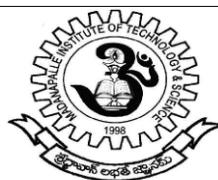


GROUND FLOOR

PROJECT NAME:

GOOD HOME-1



MADANAPALLE INSTITUTE OF
TECHNOLOGY & SCIENCE
Department of Civil Engineering

Date: 20/03/2020

DRAWING BY-

S. ARBAS KHAN
K. VIJAY KUMAR
S. Md. A. SALMAN
T. THULSI
K. POOJITHA

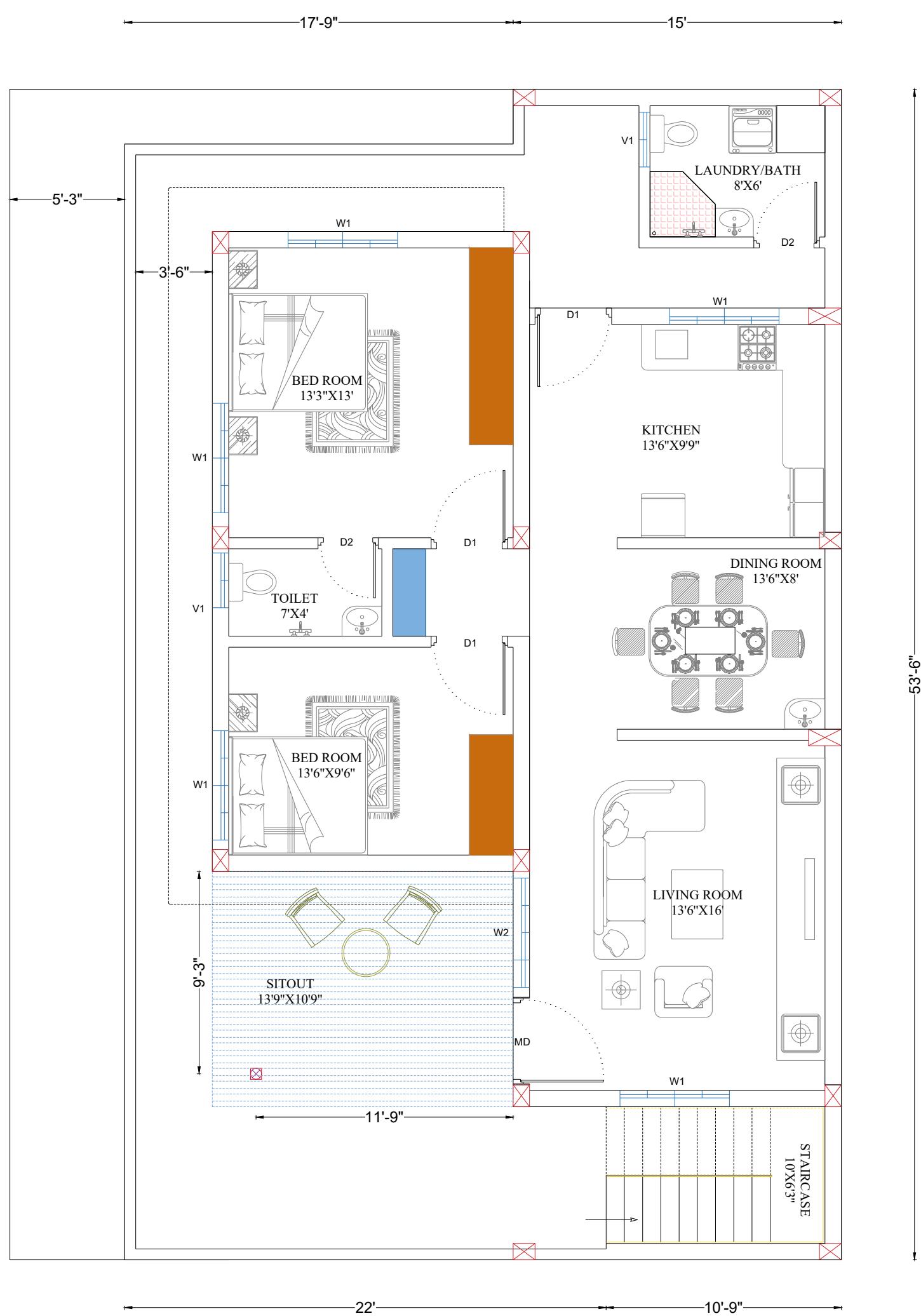
DRAWING TITLE:-

ARCHITECTURAL PLAN

DRAWING NO. :-

GH/ARCH PLAN/001

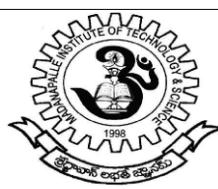
ALL UNITS ARE IN FEET AND INCHES



FIRST FLOOR

PROJECT NAME:

GOOD HOME-1



MADANAPALLE INSTITUTE OF
TECHNOLOGY & SCIENCE
Department of Civil Engineering

Date: 20/03/2020

DRAWING BY-

S. ARBAS KHAN
K. VIJAY KUMAR
S. Md. A. SALMAN
T. THULSI
K. POOJITHA

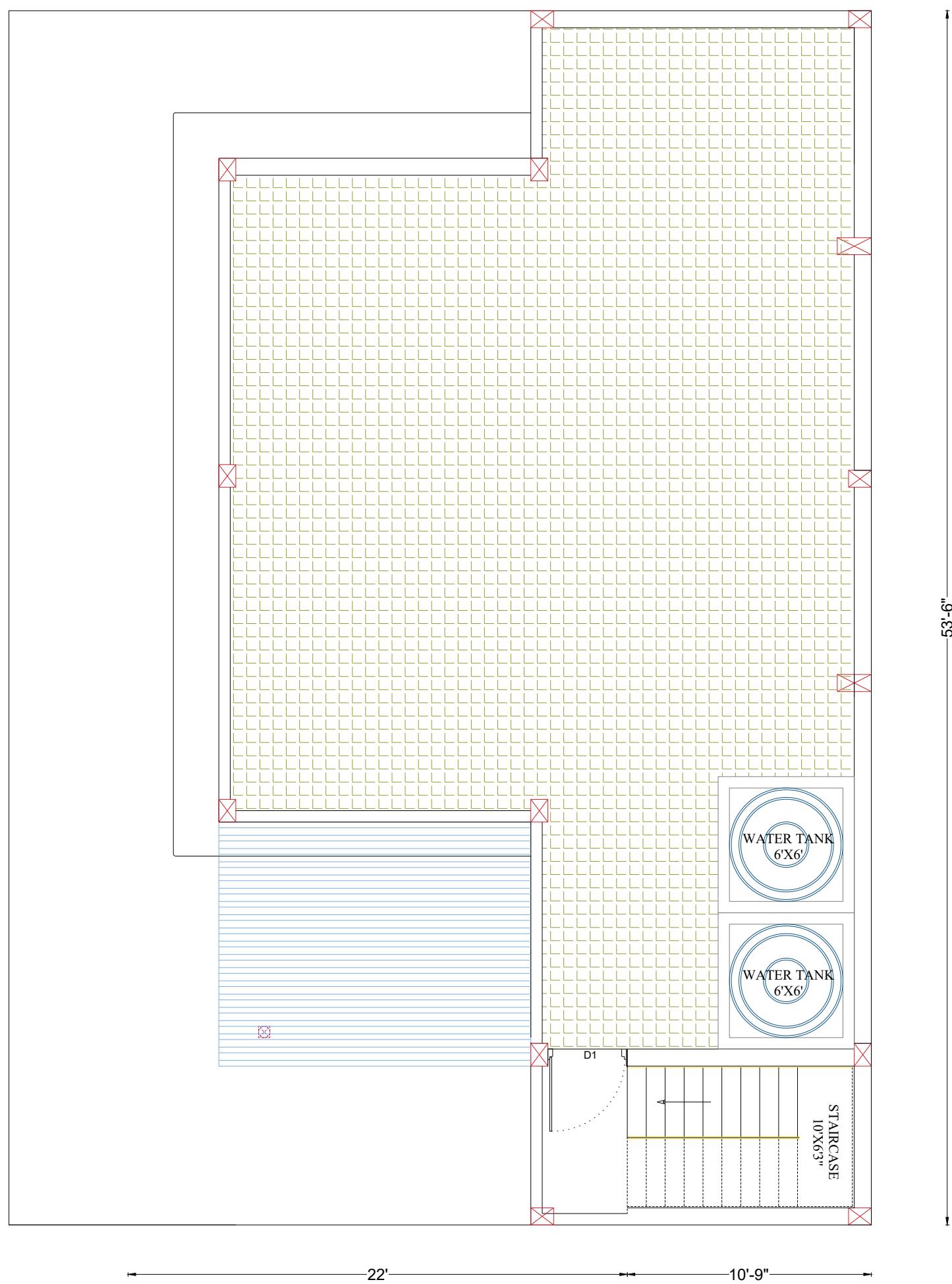
DRAWING TITLE:-

ARCHITECTURAL PLAN

DRAWING NO. :-

GH/ARCH PLAN/002

ALL UNITS ARE IN FEET AND INCHES



ROOF

PROJECT NAME: GOOD HOME-1	DRAWING BY- S. ARBAS KHAN K. VIJAY KUMAR S. Md. A. SALMAN T. THULSI K. POOJITHA	DRAWING TITLE:- ARCHITECTURAL PLAN
MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE Department of Civil Engineering Date: 20/03/2020	DRAWING NO. :- GH/ARCH PLAN/003	ALL UNITS ARE IN FEET AND INCHES

NOTES:

- DO NOT SCALE THIS DRAWING. FOLLOW FIGURED DIMENSIONS ONLY.
- ALL DIMENSIONS ARE IN MM ONLY AND LEVELS ARE IN METERS UNLESS SPECIFIED.
- S.B.O OF SOIL IS CONSIDERED AS 200 KN/M-2 AT A DEPTH OF 1.5 M AS RECOMMENDED AND SHOULD ENSURE THE SBC AT ALL FOOTINGS BEFORE EXECUTION.
- USE VIBRATED REINFORCED CONCRETE CONFIRMING TO IS : 456-2000. THE GRADES FOR DIFFERENT COMPONENTS ARE AS FOLLOWS

COMPONENT	FOOTING	PEDESTAL & COLUMNS	BEAMS	SLABS
MIX	M25	M25	M25	M25

- GRADE OF STEEL SHALL BE Fe450. EXCEPT WHEREVER INDICATED. IT SHOULD BE ENSURED THAT THE ABOVE STEEL IS PRODUCED BY THERMO MECHANICAL TREATMENT PROCESS, HAVING ELONGATION MORE THAN 14.5% AND CONFIRMING TO IS 1786-85 & ITS AMENDMENTS.
- CONCRETE LAID IN THE FORM WORK SHALL INVARIABLY VIBRATED TO OBTAIN MAX. DENSITY AND COMPACTION.
- PROVISIONS MADE IN IS 456-2000, AND SP 34 AND OTHER RELEVANT CODES SHOULD BE STRICTLY ADHERED TO, DURING EXECUTION.
- LAPS SHALL BE STAGGERED AND LAP LENGTHS ARE AS FOLLOWS.

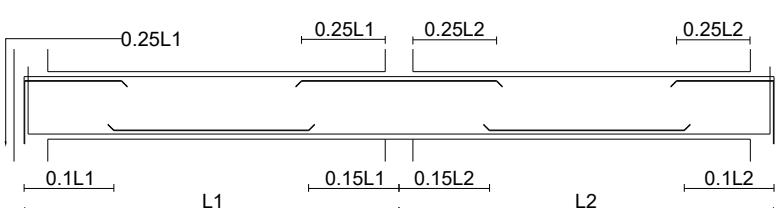
MIX	M25
Ld	49 Dia Tension/ 39 Dia Compression

- NOT MORE THAN 50 % OF COLUMN REINFORCEMENT SHALL BE LAPPED AT A PARTICULAR LOCATION.

