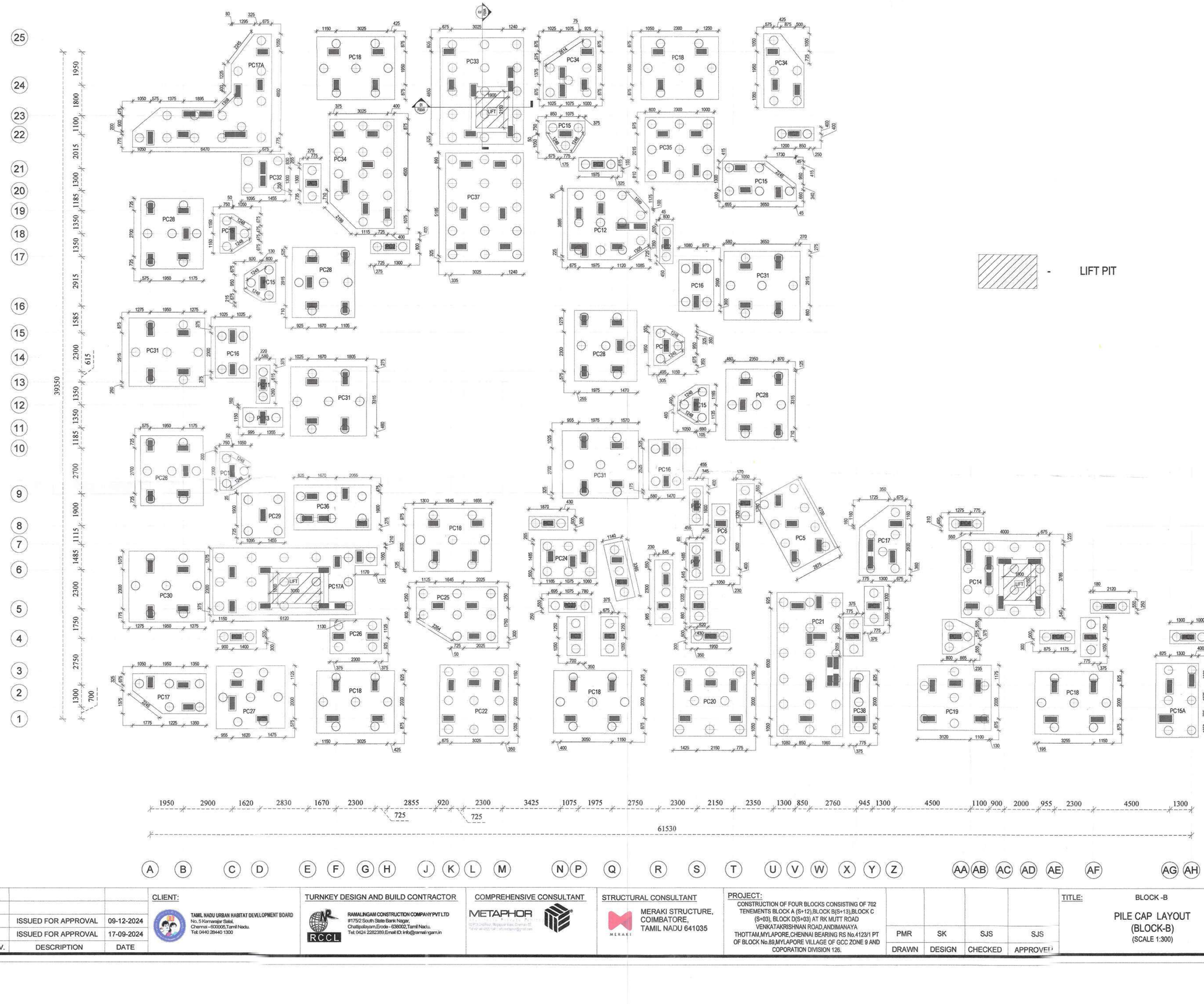
PROJECT: CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK A (S+12),BLOCK B(S+13),BLOCK C (S+03), BLOCK D(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

TITLE: BLOCK -B
PILE CAP SECTION LAYOUT (BLOCK-B)

PAPER SIZE:	A3
DRAWN DATE:	17-09-2024
PROJECT NO:	MS23035_AT_B
SHEET NO:	F004A

12/16/2024 9:26:56 PM



- LIFT PIT

EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

Dr. K. P. JAYA
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REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	09-12-2024
R0	ISSUED FOR APPROVAL	17-09-2024

CLIENT:
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
No. 5 Kamarajar Salai,
Chennai - 600005,Tamil Nadu.
Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR
RAMALINGAM CONSTRUCTION COMPANY PVT LTD
#175/2 South State Bank Nagar,
Chattipalayam,Erode - 638002,Tamil Nadu.
Tel: 0424 2282389,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT
METAPHOR

STRUCTURAL CONSULTANT
MERAKI STRUCTURE,
COIMBATORE,
TAMIL NADU 641035

PROJECT:
CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK A (S+12),BLOCK B(S+13),BLOCK C (S+03), BLOCK D(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

TITLE: BLOCK -B
PILE CAP LAYOUT
(BLOCK-B)
(SCALE 1:300)

PAPER SIZE:	A3
DRAWN DATE:	17-09-2024
PROJECT NO:	MS23035_AT_B
SHEET NO:	F003

12/16/2024 9:26:58 PM

PILE CAP DETAILS

PILE CAP ID	PILE CAP SIZE			NO OF BARS (Bottom / Shorter span / Longer span)	SHORTER SPAN		LONGER SPAN		SIDE FACE REINFORCEMENT
	LENGTH (L)	BREADTH (B)	DEPTH (D)		BOTTOM REINFORCEMENT	TOP REINFORCEMENT	BOTTOM REINFORCEMENT	TOP REINFORCEMENT	
PC1	2300	1150	1500	9/18	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC2	2300	800	1500	6/8	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC3	2300	1050	1500	8/18	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC3A	2300	1150	1500	9/13	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC4	2050	800	1500	6/16	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC5	4700	2875	1500	29/66	20@100mm C/C	20@100mm C/C	20@100mm C/C	20@100mm C/C	12@150mm C/C
PC6	4250	1050	1500	8/34	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC7	2190	800	1500	6/17	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC8	2100	1050	1500	8/16	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC9	3815	1075	1500	9/30	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC10	3395	1140	1500	9/27	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC11	2250	800	1500	8/18	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC12	ASP	ASP	1200	-	20@100mm C/C	20@125mm C/C	20@100mm C/C	20@125mm C/C	12@150mm C/C
PC13	2350	1150	1500	09/18	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC14	5225	4550	1200	46/52	20@100mm C/C	20@125mm C/C	20@100mm C/C	20@125mm C/C	12@150mm C/C
PC15	ASP	ASP	1200	-	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C
PC15A	4350	2525	1200	20/34	20@125mm C/C	20@175mm C/C	20@125mm C/C	20@175mm C/C	12@150mm C/C
PC16	3050	2050	1200	12/17	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C
PC17	ASP	ASP	1200	-	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C
PC17A	ASP	ASP	1200	-	20@100mm C/C	20@125mm C/C	20@100mm C/C	20@125mm C/C	12@150mm C/C
PC18	4600	3700	1200	21/27	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C
PC19	4350	3850	1200	22/25	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C
PC20	4350	4200	1200	24/25	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C
PC21	8475	3890	1200	39/84	20@100mm C/C	20@100mm C/C	20@100mm C/C	20@100mm C/C	12@150mm C/C
PC22	4200	4050	1200	23/24	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C
PC23	2550	800	1200	5/14	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C
PC24	3300	2300	1200	13/19	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C
PC25	ASP	ASP	1200	-	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C
PC26	3050	2050	1200	12/17	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C
PC27	4050	3700	1200	21/23	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C
PC28	4150	3700	1200	21/24	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C
PC29	2650	2550	1200	15/16	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C
PC30	4500	4150	1200	24/27	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C
PC31	4500	4050	1200	23/27	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C
PC32	2550	2380	1200	14/15	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C
PC33	6280	4940	1200	49/39	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC34	ASP	ASP	1200	-	20@125mm C/C	20@125mm C/C	20@125mm C/C	20@125mm C/C	12@150mm C/C
PC35	4100	3800	1200	22/23	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C
PC36	4550	2650	1200	25/45	20@100mm C/C	20@125mm C/C	20@100mm C/C	20@125mm C/C	12@150mm C/C
PC37	6400	4600	1200	26/36	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C
PC38	3700	1150	1200	7/21	20@175mm C/C	20@175mm C/C	20@175mm C/C	20@175mm C/C	12@150mm C/C

NOTES:

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6. GRADE OF STEEL SHALL BE Fe500D/550D ,
   GRADE OF CONCRETE
   FOR SUPER STRUCTURE [BEAM,COLUMN,WALL,SLAB] - M40
   FOR SUB-STRUCTURE [PILE,PILE CAP,PLINTH & GRADE BEAM] - M35
7. CLEAR COVER FOR
   PILE :60mm
   PILECAP :60mm
   COLUMN :40mm
   BEAM :30mm
   SLAB :25mm
8. LAP LENGTH OF BARS : 50Ø [M35],36Ø [M40]
   AT COLUMN LAPPING PROVIDE 100mm SPACING OF TIES.
9. IN CASE OF BEAM REINFORCEMENT, NO LAPPING SHALL BE ALLOWED IN FOLLOWING PLACES
(a) TOP ROD NEAR COLUMN, L/4 ON EITHER SIDES OF COLUMN
(b) TOP ROD OF CANTILEVER BEAM ALONG THE LENGTH AND ALSO DEVELOPMENT LENGTH, BEYOND COLUMN
(c) BOTTOM ROD AT MID SPAN OF BEAM
10. REMOVAL OF SHUTTERING / FORM WORK
(a) COLUMN : 24 HOURS
(b) BEAM SIDES : 24 HOURS
(c) BEAM BOTTOM : LESS THAN 6M SPAN : 14 DAYS
: MORE THAN 6M SPAN : 28 DAYS
(d) SLAB : LESS THAN 4.5M SPAN : 14 DAYS
: MORE THAN 4.5M SPAN : 28 DAYS

HOWEVER 7 DAYS STRENGTH OF CONCRETE SHOULD BE 65% OF THE TARGET STRENGTH, TO REMOVE FORM WORK.

11. THIS BUILDING IS DESIGNED FOR S+13 FLOORS
12. AS PER SOIL REPORT PILE FOUNDATION IS ADOPTED.
13. AAC BLOCKS TO BE USED FOR ALL MASONRY WORKS.
14. FLY ASH BRICKS TO BE USED FOR ALL MASONRY WALL BELOW BASEMENT

EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	09-12-2024
R0	ISSUED FOR APPROVAL	17-09-2024

CLIENT: TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD, No. 5 Kamarajar Salai, Chennai - 600005,Tamil Nadu. Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR: RAMALINGAM CONSTRUCTION COMPANY PVT LTD, #175/2 South State Bank Nagar, Chattipalayam,Erode - 638002,Tamil Nadu. Tel: 0424 2282389,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT: METAPHOR

STRUCTURAL CONSULTANT: MERAKI STRUCTURE, COIMBATORE, TAMIL NADU 641035

PROJECT: CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK A (S+12),BLOCK B(S+13),BLOCK C (S+03), BLOCK D(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

TITLE: BLOCK -B
PILE CAP DETAILS LAYOUT (BLOCK-B)

