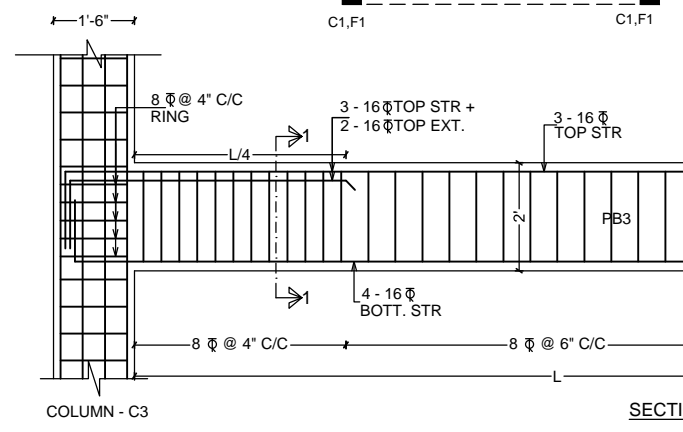
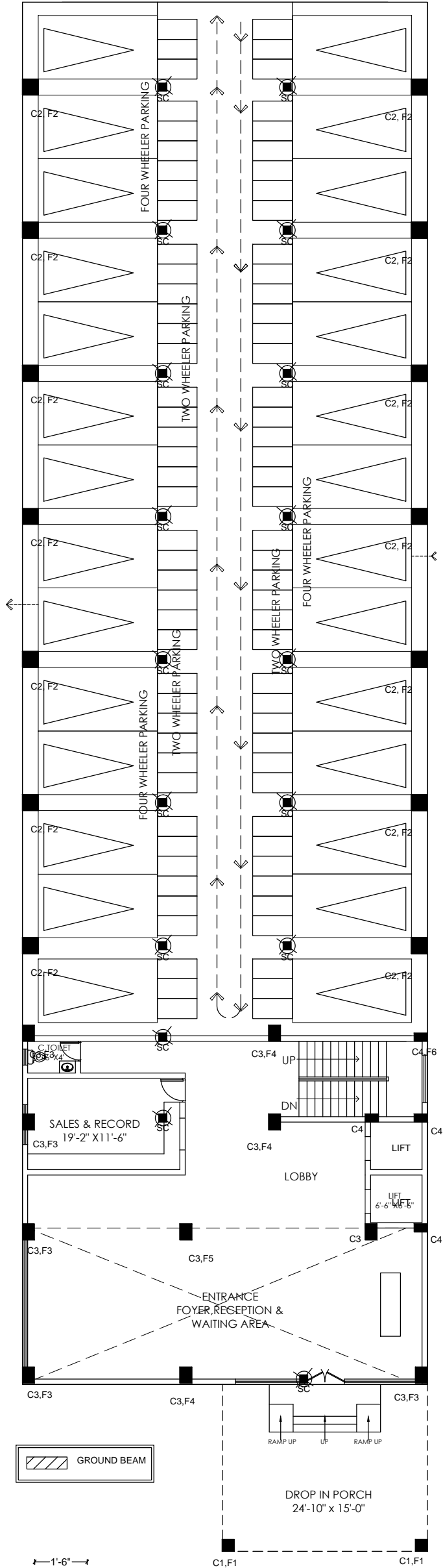


KEY PLAN FOR GROUND BEAM & PLINTH BEAMS



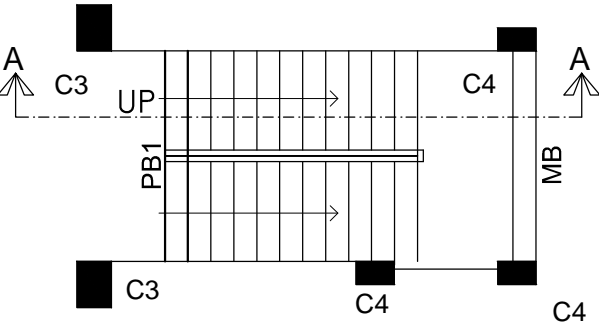
CUBE TEST REQUIRED		
QUANTITY OF CONCRETE IN CUM.	SET OF SAMPLES FOR 7 DAYS CUBE TEST	SET OF SAMPLES FOR 28 DAYS CUBE TEST
1-5	1	1
6-15	2	2
16-30	3	3
31-50	4	4
51-100	6	6

* 7 DAYS & 28 DAYS TEST REPORT SHALL BE SUBMITTED AFTER CASTING OTHER WISE WE WILL NOT BE RESPONSIBLE FOR CONCRETE STRENGTH .

