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RERA Document

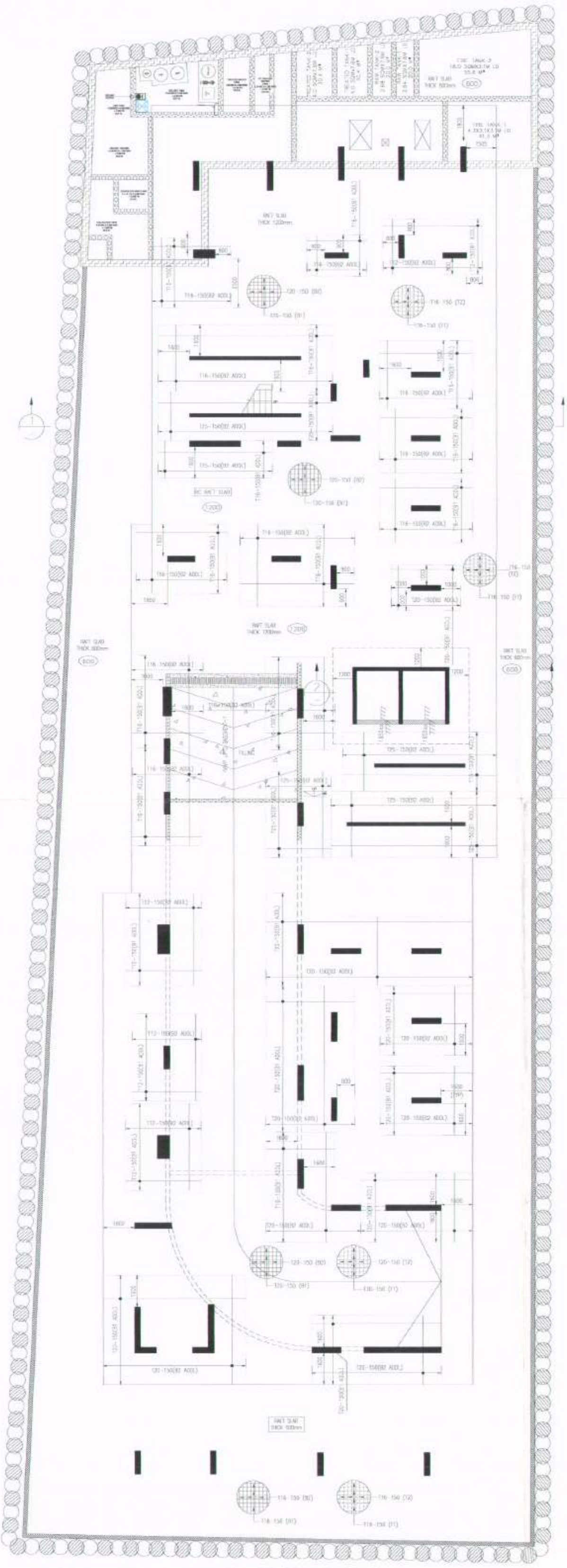
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DIGITALLY VERIFIED RECORD



RAFT FOUNDATION REINFORCEMENT LAYOUT(TOP & BOTTOM)
SCALE : 1:100

NOTES

1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG. NO. BE/GR_S-/FD/--/01.
3. FOR STANDARD DETAILS REFER TO DWG. NO. BE/GR_S-/SD/--/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE, MIX:
   DESIGN MIX M35 MIX
   CEMENT CONTENT NOT LESS THAN 340 kg/Cu.m GRADE 43/53 OPC
   CHEMICAL APPROVED DESIGN MIX to be OF ADDITIVE IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   PCC - M20 (COMPATIBLE CONCRETE SHOULD BE 400kg/cm²)
   PEB CAP - M25
   BASEMENT WALL, RAMP/STAIR M25
   COLUMN - M45, SHEAR WALL M45
   R.C. SLABS, R.C. BEAMS, STAIRCASE - M30
   ALL OTHER STRUCTURAL MEMBERS - M25
7. STEEL GRADE: Fe500 CONFORMING IS 1786:2008.
8. CLEAR COVER FOR PCC 300mm=50mm, 600mm & 750mm=75mm.
   RAFT=75mm, COLUMN=40mm, SHEAR WALL=30mm,
   SLAB=25mm, BEAM=30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL BE AS PER IS456:2000 OR 50 X DIA OF BAR
10. SEISMIC ZONE AND WIND RATE CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE IV, SEISMIC DETAILING CARRIED OUT AS PER THE SPECIFICATIONS MADE IN IS:13920-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC (SP7-1983) AND RELEVANT INDIAN CODE SPECIFICATIONS
12. ONUS OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / OWNER

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(S)+GF(S)+11 FLOORS+HOD (G2NC) AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS

NORTH POINT

NO.	AMENDMENTS	BY	DATE
		KAVI	02/02/25

Client :

LANDSCAPE CONSULTANT :

PROJECT MANAGMENT CONSULTANT :

ELECTRICAL / HVAC / FIRE / PHE CONSULTANT:

A. PERAMAIYAN, M.E., (Struct.), M.I.E.
REGISTERED STRUCTURAL ENGINEER
CHENNAI METROPOLITAN DEVELOPMENT AUTHORITY
REGISTRATION No. SE/GR-I/19/03/026
NEW No. 31 (OLD No.14), BESANT AVENUE ROAD,
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E-Mail: peram@buroengineers.in
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NOTES

UNLESS OTHERWISE SPECIFIED

1. GRADE OF CONCRETE M35
2. GRADE OF STEEL Fe550
3. ALL R.C. WALL THICKNESS ARE TO BE 200mm
4. APPROVED WATERPROOFING SHALL BE APPLIED FOR BOTH THE BASE SLAB AND THE WATERPROOFING CAN BE OF HDPE MEMBRANE FOR THE RAFT AND FOR THE RCC WALL IT CAN BE A INTEGRAL WATERPROOFING

NOTES

GRADE OF STEEL - Fe 500 RESISTANT CRACK FOR ALL STRUCTURAL ELEMENTS BUT FOR SUBSTRUCTURE WHICH ARE IN CONTACT WITH GROUND WATER (SOIL SHALL BE PROVIDED WITH CRS (CRACK i.e. FOR RAFT, BASEMENT WALL, BASEMENT SLAB, RC SHAFTS WITH SUMP AND WALL, SKIN WALL, RETAINING SYSTEM ELEVATION CLOSURE PEC WALLS.

200mm THICKNESS SKIN WALL

350mm THICKNESS STP AND SUMP OUTER WALLS

300mm THICKNESS STP AND SUMP INNER SIDE WALLS

200mm THICKNESS RAMP PARAPET RC WALL

Architects

INDRAJIT S.KEMBHAVI
CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer:

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Chennai - 600 020. 4044 2481 2754/5/56.
e-Mail ID: burokmbi@buroengineers.in

STRUCTURAL

project title:

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

drawing title:

RAFT FOUNDATION REINFORCEMENT LAYOUT TOP & BOTTOM (SHEET 01 OF 02)

scale	AS SHOWN	design by	IP
drawn by	KAVI.K	checked by	IP
date	DEC 2024	approved by	AP
drawing no.	BE/GR_S /FT/01/--/01	revision	-

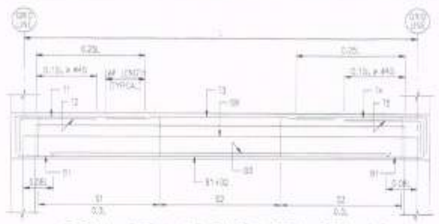
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DIE TLC NAME: BE/GR_S-/FD/--/01.dwg

SHEET-06

BEAM MARKING	LOCATION: CATEGORY	LOCATION: GRID LINE OR BEAM MARK	SIZE: WIDTH (mm)	SIZE: DEPTH (mm)	SPAN: LEFT END CANTILEVER Le	SPAN: SPAN (APPROX) L	SPAN: RIGHT END CANTILEVER Rc	REINFORCEMENT: SPAN T1	T2	T3	T4	T5	B1	B2	B3	BAR SIZE EACH FACE (DIA) SB	STIRRUPS: S1	S2	S3	S4	TYPE	REMARKS
2VB69	1	-	230	600	-	5400	-	2T20	-	2T20	2T20	2T25	2T20	-	2T20	-	110-100	110-150	110-100	-	1	
2VB70	1	-	200	450	-	3000	-	2T20	-	2T20	2T20	2T16	2T20	-	2T16	-	78-100	78-150	78-100	-	1	
2VB71	1	-	200	450	-	4050	-	2T20	-	2T20	2T20	-	3T20	-	3T12	-	78-100	78-150	78-100	-	1	
2VB72	1	-	200	450	-	3350	-	2T20	-	2T20	2T20	-	2T20	-	2T12	-	78-100	78-150	78-100	-	1	
2VB73	1	-	200	450	-	3150	-	2T20	-	2T20	2T20	-	2T20	-	2T16	-	78-100	78-125	78-100	-	1	
2VB74	1	-	200	450	-	3875	-	2T20	-	2T25	2T25	2T20	2T25	-	2T12	-	78-100	78-125	78-125	-	1	
2VB75	1	-	200	600	-	4175	-	3T20	3T20	3T25	3T20	2T16	3T20	-	2T12	-	110-100	110-150	110-100	-	1	
2VB76	1	-	200	450	-	2265	-	2T16	-	2T16	2T16	-	2T16	-	-	-	78-100	78-150	78-100	-	1	
2VB78	1	-	200	380	-	1400	-	2T16	-	2T16	2T16	-	2T16	-	-	-	78-100	78-200	78-100	-	1	
2VB80	1	-	200	400	-	3600	-	2T20	-	2T20	2T20	-	2T20	-	-	-	78-100	78-150	78-100	-	1	
2VB81	1	-	200	450	-	2463	-	2T20	2T12	2T20	2T20	-	2T20	-	-	-	78-100	78-150	78-100	-	1	
2VB82	1	-	200	360	-	1400	-	2T16	-	2T16	2T16	-	2T16	-	-	-	78-100	78-100	78-100	-	1	
2VB83	1	-	200	450	-	3550	-	2T20	-	2T20	2T20	-	2T20	-	-	-	78-100	78-150	78-100	-	1	
2VB84	1	-	200	430	-	2830	-	2T20	-	2T20	2T20	-	2T20	-	-	-	78-100	78-150	78-100	-	1	
2VB85	1	-	200	380	-	2830	-	2T16	-	2T16	2T16	-	2T16	-	-	-	78-100	78-200	78-100	-	1	
2VB86	1	-	200	380	-	1700	-	2T16	-	2T16	2T16	-	2T16	-	-	-	78-100	78-125	78-100	-	1	
2VB87	1	-	200	750	-	7325	-	2T25	-	2T25	2T25	-	2T25	-	2T25	-	110-100	110-150	110-100	-	1	BOTTOM REINFORCEMENT LAYER PROVIDE 2T20
2VB92	1	-	200	750	-	2200	-	2T25	2T25	2T25	2T25	2T25	2T25	-	2T25	-	110-100	110-100	110-100	-	1	
2VB91	1	-	200	750	-	8240	-	2T20	-	2T20	2T20	2T16	2T20	-	2T12	-	78-100	78-150	78-100	-	1	

WORKING BEAM	CATEGORY	BEAM MARK OR GRID LINE	WIDTH (mm)	DEPTH (mm)	CANTILEVER LEFT END	SPAN (APPROX) SPAN	CANTILEVER RIGHT END	REINFORCEMENT: SPAN T1	T2	T3	T4	T5	B1	B2	B3	BAR SIZE SB	STIRRUPS S1	S2	S3	S4	TYPE	REMARKS
LOCATION			SIZE		SPAN			REINFORCEMENT: SPAN									STIRRUPS					

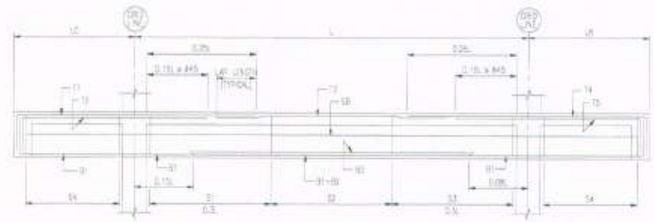


TYPICAL DETAIL OF SINGLE SPAN BEAM (1)

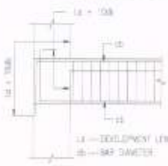
L ---- LENGTH OF SPAN UNDER CONSIDERATION
LE ---- LENGTH OF LEFT END CANTILEVER
RC ---- LENGTH OF RIGHT END CANTILEVER
(1) ---- CATEGORY

NOTES :

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN AND ALL OTHER RELEVANT DRAWINGS.
2. IF THE REINFORCEMENT IS PROVIDED IN TWO LAYERS OR MORE, THEN SPACER BARS BETWEEN THE LAYERS NEED TO BE PROVIDED.
3. SPACER BARS TO BE T25 OR MAIN BAR SIZE (WHICHEVER IS GREATER) AT 800c/c BETWEEN EACH LAYER OF MAIN STEEL.
4. THE SPAN LENGTH INDICATED ARE NOT TO BE USED FOR SETTING OUT OR MEASUREMENT.
5. IF SAME SIZE OF T+T REINFORCEMENT BARS IS INDICATED THROUGHOUT FOR BOTTOM OR TOP REINFORCEMENT, THE LAP PROVIDED FOR THE REINFORCEMENT CAN BE LIMITED BY PROVIDING STRAIGHT BARS FOR THE WHOLE LENGTH OF THE BEAM.
6. LAP LENGTH FOR BARS SHOULD BE SAME AS TENSION ANCHORAGE LENGTH BASED UPON THE LARGER BAR DIAMETER FOR HAVEING BOTH OF BARS.
7. FIRST STIRRUP OF BEAM SHOULD BE 50mm (MAXIMUM) FROM THE COLUMN FACE

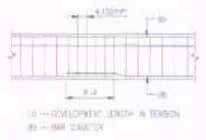


TYPICAL DETAIL OF SINGLE SPAN BEAM WITH CANTILEVERS (2)



Le --- DEVELOPMENT LENGTH IN TENSION
db --- BAR DIAMETER

ANCHORAGE OF BEAM BARS AT BEAM AND COLUMN JUNCTION (EXTERNAL JOINT)



Le --- DEVELOPMENT LENGTH IN TENSION
db --- BAR DIAMETER

LAP/SPLICE IN BEAM

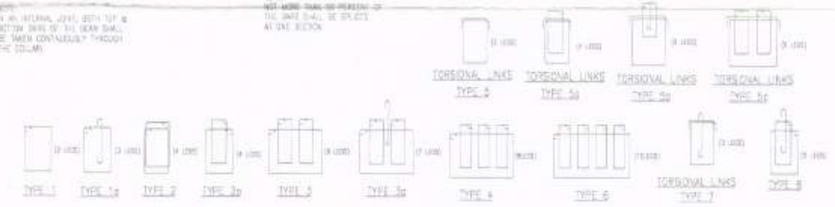
NOTE:
NOT MORE THAN 50 PERCENT OF THE BARS SHALL BE SPLICED AT ONE SECTION



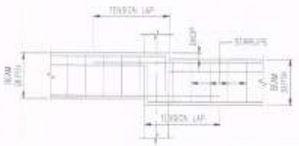
TYP. BEAM SECTION



TYP. SIDE BARS DETAIL FOR BEAM DEPTH > 750



STIRRUPS TYPE

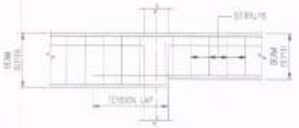


DETAIL 1

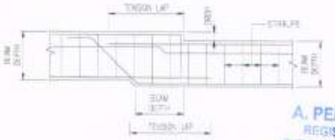


DETAIL 2

Wherever the drop is less than or equivalent to 50 The reinforcement bars can be bent at 1/10 and continues



DETAIL 3



DETAIL 4

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CHENNAI METROPOLITAN DEVELOPMENT AUTHORITY
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E-Mail: peram@buroengineers.in
Mobile: +91 99625 45530

NOTES:

1. ALL DIMENSION ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG NO. BE788_S-/ST/---/01
3. FOR STANDARD DETAILS REFER TO DWG NO. BE788_S-/SSD/---/01
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE M30
   CEMENT MIX MIX WITH
   CEMENT CONTENT NOT LESS THAN 380 kg/Cum GRADE +3/03 SPEC
   FOREIGN APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   PILE --- M30 (DEMENTRIALE DENSITY SHOULD BE 4000kg/m³)
   PILE CAP --- M30
   BASEMENT WALL, BEAM/SLAB-M35
   COLUMN + WALL ERROR WALL-M45
   R.C. SLABS, R.C. BEAMS, STAIRCASE --- M30
   ALL OTHER STRUCTURAL MEMBERS --- M30
7. STEEL GRADE FE500 CONFORMING TO IS:1786-2008
8. CLEAR COVER FOR M.S. 50DmmØ-60mm, 50DmmØ & 25Dmm-75mm
   PILECAP-75mm, COLUMN-40mm, WATER WALL-50mm,
   SLAB-25mm, BEAM-25mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 x DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE II (UNLESS OTHERWISE CHANGES DUE AS PER THE STRUCTURAL AUDIT BY IS:13935-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC (2016) AND RELEVANT INDIAN CODE SPECIFICATIONS
12. DATE OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS.

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-		KMK	07/02/24

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer :

BURO ENGINEERS (I) PRIVATE LTD.
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar,
Chennai - 600 020. ☎044-2491 2754/5508.
e-Mail ID: buroindia@buroengineers.in

STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

drawing title

SECOND FLOOR BEAM SCHEDULE (TYPICAL FLOOR-3rd TO ROOF)(SHEET-08 OF 08)

scale	AS SHOWN	design by	TP
drawn by	KMK	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE788_S-/BM/02/---/05	revision	-

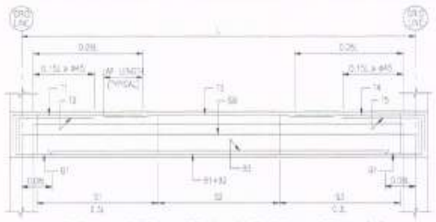
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CAD FILE NAME: BE788_S-BM02---05_dwg

SHEET-05

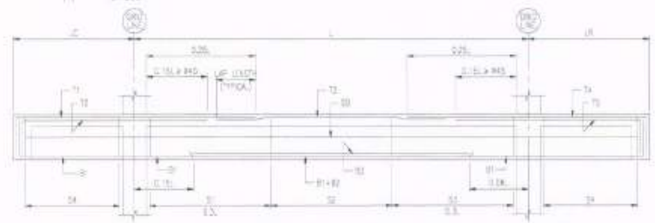
LOCATION			SIZE		SPAN			REINFORCEMENT									SIDE BAR EACH FACE (ET)	STIRRUPS					REMARKS
								SPAN															
BEAM MARK/NO	CATEGORY	GRID LINE OR BEAM MARK	WIDTH (mm)	DEPTH (mm)	LEFT END CANTILEVER LC	SPAN (APPROX) L	RIGHT END CANTILEVER RC	T1	T2	T3	T4	T5	B1	B2	B3	SB	S1	S2	S3	S4	TYPE	
2WB6	1	-	200	600	-	2900	-	2T20	-	2T20	2T20	-	2T20	-	-	-	T8-100	T8-150	T8-100	-	1	
2WB12	1	-	200	380	-	1650	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
2WB13	1	-	200	450	-	3550	-	2T16	2T16	2T16	2T16	-	2T16	-	2T12	-	T8-100	T8-150	T8-100	-	1	
2WB14	1	-	200	450	-	3550	-	2T16	-	2T16	2T16	2T16	2T16	-	2T12	-	T8-100	T8-100	T8-100	-	1	
2WB15	1	-	200	450	-	3550	-	2T16	-	2T16	2T16	2T16	2T16	-	2T12	-	T8-100	T8-100	T8-100	-	1	
2WB18	1	-	200	600	-	5100	-	2T25	2T25	2T25	2T25	-	2T25	-	2T20	-	T10-100	T10-100	T10-100	-	1	
2WB17	1	-	200	600	-	5850	-	2T25	-	2T25	2T25	-	2T25	-	2T25	-	T8-100	T8-150	T8-100	-	1	
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2WB19	1	-	200	600	-	5850	-	2T25	-	2T25	2T25	-	2T25	-	2T25	-	T8-100	T8-150	T8-100	-	1	
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2WB33	1	-	200	380	-	1825	-	2T12	-	2T12	2T12	-	2T12	-	-	-	T8-100	T8-100	T8-100	-	1	
2WB35	1	-	200	450	-	3450	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
2WB37	1	-	200	450	-	3450	-	2T16	2T12	2T16	2T16	-	2T16	-	-	-	T8-100	T8-100	T8-100	-	1	
2WB38	1	-	200	450	-	3900	-	2T20	-	2T20	2T20	-	2T20	-	-	-	T8-100	T8-100	T8-100	-	1	
2WB39	1	-	200	450	-	3375	-	2T16	2T12	2T16	2T16	-	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
2WB40	1	-	200	450	-	3575	-	2T20	2T20	2T20	2T20	-	2T22	-	2T16	-	T10-100	T10-125	T10-100	-	1	
2WB41	1	-	200	450	-	3350	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-133	T8-100	-	1	
2WB42	1	-	200	450	-	4600	-	2T20	2T12	2T20	2T20	-	2T20	-	2T12	-	T8-100	T8-200	T8-100	-	1	
2WB43	1	-	200	450	-	3600	-	2T16	2T12	2T16	2T16	-	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
2WB44	1	-	200	450	-	3950	-	2T16	-	2T16	2T16	2T16	2T16	-	-	-	T8-100	T8-100	T8-100	-	1	
2WB45	1	-	200	450	-	5150	-	2T20	-	2T20	2T20	2T20	2T20	-	2T16	-	T10-100	T10-150	T10-100	-	1	
2WB46	1	-	200	450	-	4050	-	2T20	-	2T20	2T20	2T20	2T20	-	-	-	T8-100	T8-150	T8-100	-	1	

MARKING BEAM	CATEGORY	BEAM MARK OR GRID LINE	SIZE WIDTH (mm)	SIZE DEPTH (mm)	SPAN CANTILEVER LEFT END	SPAN APPROX SPAN	SPAN CANTILEVER RIGHT END	REINFORCEMENT SPAN T1	T2	T3	T4	T5	B1	B2	B3	SIDE BAR EACH FACE (ET) SB	STIRRUPS S1	S2	S3	S4	TYPE	REMARKS
LOCATION			SIZE		SPAN			REINFORCEMENT										STIRRUPS					

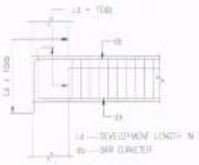


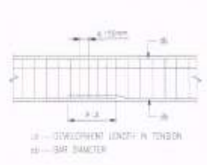
TYPICAL DETAIL OF SINGLE SPAN BEAM (1)

L ---- LENGTH OF SPAN UNDER CONSIDERATION
LC ---- LENGTH OF LEFT END CANTILEVER
RC ---- LENGTH OF RIGHT END CANTILEVER
(1) ---- CATEGORY



TYPICAL DETAIL OF SINGLE SPAN BEAM WITH CANTILEVERS (2)







TYP. BEAM SECTION



TYP. SIDE BARS DETAIL FOR BEAM DEPTH > 750

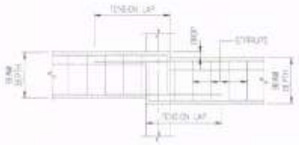
ANCHORAGE OF BEAM BARS AT BEAM AND COLUMN JUNCTION EXTERNAL JOINT

NOTE:
IN AN INTERNAL JOINT, BOTH TOP & BOTTOM BARS OF THE BEAM SHALL BE TAKEN CONTINUOUSLY THROUGH THE COLUMN

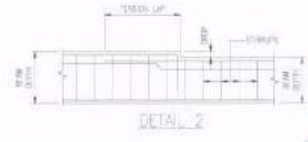
LAP/SPLICE IN BEAM

NOTE:
NOT MORE THAN 50 PERCENT OF TENSILE BARS SHALL BE SPLICED AT ONE SECTION

STIRRUPS TYPE

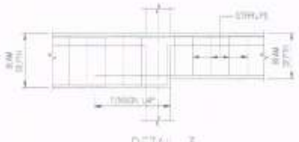


DETAIL 1

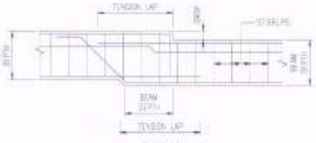


DETAIL 2

Wherever the dia. is less than or equivalent to 32 the reinforcement bars can be bent at 1/12 and continued.



DETAIL 3



DETAIL 4

NOTES :
1. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN AND ALL OTHER RELEVANT DRAWINGS.
2. IF THE REINFORCEMENT IS PROVIDED IN TWO LAYERS OR MORE, THEN SPACER BARS BETWEEN THE LAYERS NEED TO BE PROVIDED.
3. SPACER BARS TO BE T20 OR MAIN BAR SIZE (WHICHEVER IS GREATER) AT 1000c/c BETWEEN EACH LAYER OF MAIN STEEL.
4. THE BEAM LENGTH INDICATED ARE NOT TO BE USED FOR SETTING OUT OR MEASUREMENT.
5. IF BAR SIZE OF THE REINFORCEMENT BARS IS INDICATED THROUGHOUT FOR BOTTOM OR TOP REINFORCEMENT, THE LAP PROVIDED FOR THE REINFORCEMENT CAN BE CARTED BY PROVIDING STRAIGHT BARS FOR THE WHOLE LENGTH OF THE BEAM.
6. LAP LENGTH FOR BARS SHOULD BE SAME AS TENSION ANCHORAGE LENGTH BASED UPON THE LARGER BAR DIAMETER FOR LAP/SPLICE SIZE OF BARS.
7. FIRST STIRRUP OF BEAM SHOULD BE 50mm (MAXIMUM) FROM THE COLUMN FACE.

NOTES:
1. ALL DIMENSIONS ARE IN MM.
2. FOR GENERAL NOTES REFER TO DWG NO. SE/765_S-/YY/--/01.
3. FOR STANDARD DETAILS REFER TO DWG NO. SE/765_S-/GD/--/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE M30
DESIGN MIX M30 WITH
CEMENT CONTENT NOT LESS THAN 380 kg/Cum GRADE 43/53 OPC
*UNDER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
PILE - M30 (CEMENTITIOUS CONTENT SHOULD BE 450kg/m³)
PILE CAP - M25
BASEMENT WALL, RAMP/SLAB-M30,
COLUMN - M40, SHEAR WALL- M40
R.C. SLABS, R.C. BEAMS, STAIRCASE - M25
ALL OTHER STRUCTURAL MEMBERS - M25
7. STEEL GRADE: FeB500 CONFORMING TO IS:1786-2008
8. SLUMP STATED FOR R.C.C. M30mm±10mm, 40mm± & 75mm±75mm.
PILE CAP -75mm, COLUMN-100mm, SHEAR WALL- 75mm
SLAB -125mm, BEAM-125mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR.
10. REBARS USED HAVE BEEN CONSIDERED AS PER IS:1893-2016 WITH T1/T2 BEING ZONE V, SOIL TYPE BEING SOFT/MEDIUM AS PER IMI SPECIFICATIONS AND R=5.0&I=1.5
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC (2016) AND RELEVANT INDIAN CODE STIPULATIONS
12. SALE OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / DEALER / OWNER.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS.

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-		KAV.K	07/02/24

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT.S KEMBHAVI
CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer :

BURO ENGINEERS (I PRIVATE LTD.
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar,
Chennai - 600 020. 4044-0491 2764/5656
e-Mail ID: buroindia@buroengineers.in

STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

drawing title

SECOND FLOOR BEAM SCHEDULE (TYPICAL FLOOR-3rd TO ROOF)(SHEET-05 OF 06)

scale	AS SHOWN	design by	TS
drawn by	KAV.K	checked by	TS
date	DEC 2024	approved by	AP
drawing no.	SE/765_S-/BM/02/--/05	revision	-

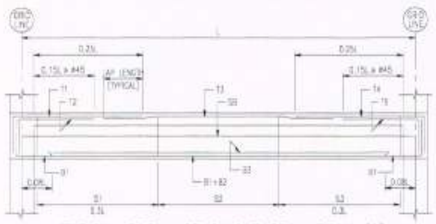
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DWG PLOT NAME: SE/765_S-BM02--05.dwg

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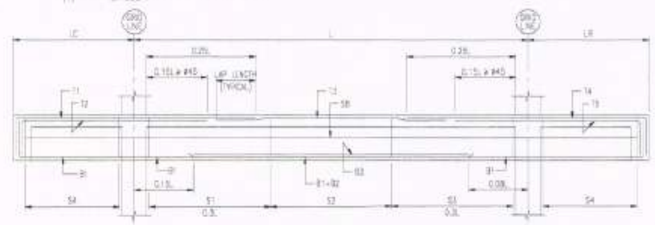
SHEET-04

LOCATION			SIZE		SPAN			REINFORCEMENT								SIDE BAR EACH FACE (ST)	STIRRUPS					REMARKS
								SPAN														
BEAM MARKING	CATEGORY	GRID LINE OR BEAM MARK	WIDTH (mm)	DEPTH (mm)	LEFT END CANTILEVER LE	SPAN (APPROX) L	RIGHT END CANTILEVER RE	T1	T2	T3	T4	T5	B1	B2	B3	SB	S1	S2	S3	S4	TYPE	
2HB38	1	-	200	450	-	2400	-	2T20	-	2T20	2T20	-	2T20	-	-	-	T8-100	T8-100	T8-100	-	1	
2HB40	1	-	200	380	-	800	-	2T12	-	2T12	2T12	-	2T12	-	-	-	T8-100	T8-100	T8-100	-	1	
2HB41	2	-	200	600	450	6775	-	2T25	2T25	2T25	2T25	2T20	2T25	-	2T20	-	T10-100	T10-150	T10-100	-	1	
2HB42	2	-	200	450	-	2550	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
2HB43	1	-	200	600	-	7125	-	2T25	-	2T25	2T25	-	2T25	-	2T25	-	T10-100	T10-150	T10-100	-	1	
2HB44	1	-	200	450	-	4050	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-200	T8-100	-	1	
2HB45	1	-	200	450	-	1650	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
2HB46	1	-	200	450	-	2550	-	2T20	-	2T20	2T20	2T16	2T20	-	-	-	T10-100	T10-150	T10-100	-	1	
2HB47	1	-	200	600	-	7125	-	2T25	2T25	2T25	2T25	2T20	2T25	-	2T25	-	T10-100	T10-125	T10-100	-	1	
2HB48	2	-	200	600	-	4075	1975	2T25	2T25	2T25	2T25	2T25	2T25	-	2T25	-	T10-100	T10-125	T10-100	T10-100	1	
2HB49	1	-	200	450	-	3000	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-200	T8-100	-	1	
2HB50	1	-	200	450	-	3000	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-200	T8-100	-	1	
2HB51	1	-	200	450	-	2775	-	2T20	-	2T20	2T20	-	2T20	-	-	-	T8-100	T8-125	T8-100	-	1	
2HB52	2	-	200	600	-	4725	1975	2T25	2T20	2T25	2T25	2T25	2T25	-	2T20	-	T10-100	T10-150	T10-100	T10-100	1	
2HB53	2	-	200	600	450	6775	-	2T25	2T25	2T25	2T25	2T25	2T25	-	2T20	-	T10-100	T10-150	T10-100	-	1	
2HB54	1	-	200	450	-	3550	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-200	T8-100	-	1	
2HB55	2	-	200	600	-	4725	1975	2T25	2T16	2T25	2T25	2T25	2T25	-	2T20	-	T12-100	T12-150	T12-100	T12-100	1	
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2HB57	1	-	200	450	-	2570	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-200	T8-100	-	1	
2HB58	1	-	200	450	-	3550	-	2T16	-	2T16	2T16	2T16	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
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2HB59a	1	-	200	380	-	1045	-	2T12	-	2T12	2T12	-	2T12	-	-	-	T8-100	T8-100	T8-100	-	1	
2HB63	1	-	200	450	-	3185	-	2T20	2T20	2T20	2T20		2T20	-	2T12	-	T12-100	T12-125	T12-100	-	1	
2HB64	1	-	200	450	-	2750	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-200	T8-100	-	1	
2HB68	1	-	200	600	-	6400	-	2T25	-	2T25	2T25	-	2T25	-	2T25	-	T10-100	T10-150	T10-100	-	1	
2HB70	1	-	200	380	-	1680	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
2V01	1	-	200	600	-	5350	-	2T25	2T16	2T25	2T25	-	2T25	-	-	-	T10-100	T10-150	T10-100	-	1	
2V04	1	-	200	600	-	6400	-	2T25	2T20	2T25	2T25	2T20	2T25	-	-	-	T10-100	T10-150	T10-100	-	1	
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2V07	1	-	200	600	-	7300	-	2T25	2T25	2T25	2T20	2T25	2T25	-	2T20	-	T10-100	T10-150	T10-100	-	1	
2V08	1	-	200	600	-	3850	-	2T20	2T20	2T20	2T20	-	2T20	-	2T16	-	T8-100	T8-150	T8-100	-	1	
MARKING BEAM	CATEGORY	BEAM MARK OR GRID LINE	(mm) WIDTH	(mm) DEPTH	CANTILEVER LEFT END	(APPROX) SPAN	CANTILEVER RIGHT END	T1	T2	T3	T4	T5	B1	B2	B3	BAR SIDE	S1	S2	S3	S4	TYPE	REMARKS
LOCATION			SIZE		SPAN			REINFORCEMENT									STIRRUPS					

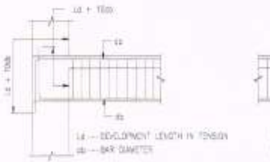


TYPICAL DETAIL OF SINGLE SPAN BEAM (1)

L ---- LENGTH OF SPAN UNDER CONSIDERATION
LC ---- LENGTH OF LEFT END CANTILEVER
RC ---- LENGTH OF RIGHT END CANTILEVER
(1) ---- CATEGORY

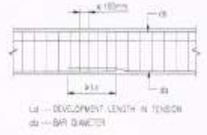


TYPICAL DETAIL OF SINGLE SPAN BEAM WITH CANTILEVERS (2)



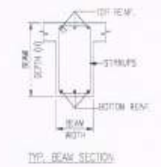
ANCHORAGE OF BEAM BARS AT BEAM AND COLUMN JUNCTION (EXTERNAL JOINT)

NOTE:
IN AN INTERNAL JOINT, BOTH TOP & BOTTOM BARS OF THE BEAM SHALL BE TAKEN CONTINUOUSLY THROUGH THE COLUMN

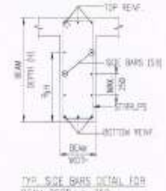


LAP/SPLICE IN BEAM

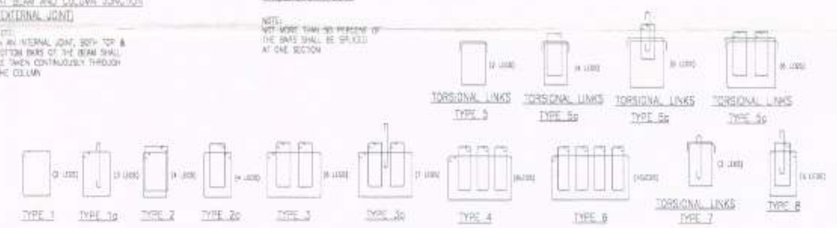
NOTE:
NOT MORE THAN 50 PERCENT OF THE BARS SHALL BE SPLICED AT ONE SECTION



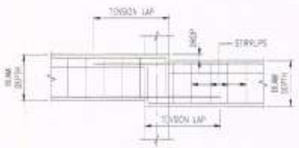
TYP. BEAM SECTION



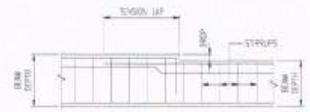
TYP. SIDE BARS DETAIL FOR BEAM DEPTH > 750



STIRRUPS TYPE

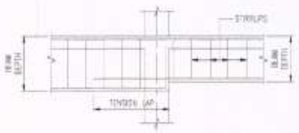


DETAIL 1

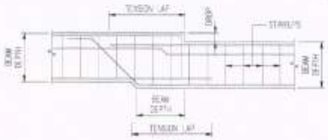


DETAIL 2

Wherever the drop is less than or equivalent to 3D
The reinforcement bars can be bent at 1:10 and continued



DETAIL 3



DETAIL 4

NOTES:
1. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN AND ALL OTHER RELEVANT DRAWINGS.
2. IF THE REINFORCEMENT IS PROVIDED IN TWO LAYERS OR MORE, THEN SPACER BARS BETWEEN THE LAYERS NEED TO BE PROVIDED.
3. SPACER BARS TO BE T25 OR MAIN BAR SIZE (WHICHEVER IS GREATER) AT 600c/c BETWEEN EACH LAYER OF MAIN STEEL.
4. THE SPAN LENGTH INDICATED ARE NOT TO BE USED FOR SETTING OUT OR MEASUREMENT.
5. IF SAME SIZE OF THE REINFORCEMENT BARS IS INDICATED THROUGH-OUT FOR BOTTOM OR TOP REINFORCEMENT, THE LAP PROVIDED FOR THE REINFORCEMENT CAN BE OMITTED BY PROVIDING STRAIGHT BARS FOR THE WHOLE LENGTH OF THE BEAM.
6. LAP LENGTH (T2R BARS SHOULD BE SAME AS TENSION ANCHORAGE LENGTH BASED UPON THE LARGER BAR DIAMETER FOR UNEQUAL SIZE OF BARS.
7. FIRST STIRRUP OF BEAM SHOULD BE 50mm (MAX.M/V) FROM THE COLUMN FACE.

NOTES:
1. ALL DIMENSIONS ARE IN MM.
2. FOR GENERAL NOTES REFER TO DWG. NO. BE1768_S-/NT/--/01.
3. FOR STANDARD DETAILS REFER TO DWG. NO. BE1768_S-/SD/--/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE M30
DESIGN MIX M30 WITH
CEMENT CONTENT NOT LESS THAN 360 kg/Cum (ONCE 43/53 GRD)
HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. CHART OF CONCRETE FOR
RCC = M30 (CEMENTITIOUS CONTENT SHOULD BE 450Kg/m³)
PLC (AP - M20
BASEMENT WALL, BEAM/SLAB-M30,
COLUMN - GWS, SHEAR WALL-M40
R.C. SLABS, R.C. BEAMS, STAIRCASE - M30
ALL OTHER STRUCTURAL MEMBERS - M25
7. STEEL GRADE: FY500 CONFORMING TO IS:1786-2008.
8. CLEAR COVER PER R.C.C 805mm+50mm, 806mm & 750mm-75mm,
PILECAP-75mm, COLUMN-40mm, BASEMENT WALL-30mm,
SLAB-25mm, BEAM-30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 Ø OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE III, DUCTILE DETAILING DRAWED OUT AS PER THE STIPULATIONS MADE IN IS:13920-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH I.S.456-2000, NBC (BPT)-1983 AND RELEVANT INDIAN CODE STIPULATIONS
12. ROLE OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-		KAVI.K	07/12/24

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26684,
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STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNA AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

drawing title

SECOND FLOOR BEAM SCHEDULE (TYPICAL FLOOR-3rd TO ROOF)(SHEET-04 OF 06)

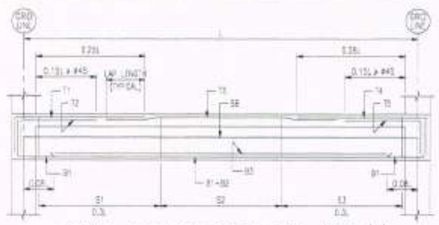
scale	AS SHOWN	design by	TP
drawn by	KAVI.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE1768_S-/BM/02/--/04		revision -

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CAD FILE NAME: BE1768_S-BM02--04_.dwg

SHEET-03

BEAM MARKING	LOCATION: CATEGORY	LOCATION: GRID LINE OR BEAM MARK	SIZE: WIDTH (mm)	SIZE: DEPTH (mm)	SPAN: LEFT END CANTILEVER Lc	SPAN: SPAN (APPROX) L	SPAN: RIGHT END CANTILEVER Rc	REINFORCEMENT: SPAN T1	T2	T3	T4	T5	B1	B2	B3	SIDE BAR EACH FACE (EF): SB	STIRRUPS: S1	S2	S3	S4	TYPE	REMARKS
2HB3	1	-	200	600	-	3605	-	2T20	-	2T20	2T20	-	2T20	-	-	-	T8-100	T8-150	T8-100	-	1	
2HB4	1	-	200	600	-	3760	-	2T20	-	2T20	2T20	-	2T20	-	-	-	T8-100	T8-150	T8-100	-	1	
2HB5	1	-	200	450	-	3245	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
2HB6	2	-	200	450	700	3750	-	2T20	-	2T20	2T20	-	2T20	-	-	-	T8-100	T8-150	T8-100	T10-100	1	
2HB7	1	-	200	450	-	3250	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-200	T8-100	-	1	
2HB11	2	-	200	450	700	3750	1975	2T20	-	2T20	2T20	-	2T20	-	-	-	T8-100	T8-150	T8-100	T10-100	1	
2HB12	1	-	200	450	-	1505	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-100	T8-100	-	1	
2HB13	1	-	200	600	-	6800	-	2T25	-	2T25	2T25	-	2T25	-	2T25 ④	-	T10-100	T10-150	T10-100	-	1	
2HB14	2	-	200	450	-	3550	-	2T20	-	2T20	2T20	-	2T20	-	-	-	T8-100	T8-100	T8-100	-	1	
2HB15	2	-	200	600	-	3075	1935	2T25	-	2T25	2T25	2T25	2T25	-	2T20 ④	-	T10-100	T10-150	T10-100	T10-100	1	
2HB16	1	-	200	450	-	1690	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T10-100	T10-100	T10-100	-	1	
2HB17	2	-	200	600	2010	3785	-	2T20	2T25	2T20	2T20	-	2T20	-	2T20 ④	-	T10-100	T10-125	T10-100	T10-100	1	
2HB18	2	-	200	600	-	4075	1975	2T25	2T20	2T25	2T25	2T25	2T25	-	2T20 ④	-	T10-100	T10-125	T10-100	T10-100	1	
2HB19	1	-	200	380	-	1450	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
2HB20	1	-	200	450	-	2400	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-200	T8-100	-	1	
2HB21	1	-	200	450	-	2400	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-200	T8-100	-	1	
2HB21a	1	-	200	450	-	3775	-	2T20	-	2T20	2T20	-	2T20	-	-	-	T8-100	T8-200	T8-100	-	1	
2HB22	2	-	200	600	-	4730	1970	2T25	-	2T25	2T25	2T25	2T25	-	2T20 ④	-	T10-100	T10-150	T10-100	T10-100	1	
2HB23	1	-	200	380	-	950	-	2T12	-	2T12	2T12	-	2T12	-	-	-	T8-100	T8-100	T8-100	-	1	
2HB24	1	-	200	600	-	3325	-	2T25	2T20	2T25	2T25	2T20	2T25	-	2T16 ④	-	T10-100	T10-150	T10-100	-	1	
2HB25	1	-	200	450	-	3450	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-200	T8-100	-	1	
2HB26	2	-	200	600	-	4675	1975	2T25	-	2T25	2T25	2T25	2T25	-	2T20 ④	-	T10-100	T10-150	T10-100	-	1	
2HB27	1	-	200	600	-	6575	-	2T25	-	2T25	2T25	-	2T25	-	2T25 ④	-	T10-100	T10-150	T10-100	-	1	
2HB28	1	-	200	450	-	2570	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-200	T8-100	-	1	
2HB29	1	-	200	380	-	1045	-	2T12	-	2T12	2T12	-	2T12	-	-	-	T8-100	T8-150	T8-100	-	1	
2HB30	1	-	200	450	-	2550	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
2HB31a	2	-	200	600	1100	-	-	2T25	2T20	2T25	2T25	2T20	2T25	-	-	-	T10-100	T10-100	T10-100	-	1	
2HB31b	2	-	200	600	-	-	1000	2T25	2T20	2T25	2T25	2T20	2T25	-	-	-	T10-100	T10-100	T10-100	-	1	
2HB32	1	-	200	600	-	6375	-	2T25	2T20	2T25	2T25	2T20	2T25	-	2T20 ④	-	T10-100	T10-150	T10-100	-	1	
2HB33	1	-	200	450	-	1105	-	2T12	-	2T12	2T12	-	2T12	-	-	-	T10-100	T10-150	T10-100	-	1	
2HB34	1	-	200	450	-	3600	-	2T16	2T16	2T16	2T16	-	2T16	-	-	-	T10-100	T10-150	T10-100	-	1	
2HB37	1	-	200	450	-	3600	-	2T16	2T16	2T16	2T16	-	2T16	-	-	-	T10-100	T10-150	T10-100	-	1	
2HB38	1	-	200	450	-	3775	-	2T16	-	2T16	2T16	-	2T20	-	-	-	T10-100	T10-150	T10-100	-	1	
MARKING BEAM	CATEGORY	BEAM MARK OR GRID LINE	(mm) WIDTH	(mm) DEPTH	CANTILEVER LEFT END	(APPROX) SPAN	CANTILEVER RIGHT END	T1	T2	T3	T4	T5	B1	B2	B3	BAR SIDE	S1	S2	S3	S4	TYPE	REMARKS
LOCATION			SIZE		SPAN			REINFORCEMENT: SPAN									STIRRUPS					

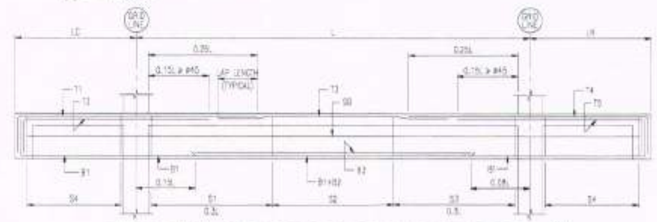


TYPICAL DETAIL OF SINGLE SPAN BEAM (1)

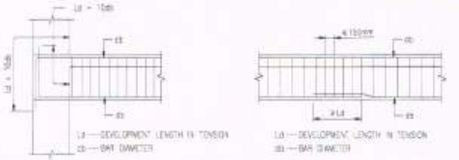
L ---- LENGTH OF SPAN UNDER CONSIDERATION
LC ---- LENGTH OF LEFT END CANTILEVER
RC ---- LENGTH OF RIGHT END CANTILEVER
(T) ---- CATEGORY

NOTES :

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN AND ALL OTHER RELEVANT DRAWINGS.
2. IF THE REINFORCEMENT IS PROVIDED IN TWO LAYERS OR MORE, THEN SPACER BARS BETWEEN THE LAYERS NEED TO BE PROVIDED
3. SPACER BARS TO BE T25 OR MAIN BAR SIZE (WHICHEVER IS GREATER) AT 500c/c BETWEEN EACH LAYER OF MAIN STEEL.
4. THE SPAN LENGTH INDICATED ARE NOT TO BE USED FOR SETTING OUT OR MEASUREMENT.
5. IF SAME SIZE OF THE REINFORCEMENT BARS IS INDICATED THROUGH-OUT FOR BOTTOM OR TOP REINFORCEMENT, THE LAP PROVIDED FOR THE REINFORCEMENT CAN BE OMITTED BY PROVIDING STRAIGHT BARS FOR THE WHOLE LENGTH OF THE BEAM.
6. LAP LENGTH FOR BARS SHOULD BE SAME AS TENSION ANCHORAGE LENGTH BASED UPON THE LARGER BAR DIAMETER FOR UNEQUAL SIZE OF BARS.
7. FIRST STIRRUP OF BEAM SHOULD BE 50mm (MAXIMUM) FROM THE COLUMN FACE



TYPICAL DETAIL OF SINGLE SPAN BEAM WITH CANTILEVERS (2)

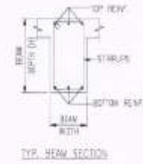


ANCHORAGE OF BEAM BARS AT BEAM AND COLUMN JUNCTION (EXTERNAL JOINT)

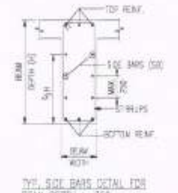
NOTE:
IN AN EXTERNAL JOINT, BOTH TOP & BOTTOM BARS OF THE BEAM SHALL BE TAKEN CONTINUOUSLY THROUGH THE COLUMN

LAP/SPLICE IN BEAM

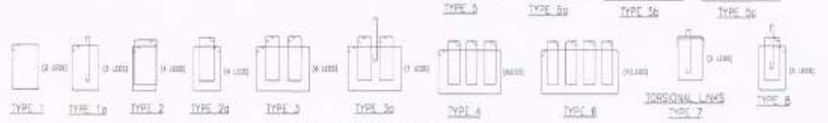
NOTE:
NOT MORE THAN 50 PERCENT OF THE BARS SHALL BE SPLICED AT ONE SECTION



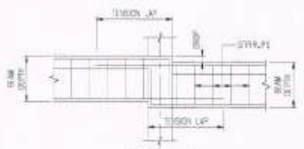
TYP. BEAM SECTION



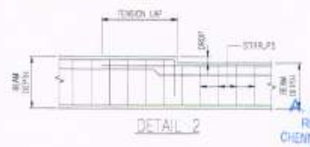
TYP. SIDE BARS DETAIL FOR BEAM DEPTH > 750



STIRRUPS TYPE

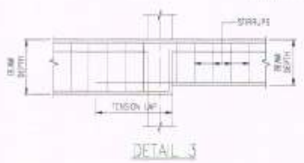


DETAIL 1

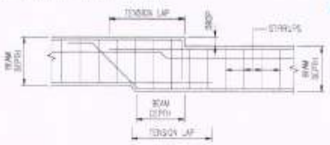


DETAIL 2

Wherever the drop is less than or equivalent to 30 The reinforcement bars can be bent at 1:10 and continued



DETAIL 3



DETAIL 4

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CHENNAI METROPOLITAN DEVELOPMENT AUTHORITY
REGISTRATION No. SE/GR-I/19/03/026
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ADYAR, CHENNAI - 600 020.
E-Mail: peram@buroengineers.in
Mobile: +91 99625 45630

NOTES:
1. ALL DIMENSIONS ARE IN MM.
2. FOR GENERAL NOTES REFER TO DWG. NO. BE/768_S-/NT/--/01.
3. FOR STANDARD DETAILS REFER TO DWG. NO. BE/768_S-/STD/--/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M30
DESIGN MIX M30 WITH
CEMENT CONTENT NOT LESS THAN 350 kg/Cum GRADE 43/53 OPC)
HUNDRED APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
RCC = M30 (CONVENTIOUS CONTENT SHOULD BE 400kg/M.)
PCC OUT = M20
BASEMENT WALL, BEAM/SLAB-M25,
COLUMN - M40, SHEAR WALL-M40
RCC SLABS, R.C. BEAMS, STAIRCASE - M30
ALL OTHER STRUCTURAL WORKING - M25
7. STEEL GRADE: Fe500 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR RCC 500mm-50mm, 600mm & 750mm-75mm.
FOOTING-75mm, COLUMN-40mm, SHEAR WALL-50mm.
SLAB-25mm, BEAM-30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR.
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE - II (LOW DAMAGE RISK ZONE) AS PER THE NOTIFICATIONS MADE IN IS:1893-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC (2017-1983) AND RELEVANT INDIAN CODE STIPULATIONS
12. ORUS OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS.

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-		KAVI K	01/02/26

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects
INDRAJIT.S.KEMBHAVI
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Civil & Structural Consultants
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e-Mail ID: buroms@buroengineers.in

STRUCTURAL

project title
PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

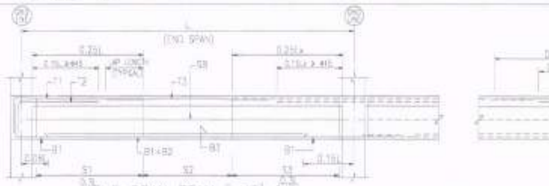
drawing title
SECOND FLOOR BEAM SCHEDULE
(TYPICAL FLOOR-3rd TO ROOF)(SHEET-03 OF 06)

scale	AS SHOWN	design by	TP
drawn by	KAVI K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE/768_S-/BM/02/--/013	revision	-

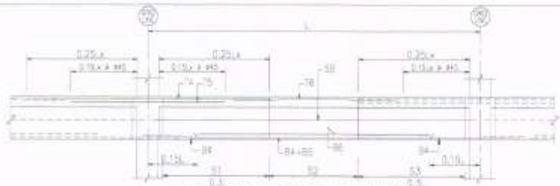
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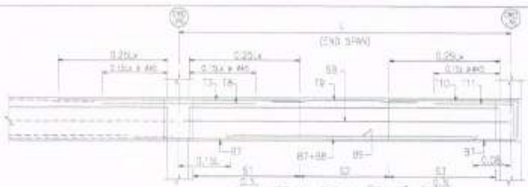
SHEET-01



END SPAN BEAM [LHS] (1)
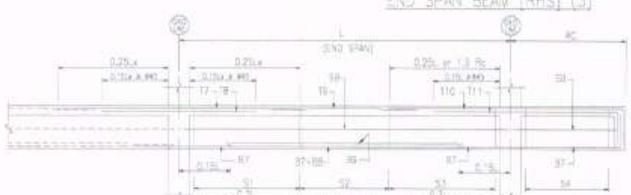


INTERMEDIATE SPAN BEAM (2)



END SPAN BEAM [RHS] (3)



END SPAN BEAM [LHS] WITH CANTILEVER (4)

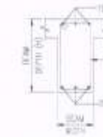


END SPAN BEAM [RHS] WITH CANTILEVER (5)

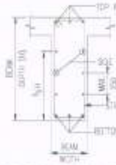
LEGEND

L ---- LENGTH OF SPAN UNDER CONSIDERATION
La ---- LENGTH OF ADJACENT SPAN TO THE SPAN UNDER CONSIDERATION
Lc ---- LENGTH OF LEFT END CANTILEVER
Rc ---- LENGTH OF RIGHT END CANTILEVER
(1) ---- CATEGORY

La = Length of span under consideration or Length of adjacent span whichever is greater



TYP. BEAM SECTION



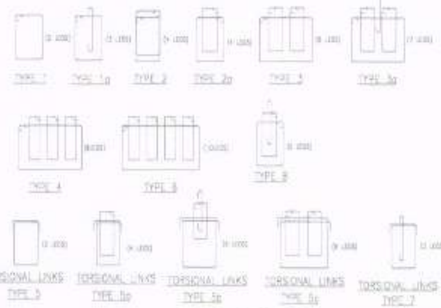
TYP. SIDE BARS DETAIL FOR BEAM DEPTH > 750

NOTES :

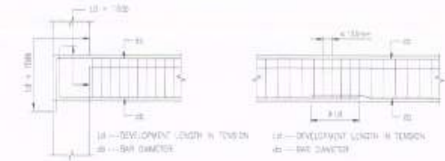
1. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN AND ALL OTHER RELEVANT DRAWINGS.
2. IF THE REINFORCEMENT IS PROVIDED IN TWO LAYERS OR MORE, THEN SPACER BARS BETWEEN THE LAYERS NEED TO BE PROVIDED.
3. SPACER BARS TO BE 12¢ OR MAIN BAR SIZE (WHICHEVER IS GREATER) AT 1000c/c BETWEEN EACH LAYER OF MAIN STEEL.
4. THE SPAN LENGTH INDICATED ARE NOT TO BE USED FOR SETTING OUT OR MEASUREMENT.
5. IF SAME SIZE OF THE REINFORCEMENT BARS IS INDICATED THROUGH-OUT FOR BOTTOM (OR TOP) REINFORCEMENT, THE LAP PROVIDED FOR THE REINFORCEMENT CAN BE STAGGERED PROVIDING STRAIGHT BARS FOR THE ANGLE LENGTH OF THE BEAM.
6. LAP LENGTH FOR BARS SHALL BE SAME AS TENSION ANCHORAGE LENGTH GIVEN UPON THE LARGER BAR DIAMETER FOR UNEQUAL SIZE OF BARS.
7. TYPE STIRRUP OF BEAM SHOULD BE 50mm (MINIMUM) FROM THE COLUMN FACE.

