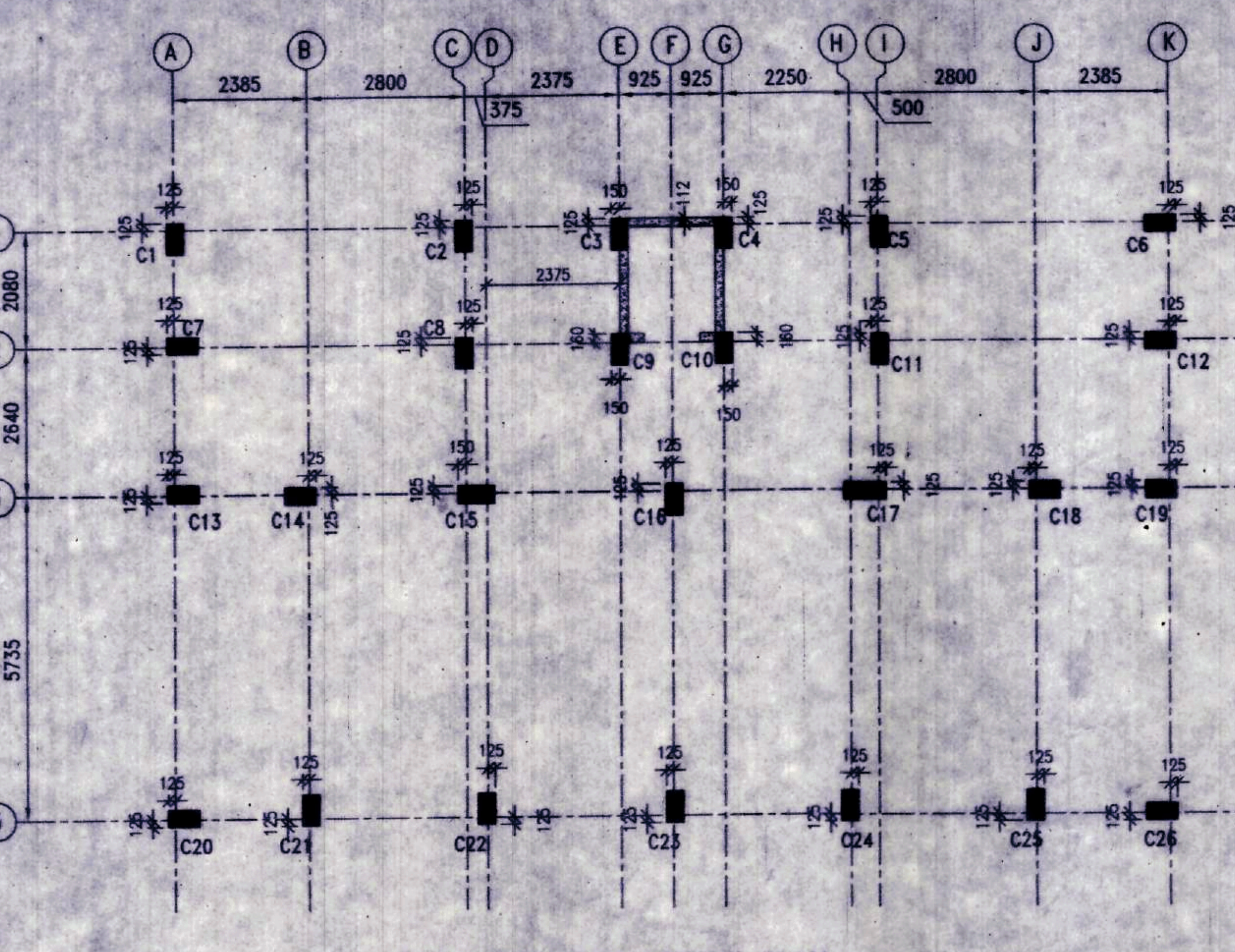
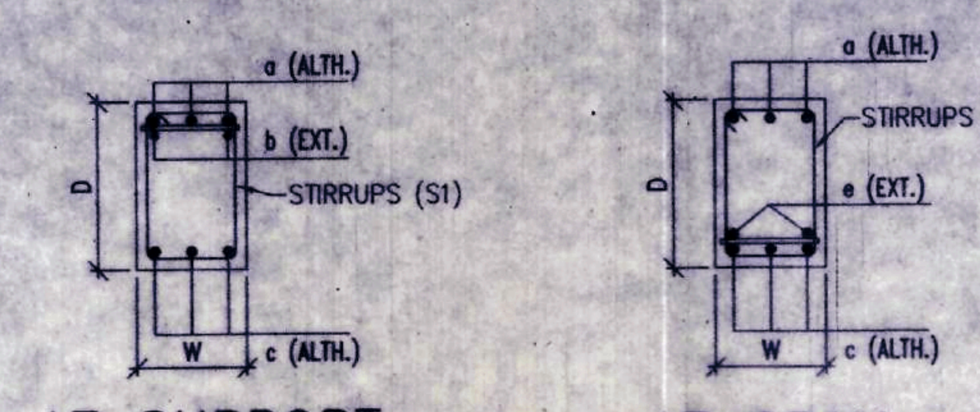


