

FOUNDATION LAYOUT PLAN
RAFT SLAB(S) 500MM THICK
SCALE- 1:100

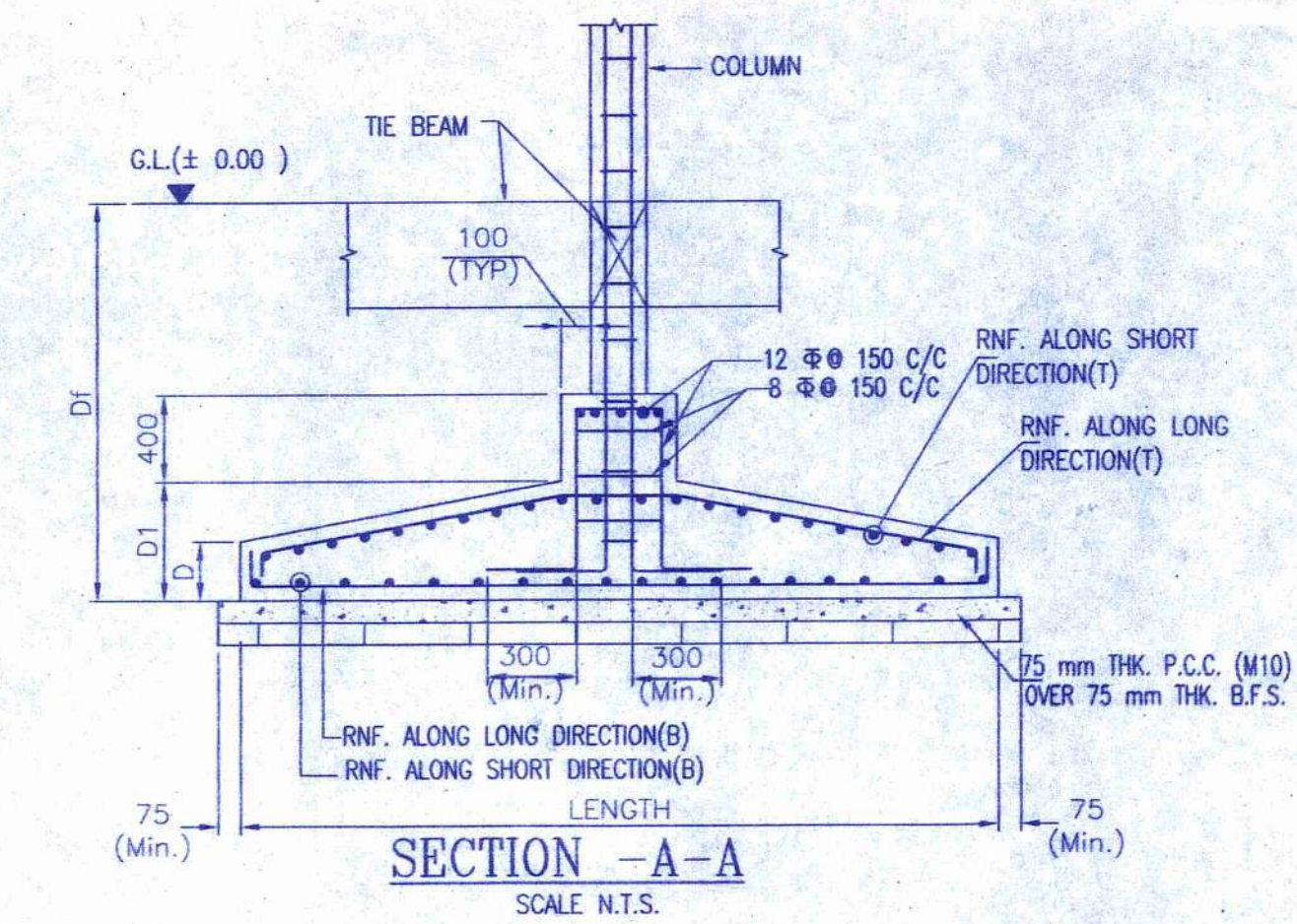
UNDER COLUMNS MARKED	FOUNDATION MARKED	NUMBER	FOUNDATION SIZE				FOUNDATION REINFORCEMENT DETAILS					
			WIDTH (m)	LENGTH (m)	THICKNESS		DEPTH		BOTTOM REINFORCEMENT		TOP REINFORCEMENT	
					D1 (mm)	D (mm)	Df (mm)	ALONG SHORT DIRECTION	ALONG LONG DIRECTION	ALONG SHORT DIRECTION	ALONG LONG DIRECTION	
C1,C2,C10,C22	F1	04	2.0	3.0	675	500	1700	16 Φ 200 C/C	16 Φ 150 C/C	8 Φ 250 C/C	8 Φ 250 C/C	
C3,C9,C15,C19	F2	04	2.9	2.9	550	400	1700	16 Φ 150 C/C	16 Φ 150 C/C	8 Φ 250 C/C	8 Φ 250 C/C	
C6	F3	01	2.0	2.0	450	300	1700	16 Φ 200 C/C	16 Φ 200 C/C	8 Φ 250 C/C	8 Φ 250 C/C	
C14	F4	01	3.0	3.0	550	400	1700	16 Φ 150 C/C	16 Φ 150 C/C	8 Φ 250 C/C	8 Φ 250 C/C	
C18,C20,C21	F5	03	2.65	2.65	550	400	1700	16 Φ 150 C/C	16 Φ 150 C/C	8 Φ 250 C/C	8 Φ 250 C/C	

