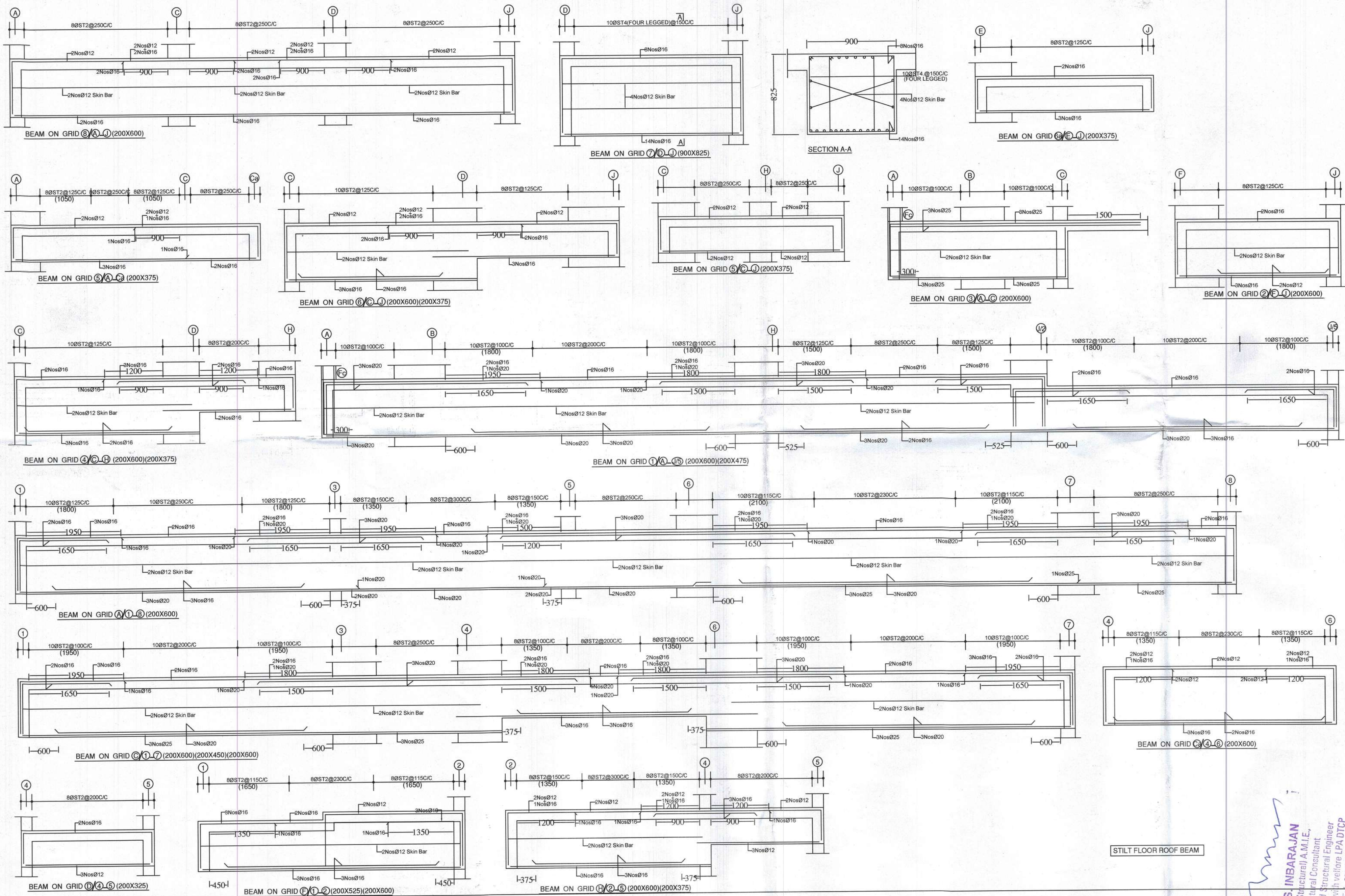




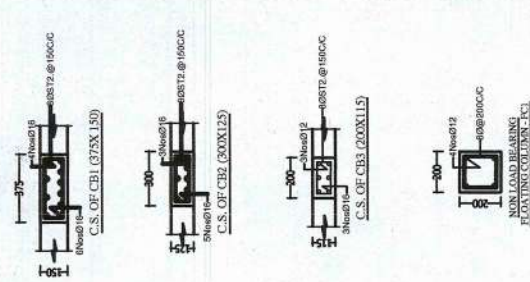
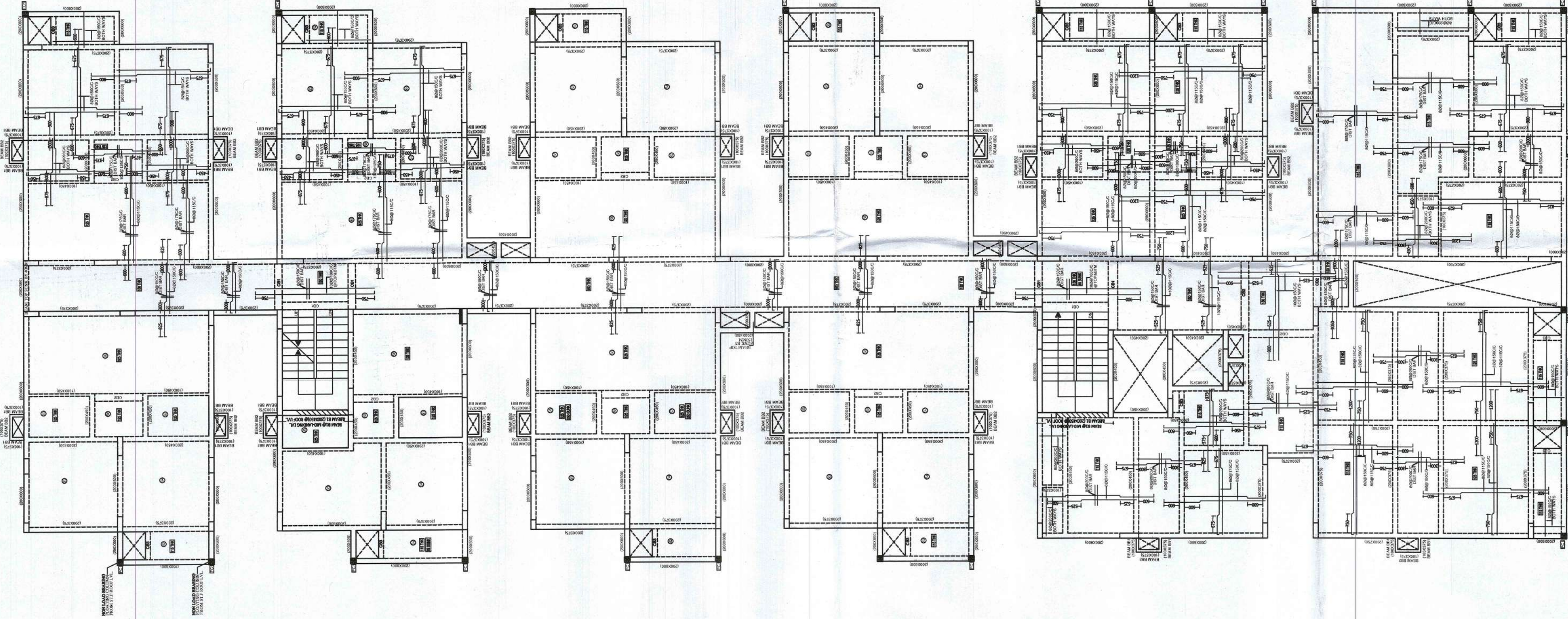
S.P.S. INBARAJAN
M.E., (Structural) A.M.I.E.,
Registered Structural Engineer
Grade II (SE) with vellore LPA DTCP
Reg. No. SE/01-1/PE-2025/001 On 02.09.2024
Door No.50, Kripasankari Street,
West Mambalam, Chennai - 600 033.

No.50, Kripasankari Street, West Mambalam, Chennai - 600 033. Ph : 2485 46 03		Drg No. 11973	
S.P.S. Inbarajan, M.E., A.M.I.E., Structural Consultant		S-05	
DATE: 17 / 12 / 2024		BLOCK-A	
ARCHITECT:		DSNO : S.P.S.I	
STILT FLOOR ROOF BEAM DETAILS..		DRN : SUDHA	
SCALE: 1/4" = 3'-6"		BOURNA Consultants - Engineers	

PROPOSED: RESIDENTIAL BUILDING FOR M/S. GOLDEN PLANET
AT MELAKUPPAM, TAMILNADU.

S. P. S. INBARAJAN
M.E., (Structural) A.M.I.E.,
Registered Structural Engineer
Grade I (SE) with Vellore LPA DTCP
Reg. No. SE/Gr-I/Feb-2025/001 On 02.09.2024
Door No.50, Kirupasankari Street,
West Mambalam, Chennai - 600 033.

FIFTH FLOOR ROOF SLAB LAYOUT

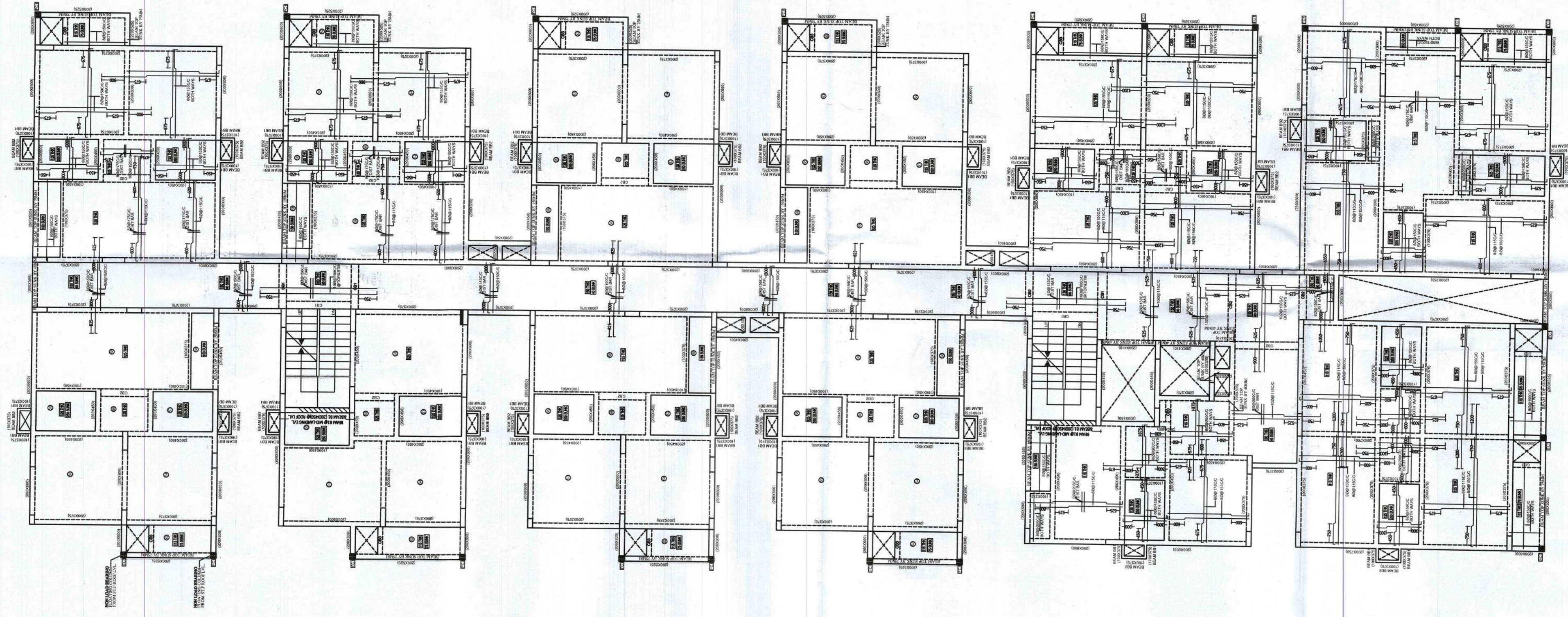


IMPORTANT NOTES:-
1. ALL SLABS ARE 150mm THICK. UNLESS NOTED OTHERWISE.
2. THE TIME OF CURING OF READY MIX CONCRETE SHALL BE AT THE MAXIMUM OF 90 MINUTES TO 120 MINUTES.
3. THE TIME OF CURING OF READY MIX CONCRETE SHALL BE AT THE MAXIMUM OF 90 MINUTES TO 120 MINUTES.
4. THE TIME OF CURING OF READY MIX CONCRETE SHALL BE AT THE MAXIMUM OF 90 MINUTES TO 120 MINUTES.
5. THE TIME OF CURING OF READY MIX CONCRETE SHALL BE AT THE MAXIMUM OF 90 MINUTES TO 120 MINUTES.
6. THE TIME OF CURING OF READY MIX CONCRETE SHALL BE AT THE MAXIMUM OF 90 MINUTES TO 120 MINUTES.
7. THE TIME OF CURING OF READY MIX CONCRETE SHALL BE AT THE MAXIMUM OF 90 MINUTES TO 120 MINUTES.
8. THE TIME OF CURING OF READY MIX CONCRETE SHALL BE AT THE MAXIMUM OF 90 MINUTES TO 120 MINUTES.
9. THE TIME OF CURING OF READY MIX CONCRETE SHALL BE AT THE MAXIMUM OF 90 MINUTES TO 120 MINUTES.
10. THE TIME OF CURING OF READY MIX CONCRETE SHALL BE AT THE MAXIMUM OF 90 MINUTES TO 120 MINUTES.

