

FOUNDATION AND COLUMN LAYOUT (BLOCK II)  
SCALE - 1:100

COLUMN NO.	COLUMN SIZE		LONGITUDINAL REINFORCEMENT DETAILS		STIRRUPS	
	Lx	Ly	Up to 2nd floor roof level		(ZONE-1)	(ZONE-2)
			Up to 2nd floor roof level	Remaining floor		
A5	300	450	4-Ø16+6-Ø25	6-Ø16+4-Ø20	8@100	8@150
A6	300	500	4-Ø16+8-Ø25	4-Ø16+8-Ø25	8@100	8@150
A8	300	500	12-Ø25	12-Ø25	8@100	8@150
A9	300	500	12-Ø25	12-Ø25	8@100	8@150
B1	300	500	4-Ø16+6-Ø25	10-Ø16	8@100	8@150
B2	300	500	6-Ø16+4-Ø25	6-Ø16+4-Ø20	8@100	8@150
B3	300	500	6-Ø16+4-Ø25	10-Ø16	8@100	8@150
B4	300	500	6-Ø16+4-Ø20	10-Ø16	8@100	8@150
C3	300	450	4-Ø16+4-Ø20	8-Ø16	8@100	8@150
C5	300	500	4-Ø16+6-Ø20	10-Ø16	8@100	8@150
C6	300	500	12-Ø25	12-Ø25	8@100	8@150
C7	450	300	4-Ø16+4-Ø20	4-Ø16+4-Ø20	8@100	8@150
C8	600	350	16-Ø25	16-Ø25	8@100	8@150
C9	300	500	4-Ø16+8-Ø25	4-Ø16+8-Ø25	8@100	8@150
D1	300	500	4-Ø16+6-Ø25	10-Ø16	8@100	8@150
D2	500	300	6-Ø16+4-Ø20	10-Ø16	8@100	8@150
D3	450	300	6-Ø16+4-Ø25	6-Ø16+4-Ø20	8@100	8@150
D4	300	500	4-Ø16+4-Ø20	8-Ø16	8@100	8@150
D5	300	500	4-Ø16+4-Ø20	4-Ø16+4-Ø20	8@100	8@150
D6	400	300	4-Ø20+6-Ø25	6-Ø16+4-Ø25	8@100	8@150
D8	500	300	6-Ø16+4-Ø20	6-Ø16+4-Ø20	8@100	8@150
D9	300	500	4-Ø16+4-Ø20	8-Ø16	8@100	8@150
E2	700	300	4-Ø16+8-Ø25	12-Ø16	8@100	8@150
E9	550	300	6-Ø16+4-Ø25	6-Ø16+4-Ø20	8@100	8@150
F1	300	500	4-Ø16+8-Ø25	4-Ø16+8-Ø20	8@100	8@150
F2	300	500	4-Ø16+8-Ø25	12-Ø16	8@100	8@150
F3	300	500	4-Ø20+6-Ø25	6-Ø16+4-Ø25	8@100	8@150
F4	300	500	6-Ø16+4-Ø25	10-Ø16	8@100	8@150
F5	300	500	4-Ø16+6-Ø20	4-Ø16+6-Ø20	8@100	8@150
F6	300	700	4-Ø16+6-Ø25	6-Ø16+4-Ø20	8@100	8@150
F8	300	500	4-Ø16+6-Ø25	4-Ø16+6-Ø20	8@100	8@150
F9	300	500	6-Ø16+4-Ø25	10-Ø16	8@100	8@150
SC-1	250	250	8-Ø16	-	8@100	8@150