BEAM MARKED	BEAM SIZE	TOP REINFORCEMENT		BOTTOM REINFORCEMENT		STIRRUPS
		ALTHROUGH	EXTRA AT SPAN	ALTHROUGH	EXTRA AT SUPPORT	
RFB1	700	7-16 Φ	-	7-16 Φ	3-16 Φ	4L-8 Φ 125 C/C
RFB2	750	7-16 Φ	-	7-16 Φ	3-16 Φ	4L-8 Φ 100 C/C
RFB2A	750	7-20 Φ	2-16 Φ	7-20 Φ	4-16 Φ	4L-10 Φ 100 C/C
RFB3	400	4-20 Φ	-	4-20 Φ	2-16 Φ	4L-8 Φ 150 C/C
RFB4	500	5-16 Φ	3-16 Φ	5-16 Φ	5-16 Φ	4L-10 Φ 100 C/C

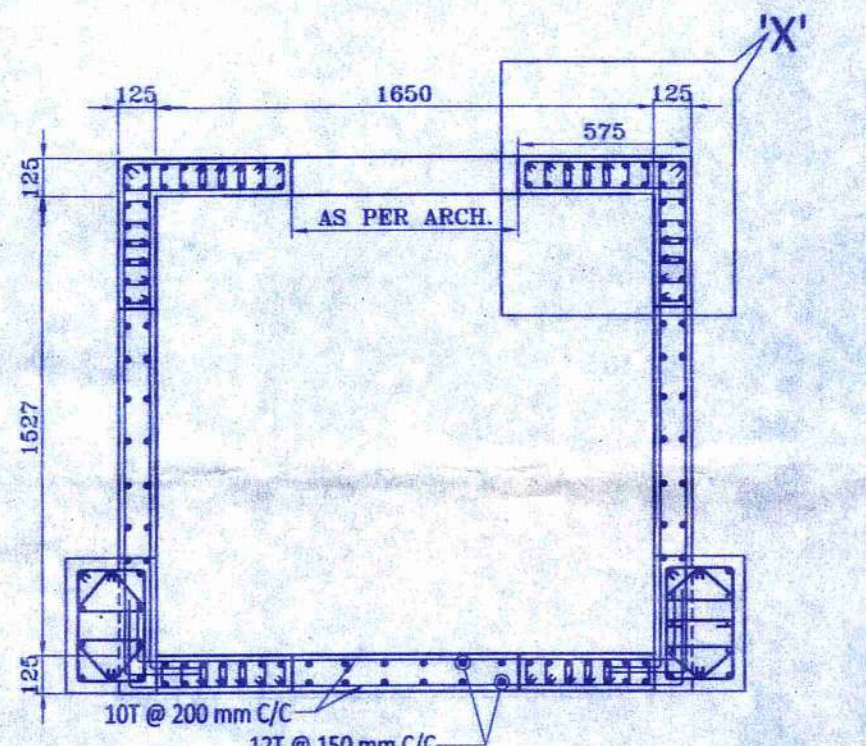
NET SAFE BEARING CAPACITIES CONSIDERED FOR FOUNDATION		
TYPE OF FOUNDATION	SIZE	NET SAFE BEARING CAPACITY (T/M ²)
ISOLATED	2.0m. x 3.0m.	17
	2.9m. x 2.9m.	15.6
	2.0m. x 2.0m.	17
	3.0m. x 3.0m.	15.6
RAFT	2.65m. x 2.65m.	15.6
	AS PER LAYOUT	12.0