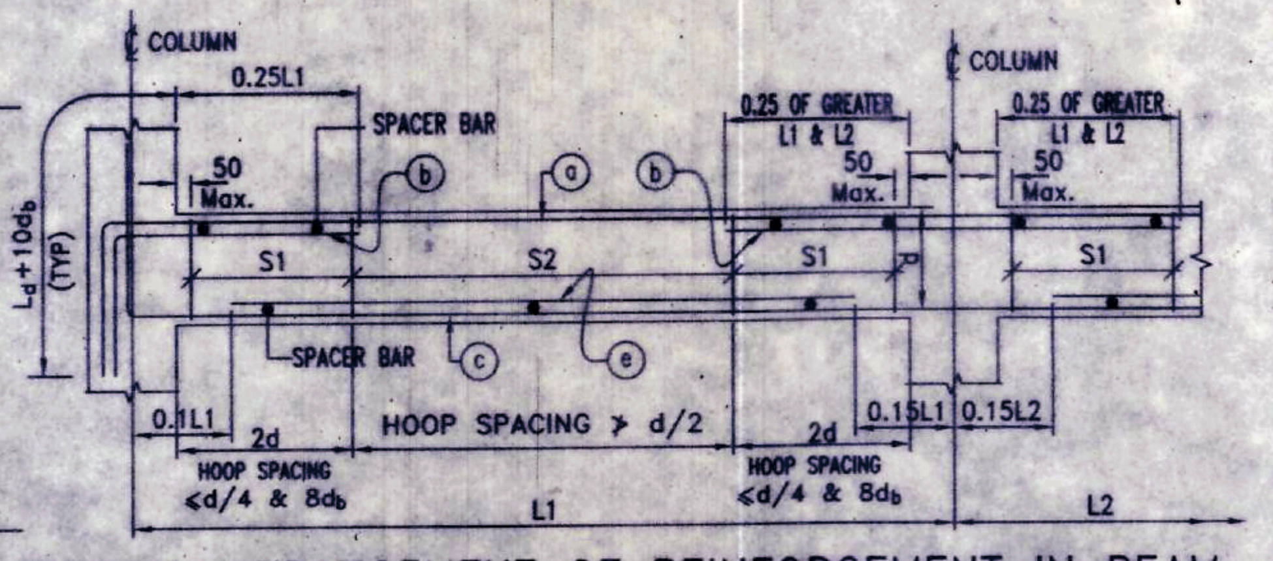
COLUMN LAYOUT PLAN

SCALE-1:100

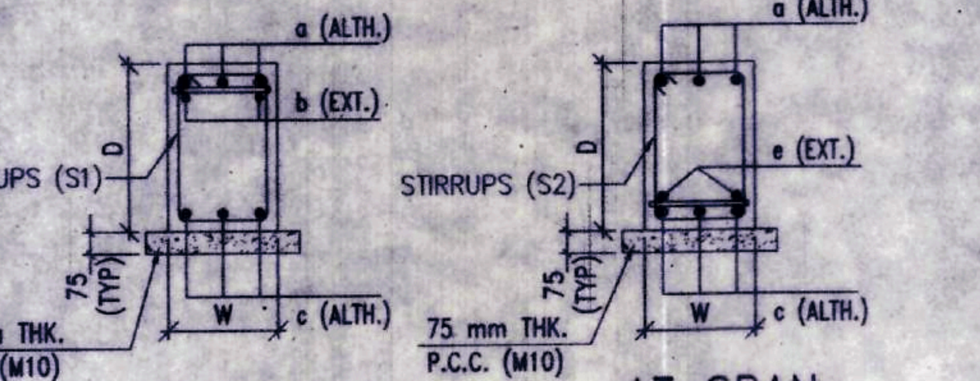


AT SUPPORT AT SPAN

TYPICAL CROSS SECTION OF BEAM

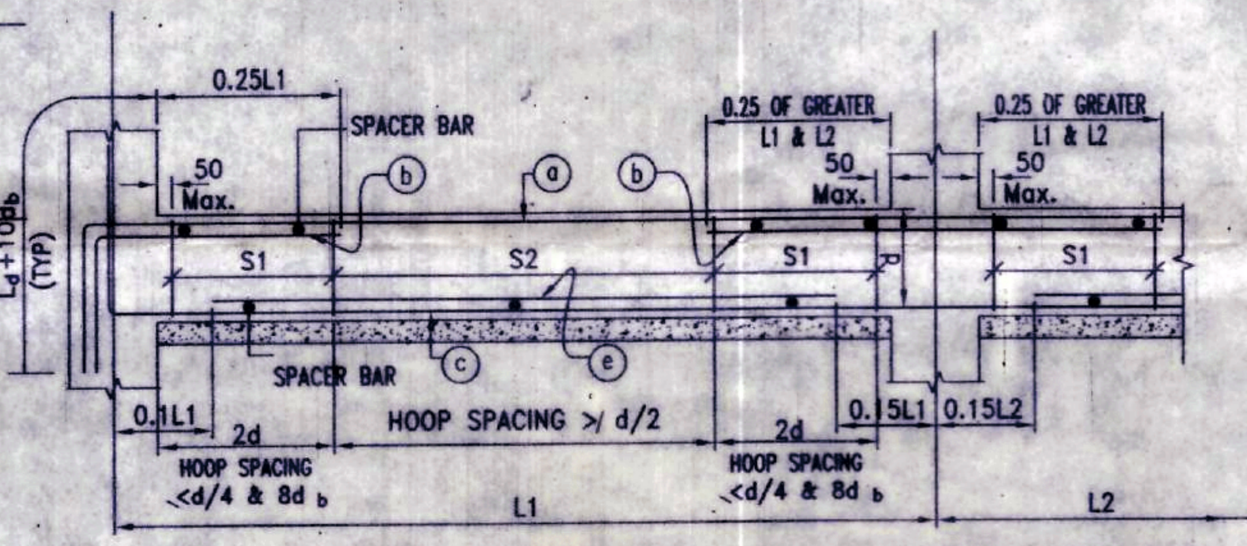


