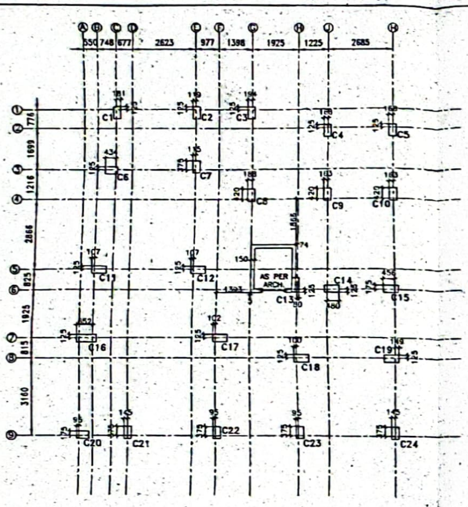
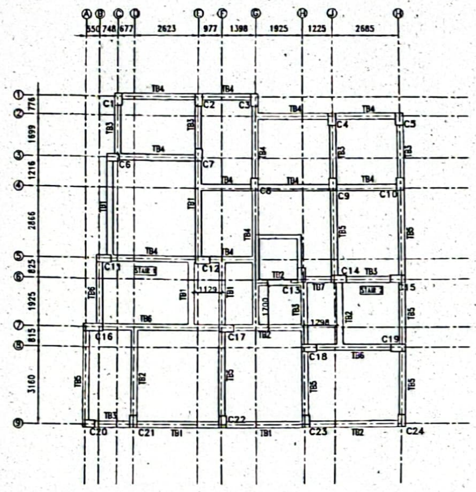
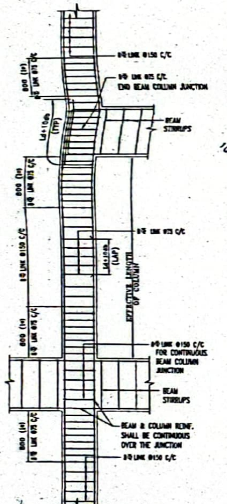


COLUMN LAYOUT PLAN
SCALE-1:100



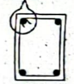
TIE BEAM LAYOUT PLAN AT LEVEL (±)0.00m.
SCALE-1:100



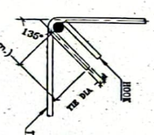
TYPICAL DUCTILE DETAIL OF BEAM COLUMN JUNCTION

L_d = DEVELOPMENT LENGTH IN TENSION
ϕ_b = DIAMETER OF LONGITUDINAL BAR
(SCALE-N.T.S)

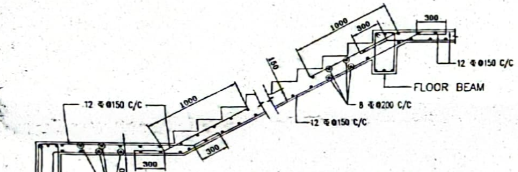
DETAIL : A



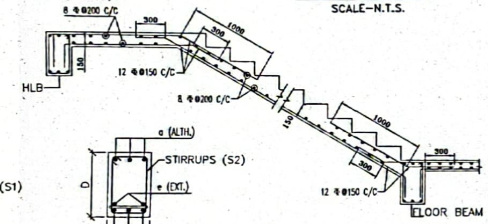
SCALE-N.T.S

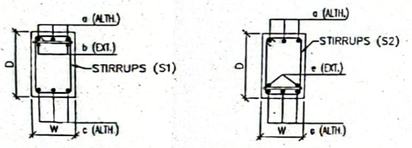


DETAIL : A
(TYPICAL DETAIL OF 135° HOOK)
SCALE-N.T.S

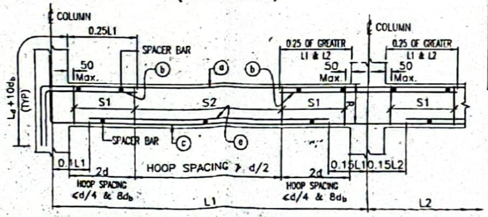


TYPICAL SECTIONAL DETAILS OF 150mm THK.STAIR WAIST SLAB
SCALE-N.T.S.





