



DECLARATION OF OWNER
 CERTIFIED THAT I HAVE GONE THROUGH THE BUILDING BY LAWS FOR WEST BENGAL MUNICIPALITY AND ALSO UNDERTAKE TO ABIDE BY THESE RULES DURING AND AFTER CONSTRUCTION OF THE BUILDING.
 CERTIFIED THAT I SHALL NOT ON A LATER DATE MAKE ANY ADDITION OR ALTERATION TO THIS PLAN DURING CONSTRUCTION. I SHALL BE FULLY RESPONSIBLE FOR ANY VIOLATION OF THE BUILDING RULES AS WELL AS THE SANCTIONED BUILDING PLAN.

SIGNATURE OF OWNER

CERTIFICATE OF ARCHITECT
 I CERTIFY THAT ALL THE ARCHITECTURAL DRAWINGS OF THE PROJECT AT L.R. DAG NO.-2532(P), 2534(P), L.R. KHANIN NO. 11282 IN MOUZA-MRIGALA, AL. NO. 102, POLICE STATION-DANKUNI (FORMERLY CHANDITALA), WITHIN THE JURISDICTION OF DANAKUNI MUNICIPALITY, WARD NO.-13, DISTRICT-HOOGHLY, KOLKATA-712311, HAVE BEEN PREPARED BY ME COMPLYING WITH THE PROVISIONS OF NATIONAL BUILDING CODE AND THE WEST BENGAL MUNICIPAL BUILDING RULES. NO SUCH WRONG AND INCORRECT INFORMATION HAS BEEN FURNISHED BY ME INCLUDING AREA CALCULATION CHARTS IN THIS DRAWING AND NO VIOLATION OF THE PROVISIONS OF THESE RULES WILL BE FOUND IN ANY OF THE DRAWINGS AND DOCUMENTS, SUBMITTED TO THE SANCTIONING AUTHORITY FOR OBTAINING SANCTION.

Signature of Architect
 Rajkumar Agarwal
 Member of Council of Architecture CA/94/17940

SIGNATURE OF THE ARCHITECT
 RAJ KUMAR AGARWAL
 COUNCIL REGISTRATION NO. CA/94/17940
 ADDRESS: RAJ AGARWAL & ASSOCIATES
 8B, ROYD STREET (2ND FLOOR), KOLKATA-71.

CERTIFICATE OF STRUCTURAL ENGINEER
 I CERTIFY THAT THE STRUCTURAL DRAWING AND DESIGN OF BOTH THE FOUNDATION AND SUPERSTRUCTURE OF THE BUILDING/BUILDINGS HAS BEEN MADE CONSIDERING THE SOIL TEST REPORTS AS PER THESE RULES AND THE REGULATIONS MADE UNDER THE ACT) AND ALSO CONSIDERING ALL POSSIBLE LOADS, SEISMIC LOAD AND THE MOMENTS GENERATED BY THE PROPOSED STRUCTURE AS PER CURRENT CODES, THE BUREAU OF INDIA STANDARD AND NATIONAL BUILDING CODE OF INDIA AND CERTIFY THAT IT IS SAFE AND STABLE IN ALL RESPECT UPTO...
 STORY/STORES AND THESE PROVISIONS SHALL BE ADHERED TO DURING THE CONSTRUCTION.

Signature of Structural Engineer
 Rupak Kumar Banerjee
 RUPAK KUMAR BANERJEE
 M.I.G.S., M.I.E., CHARTERED ENGINEER
 E.S.E. I,
 ADDRESS: 10, KUNDU LANE, BHOWANIPORE,
 KOLKATA- 700025.

CERTIFICATE OF STRUCTURAL REVIEWER
 I CERTIFY THAT THE STRUCTURAL DRAWING AND DESIGN OF BOTH THE FOUNDATION AND SUPERSTRUCTURE OF THE BUILDING/BUILDINGS HAS BEEN MADE CONSIDERING THE SOIL TEST REPORTS AS PER THESE RULES AND THE REGULATIONS MADE UNDER THE ACT) AND ALSO CONSIDERING ALL POSSIBLE LOADS, SEISMIC LOAD AND THE MOMENTS GENERATED BY THE PROPOSED STRUCTURE AS PER CURRENT CODES, THE BUREAU OF INDIA STANDARD AND NATIONAL BUILDING CODE OF INDIA AND CERTIFY THAT IT IS SAFE AND STABLE IN ALL RESPECT UPTO...
 STORY/STORES AND THESE PROVISIONS SHALL BE ADHERED TO DURING THE CONSTRUCTION.

Signature of Structural Reviewer
 M.S. MITA SAHA
 M.I.E., M.E. (Struct. C.T)
 E.M.C. ESE-9211,
 15/50, Sanku Saha Lane,
 Mob: 9831888112

SIGNATURE OF THE STRUCTURAL REVIEWER
 MITA SAHA
 AG-89, BAISHAKHI, SALT LAKE, KOLKATA.