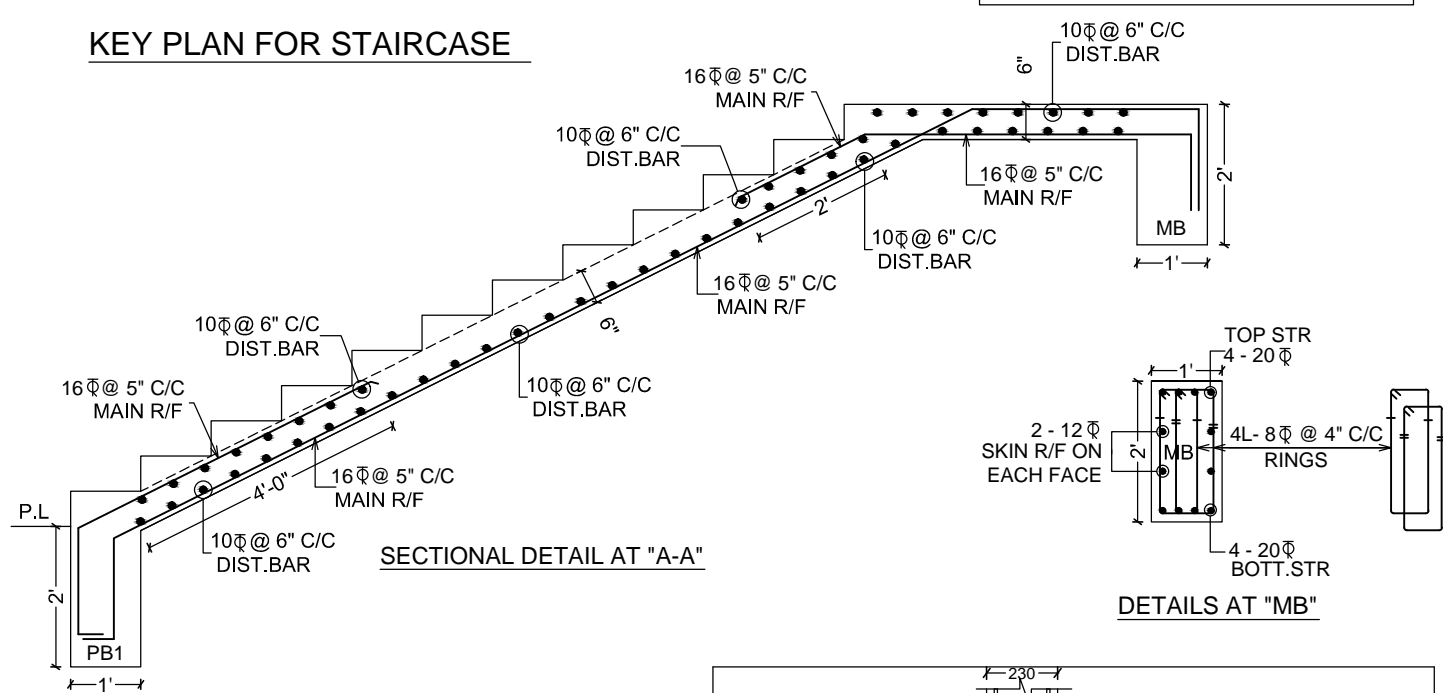
SCHEDULE FOR GROUND BEAM & PLINTH BEAMS.									
BEAM TYPE	SIZE		TOP R/F STRAIGHT	TOP EXTRA UPTO L/4 FROM SUPPORT	BOTTOM R/F STRAIGHT	BOTTOM EXTRA UPTO L/4 AT CENTRE	VERTICAL STIRRUPS		SKIN R/F ON EACH FACE
	WIDTH (INCHES)	DEPTH (INCHES)					UPTO L/4 FROM SUPPORT	AT CENTRE	
PB1	12"	24"	4 - 16 \varnothing	-----	4 - 16 \varnothing	-----	8 \varnothing @ 4" C/C	8 \varnothing @ 6" C/C	-----
PB2	12"	24"	3 - 20 \varnothing	-----	3 - 20 \varnothing	-----	8 \varnothing @ 4" C/C	8 \varnothing @ 6" C/C	-----
PB3	12"	24"	3 - 16 \varnothing	2 - 16 \varnothing	4 - 16 \varnothing	-----	8 \varnothing @ 4" C/C	8 \varnothing @ 6" C/C	-----
PB4	12"	24"	3 - 20 \varnothing	----	3 - 16 \varnothing	----	8 \varnothing @ 6" C/C	8 \varnothing @ 6" C/C	-----
PB5	12"	24"	3 - 16 \varnothing	----	3 - 16 \varnothing	----	8 \varnothing @ 4" C/C	8 \varnothing @ 6" C/C	-----
PB6	8"	16"	2 - 12 \varnothing	----	2 - 12 \varnothing	----	8 \varnothing @ 6" C/C	8 \varnothing @ 6" C/C	-----
PB7	8"	24"	3 - 16 \varnothing	----	3 - 16 \varnothing	----	8 \varnothing @ 4" C/C	8 \varnothing @ 4" C/C	-----
MB	12"	24"	4 - 20 \varnothing	-----	4 - 20 \varnothing	-----	4L-8 \varnothing @ 4" C/C	4L-8 \varnothing @ 4" C/C	2 - 12 \varnothing