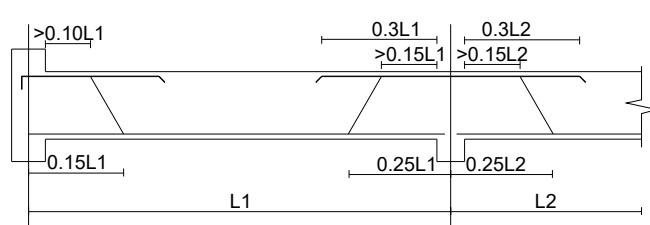
- CLEAR COVERS ARE AS FOLLOWS

FOOTING TO MAIN BAR	PEDESTAL TO STIRRUPS	COLUMN TO STIRRUPS	BEAM TO STIRRUPS	SLABS&STAIRCASE TO MAIN BAR
50MM	40MM	40MM	25MM	25MM

- ANY LOOSE OR PROTRUDING BOULDERS SHALL BE REMOVED BEFORE LAYING FOUNDATION CONCRETE AND SHALL BE FILLED WITH P.C.C. (1:4:8).
- WHEREVER NECESSARY DRILLING SHALL BE RESORTED TO, IN HARD SHEET ROCK ONLY.
- STIRRUPS SHOULD HAVE STANDARD HOOK AS PER SP-34
- EXTRA BARS AT TOP FOR BEAM SHALL BE EXTENDED UP TO 0.25L ON EITHER SIDE FROM THE FACE OF EDGE MEASURED FROM CENTER OF SUPPORT. WHERE 'L' IS c/c OF SUPPORTS. THE CURTAILMENT OF BOTTOM BARS AT 0.1 L FROM DISCONTINUOUS EDGE AND 0.15 L FROM CONTINUOUS EDGE.



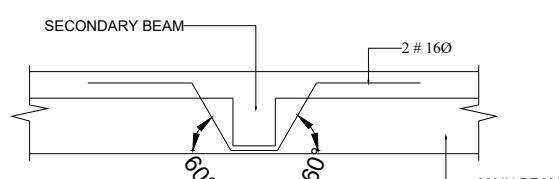
TYPICAL DETAILS OF A BEAM



TYPICAL DETAILS OF A SLAB

- SLAB BARS ARE TO BE CRANKED AT 0.25 L FROM CENTER OF SUPPORT NEAR CONTINUOUS EDGES AND 0.15 L FROM CENTER OF SUPPORT NEAR DISCONTINUOUS EDGES.
- IN SLABS EXTRA BARS OVER CONTINUOUS SUPPORT SHOULD BE TAKEN UPTO 0.3L FROM THE FACE OF BEAM. CRANK BARS AT CONTINUOUS SUPPORT SHOULD NOT BE TERMINATED ON BEAM AND SHOULD BE EXTENDED UP TO 0.3L FROM FACE OF SUPPORT INTO THE ADJACENT SPAN.
- DISTRIBUTION STEEL IN SLAB FOR CRANKED BARS AND TOP EXTRA BARS SHALL BE 10 TOR 200 C/C
- THE REINFORCEMENT SHALL BE CHECKED BEFORE LAYING CONCRETE.

- WHEREVER, THE SECONDARY BEAM RESTS ON MAIN BEAM THE ARRANGEMENT OF BENT UP HANGER BARS SHALL BE PROVIDED AS GIVEN BELOW:

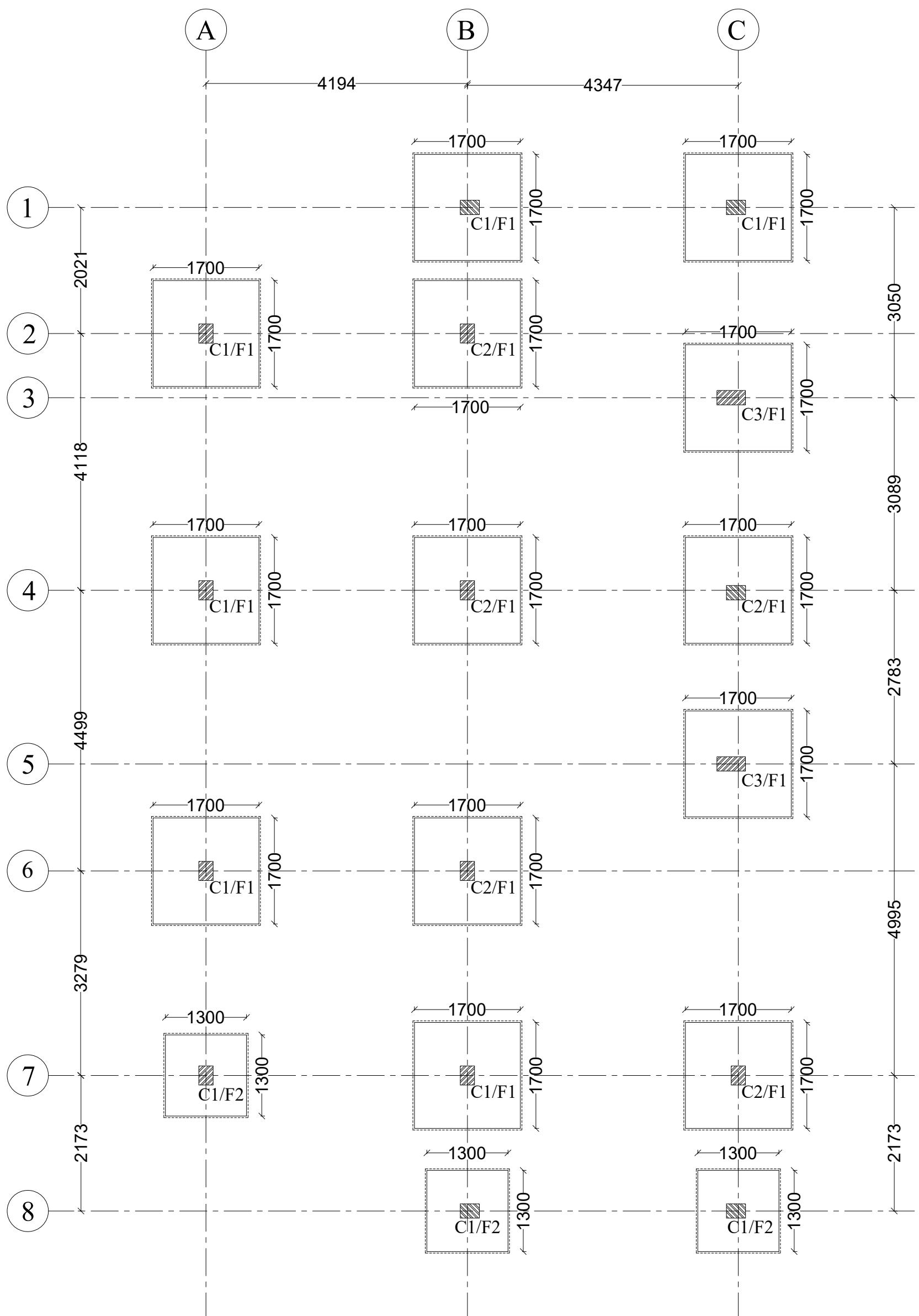


- IN BEAMS & SLABS, OVERLAPPING SHALL NOT BE PROVIDED OVER SUPPORTS FOR TOP BARS AND AT MID SPAN FOR BOTTOM BARS.
- WHEREVER REINFORCEMENT IS PROVIDED IN TWO LAYERS IN BEAMS SPACER BAR SHALL BE PROVIDED TO MAINTAIN 25MM GAP OR MAXIMUM DIA OF MAIN BAR, WHICH EVER IS MORE, BETWEEN TWO LAYERS.
- WHEN SPAN IS MORE THAN 6.0M PROVIDE A CAMBER OF SPAN/250 FOR BEAMS & SLABS.
- THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL DRAWINGS.
- THIS BUILDING IS DESIGNED FOR **G.F+4** STORIES AND FOR BASIC WIND SPEED **50 m/s** AND FOR **SEISMIC ZONE -II**
- FLOOR TO FLOOR HEIGHT IS CONSIDERED AS **3.30 m**
- CURING SHOULD BE DONE AT LEAST FOR 21 DAYS
- STRIPPING TIME OF FORMWORK SHALL CONFORM TO CLAUSE 11.3 OF IS 456-2000.

IMPORTANT NOTE:

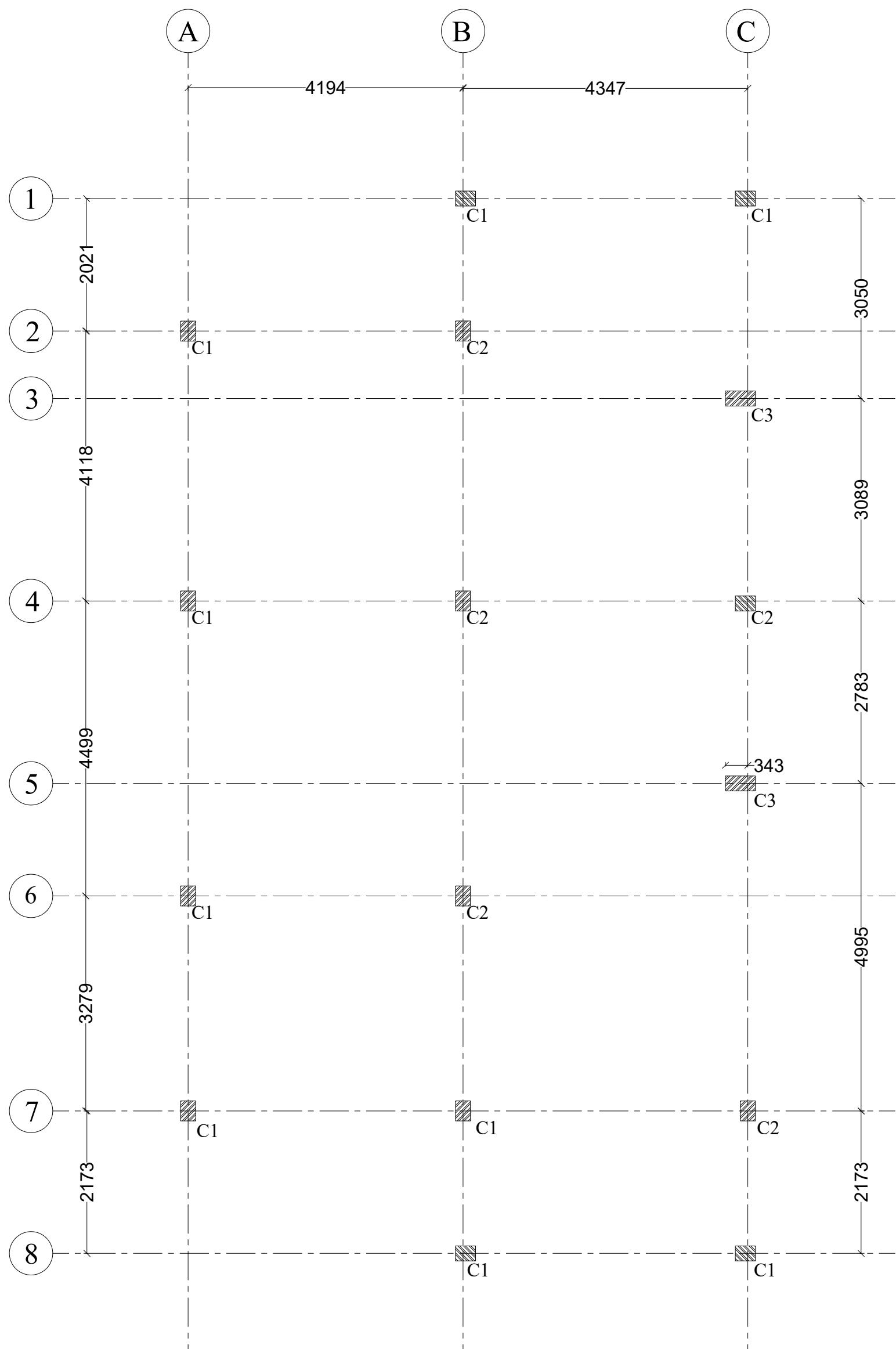
- THE RESPONSIBILITY FOR FIXING OF F.G.L AND .F.L ARE LIES WITH THE SE/E.E CONCERNED.
- PRIOR PERMISSION FOR ANY DEVIATION AND FINANCIAL IMPLICATIONS HAVE TO BE OBTAINED BEFORE EXECUTION OF WORK.
- BEFORE COMMENCEMENT OF WORK STRUCTURAL DRAWINGS SHALL HAVE TO BE VARIFIED WITH RESPECT TO THE APPROVED ARCHITECTURAL DRAWING.
- ANY ITEM OF WORK FOR WHICH STRUCTURAL DRAWINGS ARE COMMUNICATED BUT ARE NOT INCLUDED IN AGREEMENT PRIOR APPROVAL SHALL BE TAKEN FROM COMPETENT AUTHORITY BEFORE GROUNDING OF SUCH WORK.
- IF ANY VARIATION IS FOUND IN THE FOUNDATION SOIL WITH REFERENCE TO THE SBC AND SPECIFICATIONS OF SOIL IN THE DESIGNS OF FOUNDATIONS, THE SUPERINTENDING ENGINEER IS REQUESTED TO REPORT THE SAME TO THIS OFFICE FOR REVISION OF FOOTING DESIGNS.

