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SOIL EXPLORATION REPORT

OF

PROJECT : "Residential Group Development Building at Survey number 1356/1A1A1, 1356/1A4A1, 1358/1, 1359/2, 1469/1B of Thaiyur – "B" village, Thiruporur taluk with the total land extent of 1.78 Acres"

PN : 7694

F.S.ENGINEERS PVT LTD

Foundation & Structural Engineers

Reg.Office : 109,(New No .98)Velachery Road,

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NEW No: 98, (OLD No:109,)
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GUINDY, CHENNAI-600 032.

For F.S. ENGINEERS (P) LTD.

Director

SOIL EXPLORATION REPORT

PROJECT NO : **7694**

PROJECT NAME : "Residential Group Development Building at Survey number 1356/1A1A1, 1356/1A4A1, 1358/1, 1359/2, 1469/1B of Thaiyur – "B" village, Thiruporur taluk with the total land extent of 1.78 Acres"

1. INTRODUCTION

M/s. Alliance Villas Pvt Ltd are proposing to construct a "Residential Group Development Building at Survey number 1356/1A1A1, 1356/1A4A1, 1358/1, 1359/2, 1469/1B of Thaiyur – "B" village, Thiruporur taluk with the total land extent of 1.78 Acres" at the location shown in Fig-1. Soil Exploration work was referred to this firm by M/s. Alliance Villas Pvt Ltd, with a view to determining the soil properties of the area and to arrive at the most suitable foundation system for the proposed structure. For this purpose ten boreholes were bored upto the depth from 5.60 to 9.50M below ground level. The boreholes were terminated, after drilling the required depth in the very dense disintegrated rock with N>50. The borehole locations are given in Fig-1. The work comprised of conducting Standard Penetration Tests in the field and collecting samples for testing in the laboratory. The report presents the details of the work, analysis of test results and foundation recommendations made based on the analysis.

2. EXPLORATION TECHNIQUE

Rotary Drilling technique was adopted for boring in this area. Casing pipes and bentonite slurry were used to protect the sides of the boreholes. Standard Penetration Tests were conducted at change of layers and at specified intervals disturbed samples were collected in plastic bags from all the layers for visual observation and classification tests. Undisturbed samples could not be collected since the soil layers met with were essentially cohesion less in nature.

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3. SOIL PROFILE

The profile of the area as observed in the boreholes is given in Figs. 2 to 11. The top soil of 0.50M is non- uniform. The underlying layer is sandy clay present upto the depth of 2.50 to 4.50M. The layer below is cemented sand layer followed by disintegrated rock appearing at the depth of 4.0 to 5.50M below G.L. Water table was met with at depths varying from 4.50M in the boreholes below ground level at the time of exploration. The water table could however rise to about 2M below G.L during heavy rain.

4. ANALYSIS OF TEST RESULTS

1. Standard Penetration Test
2. Grain Size Analysis
3. Determination of Specific Gravity

An analysis of the results of these tests was presented in this section of the report.

4.1 Standard Penetration Test

These tests were conducted at change of layers and at specified intervals, commencing the test at 1.5 M below ground level. The results are presented graphically in Figs. 2 to 11. The relative density of the cohesionless layers obtained from the N values is given in the borelogs.

4.2 Grain Size Analysis

Combined sieve and hydrometer analyses were conducted on the various samples collected. The results are given in Table-1. Based on the proportion of the different soil constituents, the soil is classified using the Triangular Chart.

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4.3 Determination of Specific Gravity

The specific gravities of the soil grains were determined from the various samples collected. The results are given in Table-1. No abnormal value is noted in the test results.

5. FOUNDATION ANALYSIS

For the proposed structure shallow foundations can be placed after removing the sandy clay layer, resting the foundation on the cemented sand / disintegrated rock layer. Excavations are needed upto 2.50 to 4.50M below G.L.

The safe bearing capacity of the cohesionless layers could be computed using the formula,

$$Q_a = (0.5\gamma \times B \times N_\gamma + \gamma D_f N_q) \div 2.5$$

where,

B = Width of footing

γ = Submerged unit weight of soil taken as 1 gm/cc,

D_f = Depth of surcharge

$N\gamma$ Nq = Bearing capacity factors based on the N values taken from Fig. 12

The modulus of subgrade reaction (submerged) estimated from N value and grain size distribution are also given

Depth (M)	Layer	SBC (Kg/cm^2)	
		Without Basement	With Basement
2.5 to 4.0	CMS	Limited to 3.5	
Below 4.50	DR	Limited to 5.0	

The settlement of the foundations would be within 25mm.

Over excavation in the foundation trenches should be refilled by concrete as per the SBC adopted.

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If this SBC is not adequate for shallow foundation a pile foundation can be given.

5.2 PILE FOUNDATION

The pile could be seated for 1.5M in the very dense disintegrated rock layer with N>50. The length of pile could be uniformly 7.0M.