CERTIFICATE OF GEO-TECHNICAL ENGINEER
 IT IS CERTIFIED THAT THE COMPREHENSIVE GEO-TECHNICAL REPORT ON SOIL INVESTIGATION HAS BEEN PREPARED BY ME FOR DESIGN AND CALCULATION OF THE FOUNDATION BY ANALYZING THE SOIL SAMPLES FOR ESTIMATING THE BEARING CAPACITY OF THE SOIL ON WHICH FOUNDATION OF THE STRUCTURE WILL BE CONSTRUCTED.

I SHALL ALSO CHECK THE NATURE OF THE SOIL AFTER EXCAVATION AT SITE SO THAT FOUNDATION IS EXTENDED UPTO THE APPROPRIATE DEPTH THAT HAS BEEN PROPOSED IN THE GEO-TECHNICAL REPORT.

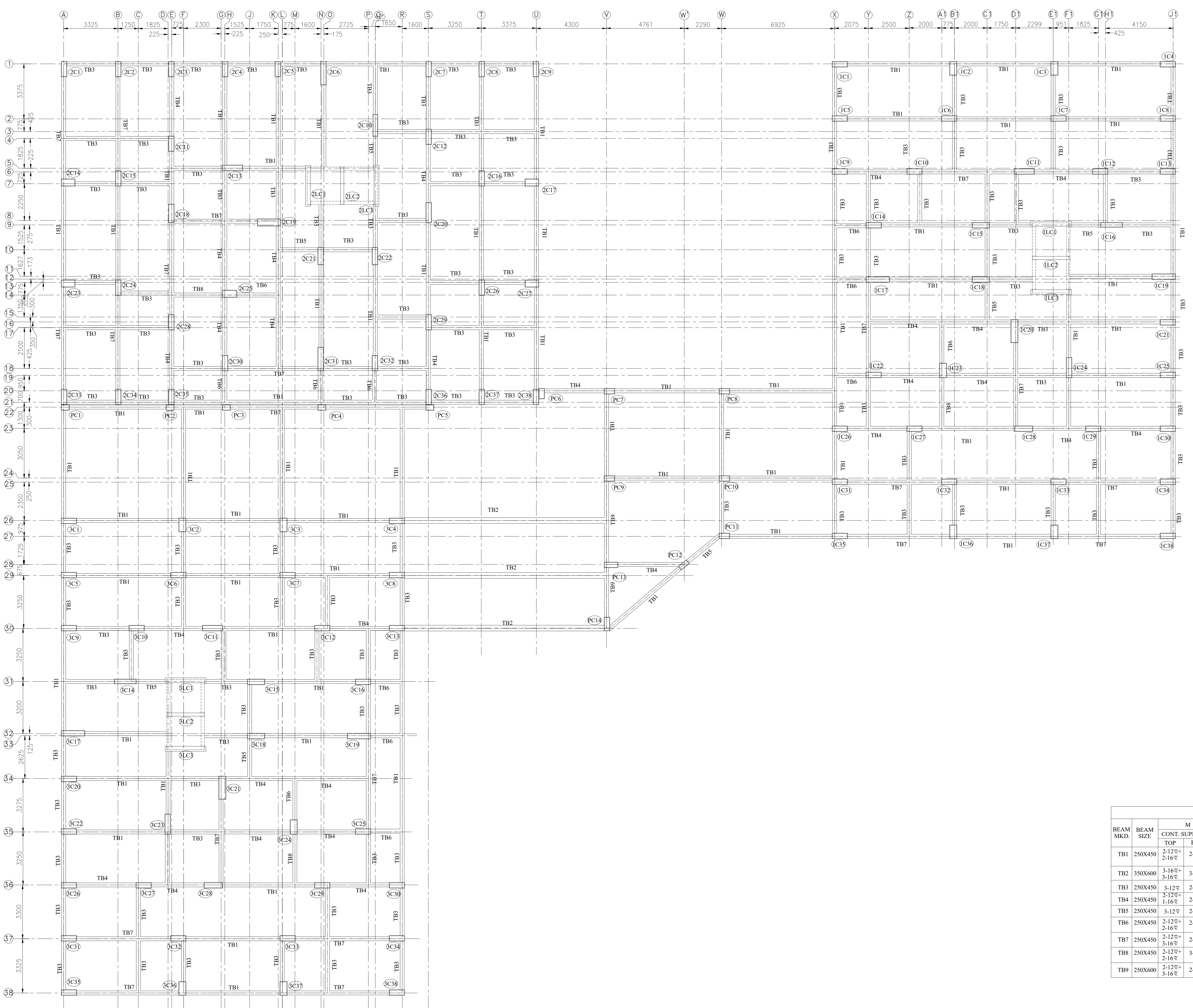
Signature of Geo-Technical Engineer
 S. K. Mandal
 M.I.E., M.E. (Struct. C.T)
 E.M.C. ESE-9211,
 15/50, Sanku Saha Lane,
 Mob: 9831888112

SIGNATURE OF THE GEO-TECHNICAL ENGINEER
 SWADISH KUMAR MANDAL
 B.E.(CIVIL), M.I.E., M.I.G.S. LM/1242
 D.S. CONSTRUCTION, KOLKATA.

TITLE
 TIE BEAM LAYOUT PLAN WITH DETAILS.

