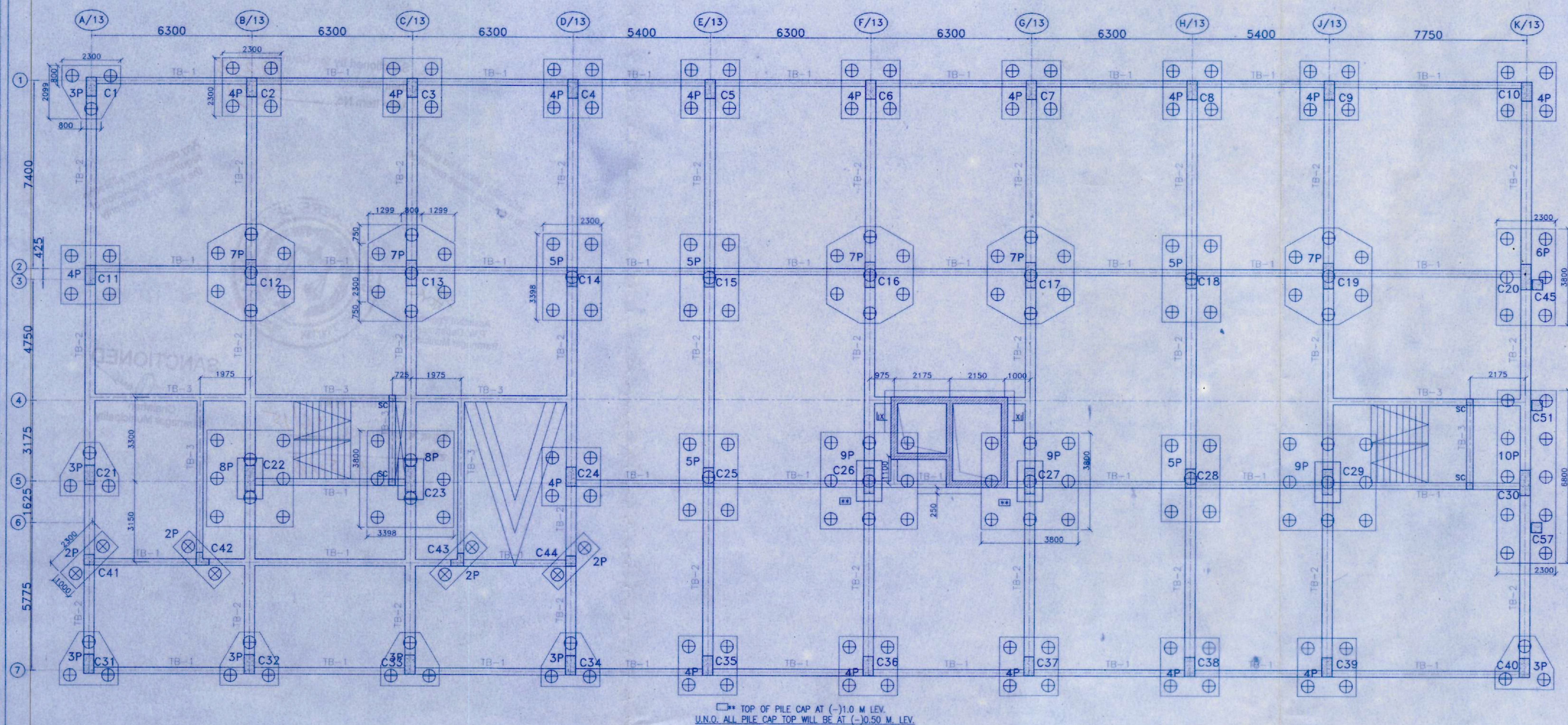