IMPORTANT NOTE FOR SAND >
SAND SHALL BE REPLACED BY SAND DUST OR PARTIALLY IN ANY PROPORTION FOR
SAND DUST SHALL BE REPLACED BY SAND DUST OR PARTIALLY IN ANY PROPORTION FOR
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SAND DUST SHALL BE REPLACED BY SAND DUST OR PARTIALLY IN ANY PROPORTION FOR

PROPOSED RESIDENTIAL BUILDING FOR M.S. GOLDEN PLANET AT MELAKUPPAM, TAMILNADU.		FIFTH FLOOR ROOF SLAB LAYOUT	
No.50, Kirupasankari Street, West Mambalam, Chennai - 600 033. Ph: 2485 48 03	DATE: 17.12.2024	SCALE: 1/4" = 1'-0"	DWG No.: 1197/3
Structural Consultant	ARCHITECT: JEGANATH JB ARCHITECTS	Block-A	S-04
	Client: J. Sankar Aranganam Plot: 1000 Sq. Ft. (24.61 Sq. Mts.) Original Drawing No: 1000/2024	DOOR: S.P.S.I	DRW: S.P.S.I
	BOURNA		
	Consultants - Engineers		

IMPORTANT NOTE FOR LAYING METHOD FOR READY MIX CONCRETE (RMC) >
1. FOR READY MIX CONCRETE PROVIDE 40 TO 60 CM OF READY MIX CONCRETE.
2. THE TIME OF CURING OF READY MIX CONCRETE SHALL BE AT THE MAXIMUM OF 90 MINUTES TO 120 MINUTES.
3. THE TIME OF CURING OF READY MIX CONCRETE SHALL BE AT THE MAXIMUM OF 90 MINUTES TO 120 MINUTES.
4. THE TIME OF CURING OF READY MIX CONCRETE SHALL BE AT THE MAXIMUM OF 90 MINUTES TO 120 MINUTES.
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9. THE TIME OF CURING OF READY MIX CONCRETE SHALL BE AT THE MAXIMUM OF 90 MINUTES TO 120 MINUTES.
10. THE TIME OF CURING OF READY MIX CONCRETE SHALL BE AT THE MAXIMUM OF 90 MINUTES TO 120 MINUTES.



**TYPICAL FLOOR ROOF SLAB LAYOUT
(FIRST, SECOND, THIRD & FOURTH FLOOR)**

IMPORTANT NOTES:

1. ALL SLABS ARE 150mm THICK, UNLESS NOTED OTHERWISE.
2. PROVIDE 600mm x 250mm C.C. CORNER BEAMS AT ALL CORNERS AND AT THE END OF BEAMS.
3. PROVIDE 100mm TOP REINFORCEMENT FOR ALL BEAMS.
4. PROVIDE 100mm TOP REINFORCEMENT FOR ALL BEAMS.
5. PROVIDE 100mm TOP REINFORCEMENT FOR ALL BEAMS.
6. PROVIDE 100mm TOP REINFORCEMENT FOR ALL BEAMS.
7. PROVIDE 100mm TOP REINFORCEMENT FOR ALL BEAMS.

IMPORTANT NOTE FOR M-SAND:

SAND SHALL BE REPLACED BY M-SAND FULLY OR PARTIALLY IN ANY PROPORTION FOR THE CONCRETE. THE PROPORTION SHALL BE AS FOLLOWS:

Part	Material	Quantity
1	M-SAND	100%
2	CEMENT	100%
3	AGGREGATE	100%

IMPORTANT NOTE FOR LAYING METHOD FOR READY MIX CONCRETE (RMC):

1. THE RMC SHALL BE LAYED IN THE FORMS AND COMPACTED BY VIBRATORS.
2. THE TIME TAKEN FOR LAYING SHALL BE AS FOLLOWS:
3. THE TIME TAKEN FOR LAYING SHALL BE AS FOLLOWS:
4. THE TIME TAKEN FOR LAYING SHALL BE AS FOLLOWS:
5. THE TIME TAKEN FOR LAYING SHALL BE AS FOLLOWS:
6. THE TIME TAKEN FOR LAYING SHALL BE AS FOLLOWS:
7. THE TIME TAKEN FOR LAYING SHALL BE AS FOLLOWS:

**PROPOSED RESIDENTIAL BUILDING FOR MRS. GOLDEN PLANET
AT MELAKUPPAM, TAMILNADU.**

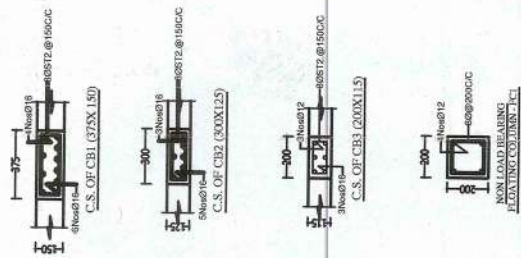
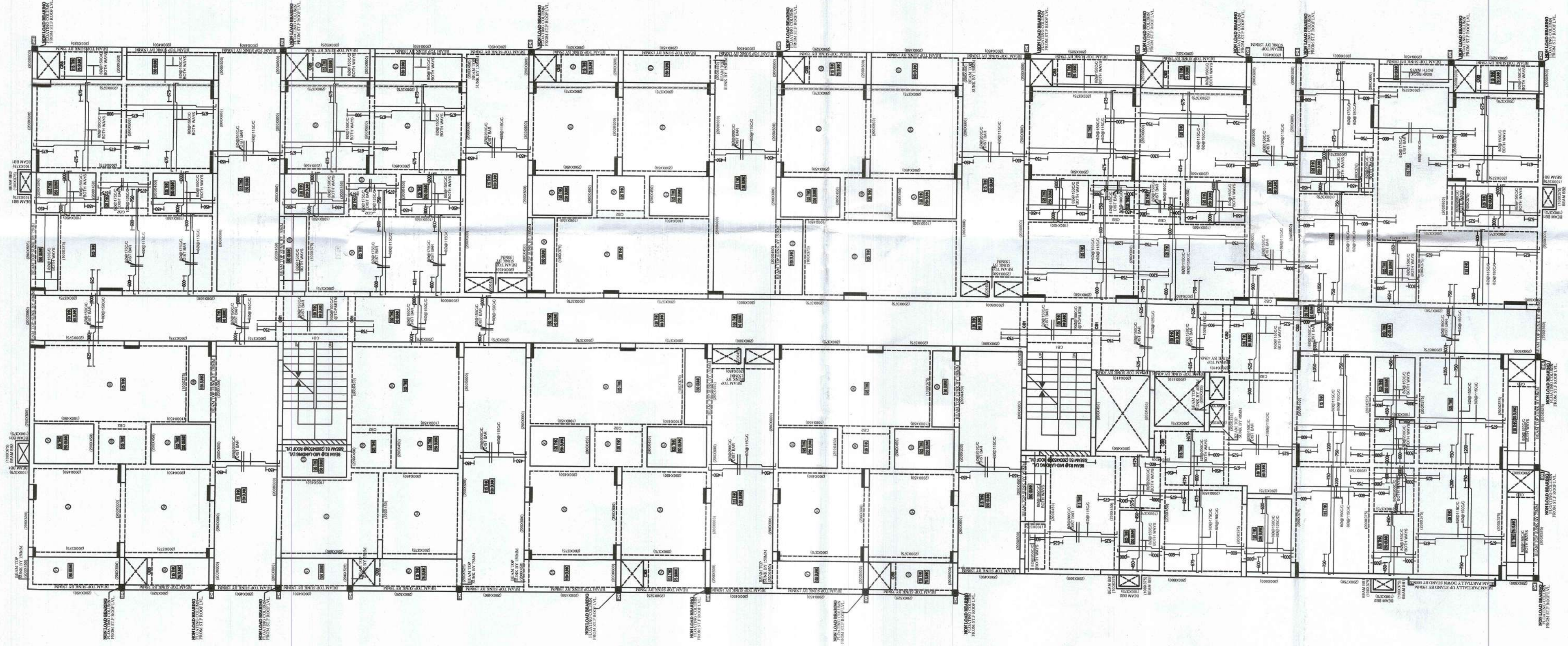
**TYPICAL FLOOR ROOF SLAB LAYOUT
(FIRST, SECOND, THIRD & FOURTH FLOOR)**

DATE: 17.12.2024 SCALE: 1/4"=1'-0"

ARCHITECT:
JEGANATH J.B. ARCHITECTS
No. 50, Kirupasakari Street, West Mambalam, Chennai - 600 033.
S.P.S. Inbarajan, M.E., A.M.I.E.,
Structural Consultant

BOURNA
Consultants - Engineers

DWG No. 11973
S-03
BLOCK A
DRW: S.B.H.A.



IMPORTANT NOTE FOR ISAND

SAND SHALL BE REPLACED BY M-SAND TILL A PARTIALITY IN ANY PROPORTION FOR THE CEMENT CONCRETE BETTER TO THE SAND ALSO FOR CEMENT CONCRETE. M-SAND SHOULD BE FREE FROM DUST AT THE TIME OF TENDING FOR CONCRETE. AT CERTAIN HEIGHT LEVEL, IF ANY DUST PRESENCE WILL ON THE AL, ALSO IF THE DUST PRESENCE WILL TAKE A PORT OF DUST M-SAND ON OUR HAND ANY

IMPORTANT NOTES:

1. ALL SAND AND CONCRETE, UNLESS NOTED OTHERWISE.
2. PROVIDE 10% EXTRA FOR WASTE.
3. PROVIDE 10% EXTRA FOR WASTE.
4. PROVIDE 10% EXTRA FOR WASTE.

IMPORTANT NOTE FOR READY MIX CONCRETE (RMC):

1. FOR READY MIX CONCRETE PROVIDE 10% EXTRA FOR WASTE.
2. PROVIDE 10% EXTRA FOR WASTE.
3. PROVIDE 10% EXTRA FOR WASTE.
4. PROVIDE 10% EXTRA FOR WASTE.

STILT FLOOR ROOF SLAB LAYOUT

DATE: 17/12/2024 SCALE: 1/4" = 1'-0"

ARCHITECT: JEGANATH JB ARCHITECTS

PROJECT: BOURNA

CLIENT: S.P.S. INBARAJAN, M.E., A.M.I.E., Structural Consultant

S. P. S. INBARAJAN
M.E., (Structural) A.M.I.E.,
Registered Structural Engineer
Graded (SE) with vellore LPA DTCP
Reg. No. SE/67-1/Feb-2025/001 In 02.09.2024
Door No.50, Kirupasanankar Street,
West Mambalam, Chennai - 600 033.

PROPOSED RESIDENTIAL BUILDING FOR MRS. GOLDEN PLANET
AT MELAKUPPAM, TAMILNADU.