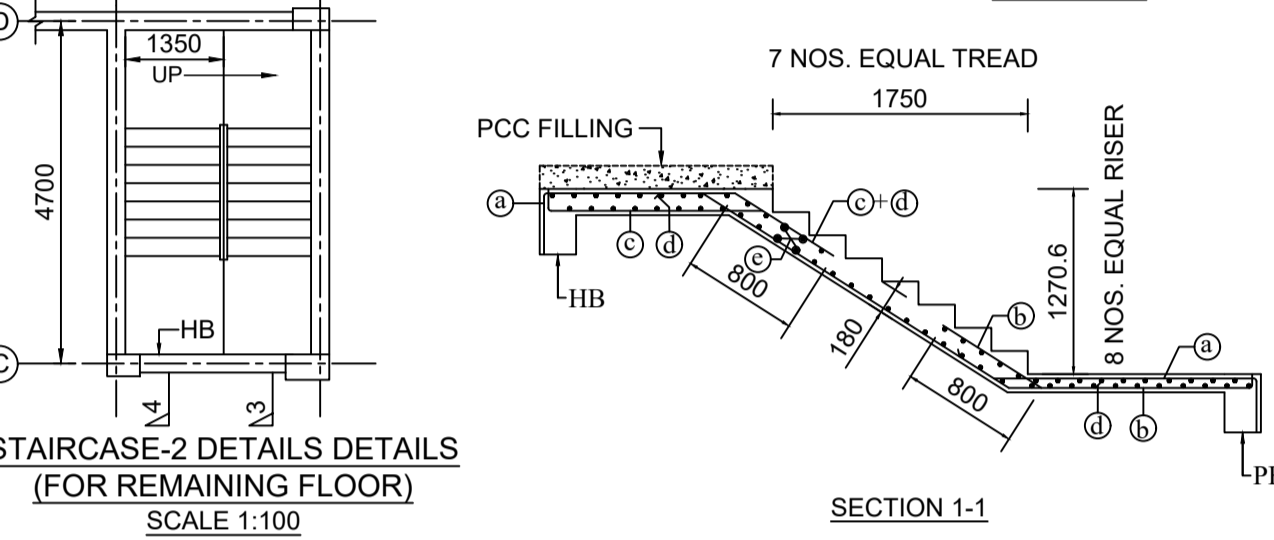
NOTE: COLUMN MKD. SC WILL TERMINATE AT PLINTH LVL.

FND. MKD.	DEPTH (D)	REINFORCEMENT DETAILS			
		LONGITUDINAL REINFORCEMENT		TRANSVERSE REINFORCEMENT	
		AT TOP(LT)	AT BOTTOM(LB)	AT TOP(ST)	AT BOTTOM(SB)
CF1	500	12Ø @ 200	12Ø @ 150	12Ø @ 200	12Ø @ 150
CF2	500	12Ø @ 150	12Ø @ 150	12Ø @ 150	12Ø @ 150
CF3	500	12Ø @ 150	16Ø @ 150	12Ø @ 150	16Ø @ 150
RF1	500	20Ø @ 200	25Ø @ 200	20Ø @ 200	20Ø @ 150
RF2	450	20Ø @ 150	20Ø @ 150	20Ø @ 150	20Ø @ 150

NOTE: DIMENSION IS PROVIDED IN FOUNDATION PLAN

MKD.	SIZE (LXB)	DEPTH (T/T+D)	REINFORCEMENT (RF)
F1	2000 x 2000	200/400	12Ø @ 200
F2	2200 x 2200	200/400	12Ø @ 200
F3	2400 x 2400	200/450	12Ø @ 150
F4	2600 x 2600	250/500	12Ø @ 150
F5	2800 x 2800	500	16Ø @ 200
F6	3000 x 3000	500	16Ø @ 200
F7	3300 x 3300	500	16Ø @ 175
F8	2600 x 3500	450	16Ø @ 175