PAPER SIZE:	A3
DRAWN DATE:	17-09-2024
PROJECT NO:	MS23035_AT_B
SHEET NO:	F003A

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GRADE BEAM DETAILS

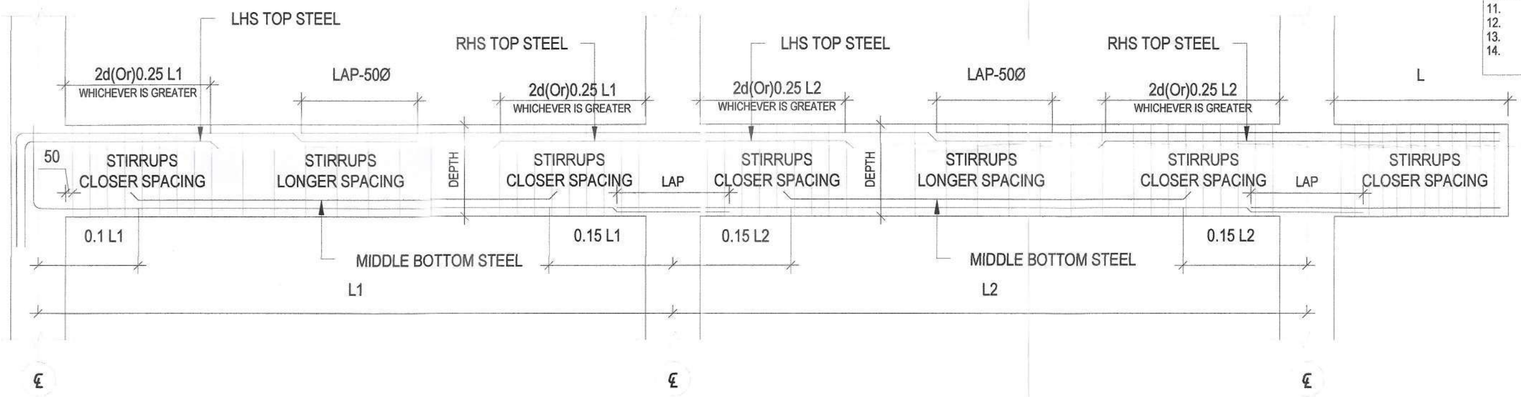
S.NO.	BEAM ID	BEAM SIZE(mm)		TOP REINFORCEMENT		BOTTOM REINFORCEMENT		SIDE FACE	STIRRUPS	
		WIDTH	DEPTH	STRAIGHT BAR	CURTAILMENT	STRAIGHT BAR	CURTAILMENT		END	MIDDLE
1	GB1	300	450	#2-T16		#2-T16		-	2L-T8@100mmC/C	2L-T8@100mmC/C
2	GB2	300	450	#2-T16 + #1-T12		#2-T16 + #1-T12		-	3L-T10@75mmC/C	3L-T10@75mmC/C
3	GB3	300	450	#2-T16 + #1-T12		#2-T16 + #1-T12		-	3L-T10@100mmC/C	3L-T10@100mmC/C
4	GB4	300	450	#4-T16		#4-T16		-	4L-T10@75mmC/C	4L-T10@75mmC/C
5	GB5	600	600	#4-T20		#4-T20		-	4L-T10@75mmC/C	4L-T10@75mmC/C
6	GB6	300	450	#4-T20		#4-T20		-	3L-T10@75mmC/C	3L-T10@75mmC/C

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   FOR SUB-STRUCTURE [PILE,PILE CAP,PLINTH & GRADE BEAM] - M35
7. CLEAR COVER FOR
   PILE :60mm
   PILECAP :60mm
   COLUMN :40mm
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8. LAP LENGTH OF BARS : 50Ø [M35],36Ø [M40]
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: MORE THAN 4.5M SPAN : 28 DAYS

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TYPICAL LAPPING & CURTAILMENT DETAILS OF BEAM

- GRADE BEAM

- LIFT PIT

EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	09-12-2024
R0	ISSUED FOR APPROVAL	17-09-2024

CLIENT: TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD, No. 5 Kamarajar Salai, Chennai - 600005,Tamil Nadu. Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR: RAMALINGAM CONSTRUCTION COMPANY PVT LTD, #17/52 South State Bank Nagar, Chettipalayam,Erode - 638002,Tamil Nadu. Tel: 0424 2282389,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT: METAPHOR

STRUCTURAL CONSULTANT: MERAKI STRUCTURE, COIMBATORE, TAMIL NADU 641035

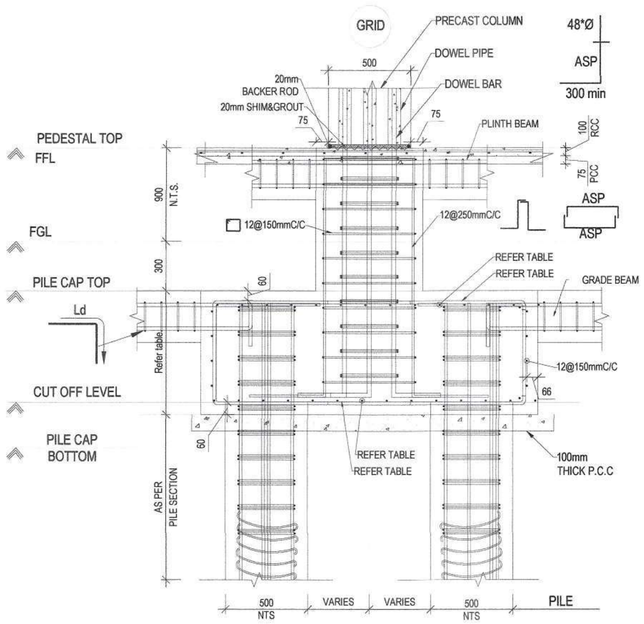
PROJECT: CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK A (S+12),BLOCK B(S+13),BLOCK C (S+03), BLOCK D(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

TITLE: BLOCK -B
GRADE BEAM DETAILS LAYOUT (BLOCK-B)

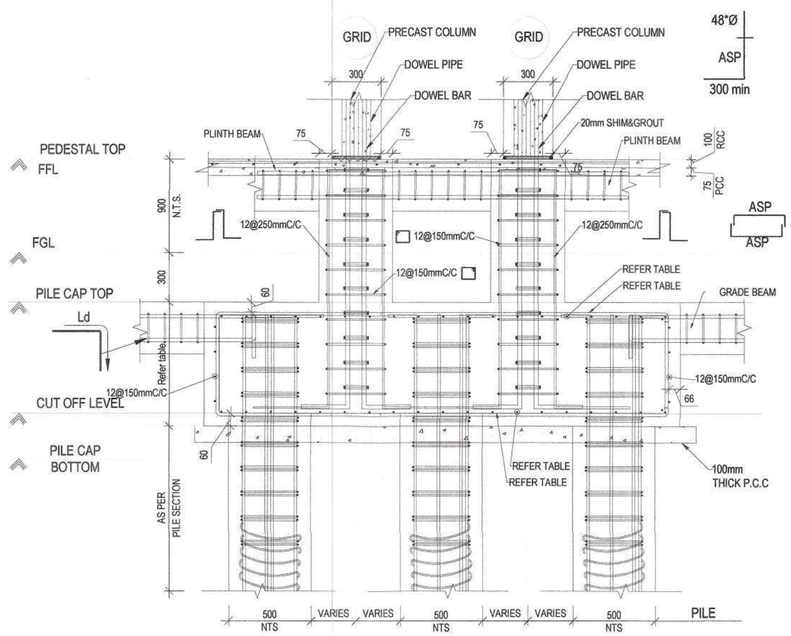
PAPER SIZE:	A3
DRAWN DATE:	17-09-2024
PROJECT NO:	MS23035_AT_B
SHEET NO:	F005A

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TYPICAL PILE CAP SECTION

SCALE 1 : 50



TYPICAL PILE CAP SECTION

SCALE 1 : 50

NOTES:

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   FOR SUB-STRUCTURE [PILE,PILE CAP,PLINTH & GRADE BEAM] - M35
7. CLEAR COVER FOR

PILE	:60mm
PILECAP	:60mm
COLUMN	:40mm
BEAM	:30mm
SLAB	:25mm

8. LAP LENGTH OF BARS : 50Ø [M35],36Ø [M40]
   AT COLUMN LAPPING PROVIDE 100mm SPACING OF TIES.
9. IN CASE OF BEAM REINFORCEMENT, NO LAPPING SHALL BE ALLOWED IN FOLLOWING PLACES

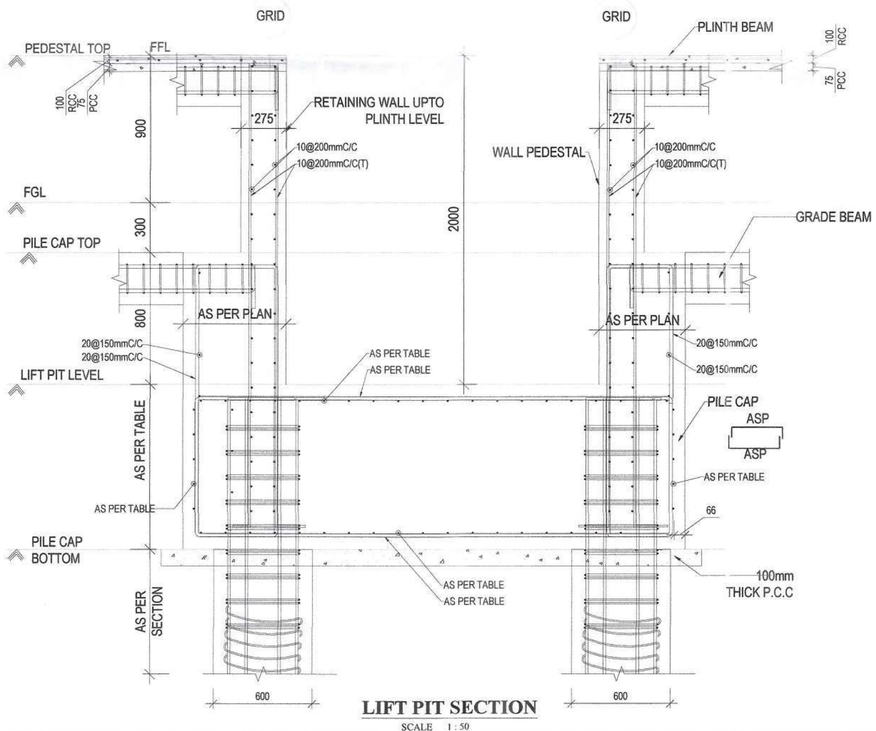
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(c) BOTTOM ROD AT MID SPAN OF BEAM

10. REMOVAL OF SHUTTERING / FORM WORK

(a)	COLUMN	: 24 HOURS
(b)	BEAM SIDES	: 24 HOURS
(c)	BEAM BOTTOM	: LESS THAN 6M SPAN : 14 DAYS
		: MORE THAN 6M SPAN : 28 DAYS
(d)	SLAB	: LESS THAN 4.5M SPAN : 14 DAYS
		: MORE THAN 4.5M SPAN : 28 DAYS

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LIFT PIT SECTION

SCALE 1 : 50

EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
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5, KAMARAJAR SALAI, CHENNAI-600 005.
05/03/25

Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.
28/12/24

4/3/25

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	09-12-2024
R0	ISSUED FOR APPROVAL	17-09-2024

CLIENT: TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD, No. 5 Kamarajar Salai, Chennai - 600005, Tamil Nadu. Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR: RAMALINGAM CONSTRUCTION COMPANY PVT LTD, #175/2 South State Bank Nagar, Chattipalayam,Erode - 638002,Tamil Nadu. Tel: 0424 2282389,Email ID: info@ramalingam.in

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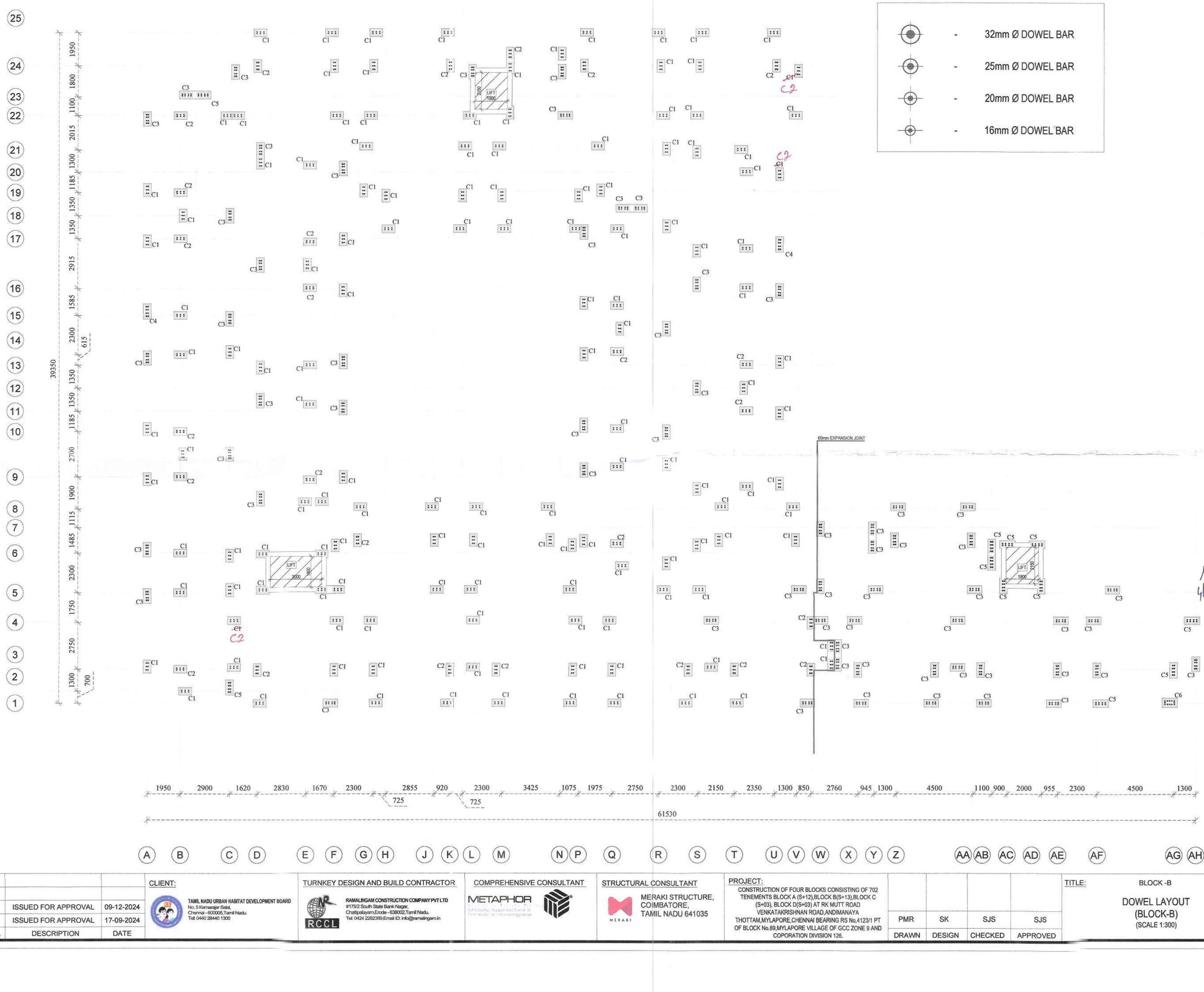
PROJECT: CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK A (S+12),BLOCK B(S+13),BLOCK C (S+03), BLOCK D(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

