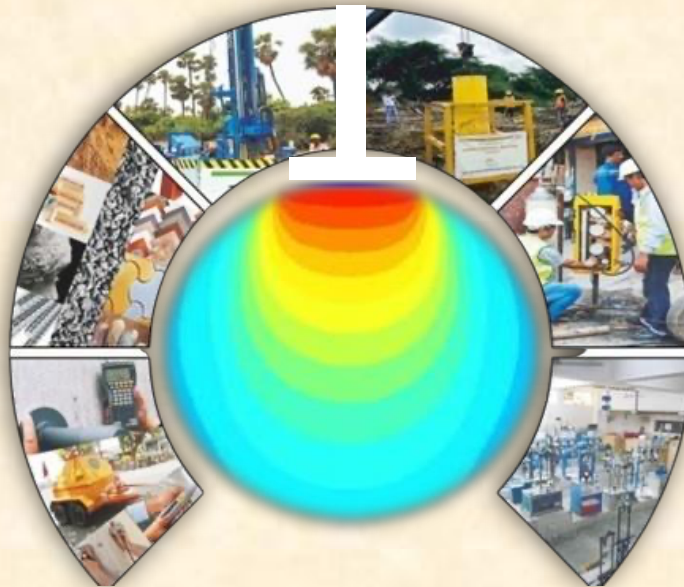


SR-1241

“Geotech Investigation work for Jaipur Metro
Ph-II Project from Prahladpura to Todi Mod
(Total approximate length -42.8 km)”



Submitted to:
DELHI METRO RAIL CORPORATION LTD



TC-10943
NABL Accredited
Both Field & Lab Tests

CEG Test House and Research Centre Pvt. Ltd.

B-11(G), Malviya Industrial Area, Jaipur-302017

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SR-1241

“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”

LOCATION

P-377(BH-01), P-385(BH-03) & P-387(BH-04)

SR. No.	Report Ref. No.	Revision No.	Date
1241_25-26	CEGTH/DMRC/SR-1241/2026-27/243	00	24.06.2026

Submitted to:
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CEGTH/DMRC/SR-1241/2026-27/243

Date:- 24.06.2026

To,

Project Director/Jaipur-II, DMRC
Office of Chief Project Manager-8
Opposite Frank Anthony Public School
Lala Lajpat Rai Marg, Lajpat Nagar-IV
New Delhi - 110024

Subject :- “Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”

Dear Sir,

We are pleased to submit this report of 03 borehole conducted at location of Ch. P+377(BH-01), P-385(BH-03) & P-387(BH-04).

The accompanying report presents results of field tests and laboratory tests conducted on selected soil and rock samples ,their interpretation and foundation recommendations.

Should there be any clarifications regarding the contents please contact us at your most convenient time.

We value the opportunity to participate in this project and look forward a pleasant association on future projects.

Very truly yours,
CEG Test House & Research Centre Pvt. Ltd.

Prepared By:-



Nehal Jain
Sr. General Manager, Geotechnical
Authorized Signatory



Balaga Chakradhar
Geotechnical Engineer



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CHAPTER 1 GENERAL

1.1 INTRODUCTION:

The work of “**Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)**” was awarded to CEG Test House & Research Centre Pvt. Ltd. by **Delhi Metro Rail Corporation Ltd.,**.

Field work including drilling of boreholes and sample collection covered in this report was carried out in the presence of Client’s Engineer. Laboratory tests were conducted on selected soil samples to determine the design parameters, confirming to relevant specifications and the guidelines received from the client.

This report includes the details of methodology of investigation, collection of soil samples, laboratory test results, analysis of results and recommendations for results for proposed structures based on Soil samples collected from the Borelog locations.

1.2 SCOPE OF WORK:

- Mobilisation of necessary plant equipments, men and materials for the geotechnical investigation work as per specifications, drawings and instructions of the engineer, shifting of the equipment from one test location to another location to complete the entire field work within the stipulated time schedule and demobilization after completion of field work.
- Making 150 mm nominal diameter boreholes at various locations upto 50.00m depth below the natural ground level in all types of soil using suitable approved method of boring including chiselling, cleaning, providing casing pipe as required or as directed by the engineer.
- Performing Standard Penetration Tests at every 1.5 m interval and at every change of strata.
- Collecting undisturbed or disturbed soil samples at every 3.0 m interval and at every change of strata. Recording of ground water table and collecting water samples for conducting chemical analysis in the laboratory.
- Recording of ground water table and collecting water samples for conducting chemical analysis in the laboratory.
- Transporting all the collected soil samples to the laboratory.
- Conducting various laboratory tests on selected soil samples at CEGTH NABL accredited laboratory including preparation of samples to determine the following properties all complete as per specification :

On soil Samples

- Dry density test
- Bulk Density and Moisture Content.

- Specific gravity
- Sieve Analysis (Mechanical) with Hydrometer Classification
- Liquid Limit, Plastic Limit and Shrinkage Limit
- Direct Shear Test
- Triaxial Shear Test
- Chemical Analysis of soil samples (pH, chloride, Sulphate)

The details of borehole locations and general geology of site location describe in **Chapter 2**.

CHAPTER 2 DETAILS OF SITE AND GENERAL GEOLOGICAL HISTORY

2.1 SITE LOCATION:

The locations of 03 boreholes were marked on the ground as per the layout given by the Engineer. These locations are shown in **Fig 3**. The details of various boreholes locations along with their co-ordinates are provided in table 2.1.

The details of the site and test locations for the proposed project are shown in location plan in Fig 3. The site of proposed project is located at **Jaipur** in the State of **Rajasthan** falls in seismic zone – II (Zone factor=0.10) of India

Table 2.1: Details of Borehole Locations & Test Locations

S.No	Chainage/ Location	BH.No	Depth of Water Table below EGL (m)	Depth of Borehole below EGL(m)	Co-ordinates (m)	
					E	N
1.	P-377	BH-01	Not Encounted	50.00	579027.000	2968502.000
2.	P-385	BH-03	Not Encounted	50.00	578931.000	2968687.000
3.	P-387	BH-04	Not Encounted	50.00	578917.000	2968744.000

2.2 GENERAL GEOLOGY

2.2.1 LOCATION

The study area is located within the eastern margin of the Aravalli Craton in Jaipur, Rajasthan, forming a part of the northwestern Indian Shield. The geology of the region is predominantly characterized by Precambrian rock formations comprising quartzites, schists, phyllites, granites, and gneisses, which are generally hard, compact, and crystalline in nature. The area also contains occurrences of alluvial deposits in low-lying zones. The regional topography is undulating, with elevation generally ranging from approximately 400 meters to 600 meters above Mean Sea Level.

2.2.2 CLIMATE

The project area, located in Jaipur district of Rajasthan, experiences a semi-arid climate characterized by extremely hot summers, mild winters, and a short monsoon season. Temperatures generally range from approximately 5°C in winter to 45°C during peak summer months, with May and June being the hottest period. The region receives an average annual rainfall of about 500 to 700 mm, mainly during the southwest monsoon from July to September. Relative humidity remains low for most of

the year, increasing during the monsoon season. Wind conditions are generally dry and moderate, with occasional dust storms during summer. These climatic conditions play an important role in geotechnical aspects such as foundation design, groundwater fluctuation, drainage planning, and construction scheduling.

2.2.3 GEOLOGY

“The subsurface conditions at the Jaipur location are predominantly composed of sandy silt, silty sand, and clayey soil with varying proportions of gravel and weathered rock fragments. The upper strata generally exhibit moderate weathering and loose to medium dense soil conditions, underlain by residual soils derived from quartzite, schist, and granite gneiss formations of the Aravalli terrain. The weathered zone gradually transitions into comparatively competent geological formations at greater depths, with occasional joints and fractures observed in the parent material.”

The Geological formation of the Rajasthan is as follows:

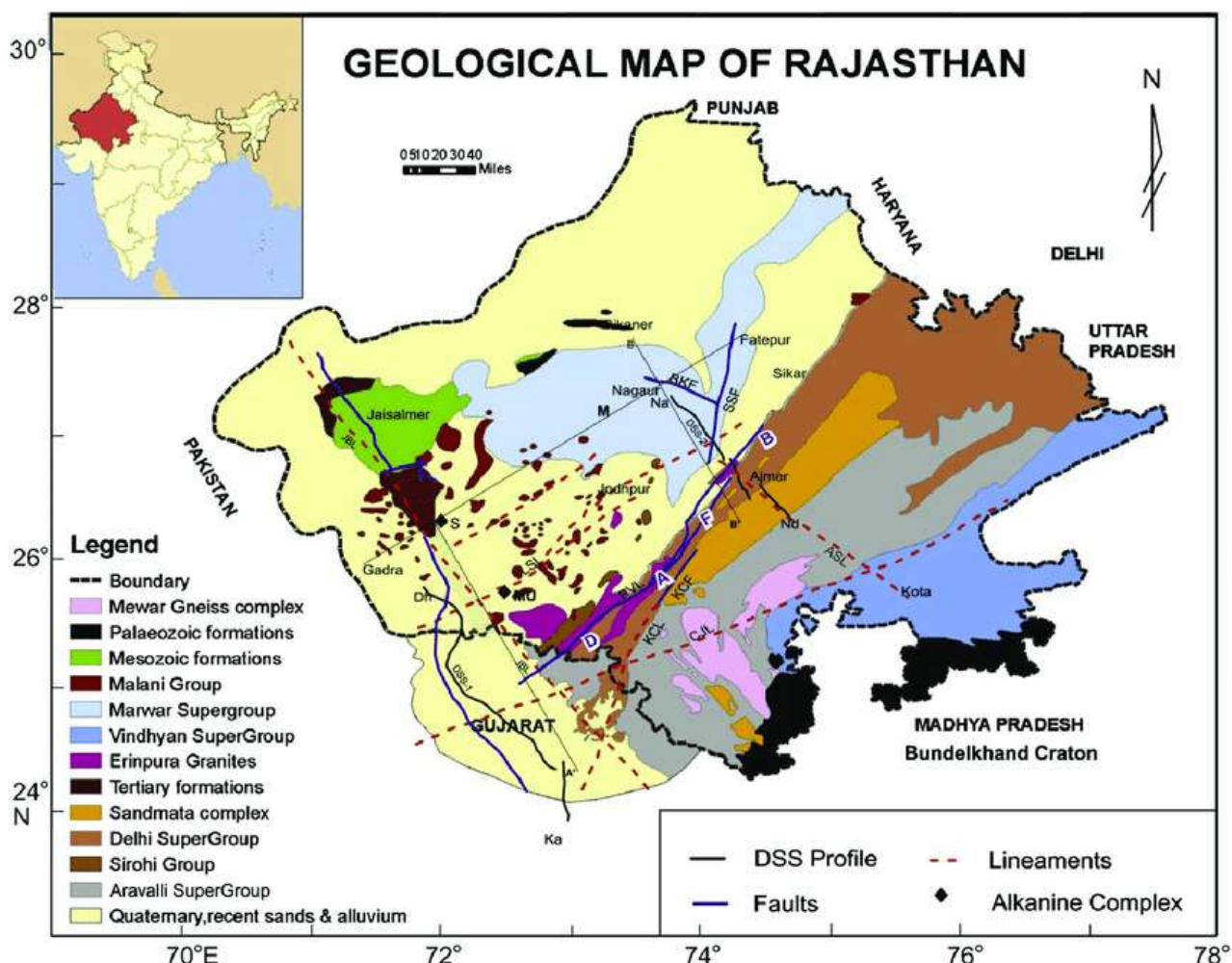


Fig. 1: Geological map of Rajasthan

The site of proposed project is located at **Jagatpura, Jaipur** in the State of **Rajasthan** falls in seismic zone – II (Zone factor=0.10) of India as per Is : 1893 (Part-1)-2016.

INDIA
SEISMIC ZONE

LEGEND

- International Boundary
- State Boundary
- Country Capital
- Zone - II (Least Active)
- Zone - III (Moderate)
- Zone - IV (High)
- Zone - V (Highest)

Map not to Scale

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(Updated on 2nd June 2014)

CEG Test House & Research Centre Pvt. Ltd.



Figure 3 : - Site Location Plan.

The field and laboratory test decribed in **Chapter 3.**

CHAPTER 3 FIELD AND LABORATORY TEST PROCEDURE

3.1 FIELD INVESTIGATION:

For geotechnical investigation work, hydraulic or mechanical drilling rigs were installed at the specified borehole locations along with the required men and machineries for conducting the requisite field work. The equipment was relocated from one test site to another during the fieldwork, and was demobilized upon the satisfactory completion of each respective borehole.

For conducting the field investigations the following practices were followed at site:

- In soil, boreholes of 150 mm dia. were drilled as per the standard procedure laid in IS: 1892. Wherever rocky strata was encountered before achieving the required depth below E.G.L., bore holes were further extended beyond refusal through soft and hard rock using Hydraulic drilling Rigs with Nx size double tube core barrel or diamond bits upto required depth below the EGL and were terminated as per the instruction of Engr. in-charge.
- Borehole was properly cleaned before taking any sample in soil.
- Standard Penetration Tests and collection of undisturbed or disturbed soil samples were carried out as per the specification IS: 2131 and IS: 2132. The same has been discussed in detail in soil and Rock characteristics attached with the report.
- Ground water table was measured as per IS: 6935-1973. The depth of ground water level was to be measured after 24 hours of completion of borehole.

3.1.1 IN SOIL STRATA

(i) Standard Penetration Test

The Standard Penetration Tests were conducted in boreholes as per IS 2131. Each test was carried out using the standard split spoon sampler carrying manual hammer to measure the number of blows ‘N’.

Standard split spoon sampler was attached to an ‘A’ rod. It was driven from borehole bottom to a distance of 45 cm using a standard hammer of 63.5 kg falling freely from a height of 75 cm to the required depth. While driving, the number of blows required to penetrate every 15 cm are recorded. The total number of blows required for the last 30 cm is taken as ‘N’ value at that particular depth of the borehole. Wherever the total penetration was less than 45cm, the no. of blows & the depth penetrated is recorded in the respective borelog.

SPT ‘N’ values were correlated with relative density of non-cohesive stratum and with consistency of cohesive stratum as given below:-

Table 3.1: Soil compactness as per SPT N values

Correlation for Clay / Plastic silt		Correlation for Sand / Non-Plastic silt	
Consistency	Penetration Value (N)	Compactness	Penetration Value (N)
Very Soft	0 - 2	Very Loose	0 - 4
Soft	2 - 4	Loose	4 - 10
Medium	4 - 8	Medium	10 - 30
Stiff	8 - 15	Dense	30 - 50
Very Stiff	15 - 30	Very Dense	> 50
Hard	> 30		

(ii) The field SPT N values were corrected as per the guidelines given in IS: 2131 as follows:

(a) For overburden: - The N value for cohesionless soil is corrected with the help of fig. 1 given in IS-2131.

(b) Due to dilatancy :- Wherever N values observed below water table in fine sand, silty sand or silt was greater than 15, then corrected N values were corrected as under:

$$N' = 15 + \frac{1}{2} (N-15)$$

(iii) Disturbed Sampling (Soil) in boreholes

Disturbed soil samples each weighing approx. 1kg. were collected starting from a depth of 0.5m depth below EGL and at every identifiable change of strata. Samples were immediately sealed, labeled and carefully transported to the laboratory for testing.

(iv) Undisturbed Sampling (Soil) in boreholes

Undisturbed samples were collected at 3.0 m intervals using 100 mm diameter and 450 mm long MS tubes with Area ratio as specified as per clause 4.1.1 (c) of IS: 1892 (latest) provided with sampler head with ball and socket arrangement. Before taking any sample, sampling tube was properly greased. Immediately after taking on undisturbed sample in a tube, the adopter head was removed along with the disturbed material. The visible ends of the sample were trimmed off any wet disturbed soil. The ends were coated alternately with four layers of just molten wax. More molten wax was added to give a total thickness of min. 25 mm. The samples were carefully labeled and transported to the laboratory for testing. Undisturbed samples wherever slipped during lifting were duly marked in the field logs as well as in the soil profile.

3.1.2 GROUND WATER TABLE DEPTH

During the field investigations conducted in May 2026, the groundwater table was not encountered below the Existing Ground Level (EGL). It is anticipated that this level may fluctuate due to seasonal variations in rainfall and surface evaporation rates. For the purpose of foundation analysis at this chainage, the groundwater table has been conservatively assumed to be at the existing ground level.

3.2 LABORATORY INVESTIGATIONS:

i. Laboratory Tests For Soil Samples

Summary of various laboratory test conducted on selected Undisturbed/Disturbed is given below:

Table 3.4: Description of Tests on Soil Samples

Description of Test	Reference	Undisturbed (UDS) Soil Samples	Disturbed (DS/SPT) Soil Samples
Grain Size Analysis / Hydrometer	IS: 2720 (Part - 4)	✓	✓
Natural Moisture Content / Bulk / Dry density	IS : 2720 (Part – 2)	✓	✓
Atterberg Limits - Liquid Limit - Plastic Limit - Shrinkage Limit	IS: 2720 (Part - 5) IS: 2720 (Part - 5) IS: 2720 (Part - 6)	✓ ✓ -	✓ ✓ -
Specific Gravity	IS : 2720 (Part – 3)	✓	✓
Direct Shear Test	IS : 2720 (Part – 13)	✓	✓
Triaxial compressive shear test	IS : 2720 (Part – 11)	✓	✓
Chemical Analysis of Soil Samples	IS : 2720 (Part – 22, 26, 27)	-	-

ii. Grain Size Analysis:

The Grain Size analysis test were performed in accordance with IS 2720 (Part 4) – 1965. For this test an oven dry pulverized soil sample is sieved through the set of sieves 19mm, 10mm, 4.75mm, 2.0mm, 425 micron, 75micron. The amounts of soil retained on each sieve were noted down. The % retained, cumulative % retained and % passing are computed accordingly. If the % passing 75 micron sieve is significant, Hydrometer method is used to find the percentage of silt and clay fraction. Hydrometer were performed in as per IS 2720 (Part 4) – 1965. The results are attached in Appendix B.

iii. Liquid Limit (IS:2720- Part-5)

By Cone Penetrometer Method

Liquid limit by cone penetrometer test were performed in accordance with IS 2720 (Part 5) – 1985. The tests were conducted, at varying water contents, in order to produce a series of cone penetrations (usually 4) in the range 15mm to 25mm. The resulting cone penetrations are plotted verses the water content of the test specimens. The Liquid Limit (WL) is read off the graph, being the water content at which the line of best fit through the test points crosses 20mm penetration.

iv. Plastic Limit:

Plastic Limit test were performed as per IS:2720-Part-5. The sample rolled between the fingers of one hand and the glass plate with pressure sufficient to reduce the mass into a thread of about 3 mm in 5 to 10 complete forward and back movements until the thread starts just crumbling at a diameter of 3 mm.

v. Plasticity Index

The plasticity index I_p is given by

$$I_p = WL - WP \text{ (in percent)}$$

vi. Specific Gravity

Specific gravity test were performed in accordance with IS 2720 (Part 3 Section-1) – 1980. The results are attached in Appendix B.

vii. Direct Shear Test

Direct shear tests were performed as per IS 2720 (Part XIII)-2015, on the undisturbed soil samples obtained during the field investigation. For this test shear box test apparatus was used. The specimen of size 6 cm x 6 cm x 2.4 cm was used. The normal stresses of 0.5 kg/cm², 1.0 kg/cm², 1.5 kg/cm², 2.0 kg/cm² and 3.0 kg/cm² respectively were used.

viii. Triaxial Shear Test

Triaxial Shear Test under Unconsolidated Un-drained (UU) condition as per IS: 2720 (Part-11)-2011 were performed on the undisturbed soil samples obtained during the field investigation. All specimen of size 38mm diameter and 76mm height were used. The axial loading was applied at 1.25 mm/min rate of strain. The normal stresses applied were 0.5 kg/cm², 1.0 kg/cm², 1.5 kg/cm², 2.0 kg/cm² and 3.0 kg/cm² respectively.

CHAPTER 4 ANALYSIS OF TEST RESULTS

4.1 STRATIFICATION

The study of the borehole logs of 03 BHs, the soil and rock strata is done as per IS 1498., the details of strata and soil classification, are provided in table 4.1.

Table 4.1: Strata Description

Ch.	BH NO.	Depth (m)		Description
		From	To	
P-377	BH-01	0.00	3.50	Filledup Strata
		3.50	11.00	Medium Dense to Dense, Greyish
		11.00	14.00	Hard, Greyish, Silty Clay of Low Plasticity
		14.00	18.50	Very Dense, Greyish, Silty Sand
		18.50	21.50	Hard, Greyish, Silty Clay of Low Plasticity
		21.50	48.50	Dense to Very Dense, Greyish, Silty Sand
		48.50	50.00	Hard, Greyish, Silty Clay of Low Plasticity
P-385	BH-03	0.00	1.50	Filledup-Strata
		1.50	16.50	Medium Dense to Very Dense, Greyish, Silty Sand
		16.50	19.50	Hard, Greyish, Silty Clay of Low Plasticity
		19.50	31.50	Very Dense, Greyish, Silty Sand
		31.50	34.50	Hard, Greyish, Silty Clay of Low Plasticity
		34.50	43.50	Very Dense, Greyish, Silty Sand
		43.50	50.00	Hard, Greyish, Silty Clay of Low Plasticity
P-387	BH-04	0.00	1.50	Filledup-Strata
		1.50	10.50	Medium Dense, Greyish, Silty Sand
		10.50	19.50	Dense, Greyish, Silty Sand
		19.50	28.50	Very Dense, Greyish, Silty Sand
		28.50	33.00	Hard, Greyish, Silty Clay of Low Plasticity
		33.00	37.50	Very Dense, Greyish, Silty Sand
		37.50	42.00	Hard, Greyish, Silty Clay of Low Plasticity
		42.00	46.50	Very Dense, Greyish, Silty Sand
		46.50	50.00	Hard, Greyish, Silty Clay of Low Plasticity

CHAPTER 5 DESIGN OF FOUNDATIONS

5.1 COMPUTATION OF LIQUEFACTION POTENTIAL

Liquefaction is the sudden loss of shear strength of the sub soil strata due to earthquake-induced vibration under saturated conditions.

Assessment of liquefaction potential of foundation strata is made by simplified approach proposed as per IS: 1893 (Part-1)-2016, from the SPT data and peak ground acceleration likely to occur at the site. In this method, cyclic shear stress likely to be induced in the foundation strata by Design Basis Earthquake (DBE) is first evaluated.

Next threshold cyclic shear stress, which is good enough to cause liquefaction, is determined from SPT data and the empirical relations. Finally, comparison of these two stresses is used in the estimation of liquefaction susceptibility of the foundation strata.

Unsaturated soils are not subjected to liquefaction because vibratory forces from earthquakes do not cause any increase in pore water pressure in such soils.

For the analysis of liquefaction potential, following constant parameters are considered:

EQ Zone	II
Earthquake Magnitude (Mw)	6.0
Peak Horizontal Ground Acceleration (amax /g)	0.10

For the cohesion less strata encountered in the borehole at site, the IRC:SP:114-2018 is referred for the analysis of Liquefaction Potential and for the cohesive strata, RDSO BS-118 is referred.

As per RDSO BS-118 Guidelines- Appendix – (G) “Simplified Procedure for Evaluation of Liquefaction Potential (Clause 13.3):

- Cohesive soils should be considered liquefiable if $w_l \leq 37\%$, $I_p \leq 12\%$ and $w_n > 0.80 w_l$ is the liquid limit, where I_p is the Plasticity Index and w_n is the moisture content.
- Liquefaction susceptibility of soils should be considered marginal if $w_l \leq 47\%$, $I_p \leq 20\%$ and $w_n \geq 0.85 w_l$, where I_p is the Plasticity Index w_n is the moisture content.
- Cohesive soils should be considered non-liquefiable if $w_l > 47\%$ or $I_p > 20\%$ or $w_n < 0.85 w_l$, where I_p is the Plasticity Index w_n is the moisture content.

Water table was not encountered in the boreholes at depths below EGL. It may rise up during heavy rains / rainy season. However, for the analysis of foundations, the water table has been considered to rise up to EGL. Therefore liquefaction analysis has been carried out and liquefaction depths are given below:-

Table 5.1: Liquefaction Analysis

Sl. No.	Chainage/ Location	BH No.	Depth of Water Table below EGL (m)	Water Table depth considered for analysis (m)	Liquefiable Depth (m)
1.	P-377	BH-01	Not Encountered	0.0	Non- Liquefiable
2.	P-385	BH-03	Not Encountered	0.0	Non- Liquefiable
3.	P-387	BH-04	Not Encountered	0.0	Non- Liquefiable

Sample Calculation of liquefaction analysis results are provided at **Appendix-C1**

5.2 TYPE and DEPTH OF FOUNDATION:

Based upon the results of field investigations, laboratory test results carried out on selected samples of sub strata collected from the locations & further discussions held with the client, the following type of foundation have been analyzed.

Table 5.2: Foundation Details

Structure/Chainage	BH No.	Type of foundation	Dia. of Pile (m)	Cut off Level below EGL (m)	Pile Length (m)
P-377	BH-01	Bored Cast in-situ RCC Pile	1.00	2.00	30.0 to 40.0
			1.20		
P-385	BH-02		1.00	2.00	30.0 to 40.0
			1.20		
P-387	BH-03		1.00	2.00	30.0 to 40.0
			1.20		

5.3 ANALYSIS OF OPEN FOUNDATION

5.3.1 Safe Load Carrying Capacity of Bored Cast In-Situ RCC Pile In Soil

The safe Load Carrying Capacity of bored, cast in-situ RCC pile is determined in compression, uplift, lateral as per **IS-2911- part-1 (Sec 2): 2010**. The axial capacity of a pile depends upon the soil skin friction along the shaft and end bearing at it's tip.

Thus Axial load = Skin Friction + End-bearing

a) For piles in granular soils (using the static formula)

$$Q_u = (0.5 \cdot D \cdot \gamma \cdot N_\gamma + P_D \cdot N_q) \cdot A_p + (\sum K_i \cdot P_{Di} \cdot \tan \delta_i) \cdot A_{si}$$

Where,

Q_u = Ultimate load capacity of pile in KN

D = Dia. of pile shaft in m

γ = Effective unit weight of the soil at pile tip in kN/m^3

N_γ & N_q = Bearing capacity factors depending upon the angle of internal friction Φ at pile tip

P_D = Effective overburden pressure at pile tip in kN/m^2 limited to 20 times diameter of pile

Σ = Summation for layers (1 to n) in which pile is installed and which contribute to (+ve) skin friction

K_i = Coefficient of earth pressure applicable for the i^{th} layer

P_{Di} = effective overburden pressure for the i^{th} layer in kN/m^2 limited to 20 times diameter of pile

δ_i = angle of wall friction between pile and soil for i^{th} layer, and

A_{si} = surface area of pile shaft in the i^{th} layer in m^2

b) For piles in cohesive soils (using the static formula)

$$Q_u = c_p * N_c * A_p + \Sigma \alpha_i * c_i * A_{si}$$

Where,

Q_u = Ultimate load capacity of pile in KN

A_p = cross-sectional area of pile tip in m^2

N_c = bearing capacity factor (= 9)

Σ = Summation for layers (1 to n) in which pile is installed and which contribute to (+ve) skin friction

α_i = adhesion factor for the i^{th} layer depending on the consistency of soil

c_i = average cohesion for i^{th} layer in kN/m^2

A_{si} = surface area for pile shaft in the i^{th} layer in m^2

5.3.2 Safe Load Carrying Capacity in Lateral of Bored Cast In-Situ RCC Pile In Soil

$$Q = (12 * E * I * Y) / (L_1 + L_f)^3$$

Where,

Q = Lateral Load (in kg)

Y = Permissible lateral deflection taken as 5mm

E = Modulus of Elasticity of concrete

I = Moment of Inertia of the pile cross-section

L_1 = Length of pile above cut-off level

L_f = Length of fixity

The effective length of the pile has been considered below the cut-off level taken as 2.0 m below the EGL. Normal cast in-situ RCC piles having stem diameter equal to 1.00 & 1.20m.

The sample calculation for computation of safe load carrying capacity of normal driven, cast-in-situ RCC pile in compression & uplift are attached vide **Appendix-C2**.

The sample calculation for computation of safe load carry

Table 5.3: Design Soil Parameter for Foundation Analysis

Chainage	BH.No	Layer depth below EGL (m)		Thickness of strata (m)	Strata description	SPT 'N'		Bulk Density (gm/cc)	Cohesion (C) (kg/cm ²)	Angle of internal Friction (Φ) (°)
		From	To			Observed	Corrected			
P-377	BH-01	0.00	3.50	3.50	Filled up Strata	-	-	1.74	0.00	30
		3.50	5.50	2.00	Silty Sand	21	23	1.74	0.00	30
		5.50	8.50	3.00	Silty Sand	30	28	1.76	0.00	31
		8.50	11.00	2.50	Silty Sand	41	34	1.80	0.00	31
		11.00	14.00	3.00	Silty Clay	59	59	1.93	1.76	8
		14.00	18.50	4.50	Silty Sand	91	59	1.88	0.00	33
		18.50	21.50	3.00	Silty Clay	100	-	1.98	2.76	8
		21.50	48.50	21.00	Silty Sand	100	-	1.85	0.00	33
		48.50	50.00	1.50	Silty Clay	100	-	2.01	2.87	7
P-385	BH-03	0.00	1.50	1.50	Filled up Strata	-	-	1.70	-	-
		1.50	5.50	4.00	Silty Sand	25	31	1.70	0.00	30
		5.50	13.50	8.00	Silty Sand	38	33	1.77	0.00	31
		13.50	16.50	3.00	Silty Sand	54	37	1.82	0.00	32
		16.50	19.50	3.00	Silty Clay	46	46	1.94	1.55	7
		19.50	31.50	12.00	Silty Sand	82	44	1.84	0.00	33
		31.50	34.50	3.00	Silty Clay	99	98	2.01	2.64	8
		34.50	43.50	9.00	Silty Sand	100	-	1.89	0.00	33
		43.50	50.00	6.50	Silty Clay	100	-	2.01	2.90	8
P-387	BH-04	0.00	1.50	1.50	Filled up Strata	-	-	1.59	-	-
		1.50	5.50	4.00	Silty Sand	17	21	1.59	0.00	30
		5.50	10.50	5.00	Silty Sand	23	22	1.61	0.00	31
		10.50	16.50	6.00	Silty Sand	36	27	1.73	0.00	32
		16.50	19.50	3.00	Silty Sand	48	31	1.80	0.00	32
		19.50	24.00	4.50	Silty Sand	66	38	1.81	0.00	32
		24.00	28.50	4.50	Silty Sand	86	44	1.84	0.00	33
		28.50	33.00	4.50	Silty Clay	100	99	2.01	2.80	7
		33.00	37.50	4.50	Silty Sand	100	-	1.89	0.00	33
		37.50	42.00	4.50	Silty Clay	100	-	2.01	2.80	7
		42.00	46.50	4.50	Silty Sand	100	-	1.89	0.00	33
		46.50	50.00	3.50	Silty Clay	100	-	2.01	2.80	7

The foundation recommendation are described in **Chapter 6**.

CHAPTER 6 FOUNDATION RECOMMENDATIONS

6.1 FOUNDATION RECOMMENDATIONS

- Based on the nature & strength characteristics of the substrata and requirement of the project, Pile Foundation have been analysed at the following locations.

Table 6.1: Recommended Safe Load Capacity for Bored Cast In-Situ Pile

Chainage	BH No.	Diameter of Pile (m)	Length of piles below cut-off (m)	Cut-off level below EGL (m)	Safe load carrying capacity of single pile (T)		Length of fixity below EGL Based on fixed head Condition(m)	In Lateral (T)
					In compression	In uplift		Fixed Head
P-377	BH-01	1.00	30.0	2.0	364.0	226.0	9.27	22.67
			32.0		383.0	245.0		
			34.0		402.0	263.0		
			36.0		421.0	281.0		
			38.0		440.0	300.0		
			40.0		459.0	318.0		
		1.20	30.0	2.0	546.0	308.0	10.18	33.01
			32.0		574.0	335.0		
			34.0		602.0	362.0		
			36.0		630.0	389.0		
			38.0		659.0	416.0		
			40.0		687.0	443.0		
P-385	BH-03	1.00	30.0	2.0	289.0	207.0	9.12	24.17
			32.0		310.0	227.0		
			34.0		329.0	245.0		
			36.0		391.0	263.0		
			38.0		409.0	280.0		
			40.0		427.0	297.0		
		1.20	30.0	2.0	402.0	286.0	10.18	33.01
			32.0		429.0	311.0		
			34.0		455.0	337.0		
			36.0		587.0	362.0		
			38.0		614.0	388.0		
			40.0		641.0	414.0		
P-387	BH-04	1.00	30.0	2.0	277.0	195.0	9.58	20.02
			32.0		295.0	213.0		
			34.0		311.0	228.0		

Chainage	BH No.	Diameter of Pile (m)	Length of piles below cut-off (m)	Cut-off level below EGL (m)	Safe load carrying capacity of single pile (T)		Length of fixity below EGL Based on fixed head Condition(m)	In Lateral (T)
					In compression	In uplift		Fixed Head
P-387	BH-04	1.00	36.0	2.0	328.0	245.0	9.58	20.02
			38.0		349.0	265.0		
			40.0		370.0	285.0		
		1.20	30.0	2.0	382.0	266.0	10.69	27.54
			32.0		407.0	290.0		
			34.0		431.0	313.0		
			36.0		455.0	336.0		
			38.0		481.0	362.0		
			40.0		507.0	387.0		

Notes: -

1. The recommendation are corresponding to limited area where the boreholes were conducted at site.
2. Permissible lateral deflection has been taken as 5mm at Max. of cut-off level.
3. The self weight of the pile has been taken into account while computing the Safe Load Carrying Capacity of Pile in uplift only and not considered for vertical load capacity in compression.
4. While erecting bored cast in-situ pile, utmost care should be taken while flushing/cleaning the bottom of pile particularly prior to start of pouring of concrete so as to rest the pile in virgin soil only for obtaining full point bearing as while computing safe load carrying capacity of pile no bottom softening during erection of pile has been considered.
5. Further the pile should have necessary structural strength to transmit / sustain the design load.

All The above recommendations are based on the field and laboratory tests conducted on selected soil samples and our experience in this regard. If the actual substrata conditions during excavation for the foundation differ from the observations reported here, the design experts/consultants should be referred for suggestion, further investigations.

Abbreviations

BH	Borehole
EGL	Existing Ground Level
GWT	Ground Water Table
RQD	Rock Quality Designation
IS	Indian Standards
SPT	Standard Penetration Test
DS	Disturbed Soil
R.L.	Reduced Level
m	Metre
sp. gr.	Specific Gravity
%	Percentage
mg /l	Milligram per litre
mg /kg	Milligram per kilogram

REFERENCE INDIAN STANDARD CODES

S.No.	IS Codes No	TITLE
1	IS : 1892-1979 RA-2016	Code of Practice for subsurface investigation for foundations.
2	IS : 1498-1970 RA 2016	Classification and Identification of soils for general Engineering Purpose.
3	IS :1904 - 2021	Code of practice for design and construction of foundations in soils:General Requirements.
4	IS : 2131-1981 RA 2016	Method for Standard Penetration Test (SPT) for Soils.
5	IS : 2132-1986 RA 2016	Code of Practice for Thin - Walled tube sampling of Soils.
6	IS : 4464-1985 RA 2019	Code of Practice for presentation of drilling information and core description in foundation investigation.
7	IS : 5313-1980 RA 2019	Guide for core drilling observations.
8	IS :5313-2020	Guide for core drilling observations.
9	IS : 4078-1980 RA2019	Code of Practice for indexing and storage of drill cores.
10	IS : 6926-1996 RA 2015	Diamond core drilling – Site investigation for river valley projects - code of Practice.
11	IS : 6935-1973 RA 2019	Method of determination of water level in a bore hole.
12	IS : 15686:2006 RA 2015	Recommendations for the preparation of Geological and Geotechnical maps for river valley projects.
13	IS : 6403 1981 RA 2016	Code of Practice for Determination of Bearing capacity of shallow foundations
14	IS : 8009 (P-1)-1976 RA 2019	Code of practice for calculation of Settlements of Foundations
15	IS: 12070 - 1987 RA 2020	Code of practice for design and construction of shallow foundations on rocks
16	IS :13365 (P-1) : 1998 RA 2021	Quantitative classificationSystems of rock mass — guidelines
17	IS : 1893 (P-1) 2016	Criteria for Earthquake resistant design of structures.
18	IS : 456- 2000 RA 2016	Plain and Reinforced Concrete-Code of Practice.
19	IRC-78-2024	Standard Specifications and Code of Practice for Road Bridges, Foundation & Substructure
Sr.	BOOK	TITLE
1.	Joseph E. Bowles	Foundation Analysis and Design

APPENDIX – A (FIELD DATA RESULTS)

Appendix No.	ITEMS
A-1	FIELD BOREHOLE LOGS

FIELD BOREHOLE LOG

Project Name :GTI work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-377	Northing :2968502 m	Easting :579027 m
Reduced Level (m):(+) -	BH. No. :BH-01	BH Depth (m):50
Proposed/Existing Structure :P-377	Water Table (m):Not Encounted	Inclination : Vertical
Boring type :-	Dia. of Boring :- mm	Depth of Casing (m) :-
Date of Start :21-05-2026	Date of Completion :26-05-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5									
2.0				Filledup Strata	FILL				
2.5									
3.0									
3.5	3.5	SPT-1	16						
4.0									
4.5									
5.0	5	SPT-2	25						
5.5	5.5	UDS-1							
6.0									
6.5	6.5	SPT-3	29						
7.0				Medium Dense to Dense, Greyish	SM				
7.5									
8.0	8	SPT-4	31						
8.5	8.5	UDS-2							
9.0									
9.5	9.5	SPT-5	41						
10.0									

FIELD BOREHOLE LOG

Project Name :GTI work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

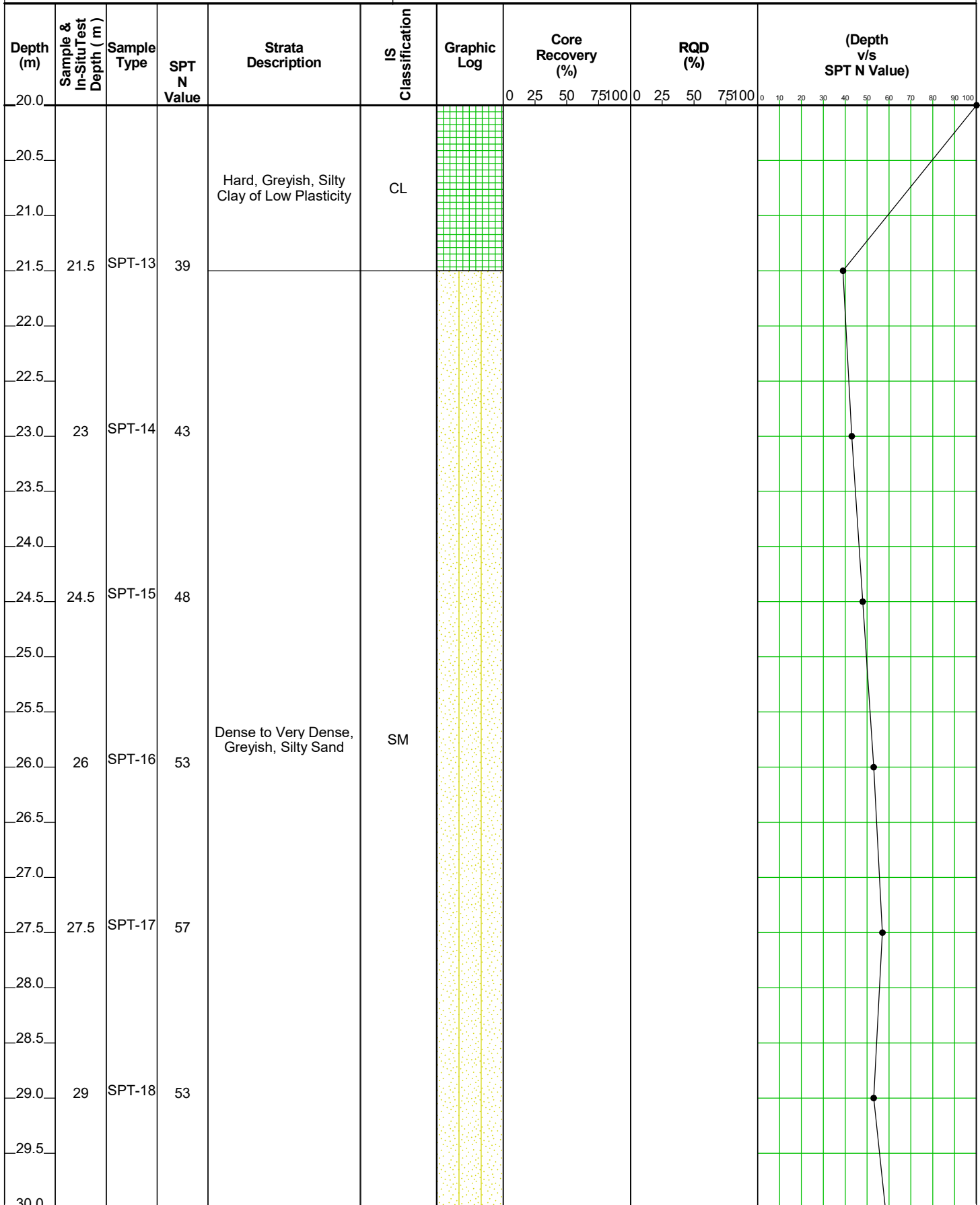
BH Location/Chainage :P-377	Northing :2968502 m	Easting :579027 m
Reduced Level (m):(+) -	BH. No. :BH-01	BH Depth (m):50
Proposed/Existing Structure :P-377	Water Table (m):Not Encounted	Inclination : Vertical
Boring type :-	Dia. of Boring :- mm	Depth of Casing (m) :-
Date of Start :21-05-2026	Date of Completion :26-05-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5				Medium Dense to Dense, Greyish	SM				
11.0	11	SPT-6	51						
11.5	11.5	UDS-3							
12.0									
12.5	12.5	SPT-7	67	Hard, Greyish, Silty Clay of Low Plasticity	CL				
13.0									
13.5									
14.0	14	SPT-8	81						
14.5	14.5	UDS-4							
15.0									
15.5	15.5	SPT-9	92						
16.0									
16.5				Very Dense, Greyish, Silty Sand	SM				
17.0	17	SPT-10	>100						
17.5									
18.0									
18.5	18.5	SPT-11	>100						
19.0									
19.5				Hard, Greyish, Silty Clay of Low Plasticity	CL				
20.0	20	SPT-12	>100						

FIELD BOREHOLE LOG

Project Name :GTI work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-377	Northing :2968502 m	Easting :579027 m
Reduced Level (m):(+) -	BH. No. :BH-01	BH Depth (m):50
Proposed/Existing Structure :P-377	Water Table (m):Not Encounted	Inclination : Vertical
Boring type :-	Dia. of Boring :- mm	Depth of Casing (m) :-
Date of Start :21-05-2026	Date of Completion :26-05-2026	



FIELD BOREHOLE LOG

Project Name :GTI work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-377	Northing :2968502 m	Easting :579027 m
Reduced Level (m):(+) -	BH. No. :BH-01	BH Depth (m):50
Proposed/Existing Structure :P-377	Water Table (m):Not Encounted	Inclination : Vertical
Boring type :-	Dia. of Boring :- mm	Depth of Casing (m) :-
Date of Start :21-05-2026	Date of Completion :26-05-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5	30.5	SPT-19	61						
31.0									
31.5									
32.0	32	SPT-20	>100						
32.5									
33.0									
33.5	33.5	SPT-21	>100						
34.0									
34.5									
35.0	35	SPT-22	>100	Dense to Very Dense, Greyish, Silty Sand	SM				
35.5									
36.0									
36.5	36.5	SPT-23	>100						
37.0									
37.5									
38.0	38	SPT-24	>100						
38.5									
39.0									
39.5	39.5	SPT-25	>100						
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-377	Northing :2968502 m	Easting :579027 m
Reduced Level (m):(+) -	BH. No. :BH-01	BH Depth (m):50
Proposed/Existing Structure :P-377	Water Table (m):Not Encounted	Inclination : Vertical
Boring type :-	Dia. of Boring :- mm	Depth of Casing (m) :-
Date of Start :21-05-2026	Date of Completion :26-05-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5									
41.0	41	SPT-26	>100						
41.5									
42.0									
42.5	42.5	SPT-27	>100						
43.0									
43.5									
44.0	44	SPT-28	>100						
44.5				Dense to Very Dense, Greyish, Silty Sand	SM				
45.0									
45.5	45.5	SPT-29	>100						
46.0									
46.5									
47.0	47	SPT-30	>100						
47.5									
48.0									
48.5	48.5	SPT-31	>100						
49.0									
49.5				Hard, Greyish, Silty Clay of Low Plasticity	CL				
50.0	50	SPT-32	>100						

FIELD BOREHOLE LOG

Project Name :GTI work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

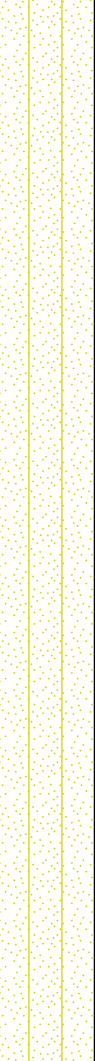
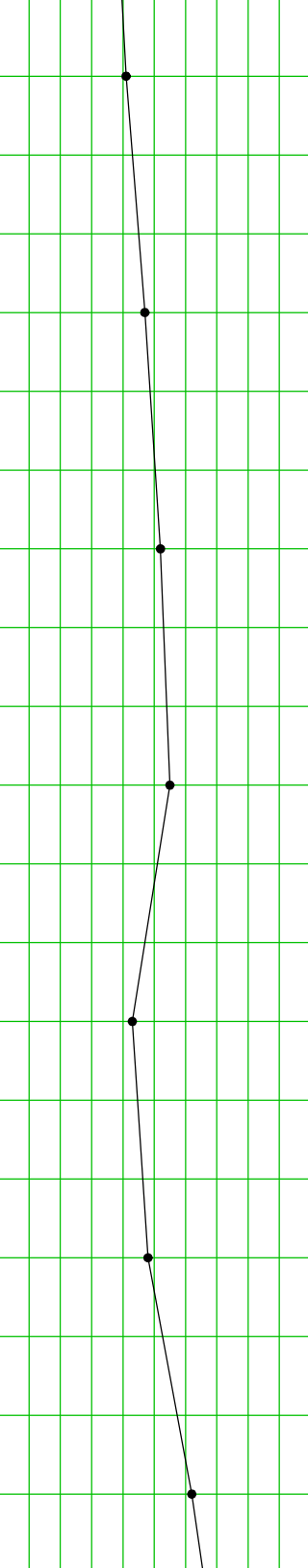
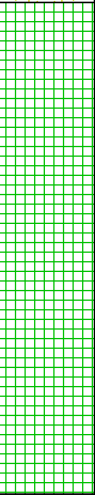
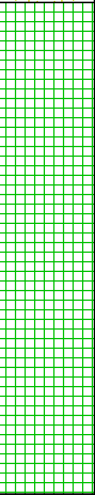
BH Location/Chainage :P-385	Northing :2968687 m	Easting :578931 m
Reduced Level (m):(+) -	BH. No. :BH-03	BH Depth (m):50
Proposed/Existing Structure :P-385	Water Table (m):Not Encounted	Inclination : Vertical
Boring type :-	Dia. of Boring :- mm	Depth of Casing (m) :-
Date of Start :27-05-2026	Date of Completion :30-05-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5				Filledup-Strata	FILL				
1.0									
1.5	1.5	SPT-1	25						
2.0									
2.5	2.5	UDS-1							
3.0	3	SPT-2	23						
3.5									
4.0									
4.5	4.5	SPT-3	27						
5.0									
5.5	5.5	UDS-2							
6.0	6	SPT-4	32	Medium Dense to Very Dense, Greyish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-5	34						
8.0									
8.5									
9.0	9	SPT-6	37						
9.5									
10.0									

FIELD BOREHOLE LOG

Project Name :GTI work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-385	Northing :2968687 m	Easting :578931 m
Reduced Level (m):(+) -	BH. No. :BH-03	BH Depth (m):50
Proposed/Existing Structure :P-385	Water Table (m):Not Encounted	Inclination : Vertical
Boring type :-	Dia. of Boring :- mm	Depth of Casing (m) :-
Date of Start :27-05-2026	Date of Completion :30-05-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-7	41	Medium Dense to Very Dense, Greyish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-8	47						
12.5				Hard, Greyish, Silty Clay of Low Plasticity	CL				
13.0									
13.5	13.5	SPT-9	52						
14.0									
14.5				Very Dense, Greyish, Silty Sand	SM				
15.0	15	SPT-10	55						
15.5									
16.0									
16.5	16.5	SPT-11	43	Hard, Greyish, Silty Clay of Low Plasticity	CL				
17.0									
17.5									
18.0	18	SPT-12	48						
18.5				Very Dense, Greyish, Silty Sand	SM				
19.0									
19.5	19.5	SPT-13	62						
20.0									

FIELD BOREHOLE LOG

Project Name :GTI work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-385	Northing :2968687 m	Easting :578931 m
Reduced Level (m):(+) -	BH. No. :BH-03	BH Depth (m):50
Proposed/Existing Structure :P-385	Water Table (m):Not Encounted	Inclination : Vertical
Boring type :-	Dia. of Boring :- mm	Depth of Casing (m) :-
Date of Start :27-05-2026	Date of Completion :30-05-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-14	73						
21.5									
22.0									
22.5	22.5	SPT-15	77						
23.0									
23.5									
24.0	24	SPT-16	82						
24.5									
25.0				Very Dense, Greyish, Silty Sand	SM				
25.5	25.5	SPT-17	85						
26.0									
26.5									
27.0	27	SPT-18	88						
27.5									
28.0									
28.5	28.5	SPT-19	92						
29.0									
29.5									
30.0	30	SPT-20	95						

FIELD BOREHOLE LOG

Project Name :GTI work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

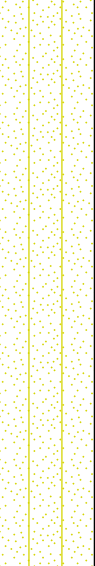
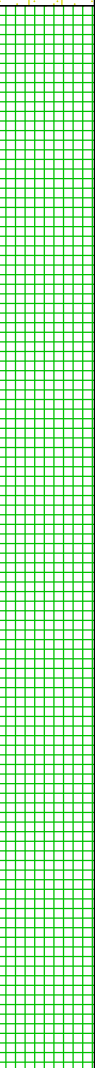
BH Location/Chainage :P-385	Northing :2968687 m	Easting :578931 m
Reduced Level (m):(+) -	BH. No. :BH-03	BH Depth (m):50
Proposed/Existing Structure :P-385	Water Table (m):Not Encounted	Inclination : Vertical
Boring type :-	Dia. of Boring :- mm	Depth of Casing (m) :-
Date of Start :27-05-2026	Date of Completion :30-05-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5				Very Dense, Greyish, Silty Sand	SM				
31.0									
31.5	31.5	SPT-21	98						
32.0				Hard, Greyish, Silty Clay of Low Plasticity	CL				
32.5									
33.0	33	SPT-22	>100						
33.5									
34.0									
34.5	34.5	SPT-23	>100						
35.0									
35.5									
36.0	36	SPT-24	>100						
36.5									
37.0				Very Dense, Greyish, Silty Sand	SM				
37.5	37.5	SPT-25	>100						
38.0									
38.5									
39.0	39	SPT-26	>100						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-385	Northing :2968687 m	Easting :578931 m
Reduced Level (m):(+) -	BH. No. :BH-03	BH Depth (m):50
Proposed/Existing Structure :P-385	Water Table (m):Not Encounted	Inclination : Vertical
Boring type :-	Dia. of Boring :- mm	Depth of Casing (m) :-
Date of Start :27-05-2026	Date of Completion :30-05-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-27	>100	Very Dense, Greyish, Silty Sand	SM				
41.0									
41.5									
42.0	42	SPT-28	>100						
42.5				Hard, Greyish, Silty Clay of Low Plasticity	CL				
43.0									
43.5	43.5	SPT-29	>100						
44.0									
44.5									
45.0	45	SPT-30	>100						
45.5									
46.0									
46.5	46.5	SPT-31	>100						
47.0									
47.5									
48.0	48	SPT-32	>100						
48.5									
49.0									
49.5									
50.0	50	SPT-33	>100						

FIELD BOREHOLE LOG

Project Name :GTI work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-387	Northing :2968744 m	Easting :578917 m
Reduced Level (m):(+) -	BH. No. :BH-04	BH Depth (m):50
Proposed/Existing Structure :P-387	Water Table (m):Not Encounted	Inclination : Vertical
Boring type :-	Dia. of Boring :- mm	Depth of Casing (m) :-
Date of Start :31-05-2026	Date of Completion :03-06-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5				Filledup-Strata	FILL				
1.0									
1.5	1.5	SPT-1	14						
2.0									
2.5	2.5	UDS-1							
3.0	3	SPT-2	18						
3.5									
4.0									
4.5	4.5	SPT-3	19						
5.0									
5.5	5.5	UDS-2							
6.0	6	SPT-4	20	Medium Dense, Greyish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-5	22						
8.0									
8.5									
9.0	9	SPT-6	27						
9.5									
10.0									

FIELD BOREHOLE LOG

Project Name :GTI work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-387	Northing :2968744 m	Easting :578917 m
Reduced Level (m):(+) -	BH. No. :BH-04	BH Depth (m):50
Proposed/Existing Structure :P-387	Water Table (m):Not Encounted	Inclination : Vertical
Boring type :-	Dia. of Boring :- mm	Depth of Casing (m) :-
Date of Start :31-05-2026	Date of Completion :03-06-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-7	31	Medium Dense, Greyish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-8	34						
12.5									
13.0									
13.5	13.5	SPT-9	37						
14.0									
14.5									
15.0	15	SPT-10	42	Dense, Greyish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-11	46						
17.0									
17.5									
18.0	18	SPT-12	49						
18.5									
19.0									
19.5	19.5	SPT-13	54						
20.0				Very Dense, Greyish, Silty Sand	SM				

FIELD BOREHOLE LOG

Project Name :GTI work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-387	Northing :2968744 m	Easting :578917 m
Reduced Level (m):(+) -	BH. No. :BH-04	BH Depth (m):50
Proposed/Existing Structure :P-387	Water Table (m):Not Encounted	Inclination : Vertical
Boring type :-	Dia. of Boring :- mm	Depth of Casing (m) :-
Date of Start :31-05-2026	Date of Completion :03-06-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-14	69						
21.5									
22.0									
22.5	22.5	SPT-15	74						
23.0									
23.5									
24.0	24	SPT-16	79	Very Dense, Greyish, Silty Sand	SM				
24.5									
25.0									
25.5	25.5	SPT-17	84						
26.0									
26.5									
27.0	27	SPT-18	94						
27.5									
28.0									
28.5	28.5	SPT-19	99						
29.0				Hard, Greyish, Silty Clay of Low Plasticity	CL				
29.5									
30.0	30	SPT-20	>100						

FIELD BOREHOLE LOG

Project Name :GTI work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

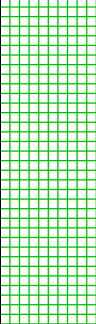
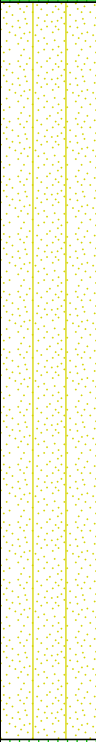
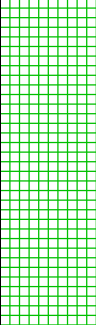
BH Location/Chainage :P-387	Northing :2968744 m	Easting :578917 m
Reduced Level (m):(+) -	BH. No. :BH-04	BH Depth (m):50
Proposed/Existing Structure :P-387	Water Table (m):Not Encounted	Inclination : Vertical
Boring type :-	Dia. of Boring :- mm	Depth of Casing (m) :-
Date of Start :31-05-2026	Date of Completion :03-06-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-21	>100	Hard, Greyish, Silty Clay of Low Plasticity	CL				
32.0									
32.5									
33.0	33	SPT-22	>100						
33.5									
34.0									
34.5	34.5	SPT-23	>100						
35.0									
35.5				Very Dense, Greyish, Silty Sand	SM				
36.0	36	SPT-24	>100						
36.5									
37.0									
37.5	37.5	SPT-25	>100						
38.0									
38.5									
39.0	39	SPT-26	>100	Hard, Greyish, Silty Clay of Low Plasticity	CL				
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-387	Northing :2968744 m	Easting :578917 m
Reduced Level (m):(+) -	BH. No. :BH-04	BH Depth (m):50
Proposed/Existing Structure :P-387	Water Table (m):Not Encounted	Inclination : Vertical
Boring type :-	Dia. of Boring :- mm	Depth of Casing (m) :-
Date of Start :31-05-2026	Date of Completion :03-06-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-27	>100	Hard, Greyish, Silty Clay of Low Plasticity	CL				
41.0									
41.5									
42.0	42	SPT-28	>100						
42.5				Very Dense, Greyish, Silty Sand	SM				
43.0									
43.5	43.5	SPT-29	>100						
44.0									
44.5									
45.0	45	SPT-30	>100						
45.5				Hard, Greyish, Silty Clay of Low Plasticity	CL				
46.0									
46.5	46.5	SPT-31	>100						
47.0									
47.5									
48.0	48	SPT-32	>100						
48.5									
49.0									
49.5									
50.0	50	SPT-33	>100						

APPENDIX – B (LAB TEST RESULTS)

Appendix No.	ITEMS
B-1	SOIL CHARACTERISTICS SHEETS
B-2	GSD CURVES
B-3	CONSOLIDATION CURVES

SOIL CHARACTERISTICS

Project	Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)										IS Classification	IS Symbol	Soil Description	Corrected SPT Value (N _c)	Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	21-05-2026	to	26-05-2026	P-377	BH-01	Not Encounted	50.00 m	579027.000 m							2968502.000 m				-	SR-1241_25-26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
								Clay	Silt	Fine					Medium	Coarse					Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)			Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)										Soil Description	IS Classification	IS Symbol	Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	21-05-2026	to	26-05-2026	P-377	BH-01	Not Encounted	50.00 m	579027.000 m						2968502.000 m				-	SR-1241_25-26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
								Clay	Silt	Fine				Medium	Coarse						Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit			Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N)	Dense to Very Dense, Greyish, Silty Sand										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)										Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code
	Date of Boring		Chainage/Location	B.H. No.	Bulk Density (g/cm³)		Natural Moisture Content (%)	Dry Density (g/cm³)	Specific Gravity	Shear Strength				Free Swell Index (%)	Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Consolidation Parameters																		
	27-05-2026	to 30-05-2026			P-385	BH-03				Not Encounted							50.00 m	578931.000 m	2968687.000 m	Void Ratio (e ₀)	Pressure (kg/cm²)	C _v x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm³/kg)	Compression Index (C _p)											
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Medium Dense to Very Dense, Greyish, Silty Sand										Filledup-Strata				-	-						-						-	-			
DS-1	0.00	-	-															-													-	-			
SPT-1	1.50	25	36															-													-	-			
UDS-1	2.50	-	-															-													-	-			
SPT-2	3.00	23	28															-													-	-			
SPT-3	4.50	27	29															-													-	-			
UDS-2	5.50	-	-															-													-	-			
SPT-4	6.00	32	32															-													-	-			
SPT-5	7.50	34	31															-													-	-			
SPT-6	9.00	37	32															-													-	-			
SPT-7	10.50	41	33															-													-	-			
SPT-8	12.00	47	36															-													-	-			
SPT-9	13.50	52	37															-													-	-			
SPT-10	15.00	55	37															-													-	-			
SPT-11	16.50	43	43															-													-	-			
SPT-12	18.00	48	48															-													-	-			
SPT-13	19.50	62	62															-													-	-			
SPT-14	21.00	73	41															-													-	-			
SPT-15	22.50	77	41															-													-	-			
SPT-16	24.00	82	42															-													-	-			
SPT-17	25.50	85	42															-													-	-			

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)										Soil Description	IS Classification	IS Symbol	Date of Boring						Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	27-05-2026		to		30-05-2026		P-385	BH-03	Not Encountered	50.00 m				578931.000 m	2968687.000 m	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

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SOIL CHARACTERISTICS

Project	Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)										Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code					
	31-05-2026		to 03-06-2026		P-387		BH-04	Not Encounted		50.00 m		578917,000 m		2968744,000 m		-	SR-1241_25-26															
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification		IS Symbol	Clay	Silt	Fine	Medium	Coarse	Gravel				Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)
DS-1	0.00	-	-	-	Filledup-Strata	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-1	1.50	14	21	-	Medium Dense, Greyish, Silty Sand	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDS-1	2.50	-	-	SM		-	-	0	17	82	1	0	0	0	-	Nil	NP	-	1.59	10.32	1.44	2.63	DST	0.00	30	-	-	-	-	-	-	-
SPT-2	3.00	18	22	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-3	4.50	19	21	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDS-2	5.50	-	-	SM		-	-	0	19	73	6	2	0	0	-	Nil	NP	-	1.61	10.94	1.45	2.62	DST	0.00	31	-	-	-	-	-	-	-
SPT-4	6.00	20	20	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-5	7.50	22	21	-		SM	-	0	18	70	8	4	0	0	-	Nil	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-6	9.00	27	24	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-7	10.50	31	26	-		SM	-	0	22	28	49	0	1	0	-	Nil	NP	-	1.73	11.00	1.56	2.63	DST+	0.00	32	-	-	-	-	-	-	-
SPT-8	12.00	34	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-9	13.50	37	27	-	SM	-	0	24	67	6	3	0	0	-	Nil	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-10	15.00	42	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-11	16.50	46	31	-	SM	-	0	15	77	5	3	0	0	-	Nil	NP	-	1.80	11.20	1.62	2.62	DST+	0.00	32	-	-	-	-	-	-	-	
SPT-12	18.00	49	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-13	19.50	54	33	-	SM	-	0	17	54	21	8	0	0	-	Nil	NP	-	1.81	11.30	1.63	2.63	DST+	0.00	32	-	-	-	-	-	-	-	
SPT-14	21.00	69	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-15	22.50	74	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-16	24.00	79	42	-	SM	-	0	16	25	32	4	23	0	-	Nil	NP	-	1.84	12.00	1.64	2.63	DST+	0.00	33	-	-	-	-	-	-	-	
SPT-17	25.50	84	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

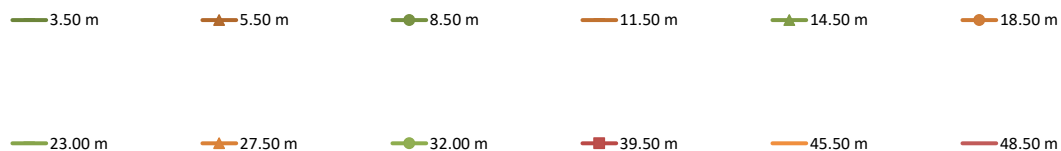
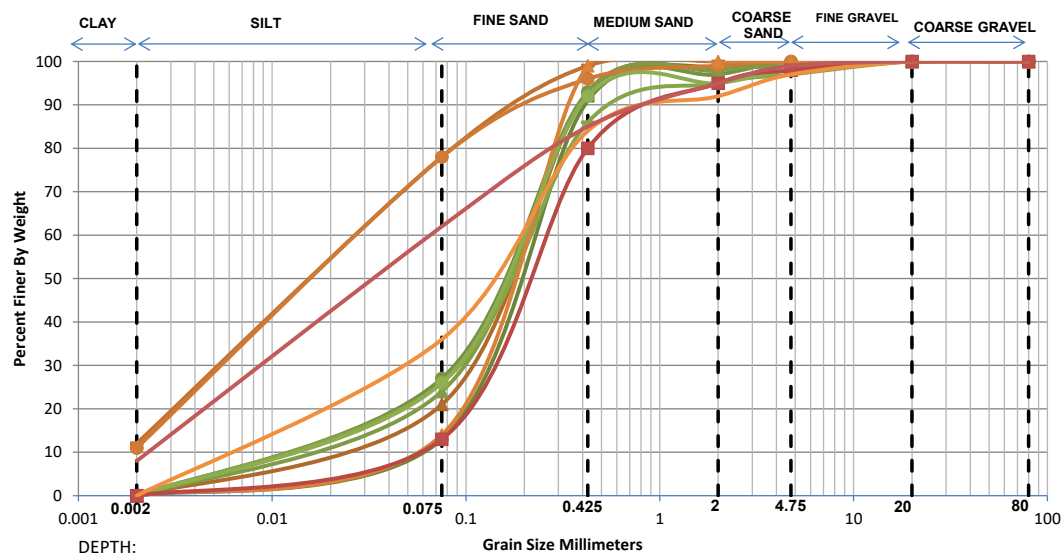
SOIL CHARACTERISTICS

Project	Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)										IS Classification	IS Symbol	Soil Description	Corrected SPT Value (N _c)	Observed SPT Value (N)	Depth from G.L. (m)	Grain Size Distribution % wt retained						Atterberg Limits %				Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	Date of Boring		Chainage/Location	B.H. No.	Bulk Density (g/cm ³)		Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test							Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)		Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	31-05-2026	to			03-06-2026	P-387				BH-04							Not Encountered	50.00 m	578917.000 m				2968744.000 m	-					SR-1241_25-26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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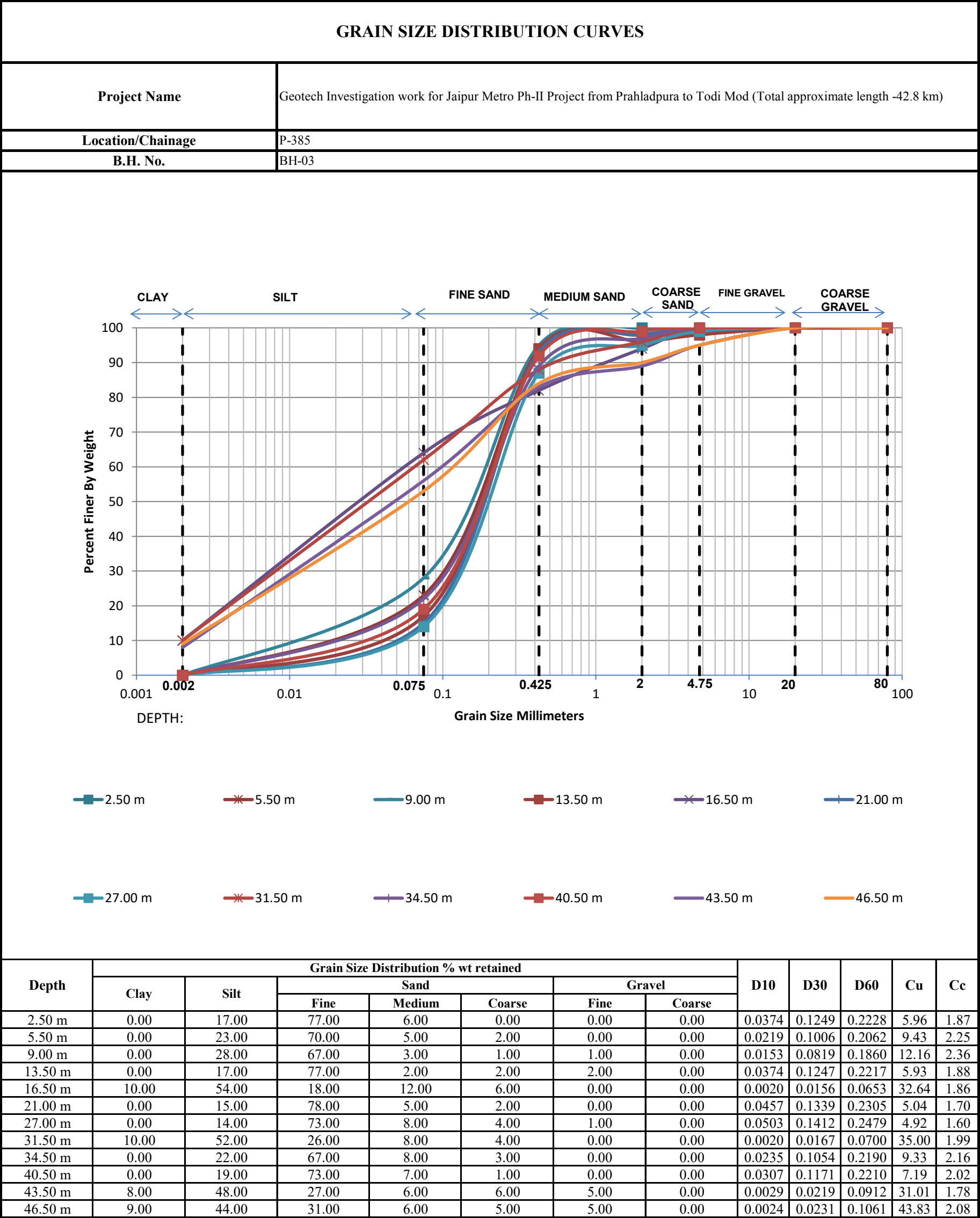
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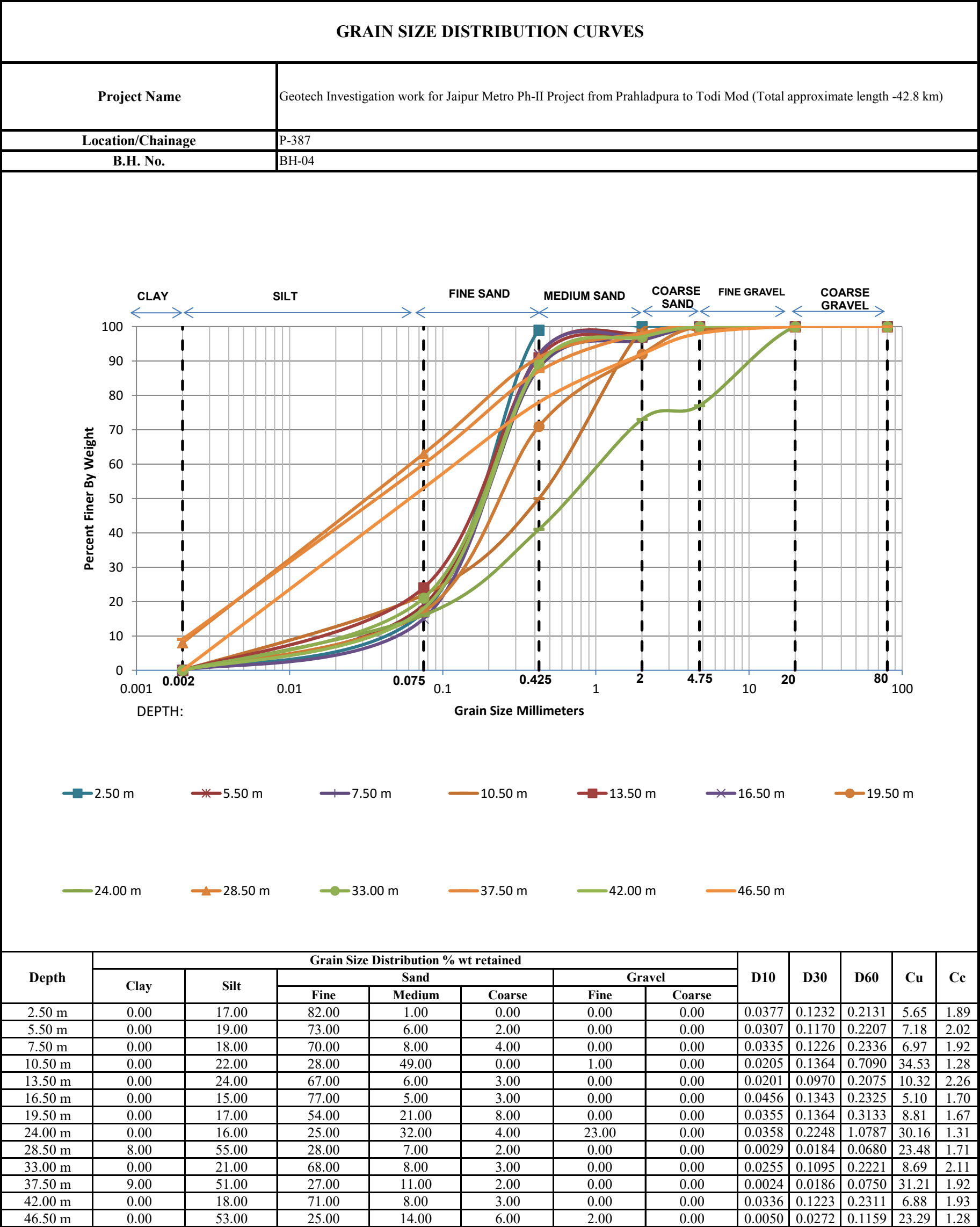
GRAIN SIZE DISTRIBUTION CURVES

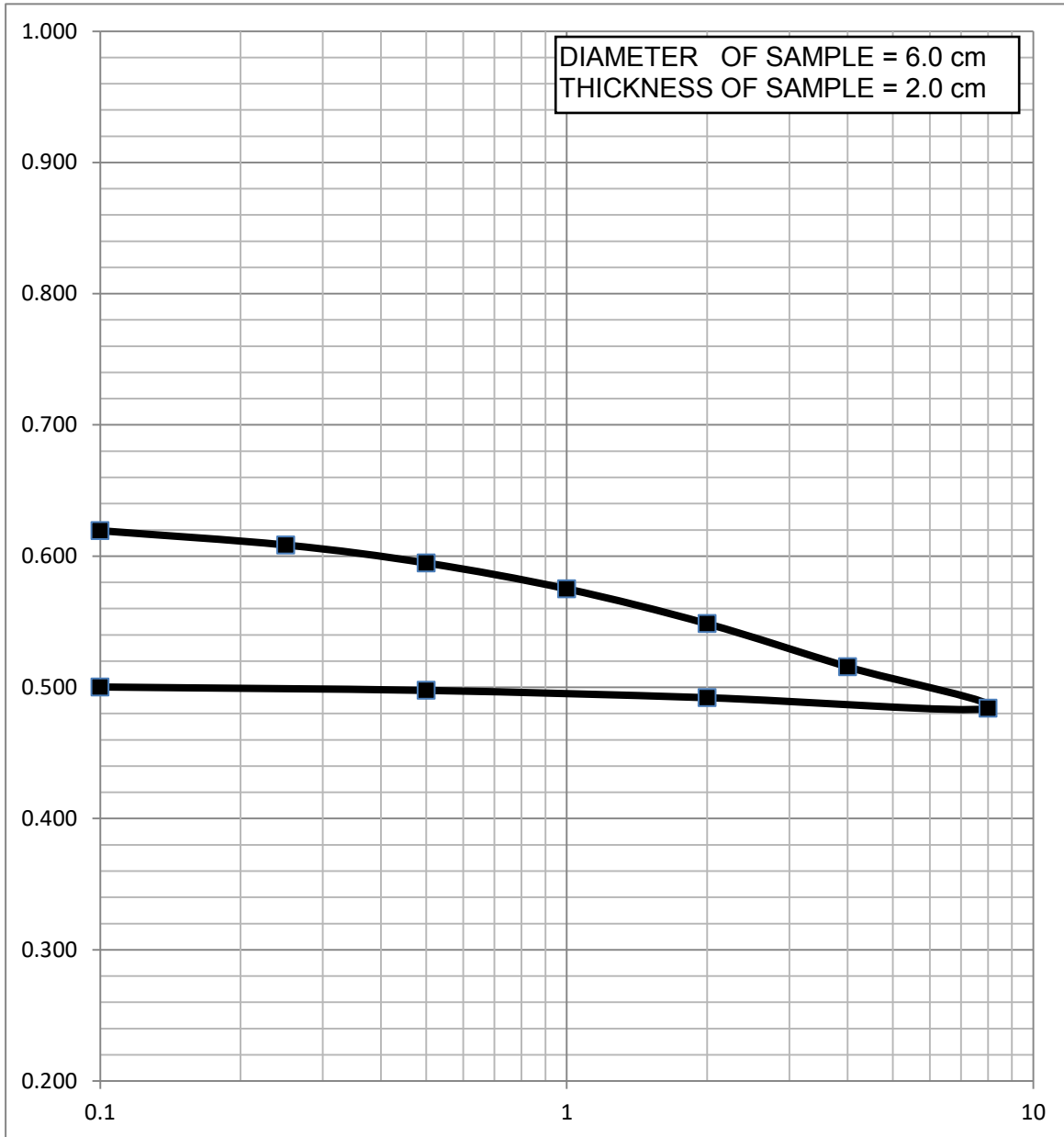
Project Name	Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)
Location/Chainage	P-377
B.H. No.	BH-01



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.50 m	0.00	13.00	78.00	8.00	1.00	0.00	0.00	0.0563	0.1441	0.2414	4.29	1.53
5.50 m	0.00	21.00	72.00	5.00	2.00	0.00	0.00	0.0258	0.1085	0.2123	8.24	2.15
8.50 m	0.00	27.00	66.00	4.00	3.00	0.00	0.00	0.0163	0.0855	0.1932	11.87	2.33
11.50 m	12.00	66.00	21.00	1.00	0.00	0.00	0.00	-	0.0107	0.0430	-	-
14.50 m	0.00	24.00	69.00	5.00	1.00	1.00	0.00	0.0202	0.0967	0.2030	10.04	2.28
18.50 m	11.00	67.00	18.00	3.00	1.00	0.00	0.00	-	0.0114	0.0433	-	-
23.00 m	0.00	26.00	60.00	9.00	2.00	3.00	0.00	0.0171	0.0899	0.2147	12.54	2.20
27.50 m	0.00	14.00	85.00	1.00	0.00	0.00	0.00	0.0511	0.1360	0.2223	4.35	1.63
32.00 m	0.00	26.00	66.00	3.00	3.00	2.00	0.00	0.0174	0.0893	0.1981	11.39	2.31
39.50 m	0.00	13.00	67.00	15.00	3.00	2.00	0.00	0.0555	0.1504	0.2748	4.95	1.48
45.50 m	0.00	36.00	48.00	8.00	5.00	3.00	0.00	0.0094	0.0564	0.1847	19.64	1.83
48.50 m	8.00	54.00	23.00	10.00	4.00	1.00	0.00	0.0029	0.0185	0.0701	24.20	1.69





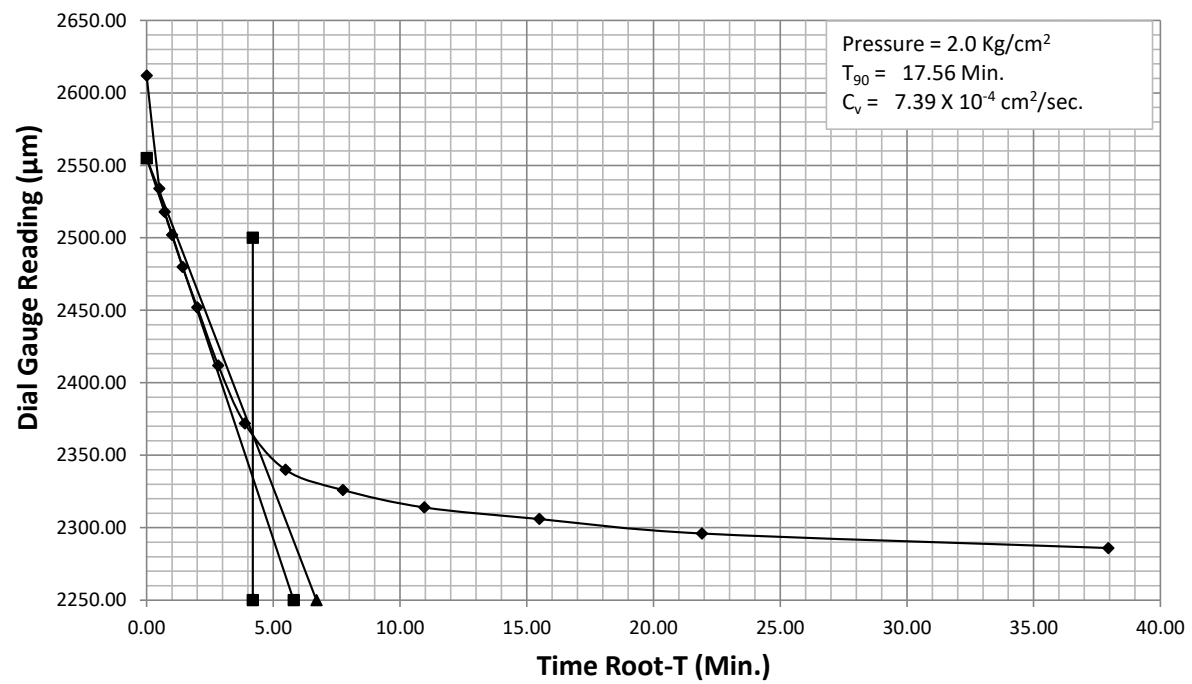
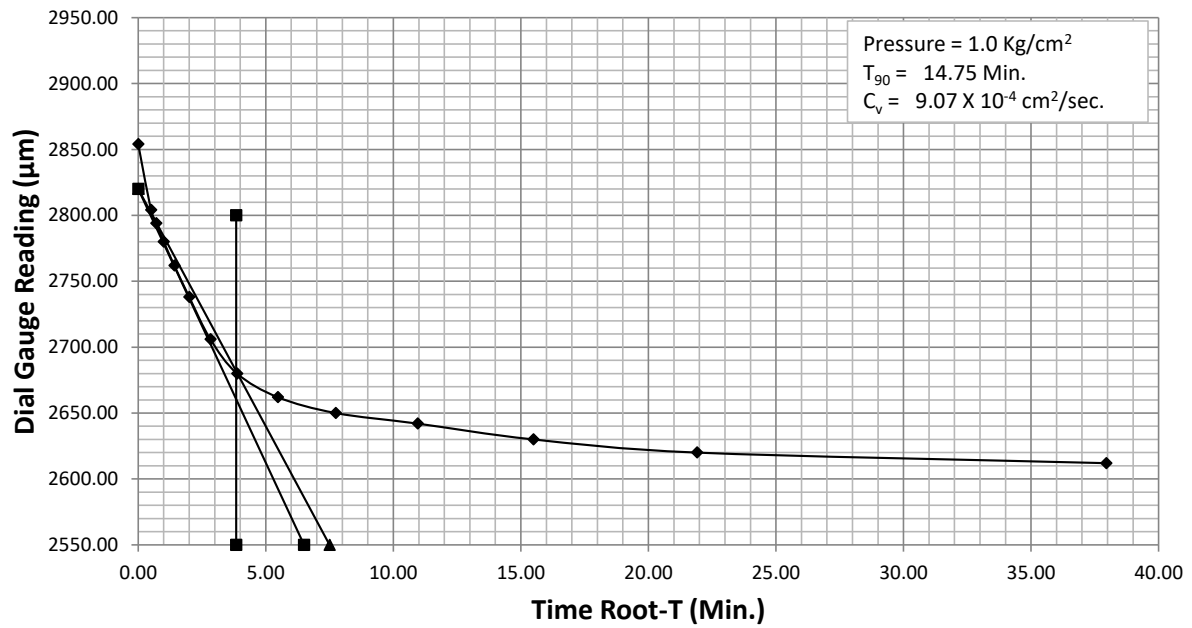


