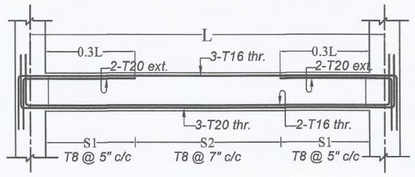
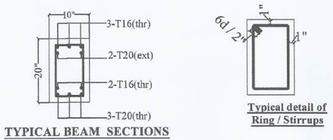
BMC/176/2025-26

TYPICAL BEAM SECTION

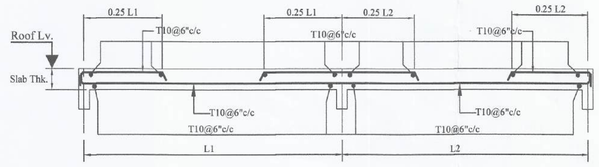


TYPICAL BEAM SECTION



TYPICAL BEAM SECTIONS

Typical detail of Ring / Stirrups

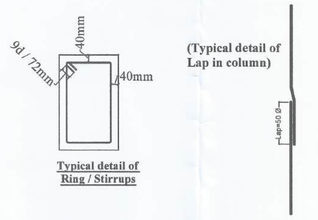


TYPICAL SLAB SECTION

TYPICAL COLUMN DETAILS

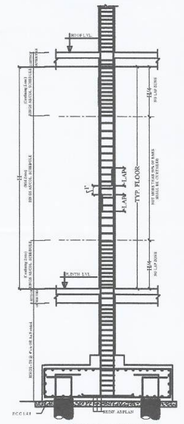
TYPICAL COLUMN DETAILS

COLUMN SYMBOL	STEEL DETAILS	STIRRUP
C1	12" × 20", ● T20 ○ T16	
	8-T20+4-T16	T8 @ 4"-6"-4" c/c



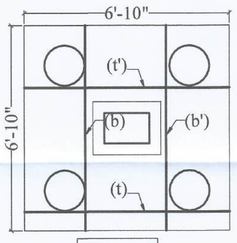
Typical detail of Ring / Stirrups

(Typical detail of Lap in column)



NOTES:-

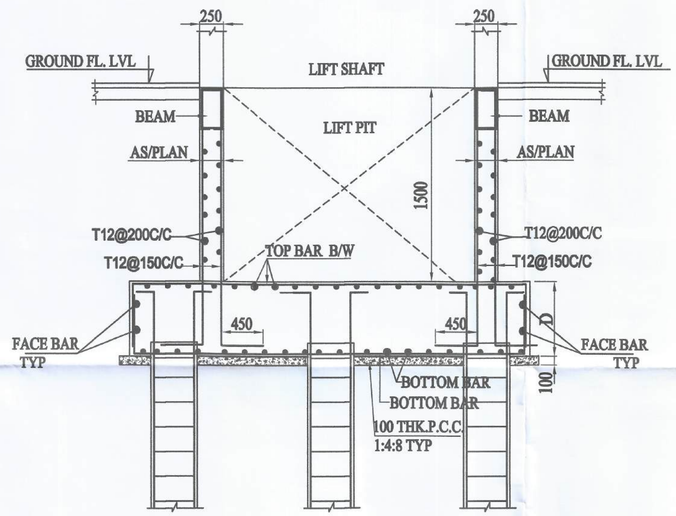
1. ALL DIMENSIONS ARE IN INCHES AND MM.
2. ALL CONCRETE MIX M-25 (1:1:2) UNLESS OTHERWISE SPECIFIED.
3. ALL TOR STEEL YIELD STRENGTH 500 N/mm2
4. ALL CONCRETE SHALL BE MACHINE MIXED AND MACHINE VIBRATED.
5. CLEAR COVER TO MAIN STEEL
   50mm IN PILE, 50 mm IN PILE CAP.
   40mm IN COLUMN, 25 mm IN BEAM.
6. USE 10% EXTRA CEMENT IN CASTING OF FOUNDATION.
7. WHEREVER SHOWN BEAM BAR SHALL BE ANCHORED INTO COLUMN UP-TO A LENGTH EQUAL TO 50 X BAR DIA. DISTANCE MEASURED FROM COLUMN FACE.
8. ALL DIMENSIONS ARE TO BE READ NOT TO BE MEASURED.
9. ALL R.C.C. WORK SHALL BE CONFERMED TO IS:456-2000.
10. STRUCTURE HAS BEEN DESIGNED FOR B+G+6 STOREYED ONLY. (ALL FLOOR HEIGHT = 3.2m)
11. ALL DIMENSIONS & DETAILS ARE TO BE VERIFIED WITH THE ARCHITECTURAL DRAWING AMBIGUITY IF ANY SHOULD BE BROUGHT TO THE NOTICE OF THE CONSULTING ENGINEERS / ARCHITECTS.



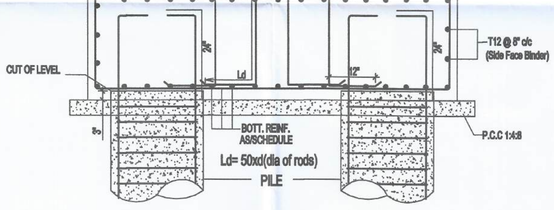
16"Ø pile

4 - PILES GROUP

TYPICAL PILE GROUP

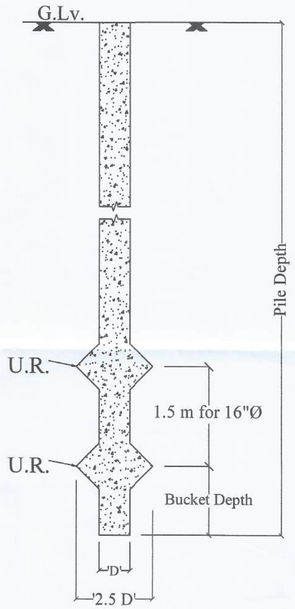


TYP. R/F. DET. OF PILE CAPE WITH LIFT PIT



PILE CAP TYPICAL SECTION

(WITH DOUBLE LAYER STEEL)



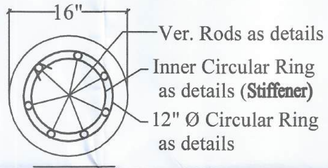
16" Ø PILE L/S

TYPICAL PILE DETAILS

Pile	DIA	DEPTH	DIA OF UR	No. OF UR	STEEL	RINGS	INNER RINGS (Stiffener)
○	16"	10m	40"	2	7- T12 mm	T8 mm @ 8" c/c	T8 mm @ 1500 c/c

TYPICAL PILE CAP DETAILS

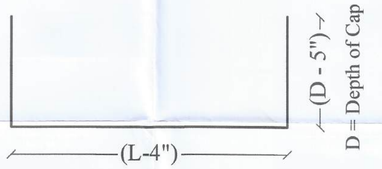
Pile Cap	Pile Dia	Pile Group	Pile Cap Depth (inch)	(Bottom Layer Mat) Main Steel (b) (Lower Level)	(Bottom Layer Mat) Dist. Steel (t) (Upper Level)	(Top Layer Mat-Inverted) Main Steel (b') (Upper Level)	(Top Layer Mat-Inverted) Dist. Steel (t') (Lower Level)	Pile Group
Pc-1	16"	10m x 4	40"	T16 @ 5" c/c	T16 @ 5" c/c	T16 @ 5" c/c	T16 @ 5" c/c	4- 16" Ø Pile Grp.