TYPICAL ARRANGEMENT OF REINFORCEMENT IN BEAM



AT SUPPORT AT SPAN

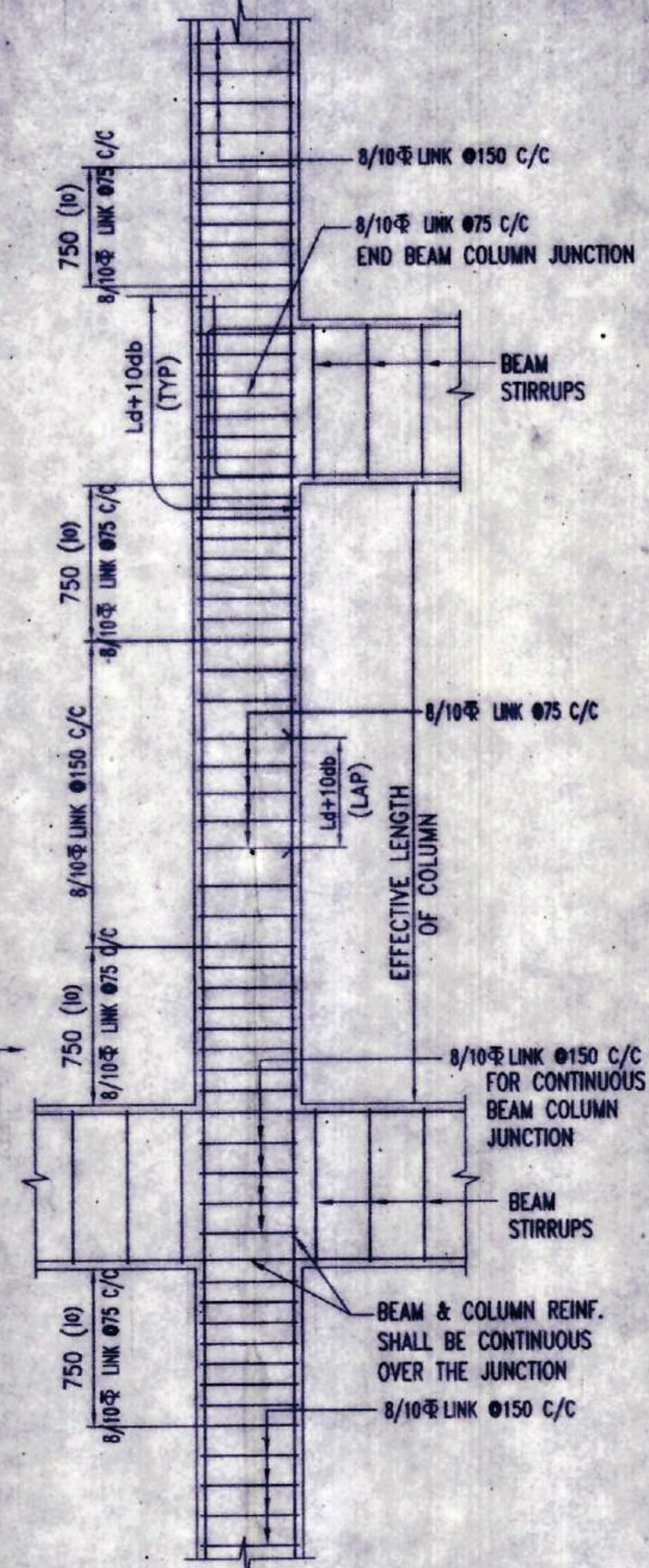
TYPICAL CROSS SECTION OF TIE BEAM



TYPICAL ARRANGEMENT OF REINFORCEMENT IN TIE BEAM

