



FOUNDATION LAYOUT & SECTION DETAIL

IMPORTANT NOTES:-

GENERAL:-

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ARCHITECTURAL DRAWINGS AND OTHER INFRASTRUCTURAL ENGINEERING DRAWING.
- ALL DIMENSIONS AND LEVELS SHALL BE CHECKED & CO-RELATED WITH ARCHITECTURAL / INFRASTRUCTURAL ENGINEERING DRAWINGS.
- THIS SET OF DRAWINGS IS THE PROPERTY OF PARSHWA CONSULTANCY NOT TO BE USED OR COPIED WITHOUT HIS PRIOR PERMISSION.
- CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ALL TEMPORARY WORKS INCLUDING PLANKING AND SHORING OF TRENCHES AND PLANKING AND SHORING OF WALLS AND BUILDINGS ADJACENT TO ANY EXCAVATIONS.
- STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR QUALITY & QUANTITY OF MATERIAL MISUNDERSTANDING OF DRAWINGS, CURING, SCAFFOLDING, WELDING, FABRICATION AND QUALITY AND SUPERVISION OF WORK.
- IF THERE IS ANY DISCREPANCY, BETWEEN THIS AND ARCHITECTURAL / INFRASTRUCTURAL DRAWINGS, SHALL BE BROUGHT TO US IMMEDIATELY PRIOR TO EXECUTION OF WORK.
- UNLESS OTHERWISE STATED, ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS.
- ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED INSTEAD OF SCALED DIMENSIONS.
- UNLESS PROVISION IS MADE FOR WATER, SEWER OR ANY SERVICE PIPES SHALL NOT PASS THROUGH OR BE EMBEDDED IN R.C. BEAMS AND COLUMNS.
- UNLESS OTHERWISE STATED, FOOTINGS ARE CONCENTRIC WITH LOWER GROUND FLOOR COLUMNS.
- CONSIDERED SAFE BEARING CAPACITY OF SOIL IS **250KN/SQM** AT DEPTH OF 2.50m BELOW FROM N.G.L.
- SOIL STRATA AT THE GIVEN DEPTH OF FOOTING SHOULD BE VERIFIED BY SOIL (GEO TECHNICAL) CONSULTANT BEFORE CASTING FOOTING AND SHOULD BE CERTIFIED BY GEO-TECH CONSULTANT THAT THE SOIL STRATA IS AS PER SOIL TEST REPORT ONLY.
- THE CLIENT WILL BE FULLY RESPONSIBLE FOR CONSTRUCTION, SUPERVISION AND SHALL ENGAGE FULL TIME TECHNICALLY QUALIFIED ENGINEER ON SITE.

RCC WORK:-

CONCRETE:-

- MATERIALS LIKE CEMENT, FINE AGGREGATE, COARSE AGGREGATE, WATER, ETC. REQUIRED TO PRODUCE THE CONCRETE SHALL BE TO THE RESPECTIVE IS CODE, AS SPECIFIED IN IS CODE 456-2000.
- ALL FINE AND COARSE AGGREGATES SHALL BE CLEAN, HARD AND FREE OF DUST, OIL, GREASE AND OTHER CONTAMINANTS, ETC.
- WATER SHALL BE FREE FROM DUST, DIRT & FREE FROM CHEMICALS LIKE SULPHATES, CHLORIDES, ETC.
- UNLESS OTHERWISE STATED, ALL STRUCTURAL CONCRETE MIX SHALL BE OF **CONCRETE GRADE M25** - DESIGN MIX CONCRETE - CONFIRMING TO IS : 456 - 2000.
- ALL LEAN CONCRETE SHALL BE OF CONCRETE GRADE M10.
- MIXING OF CONCRETE SHALL BE DONE BY MECHANICAL MIXER MACHINE - MECHANICALLY ROTATING AND TILTING DRUM TYPE MIXER MACHINE.
- IF HAND MIXING OF CONCRETE IS TO BE DONE, 10% EXTRA CEMENT SHALL BE USED.
- POURING OF CONCRETE SHALL NOT BE DONE OVER A HEIGHT OF MORE THAN 2M.
- CONCRETE SHALL BE THOROUGHLY COMPACTED BY USING MECHANICAL VIBRATORS.
- ALL 230 TH. BRICK WORK SHALL BE DONE IN 1:6 CEMENT MORTAR 1:15 TH. MASONRY SHALL BE DONE IN 1:4 CEMENT MORTAR.
- CURING OF CONCRETE SHALL BE DONE UP VERTICAL FACE OF COLUMN= 1 DAY
SLAB SPANNING UP TO 15' OR 4.5M = 7 DAY
SLAB SPANNING MORE THAN 15' OR 4.5M = 14 DAY
BEAM SPANNING UP TO 20' OR 6.0M = 14 DAY
BEAM SPANNING MORE THAN 20' OR 6.0M = 14 DAY
- FOR SLAB PONDING METHOD, WRAP JUTE BAGS AROUND COLUMNS, AND WETTING 3 TIMES A DAY FOR BRICK WALLS.
- ADMIXTURES IN CONCRETE, IF SPECIFIED TO USE, SHALL BE COMPLIED WITH IS 9103 AND SHALL BE USED AS PER MANUFACTURER'S SPECIFICATION AND CONFIRMED BY US.
- AT CONSTRUCTION JOINT OF R.C.C. WALL, RAFT & SLAB, ETC. PROVIDE RUBBER / P.V.C. WATER STOPS. FORM WORK - FIXING & REMOVAL - AND CONCRETING - PLACING.
- COMPACTING, FINISHING FOR DURABILITY & CURING - SHALL BE DONE AS SPECIFIED BY IS : 456 - 2000.
- FOR THE DESIGN AND DETAILING OF FORM WORK, REFERENCE MAY BE MADE TO IS : 14687.