16"Ø Pile

TYPICAL PILE C/S

Accepted
Valid From 17/02/26 to 16/02/31.
17/02/2026
Municipal Commissioner
Municipal Corporation, Begusarai
Dt. 17/02/26



L = Length of Cap

Shape of b / t for all Caps

DRAWING RELEASED FOR:-

☐ APPROVAL ☑ SUBMISSION ☐ ADVANCE COPY ☐ CONSTRUCTION

DEVELOPER:-

For PINE DEVELOPERS PVT. LTD.
Managing Director

SHEET NO :-	PROJECT :-	SHEET TITLE :-	NO. OF ROOF:-	NORTH:-	CONSULTING ENGINEER:-
ST - 01	PINE AVL HEIGHTS	TYPICAL STRUCTURAL DETAILS	--------	E S N W	SHAILESH RANJAN, STR. ENGINEER, EMP No.-BR/UDHD/SE/23-0110, UDHD, PATNA (BIHAR)
		DATE - 19-01-25 / REV. - 00	DRAWN BY:- -------- / CHECKED BY:- --------		

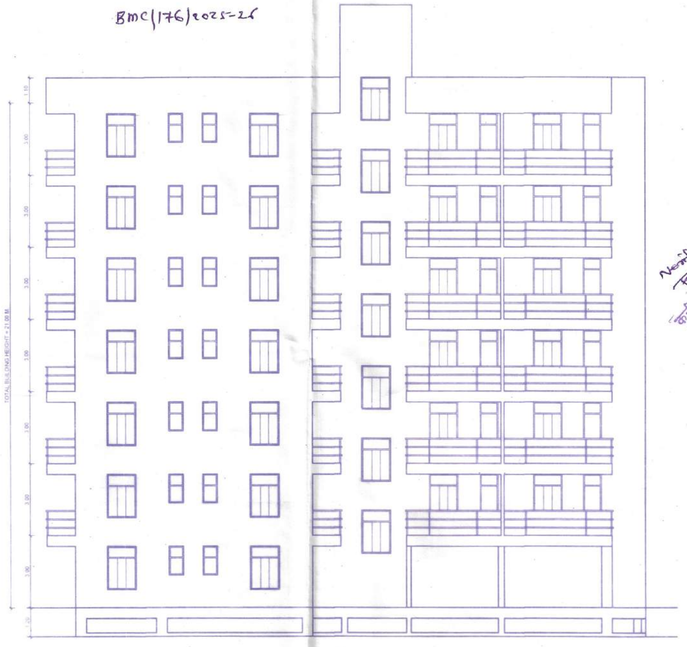
- THIS DRAWING IS THE PROPERTY OF '----------' AND IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN FOR WHICH IT IS ISSUED WITH OUT PERMISSION OF ITS PRINCIPALS.
- THIS DRAWING IS TO BE READ IN CONJUCTION WITH OTHER RELEVENT ARCHITECTURAL, STRUCTURAL AND OTHER SERVICES/ CONSULTANTS DRAWING. IT SHALL BE THE DEEMED RESPONSIBILITY OF THE CONTRACTOR/ FABRICATOR TO BRING IN TO NOTICE OF ARCHITECTS/STRUCTURE ENGINEER. IF ANY DISCREPANCY WITHIN OR BETWEEN THE DRAWINGS PRIOR TO CONSTRUCTION.
- ALL WRITTEN DIMENSIONS ARE TO BE FOLLOWED AND THE DRAWING IS NOT TO BE SCALED. STRUCTURE HAS BEEN DESIGNED FOR B+G+4 STOREYED ONLY(BASEMENT TO SIXTH FLOOR TO FLOOR HEIGHT = 3.2m).