TYPICAL CROSS SECTION OF BEAM
(SCALE-N.T.S)



TYPICAL ARRANGEMENT OF REINFORCEMENT IN BEAM
(SCALE-N.T.S)

SCHEDULE OF COLUMNS

COLUMN MARKED	NOS. OF COLUMNS	COLUMN SIZE (mm x mm)	FOUNDATION TO 4TH FLOOR	FOUNDATION TO ROOF & ABOVE ROOF	STIRRUP ARRANGEMENT & SPACING: NEAR JUNCTION(10)	STIRRUP ARRANGEMENT & SPACING: REST PORTION
C1,C5,C22, C23	04	300X500	300 × 500; MAIN RNF.:- 4-20Φ● + 6-16Φ○	300 × 500; MAIN RNF.:- 4-20Φ● + 6-16Φ○	8Φ@75 C/C (3 NOS. CLOSED LINK)	8Φ@150 C/C (3 NOS. CLOSED LINK)
C11,C12,C13, C14,C17	05	300X600	300 × 600; MAIN RNF.:- 12-16Φ●	300 × 600; MAIN RNF.:- 6-16Φ● + 6-12Φ○	8Φ@75 C/C (3 NOS. CLOSED LINK) (1 NO. OPEN LINK)	8Φ@150 C/C (3 NOS. CLOSED LINK) (1 NO. OPEN LINK)
C2,C3,C4,C7, C8,C9,C20	07	300X500	300 × 500; MAIN RNF.:-10-16Φ●	300 × 500; MAIN RNF.:- 6-16Φ● + 4-12Φ○	8Φ@75 C/C (3 NOS. CLOSED LINK)	8Φ@150 C/C (3 NOS. CLOSED LINK)
C6,C10, C21,C24	04	300X500	300 × 500; MAIN RNF.:-10-20Φ●	300 × 500; MAIN RNF.:- 6-20Φ● + 4-16Φ○	8Φ@75 C/C (3 NOS. CLOSED LINK)	8Φ@150 C/C (3 NOS. CLOSED LINK)
C15,C18,C19	03	300X600	300 × 600; MAIN RNF.:- 4-20Φ● + 8-16Φ○	300 × 600; MAIN RNF.:- 4-20Φ● + 8-16Φ○	8Φ@75 C/C (3 NOS. CLOSED LINK) (1 NO. OPEN LINK)	8Φ@150 C/C (3 NOS. CLOSED LINK) (1 NO. OPEN LINK)
C16	01	300X800	300 × 800; MAIN RNF.:- 4-20Φ● + 12-16Φ○	300 × 800; MAIN RNF.:- 4-20Φ● + 12-16Φ○	8Φ@75 C/C (3 NOS. CLOSED LINK) (3 NOS. OPEN LINK)	8Φ@150 C/C (3 NOS. CLOSED LINK) (3 NOS. OPEN LINK)

SCHEDULE OF STOOL COLUMNS

COLUMN MARKED	NOS. OF COLUMNS	COLUMN SIZE (mm x mm)	ROOF TO ABOVE ROOF	STIRRUP ARRANGEMENT & SPACING
ST1 (ROOF TO WATER TANK)	01	250x250	250 × 250; MAIN RNF.:- 4-12Φ●	8Φ@150 C/C (1 NO. CLOSED LINK)
ST2,ST3 (ROOF TO LMR ROOF)	02	250x250	250 × 250; MAIN RNF.:- 4-16Φ●	8Φ@150 C/C (1 NO. CLOSED LINK)

SCHEDULE OF TIE BEAMS

BEAM MARKED	BEAM SIZE: WIDTH (W) (mm)	BEAM SIZE: DEPTH (D) (mm)	TOP REINFORCEMENT: ALTHROUGH (a)	TOP REINFORCEMENT: EXTRA AT SUPPORT (b)	BOTTOM REINFORCEMENT: ALTHROUGH (c)	BOTTOM REINFORCEMENT: EXTRA AT SPAN (e)	STIRRUPS (AT SUPPORT) (S1)	STIRRUPS (AT SPAN) (S2)
TB1	250	400	3-12Φ	-	3-12Φ	-	2L-8Φ@100 C/C	2L-8Φ@200 C/C
TB2	250	400	3-12Φ	2-12Φ	3-12Φ	-	2L-8Φ@100 C/C	2L-8Φ@200 C/C
TB3	250	400	3-12Φ +3-12Φ	-	3-12Φ +3-12Φ	-	2L-8Φ@100 C/C	2L-8Φ@200 C/C
TB4	250	400	2-16Φ +1-12Φ	-	2-16Φ +1-12Φ	-	2L-8Φ@100 C/C	2L-8Φ@200 C/C
TB5	250	400	3-12Φ +2-12Φ	-	3-12Φ +2-12Φ	-	2L-8Φ@100 C/C	2L-8Φ@200 C/C
TB6	250	400	3-12Φ	3-16Φ	3-12Φ +3-16Φ	-	2L-8Φ@100 C/C	2L-8Φ@200 C/C
TB7	250	400	3-12Φ +3-16Φ	-	3-12Φ +3-16Φ	-	2L-8Φ@100 C/C	2L-8Φ@100 C/C