SCHEDULE FOR STAIRS				
TYPE	THICKNESS (INCHES)	MAIN R/F	DIST. BAR	REMARKS
STAIR	6"	16 @ 5" C/C	10 @ 6" C/C	STAIRCASE

COLUMN	COLUMN DETAILS				RING PATTERN
	WIDTH	DEPTH	MAIN BARS	RINGS	
ST	12"	12"	4 - 12	8 @ 6" C/C	



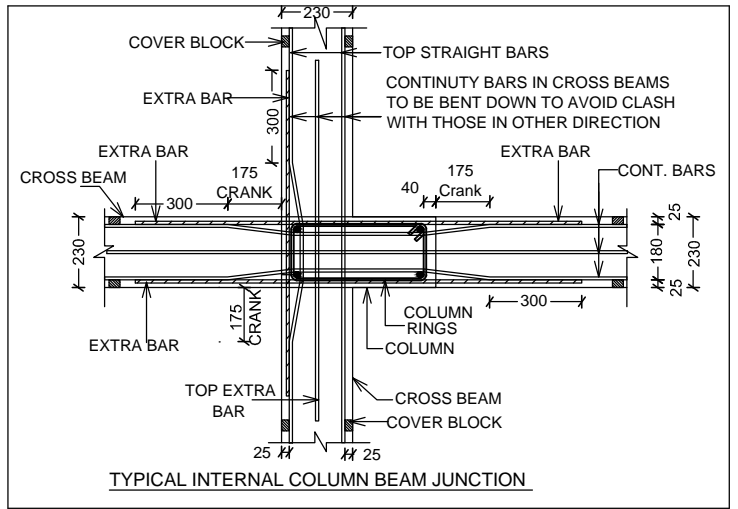
KEY PLAN FOR STAIRCASE



DEV. LENGTH TABLE OF BARS			
DIA OF BAR	DEV. LENGTH	DIA OF BAR	DEV. LENGTH
6 MM	12 INCHES	12 MM	24 INCHES
8 MM	16 INCHES	16 MM	30 INCHES
10 MM	20 INCHES	20 MM	38 INCHES
25 MM	50 INCHES	32 MM	WELDED

NOTE:- FOR 32 MM DIA BAR IT IS MANDATORY TO WELD THE LAPS

WELDED LAP
40 INCHES
32 MM DIA BAR
LAPS OF 32 MM DIA BAR SHALL BE WELDED.



BUILDING IS DESIGN FOR G+2 ONLY

GRADE OF CONCRETE - M25

GRADE OF STEEL - FE 500

ICA
(GROUND BEAM & PLINTH BEAM DETAILS)

- RCC LIFT WALL UPTO GROUND FLOOR SLAB LVL.
- "SC" COLUMN TERMINATED AT THIS LEVEL
- GROUND BEAM
- STUB "ST" CONNECTING GROUND BEAM TO PLINTH BEAM

FOR DIMENSIONS, LEVELS, CENTERLINE AND GENERAL ARRANGMENT REFER ARCHITECTURAL DRAWING.