TITLE: BLOCK -B
PILE CAP SECTION LAYOUT (BLOCK-B)

PAPER SIZE:	A3
DRAWN DATE:	17-09-2024
PROJECT NO:	MS23035_AT_B
SHEET NO:	F004

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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

Dr. K. P. JAYA
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Anna University, Chennai - 600 025.

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	09-12-2024
R0	ISSUED FOR APPROVAL	17-09-2024

CLIENT: TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD, No. 5 Kamarajar Salai, Chennai - 600005,Tamil Nadu. Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR: RAMALINGAM CONSTRUCTION COMPANY PVT LTD, #175/2 South State Bank Nagar, Chattipalayam,Erode - 638002,Tamil Nadu. Tel: 0424 2282289,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT: METAPHOR

STRUCTURAL CONSULTANT: MERAKI STRUCTURE, COIMBATORE, TAMIL NADU 641035

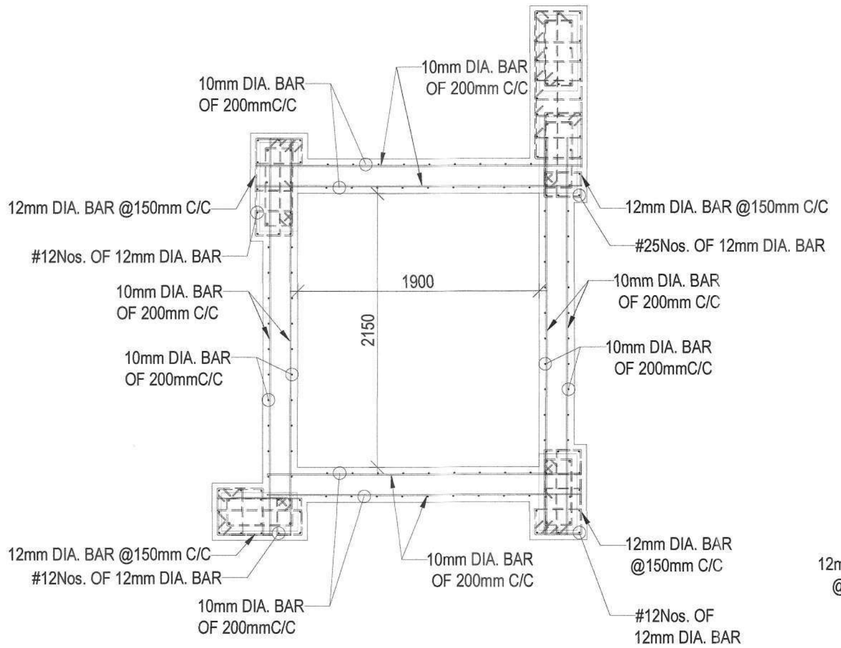
PROJECT: CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK A (S+12),BLOCK B(S+13),BLOCK C (S+03), BLOCK D(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

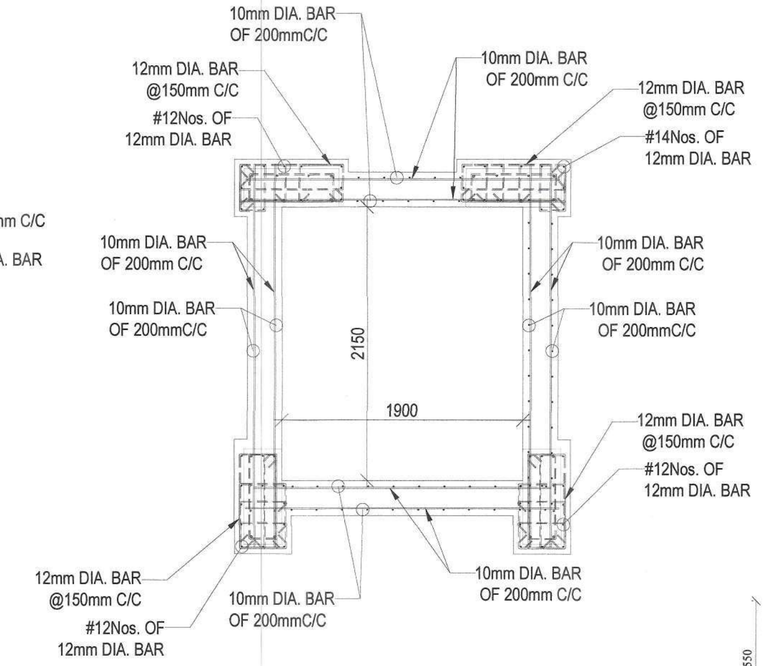
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DOWEL LAYOUT (BLOCK-B)
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PAPER SIZE:	A3
DRAWN DATE:	17-09-2024
PROJECT NO:	MS23035_AT_B
SHEET NO:	F007

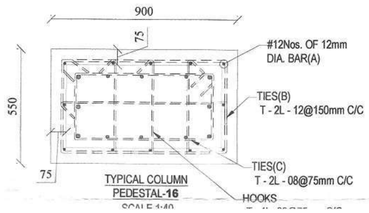
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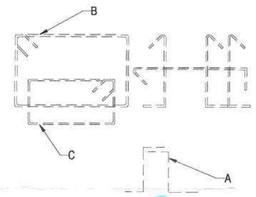
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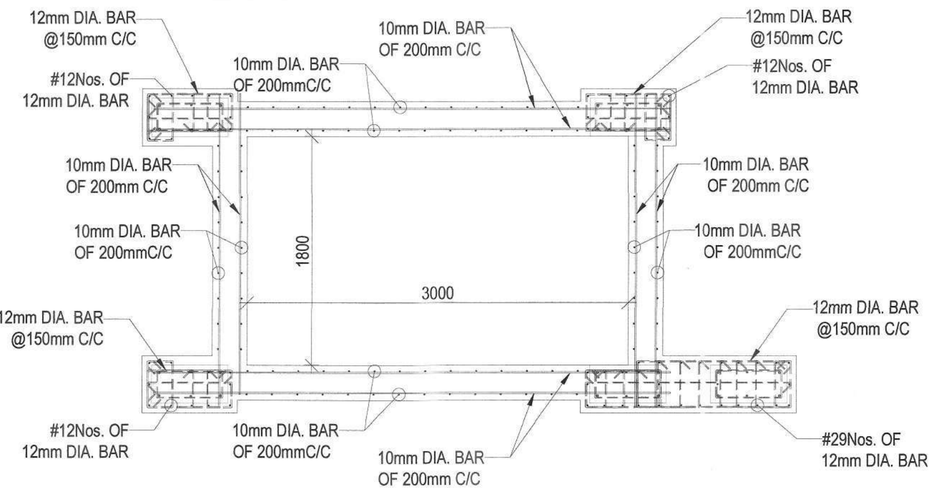


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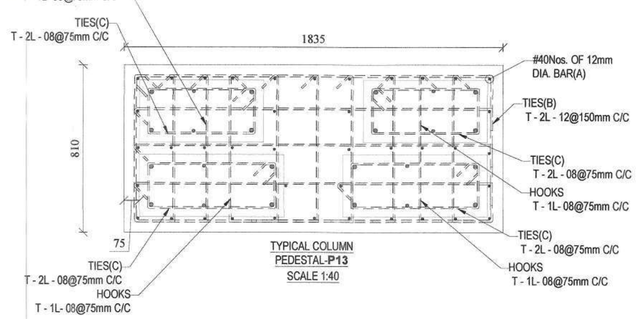


TYPICAL COLUMN
PEDESTAL-**16**
SCALE 1:40

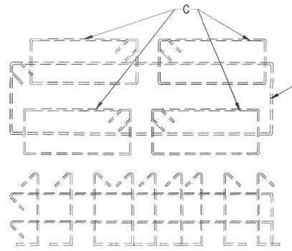


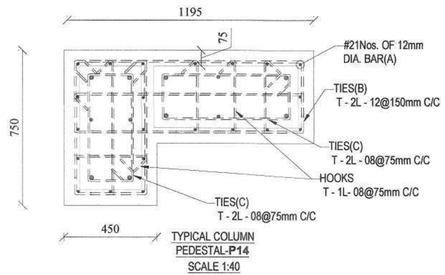


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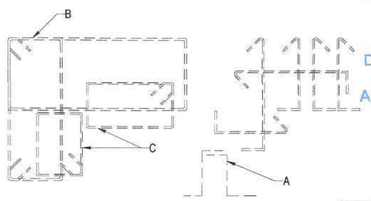


TYPICAL COLUMN
PEDESTAL-**P13**
SCALE 1:40





TYPICAL COLUMN
PEDESTAL-**P14**
SCALE 1:40



EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	09-12-2024
R0	ISSUED FOR APPROVAL	17-09-2024

CLIENT: TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD, No. 5 Kamarajar Salai, Chennai - 600005,Tamil Nadu. Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR: RAMALINGAM CONSTRUCTION COMPANY PVT LTD, #175/2 South State Bank Nagar, Chattipalayam,Erode - 638002,Tamil Nadu. Tel: 0424 2282389,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT: METAPHOR