BH NO. = BH-01 (P-377)
 SAMPLE NO. = UDS-3
 DEPTH (m) = 11.50m
 TYPE OF SOIL = CI

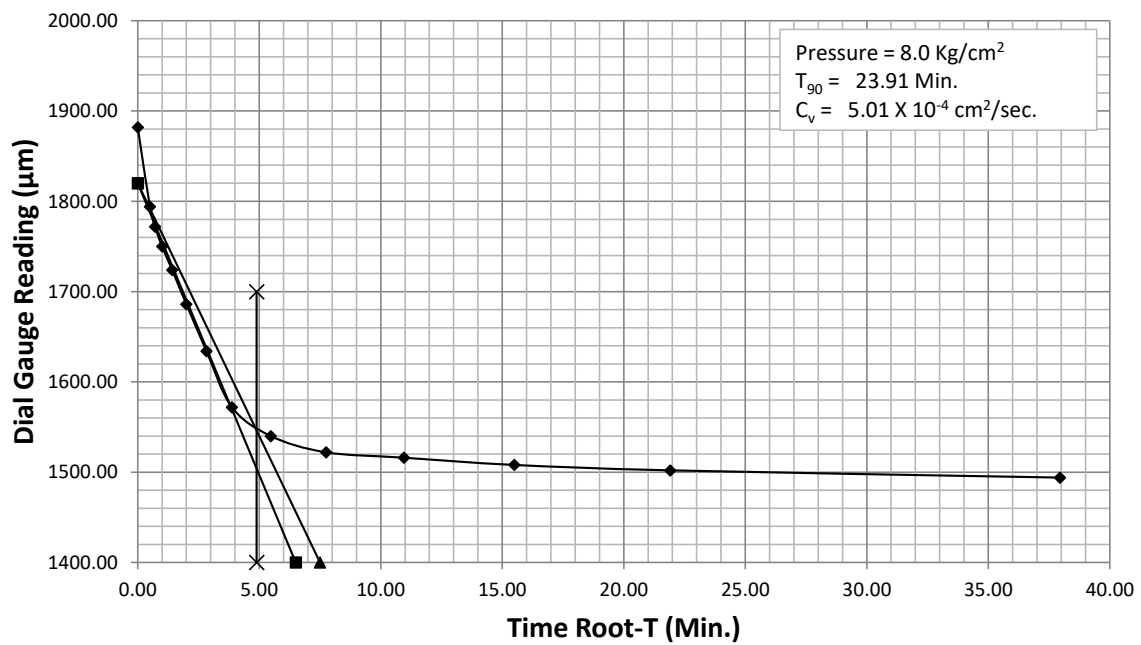
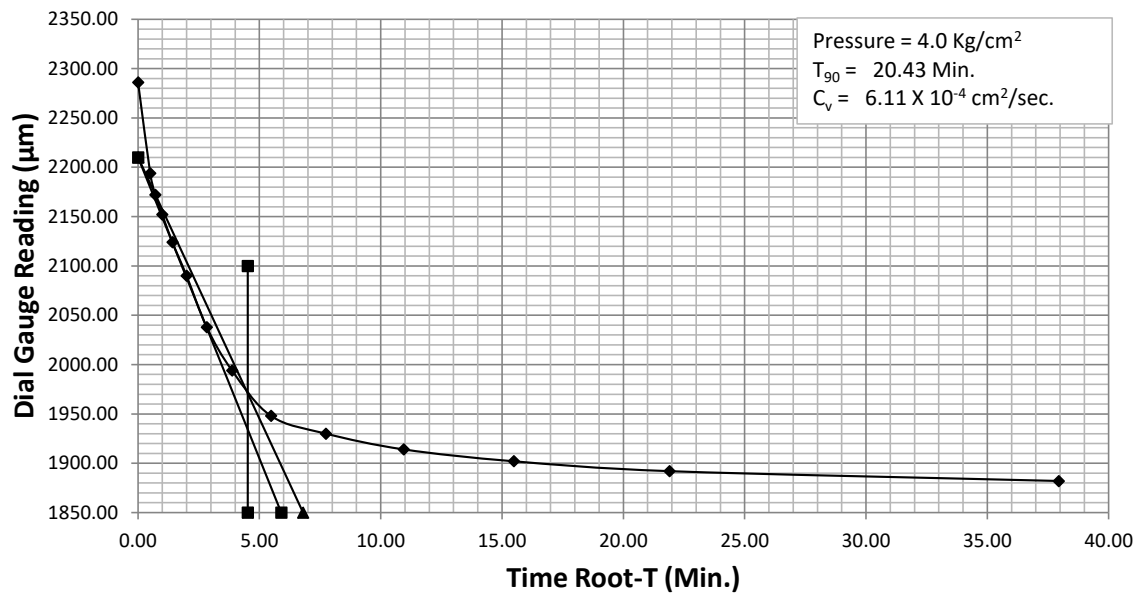
INITIAL WATER CONTENT = 18.59 %
 DRY DENSITY = 1.63 g/cc
 VOID RATIO (e_o) = 0.630
 COMPRESSION INDEX (C_c) = 0.105

FIGURE NO. PRESSURE Vs VOID RATIO CURVE (e-log p)

BH NO. = BH-01 (P-377)
SAMPLE NO. = UDS-3
DEPTH (m) = 11.50m



BH NO. = BH-01 (P-377)
SAMPLE NO. = UDS-3
DEPTH (m) = 11.50m



APPENDIX – C

(ANALYSIS & CALCULATION SHEET)

Appendix No.	ITEMS
C-1	CALCULATION OF LIQUEFACTION POTENTIAL ANALYSIS RESULTS
C-2	CALCULATION FOR COMPUTATION OF SAFE LOAD CARRYING CAPACITY OF NORMAL DRIVEN, CAST-IN-SITU RCC PILE IN COMPRESSION & UPLIFT
C-3	CALCULATION FOR COMPUTATION OF SAFE LOAD CARRYING CAPACITY OF BORED CAST IN-SITU RCC PILE IN LATERAL

Liquefaction Analysis as per IS:1893 Part-1 (2016) & RDSO BS-118																											
Location:-		P-377		BH No.:-		1		Liquefiable upto:-		NL		Water Table depth considered for analysis (m):-							Earthquake Magnitude (Mw):-				6				
Depth Below G.L. (z) in m	Observed SPT Value	Saturated Density (t/m ³)	Submerged Density (t/m ³)	Strata Type	Fine Content (%)	Stress Reduction Coefficient (rd)	Total Overburden Press (σ _o), t/m ²	Effective Overburden (σ' _o), t/m ²	Critical Stress Ratio (CSR)	C _{HT}	C _{HW}	C _{SS}	C _{RL}	C _{BD}	C ₆₀	Stress Normalization Factor(C _N)	SPT Corrected (N1) ₆₀	α	β	(N1) _{60CS}	CRR _{M=7.5}	K _M	K _σ	CRR _{Mw}	FOS	Conclusion	
3.50	16	1.96	0.961	Cohesionless	13	0.973	6.30	2.80	0.142	0.75	0.986	1.00	0.80	1.05	0.621	1.70	16.9	1.89	1.04	19.40	0.208	1.77	1	1.00	0.368	2.59	Non Liquefiable
5.00	25	1.96	0.961	Cohesionless	13	0.962	9.24	4.24	0.136	0.75	0.986	1.00	0.85	1.05	0.660	1.52	25.1	1.89	1.04	27.89	0.366	1.77	1	1.00	0.647	4.75	Non Liquefiable
6.50	29	1.97	0.969	Cohesionless	21	0.950	12.18	5.68	0.132	0.75	0.986	1.00	0.95	1.05	0.738	1.31	28.1	3.78	1.09	34.29	NA	1.77	1	1.00	NA	>1	Non Liquefiable
8.00	31	1.97	0.969	Cohesionless	21	0.939	15.14	7.14	0.129	0.75	0.986	1.00	0.95	1.05	0.738	1.17	26.8	3.78	1.09	32.88	NA	1.77	1	1.00	NA	>1	Non Liquefiable
9.50	41	1.99	0.985	Cohesionless	27	0.920	18.09	8.59	0.126	0.75	0.986	1.00	0.95	1.05	0.738	1.07	32.3	4.48	1.13	40.99	NA	1.77	1	1.00	NA	>1	Non Liquefiable
11.00	51	2.03	1.026	Cohesive	78	0.880	21.07	10.07	0.120	0.75	0.986	1.00	1.00	1.05	0.776	-	-	-	-	-	-	-	-	-	-	>1	Non Liquefiable
12.50	67	2.03	1.026	Cohesive	78	0.840	24.11	11.61	0.113	0.75	0.986	1.00	1.00	1.05	0.776	-	-	-	-	-	-	-	-	-	-	>1	Non Liquefiable
14.00	81	2.03	1.025	Cohesionless	24	0.800	27.15	13.15	0.107	0.75	0.986	1.00	1.00	1.05	0.776	0.86	54.3	4.18	1.11	64.31	NA	1.77	1	1.00	NA	>1	Non Liquefiable
15.00	92	2.03	1.025	Cohesionless	24	0.774	29.17	14.17	0.103	0.75	0.986	1.00	1.00	1.05	0.776	0.83	59.4	4.18	1.11	69.96	NA	1.77	1	1.00	NA	>1	Non Liquefiable
17.00	100	2.03	1.025	Cohesionless	24	0.720	33.22	16.22	0.096	0.75	0.986	1.00	1.00	1.05	0.776	0.78	60.3	4.18	1.11	71.01	NA	1.77	1	1.00	NA	>1	Non Liquefiable

Liquefaction Analysis as per IS:1893 Part-1 (2016) & RDSO BS-118																											
Location:-		P-385		BH No.:-		3		Liquefiable upto:-		NL		Water Table depth considered for analysis (m):-										Earthquake Magnitude (Mw):-			6		
Depth Below G.L. (z) in m	Observed SPT Value	Saturated Density (t/m ³)	Submerged Density (t/m ³)	Strata Type	Fine Content (%)	Stress Reduction Coefficient (rd)	Total Overburden Press (σ _o), t/m ²	Effective Overburden (σ' _o), t/m ²	Critical Stress Ratio (CSR)	C _{HT}	C _{HW}	C _{SS}	C _{RL}	C _{BD}	C ₆₀	Stress Normalization Factor(C _N)	SPT Corrected (N1) ₆₀	α	β	(N1) _{60CS}	CRR _{M=7.5}	K _M	K _σ	CRR _{Mw}	FOS	Conclusion	
1.50	25	1.95	0.952	Cohesionless	17	0.989	2.70	1.20	0.145	0.75	0.986	1.00	0.75	1.05	0.582	1.70	24.7	3.01	1.06	29.24	0.422	1.77	1	1.00	0.747	5.17	Non Liquefiable
3.00	23	1.95	0.952	Cohesionless	17	0.977	5.63	2.63	0.136	0.75	0.986	1.00	0.80	1.05	0.621	1.70	24.3	3.01	1.06	28.75	0.399	1.77	1	1.00	0.706	5.19	Non Liquefiable
4.50	27	1.95	0.952	Cohesionless	17	0.966	8.56	4.06	0.132	0.75	0.986	1.00	0.85	1.05	0.660	1.55	27.7	3.01	1.06	32.37	NA	1.77	1	1.00	NA	>1	Non Liquefiable
6.00	32	1.99	0.992	Cohesionless	23	0.954	11.48	5.48	0.130	0.75	0.986	1.00	0.95	1.05	0.738	1.34	31.5	4.06	1.10	38.77	NA	1.77	1	1.00	NA	>1	Non Liquefiable
7.50	34	1.99	0.992	Cohesionless	23	0.943	14.47	6.97	0.127	0.75	0.986	1.00	0.95	1.05	0.738	1.19	29.7	4.06	1.10	36.77	NA	1.77	1	1.00	NA	>1	Non Liquefiable
9.00	37	1.99	0.992	Cohesionless	28	0.931	17.46	8.46	0.125	0.75	0.986	1.00	0.95	1.05	0.738	1.08	29.4	4.56	1.14	37.99	NA	1.77	1	1.00	NA	>1	Non Liquefiable
10.50	41	1.99	0.992	Cohesionless	28	0.894	20.45	9.95	0.119	0.75	0.986	1.00	1.00	1.05	0.776	0.99	31.6	4.56	1.14	40.52	NA	1.77	1	1.00	NA	>1	Non Liquefiable
12.00	47	1.99	0.992	Cohesionless	28	0.854	23.43	11.43	0.114	0.75	0.986	1.00	1.00	1.05	0.776	0.93	33.8	4.56	1.14	43.01	NA	1.77	1	1.00	NA	>1	Non Liquefiable
13.50	52	2.01	1.014	Cohesionless	17	0.814	26.42	12.92	0.108	0.75	0.986	1.00	1.00	1.05	0.776	0.87	35.2	3.01	1.06	40.28	NA	1.77	1	1.00	NA	>1	Non Liquefiable
15.00	55	2.01	1.014	Cohesionless	17	0.774	29.44	14.44	0.102	0.75	0.986	1.00	1.00	1.05	0.776	0.82	35.2	3.01	1.06	40.30	NA	1.77	1	1.00	NA	>1	Non Liquefiable

Liquefaction Analysis as per IS:1893 Part-1 (2016) & RDSO BS-118																											
Location:-		P-387		BH No.:-		4		Liquefiable upto:-			NL		Water Table depth considered for analysis (m):-							0			Earthquake Magnitude (Mw):-			6	
Depth Below G.L. (z) in m	Observed SPT Value	Saturated Density (t/m ³)	Submerged Density (t/m ³)	Strata Type	Fine Content (%)	Stress Reduction Coefficient (rd)	Total Overburden Press (σ _o), t/m ²	Effective Overburden (σ' _o), t/m ²	Critical Stress Ratio (CSR)	C _{HT}	C _{HW}	C _{SS}	C _{RL}	C _{BD}	C ₆₀	Stress Normalization Factor(C _N)	SPT Corrected (N1) ₆₀	α	β	(N1) _{60CS}	CRR _{M=7.5}	K _M	K _α	K _σ	CRR _{Mw}	FOS	Conclusion
1.50	14	1.89	0.892	Cohesionless	17	0.989	2.70	1.20	0.145	0.75	0.986	1.00	0.75	1.05	0.582	1.70	13.9	3.01	1.06	17.70	0.188	1.77	1	1.00	0.334	2.31	Non Liquefiable
3.00	18	1.89	0.892	Cohesionless	17	0.977	5.54	2.54	0.139	0.75	0.986	1.00	0.80	1.05	0.621	1.70	19.0	3.01	1.06	23.16	0.259	1.77	1	1.00	0.459	3.31	Non Liquefiable
4.50	19	1.89	0.892	Cohesionless	17	0.966	8.38	3.88	0.136	0.75	0.986	1.00	0.85	1.05	0.660	1.59	19.9	3.01	1.06	24.14	0.276	1.77	1	1.00	0.488	3.60	Non Liquefiable
6.00	20	1.90	0.897	Cohesionless	19	0.954	11.22	5.22	0.133	0.75	0.986	1.00	0.95	1.05	0.738	1.37	20.2	3.43	1.07	25.12	0.294	1.77	1	1.00	0.521	3.91	Non Liquefiable
7.50	22	1.90	0.897	Cohesionless	18	0.943	14.06	6.56	0.131	0.75	0.986	1.00	0.95	1.05	0.738	1.22	19.8	3.23	1.07	24.38	0.280	1.77	1	1.00	0.496	3.78	Non Liquefiable
9.00	27	1.90	0.897	Cohesionless	18	0.931	16.91	7.91	0.129	0.75	0.986	1.00	0.95	1.05	0.738	1.11	22.2	3.23	1.07	26.88	0.335	1.77	1	1.00	0.593	4.58	Non Liquefiable
10.50	31	1.97	0.967	Cohesionless	22	0.894	19.75	9.25	0.124	0.75	0.986	1.00	1.00	1.05	0.776	1.03	24.8	3.93	1.09	31.00	NA	1.77	1	1.00	NA	>1	Non Liquefiable
12.00	34	1.97	0.967	Cohesionless	22	0.854	22.70	10.70	0.118	0.75	0.986	1.00	1.00	1.05	0.776	0.96	25.3	3.93	1.09	31.54	NA	1.77	1	1.00	NA	>1	Non Liquefiable
13.50	37	1.97	0.967	Cohesionless	24	0.814	25.65	12.15	0.112	0.75	0.986	1.00	1.00	1.05	0.776	0.90	25.8	4.18	1.11	32.75	NA	1.77	1	1.00	NA	>1	Non Liquefiable
15.00	42	1.97	0.967	Cohesionless	24	0.774	28.60	13.60	0.106	0.75	0.986	1.00	1.00	1.05	0.776	0.85	27.7	4.18	1.11	34.83	NA	1.77	1	1.00	NA	>1	Non Liquefiable

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 30.00 m										Bore Hole No = BH-01			Ch. (KM) P-377		Dia of pile = 1.00 m			Cut-off Level = 2.00 m			below EGL																		
Water Table depth considered for analysis =										Restricting PD to 15D										Scour Depth = Non-Scourable										Liquefaction Depth = Non-Liquefiable									
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction							For End Bearing				Nc	Nq	Ny	As/cm	Ap	qs	Qp																		
		from	to	c	Ø	k	α	y _{eff}	ΔL	pd (s.f)	Pd (e.b)	y _{eff}	c	Ø																									
(m)	(m)	(m)	(m)	kg/cm ²	deg				gm/cc	cm	kg/cm ²	kg/cm ²	gm/cc	kg/cm ²			cm ²	cm ²	t	t	t																		
1.00	2.00	0.00	2.00						0.60	200	0.06						314.29		4.77																				
1.00		2.00	3.50	0.00	30	1.00	1.00		0.74	150	0.18						314.29		11.04																				
1.00		3.50	5.50	0.00	30	1.00	1.00		0.74	200	0.30						314.29		27.87																				
1.00		5.50	8.50	0.00	31	1.00	1.00		0.76	300	0.49						314.29		33.33																				
1.00		8.50	11.00	0.00	31	1.00	1.00		0.80	250	0.71						314.29		55.68																				
1.00		11.00	14.00	1.76	8	1.00	0.26		0.93	300	0.95						314.29		23.06																				
1.00		14.00	15.00	0.00	33	1.00	1.00		0.88	100	1.13						314.29		83.86																				
1.00		15.00	18.50	0.00	33	1.00	1.00		0.88	350	1.17						314.29		83.21																				
1.00		18.50	21.50	2.76	8	1.00	0.26		0.98	300	1.17						314.29		251.58																				
1.00		21.50	32.00	0.00	33	1.00	1.00		0.85	1050	1.17	1.17	0.85	0.00	33	9	35.17	7857.14	574.41	335.96																			
																					574.41		335.96																
Qu,comp.=										qs + Qp		Qu,uplift =										Safe Frictional Resistance + Weight of Pile																	
Qa,comp.=										(574.41 + 335.96) / 2.5		Qa,uplift =										574.41 / 3 + 35.34																	
Qa,comp.=										364.15 T		Qa,uplift =										226.81 T																	
Say										364.00 T		Qa,uplift =										226.00 T																	

*FOS for Vertical Capacity of pile in compression = 2.5

**FOS for Uplift Capacity of pile = 3.0

***Density of Concrete for Weight of Pile = 2.5t/m³

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 32.00 m										Bore Hole No = BH-01			Ch. (KM) P-377		Dia of pile = 1.00 m			Cut-off Level = 2.00 m			below EGL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Restricting PD to 15D										Water Table depth considered for analysis = 0.00 m										Scour Depth = Non-Scourable						Liquefaction Depth = Non-Liquefiable																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction							For End Bearing					Nc	Nq	Ny	As/cm	Ap	qs	Qp																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
		from	to	c	Ø	k	α	y _{eff}	ΔL	pd (s.f)	Pd (e.b)	y _{eff}	c	Ø	kg/cm ²								gm/cc	kg/cm ²	cm ²	cm ²	t	t																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
(m)	(m)	(m)	(m)	kg/cm ²	deg				cm	kg/cm ²	kg/cm ²	gm/cc	deg																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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1.00		2.00	3.50	0.00	30	1.00	1.00	0.60	150	0.18							314.29		4.77																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
1.00		3.50	5.50	0.00	30	1.00	1.00	0.74	200	0.30							314.29		11.04																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
1.00		5.50	8.50	0.00	31	1.00	1.00	0.76	300	0.49							314.29		27.87																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
1.00		8.50	11.00	0.00	31	1.00	1.00	0.80	250	0.71							314.29		33.33																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
1.00		11.00	14.00	1.76	8	1.00	0.26	0.93	300	0.95							314.29		55.68																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
1.00		14.00	15.00	0.00	33	1.00	1.00	0.88	100	1.13							314.29		23.06																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
1.00		15.00	18.50	0.00	33	1.00	1.00	0.88	350	1.17							314.29		83.86																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
1.00		18.50	21.50	2.76	8	1.00	0.26	0.98	300	1.17							314.29		83.21																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
1.00		21.50	34.00	0.00	33	1.00	1.00	0.85	1250	1.17	1.17	0.85	0.00	33	9	35.17	35.19	314.29	7857.14	299.50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 34.00 m										Bore Hole No = BH-01			Ch. (KM) P-377		Dia of pile = 1.00 m			Cut-off Level = 2.00 m			below EGL										
Restricting PD to 15D										Water Table depth considered for analysis = 0.00 m										Scour Depth = Non-Scourable						Liquefaction Depth = Non-Liquefiable					
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction							For End Bearing				Nc	Nq	Ny	As/cm	Ap	qs	Qp										
		from	to	c	Ø	k	α	y _{eff}	ΔL	pd (s.f)	Pd (e.b)	y _{eff}	c	Ø																	
(m)	(m)	(m)	(m)	kg/cm ²	deg				gm/cc	cm	kg/cm ²	kg/cm ²	gm/cc	kg/cm ²			cm ²	cm ²	t	t											
1.00	2.00	0.00	2.00						0.60	200	0.06						314.29		4.77												
1.00		2.00	3.50	0.00	30	1.00	1.00		0.74	150	0.18						314.29		11.04												
1.00		3.50	5.50	0.00	30	1.00	1.00		0.74	200	0.30						314.29		27.87												
1.00		5.50	8.50	0.00	31	1.00	1.00		0.76	300	0.49						314.29		33.33												
1.00		8.50	11.00	0.00	31	1.00	1.00		0.80	250	0.71						314.29		55.68												
1.00		11.00	14.00	1.76	8	1.00	0.26		0.93	300	0.95						314.29		23.06												
1.00		14.00	15.00	0.00	33	1.00	1.00		0.88	100	1.13						314.29		83.86												
1.00		15.00	18.50	0.00	33	1.00	1.00		0.88	350	1.17						314.29		83.21												
1.00		18.50	21.50	2.76	8	1.00	0.26		0.98	300	1.17						314.29		347.42												
1.00		21.50	36.00	0.00	33	1.00	1.00		0.85	1450	1.17	1.17	0.85	0.00	33	9	35.17	35.19	7857.14												
																			670.25	335.96											
																			Safe Frictional Resistance + Weight of Pile												
																			Qu,uplift =												
																			Qa,uplift =												
																			Qa,uplift =												
																			263.47 T												
																			Say												
																			Qa,comp.=												
																			402.00 T												
																			263.00 T												

*FOS for Vertical Capacity of pile in compression = 2.5

**FOS for Uplift Capacity of pile = 3.0

***Density of Concrete for Weight of Pile = 2.5t/m³

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 36.00 m										Bore Hole No = BH-01			Ch. (KM) P-377		Dia of pile = 1.00 m			Cut-off Level = 2.00 m			below EGL																							
Water Table depth considered for analysis = 0.00 m										Scour Depth = Non-Scourable										Liquefaction Depth = Non-Liquefiable																								
Restricting PD to 15D										For End Bearing																																		
Dia. of Pile	Cut-off Depth	Soil layers					Properties of layers/for Skin Friction					Pd (e.b)					yeff	c	Ø	Nc	Nq	Ny	As/cm	Ap	qs	Qp																		
(m)	(m)	from	to	c	Ø	k	α	yeff	ΔL	pd (s.f)	Pd (e.b)	gm/cc	kg/cm ²	deg	kg/cm ²	gm/cc	kg/cm ²	deg				cm ²	cm ²	t	t																			
1.00	2.00	0.00	2.00					0.60	200	0.06																																		
1.00		2.00	3.50	0.00	30	1.00	1.00	0.74	150	0.18												314.29		4.77																				
1.00		3.50	5.50	0.00	30	1.00	1.00	0.74	200	0.30												314.29		11.04																				
1.00		5.50	8.50	0.00	31	1.00	1.00	0.76	300	0.49												314.29		27.87																				
1.00		8.50	11.00	0.00	31	1.00	1.00	0.80	250	0.71												314.29		33.33																				
1.00		11.00	14.00	1.76	8	1.00	0.26	0.93	300	0.95												314.29		55.68																				
1.00		14.00	15.00	0.00	33	1.00	1.00	0.88	100	1.13												314.29		23.06																				
1.00		15.00	18.50	0.00	33	1.00	1.00	0.88	350	1.17												314.29		83.86																				
1.00		18.50	21.50	2.76	8	1.00	0.26	0.98	300	1.17												314.29		83.21																				
1.00		21.50	38.00	0.00	33	1.00	1.00	0.85	1650	1.17	1.17	0.85	0.00	33	9	35.17						7857.14		395.34																				
																							Safe Frictional Resistance + Weight of Pile										718.17	335.96										
Qu,comp.=										qs + Qp					Qu,uplift =																													
Qa,comp.=										(718.17 + 335.96) / 2.5					Qa,uplift =					718.17 / 3 + 42.41																								
Qa,comp.=										421.65 T					Qa,uplift =					281.80 T																								
Say										Qa,comp.=					421.00 T					Qa,uplift =					281.00 T																			

*FOS for Vertical Capacity of pile in compression = 2.5

****FOS for Uplift Capacity of pile = 3.0**

***Density of Concrete for Weight of Pile = 2.5t/m^3

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 40.00 m										Bore Hole No = BH-01			Ch. (KM) P-377		Dia of pile = 1.00 m			Cut-off Level = 2.00 m			below EGL										
Restricting PD to 15D										Water Table depth considered for analysis = 0.00 m										Scour Depth = Non-Scourable						Liquefaction Depth = Non-Liquefiable					
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction							For End Bearing				Nc	Nq	Ny	As/cm	Ap	qs	Qp										
		from	to	c	Ø	k	α	γ _{eff}	ΔL	pd (s.f)	Pd (e.b)	γ _{eff}	c	Ø																	
(m)	(m)	(m)	(m)	kg/cm ²	deg			gm/cc	cm	kg/cm ²	kg/cm ²	gm/cc	kg/cm ²	deg			cm ²	cm ²	t	t											
1.00	2.00	0.00	2.00					0.60	200	0.06							314.29		4.77												
1.00		2.00	3.50	0.00	30	1.00	1.00	0.74	150	0.18							314.29		11.04												
1.00		3.50	5.50	0.00	30	1.00	1.00	0.74	200	0.30							314.29		27.87												
1.00		5.50	8.50	0.00	31	1.00	1.00	0.76	300	0.49							314.29		33.33												
1.00		8.50	11.00	0.00	31	1.00	1.00	0.80	250	0.71							314.29		55.68												
1.00		11.00	14.00	1.76	8	1.00	0.26	0.93	300	0.95							314.29		23.06												
1.00		14.00	15.00	0.00	33	1.00	1.00	0.88	100	1.13							314.29		83.86												
1.00		15.00	18.50	0.00	33	1.00	1.00	0.88	350	1.17							314.29		83.21												
1.00		18.50	21.50	2.76	8	1.00	0.26	0.98	300	1.17							314.29		491.18												
1.00		21.50	42.00	0.00	33	1.00	1.00	0.85	2050	1.17	1.17	0.85	0.00	33	9	35.17	35.19	7857.14		335.96											
																			814.01	335.96											
																			Qu,uplift =			Safe Frictional Resistance + Weight of Pile									
																			Qa,uplift =			814.01 / 3 + 47.12									
																			Qa,uplift =			318.46 T									
																			Say			Qa,uplift = 318.00 T									

*FOS for Vertical Capacity of pile in compression = 2.5

**FOS for Uplift Capacity of pile = 3.0

***Density of Concrete for Weight of Pile = 2.5t/m³

*FOS for Vertical Capacity of pile in compression = 2.5

**FOS for Uplift Capacity of pile = 3.0

***Density of Concrete for Weight of Pile = 2.5t/m³

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 30.00 m										Bore Hole No = BH-01			Ch. (KM) P-377		Dia of pile = 1.20 m			Cut-off Level = 2.00 m			below EGL											
Restricting PD to 15D										Water Table depth considered for analysis = 0.00 m										Scour Depth = Non-Scourable						Liquefaction Depth = Non-Liquefiable						
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction							For End Bearing				Nc	Nq	Ny	As/cm	Ap	qs	Qp											
		from	to	c	Ø	k	α	y _{eff}	ΔL	pd (s.f)	Pd (e.b)	y _{eff}	c	Ø																		
(m)	(m)	(m)	(m)	kg/cm ²	deg				gm/cc	cm	kg/cm ²	kg/cm ²	gm/cc	deg			cm ²	cm ²	t	t												
1.20	2.00	0.00	2.00						0.60	200	0.06						377.14		5.73													
1.20		2.00	3.50	0.00	30	1.00	1.00		0.74	150	0.18						377.14		13.25													
1.20		3.50	5.50	0.00	30	1.00	1.00		0.74	200	0.30						377.14		33.44													
1.20		5.50	8.50	0.00	31	1.00	1.00		0.76	300	0.49						377.14		40.00													
1.20		8.50	11.00	0.00	31	1.00	1.00		0.80	250	0.71						377.14		66.82													
1.20		11.00	14.00	1.76	8	1.00	0.26		0.93	300	0.95						377.14		123.61													
1.20		14.00	18.00	0.00	33	1.00	1.00		0.88	400	1.26						377.14		17.60													
1.20		18.00	18.50	0.00	33	1.00	1.00		0.88	50	1.44						377.14		104.05													
1.20		18.50	21.50	2.76	8	1.00	0.26		0.98	300	1.44						377.14		369.66													
1.20		21.50	32.00	0.00	33	1.00	1.00		0.85	1050	1.44	1.44	0.85	33	9	35.17	35.19	11314.29		591.96												
																			774.15	591.96												
																			Qu,uplift =		Safe Frictional Resistance + Weight of Pile											
																			Qa,comp.=		qs + Qp		(774.15 + 591.96) / 2.5									
																			Qa,comp.=				774.15 / 3 + 50.89									
																			Qa,comp.=		546.44 T		308.94 T									
Say																			Qa,comp.=		546.00 T		308.00 T									

*FOS for Vertical Capacity of pile in compression = 2.5

**FOS for Uplift Capacity of pile = 3.0

***Density of Concrete for Weight of Pile = 2.5t/m³

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 32.00 m										Bore Hole No = BH-01			Ch. (KM) P-377		Dia of pile = 1.20 m			Cut-off Level = 2.00 m			below EGL										
Restricting PD to 15D										Water Table depth considered for analysis = 0.00 m										Scour Depth = Non-Scourable						Liquefaction Depth = Non-Liquefiable					
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction							For End Bearing				Nc	Nq	Ny	As/cm	Ap	qs	Qp										
		from	to	c	Ø	k	α	yeff	ΔL	pd (s.f)	Pd (e.b)	yeff	c	Ø																	
(m)	(m)	(m)	(m)	kg/cm ²	deg			gm/cc	cm	kg/cm ²	kg/cm ²	gm/cc	kg/cm ²	deg			cm ²	cm ²	t	t											
1.20	2.00	0.00	2.00					0.60	200	0.06							377.14		5.73												
1.20		2.00	3.50	0.00	30	1.00	1.00	0.74	150	0.18							377.14		13.25												
1.20		3.50	5.50	0.00	30	1.00	1.00	0.74	200	0.30							377.14		33.44												
1.20		5.50	8.50	0.00	31	1.00	1.00	0.76	300	0.49							377.14		40.00												
1.20		8.50	11.00	0.00	31	1.00	1.00	0.80	250	0.71							377.14		66.82												
1.20		11.00	14.00	1.76	8	1.00	0.26	0.93	300	0.95							377.14		123.61												
1.20		14.00	18.00	0.00	33	1.00	1.00	0.88	400	1.26							377.14		17.60												
1.20		18.00	18.50	0.00	33	1.00	1.00	0.88	50	1.44							377.14		104.05												
1.20		18.50	21.50	2.76	8	1.00	0.26	0.98	300	1.44							377.14		440.07												
1.20		21.50	34.00	0.00	33	1.00	1.00	0.85	1250	1.44	1.44	0.85	0.00	33	9	35.17	35.19	11314.29	591.96												
																				844.56	591.96										
										Qu,comp.=		qs + Qp		Qu,uplift =		Safe Frictional Resistance + Weight of Pile															
										Qa,comp.=		(844.56 + 591.96) / 2.5		Qa,uplift =		844.56 / 3 + 54.29															
										Qa,comp.=		574.61 T		Qa,uplift =		335.81 T															
										Say		Qa,comp.=		574.00 T		Qa,uplift =		335.00 T													

*FOS for Vertical Capacity of pile in compression = 2.5

**FOS for Uplift Capacity of pile = 3.0

***Density of Concrete for Weight of Pile = 2.5t/m³

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahadpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 38.00 m				Bore Hole No = BH-01		Ch. (KM) P-377		Dia of pile = 1.20 m		Cut-off Level = 2.00 m		below EGL															
Restricting PD to 15D				Water Table depth considered for analysis = 0.00 m				Scour Depth = Non-Scourable				Liquefaction Depth = Non-Liquefiable															
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction					For End Bearing																		
(m)	(m)	from	to	c	Ø	k	α	yeff	ΔL	pd (s.f)	Pd (e.b)	yeff	c	Ø	Nc	Nq	Ny	As/cm	Ap	qs	Qp						
		(m)	(m)	kg/cm ²	deg			gm/cc	cm	kg/cm ²	kg/cm ²	gm/cc	kg/cm ²	deg				cm ²	cm ²	t	t						
1.20	2.00	0.00	2.00					0.60	200	0.06								377.14		5.73							
1.20		2.00	3.50	0.00	30	1.00	1.00	0.74	150	0.18								377.14		13.25							
1.20		3.50	5.50	0.00	30	1.00	1.00	0.74	200	0.30								377.14		33.44							
1.20		5.50	8.50	0.00	31	1.00	1.00	0.76	300	0.49								377.14		40.00							
1.20		8.50	11.00	0.00	31	1.00	1.00	0.80	250	0.71								377.14		66.82							
1.20		11.00	14.00	1.76	8	1.00	0.26	0.93	300	0.95								377.14		123.61							
1.20		14.00	18.00	0.00	33	1.00	1.00	0.88	400	1.26								377.14		17.60							
1.20		18.00	18.50	0.00	33	1.00	1.00	0.88	50	1.44								377.14		104.05							
1.20		18.50	21.50	2.76	8	1.00	0.26	0.98	300	1.44								377.14		651.30	591.96						
1.20		21.50	40.00	0.00	33	1.00	1.00	0.85	1850	1.44	1.44	0.85	0.00	33	9	35.17	35.19	377.14	11314.29								
																						1055.79	591.96				
																Qu,comp.=						qs + Qp		Qu,uplift =		Safe Frictional Resistance + Weight of Pile	
																Qa,comp.=						(1055.79 + 591.96) / 2.5		Qa,uplift =		1055.79 / 3 + 64.47	
																Qa,comp.=						659.10 T		Qa,uplift =		416.40 T	
																Say		Qa,comp.=		659.00 T		Qa,uplift =		416.00 T			

*FOS for Vertical Capacity of pile in compression = 2.5

**FOS for Uplift Capacity of pile = 3.0

***Density of Concrete for Weight of Pile = 2.5t/m³

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)																								
Length of Pile below cut of level = 40.00 m				Bore Hole No = BH-01				Ch. (KM) P-377				Dia of pile = 1.20 m				Cut-off Level = 2.00 m				below EGL				
Restricting PD to 15D				Water Table depth considered for analysis = 0.00 m				Scour Depth = Non-Scourable				Liquefaction Depth = Non-Liquefiable												
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction							For End Bearing													
(m)	(m)	from	to	c	Ø	k	α	y _{eff}	ΔL	pd (s.f)	Pd (e.b)	y _{eff}	c	Ø	N _c	N _q	N _y	As/cm	Ap					
		(m)	(m)	kg/cm ²	deg			gm/cc	cm	kg/cm ²	kg/cm ²	gm/cc	kg/cm ²	deg				cm ²	cm ²					
1.20	2.00	0.00	2.00																					
1.20		2.00	3.50	0.00	30	1.00	1.00	0.60	200	0.06								377.14	5.73					
1.20		3.50	5.50	0.00	30	1.00	1.00	0.74	150	0.18								377.14	13.25					
1.20		5.50	8.50	0.00	31	1.00	1.00	0.76	200	0.30								377.14	33.44					
1.20		8.50	11.00	0.00	31	1.00	1.00	0.80	300	0.49								377.14	40.00					
1.20		11.00	14.00	1.76	8	1.00	0.26	0.93	250	0.71								377.14	66.82					
1.20		14.00	18.00	0.00	33	1.00	1.00	0.88	400	1.26								377.14	123.61					
1.20		18.00	18.50	0.00	33	1.00	1.00	0.88	50	1.44								377.14	17.60					
1.20		18.50	21.50	2.76	8	1.00	0.26	0.98	300	1.44								377.14	104.05					
1.20		21.50	42.00	0.00	33	1.00	1.00	0.85	2050	1.44	1.44	0.85	0.00	33	9	35.17	35.19	377.14	721.71					
																				1126.20		591.96		
																	Qu,comp.=			qs + Qp		Safe Frictional Resistance + Weight of Pile		
																	Qa,comp.=			(1126.2 + 591.96) / 2.5		Qa,uplift =		
																	Qa,comp.=			687.26 T		Qa,uplift =		
																	Say			687.00 T		443.00 T		
*FOS for Vertical Capacity of pile in compression = 2.5																								
**FOS for Uplift Capacity of pile = 3.0																								
***Density of Concrete for Weight of Pile = 2.5t/m ³																								

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

[illegible]

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 34.00 m										Bore Hole No = BH-03				Ch. (KM) P-385		Dia of pile = 1.00 m				Cut-off Level = 2.00 m				below EGL					
Water Table depth considered for analysis = 0.00 m										Scour Depth = Non-Scourable								Liquefaction Depth = Non-Liquefiable											
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction							For End Bearing				Nc	Nq	Ny	As/cm	Ap	qs	Qp								
		from	to	c	Ø	k	α	γ _{eff}	ΔL	pd (s.f)	Pd (e.b)	γ _{eff}	c	Ø															
(m)	(m)	(m)	(m)	kg/cm ²	deg			gm/cc	cm	kg/cm ²	gm/cc	kg/cm ²	deg				cm ²	cm ²	t	t									
1.00	2.00	0.00	2.00					0.60	200	0.06									15.36										
1.00		2.00	5.50	0.00	30	1.00	1.00	0.70	350	0.24							314.29		101.33										
1.00		5.50	13.50	0.00	31	1.00	1.00	0.77	800	0.67							314.29		30.62										
1.00		13.50	15.00	0.00	32	1.00	1.00	0.82	150	1.04							314.29		32.43										
1.00		15.00	16.50	0.00	32	1.00	1.00	0.82	150	1.10							314.29		55.36										
1.00		16.50	19.50	1.55	7	1.00	0.29	0.94	300	1.10							314.29		269.62										
1.00		19.50	31.50	0.00	33	1.00	1.00	0.84	1200	1.10							314.29		79.30										
1.00		31.50	34.50	2.64	8	1.00	0.26	1.01	300	1.10							314.29		33.70										
1.00		34.50	36.00	0.00	33	1.00	1.00	0.89	150	1.10	1.01	2.64	8	9	2.06	0.86	7857.14		204.82										
																			617.73	204.82									
Qu,comp.= qs + Qp										Qu,uplift =										Safe Frictional Resistance + Weight of Pile									
Qa,comp.= (617.73 + 204.82) / 2.5										Qa,uplift =										617.73 / 3 + 40.06									
Qa,comp.= 329.02 T										Qa,uplift =										245.96 T									
Say										Qa,comp.= 329.00 T										Qa,uplift = 245.00 T									

*FOS for Vertical Capacity of pile in compression = 2.5

****FOS for Uplift Capacity of pile = 3.0**

***Density of Concrete for Weight of Pile = 2.5t/m^3

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)																							
Length of Pile below cut of level = 36.00 m				Bore Hole No = BH-03				Ch. (KM) P-385				Dia of pile = 1.00 m				Cut-off Level = 2.00 m				below EGL			
Restricting PD to 15D				Water Table depth considered for analysis = 0.00 m				Scour Depth = Non-Scourable				Liquefaction Depth = Non-Liquefiable											
Dia. of Pile (m)	Cut-off Depth (m)	Soil layers		Properties of layers/for Skin Friction							For End Bearing				Nc	Nq	Ny	As/cm ²	Ap cm ²	qs t	Qp t		
		from (m)	to (m)	c kg/cm ²	Ø deg	k	α	γ _{eff} gm/cc	ΔL cm	pd (s.f) kg/cm ²	Pd (e.b) kg/cm ²	γ _{eff} gm/cc	c kg/cm ²	Ø deg									
1.00	2.00	0.00	2.00							0.60	200	0.06											
1.00		2.00	5.50	0.00	30	1.00	1.00	0.70	350	0.24							314.29		15.36				
1.00		5.50	13.50	0.00	31	1.00	1.00	0.77	800	0.67							314.29		101.33				
1.00		13.50	15.00	0.00	32	1.00	1.00	0.82	150	1.04							314.29		30.62				
1.00		15.00	16.50	0.00	32	1.00	1.00	0.82	150	1.10							314.29		32.43				
1.00		16.50	19.50	1.55	7	1.00	0.29	0.94	300	1.10							314.29		55.36				
1.00		19.50	31.50	0.00	33	1.00	1.00	0.84	1200	1.10							314.29		269.62				
1.00		31.50	34.50	2.64	8	1.00	0.26	1.01	300	1.10							314.29		79.30				
1.00		34.50	38.00	0.00	33	1.00	1.00	0.89	350	1.10	1.10	0.89	0.00	33	35.17	35.19	7857.14		78.64	316.41			
																	662.66	316.41					
				Qu,comp.=		qs + Qp		Qu,uplift =		Safe Frictional Resistance + Weight of Pile													
				Qa,comp.=		(662.66 + 316.41) / 2.5		Qa,uplift =		662.66 / 3 + 42.41													
				Qa,comp.=		391.63 T		Qa,uplift =		263.30 T													
				Say		391.00 T		Qa,uplift =		263.00 T													
*FOS for Vertical Capacity of pile in compression = 2.5																							
**FOS for Uplift Capacity of pile = 3.0																							
***Density of Concrete for Weight of Pile = 2.5t/m ³																							

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 40.00 m										Bore Hole No = BH-03			Ch. (KM) P-385		Dia of pile = 1.00 m			Cut-off Level = 2.00 m			below EGL			
Water Table depth considered for analysis =										Scour Depth = Non-Scourable										Liquefaction Depth = Non-Liquefiable				
Restricting PD to 15D																								
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction							For End Bearing				Nc	Nq	Ny	As/cm	Ap	qs	Qp			
		from	to	c	Ø	k	α	γ _{eff}	ΔL	pd (s.f)	Pd (e.b)	γ _{eff}	c	Ø										
(m)	(m)	(m)	(m)	kg/cm ²	deg			gm/cc	cm	kg/cm ²	kg/cm ²	gm/cc	kg/cm ²	deg			cm ²	cm ²	t	t				
1.00	2.00	0.00	2.00					0.60	200	0.06									15.36					
1.00		2.00	5.50	0.00	30	1.00	1.00	0.70	350	0.24									101.33					
1.00		5.50	13.50	0.00	31	1.00	1.00	0.77	800	0.67									30.62					
1.00		13.50	15.00	0.00	32	1.00	1.00	0.82	150	1.04									32.43					
1.00		15.00	16.50	0.00	32	1.00	1.00	0.82	150	1.10									55.36					
1.00		16.50	19.50	1.55	7	1.00	0.29	0.94	300	1.10									269.62					
1.00		19.50	31.50	0.00	33	1.00	1.00	0.84	1200	1.10									79.30					
1.00		31.50	34.50	2.64	8	1.00	0.26	1.01	300	1.10									168.52					
1.00		34.50	42.00	0.00	33	1.00	1.00	0.89	750	1.10	1.10	0.89	0.00	33	9	35.17	7857.14		316.41					
																						752.54	316.41	
										Qu,comp.=		qs + Qp		Qu,uplift =		Safe Frictional Resistance + Weight of Pile								
										Qa,comp.=		(752.54 + 316.41) / 2.5		Qa,uplift =		752.54 / 3 + 47.12								
										Qa,comp.=		427.58 T		Qa,uplift =		297.97 T								
Say										Qa,comp.=		427.00 T		Qa,uplift =		297.00 T								

*FOS for Vertical Capacity of pile in compression = 2.5

****FOS for Uplift Capacity of pile = 3.0**

***Density of Concrete for Weight of Pile = 2.5 t/m^3

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahadpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 30.00 m				Bore Hole No = BH-03				Ch. (KM) P-385				Dia of pile = 1.20 m				Cut-off Level = 2.00 m				below EGL							
Restricting PD to 15D				Water Table depth considered for analysis = 0.00 m								Scour Depth = Non-Scourable								Liquefaction Depth = Non-Liquefiable							
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction							For End Bearing				Nc	Nq	Ny	As/cm	Ap	qs	Qp						
		from	to	c	Ø	k	α	γ _{eff}	ΔL	pd (s.f)	Pd (e.b)	γ _{eff}	c	Ø													
(m)	(m)	(m)	(m)	kg/cm ²	deg				gm/cc	cm	kg/cm ²	gm/cc	kg/cm ²	deg			cm ²	cm ²	t	t							
1.20	2.00	0.00	2.00						0.60	200	0.06								18.43								
1.20		2.00	5.50	0.00	30	1.00	1.00		0.70	350	0.24								121.59								
1.20		5.50	13.50	0.00	31	1.00	1.00		0.77	800	0.67								77.83								
1.20		13.50	16.50	0.00	32	1.00	1.00		0.82	300	1.10								34.57								
1.20		16.50	18.00	1.55	7	1.00	0.29		0.94	150	1.29								35.06								
1.20		18.00	19.50	1.55	7	1.00	0.29		0.94	150	1.36								401.37								
1.20		19.50	31.50	0.00	33	1.00	1.00		0.84	1200	1.36								16.56								
1.20		31.50	32.00	2.64	8	1.00	0.26		1.01	50	1.36	1.01	2.64	8	9	2.06	11314.29			301.20							
																			705.41	301.20							
				Qu,comp.=		qs + Qp		Qu,uplift =		Safe Frictional Resistance + Weight of Pile																	
				Qa,comp.=		(705.41 + 301.2) / 2.5		Qa,uplift =		705.41 / 3 + 50.89																	
				Qa,comp.=		402.64 T		Qa,uplift =		286.03 T																	
Say				Qa,comp.=		402.00 T		Qa,uplift =		286.00 T																	

*FOS for Vertical Capacity of pile in compression = 2.5

****FOS for Uplift Capacity of pile = 3.0**

***Density of Concrete for Weight of Pile = $2.5t/m^3$

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 32.00 m										Bore Hole No = BH-03		Ch. (KM) P-385		Dia of pile = 1.20 m		Cut-off Level = 2.00 m		below EGL									
Restricting PD to 15D										Water Table depth considered for analysis = 0.00 m										Scour Depth = Non-Scourable				Liquefaction Depth = Non-Liquefiable			
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction						For End Bearing				Nc	Nq	Ny	As/cm	Ap	qs	Qp							
		from	to	c	Ø	k	α	y _{eff}	ΔL	pd (s.f)	Pd (e.b)	y _{eff}	c								Ø						
(m)	(m)	(m)	(m)	kg/cm ²	deg				gm/cc	cm	kg/cm ²	kg/cm ²	gm/cc	kg/cm ²			cm ²	cm ²	t	t							
1.20	2.00	0.00	2.00						0.60	200	0.06						377.14		18.43								
1.20		2.00	5.50	0.00	30	1.00	1.00		0.70	350	0.24						377.14		121.59								
1.20		5.50	13.50	0.00	31	1.00	1.00		0.77	800	0.67						377.14		77.83								
1.20		13.50	16.50	0.00	32	1.00	1.00		0.82	300	1.10						377.14		34.57								
1.20		16.50	18.00	1.55	7	1.00	0.29		0.94	150	1.29						377.14		35.06								
1.20		18.00	19.50	1.55	7	1.00	0.29		0.94	150	1.36						377.14		401.37								
1.20		19.50	31.50	0.00	33	1.00	1.00		0.84	1200	1.36						377.14		82.81								
1.20		31.50	34.00	2.64	8	1.00	0.26		1.01	250	1.36	1.36	1.01	2.64	8	9	377.14	11314.29		301.20							
																		771.66	301.20								
																		Safe Frictional Resistance + Weight of Pile									
																		Qu,comp.=		qs + Qp		Qu,uplift =					
																		Qa,comp.=		(771.66 + 301.2) / 2.5		Qa,uplift =					
																		Qa,comp.=		429.14 T		Qa,uplift =					
																						311.51 T					
																		Say									
																		Qa,comp.=		429.00 T		Qa,uplift =					

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 34.00 m															Bore Hole No = BH-03			Ch. (KM) P-385		Dia of pile = 1.20 m		Cut-off Level = 2.00 m			below EGL				
Restricting PD to 15D															Water Table depth considered for analysis = 0.00 m					Scour Depth = Non-Scourable					Liquefaction Depth = Non-Liquefiable				
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction						For End Bearing				Nc	Nq	Ny	As/cm ²	Ap	qs	Qp									
		from	to	c	Ø	k	α	y _{eff}	ΔL	pd (s.f)	Pd (e.b)	y _{eff}	c								Ø								
(m)	(m)	(m)	(m)	kg/cm ²	deg			gm/cc	cm	kg/cm ²	kg/cm ²	gm/cc	kg/cm ²	deg			cm ²	cm ²	t	t									
1.20	2.00	0.00	2.00						200	0.06							377.14		18.43										
1.20		2.00	5.50	0.00	30	1.00	1.00	0.60	350	0.24							377.14		121.59										
1.20		5.50	13.50	0.00	31	1.00	1.00	0.70	800	0.67							377.14		77.83										
1.20		13.50	16.50	0.00	32	1.00	1.00	0.82	300	1.10							377.14		34.57										
1.20		16.50	18.00	1.55	7	1.00	0.29	0.94	150	1.29							377.14		35.06										
1.20		18.00	19.50	1.55	7	1.00	0.29	0.94	150	1.36							377.14		401.37										
1.20		19.50	31.50	0.00	33	1.00	1.00	0.84	1200	1.36							377.14		99.37										
1.20		31.50	34.50	2.64	8	1.00	0.26	1.01	300	1.36							377.14		50.17										
1.20		34.50	36.00	0.00	33	1.00	1.00	0.89	150	1.36	1.36	1.01	2.64	8	9	2.06	0.86	11314.29		301.20									
																									838.40	301.20			
															Qu,comp.=					qs + Qp					Safe Frictional Resistance + Weight of Pile				
															Qa,comp.=					(838.4 + 301.2) / 2.5					838.4 / 3 + 57.68				
															Qa,comp.=					455.84 T					337.15 T				
															Say					Qa,comp.=					337.00 T				

*FOS for Vertical Capacity of pile in compression = 2.5

**FOS for Uplift Capacity of pile = 3.0

***Density of Concrete for Weight of Pile = 2.5t/m³

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level =				36.00 m		Bore Hole No = BH-03		Ch. (KM) P-385		Dia of pile = 1.20 m		Cut-off Level = 2.00 m		below EGL							
Water Table depth considered for analysis =										Scour Depth = Non-Scourable				Liquefaction Depth = Non-Liquefiable							
Restricting PD to 15D																					
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction							For End Bearing				Nc	Nq	Ny	As/cm	Ap	qs	Qp
		from	to	c	Ø	k	α	y _{eff}	ΔL	pd (s.f)	Pd (e.b)	y _{eff}	c	Ø							
(m)	(m)	(m)	(m)	kg/cm ²	deg				gm/cc	cm	kg/cm ²	gm/cc	kg/cm ²	deg			cm ²	cm ²	t	t	
1.20	2.00	0.00	2.00						0.60	200	0.06										
1.20		2.00	5.50	0.00	30	1.00	1.00		0.70	350	0.24						377.14		18.43		
1.20		5.50	13.50	0.00	31	1.00	1.00		0.77	800	0.67						377.14		121.59		
1.20		13.50	16.50	0.00	32	1.00	1.00		0.82	300	1.10						377.14		77.83		
1.20		16.50	18.00	1.55	7	1.00	0.29		0.94	150	1.29						377.14		34.57		
1.20		18.00	19.50	1.55	7	1.00	0.29		0.94	150	1.36						377.14		35.06		
1.20		19.50	31.50	0.00	33	1.00	1.00		0.84	1200	1.36						377.14		401.37		
1.20		31.50	34.50	2.64	8	1.00	0.26		1.01	300	1.36						377.14		99.37		
1.20		34.50	38.00	0.00	33	1.00	1.00		0.89	350	1.36		1.36	33	9	35.17	377.14	11314.29	117.07	564.50	
																			905.29	564.50	
																			Safe Frictional Resistance + Weight of Pile		
																			Qu,uplift =		
																			Qa,uplift =		
																			Qa,uplift =		
																			T		
																			362.84		
																			T		
																			362.00		
																			T		

*FOS for Vertical Capacity of pile in compression = 2.5

****FOS for Uplift Capacity of pile = 3.0**

***Density of Concrete for Weight of Pile = 2.5 t/m^3

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 38.00 m										Bore Hole No = BH-03			Ch. (KM) P-385		Dia of pile = 1.20 m		Cut-off Level = 2.00 m			below EGL	
Restricting PD to 15D										Water Table depth considered for analysis = 0.00 m											
Scour Depth = Non-Scourable										Liquefaction Depth = Non-Liquefiable											
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction							For End Bearing				Nc	Nq	Ny	As/cm	Ap	qs	Qp
		from	to	c	Ø	k	α	yeff	ΔL	pd (s.f)	Pd (e.b)	yeff	c	Ø							
(m)	(m)	(m)	(m)	kg/cm²	deg			gm/cc	cm	kg/cm²	kg/cm²	gm/cc	kg/cm²	deg			cm²	cm²	t	t	
1.20	2.00	0.00	2.00					0.60	200	0.06							377.14		18.43		
1.20		2.00	5.50	0.00	30	1.00	1.00	0.70	350	0.24							377.14		121.59		
1.20		5.50	13.50	0.00	31	1.00	1.00	0.77	800	0.67							377.14		77.83		
1.20		13.50	16.50	0.00	32	1.00	1.00	0.82	300	1.10							377.14		34.57		
1.20		16.50	18.00	1.55	7	1.00	0.29	0.94	150	1.29							377.14		35.06		
1.20		18.00	19.50	1.55	7	1.00	0.29	0.94	150	1.36							377.14		401.37		
1.20		19.50	31.50	0.00	33	1.00	1.00	0.84	1200	1.36							377.14		99.37		
1.20		31.50	34.50	2.64	8	1.00	0.26	1.01	300	1.36							377.14		183.96		
1.20		34.50	40.00	0.00	33	1.00	1.00	0.89	550	1.36	1.36	0.89	0.00	33	9	35.17	377.14	11314.29	564.50		
																			972.19	564.50	
Qu,comp.=										qs + Qp		Qu,uplift =		Safe Frictional Resistance + Weight of Pile							
Qa,comp.=										(972.19 + 564.5) / 2.5		Qa,uplift =		972.19 / 3 + 64.47							
Qa,comp.=										614.68 T		Qa,uplift =		388.53 T							
Say										614.00 T		Qa,uplift =		388.00 T							

*FOS for Vertical Capacity of pile in compression = 2.5

**FOS for Uplift Capacity of pile = 3.0

***Density of Concrete for Weight of Pile = 2.5t/m³

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 40.00 m				Bore Hole No = BH-03		Ch. (KM) P-385		Dia of pile = 1.20 m		Cut-off Level = 2.00 m		below EGL											
Restricting PD to 15D				Water Table depth considered for analysis = 0.00 m				Scour Depth = Non-Scourable				Liquefaction Depth = Non-Liquefiable											
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction					For End Bearing														
(m)	(m)	from	to	c	Ø	k	α	y _{eff}	ΔL	pd (s.f)	Pd (e.b)	y _{eff}	c	Ø	Nc	Nq	Ny	As/cm	Ap	qs	Qp		
		(m)	(m)	kg/cm ²	deg			gm/cc	cm	kg/cm ²	kg/cm ²	gm/cc	kg/cm ²	deg				cm ²	cm ²	t	t		
1.20	2.00	0.00	2.00					0.60	200	0.06								377.14		18.43			
1.20		2.00	5.50	0.00	30	1.00	1.00	0.70	350	0.24								377.14		121.59			
1.20		5.50	13.50	0.00	31	1.00	1.00	0.77	800	0.67								377.14		77.83			
1.20		13.50	16.50	0.00	32	1.00	1.00	0.82	300	1.10								377.14		34.57			
1.20		16.50	18.00	1.55	7	1.00	0.29	0.94	150	1.29								377.14		35.06			
1.20		18.00	19.50	1.55	7	1.00	0.29	0.94	150	1.36								377.14		401.37			
1.20		19.50	31.50	0.00	33	1.00	1.00	0.84	1200	1.36								377.14		99.37			
1.20		31.50	34.50	2.64	8	1.00	0.26	1.01	300	1.36								377.14		250.86			
1.20		34.50	42.00	0.00	33	1.00	1.00	0.89	750	1.36	1.36	0.89	0.00	33	9	35.17	35.19	11314.29		564.50			
																				1039.08	564.50		
				Qu,comp.=				qs + Qp				Qu,uplift =				Safe Frictional Resistance + Weight of Pile							
				Qa,comp.=				(1039.08 + 564.5) / 2.5				Qa,uplift =				1039.08 / 3 + 67.86							
				Qa,comp.=				641.44 T				Qa,uplift =				414.22 T							
				Say				Qa,comp.=				641.00 T				Qa,uplift =				414.00 T			

*FOS for Vertical Capacity of pile in compression = 2.5

**FOS for Uplift Capacity of pile = 3.0

***Density of Concrete for Weight of Pile = 2.5t/m³

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 30.00 m										Bore Hole No = BH-04				Ch. (KM) P-387				Dia of pile = 1.00 m				Cut-off Level = 2.00 m				below EGL													
Restricting PD to 15D										Water Table depth considered for analysis = 0.00 m										Scour Depth = Non-Scourable										Liquefaction Depth = Non-Liquefiable									
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction							For End Bearing				Nc	Nq	Ny	As/cm	Ap	qs	Qp																		
		from	to	c	Ø	k	α	y _{eff}	ΔL	pd (s.f)	Pd (e.b)	y _{eff}	c	Ø																									
(m)	(m)	(m)	(m)	kg/cm ²	deg				gm/cc	cm	kg/cm ²	kg/cm ²	gm/cc	kg/cm ²	deg		cm ²	cm ²	t	t																			
1.00	2.00	0.00	2.00						0.60	200	0.06						314.29		14.17																				
1.00		2.00	5.50	0.00	30	1.00	1.00	0.59	350	0.22							314.29		45.17																				
1.00		5.50	10.50	0.00	31	1.00	1.00	0.61	500	0.48							314.29		70.29																				
1.00		10.50	15.00	0.00	32	1.00	1.00	0.73	450	0.79							314.29		28.28																				
1.00		15.00	16.50	0.00	32	1.00	1.00	0.73	150	0.96							314.29		56.56																				
1.00		16.50	19.50	0.00	32	1.00	1.00	0.80	300	0.96							314.29		84.84																				
1.00		19.50	24.00	0.00	32	1.00	1.00	0.81	450	0.96							314.29		88.17																				
1.00		24.00	28.50	0.00	33	1.00	1.00	0.84	450	0.96							314.29		93.05																				
1.00		28.50	32.00	2.80	7	1.00	0.26	1.01	350	0.96	0.96	1.01	2.80	7	9	1.88	0.71	7857.14		212.45																			
																				480.53	212.45																		
										Qu,comp. =				qs + Qp				Qu,uplift =				Safe Frictional Resistance + Weight of Pile																	
										Qa,comp. =				(480.53 + 212.45) / 2.5				Qa,uplift =				480.53 / 3 + 35.34																	
										Qa,comp. =				277.19 T				Qa,uplift =				195.52 T																	
										Say				Qa,comp.=				277.00 T				Qa,uplift =				195.00 T													

*FOS for Vertical Capacity of pile in compression = 2.5

**FOS for Uplift Capacity of pile = 3.0

***Density of Concrete for Weight of Pile = 2.5t/m³

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 32.00 m										Bore Hole No = BH-04			Ch. (KM) P-387		Dia of pile = 1.00 m			Cut-off Level = 2.00 m			below EGL										
Restricting PD to 15D										Water Table depth considered for analysis = 0.00 m										Scour Depth = Non-Scourable						Liquefaction Depth = Non-Liquefiable					
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction						For End Bearing				Nc	Nq	Ny	As/cm	Ap	qs	Qp											
		from	to	c	Ø	k	α	y _{eff}	ΔL	pd (s.f)	Pd (e.b)	y _{eff}	c								Ø										
(m)	(m)	(m)	(m)	kg/cm ²	deg				cm	kg/cm ²	gm/cc	kg/cm ²	deg				cm ²	cm ²	t	t											
1.00	2.00	0.00	2.00						200	0.06							314.29		14.17												
1.00		2.00	5.50	0.00	30	1.00	1.00	0.60	350	0.22							314.29		45.17												
1.00		5.50	10.50	0.00	31	1.00	1.00	0.61	500	0.48							314.29		70.29												
1.00		10.50	15.00	0.00	32	1.00	1.00	0.73	450	0.79							314.29		28.28												
1.00		15.00	16.50	0.00	32	1.00	1.00	0.73	150	0.96							314.29		56.56												
1.00		16.50	19.50	0.00	32	1.00	1.00	0.80	300	0.96							314.29		84.84												
1.00		19.50	24.00	0.00	32	1.00	1.00	0.81	450	0.96							314.29		88.17												
1.00		24.00	28.50	0.00	33	1.00	1.00	0.84	450	0.96							314.29		119.63												
1.00		28.50	33.00	2.80	7	1.00	0.26	1.01	450	0.96							314.29		19.59												
1.00		33.00	34.00	0.00	33	1.00	1.00	0.89	100	0.96	1.01	2.80	7	9	1.88	0.71	314.29	7857.14		212.45											

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 34.00 m										Bore Hole No = BH-04			Ch. (KM) P-387		Dia of pile = 1.00 m			Cut-off Level = 2.00 m			below EGL										
Restricting PD to 15D										Water Table depth considered for analysis = 0.00 m										Scour Depth = Non-Scourable						Liquefaction Depth = Non-Liquefiable					
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction						For End Bearing				Nc	Nq	Ny	As/cm	Ap	qs	Qp											
		from	to	c	Ø	k	α	y _{eff}	ΔL	pd (s.f)	Pd (e.b)	y _{eff}	c								Ø										
(m)	(m)	(m)	(m)	kg/cm ²	deg				gm/cc	cm	kg/cm ²	kg/cm ²	gm/cc	kg/cm ²			cm ²	cm ²	t	t											
1.00	2.00	0.00	2.00						0.60	200	0.06						314.29		14.17												
1.00		2.00	5.50	0.00	30	1.00	1.00		0.59	350	0.22						314.29		45.17												
1.00		5.50	10.50	0.00	31	1.00	1.00		0.61	500	0.48						314.29		70.29												
1.00		10.50	15.00	0.00	32	1.00	1.00		0.73	450	0.79						314.29		28.28												
1.00		15.00	16.50	0.00	32	1.00	1.00		0.73	150	0.96						314.29		56.56												
1.00		16.50	19.50	0.00	32	1.00	1.00		0.80	300	0.96						314.29		84.84												
1.00		19.50	24.00	0.00	32	1.00	1.00		0.81	450	0.96						314.29		88.17												
1.00		24.00	28.50	0.00	33	1.00	1.00		0.84	450	0.96						314.29		119.63												
1.00		28.50	33.00	2.80	7	1.00	0.26		1.01	450	0.96						314.29		58.78												
1.00		33.00	36.00	0.00	33	1.00	1.00		0.89	300	0.96	0.96	1.01	2.80	7	9	7857.14														
																			565.90	212.45											
																			Qu,uplift =			Safe Frictional Resistance + Weight of Pile									
																			Qa,uplift =			565.9 / 3 + 40.06									
																			Qa,comp.=			228.69 T									
																			Qa,uplift =			228.00 T									

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 38.00 m										Bore Hole No = BH-04		Ch. (KM) P-387		Dia of pile = 1.00 m		Cut-off Level = 2.00 m		below EGL									
Restricting PD to 15D										Water Table depth considered for analysis = 0.00 m										Scour Depth = Non-Scourable				Liquefaction Depth = Non-Liquefiable			
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction						For End Bearing				Nc	Nq	Ny	As/cm	Ap	qs	Qp							
(m)	(m)	from	to	c	Ø	k	α	y _{eff}	ΔL	pd (s.f)	Pd (e.b)	y _{eff}	c	Ø			cm ²	cm ²	t	t							
		(m)	(m)	kg/cm ²	deg			gm/cc	cm	kg/cm ²	kg/cm ²	gm/cc	kg/cm ²	deg													
1.00	2.00	0.00	2.00					0.60	200	0.06							314.29		14.17								
1.00		2.00	5.50	0.00	30	1.00	1.00	0.59	350	0.22							314.29		45.17								
1.00		5.50	10.50	0.00	31	1.00	1.00	0.61	500	0.48							314.29		70.29								
1.00		10.50	15.00	0.00	32	1.00	1.00	0.73	450	0.79							314.29		28.28								
1.00		15.00	16.50	0.00	32	1.00	1.00	0.73	150	0.96							314.29		56.56								
1.00		16.50	19.50	0.00	32	1.00	1.00	0.80	300	0.96							314.29		84.84								
1.00		19.50	24.00	0.00	32	1.00	1.00	0.81	450	0.96							314.29		88.17								
1.00		24.00	28.50	0.00	33	1.00	1.00	0.84	450	0.96							314.29		119.63								
1.00		28.50	33.00	2.80	7	1.00	0.26	1.01	450	0.96							314.29		88.17								
1.00		33.00	37.50	0.00	33	1.00	1.00	0.89	450	0.96							314.29		66.46								
1.00		37.50	40.00	2.80	7	1.00	0.26	1.01	250	0.96	0.96	1.01	2.80	7	9	1.88	0.71	7857.14	212.45								
																			661.75	212.45							
																			Safe Frictional Resistance + Weight of Pile								
																			Qu,uplift =			Qa,uplift =					
																			Qa,comp.=			661.75 / 3 + 44.77					
																			Qa,comp.=			265.35 T					
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NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 40.00 m										Bore Hole No = BH-04			Ch. (KM) P-387		Dia of pile = 1.00 m			Cut-off Level = 2.00 m			below EGL										
Restricting PD to 15D										Water Table depth considered for analysis = 0.00 m										Scour Depth = Non-Scourable						Liquefaction Depth = Non-Liquefiable					
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction							For End Bearing				Nc	Nq	Ny	As/cm	Ap	qs	Qp										
		from	to	c	Ø	k	α	y _{eff}	ΔL	pd (s.f)	Pd (e.b)	y _{eff}	c	Ø																	
(m)	(m)	(m)	(m)	kg/cm ²	deg				gm/cc	cm	kg/cm ²	kg/cm ²	gm/cc	kg/cm ²	deg			cm ²	cm ²	t	t										
1.00	2.00	0.00	2.00																												
1.00		2.00	5.50	0.00	30	1.00	1.00	0.60	200	0.06							314.29		14.17												
1.00		5.50	10.50	0.00	31	1.00	1.00	0.59	350	0.22							314.29		45.17												
1.00		10.50	15.00	0.00	32	1.00	1.00	0.61	500	0.48							314.29		70.29												
1.00		15.00	16.50	0.00	32	1.00	1.00	0.73	450	0.79							314.29		28.28												
1.00		16.50	19.50	0.00	32	1.00	1.00	0.73	150	0.96							314.29		56.56												
1.00		19.50	24.00	0.00	32	1.00	1.00	0.80	300	0.96							314.29		84.84												
1.00		24.00	28.50	0.00	33	1.00	1.00	0.81	450	0.96							314.29		88.17												
1.00		28.50	33.00	0.00	7	1.00	0.26	0.84	450	0.96							314.29		119.63												
1.00		33.00	37.50	2.80	33	1.00	1.00	1.01	450	0.96							314.29		88.17												
1.00		37.50	42.00	0.00	7	1.00	0.26	0.89	450	0.96	0.96	1.01	2.80	7	9	1.88	0.71	7857.14		119.63											
1.00				2.80	7	1.00	0.26	1.01	450	0.96	0.96	1.01	2.80	7	9	1.88	0.71	7857.14		119.63											
																		714.92					212.45								
																		Qu,uplift =				Safe Frictional Resistance + Weight of Pile									
																		Qa,comp.=				qs + Qp									
																		Qa,comp.=				(714.92 + 212.45) / 2.5									
																		Qa,comp.=				370.95 T									
																		Qa,uplift =				285.43 T									
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																		Qa,comp.=				370.95 T									
																		Qa,uplift =				285.43 T									
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NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 32.00 m										Bore Hole No = BH-04			Ch. (KM) P-387		Dia of pile = 1.20 m			Cut-off Level = 2.00 m			below EGL										
Restricting PD to 15D										Water Table depth considered for analysis = 0.00 m										Scour Depth = Non-Scourable						Liquefaction Depth = Non-Liquefiable					
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction							For End Bearing				Nc	Nq	Ny	As/cm	Ap	qs	Qp										
		from	to	c	Ø	k	α	yeff	ΔL	pd (s.f)	Pd (e.b)	yeff	c	Ø																	
(m)	(m)	(m)	(m)	kg/cm ²	deg			gm/cc	cm	kg/cm ²	kg/cm ²	gm/cc	kg/cm ²	deg			cm ²	cm ²	t	t											
1.20	2.00	0.00	2.00					0.60	200	0.06							377.14		17.00												
1.20		2.00	5.50	0.00	30	1.00	1.00	0.59	350	0.22							377.14		54.21												
1.20		5.50	10.50	0.00	31	1.00	1.00	0.61	500	0.48							377.14		120.22												
1.20		10.50	16.50	0.00	32	1.00	1.00	0.73	600	0.85							377.14		39.94												
1.20		16.50	18.00	0.00	32	1.00	1.00	0.80	150	1.13							377.14		42.07												
1.20		18.00	19.50	0.00	32	1.00	1.00	0.80	150	1.19							377.14		126.21												
1.20		19.50	24.00	0.00	32	1.00	1.00	0.81	450	1.19							377.14		131.17												
1.20		24.00	28.50	0.00	33	1.00	1.00	0.84	450	1.19							377.14		148.35												
1.20		28.50	33.00	2.80	7	1.00	0.26	1.01	450	1.19	1.19	1.01	2.80	7			377.14		29.15	310.89											
1.20		33.00	34.00	0.00	33	1.00	1.00	0.89	100	1.19							377.14	11314.29													
																			708.32	310.89											
																			Safe Frictional Resistance + Weight of Pile												
Qu,comp.=										qs + Qp				Qu,uplift =																	
Qa,comp.=										(708.32 + 310.89) / 2.5				Qa,uplift =				708.32 / 3 + 54.29													
Qa,comp.=										407.68 T				Qa,uplift =				290.39 T													
Say										Qa,comp.= 407.00 T				Qa,uplift = 290.00 T																	

*FOS for Vertical Capacity of pile in compression = 2.5

**FOS for Uplift Capacity of pile = 3.0

***Density of Concrete for Weight of Pile = 2.5t/m³

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 34.00 m										Bore Hole No = BH-04			Ch. (KM) P-387		Dia of pile = 1.20 m		Cut-off Level = 2.00 m			below EGL									
Restricting PD to 15D										Water Table depth considered for analysis = 0.00 m										Scour Depth = Non-Scourable					Liquefaction Depth = Non-Liquefiable				
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction						For End Bearing				Nc	Nq	Ny	As/cm	Ap	qs	Qp									
(m)	(m)	from	to	c	Ø	k	α	y _{eff}	ΔL	pd (s.f)	Pd (e.b)	y _{eff}	c	Ø			cm ²	cm ²	t	t									
		(m)	(m)	kg/cm ²	deg			gm/cc	cm	kg/cm ²	kg/cm ²	gm/cc	kg/cm ²	deg															
1.20	2.00	0.00	2.00					0.60	200	0.06							377.14		17.00										
1.20		2.00	5.50	0.00	30	1.00	1.00	0.59	350	0.22							377.14		54.21										
1.20		5.50	10.50	0.00	31	1.00	1.00	0.61	500	0.48							377.14		120.22										
1.20		10.50	16.50	0.00	32	1.00	1.00	0.73	600	0.85							377.14		39.94										
1.20		16.50	18.00	0.00	32	1.00	1.00	0.80	150	1.13							377.14		42.07										
1.20		18.00	19.50	0.00	32	1.00	1.00	0.80	150	1.19							377.14		126.21										
1.20		19.50	24.00	0.00	32	1.00	1.00	0.81	450	1.19							377.14		131.17										
1.20		24.00	28.50	0.00	33	1.00	1.00	0.84	450	1.19							377.14		148.35										
1.20		28.50	33.00	2.80	7	1.00	0.26	1.01	450	1.19							377.14		87.44										
1.20		33.00	36.00	0.00	33	1.00	1.00	0.89	300	1.19	1.19	1.01	2.80	7	9	1.88	377.14	11314.29		310.89									
																	766.61	310.89											
																	Safe Frictional Resistance + Weight of Pile												
																	Qu,uplift =		766.61 / 3 + 57.68										
																	Qa,uplift =		313.22 T										
																	Qa,uplift =												
																	Qa,comp.=		431.00 T		313.00 T								

*FOS for Vertical Capacity of pile in compression = 2.5

**FOS for Uplift Capacity of pile = 3.0

***Density of Concrete for Weight of Pile = 2.5t/m³

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

Length of Pile below cut of level = 38.00 m					Bore Hole No = BH-04			Ch. (KM)		P-387		Dia of pile = 1.20 m			Cut-off Level = 2.00 m			below EGL		
Water Table depth considered for analysis = 0.00 m										Restricting PD to 15D										
Scour Depth = Non-Scourable										Liquefaction Depth = Non-Liquefiable										
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction						For End Bearing				Nc	Nq	Ny	As/cm	Ap	qs	Qp
		from	to	c	Ø	k	α	y _{eff}	ΔL	pd (s.f)	Pd (e.b)	y _{eff}	c							
(m)	(m)	(m)	(m)	kg/cm ²	deg			gm/cc	cm	kg/cm ²	kg/cm ²	gm/cc	kg/cm ²	deg			cm ²	cm ²	t	t
1.20	2.00	0.00	2.00					0.60	200	0.06							377.14		17.00	
1.20		2.00	5.50	0.00	30	1.00	1.00	0.59	350	0.22							377.14		54.21	
1.20		5.50	10.50	0.00	31	1.00	1.00	0.61	500	0.48							377.14		120.22	
1.20		10.50	16.50	0.00	32	1.00	1.00	0.73	600	0.85							377.14		39.94	
1.20		16.50	18.00	0.00	32	1.00	1.00	0.80	150	1.13							377.14		42.07	
1.20		18.00	19.50	0.00	32	1.00	1.00	0.80	150	1.19							377.14		126.21	
1.20		19.50	24.00	0.00	32	1.00	1.00	0.81	450	1.19							377.14		131.17	
1.20		24.00	28.50	0.00	33	1.00	1.00	0.84	450	1.19							377.14		148.35	
1.20		28.50	33.00	2.80	7	1.00	0.26	1.01	450	1.19							377.14		131.17	
1.20		33.00	37.50	0.00	33	1.00	1.00	0.89	450	1.19	1.19	1.01	2.80	7	9	1.88	11314.29		82.42	310.89
1.20		37.50	40.00	2.80	7	1.00	0.26	1.01	250	1.19	1.19	1.01	2.80	7	9	1.88	11314.29		82.42	310.89
																			892.75	310.89
Qu,comp.=										qs + Qp		Qu,uplift =		Safe Frictional Resistance + Weight of Pile						
Qa,comp.=										(892.75 + 310.89) / 2.5		Qa,uplift =		892.75 / 3 + 64.47						
Qa,comp.=										481.46 T		Qa,uplift =		362.05 T						
Say										481.00 T		Qa,uplift =		362.00 T						

*FOS for Vertical Capacity of pile in compression = 2.5

**FOS for Uplift Capacity of pile = 3.0

***Density of Concrete for Weight of Pile = 2.5t/m³

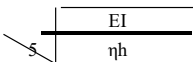
NAME OF PROJECT:- Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)

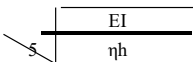
Length of Pile below cut of level = 40.00 m										Bore Hole No = BH-04			Ch. (KM)		P-387		Dia of pile = 1.20 m		Cut-off Level = 2.00 m		below EGL										
Restricting PD to 15D										Water Table depth considered for analysis = 0.00 m										Scour Depth = Non-Scourable						Liquefaction Depth = Non-Liquefiable					
Dia. of Pile	Cut-off Depth	Soil layers		Properties of layers/for Skin Friction							For End Bearing				Nc	Nq	Ny	As/cm	Ap	qs	Qp										
		from	to	c	Ø	k	α	γ _{eff}	ΔL	pd (s.f)	Pd (e.b)	γ _{eff}	c	Ø																	
(m)	(m)	(m)	(m)	kg/cm ²	deg			gm/cc	cm	kg/cm ²	kg/cm ²	gm/cc	kg/cm ²	deg			cm ²	cm ²	t	t											
1.20	2.00	0.00	2.00					0.60	200	0.06							377.14		17.00												
1.20		2.00	5.50	0.00	30	1.00	1.00	0.59	350	0.22							377.14		54.21												
1.20		5.50	10.50	0.00	31	1.00	1.00	0.61	500	0.48							377.14		120.22												
1.20		10.50	16.50	0.00	32	1.00	1.00	0.73	600	0.85							377.14		39.94												
1.20		16.50	18.00	0.00	32	1.00	1.00	0.80	150	1.13							377.14		42.07												
1.20		18.00	19.50	0.00	32	1.00	1.00	0.80	150	1.19							377.14		126.21												
1.20		19.50	24.00	0.00	32	1.00	1.00	0.81	450	1.19							377.14		131.17												
1.20		24.00	28.50	0.00	33	1.00	1.00	0.84	450	1.19							377.14		148.35												
1.20		28.50	33.00	2.80	7	1.00	0.26	1.01	450	1.19							377.14		131.17												
1.20		33.00	37.50	0.00	33	1.00	1.00	0.89	450	1.19	1.19	1.01	2.80	7	9	1.88	11314.29		148.35	310.89											
1.20		37.50	42.00	2.80	7	1.00	0.26	1.01	450	1.19	1.19	1.01	2.80	7	9	1.88	11314.29		148.35	310.89											
																					958.69	310.89									
										Qu,comp.=		qs + Qp		Qu,uplift =		Safe Frictional Resistance + Weight of Pile															
										Qa,comp.=		(958.69 + 310.89) / 2.5		Qa,uplift =		958.69 / 3 + 67.86															
										Qa,comp.=		507.83 T		Qa,uplift =		387.42 T															
										Qa,comp.=		507.00 T		Qa,uplift =		387.00 T															
										Say																					

*FOS for Vertical Capacity of pile in compression = 2.5

**FOS for Uplift Capacity of pile = 3.0

***Density of Concrete for Weight of Pile = 2.5t/m³

Lateral Load capacity of Pile				
	BH-1			
	Chainage: P-377			
		Fck	=	35.0 N/mm ²
		D	=	100 cm
	Bed level	0.0 m		
	Pile cap bottom level	-2.000 m		
	Max. of Liquefaction & Scour Depth	0.000 m		
	N value	27.000		
E	=	Young's Modulus of Pile (Kg/cm ²)	=	295803.99 Kg/cm ²
		(E value taken from IRC-112 table no-6.5)		
I	=	Moment of Inertia (cm ⁴)	=	$\frac{\pi D^4}{64}$
			=	4908738.5 cm ⁴
η_h	=	Constant for Sandy / Normally Consolidated Clay	(Kg/cm ³)	= 0.385
T,	Relative stiffness factor in Sand			= 327.6 cm
		T	=	
For Long Pile If $L_c > 4T$				
L_1	=		=	0.00 cm
$\frac{L_1}{T}$			=	0.00
For Fixed Head Pile				
$\frac{L_f}{T}$			=	2.219 From Fig. 4
L_f			=	726.95 cm
Equivalent length of cantilever	$L= L_1+L_f=$	0.00 + 726.95089	=	726.95 cm
Y	=	Pile Head Deflection (Cm)	=	$\frac{Q(L_1 + L_f)^3}{12 EI}$ (for fixed Head pile)
			Q	= Lateral Load in Kg
Lateral Load For Pile Head Deflection 0.5 cm			Q	= 22678.272 Kg
				= 22.68 T

Lateral Load capacity of Pile				
		BH-1		
		Chainage: P-377		
		Fck	=	35.0 N/mm ²
		D	=	120 cm
Bed level	0.0 m			
Pile cap bottom level	-2.000 m			
Max. of Liquefaction & Scour Depth	0.000 m			
N value	31.000			
E	=	Young's Modulus of Pile (Kg/cm ²)	=	295803.99 Kg/cm ²
(E value taken from IRC-112 table no-6.5)				
I	=	Moment of Inertia (cm ⁴)	=	$\pi D^4/64$
			=	10178760.2 cm ⁴
η_h	=	Constant for Sandy / Normally Consolidated Clay (Kg/cm ³)	=	0.442
T,	Relative stiffness factor in Sand		=	368.6 cm
		T	=	
For Long Pile If $L_c > 4T$				
L ₁	=		=	0.00 cm
$\frac{L_1}{T}$			=	0.00
For Fixed Head Pile				
$\frac{L_f}{T}$			=	2.219 From Fig. 4
L _f			=	817.96 cm
Equivalent length of cantilever	L= L ₁ +L _f =	0.00 + 817.96376	=	817.96 cm
Y	=	Pile Head Deflection (Cm)	=	$\frac{Q(L_1 + L_f)^3}{12 EI}$ (for fixed Head pile)
		Q	=	Lateral Load in Kg
Lateral Load For Pile Head Deflection 0.5 cm		Q	=	33010.187 Kg
			=	33.01 T

Lateral Load capacity of Pile				
		BH-3		
		Chainage: P-385		
		Fck	=	35.0 N/mm ²
		D	=	100 cm
Bed level	0.0 m			
Pile cap bottom level	-2.000 m			
Max. of Liquefaction & Scour Depth	0.000 m			
N value	30.000			
E = Young's Modulus of Pile (Kg/cm ²)			=	295803.99 Kg/cm ²
(E value taken from IRC-112 table no-6.5)				
I = Moment of Inertia (cm4)		=	$\pi D^4/64$	= 4908738.5 cm ⁴
η_h = Constant for Sandy / Normally Consolidated Clay		(Kg/cm ³)	=	0.428
T, Relative stiffness factor in Sand			=	320.7 cm
		$T = \frac{EI}{5 \eta_h}$		
For Long Pile If $L_e > 4T$				
L_1 =			=	0.00 cm
$\frac{L_1}{T}$			=	0.00
For Fixed Head Pile				
$\frac{L_f}{T}$			=	2.219 From Fig. 4
L_f			=	711.64 cm
Equivalent length of cantilever $L= L_1+L_f=$	0.00	+	711.64489	= 711.64 cm
Y = Pile Head Deflection (Cm)		=	$\frac{Q(L_1 + L_f)^3}{12 EI}$	(for fixed Head pile)
		Q	=	Lateral Load in Kg
Lateral Load For Pile Head Deflection 0.5 cm		Q	=	24173.2573 Kg
			=	24.17 T

Lateral Load capacity of Pile					
		BH-3			
		Chainage: P-385			
		Fck	=	35.0 N/mm ²	D = 120 cm
Bed level		0.0 m			
Pile cap bottom level		-2.000 m			
Max. of Liquefaction & Scour Depth		0.000 m			
N value		31.000			
E	=	Young's Modulus of Pile (Kg/cm ²)		=	295803.99 Kg/cm ²
(E value taken from IRC-112 table no-6.5)					
I	=	Moment of Inertia (cm4)	=	$\pi D^4/64$	= 10178760.2 cm ⁴
ηh	=	Constant for Sandy / Normally Consolidated Clay	(Kg/cm ³)	=	0.442
T,	Relative stiffness factor in Sand			=	368.6 cm
		$T = \frac{EI}{5 \eta h}$			
For Long Pile If $L_0 > 4T$					
L_1	=			=	0.00 cm
$\frac{L_1}{T}$				=	0.00
For Fixed Head Pile					
$\frac{L_1}{T}$				=	2.219 From Fig. 4
L_f				=	817.96 cm
Equivalent length of cantilever	$L= L_1+L_f=$	0.00	+	817.9638	= 817.96 cm
Y	=	Pile Head Deflection (Cm)	=	$\frac{Q(L_1 + L_f)^3}{12 EI}$	(for fixed Head pile)
		Q	=	Lateral Load in Kg	
Lateral Load For Pile Head Deflection 0.5 cm		Q	=	33010.1865	Kg
			=	33.01	T

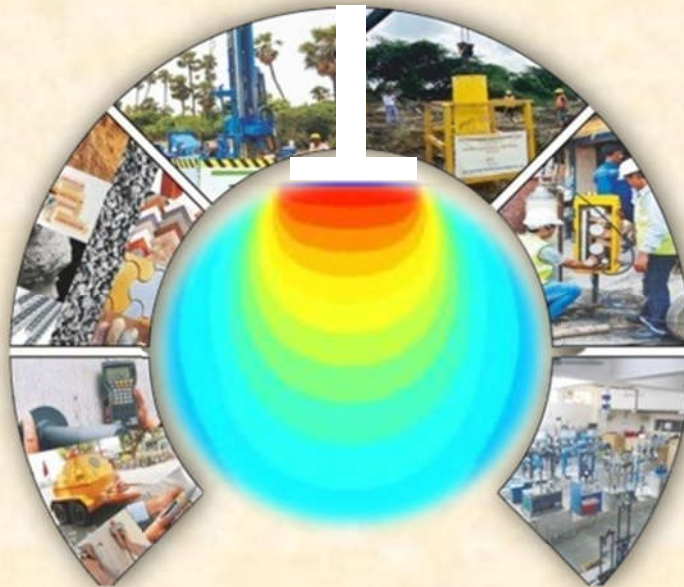
Lateral Load capacity of Pile				
	BH-4			
	P-387			
			Fck =	35.0 N/mm ²
			D =	100 cm
Bed level	0.0 m			
Pile cap bottom level	-2.000 m			
max. of Liquefaction & Scour	0.000 m			
Depth	22.000			
N value	22.000			
E =	Young's Modulus of Pile (Kg/cm ²)		=	295803.99 Kg/cm ²
(E value taken from IRC-112 table no-6.5)				
I =	Moment of Inertia (cm4)		=	$\frac{\pi D^4}{64}$
			=	4908738.5 cm ⁴
ηh =	Constant for Sandy / Normally Consolidated Clay		(Kg/cm ³)	= 0.313
T, Relative stiffness factor in Sand			=	341.5 cm
	T =	$\sqrt[5]{\frac{EI}{\eta h}}$		
For Long Pile If $L_0 > 4T$				
L1 =			=	0.00 cm
$\frac{L_1}{T}$			=	0.00
For Fixed Head Pile				
$\frac{L_f}{T}$			=	2.219 From Fig. 4
Lf			=	757.70 cm
Equivalent length of cantilever	L= L1+Lf=	0.00 + 757.7025	=	757.70 cm
Y =	Pile Head Deflection (Cm)		=	$\frac{Q(L_1 + L_f)^3}{12 EI}$ (for fixed Head pile)
			Q =	Lateral Load in Kg
Lateral Load For Pile Head Deflection 0.5 cm			Q	= 20027.6 Kg
				= 20.03 T

Lateral Load capacity of Pile				
	BH-4			
	P-387			
Fck =			35.0 N/mm ²	D = 120 cm
Bed level		0.0 m		
Pile cap bottom level		-2.000 m		
max. of Liquefaction & Scour		0.000 m		
Depth		23.000		
N value				
E =	Young's Modulus of Pile (Kg/cm ²)		=	295803.99 Kg/cm ²
(E value taken from IRC-112 table no-6.5)				
I =	Moment of Inertia (cm4)		=	$\pi D^4/64$ = 10178760.2 cm ⁴
ηh =	Constant for Sandy / Normally Consolidated Clay		(Kg/cm ³)	= 0.327
T, Relative stiffness factor in Sand			=	391.5 cm
		$T = \sqrt[5]{\frac{EI}{\eta h}}$		
For Long Pile If $L_0 > 4T$				
L1 =			=	0.00 cm
$\frac{L_1}{T}$			=	0.00
For Fixed Head Pile				
$\frac{L_f}{T}$			=	2.219 From Fig. 4
Lf			=	868.83 cm
Equivalent length of cantilever	L= L1+Lf=	0.00 + 868.8292	=	868.83 cm
Y =	Pile Head Deflection (Cm)		=	$\frac{Q(L_1 + L_f)^3}{12 EI}$ (for fixed Head pile)
		Q =	Lateral Load in Kg	
Lateral Load For Pile Head Deflection 0.5 cm		Q	=	27545.261 Kg
			=	27.55 T

SR-1241

“Geotech Investigation work for Jaipur Metro
Ph-II Project from Prahladpura to Todi Mod
(Total approximate length -42.8 km)”

PKG-III



Submitted to:
Delhi Metro Rail Corporation Ltd



TC-10943
NABL Accredited
Both Field & Lab Tests

CEG Test House and Research Centre Pvt. Ltd.