The piles could be designed as end bearing pile. The end bearing capacity of the pile could be computed using the formula,

Qe = 4 X N X As Tonnes

Where,

N = Standard Penetration Test value

As = Area of cross-section of pile expressed in sq.ft

When the pile are seated in the layer with N>50 full structural capacity of the pile which is 50 kg/cm^2 for M-20 concrete would determine the allowable load.

The lateral load capacity for a minimum of reinforcement of 0.4% of C.S of pile is 10% of vertical capacity. The pull out capacity which is given by skin friction computed using the formula N/3 + 1 T/M^2 of surface area of pile gives more than 50% of vertical capacity. Accordingly the pile capacities are given below

Pile dia D	Vertical Capacity T	Lateral Capacity T	Pull out Capacity T
50	98	10	Pull out capacity is 50% of vertical capacity
60	141	14	
70	192	19	
100	398	39	

The settlement of the pile foundations would be within allowable limit as per IS.

M-25 concrete is recommended for pile foundation to counteract the harmful effect of chloride chemicals present in soil and water.

Since the piles are seated in disintegrated rock layer DMC method of piling is recommended to avoid disturbance to pile bore base. To verify this one SPT test in one

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pile bore in a group has to be done after flushing and confirm the SPT value is minimum 50. High horse power pump and good quality bentonite has to be used for flushing..

6. EXCAVATION PROCEDURE

1. Slope 1½ to 1 is required. Excavation needed upto 2.50 to 4.50M below G.L.

2. Slush formed by any water accumulation should be removed and refilled by lean concrete.

3. Excavations in disintegrated rock could be done by normal excavators.

4. If water accumulates in the foundation trenches, dewatering should be done by pumping out water from a level minimum 1M lower than the foundation level to maintain downward flow of water. The downward flow of water should be maintained continuously upto 24 hours after laying the PCC.

5. Water should not be allowed to flow over the cut surface. Adequate surface drains should be given prior to commencement of excavation. The exposed side of excavation should be covered by plastic sheet to prevent moisture evaporation.

7. CONCLUSION

1. The area explored has got top soil of 0.50M is non- uniform. The underlying layer is sandy clay present upto the depth of 2.50 to 4.50M. The layer below is cemented sand layer followed by disintegrated rock appearing at the depth of 4.0 to 5.50M below G.L. Water table was met with at depths varying from 4.50M in the boreholes below ground level at the time of exploration. The water table could however rise to about 2M below G.L during heavy rain.

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2. For the proposed structure shallow foundations can be placed after removing the sandy clay layer, resting the foundation on the cemented sand / disintegrated rock layer. The SBCs that could be adopted for different depths are given in the report.

3. The settlement of the shallow foundation would be within 25mm.

4. Over excavations in the foundation trenches should be refilled by concrete as per SBC adopted.

5. As an alternative pile if adopted the length of pile could be 7.0M utilizing the full capacity of 50kg/cm^2.

6. Suggested precautions and piling method should be adopted while undertaking the construction.

For F.S. ENGINEERS (P) LTD.

(Dr. A. Verghese Chummar) Director

DIRECTOR

Dated: Feb 20th , 2023

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PROJECT : SOIL INVESTIGATION WORK AT HUMMING GARDENS PHASE-III, KELAMBAKKAM

