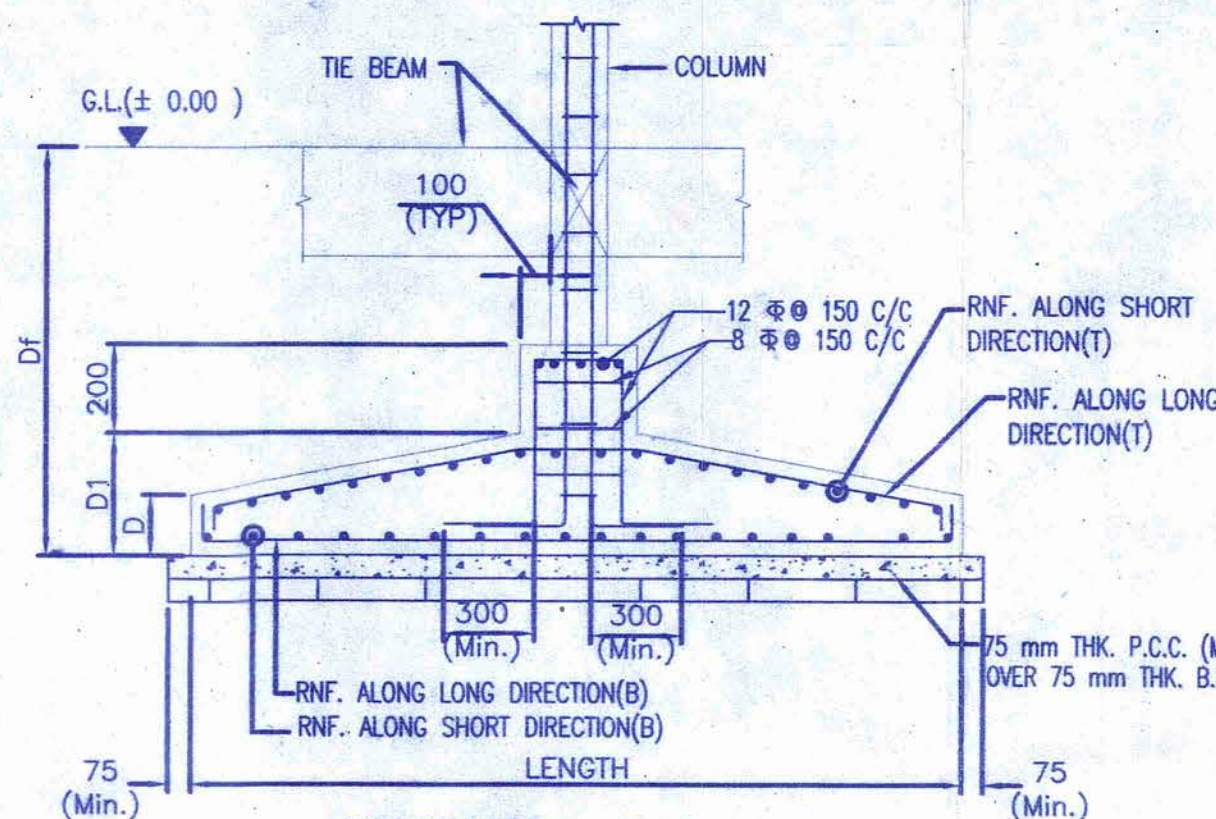


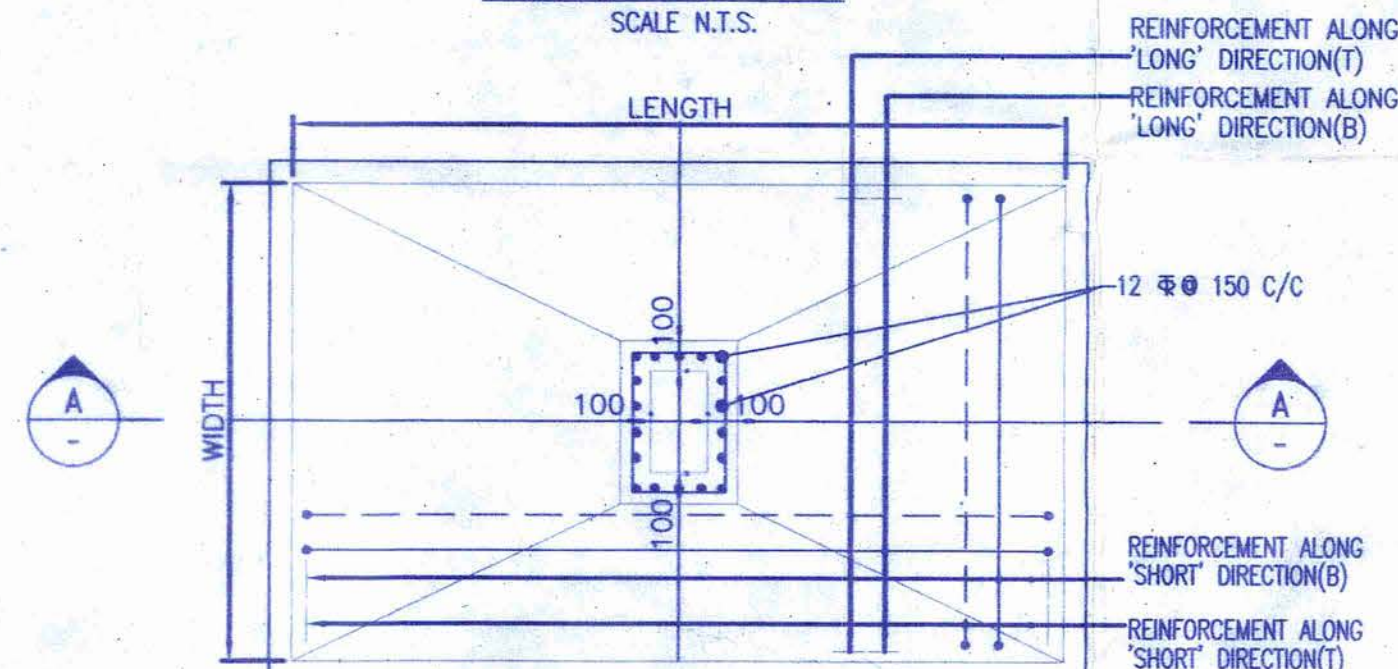
FOUNDATION LAYOUT PLAN  
SCALE-1:100

| SLAB MARKED | SLAB THICKNESS (mm) | BOTTOM REINFORCEMENT  |                      | TOP REINFORCEMENT     |                      |
|-------------|---------------------|-----------------------|----------------------|-----------------------|----------------------|
|             |                     | ALONG SHORT DIRECTION | ALONG LONG DIRECTION | ALONG SHORT DIRECTION | ALONG LONG DIRECTION |
| RS1         | 650                 | 20 $\Phi$ 100 C/C     | 20 $\Phi$ 100 C/C    | 20 $\Phi$ 100 C/C     | 20 $\Phi$ 100 C/C    |
| CF5         | 650                 | 16 $\Phi$ 100 C/C     | 10 $\Phi$ 200 C/C    | 8 $\Phi$ 200 C/C      | 8 $\Phi$ 200 C/C     |