REINFORCEMENT:-

- REINFORCEMENT MARKED:
INDICATES HYSD / RIBBED BAR / COLD TWISTED BAR SHALL CONFIRM TO IS : 1786 - 1985 OF GRADE OF Fe 500.
INDICATES MILD STEEL BAR CONFORMING TO IS : 432 PART I - 1982 OF GRADE Fe 250.
- REINFORCEMENT SHALL BE FREE FROM LOOSE MILL SCALES, LOOSE RUST AND COATS OF PAINT, OIL, MUD OR ANY OTHER SUBSTANCES WHICH REDUCE THE BOND.
- REINFORCEMENT SHALL BE BENT AND FIXED IN ACCORDANCE WITH PROCEDURE SPECIFIED IN IS 2502.
- MINIMUM CLEAR COVER TO MAIN REINFORCEMENT SHALL BE PROVIDED BY PLASTIC / CONCRETE COVER BLOCKS AS FOLLOWS:
50 MM FOR FOUNDATION (2 INCH)
40 MM FOR COLUMNS (1.5 INCH)
20 MM FOR BEAMS &
15 MM FOR LINTELS & CHAJJA (1 INCH)
45 MM FOR WATER RETAINING ELEMENTS (0.5 INCH)
- BENDING / BINDING / FIXING / ASSEMBLING OF REINFORCEMENT SHALL BE DONE, CONFIRMED TO IS : 2502.
- PROVIDE APPROVED TYPE AND ADEQUATE CHAIRS TO TOP BARS TO KEEP AT TOP LEVEL AT AND LEAST ONE CHAIR / 1 SQM OF AREA.
- PROVIDE 25 MM DIA BAR AS SPACER BAR @ 750 MM C/C TO KEEP THE REINFORCEMENT BAR IN LAYERS FOR BEAMS.
- BAR OF DIAMETER MORE THAN 25MM TO BE WELDED AS SPECIFIED BY IS CODE FOR 250 MM MINIMUM LENGTH.
- LAPS TO BE STAGGERED AND AT ONE POINT SHALL NOT BE MORE THAN 33% OF BARS.
- LAP LENGTH FOR HYSD / RIBBED TOR / COLD TWISTED BARS SHALL BE 50 TIMES DIA OF BAR.
- PRIOR TO CONCRETING, REINFORCEMENT SHALL BE CHECKED BY AUTHORIZED ENGINEER OR FROM OFFICE.
- STRUCTURAL CONSULTANT IS NOT RESPONSIBLE FOR ANY DAMAGE IN THE ADJOINING BUILDING OR THE BUILDING WHICH IS UNDER CONSTRUCTION DUE TO CONSTRUCTION MISTAKES.
- DO NOT REMOVE THE CENTERING OF PROJECTED PORTION OF SLABS & BEAMS UNLESS & UNTIL PROPER LOAD AGAINST OVERTURNING IS ESTABLISHED OVER THOSE SLABS & BEAMS.
- IN CASE OF ANY HIGHER MIX PROPOSED FOR ANY COLUMNS THEN CAST THE JUNCTION OF ALL BEAMS OVER THAT COLUMN IN THE SAME HIGHER MIX.
- FIRST CONSTRUCT BRICK WALL AND THEN CAST BEAM, COLUMN AND SLAB TO AVOID CRACKING PROBLEMS.

FABRICATION :-

- ALL STRUCTURAL STEEL OF FOR FABRICATION WORK SHALL BE OF Fe250 GRADE.
- ALL PIPES SHALL HAVE MINIMUM YIELD STRENGTH OF 250 N/Sq.mm.
- ALL CAP & SHOE PLATE SHALL BE WELDED AFTER FINAL ERECTION.