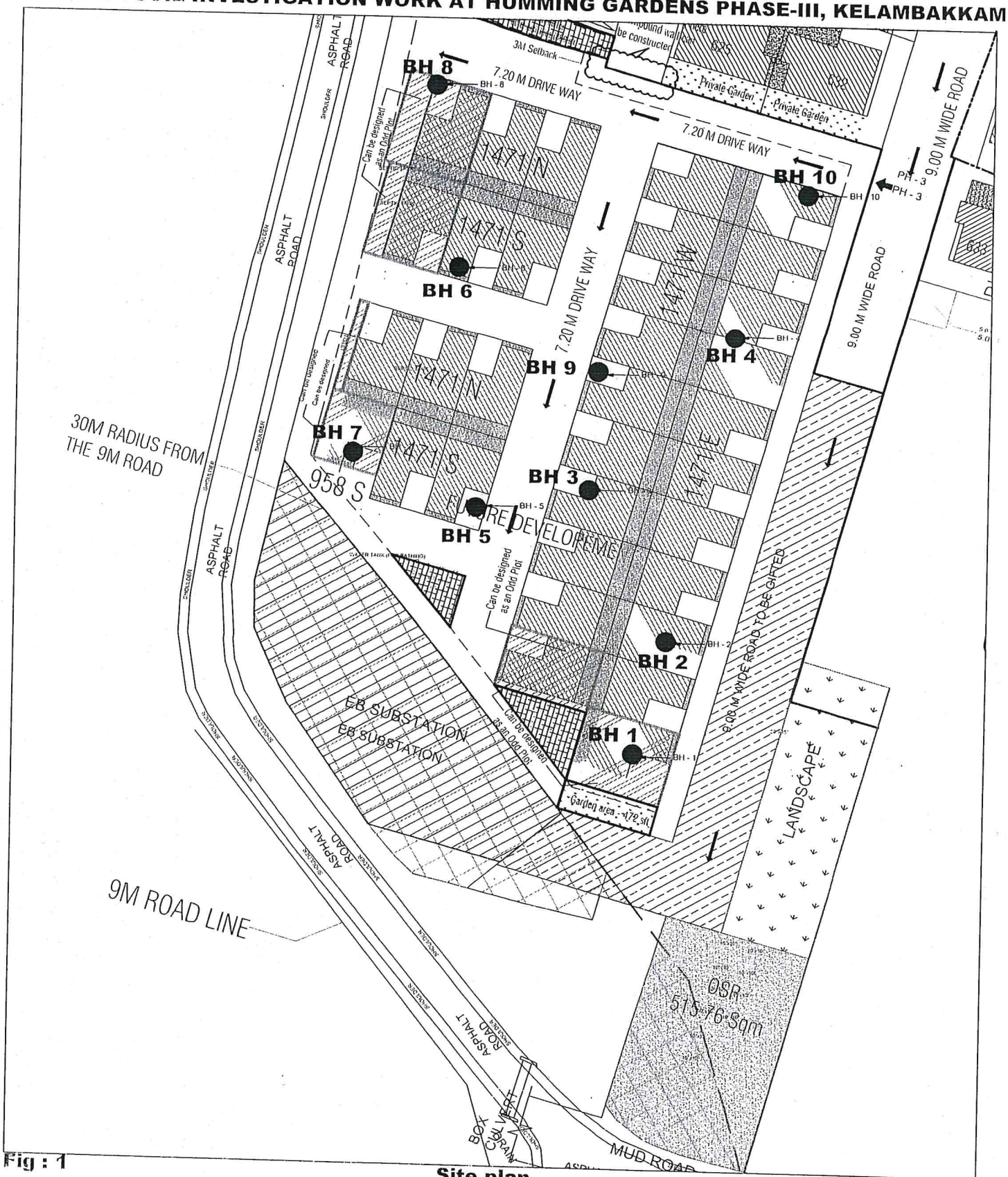


Fig : 1

Site plan

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SOIL EXPLORATION AND FOUNDATION DESIGN DIVISION

FIELD BORE LOG

PROJECT : SOIL INVESTIGATION WORK AT HUMMING GARDENS - PHASE III, KELAMBAKKAM

DATE OF COMMENCEMENT : 11.02.2023

BORE HOLE NO : 1

DATE OF COMPLETION : 12.02.2023

TYPE OF BORING : ROTARY DRILLING

G.W.L : 4.50 Mtr

DEPTH BELOW GL	SOIL PROFILE	DESCRIPTION OF SOIL	THICKNESS OF LAYER	DEPTH AT WHICH SAMPLES ARE COLLECTED		STANDARD PENETRATION TEST DATA				GRAPHICAL REPRESENTATION OF PENETRATION RESISTANCE
				D.S	U.D.S	DEPTH AT WHICH TEST CONDUCTED	N - VALUE	PENETRATION IN " CMS "	RELATIVE DENSITY CONSISTANCYD	10 20 30 40 >50
		TOP SOIL	0.50	0.50						
1		SANDY CLAY SC (Gravelly) (Brownish Grey)	2.00			1.50	12	30	STIFF	
2				2.50						
3		CEMENTED SAND CMS1 (Greyish Brown)	3.00			3.00	34	30	DENSE	
4										
5						4.50	>50	0	V.DENSE	
6		DISINTEGRATED ROCK DR1 (Brown)	4.00	5.50		6.00	>50	0	V.DENSE	
7										
8						7.50	>50	0	V.DENSE	
9										
9.50				9.50		9.50	>50	0	REBOUND	