LOCATION			SIZE		SPAN			REINFORCEMENT																				SIDE BAR EACH FACE (SB)	STIRRUPS					REMARKS
BEAM MARKING	CATEGORY	GRID LINE OR BEAM MARK	WIDTH (mm)	DEPTH (mm)	LEFT END CANTILEVER La	SPAN (APPROX) L	RIGHT END CANTILEVER Rc	LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN										S1	S2	S3	S4	TYPE
								T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	S5					
2VB45	1	-	200	750	-	4525	-	2T25	2T25	2T25	2T25	-	2T25*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T12-100	T12-150	T12-100		1
2VB50	2	-	200	600	-	7300	-	-	-	-	-	-	-	2T25	2T25	2T25	2T25	-	-	-	-	-	-	-	-	-	-	-	T10-100	T10-125	T12-100	-	1
2VB51	2	-	200	600	-	6350	-	-	-	-	-	-	-	2T25	2T20	2T25	2T25	-	2T20*	-	-	-	-	-	-	-	-	-	T12-100	T12-150	T12-100	-	1
2VB52	2	-	200	600	-	5650	-	-	-	-	-	-	-	2T25	2T20	2T25	2T25	-	2T16*	-	-	-	-	-	-	-	-	-	T10-100	T10-125	T12-100	-	1
2VB53	2	-	200	600	-	7400	-	-	-	-	-	-	-	2T25	2T16	2T25	2T25	-	2T16*	-	-	-	-	-	-	-	-	-	T10-100	T10-150	T12-100	-	1
2VB54	2	-	200	600	-	5850	-	-	-	-	-	-	-	2T25	2T20	2T25	2T25	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-150	T8-100	-	1
2VB55	2	-	200	450	-	1400	-	-	-	-	-	-	-	2T25	-	2T25	2T25	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-150	T8-100	-	1
2VB56	2	-	200	450	-	2900	-	-	-	-	-	-	-	2T25	-	2T25	2T25	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-150	T8-100	-	1
2VB57	2	-	200	600	-	1400	-	-	-	-	-	-	-	2T25	2T20	2T25	2T25	-	2T25*	-	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	-	1
2VB58	2	-	200	450	-	2000	-	-	-	-	-	-	-	2T25	-	2T25	2T25	-	2T16*	-	-	-	-	-	-	-	-	-	T10-100	T10-100	T10-100	-	1
2VB59	2	-	200	600	-	5140	-	-	-	-	-	-	-	-	-	-	-	-	-	2T25	2T20	2T25	2T25	2T16	2T25	-	2T25*	-	T10-100	T10-150	T10-100	-	1
2VB76	1	-	200	450	-	3300	-	2T20	-	2T20	2T20	-	2T16*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T12-100	T12-125	T12-100	-	1
2VB77	1	-	200	450	-	4525	-	-	-	-	-	-	-	-	-	-	-	-	-	2T20	2T20	2T20	2T20	2T20	2T20	-	2T25*	-	T12-100	T12-125	T12-100	-	1
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2VB92	2	-	200	600	-	3200	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T25	2T20	2T20	-	2T20	-	-	-	T10-100	T10-150	T12-100	-	1
2VB65	1	-	200	450	-	3320	-	2T20	-	2T20	2T20	-	2T16*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-125	T8-100	-	1
2VB66	3	-	200	450	-	1295	-	-	-	-	-	-	-	-	-	-	-	-	-	2T20	2T20	2T20	2T20	-	2T20	-	-	-	T10-100	T12-100	T12-100	-	1

MARKING BEAM	CATEGORY	BEAM MARK ON GRID LINE	WIDTH (mm)	DEPTH (mm)	Lc CANTILEVER LEFT END	L SPAN (APPROX)	Rc CANTILEVER RIGHT END	T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	SIDE BAR EACH FACE	S1	S2	S3	S4	TYPE	REMARKS
LOCATION			SIZE		SPAN			LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN									STIRRUPS					
								REINFORCEMENT																											



STIRRUPS TYPE

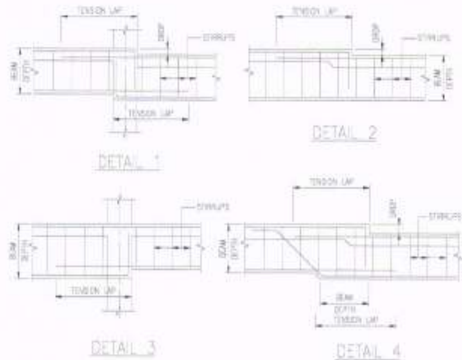


ANCHORAGE OF BEAM BARS AT BEAM AND COLUMN JUNCTION (EXTERNAL JOINT)

NOTE:
IN AN INTERNAL JOINT, BOTH TOP & BOTTOM BARS OF THE BEAM SHALL BE TAKEN CONTINUOUSLY THROUGH THE COLUMN

LAP/SPLICE IN BEAM

NOTE:
NOT MORE THAN 50 PERCENT OF THE BARS SHALL BE SPLICED AT ONE SECTION



Wherever the drop is less than or equivalent to 50, the reinforcement bars can be bent at 1:6 and continued

A. PERAMAIYAN, M.E., (Struct.), M.I.E.
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E-Mail: peram@buroengineers.in
Mobile: +91 99625 45630

NOTES:

1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG NO. BE/768.5-/ST/---/01.
3. FOR STANDARD DETAILS REFER TO DWG NO. BE/768.5-/ST/---/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE, M30
   CONCRETE MIX DESIGN WITH CEMENT CONTENT NOT LESS THAN 350 KG/CUM GRADE ADMIXTURE (IF ANY) HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED & CONFIRMED
6. GRADE OF CONCRETE FOR
   RCC - M30 (COMPRESSIVE STRENGTH SHOULD BE 40N/sq.mm.)
   PILE CAP - M30
   BASEMENT WALL, SHEAR WALL, LIFT WALL - M30
   COLUMN - M40, SHEAR WALL - M40
   RAFT SLABS, R.C. ROOFS, STAIRCASE - M30
   ALL OTHER STRUCTURAL MEMBERS - M30
7. STEEL GRADE - FE500 CONFORMING TO IS:1786-2008.
8. COVER BLOCKS FOR PILE 600mm-80mm, 800mm & 1500mm-75mm, PILECAP-75mm, COLUMN-40mm, SHEAR WALL-25mm, SLAB-25mm, BEAM-30mm.
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR.
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE II, 0.10 I.F. DETAILING CARRIED OUT AS PER THE STIPULATIONS MADE IN IS:13920-2016.
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH I.S.456-2000, SP23-1982 AND RELEVANT WORKING CODE STIPULATIONS.
12. DETAILS OF CONSTRUCTION JOINTS WITH DOWEL/KEY / SHEAR.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF (SHOP, MEP, BLOCKS) FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS.

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-		KM.K	07/02/24

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT.S KEMBHAVI
CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer :

BURO ENGINEERS (I) PRIVATE LTD.
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar, Chennai - 600 020. 4044-2481 2754/55/66.
e-Mail ID: buroindia@buroengineers.in

STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

drawing title

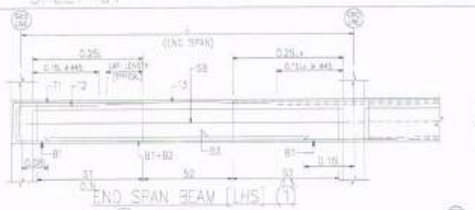
SECOND FLOOR BEAM SCHEDULE (TYPICAL FLOOR-3rd TO ROOF)(SHEET-02 OF 06)

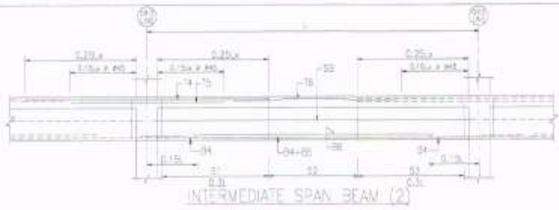
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drawn by	KM.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE/768.5-/BM/02/---/02	revision	-

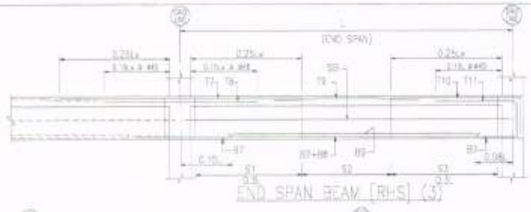
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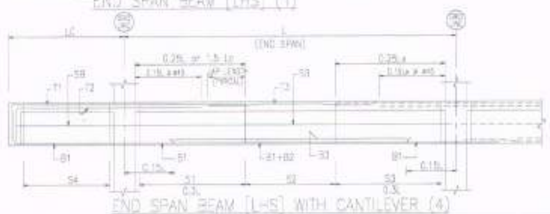
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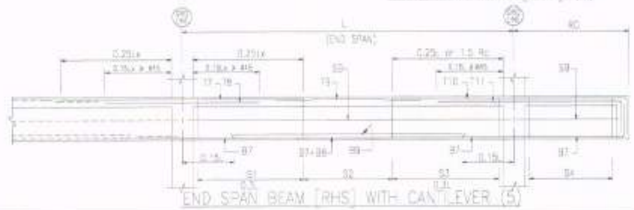
SHEET-01











LEGEND

L ——LENGTH OF SPAN UNDER CONSIDERATION
Lo——LENGTH OF ADJACENT SPAN TO THE SPAN UNDER CONSIDERATION
Lc——LENGTH OF LEFT END CANTILEVER
Rc——LENGTH OF RIGHT END CANTILEVER
(1)——CATEGORY

La = Length of span under consideration or Length of adjacent span whichever is greater



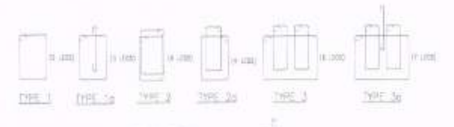
TYP. BEAM SECTION



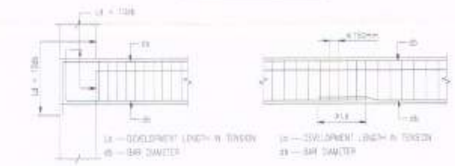
TYP. SIDE BARS DETAIL FOR BEAM DEPTH > 750

NOTES :

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE ADY PLAN AND ALL OTHER RELEVANT DRAWINGS.
2. IF TWO REINFORCEMENT IS PROVIDED IN TWO LAYERS OR MORE, THICK SPACER BARS BETWEEN THE LAYERS NEED TO BE PROVIDED.
3. SPACER BARS TO BE 12Ø OR MAIN BAR SIZE (WHICHEVER IS GREATER) AT 800c/c BETWEEN EACH LAYER OF MAIN STEEL.
4. THE SPAN LENGTH NOTICED ARE NOT TO BE USED FOR SETTING OUT OR MEASUREMENT.
5. IF SAME SIZE OF THE REINFORCEMENT BARS IS NOT EXTRD THROUGH-OUT FOR SECTION FOR THE REINFORCEMENT, THE LAP PROVIDED FOR THE REINFORCEMENT CAN BE OMITTED BY PROVIDING STRAIGHT BARS FOR THE WHOLE LENGTH OF THE BEAM.
6. LAP LENGTH FOR BARS SHOULD BE SAME AS TENSION ANC-SPRACE LENGTH BASED UPON THE LARGER BAR DIAMETER FOR UNEQUAL SIZE OF BARS.
7. FIRST STIRRUP OF BEAM SHOULD BE 50mm (MAXIMUM) FROM THE COLUMN FACE.



STIRRUPS TYPE

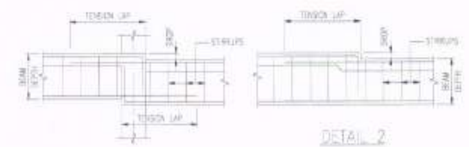


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Mobile: +91 99625 45830

LOCATION			SIZE		SPAN		REINFORCEMENT																						BUNDLE BAR EACH FACE (IF)	STIRRUPS					REMARKS
							LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN																
BEAM MARKING	CATEGORY	ORIG. LINE OR BEAM MARK	WIDTH (mm)	DEPTH (mm)	LOFT END CANTILEVER Lc	SPAN (APPROX)	RIGHT END CANTILEVER Rc	T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	S8	S1	S2	S3	S4	TYPE	
2HB1	1	-	200	600	-	3045	-	2T20	-	2T20	2T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-150	T8-100	-	1	
2HB2	3	-	200	600	-	3250	-	-	-	-	-	-	-	-	-	-	-	-	2T20	-	2T20	2T20	-	2T20	-	-	-	T8-100	T8-150	T8-100	-	1	
2HB5	1	-	200	750	-	6710	-	2T25	2T25	2T25	2T25	-	2T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T10-100	T10-125	T10-100	-	1	
2HB6	2	-	200	750	-	3250	-	-	-	-	-	-	-	2T25	2T25	2T25	2T25	-	-	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	-	1	
2HBT0	3	-	200	750	-	3750	-	-	-	-	-	-	-	-	-	-	-	-	-	2T25	-	2T25	2T25	-	2T25	-	-	T10-100	T10-150	T10-100	-	1	
2HB3A	4	-	200	600	1200	2350	-	2T20	2T25	2T20	2T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T12-100	T12-200	T12-100	112+100	1	
2HB3B	5	-	200	600	-	2350	-	-	-	-	-	-	-	-	-	-	-	-	-	2T20	-	2T20	2T20	-	2T20	-	-	T12-100	T12-200	T12-100	-	1	
2HB6I	1	-	200	750	-	7139	-	2T25	-	2T25	2T25	-	2T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T13-100	T13-150	T12-100	-	1	
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2HB62	5	-	200	600/750	-	2410	2640	-	-	-	-	-	-	-	-	-	-	-	-	2T25	2T20	2T25	2T25	2T25	2T20	-	2T20	T13-100	T13-150	T12-100	-	1	
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2HB72	2	-	200	900	-	6000	-	-	-	-	-	-	-	2T25	2T20	2T25	2T25	-	-	-	-	-	-	-	-	-	-	T10-100	T10-100	T10-100	-	1	
2HB73	5	-	200	600/750	-	3860	3960	-	-	-	-	-	-	-	-	-	-	-	-	2T25	2T20	2T25	2T25	2T25	2T25	-	2T25	T12-100	T12-100	T12-100	T12-100	1	
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2HB40	4	-	200	600/750	-	4825	-	2T25	2T25	2T25	2T25	-	2T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T12-100	T12-120	T12-100	T12-100	1	
2HB41	3	-	200	600	-	7200	-	-	-	-	-	-	-	2T25	2T25	2T25	2T25	-	2T25	-	-	-	-	-	-	-	-	T12-100	T12-150	T12-100	-	1	
2HB42	3	-	200	600	-	6350	-	-	-	-	-	-	-	2T25	2T25	2T25	2T25	-	2T25	-	-	-	-	-	-	-	-	T10-100	T10-125	T10-100	-	1	
2HB43	3	-	200	600	-	5650	-	-	-	-	-	-	-	2T25	2T20	2T25	2T25	-	2T20	-	-	-	-	-	-	-	-	T10-100	T10-125	T10-100	-	1	
2HB44	3	-	200	600	-	7400	-	-	-	-	-	-	-	2T25	2T25	2T25	2T25	-	2T25	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	-	1	
2HB45	3	-	200	600	-	5650	-	-	-	-	-	-	-	2T23	2T16	2T25	2T25	-	-	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	-	1	
2HB46	2	-	200	450	-	1400	-	-	-	-	-	-	-	2T25	-	2T25	2T25	-	-	-	-	-	-	-	-	-	-	T10-100	T10-100	T10-100	-	1	
2HB47	3	-	200	450	-	2800	-	-	-	-	-	-	-	2T25	-	2T25	2T25	-	-	-	-	-	-	-	-	-	-	T8-100	T8-150	T8-100	-	1	
2HB48	3	-	200	600	-	5140	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	-	2T25	2T25	-	2T25	-	-	T8-100	T8-150	T8-100	-	1	
MARKING BEAM	CATEGORY	BEAM MARK OR ORIG LINE	WIDTH (mm)	DEPTH (mm)	Lc CANTILEVER LEFT END	SPAN (APPROX)	Rc CANTILEVER RIGHT END	T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	S8	S1	S2	S3	S4	TYPE	REMARKS
LOCATION			SIZE		SPAN			REINFORCEMENT																				BAR EACH FACE	STIRRUPS					

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NOTES:

1. ALL DIMENSIONS ARE IN MM.
2. FOR STRUCTURAL NOTES REFER TO DWG NO. BE/768_S-/ST/---/01.
3. FOR STANDARD DETAILS REFER TO DWG NO. BE/768_S-/STD/---/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE ADY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT CONSULTANTS DRAWINGS.
5. CONCRETE GRADE: M30
   DESIGN MIX MIXED WITH CEMENT CONTENT NOT LESS THAN 320 kg/Cum GRADE 43/53 GRD. PORTLAND CEMENT. DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION.
6. GRADE OF CONCRETE FOR
   PILE = M30 (CEMENTITIOUS CONTENT SHOULD BE 400kg/m³)
   PILE CAP = M30
   BASEMENT WALL, BEAM/SLAB=M30,
   COLUMN = M40, SHEAR WALL=M40
   R.C. SLABS, R.C. BEAMS, STAIRCASE = M30
   ALL OTHER STRUCTURAL MEMBERS = M30
7. STEEL GRADE : Fe500 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR RCC 50mm+mm, 100mm+ & 75mm+-75mm.
   RAFT=75mm, COLUMN=40mm, SHEAR WALL=35 mm.
   SLAB=15mm, BEAM=15mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 x DIA OF BAR.
10. DESIGN LOAD AND SEISMIC CONSIDERED AS PER IS:1893-2016 & IS: 456 SEISMIC ZONE III & SOFTSOIL DETAILED CHECKED AS PER IS:6403 (FOR UPLIFT) AND IS 15 12985-2016
11. STRUCTURE TO BE DESIGNED IN ACCORDANCE WITH IS:456-2000, NBC, SP21-1983, AND RELEVANT INDIAN CODE OF PRACTICE.
12. ROLE OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING RAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-		KMKR	09/02/26

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

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STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

drawing title

SECOND FLOOR BEAM SCHEDULE (TYPICAL FLOOR-3rd TO ROOF)(SHEET-01 OF 06)

scale	AS SHOWN	design by	TP
drawn by	KMKR	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE/768_S-/BM/02/---/01	revision	-

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CAD FILE NAME: BE/768_S-/BM/---/01.DWG

SHEET-05

BEAM MARKING	LOCATION: CATEGORY	LOCATION: GRID LINE OR BEAM MARK	SIZE: WIDTH (mm)	SIZE: DEPTH (mm)	SPAN: LEFT END CANTILEVER Lc	SPAN: SPAN (APPROX) L	SPAN: RIGHT END CANTILEVER Rc	REINFORCEMENT: SPAN T1	T2	T3	T4	T5	B1	B2	B3	SIDE BAR EACH FACE (SF) SB	STIRRUPS: S1	S2	S3	S4	TYPE	REMARKS
IVB23	1	-	200	450	-	3500	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-150	T8-150	T8-100	-	1	
IVB24	1	-	200	450	-	2450	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
IVB25	1	-	200	450	-	3500	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-200	T8-100	-	1	
IVB26	1	-	200	450	-	2450	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
IVB27	1	-	200	450	-	3500	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
IVB28	1	-	200	380	-	1825	-	2T12	-	2T12	2T12	-	2T12	-	-	-	T8-100	T8-150	T8-100	-	1	
IVB29	1	-	200	450	-	1825	-	2T12	-	2T12	2T12	-	2T12	-	-	-	T8-100	T8-150	T8-100	-	1	
IVB30	1	-	200	450	-	2450	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
IVB31	1	-	200	380	-	1825	-	2T12	-	2T12	2T12	-	2T12	-	-	-	T8-100	T8-150	T8-100	-	1	
IVB32	1	-	200	450	-	2050	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
IVB33	1	-	200	380	-	1825	-	2T12	-	2T12	2T12	-	2T12	-	-	-	T8-100	T8-150	T8-100	-	1	
IVB34	1	-	200	450	-	2050	-	2T16	2T12	2T16	2T16	-	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
IVB35	1	-	200	450	-	2800	-	2T20	-	2T20	2T20	-	2T20	-	-	-	T8-100	T8-150	T8-100	-	1	
IVB36	1	-	200	450	-	4600	-	2T20	-	2T20	2T20	2T16	2T20	-	-	-	T8-100	T8-150	T8-100	-	1	
IVB37	1	-	200	450	-	5025	-	2T20	2T16	2T20	2T20	2T16	2T20	-	-	-	T8-100	T8-150	T8-100	-	1	
IVB38	1	-	200	450	-	3575	-	2T20	2T20	2T20	2T20	-	2T20	-	2T16*	-	T10-100	T10-125	T10-100	-	1	
IVB39	1	-	200	450	-	3750	-	2T20	-	2T20	2T20	2T20	2T20	-	2T20*	-	T10-100	T10-125	T10-100	-	1	
IVB40	1	-	200	450	-	3550	-	2T16	-	2T16	2T16	2T16	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
IVB41	1	-	200	450	-	4650	-	2T16	2T16	2T16	2T16	-	2T16	-	2T16*	-	T8-100	T8-200	T8-100	-	1	
IVB42	1	-	200	450	-	3020	-	2T16	2T12	2T16	2T16	-	2T16	-	-	-	T8-100	T8-200	T8-100	-	1	
IVB44	1	-	200	450	-	3975	-	2T20	-	2T20	2T20	2T20	2T20	-	-	-	T8-100	T8-100	T8-100	-	1	
IVB45	1	-	200	450	-	4050	-	2T16	-	2T16	2T16	-	2T20	-	-	-	T8-100	T8-150	T8-100	-	1	
IVB46	1	-	200	600	-	6400	-	2T20	-	2T20	2T20	2T25	2T25	-	-	-	T10-100	T10-150	T10-100	-	1	
IVB47	1	-	200	450	-	3000	-	2T20	-	2T20	2T20	-	2T20	-	-	-	T8-100	T8-150	T8-100	-	1	
IVB48	1	-	200	450	-	4175	-	2T20	2T12	2T20	2T20	-	2T20	-	-	-	T8-100	T8-125	T8-100	-	1	
IVB73	1	-	200	450	-	4525	-	2T20	-	2T20	2T20	2T20	2T20	-	2T20*	-	T10-100	T10-125	T10-100	-	1	
IVB74	1	-	200	450	-	2285	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
IVB75	1	-	200	380	-	1400	-	2T16	2T12	2T16	2T16	-	2T16	-	-	-	T8-100	T8-100	T8-100	-	1	
IVB76	1	-	200	450	-	3550	-	2T16	2T12	2T16	2T16	2T12	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
IVB77	1	-	200	380	-	1400	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-100	T8-100	-	1	
IVB78	1	-	200	450	-	1700	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-100	T8-100	-	1	
IVB79	1	-	200	750	-	7325	-	2T25	-	2T25	2T25	-	2T25	-	2T25*	-	T10-100	T10-150	T10-100	-	1	
IVB85	1	-	200	600	-	2200	-	2T25	2T16	2T25	2T25	2T20	2T25	-	2T20*	-	T10-100	T10-100	T10-100	-	1	
IVB91	1	-	200	600	-	5240	-	2T20		2T20	2T20	2T20	2T20	-	2T16*	-	T10-100	T10-150	T10-100	-	1	
MARKING BEAM	CATEGORY	BEAM MARK OR GRID LINE	(mm) WIDTH	(mm) DEPTH	CANTILEVER LEFT END	(APPROX) SPAN	CANTILEVER RIGHT END	T1	T2	T3	T4	T5	B1	B2	B3	SIDE BAR EACH FACE	S1	S2	S3	S4	TYPE	REMARKS
LOCATION			SIZE		SPAN			REINFORCEMENT: SPAN									STIRRUPS					

TYPICAL DETAIL OF SINGLE SPAN BEAM (1)

L ---- :LENGTH OF SPAN UNDER CONSIDERATION
LC ---- :LENGTH OF LEFT END CANTILEVER
RC ---- :LENGTH OF RIGHT END CANTILEVER
(1) ---- :CATEGORY

TYPICAL DETAIL OF SINGLE SPAN BEAM WITH CANTILEVERS (2)

Ld --- :DEVELOPMENT LENGTH IN TENSION
db --- :BAR DIAMETER

ANCHORAGE OF BEAM BARS AT BEAM AND COLUMN JUNCTION

LAP/SPLICE IN BEAM

NOTE:
NOT MORE THAN 50 PERCENT OF THE BARS SHALL BE SPLICED AT ONE SECTION

TYP. BEAM SECTION

TYP. SIDE BARS DETAIL FOR BEAM DEPTH > 750

STIRRUPS TYPE

DETAIL 1

DETAIL 2

Wherever the drop is less than or equivalent to 50 The reinforcement bars can be bent at 1:10 and continued

DETAIL 3

DETAIL 4

NOTES :

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN AND ALL OTHER RELEVANT DRAWINGS.
2. IF THE REINFORCEMENT IS PROVIDED IN TWO LAYERS OR MORE, THEN SPACER BARS BETWEEN THE LAYERS NEED TO BE PROVIDED
3. SPACER BARS TO BE T25 OR MAIN BAR SIZE (WHICHEVER IS GREATER) AT 900c/c BETWEEN EACH LAYER OF MAIN STEEL.
4. THE SPAN LENGTH INDICATED ARE NOT TO BE USED FOR SETTING OUT OR MEASUREMENT.
5. IF SAME SIZE OF THE REINFORCEMENT BARS IS INDICATED THROUGHOUT FOR BOTTOM OR TOP REINFORCEMENT, THE LAP PROVIDED FOR THE REINFORCEMENT CAN BE OMITTED BY PROVIDING STRAIGHT BARS FOR THE WHOLE LENGTH OF THE BEAM
6. LAP LENGTH FOR BARS SHOULD BE SAME AS TENSION ANCHORAGE LENGTH BASED UPON THE LARGER BAR DIAMETER FOR UNEQUAL SIZE OF BARS
7. FIRST STIRRUP OF BEAM SHOULD BE 50mm (MAXIMUM) FROM THE COLUMN FACE

NOTES:

1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG NO. BE1768_S-/NT/--/01.
3. FOR STANDARD DETAILS REFER TO DWG NO. BE1768_S-/SD/--/01
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS
5. CONCRETE GRADE: M30
   DESIGN: M30 WITH
   CEMENT CONTENT NOT LESS THAN 350 kg/cum SPACE 43/53 GRD.
   HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   RCC = M30 (CONDITIONS CONCRETE SHOULD BE 40KN/m²)
   PILE CAP = M30
   BASEMENT WALL, BEAM/SUMP=M30,
   COLUMN = M40, SHEAR WALL=M40
   RCC SLABS, RCC BEAMS, STAIRCASE = M30
   ALL OTHER STRUCTURAL MEMBERS = M30
7. STEEL GRADE: Fe500 CONFORMING TO IS:1786-2008
8. CLEAR COVER FOR RCC 500mm-60mm, 650mm & 750mm-75mm,
   PILECAP-75mm, COLUMN-40mm, SHEAR WALL-30mm,
   SUMP-25mm, BEAM-30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE II, DUCTILE DETAILING CARRIED OUT AS PER THE STIPULATIONS MADE IN IS:13920-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, SP23-1982 AND RELEVANT INDIAN CODE STIPULATIONS
12. DAILY OF CONSTRUCTION LOG WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-	-	KRK K	07/02/25

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

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STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

drawing title

FIRST FLOOR BEAM SCHEDULE (SHEET-05 OF 05)

scale	AS SHOWN	design by	TP
drawn by	KAVI.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE1768_S-/BM/01/--/05	revision	-

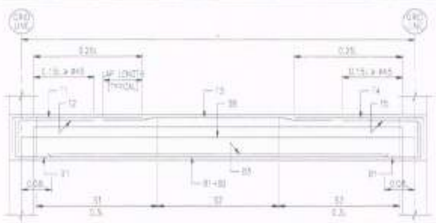
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CAD FILE NAME: BE1768_S-BM01--05(.dwg)

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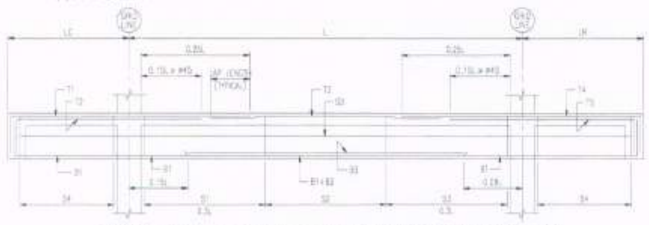
SHEET-04

BEAM MARKING	LOCATION: CATEGORY	LOCATION: BEAM MARK OR GRID LINE	SIZE: WIDTH (mm)	SIZE: DEPTH (mm)	SPAN: LEFT END CANTILEVER	SPAN: (APPROX) SPAN	SPAN: RIGHT END CANTILEVER	REINFORCEMENT: SPAN T1	T2	T3	T4	T5	B1	B2	B3	SIDE BAR EACH FACE (IF) SB	STIRRUPS S1	S2	S3	S4	TYPE	REMARKS
					LC	L	RC															
1-B41	1	-	200	600	-	7125	-	3T25	3T25	3T25	3T25	3T20	3T25	-	2T28*	-	T10-100	T10-125	T10-100	-	1	
1-B42	2	-	200	600	-	4075	1975	3T25	3T25	3T25	3T20	3T20	3T25	-	2T28*	-	T10-100	T10-125	T10-100	T10-100	1	
1-B43	1	-	200	450	-	3000	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-200	T8-100	-	1	
1-B44	1	-	200	450	-	3000	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-200	T8-100	-	1	
1-B45	1	-	200	450	-	3775	-	2T16	-	2T16	2T16	-	2T20	-	-	-	T8-100	T8-135	T8-100	-	1	
1-B46	2	-	200	600	-	4725	1975	3T25	2T20	3T25	3T25	3T25	3T25	-	2T28*	-	T10-100	T10-150	T10-100	T10-100	1	
1-B47	2	-	200	600	450	6775	-	3T25	3T25	3T25	3T25	3T25	3T25	-	2T28*	-	T10-100	T10-150	T10-100	-	1	
1-B48	1	-	200	450	-	3500	-	2T16	-	2T16	2T16	-	2T20	-	-	-	T8-100	T8-200	T8-100	-	1	
1-B49	2	-	200	600	-	4725	1975	3T25	2T16	3T25	3T25	3T20	3T25	-	2T28*	-	T12-100	T12-150	T12-100	T12-100	1	
1-B50	1	-	200	600	-	7125	-	3T25	3T25	3T25	3T25	-	3T25	-	2T28*	-	T10-100	T10-150	T10-100	-	1	
1-B50a	1	-	200	450	-	2575	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-200	T8-100	-	1	
1-B51	1	-	200	450	-	2650	-	2T16	-	2T16	2T16	2T16	2T16	-	-	-	T8-100	T8-150	T8-150	-	1	
1-B52	1	-	200	600	-	6800	-	3T25	-	3T25	3T25	-	3T25	-	2T28*	-	T10-100	T10-150	T10-100	-	1	
1-B52a	1	-	200	380	-	1045	-	2T12	-	2T12	2T12	-	2T12	-	-	-	T8-100	T8-150	T8-150	-	1	
1-B56	1	-	200	450	-	3165	-	2T20	2T20	2T20	2T20	-	2T20	-	2T25*	-	T10-100	T10-150	T10-150	-	1	
1-B56a	1	-	200	450	-	2750	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-200	T8-100	-	1	
1-B57	1	-	200	450	-	3500	-	2T16	-	2T16	2T16	-	2T20	-	-	-	T8-100	T8-150	T8-150	-	1	
1-B58	1	-	200	600	-	6800	-	3T25	3T25	3T25	3T25	-	3T25	-	2T28*	-	T10-100	T10-150	T10-100	-	1	
1-B59	1	-	200	600	-	5850	-	2T25	-	2T25	2T25	-	2T25	-	2T28*	-	T8-100	T8-150	T8-100	-	1	
1-B60	1	-	200	600	-	5850	-	2T25	-	2T25	2T25	-	2T25	-	2T28*	-	T8-100	T8-150	T8-100	-	1	
1-B61	1	-	200	380	-	1650	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
1-B61	1	-	200	600	-	5350	-	2T25	-	2T25	2T25	-	2T20	-	-	-	T10-100	T10-150	T10-100	-	1	
1-B64	1	-	200	600	-	6050	-	2T25	-	2T25	2T25	2T16	2T25	-	-	-	T10-100	T10-150	T10-100	-	1	
1-B65	1	-	200	600	-	5350	-	2T25	2T20	2T25	2T25	2T16	2T25	-	-	-	T10-100	T10-150	T10-100	-	1	
1-B66	1	-	200	600	-	2650	-	2T25	-	2T25	2T25	2T20	2T25	-	2T32*	-	T12-100	T12-100	T12-100	-	1	
1-B69	1	-	200	600	-	5850	-	2T20	2T16	2T20	2T20	-	2T20	-	3T16*	-	T8-100	T8-150	T8-100	-	1	
1-B611	1	-	200	600	-	2900	-	2T20	-	2T20	2T20	-	2T20	-	-	-	T8-100	T8-150	T8-100	-	1	
1-B614	1	-	200	450	-	3500	-	2T16	2T16	2T16	2T16	-	2T20	-	-	-	T8-100	T8-200	T8-100	-	1	
1-B615	1	-	200	450	-	3550	-	2T16	-	2T16	2T16	2T16	2T20	-	-	-	T8-100	T8-200	T8-100	-	1	
1-B616	1	-	200	380	-	1975	-	2T16	-	2T16	2T16	2T16	2T16	-	-	-	T10-100	T10-150	T10-100	-	1	
~~1-B617~~	1	-	200	380	-	1650	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T10-100	T10-150	T10-100	-	1	
1-B618	1	-	200	600	-	6150	-	2T25	2T20	2T25	2T25	-	2T25	-	2T30*	-	T10-100	T10-125	T10-100	-	1	
1-B619	1	-	200	600	-	5850	-	2T25	-	2T25	2T25	-	2T25	-	2T25*	-	T8-100	T8-150	T8-100	-	1	
1-B620	1	-	200	600	-	5850	-	2T25	-	2T25	2T25	-	2T25	-	2T25*	-	T8-100	T8-150	T8-100	-	1	
1-B621	1	-	200	600	-	5850	-	2T25	-	2T25	2T25	-	2T25	-	2T25*	-	T8-100	T8-150	T8-100	-	1	
1-B622	1	-	200	450	-	3350	-	2T16	-	2T16	2T16	-	2T20	-	-	-	T8-100	T8-150	T8-100	-	1	
MARKING BEAM	CATEGORY	BEAM MARK OR GRID LINE	(mm) WIDTH	(mm) DEPTH	CANTILEVER LEFT END	(APPROX) SPAN	CANTILEVER RIGHT END	T1	T2	T3	T4	T5	B1	B2	B3	SIDE BAR EACH FACE (IF) SB	S1	S2	S3	S4	TYPE	REMARKS
LOCATION			SIZE		SPAN			REINFORCEMENT: SPAN									STIRRUPS					

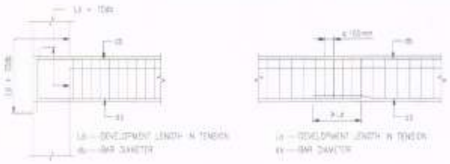


TYPICAL DETAIL OF SINGLE SPAN BEAM (1)

L ---- LENGTH OF SPAN UNDER CONSIDERATION
LC ---- LENGTH OF LEFT END CANTILEVER
RC ---- LENGTH OF RIGHT END CANTILEVER
(*) ---- CATEGORY



TYPICAL DETAIL OF SINGLE SPAN BEAM WITH CANTILEVERS (2)

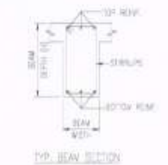


ANCHORAGE OF BEAM BARS AT BEAM AND COLUMN JUNCTION (EXTERNAL JOINT)

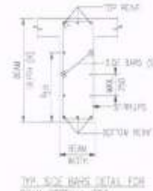
NOTE:
IN AN INTERNAL JOINT, BOTH TOP & BOTTOM BARS OF THE BEAM SHALL BE TAKEN CONTINUOUSLY THROUGH THE COLUMN

LAP/SPLICE IN BEAM

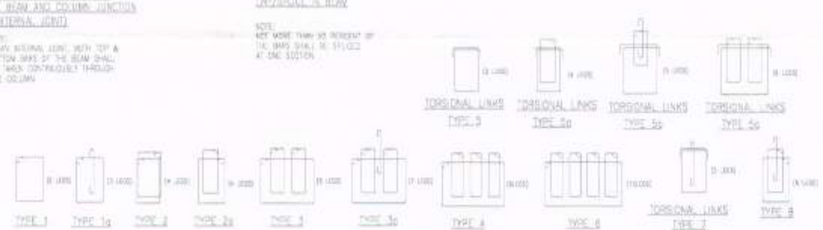
NOTE:
NOT MORE THAN 50 PERCENT OF THE BARS SHALL BE SPLICED AT ONE SECTION



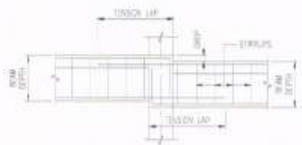
TYP. BEAM SECTION



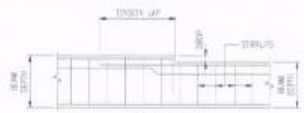
TYP. SIDE BARS DETAIL FOR BEAM DEPTH > 750



STIRRUPS TYPE

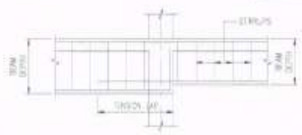


DETAIL 1

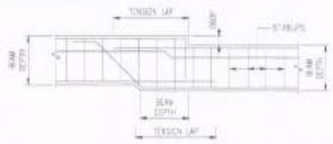


DETAIL 2

Wherever the drop is less than or equivalent to 50
The reinforcement bars can be bent at 1:10 and continued



DETAIL 3



DETAIL 4

NOTES:

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN AND ALL OTHER RELEVANT DRAWINGS.
2. IF THE REINFORCEMENT IS PROVIDED IN TWO LAYERS OR MORE, THEN SPACER BARS (STRAIGHT) OF THE SAME SIZE AS MAIN BARS SHALL BE PROVIDED AT 500c/c BETWEEN EACH LAYER OF MAIN STEEL.
3. SPACER BARS TO BE T25 OR MAIN BAR SIZE (WHICHEVER IS GREATER) AT 500c/c BETWEEN EACH LAYER OF MAIN STEEL.
4. THE SPAN LENGTH INDICATED ARE NOT TO BE USED FOR SETTING OUT OF MEASUREMENT.
5. IF BAR SIZE OF THE REINFORCEMENT BARS IS INDICATED THROUGH OUT FOR BOTTOM OR TOP REINFORCEMENT, NO LAP PROVIDED FOR THE REINFORCEMENT CAN BE OMITTED BY PROVIDING STRAIGHT BARS FOR THE WHOLE LENGTH OF THE BEAM.
6. LAP LENGTH FOR BARS SHOULD BE SAME AS TENSION ANCHORAGE LENGTH BASED UPON THE LARGER BAR DIAMETER FOR UNEQUAL SIZE OF BARS.
7. FIRST STIRRUP OF BEAM SHOULD BE 50mm (MAXIMUM) FROM THE COLUMN FACE.

NOTES:

1. ALL DIMENSIONS ARE IN MM.
2. FOR GENERAL NOTES REFER TO DWG. NO. BE768_S-(W)---/01.
3. FOR STANDARD DETAILS REFER TO DWG. NO. BE768_S-(SD)---/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M30
   DESIGN MIX M30 WITH
   CEMENT CONTENT NOT LESS THAN 350 kg/Cum SLUMP +/-25 mm.
   HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION.
6. GRADE OF CONCRETE FOR
   PILE = M30 (CEMENTITIOUS CONTENT SHOULD BE 400kg/m³)
   PILE CAP = M30
   BASEMENT WALL, SLAB/SLAB-M30,
   COLUMN = M40, SHEAR WALL M40,
   RCC SLABS, RCC BEAMS, STAIRCASE = M30
   ALL OTHER STRUCTURAL MEMBERS = M30.
7. STEEL GRADE: FE500 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR PILE 100mm-65mm, RECTANGLE & 150mm-75mm.
   PILECAP-75mm, COLUMN-40mm, SHEAR WALL-30mm.
   SLAB-20mm, BEAM-30mm.
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR.
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE III, SLOPE DETAILING CARRIED OUT AS PER THE STIPULATIONS MADE IN IS:13920-2016.
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH I.S.456-2000, SP(---)-2010 AND RELEVANT ROBMS CODE STIPULATIONS.
12. LEVEL OF CONSTRUCTION TO BE WITH CONTINUOUS PROMOTER / BUILDER / OWNER.

FOUNDATION AND COLUMNS DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FLUSH WALLS.

NORTH POINT



NO	AMENDMENTS	BY	DATE
-	-	KAV.K	01/02/26

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT S KEMBHAVI
CA/2000/26684,
BCC/BL-3.8/A-2569/14-15

Civil & Structural Engineer :

BURO ENGINEERS (I) PRIVATE LTD.
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar,
Chennai - 600 020. Ph:+91-44-2491 2754/5556.
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STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

drawing title

FIRST FLOOR BEAM SCHEDULE (SHEET-04 OF 05)

scale	AS SHOWN	design by	TP
drawn by	KAV.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE768_S-/3M/01/---/04	revision	-

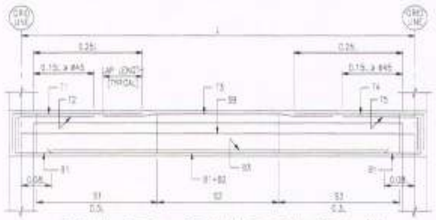
THIS DRAWING IS COPYRIGHT

DXF FILE NAME: BE768_S-3M01---04_.dwg

SHEET-03

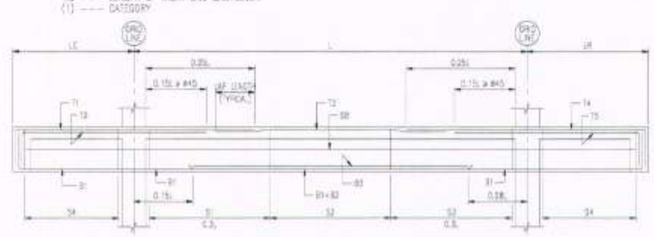
BEAM MARKING	LOCATION: CATEGORY	LOCATION: GRID LINE OF BEAM MARK	SIZE: WIDTH (mm)	SIZE: DEPTH (mm)	SPAN: LEFT END CANTILEVER Le	SPAN: SPAN (APPROX) L	SPAN: RIGHT END CANTILEVER Re	REINFORCEMENT: SPAN T1	T2	T3	T4	T5	B1	B2	B3	SIDE BAR EACH FACE (EF) SB	STIRRUPS: S1	S2	S3	S4	TYPE	REMARKS
THB3	1	-	200	600	-	3605	-	2T20	-	2T25	2T20	-	2T20	-	-	-	T8-100	T8-150	T8-100	-	1	
THB4	1	-	200	600	-	3750	-	2T20	-	2T20	2T20	-	2T20	-	-	-	T8-100	T8-150	T8-100	-	1	
THB5	1	-	200	450	-	3250	-	2T16	-	2T16	2T16	-	2T20	-	-	-	T8-200	T8-200	T8-200	-	1	
THB9	1	-	200	600	-	6800	-	2T25	-	2T25	2T25	-	2T25	-	2T16*	-	T8-200	T8-200	T8-200	-	1	
THB10	1	-	200	600	-	6800	-	2T25	-	2T25	2T25	-	2T25	-	2T20*	-	T10-100	T10-150	T10-100	-	1	
THB11	2	-	200	600	-	3225	1975	2T25	-	2T25	2T25	2T25	2T25	-	2T20*	-	T12-100	T12-200	T12-100	T12-150	1	
THB12	1	-	200	450	-	1600	-	2T16	2T12	2T16	2T16	-	2T16	-	2T12*	-	T10-100	T10-150	T10-100	-	1	
THB13	2	-	200	600	-	4075	1975	2T25	2T20	2T25	2T25	2T25	2T25	-	2T20*	-	T10-100	T10-125	T10-100	-	1	
THB14	2	-	200	600	3010	3765	-	2T20	2T25	2T20	2T20	-	2T20	-	2T20*	-	T10-100	T10-125	T10-100	-	1	
THB15	1	-	200	450	-	2400	-	2T16	-	2T16	2T16	-	2T16	-	2T12*	-	T8-100	T8-200	T8-100	-	1	
THB16	1	-	200	450	-	3715	-	2T16	-	2T16	2T16	-	2T16	-	2T12*	-	T8-100	T8-200	T8-100	-	1	
THB17	2	-	200	600	-	4730	1970	2T25	-	2T25	2T25	2T25	2T25	-	2T20*	-	T10-100	T10-150	T10-100	T10-100	1	
THB18	1	-	200	350	-	950	-	2T12	-	2T12	2T12	-	2T12	-	-	-	T8-100	T8-100	T8-100	-	1	
THB19	1	-	200	600	-	5325	-	2T20	2T20	2T20	2T20	2T20	2T20	-	2T16*	-	T10-100	T10-150	T10-100	-	1	
THB20	1	-	200	450	-	2520	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-200	T8-100	-	1	
THB21	2	-	200	600	-	4675	1975	2T25	-	2T25	2T25	2T25	2T25	-	2T20*	-	T10-100	T10-150	T10-100	T10-100	1	
THB23	1	-	200	600	-	6575	-	2T25	-	2T25	2T25	2T25	2T25	-	2T25*	-	T10-100	T10-150	T10-100	-	1	
THB24	1	-	200	450	-	2550	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-125	T8-100	-	1	
THB25a	2	-	200	600	1100	-	-	2T25	2T20	2T25	2T25	-	2T25	-	-	-	-	-	-	T12-100	1	
THB25b	2	-	200	600	-	-	800	2T25	-	2T25	2T25	2T20	2T25	-	-	-	-	-	-	T12-100	1	
THB26	1	-	200	450	-	1100	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-100	T8-100	-	1	
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THB38	1	-	200	450	-	4050	-	2T16	-	2T16	2T16	-	2T20	-	-	-	T8-100	T8-200	T8-100	-	1	
THB39	1	-	200	450	-	1600	-	2T16	-	2T16	2T16	-	2T16	-	-	-	T8-100	T8-150	T8-100	-	1	
THB40	1	-	200	450	-	2550	-	2T20	-	2T20	2T20	2T16	2T20	-	-	-	T10-150	T10-150	T10-100	-	1	

MARKING BEAM	LOCATION: CATEGORY	LOCATION: BEAM MARK OR GRID LINE	SIZE: WIDTH (mm)	SIZE: DEPTH (mm)	SPAN: CANTILEVER LEFT END	SPAN: (APPROX) SPAN	SPAN: CANTILEVER RIGHT END	REINFORCEMENT: SPAN T1	T2	T3	T4	T5	B1	B2	B3	SIDE BAR EACH FACE	STIRRUPS: S1	S2	S3	S4	TYPE	REMARKS

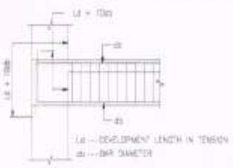


TYPICAL DETAIL OF SINGLE SPAN BEAM (1)

L ---- LENGTH OF SPAN UNDER CONSIDERATION
LC ---- LENGTH OF LEFT END CANTILEVER
RC ---- LENGTH OF RIGHT END CANTILEVER
(1) ---- CATEGORY

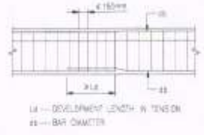


TYPICAL DETAIL OF SINGLE SPAN BEAM WITH CANTILEVERS (2)



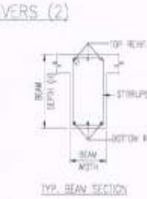
ANCHORAGE OF BEAM BARS AT BEAM AND COLUMN JUNCTION (EXTERNAL JOINT)

NOTE:
IN AN INTERNAL JOINT, BOTH TOP & BOTTOM BARS OF THE BEAM SHALL BE TAKEN CONTINUOUSLY THROUGH THE COLUMN

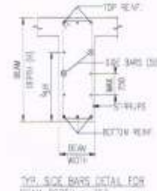


LAP/SPLICE IN BEAM

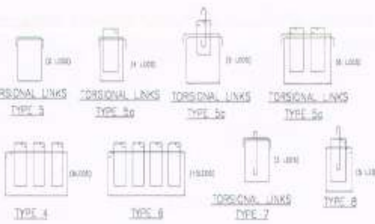
NOTE:
NOT MORE THAN 50 PERCENT OF THE BARS SHALL BE SPLICED AT ONE SECTION



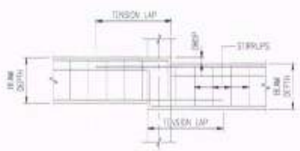
TYP. BEAM SECTION



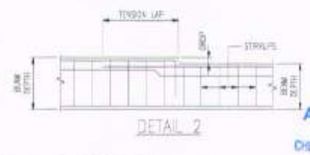
TYP. SIDE BARS DETAIL FOR BEAM DEPTH > 750



STIRRUPS TYPE

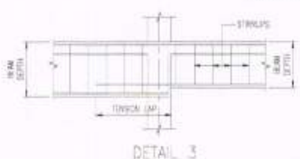


DETAIL 1

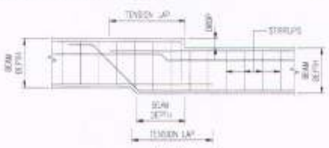


DETAIL 2

Wherever the crop is less than or equivalent to 50
The reinforcement bars can be bent at 1:10 and continued



DETAIL 3



DETAIL 4

NOTES:
1. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN AND ALL OTHER RELEVANT DRAWINGS.
2. IF THE REINFORCEMENT IS PROVIDED IN TWO LAYERS OR MORE, THEN SPACING BARS BETWEEN THE LAYERS NEED TO BE PROVIDED
3. SPACER BARS TO BE T25 OR MINIMUM BAR SIZE (WHICHEVER IS GREATER) AT 1000c/c BETWEEN EACH LAYER OF MAIN STEEL.
4. THE SPAN LENGTH INDICATED ARE NOT TO BE USED FOR SETTING OUT OR MEASUREMENT.
5. IF SAME SIZE OF THE REINFORCEMENT BARS IS INDICATED THROUGH-OUT FOR BOTTOM OR TOP REINFORCEMENT, THE LAP PROVIDED FOR THE REINFORCEMENT CAN BE OMITTED BY PROVIDING STRAIGHT BARS FOR THE WHOLE LENGTH OF THE BEAM
6. LAP LENGTH FOR BARS SHOULD BE SAME AS TENSION AND ANCHORAGE LENGTH BASED UPON THE LARGER BAR DIAMETER FOR UNEQUAL SIZE OF BARS.
7. FIRST STIRRUP OF BEAM SHOULD BE 50mm (MAXIMUM) FROM THE COLUMN FACE

NOTES:
1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG. NO. BE1768_S-/GN/--/01.
3. FOR STANDARD DETAILS REFER TO DWG NO. BE1768_S-/STD/--/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M30
   DESIGN MIX MIXED WITH CEMENT CONTENT NOT LESS THAN 350 kg/Cum GRADE 53/52 OPC. HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   PILE - M30 (CEMENTITIOUS CONTENT SHOULD BE 400kg/m³)
   PILE CAP - M30
   BASEMENT WALL, RETAINING WALL - M30
   COLUMN - M40, SHEAR WALL - M40
   R.C. SLABS, R.C. BEAMS, STAIRCASE - M30
   ALL OTHER STRUCTURAL MEMBERS - M30
7. STEEL GRADE: FE500 CONFORMING TO IS 1786-2008.
8. CLEAR COVER FOR PILE 100mm@ 50mm, 600mm@ & 750mm-75mm;
   PILECAP-75mm, COLUMN-40mm, SHEAR WALL-30mm,
   SLAB-25mm, BEAM-30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE II, SOIL-2 DETAILING EMPLOYED BUT AS PER THE STRUCTURAL MEET IS IS:13920-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH I.S.456-2000, NBC (SP7-1983) AND RELEVANT ACMA CODE STIPULATIONS
12. DRAWINGS OF CONSTRUCTION LESS WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS.