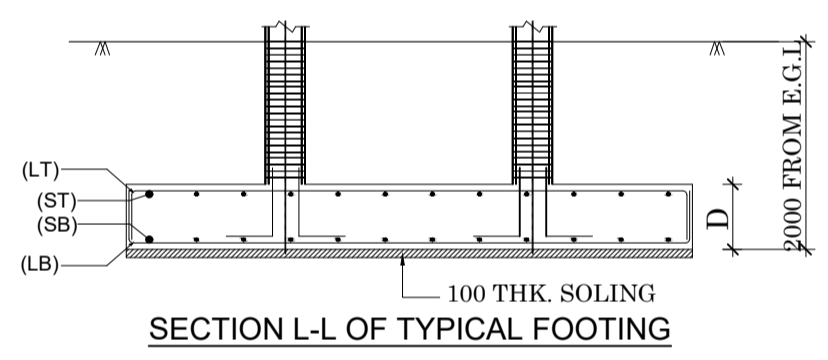
STAIRCASE-2 DETAILS DETAILS (FROM PLINTH TO 1ST FLOOR LVL)  
SCALE 1:100



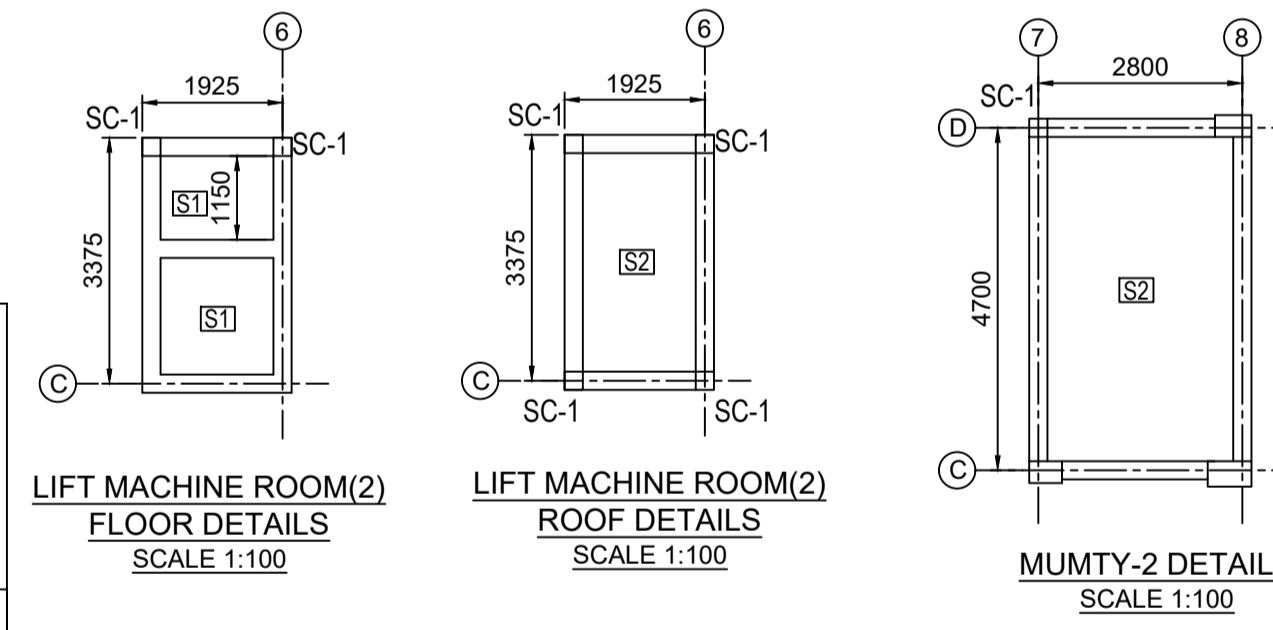
STAIRCASE-2 DETAILS DETAILS (FOR REMAINING FLOOR)  
SCALE 1:100

REINFORCEMENT ARRANGEMENT OF COMBINED/RAFT FOOTING  
NOT TO SCALE

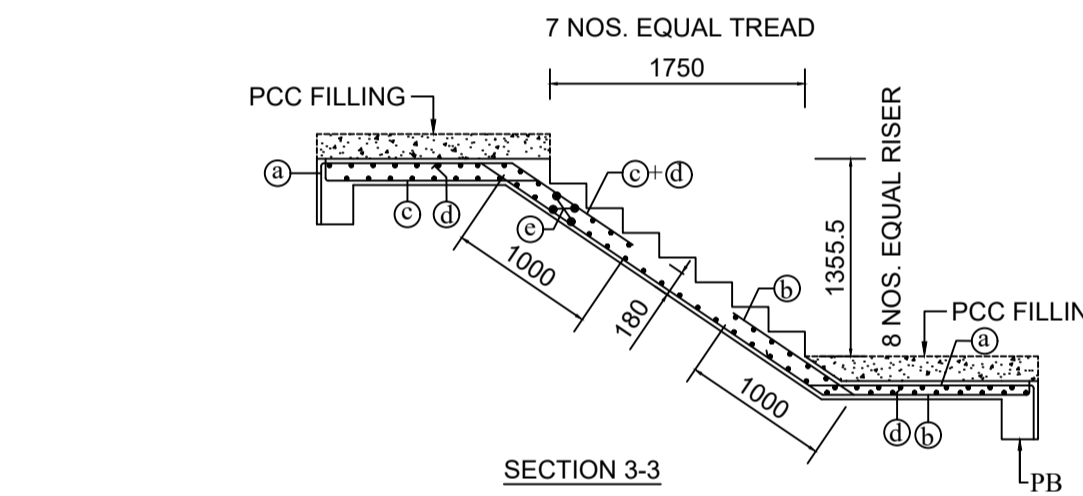
TYPICAL REINFORCEMENT ARRANGEMENT OF COLUMNS			
LINK BAR (2 SETS)	LINK BAR (3 SETS)	LINK BAR (3 SETS)	LINK BAR (4 SETS)
8 MAIN BAR	10 MAIN BAR	12 MAIN BAR	16 MAIN BAR



