

**STRUCTURAL DRAWING**

**PROPOSED CP+G+2 RESIDENTIAL BUILDING PLAN  
AT PLOT NO -130 , BLOCK - EC, SECTOR -I , SALT  
LAKE CITY , KOLKATA - 700 064.**

**CERTIFICATE OF OWNER**

CERTIFIED THAT I SHALL NOT ON LATER DATE MAKE ANY ADDITION OR ALTERATION TO THIS PLAN SO AS TO CONVERT IT FOR MY USE OR ALLOW IT TO BE USED FOR TWO SEPARATE FLATS PER FLOOR OR PER STOREY.  
CERTIFIED THAT I HAVE GONE THROUGH THE BUILDING RULES FOR BIDHAN NAGAR AND ALSO UNDERTAKE TO ABIDE BY THOSE RULES DURING AND AFTER THE CONSTRUCTION OF THE BUILDING.

✓ *Ravindra Kumar Chopra*  
✓ *Brendra Kumar Chopra*

**SIGNATURE OF OWNER**

**CERTIFICATE OF ENGG. & ARCH.**

CERTIFIED THAT THE FOUNDATION AND SUPERSTRUCTURE OF THE BUILDING HAS BEEN SO DESIGNED BY ME/US AS TO BE SAFE IN ALL RESPECT INCLUDING THE CONSIDERATION OF BEARING CAPACITY AND SETTLEMENT OF SOIL.  
CERTIFIED THAT THE PLAN HAS BEEN DESIGNED AND DRAWN UP STRICTLY ACCORDING TO THE BUILDING RULES FOR BIDHAN NAGAR.

**SIGNATURE OF L. B. S.**

**SIGNATURE OF ENGINEER**

**NOTES :-**

- ALL DIMENSIONS ARE IN MM.
- ALL REINFORCEMENT ARE Fe500 (HYSD) GRADE AS PER I.S.
- ALL BRICK WORK IN 1:4 CEMENT MORTAR WITH GOOD QUALITY PICKED BRICKS.
- ALL R.C.C. WORK SHALL BE GRADE M20 & MIX NOT LEANER THAN 1:1.5:3
- LAPS & ANCHORAGE OF REINF. 50 TIMES DIA OF BARS.
- CLEAR COVER TO MAIN REINF. (a) FOR = 50 MM. (b) BEAM = 25 MM. (c) COLUMN = 40 MM. (d) SLAB = 20 MM
- THIS DWG. SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS.

**SCHEDULE OF TIE BEAM (CONC. GRADE - M20)**

S.L. BEAM NO. MKD	BEAM SIZE	ALTH. TOP	ALTH. BOTTOM	EXTRA REINFORCEMENT			STIRRUPS	
				CONT.(T)	MID SPAN. (B)	DISCONT. EDGE.(T)		
1.	TB1	250 X 400	2 - 16 #	2 - 16 #	1 - 16 #	----	1 - 16 #	2L-8@150C (SUPP) 2L-8@175C (SPAN)
2.	TB2	250 X 400	2 - 16 #	2 - 16 #	1-16#+1-12#	----	1-16#+1-12#	2L-8@150C (SUPP) 2L-8@175C (SPAN)
3.	TB3	250 X 450	3 - 16 #	3 - 16 #	2 - 16 #	----	2 - 16 #	2L-8@150C (SUPP) 2L-8@175C (SPAN)

**SCHEDULE OF FLOOR BEAMS (CONC. GRADE - M20)**

BEAM MKD.	SIZE	ALL THROUGH REINFORCEMENT		EXTRA REINFORCEMENT			STIRRUPS	
		TOP	BOTTOM	CONTINUOUS SUPPORT. (TOP)	MIDDLE SPAN. (B)	DISCONTINUOUS SUPPORT (TOP)	SUPPORT	MIDDLE SPAN
B1	250x500	3 - 16 dia	3 - 16 dia	2 - 16 dia	----	2 - 16 dia	2L-8 dia @150 C/C	2L-8 dia @175 C/C
B2	250x500	3 - 16 dia	3 - 16 dia	1-20 dia + 1-16 dia	----	2-16 dia	2L-8 dia @125 C/C	2L-8 dia @150 C/C
B3	250x500	3 - 16 dia	3 - 16 dia	2 - 20 dia	1-16 dia + 1-12dia	1-20 dia + 1-16 dia	2L-8 dia @125 C/C	2L-8 dia @150 C/C
B4	250x500	3 - 16 dia	3 - 16 dia	2-20 dia + 1-16 dia	1-16 dia + 1-12dia	2 - 20 dia	2L-8 dia @125 C/C	2L-8 dia @150 C/C
B5	250x500	3 - 16 dia	3 - 16 dia	----	----	2 - 16 dia	2L-8 dia @125 C/C	2L-8 dia @150 C/C
LB	250x500	3 - 20 dia	3 - 20 dia	----	----	----	2L-8 dia @150 C/C	2L-8 dia @175 C/C