REMARKS : ALL DIMENSIONS ARE IN METRES

END OF BORING

Fig : 2

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FIELD BORE LOG

PROJECT : SOIL INVESTIGATION WORK AT HUMMING GARDENS - PHASE III, KELAMBAKKAM

DATE OF COMMENCEMENT : 11.02.2023

BORE HOLE NO : 2

DATE OF COMPLETION : 12.02.2023

TYPE OF BORING : ROTARY DRILLING

G.W.L : 4.50 Mtr

DEPTH BELOW GL	SOIL PROFILE	DESCRIPTION OF SOIL	THICKNESS OF LAYER	DEPTH AT WHICH SAMPLES ARE COLLECTED		STANDARD PENETRATION TEST DATA				GRAPHICAL REPRESENTATION OF PENETRATION RESISTANCE
				D.S	U.D.S	DEPTH AT WHICH TEST CONDUCTED	N - VALUE	PENETRATION IN " CMS "	RELATIVE DENSITY CONSISTANCYD	10 20 30 40 >50
		TOP SOIL	0.50	0.50						
1 2		SANDY CLAY SC (Gravelly) (Brownish Grey)	2.00			1.50	11	30	STIFF	
3 4 5		CEMENTED SAND CMS1 (Greyish Brown)	3.00	2.50		2.50	38	30	DENSE	
						4.00	>50	0	V.DENSE	
6 7 8		DISINTEGRATED ROCK DR1 (Brown)	3.00	5.50		5.50	>50	0	V.DENSE	
						7.00	>50	0	V.DENSE	
8.50				8.50		8.50	>50	0	REBOUND	

REMARKS : ALL DIMENSIONS ARE IN METRES

END OF BORING

Fig : 3

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FIELD BORE LOG

PROJECT : SOIL INVESTIGATION WORK AT HUMMING GARDENS - PHASE III, KELAMBAKKAM

BORE HOLE NO : 3

TYPE OF BORING : ROTARY DRILLING

DATE OF COMMENCEMENT : 12.02.2023

DATE OF COMPLETION : 12.02.2023

G.W.L : 4.50 Mtr

DEPTH BELOW GL	SOIL PROFILE	DESCRIPTION OF SOIL	THICKNESS OF LAYER	DEPTH AT WHICH SAMPLES ARE COLLECTED		STANDARD PENETRATION TEST DATA				GRAPHICAL REPRESENTATION OF PENETRATION RESISTANCE
				D.S	U.D.S	DEPTH AT WHICH TEST CONDUCTED	N - VALUE	PENETRATION IN " CMS "	RELATIVE DENSITY CONSISTANCYD	10 20 30 40 >50
		TOP SOIL	0.50	0.50						
1		SANDY CLAY SC (Gravelly) (Brownish Grey)	3.50			1.50	17	30	V.STIFF	
2										
3						3.00	35	30	HARD	
4				4.00						
5		DISINTEGRATED ROCK DR1 (Brown)	4.00			4.50	>50	0	V.DENSE	
6										
7						6.00	>50	0	V.DENSE	
8.00				8.00		8.00	>50	0	REBOUND	

REMARKS : ALL DIMENSIONS ARE IN METRES

END OF BORING

Fig 1.4

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FIELD BORE LOG

PROJECT : SOIL INVESTIGATION WORK AT HUMMING GARDENS - PHASE III, KELAMBAKKAM

DATE OF COMMENCEMENT : 12.02.2023

BORE HOLE NO : 4

DATE OF COMPLETION : 13.02.2023

TYPE OF BORING : ROTARY DRILLING

G.W.L : 4.50 Mtr

DEPTH BELOW GL	SOIL PROFILE	DESCRIPTION OF SOIL	THICKNESS OF LAYER	DEPTH AT WHICH SAMPLES ARE COLLECTED		STANDARD PENETRATION TEST DATA				GRAPHICAL REPRESENTATION OF PENETRATION RESISTANCE
				D.S	U.D.S	DEPTH AT WHICH TEST CONDUCTED	N - VALUE	PENETRATION IN " CMS "	RELATIVE DENSITY CONSISTANCYD	10 20 30 40 >50
		TOP SOIL	0.50	0.50						
1		SANDY CLAY SC (Gravelly) (Brownish Grey)	3.50			1.50	12	30	STIFF	
2										
3						3.00	47	30	HARD	
4				4.00						
5		DISINTEGRATED ROCK DR1 (Brown)	1.60			4.50	>50	0	V.DENSE	
5.60				5.60		5.60	>50	0	REBOUND	

REMARKS : ALL DIMENSIONS ARE IN METRES

END OF BORING

Fig : 5

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FIELD BORE LOG

PROJECT : SOIL INVESTIGATION WORK AT HUMMING GARDENS - PHASE III, KELAMBAKKAM

DATE OF COMMENCEMENT : 12.02.2023

BORE HOLE NO : 5

DATE OF COMPLETION : 13.02.2023

TYPE OF BORING : ROTARY DRILLING

G.W.L : 4.50 Mtr

DEPTH BELOW GL	SOIL PROFILE	DESCRIPTION OF SOIL	THICKNESS OF LAYER	DEPTH AT WHICH SAMPLES ARE COLLECTED		STANDARD PENETRATION TEST DATA				GRAPHICAL REPRESENTATION OF PENETRATION RESISTANCE
				D.S	U.D.S	DEPTH AT WHICH TEST CONDUCTED	N - VALUE	PENETRATION IN " CMS "	RELATIVE DENSITY CONSISTANCYD	10 20 30 40 >50
		TOP SOIL	0.50	0.50						
1		SANDY CLAY SC (Gravelly) (Brownish Grey)	3.50			1.50	11	30	STIFF	
2										
3						3.00	35	30	HARD	
4				4.00						
5		DISINTEGRATED ROCK DR1 (Brown)	1.60			4.50	>50	24	V.DENSE	
5.60				5.60		5.60	>50	0	REBOUND	

