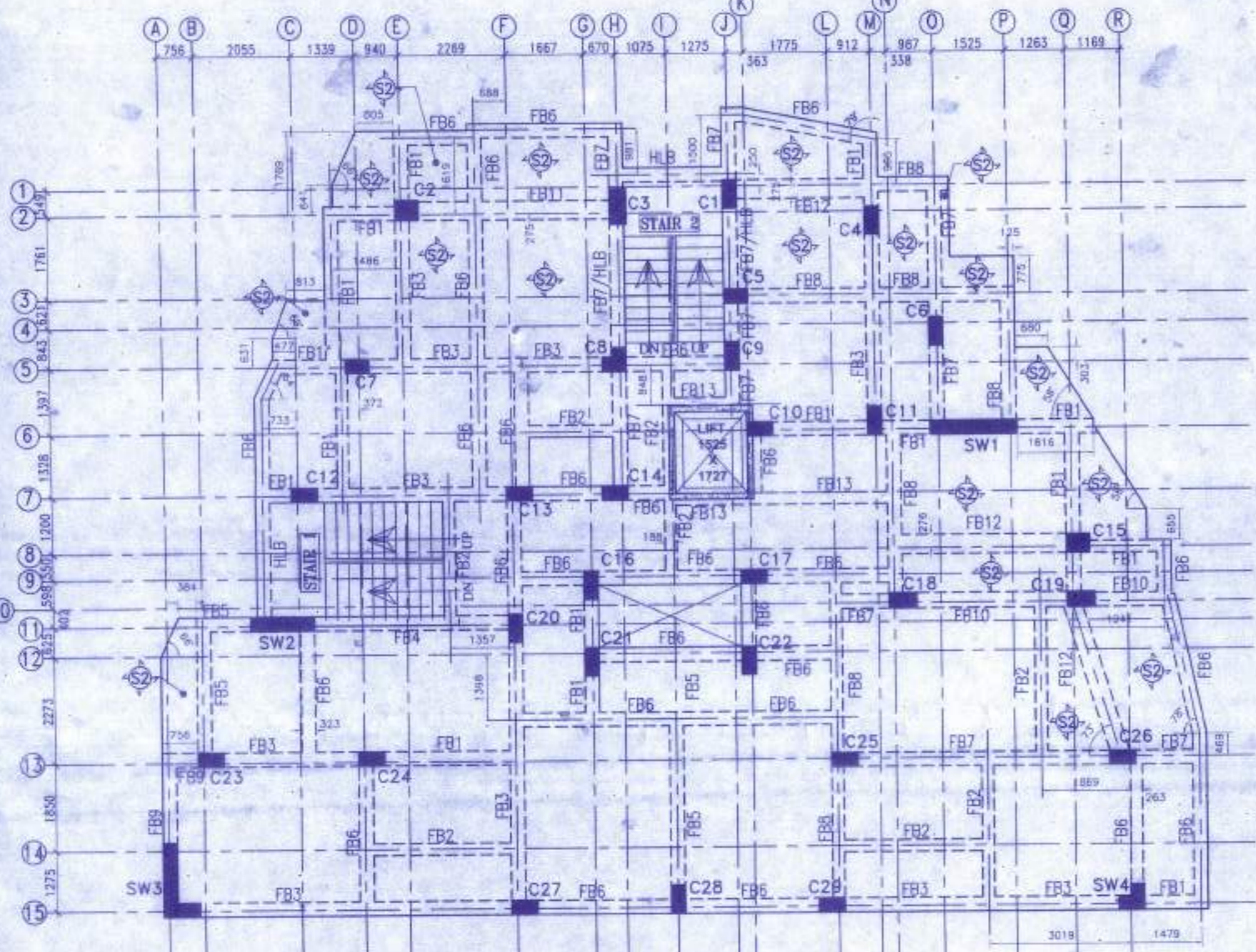
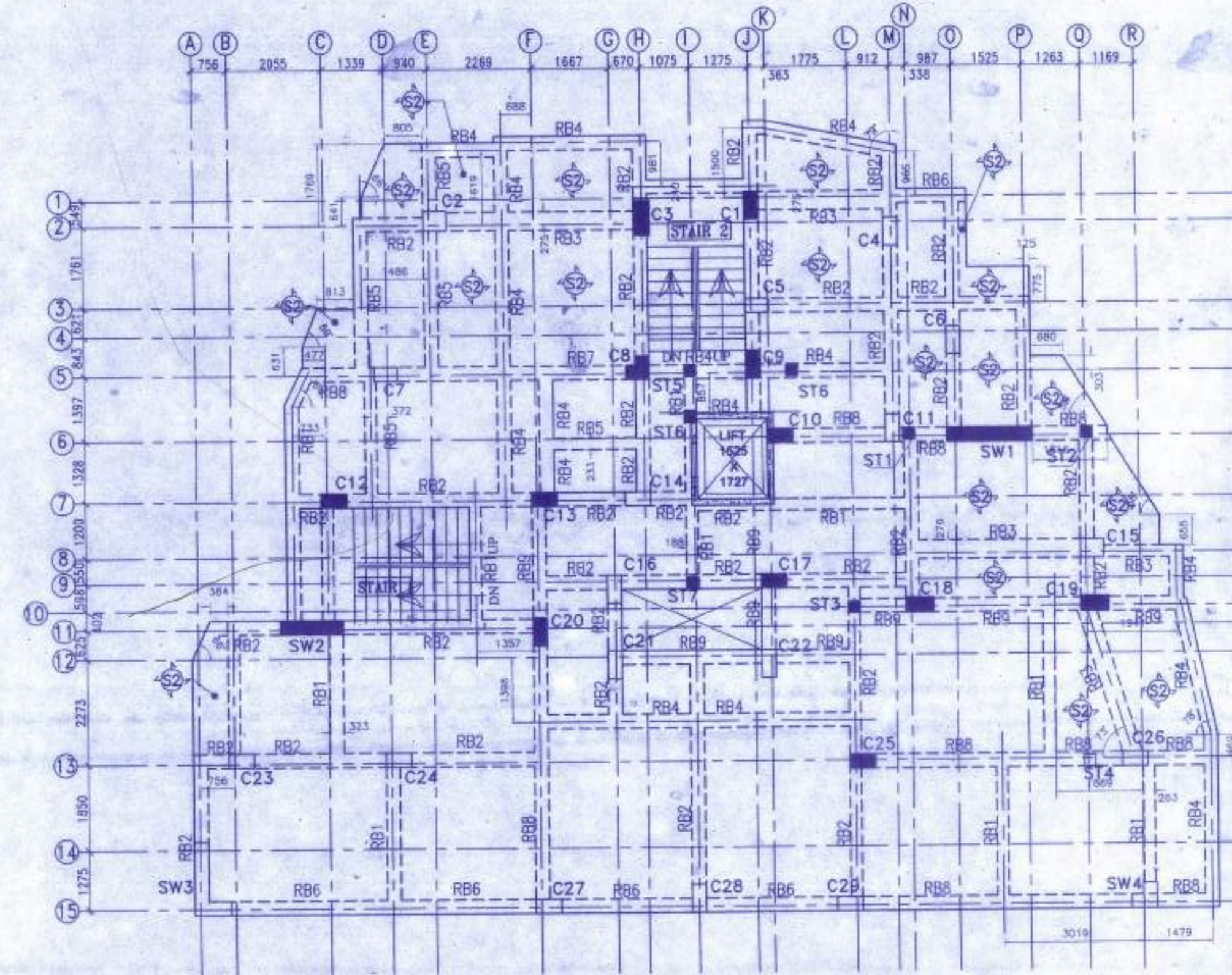


