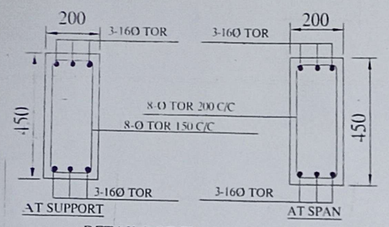
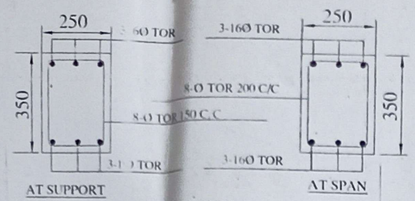
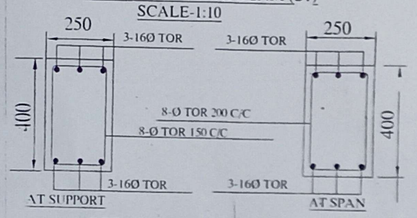


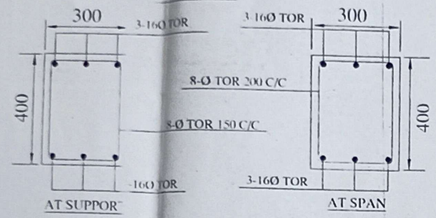

DETAILS OF FLOOR BEAM (B1)
SCALE-1:10



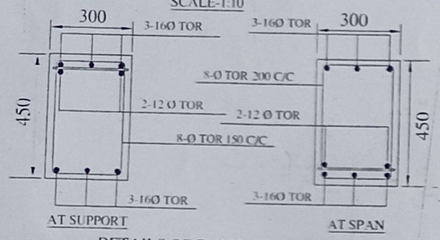

DETAILS OF FLOOR BEAM (B2)
SCALE-1:10



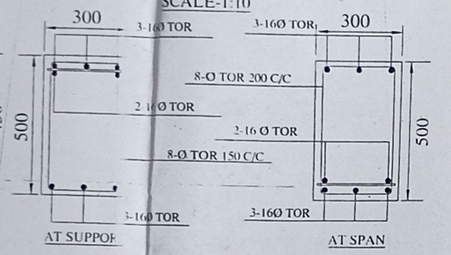

DETAILS OF FLOOR BEAM (B3)
SCALE-1:10



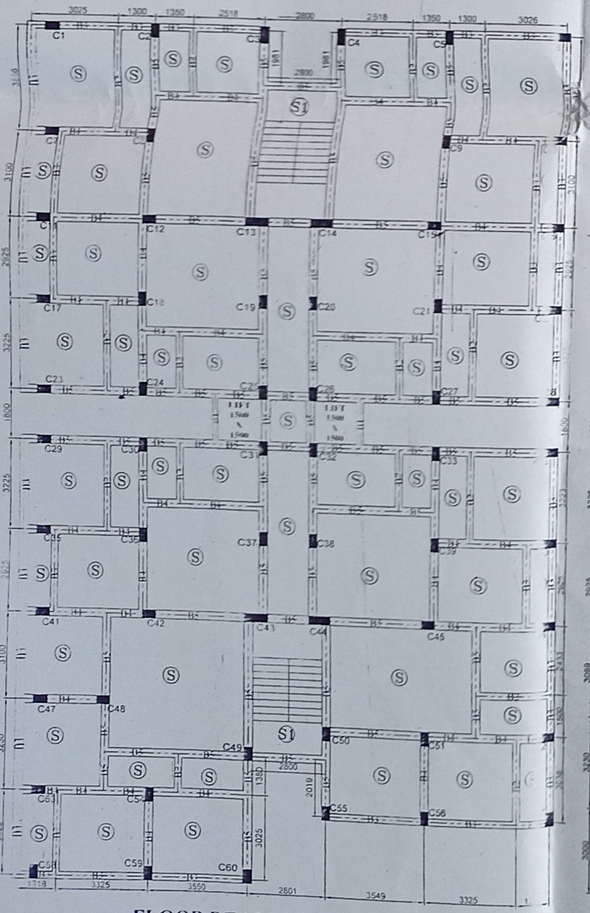

DETAILS OF FLOOR BEAM (B4)
SCALE-1:10



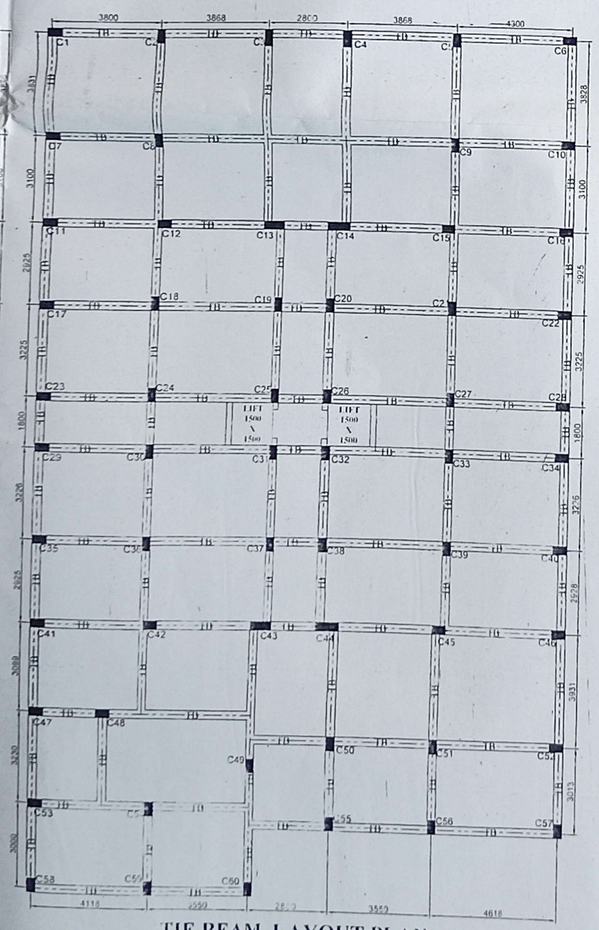

DETAILS OF FLOOR BEAM (B5)
SCALE-1:10




DETAILS OF TIE BEAM (TB)
SCALE-1:10



FLOOR BEAM LAYOUT PLAN
SCALE :- 1:100



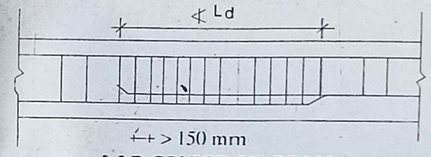
TIE BEAM LAYOUT PLAN
SCALE :- 1:100

## SCHEDULE OF R. C. BEAM

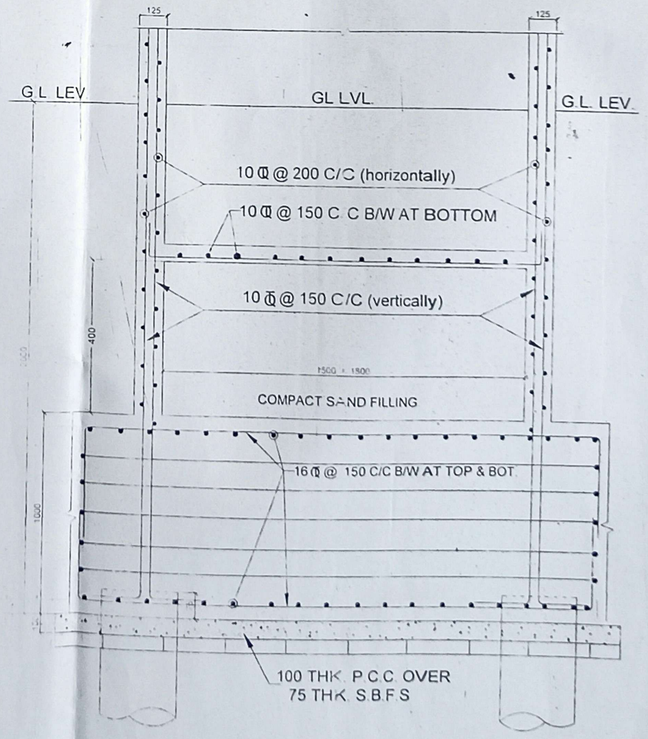