PROJECT NAME: GOOD HOME-1	DRAWING BY- S. ARBAS KHAN K. VIJAY KUMAR S. Md. A. SALMAN T. THULSI K. POOJITHA	DRAWING TITLE:- STRUCTURAL DRAWING
MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE Department of Civil Engineering Date: 20/03/2020		DRAWING NO. :- GH/STRL PLAN/001 SBC - 200 KN/m² Sesmic zone II, Grade of concrete: M20, Steel Grade Fe 500



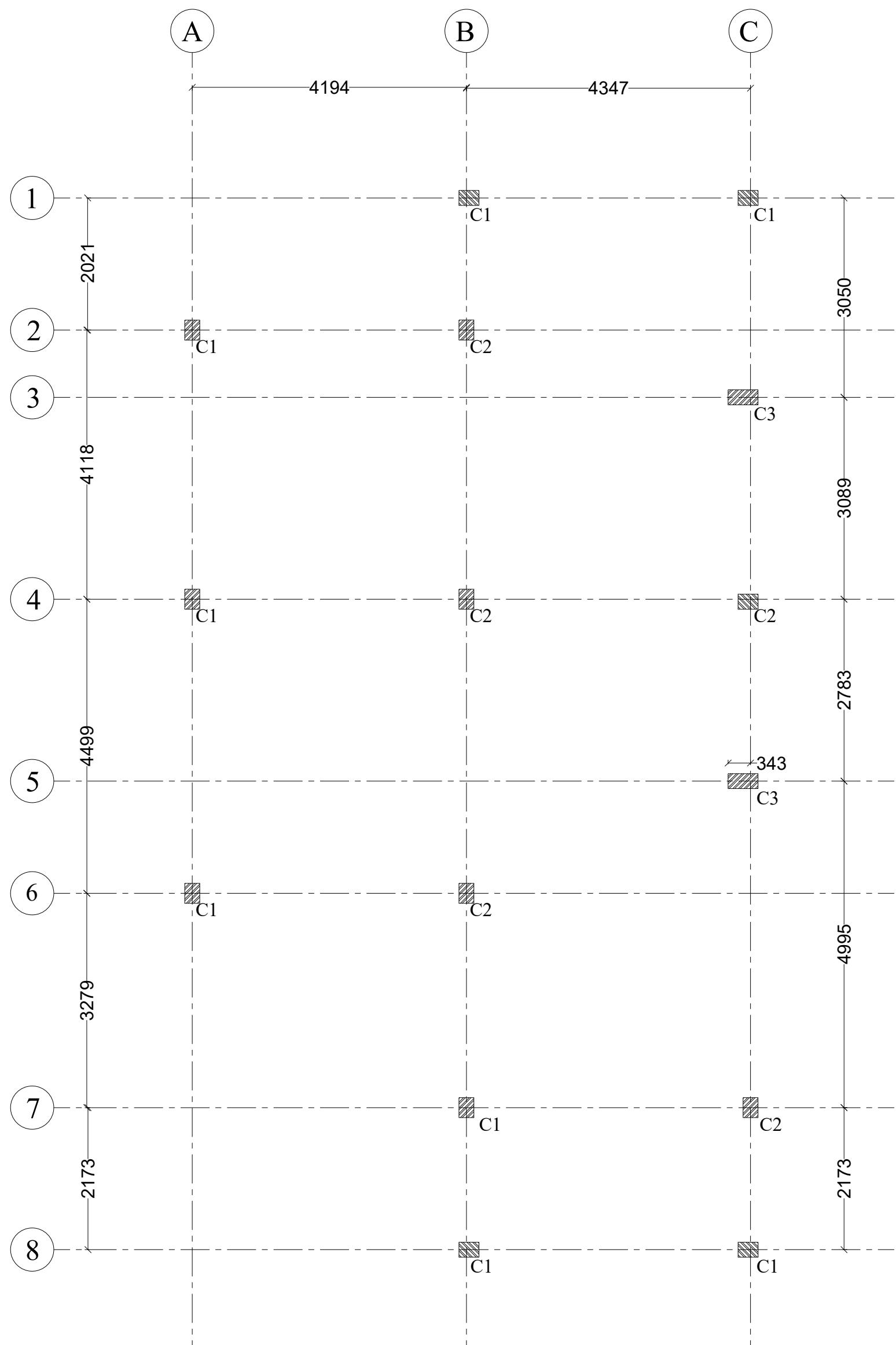
COLUMN & FOOTING LAYOUT

PROJECT NAME: GOOD HOME-1	DRAWING BY- S. ARBAS KHAN K. VIJAY KUMAR S. Md. A. SALMAN T. THULSI K. POOJITHA	DRAWING TITLE:- STRUCTURAL DRAWING
MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE Department of Civil Engineering Date: 20/03/2020	DRAWING NO. :- GH/STRL PLAN/002	SBC - 200 KN/m ² Sesmic zone II, Grade of concrete: M20, Steel Grade Fe 500



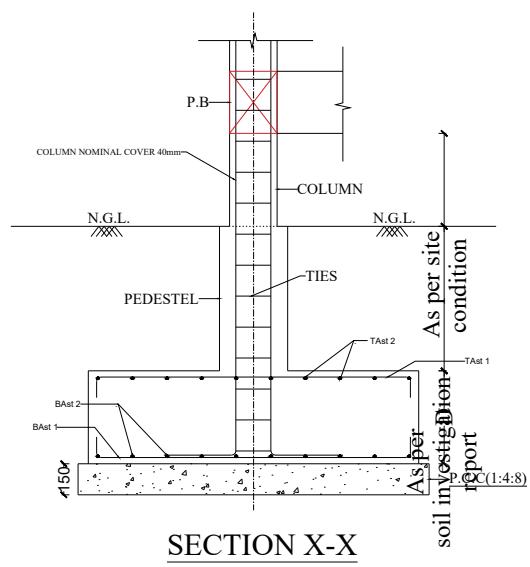
COLUMN LAYOUT(GROUND FLOOR)

PROJECT NAME: GOOD HOME-1	DRAWING BY- S. ARBAS KHAN K. VIJAY KUMAR S. Md. A. SALMAN T. THULSI K. POOJITHA	DRAWING TITLE:- STRUCTURAL DRAWING
 MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE Department of Civil Engineering Date: 20/03/2020	DRAWING NO. :- GH/STRL PLAN/003 SBC - 200 KN/m² Sesmic zone II, Grade of concrete: M20, Steel Grade Fe 500	

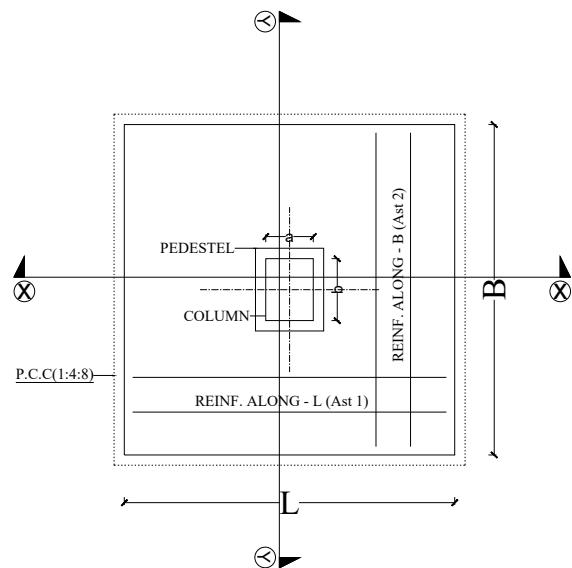


COLUMN LAYOUT(FIRST FLOOR)

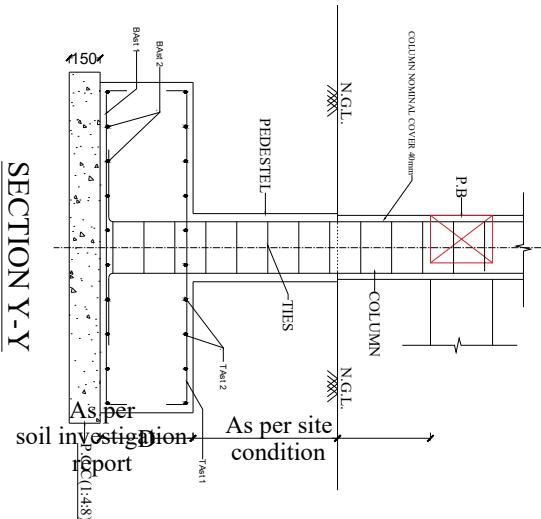
PROJECT NAME: GOOD HOME-1	DRAWING BY- S. ARBAS KHAN K. VIJAY KUMAR S. Md. A. SALMAN T. THULSI K. POOJITHA	DRAWING TITLE:- STRUCTURAL DRAWING
 MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE Department of Civil Engineering Date: 20/03/2020	DRAWING NO. :- GH/STRL PLAN/003 SBC - 200 KN/m ² Sesmic zone II, Grade of concrete: M20, Steel Grade Fe 500	



SECTION X-X



TYPICAL FOOTING PLAN



SECTION Y-Y

SCHEDULE OF FOOTING FOR SBC- 200 KN/mm²

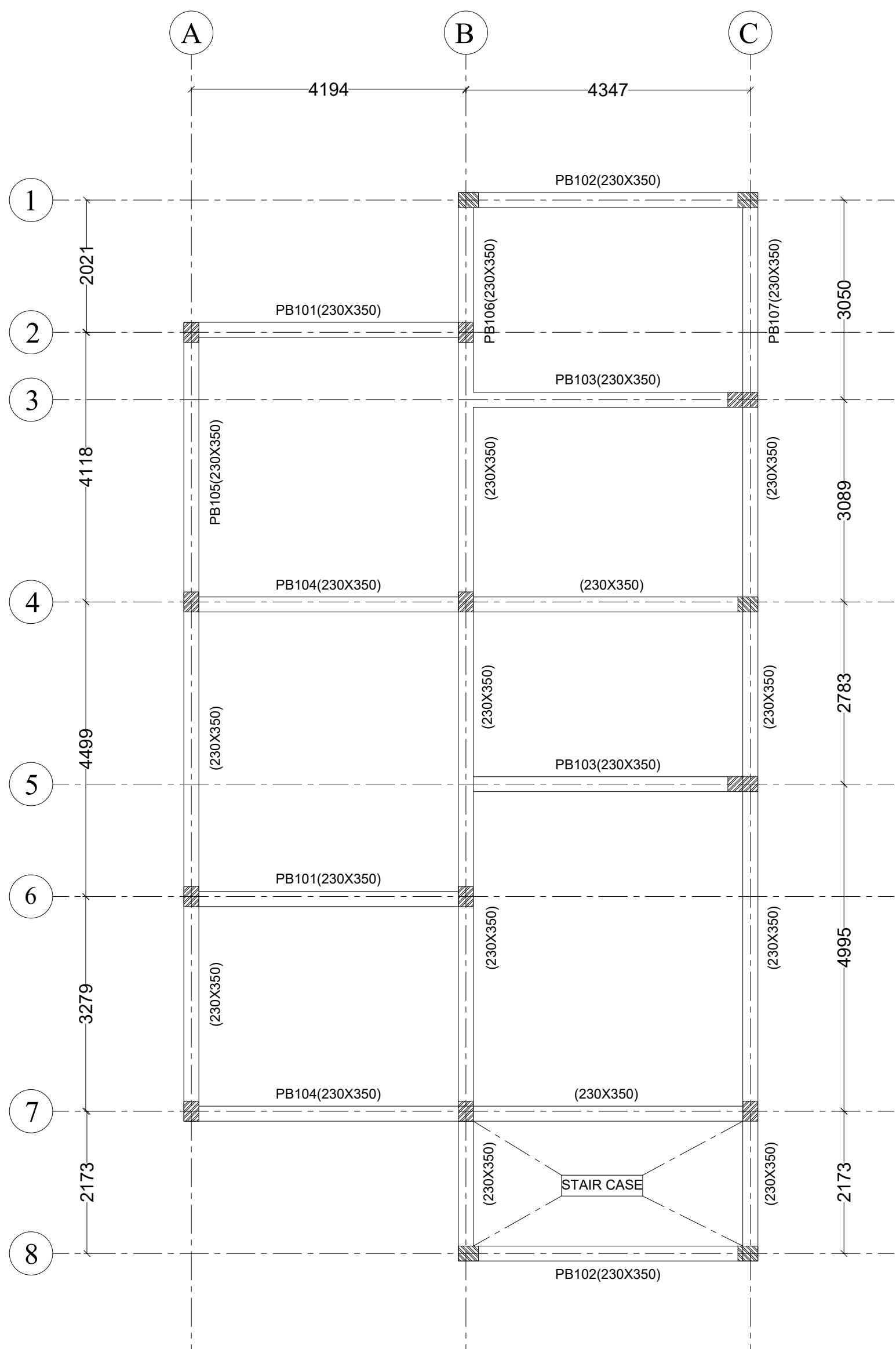
FOOTING GROUP	MIX	FOOTING SIZE (mm) L X B	DEPTH (mm) D	Bottom Reinforcement		Top Reinforcement	
				Reinf. Along - L (BAst 1)	Reinf. Along - B (BAst 2)	Reinf. Along - L (Tast 1)	Reinf. Along - B (Tast 2)
F1	M25	1700 X 1700	450	Ø12 @ 150mm c/c	Ø12 @ 150mm c/c	Ø12 @ 150mm c/c	Ø12 @ 150mm c/c
F2	M25	1300 X 1300	450	Ø12 @ 150mm c/c	Ø12 @ 150mm c/c	Ø12 @ 150mm c/c	Ø12 @ 150mm c/c