Ayeed
07/02/25

BMC/176/2025-26



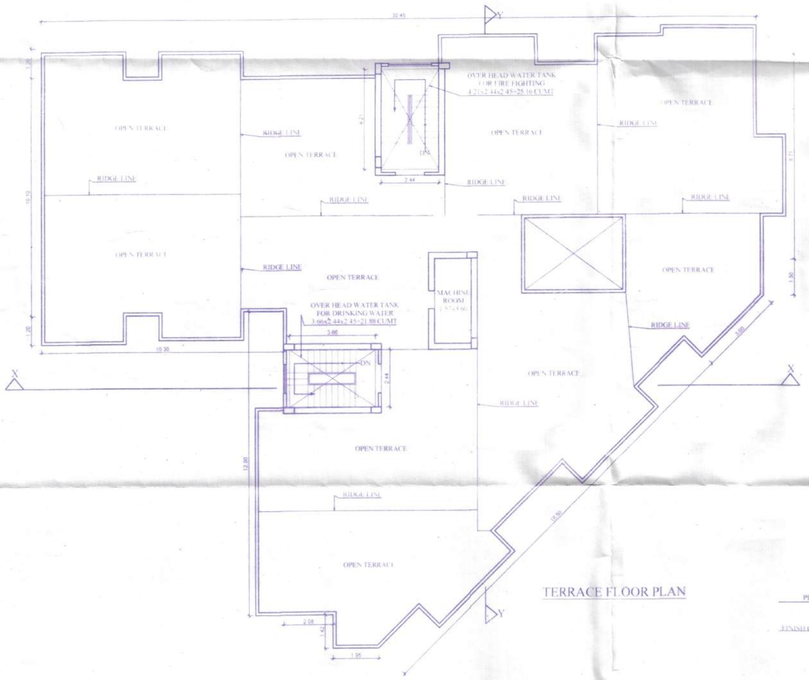
FRONT ELEVATION



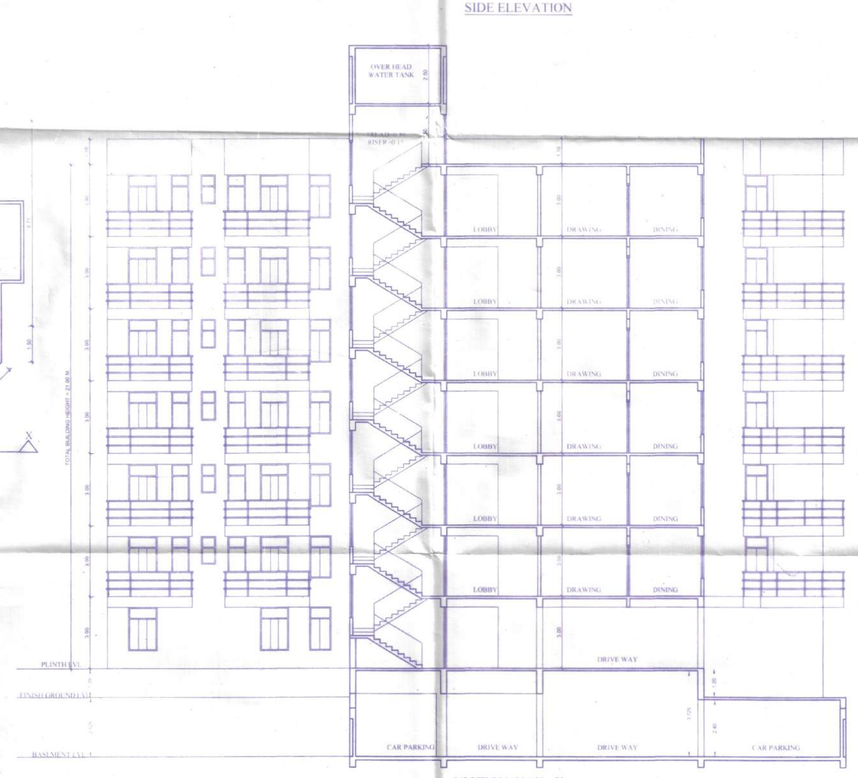
SIDE ELEVATION



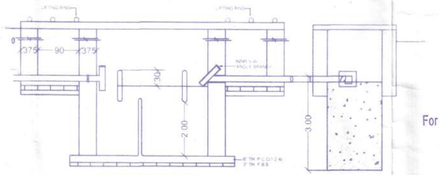
SECTION ON Y - Y



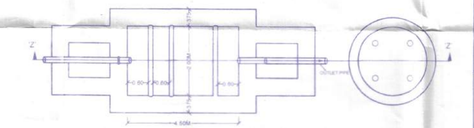
TERRACE FLOOR PLAN



SECTION ON X - X



SECTION ON 'Z-Z'



PLAN OF SEPTIC TANK AND SOAK PIT

SCALE	NORTH	SHEET NO
1:100 1:200		02

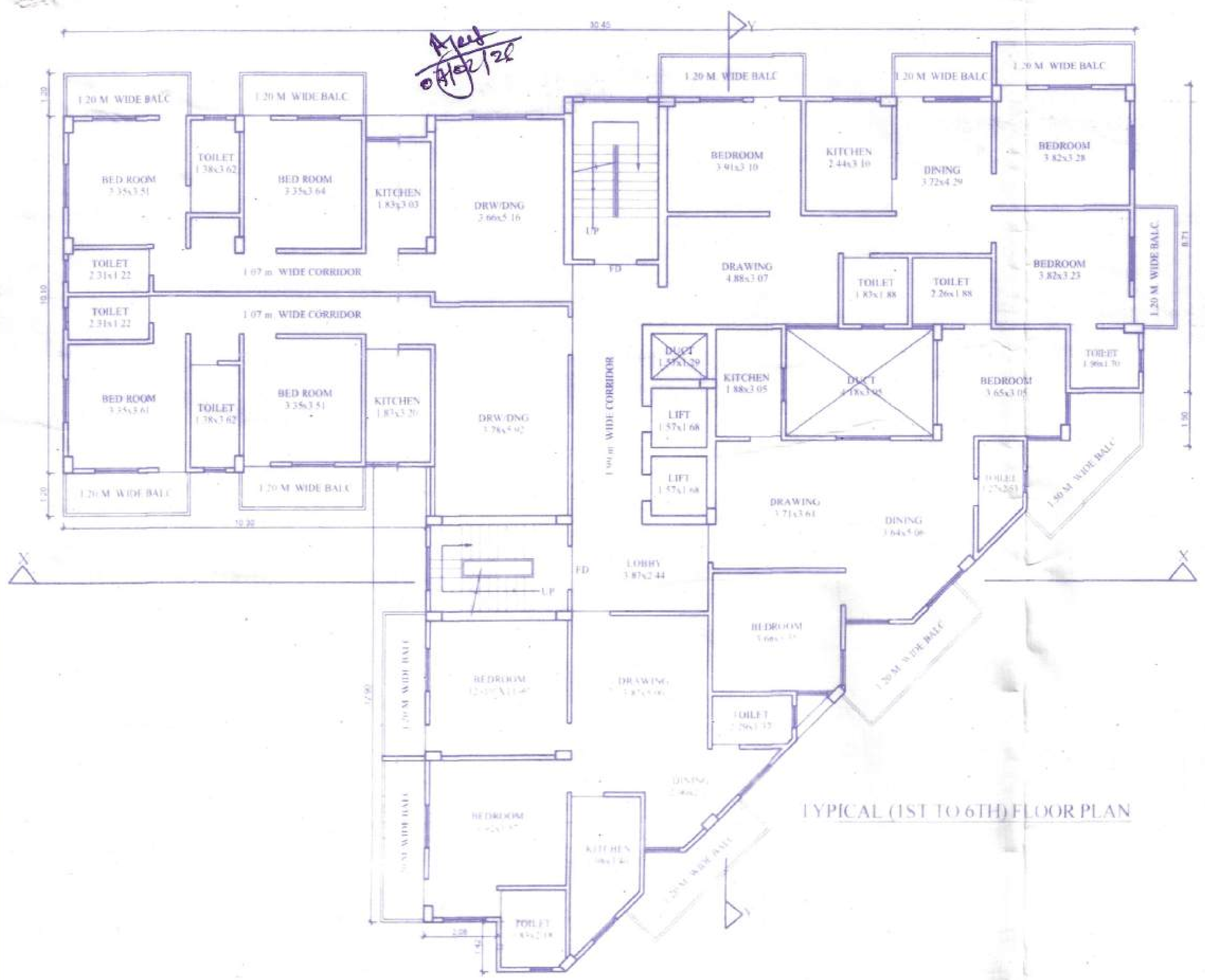
For PINE DEVELOPERS PVT. LTD.
Managing Director
SIG. OF OWNER/DEVELOPER