Door No. 11973
S-02
BLOCK-A
DMD & P&I
DPR: SUDHA

DATE: 17/12/2024 SCALE: 1/4" = 1'-0"

ARCHITECT: JEGANATH JB ARCHITECTS

PROJECT: BOURNA

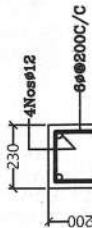
CLIENT: S.P.S. INBARAJAN, M.E., A.M.I.E., Structural Consultant

NO	DESCRIPTION	QTY	UNIT	DATE
01	ROOF SLAB REINFORCE	8.8	KL	06.10.2024
02	ROOF SLAB REINFORCE	8.8	KL	07.10.2024
03	ROOF SLAB REINFORCE	8.8	KL	08.10.2024
04	ROOF SLAB REINFORCE	8.8	KL	09.10.2024

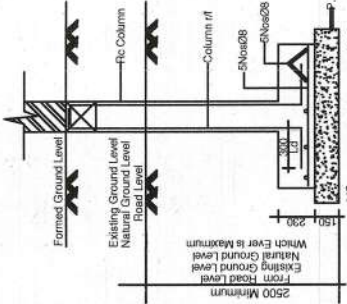
GRADE OF CONCRETE SHALL BE M35 MIX 1:1:2 FOR ALL COLUMNS					
COLUMN DETAILS		ST.F.=STILT FLOOR 1st.F.=FIRST FLOOR 2nd.F.=SECOND FLOOR 3rd.F.=THIRD FLOOR 4th.F.=FOURTH FLOOR 5th.F.=FIFTH FLOOR		Column Section Rod Detail	
Sl. No.	Name Of Column	Column Size	Main Reinforcement	Column Tie	Column Section Rod Detail
1.	C1	ST.F. = (300X900)	22NosØ20+10NosØ12	4(Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		1st.F. = (200X900)	22NosØ20		10NosØ12 (1st F) (5th F)
		2nd.F. = (200X900)	8NosØ20+4NosØ16	(3Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		3rd.F. = (200X900)	8NosØ20+4NosØ12		10NosØ12 (1st F) (5th F)
		4th.F. = (200X900)	22NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
	C2	ST.F. = (300X900)	12NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
		1st.F. = (200X900)	18NosØ20		10NosØ12 (1st F) (5th F)
		2nd.F. = (200X900)	4NosØ20+4NosØ16	(3Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		3rd.F. = (200X900)	4NosØ20+4NosØ12		10NosØ12 (1st F) (5th F)
		4th.F. = (200X900)	18NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
	C3	ST.F. = (300X900)	10NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
		1st.F. = (200X900)	14NosØ20		10NosØ12 (1st F) (5th F)
		2nd.F. = (200X900)	4NosØ20+4NosØ16	(3Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		3rd.F. = (200X900)	4NosØ20+4NosØ12		10NosØ12 (1st F) (5th F)
		4th.F. = (200X900)	16NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
	C4	ST.F. = (300X900)	10NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
		1st.F. = (200X900)	14NosØ20		10NosØ12 (1st F) (5th F)
		2nd.F. = (200X900)	4NosØ20+4NosØ16	(3Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		3rd.F. = (200X900)	4NosØ20+4NosØ12		10NosØ12 (1st F) (5th F)
		4th.F. = (200X900)	16NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
	C5	ST.F. = (300X900)	10NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
		1st.F. = (200X900)	14NosØ20		10NosØ12 (1st F) (5th F)
		2nd.F. = (200X900)	4NosØ20+4NosØ16	(3Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		3rd.F. = (200X900)	4NosØ20+4NosØ12		10NosØ12 (1st F) (5th F)
		4th.F. = (200X900)	16NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
	C6	ST.F. = (300X900)	10NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
		1st.F. = (200X900)	14NosØ20		10NosØ12 (1st F) (5th F)
		2nd.F. = (200X900)	4NosØ20+4NosØ16	(3Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		3rd.F. = (200X900)	4NosØ20+4NosØ12		10NosØ12 (1st F) (5th F)
		4th.F. = (200X900)	16NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
	C7	ST.F. = (300X900)	10NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
		1st.F. = (200X900)	14NosØ20		10NosØ12 (1st F) (5th F)
		2nd.F. = (200X900)	4NosØ20+4NosØ16	(3Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		3rd.F. = (200X900)	4NosØ20+4NosØ12		10NosØ12 (1st F) (5th F)
		4th.F. = (200X900)	16NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
	C8	ST.F. = (300X900)	10NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
		1st.F. = (200X900)	14NosØ20		10NosØ12 (1st F) (5th F)
		2nd.F. = (200X900)	4NosØ20+4NosØ16	(3Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		3rd.F. = (200X900)	4NosØ20+4NosØ12		10NosØ12 (1st F) (5th F)
		4th.F. = (200X900)	16NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
	C9	ST.F. = (300X900)	10NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
		1st.F. = (200X900)	14NosØ20		10NosØ12 (1st F) (5th F)
		2nd.F. = (200X900)	4NosØ20+4NosØ16	(3Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		3rd.F. = (200X900)	4NosØ20+4NosØ12		10NosØ12 (1st F) (5th F)
		4th.F. = (200X900)	16NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
	C10	ST.F. = (300X900)	10NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
		1st.F. = (200X900)	14NosØ20		10NosØ12 (1st F) (5th F)
		2nd.F. = (200X900)	4NosØ20+4NosØ16	(3Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		3rd.F. = (200X900)	4NosØ20+4NosØ12		10NosØ12 (1st F) (5th F)
		4th.F. = (200X900)	16NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)

IMPORTANT NOTE FOR LAYING METHOD FOR READY MIX CONCRETE (RMC) :-

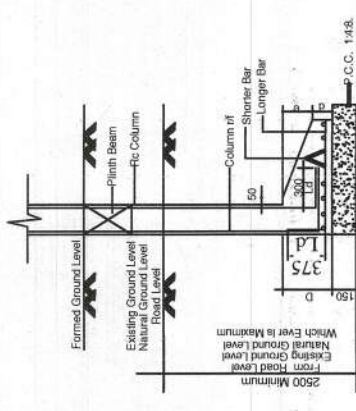
- FOR M25 GRADE CONCRETE PROVIDE 340 KG CEMENT PER CUBIC METER OF READY MIX CONCRETE.
- THE BEST STRENGTH RESULT OF CONCRETE SHALL BE AT THE MAXIMUM OF 90 MINUTES TO 100 MINUTES FOR THE CURE DURATION.
- TIME DURATION INCLUDES FROM THE TIME OF WATER ADDING IN THE BATCHING AND LAYING OF CONCRETE.
- AFTER 60 MINUTES TO 90 MINUTES ON LAYING OF CONCRETE, TO RECTIFY THIS, POUR THICK CEMENT SLURRY, WILL DEVELOP ON THE TOP SURFACE OF THE CONCRETE, TO RECTIFY THIS, POUR THICK CEMENT SLURRY, FILL IT AND PACK IT WITH BROOM.
- THE CONCRETE TOP SURFACE SHOULD BE SPRAYED WITH WATER TO STAY CURING AFTER 120 MINUTES TO 150 MINUTES FROM THE TIME OF CONCRETE LAYING.
- START CURING WITH STORING WATER ON TOP OF CONCRETE AFTER 240 MINUTES TO 300 MINUTES FROM THE TIME OF CONCRETE LAYING.



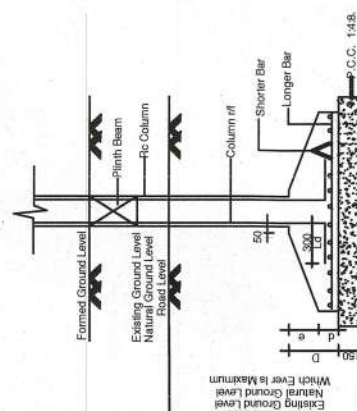
C.S. OF STUB COLUMN (SC)



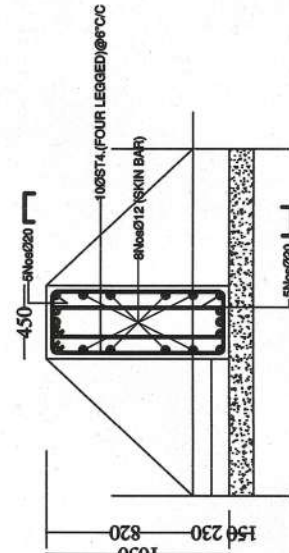
TYP. C.S. OF R.C. STUB COLUMN FOOTING



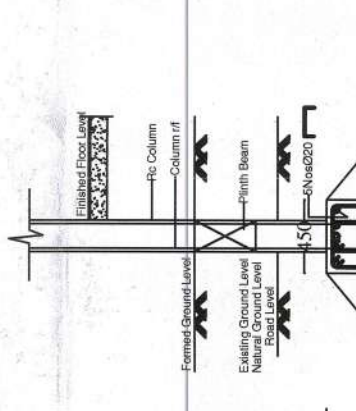
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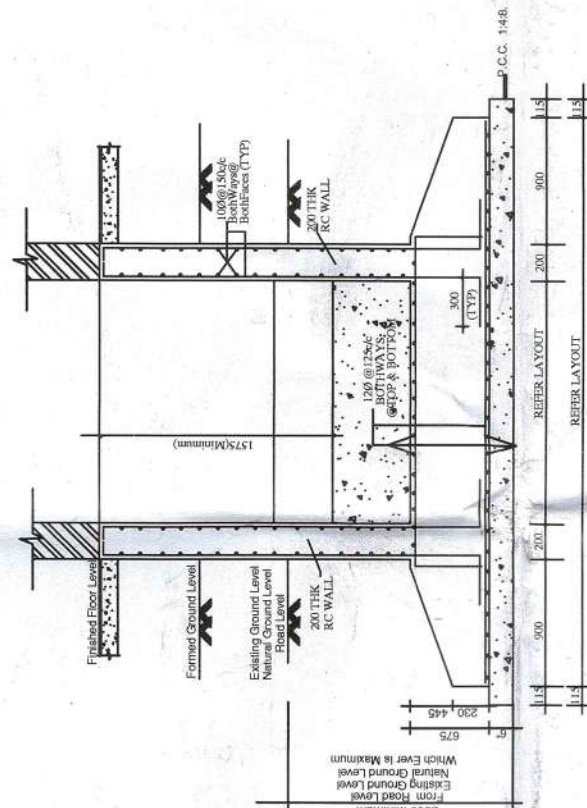
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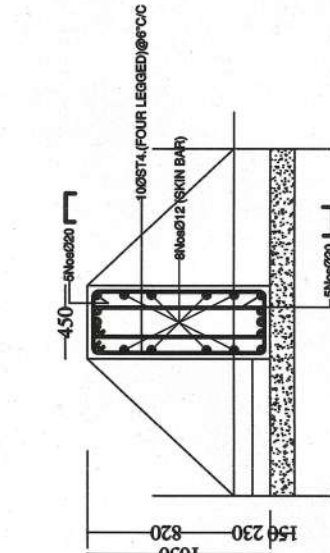
C.S. OF RB1 (450X1050)



C.S. OF RB4 (450X1050)



