

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

FOUNDATION LAYOUT

PROPOSED RESIDENTIAL BUILDING FOR M/S. MEENAKSHI (M4)
AT MAHARAJA NAGAR, TIRUNELVELI, TAMILNADU FOR M/S. SRI SHARADA ESTATES

NO 50, Kirupasankari Street, West Mambalam,
Chennai - 600 033. Ph : 2485 46 03

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

BOURNA
Consultants - Engineers

FOUNDATION LAYOUT.

DATE: 04.06.2025 SCALE: 1/4"=3/4"

ARCHITECT:

Dwg No...
12217
S-01

DSND : S.P.S.I
DRN : SENTHIL.R

CONCRETE NOTES:-
1. CONCRETE SHALL BE OF GRADE M20 (MIX 1:1.5:3)
UNLESS NOTED OTHERWISE.
2. 60 BARS ARE MILDSTEEL REMAINING ALL OTHERS BARS
ARE TORSTEEL CONFORMING TO GRADE Fe500.
3. CLEAR COVER TO MAIN R/F SHALL BE AS FOLLOWS:-
COLUMN FOOTING 2"(50mm), COLUMN 1 1/2"(40mm),
RC WALL 1"(25mm), ROOF SLAB 5/8"(15mm),
RAFT SLAB 1 1/2"(40mm), RAFT BEAM 2"(50mm).
4. LAP LENGTH SHALL BE OF 50 TIMES THE DIAMETER
OF SMALLER BAR IN COMPRESSION AND
60 TIMES THE DIAMETER OF SMALLER BAR IN TENSION.
5. FOUNDATION IS DESIGNED FOR
STILT, FIRST, SECOND, THIRD, FOURTH & FIFTH FLOOR ONLY.

SOIL NOTES:- (APPLICABLE ONLY IF THE TOP SOIL IS CLAY STRATA
OTHERWISE IGNORE THIS SOIL NOTES.)

1. THE EXCAVATED SOIL CANNOT BE USED FOR BACKFILLING PURPOSE.
2. IF THE TOP SOIL IS OF MEDIUM SWELLING TYPE, THEN,
IT WILL EXERT UPWARD THRUST ON THE GROUND FLOOR FLOORING.
HENCE, IT IS SUGGESTED TO REMOVE TOP 30 - 40 CMS OF NATURAL SOIL
AND REPLACE WITH QUARRY DUST / SAND / GRAVEL
FOR GROUND FLOOR FLOORING.
3. AFTER THE EXCAVATION, THE FOUNDATION TRENCHES SHOULD BE
COMPACTED PROPERLY BEFORE LAYING THE FOUNDATION.
THE TOP SLUSH SHOULD BE REMOVED AND THE SURFACE COMPACTED
PROPERLY. AS A PRECAUTIONARY MEASURE, SPREAD BRICK-BATS /
GRAVELS AND COMPACT THE BOTTOM OF THE FIT.
THE FOUNDATIONS CAN BE SUBSEQUENTLY
BE PLACED OVER THIS PREPARED SURFACE.

REV	DESCRIPTION	CHKD	DRN	DATE
R2	DRAWING REVISED COLUMN C3A, C3B, C5A, C5B & C7A	S.P.S.I	SENTHIL.R	08.10.25
R1	DRAWING REVISED AS PER ARCHITECT NEW PLAN	S.P.S.I	SENTHIL.R	30.08.25
REV				

IMPORTANT NOTE :-

1. ALL CENTER LINE DIMENSIONS TO BE CHECKED BY ARCHITECT BEFORE SETTING OUT OF PLAN AT SITE
2. FOR COLUMNS WHICH ARE ADJACENT TO THE STAIR BASE SLAB, SEPTIC TANK BASE SLAB, FOR THIS TANK
BASE SLAB LEVEL, IF THE SEPTIC TANK BASE SLAB COMES OVER THE FOOTING FOR THIS
DEPTH OF COLUMN FOUNDATION SHALL BE TAKEN BELOW THE SEPTIC TANK / SUMP BASE SLAB BOTTOM LEVEL.
3. IF THE HEIGHT OF THE COLUMN BETWEEN FIRST LEVEL PLINTH BEAM TOP LEVEL TO GROUND FLOOR ROOF SLAB
TOP LEVEL EXCEED 12", THEN PROVIDE SECOND LEVEL PLINTH BEAM AT BASEMENT LEVEL DETAIL FOR THIS
SAME LEVEL PLINTH BEAM SHALL BE OF SIZE (9"x9") (230mm x 230mm) WITH 3nos@12@TOP AND
3nos@12@BTM AND 8nos@12@C/C STRIKERS.

