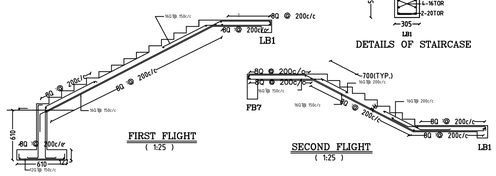
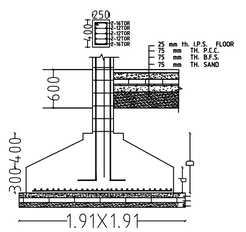
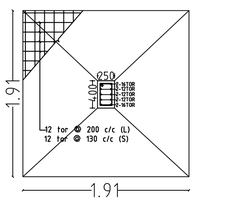
THE STRUCTURAL PLAN SHOWING THE PROPOSED GROUND + FOUR STORIEDAPARTMENT TYPE RESIDENTIAL BUILDING OF [1.] SUMANT PRATAP SINGH S/O. SRI VISHWA NATH SINGH [2.] SRI. PABITRA MANDAL S/O LATE SUBAL MANDAL AT - GOPALPUR, ASANSOL ON R.S. PLOT NO.- 665 /939 , 665 /940 , L.R. PLOT NO- 941 , & 942 , L. R. KHATIAN NO. - 2566, 2567, MOUZA - GOPALPUR , J.L. NO- 10, P.S.- ASANSOL[S] ,WARD NO- 55 , BOROUGH - V , PIN - 713305 , DIST- PASCHIM BARDHAMAN (W.B.) , UNDER ASANSOL MUNICIPAL CORPORATION.

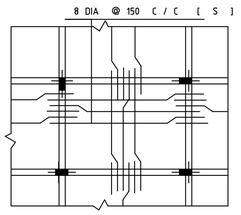


DETAILS OF STAIRCASE

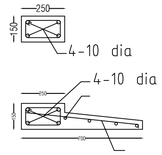




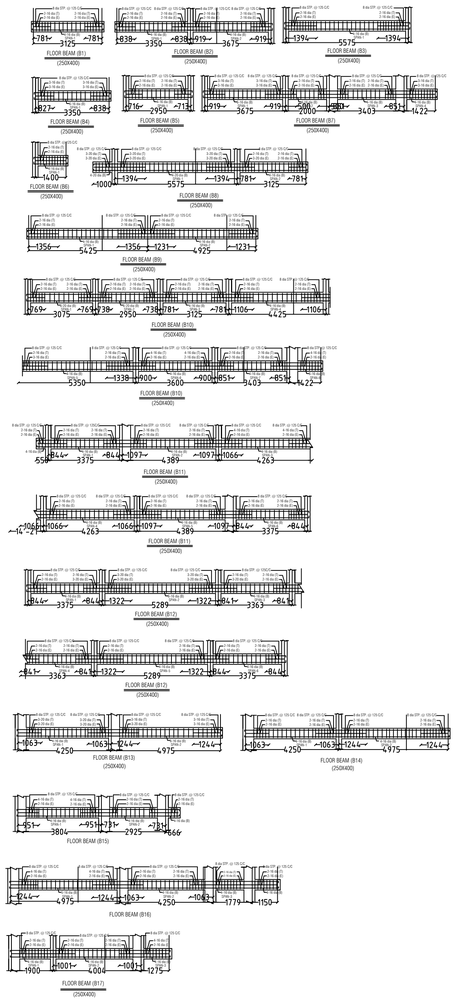
DETAILS OF R.C.C. COLUMN & FOUNDATION (F4)
SCALE :- 1:25

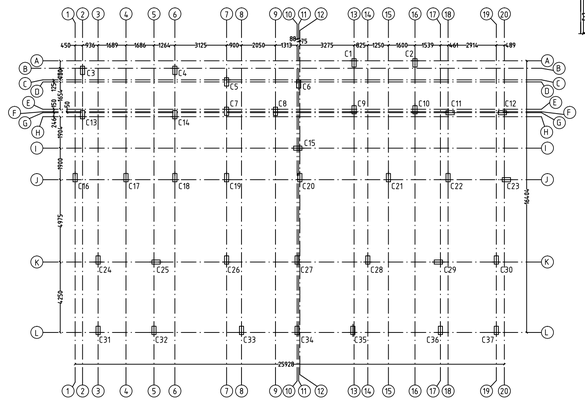


DETAILS OF R.C.C. SLAB (S2)
(1 : 50)