SCHEDULE OF COLUMN

COLUMN GROUP	COLUMN SIZE (mm)		Reinforcement Bars	SECTION	
	Length (a)	Breadth (b)			
C1	230	300	• 4 - #16 mm		1 TIE
C2	230	300	◦ 2 - #12 mm • 4 - #16 mm		1 TIE
C3	230	450	• 8 - #16 mm		1 TIE

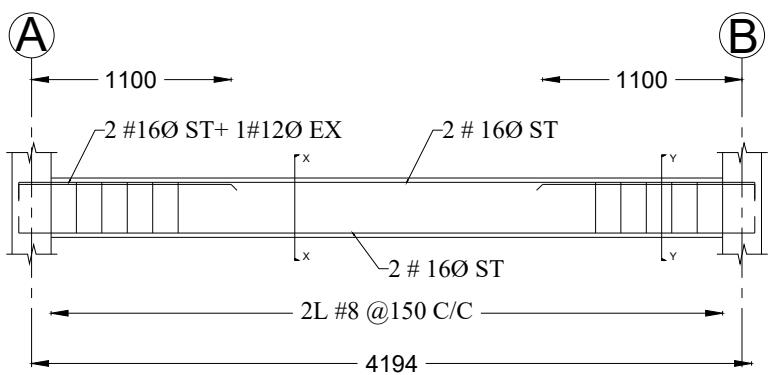
FOOTING & COLUMN DETAILS

PROJECT NAME: GOOD HOME-1	DRAWING BY- S. ARBAS KHAN K. VIJAY KUMAR S. Md. A. SALMAN T. THULSI K. POOJITHA	DRAWING TITLE:- STRUCTURAL DRAWING
MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE Department of Civil Engineering Date: 20/03/2020	DRAWING NO. :- GH/STRL PLAN/003	SBC - 200 KN/m ² Sesmic zone II, Grade of concrete: M20, Steel Grade Fe 500

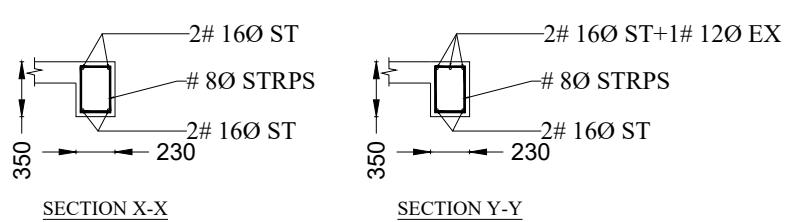


PLINTH BEAM LAYOUT

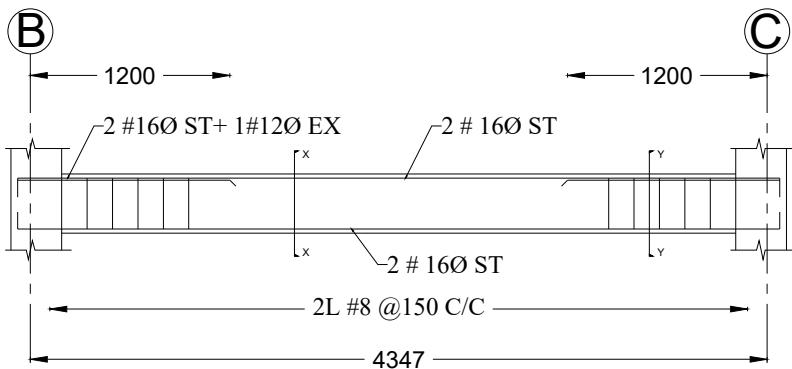
PROJECT NAME: GOOD HOME-1	DRAWING BY- S. ARBAS KHAN K. VIJAY KUMAR S. Md. A. SALMAN T. THULSI K. POOJITHA	DRAWING TITLE:- STRUCTURAL DRAWING
 MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE Department of Civil Engineering Date: 20/03/2020		DRAWING NO. :- GH/STRSL PLAN/006 SBC - 200 KN/m ² Sesmic zone II, Grade of concrete: M20, Steel Grade Fe 500



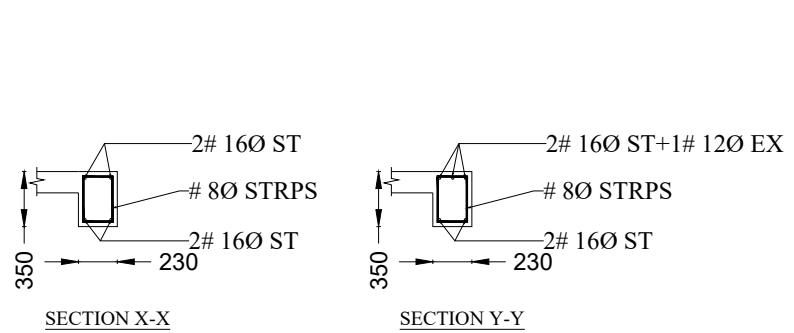
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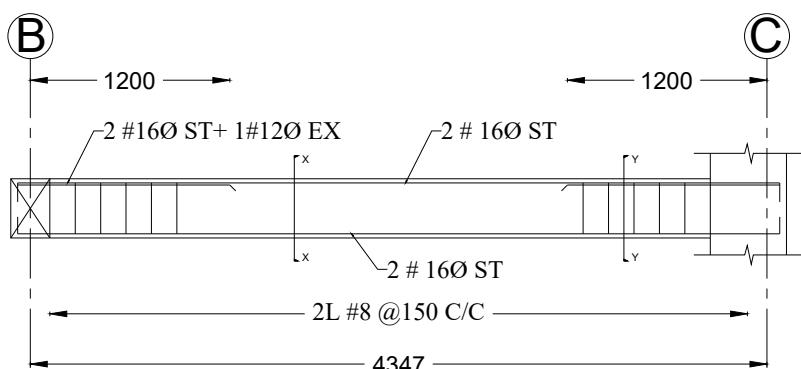
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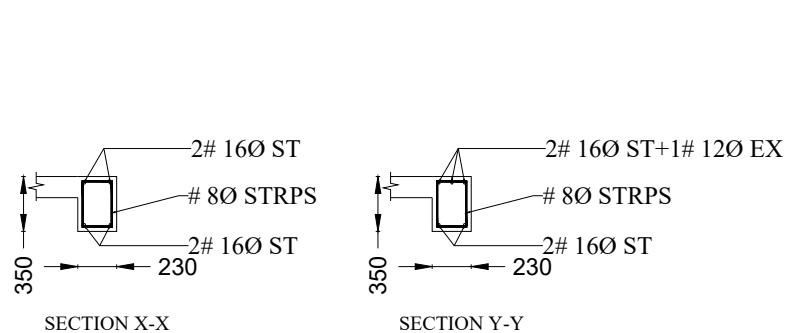
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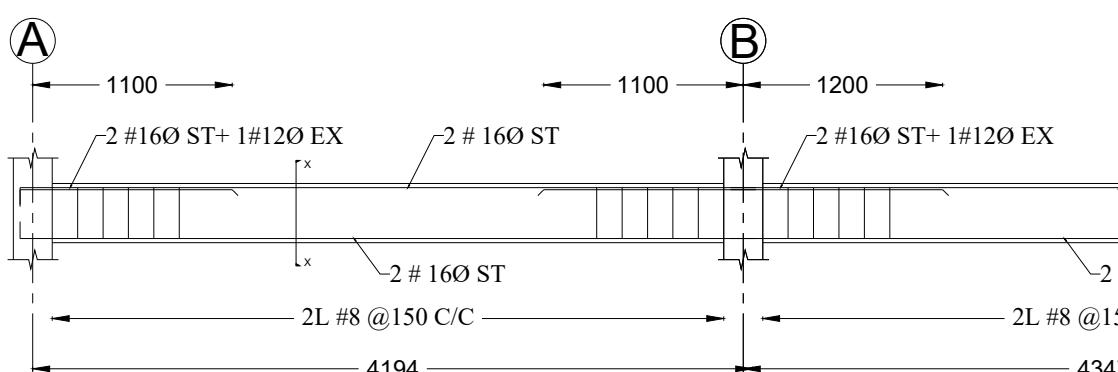
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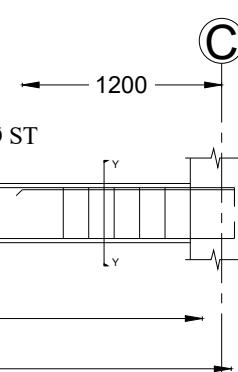
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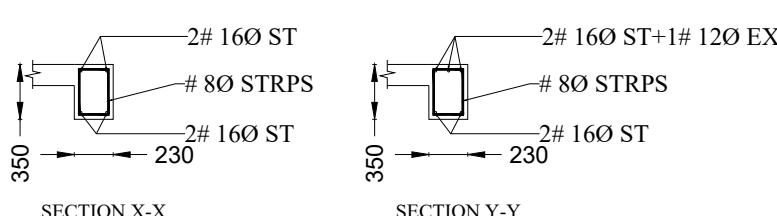
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PB104(230X350)



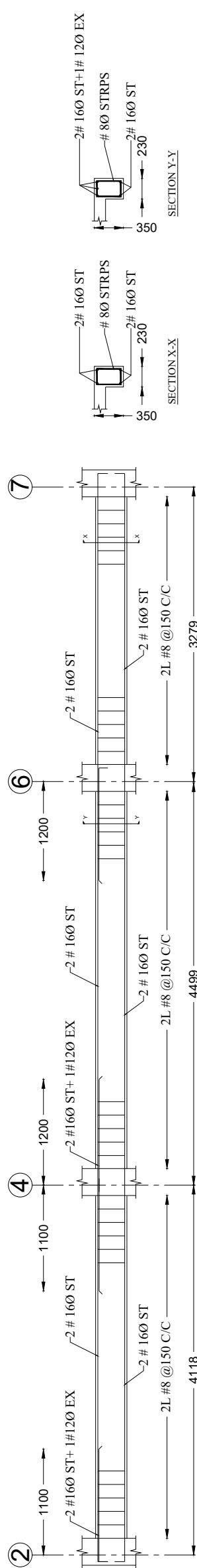
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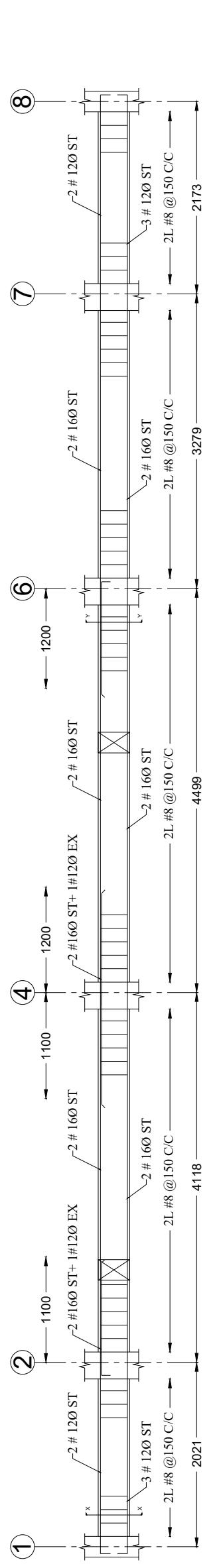
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PLINTH BEAM DETAILS