REMARKS : ALL DIMENSIONS ARE IN METRES

END OF BORING

Fig: 6

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FIELD BORE LOG

PROJECT : SOIL INVESTIGATION WORK AT HUMMING GARDENS - PHASE III, KELAMBAKKAM

DATE OF COMMENCEMENT : 12.02.2023

BORE HOLE NO : 6

DATE OF COMPLETION : 13.02.2023

TYPE OF BORING : ROTARY DRILLING

G.W.L : 4.50 Mtr

DEPTH BELOW GL	SOIL PROFILE	DESCRIPTION OF SOIL	THICKNESS OF LAYER	DEPTH AT WHICH SAMPLES ARE COLLECTED		STANDARD PENETRATION TEST DATA				GRAPHICAL REPRESENTATION OF PENETRATION RESISTANCE
				D.S	U.D.S	DEPTH AT WHICH TEST CONDUCTED	N - VALUE	PENETRATION IN " CMS "	RELATIVE DENSITY CONSISTANCYD	10 20 30 40 >50
		TOP SOIL	0.50	0.50						
1		SANDY CLAY SC (Gravelly) (Brownish Grey)	4.00			1.50	9	30	STIFF	
2										
3						3.00	49	30	HARD	
4										
5		DISINTEGRATED ROCK DR1 (Brown)	3.00	4.50		4.50	>50	21	V.DENSE	
6						6.00	>50	0	V.DENSE	
7										
7.50				7.50		7.50	>50	0	REBOUND	

REMARKS : ALL DIMENSIONS ARE IN METRES

END OF BORING

Fig

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PROJECT : SOIL INVESTIGATION WORK AT HUMMING GARDENS - PHASE III, KELAMBAKKAM

BORE HOLE NO : 7

TYPE OF BORING : ROTARY DRILLING

DATE OF COMMENCEMENT : 13.02.2023

DATE OF COMPLETION : 13.02.2023

G.W.L : 4.50 Mtr

DEPTH BELOW GL	SOIL PROFILE	DESCRIPTION OF SOIL	THICKNESS OF LAYER	DEPTH AT WHICH SAMPLES ARE COLLECTED		STANDARD PENETRATION TEST DATA				GRAPHICAL REPRESENTATION OF PENETRATION RESISTANCE
				D.S	U.D.S	DEPTH AT WHICH TEST CONDUCTED	N - VALUE	PENETRATION IN " CMS "	RELATIVE DENSITY CONSISTANCYD	10 20 30 40 >50
		TOP SOIL	0.50	0.50						
1		SANDY CLAY SC (Gravelly) (Brownish Grey)	2.50							
2						1.50	10	30	STIFF	
3				3.00		3.00	41	30	DENSE	
4		CEMENTED SAND CMS1 (Greyish Brown)	1.50							
5				4.50		4.50	>50	0	V.DENSE	
6		DISINTEGRATED ROCK DR1 (Brown)	2.50			6.00	>50	0	V.DENSE	
7.00				7.00		7.00	>50	0	REBOUND	

REMARKS : ALL DIMENSIONS ARE IN METRES

END OF BORING

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FIELD BORE LOG

PROJECT : SOIL INVESTIGATION WORK AT HUMMING GARDENS - PHASE III, KELAMBAKKAM

DATE OF COMMENCEMENT : 13.02.2023

BORE HOLE NO : 8

DATE OF COMPLETION : 13.02.2023

TYPE OF BORING : ROTARY DRILLING

G.W.L : 4.50 Mtr

DEPTH BELOW GL	SOIL PROFILE	DESCRIPTION OF SOIL	THICKNESS OF LAYER	DEPTH AT WHICH SAMPLES ARE COLLECTED		STANDARD PENETRATION TEST DATA				GRAPHICAL REPRESENTATION OF PENETRATION RESISTANCE
				D.S	U.D.S	DEPTH AT WHICH TEST CONDUCTED	N - VALUE	PENETRATION IN " CMS "	RELATIVE DENSITY CONSISTANCYD	10 20 30 40 >50
		TOP SOIL	0.50	0.50						
1		SANDY CLAY SC (Gravelly) (Brownish Grey)	3.50			1.50	9	30	STIFF	
2										
3						3.00	36	30	HARD	
4				4.00						
5		DISINTEGRATED ROCK DR1 (Brown)	2.00			4.50	>50	0	V.DENSE	
6.00				6.00		6.00	>50	0	REBOUND	