| UNDER COLUMNS MARKED | FOUNDATION MARKED | NUMBER | FOUNDATION SIZE |            |           |        | FOUNDATION REINFORCEMENT DETAILS |                       |                      |                       |                      |
|----------------------|-------------------|--------|-----------------|------------|-----------|--------|----------------------------------|-----------------------|----------------------|-----------------------|----------------------|
|                      |                   |        | WIDTH (m)       | LENGTH (m) | THICKNESS |        | DEPTH (mm)                       | BOTTOM REINFORCEMENT  |                      | TOP REINFORCEMENT     |                      |
|                      |                   |        |                 |            | D1 (mm)   | D (mm) |                                  | ALONG SHORT DIRECTION | ALONG LONG DIRECTION | ALONG SHORT DIRECTION | ALONG LONG DIRECTION |
| C1,C2,C7,C35         | F1                | 04     | 3.4             | 3.4        | 700       | 500    | 1500                             | 16 $\Phi$ 150 C/C     | 16 $\Phi$ 150 C/C    | 8 $\Phi$ 200 C/C      | 8 $\Phi$ 200 C/C     |
| C3                   | F2                | 01     | 2.9             | 3.55       | 650       | 400    | 1500                             | 16 $\Phi$ 200 C/C     | 16 $\Phi$ 150 C/C    | 8 $\Phi$ 200 C/C      | 8 $\Phi$ 200 C/C     |
| C4,C9                | F3                | 02     | 3.3             | 3.9        | 725       | 600    | 1500                             | 16 $\Phi$ 175 C/C     | 16 $\Phi$ 100 C/C    | 8 $\Phi$ 200 C/C      | 8 $\Phi$ 200 C/C     |
| C8,C32               | F4                | 02     | 2.5             | 4.5        | 725       | 650    | 1500                             | 20 $\Phi$ 200 C/C     | 20 $\Phi$ 100 C/C    | 8 $\Phi$ 200 C/C      | 8 $\Phi$ 200 C/C     |
| C11                  | F5                | 01     | 2.0             | 4.0        | 700       | 500    | 1500                             | 20 $\Phi$ 200 C/C     | 20 $\Phi$ 125 C/C    | 8 $\Phi$ 200 C/C      | 8 $\Phi$ 200 C/C     |
| C12                  | F6                | 01     | 2.75            | 3.2        | 600       | 400    | 1500                             | 16 $\Phi$ 150 C/C     | 16 $\Phi$ 150 C/C    | 8 $\Phi$ 200 C/C      | 8 $\Phi$ 200 C/C     |
| C15                  | F7                | 01     | 3.1             | 3.1        | 600       | 400    | 1500                             | 16 $\Phi$ 150 C/C     | 16 $\Phi$ 150 C/C    | 8 $\Phi$ 200 C/C      | 8 $\Phi$ 200 C/C     |
| C19                  | F8                | 01     | 2.55            | 2.55       | 550       | 350    | 1500                             | 16 $\Phi$ 200 C/C     | 16 $\Phi$ 175 C/C    | 8 $\Phi$ 200 C/C      | 8 $\Phi$ 200 C/C     |
| C30                  | F9                | 01     | 2.7             | 3.0        | 600       | 400    | 1500                             | 16 $\Phi$ 150 C/C     | 16 $\Phi$ 150 C/C    | 8 $\Phi$ 200 C/C      | 8 $\Phi$ 200 C/C     |
| C31,C34              | F10               | 02     | 2.5             | 4.0        | 700       | 500    | 1500                             | 20 $\Phi$ 200 C/C     | 20 $\Phi$ 125 C/C    | 8 $\Phi$ 200 C/C      | 8 $\Phi$ 200 C/C     |
| C33                  | F11               | 01     | 2.55            | 3.85       | 725       | 525    | 1500                             | 20 $\Phi$ 200 C/C     | 20 $\Phi$ 125 C/C    | 8 $\Phi$ 200 C/C      | 8 $\Phi$ 200 C/C     |
| C26                  | F12               | 01     | 3.5             | 3.5        | 650       | 500    | 1500                             | 16 $\Phi$ 125 C/C     | 16 $\Phi$ 125 C/C    | 8 $\Phi$ 200 C/C      | 8 $\Phi$ 200 C/C     |