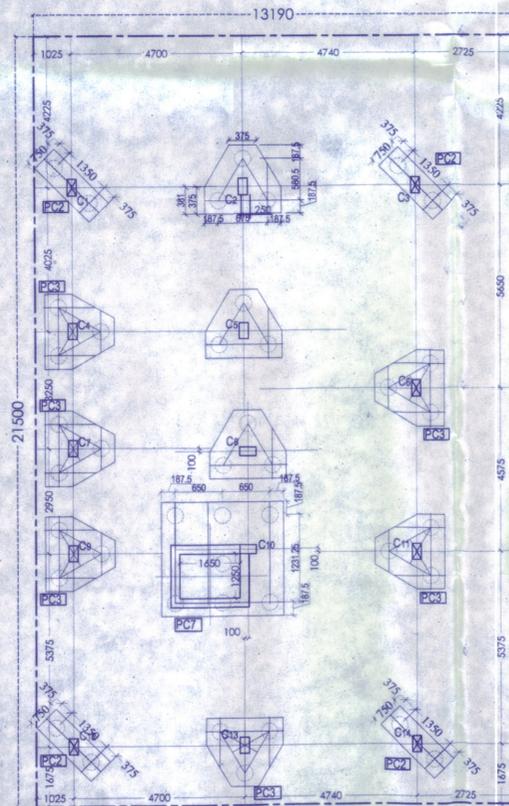
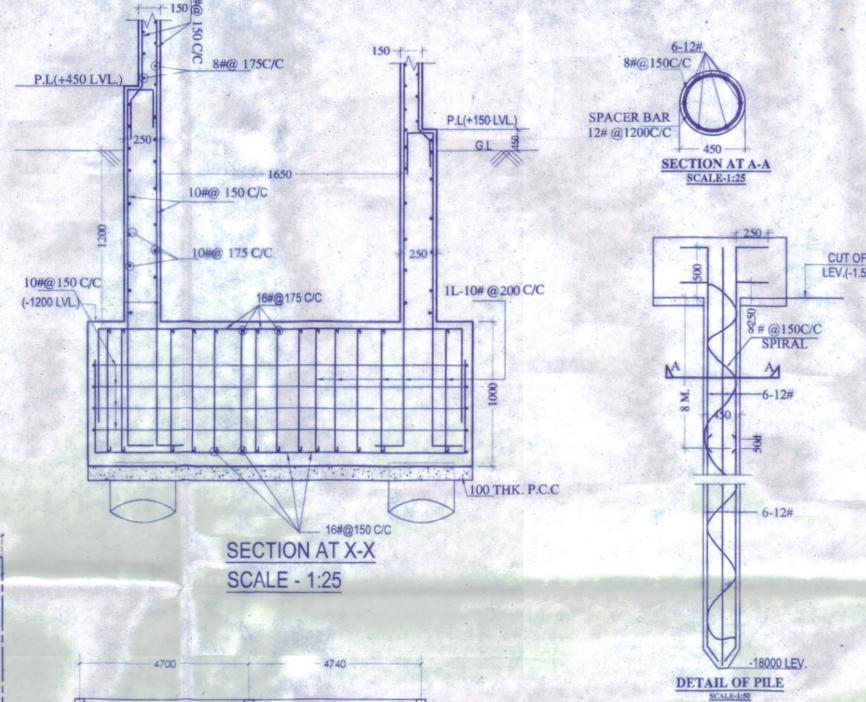
**SCHEDULE OF SLABS (CONC. GRADE - M20)**