AR. RAJEEV KUMAR
REGISTERED ARCHITECT
REG. No.-CA/2015/68352
UDHD, BIHAR
SIGNATURE OF ARCHITECT

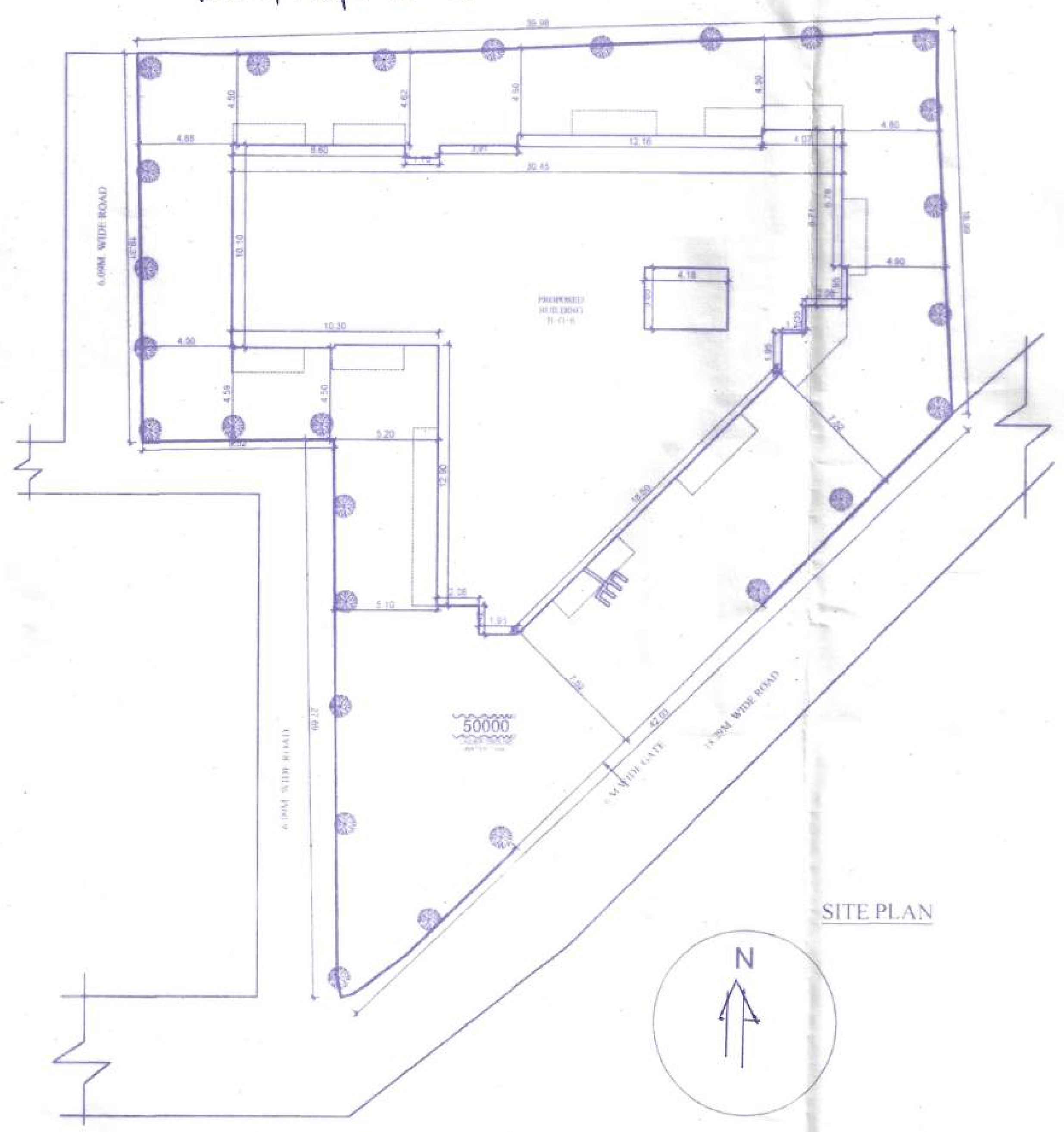
SHAILESH RANJAN
STR. ENGINEER
EMP No.-BR/UDHD/SE/23-0110
UDHD, PATNA (BIHAR)
SIGNATURE OF ENGINEER

Accepted
Valid From 17/02/26 to 16/02/31
17/02/2026
Municipal Commissioner
Municipal Corporation, Begusarai
17/02/26