REMARKS : ALL DIMENSIONS ARE IN METRES

END OF BORING

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SOIL EXPLORATION AND FOUNDATION DESIGN DIVISION

FIELD BORE LOG

PROJECT : SOIL INVESTIGATION WORK AT HUMMING GARDENS - PHASE III, KELAMBAKKAM

DATE OF COMMENCEMENT : 13.02.2023

BORE HOLE NO : 9

DATE OF COMPLETION : 14.02.2023

TYPE OF BORING : ROTARY DRILLING

G.W.L : 4.50 Mtr

DEPTH BELOW GL	SOIL PROFILE	DESCRIPTION OF SOIL	THICKNESS OF LAYER	DEPTH AT WHICH SAMPLES ARE COLLECTED		STANDARD PENETRATION TEST DATA				GRAPHICAL REPRESENTATION OF PENETRATION RESISTANCE
				D.S	U.D.S	DEPTH AT WHICH TEST CONDUCTED	N - VALUE	PENETRATION IN " CMS "	RELATIVE DENSITY CONSISTANCYD	10 20 30 40 >50
		TOP SOIL	0.50	0.50						
1		SANDY CLAY SC (Gravelly) (Brownish Grey)	3.50			1.50	13	30	STIFF	
2										
3						3.00	45	30	HARD	
4				4.00						
5		DISINTEGRATED ROCK DR1 (Brown)	3.60			4.50	>50	0	V.DENSE	
6						6.00	>50	0	V.DENSE	
7										
7.60				7.60		7.60	>50	0	REBOUND	

REMARKS : ALL DIMENSIONS ARE IN METRES

END OF BORING

Fig : 10

P N : 7694

For F.S. ENGINEERS (P) LTD.

Director

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F.S.ENGINEERS PRIVATE LIMITED

SOIL EXPLORATION AND FOUNDATION DESIGN DIVISION

FIELD BORE LOG

PROJECT : SOIL INVESTIGATION WORK AT HUMMING GARDENS - PHASE III, KELAMBAKKAM

DATE OF COMMENCEMENT : 13.02.2023

BORE HOLE NO : 10

DATE OF COMPLETION : 14.02.2023

TYPE OF BORING : ROTARY DRILLING

G.W.L : 4.50 Mtr

DEPTH BELOW GL	SOIL PROFILE	DESCRIPTION OF SOIL	THICKNESS OF LAYER	DEPTH AT WHICH SAMPLES ARE COLLECTED		STANDARD PENETRATION TEST DATA				GRAPHICAL REPRESENTATION OF PENETRATION RESISTANCE
				D.S	U.D.S	DEPTH AT WHICH TEST CONDUCTED	N - VALUE	PENETRATION IN " CMS "	RELATIVE DENSITY CONSISTANCYD	10 20 30 40 >50
		TOP SOIL	0.50	0.50						
1		SANDY CLAY SC (Gravelly) (Brownish Grey)	3.50			1.50	16	30	V.STIFF	
2										
3						3.00	27	30	V.STIFF	
4				4.00						
5		DISINTEGRATED ROCK DR1 (Brown)	3.00			4.50	>50	0	V.DENSE	
6						6.00	>50	0	V.DENSE	
7.00				7.00		7.00	>50	0	REBOUND	

REMARKS : ALL DIMENSIONS ARE IN METRES

END OF BORING

Fig 10

F.S. ENGINEERS PVT. LTD.
NEW No: 98. (OLD No:109,)
VELACHERY ROAD,
GUINDY, CHENNAI-600 032.

For F.S. ENGINEERS (P) LTD.