SPECIAL NOTES:-

1. THIS STRUCTURAL DRAWING IS VALID IF THE CONSTRUCTION IS DONE USING AAC BLOCKS FOLLOWING PROPER DIMENSION OF EXTERNAL AND INTERNAL WALLS AS PER ARCHITECTURAL DRAWING.
2. THE STRUCTURE MUST BE CONSTRUCTED IN PRESENCE OF A COMPETENT STRUCTURAL ENGINEER FOR STRICT SUPERVISION.

SCHEDULE OF 1ST FLOOR BEAMS

BEAM MARKED	BEAM SIZE: WIDTH (W) (mm)	BEAM SIZE: DEPTH (D) (mm)	TOP REINFORCEMENT: ALTHROUGH (a)	TOP REINFORCEMENT: EXTRA AT SUPPORT (b)	BOTTOM REINFORCEMENT: ALTHROUGH (c)	BOTTOM REINFORCEMENT: EXTRA AT SPAN (e)	STIRRUPS (AT SUPPORT) (S1)	STIRRUPS (AT SPAN) (S2)
1FB1	250	400	3-12Φ	-	3-12Φ	-	2L-8Φ@100 C/C	2L-8Φ@200 C/C
1FB2	250	450	2-16Φ +1-12Φ	-	2-16Φ +1-12Φ	-	2L-8Φ@100 C/C	2L-8Φ@200 C/C
1FB3	250	450	3-16Φ	3-16Φ	3-16Φ +2-16Φ	-	2L-8Φ@100 C/C	2L-8Φ@200 C/C
1FB4	250	450	3-20Φ	-	3-16Φ	-	2L-8Φ@100 C/C	2L-8Φ@100 C/C
1FB5	250	450	3-20Φ	2-16Φ	3-16Φ +3-12Φ	-	2L-8Φ@100 C/C	2L-8Φ@200 C/C
1FB6	250	450	3-16Φ	3-20Φ	3-16Φ +2-16Φ		2L-8Φ@100 C/C	2L-8Φ@200 C/C
1FB7	250	450	3-16Φ	-	3-16Φ	-	2L-8Φ@100 C/C	2L-8Φ@100 C/C
1FB8	250	450	3-20Φ	-	3-16Φ +3-12Φ	-	2L-8Φ@100 C/C	2L-8Φ@200 C/C
1FB9	250	450	3-16Φ	3-12Φ	3-16Φ	-	2L-8Φ@100 C/C	2L-8Φ@200 C/C
1FB10	250	450	3-20Φ +3-16Φ	-	3-16Φ +3-16Φ	-	2L-8Φ@100 C/C	2L-8Φ@200 C/C
HLB1	250	450	3-16Φ +3-20Φ	-	3-16Φ +3-20Φ	-	2L-8Φ@100 C/C	2L-8Φ@150 C/C
HLB2	250	450	3-12Φ +2-12Φ	-	3-12Φ	-	2L-8Φ@100 C/C	2L-8Φ@100 C/C
HLB3	250	450	3-12Φ	-	3-12Φ	-	2L-8Φ@100 C/C	2L-8Φ@200 C/C

NOTES :