STRUCTURAL CONSULTANT: MERAKI STRUCTURE, COIMBATORE, TAMIL NADU 641035

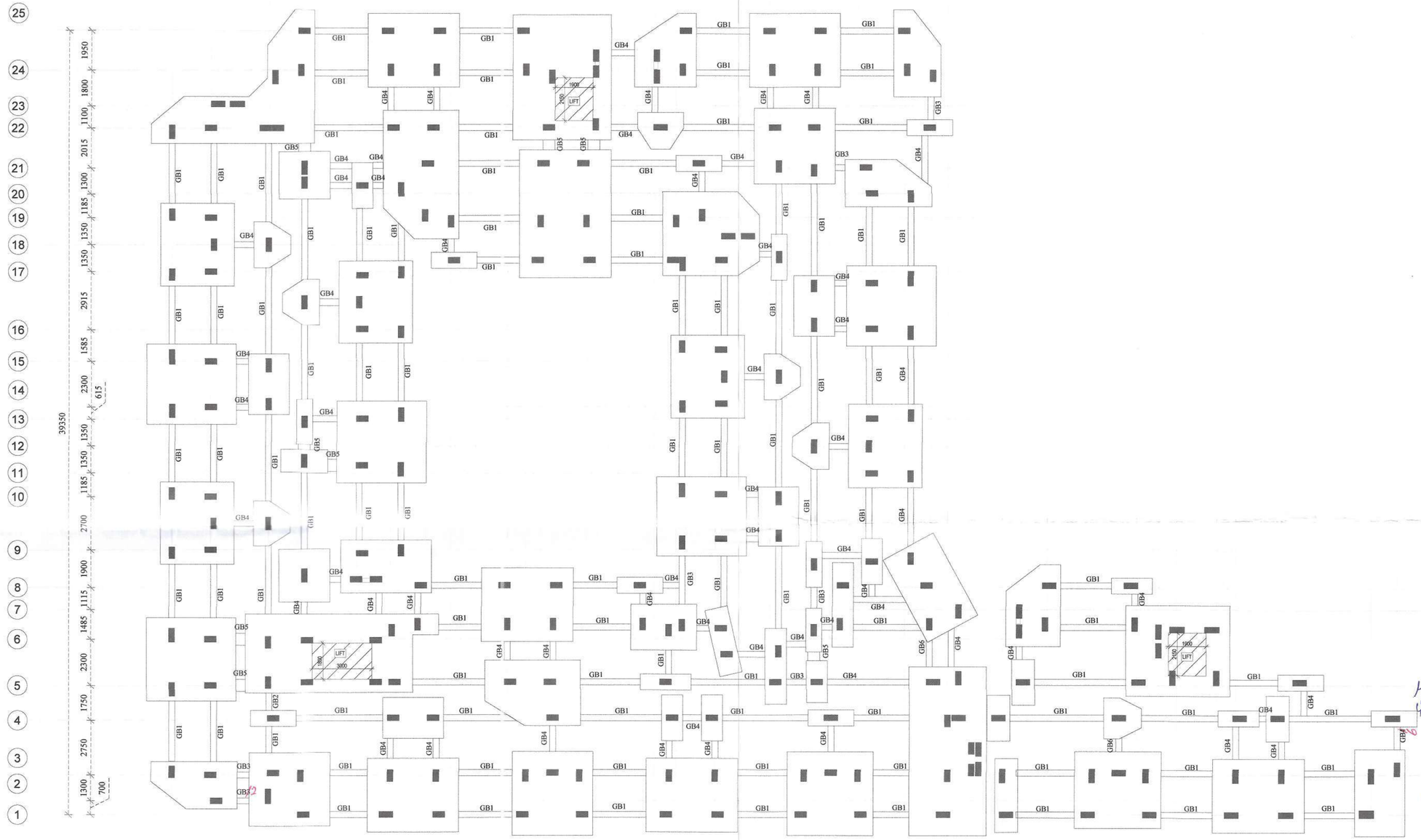
PROJECT: CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK A (S+12),BLOCK B(S+13),BLOCK C (S+03), BLOCK D(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

TITLE: BLOCK -B
PEDESTAL SECTION LAYOUT (BLOCK-B)

PAPER SIZE:	A3
DRAWN DATE:	17-09-2024
PROJECT NO:	MS23035_AT_B
SHEET NO:	F006B

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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
05/03/25

23.12.24

Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

MERAKI STRUCTURE COIMBATORE

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	09-12-2024
R0	ISSUED FOR APPROVAL	17-09-2024

CLIENT:
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
No. 5 Kamarajar Salai,
Chennai - 600005,Tamil Nadu.
Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR
RCCL
RAMALINGAM CONSTRUCTION COMPANY PVT LTD
#17/52,South State Bank Nagar,
Chattipalayam,Erode - 638002,Tamil Nadu.
Tel: 0424 2282389,Email ID: info@ramaling.um.in

COMPREHENSIVE CONSULTANT
METAPHOR

STRUCTURAL CONSULTANT
MERAKI STRUCTURE,
COIMBATORE,
TAMIL NADU 641035

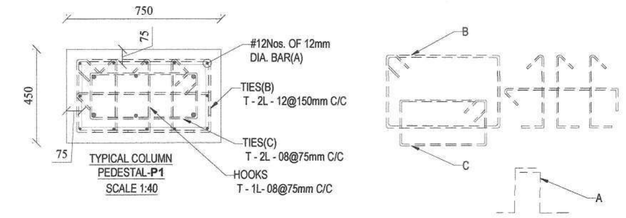
PROJECT:
CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK A (S+12),BLOCK B(S+13),BLOCK C (S+03), BLOCK D(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

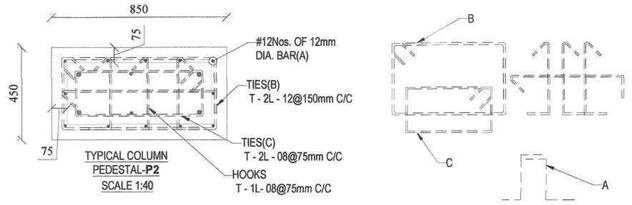
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GRADE BEAM LAYOUT
(BLOCK-B)
(SCALE 1:300)

PAPER SIZE:	A3
DRAWN DATE:	17-09-2024
PROJECT NO:	MS23035_AT_B
SHEET NO:	F005

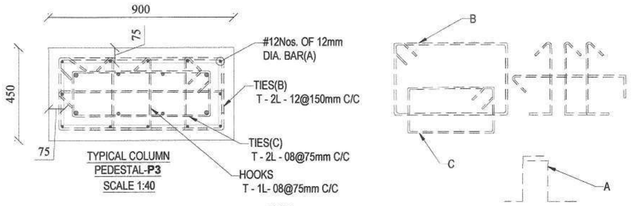
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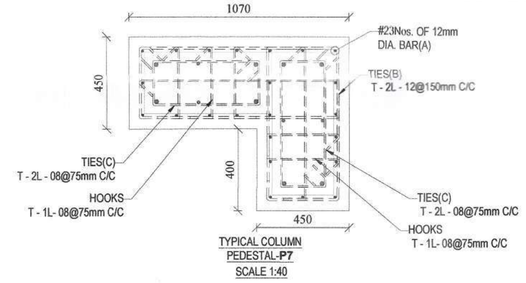
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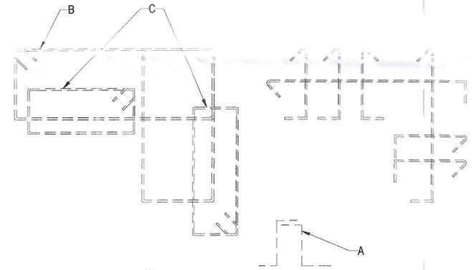
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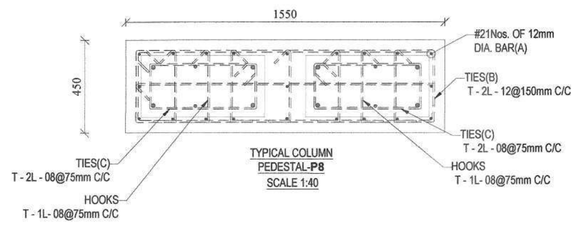


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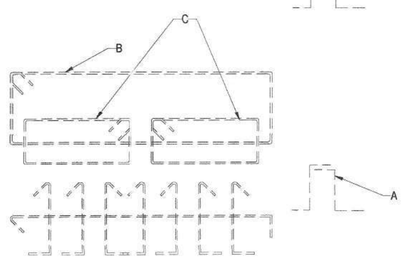


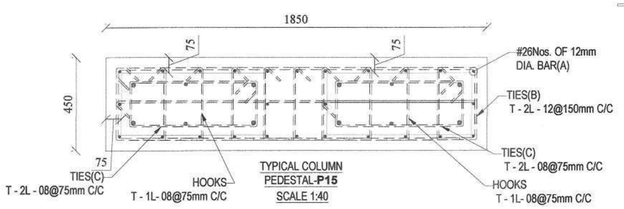
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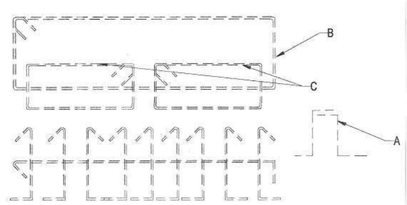


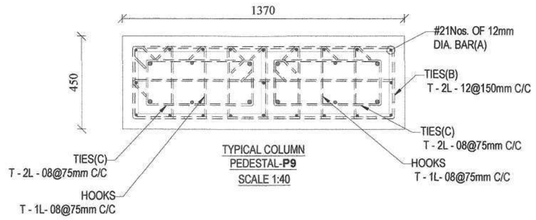
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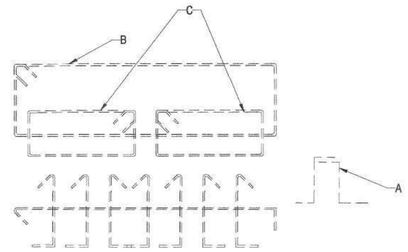


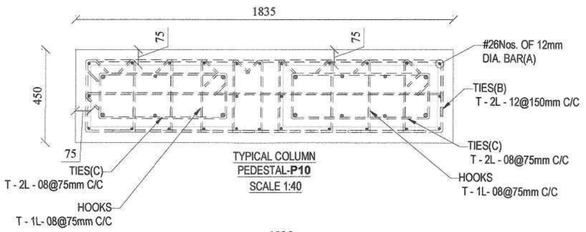
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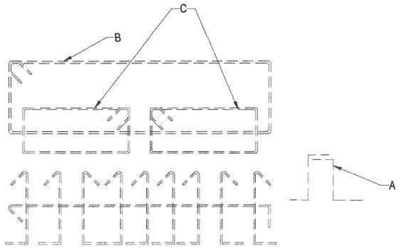


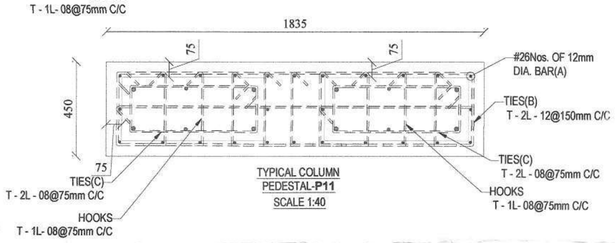
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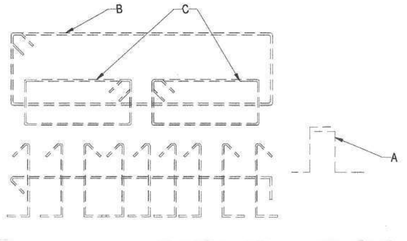


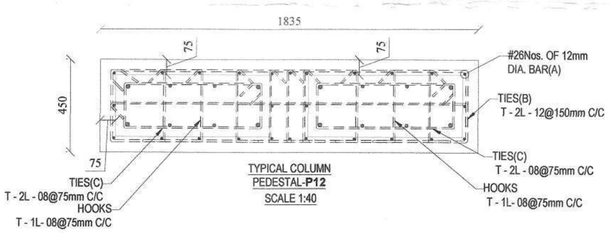
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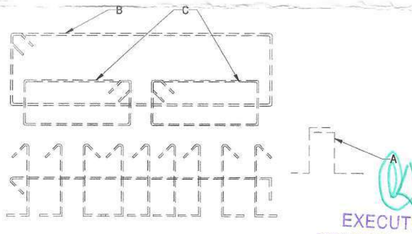


TYPICAL COLUMN PEDESTAL-**P11** SCALE 1:40





TYPICAL COLUMN PEDESTAL-**P12** SCALE 1:40



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETER, UNLESS OTHERWISE SPECIFIED.
2. DRAWING SHOULD NOT BE SCALED, FOLLOW FIGURED DIMENSIONS.
3. ANY DISCREPANCY IN DRAWING SHALL BE BRING TO NOTICE OF STRUCTURAL CONSULTANT BEFORE EXECUTION OF WORK.
4. THIS DRAWING SHOULD BE READ ALONG WITH THE RELEVANT ARCHITECTURAL DRAWING.
5. IF THERE IS ANY REVISION IN DRAWING, FURTHER CONSTRUCTION SHALL BE EXECUTED AS PER THE LATEST REVISED DRAWING, ON THE ISSUE OF LATEST REVISION.
6. GRADE OF STEEL SHALL BE Fe500D/550D ,
   GRADE OF CONCRETE
   FOR SUPER STRUCTURE [BEAM,COLUMN,WALL,SLAB] - M40
   FOR SUB-STRUCTURE [PILE,PILE CAP,PLINTH & GRADE BEAM] - M35
7. CLEAR COVER FOR

PILE	:60mm
PILECAP	:60mm
COLUMN	:40mm
BEAM	:30mm
SLAB	:25mm

8. LAP LENGTH OF BARS : 50Ø [M35],36Ø [M40]
   AT COLUMN LAPPING PROVIDE 100mm SPACING OF TIES.
9. IN CASE OF BEAM REINFORCEMENT, NO LAPPING SHALL BE ALLOWED IN FOLLOWING PLACES
   (a) TOP ROD NEAR COLUMN, L/4 ON EITHER SIDES OF COLUMN
   (b) TOP ROD OF CANTILEVER BEAM ALONG THE LENGTH AND ALSO DEVELOPMENT LENGTH, BEYOND COLUMN
   (c) BOTTOM ROD AT MID SPAN OF BEAM
10. REMOVAL OF SHUTTERING / FORM WORK

(a)	COLUMN	: 24 HOURS
(b)	BEAM SIDES	: 24 HOURS
(c)	BEAM BOTTOM	: LESS THAN 6M SPAN : 14 DAYS
		: MORE THAN 6M SPAN : 28 DAYS
(d)	SLAB	: LESS THAN 4.5M SPAN : 14 DAYS
		: MORE THAN 4.5M SPAN : 28 DAYS

HOWEVER 7 DAYS STRENGTH OF CONCRETE SHOULD BE 65% OF THE TARGET STRENGTH, TO REMOVE FORM WORK.