IMPORTANT NOTE FOR M-SAND :-

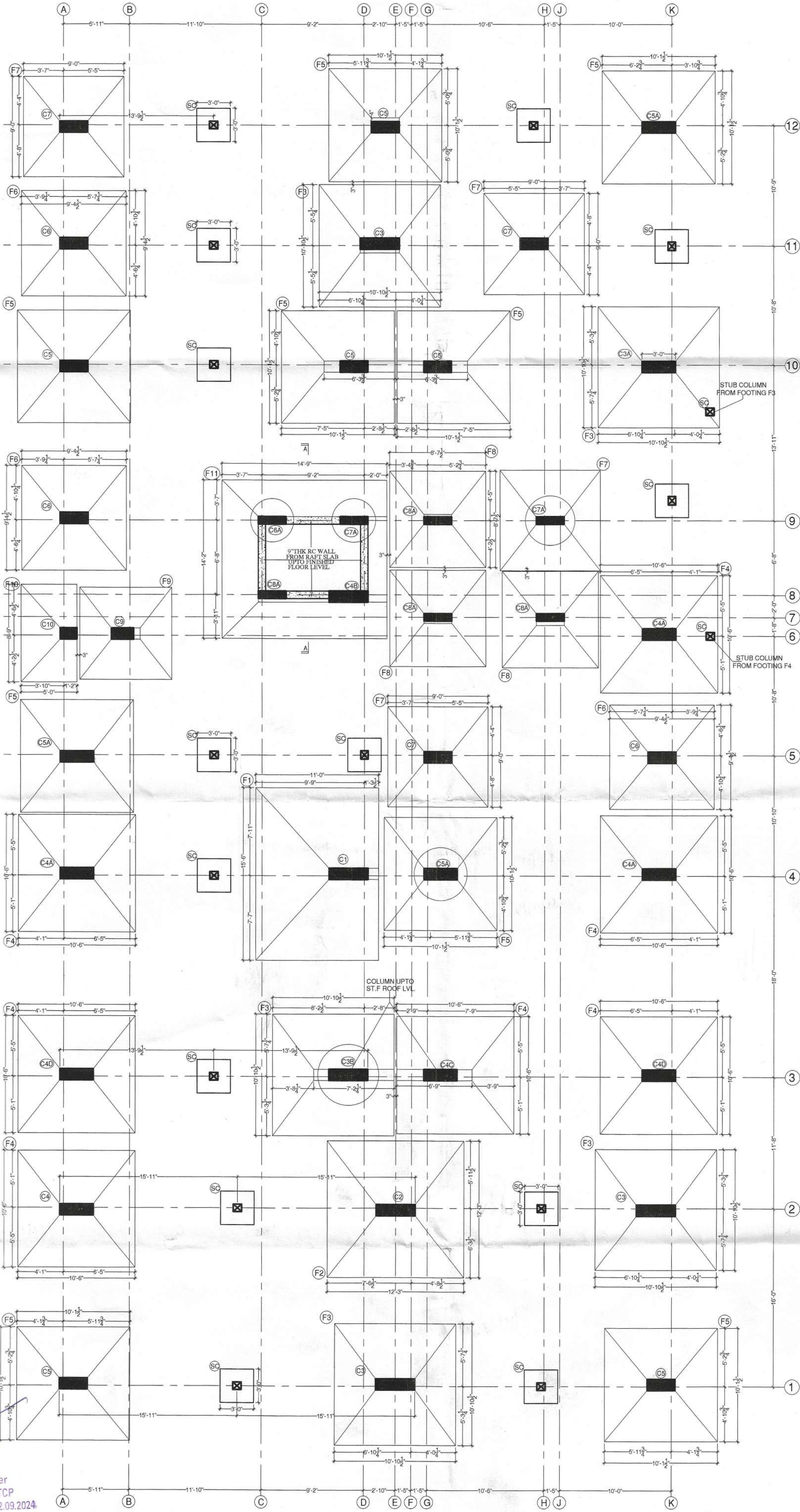
1. SAND SHALL BE REPLACED BY M-SAND FULLY OR PARTIALLY IN ANY PROPORTION FOR
PLAIN CEMENT CONCRETE, REINFORCEMENT CEMENT CONCRETE EXCEPT COLUMN CONCRETE.
FOR COLUMN CONCRETE, BETTER TO USE SAND ALONE FOR CONCRETE.
M-SAND SHOULD BE FREE FROM DUST AT SITE AT THE TIME OF USING FOR CONCRETE.
TO CHECK THE SAND FOR DUST CONTENT, DRY THEM SAND AND SIFT IT
TAKE A PINCH ALSO IF WE TAKE A PINCH OF DRIED MAND 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, VOA 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 NOTE FOR LAYING METHOD FOR READY MIX CONCRETE (RMC) :-

1. FOR M25 GRADE CONCRETE PROVIDE 340 KG CEMENT PER CUBIC METER OF READY MIX CONCRETE.
2. 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.
3. TIME DURATION INCLUDES FROM THE TIME OF WATER ADDING IN THE BATCHING PLANT (60) TIME OF LOBBY
DEPARTURE FROM PLANT, TRAVEL TIME, PUMP CONNECTING TIME, PUMPING AND LAYING OF CONCRETE
ON FORM WORK.
4. 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.
5. THE CONCRETE TOP SURFACE SHOULD BE SPROYED WITH WATER TO START CURING AFTER 120 MINUTES
TO 150 MINUTES FROM THE TIME OF CONCRETE LAYING.
6. START CURING WITH STORING WATER ON TOP OF CONCRETE AFTER 240 MINUTES TO 300 MINUTES FROM THE
TIME OF CONCRETE LAYING.



