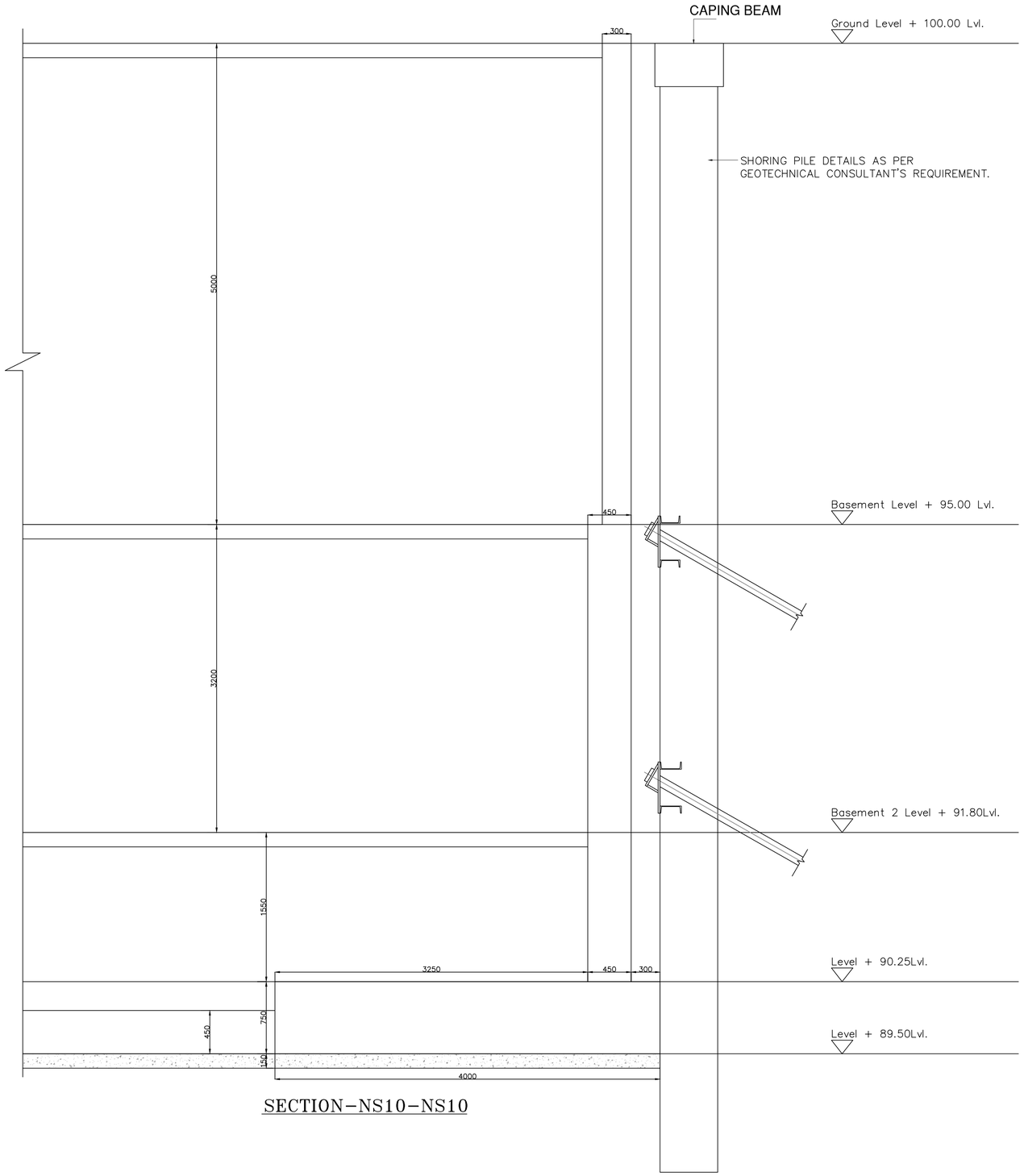


SECTION–NS10–NS10

CALCULATIONS FOR UPLIFT PRESSURE

TOTAL HEIGHT UP TO BASEMENT BTM RAFT = 10.50m

WATER TABLE CONSIDERED BELOW GROUND = 2.00m

UPLIFT PRESSURE = 85.00 KN/M2

TOTAL BALANCING LOAD

SELF WEIGHT OF RAFT = 0.45x25 = 11.25 KN/M2

WEIGHT OF ALL-IN-ONE AGGREGATE FILLING = 1.85x20 = 37.00 KN/M2

TOTAL BALANCING PRESSURE = 48.25 KN/M2

DESIGN UPLIFT PRESSURE = 36.75 KN/M2

SIGNATURE OF ARCHITECT ON RECORD:-	SIGNATURE & STAMP OF JW CONSULTANTS LLP:-
	ACHYUT WATVE. B.E. F.I.E. Structural Engineer M.C.G.B. Reg.No.STR/W/10 **For & On behalf of** **JW Consultants LLP**
	DRAWING IS VALID FOR DESIGN ADEQUACY, PROVIDED IT IS SIGNED & STAMPED BY OUR OFFICE

NOTES:

1. Basic reference codes:
   IS456: 2000, IS1893(Part1): 2016, IS13920: 2016.
2. Due care shall be taken to ascertain that requisite strength of concrete is gained before commencement of deshuttering. It shall comply with provisions of Clause No. 11.3 of IS 456: 2000.
3. Nominal covers

		Mild	Moderate	Severe
I	Footings	50	50	50
II	Columns & walls >200mm width (to links of column)	40	40	45
III	Columns & walls with width of 200mm & below having reinf. of dia. 16mm & above. (to links of column)	40	40	45
IV	Columns & walls with width of 200mm & below having reinf. of dia. 12mm. (to links of column)	25	30	45
V	Slabs	20	30	45
VI	Beams (to stirrups of beam)	20	30	45
VII	Lift walls	40	40	45

   For main reinf. up to 12mm dia. bar for mild exposure the nominal cover may be reduced by 5mm for slabs & beams only.
4. Beams with depth more than 750mm, provide side-face reinforcement.
5. Substratum shall be approved from our office before laying P.C.C.
6. Minimum clear spacing between any two longitudinal bars in beam= 50mm.
7. All lags (Ld) shall be staggered & not more than 50% bars to be lapped at any given section.

GRADE OF REINF.	M20	M25	M30	M35	M40 & ABOVE
Fe415	48 X D	41 X D	38 X D	34 X D	30 X D
Fe500 (TMT)	57 X D	49 X D	46 X D	40 X D	36 X D

   For bundled bars, Ld shall be increased by 10% for 2 bars in contact, 20% for 3 bars in contact and 33% for 4 bars in contact.
8. All buildings shall have tie beams/plinth beams at ground/plinth level.
9. If footings overlap with each other, necessary revision shall be obtained from our office.
10. Design is valid for number of floors as indicated in the drawing.
11. At any level where column size gets reduced in either dimension tie beams/plinth beams are essential.
12. For cantilevers, top bars to be anchored behind from external face of support for - Ld or span of cantilever - whichever is greater.
13. Fire rating considered:- 2 Hour.

Use of this drawing for construction shall explicitly confirm acceptance of following conditions by Owner / Builder / Contractor

1. Our responsibility shall remain limited to safe and sound structural design as transmitted by this drawing.
2. This drawing shall not be used for any construction unless necessary statutory approvals are obtained by the Owner / Builder / Architect from the Regulating Authorities. JW CONSULTANTS LLP are indemnified of any legal consequences in case of unauthorised construction.
3. We shall not remain responsible for -
   a) Safety of old structure during demolition.
   b) Safety of any adjoining building /persons staying in adjoining building/persons and properties on adjoining roads.
   c) Safety of construction worker/any personnel at work site during construction
   d) Correctness/safety of any temporary structure, scaffolding, shuttering, centering erected at site and any injury to any personnel arising out of any accidents.
   e) Accidents occurring due to premature deshuttering, faulty / substandard construction material or workmanship / faulty construction procedure.
   f) Any accident occurring due to construction of elements of buildings not designed by us.
4. Supervision if specifically asked for will be provided to the extent of verification of reinforcement on site but responsibility regarding correct & sound construction shall solely rest with contractor/ builder / owner.
5. All structural concrete should be weigh batched, machine mixed and mechanically vibrated.
6. Any discrepancy between our drawing & Architects' drawing shall be brought to our notice before construction.
7. This drawing is property of JW CONSULTANTS LLP and shall not be reproduced or used without explicit permission of this office.

DRAWING TO BE VALIDATED BY ARCHITECT ON RECORD AFTER CHECKING COMPLIANCE WITH APPROVED PLANS FROM THE REGULATING LOCAL GOVERNMENT AUTHORITY.

NO.	REV. DATE	DESCRIPTION	NO.	REV. DATE	DESCRIPTION
R0	·	·	R5	·	·
R1	·	·	R6	·	·
R2	·	·	R7	·	·
R3	·	·	R8	·	·
R4	·	·	R9	·	·

ENVIRONMENTAL EXPOSURE CONDITION :-	MODERATE	GRADE OF CONCRETE :-	M40
DESIGN LIVE LOAD :- (UNLESS SPECIFIED)	-	GRADE OF STEEL :-	Fe 500 TMT
SUPERIMPOSED DEAD LOAD :-	-	S.B.C. :-	300 T/m²

CHECKED BY	DEALT BY	DRAWN BY	DRG. NO.	BLDG.	JOB NO.
N.R.P.	SHREYAS	PARAS	101060-111-1	EUCALYPTIA & FENELIA	10:1060

DEVELOPER:-	ASCENT CONSTRUCTION PVT.LTD. DIRECTOR SHRI. PRAVIN H. DOSHI & SHRI. MUNISH P. DOSHI
DESIGN ARCHITECT:-	MANDVIWALA QUTUB & ASSOCIATES
ARCHITECT ON RECORD:-	scapes architects
PROJECT:-	PROPOSED BUILDINGS ON LAND BEARING GUT.NO. 61/1/1,2,3,4, 61/2/1,2,3 VILLAGE CHITALSAR - MANPADA, TALUKA DIST. THANE.
TITLE:-	DETAILS OF RETAINING WALL

LLP IDENTITY NO.. AAA-2650
PARTNERSHIP WITH LIMITED LIABILITY

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