AS PER SP 34-1987 & 13920-1998

d= EFFECTIVE DEPTH OF BEAM
Ld= DEVELOPMENT LENGTH IN TENSION
db= DIAMETER OF LONGITUDINAL BAR

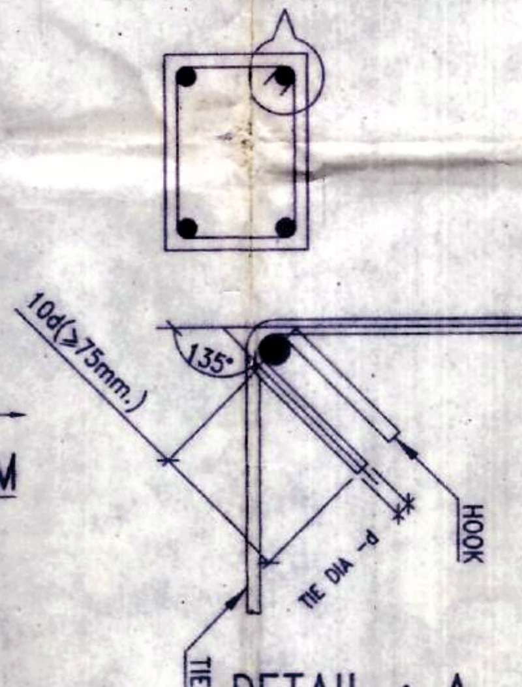


TYPICAL DUCTILE DETAIL OF BEAM COLUMN JUNCTION

SCALE 1:25