| BEAM MKD. | BEAM SIZE | REINFORCEMENT AT SUPPORT | | REINFORCEMENT AT SPAN | | STIRRUPS |
|---|---|---|---|---|---|---|
| | | TOP | BOTTOM | TOP | BOTTOM | |
| B1 | 200 X 450 | 3-16 ø TOR | 3-16 ø TOR | 3-16 ø TOR | 3-16 ø TOR | SUPP.-8ø TOR @ 150C/C<br>SPAN.-8ø TOR @ 200C/C |
| B2 | 250 X 350 | 3-16 ø TOR+ | 3-16 ø TOR | 3-16 ø TOR | 3-16 ø TOR+ | SUPP.-8ø TOR @ 150C/C<br>SPAN.-8ø TOR @ 200C/C |
| B3 | 250 X 400 | 3-16 ø TOR+ | 3-16 ø TOR | 3-16 ø TOR | 3-16 ø TOR+ | SUPP.-8ø TOR @ 150C/C<br>SPAN.-8ø TOR @ 200C/C |
| B4 | 300 X 400 | 3-16 ø TOR | 3-16 ø TOR | 3-16 ø TOR | 3-16 ø TOR | SUPP.-8ø TOR @ 150C/C<br>SPAN.-8ø TOR @ 200C/C |
| B5 | 300 X 450 | 3-16 ø TOR+<br>2-12 ø TOR | 3-16 ø TOR | 3-16 ø TOR | 3-16 ø TOR+<br>2-12 ø TOR | SUPP.-8ø TOR @ 150C/C<br>SPAN.-8ø TOR @ 200C/C |