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Door No.50, Kirupasankari Street,
West Mambalam, Chennai - 600 033.

IMPORTANT NOTE :-
CONCRETING AT SITE SHALL BE STARTED ONLY AFTER VERIFYING ALL FABRICATION OF REINFORCEMENT BAR DONE FOR VARIOUS MEMBERS (COLUMNS, BEAMS, COLLARS, FOOTINGS, ETC.) AND SHOULD BE CHECKED AS PER THE STRUCTURAL LATEST REVISION DRAWINGS FOR FABRICATION OF REINFORCEMENT BAR.

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 COLLUMEN CONCRETE FOR COLUMN CONCRETE. BETTER TO USE SAND ALONG WITH FLY ASH FOR CONCRETE. M-SAND SHOULD BE FREE FROM DUST AT SITE AT THE TIME OF USING FOR CONCRETE. CONCRETE SHOULD BE CASTED AT A MINIMUM OF 150mm TO 200mm ABOVE THE FINISHED SURFACE AT CERTAIN HEIGHT LEVEL. IF ANY DUST PRESENCE WILL BE 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 OR OUR HAND.

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

1. FOR M25 GRADE CONCRETE PROVIDE 340 KG CEMENT PER CUBIC METER OF READY MIX CONCRETE.

2. 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.

3. TIME DURATION INCLUDES FROM THE TIME ON WATER ADDING IN THE BATCHING PLANT (60) TIME OF LORRY TRAVEL TO THE CONCRETE PLANT, TRAVEL TIME, PUMP CONNECTING TIME, PUMPING AND LAYING OF CONCRETE ON FORM WORKS.

4. AFTER 60 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.

5. THE CONCRETE TOP SURFACE SHOULD BE SPRAYED WITH WATER TO START CURING AFTER 120 MINUTES TO 150 MINUTES FROM THE TIME OF CONCRETE LAYING.

6. START CURING WITH STORING WATER ON TOP OF CONCRETE AFTER 240 MINUTES TO 360 MINUTES FROM THE TIME OF CONCRETE LAYING.

PROPOSED RESIDENTIAL BUILDING FOR M/S. MEENAKSHI (M4) AT MAHARAJA NAGAR, TIRUNELVELI, TAMILNADU FOR M/S. SRI SHARADA ESTATES				
NO 50, Kirupasanikari Street, West Mambalam, Chennai - 600 033. Ph : 2485 46 03		FOUNDATION DETAILS-I.		
S.P.S.Inbarajan, M.E., A.M.I.E., Structural Consultant		DATE: 04 /06/ 2025	SCALE:1/4"=3/4"	Dwg No... 12217 S -04
BOURNA Consultants - Engineers		ARCHITECT:		
		DSND : S.P.S.I		
		DRN : SENTHIL.R		

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FOUNDATION LAYOUT

PROPOSED RESIDENTIAL BUILDING FOR M/S. MEENAKSHI (M4)
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Consultants - Engineers

FOUNDATION LAYOUT.

DATE: 04.06.2025

SCALE: 1/4" = 3/4"

ARCHITECT:

Dwg No..
12217
S-03

DSND : S.P.S.I

DRN : SENTHILR

CONCRETE NOTES:-
1. CONCRETE SHALL BE OF GRADE M20 (MIX 1:1.5:3)
UNLESS NOTED OTHERWISE
2. FOR CONVENTIONAL MIXTURE MACHINE CONCRETE AND
CONCRETE SHALL BE OF GRADE M25 FOR READY MIX CONCRETE
(40KG CEMENT PER CUM OF READY MIX CONCRETE WITHOUT FLYASH)
EXCEPT FOR PILE, COLUMN AND BEAM.
3. CLEAR COVER TO MAIN R/F SHALL BE AS FOLLOWS:-
COLUMN FOOTING 2"(50mm), COLUMN 1 1/2"(40mm),
RC WALL 1"(25mm), ROOF SLAB 3/4"(15mm),
RAFT BEAM 1"(25mm), PILE CAP 2"(50mm) & PILE 2"(50mm),
RAFT SLAB 1 1/2"(40mm), RAFT BEAM 2"(50mm)
4. LAP LENGTH SHALL BE OF 50 TIMES THE DIAMETER
OF SMALLER BAR IN COMPRESSION AND
60 TIMES THE DIAMETER OF SMALLER BAR IN TENSION.
5. FOUNDATION IS DESIGNED FOR
STILT, FIRST, SECOND, THIRD, FOURTH & FIFTH FLOOR ONLY

SOIL NOTES:- (APPLICABLE ONLY IF THE TOP SOIL IS CLAY STRATA
OTHERWISE IGNORE THIS SOIL NOTES.)