1) CONSULTANT COPY 2) CLIENT'S COPY 3) SITE COPY 4) OFFICE COPY

- NOTE:-
- ALL DIMENSIONS ARE IN FEET INCHES.
 - S.B.C. OF THE SOIL IS ASSUMED AS 1000/500 K. AND SHALL BE VERIFIED AT SITE BY SITE ENGINEER.
 - MIN DEPTH OF FOUNDATION SHOULD BE 10 FEET BELOW N.G. LEVEL
 - USE M25 GRADE OF CONCRETE.
 - DENSITY OF BRICK ASSUME TO BE 850 KG/M³.
 - ALL STRUCTURAL STEEL REINFORCEMENT SHALL BE HIGH STRENGTH DEFORM BARS OF GRADE FE 500 CONFORMING TO IS 1786-1985 & MILD STEEL GRADE I CONFORMING TO IS 432-1982 (PART 1)
 - PROVIDE CLEAR COVER OF 50 mm FOR FOOTING R/F.
 - PROVIDE CLEAR COVER OF 40 mm FOR COLUMN R/F.
 - PROVIDE CLEAR COVER OF 25 mm FOR BEAM R/F AND 20 mm FOR SLAB R/F
 - NOT MORE THAN 50 % BARS SHOULD BE LAPPED AT ONE SECTION.
 - EXECUTION SHALL BE AS PER IS 456-2000.
 - FOR DIMENSIONS, LEVELS, CENTERLINE AND GENERAL ARRANGMENT REFER ARCHITECTURAL DRAWING.
 - ALL BARS SHOULD BE EXTENDED UPTO DEVELOPMENT LENGTH + 10 DIA OF BAR
 - LAP SHOULD BE EQUAL TO DEVELOPMENT LENGTH + 10 DIA OF BAR
 - USE OPC/PPC WITH MINIMUM GRADE 43/53 AND USE MAXIMUM WATER CEMENT RATIO 0.5
 - NO OVERLAPS ARE ALLOWED IN FOOTING
 - ALL AGGREGATE FOR FOOTING 30mm DOWN AND FOR COLUMN 20mm DOWN
 - USE CURED MORTAR COVER BLOCKS OF SAME STRENGTH OF CONCRETE
 - STRIPPING OF TIME FOR SHUTTERING AS PER IS 456-2000
 - TOLERANCES FOR FORMWORK, REINFORCEMENT, COVER AS PER IS 456-2000
 - BACKFILLING IN COLUMN PITS SHALL BE WITH APPROVED SOIL AND COMPACTED PROPERLY TO AVOID SETTLEMENT
 - USE DESIGNED COATED PLYWOOD FOR SHUTTERING & FORMWORK
 - USE STEEL PROPS & STEEL SUPPORT FOR FORMWORK
 - BURNED OIL NOT PERMITTED FOR SHUTTERING, USE MOULD OIL.
 - USE SUPER-PLASTICISER TO MAINTAIN WATER/CEMENT RATIO
 - CURING-EXPOSED SURFACE OF CONCRETE SHALL BE KEPT CONTINUOUSLY IN WET CONDITION MINIMUM FOR 14 DAYS.
 - GHODI OR CHAIR SPACING @ 600 C/C
 - GHODI OR CHAIR HEIGHT = (SLAB THICKNESS - 130MM + (2X DIA BARS))
 - ALL OUTER PLINTH BEAMS BOTTOMS SHALL BE 100 MM BELOW G.L.
 - ALL INNER BEAMS SHALL BE AT PLINTH LEVEL
 - STUB COLUMN SC ARE ONLY UPTO PLINTH LEVEL
 - BUILDING IS DESIGN FOR G+2 ONLY
 - IN BOX FOOTING "L" SHALL BE (D-150)
 - IN RAFT, BOX AND ECCENTRIC FOOTING DO NOT PROVIDE PEDESTAL UNTILL & UNLESS SPECIFIED
 - HIGHER DIAMETER OF BAR SHALL BE PLACED AT SHORTER FACE OF COLUMN
 - SUPERVISION AT OWNER'S RISK.
 - FOR ISOLATED FOOTING LONG BARS SHALL BE KEPT BELOW SHORT BARS.
 - FOR COMBINED & RAFT FOOTING SHORT BARS SHALL BE KEPT BELOW LONG BARS.
 - TYPICAL DETAILS OF SWEAR BARS AT EVERY JUNCTION OF MAIN BEAM AND SECONDARY BEAM

40) GRADE OF CONCRETE FOR P.C.C. - 1:4:8

41) CONCRETE AND STEEL MATERIAL TESTING AT OWNER'S RISK.

42) POSITION OF DRAIN PIPES IN TOILETS MAY VARY AS PER ARCHITECTURAL REQUIREMENT & SHALL BE 250MM AWAY FROM SUPPORT

STUDY PURPOSE		REVISION		DATE	
R.NO.	REVISION	DATE	DESIGN--	AEC	
1.			DEALT --	SHATRUGHNA	
2.			DATE--	24/04/2018	
3.			SCALE--	VARIABLE	
4.					

PROJECT:- PROPOSED ICAI AT PURENA, RAIPUR.(C.G.)

TITLE:- STRUCTURAL DETAILS OF PLINTH BEAM

OWNER:-

ARCHITECT :- ARCHITECT SANDEEP NEENA + ASSOCIATES

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Raipur, (C.G.)
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STRUCTURAL DESIGNER:-
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SUNRAJ BHASKAR CMPLX., SECOND FLR., PRATAP NAGAR,
Ph.No. 9970066936 e-mail: mail@aaajengineers.in

NOTE - THIS DRAWING SHOULD NOT BE CONSIDERED AS A LEGAL DOCUMENT