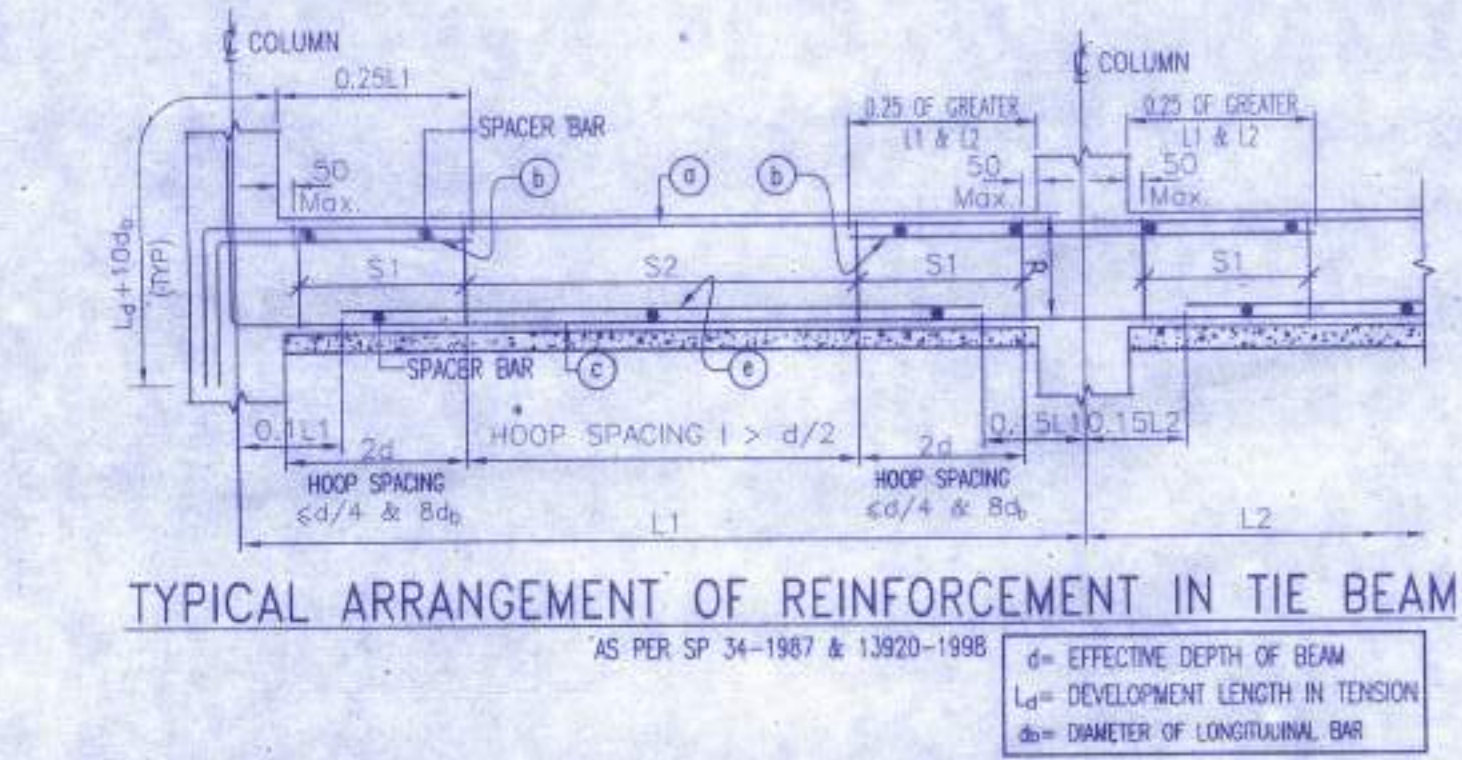
TIE BEAM LAYOUT PLAN AT LEVEL ±0.00  
(CONCRETE GRADE: M30)



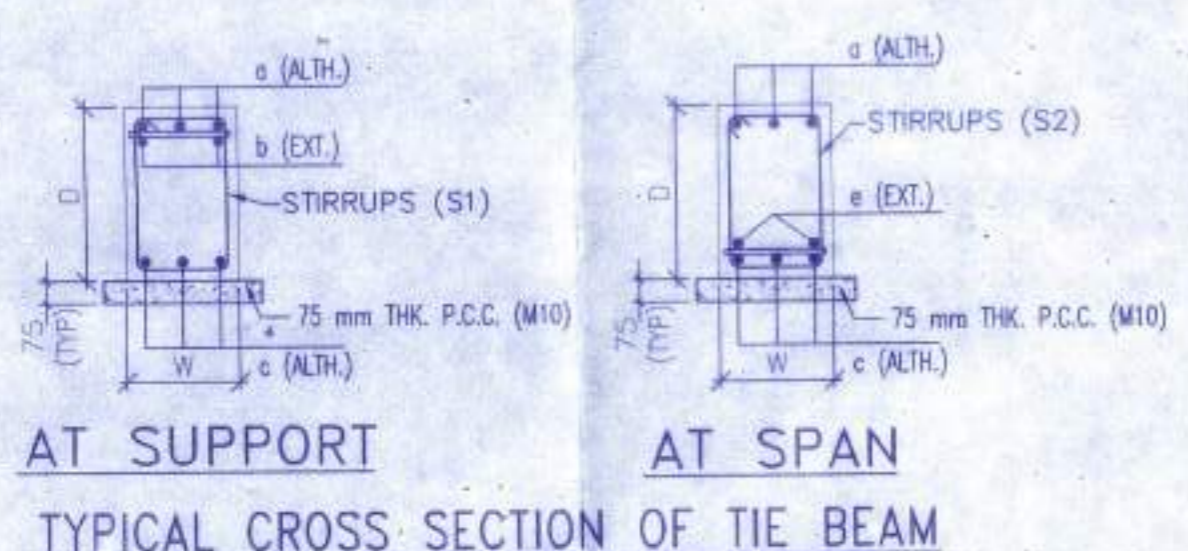
TYPICAL (FIRST TO SIXTH) FLOOR BEAM AND SLAB LAYOUT PLANS AT LEVEL (+)2.85 m, (+)5.7 m, (+)8.55 m, (+)11.4 m, (+)14.25 m, (+)17.1 m  
S2 MARKED SLABS ARE 150 MM THICK  
ALL OTHER SLABS ARE 110 MM THICK(S1)  
SCALE: 1:100  
(CONCRETE GRADE: M30)



