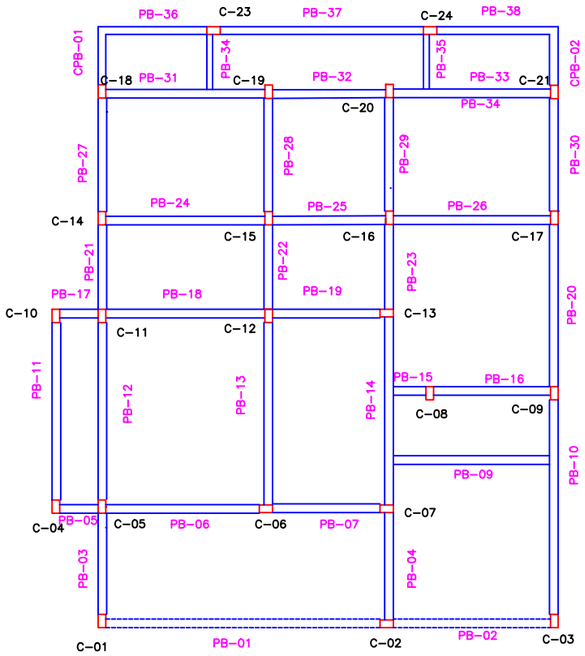


SCHEDULE OF COLUMNS & FOOTINGS

COLUMN NOTATION		C 13, C 16 ,C19	C01, C02,C07,C14 C22,C23	C06,C08,C12,C15 C20	C4, C10	C03,C05.C09.C11.C13 C17, C18,
COLUMN FIRST FLOOR	SIZE STEEL	230X450 + 4-16 4-12	230X450 + 4-16 4-12	230X450 + 4-16 4-12	230X375 8-12	230X450 + 4-16 4-12
	SECTION					
COLUMN GROUND FLOOR	SIZE STEEL	230X450 + 4-16 4-12	230X450 8-16	230X450 8-16	230X375 8-12	230X525 + 4-16 6-12
	SECTION					
FOOTING	SIZE OF P.C.C	1400 X 1600	1600 X 1750	1500 X 1700	1300 x 1500	1650 X 1800
	SIZE OF FOOTING	1250 X 1450	1450 X 1600	1350 X 1550	1150 x 1350	1500 X 1650
CONCRETE DEPTH	AT EDGE d	450	500	500	400	550
	AT FACE D	450	500	500	400	550
STEEL IN SHORTER DIRECTION	DIA NOS.	10 mm 12 NOS.	10 mm 13 NOS.	10 mm 12 NOS.	10 mm 14 NOS.	10 mm 14 NOS.
	LENGTH					
STEEL IN LONGER DIRECTION	DIA NOS.	10 mm 10 NOS.	10 mm 11 NOS.	10 mm 11 NOS.	10 mm 12 NOS.	10 mm 12 NOS.
	LENGTH					
LINK DETAILS						

* ALL LINKS TO BE T8 @ 150mm C/C

*** STRUCTURE IS TO BE DESIGNED FOR GROUND + 1 RESIDENTIAL FLOOR**

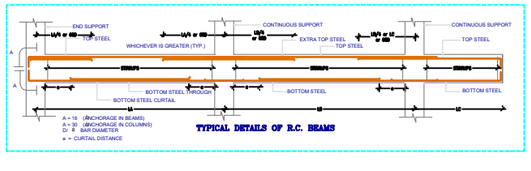
- EXTRA TOP BARS SHALL BE PLACED IN LENGTH AS PER SPLIT UP DESCRIBED IN SCHEDULE.
- EXTRA TOP BARS SHALL BE PROVIDED FOR A LENGTH EQUAL TO L/4 OF THE SPAN OR "L0") WHICH EVER IS GREATER.
- AT A DISCONTINUOUS END, EXTRA TOP BARS SHALL HAVE ANCHORAGE NOT LESS THAN "Ld"+10d; IN SUPPORTING MEMBER WITH BOND BARSR "Ld1" BEND.
- AT A CONTINUOUS END, EXTRA TOP BARS SHALL EXTEND IN TO ADJOINING SPAN FOR A LENGTH EQUAL TO L/4 OF THE ADJOINING SPAN OR "L0" WHICH EVER IS GREATER.
- TOP BARS OF CANTILEVER BEAM SHALL EXTEND IN TO ADJOINING SPAN FOR A LENGTH EQUAL TO LENGTH OF CANTILEVER OR L/4 OF THE ADJOINING SPAN OR "L0" WHICH EVER IS GREATER.
- REFER BENWARE DETAILS FOR THE CANTILEVERS WITH NO BALANCING EXTENSION BEHIND.

- ALL DIMENSIONS ARE IN MILIMETER , UNLESS SPECIFIED OTHERWISE.
- COVER TO BEAM SHOULD BE OF 25mm.
- ANCHORAGE LENGTH SHOULD BE 300MM MIN.
  RCC WORK & RELATED DETAILS.
- REFER ARCHITECTURAL WORKING DRG. & CENTRELINE PLAN FOR EXACT COLUMN ORIENTATIONS & POSITIONS OF RCC MEMBERS.
- EXTRA BAR SHOULD PROVIDE IN CONTINOUS BEAM AS MENTION.

