



TYPICAL FLOOR BEAM SCHEDULE

Beam Mkd.	Beam Size		Reinf. Ath.		Reinforcement Extra		Vt. Stirrups - 2L	
	B	D	Top	Bottom	Top at Supp.	Bottom Span	Supp.	Span
BX-1	250	400	2-16	2-16	3-16	2-16	8 @ 150c/c	8 @ 200c/c
BX-2	250	400	2-20	4-20	3-20		8 @ 150c/c	8 @ 200c/c
BX-3	250	350	2-12	2-12		4-12	8 @ 200c/c	8 @ 200c/c
BX-4	250	350	2-16	2-16	3-16	1-16	8 @ 200c/c	8 @ 200c/c
BX-5	250	350	4-16	3-20	4-16		8 @ 150c/c	8 @ 200c/c
BY-1	250	400	2-16	5-16	4-16	1-16	8 @ 150c/c	8 @ 200c/c
BY-2	250	400	2-20	4-16	2-20		8 @ 150c/c	8 @ 200c/c
BY-3	250	350	2-16	2-12		2-12	8 @ 200c/c	8 @ 200c/c
BY-4	250	350	2-16	2-16	2-16	1-16	8 @ 150c/c	8 @ 200c/c
BY-5	250	350	2-16	4-12	4-16	1-12	8 @ 150c/c	8 @ 200c/c
TIE BEAM	250	400	3-16	3-16			8 @ 200c/c	8 @ 200c/c

1. For Supports having Two Different Extra Top Reinf. at Two Sides, the Higher Top Reinf. Shall be Provided. distance - 4 x d
 2. Stirrups for supports should be extended upto distance of 2 x d (d=Effective depth of beam) from of support & for span should be placed edge to edge distance = 4 x d

SCHEDULE OF PILE & PILE CAP

PILE MKD.	NO. OF PILE	COL. MKD.	DIA OF PILE	RE.	LAT. TIES	DETAIL OF PILE CAP				PILE CAP SIZE (L X B X D) (FIGURE)	TENTATIVE CUT-OFF LEVEL OF PILE	TOT. NO OF SIMILAR CAP	TOT. NO OF PILES	LENGTH OF PILE
						PILE SIZE	DE.	MAIN RE.	SEC. RE.					
P4	4	C1,C2,C3,C4,C5,C6,C8,C9,C11,C12,C17,C19,C24,C25,C27,C28,C30,C31,C32,C38,C39,C44,C45,C47,C52,C56,C58,C59,C60	450	8-16c AT TOP 9M & 8-16c AT BO. 9M	8c @ 175c/c & 10c @ 100c/c From 1500 TOP & BOTTOM	PC4 2200 X 2200	16c @ 150c/c [B/W]	3-12c USED AS PERIPHERAL REIN.	2L-12c @ 100c/c	12c @ 200c/c IN BOTH WAY AT TOP	AREA= 4.84 SQ.M.	-1500	29	116
P5	5	C7,C10,C13,C16,C18,C20,C23,C34,C35,C36,C46,C49,C50,C53,C54	450	8-16c AT TOP 9M & 8-16c AT BO. 9M	8c @ 175c/c & 10c @ 100c/c From 1500 TOP & BOTTOM	PC5 3088 X 2100	16c @ 150c/c [B/W]	3-12c USED AS PERIPHERAL REIN.	2L-12c @ 100c/c	12c @ 200c/c IN BOTH WAY AT TOP	AREA= 6.8 SQ.M.	-1500	15	90
P6	6	C14,C15,C21,C29,C40,C41,C42,C55,C57	450	8-16c AT TOP 9M & 8-16c AT BO. 9M	8c @ 175c/c & 10c @ 100c/c From 1500 TOP & BOTTOM	PC6 3550 X 2200	16c @ 150c/c [B/W]	3-12c USED AS PERIPHERAL REIN.	2L-12c @ 100c/c	12c @ 200c/c IN BOTH WAY AT TOP	AREA= 7.81 SQ.M.	-1500	9	60
P8	8	C22,C37,C43	450	8-16c AT TOP 9M & 8-16c AT BO. 9M	8c @ 175c/c & 10c @ 100c/c From 1500 TOP & BOTTOM	PC8 4900 X 2100	16c @ 150c/c [B/W]	3-12c USED AS PERIPHERAL REIN.	2L-12c @ 100c/c	12c @ 200c/c IN BOTH WAY AT TOP	AREA= 10.78 SQ.M.	-1500	3	24
P11	11	C26+C33, C48+C51	450	8-16c AT TOP 9M & 8-16c AT BO. 9M	8c @ 175c/c & 10c @ 100c/c From 1500 TOP & BOTTOM	PC11 4900 X 3188	16c @ 150c/c [B/W]	3-12c USED AS PERIPHERAL REIN.	2L-12c @ 100c/c	12c @ 200c/c IN BOTH WAY AT TOP	AREA= 15.62 SQ.M.	-1500	2	22