ROOF BEAM AND SLAB LAYOUT PLANS AT LEVEL (+)19.95 m  
S2 MARKED SLABS ARE 150 MM THICK  
ALL OTHER SLABS ARE 110 MM THICK(S1)  
SCALE: 1:100  
(CONCRETE GRADE: M30)

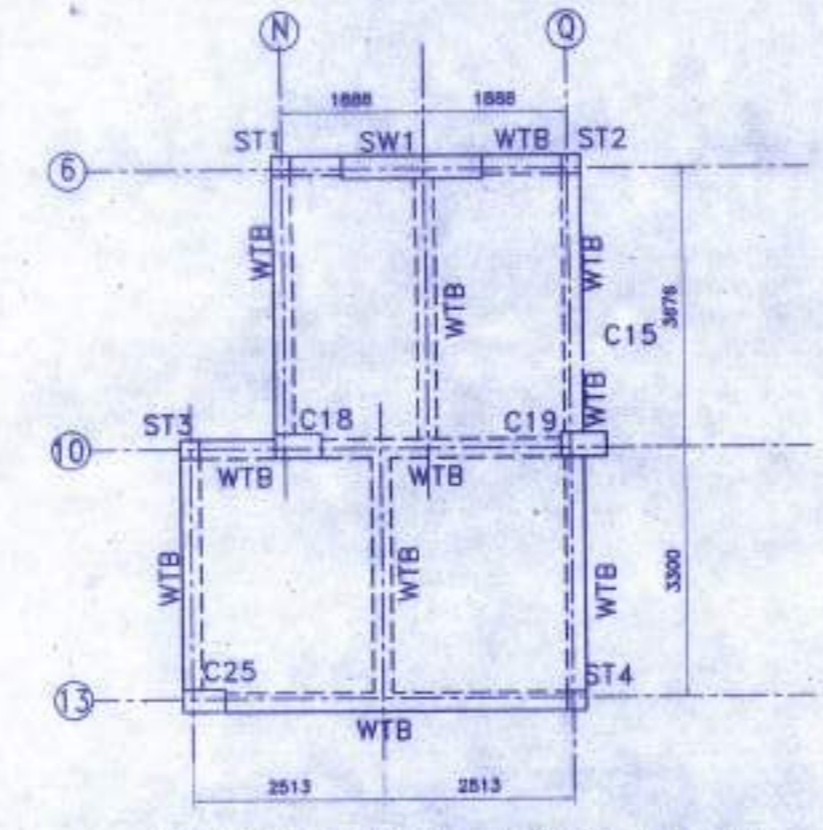


TYPICAL ARRANGEMENT OF REINFORCEMENT IN TIE BEAM  
AS PER SP 34-1987 & 13020-1988



TYPICAL CROSS SECTION OF TIE BEAM  
AT SUPPORT AT SPAN

IN ALL CANTILEVER SLABS WITHOUT PERIPHERAL BEAMS THE TOP REINFORCEMENT PARALLEL TO THE CANTILEVER SPAN SHOULD BE CONTINUED UP TO ATLEAST 1.5 TIMES THE CANTILEVER SPAN WITHIN THE ADJACENT SLAB.



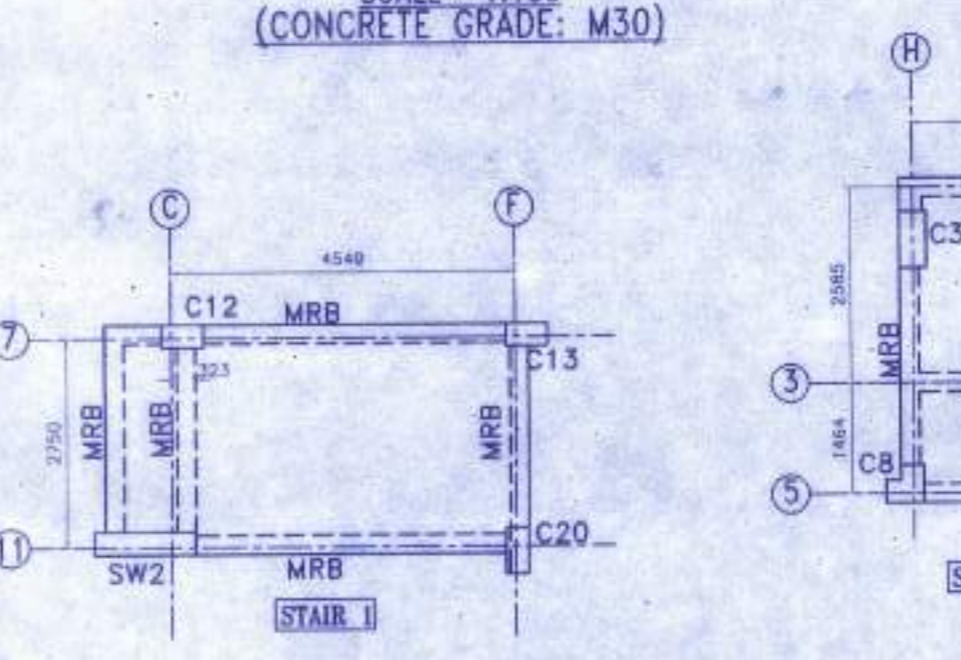
WATER TANK FLOOR BEAM AND SLAB LAYOUT PLAN (+) 20.95 m. LEVEL  
SLAB 200 mm THICK (S3)  
SCALE: 1:100  
(CONCRETE GRADE: M30)

SCHEDULE OF TIE BEAMS (CONCRETE GRADE: M30)

BEAM MARKED	BEAM SIZE	TOP REINFORCEMENT	BOTTOM REINFORCEMENT	STIRRUPS (AT SUPPORT)	STIRRUPS (AT SPAN)
TB1	250 x 500	3-16 @	3-16 @	2-8 @100 C/C	2-8 @150 C/C
TB2	250 x 500	3-20 @	3-20 @	2-8 @100 C/C	2-8 @150 C/C
TB3	250 x 500	3-20 @	3-16 @	2-8 @100 C/C	2-8 @150 C/C
TB4	250 x 500	3-20 @	3-20 @	2-8 @100 C/C	2-8 @150 C/C

SCHEDULE OF TYPICAL FLOOR & HALF LANDING BEAMS (CONCRETE GRADE: M30)