A. PERAMAIYAN, M.E., (Struct.), M.I.E.
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NORTH POINT

NO.	AMENDMENTS	BY	DATE
-	-	KM/K	07/02/26

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT S KEMBHAVI
CA/2000/26684,
BCC/BL-3.9/A-2569/14-15

Civil & Structural Engineer :

BURO ENGINEERS (I) PRIVATE LTD.
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar,
Chennai - 600 020. 2441 2754/5058.
e-Mail ID: buroindia@buroengineers.in

STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

drawing title

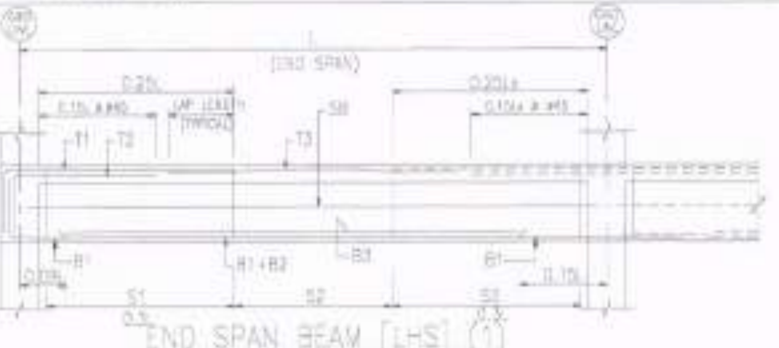
FIRST FLOOR BEAM SCHEDULE (SHEET-03 OF 05)

scale	AS SHOWN	design by	TP
drawn by	KM/K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE1768_S-/BM/01/--/013		revision -

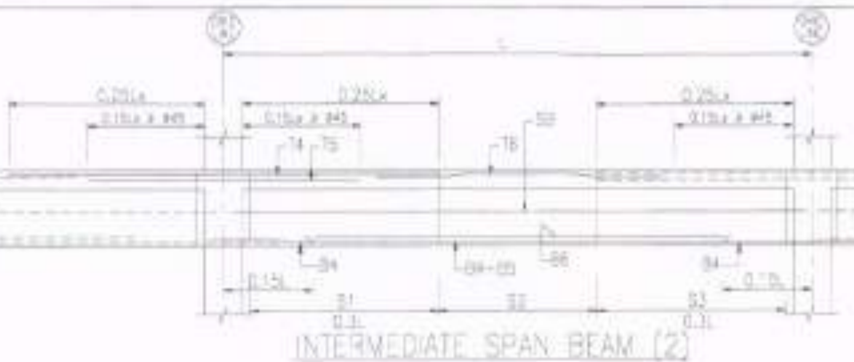
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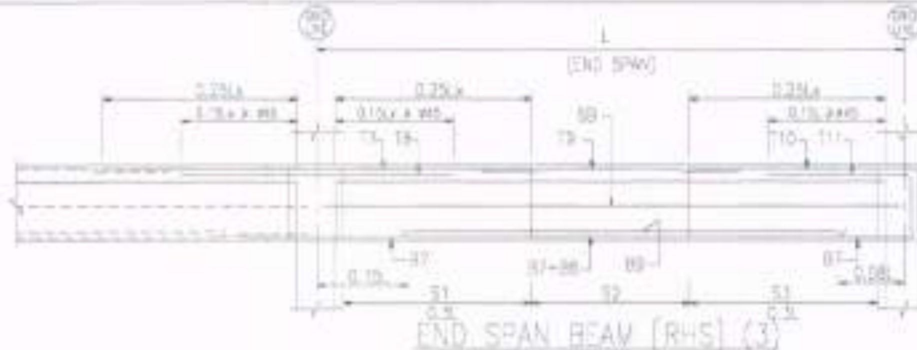
SHEET-02



END SPAN BEAM [LHS] (1)



INTERMEDIATE SPAN BEAM (2)



END SPAN BEAM [RHS] (3)

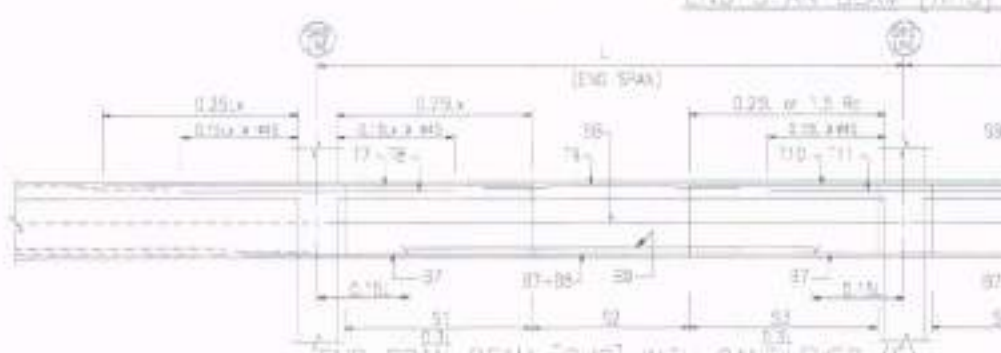


END SPAN BEAM [LHS] WITH CANTILEVER (4)

LEGEND

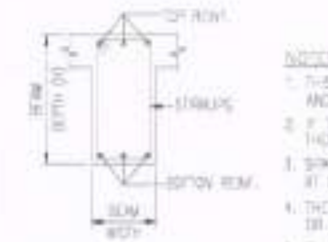
L ---- LENGTH OF SPAN UNDER CONSIDERATION
Lo ---- LENGTH OF ADJACENT SPAN TO THE SPAN UNDER CONSIDERATION
Lc ---- LENGTH OF LEFT END CANTILEVER
Rc ---- LENGTH OF RIGHT END CANTILEVER
(1) ---- CATEGORY

Lx = Length of span under consideration or Length of adjacent span whichever is greater

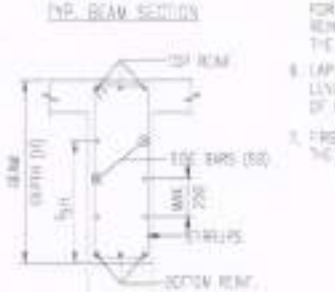


END SPAN BEAM [RHS] WITH CANTILEVER (5)

LOCATION			SIZE		SPAN			REINFORCEMENT																				SIDE BAR EACH FACE (EF)	STIRRUPS					REMARKS
								LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN														
BEAM MARKING	CATEGORY	GRID LINE OR BEAM MARK	WIDTH (mm)	DEPTH (mm)	LEFT END CANTILEVER Lc	SPAN (APPROX) L	RIGHT END CANTILEVER Rc	T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	SB	S1	S2	S3	S4	TYPE	
1VB46	1	-	200	750	-	3325	-	2T25	2T25	2T25	2T25	-	2T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T12-100	T12-100	T12-100	-	1	
1VB47	2	-	200	600	-	4950	-	-	-	-	-	-	-	2T25	2T25	2T25	2T25	-	-	-	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	-	1	
1VB48	2	-	200	600	-	4200	-	-	-	-	-	-	-	2T25	-	2T25	2T25	-	2T16*	-	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	-	1	
1VB49	2	-	200	600	-	3900	-	-	-	-	-	-	-	2T25	-	2T25	2T25	-	-	-	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	-	1	
1VB50	2	-	200	600	-	6400	-	-	-	-	-	-	-	2T25	-	2T25	2T25	-	-	-	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	-	1	
1VB51	2	-	200	600	-	5195	-	-	-	-	-	-	-	2T25	-	2T25	2T25	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-200	T8-100	-	1	
1VB52	2	-	200	450	-	2700	-	-	-	-	-	-	-	2T25	-	2T25	2T25	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-200	T8-100	-	1	
1VB53	2	-	200	450	-	4675	-	-	-	-	-	-	-	2T25	-	2T25	2T25	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-200	T8-100	-	1	
1VB54	2	-	200	600	-	3100	-	-	-	-	-	-	-	2T25	2T20	2T25	2T25	-	2T16*	-	-	-	-	-	-	-	-	-	T10-100	T10-100	T10-100	-	1	
1VB55	2	-	200	600	-	2300	-	-	-	-	-	-	-	2T25	-	2T25	2T25	-	-	-	-	-	-	-	-	-	-	-	T10-100	T10-100	T10-100	-	1	
1VB56	3	-	200	600	-	6900	-	-	-	-	-	-	-	-	-	-	-	-	-	2T25	2T16	2T25	2T25	-	2T25	-	2T16*	-	T10-100	T10-150	T10-100	-	1	
1VB63	1	-	200	450	-	3500	-	2T20	-	2T20	2T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-150	T8-100	-	1	
1VB63a	3	-	200	450	-	1250	-	-	-	-	-	-	-	-	-	-	-	-	-	2T20	2T16	2T20	2T20	-	2T20	-	-	-	T12-100	T12-100	T12-100	-	1	
1VB80	1	-	200	600	-	3400	-	2T20	-	2T20	2T20	-	2T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-150	T8-100	-	1	
1VB81	2	-	200	600	-	4050	-	-	-	-	-	-	-	2T20	-	2T20	2T20	-	2T16*	-	-	-	-	-	-	-	-	-	T8-100	T8-200	T8-100	-	1	
1VB82	2	-	200	600	-	3550	-	-	-	-	-	-	-	2T20	-	2T20	2T20	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-200	T8-100	-	1	
1VB83	2	-	200	600	-	8400	-	-	-	-	-	-	-	2T20	-	2T20	2T20	-	2T25	-	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	-	1	
1VB84	3	-	200	600	-	3000	-	-	-	-	-	-	-	-	-	-	-	-	-	2T20	2T25	2T20	2T20	-	2T20	-	-	-	T8-100	T8-200	T8-100	-	1	
1VB85	1	-	200	600	-	4175	-	2T20	-	2T20	2T20	-	2T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-150	T8-100	-	1	
1VB87	2	-	200	600	-	4050	-	-	-	-	-	-	-	2T20	-	2T20	2T20	-	2T16*	-	-	-	-	-	-	-	-	-	T8-100	T8-200	T8-100	-	1	
1VB88	2	-	200	600	-	3550	-	-	-	-	-	-	-	2T20	-	2T20	2T20	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-200	T8-100	-	1	
1VB89	2	-	200	600	-	3250	-	-	-	-	-	-	-	2T20	-	2T20	2T20	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-150	T8-100	-	1	
1VB90	3	-	200	600	-	5950	-	-	-	-	-	-	-	-	-	-	-	-	-	2T20	-	2T20	2T20	2T20	2T20	-	2T20*	-	T8-100	T8-150	T8-100	-	1	
MARKING BEAM	CATEGORY	BEAM MARK OR GRID LINE	(mm) WIDTH	(mm) DEPTH	Lc CANTILEVER LEFT END	L (APPROX) SPAN	Rc CANTILEVER RIGHT END	T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	SB	S1	S2	S3	S4	TYPE	REMARKS
								LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN								SIDE BAR	STIRRUPS					
LOCATION			SIZE		SPAN			REINFORCEMENT																										



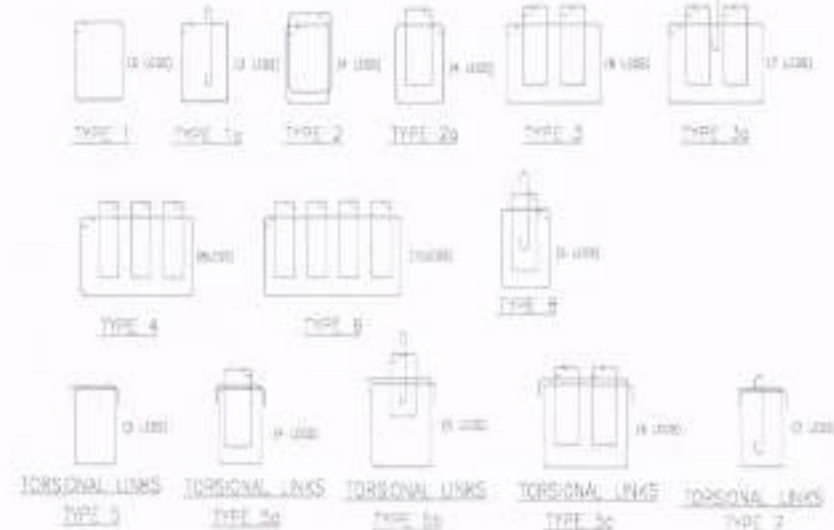
TYP. BEAM SECTION



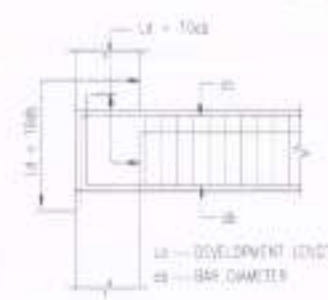
TYP. SIDE BARS DETAIL FOR BEAM DEPTH ≥ 750

NOTES :

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN AND ALL OTHER RELEVANT DRAWINGS.
2. IF THE REINFORCEMENT IS PROVIDED IN TWO LAYERS OR MORE, THEN SPACER BARS BETWEEN THE LAYERS NEED TO BE PROVIDED.
3. SPACER BARS TO BE T25 OR MAIN BAR SIZE (WHICHEVER IS GREATER) AT 1000c/c BETWEEN EACH LAYER OF MAIN STEEL.
4. THE SPAN LENGTH INDICATED ARE NOT TO BE USED FOR SETTING OUT OR MEASUREMENT.
5. IF SAME SIZE OF THE REINFORCEMENT BARS IS INDICATED THROUGH-OUT FOR BOTTOM OR TOP REINFORCEMENT, THE LAP PROVIDED FOR THE REINFORCEMENT CAN BE OMITTED BY PROVIDING STRAIGHT BARS FOR THE WHOLE LENGTH OF THE BEAM.
6. LAP LENGTH FOR BARS SHOULD BE SAME AS TENSION ANCHORAGE LENGTH BASED UPON THE LARGER BAR DIAMETER FOR UNEQUAL SIZE OF BARS.
7. FIRST STIRRUP OF BEAM SHOULD BE 50mm (MINIMUM) FROM THE COLUMN FACE.

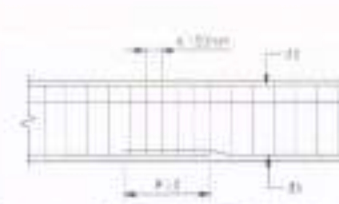


STIRRUPS TYPE



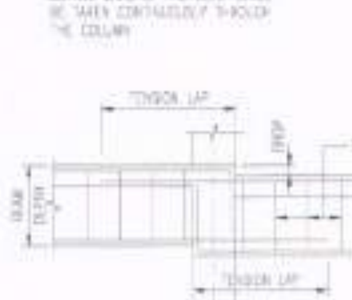
ANCHORAGE OF BEAM BARS AT BEAM AND COLUMN JUNCTION (EXTERNAL JOINT)

NOTE:
IN AN INTERNAL JOINT, BOTH TOP & BOTTOM BARS OF THE BEAM SHALL BE TAKEN CONTINUOUSLY THROUGH THE COLUMN

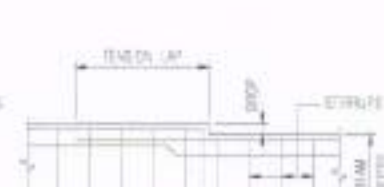


LAP/SPLICE IN BEAM

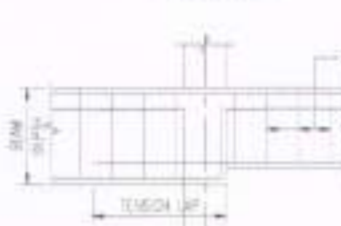
NOTE:
NOT MORE THAN 50 PERCENT OF THE BARS SHALL BE SPLICED AT ONE SECTION



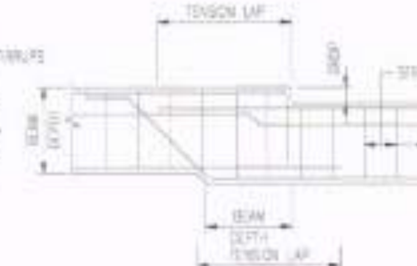
DETAIL 1



DETAIL 2



DETAIL 3



DETAIL 4

Wherever the drop is less than or equivalent to 50
The reinforcement bars can be bent at 1:10 and continued

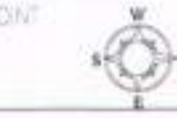
A. PERAMAIYAN, M.E., (Struct.), M.I.E.
REGISTERED STRUCTURAL ENGINEER
CHENNAI METROPOLITAN DEVELOPMENT AUTHORITY
REGISTRATION No. SE/GR-I/19/03/026
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E-Mail: peram@buroengineers.in
Mobile: +91 99625 45630

NOTES:

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3. FOR STANDARD DETAILS REFER TO DWG. NO. BE788_S-/SD/--/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS
5. [illegible]
6. GRADE OF CONCRETE FOR [illegible]
7. STEEL GRADE: Fe550 CONFORMING TO IS 1786-2008
8. CLEAR COVER [illegible]
9. [illegible]
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS 1893-2016 [illegible]
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, AND IS:13920 [illegible]
12. [illegible]

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS

NORTH POINT



-	-	KAVI.K	07/02/26
NO.	AMENDMENTS	BY	DATE

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects :

INDRAJIT.S.KEMBHAVI
CA/2000/26664,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer :

BURO ENGINEERS (I) PRIVATE LTD.
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STRUCTURAL

project title

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drawing title

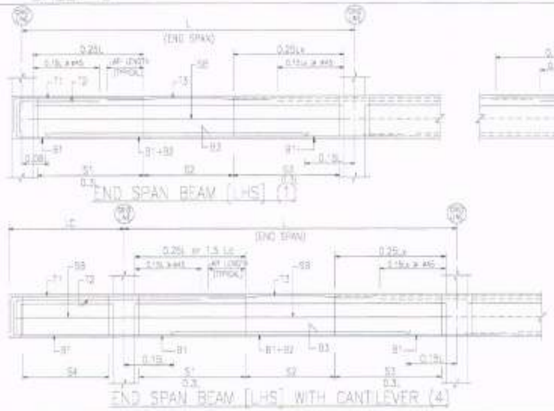
FIRST FLOOR BEAM SCHEDULE
(SHEET-02 OF 05)

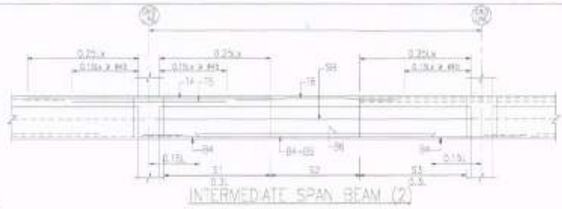
scale	AS SHOWN	design by	TP
drawn by	KAVI.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE788_S-/BM/01/--/02	revision	-

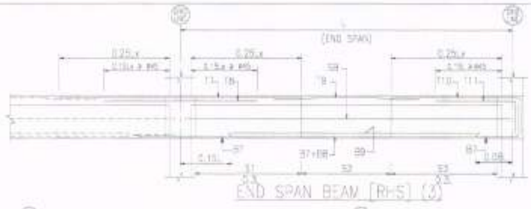
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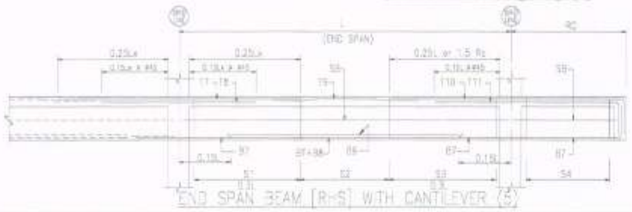
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SHEET-01









LEGEND

L ------ LENGTH OF SPAN UNDER CONSIDERATION
Lx ------ LENGTH OF ADJACENT SPAN TO THE SPAN UNDER CONSIDERATION
Lc ------ LENGTH OF LEFT END CANTILEVER
Rc ------ LENGTH OF RIGHT END CANTILEVER
(1) ------ CATEGORY

Lx = Length of span under consideration or Length of adjacent span whichever is greater

LOCATION			SIZE		SPAN		REINFORCEMENT																										SIDE BAR (EACH FACE) (D)	STIRRUPS				REMARKS
							LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN																			
BEAM MARKING	CATEGORY	GRID LINE OR BEAM MARK	WIDTH (mm)	DEPTH (mm)	LEFT END CANTILEVER Lc	SPAN (APPROX) L	RIGHT END CANTILEVER Rc	T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	S8	S1	S2	S3	S4	TYPE	
1HB1	1	-	200	600	-	3340	-	2T20	-	2T20	2T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-150	T8-100	-	1	
1HB2	3	-	200	600	-	3350	-	-	-	-	-	-	-	-	-	-	-	-	-	2T20	-	2T20	2T20	-	2T20	-	-	T8-100	T8-150	T8-100	-	1	
1HB6	1	-	200	750	-	8710	-	2T20	2T20	2T20	2T25	2T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	-	1	
1HB7	2	-	200	450	-	3350	-	-	-	-	-	-	-	2T25	2T25	2T25	2T25	-	-	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	-	1	
1HB8	3	-	200	450	-	3700	-	-	-	-	-	-	-	-	-	-	-	-	-	2T20	-	2T20	2T20	-	2T20	-	-	T10-100	T10-150	T10-100	-	1	
1HB28	1	-	200	600	1200	2350	-	2T20	2T20	2T20	2T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T12-100	T12-200	T12-100	-	1	
1HB29	3	-	200	600	-	2350	-	-	-	-	-	-	-	-	-	-	-	-	-	2T20	-	2T20	2T20	-	2T20	-	-	T12-100	T12-200	T12-100	-	1	
1HB53	1	-	200	750	-	7125	-	2T25	-	2T20	2T25	-	2T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T12-100	T12-150	T12-100	-	1	
1HB54	2	-	200	450	-	3350	-	-	-	-	-	-	-	2T25	2T20	2T25	2T25	-	-	-	-	-	-	-	-	-	-	T12-100	T12-150	T12-100	-	1	
1HB55	3	-	200	600/750	-	3410	3840	-	-	-	-	-	-	-	-	-	-	-	-	2T25	2T20	2T25	2T25	2T25	2T25	-	3T20	T12-100	T12-150	T12-100	-	1	
1HB58	2	-	200	600	-	6150	-	-	-	-	-	-	-	2T20	2T20	2T20	2T20	-	2T25	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	-	1	
1HB59	3	-	200	450	-	3150	-	-	-	-	-	-	-	-	-	-	-	-	-	2T20	2T20	2T20	2T20	-	2T20	-	-	T8-100	T8-150	T8-100	-	1	
1HB62	1	-	200	600	-	3835	-	2T25	2T20	2T25	2T25	-	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	-	1	
1HB62	2	-	200	600	-	6150	-	-	-	-	-	-	-	2T25	2T20	2T25	2T25	-	-	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	-	1	
1HB64	3	-	200	600/750	-	3860	3840	-	-	-	-	-	-	-	-	-	-	-	-	2T25	2T20	2T25	2T25	2T25	2T25	-	3T25	T12-100	T12-150	T12-100	T12-100	1	
1HB2	1	-	200	600	-	3360	-	2T25	2T20	2T25	2T25	-	2T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	-	1	
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1HB7	1	-	200	600	-	1875	-	2T25	-	2T25	2T25	-	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	-	1	
1HB6	3	-	200	600	-	7300	-	-	-	-	-	-	-	-	-	-	-	-	-	2T25	2T25	2T25	2T25	2T20	2T25	-	-	T10-100	T10-150	T10-100	-	1	
1HB12	1	-	200	600	-	5170	-	2T20	-	2T20	2T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-150	T8-100	-	1	
1HB13	3	-	200	600	-	4100	-	-	-	-	-	-	-	-	-	-	-	-	-	2T20	2T20	2T20	2T20	2T20	2T20	-	2T16	T8-100	T8-150	T8-100	-	1	
1HB27	4	-	200	600/750	1675	4825	-	2T25	2T25	2T25	2T25	2T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	T10-100	1	
1HB28	2	-	200	450	-	7320	-	-	-	-	-	-	-	2T25	2T25	2T25	2T25	-	2T16	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	-	1	
1HB39	2	-	200	450	-	6350	-	-	-	-	-	-	-	2T25	2T25	2T25	2T25	-	2T16	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	-	1	
1HB40	2	-	200	450	-	5450	-	-	-	-	-	-	-	2T25	2T25	2T25	2T25	-	2T16	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	-	1	
1HB41	2	-	200	450	-	7400	-	-	-	-	-	-	-	2T25	2T25	2T25	2T25	-	2T16	-	-	-	-	-	-	-	-	T10-100	T10-150	T10-100	-	1	
1HB42	2	-	200	450	-	5850	-	-	-	-	-	-	-	2T25	2T25	2T25	2T25	-	-	-	-	-	-	-	-	-	-	T8-100	T8-150	T8-100	-	1	
1HB43	2	-	200	450	-	1400	-	-	-	-	-	-	-	2T25	-	2T25	2T25	-	-	-	-	-	-	-	-	-	-	T8-100	T8-150	T8-100	-	1	
1HB44	2	-	200	450	-	2500	-	-	-	-	-	-	-	2T25	-	2T25	2T25	-	-	-	-	-	-	-	-	-	-	T8-100	T8-150	T8-100	-	1	
1HB45	3	-	200	600	-	5170	-	-	-	-	-	-	-	-	-	-	-	-	-	2T25	2T20	2T25	2T25	-	2T25	-	-	T8-100	T8-150	T8-100	-	1	
1HB69	1	-	200	600	-	4060	-	2T20	-	3T20	2T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-150	T8-100	-	1	
1HB70	3	-	200	600	-	3650	-	-	-	-	-	-	-	-	-	-	-	-	-	2T20	-	2T20	2T20	-	2T20	-	-	T8-100	T8-150	T8-100	-	1	
MARKING BEAM	CATEGORY	BEAM MARK OR GRID LINE	WIDTH (mm)	DEPTH (mm)	Lc CANTILEVER LEFT END	L SPAN (APPROX)	Rc CANTILEVER RIGHT END	T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	S8	S1	S2	S3	S4	TYPE	REMARKS
LOCATION			SIZE		SPAN			LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN								SIDE BAR (EACH FACE) (D)	STIRRUPS					
								REINFORCEMENT																										



TYP. BEAM SECTION



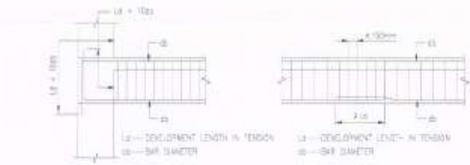
TYP. SIDE BARS DETAIL FOR BEAM DEPTH > 750

NOTES :

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE ADV PLAN AND ALL OTHER RELEVANT DRAWINGS.
2. IF THE REINFORCEMENT IS PROVIDED IN TWO LAYERS OR MORE, T-BAR SPACER BARS BETWEEN THE LAYERS NEED TO BE PROVIDED.
3. SPACER BARS TO BE 12ϕ OR MAIN BAR SIZE (WHICHEVER IS GREATER) AT 900c/c BETWEEN EACH LAYER OF MAIN STEEL.
4. THE SPAN LENGTH INDICATED ARE NOT TO BE USED FOR SETTING OUT OR MEASUREMENT.
5. IF BAR SIZE OF THE REINFORCEMENT BARS IS INDICATED THROUGHOUT FOR BOTTOM OR TOP REINFORCEMENT, THE LAP PROVIDED FOR THE REINFORCEMENT CAN BE OMITTED BY PROVIDING STRAIGHT BARS FOR THE WHOLE LENGTH OF THE SPAN.
6. LAP LENGTH FOR BARS SHOULD BE SAME AS TENSION ANCHORAGE LENGTH GIVEN UPON THE LARGER BAR DIAMETER FOR UNEQUAL SIZE OF BARS.
7. FIRST STIRRUP OF BEAM SHOULD BE 50mm (MAXIMUM) FROM THE COLUMN FACE



STIRRUPS TYPE

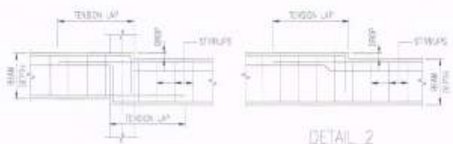


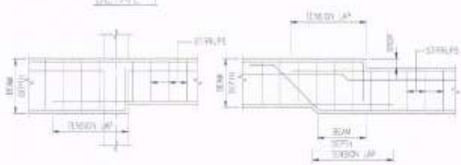
ANCHORAGE OF BEAM BARS AT BEAM AND COLUMN JUNCTION (EXTERNAL JOINT)

NOTE:
IN AN INTERNAL JOINT, BOTH TOP & BOTTOM BARS OF THE BEAM SHALL BE TAKEN CONTINUOUSLY THROUGH THE COLUMN.

LAP SPLICE IN BEAM

NOTE:
NOT MORE THAN 50 PERCENT OF THE BARS SHALL BE SPLICED AT ONE SECTION





Wherever the drop 'a' less than or equivalent to 50 The reinforcement bars can be bent at 1:6 and continued

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REGISTERED STRUCTURAL ENGINEER
CHENNAI METROPOLITAN DEVELOPMENT AUTHORITY
REGISTRATION No. SE/GR-I/19/03/026
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E-Mail: perem@buroengineers.in
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NOTES:
GENERAL
1. ALL DIMENSIONS ARE in MM.
2. FOR GENERAL NOTES REFER TO DWG. NO. 98768_S-/NT/---/01.
3. FOR STANDARD DETAILS REFER TO DWG. NO. 98768_S-/STD/---/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE ADV PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M30
EXCEPT WHERE OTHERWISE NOTED
CEMENT CONTENT NOT LESS THAN 350 kg/Cu.m GRADE 43/53 OPC)
HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION.
6. GRADE OF CONCRETE FOR
PILE = M 35 (CONVENTIONAL CONCRETE SHOULD BE 450kg/cm²)
RAFT = M25
BASEMENT WALL, BEAM/SLAB-M25,
COLUMN - SHEAR WALL-M40
R.C. SLABS, R.C. BEAMS, STAIRCASE - M25
ALL OTHER STRUCTURAL MEMBERS - M25
7. STEEL GRADE: FeB500 CONFORMING TO IS1786-2008
8. CLEAR COVER FOR RAFT 300mm=50mm, 600mm & 750mm=75mm.
PILE=75mm, COLUMN=40mm, SHEAR WALL=30mm.
SLAB=20mm, BEAM=25mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR
10. SEISMIC ZONE HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE III, DUCTILE DETAILING ENSURED SCI AS PER THE STIPULATIONS MADE IN IS 13920-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC (SP7)-1983, AND RELEVANT INDIAN CODE STIPULATIONS
12. ONUS OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT+STILT+11 FLOORS+ROOF, USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS.

NORTH POINT

NO	AMENDMENTS	BY	DATE
-	-	KAVI.K	07/02/24

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26584
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer :

BURO ENGINEERS (I) PRIVATE LTD.
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar,
Chennai - 600 020. 9044-2491 2754/5536.
e-Mail ID: buroindia@buroengineers.in

STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

drawing title

FIRST FLOOR BEAM SCHEDULE (SHEET-01 OF 02)

scale	AS SHOWN	design by	TP
drawn by	KAVI.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no	98768_S-/BM/01/---/01	revision	-

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DG FILE NAME: 98768_S-BM/---01.dwg

SHEET-04

LOCATION			SIZE		SPAN			REINFORCEMENT									SIDE BAR EACH FACE (ET)	STIRRUPS					REMARKS
BEAM MARKING	CATEGORY	GRID LINE OF BEAM MARK	WIDTH (mm)	DEPTH (mm)	LEFT END CANTILEVER LC	SPAN (APPROX) L	RIGHT END CANTILEVER RC	T1	T2	T3	T4	T5	B1	B2	B3	SB	S1	S2	S3	S4	TYPE	
SHB1	1	-	300	450	-	3715	-	3T25	-	3T20	3T25	-	3T20	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	SIMILAR BEAM-SHB5,SHB8
SHB2	1	-	300	450	-	3150	-	3T20	-	3T20	3T20	-	3T20	-	-	-	T8-100	T8-150	T8-100	-	1	SIMILAR BEAM-SHB6
SHB7	1	-	300	600	-	5570	-	3T25	-	3T25	3T25	-	3T25	-	2T25	-	3T8-100	3T8-150	3T8-100	-	1a	
SHB9	1	-	300	600	-	5430	-	3T25	-	2T25	3T25	-	3T25	-	2T25	-	T8-100	T8-125	T8-100	-	1	SIMILAR BEAM-SHB1's
SHB10	1	-	300	450	-	1700	-	2T20	-	2T20	2T20	-	2T20	-	-	-	T8-100	T8-100	T8-100	-	1	SIMILAR BEAM-SHB14,23
SHB11	1	-	300	600	-	1600	-	3T25	-	3T25	3T25	-	3T25	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
SHB33	1	-	300	450	-	5430	-	3T25	-	3T25	3T25	-	3T20	-	2T18	-	3T8-100	3T8-150	3T8-100	-	1a	
SHB38	1	-	300	750/450	-	4450	-	3T25	-	3T25	3T25	-	3T25	-	2T25	-	3T8-100	3T8-150	3T8-100	-	1a	
SHB43	1	-	300	600	-	3900	-	2T20	-	2T20	2T20	3T13	2T20	-	2T18	-	T8-100	T8-150	T8-100	-	1	
SHB44	3	-	300	750/450	-	4490	-	3T20	-	3T20	3T20	-	3T20	-	2T20	-	3T8-100	3T8-150	3T8-100	-	1a	
SHB48	1	-	200	600	-	3670	-	2T25	-	2T25	2T25	-	2T25	-	2T20	-	T8-100	T8-150	T8-100	-	1	SIMILAR BEAM-SHB49
SHB52	1	-	300	450	-	4830	-	3T20	-	3T25	3T25	-	3T25	-	3T25	-	3T8-100	3T8-125	3T8-100	-	1a	SIMILAR BEAM-SHB53,58
SHB68	1	-	300	600	-	5200	-	3T25	-	3T25	3T25	3T20	3T25	-	2T25	-	3T10-100	3T10-125	3T10-100	-	1a	
SHB72	1	-	300	600	-	5890	-	3T25	-	3T25	3T25	3T25	3T25	-	2T25	-	3T10-100	3T10-150	3T10-100	-	1a	SIMILAR BEAM-SHB73
SVB8	1	-	300	600	-	5295	-	3T25	-	3T25	3T25	2T20	3T25	-	2T20	-	3T8-100	3T8-125	3T8-100	-	1a	
SVB18	1	-	200	380	-	1600	-	2T12	-	2T12	2T12	-	2T12	-	-	-	T8-100	T8-200	T8-100	-	1	
SVB24	1	-	200	450	-	2875	-	2T20	-	2T20	2T20	-	2T20	-	-	-	T8-100	T8-150	T8-100	-	1	
SVB29	1	-	200	450	-	2300	-	2T20	-	2T20	2T20	-	2T20	-	-	-	T8-100	T8-150	T8-100	-	1	
SVB49	1	-	300	600	-	4975	-	3T25	-	3T25	3T25	-	3T25	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
SVB54	1	-	200	450	-	3200	-	2T25	-	2T20	3T20	-	2T20	-	-	-	T8-100	T8-150	T8-100	-	1	
SVB55	1	-	200	450	-	3550	-	2T20	-	2T20	3T20	-	3T20	-	-	-	T8-100	T8-200	T8-100	-	1	
SVB56	1	-	300	600	-	3250	-	3T20	-	3T20	3T20	-	3T20	-	-	-	3T8-100	3T8-200	3T8-100	-	1a	
SVB65	1	-	300	600	-	4670	-	3T25	-	3T25	3T25	-	3T25	-	3T20	-	3T8-100	3T8-125	3T8-100	-	1a	
SVB68	1	-	200	380	-	1700	-	2T12	-	2T12	2T12	-	2T12	-	-	-	T8-100	T8-200	T8-100	-	1	
SVB72	1	-	300	900	-	6800	-	3T25	-	3T25	3T25	-	3T25	-	3T20	-	3T8-100	3T8-150	3T8-100	-	1a	
SVB73	1	-	200	900	-	3020	-	2T20	-	2T20	2T20	-	2T20	-	-	-	T8-100	T8-150	T8-100	-	1	
SVB74	1	-	200	900	-	3195	-	2T20	-	2T20	2T20	-	2T20	-	-	-	T8-100	T8-150	T8-100	-	1	

WORKING BEAM	CATEGORY	BEAM MARK OR GRID LINE	(mm) WIDTH	(mm) DEPTH	CANTILEVER LEFT END	SPAN (APPROX)	CANTILEVER RIGHT END	T1	T2	T3	T4	T5	B1	B2	B3	SIDE BAR SIZE	S1	S2	S3	S4	TYPE	REMARKS
LOCATION			SIZE		SPAN			REINFORCEMENT									STIRRUPS					

TYPICAL DETAIL OF SINGLE SPAN BEAM (1)

LC - - - LENGTH OF SPAN UNDER CONSIDERATION
LC - - - LENGTH OF LEFT END CANTILEVER
RC - - - LENGTH OF RIGHT END CANTILEVER
(1) - - - CATEGORY

NOTES :-
1. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN AND ALL OTHER RELEVANT DRAWINGS.
2. IF THE REINFORCEMENT IS PROVIDED IN TWO LAYERS OR MORE, THEN SPACER BARS BETWEEN THE LAYERS NEED TO BE PROVIDED.
3. SPACER BARS TO BE T20 OR MAIN BAR SIZE (WHICHEVER IS GREATER) AT 800c/c BETWEEN EACH LAYER OF MAIN STEEL.
4. THE SPAN LENGTH INDICATED ARE NOT TO BE USED FOR SETTING OUT OR MEASUREMENT.
5. IF SAME SIZE OF THE REINFORCEMENT BARS IS INDICATED THROUGHOUT FOR BOTTOM OR TOP REINFORCEMENT, THE LAP PROVIDED FOR THAT REINFORCEMENT CAN BE OMITTED BY PROVIDING STRAIGHT BARS FOR THE WHOLE LENGTH OF THE BEAM.
6. LAP LENGTH FOR BARS SHOULD BE SAME AS TENSION ANCHORAGE LENGTH BASED UPON THE LARGER BAR DIAMETER FOR VARIOUS SIZE OF BARS.
7. FIRST STIRRUP OF BEAM SHOULD BE 50mm (MAXIMUM) FROM THE COLUMN FACE.

NOTES:
1. ALL DIMENSIONS ARE IN mm
2. FOR GENERAL NOTES REFER TO DWG NO. BE788_S-/A/-/--/01.
3. FOR STANDARD DETAILS REFER TO DWG NO. BE788_S-/ST/-/--/01.
4. THIS DRAWING TO BE READ IN CONJUCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE M30
DESIGN MIX M30 WITH
CEMENT CONTENT NOT LESS THAN 350 Kg/Cum, SLUMP 100±25 DNO
ADMIXTURE APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF REINFORCEMENT FOR
PILE - Fe 415 (CONSTRUCTION CONTROL SHOULD BE 400Kg/cm²)
PILE CAP - Fe 415
BASEMENT WALL, BEAM/SLAB-Fe415
COLUMN - Fe415, RAFT WALL-Fe415
RCC SLABS, RCC BEAMS, STAIRCASE - Fe 415
ALL OTHER STRUCTURAL MEMBERS - Fe 415
7. STEEL GRADE : TMT50 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR PILE 500mm-80mm, 600mm & 750mm-75mm.
FOOTING- 75mm, COLUMN-40mm, BEAM WALL-50mm.
SLAB-20mm, BEAM-30mm.
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR.
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE III (0.16)(I) DETAILING EMPHASIS SHALL BE PER THE STIPULATIONS MADE IN IS:13920-2016.
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH I.S.456-2000, NBC (SP7-1981) AND RELEVANT INDIAN CODE STIPULATIONS.
12. MODE OF CONSTRUCTION LES WITH GEOMETRY MONKEY / SUNDER / BANDI

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS.

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-	-	KAVI.K	07/02/25

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26584,
BCC/BL-3.8/A-2569/14-15

Civil & Structural Engineer :

BURO ENGINEERS (I) PRIVATE LTD.
Civil & Structural Consultants
New No. 31 (Old No. 14, Besant Avenue, Adyar,
Chennai - 600 020. ☎ 044-2491 2754/5594.
e-Mail ID: buroindia@buroengineers.in

TYPICAL DETAIL OF SINGLE SPAN BEAM WITH CANTILEVERS (2)

ANCHORAGE OF BEAM BARS AT BEAM AND COLUMN JUNCTION (EXTERNAL JOINT)

Ld = DEVELOPMENT LENGTH IN TENSION
ø = BAR DIAMETER

NOTE:
IN AN EXTERNAL JOINT, BOTH TOP & BOTTOM BARS OF THE BEAM SHALL BE TAKEN CONTINUOUSLY THROUGH THE COLUMN.

LAP/SPLICE IN BEAM

Ld = DEVELOPMENT LENGTH IN TENSION
ø = BAR DIAMETER

NOTE:
NOT MORE THAN 50 PERCENT OF THE BARS SHALL BE SPLICED AT ONE SECTION

TYP. BEAM SECTION

TYP. SIDE BARS DETAIL FOR BEAM DEPTH > 750

STIRRUPS TYPE

TYPE 1 TYPE 1a TYPE 2 TYPE 2a TYPE 3 TYPE 3a TYPE 4 TYPE 5 TORSIONAL LINKS TYPE 6 TYPE 8

DETAIL 1 DETAIL 2 DETAIL 3 DETAIL 4

Wherever the drop is less than or equivalent to 90 the reinforcement bars can be bent in 1:10 and continued

STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

drawing title

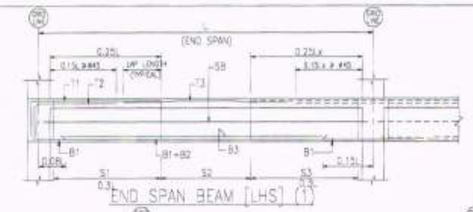
STILT FLOOR BEAM SCHEDULE (SHEET-03 OF 05)

scale	AS SHOWN	design by	TP
drawn by	KAVI.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE788_S-/BM/S-/--/05		REVISION

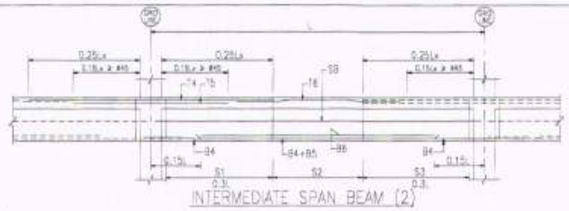
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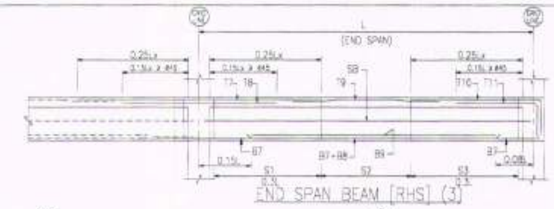
A. PERAMAIYAN, M.E., (Struct.), M.I.E.,
REGISTERED STRUCTURAL ENGINEER
CHENNAI METROPOLITAN DEVELOPMENT AUTHORITY
REGISTRATION No. SE/GR-I/19/03/026
NEW No. 31 (OLD No 14), BESANT AVENUE ROAD,
ADYAR, CHENNAI - 600 020.
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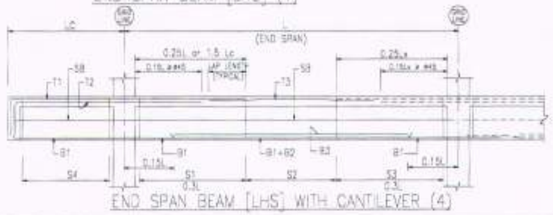
END SPAN BEAM [LHS] (1)



INTERMEDIATE SPAN BEAM (2)



END SPAN BEAM [RHS] (3)

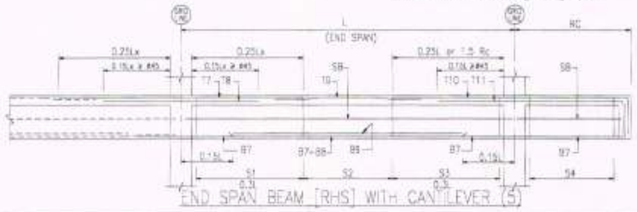


END SPAN BEAM [LHS] WITH CANTILEVER (4)

LEGEND

L ------ LENGTH OF SPAN UNDER CONSIDERATION
La ------ LENGTH OF ADJACENT SPAN TO THE SPAN UNDER CONSIDERATION
Lc ------ LENGTH OF LEFT END CANTILEVER
Rc ------ LENGTH OF RIGHT END CANTILEVER
(1) ------ CATEGORY

Lx = Length of span under consideration or Length of adjacent span whichever is greater



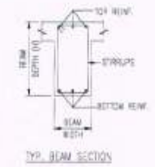
END SPAN BEAM [RHS] WITH CANTILEVER (5)

LOCATION			SIZE		SPAN			REINFORCEMENT																			SIDE BAR EACH FACE (EF)	STIRRUPS					REMARKS
BEAM MARKING	CATEGORY	GRID LINE OR BEAM MARK	WIDTH (mm)	DEPTH (mm)	LEFT END CANT-LEVER Lc	SPAN (APPROX) L	RIGHT END CANTILEVER Rc	LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN									S1	S2	S3	S4	TYPE	
								T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	S8						
SWB46	1	-	300	600	-	7050	-	3T25	2T25	3T25	3T25	-	2T25*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-125	3T8-100	-	1a	
SWB47	2	-	300	600	-	2350	-	-	-	-	-	-	-	3T25	2T25	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	3T8-150	3T8-125	3T8-100	-	1a	
SWB48	3	-	300	600	-	6850	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	2T25	3T25	3T25	2T25	3T25	-	2T25*	-	3T8-100	3T8-125	3T8-100	-	1a	
SWB50	1	-	300	600	-	3650	-	3T25	-	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T10-100	3T10-150	3T10-100	-	1a	
SWB51	3	-	300	600	-	6155	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	3T20	3T25	-	2T20*	-	3T10-100	3T10-150	3T10-100	-	1a	
SWB52	1	-	200	600	-	5450	-	2T20	-	2T20	2T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8-100	8-150	8-100	-	1	
SWB53	3	-	200	600	-	4050	-	-	-	-	-	-	-	-	-	-	-	-	-	2T20	-	2T20	2T20	-	2T20	-	-	-	8-100	8-150	8-100	-	1	
SWB57	1	-	300	600	-	6500	-	3T25	-	3T25	3T25	-	2T20*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T10-100	3T10-150	3T10-100	-	1a	
SWB58	3	-	300	600	-	4550	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	2T20	3T25	-	2T20*	-	3T10-100	3T10-150	3T10-100	-	1a	
SWB59	1	-	300	600	-	4050	-	3T25	-	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T10-100	3T10-150	3T10-100	-	1a	
SWB60	3	-	300	600	-	5800	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	2T20	3T25	-	2T20*	-	3T10-100	3T10-150	3T10-100	-	1a	
SWB61	1	-	300	750	-	5450	-	3T25	-	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T10-100	3T10-150	3T10-100	-	1a	
SWB62	2	-	300	750	-	4050	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	-	2T20*	-	-	-	-	-	-	-	-	-	3T10-100	3T10-150	3T10-100	-	1a	
SWB63	2	-	300	750	-	3550	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	-	2T20*	-	-	-	-	-	-	-	-	-	3T10-100	3T10-150	3T10-100	-	1a	
SWB64	3	-	300	750	-	6450	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	2T20	3T25	-	3T25*	-	3T10-100	3T10-150	3T10-100	-	1a	
SWB65a	1	-	300	750	-	4050	-	3T25	-	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-125	3T8-100	-	1a	
SWB65b	2	-	300	750	-	3550	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-125	3T8-100	-	1a	
SWB65	2	-	300	750	-	4050	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	3T8-102	3T8-125	3T8-100	-	1a	
SWB67	2	-	300	750	-	3550	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-125	3T8-100	-	1a	
SWB68	2	-	300	750	-	3250	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	3T8-102	3T8-125	3T8-100	-	1a	
SWB69	2	-	300	750	-	6050	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	-	2T25*	-	-	-	-	-	-	-	-	-	3T10-100	3T10-150	3T10-100	-	1a	
SWB69a	3	-	300	750	-	5150	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	3T25	3T25	3T25	3T20	3T25	-	2T25*	-	3T10-100	3T10-150	3T10-100	-	1a	
SWB70	1	-	300	600	-	3750	-	3T25	-	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T10-100	3T10-150	3T10-100	-	1a	
SWB71	3	-	300	600	-	6155	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	2T20	3T25	-	2T20*	-	3T10-100	3T10-150	3T10-100	-	1a	
MARKING BEAM	CATEGORY	BEAM MARK OR GRID LINE	WIDTH (mm)	DEPTH (mm)	Lc CANTILEVER LEFT END	L (APPROX) SPAN	Rc CANTILEVER RIGHT END	T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	BAR SIDE	S1	S2	S3	S4	TYPE	REMARKS
LOCATION			SIZE		SPAN			LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN								REINFORCEMENT						

NOTES:

1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG. NO. BE768_S-/AR/---/01
3. FOR STANDARD DETAILS REFER TO DWG. NO. BE768_S-/ST/---/01
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M30
   DESIGN MIX M30 WITH CEMENT CONTENT NOT LESS THAN 350 kg/Cum. GRADE 43/53 OPC. HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   PILE - M35 (CEMENTITIOUS CONTENT SHOULD BE 450Kg/m³)
   PILE CAP - M35
   BASEMENT WALL, BEAM/SLAB-M30,
   COLUMN + WALL, SHEAR WALL-M40
   R.C. SLABS, R.C. BEAMS, STAIRCASE - M25
   ALL OTHER STRUCTURAL MEMBERS - M25
7. STEEL GRADE: Fe500 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR PILE 500mm+-50mm, 600mm+-50 & 750mm+-75mm,
   PILECAP-75mm, COLUMN-40mm, SHEAR WALL-30mm,
   SLAB-25mm, BEAM-30mm.
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE III. DUCTILE DETAILING CARRIED OUT AS PER THE STIPULATIONS MADE IN IS: 13920-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC (PART-I&II) AND RELEVANT INDIAN CODE STIPULATIONS
12. DATE OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER

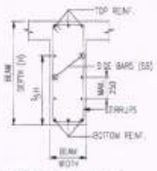
FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS



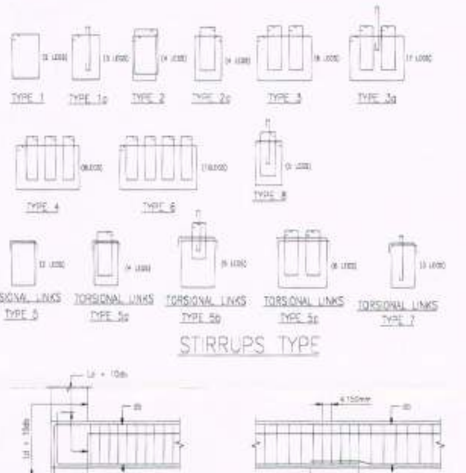
TYP. BEAM SECTION

NOTES :

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN AND ALL OTHER RELEVANT DRAWINGS.
2. IF THE REINFORCEMENT IS PROVIDED IN TWO LAYERS OR MORE, THEN SPACER BARS BETWEEN THE LAYERS NEED TO BE PROVIDED
3. SPACER BARS TO BE T20 OR MAIN BAR SIZE (WHICHEVER IS GREATER) AT 900c/c BETWEEN EACH LAYER OF MAIN STEEL
4. THE SPAN LENGTH INDICATED ARE NOT TO BE USED FOR SETTING OUT OR MEASUREMENT.
5. IF SAME SIZE OF THE REINFORCEMENT BARS IS INDICATED THROUGHOUT FOR BOTTOM OR TOP REINFORCEMENT, THE LAP PROVIDED FOR THE REINFORCEMENT CAN BE OMITTED BY PROVIDING STRAIGHT BARS FOR THE WHOLE LENGTH OF THE BEAM
6. LAP LENGTH FOR BARS SHOULD BE SAME AS TENSION AND CHORDE LENGTH BASED UPON THE LARGER BAR DIAMETER FOR UNEQUAL SIZE OF BARS
7. FIRST STIRRUP OF BEAM SHOULD BE 50mm (MAXIMUM) FROM THE COLUMN FACE



TYP. SIDE BARS DETAIL FOR BEAM DEPTH > 750



STIRRUPS TYPE

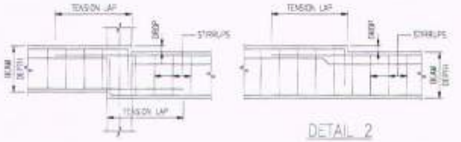


ANCHORAGE OF BEAM BARS AT BEAM AND COLUMN JUNCTION (EXTERNAL JOINT)

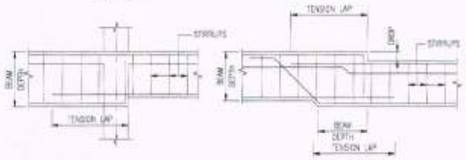
NOTE:
IN AN INTERNAL JOINT, BOTH TOP & BOTTOM BARS OF THE BEAM SHALL BE TAKEN CONTINUOUSLY THROUGH THE COLUMN

LAP/SPLICE IN BEAM

NOTE:
NOT MORE THAN 50 PERCENT OF THE BARS SHALL BE SPLICED AT ONE SECTION



DETAIL 1 DETAIL 2



DETAIL 3 DETAIL 4

Wherever the cross is less than or equivalent to 50
The reinforcement bars can be bent at 1:10 and continued

A. PERAMAIYAN, B.E., (Struct.), M.I.E.
REGISTERED STRUCTURAL ENGINEER
CHENNAI METROPOLITAN DEVELOPMENT AUTHORITY
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NEW No. 31 (OLD No.14), BESANT AVENUE ROAD,
ADYAR, CHENNAI - 600 020.
E-Mail: peram@buroengineers.in
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NORTH POINT

NO.	AMENDMENTS	BY	DATE
-	-	KAV.K	27/02/26

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer :

BURO ENGINEERS (I) PRIVATE LTD.
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar,
Chennai - 600 020. Work: 2441 2754/55/56,
e-Mail ID: burochn@buroengineers.in

STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

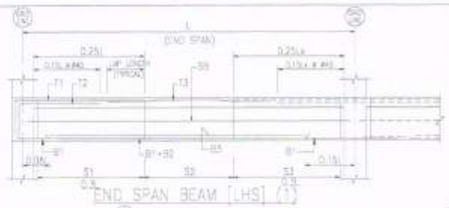
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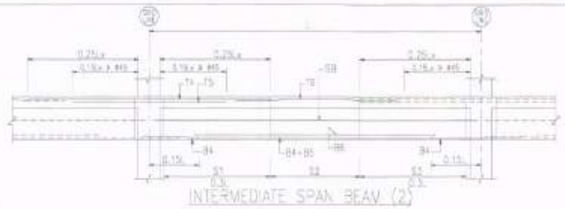
STILT FLOOR BEAM SCHEDULE (SHEET-04 OF 05)

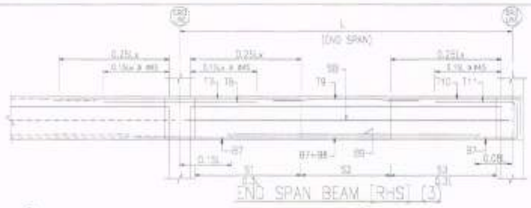
scale	AS SHOWN	design by	TP
drawn by	KAV.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE768_S-/BM/S-/---/04	revision	-

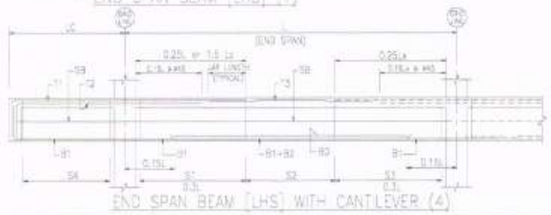
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CAD FILE NAME: BE768_S-BM/---/04.dwg









LEGEND

L ——— LENGTH OF SPAN UNDER CONSIDERATION

Le ——— LENGTH OF ADJACENT SPAN TO THE SPAN UNDER CONSIDERATION

Le ——— LENGTH OF LEFT END CANTILEVER

Re ——— LENGTH OF RIGHT END CANTILEVER

(-) ——— CATEGORY

Le = Length of span under consideration or Length of adjacent span whichever is greater





TYP. BEAM SECTION

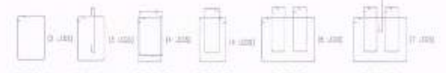


TYP. SIDE BARS DETAIL FOR BEAM DEPTH > 750

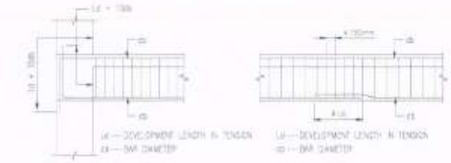
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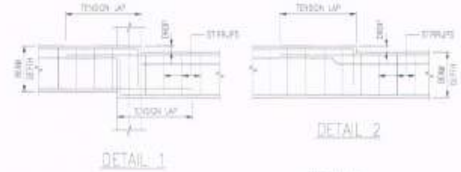
1. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN AND ALL OTHER RELEVANT DRAWINGS.
2. IF THE REINFORCEMENT IS PROVIDED IN TWO LAYERS OR MORE, THEN SPACER BARS BETWEEN THE LAYERS NEED TO BE PROVIDED.
3. SPACER BARS TO BE 12Ø OF MAIN BAR SIZE (WHICHEVER IS GREATER) AT 500c/c BETWEEN EACH LAYER OF MAIN STEEL.
4. THE SPAN LENGTH INDICATED ARE NOT TO BE USED FOR SETTING OUT OR MEASUREMENT.
5. 'B' BAND SIDE OF THE REINFORCEMENT BARS IS INDICATED THROUGHOUT FOR BOTTOM OR FOR REINFORCEMENT. THE LAP PROVIDED FOR THE REINFORCEMENT CAN BE OMITTED BY PROVIDING STRAIGHT BARS FOR THE MIDDLE LENGTH OF THE SPAN.
6. LAP LENGTH FOR BARS SHOULD BE SAME AS TENSION ANCHORAGE LENGTH BASED UPON THE LARGER BAR DIAMETER FOR UNEQUAL SIZE OF BARS.
7. FIRST STIRRUP OF BEAM SHOULD BE 50mm (MAXIMUM) FROM THE COLUMN FACE.