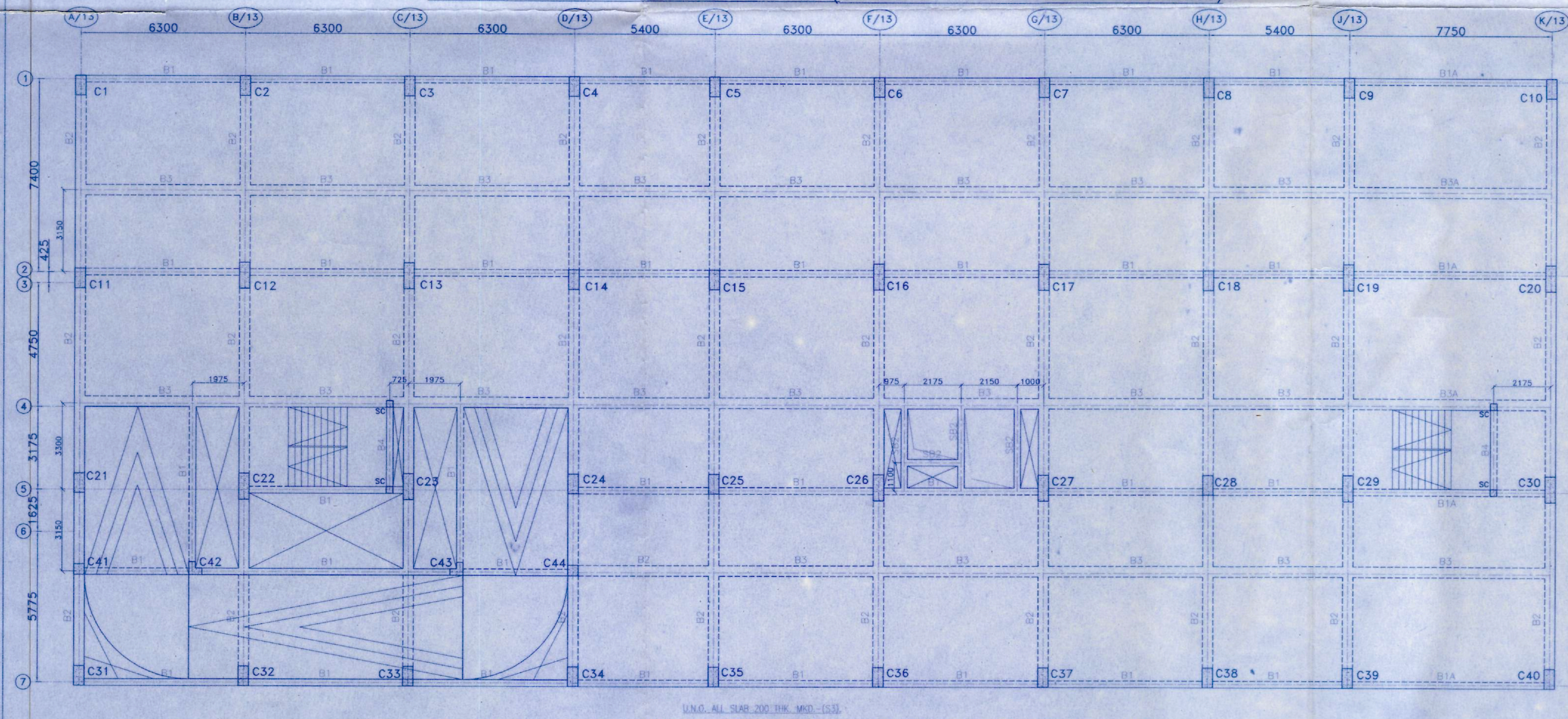