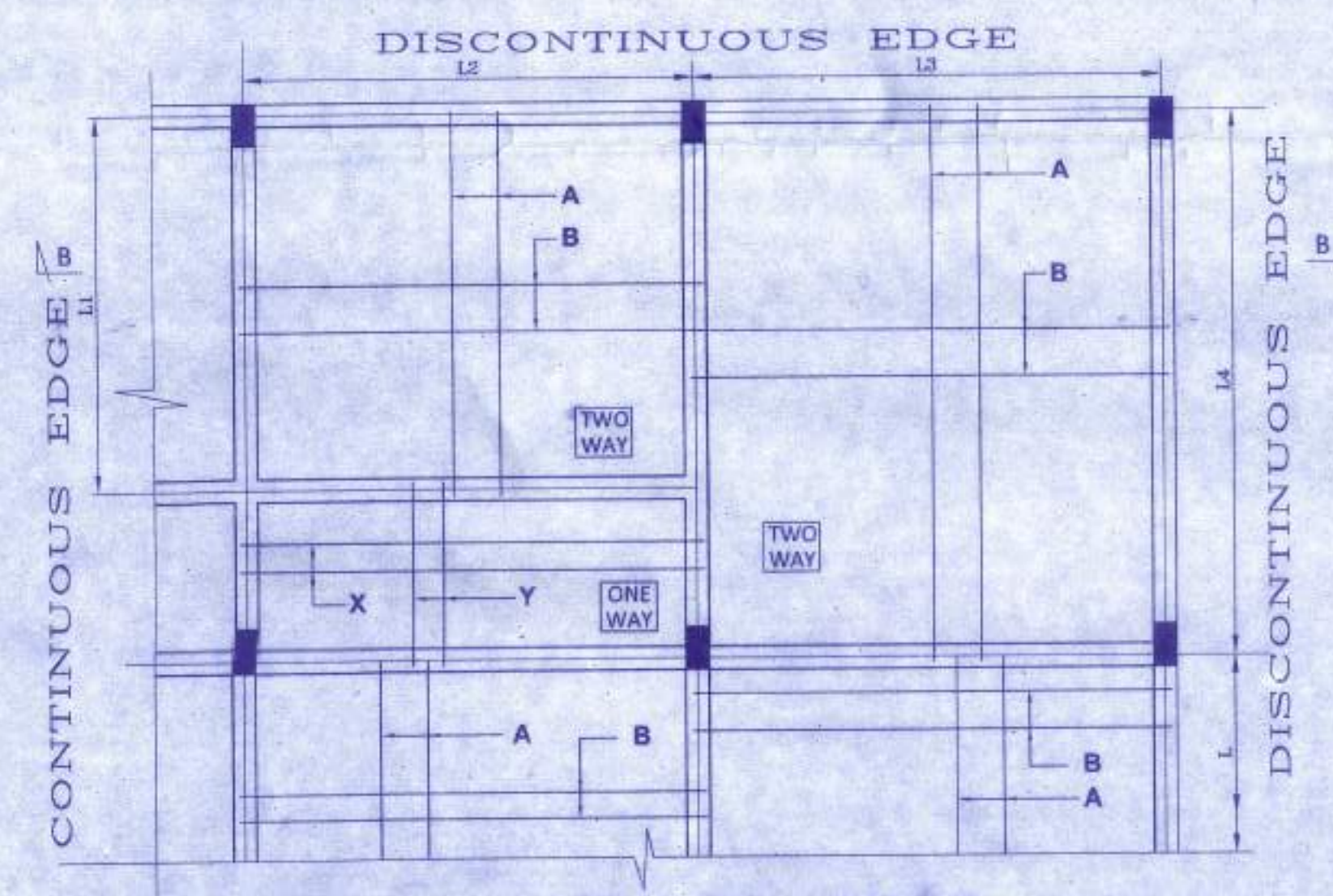
BEAM MARKED	BEAM SIZE	TOP REINFORCEMENT	BOTTOM REINFORCEMENT	STIRRUPS (AT SUPPORT)	STIRRUPS (AT SPAN)
FB1	300 x 550	3-20 @	3-20 @	2-8 @100 C/C	2-8 @125 C/C
FB2	250 x 500	3-16 @	3-16 @	2-8 @100 C/C	2-8 @150 C/C
FB3	300 x 550	3-20 @	3-20 @	2-8 @100 C/C	2-8 @125 C/C
FB4	300 x 550	3-20 @	2-12 @	2-8 @100 C/C	2-8 @125 C/C
FB5	300 x 550	3-20 @	3-20 @	2-8 @100 C/C	2-8 @125 C/C
FB6	300 x 550	3-20 @	3-20 @	2-8 @100 C/C	2-8 @125 C/C
FB7	300 x 550	3-20 @	3-20 @	2-8 @100 C/C	2-8 @125 C/C
FB8	300 x 550	3-20 @	3-20 @	2-8 @100 C/C	2-8 @125 C/C
FB9	300 x 550	3-20 @	3-20 @	2-8 @100 C/C	2-8 @125 C/C
FB10	325 x 550	3-20 @	3-20 @	2-10 @100 C/C	2-10 @125 C/C
FB11	400 x 300	4-20 @	4-20 @	2-10 @100 C/C	2-10 @125 C/C
FB12	400 x 300	4-20 @	4-20 @	2-10 @100 C/C	2-10 @125 C/C
FB13	300 x 550	3-16 @	3-16 @	2-8 @100 C/C	2-8 @125 C/C
HLB	300 x 550	3-20 @	3-20 @	2-8 @100 C/C	2-8 @125 C/C