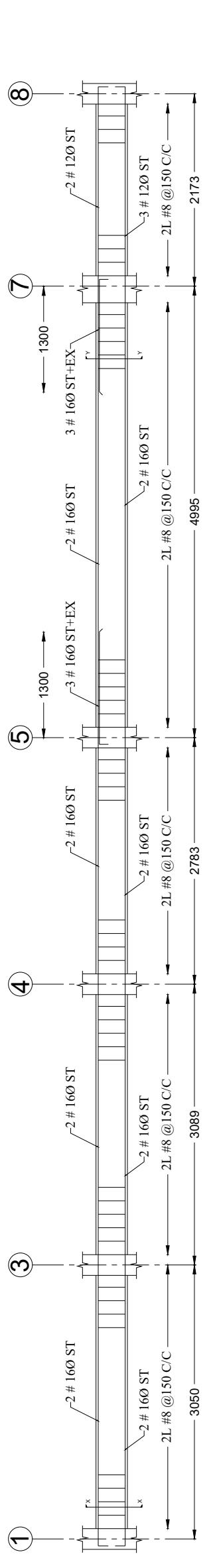
PROJECT NAME: GOOD HOME-1 MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE Department of Civil Engineering Date: 20/03/2020	DRAWING BY- S. ARBAS KHAN K. VIJAY KUMAR S. Md. A. SALMAN T. THULSI K. POOJITHA	DRAWING TITLE:- STRUCTURAL DRAWING DRAWING NO. :- GH/STRL PLAN/007 SBC - 200 KN/m² Sesmic zone II, Grade of concrete: M20, Steel Grade Fe 500
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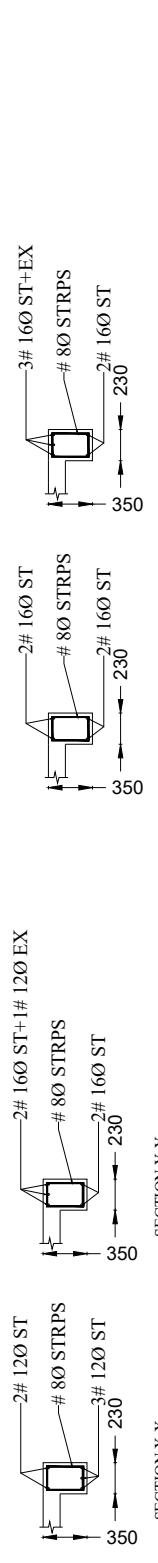
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PB106(230X350)



PB107(230X350)

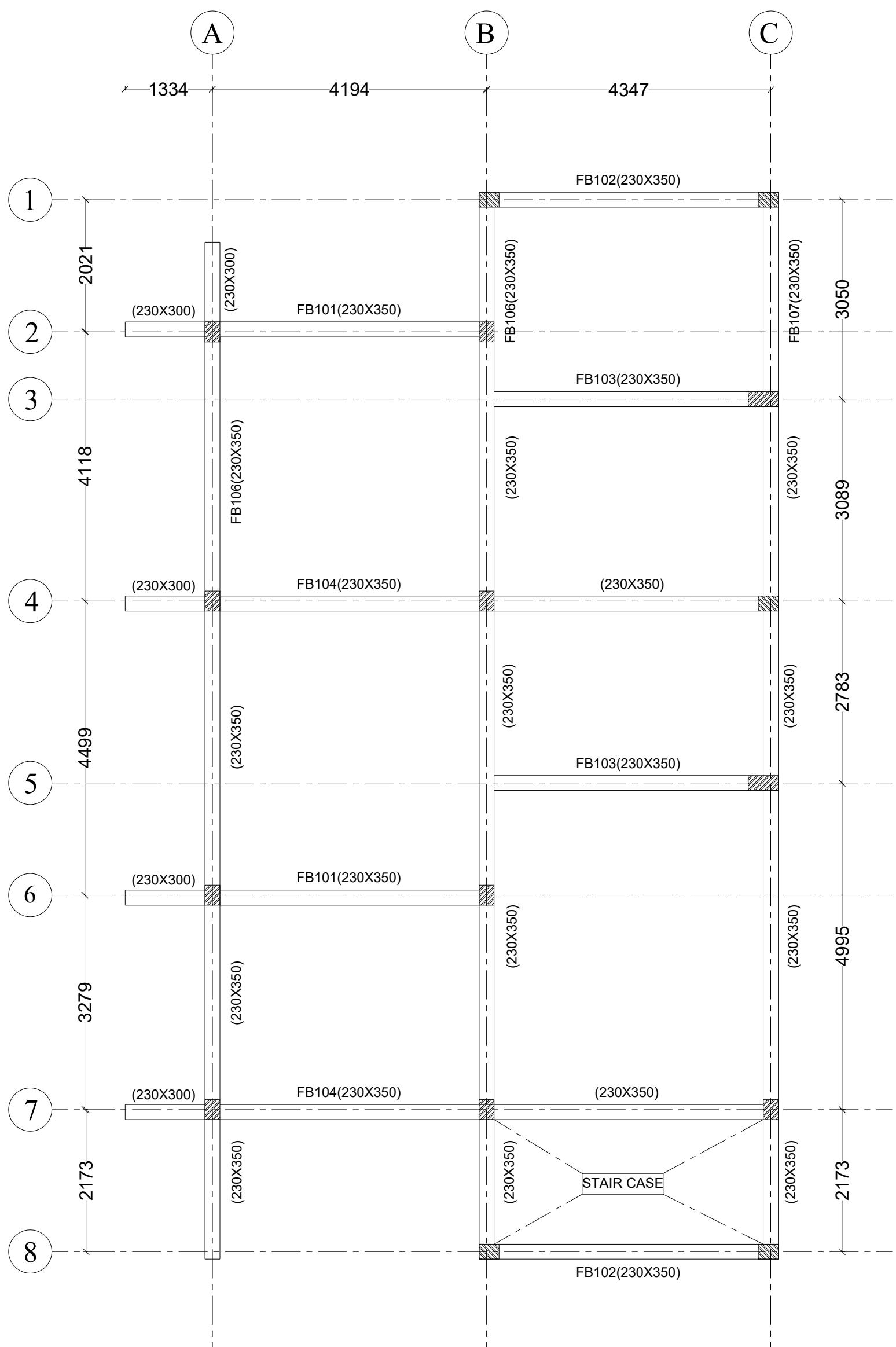


PB106(230X350)

PB107(230X350)

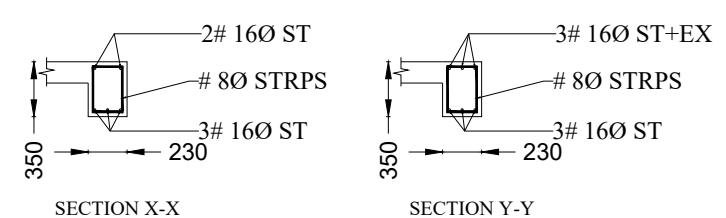
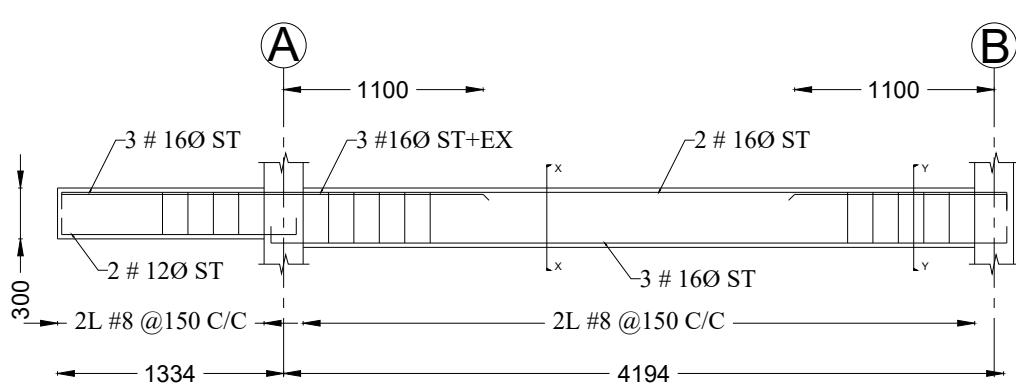
PLINTH BEAM DETAILS

PROJECT NAME: GOOD HOME-1 MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE Department of Civil Engineering Date: 20/03/2020	DRAWING BY- S. ARBAS KHAN K. VIJAY KUMAR S. Md. A. SALMAN T. THULSI K. POOJITHA	DRAWING TITLE:- STRUCTURAL DRAWING DRAWING NO. :- GH/STRL PLAN/008 SBC - 200 KN/m ² Sesmic zone II, Grade of concrete: M20, Steel Grade Fe 500
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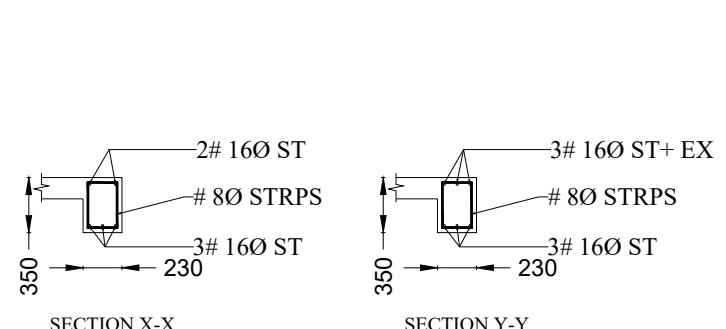
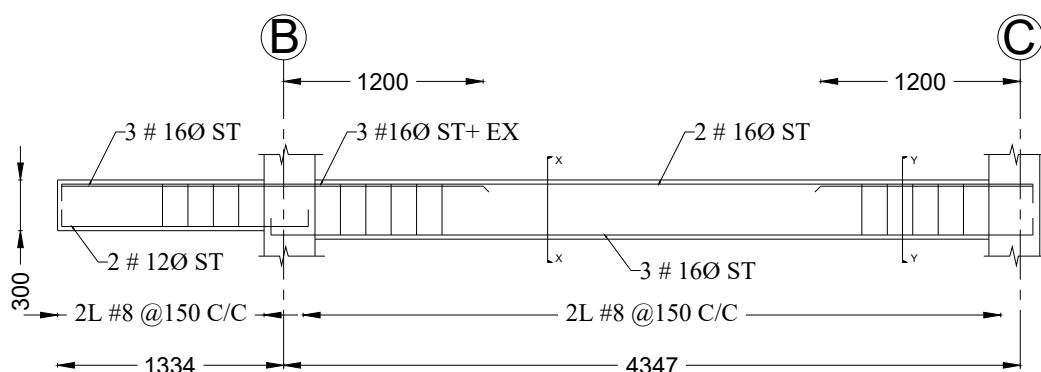


FIRST FLOOR BEAM LAYOUT

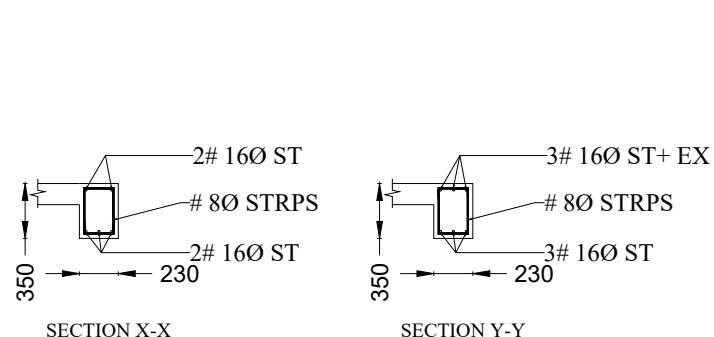
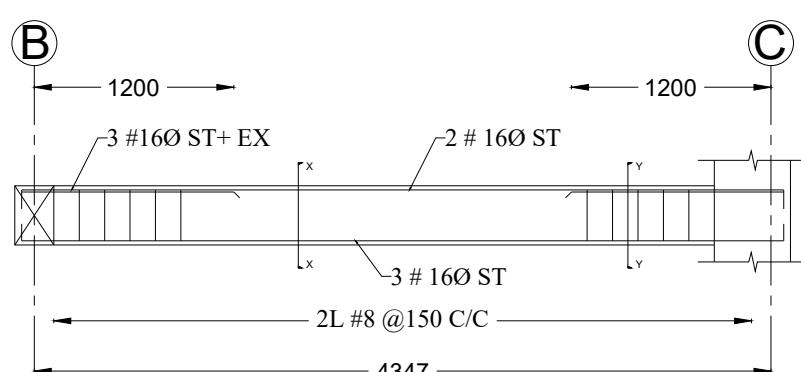
PROJECT NAME: GOOD HOME-1	DRAWING BY- S. ARBAS KHAN K. VIJAY KUMAR S. Md. A. SALMAN T. THULSI K. POOJITHA	DRAWING TITLE:- STRUCTURAL DRAWING
MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE Department of Civil Engineering Date: 20/03/2020	DRAWING NO. :- GH/STRL PLAN/009 SBC - 200 KN/m² Sesmic zone II, Grade of concrete: M20, Steel Grade Fe 500	