B-11(G), Malviya Industrial Area, Jaipur-302017

Tel.: 91-141-4046599, Fax: 91-141-2751806

E-mail: info@cegtesthouse.com

www.cegtesthouse.com

SR-1241

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PKG-III

SR. No.	Report Ref. No.	Revision No.	Date
1241_25-26	CEGTH/DMRC/SR-1241/2026-27/344_10 BHs	00	11.08.2026

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CEGTH/DMRC/SR-1241/2026-27/344

Date:- 10.08.2026

To,

Project Director/Jaipur-II, DMRC
Office of Chief Project Manager-8
Opposite Frank Anthony Public School
Lala Lajpat Rai Marg, Lajpat Nagar-IV
New Delhi - 110024

Subject :- “Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi
Mod (Total approximate length -42.8 km)”**PKG-III**

Dear Sir,

We are pleased to submit this report of 10 boreholes carried out for the proposed project.

The accompanying report presents results of field tests and laboratory tests conducted on selected soil and rock samples ,their interpretation and foundation recommendations.

Should there be any clarifications regarding the contents please contact us at your most convenient time.

We value the opportunity to participate in this project and look forward a pleasant association on future projects.

Very truly yours,
CEG Test House & Research Centre Pvt. Ltd.



Nehal Jain
Sr. General Manager, Geotechnical
Authorized Signatory

Prepared By:-



Pratibha Bagaria
Sr Geotechnical Engineer



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CHAPTER 1 GENERAL

1.1 INTRODUCTION:

The work of “**Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)**” was awarded to CEG Test House & Research Centre Pvt. Ltd. by **Delhi Metro Rail Corporation Ltd.,,**

Field work including drilling of boreholes and sample collection covered in this report was carried out in the presence of Client’s Engineer. Laboratory tests were conducted on selected soil samples to determine the design parameters, confirming to relevant specifications and the guidelines received from the client.

This report includes the details of methodology of investigation, collection of soil samples, laboratory test results, analysis of results and recommendations for results for proposed structures based on Soil samples collected from the Borelog locations.

1.2 SCOPE OF WORK:

- Mobilisation of necessary plant equipments, men and materials for the geotechnical investigation work as per specifications, drawings and instructions of the engineer, shifting of the equipment from one test location to another location to complete the entire field work within the stipulated time schedule and demobilization after completion of field work.
- Making 150 mm nominal diameter boreholes at various locations upto 45.00m depth below the natural ground level in all types of soil using suitable approved method of boring including chiselling, cleaning, providing casing pipe as required or as directed by the engineer.
- Performing Standard Penetration Tests at every 1.5 m interval and at every change of strata.
- Collecting undisturbed or disturbed soil samples at every 3.0 m interval and at every change of strata. Recording of ground water table and collecting water samples for conducting chemical analysis in the laboratory.
- Recording of ground water table and collecting water samples for conducting chemical analysis in the laboratory.
- Transporting all the collected soil samples to the laboratory.
- Conducting various laboratory tests on selected soil samples at CEGTH NABL accredited laboratory including preparation of samples to determine the following properties all complete as per specification :

On soil Samples

- Dry density test
- Bulk Density and Moisture Content.

- Specific gravity
- Sieve Analysis (Mechanical) with Hydrometer Classification
- Liquid Limit, Plastic Limit and Shrinkage Limit
- Direct Shear Test
- Triaxial Shear Test
- Chemical Analysis of soil samples (pH, chloride, Sulphate)

The details of borehole locations and general geology of site location describe in **Chapter 2**.

CHAPTER 2 DETAILS OF SITE AND GENERAL GEOLOGICAL HISTORY

2.1 SITE LOCATION:

The locations of 10 boreholes were marked on the ground as per the layout given by the Engineer. These locations are shown in **Fig 3**. The details of various boreholes locations along with their co-ordinates are provided in table 2.1.

The details of the site and test locations for the proposed project are shown in location plan in Fig 3. The site of proposed project is located at **Jaipur** in the State of **Rajasthan** falls in seismic zone – II (Zone factor=0.10) of India.

Table 2.1: Details of Borehole Locations & Test Locations

S.No	BH.No	Pier no.	Depth of Water Table below EGL (m)	Depth of Borehole below EGL(m)	Co-ordinates (m)		+(R.L.)
					E	N	
1.	BH-05	P-388	Not Encountered	50.00	578856.000	2968764.000	393.367
2.	BH-5A	P-393	Not Encountered	50.00	578844.000	2968892.000	394.064
3.	BH-166	-	26.00	50.00	579099.000	2968405.000	391.232
4.	BH-170	P-401	Not Encountered	50.00	583091.000	2961048.000	394.614
5.	BH-183	P-442	Not Encountered	50.00	578943.000	2970468.000	402.101
6.	BH-184	P-445	Not Encountered	50.00	578952.000	2970558.000	403.015
7.	BH-185	P-448	NoT Encountered	50.00	578967.000	2970678.000	404.024
8.	BH-186	P-452	Not Encountered	50.00	578977.000	2970766.000	404.752
9.	BH-187	P-456	Not encountered	50.00	578992.000	2970857.000	405.320
10.	BH-188	P-459	Not Encountered	50.00	579000.000	2970954.000	406.093

2.2 GENERAL GEOLOGY

2.2.1 LOCATION

The study area is located within the eastern margin of the Aravalli Craton in Jaipur, Rajasthan, forming a part of the northwestern Indian Shield. The geology of the region is predominantly characterized by Precambrian rock formations comprising quartzites, schists, phyllites, granites, and gneisses, which are generally hard, compact, and crystalline in nature. The area also contains occurrences of alluvial deposits in low-lying zones. The regional topography is undulating, with elevation generally ranging from approximately 400 meters to 600 meters above Mean Sea Level.

2.2.2 CLIMATE

The project area, located in Jaipur district of Rajasthan, experiences a semi-arid climate characterized by extremely hot summers, mild winters, and a short monsoon season. Temperatures generally range

from approximately 5°C in winter to 45°C during peak summer months, with May and June being the hottest period. The region receives an average annual rainfall of about 500 to 700 mm, mainly during the southwest monsoon from July to September. Relative humidity remains low for most of the year, increasing during the monsoon season. Wind conditions are generally dry and moderate, with occasional dust storms during summer. These climatic conditions play an important role in geotechnical aspects such as foundation design, groundwater fluctuation, drainage planning, and construction scheduling.

2.2.3 GEOLOGY

“The subsurface conditions at the Jaipur location are predominantly composed of sandy silt, silty sand, and clayey soil with varying proportions of gravel and weathered rock fragments. The upper strata generally exhibit moderate weathering and loose to medium dense soil conditions, underlain by residual soils derived from quartzite, schist, and granite gneiss formations of the Aravalli terrain. The weathered zone gradually transitions into comparatively competent geological formations at greater depths, with occasional joints and fractures observed in the parent material.”

The Geological formation of the Rajasthan is as follows:

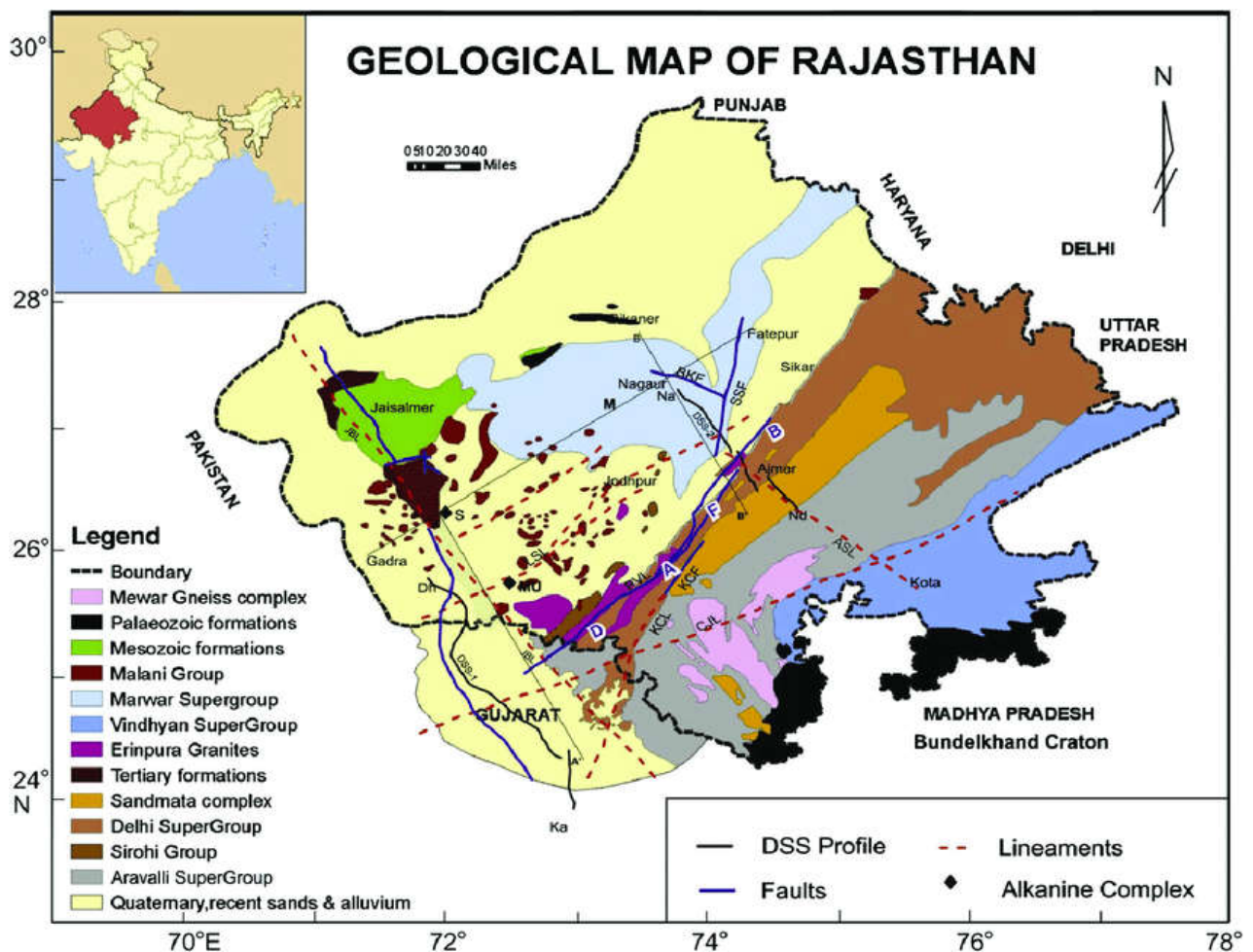


Fig. 1: Geological map of Rajasthan

2.2.4 Seismicity

The site of proposed project is located at **Jagatpura, Jaipur** in the State of **Rajasthan** falls in seismic zone – II (Zone factor=0.10) of India as per Is : 1893 (Part-1)-2016.

Seismicity Map of India is shown below:-

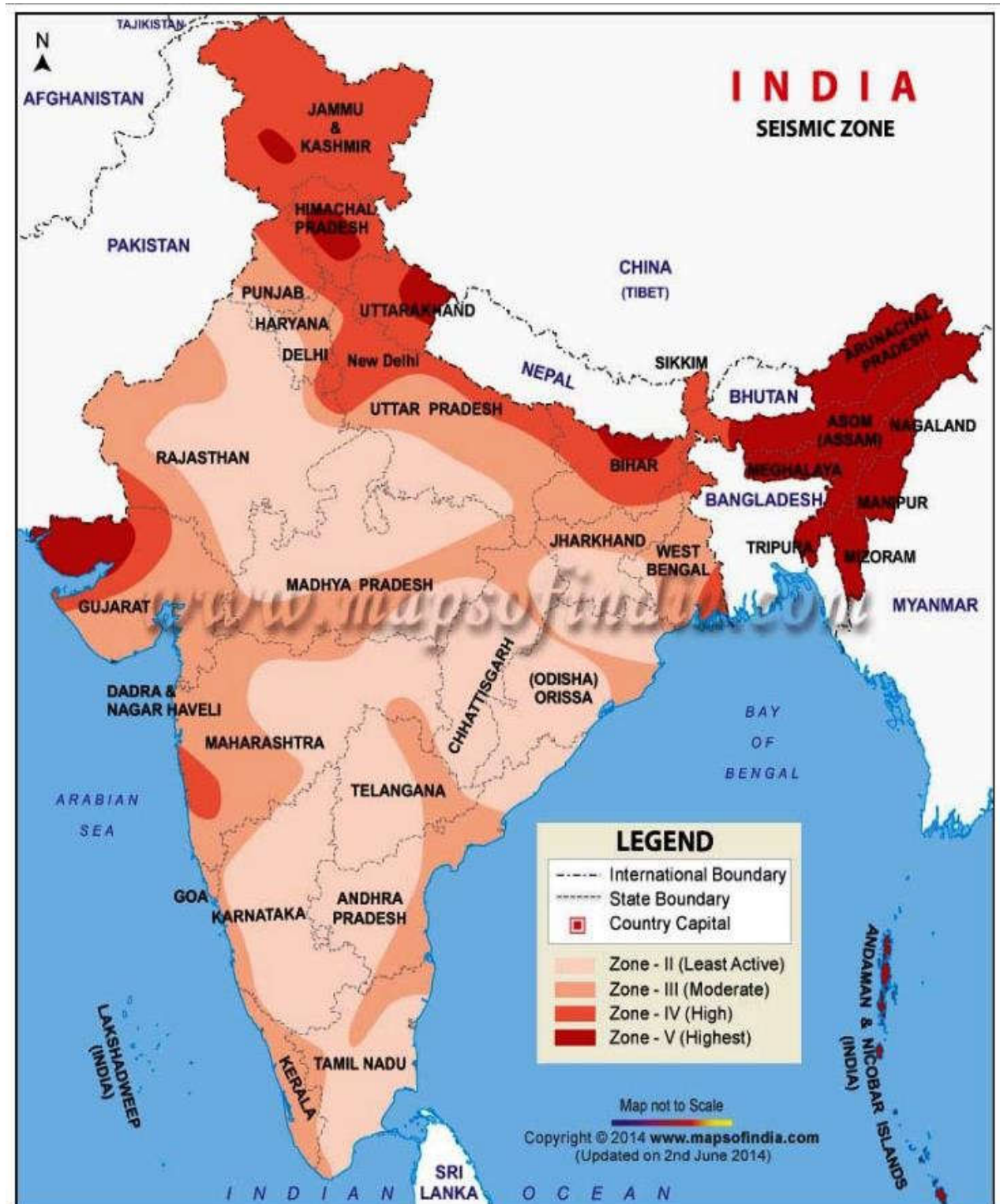


Fig. 2: Seismicity Map of India

CHAPTER 3 FIELD AND LABORATORY TEST PROCEDURE

3.1 FIELD INVESTIGATION:

For geotechnical investigation work, hydraulic or mechanical drilling rigs were installed at the specified borehole locations along with the required men and machineries for conducting the requisite field work. The equipment was relocated from one test site to another during the fieldwork, and was demobilized upon the satisfactory completion of each respective borehole.

For conducting the field investigations the following practices were followed at site:

- In soil, boreholes of 150 mm dia. were drilled as per the standard procedure laid in IS: 1892. Wherever rocky strata was encountered before achieving the required depth below E.G.L., bore holes were further extended beyond refusal through soft and hard rock using Hydraulic drilling Rigs with Nx size double tube core barrel or diamond bits upto required depth below the EGL and were terminated as per the instruction of Engr. in-charge.
- Borehole was properly cleaned before taking any sample in soil.
- Standard Penetration Tests and collection of undisturbed or disturbed soil samples were carried out as per the specification IS: 2131 and IS: 2132. The same has been discussed in detail in soil and Rock characteristics attached with the report.
- Ground water table was measured as per IS: 6935-1973. The depth of ground water level was to be measured after 24 hours of completion of borehole.

3.1.1 IN SOIL STRATA

(i) Standard Penetration Test

The Standard Penetration Tests were conducted in boreholes as per IS 2131. Each test was carried out using the standard split spoon sampler carrying manual hammer to measure the number of blows ‘N’.

Standard split spoon sampler was attached to an ‘A’ rod. It was driven from borehole bottom to a distance of 45 cm using a standard hammer of 63.5 kg falling freely from a height of 75 cm to the required depth. While driving, the number of blows required to penetrate every 15 cm are recorded. The total number of blows required for the last 30 cm is taken as ‘N’ value at that particular depth of the borehole. Wherever the total penetration was less than 45cm, the no. of blows & the depth penetrated is recorded in the respective borelog.

SPT ‘N’ values were correlated with relative density of non-cohesive stratum and with consistency of cohesive stratum as given below:-

Table 3.1: Soil compactness as per SPT N values

Correlation for Clay / Plastic silt		Correlation for Sand / Non-Plastic silt	
Consistency	Penetration Value (N)	Compactness	Penetration Value (N)
Very Soft	0 - 2	Very Loose	0 - 4
Soft	2 - 4	Loose	4 - 10
Medium	4 - 8	Medium	10 - 30
Stiff	8 - 15	Dense	30 - 50
Very Stiff	15 - 30	Very Dense	> 50
Hard	> 30		

(ii) The field SPT N values were corrected as per the guidelines given in IS: 2131 as follows:

(a) For overburden: - The N value for cohesionless soil is corrected with the help of fig. 1 given in IS-2131.

(b) Due to dilatancy :- Wherever N values observed below water table in fine sand, silty sand or silt was greater than 15, then corrected N values were corrected as under:

$$N' = 15 + \frac{1}{2} (N-15)$$

(iii) Disturbed Sampling (Soil) in boreholes

Disturbed soil samples each weighing approx. 1kg. were collected starting from a depth of 0.5m depth below EGL and at every identifiable change of strata. Samples were immediately sealed, labeled and carefully transported to the laboratory for testing.

(iv) Undisturbed Sampling (Soil) in boreholes

Undisturbed samples were collected at 3.0 m intervals using 100 mm diameter and 450 mm long MS tubes with Area ratio as specified as per clause 4.1.1 (c) of IS: 1892 (latest) provided with sampler head with ball and socket arrangement. Before taking any sample, sampling tube was properly greased. Immediately after taking on undisturbed sample in a tube, the adopter head was removed along with the disturbed material. The visible ends of the sample were trimmed off any wet disturbed soil. The ends were coated alternately with four layers of just molten wax. More molten wax was added to give a total thickness of min. 25 mm. The samples were carefully labeled and transported to the laboratory for testing. Undisturbed samples wherever slipped during lifting were duly marked in the field logs as well as in the soil profile.

3.1.2 GROUND WATER TABLE DEPTH

During the field investigation conducted in June July 2026, the groundwater table was not encountered in any of the borehole locations.

3.2 LABORATORY INVESTIGATIONS:

i. Laboratory Tests For Soil Samples

Summary of various laboratory test conducted on selected Undisturbed/Disturbed is given below:

Table 3.4: Description of Tests on Soil Samples

Description of Test	Reference	Undisturbed (UDS) Soil Samples	Disturbed (DS/SPT) Soil Samples
Grain Size Analysis / Hydrometer	IS: 2720 (Part - 4)	✓	✓
Natural Moisture Content / Bulk / Dry density	IS : 2720 (Part – 2)	✓	-
Atterberg Limits - Liquid Limit - Plastic Limit - Shrinkage Limit	IS: 2720 (Part - 5) IS: 2720 (Part - 5) IS: 2720 (Part - 6)	✓ ✓ -	✓ ✓ -
Specific Gravity	IS : 2720 (Part – 3)	✓	✓
Direct Shear Test	IS : 2720 (Part – 13)	✓	✓
Triaxial compressive shear test	IS : 2720 (Part – 11)	✓	✓
Chemical Analysis of Soil Samples	IS : 2720 (Part – 22, 26, 27)	✓	-

ii. Grain Size Analysis:

The Grain Size analysis test were performed in accordance with IS 2720 (Part 4) – 1965. For this test an oven dry pulverized soil sample is sieved through the set of sieves 19mm, 10mm, 4.75mm, 2.0mm, 425 micron, 75micron. The amounts of soil retained on each sieve were noted down. The % retained, cumulative % retained and % passing are computed accordingly. If the % passing 75 micron sieve is significant, Hydrometer method is used to find the percentage of silt and clay fraction. Hydrometer were performed in as per IS 2720 (Part 4) – 1965. The results are attached in Appendix B.

iii. Liquid Limit (IS:2720- Part-5)

By Cone Penetrometer Method

Liquid limit by cone penetrometer test were performed in accordance with IS 2720 (Part 5) – 1985. The tests were conducted, at varying water contents, in order to produce a series of cone penetrations (usually 4) in the range 15mm to 25mm. The resulting cone penetrations are plotted verses the water content of the test specimens. The Liquid Limit (WL) is read off the graph, being the water content at which the line of best fit through the test points crosses 20mm penetration.

iv. Plastic Limit:

Plastic Limit test were performed as per IS:2720-Part-5. The sample rolled between the fingers of one hand and the glass plate with pressure sufficient to reduce the mass into a thread of about 3 mm in 5 to 10 complete forward and back movements until the thread starts just crumbling at a diameter of 3 mm.

v. Plasticity Index

The plasticity index I_p is given by

$$I_p = WL - WP \text{ (in percent)}$$

vi. Specific Gravity

Specific gravity test were performed in accordance with IS 2720 (Part 3 Section-1) – 1980. The results are attached in Appendix B.

vii. Direct Shear Test

Direct shear tests were performed as per IS 2720 (Part XIII)-2015, on the undisturbed soil samples obtained during the field investigation. For this test shear box test apparatus was used. The specimen of size 6 cm x 6 cm x 2.4 cm was used. The normal stresses of 0.5 kg/cm², 1.0 kg/cm², 1.5 kg/cm², 2.0 kg/cm² and 3.0 kg/cm² respectively were used.

viii. Triaxial Shear Test

Triaxial Shear Test under Unconsolidated Un-drained (UU) condition as per IS: 2720 (Part-11)-2011 were performed on the undisturbed soil samples obtained during the field investigation. All specimen of size 38mm diameter and 76mm height were used. The axial loading was applied at 1.25 mm/min rate of strain. The normal stresses applied were 0.5 kg/cm², 1.0 kg/cm², 1.5 kg/cm², 2.0 kg/cm² and 3.0 kg/cm² respectively.

CHAPTER 4 ANALYSIS OF TEST RESULTS

4.1 STRATIFICATION

The study of the borehole logs of 10 BHs, the soil and rock strata is done as per IS 1498., the details of strata and soil classification, are provided in table 4.1.

Table 4.1: Strata Description

BH NO.	Depth (m)		Description
	From	To	
BH-05	0.00	3.50	Filled Up Soil
	3.50	15.50	Medium Dense to Dense, Brownish Red, Silty Sand
	15.50	42.50	Dense to Very Dense, Brownish, Silty Sand
	42.50	50.00	Very Dense, Brownish, Poorly Graded Silty Sand
BH-5A	0.00	2.50	Filled Up Soil
	2.50	12.00	Loose to Dense, Brownish Red, Silty Sand
	12.00	31.50	Dense to Very Dense, Brownish, Silty Sand
	31.50	50.00	Dense to Very Dense, Brownish, Silty Sand
BH-166	0.00	2.50	Filled Up soil
	2.50	19.50	Medium Dense to Dense, Brownish Red, Silty Sand
	19.50	40.50	Dense to Very Dense, Brownish, Silty Sand
	40.50	50.00	Very Dense, Brownish, Poorly Graded Sand
BH-170	0.00	3.00	Filled Up soil
	3.00	19.50	Medium Dense to Dense, Brownish Red, Silty Sand
	19.50	50.00	Very Dense, Brownish, Silty Sand
BH-183	0.00	3.00	Filled Up soil
	3.00	13.50	Loose to Medium Dense, Brownish, Poorly Graded Silty Sand
	13.50	30.00	Dense to Very Dense, Brownish, Poorly Graded Sand
	30.00	39.00	Hard, Brownish, Silty Clay of Low Plasticity.
	39.00	50.00	Very Dense, Brownish, Clayey Sand
BH-184	0.00	2.50	Filled Up soil
	2.50	19.50	Loose to Medium Dense, Brownish, Poorly Graded Silty Sand
	19.50	25.50	Dense, Brownish, Clayey Sand
	25.50	50.00	Very Dense, Brownish, Silty Sand
BH-185	0.00	3.00	Filled Up Soil consist of Silty Sand
	3.00	15.00	Loose to Medium Dense, Brownish, Silty Sand
	15.00	25.50	Dense to Very Dense, Brownish, Silty Sand
	25.50	39.00	Very Dense, Brownish, Clayey Sand
	39.00	45.00	Very Dense, Brownish, Silty Sand
	45.00	50.00	Very Dense, Brownish, Poorly Graded Sand
BH-186	0.00	3.00	Filled Up Soil consist of Silty Sand
	3.00	15.00	Loose to Medium Dense, Brownish, Poorly graded Silty Sand

BH NO.	Depth (m)		Description
	From	To	
BH-186	15.00	22.50	Medium Dense to Dense, Brownish, Clayey Sand
	22.50	39.00	Very Dense, Brownish, Poorly graded Silty Sand
	39.00	50.00	Very Dense, Brownish, Silty Sand
BH-187	0.00	2.50	Filled Up Soil consist of Silty Sand
	2.50	21.00	Loose to Medium Dense, Brownish, Silty Sand
	21.00	37.50	Dense to Very Dense, Brownish, Clayey Sand
	37.50	50.00	Very Dense, Brownish, Silty Sand
BH-188	0.00	3.00	Filled Up Soil consist of Silty Sand
	3.00	22.50	Loose to Medium Dense, Brownish, Silty Sand
	22.50	50.00	Very Dense, Brownish, Clayey Sand

Abbreviations

BH	Borehole
EGL	Existing Ground Level
GWT	Ground Water Table
RQD	Rock Quality Designation
IS	Indian Standards
SPT	Standard Penetration Test
DS	Disturbed Soil
R.L.	Reduced Level
m	Metre
sp. gr.	Specific Gravity
%	Percentage
mg /l	Milligram per litre
mg /kg	Milligram per kilogram

REFERENCE INDIAN STANDARD CODES

S.No.	IS Codes No	TITLE
1	IS : 1892-1979 RA-2016	Code of Practice for subsurface investigation for foundations.
2	IS : 1498-1970 RA 2016	Classification and Identification of soils for general Engineering Purpose.
3	IS :1904 - 2021	Code of practice for design and construction of foundations in soils:General Requirements.
4	IS : 2131-1981 RA 2016	Method for Standard Penetration Test (SPT) for Soils.
5	IS : 2132-1986 RA 2016	Code of Practice for Thin - Walled tube sampling of Soils.
6	IS : 4464-1985 RA 2019	Code of Practice for presentation of drilling information and core description in foundation investigation.
7	IS : 5313-1980 RA 2019	Guide for core drilling observations.
8	IS :5313-2020	Guide for core drilling observations.
9	IS : 4078-1980 RA2019	Code of Practice for indexing and storage of drill cores.
10	IS : 6926-1996 RA 2015	Diamond core drilling – Site investigation for river valley projects - code of Practice.
11	IS : 6935-1973 RA 2019	Method of determination of water level in a bore hole.
12	IS : 15686:2006 RA 2015	Recommendations for the preparation of Geological and Geotechnical maps for river valley projects.
13	IS : 6403 1981 RA 2016	Code of Practice for Determination of Bearing capacity of shallow foundations
14	IS : 8009 (P-1)-1976 RA 2019	Code of practice for calculation of Settlements of Foundations
15	IS: 12070 - 1987 RA 2020	Code of practice for design and construction of shallow foundations on rocks
16	IS :13365 (P-1) : 1998 RA 2021	Quantitative classificationSystems of rock mass — guidelines
17	IS : 1893 (P-1) 2016	Criteria for Earthquake resistant design of structures.
18	IS : 456- 2000 RA 2016	Plain and Reinforced Concrete-Code of Practice.
19	IRC-78-2024	Standard Specifications and Code of Practice for Road Bridges, Foundation & Substructure
Sr.	BOOK	TITLE
1.	Joseph E. Bowles	Foundation Analysis and Design

APPENDIX – A (FIELD DATA RESULTS)

Appendix No.	ITEMS
A-1	FIELD BOREHOLE LOGS
A-2	SUBSOIL PROFILE DIAGRAM

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-388	Northing :2968764 m	Easting :578856 m
Reduced Level (m):(+)393.367	BH. No. :BH-05	BH Depth (m):50
Proposed/Existing Structure :P-388	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :04-06-2026	Date of Completion :09-04-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5									
2.0				Filled Up Soil	FILL				
2.5									
3.0									
3.5	3.5	SPT-1	13						
4.0									
4.5									
5.0	5	SPT-2	14						
5.5	5.5	UDS-1							
6.0									
6.5	6.5	SPT-3	18						
7.0				Medium Dense to Dense, Brownish Red, Silty Sand	SM				
7.5									
8.0	8	SPT-4	22						
8.5	8.5	UDS-2							
9.0									
9.5	9.5	SPT-5	27						
10.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-388	Northing :2968764 m	Easting :578856 m
Reduced Level (m):(+)393.367	BH. No. :BH-05	BH Depth (m):50
Proposed/Existing Structure :P-388	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :04-06-2026	Date of Completion :09-04-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5									
11.0	11	SPT-6	35						
11.5									
12.0									
12.5	12.5	SPT-7	43	Medium Dense to Dense, Brownish Red, Silty Sand	SM				
13.0									
13.5									
14.0	14	SPT-8	49						
14.5									
15.0									
15.5	15.5	SPT-9	53						
16.0									
16.5									
17.0	17	SPT-10	56						
17.5									
18.0									
18.5	18.5	SPT-11	61	Dense to Very Dense, Brownish, Silty Sand	SM				
19.0									
19.5									
20.0	20	SPT-12	67						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-388	Northing :2968764 m	Easting :578856 m
Reduced Level (m):(+)393.367	BH. No. :BH-05	BH Depth (m):50
Proposed/Existing Structure :P-388	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :04-06-2026	Date of Completion :09-04-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0									
21.5	21.5	SPT-13	71						
22.0									
22.5									
23.0	23	SPT-14	82						
23.5									
24.0									
24.5	24.5	SPT-15	89						
25.0				Dense to Very Dense, Brownish, Silty Sand	SM				
25.5									
26.0	26	SPT-16	90						
26.5									
27.0									
27.5	27.5	SPT-17	72						
28.0									
28.5									
29.0	29	SPT-18	80						
29.5									
30.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-388	Northing :2968764 m	Easting :578856 m
Reduced Level (m):(+)393.367	BH. No. :BH-05	BH Depth (m):50
Proposed/Existing Structure :P-388	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :04-06-2026	Date of Completion :09-04-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5	30.5	SPT-19	83						
31.0									
31.5									
32.0	32	SPT-20	97						
32.5									
33.0									
33.5	33.5	SPT-21	89						
34.0									
34.5									
35.0	35	SPT-22	91	Dense to Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0									
36.5	36.5	SPT-23	95						
37.0									
37.5									
38.0	38	SPT-24	97						
38.5									
39.0									
39.5	39.5	SPT-25	98						
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-388	Northing :2968764 m	Easting :578856 m
Reduced Level (m):(+)393.367	BH. No. :BH-05	BH Depth (m):50
Proposed/Existing Structure :P-388	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :04-06-2026	Date of Completion :09-04-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5									
41.0	41	SPT-26	99	Dense to Very Dense, Brownish, Silty Sand	SM				
41.5									
42.0									
42.5	42.5	SPT-27	>100						
43.0									
43.5									
44.0	44	SPT-28	>100						
44.5									
45.0									
45.5	45.5	SPT-29	>100						
46.0									
46.5				Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
47.0	47	SPT-30	>100						
47.5									
48.0									
48.5	48.5	SPT-31	>100						
49.0									
49.5									
50.0	50	SPT-32	>100						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

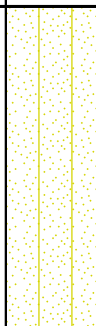
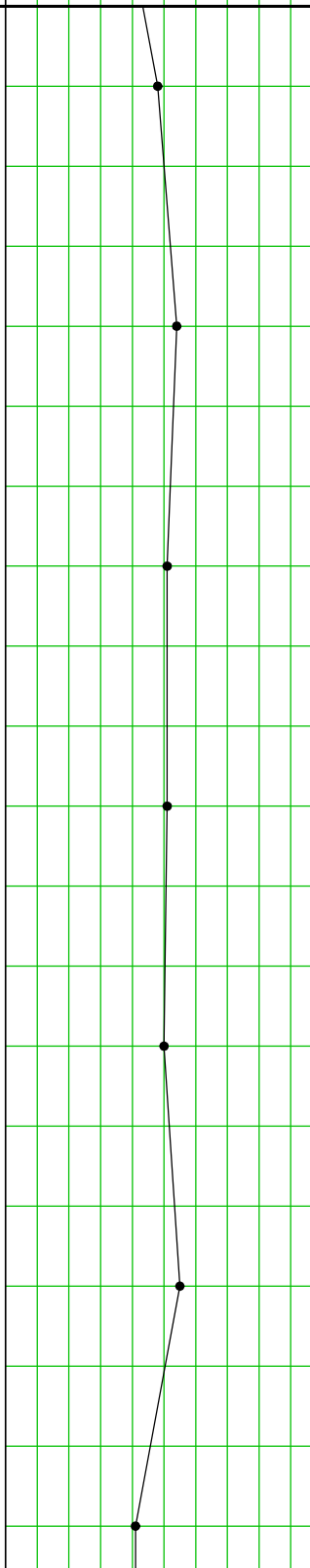
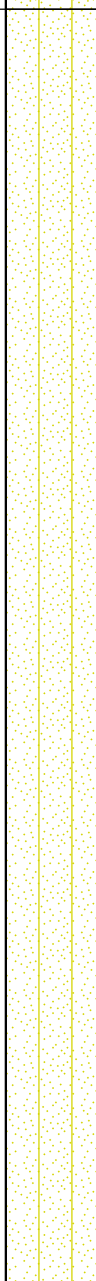
BH Location/Chainage :P-393	Northing :2968892 m	Easting :578844 m
Reduced Level (m):(+)394.064	BH. No. :BH-5A	BH Depth (m):50
Proposed/Existing Structure :P-393	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :02-07-2026	Date of Completion :04-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	5						
3.5									
4.0									
4.5	4.5	SPT-2	6						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	7	Loose to Dense, Brownish Red, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	14						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	34						
9.5									
10.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-393	Northing :2968892 m	Easting :578844 m
Reduced Level (m):(+)394.064	BH. No. :BH-5A	BH Depth (m):50
Proposed/Existing Structure :P-393	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :02-07-2026	Date of Completion :04-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	48	Loose to Dense, Brownish Red, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	54						
12.5				Dense to Very Dense, Brownish, Silty Sand	SM				
13.0									
13.5	13.5	SPT-8	51						
14.0									
14.5									
15.0	15	SPT-9	51						
15.5									
16.0									
16.5	16.5	SPT-10	50						
17.0									
17.5									
18.0	18	SPT-11	55						
18.5									
19.0									
19.5	19.5	SPT-12	41						
20.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-393	Northing :2968892 m	Easting :578844 m
Reduced Level (m):(+)394.064	BH. No. :BH-5A	BH Depth (m):50
Proposed/Existing Structure :P-393	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :02-07-2026	Date of Completion :04-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	41						
21.5									
22.0									
22.5	22.5	SPT-14	51						
23.0									
23.5									
24.0	24	SPT-15	55						
24.5									
25.0				Dense to Very Dense, Brownish, Silty Sand	SM				
25.5	25.5	SPT-16	62						
26.0									
26.5									
27.0	27	SPT-17	63						
27.5									
28.0									
28.5	28.5	SPT-18	51						
29.0									
29.5									
30.0	30	SPT-19	52						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-393	Northing :2968892 m	Easting :578844 m
Reduced Level (m):(+)394.064	BH. No. :BH-5A	BH Depth (m):50
Proposed/Existing Structure :P-393	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :02-07-2026	Date of Completion :04-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5				Dense to Very Dense, Brownish, Silty Sand	SM				
31.0									
31.5	31.5	SPT-20	39						
32.0									
32.5									
33.0	33	SPT-21	41						
33.5									
34.0									
34.5	34.5	SPT-22	49						
35.0									
35.5				Dense to Very Dense, Brownish, Silty Sand	SM				
36.0	36	SPT-23	55						
36.5									
37.0									
37.5	37.5	SPT-24	53						
38.0									
38.5									
39.0	39	SPT-25	57						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-393	Northing :2968892 m	Easting :578844 m
Reduced Level (m):(+)394.064	BH. No. :BH-5A	BH Depth (m):50
Proposed/Existing Structure :P-393	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :02-07-2026	Date of Completion :04-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	59						
41.0									
41.5									
42.0	42	SPT-27	58						
42.5									
43.0									
43.5	43.5	SPT-28	60						
44.0									
44.5									
45.0	45	SPT-29	48	Dense to Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	53						
47.0									
47.5									
48.0	48	SPT-31	55						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2968405 m	Easting :579099 m
Reduced Level (m):(+)391.232	BH. No. :BH-166	BH Depth (m):50
Proposed/Existing Structure :-	Water Table (m):26.00	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :03-07-2026	Date of Completion :04-07-2026	

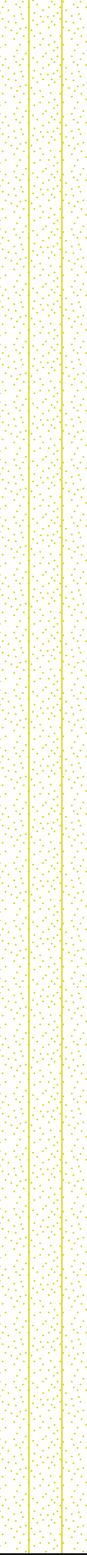
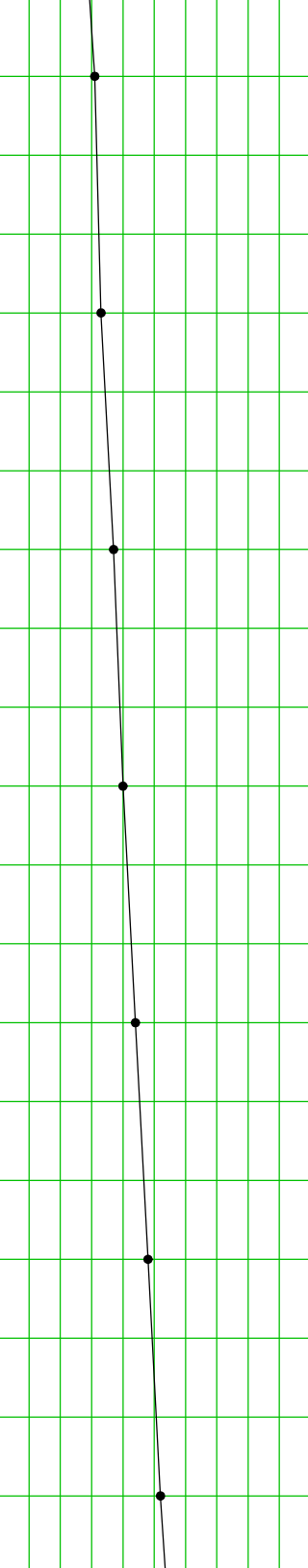
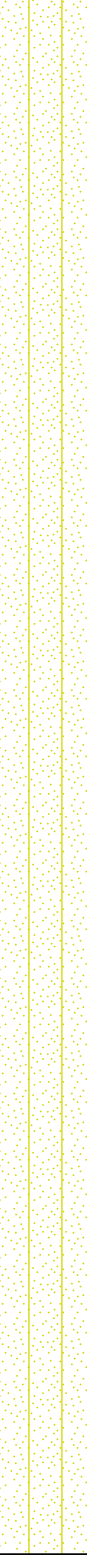
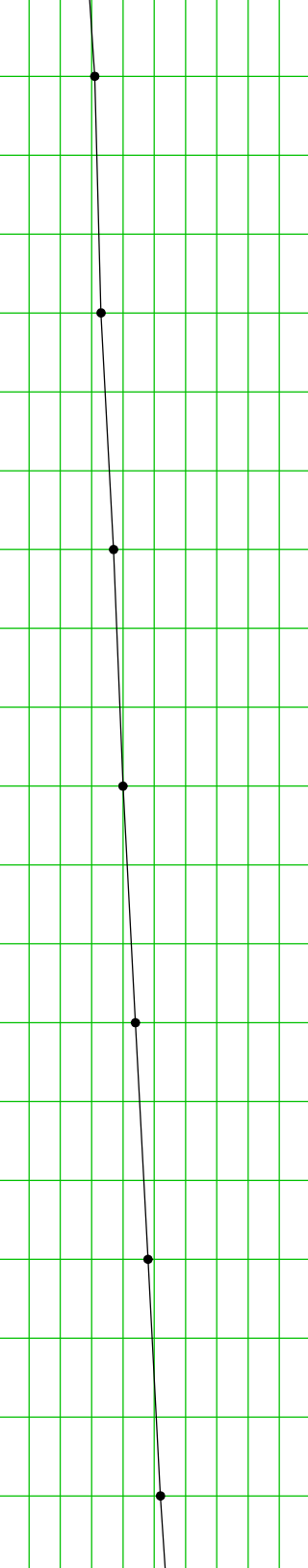
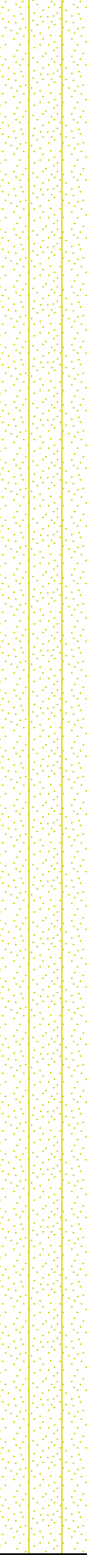
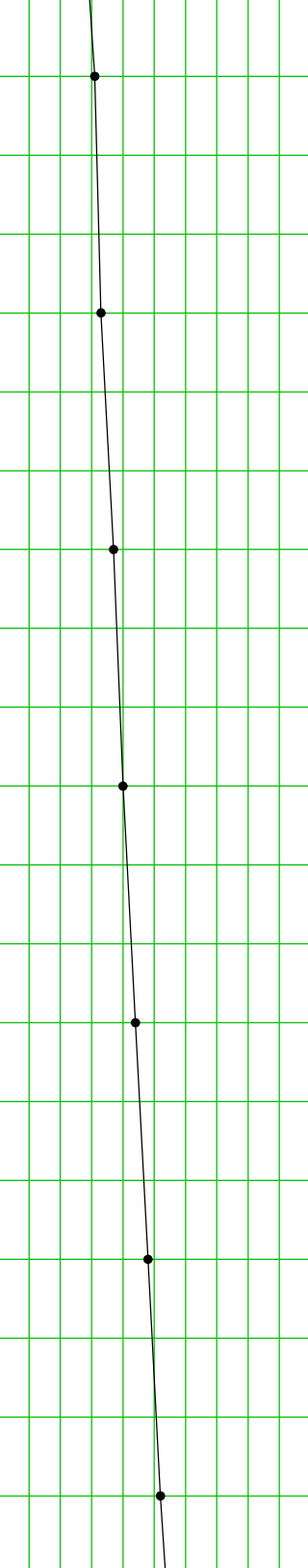
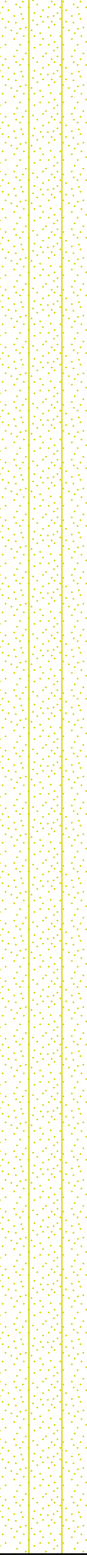
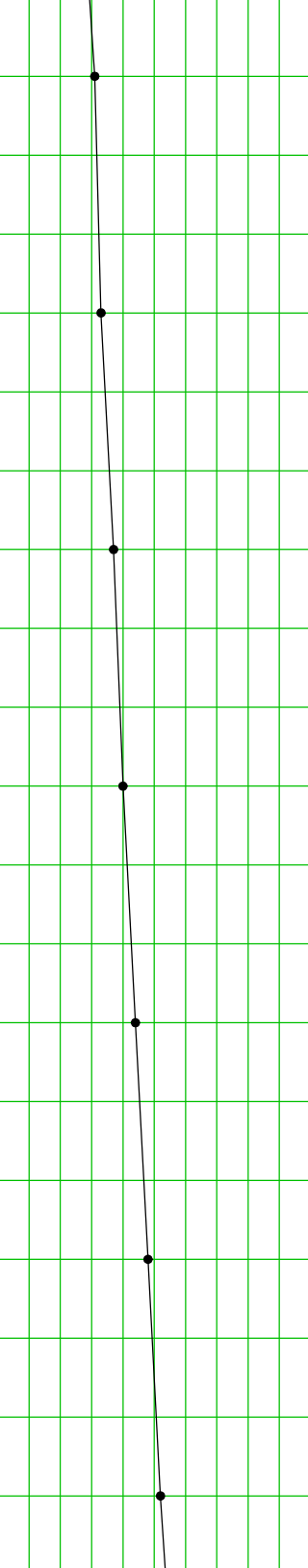
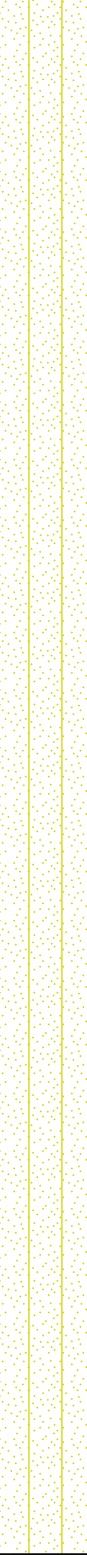
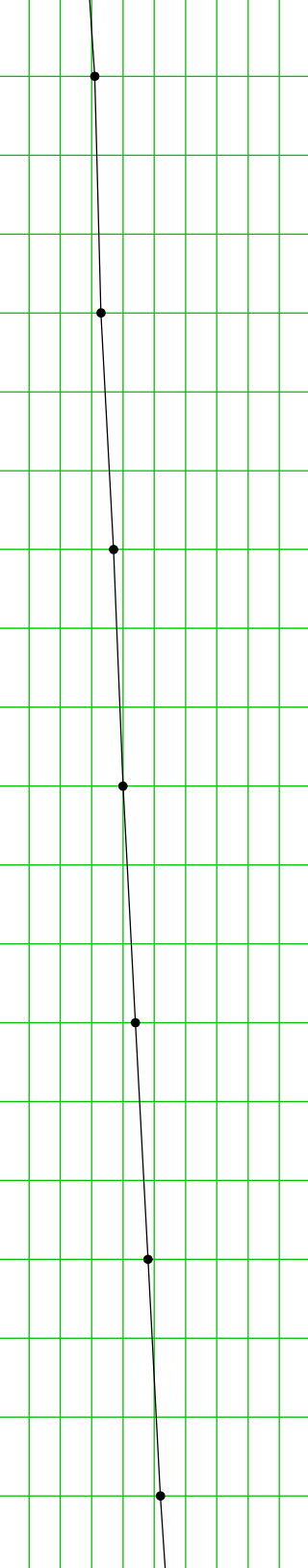
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS-1							
3.0	3	SPT-1	9						
3.5									
4.0									
4.5	4.5	SPT-2	13						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	15	Medium Dense to Dense, Brownish Red, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	20						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	26						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2968405 m	Easting :579099 m
Reduced Level (m):(+)391.232	BH. No. :BH-166	BH Depth (m):50
Proposed/Existing Structure :-	Water Table (m):26.00	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :03-07-2026	Date of Completion :04-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	31	Medium Dense to Dense, Brownish Red, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	33						
12.5									
13.0				Medium Dense to Dense, Brownish Red, Silty Sand	SM				
13.5	13.5	SPT-8	37						
14.0									
14.5									
15.0	15	SPT-9	40						
15.5				Medium Dense to Dense, Brownish Red, Silty Sand	SM				
16.0									
16.5	16.5	SPT-10	44						
17.0									
17.5									
18.0	18	SPT-11	48	Medium Dense to Dense, Brownish Red, Silty Sand	SM				
18.5									
19.0									
19.5	19.5	SPT-12	52						
20.0				Dense to Very Dense, Brownish, Silty Sand	SM				

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2968405 m	Easting :579099 m
Reduced Level (m):(+)391.232	BH. No. :BH-166	BH Depth (m):50
Proposed/Existing Structure :-	Water Table (m):26.00	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :03-07-2026	Date of Completion :04-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	57						
21.5									
22.0									
22.5	22.5	SPT-14	59						
23.0									
23.5									
24.0	24	SPT-15	62						
24.5									
25.0				Dense to Very Dense, Brownish, Silty Sand	SM				
25.5	25.5	SPT-16	65						
26.0						▼ 26.00m			
26.5									
27.0	27	SPT-17	68						
27.5									
28.0									
28.5	28.5	SPT-18	70						
29.0									
29.5									
30.0	30	SPT-19	73						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2968405 m	Easting :579099 m
Reduced Level (m):(+)391.232	BH. No. :BH-166	BH Depth (m):50
Proposed/Existing Structure :-	Water Table (m):26.00	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :03-07-2026	Date of Completion :04-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	76						
32.0									
32.5									
33.0	33	SPT-21	79						
33.5									
34.0									
34.5	34.5	SPT-22	82						
35.0				Dense to Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	84						
36.5									
37.0									
37.5	37.5	SPT-24	87						
38.0									
38.5									
39.0	39	SPT-25	89						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2968405 m	Easting :579099 m
Reduced Level (m):(+)391.232	BH. No. :BH-166	BH Depth (m):50
Proposed/Existing Structure :-	Water Table (m):26.00	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :03-07-2026	Date of Completion :04-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	92	Dense to Very Dense, Brownish, Silty Sand	SM				
41.0									
41.5									
42.0	42	SPT-27	94						
42.5									
43.0									
43.5	43.5	SPT-28	95						
44.0									
44.5									
45.0	45	SPT-29	97	Very Dense, Brownish, Poorly Graded Sand	SP				
45.5									
46.0									
46.5	46.5	SPT-30	98						
47.0									
47.5									
48.0	48	SPT-31	99						
48.5									
49.0									
49.5									
50.0	50	SPT-32	>100						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

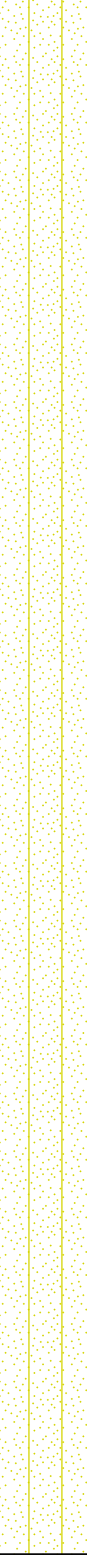
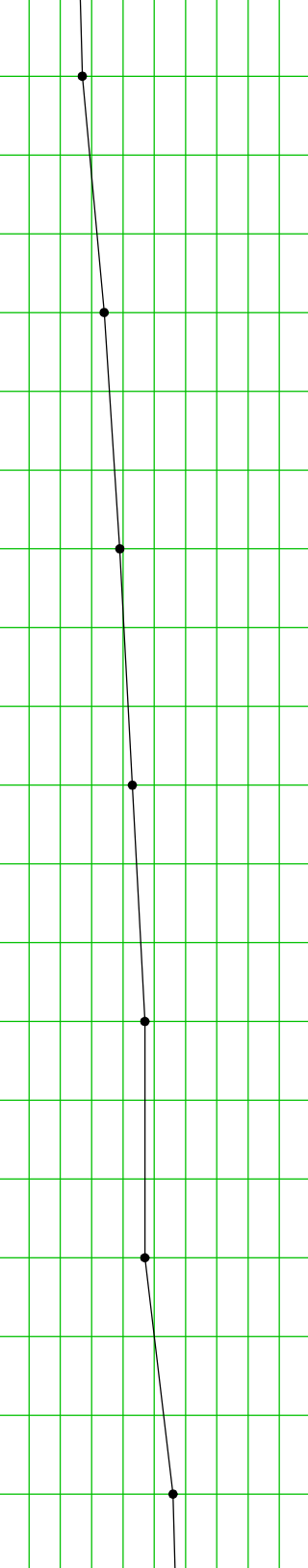
BH Location/Chainage :P-401	Northing :2961048 m	Easting :583091 m
Reduced Level (m):(+)394.614	BH. No. :BH-170	BH Depth (m):50
Proposed/Existing Structure :P-401	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5									
3.0	3	SPT-1	13						
3.5									
4.0									
4.5	4.5	SPT-2	15						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	13						
6.5				Medium Dense to Dense, Brownish Red, Silty Sand	SM				
7.0									
7.5	7.5	SPT-4	21						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	25						
9.5									
10.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-401	Northing :2961048 m	Easting :583091 m
Reduced Level (m):(+)394.614	BH. No. :BH-170	BH Depth (m):50
Proposed/Existing Structure :P-401	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	27	Medium Dense to Dense, Brownish Red, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	34						
12.5									
13.0									
13.5	13.5	SPT-8	39						
14.0									
14.5									
15.0	15	SPT-9	43						
15.5				Very Dense, Brownish, Silty Sand	SM				
16.0									
16.5	16.5	SPT-10	47						
17.0									
17.5									
18.0	18	SPT-11	47						
18.5									
19.0									
19.5	19.5	SPT-12	56						
20.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-401	Northing :2961048 m	Easting :583091 m
Reduced Level (m):(+)394.614	BH. No. :BH-170	BH Depth (m):50
Proposed/Existing Structure :P-401	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	58						
21.5									
22.0									
22.5	22.5	SPT-14	67						
23.0									
23.5									
24.0	24	SPT-15	72						
24.5									
25.0				Very Dense, Brownish, Silty Sand	SM				
25.5	25.5	SPT-16	77						
26.0									
26.5									
27.0	27	SPT-17	83						
27.5									
28.0									
28.5	28.5	SPT-18	70						
29.0									
29.5									
30.0	30	SPT-19	75						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-401	Northing :2961048 m	Easting :583091 m
Reduced Level (m):(+)394.614	BH. No. :BH-170	BH Depth (m):50
Proposed/Existing Structure :P-401	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	66						
32.0									
32.5									
33.0	33	SPT-21	73						
33.5									
34.0									
34.5	34.5	SPT-22	78						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	60						
36.5									
37.0									
37.5	37.5	SPT-24	67						
38.0									
38.5									
39.0	39	SPT-25	73						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-401	Northing :2961048 m	Easting :583091 m
Reduced Level (m):(+)394.614	BH. No. :BH-170	BH Depth (m):50
Proposed/Existing Structure :P-401	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	79						
41.0									
41.5									
42.0	42	SPT-27	74						
42.5									
43.0									
43.5	43.5	SPT-28	83						
44.0									
44.5									
45.0	45	SPT-29	88	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

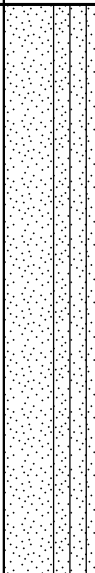
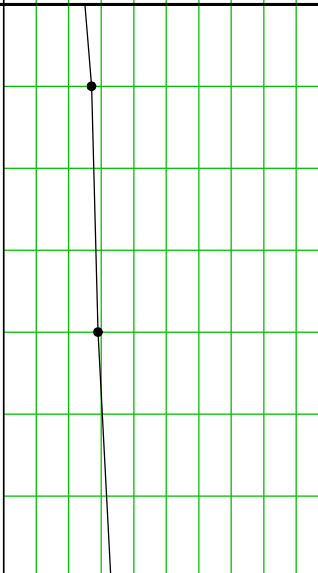
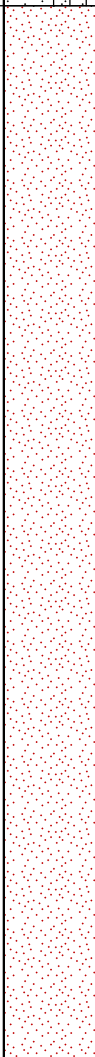
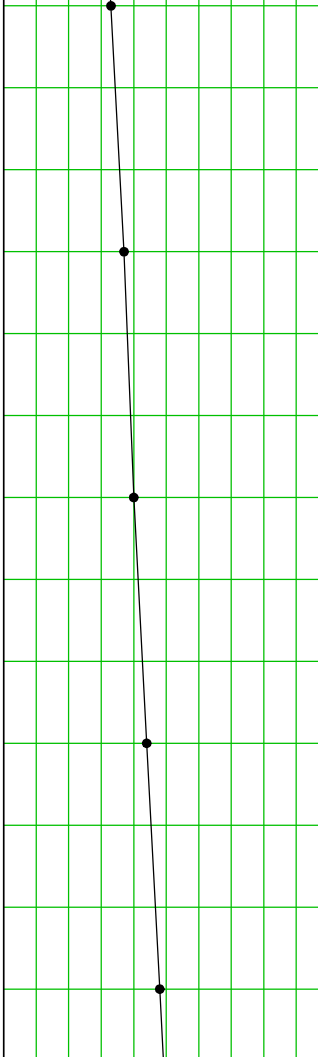
BH Location/Chainage :P-442	Northing :2970468 m	Easting :578943 m
Reduced Level (m):(+)402.101	BH. No. :BH-183	BH Depth (m):50
Proposed/Existing Structure :P-442	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :24-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5									
3.0	3	SPT-1	5						
3.5									
4.0									
4.5	4.5	SPT-2	7						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	13						
6.5				Loose to Medium Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
7.0									
7.5	7.5	SPT-4	16						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	21						
9.5									
10.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-442	Northing :2970468 m	Easting :578943 m
Reduced Level (m):(+)402.101	BH. No. :BH-183	BH Depth (m):50
Proposed/Existing Structure :P-442	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :24-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	27	Loose to Medium Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
11.0									
11.5									
12.0	12	SPT-7	29						
12.5				Dense to Very Dense, Brownish, Poorly Graded Sand	SP				
13.0									
13.5	13.5	SPT-8	33						
14.0									
14.5									
15.0	15	SPT-9	37						
15.5									
16.0									
16.5	16.5	SPT-10	40						
17.0									
17.5									
18.0	18	SPT-11	44						
18.5									
19.0									
19.5	19.5	SPT-12	48						
20.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-442	Northing :2970468 m	Easting :578943 m
Reduced Level (m):(+)402.101	BH. No. :BH-183	BH Depth (m):50
Proposed/Existing Structure :P-442	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :24-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	52						
21.5									
22.0									
22.5	22.5	SPT-14	57						
23.0									
23.5									
24.0	24	SPT-15	60						
24.5									
25.0				Dense to Very Dense, Brownish, Poorly Graded Sand	SP				
25.5	25.5	SPT-16	61						
26.0									
26.5									
27.0	27	SPT-17	66						
27.5									
28.0									
28.5	28.5	SPT-18	72						
29.0									
29.5									
30.0	30	SPT-19	75						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-442	Northing :2970468 m	Easting :578943 m
Reduced Level (m):(+)402.101	BH. No. :BH-183	BH Depth (m):50
Proposed/Existing Structure :P-442	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :24-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	67						
32.0									
32.5									
33.0	33	SPT-21	65						
33.5									
34.0									
34.5	34.5	SPT-22	72	Hard, Brownish, Silty Clay of Low Plasticity.	CL				
35.0									
35.5									
36.0	36	SPT-23	74						
36.5									
37.0									
37.5	37.5	SPT-24	76						
38.0									
38.5									
39.0	39	SPT-25	82						
39.5				Very Dense, Brownish, Clayey Sand	SC				
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-442	Northing :2970468 m	Easting :578943 m
Reduced Level (m):(+)402.101	BH. No. :BH-183	BH Depth (m):50
Proposed/Existing Structure :P-442	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :24-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	84						
41.0									
41.5									
42.0	42	SPT-27	86						
42.5									
43.0									
43.5	43.5	SPT-28	90						
44.0									
44.5									
45.0	45	SPT-29	96	Very Dense, Brownish, Clayey Sand	SC				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-445	Northing :2970558 m	Easting :578952 m
Reduced Level (m):(+)403.015	BH. No. :BH-184	BH Depth (m):50
Proposed/Existing Structure :P-445	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :22-07-2026	Date of Completion :23-07-2026	

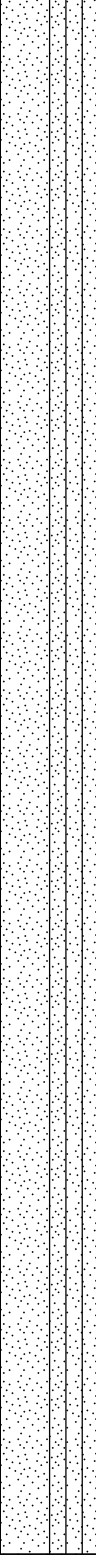
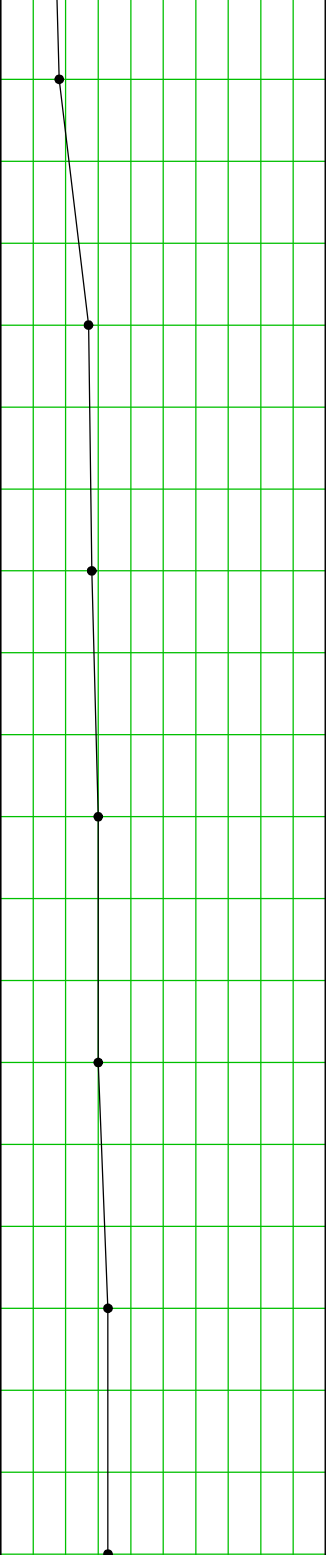
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	6						
3.5									
4.0									
4.5	4.5	SPT-2	8						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	9	Loose to Medium Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
6.5									
7.0									
7.5	7.5	SPT-4	11						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	16						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client : DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage : P-445	Northing : 2970558 m	Easting : 578952 m
Reduced Level (m): (+)403.015	BH. No. : BH-184	BH Depth (m): 50
Proposed/Existing Structure : P-445	Water Table (m): Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 22-07-2026	Date of Completion : 23-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	18	Loose to Medium Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
11.0									
11.5									
12.0	12	SPT-7	27						
12.5									
13.0									
13.5	13.5	SPT-8	28						
14.0									
14.5									
15.0	15	SPT-9	30						
15.5				Dense, Brownish, Clayey Sand	SC				
16.0									
16.5	16.5	SPT-10	30						
17.0									
17.5									
18.0	18	SPT-11	33						
18.5									
19.0									
19.5	19.5	SPT-12	33						
20.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client : DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage : P-445	Northing : 2970558 m	Easting : 578952 m
Reduced Level (m): (+)403.015	BH. No. : BH-184	BH Depth (m): 50
Proposed/Existing Structure : P-445	Water Table (m): Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 22-07-2026	Date of Completion : 23-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	36						
21.5									
22.0									
22.5	22.5	SPT-14	38	Dense, Brownish, Clayey Sand	SC				
23.0									
23.5									
24.0	24	SPT-15	40						
24.5									
25.0									
25.5	25.5	SPT-16	57						
26.0									
26.5									
27.0	27	SPT-17	66						
27.5									
28.0				Very Dense, Brownish, Silty Sand	SM				
28.5	28.5	SPT-18	70						
29.0									
29.5									
30.0	30	SPT-19	73						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-445	Northing :2970558 m	Easting :578952 m
Reduced Level (m):(+)403.015	BH. No. :BH-184	BH Depth (m):50
Proposed/Existing Structure :P-445	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :22-07-2026	Date of Completion :23-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	65						
32.0									
32.5									
33.0	33	SPT-21	60						
33.5									
34.0									
34.5	34.5	SPT-22	48						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	51						
36.5									
37.0									
37.5	37.5	SPT-24	54						
38.0									
38.5									
39.0	39	SPT-25	54						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-445	Northing :2970558 m	Easting :578952 m
Reduced Level (m):(+)403.015	BH. No. :BH-184	BH Depth (m):50
Proposed/Existing Structure :P-445	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :22-07-2026	Date of Completion :23-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	57						
41.0									
41.5									
42.0	42	SPT-27	60						
42.5									
43.0									
43.5	43.5	SPT-28	60						
44.0									
44.5									
45.0	45	SPT-29	71	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	95						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

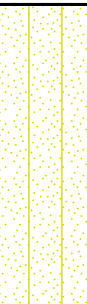
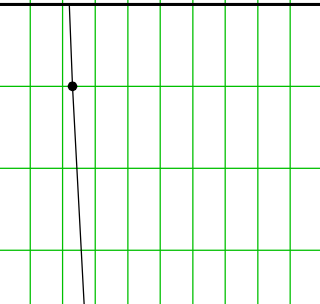
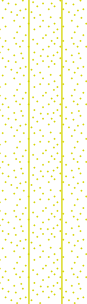
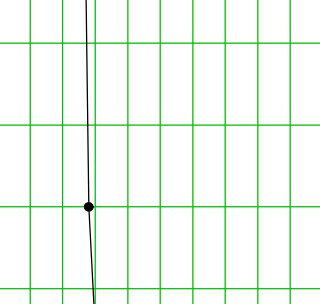
BH Location/Chainage :P-448	Northing :2970678 m	Easting :578967 m
Reduced Level (m):(+)404.024	BH. No. :BH-185	BH Depth (m):50
Proposed/Existing Structure :P-448	Water Table (m):NoT Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :24-07-2026	Date of Completion :25-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil consist of Silty Sand	FILL				
2.0									
2.5									
3.0	3	SPT-1	6						
3.5									
4.0									
4.5	4.5	SPT-2	9						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	14						
6.5				Loose to Medium Dense, Brownish, Silty Sand	SM				
7.0									
7.5	7.5	SPT-4	17						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	20						
9.5									
10.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-448	Northing :2970678 m	Easting :578967 m
Reduced Level (m):(+)404.024	BH. No. :BH-185	BH Depth (m):50
Proposed/Existing Structure :P-448	Water Table (m):NoT Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :24-07-2026	Date of Completion :25-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	23	Loose to Medium Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	27						
12.5				Dense to Very Dense, Brownish, Silty Sand	SM				
13.0									
13.5	13.5	SPT-8	28						
14.0									
14.5									
15.0	15	SPT-9	32						
15.5									
16.0									
16.5	16.5	SPT-10	36						
17.0									
17.5									
18.0	18	SPT-11	40						
18.5									
19.0									
19.5	19.5	SPT-12	44						
20.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-448	Northing :2970678 m	Easting :578967 m
Reduced Level (m):(+)404.024	BH. No. :BH-185	BH Depth (m):50
Proposed/Existing Structure :P-448	Water Table (m):NoT Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :24-07-2026	Date of Completion :25-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	47						
21.5									
22.0									
22.5	22.5	SPT-14	55	Dense to Very Dense, Brownish, Silty Sand	SM				
23.0									
23.5									
24.0	24	SPT-15	60						
24.5									
25.0									
25.5	25.5	SPT-16	62						
26.0									
26.5									
27.0	27	SPT-17	65						
27.5									
28.0									
28.5	28.5	SPT-18	68	Very Dense, Brownish, Clayey Sand	SC				
29.0									
29.5									
30.0	30	SPT-19	70						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

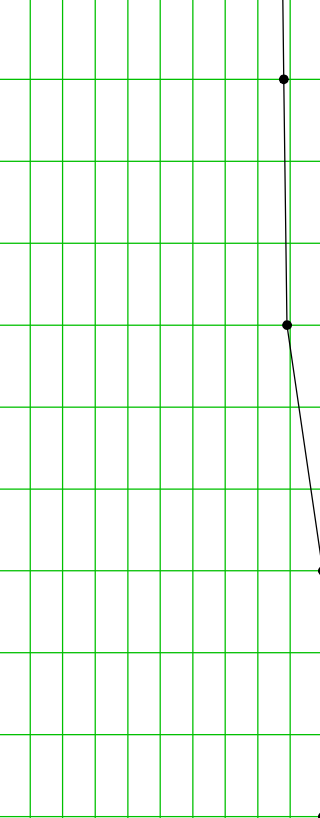
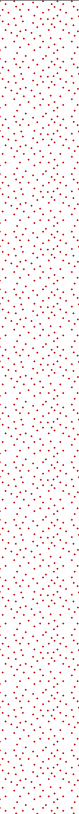
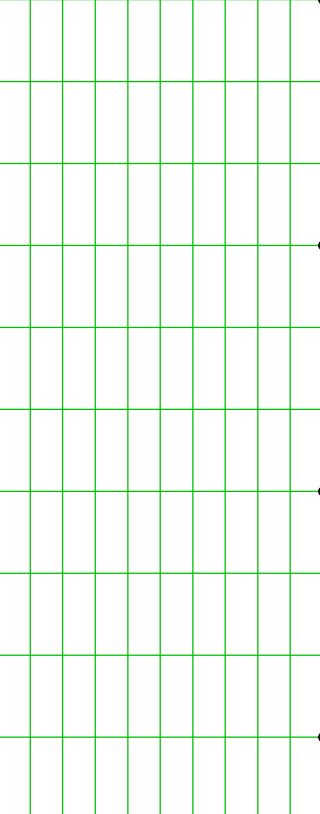
BH Location/Chainage :P-448	Northing :2970678 m	Easting :578967 m
Reduced Level (m):(+)404.024	BH. No. :BH-185	BH Depth (m):50
Proposed/Existing Structure :P-448	Water Table (m):NoT Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :24-07-2026	Date of Completion :25-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	73						
32.0									
32.5									
33.0	33	SPT-21	76						
33.5									
34.0									
34.5	34.5	SPT-22	78	Very Dense, Brownish, Clayey Sand	SC				
35.0									
35.5									
36.0	36	SPT-23	80						
36.5									
37.0									
37.5	37.5	SPT-24	84						
38.0									
38.5									
39.0	39	SPT-25	87						
39.5				Very Dense, Brownish, Silty Sand	SM				
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-448	Northing :2970678 m	Easting :578967 m
Reduced Level (m):(+)404.024	BH. No. :BH-185	BH Depth (m):50
Proposed/Existing Structure :P-448	Water Table (m):NoT Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :24-07-2026	Date of Completion :25-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	88	Very Dense, Brownish, Silty Sand	SM				
41.0									
41.5									
42.0	42	SPT-27	89						
42.5				Very Dense, Brownish, Poorly Graded Sand	SP				
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100						
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

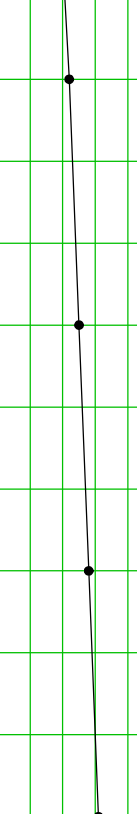
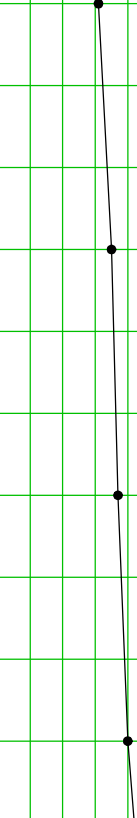
BH Location/Chainage :P-452	Northing :2970766 m	Easting :578977 m
Reduced Level (m):(+)404.752	BH. No. :BH-186	BH Depth (m):50
Proposed/Existing Structure :P-452	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :25-07-2026	Date of Completion :27-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil consist of Silty Sand	FILL				
2.0									
2.5									
3.0	3	SPT-1	8						
3.5									
4.0									
4.5	4.5	SPT-2	10						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	14						
6.5				Loose to Medium Dense, Brownish, Poorly graded Silty Sand	SP-SM				
7.0									
7.5	7.5	SPT-4	15						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	18						
9.5									
10.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-452	Northing :2970766 m	Easting :578977 m
Reduced Level (m):(+)404.752	BH. No. :BH-186	BH Depth (m):50
Proposed/Existing Structure :P-452	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :25-07-2026	Date of Completion :27-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	22	Loose to Medium Dense, Brownish, Poorly graded Silty Sand	SP-SM				
11.0									
11.5									
12.0	12	SPT-7	25						
12.5				Medium Dense to Dense, Brownish, Clayey Sand	SC				
13.0									
13.5	13.5	SPT-8	28						
14.0									
14.5									
15.0	15	SPT-9	31						
15.5									
16.0									
16.5	16.5	SPT-10	35						
17.0									
17.5									
18.0	18	SPT-11	37						
18.5									
19.0									
19.5	19.5	SPT-12	40						
20.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client : DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage : P-452	Northing : 2970766 m	Easting : 578977 m
Reduced Level (m) : (+) 404.752	BH. No. : BH-186	BH Depth (m) : 50
Proposed/Existing Structure : P-452	Water Table (m) : Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) : -
Date of Start : 25-07-2026	Date of Completion : 27-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	46	Medium Dense to Dense, Brownish, Clayey Sand	SC				
21.5									
22.0									
22.5	22.5	SPT-14	51						
23.0									
23.5									
24.0	24	SPT-15	59						
24.5									
25.0									
25.5	25.5	SPT-16	62						
26.0									
26.5				Very Dense, Brownish, Poorly graded Silty Sand	SP-SM				
27.0	27	SPT-17	66						
27.5									
28.0									
28.5	28.5	SPT-18	70						
29.0									
29.5									
30.0	30	SPT-19	74						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-452	Northing :2970766 m	Easting :578977 m
Reduced Level (m):(+)404.752	BH. No. :BH-186	BH Depth (m):50
Proposed/Existing Structure :P-452	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :25-07-2026	Date of Completion :27-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	74						
32.0									
32.5									
33.0	33	SPT-21	76						
33.5									
34.0									
34.5	34.5	SPT-22	78	Very Dense, Brownish, Poorly graded Silty Sand	SP-SM				
35.0									
35.5									
36.0	36	SPT-23	81						
36.5									
37.0									
37.5	37.5	SPT-24	83						
38.0									
38.5									
39.0	39	SPT-25	84						
39.5				Very Dense, Brownish, Silty Sand	SM				
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-452	Northing :2970766 m	Easting :578977 m
Reduced Level (m):(+)404.752	BH. No. :BH-186	BH Depth (m):50
Proposed/Existing Structure :P-452	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :25-07-2026	Date of Completion :27-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	86						
41.0									
41.5									
42.0	42	SPT-27	89						
42.5									
43.0									
43.5	43.5	SPT-28	91						
44.0									
44.5									
45.0	45	SPT-29	95	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-456	Northing :2970857 m	Easting :578992 m
Reduced Level (m):(+)405.320	BH. No. :BH-187	BH Depth (m):50
Proposed/Existing Structure :P-456	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :28-07-2026	Date of Completion :29-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil consist of Silty Sand	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	6						
3.5									
4.0									
4.5	4.5	SPT-2	8						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	10	Loose to Medium Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	11						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	16						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-456	Northing :2970857 m	Easting :578992 m
Reduced Level (m):(+)405.320	BH. No. :BH-187	BH Depth (m):50
Proposed/Existing Structure :P-456	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :28-07-2026	Date of Completion :29-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	20						
11.0									
11.5									
12.0	12	SPT-7	23						
12.5									
13.0									
13.5	13.5	SPT-8	28						
14.0									
14.5									
15.0	15	SPT-9	31	Loose to Medium Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	35						
17.0									
17.5									
18.0	18	SPT-11	39						
18.5									
19.0									
19.5	19.5	SPT-12	43						
20.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-456	Northing :2970857 m	Easting :578992 m
Reduced Level (m):(+)405.320	BH. No. :BH-187	BH Depth (m):50
Proposed/Existing Structure :P-456	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :28-07-2026	Date of Completion :29-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5				Loose to Medium Dense, Brownish, Silty Sand	SM				
21.0	21	SPT-13	45						
21.5									
22.0									
22.5	22.5	SPT-14	47						
23.0									
23.5									
24.0	24	SPT-15	49						
24.5									
25.0									
25.5	25.5	SPT-16	52	Dense to Very Dense, Brownish, Clayey Sand	SC				
26.0									
26.5									
27.0	27	SPT-17	54						
27.5									
28.0									
28.5	28.5	SPT-18	56						
29.0									
29.5									
30.0	30	SPT-19	59						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-456	Northing :2970857 m	Easting :578992 m
Reduced Level (m):(+)405.320	BH. No. :BH-187	BH Depth (m):50
Proposed/Existing Structure :P-456	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :28-07-2026	Date of Completion :29-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	62						
32.0									
32.5									
33.0	33	SPT-21	63						
33.5									
34.0				Dense to Very Dense, Brownish, Clayey Sand	SC				
34.5	34.5	SPT-22	66						
35.0									
35.5									
36.0	36	SPT-23	69						
36.5									
37.0									
37.5	37.5	SPT-24	72						
38.0									
38.5									
39.0	39	SPT-25	75	Very Dense, Brownish, Silty Sand	SM				
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-456	Northing :2970857 m	Easting :578992 m
Reduced Level (m):(+)405.320	BH. No. :BH-187	BH Depth (m):50
Proposed/Existing Structure :P-456	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :28-07-2026	Date of Completion :29-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	78						
41.0									
41.5									
42.0	42	SPT-27	80						
42.5									
43.0									
43.5	43.5	SPT-28	83						
44.0									
44.5									
45.0	45	SPT-29	87	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-459	Northing :2970954 m	Easting :579000 m
Reduced Level (m):(+)406.093	BH. No. :BH-188	BH Depth (m):50
Proposed/Existing Structure :P-459	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :30-07-2026	Date of Completion :02-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil consist of Silty Sand	FILL				
2.0									
2.5									
3.0	3	SPT-1	8						
3.5									
4.0									
4.5	4.5	SPT-2	12						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	15						
6.5				Loose to Medium Dense, Brownish, Silty Sand	SM				
7.0									
7.5	7.5	SPT-4	20						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	25						
9.5									
10.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-459	Northing :2970954 m	Easting :579000 m
Reduced Level (m):(+)406.093	BH. No. :BH-188	BH Depth (m):50
Proposed/Existing Structure :P-459	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :30-07-2026	Date of Completion :02-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	28						
11.0									
11.5									
12.0	12	SPT-7	30						
12.5									
13.0									
13.5	13.5	SPT-8	33						
14.0									
14.5									
15.0	15	SPT-9	36	Loose to Medium Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	38						
17.0									
17.5									
18.0	18	SPT-11	42						
18.5									
19.0									
19.5	19.5	SPT-12	45						
20.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client : DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage : P-459	Northing : 2970954 m	Easting : 579000 m
Reduced Level (m): (+) 406.093	BH. No. : BH-188	BH Depth (m): 50
Proposed/Existing Structure : P-459	Water Table (m): Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 30-07-2026	Date of Completion : 02-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	49	Loose to Medium Dense, Brownish, Silty Sand	SM				
21.5									
22.0									
22.5	22.5	SPT-14	53						
23.0									
23.5									
24.0	24	SPT-15	57						
24.5									
25.0									
25.5	25.5	SPT-16	61						
26.0									
26.5									
27.0	27	SPT-17	64	Very Dense, Brownish, Clayey Sand	SC				
27.5									
28.0									
28.5	28.5	SPT-18	68						
29.0									
29.5									
30.0	30	SPT-19	72						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-459	Northing :2970954 m	Easting :579000 m
Reduced Level (m):(+)406.093	BH. No. :BH-188	BH Depth (m):50
Proposed/Existing Structure :P-459	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :30-07-2026	Date of Completion :02-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	77						
32.0									
32.5									
33.0	33	SPT-21	81						
33.5									
34.0									
34.5	34.5	SPT-22	84						
35.0				Very Dense, Brownish, Clayey Sand	SC				
35.5									
36.0	36	SPT-23	86						
36.5									
37.0									
37.5	37.5	SPT-24	89						
38.0									
38.5									
39.0	39	SPT-25	92						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-459	Northing :2970954 m	Easting :579000 m
Reduced Level (m):(+)406.093	BH. No. :BH-188	BH Depth (m):50
Proposed/Existing Structure :P-459	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :30-07-2026	Date of Completion :02-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	95						
41.0									
41.5									
42.0	42	SPT-27	>100						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Clayey Sand	SC				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

APPENDIX – B (LAB TEST RESULTS)

Appendix No.	ITEMS
B-1	SOIL CHARACTERISTICS SHEETS
B-2	GSD CURVES

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-III										Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)				R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				Depth of Water Table		Termination Depth	Coordinates (E,N)				R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
								Clay	Silt	Fine	Medium	Coarse	Gravel		Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)		Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test			Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ³ /Kg)	Compression Index (C _c)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	DS-1	0.00	-	-	Filled Up Soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Unundisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

[illegible]

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 DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-III										Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)				R.L.	Ref. Code	
	02-07-2026		to		04-07-2026		P-393	5A	NOT ENCOUNTERED		50.00 m	578844.000 m			2968892.000 m			(+394.064 m	SR-1241_26-27					
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description				IS Classification	IS Symbol		Grain Size Distribution % wt retained				Atterberg Limits %				Void Ratio (e ₀)		Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /kg)
DS-1	0.00	-	-	Filled up soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS*	2.50	-	-	Loose to Dense, Brownish Red, Silty Sand	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-1	3.00	5	6		SM		0	22	58	18	2	0	0	-	NIL	-	-	-	-	-	-	-	-	
SPT-2	4.50	6	7		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS-1	5.50	-	-		SM		0	21	60	15	4	0	0	-	NIL	-	1.65	11.36	2.63	2.63	0.00	28	-	-
SPT-3	6.00	7	7		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-4	7.50	14	13		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDS*	8.50	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-5	9.00	34	30		SM		0	25	64	11	0	0	0	-	NIL	-	1.80	11.50	2.62	2.62	0.00	31	-	-
SPT-6	10.50	48	39		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-7	12.00	54	41	Dense to Very Dense, Brownish, Silty Sand	SM		0	23	64	6	4	2	1	-	NIL	-	1.83	12.00	2.61	2.61	0.00	32	-	-
SPT-8	13.50	51	37		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-9	15.00	51	35		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-10	16.50	50	33		SM		0	28	67	3	0	1	1	-	NIL	-	-	-	-	-	-	-	-	-
SPT-11	18.00	55	34		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-12	19.50	41	24		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-13	21.00	41	23		SM		0	31	62	2	0	3	2	-	NIL	-	1.83	11.50	2.61	2.61	0.00	32	-	-
SPT-14	22.50	51	28		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-15	24.00	55	29		SM		0	19	70	2	5	2	2	-	NIL	-	-	-	-	-	-	-	-	-
SPT-16	25.50	62	31	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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DS-Disurbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