NOTES:

- ALL DIMENSIONS ARE IN MM
- ALL STRUCTURAL CONCRETE SHALL BE OF GRADE M-25 CONFORMING TO IS 456-2000 & REINFORCEMENT DETAIL FOLLOWED AS PER SP 34
- ALL LEAN CONCRETE SHALL BE GRADE OF (1:4:8)
- ALL REINFORCEMENT STEEL BARS SHALL CONFORM TO IS: 1786-1985 OF GRADE FE-500
- UNLESS NOTED, OTHERWISE LAP/ANCHOR (Ld) LENGTH SHALL BE 45 TIMES THE DIAMETER OF THE BAR OR CLAUSE 26.2.5.1 OF IS 456-2000
- CLEAR COVER TO MAIN REINFORCEMENT SHALL BE AS FOLLOWS:

ITEMS	TOP	BOTTOM	SIDE
a) PILE CAP	50 MM	50 MM	40 MM
b) COLUMN	25 MM	25 MM	25 MM
c) THE BEAM	20 MM	20 MM	25 MM
d) FOUNDATION BEAM	50 MM	50 MM	50 MM

Panel Mkd.	Thick. (mm)	Bottom Reinforcement		Top Reinforcement	
		Short Span[2,3]	Long Span[6,7]	Short Span[4,5]	Long Span
S1	120	8c @ 150 c/c	8c @ 200 c/c	8c @ 150 c/c	8c @ 200 c/c

- Provide reinforcement 8c @ 300c/c [1] at discontinuous Support at Top.
- Distribution Steel 8c @ 300c/c Where ever Reqd.
- Provide greater of the Two (i.e. Reinforcement lesser spacing) unless specified.
- Provide support reinforcement at distance 0.02L / 0.30L from the face of support.
- No curtailment of bottom reinforcement shall be done for bars having spacing 200c/c or more

STRUCTURAL DECLARATION

- CERTIFIED THAT THE FOUNDATION AND THE SUPER. STRUCTURE OF THE BUILDING HAVE BEEN SO DESIGNED BY ME TO BE SAFE IN ALL RESPECT INCLUDING IN THE CONSIDERATION OF THE BEARING CAPACITY & SETTLEMENT OF SOIL.
- THE STRUCTURAL DESIGN & DRAWING OF BOTH FOUNDATION AND SUPER STRUCTURE OF THE BUILDING HAS BEEN MADE BY ME CONSIDERING ALL POSSIBLE LOADS (HORIZONTAL & VERTICAL) AS PER THE NATIONAL BUILDING CODE OF INDIA.

TITLE : SLAB,BEAM,G/A PLAN & DETAIL OF WATER RESERVOIR TANK

PROPOSED ADDITIONAL THREE FLOOR(5TH TO 7TH.) OVER SANCTIONED OF B+G+IV STORIED RESIDENTIAL BUILDING AT HOLDING NO -5/2, KHETRA MITRA LANE, P.S. & MOUZA- GOLABARI, L.R. DAG NO-370.371.372, L.R.K.H.NO-32.88.218.279.391.404.682, J.L. NO-1, SHEET NO-20, WARD NO -11, BOROUGH - II, DIST - HOWRAH, UNDER H.M.C. PIN -711106,

STRUCTURAL DETAIL SHEET NO - 8 OF 8. ALL DIMENSIONS ARE IN M.M. SCALE = 1:10, 25: 50; 100; 600 & 1000

TANUSRI DATTA
 Empanelled Structural Engineer of H.M.C. Class-I, Rank No. 21 304902

SIGN. OF STR. ENG.

Mintu Paul
 Ar. Mintu Paul (B. Arch) L.B.A. No.-49, of H. M. C S. Dulliya, Andul, Howrah 711302

SIGN. OF L. B. S./L.B.A.

Constituted Lawful Attorney of Sri Sourav Dutta alias Raja Dutta Sri Bireswar Ganguly, Sri Ashok K. Ganguly Smt. Poly Banerjee, Smt. Rina Koley, Smt. Latika Ganguly, Smt. Keka Chakraborty

SIGN. OF APPLICANT/S



SIGN. OF APPLICANT/S H.M.C. SEAL

CERTIFIED COPY

Structural plan and design calculation as submitted by the structural engineer have been kept with B.P. No. 120/1187 Date 11/12/18 for record of the Howrah Municipal Corporation without verification. No deviation from the submitted structural plan should be made at the time of erection without submitting fresh structural plan along with design calculation and stability certificate in the premises with necessary steps should be taken for the safety of the adjoining premises public and private properties and safety of Human Life during construction.

[Signature]
Assistant Engineer (In-Charge)
Building Department
Howrah Municipal Corporation

Additional *S.P. 211* floors over sanctioned *11/12/18* building
Approved by order of
Commissioner D. *11/12/18*
Hon'ble Mayor D. *11/12/18*

H.M.C. or its men / Officials / agents are not responsible for the Structural Stability.

S. Saha
11/12/18