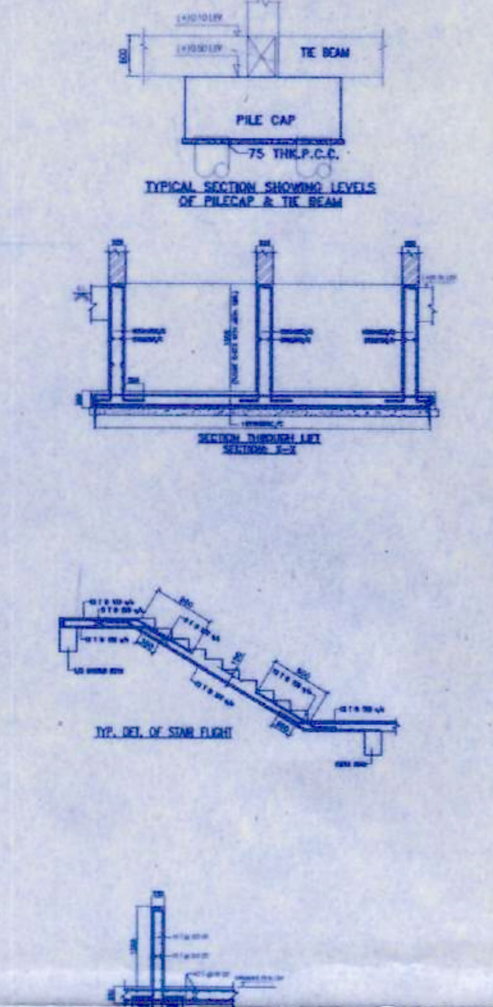
FOUNDATION & TIE BEAM LAYOUT PLAN(G+13TH. STORIED RESIDENTIAL BUILDING)