[illegible]

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”PKG-III										Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	03-07-2026		to		04-07-2026		CH-14620		BH-166		26.00 m		50.00 m			579099,000 m		2968405,000 m																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %			Shear Strength			Free Swell Index (%)			Swelling Pressure (kg/cm ²)		Permeability (cm/sec)	Consolidation Parameters																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
							Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)		Angle of Friction (φ°)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /kg)	Compression Index (C _p)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
DS-1	0.00	-	-	Filled Up soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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SOIL CHARACTERISTICS

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SPT-12	19.50	52	31	Dense to Very Dense, Brownish, Silty Sand															0			26			54	17						3	0	0	NIL	NP	-	1.83	12.50	1.63	2.61	DST+
SPT-13	21.00	57	32											-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-14	22.50	59												-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-15	24.00	62	32											0	19	64	13	4	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-16	25.50	65	33											-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-17	27.00	68	24											0	19	64	13	4	0	0	-	NIL	NP	-	1.85	13.00	1.64	2.61	DST+	0.00	33	-	-	-	-	-	-	-	-	-	-	-
SPT-18	28.50	70	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
SPT-19	30.00	73	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
SPT-20	31.50	76	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
SPT-21	33.00	79	26	0	13	60	20	5	2	0	-	NIL	NP	-	1.88	13.50	1.66	2.61	DST+	0.00	33	-	-	-	-	-	-	-	-	-	-	-	-									
SPT-22	34.50	82	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
SPT-23	36.00	84	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
SPT-24	37.50	87	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
SPT-25	39.00	89	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
SPT-26	40.50	92	29	0	4	76	15	5	0	0	-	NIL	NP	-	1.89	12.50	1.68	2.62	DST+	0.00	34	-	-	-	-	-	-	-	-	-	-	-	-									
SPT-27	42.00	94	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
SPT-28	43.50	95	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
SPT-29	45.00	97	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
SPT-30	46.50	98	30	0	3	73	18	6	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
SPT-31	48.00	99	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
SPT-32	50.00	>100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length ~42.8 km)”PKG-III						Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)				R.L.	Ref. Code																
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %				Not Encountered		50.00 m	583091.000 m				(+394.614 m	SR-1241_25-26												
								Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)			
		0.00	-	-	Filled Up soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-1	3.00	13	16	Medium Dense to Dense, Brownish Red, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-2	4.50	15	16		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	UDS-1	5.50	-	-		SM		0	16	74	6	2	0	-	NIL	NP	-	1.71	11.14	1.54	2.63	DST	0.00	29	-	-	-	-	-	-	-	-	-	-	-	
	SPT-3	6.00	13	13		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-4	7.50	21	19		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS-2	8.50	-	-		SM		0	13	80	2	1	4	0	-	NIL	NP	-	1.75	11.55	1.57	2.62	DST	0.00	30	-	-	-	-	-	-	-	-	-	-	-
	SPT-5	9.00	25	21		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-6	10.50	27	22		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-7	12.00	34	26		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-8	13.50	39	28		SM		0	14	70	10	2	3	1	-	NIL	NP	-	1.83	12.00	1.63	2.61	DST+	0.00	31	-	-	-	-	-	-	-	-	-	-	-
	SPT-9	15.00	43	29		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-10	16.50	47	30		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-11	18.00	47	29		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”PKG-III						Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)					R.L.	Ref. Code																			
	20-07-2026		to	21-07-2026	P-401		BH-170	Not Encountered		50.00 m		583091.000 m		2961048.000 m		(+394.614 m	SR-1241_25-26																						
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %			Bulk Density (g/cm ³)		Natural Moisture Content (%)		Dry Density (g/cm ³)		Specific Gravity		Shear Strength			Free Swell Index (%)		Swelling Pressure (kg/cm ²)		Permeability (cm/sec)		Consolidation Parameters								
							Sand		Gravel		Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)		Natural Moisture Content (%)		Dry Density (g/cm ³)		Specific Gravity		Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)		Swelling Pressure (kg/cm ²)		Permeability (cm/sec)		Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)			
SPT-12	19.50	56	33	Very Dense, Brownish, Silty Sand	SM																																		
SPT-13	21.00	58	33		-																																		
SPT-14	22.50	67	36		-																																		
SPT-15	24.00	72	37		-																																		
SPT-16	25.50	77	38		SM																																		
SPT-17	27.00	83	39		-																																		
SPT-18	28.50	70	32		-																																		
SPT-19	30.00	75	35		-																																		
SPT-20	31.50	66	30		SM																																		
SPT-21	33.00	73	34		-																																		
SPT-22	34.50	78	36		-																																		
SPT-23	36.00	60	28		SM																																		
SPT-24	37.50	67	31		-																																		
SPT-25	39.00	73	34		-																																		
SPT-26	40.50	79	36		SM																																		
SPT-27	42.00	74	34		-																																		
SPT-28	43.50	83	38	-																																			
SPT-29	45.00	88	40	-																																			
SPT-30	46.50	>100	-	SM																																			
SPT-31	48.00	>100	-	-																																			
SPT-32	49.50	>100	-	-																																			

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)"PKG-III										Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)				R.L.	Ref. Code											
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained							Atterberg Limits %				Depth of Water Table		Termination Depth				Coordinates (E,N)										
								Clay	Silt	Fine	Medium	Coarse	Fine	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ³ /Kg)	Compression Index (C _c)		
	DS-1	0.00	-	-	Filled Up soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS*	2.50	-	-	Loose to Medium Dense, Brownish, Poorly Graded Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-1	3.00	6	7		SP-SM		-	0	9	90	1	0	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-2	4.50	8	9		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS-1	5.50	-	-		SP-SM		-	0	8	89	3	0	0	0	-	NIL	NP	-	1.66	11.18	1.49	2.63	DST+	0.00	28	-	-	-	-	-	-	-	-	-
	SPT-3	6.00	9	9		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-4	7.50	11	10		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS-2	8.50	-	-		SP-SM		-	0	11	86	3	0	0	0	-	NIL	NP	-	1.68	11.45	1.51	2.62	DST+	0.00	29	-	-	-	-	-	-	-	-	-
	SPT-5	9.00	16	14		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-6	10.50	18	15		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-7	12.00	27	21		SP-SM		-	0	6	92	2	0	0	0	-	NIL	NP	-	1.77	12.00	1.58	2.62	DST+	0.00	30	-	-	-	-	-	-	-	-	
	SPT-8	13.50	28	20		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-9	15.00	30	21		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-10	16.50	30	20		SP-SM		-	0	6	70	21	2	1	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-11	18.00	33	21		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-12	19.50	33	20		Dense, Brownish, Clayey Sand	SC		9	23	50	12	4	0	0	29	17	12	-	1.84	14.50	1.61	2.65	DST+	0.09	30	-	-	-	-	-	-	-	-	-
	SPT-13	21.00	36	21	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-14	22.50	38	21	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-15	24.00	40	21	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviations:-
 DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS+ - Undisturbed Sample, UDS* - UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”PKG-III										Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code									
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained							Atterberg Limits %				Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Shear Strength				Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters					
								Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit					Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Void Ratio (e ₀)				Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _y x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)		
SPT-16	25.50	57	29	Very Dense, Brownish, Silty Sand	SM		0	28	60	10	1	0	-	NIL	NP	-	1.85	12.50	1.64	2.62	DST+	0.00	32	-	-	-	-	-	-	-	-	-	-		
SPT-17	27.00	66	32		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-18	28.50	70	32		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-19	30.00	73	34		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-20	31.50	65	30		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-21	33.00	60	28		SM			0	27	70	3	0	0	-	NIL	NP	-	1.86	13.00	1.65	2.62	DST+	0.00	33	-	-	-	-	-	-	-	-	-	-	
SPT-22	34.50	48	22		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-23	36.00	51	23		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-24	37.50	54	25		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-25	39.00	54	25		SM			0	28	60	10	2	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-26	40.50	57	26		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-27	42.00	60	28		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-28	43.50	60	28		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-29	45.00	71	33		SM			0	22	65	8	3	2	0	NIL	NP	-	1.87	12.50	1.66	2.62	DST+	0.00	33	-	-	-	-	-	-	-	-	-	-	-
SPT-30	46.50	95	44		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-31	48.00	>100	-		SM			0	38	52	6	3	1	0	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-32	49.50	>100	-		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todt Mod (Total approximate length -42.8 km)"PKG-III										Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.		Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				Bulk Density (g/cm ³)		Natural Moisture Content (%)		Dry Density (g/cm ³)		Specific Gravity		Shear Strength			Free Swell Index (%)			Swelling Pressure (kg/cm ²)		Permeability (cm/sec)		Consolidation Parameters																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
								Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	DS-1	0.00	-	-	Filled Up Soil consist of Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-</

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SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todt Mod (Total approximate length -42.8 km)"PKG-III										IS Classification	IS Symbol	Soil Description	Corrected SPT Value (N _c)	Grain Size Distribution % wt retained				Atterberg Limits %				Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	Depth from G.L. (m)	Observed SPT Value (N)	SPT Value (N _c)	Clay	Silt	Fine	Medium	Coarse	Gravel						Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)		Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)			C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS+ - Undisturbed Sample, UDS* - UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-III						Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)					R.L.	Ref. Code										
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %				Not Encountered		50.00 m		578977.000 m			2970766.000 m		(+404.752 m)	SR-1241_26-27						
Clay								Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)			Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)
	SPT-14	22.50	51	28	Very Dense, Brownish, Poorly graded Silty Sand	SP-SM		0	10	82	6	1	0	-	Nil	NP	-	1.85	13.00	1.64	2.61	-	-	-	-	-	-	-	-	-		
	SPT-15	24.00	59	31		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-16	25.50	62	31		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-17	27.00	66	31		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-18	28.50	70	32		SP-SM		0	8	85	4	2	1	0	-	Nil	NP	-	1.84	11.50	1.65	2.62	-	-	-	-	-	-	-	-	-	
	SPT-19	30.00	74	34		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-20	31.50	74	34		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-21	33.00	76	35		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-22	34.50	78	36		SP-SM		0	10	82	4	3	1	0	-	Nil	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-23	36.00	81	37		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-24	37.50	83	38		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-25	39.00	84	39	Very Dense, Brownish, Silty Sand	SM		0	34	63	1	1	0	-	Nil	NP	-	1.85	10.50	1.67	2.63	-	-	-	-	-	-	-	-	-	-	
	SPT-26	40.50	86	40		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-27	42.00	89	41		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-28	43.50	91	42		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-29	45.00	95	44		SM		0	27	66	3	2	2	0	-	Nil	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-30	46.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-31	48.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-32	49.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
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SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”PKG-III										Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code							
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained					Atterberg Limits %				Dry Density (g/cm³)		Specific Gravity	Shear Strength			Free Swell Index (%)			Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm²)	C _v x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm²/Kg)	Compression Index (C _c)		
								Clay	Silt	Fine	Medium	Coarse	Fine	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit		Bulk Density (g/cm³)	Natural Moisture Content (%)	Dry Density (g/cm³)	Type of Test	Cohesion C (kg/cm²)	Angle of Friction (φ°)									
	DS-1	0.00	-	-	Filled Up Soil consist of Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	UDS*	2.50	-	-	Loose to Medium Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-1	3.00	6	7		SM		0	22	76	2	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-2	4.50	8	9		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS-1	5.50	-	-		SM		0	19	68	13	0	0	0	0	-	-	1.69	11.66	1.51	2.63	DST	0.00	28	-	-	-	-	-	-	-	-	-	-
	SPT-3	6.00	10	10		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-4	7.50	11	10		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS-2	8.50	-	-		SM		0	23	60	15	2	0	0	0	-	-	1.72	11.85	1.54	2.63	DST	0.00	30	-	-	-	-	-	-	-	-	-	-
	SPT-5	9.00	16	14		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-6	10.50	20	16		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-7	12.00	23	18		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-8	13.50	28	20		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-9	15.00	31	21		SM		0	15	83	2	0	0	0	0	-	-	1.77	12.50	1.57	2.62	DST+	0.00	31	-	-	-	-	-	-	-	-	-	-
	SPT-10	16.50	35	23		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-11	18.00	39	24		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-12	19.50	43	26		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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SOIL CHARACTERISTICS

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								Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)			Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)
	SPT-13	21.00	45	26	Dense to Very Dense, Brownish, Clayey Sand	SC		9	35	48	3	3	0	29	18	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-14	22.50	47	26		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-15	24.00	49	26		SC		10	25	40	3	12	0	30	18	12	-	1.88	15.50	1.63	2.65	DST+	0.09	31	-	-	-	-	-	-	-	
	SPT-16	25.50	52	26		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-17	27.00	54	26		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-18	28.50	56	26		SC		8	28	45	10	4	5	0	27	16	11	-	1.90	16.00	1.64	2.65	DST+	0.11	32	-	-	-	-	-	-	-
	SPT-19	30.00	59	27		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-20	31.50	62	29		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-21	33.00	63	29		SC		9	34	29	8	10	0	28	18	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-22	34.50	66	30		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-23	36.00	69	32		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-24	37.50	72	33	Very Dense, Brownish, Silty Sand	SM		0	18	65	8	2	2	-	NIL	NP	-	1.87	13.50	1.65	2.62	DST+	0.00	34	-	-	-	-	-	-	-	
	SPT-25	39.00	75	35		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-26	40.50	78	36		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-27	42.00	80	37		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-28	43.50	83	38		SM		0	17	70	13	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-29	45.00	87	40		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-30	46.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-31	48.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-32	49.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”PKG-III										Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)				R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				Bulk Density (g/cm ³)		Natural Moisture Content (%)		Dry Density (g/cm ³)		Specific Gravity		Shear Strength				Free Swell Index (%)		Swelling Pressure (kg/cm ²)		Permeability (cm/sec)		Void Ratio (e ₀)				Pressure (kg/cm ²)		C _v x 10 ⁻⁴ (cm ² /Sec)		M _v x 10 ⁻² (cm ² /Kg)		Compression Index (C _p)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
								Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
DS-1	0.00	-	-	-	Filled Up Soil consist of Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

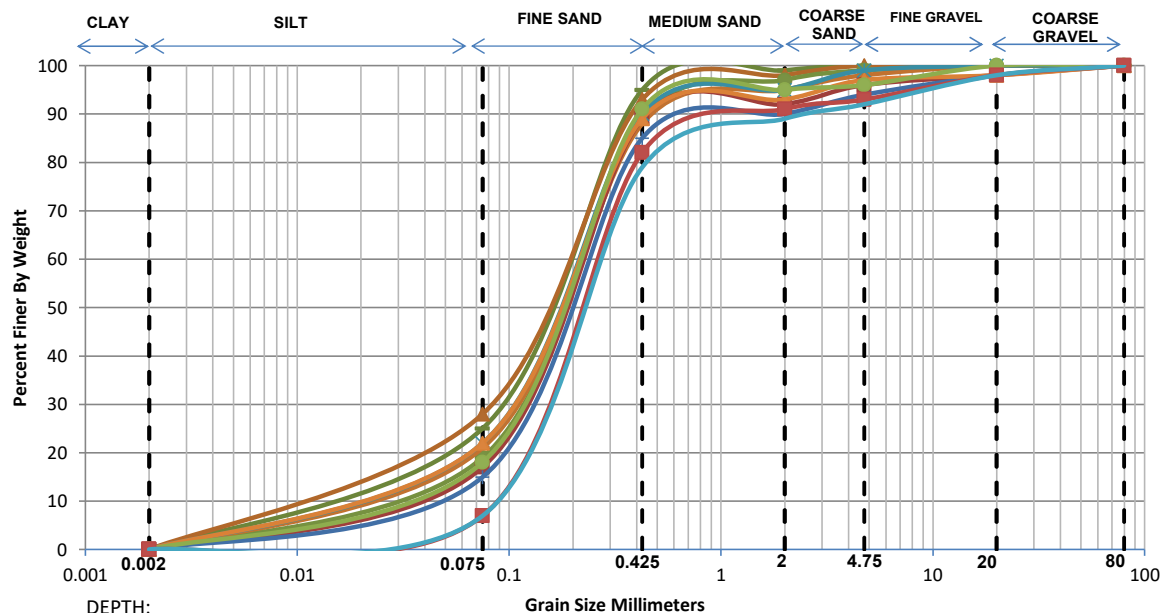
SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”PKG-III										Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)					R.L.	Ref. Code										
	Date of Boring		Not Encountered	50.00 m	579000.000 m		2970954.000 m																									
	30-07-2026	to			02-08-2026	P-459	BH-188																									
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description		IS Classification	IS Symbol	Grain Size Distribution % wt retained					Atterberg Limits %				Void Ratio (e ₀)		Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)										
								Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)				
SPT-14	22.50	53	29	Very Dense, Brownish, Clayey Sand	SC			10	31	45	3	2	9	0	28	17	11	-	1.91	15.50	1.65	2.64	DST+	0.08	32	-	-	-	-			
SPT-15	24.00	57	30		-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-16	25.50	61	30		-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-17	27.00	64	31		-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-18	28.50	68	31		SC				11	17	64	2	1	5	0	29	18	11	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-19	30.00	72	33		-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-20	31.50	77	35		-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-21	33.00	81	37		SC				9	18	60	5	2	6	0	28	17	11	-	1.93	16.00	1.66	2.64	DST+	0.10	33	-	-	-	-		
SPT-22	34.50	84	39		-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-23	36.00	86	40		Very Dense, Brownish, Clayey Sand	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-24	37.50	89	41			-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-25	39.00	92	42			-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-26	40.50	95	44			SC				10	23	55	7	1	4	0	29	18	11	-	1.93	15.50	1.67	2.64	DST+	0.11	33	-	-	-	-	-
SPT-27	42.00	>100	-			-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-28	43.50	>100	-			-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-29	45.00	>100	-			SC				10	11	75	2	1	1	0	30	22	8	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-30	46.50	>100	-	-					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-31	48.00	>100	-	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-32	49.50	>100	-	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-III
Location/Chainage	P-388
B.H. No.	5

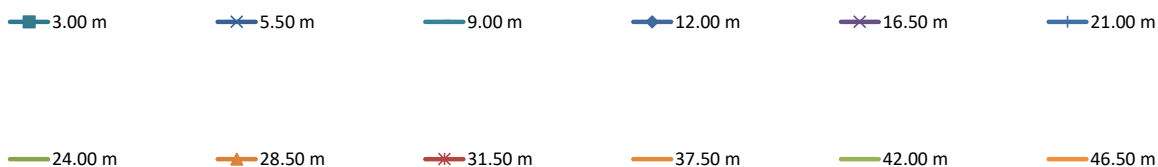
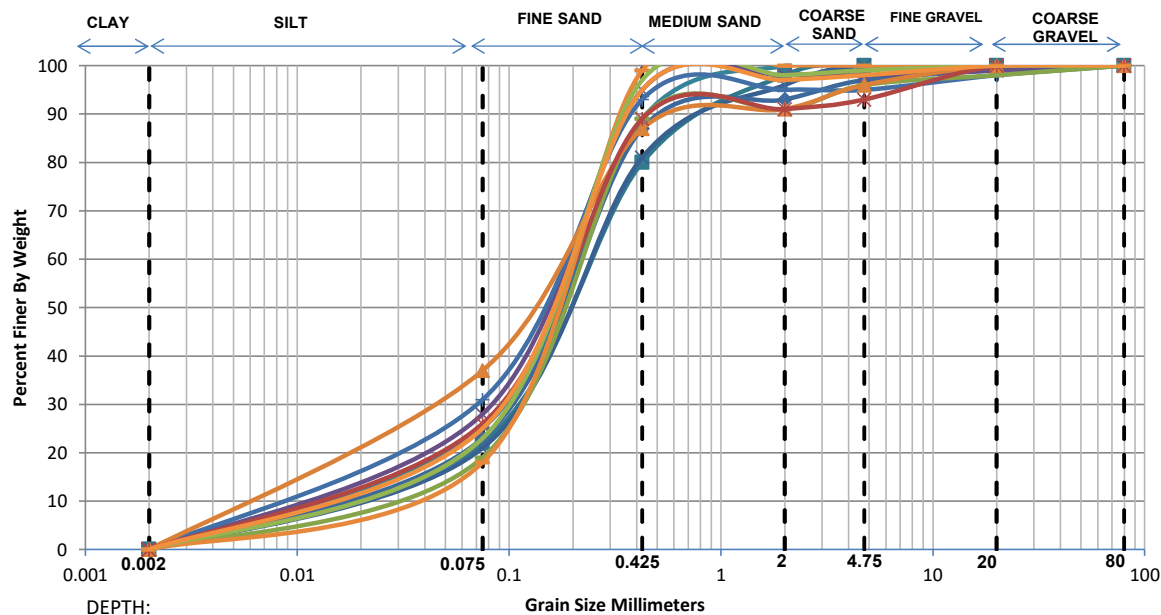


— 3.50 m — 5.50 m — 8.50 m — 12.50 m — 15.50 m — 20.00 m — 23.00 m — 30.50 m — 35.00 m — 42.50 m — 47.00 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.50 m	0.00	25.00	70.00	4.00	1.00	0.00	0.00	0.0188	0.0927	0.1959	10.39	2.33
5.50 m	0.00	28.00	65.00	5.00	2.00	0.00	0.00	0.0152	0.0819	0.1903	12.50	2.32
8.50 m	0.00	19.00	70.00	8.00	2.00	1.00	0.00	0.0305	0.1180	0.2281	7.47	2.00
12.50 m	0.00	21.00	67.00	7.00	3.00	2.00	0.00	0.0255	0.1097	0.2243	8.80	2.11
15.50 m	0.00	17.00	72.00	3.00	4.00	2.00	2.00	0.0370	0.1264	0.2326	6.28	1.86
20.00 m	0.00	22.00	68.00	5.00	4.00	1.00	0.00	0.0235	0.1051	0.2157	9.17	2.18
23.00 m	0.00	15.00	70.00	5.00	4.00	4.00	2.00	0.0451	0.1371	0.2496	5.53	1.67
30.50 m	0.00	22.00	67.00	4.00	4.00	1.00	2.00	0.0235	0.1053	0.2178	9.28	2.17
35.00 m	0.00	18.00	73.00	4.00	1.00	4.00	0.00	0.0337	0.1215	0.2253	6.68	1.94
42.50 m	0.00	7.00	75.00	9.00	2.00	5.00	2.00	0.0934	0.1804	0.2819	3.02	1.24
47.00 m	0.00	7.00	72.00	10.00	3.00	6.00	2.00	0.0939	0.1828	0.2921	3.11	1.22

GRAIN SIZE DISTRIBUTION CURVES

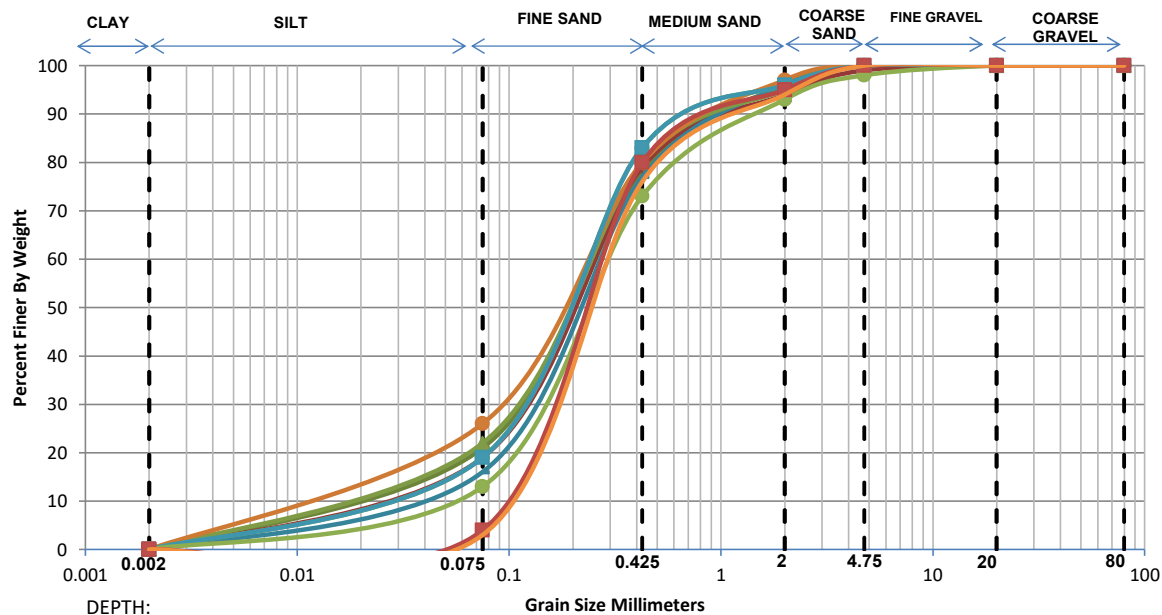
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-III
Location/Chainage	P-393
B.H. No.	5A



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	22.00	58.00	18.00	2.00	0.00	0.00	0.0229	0.1079	0.2513	10.96	2.02
5.50 m	0.00	21.00	60.00	15.00	4.00	0.00	0.00	0.0250	0.1119	0.2491	9.95	2.01
9.00 m	0.00	25.00	64.00	11.00	0.00	0.00	0.00	0.0186	0.0935	0.2105	11.34	2.24
12.00 m	0.00	23.00	64.00	6.00	4.00	2.00	1.00	0.0215	0.1016	0.2204	10.24	2.18
16.50 m	0.00	28.00	67.00	3.00	0.00	1.00	1.00	0.0153	0.0819	0.1860	12.16	2.36
21.00 m	0.00	31.00	62.00	2.00	0.00	3.00	2.00	0.0126	0.0717	0.1795	14.21	2.27
24.00 m	0.00	19.00	70.00	2.00	5.00	2.00	2.00	0.0305	0.1177	0.2263	7.41	2.00
28.50 m	0.00	37.00	50.00	4.00	5.00	4.00	0.00	0.0090	0.0540	0.1711	18.92	1.88
31.50 m	0.00	26.00	63.00	2.00	2.00	7.00	0.00	0.0173	0.0895	0.2045	11.85	2.27
37.50 m	0.00	18.00	81.00	1.00	0.00	0.00	0.00	0.0342	0.1192	0.2101	6.14	1.97
42.00 m	0.00	23.00	74.00	1.00	1.00	1.00	0.00	0.0221	0.0999	0.1979	8.97	2.29
46.50 m	0.00	25.00	70.00	2.00	1.00	2.00	0.00	0.0188	0.0927	0.1953	10.36	2.33

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-III
Location/Chainage	CH-14620
B.H. No.	166

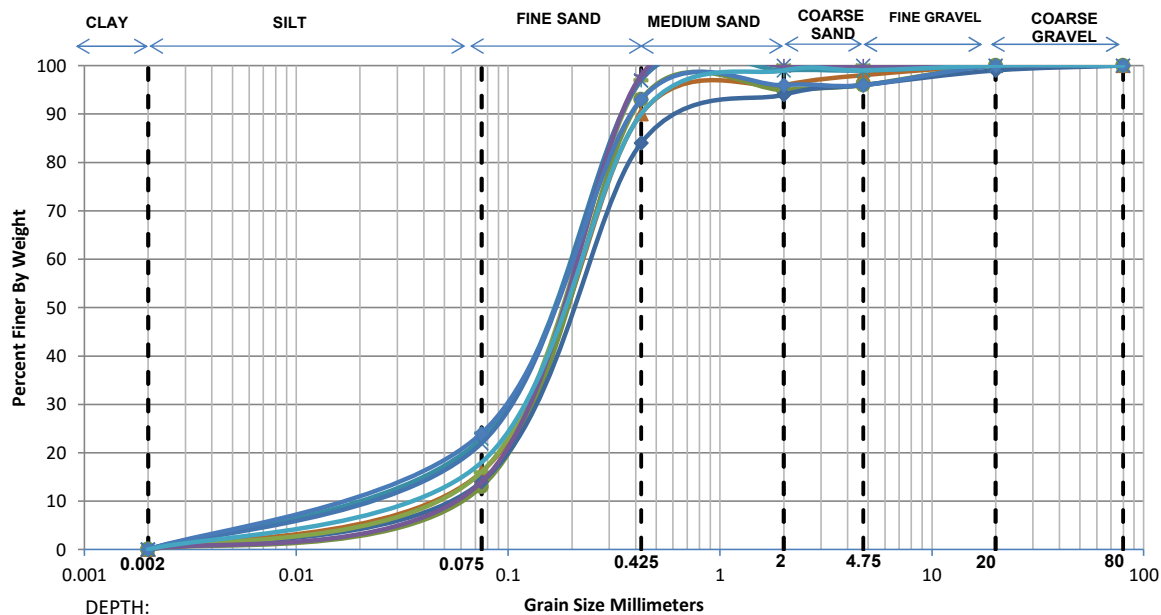


— 2.50 m — 6.00 m — 9.00 m — 15.00 m — 19.50 m — 24.00 m — 27.00 m — 33.00 m — 40.50 m — 46.50 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
2.50 m	0.00	21.00	57.00	18.00	4.00	0.00	0.00	0.0248	0.1130	0.2629	10.59	1.96
6.00 m	0.00	19.00	60.00	15.00	5.00	1.00	0.00	0.0298	0.1218	0.2629	8.81	1.89
9.00 m	0.00	16.00	61.00	19.00	4.00	0.00	0.00	0.0400	0.1375	0.2810	7.03	1.68
15.00 m	0.00	22.00	58.00	15.00	5.00	0.00	0.00	0.0229	0.1077	0.2502	10.92	2.02
19.50 m	0.00	26.00	54.00	17.00	3.00	0.00	0.00	0.0168	0.0906	0.2387	14.20	2.04
24.00 m	0.00	19.00	64.00	13.00	4.00	0.00	0.00	0.0301	0.1201	0.2470	8.20	1.94
27.00 m	0.00	19.00	64.00	13.00	4.00	0.00	0.00	0.0301	0.1201	0.2470	8.20	1.94
33.00 m	0.00	13.00	60.00	20.00	5.00	2.00	0.00	0.0550	0.1558	0.3088	5.62	1.43
40.50 m	0.00	4.00	76.00	15.00	5.00	0.00	0.00	0.1148	0.2010	0.2978	2.59	1.18
46.50 m	0.00	3.00	73.00	18.00	6.00	0.00	0.00	0.1244	0.2119	0.3152	2.53	1.15

GRAIN SIZE DISTRIBUTION CURVES

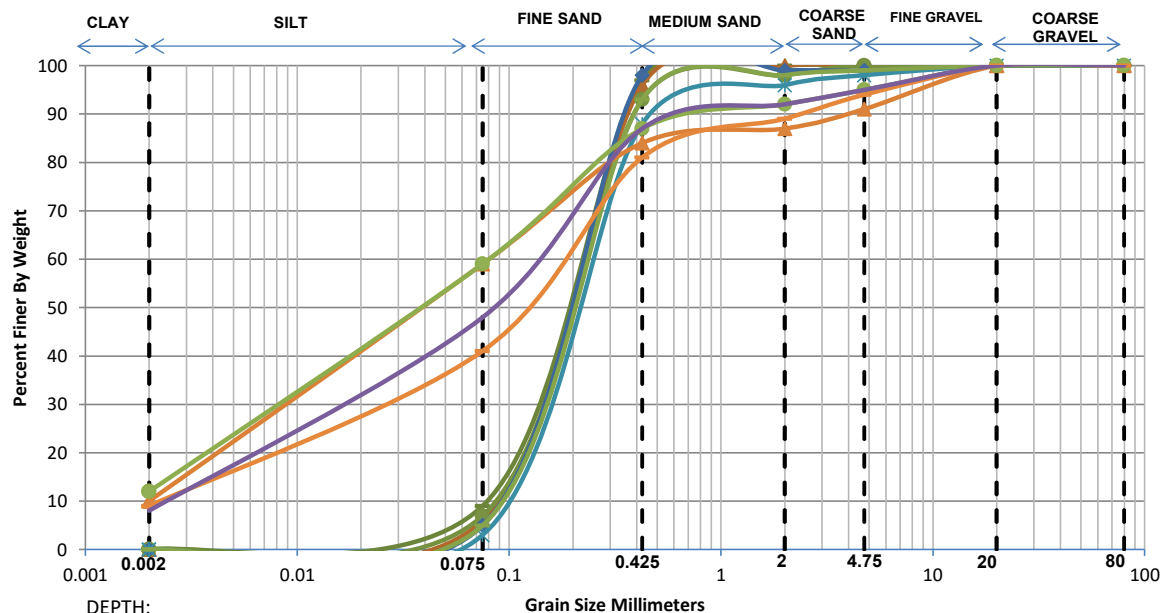
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-III
Location/Chainage	P-401
B.H. No.	170



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
5.50 m	0.00	16.00	74.00	6.00	2.00	2.00	0.00	0.0410	0.1306	0.2341	5.71	1.78
8.50 m	0.00	13.00	80.00	2.00	1.00	4.00	0.00	0.0564	0.1428	0.2357	4.18	1.53
13.50 m	0.00	14.00	70.00	10.00	2.00	3.00	1.00	0.0501	0.1428	0.2569	5.13	1.58
19.50 m	0.00	23.00	74.00	2.00	0.00	1.00	0.00	0.0221	0.1000	0.1982	8.98	2.29
25.50 m	0.00	16.00	81.00	3.00	0.00	0.00	0.00	0.0415	0.1281	0.2198	5.30	1.80
31.50 m	0.00	22.00	75.00	3.00	0.00	0.00	0.00	0.0239	0.1038	0.2015	8.42	2.24
36.00 m	0.00	14.00	84.00	2.00	0.00	0.00	0.00	0.0511	0.1364	0.2241	4.39	1.63
40.50 m	0.00	24.00	69.00	3.00	0.00	4.00	0.00	0.0202	0.0967	0.2025	10.01	2.29
46.50 m	0.00	18.00	72.00	9.00	0.00	1.00	0.00	0.0336	0.1220	0.2290	6.81	1.93

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-III
Location/Chainage	P-442
B.H. No.	183

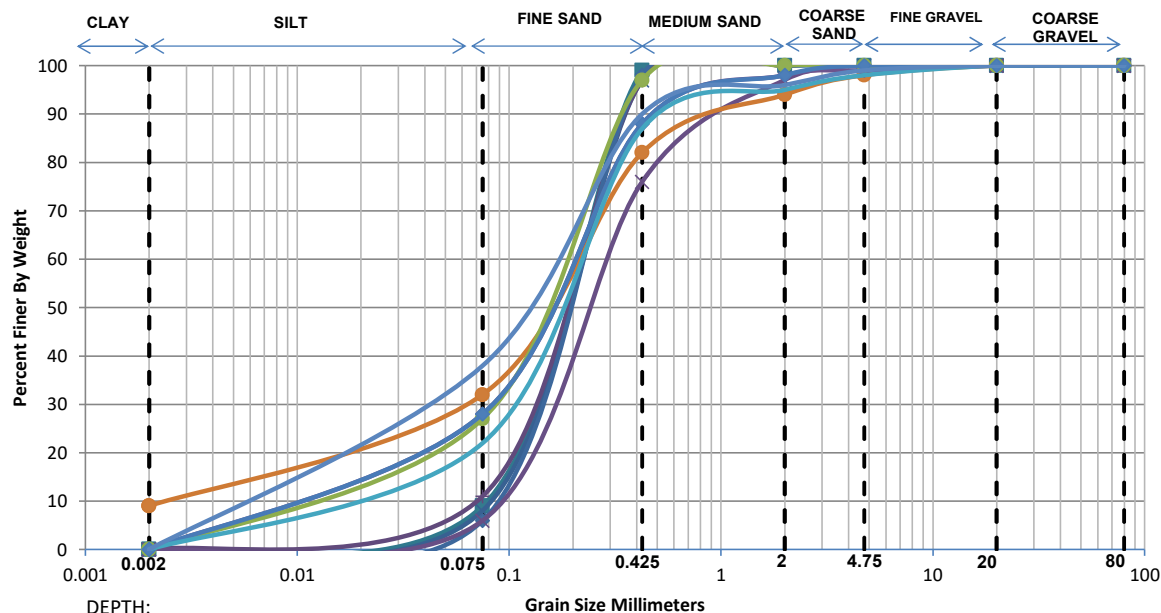


— 3.00 m — 5.50 m — 8.50 m — 13.50 m — 19.50 m — 25.50 m — 30.00 m — 34.50 m — 39.00 m — 45.00 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	9.00	88.00	3.00	0.00	0.00	0.00	0.0803	0.1601	0.2414	3.01	1.32
5.50 m	0.00	6.00	90.00	4.00	0.00	0.00	0.00	0.0972	0.1763	0.2529	2.60	1.26
8.50 m	0.00	7.00	86.00	5.00	2.00	0.00	0.00	0.0918	0.1728	0.2549	2.78	1.28
13.50 m	0.00	5.00	93.00	1.00	0.00	1.00	0.00	0.1028	0.1804	0.2526	2.46	1.25
19.50 m	0.00	3.00	85.00	8.00	2.00	2.00	0.00	0.1190	0.1998	0.2781	2.34	1.21
25.50 m	0.00	5.00	88.00	5.00	1.00	1.00	0.00	0.1040	0.1839	0.2613	2.51	1.24
30.00 m	10.00	49.00	25.00	3.00	4.00	9.00	0.00	0.0020	0.0180	0.0781	39.03	2.08
34.50 m	12.00	47.00	28.00	5.00	3.00	5.00	0.00	-	0.0162	0.0780	-	-
39.00 m	9.00	32.00	40.00	8.00	5.00	6.00	0.00	0.0025	0.0389	0.1764	71.15	3.46
45.00 m	8.00	40.00	39.00	5.00	3.00	5.00	0.00	0.0030	0.0294	0.1269	41.80	2.25

GRAIN SIZE DISTRIBUTION CURVES

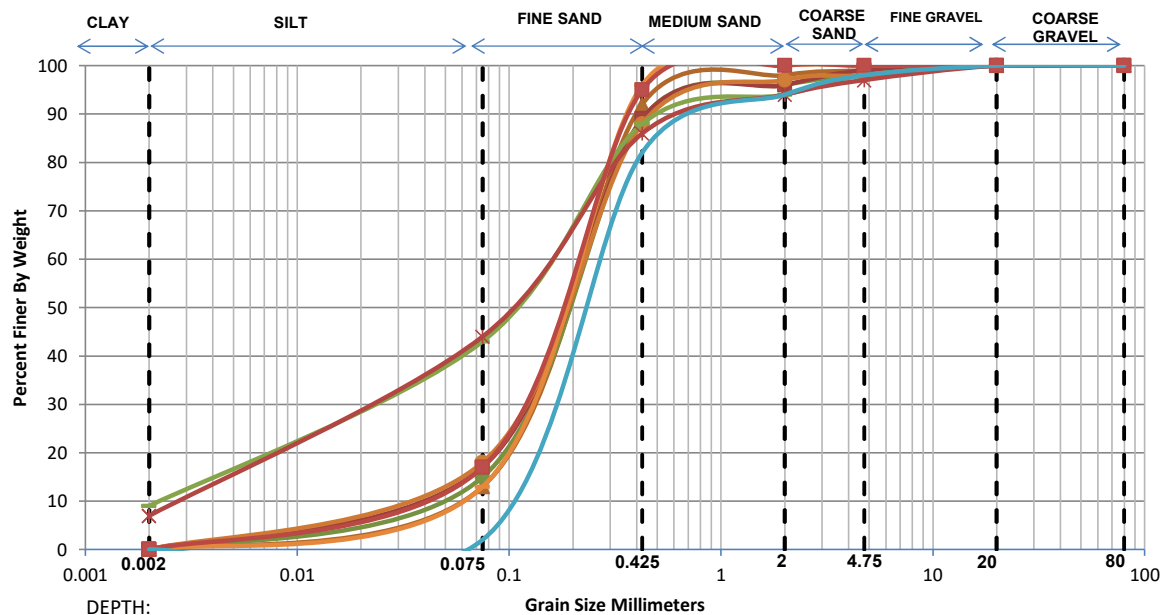
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-III
Location/Chainage	P-445
B.H. No.	184



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	9.00	90.00	1.00	0.00	0.00	0.00	0.0802	0.1590	0.2380	2.97	1.33
5.50 m	0.00	8.00	89.00	3.00	0.00	0.00	0.00	0.0857	0.1652	0.2446	2.85	1.30
8.50 m	0.00	11.00	86.00	3.00	0.00	0.00	0.00	0.0691	0.1505	0.2351	3.40	1.39
12.00 m	0.00	6.00	92.00	2.00	0.00	0.00	0.00	0.0969	0.1750	0.2495	2.57	1.27
16.50 m	0.00	6.00	70.00	21.00	2.00	1.00	0.00	0.1015	0.1930	0.3092	3.05	1.19
19.50 m	9.00	23.00	50.00	12.00	4.00	2.00	0.00	0.0026	0.0662	0.2133	82.04	7.91
25.50 m	0.00	28.00	60.00	10.00	1.00	1.00	0.00	0.0150	0.0822	0.2030	13.52	2.22
33.00 m	0.00	27.00	70.00	3.00	0.00	0.00	0.00	0.0164	0.0853	0.1859	11.31	2.38
39.00 m	0.00	28.00	60.00	10.00	2.00	0.00	0.00	0.0150	0.0822	0.2030	13.52	2.22
45.00 m	0.00	22.00	65.00	8.00	3.00	2.00	0.00	0.0234	0.1058	0.2242	9.60	2.14
48.00 m	0.00	38.00	52.00	6.00	3.00	1.00	0.00	0.0087	0.0518	0.1613	18.52	1.91

GRAIN SIZE DISTRIBUTION CURVES

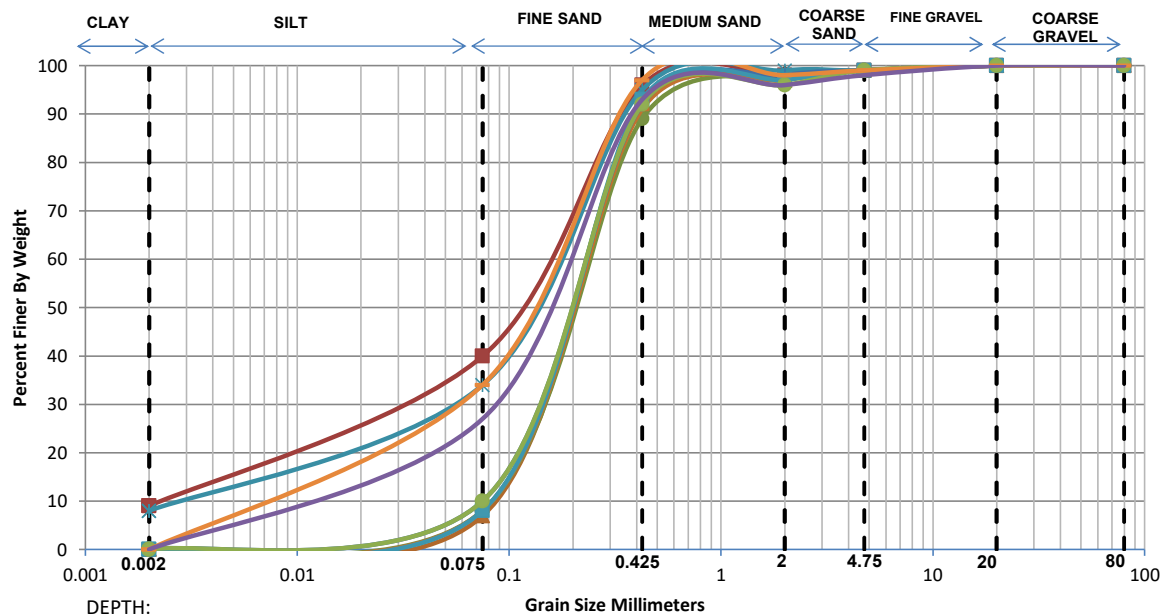
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-III
Location/Chainage	P-448
B.H. No.	185



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
5.50 m	0.00	13.00	79.00	6.00	1.00	1.00	0.00	0.0563	0.1435	0.2387	4.24	1.53
8.50 m	0.00	15.00	74.00	7.00	2.00	2.00	0.00	0.0454	0.1356	0.2397	5.28	1.69
15.00 m	0.00	17.00	72.00	7.00	3.00	1.00	0.00	0.0370	0.1266	0.2338	6.32	1.85
21.00 m	0.00	18.00	70.00	9.00	1.00	2.00	0.00	0.0335	0.1227	0.2339	6.98	1.92
25.50 m	9.00	34.00	45.00	6.00	4.00	2.00	0.00	0.0025	0.0357	0.1489	60.30	3.47
33.00 m	7.00	37.00	42.00	8.00	3.00	3.00	0.00	0.0039	0.0359	0.1479	37.80	2.23
39.00 m	0.00	13.00	83.00	4.00	0.00	0.00	0.00	0.0566	0.1417	0.2308	4.08	1.54
42.00 m	0.00	17.00	78.00	5.00	0.00	0.00	0.00	0.0374	0.1246	0.2207	5.90	1.88
46.50 m	0.00	2.00	80.00	12.00	4.00	2.00	0.00	0.1293	0.2121	0.2965	2.29	1.17

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-III
Location/Chainage	P-452
B.H. No.	186

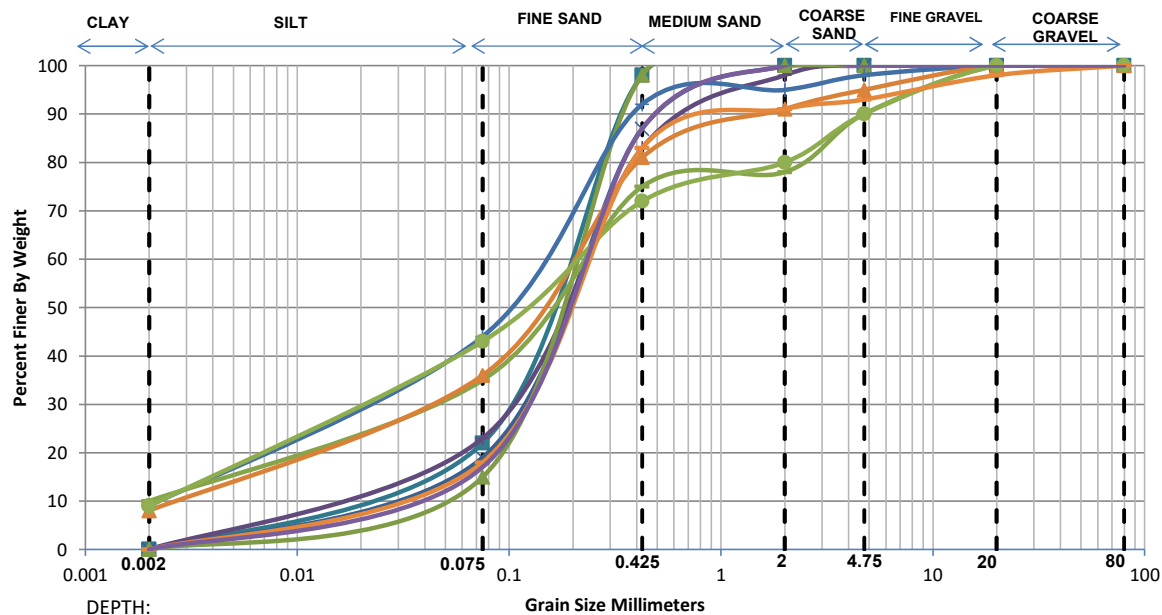


— 5.50 m — 8.50 m — 12.00 m — 15.00 m — 19.50 m — 22.50 m — 28.50 m — 34.50 m — 39.00 m — 45.00 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
5.50 m	0.00	7.00	85.00	5.00	2.00	1.00	0.00	0.0919	0.1734	0.2567	2.79	1.27
8.50 m	0.00	8.00	81.00	9.00	1.00	1.00	0.00	0.0864	0.1702	0.2608	3.02	1.29
12.00 m	0.00	8.00	83.00	6.00	2.00	1.00	0.00	0.0862	0.1687	0.2558	2.97	1.29
15.00 m	9.00	31.00	56.00	2.00	1.00	1.00	0.00	0.0025	0.0423	0.1484	59.43	4.83
19.50 m	8.00	26.00	61.00	4.00	0.00	1.00	0.00	0.0035	0.0598	0.1719	49.45	5.98
22.50 m	0.00	10.00	82.00	6.00	1.00	1.00	0.00	0.0750	0.1579	0.2478	3.30	1.34
28.50 m	0.00	8.00	85.00	4.00	2.00	1.00	0.00	0.0860	0.1674	0.2515	2.92	1.30
34.50 m	0.00	10.00	82.00	4.00	3.00	1.00	0.00	0.0750	0.1578	0.2472	3.30	1.34
39.00 m	0.00	34.00	63.00	1.00	1.00	1.00	0.00	0.0108	0.0626	0.1626	15.06	2.23
45.00 m	0.00	27.00	66.00	3.00	2.00	2.00	0.00	0.0163	0.0855	0.1929	11.86	2.33

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-III
Location/Chainage	P-456
B.H. No.	187

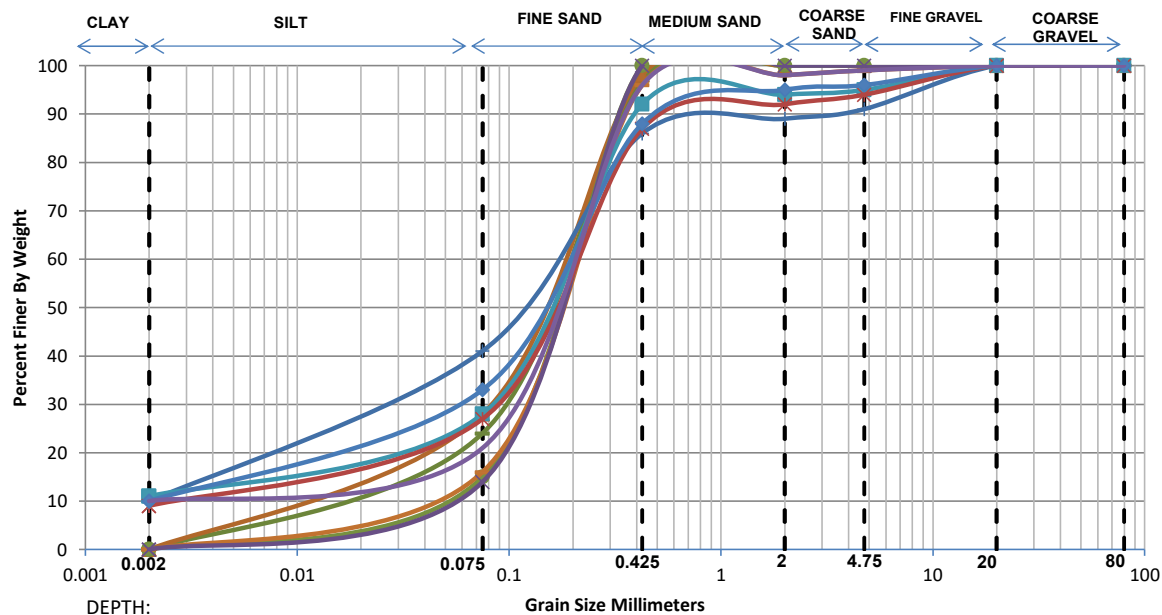


■ 3.00 m
 × 5.50 m
 + 8.50 m
 ▲ 15.00 m
 + 21.00 m
 — 24.00 m
 ▲ 28.50 m
 — 33.00 m
 — 37.50 m
 — 43.50 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	22.00	76.00	2.00	0.00	0.00	0.00	0.0240	0.1036	0.1997	8.33	2.24
5.50 m	0.00	19.00	68.00	13.00	0.00	0.00	0.00	0.0304	0.1188	0.2348	7.72	1.98
8.50 m	0.00	23.00	60.00	15.00	2.00	0.00	0.00	0.0213	0.1027	0.2358	11.07	2.10
15.00 m	0.00	15.00	83.00	2.00	0.00	0.00	0.00	0.0460	0.1320	0.2210	4.80	1.71
21.00 m	9.00	35.00	48.00	3.00	3.00	2.00	0.00	0.0025	0.0343	0.1377	55.86	3.47
24.00 m	10.00	25.00	40.00	3.00	12.00	10.00	0.00	0.0020	0.0537	0.2288	#####	6.30
28.50 m	8.00	28.00	45.00	10.00	4.00	5.00	0.00	0.0033	0.0524	0.1993	59.81	4.13
33.00 m	9.00	34.00	29.00	8.00	10.00	10.00	0.00	0.0025	0.0343	0.2116	85.99	2.26
37.50 m	0.00	18.00	65.00	8.00	2.00	5.00	2.00	0.0331	0.1244	0.2482	7.49	1.88
43.50 m	0.00	17.00	70.00	13.00	0.00	0.00	0.00	0.0369	0.1277	0.2407	6.53	1.84

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-III
Location/Chainage	P-459
B.H. No.	188

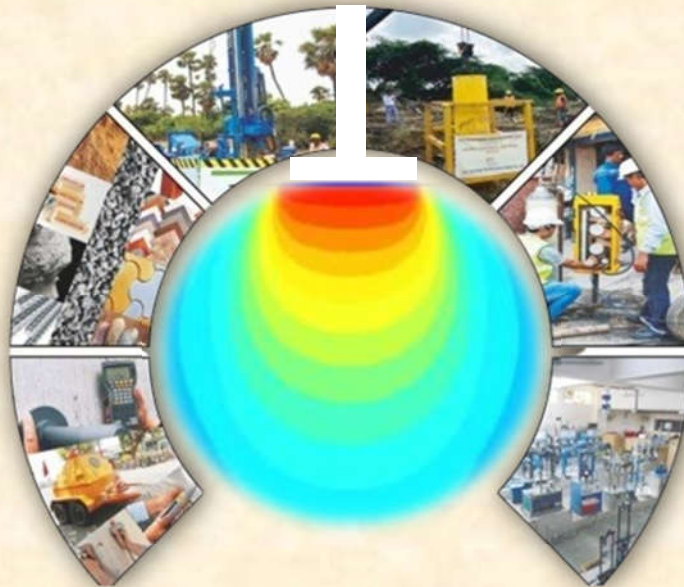


Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	24.00	73.00	3.00	0.00	0.00	0.00	0.0204	0.0962	0.1953	9.57	2.32
5.50 m	0.00	28.00	70.00	2.00	0.00	0.00	0.00	0.0154	0.0818	0.1810	11.74	2.40
8.50 m	0.00	15.00	85.00	0.00	0.00	0.00	0.00	0.0462	0.1492	0.3099	6.71	1.56
12.00 m	0.00	16.00	80.00	2.00	1.00	1.00	0.00	0.0414	0.1284	0.2212	5.34	1.80
18.00 m	0.00	14.00	86.00	0.00	0.00	0.00	0.00	0.0512	0.1553	0.3138	6.13	1.50
22.50 m	10.00	31.00	45.00	3.00	2.00	9.00	0.00	0.0020	0.0383	0.1614	80.69	4.55
28.50 m	11.00	17.00	64.00	2.00	1.00	5.00	0.00	-	0.0844	0.2016	-	-
33.00 m	9.00	18.00	60.00	5.00	2.00	6.00	0.00	0.0028	0.0889	0.2146	77.31	13.26
40.50 m	10.00	23.00	55.00	7.00	1.00	4.00	0.00	0.0020	0.0621	0.1913	95.67	10.08
45.00 m	10.00	11.00	75.00	2.00	1.00	1.00	0.00	0.0020	0.1183	0.2194	#####	31.88

SR-1241

“Geotech Investigation work for Jaipur Metro
Ph-II Project from Prahladpura to Todi Mod
(Total approximate length -42.8 km)”

PKG-III



Submitted to:
Delhi Metro Rail Corporation Ltd



TC-10943
NABL Accredited
Both Field & Lab Tests

CEG Test House and Research Centre Pvt. Ltd.
B-11(G), Malviya Industrial Area, Jaipur-302017
Tel.: 91-141-4046599, Fax: 91-141-2751806
E-mail: info@cegtesthouse.com.
www.cegtesthouse.com

SR-1241

“Geotech Investigation work for Jaipur Metro
Ph-II Project from Prahladpura to Todi Mod
(Total approximate length -42.8 km)”

PKG-III

SR. No.	Report Ref. No.	Revision No.	Date
1241_25-26	CEGTH/DMRC/SR-1241/2026-27/344_03 BHs	00	10.08.2026

Submitted to:
Delhi Metro Rail Corporation Ltd



TC-10943
NABL Accredited
Both Field & Lab Tests

CEG Test House and Research Centre Pvt. Ltd.
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E-mail: info@cegtesthouse.com
www.cegtesthouse.com

CEGTH/DMRC/SR-1241/2026-27/344

Date:- 10.08.2026

To,

Project Director/Jaipur-II, DMRC
Office of Chief Project Manager-8
Opposite Frank Anthony Public School
Lala Lajpat Rai Marg, Lajpat Nagar-IV
New Delhi - 110024

Subject :- “Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi
Mod (Total approximate length -42.8 km)”**PKG-III**

Dear Sir,

We are pleased to submit this report of 03 boreholes (BH-167 to BH-169) carried out for the proposed project.

The accompanying report presents results of field tests and laboratory tests conducted on selected soil and rock samples ,their interpretation and foundation recommendations.

Should there be any clarifications regarding the contents please contact us at your most convenient time.

We value the opportunity to participate in this project and look forward a pleasant association on future projects.

Very truly yours,
CEG Test House & Research Centre Pvt. Ltd.

Nehal Jain
Sr. General Manager, Geotechnical
Authorized Signatory

Prepared By:-

Pratibha Bagaria
Sr Geotechnical Engineer



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Both Field & Lab Tests

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E-mail: info@cegtesthouse.com., www.cegtesthouse.com

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1.2	SCOPE OF WORK	1-2
CHAPTER 2 DETAILS OF SITE AND GENERAL GEOLOGICAL HISTORY		
2.1	SITE LOCATION	3
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CHAPTER 1 GENERAL

1.1 INTRODUCTION:

The work of “**Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)**” was awarded to CEG Test House & Research Centre Pvt. Ltd. by **Delhi Metro Rail Corporation Ltd.,,**

Field work including drilling of boreholes and sample collection covered in this report was carried out in the presence of Client’s Engineer. Laboratory tests were conducted on selected soil samples to determine the design parameters, confirming to relevant specifications and the guidelines received from the client.

This report includes the details of methodology of investigation, collection of soil samples, laboratory test results, analysis of results and recommendations for results for proposed structures based on Soil samples collected from the Borelog locations.

1.2 SCOPE OF WORK:

- Mobilisation of necessary plant equipments, men and materials for the geotechnical investigation work as per specifications, drawings and instructions of the engineer, shifting of the equipment from one test location to another location to complete the entire field work within the stipulated time schedule and demobilization after completion of field work.
- Making 150 mm nominal diameter boreholes at various locations upto 45.00m depth below the natural ground level in all types of soil using suitable approved method of boring including chiselling, cleaning, providing casing pipe as required or as directed by the engineer.
- Performing Standard Penetration Tests at every 1.5 m interval and at every change of strata.
- Collecting undisturbed or disturbed soil samples at every 3.0 m interval and at every change of strata. Recording of ground water table and collecting water samples for conducting chemical analysis in the laboratory.
- Recording of ground water table and collecting water samples for conducting chemical analysis in the laboratory.
- Transporting all the collected soil samples to the laboratory.
- Conducting various laboratory tests on selected soil samples at CEGTH NABL accredited laboratory including preparation of samples to determine the following properties all complete as per specification :

On soil Samples

- Dry density test
- Bulk Density and Moisture Content.

- Specific gravity
- Sieve Analysis (Mechanical) with Hydrometer Classification
- Liquid Limit, Plastic Limit and Shrinkage Limit
- Direct Shear Test
- Triaxial Shear Test
- Chemical Analysis of soil samples (pH, chloride, Sulphate)

The details of borehole locations and general geology of site location describe in **Chapter 2**.

CHAPTER 2 DETAILS OF SITE AND GENERAL GEOLOGICAL HISTORY

2.1 SITE LOCATION:

The locations of 03 boreholes were marked on the ground as per the layout given by the Engineer. These locations are shown in **Fig 3**. The details of various boreholes locations along with their co-ordinates are provided in table 2.1.

The details of the site and test locations for the proposed project are shown in location plan in Fig 3. The site of proposed project is located at **Jaipur** in the State of **Rajasthan** falls in seismic zone – II (Zone factor=0.10) of India.

Table 2.1: Details of Borehole Locations & Test Locations

S.No	BH.No	Depth of Water Table below EGL (m)	Depth of Borehole below EGL(m)	Co-ordinates (m)	
				E	N
1.	BH-167 (P396)	Not Encountered	50.00	578873.000	2968980.000
2.	BH-168 (P400)	Not Encountered	50.00	578846.000	2969085.000
3.	BH-169(B2 Bypass station (Airport to Todi mod)	Not Encountered	50.00	578872.000	2969148.000

2.2 GENERAL GEOLOGY

2.2.1 LOCATION

The study area is located within the eastern margin of the Aravalli Craton in Jaipur, Rajasthan, forming a part of the northwestern Indian Shield. The geology of the region is predominantly characterized by Precambrian rock formations comprising quartzites, schists, phyllites, granites, and gneisses, which are generally hard, compact, and crystalline in nature. The area also contains occurrences of alluvial deposits in low-lying zones. The regional topography is undulating, with elevation generally ranging from approximately 400 meters to 600 meters above Mean Sea Level.

2.2.2 CLIMATE

The project area, located in Jaipur district of Rajasthan, experiences a semi-arid climate characterized by extremely hot summers, mild winters, and a short monsoon season. Temperatures generally range from approximately 5°C in winter to 45°C during peak summer months, with May and June being the hottest period. The region receives an average annual rainfall of about 500 to 700 mm, mainly during the southwest monsoon from July to September. Relative humidity remains low for most of

the year, increasing during the monsoon season. Wind conditions are generally dry and moderate, with occasional dust storms during summer. These climatic conditions play an important role in geotechnical aspects such as foundation design, groundwater fluctuation, drainage planning, and construction scheduling.

2.2.3 GEOLOGY

“The subsurface conditions at the Jaipur location are predominantly composed of sandy silt, silty sand, and clayey soil with varying proportions of gravel and weathered rock fragments. The upper strata generally exhibit moderate weathering and loose to medium dense soil conditions, underlain by residual soils derived from quartzite, schist, and granite gneiss formations of the Aravalli terrain. The weathered zone gradually transitions into comparatively competent geological formations at greater depths, with occasional joints and fractures observed in the parent material.”

The Geological formation of the Rajasthan is as follows:

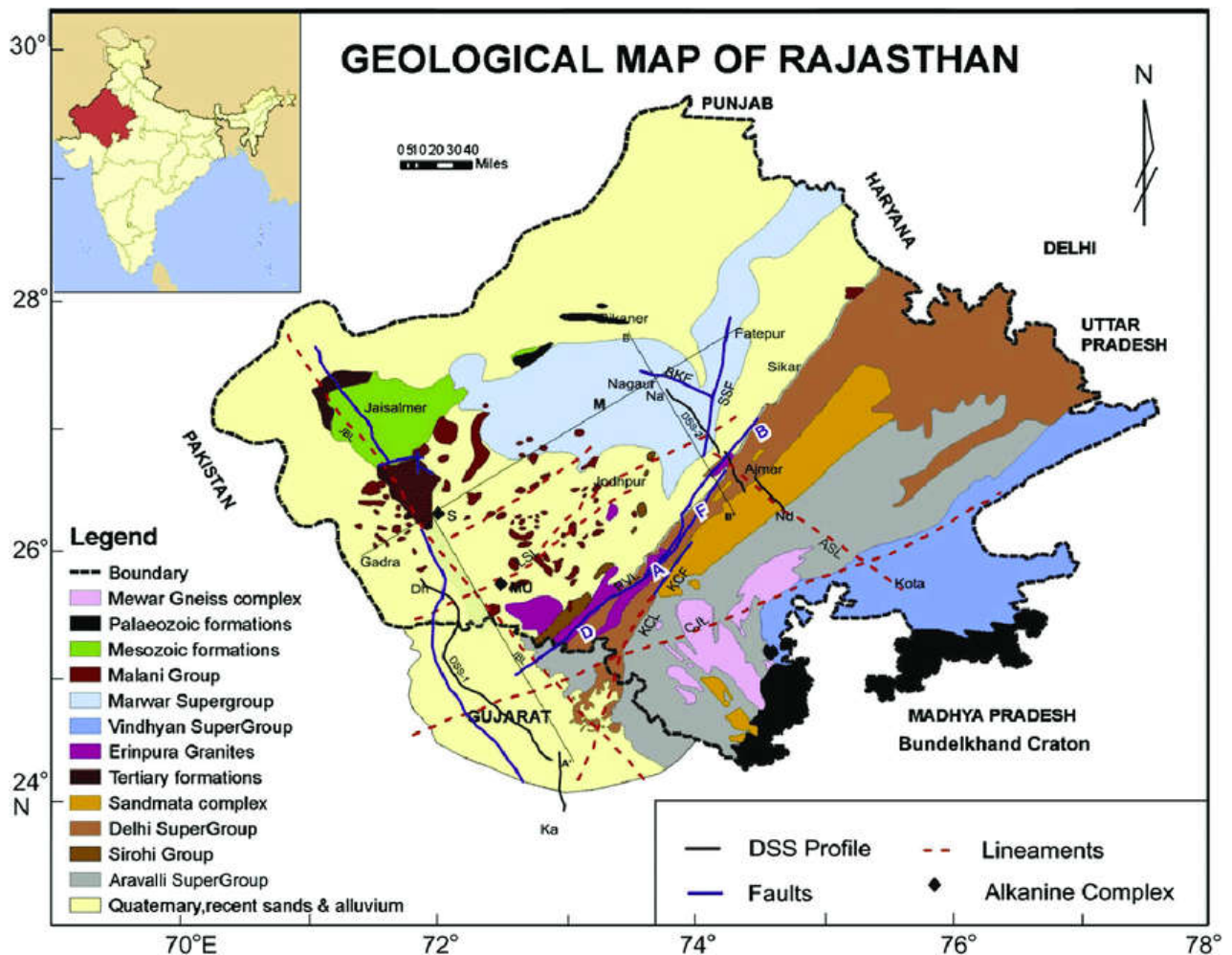


Fig. 1: Geological map of Rajasthan

2.2.4 Seismicity

The site of proposed project is located at **Jagatpura, Jaipur** in the State of **Rajasthan** falls in seismic zone – II (Zone factor=0.10) of India as per Is : 1893 (Part-1)-2016.

Seismicity Map of India is shown below:-

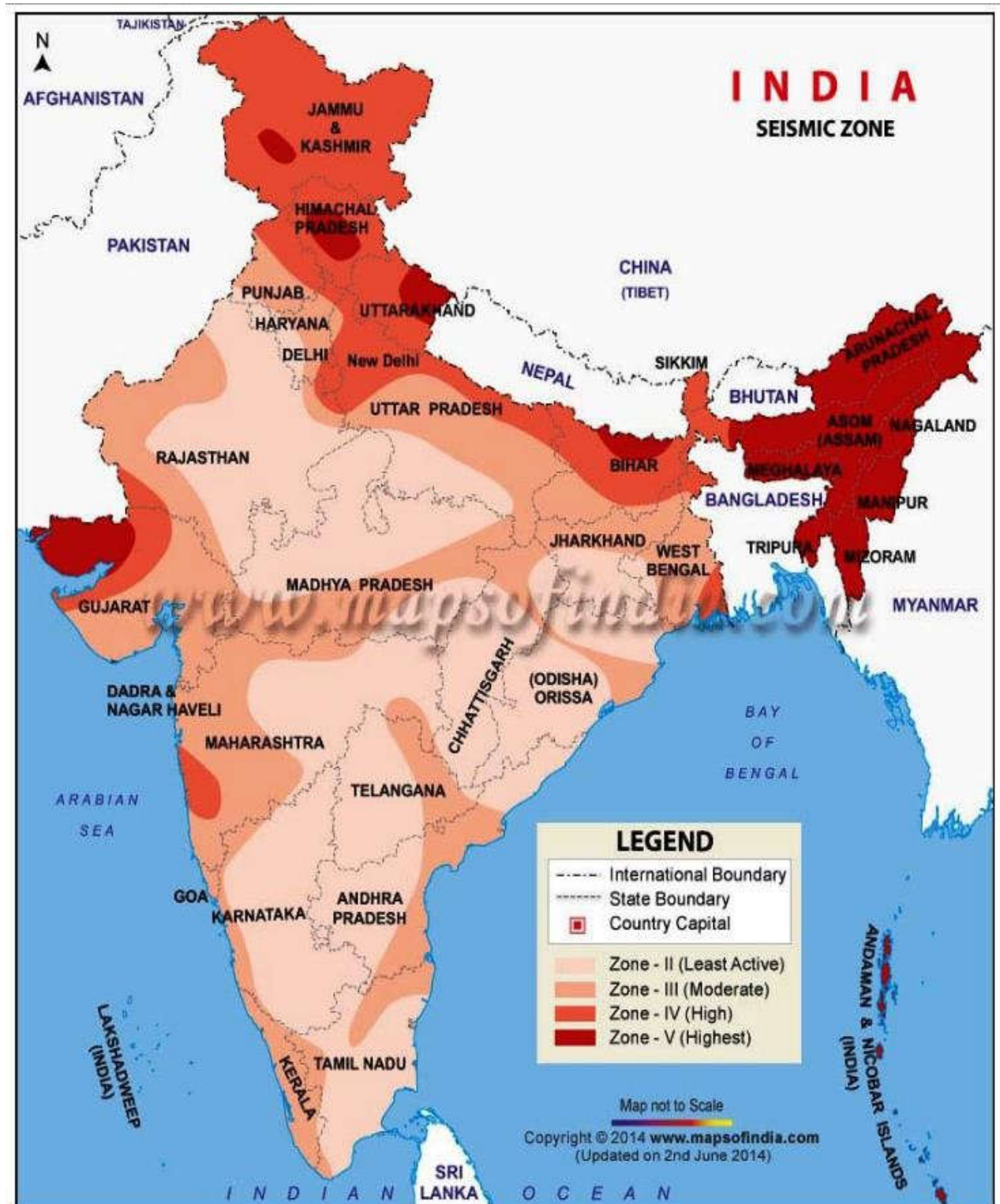


Fig. 2: Seismicity Map of India

CHAPTER 3 FIELD AND LABORATORY TEST PROCEDURE

3.1 FIELD INVESTIGATION:

For geotechnical investigation work, hydraulic or mechanical drilling rigs were installed at the specified borehole locations along with the required men and machineries for conducting the requisite field work. The equipment was relocated from one test site to another during the fieldwork, and was demobilized upon the satisfactory completion of each respective borehole.

For conducting the field investigations the following practices were followed at site:

- In soil, boreholes of 150 mm dia. were drilled as per the standard procedure laid in IS: 1892. Wherever rocky strata was encountered before achieving the required depth below E.G.L., bore holes were further extended beyond refusal through soft and hard rock using Hydraulic drilling Rigs with Nx size double tube core barrel or diamond bits upto required depth below the EGL and were terminated as per the instruction of Engr. in-charge.
- Borehole was properly cleaned before taking any sample in soil.
- Standard Penetration Tests and collection of undisturbed or disturbed soil samples were carried out as per the specification IS: 2131 and IS: 2132. The same has been discussed in detail in soil and Rock characteristics attached with the report.
- Ground water table was measured as per IS: 6935-1973. The depth of ground water level was to be measured after 24 hours of completion of borehole.

3.1.1 IN SOIL STRATA

(i) Standard Penetration Test

The Standard Penetration Tests were conducted in boreholes as per IS 2131. Each test was carried out using the standard split spoon sampler carrying manual hammer to measure the number of blows ‘N’.

Standard split spoon sampler was attached to an ‘A’ rod. It was driven from borehole bottom to a distance of 45 cm using a standard hammer of 63.5 kg falling freely from a height of 75 cm to the required depth. While driving, the number of blows required to penetrate every 15 cm are recorded. The total number of blows required for the last 30 cm is taken as ‘N’ value at that particular depth of the borehole. Wherever the total penetration was less than 45cm, the no. of blows & the depth penetrated is recorded in the respective borelog.

SPT ‘N’ values were correlated with relative density of non-cohesive stratum and with consistency of cohesive stratum as given below:-

Table 3.1: Soil compactness as per SPT N values

Correlation for Clay / Plastic silt		Correlation for Sand / Non-Plastic silt	
Consistency	Penetration Value (N)	Compactness	Penetration Value (N)
Very Soft	0 - 2	Very Loose	0 - 4
Soft	2 - 4	Loose	4 - 10
Medium	4 - 8	Medium	10 - 30
Stiff	8 - 15	Dense	30 - 50
Very Stiff	15 - 30	Very Dense	> 50
Hard	> 30		

(ii) The field SPT N values were corrected as per the guidelines given in IS: 2131 as follows:

(a) For overburden: - The N value for cohesionless soil is corrected with the help of fig. 1 given in IS-2131.

(b) Due to dilatancy :- Wherever N values observed below water table in fine sand, silty sand or silt was greater than 15, then corrected N values were corrected as under:

$$N' = 15 + \frac{1}{2} (N-15)$$

(iii) Disturbed Sampling (Soil) in boreholes

Disturbed soil samples each weighing approx. 1kg. were collected starting from a depth of 0.5m depth below EGL and at every identifiable change of strata. Samples were immediately sealed, labeled and carefully transported to the laboratory for testing.

(iv) Undisturbed Sampling (Soil) in boreholes

Undisturbed samples were collected at 3.0 m intervals using 100 mm diameter and 450 mm long MS tubes with Area ratio as specified as per clause 4.1.1 (c) of IS: 1892 (latest) provided with sampler head with ball and socket arrangement. Before taking any sample, sampling tube was properly greased. Immediately after taking on undisturbed sample in a tube, the adopter head was removed along with the disturbed material. The visible ends of the sample were trimmed off any wet disturbed soil. The ends were coated alternately with four layers of just molten wax. More molten wax was added to give a total thickness of min. 25 mm. The samples were carefully labeled and transported to the laboratory for testing. Undisturbed samples wherever slipped during lifting were duly marked in the field logs as well as in the soil profile.

3.1.2 GROUND WATER TABLE DEPTH

During the field investigation conducted in June July 2026, the groundwater table was not encountered in any of the borehole locations.

3.2 LABORATORY INVESTIGATIONS:

i. Laboratory Tests For Soil Samples

Summary of various laboratory test conducted on selected Undisturbed/Disturbed is given below:

Table 3.4: Description of Tests on Soil Samples

Description of Test	Reference	Undisturbed (UDS) Soil Samples	Disturbed (DS/SPT) Soil Samples
Grain Size Analysis / Hydrometer	IS: 2720 (Part - 4)	✓	✓
Natural Moisture Content / Bulk / Dry density	IS : 2720 (Part – 2)	✓	-
Atterberg Limits - Liquid Limit - Plastic Limit - Shrinkage Limit	IS: 2720 (Part - 5) IS: 2720 (Part - 5) IS: 2720 (Part - 6)	✓ ✓ -	✓ ✓ -
Specific Gravity	IS : 2720 (Part – 3)	✓	✓
Direct Shear Test	IS : 2720 (Part – 13)	✓	✓
Triaxial compressive shear test	IS : 2720 (Part – 11)	✓	✓
Chemical Analysis of Soil Samples	IS : 2720 (Part – 22, 26, 27)	✓	-

ii. Grain Size Analysis:

The Grain Size analysis test were performed in accordance with IS 2720 (Part 4) – 1965. For this test an oven dry pulverized soil sample is sieved through the set of sieves 19mm, 10mm, 4.75mm, 2.0mm, 425 micron, 75micron. The amounts of soil retained on each sieve were noted down. The % retained, cumulative % retained and % passing are computed accordingly. If the % passing 75 micron sieve is significant, Hydrometer method is used to find the percentage of silt and clay fraction. Hydrometer were performed in as per IS 2720 (Part 4) – 1965. The results are attached in Appendix B.

iii. Liquid Limit (IS:2720- Part-5)

By Cone Penetrometer Method

Liquid limit by cone penetrometer test were performed in accordance with IS 2720 (Part 5) – 1985. The tests were conducted, at varying water contents, in order to produce a series of cone penetrations (usually 4) in the range 15mm to 25mm. The resulting cone penetrations are plotted verses the water content of the test specimens. The Liquid Limit (WL) is read off the graph, being the water content at which the line of best fit through the test points crosses 20mm penetration.

iv. Plastic Limit:

Plastic Limit test were performed as per IS:2720-Part-5. The sample rolled between the fingers of one hand and the glass plate with pressure sufficient to reduce the mass into a thread of about 3 mm in 5 to 10 complete forward and back movements until the thread starts just crumbing at a diameter of 3 mm.

v. Plasticity Index

The plasticity index I_p is given by

$$I_p = WL - WP \text{ (in percent)}$$

vi. Specific Gravity

Specific gravity test were performed in accordance with IS 2720 (Part 3 Section-1) – 1980. The results are attached in Appendix B.

vii. Direct Shear Test

Direct shear tests were performed as per IS 2720 (Part XIII)-2015, on the undisturbed soil samples obtained during the field investigation. For this test shear box test apparatus was used. The specimen of size 6 cm x 6 cm x 2.4 cm was used. The normal stresses of 0.5 kg/cm², 1.0 kg/cm², 1.5 kg/cm², 2.0 kg/cm² and 3.0 kg/cm² respectively were used.

viii. Triaxial Shear Test

Triaxial Shear Test under Unconsolidated Un-drained (UU) condition as per IS: 2720 (Part-11)-2011 were performed on the undisturbed soil samples obtained during the field investigation. All specimen of size 38mm diameter and 76mm height were used. The axial loading was applied at 1.25 mm/min rate of strain. The normal stresses applied were 0.5 kg/cm², 1.0 kg/cm², 1.5 kg/cm², 2.0 kg/cm² and 3.0 kg/cm² respectively.

CHAPTER 4 ANALYSIS OF TEST RESULTS

4.1 STRATIFICATION

The study of the borehole logs of 03 BHs, the soil and rock strata is done as per IS 1498., the details of strata and soil classification, are provided in table 4.1.