SPECIAL NOTE:-
THIS DESIGN WILL NOT BE VALID IF THIS BEARING CAPACITIES ARE NOT ENSURED AT SITE UNDER THE SUPERVISION OF A COMPETENT GEO-TECHNICAL ENGINEER.

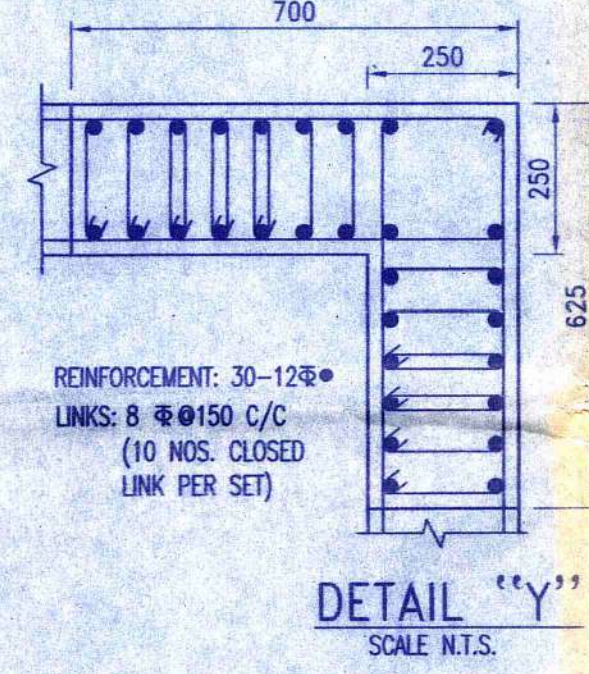
SCHEDULE OF RAFT SLAB					
SLAB MARKED	SLAB THICKNESS (mm)	REINFORCEMENT ALONG SHORTER DIRECTION		REINFORCEMENT ALONG LONGER DIRECTION	
		BOTTOM	TOP	BOTTOM	TOP
RS	500	20 Φ 125 C/C	20 Φ 125 C/C	20 Φ 125 C/C	20 Φ 125 C/C



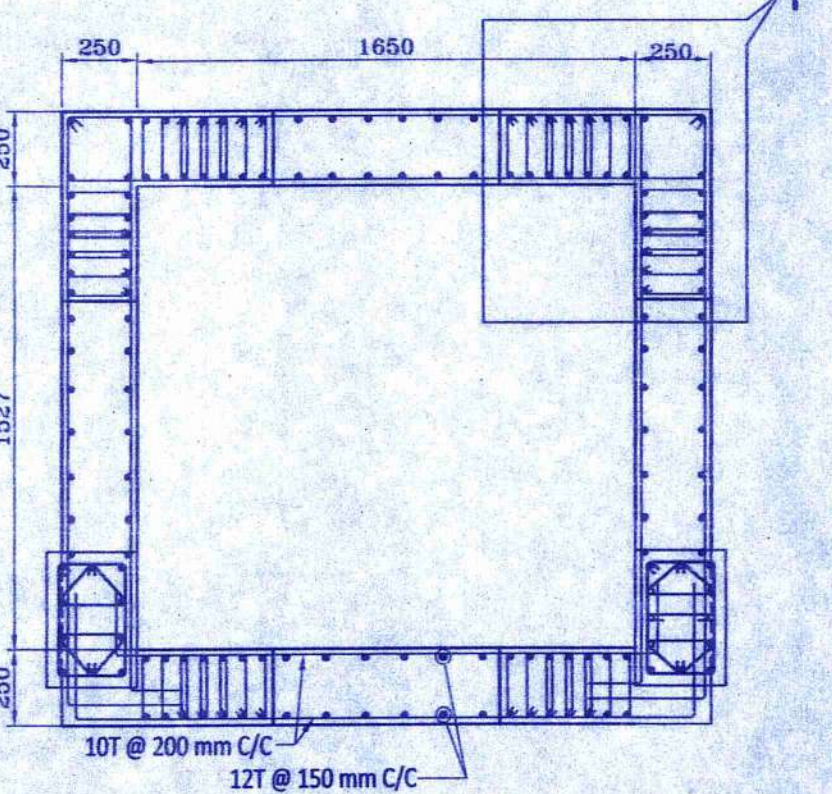
SECTION -A-A
SCALE N.T.S.