LOCATION			SIZE		SPAN			REINFORCEMENT																							STIRRUPS					REMARKS
BEAM MARKING	CATEGORY	GRID LINE OR BEAM MARK	WIDTH (mm)	DEPTH (mm)	LEFT END CANTILEVER Le	SPAN (APPROX) L	RIGHT END CANTILEVER Re	LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN									SIDE BAR (EACH FACE) (SB)							
								T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	SB	S1	S2	S3	S4	TYPE	
SW96	1	-	300	600	-	6300	-	3T25	3T20	3T25	3T25	-	3T20*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T12-100	3T12-150	5T10-100	-	1a	
SW97	2	-	300	600	-	4480	-	-	-	-	-	-	-	3T25	3T25	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	8T12-100	3T12-150	5T10-100	-	1a	
SW98	2	-	300	600	-	4000	-	-	-	-	-	-	-	3T25	3T25	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	8T12-100	3T12-150	5T10-100	-	1a	
SW99	2	-	300	600	-	4530	-	-	-	-	-	-	-	3T25	3T25	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	8T12-100	3T12-150	5T10-100	-	1a	
SW910	3	-	300	900	-	8300	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	3T32	3T25	3T25	3T25	3T25	-	3T32*	-	8T12-100	3T12-150	5T10-100	-	1a	
SW911	1	-	300	900	-	8025	-	3T25	3T32	3T25	3T25	-	3T32*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T12-100	3T12-125	5T10-100	-	1a	
SW912	2	-	300	600	-	2690	-	-	-	-	-	-	-	3T25	3T25	3T25	3T25	-	3T25*	-	-	-	-	-	-	-	-	-	8T12-100	3T12-125	5T10-100	-	1a	
SW913	2	-	300	600	-	2525	-	-	-	-	-	-	-	3T25	-	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	8T12-100	3T12-125	5T10-100	-	1a	
SW914	4	-	300	800	-	7290	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	3T32	3T25	3T25	3T25	3T25	-	3T32*	-	8T12-100	3T12-125	5T10-100	-	1a	
SW915	1	-	300	800	-	5800	-	3T25	3T32	3T25	3T25	-	3T32*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T12-100	3T12-150	5T10-100	-	1a	
SW916	2	-	300	600	-	1450	-	-	-	-	-	-	-	3T25	3T25	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	8T12-100	3T12-150	5T10-100	-	1a	
SW917	3	-	200	600	-	3900	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	-	3T25	3T25	-	3T25	-	3T25*	-	8T12-100	3T12-150	5T10-100	-	1a	
SW918	1	-	300	600	-	3890	-	3T25	-	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T10-100	3T10-150	5T10-100	-	1a	
SW921	3	-	300	600	-	5715	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	3T20	3T25	3T25	3T20	3T25	-	2T20*	-	8T10-100	3T10-150	5T10-100	-	1a	
SW922	1	-	300	600	-	3660	-	3T25	-	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T10-100	3T10-150	5T10-100	-	1a	
SW923	3	-	300	600	-	6150	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	3T20	3T25	3T25	3T20	3T25	-	2T20*	-	8T10-100	3T10-150	5T10-100	-	1a	
SW924	1	-	300	600	-	5220	-	3T25	-	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T2-100	3T10-150	5T10-100	-	1a	
SW927	3	-	300	600	-	4350	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	-	3T25	3T25	-	3T25	-	3T25*	-	8T2-100	3T12-150	5T10-100	-	1a	
SW928	1	-	300	600	-	2875	-	3T25	2T20	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T8-100	3T8-125	5T8-150	-	1a	
SW929	2	-	300	600	-	4175	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	8T8-100	3T8-125	5T8-150	-	1a	
SW930	2	-	300	600	-	7150	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	-	3T20*	-	-	-	-	-	-	-	-	-	8T10-100	3T10-150	5T10-100	-	1a	
SW931	2	-	300	600	-	6350	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	-	3T20*	-	-	-	-	-	-	-	-	-	8T10-100	3T10-150	5T10-100	-	1a	
SW932	3	-	300	600	-	5650	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	2T20	3T25	-	2T20*	-	8T10-100	3T10-150	5T10-100	-	1a	
SW933	1	-	300	600	-	7350	-	3T25	2T25	3T25	3T25	-	2T25*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T10-100	3T10-125	5T10-150	-	1a	
SW934	2	-	300	600	-	5950	-	-	-	-	-	-	-	3T25	2T25	3T25	3T25	-	3T25*	-	-	-	-	-	-	-	-	-	8T10-100	3T10-125	5T10-150	-	1a	
SW935	2	-	300	450	-	1460	-	-	-	-	-	-	-	3T25 / 2T20	-	2T20	2T20	-	-	-	-	-	-	-	-	-	-	-	8-100	8-150	8-100	-	1	
SW936	3	-	300	450	-	2902	-	-	-	-	-	-	-	-	-	-	-	-	-	2T20	-	2T20	2T20	-	2T20	-	-	-	8-100	8-150	8-100	-	1	
SW937	1	-	300	600	-	3950	-	3T25	-	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T2-100	3T10-150	5T10-100	-	1a	
SW938	3	-	300	600	-	5800	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	2T20	3T25	-	2T20*	-	8T2-100	3T10-150	5T10-100	-	1a	
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SW940	2	-	300	600	-	4200	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	8T8-100	3T8-150	5T8-100	-	1a	
SW941	2	-	300	600	-	3650	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	8T8-100	3T8-150	5T8-100	-	1a	
SW942	2	-	300	600	-	4450	-	-	-	-	-	-	-	3T20	2T20	3T20	2T20	-	3T20*	-	-	-	-	-	-	-	-	-	8T8-100	3T8-150	5T8-100	-	1a	
SW943	3	-	200	600	-	3300	-	-	-	-	-	-	-	3T20 / 2T20	2T20	3T20	2T20	-	-	-	-	-	-	-	-	-	-	-	8-100	8-150	8-100	-	1	
SW944	2	-	200	600	-	2875	-	-	-	-	-	-	-	2T20	-	2T20	2T20	-	-	-	-	-	-	-	-	-	-	-	8-100	8-150	8-100	-	1	
SW945	3	-	200	600	-	2500	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	3T20	-	-	-	8-100	8-150	8-100	-	1	
MARKING BEAM	CATEGORY	BEAM MARK OR GRID LINE	WIDTH (mm)	DEPTH (mm)	LEFT END CANTILEVER Le	SPAN (APPROX) L	RIGHT END CANTILEVER Re	T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	SB	S1	S2	S3	S4	TYPE	REMARKS
LOCATION			SIZE		SPAN			LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN								SIDE BAR (EACH FACE) (SB)	STIRRUPS					
								REINFORCEMENT																											



STIRRUPS TYPE





Wherever the crop is less than or equivalent to 32 The reinforcement bars can be bent at 1:10 and continued

A. PERAMAIYAN, M.E., (Struct.), M.I.E.,
REGISTERED STRUCTURAL ENGINEER
CHENNAI METROPOLITAN DEVELOPMENT AUTHORITY
REGISTRATION No. SE/GR-I/19/03/026
NEW No. 31 (OLD No.14), BESANT AVENUE ROAD,
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Mobile: +91 99625 45630

NOTES:

1. ALL DIMENSIONS ARE IN MM.
2. FOR GENERAL NOTES REFER TO DWG. NO. BE768_S-/01/---/01.
3. FOR STAGING DETAILS REFER TO DWG. NO. BE768_S-/03/---/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, MONITORING AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE : M30
   DESIGN MIX M30 WITH
   CEMENT CONTENT NOT LESS THAN 360 kg/m³ OF GRADE 43/53 GRS. WHICHEVER APPROVED DESIGN MIX SHALL BE ADOPTED AT CONSTRUCTION.
6. GRADE OF CONCRETE FOR
   PILE :- M30 (CONCRETE CONTENT SHOULD BE 400kg/m³)
   PILE CAP :- M30
   BASEMENT WALL, RAMP WALL :- M30,
   COLUMN :- M30, SHEAR WALL :- M30,
   R.C. SLABS, R.C. BEAMS, STAIRCASE :- M30
   ALL OTHER STRUCTURAL MEMBERS :- M30
7. STEEL GRADE : Fe500 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR PILE 500mm-Φ :50mm, 600mm-Φ & 750mm-Φ :75mm.
   PILECAP :75mm, COLUMN :40mm, SHEAR WALL :30mm,
   SLAB :20mm, BEAM :30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 d OR 0.6M.
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE IN ELASTIC DETAILING CARRIED OUT AS PER THE STIPULATIONS MADE IN IS:13920-2016.
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH : IS:456-2000, SP16 (1980) AND RELEVANT INDIAN CODES & PRACTICES.
12. RULES OF CONSTRUCTION TO BE WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS-ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS.

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-	-	KMK/K	07/02/26

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer :

BURO ENGINEERS (I) PRIVATE LTD.
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar, Chennai - 600 020. ☎ 24412754/55/56.
e-Mail ID : burochn@buroengineers.in

STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

drawing title

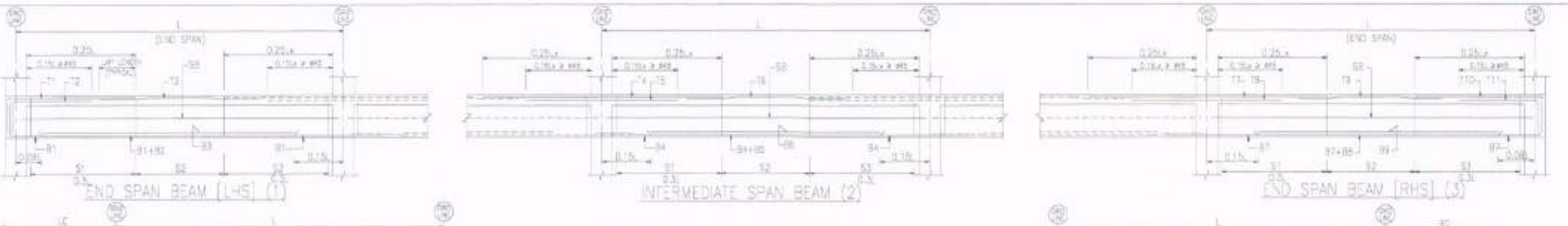
STILT FLOOR BEAM SCHEDULE (S-SET-03 OF 05)

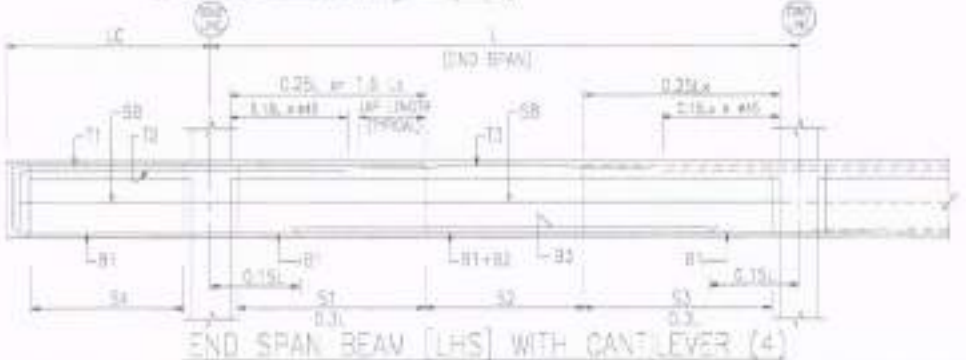
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drawn by	KMK/K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE768_S-/3M/S-/---/01	revision	-

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SHEET-02

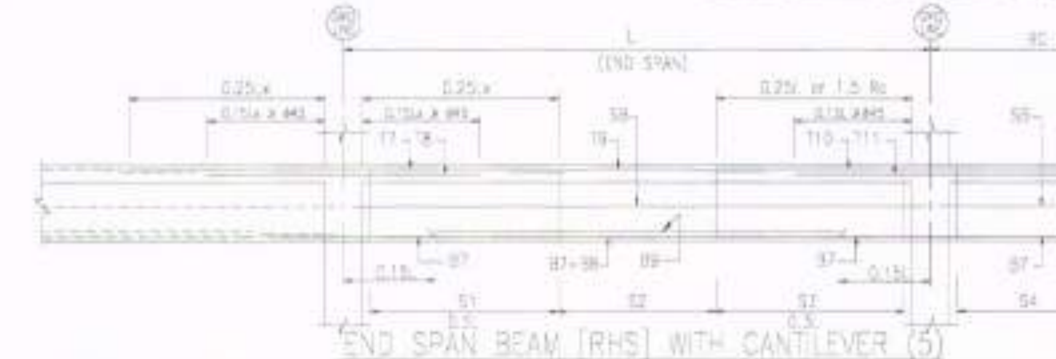




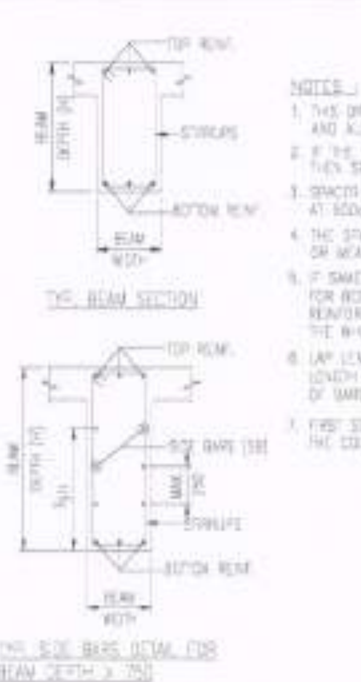
LEGEND

L —— LENGTH OF SPAN UNDER CONSIDERATION
La —— LENGTH OF ADJACENT SPAN TO THE SPAN UNDER CONSIDERATION
Lc —— LENGTH OF LEFT END CANTILEVER
Rc —— LENGTH OF RIGHT END CANTILEVER
(1) —— CATEGORY

Lx = Length of span under consideration or Length of adjacent span whichever is greater

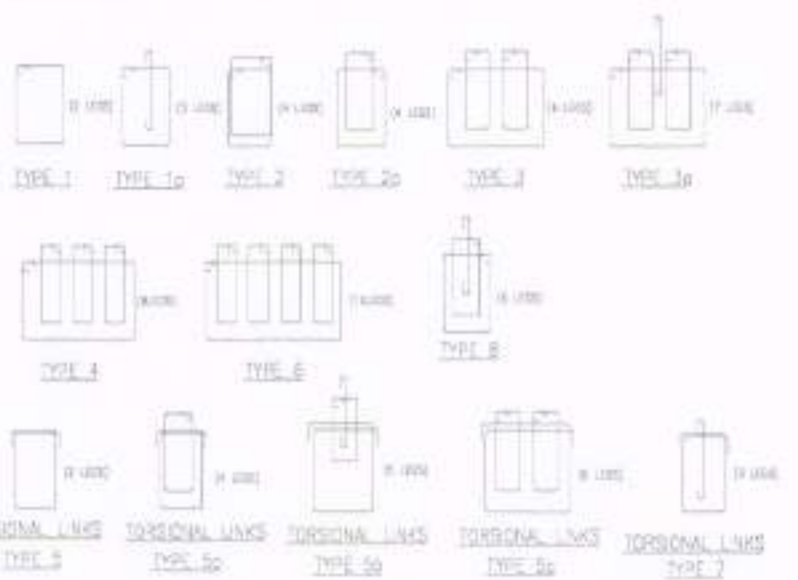


BEAM MARKING	CATEGORY	GRID LINE OR BEAM MARK	WIDTH (mm)	DEPTH (mm)	LEFT END CANT LEVER Lc	SPAN (APPROX) L	RIGHT END CANT LEVER Rc	T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	SB	S1	S2	S3	S4	TYPE	REMARKS
LOCATION			SIZE		SPAN			REINFORCEMENT: LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN								SIDE BAR EACH FACE (EF)	STIRRUPS					
S-B50	1	-	300	600	-	5325	-	3T25	-	3T25	3T25	-	2T20*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-125	3T8-100	-	1a	
S-B51	3	-	300	600	-	7125	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	2T25	3T25	3T25	-	3T25	-	2T20*	-	3T8-100	3T8-125	3T8-100	-	1a	
S-B53	1	-	300	600	-	5470	-	3T25	-	3T25	3T25	-	2T20*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-125	3T8-100	-	1a	
S-B54	3	-	300	600	-	7125	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	2T25	3T25	3T25	-	3T25	-	2T20*	-	3T8-100	3T8-125	3T8-100	-	1a	
S-B55	1	-	300	600	-	2500	-	3T25	-	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
S-B56	2	-	300	600	-	4025	-	-	-	-	-	-	-	3T25	-	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-125	3T8-100	-	1a	
S-B57	3	-	300	750/450	-	5530	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	3T25	3T25	3T25	-	3T25	-	2T25*		3T8-100	3T8-125	3T8-100	-	1a	
S-B58	1	-	300	600	-	3985	-	3T25	-	3T25	3T25	-	2T20*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-125	3T8-100	-	1a	
S-B59	3	-	300	600	-	6600	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	2T25	3T25	3T25	-	3T25	-	2T20*	-	3T8-100	3T8-125	3T8-100	-	1a	
S-B61	1	-	300	600	-	4875	-	3T25	-	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-125	3T8-100	-	1a	
S-B62	3	-	300	750/450	-	5575	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	-	3T25	-	2T25*	-	3T8-100	3T8-125	3T8-100	-	1a	
S-B63	1	-	300	600	-	6135	-	3T25	-	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-125	3T8-100	-	1a	
S-B64	3	-	300	600	-	5575	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	-	3T25	-	2T20*	-	3T8-100	3T8-125	3T8-100	-	1a	
S-B66	1	-	300	600	-	4675	-	3T25	-	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-125	3T8-100	-	1a	
S-B67	3	-	300	750/450	-	5500	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	2T20	3T25	3T20	-	3T20	-	2T25*	-	3T8-100	3T8-125	3T8-100	-	1a	
S-B70	1	-	300	600	-	3415	-	3T25	-	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-125	3T8-100	-	1a	
S-B71	3	-	300	750/450	-	6145	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	2T25	3T25	3T25	-	3T25	-	3T25*	-	3T8-100	3T8-125	3T8-100	-	1a	
S-B75	1	-	300	600	-	5350	-	3T25	-	3T25	3T25	-	2T20*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
S-B76	2	-	300	600	-	3735	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-125	3T8-100	-	1a	
S-B77	2	-	300	600	-	5500	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	-	2T20*	-	-	-	-	-	-	-	-	-	3T8-100	3T8-125	3T8-100	-	1a	
S-B78	2	-	300	600	-	3885	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	-	2T20*	-	-	-	-	-	-	-	-	-	3T8-100	3T8-125	3T8-100	-	1a	
S-B79	3	-	300	750/450	-	6670	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	-	3T25	-	3T25*		3T8-100	3T8-125	3T8-100	-	1a	
S-B80	1	-	300	600	-	5350	-	3T25	3T25	3T25	3T25	-	3T25*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
S-B81	2	-	300	600	-	3835	-	-	-	-	-	-	-	3T25	2T25	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-150	-	1a	
S-B82	2	-	300	600	-	5425	-	-	-	-	-	-	-	3T25	2T25	3T25	3T25	-	3T25*	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
S-B83	2	-	300	600	-	5425	-	-	-	-	-	-	-	3T25	2T25	3T25	3T20	-	3T25*	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
S-B84	3	-	300	600	-	5425	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	2T25	3T25	3T25	2T25	3T25	-	3T25*		3T8-100	3T8-150	3T8-100	-	1a	
SVB1	1	-	300	600	-	3375	-	3T25	-	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-125	3T8-100	-	1a	
SVB2	3	-	300	600	-	6155	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	2T25	3T25	3T25	-	3T25	-	2T20*	-	3T8-100	3T8-125	3T8-100	-	1a	
SVB3	1	-	300	600	-	3880	-	3T25	-	3T25	3T25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T10-100	3T10-150	3T10-100	-	1a	
SVB4	2	-	300	600	-	6730	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	-	2T25*	-	-	-	-	-	-	-	-	-	3T10-100	3T10-150	3T10-100	-	1a	
SVB5	3	-	300	600	-	5300	-	-	-	-	-	-	-	-	-	-	-	-	-	3T25	2T20	3T25	3T25	2T20	3T25	-	2T20*	-	3T10-100	3T10-150	3T10-100	-	1a	
MARKING BEAM	CATEGORY	BEAM MARK OR GRID LINE	(mm) WIDTH	(mm) DEPTH	Lc CANT LEVER LEFT END	L (APPROX) SPAN	Rc CANT LEVER RIGHT END	T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	SB	S1	S2	S3	S4	TYPE	REMARKS
LOCATION			SIZE		SPAN			LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN								BAR SIDE	STIRRUPS					
								REINFORCEMENT																										

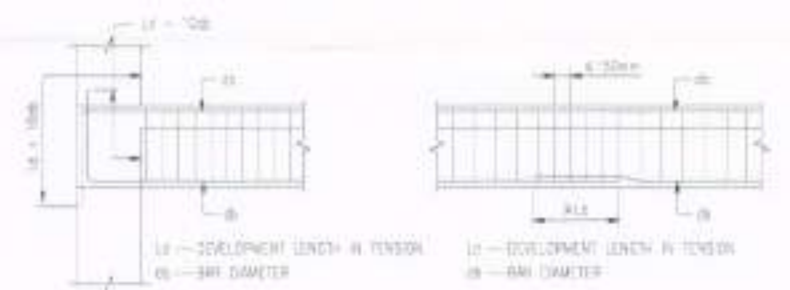


NOTES :

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN AND ALL OTHER RELEVANT DRAWINGS.
2. IF THE REINFORCEMENT IS PROVIDED IN TWO LAYERS OR MORE, THEN SPACER BARS BETWEEN THE LAYERS NEED TO BE PROVIDED.
3. SPACER BARS TO BE T25 OR MAIN BAR SIZE (WHICHEVER IS GREATER) AT 600c/c BETWEEN EACH LAYER OF MAIN STEEL.
4. THE SPAN LENGTH INDICATED ARE NOT TO BE USED FOR SETTING OUT OR MEASUREMENT.
5. IF SAME SIZE OF THE REINFORCEMENT BARS IS INDICATED THROUGHOUT FOR BOTTOM OR TOP REINFORCEMENT, THE LAP PROVIDED FOR THE REINFORCEMENT CAN BE OMITTED BY PROVIDING STRAIGHT BARS FOR THE WHOLE LENGTH OF THE BEAM.
6. LAP LENGTH FOR BARS SHOULD BE SAME AS TENSION ANCHORAGE LENGTH BASED UPON THE LARGER BAR DIAMETER FOR UNEQUAL SIZE OF BARS.
7. FIRST STIRRUP OF BEAM SHOULD BE 50mm (MAXIMUM) FROM THE COLUMN FACE.



STIRRUPS TYPE

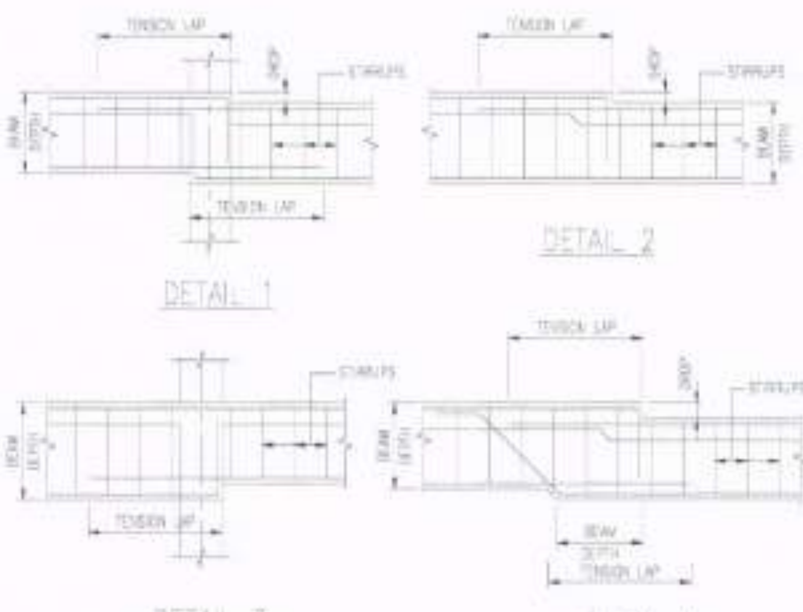


ANCHORAGE OF BEAM BARS AT BEAM AND COLUMN JUNCTION (EXTERNAL JOINT)

NOTE:
IN AN INTERNAL JOINT, BOTH TOP & BOTTOM BARS OF THE BEAM SHALL BE TAKEN CONTINUOUSLY THROUGH THE COLUMN

LAP/SPLICE IN BEAM

NOTE:
NOT MORE THAN 50 PERCENT OF THE BARS SHALL BE SPLICED AT ONE SECTION



Wherever the drop is less than or equivalent to 50 The reinforcement bars can be bent at 1:10 and continued.

A. PERAMAIYAN, M.E., (Struct.), M.I.E.
REGISTERED STRUCTURAL ENGINEER
CHENNAI METROPOLITAN DEVELOPMENT AUTHORITY
REGISTRATION No. SE/GR-I/19/03/026
NEW No. 31 (OLD No.14), BESANT AVENUE ROAD, ADYAR, CHENNAI - 600 020.
E-Mail: peram@buroengineers.in
Mobile: +91 99625 45530

NOTES:

1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG. NO. BE788_S-/GC/--/01.
3. FOR STANDARD DETAILS REFER TO DWG. NO. BE788_S-/SD/--/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M30 [illegible]
6. GRADE OF CONCRETE FOR [illegible]
7. STEEL GRADE : Fe500 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR [illegible]
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 60 X DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 [illegible]
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC (2016) AND RELEVANT INDIAN CODE STIPULATIONS
12. [illegible]

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-	-	KAVI.K	07/12/26

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer :

BURO ENGINEERS (I) PRIVATE LTD
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar, Chennai - 600 020. 9044-2491 2754/5556.
e-Mail ID: buroindia@buroengineers.in

STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

drawing title

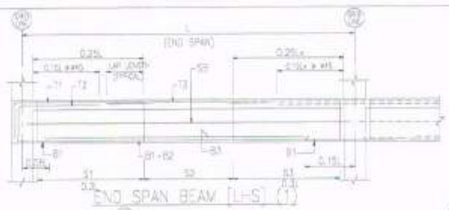
STILT FLOOR BEAM SCHEDULE (SHEET-02 OF 05)

scale	AS SHOWN	design by	TP
drawn by	KAVI.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE788_S-/BM/S-/--/02	revision	-

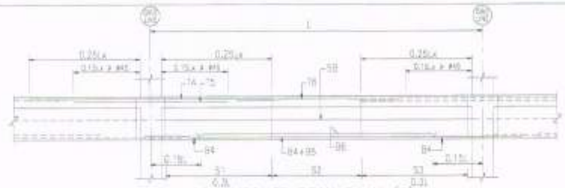
THIS DRAWING IS COPYRIGHT

CAD FILE NAME: BE788_S-BMS---02_.dwg

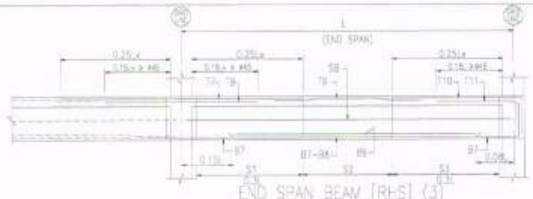
SHEET-01



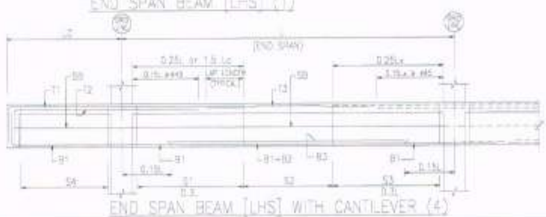
END SPAN BEAM [LHS] (1)



INTERMEDIATE SPAN BEAM (2)



END SPAN BEAM [RHS] (3)



END SPAN BEAM [LHS] WITH CANTILEVER (4)

LEGEND

L ——LENGTH OF SPAN UNDER CONSIDERATION

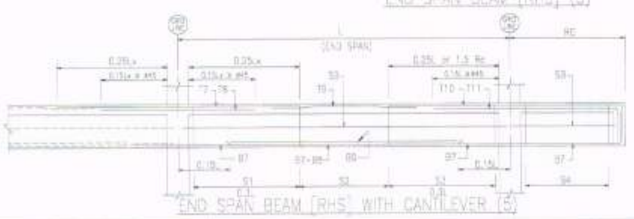
La ——LENGTH OF ADJACENT SPAN TO THE SPAN UNDER CONSIDERATION

Lc ——LENGTH OF LEFT END CANTILEVER

Rc ——LENGTH OF RIGHT END CANTILEVER

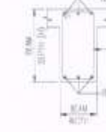
(T) ——CATEGORY

La = Length of span under consideration or Length of adjacent span whichever is greater



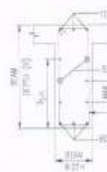
END SPAN BEAM [RHS] WITH CANTILEVER (5)

LOCATION			SIZE		SPAN			REINFORCEMENT																			SIDE BAR EACH FACE (SF)	STIRRUPS				REMARK
BEAM MARKING	CATEGORY	BEAM MARK OR GRID LINE	WIDTH (mm)	DEPTH (mm)	LEFT END CANTILEVER Lc	SPAN (APPROX) L	RIGHT END CANTILEVER Rc	LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN									S1	S2	S3	S4	TYPE
								T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	B10					
SHB3	1	–	300	600	–	4715	–	3T25	3T20	3T25	3T25	–	2T20	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3T8-100	3T8-125	3T8-100	–	1a
SHB4	3	–	300	600	–	3210	–	–	–	–	–	–	–	–	–	–	–	–	–	3T25	2T20	3T25	3T25	–	3T25	–	–	–	3T8-100	3T8-125	3T8-100	–	1a
SHB12	1	–	300	600	–	3020	–	3T25	–	3T25	3T25	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3T8-100	3T8-150	3T8-100	–	1a
SHB13	3	–	300	750/450	–	3620	–	–	–	–	–	–	–	–	–	–	–	–	–	3T25	3T25	3T25	3T25	–	3T25	–	3T25	–	3T8-100	3T8-125	3T8-100	–	1a
SHB16	1	–	300	600	–	7090	–	3T25	–	3T25	3T25	–	2T20	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3T8-100	3T8-125	3T8-100	–	1a
SHB17	2	–	300	600	–	3765	–	–	–	–	–	–	–	3T25	2T25	3T25	3T25	–	–	–	–	–	–	–	–	–	–	–	3T8-100	3T8-125	3T8-100	–	1a
SHB18	3	–	300	600	–	3255	–	–	–	–	–	–	–	–	–	–	–	–	–	3T25	–	3T25	3T25	–	3T25	–	–	–	3T8-100	3T8-125	3T8-100	–	1a
SHB19	1	–	300	600	–	4075	–	3T25	–	3T25	3T25	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3T8-100	3T8-125	3T8-100	–	1a
SHB20	3	–	300	750/450	–	3600	–	–	–	–	–	–	–	–	–	–	–	–	–	3T25	2T25	3T25	3T25	–	3T25	–	2T25	–	3T8-100	3T8-125	3T8-100	–	1a
SHB21	1	–	300	600	–	6075	–	3T25	–	3T25	3T25	–	2T20	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3T8-100	3T8-125	3T8-100	–	1a
SHB22	2	–	300	600	–	5400	–	–	–	–	–	–	–	–	–	–	–	–	–	3T25	3T25	3T25	3T25	–	3T25	–	–	–	3T8-100	3T8-125	3T8-100	–	1a
SHB24	1	–	300	600	–	4875	–	3T25	–	3T25	3T25	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3T8-100	3T8-125	3T8-100	–	1a
SHB25	3	–	300	750/450	–	5550	–	–	–	–	–	–	–	–	–	–	–	–	–	3T25	3T25	3T25	3T25	–	3T25	–	3T25	–	3T8-100	3T8-125	3T8-100	–	1a
SHB26	1	–	300	600	–	5860	–	3T25	–	3T25	3T25	–	2T20	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3T8-100	3T8-125	3T8-100	–	1a
SHB27	3	–	300	600	–	5325	–	–	–	–	–	–	–	–	–	–	–	–	–	3T25	3T25	3T25	3T25	–	3T25	–	–	–	3T8-100	3T8-125	3T8-100	–	1a
SHB28	1	–	200	450	–	1605	–	3T25	–	2T25	2T25	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	T8-100	T8-150	T8-100	–	1
SHB29	2	–	200	450	–	4675	–	–	–	–	–	–	–	2T20	–	3T25	3T25	–	–	–	–	–	–	–	–	–	–	–	T8-100	T8-150	T8-100	–	1
SHB30	3	–	300	750/450	–	5690	–	–	–	–	–	–	–	–	–	–	–	–	–	3T25 / 3T25	2T20	3T25	3T25	–	3T25	–	3T25	–	3T8-100	3T8-150	3T8-100	–	1a
SHB31	1	–	300	600	–	5075	–	3T25	–	3T25	3T25	–	3T20	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3T8-100	3T8-125	3T8-100	–	1a
SHB32	3	–	300	600	–	6775	–	–	–	–	–	–	–	–	–	–	–	–	–	3T25	3T25	3T25	3T25	–	3T25	–	–	–	3T8-100	3T8-125	3T8-100	–	1a
SHB34	1	–	200	600	–	2800	–	2T20	–	3T20	3T20	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	T8-100	T8-125	T8-100	–	1
SHB35	3	–	300	600	–	3300	–	–	–	–	–	–	–	–	–	–	–	–	–	2T20	–	2T20	2T20	–	2T20	–	–	–	T8-100	T8-125	T8-100	–	1
SHB37	1	–	300	600	–	5275	–	3T25	–	3T25	3T25	–	3T20	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3T8-100	3T8-125	3T8-100	–	1a
SHB38	3	–	300	600	–	6775	–	–	–	–	–	–	–	–	–	–	–	–	–	3T25	2T25	3T25	3T25	–	3T25	–	–	–	3T8-100	3T8-125	3T8-100	–	1a
SHB39	1	–	300	600	–	5365	–	3T25	–	3T25	3T25	–	2T20	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3T8-100	3T8-125	3T8-100	–	1a
SHB40	3	–	300	600	–	6775	–	–	–	–	–	–	–	–	–	–	–	–	–	3T25	2T25	3T25	3T25	–	3T25	–	–	–	3T8-100	3T8-125	3T8-100	–	1a
SHB42	4	–	200	450	1100	3350	–	2T20	–	3T20	2T20	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	T8-100	T8-150	T8-100	–	1
SHB43	3	–	200	450	–	2550	–	–	–	–	–	–	–	–	–	–	–	–	–	3T20	2T16	3T20	2T20	–	–	–	–	–	T8-100	T8-150	T8-100	–	1
SHB47	1	–	300	600	–	5535	–	3T25	–	3T25	3T25	–	3T20	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3T8-100	3T8-125	3T8-100	–	1a
SHB48	3	–	300	600	–	6735	–	–	–	–	–	–	–	–	–	–	–	–	–	3T25	2T25	3T25	3T25	–	3T25	–	2T25	–	3T8-100	3T8-125	3T8-100	–	1a
MARKING BEAM	CATEGORY	BEAM MARK OR GRID LINE	WIDTH (mm)	DEPTH (mm)	Lc CANTILEVER LEFT END	L SPAN (APPROX)	Rc CANTILEVER RIGHT END	T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	B10	S1	S2	S3	S4	TYPE	REMARK
LOCATION			SIZE		SPAN			LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN								SIDE BAR EACH FACE (SF)	STIRRUPS				
								REINFORCEMENT																									

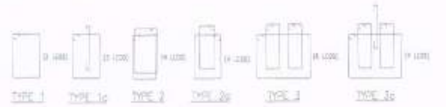


NOTES:

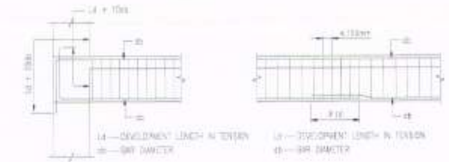
1. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN AND ALL OTHER RELEVANT DRAWINGS.
2. IF THE REINFORCEMENT IS PROVIDED IN TWO LAYERS OR MORE, THEN SPACER BARS BETWEEN THE LAYERS NEED TO BE PROVIDED.
3. SPACER BARS TO BE 12Ø OF MAIN BAR SIZE (WHICHEVER IS GREATER) AT 800c/c BETWEEN EACH LAYER OF MAIN STEEL.
4. THE SPAN LENGTH INDICATED ARE NOT TO BE USED FOR SETTING OUT OR MEASUREMENT.
5. IF BAR SIZE OF THE REINFORCEMENT BARS IS INDICATED THROUGHOUT FOR BOTTOM BAR TOP REINFORCEMENT, THE LAP PROVIDED FOR THE REINFORCEMENT CAN BE OMITTED IN PROVIDING STRAIGHT BARS FOR THE WHOLE LENGTH OF THE BEAM.
6. LAP LENGTH FOR BARS SHOULD BE SAME AS TENSION ANCHORAGE LENGTH BASED UPON THE LARGER BAR DIAMETER FOR UNEQUAL SIZE OF BARS.
7. FIRST STIRRUP OF BEAM SHOULD BE 50mm (MAXIMUM) FROM THE COLUMN FACE.



TYP. SIDE BARS DETAIL FOR BEAM DEPTH > 750



STIRRUPS TYPE

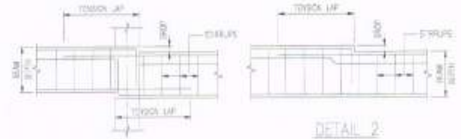


ANCHORAGE OF BEAM BARS AT BEAM AND COLUMN JUNCTION (EXTERNAL JOINT)

NOTE:
IN AN INTERNAL JOINT, BOTH TOP & BOTTOM BARS OF THE BEAM SHALL BE TAKEN CONTINUOUSLY THROUGH THE COLUMN.

LAP/SPLICE IN BEAM

NOTE:
NOT MORE THAN 50 PERCENT OF THE BARS SHALL BE SPLICED AT ONE SECTION.



Wherever the drop is less than or equivalent to 150 The reinforcement bars can be bent at 1:10 and continued

A. PERAMAIYAN, M.E., (Struct), M.I.E.
REGISTERED STRUCTURAL ENGINEER
CHENNAI METROPOLITAN DEVELOPMENT AUTHORITY
REGISTRATION No. SE/GR-V/19/03/026
NEW No. 31 (OLD No.14), BESANT AVENUE ROAD,
ADYAR, CHENNAI - 600 020.
E-Mail: perarm@buroengineers.in
Mobile: +91 99625 45630

NOTES:

1. ALL DIMENSIONS ARE IN MM.
2. FOR GENERAL NOTES REFER TO DWG. NO. 001768_S-/GV/---/01.
3. FOR STANDARD DETAILS REFER TO DWG NO. 001768_S-/STD/---/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN AND ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M30
   DESIGN MIX MIN. M35
   CEMENT CONTENT NOT LESS THAN 380 kg/Cum GRADE +3/-2 SPEC. HOWEVER IMPROVED DESIGN MIX M40 MAY BE ADOPTED IN CONSTRUCTION.
6. GRADE OF CONCRETE FOR
   PILE – M30 (COMPATIBLE CONCRETE SHELLS OF 40N/sq.m.)
   PILE CAP – M30
   BASEMENT WALL, RAMP/BEAM-M30,
   COLUMN + WALL SHEAR WALL-M40
   R.C. SLABS, R.C. BEAMS, STAIRCASE – M30
   ALL OTHER STRUCTURAL MEMBERS – M30
7. STEEL GRADE: Fe500 CONFORMING TO IS 1786-2008.
8. CLEAR COVER FOR PILE 500mm-60mm, 600mm & 750mm-75mm,
   PILECAP-75mm, COLUMN-40mm, SHEAR WALL-50mm,
   SLAB-20mm, BEAM-30mm.
9. UNLESS OTHERWISE SPECIFICALLY APPROVED/NOT, JOINTS SHALL NOT BE LESS THAN 50 X DIA OF BAR.
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE IV, ZONE FACTOR 0.24 SOIL TYPE II (MEDIUM SOIL) AS PER THE SPECIFICATIONS MADE IN IS:1893-2016.
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC (2016) AND RELEVANT INDIAN CODE SPECIFICATIONS.
12. DRAWINGS OF CONSTRUCTION ARE WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS

NORTH POINT

NO.	AMENDMENTS	BY	DATE
–	–	KMVK	17/12/24

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT S KEMBHAVI
CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer :

BURO ENGINEERS (I PRIVATE LTD.
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar,
Chennai - 600 020. 4044-2491 2754/6/66,
e-Mail ID: burodo@buroengineers.in

STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

drawing title

STILT FLOOR BEAM SCHEDULE (SHEET-01 OF 03)

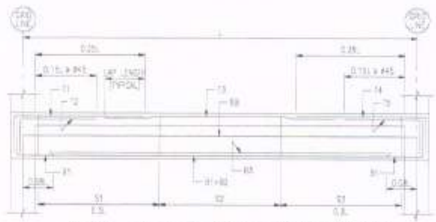
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drawn by	KMVK	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	001768_S-/BM/S-/---/01	revision	–

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CAD FILE NAME: 001768_S-BME---01.dwg

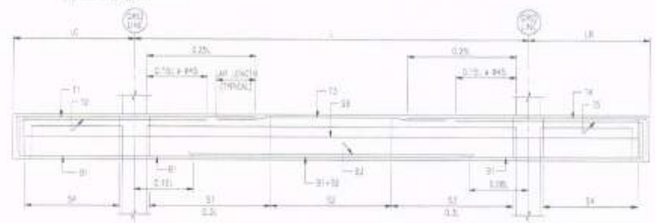
SHEET-04

BEAM MARK NO.	LOCATION: CATEGORY	LOCATION: GRID LINE OF BEAM MARK	SIZE: WIDTH (mm)	SIZE: DEPTH (mm)	SPAN: LEFT END CANTILEVER L0	SPAN: SPAN (APPROX) L	SPAN: RIGHT END CANTILEVER R0	REINFORCEMENT: SPAN T1	T2	T3	T4	T5	B1	B2	B3	SIDE BAR FACE FACE (EF) SB	STIRRUPS: S1	S2	S3	S4	TYPE	REMARKS
B1RB6	1	-	350	650	-	3635	-	3T16	-	3T16	3T16	-	3T16	-	-	-	8T8-100	8T8-200	8T8-100	-	1a	
B1HS7	1	-	350	650	-	3150	-	2T16	-	3T16	3T16	-	3T16	-	-	-	7T8-100	7T8-200	7T8-100	-	1	
B1HS10	1	-	300	600	-	3825	-	3T16	-	3T16	3T16	-	3T16	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1HR12	1	-	300	600	-	3710	-	3T20	-	3T20	3T20	-	3T20	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1HR13	1	-	300	600	-	3615	-	3T16	-	3T16	3T16	-	3T16	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1HB14	1	-	200	600	-	5565	-	3T20	-	2T20	3T20	-	2T20	-	-	-	7T8-100	7T8-150	7T8-100	-	1	SIMILAR BEAM-B1HB20
B1HB15	1	-	200	450	-	1700	-	2T16	-	2T16	2T16	-	2T16	-	-	-	7T8-100	7T8-200	7T8-100	-	1	SIMILAR BEAM-B1HB21
B1HB39	1	-	300	600	-	3290	-	3T20	-	3T20	3T20	-	3T20	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1HB41	1	-	300	600	-	4405	-	3T20	-	3T20	3T20	-	3T20	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1HB48	1	-	200	600	-	4000	-	2T20	-	2T20	2T20	-	2T20	-	-	-	7T8-100	7T8-200	7T8-100	-	1	
B1HB50	1	-	200	600	-	3565	-	2T20	-	2T20	2T20	-	2T20	-	-	-	7T8-100	7T8-200	7T8-100	-	1	
B1HB53	1	-	200	600	-	3575	-	2T20	-	2T20	2T20	-	2T20	-	-	-	7T8-100	7T8-200	7T8-100	-	1	
B1HB56	1	-	300	600	-	4840	-	3T20	-	3T20	3T20	-	3T20	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1HB57	1	-	300	600	-	5690	-	3T20	-	3T20	3T20	-	3T20	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1HB6*	1	-	300	600	-	5865	-	3T20	-	3T20	3T20	-	3T20	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1HB66	1	-	300	600	-	6035	-	3T20	-	3T20	3T20	-	3T20	-	3T16*	-	8T8-100	8T8-150	8T8-100	-	1a	
B1HB69	1	-	300	600	-	6055	-	3T20	-	3T20	3T20	-	3T20	-	2T16*	-	8T8-100	8T8-150	8T8-100	-	1a	
B1HB70	1	-	200	600	-	4795	-	2T16	-	3T16	3T16	-	3T16	-	2T16*	-	8T8-100	8T8-150	8T8-100	-	1a	
B1HB71	1	-	300	600	-	5750	-	3T20	-	3T20	3T20	-	3T20	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1HB74	1	-	300	600	-	5100	-	3T20	-	3T20	3T20	-	3T20	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1HB75	1	-	300	600	-	4775	-	3T20	-	3T20	3T20	-	3T20	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1HB78	1	-	300	450	-	3735	-	2T16	-	2T16	2T16	-	2T16	-	-	-	7T8-100	7T8-150	7T8-100	-	1	
B1HB14	1	-	200	380	-	1600	-	2T12	-	2T12	2T12	-	2T12	-	-	-	7T8-100	7T8-200	7T8-100	-	1	
B1HB15	1	-	200	450	-	2875	-	2T16	-	2T16	2T16	-	2T16	-	-	-	7T8-100	7T8-200	7T8-100	-	1	
B1HB22	1	-	200	450	-	2503	-	2T20	-	2T20	2T20	-	2T20	-	-	-	7T8-100	7T8-200	7T8-100	-	1	
B1HB33	1	-	200	450	-	3550	-	2T20	-	2T20	2T20	-	2T20	-	-	-	7T8-100	7T8-200	7T8-100	-	1	
B1HB43	1	-	200	450	-	3000	-	2T20	-	2T20	2T20	-	2T20	-	-	-	7T8-100	7T8-200	7T8-100	-	1	SIMILAR BEAM-B1HB42a
B1VB43	1	-	300	600	-	3550	-	3T20	-	3T20	3T20	-	3T20	-	-	-	8T8-100	8T8-150	8T8-100	-	1	
B1VB44	1	-	300	450	-	3355	-	2T16	-	3T16	3T16	-	3T16	-	-	-	8T8-100	8T8-200	8T8-100	-	1a	
B1VB56	1	-	200	600	-	3003	-	2T20	-	2T20	2T20	-	2T20	-	-	-	7T8-100	7T8-200	7T8-100	-	1	
B1VB57	1	-	200	600	-	2185	-	2T16	-	2T16	2T16	-	2T16	-	-	-	7T8-100	7T8-150	7T8-100	-	1	
B1VB58	1	-	300	600	-	4135	-	3T16	-	3T16	3T16	-	3T16	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
MARKING BEAM	CATEGORY	BEAM MARK OR GRID LINE	WIDTH (mm)	DEPTH (mm)	CANTILEVER LEFT END	SPAN (APPROX)	CANTILEVER RIGHT END	T1	T2	T3	T4	T5	B1	B2	B3	SIDE BAR FACE FACE (EF)	S1	S2	S3	S4	TYPE	REMARKS
LOCATION			SIZE		SPAN			REINFORCEMENT: SPAN									STIRRUPS					

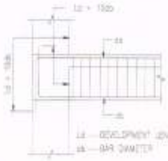


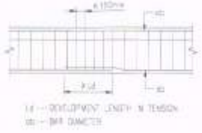
TYPICAL DETAIL OF SINGLE SPAN BEAM (1)

L ---- LENGTH OF SPAN UNDER CONSIDERATION
LO ---- LENGTH OF LEFT END CANTILEVER
RO ---- LENGTH OF RIGHT END CANTILEVER
(1) ---- CATEGORY



TYPICAL DETAIL OF SINGLE SPAN BEAM WITH CANTILEVERS (2)



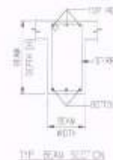


ANCHORAGE OF BEAM BARS AT BEAM AND COLUMN JUNCTION (EXTERNAL JOINT)

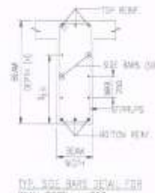
NOTE:
IN AN INTERNAL JOINT, BOTH TOP & BOTTOM BARS OF THE BEAM SHALL BE TAKEN CONTINUOUSLY THROUGH THE COLUMN.

LAP/SPLICE IN BEAM

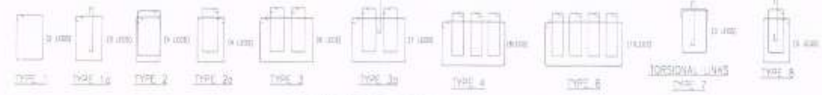
NOTE:
NOT MORE THAN 50 PERCENT OF THE BARS SHALL BE SPLICED AT ONE SECTION



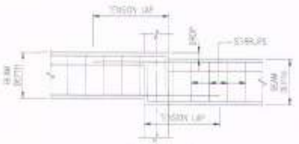
TYP. BEAM SECTION



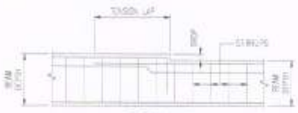
TYP. SIDE BARS DETAIL FOR BEAM DEPTH > 750



STIRRUPS TYPE

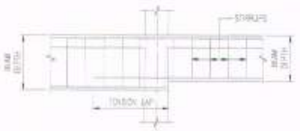


DETAIL 1

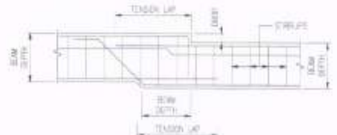


DETAIL 2

Whenever the steel is less than or equivalent to 50
The reinforcement bars can be bent at 1:10 and continued



DETAIL 3



DETAIL 4

NOTES:
1. THIS DRAWING TO BE READ IN COLLUNCTION WITH THE KEY PLAN AND ALL OTHER RELEVANT DRAWINGS.
2. IF THE REINFORCEMENT IS PROVIDED IN TWO LAYERS OR MORE, THEN SPACER BARS BETWEEN THE LAYERS NEED TO BE PROVIDED
3. SPACER BARS TO BE T26 C/C MAX BAR SIZE (WHICHEVER IS GREATER) @ 9700/S BETWEEN EACH LAYER OF MAIN STEEL.
4. THE SPAN LENGTH INDICATED ARE NOT TO BE USED FOR SETTING OUT OR MEASUREMENT.
5. IF SAME SIZE OF THE REINFORCEMENT BARS IS INDICATED THROUGHOUT FOR BOTTOM OR TOP REINFORCEMENT, THE LAP PROVIDED FOR THE REINFORCEMENT CAN BE OMITTED BY PROVIDING STIRRUPS HERE FOR THE HALF LENGTH OF THE BEAM
6. LAP LENGTH FOR BARS SHOULD BE SAME AS TENSION ANCHORAGE LENGTH GIVEN UPON THE LARGER BAR DIAMETER FOR UNEQUAL SIZE OF BARS
7. FIRST STIRRUP OF BEAM SHOULD BE 50mm (MAXIMUM) FROM THE COLUMN FACE

NOTES:
1. ALL DIMENSIONS ARE IN MM.
2. FOR BEAMS, NOTES REFER TO DWG. NO. BE768_S-/BM/--/01.
3. FOR SLABS DETAILS REFER TO DWG. NO. BE768_S-/SB/--/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M30
   DESIGN MIX MUST WITH
   CEMENT CONTENT NOT LESS THAN 320 kg/Cum, WHEN 40/20 OPC HAVING APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   RCC :- M30 (CONCRETE GRADE SHOULD BE 4000kg/m²)
   PCC CAP :- M15
   BASEMENT WALL, BEAM/SLAB- M30,
   COLUMN :- M40, SHEAR WALL- M40
   RCC SLABS, RCC BEAMS, STAIRCASE :- M30
   ALL OTHER STRUCTURAL MEMBERS :- M30
7. STEEL GRADE :- FE500 CONFORMING TO IS:1786-2008
8. CLEAR COVER FOR PILE 500mm- 60mm, 600mm & 750mm-75mm,
   PILECAP-75mm, COLUMN-40mm, SHEAR WALL- 30mm,
   SLAB-20mm, BEAM-30mm
9. UNLESS OTHERWISE SPECIFIED, DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR
10. SEISMIC ZONE HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE IN EQUITLE DETAILING CARRIED OUT AS PER THE STIPULATIONS MADE IN IS:13920-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC (PART-1&2) AND RELEVANT INDIAN CODE STIPULATIONS
12. RULE OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+MOOR. FILLING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-		RAVI.K	27/02/24

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer :

BURO ENGINEERS (I) PRIVATE LTD.
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar,
Chennai - 600 020. 4044 2491 2754/55/56
e-Mail ID: buroindia@buroengineers.in

STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAYUR, CHENNAI AND COVERED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

drawing title

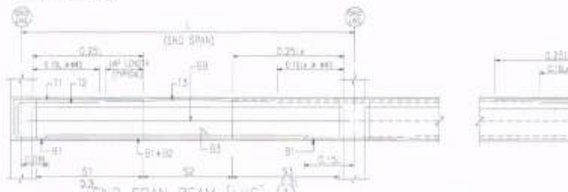
BASEMENT-1 FLOOR BEAM SCHEDULE (SHEET-05 OF 05)

scale	AS SHOWN	design by	TP
drawn by	RAVI.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE768_S-/BM/B1/--/05	revision	-

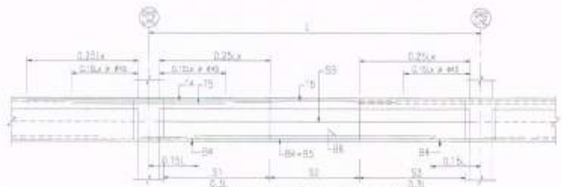
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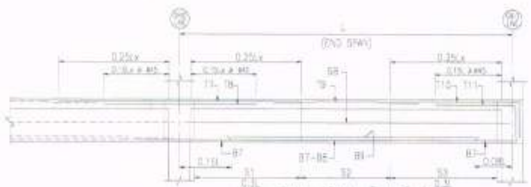
SHEET-03



END SPAN BEAM (LHS) (1)



INTERMEDIATE SPAN BEAM (2)



END SPAN BEAM (RHS) (3)



END SPAN BEAM (LHS) WITH CANTILEVER (4)



END SPAN BEAM (RHS) WITH CANTILEVER (5)

LEGEND

L —— LENGTH OF SPAN UNDER CONSIDERATION
Lc —— LENGTH OF ADJACENT SPAN TO THE SPAN UNDER CONSIDERATION
Lc —— LENGTH OF LEFT END CANTILEVER
Rc —— LENGTH OF RIGHT END CANTILEVER
(*) —— CATEGORY

La = Length of span under consideration or length of adjacent span whichever is greater

LOCATION			SIZE		SPAN			REINFORCEMENT																						SIDE BAR EACH FACE (IF)	STIRRUPS					REMARKS
BEAM MARKING	CATEGORY	GRID LINE OR BEAM MARK	WIDTH (mm)	DEPTH (mm)	LEFT END CANTILEVER Lc	SPAN (APPROX) L	RIGHT END CANTILEVER Rc	LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN																					
								T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	SB	S1	S2	S3	S4	TYPE	
B1/B48	1	-	300	600	-	3840	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1/B50	3	-	300	600	-	5805	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T16	3T20	2T20	-	3T20	-	2T16*	-	3T8-100	3T8-150	3T8-100	-	1a	
B1/B51	1	-	300	600	-	7225	-	3T20	2T16	3T20	3T20	-	3T20*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1/B52	2	-	300	600	-	5450	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	-	2T16*	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1/B53	2	-	300	600	-	4050	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	-	2T16*	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1/B54	2	-	300	600	-	3660	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1/B55	3	-	300	600	-	6445	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	-	3T20	-	2T20*	-	3T8-100	3T8-150	3T8-100	-	1a	
B1/B58	1	-	300	600	-	4050	-	3T20	-	3T20	3T20	-	3T20*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1/B60	2	-	300	600	-	3650	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1/B61	3	-	300	600	-	5250	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	-	3T20	-	2T20*	-	3T8-100	3T8-150	3T8-100	-	1a	
B1/B62	1	-	300	600	-	8505	-	3T20	2T16	3T20	3T20	-	2T20*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1/B63	3	-	300	600	-	4525	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	-	3T20	-	2T16*	-	3T8-100	3T8-150	3T8-100	-	1a	
B1/B64	1	-	300	600	-	8252	-	3T20	2T16	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1/B65	3	-	300	600	-	4525	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	-	3T20	-	2T16*	-	3T8-100	3T8-150	3T8-100	-	1a	
B1/B66	1	-	300	600	-	3892	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1/B67	3	-	300	600	-	6155	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	-	3T20	-	2T20*	-	3T8-100	3T8-150	3T8-100	-	1a	

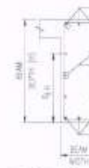
MARKING BEAM	CATEGORY	BEAM MARK OR GRID LINE	LOCATION		SIZE		SPAN		REINFORCEMENT																						SIDE BAR	STIRRUPS					REMARKS
					(mm) WIDTH	(mm) DEPTH	LL CANTILEVER LEFT END	(APPROX) SPAN	RC CANTILEVER RIGHT END	T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	SB	S1	S2	S3	S4	TYPE	
										LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN													

NOTES:

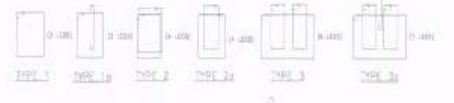
1. THIS DRAWING TO BE READ IN COLLUNCTION WITH THE KEY PLAN AND ALL OTHER RELEVANT DRAWINGS.
2. IF THE REINFORCEMENT IS PROVIDED IN TWO LAYERS OR MORE, THEN SPACER BARS BETWEEN THE LAYERS. NOTE TO BE PROVIDED
3. SPACER BARS TO BE T20 OR MAIN BAR SIZE (WHICHEVER IS GREATER) AT 3000c/c BETWEEN EACH LAYER OF MAIN STEEL.
4. THE SPAN LENGTH INDICATED ARE NOT TO BE USED FOR SETTING OUT OR MEASUREMENT.
5. IF SPAN SIZE OF THE REINFORCEMENT BARS IS INDICATED THROUGH-OUT FOR BOTTOM BAR FOR REINFORCEMENT, THE LAP PROVIDED FOR THE REINFORCEMENT CAN BE SHIFTED BY PROVIDING STRAIGHT BARS FOR THE WHOLE LENGTH OF THE SPAN
6. LAP LENGTH FOR BARS SHOULD BE SAME AS TENSION ANCHORAGE LENGTH BASED UPON THE LARGER BAR DIAMETER FOR UNEQUAL SIZE OF BARS
7. FIRST STIRRUP OF BEAM SHOULD BE 50mm (MAXIMUM) FROM THE COLUMN FACE.



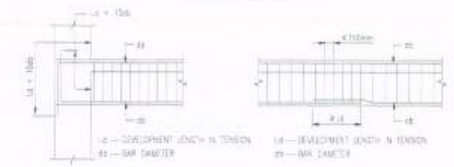
TYP. BEAM SECTION



TYP. SIDE BARS DETAIL FOR BEAM DEPTH > 750



STIRRUPS TYPE

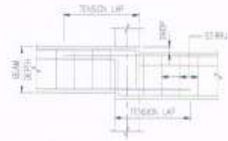


ANCHORAGE OF BEAM BARS AT BEAM AND COLUMN JUNCTION (EXTERNAL JOINT)

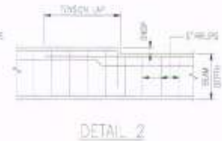
NOTE:
IN AN INTERNAL JOINT, BOTH TOP & BOTTOM BARS OF THE BEAM SHALL BE TAKEN CONTINUOUSLY THROUGH THE COLUMN

LAP/SPLICE IN BEAM

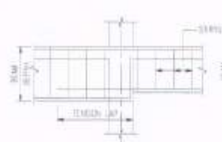
NOTE:
NOT MORE THAN 50 PERCENT OF THE BARS SHALL BE SPLICED AT ONE SECTION



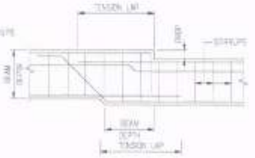
DETAIL 1



DETAIL 2



DETAIL 3



DETAIL 4

Wherever the shear is less than or equivalent to 50 The reinforcement bars can be bent at 1:10 and stirrups

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Mobile: +91 99625 45630

NOTES:

1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG NO. SE/BBB/S-/NT/---/01.
3. FOR STANDARD DETAILS REFER TO DWG NO. SE/BBB/S-/STD/---/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M30
   CEMENT: BIS 455 (BFT)
   (ONLY CEMENT NOT LESS THAN 350 kg/cum SHALL BE USED FOR CONCRETE APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   PILE - M30 (CONDITIONS CONCRETE SHALL BE 450kg/m³)
   PILE CAP - M25
   BASEMENT WALL, RAMP/SLAB-M30,
   COLUMN - M40, BEAM WALL-M40
   RCC SLABS, RCC BEAMS, STAIRCASE - M25
   ALL OTHER STRUCTURAL MEMBERS - M25
7. STEEL GRADE: FE500 CONFORMING TO IS:1786-2008
8. CLEAR COVER FOR PILE 300mm&-60mm, 600mm& & 750mm-75mm.
   PILECAP-75mm, COLUMN-40mm, SHEAR WALL-25mm.
   SLAB-20mm, BEAM-30mm.
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR.
10. EXISTING LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE II, ZONE FACTOR 0.10 AND IMPORTANCE FACTOR AS PER THE STIPULATIONS MADE IN IS:1893-2016.
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH I.S.456-2000, NBC 2017-(1983) AND RELEVANT INDIAN CODE STANDARDS
12. DUE OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF, USING RAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS.