## SCHEDULE OF TIE BEAM

| BEAM MKD. | SIZE | REINFORCEMENTS | | | | STIRRUPS |
|---|---|---|---|---|---|---|
| | | REIN. AT SUPPORT | | REIN. AT SPAN | | |
| | | TOP | BOTTOM | TOP | BOTTOM | |
| TB | 300X500 | 3-16 ø TOR+<br>2-16 ø TOR | 3-16 ø TOR | 3-16 ø TOR | 3-16 ø TOR+<br>2-16 ø TOR | SUPP.-<br>8 ø TOR @ 150C/C<br>SPAN.-<br>8 ø TOR @ 200C/C |




LAP,SPLICE IN BEAM




TYP.LIFT SECTION
(SCALE = 1:25)

**STRUCTURAL PLAN FOR PROPOSED G+IV STORIED RESIDENTIAL BUILDING PLAN AT MOUZA:- GHUNI J.L.NO.:- 23. R.S.NO.:- 232. TOUZI NO.:-1250. R.S.KH. NO:-1093. IN R.S. DAG NO.:- 3050,3051. L.R.KH.NO.:- 3800,3801,3803,4003,7919,7920,10314, -10316. P.S.:- NEW TOWN. DIST.:- NORTH 24 PARGANAS. UNDER JYANGRA HATIARA 2 NO. GRAM PANCHAYET.**

NAME OF THE OWNERS

1. PRAMOD ROUT.
2. SADANANDA SARKAR.
3. MOUSUMI MISTRI.
4. ARCHANA SINGH.
5. ASWINI KUMAR DUTTA.
6. RAJENDRA NATH DUTTA. (RAJU KUMAR DUTTA)

-: NOTES :-

**A. GENERAL:**

1. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRE.
2. DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
3. ALL FOUNDATIONS SHALL REST ON VIRGIN SOIL OR ON THOROUGHLY COMPACTED SOIL AS PER SPECIFICATION. WHENEVER THE SOIL CONTAIN THE LOOSE SOIL POCKETS THE SAME SHALL BE REMOVED AND REFILLED WITH THE P.C.C.

**B. CONCRETE WORK:**

**CONCRETE/CONCRETING:**

1. ALL CONCRETE WORK SHALL BE AS PER IS:456 (LATEST REVISION).
2. ALL STRUCTURAL REINFORCED CONCRETE WORK SHALL BE WITH DESIGN MIX CONCRETE OF GRADE AS FOLLOWS UNLESS NOTED OTHERWISE.
   a). THE GRADE CONC. FOR SUB & SUPER STRUCTURES ARE M-25
3. PLAIN CONCRETE WORK SHALL BE OF THE FOLLOWING GRADES OF NOMINAL MIX CONCRETE:
   a). 1:5:10 PLUM CONCRETE FOR FILLING CONCRETE UNDER FOUNDATION (WITH MAXIMUM AGGREGATE SIZE OF 40 MM.) AND AS PER TRENCHES ETC.
   b). M-15 FOR LEAN CONCRETE BELOW FOUNDATIONS & PLINTH PROTECTION
4. THE MINIMUM CLEAR COVER FOR PROTECTION OF MAIN REINFORCEMENT SHALL BE AS FOLLOWS:

| STRUCTURAL ELEMENT | COVER | | |
|---|---|---|---|
| | TOP | BOTTOM | SIDES |
| a). TIE BEAM | 25 | 25 | 25 |
| b). COLUMNS | 40 | - | 40 |
| c). FLOOR BEAM | 25 | 25 | 25 |
| d). SLAB | 20 | 20 | 20 |
| e). FOUNDATION | 50 | 50 | 50 |