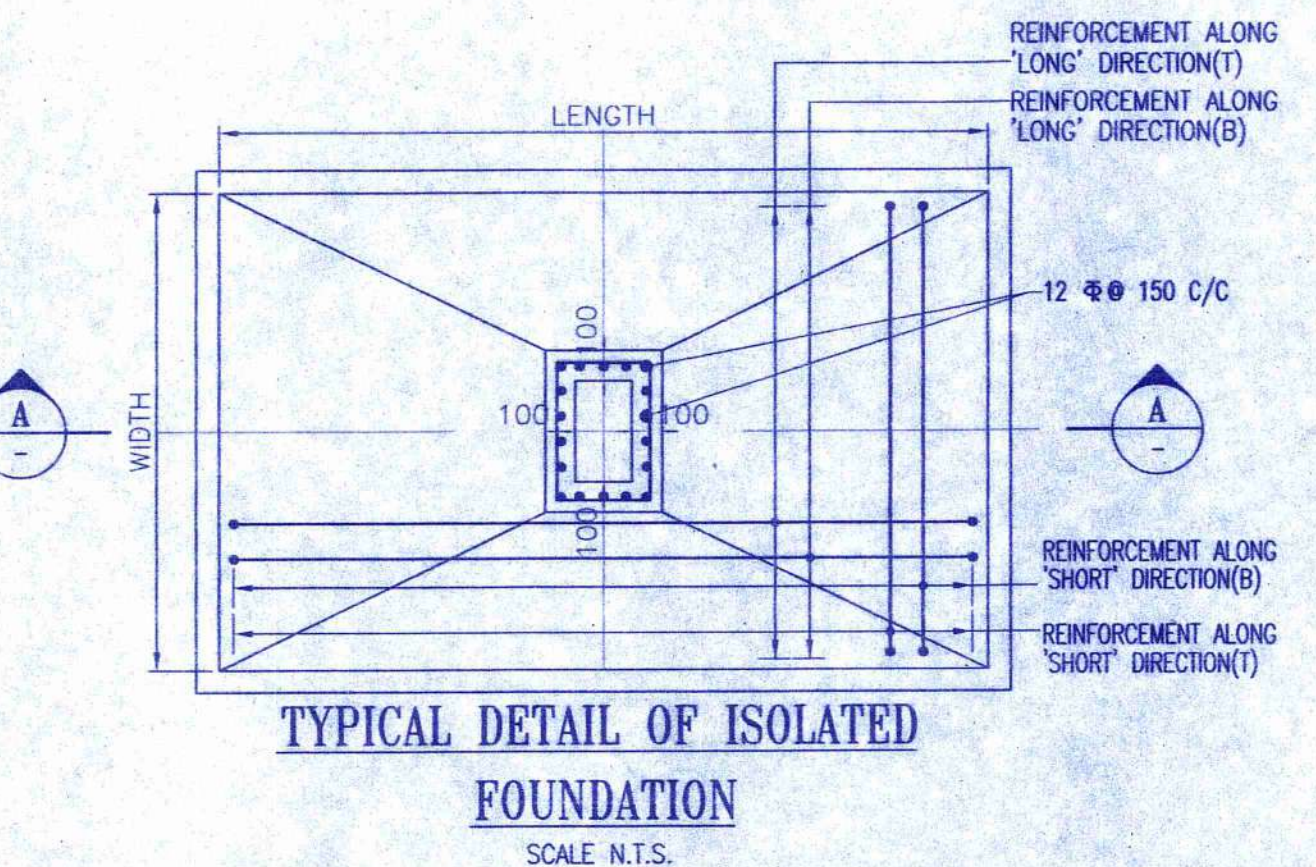
LIFT WALL PLAN AT FLOOR LEVEL
SECTION (S-S)
SCALE 1:25