Table 4.1: Strata Description

BH NO.	Depth (m)		Description
	From	To	
167	0.00	2.50	Filled up Soil
	2.50	12.00	Loose to Medium Dense, Brownish, Silty Sand
	12.00	28.50	Medium Dense to Very Dense, Brownish, Silty Clayey Sand
	28.50	50.00	Very Dense, Brownish, Poorly graded Sand
168	0.00	2.50	Filled Up Soil consist of Gravel
	2.50	12.00	Loose to Medium Dense, Brownish, Silty Sand
	12.00	36.00	Dense to Very Dense, Brownish, Silty Sand
	36.00	48.00	Very Dense, Brownish, Poorly Graded Silty Sand
	48.00	50.00	Very Dense, Brownish, Clayey Sand
169	0.00	2.50	Filled up Soil consist of Gravel
	2.50	15.00	Loose to Vey Dense, Brownish, Silty Sand
	15.00	27.00	Dense to Very Dense, Brownish, Silty Clayey Sand
	27.00	50.00	Very Dense, Brownish, Poorly Graded Silty Sand

Abbreviations

BH	Borehole
EGL	Existing Ground Level
GWT	Ground Water Table
RQD	Rock Quality Designation
IS	Indian Standards
SPT	Standard Penetration Test
DS	Disturbed Soil
R.L.	Reduced Level
m	Metre
sp. gr.	Specific Gravity
%	Percentage
mg /l	Milligram per litre
mg /kg	Milligram per kilogram

REFERENCE INDIAN STANDARD CODES

S.No.	IS Codes No	TITLE
1	IS : 1892-1979 RA-2016	Code of Practice for subsurface investigation for foundations.
2	IS : 1498-1970 RA 2016	Classification and Identification of soils for general Engineering Purpose.
3	IS :1904 - 2021	Code of practice for design and construction of foundations in soils:General Requirements.
4	IS : 2131-1981 RA 2016	Method for Standard Penetration Test (SPT) for Soils.
5	IS : 2132-1986 RA 2016	Code of Practice for Thin - Walled tube sampling of Soils.
6	IS : 4464-1985 RA 2019	Code of Practice for presentation of drilling information and core description in foundation investigation.
7	IS : 5313-1980 RA 2019	Guide for core drilling observations.
8	IS :5313-2020	Guide for core drilling observations.
9	IS : 4078-1980 RA2019	Code of Practice for indexing and storage of drill cores.
10	IS : 6926-1996 RA 2015	Diamond core drilling – Site investigation for river valley projects - code of Practice.
11	IS : 6935-1973 RA 2019	Method of determination of water level in a bore hole.
12	IS : 15686:2006 RA 2015	Recommendations for the preparation of Geological and Geotechnical maps for river valley projects.
13	IS : 6403 1981 RA 2016	Code of Practice for Determination of Bearing capacity of shallow foundations
14	IS : 8009 (P-1)-1976 RA 2019	Code of practice for calculation of Settlements of Foundations
15	IS: 12070 - 1987 RA 2020	Code of practice for design and construction of shallow foundations on rocks
16	IS :13365 (P-1) : 1998 RA 2021	Quantitative classificationSystems of rock mass — guidelines
17	IS : 1893 (P-1) 2016	Criteria for Earthquake resistant design of structures.
18	IS : 456- 2000 RA 2016	Plain and Reinforced Concrete-Code of Practice.
19	IRC-78-2024	Standard Specifications and Code of Practice for Road Bridges, Foundation & Substructure
Sr.	BOOK	TITLE
1.	Joseph E. Bowles	Foundation Analysis and Design

APPENDIX – A (FIELD DATA RESULTS)

Appendix No.	ITEMS
A-1	FIELD BOREHOLE LOGS
A-2	SUBSOIL PROFILE DIAGRAM

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-396	Northing :2968980 m	Easting :578873 m
Reduced Level (m):(+) -	BH. No. :BH-167	BH Depth (m):50
Proposed/Existing Structure :P-396	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :02-07-2026	Date of Completion :03-07-2026	

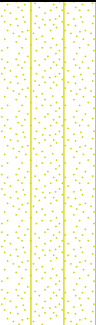
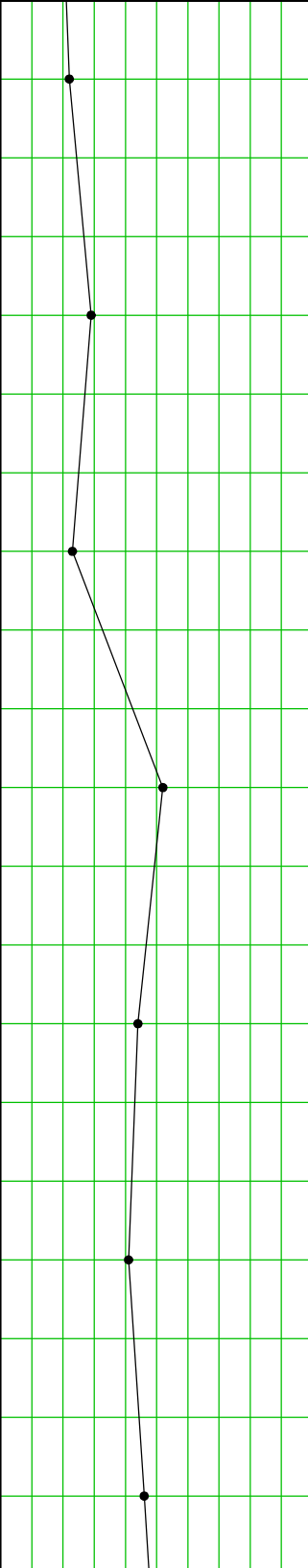
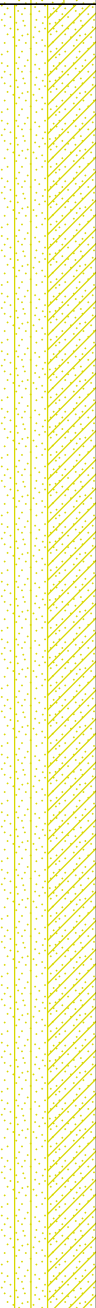
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	5						
3.5									
4.0									
4.5	4.5	SPT-2	7						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	9	Loose to Medium Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	16						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	19						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-396	Northing :2968980 m	Easting :578873 m
Reduced Level (m):(+) -	BH. No. :BH-167	BH Depth (m):50
Proposed/Existing Structure :P-396	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :02-07-2026	Date of Completion :03-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	
10.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5	SPT-6	22	Loose to Medium Dense, Brownish, Silty Sand	SM					
11.0										
11.5										
12.0	12	SPT-7	29	Medium Dense to Very Dense, Brownish, Silty Clayey Sand	SM-SC					
12.5										
13.0										
13.5	13.5	SPT-8	23							
14.0										
14.5										
15.0	15	SPT-9	52							
15.5										
16.0										
16.5	16.5	SPT-10	44							
17.0										
17.5										
18.0	18	SPT-11	41							
18.5										
19.0										
19.5	19.5	SPT-12	46							
20.0										

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-396	Northing :2968980 m	Easting :578873 m
Reduced Level (m):(+) -	BH. No. :BH-167	BH Depth (m):50
Proposed/Existing Structure :P-396	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :02-07-2026	Date of Completion :03-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	51						
21.5									
22.0									
22.5	22.5	SPT-14	52						
23.0									
23.5									
24.0	24	SPT-15	58	Medium Dense to Very Dense, Brownish, Silty Clayey Sand	SM-SC				
24.5									
25.0									
25.5	25.5	SPT-16	70						
26.0									
26.5									
27.0	27	SPT-17	71						
27.5									
28.0									
28.5	28.5	SPT-18	69						
29.0				Very Dense, Brownish, Poorly graded Sand	SP				
29.5									
30.0	30	SPT-19	75						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-396	Northing :2968980 m	Easting :578873 m
Reduced Level (m):(+) -	BH. No. :BH-167	BH Depth (m):50
Proposed/Existing Structure :P-396	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :02-07-2026	Date of Completion :03-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	74						
32.0									
32.5									
33.0	33	SPT-21	78						
33.5									
34.0									
34.5	34.5	SPT-22	78						
35.0				Very Dense, Brownish, Poorly graded Sand	SP				
35.5									
36.0	36	SPT-23	70						
36.5									
37.0									
37.5	37.5	SPT-24	74						
38.0									
38.5									
39.0	39	SPT-25	80						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-396	Northing :2968980 m	Easting :578873 m
Reduced Level (m):()-	BH. No. :BH-167	BH Depth (m):50
Proposed/Existing Structure :P-396	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :02-07-2026	Date of Completion :03-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	84						
41.0									
41.5									
42.0	42	SPT-27	87						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	92	Very Dense, Brownish, Poorly graded Sand	SP				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-400	Northing :2969085 m	Easting :578846 m
Reduced Level (m):()-	BH. No. :BH-168	BH Depth (m):50
Proposed/Existing Structure :P-400	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :01-07-2026	Date of Completion :02-07-2026	

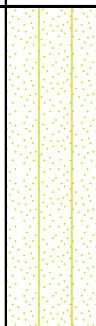
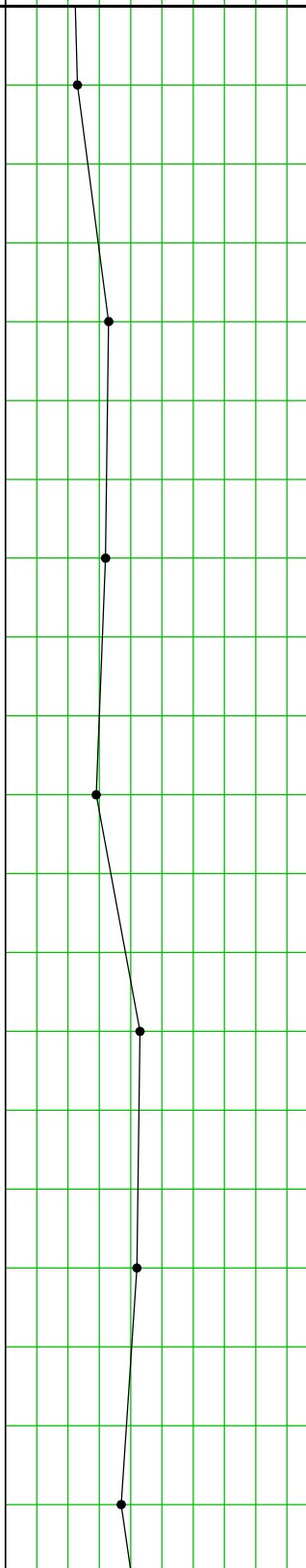
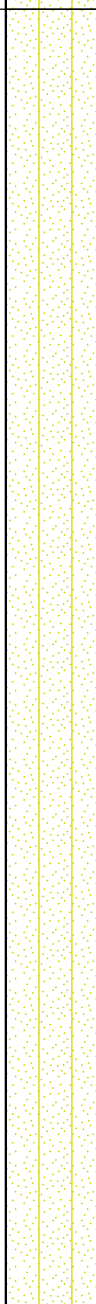
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil consist of Gravel	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	7						
3.5									
4.0									
4.5	4.5	SPT-2	10						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	14	Loose to Medium Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	15						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	21						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-400	Northing :2969085 m	Easting :578846 m
Reduced Level (m):(+) -	BH. No. :BH-168	BH Depth (m):50
Proposed/Existing Structure :P-400	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :01-07-2026	Date of Completion :02-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	23	Loose to Medium Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	33						
12.5				Dense to Very Dense, Brownish, Silty Sand	SM				
13.0									
13.5	13.5	SPT-8	32						
14.0									
14.5									
15.0	15	SPT-9	29						
15.5									
16.0									
16.5	16.5	SPT-10	43						
17.0									
17.5									
18.0	18	SPT-11	42						
18.5									
19.0									
19.5	19.5	SPT-12	37						
20.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-400	Northing :2969085 m	Easting :578846 m
Reduced Level (m):(+) -	BH. No. :BH-168	BH Depth (m):50
Proposed/Existing Structure :P-400	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :01-07-2026	Date of Completion :02-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	48						
21.5									
22.0									
22.5	22.5	SPT-14	50						
23.0									
23.5									
24.0	24	SPT-15	39						
24.5									
25.0				Dense to Very Dense, Brownish, Silty Sand	SM				
25.5	25.5	SPT-16	47						
26.0									
26.5									
27.0	27	SPT-17	63						
27.5									
28.0									
28.5	28.5	SPT-18	72						
29.0									
29.5									
30.0	30	SPT-19	82						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

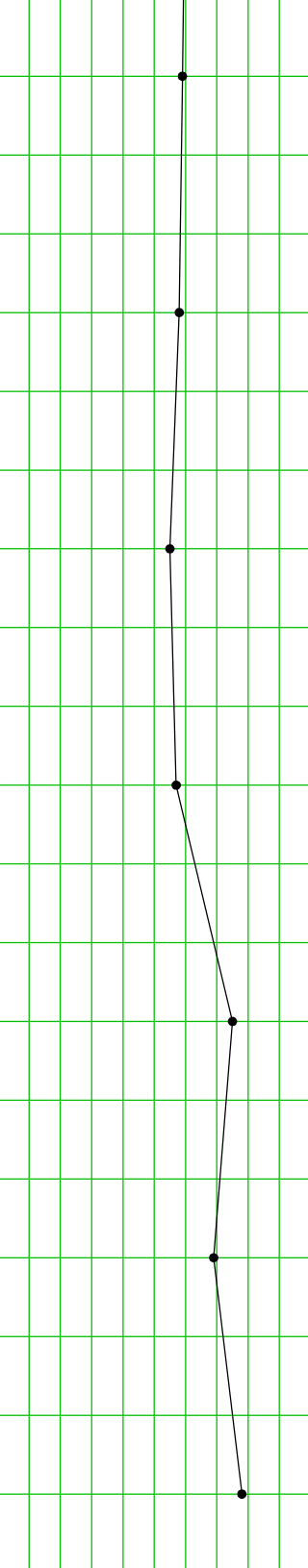
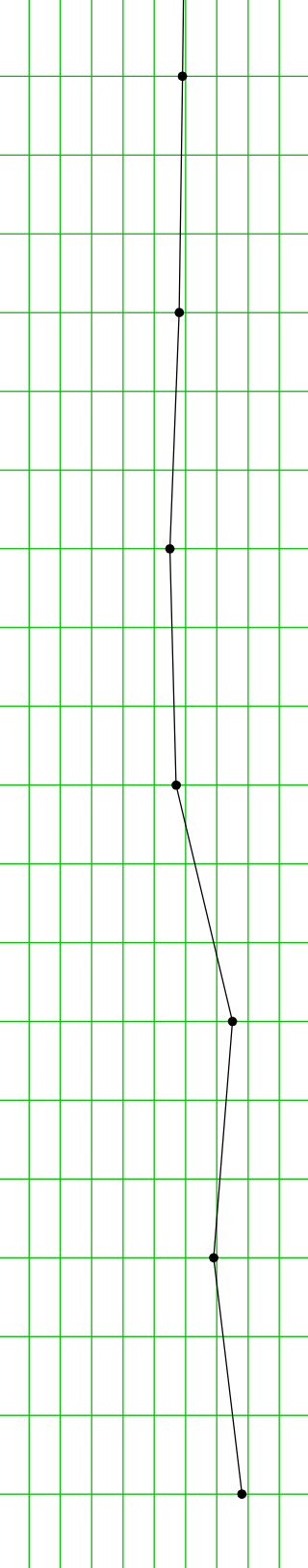
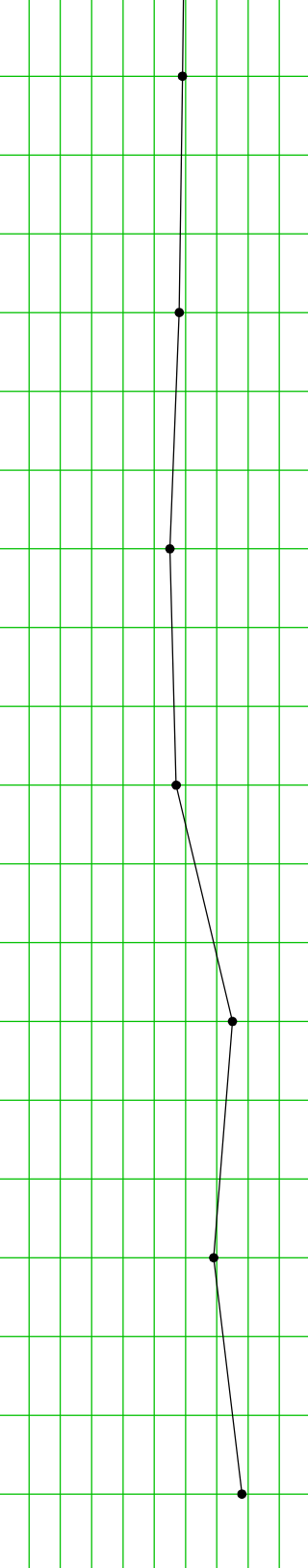
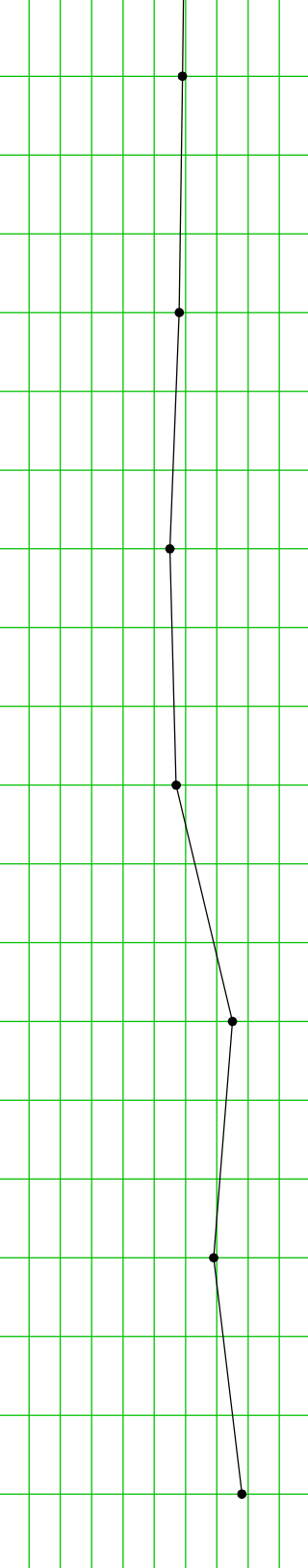
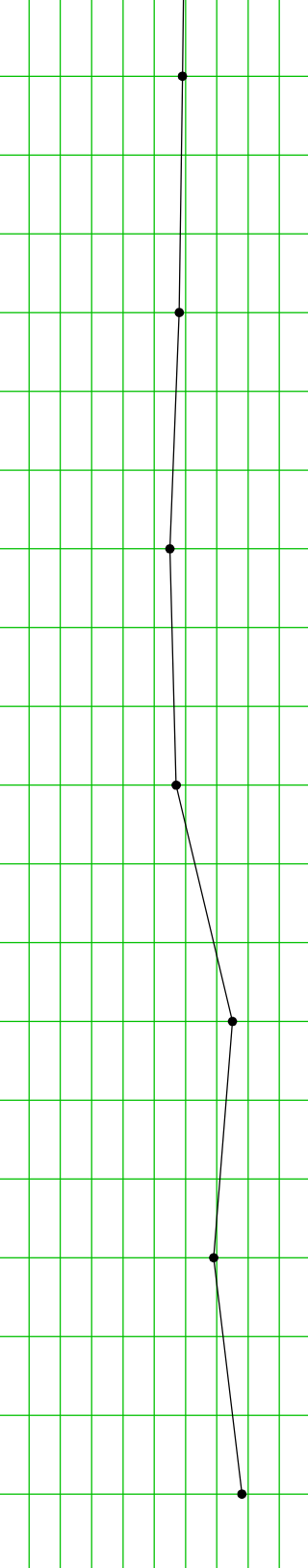
BH Location/Chainage :P-400	Northing :2969085 m	Easting :578846 m
Reduced Level (m):(+) -	BH. No. :BH-168	BH Depth (m):50
Proposed/Existing Structure :P-400	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :01-07-2026	Date of Completion :02-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	52						
32.0									
32.5									
33.0	33	SPT-21	>100	Dense to Very Dense, Brownish, Silty Sand	SM				
33.5									
34.0									
34.5	34.5	SPT-22	60						
35.0									
35.5									
36.0	36	SPT-23	>100						
36.5									
37.0									
37.5	37.5	SPT-24	60						
38.0				Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
38.5									
39.0	39	SPT-25	60						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-400	Northing :2969085 m	Easting :578846 m
Reduced Level (m):(+) -	BH. No. :BH-168	BH Depth (m):50
Proposed/Existing Structure :P-400	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :01-07-2026	Date of Completion :02-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	59	Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
41.0									
41.5									
42.0	42	SPT-27	58						
42.5									
43.0				Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
43.5	43.5	SPT-28	55						
44.0									
44.5									
45.0	45	SPT-29	57						
45.5				Very Dense, Brownish, Clayey Sand	SC				
46.0									
46.5	46.5	SPT-30	75						
47.0									
47.5									
48.0	48	SPT-31	69	Very Dense, Brownish, Clayey Sand	SC				
48.5									
49.0									
49.5	49.5	SPT-32	78	Very Dense, Brownish, Clayey Sand	SC				
50.0	50								

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client : DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage : b2 bypass station (Airport to Todi mod)	Northing : 2969148 m	Easting : 578872 m
Reduced Level (m) : (+)-	BH. No. : BH-169	BH Depth (m) : 50
Proposed/Existing Structure : b2 bypass station (Airport to Todi mod)	Water Table (m) : Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 02-07-2026	Date of Completion : 04-07-2026	

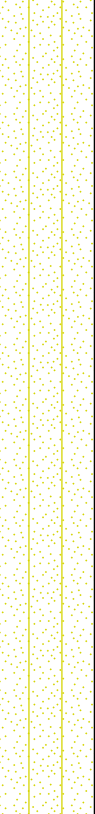
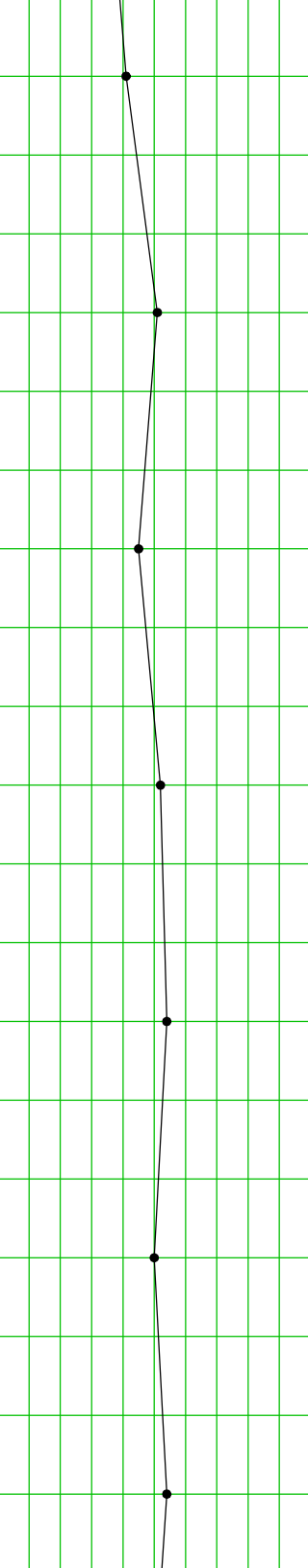
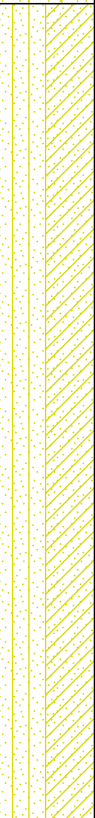
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled up Soil consist of Gravel	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	6						
3.5									
4.0									
4.5	4.5	SPT-2	9						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	31	Loose to Vey Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	23						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	35						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client : DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage : b2 bypass station (Airport to Todi mod)	Northing : 2969148 m	Easting : 578872 m
Reduced Level (m):(+) -	BH. No. : BH-169	BH Depth (m): 50
Proposed/Existing Structure : b2 bypass station (Airport to Todi mod)	Water Table (m): Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 02-07-2026	Date of Completion : 04-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	41	Loose to Vey Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	51						
12.5				Dense to Very Dense, Brownish, Silty Clayey Sand	SM-SC				
13.0									
13.5	13.5	SPT-8	45						
14.0									
14.5									
15.0	15	SPT-9	52						
15.5									
16.0									
16.5	16.5	SPT-10	54						
17.0									
17.5									
18.0	18	SPT-11	50						
18.5									
19.0									
19.5	19.5	SPT-12	54						
20.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client : DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage : b2 bypass station (Airport to Todi mod)	Northing : 2969148 m	Easting : 578872 m
Reduced Level (m): (+)-	BH. No. : BH-169	BH Depth (m): 50
Proposed/Existing Structure : b2 bypass station (Airport to Todi mod)	Water Table (m): Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 02-07-2026	Date of Completion : 04-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	49						
21.5									
22.0									
22.5	22.5	SPT-14	52						
23.0									
23.5				Dense to Very Dense, Brownish, Silty Clayey Sand	SM-SC				
24.0	24	SPT-15	53						
24.5									
25.0									
25.5	25.5	SPT-16	51						
26.0									
26.5									
27.0	27	SPT-17	61						
27.5									
28.0									
28.5	28.5	SPT-18	50	Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
29.0									
29.5									
30.0	30	SPT-19	50						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client : DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage : b2 bypass station (Airport to Todi mod)	Northing : 2969148 m	Easting : 578872 m
Reduced Level (m) : (+)-	BH. No. : BH-169	BH Depth (m) : 50
Proposed/Existing Structure : b2 bypass station (Airport to Todi mod)	Water Table (m) : Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 02-07-2026	Date of Completion : 04-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	61						
32.0									
32.5									
33.0	33	SPT-21	62						
33.5									
34.0									
34.5	34.5	SPT-22	79						
35.0				Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
35.5									
36.0	36	SPT-23	77						
36.5									
37.0									
37.5	37.5	SPT-24	81						
38.0									
38.5									
39.0	39	SPT-25	72						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client : DELHI METRO RAIL CORPORATION LTD

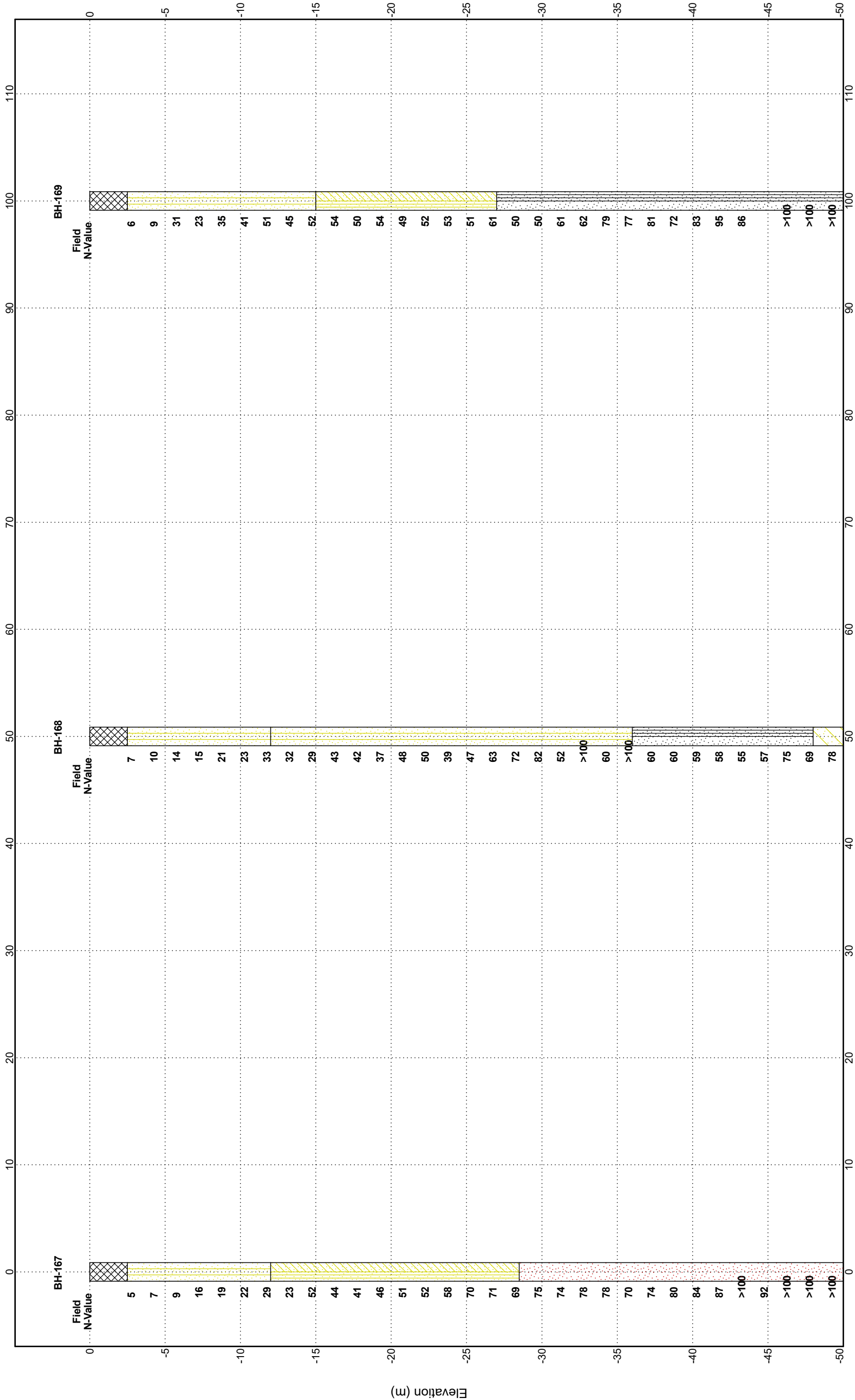
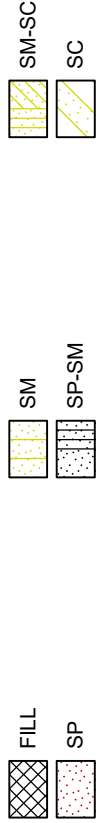
BH Location/Chainage : b2 bypass station (Airport to Todi mod)	Northing : 2969148 m	Easting : 578872 m
Reduced Level (m) : (+) -	BH. No. : BH-169	BH Depth (m) : 50
Proposed/Existing Structure : b2 bypass station (Airport to Todi mod)	Water Table (m) : Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 02-07-2026	Date of Completion : 04-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	83						
41.0									
41.5									
42.0	42	SPT-27	95						
42.5									
43.0									
43.5	43.5	SPT-28	86						
44.0									
44.5									
45.0				Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
45.5									
46.0									
46.5	46.5	SPT-29	>100						
47.0									
47.5									
48.0	48	SPT-30	>100						
48.5									
49.0									
49.5	49.5	SPT-31	>100						
50.0	50								

SUB SOIL PROFILE DIAGRAM -

CLIENT DELHI METRO RAIL CORPORATION LTD
PROJECT NUMBER SR-1241_25-26

PROJECT NAME GTI work for JPR Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)
PROJECT LOCATION Jaipur, Rajasthan



Distance Along Baseline (m)

APPENDIX – B (LAB TEST RESULTS)

Appendix No.	ITEMS
B-1	SOIL CHARACTERISTICS SHEETS
B-2	GSD CURVES

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)” PKG-G-III										Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)				R.L.	Ref. Code									
	02-07-2026		to		03-07-2026		P-396		BH-167		NOT ENCOUNTERED		50.00 m	578873.000 m				2968980.000 m		-	SR-1241_26-27											
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %			Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)		Specific Gravity	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters							
							Clay	Silt	Fine	Medium	Coarse	Gravel	Liquid Limit			Plastic Limit	Plasticity Index		Shrinkage Limit	Type of Test	Cohesion C (kg/cm ²)				Angle of Friction (φ°)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ³ /Kg)	Compression Index (C _p)		
DS-1	0.00	-	-	Filled up Soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
UDS*	2.50	-	-	Loose to Medium Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-1	3.00	5	6		SM		0	17	66	12	3	2	0	-	Nil	-	1.64	10.00	1.49	2.59	0.00	27	-	-	-	-	-	-	-	-	-	
SPT-2	4.50	7	8		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS*	5.50	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-3	6.00	9	9		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-4	7.50	16	15		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS-1	8.50	-	-		SM		0	22	62	15	1	0	0	-	Nil	-	1.72	12.18	1.53	2.60	0.00	30	-	-	-	-	-	-	-	-	-	-
SPT-5	9.00	19	16		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-6	10.50	22	18		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-7	12.00	29	22		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-8	13.50	23	17	SM-SC		4	18	67	7	2	2	0	25	20	5	1.80	12.50	1.60	2.61	0.05	30	-	-	-	-	-	-	-	-	-	-	
SPT-9	15.00	52	36	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-10	16.50	44	29	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-11	18.00	41	26	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-12	19.50	46	27	SM-SC		6	16	59	8	4	7	0	26	19	7	1.83	12.00	1.63	2.61	0.06	31	-	-	-	-	-	-	-	-	-	-	-
SPT-13	21.00	51	29	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-14	22.50	52	28	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-15	24.00	58	30	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-16	25.50	70	35	SM-SC		5	17	60	10	3	5	0	25	19	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-17	27.00	71	34	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)” PKG-III										Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code									
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %			Specific Gravity		Shear Strength			Free Swell Index (%)			Swelling Pressure (kg/cm ²)		Permeability (cm/sec)	Consolidation Parameters							
								Clay	Silt	Fine	Medium	Coarse	Sand	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)		Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ³ /Kg)	Compression Index (C _p)				
	SPT-18	28.50	69	32	Very Dense, Brownish, Poorly graded Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-19	30.00	75	35		SP		0	4	49	20	9	18	0	Nil	NP	-	1.86	12.50	1.65	2.60	DST+	0.00	33	-	-	-	-	-	-	-	-	-	-	
	SPT-20	31.50	74	34		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-21	33.00	78	36		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-22	34.50	78	36		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-23	36.00	70	32		SP		0	5	43	24	13	15	0	Nil	NP	-	1.86	11.50	1.67	2.62	DST+	0.00	34	-	-	-	-	-	-	-	-	-	-	-
	SPT-24	37.50	74	34		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-25	39.00	80	37		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-26	40.50	84	39		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-27	42.00	87	40		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-28	43.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-29	45.00	92	42		SP		0	3	45	21	10	21	0	Nil	NP	-	1.87	10.50	1.69	2.63	DST+	0.00	34	-	-	-	-	-	-	-	-	-	-	-
	SPT-30	46.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-31	48.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-32	49.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)" PKG-III										Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)				R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	01-07-2026		to		02-07-2026		P-400		NOT ENCOUNTERD				50.00 m			578846.000 m		2969085.000 m																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained					Atterberg Limits %				Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Clay								Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit				Bulk Density (g/cm ³)	Natural Moisture Content (%)				Dry Density (g/cm ³)	Specific Gravity																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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Abbreviations:-
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SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
DS-Disrupted Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS+ - Undisturbed Undrained Tri-axial Test on Remoulded Sample, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample, DST*-Direct Shear Test, UUT*-Unconsolidated Undrained Tri-axial Test on Disturbed Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)” PKG-III										Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)				R.L.	Ref. Code										
											02-07-2026		to	04-07-2026	b2 bypass station (Airport to Todi mod)	BH-169	NOT ENCOUNTERED		50.00 m	578872.000 m				2969148.000 m	-	SR-1241_26-27							
											Grain Size Distribution % wt retained						Atterberg Limits %				Natural Moisture Content (%)		Dry Density (g/cm³)		Specific Gravity		Shear Strength		Free Swell Index (%)		Swelling Pressure (kg/cm²)		Permeability (cm/sec)
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Clay	Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm³)	Natural Moisture Content (%)	Dry Density (g/cm³)	Specific Gravity	Type of Test	Cohesion C (kg/cm²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm²)	C _y x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm³/Kg)	Compression Index (C _c)		
DS-1	0.00	-	-	Filled up Soil consist of Gravel	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
UDS*	2.50	-	-	Loose to Vey Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-1	3.00	6	7		SM			0	26	67	4	2	1	0	Nil	NP	-	1.67	11.00	1.50	2.60	DST+	0.00	27	-	-	-	-	-	-	-	-	
SPT-2	4.50	9	10		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS*	5.50	-	-		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-3	6.00	31	31		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-4	7.50	23	21		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS-1	8.50	-	-		SM			0	28	56	7	4	5	0	Nil	NP	-	1.77	11.73	1.58	2.61	DST	0.00	30	-	-	-	-	-	-	-	-	-
SPT-5	9.00	35	30		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-6	10.50	41	33	Dense to Very Dense, Brownish, Silty Clayey Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-7	12.00	51	39		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-8	13.50	45	32		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-9	15.00	52	36		SM-SC			5	16	71	3	5	0	0	26	6	-	1.81	12.50	1.61	2.60	DST+	0.06	31	-	-	-	-	-	-	-	-	-
SPT-10	16.50	54	35	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-11	18.00	50	31	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-12	19.50	54	32	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-13	21.00	49	28	SM-SC			4	16	67	8	3	2	0	25	5	-	1.83	13.00	1.62	2.61	DST+	0.08	32	-	-	-	-	-	-	-	-	-	-
SPT-14	22.50	52	28		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-15	24.00	53	28		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-16	25.50	51	25		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Undisturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

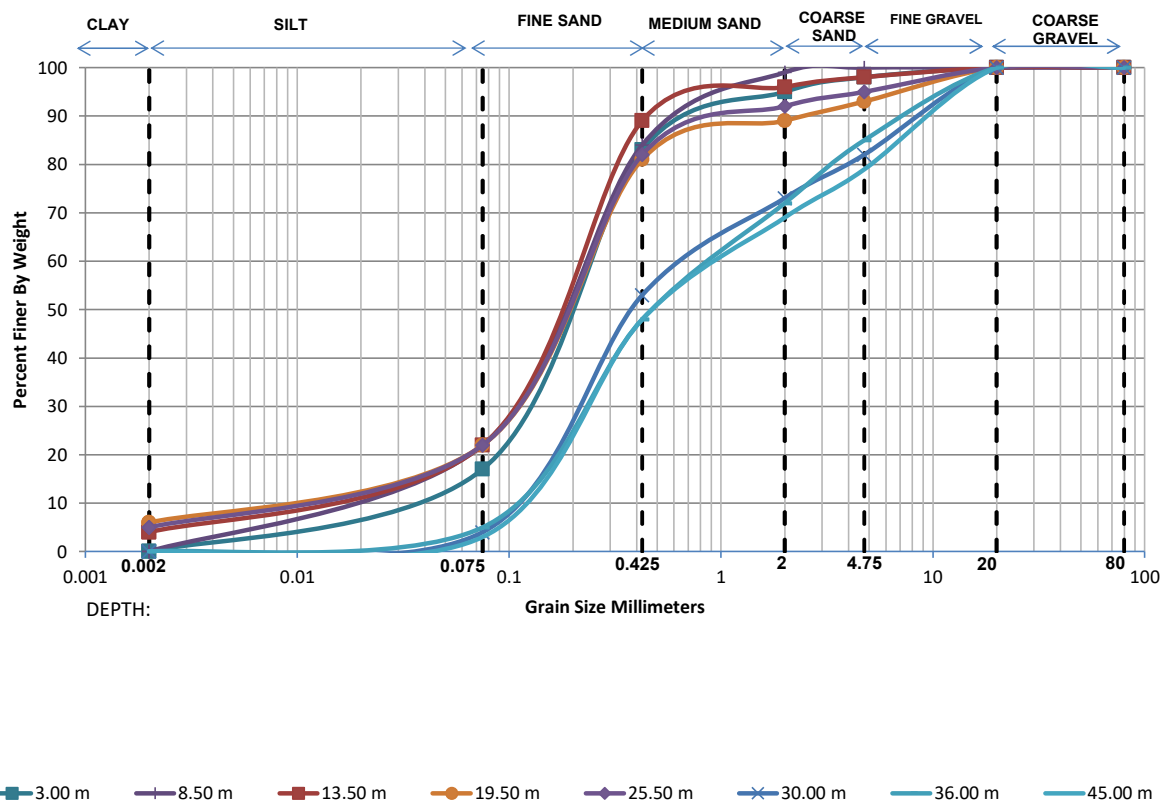
SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
DS-Disrupted Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS+ - Undisturbed Sample, UDS- Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample, DST*-Disturbed Sample, SPT*-Standard Penetration Test, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

GRAIN SIZE DISTRIBUTION CURVES

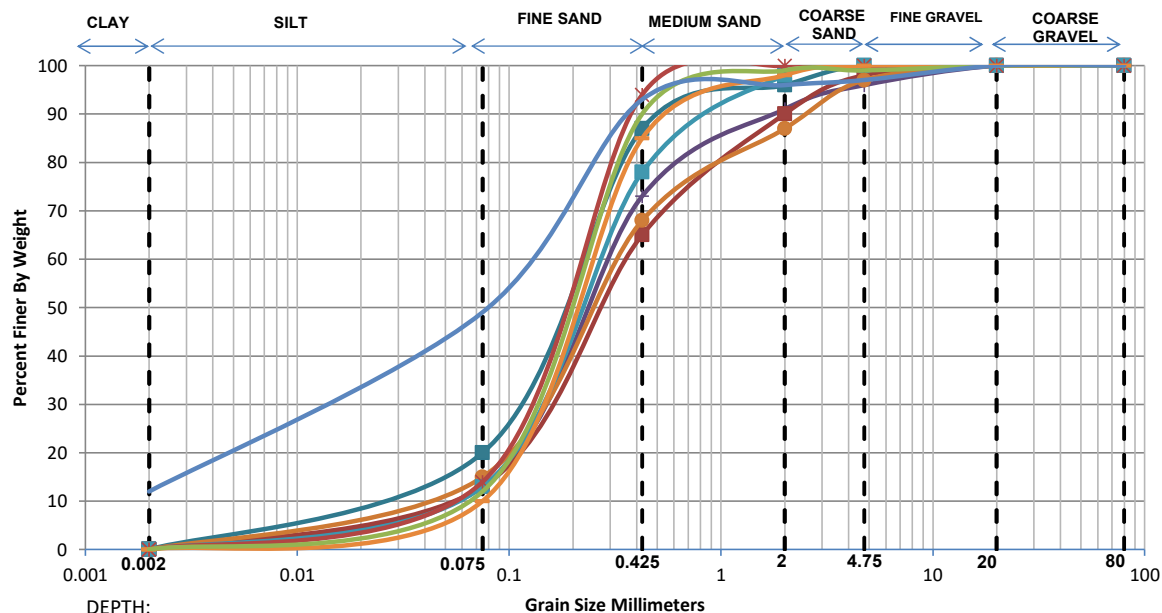
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)" PKG-III
Location/Chainage	P-396
B.H. No.	167



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	17.00	66.00	12.00	3.00	2.00	0.00	0.0366	0.1292	0.2524	6.90	1.81
8.50 m	0.00	22.00	62.00	15.00	1.00	0.00	0.00	0.0232	0.1067	0.2355	10.16	2.09
13.50 m	4.00	18.00	67.00	7.00	2.00	2.00	0.00	0.0172	0.1085	0.2223	12.92	3.08
19.50 m	6.00	16.00	59.00	8.00	4.00	7.00	0.00	0.0109	0.1126	0.2480	22.68	4.67
25.50 m	5.00	17.00	60.00	10.00	3.00	5.00	0.00	0.0139	0.1113	0.2443	17.56	3.64
30.00 m	0.00	4.00	49.00	20.00	9.00	18.00	0.00	0.1285	0.2401	0.7081	5.51	0.63
36.00 m	0.00	5.00	43.00	24.00	13.00	15.00	0.00	0.1215	0.2500	0.9554	7.87	0.54
45.00 m	0.00	3.00	45.00	21.00	10.00	21.00	0.00	0.1437	0.2614	1.0648	7.41	0.45

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)" PKG-III
Location/Chainage	P-400
B.H. No.	168

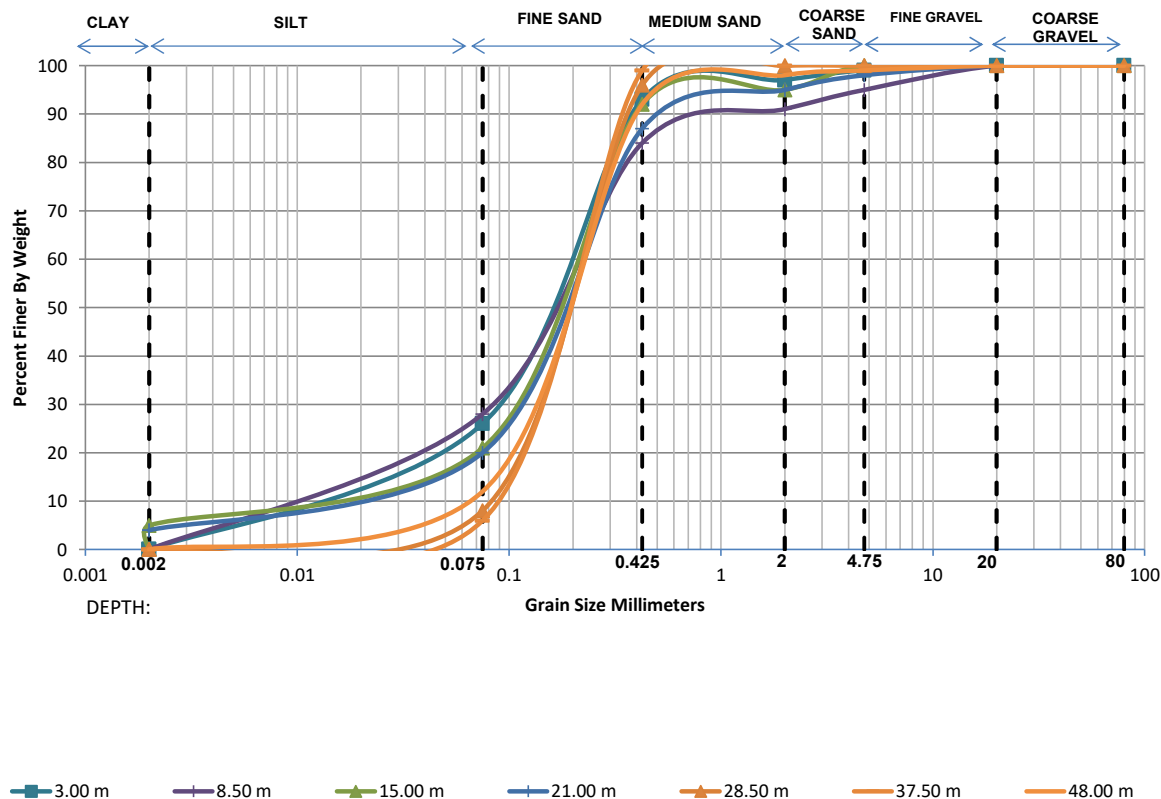


■ 3.00 m
 — 8.50 m
 ■ 13.50 m
 ■ 19.50 m
 ■ 27.00 m
 ✱ 31.50 m
 — 37.50 m
 — 42.00 m
 — 48.00 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	20.00	67.00	9.00	4.00	0.00	0.00	0.0278	0.1143	0.2306	8.31	2.04
8.50 m	0.00	13.00	60.00	18.00	5.00	4.00	0.00	0.0550	0.1556	0.3082	5.61	1.43
13.50 m	0.00	13.00	52.00	25.00	8.00	2.00	0.00	0.0543	0.1644	0.3689	6.80	1.35
19.50 m	0.00	15.00	53.00	19.00	10.00	3.00	0.00	0.0436	0.1492	0.3387	7.76	1.51
27.00 m	0.00	13.00	65.00	20.00	2.00	0.00	0.00	0.0554	0.1522	0.2843	5.13	1.47
31.50 m	0.00	14.00	80.00	6.00	0.00	0.00	0.00	0.0508	0.1381	0.2319	4.56	1.62
37.50 m	0.00	10.00	75.00	13.00	2.00	0.00	0.00	0.0750	0.1625	0.2660	3.55	1.32
42.00 m	0.00	12.00	78.00	9.00	0.00	1.00	0.00	0.0624	0.1494	0.2468	3.95	1.45
48.00 m	12.00	37.00	44.00	3.00	1.00	3.00	0.00	-	0.0243	0.1169	-	-

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)" PKG-III
Location/Chainage	b2 bypass station (Airport to Todi mod)
B.H. No.	169

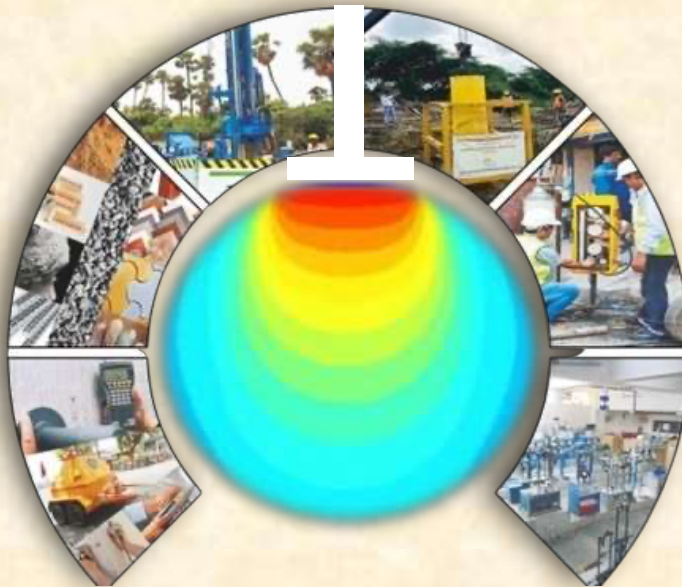


Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	26.00	67.00	4.00	2.00	1.00	0.00	0.0174	0.0892	0.1964	11.26	2.32
8.50 m	0.00	28.00	56.00	7.00	4.00	5.00	0.00	0.0148	0.0823	0.2136	14.40	2.14
15.00 m	5.00	16.00	71.00	3.00	5.00	0.00	0.00	0.0156	0.1132	0.2190	14.06	3.76
21.00 m	4.00	16.00	67.00	8.00	3.00	2.00	0.00	0.0204	0.1184	0.2340	11.49	2.94
28.50 m	0.00	8.00	88.00	4.00	0.00	0.00	0.00	0.0858	0.1658	0.2464	2.87	1.30
37.50 m	0.00	6.00	93.00	1.00	0.00	0.00	0.00	0.0967	0.1743	0.2478	2.56	1.27
48.00 m	0.00	12.00	80.00	6.00	1.00	1.00	0.00	0.0625	0.1482	0.2417	3.87	1.45

SR-1241

“Geotech Investigation work for Jaipur Metro
Ph-II Project from Prahladpura to Todi Mod
(Total approximate length -42.8 km)”

PKG-III



Submitted to:
Delhi Metro Rail Corporation Ltd



TC-10943
NABL Accredited
Both Field & Lab Tests

CEG Test House and Research Centre Pvt. Ltd.
B-11(G), Malviya Industrial Area, Jaipur-302017
Tel.: 91-141-4046599, Fax: 91-141-2751806
E-mail: info@cegtesthouse.com.
www.cegtesthouse.com

SR-1241

**“Geotech Investigation work for Jaipur Metro
Ph-II Project from Prahladpura to Todi Mod
(Total approximate length -42.8 km)”**

PKG-III

SR. No.	Report Ref. No.	Revision No.	Date
1241_25-26	CEGTH/DMRC/SR-1241/2026-27/365_05 BHs	00	13.08.2026

Submitted to:
Delhi Metro Rail Corporation Ltd



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NABL Accredited
Both Field & Lab Tests

CEG Test House and Research Centre Pvt. Ltd.
B-11(G), Malviya Industrial Area, Jaipur-302017
Tel.: 91-141-4046599, Fax: 91-141-2751806
E-mail: info@cegtesthouse.com
www.cegtesthouse.com

CEGTH/DMRC/SR-1241/2026-27/365

Date:- 13.08.2026

To,

Project Director/Jaipur-II, DMRC
Office of Chief Project Manager-8
Opposite Frank Anthony Public School
Lala Lajpat Rai Marg, Lajpat Nagar-IV
New Delhi - 110024

Subject :- “Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi
Mod (Total approximate length -42.8 km)”**PKG-III**

Dear Sir,

We are pleased to submit this report of 05 boreholes carried out for the proposed project.

The accompanying report presents results of field tests and laboratory tests conducted on selected soil and rock samples ,their interpretation and foundation recommendations.

Should there be any clarifications regarding the contents please contact us at your most convenient time.

We value the opportunity to participate in this project and look forward a pleasant association on future projects.

Very truly yours,
CEG Test House & Research Centre Pvt. Ltd.



Nehal Jain
Sr. General Manager, Geotechnical
Authorized Signatory

Prepared By:-



Pratibha Bagaria
Sr Geotechnical Engineer



TC-10943
NABL Accredited
Both Field & Lab Tests

CEG Test House and Research Centre Pvt. Ltd.

B-11(G), Malviya Industrial Area, Jaipur-302017

Tel.: 91-141-4046599, Fax: 91-141-2751806

E-mail: info@cegtesthouse.com., www.cegtesthouse.com

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CHAPTER 1 GENERAL

1.1 INTRODUCTION:

The work of “**Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)**” was awarded to CEG Test House & Research Centre Pvt. Ltd. by **Delhi Metro Rail Corporation Ltd.,**.

Field work including drilling of boreholes and sample collection covered in this report was carried out in the presence of Client’s Engineer. Laboratory tests were conducted on selected soil samples to determine the design parameters, confirming to relevant specifications and the guidelines received from the client.

This report includes the details of methodology of investigation, collection of soil samples, laboratory test results, analysis of results and recommendations for results for proposed structures based on Soil samples collected from the Borelog locations.

1.2 SCOPE OF WORK:

- Mobilisation of necessary plant equipments, men and materials for the geotechnical investigation work as per specifications, drawings and instructions of the engineer, shifting of the equipment from one test location to another location to complete the entire field work within the stipulated time schedule and demobilization after completion of field work.
- Making 150 mm nominal diameter boreholes at various locations upto 50.00m depth below the natural ground level in all types of soil using suitable approved method of boring including chiselling, cleaning, providing casing pipe as required or as directed by the engineer.
- Performing Standard Penetration Tests at every 1.5 m interval and at every change of strata.
- Collecting undisturbed or disturbed soil samples at every 3.0 m interval and at every change of strata. Recording of ground water table and collecting water samples for conducting chemical analysis in the laboratory.
- Recording of ground water table and collecting water samples for conducting chemical analysis in the laboratory.
- Transporting all the collected soil samples to the laboratory.
- Conducting various laboratory tests on selected soil samples at CEGTH NABL accredited laboratory including preparation of samples to determine the following properties all complete as per specification :

On soil Samples

- Dry density test
- Bulk Density and Moisture Content.

- Specific gravity
- Sieve Analysis (Mechanical) with Hydrometer Classification
- Liquid Limit, Plastic Limit and Shrinkage Limit
- Direct Shear Test
- Triaxial Shear Test
- Chemical Analysis of soil samples (pH, chloride, Sulphate)

The details of borehole locations and general geology of site location describe in **Chapter 2**.

CHAPTER 2 DETAILS OF SITE AND GENERAL GEOLOGICAL HISTORY

2.1 SITE LOCATION:

The locations of 05 boreholes were marked on the ground as per the layout given by the Engineer. These locations are shown in **Fig 3**. The details of various boreholes locations along with their co-ordinates are provided in table 2.1.

The details of the site and test locations for the proposed project are shown in location plan in Fig 3. The site of proposed project is located at **Jaipur** in the State of **Rajasthan** falls in seismic zone – II (Zone factor=0.10) of India.

Table 2.1: Details of Borehole Locations & Test Locations

S.No	BH.No	Pier no.	Depth of Water Table below EGL (m)	Depth of Borehole below EGL(m)	Co-ordinates (m)		+(R.L.)
					E	N	
1.	BH-190	P-466	Not Encountered	50.00	579010.000	2971146.000	408.360
2.	BH-191	-	Not Encountered	50.00	579033.000	2971272.000	408.968
3.	BH-192	-	Not Encountered	50.00	579047.000	2911355.000	408.360
4.	BH-202	P-504	Not Encountered	50.00	579177.000	2972307.000	408.968
5.	BH-203A	P-508	Not Encountered	50.00	579187.000	2972403.000	416.543

2.2 GENERAL GEOLOGY

2.2.1 LOCATION

The study area is located within the eastern margin of the Aravalli Craton in Jaipur, Rajasthan, forming a part of the northwestern Indian Shield. The geology of the region is predominantly characterized by Precambrian rock formations comprising quartzites, schists, phyllites, granites, and gneisses, which are generally hard, compact, and crystalline in nature. The area also contains occurrences of alluvial deposits in low-lying zones. The regional topography is undulating, with elevation generally ranging from approximately 400 meters to 600 meters above Mean Sea Level.

2.2.2 CLIMATE

The project area, located in Jaipur district of Rajasthan, experiences a semi-arid climate characterized by extremely hot summers, mild winters, and a short monsoon season. Temperatures generally range from approximately 5°C in winter to 45°C during peak summer months, with May and June being the hottest period. The region receives an average annual rainfall of about 500 to 700 mm, mainly during the southwest monsoon from July to September. Relative humidity remains low for most of the year, increasing during the monsoon season. Wind conditions are generally dry and moderate,

with occasional dust storms during summer. These climatic conditions play an important role in geotechnical aspects such as foundation design, groundwater fluctuation, drainage planning, and construction scheduling.

2.2.3 GEOLOGY

“The subsurface conditions at the Jaipur location are predominantly composed of sandy silt, silty sand, and clayey soil with varying proportions of gravel and weathered rock fragments. The upper strata generally exhibit moderate weathering and loose to medium dense soil conditions, underlain by residual soils derived from quartzite, schist, and granite gneiss formations of the Aravalli terrain. The weathered zone gradually transitions into comparatively competent geological formations at greater depths, with occasional joints and fractures observed in the parent material.”

The Geological formation of the Rajasthan is as follows:

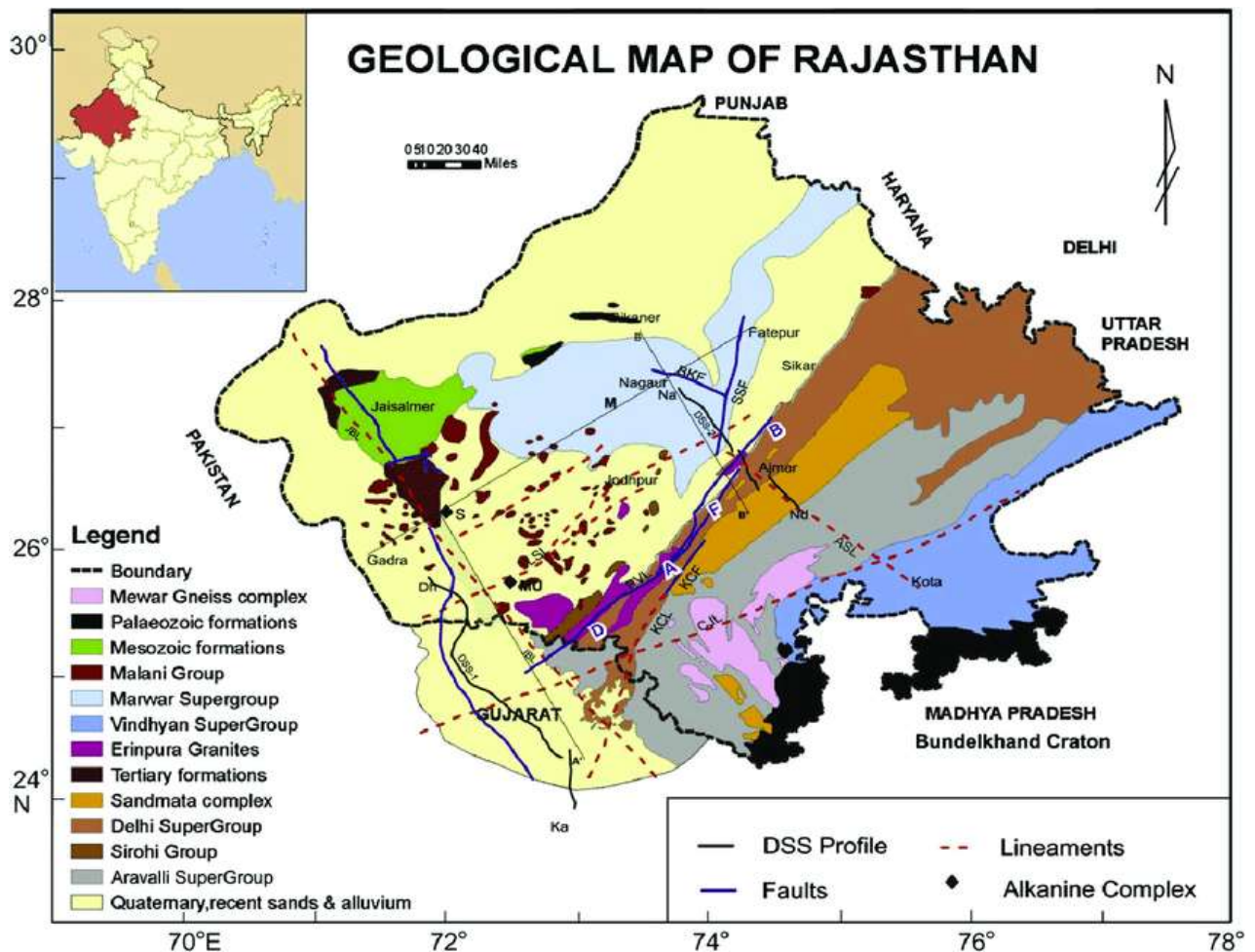


Fig. 1: Geological map of Rajasthan

2.2.4 Seismicity

The site of proposed project is located at **Jagatpura, Jaipur** in the State of **Rajasthan** falls in seismic zone – II (Zone factor=0.10) of India as per Is : 1893 (Part-1)-2016.

Seismicity Map of India is shown below:-

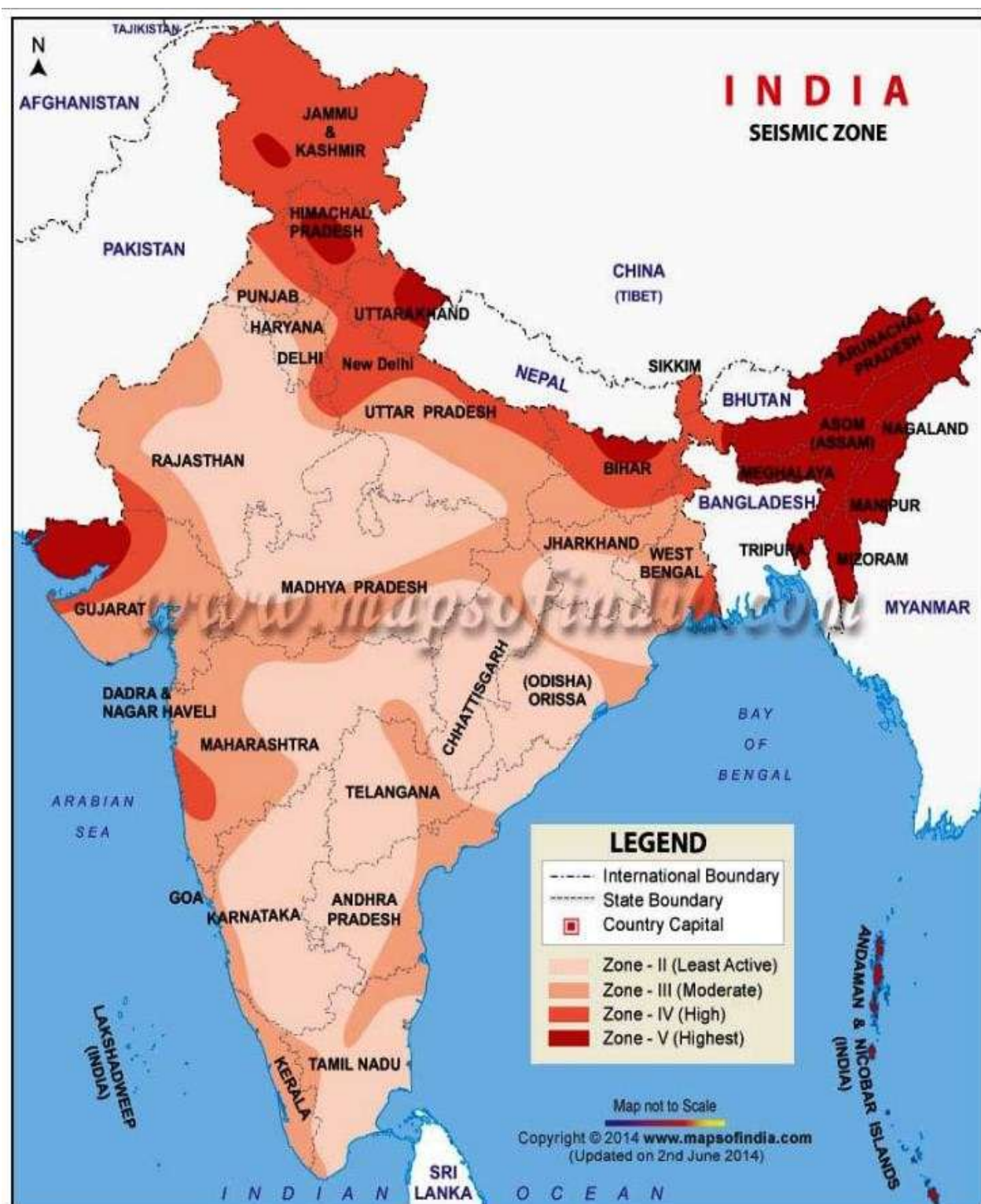


Fig. 2: Seismicity Map of India

CHAPTER 3 FIELD AND LABORATORY TEST PROCEDURE

3.1 FIELD INVESTIGATION:

For geotechnical investigation work, hydraulic or mechanical drilling rigs were installed at the specified borehole locations along with the required men and machineries for conducting the requisite field work. The equipment was relocated from one test site to another during the fieldwork, and was demobilized upon the satisfactory completion of each respective borehole.

For conducting the field investigations the following practices were followed at site:

- In soil, boreholes of 150 mm dia. were drilled as per the standard procedure laid in IS: 1892. Wherever rocky strata was encountered before achieving the required depth below E.G.L., bore holes were further extended beyond refusal through soft and hard rock using Hydraulic drilling Rigs with Nx size double tube core barrel or diamond bits upto required depth below the EGL and were terminated as per the instruction of Engr. in-charge.
- Borehole was properly cleaned before taking any sample in soil.
- Standard Penetration Tests and collection of undisturbed or disturbed soil samples were carried out as per the specification IS: 2131 and IS: 2132. The same has been discussed in detail in soil and Rock characteristics attached with the report.
- Ground water table was measured as per IS: 6935-1973. The depth of ground water level was to be measured after 24 hours of completion of borehole.

3.1.1 IN SOIL STRATA

(i) Standard Penetration Test

The Standard Penetration Tests were conducted in boreholes as per IS 2131. Each test was carried out using the standard split spoon sampler carrying manual hammer to measure the number of blows ‘N’.

Standard split spoon sampler was attached to an ‘A’ rod. It was driven from borehole bottom to a distance of 45 cm using a standard hammer of 63.5 kg falling freely from a height of 75 cm to the required depth. While driving, the number of blows required to penetrate every 15 cm are recorded. The total number of blows required for the last 30 cm is taken as ‘N’ value at that particular depth of the borehole. Wherever the total penetration was less than 45cm, the no. of blows & the depth penetrated is recorded in the respective borelog.

SPT ‘N’ values were correlated with relative density of non-cohesive stratum and with consistency of cohesive stratum as given below:-

Table 3.1: Soil compactness as per SPT N values

Correlation for Clay / Plastic silt		Correlation for Sand / Non-Plastic silt	
Consistency	Penetration Value (N)	Compactness	Penetration Value (N)
Very Soft	0 - 2	Very Loose	0 - 4
Soft	2 - 4	Loose	4 - 10
Medium	4 - 8	Medium	10 - 30
Stiff	8 - 15	Dense	30 - 50
Very Stiff	15 - 30	Very Dense	> 50
Hard	> 30		

(ii) The field SPT N values were corrected as per the guidelines given in IS: 2131 as follows:

(a) For overburden: - The N value for cohesionless soil is corrected with the help of fig. 1 given in IS-2131.

(b) Due to dilatancy :- Wherever N values observed below water table in fine sand, silty sand or silt was greater than 15, then corrected N values were corrected as under:

$$N' = 15 + \frac{1}{2} (N-15)$$

(iii) Disturbed Sampling (Soil) in boreholes

Disturbed soil samples each weighing approx. 1kg. were collected starting from a depth of 0.5m depth below EGL and at every identifiable change of strata. Samples were immediately sealed, labeled and carefully transported to the laboratory for testing.

(iv) Undisturbed Sampling (Soil) in boreholes

Undisturbed samples were collected at 3.0 m intervals using 100 mm diameter and 450 mm long MS tubes with Area ratio as specified as per clause 4.1.1 (c) of IS: 1892 (latest) provided with sampler head with ball and socket arrangement. Before taking any sample, sampling tube was properly greased. Immediately after taking on undisturbed sample in a tube, the adopter head was removed along with the disturbed material. The visible ends of the sample were trimmed off any wet disturbed soil. The ends were coated alternately with four layers of just molten wax. More molten wax was added to give a total thickness of min. 25 mm. The samples were carefully labeled and transported to the laboratory for testing. Undisturbed samples wherever slipped during lifting were duly marked in the field logs as well as in the soil profile.

3.1.2 GROUND WATER TABLE DEPTH

During the field investigation conducted in July & August 2026, the groundwater table was not encountered in any of the borehole locations.

3.2 LABORATORY INVESTIGATIONS:

i. Laboratory Tests For Soil Samples

Summary of various laboratory test conducted on selected Undisturbed/Disturbed is given below:

Table 3.4: Description of Tests on Soil Samples

Description of Test	Reference	Undisturbed (UDS) Soil Samples	Disturbed (DS/SPT) Soil Samples
Grain Size Analysis / Hydrometer	IS: 2720 (Part - 4)	✓	✓
Natural Moisture Content / Bulk / Dry density	IS : 2720 (Part – 2)	✓	-
Atterberg Limits - Liquid Limit - Plastic Limit - Shrinkage Limit	IS: 2720 (Part - 5) IS: 2720 (Part - 5) IS: 2720 (Part - 6)	✓ ✓ -	✓ ✓ -
Specific Gravity	IS : 2720 (Part – 3)	✓	✓
Direct Shear Test	IS : 2720 (Part – 13)	✓	✓
Triaxial compressive shear test	IS : 2720 (Part – 11)	✓	✓
Chemical Analysis of Soil Samples	IS : 2720 (Part – 22, 26, 27)	✓	-

ii. Grain Size Analysis:

The Grain Size analysis test were performed in accordance with IS 2720 (Part 4) – 1965. For this test an oven dry pulverized soil sample is sieved through the set of sieves 19mm, 10mm, 4.75mm, 2.0mm, 425 micron, 75micron. The amounts of soil retained on each sieve were noted down. The % retained, cumulative % retained and % passing are computed accordingly. If the % passing 75 micron sieve is significant, Hydrometer method is used to find the percentage of silt and clay fraction. Hydrometer were performed in as per IS 2720 (Part 4) – 1965. The results are attached in Appendix B.

iii. Liquid Limit (IS:2720- Part-5)

By Cone Penetrometer Method

Liquid limit by cone penetrometer test were performed in accordance with IS 2720 (Part 5) – 1985. The tests were conducted, at varying water contents, in order to produce a series of cone penetrations (usually 4) in the range 15mm to 25mm. The resulting cone penetrations are plotted verses the water content of the test specimens. The Liquid Limit (WL) is read off the graph, being the water content at which the line of best fit through the test points crosses 20mm penetration.

iv. Plastic Limit:

Plastic Limit test were performed as per IS:2720-Part-5. The sample rolled between the fingers of one hand and the glass plate with pressure sufficient to reduce the mass into a thread of about 3 mm in 5 to 10 complete forward and back movements until the thread starts just crumbling at a diameter of 3 mm.

v. Plasticity Index

The plasticity index I_p is given by

$$I_p = WL - WP \text{ (in percent)}$$

vi. Specific Gravity

Specific gravity test were performed in accordance with IS 2720 (Part 3 Section-1) – 1980. The results are attached in Appendix B.

vii. Direct Shear Test

Direct shear tests were performed as per IS 2720 (Part XIII)-2015, on the undisturbed soil samples obtained during the field investigation. For this test shear box test apparatus was used. The specimen of size 6 cm x 6 cm x 2.4 cm was used. The normal stresses of 0.5 kg/cm², 1.0 kg/cm², 1.5 kg/cm², 2.0 kg/cm² and 3.0 kg/cm² respectively were used.

viii. Triaxial Shear Test

Triaxial Shear Test under Unconsolidated Un-drained (UU) condition as per IS: 2720 (Part-11)-2011 were performed on the undisturbed soil samples obtained during the field investigation. All specimen of size 38mm diameter and 76mm height were used. The axial loading was applied at 1.25 mm/min rate of strain. The normal stresses applied were 0.5 kg/cm², 1.0 kg/cm², 1.5 kg/cm², 2.0 kg/cm² and 3.0 kg/cm² respectively.

CHAPTER 4 ANALYSIS OF TEST RESULTS

4.1 STRATIFICATION

The study of the borehole logs of 05 BHs, the soil and rock strata is done as per IS 1498., the details of strata and soil classification, are provided in table 4.1.

Table 4.1: Strata Description

BH NO.	Depth (m)		Description
	From	To	
BH-190	0.00	3.00	Filled Up Soil Consist of Silty Sand
	3.00	15.00	Loose to Medium Dense, Brownish, Silty Sand
	15.00	50.00	Dense to Very Dense, Brownish, Silty Sand
BH-191	0.00	3.00	Filled Up Soil Consist of Silty Sand
	3.00	12.00	Loose to Medium Dense, Brownish, Silty Sand
	12.00	36.00	Dense to Very Dense, Brownish, Silty Sand
	36.00	50.00	Very Dense, Brownish, Silty Sand
BH-192	0.00	3.00	Filled Up soil
	3.00	15.00	Loose to Dense, Brownish Red, Silty Sand
	15.00	50.00	Very Dense, Brownish Red, Silty Sand
BH-202	0.00	3.00	Filled Up soil
	3.00	19.50	Loose to Dense, Brownish Red, Silty Sand
	19.50	50.00	Very Dense, Brownish Red, Silty Sand
BH-203A	0.00	3.00	Filledup Strata
	3.00	16.50	Medium Dense, Brownish, Silty Sand
	16.50	25.50	Dense, Brownish, Silty Sand
	25.50	50.00	Very Dense, Brownish, Silty Sand with Gravles

Abbreviations

BH	Borehole
EGL	Existing Ground Level
GWT	Ground Water Table
RQD	Rock Quality Designation
IS	Indian Standards
SPT	Standard Penetration Test
DS	Disturbed Soil
R.L.	Reduced Level
m	Metre
sp. gr.	Specific Gravity
%	Percentage
mg /l	Milligram per litre
mg /kg	Milligram per kilogram

REFERENCE INDIAN STANDARD CODES

S.No.	IS Codes No	TITLE
1	IS : 1892-1979 RA-2016	Code of Practice for subsurface investigation for foundations.
2	IS : 1498-1970 RA 2016	Classification and Identification of soils for general Engineering Purpose.
3	IS :1904 - 2021	Code of practice for design and construction of foundations in soils:General Requirements.
4	IS : 2131-1981 RA 2016	Method for Standard Penetration Test (SPT) for Soils.
5	IS : 2132-1986 RA 2016	Code of Practice for Thin - Walled tube sampling of Soils.
6	IS : 4464-1985 RA 2019	Code of Practice for presentation of drilling information and core description in foundation investigation.
7	IS : 5313-1980 RA 2019	Guide for core drilling observations.
8	IS :5313-2020	Guide for core drilling observations.
9	IS : 4078-1980 RA2019	Code of Practice for indexing and storage of drill cores.
10	IS : 6926-1996 RA 2015	Diamond core drilling – Site investigation for river valley projects - code of Practice.
11	IS : 6935-1973 RA 2019	Method of determination of water level in a bore hole.
12	IS : 15686:2006 RA 2015	Recommendations for the preparation of Geological and Geotechnical maps for river valley projects.
13	IS : 6403 1981 RA 2016	Code of Practice for Determination of Bearing capacity of shallow foundations
14	IS : 8009 (P-1)-1976 RA 2019	Code of practice for calculation of Settlements of Foundations
15	IS: 12070 - 1987 RA 2020	Code of practice for design and construction of shallow foundations on rocks
16	IS :13365 (P-1) : 1998 RA 2021	Quantitative classificationSystems of rock mass — guidelines
17	IS : 1893 (P-1) 2016	Criteria for Earthquake resistant design of structures.
18	IS : 456- 2000 RA 2016	Plain and Reinforced Concrete-Code of Practice.
19	IRC-78-2024	Standard Specifications and Code of Practice for Road Bridges, Foundation & Substructure
Sr.	BOOK	TITLE
1.	Joseph E. Bowles	Foundation Analysis and Design

APPENDIX – A (FIELD DATA RESULTS)

Appendix No.	ITEMS
A-1	FIELD BOREHOLE LOGS
A-2	SUBSOIL PROFILE DIAGRAM

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-466	Northing :2971146 m	Easting :579010 m
Reduced Level (m):(+)408.360	BH. No. :BH-190	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :04-08-2026	Date of Completion :08-08-2026	

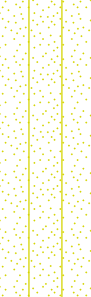
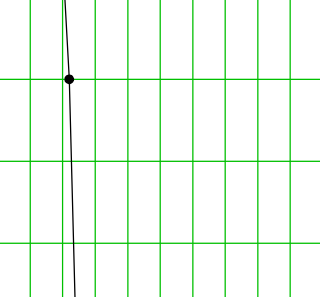
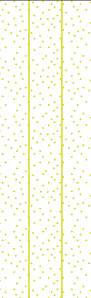
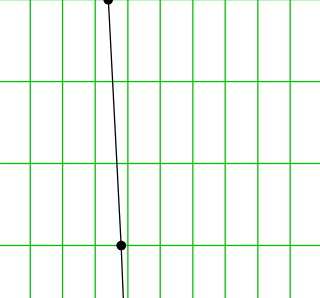
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil Consist of Silty Sand	FILL				
2.0									
2.5									
3.0	3	SPT-1	7						
3.5									
4.0	4	SPT-29	86						
4.5	4.5	SPT-2	8						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	15						
6.5				Loose to Medium Dense, Brownish, Silty Sand	SM				
7.0									
7.5	7.5	SPT-4	17						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	18						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-466	Northing :2971146 m	Easting :579010 m
Reduced Level (m):(+)408.360	BH. No. :BH-190	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :04-08-2026	Date of Completion :08-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	22	Loose to Medium Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	24						
12.5				Dense to Very Dense, Brownish, Silty Sand	SM				
13.0									
13.5	13.5	SPT-8	28						
14.0									
14.5									
15.0	15	SPT-9	34						
15.5									
16.0									
16.5	16.5	SPT-10	38						
17.0									
17.5									
18.0	18	SPT-11	41						
18.5									
19.0									
19.5	19.5	SPT-12	44						
20.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-466	Northing :2971146 m	Easting :579010 m
Reduced Level (m):(+)408.360	BH. No. :BH-190	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :04-08-2026	Date of Completion :08-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	47						
21.5									
22.0									
22.5	22.5	SPT-14	50						
23.0									
23.5									
24.0	24	SPT-15	52						
24.5									
25.0				Dense to Very Dense, Brownish, Silty Sand	SM				
25.5	25.5	SPT-16	54						
26.0									
26.5									
27.0	27	SPT-17	56						
27.5									
28.0									
28.5	28.5	SPT-18	59						
29.0									
29.5									
30.0	30	SPT-19	62						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-466	Northing :2971146 m	Easting :579010 m
Reduced Level (m):(+)408.360	BH. No. :BH-190	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :04-08-2026	Date of Completion :08-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	64						
32.0									
32.5									
33.0	33	SPT-21	66						
33.5									
34.0									
34.5	34.5	SPT-22	68						
35.0				Dense to Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	70						
36.5									
37.0									
37.5	37.5	SPT-24	73						
38.0									
38.5									
39.0	39	SPT-25	75						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-466	Northing :2971146 m	Easting :579010 m
Reduced Level (m):(+)408.360	BH. No. :BH-190	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :04-08-2026	Date of Completion :08-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	78						
41.0									
41.5									
42.0	42	SPT-27	80						
42.5									
43.0									
43.5	43.5	SPT-28	84						
44.0									
44.5									
45.0				Dense to Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	90						
47.0									
47.5									
48.0	48	SPT-31	94						
48.5									
49.0									
49.5	49.5	SPT-32	96						
50.0	50								

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client : DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage : 17+540	Northing : 2971272 m	Easting : 579033 m
Reduced Level (m): (+)408.968	BH. No. : BH-191	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 07-08-2026	Date of Completion : 09-08-2026	

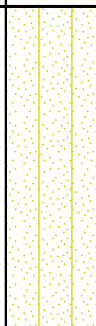
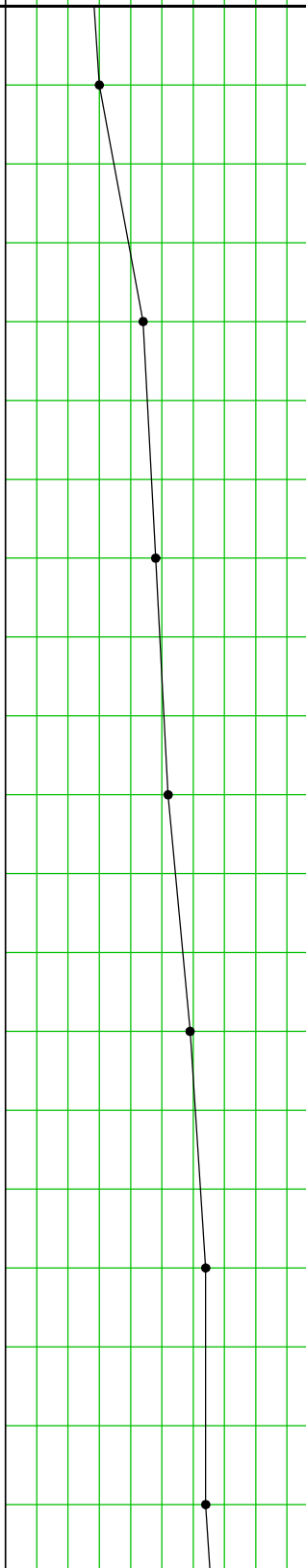
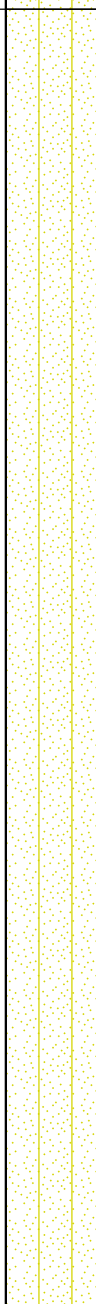
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil Consist of Silty Sand	FILL				
2.0									
2.5									
3.0	3	SPT-1	9						
3.5									
4.0									
4.5	4.5	SPT-2	15						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	19						
6.5				Loose to Medium Dense, Brownish, Silty Sand	SM				
7.0									
7.5	7.5	SPT-4	21						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	25						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client : DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage : 17+540	Northing : 2971272 m	Easting : 579033 m
Reduced Level (m): (+)408.968	BH. No. : BH-191	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 07-08-2026	Date of Completion : 09-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	30	Loose to Medium Dense, Brownish, Silty Sand	SM				
11.0									
11.5	11.5	UDS-3							
12.0	12	SPT-7	44	Dense to Very Dense, Brownish, Silty Sand	SM				
12.5									
13.0									
13.5	13.5	SPT-8	48						
14.0									
14.5									
15.0	15	SPT-9	52						
15.5									
16.0									
16.5	16.5	SPT-10	59						
17.0									
17.5									
18.0	18	SPT-11	64						
18.5									
19.0									
19.5	19.5	SPT-12	64						
20.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client : DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage : 17+540	Northing : 2971272 m	Easting : 579033 m
Reduced Level (m): (+)408.968	BH. No. : BH-191	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 07-08-2026	Date of Completion : 09-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	69						
21.5									
22.0									
22.5	22.5	SPT-14	72						
23.0									
23.5									
24.0	24	SPT-15	74						
24.5									
25.0				Dense to Very Dense, Brownish, Silty Sand	SM				
25.5	25.5	SPT-16	80						
26.0									
26.5									
27.0	27	SPT-17	83						
27.5									
28.0									
28.5	28.5	SPT-18	86						
29.0									
29.5									
30.0	30	SPT-19	90						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client : DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage : 17+540	Northing : 2971272 m	Easting : 579033 m
Reduced Level (m): (+)408.968	BH. No. : BH-191	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 07-08-2026	Date of Completion : 09-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	94						
32.0									
32.5									
33.0	33	SPT-21	95	Dense to Very Dense, Brownish, Silty Sand	SM				
33.5									
34.0									
34.5	34.5	SPT-22	95						
35.0									
35.5									
36.0	36	SPT-23	>100						
36.5									
37.0									
37.5	37.5	SPT-24	>100						
38.0									
38.5									
39.0	39	SPT-25	>100	Very Dense, Brownish, Silty Sand	SM				
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :17+540	Northing :2971272 m	Easting :579033 m
Reduced Level (m):(+)408.968	BH. No. :BH-191	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :07-08-2026	Date of Completion :09-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	>100						
41.0									
41.5									
42.0	42	SPT-27	>100						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :17+620	Northing :2911355 m	Easting :579047 m
Reduced Level (m):(+)409.481	BH. No. :BH-192	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :07-08-2026	Date of Completion :08-08-2026	

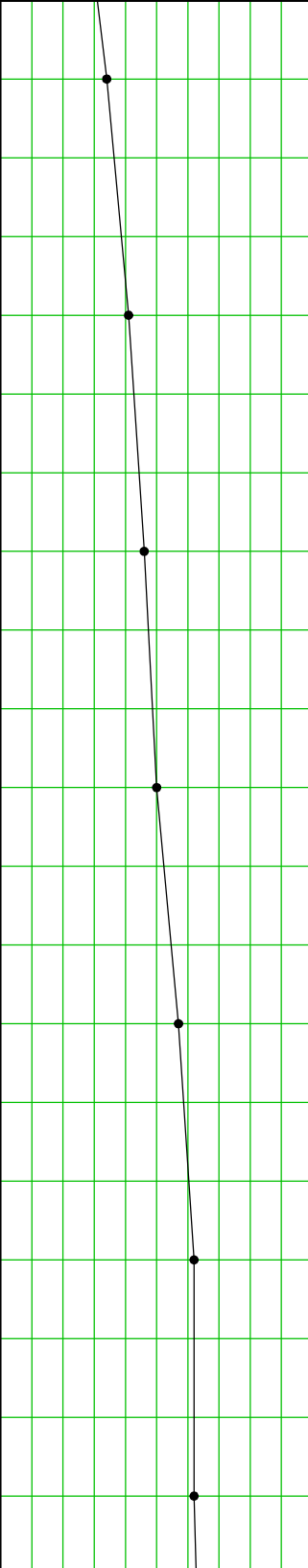
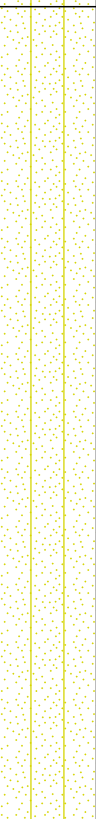
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5									
3.0	3	SPT-1	7						
3.5									
4.0									
4.5	4.5	SPT-2	11						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	13						
6.5				Loose to Dense, Brownish Red, Silty Sand	SM				
7.0									
7.5	7.5	SPT-4	19						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	25						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client : DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage : 17+620	Northing : 2911355 m	Easting : 579047 m
Reduced Level (m): (+)409.481	BH. No. : BH-192	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 07-08-2026	Date of Completion : 08-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	
10.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5	SPT-6	34	Loose to Dense, Brownish Red, Silty Sand	SM					
11.0										
11.5	11.5	UDS-3								
12.0	12	SPT-7	41							
12.5										
13.0				Very Dense, Brownish Red, Silty Sand	SM					
13.5	13.5	SPT-8	46							
14.0										
14.5										
15.0	15	SPT-9	50							
15.5										
16.0										
16.5	16.5	SPT-10	57							
17.0										
17.5										
18.0	18	SPT-11	62							
18.5										
19.0										
19.5	19.5	SPT-12	62							
20.0										

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :17+620	Northing :2911355 m	Easting :579047 m
Reduced Level (m):(+)409.481	BH. No. :BH-192	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :07-08-2026	Date of Completion :08-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	64						
21.5									
22.0									
22.5	22.5	SPT-14	66						
23.0									
23.5									
24.0	24	SPT-15	68						
24.5									
25.0				Very Dense, Brownish Red, Silty Sand	SM				
25.5	25.5	SPT-16	70						
26.0									
26.5									
27.0	27	SPT-17	72						
27.5									
28.0									
28.5	28.5	SPT-18	74						
29.0									
29.5									
30.0	30	SPT-19	77						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 1.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :17+620	Northing :2911355 m	Easting :579047 m
Reduced Level (m):(+)409.481	BH. No. :BH-192	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :07-08-2026	Date of Completion :08-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	79						
32.0									
32.5									
33.0	33	SPT-21	82						
33.5									
34.0									
34.5	34.5	SPT-22	84						
35.0				Very Dense, Brownish Red, Silty Sand	SM				
35.5									
36.0	36	SPT-23	92						
36.5									
37.0									
37.5	37.5	SPT-24	94						
38.0									
38.5									
39.0	39	SPT-24	>100 (24cm)						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client : DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage : 17+620	Northing : 2911355 m	Easting : 579047 m
Reduced Level (m): (+)409.481	BH. No. : BH-192	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 07-08-2026	Date of Completion : 08-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-24	>100 (26cm)						
41.0									
41.5									
42.0	42	SPT-25	>100						
42.5									
43.0									
43.5	43.5	SPT-26	>100						
44.0									
44.5									
45.0	45	SPT-27	>100	Very Dense, Brownish Red, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-28	>100						
47.0									
47.5									
48.0	48	SPT-29	>100						
48.5									
49.0									
49.5	49.5	SPT-30	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-504	Northing :2972307 m	Easting :579177 m
Reduced Level (m):(+)416.190	BH. No. :BH-202	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :07-08-2026	Date of Completion :09-08-2026	