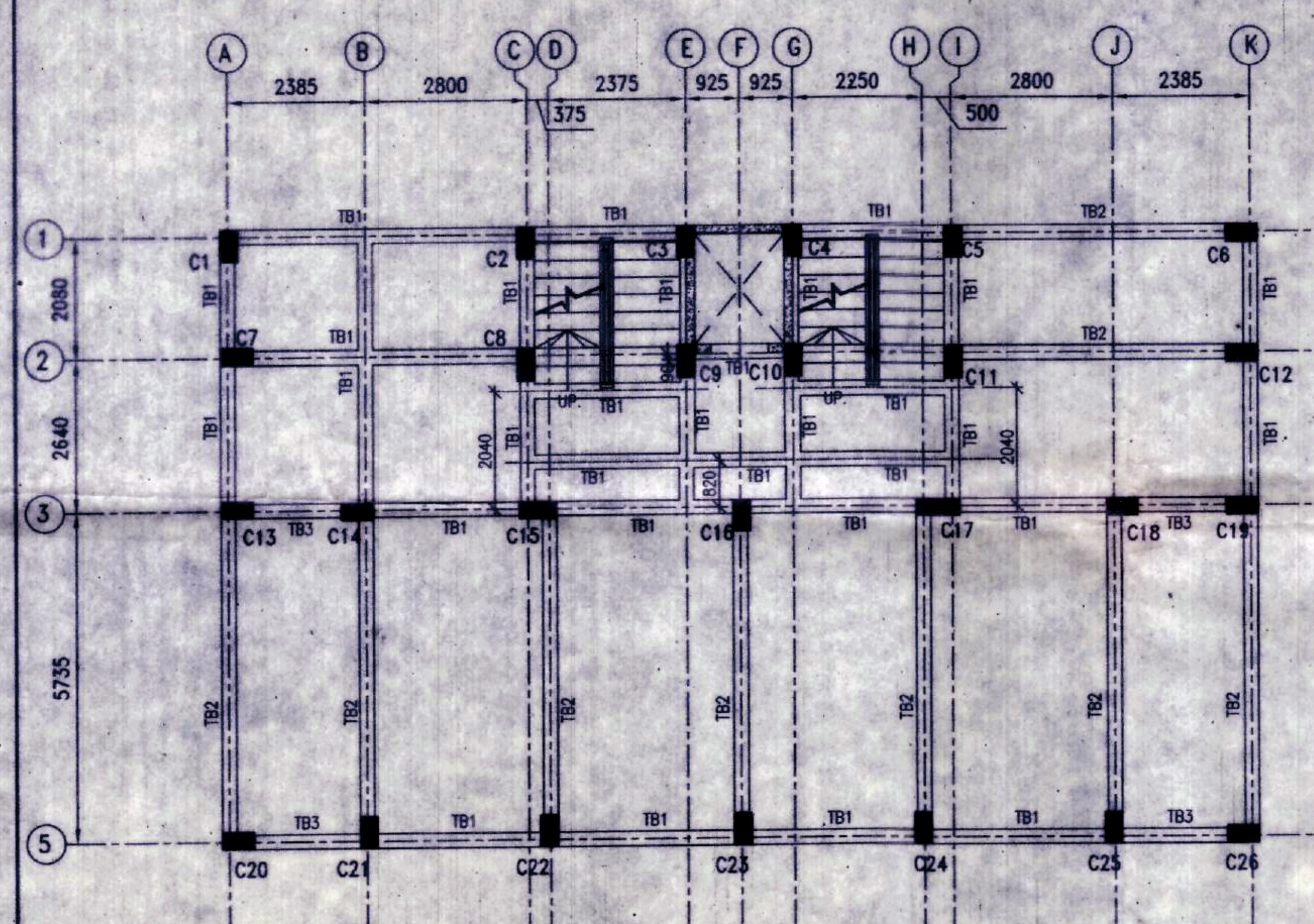
Ld = DEVELOPMENT LENGTH IN TENSION
db = DIAMETER OF LONGITUDINAL BAR

DETAIL : A



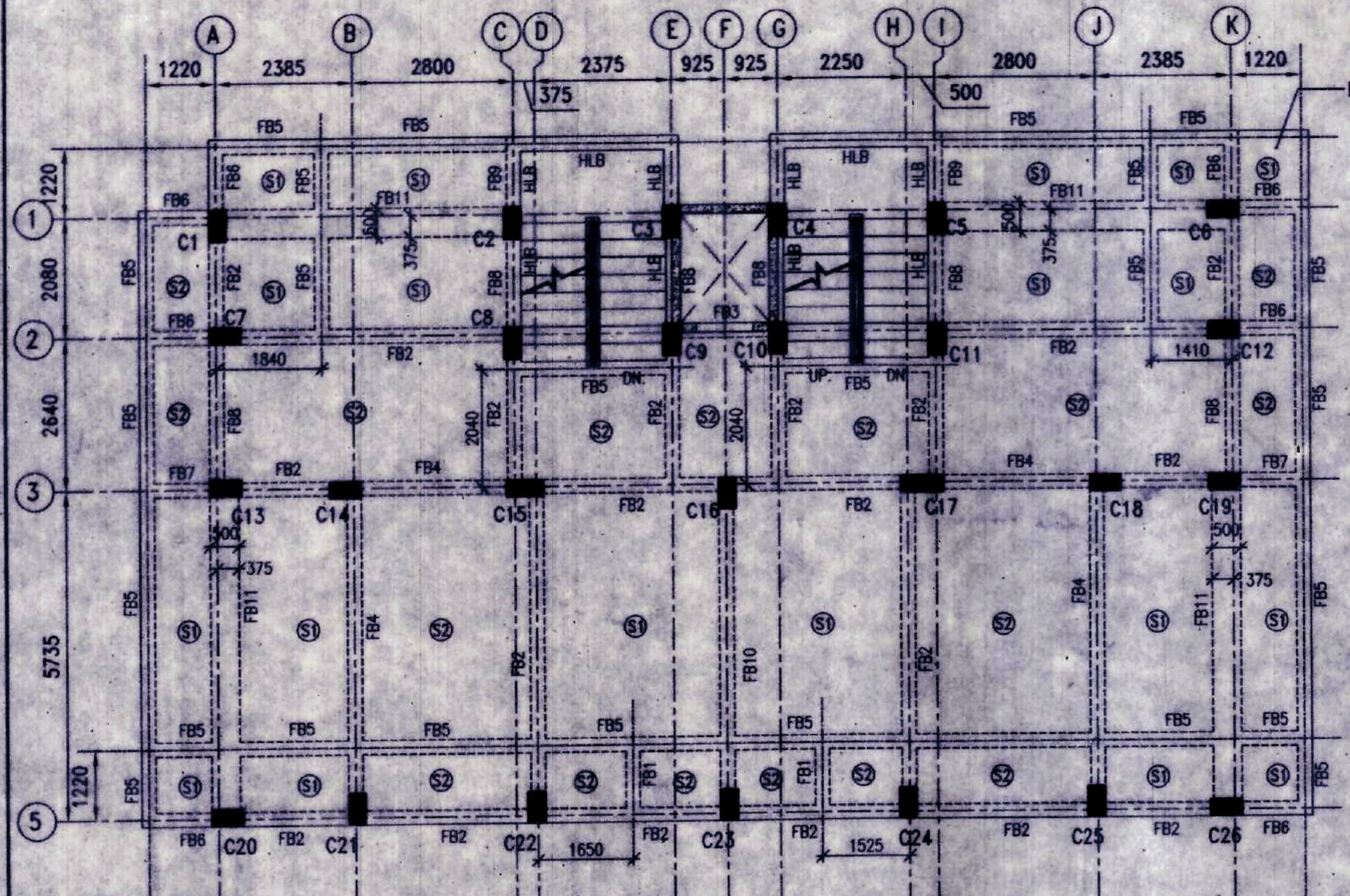
DETAIL : A

(TYPICAL DETAIL OF 135° HOOK)