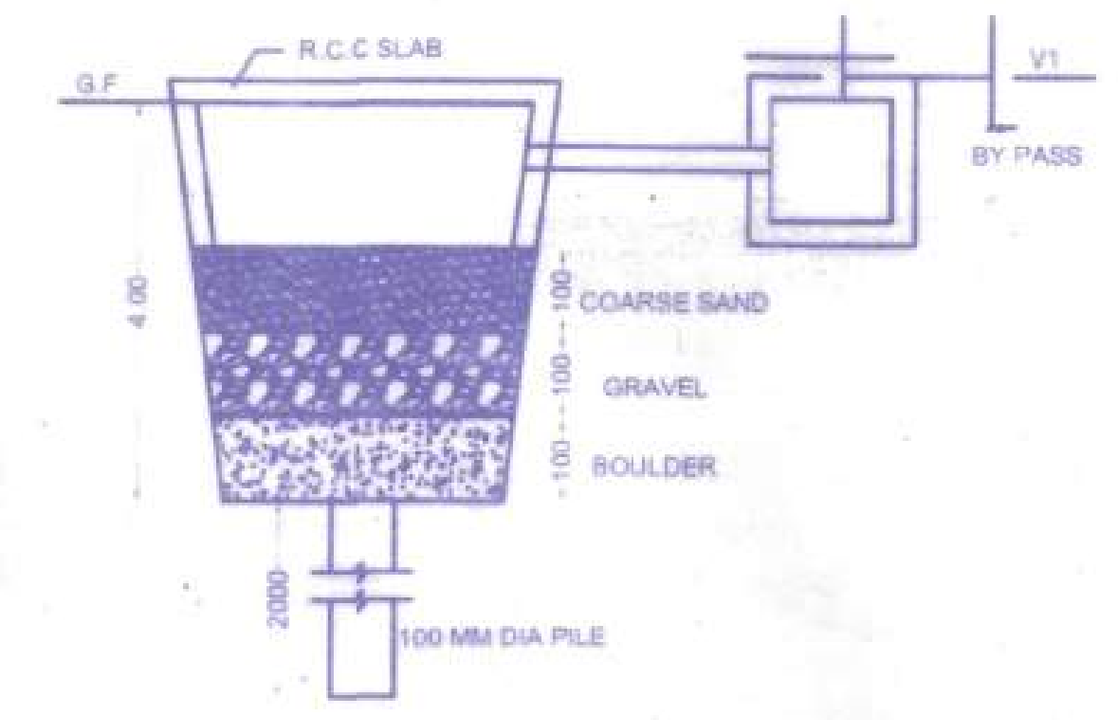
BMC/176/2025-26



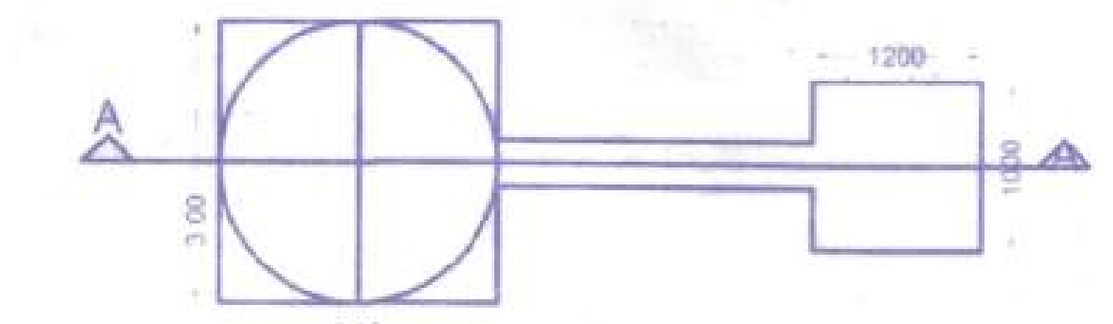
TYPICAL (1ST TO 6TH) FLOOR PLAN



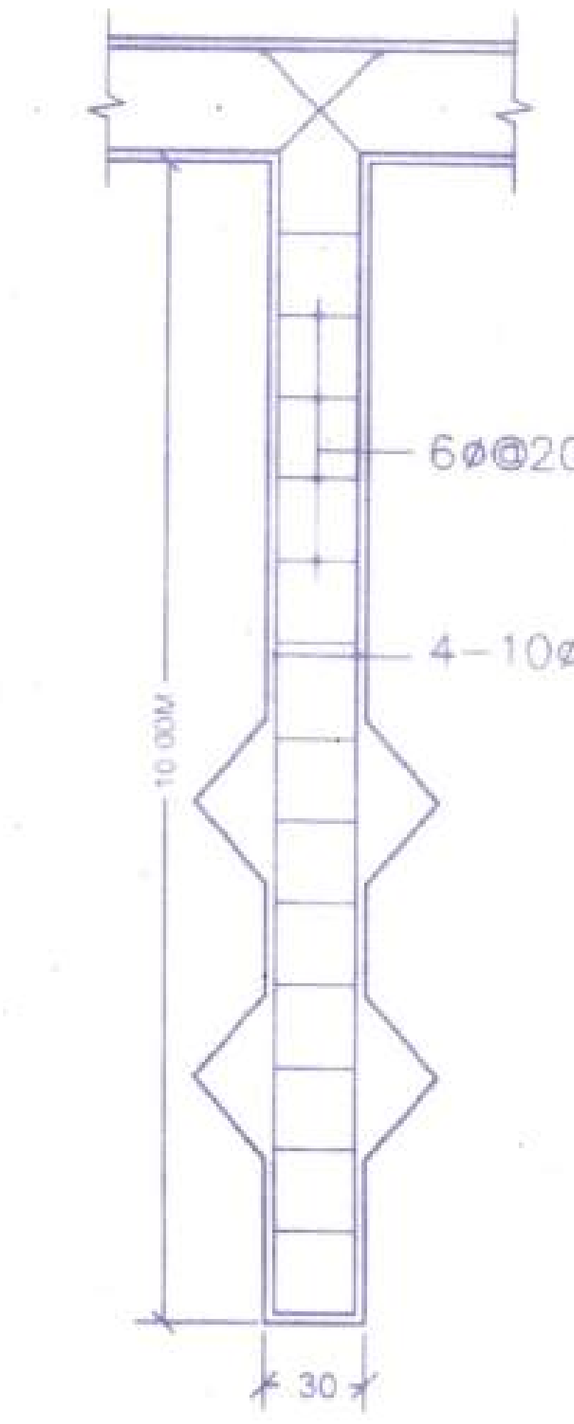
SITE PLAN



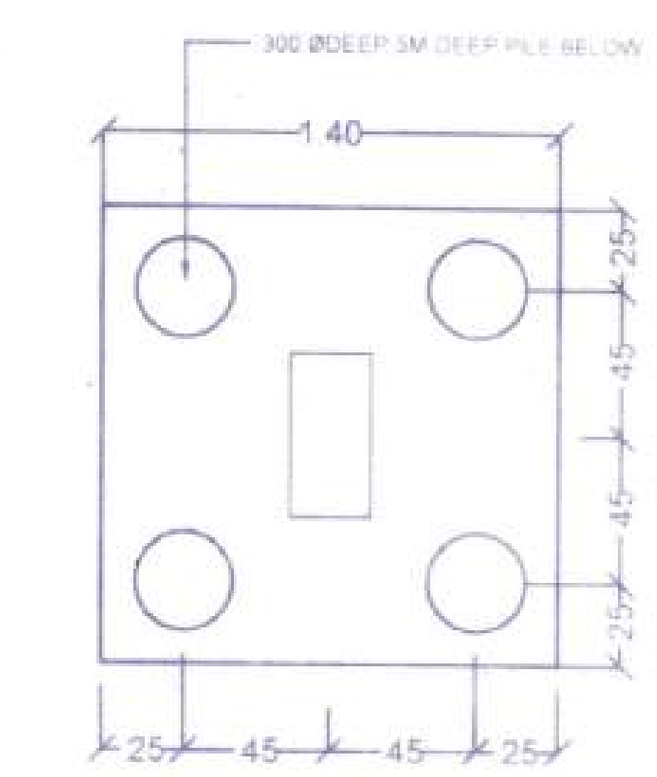
SECTION AT-A A



DETAIL OF RECHARGEABLE BORE WELL



SECTION



DETAIL OF PILE FOUNDATION

FIRE LEGEND

1. UNDERGROUND WATER STATIC TANK LITRES CAPACITY ---------- 50,000
2. SEAMESE CONNECTION ----------
3. HYDRANT POINT ----------
4. HOSE REEL ----------
5. FIRE RESISTANCE CHECK DOOR ---------- FD
6. EMERGENCY LIGHT ----------
7. ILLUMINATED EXIT SIGN ---------- EXIT
8. MANUAL CALL ALARM SYSTEM ----------
9. OVER HEAD WATER STATIC TANK LITERS CAPACITY ---------- 25,000
10. DOWN COMMER SYTEM----------
11. SPRINKLER'S INSTALATIN---------- Ⓢ

SEPTIC TANK CALCULATION

TOTAL NOS. OF PERSONS = 155
REQUIRMENT OF SEPTIC TANK FOR 155 PERSONS
@ 0.085 CUM. PER PERSONS PER DAY = 155 X 0.085 =13.175 CUM
PROVIDED OF SEPTIC TANK SIZE
= 4.00 X W. = 2.00 X H. = 2.00 = 16.00 CUM.