DETAIL 'X'
SCALE N.T.S.

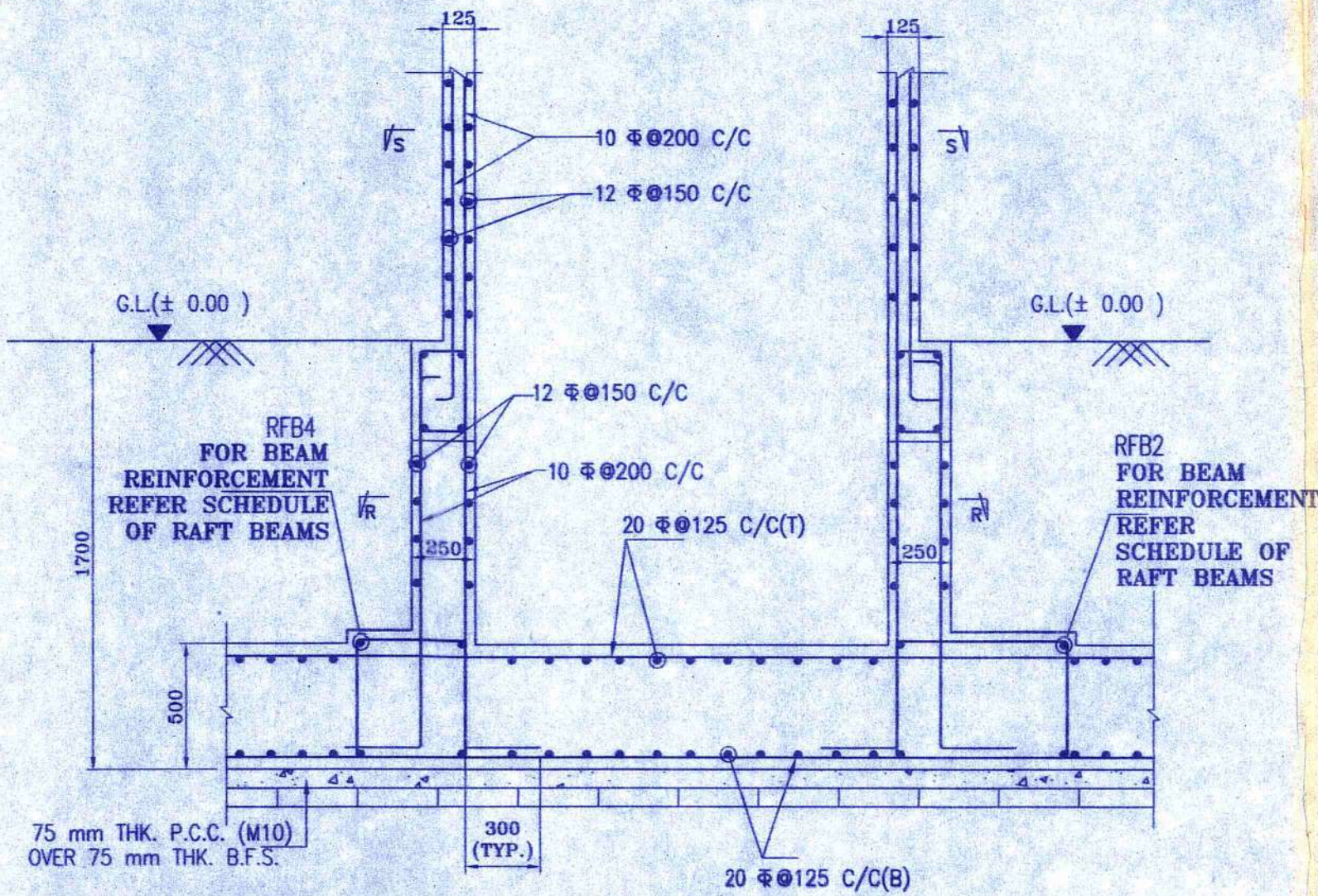


LIFT WALL PLAN AT BASE LEVEL
SECTION (R-R)
SCALE 1:25

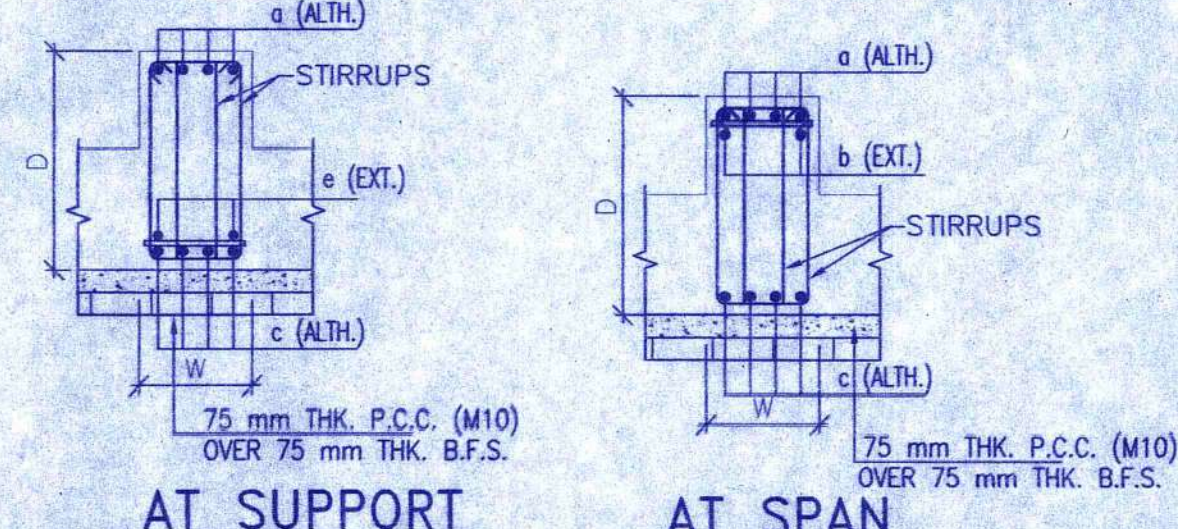


TYPICAL DETAIL OF ISOLATED FOUNDATION
SCALE N.T.S.

