



BEAM MARKED	BEAM SIZE		TOP REINFORCEMENT		BOTTOM REINFORCEMENT		STIRRUPS (AT SUPPORT)	STIRRUPS (AT SPAN)
	WIDTH (W)	DEPTH (D)	ALTHROUGH	EXTRA AT SUPPORT	ALTHROUGH	EXTRA AT SPAN		
TB1	250	450	2-16 Φ +1-12 Φ	—	2-16 Φ +1-12 Φ	—	2L-8 Φ 100 C/C	2L-8 Φ 200 C/C
TB2	250	450	3-16 Φ	—	3-16 Φ	—	2L-8 Φ 100 C/C	2L-8 Φ 200 C/C

BEAM MARKED	BEAM SIZE		TOP REINFORCEMENT		BOTTOM REINFORCEMENT		STIRRUPS (AT SUPPORT)	STIRRUPS (AT SPAN)
	WIDTH (W)	DEPTH (D)	ALTHROUGH	EXTRA AT SUPPORT	ALTHROUGH	EXTRA AT SPAN		
FB1	250	450	3-16 Φ	—	3-16 Φ	—	2L-8 Φ 100 C/C	2L-8 Φ 125 C/C
FB2	250	450	3-16 Φ	—	3-16 Φ	—	2L-8 Φ 100 C/C	2L-8 Φ 125 C/C
FB3 (HIDDEN BEAM)	800	150	6-16 Φ	—	6-16 Φ	—	4L-8 Φ 100 C/C	4L-8 Φ 100 C/C
FB4	250	450	3-16 Φ	—	3-16 Φ	—	2L-8 Φ 100 C/C	2L-8 Φ 200 C/C
FB5	250	450	3-16 Φ	2-16 Φ	3-16 Φ	—	2L-8 Φ 100 C/C	2L-8 Φ 200 C/C
HLB1	250	450	2-20 Φ +1-25 Φ	—	3-16 Φ	—	2L-8 Φ 100 C/C	2L-8 Φ 100 C/C
HLB2	250	450	3-16 Φ	—	3-16 Φ	—	2L-8 Φ 100 C/C	2L-8 Φ 100 C/C

COLUMN MARKED	NOS. OF COLUMNS	COLUMN SIZE (mm x mm)	FOUNDATION TO ROOF AND ABOVE ROOF	STIRRUP ARRANGEMENT & SPACING	
				NEAR JUNCTION (10)	REST PORTION
C20, C21	02	400x400	400 400 MAIN RNF.:- 4-16 Φ +8-12 Φ	8 Φ 75 C/C (3 NOS. CLOSED LINK)	8 Φ 150 C/C (3 NOS. CLOSED LINK)
C11	01	300x500	300 500 MAIN RNF.:- 4-20 Φ +6-16 Φ	8 Φ 75 C/C (3 NOS. CLOSED LINK)	8 Φ 150 C/C (3 NOS. CLOSED LINK)
C15	01	300x500	300 500 MAIN RNF.:- 4-16 Φ +6-12 Φ	8 Φ 75 C/C (3 NOS. CLOSED LINK)	8 Φ 150 C/C (3 NOS. CLOSED LINK)
C8	01	300x775	300 775 MAIN RNF.:- 12-16 Φ	8 Φ 75 C/C (3 NOS. CLOSED LINK) (1 NO. CLOSED LINK)	8 Φ 150 C/C (3 NOS. CLOSED LINK) (1 NO. CLOSED LINK)
C12	01	300x750	300 750 MAIN RNF.:- 12-16 Φ	8 Φ 75 C/C (3 NOS. CLOSED LINK) (1 NO. CLOSED LINK)	8 Φ 150 C/C (3 NOS. CLOSED LINK) (1 NO. CLOSED LINK)
C17	01	300x650	300 650 MAIN RNF.:- 6-16 Φ +6-12 Φ	8 Φ 75 C/C (3 NOS. CLOSED LINK) (1 NO. CLOSED LINK)	8 Φ 150 C/C (3 NOS. CLOSED LINK) (1 NO. CLOSED LINK)
C13, C14, C16	03	300x450	300 450 MAIN RNF.:- 8-16 Φ +2-12 Φ	8 Φ 75 C/C (2 NOS. CLOSED LINK) (1 NO. OPEN LINK)	8 Φ 150 C/C (2 NOS. CLOSED LINK) (1 NO. OPEN LINK)
C1, C2, C3, C4, C5, C6, C7, C9, C10, C18, C19	11	300x450	300 450 MAIN RNF.:- 4-16 Φ +6-12 Φ	8 Φ 75 C/C (2 NOS. CLOSED LINK) (1 NO. OPEN LINK)	8 Φ 150 C/C (2 NOS. CLOSED LINK) (2 NOS. OPEN LINK)
ST1 (ROOF TO LIFT MACHINE ROOM ROOF)	01	250x350	250 350 MAIN RNF.:- 4-16 Φ +4-12 Φ	8 Φ 150 C/C (2 NOS. CLOSED LINK)	

SPECIAL NOTES:

- 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.
- THIS DRAWING SHOWS A NUMBER OF NON RECTANGULAR SLAB PANELS. SLAB REINFORCEMENTS MUST BE LAID UNDER SUPERVISION OF COMPETENT STRUCTURAL ENGINEER BY CLEARLY IDENTIFYING THE SLAB PANELS BOUNDED BY HIDDEN BEAMS AT PLACES.