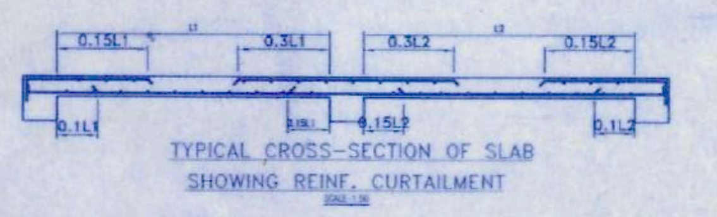


G.A. AT 1st. & 2nd. FLOOR LEV.(G+13TH. STORIED RESIDENTIAL BUILDING)

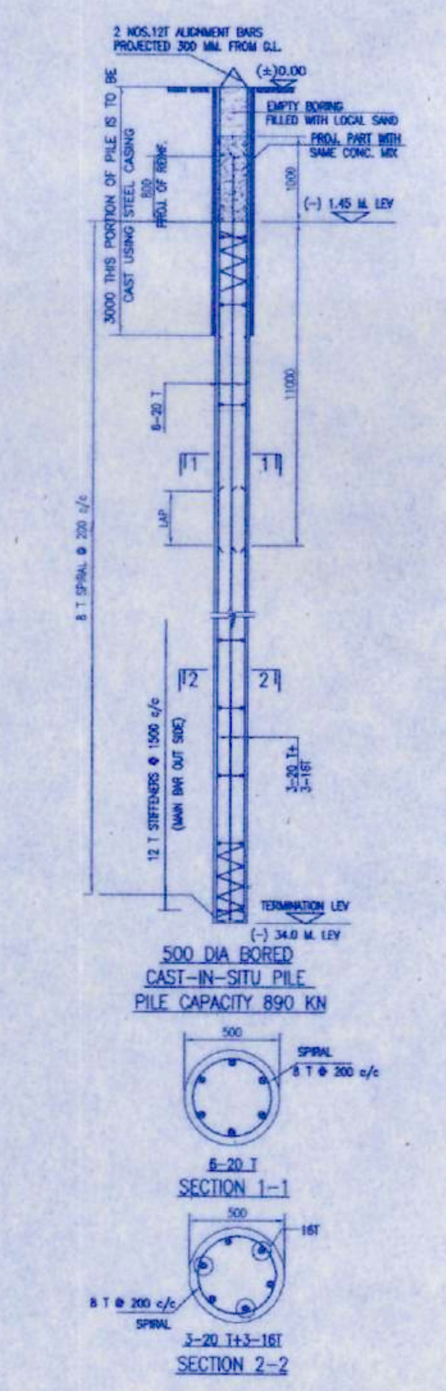
SCHEDULE OF PILE CAP

PILE CAP MKD	OVERALL DEPTH (mm)	CAP REINFORCEMENT						BURSTING BAR
		LONGER BAR			SHORTER BAR			
		BOTTOM BAR	TOP BAR	STIRRUPS	BOTTOM BAR	TOP BAR	STIRRUPS	
2P	1000	7-20T	4-12T	4L-10T@200C/C	——	——	——	5-12T
3P	1200	7-20T	4-12T	4L-10T@200C/C	7-20T	4-12T	4L-10T@200C/C	7-12T
4P	1350	17-20T	9-12T	——	17-20T	9-12T	——	8-12T
5P	1500	19-20T	10-12T	6L-10T@150C/C	27-20T	14-12T	——	9-12T
6P	1500	19-20T	10-12T	6L-10T@150C/C	31-20T	16-12T	——	9-12T
7P	1600	39-20T	20-12T	6L-10T@150C/C	35-20T	18-12T	——	9-12T
8P	1750	27-25T	14-12T	——	25-25T	13-12T	8L-12T@200C/C	10-12T
9P	2000	31-25T	16-12T	——	31-25T	16-12T	——	12-12T
10P	1750	17-25T	17-25T	6L-12T@150C/C	47-25T	24-12T	——	10-12T





TYPICAL CROSS-SECTION OF SLAB SHOWING REINF. CURTAILMENT



NOTES:

1. Basic reference code:-IS456:2000, IS1893:2002(Part1), IS13920:1993(Reaffirm2002)
2. Due care shall be taken to ascertain that requisite strength of concrete is gained before commencement of deshuttering. It shall comply with provisions of Clause No. 11.3 of IS 456: 2000.
3. Nominal covers

		Mild	Moderate	Severe
I	Footings	50	50	50
II	Columns & walls >200mm width (to links of column)	40	40	45
III	Columns & walls with width of 200mm & below having reinf. of dia. 16mm & above. (to links of column)	40	40	45
IV	Columns & walls with width of 200mm & below having reinf. of dia. 12mm. (to links of column)	25	30	45
V	Slabs	20	30	45
VI	Beams (to stirrups of beam)	20	30	45
VII	Lift walls	40	40	45

For main reinf. up to 12mm diameter bar for mild exposure, the nominal cover may be reduced by 5mm for slabs & beams only.

4. Beams with depth more than 750mm, provide side-face reinforcement.
5. Substratum shall be approved from our office before laying P.C.C.
6. Minimum clear spacing between any two longitudinal bars in beam= 50mm.
7. All laps (Ld) shall be staggered & not more than 50% bars to be lapped at any given section.

GRADE OF REINF.	M20	M25	M30	M35	M40 & ABOVE
Fe415	48 X D	41 X D	38 X D	34 X D	30 X D
Fe500 (TMT)	57 X D	49 X D	46 X D	40 X D	36 X D

For bundled bars, Ld shall be increased by 10% for 2 bars in contact, 20% for 3 bars in contact and 33% for 4 bars in contact.

8. All buildings shall have tie beams/plinth beams at ground/plinth level.
9. If footings overlap with each other, necessary revision shall be obtained from our office.
10. Design is valid for number of floors as indicated in the drawing.
11. At any level where column size gets reduced in either dimension tie beams/plinth beams are essential.
12. For cantilevers, top bars to be anchored behind from external face of support for - Ld or span of cantilever - whichever is greater.

Grade of Steel: Fe500
Grade of Concrete: Pile: M 25
Pile Cap, Tie Beam: M 30
Column, Beam, Slab: M 40

CERTIFICATE OF STRUCTURAL STABILITY

WE HEREBY CERTIFY THAT THE FOUNDATION AND SUPERSTRUCTURE OF THE BUILDING PROPOSED FOR CONSTRUCTION ON PLOT 4 (OLD NO. 1290) WARD NO. 15 (OLD NO. 31/29) HAVE BEEN SO DESIGNED BY ME/US WILL MAKE SUCH FOUNDATION & SUPER STRUCTURE SAFE IN ALL RESPECT INCLUDING THE CONSIDERATION OF BEARING CAPACITY & SETTLEMENT OF SOIL ETC.