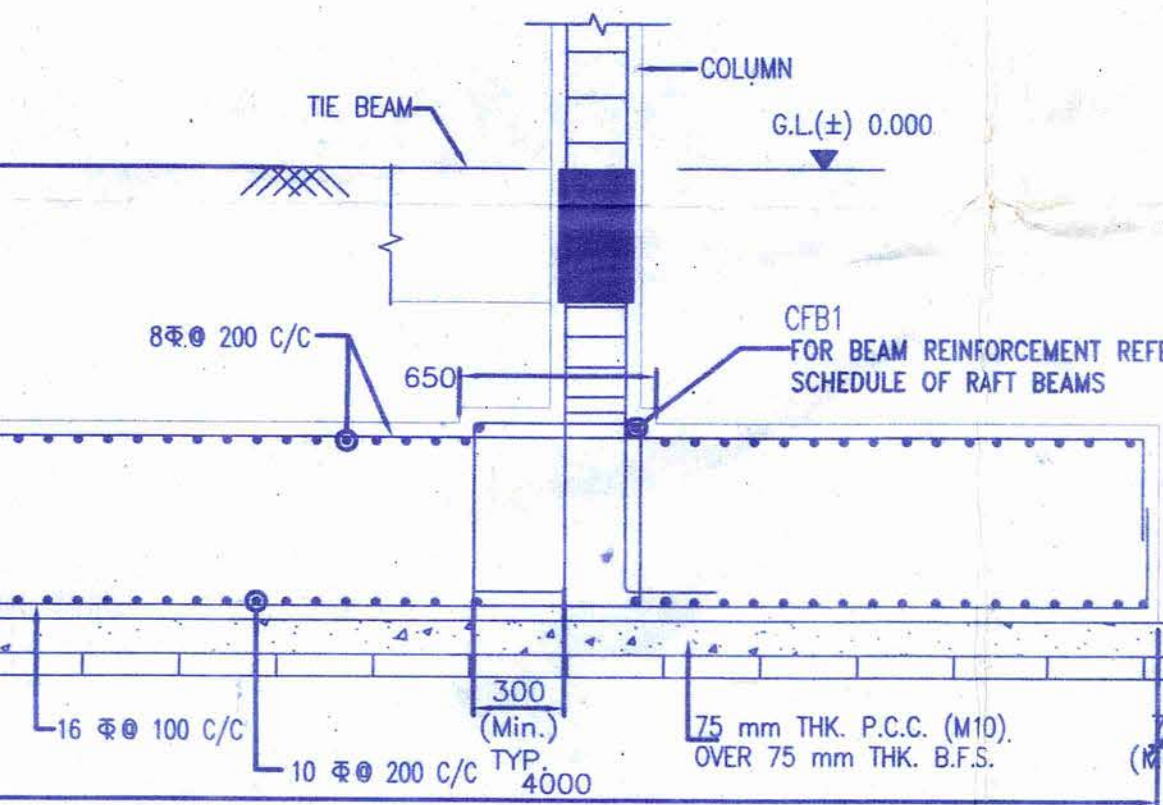


SECTION -A-A  
SCALE N.T.S.

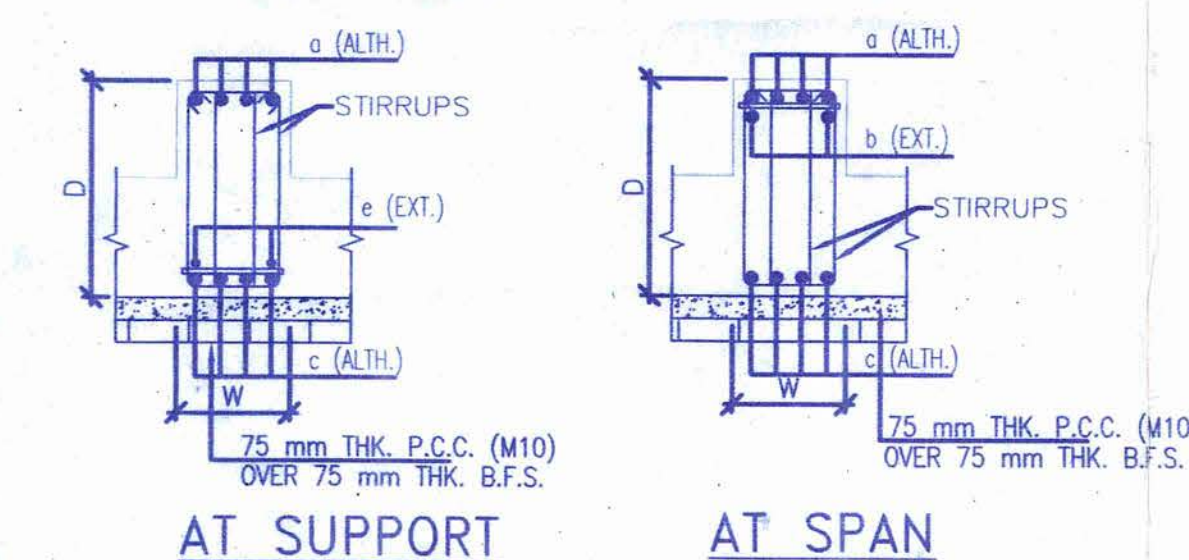


TYPICAL DETAIL OF ISOLATED FOUNDATION  
SCALE N.T.S.