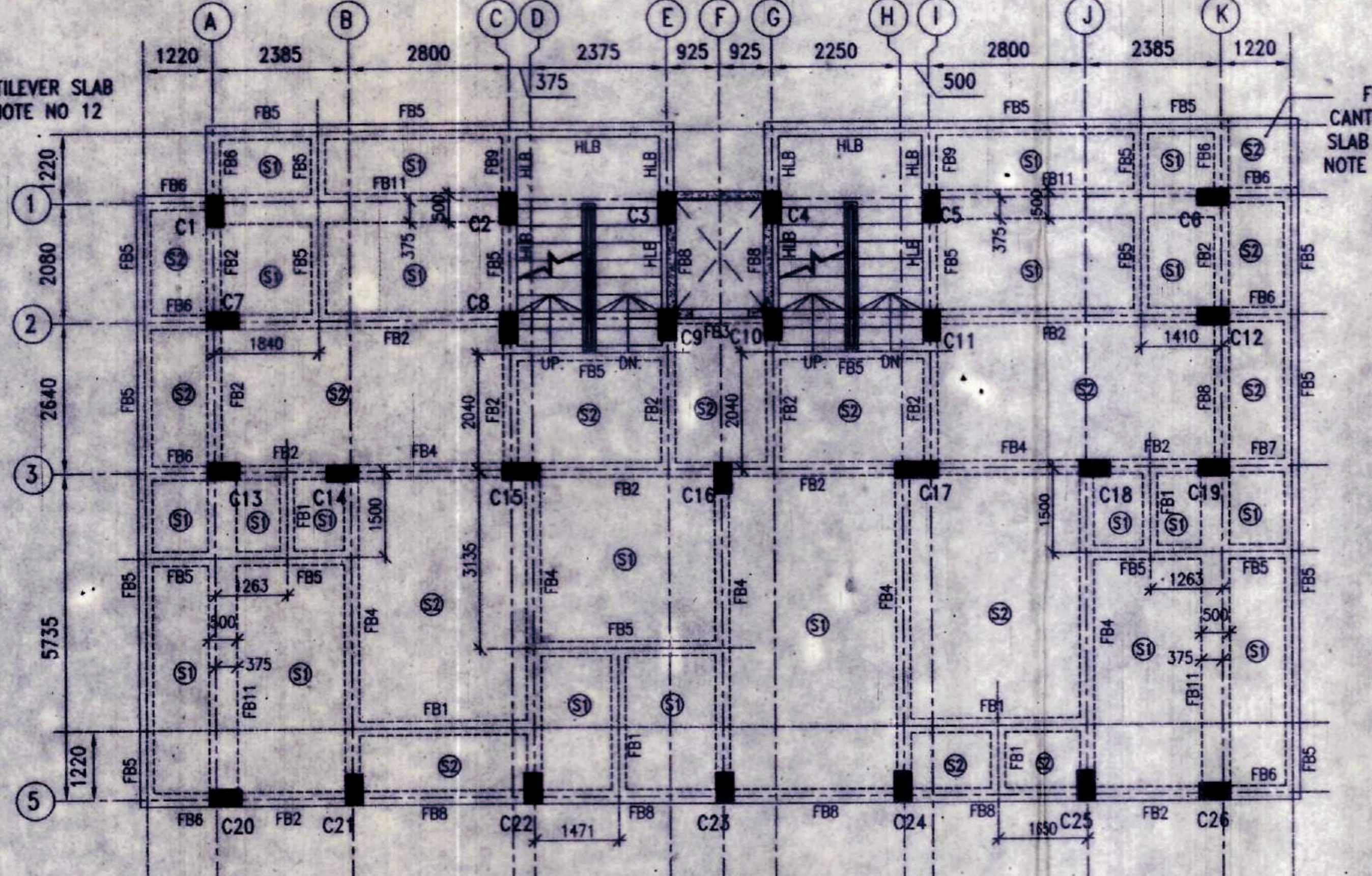


TIE BEAM LAYOUT PLAN AT LEVEL (±)0.00

SCALE-1:100



1ST, 2ND & 3RD FLOOR BEAM AND SLAB LAYOUT
PLAN AT LEVEL (+)2.9m, (+)5.8m, (+)8.7m
S1 MARKED SLABS ARE 150 mm THICK
S2 MARKED SLABS ARE 125 mm THICK
HLB REFERS TO HALF LANDING BEAM
SCALE- 1:100



4TH, 5TH & 6TH FLOOR BEAM AND SLAB LAYOUT
PLAN AT LEVEL (+)11.6m, (+)14.5m, (+)17.4m
S1 MARKED SLABS ARE 150 mm THICK
S2 MARKED SLABS ARE 125 mm THICK
HLB REFERS TO HALF LANDING BEAM
SCALE- 1:100

SPECIAL NOTES FOR PRECAMBER:

1. ALL BEAMS SPANNING GREATER THAN 4.0 M FROM GROUND FLOOR TO ROOF SHOULD BE CAST WITH A PRECAMBER OF LENGTH/400 AT BOTTOM AND LENGTH/600 AT TOP BUT NOT LESS THAN 12 mm IN EACH BAY.
2. ALL THE CANTILEVER BEAMS SHOULD BE CAST. WITH A PRECAMBER OF 10mm AT TIP.

SCHEDULE OF COLUMNS

COLUMN MARKED	NOS. OF COLUMNS	COLUMN SIZE (mmxmm)	FOUNDATION TO 4TH FLOOR	4TH FLOOR TO ROOF & ABOVE ROOF	STIRRUP ARRANGEMENT & SPACING: NEAR JUNCTION (lo)	STIRRUP ARRANGEMENT & SPACING: REST PORTION
C1, C12	02	300X550	300 × 550; MAIN RNF.:-12-20 Φ●	300 × 550; MAIN RNF.:- 6-20 Φ● +6-16 Φ○	8 Φ@75 C/C (3 NOS. CLOSED LINK) (1 NO. OPEN LINK)	8 Φ@150 C/C (3 NOS. CLOSED LINK) (1 NO. OPEN LINK)
C5, C6, C13, C19	04	300X550	300 × 550; MAIN RNF.:- 6-25 Φ● +6-20 Φ○	300 × 550; MAIN RNF.:- 4-25 Φ● +8-16 Φ○	10 Φ@75 C/C (3 NOS. CLOSED LINK) (1 NO. OPEN LINK)	10 Φ@150 C/C (3 NOS. CLOSED LINK) (1 NO. OPEN LINK)