1. THE EXCAVATED SOIL CANNOT BE USED FOR BACKFILLING PURPOSE.
2. IF THE TOP SOIL IS OF MEDIUM SWELLING TYPE, THEN,
IT WILL EXERT UPWARD THRUST ON THE GROUND FLOOR FLOORING.
HENCE, IT IS SUGGESTED TO REMOVE TOP 30 - 40 CMS OF NATURAL SOIL
AND REPLACE WITH QUARRY DUST / SAND / GRAVEL
FOR GROUND FLOOR FLOORING.
3. AFTER THE EXCAVATION, THE FOUNDATION TRENCHES SHOULD BE
COMPACTED PROPERLY BEFORE LAYING THE FOUNDATION.
THE TOP SLUSH SHOULD BE REMOVED AND THE SURFACE COMPACTED
PROPERLY. AS A PRECAUTIONARY MEASURE, SPREAD BRICK-BATS /
GRAVELS AND COMPACT THE BOTTOM OF THE PIT.
THE FOUNDATIONS CAN BE SUBSEQUENTLY
BE PLACED OVER THIS PREPARED SURFACE.

REV	DESCRIPTION	CHKD	DRN	DATE
R2	DRAWING REVISED COLUMN C3A, C3B, C5A, C6A & C7A	S.P.S.I	SENTHILR	08.10.25
R1	DRAWING REVISED AS PER ARCHITECT NEW PLAN	S.P.S.I	SENTHILR	30.08.25

IMPORTANT NOTE :-

- ALL CENTER LINE DIMENSIONS TO BE CHECKED BY ARCHITECT BEFORE SETTING OUT OF PLAN AT SITE
- FOR COLUMN WHICH ARE ADJACENT TO THE SUMP BASE SLAB, SEPTIC TANK BASE SLAB, FOR THIS
BASE SLAB LEVEL, IF THE SUMP, SEPTIC TANK BASE SLAB COMES OVER THE FOOTING FOR THIS
DEPTH OF COLUMN FOUNDATION SHALL BE TAKEN BELOW THE SEPTIC TANK SUMP BASE SLAB BOTTOM LEVEL.
3. IF THE HEIGHT OF THE COLUMN BETWEEN FIRST LEVEL PLINTH BEAM TOP LEVEL TO GROUND FLOOR ROOF SLAB
TOP LEVEL EXCEED 12". THEN PROVIDE SECOND LEVEL PLINTH BEAM AT BASEMENT LEVEL DETAIL FOR THIS
SAME LEVEL PLINTH BEAM SHALL BE OF SIZE (6"x9") (230mm X 230mm) WITH 3nos@12@TOP AND
3nos@12@BTM AND 4nos@12@230mm/C/C STIRRUPS.

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
TO CHECK THE M-SAND FOR DUST CONTENT, DRY THE M-SAND AND SPRAY IT
TO 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.
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 NOTE FOR LAYING METHOD FOR READY MIX CONCRETE (RMC) :-

- FOR M25 GRADE CONCRETE PROVIDE 440 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 (60 TIME OF LOBBY
DEPARTURE FROM PLANT, TRAVEL TIME, PUMP CONNECTING TIME, PUMPING AND LAYING OF CONCRETE
ON FORM WORK.
- AFTER 60 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.

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FOUNDATION LAYOUT

PROPOSED RESIDENTIAL BUILDING FOR M/S. MEENAKSHI (M4)
AT MAHARAJA NAGAR, TIRUNELVELI, TAMILNADU FOR M/S. SRI SHARADA ESTATES

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S.P.S.Inbarajan, M.E., A.M.I.E.,
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BOURNA
Consultants - Engineers

FOUNDATION LAYOUT.

DATE: 04.06.2025 SCALE: 1/4" = 3/4"

ARCHITECT:

Dwg No...

12217
S-02

DSND : S.P.S.I
DRN : SENTHIL.R

CONCRETE NOTES:-
1. CONCRETE SHALL BE OF GRADE M20 (MIX 1:1.5:3)
UNLESS NOTED OTHERWISE
2. FOR CONVENTIONAL MIXTURE MACHINE CONCRETE AND
CONCRETE SHALL BE OF GRADE M25 FOR READY MIX CONCRETE.
(40KG CEMENT PER CUM OF READY MIX CONCRETE WITHOUT FLYASH)
EXCEPT FOR PILE, COLUMN CONCRETING.

2. 40 BARS ARE MILDSTEEL REMAINING ALL OTHERS BARS
ARE TORSTEEL CONFORMING TO GRADE Fe500.
3. CLEAR COVER TO MAIN R/F SHALL BE AS FOLLOWS:-
COLUMN FOOTING 2"(50mm), COLUMN 1 1/2"(40mm),
RC WALL 1"(25mm), ROOF SLAB 5/8"(15mm),
ROOF BEAM 1"(25mm), PILE CAP 2"(50mm) & PILE 2"(50mm),
RAFT SLAB 1 1/2"(40mm), RAFT BEAM 2"(50mm)
4. LAP LENGTH SHALL BE OF 50 TIMES THE DIAMETER
OF SMALLER BAR IN COMPRESSION AND
60 TIMES THE DIAMETER OF SMALLER BAR IN TENSION.
5. FOUNDATION IS DESIGNED FOR
STILT, FIRST, SECOND, THIRD, FOURTH & FIFTH FLOOR ONLY

SOIL NOTES:- (APPLICABLE ONLY IF THE TOP SOIL IS CLAY STRATA
OTHERWISE IGNORE THIS SOIL NOTES.)