11. THIS BUILDING IS DESIGNED FOR S+13 FLOORS
12. AS PER SOIL REPORT PILE FOUNDATION IS ADOPTED.
13. AAC BLOCKS TO BE USED FOR ALL MASONRY WORKS.
14. FLY ASH BRICKS TO BE USED FOR ALL MASONRY WALL BELOW BASEMENT

EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
05/03/25

Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.
23/12/24

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	09-12-2024
R0	ISSUED FOR APPROVAL	17-09-2024

CLIENT:
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
No. 5 Kamarajar Salai,
Chennai - 600005,Tamil Nadu.
Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR
RAMALINGAM CONSTRUCTION COMPANY PVT LTD
#175/2 South State Bank Nagar,
Chattipalayam,Erode - 638002,Tamil Nadu.
Tel: 0424 2252389,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT
METAPHOR

STRUCTURAL CONSULTANT
MERAKI STRUCTURE,
COIMBATORE,
TAMIL NADU 641035

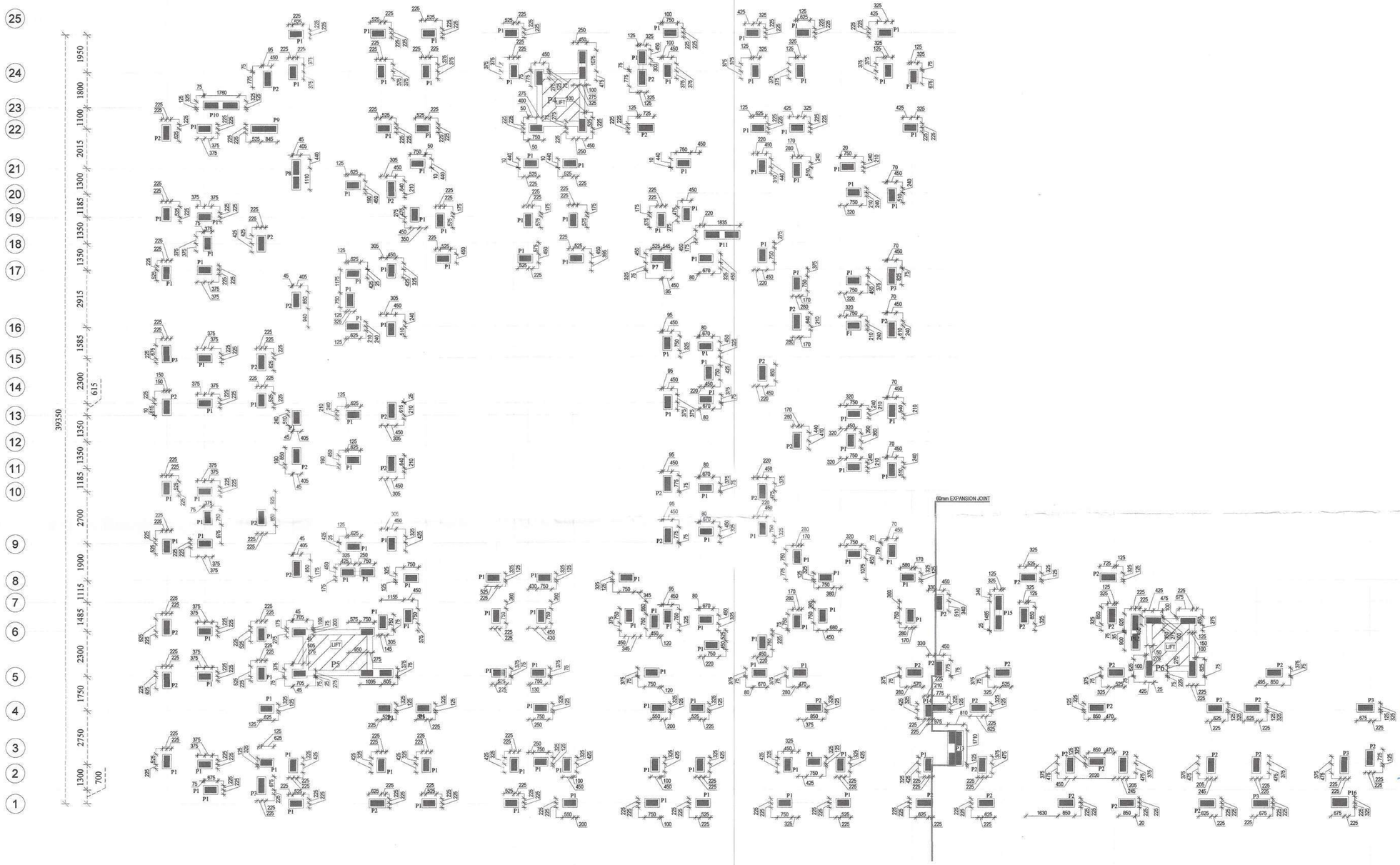
PROJECT:
CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK A (S+12),BLOCK B(S+13),BLOCK C (S+03), BLOCK D(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

TITLE: BLOCK -B
PEDESTAL SECTION LAYOUT (BLOCK-B)
(SCALE 1:40)

PAPER SIZE:	A3
DRAWN DATE:	17-09-2024
PROJECT NO:	MS23035_AT_B
SHEET NO:	F006A

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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	09-12-2024
R0	ISSUED FOR APPROVAL	17-09-2024

CLIENT: TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD, No. 5 Kamarajar Salai, Chennai - 600005,Tamil Nadu. Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR: RAMALINGAM CONSTRUCTION COMPANY PVT LTD #175/2 South State Bank Nagar, Chattipalayam,Erode - 638002,Tamil Nadu. Tel: 0424 2282389,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT: METAPHOR

STRUCTURAL CONSULTANT: MERAKI STRUCTURE, COIMBATORE, TAMIL NADU 641035

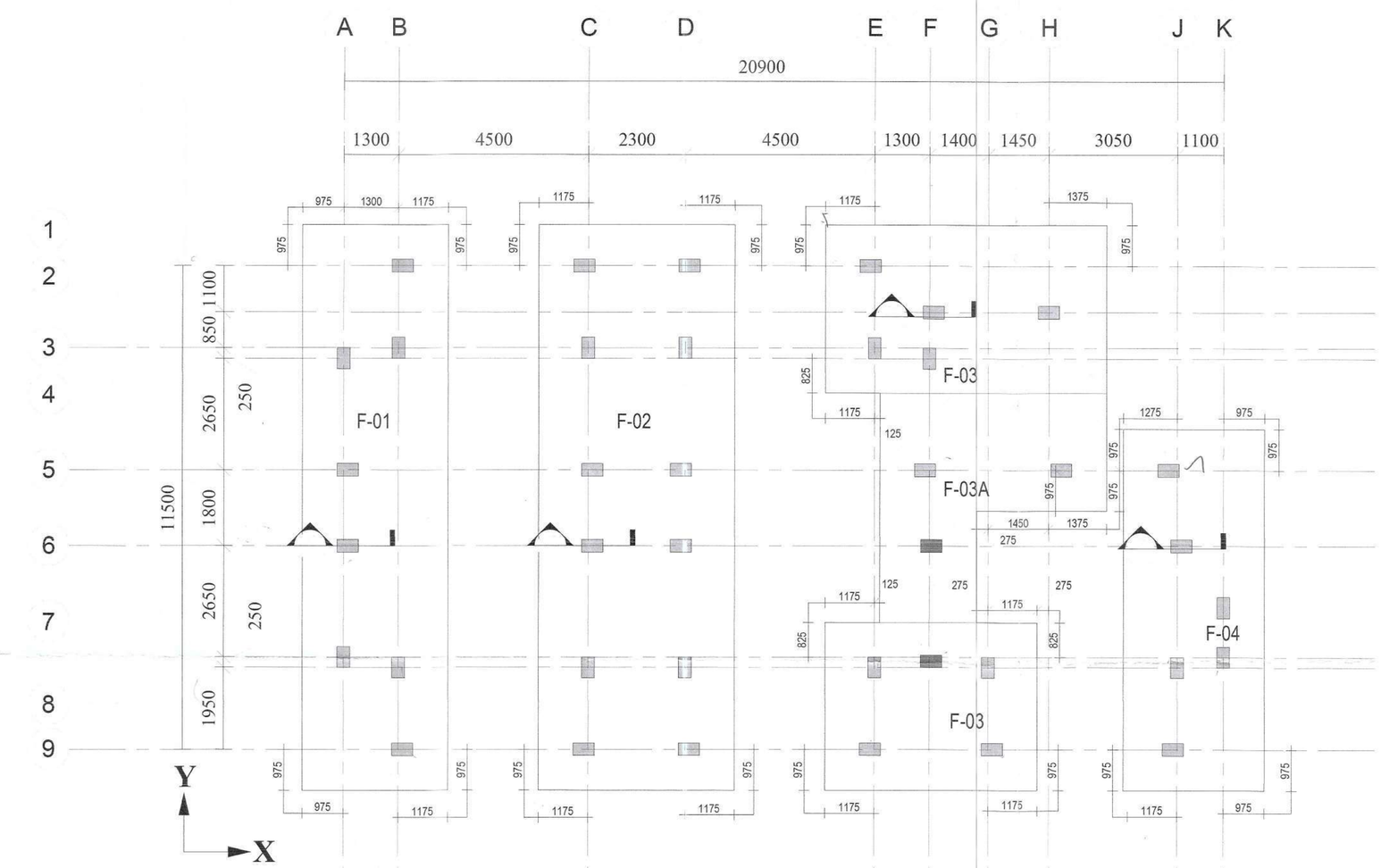
PROJECT: CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK A (S+12),BLOCK B(S+13),BLOCK C (S+03), BLOCK D(S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

TITLE: BLOCK -B
PEDESTAL LAYOUT (BLOCK-B)
(SCALE 1:300)

PAPER SIZE:	A3
DRAWN DATE:	17-09-2024
PROJECT NO:	MS23035_AT_B
SHEET NO:	F006

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GENERAL NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETER, UNLESS OTHERWISE SPECIFIED.
2. DRAWING SHOULD NOT BE SCALED, FOLLOW FIGURED DIMENSIONS.
3. ANY DISCREPANCY IN DRAWING SHALL BE BRING TO NOTICE OF STRUCTURAL CONSULTANT BEFORE EXECUTION OF WORK.
4. THIS DRAWING SHOULD BE READ ALONG WITH THE RELEVANT ARCHITECTURAL DRAWING.
5. IF THERE IS ANY REVISION IN DRAWING, FURTHER CONSTRUCTION SHALL BE EXECUTED AS PER.THE LATEST REVISED DRAWING, ON THE ISSUE OF LATEST REVISION.
6. GRADE OF STEEL SHALL BE Fe500D/S55D ,
   GRADE OF CONCRETE
   FOR SUPER STRUCTURE [BEAM,COLUMN,WALL,SLAB] - M40
   FOR SUB-STRUCTURE [FOUNDATION,PLINTH & RAFT BEAM] - M35
7. CLEAR COVER FOR
   FOOTING :50mm
   COLUMN :40mm
   BEAM :30mm
   SLAB :25mm
8. LAP LENGTH OF BARS : 50Ø [M35],40Ø [M40]
   AT COLUMN LAPPING PROVIDE 75mm SPACING OF TIES.
9. IN CASE OF BEAM REINFORCEMENT, NO LAPPING SHALL BE ALLOWED IN FOLLOWING PLACES
(a) TOP ROD NEAR COLUMN, L/4 ON EITHER SIDES OF COLUMN
(b) TOP ROD OF CANTILEVER BEAM ALONG THE LENGTH AND ALSO DEVELOPMENT LENGTH, BEYOND COLUMN
(c) BOTTOM ROD AT MID SPAN OF BEAM
10. REMOVAL OF SHUTTERING / FORM WORK
(a) COLUMN : 24 HOURS
(b) BEAM SIDES : 24 HOURS
(c) BEAM BOTTOM : LESS THAN 6M SPAN : 14 DAYS
: MORE THAN 6M SPAN : 28 DAYS
(d) SLAB : LESS THAN 4.5M SPAN : 14 DAYS
: MORE THAN 4.5M SPAN : 28 DAYS
HOWEVER 7 DAYS STRENGTH OF CONCRETE SHOULD BE 65% OF THE TARGET STRENGTH, TO REMOVE FORM WORK.
11. THIS BUILDING IS DESIGNED FOR GROUND + 3 FLOORS
12. AS PER SOIL REPORT RAFT FOUNDATION IS ADOPTED.
13. AAC BLOCKS TO BE USED FOR ALL MASONRY WORKS.
14. FLY ASH BRICKS TO BE USED FOR ALL MASONRY WALL BELOW BASEMENT
15. SAFE BEARING CAPACITY AS PER SOIL REPORT = 200 kN/m2
16. SOIL REPORT NO:SM&FE 149/CONSULTANCY/TNSCB/2019 Dt: 30/10/2019