SECTION A-A



SECTION B-B

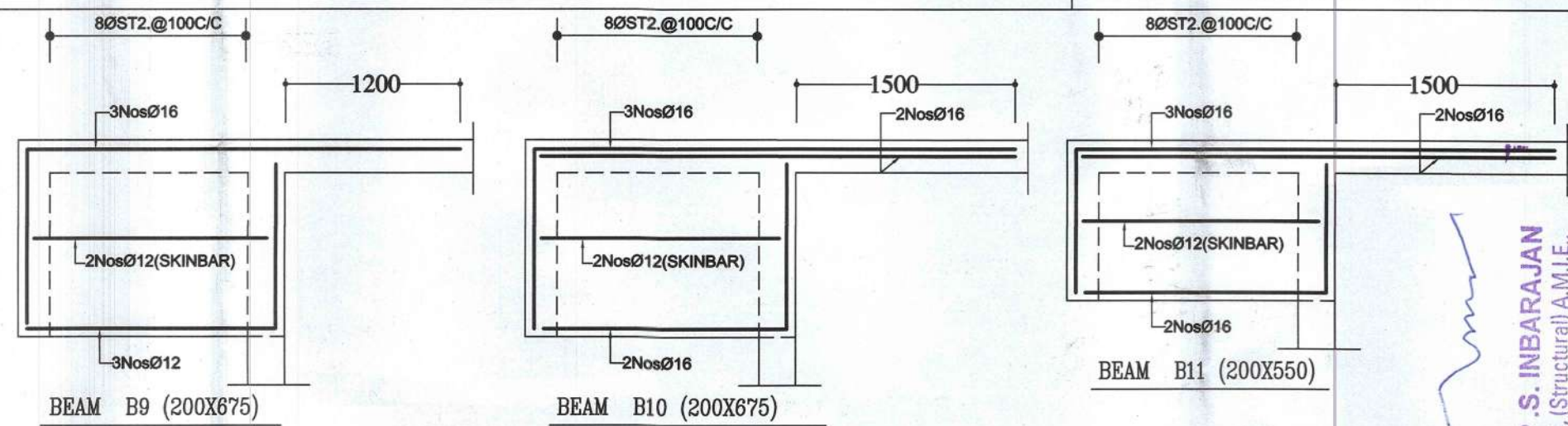
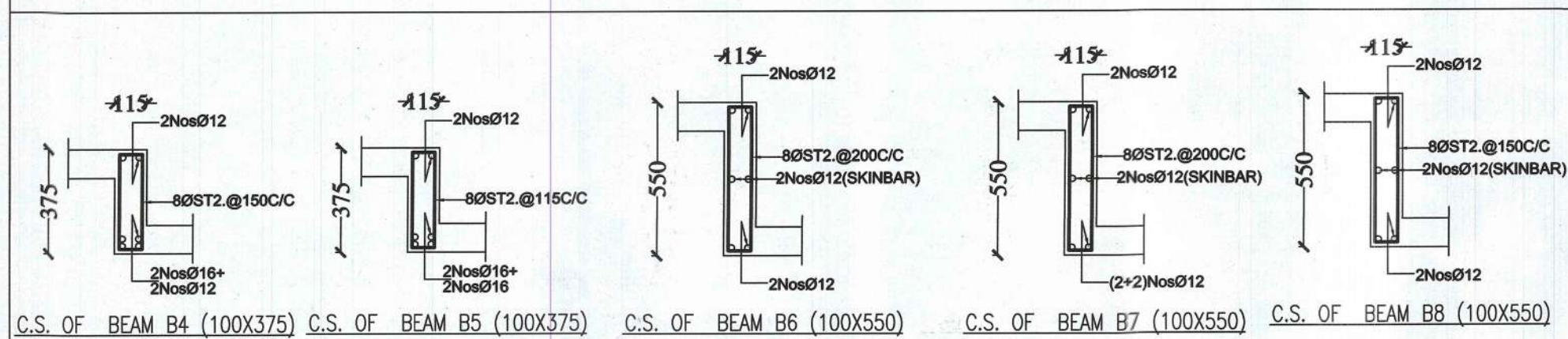
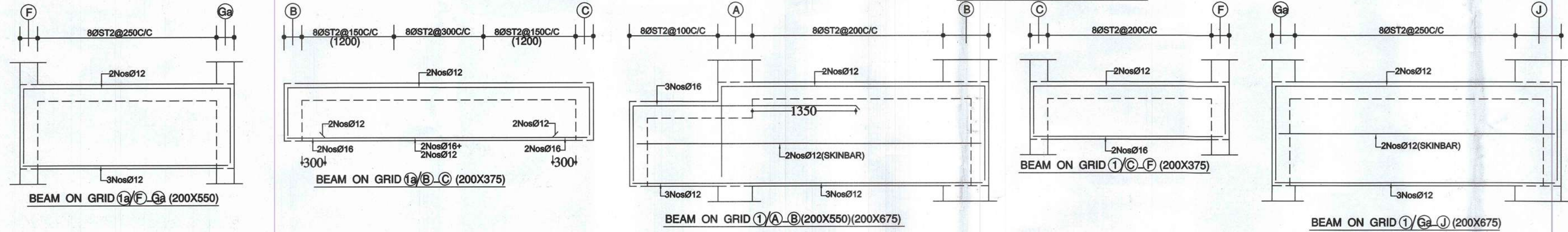
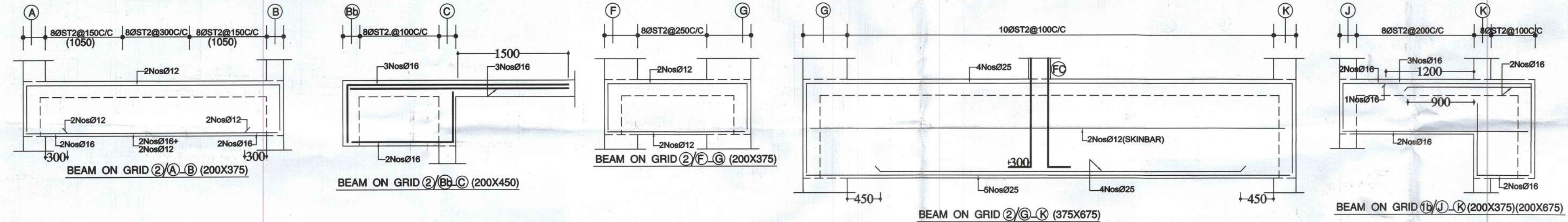
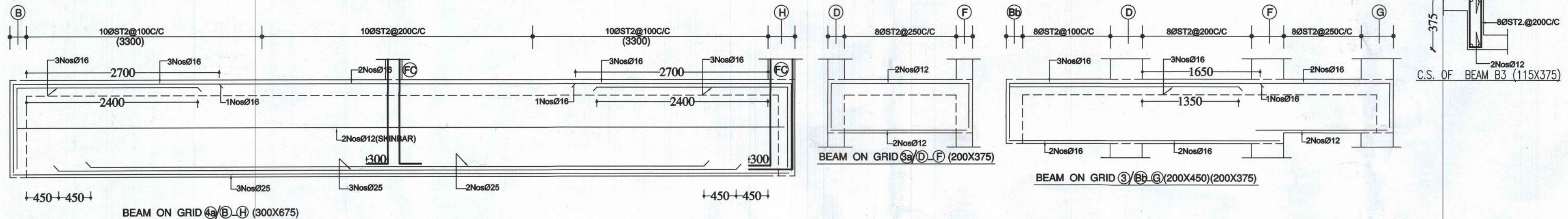
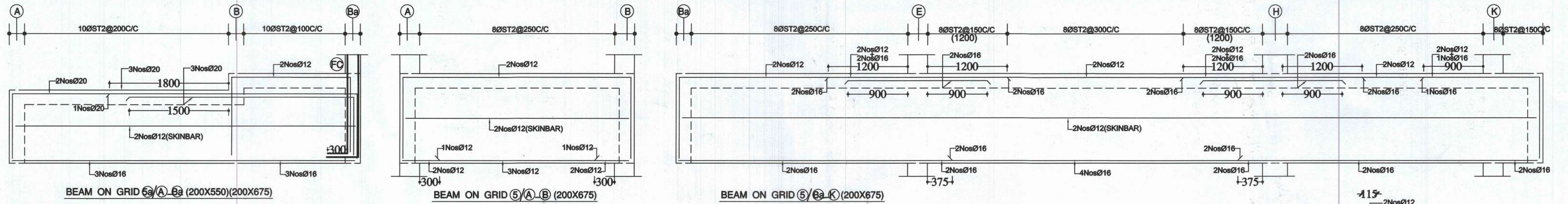
IMPORTANT NOTE FOR M-SAND :-

SAND SHALL BE REPLACED BY M-SAND FULLY FOR PLAIN CEMENT CONCRETE, REINFORCEMENT CEMENT CONCRETE. M-SAND SHOULD BE FREE FROM DUST AT SITE AT THE TIME OF USING FOR CONCRETE. TO CHECK THE M-SAND FOR DUST CONTENT, DRY THE M-SAND AND SPRAY IT AT CERTAIN HEIGHT LEVEL. IF ANY DUST PRESENCE WILL FLY ON THE AIR, ALSO IF WE TAKE A PINCH ALSO IF WE TAKE A PINCH OF DRIED M-SAND ON OUR HAND ANY DUST PRESENCE WILL STICK ON TO OUR PALM OF OUR HAND.

GRADE OF CONCRETE SHALL BE M35 MIX 1:1:2 FOR ALL COLUMNS					
COLUMN DETAILS		ST.F.=STILT FLOOR 1st.F.=FIRST FLOOR 2nd.F.=SECOND FLOOR 3rd.F.=THIRD FLOOR 4th.F.=FOURTH FLOOR 5th.F.=FIFTH FLOOR		Column Section Rod Detail	
Sl. No.	Name Of Column	Column Size	Main Reinforcement	Column Tie	Column Section Rod Detail
1.	C1	ST.F. = (300X900)	22NosØ20+10NosØ12	4(Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		1st.F. = (200X900)	22NosØ20		10NosØ12 (1st F) (5th F)
		2nd.F. = (200X900)	8NosØ20+4NosØ16	(3Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		3rd.F. = (200X900)	8NosØ20+4NosØ12		10NosØ12 (1st F) (5th F)
		4th.F. = (200X900)	22NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
	C2	ST.F. = (300X900)	12NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
		1st.F. = (200X900)	18NosØ20		10NosØ12 (1st F) (5th F)
		2nd.F. = (200X900)	4NosØ20+4NosØ16	(3Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		3rd.F. = (200X900)	4NosØ20+4NosØ12		10NosØ12 (1st F) (5th F)
		4th.F. = (200X900)	18NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
	C3	ST.F. = (300X900)	10NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
		1st.F. = (200X900)	14NosØ20		10NosØ12 (1st F) (5th F)
		2nd.F. = (200X900)	4NosØ20+4NosØ16	(3Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		3rd.F. = (200X900)	4NosØ20+4NosØ12		10NosØ12 (1st F) (5th F)
		4th.F. = (200X900)	16NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
	C4	ST.F. = (300X900)	10NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
		1st.F. = (200X900)	14NosØ20		10NosØ12 (1st F) (5th F)
		2nd.F. = (200X900)	4NosØ20+4NosØ16	(3Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		3rd.F. = (200X900)	4NosØ20+4NosØ12		10NosØ12 (1st F) (5th F)
		4th.F. = (200X900)	16NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
	C5	ST.F. = (300X900)	10NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
		1st.F. = (200X900)	14NosØ20		10NosØ12 (1st F) (5th F)
		2nd.F. = (200X900)	4NosØ20+4NosØ16	(3Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		3rd.F. = (200X900)	4NosØ20+4NosØ12		10NosØ12 (1st F) (5th F)
		4th.F. = (200X900)	16NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
	C6	ST.F. = (300X900)	10NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
		1st.F. = (200X900)	14NosØ20		10NosØ12 (1st F) (5th F)
		2nd.F. = (200X900)	4NosØ20+4NosØ16	(3Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		3rd.F. = (200X900)	4NosØ20+4NosØ12		10NosØ12 (1st F) (5th F)
		4th.F. = (200X900)	16NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
	C7	ST.F. = (300X900)	10NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
		1st.F. = (200X900)	14NosØ20		10NosØ12 (1st F) (5th F)
		2nd.F. = (200X900)	4NosØ20+4NosØ16	(3Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		3rd.F. = (200X900)	4NosØ20+4NosØ12		10NosØ12 (1st F) (5th F)
		4th.F. = (200X900)	16NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
	C8	ST.F. = (300X900)	10NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
		1st.F. = (200X900)	14NosØ20		10NosØ12 (1st F) (5th F)
		2nd.F. = (200X900)	4NosØ20+4NosØ16	(3Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		3rd.F. = (200X900)	4NosØ20+4NosØ12		10NosØ12 (1st F) (5th F)
		4th.F. = (200X900)	16NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
	C9	ST.F. = (300X900)	10NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
		1st.F. = (200X900)	14NosØ20		10NosØ12 (1st F) (5th F)
		2nd.F. = (200X900)	4NosØ20+4NosØ16	(3Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		3rd.F. = (200X900)	4NosØ20+4NosØ12		10NosØ12 (1st F) (5th F)
		4th.F. = (200X900)	16NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
	C10	ST.F. = (300X900)	10NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)
		1st.F. = (200X900)	14NosØ20		10NosØ12 (1st F) (5th F)
		2nd.F. = (200X900)	4NosØ20+4NosØ16	(3Nos Of Set) 8Ø@200C/C	10NosØ12 (1st F) (5th F)
		3rd.F. = (200X900)	4NosØ20+4NosØ12		10NosØ12 (1st F) (5th F)
		4th.F. = (200X900)	16NosØ12	8Ø@200C/C	10NosØ12 (1st F) (5th F)