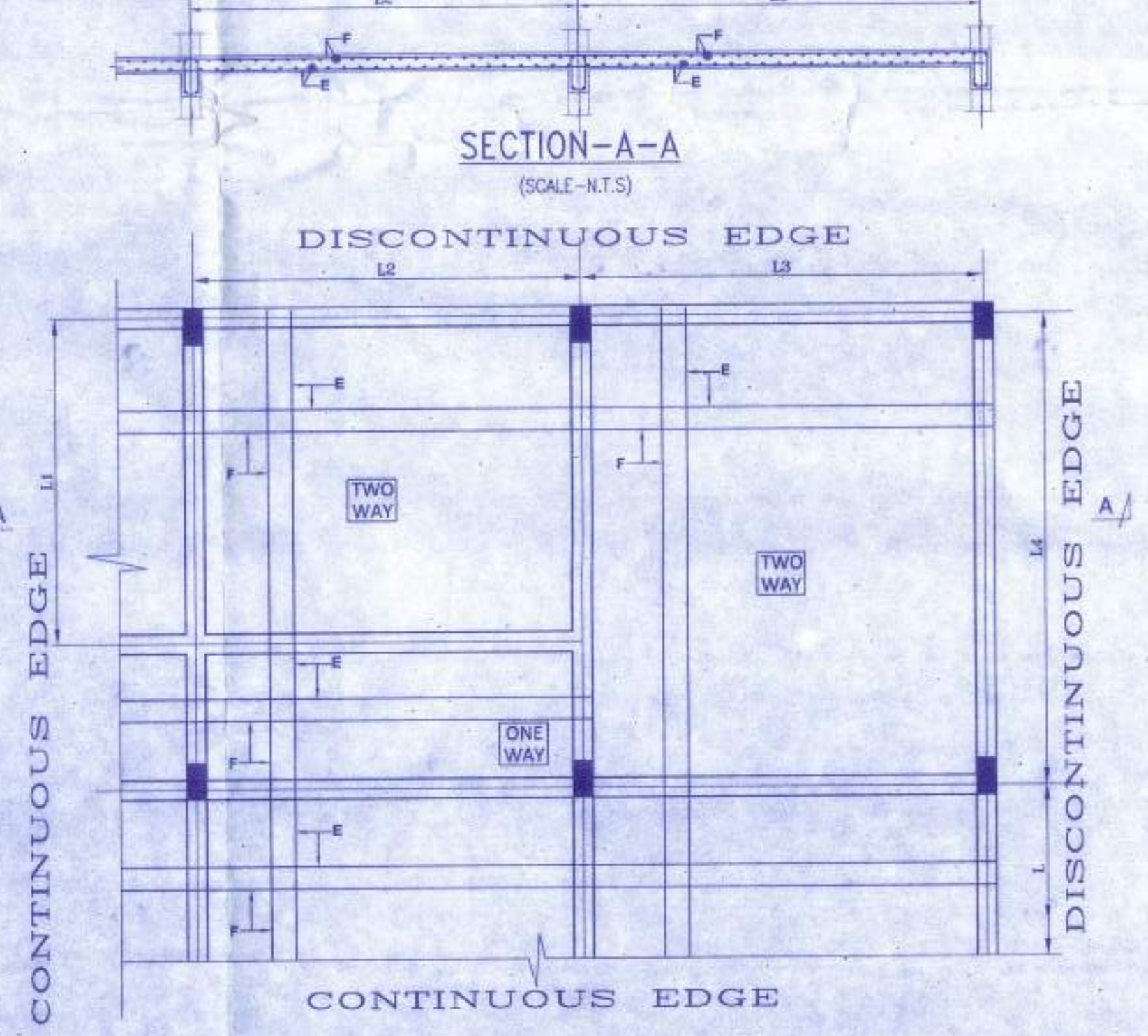
MUMMY ROOF BEAM & SLAB LAYOUT PLAN AT LVL. (+)22.35m.  
ALL SLABS 110 mm THK. (S1)  
SCALE: 1:100  
(CONCRETE GRADE: M30)

SCHEDULE OF ROOF, L.M.R FLOOR & ROOF BEAMS, WATER TANK PLATFORM BEAMS & MUMMY ROOF BEAMS (CONCRETE GRADE: M30)

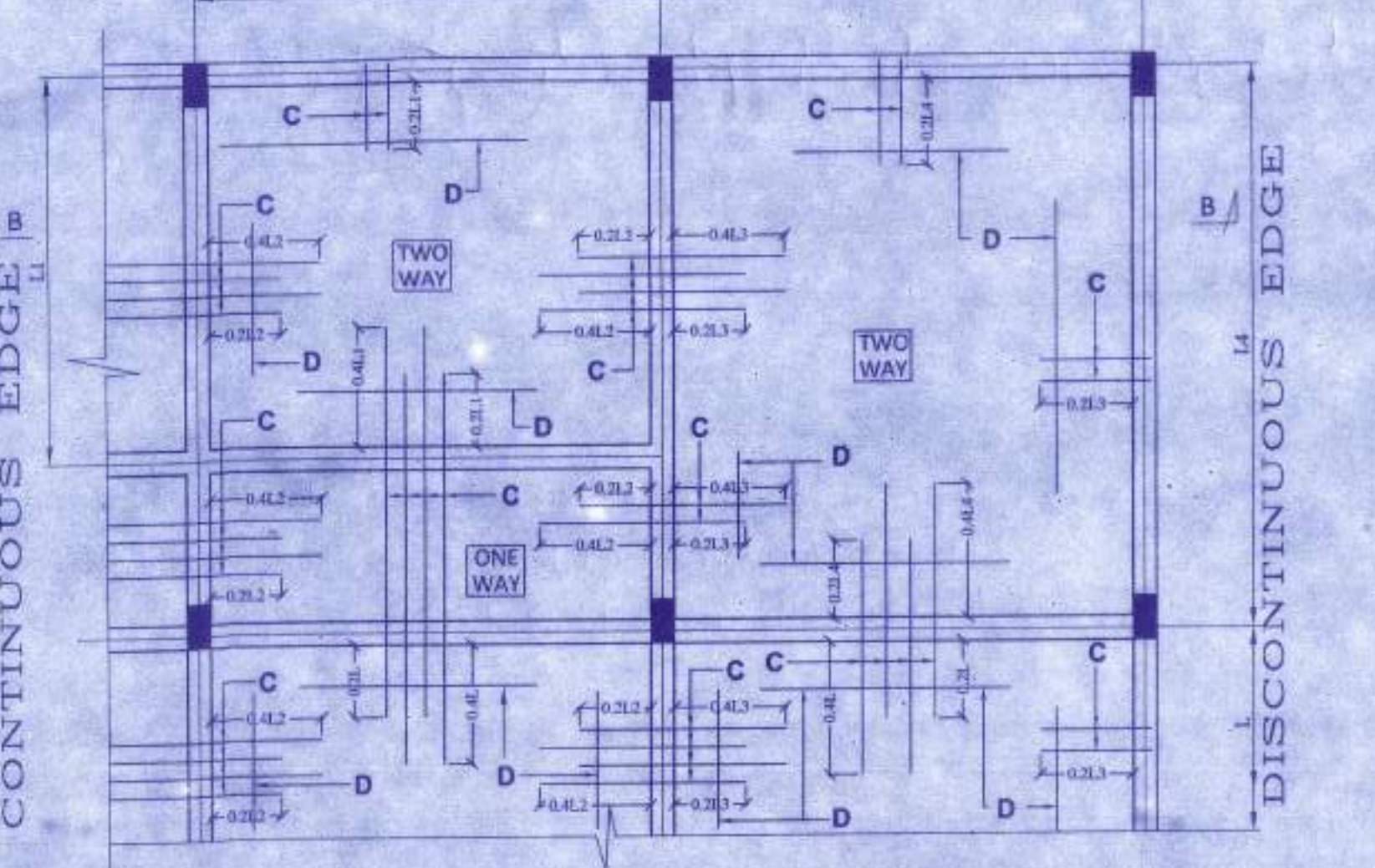
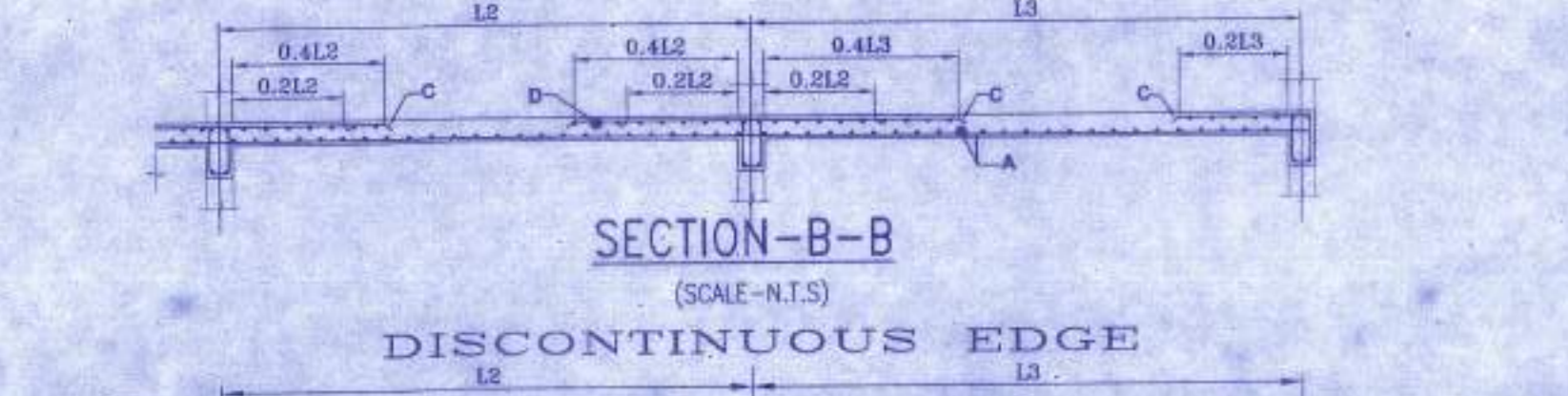
BEAM MARKED	BEAM SIZE	TOP REINFORCEMENT	BOTTOM REINFORCEMENT	STIRRUPS (AT SUPPORT)	STIRRUPS (AT SPAN)
RB1	250 x 500	3-16 @	3-16 @	2-8 @100 C/C	2-8 @150 C/C
RB2	300 x 550	3-20 @	3-20 @	2-8 @100 C/C	2-8 @150 C/C
RB3	400 x 300	4-20 @	4-20 @	2-8 @100 C/C	2-8 @150 C/C
RB4	300 x 550	3-16 @	3-16 @	2-8 @100 C/C	2-8 @150 C/C
RB5	300 x 550	3-16 @	3-16 @	2-8 @100 C/C	2-8 @150 C/C
RB6	300 x 550	3-20 @	3-16 @	2-8 @100 C/C	2-8 @150 C/C
RB7	300 x 550	3-20 @	3-16 @	2-8 @100 C/C	2-8 @150 C/C
RB8	300 x 550	3-20 @	3-16 @	2-8 @100 C/C	2-8 @150 C/C
RB9	300 x 550	3-20 @	3-20 @	2-8 @100 C/C	2-8 @150 C/C
MRB	250 x 500	3-16 @	3-16 @	2-8 @100 C/C	2-8 @150 C/C
L.M.R.F	250 x 400	3-16 @	3-16 @	2-8 @100 C/C	2-8 @150 C/C
L.M.R.F	250 x 400	3-16 @	3-16 @	2-8 @100 C/C	2-8 @150 C/C
WTB	250 x 500	3-20 @	3-20 @	2-8 @100 C/C	2-8 @150 C/C