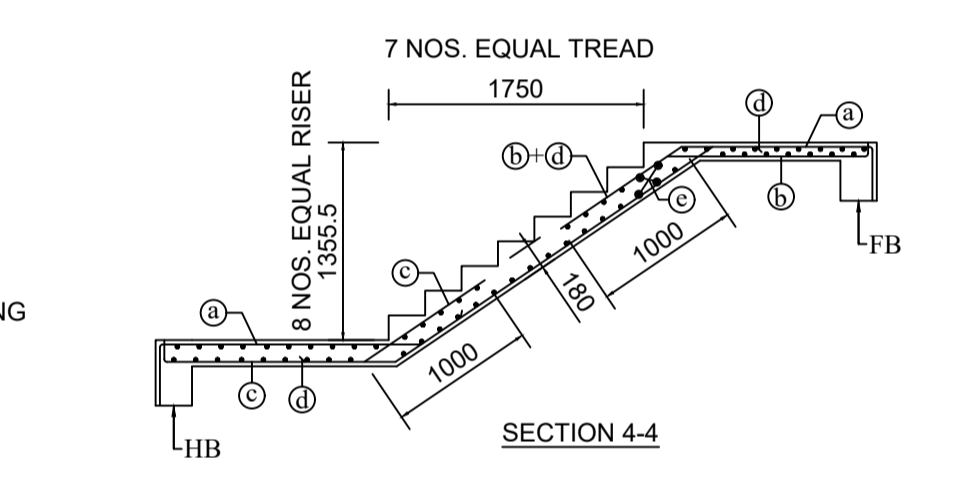
SECTION L-L OF TYPICAL FOOTING



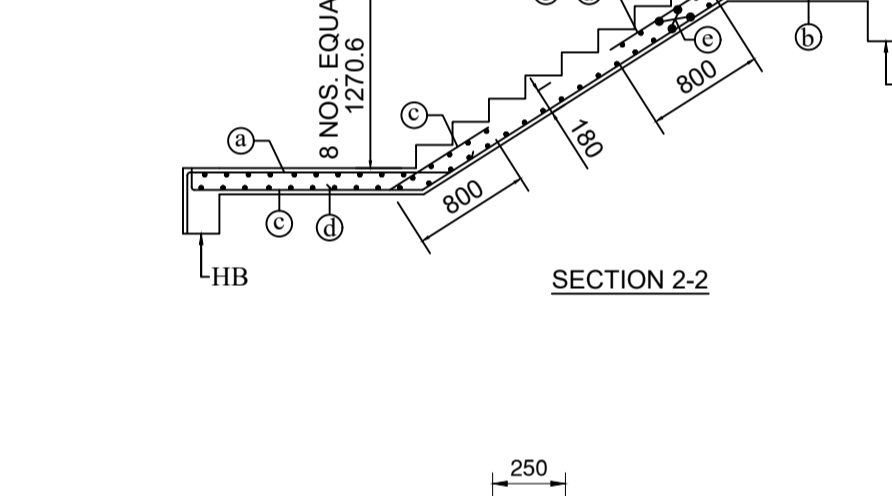
LIFT MACHINE ROOM(2) FLOOR DETAILS SCALE 1:100  
LIFT MACHINE ROOM(2) ROOF DETAILS SCALE 1:100  
MUMTY-2 DETAILS SCALE 1:100