STABILITY NOTES:-

- THE STRUCTURAL STABILITY OF THE GIVEN BUILDING DRAWING WILL BE VALID FOR 3 YEARS FROM THE GIVEN DRAWING DATE. CLIENT/OWNER/CONTRACTOR HAS TO GET STRUCTURAL STABILITY REPORT AFTER 3 YEARS ON THEIR OWN. CLIENT/OWNER/CONTRACTOR TO KEEP REQUIRED TEST OF ALL MATERIALS LIKE CONCRETE/STEEL/BRICKS ETC. AND SUBMIT TO STRUCTURAL DESIGNER OR CONSULTANT. IF REPORTS ARE NOT SUBMITTED, STRUCTURAL ENGINEER WILL NOT BE RESPONSIBLE FOR STRUCTURAL SAFETY OF BUILDING.
- THIS STRUCTURAL DESIGN & DRAWING IS MADE ON BASIS OF ARCHITECTURAL DRAWING BY CLIENT. ANY CHANGES AFTERWARDS MADE BY CLIENT OR OWNER WILL BE RESPONSIBILITY OF CLIENT OR OWNER & AFTER THAT STRUCTURAL STABILITY OF THAT BUILDING WILL NOT BE RESPONSIBILITY OF STRUCTURAL ENGINEER.

NOTES:-

- PLEASE CHECK CENTER LINE AS PER ARCH. DRG. BEFORE STARTING WORK.
- DO NOT PROVIDE PEDESTAL IN LIFT COLUMN ONLY.
- PROVIDE FOOTING ADJOINING TO LIFT AT THE SAME LEVEL OF LIFT FOUNDATION.
- PROVIDE DEPTH OF FOOTING FOR LIFT AS PER LIFT MANUFACTURER.
- STRUCTURE ENGINEER IS NOT RESPONSIBLE IF ANY ACCIDENT OCCURS ON SITE DUE TO CONSTRUCTION FAULTS.
- IF ANY AMBIGUITY FOUND, CONTACT STRUCTURE ENGG. IMMEDIATELY BEFORE STARTING WORK.
- FOLLOW ONLY ARCHITECTURAL DIMENSIONS.
- BOTTOM OF FOOTING SHOULD NOT BE ON FILLED UP SOIL. IF FILLED UP SOIL IS FOUND PLEASE INFORM STRUCTURE ENGINEER BEFORE START EXECUTION.
- EXCAVATION MUST BE DONE IN NATURAL SLOPE. i.e AT ANGLE OF 30 WITH VERTICAL.



- THIS STR. DRG. IS BASED ON ARCH. DRG. SEND BY MAIL ON DATE 20-07-2024.
- SBC REPORT IS NOT GIVEN BY CLIENT AND IT IS ASSUMED AS SUGGESTED BY CLIENT.

CONCRETE GRADE	
ITEM	GRADE
COLUMN	M25
FOOTING	M25
USE STEEL GRADE Fe 500	

TAKE FOLLOWING PRECAUTION BEFORE STARTING EXCAVATION OF ECCENTRIC FOOTING/ADJOINING TO OTHER PROPERTY.

- PROVIDE VERTICAL SHEET PILE & SHORING.
- PROP UP (SUPPORT) THE BOTH SIDE BUILDING VERTICALLY AND HORIZONTALLY.
- EXCAVATE ONE FOOTING, CAST & FILL UP IT FIRST, THEN EXCAVATE, ANOTHER FOOTING & FILL IT. THUS EXCAVATE & CAST FOOTING ONE BY ONE. (STAGGERED MANNER ON BOTH SIDE)
- STRUCTURAL ENGINEER IS NOT RESPONSIBLE IF ANY ACCIDENT OCCURS TO THE ADJOINING PROPERTY ON SITE DUE TO CONSTRUCTION PROBLEM.

REV.	DESCRIPTION:	BY:	DATE:
------	--------------	-----	-------

NO.	REFERENCE DRAWING	DRG. NO
01.	FOUNDATION LAYOUT & SECTION DETAIL	RC-01
02.	GROUND BEAM DETAIL	RC-02
03.	LINTEL BEAM LAYOUT	RC-03

CLIENT:
VICENZA HIGHLANDS

AGENCY:
TRIGON STRUCTURES

PROJECT NAME:
PARKING STRUCTURE

LOCATION:
VADODARA

STRUCTURAL CONSULTANT :



GF-29 & 31 , THE EMPORER COMPLEX
FATEHGUNJ MAIN ROAD
VADODARA - 390002.
MOB:- +91-6355614784 / +91-9979877931
E-MAIL: parshwa.strl@gmail.com

DRAWING TITLE:
FOUNDATION LAYOUT & SECTION DETAIL

DRAWING NO. :	DESIGN	DRAWN	CHECK
RC-01	J.P.B	K.S.P.	J.P.B

REVISION	SHEET	SCALE	SIZE
R0	1 OF 1	1:75	A4

JOB NUMBER	DATE
PC-12-2025	20/01/2025