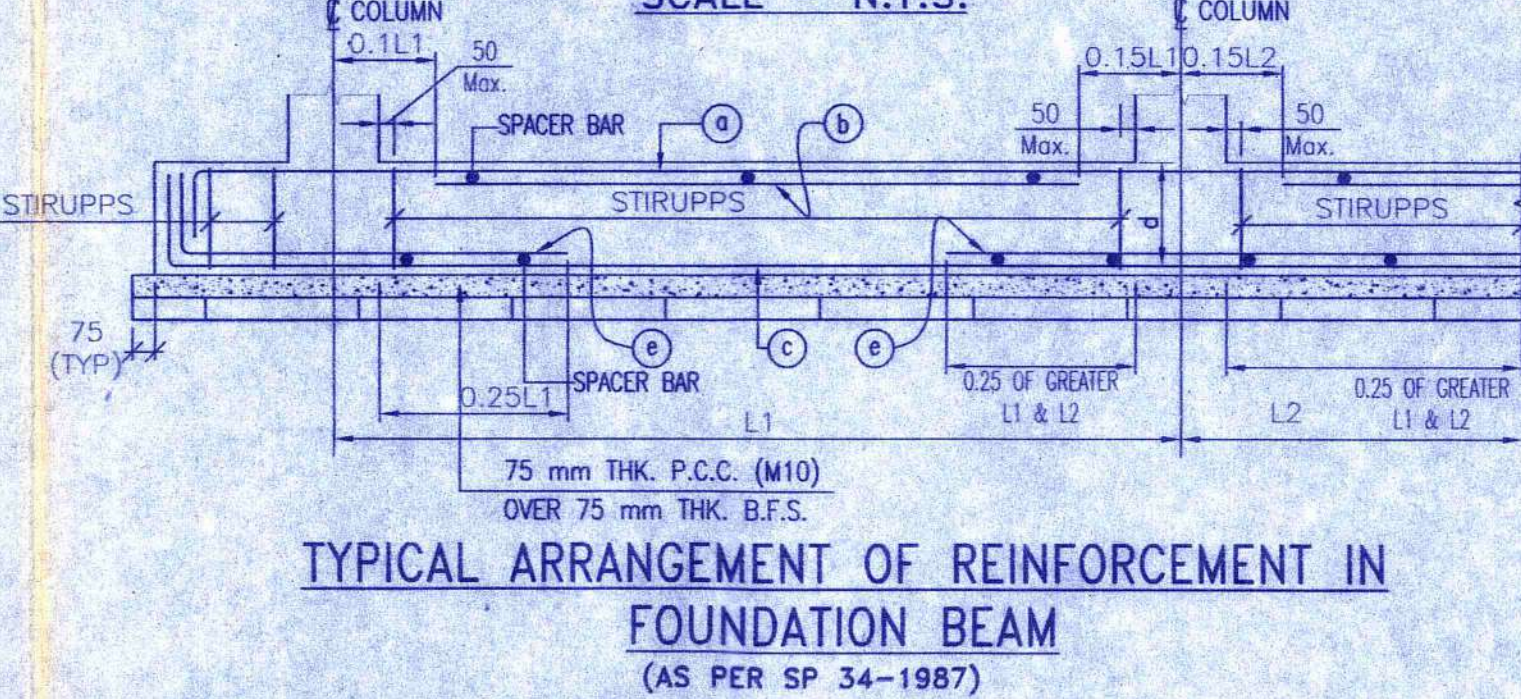
IMPORTANT NOTE:
THE STRUCTURE MUST BE CONSTRUCTED IN PRESENCE OF A COMPETENT STRUCTURAL ENGINEER FOR STRICT SUPERVISION.



SECTION -A-A
SCALE- 1:25



TYPICAL CROSS SECTION OF FOUNDATION BEAM
SCALE - N.T.S.



TYPICAL ARRANGEMENT OF REINFORCEMENT IN FOUNDATION BEAM
(AS PER SP 34-1987)

- 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).
 - ALL STRUCTURAL DRAWINGS SHALL BE READ ALONG WITH THIS DRAWING AS WELL AS RELEVANT ARCHITECTURAL DRAWINGS.
 - 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 TMT BARS OF GRADE Fe-500/500 D CONFORMING TO IS-1786-2008.
 - ADEQUATE CHAIR BARS TO BE PROVIDED TO KEEP THE TOP REINFORCEMENT IN PROPER POSITION.
 - VIBRATOR SHALL BE USED FOR PROPER COMPACTION OF CONCRETE AND CURING SHALL BE DONE PROPERLY.
 - UNLESS OTHERWISE SPECIFIED DISTRIBUTION REINFORCEMENT SHALL BE 8 Φ 250 C/C.
 - CONCRETE CLEAR COVER SHALL BE AS FOLLOWS:
i) ISOLATED FOUNDATION : 50 mm
ii) RAFT BEAM & SLAB : 50 mm
iii) SHEAR WALL : 20 mm
 - GRADE OF CONCRETE FOR SUBSTRUCTURE WILL BE M25 AS PER IS: 456-2000.
 - DEVELOPMENT LENGTH 50XD FOR LAP & SPLICES SHOULD BE PROVIDED AS PER THE PROVISIONS LAID DOWN IN SP 34:1987.
 - THE NET SAFE BEARING CAPACITIES FOR ALL ISOLATED FOOTINGS AT DEPTH (-)1.7m. FROM G.L. HAS BEEN CONSIDERED AS MENTIONED IN DRAWING IN TUNE WITH THE SOIL REPORT PREPARED BY MR. SUVANKAR CHAUDHURI.
 - THE NET SAFE BEARING CAPACITIES FOR RAFT FOUNDATION AT DEPTH (-)1.7m. FROM G.L. HAS BEEN CONSIDERED 12 T/SQM IN TUNE WITH THE SOIL REPORT PREPARED BY MR. BHASKARJYOTI ROY.
 - THE ABOVE MENTIONED BEARING CAPACITIES MUST BE ENSURED AT SITE UNDER THE SUPERVISION OF COMPETENT GEOTECHNICAL ENGINEER FOR VALIDITY OF THIS DRAWING.
 - THE N VALUE AS DESCRIBED UNDER NOTES OF TABLE-1 OF IS-1893 (PART-1)-2016 SHOULD BE ENSURED TO BE GREATER THAN 15 FOR VALIDITY OF THIS DESIGN AND DRAWING.