1. THE EXCAVATED SOIL CANNOT BE USED FOR BACK FILLING PURPOSE.
2. IF THE TOP SOIL IS OF MEDIUM SWELLING TYPE, THEN
IT WILL EXERT UPWARD THRUST ON THE GROUND FLOOR FLOORING.
HENCE, IT IS SUGGESTED TO REMOVE TOP 30 - 40 CMS OF NATURAL SOIL
AND REPLACE WITH QUARRY DUST / SAND / GRAVEL
FOR GROUND FLOOR FLOORING.
3. AFTER THE EXCAVATION, THE FOUNDATION TRENCHES SHOULD BE
COMPACTED PROPERLY BEFORE LAYING THE FOUNDATION.
THE TOP SLUSH SHOULD BE REMOVED AND THE SURFACE COMPACTED
PROPERLY. AS A PRECAUTIONARY MEASURE, SPREAD BRICK-BATS /
GRAVELS AND COMPACT THE BOTTOM OF THE PIT.
THE FOUNDATIONS CAN BE SUBSEQUENTLY
BE PLACED OVER THIS PREPARED SURFACE.

REV	DESCRIPTION	CHKD	DRN	DATE
R2	DRAWING REVISED COLUMN C3A, C3B, C5A, C5B & C7A	S.P.S.I	SENTHIL.R	08.10.25
R1	DRAWING REVISED AS PER ARCHITECT NEW PLAN	S.P.S.I	SENTHIL.R	30.08.25
REV				

IMPORTANT NOTE :-

1. ALL CENTER LINE DIMENSIONS TO BE CHECKED BY ARCHITECT BEFORE SETTING OUT OF PLAN AT SITE.
2. FOR COLUMN WHICH ARE ADJACENT TO THE SEPTIC TANK, THE SEPTIC TANK SHALL BE SET BACK FROM THE COLUMN CENTER LINE BY AT LEAST 1.0 METER. THE SEPTIC TANK SHALL BE SET BACK FROM THE COLUMN CENTER LINE BY AT LEAST 1.0 METER. THE SEPTIC TANK SHALL BE SET BACK FROM THE COLUMN CENTER LINE BY AT LEAST 1.0 METER.
3. IF THE HEIGHT OF THE COLUMN BETWEEN FIRST LEVEL PLINTH BEAM TOP LEVEL TO GROUND FLOOR ROOF SLAB TOP LEVEL EXCEED 12", THEN PROVIDE SECOND LEVEL PLINTH BEAM AT BASEMENT LEVEL DETAIL FOR THIS SAME LEVEL PLINTH BEAM SHALL BE OF SIZE 6"X9" (230mmX230mm) WITH 3nos@12@TOP AND 3nos@12@BOT AND 4nos@12 @230mmX230mm STRIKES.

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.
AT CERTAIN HEIGHT LEVEL, IF ANY DUST PRESENCE WILL LAY 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.