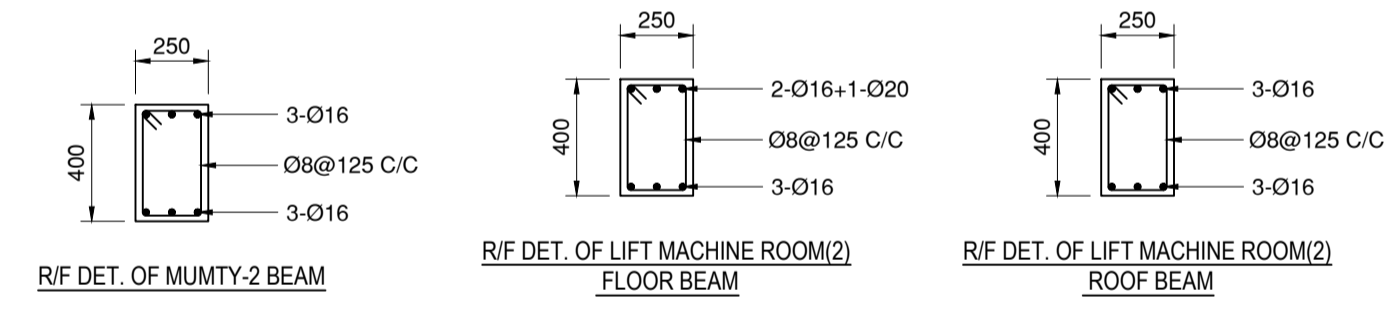
SECTION 3-3



SECTION 4-4



SECTION 2-2



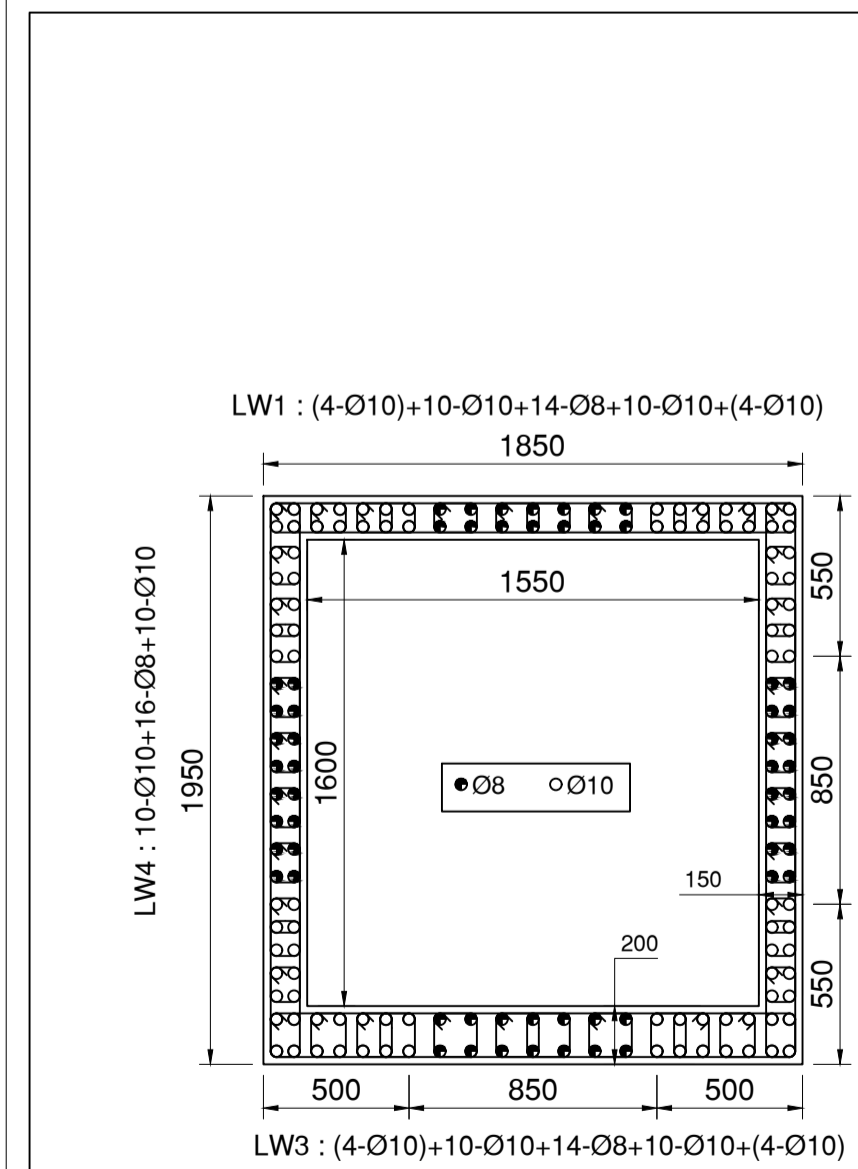
RIF DET. OF MUMTY-2 BEAM  
RIF DET. OF LIFT MACHINE ROOM(2) FLOOR BEAM  
RIF DET. OF LIFT MACHINE ROOM(2) ROOF BEAM