FOUNDATION DETAILS

S.NO.	TYPE	DEPTH (mm)	TOP REINFORCEMENT		BOTTOM REINFORCEMENT	
			X	Y	X	Y
1	F-01	600	T16@150mmC/C	T16@150mmC/C	T16@150mmC/C	T16@150mmC/C
2	F-02	600	T16@150mmC/C	T16@150mmC/C	T16@150mmC/C	T16@150mmC/C
3	F-03	600	T16@150mmC/C	T16@150mmC/C	T16@150mmC/C	T16@150mmC/C
4	F-03A	600	T16@150mmC/C	T16@150mmC/C	T20@150mmC/C	T20@100mmC/C
5	F-04	600	T16@150mmC/C	T16@150mmC/C	T16@150mmC/C	T16@125mmC/C

25/11/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

20.11.24
Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

25/11/24

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	13-11-2024
R0	ISSUED FOR APPROVAL	12-09-2024

CLIENT: TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD, No.5 Kamarajar Salai, Chennai - 600005,Tamil Nadu. Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR: RCCL — RAMALINGAM CONSTRUCTION COMPANY PVT LTD, #175/2 South State Bank Nagar, Chettipalayam,Erode - 638002,Tamil Nadu. Tel: 0424 2282389,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT: METAPHOR

STRUCTURAL CONSULTANT: MERAKI STRUCTURE, COIMBATORE, TAMIL NADU 641035

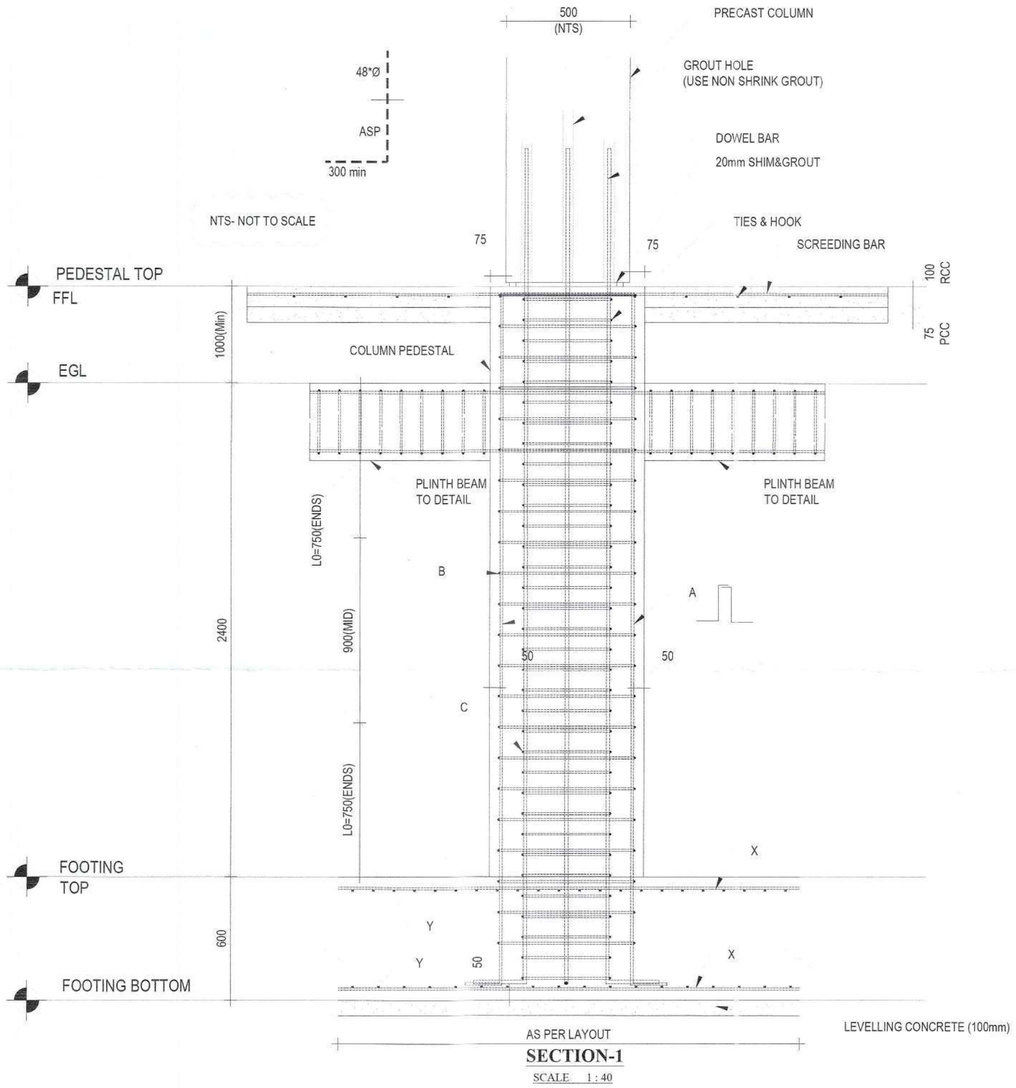
PROJECT: CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK A (S+12),BLOCK B(S+13),BLOCK C (S+03), BLOCK D (S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

TITLE: BLOCK D
FOOTING LAYOUT

PAPER SIZE:	A3
DRAWN DATE:	12-09-2024
PROJECT NO:	MS23035_AT_D
SHEET NO:	F001

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SECTION-1

SCALE 1 : 40

GENERAL NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETER, UNLESS OTHERWISE SPECIFIED.
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6. GRADE OF STEEL SHALL BE Fe500D/550D ,
   GRADE OF CONCRETE
   FOR SUPER STRUCTURE [BEAM,COLUMN,WALL,SLAB] - M40
   FOR SUB-STRUCTURE [FOUNDATION,PLINTH & RAFT BEAM] - M35
7. CLEAR COVER FOR
   FOOTING :50mm
   COLUMN :40mm
   BEAM :30mm
   SLAB :25mm
8. LAP LENGTH OF BARS : 50Ø [M35],40Ø [M40]
   AT COLUMN LAPPING PROVIDE 75mm SPACING OF TIES.
9. IN CASE OF BEAM REINFORCEMENT, NO LAPPING SHALL BE ALLOWED IN FOLLOWING PLACES
(a) TOP ROD NEAR COLUMN, L/4 ON EITHER SIDES OF COLUMN
(b) TOP ROD OF CANTILEVER BEAM ALONG THE LENGTH AND ALSO DEVELOPMENT LENGTH, BEYOND COLUMN
(c) BOTTOM ROD AT MID SPAN OF BEAM
10. REMOVAL OF SHUTTERING / FORM WORK
(a) COLUMN : 24 HOURS
(b) BEAM SIDES : 24 HOURS
(c) BEAM BOTTOM : LESS THAN 6M SPAN : 14 DAYS
: MORE THAN 6M SPAN : 28 DAYS
(d) SLAB : LESS THAN 4.5M SPAN : 14 DAYS
: MORE THAN 4.5M SPAN : 28 DAYS

HOWEVER 7 DAYS STRENGTH OF CONCRETE SHOULD BE 65% OF THE TARGET STRENGTH, TO REMOVE FORM WORK.

11. THIS BUILDING IS DESIGNED FOR GROUND + 3 FLOORS
12. AS PER SOIL REPORT RAFT FOUNDATION IS ADOPTED.
13. AAC BLOCKS TO BE USED FOR ALL MASONRY WORKS.
14. FLY ASH BRICKS TO BE USED FOR ALL MASONRY WALL BELOW BASEMENT
15. SAFE BEARING CAPACITY AS PER SOIL REPORT = 200 kN/m2
16. SOIL REPORT NO:SM&FE 149/CONSULTANCY/TNSCB/2019 , Dt:30/10/2019

20/11.24
Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

25/11/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	13-11-2024
R0	ISSUED FOR APPROVAL	12-09-2024

CLIENT:
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
No.5 Kamarajar Salai,
Chennai - 600005,Tamil Nadu.
Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR
RCCL
RAMALINGAM CONSTRUCTION COMPANY PVT LTD
#175/2 South State Bank Nagar,
Chettipalayam,Erode - 638002,Tamil Nadu.
Tel: 0424 2282369,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT
METAPHOR
Architects Private Limited

STRUCTURAL CONSULTANT
MERAKI
MERAKI STRUCTURE,
COIMBATORE,
TAMIL NADU 641035

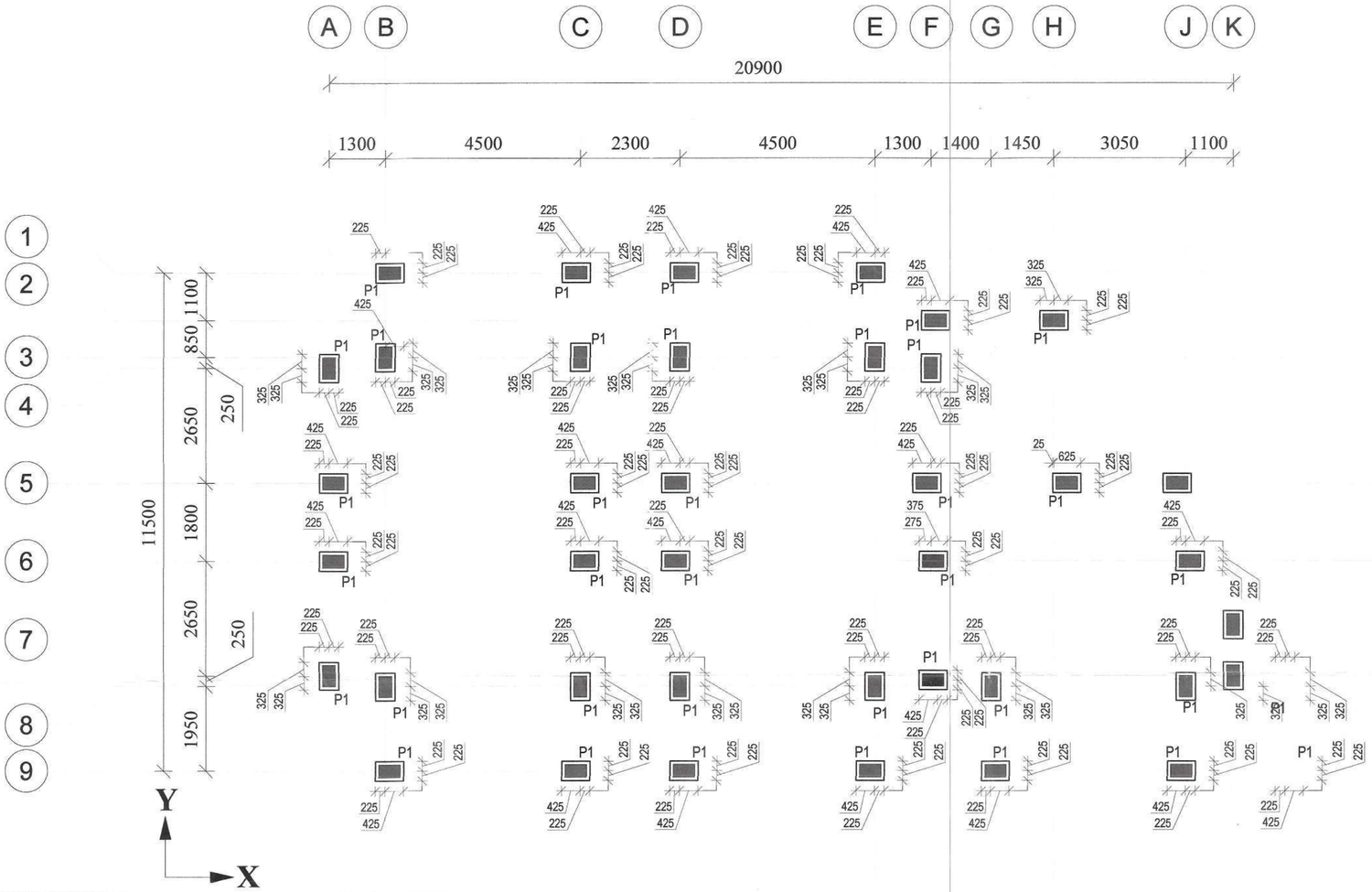
PROJECT:
CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK A (S+12),BLOCK B(S+13),BLOCK C (S+03), BLOCK D (S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