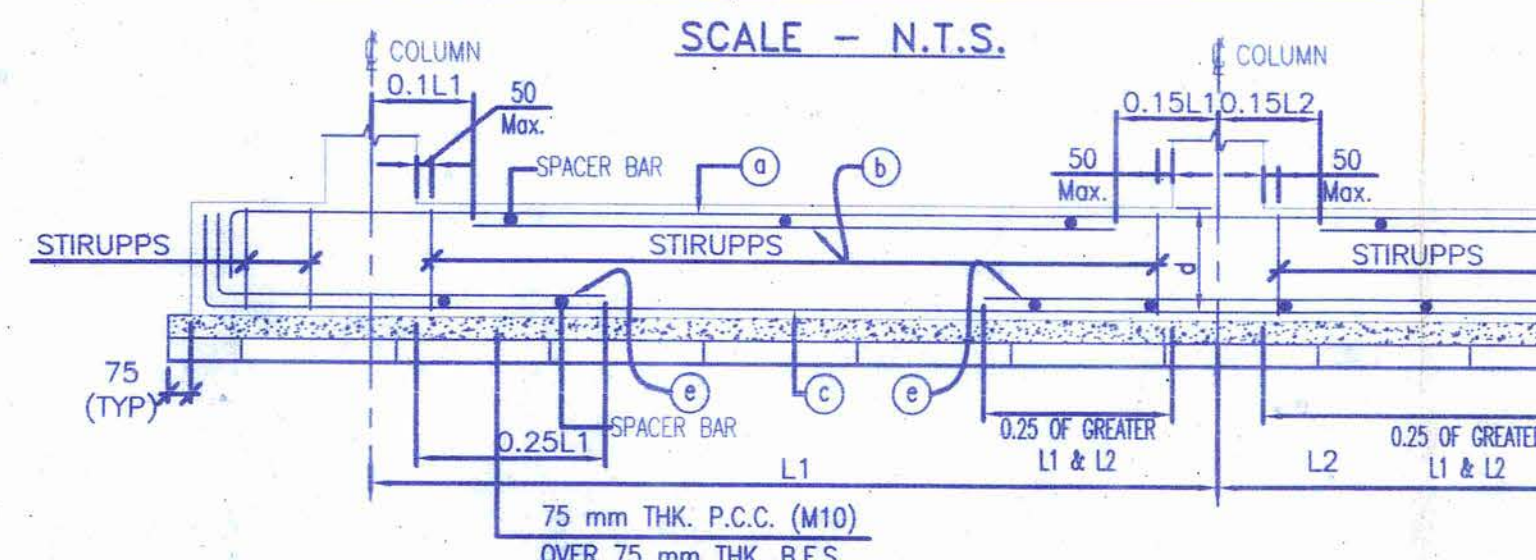
| BEAM MARKED | BEAM SIZE | TOP REINFORCEMENT |               | BOT. REINFORCEMENT |                  | STIRRUPS             |
|-------------|-----------|-------------------|---------------|--------------------|------------------|----------------------|
|             |           | ALTHOUGH          | EXTRA AT SPAN | ALTHOUGH           | EXTRA AT SUPPORT |                      |
| CFB1        | 650 700   | 6-20 $\Phi$       | 3-16 $\Phi$   | 6-20 $\Phi$        | 5-16 $\Phi$      | 4L-10 $\Phi$ 125 C/C |
| RFB1        | 600 700   | 6-16 $\Phi$       | 2-16 $\Phi$   | 6-16 $\Phi$        | 4-16 $\Phi$      | 4L-10 $\Phi$ 100 C/C |
| RFB2        | 750 700   | 7-16 $\Phi$       | 2-16 $\Phi$   | 7-16 $\Phi$        | 4-16 $\Phi$      | 4L-10 $\Phi$ 100 C/C |
| RFB3        | 400 700   | 4-20 $\Phi$       | 2-16 $\Phi$   | 4-20 $\Phi$        | 2-20 $\Phi$      | 4L-10 $\Phi$ 125 C/C |
| RFB4        | 900 700   | 7-20 $\Phi$       | 4-16 $\Phi$   | 7-20 $\Phi$        | 4-20 $\Phi$      | 4L-12 $\Phi$ 125 C/C |
| RFB5        | 800 700   | 8-16 $\Phi$       | -             | 8-16 $\Phi$        | 2-16 $\Phi$      | 4L-10 $\Phi$ 125 C/C |
| RFB6        | 650 700   | 7-16 $\Phi$       | 3-16 $\Phi$   | 7-16 $\Phi$        | 5-16 $\Phi$      | 4L-10 $\Phi$ 100 C/C |