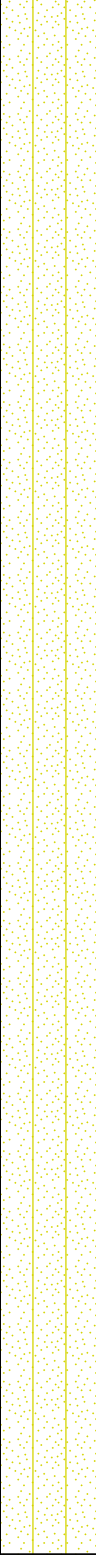
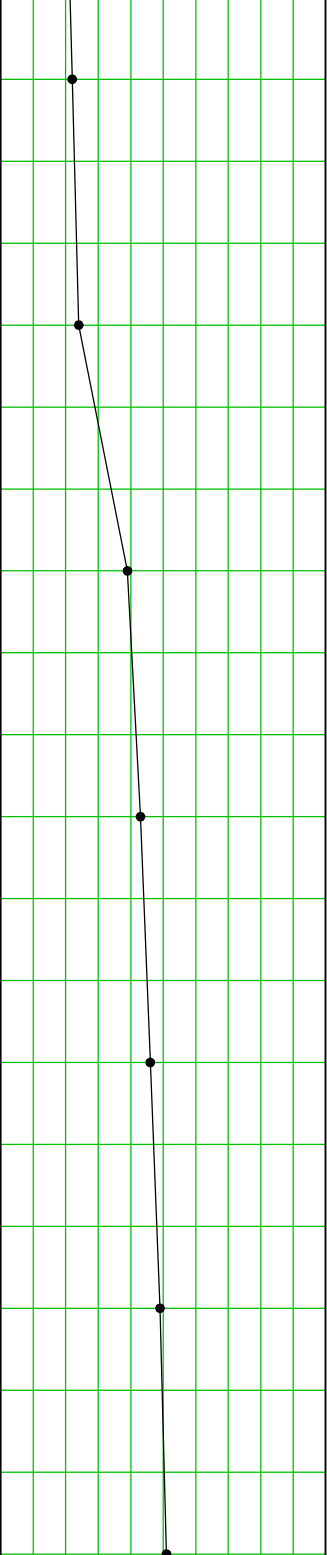
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5									
3.0	3	SPT-1	7						
3.5									
4.0									
4.5	4.5	SPT-2	10						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	13						
6.5				Loose to Dense, Brownish Red, Silty Sand	SM				
7.0									
7.5	7.5	SPT-4	17						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	20						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-504	Northing :2972307 m	Easting :579177 m
Reduced Level (m):(+)416.190	BH. No. :BH-202	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :07-08-2026	Date of Completion :09-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	22	Loose to Dense, Brownish Red, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	24						
12.5									
13.0									
13.5	13.5	SPT-8	39						
14.0									
14.5									
15.0	15	SPT-9	43						
15.5				Very Dense, Brownish Red, Silty Sand	SM				
16.0									
16.5	16.5	SPT-10	46						
17.0									
17.5									
18.0	18	SPT-11	49						
18.5									
19.0									
19.5	19.5	SPT-12	51						
20.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client : DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage : P-504	Northing : 2972307 m	Easting : 579177 m
Reduced Level (m) : (+) 416.190	BH. No. : BH-202	BH Depth (m) : 50
Proposed/Existing Structure :	Water Table (m) : Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 07-08-2026	Date of Completion : 09-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	53						
21.5									
22.0									
22.5	22.5	SPT-14	58						
23.0									
23.5									
24.0	24	SPT-15	61						
24.5									
25.0				Very Dense, Brownish Red, Silty Sand	SM				
25.5	25.5	SPT-16	65						
26.0									
26.5									
27.0	27	SPT-17	68						
27.5									
28.0									
28.5	28.5	SPT-18	70						
29.0									
29.5									
30.0	30	SPT-19	72						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-504	Northing :2972307 m	Easting :579177 m
Reduced Level (m):(+)416.190	BH. No. :BH-202	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :07-08-2026	Date of Completion :09-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	74						
32.0									
32.5									
33.0	33	SPT-21	77						
33.5									
34.0									
34.5	34.5	SPT-22	79						
35.0				Very Dense, Brownish Red, Silty Sand	SM				
35.5									
36.0	36	SPT-23	81						
36.5									
37.0									
37.5	37.5	SPT-24	85						
38.0									
38.5									
39.0	39	SPT-25	88						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-504	Northing :2972307 m	Easting :579177 m
Reduced Level (m):(+)416.190	BH. No. :BH-202	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :07-08-2026	Date of Completion :09-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	91						
41.0									
41.5									
42.0	42	SPT-27	94						
42.5									
43.0									
43.5	43.5	SPT-27	>100 (22cm)						
44.0									
44.5									
45.0	45	SPT-28	>100	Very Dense, Brownish Red, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-29	>100						
47.0									
47.5									
48.0	48	SPT-30	>100						
48.5									
49.0									
49.5	49.5	SPT-31	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 1.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-508	Northing :2972403 m	Easting :579187 m
Reduced Level (m):(+)416.543	BH. No. :BH-203A	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :08-08-2026	Date of Completion :09-08-2026	

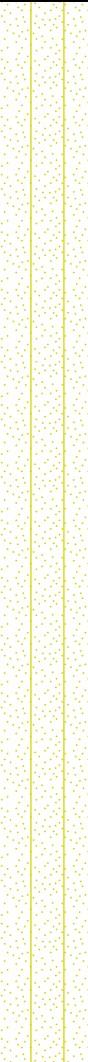
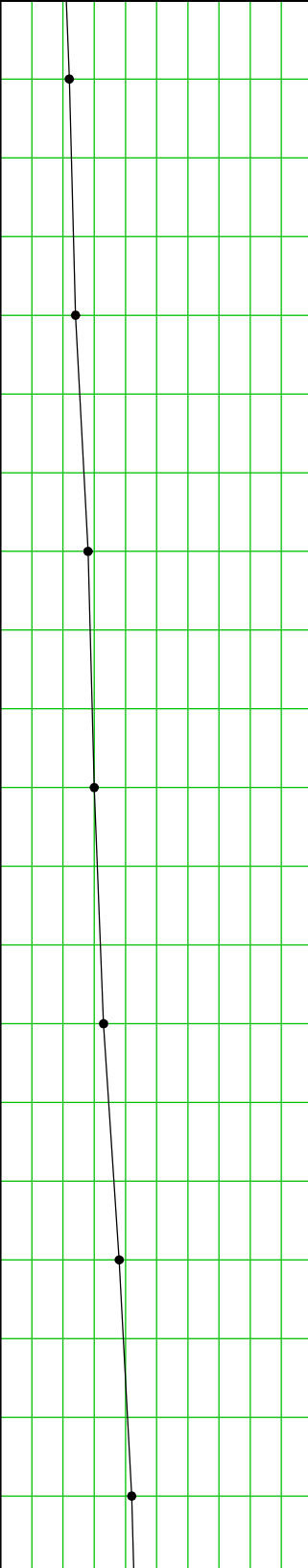
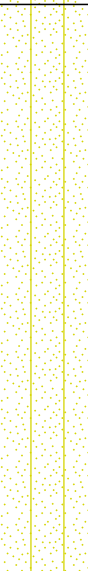
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filledup Strata	FILL				
2.0									
2.5									
3.0	3	SPT-1	11						
3.5									
4.0									
4.5	4.5	SPT-2	12						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	14						
6.5				Medium Dense, Brownish, Silty Sand	SM				
7.0									
7.5	7.5	SPT-4	16						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	19						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client : DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage : P-508	Northing : 2972403 m	Easting : 579187 m
Reduced Level (m) : (+) 416.543	BH. No. : BH-203A	BH Depth (m) : 50
Proposed/Existing Structure :	Water Table (m) : Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 08-08-2026	Date of Completion : 09-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	
10.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5	SPT-6	22	Medium Dense, Brownish, Silty Sand	SM					
11.0										
11.5	11.5	UDS*								
12.0	12	SPT-7	24							
12.5										
13.0										
13.5	13.5	SPT-8	28							
14.0										
14.5										
15.0	15	SPT-9	30							
15.5										
16.0										
16.5	16.5	SPT-10	33							
17.0										
17.5										
18.0	18	SPT-11	38	Dense, Brownish, Silty Sand	SM					
18.5										
19.0										
19.5	19.5	SPT-12	42							
20.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-508	Northing :2972403 m	Easting :579187 m
Reduced Level (m):(+)416.543	BH. No. :BH-203A	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :08-08-2026	Date of Completion :09-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	44						
21.5									
22.0									
22.5	22.5	SPT-14	47	Dense, Brownish, Silty Sand	SM				
23.0									
23.5									
24.0	24	SPT-15	50						
24.5									
25.0									
25.5	25.5	SPT-16	53						
26.0									
26.5									
27.0	27	SPT-17	56						
27.5									
28.0									
28.5	28.5	SPT-18	59	Very Dense, Brownish, Silty Sand with Gravels	SM				
29.0									
29.5									
30.0	30	SPT-19	67						

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

BH Location/Chainage :P-508	Northing :2972403 m	Easting :579187 m
Reduced Level (m):(+)416.543	BH. No. :BH-203A	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :08-08-2026	Date of Completion :09-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	73						
32.0									
32.5									
33.0	33	SPT-21	78						
33.5									
34.0									
34.5	34.5	SPT-22	83						
35.0				Very Dense, Brownish, Silty Sand with Gravles	SM				
35.5									
36.0	36	SPT-23	86						
36.5									
37.0									
37.5	37.5	SPT-24	94						
38.0									
38.5									
39.0	39	SPT-24	>100 (21cm)						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 10.5 km) Client :DELHI METRO RAIL CORPORATION LTD

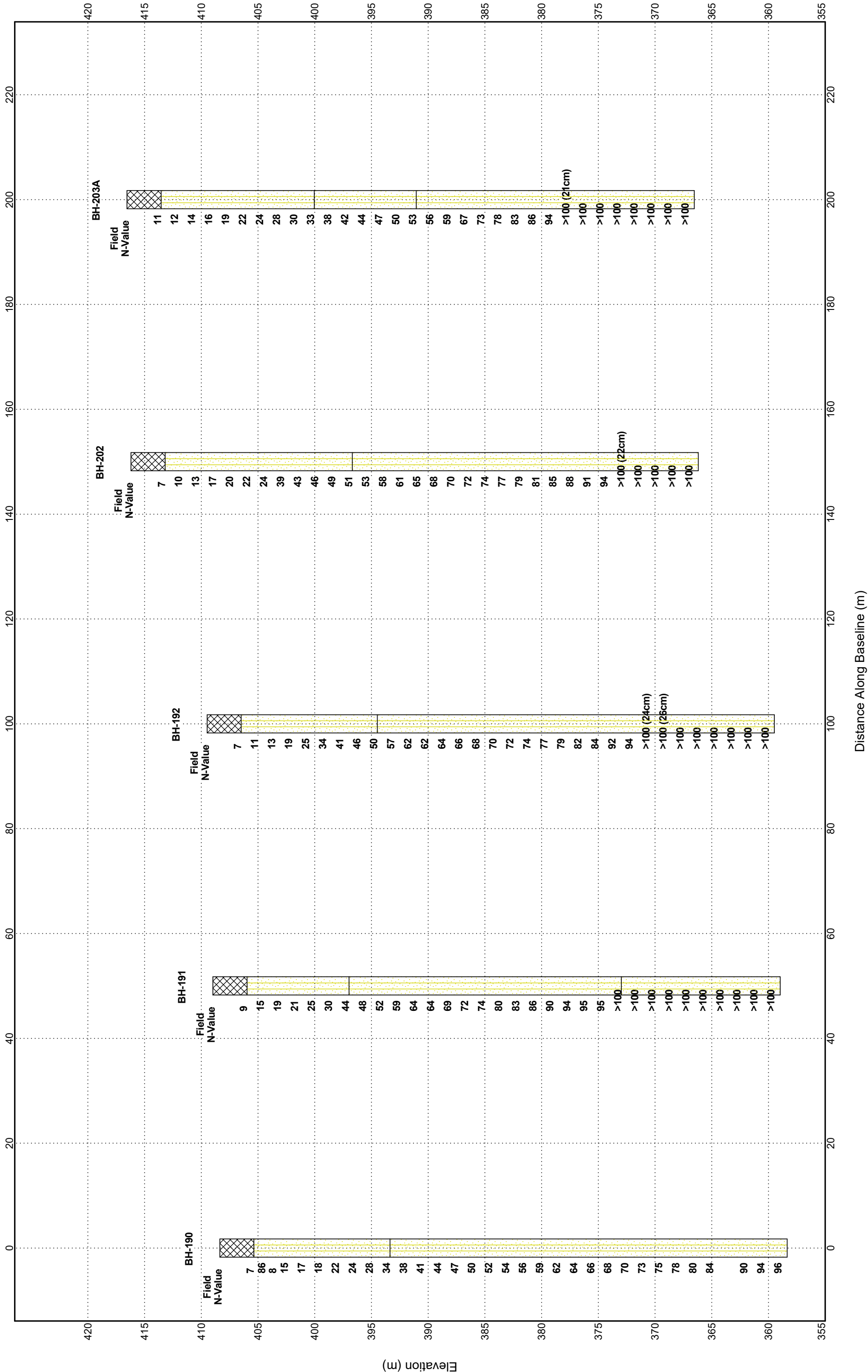
BH Location/Chainage :P-508	Northing :2972403 m	Easting :579187 m
Reduced Level (m):(+)416.543	BH. No. :BH-203A	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :08-08-2026	Date of Completion :09-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-25	>100						
41.0									
41.5									
42.0	42	SPT-26	>100						
42.5									
43.0									
43.5	43.5	SPT-27	>100						
44.0									
44.5									
45.0	45	SPT-28	>100	Very Dense, Brownish, Silty Sand with Gravles	SM				
45.5									
46.0									
46.5	46.5	SPT-29	>100						
47.0									
47.5									
48.0	48	SPT-30	>100						
48.5									
49.0									
49.5	49.5	SPT-31	>100						
50.0	50								

SUB SOIL PROFILE DIAGRAM -

CLIENT DELHI METRO RAIL CORPORATION LTD
PROJECT NUMBER SR-1241_25-26

PROJECT NAME GTI work for JPR Metro Ph-II Project from Prahladpura to Todli Mod (Total approximate length ~42.8 km)
PROJECT LOCATION Jaipur, Rajasthan



APPENDIX – B (LAB TEST RESULTS)

Appendix No.	ITEMS
B-1	SOIL CHARACTERISTICS SHEETS
B-2	GSD CURVES

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"										Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
											04-08-2026		to 08-08-2026		P-466		BH-190	Not Encountered		50.00 m		579010.000 m		2971146.000 m		(+)408.360 m	SR-1241_25-26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
											IS Classification	IS Symbol	Soil Description	Corrected SPT Value (N)	Observed SPT Value (N)	Depth from G.L. (m)	Clay	Silt	Grain Size Distribution % wt retained			Atterberg Limits %			Bulk Density (g/cm³)	Natural Moisture Content (%)	Dry Density (g/cm³)	Specific Gravity	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Void Ratio (e₀)	Pressure (kg/cm²)	C _x x 10⁴ (cm²/Sec)	M _y x 10² (cm²/Kg)	Compression Index (C _c)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 UDS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+-Direct Shear Test on Remoulded Sample, UUT+-Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"										Date of Boring				Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code			
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _a)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %			Not Encountered		50.00 m		579033.000 m			2971272.000 m			Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _y x 10 ⁻² (cm ² /kg)	Compression Index (C _c)	
								Clay	Silt	Fine	Medium	Coarse	Gravel		Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)						Swelling Pressure (kg/cm ²)
	DS-1	0.00	-	-	Filled Up Soil Consist of Silty Sand	-																										
	SPT-1	3.00	9	11	Loose to Medium Dense, Brownish, Silty Sand	-																										
	SPT-2	4.50	15	16		-																										
	UDS-1	5.50	-	-		SM																										
	SPT-3	6.00	19	19		-																										
	SPT-4	7.50	21	19		-																										
	UDS-2	8.50	-	-		SM																										
	SPT-5	9.00	25	21		-																										
	SPT-6	10.50	30	24		-																										
	UDS-3	11.50	-	-		SM																										
	SPT-7	12.00	44	33		-																										
	SPT-8	13.50	48	34	SM																											
	SPT-9	15.00	52	35	-																											
	SPT-10	16.50	59	38	-																											
	SPT-11	18.00	64	40	SM																											
	SPT-12	19.50	64	38	-																											
	SPT-13	21.00	69	39	-																											
	SPT-14	22.50	72	39	Dense to Very Dense, Brownish, Silty Sand																											
	SPT-15	24.00	74	38		-																										
	SPT-16	25.50	80	40		SM																										
	SPT-17	27.00	83	39		-																										

Abbreviations:-
 UDS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+-Direct Shear Test on Remoulded Sample, UUT+-Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length 42.8 km)”										Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)					R.L.		Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																													
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				Not Encountered		50.00 m		579033.000 m			2971272.000 m		Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁴ (cm ² /Sec)	M _v x 10 ² (cm ² /Kg)	Compression Index (C _c)																																																																																																																																																																																																																																																																																																																																																																																																																																										
Clay								Silt	Fine	Sand		Gravel		Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)						Permeability (cm/sec)																																																																																																																																																																																																																																																																																																																																																																																																																																									
	07-08-2026	to	09-08-2026	17+540	BH-191	Not Encountered	50.00 m			579033.000 m	2971272.000 m	(+)408.968 m	SR-1241_25-26																																																																																																																																																																																																																																																																																																																																																																																																																																																												
SPT-18	SPT-18	28.50	86	40		-																																																																																																																																																																																																																																																																																																																																																																																																																																																																			</

Abbreviations:-
DS-Disurbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”PKG-III										Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				Bulk Density (g/cm ³)		Natural Moisture Content (%)		Dry Density (g/cm ³)		Specific Gravity		Shear Strength			Free Swell Index (%)			Swelling Pressure (kg/cm ²)			Permeability (cm/sec)			Consolidation Parameters																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
								Silt		Fine		Medium		Coarse		Gravel		Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit									Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _y x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	DS-1	0.00	-	-	Filledup Strata	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 SPS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+-Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)” PKG-III						Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)					R.L.		Ref. Code										
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %			Not Encountered		50.00 m		579047.000 m					2911355.000 m		Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _s x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)		
								Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)						Permeability (cm/sec)	
	DS-1	0.00	-	-	Filled Up soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-1	3.00	7	9	Loose to Dense, Brownish Red, Silty Sand	SM		0	20	65	10	5	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-2	4.50	11	12		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS-1	5.50	-	-		SM		0	14	66	16	4	0	0	-	1.69	11.63	1.51	2.63	DST	0.00	29	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-3	6.00	13	13		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-4	7.50	19	18		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS-2	8.50	-	-		SM		0	16	64	16	4	0	0	-	1.77	12.15	1.58	2.63	DST	0.00	30	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-5	9.00	25	21		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-6	10.50	34	27		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS-3	11.50	-	-		SM		0	14	60	18	6	2	0	-	1.83	12.45	1.63	2.62	DST	0.00	31	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-7	12.00	41	31		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-8	13.50	46	33		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-9	15.00	50	34		SM		0	25	58	14	3	0	0	-	1.85	13.00	1.64	2.61	DST+	0.00	32	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-10	16.50	57	37		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-11	18.00	62	38		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-12	19.50	62	36		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-13	21.00	64	36		SM		0	19	62	14	5	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-14	22.50	66	35		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-15	24.00	68	35		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-16	25.50	70	35	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)” PKG-III										Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code					
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained					Atterberg Limits %			Not Encountered		50.00 m		2911355.000 m			579047.000 m		2911355.000 m		Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ³ /Kg)	Compression Index (C _c)	
								Clay	Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)						Permeability (cm/sec)
SPT-17	27.00	72	34		Very Dense, Brownish Red, Silty Sand	SM		0	24	63	9	4	0	0	NIL	NP	-	1.87	13.50	1.65	2.61	DST+	0.00	33	-	-	-	-	-	-	-	-
SPT-18	28.50	74	34			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-19	30.00	77	35			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-20	31.50	79	36			SM		0	17	67	10	5	1	0	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-21	33.00	82	38			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-22	34.50	84	39			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-23	36.00	92	42			SM		0	28	60	7	5	0	0	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-24	37.50	94	43			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-24	39.00	>100 (24cm)	-			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-24	40.50	>100 (26cm)	-			SM		0	27	55	10	8	0	0	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-25	42.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-26	43.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-27	45.00	>100	-		SM		0	19	62	13	6	0	0	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-28	46.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-29	48.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-30	49.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	Date of Boring						Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)					R.L.		Ref. Code												
	07-08-2026		to		09-08-2026		P-504		BH-202		Not Encountered		50.00 m		2972307.000 m					(+)408.968 m		SR-124I_25-26												
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %			Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _y x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)					
Clay								Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit					Plasticity Index	Shrinkage Limit	Type of Test									Cohesion C (kg/cm ²)	Angle of Friction (φ°)			
DS-1	0.00	-	-	-	Filled Up soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SPT-1	3.00	7	9	-	Loose to Dense, Brownish Red, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SPT-2	4.50	10	11	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
UDS-1	5.50	-	-	SM		-		0	19	68	10	2	1	0	-	NIL	-	1.68	11.45	1.51	2.63	DST	0.00	29	-	-	-	-	-	-	-	-		
SPT-3	6.00	13	13	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-4	7.50	17	16	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
UDS-2	8.50	-	-	SM		-		0	18	58	19	5	0	0	-	NIL	-	1.72	12.10	1.53	2.63	DST	0.00	30	-	-	-	-	-	-	-	-	-	
SPT-5	9.00	20	17	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-6	10.50	22	18	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-7	12.00	24	18	SM		-		0	24	63	13	0	0	0	-	NIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-8	13.50	39	28	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-9	15.00	43	30	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-10	16.50	46	30	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-11	18.00	49	31	SM		-		0	15	59	17	8	1	0	-	NIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-12	19.50	51	31	SM		-		0	13	55	20	10	2	0	-	NIL	-	1.83	12.50	1.63	2.62	DST+	0.00	32	-	-	-	-	-	-	-	-	-	-
SPT-13	21.00	53	30	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-14	22.50	58	32	SM		-		0	17	58	17	7	1	0	-	NIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-15	24.00	61		-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-16	25.50	65	33	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-17	27.00	68	33	SM	-		0	27	50	18	5	0	0	-	NIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

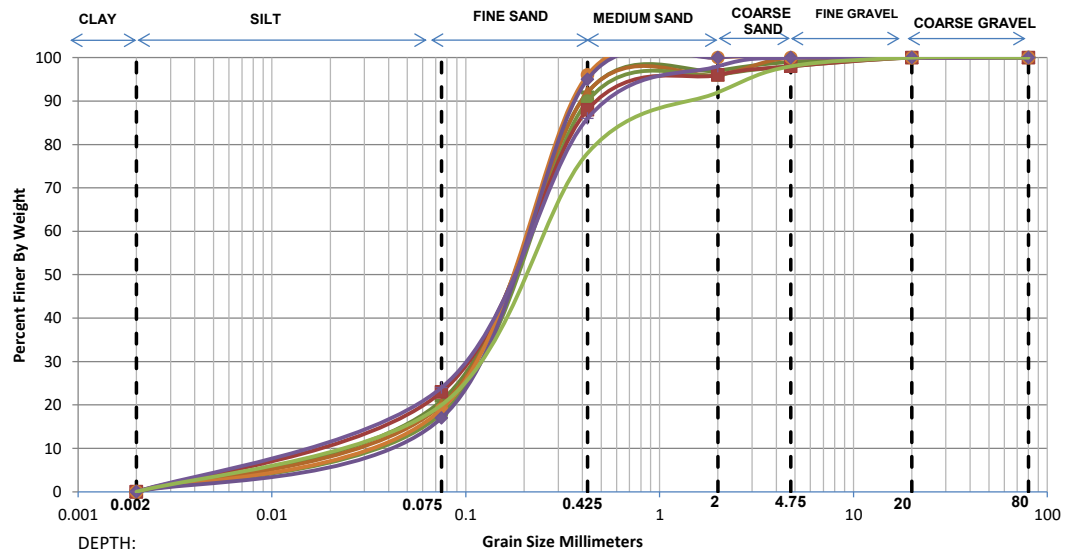
SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"
Location/Chainage	P-466
B.H. No.	190

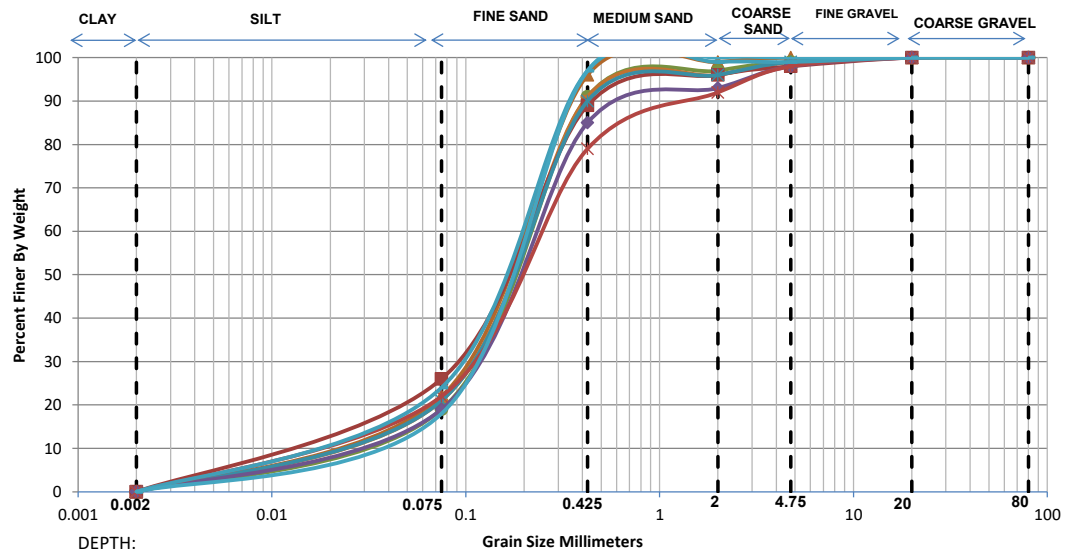


— 3.00 m — 5.50 m — 8.50 m — 15.00 m — 21.00 m — 27.00 m — 36.00 m — 43.50 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	21.00	71.00	5.00	2.00	1.00	0.00	0.0257	0.1088	0.2144	8.33	2.14
5.50 m	0.00	20.00	72.00	4.00	4.00	0.00	0.00	0.0281	0.1128	0.2171	7.73	2.09
8.50 m	0.00	18.00	72.00	6.00	2.00	2.00	0.00	0.0336	0.1219	0.2281	6.78	1.94
15.00 m	0.00	23.00	65.00	8.00	2.00	2.00	0.00	0.0216	0.1015	0.2184	10.12	2.19
21.00 m	0.00	19.00	77.00	4.00	0.00	0.00	0.00	0.0310	0.1159	0.2126	6.86	2.04
27.00 m	0.00	17.00	78.00	5.00	0.00	0.00	0.00	0.0374	0.1246	0.2207	5.90	1.88
36.00 m	0.00	24.00	62.00	12.00	2.00	0.00	0.00	0.0199	0.0979	0.2221	11.19	2.17
43.50 m	0.00	20.00	58.00	14.00	6.00	2.00	0.00	0.0271	0.1174	0.2643	9.74	1.92

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"
Location/Chainage	17+540
B.H. No.	191

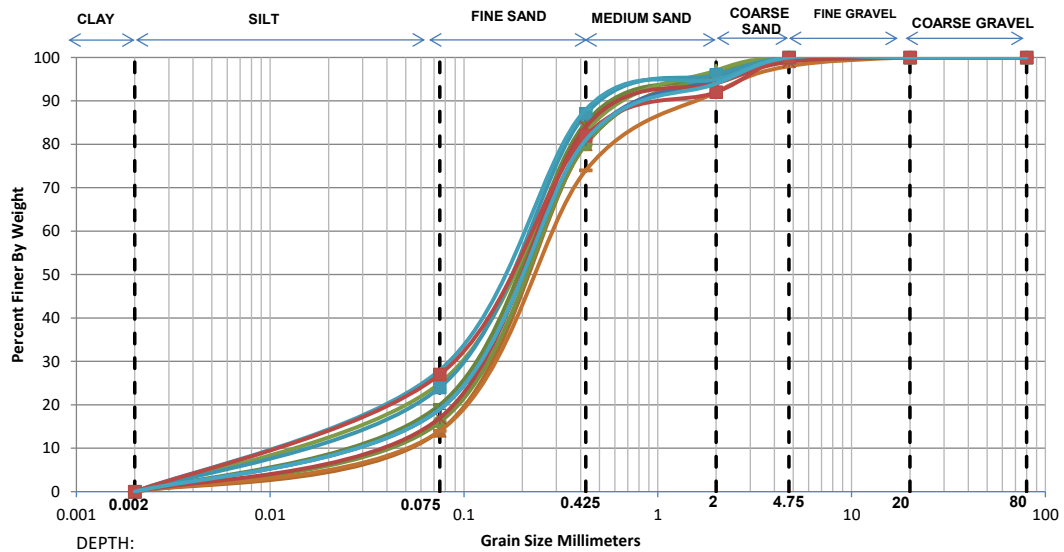


— 5.50 m — 8.50 m — 11.50 m — 13.50 m — 18.00 m — 25.50 m — 31.50 m — 36.00 m — 45.00 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
5.50 m	0.00	22.00	74.00	3.00	1.00	0.00	0.00	0.0239	0.1040	0.2032	8.51	2.23
8.50 m	0.00	19.00	72.00	6.00	2.00	1.00	0.00	0.0307	0.1173	0.2229	7.27	2.01
11.50 m	0.00	21.00	70.00	5.00	3.00	1.00	0.00	0.0257	0.1090	0.2165	8.44	2.14
13.50 m	0.00	26.00	63.00	7.00	2.00	2.00	0.00	0.0173	0.0896	0.2061	11.94	2.26
18.00 m	0.00	21.00	69.00	6.00	3.00	1.00	0.00	0.0256	0.1092	0.2191	8.56	2.13
25.50 m	0.00	19.00	66.00	8.00	5.00	2.00	0.00	0.0303	0.1192	0.2390	7.89	1.96
31.50 m	0.00	22.00	57.00	13.00	6.00	2.00	0.00	0.0229	0.1079	0.2537	11.10	2.01
36.00 m	0.00	24.00	73.00	2.00	0.00	1.00	0.00	0.0204	0.0962	0.1951	9.56	2.32
45.00 m	0.00	18.00	79.00	3.00	0.00	0.00	0.00	0.0341	0.1197	0.2137	6.27	1.97

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)" PKG-III
Location/Chainage	17+620
B.H. No.	BH-192

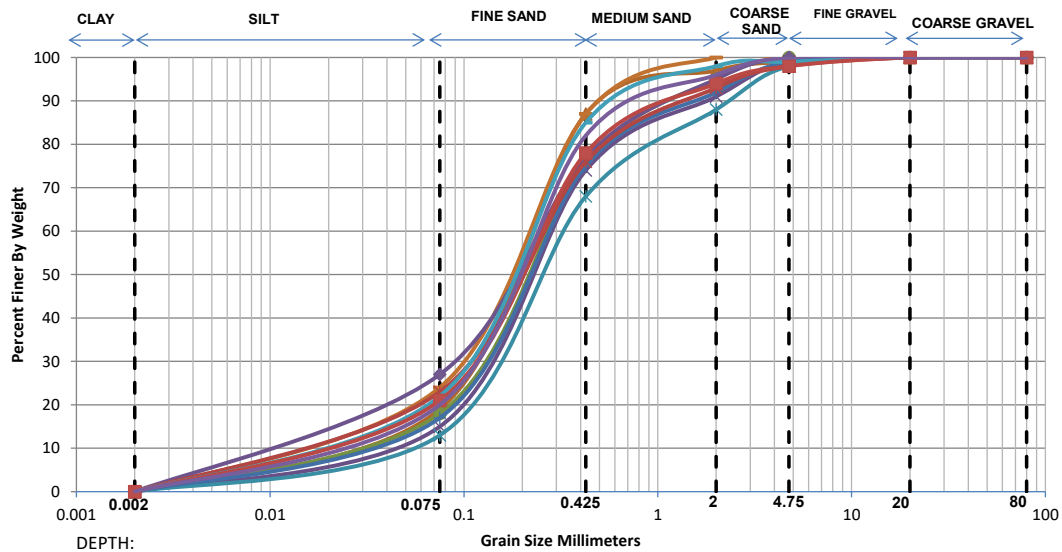


— 3.00 m — 5.50 m — 8.50 m — 11.50 m — 15.00 m — 21.00 m — 27.00 m — 31.50 m — 36.00 m — 40.50 m — 45.00 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	20.00	65.00	10.00	5.00	0.00	0.00	0.0276	0.1149	0.2367	8.57	2.02
5.50 m	0.00	14.00	66.00	16.00	4.00	0.00	0.00	0.0498	0.1454	0.2725	5.47	1.56
8.50 m	0.00	16.00	64.00	16.00	4.00	0.00	0.00	0.0402	0.1356	0.2672	6.64	1.71
11.50 m	0.00	14.00	60.00	18.00	6.00	2.00	0.00	0.0493	0.1496	0.3005	6.10	1.51
15.00 m	0.00	25.00	58.00	14.00	3.00	0.00	0.00	0.0183	0.0943	0.2293	12.56	2.12
21.00 m	0.00	19.00	62.00	14.00	5.00	0.00	0.00	0.0300	0.1209	0.2545	8.49	1.92
27.00 m	0.00	24.00	63.00	9.00	4.00	0.00	0.00	0.0199	0.0977	0.2183	10.97	2.19
31.50 m	0.00	17.00	67.00	10.00	5.00	1.00	0.00	0.0366	0.1287	0.2485	6.78	1.82
36.00 m	0.00	28.00	60.00	7.00	5.00	0.00	0.00	0.0150	0.0821	0.2020	13.46	2.23
40.50 m	0.00	27.00	55.00	10.00	8.00	0.00	0.00	0.0158	0.0863	0.2250	14.26	2.10
45.00 m	0.00	19.00	62.00	13.00	6.00	0.00	0.00	0.0300	0.1209	0.2542	8.48	1.92

GRAIN SIZE DISTRIBUTION CURVES

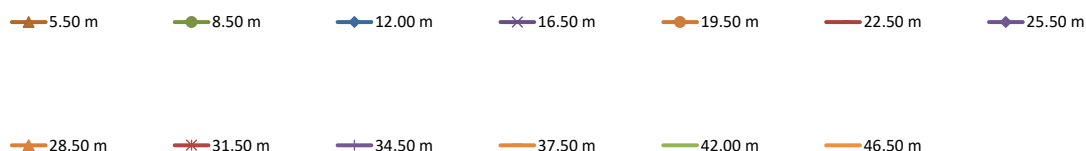
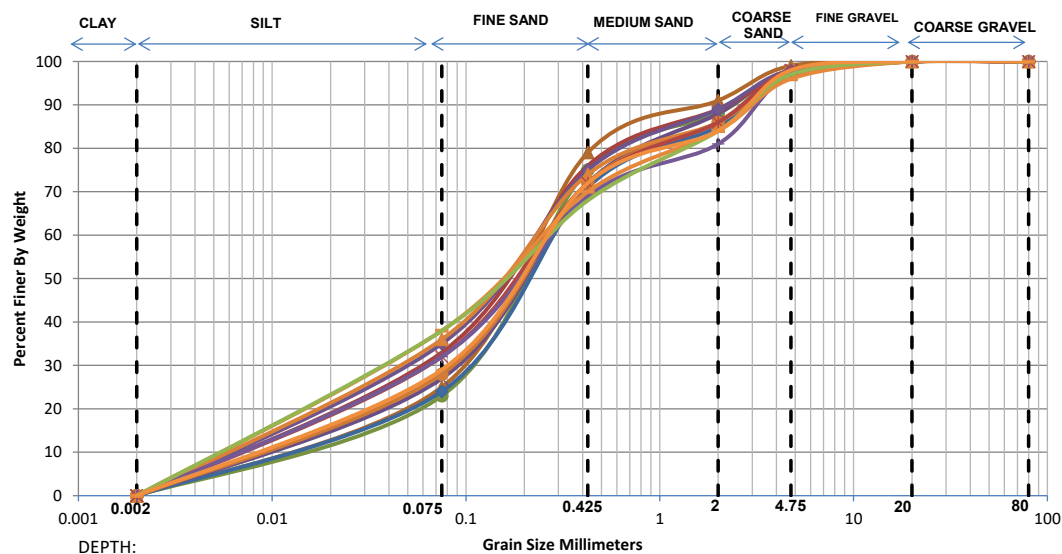
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)" PKG-III
Location/Chainage	P-504
B.H. No.	202



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
5.50 m	0.00	19.00	68.00	10.00	2.00	1.00	0.00	0.0304	0.1187	0.2339	7.69	1.98
8.50 m	0.00	18.00	58.00	19.00	5.00	0.00	0.00	0.0326	0.1282	0.2809	8.62	1.80
12.00 m	0.00	24.00	63.00	13.00	0.00	0.00	0.00	0.0199	0.0977	0.2196	11.03	2.19
18.00 m	0.00	15.00	59.00	17.00	8.00	1.00	0.00	0.0442	0.1443	0.2980	6.74	1.58
19.50 m	0.00	13.00	55.00	20.00	10.00	2.00	0.00	0.0545	0.1603	0.3421	6.27	1.38
22.50 m	0.00	17.00	58.00	17.00	7.00	1.00	0.00	0.0359	0.1335	0.2879	8.02	1.72
27.00 m	0.00	27.00	50.00	18.00	5.00	0.00	0.00	0.0155	0.0868	0.2500	16.10	1.94
33.00 m	0.00	23.00	53.00	17.00	5.00	2.00	0.00	0.0209	0.1044	0.2669	12.79	1.96
37.50 m	0.00	22.00	63.00	13.00	1.00	1.00	0.00	0.0232	0.1064	0.2316	9.97	2.10
42.00 m	0.00	21.00	57.00	16.00	4.00	2.00	0.00	0.0248	0.1129	0.2622	10.56	1.96
45.00 m	0.00	20.00	62.00	14.00	4.00	0.00	0.00	0.0274	0.1160	0.2480	9.04	1.98

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-III
Location/Chainage	P-508
B.H. No.	BH-203A



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
5.50 m	0.00	25.00	54.00	12.00	8.00	1.00	0.00	0.0180	0.0948	0.2443	13.55	2.04
8.50 m	0.00	23.00	52.00	13.00	10.00	2.00	0.00	0.0208	0.1045	0.2709	13.02	1.94
12.00 m	0.00	24.00	47.00	14.00	12.00	3.00	0.00	0.0190	0.1010	0.2948	15.55	1.83
16.50 m	0.00	27.00	45.00	16.00	10.00	2.00	0.00	0.0153	0.0873	0.2800	18.34	1.78
19.50 m	0.00	28.00	44.00	14.00	12.00	2.00	0.00	0.0143	0.0830	0.2761	19.36	1.75
22.50 m	0.00	33.00	43.00	13.00	8.00	3.00	0.00	0.0107	0.0647	0.2325	21.73	1.68
25.50 m	0.00	35.00	40.00	14.00	9.00	2.00	0.00	0.0096	0.0586	0.2310	24.06	1.55
28.50 m	0.00	36.00	38.00	12.00	11.00	3.00	0.00	0.0091	0.0557	0.2322	25.51	1.47
31.50 m	0.00	32.00	40.00	14.00	12.00	2.00	0.00	0.0112	0.0678	0.2630	23.58	1.57
34.50 m	0.00	32.00	37.00	12.00	16.00	3.00	0.00	0.0110	0.0677	0.2881	26.11	1.44
37.50 m	0.00	38.00	32.00	14.00	12.00	4.00	0.00	0.0082	0.0504	0.2566	31.42	1.21
42.00 m	0.00	38.00	30.00	16.00	13.00	3.00	0.00	0.0081	0.0502	0.2790	34.41	1.11
46.50 m	0.00	29.00	43.00	12.00	14.00	2.00	0.00	0.0134	0.0789	0.2721	20.36	1.71

Table: Borehole Details of Package-03

S.No.	Bore Hole No.	PILLER NO/ CHAINAGE	Coordinates	
			Northing	Easting
1	BH-166	14+620	2968405.00	579099.00
2	BH-192	17+620	2911355.00	579047.00
3	BH-191	17-540	2971272.00	579033.00
4	BH-169	Airport to Todi Mod	2969148.00	578872.00
5	BH-1	P377	2968502.00	579027.00
6	BH-3	P385	2968687.00	578931.00
7	BH-4	P387	2968744.00	578917.00
8	BH-5	P388	2968764.00	578856.00
9	BH-5A	P-393	2968892.00	578844.00
10	BH-167	P-396	2968980.00	578873.00
11	BH-168	P-400	2969085.00	578846.00
12	BH-170	P-401	2961048.00	583091.00
13	BH-183	P-442	2970468.00	578943.00
14	BH-184	P-445	2970558.00	578952.00
15	BH-185	P-448	2970678.00	578967.00
16	BH-186	P-452	2970766.00	578977.00
17	BH-187	P-456	2970857.00	578992.00
18	BH-188	P-459	2970954.00	579000.00
19	BH-190	P-466	2971146.00	579010.00
20	BH-202	P-504	2972307.00	579177.00
21	203A	P-508	2972403.00	579187.00



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BH-202_P-504

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Pooja Towers

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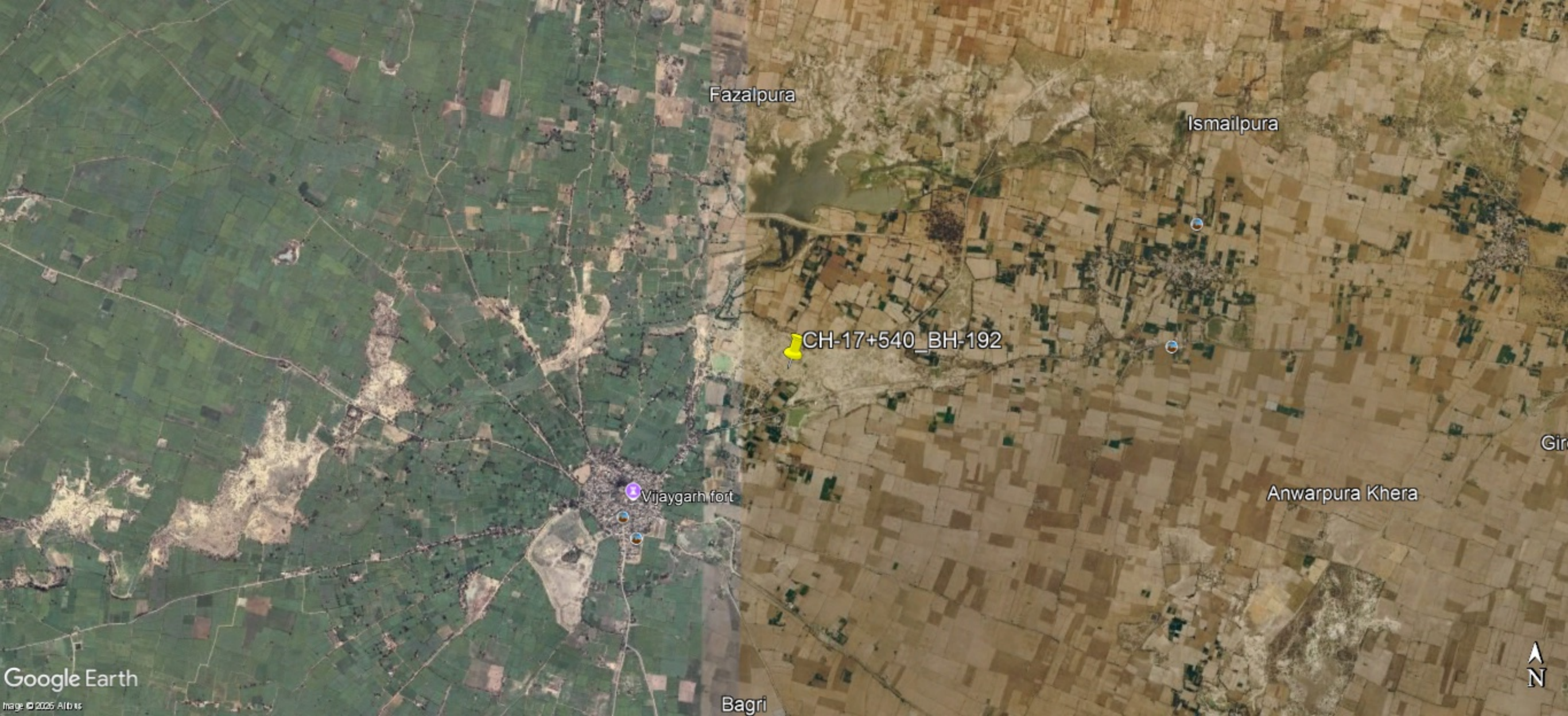
ArgOne

BH-190-P-466

CH-17+540 BH-191

Gopalpura Puliya

National Engineering Industries Limited



Fazalpur

Ismailpur

CH-17+540_BH-192

Vijaygarh fort

Anwarpura Khera

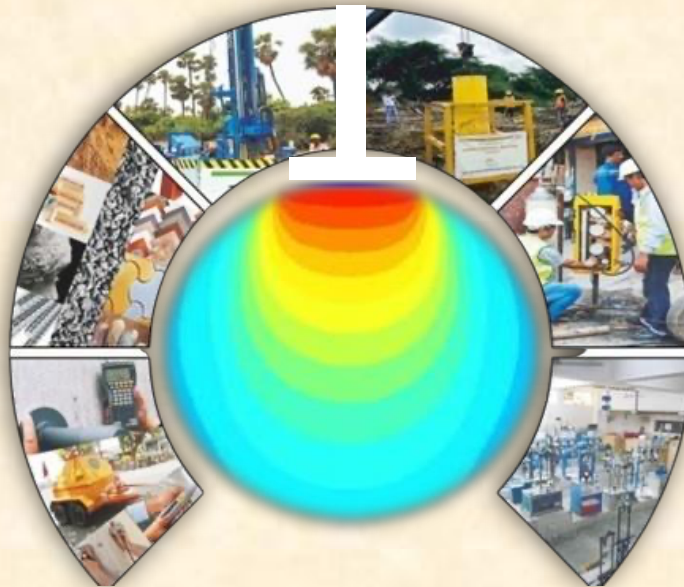
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Bagri



SR-1241

“Geotech Investigation work for Jaipur Metro
Ph-II Project from Prahladpura to Todi Mod
(Total approximate length -42.8 km)”



Submitted to:
DELHI METRO RAIL CORPORATION LTD



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SR-1241

“Geotech Investigation work for Jaipur Metro
Ph-II Project from Prahladpura to Todi Mod
(Total approximate length -42.8 km)”

SR. No.	Report Ref. No.	Revision No.	Date
1241_25-26	CEGTH/DMRC/SR-1241/2026-27/402_22 BHs	00	24.08.2026

Submitted to:
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www.cegtesthouse.com

CEGTH/DMRC/SR-1241/2026-27/402

Date:- 24.08.2026

To,

Project Director/Jaipur-II, DMRC
Office of Chief Project Manager-8
Opposite Frank Anthony Public School
Lala Lajpat Rai Marg, Lajpat Nagar-IV
New Delhi - 110024

Subject :- “Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”

Dear Sir,

We are pleased to submit this report of 22 boreholes carried out for the proposed project.

The accompanying report presents results of field tests and laboratory tests conducted on selected soil and rock samples ,their interpretation and foundation recommendations.

Should there be any clarifications regarding the contents please contact us at your most convenient time.

We value the opportunity to participate in this project and look forward a pleasant association on future projects.

Very truly yours,
CEG Test House & Research Centre Pvt. Ltd.

Prepared By:-



Nehal Jain
Sr. General Manager, Geotechnical
Authorized Signatory



Pratibha Bagaria
Sr Geotechnical Engineer



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Both Field & Lab Tests

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CHAPTER 1 GENERAL

1.1 INTRODUCTION:

The work of “**Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)**” was awarded to CEG Test House & Research Centre Pvt. Ltd. by **Delhi Metro Rail Corporation Ltd.,**.

Field work including drilling of boreholes and sample collection covered in this report was carried out in the presence of Client’s Engineer. Laboratory tests were conducted on selected soil samples to determine the design parameters, confirming to relevant specifications and the guidelines received from the client.

This report includes the details of methodology of investigation, collection of soil samples, laboratory test results, analysis of results and recommendations for results for proposed structures based on Soil samples collected from the Borelog locations.

1.2 SCOPE OF WORK:

- Mobilisation of necessary plant equipments, men and materials for the geotechnical investigation work as per specifications, drawings and instructions of the engineer, shifting of the equipment from one test location to another location to complete the entire field work within the stipulated time schedule and demobilization after completion of field work.
- Making 150 mm nominal diameter boreholes at various locations upto 50.00m depth below the natural ground level in all types of soil using suitable approved method of boring including chiselling, cleaning, providing casing pipe as required or as directed by the engineer.
- Performing Standard Penetration Tests at every 1.5 m interval and at every change of strata.
- Collecting undisturbed or disturbed soil samples at every 3.0 m interval and at every change of strata. Recording of ground water table and collecting water samples for conducting chemical analysis in the laboratory.
- Recording of ground water table and collecting water samples for conducting chemical analysis in the laboratory.
- Transporting all the collected soil samples to the laboratory.
- Conducting various laboratory tests on selected soil samples at CEGTH NABL accredited laboratory including preparation of samples to determine the following properties all complete as per specification :

On soil Samples

- Dry density test
- Bulk Density and Moisture Content.

- Specific gravity
- Sieve Analysis (Mechanical) with Hydrometer Classification
- Liquid Limit, Plastic Limit and Shrinkage Limit
- Direct Shear Test
- Triaxial Shear Test
- Chemical Analysis of soil samples (pH, chloride, Sulphate)

The details of borehole locations and general geology of site location describe in **Chapter 2**.

CHAPTER 2 DETAILS OF SITE AND GENERAL GEOLOGICAL HISTORY

2.1 SITE LOCATION:

The locations of 22 boreholes were marked on the ground as per the layout given by the Engineer.

The details of various boreholes locations along with their co-ordinates are provided in table 2.1.

The details of the site and test locations for the proposed project are shown in location plan in Fig 3.

The site of proposed project is located at **Jaipur** in the State of **Rajasthan** falls in seismic zone – II (Zone factor=0.10) of India.

Table 2.1: Details of Borehole Locations & Test Locations

Pier No.	BH.No	Depth of Water Table below EGL (m)	Depth of Borehole below EGL(m)	Co-ordinates (m)	
				E	N
P-463	BH-189	Not Encountered	50.00	579007.000	2971051.000
P-473	BH-193	Not Encountered	50.00	579062.000	2971435.000
P-476	BH-194	Not Encountered	50.00	579068.000	2971517.000
P-197	BH-197	Not Encountered	50.00	579910.000	2971835.000
P-490	BH-198	Not Encountered	50.00	579119.000	2971942.000
P-494	BH-199	Not Encountered	50.00	579129.000	2972057.000
P-497	BH-200	Not Encountered	50.00	579135.000	2972118.000
P-501	BH-201	Not Encountered	50.00	579152.000	2972233.000
P-508	BH-203	Not Encountered	50.00	579170.000	2972398.000
P-515	BH-204	Not Encountered	50.00	579191.000	2972562.000
-	BH-216	Not Encountered	50.00	579450.000	2973647.000
P-598	BH-230	Not Encountered	50.00	580158.000	2974868.000
P-501	BH-231	Not Encountered	50.00	580262.000	2974996.000
-	BH-238	Not Encountered	50.00	580631.000	2975532.000
-	BH-239	Not Encountered	50.00	580701.000	2975643.000
P-628	BH-240	Not Encountered	50.00	580736.000	2975696.000
-	BH-242	Not Encountered	50.00	580798.000	2975861.000
-	BH-243	Not Encountered	50.00	580833.000	2975962.000

Pier No.	BH.No	Depth of Water Table below EGL (m)	Depth of Borehole below EGL(m)	Co-ordinates (m)	
				E	N
-	BH-248	Not Encountered	50.00	580935.000	2976417.000
P-674	BH-256	Not Encountered	50.00	580807.000	2977043.000
	BH-266	Not Encountered	50.00	579851.293	2977247.508
	BH-277	Not Encountered	50.00	579056.708	2977782.971

2.2 GENERAL GEOLOGY

2.2.1 LOCATION

The study area is located within the eastern margin of the Aravalli Craton in Jaipur, Rajasthan, forming a part of the northwestern Indian Shield. The geology of the region is predominantly characterized by Precambrian rock formations comprising quartzites, schists, phyllites, granites, and gneisses, which are generally hard, compact, and crystalline in nature. The area also contains occurrences of alluvial deposits in low-lying zones. The regional topography is undulating, with elevation generally ranging from approximately 400 meters to 600 meters above Mean Sea Level.

2.2.2 CLIMATE

The project area, located in Jaipur district of Rajasthan, experiences a semi-arid climate characterized by extremely hot summers, mild winters, and a short monsoon season. Temperatures generally range from approximately 5°C in winter to 45°C during peak summer months, with May and June being the hottest period. The region receives an average annual rainfall of about 500 to 700 mm, mainly during the southwest monsoon from July to September. Relative humidity remains low for most of the year, increasing during the monsoon season. Wind conditions are generally dry and moderate, with occasional dust storms during summer. These climatic conditions play an important role in geotechnical aspects such as foundation design, groundwater fluctuation, drainage planning, and construction scheduling.

2.2.3 GEOLOGY

“The subsurface conditions at the Jaipur location are predominantly composed of sandy silt, silty sand, and clayey soil with varying proportions of gravel and weathered rock fragments. The upper strata generally exhibit moderate weathering and loose to medium dense soil conditions, underlain by residual soils derived from quartzite, schist, and granite gneiss formations of the Aravalli terrain. The weathered zone gradually transitions into comparatively competent geological formations at greater depths, with occasional joints and fractures observed in the parent material.”

The Geological formation of the Rajasthan is as follows:

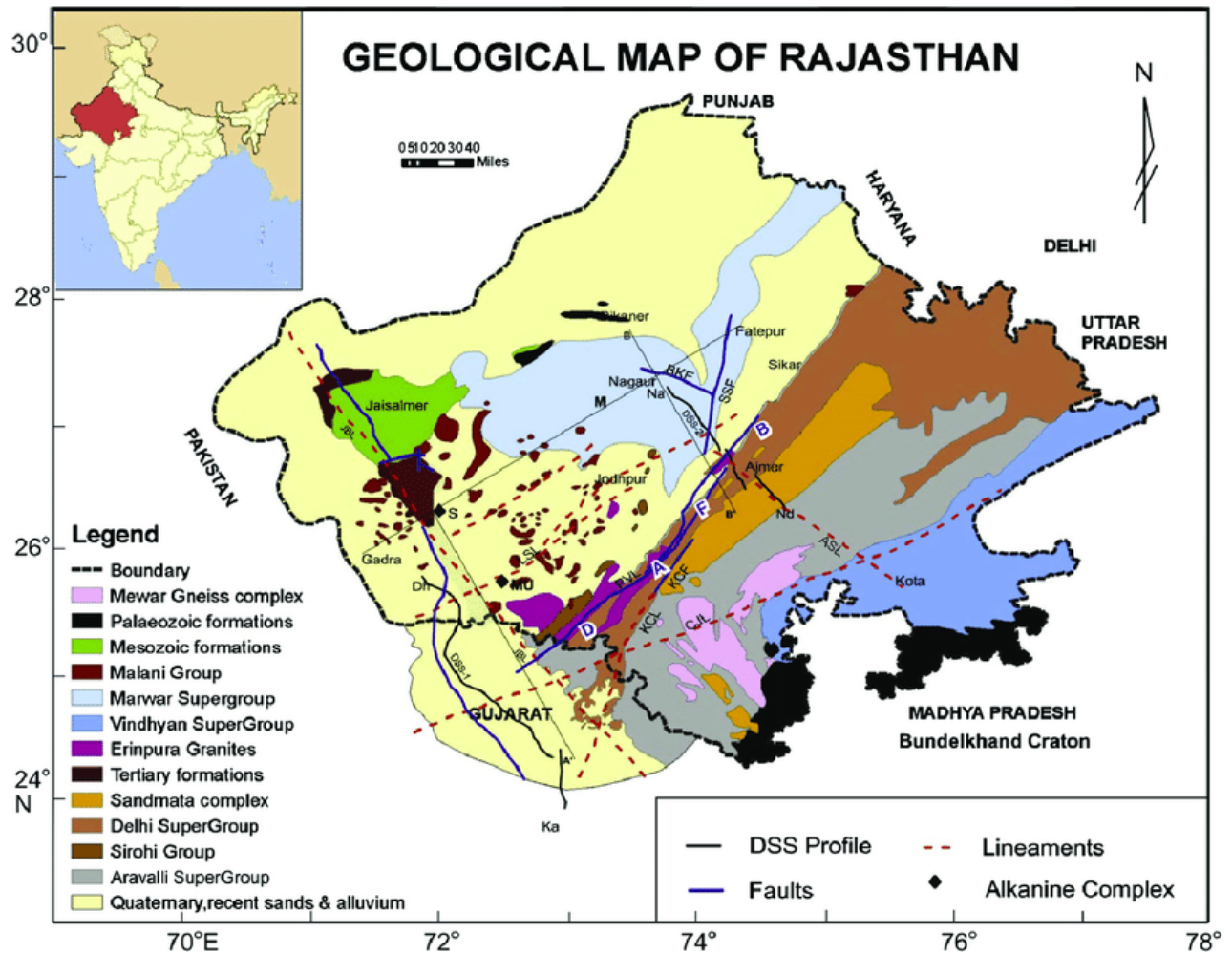


Fig. 1: Geological map of Rajasthan

2.2.4 Seismicity

The site of proposed project is located at **Jagatpura, Jaipur** in the State of **Rajasthan** falls in seismic zone – II (Zone factor=0.10) of India as per Is : 1893 (Part-1)-2016.

Seismicity Map of India is shown below:-

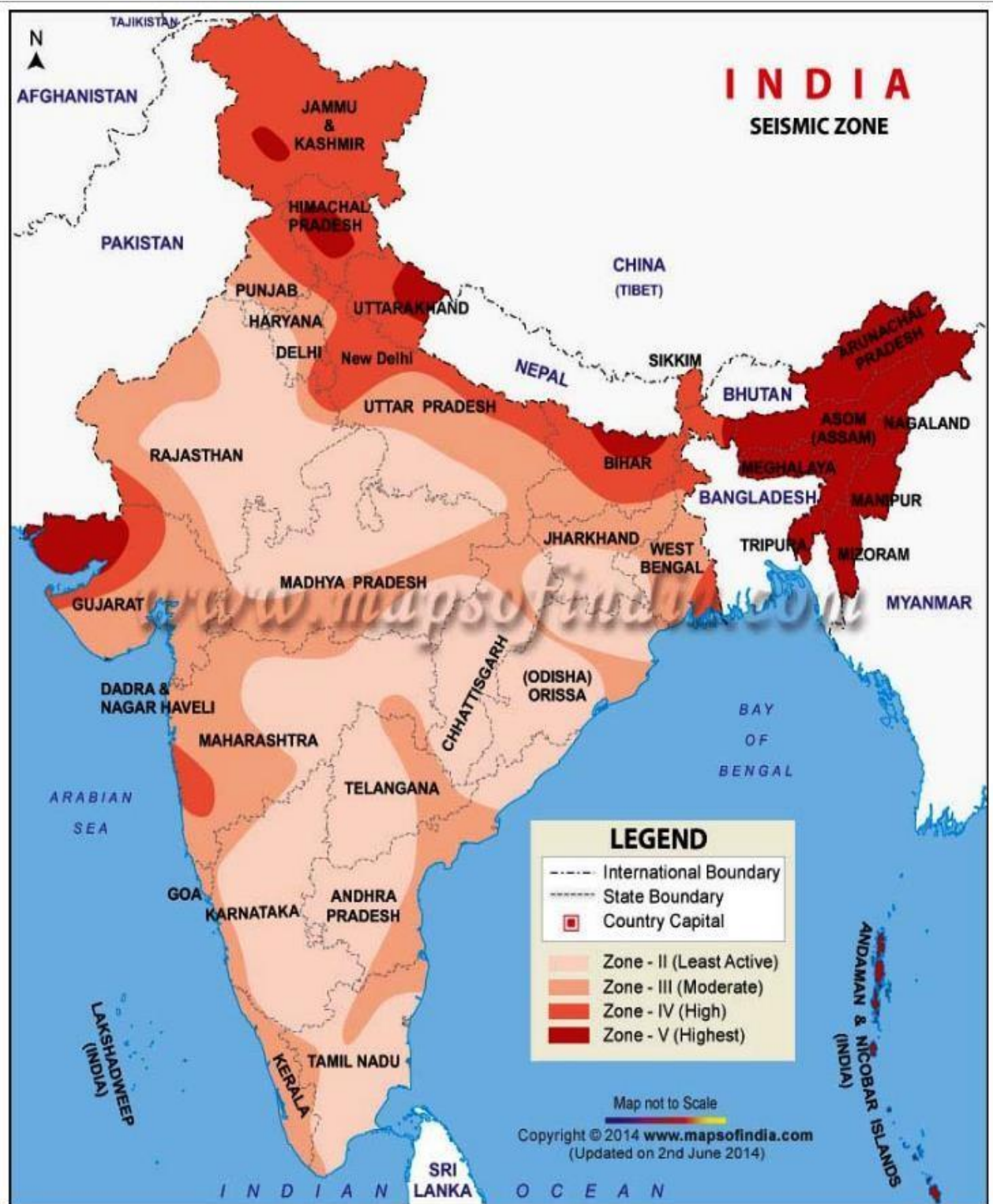


Fig. 2: Seismicity Map of India

CHAPTER 3 FIELD AND LABORATORY TEST PROCEDURE

3.1 FIELD INVESTIGATION:

For geotechnical investigation work, hydraulic or mechanical drilling rigs were installed at the specified borehole locations along with the required men and machineries for conducting the requisite field work. The equipment was relocated from one test site to another during the fieldwork, and was demobilized upon the satisfactory completion of each respective borehole.

For conducting the field investigations the following practices were followed at site:

- In soil, boreholes of 150 mm dia. were drilled as per the standard procedure laid in IS: 1892. Wherever rocky strata was encountered before achieving the required depth below E.G.L., bore holes were further extended beyond refusal through soft and hard rock using Hydraulic drilling Rigs with Nx size double tube core barrel or diamond bits upto required depth below the EGL and were terminated as per the instruction of Engr. in-charge.
- Borehole was properly cleaned before taking any sample in soil.
- Standard Penetration Tests and collection of undisturbed or disturbed soil samples were carried out as per the specification IS: 2131 and IS: 2132. The same has been discussed in detail in soil and Rock characteristics attached with the report.
- Ground water table was measured as per IS: 6935-1973. The depth of ground water level was to be measured after 24 hours of completion of borehole.

3.1.1 IN SOIL STRATA

(i) Standard Penetration Test

The Standard Penetration Tests were conducted in boreholes as per IS 2131. Each test was carried out using the standard split spoon sampler carrying manual hammer to measure the number of blows ‘N’.

Standard split spoon sampler was attached to an ‘A’ rod. It was driven from borehole bottom to a distance of 45 cm using a standard hammer of 63.5 kg falling freely from a height of 75 cm to the required depth. While driving, the number of blows required to penetrate every 15 cm are recorded. The total number of blows required for the last 30 cm is taken as ‘N’ value at that particular depth of the borehole. Wherever the total penetration was less than 45cm, the no. of blows & the depth penetrated is recorded in the respective borelog.

SPT ‘N’ values were correlated with relative density of non-cohesive stratum and with consistency of cohesive stratum as given below:-

Table 3.1: Soil compactness as per SPT N values

Correlation for Clay / Plastic silt		Correlation for Sand / Non-Plastic silt	
Consistency	Penetration Value (N)	Compactness	Penetration Value (N)
Very Soft	0 - 2	Very Loose	0 - 4
Soft	2 - 4	Loose	4 - 10
Medium	4 - 8	Medium	10 - 30
Stiff	8 - 15	Dense	30 - 50
Very Stiff	15 - 30	Very Dense	> 50
Hard	> 30		

(ii) The field SPT N values were corrected as per the guidelines given in IS: 2131 as follows:

(a) For overburden: - The N value for cohesionless soil is corrected with the help of fig. 1 given in IS-2131.

(b) Due to dilatancy :- Wherever N values observed below water table in fine sand, silty sand or silt was greater than 15, then corrected N values were corrected as under:

$$N' = 15 + \frac{1}{2} (N-15)$$

(iii) Disturbed Sampling (Soil) in boreholes

Disturbed soil samples each weighing approx. 1kg. were collected starting from a depth of 0.5m depth below EGL and at every identifiable change of strata. Samples were immediately sealed, labeled and carefully transported to the laboratory for testing.

(iv) Undisturbed Sampling (Soil) in boreholes

Undisturbed samples were collected at 3.0 m intervals using 100 mm diameter and 450 mm long MS tubes with Area ratio as specified as per clause 4.1.1 (c) of IS: 1892 (latest) provided with sampler head with ball and socket arrangement. Before taking any sample, sampling tube was properly greased. Immediately after taking on undisturbed sample in a tube, the adopter head was removed along with the disturbed material. The visible ends of the sample were trimmed off any wet disturbed soil. The ends were coated alternately with four layers of just molten wax. More molten wax was added to give a total thickness of min. 25 mm. The samples were carefully labeled and transported to the laboratory for testing. Undisturbed samples wherever slipped during lifting were duly marked in the field logs as well as in the soil profile.

3.1.2 GROUND WATER TABLE DEPTH

During the field investigation conducted in August 2026, the groundwater table was not encountered in any of the borehole locations.

3.2 LABORATORY INVESTIGATIONS:

i. Laboratory Tests For Soil Samples

Summary of various laboratory test conducted on selected Undisturbed/Disturbed is given below:

Table 3.4: Description of Tests on Soil Samples

Description of Test	Reference	Undisturbed (UDS) Soil Samples	Disturbed (DS/SPT) Soil Samples
Grain Size Analysis / Hydrometer	IS: 2720 (Part - 4)	✓	✓
Natural Moisture Content / Bulk / Dry density	IS : 2720 (Part – 2)	✓	-
Atterberg Limits - Liquid Limit - Plastic Limit - Shrinkage Limit	IS: 2720 (Part - 5) IS: 2720 (Part - 5) IS: 2720 (Part - 6)	✓ ✓ -	✓ ✓ -
Specific Gravity	IS : 2720 (Part – 3)	✓	✓
Direct Shear Test	IS : 2720 (Part – 13)	✓	✓
Triaxial compressive shear test	IS : 2720 (Part – 11)	✓	✓
Chemical Analysis of Soil Samples	IS : 2720 (Part – 22, 26, 27)	✓	-

ii. Grain Size Analysis:

The Grain Size analysis test were performed in accordance with IS 2720 (Part 4) – 1965. For this test an oven dry pulverized soil sample is sieved through the set of sieves 19mm, 10mm, 4.75mm, 2.0mm, 425 micron, 75micron. The amounts of soil retained on each sieve were noted down. The % retained, cumulative % retained and % passing are computed accordingly. If the % passing 75 micron sieve is significant, Hydrometer method is used to find the percentage of silt and clay fraction. Hydrometer were performed in as per IS 2720 (Part 4) – 1965. The results are attached in Appendix B.

iii. Liquid Limit (IS:2720- Part-5)

By Cone Penetrometer Method

Liquid limit by cone penetrometer test were performed in accordance with IS 2720 (Part 5) – 1985. The tests were conducted, at varying water contents, in order to produce a series of cone penetrations (usually 4) in the range 15mm to 25mm. The resulting cone penetrations are plotted verses the water content of the test specimens. The Liquid Limit (WL) is read off the graph, being the water content at which the line of best fit through the test points crosses 20mm penetration.

iv. Plastic Limit:

Plastic Limit test were performed as per IS:2720-Part-5. The sample rolled between the fingers of one hand and the glass plate with pressure sufficient to reduce the mass into a thread of about 3 mm in 5 to 10 complete forward and back movements until the thread starts just crumbling at a diameter of 3 mm.

v. Plasticity Index

The plasticity index I_p is given by

$$I_p = WL - WP \text{ (in percent)}$$

vi. Specific Gravity

Specific gravity test were performed in accordance with IS 2720 (Part 3 Section-1) – 1980. The results are attached in Appendix B.

vii. Direct Shear Test

Direct shear tests were performed as per IS 2720 (Part XIII)-2015, on the undisturbed soil samples obtained during the field investigation. For this test shear box test apparatus was used. The specimen of size 6 cm x 6 cm x 2.4 cm was used. The normal stresses of 0.5 kg/cm², 1.0 kg/cm², 1.5 kg/cm², 2.0 kg/cm² and 3.0 kg/cm² respectively were used.

viii. Triaxial Shear Test

Triaxial Shear Test under Unconsolidated Un-drained (UU) condition as per IS: 2720 (Part-11)-2011 were performed on the undisturbed soil samples obtained during the field investigation. All specimen of size 38mm diameter and 76mm height were used. The axial loading was applied at 1.25 mm/min rate of strain. The normal stresses applied were 0.5 kg/cm², 1.0 kg/cm², 1.5 kg/cm², 2.0 kg/cm² and 3.0 kg/cm² respectively.

CHAPTER 4 ANALYSIS OF TEST RESULTS

4.1 STRATIFICATION

The study of the borehole logs of 22 BHs, the soil and rock strata is done as per IS 1498., the details of strata and soil classification, are provided in table 4.1.

Table 4.1: Strata Description

BH NO.	Depth (m)		Description
	From	To	
BH-189	0.00	18.00	Loose to Medium Dense, Brownish, Silty Sand
	18.00	27.00	Dense, Brownish, Silty Sand
	27.00	50.00	Very Dense, Brownish, Silty Sand
BH-193	0.00	10.50	Medium Dense, Brownish, Silty Sand
	10.50	22.50	Dense, Brownish, Silty Sand
	22.50	50.00	Very Dense, Brownish, Silty Sand
BH-194	0.00	6.00	Loose to Medium Dense, Brownish, Poorly Graded Silty Sand
	6.00	21.00	Medium Dense to Dense, Brownish, Silty Sand
	21.00	43.50	Very Dense, Brownish, Silty Sand
	43.50	50.00	Very Stiff, Brownish, Silty Clay of Low Plasticity
BH-197	0.00	13.50	Loose to Medium Dense, Brownish, Poorly Graded Silty Sand
	13.50	34.50	Dense, Brownish, Silty Sand
	34.50	50.00	Very Dense, Brownish, Poorly Graded Silty Sand
BH-198	0.00	13.50	Medium Dense, Brownish, Silty Sand
	13.50	21.00	Dense, Brownish, Poorly Graded Silty Sand
	21.00	50.00	Very Dense, Brownish, Poorly Graded Silty Sand
BH-199	0.00	13.50	Loose to Medium Dense, Brownish, Silty Sand
	13.50	27.00	Dense, Brownish, Poorly Graded Silty Sand
	27.00	50.00	Very Dense, Brownish, Silty Sand
BH-200	0.00	10.50	Medium Dense, Brownish, Silty Sand
	10.50	21.00	Dense, Brownish, Silty Sand
	21.00	50.00	Very Dense, Brownish, Silty Sand
BH-201	0.00	12.00	Medium Dense, Brownish, Silty Sand
	12.00	21.00	Dense, Brownish, Silty Sand
	21.00	50.00	Very Dense, Brownish, Silty Sand
BH-203	0.00	18.00	Loose to Medium Dense, Brownish, Silty Sand
	18.00	27.00	Dense, Brownish, Poorly Graded Silty Sand
	27.00	50.00	Very Dense, Brownish, Silty Sand
BH-204	0.00	9.00	Medium Dense, Brownish, Silty Sand
	9.00	18.00	Dense, Brownish, Poorly Graded Silty Sand
	18.00	36.00	Very Dense, Brownish, Poorly Graded Silty Sand
	36.00	50.00	Very Dense, Brownish, Silty Sand

BH NO.	Depth (m)		Description
	From	To	
BH-216	0.00	12.00	Medium Dense to Dense, Brownish, Silty Sand
	12.00	25.50	Very Dense, Brownish, Silty Sand
	25.50	37.50	Very Dense, Brownish, Poorly Graded Silty Sand
	37.50	50.00	Very Dense, Brownish, Silty Sand
BH-230	0.00	13.50	Medium Dense, Brownish, Silty Sand
	13.50	21.00	Dense, Brownish, Silty Sand
	21.00	50.00	Very Dense, Brownish, Silty Sand
BH-231	0.00	12.00	Medium Dense, Brownish, Silty Sand
	12.00	19.50	Dense, Brownish, Silty Sand
	19.50	50.00	Very Dense, Brownish, Poorly Graded Silty Sand
BH-238	0.00	3.00	Filled Up soil
	3.00	14.50	Medium Dense, Brownish, Silty Sand
	14.50	24.00	Dense, Brownish, Silty Sand
	24.00	50.00	Very Dense, Brownish, Silty Sand
BH-239	0.00	12.00	Medium Dense, Brownish, Silty Sand
	12.00	21.00	Dense, Brownish, Silty Sand
	21.00	50.00	Very Dense, Brownish, Silty Sand
BH-240	0.00	3.00	Filled Up soil
	3.00	16.50	Medium Dense, Brownish, Silty Sand
	16.50	24.00	Dense, Brownish, Silty Sand
	24.00	50.00	Very Dense, Brownish, Silty Sand
BH-242	0.00	12.00	Medium Dense, Brownish, Silty Sand
	12.00	19.50	Dense, Brownish, Silty Sand
	19.50	50.00	Very Dense, Brownish, Silty Sand
BH-243	0.00	10.50	Medium Dense, Brownish, Silty Sand
	10.50	22.50	Dense, Brownish, Silty Sand
	22.50	37.50	Very Dense, Brownish, Silty Sand
	37.50	50.00	Very Dense, Brownish, Silty Sand
BH-248	0.00	10.50	Medium Dense, Brownish, Silty Sand
	10.50	18.00	Dense, Brownish, Silty Sand
	18.00	50.00	Very Dense, Brownish, Poorly Graded Silty Sand
BH-256	0.00	3.00	Filled Up soil
	3.00	13.50	Medium Dense, Brownish, Silty Sand
	13.50	22.50	Dense, Brownish, Silty Sand
	22.50	50.00	Very Dense, Brownish, Silty Sand
BH-266	0.00	3.00	Filled Up soil
	3.00	13.50	Medium Dense, Brownish, Silty Sand
	13.50	22.50	Dense, Brownish, Silty Sand
	22.50	50.00	Very Dense, Brownish, Silty Sand with Gravels

BH NO.	Depth (m)		Description
	From	To	
BH-277	0.00	3.00	Filled Up soil
	3.00	9.00	Medium Dense, Brownish, Silty Sand
	9.00	18.00	Dense, Brownish, Silty Sand
	18.00	50.00	Very Dense, Brownish, Silty Sand with Gravels

Abbreviations

BH	Borehole
EGL	Existing Ground Level
GWT	Ground Water Table
RQD	Rock Quality Designation
IS	Indian Standards
SPT	Standard Penetration Test
DS	Disturbed Soil
R.L.	Reduced Level
m	Metre
sp. gr.	Specific Gravity
%	Percentage
mg /l	Milligram per litre
mg /kg	Milligram per kilogram

REFERENCE INDIAN STANDARD CODES

S.No.	IS Codes No	TITLE
1	IS : 1892-1979 RA-2016	Code of Practice for subsurface investigation for foundations.
2	IS : 1498-1970 RA 2016	Classification and Identification of soils for general Engineering Purpose.
3	IS :1904 - 2021	Code of practice for design and construction of foundations in soils:General Requirements.
4	IS : 2131-1981 RA 2016	Method for Standard Penetration Test (SPT) for Soils.
5	IS : 2132-1986 RA 2016	Code of Practice for Thin - Walled tube sampling of Soils.
6	IS : 4464-1985 RA 2019	Code of Practice for presentation of drilling information and core description in foundation investigation.
7	IS : 5313-1980 RA 2019	Guide for core drilling observations.
8	IS :5313-2020	Guide for core drilling observations.
9	IS : 4078-1980 RA2019	Code of Practice for indexing and storage of drill cores.
10	IS : 6926-1996 RA 2015	Diamond core drilling – Site investigation for river valley projects - code of Practice.
11	IS : 6935-1973 RA 2019	Method of determination of water level in a bore hole.
12	IS : 15686:2006 RA 2015	Recommendations for the preparation of Geological and Geotechnical maps for river valley projects.
13	IS : 6403 1981 RA 2016	Code of Practice for Determination of Bearing capacity of shallow foundations
14	IS : 8009 (P-1)-1976 RA 2019	Code of practice for calculation of Settlements of Foundations
15	IS: 12070 - 1987 RA 2020	Code of practice for design and construction of shallow foundations on rocks
16	IS :13365 (P-1) : 1998 RA 2021	Quantitative classificationSystems of rock mass — guidelines
17	IS : 1893 (P-1) 2016	Criteria for Earthquake resistant design of structures.
18	IS : 456- 2000 RA 2016	Plain and Reinforced Concrete-Code of Practice.
19	IRC-78-2024	Standard Specifications and Code of Practice for Road Bridges, Foundation & Substructure
Sr.	BOOK	TITLE
1.	Joseph E. Bowles	Foundation Analysis and Design

APPENDIX – A (FIELD DATA RESULTS)

Appendix No.	ITEMS
A-1	FIELD BOREHOLE LOGS
A-2	SUBSOIL PROFILE DIAGRAM

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-463	Northing :2971051 m	Easting :579007 m
Reduced Level (m):(+)0	BH. No. :BH-189	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :01-08-2026	Date of Completion :05-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5									
2.0									
2.5									
3.0	3	SPT-1	5						
3.5									
4.0									
4.5	4.5	SPT-2	7						
5.0				Loose to Medium Dense, Brownish, Silty Sand	SM				
5.5	5.5	UDS-1							
6.0	6	SPT-3	11						
6.5									
7.0									
7.5	7.5	SPT-4	14						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	16						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-463	Northing :2971051 m	Easting :579007 m
Reduced Level (m):(+)0	BH. No. :BH-189	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :01-08-2026	Date of Completion :05-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	20	Loose to Medium Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	22						
12.5									
13.0				Loose to Medium Dense, Brownish, Silty Sand	SM				
13.5	13.5	SPT-8	24						
14.0									
14.5									
15.0	15	SPT-9	28						
15.5				Dense, Brownish, Silty Sand	SM				
16.0									
16.5	16.5	SPT-10	30						
17.0									
17.5									
18.0	18	SPT-11	33	Dense, Brownish, Silty Sand	SM				
18.5									
19.0									
19.5	19.5	SPT-12	36						
20.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-463	Northing : 2971051 m	Easting : 579007 m
Reduced Level (m):(+)0	BH. No. : BH-189	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 01-08-2026	Date of Completion : 05-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	40						
21.5									
22.0									
22.5	22.5	SPT-14	44						
23.0									
23.5				Dense, Brownish, Silty Sand	SM				
24.0	24	SPT-15	47						
24.5									
25.0									
25.5	25.5	SPT-16	49						
26.0									
26.5									
27.0	27	SPT-17	51						
27.5									
28.0									
28.5	28.5	SPT-18	55	Very Dense, Brownish, Silty Sand	SM				
29.0									
29.5									
30.0	30	SPT-19	58						

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-463	Northing :2971051 m	Easting :579007 m
Reduced Level (m):(+)0	BH. No. :BH-189	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :01-08-2026	Date of Completion :05-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	61						
32.0									
32.5									
33.0	33	SPT-21	63						
33.5									
34.0									
34.5	34.5	SPT-22	72						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	76						
36.5									
37.0									
37.5	37.5	SPT-24	81						
38.0									
38.5									
39.0	39	SPT-25	83						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-463	Northing :2971051 m	Easting :579007 m
Reduced Level (m):(+)0	BH. No. :BH-189	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :01-08-2026	Date of Completion :05-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	92						
41.0									
41.5									
42.0	42	SPT-27	>100						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-473	Northing : 2971435 m	Easting : 579062 m
Reduced Level (m):(+)0	BH. No. : BH-193	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start :	Date of Completion :	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5									
2.0									
2.5	2.5	SPT-1	15						
3.0	3	SPT-2	19						
3.5									
4.0									
4.5	4.5	SPT-3	21						
5.0				Medium Dense, Brownish, Silty Sand	SM				
5.5	5.5	UDS-1							
6.0	6	SPT-4	23						
6.5									
7.0									
7.5	7.5	SPT-5	26						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-6	29						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-473	Northing : 2971435 m	Easting : 579062 m
Reduced Level (m):(+)0	BH. No. : BH-193	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start :	Date of Completion :	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-7	31	Medium Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-8	33						
12.5									
13.0									
13.5	13.5	SPT-9	35						
14.0									
14.5									
15.0	15	SPT-10	39	Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-11	44						
17.0									
17.5									
18.0	18	SPT-12	46						
18.5									
19.0									
19.5	19.5	SPT-13	48						
20.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-473	Northing : 2971435 m	Easting : 579062 m
Reduced Level (m): (+)0	BH. No. : BH-193	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start :	Date of Completion :	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-14	50	Dense, Brownish, Silty Sand	SM				
21.5									
22.0									
22.5	22.5	SPT-15	58						
23.0									
23.5									
24.0	24	SPT-16	60						
24.5									
25.0									
25.5	25.5	SPT-17	59						
26.0									
26.5				Very Dense, Brownish, Silty Sand	SM				
27.0	27	SPT-18	61						
27.5									
28.0									
28.5	28.5	SPT-19	63						
29.0									
29.5									
30.0	30	SPT-20	66						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-473	Northing : 2971435 m	Easting : 579062 m
Reduced Level (m): (+)0	BH. No. : BH-193	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start :	Date of Completion :	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-21	69						
32.0									
32.5									
33.0	33	SPT-22	71						
33.5									
34.0									
34.5	34.5	SPT-23	74						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-24	75						
36.5									
37.0									
37.5	37.5	SPT-25	78						
38.0									
38.5									
39.0	39	SPT-26	81						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-473	Northing : 2971435 m	Easting : 579062 m
Reduced Level (m): (+)0	BH. No. : BH-193	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start :	Date of Completion :	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-27	86						
41.0									
41.5									
42.0	42	SPT-28	89						
42.5									
43.0									
43.5	43.5	SPT-29	94						
44.0									
44.5									
45.0	45	SPT-30	>100	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-31	>100						
47.0									
47.5									
48.0	48	SPT-32	>100						
48.5									
49.0									
49.5	49.5	SPT-33	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-476	Northing : 2971517 m	Easting : 579068 m
Reduced Level (m): (+)0	BH. No. : BH-194	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 09-08-2026	Date of Completion : 11-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5									
2.0									
2.5									
3.0	3	SPT-1	7	Loose to Medium Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
3.5									
4.0									
4.5	4.5	SPT-2	11						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	14						
6.5									
7.0									
7.5	7.5	SPT-4	17						
8.0									
8.5	8.5	UDS-1		Medium Dense to Dense, Brownish, Silty Sand	SM				
9.0	9	SPT-5	24						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-476	Northing :2971517 m	Easting :579068 m
Reduced Level (m):(+)0	BH. No. :BH-194	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :09-08-2026	Date of Completion :11-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	25						
11.0									
11.5									
12.0	12	SPT-7	33						
12.5									
13.0									
13.5	13.5	SPT-8	33						
14.0									
14.5									
15.0	15	SPT-9	37	Medium Dense to Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	40						
17.0									
17.5									
18.0	18	SPT-11	45						
18.5									
19.0									
19.5	19.5	SPT-12	49						
20.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-476

Northing : 2971517 m

Easting : 579068 m

Reduced Level (m):(+)0

BH. No. : BH-194

BH Depth (m): 50

Proposed/Existing Structure :

Water Table (m): Not encountered

Inclination : Vertical

Boring type : Rotary

Dia. of Boring : 150/76 mm

Depth of Casing (m) :-

Date of Start : 09-08-2026

Date of Completion : 11-08-2026

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5				Medium Dense to Dense, Brownish, Silty Sand	SM				
21.0	21	SPT-13	51						
21.5									
22.0									
22.5	22.5	SPT-14	57						
23.0									
23.5									
24.0	24	SPT-15	47						
24.5									
25.0									
25.5	25.5	SPT-16	47	Very Dense, Brownish, Silty Sand	SM				
26.0									
26.5									
27.0	27	SPT-17	54						
27.5									
28.0									
28.5	28.5	SPT-18	61						
29.0									
29.5									
30.0	30	SPT-19	60						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

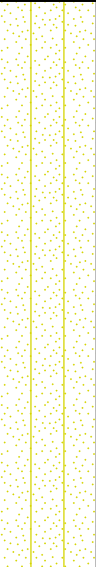
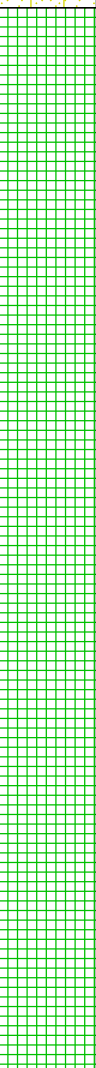
BH Location/Chainage :P-476	Northing :2971517 m	Easting :579068 m
Reduced Level (m):(+)0	BH. No. :BH-194	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :09-08-2026	Date of Completion :11-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	60						
32.0									
32.5									
33.0	33	SPT-21	60						
33.5									
34.0									
34.5	34.5	SPT-22	65						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	63						
36.5									
37.0									
37.5	37.5	SPT-24	67						
38.0									
38.5									
39.0	39	SPT-25	67						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-476	Northing : 2971517 m	Easting : 579068 m
Reduced Level (m): (+)0	BH. No. : BH-194	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 09-08-2026	Date of Completion : 11-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)					RQD (%)					(Depth v/s SPT N Value)										
40.0							0	25	50	75	100	0	25	50	75	100	0	10	20	30	40	50	60	70	80	90	100
40.5	40.5	SPT-26	72	Very Dense, Brownish, Silty Sand	SM																						
41.0																											
41.5																											
42.0	42	SPT-27	75																								
42.5																											
43.0				Very Stiff, Brownish, Silty Clay of Low Plasticity	CL																						
43.5	43.5	SPT-28	82																								
44.0																											
44.5																											
45.0	45	SPT-29	90																								
45.5																											
46.0																											
46.5	46.5	SPT-30	91																								
47.0																											
47.5																											
48.0	48	SPT-31	90																								
48.5																											
49.0																											
49.5																											
50.0	50	SPT-32	>100																								