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-		RMVK	07/02/26

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer :

BURO ENGINEERS (I) PRIVATE LTD.
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar,
Chennai - 600 020. 044-2491 2754/55/56
e-Mail ID: buroindia@buroengineers.in

STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 1 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

drawing title

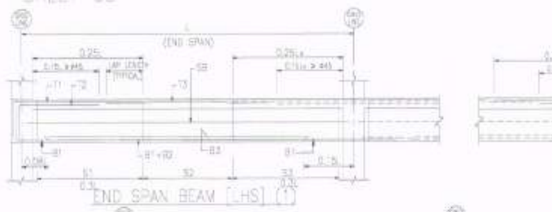
BASEMENT-1 FLOOR BEAM SCHEDULE (SHEET-04 OF 05)

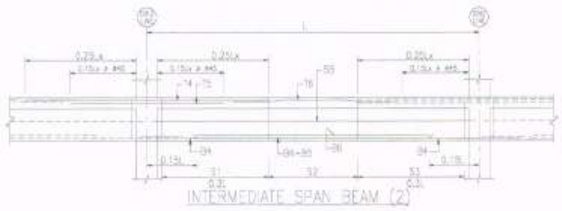
scale	AS SHOWN	design by	SP
drawn by	KAV. K	checked by	SP
date	DEC 2024	approved by	AP
drawing no.	BC768_S-/BM/B1/---/04		revision -

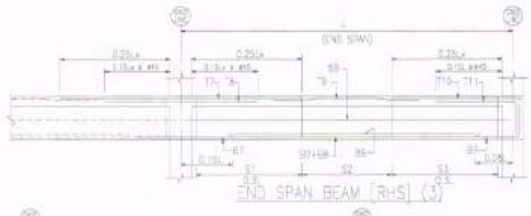
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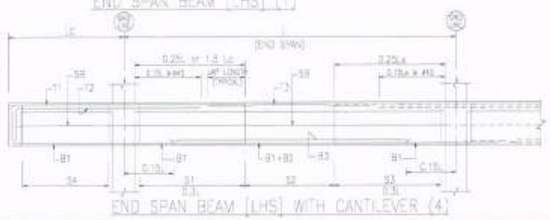
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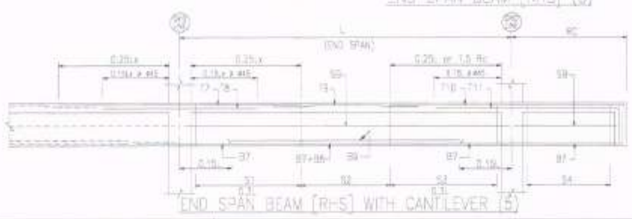
SHEET-03









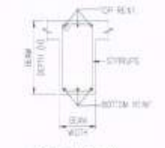


LEGEND
L ------ LENGTH OF SPAN UNDER CONSIDERATION
La ------ LENGTH OF ADJACENT SPAN TO THE SPAN UNDER CONSIDERATION
Le ------ LENGTH OF LEFT END CANTILEVER
Re ------ LENGTH OF RIGHT END CANTILEVER
(1) ------ CATEGORY

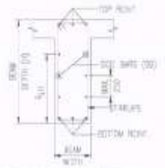
La = Length of span under consideration or Length of adjacent span whichever is greater

LOCATION			SIZE		SPAN		REINFORCEMENT																				SIDE BAR EACH FACE (SF)	STIRRUPS					REMARKS
BEAM MARKING	CATEGORY	GRID LINE OR BEAM MARK	WIDTH (mm)	DEPTH (mm)	LEFT END CANTILEVER Le	SPAN (APPROX) L	RIGHT END CANTILEVER Re	LEFT END SPAN T1	T2	T3	B1	B2	B3	INTERMEDIATE SPAN T4	T5	T6	B4	B5	B6	RIGHT END SPAN T7	T8	T9	T10	T11	B7	B8	B9	SS	S1	S2	S3	S4	TYPE	
B1VB10	1	-	300	600	-	5650	-	3T20	-	3T20	3T20	-	2T12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB11	2	-	300	600	-	1450	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB12	3	-	300	600	-	2950	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20/3T20	-	2T20	3T20	-	2T20	-	-	-	T8-100	T8-150	T8-100	-	1	
B1VB13	1	-	300	600	-	5265	-	3T20	-	3T20	3T20	-	2T12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB13a	2	-	300	600	-	3975	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	2T16	3T20	-	2T20	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB15	1	-	300	600	-	3850	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB16	2	-	300	600	-	5705	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	-	3T20	-	2T16	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB17	1	-	300	600	-	3450	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB18	2	-	300	600	-	6155	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	-	3T20	-	2T20	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB21	1	-	300	600	-	5220	-	3T20	-	3T20	3T20	-	2T16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB22	2	-	300	600	-	4150	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	3T20	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB23	1	-	300	600	-	2775	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB24	2	-	300	600	-	4450	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB29	2	-	300	600	-	7150	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	-	3T20	-	-	-	-	-	-	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB23a	2	-	300	600	-	6350	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	-	3T16	-	-	-	-	-	-	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB24a	2	-	300	600	-	1650	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	-	3T20	-	2T16	-	T8-100	T8-150	T8-100	-	1	
B1VB25a	1	-	300	600	-	7350	-	3T20	2T16	3T20	3T20	-	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB26	2	-	300	600	-	5650	-	-	-	-	-	-	-	3T20	2T20	3T20	3T20	-	3T16	-	-	-	-	-	-	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB27	2	-	300	450	-	1450	-	-	-	-	-	-	-	3T20/2T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-150	T8-100	-	1	
B1VB28	3	-	300	450	-	2900	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	3T20	-	-	-	T8-100	T8-150	T8-100	-	1	
B1VB29	1	-	300	600	-	3450	-	3T20	2T12	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB30	2	-	300	600	-	5805	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	-	3T20	-	2T16	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB31	1	-	300	600	-	5200	-	3T20	-	3T20	3T20	-	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB32	2	-	300	600	-	4200	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	3T20	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB34	1	-	300	600	-	6445	-	3T20	-	3T20	3T20	-	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB35	2	-	300	450	-	3300	-	-	-	-	-	-	-	3T20/2T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	8T8-100	8T8-150	8T8-100	-	1	
B1VB36	2	-	300	450	-	2195	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	8T8-100	8T8-150	8T8-100	-	1	
B1VB37	2	-	300	450	-	2900	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	3T20	-	-	-	T8-100	T8-150	T8-100	-	1	
B1VB38	1	-	300	600	-	7650	-	3T20	2T16	3T20	3T20	-	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB39	2	-	300	600	-	2350	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB40	3	-	300	600	-	6950	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	2T16	3T20	-	2T20	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB45	1	-	300	600	-	3600	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8T8-100	8T8-150	8T8-100	-	1a	
B1VB46	2	-	300	600	-	6155	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	-	3T20	-	2T16	-	8T8-100	8T8-150	8T8-100	-	1a	
MARKING BEAM	CATEGORY	BEAM MARK OR GRID LINE	WIDTH (mm)	DEPTH (mm)	Le CANTILEVER (LEFT END)	SPAN (APPROX) L	Re CANTILEVER (RIGHT END)	T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	SS	S1	S2	S3	S4	TYPE	REMARKS
LOCATION			SIZE		SPAN			LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN								SIDE BAR EACH FACE	STIRRUPS					
					REINFORCEMENT																													

NOTES :
1. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN AND ALL OTHER RELEVANT DRAWINGS.
2. IF THE REINFORCEMENT IS PROVIDED IN TWO LAYERS OR MORE, THEN SPACER BARS BETWEEN THE LAYERS, NEED TO BE 2T16/1000.
3. SPACER BARS TO BE "2S (BY MAIN BAR SIZE (WHICHEVER IS GREATER) AT 1000c/c BETWEEN EACH LAYER OF MAIN STEEL.
4. THE SPAN LENGTH INDICATED ARE NOT TO BE USED FOR SETTING OUT OR MEASUREMENT.
5. R SAME SIZE OF THE REINFORCEMENT BARS IS INDICATED THROUGHOUT FOR BOTTOM OR TOP REINFORCEMENT, THE LAP PROVIDE FOR THE REINFORCEMENT CAN BE SHIFTED BY PROVIDING STRAIGHT BARS FOR THE WHOLE LENGTH OF THE BEAM.
6. LAP LENGTH FOR BARS SHOULD BE SAME AS TENSION ANCHORAGE LENGTH BASED UPON THE LARGER BAR DIAMETER FOR UNEQUAL SIZE OF BARS.
7. FIRST STIRRUP OF BEAM SHOULD BE 50mm (MINIMUM) FROM THE COLUMN FACE.



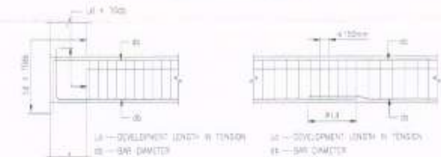
TYP. BEAM SECTION



TYP. SIDE BARS DETAIL FOR BEAM DEPTH > 750



STIRRUPS TYPE

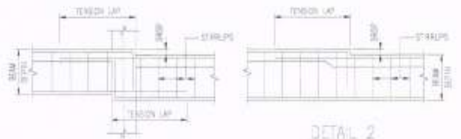


ANCHORAGE OF BEAM BARS AT BEAM AND COLUMN JUNCTION (EXTERNAL JOINT)

NOTE:
IN AN INTERNAL JOINT, BOTH TOP & BOTTOM BARS OF THE BEAM SHALL BE TAKEN CONTINUOUSLY THROUGH THE COLUMN.

LAP/SPLICE IN BEAM

NOTE:
NOT MORE THAN 50 PERCENT OF THE BARS SHALL BE SPLICED AT ONE SECTION.



Wherever the drop is less than or equivalent to 50 the reinforcement bars can be bent at 1:10 and continued

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REGISTERED STRUCTURAL ENGINEER
CHENNAI METROPOLITAN DEVELOPMENT AUTHORITY
REGISTRATION No. SE/GR-I/15/03/026
NEW No. 31 (OLD No.14), BESANT AVENUE ROAD,
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E-Mail: peram@buroengineers.in
Mobile: +91 99625 45630

NOTES:
1. ALL DIMENSIONS ARE IN MM.
2. FOR GENERAL NOTES REFER TO DNC NO. SE/BBR_S-/W/---/20.
3. FOR DRAWING DETAILS REFER TO DNC NO. SE/BBR_S-/SS/---/20.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M30
   DESIGN MIX M30 WITH
   CEMENT CONTENT NOT LESS THAN 360 Kg/Cum (GRADE 43/53 OPC).
   HARDNESS APPROACH SHOULD NOT BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   PILE - M30 (COMMENSURATE CONTENT SHOULD BE 400Kg/m³)
   RAFT CAP - M35
   BASEMENT WALL, BEAM/SLAB-M35,
   COLUMN - M40, SHEAR WALL-M40
   R.C. SLABS, P.C. BEAMS, STAIRCASE - M25
   ALL OTHER STRUCTURAL MEMBERS - M30
7. STEEL GRADE: FE500 CONFORMING TO IS:1786-2008
8. CLEAR COVER FOR PILE 500mm=50mm, 800mm & 1100mm=75mm.
   RAFT=75mm, COLUMN-40mm, SHEAR WALL-30mm.
   BEAM-25mm, SLAB-20mm.
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 60 X DIA OF BAR.
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE 3, SOIL TYPE-II, DAMPED SLOPE AS PER THE STRUCTURE MADE IN IS:1893-2016.
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, SP(SP7-1981) AND RELEVANT NBMC CODE OF PRACTICE.
12. ROLE OF CONSTRUCTION (US AMY CONTRACTOR/ PROMOTER / BUILDER / OWNER).

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF, USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-		KAVI	07/02/24

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects
INDRAJIT.S.KEMBHAVI
CA/2000/26684,
BCC/BL-3.5/A-2569/14-15

Civil & Structural Engineer :
BURO ENGINEERS (I) PRIVATE LTD.
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar,
Chennai - 600 020. 9944-2491 2764/5556.
e-Mail ID: buroindia@buroengineers.in

STRUCTURAL

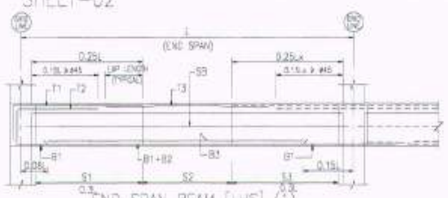
project title
PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

drawing title
BASEMENT-1 FLOOR BEAM SCHEDULE (SHEET-03 OF 05)

scale	AS SHOWN	design by	TP
drawn by	KAVI.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE/768_S-/BM/B1/---/013	revision	-

THIS DRAWING IS COPYRIGHT
DWG FILE NAME: BE768_S-/BM/B1/---/03.dwg

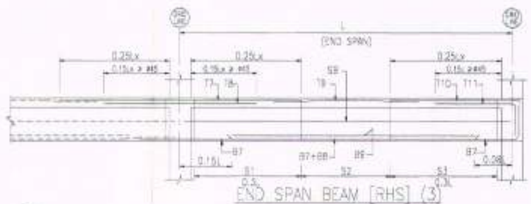
SHEET-02



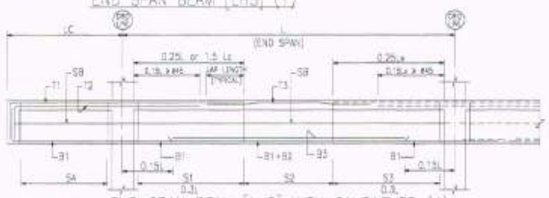
END SPAN BEAM [LHS] (1)



INTERMEDIATE SPAN BEAM (2)



END SPAN BEAM [RHS] (3)

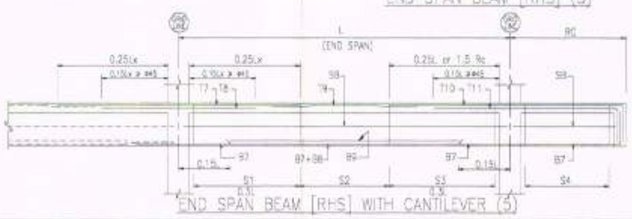


END SPAN BEAM [LHS] WITH CANTILEVER (4)

LEGEND

L ------ LENGTH OF SPAN UNDER CONSIDERATION
Lc ------ LENGTH OF ADJACENT SPAN TO THE SPAN UNDER CONSIDERATION
Lc ------ LENGTH OF LEFT END CANTILEVER
Rc ------ LENGTH OF RIGHT END CANTILEVER
(1) ------ CATEGORY

Lx = Length of span under consideration or Length of adjacent span whichever is greater



END SPAN BEAM [RHS] WITH CANTILEVER (5)

LOCATION			SIZE		SPAN			REINFORCEMENT																						SIDE BAR EACH FACE (EF)	STIRRUPS					REMARKS
BEAM MARKING	CATEGORY	GRID LINE OR BEAM MARK	WIDTH (mm)	DEPTH (mm)	LEFT END CANTILEVER Lc	SPAN (APPROX) L	RIGHT END CANTILEVER Rc	LEFT END SPAN T1	T2	T3	B1	B2	B3	INTERMEDIATE SPAN T4	T5	T6	B4	B5	B6	RIGHT END SPAN T7	T8	T9	T10	T11	B7	B8	B9	S8	S1	S2	S3	S4	TYPE	
B1HB58	1	-	300	800	-	3300	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB59	2	-	300	800	-	4075	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB60	3	-	300	800	-	5430	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	3T20	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB62	1	-	300	800	-	4675	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB64	3	-	300	800	-	5415	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	3T20	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB67	1	-	300	600	-	4675	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB68	3	-	300	600	-	5400	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	3T20	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB72	1	-	300	600	-	3400	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB73	3	-	300	600	-	6050	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	3T20	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB77	1	-	300	600	-	3250	-	3T20	-	3T20	3T20	-	2T20 ①	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB78	2	-	300	600	-	3735	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB79	2	-	300	600	-	5850	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	2T20 ①	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB80	2	-	300	600	-	3660	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB81	3	-	300	600	-	6575	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20 / 3T20	-	3T20	3T20	-	3T20	-	2T20 ①	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB82	1	-	300	600	-	5550	-	3T20	-	3T20	3T20	-	2T20 ①	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB83	2	-	300	600	-	5835	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB84	2	-	300	600	-	5430	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	2T20 ①	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB85	2	-	300	600	-	5410	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	2T20 ①	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB86	3	-	300	600	-	6320	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20 / 3T20	-	3T20	3T20	-	3T20	-	2T20 ①	-	3T8-100	3T8-150	3T8-100	-	1a	
B1V81	1	-	300	600	-	3275	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1V82	3	-	300	600	-	6155	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	-	3T20	-	3T20 ①	-	3T8-100	3T8-150	3T8-100	-	1a	
B1V83	1	-	300	600	-	3780	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1V84	2	-	300	600	-	5705	-	-	-	-	-	-	-	3T20	3T16	3T20	3T20	-	2T16 ①	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
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B1V85a	1	-	300	600	-	5550	-	3T20	-	3T20	3T20	-	2T20 ①	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1V85b	2	-	300	600	-	5835	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1V85c	2	-	300	600	-	5435	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	2T20 ①	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
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B1V87	2	-	300	600	-	2650	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1V88	2	-	300	600	-	2525	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1V89	3	-	300	600	-	7250	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	2T16	3T20	-	2T20 ①	-	3T8-100	3T8-150	3T8-100	-	1a	
MARKING BEAM	CATEGORY	BEAM MARK OR GRID LINE	(mm) WIDTH	(mm) DEPTH	Lc CANTILEVER LEFT END	L (APPROX) SPAN	Rc CANTILEVER RIGHT END	T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	S8/S9	S1	S2	S3	S4	TYPE	REMARKS
LOCATION			SIZE		SPAN			LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN									STIRRUPS					
								REINFORCEMENT																											



TYP. BEAM SECTION



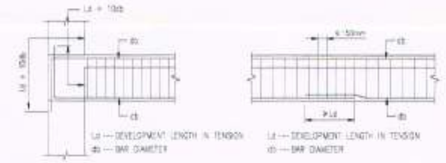
TYP. SIDE BARS DETAIL FOR BEAM DEPTH > 750

NOTES :

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN AND ALL OTHER RELEVANT DRAWINGS.
2. IF THE REINFORCEMENT IS PROVIDED IN TWO LAYERS OR MORE, THEN SPACER BARS BETWEEN THE LAYERS NEED TO BE PROVIDED
3. SPACER BARS TO BE T25 OR MAIN BAR SIZE (WHICHEVER IS GREATER) AT 900c/c BETWEEN EACH LAYER OF MAIN STEEL.
4. THE SPAN LENGTH INDICATED ARE NOT TO BE USED FOR SETTING OUT OR MEASUREMENT.
5. IF SAME SIZE OF THE REINFORCEMENT BARS IS INDICATED THROUGH-OUT FOR BOTTOM OR TOP REINFORCEMENT, THE LAP PROVIDED FOR THE REINFORCEMENT CAN BE OMITTED BY PROVIDING STRAIGHT BARS FOR THE WHOLE LENGTH OF THE BEAM.
6. LAP LENGTH FOR BARS SHOULD BE SAME AS TENSION ANCHORAGE LENGTH BASED UPON THE LARGER BAR DIAMETER FOR UNEQUAL SIZE OF BARS
7. FIRST STIRRUP OF BEAM SHOULD BE 50mm (MAXIMUM) FROM THE COLUMN FACE



STIRRUPS TYPE

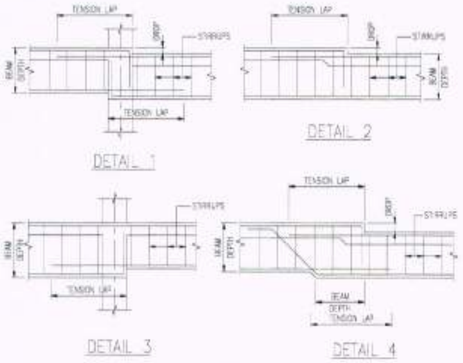


ANCHORAGE OF BEAM BARS AT BEAM AND COLUMN JUNCTION (EXTERNAL JOINT)

NOTE:
IN AN INTERNAL JOINT, BOTH TOP & BOTTOM BARS OF THE BEAM SHALL BE TAKEN CONTINUOUSLY THROUGH THE COLUMN

LAP/SPLICE IN BEAM

NOTE
NOT MORE THAN 50 PERCENT OF THE BARS SHALL BE SPLICED AT ONE SECTION



Wherever the drop is less than or equivalent to 50 The reinforcement bars can be bent at 1:6 and continued

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ADYAR, CHENNAI - 600 020.
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Mobile: +91 99625 45530

NOTES:

1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG. NO. BE1768_S-/NT/---/01.
3. FOR STANDARD DETAILS REFER TO DWG. NO. BE1768_S-/SD/---/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT STRUCTS DRAWINGS.
5. CONCRETE GRADE: M30
   DESIGN MIX MOD WITH
   CEMENT CONTENT NOT LESS THAN 350 kg/Cum SPACE 43/53 OPC
   HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   PILE – M30 (CONVENTIOUS CONTENT SHALL BE <400kg/m³)
   PILE CAP – M30
   BASEMENT WALL, BEAM,SLAB-M30,
   COLUMN – M40, SHEAR WALL-M40
   R.C. SLABS, R.C. BEAMS, STAIRCASE – M30.
   ALL OTHER STRUCTURAL MEMBERS – M30.
7. STEEL GRADE : Fe500 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR PILE 500mm=8-50mm, 600mm& 750mm=75mm.
   RAFT=75mm, COLUMN-40mm, SHEAR WALL-30mm.
   SLAB-25mm, BEAM-30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE II DUCTILE DETAILING EXPRESS OUT AS PER THE STIPULATIONS MADE IN IS:13920-2016.
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, ARE (SP7-1983) AND RELEVANT INDIAN CODE STIPULATIONS
12. ONUS OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING RAFT SLABS FOR BOTH INTERIOR AND EXTERIOR FILLED WALLS

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-		KAV.K	07/02/25

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26684,
BCC/BL-3.8/A-2569/14-15

Civil & Structural Engineer :

BURO ENGINEERS (I) PRIVATE LTD.
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar,
Chennai - 600 020. Ph:44-2441 2754/55/56.
e-Mail ID: buroindia@buroengineers.in

STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

drawing title

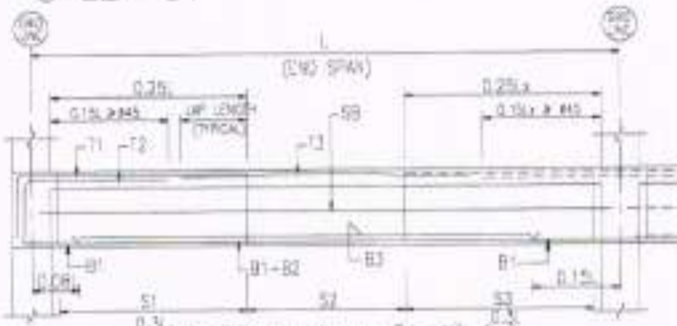
BASEMENT-1 FLOOR BEAM SCHEDULE (SHEET-02 OF 05)

scale	AS SHOWN	design by	TP
drawn by	KAVI.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE1768_S-/BM/B1/---/02	revision	-

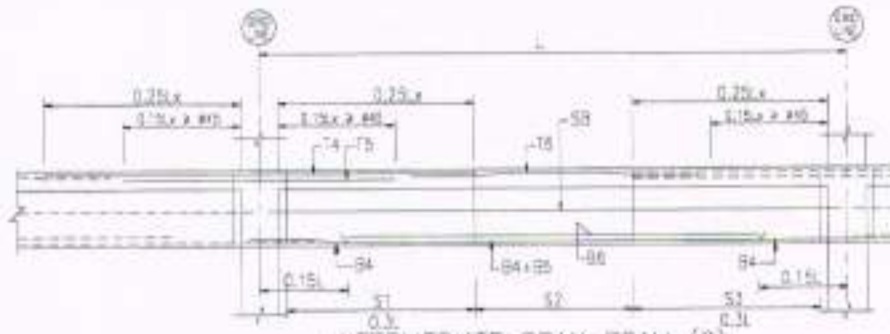
THIS DRAWING IS COPYRIGHT

CAD FILE NAME: BE1768_S-BMB1----02.dwg

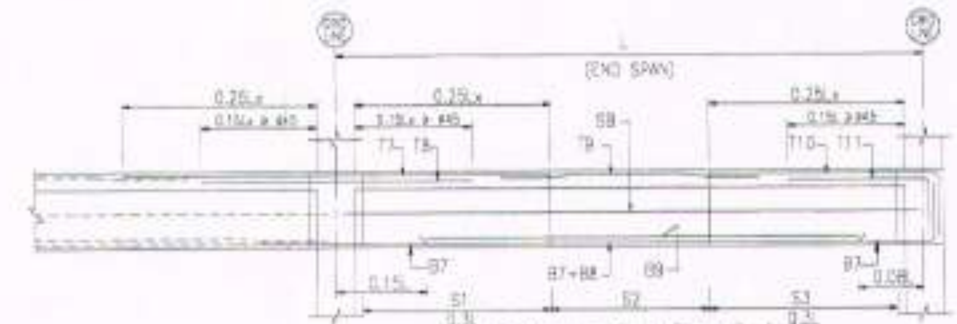
SHEET-01



END SPAN BEAM [LHS] (1)



INTERMEDIATE SPAN BEAM (2)



END SPAN BEAM [RHS] (3)

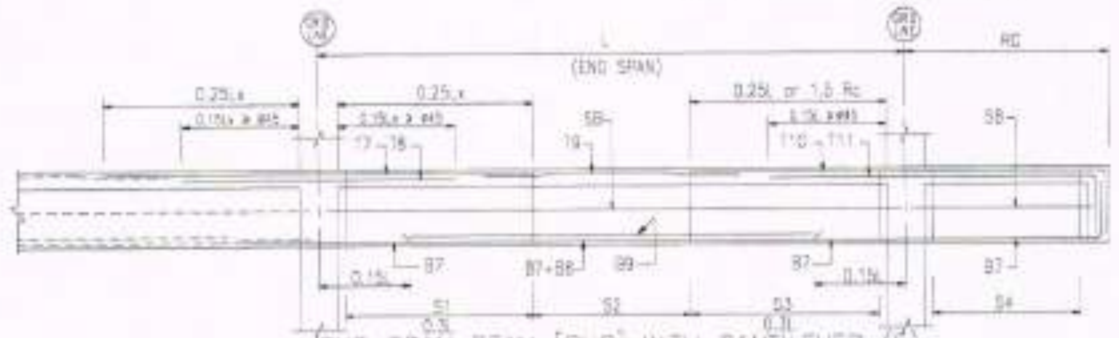


END SPAN BEAM [LHS] WITH CANTILEVER (4)

LEGEND

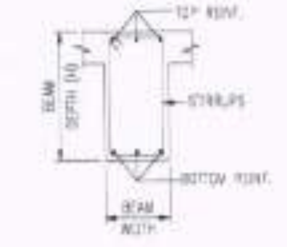
L ------ LENGTH OF SPAN UNDER CONSIDERATION
Lo ------ LENGTH OF ADJACENT SPAN TO THE SPAN UNDER CONSIDERATION
Lc ------ LENGTH OF LEFT END CANTILEVER
Rc ------ LENGTH OF RIGHT END CANTILEVER
(1) ------ CATEGORY

Lx = Length of span under consideration or Length of adjacent span whichever is greater

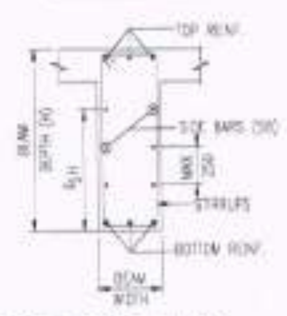


END SPAN BEAM [RHS] WITH CANTILEVER (5)

BEAM MARKING	CATEGORY	GRID LINE OR BEAM MARK	WIDTH (mm)	DEPTH (mm)	LEFT END CANTILEVER Lc	SPAN (APPROX) L	RIGHT END CANTILEVER Rc	T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	SIDE BAR EACH FACE (EF) SB	S1	S2	S3	S4	TYPE	REMARKS
LOCATION			SIZE		SPAN			REINFORCEMENT: LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN									STIRRUPS					
B1HB8	1	-	300	600	-	6700	-	3T20	2T16	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB9	3	-	300	600	-	3250	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	-	3T20	-	2T20*	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB16	1	-	300	600	-	1650	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-125	3T8-100	-	1a	
B1HB17	2	-	300	600	-	3025	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB18	3	-	300	600	-	5400	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	-	3T20	-	3T20*	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB22	1	-	300	600	-	7050	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB23	2	-	300	600	-	3783	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB24	3	-	300	600	-	2250	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	3T20	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB25	1	-	300	600	-	4075	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB26	3	-	300	600	-	5600	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	3T20	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB27	1	-	300	600	-	6075	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB28	3	-	300	600	-	5400	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	3T20	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB30	1	-	300	400	-	4675	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-200	3T8-100	-	1a	
B1HB31	3	-	300	600	-	5550	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	3T20	-	-	-	3T8-100	3T8-200	3T8-100	-	1a	
B1HB32	1	-	300	600	-	5445	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB33	3	-	300	600	-	5325	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	3T20	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB34	1	-	200	600	-	1750	-	2T20	-	2T20	2T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-150	T8-100	-	1	
B1HB35	2	-	200	600	-	4675	-	-	-	-	-	-	-	2T20	-	2T20	2T20	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-150	T8-100	-	1	
B1HB36	3	-	200	600	-	5480	-	-	-	-	-	-	-	-	-	-	-	-	-	2T20 / 3T20	-	3T20	3T20	-	3T20	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB37	1	-	300	600	-	4980	-	3T20	-	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB38	3	-	300	600	-	6725	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	3T20	-	2T16*	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB42	1	-	300	600	-	5175	-	3T20	2T12	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB43	3	-	300	600	-	6750	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	2T16	3T20	-	2T16*	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB44	4	-	200	600	1100	2350	-	2T20	-	2T20	2T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-150	T8-100	T8-100	1	
B1HB45	2	-	200	600	-	2350	-	-	-	-	-	-	-	2T20	-	2T20	2T20	-	-	-	-	-	-	-	-	-	-	-	T8-100	T8-150	T8-100	-	1	
B1HB46	3	-	300	600	-	4380	-	-	-	-	-	-	-	-	-	-	-	-	-	2T20 / 3T20	-	3T20	3T20	-	3T20	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB47	1	-	300	600	-	5285	-	3T20	2T12	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB48	3	-	300	600	-	6775	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	2T12	3T20	-	3T16*	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB51	1	-	300	600	-	5435	-	3T20	2T12	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB52	3	-	300	600	-	6725	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	2T16	3T20	3T20	3T12	3T20	-	2T16*	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB54	1	-	300	600	-	3550	-	3T20	2T12	3T20	3T20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3T8-100	3T8-150	3T8-100	-	1a	
B1HB55	3	-	300	600	-	6800	-	-	-	-	-	-	-	-	-	-	-	-	-	3T20	-	3T20	3T20	-	3T20	-	2T16*	-	3T8-100	3T8-150	3T8-100	-	1a	
MARKING BEAM	CATEGORY	BEAM MARK OR GRID LINE	(mm) WIDTH	(mm) DEPTH	Lc CANTILEVER LEFT END	L (APPROX) SPAN	Rc CANTILEVER RIGHT END	T1	T2	T3	B1	B2	B3	T4	T5	T6	B4	B5	B6	T7	T8	T9	T10	T11	B7	B8	B9	SB	S1	S2	S3	S4	TYPE	REMARKS
LOCATION			SIZE		SPAN			REINFORCEMENT: LEFT END SPAN						INTERMEDIATE SPAN						RIGHT END SPAN								BAR SIZE	STIRRUPS					



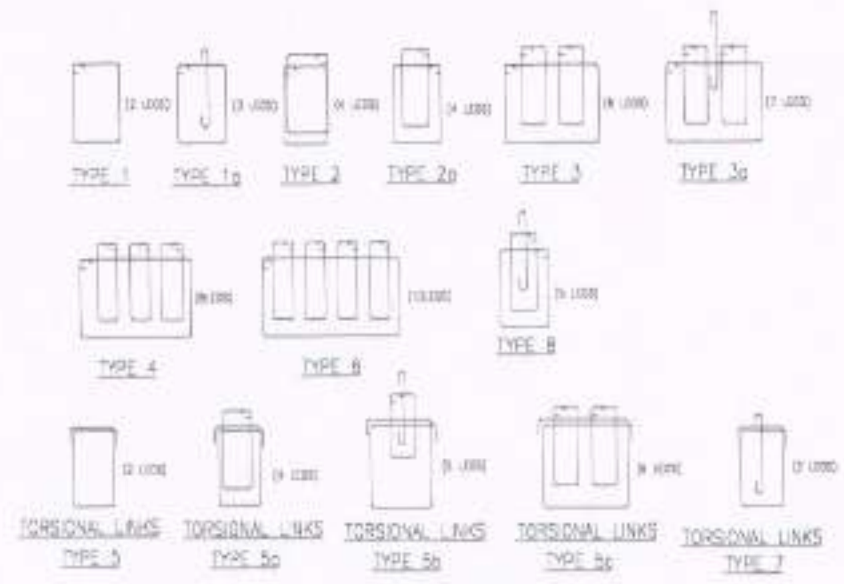
TYP. BEAM SECTION



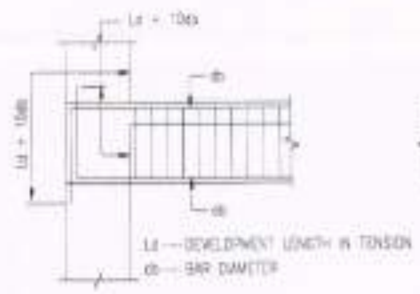
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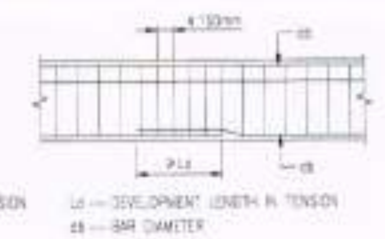


STIRRUPS TYPE



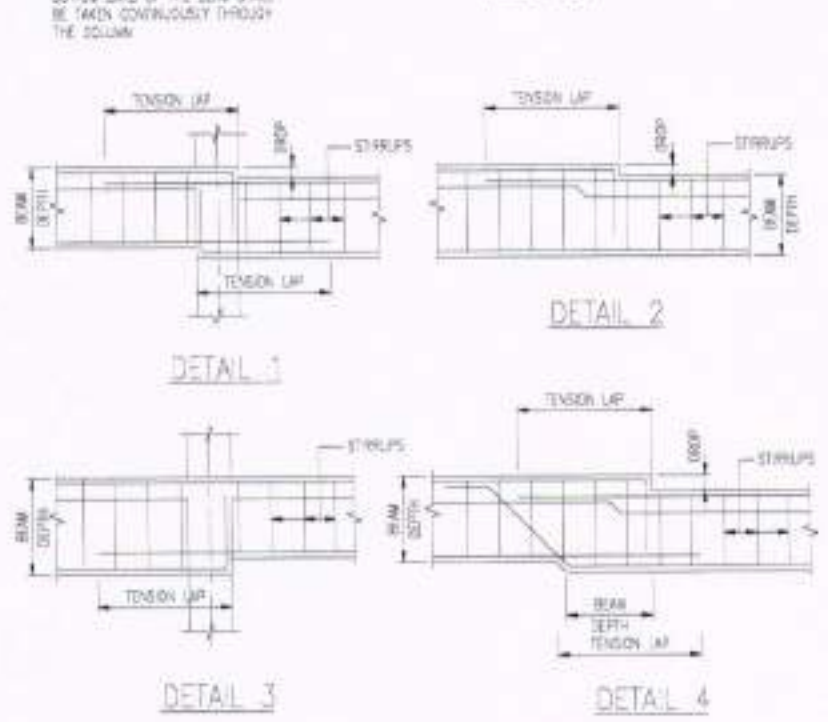
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LAP/SPLICE IN BEAM

NOTE:
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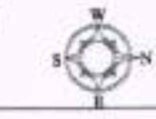
A. PERAMAIYAN, M.E., (Struct.), M.I.E.
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CHENNAI METROPOLITAN DEVELOPMENT AUTHORITY
REGISTRATION No. SE/GR-I/19/03/026
NEW No. 31 (OLD No.14), BESANT AVENUE ROAD, ADYAR, CHENNAI - 600 020.
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6. GRADE OF CONCRETE FOR
PILE - M30 (CEMENTITIOUS CONTENT SHOULD BE 400kg/m³)
PILE CAP - M35
BASEMENT WALL, BEAM/SLAB-M30
COLUMN - M40, SHEAR WALL-M40
R.C. SLABS, R.C. BEAMS, STAIRCASE - M35
ALL OTHER STRUCTURAL MEMBERS - M35
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8. CLEAR COVER FOR PILE 500mm-50mm, 600mm & 750mm-75mm, PILECAP-75mm, COLUMN-40mm, SHEAR WALL-30mm, SLAB-25mm, BEAM-30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE [illegible]. DUCTILE DETAILING CARRIED OUT AS PER THE STIPULATIONS MADE IN IS:13920-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC (SP7-[illegible]) AND RELEVANT INDIAN CODE STIPULATIONS
12. ONUS OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS.

NORTH POINT



NO.	AMENDMENTS	BY	DATE
-		KAVLK	07/02/25

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer :

BURO ENGINEERS (I) PRIVATE LTD.
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar, Chennai - 600 020. #044-2491 2794/50/68,
e-Mail ID: buromds@buroengineers.in

STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

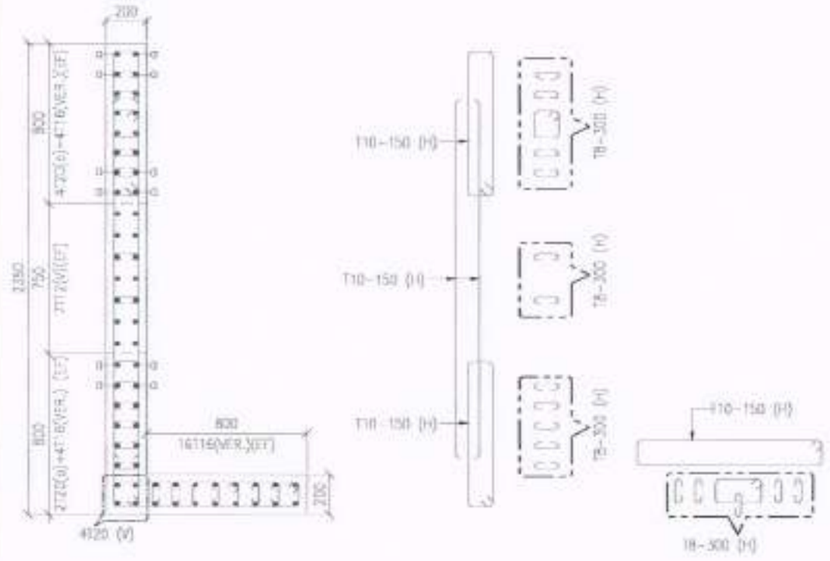
drawing title

BASEMENT-1 FLOOR BEAM SCHEDULE (SHEET-01 OF 05)

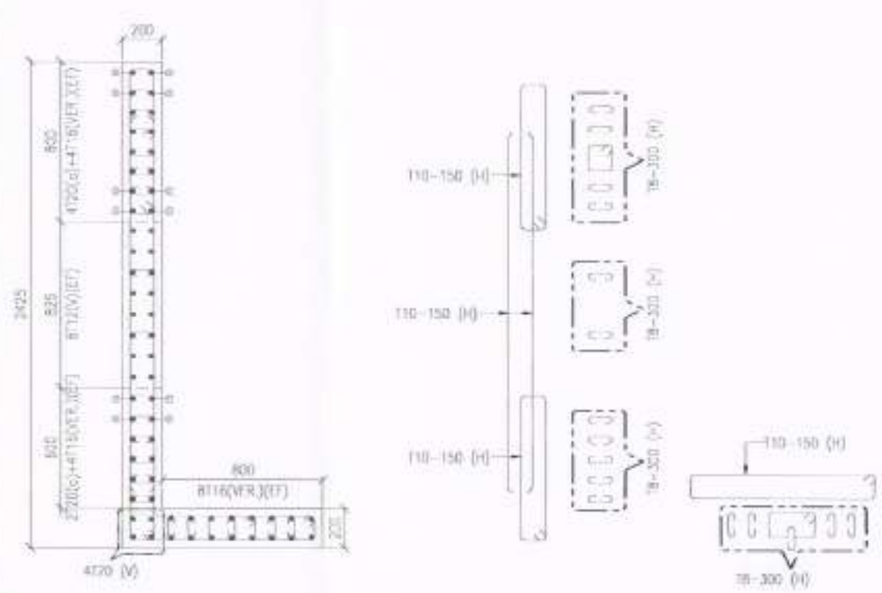
scale	AS SHOWN	design by	TP
drawn by	KAVLK	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE768_S-/BM/B1/--/01	revision	-

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CAD FILE NAME: BE768_S-BMB1---01_.dwg



SW48 (300X2350)- SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 5th FLOOR LVL TO ROOF LVL
SCALE 1:25



SW49 (300X2475)- SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 5th FLOOR LVL TO ROOF LVL
SCALE 1:25

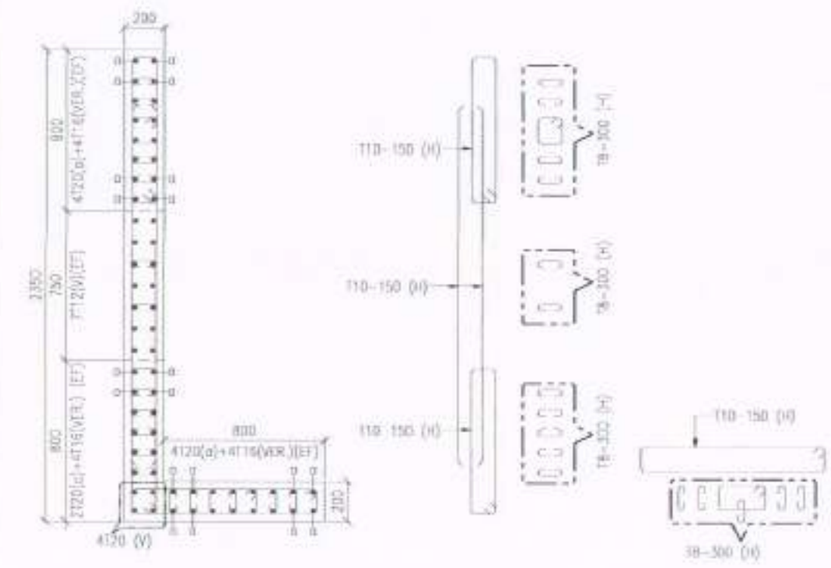
NOTES:

1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG. NO. BEI/68_S-/NO/---/01
3. FOR STANDARD DETAILS REFER TO DWG. NO. BEI/68_S-/DD/---/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M30
   (DESIGN MIX M30 WITH
   CEMENT CONTENT NOT LESS THAN 350 kg/Cum GRADE 43/53 OPC)
   HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   PILE - M30 (CEMENTITIOUS CONTENT SHOULD BE 400kg/m³)
   PILE CAP - M35
   BASEMENT WALL, BEAM/SLAB M35,
   COLUMN - M40, SHEAR WALL - M40
   R.C. SLABS, R.C. BEAMS, STAIRCASE - M30
   ALL OTHER STRUCTURAL MEMBERS - M25
7. STEEL GRADE: Fe500 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR PILE 500mmø-50mm, 600mmø & 750mm-75mm,
   PILECAP-75mm, COLUMN 40mm, SHEAR WALL-25mm,
   SLAB-25mm, BEAM-30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE III DUCTILE DETAILING CARRIED OUT AS PER THE STIPULATIONS MADE IN IS:13920-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC (SP7: 1981) AND RELEVANT INDIAN CODE STIPULATIONS
12. ONUS OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER

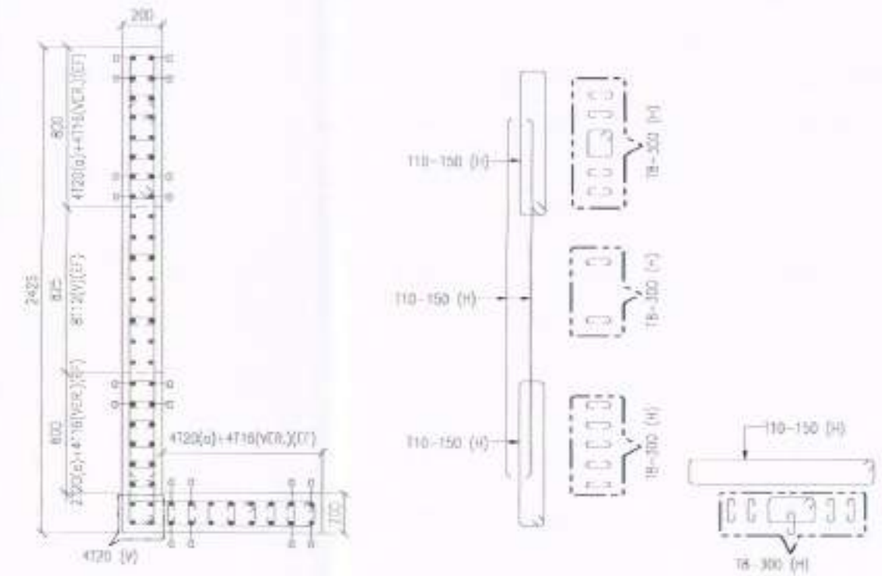
FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS.

NORTH POINT

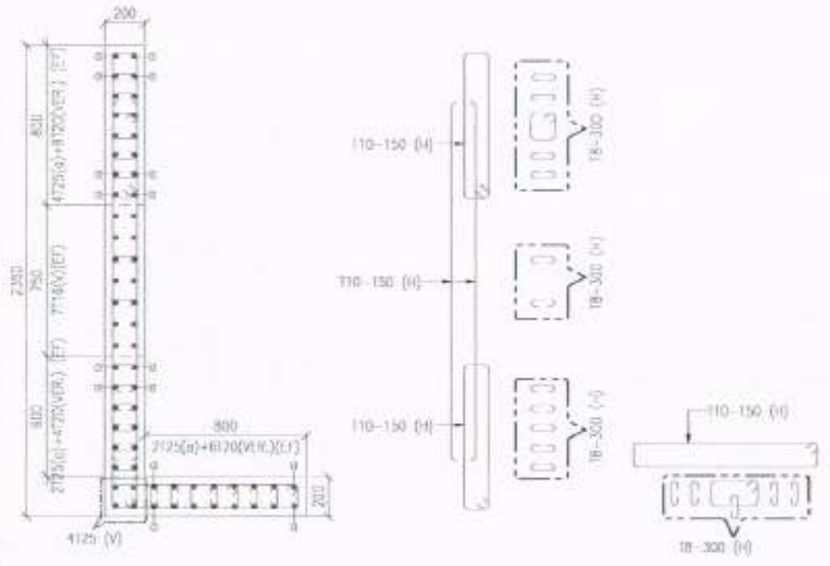




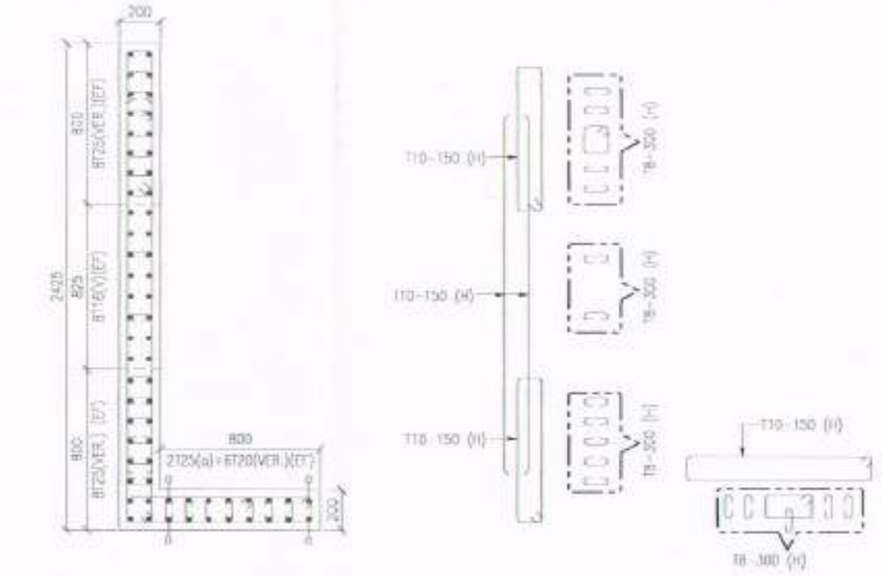
SW48 (300X2350)- SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 3rd FLOOR LVL TO 5th FLOOR LVL
SCALE 1:25



SW49 (300X2475)- SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 3rd FLOOR LVL TO 5th FLOOR LVL
SCALE 1:25



SW48 (300X2350)- SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 1st FLOOR LVL TO 3rd FLOOR LVL
SCALE 1:25



SW49 (300X2475)- SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 1st FLOOR LVL TO 3rd FLOOR LVL
SCALE 1:25

NO.	AMENDMENTS	BY	DATE

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

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Mobile: +91 99625 45630

STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES, MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

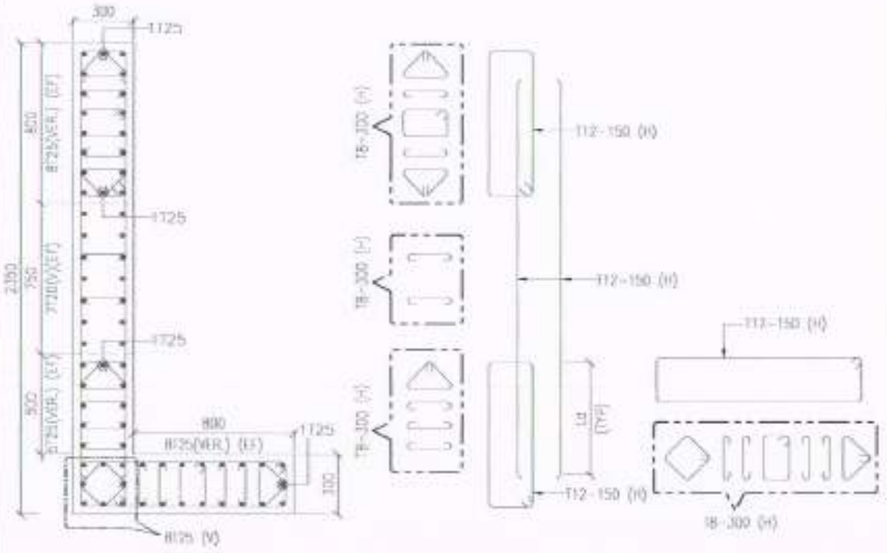
drawing title

COLUMN SCHEDULE
(SHEET-07 OF 07)

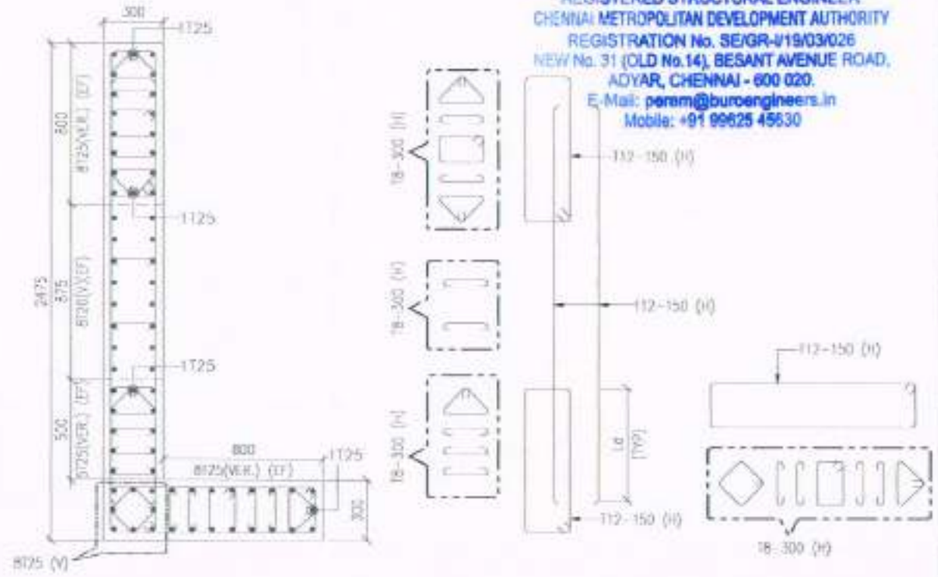
scale	AS SHOWN	design by	HB
drawn by	KAVI.K	checked by	AP
date	JAN 2024	approved by	AP
drawing no.	BEI/68_S-/CL/SH/---/07	revision	

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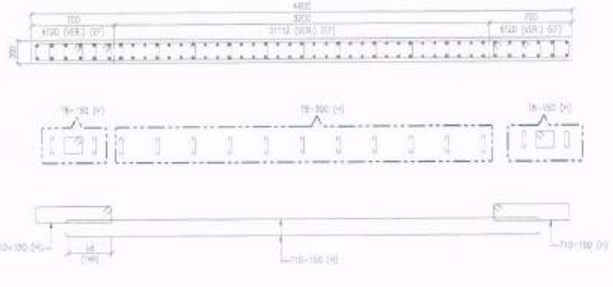
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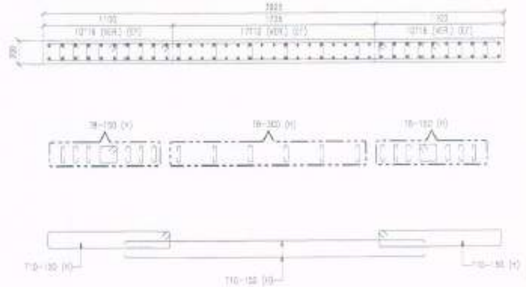
SW48 (300X2350)- SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM FOUNDATION TO 1st FLOOR LVL
SCALE 1:25



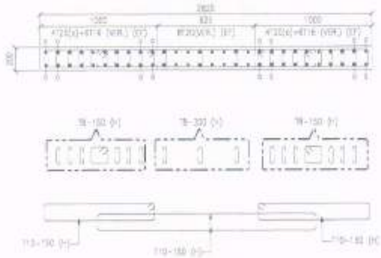
SW49 (300X2475)- SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM FOUNDATION TO 1st FLOOR LVL
SCALE 1:25



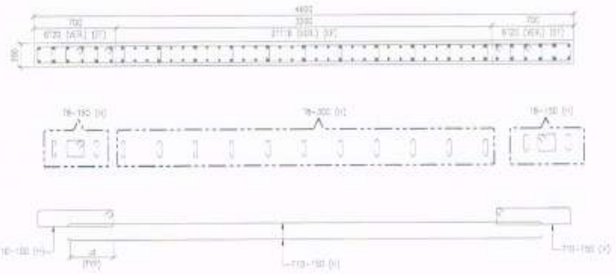
SW28 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 41th FLOOR LVL TO ROOF LVL