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.

TITLE
STRUCTURAL DRAWING OF PROPOSED SIX (G+5) STORIED COMMERCIAL/RESIDENTIAL BUILDING OF 1.) SRI. GOURANGA CHATTARAJ, OVER R.S. PLOT NO - 1468(P), L.R. PLOT NO:- 1842, J.L. NO - 110, KHATANJ NO:- 2314, OF MOUZA - KALIGANJ, P.S.- N.T.S.P.S, DIST. - BURDWAN PASCHIM.

SIGNATURE OF LAND OWNER'S
Gowonga Chatterjee

CONSULTANT/ARCHITECT SIGNATURE
AR. JUI CHATTERJEE, B.A.RCH
Registration No : CA2021134352
Ph : 9434649399, 7585893411
4/13, Suhasta Commercial Complex,
City Centre, Durgapur - 713216

SIGNATURE OF GEOTECHNICAL ENGINEER
SUSMITA CHOUDHURY
STRUCTURAL ENGINEER
REGISTERED ENGINEER
GEOTECHNICAL CONSULTANT

SIGNATURE OF PANCHAYET PRADHAN
Approved Plan No. 60 on Meeting No. 13/2022-23 Date: 25/10/2022 Valid upto: 15/11/2025
Mallika Lohar
Pradhan 12/10/22
Jumua Gram Panchayat

CERTIFICATE OF STRUCTURAL ENGINEER
THE STRUCTURAL DESIGN AND DRAWING OF BOTH FOUNDATION AND SUPERSTRUCTURE OF THE BUILDING HAS BEEN MADE BY ME CONSIDERING ALL POSSIBLE LOADS INCLUDING THE SEISMIC LOAD AS PER THE NATIONAL BUILDING CODE OF INDIA AND CERTIFIED THAT IT IS SAFE AND STABLE IN ALL RESPECT.
S. Choudhury 13/9/21
SUSMITA CHOUDHURY
B.TECH (WBUT), M.E. (AI)
CIVIL ENGINEER, NIDA
LICENSE NO. OVER/NIDA/10/00175
M-8897517321, 7003201735

SIGNATURE OF THE VETTING AUTHORITY
CHECKED & VETTED
DR. DIPANKAR CHAKRABARTY
STRUCTURAL ENGINEER (REGISTERED)
PROFESSOR & FORMER HEAD
CIVIL ENGINEERING DEPARTMENT
JADAVPUR UNIVERSITY,
8, ELAHI ROAD, MEDINIPUR
PIN-721102, WB
CIVIL ENGINEER (AI)
(M) 9830189502 & 9433993143
EMAIL: Prof.dipankar@gmail.com

DRAWING TITLE
FOUNDATION LAYOUT PLAN AND REINFORCEMENT DETAILS
SCALE-1:100 OR AS SHOWN
DATE-13.09.2021
SHEET NO. -1 OF 4