RAIN WATER HARVESTING CALCULATION

TOTAL BUILT UP AREA = **530.08** SQ.MT
100 SQ.MT. FOR 6 CUMT. AREA REQUIRED
530.08/100 = 5.30 X 6 = 31.80 REQ.
PROVIDED R.W.H.T =36.00 CUMT

GREEN AREA CALCULATION

REQ. PLANTATION NET PLOT AREA 10% of 1212.92 = 129.29 SQM
= PROVIDED PLANTATION AREA =132.00 SQM

SCHEDULE OF DOORS & WINDOWS

SL. NO	TYPE	WIDTH	HEIGHT	DESCRIPTION
1	D	1.05	2.10	FULLY PANNELED DOOR
2	D1	0.90	2.10	DO
3	D2	0.75	2.10	DO
4	DW	2.13	2.40/1.65	PANNELED/GLAZED
5	DW1	1.52	2.40/1.65	PANNELED/GLAZED
6	W	1.35	1.65	FULLY GLAZED WINDOW
7	W1	0.90	1.65	FULLY GLAZED WINDOW
8	W2	0.60	1.20	FULLY GLAZED WINDOW

SPECIFICATION

(1) FOUNDATION :- R.C.C. U/R GROUP PILE FOUNDATION AS/STRUCTURE DESIGN
(2) SUPER STRUCTURE :- 1ST. CLASS BRICK WORK IN SUPER STRUCTURE WITH CEMENT MORTAR
(3) PLINTH : HEIGHT P. LEV. & G. LEV. AS SHOWN IN SECTION.
(4) FLOORING :- 25mm.TH. MOSAIC FLOORING OVER 125mm. TH.DRY RAMMED KHOA OVER 75mm. TH. B. F. S. OVER SAND FILLING.
(5) DOORS :- CHOWKHATS OF DOOR TO BE SAL WOOD.
(6) WINDOWS :- ALL WINDOWS TO BE FULLY GLAZED IN STEEL
(7) ROOF :- 100mm. TH. R.C.C. SLAB , 11mm. TH. AVG. LIME TERRACING OVER.
(8) PLASTER :- 12mm. TH. CEMENT PLASTER ON BOTH SIDE OF WALL
(9) COLOUR :- COLOUR OR WHITE WASH AS/CHOICE

AREA CALCULATION

TOTAL AREA OF THIS PLOT	= 1199.0 SQ.MT
TOTAL BASEMENT FLOOR BUILT UP AREA	= 10.08 SQ.MT
TOTAL GROUND FLOOR BUILT UP AREA	= 64.88 SQ.MT
TOTAL FIRST FLOOR BUILT UP AREA	= 481.85 SQ.MT
TOTAL SECOND FLOOR BUILT UP AREA	= 481.85 SQ.MT
TOTAL THIRD FLOOR BUILT UP AREA	= 481.85 SQ.MT
TOTAL FOURTH FLOOR BUILT UP AREA	= 481.85 SQ.MT
TOTAL FIFTH FLOOR BUILT UP AREA	= 481.85 SQ.MT
TOTAL SIXTH FLOOR BUILT UP AREA	= 481.85 SQ.MT
TOTAL FLOOR BUILT UP AREA	= 2966.06 SQ.MT

F. A. R = 2.47

PARKING CALCULATION

TOTAL BUILT UP AREA = 2966.06 SQMT.
DEDUCT 15 % COMMON AREA = 444.90 SQMT
2966.06-444.90=2521.16 SQMT.
@ 25% OF PARKING AREA = 630.29 SQMT.
TOTAL PARKING AREA IN BASEMENT FLOOR = 604.92 SQMT.
TOTAL PARKING AREA IN GROUND FLOOR = 348.81 SQMT
TOTAL PROVIDED PARKING AREA 604.92+348.81 = 953.73 SQMT

WATER SUPPLY CALCULATION

TOTAL NOS. OF FLAT = 31
ASSUMING 5 PERSONS PER FLAT 31 X 5 = 155 PERSONS
@ 135 LITERS / PERSONS / DAY = 155 X 135 = 20925 LITERS
25160 LTRS FOR FIRE FIGHTING
REQUIRMENT OF WATER TANK FOR 46085 LITERS
SIZE OF OVER HEAD WATER TANK 2 NOS.
(1) 4.21 x 2.44 x 2.45 = 25.16 CUMT
(2) 3.66 x 2.44 x 2.45 = 21.88 CUMT
TOTAL 25.16+21.88=47.04 CUMT = 47040 LITERS