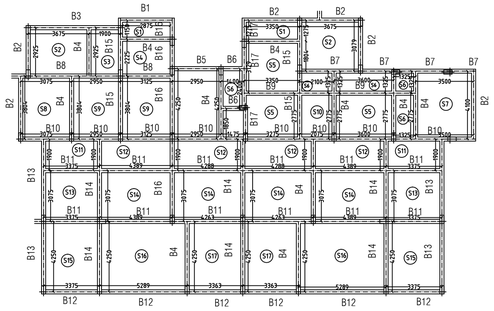


DETAILS OF R.C.C.
LINTEL & CHAJJA





COLUMN LAYOUT PLAN
SCALE - 1:100



FLOOR BEAM & SLAB LAYOUT PLAN
SCALE - 1:100

FND. MKD.	FOUNDATION SIZE	COL. MKD.	D	d	REBAR DETAILING	REINFORCEMENT DETAILS G.F. TO F.F.	F.F. TO S.F.	S.F. TO T.F.	T.F. TO F.F.	4.F. TO S.F.
F1	2475X2475	C1	400	250	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 4-16 TOR 6-12TOR	250X400 8-12TOR	250X400 8-12TOR	250X400 8-12TOR	250X400 8-12TOR
F2	2100X2100	C2	350	200	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 4-16 TOR 6-12TOR	250X400 8-12TOR	250X400 8-12TOR	250X400 8-12TOR	250X400 8-12TOR
F3	2400X2400	C3	400	250	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 4-12 TOR 6-16 TOR	250X400 4-12TOR 4-16TOR	250X400 4-12TOR 4-16TOR	250X400 4-12TOR 4-16TOR	250X400 4-12TOR 4-16TOR
F4	2850X2850	C4	550	300	12 DIA @ 150 C/C[L] 12 DIA @ 150 C/C[S]	250X500 10-16 TOR	250X400 8-16TOR	250X400 4-12TOR 4-16TOR	250X400 8-12TOR	250X400 8-12TOR
F5	2325X2325	C5	400	250	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 4-16 TOR 6-12 TOR	250X400 8-12TOR	250X400 8-12TOR	250X400 8-12TOR	250X400 8-12TOR
F6	2475X2475	C6	400	250	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 4-16TOR 6-12 TOR	250X400 8-12TOR	250X400 8-12TOR	250X400 8-12TOR	250X400 8-12TOR
F7	2400X2400	C7	400	250	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 4-16 TOR 6-12 TOR	250X400 8-12TOR	250X400 8-12TOR	250X400 8-12TOR	250X400 8-12TOR
F8	2550X2550	C8	400	250	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 4-16 TOR 6-12TOR	250X400 8-12TOR	250X400 8-12TOR	250X400 8-12TOR	250X400 8-12TOR
F9	3000X3000	C9	550	300	12 DIA @ 150 C/C[L] 12 DIA @ 150 C/C[S]	250X500 16-12 TOR	250X400 8-16TOR	250X400 8-12TOR	250X400 8-12TOR	250X400 8-12TOR
F10	2400X2400	C10	400	250	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 4-16 TOR 6-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F11	2550X2550	C11	400	250	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 6-16 TOR 4-12 TOR	250X400 4-16 TOR 4-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F12	2625X2625	C12	450	300	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 4-16 TOR 6-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F13	2700X2700	C13	450	300	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 6-16 TOR 4-12 TOR	250X400 4-16 TOR 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F14	2925X2925	C14	550	300	12 DIA @ 150 C/C[L] 12 DIA @ 150 C/C[S]	250X500 10-16 TOR	250X400 8-16 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F15	2700X2700	C15	450	300	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 6-16 TOR 4-12 TOR	250X400 4-16 TOR 4-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR

SCHEDULE OF RESIDENTIAL R. C. C. SLAB (M20)			
SLAB MKD.	THICKNESS	REINFORCEMENT DETAILS	REMARKS
S1	115	8 DIA @ 125 C/C (S) 8 DIA @ 150 C/C (L) 8 DIA @ 250 C/C (E)	ALTERNATE CRANK AT CONTINEOUS EDGE
S2	115	8 DIA @ 150 C/C (S) 8 DIA @ 175 C/C (L) 8 DIA @ 300 C/C (E)	ALTERNATE CRANK AT CONTINEOUS EDGE
S3	115	8 DIA @ 150 C/C (S) 8 DIA @ 175 C/C (L) 8 DIA @ 300 C/C (E)	ALTERNATE CRANK AT CONTINEOUS EDGE
S4	115	8 DIA @ 150 C/C (S) 8 DIA @ 175 C/C (L) 8 DIA @ 300 C/C (E)	ALTERNATE CRANK AT CONTINEOUS EDGE
S5	115	8 DIA @ 115 C/C (S) 8 DIA @ 150 C/C (L) 8 DIA @ 175 C/C (E)	ALTERNATE CRANK AT CONTINEOUS EDGE
S6	115	8 DIA @ 150 C/C (S) 8 DIA @ 175 C/C (L) 8 DIA @ 300 C/C (E)	ALTERNATE CRANK AT CONTINEOUS EDGE
S7	115	8 DIA @ 150 C/C (S) 8 DIA @ 175 C/C (L) 8 DIA @ 300 C/C (E)	ALTERNATE CRANK AT CONTINEOUS EDGE
S8	115	8 DIA @ 150 C/C (S) 8 DIA @ 175 C/C (L) 8 DIA @ 300 C/C (E)	ALTERNATE CRANK AT CONTINEOUS EDGE
S9	115	8 DIA @ 150 C/C (S) 8 DIA @ 175 C/C (L) 8 DIA @ 300 C/C (E)	ALTERNATE CRANK AT CONTINEOUS EDGE
S10	115	8 DIA @ 125 C/C (S) 8 DIA @ 150 C/C (L) 8 DIA @ 250 C/C (E)	ALTERNATE CRANK AT CONTINEOUS EDGE
S11	115	8 DIA @ 150 C/C (S) 8 DIA @ 175 C/C (L) 8 DIA @ 300 C/C (E)	ALTERNATE CRANK AT CONTINEOUS EDGE
S12	115	8 DIA @ 150 C/C (S) 8 DIA @ 175 C/C (L) 8 DIA @ 300 C/C (E)	ALTERNATE CRANK AT CONTINEOUS EDGE
S13	115	8 DIA @ 150 C/C (S) 8 DIA @ 175 C/C (L) 8 DIA @ 300 C/C (E)	ALTERNATE CRANK AT CONTINEOUS EDGE
S14	115	8 DIA @ 150 C/C (S) 8 DIA @ 175 C/C (L) 8 DIA @ 300 C/C (E)	ALTERNATE CRANK AT CONTINEOUS EDGE
S15	115	8 DIA @ 150 C/C (S) 8 DIA @ 175 C/C (L) 8 DIA @ 300 C/C (E)	ALTERNATE CRANK AT CONTINEOUS EDGE
S16	115	8 DIA @ 114 C/C (S) 8 DIA @ 127 C/C (L) 8 DIA @ 229 C/C (E)	ALTERNATE CRANK AT CONTINEOUS EDGE
S17	115	8 DIA @ 150 C/C (S) 8 DIA @ 175 C/C (L) 8 DIA @ 300 C/C (E)	ALTERNATE CRANK AT CONTINEOUS EDGE

SCHEDULE OF R.C.C. COLUMN AND FOUNDATION (M 20)

FND. MKD.	FOUNDATION SIZE	COL. MKD.	D	d	REBAR DETAILING	REINFORCEMENT DETAILS G.F. TO F.F.	F.F. TO S.F.	S.F. TO T.F.	T.F. TO F.F.	F.F. TO S.F.
F16	2325X2325	C16	400	250	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 4-16 TOR 6-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F17	2775X2775	C17	450	300	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 8-16 TOR	250X400 4-16 TOR 4-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F18	2700X2700	C18	450	300	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 8-16 TOR	250X400 4-16 TOR 4-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F19	3450X3450	C19	650	400	12 DIA @125 C/C[L] 12 DIA @125 C/C[S]	250X600 12-20 TOR	250X500 12-16 TOR	250X400 10-16 TOR	250X400 4-16 TOR 4-12 TOR	250X400 8-12 TOR
F20	3600X3600	C20	650	400	12 DIA @125 C/C[L] 12 DIA @125 C/C[S]	250X600 14-20 TOR	250X500 12-16 TOR	250X500 12-16 TOR	250X400 8-16 TOR	250X400 8-12 TOR
F21	3450X3450	C21	650	400	12 DIA @125 C/C[L] 12 DIA @125 C/C[S]	250X600 12-20 TOR	250X500 12-16 TOR	250X400 10-16 TOR	250X400 4-16 TOR 4-12 TOR	250X400 8-12 TOR
F22	3150X3150	C22	600	350	12 DIA @ 150 C/C[L] 12 DIA @ 150 C/C[S]	250X500 12-16 TOR	250X400 10-16 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F23	3000X3000	C23	550	350	12 DIA @ 150 C/C[L] 12 DIA @ 150 C/C[S]	250X500 12-16 TOR	250X400 8-16 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F24	2775X2775	C24	450	300	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 4-16 TOR 6-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F25	3225X3225	C25	600	350	12 DIA @ 150 C/C[L] 12 DIA @ 125 C/C[S]	250X600 12-16 TOR	250X500 10-16 TOR	250X500 4-16 TOR 6-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F26	3225X3225	C26	600	350	12 DIA @ 150 C/C[L] 12 DIA @ 125 C/C[S]	250X600 12-16 TOR	250X500 10-16 TOR	250X500 4-16 TOR 6-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F27	3300X3300	C27	550	400	12 DIA @ 125 C/C[L] 12 DIA @ 125 C/C[S]	250X600 12-20 TOR	250X600 12-16 TOR	250X250 4-16 TOR 6-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F28	3300X3300	C28	600	400	12 DIA @ 150 C/C[L] 12 DIA @ 125 C/C[S]	250X600 12-16 TOR	250X600 12-16 TOR	250X500 10-16 TOR	250X400 8-16 TOR	250X400 4-16 TOR 4-12 TOR
F29	3225X3225	C29	600	400	12 DIA @ 150 C/C[L] 12 DIA @ 125 C/C[S]	250X600 12-16 TOR	250X500 10-16 TOR	250X500 4-16 TOR 6-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F30	2700X2700	C30	450	300	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 4-16 TOR 6-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F31	2100X2100	C31	350	200	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 4-16 TOR 6-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F32	2550X2550	C32	450	300	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 4-16 TOR 6-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F33	2700X2700	C33	450	300	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 4-16 TOR 6-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F34	2400X2400	C34	400	250	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 4-16 TOR 6-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F35	2700X2700	C35	450	300	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 4-16 TOR 6-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F36	2625X2625	C36	450	300	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 4-16 TOR 6-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR
F37	2025X2025	C37	350	200	12 DIA @ 175 C/C[L] 12 DIA @ 150 C/C[S]	250X500 4-16 TOR 6-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR	250X400 8-12 TOR