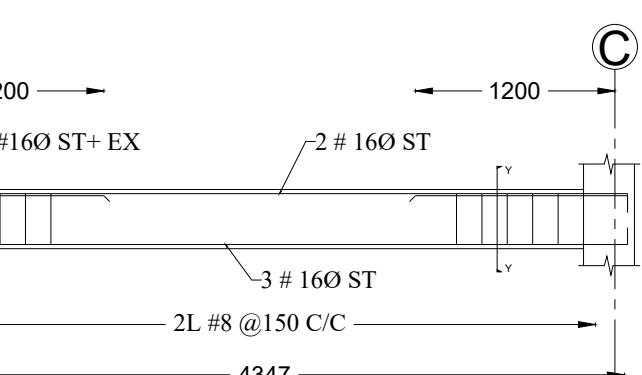
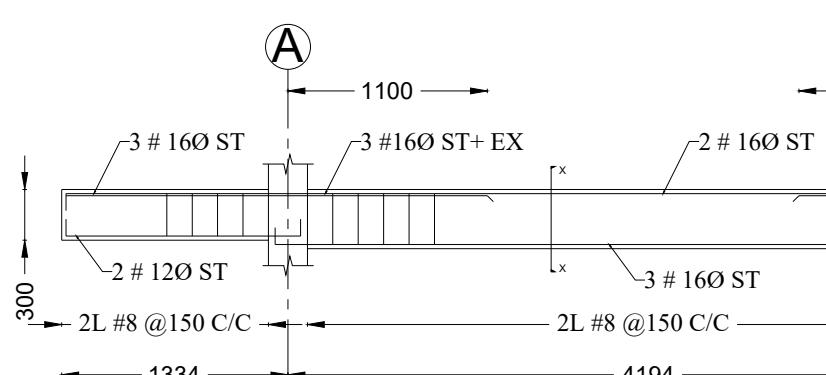
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FB102(230X350)



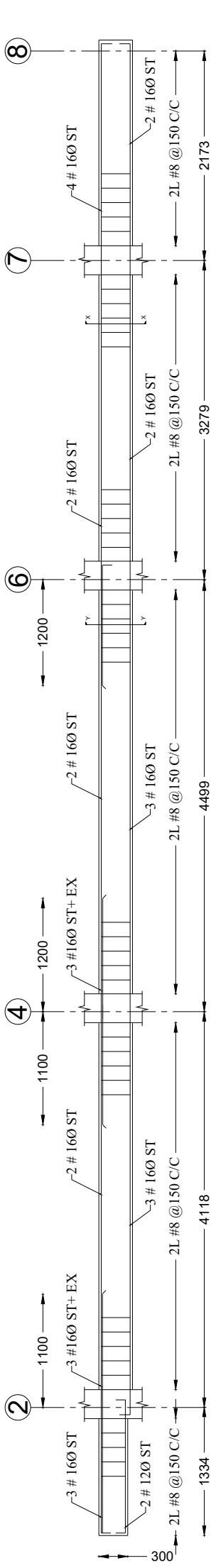
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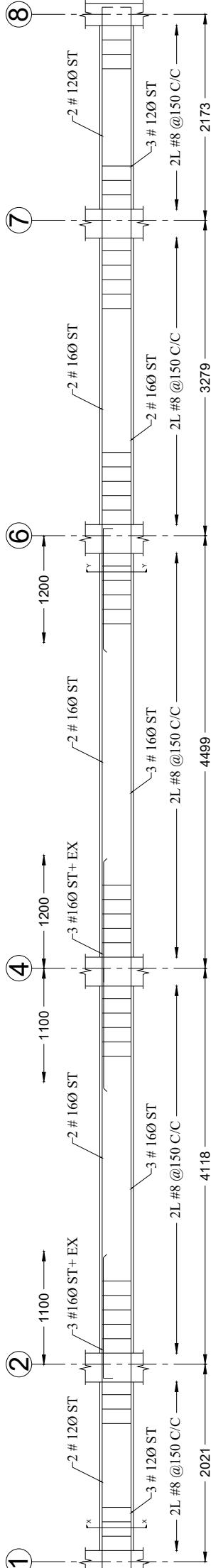
FB104(230X350)

FIRST FLOOR BEAM DETAILS

PROJECT NAME: GOOD HOME-1 MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE Department of Civil Engineering Date: 20/03/2020	DRAWING BY- S. ARBAS KHAN K. VIJAY KUMAR S. Md. A. SALMAN T. THULSI K. POOJITHA	DRAWING TITLE:- STRUCTURAL DRAWING DRAWING NO. :- GH/STRL PLAN/010 SBC - 200 KN/m ² Sesmic zone II, Grade of concrete: M20, Steel Grade Fe 500
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FB105(230X350)



FB106(230X350)



FB106(230X350)



FB106(230X350)



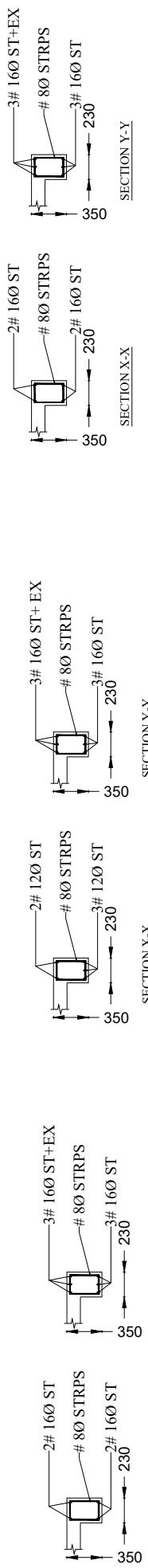
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FB107(230X350)



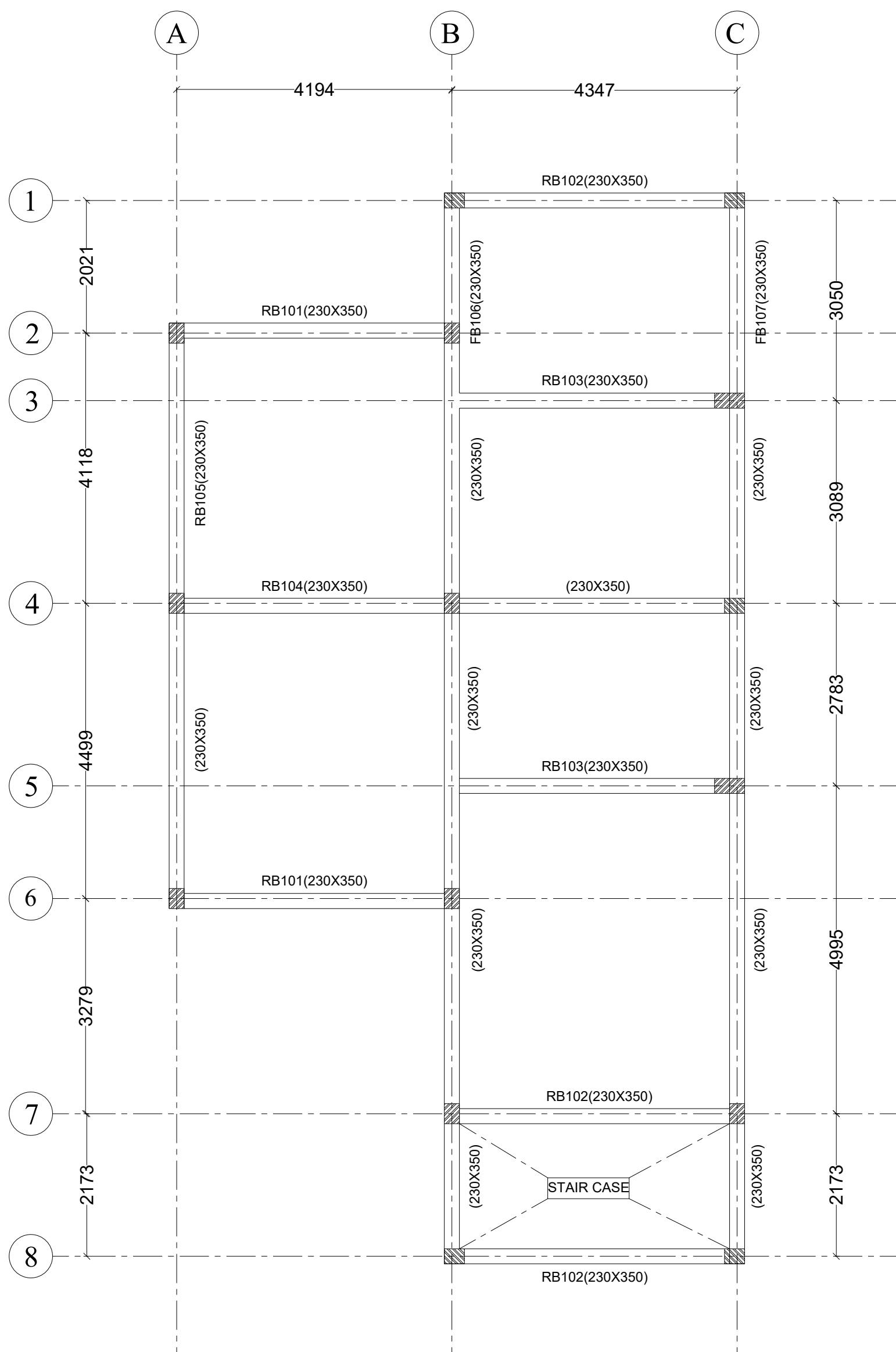
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SECTION X-X