* CONCRETE GRADE M-25
* STEEL GRADE Fe-500
* PCC CONCRETE GRADE M-15

SCHEDULE OF R.C.C BEAMS

BEAM Nos.	BEAM SIZE WIDTH B	BEAM SIZE DEPTH D	BOTTOM REINF. STRAIGHT	BOTTOM REINF. EXTRA @ SUPPORT	BOTTOM REINF. CURTAIL	BOTTOM REINF. DISTANCE	TOP REINF.	STIRRUPS ZONE 1(L)	STIRRUPS ZONE 2 (M)	STIRRUPS ZONE 3 (R)	REMARK.
PLINTH BEAMS											
[illegible]	230	600	2-T12		2-T16	485	2-T12	T8 @ 150c/c	T8 @ 200c/c	T8 @ 200c/c	
[illegible]	230	450	2-T12		2-T16	485	2-T12	T8 @ 150c/c	T8 @ 200c/c	T8 @ 200c/c	
[illegible]	230	450	2-T12		2-T16	485	2-T12	T8 @ 200c/c	T8 @ 200c/c	T8 @ 200c/c	
[illegible]	230	375	2-T12		1-T16	375	2-T8	T8 @ 200c/c	T8 @ 200c/c	T8 @ 200c/c	
[illegible]	230	375	2-T12				2-T12	T8 @ 150c/c	T8 @ 150c/c	T8 @ 150c/c	CANTILEVER BEAM
[illegible]	230	375	2-T12				2-T12	T8 @ 150c/c	T8 @ 150c/c	T8 @ 150c/c	
[illegible]	230	375	2-T12				2-T8	T8 @ 150c/c	T8 @ 150c/c	T8 @ 150c/c	
[illegible]	150	300	2-T12				2-T12	T8 @ 200c/c	T8 @ 200c/c	T8 @ 200c/c	
[illegible]	230	375	2-T12				2-T8	T8 @ 200c/c	T8 @ 200c/c	T8 @ 200c/c	



TYPICAL DETAILS OF R.C. BEAMS

(A) GENERAL NOTES:-

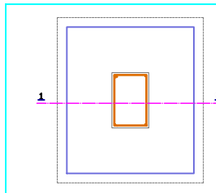
* ALL THE DIMENSIONS AND MEASUREMENTS TO BE REFERED FROM ARCHITECTURAL DRAWINGS.
* THE S.B.C. OF FOUNDATION STRATA IS ASSUMED TO 250 KN/M.SQ.
* CONCRETE GRADE TO BE M25 UNLESS OR OTHERWISE SPECIFIED
* ALL REINFORCEMENT TO BE T.M.T. BARS OF GRADE Fe500 OR HIGHER CONFIRMING TO I.S.:1986 WITH LATEST AMENDMENTS.
* ANY DEVIATIONS FROM DESIGNED SIZES, FOUND NECESSARY ON SITE SHALL BE GOT APPROVED WELL IN ADVANCE, BEFORE EXECUTION .
* DEVELOPMENT LENGTH OF REINFORCING BARS SHALL BE IN ACCORDANCE WITH CLAUSE 26.2.1 OF IS: 456-2000.
* LIVE LOAD ASSUMED IS 3/2 KN/SQ.M.
* EXTRA STEEL AT SUPPORT SHOULD EXTEND 1/4TH OF SPAN OR 60D WHICHEVER IS GREATER.

(B) FOOTINGS & COLUMNS:-

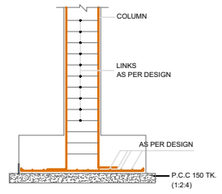
* THE LARGER DIMENSIONS OF A FOOTING SHALL BE ORIENTED ALONG THE LARGER SIDE OF A COLUMN, UNLESS & UNTIL MENTIONED OTHERWISE.
* REINFORCEMENT PARALLEL TO WIDTH OF FOOTING SHALL BE LAID FIRST.
* REINFORCING SHALL BE BENT FOR 75 mm. AT THE EDGES OF FOOTINGS AS INDICATED IN SKETCH.
* THE SUBSOIL & SUBSOIL WATER ARE ASSUMED TO BE FREE FROM HARMFUL ELEMENTS.
* FOR ANY CHANGE PROPOSED AT SITE, IN THE SIZE OF COLUMN SECTION AND/OR THEIR ORIENTATION, APPROVAL OF STRUCTURAL ENGINEER SHALL BE OBTAINED BEFORE EXECUTION.
* LARGER DIAMETER BARS SHALL BE PROVIDED AT CORNERS, UNLESS OTHERWISE INDICATED IN DRAWING.
* ARRANGEMENT OF MAIN VERTICAL REINFORCEMENT SHOULD NOT BE MODIFIED.

CLEAR COVER/LAP/ANCHORAGE LENGTH DETAILS

MEMBERS	CLEAR COVER		LAP/ANCHORAGE LENGTH IN mm						
			BAR DIAMETER IN mm						
			8 ϕ	10 ϕ	12 ϕ	16 ϕ	20 ϕ	25 ϕ	
FLOOR SLAB	TOP BOTTOM	20 20	480	600	720	960	1200	1500	
FLOOR BEAM	TOP BOTTOM SIDE	30 30 30	480	600	720	960	1200	1500	
COLUMNS	SIDE	40	-	-	576	768	960	1200	
FOOTINGS	BOTTOM SIDE	50 50	NO LAP ALLOWED						



PLAN



SECTION 1-1

SECTION THROUGH TYPICAL FOOTING

Project : Proposed Construction of BUNGALOW at Chennai.

Client : Mr. Dhanaraman

PRINCIPAL ARCHITECT : Happho Solutions V Mart PVT. LTD

TITLE : FOUNDATION AND PLINTH RCC DESIGN

Rev 01 : ADVANCE COPY

DATE: 31 AUGUST 2020

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