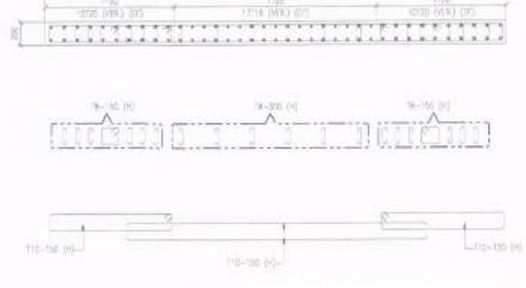
SW51 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 3rd FLOOR LVL TO ROOF LVL



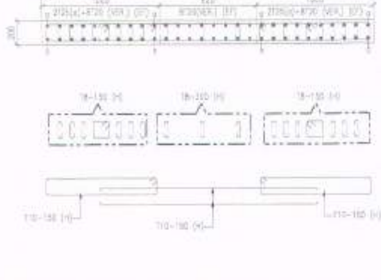
SW45 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 5rd FLOOR LVL TO ROOF LVL



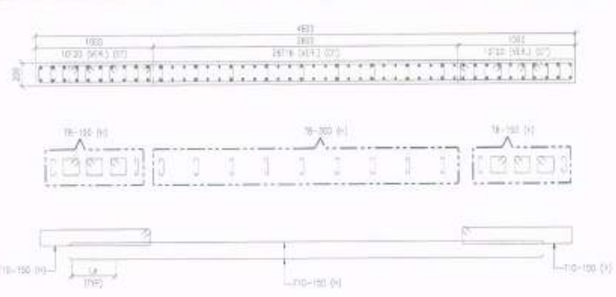
SW28 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 1st FLOOR LVL TO 41th FLOOR LVL



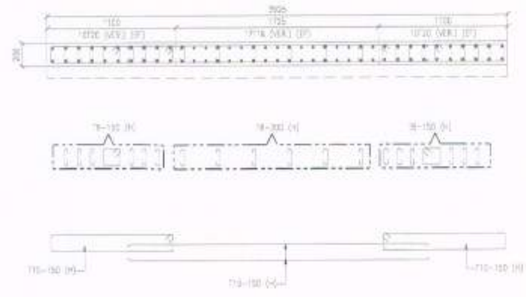
SW51 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 2nd FLOOR LVL TO 3rd FLOOR LVL



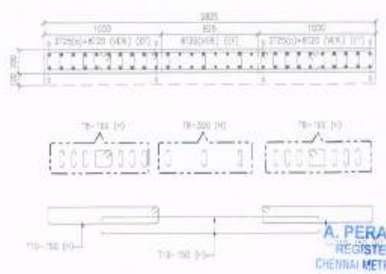
SW45 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 2nd FLOOR LVL TO 3rd FLOOR LVL



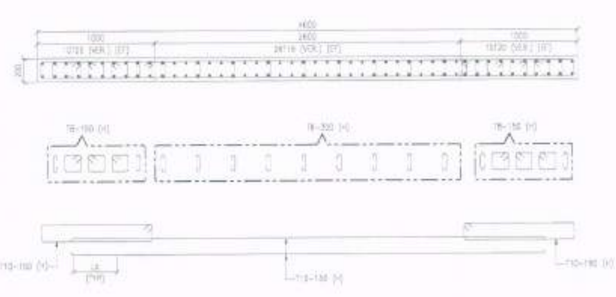
SW28 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM BASEMENT FLOOR LVL-1 TO 1st FLOOR LVL



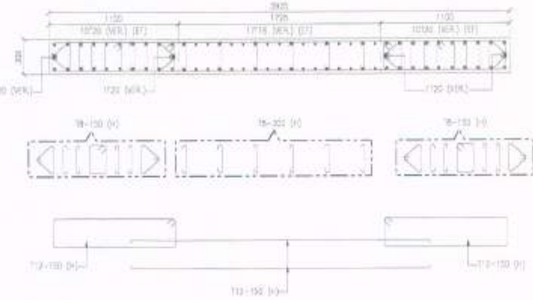
SW51 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 1st FLOOR LVL TO 2nd FLOOR LVL



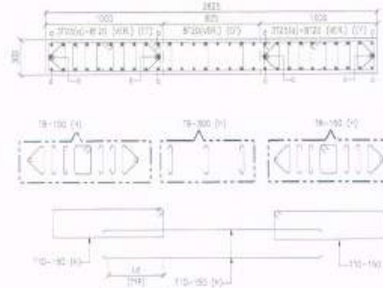
SW45 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 1st FLOOR LVL TO 2nd FLOOR LVL



SW28 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM FOUNDATION TO BASEMENT LVL-1



SW51 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM FOUNDATION TO 1st FLOOR LVL



SW45 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM FOUNDATION TO 1st FLOOR LVL

	11th FLOOR LEVEL TO ROOF LVL	3rd FLOOR LEVEL TO 11th FLOOR LVL	2nd FLOOR LEVEL TO 3rd FLOOR LVL	FOUNDATION LEVEL TO 1st FLOOR LVL
SIZE	300X1800	300X1800	300X1800	300X1800
CONCRETE GRADE/COVER	M40/30mm	M40/30mm	M40/30mm	M40/30mm
REINFORCEMENT/STEEL GRADE Fe	36720=4716(d)/Fe 550	36720/Fe 550	12720(d)+24720/Fe 550	12720(d)+24720/Fe 550
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	AS SHOWN/Fe 550	AS SHOWN/Fe 550	AS SHOWN/Fe 550
COLUMN MARK				SW59

NOTES:
1. ALL DIMENSIONS ARE IN MM
2. FOR DRAWING NOTES REFER TO DWG NO. BC/768_S-/V/---/01
3. FOR STANDARD DETAILS REFER TO DWG NO. BC/768_S-/GD/---/01
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS
5. CONCRETE GRADE AND DESIGN MIX AS PER IS456:2000
CONCRETE CONTENT NOT LESS THAN 320 Kg/Cum GRADE M30 OR MORE HARDNESS ATTAINED AS PER IS 456 : 2000 TO BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
PILE – M30 (CEMENTITIOUS CONTENT SHOULD BE 400kg/m³)
PILE CAP – M30
BASEMENT WALL, SHEARWALL-M30,
COLUMN – M40, SHEAR WALL-M40
R.C. SLABS, R.C. BEAMS, STAIRCASE – M30
ALL OTHER STRUCTURAL MEMBERS – M25
7. STEEL GRADE : FE550 CONFORMING TO IS:1786-2008
8. CLEAR COVER FOR PILE 300mm Ø-50mm, 600mm & 750mm-75mm,
FLOOR-15mm, COLUMN-40mm, SHEAR WALL-25mm,
SLAB-20mm, BEAM-30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR
10. SIGNAGE LOAD AND WIND CONSIDERED AS PER IS:875(3)-2015 WITH BASIC ZONE III, EXPOSURE CATEGORY B AND TERRAIN CATEGORY AS PER THE SPECIFICATIONS MADE IN IS:875(3)-2015
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC 2017-18(I) AND RELEVANT INDIAN CODE SPECIFICATIONS
12. SCALE OF DRAWINGS : AS NOTED
DRAWINGS TO BE CHECKED BY CONTRACTOR/ PROMOTER / BUILDER / OWNER

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(S)+STILT+11 FLOORS+ROOF USING RAC RAFT FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS

NORTH POINT

NO.	AMENDMENTS	BY	DATE
--		AM/B	02/03/25

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects
INDRAJIT.S.KEMBHAVI
CA/2000/26684,
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Civil & Structural Engineer :
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Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar, Chennai. - 600 020. 4044 2491 2764/9599.
e-Mail ID: burostaff@burengineers.in

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ADYAR, CHENNAI - 600 020.
E-Mail: peram@burengineers.in
Mobile: +91 99625 45630

STRUCTURAL

project title
PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

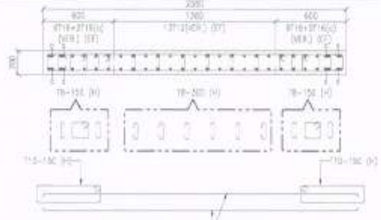
drawing title
COLUMN SCHEDULE
(SHEET-06 OF 07)

scale	AS SHOWN	design by	TP
drawn by	KM/K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BC/768_S-/CL/SH/---/06	revision	-

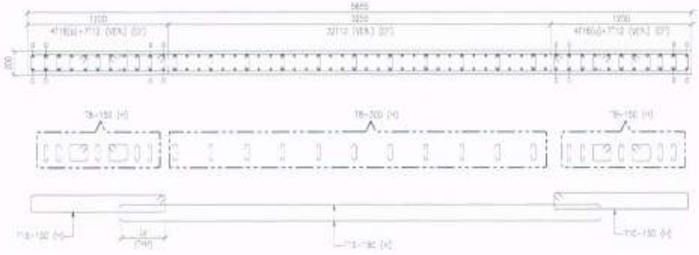
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SW10, SW14 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM ROOF LVL TO O/H LVL
SCALE 1:25

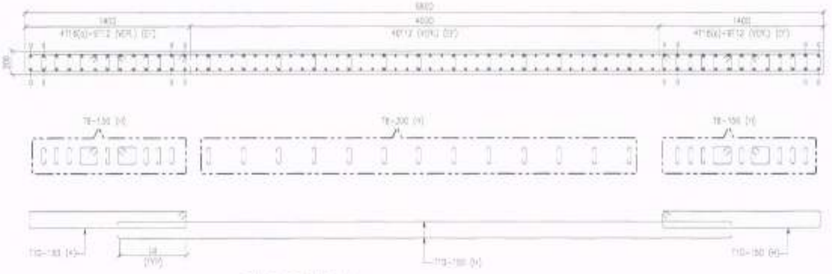
SW31 SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 3rd FLOOR LVL TO ROOF LVL
SCALE 1:25



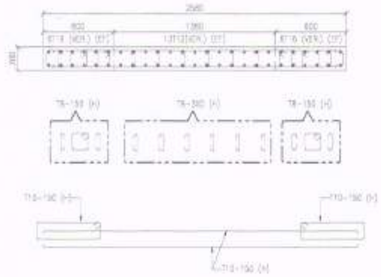
SW15 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 11th FLOOR LVL TO ROOF LVL
SCALE 1:25



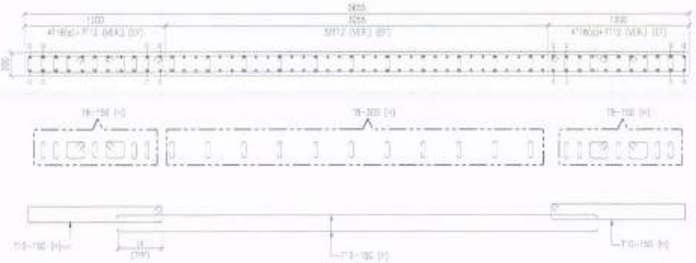
SW10, SW14 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 11th FLOOR LVL TO ROOF LVL
SCALE 1:25



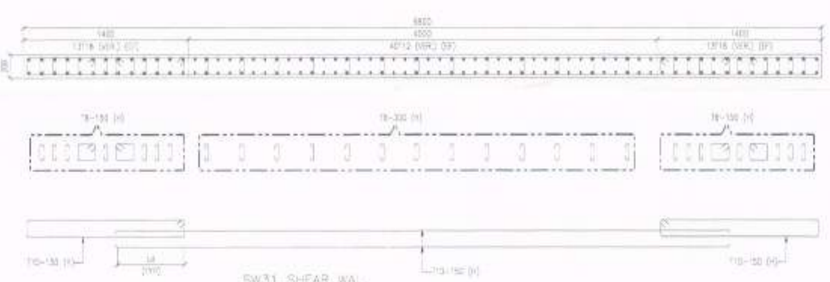
SW31 SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 3rd FLOOR LVL TO ROOF LVL
SCALE 1:25



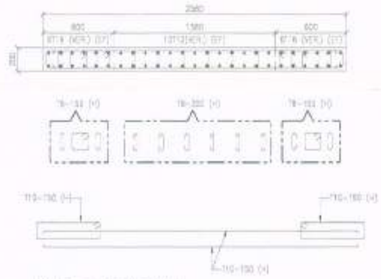
SW15 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 3rd FLOOR LVL TO 11th FLOOR
SCALE 1:25



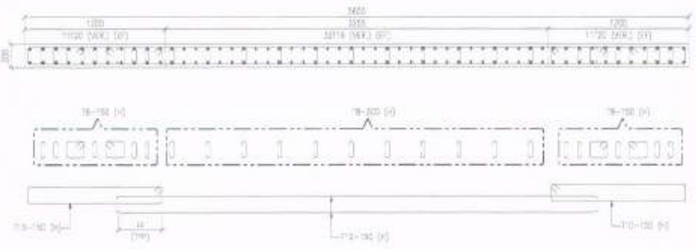
SW10, SW14 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 1st FLOOR LVL TO 11th FLOOR LVL
SCALE 1:25



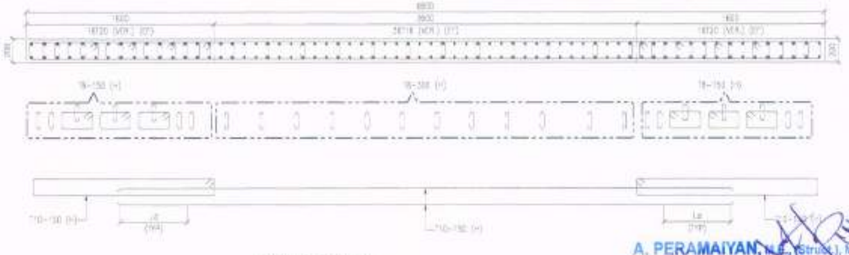
SW31 SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 1st FLOOR LVL TO 3rd FLOOR LVL
SCALE 1:25



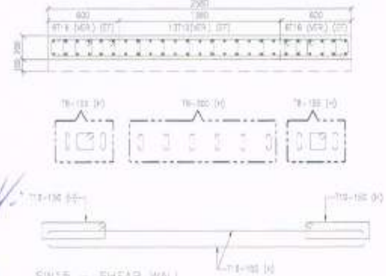
SW15 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 2nd FLOOR LVL TO 3rd FLOOR LVL
SCALE 1:25



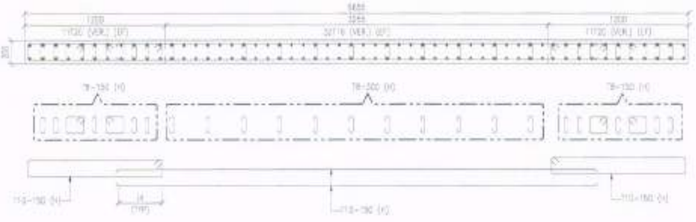
SW10, SW14 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM BASEMENT FLOOR LVL-1 TO 1st FLOOR LVL
SCALE 1:25



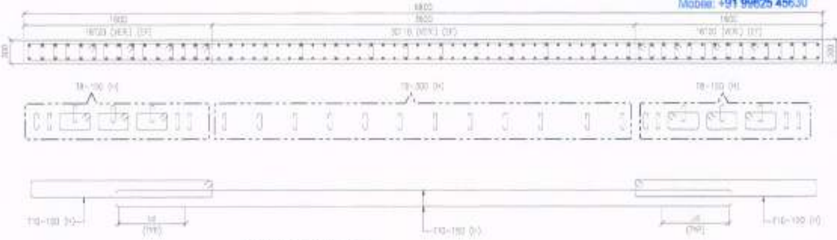
SW31 SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM BASEMENT FLOOR LVL-1 TO 1st FLOOR LVL
SCALE 1:25



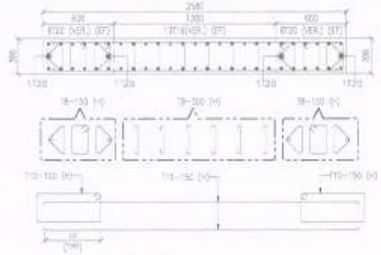
SW15 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM 1st FLOOR LVL TO 2nd FLOOR LVL
SCALE 1:25



SW10, SW14 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM FOUNDATION TO BASEMENT LVL-1
SCALE 1:25



SW31 SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM FOUNDATION TO BASEMENT LVL-1
SCALE 1:25



SW15 – SHEAR WALL
VERTICAL & HORIZONDAL REINFORCEMENT DETAILS
FROM FOUNDATION TO 1st FLOOR LVL
SCALE 1:25

NOTES:
1. ALL DIMENSIONS ARE IN MM
2. FOR SEISMIC NOTES REFER TO DWG. NO. BC/768_S-/ST/---/01
3. FOR STANDARD DETAILS REFER TO DWG. NO. BC/768_S-/DET/---/01
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M30
   DESIGN MIX M30 BY-
   CEMENT CONTENT NOT LESS THAN 350 kg/Cum GRADE 43/53 OPC
   HARDNER ADMIXED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   PILE - M30 CEDENTITIOUS CONTENT SHOULD BE 450kg/m³
   PILE CAP - M35
   BASEMENT WALL, RCWs/SLAB-M35,
   COLUMN - MAX. SHEAR WALL-M45
   R.C. SLABS, R.C. BEAMS, STAIRCASE - M30
   ALL OTHER STRUCTURAL MEMBERS - M30
7. STEEL GRADE: FeE500 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR PILE 500mm#-50mm, 800mm# & 750mm-75mm.
   PILECAP-75mm, COLUMN-40mm, SHEAR WALL-30mm,
   SLAB-20mm, BEAM-30mm
9. UNLESS OTHERWISE SPECIFIED LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 ϕ OR 24" MM
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE III. DUCTILE DETAILING CARRIED OUT AS PER IS:13920-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH CLAUSE-22(2), NBC (PART-1983) AND RELEVANT INDIAN CODE SPECIFICATIONS
12. DETAILS OF CONSTRUCTION LEG WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER

TOTAL FOUNDATION AND COLUMN DESIGNED FOR BASEMENT+STILT+11 FLOORS+ROOF LOADS AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS

NORTH POINT

NO.	AMENDMENTS	BY	DATE
–		KAV.K	07/02/24

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26684,
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STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,VULT-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 1 OF THIRUVANMAYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

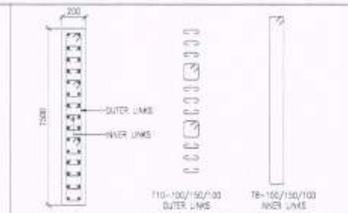
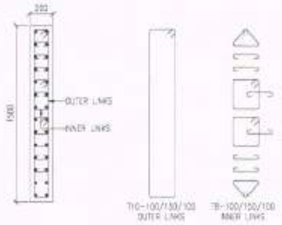
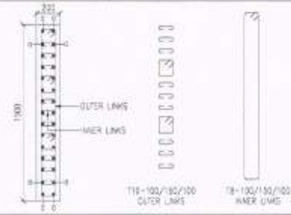
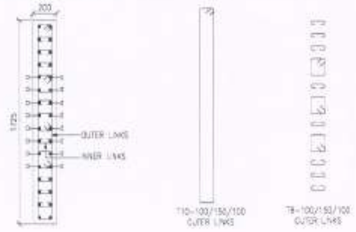
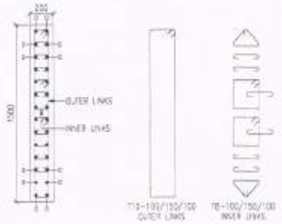
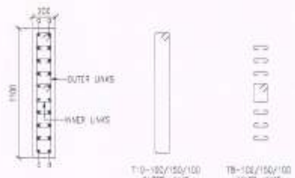
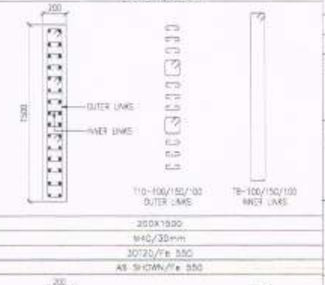
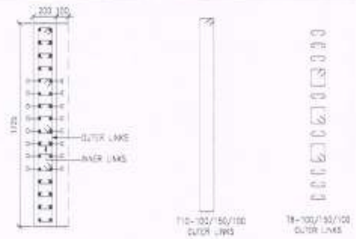
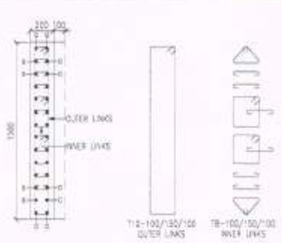
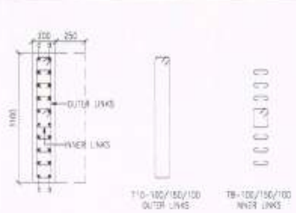
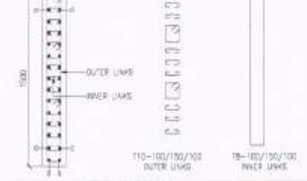
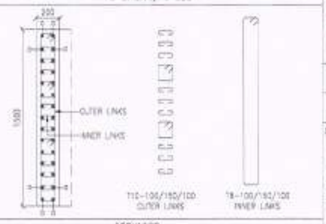
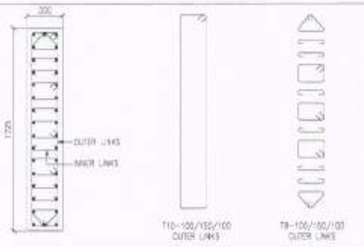
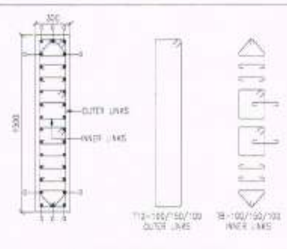
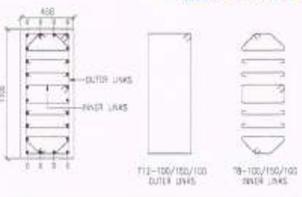
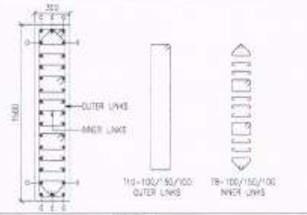
drawing title

COLUMN SCHEDULE
(SHEET-05 OF 07)

scale	AS SHOWN	design by	TP
drawn by	KAV.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BC/768_S-/CL/SH/---/05	revision	–

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DWG FILE NAME: BC/768_S-/CL/---/05.dwg

4th FLOOR LVL TO ROOF LVL	SAME AS ABOVE	5th FLOOR LVL TO ROOF LVL	SAME AS ABOVE	SAME AS ABOVE	8th FLOOR LVL TO ROOF LVL	
3rd FLOOR LVL TO 4th FLOOR LVL	SAME AS ABOVE	4th FLOOR LVL TO 5th FLOOR LVL			5th FLOOR LVL TO 8th FLOOR LVL	
2nd FLOOR LVL TO 3rd FLOOR LVL		2nd FLOOR LVL TO 4th FLOOR LVL			3rd FLOOR LVL TO 5th FLOOR LVL	
FIRST FLOOR LVL TO 2nd FLOOR LVL		FIRST FLOOR LVL TO 2nd FLOOR LVL			2nd FLOOR LVL TO 3rd FLOOR LVL	
BASEMENT-1 LVL TO FIRST FLOOR LVL	SAME AS ABOVE	BASEMENT-1 LVL TO FIRST FLOOR LVL	SAME AS ABOVE	SAME AS ABOVE	FIRST FLOOR LVL TO 2nd FLOOR LVL	
FOUNDATION LEVEL TO BASEMENT-1 LVL		FOUNDATION LEVEL TO BASEMENT-1 LVL			FOUNDATION LEVEL TO FIRST FLOOR LVL	
SIZE	300X1725	SIZE	300X1500	450X1100	SIZE	300X1500
CONCRETE GRADE/COVER	M40/30mm	CONCRETE GRADE/COVER	M40/30mm	M40/30mm	CONCRETE GRADE/COVER	M40/30mm
REINFORCEMENT/STEEL GRADE Fe	34*30/Fe 550	REINFORCEMENT/STEEL GRADE Fe	10*25(a)+22*20/Fe 550	8*25(a)+16*20/Fe 550	REINFORCEMENT/STEEL GRADE Fe	10*25(a)+22*20/Fe 550
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	AS SHOWN/Fe 550	LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550
COLUMN MARK	SW3 & SW4	COLUMN MARK	SW1 & SW2	SW5	COLUMN MARK	SW34,SW35,SW36,SW41 & SW44

NOTES:

1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG. NO. BE1768_S-/01/---/01.
3. FOR STANDARD DETAILS REFER TO DWG. NO. BE1768_S-/00/---/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M30
   DESIGN MIX M30 WITH
   CEMENT CONTENT NOT LESS THAN 350 kg/Cum GRADE 43/53 OPC)
   HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR:
   PILE - M30 (CEMENTITIOUS CONTENT SHALL BE 400kg/M³)
   PILE CAP - M30
   RAFT - M30
   BASEMENT WALL, BEAMS/SLAB-M30,
   COLUMN - GR.F. SHEAR WALL-M30
   R.C. SLABS, R.C. BEAMS, STAIRCASE - M30
   ALL OTHER STRUCTURAL MEMBERS - M30
7. STEEL GRADE: FeE500 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR PILE 300mm+50mm, 800mm & 700mm+75mm.
   PLCAP-75mm, COLUMN-40mm, SHEAR WALL-30mm,
   SLAB-20mm, BEAM-30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 60 X DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE III, DUCTILE DETAILING DRAWN OUT AS PER THE STIPULATIONS MADE IN IS:13920-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC SP21-1983 AND RELEVANT INDIAN CODE STIPULATIONS
12. ONUS OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-		KAVI.K	07/02/25

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer :

BURO ENGINEERS (I) PRIVATE LTD.
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar,
Chennai - 600 020. Ph:44-2491 2754/3098.
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STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

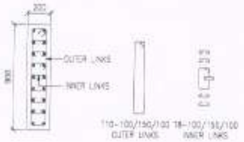
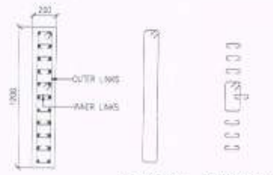
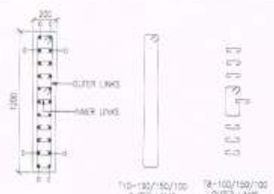
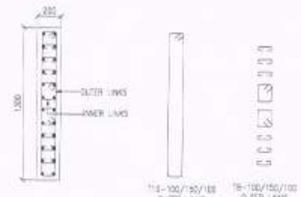
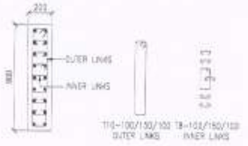
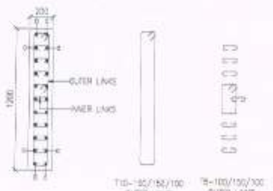
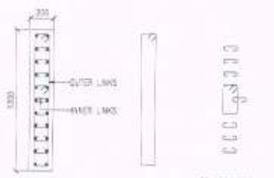
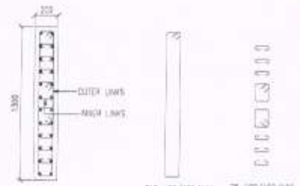
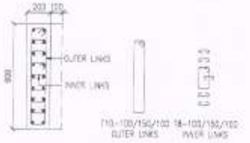
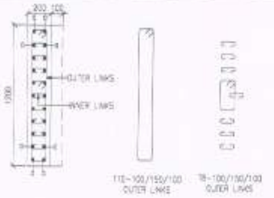
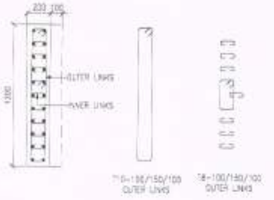
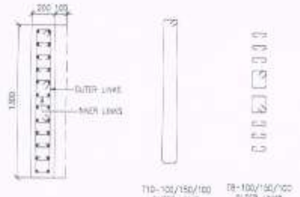
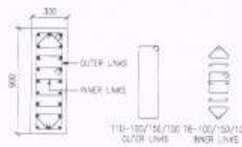
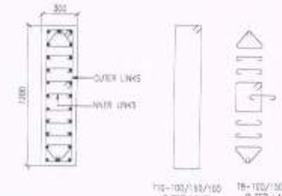
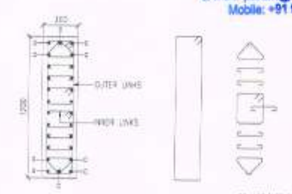
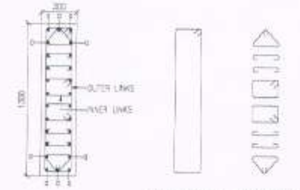
drawing title

COLUMN SCHEDULE (SHEET-04 OF 07)

scale	AS SHOWN	design by	TP
drawn by	KAVI.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE1768_S-/CL/SH/---/04	revision	-

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DWG FILE NAME: BE1768_S-/CL/---/04.dwg

4th FLOOR LVL TO ROOF LVL	SAME AS ABOVE	SAME AS ABOVE	6th FLOOR LVL TO ROOF LVL	SAME AS ABOVE	4th FLOOR LVL TO ROOF LVL	SAME AS ABOVE
SIZE			SIZE			
CONCRETE GRADE/COVER			CONCRETE GRADE/COVER			
REINFORCEMENT/STEEL GRADE Fe			REINFORCEMENT/STEEL GRADE Fe			
LINKS/TIES/STEEL GRADE Fe			LINKS/TIES/STEEL GRADE Fe			
3rd FLOOR LVL TO 4th FLOOR LVL			5th FLOOR LVL TO 6th FLOOR LVL		3rd FLOOR LVL TO 4th FLOOR LVL	
SIZE	200X900	200X1200	SIZE	200X1200		200X1300
CONCRETE GRADE/COVER	M40/30mm	M40/30mm	CONCRETE GRADE/COVER	M40/30mm		M40/30mm
REINFORCEMENT/STEEL GRADE Fe	18T16/Fe 550	22T16/Fe 550	REINFORCEMENT/STEEL GRADE Fe	8T20(a)+14T16/Fe 550		24T16/Fe 550
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	AS SHOWN/Fe 550	LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550		AS SHOWN/Fe 550
2nd FLOOR LVL TO 3rd FLOOR LVL			2nd FLOOR LVL TO 5th FLOOR LVL		2nd FLOOR LVL TO 3rd FLOOR LVL	
SIZE	200X900	200X1200	SIZE	200X1200		200X1300
CONCRETE GRADE/COVER	M40/30mm	M40/30mm	CONCRETE GRADE/COVER	M40/30mm		M40/30mm
REINFORCEMENT/STEEL GRADE Fe	20T20/Fe 550	8T20(a)+14T16/Fe 550	REINFORCEMENT/STEEL GRADE Fe	22T20/Fe 550		24T20/Fe 550
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	AS SHOWN/Fe 550	LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550		AS SHOWN/Fe 550
FIRST FLOOR LVL TO 2nd FLOOR LVL			FIRST FLOOR LVL TO 2nd FLOOR LVL		FIRST FLOOR LVL TO 2nd FLOOR LVL	
SIZE	200X900	200X1200	SIZE	200X1200		200X1300
CONCRETE GRADE/COVER	M40/30mm	M40/30mm	CONCRETE GRADE/COVER	M40/30mm		M40/30mm
REINFORCEMENT/STEEL GRADE Fe	18T20/Fe 550	8T20(a)+14T16/Fe 550	REINFORCEMENT/STEEL GRADE Fe	22T20/Fe 550		24T20/Fe 550
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	AS SHOWN/Fe 550	LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550		AS SHOWN/Fe 550
BASEMENT-1 LVL TO FIRST FLOOR LVL	SAME AS ABOVE	SAME AS ABOVE	BASEMENT-1 LVL TO FIRST FLOOR LVL	SAME AS ABOVE	BASEMENT-1 LVL TO FIRST FLOOR LVL	SAME AS ABOVE
SIZE			SIZE			
CONCRETE GRADE/COVER			CONCRETE GRADE/COVER			
REINFORCEMENT/STEEL GRADE Fe			REINFORCEMENT/STEEL GRADE Fe			
LINKS/TIES/STEEL GRADE Fe			LINKS/TIES/STEEL GRADE Fe			
FOUNDATION LEVEL TO BASEMENT-1 LVL			FOUNDATION LEVEL TO BASEMENT-1 LVL		FOUNDATION LEVEL TO BASEMENT-1 LVL	
SIZE	300X900	300X1200	SIZE	300X1200		300X1300
CONCRETE GRADE/COVER	M40/30mm	M40/30mm	CONCRETE GRADE/COVER	M40/30mm	CONCRETE GRADE/COVER	M40/30mm
REINFORCEMENT/STEEL GRADE Fe	20T20/Fe 550	24T20/Fe 550	REINFORCEMENT/STEEL GRADE Fe	10T25(a)+16T20/Fe 550	REINFORCEMENT/STEEL GRADE Fe	10T25(a)+16T20/Fe 550
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	AS SHOWN/Fe 550	LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550
COLUMN MARK	SW1 & SW3	SW8 & SW22	COLUMN MARK	SW7,SW9 & SW16	COLUMN MARK	SW5 & SW27

NOTES:

1. ALL DIMENSIONS ARE IN MM.
2. FOR GENERAL NOTES REFER TO DWG NO. BE1768_S-/N/--/01.
3. FOR STANDARD DETAILS REFER TO DWG NO. BE1768_S-/ND/--/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M30
   CEMENT: 43 & 53 GRADE OPC
   CEMENT CONTENT NOT LESS THAN 300 KG/Cum GRADE 43/53 OPC)
   ADMIXTURE APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   PILE – M30 (CEMENTITIOUS CONTENT SHOULD BE 400kg/m³)
   PILE CAP – M30
   BASEMENT WALL, RETAINING WALL
   COLUMN – M40, SHEAR WALL– M40
   R.C. SLABS, R.C. BEAMS, STAIRCASE – M30.
   ALL OTHER STRUCTURAL MEMBERS – M30.
7. STEEL GRADE: FeE415 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR PILE 250mm=60mm, 600mm & 750mm=75mm.
   PILECAP–75mm, COLUMN–40mm, WATER WALL–50mm,
   SLAB–25mm, BEAM–30mm
9. LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH ZONE FACTOR 0.16 (ZONE II). DUCTILE DETAILING CARRIED OUT AS PER THE STIPULATIONS MADE IN IS:13920-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC 2016 AND ALL RELEVANT INDIAN CODE STIPULATIONS
12. DRAWS OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(-)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-		KAVI.K	07/02/26

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26684,
BCC/BL-3.8/A-2569/14-15

Civil & Structural Engineer :

BURO ENGINEERS (I PRIVATE LTD.
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar,
Chennai - 600 020. 4044-2491 2764/8595
e-Mail ID: burorde@buroengineers.in

A. PERAMAIYAN, M.E., (Struct.), MIE
REGISTERED STRUCTURAL ENGINEER
CHENNAI METROPOLITAN DEVELOPMENT AUTHORITY
REGISTRATION No. SE/GR-I/19/03/026
NEW No. 31 (OLD No.14), BESANT AVENUE ROAD,
ADYAR, CHENNAI - 600 020.
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Mobile: +91 99625 45630

STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

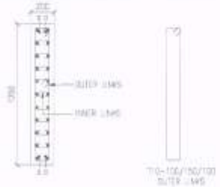
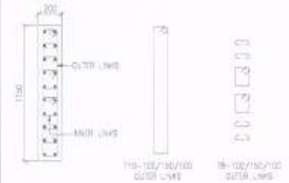
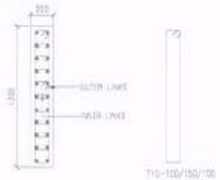
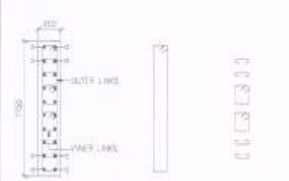
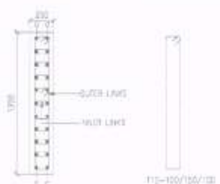
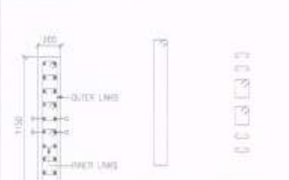
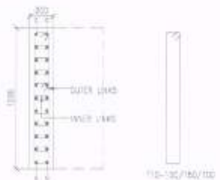
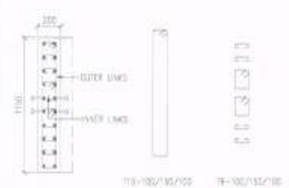
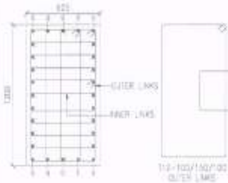
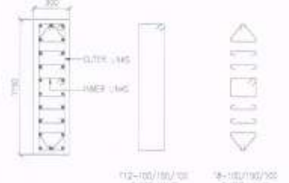
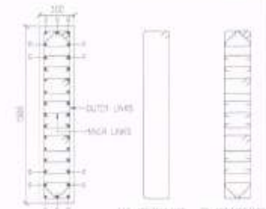
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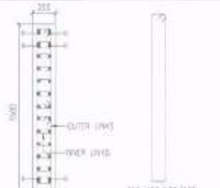
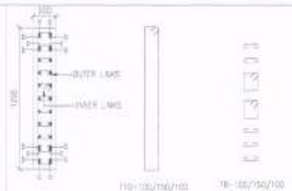
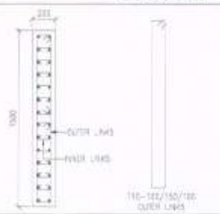
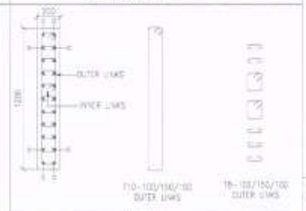
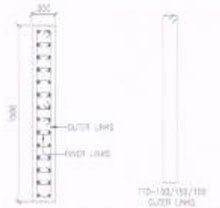
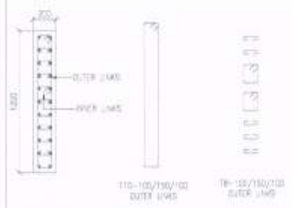
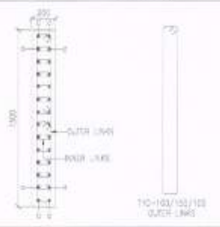
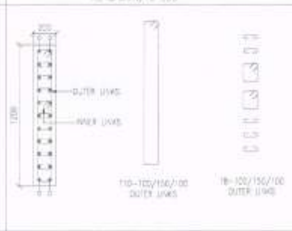
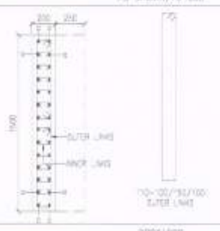
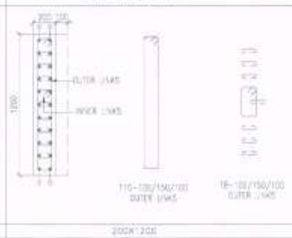
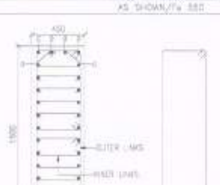
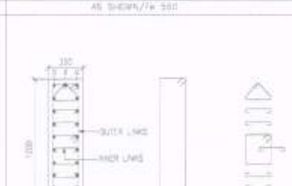
COLUMN SCHEDULE
(SHEET-03 OF 07)

scale	AS SHOWN	design by	TP
drawn by	KAVI.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE1768_S-/CL/SH/--/03		revision -

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CAD FILE NAME: BE1768_S-/CL/SH/--/03.dwg

11th FLOOR LVL TO ROOF LVL		5th FLOOR LVL TO ROOF LVL		SAME AS ABOVE
SIZE	200X1200	SIZE	200X1150	
CONCRETE GRADE/COVER	M40/30mm	CONCRETE GRADE/COVER	M40/30mm	
REINFORCEMENT/STEEL GRADE Fe	22T20+4T16(x)/Fe 550	REINFORCEMENT/STEEL GRADE Fe	20T20/Fe 550	
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	
3rd FLOOR LVL TO 11th FLOOR LVL		3rd FLOOR LVL TO 5th FLOOR LVL		
SIZE	200X1200	SIZE	200X1150	200X1500
CONCRETE GRADE/COVER	M40/30mm	CONCRETE GRADE/COVER	M40/30mm	M40/30mm
REINFORCEMENT/STEEL GRADE Fe	20T20/Fe 550	REINFORCEMENT/STEEL GRADE Fe	8T25(x)+12T20/Fe 550	30T20/Fe 550
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	AS SHOWN/Fe 550
2nd FLOOR LVL TO 3rd FLOOR LVL		2nd FLOOR LVL TO 3rd FLOOR LVL		
SIZE	200X1200	SIZE	200X1150	200X1500
CONCRETE GRADE/COVER	M40/30mm	CONCRETE GRADE/COVER	M40/30mm	M40/30mm
REINFORCEMENT/STEEL GRADE Fe	4T25(x)+18T20/Fe 550	REINFORCEMENT/STEEL GRADE Fe	18T25+4T20(x)/Fe 550	12T25+18T20/Fe 550
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	AS SHOWN/Fe 550
FIRST FLOOR LVL TO 2nd FLOOR LVL		FIRST FLOOR LVL TO 2nd FLOOR LVL		
SIZE	200X1200	SIZE	200X1150	200X1500
CONCRETE GRADE/COVER	M40/30mm	CONCRETE GRADE/COVER	M40/30mm	M40/30mm
REINFORCEMENT/STEEL GRADE Fe	4T25(x)+18T20/Fe 550	REINFORCEMENT/STEEL GRADE Fe	18T25+4T20(x)/Fe 550	12T25(x)+18T20/Fe 550
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	AS SHOWN/Fe 550
BASEMENT-1 LVL TO FIRST FLOOR LVL	SAME AS ABOVE	BASEMENT-1 LVL TO FIRST FLOOR LVL	SAME AS ABOVE	SAME AS ABOVE
SIZE		SIZE		
CONCRETE GRADE/COVER		CONCRETE GRADE/COVER		
REINFORCEMENT/STEEL GRADE Fe		REINFORCEMENT/STEEL GRADE Fe		
LINKS/TIES/STEEL GRADE Fe		LINKS/TIES/STEEL GRADE Fe		
FOUNDATION LEVEL TO BASEMENT-1 LVL		FOUNDATION LEVEL TO BASEMENT-1 LVL		
SIZE	625X1200	SIZE	300X1150	300X1500
CONCRETE GRADE/COVER	M40/30mm	CONCRETE GRADE/COVER	M40/30mm	M40/30mm
REINFORCEMENT/STEEL GRADE Fe	12T20(x)+18T20/Fe 550	REINFORCEMENT/STEEL GRADE Fe	22T25/Fe 550	14T20(x)+8T20/Fe 550
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	AS SHOWN/Fe 550
COLUMN MARK	SW2	COLUMN MARK	SW3	SW5 & SW10

11th FLOOR LVL TO ROOF LVL				
SIZE	200X1500		200X1200	
CONCRETE GRADE/COVER	M40/30mm		M40/30mm	
REINFORCEMENT/STEEL GRADE Fe	28T16+8T16(x)/Fe 550		8T20(x)+14T16+8T16(U)/Fe 550	
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550		AS SHOWN/Fe 550	
5th FLOOR LVL TO 11th LVL				
SIZE	200X1500		200X1200	
CONCRETE GRADE/COVER	M40/30mm		M40/30mm	
REINFORCEMENT/STEEL GRADE Fe	28T16/Fe 550		8T20(x)+14T16/Fe 550	
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550		AS SHOWN/Fe 550	
3rd FLOOR LVL TO 5th FLOOR LVL				
SIZE	200X1500		200X1200	
CONCRETE GRADE/COVER	M40/30mm		M40/30mm	
REINFORCEMENT/STEEL GRADE Fe	28T20/Fe 550		23T20/Fe 550	
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550		AS SHOWN/Fe 550	
2nd FLOOR LVL TO 3rd FLOOR LVL				
SIZE	200X1500		200X1200	
CONCRETE GRADE/COVER	M40/30mm		M40/30mm	
REINFORCEMENT/STEEL GRADE Fe	8T25(x)+20T20/Fe 550		4T25(x)+18T20/Fe 550	
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550		AS SHOWN/Fe 550	
FIRST FLOOR LVL TO 2nd FLOOR LVL				
SIZE	200X1500		200X1200	
CONCRETE GRADE/COVER	M40/30mm		M40/30mm	
REINFORCEMENT/STEEL GRADE Fe	8T25(x)+20T20/Fe 550		4T25(x)+18T20/Fe 550	
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550		AS SHOWN/Fe 550	
FOUNDATION LEVEL TO 1st FLOOR LVL				
SIZE	450X1500		300X1200	
CONCRETE GRADE/COVER	M40/30mm		M40/30mm	
REINFORCEMENT/STEEL GRADE Fe	12T20(x)+30T20/Fe 550		6T20(x)+18T20/Fe 550	
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550		AS SHOWN/Fe 550	
COLUMN MARK	SW4		SW8 & SW6	

NOTES:
Dimensions
1. ALL DIMENSIONS ARE IN MM.
2. FOR COVERING NOTES REFER TO DWG. NO. BC768_S-/ST/---/01.
3. FOR STANDARD DETAILS REFER TO DWG. NO. BC768_S-/GD/---/01
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE, MIX DESIGN AND MIX NOTE: CEMENT CONTENT NOT LESS THAN 350 kg/Cum (SAND, 10/20 GRIT, HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION.
6. GRADE OF CONCRETE FOR
PILE - M30 (IDENTIFIED CONCRETE GRADE SHOULD BE 400kg/m³)
PILE CAP - M30
DIAPHRAGM WALL, BEAM/SLAB-M30,
COLUMN - M40, SHEAR WALL-M40
RCC SLABS, RCC BEAMS, STAIRCASE - M30
ALL OTHER STRUCTURAL MEMBERS - M30
7. STEEL GRADE - FE500 CONFORMING TO IS1786-2008.
8. CLEAR COVER FOR PILE 50mm(4-50mm, 8@12mm) & 75mm-25mm.
FLOOR-15mm, COLUMN-40mm, SHEAR WALL-30mm.
SUMP-25mm, BEAM-25mm
9. WHERE OVERHEAD SERVICES, UNDERGROUND UTILITIES ARE NOT SHOWN IN THE DRAWINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF SUCH SERVICES.
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE IV. OUTPUT SEISMIC CHARTS SUBMITTED FOR THE STIPULATIONS MADE IN ST/2020-2015
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH I.S.456-2000, NBC (SP7-1983) AND RELEVANT INDIAN CODE STIPULATIONS
12. SEQUENCE OF CONSTRUCTION (AS WITH CONTRACTOR) REMARKS / DESIGN / DRAWN

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS.

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-		KAVI.K	07/02/24

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

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STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

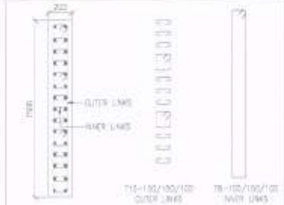
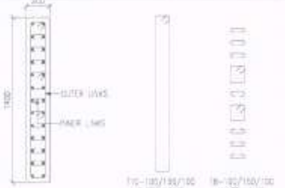
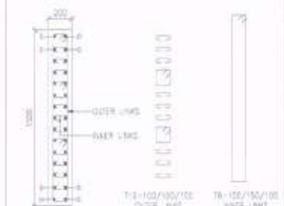
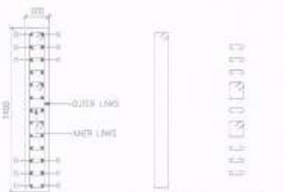
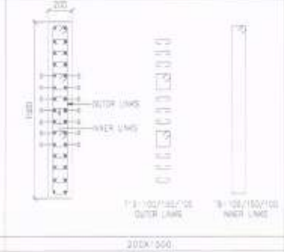
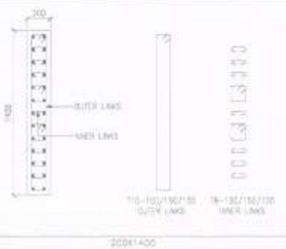
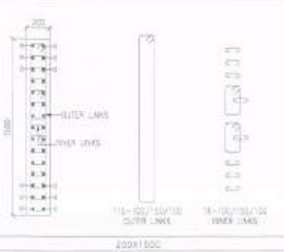
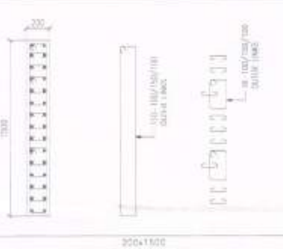
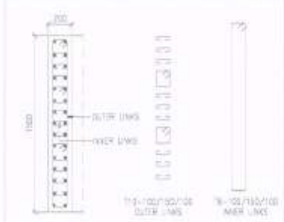
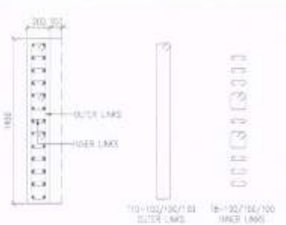
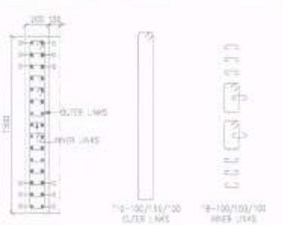
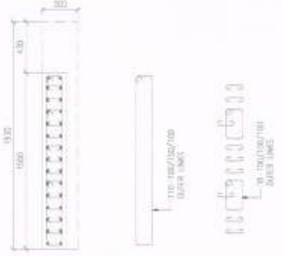
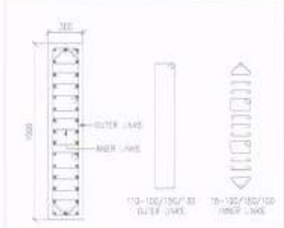
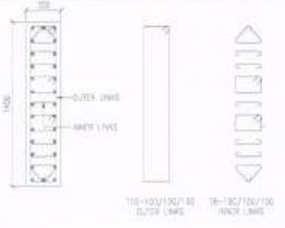
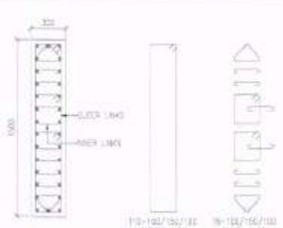
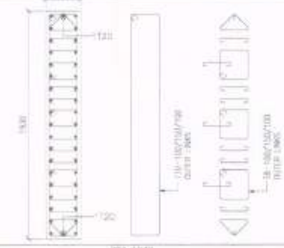
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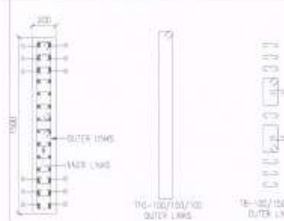
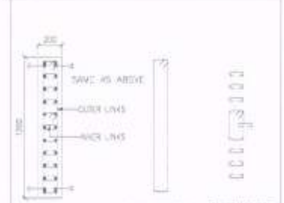
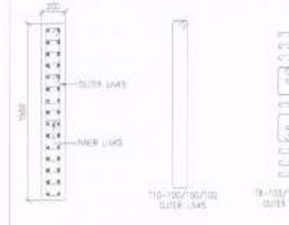
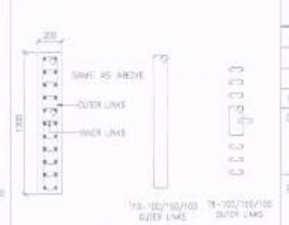
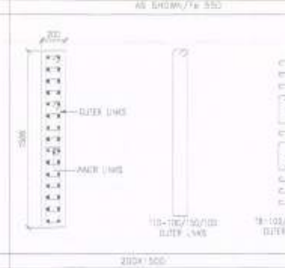
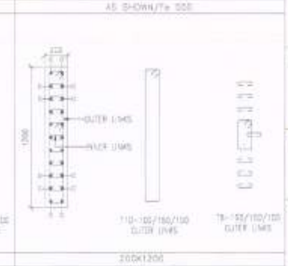
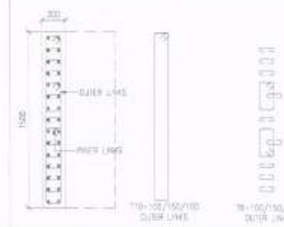
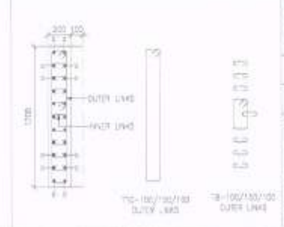
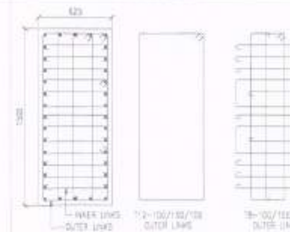
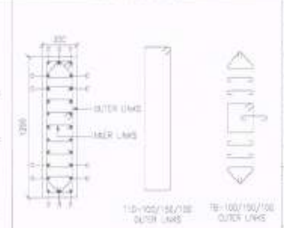
COLUMN SCHEDULE (SHEET-02 OF 07)

scale	AS SHOWN	design by	TP
drawn by	KAVI.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BC768_S-/SL/SH/---/02	revision	-

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DWG FILE NAME: BC768_S-/SL/SH/---/02.dwg

6th FLOOR LVL TO ROOF LVL			SAME AS ABOVE	SAME AS ABOVE
SIZE	200X1500	200X1400		
CONCRETE GRADE/COVER	M40/30mm	M40/30mm		
REINFORCEMENT/STEEL GRADE Fe	30T20+14T16/Fe 550	26T16/Fe 550		
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	AS SHOWN/Fe 550		
4th FLOOR LVL TO 6th FLOOR LVL			SAME AS ABOVE	SAME AS ABOVE
SIZE	200X1300	200X1400		
CONCRETE GRADE/COVER	M40/30mm	M40/30mm		
REINFORCEMENT/STEEL GRADE Fe	8T25(E)+22T20+/Fe 550	12T20(a)+14T16/Fe 550		
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	AS SHOWN/Fe 550		
2nd FLOOR LVL TO 4th FLOOR LVL				
SIZE	200X1500	200X1400	200X1500	200x1500
CONCRETE GRADE/COVER	M40/30mm	M40/30mm	M40/30mm	M40/30mm
REINFORCEMENT/STEEL GRADE Fe	18T25+14T20(a)/Fe 550	28T20/Fe 550	12T20(a)+18T16/Fe 550	30T20/Fe 550
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	AS SHOWN/Fe 550	AS SHOWN/Fe 550	AS SHOWN/Fe 550
FIRST FLOOR LVL TO 2nd FLOOR LVL				
SIZE	200X1500	200X1400	200X1500	200x1500
CONCRETE GRADE/COVER	M40/30mm	M40/30mm	M40/30mm	M40/30mm
REINFORCEMENT/STEEL GRADE Fe	30T25/Fe 550	26T20/Fe 550	12T20(a)+18T16/Fe 550	30T20/Fe 550
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	AS SHOWN/Fe 550	AS SHOWN/Fe 550	AS SHOWN/Fe 550
BASEMENT-1 LVL TO FIRST FLOOR LVL	SAME AS ABOVE	SAME AS ABOVE	SAME AS ABOVE	SAME AS ABOVE
SIZE				
CONCRETE GRADE/COVER				
REINFORCEMENT/STEEL GRADE Fe				
LINKS/TIES/STEEL GRADE Fe				
FOUNDATION LEVEL TO BASEMENT-1 LVL				
SIZE	300X1500	300X1400	300x1500	300x1800
CONCRETE GRADE/COVER	M40/30mm	M40/30mm	M40/30mm	M40/30mm
REINFORCEMENT/STEEL GRADE Fe	32T25/Fe 550	28T20/Fe 550	32T20/Fe 550	40T25/Fe 550
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	AS SHOWN/Fe 550	AS SHOWN/Fe 550	AS SHOWN/Fe 550
COLUMN MARK	SW5	SW6	SW12,SW7,SW18,SW19, SW21,SW23 & SW37	SW8

11th FLOOR LVL TO ROOF LVL				
SIZE	200X1500	200X1200		
CONCRETE GRADE/COVER	M40/30mm	M40/30mm		
REINFORCEMENT/STEEL GRADE Fe	30T16+12T16(c)/Fe 550	22T20+4T16(c)/Fe 550		
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	AS SHOWN/Fe 550		
6th FLOOR LVL TO 11th FLOOR LVL	SAME AS ABOVE	SAME AS ABOVE		
SIZE				
CONCRETE GRADE/COVER				
REINFORCEMENT/STEEL GRADE Fe				
LINKS/TIES/STEEL GRADE Fe				
4th FLOOR LVL TO 6th FLOOR LVL				
SIZE	200X1500	200X1200		
CONCRETE GRADE/COVER	M40/30mm	M40/30mm		
REINFORCEMENT/STEEL GRADE Fe	30T16	22T20/Fe 550		
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	AS SHOWN/Fe 550		
2nd FLOOR LVL TO 4th FLOOR LVL				
SIZE	200X1500	200X1200		
CONCRETE GRADE/COVER	M40/30mm	M40/30mm		
REINFORCEMENT/STEEL GRADE Fe	30T20/Fe 550	12T25(a)+10T20/Fe 550		
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	AS SHOWN/Fe 550		
FIRST FLOOR LVL TO 2nd FLOOR LVL				
SIZE	200X1500	200X1200		
CONCRETE GRADE/COVER	M40/30mm	M40/30mm		
REINFORCEMENT/STEEL GRADE Fe	30T20/Fe 550	12T25(a)+10T20/Fe 550		
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	AS SHOWN/Fe 550		
FOUNDATION LEVEL TO 1st FLOOR LVL				
SIZE	820X1500	300X1200		
CONCRETE GRADE/COVER	M40/30mm	M40/30mm		
REINFORCEMENT/STEEL GRADE Fe	36T20/Fe 550	14T25(a)+10T20/Fe 550		
LINKS/TIES/STEEL GRADE Fe	AS SHOWN/Fe 550	AS SHOWN/Fe 550		
COLUMN MARK	SW2	SW3		

NOTES:

1. ALL DIMENSIONS ARE IN mm
2. FOR GENERAL NOTES REFER TO DWG NO. BE788_5-/ST/---/01
3. FOR STANDARD DETAILS REFER TO DWG NO. BE788_5-/SD/---/01
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT STRUCTURAL DRAWINGS.
5. CONCRETE GRADE M30
   DESIGN MIX M30 WITH
   CEMENT CONTENT NOT LESS THAN 250 kg/Cum GRADE 43/53 OPC
   HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   PILE - M30 (CONSTRUCTION EXPERT SHOULD BE ADOPTED)
   PILE CAP - M30
   BASEMENT WALL, RCWALLS&RCB,
   COLUMN - M40, RAFT, RAFT WALL M40
   PLC SLABS, PLC BEAMS, STAIRCASE - M30
   ALL OTHER STRUCTURAL MEMBERS - M30
7. STEEL GRADE: FY500 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR PILE 300mm+4-50mm, 400mm & 750mm+-75mm
   PLINTH- 75mm, COLUMN- 40mm, SHEAR WALL- 25mm,
   SLAB- 25mm, BEAM- 25mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 AS PER TYPE SCHEME ZONE III, ZONE DEVELOPMENT FACTOR AS PER THE STIPULATIONS MADE IN IS:1893-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH CLAUSE 33(E), SEC 331 OF CMDA AND RELEVANT INDIAN CODE STIPULATIONS
12. CHIEF OF CONSTRUCTION - ICE WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER

TERRACATION AND COLUMN DESIGNED FOR BASEMENT(1)+ST(1)+11 FLOORS+ROOF, USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS.