**C. REINFORCEMENTS:**

1. ALL REINFORCING STEEL SHALL BE OF TESTED QUALITY.
2. (a). HIGH YIELD STRENGTH DEFORMED BAR REINFORCEMENT (YIELD STRESS Fe= 500 MPa.) SHALL CONFORM TO IS:1786. (LATEST REVISION)
3. LAPS AND SPLICES OF REINFORCEMENT TO SUIT AVAILABLE LENGTH OF BARS SHALL BE MADE AS SHOWN ON THE DRAWINGS OR APPROVED BY THE ENGINEER AT SITE.
4. ALL HOOKS, BENDS, LAPS AND SPLICES SHALL BE AS PER IS:2502.
5. THE LAP/ANCHORAGE LENGTH OF BARS OF DIAMETER 'D' SHALL BE AS FOLLOWS:-

| CONCRETE GRADE | DEFORMED BARS | |
|---|---|---|
| | TENSION | COMPRESSION |
| M-25 | 41XD | 33XD |

6. LAPPING OF BARS SHALL BE SUITABLY STAGGERED AND IN NO CASE MORE THAN 50% BARS SHALL BE LAPPED AT ANY SECTION.
7. LAPPING OF BARS FOR BEAM AND SLAB SHALL BE AVOIDED IN THE MAXIMUM TENSION ZONES.
8. DEVELOPMENT LENGTH (Ld) = 50XDIA OF THE BAR.

**CERTIFICATE OF OWNERS**

I SHALL NOT CONSTRUCT THE BUILDING IN DEVIATION OF THE SUBMITTED PLANS AND DRAWINGS

Pramod Rout
Sadananda Sarkar
Mousumi Mistri
Archana Singh
Aswini Kumar Dutta
Rajendra Nath Dutta
(Raju Kumar Dutta)

DATE :- -: SIGNATURE OF OWNERS :-

**-:CERTIFICATE OF ARCHITECT/L.B.S.:-**

I CERTIFY THAT ALL THE ARCHITECTURAL DRAWINGS OF THE PROJECT AT MOUZA GHUNI J.L. NO.-23, R.S. NO.-232, TOUZI NO.-1250, R.S.KH.NO.-1093 IN R.S. DAG NO.-3050,3051, L.R.KH.NO.-3800,3801,3803,4003,7919,7920,10314, 10316, HAVE BEEN PREPARED BY ME COMPLYING WITH THE PROVISION OF NEW TOWN DEVELOPMENT AUTHORITY ACT (BUILDING RULES) & KOLKATA GAZETTE NOTIFICATION FROM HIDCO/UD DEPTT. vide no-698-UD/O/M/HIDA I-03/2013 Dt.04/03/2014 FOR THE PROJECTS WITHIN NEW TOWN KOLKATA PLANNING AREA RAJARHAT. NO SUCH WRONG & INCORRECT INFORMATION HAS BEEN FURNISHED BY ME INCLUDING AREA CALCULATION CHARTS IN THIS DRAWING & NO VIOLATION OF THE PROVISION OF THESE RULES WILL BE FOUND IN ANY OF THE DRAWINGS & DOCUMENTS SUBMITTED TO THE SANCTIONING AUTHORITY FOR OBTAINING SANCTION.

Biswas
MONALISA BISWAS NASKAR
L.B.S. / I / 1641
KOLKATA MUNICIPAL CORPORATION
Mob. : +91 9903481481

DATE :- -: SIG. OF ARCHITECT/L.B.S. :-

**-:CERTIFICATE OF GEO - TECHNICAL ENGINEER:-**

IT IS CERTIFIED THAT COMPREHENSIVE GEO-TECHNICAL REPORT ON SOIL INVESTIGATION HAS BEEN PREPARED BY ME FOR DESIGN & 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 UP TO THE APPROPRIATE DEPTH THAT HAS BEEN PROPOSED IN THE GEOTECHNICAL REPORT.

Bhaskarjyoti Roy
Mr. Bhaskarjyoti Roy
B.C.E., M.I.E., M.I.G.S.
Chartered Engineer
Empanelment No.-GT/II/4/(K.M.C.)

DATE :- -: SIG. OF GEO-TEC. ENGINEER :-

**-:CERTIFICATE OF STRUCTURAL ENGINEER:-**

CERTIFY THAT THE STRUCTURAL DRAWING & DESIGN OF BOTH THE FOUNDATION & SUPERSTRUCTURE OF THE BUILDING HAS BEEN MADE CONSIDERING THE SOIL TEST REPORT (AS PER THESE RULES, REGULATIONS & CODE MADE) & ALSO CONSIDERING ALL POSSIBLE LOADS, SEISMIC LOAD & THE MOMENTS GENERATED BY THE PROPOSED STRUCTURE AS PER CURRENT CODES OF BUREAU OF INDIA STANDARD & NATIONAL BUILDING CODE OF INDIA & CERTIFY THAT IT IS SAFE & STABLE IN ALL RESPECT OF G+IV STORIES & THESE PROVISION SHALL BE ADHERED TO DURING THE CONSTRUCTION.

Vetted

Suddhasil Bhaumik
SUDDHASIL BHAUMIK
B.Tech.(Civil), M.Tech (Struct.)
M.I.E., M.I.O.S.(LM-40223)
Chartered Engineer (162240/7)
KMC-ESE-11/562

DATE :- -: SIG. OF STRUCTURAL ENGINEER :-

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