MARKING	REINFORCEMENT DETAILS
a	12mm Ø @ 150mm c/c
b	12mm Ø @ 150mm c/c
c	12mm Ø @ 150mm c/c
d	8mm Ø @ 150mm c/c
e	8mm Ø @ 200mm c/c

SCHEDULE OF BARS IN STAIRS

TYPICAL DETAIL OF COLUMN REINFORCEMENT

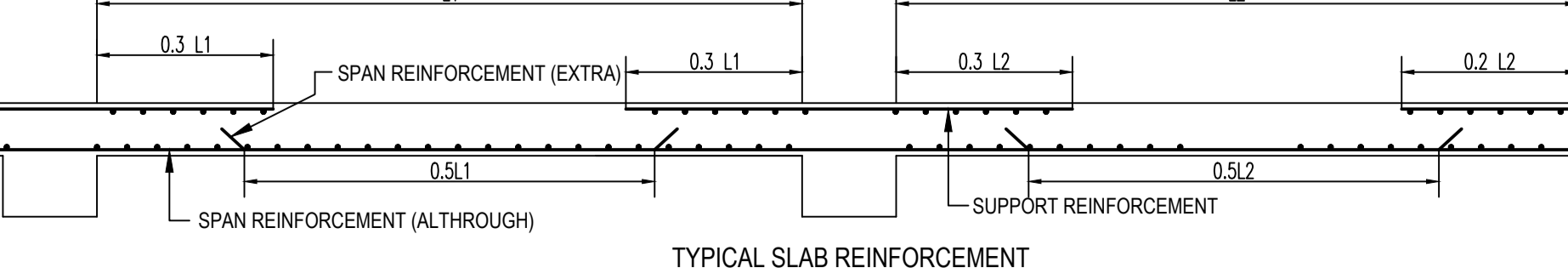
L0 = Shall not be less than,  
a) Larger lateral dimension of the member,  
b) 1/6 of clear span of member,  
c) 450 mm.



LW1 : (4-Ø10)+10-Ø10+14-Ø8+10-Ø10+(4-Ø10)  
LW2 : 10-Ø10+16-Ø8+10-Ø10  
LW3 : (4-Ø10)+10-Ø10+14-Ø8+10-Ø10+(4-Ø10)  
LW4 : 10-Ø10+16-Ø8+10-Ø10

SLAB MKD.	SCHEDULE OF SLAB REINFORCEMENT						REMARKS
	ALONG SHORT SPAN			ALONG LONG SPAN			
	BOTTOM ALTHROUGH	EXTRA BOTT. AT MID SPAN	TOP AT SUPPORT	BOTTOM ALTHROUGH	EXTRA BOTT. AT MID SPAN	TOP AT SUPPORT	
S1	10Ø @ 300	10Ø @ 300	10Ø @ 150	10Ø @ 300	10Ø @ 300	10Ø @ 150	1. TOP REINFORCEMENT AT DISCONTINUOUS SUPPORT - 8Ø AT 200 2. PROVIDE CHAIRS OF Ø10 AS REQUIRED TO KEEP THE TOP BARS IN POSITION 3. REFER FIGURE "TYPICAL SLAB REINFORCEMENT" 4. FOR TOP REINFORCEMENT AT COMMON EDGE OF TWO SLABS, PROVIDE HEAVIER BAR OF TWO / LESSER SPACING IN CASE OF SAME DIAMETER.
S2	8Ø @ 300	8Ø @ 300	8Ø @ 150	8Ø @ 300	8Ø @ 300	8Ø @ 150	
S3	8Ø @ 300	8Ø @ 300	8Ø @ 200	8Ø @ 300	8Ø @ 300	8Ø @ 200	
	8Ø @ 300	8Ø @ 300	8Ø @ 200	8Ø @ 300	8Ø @ 300	8Ø @ 200	