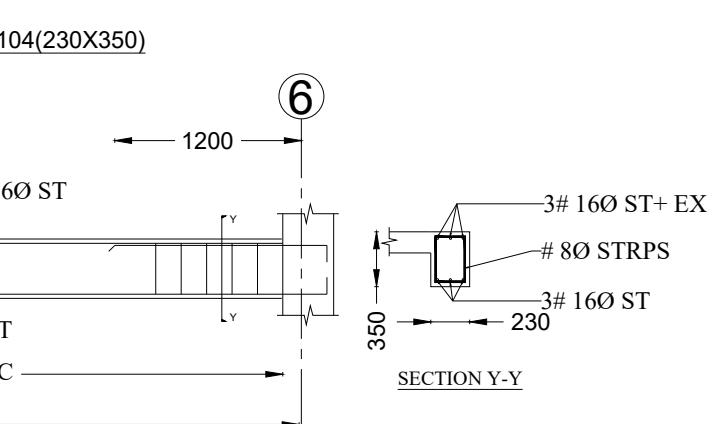
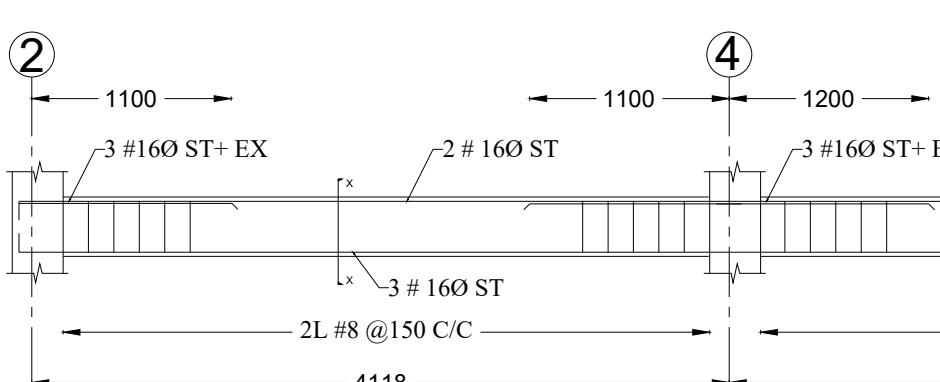
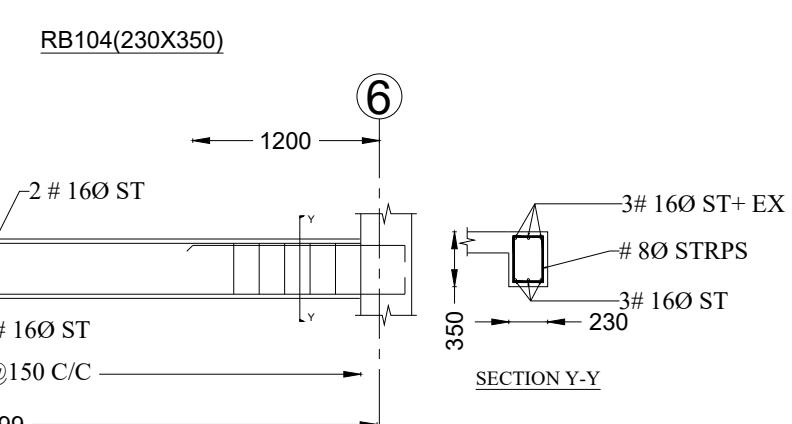
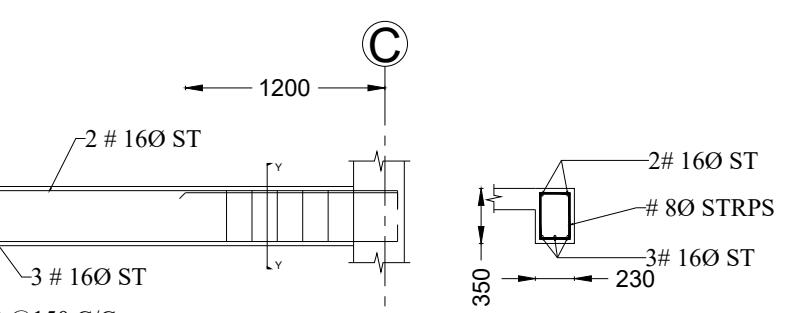
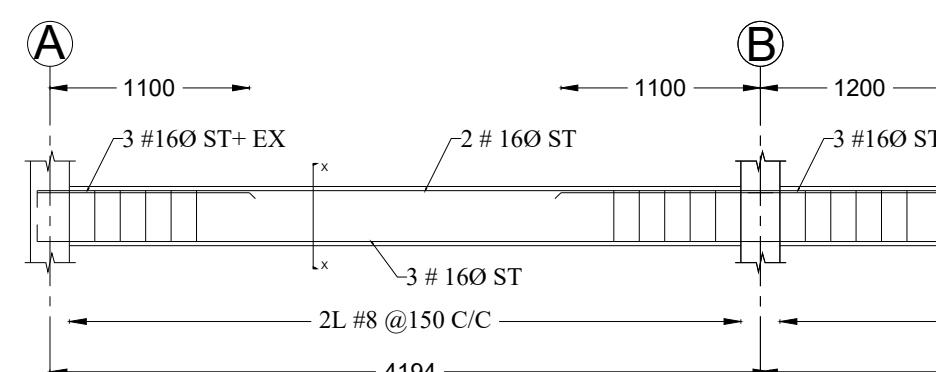
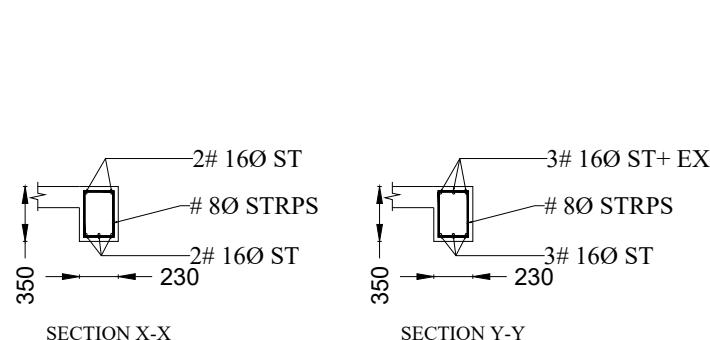
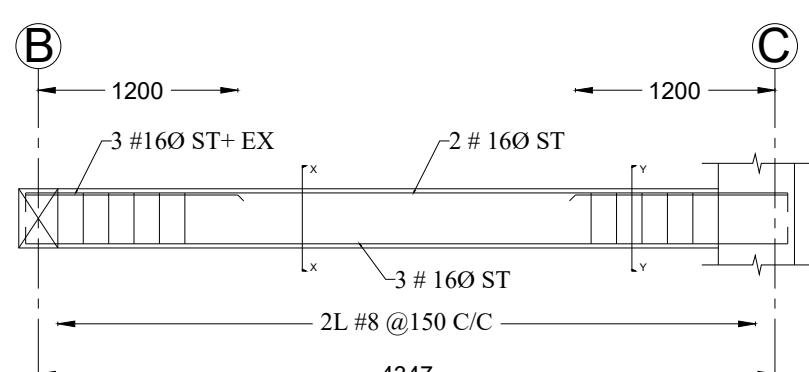
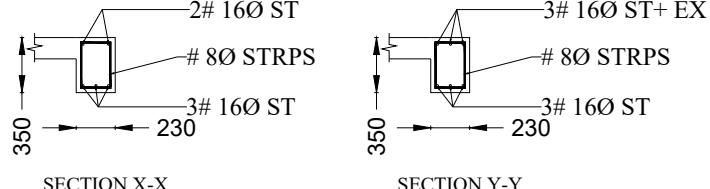
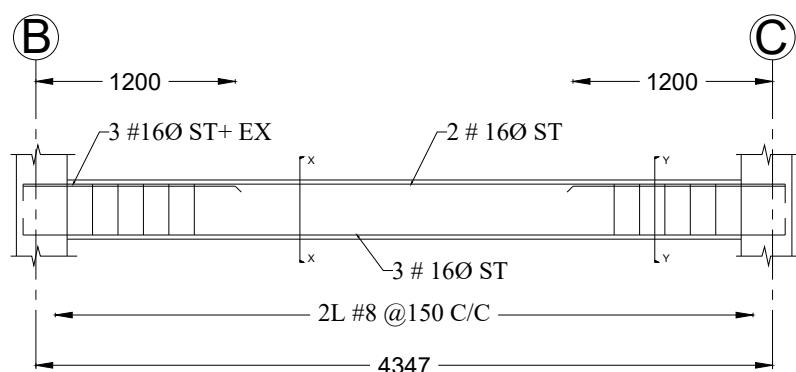
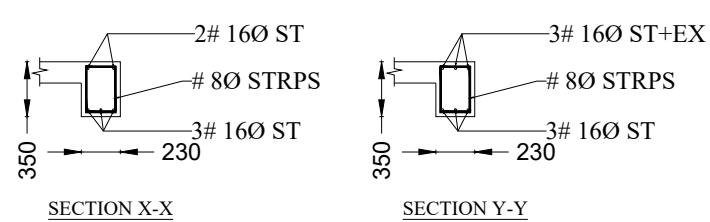
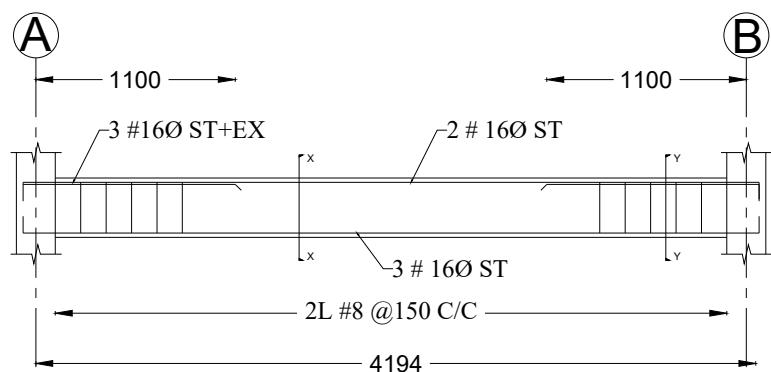
SECTION Y-Y

PROJECT NAME: GOOD HOME-1	DRAWING BY- S. ARBAS KHAN K. VIJAY KUMAR S. Md. A. SALMAN T. THULSI K. POOJITHA	DRAWING TITLE:- STRUCTURAL DRAWING
MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE Department of Civil Engineering Date: 20/03/2020	DRAWING NO. :- GH/STRL PLAN/011	SBC - 200 KN/m ² Sesmic zone II, Grade of concrete: M20, Steel Grade Fe 500



ROOF BEAM LAYOUT

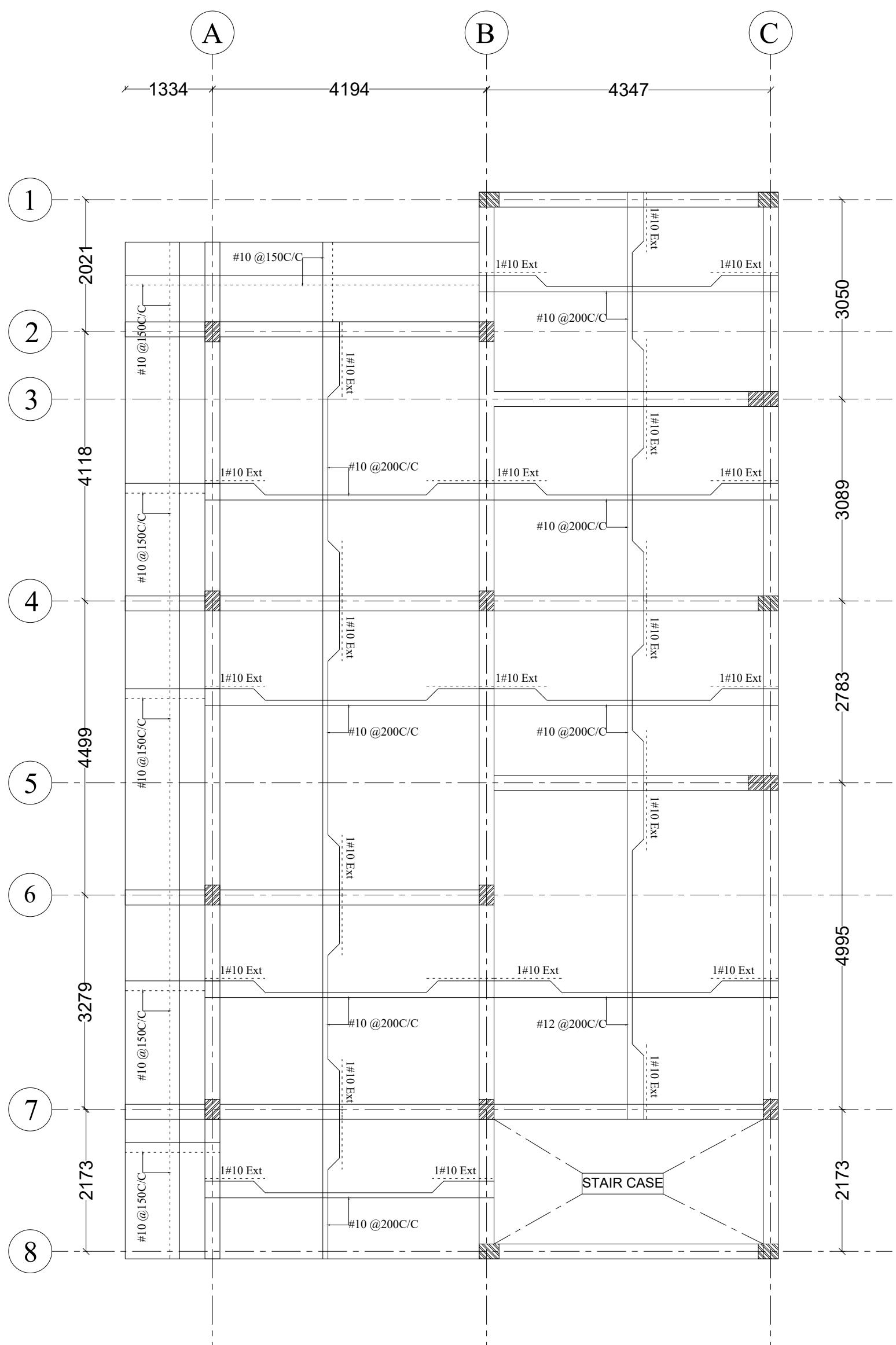
PROJECT NAME: GOOD HOME-1	DRAWING BY- S. ARBAS KHAN K. VIJAY KUMAR S. Md. A. SALMAN T. THULSI K. POOJITHA	DRAWING TITLE:- STRUCTURAL DRAWING
MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE Department of Civil Engineering Date: 20/03/2020	DRAWING NO. :- GH/STRSL PLAN/012	SBC - 200 KN/m ² Sesmic zone II, Grade of concrete: M20, Steel Grade Fe 500



RB105(230X350)