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-197	Northing : 2971835 m	Easting : 579910 m
Reduced Level (m):(+)0	BH. No. : BH-197	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 10-08-2026	Date of Completion : 12-08-2026	

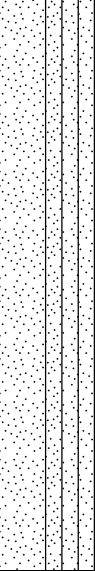
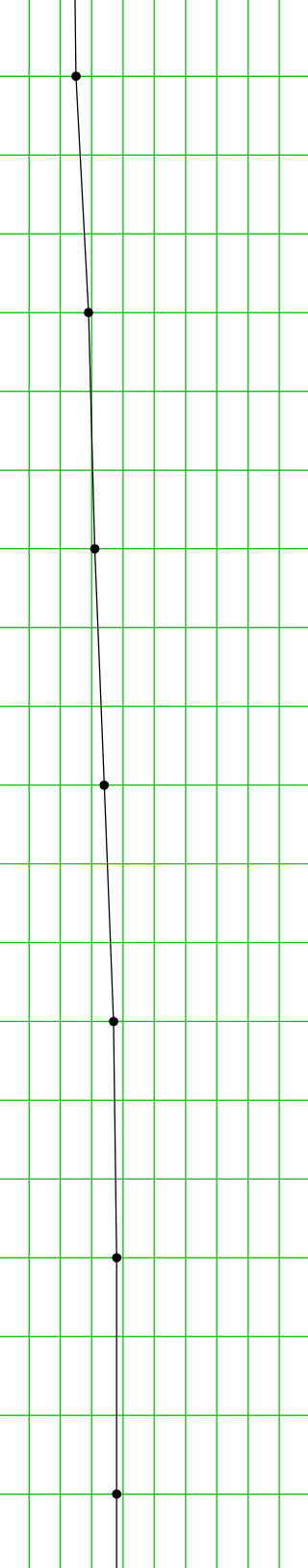
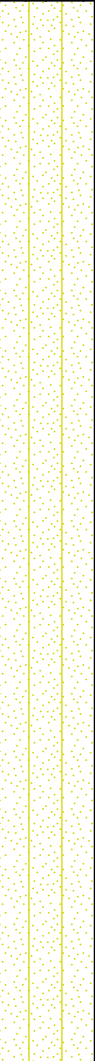
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5									
2.0									
2.5									
3.0	3	SPT-1	7						
3.5									
4.0									
4.5	4.5	SPT-2	11						
5.0				Loose to Medium Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
5.5	5.5	UDS-1							
6.0	6	SPT-3	14						
6.5									
7.0									
7.5	7.5	SPT-4	17						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	24						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-197	Northing : 2971835 m	Easting : 579910 m
Reduced Level (m):(+)0	BH. No. : BH-197	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 10-08-2026	Date of Completion : 12-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	25	Loose to Medium Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
11.0									
11.5									
12.0	12	SPT-7	29						
12.5				Dense, Brownish, Silty Sand	SM				
13.0									
13.5	13.5	SPT-8	31						
14.0									
14.5									
15.0	15	SPT-9	34						
15.5									
16.0									
16.5	16.5	SPT-10	37						
17.0									
17.5									
18.0	18	SPT-11	38						
18.5									
19.0									
19.5	19.5	SPT-12	38						
20.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-197	Northing :2971835 m	Easting :579910 m
Reduced Level (m):(+)0	BH. No. :BH-197	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :10-08-2026	Date of Completion :12-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	38						
21.5									
22.0									
22.5	22.5	SPT-14	41						
23.0									
23.5									
24.0	24	SPT-15	41						
24.5									
25.0				Dense, Brownish, Silty Sand	SM				
25.5	25.5	SPT-16	42						
26.0									
26.5									
27.0	27	SPT-17	41						
27.5									
28.0									
28.5	28.5	SPT-18	44						
29.0									
29.5									
30.0	30	SPT-19	47						

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-197	Northing :2971835 m	Easting :579910 m
Reduced Level (m):(+)0	BH. No. :BH-197	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :10-08-2026	Date of Completion :12-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	46						
32.0				Dense, Brownish, Silty Sand	SM				
32.5									
33.0	33	SPT-21	48						
33.5									
34.0									
34.5	34.5	SPT-22	52						
35.0									
35.5									
36.0	36	SPT-23	56						
36.5									
37.0									
37.5	37.5	SPT-24	66	Very Dense, Brownish, Poorly Graded Silty Sand	SM				
38.0									
38.5									
39.0	39	SPT-25	68						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-197	Northing : 2971835 m	Easting : 579910 m
Reduced Level (m): (+)0	BH. No. : BH-197	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not Encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 10-08-2026	Date of Completion : 12-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	70						
41.0									
41.5									
42.0	42	SPT-27	70						
42.5									
43.0									
43.5	43.5	SPT-28	86						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Poorly Graded Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-490	Northing :2971942 m	Easting :579119 m
Reduced Level (m):(+)0	BH. No. :BH-198	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :13-08-2026	Date of Completion :14-08-2026	

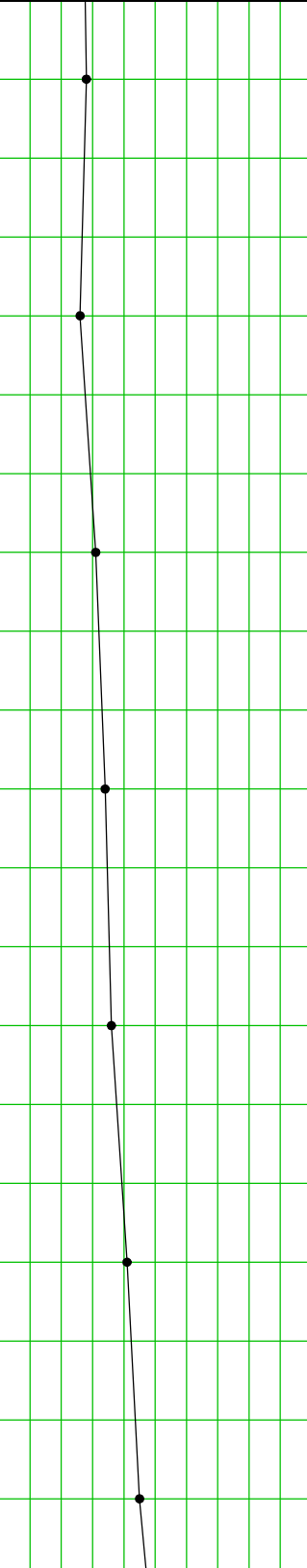
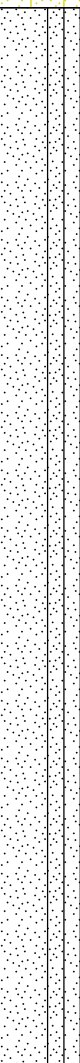
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5									
2.0									
2.5									
3.0	3	SPT-1	11						
3.5									
4.0									
4.5	4.5	SPT-2	16						
5.0				Medium Dense, Brownish, Silty Sand	SM				
5.5	5.5	UDS*							
6.0	6	SPT-3	22						
6.5									
7.0									
7.5	7.5	SPT-4	23						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	27						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-490	Northing : 2971942 m	Easting : 579119 m
Reduced Level (m):(+)0	BH. No. : BH-198	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 13-08-2026	Date of Completion : 14-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	
10.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5	SPT-6	28	Medium Dense, Brownish, Silty Sand	SM					
11.0										
11.5										
12.0	12	SPT-7	26							
12.5				Dense, Brownish, Poorly Graded Silty Sand	SP-SM					
13.0										
13.5	13.5	SPT-8	31							
14.0										
14.5										
15.0	15	SPT-9	34							
15.5										
16.0										
16.5	16.5	SPT-10	36							
17.0										
17.5										
18.0	18	SPT-11	41							
18.5										
19.0										
19.5	19.5	SPT-12	45							
20.0										

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-490	Northing : 2971942 m	Easting : 579119 m
Reduced Level (m):(+)0	BH. No. : BH-198	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 13-08-2026	Date of Completion : 14-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5				Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
21.0	21	SPT-13	52						
21.5									
22.0									
22.5	22.5	SPT-14	57						
23.0									
23.5									
24.0	24	SPT-15	57						
24.5									
25.0									
25.5	25.5	SPT-16	64	Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
26.0									
26.5									
27.0	27	SPT-17	71						
27.5									
28.0									
28.5	28.5	SPT-18	73						
29.0									
29.5									
30.0	30	SPT-19	77						

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-490	Northing : 2971942 m	Easting : 579119 m
Reduced Level (m): (+)0	BH. No. : BH-198	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 13-08-2026	Date of Completion : 14-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	75						
32.0									
32.5									
33.0	33	SPT-21	81						
33.5									
34.0									
34.5	34.5	SPT-22	70						
35.0				Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
35.5									
36.0	36	SPT-23	79						
36.5									
37.0									
37.5	37.5	SPT-24	81						
38.0									
38.5									
39.0	39	SPT-25	87						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-490	Northing : 2971942 m	Easting : 579119 m
Reduced Level (m): (+)0	BH. No. : BH-198	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 13-08-2026	Date of Completion : 14-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	88						
41.0									
41.5									
42.0	42	SPT-27	>100						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-494	Northing :2972057 m	Easting :579129 m
Reduced Level (m):(+)0	BH. No. :BH-199	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :13-08-2026	Date of Completion :14-08-2026	

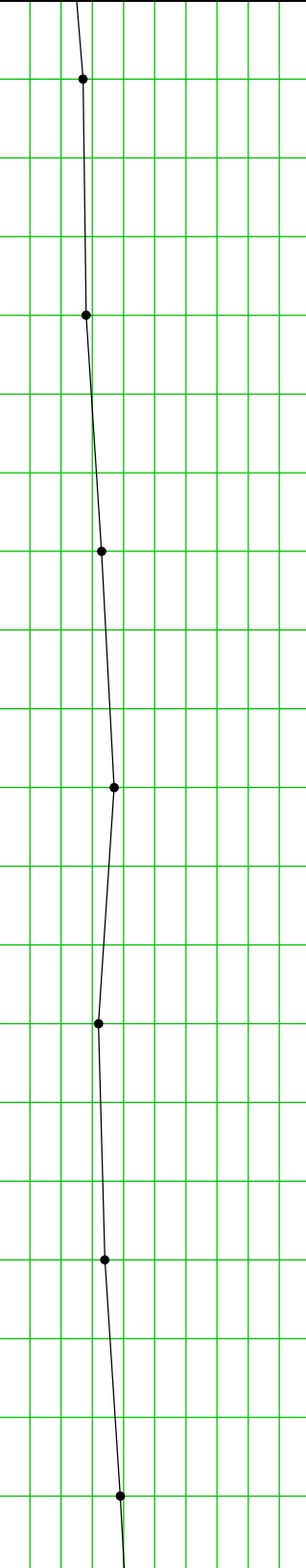
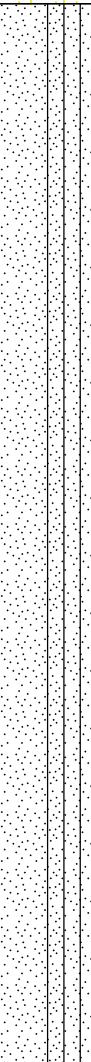
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5									
2.0									
2.5									
3.0	3	SPT-1	8						
3.5									
4.0									
4.5	4.5	SPT-2	10						
5.0				Loose to Medium Dense, Brownish, Silty Sand	SM				
5.5	5.5	UDS*							
6.0	6	SPT-3	17						
6.5									
7.0									
7.5	7.5	SPT-4	16						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	21						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-494	Northing :2972057 m	Easting :579129 m
Reduced Level (m):(+)0	BH. No. :BH-199	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :13-08-2026	Date of Completion :14-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	27	Loose to Medium Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	28						
12.5				Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
13.0									
13.5	13.5	SPT-8	33						
14.0									
14.5									
15.0	15	SPT-9	37						
15.5									
16.0									
16.5	16.5	SPT-10	32						
17.0									
17.5									
18.0	18	SPT-11	34						
18.5									
19.0									
19.5	19.5	SPT-12	39						
20.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-494	Northing : 2972057 m	Easting : 579129 m
Reduced Level (m):(+)0	BH. No. : BH-199	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 13-08-2026	Date of Completion : 14-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	43						
21.5									
22.0									
22.5	22.5	SPT-14	44						
23.0									
23.5				Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
24.0	24	SPT-15	47						
24.5									
25.0									
25.5	25.5	SPT-16	50						
26.0									
26.5									
27.0	27	SPT-17	51						
27.5									
28.0									
28.5	28.5	SPT-18	54	Very Dense, Brownish, Silty Sand	SM				
29.0									
29.5									
30.0	30	SPT-19	59						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-494	Northing :2972057 m	Easting :579129 m
Reduced Level (m):(+)0	BH. No. :BH-199	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :13-08-2026	Date of Completion :14-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	64						
32.0									
32.5									
33.0	33	SPT-21	67						
33.5									
34.0									
34.5	34.5	SPT-22	70						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	73						
36.5									
37.0									
37.5	37.5	SPT-24	72						
38.0									
38.5									
39.0	39	SPT-25	74						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-494	Northing :2972057 m	Easting :579129 m
Reduced Level (m):(+)0	BH. No. :BH-199	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :13-08-2026	Date of Completion :14-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	77						
41.0									
41.5									
42.0	42	SPT-27	80						
42.5									
43.0									
43.5	43.5	SPT-28	87						
44.0									
44.5									
45.0	45	SPT-29	95	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-497	Northing :2972118 m	Easting :579135 m
Reduced Level (m):(+)0	BH. No. :BH-200	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5									
2.0									
2.5									
3.0	3	SPT-1	14						
3.5									
4.0									
4.5	4.5	SPT-2	19						
5.0				Medium Dense, Brownish, Silty Sand	SM				
5.5	5.5	UDS*							
6.0	6	SPT-3	20						
6.5									
7.0									
7.5	7.5	SPT-4	24						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	29						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-497	Northing :2972118 m	Easting :579135 m
Reduced Level (m):(+)0	BH. No. :BH-200	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	31	Medium Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	38						
12.5									
13.0									
13.5	13.5	SPT-8	41						
14.0									
14.5									
15.0	15	SPT-9	42	Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	45						
17.0									
17.5									
18.0	18	SPT-11	48						
18.5									
19.0									
19.5	19.5	SPT-12	50						
20.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-497	Northing :2972118 m	Easting :579135 m
Reduced Level (m):(+)0	BH. No. :BH-200	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5				Dense, Brownish, Silty Sand	SM				
21.0	21	SPT-13	54						
21.5									
22.0									
22.5	22.5	SPT-14	57						
23.0									
23.5									
24.0	24	SPT-15	60						
24.5									
25.0									
25.5	25.5	SPT-16	63	Very Dense, Brownish, Silty Sand	SM				
26.0									
26.5									
27.0	27	SPT-17	66						
27.5									
28.0									
28.5	28.5	SPT-18	69						
29.0									
29.5									
30.0	30	SPT-19	75						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-497	Northing :2972118 m	Easting :579135 m
Reduced Level (m):(+)0	BH. No. :BH-200	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	79						
32.0									
32.5									
33.0	33	SPT-21	81						
33.5									
34.0									
34.5	34.5	SPT-22	84						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	88						
36.5									
37.0									
37.5	37.5	SPT-24	94						
38.0									
38.5									
39.0	39	SPT-25	96						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-497	Northing :2972118 m	Easting :579135 m
Reduced Level (m):(+)0	BH. No. :BH-200	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	>100						
41.0									
41.5									
42.0	42	SPT-27	>100						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-501	Northing :2972233 m	Easting :579152 m
Reduced Level (m):(+)0	BH. No. :BH-201	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :16-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5									
2.0									
2.5									
3.0	3	SPT-1	15						
3.5									
4.0									
4.5	4.5	SPT-2	17						
5.0				Medium Dense, Brownish, Silty Sand	SM				
5.5	5.5	UDS*							
6.0	6	SPT-3	20						
6.5									
7.0									
7.5	7.5	SPT-4	24						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	27						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-501	Northing : 2972233 m	Easting : 579152 m
Reduced Level (m):(+)0	BH. No. : BH-201	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 16-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	30	Medium Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	35						
12.5				Dense, Brownish, Silty Sand	SM				
13.0									
13.5	13.5	SPT-8	39						
14.0									
14.5									
15.0	15	SPT-9	41						
15.5									
16.0									
16.5	16.5	SPT-10	44						
17.0									
17.5									
18.0	18	SPT-11	48						
18.5									
19.0									
19.5	19.5	SPT-12	50						
20.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-501	Northing :2972233 m	Easting :579152 m
Reduced Level (m):(+)0	BH. No. :BH-201	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :16-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5				Dense, Brownish, Silty Sand	SM				
21.0	21	SPT-13	52						
21.5									
22.0									
22.5	22.5	SPT-14	56						
23.0									
23.5									
24.0	24	SPT-15	59						
24.5									
25.0									
25.5	25.5	SPT-16	63	Very Dense, Brownish, Silty Sand	SM				
26.0									
26.5									
27.0	27	SPT-17	66						
27.5									
28.0									
28.5	28.5	SPT-18	70						
29.0									
29.5									
30.0	30	SPT-19	73						

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-501	Northing :2972233 m	Easting :579152 m
Reduced Level (m):(+)0	BH. No. :BH-201	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :16-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	75						
32.0									
32.5									
33.0	33	SPT-21	78						
33.5									
34.0									
34.5	34.5	SPT-22	79						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	82						
36.5									
37.0									
37.5	37.5	SPT-24	90						
38.0									
38.5									
39.0	39	SPT-25	96						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-501	Northing :2972233 m	Easting :579152 m
Reduced Level (m):(+)0	BH. No. :BH-201	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :16-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	97						
41.0									
41.5									
42.0	42	SPT-27	>100						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-508	Northing :2972398 m	Easting :579170 m
Reduced Level (m):(+)0	BH. No. :BH-203	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :15-08-2026	Date of Completion :16-08-2026	

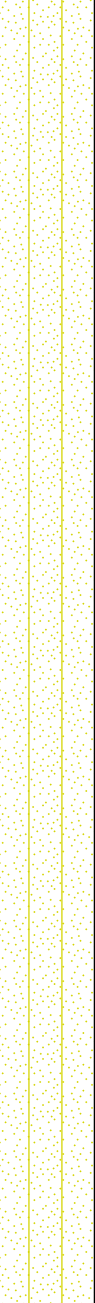
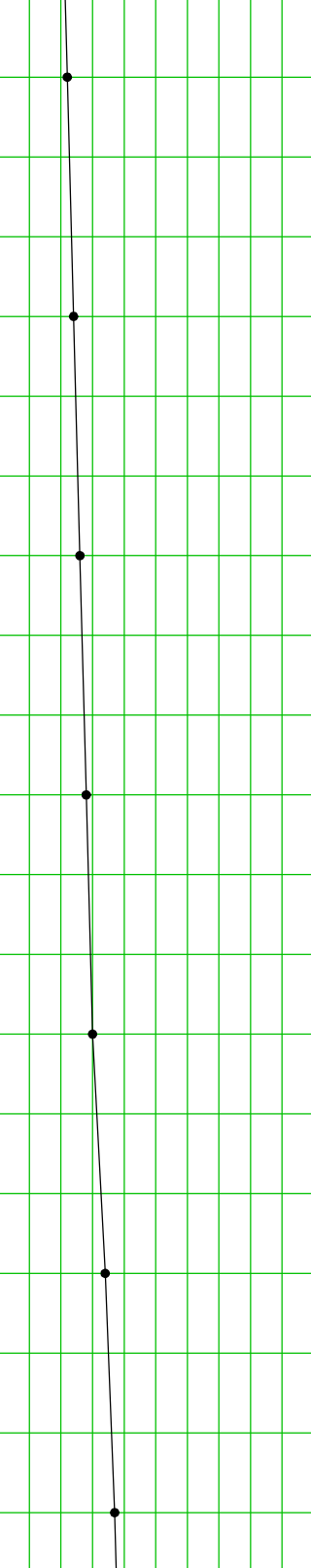
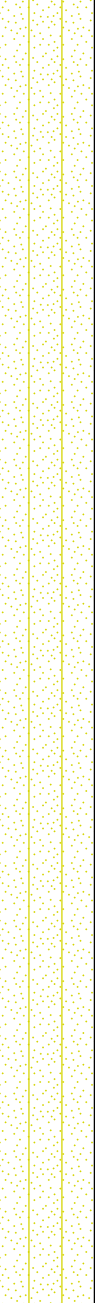
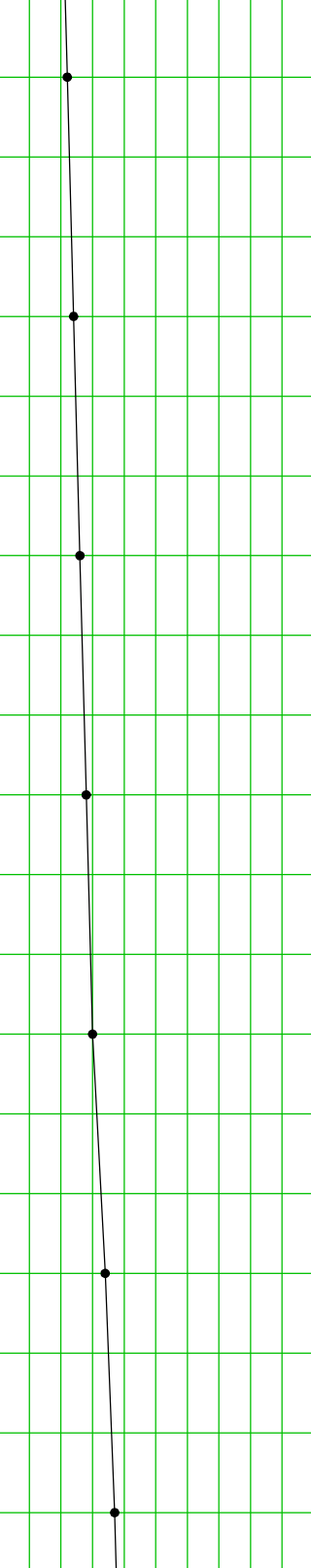
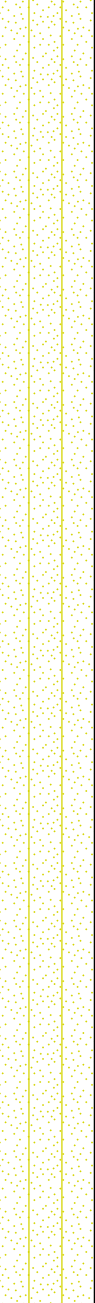
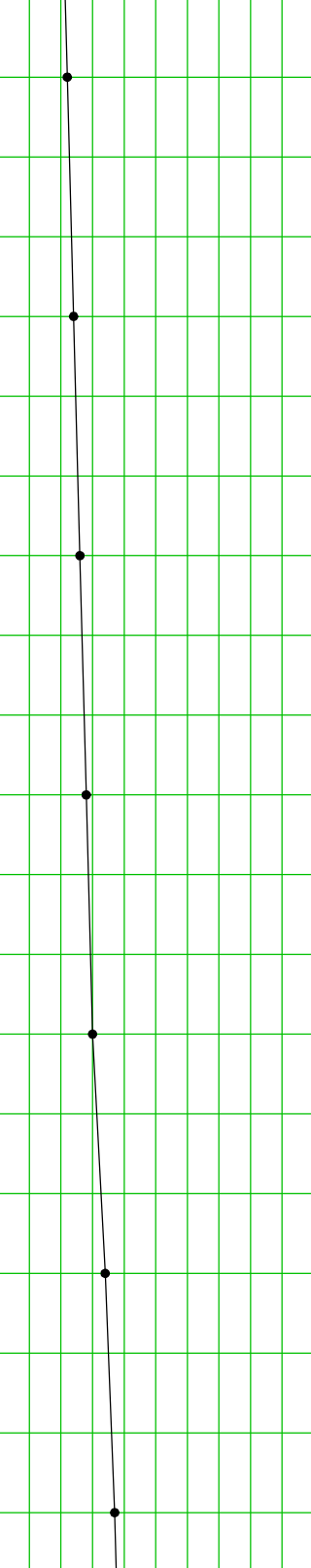
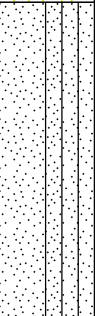
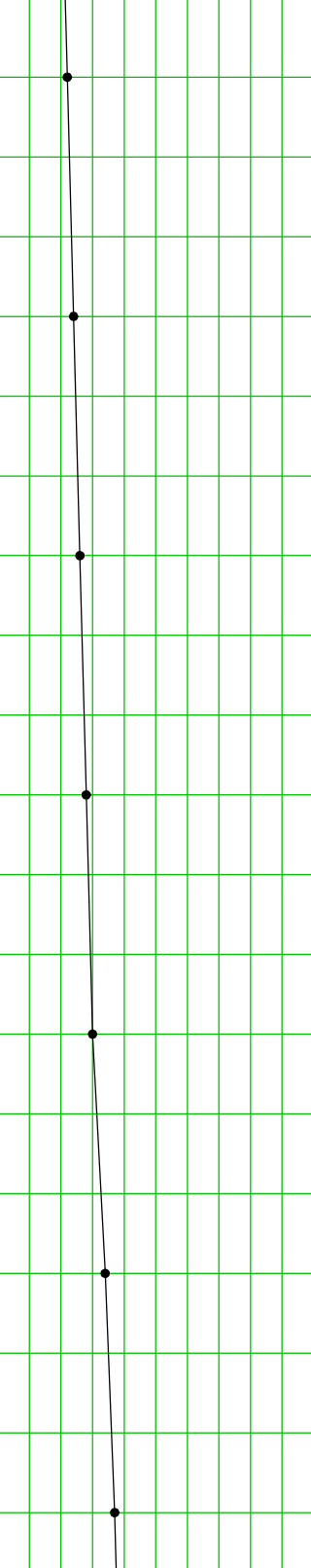
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5									
2.0									
2.5									
3.0	3	SPT-1	7						
3.5									
4.0									
4.5	4.5	SPT-2	11						
5.0				Loose to Medium Dense, Brownish, Silty Sand	SM				
5.5	5.5	UDS*							
6.0	6	SPT-3	13						
6.5									
7.0									
7.5	7.5	SPT-4	17						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	20						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-508	Northing : 2972398 m	Easting : 579170 m
Reduced Level (m): (+)0	BH. No. : BH-203	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 15-08-2026	Date of Completion : 16-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	22	Loose to Medium Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	24						
12.5									
13.0				Loose to Medium Dense, Brownish, Silty Sand	SM				
13.5	13.5	SPT-8	26						
14.0									
14.5									
15.0	15	SPT-9	28						
15.5				Loose to Medium Dense, Brownish, Silty Sand	SM				
16.0									
16.5	16.5	SPT-10	30						
17.0									
17.5									
18.0	18	SPT-11	34	Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
18.5									
19.0									
19.5	19.5	SPT-12	37						
20.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-508

Northing : 2972398 m

Easting : 579170 m

Reduced Level (m):(+)0

BH. No. : BH-203

BH Depth (m):50

Proposed/Existing Structure :

Water Table (m): Not encountered

Inclination : Vertical

Boring type : Rotary

Dia. of Boring : 150/76 mm

Depth of Casing (m) :-

Date of Start : 15-08-2026

Date of Completion : 16-08-2026

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	39						
21.5									
22.0									
22.5	22.5	SPT-14	42						
23.0									
23.5				Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
24.0	24	SPT-15	45						
24.5									
25.0									
25.5	25.5	SPT-16	49						
26.0									
26.5									
27.0	27	SPT-17	51						
27.5									
28.0									
28.5	28.5	SPT-18	54	Very Dense, Brownish, Silty Sand	SM				
29.0									
29.5									
30.0	30	SPT-19	56						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-508	Northing : 2972398 m	Easting : 579170 m
Reduced Level (m): (+)0	BH. No. : BH-203	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 15-08-2026	Date of Completion : 16-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	59						
32.0									
32.5									
33.0	33	SPT-21	61						
33.5									
34.0									
34.5	34.5	SPT-22	70						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	72						
36.5									
37.0									
37.5	37.5	SPT-24	77						
38.0									
38.5									
39.0	39	SPT-25	86						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-508	Northing : 2972398 m	Easting : 579170 m
Reduced Level (m): (+)0	BH. No. : BH-203	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 15-08-2026	Date of Completion : 16-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	93						
41.0									
41.5									
42.0	42	SPT-27	>100						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-515	Northing : 2972562 m	Easting : 579191 m
Reduced Level (m):(+)0	BH. No. : BH-204	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5									
2.0									
2.5									
3.0	3	SPT-1	15						
3.5									
4.0									
4.5	4.5	SPT-2	19	Medium Dense, Brownish, Silty Sand	SM				
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	22						
6.5									
7.0									
7.5	7.5	SPT-4	29						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	31						
9.5				Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-515	Northing :2972562 m	Easting :579191 m
Reduced Level (m):(+)0	BH. No. :BH-204	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	38	Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
11.0									
11.5									
12.0	12	SPT-7	41						
12.5									
13.0				Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
13.5	13.5	SPT-8	43						
14.0									
14.5									
15.0	15	SPT-9	46						
15.5				Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
16.0									
16.5	16.5	SPT-10	50						
17.0									
17.5									
18.0	18	SPT-11	53	Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
18.5									
19.0									
19.5	19.5	SPT-12	55						
20.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-515	Northing : 2972562 m	Easting : 579191 m
Reduced Level (m): (+)0	BH. No. : BH-204	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	58						
21.5									
22.0									
22.5	22.5	SPT-14	61						
23.0									
23.5									
24.0	24	SPT-15	64						
24.5									
25.0				Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
25.5	25.5	SPT-16	69						
26.0									
26.5									
27.0	27	SPT-17	71						
27.5									
28.0									
28.5	28.5	SPT-18	73						
29.0									
29.5									
30.0	30	SPT-19	77						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-515	Northing : 2972562 m	Easting : 579191 m
Reduced Level (m): (+)0	BH. No. : BH-204	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	82						
32.0									
32.5									
33.0	33	SPT-21	84	Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
33.5									
34.0									
34.5	34.5	SPT-22	86						
35.0									
35.5									
36.0	36	SPT-23	89						
36.5									
37.0									
37.5	37.5	SPT-24	93						
38.0				Very Dense, Brownish, Silty Sand	SM				
38.5									
39.0	39	SPT-25	96						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-515	Northing :2972562 m	Easting :579191 m
Reduced Level (m):(+)0	BH. No. :BH-204	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	>100						
41.0									
41.5									
42.0	42	SPT-27	>100						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2973647 m	Easting :579450 m
Reduced Level (m):(+)0	BH. No. :BH-216	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5									
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	14						
3.5									
4.0									
4.5	4.5	SPT-2	21						
5.0				Medium Dense to Dense, Brownish, Silty Sand	SM				
5.5	5.5	UDS-1							
6.0	6	SPT-3	29						
6.5									
7.0									
7.5	7.5	SPT-4	35						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	41						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2973647 m	Easting : 579450 m
Reduced Level (m):(+)0	BH. No. : BH-216	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)					RQD (%)					(Depth v/s SPT N Value)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
							0	25	50	75	100	0	25	50	75	100	0	10	20	30	40	50	60	70	80	90	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2973647 m	Easting : 579450 m
Reduced Level (m):(+)0	BH. No. : BH-216	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	82						
21.5									
22.0									
22.5	22.5	SPT-14	91	Very Dense, Brownish, Silty Sand	SM				
23.0									
23.5									
24.0	24	SPT-15	96						
24.5									
25.0									
25.5	25.5	SPT-16	>100						
26.0									
26.5									
27.0	27	SPT-17	>100						
27.5									
28.0				Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
28.5	28.5	SPT-18	>100						
29.0									
29.5									
30.0	30	SPT-19	>100						

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2973647 m	Easting : 579450 m
Reduced Level (m):(+)0	BH. No. : BH-216	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	>100						
32.0									
32.5									
33.0	33	>01000	>0100						
33.5									
34.0				Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
34.5	34.5	SPT-21	>100						
35.0									
35.5									
36.0	36	SPT-22	>100						
36.5									
37.0									
37.5	37.5	SPT-23	>100						
38.0									
38.5									
39.0	39	SPT-24	>100	Very Dense, Brownish, Silty Sand	SM				
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2973647 m	Easting : 579450 m
Reduced Level (m):(+)0	BH. No. : BH-216	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-25	>100						
41.0									
41.5									
42.0	42	SPT-26	>100						
42.5									
43.0									
43.5	43.5	SPT-27	>100						
44.0									
44.5									
45.0	45	SPT-28	>100	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-29	>100						
47.0									
47.5									
48.0	48	SPT-30	>100						
48.5									
49.0									
49.5	49.5	SPT-31	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-598	Northing : 2974868 m	Easting : 580158 m
Reduced Level (m): (+)0	BH. No. : BH-230	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5									
2.0									
2.5									
3.0	3	SPT-1	14						
3.5									
4.0									
4.5	4.5	SPT-2	16						
5.0				Medium Dense, Brownish, Silty Sand	SM				
5.5	5.5	UDS*							
6.0	6	SPT-3	18						
6.5									
7.0									
7.5	7.5	SPT-4	20						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	21						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-598

Northing :2974868 m

Easting :580158 m

Reduced Level (m):(+)0

BH. No. :BH-230

BH Depth (m):50

Proposed/Existing Structure :

Water Table (m):Not encountered

Inclination : Vertical

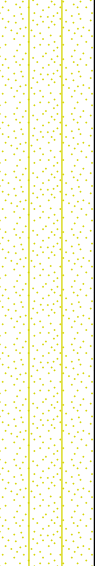
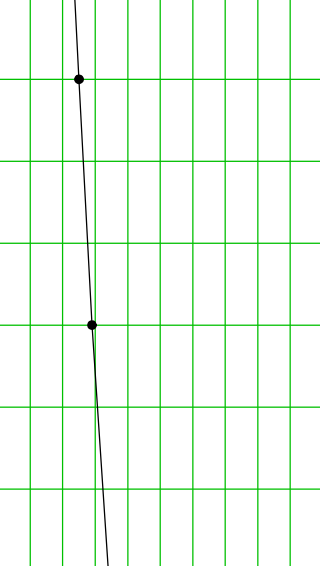
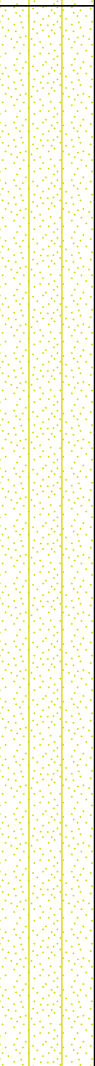
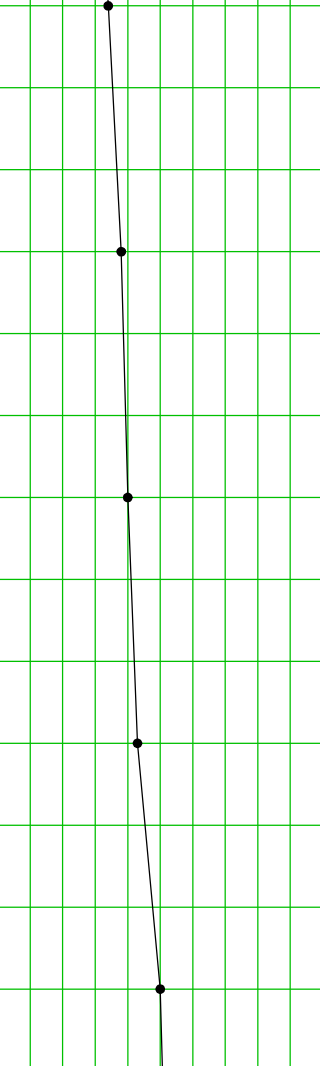
Boring type :Rotary

Dia. of Boring :150/76 mm

Depth of Casing (m) :-

Date of Start :14-08-2026

Date of Completion :15-08-2026

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	25	Medium Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	29						
12.5				Dense, Brownish, Silty Sand	SM				
13.0									
13.5	13.5	SPT-8	34						
14.0									
14.5									
15.0	15	SPT-9	38						
15.5									
16.0									
16.5	16.5	SPT-10	40						
17.0									
17.5									
18.0	18	SPT-11	43						
18.5									
19.0									
19.5	19.5	SPT-12	50						
20.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-598	Northing : 2974868 m	Easting : 580158 m
Reduced Level (m): (+)0	BH. No. : BH-230	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5				Dense, Brownish, Silty Sand	SM				
21.0	21	SPT-13	52						
21.5									
22.0									
22.5	22.5	SPT-14	57						
23.0									
23.5									
24.0	24	SPT-15	60						
24.5									
25.0									
25.5				Very Dense, Brownish, Silty Sand	SM				
26.0									
26.5									
27.0	27	SPT-16	62						
27.5									
28.0									
28.5	28.5	SPT-17	65						
29.0									
29.5									
30.0	30	SPT-18	67						

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-598	Northing :2974868 m	Easting :580158 m
Reduced Level (m):(+)0	BH. No. :BH-230	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-19	71						
32.0									
32.5									
33.0	33	SPT-20	77						
33.5									
34.0									
34.5	34.5	SPT-21	79						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-22	85						
36.5									
37.0									
37.5	37.5	SPT-23	87						
38.0									
38.5									
39.0	39	SPT-24	91						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-598	Northing : 2974868 m	Easting : 580158 m
Reduced Level (m): (+)0	BH. No. : BH-230	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-25	94						
41.0									
41.5									
42.0	42	SPT-26	98						
42.5									
43.0									
43.5	43.5	SPT-27	>100						
44.0									
44.5									
45.0	45	SPT-28	>100	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-29	>100						
47.0									
47.5									
48.0	48	SPT-30	>100						
48.5									
49.0									
49.5	49.5	SPT-31	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-501	Northing :2974996 m	Easting :580262 m
Reduced Level (m):(+)0	BH. No. :BH-231	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :15-08-2026	

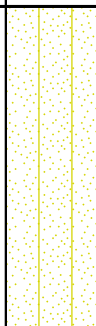
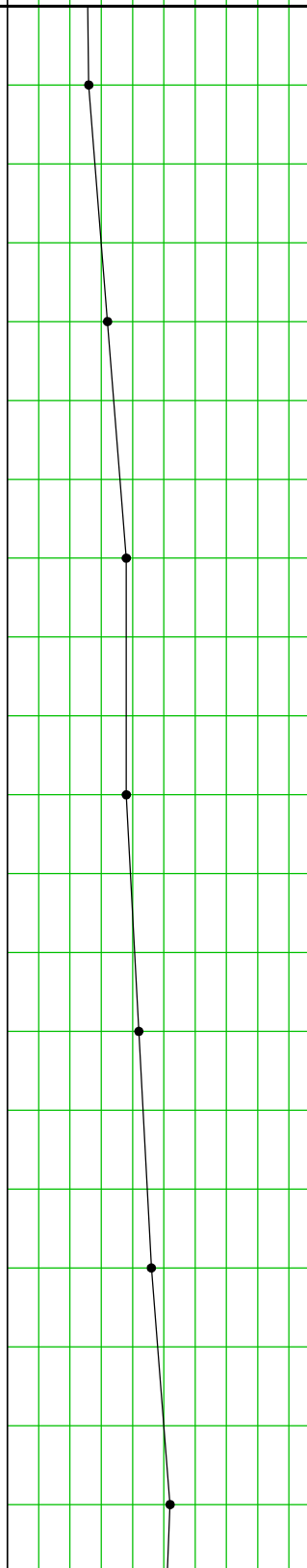
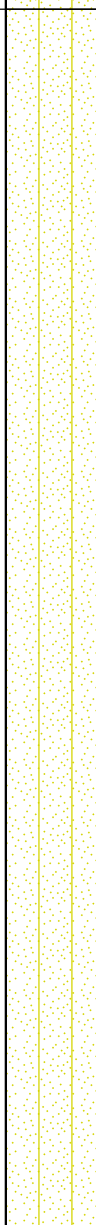
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5									
2.0									
2.5									
3.0	3	SPT-1	13						
3.5									
4.0									
4.5	4.5	SPT-2	14						
5.0				Medium Dense, Brownish, Silty Sand	SM				
5.5	5.5	UDS-1							
6.0	6	SPT-3	17						
6.5									
7.0									
7.5	7.5	SPT-4	21						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	25						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-501	Northing : 2974996 m	Easting : 580262 m
Reduced Level (m):(+)0	BH. No. : BH-231	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	
10.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5	SPT-6	26	Medium Dense, Brownish, Silty Sand	SM					
11.0										
11.5										
12.0	12	SPT-7	32	Dense, Brownish, Silty Sand	SM					
12.5										
13.0										
13.5	13.5	SPT-8	38							
14.0										
14.5										
15.0	15	SPT-9	38							
15.5										
16.0										
16.5	16.5	SPT-10	42							
17.0										
17.5										
18.0	18	SPT-11	46							
18.5										
19.0										
19.5	19.5	SPT-12	52	Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM					
20.0										

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-501	Northing : 2974996 m	Easting : 580262 m
Reduced Level (m):(+)0	BH. No. : BH-231	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	49						
21.5									
22.0									
22.5	22.5	SPT-14	52						
23.0									
23.5									
24.0	24	SPT-15	56						
24.5									
25.0				Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
25.5	25.5	SPT-16	61						
26.0									
26.5									
27.0	27	SPT-17	62						
27.5									
28.0									
28.5	28.5	SPT-18	65						
29.0									
29.5									
30.0	30	SPT-19	66						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-501	Northing : 2974996 m	Easting : 580262 m
Reduced Level (m): (+)0	BH. No. : BH-231	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	70						
32.0									
32.5									
33.0	33	SPT-21	75						
33.5									
34.0									
34.5	34.5	SPT-22	77						
35.0				Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
35.5									
36.0	36	SPT-23	88						
36.5									
37.0									
37.5	37.5	SPT-24	94						
38.0									
38.5									
39.0	39	SPT-25	98						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-501	Northing : 2974996 m	Easting : 580262 m
Reduced Level (m): (+)0	BH. No. : BH-231	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	>100						
41.0									
41.5									
42.0	42	SPT-27	>100						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 22+200	Northing : 2975532 m	Easting : 580631 m
Reduced Level (m): (+)0	BH. No. : BH-238	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 16-08-2026	Date of Completion : 17-08-2026	

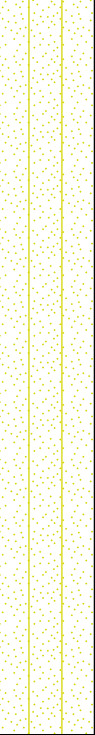
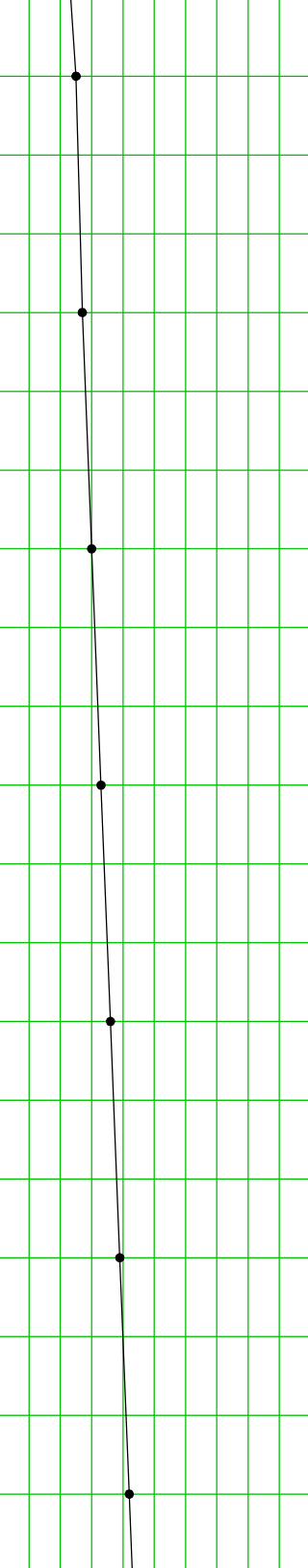
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5									
3.0	3	SPT-1	11						
3.5									
4.0									
4.5	4.5	SPT-2	9						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	13						
6.5				Medium Dense, Brownish, Silty Sand	SM				
7.0									
7.5	7.5	SPT-4	16						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	20						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 22+200	Northing : 2975532 m	Easting : 580631 m
Reduced Level (m):(+)0	BH. No. : BH-238	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 16-08-2026	Date of Completion : 17-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	25	Medium Dense, Brownish, Silty Sand	SM				
11.0									
11.5	11.5	UDS*							
12.0	12	SPT-7	27						
12.5				Dense, Brownish, Silty Sand	SM				
13.0									
13.5	13.5	SPT-8	30						
14.0									
14.5	14.5	UDS*							
15.0	15	SPT-9	33						
15.5									
16.0									
16.5	16.5	SPT-10	36						
17.0									
17.5									
18.0	18	SPT-11	39						
18.5									
19.0									
19.5	19.5	SPT-12	42						
20.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 22+200	Northing : 2975532 m	Easting : 580631 m
Reduced Level (m):(+)0	BH. No. : BH-238	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 16-08-2026	Date of Completion : 17-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	45						
21.5									
22.0				Dense, Brownish, Silty Sand	SM				
22.5	22.5	SPT-14	47						
23.0									
23.5									
24.0	24	SPT-15	50						
24.5									
25.0									
25.5	25.5	SPT-16	53						
26.0									
26.5									
27.0	27	SPT-17	55	Very Dense, Brownish, Silty Sand	SM				
27.5									
28.0									
28.5	28.5	SPT-18	58						
29.0									
29.5									
30.0	30	SPT-19	61						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 22+200	Northing : 2975532 m	Easting : 580631 m
Reduced Level (m):(+)0	BH. No. : BH-238	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 16-08-2026	Date of Completion : 17-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	63						
32.0									
32.5									
33.0	33	SPT-21	66						
33.5									
34.0									
34.5	34.5	SPT-22	68						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	72						
36.5									
37.0									
37.5	37.5	SPT-24	74						
38.0									
38.5									
39.0	39	SPT-25	77						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :22+200	Northing :2975532 m	Easting :580631 m
Reduced Level (m):(+)0	BH. No. :BH-238	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :16-08-2026	Date of Completion :17-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	80						
41.0									
41.5									
42.0	42	SPT-27	82						
42.5									
43.0									
43.5	43.5	SPT-28	85						
44.0									
44.5									
45.0	45	SPT-29	88	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	91						
47.0									
47.5									
48.0	48	SPT-31	94						
48.5									
49.0									
49.5									
50.0	50	SPT-32	98						

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :22+280	Northing :2975643 m	Easting :580701 m
Reduced Level (m):(+)0	BH. No. :BH-239	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :16-08-2026	Date of Completion :17-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5									
2.0									
2.5									
3.0	3	SPT-1	15						
3.5									
4.0									
4.5	4.5	SPT-2	13						
5.0				Medium Dense, Brownish, Silty Sand	SM				
5.5	5.5	UDS-1							
6.0	6	SPT-3	16						
6.5									
7.0									
7.5	7.5	SPT-4	20						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	24						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 22+280

Northing : 2975643 m

Easting : 580701 m

Reduced Level (m):(+)0

BH. No. : BH-239

BH Depth (m):50

Proposed/Existing Structure :

Water Table (m):Not encountered

Inclination : Vertical

Boring type : Rotary

Dia. of Boring : 150/76 mm

Depth of Casing (m) :-

Date of Start : 16-08-2026

Date of Completion : 17-08-2026

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	27	Medium Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	32	Dense, Brownish, Silty Sand	SM				
12.5									
13.0									
13.5	13.5	SPT-8	35						
14.0									
14.5									
15.0	15	SPT-9	37						
15.5									
16.0									
16.5	16.5	SPT-10	40						
17.0									
17.5									
18.0	18	SPT-11	43						
18.5									
19.0									
19.5	19.5	SPT-12	47						
20.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 22+280	Northing : 2975643 m	Easting : 580701 m
Reduced Level (m):(+)0	BH. No. : BH-239	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 16-08-2026	Date of Completion : 17-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5				Dense, Brownish, Silty Sand	SM				
21.0	21	SPT-13	52						
21.5									
22.0									
22.5	22.5	SPT-14	54						
23.0									
23.5									
24.0	24	SPT-15	58						
24.5									
25.0									
25.5	25.5	SPT-16	62	Very Dense, Brownish, Silty Sand	SM				
26.0									
26.5									
27.0	27	SPT-17	64						
27.5									
28.0									
28.5	28.5	SPT-18	67						
29.0									
29.5									
30.0	30	SPT-19	70						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :22+280

Northing :2975643 m

Easting :580701 m

Reduced Level (m):(+)0

BH. No. :BH-239

BH Depth (m):50

Proposed/Existing Structure :

Water Table (m):Not encountered

Inclination : Vertical

Boring type :Rotary

Dia. of Boring :150/76 mm

Depth of Casing (m) :-

Date of Start :16-08-2026

Date of Completion :17-08-2026

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	73						
32.0									
32.5									
33.0	33	SPT-21	75						
33.5									
34.0									
34.5	34.5	SPT-22	77						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	80						
36.5									
37.0									
37.5	37.5	SPT-24	83						
38.0									
38.5									
39.0	39	SPT-25	87						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 22+280	Northing : 2975643 m	Easting : 580701 m
Reduced Level (m): (+)0	BH. No. : BH-239	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 16-08-2026	Date of Completion : 17-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	93						
41.0									
41.5									
42.0	42	SPT-27	99						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5									
50.0	50	SPT-32	>100						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-628

Northing : 2975696 m

Easting : 580736 m

Reduced Level (m): (+)0

BH. No. : BH-240

BH Depth (m): 50

Proposed/Existing Structure :

Water Table (m): Not encountered

Inclination : Vertical

Boring type : Rotary

Dia. of Boring : 150/76 mm

Depth of Casing (m) :-

Date of Start : 16-08-2026

Date of Completion : 17-08-2026

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5									
3.0	3	SPT-1	17						
3.5									
4.0									
4.5	4.5	SPT-2	9						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	11						
6.5				Medium Dense, Brownish, Silty Sand	SM				
7.0									
7.5	7.5	SPT-4	14						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	18						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-628

Northing : 2975696 m

Easting : 580736 m

Reduced Level (m):(+)0

BH. No. : BH-240

BH Depth (m):50

Proposed/Existing Structure :

Water Table (m): Not encountered

Inclination : Vertical

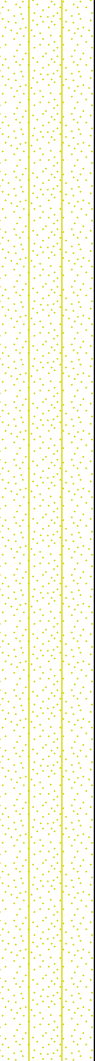
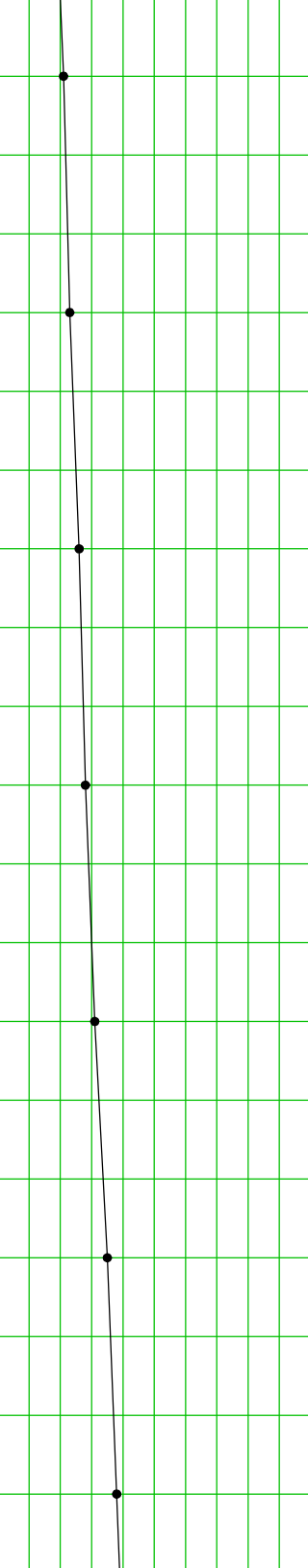
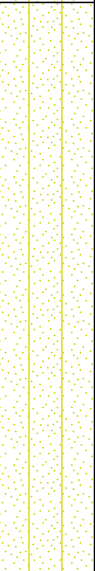
Boring type : Rotary

Dia. of Boring : 150/76 mm

Depth of Casing (m) :-

Date of Start : 16-08-2026

Date of Completion : 17-08-2026

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	21	Medium Dense, Brownish, Silty Sand	SM				
11.0									
11.5	11.5	UDS*							
12.0	12	SPT-7	23						
12.5									
13.0				Dense, Brownish, Silty Sand	SM				
13.5	13.5	SPT-8	26						
14.0									
14.5	14.5	UDS*							
15.0	15	SPT-9	28						
15.5									
16.0									
16.5	16.5	SPT-10	31						
17.0									
17.5	17.5	UDS*							
18.0	18	SPT-11	35						
18.5									
19.0									
19.5	19.5	SPT-12	38						
20.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-628	Northing :2975696 m	Easting :580736 m
Reduced Level (m):(+)0	BH. No. :BH-240	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :16-08-2026	Date of Completion :17-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	41						
21.5									
22.0				Dense, Brownish, Silty Sand	SM				
22.5	22.5	SPT-14	45						
23.0									
23.5									
24.0	24	SPT-15	50						
24.5									
25.0									
25.5	25.5	SPT-16	53						
26.0									
26.5									
27.0	27	SPT-17	56	Very Dense, Brownish, Silty Sand	SM				
27.5									
28.0									
28.5	28.5	SPT-18	59						
29.0									
29.5									
30.0	30	SPT-19	61						

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-628	Northing :2975696 m	Easting :580736 m
Reduced Level (m):(+)0	BH. No. :BH-240	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :16-08-2026	Date of Completion :17-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	64						
32.0									
32.5									
33.0	33	SPT-21	68						
33.5									
34.0									
34.5	34.5	SPT-22	71						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	74						
36.5									
37.0									
37.5	37.5	SPT-24	77						
38.0									
38.5									
39.0	39	SPT-25	79						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-628	Northing : 2975696 m	Easting : 580736 m
Reduced Level (m): (+)0	BH. No. : BH-240	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 16-08-2026	Date of Completion : 17-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	82						
41.0									
41.5									
42.0	42	SPT-27	85						
42.5									
43.0									
43.5	43.5	SPT-28	89						
44.0									
44.5									
45.0	45	SPT-29	91	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	93						
47.0									
47.5									
48.0	48	SPT-31	97						
48.5									
49.0									
49.5									
50.0	50	SPT-32	99						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 22+560	Northing : 2975861 m	Easting : 580798 m
Reduced Level (m): (+)0	BH. No. : BH-242	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 17-08-2026	Date of Completion : 18-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5									
2.0									
2.5									
3.0	3	SPT-1	18						
3.5									
4.0									
4.5	4.5	SPT-2	18						
5.0				Medium Dense, Brownish, Silty Sand	SM				
5.5	5.5	UDS-1							
6.0	6	SPT-3	20						
6.5									
7.0									
7.5	7.5	SPT-4	22						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	24						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 22+560

Northing : 2975861 m

Easting : 580798 m

Reduced Level (m):(+)0

BH. No. : BH-242

BH Depth (m): 50

Proposed/Existing Structure :

Water Table (m): Not encountered

Inclination : Vertical

Boring type : Rotary

Dia. of Boring : 150/76 mm

Depth of Casing (m) :-

Date of Start : 17-08-2026

Date of Completion : 18-08-2026

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	28	Medium Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	31	Dense, Brownish, Silty Sand	SM				
12.5									
13.0									
13.5	13.5	SPT-8	37						
14.0									
14.5									
15.0	15	SPT-9	39						
15.5									
16.0									
16.5	16.5	SPT-10	41						
17.0									
17.5									
18.0	18	SPT-11	46						
18.5									
19.0									
19.5	19.5	SPT-12	50	Very Dense, Brownish, Silty Sand	SM				
20.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 22+560	Northing : 2975861 m	Easting : 580798 m
Reduced Level (m):(+)0	BH. No. : BH-242	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 17-08-2026	Date of Completion : 18-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	55						
21.5									
22.0									
22.5	22.5	SPT-14	58						
23.0									
23.5									
24.0	24	SPT-15	61						
24.5									
25.0				Very Dense, Brownish, Silty Sand	SM				
25.5	25.5	SPT-16	64						
26.0									
26.5									
27.0	27	SPT-17	68						
27.5									
28.0									
28.5	28.5	SPT-18	74						
29.0									
29.5									
30.0	30	SPT-19	77						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 22+560	Northing : 2975861 m	Easting : 580798 m
Reduced Level (m): (+)0	BH. No. : BH-242	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 17-08-2026	Date of Completion : 18-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	81						
32.0									
32.5									
33.0	33	SPT-21	85						
33.5									
34.0									
34.5	34.5	SPT-22	89						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	91						
36.5									
37.0									
37.5	37.5	SPT-24	95						
38.0									
38.5									
39.0	39	SPT-25	98						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 22+560	Northing : 2975861 m	Easting : 580798 m
Reduced Level (m): (+)0	BH. No. : BH-242	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 17-08-2026	Date of Completion : 18-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	99						
41.0									
41.5									
42.0	42	SPT-27	>100						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5									
50.0	50	SPT-32	>100						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-639	Northing :2975962 m	Easting :580833 m
Reduced Level (m):(+)0	BH. No. :BH-243	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :17-08-2026	Date of Completion :18-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5									
2.0									
2.5									
3.0	3	SPT-1	14						
3.5									
4.0									
4.5	4.5	SPT-2	13						
5.0				Medium Dense, Brownish, Silty Sand	SM				
5.5	5.5	UDS-1							
6.0	6	SPT-3	18						
6.5									
7.0									
7.5	7.5	SPT-4	23						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	27						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-639	Northing : 2975962 m	Easting : 580833 m
Reduced Level (m):(+)0	BH. No. : BH-243	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 17-08-2026	Date of Completion : 18-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	31	Medium Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	33						
12.5									
13.0									
13.5	13.5	SPT-8	36						
14.0									
14.5									
15.0	15	SPT-9	38	Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	40						
17.0									
17.5									
18.0	18	SPT-11	43						
18.5									
19.0									
19.5	19.5	SPT-12	46						
20.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-639	Northing : 2975962 m	Easting : 580833 m
Reduced Level (m): (+)0	BH. No. : BH-243	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 17-08-2026	Date of Completion : 18-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	49	Dense, Brownish, Silty Sand	SM				
21.5									
22.0									
22.5	22.5	SPT-14	51						
23.0									
23.5									
24.0	24	SPT-15	55						
24.5									
25.0									
25.5	25.5	SPT-16	58						
26.0									
26.5				Very Dense, Brownish, Silty Sand	SM				
27.0	27	SPT-17	62						
27.5									
28.0									
28.5	28.5	SPT-18	67						
29.0									
29.5									
30.0	30	SPT-19	72						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-639	Northing : 2975962 m	Easting : 580833 m
Reduced Level (m): (+)0	BH. No. : BH-243	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 17-08-2026	Date of Completion : 18-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	77						
32.0									
32.5									
33.0	33	SPT-21	80						
33.5									
34.0				Very Dense, Brownish, Silty Sand	SM				
34.5	34.5	SPT-22	84						
35.0									
35.5									
36.0	36	SPT-23	87						
36.5									
37.0									
37.5	37.5	SPT-24	91						
38.0									
38.5									
39.0	39	SPT-25	93	Very Dense, Brownish, Silty Sand	SM				
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-639	Northing : 2975962 m	Easting : 580833 m
Reduced Level (m): (+)0	BH. No. : BH-243	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 17-08-2026	Date of Completion : 18-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	97						
41.0									
41.5									
42.0	42	SPT-27	>100						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5									
50.0	50	SPT-32	>100						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :23+160	Northing :2976417 m	Easting :580935 m
Reduced Level (m):(+)0	BH. No. :BH-248	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :16-08-2026	Date of Completion :17-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5									
2.0									
2.5									
3.0	3	SPT-1	18						
3.5									
4.0									
4.5	4.5	SPT-2	12						
5.0				Medium Dense, Brownish, Silty Sand	SM				
5.5	5.5	UDS-1							
6.0	6	SPT-3	18						
6.5									
7.0									
7.5	7.5	SPT-4	23						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	27						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 23+160

Northing : 2976417 m

Easting : 580935 m

Reduced Level (m):(+)0

BH. No. : BH-248

BH Depth (m):50

Proposed/Existing Structure :

Water Table (m): Not encountered

Inclination : Vertical

Boring type : Rotary

Dia. of Boring : 150/76 mm

Depth of Casing (m) :-

Date of Start : 16-08-2026

Date of Completion : 17-08-2026

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	32	Medium Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	37						
12.5									
13.0									
13.5	13.5	SPT-8	40						
14.0									
14.5				Dense, Brownish, Silty Sand	SM				
15.0	15	SPT-9	43						
15.5									
16.0									
16.5	16.5	SPT-10	48						
17.0									
17.5									
18.0	18	SPT-11	52						
18.5									
19.0				Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
19.5	19.5	SPT-12	58						
20.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 23+160	Northing : 2976417 m	Easting : 580935 m
Reduced Level (m):(+)0	BH. No. : BH-248	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 16-08-2026	Date of Completion : 17-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	61						
21.5									
22.0									
22.5	22.5	SPT-14	65						
23.0									
23.5									
24.0	24	SPT-15	69						
24.5									
25.0				Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
25.5	25.5	SPT-16	74						
26.0									
26.5									
27.0	27	SPT-17	79						
27.5									
28.0									
28.5	28.5	SPT-18	84						
29.0									
29.5									
30.0	30	SPT-19	89						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 23+160	Northing : 2976417 m	Easting : 580935 m
Reduced Level (m):(+)0	BH. No. : BH-248	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 16-08-2026	Date of Completion : 17-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	95						
32.0									
32.5									
33.0	33	SPT-21	97						
33.5									
34.0									
34.5	34.5	SPT-22	99						
35.0				Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
35.5									
36.0	36	SPT-23	>100						
36.5									
37.0									
37.5	37.5	SPT-24	>100						
38.0									
38.5									
39.0	39	SPT-25	>100						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 23+160	Northing : 2976417 m	Easting : 580935 m
Reduced Level (m):(+)0	BH. No. : BH-248	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 16-08-2026	Date of Completion : 17-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	>100						
41.0									
41.5									
42.0	42	SPT-27	>100						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5									
50.0	50	SPT-32	>100						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-674

Northing :2977043 m

Easting :580807 m

Reduced Level (m):(+)0

BH. No. :BH-256

BH Depth (m):50

Proposed/Existing Structure :

Water Table (m):Not encountered

Inclination : Vertical

Boring type :Rotary

Dia. of Boring :150/76 mm

Depth of Casing (m) :-

Date of Start :16-08-2026

Date of Completion :17-08-2026

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5									
3.0	3	SPT-1	11						
3.5									
4.0									
4.5	4.5	SPT-2	15						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	18						
6.5				Medium Dense, Brownish, Silty Sand	SM				
7.0									
7.5	7.5	SPT-4	22						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	25						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-674	Northing :2977043 m	Easting :580807 m
Reduced Level (m):(+)0	BH. No. :BH-256	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :16-08-2026	Date of Completion :17-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)					RQD (%)					(Depth v/s SPT N Value)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
							0	25	50	75	100	0	25	50	75	100	0	10	20	30	40	50	60	70	80	90	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-674	Northing : 2977043 m	Easting : 580807 m
Reduced Level (m): (+)0	BH. No. : BH-256	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 16-08-2026	Date of Completion : 17-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	48	Dense, Brownish, Silty Sand	SM				
21.5									
22.0									
22.5	22.5	SPT-14	51						
23.0									
23.5									
24.0	24	SPT-15	53						
24.5									
25.0									
25.5	25.5	SPT-16	55						
26.0									
26.5				Very Dense, Brownish, Silty Sand	SM				
27.0	27	SPT-17	58						
27.5									
28.0									
28.5	28.5	SPT-18	63						
29.0									
29.5									
30.0	30	SPT-19	66						

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :P-674	Northing :2977043 m	Easting :580807 m
Reduced Level (m):(+)0	BH. No. :BH-256	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :16-08-2026	Date of Completion :17-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	69						
32.0									
32.5									
33.0	33	SPT-21	72						
33.5									
34.0									
34.5	34.5	SPT-22	76						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	78						
36.5									
37.0									
37.5	37.5	SPT-24	81						
38.0									
38.5									
39.0	39	SPT-25	86						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : P-674	Northing : 2977043 m	Easting : 580807 m
Reduced Level (m): (+)0	BH. No. : BH-256	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 16-08-2026	Date of Completion : 17-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	92						
41.0									
41.5									
42.0	42	SPT-27	95						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :24+860	Northing :2977247.508 m	Easting :579851.293 m
Reduced Level (m):(+)0	BH. No. :BH-266	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :15-08-2026	

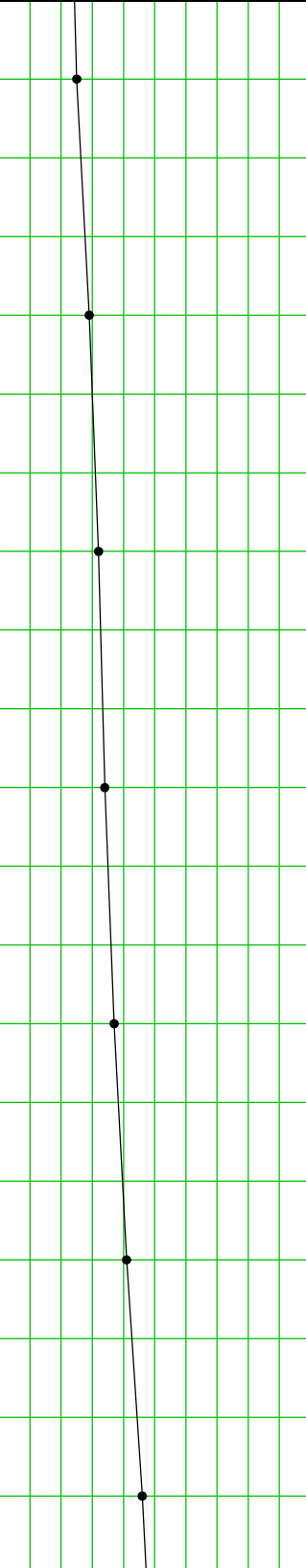
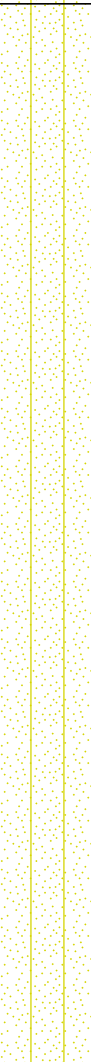
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5									
3.0	3	SPT-1	12						
3.5									
4.0									
4.5	4.5	SPT-2	14						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	15						
6.5				Medium Dense, Brownish, Silty Sand	SM				
7.0									
7.5	7.5	SPT-4	19						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	23						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 24+860	Northing : 2977247.508 m	Easting : 579851.293 m
Reduced Level (m):(+)0	BH. No. : BH-266	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	25	Medium Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	29						
12.5				Dense, Brownish, Silty Sand	SM				
13.0									
13.5	13.5	SPT-8	32						
14.0									
14.5									
15.0	15	SPT-9	34						
15.5									
16.0									
16.5	16.5	SPT-10	37						
17.0									
17.5									
18.0	18	SPT-11	41						
18.5									
19.0									
19.5	19.5	SPT-12	46						
20.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 24+860

Northing : 2977247.508 m

Easting : 579851.293 m

Reduced Level (m):(+)0

BH. No. : BH-266

BH Depth (m): 50

Proposed/Existing Structure :

Water Table (m): Not encountered

Inclination : Vertical

Boring type : Rotary

Dia. of Boring : 150/76 mm

Depth of Casing (m) :-

Date of Start : 14-08-2026

Date of Completion : 15-08-2026

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	50	Dense, Brownish, Silty Sand	SM				
21.5									
22.0									
22.5	22.5	SPT-14	53						
23.0									
23.5									
24.0	24	SPT-15	55						
24.5									
25.0									
25.5	25.5	SPT-16	59						
26.0									
26.5				Very Dense, Brownish, Silty Sand with Gravels	SM				
27.0	27	SPT-17	63						
27.5									
28.0									
28.5	28.5	SPT-18	66						
29.0									
29.5									
30.0	30	SPT-19	71						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 24+860

Northing : 2977247.508 m

Easting : 579851.293 m

Reduced Level (m):(+)0

BH. No. : BH-266

BH Depth (m): 50

Proposed/Existing Structure :

Water Table (m): Not encountered

Inclination : Vertical

Boring type : Rotary

Dia. of Boring : 150/76 mm

Depth of Casing (m) :-

Date of Start : 14-08-2026

Date of Completion : 15-08-2026

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	80						
32.0									
32.5									
33.0	33	SPT-21	82						
33.5									
34.0									
34.5	34.5	SPT-22	83						
35.0				Very Dense, Brownish, Silty Sand with Gravels	SM				
35.5									
36.0	36	SPT-23	87						
36.5									
37.0									
37.5	37.5	SPT-24	90						
38.0									
38.5									
39.0	39	SPT-25	93						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 24+860	Northing : 2977247.508 m	Easting : 579851.293 m
Reduced Level (m):(+)0	BH. No. : BH-266	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	96						
41.0									
41.5									
42.0	42	SPT-27	>100						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Silty Sand with Gravels	SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 25+960	Northing : 2977782.971 m	Easting : 579056.708 m
Reduced Level (m): (+)0	BH. No. : BH-277	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 15-08-2026	

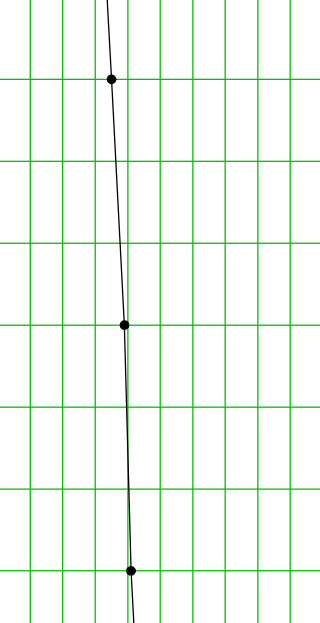
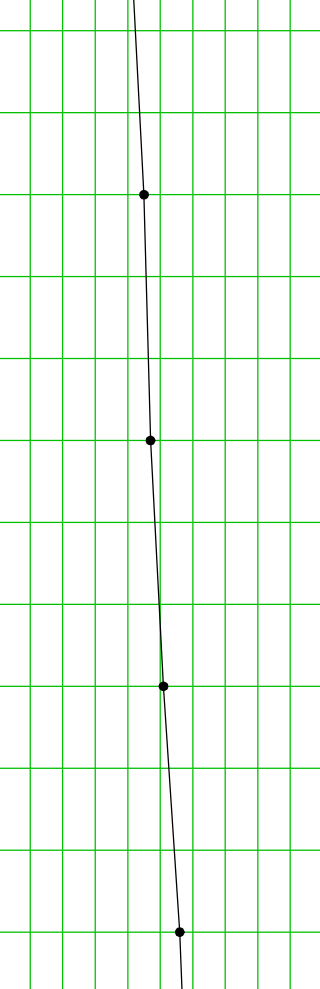
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5									
3.0	3	SPT-1	18						
3.5									
4.0									
4.5	4.5	SPT-2	20						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	22	Medium Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	27						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	31						
9.5				Dense, Brownish, Silty Sand	SM				
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :25+960	Northing :2977782.971 m	Easting :579056.708 m
Reduced Level (m):(+)0	BH. No. :BH-277	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	35	Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	39						
12.5									
13.0				Very Dense, Brownish, Silty Sand with Gravels	SM				
13.5	13.5	SPT-8	41						
14.0									
14.5									
15.0	15	SPT-9	45						
15.5				Very Dense, Brownish, Silty Sand with Gravels	SM				
16.0									
16.5	16.5	SPT-10	47						
17.0									
17.5									
18.0	18	SPT-11	51	Very Dense, Brownish, Silty Sand with Gravels	SM				
18.5									
19.0									
19.5	19.5	SPT-12	56						
20.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 25+960	Northing : 2977782.971 m	Easting : 579056.708 m
Reduced Level (m):(+)0	BH. No. : BH-277	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	59						
21.5									
22.0									
22.5	22.5	SPT-14	63						
23.0									
23.5									
24.0	24	SPT-15	65						
24.5									
25.0				Very Dense, Brownish, Silty Sand with Gravels	SM				
25.5	25.5	SPT-16	68						
26.0									
26.5									
27.0	27	SPT-17	73						
27.5									
28.0									
28.5	28.5	SPT-18	76						
29.0									
29.5									
30.0	30	SPT-19	79						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 25+960	Northing : 2977782.971 m	Easting : 579056.708 m
Reduced Level (m): (+)0	BH. No. : BH-277	BH Depth (m): 50
Proposed/Existing Structure :	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	83						
32.0									
32.5									
33.0	33	SPT-21	86						
33.5									
34.0									
34.5	34.5	SPT-22	89						
35.0				Very Dense, Brownish, Silty Sand with Gravels	SM				
35.5									
36.0	36	SPT-23	95						
36.5									
37.0									
37.5	37.5	SPT-24	97						
38.0									
38.5									
39.0	39	SPT-25	>100						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage : 25+960	Northing : 2977782.971 m	Easting : 579056.708 m
Reduced Level (m):(+)0	BH. No. : BH-277	BH Depth (m):50
Proposed/Existing Structure :	Water Table (m):Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-08-2026	Date of Completion : 15-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	>100						
41.0									
41.5									
42.0	42	SPT-27	>100						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Silty Sand with Gravels	SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

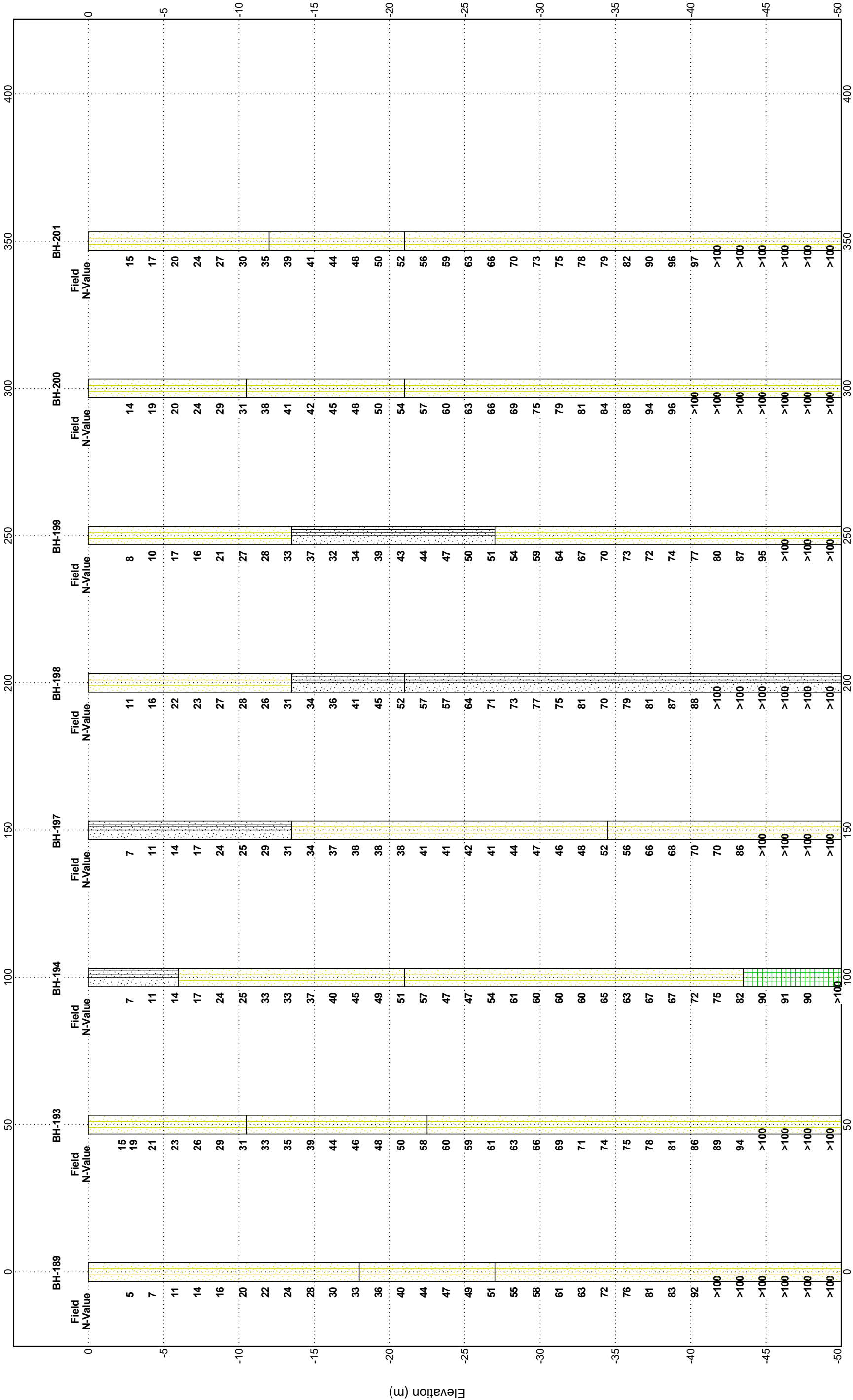
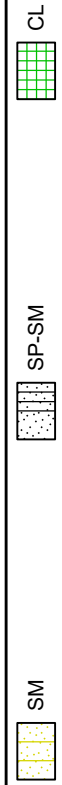
SUB SOIL PROFILE DIAGRAM -

CLIENT Delhi Metro Rail Corporation Ltd

PROJECT NAME GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)

PROJECT NUMBER SR-1241 25-26

PROJECT LOCATION Jaipur, Rajasthan



Distance Along Baseline (m)

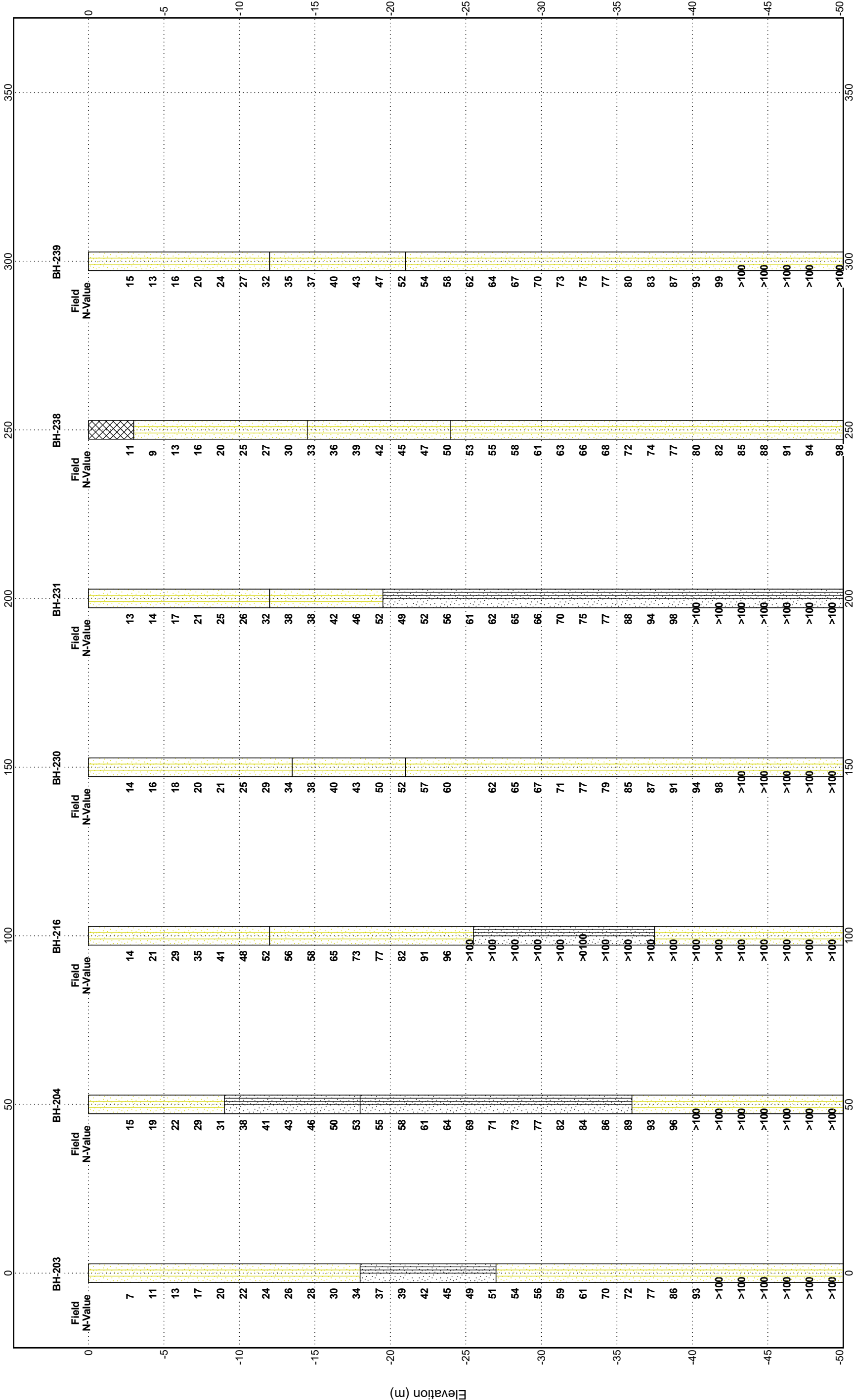
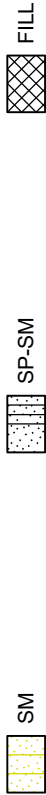
SUB SOIL PROFILE DIAGRAM -

CLIENT Delhi Metro Rail Corporation Ltd

PROJECT NAME GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)

PROJECT NUMBER SR-1241 25-26

PROJECT LOCATION Jaipur, Rajasthan



Distance Along Baseline (m)

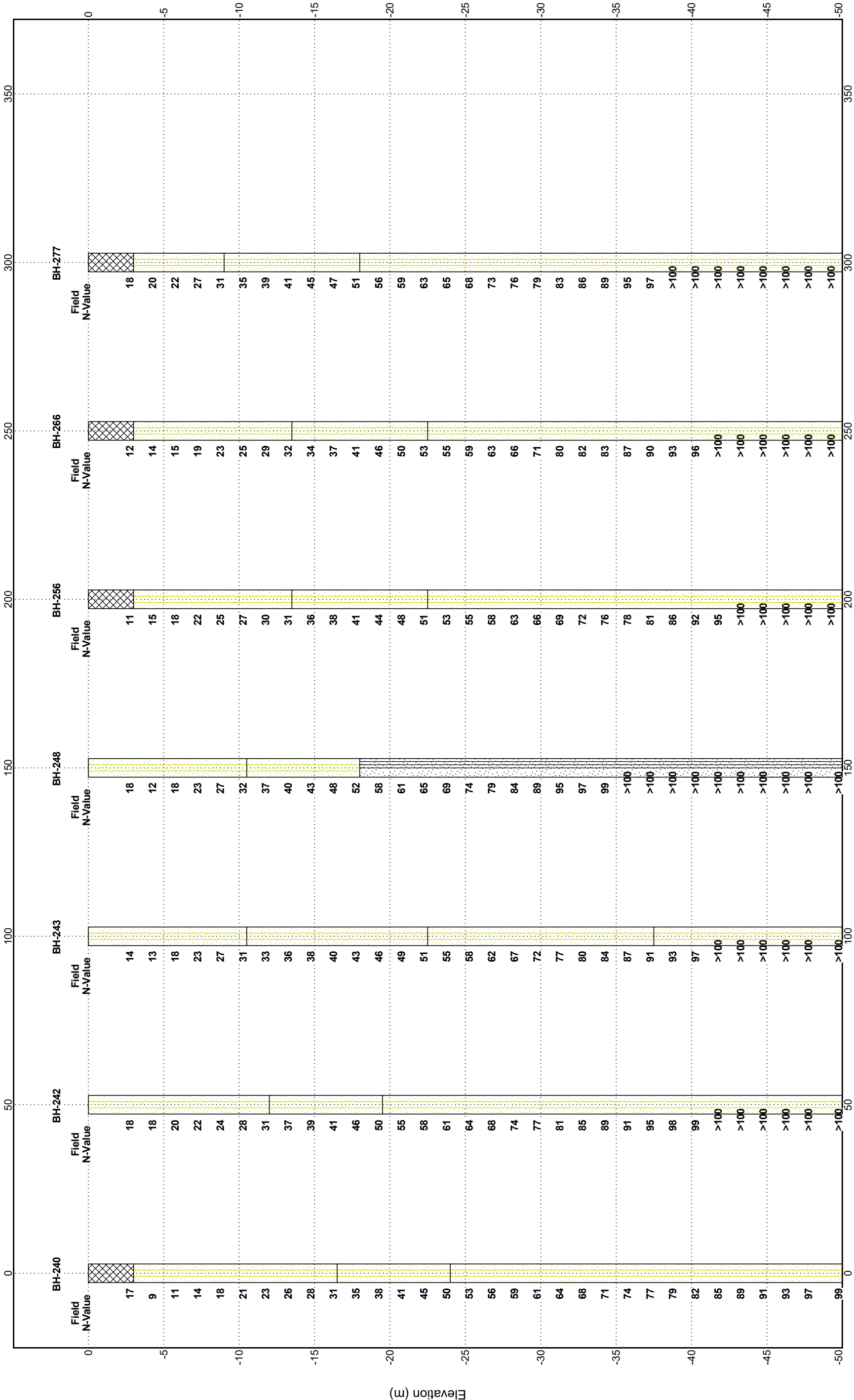
SUB SOIL PROFILE DIAGRAM -

CLIENT Delhi Metro Rail Corporation Ltd

PROJECT NAME GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)