1. UNLESS OTHERWISE STATED ALL CONSTRUCTION ACTIVITIES SHALL BE CARRIED OUT CONFORMING TO RELEVANT (INDIAN) STANDARD CODES OF PRACTICE.
2. ALL DIMENSIONS ARE IN MILLIMETERS & LEVELS ARE IN METER. EXCEPT OTHERWISE MENTIONED ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED. ALL LEVELS GIVEN IN STRUCTURAL DRAWINGS ARE IN ACCORDANCE WITH ARCHITECTURAL DRAWINGS AND INDICATE STRUCTURAL LEVEL ONLY (WITHOUT FINISH).
3. ANY DISCREPANCY IN THE STRUCTURAL AND ARCHITECTURAL DRAWINGS SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL CONSULTANT BEFORE EXECUTION OF WORK.
4. UNLESS OTHERWISE SPECIFIED ALL REINFORCEMENT TO BE USED SHALL BE TMT BARS OF GRADE Fe-500/500D CONFORMING TO IS-1786-2008.
5. UNLESS OTHERWISE STATED LAP LENGTH OF BARS SHALL BE EQUAL TO THE DEVELOPMENT LENGTH = 50xBAR DIA.
6. CONCRETE NOMINAL COVER TO MAIN REINFORCEMENT SHALL BE AS FOLLOWS:
   i) COLUMNS : 40 mm
   ii) BEAMS : 30 mm
   iii) SLABS : 20 mm
   iv) WAIST SLAB : 20 mm
7. GRADE OF CONCRETE FOR SUPERSTRUCTURE UPTO & INCLUDING 4TH FLOOR WILL BE OF M30 AND ABOVE THAT WILL BE OF M25 AS PER IS:456:2000.
8. VIBRATOR SHALL BE USED FOR PROPER COMPACTION OF CONCRETE AND CURING SHALL BE DONE PROPERLY.
9. DEVELOPMENT LENGTH 50XD FOR LAP & SPLICES SHOULD BE PROVIDED AS PER THE PROVISIONS LAID DOWN IN SP34:1987
10. WHEREVER A SUPPORTED MEMBER TERMINATES AT A SUPPORTING MEMBER THE BARS OF THE SUPPORTED MEMBER SHOULD HAVE AN ANCHORAGE OF 60D IN THE SUPPORTING MEMBER.
11. WHEN TWO BEAMS MEET AT A COLUMN LOCATION ALONG THE SAME LINE THE HIGHER REINFORCEMENT AT THE TOP SHOULD BE CONTINUED AT BOTH SIDE.
12. ALL CANTILEVER SLAB WITHOUT PERIPHERAL BEAMS THE TOP REINFORCEMENT PARALLEL TO THE CANTILEVER SPAN SHOULD BE CONTINUED UPTO ATLEAST 1.5 TIMES THE CANTILEVER SPAN WITHIN THE ADJACENT SLAB.

TITLE –

STRUCTURAL DRAWING OF PROPOSED G+6 STORIED RESIDENTIAL (APARTMENT) BUILDING OF "BLUE ONYX PVT. LTD." OVER R.S. PLOT NO - 47(P), L.R PLOT NO.- 388, L.R KHATIAN NO.- 1954,R.S KHATIAN NO.-67, MOUZA - TETIKHALA, J.L. NO- 111, P.S. - NEWTOWNSHIP, DIST- PASCHIM BARDHAMAN, LAND OWNER - SRI. GANESH PARAMANIK

SIGNATURE OF OWNER

Ganesh chandra paramanik
Ganesh paramanik

SIGNATURE OF ARCHITECT

18/6/23

AR. VIJAYA SINGH MAZUMDER
CONSULTING ARCHITECT
COA REGISTERED
CA/2021/134276

Ar. VIJAYA SINGH MAZUMDER
COA Registered
CA/2021/134276
9332802169 / 9476426106

SIGNATURE OF GEO-TECHNICAL ENGINEER

ASIM SARKAR
BCE, ME(SOIL), M.TECH (STRUCTURE), MIGS, MIE
EMPANELLED GEOTECHNICAL ENGINEER
KMC NO - CLASS I / 2

SIGNATURE OF PANCHAYAT PRADHAN

Approved Plan No. 32 on Meeting
No. 13/2023-24 Date 29/01/2024
Valid upto 09/01/2026

Saptasati sen
Prodhan 10/09/24
Jemua Gram Panchayat

SIGNATURE OF STRUCTURAL ENGINEER

SUSMITA CHOUDHURY
B.TECH (CIVIL) - WBUT
ME (CONSTRUCTION) - JU
ESE-I/RJPSON/130
ESE-II/KMC/604
STER/NKDA/21/00010
CVER/NKDA/10/00175
(M)- 8697517321/7003201735
18/6/23

SIGNATURE OF THE VETTING AUTHORITY

CHECKED & VETTED
23/6/23
DR. DIPANKAR CHAKRAVORTY

STRUCTURAL CONSULTANT:

STRUCTCON ENTERPRISE
REGD. ADDRESS: ASHRAY APARTMENT, GROUND FLOOR
968, KALIKAPUR ROAD, KOLKATA- 700 099
Email-structconenterprise@gmail.com
Ph.-8697517321, 7003201735

DRAWING TITLE

COLUMN & TIE BEAM LAYOUT PLAN WITH REINF. DETAILS., REINF. DETAILS OF 1ST FLOOR BEAM, & DETAILS OF STAIR .

SCALE.-1:100 OR AS SHOWN

SHEET-02 OF 3	SHEET SIZE – A1