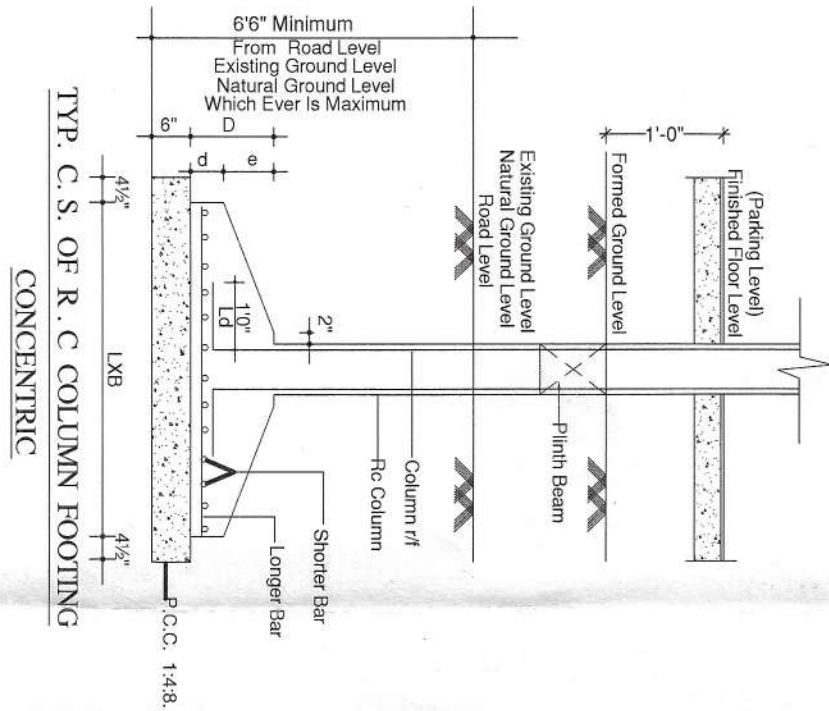
IMPORTANT NOTE FOR LAYING METHOD FOR READY MIX CONCRETE (RMC) :-

1. FOR M25 GRADE CONCRETE PROVIDE 140 KG CEMENT PER CUBIC METER OF READY MIX CONCRETE.
2. 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.
3. TIME DURATION INCLUDES FROM THE TIME OF WATER ADDING IN THE BATCHING PLANT (a) TIME OF LOBBY
DEPARTURE FROM PLANT, TRAVEL TIME, PUMP CONNECTING TIME, PUMPING AND LAYING OF CONCRETE
ON FORM WORK.
4. 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 CONCRETE SLURRY,
WILL IT AND PACK IT WITH BROOM.
5. THE REINFORCEMENT CHAIRS SHOULD BE SPACED WITH WATER TO START CURING AFTER 120 MINUTES
TO 150 MINUTES FROM THE TIME OF CONCRETE LAYING.
6. START CURING WITH STORING WATER ON TOP OF CONCRETE AFTER 240 MINUTES TO 300 MINUTES FROM THE
TIME OF CONCRETE LAYING.

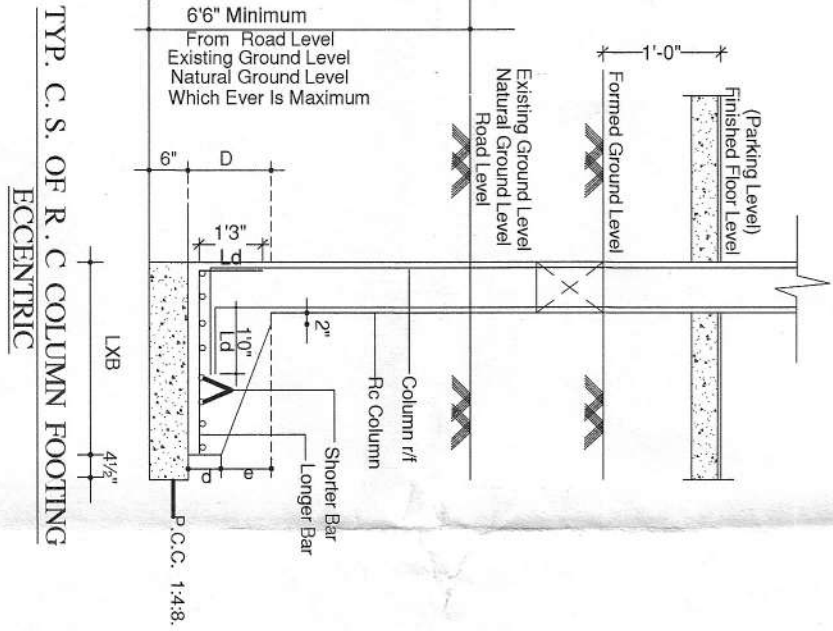
Figure 1 consists of two parts. The top part is a cross-section of a precast concrete beam, labeled 'TYPICAL CROSS-SECTION OF PRECAST CONCRETE BEAM'. It shows a rectangular beam with a top bar, a tie bar, and a bottom bar. The top bar is labeled 'TOP BAR', the tie bar is labeled 'TIE BAR', and the bottom bar is labeled 'BOTTOM BAR'. The beam is shown with a cross-section 'B-B' indicated. The bottom part is a longitudinal view of the beam, showing its length and the placement of reinforcement. It includes a cross-section 'B-B' at one end and a cross-section 'D-D' at the other. The beam is shown with a cross-section 'B-B' indicated. The longitudinal view shows the beam's length and the placement of reinforcement. It includes a cross-section 'B-B' at one end and a cross-section 'D-D' at the other. The beam is shown with a cross-section 'B-B' indicated.

SL. No.	NAME OF PLINTH BEAM	PLINTH BEAM SIZE (BXD)	PLINTH BEAM TOP BAR	PLINTH BEAM BOTTOM BAR	PLINTH BEAM TIE	
1.	PB1	(9'X1'6")	3NosØ16	3NosØ16 2NosØ16	10ØS12.@7'C/C	
2.	PB2	(9'X1'6")	3NosØ16	4NosØ16	8ØS12.@8'C/C	
3.	PB3	(9'X1'6")	3NosØ16	3NosØ16	8ØS12.@4'C/C(End 1/3rd Span) 8ØS12.@4'C/C(Mid 1/3rd Span) 8ØS12.@4'C/C(End 1/3rd Span)	
4.	PB4	(9'X1'6")	3NosØ16	3NosØ16 2NosØ16	8ØS12.@5'C/C(End 1/3rd Span) 8ØS12.@10'C/C(Mid 1/3rd Span) 8ØS12.@5'C/C(End 1/3rd Span)	
5.	PB5	(9'X1'6")	2NosØ16	4NosØ16	8ØS12.@8'C/C	
6.	PB6	(9'X1'6")	2NosØ16	3NosØ16 1NosØ12	8ØS12.@8'C/C	
7.	PB7	(9'X1'3")	2NosØ12	2NosØ16 1NosØ12	8ØS12.@8'C/C	
8.	PB8	(9'X1'3")	2NosØ12	4NosØ12	8ØS12.@10'C/C	
9.	PB9	(9'X1'3")	2NosØ12	3NosØ12	8ØS12.@10'C/C	
10.	PB10	(9'X1'3")	2NosØ12	2NosØ12	8ØS12.@10'C/C	Formed Ground Level