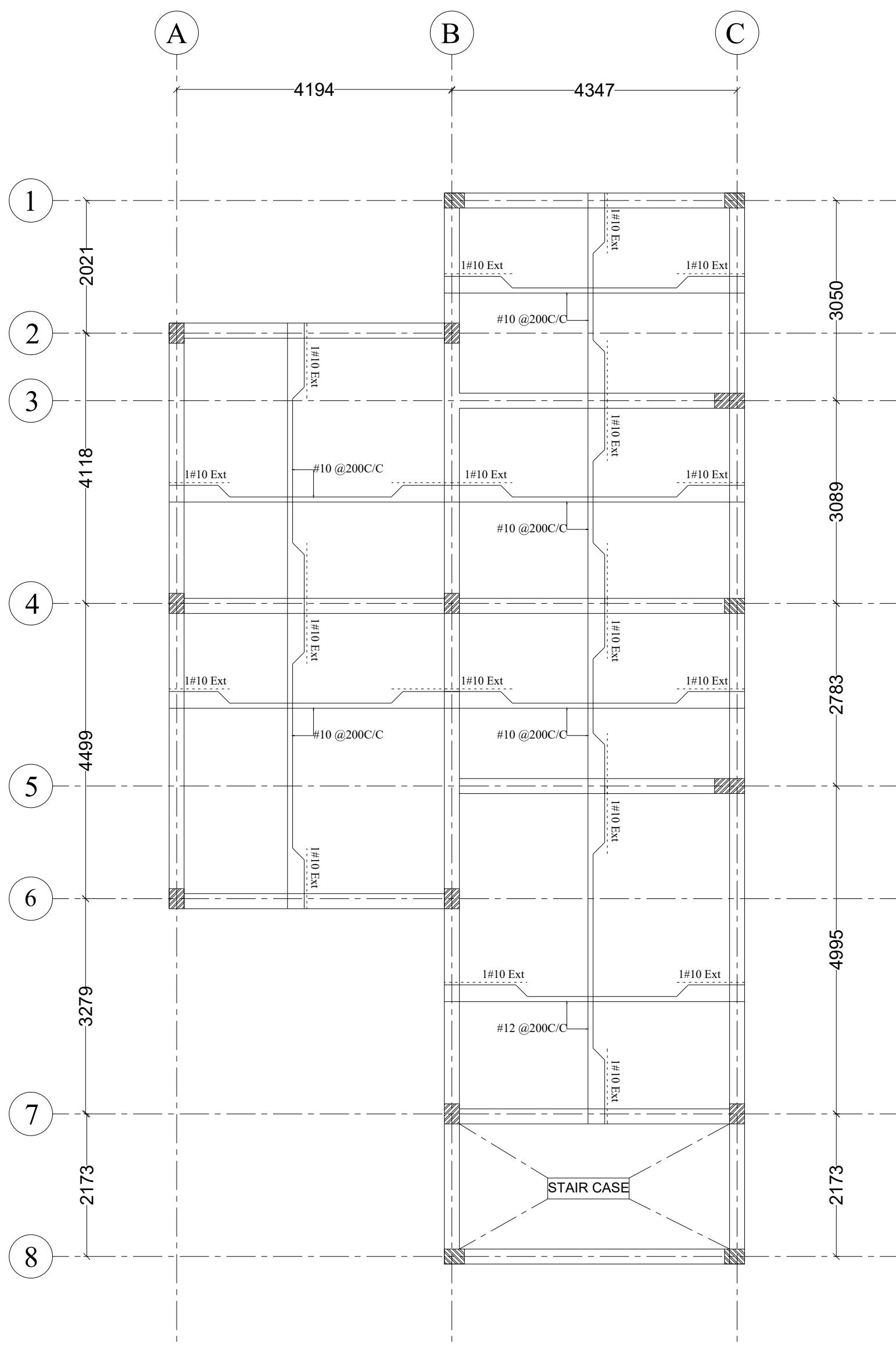
ROOF BEAM DETAILS

PROJECT NAME: GOOD HOME-1	DRAWING BY- S. ARBAS KHAN K. VIJAY KUMAR S. Md. A. SALMAN T. THULSI K. POOJITHA	DRAWING TITLE:- STRUCTURAL DRAWING
MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE Department of Civil Engineering Date: 20/03/2020	DRAWING NO. :- GH/STRL PLAN/013	SBC - 200 KN/m ² Sesmic zone II, Grade of concrete: M20, Steel Grade Fe 500



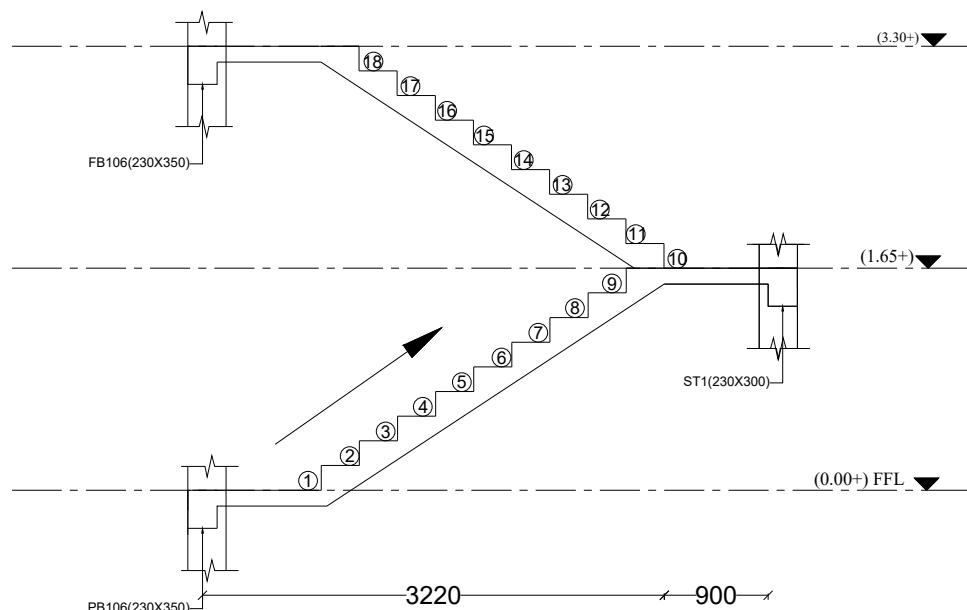
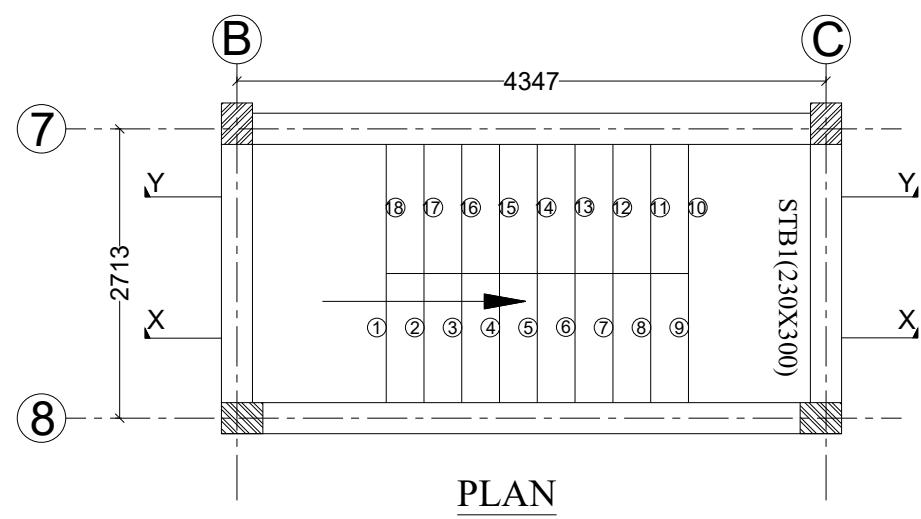
FIRST FLOOR SLAB LAYOUT

PROJECT NAME: GOOD HOME-1	DRAWING BY- S. ARBAS KHAN K. VIJAY KUMAR S. Md. A. SALMAN T. THULSI K. POOJITHA	DRAWING TITLE:- STRUCTURAL DRAWING
MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE Department of Civil Engineering Date: 20/03/2020	DRAWING NO. :- GH/STRL PLAN/014	SBC - 200 KN/m ² Sesmic zone II, Grade of concrete: M20, Steel Grade Fe 500

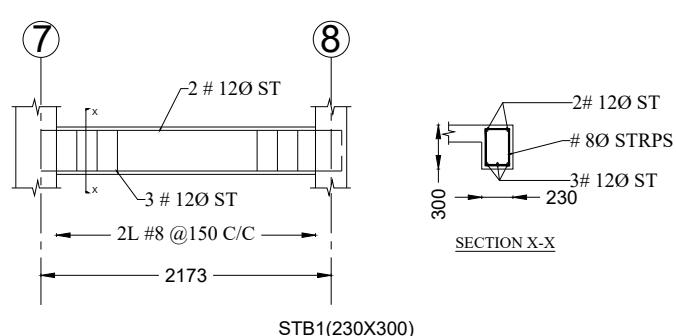
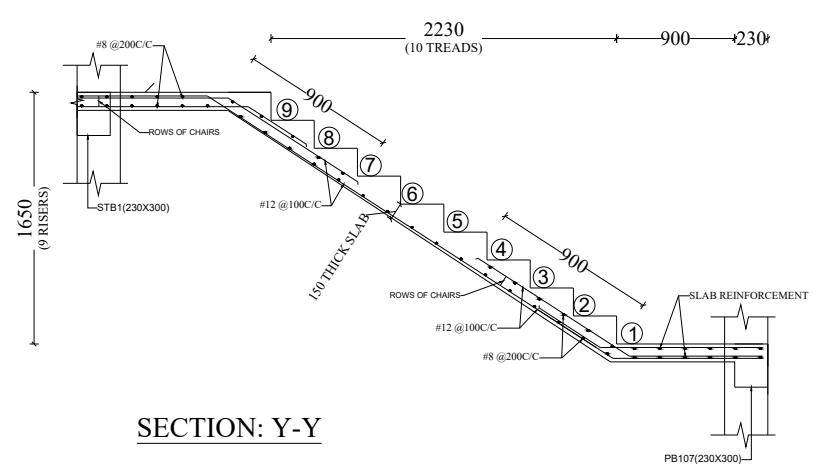
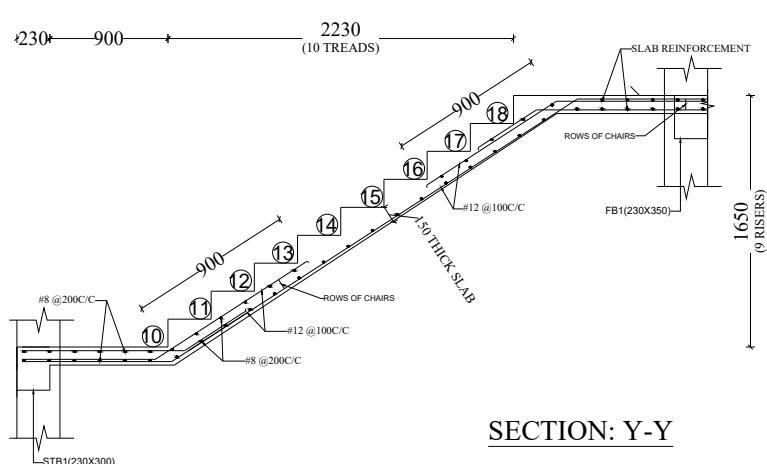


ROOF SLAB LAYOUT

PROJECT NAME: GOOD HOME-1	DRAWING BY- S. ARBAS KHAN K. VIJAY KUMAR S. Md. A. SALMAN T. THULSI K. POOJITHA	DRAWING TITLE:- STRUCTURAL DRAWING
MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE Department of Civil Engineering Date: 20/03/2020	DRAWING NO. :- GH/STRL PLAN/015	SBC - 200 KN/m ² Sesmic zone II, Grade of concrete: M20, Steel Grade Fe 500



CROSS SECTION



TYPICAL STAIRCASE PLAN

PROJECT NAME: GOOD HOME-1	DRAWING BY- S. ARBAS KHAN K. VIJAY KUMAR S. Md. A. SALMAN T. THULSI K. POOJITHA	DRAWING TITLE:- STRUCTURAL DRAWING
MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE Department of Civil Engineering Date: 20/03/2020	DRAWING NO. :- GH/STRL PLAN/016	SBC - 200 KN/m ² Sesmic zone II, Grade of concrete: M20, Steel Grade Fe 500