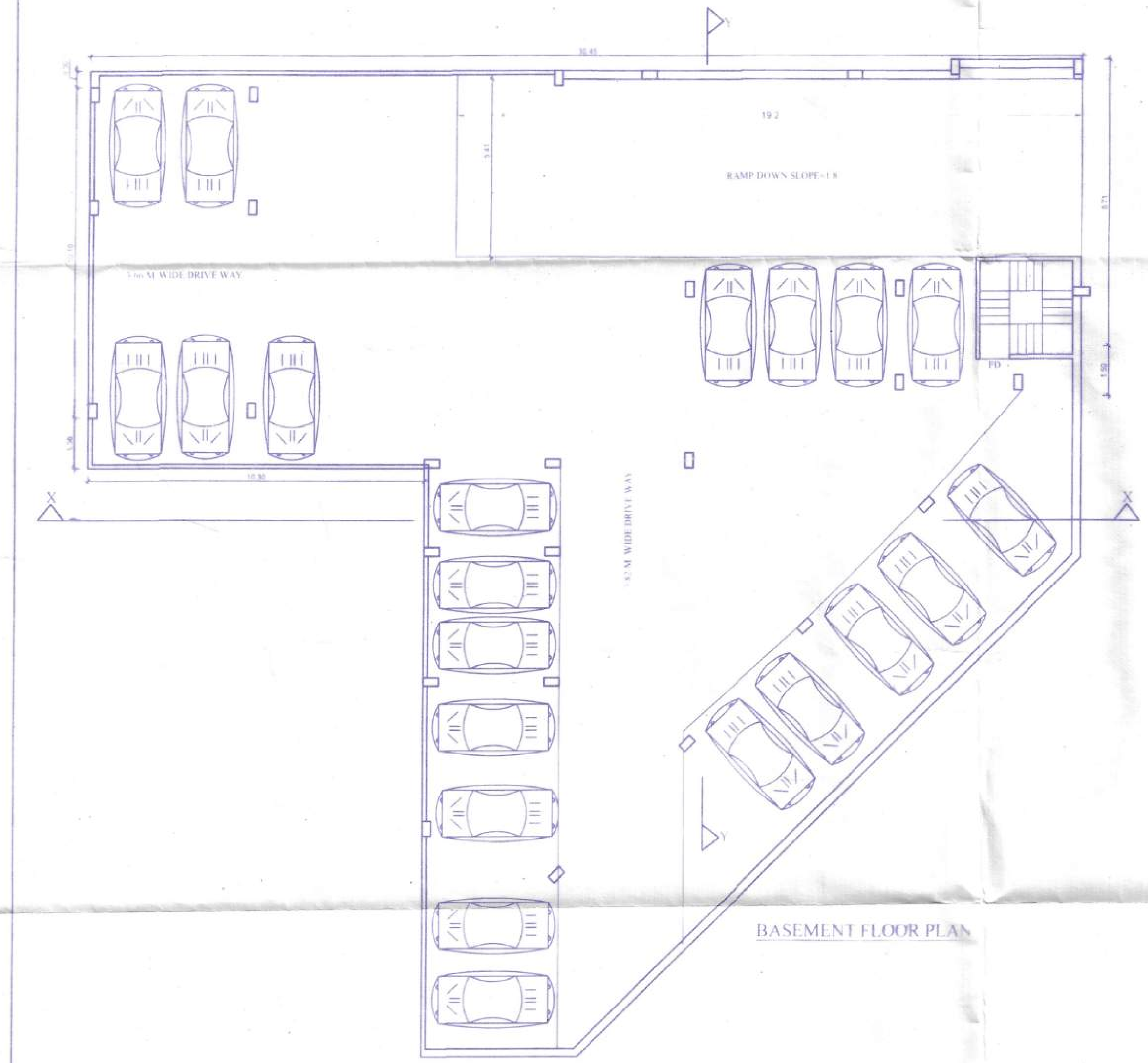
PLOT DETAILS

PROPOSED RESIDENTIAL BUILDING B+G+6 OF PRASHANT KUMAR MANAGING DIRECTOR - PINE DEVELOPERS PVT. LTD. AT MAUZA- MAHADEV SIMARIYA (ULAO OMNAFAR) PRAGANA- MALKI THANA- SINGHAUL HALKA- ULAO PART - 55, PAGE 80,82,79 TAUJI NO -843 THANA NO -412 WARD NO -03 BEGUSARAI (BIHAR)

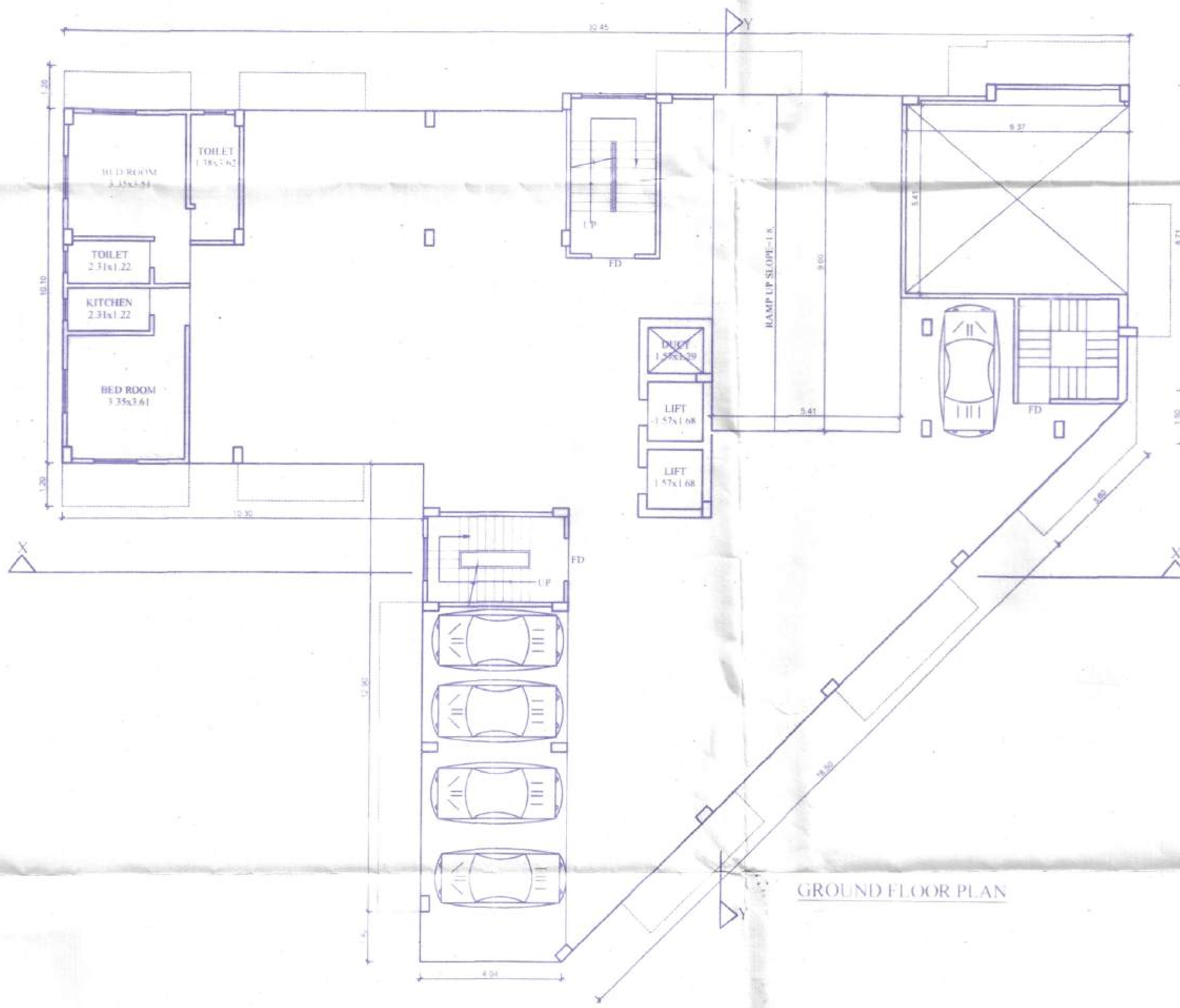
CHAUHADDEE

NORTH - RAJKUMARI DEVI WFE OF LATE BALMIKI SINGH AND UMAKANT SINGH, KHESRA NO. - 791
SOUTH - P.C.C ROAD
EAST - BAUELAL SINGH K WARSAN KHESRA NO. 792
WEST - P.C.C ROAD