NOTE: SLAB THICKNESS = 125MM (GENERAL)  
SLAB THICKNESS = 150MM (SLAB MKD. S1)- TO BE FOLLOWED IN TERRACE AND MACHINE ROOM FLOOR ONLY



TYPICAL SLAB REINFORCEMENT

NOTE: SPECIAL CONFINED REINFORCEMENT TO BE PROVIDED FOR A LENGTH OF 800 MM. @ 100 MM. C/C. CONFINING BAR SHOULD BE SAME AS THE DIA. OF STIRRUPS BAR USED IN A PARTICULAR BEAM UNLESS OTHERWISE SPECIFIED.

- NOTES :-
- DEPTH OF FOUNDATION HAS BEEN CONSIDERED 2M IN DESIGN FOR A BEARING CAPACITY OF 130 KN/SMQ AS PER SOIL REPORT SUBMITTED BY ACHARYA ASSOCIATES.
  - ALL DIMENSION AND ELEVATIONS ARE IN M.M. UNLESS NOTED OTHERWISE
  - USE M-25 GRADE FOR CONCRETE WORK.
  - REINFORCEMENT STEEL WILL BE OF GRADE Fe-500
  - USE COLD TWISTED DEFORMED REINFORCING BAR CONFORMING TO IS: 1786.
  - MINIMUM CLEAR CONCRETE COVER SHALL BE AS FOLLOWS:
- | ITEM    | TOP | BOTTOM | SIDE |
|---------|-----|--------|------|
| FOOTING | 60  | 60     | 60   |
| COLUMN  | -   | -      | 40   |
| BEAM    | 25  | 25     | 25   |
| SLAB    | 20  | 20     | 25   |
- UNLESS SPECIFIED OTHERWISE ALL HOOKS, BENDS, LAPS, SPLICES ETC. SHALL BE AS PER LATEST IS:456 & OTHER RELEVANT INDIAN STANDARDS. PROVIDE DEVELOPMENT LENGTH 40D WHERE.
  - "D" IS THE DIAMETER OF REINFORCING BAR.
  - ALL DIMENSIONS AND DETAILS ARE TYPICAL UNLESS INDICATED OTHERWISE.
  - THIS DRAWING WILL BE READ IN CONJUNCTION WITH CONTRACT DOCUMENT.
  - DESIGN IS BASED ON IS:456-2000, IS:1893(PART1)-2002, IS:875(PART1&II)-1987

PROJECT TITLE:-  
G+4 STORIED RESIDENTIAL CUM COMMERCIAL BUILDING OF SRI. SHYAMAL ROY

DRAWING TITLE:- FOUNDATION, COLUMN, STAIRCASE, MUMTY, LIFT, SLAB & LIFT MACHINE ROOM BEAM DETAILS OF BLOCK II

DECLARATION

We do hereby certify that the foundation and superstructure of the building proposed for construction on Plot no: 112 (R.S.), 163 (L.R.) At Sashtri Nagar, PS- Bhaktinagar, Dist.- Jalpaiguri under the jurisdiction of Siliguri Municipal Corporation/ Notified Area Authority/ Industrial Township Authority have been personally inspected and so designed by us will make such foundation and super structure safe in all respect including the consideration of bearing capacity and settlement of soil and other condition if any conforming to all stipulations of all relevant IS CODE of practice.

SIGN OF STRUCTURAL ENGINEER  
CREOZENTH CIVIL & STRUCTURAL ENGINEERING CONSULTANTS  
ADDRESS: 10, HAREN MUKHERJEE ROAD, SILIGURI  
CONTACT NUMBER: +91 790820322/ 9830577330  
STRUCTURAL DRAWING IS PREPARED BY CREOZENTH. NO PART OF THE DRAWING SHOULD BE DUPLICATED WITHOUT THE CONSENT OF THE FIRM.  
DESIGNED BY : S. BASAK  
DRAWN BY : S. SAHA & N. RAI  
CHECKED BY : R. CHAKRABORTI  
SCALE 1:100 SHEET NO. STR/04 DATE: 07/02/2023