JAY PRAKASH BHARAT KUMAR AGRAWAL
B. Arch., A.I.I.A.
Reg. No. CA / 86 / 10098
ARCHITECT SL. NO. - 32(A)
SIGNATURE OF ARCHITECT

SANJAY KUMAR DUBEY
Structural Engineer, ESE-I/142
KOLKATA MUNICIPAL CORPORATION
SIGNATURE OF STRUCTURAL ENGG.

SHYAMAL KUMAR MITRA, B.E. (CIVIL)
GEO-TECHNICAL ENGINEER
ENROLMENT NO. GTER-NIDCO/09/00010
SIGN.OF GEO-TECH. ENGG.

SIGNATURE OF OWNER

JAY PRAKASH BHARAT KUMAR AGRAWAL
B. Arch., A.I.I.A.
Reg. No. CA / 86 / 10098
ARCHITECT SL. NO. - 32(A)
SIGNATURE OF ARCHITECT

SANJAY KUMAR DUBEY
Structural Engineer, ESE-I/142
KOLKATA MUNICIPAL CORPORATION
SIGNATURE OF STRUCTURAL ENGG.

SHYAMAL KUMAR MITRA, B.E. (CIVIL)
GEO-TECHNICAL ENGINEER
ENROLMENT NO. GTER-NIDCO/09/00010
SIGN.OF GEO-TECH. ENGG.

TITLE :-
SUB & SUPER STRUCTURE
(G+13 FL. BLOCK) (REHABILITATION)

PROJECT :-
REVISED PLAN OF RESIDENTIAL DEVELOPMENT AT PREMISES NO. 561, BONHOOGLY ARABLE LAND, HOLDING NO. 4 (OLD NO. 1290), WARD NO. 15 (OLD NO. 31/29), DIST. NORTH 24 PARAGANAS, UNDER BARANAGAR MUNICIPALITY, FOR R.R. & R.DEPARTMENT, GOVT. OF W.B. (BONHOOGLY TENEMENT SCHEME) IN THE CONTINUATION OF OLD BUILDING PERMIT NO. BSPW/372/31, DTD. 12.01.09. & SUBSEQUENTLY SANCTIONED VIDE BUILDING PERMIT NO. PWBS/357/15, DATED 10.12.2014 AND FURTHER SANCTIONED VIED BUILDING PERMIT NO. PWBS/160/15 DATED 24.10.2016 & PARTIAL COMPLETION CERTIFICATE ISSUED VIED MEMO NO. BMPW/CC/249/15, DATED 05.01.17 FOR L.I.G. BLOCK A,B,C, D & CLUB COMMUNITY.

STRUCTURAL CONSULTANT:

LLP IDENTITY NO. AAA-2650
PARTNERSHIP WITH LIMITED LIABILITY
Formerly Y S Sane Associates
JW CONSULTANTS LLP
www.jwconsultants.in
design@jwconsultants.in
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SAI RADHE, OFFICE NO 201, 2ND FL., 100 KENNEDY ROAD, BEHIND HOTEL LE MERIDIEN, PUNE 411001
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MUMBAI OFFICE
314, 3RD FLOOR, PRABHADEVI INDUSTRIAL ESTATE, VEER SAVARKAR MARG, PRABHADEVI, MUMBAI-400025
Tel. +91 22 66322845/46 FAX: +91 22 66322850

SCALE	DATE	DEALT	CHECKED

STRUCTURAL ENGINEER:

SANJAY KUMAR DUBEY
ME (Structure), CHARTERED ENGINEER (I)
SALTLAKE CITY, KOLKATA

ARCHITECTS

AGRAWAL & AGRAWAL
BARODA & KOLKATA

SCALE	DATE	DEALT	CHECKED
1 : 100	09.09.17		

F-2

Sanctioned by the Councillors at
their meeting held on 19.2.18
Vide Item No. 5(IV)

Intimation should be given to the office before execution

Any deviation or alteration requires prior sanction of the Municipal Authority

Assistant Engineer
P.W. Department
Baranagar Municipality

SANCTIONED

Chairman
Baranagar Municipality

অনুমোদিত নক্সা
ইস্যু নং পি. ডব্লিউ/বারা.মি. 16/15
তারিখ 11.5.18