P N : 7694

Director

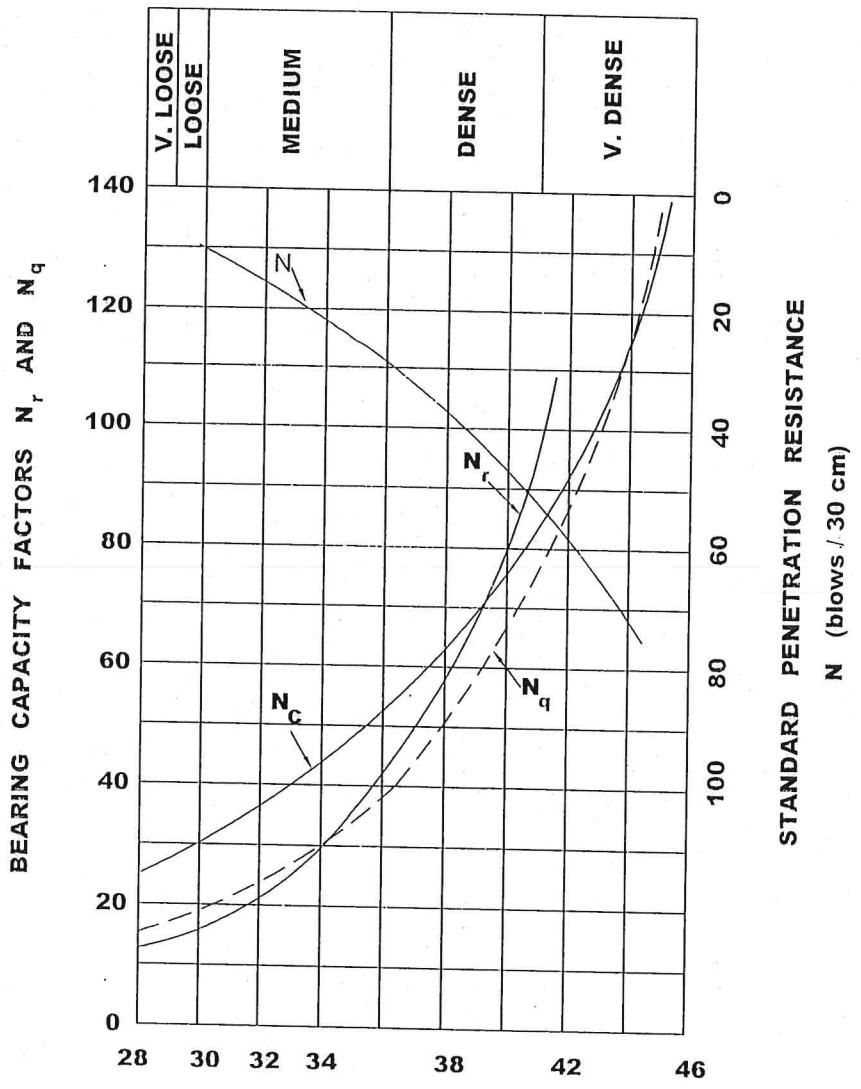


FIG. 12 CURVES SHOWING THE RELATIONSHIP BETWEEN ø N_r N_q, N_c AND N

Ref : Foundation Analysis & Design.
Joseph. E. Bowles.

PN : 7694

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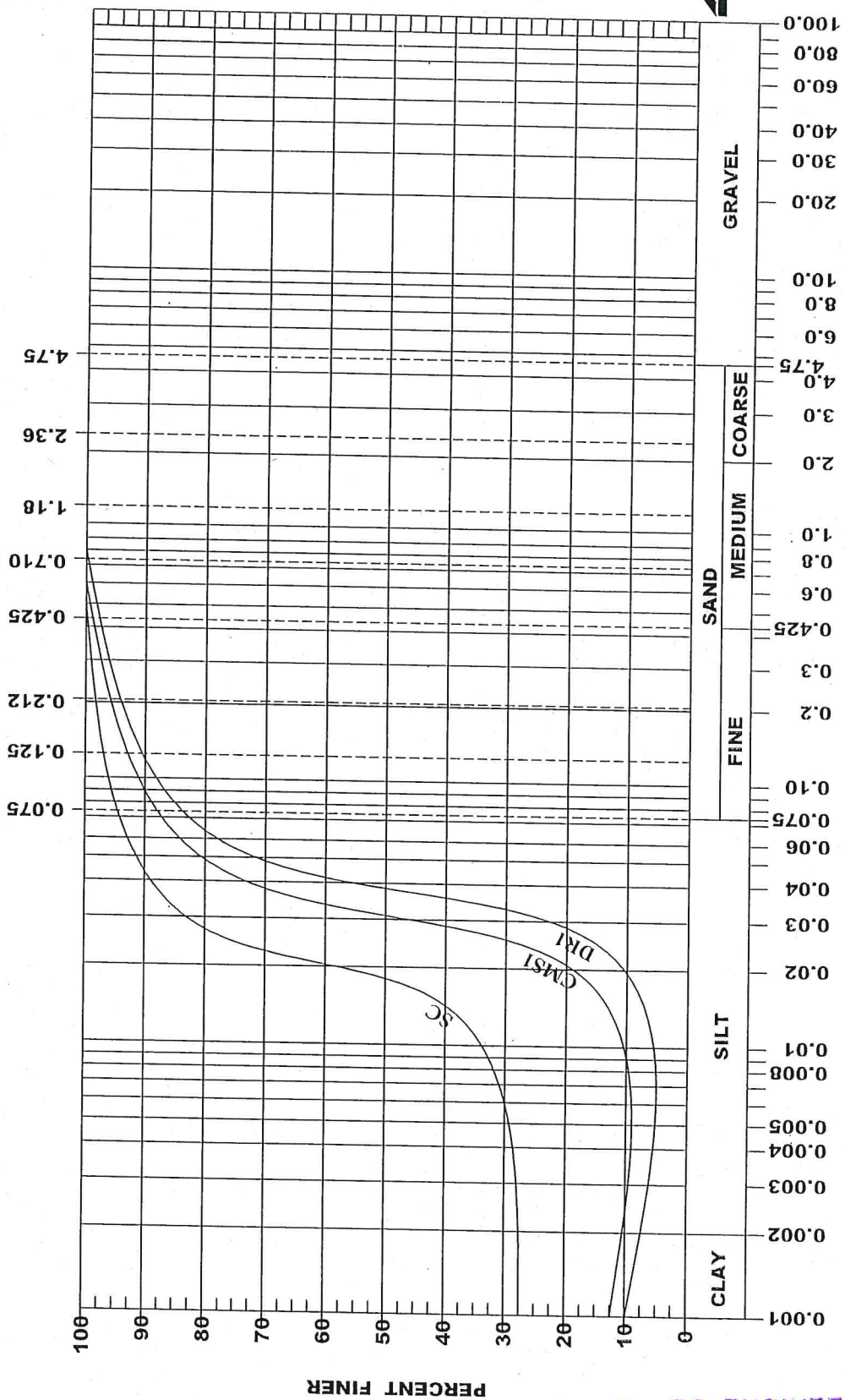