SECTION -B-B  
REINFORCEMENT DETAILS OF COMBINED FOUNDATION  
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)

| TYPE OF FOUNDATION | NET SAFE BEARING CAPACITIES CONSIDERED FOR FOUNDATION |   |
|--------------------|---|---|
|                    | SIZE  | NET SAFE BEARING CAPACITY (T/M <sup>2</sup> ) |
| ISOLATED           | 3.40m. x 3.40m.                                       | 14.00   |
|                    | 2.90m. x 3.55m.                                       | 14.00   |
|                    | 3.30m. x 3.90m.                                       | 14.00   |
|                    | 2.50m. x 4.50m.                                       | 14.00   |
|                    | 2.00m. x 4.00m.                                       | 14.20   |
|                    | 2.75m. x 3.2m.  | 14.20   |
|                    | 3.10m. x 3.10m.                                       | 14.20   |
|                    | 2.55m. x 2.55m.                                       | 14.20   |
|                    | 2.70m. x 3.00m.                                       | 14.00   |
| RAFT               | 2.50m. x 4.00m.                                       | 14.00   |
|                    | 2.55m. x 3.85m.                                       | 14.00   |
|                    | 3.50m. x 3.50m.                                       | 14.00   |
| COMBINED           | 4.00m x 6.50m   | 12.00   |

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

- 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 T @ 250 C/C.
  - CONCRETE CLEAR COVER SHALL BE AS FOLLOWS:  
i) RAFT BEAM & SLAB : 50 mm  
ii) 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 OF ISOLATED, COMBINED AND RAFT FOUNDATIONS HAVE BEEN CONSIDERED AS MENTIONED IN DRAWING IN TUNE WITH THE SOIL REPORT PREPARED BY MR. ASIM SARKAR (ASSOCIATED FOUNDATION ENGINEERS). THIS MUST BE ENSURED AT SITE UNDER THE SUPERVISION OF A COMPETENT GEOTECHNICAL ENGINEER FOR VALIDITY OF THIS DRAWING.
  - THE 'N' VALUE AS DESCRIBED UNDER ENTRIES 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 NOTE:-  
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.

TITLE  
PROPOSED STRUCTURAL DRAWING OF G+7 STORED RESIDENTIAL (APARTMENT) BUILDING OF SRI SUDIP KUMAR BISWAS, SRI BASUDEB NATH, SMT. SWAPNA CHAKRABORTY THAKUR, & SRI. SAIKAT CHAKRABORTY THAKUR OVER L.R. PLOT NO. - 2101,2102 & 2103, R.S PLOT NO.-1586, LR KHATIAN NO.- 4919,990,5042 & 5043, MOUZA -ARRAH, J.L. NO- 91, P.S. KANKSHA, DIST- PASCHIM BARDHAMAN.

SIGNATURE OF OWNER  
SRI SATYAM ENGINEERS PRIVATE LIMITED  
Director  
Rabi Kumar  
Smt. Swapna Chakraborty Thakur & Srikat Chakraborty Thakur

SIGNATURE OF L.B.S./ENGINEER/ARCHITECT

AR. VIJAYA SINGH MAZUMDER  
COA REGISTERED  
CA/2021/134278  
LIC NO. - DMC/BPD/60  
9332802186 / 9476428106

SIGNATURE OF GEOTECHNICAL ENGINEER  
ASIM SARKAR  
BCE, ME (SOIL), MIGS  
EMPLOYED GEOTECHNICAL ENGINEER  
K.M.C. NO. : GLASS-4/2

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.  
Dr. Saughey Das  
Asst. Prof., IIT Guwahati  
Reg. No. 1222 of IIT Guwahati  
Chartered Engineer  
Jalandhar, India  
Licence No. - COVER/NKDA/10/00175  
11-6837517321, 7003201732

SIGNATURE OF THE VETTING AUTHORITY

CHECKED & LETTID  
DR. DIPANKAR CHAKRABORTY  
PROFESSOR & HEAD  
JALANDHAR UNIVERSITY  
JALANDHAR  
I.T.E.C. GOLD MEDALIST  
COE (IIT) GUWAHATI  
Licence No. - COVER/NKDA/10/00175  
11-6837517321, 7003201732

SIGNATURE OF PANCHAYAT PRADHAN

Approved  
Vide Memo No. DE/122/2021 Dt. 22/10/2021  
DISTRICT ENGINEER OF PASCHIM BARDHAMAN, ZILA PARISHAD

DRAWING TITLE

FOUNDATION LAYOUT PLAN & REINFORCEMENT DETAILS

SCALE-1:100 OR AS SHOWN

DATE- 17.08.2021

SHEET NO. - 1 OF 4