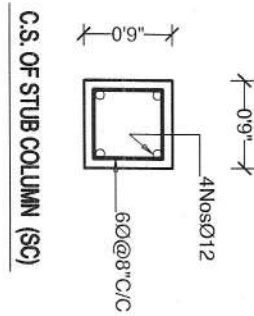
Sl. No.	FOOTING MARK	FOOTING SIZE					FOOTING REINFORCEMENT		Nos Of FOOTING
		L	B	D	d	e	LONGER BAR	SHORTER BAR	
1.	F1	159"	110"	40"	16"	26"	30Nosø16	46Nosø16	
2.	F2	123"	123"	39"	13"	25"	30Nosø16	30Nosø16	
3.	F3	1010/2"	1010/2"	377/2"	13"	24/2"	27Nosø16	27Nosø16	
4.	F4	106"	106"	36"	13"	23"	39Nosø12	39Nosø12	
5.	F5	1011/2"	1011/2"	34/2"	13"	211/2"	36Nosø12	36Nosø12	
6.	F6	941/2"	941/2"	30"	13"	19"	29Nosø12	29Nosø12	
7.	F7	90"	90"	2710/2"	13"	177/2"	27Nosø12	27Nosø12	
8.	F8	877/2"	877/2"	29"	13"	16"	25Nosø12	25Nosø12	
9.	F9	83"	83"	277/2"	13"	14/2"	23Nosø12	23Nosø12	
10.	F10 Eccentric (LIFT)	83"	50"	24/2"	13"	111/2"	12Nosø12	22Nosø12	
11.	F11 (LIFT)	149"	142"	23"	09"	16"	120ø41/2CC BOTTOMWAS @TOP&BOTTOM		
12.	SC	30"	30"	09"	-	-	5Nosø8	5Nosø8	



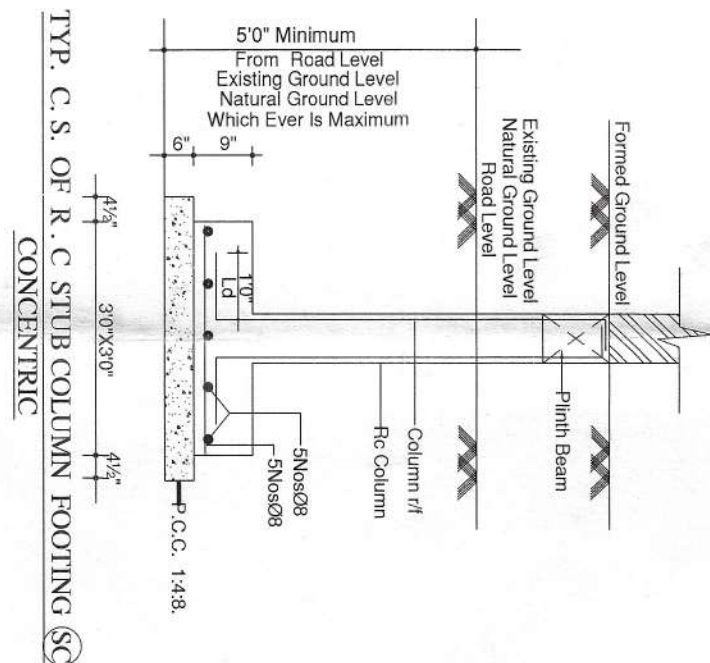
TYP. C. S. OF R. C. COLUMN FOOTING
CONCENTRIC