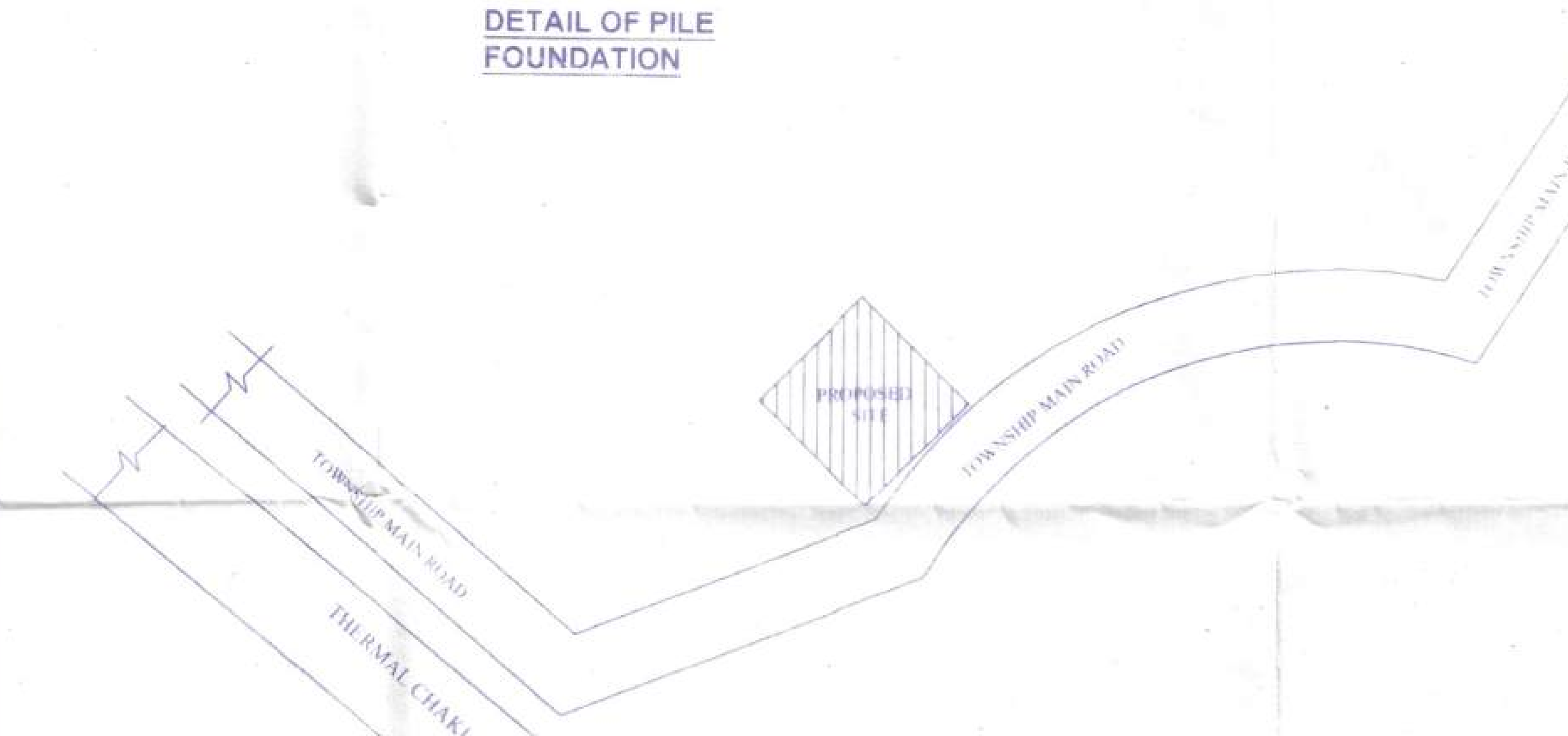
SCALE :-	NORTH -	SHEET NO.:-
1:100, 1:200	↑	01



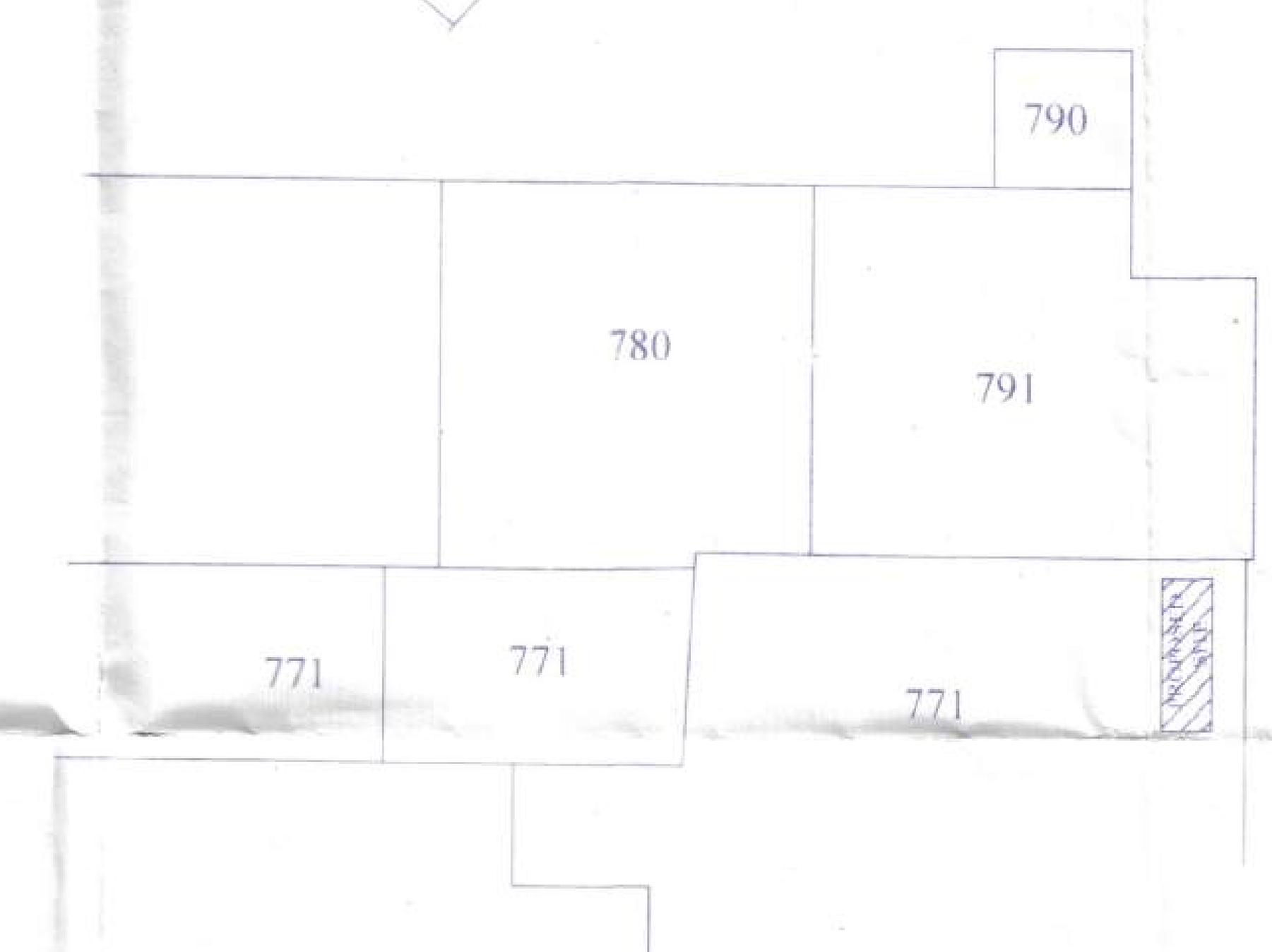
BASEMENT FLOOR PLAN



GROUND FLOOR PLAN



LOCATION PLAN



KEY PLAN

For PINE DEVELOPERS PVT. LTD.
Managing Director
SIG. OF OWNER/DEVELOPER

AR. RAJEEV KUM..
REGISTERED ARCHITECT
REG. No.-CA/2015/68352
UDHD, BIHAR
SIGNATURE OF ARCHITECT

SHAILESH RANJAN
STR. ENGINEER
EMP No.-BR/UDHD/SE/23-0110
UDHD, PATNA (BIHAR)
SIGNATURE OF ENGINEER

Accepted
Valid From 17/02/26 to 16/02/31
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Municipal Commissioner
Municipal Corporation, Begusarai
17/02/26