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-		ANUK	07/12/21

Client :

Project Managers & Quantity Surveyors :

HVAC Consultant :

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Architects

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e-Mail ID: buroindia@buroengineers.in

STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

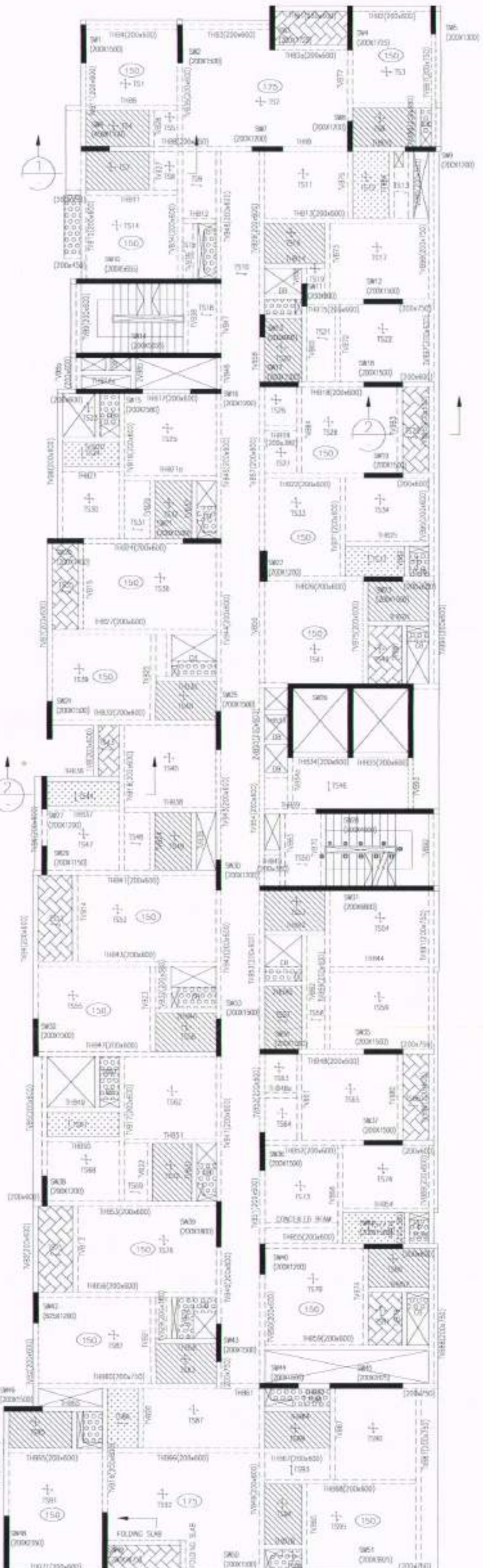
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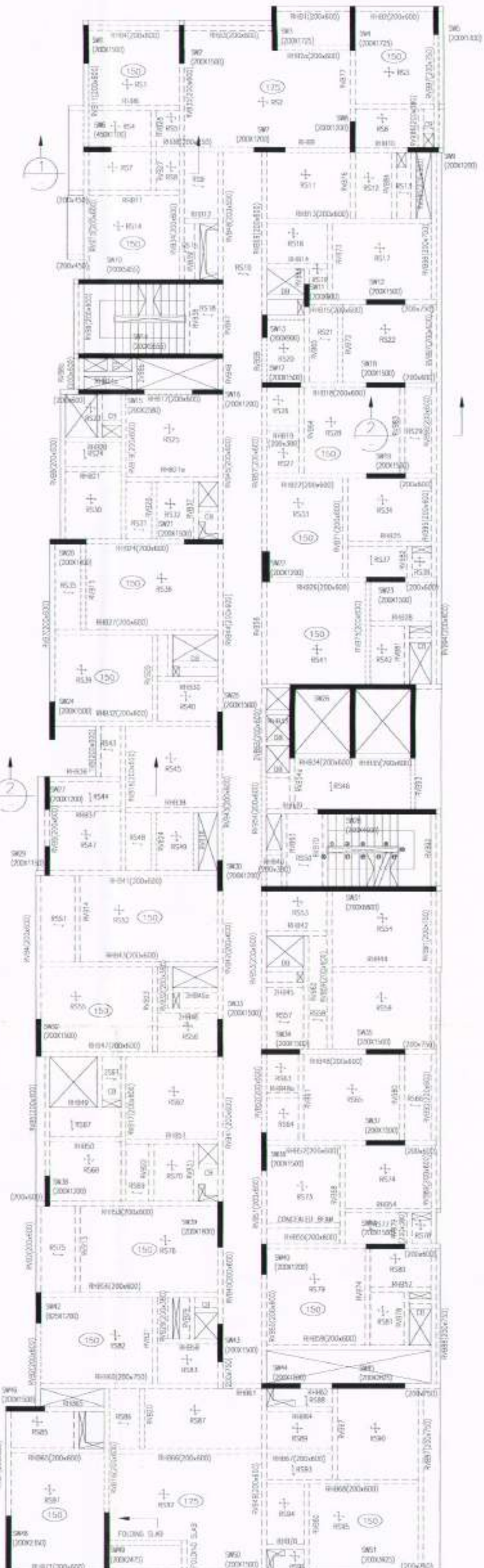
COLUMN SCHEDULE (SHEET-01 OF 07)

scale	AS SHOWN	design by	SP
drawn by	KNK	checked by	SP
date	DEC 2021	approved by	AP
drawing no.	BE788_5-/CL/SH/---/01		revision -

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DXF FILE NAME: BE788_5-CL/SH/---01.dwg





TYPICAL FLOOR FRAMING PLAN(3rd FLOOR TO 11th FLOOR)

SCALE - 1:100

NOTES

UNLESS OTHERWISE SPECIFIED

1. ALL THE FLOOR RC BEAMS ARE TO BE (WIDTHxDEPTH) 200x450mm.
2. ALL THE RC SLABS ARE TO BE 125mm THICK.
3. GRADE OF CONCRETE M35.
4. GRADE OF STEEL TO BE Fe 550 FOR ALL STRUCTURAL

100mm THICKNESS BALCONY SUNKEN

100mm THICKNESS TOILET SUNKEN

50mm THICKNESS UTILITY SUNKEN

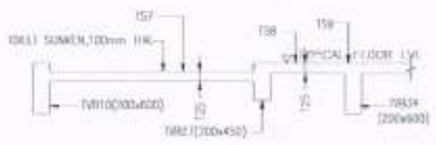
ROOF FRAMING PLAN

SCALE 1:100

NOTES

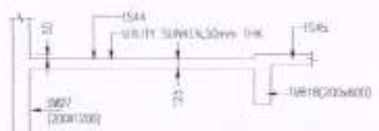
UNLESS OTHERWISE SPECIFIED

1. ALL THE FLOOR RC BEAMS ARE TO BE (WIDTHxDEPTH) 200x450mm
2. ALL THE RC SLABS ARE TO BE 125mm THICK.
3. GRADE OF CONCRETE M35.
4. GRADE OF STEEL TO BE Fe 550 FOR ALL STRUCTURAL



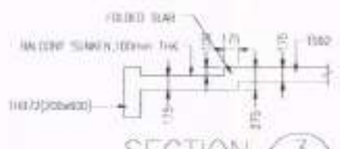
SECTION 1

SCALE 1:50



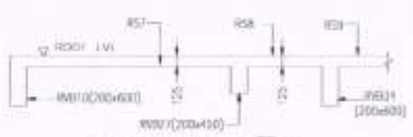
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SCALE 1:50



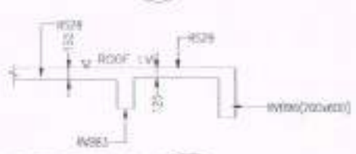
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SCALE 1:50



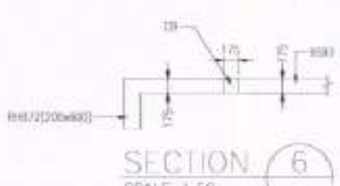
SECTION 4

SCALE 1:50



SECTION 5

SCALE 1:50



SECTION 6

SCALE 1:50

FLOOR LOADS

DESCRIPTION	LIVE LOADS kN/m2	SDL kN/m2	FILLING kN/m2
BED/KITCHEN/LIVING	2.0	1.75	-
TOILET	2.0	1.8	0.8
UTILITY	2.0	1.8	0.4
BALCONY	3.0	1.8	0.8
CORRIDOR	3.0	1.25	-
LOBBY	3.0	1.25	-
TERRACE	3.0	2	-
LMR/DHT	3.0	20	-

NOTES:

1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG. NO. BE768_S-/NT/--/01.
3. FOR STANDARD DETAILS REFER TO DWG. NO. BE768_S-/STD/--/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M30
   DESIGN MIX M35 WITH
   CEMENT CONTENT NOT LESS THAN 340 kg/Cum GRADE 43/53 (OPC)
   HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   PILE – M30 (CEMENT CONTENT SHOULD BE 400kg/m³)
   PILE CAP – M35
   BASEMENT WALL, RCWM/SHEAR WALL M35
   COLUMN – M40, SHEAR WALL M40
   R.C. SLABS, R.C. BEAMS, STAIRCASE – M30
   ALL OTHER STRUCTURAL MEMBERS – M25
7. STEEL GRADE: Fe500 CONFORMING TO IS:1786 2008.
8. CLEAR COVER FOR PILE 500mm Ø-50mm, 600mm Ø & 750mm-75mm,
   PILE CAP-75mm, COLUMN-40mm, SHEAR WALL-35mm,
   SLAB-25mm, BEAM-30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE III DUCTILE DETAILING ADOPTED IAS PER THE STIPULATIONS MADE IN IS:13920-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC (SP7-1983) AND RELEVANT INDIAN CODE STIPULATIONS
12. ONUS OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS

NORTH POINT

NO	AMENDMENTS	BY	DATE
-	-	KMA	07/02/25

Client:

LANDSCAPE CONSULTANT :

PROJECT MANAGEMENT CONSULTANT :

ELECTRICAL / HVAC / FIRE / PHE CONSULTANT:

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer:

BURO ENGINEERS (I) PRIVATE LTD.
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar, Chennai - 600 020. 9044-2491 2154/55/56.
e-Mail ID: buroindia@buroengineers.in

A. PERAMAIYAN, B.E., (Struct), M.I.E.
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E-Mail: perem@buroengineers.in
Mobile: +91 99625 45630

STRUCTURAL

project title:

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES;MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

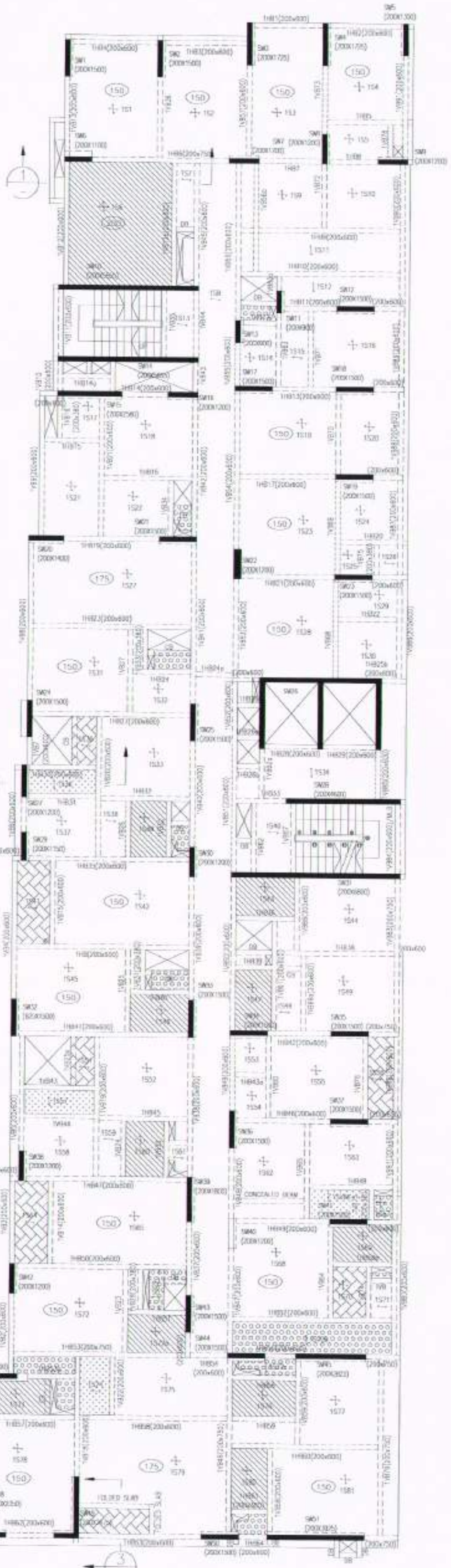
drawing title:

TYPICAL FLOOR AND ROOF FRAMING PLAN

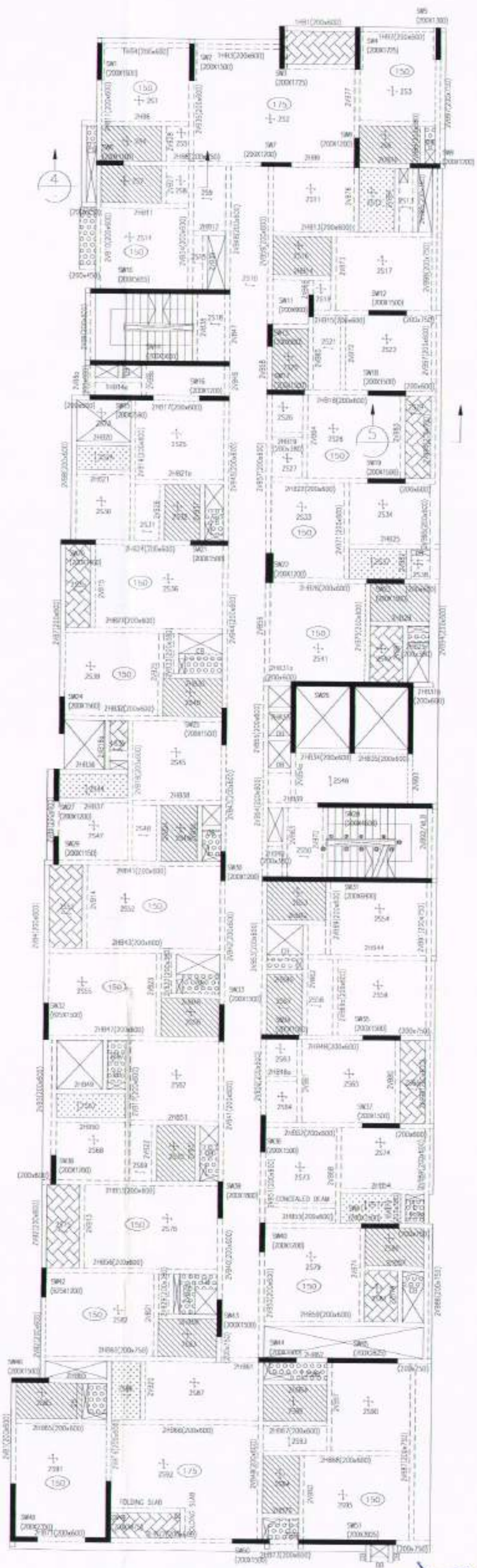
scale	AS SHOWN	design by	TP
drawn by	KMA/K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE768_S-/TP/1-/--/01	revision	-

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CAD FILE NAME: BE768_S-TP1--01.dwg



1st FLOOR FRAMING PLAN
SCALE - 1:100



SECOND FLOOR FRAMING PLAN
SCALE - 1:100

NOTES

UNLESS OTHERWISE SPECIFIED

1. ALL THE FLOOR RC BEAMS ARE TO BE (WIDTH x DEPTH) 200x450mm.
2. ALL THE RC SLABS ARE TO BE 125mm THICK.
3. GRADE OF CONCRETE M35.
4. GRADE OF STEEL TO BE Fe 550 FOR ALL STRUCTURAL

100mm THICKNESS BALCONY SUNKEN

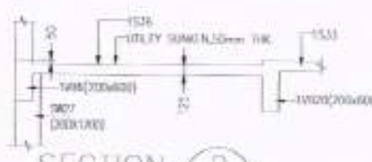
100mm THICKNESS TOILET SUNKEN

50mm THICKNESS UTILITY SUNKEN

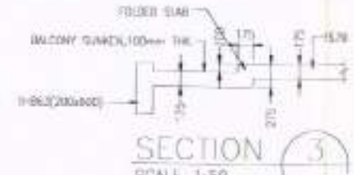
50mm THICKNESS OPEN TERRACE SUNKEN



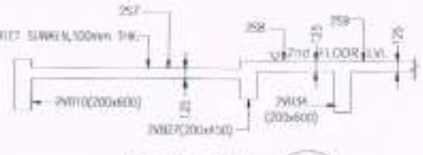
SECTION 1
SCALE 1:50



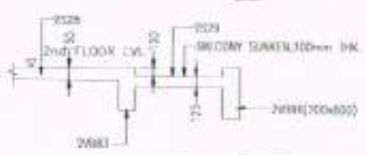
SECTION 2
SCALE 1:50



SECTION 3
SCALE 1:50



SECTION 4
SCALE 1:50



SECTION 5
SCALE 1:50

FLOOR LOADS

DESCRIPTION	LIVE LOADS kN/m2	SDL kN/m2	FILLING kN/m2
BED/KITCHEN/LIVING	2.0	1.25	-
TOILET	2.0	1.6	0.8
UTILITY	2.0	1.6	0.4
BALCONY	3.0	1.6	0.8
CORRIDOR	3.0	1.25	-
LOBBY	3.0	1.25	-
GYM/YOGA/INDOOR GAMES	5.0	2.4	-
MULTI PURPOSE HALL	5.0	2.4	-
PRE-FUNCTION AREA	5.0	2.4	-
BILLIARDS/TT ROOM	5.0	2.4	-

NOTES:

1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG. NO. BE/68_S-/N/--/01.
3. FOR STANDARD DETAILS REFER TO DWG. NO. BE/68_S-/SD/--/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH SITE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M35
   DESIGN MIX M35 WITH
   CEMENT CONTENT NOT LESS THAN 350 kg/Cum GRADE 43 (G) OPC
   HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   RAFT – M35 (CONCRETING CONTENT SHOULD BE 400kg/m³)
   PEC CAP – M35
   BASEMENT WALL, RDM/FLOOR-M35,
   COLUMN – SHEAR WALL, M35
   R.C. SLABS, P.C. BEAMS, STAIRCASE – M35
   ALL OTHER STRUCTURAL MEMBERS – M35
7. STEEL GRADE: Fe550 CONFORMING TO IS:1786-2008
8. CLEAR COVER FOR PCC: 100mm#-50mm, 80mm# & 150mm- 75mm.
   PEDESTAL-75mm, COLUMN-40mm, SHEAR WALL-30mm.
   SLAB-25mm, BEAM-30mm
9. UNLESS OTHERWISE SPECIFIED, DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE III, DUCTILE DETAILING CHARGE OUT AS PER THE STIPULATIONS MADE IN IS:13920-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC (PART-1)2005 AND RELEVANT INDIAN CODE STIPULATIONS
12. DAYS OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / DEVELOPER / OWNER.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-	-	KAVI	07/02/25

Client:

LANDSCAPE CONSULTANT :

PROJECT MANAGEMENT CONSULTANT :

ELECTRICAL / HVAC / FIRE / PHE CONSULTANT:

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer:

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Civil & Structural Consultants
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Chennai - 600 020. (044-2491 2754/55/56)
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E-Mail: peram@buroengineers.in
Mobile: +91 99625 45630

STRUCTURAL

project title:

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

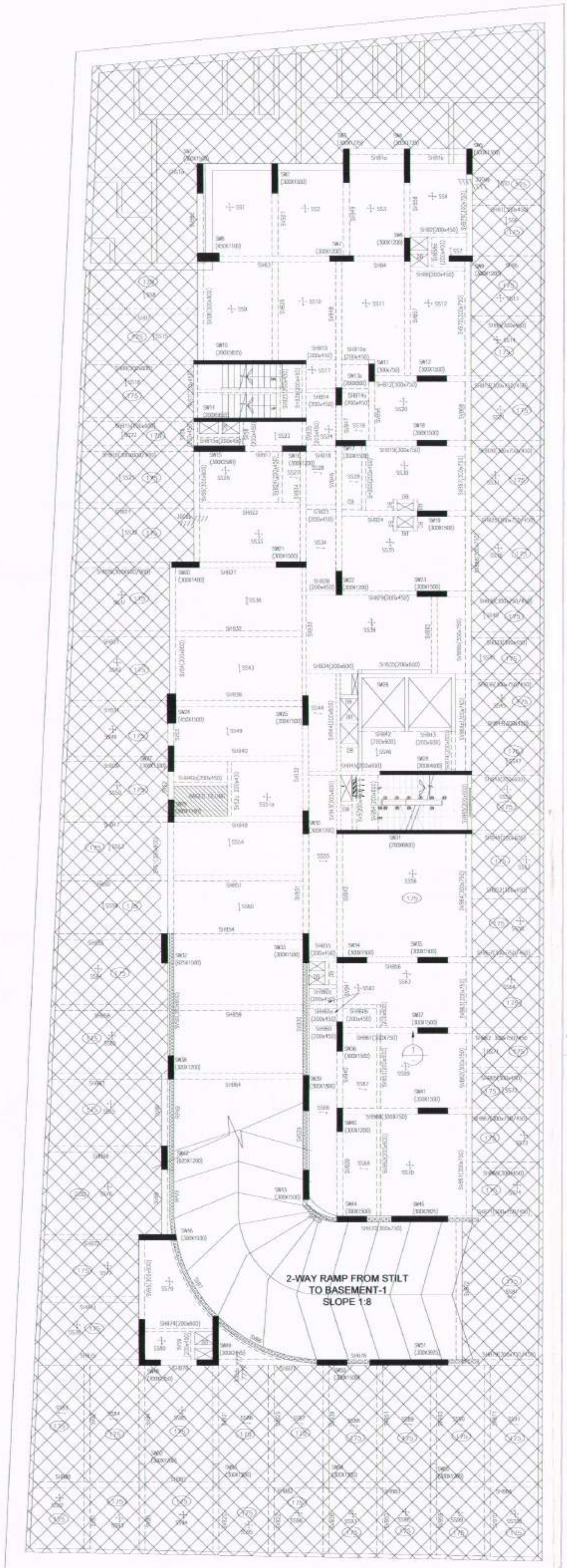
drawing title:

FIRST AND SECOND FLOOR FRAMING PLAN

scale	AS SHOWN	design by	TP
drawn by	KAVI.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE/68_S-/FF/01/--/01	revision	-

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DXD FILE NAME: BE/68_S-/FF/01/--/01.dwg



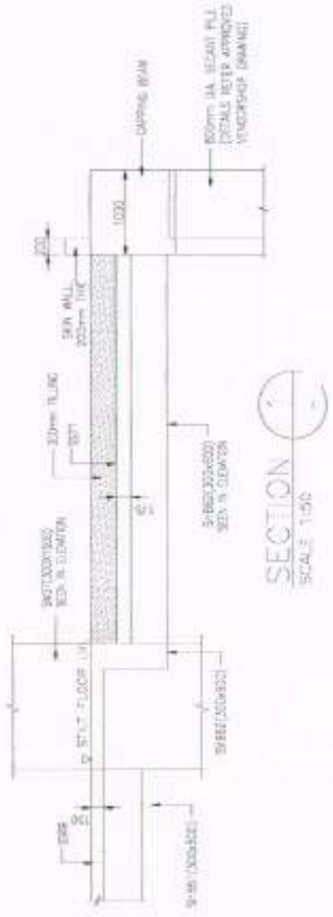
STILT FLOOR FRAMING PLAN
SCALE : 1:100

NOTES:

1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG NO. BE176B_S-/NT/---/01.
3. FOR STANDARD DETAILS REFER TO DWG NO. BE176B_S-/SD/---/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE - M30
   DESIGN MIX M35 M30
   CHLORIDE CONTENT NOT LESS THAN 350 kg/Cum GRADE 43/53 OPC
   HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION.
6. GRADE OF CONCRETE FOR
   PILE - M30 (CEMENTICIOUS CONTENT SHOULD BE 400Kg/m³)
   PILE CAP - M35
   BASEMENT WALL, BEAM/SLAB M35
   COLUMN - M40, SHEAR WALL M40
   R.C. SLABS, R.C. BEAMS, STAIRCASE - M35
   ALL OTHER STRUCTURAL MEMBERS - M25
7. STEEL GRADE - Fe550 CONFORMING TO IS 1786-2008.
8. CLEAR COVER FOR PILE 500mm# 50mm, 600mm# & 750mm Plies,
   PILECAP - 75mm, COLUMN - 40mm, SHEAR WALL - 30mm,
   SLAB - 25mm, BEAM - 30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE III (FACTOR OF SAFETY CONSIDERED AS PER IS:1893-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC (2017-18&12) AND RELEVANT INDIAN CODE STIPULATIONS.
12. CHAIN OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS

NORTH POINT



NOTES

GRADE OF STEEL: Fe 550 REDUAM GRADE FOR ALL STRUCTURAL ELEMENTS. BUT FOR SUBSTRUCTURE WHICH ARE IN CONTACT WITH GROUND WATER /SOIL SHALL BE PROVIDED WITH CRS GRADE i.e. FOR RAFT, BASEMENT WALL, BASEMENT SLAB, UG SUMP'S (RAT SLAB AND WALL, SKIN WALL, RETAINING SYSTEM SUCH AS SECANT PILE WALLS.

FLOOR LOADS

DESCRIPTION	LIVE LOADS kN/m2	SDL kN/m2	FILLING kN/m2
PARKING	3.0	2.4	-
DRIVEWAY	5.0	2.4	-
FIRE TRACK	5.0	20	-
ELECTRICAL ROOM	7.5	1.8	-
RAMP	5	2.4	-
PUMP ROOM	7.5	1.8	-

NOTES

UNLESS OTHERWISE SPECIFIED

1. ALL THE STILT FLOOR RC BEAMS ARE TO BE (WIDTH×DEPTH) 300x600mm.
2. ALL THE RC SLABS ARE TO BE 150mm THICK.
3. GRADE OF CONCRETE M35.
4. GRADE OF STEEL TO BE Fe 550 FOR ALL STRUCTURAL

300mm DROP,CINDER FILLING

A. PERAMAIYAN, M.E., (Struct.),
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NEW No. 31 (OLD No.14), BESANT AVENUE ROAD,
ADYAR, CHENNAI - 600 020.
E-Mail: peram@buroengineers.in
Mobile: +91 99625 45630

NO.	AMENDMENTS	BY	DATE
-	-	KAVI	01/02/24

Client:

LANDSCAPE CONSULTANT :

PROJECT MANAGEMENT CONSULTANT :

ELECTRICAL / HVAC / FIRE / PHE CONSULTANT:

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer:

BURO ENGINEERS (I) PRIVATE LTD.
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar,
Chennai - 600 020. 4044-2491 2754/55/56,
e-Mail ID: buroindia@buroengineers.in

STRUCTURAL

project title:

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN I.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

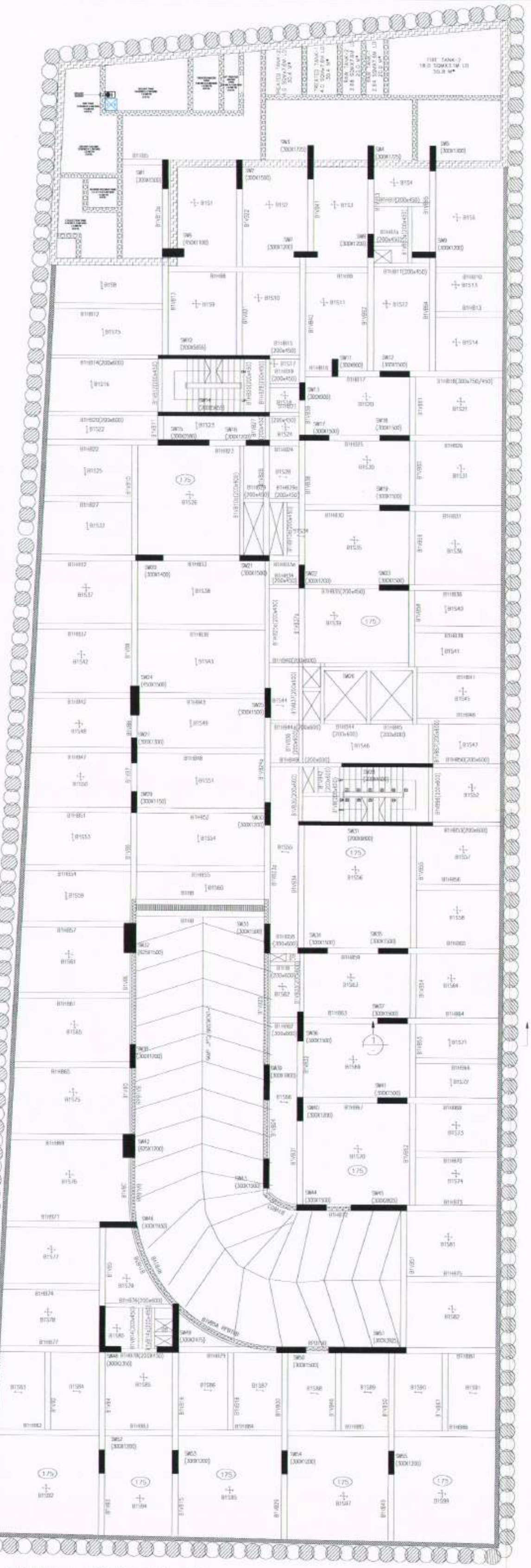
drawing title:

STILT FLOOR FRAMING PLAN

scale	AS SHOWN	design by	TP
drawn by	KAVI.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE176B_S-/TP/S / /01	revision	-

THIS DRAWING IS COPYRIGHT

CAD FILE NAME: BE176B_S-/TP/S---/01.dwg



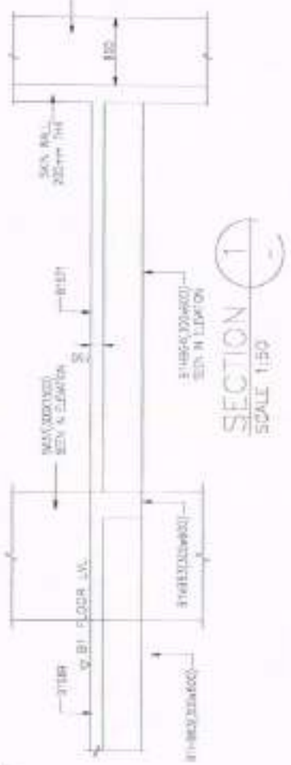
BASEMENT-1 FLOOR FRAMING PLAN
SCALE - 1:100

NOTES:

1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG. NO. B(768_S-/NP/---/01.
3. FOR STANDARD DETAILS REFER TO DWG. NO. B(768_S-/STD/---/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M30
   DESIGN MIX M30 (RT)
   CEMENT CONTENT NOT LESS THAN 350 kg/Cum. GRADE 43/53 OPC
   HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION.
6. GRADE OF CONCRETE FOR
   PILE - M30 (CEMENTENG CONTENT SHOULD BE 400kg/m³)
   PILE CAP - M30
   BASEMENT WALL, BEAM/SLAB-M30,
   COLUMN - M40, SHEAR WALL- M40
   R.C. SLABS, R.C. BEAMS, STAIRCASE - M30
   ALL OTHER STRUCTURAL MEMBERS - M30
7. STEEL GRADE: FE550 CONFORMING TO IS:1786-2008
8. CLEAR COVER FOR PILE 500mm+50mm, 600mm & 750mm+75mm,
   PILECAP-75mm, COLUMN-40mm, SHEAR WALL-35mm,
   SLAB-25mm, BEAM-30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 Ø OR 1MM
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE IV, SOFT SOIL DEFINING CARRIED OUT AS PER THE STIPULATIONS MADE IN IS:1893-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC (PT1-2005) AND RELEVANT INDIAN CODE STIPULATIONS.
12. DATE OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS.

NORTH POINT



REMOVED BEAMS

B1(6) - 6, 18, 28, 42
B1(8) - 5, 17, 43, 44, 45, 47, 48, 66
B1(5 - 5, 19, 27, 29, 33, 67, 68, 93, 96, 98, 100

NOTES

GRADE OF STEEL : Fe 550 REGULAR GRADE FOR ALL STRUCTURAL ELEMENTS. HSD FOR SUBSTRACTIVE WHICH ARE IN CONTACT WITH GROUND WATER /SOIL SHALL BE PROVIDED WITH CRS GRADE i.e. FOR RAFT, BASEMENT WALL, BASEMENT SLAB, OH TANK'S BASE SLAB AND WALL, SKIN WALL, RETAINING SYSTEM SUCH AS SLURRY WALLS.

A. PERAMAIYAN, M.E.(Struct.), M.I.E.
REGISTERED STRUCTURAL ENGINEER
CHENNAI METROPOLITAN DEVELOPMENT AUTHORITY
REGISTRATION No. SE/GR-I/19/03/026
NEW No. 31 (OLD No.14), BESANT AVENUE ROAD,
ADYAR, CHENNAI - 600 020.
E-Mail: perams@buroengineers.in
Mobile: +91 99625 45630

FLOOR LOADS

DESCRIPTION			
PARKING	3.0	2.4	KN/m²
DRIVEWAY	3.0	2.4	"
FIRE TRACK	3.0	20	"
ELECTRICAL ROOM	7.5	1.8	"
RAMP	5	2.4	"
PUMP ROOM	7.5	1.8	"

NOTES

UNLESS OTHERWISE SPECIFIED

1. ALL THE BASEMENT-1 RC BEAMS ARE TO BE 300x600mm.
2. ALL THE RC SLABS ARE TO BE 150mm THICK.
3. GRADE OF CONCRETE M35.
4. GRADE OF STEEL TO BE Fe 550 FOR ALL STRUCTURAL.

200mm THICKNESS BASEMENT RC WALL.

350mm THICKNESS STP AND SUMP OUTER WALLS.

300mm THICKNESS STP AND SUMP INNER SIDE WALLS.

200mm THICKNESS RAMP PARAPET RC WALL.

NO.	AMENDMENTS	BY	DATE
-	-	KAVI	01/02/25

Client:

LANDSCAPE CONSULTANT :

PROJECT MANAGAMENT CONSULTANT :

ELECTRICAL / HVAC / FIRE / PHE CONSULTANT:

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer:

BURO ENGINEERS (I) PRIVATE LTD.
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar,
Chennai - 600 020. Ph: 2441 2754/55/56,
e-Mail ID: buroindia@buroengineers.in

STRUCTURAL

project title:

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

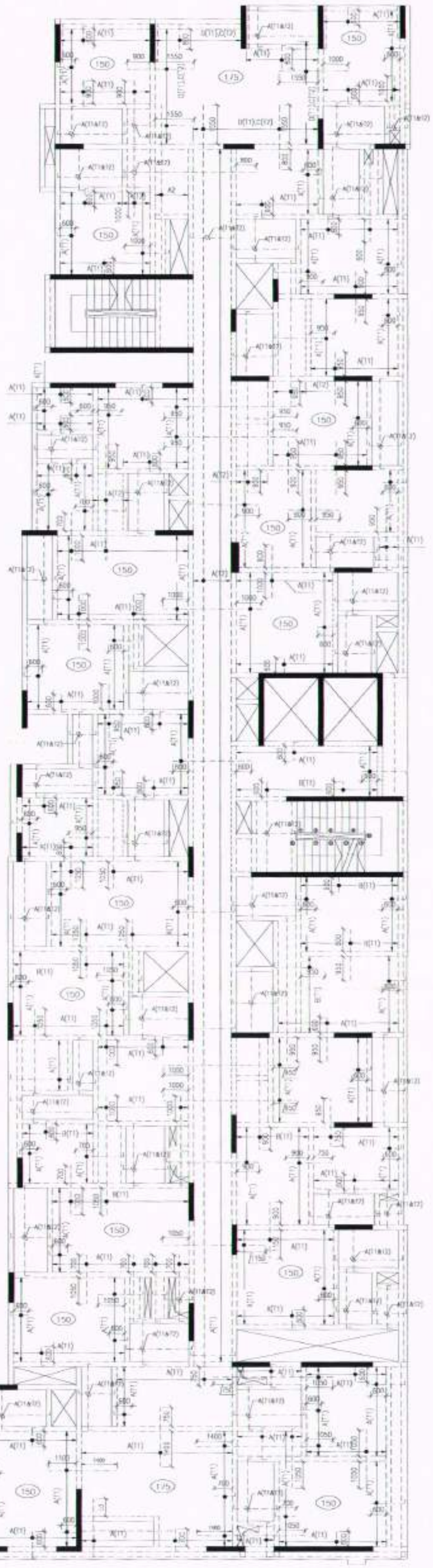
drawing title:

BASEMENT-1 FLOOR FRAMING PLAN

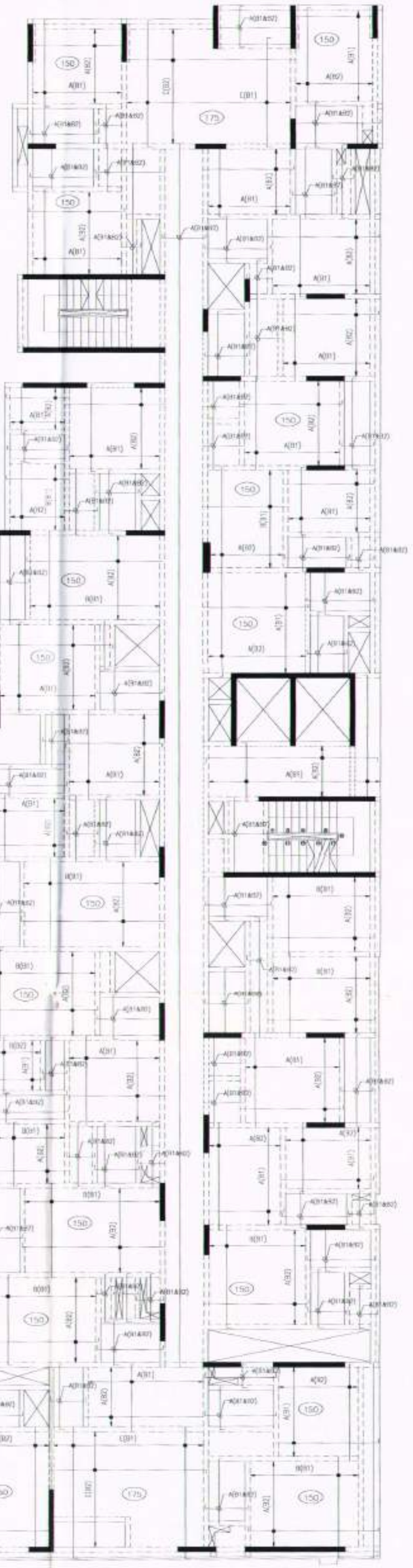
scale	AS SHOWN	design by	IP
drawn by	KAVI.K	checked by	IP
date	DEC 2024	approved by	AP
drawing no.	B(768_S-/FP/B1/---/01	revision	-

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CAD FILE NAME: B(768_S-FPB1-01.dwg



SECOND FLOOR SLAB REINFORCEMENT DETAILS (TOP)
SCALE - 1:100



SECOND FLOOR SLAB REINFORCEMENT DETAILS (BOTTOM)
SCALE - 1:100

NOTES

1. ALL THE RC SLABS ARE TO BE 125mm THICK
2. GRADE OF CONCRETE M35
3. GRADE OF STEEL Fe550

REINFORCEMENT SCHEDULE

MARK	SIZE	SPACING
A	T8	200
B	T8	150
C	T10	200
D	T10	150
E	T10	125

BAR LAYING SEQUENCE

LEGEND:
- — — TOP REINFORCEMENT

LEGEND:
——— BOTTOM REINFORCEMENT

NOTES
* FOR CLARITY PURPOSE DISTRIBUTION BARS NOT SHOWN. ALL DISTRIBUTION BARS ARE TO BE T8-200 (T2 & B2) UNLESS OTHERWISE INDICATED

REFER FRAMING PLAN FOR SUNKEN DETAILS

NOTES:
1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG. NO. BE768_S-/GN/---/01
3. FOR STANDARD DETAILS REFER TO DWG. NO. BE768_S-/SD/---/01
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M35
   DESIGN MIX M35 MIX
   CEMENT CONTENT NOT LESS THAN 350 kg/Cum. GRADE 43/53 OPC
   HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   - PILE - M25 (CEMENTITIOUS CONTENT SHOULD BE 400Kg/m³)
   - PILE CAP - M25
   - BASEMENT WALL, RAMP/SLAB M25,
   - COLUMN - M40, SHEAR WALL- M40
   - R.C. SLABS, R.C. BEAMS, STAIRCASE - M25
   - ALL OTHER STRUCTURAL MEMBERS - M25
7. STEEL GRADE: Fe550 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR PILE 500mm ø 50mm, 600mm ø 75mm- 75mm,
   PILECAP- 75mm, COLUMN-40mm, SHEAR WALL- 50mm,
   SLAB 25mm, BEAM-30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 N DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE III. DUCTILE DETAILING CARRIED OUT AS PER THE STIPULATIONS MADE IN IS:13920-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456- 2000, NBC (SP1- 1983) AND RELEVANT INDIAN CODE STIPULATIONS
12. ONUS OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS

NORTH POINT



NO.	AMENDMENTS	BY	DATE
-	-	KAVI	07/02/25

Client:

LANDSCAPE CONSULTANT :

PROJECT MANAGAMENT CONSULTANT :

ELECTRICAL / HVAC / FIRE / PHE CONSULTANT:

Architects

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CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

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STRUCTURAL

project title:

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

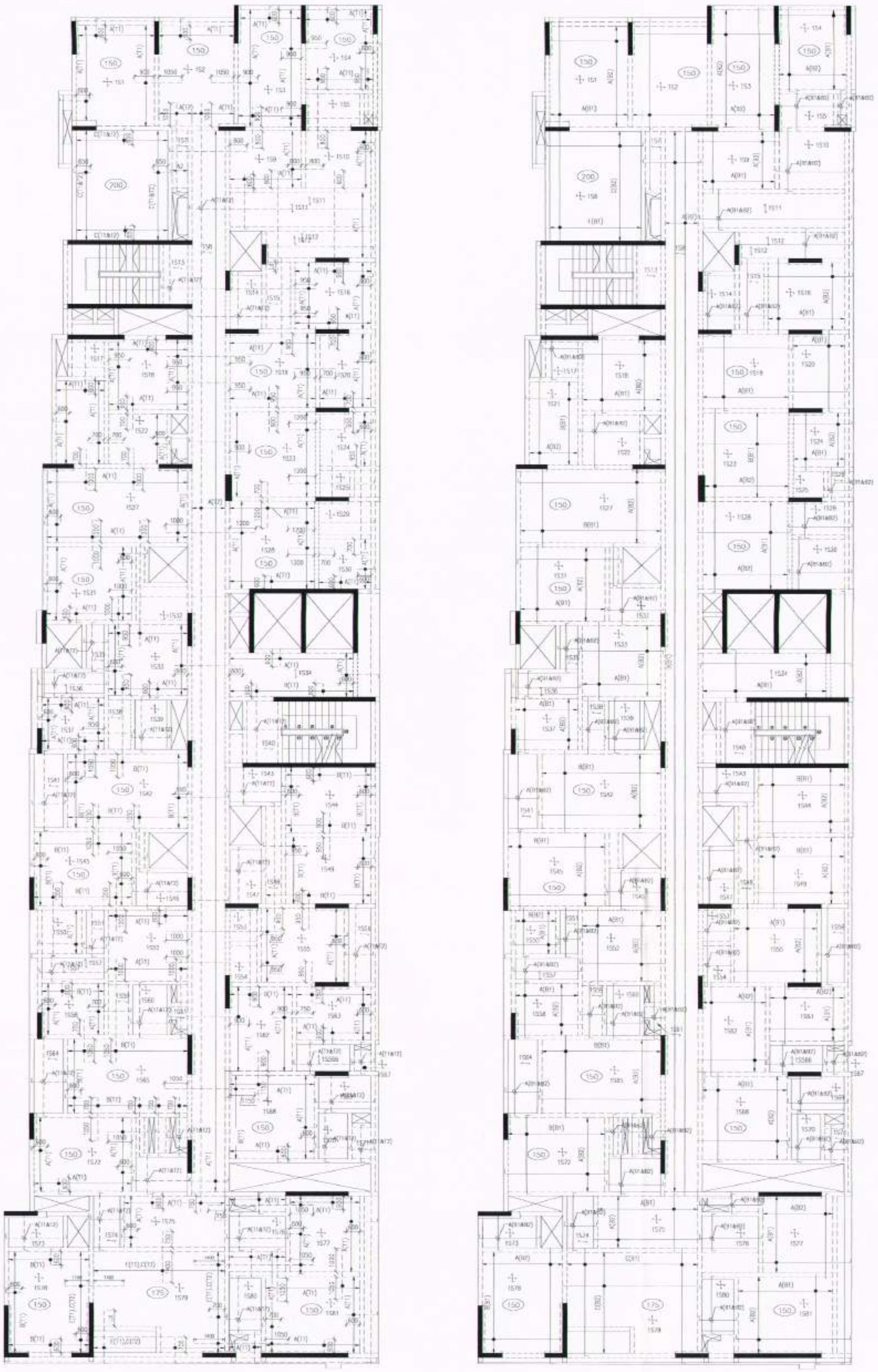
drawing title:

SECOND FLOOR SLAB REINFORCEMENT DETAILS (3rd FLOOR TO 11th FLOOR) (TOP & BOTTOM)

scale	AS SHOWN	design by	TP
drawn by	KAVI.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE768_S /SB/02/---/01	revision	-

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CAD FILE NAME: BE768_S-SB02 - 01.dwg



FIRST FLOOR SLAB REINFORCEMENT DETAILS (TOP)
SCALE - 1:100

FIRST FLOOR SLAB REINFORCEMENT DETAILS (BOTTOM)
SCALE - 1:100

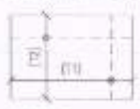
NOTES

1. ALL THE RC SLABS ARE TO BE 125mm THICK.
2. GRADE OF CONCRETE M35
3. GRADE OF STEEL Fe550

REINFORCEMENT SCHEDULE

MARK	SIZE	SPACING
A	T8	200
B	T8	150
C	T10	200
D	T10	150
E	T10	125

BAR LAYING SEQUENCE



LEGEND:
---TOP REINFORCEMENT



LEGEND:
——BOTTOM REINFORCEMENT

NOTES:
* FOR CLARITY PURPOSE DISTRIBUTION BARS NOT SHOWN. ALL DISTRIBUTION BARS ARE TO BE T8-200 (T2 & B2) UNLESS OTHERWISE INDICATED.

REFER FRAMING PLAN FOR SUNKEN DETAILS.

NOTES:
1. ALL DIMENSIONS ARE IN MM.
2. FOR GENERAL NOTES REFER TO DWG. NO. RE1768_S-/N1/---/01.
3. FOR STANDARD DETAILS REFER TO DWG. NO. RE1768_S-/SD/---/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M35
   DESIGN MIX M35 WITH
   CEMENT CONTENT NOT LESS THAN 350 kg/Cum GRADE 43/53 OPC
   +20MPA# APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION.
6. GRADE OF CONCRETE FOR
   PILE - M30 (CUBE/STRESS CONCRETE STRENGTH 30 40N/mm²)
   PILE CAP - M35
   BASEMENT RAFT, BEAM/SLAB M35,
   COLUMN - M40, SHEAR WALL - M40
   R.C. SLABS, R.C. BEAMS, STAIRCASE - M35
   ALL OTHER STRUCTURAL MEMBERS - M30
7. STEEL GRADE - Fe550 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR PILE 500mm# 75mm, 800mm# & 1500mm - 75mm,
   PILECAP - 75mm, COLUMN - 40mm, SHEAR WALL - 30mm,
   SLAB - 25mm, BEAM - 30mm
9. UNLESS OTHERWISE SPECIFIED, ANY DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE III (SPECIAL DETAILING CARRIED OUT AS PER THE SPECIFICATIONS MADE IN IS:13920-2016)
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC (SP1-1983) AND RELEVANT INDIAN CODE STIPULATIONS.
12. DAILY OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+MOOP USING RAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS.

NORTH POINT



NO.	AMENDMENTS	BY	DATE
-	-	KAK	07/03/26

Client:

LANDSCAPE CONSULTANT :

PROJECT MANAGAMENT CONSULTANT :

ELECTRICAL / HVAC / FIRE / PHE CONSULTANT:

Architects

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STRUCTURAL

project title:

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

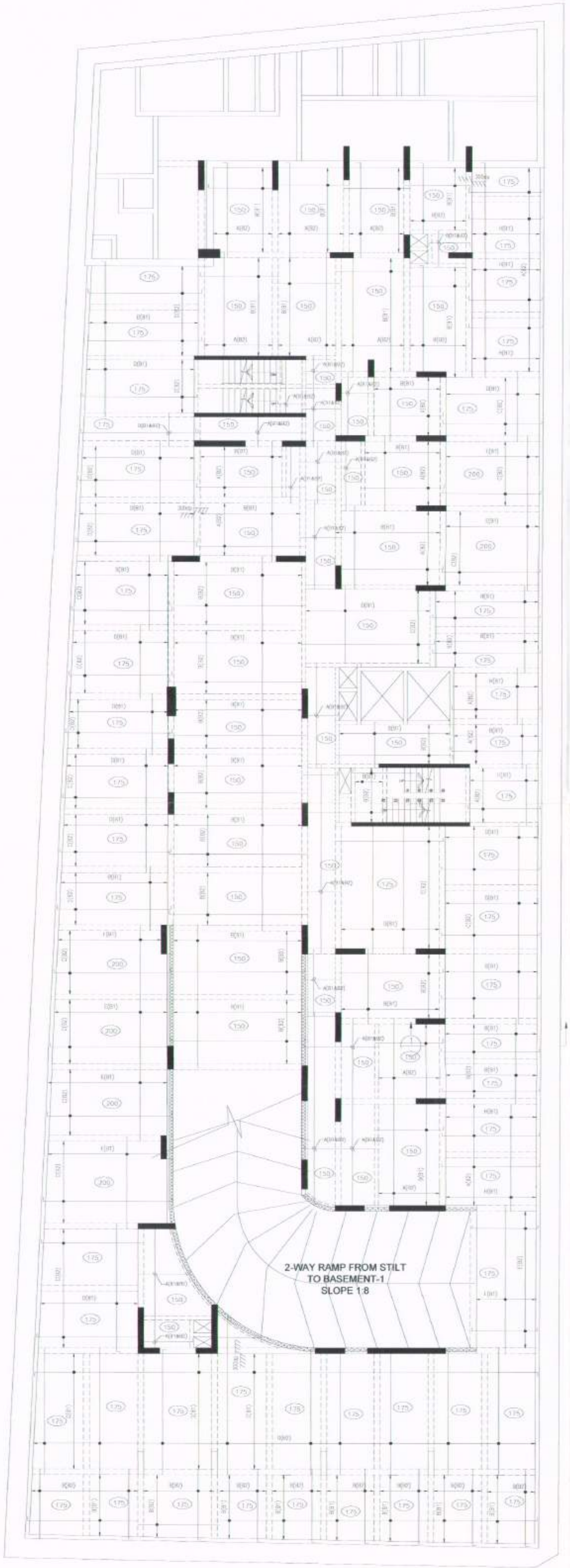
drawing title:

FIRST FLOOR SLAB REINFORCEMENT LAYOUT (TOP & BOTTOM)

scale	AS SHOWN	design by	TP
drawn by	KAK.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	RE1768_S-/SB/01/---/01	revision	-

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CAD FILE NAME: RE1768_S-SB01---01.dwg



STILT FLOOR SLAB REINFORCEMENT DETAILS (BOTTOM)
SCALE - 1:100

NOTES:

1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG. NO. BR1768_S-(M2)---(01)
3. FOR STANDARD DETAILS REFER TO DWG. NO. BR1768_S-(M2)---(01)
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS
5. CONCRETE GRADE: M30
   DESIGN MIX M30 WITH
   CEMENT CONTENT NOT LESS THAN 320 kg/Cum GRADE 43/53 OPC
   HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   PILE - M30 (CEMENTITIOUS CONTENT SHOULD BE 450kg/m³)
   PILE CAP - M35
   BASEMENT WALL, RAMP WALL - M30,
   COLUMN - M40, SLAB M40/ M45
   R.C. FLOOR, R.C. BEAMS, STAIRCASE - M30
   ALL OTHER CONCRETE MEMBERS - M25
7. STEEL GRADE: Fe500 CONFORMING TO IS:1786 2008
8. CLEAR COVER FOR PILE 300mm Ø-50mm, 500mm Ø & 750mm- 75mm,
   PILE CAP -75mm, COLUMN-40mm, SLAB MIN.- 25mm,
   SLAB -25mm, BEAM- 30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH ZONE FACTOR 0.16(ZONE III)MRF OBTAINED FROM ETABS AS PER THE CALCULATIONS AND AS IS:13920-2016
11. CONCRETE TO BE CONFORMED IN ACCORDANCE WITH IS:456-2000, NBC 2017-18(2) AND RELEVANT INDIAN CODE SPECIFICATIONS
12. HEAD OF CONSTRUCTION (OR) MPEI CONTRACTOR/ PROMOTER / BUILDER / OWNER

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR WALLS

NORTH POINT

NO.	AMENDMENTS	BY	DATE
	-	KMK	07/02/26

Client:

LANDSCAPE CONSULTANT :

PROJECT MANAGEMENT CONSULTANT :

ELECTRICAL / HVAC / FIRE / PHE CONSULTANT:

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Mobile: +91 99625 45630

NOTES:

GRADE OF STEEL: Fe 500 RESUAM GRADE FOR ALL STRUCTURAL ELEMENTS. BUT FOR SUBSTRUCTURE WHICH ARE IN CONTACT WITH GROUND WATER /SOIL SHALL BE PROVIDED WITH CRS GRADE. i.e. STILT WALL, BASEMENT WALL, BASEMENT SLAB, LIFT SHAFT, OHSR SLAB AND WALL, SKIN WALL, RETAINING SYSTEM SUCH AS SECANT PILE WALLS.