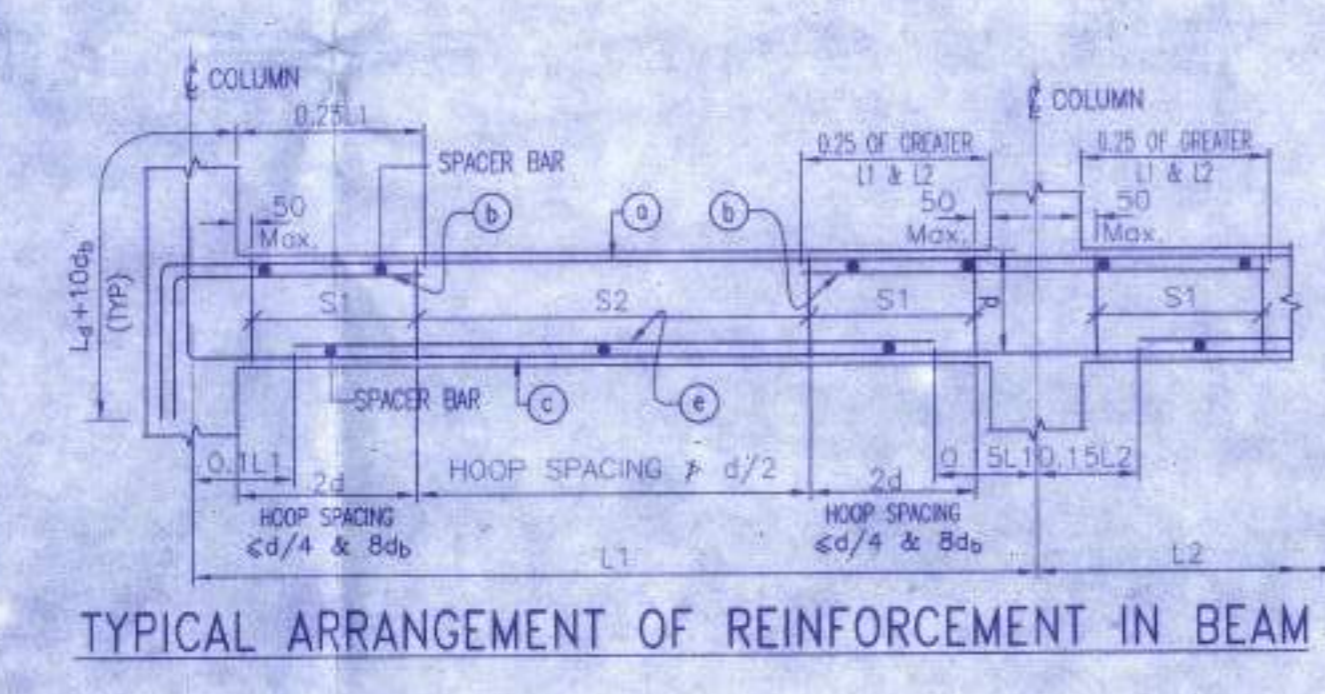
TYPICAL DETAILS OF SLAB REINFORCEMENT (BOTTOM)  
SLAB MARKED S1, S2 (EXCEPT MUMMY ROOM ROOF SLAB AND L.M.R. ROOF SLAB)  
SCALE: N.T.S.  
(CONCRETE GRADE: M30)