FOOTING SCHEDULE:

SL. No.	Footing Mark	Footing Size				Footing Reinforcement		Nos Of Footing	
		L	B	D	e	Longer Bar	Shorter Bar		
1.	F1	3250	3250	1050	230	820	36Nosø12	36Nosø12	
2.	F2	3100	3100	1025	230	795	34Nosø12	34Nosø12	
3.	F3	2700	2700	900	230	670	28Nosø12	28Nosø12	
4.	F4	2600	2600	875	230	645	26Nosø12	26Nosø12	
5.	F5	2500	2500	825	230	595	24Nosø12	24Nosø12	
6.	F6	2250	2250	750	230	520	20Nosø12	20Nosø12	
7.	F7	2150	2150	725	230	495	19Nosø12	19Nosø12	
8.	F8	2050	2050	675	230	445	18Nosø12	18Nosø12	
9.	F9	1950	1950	650	230	420	20Nosø10	20Nosø10	
10.	F10	1850	1850	625	230	395	18Nosø12	18Nosø12	
11.	F11	1200@125/C/C Bottomways @TopBottom							
12.	F12	5250	3225	825	-	-	1200@115/C/C Bottomways @TopBottom		
13.	F13	2950	2250	975	230	745	24Nosø12	30Nosø12	
14.	F14	3000	2400	900	230	670	25Nosø12	31Nosø12	
15.	F15	2850	2350	875	230	645	22Nosø12	30Nosø12	
16.	F16	3000	2200	875	230	645	21Nosø12	34Nosø12	
17.	F17	2500	2500	825	230	595	27Nosø12	27Nosø12	
18.	F18	2900	2400	875	230	645	24Nosø12	30Nosø12	
19.	F19	2950	2500	900	230	670	26Nosø12	31Nosø12	
20.	F20	3450	1600	950	230	720	16Nosø12	35Nosø12	
21.	F21	5330	3250	1050	230	820	36Nosø12	56Nosø12	
22.	F22	900	900	230	-	-	5Nosø8	5Nosø8	

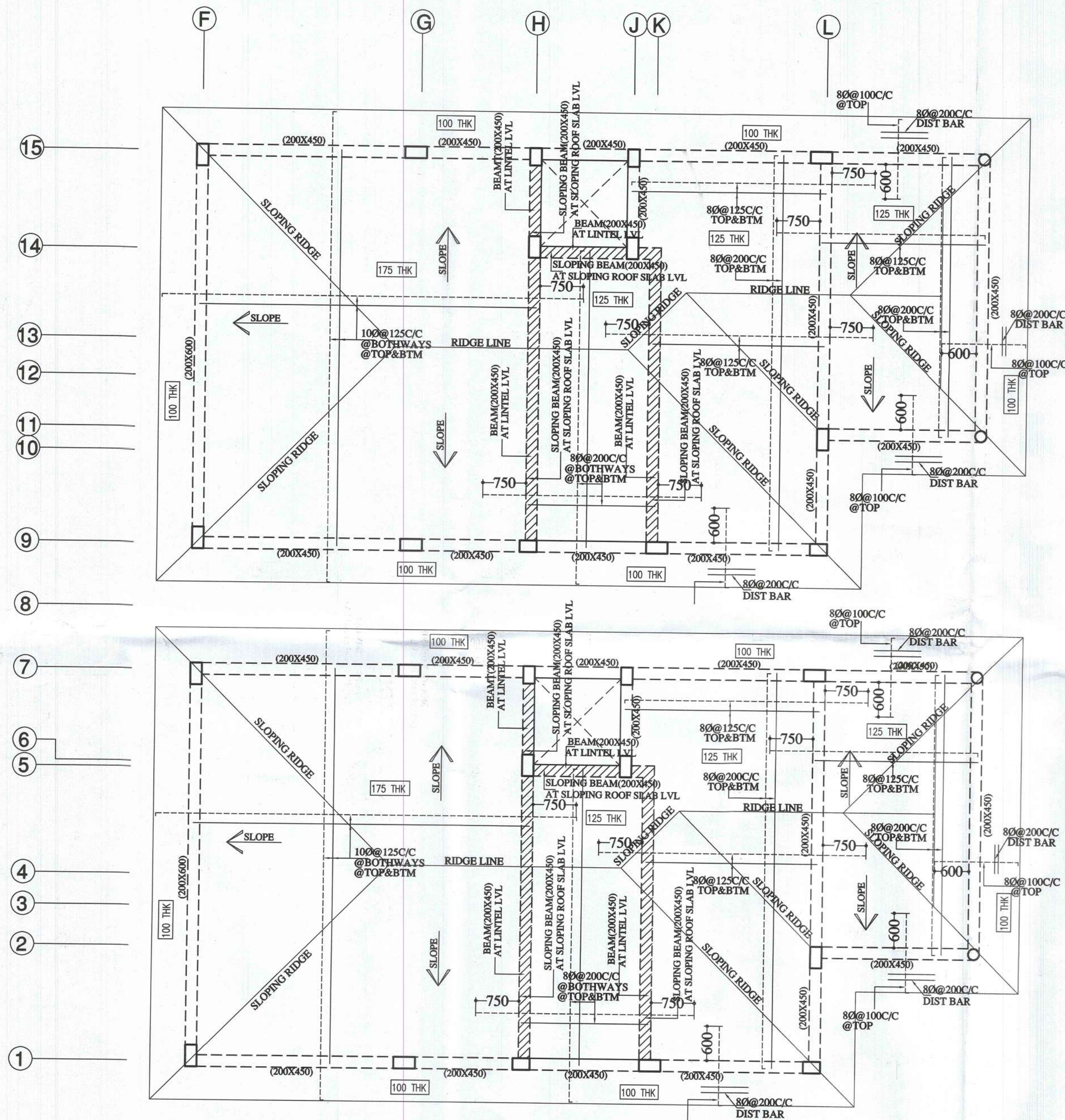


GROUND FLOOR ROOF BEAM DETAILS

FIRST FLOOR ROOF BEAM DETAILS

PROPOSED VILLAS BUILDING FOR M/S GOLDEN PLANET SENIOR HERITAGE HOME
PVT LTD RISHI AT MAMALLAPURAM, MELAKUPPAM VILLAGE

Dwg No... 11965 S-14	DATE :26.06.2025	SCALE:1/4" , 3/4"	ARCHITECT:	BOURNA Consultants - Engineers	
GROUND & FIRST FLOOR ROOF BEAM DETAILS..			VILLAS (B1 A1&B2 A2) DSND : S.P.S.I DRN : MD SULTHAN A		
S.P.S.Inbarajan, M.E., A.M.I.E., Structural Consultant					



FIRST FLOOR ROOF SLAB LAYOUT

IMPORTANT NOTE FOR M-SAND :-

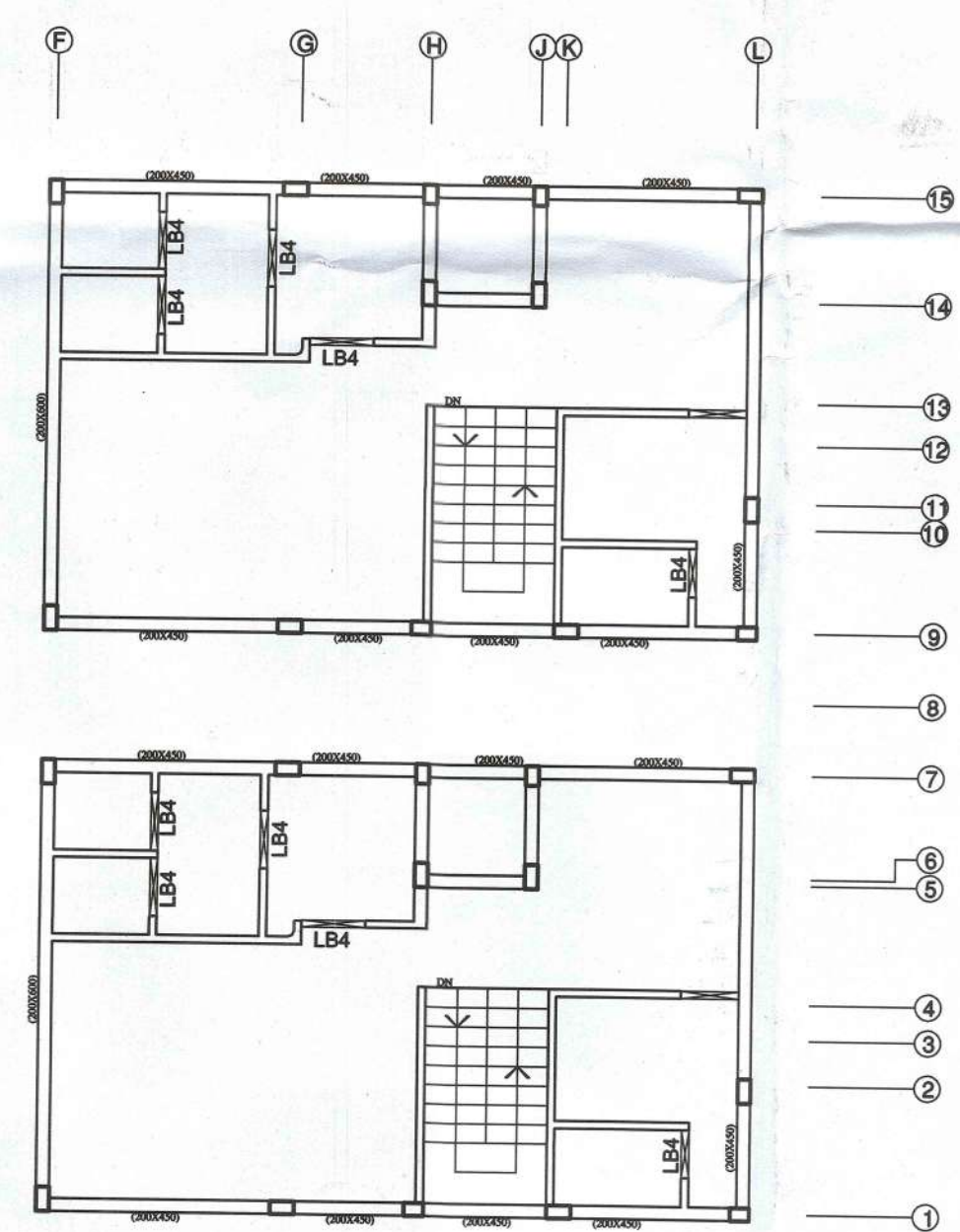
SAND SHALL BE REPLACED BY M-SAND FULLY OR PARTIALLY IN ANY PROPORTION FOR PLAIN CEMENT CONCRETE, REINFORCEMENT CEMENT CONCRETE EXCEPT COLUMN CONCRETE. FOR COLUMN CONCRETE BETTER TO USE SAND ALONE FOR CONCRETE. M-SAND SHOULD BE FREE FROM DUST AT SITE AT THE TIME OF USING FOR CONCRETE. TO CHECK THE M-SAND FOR DUST CONTENT, DRY THE M-SAND AND SPRAY IT AT CERTAIN HEIGHT LEVEL, IF ANY DUST PRESENCE WILL FLY ON THE AIR. ALSO IF WE TAKE A PINCH ALSO IF WE TAKE A PINCH OF DRIED M-SAND ON OUR HAND ANY DUST PRESENCE WILL STICK ON TO OUR PALM OF OUR HAND.

IMPORTANT NOTE :-

1. CONCRETING AT SITE SHALL BE STARTED ONLY AFTER VERIFYING ALL FABRICATION OF REINFORCEMENT BAR DONE FOR VARIOUS MEMBERS, (Via) BEAMS, SLABS, COLUMNS, FOOTINGS, ETC. AND SHOULD BE CHECKED AS PER THE STRUCTURAL LATEST REVISION DRAWINGS FOR FABRICATION OF REINFORCEMENT BAR.
2. CONCRETE SHOULD BE DONE MONOLITHICALLY FOR CANTILEVER SLABS AND BEAMS. CONSTRUCTION JOINT IN CONCRETE SHOULD BE FOLLOWED AS PER DIRECTIONS GIVEN BY QUALIFIED CIVIL ENGINEER / SITE IN-CHARGE ENGINEER.