SLAB MKD.	SLAB THICK.	REINFORCEMENT				EXTRA STEEL AT TOP	
		ALONG SHORTER SPAN	ALONG LONGER SPAN	ALONG SHORTER SPAN	ALONG LONGER SPAN	ALONG SHORTER SPAN	ALONG LONGER SPAN
S1	125	8 dia @ 150 C/C	8 dia @ 150 C/C	8 dia @ 125 C/C	8 dia @ 125 C/C	----	----
S2	115	8 dia @ 150 C/C	8 dia @ 150 C/C	8 dia @ 150 C/C	8 dia @ 150 C/C	----	----
WAIST SLAB	150	12 dia @ 150 C/C		BINDER - 8 dia @ 150 C/C		----	----
BINDER	----	8 dia @ 200 C/C (AT TOP)		----		----	----

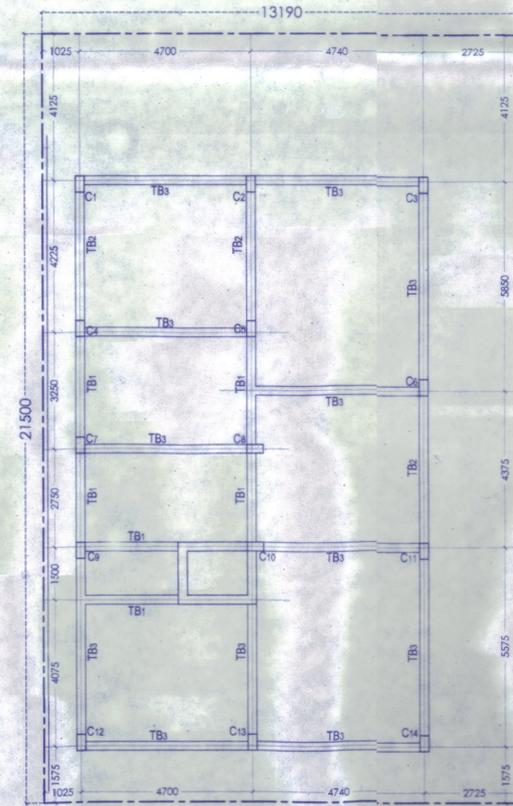
- PILE DIA = 450mm.
- PILE SHAFT LENGTH = 18.0 m.
- CAPACITY OF PILE = 26 T
- CLEAR COVER = 50 MM
- TOTAL NO. OF PILE = 51 NOS
- CUT OFF LENGTH = 1.5 m.

**SCHEDULE OF PILE CAPS (CONC. GRADE-M25, Steel Grade-Fe500 (HYSD))**

Pile Cap Mkd	No. Of Piles	Tot.No Of Similar,Cap	Depth	Bottom Steel		Top Steel		Stirrups	Side face bar
				Longer Span	Shorter Span	Longer Span	Shorter Span		
PC2	2	1	900	7-20#	----	7-16#	----	4L-10#@200 C/C	12# @150 C/C
PC3	3	5	900	16# @125C/C	16# @125C/C	12# @125C/C	12# @125C/C	----	12# @150 C/C
PC7	5	2	1000	20# @100C/C	20# @100C/C	12# @100C/C	12# @100C/C	----	12# @150 C/C



**COLUMN CENTRE LINE LAYOUT PLAN at EC-130**  
SCALE-1:100



**FOUNDATION LAYOUT PLAN at EC-130**  
SCALE-1:100



**FLOOR LEVEL BEAM & SLAB LAYOUT PLAN**  
SCALE-1:100

**SCHEDULE OF COLUMNS : (M20 GRADE CONCRETE)**

COL. MKD	C5, C8, C10, C13.	C7, C9, C12, C14.	C1, C2, C3, C4, C6, C11.
Col. Size	250X450	250X450	250X450
FOR 1ST. FL. ROOF.	10-20dia + 2-16dia 8# @150 C/C (4 NOS/SET)	6-20dia + 4-16dia 8# @150 C/C (3 NOS/SET)	4-20dia + 6-16dia 8# @150 C/C (3 NOS/SET)
Col. Size	250X450	250X450	250X450
2ND FL. LVL. TO REST.	6-20dia + 4-16dia 8# @150 C/C (3 NOS/SET)	4-20dia + 6-16dia 8# @150 C/C (3 NOS/SET)	10-16dia 8# @150 C/C (3 NOS/SET)



DWG NO :- CC/EC-130/STR.-01

SCALE 1:100, 1:50, 1:25, 1:10

DATE:

PRE. NO:- EC-130