TITLE: BLOCK D
FOOTING SECTION LAYOUT

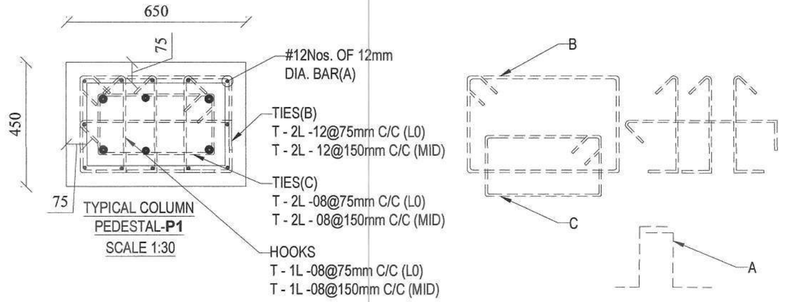
PAPER SIZE:	A3
DRAWN DATE:	12-09-2024
PROJECT NO:	MS23035_AT_D
SHEET NO:	F002

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16. SOIL REPORT NO:SM&FE 149/CONSULTANCY/TNSCB/2019 dt 20/12/2019



20/11/24
Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

25/11/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

28/11/24

MERAKI STRUCTURE COIMBATORE

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	13-11-2024
R0	ISSUED FOR APPROVAL	12-09-2024

CLIENT: TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD, No.5 Kamarajar Salai, Chennai - 600005,Tamil Nadu. Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR: RAMALINGAM CONSTRUCTION COMPANY PVT LTD, #175/2 South State Bank Nagar, Chattipalayam,Erode - 638302,Tamil Nadu. Tel: 0424 2282389,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT: METAPHOR

STRUCTURAL CONSULTANT: MERAKI STRUCTURE, COIMBATORE, TAMIL NADU 641035

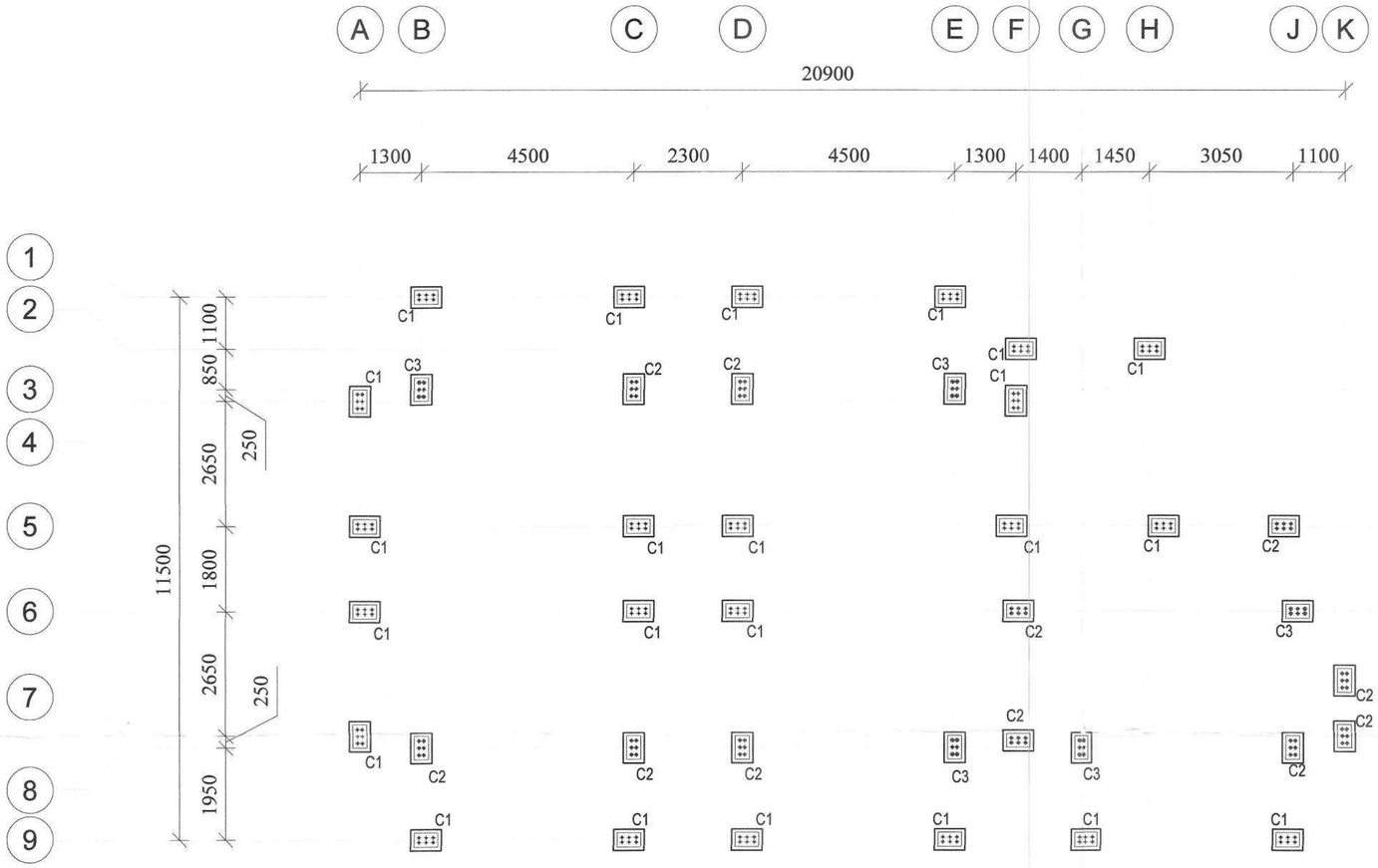
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PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

TITLE: BLOCK D
PEDESTAL LAYOUT

PAPER SIZE:	A3
DRAWN DATE:	12-09-2024
PROJECT NO:	MS23035_AT_D
SHEET NO:	F003

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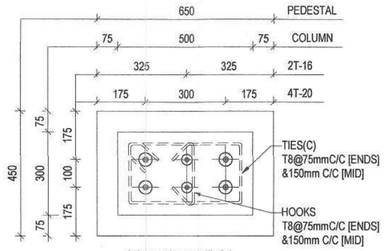
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7. CLEAR COVER FOR
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   COLUMN :40mm
   BEAM :30mm
   SLAB :25mm
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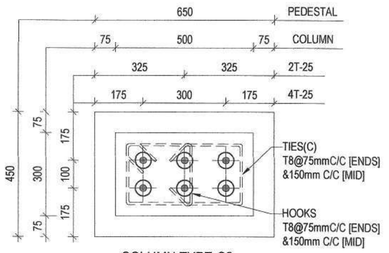
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16. SOIL REPORT NO:SM&FE 149/CONSULTANCY/TNSCB/2019 , dt: 30.9.2019 .

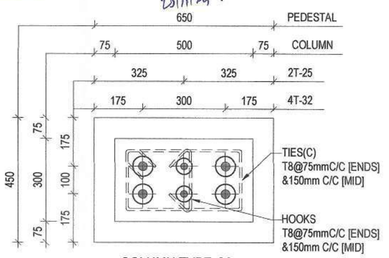
- 32mm Ø DOWEL BAR
- 25mm Ø DOWEL BAR
- 20mm Ø DOWEL BAR
- 16mm Ø DOWEL BAR



COLUMN TYPE-C1



COLUMN TYPE-C2



COLUMN TYPE-C3

20.11.24
Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
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25/11/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

25/11/24

MERAKI STRUCTURE COIMBATORE

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	13-11-2024
R0	ISSUED FOR APPROVAL	12-09-2024

CLIENT: TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD, No. 5 Kamarajar Salai, Chennai - 600005, Tamil Nadu. Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR: RAMALINGAM CONSTRUCTION COMPANY PVT LTD, #175/2 South State Bank Nagar, Chettipalayam, Erode - 638002, Tamil Nadu. Tel: 0424 2282399, Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT: METAPHOR

STRUCTURAL CONSULTANT: MERAKI STRUCTURE, COIMBATORE, TAMIL NADU 641035

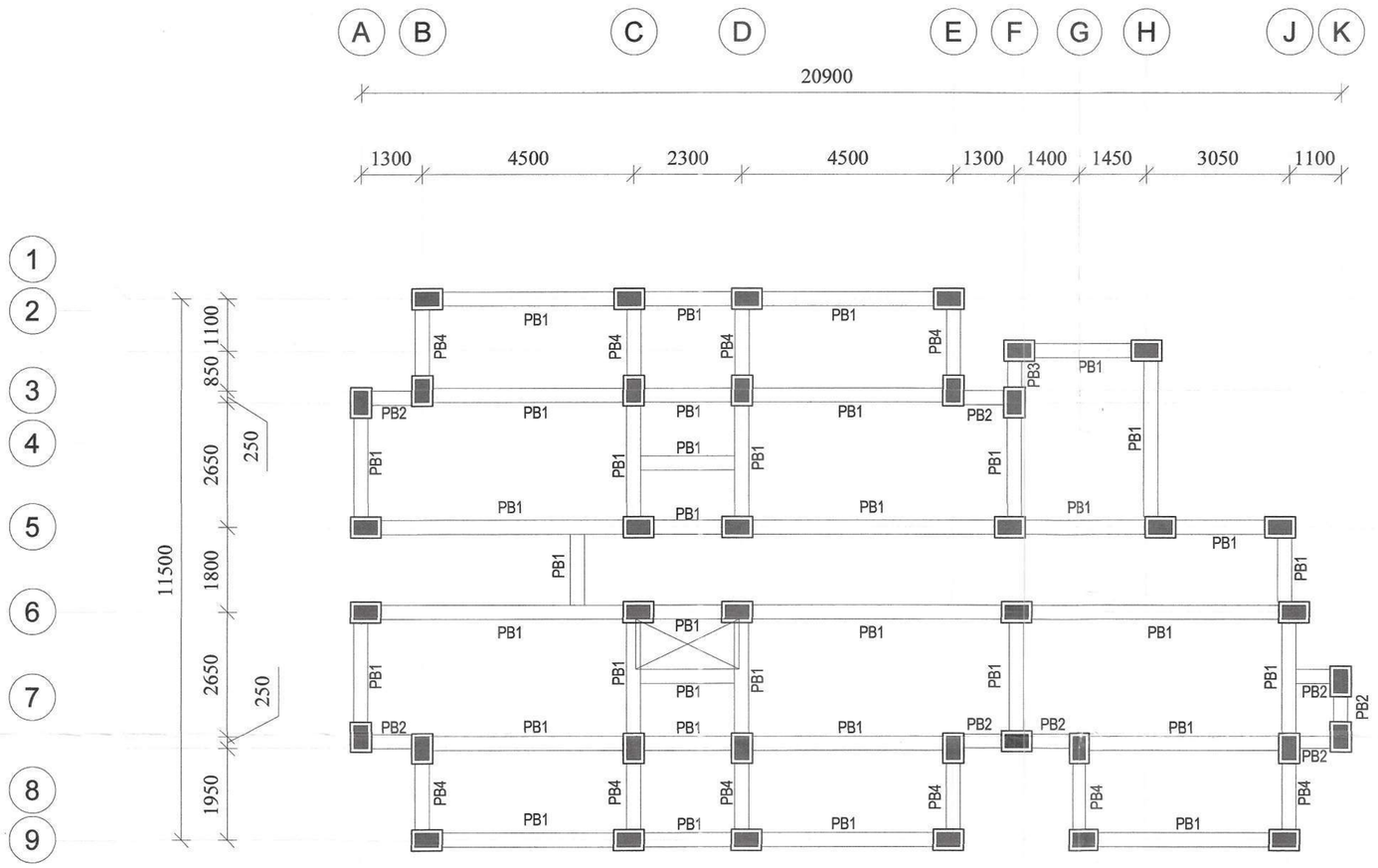
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PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