IMPORTANT NOTES :-

1. ALL SLABS ARE 4" (100mm) THICK. UNLESS NOTED OTHER WISE.
2. PROVIDE 6Ø@6" (150mm) C/C. (OR) 8Ø@10" (250mm) C/C. DISTRIBUTORS WHERE EVER NEEDED AT TOP AND BOTTOM OF SLAB.
3. ——— LINE INDICATES BAR AT TOP IN PLAN, ——— LINE INDICATES BAR AT BOTTOM IN PLAN.
4. PROVIDE L - BEND FOR TOP REINFORCEMENT BAR AT END OF THE BEAM FOR BEAMS DETAIL GIVEN IN CROSS SECTION. PROVIDE L - BEND 7" (175mm) IN THE SLAB CRANKED REINFORCEMENT BAR IN TO THE BEAM. WHICH ARE NOT CONTINUING TO THE ADJACENT SLAB.



FIRST FLOOR LINTEL LAYOUT

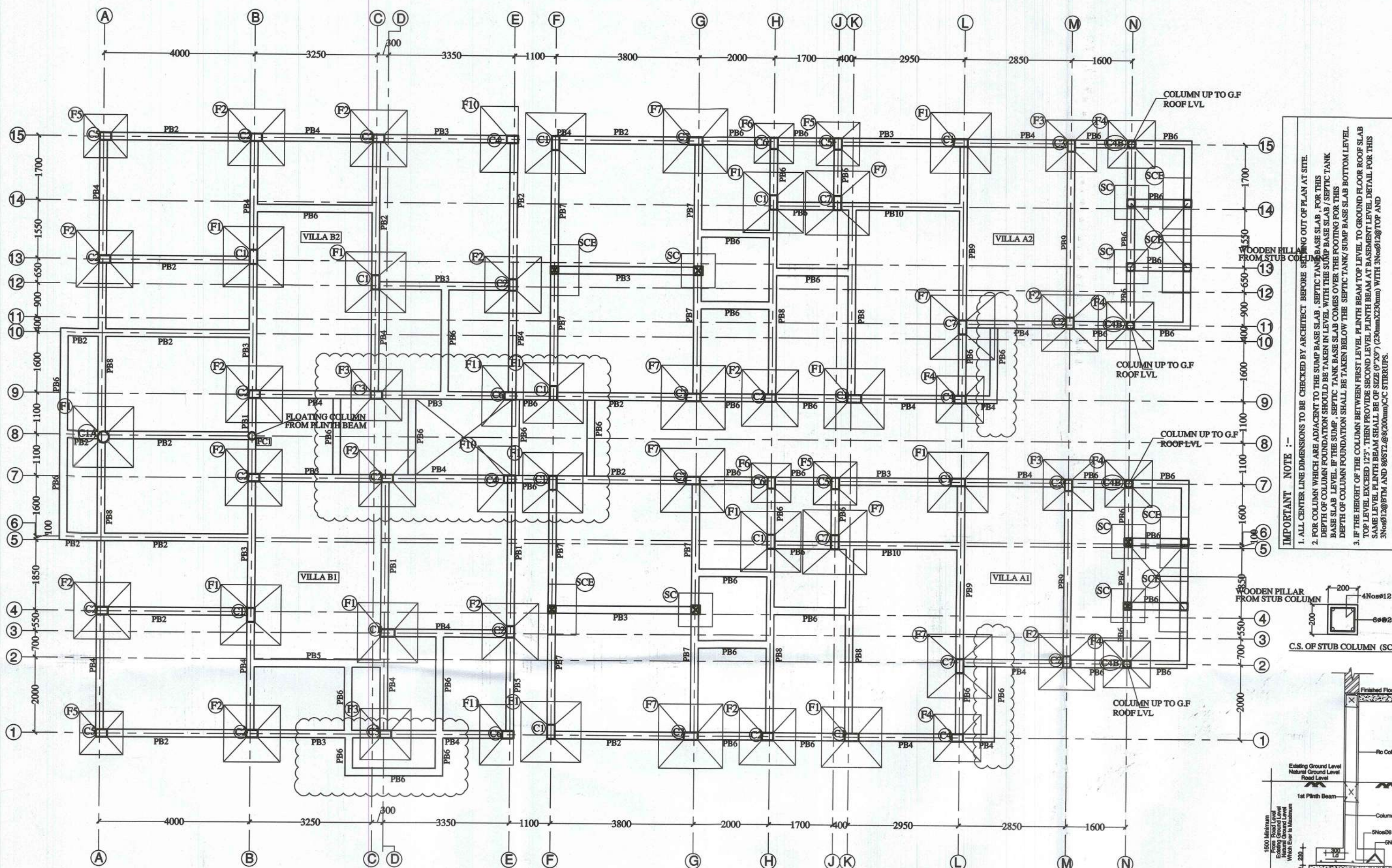
S. P. S. INBARAJAN
M.E., (Structural) A.M.I.E.,
Structural Consultant
Registered Structural Engineer
Grade I/SEI with vellore LPA DTCP

PROPOSED VILLAS BUILDING FOR M/S GOLDEN PLANET SENIOR HERITAGE HOME
PVT. LTD. - RISHI AT MALLAPURAM, MELAKUPPAM VILLAGE
No. 60, Kripasankar Street West Marthandam
Chennai - 600 083. Ph : 2485 48 03

S.P.S.Inbarajan, M.E., A.M.I.E.,
Structural Consultant

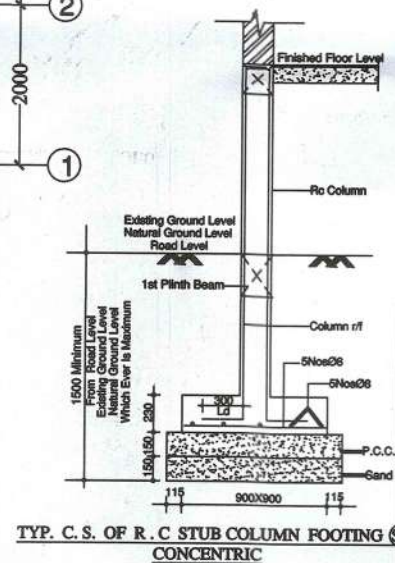
BOURNA
Consultants - Engineers

DWG NO : 11965		DATE : 26-06-2025		ARCHITECT :	
S-13		SCALE: 1/4" = 3/4"		VILLAS (B1, A1B2, A2)	
				DSND : S.P.S.J	
				DRN : MD SULTHAN A	



FOUNDATION LAYOUT
DUPLEX VILLA (B1,A1&B2,A2)

FOOTING SCHEDULE:



SL. No.	Footing Mark	Footing Size					Footing Reinforcement		Nos Of Footing
		L	B	D	d	e	Longer Bar	Shorter Bar	
1.	F1	1800	1800	575	230	270	13Nos@10	13Nos@10	
2.	F2	1500	1500	500	230	220	11Nos@10	11Nos@10	
3.	F3	1350	1350	450	230	170	10Nos@10	10Nos@10	
4.	F4	1250	1250	425	230	145	9Nos@10	9Nos@10	
5.	F5	1150	1150	375	230	120	7Nos@10	7Nos@10	
6.	F6	1050	1050	350	230	170	6Nos@10	6Nos@10	
7.	F7	1700	1700	575	230	145	15Nos@10	15Nos@10	
8.	F8	1500	850	375	230	120	5Nos@10	9Nos@10	
9.	F9	2050	1150	575	230	-	8Nos@10	15Nos@10	

IMPORTANT NOTE FOR LAYING METHOD FOR READY MIX CONCRETE (RMC) :-

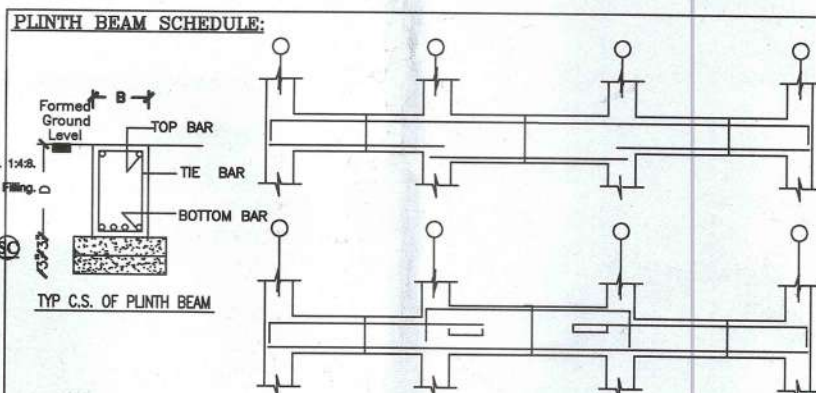
- FOR M25 GRADE CONCRETE PROVIDE 340 KG CEMENT PER CUBIC METER OF READY MIX CONCRETE.
- THE TIME DURATION OF READY MIX CONCRETE SHALL BE AT THE MAXIMUM OF 90 MINUTES TO 100 MINUTES FOR THE BEST STRENGTH RESULT OF CONCRETE.
- TIME DURATION INCLUDES FROM THE TIME OF WATER ADDING IN THE BATCHING PLANT (i.e.) TIME OF LORRY DEPARTURE FROM PLANT, TRAVEL TIME, PUMP CONNECTING TIME, PUMPING AND LAYING OF CONCRETE ON FORM WORK.
- AFTER 60 MINUTES TO 90 MINUTES ON LAYING OF CONCRETE SOME HAIRLINE / MINOR SHRINKAGE CRACKS WILL DEVELOP ON THE TOP SURFACE OF THE CONCRETE. TO RECTIFY THIS, POUR THICK CEMENT SLURRY, FILL IT AND PACK IT WITH BROOM.
- THE CONCRETE TOP SURFACE SHOULD BE SPRAYED WITH WATER TO START CURING AFTER 120 MINUTES TO 150 MINUTES FROM THE TIME OF CONCRETE LAYING.
- START CURING WITH STORING WATER ON TOP OF CONCRETE AFTER 240 MINUTES TO 300 MINUTES FROM THE TIME OF CONCRETE LAYING.

IMPORTANT NOTE FOR M-SAND :-

SAND SHALL BE REPLACED BY M-SAND FULLY OR PARTIALLY IN ANY PROPORTION FOR PLAIN CEMENT CONCRETE, REINFORCEMENT CEMENT CONCRETE EXCEPT COLUMN CONCRETE. FOR COLUMN CONCRETE BETTER TO USE SAND ALONE FOR CONCRETE. M-SAND SHOULD BE FREE FROM DUST AT SITE AT THE TIME OF USING FOR CONCRETE. TO CHECK THE M-SAND FOR DUST CONTENT, DRY THE M-SAND AND SPRAY IT AT CERTAIN HEIGHT LEVEL, IF ANY DUST PRESENCE WILL FLY ON THE AIR. ALSO IF WE TAKE A PINCH ALSO IF WE TAKE A PINCH OF DRIED M-SAND ON OUR HAND ANY DUST PRESENCE WILL STICK ON TO OUR PALM OF OUR HAND.

- IMPORTANT NOTE :-
- CONCRETING AT SITE SHALL BE STARTED ONLY AFTER VERIFYING ALL FABRICATION OF REINFORCEMENT BAR DONE FOR VARIOUS MEMBERS, (VIA) BEAMS, SLABS, COLUMNS, FOOTINGS, ETC. AND SHOULD BE CHECKED AS PER THE STRUCTURAL LATEST REVISION DRAWINGS FOR FABRICATION OF REINFORCEMENT BAR.
 - CONCRETE SHOULD BE DONE MONOLITHICALLY FOR CANTILEVER SLABS AND BEAMS. CONSTRUCTION JOINT IN CONCRETE SHOULD BE FOLLOWED AS PER DIRECTIONS GIVEN BY QUALIFIED CIVIL ENGINEER / SITE IN-CHARGE ENGINEER.