C2	01	300X550	300 × 550; MAIN RNF.:-10-25 Φ● +2-20 Φ○	300 × 550; MAIN RNF.:- 6-25 Φ● +6-20 Φ○	8 Φ@75 C/C (3 NOS. CLOSED LINK) (1 NO. OPEN LINK)	8 Φ@150 C/C (3 NOS. CLOSED LINK) (1 NO. OPEN LINK)
C3, C4, C7, C8, C9, C10. C11, C14, C16, C18, C20, C21, C22, C23, C24, C25, C26	17	300X550	300 × 550; MAIN RNF.:- 8-20 Φ● +4-16 Φ○	300 × 550; MAIN RNF.:- 4-20 Φ● +8-16 Φ○	8 Φ@75 C/C (3 NOS. CLOSED LINK) (1 NO. OPEN LINK)	8 Φ@150 C/C (3 NOS. CLOSED LINK) (1 NO. OPEN LINK)
C15	01	300X650	300 × 650; MAIN RNF.:-10-20 Φ● +4-16 Φ○	300 × 650; MAIN RNF.:- 6-20 Φ● +8-16 Φ○	8 Φ@75 C/C (4 NOS. CLOSED LINK)	8 Φ@150 C/C (4 NOS. CLOSED LINK)
C17	01	300X750	300 × 750; MAIN RNF.:-10-20 Φ● +4-16 Φ○	300 × 750; MAIN RNF.:- 6-20 Φ● +8-16 Φ○	8 Φ@75 C/C (4 NOS. CLOSED LINK)	8 Φ@150 C/C (4 NOS. CLOSED LINK)
STOOL COLUMN						
ST1, ST2, ST3, ST4 (ROOF TO WATER TANK PLATFORM SLAB) ST5, ST8 (ROOF TO MUMTY ROOF SLAB) ST6, ST7 (ROOF TO LMR ROOF SLAB)	08	250x250	MAIN RNF.:- 4-16 Φ● +4-12 Φ○		8 Φ@150 C/C (2 NOS. 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	450	3-16 Φ	-	3-16 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
TB2	250	450	3-16 Φ	-	3-16 Φ	2-12 Φ	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
TB3	250	450	3-16 Φ	2-12 Φ	3-16 Φ	2-12 Φ	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C