REMARKS

NOTES

1. All dimensions are in mm.
2. Only written dimensions are to be followed . Drawing should not be scaled.
3. The layout of building shall be given from the architectural drawings.
4. The foundation has been designed for 18.00 t/sqm. bearing capacity is to be assumed .
5. The foundation are to be placed on the firm soil . If filledup soil is encountered , the foundation should be placed where firm soil is available.
6. All reinforcement shall be T. M. T. bars of grade Fe 500 conforming to IS : 1786.
7. Concrete mix M-20 shall be used for R.C.C. works.
8. Lean concrete 1:2:4
9. Concrete covers -

(a) Cover to main reinforcement.

Element	Top/Bottom cover
column	40 mm
footing	50 mm
Beam	25 mm
Slab	15 mm or dia of bar if > 15 mm

(b) Cover to secondary reinforcement shall not be less than 15 mm.

10. Not more than one half of the bars shall be lapped at one section. (lap shall be staggered)
11. Development length shall be 50 times dia of bar.
12. Lap length in longitudinal bar in columns shall be equal to development length in tension.
13. In case of difficulty in providing closed ties, U - ties may be provided.
14. Any discrepancy between architectural and structural drawing shall be intemated to this office and got reconciled before execution.
15. At the junction of two different nos.of beams that column support shall be referred as second support for the lower no. of beam,while for the higher no. of beam that column support shall be referred as first support.
16. Construction joints shall be provided at one third span of beam with proper key construction joints.
17. Reinforcement adopted at the top face shall continue on the same face of slab at both sides of supports up to a distance equal to 0.3 times of the respective span of concerned slab.
18. Alternate half of the reinforcement provided at the bottom face of the slab shall be continued up to the middle of support.
19. Remaining alternate half of the reinforcement provided at the bottom face of the slab shall be curtailed from the support at a distance equal to 0.15 times of the respective span.
20. Minimum length of the bars used in the slab as reinforcement shall be 2 * Ld , where 'Ld' is the development length of bar.
21. 8 tor @ 300 is to be provided just below the top face reinforcement which has not been mentioned the drawing .
22. Dotted lines are shown as top face reinforcement , while firm lines are bottom face reinforcement.

DRAWING TITLE: COLUMN & FOUNDATION AND SLAB LAYOUT PLAN STRUCTURAL DETAILS

SIGNATURE OF OWNER'S

Sumant pratap Singh

Pabitra Mandal

SIGNATURE OF CONSULTANT

SURANJAN DHAR
B.E. (CIVIL), M.I.E
CHATERED ENGINEER (I)
L.B.S. NO. 22/21-22

ANALYZED AN
DHAR AS
ENGINEERS & STR
39 ,MOHISHILA COLO
ASANSOL -713

DRAWING NO. DA /36/04/2021