COLUMN DETAILS		G.F. = GROUND FLOOR.		F.F. = FIRST FLOOR.	
SL. No.	Name Of Column	Column Size	Main Reinforcement	Column Tie	Column Section Rod Detail
1.	C1	G.F. = (200X375) F.F. = (200X375)	4Nos@16+ 4Nos@12	8@200C/C	200 (G.F.) 200 (F.F.)
2.	C2	G.F. = (200X300) F.F. = (200X300)	4Nos@16+ 4Nos@12	8@200C/C	200 (G.F.) 200 (F.F.)
3.	C3	G.F. = (200X300) F.F. = (200X300)	8Nos@12	(2Nos Of Set) 8@200C/C	200 (G.F.) 200 (F.F.)
4.	C4	G.F. = (200X300) F.F. = (200X300)	8Nos@12	8@200C/C	200 (G.F.) 200 (F.F.)
5.	C5	G.F. = (200X300) F.F. = (200X300)	8Nos@12	8@200C/C	200 (G.F.) 200 (F.F.)
6.	C6	G.F. = (200X300) F.F. = (200X300)	8Nos@12	8@200C/C	200 (G.F.) 200 (F.F.)
7.	C7	G.F. = (200X375) F.F. = (200X375)	8Nos@16	8@200C/C	200 (G.F.) 200 (F.F.)
8.	C8	G.F. = (200X300) F.F. = (200X300)	4Nos@16+ 4Nos@12	8@200C/C	200 (G.F.) 200 (F.F.)
9.	C9	G.F. = (200X300) F.F. = (200X300)	4Nos@16+ 4Nos@12	8@200C/C	200 (G.F.) 200 (F.F.)
10.	C2A	G.F. = (200X300) F.F. = (200X300)	8Nos@12	8@200C/C	200 (G.F.) 200 (F.F.)
11.	C3A	G.F. = (200X300) F.F. = (200X300)	4Nos@12	8@200C/C	200 (G.F.) 200 (F.F.)
12.	C4A	G.F. = (200X300) F.F. = (200X300)	4Nos@16+ 4Nos@12	8@200C/C	200 (G.F.) 200 (F.F.)
13.	C4B	G.F. = (200@) F.F. = -	5Nos@16	8@200C/C	200 (G.F.) 200 (F.F.)
14.	C1A	G.F. = (300@) F.F. = (300@)	5Nos@16	8@200C/C	200 (G.F.) 200 (F.F.)



SL. No.	NAME OF PLINTH BEAM	PLINTH BEAM SIZE (BXD)	PLINTH BEAM TOP BAR	PLINTH BEAM BOTTOM BAR	PLINTH BEAM TIE
1.	PB1	(200X375)	2Nos@16	3Nos@16	8@ST2@200C/C
2.	PB2	(200X375)	2Nos@12	2Nos@16 1Nos@12	8@ST2@200C/C
3.	PB3	(200X375)	2Nos@12	2Nos@12 1Nos@16	8@ST2@200C/C
4.	PB4	(200X300)	2Nos@12	2Nos@12 1Nos@16	8@ST2@200C/C
5.	PB5	(200X300)	2Nos@12	3Nos@12	8@ST2@250C/C
6.	PB6	(200X300)	2Nos@12	2Nos@12	8@ST2@250C/C
7.	PB7	(200X375)	3Nos@16	2Nos@16 1Nos@12	8@ST2@125C/C
8.	PB8	(200X450)	2Nos@16	3Nos@16 2Nos@12	8@ST2@150C/C End 1/3rd Span 8@ST2@300C/C Mid 1/3rd Span 8@ST2@150C/C End 1/3rd Span
9.	PB9	(200X450)	3Nos@16	3Nos@16 3Nos@12	8@ST2@250C/C End 1/3rd Span 8@ST2@250C/C Mid 1/3rd Span 8@ST2@125C/C End 1/3rd Span
10.	PB10	(200X375)	2Nos@16	3Nos@16 2Nos@12	8@ST2@175C/C
11.	PB11	(200X230)	3Nos@12	3Nos@12	8@ST2@200C/C

PROPOSED VILLAS BUILDING FOR M/S GOLDEN PLANET SENIOR HERITAGE HOME
PVT LTD - RISHI AT MAMALLAPURAM, MELAKUPPAM VILLAGE

DWG NO :
11965
S-11
VILLAS (B1,A1&B2,A2)
DSND : S.P.S.I
DRN : MD SULTHANA

FOUNDATION LAYOUT

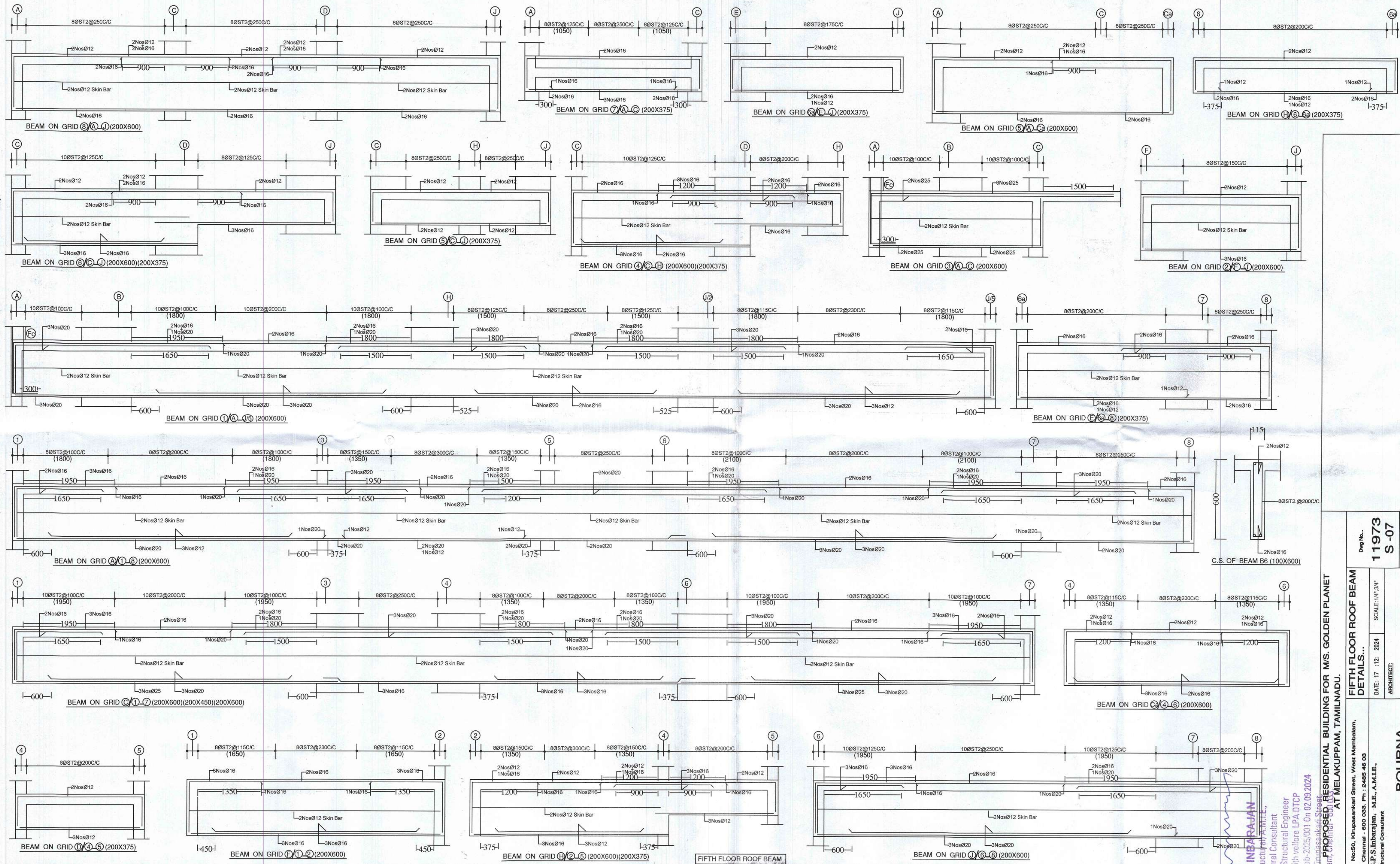
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ARCHITECT:

S.P.S. Inbarajan, M.E., A.M.I.E.,
Structural Consultant

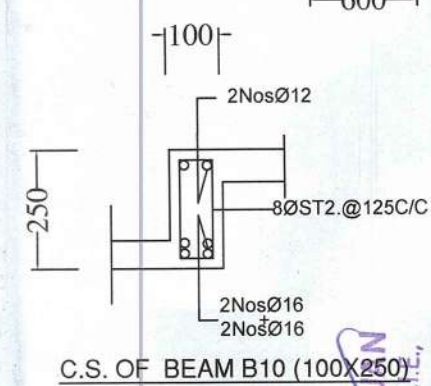
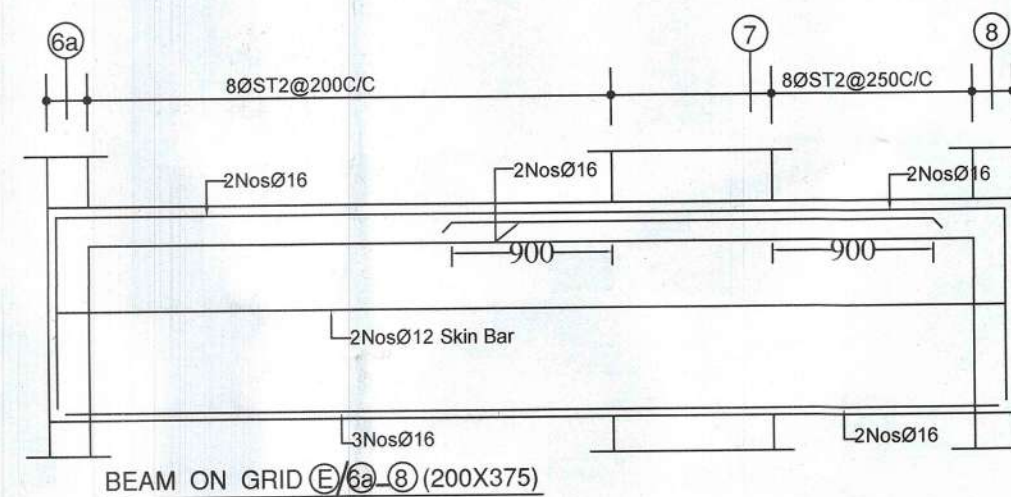
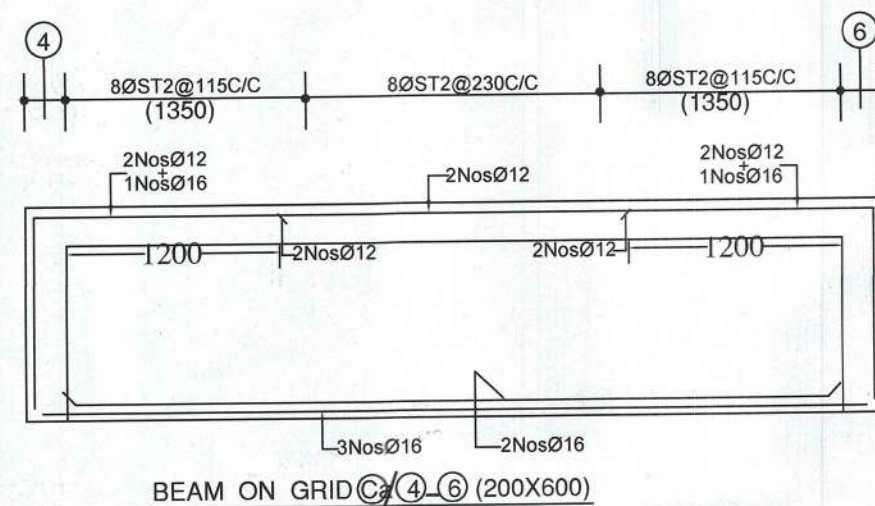
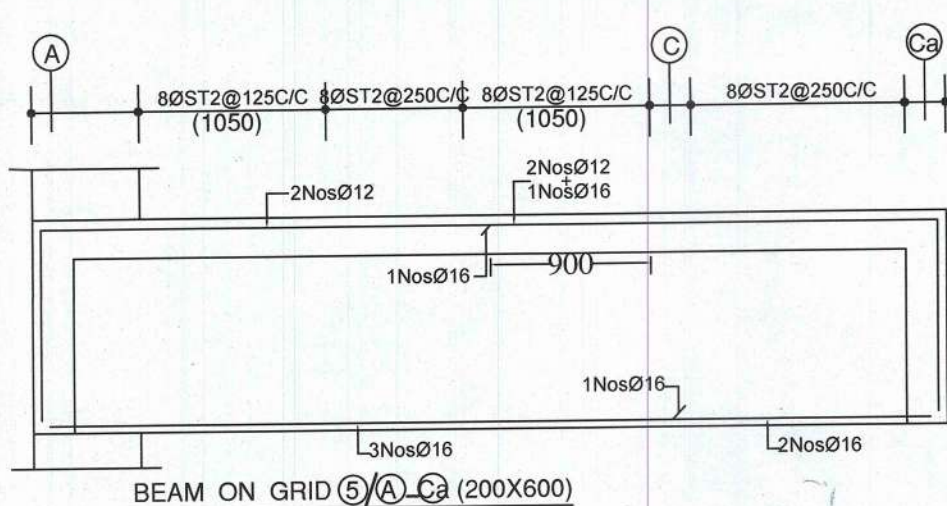
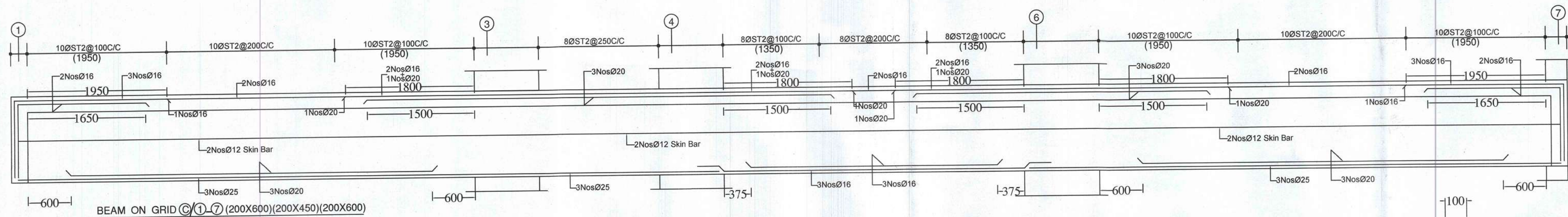
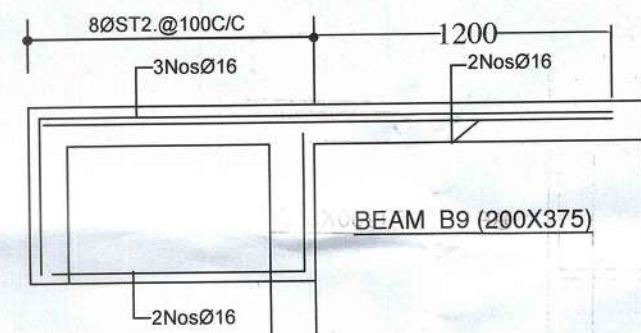
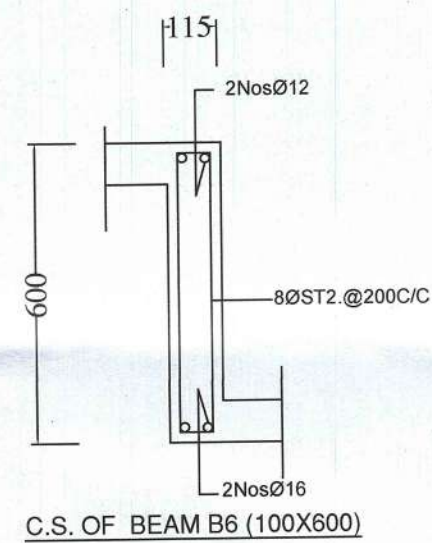
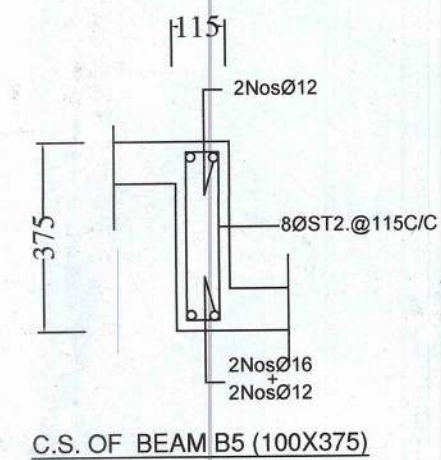
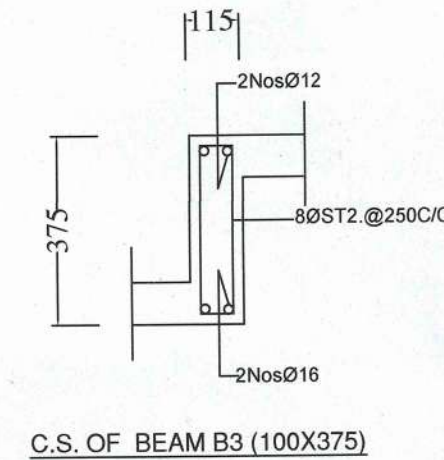
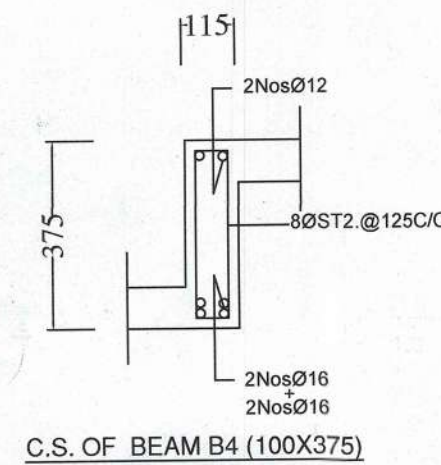
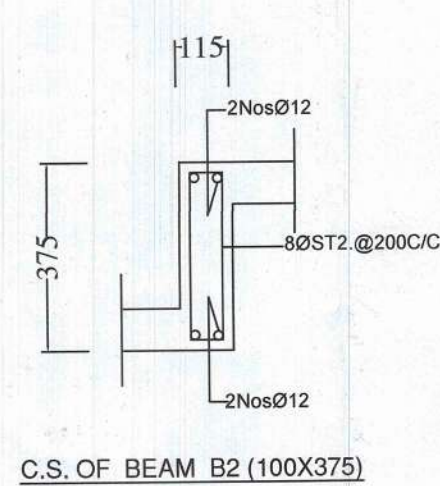
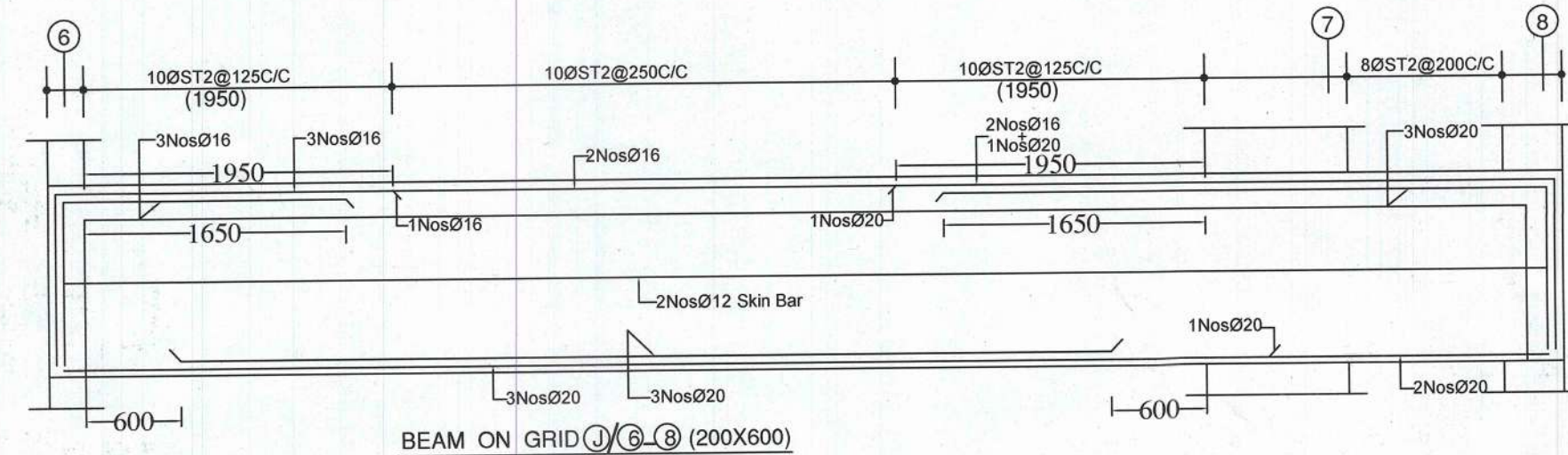
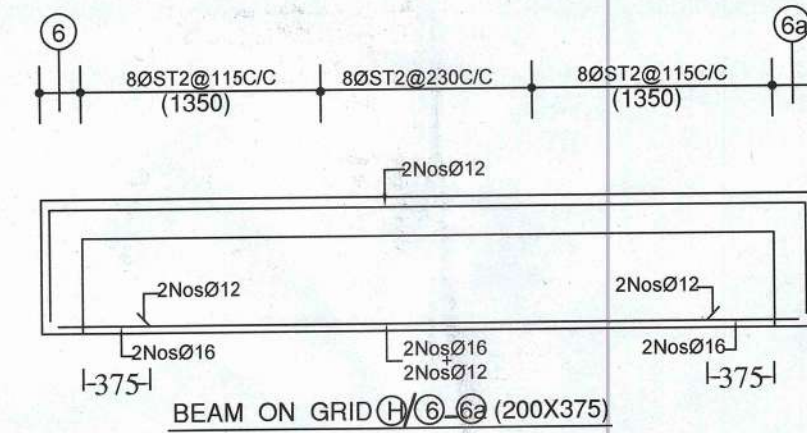
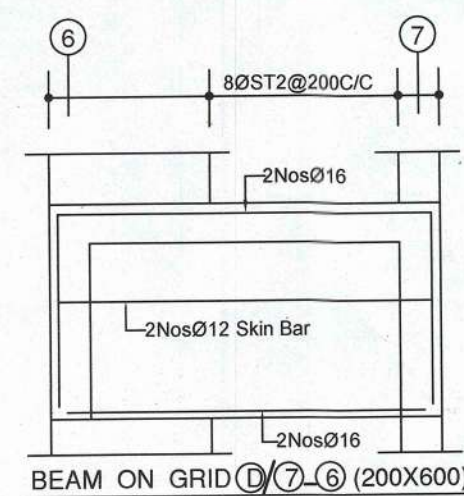
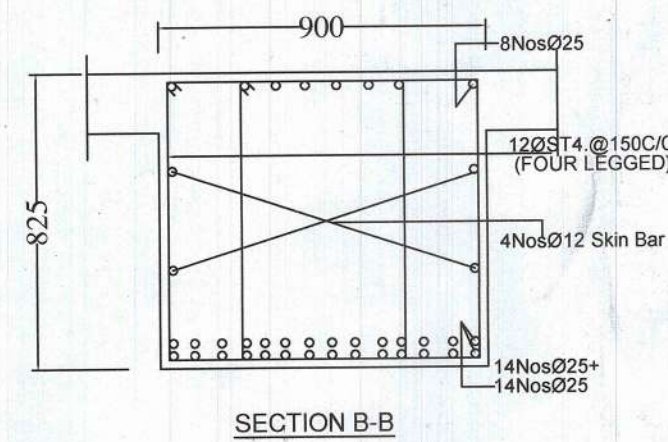
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Chennai - 600 033. Ph : 2445 46 03

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PROPOSED RESIDENTIAL BUILDING FOR M/S. GOLDEN PLANET
AT MELAKUPPAM, TAMILNADU.

Dwg No.. 11973 S-07		BLOCK-A DMD : S.P.S.I DRN : SUDHA	
FIFTH FLOOR ROOF BEAM DETAILS..		ARCHITECT:	
DATE: 17 / 12 / 2024 SCALE: 1/4" = 3/4"		BOURNA Consultants - Engineers	
No.50, Krupasankari Street, West Mambalam, Chennai - 600 033. Ph : 2485 46 03 S.P.S. Inbarajan, M.E., A.M.I.E., Structural Consultant		Registered Structural Engineer @Grade I (SE) with vellore LPA DTCP Reg. No. SE/6-1/Feb-2025/001 On 02.09.2024 Door No.50, Krupasankari Street, West Mambalam, Chennai - 600 033	



TYPICAL FLOOR ROOF BEAM
(FIRST,SECOND,THIRD & FOURTH FLOOR)