SCHEDULE OF 1st TO 6th 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)
FB1	250	400	3-16 Φ	-	3-16 Φ	2-16 Φ	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
FB2	250	450	3-20 Φ	2-16 Φ	3-20 Φ	2-16 Φ	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
FB3	250	450	3-20 Φ	-	3-20 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
FB4	250	450	3-20 Φ	2-16 Φ	3-20 Φ	2-16 Φ	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
FB5	250	450	3-16 Φ +2-16 Φ	-	3-16 Φ +3-16 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
FB6	250	450	3-20 Φ	-	3-20 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@100 C/C
FB7	250	450	3-20 Φ +2-16 Φ	-	3-20 Φ	2-16 Φ	2L-8 Φ@100 C/C	2L-8 Φ@100 C/C
FB8	250	450	3-16 Φ	2-12 Φ	3-16 Φ	2-12 Φ	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
FB9	250	450	3-16 Φ +2-12 Φ	-	3-16 Φ +2-12 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@100 C/C
FB10	250	450	3-20 Φ	3-16 Φ	3-20 Φ	2-16 Φ	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
FB11 (HIDDEN BEAM)	500	250	6-20 Φ	-	6-20 Φ	-	4L-12 Φ@100 C/C	4L-12 Φ@100 C/C
HLB	250	450	3-20 Φ	2-16 Φ	3-20 Φ	-	2L-8, Φ@100 C/C	2L-8 Φ@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 = 60xBAR DIA.
6. CONCRETE NOMINAL COVER TO MAIN REINFORCEMENT SHALL BE AS FOLLOWS:
   i) COLUMNS : 40 mm
   ii) BEAMS : 30 mm
   iii) SLABS : 20 mm
7. GRADE OF CONCRETE FOR SUPERSTRUCTURE & SUBSTRUCTURE WILL BE 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. IN 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 DRAWINGS OF PROPOSED G+6 STORIED APARTMENT BUILDING OF SMT. CHAMPA MUKHERJEE OVER L.R. PLOT NO. - 207, L.R. KHATIAN NO. - 725, MOUZA - TETIKHOLA, J.L. NO- 111, P.S. - NEW TOWNSHIP, DIST- PASCHIM BARDHAMAN.

SIGNATURE OF OWNER

Champa Mukherjee

SIGNATURE OF L.B.S./ENGINEER/ARCHITECT

Vijaya 22/9/2020

VIJAYA SINGH MAZUMDER
Consulting Architect
DMC Registered [DMC/BPD/60]
9332802166, 9476426106

VIJAYA SINGH
DMC REGISTERED
LIC NO. - DMC/BPD/60

SIGNATURE OF STRUCTURAL ENGINEER

S. Choudhury 14/9/2020

SUSMITA CHOUDHURY
B.TECH (WBUT)
CIVIL ENGINEER, NKDA

Sanjoy Das Neogi 16/9/2020

Dr. Sanjoy Das Neogi
Asst. Prof. Techno International Newtown
PhD.(Engg), ME(Structure, JU), BE (JU), MIE
Reg. ESE/ 1/223 of KMC, CVER/NKDA/10/00087
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SIGNATURE OF VETTING AUTHORITY

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DR. DIPANKAR CHAKRAVORTY
STRUCTURAL ENGINEERING DIVISION
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PH.D (IIT KGP)
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(M) 9830188502 & 9433993143
EMAIL : prof.dipankar@gmail.com

SIGNATURE OF PANCHAYAT PRADHAN

Approved Plan No. 43 on Meeting
No. 13/2021-22 Date 25/01/2022
Valid upto 07/12/2025

Sapta sati sen
Prodhan 08/12/23
Jemua Gram Panchayat

DRAWING DETAILS

COLUMN LAYOUT PLAN & REINFORCEMENT DETAILS, TIE,1ST TO 3RD & 4TH TO 6TH FLOOR BEAM AND SLAB LAYOUT PLAN & REINFORCEMENT DETAILS. DUCTILE DETAIL

SCALE-1:100 OR AS SHOWN

DATE- 05.09.2020

SHEET 2 OF 3