TITLE: BLOCK D
DOWEL LAYOUT

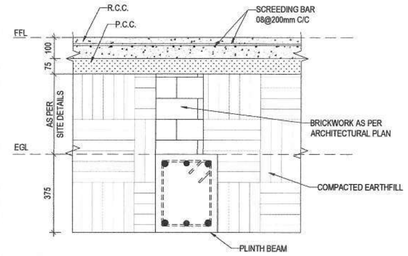
PAPER SIZE:	A3
DRAWN DATE:	12-09-2024
PROJECT NO:	MS23035_AT_D
SHEET NO:	F004

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GENERAL NOTES:

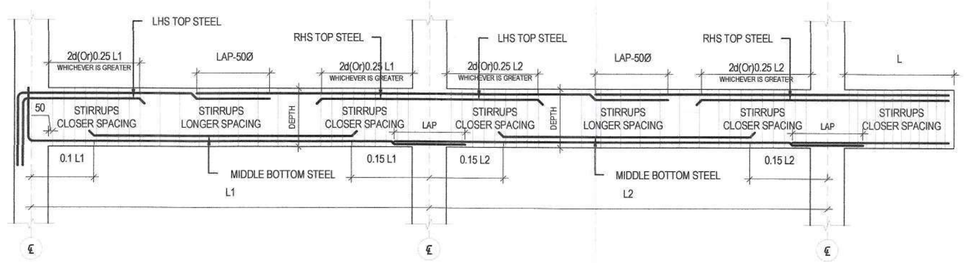
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PLINTH BEAM C/S(TYP.)
SCALE 1:30

PLINTH BEAM DETAILS

S.NO.	BEAM ID	BEAM SIZE(mm)		TOP REINFORCEMENT		BOTTOM REINFORCEMENT		SIDE FACE	STIRRUPS	
		WIDTH	DEPTH	STRAIGHT BAR	CURTAILMENT	STRAIGHT BAR	CURTAILMENT		END	MIDDLE
1	PB1	300	375	#2-T16 + #1-T12	-	#2-T16 + #1-T12	-	-	T8@75mmC/C	T8@150mmC/C
2	PB2	300	375	#2-T16	1T12	#2-T16	1T12	-	T8@75mmC/C	T8@75mmC/C
3	PB3	300	375	#2-T16	1T12	#2-T16	1T12	-	T12@75mmC/C	T12@75mmC/C
4	PB4	300	375	#2-T16	1T12	#2-T16	1T12	-	T8@75mmC/C	T8@100mmC/C



TYPICAL LAPPING & CURTAILMENT DETAILS OF BEAM

20/11/24
Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025.

25/11/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

29/11/24.

MERAKI STRUCTURE COIMBATORE

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	13-11-2024
R0	ISSUED FOR APPROVAL	12-09-2024

CLIENT: TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD, No. 5 Kamarajar Salai, Chennai - 600005,Tamil Nadu. Tel: 0440 28440 1300

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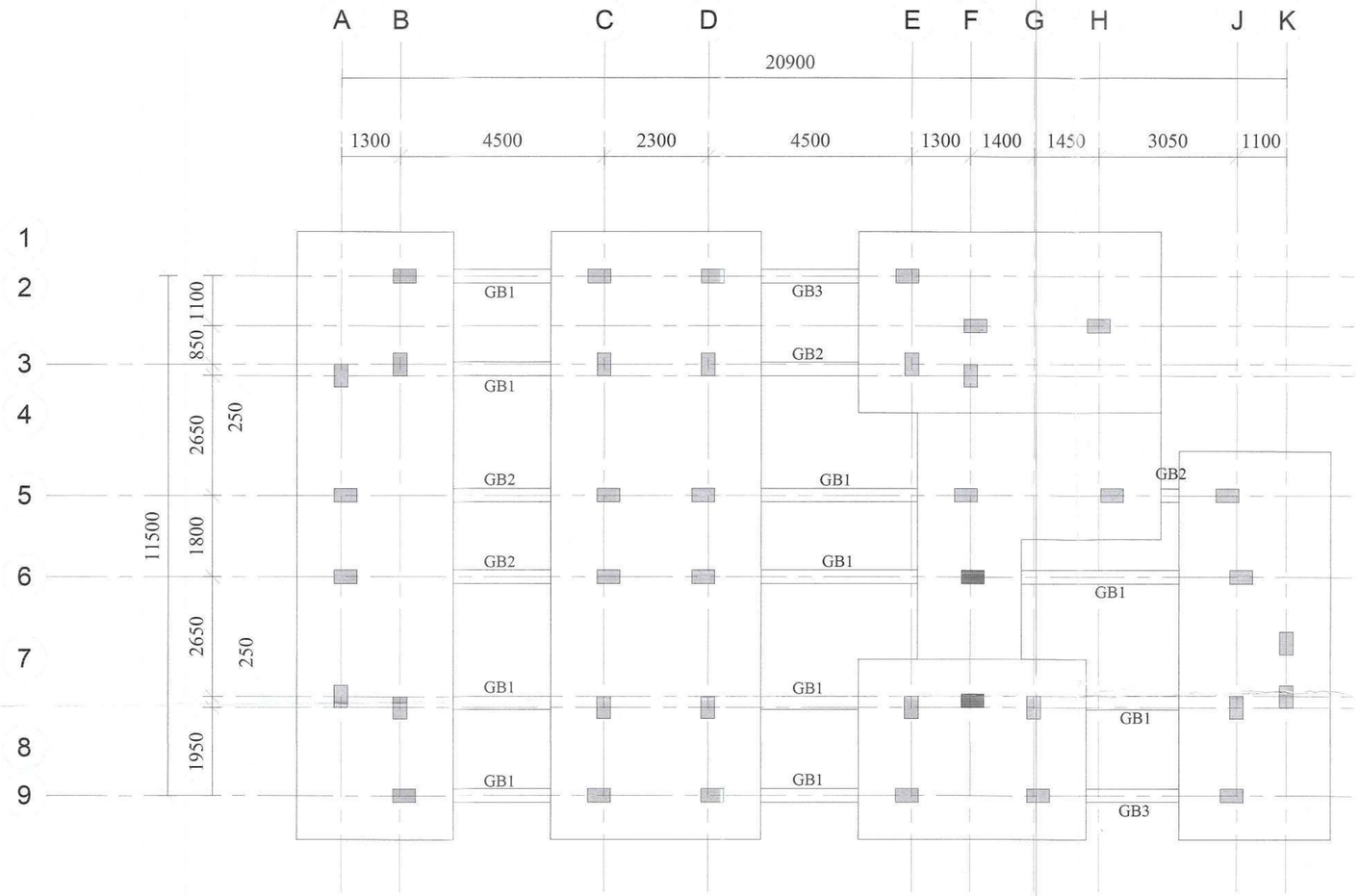
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PMR	SK	SJS	SJS
DRAWN	DESIGN	CHECKED	APPROVED

TITLE: BLOCK D
PLINTH BEAM LAYOUT

PAPER SIZE:	A3
DRAWN DATE:	12-09-2024
PROJECT NO:	MS23035_AT_D
SHEET NO:	F005

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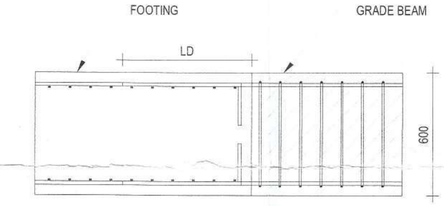


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(a) COLUMN : 24 HOURS
(b) BEAM SIDES : 24 HOURS
(c) BEAM BOTTOM : LESS THAN 6M SPAN : 14 DAYS
: MORE THAN 6M SPAN : 28 DAYS
(d) SLAB : LESS THAN 4.5M SPAN : 14 DAYS
: MORE THAN 4.5M SPAN : 28 DAYS.

HOWEVER 7 DAYS STRENGTH OF CONCRETE SHOULD BE 65% OF THE TARGET STRENGTH, TO REMOVE FORM WORK.

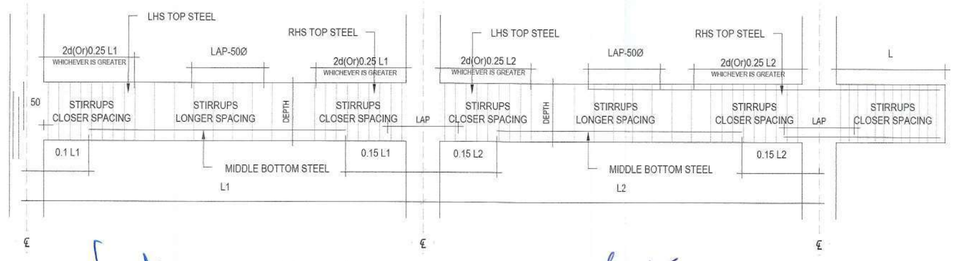
11. THIS BUILDING IS DESIGNED FOR GROUND + 3 FLOORS
12. AS PER SOIL REPORT RAFT FOUNDATION IS ADOPTED.
13. AAC BLOCKS TO BE USED FOR ALL MASONRY WORKS.
14. FLY ASH BRICKS TO BE USED FOR ALL MASONRY WALL BELOW BASEMENT
15. SAFE BEARING CAPACITY AS PER SOIL REPORT = 200 kN/m2
16. SOIL REPORT NO:SM&FE 149/CONSULTANCY/TNSDB/2019



GRADE BEAM TO FOOTING CONNECTION

GRADE BEAM DETAILS

S.NO.	BEAM ID	BEAM SIZE(mm)		TOP REINFORCEMENT		BOTTOM REINFORCEMENT		SIDE FACE	STIRRUPS	
		WIDTH	DEPTH	STRAIGHT BAR	CURTAILMENT	STRAIGHT BAR	CURTAILMENT		END	MIDDLE
1	GB1	300	600	#3-T16		#3T16		-	2L-T8@100mmC/C	2L-T8@100mmC/C
2	GB2	300	600	#3-T16		#3-T20		-	3L-T8@100mmC/C	3L-T8@100mmC/C
3	GB3	300	600	#3-T16		#4-T20		-	2L-T10@100mmC/C	2L-T10@100mmC/C



TYPICAL LAPPING & CURTAILMENT DETAILS OF BEAM

20/11/24

Dr. K. P. JAYA
Professor
Division of Structural Engineering
Department of Civil Engineering
Anna University, Chennai - 600 025

25/11/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
KAMARAJAR SALAI, CHENNAI-600 005.

25/11/24

REV.	DESCRIPTION	DATE
R1	ISSUED FOR APPROVAL	13-11-2024
R0	ISSUED FOR APPROVAL	12-09-2024

CLIENT:
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
No. 5 Kamarajar Salai,
Chennai - 600005,Tamil Nadu.
Tel: 0440 28440 1300

TURNKEY DESIGN AND BUILD CONTRACTOR
RAMALINGAM CONSTRUCTION COMPANY PVT LTD
#175/2 South State Bank Nagar,
Chettipalayam,Erode - 638002,Tamil Nadu.
Tel: 0424 2282380,Email ID: info@ramalingam.in

COMPREHENSIVE CONSULTANT
METAPHOR Architects' Private Limited

STRUCTURAL CONSULTANT
MERAKI STRUCTURE,
COIMBATORE,
TAMIL NADU 641035

PROJECT:
CONSTRUCTION OF FOUR BLOCKS CONSISTING OF 702 TENEMENTS BLOCK A (S+12),BLOCK B(S+13),BLOCK C (S+03), BLOCK D (S+03) AT RK MUTT ROAD VENKATAKRISHNAN ROAD,ANDIMANAYA THOTTAM,MYLAPORE,CHENNAI BEARING RS No.4123/1 PT OF BLOCK No.89,MYLAPORE VILLAGE OF GCC ZONE 9 AND COPORATION DIVISION 126.

DRAWN	DESIGN	CHECKED	APPROVED
PMR	SK	SJS	SJS

TITLE: BLOCK D
GRADE BEAM LAYOUT

PAPER SIZE:	A3
DRAWN DATE:	12-09-2024
PROJECT NO:	MS23035_AT_D
SHEET NO:	F006

11/20/2024 12:19:37 PM

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

Verified RealEstate
3/350/2 Mettukuppam,
OMR Thoraipakkam,
Chennai 600 097, India
hello@verified.realestate
+91 9996 12 9996

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.