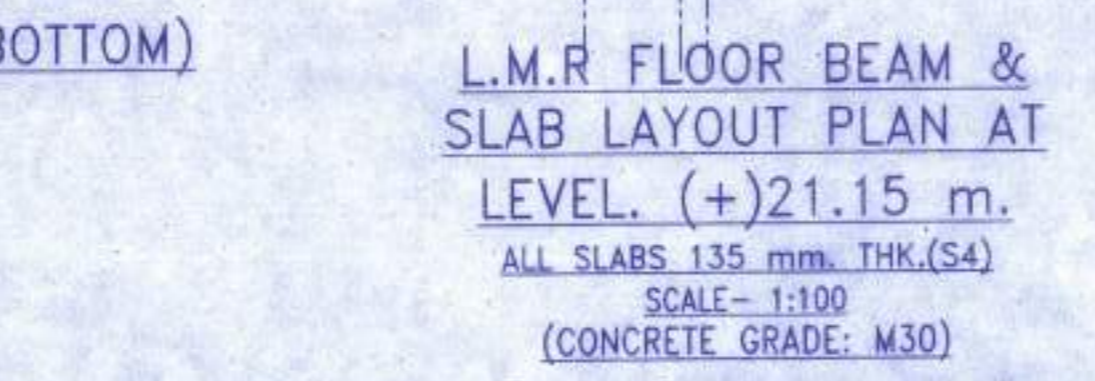
TYPICAL DETAILS OF SLAB REINFORCEMENT (TOP & BOTTOM)  
(S3 FOR MUMMY ROOM ROOF SLAB AND L.M.R. ROOF SLAB, S5 & S6)  
SCALE: N.T.S.  
(CONCRETE GRADE: M30)



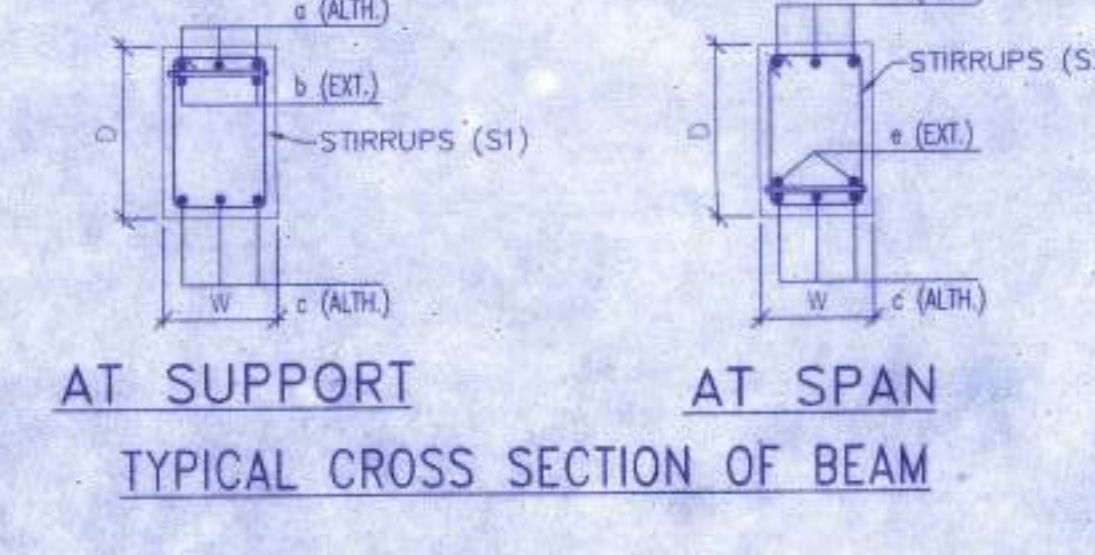
TYPICAL DETAILS OF SLAB REINFORCEMENT (TOP)  
SLAB MARKED S1, S2 (EXCEPT MUMMY ROOM ROOF SLAB AND L.M.R. ROOF SLAB)  
SCALE: N.T.S.  
(CONCRETE GRADE: M30)



TYPICAL ARRANGEMENT OF REINFORCEMENT IN BEAM  
AT SUPPORT AT SPAN



L.M.R FLOOR BEAM & SLAB LAYOUT PLAN AT LEVEL. (+)21.15 m.  
ALL SLABS 135 mm THK. (S4)  
SCALE: 1:100  
(CONCRETE GRADE: M30)



TYPICAL CROSS SECTION OF BEAM  
AT SUPPORT AT SPAN

SCHEDULE OF TYPICAL FLOOR SLAB MARKED S1 (THICKNESS-110 mm.) (CONCRETE GRADE: M30)

BAR MKD.	REINFORCEMENT	POSITION
A	8@ 150 mm C/C (ALL THROUGH)	BOT.
B	8@ 150 mm C/C (ALL THROUGH)	BOT.
X	8@ 150 mm C/C (ALL THROUGH)	BOT.
Y	8@ 150 mm C/C (ALL THROUGH)	BOT.
C	8@ 150 mm C/C (COURTMENT)	TOP
D(BINDER)	8@ 150 mm C/C (WHEREVER REQUIRED)	TOP

SCHEDULE OF TYPICAL FLOOR SLAB MARKED S2 (THICKNESS-150 mm.) (CONCRETE GRADE: M30)

BAR MKD.	REINFORCEMENT	POSITION
A	10 @ 150 mm C/C (ALL THROUGH)	BOT.
B	10 @ 150 mm C/C (ALL THROUGH)	BOT.
X	10 @ 150 mm C/C (ALL THROUGH)	BOT.
Y	10 @ 150 mm C/C (ALL THROUGH)	BOT.
C	10 @ 150 mm C/C (COURTMENT)	TOP
D(BINDER)	8 @ 150 mm C/C (WHEREVER REQUIRED)	TOP

SCHEDULE OF WATER TANK FLOOR SLAB MARKED S3 (THICKNESS-200 mm.) (CONCRETE GRADE: M30)

BAR MKD.	REINFORCEMENT	POSITION
E	10 @ 150 mm C/C (ALL THROUGH)	BOT.
F	10 @ 150 mm C/C (ALL THROUGH)	TOP

SCHEDULE OF L.M.R FLOOR SLAB MARKED S4 (THICKNESS-110 mm.) (CONCRETE GRADE: M30)

BAR MKD.	REINFORCEMENT	POSITION
E	10 @ 150 mm C/C (ALL THROUGH)	BOT.
F	10 @ 150 mm C/C (ALL THROUGH)	TOP

SPECIAL NOTE:  
LIGHT WEIGHT AAC BLOCKS ARE TO BE USED IN PLACE OF CONVENTIONAL BRICK WORK AT ALL PLACES.