NOTES

1. ALL THE RC SLABS ARE TO BE 150mm THICK
2. GRADE OF CONCRETE M35
3. GRADE OF STEEL Fe550

REINFORCEMENT SCHEDULE

MARK	SIZE	SPACING
A	16	200
B	16	150
C	110	200
D	110	150
E	110	125
F	110	100
G	113	125
H	16	125

NOTES
* FOR CLARITY PURPOSE DISTRIBUTION BARS NOT SHOWN. ALL DISTRIBUTION BARS ARE @ 8E 16-200 (12 & 10) UNLESS OTHERWISE INDICATED

REFER FRAMING PLAN FOR SUNKEN DETAILS

BAR LAYING SEQUENCE



LEGEND:
TOP REINFORCEMENT



LEGEND:
BOTTOM REINFORCEMENT

Architects:

INDRAJIT.S.KEMBHAVI
CA/2000/26684,
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Civil & Structural Engineer:

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Chennai - 600 020. ☎044-2491 2754/5556,
e-Mail ID: buroindia@buroengineers.in

STRUCTURAL

project title:

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

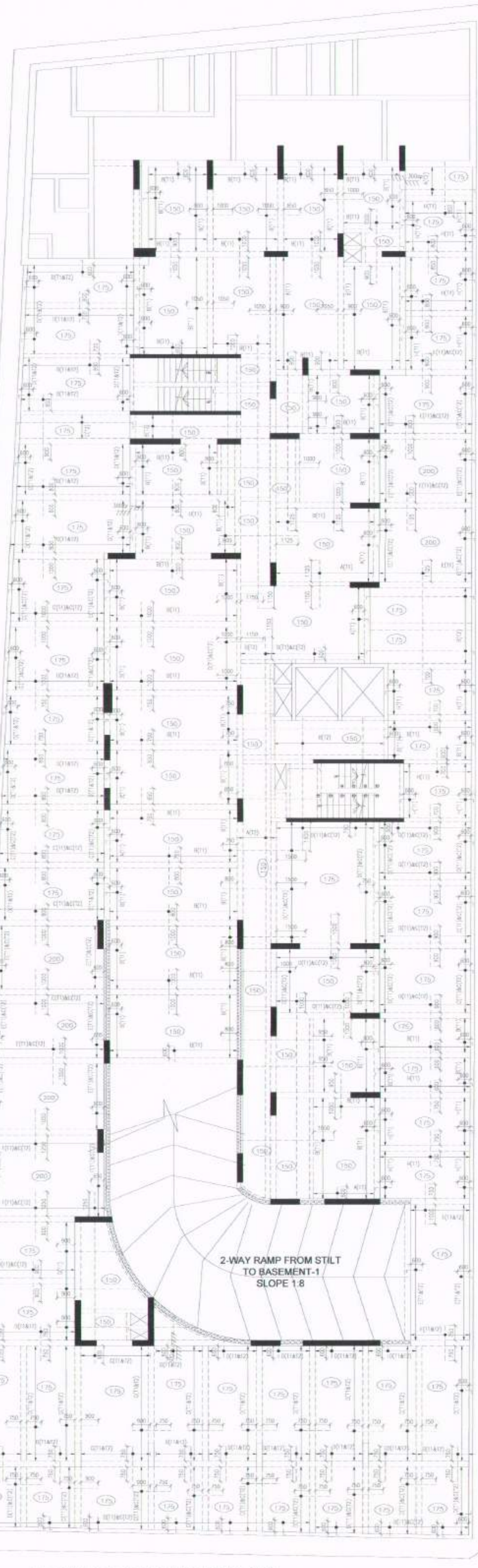
drawing title:

STILT FLOOR SLAB (BOTTOM) REINFORCEMENT DETAILS (SHEET 02 TO 02)

scale	AS SHOWN	design by	VP
drawn by	KMK/K	checked by	VP
date	DEC 2024	approved by	AP
drawing no.	BR1768_S /SB/S / /02		revision

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CAD FILE NAME: BR1768_S-SB---02.dwg



STILT FLOOR SLAB REINFORCEMENT DETAILS (TOP)

SCALE - 1:100

NOTES:

1. ALL DIMENSIONS ARE IN MM.
2. FOR GENERAL NOTES REFER TO DWG. NO. B1758_S_(N)/--/01.
3. FOR STANDARD DETAILS REFER TO DWG. NO. B1758_S_/SD/---/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT CONSULTS DRAWINGS.
5. CONCRETE GRADE: M35
   DESIGN MIX M35 MPA
   CEMENT CONTENT NOT LESS THAN 320 kg/Cum (OPC 43/53 GRD)
   HIGHER APPROVED ESTIMA MIX SHALL BE ADOPTED IN CONSTRUCTION.
6. GRADE OF CONCRETE USE
   PILE - M35 (STAR/HYSTEEL CONCRETE THREAD IN 4000kg/cm²)
   PILE CAP - M35.
   BASEMENT WALL, SLAB/SLAB-M35.
   COLUMN - M40, SHEAR WALL M40
   R.C. STAIRS, R.C. BEAMS, CANTILEVER - M35.
   ALL OTHER STRUCTURAL MEMBERS - M35
7. STEEL GRADE - FeE550 CONFORMING TO IS 1786: 2008
8. CLEAR COVER USE PILE 300mm-50mm, 600mm & 750mm-75mm,
   PILECAP-75mm, COLUMN-40mm, SHEAR WALL-30mm,
   SLAB-25mm, BEAM-30mm
9. UNLESS OTHERWISE SPECIFIED, REINFORCEMENT LENGTH SHALL BE @ LESS THAN 50 X DIA OF BAR
10. SEISMIC ZONE MAP, AS PER CONSIDERED AS PER IS 1893-2016 WITH 5% SEISMIC ZONE III, DUCTILE DETAILING CARRIED OUT AS PER THE SPECIFICATIONS MADE IN IS 13920-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH TNCDBR-2000, NBC 2017 CODE AND RELEVANT INDIAN CODE STIPULATIONS.
12. TAKE OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+MOOR USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS.

NORTH POINT

NO.	AMENDMENTS	BY	DATE
		KRM	07/02/26

Client:

LANDSCAPE CONSULTANT :

PROJECT MANAGEMENT CONSULTANT :

ELECTRICAL / HVAC / FIRE / PHE CONSULTANT:

Architects:

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CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer:

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Mobile: +91 99625 45630

NOTES:

GRADE OF STEEL: Fe 550 REGULAR GRADE FOR ALL STRUCTURAL ELEMENTS. BUT FOR SUPERSTRUCTURE WHICH ARE IN CONTACT WITH GROUND WATER /SOIL SHALL BE PROVIDED WITH CRS GRADE. i.e. FOR RAFT, BASEMENT WALL, BASEMENT SLABS, LIFT WELL'S AND SUMP AND WALL, SHEAR WALL, RETAINING SYSTEM SUCH AS SECANT PILE WALLS.

NOTES

1. ALL THE RC SLABS ARE TO BE 150mm THICK.
2. GRADE OF CONCRETE M35
3. GRADE OF STEEL Fe550

SLING DISCLOSURE SCHEDULE

MARK	SIZE	SPACING
A	T8	200
B	T8	150
C	T10	200
D	T10	150
E	T10	125
F	T10	100
G	T12	125
H	T8	135

NOTES:
* FOR CLARITY PURPOSE DISTRIBUTION BARS NOT SHOWN. ALL DISTRIBUTION BARS ARE TO BE 8-200 (T2 & B2) UNLESS OTHERWISE INDICATED

REFER FRAMING PLAN FOR SUNKEN DETAILS

BAR LAYING SEQUENCE

LEGEND:
—— TOP REINFORCEMENT

LEGEND:
—— BOTTOM REINFORCEMENT

STRUCTURAL

project title:

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

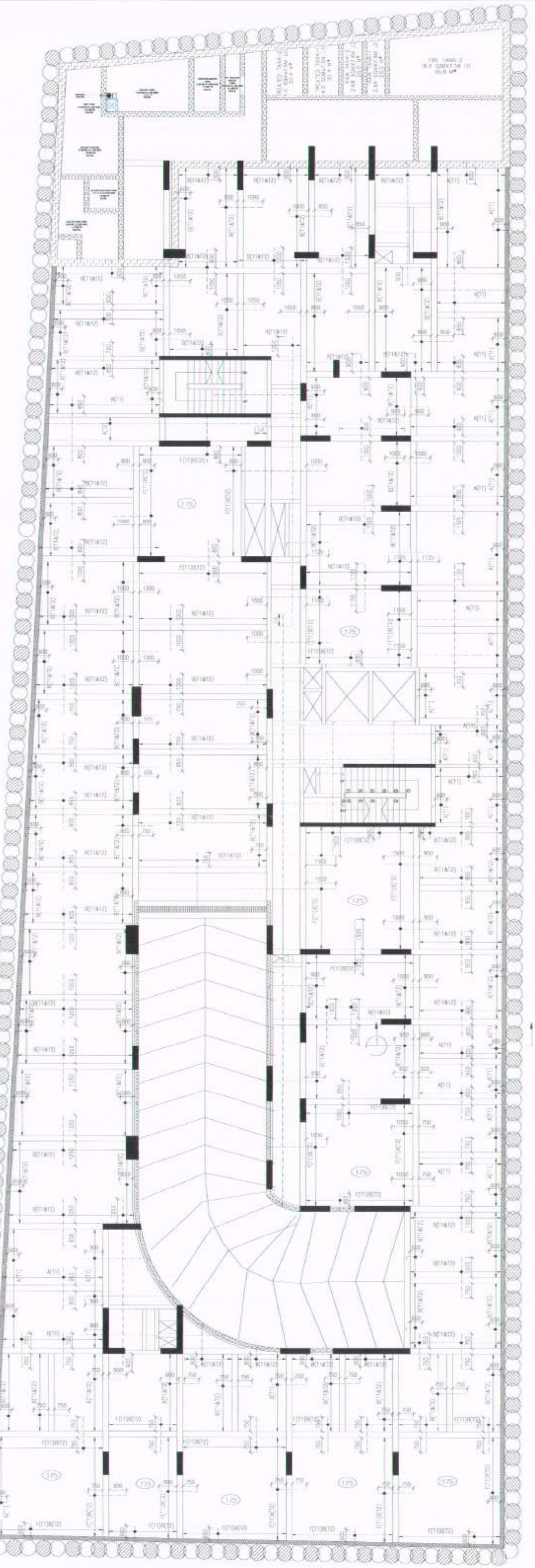
drawing title:

STILT FLOOR SLAB (TOP) REINFORCEMENT DETAILS (SHEET 01 TO 02)

scale	AS SHOWN	design by	TP
drawn by	KMK	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	B1758_S /SB/S/ -/01	revision	-

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CAD FILE NAME: B1758_S-SB-----01.dwg



BASEMENT - 1 FLOOR SLAB REINFORCEMENT DETAILS (TOP)

SCALE - 1:100

NOTES

1. ALL THE RC SLABS ARE TO BE 150mm THICK
2. GRADE OF CONCRETE M35
3. GRADE OF STEEL Fe500

NOTES:

1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG. NO. BE/768_S-/PLT---/01.
3. FOR STANDARD DETAILS REFER TO DWG. NO. BE/768_S-/SD/---/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT CONSULTANTS DRAWINGS.
5. CONCRETE GRADE: M35
   CEMENT MIN WCR: M30
   CEMENT CONTENT NOT LESS THAN 330 kg/Cum (GRADE 43/53 OPC)
   HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   PILE - M30 (DEMONSTRATE CUBE/CYL STRENGTH SHOULD BE 450kg/cm²)
   PILE CAP - M35
   BASEMENT WALL, RCWALL/SLAB: M35,
   COLUMN - M40, SHEAR WALL: M35
   R.C. SLABS, R.C. BEAMS, STAIRCASE - M35
   ALL OTHER STRUCTURAL MEMBERS - M30
7. STEEL GRADE: Fe500 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR PILE 500mm@ 65mm, 600mm@ & 750mm - 75mm,
   FOOTING - 75mm, COLUMN - 40mm, SHEAR WALL - 30mm,
   SLAB - 25mm, BEAM - 30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 D OR 600 MM
10. SEISMIC LOAD AND DETAILING CONFORMS TO IS:1893-2016 WITH ZONE III, SEISMIC ZONE III, SOIL TYPE II, DESIGN EARTHQUAKE ACCELERATION COEFFICIENT AS PER IS:1893-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC (PART-1&2) AND RELEVANT INDIAN CODE OF PRACTICE
12. ORDER OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+MOOR USING AAC BLOCKS 10N (80N) INTERIOR AND EXTERIOR FILLER WALLS.

NORTH POINT



NO.	AMENDMENTS	BY	DATE
R3	CLUBHOUSE PORTION ADDED	KMM	05/10/25
---	---	KMM	18/08/25

Client:

LANDSCAPE CONSULTANT :

PROJECT MANAGAMENT CONSULTANT :

ELECTRICAL / HVAC / FIRE / PHE CONSULTANT :

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer:

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Civil & Structural Consultants
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e-Mail ID: burcen@buroengineers.in

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E-Mail: perm@buroengineers.in
Mobile: +91 99625 46530

NOTES

GRADE OF STEEL: Fe 500 BI-POLAR GRADE FOR ALL STRUCTURAL ELEMENTS, BUT FOR SUBSTRUCTURE WHICH ARE IN CONTACT WITH GROUND WATER /SOIL SHALL BE PROVIDED WITH CRS GRADE i.e. FOR RAFT, BASEMENT WALL, BASEMENT SLAB, UG TANK'S (BOTTOM SLAB AND WALL), SKIN WALL, RETAINING SYSTEM SUCH AS SECANT PILE WALLS.

REINFORCEMENT SCHEDULE

MARK	SIZE	SPACING
A	T8	200
B	T8	150
C	T10	200
D	T10	150
E	T10	125
F	T8	100

NOTES:
FOR CLARITY PURPOSE DISTRIBUTION BARS NOT SHOWN, ALL DISTRIBUTION BARS ARE TO BE T8-200 (T) & (B) UNLESS OTHERWISE INDICATED

REFER FRAMING PLAN FOR SUNKEN DETAILS

BAR LAYING SEQUENCE



LEGEND:
——TOP REINFORCEMENT

LEGEND:
——BOTTOM REINFORCEMENT

STRUCTURAL

project title:

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR CAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

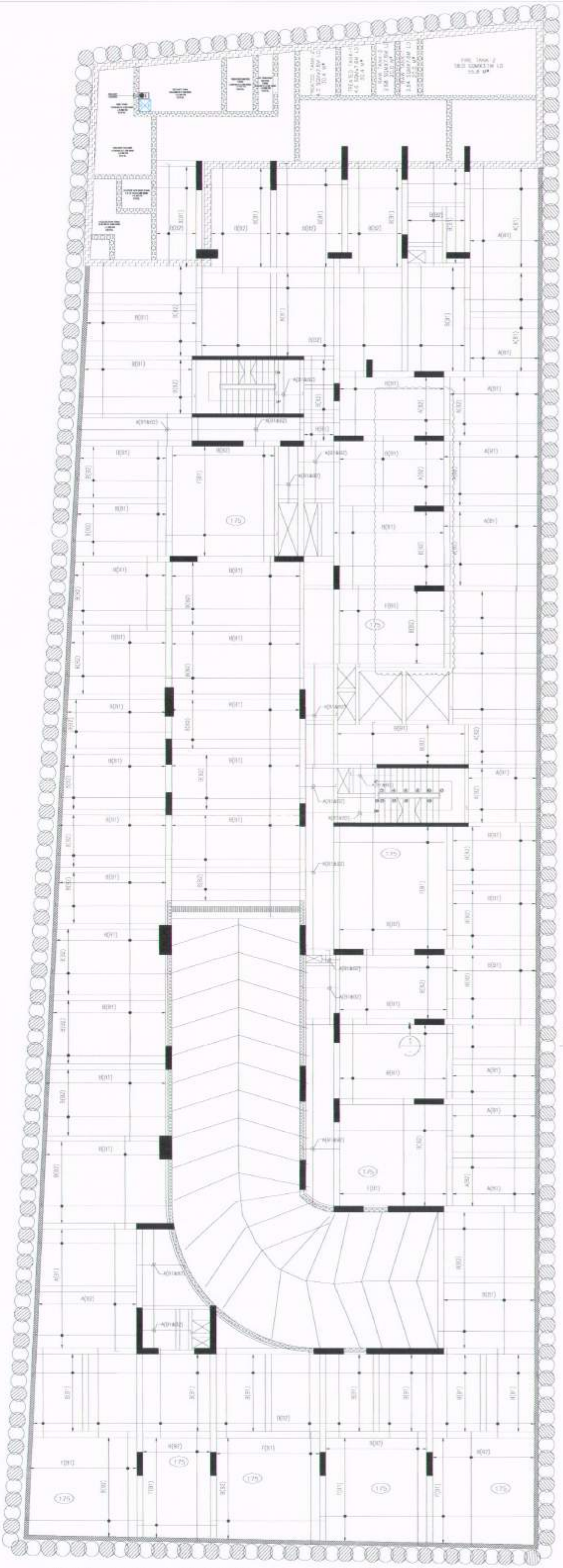
drawing title:

BASEMENT 1 FLOOR SLAB (TOP) REINFORCEMENT DETAILS (SHEET 01 TO 02)

scale	AS SHOWN	design by	TP
drawn by	KMM	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE/768_S-/SB/R1/---/01		revision R1

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DWG FILE NAME: BE/768_S-SB01---R01.dwg



BASEMENT-1 FLOOR FRAMING PLAN
BASEMENT-1FLOOR SLAB REINFORCEMENT DETAILS (BOTTOM)
SCALE - 1:100

NOTES
1. ALL THE RC SLABS ARE TO BE 150mm THICK.
2. GRADE OF CONCRETE M35
3. GRADE OF STEEL Fe500

NOTES:
1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG NO. BE1768_S-/AR/ -/01
3. FOR STANDARD DETAILS REFER TO DWG NO. BE1768_S-/SD/ -/01
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M35
DESIGN MIX M35 WITH
CEMENT CONTENT NOT LESS THAN 360 kg/Cum GRADE 43/53 (OPC)
HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION.
6. GRADE OF CONCRETE FOR
FOUNDATION - M25 (MINIMUM GRADE CONCRETE SHOULD BE 400kg/Cm.)
PILE CAP - M35
BASEMENT WALL, FRAME(SLAB-BEAM),
COLUMN - M40, SHEAR WALL-M40
R.C. SLABS, R.C. BEAMS, STAIRCASE - M35
ALL OTHER STRUCTURAL MEMBERS - M30
7. STEEL GRADE: Fe500 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR PILE 500mmø-70mm, 600mmø & 750mm-75mm,
PILECAP-75mm, COLUMN-40mm, SHEAR WALL-30mm,
SLAB-25mm, BEAM-30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE III. DUCTILE DETAILING CARRIED OUT AS PER THE STIPULATIONS MADE IN IS:13920-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH I.S.456: 2000, NBC (PART-VIII) AND RELEVANT INDIAN CODE SPECIFICATIONS
12. CHECK BY CONSTRUCTION (IT) AGENCY/CONTRACTOR/ PROMOTER / BUILDER / OWNER

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING RAFT BLOCKS FOR BOTH INTERIOR AND EXTERIOR FALLER WALLS.

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-	-	KAVI	07/03/25

Client:

LANDSCAPE CONSULTANT :

PROJECT MANAGMENT CONSULTANT :

ELECTRICAL / HVAC / FIRE / PHE CONSULTANT:

Architects

INDRAJIT S.KEMBHAVI
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Mobile: +91 99625 45630

NOTES:
GRADE OF STEEL: Fe 550 REGULAR GRADE FOR ALL STRUCTURAL ELEMENTS, BUT FOR SUBSTRACTIVE WHICH ARE IN CONTACT WITH GROUND WATER /SOIL SHALL BE PROVIDED WITH CRS (CORE
i.e FOR RAFT, BASEMENT WALL, BASEMENT FLOOR, OC TANK'S RAFT SUMP AND WALL, SHEAR WALL, RETAINING SYSTEM SUCH AS SCREW PILE WALLS.

REINFORCEMENT SCHEDULE

MARK	SIZE	SPACING
A	T8	200
B	T8	150
C	T10	200
D	T10	150
E	T10	125
F	T8	100

NOTICE
* FOR CLARITY PURPOSE DISTRIBUTION BARS NOT SHOWN. ALL DISTRIBUTION BARS ARE TO BE T8-200 (TOP & BOT) UNLESS OTHERWISE INDICATED

REFER FRAMING PLAN FOR SUNKEN DETAILS

BAR LAYING SEQUENCE

LEGEND:
——TOP REINFORCEMENT



LEGEND:
——BOTTOM REINFORCEMENT

STRUCTURAL

project title:

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

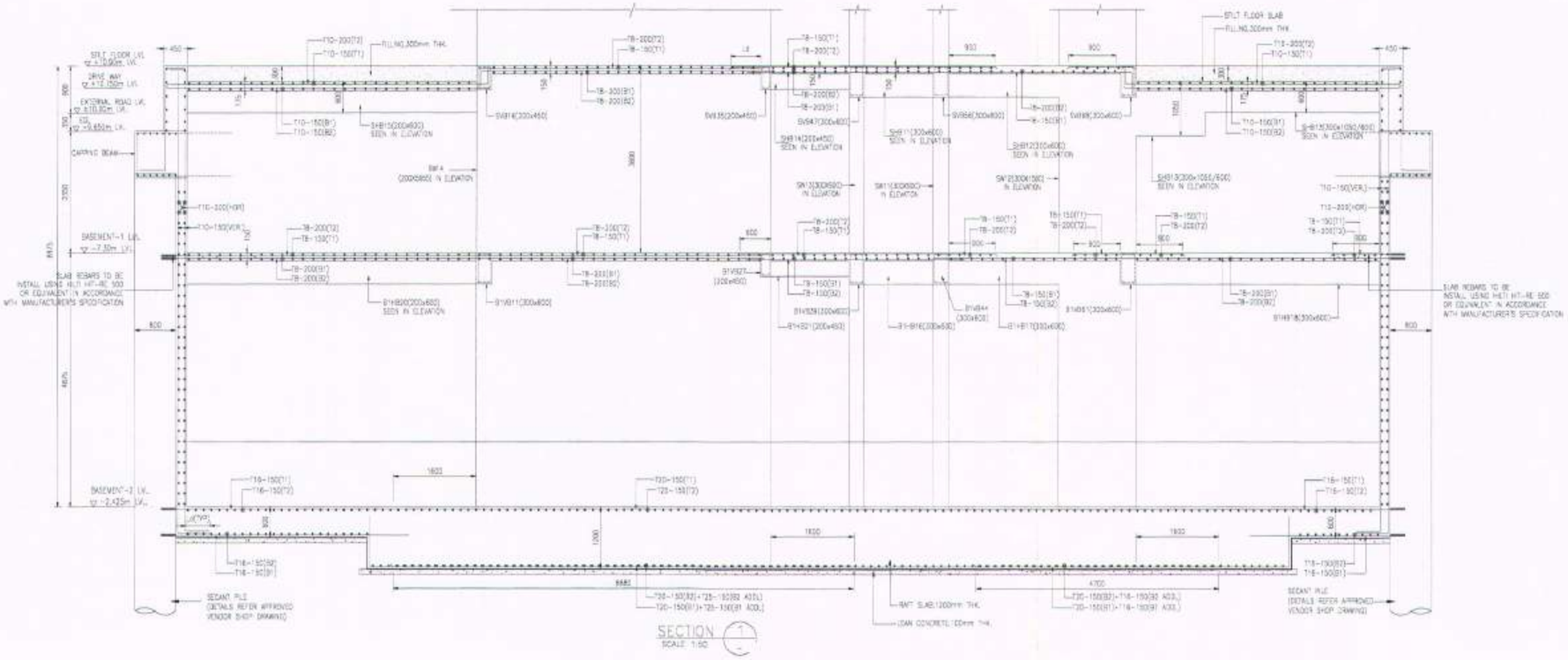
drawing title:

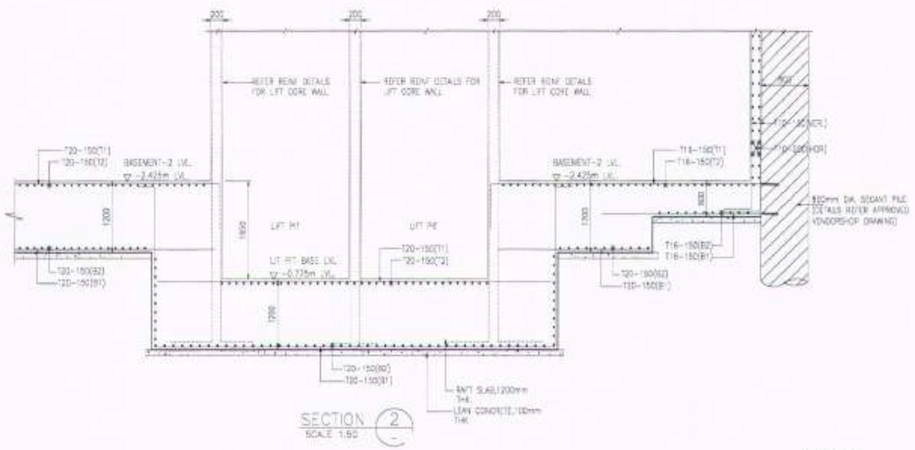
BASEMENT-1 FLOOR SLAB(BOTTOM) REINFORCEMENT DETAILS (SHEET 02 TO 02)

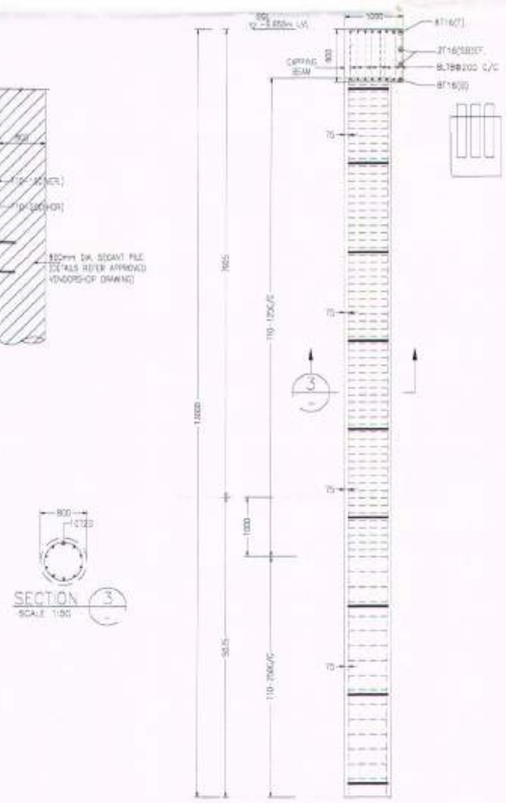
scale	AS SHOWN	design by	TP
drawn by	KAVI.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE1768_S-/SB/B1/ -/02		revision -

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CAD FILE NAME: BE1768_S SB01 02.dwg

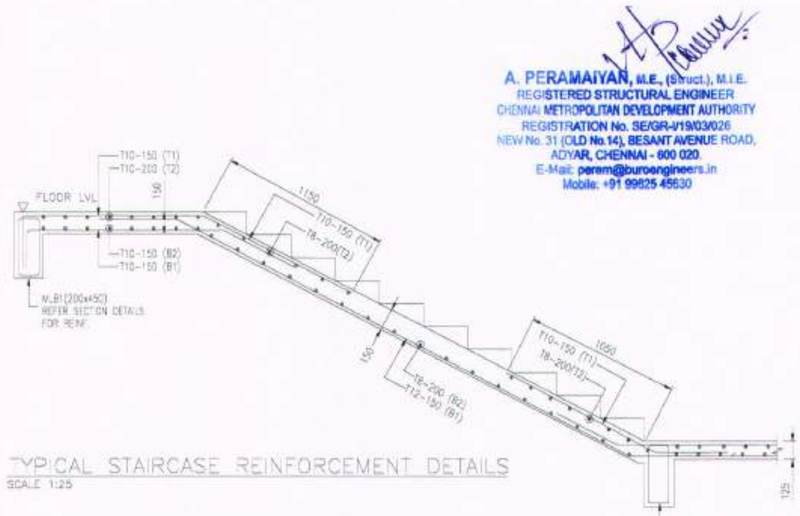






NOTES:

GRADE OF STEEL: Fe 550 REGULAR GRADE FOR ALL STRUCTURAL ELEMENTS, BUT FOR SUBTRACTIVE WHICH ARE IN CONTACT WITH GROUND WATER (SUCH SHALL BE PROVIDED WITH CRS GRADE i.e. FOR RAFT, BASEMENT WALL, BASEMENT SLAB, LIFT TANK'S INSIDE SLAB AND WALL, SKIN WALL, RETAINING SYSTEM SUCH AS SECANT PILE WALLS.



TYPICAL STAIRCASE REINFORCEMENT DETAILS
SCALE 1:25

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Mobile: +91 99625 45630

NOTES:
1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG NO. BE7BR_S-/XY/---/01.
3. FOR STANDARD DETAILS REFER TO DWG NO. BE7BR_S-/XY/---/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M30
   DESIGN MIX MIX WITH
   CEMENT CONTENT NOT LESS THAN 360 kg/Cum GRADE 43/53 SPEC
   HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   PILE - M30 (OSMOTHOUS CONTENT SHOULD BE 400kg/m³)
   PILE CAP - M30
   BASEMENT WALL, BEAM/SLAB - M35
   COLUMN - W40, SHEAR WALL- M40
   R.C. SLABS, R.C. BEAMS, STAIRCASE - M30
   ALL OTHER STRUCTURAL MEMBERS - M30
7. STEEL GRADE: Fe550 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR PILE 500mm⌀-50mm, 600mm⌀ & 750mm⌀-75mm,
   PILECAP-75mm, COLUMN-40mm, SHEAR WALL-30mm,
   SLAB-25mm, BEAM-30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/COVERAGE LENGTH SHALL NOT BE LESS THAN 50 ⌀ OR 24" OF BAR.
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE III, DUCTILE DETAILING CARRIED OUT AS PER THE STIPULATIONS MADE IN IS:13920-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH LATEST BIS, NBC (SP7-1983) AND RELEVANT FIRE CODE STIPULATIONS
12. BASIS OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-	-	KAV	07/02/26

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26884,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer :

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Civil & Structural Consultants
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Chennai - 600 020. 4044-2491 2784/85/86.
e-Mail ID: buroindia@buroengineers.in

STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

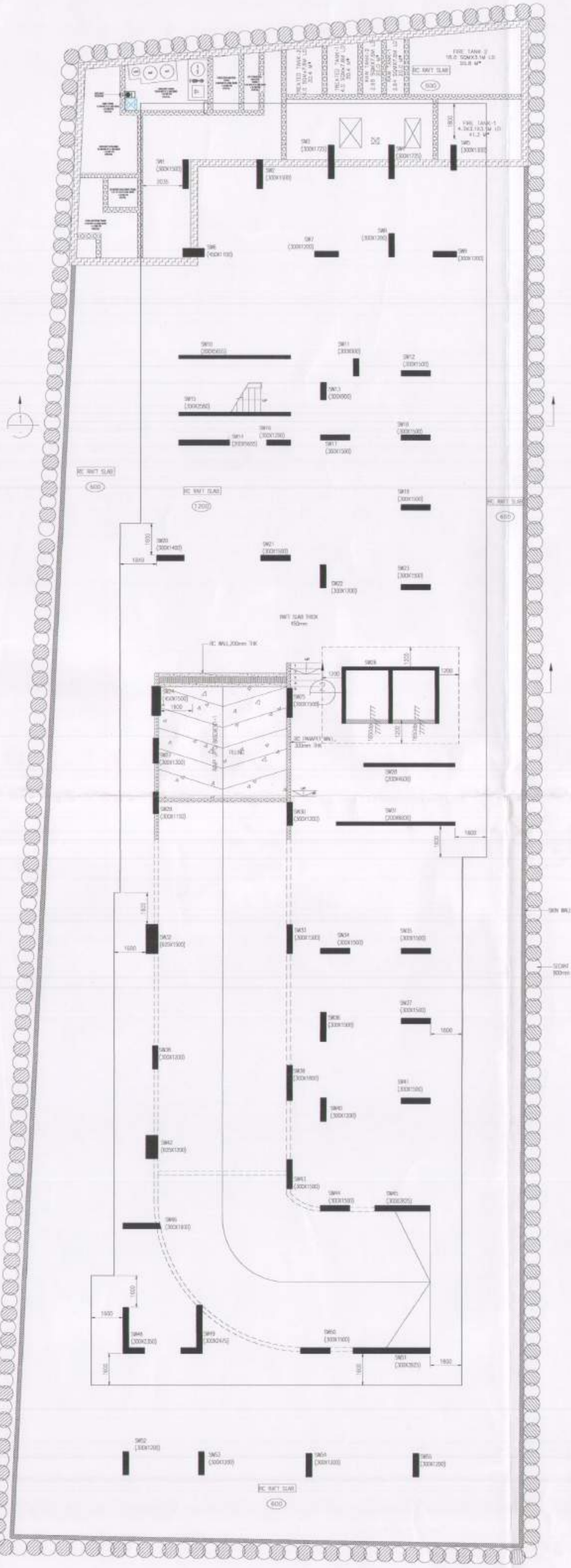
drawing title

FOUNDATION SECTION REINFORCEMENT DETAILS (SHEET 02 OF 02)

scale	AS SHOWN	design by	TP
drawn by	KAVI.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE7BR_S-/YT/01/---/02		revision -

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CAD FILE NAME: BE7BR_S-YT01---02_.dwg



BASEMENT-2 RAFT FOUNDATION PLAN
SCALE :- 1:100

NOTES:

1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG. NO. BE1768_S-/FP/GT/---/01.
3. FOR STANDARD DETAILS REFER TO DWG NO. BE1768_S-/SD/---/01.
4. THIS DRAWING TO BE READ IN COALESCENCE WITH THE KEY PLAN, ARCHITECTURAL AND M.E. OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M35
   DESIGN MIX M35 WITH
   CEMENT CONTENT NOT LESS THAN 350 kg/Cum. GRADE 43/53 OPC
   HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   PILE :- M35 (CEMENTITIOUS CONTENT SHOULD BE 400kg/m³)
   PILE CAP :- M35
   BASEMENT WALL, BEAM/SLAB:-M35,
   COLUMN :- M40, SHEAR WALL: M40
   R.C. SLABS, R.C. BEAMS, STAIRCASE :- M35
   ALL OTHER STRUCTURAL MEMBERS :- M35
7. STEEL GRADE:- Fe500 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR PILE 600mm dia -50mm, 450mm dia & 750mm dia -75mm,
   PILE CAP:-75mm, COLUMN-40mm, SHEAR WALL:-35mm,
   SLAB-25mm, BEAM-30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE III, SOFTSOIL DESIGNS CARRIED OUT AS PER THE STIPULATIONS MADE IN IS:1893-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC (SP7-1983), AND RELEVANT INDIAN CODE STIPULATIONS.
12. DAILY QC CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / DEALER / OWNER.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS.

NORTH POINT

—		KAV.	07/03/25
NO.	AMENDMENTS	BY	DATE

Client:

LANDSCAPE CONSULTANT :

PROJECT MANAGAMENT CONSULTANT :

ELECTRICAL / HVAC / FIRE / PHE CONSULTANT:

Architects

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CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer:

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ADYAR, CHENNAI - 600 020.
E-Mail: peramm@buroengineers.in
Mobile: +91 99625 45630

NOTES

UNLESS OTHERWISE SPECIFIED

1. GRADE OF CONCRETE M35
2. GRADE OF STEEL Fe500
3. ALL THE RC WALL THICKNESS ARE TO BE 200mm
4. APPROVED WATERPROOFING SHALL BE APPLIED FOR BOTH THE BASE SLAB/RAFT, THE TYPE WATERPROOFING CAN BE OF HDPE MEMBRANE FOR THE BASE AND FOR THE SKIN WALL IT CAN BE A INTEGRAL WATERPROOFING

NOTES:

GRADE OF STEEL: Fe 550 REGULAR GRADE FOR ALL STRUCTURAL ELEMENTS, BUT FOR SUBSTRUCTURE WHICH ARE IN CONTACT WITH GROUND WATER /SOIL SHALL BE PROVIDED WITH CRS GRADE i.e. FOR RAFT, BASEMENT WALL, BASEMENT SLABS, UG TANK'S BASE SLAB AND WALL, SKIN WALL, RETAINING SYSTEM SUCH AS SECANT PILE WALLS.

200mm THICKNESS BASEMENT RC WALL

350mm THICKNESS STP AND SUMP OUTER WALLS

300mm THICKNESS STP AND SUMP INNER SIDE WALLS

200mm THICKNESS RAMP PARAPET RC WALL

—

STRUCTURAL

project title:

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

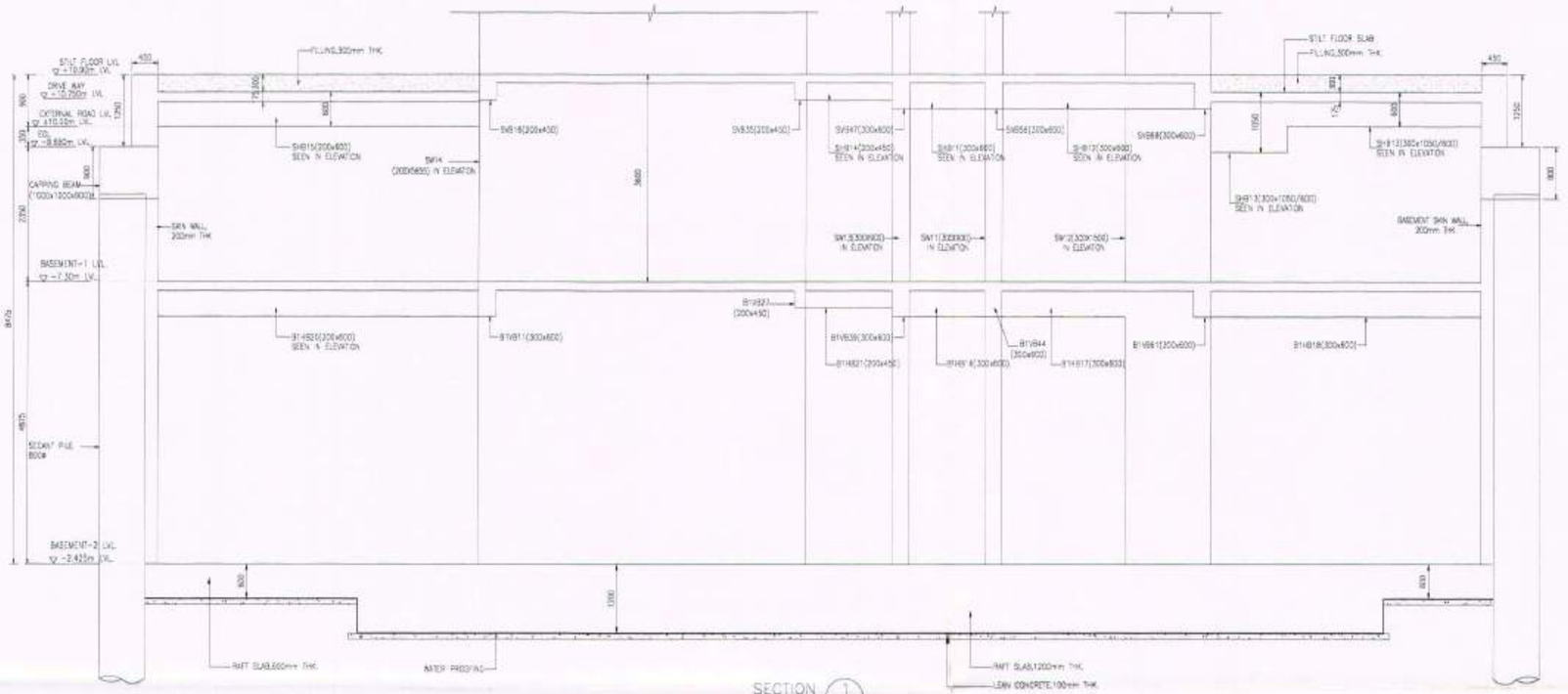
drawing title:

RAFT FOUNDATION LAYOUT (SHEET 01 OF 02)

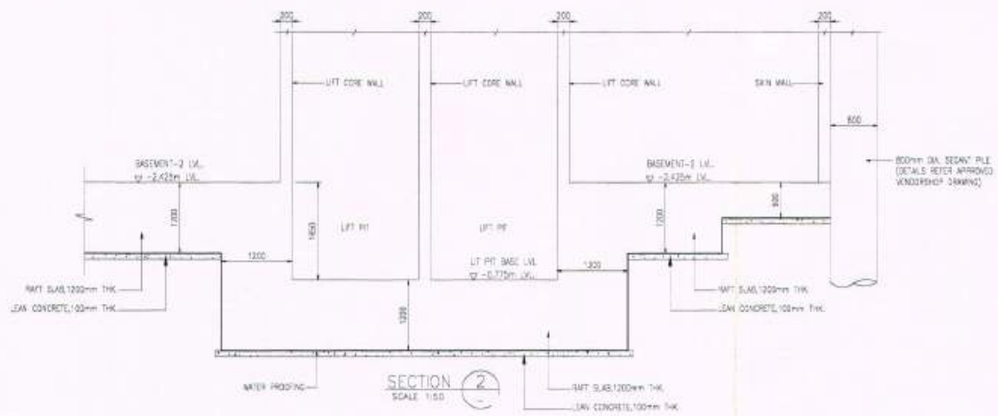
scale	AS SHOWN	design by	TP
drawn by	KAV.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE1768_S-/FP/FT/---/01		revision —

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CAD FILE NAME: BE1768_S-FPFT---01.dwg



SECTION 1
SCALE 1:50



SECTION 2
SCALE 1:50

NOTES:

GRADE OF STEEL: Fe 550 (FOR BAR GRADE FOR ALL STRUCTURAL ELEMENTS BUT FOR SUBSTRUCTRE WHICH ARE IN CONTACT WITH GROUND WATER /SOIL SHALL BE PROVIDED WITH CRS GRADE i.e. FOR RAFT, BASEMENT WALL, BASEMENT SLAB, UG TANK'S BASE SLAB AND WALL, SKIN WALL, RETAINING SYSTEM SUCH AS SECANT PILE WALLS.

NOTES:

1. ALL DIMENSIONS ARE IN MM
2. FOR GENERAL NOTES REFER TO DWG NO. BE768_S-/NT/--/01.
3. FOR STANDARD DETAILS REFER TO DWG NO. BE768_S-/STD/--/01.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE KEY PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M30
   EXCEPT M35 WHERE WITH CEMENT CONTENT NOT LESS THAN 360 kg/Cum GRADE 43/53 (OPC) HOWEVER APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR
   PILE - M30 (CEMENTITIOUS CONTENT SHOULD BE 400kg/m³)
   PILE CAP - M35
   SEGMENT WALL, BEAM/SLAB-M35,
   COLUMN - M40, SHEAR WALL-M40
   RCC SLABS, R.C. BEAMS, STAIRCASE - M30.
   ALL OTHER STRUCTURAL MEMBERS - M30
7. STEEL GRADE: Fe500 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR PILE 500mm-50mm, 600mm & 750mm-75mm.
   PILECAP-75mm, COLUMN-40mm, SHEAR WALL-50mm,
   SLAB-25mm, BEAM-25mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE IV, DUCTILE DETAILING EMPLOYED CLT AS PER THE STIPULATIONS MADE IN IS:13920-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH IS:456-2000, NBC (2016) AND RELEVANT INDIAN CODE STIPULATIONS
12. ONUS OF CONSTRUCTION LIES WITH CONTRACTOR/ PROMOTER / BUILDER / OWNER.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT(1)+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-	-	KAVI	07/02/26

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

P+E&FIRE Consultant :

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26684,
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—

STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

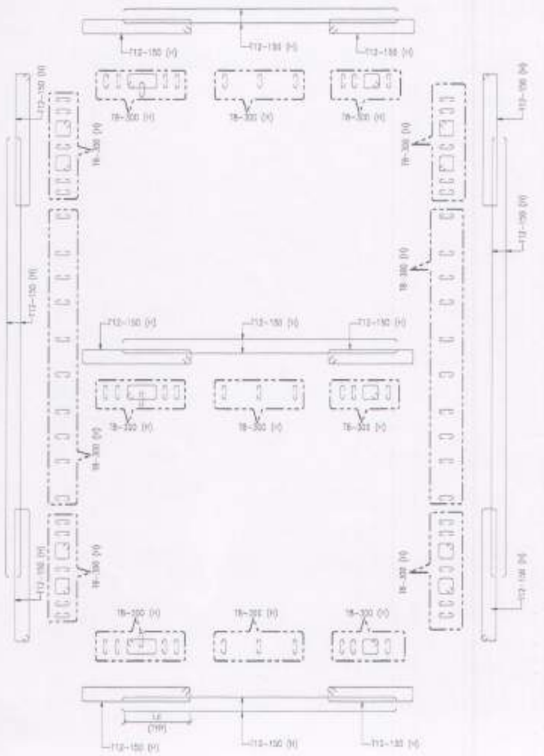
drawing title

RAFT FOUNDATION SECTION DETAILS (SHEET 02 OF 02)

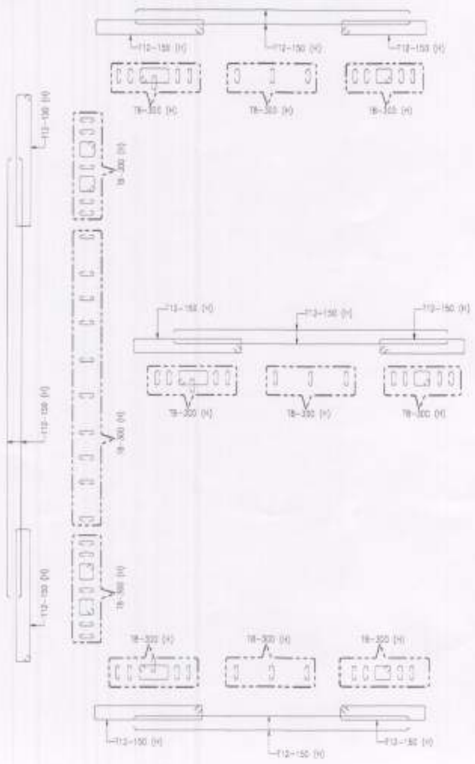
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drawn by	KAVI.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE768_S-/FP/TT/--/02		revision -

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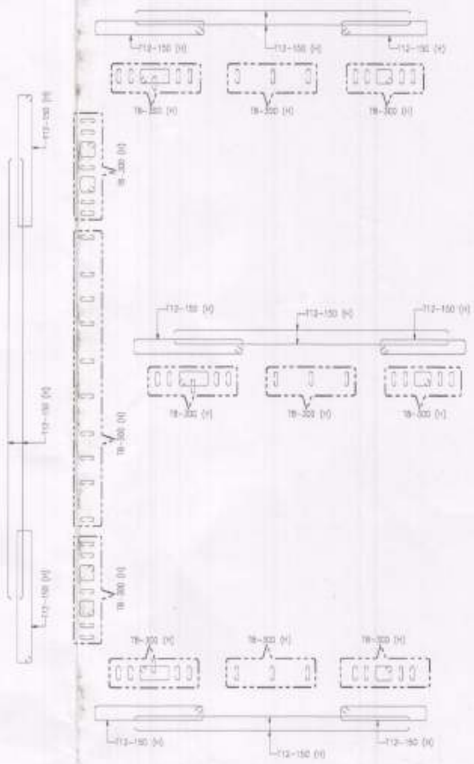
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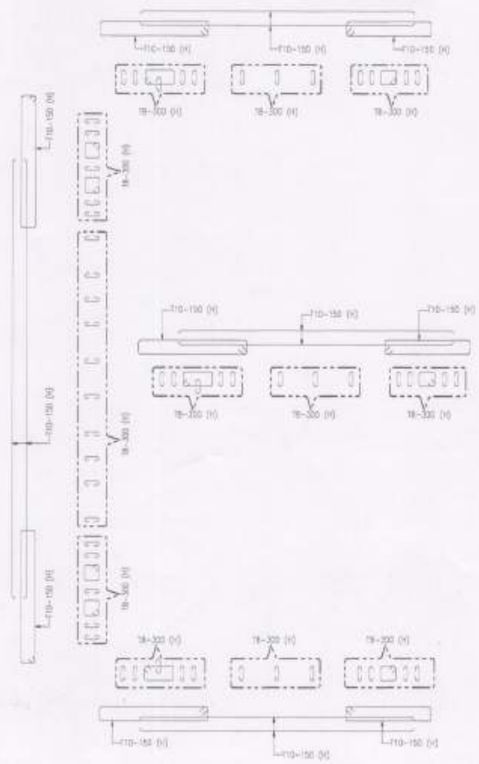
SW26 – CORE WALL HORIZONTAL REINFT. DETAILS
FROM FOUNDATION TO STILT FLOOR
SCALE 1:25



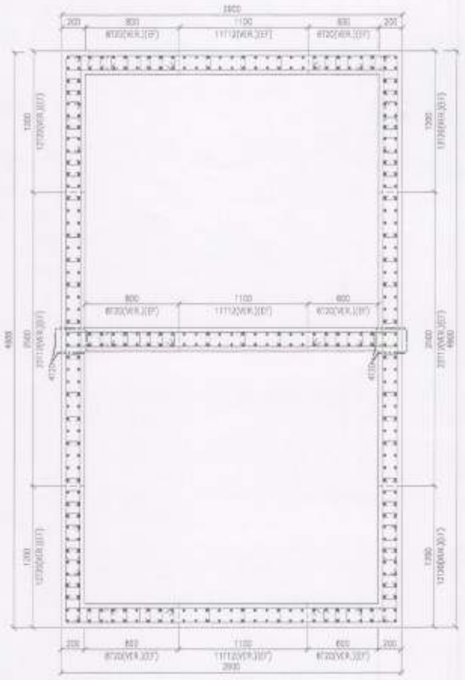
SW26 – CORE WALL HORIZONTAL REINFT. DETAILS
FROM STILT FLOOR LVL TO 3rd FLOOR LVL
SCALE 1:25



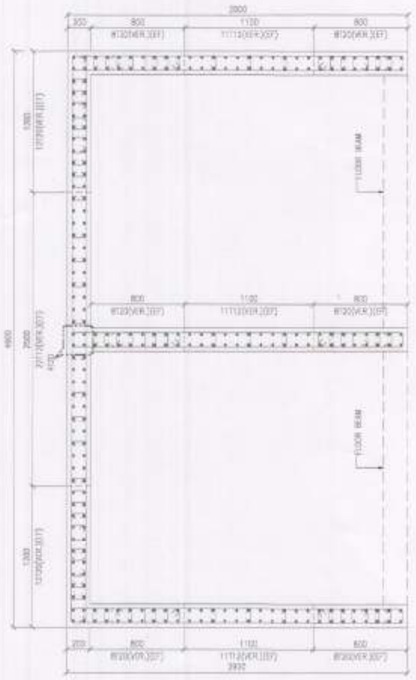
SW26 – CORE WALL HORIZONTAL REINFT. DETAILS
FROM 3rd FLOOR LVL TO 5th FLOOR LVL
SCALE 1:25



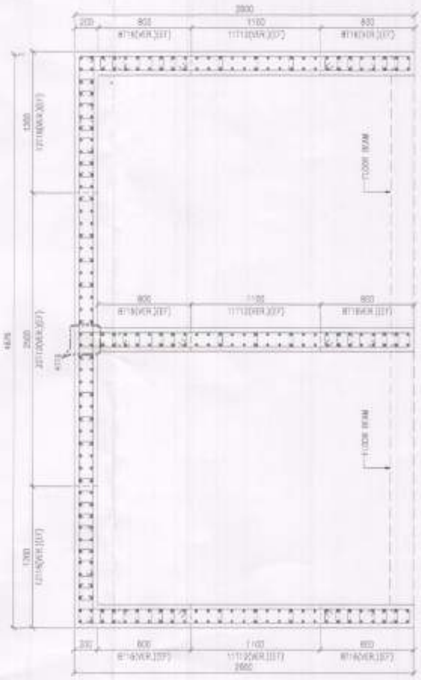
SW26 – CORE WALL HORIZONTAL REINFT. DETAILS
FROM 5th FLOOR LVL TO ROOF LVL
SCALE 1:25



SW26 – CORE WALL VERTICAL REINFT. DETAILS
FROM FOUNDATION TO STILT FLOOR
SCALE 1:25



SW26 – CORE WALL VERTICAL REINFT. DETAILS
FROM STILT FLOOR LVL TO 3rd FLOOR LVL
SCALE 1:25



SW26 – CORE WALL VERTICAL REINFT. DETAILS
FROM 3rd FLOOR LVL TO 5th FLOOR LVL
SCALE 1:25



SW26 – CORE WALL VERTICAL REINFT. DETAILS
FROM 5th FLOOR LVL TO ROOF LVL
SCALE 1:25

NOTES:
1. ALL DIMENSIONS ARE IN MM.
2. FOR GENERAL NOTES REFER TO DWG. NO. BE768_S-/01/---/01.
3. FOR STANDARD DETAILS REFER TO DWG. NO. BE768_S-/02/---/01.
4. THIS DRAWING TO BE READ IN COLLABORATION WITH THE <01> PLAN, ARCHITECTURAL AND ALL OTHER RELEVANT SERVICES DRAWINGS.
5. CONCRETE GRADE: M30
[MIXES MIX M30 BY:
DENSIFIX CONTENT NOT LESS THAN 350 kg/Cum GRADE 43/53 OPC)
HONGKON APPROVED DESIGN MIX SHALL BE ADOPTED IN CONSTRUCTION
6. GRADE OF CONCRETE FOR :
PILE – M30 (CHARACTERISTIC CONTENT SHOULD BE 40MPa/m²)
PILE CAP – M30
BASEMENT WALL, RAMP/SLAB-M30,
COLUMN – M40, RETAIN WALL– M40
R.C. SLABS, R.C. BEAMS, STAIRCASE – M30
ALL OTHER STRUCTURAL MEMBERS – M30
7. STEEL GRADE: Fe500 CONFORMING TO IS:1786-2008.
8. CLEAR COVER FOR PILE 300mm@-50mm, 800mm@ & 750mm-75mm.
PILECAP-75mm, COLUMN-40mm, RETAIN WALL-50mm,
SLAB-20mm, BEAM-30mm
9. UNLESS OTHERWISE SPECIFIED, LAP/DEVELOPMENT LENGTH SHALL NOT BE LESS THAN 50 X DIA OF BAR
10. SEISMIC LOAD HAS BEEN CONSIDERED AS PER IS:1893-2016 WITH THE SEISMIC ZONE III. DUCTILE DETAILING CARRIED OUT AS PER THE STIPULATIONS MADE IN IS:13920-2016
11. STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH I.S.456-2000, NBC 2007-2883 AND RELEVANT INDIAN CODE STIPULATIONS
12. DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS AND ALL OTHER RELEVANT SERVICES DRAWINGS.

FOUNDATION AND COLUMN DESIGNED FOR BASEMENT+1+STILT+11 FLOORS+ROOF USING AAC BLOCKS FOR BOTH INTERIOR AND EXTERIOR FILLER WALLS

NORTH POINT

NO.	AMENDMENTS	BY	DATE
-		KAVI.K	01/03/24

Client :

Project Managers & Quantity Surveyors :

ELECTRICAL Consultant :

HVAC Consultant :

PHE&FIRE Consultant :

Architects

INDRAJIT.S.KEMBHAVI
CA/2000/26684,
BCC/BL-3.6/A-2569/14-15

Civil & Structural Engineer :

BURO ENGINEERS (I) PRIVATE LTD.
Civil & Structural Consultants
New No. 31, Old No. 14, Besant Avenue, Adyar,
Chennai - 600 020. 2044-2491 2754/2058.
e-Mail ID: burolndia@buroengineers.in

STRUCTURAL

project title

PLAN SHOWING THE PROPOSED CONSTRUCTION OF EXTENDED BASEMENT FLOOR + STILT FLOOR + 11 FLOORS (INDOOR GAMES,MULTI-PURPOSE HALL & GYM @ 1st FLOOR LVL) RESIDENTIAL BUILDING WITH 74 DWELLING UNITS (WITH HEIGHT 36.00m) AT LATTICE BRIDGE ROAD, THIRUVANMAIYUR, CHENNAI AND COMPRISED IN T.S. NO. 71, BLOCK NO. 11 OF THIRUVANMAIYUR VILLAGE, VELACHERRY TALUK AND WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION.

drawing title

CORE WALL DETAILS

scale	AS SHOWN	design by	TP
drawn by	KAVI.K	checked by	TP
date	DEC 2024	approved by	AP
drawing no.	BE768_S-/CW/0"/---/01	revision	-

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DXF FILE NAME: BE768_S-DRSF---01_.dwg

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
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Chennai 600 097, India
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Prepared from the registers named on the page each finding sits on. Where a register could not be read, this document says so in its place rather than leaving the gap to be read as a clean result.