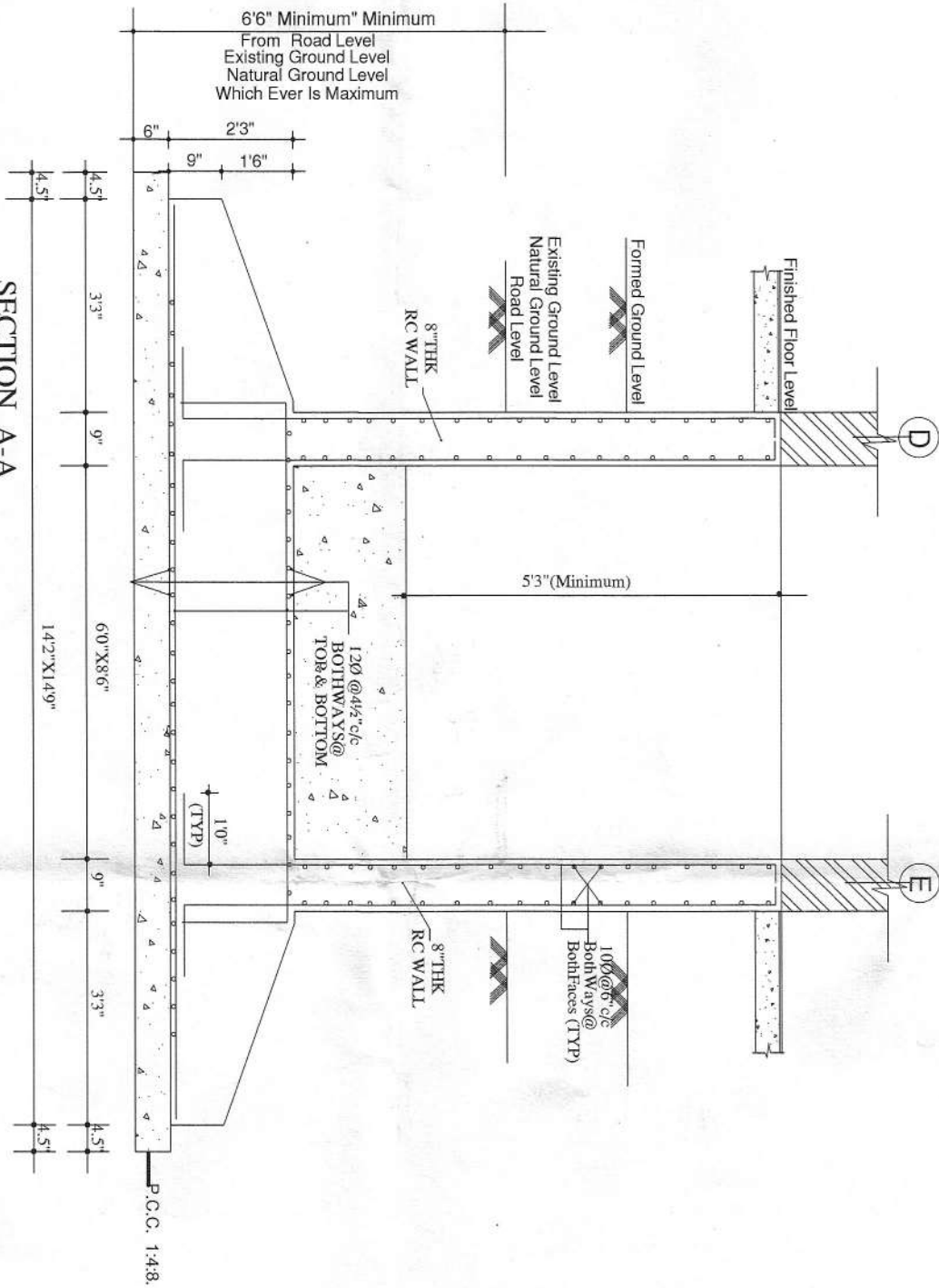
TYP. C. S. OF R. C COLUMN FOOTING
ECCENTRIC



C.S. OF STUB COLUMN (SC)



TYP. C. S. OF R. C. STUB COLUMN FOOTING (SC)
CONCENTRIC



SECTION A-A

SAND SHALL BE PLACED BY M-SAND FILLOR PARTIALLY IN ANY PROPORTION FOR PLAN 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 FL Y 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.

1. FOR M25 GRADE CONCRETE PROVIDE 340 KG CEMENT PER CUBIC METER OF READY MIX CONCRETE.
2. THE TIME DURATION OF READY MIX CONCRETE SHALL BE AT THE MAXIMUM OF 90 MINUTES TO 100 MINUTES.
3. THE BEST STRENGTH RESULT OF CONCRETE.
3. TIME DURATION INCLUDES FROM THE TIME OF WATER ADDING IN THE BATCHING PLANT (i.e) TIME OF LOREY DEPARTURE FROM PLANT, TRAVEL TIME, PUMP CONNECTING TIME, PUMPING AND LAYING OF CONCRETE ON FORM WORK.
4. 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 SLOPPY, FILL IT AND PACK IT WITH BROOM.
5. THE CONCRETE TOP SURFACE SHOULD BE SPRAYED WITH WATER TO START CURING AFTER 120 MINUTES TO 150 MINUTES FROM THE TIME OF CONCRETE LAYING.
6. START CURING WITH SPRAYING WATER ON TOP OF CONCRETE AFTER 240 MINUTES TO 300 MINUTES FROM THE TIME OF CONCRETE LAYING.

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.

Reg. No. SE/Gr-I/Feb-2025/001 On 02.09.2024

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

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ARCHITECT:

DRN : SENTHIL.R

R1	DRAWING REVISED AS PER ARCHITECT NEW PLAN	S.P.S.I	SENTHIL.R	30.08.25
REV	DESCRIPTION	CHKD	DRN	DATE