- NOTES
- UNLESS OTHERWISE STATED ALL CONSTRUCTION ACTIVITIES SHALL BE CARRIED OUT CONFORMING TO RELEVANT (INDIAN) STANDARD CODES OF PRACTICE.
  - 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).
  - ANY DISCREPANCY IN THE STRUCTURAL AND ARCHITECTURAL DRAWINGS SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL CONSULTANT BEFORE EXECUTION OF WORK UNLESS OTHERWISE SPECIFIED ALL REINFORCEMENT TO BE USED SHALL BE IN THE FORM OF GRADE Fe-500/500D CONFORMING TO IS-1786-2008.
  - UNLESS OTHERWISE STATED LAP LENGTH OF BARS SHALL BE EQUAL TO THE DEVELOPMENT LENGTH = 50BAR DIA.
  - CONCRETE NOMINAL COVER TO MAIN REINFORCEMENT SHALL BE AS FOLLOWS:  
i) BEAM: 30 mm  
ii) BEAMS SURROUNDING THE STAIR ROOM: 70 mm TO MEET 4 HRS. OF FIRE RESISTANCE  
iii) WALL: 50 mm TO MEET 4 HRS. OF FIRE + 55 mm RESISTANCE  
iv) FLOOR SLAB: 20 mm  
v) LEFT SHEAR WALL: 20 mm
  - GRADE OF CONCRETE FOR SUPERSTRUCTURE WILL BE M30 AS PER IS-456:2000.
  - VIBRATOR SHALL BE USED FOR PROPER COMPACTION OF CONCRETE AND CURING SHALL BE DONE PROPERLY.
  - DEVELOPMENT LENGTH FOR LAP & SPLICES SHOULD BE PROVIDED AS PER THE PROVISIONS LAID DOWN IN SP34-1987.
  - WHEREVER A SUPPORTED MEMBER TERMINATES AT A SUPPORTING MEMBER THE BARS OF THE SUPPORTED MEMBER SHOULD HAVE AN ANCHORAGE OF 50D IN THE SUPPORTING MEMBER.
  - WHEN TWO BEAMS MEET AT A COLUMN LOCATION ALONG THE SAME LINE THE HIGHER REINFORCEMENT AT THE TOP SHOULD BE CONTINUED AT BOTH SIDES OF THE COLUMN.
  - IN ALL CANTILEVER SLAB WITHOUT PERIPHERAL BEAMS THE TOP REINFORCEMENT PARALLEL TO THE CANTILEVER SPAN SHOULD BE CONTINUED UP TO ATLEAST 1.5 TIMES THE CANTILEVER SPAN WITHIN THE ADJACENT SLAB.

TITLE  
STRUCTURAL DRAWING OF PROPOSED PLAN FOR SEVEN (G+6) STORED RESIDENTIAL APARTMENT OF DURGAPUR NABAUDYOG DEVELOPERS, OVER, PLOT DETAILS / ADDRESS : PLOT-11586(R.S.) 2023, 2024 (L.R) L.R KHATIAN NO-2017, 4756, 4757, 4758, 4759, & 4760 J.L. NO-91 MUZAL-ARRAH, DGP-713212, P.S.-KANKSA UNDER MOLANDIGHI GRAM PANCHAYET, DIST.-PASHCHIM BURDWAN.

CERTIFICATE OF ARCHITECT  
I DO HEREBY CONFIRM AND CERTIFY WITH FULL RESPONSIBILITY THAT THE BUILDING PLAN HAS BEEN PREPARED BY ME KEEPING THE PROVISION OF NBC OF INDIA AND CERTIFY THAT IT IS SAFE & STABLE IN ALL RESPECT.  
**Anirban Bhattacharya**  
ANIRBAN BHATTACHARYA  
B.Arch  
CA/2014/62790  
ANIRBAN BHATTACHARYA  
Reg. NO. CAZ/2014/62790  
SIG. OF ARCHITECT/ENGINEER  
**Jui Chatterjee**  
JUI CHATTERJEE  
Lic. No. DMCR/02-35  
1718 Ramrajnagar Road, Durgapur-5  
Contact: 9504177943/943469399  
SIG. OF ARCHITECT/ENGINEER

CERTIFICATE OF STRUCTURAL ENGINEER  
THE STRUCTURAL DESIGN AND DRAWING OF BOTH FOUNDATION AND SUPERSTRUCTURE OF THE BUILDING HAS BEEN MADE BY ME, CONSIDERING ALL NECESSARY LOADS INCLUDING THE SEISMIC LOADS AS PER THE NATIONAL BUILDING CODE OF INDIA AND CERTIFIED THAT IT IS SAFE AND STABLE IN ALL RESPECT.  
**Susmita Choudhury**  
1/1/19  
**Susmita Choudhury**  
B.TECH (WBUTU)  
CIVIL ENGINEER, NIDA  
LICENCE NO. OVER/INDIA/10/001375  
**Sanjay Das Varma**  
8/3/19  
Sanjay Das Varma  
Lic. No. DMCR/02-35  
1718 Ramrajnagar Road, Durgapur-5  
Contact: 9504177943/943469399  
SIG. OF STRUCTURAL ENGINEER

SIGNATURE OF THE VETTING AUTHORITY

CHECKED & VERIFIED  
**DR. DIPANKAR GHOSH**  
DR. DIPANKAR GHOSH  
Lic. No. DMCR/02-35  
1718 Ramrajnagar Road, Durgapur-5  
Contact: 9504177943/943469399  
SIG. OF ARCHITECT/ENGINEER

SIGNATURE OF DEVELOPERS  
DURGAPUR NABAUDYOG DEVELOPERS  
**Pranay Horra Saha**  
Partner

DECLARATION OF OWNERS  
THIS IS TO CERTIFY THAT I SHALL NOT ON A LATER DATE, MAKE ANY ADDITION OR ALTERATION TO THIS PLAN, THIS IS CERTIFIED THAT I HAVE GONE THROUGH THE NBC OF INDIA AND ALSO MADE BY THOSE RULES DURING AND LATER CONSTRUCTION OF BUILDING.  
**Pranay Horra Saha**  
Pranay Horra Saha  
Lic. No. DMCR/02-35  
1718 Ramrajnagar Road, Durgapur-5  
Contact: 9504177943/943469399  
SIG. OF OWNERS

APPROVAL VILLE MAMO W- DE/PSB/1/22  
Dt. 05/04/2020 of District Engineer, Paschim Medinipur, Jharkhand.

DRAWING TITLE  
TIE, TYP. FLOOR, ROOF AND ABOVE BEAM AND SLAB LAYOUT PLAN AND REINFORCEMENT DETAILS  
SCALE: 1:100 OR AS SHOWN  
DATE: 04.03.2019  
SHEET NO. - 3 OF 3