FIG. 13 GRAIN SIZE DISTRIBUTION CURVE

For F.S. ENGINEERS (P) LTD.

Director

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PROJECT : SOIL INVESTIGATION WORK AT HUMMING GARDENS PHASE – III, KELAMBAKKAM

		Layer	W_L	Wp	Wn	swell	Grain Size Distribution				Sp. Gr.
							Clay	Silt	Sand	Gravel	G
M			%	%	%	%	%	%	%	%	
1	2	3	4	5	6	7	8	9	10	11	12
BH.1											
	0.00-0.50	TOP	-	-	-	-	-	-	-	-	-
	0.50-2.50	SC	-	-	-	-	28	20	52	-	2.63
	2.50-5.50	CMS1	-	-	-	-	12	25	63	-	2.65
	5.50-9.50	DR1	-	-	-	-	10	15	75	-	2.64
BH.2							(not clay)				
	0.00-0.50	TOP	-	-	-	-	-	-	-	-	-
	0.50-2.50	SC	-	-	-	-	30	15	55	-	2.63
	2.50-5.50	CMS1	-	-	-	-	10	25	65	-	2.65
	5.50-8.50	DR1	-	-	-	-	15	15	70	-	2.64
BH.3							(not clay)				
	0.00-0.50	TOP	-	-	-	-	-	-	-	-	-
	0.50-4.00	SC	-	-	-	-	25	15	60	-	2.63
	4.00-8.00	DR1	-	-	-	-	14	12	74	-	2.64
BH.4							(not clay)				
	0.00-0.50	TOP	-	-	-	-	-	-	-	-	-
	0.50-4.00	SC	-	-	-	-	22	20	58	-	2.63
	4.00-5.60	DR1	-	-	-	-	10	10	80	-	2.64
BH.5							(not clay)				
	0.00-0.50	TOP	-	-	-	-	-	-	-	-	-
	0.50-4.00	SC	-	-	-	-	27	13	60	-	2.63
	4.00-5.60	DR1	-	-	-	-	8	15	77	-	2.64
BH.6							(not clay)				
	0.00-0.50	TOP	-	-	-	-	-	-	-	-	-
	0.50-4.50	SC	-	-	-	-	26	20	54	-	2.63
	4.50-7.50	DR1	-	-	-	-	10	15	75	-	2.64
BH.7							(not clay)				
	0.00-0.50	TOP	-	-	-	-	-	-	-	-	-
	0.50-3.00	SC	-	-	-	-	30	20	50	-	2.63
	3.00-4.50	CMS1	-	-	-	-	10	23	67	-	2.65
	4.50-7.00	DR1	-	-	-	-	15	15	70	-	2.64
BH.8							(not clay)				
	0.00-0.50	TOP	-	-	-	-	-	-	-	-	-
	0.50-4.00	SC	-	-	-	-	24	15	61	-	2.63
	4.00-6.00	DR1	-	-	-	-	9	15	76	-	2.64
BH.9							(not clay)				
	0.00-0.50	TOP	-	-	-	-	-	-	-	-	-
	0.50-4.00	SC	-	-	-	-	24	20	56	-	2.63
	4.00-7.60	DR1	-	-	-	-	15	15	70	-	2.64
BH.10							(not clay)				
	0.00-0.50	TOP	-	-	-	-	-	-	-	-	-
	0.50-4.00	SC	-	-	-	-	28	20	52	-	2.63
	4.00-7.00	DR1	-	-	-	-	10	12	78	-	2.64
							(not clay)				

Lab table : 1

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lab test result

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Land Use Zone Finder, CRZ Zone Check, Aquifer Zone Check, CBA Check, EWS Check, Road Width Check, Proposed Road Widening Check, FSI Calculator

Property Documentation & Workflow Tools

Forms & Templates, Document Generator, Document Translation, Dictionary

Vastu & Property Management Tools

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