PROJECT
 PROPOSED G+XII STORED(36.9 M. HT.) (TOWER-2) & G+XII STORED (39.95 M. HT.) (TOWER-1 & 3) RESIDENTIAL BUILDING OF FRONTIER WAREHOUSING LIMITED DIRECTOR OF GOUTAM AGARWALLA AT L.R. DAG NO.2532(P), 2534(P), L.R. KH. NO. 12103 IN MOUZA-MRIGALA, J.L. NO. 102, POLICE STATION-DANKUNI (FORMERLY CHANDITALA), WITHIN THE JURISDICTION OF DANAKUNI MUNICIPALITY, WARD NO.-13, DISTRICT-HOOGHLY, KOLKATA-712311.

NOTES -
 1. ALL DIMENSIONS ARE IN MILLIMETERS.
 2. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
 3. ROAD CREST LEVEL IS TAKEN AS +0.00 LEV.
 4. CLEAR COVER TO SECONDARY REINFORCEMENT:-
 a) FOUNDATION (PILE)- 50 MM. b) TIE BEAM- 50 MM. c) SLAB - 20 MM.
 d) FOUNDATION BEAM- 50 MM. e) FLOOR BEAM- 25 MM.
 5. LAP/ ANCHORAGE LENGTH SHOULD BE GENERALLY 50D, (D = DIA OF BAR).
 6. * INDICATES COLD TWISTED DEFORMED BAR AS PER IS 1786.
 7. GRADE OF CONCRETE - AS PER SCHEDULE.
 8. GRADE OF STEEL- F-500.
 9. READ THIS DRAWING IN CONJUNCTION WITH RELEVANT ARCHITECTURAL DRAWING.
 10. ALL SORTS OF PRECAUTIONARY MEASURES WILL BE TAKEN AT THE TIME OF CONSTRUCTION.



TIE BEAM LAYOUT PLAN.
 SCALE: 1:100

BEAM MKD.	BEAM SIZE	MAIN REINFORCEMENT						STIRRUPS	
		CONT. SUPPORT	SPAN		DISCONT. SUPP.		SUPPORT	SPAN	
		TOP	BOT.	TOP	BOT.	TOP	BOT.		
TB1	250X450	2-12 ⁺ 2-16 ⁺	2-12 ⁺	2-12 ⁺	2-12 ⁺ 1-16 ⁺	2-12 ⁺	2-12 ⁺	8 [#] -2L @ 100 CC	8 [#] -2L @ 250 CC
TB2	350X600	3-16 ⁺ 3-16 ⁺	3-16 ⁺	3-16 ⁺	3-16 ⁺ 2-16 ⁺	3-16 ⁺	3-16 ⁺	8 [#] -4L @ 100 CC	8 [#] -4L @ 200 CC
TB3	250X450	3-12 ⁺ 2-12 ⁺	2-12 ⁺	2-12 ⁺	3-12 ⁺ 2-12 ⁺	2-12 ⁺	2-12 ⁺	8 [#] -2L @ 100 CC	8 [#] -2L @ 250 CC
TB4	250X450	2-12 ⁺ 1-16 ⁺	2-12 ⁺	2-12 ⁺	3-12 ⁺ 2-12 ⁺	2-12 ⁺	2-12 ⁺	8 [#] -2L @ 100 CC	8 [#] -2L @ 250 CC
TB5	250X450	3-12 ⁺	2-12 ⁺	2-12 ⁺				ALTH.	8 [#] -2L @ 100 C/C
TB6	250X450	2-12 ⁺ 2-16 ⁺						CANTILEVER.	8 [#] -2L @ 100 C/C
TB7	250X450	2-12 ⁺ 3-16 ⁺	2-16 ⁺	2-12 ⁺	3-16 ⁺	2-12 ⁺	2-16 ⁺	8 [#] -2L @ 100 CC	8 [#] -2L @ 250 C/C
TB8	250X450	2-12 ⁺ 2-16 ⁺			3-12 ⁺			ALTH.	8 [#] -2L @ 100 C/C
TB9	250X600	2-12 ⁺ 3-16 ⁺	2-16 ⁺	2-12 ⁺	3-16 ⁺	2-12 ⁺	2-16 ⁺	8 [#] -2L @ 100 CC	8 [#] -2L @ 250 C/C

GRADE OF CONCRETE		
PILE	PILE CAP	BEAM,COLUMN, SLAB
M25	M30	M30- FOUNDATION TO 2ND FL. LVL. M30- 2ND FL. LVL. TO 4TH FL. LVL. M25- 4TH FL. LVL. TO ROOF.

DATE 11.07.22 **DRGNO** (MADR)P.2 **DEALT** CHANUB **CHECKED** SUBRABET 2 OF 4
SCALE 1:100 **ARCHITECT**
 RAJ AGARWAL & ASSOCIATES
 8B, ROYD STREET, CALCUTTA - 16
CONSULTANTS: -B.CHAKRABORTY & ASSOCIATES
 ARCHITECTS & ENGINEERS
 NANDAKANAL, DANAKUNI, HOOGHLY