- 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).
 - 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-500/500D CONFORMING TO IS-1786-2008.
 - UNLESS OTHERWISE STATED LAP LENGTH OF BARS SHALL BE EQUAL TO THE DEVELOPMENT LENGTH = 50xBAR DIA.
 - CONCRETE NOMINAL COVER TO MAIN REINFORCEMENT SHALL BE AS FOLLOWS:
 - i) COLUMNS : 40 mm
 - ii) BEAMS : 30 mm
 - iii) SLABS : 20 mm
 - GRADE OF CONCRETE FOR SUPERSTRUCTURE & SUBSTRUCTURE WILL BE M25 AS PER IS:456:2000.
 - VIBRATOR SHALL BE USED FOR PROPER COMPACTION OF CONCRETE AND CURING SHALL BE DONE PROPERLY.
 - DEVELOPMENT LENGTH SOWN FOR LAP & SPLICES SHOULD BE PROVIDED AS PER THE PROVISIONS LAID DOWN IN SP34:1987
 - WHEREVER A SUPPORTED MEMBER TERMINATES AT A SUPPORTING MEMBER THE BARS OF THE SUPPORTED MEMBER SHOULD HAVE AN ANCHORAGE OF 50D IN THE SUPPORTING MEMBER.
 - WHEN TWO BEAMS MEET AT A COLUMN LOCATION ALONG THE SAME LINE THE HIGHER REINFORCEMENT AT THE TOP SHOULD BE CONTINUED AT BOTH SIDES.
 - WHEN TWO SLAB PANELS MEET ALONG A COMMON BEAM THEN THE TOP REINFORCEMENT TO BE PROVIDED FOR BOTH THE PANELS SHOULD BE THE HIGHER ONE AMONG THE TABULATED VALUES FOR THE INDIVIDUAL PANELS.
 - IN ALL CANTILEVER SLABS WITHOUT PERIPHERAL BEAMS THE TOP REINFORCEMENT PARALLEL TO THE CANTILEVER SPAN SHOULD BE CONTINUED UP TO ATLEAST 1.5 TIMES THE CANTILEVER SPAN WITHIN THE ADJACENT SLAB.

TITLE
 PROPOSED STRUCTURAL DRAWINGS FOR FIVE (G+4) STORIED RESIDENTIAL APARTMENT OF M.R DEVELOPER . OVER, PLOT DETAILS /ADDRESS : PLOT NO- [1654(R.S.) & 2425/3280(L.R.); SUB PLOT NO 37(P) J.L. NO-91, MOUZA:-ARRAH, DGP-713212 P.S.- PANKSA, UNDER MOLANDIGHI GRAM PANCHAYAT, DIST. -PASHCHIM BURDWAN.

LAND OWNER : SMT. DULALI SUR

CERTIFICATE OF ARCHITECT
 I DO HEREBY CONFIRM AND CERTIFY WITH FULL RESPONSIBILITY THAT THE BUILDING PLAN HAS BEEN PREPARED BY ME KEEPING THE PROVISION OF NBC OF INDIA AND CERTIFY THAT IT IS SAFE & STABLE IN ALL RESPECT.

ANIRBAAN BHATTACHARYA
 (LICENSE NO - CA/2014/62790)

SIGNATURE OF ARCHITECT/ENGINEER
 JUI CHATTERJEE
 Lic.No./DMC/BPD-25
 1/13 Ramnagar Road, Durgam - 5
 JUI CHATTERJEE 0417/9434649399
 (LICENSE NO - DMC/BPD/25
 SIG. OF ARCHITECT/ENGINEER

SIGNATURE OF GEOTECHNICAL ENGINEER

THIS IS TO CERTIFY THAT THE SOIL TEST HAS BEEN PERFORMED BY ME FOR THIS PROJECT
 ASIM SARKAR
 BCE, ME (SOIL), MIGS
 EMPANELLED GEOTECHNICAL ENGINEER
 K.M.C. No.:CLASS-I/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.
 SOUMYADIP DUTTA
 B.TECH (WBUT)
 CIVIL ENGINEER, NKDA
 LICENCE NO.- CVER/NKDA/10/00174

SIG. OF STRUCTURAL ENGINEER

SIGNATURE OF THE VETTING AUTHORITY

CHECKED & VETTED
 DR. DIPANKAR CHAKRAVARTY
 STRUCTURAL ENGINEERING DIVISION
 PROFESSOR & HEAD CIVIL ENGINEERING DEPARTMENT
 JADAVPUR UNIVERSITY
 (EISE-10KMC), STRUCTURAL REVIEWER (KMC)
 I.E.TECH (ITKGP) GOLD MEDALIST
 I.E.TECH (ITKGP) GOLD MEDALIST
 (I.E.TECH (ITKGP))
 Mob.- 9831532846

SIGNATURE OF LAND OWNER/S
 Approved vide Memo No- DB/PSD/1/236
 Dt- 06/05/2020 of District Engineer Paschim
 Bardhaman Zilla panchayat.

SIGNATURE OF OWNER
 APPROVED
 Malandighi Gram Panchayat

DRAWING TITLE
 COLUMN LAYOUT PLAN, COLUMN SCHEDULE & TYPICAL DUCTILE DETAIL OF COLUMN-BEAM JUNCTION, TIE BEAM LAYOUT PLAN, TYPICAL FLOOR SLAB AND BEAM LAYOUT PLAN AND REINFORCEMENT SCHEDULES
 SCALE-1:100 OR AS SHOWN
 DATE- 04.08.2019
 SHEET NO. -3 OF 4