PROJECT NUMBER SR-1241 25-26

PROJECT LOCATION Jaipur, Rajasthan



Distance Along Baseline (m)

APPENDIX – B (LAB TEST RESULTS)

Appendix No.	ITEMS
B-1	SOIL CHARACTERISTICS SHEETS
B-2	GSD CURVES

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length ~42.8 km)”						Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code						
	1-08-2026		to	05-08-2026		P-463		BH-189	Not Encountered		50.00 m	579007.000 m			2971051.000 m			-	SR-1241_25-26								
	Clay	Silt	Fine	Medium	Coarse	Gravel		Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm³)	Natural Moisture Content (%)	Dry Density (g/cm³)	Specific Gravity	Type of Test	Cohesion C (kg/cm²)	Angle of Friction (φ°)		Free Swell Index (%)	Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Void Ratio (e₀)	Pressure (kg/cm²)	C _v x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm²/kg)	Compression Index (C _p)
Sample Type	Depth from G.L. (m)			Observed SPT Value (N)		Corrected SPT Value (N _c)		Soil Description				IS Classification	IS Symbol														
DS-1	0.00	-	-	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-1	3.00	5	6	-				0	1	1	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-
SPT-2	4.50	7	8	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDS-1	5.50	-	-	-				28	66	4	1	1	0	-	NIL	NP	-	1.71	12.47	1.52	2.59	DST	0.00	28	-	-	-
SPT-3	6.00	11	11	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-4	7.50	14	13	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDS-2	8.50	-	-	-				28	68	3	1	0	0	-	NIL	NP	-	1.73	13.24	1.53	2.61	DST	0.00	29	-	-	-
SPT-5	9.00	16	14	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-6	10.50	20	16	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-7	12.00	22	17	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-8	13.50	24	17	-				26	70	2	1	1	0	-	NIL	NP	-	1.79	13.50	1.58	2.60	DST	0.00	30	-	-	-
SPT-9	15.00	28	19	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-10	16.50	30	19	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-11	18.00	33	20	-				32	64	4	0	0	0	-	NIL	NP	-	1.83	13.00	1.62	2.61	DST+	0.00	31	-	-	-
SPT-12	19.50	36	21	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-13	21.00	40	23	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-14	22.50	44	24	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-15	24.00	47	24	-				30	66	3	1	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-
SPT-16	25.50	49	24	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 UDS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+-Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”										IS Classification	IS Symbol	Soil Description	Corrected SPT Value (N)	Observed SPT Value (N)	Depth from G.L. (m)	Date of Boring						Chainage/Location		B.H. No.	Depth of Water Table			Termination Depth		Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	10-08-2026		to		12-08-2026		P-197		BH-197	Not Encountered							50.00 m	2971835.000 m	579910.000 m	2971835.000 m	579910.000 m	SR-1241_25-26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	Clay	Silt	Fine	Medium	Coarse	Gravel		Liquid Limit															Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm³)	Natural Moisture Content (%)	Dry Density (g/cm³)	Specific Gravity	Type of Test	Cohesion C (kg/cm²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm²)	C _v x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm²/Kg)	Compression Index (C _c)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Sample Type	DS-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”											Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.		Ref. Code																				
	Date of Boring		Grain Size Distribution % wt retained				Atterberg Limits %				Liquid Limit		Plastic Limit		Shrinkage Limit		Bulk Density (g/cm ³)		Natural Moisture Content (%)		Dry Density (g/cm ³)		Specific Gravity		Shear Strength			Free Swell Index			Swelling Pressure			Permeability			Consolidation Parameters											
	Clay	Silt	Fine	Medium	Coarse	Gravel	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)																								
SPT-19	0	15	83	1	1	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
SPT-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SPT-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
SPT-22	0	18	82	0	0	0	-	NIL	NP	1.84	12.00	1.64	2.62	DST+	0.00	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SPT-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-27	0	15	85	0	0	0	-	NIL	NP	1.85	11.50	1.66	2.64	DST+	0.00	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 UDS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todī Mod (Total approximate length ~42.8 km)”										Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code			
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Clay	Silt	Grain Size Distribution % wt retained			Liquid Limit			Atterberg Limits %		Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Shear Strength			Free Swell Index (%)			Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)
SPT-19										SPT-20	SPT-21	SPT-22	SPT-23	SPT-24	SPT-25	SPT-26	SPT-27					SPT-28	SPT-29	SPT-30		SPT-31	SPT-32			

SOIL CHARACTERISTICS

Project	Date of Boring				Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code															
	09-08-2026		to	11-08-2026			NOT ENCOUNTERED			50.00 m		579068.000 m		2971517.000 m																		
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %				Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)						
Clay								Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index												Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	
	DS-1	0.00	-	-	Loose to Medium Dense, Brownish, Poorly Graded Silty Sand	-																										
	SPT-1	3.00	7	9		SP-SM																										
	SPT-2	4.50	11	12		-																										
	UDS*	5.50	-	-		-																										
	SPT-3	6.00	14	14	Medium Dense to Dense, Brownish, Silty Sand	SM																										
	SPT-4	7.50	17	16		-																										
	UDS-1	8.50	-	-		SM																										
	SPT-5	9.00	24	21		-																										
	SPT-6	10.50	25	20		-																										
	SPT-7	12.00	33	25		SM																										
	SPT-8	13.50	33	24		-																										
	SPT-9	15.00	37	25		-																										
	SPT-10	16.50	40	26		SM																										
	SPT-11	18.00	45	28		-																										
	SPT-12	19.50	49	29		-																										
	SPT-13	21.00	51	29		SM																										
	SPT-14	22.50	57	31		-																										
	SPT-15	24.00	47	24																												
	SPT-16	25.50	47	23	SM																											
	SPT-17	27.00	54	26	-																											
	SPT-18	28.50	61	28	-																											

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”										Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.		Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				Bulk Density (g/cm ³)		Natural Moisture Content (%)		Dry Density (g/cm ³)		Specific Gravity		Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
								Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
SPT-19	30.00	60	28	Very Dense, Brownish, Silty Sand	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

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SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length ~42.8 km)"										Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code															
	13-08-2026		to		14-08-2026		P-490		BH-198		NOT ENCOUNTERED		50.00 m			579119,000 m			2971942,000 m				-																		
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _p)	Soil Description				IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %				Bulk Density (g/cm ³)		Natural Moisture Content (%)			Dry Density (g/cm ³)			Specific Gravity		Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)		
	DS-1	0.00	-	-	Medium Dense, Brownish, Silty Sand				-																																
	SPT-1	3.00	11	14					SM																																
	SPT-2	4.50	16	17					-																																
	UDS*	5.50	-	-					-																																
	SPT-3	6.00	22	22					SM																																
	SPT-4	7.50	23	21					-																																
	UDS-1	8.50	-	-					SM																																
	SPT-5	9.00	27	23					-																																
	SPT-6	10.50	28	23					-																																
	SPT-7	12.00	26	20					-																																
	SPT-8	13.50	31	22	Dense, Brownish, Poorly Graded Silty Sand				SP-SM																																
	SPT-9	15.00	34	23					-																																
	SPT-10	16.50	36	23					-																																
	SPT-11	18.00	41	25					SP-SM																																
	SPT-12	19.50	45	27					-																																
	SPT-13	21.00	52	29					SP-SM																																
	SPT-14	22.50	57	31					-																																
	SPT-15	24.00	57	30					-																																
	SPT-16	25.50	64	32					-																																
	SPT-17	27.00	71	34					SP-SM																																
	SPT-18	28.50	73	34	-																																				

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SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length ~42.8 km)”										Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	13-08-2026		to		14-08-2026		P-490		BH-198		NOT ENCOUNTERED		50.00 m			579119,000 m			2971942,000 m		-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _p)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %				Bulk Density (g/cm ³)			Dry Density (g/cm ³)		Specific Gravity		Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Clay								Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Natural Moisture Content (%)			Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Void Ratio (e ₀)	Pressure (kg/cm ²)				C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
SPT-19	30.00	77	35	Very Dense, Brownish, Poorly Graded Silty Sand	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	</

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SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Un-disturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”										Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code				
	Date of Boring		Grain Size Distribution % wt retained		Atterberg Limits %			Specific Gravity		Shear Strength			Free Swell Index			Permeability (cm/sec)											
Sample Type	IS Classification	IS Symbol	Soil Description	Observed SPT Value (N)	Corrected SPT Value (N _p)	Clay	Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit		Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)
SPT-19	-		Very Dense, Brownish, Silty Sand	59	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-20	-			64	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-21	SM			67	31	0	17	73	6	3	1	0	-	Nil	NP	-	1.88	14.00	1.65	DST+	0.00	32	-	-	-	-	-
SPT-22	-			70	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-23	-			73	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-24	-			72	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-25	SM			74	34	0	22	69	5	4	0	0	-	Nil	NP	-	1.88	13.50	1.66	DST+	0.00	33	-	-	-	-	-
SPT-26	-			77	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-27	-			80	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-28	-			87	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-29	SM			95	44	0	17	70	3	7	3	0	-	Nil	NP	-	1.89	12.50	1.68	DST+	0.00	34	-	-	-	-	-
SPT-30	-			>100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-31	-			>100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-32	-		>100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"										IS Classification	IS Symbol	Soil Description	Corrected SPT Value (N _c)	Observed SPT Value (N)	Depth from G.L. (m)	Date of Boring						Chainage/Location			B.H. No.	Depth of Water Table				Termination Depth		Coordinates (E,N)						R.L.	Ref. Code
	14-08-2026		to		15/08/2026		P-497		BH-200	NOT ENCOUNTERED							50.00 m	2972118.000 m		579135.000 m		2972118.000 m		-																
	Sample Type	DS-1	SPT-1	SPT-2	UDS*	SPT-3	SPT-4	UDS-1		SPT-5								SPT-6	SPT-7	SPT-8	SPT-9	SPT-10	SPT-11	SPT-12	SPT-13	SPT-14	SPT-15	SPT-16	SPT-17	SPT-18	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	Date of Boring						Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	14-08-2026		to		15/08/2026				P-497			BH-200		NOT ENCOUNTERED		579135.000 m				2972118.000 m																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _p)	Soil Description	IS Classification			IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %						Void Ratio (e ₀)		Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Clay							Silt	Fine		Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test					Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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SOIL CHARACTERISTICS

Project	Date of Boring						Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code															
	14-08-2026	to	16/08/206		P-501	NOT ENCOUNTERED	50.00 m	579152.000 m		2972233.000 m																										
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %			Type of Test	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters															
							Clay	Silt	Fine	Medium	Coarse	Fine	Coarse		Liquid Limit	Plastic Limit	Plasticity Index				Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)				
DS-1	0.00	-	-	Medium Dense, Brownish, Silty Sand	-									-																						
SPT-1	3.00	15	18		SM										0	21	75	2	2	0	0	1.73	11.00	1.56	2.61	DST+	0.00	30								
SPT-2	4.50	17	18		-										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDS*	5.50	-	-		-										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-3	6.00	20	20		SM										0	23	76	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-4	7.50	24	22		-										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDS-1	8.50	-	-		SM										0	20	76	3	1	0	0	1.81	13.41	1.60	2.59	DST	0.00	30								
SPT-5	9.00	27	23		-										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-6	10.50	30	24		-										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-7	12.00	35	26		SM										0	18	73	7	1	1	0	1.83	13.00	1.62	2.60	DST+	0.00	31								
SPT-8	13.50	39	28	-										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-9	15.00	41	28	-										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-10	16.50	44	28	SM										0	21	73	3	2	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-11	18.00	48	29	-										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-12	19.50	50	29	-										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-13	21.00	52	29	SM										0	20	78	1	1	0	0	1.85	12.50	1.64	2.61	DST+	0.00	32									
SPT-14	22.50	56	30	-										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-15	24.00	59	30	-										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-16	25.50	63	31	-										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-17	27.00	66	31	SM										0	16	72	8	3	1	0	1.86	13.00	1.65	2.62	DST+	0.00	32									
SPT-18	28.50	70	32	-										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length ~42.8 km)”										Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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	Date of Boring		15-08-2026		16/08/2026		P-508		BH-203				NOT ENCOUNTERED			50.00 m		579170.000 m		2972398.000 m																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained					Atterberg Limits %				Natural Moisture Content (%)	Bulk Density (g/cm ³)	Dry Density (g/cm ³)	Specific Gravity	Type of Test			Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
Clay								Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit						Void Ratio (e ₀)	Pressure (kg/cm ²)						C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
DS-1	0.00	-	-	-	Loose to Medium Dense, Brownish, Silty Sand	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				</

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 UDS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"						Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code									
	14-08-2026		to 15-08-2026		P-515		BH-204		NOT ENCOUNTERED			579191.000 m			2972562.000 m								-								
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %				Dry Density (g/cm ³)	Specific Gravity	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)		Permeability (cm/sec)	Consolidation Parameters						
Silt								Clay	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index			Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)			Type of Test		Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)
DS-1	0.00	-	-		Medium Dense, Brownish, Silty Sand	-								-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-1	3.00	15	18			-									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-2	4.50	19	21			SM									0	14	78	8	0	0	0	0	0	0	0	0	0	0	0	0	-
UDS*	5.50	-	-			-									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-3	6.00	22	22			-									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-4	7.50	29	27		-									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS-1	8.50	-	-		SM									0	23	69	6	2	0	0	0	0	0	0	0	0	0	0	0	0	-
SPT-5	9.00	31	26		-									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-6	10.50	38	30		SP-SM									0	11	83	6	0	0	0	0	0	0	0	0	0	0	0	0	0	-
SPT-7	12.00	41	31		-									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-8	13.50	43	31		SP-SM									0	11	85	3	1	0	0	0	0	0	0	0	0	0	0	0	0	-
SPT-9	15.00	46	31		-									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-10	16.50	50	32		-									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-11	18.00	53	32		SP-SM									0	8	83	4	3	2	0	0	0	0	0	0	0	0	0	0	0	-
SPT-12	19.50	55	32		-									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-13	21.00	58	32		-									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-14	22.50	61	33		-									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-15	24.00	64	33		SP-SM									0	9	81	6	4	0	0	0	0	0	0	0	0	0	0	0	0	-
SPT-16	25.50	69	34		-									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-17	27.00	71	33		-									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-18	28.50	73	34		SP-SM									0	7	89	3	1	0	0	0	0	0	0	0	0	0	0	0	0	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length ~42.8 km)”										Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code											
	Date of Boring		to		15-08-2026		P-515		NOT ENCOUNTERED				50.00 m			579191.000 m		2972562.000 m																
	14-08-2026	to	15-08-2026																															
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %			Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)		Specific Gravity	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters							
							Clay	Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index			Shrinkage Limit	Type of Test		Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Void Ratio (e ₀)				Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)				
SPT-19	30.00	77	35		-																													
SPT-20	31.50	82	38		-																													
SPT-21	33.00	84	39		SP-SM																													
SPT-22	34.50	86	40		-																													
SPT-23	36.00	89	41	Very Dense, Brownish, Silty Sand	SM																													
SPT-24	37.50	93	43		-																													
SPT-25	39.00	96	44		-																													
SPT-26	40.50	>100	-		SM																													
SPT-27	42.00	>100	-		-																													
SPT-28	43.50	>100	-		-																													
SPT-29	45.00	>100	-		SM																													
SPT-30	46.50	>100	-		-																													
SPT-31	48.00	>100	-	-																														
SPT-32	49.50	>100	-	-																														

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”										Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	Date of Boring		Grain Size Distribution % wt retained		Atterberg Limits %			Bulk Density (g/cm³)		Natural Moisture Content (%)			Dry Density (g/cm³)			Specific Gravity		Shear Strength		Free Swell Index (%)				Swelling Pressure (kg/cm²)		Permeability (cm/sec)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	14-08-2026	to	15-08-2026	-	Clay	Silt	Fine	Medium	Coarse	Gravel			Liquid Limit	Plastic Limit		Plasticity Index	Shrinkage Limit	Bulk Density (g/cm³)	Natural Moisture Content (%)	Dry Density (g/cm³)	Specific Gravity			Type of Test	Cohesion C (kg/cm²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm²)	C _v x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm²/Kg)	Compression Index (C _c)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
DS-1	0.00	-	-	Medium Dense to Dense, Brownish, Silty Sand	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

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SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length ~42.8 km)”										IS Classification	IS Symbol	Soil Description	Observed SPT Value (N)	Corrected SPT Value (N _c)	Sample Type	Coordinates (E,N)						Termination Depth	Depth of Water Table						B.H. No.		Chainage/Location		Date of Boring		Grain Size Distribution % wt retained		Atterberg Limits %				NOT ENCOUNTERED		50.00 m		580158.000 m				2974868.000 m			R.L.		Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	Depth from G.L. (m)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)							Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Natural Moisture Content (%)	Bulk Density (g/cm ³)	Dry Density (g/cm ³)	Specific Gravity		Clay	Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Gravel	Fine	Coarse	Medium	Coarse	Fine	Silt	Clay	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

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SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”										Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code							
	Date of Boring		14-08-2026		to		15-08-2026		P-598				BH-230			NOT ENCOUNTERED		50.00 m		580158.000 m				2974868.000 m						
	Sample Type	IS Classification	IS Symbol	Soil Description	Observed SPT Value (N)	Corrected SPT Value (N _c)	Grain Size Distribution % wt retained						Atterberg Limits %			Free Swell Index		Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters										
Depth from G.L. (m)							Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit			Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)				
			Very Dense, Brownish, Silty Sand																											
SPT-19	-				71	33																								
SPT-20	-				77	35																								
SPT-21	SM				79	36	0	19	77	1	1	2	0																	
SPT-22	-				85	39																								
SPT-23	-				87	40																								
SPT-24	SM				91	42	0	18	80	1	1	0	0																	
SPT-25	-				94	43																								
SPT-26	-				98	45																								
SPT-27	-				>100	-																								
SPT-28	SM				>100	-	0	15	84	1	0	0	0																	
SPT-29	-				>100	-																								
SPT-30	-				>100	-																								
SPT-31	-			>100	-																									

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SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"										IS Classification	IS Symbol	Soil Description	Corrected SPT Value (N _c)	Observed SPT Value (N)	Depth from G.L. (m)	Grain Size Distribution % wt retained				Atterberg Limits %				Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	Date of Boring		Chainage/Location	B.H. No.	NOT ENCOUNTERED		50.00 m	580262.000 m		2974996.000 m							-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	14/08/2026	to			15/08/2026	P-501		BH-231	Bulk Density (g/cm ³)	Natural Moisture Content (%)								Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Sample Type	Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit			Plastic Limit	Plasticity Index	Shrinkage Limit	Consolidation Parameters																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
DS-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
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SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 UDS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+-Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"										Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code				
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %			Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters							
								Clay	Silt	Fine	Medium	Coarse	Fine	Coarse					Liquid Limit	Plastic Limit	Plasticity Index				Shrinkage Limit	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)
	DS-1	0.00	-	-	Medium Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	SPT-1	3.00	15	18		SM		-	0	21	78	1	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-2	4.50	13	14		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	UDS-1	5.50	-	-		SM		-	0	25	74	1	0	0	0	-	11.69	1.53	2.59	DST	0.00	29	-	-	-	-	-	-	-	-		
	SPT-3	6.00	16	16		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-4	7.50	20	18		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	UDS-2	8.50	-	-		SM		-	0	20	76	3	1	0	0	-	12.35	1.56	2.60	DST	0.00	30	-	-	-	-	-	-	-	-		
	SPT-5	9.00	24	21		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-6	10.50	27	22		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-7	12.00	32	24		SM		-	0	14	82	3	1	0	0	-	12.50	1.60	2.61	DST+	0.00	31	-	-	-	-	-	-	-	-	-	
	SPT-8	13.50	35	25	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-9	15.00	37	25	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-10	16.50	40	26	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-11	18.00	43	26	SM		-	0	13	81	5	1	0	0	-	13.00	1.61	2.60	DST+	0.00	31	-	-	-	-	-	-	-	-	-	-	
	SPT-12	19.50	47	28	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-13	21.00	52	29	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-14	22.50	54	29	SM		-	0	15	74	6	2	3	0	-	13.50	1.63	2.62	DST+	0.00	32	-	-	-	-	-	-	-	-	-	-	-
	SPT-15	24.00	58	30	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-16	25.50	62	31	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-17	27.00	64	30	SM		-	0	22	70	5	2	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-18	28.50	67	31	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”						Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.		Ref. Code															
	16/08/2026		to		17/08/2026		CH-22280		BH-239		NOT ENCOUNTERED		50.00 m		2975643.000 m		580701.000 m		Free Swell Index (%)		Swelling Pressure (kg/cm ²)		Permeability (cm/sec)		Void Ratio (e ₀)		Pressure (kg/cm ²)		C _v x 10 ⁻⁴ (cm ² /Sec)		M _v x 10 ⁻² (cm ² /Kg)		Compression Index (C _c)							
	Grain Size Distribution % wt retained		Sand		Gravel		Liquid Limit		Plastic Limit		Shrinkage Limit		Bulk Density (g/cm ³)		Natural Moisture Content (%)		Dry Density (g/cm ³)		Specific Gravity		Type of Test		Cohesion C (kg/cm ²)		Angle of Friction (φ°)															
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description				IS Classification	IS Symbol	Clay	Silt	Fine	Medium	Coarse	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)				
SPT-19	30.00	70	32	Very Dense, Brownish, Silty Sand				SM		0	19	79	2	0	0	0	0	-	NIL	NP	-	1.88	13.00	1.66	2.61	DST+	0.00	33	-	-	-	-	-	-	-	-				
SPT-20	31.50	73	34					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-21	33.00	75	35					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-22	34.50	77	35					SM		0	21	78	1	0	0	0	0	0	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-23	36.00	80	37					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-24	37.50	83	38					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-25	39.00	87	40					SM		0	16	80	3	1	0	0	0	0	0	0	-	NIL	NP	-	1.88	12.50	1.67	2.63	DST+	0.00	34	-	-	-	-	-	-	-	-	
SPT-26	40.50	93	43					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-27	42.00	99	46					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-28	43.50	>100	-					SM		0	17	77	3	2	1	0	0	0	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-29	45.00	>100	-					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-30	46.50	>100	-					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-31	48.00	>100	-	SM		0	14	78	5	2	1	0	0	0	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SPT-32	50.00	>100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				

SOIL CHARACTERISTICS

[illegible]

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SOIL CHARACTERISTICS

Project	Date of Boring						Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	17/08/2026		to	18/08/2026	P-639		NOT ENCOUNTERD			50.00 m			580833.000 m		2975962.000 m																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”										Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code							
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				NOT ENCOUNTERD		50.00 m	580833.000 m		2975962.000 m		-	SR-1241_25-26								
								Clay	Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _y x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)		
	SPT-19	30.00	72	33	Very Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-20	31.50	77	35		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-21	33.00	80	37		SM		0	19	73	3	4	1	0	-	NIL	-	1.89	13.00	1.67	2.63	DST+	0.00	33	-	-	-	-	-	-	-	-	-	
	SPT-22	34.50	84	39		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-23	36.00	87	40		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-24	37.50	91	42	Very Dense, Brownish, Silty Sand	SM		0	16	75	6	2	1	0	-	NIL	-	1.90	12.50	1.69	2.64	DST+	0.00	34	-	-	-	-	-	-	-	-	-	-
	SPT-25	39.00	93	43		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-26	40.50	97	45		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-27	42.00	>100	-		SM		0	19	69	6	5	1	0	-	NIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-28	43.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-29	45.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-30	46.50	>100	-		SM		0	18	76	3	2	1	0	-	NIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-31	48.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-32	50.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 UDS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

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SOIL CHARACTERISTICS

Project	Date of Boring				Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)				R.L.	Ref. Code											
	16/08/2026	to	17/08/2026	22200.000 m	BH-238	NOT ENCOUNTERED	50.00 m	580631.000 m	2975532.000 m	-	SR-1241_25-26															
Sample Type	Grain Size Distribution % wt retained						Atterberg Limits %			Shear Strength		Consolidation Parameters														
	Clay	Silt	Fine	Medium	Coarse		Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm³)	Natural Moisture Content (%)	Dry Density (g/cm³)	Specific Gravity	Type of Test	Cohesion C (kg/cm²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Void Ratio (e₀)	Pressure (kg/cm²)	C _v x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm²/Kg)	Compression Index (C _c)	
SPT-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-19	0	24	55	13	4	3	1	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-21	0	14	58	20	4	3	1	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-24	0	16	60	17	3	2	2	-	NIL	NP	1.88	13.50	1.66	2.62	DST+	0	33	-	-	-	-	-	-	-	-	-
SPT-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-27	0	13	70	11	3	1	2	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-30	0	16	58	18	4	3	1	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length ~42.8 km)”										Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.		Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %			NOT ENCOUNTERED	50.00 m	580736.000 m						2975696.000 m	-	SR-1241_25-26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
								Sand			Gravel			Liquid Limit	Plastic Limit	Plasticity Index			Shrinkage Limit	Bulk Density (g/cm³)	Natural Moisture Content (%)	Dry Density (g/cm³)	Specific Gravity	Type of Test				Cohesion C (kg/cm²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm²)	C _v x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm²/Kg)	Compression Index (C _c)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
DS-1	0.00	-	-	Filled Up soil	-		-	-	-	-	-	-	-				-	-							-	-	-											-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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	Date of Boring		to		17/08/2026		P-674		BH-256	NOT ENCOUNTERED								50.00 m		580807.000 m			2977043.000 m				-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"										IS Classification	IS Symbol	Date of Boring				Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code		
	14/08/2026		to		15/08/2026		P-24860		BH-266				NOT ENCOUNTERED		50.00 m				579851.293 m		2977247.508 m		-									
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N)	Soil Description	Clay	Grain Size Distribution % wt retained						Atterberg Limits %			Bulk Density (g/cm³)			Natural Moisture Content (%)	Dry Density (g/cm³)	Specific Gravity	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Void Ratio (e ₀)			Pressure (kg/cm²)	C _v x 10 ⁻⁴ (cm²/Sec)
Silt							Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit		Type of Test	Cohesion C (kg/cm²)				Angle of Friction (φ°)										
	DS-1	0.00	-	-	Filled Up soil																											
	SPT-1	3.00	12	15	Medium Dense, Brownish, Silty Sand	0	25	62	7	4	0	-	Nil	NP	1.66	9.00	1.52	2.63	DST+	0.00	29	-	-	-	-	-	-	-	-	-	-	
	SPT-2	4.50	14	15		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS*	5.50	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-3	6.00	15	15		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-4	7.50	19	18		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS-1	8.50	-	-		SM	0	20	62	10	6	0	-	Nil	NP	1.71	10.87	1.54	2.63	DST	0.00	30	-	-	-	-	-	-	-	-	-	-
	SPT-5	9.00	23	20		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-6	10.50	25	20		SM	0	22	60	12	5	0	-	Nil	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-7	12.00	29	22		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-8	13.50	32	23		SM	0	25	56	8	8	0	-	Nil	NP	1.78	11.00	1.60	2.63	DST+	0.00	32	-	-	-	-	-	-	-	-	-	-
	SPT-9	15.00	34	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-10	16.50	37	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-11	18.00	41	26	SM	0	26	55	7	9	0	-	Nil	NP	1.81	11.50	1.62	2.62	DST+	0.00	32	-	-	-	-	-	-	-	-	-	-	
	SPT-12	19.50	46	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-13	21.00	50	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-14	22.50	53	29	SM	0	19	62	7	8	0	-	Nil	NP	1.84	12.00	1.64	2.62	DST+	0.00	33	-	-	-	-	-	-	-	-	-	-	
	SPT-15	24.00	55	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-16	25.50	59	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-17	27.00	63	30	SM	0	21	63	7	5	0	-	Nil	NP	1.86	12.50	1.65	2.63	DST+	0.00	33	-	-	-	-	-	-	-	-	-	-	
	SPT-18	28.50	66	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviations:-
 DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 UDS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+-Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length ~42.8 km)”										IS Classification	IS Symbol	Soil Description	Observed SPT Value (N)	Corrected SPT Value (N _p)	Depth from G.L. (m)	Date of Boring						Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code
	14/08/2026		to		15/08/2026		CH-25960		BH-277								NOT ENCOUNTERED		50.00 m		2977782.971 m		579056.708 m			2977782.971 m											
	Clay	Silt	Fine	Medium	Coarse	Gravel		Liquid Limit	Plastic Limit	Plasticity Index							Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)		Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)				
DS-1	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-1	3.00	18	22	0	22	58	11	7	2	0	-	1.67	9.00	1.53	2.63	DST+	0.00	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-2	4.50	20	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDS*	5.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-3	6.00	22	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-4	7.50	27	25	0	25	61	7	6	1	0	-	1.72	10.00	1.56	2.63	DST+	0.00	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDS*	8.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-5	9.00	31	27	0	20	63	9	6	2	0	-	1.77	10.50	1.60	2.64	DST+	0.00	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-6	10.50	35	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-7	12.00	39	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-8	13.50	41	30	0	22	59	12	6	1	0	-	1.80	11.00	1.62	2.63	DST+	0.00	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-9	15.00	45	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-10	16.50	47	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-11	18.00	51	32	0	24	57	10	7	2	0	-	1.83	11.50	1.64	2.64	DST+	0.00	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-12	19.50	56	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-13	21.00	59	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-14	22.50	63	34	0	16	61	12	10	1	0	-	1.85	12.00	1.65	2.63	DST+	0.00	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-15	24.00	65	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-16	25.50	68	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-17	27.00	73	35	0	22	58	12	6	2	0	-	1.87	12.50	1.66	2.64	DST+	0.00	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-18	28.50	76	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

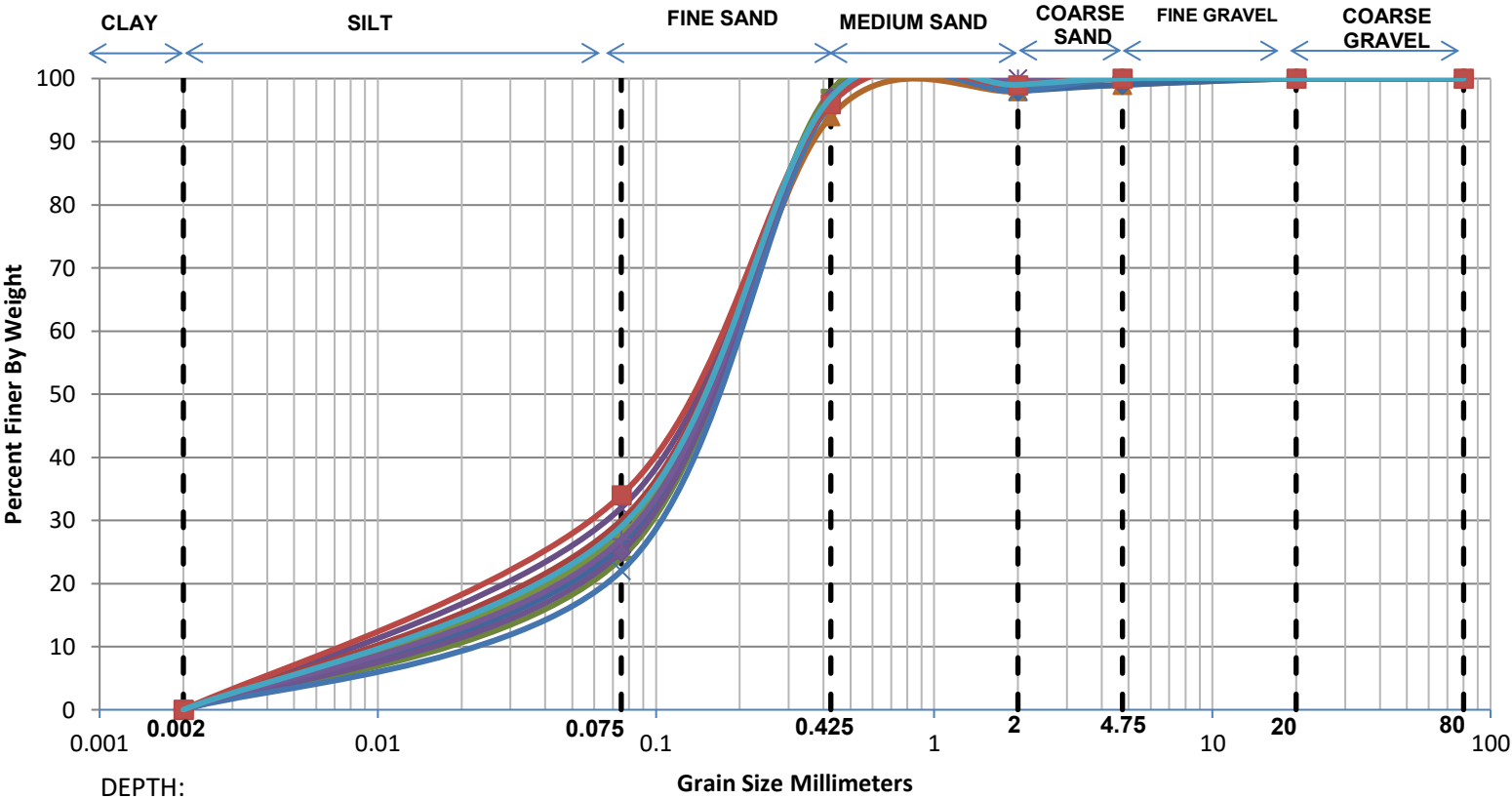
Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

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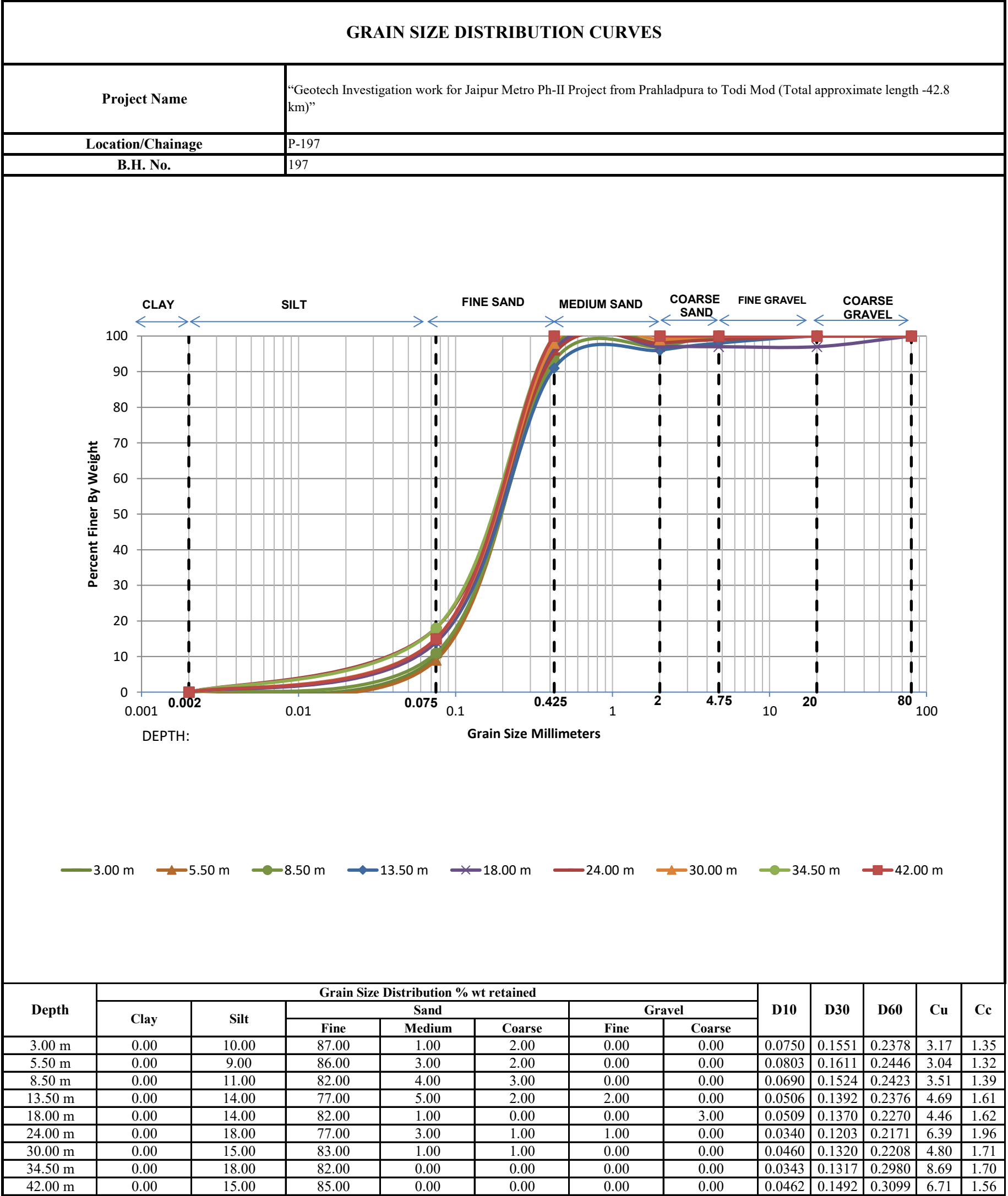
Abbreviations:-
 UDS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+-Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

GRAIN SIZE DISTRIBUTION CURVES	
Project Name	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”
Location/Chainage	P-463
B.H. No.	189

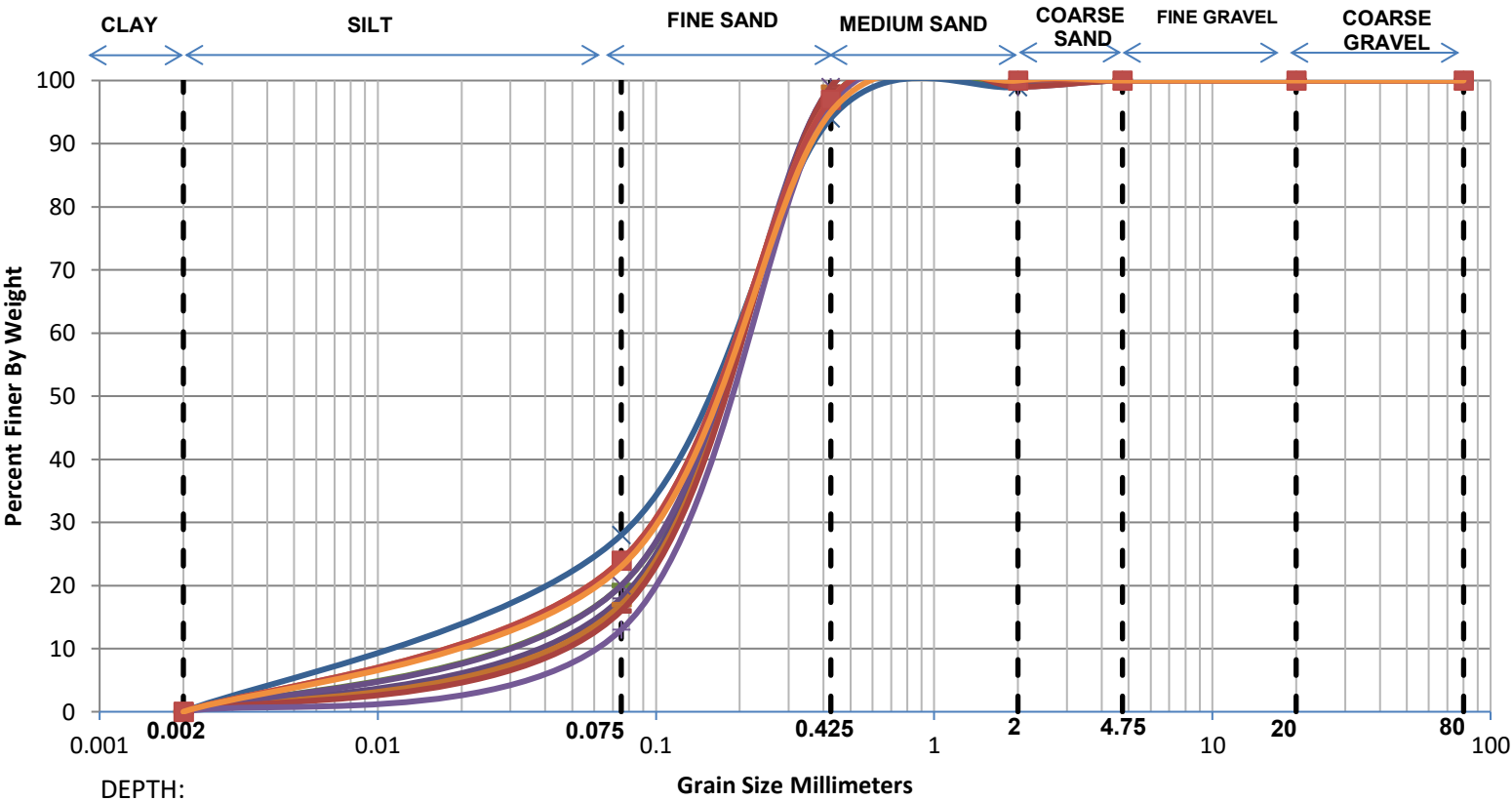


#REF! 4.50 m 7.50 m 12.00 m 16.50 m 22.50 m 25.50 m 30.00 m 34.50 m 40.50 m 45.00 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
#REF!	0.00	24.00	74.00	1.00	1.00	0.00	0.00	0.0205	0.0961	0.1932	9.44	2.33
4.50 m	0.00	28.00	66.00	4.00	1.00	1.00	0.00	0.0153	0.0819	0.1881	12.33	2.34
7.50 m	0.00	28.00	68.00	3.00	1.00	0.00	0.00	0.0153	0.0818	0.1843	12.02	2.37
12.00 m	0.00	26.00	70.00	2.00	1.00	1.00	0.00	0.0176	0.0889	0.1904	10.83	2.36
16.50 m	0.00	32.00	64.00	4.00	0.00	0.00	0.00	0.0120	0.0685	0.1715	14.28	2.28
22.50 m	0.00	30.00	66.00	3.00	1.00	0.00	0.00	0.0135	0.0750	0.1779	13.16	2.34
25.50 m	0.00	25.00	72.00	2.00	1.00	0.00	0.00	0.0189	0.0925	0.1919	10.13	2.35
30.00 m	0.00	22.00	74.00	2.00	2.00	0.00	0.00	0.0239	0.1040	0.2029	8.50	2.23
34.50 m	0.00	27.00	70.00	3.00	0.00	0.00	0.00	0.0164	0.0853	0.1859	11.31	2.38
40.50 m	0.00	34.00	62.00	3.00	1.00	0.00	0.00	0.0108	0.0625	0.1646	15.28	2.20
45.00 m	0.00	29.00	68.00	2.00	1.00	0.00	0.00	0.0144	0.0784	0.1793	12.44	2.38

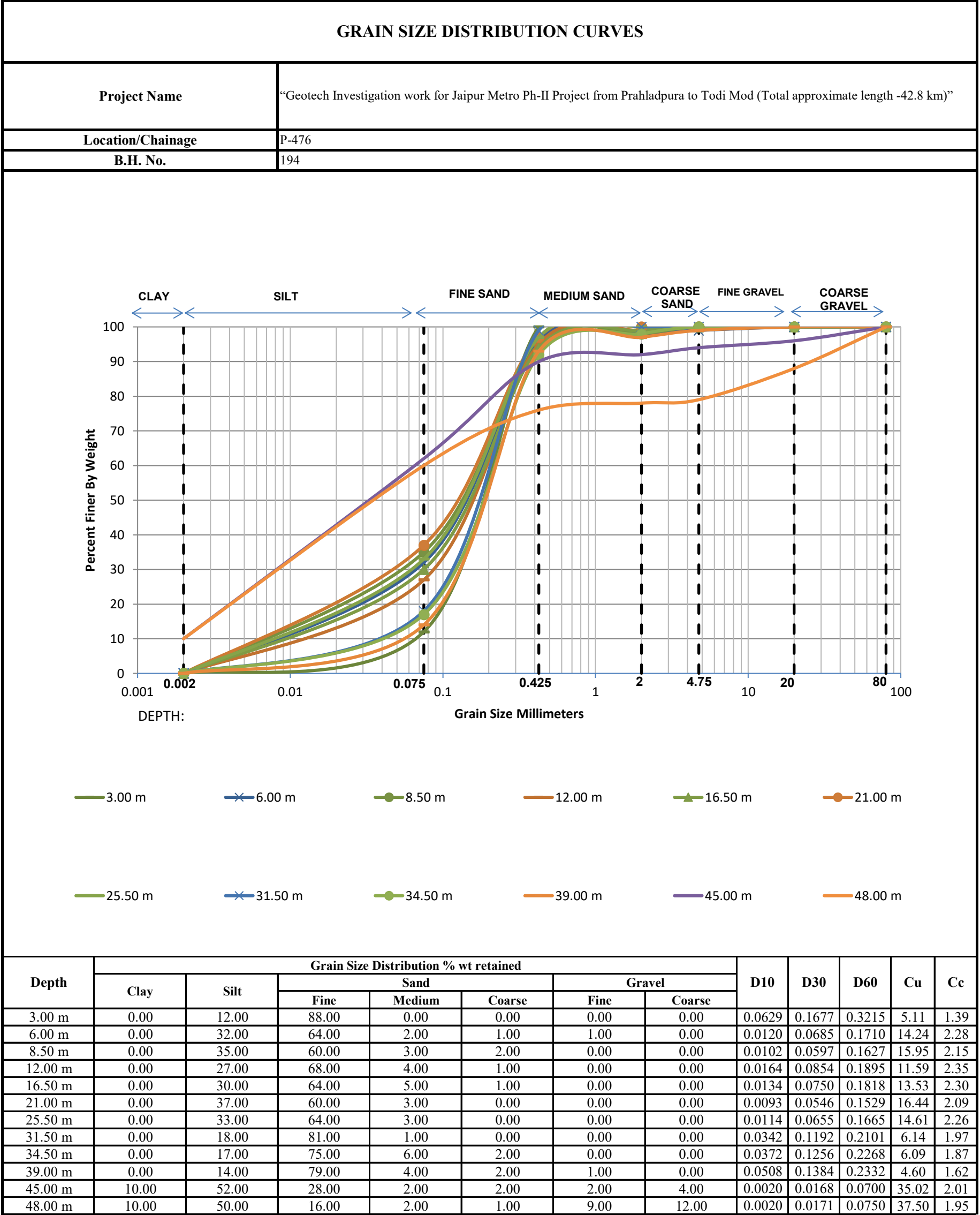


GRAIN SIZE DISTRIBUTION CURVES	
Project Name	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”
Location/Chainage	P-473
B.H. No.	193

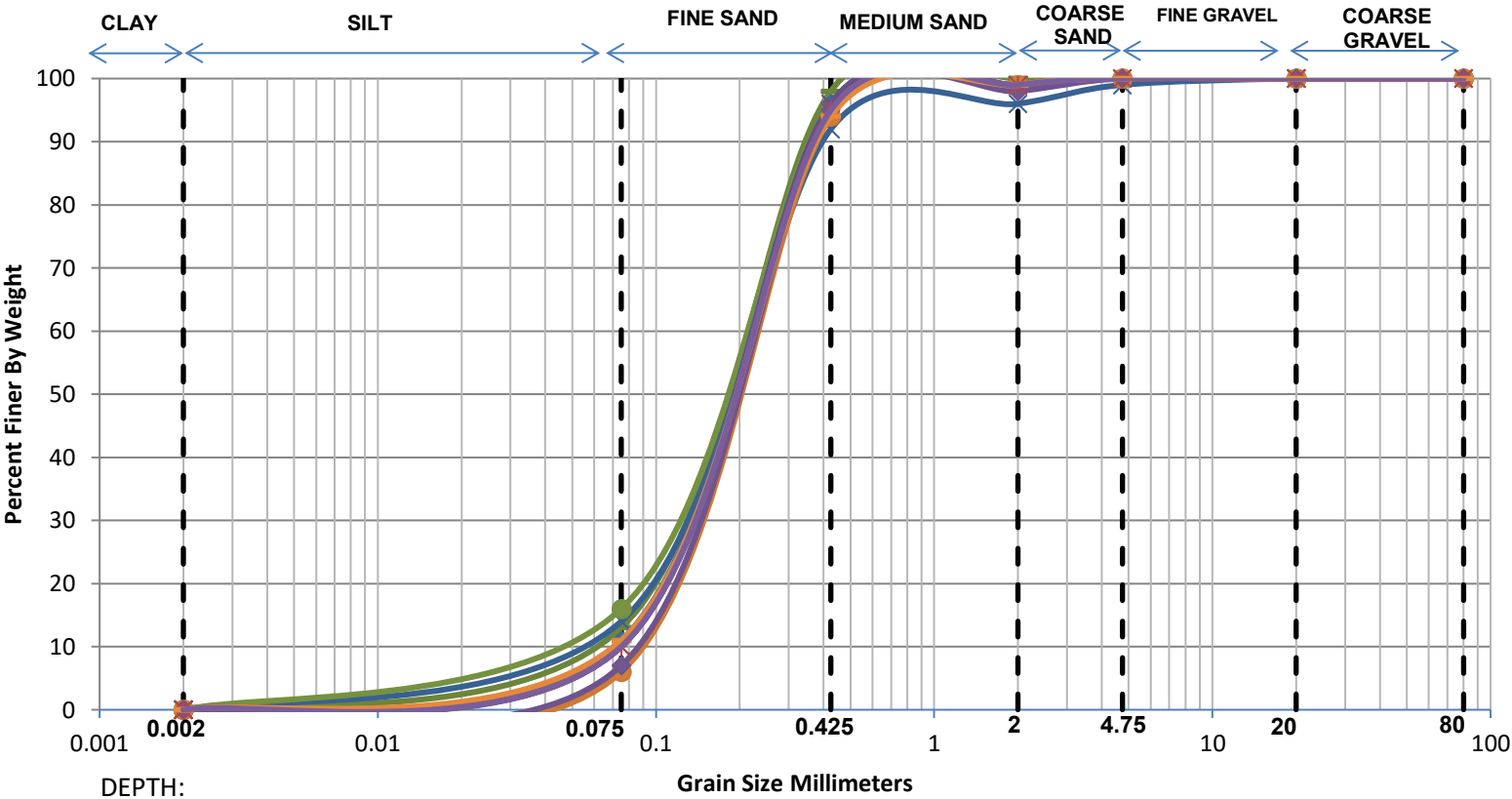


2.50 m 5.50 m 8.50 m 10.50 m 16.50 m 22.50 m 28.50 m 34.50 m 40.50 m 46.50 m

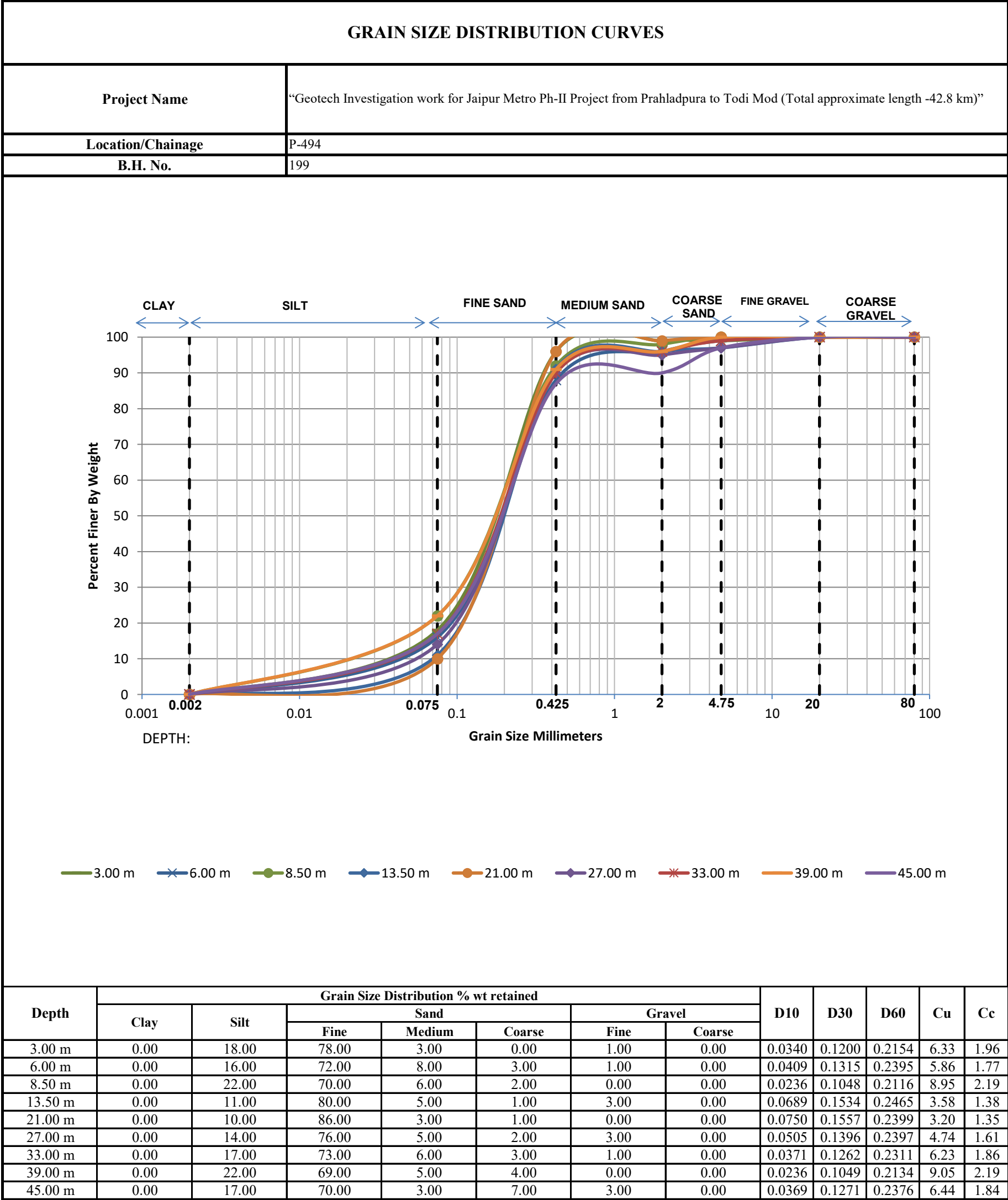
Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
2.50 m	0.00	20.00	77.00	2.00	1.00	0.00	0.00	0.0284	0.1116	0.2074	7.31	2.12
5.50 m	0.00	28.00	66.00	5.00	1.00	0.00	0.00	0.0153	0.0819	0.1884	12.35	2.33
8.50 m	0.00	18.00	81.00	0.00	1.00	0.00	0.00	0.0342	0.1322	0.3005	8.78	1.70
10.50 m	0.00	17.00	82.00	1.00	0.00	0.00	0.00	0.0377	0.1232	0.2131	5.65	1.89
16.50 m	0.00	20.00	79.00	1.00	0.00	0.00	0.00	0.0285	0.1112	0.2040	7.16	2.13
22.50 m	0.00	16.00	83.00	0.00	1.00	0.00	0.00	0.0416	0.1439	0.3084	7.41	1.61
28.50 m	0.00	24.00	73.00	3.00	0.00	0.00	0.00	0.0204	0.0962	0.1953	9.57	2.32
34.50 m	0.00	13.00	83.00	4.00	0.00	0.00	0.00	0.0566	0.1417	0.2308	4.08	1.54
40.50 m	0.00	24.00	73.00	3.00	0.00	0.00	0.00	0.0204	0.0962	0.1953	9.57	2.32
46.50 m	0.00	23.00	72.00	5.00	0.00	0.00	0.00	0.0220	0.1003	0.2024	9.21	2.26



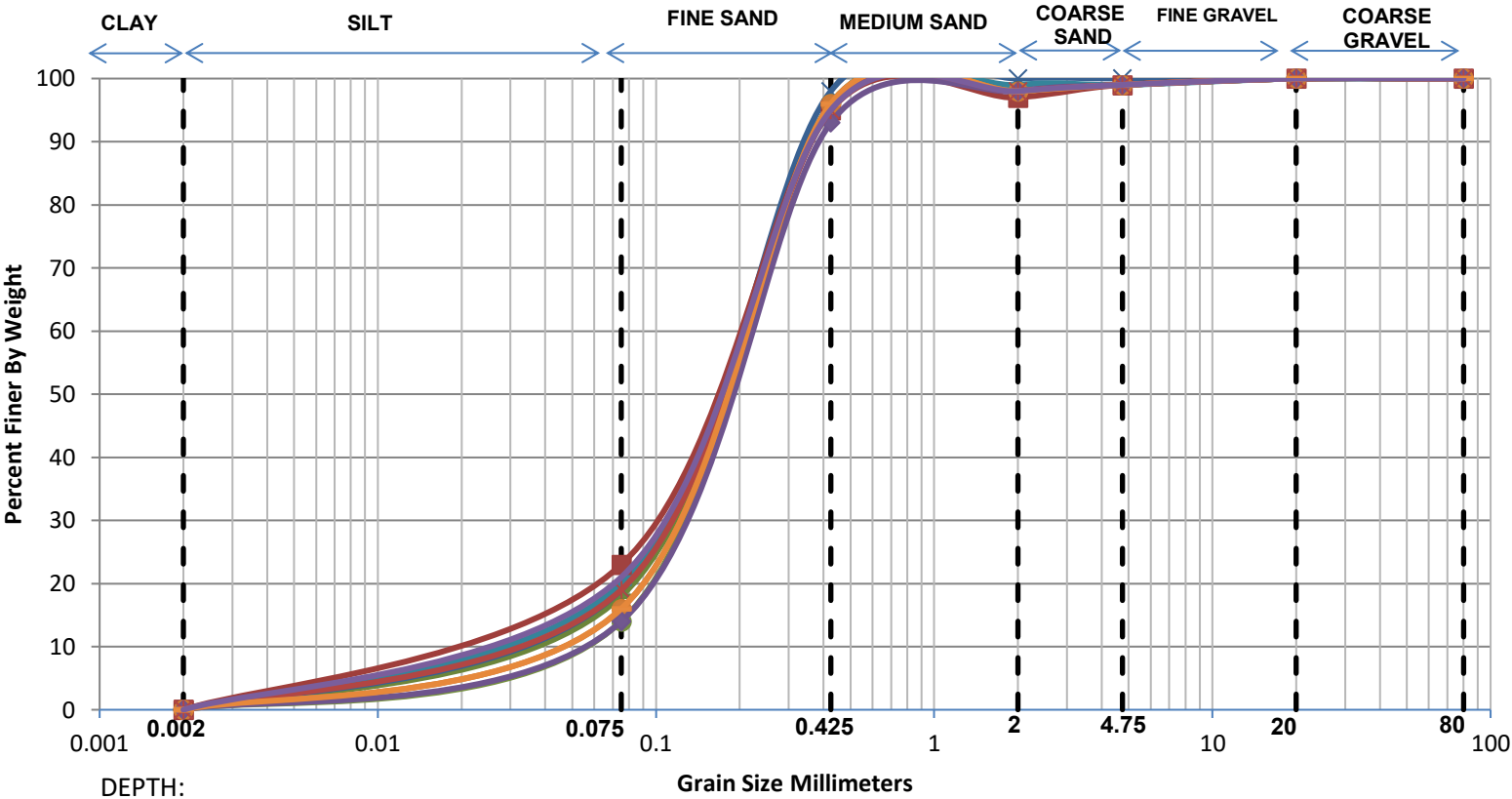
GRAIN SIZE DISTRIBUTION CURVES	
Project Name	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”
Location/Chainage	P-490
B.H. No.	198



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	13.00	85.00	2.00	0.00	0.00	0.00	0.0567	0.1408	0.2271	4.01	1.54
6.00 m	0.00	14.00	78.00	4.00	3.00	1.00	0.00	0.0507	0.1388	0.2352	4.64	1.62
8.50 m	0.00	16.00	80.00	3.00	1.00	0.00	0.00	0.0414	0.1284	0.2215	5.35	1.80
13.50 m	0.00	11.00	85.00	3.00	1.00	0.00	0.00	0.0691	0.1509	0.2367	3.43	1.39
18.00 m	0.00	10.00	86.00	3.00	1.00	0.00	0.00	0.0750	0.1557	0.2399	3.20	1.35
21.00 m	0.00	6.00	88.00	5.00	1.00	0.00	0.00	0.0976	0.1776	0.2564	2.63	1.26
27.00 m	0.00	7.00	88.00	3.00	2.00	0.00	0.00	0.0915	0.1714	0.2510	2.74	1.28
33.00 m	0.00	10.00	85.00	4.00	1.00	0.00	0.00	0.0750	0.1563	0.2418	3.22	1.35
39.00 m	0.00	11.00	83.00	5.00	1.00	0.00	0.00	0.0690	0.1520	0.2407	3.49	1.39
45.00 m	0.00	10.00	85.00	4.00	1.00	0.00	0.00	0.0750	0.1563	0.2418	3.22	1.35

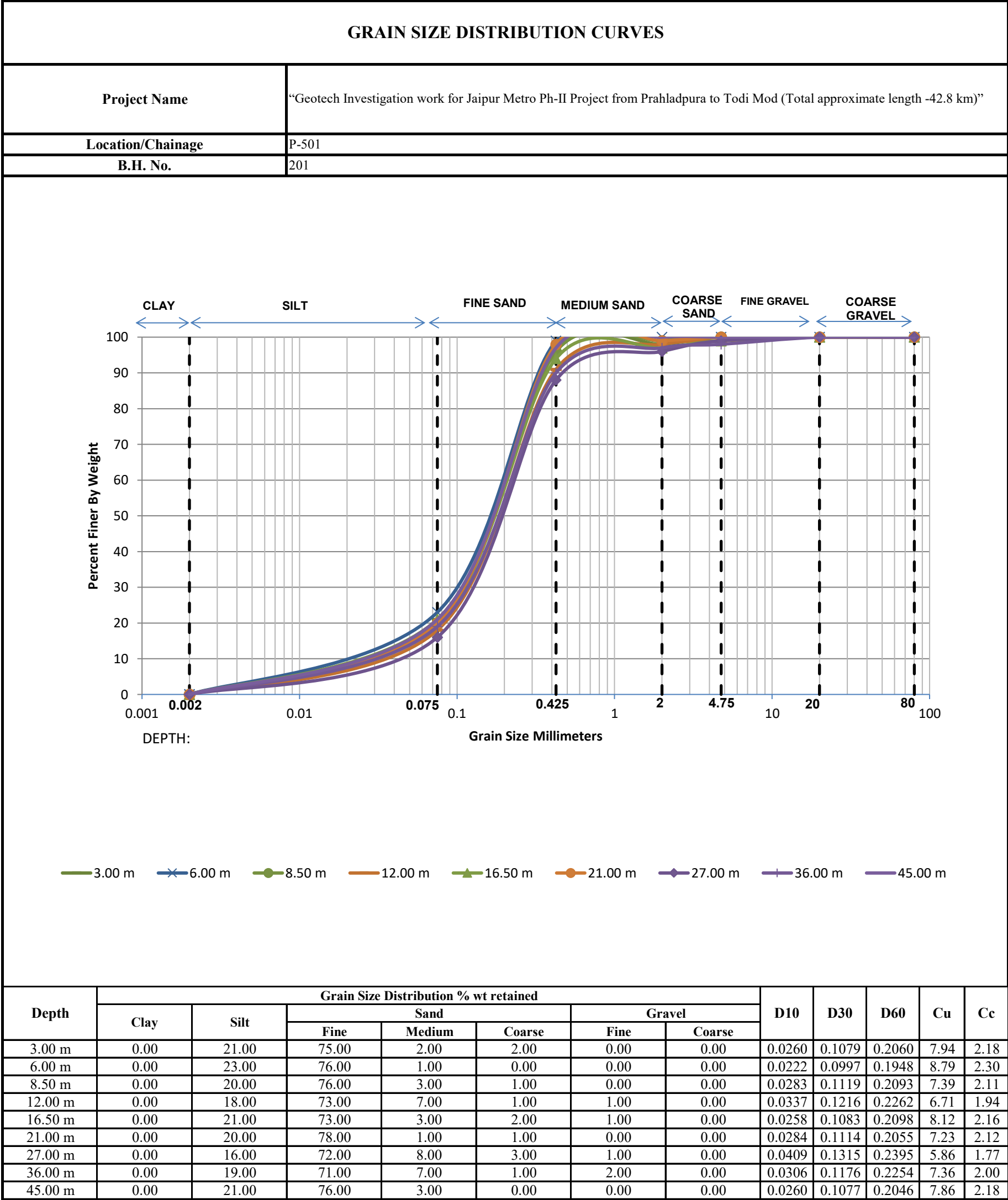


GRAIN SIZE DISTRIBUTION CURVES	
Project Name	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”
Location/Chainage	P-497
B.H. No.	200

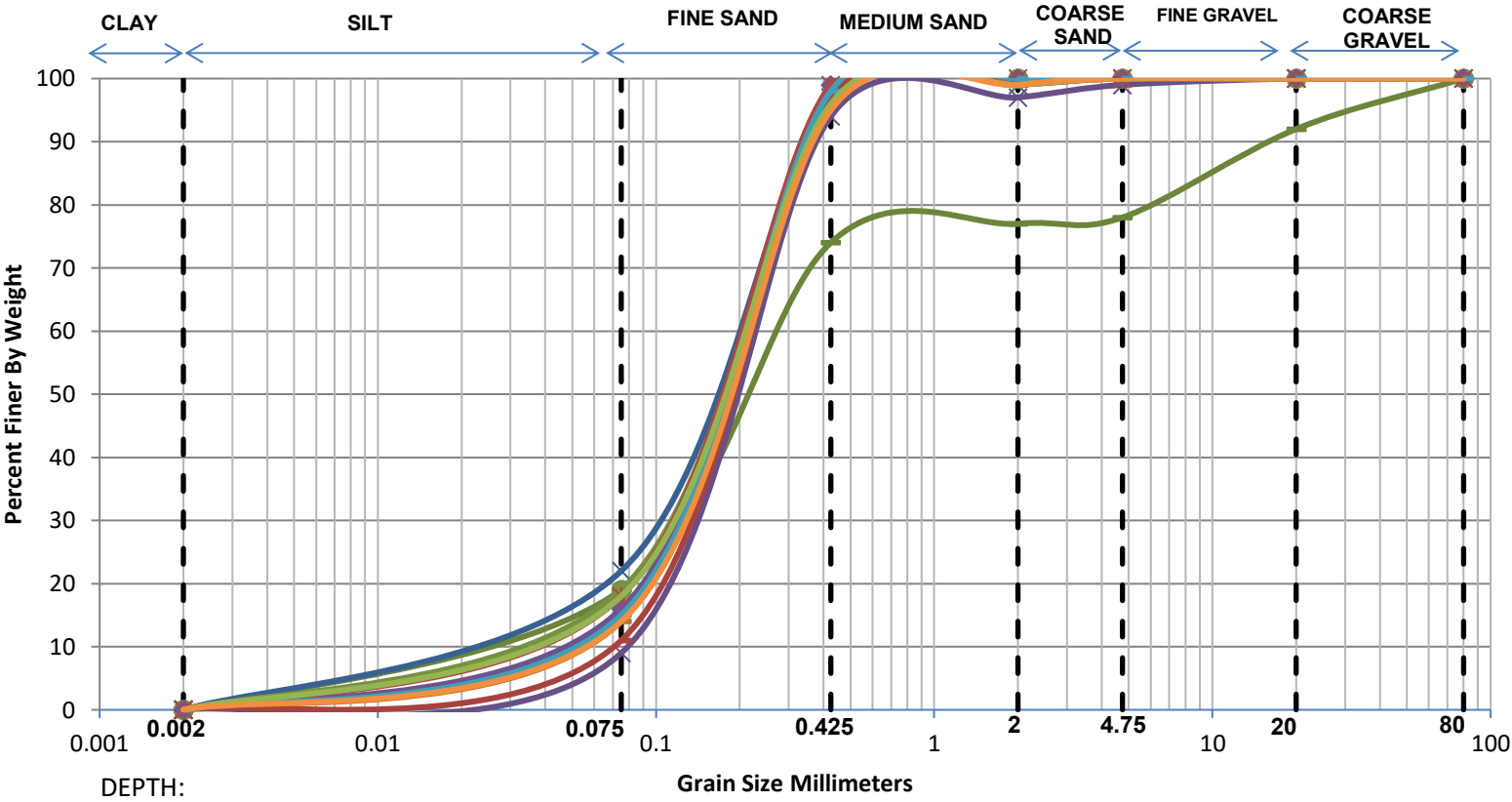


#REF! 5.50 m 7.50 m 9.00 m 13.50 m 19.50 m 25.50 m 31.50 m 37.50 m 43.50 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
#REF!	0.00	18.00	78.00	2.00	1.00	1.00	0.00	0.0340	0.1200	0.2151	6.32	1.97
5.50 m	0.00	19.00	79.00	2.00	0.00	0.00	0.00	0.0311	0.1154	0.2088	6.71	2.05
7.50 m	0.00	14.00	82.00	2.00	1.00	1.00	0.00	0.0509	0.1371	0.2273	4.46	1.62
9.00 m	0.00	20.00	75.00	4.00	0.00	1.00	0.00	0.0283	0.1121	0.2113	7.48	2.10
13.50 m	0.00	23.00	72.00	2.00	2.00	1.00	0.00	0.0220	0.1003	0.2016	9.18	2.27
19.50 m	0.00	16.00	80.00	2.00	1.00	1.00	0.00	0.0414	0.1284	0.2212	5.34	1.80
25.50 m	0.00	14.00	79.00	5.00	1.00	1.00	0.00	0.0508	0.1384	0.2335	4.60	1.62
31.50 m	0.00	19.00	76.00	3.00	1.00	1.00	0.00	0.0309	0.1161	0.2141	6.92	2.04
37.50 m	0.00	16.00	80.00	2.00	1.00	1.00	0.00	0.0414	0.1284	0.2212	5.34	1.80
43.50 m	0.00	21.00	74.00	3.00	1.00	1.00	0.00	0.0259	0.1081	0.2080	8.03	2.17



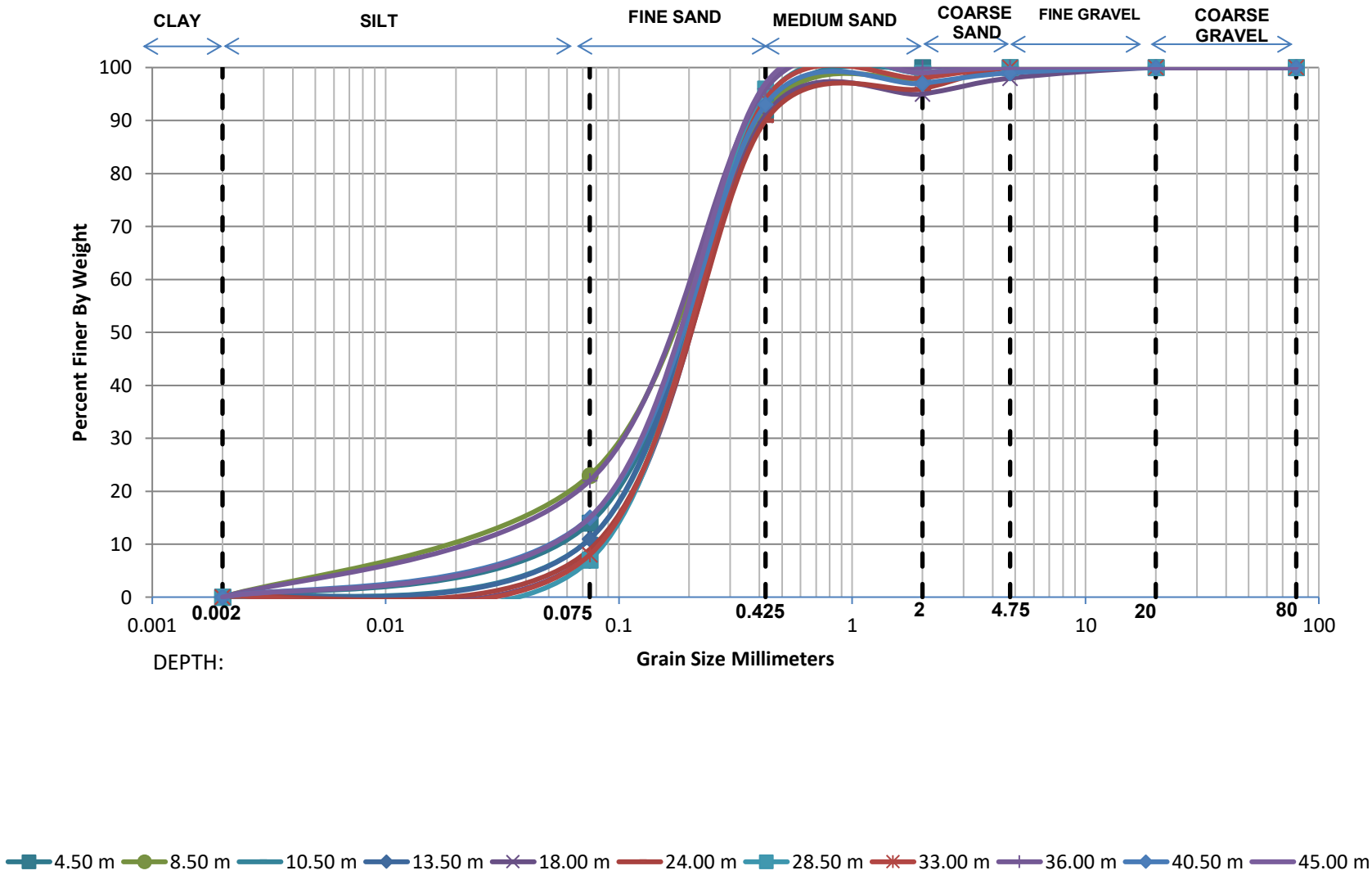
GRAIN SIZE DISTRIBUTION CURVES	
Project Name	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”
Location/Chainage	P-508
B.H. No.	203



3.00 m 6.00 m 8.50 m 12.00 m 18.00 m 24.00 m 27.00 m 33.00 m 37.50 m 43.50 m 48.00 m

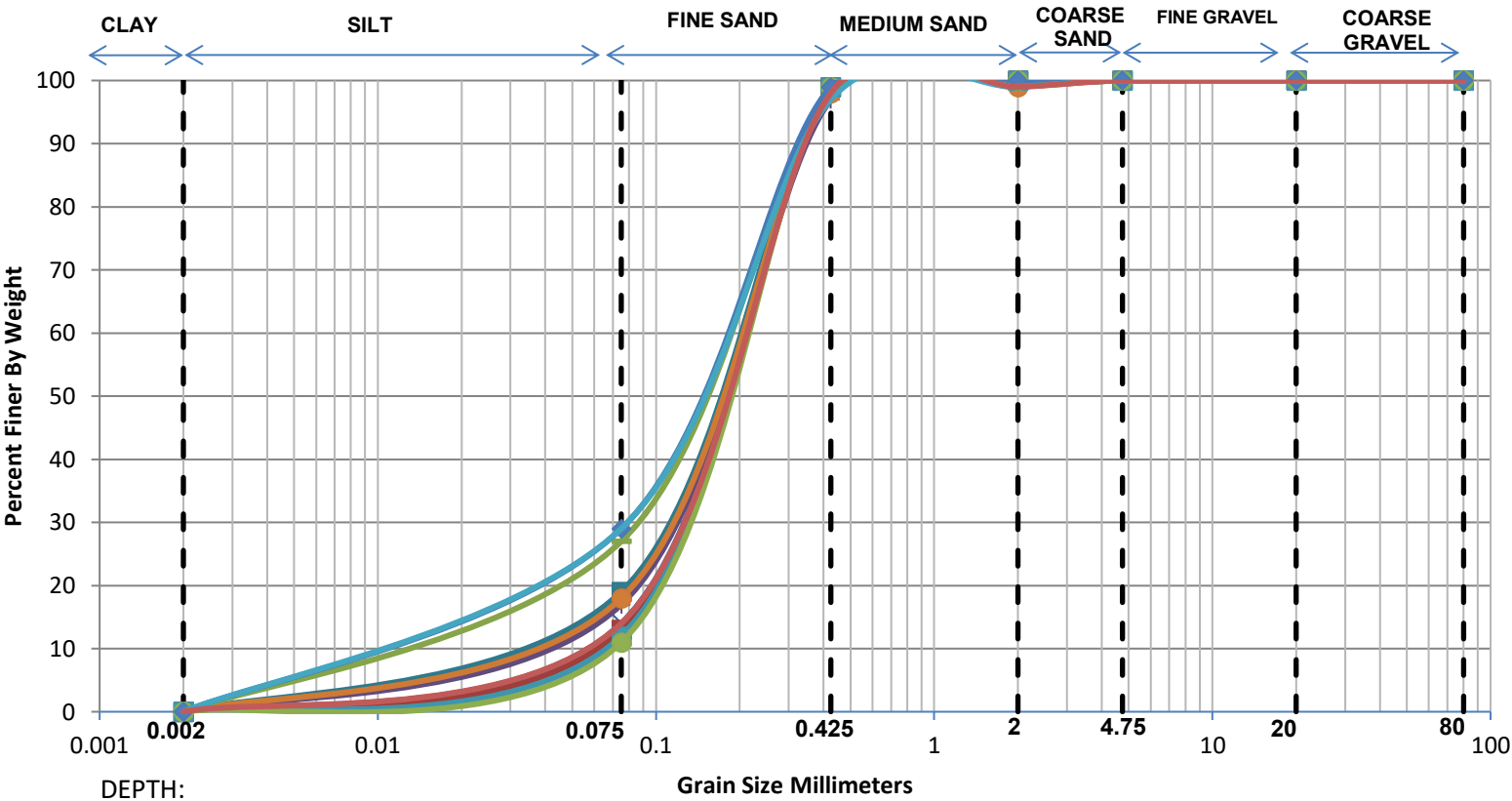
Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	19.00	55.00	3.00	1.00	14.00	8.00	0.0294	0.1230	0.2834	9.63	1.81
6.00 m	0.00	22.00	75.00	2.00	1.00	0.00	0.00	0.0239	0.1038	0.2012	8.41	2.24
8.50 m	0.00	19.00	78.00	3.00	0.00	0.00	0.00	0.0311	0.1157	0.2107	6.78	2.04
12.00 m	0.00	14.00	83.00	2.00	1.00	0.00	0.00	0.0510	0.1367	0.2256	4.42	1.62
18.00 m	0.00	9.00	85.00	3.00	2.00	1.00	0.00	0.0804	0.1616	0.2464	3.06	1.32
24.00 m	0.00	11.00	86.00	3.00	0.00	0.00	0.00	0.0691	0.1505	0.2351	3.40	1.39
27.00 m	0.00	16.00	83.00	1.00	0.00	0.00	0.00	0.0416	0.1274	0.2162	5.19	1.80
33.00 m	0.00	18.00	81.00	1.00	0.00	0.00	0.00	0.0342	0.1192	0.2101	6.14	1.97
37.50 m	0.00	15.00	83.00	2.00	0.00	0.00	0.00	0.0460	0.1320	0.2210	4.80	1.71
43.50 m	0.00	18.00	78.00	3.00	1.00	0.00	0.00	0.0340	0.1200	0.2154	6.33	1.96
48.00 m	0.00	14.00	81.00	4.00	1.00	0.00	0.00	0.0509	0.1376	0.2295	4.51	1.62

GRAIN SIZE DISTRIBUTION CURVES	
Project Name	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”
Location/Chainage	P-515
B.H. No.	204



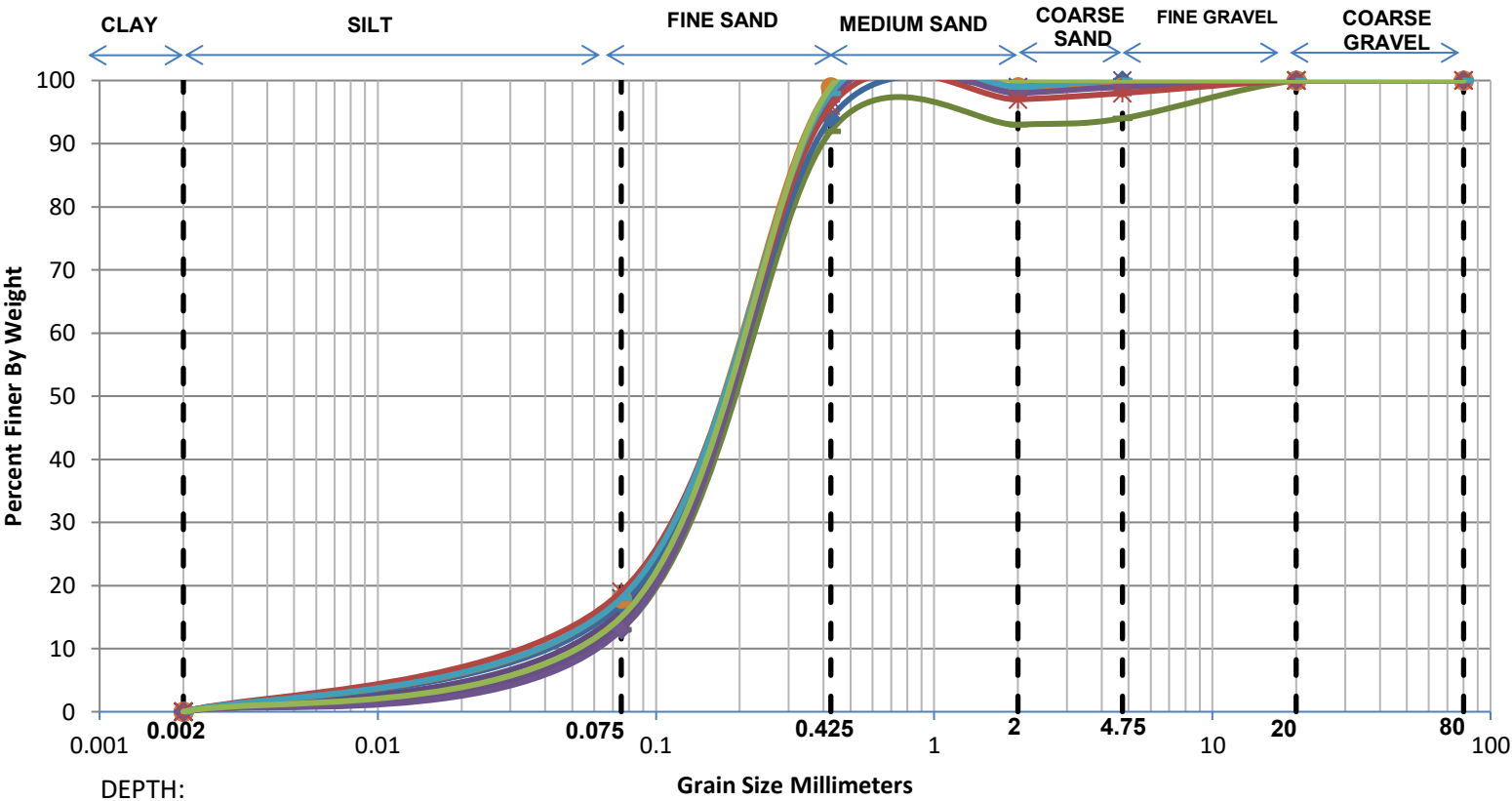
Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
4.50 m	0.00	14.00	78.00	8.00	0.00	0.00	0.00	0.0507	0.1390	0.2363	4.66	1.61
8.50 m	0.00	23.00	69.00	6.00	2.00	0.00	0.00	0.0218	0.1008	0.2085	9.56	2.23
10.50 m	0.00	11.00	83.00	6.00	0.00	0.00	0.00	0.0690	0.1520	0.2410	3.49	1.39
13.50 m	0.00	11.00	85.00	3.00	1.00	0.00	0.00	0.0691	0.1509	0.2367	3.43	1.39
18.00 m	0.00	8.00	83.00	4.00	3.00	2.00	0.00	0.0862	0.1685	0.2553	2.96	1.29
24.00 m	0.00	9.00	81.00	6.00	4.00	0.00	0.00	0.0806	0.1641	0.2549	3.16	1.31
28.50 m	0.00	7.00	89.00	3.00	1.00	0.00	0.00	0.0914	0.1709	0.2494	2.73	1.28
33.00 m	0.00	8.00	86.00	4.00	2.00	0.00	0.00	0.0859	0.1668	0.2497	2.91	1.30
36.00 m	0.00	22.00	74.00	4.00	0.00	0.00	0.00	0.0239	0.1040	0.2034	8.52	2.23
40.50 m	0.00	15.00	78.00	4.00	2.00	1.00	0.00	0.0457	0.1339	0.2302	5.04	1.70
45.00 m	0.00	15.00	82.00	2.00	1.00	0.00	0.00	0.0460	0.1324	0.2226	4.84	1.71

GRAIN SIZE DISTRIBUTION CURVES	
Project Name	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”
Location/Chainage	-
B.H. No.	216

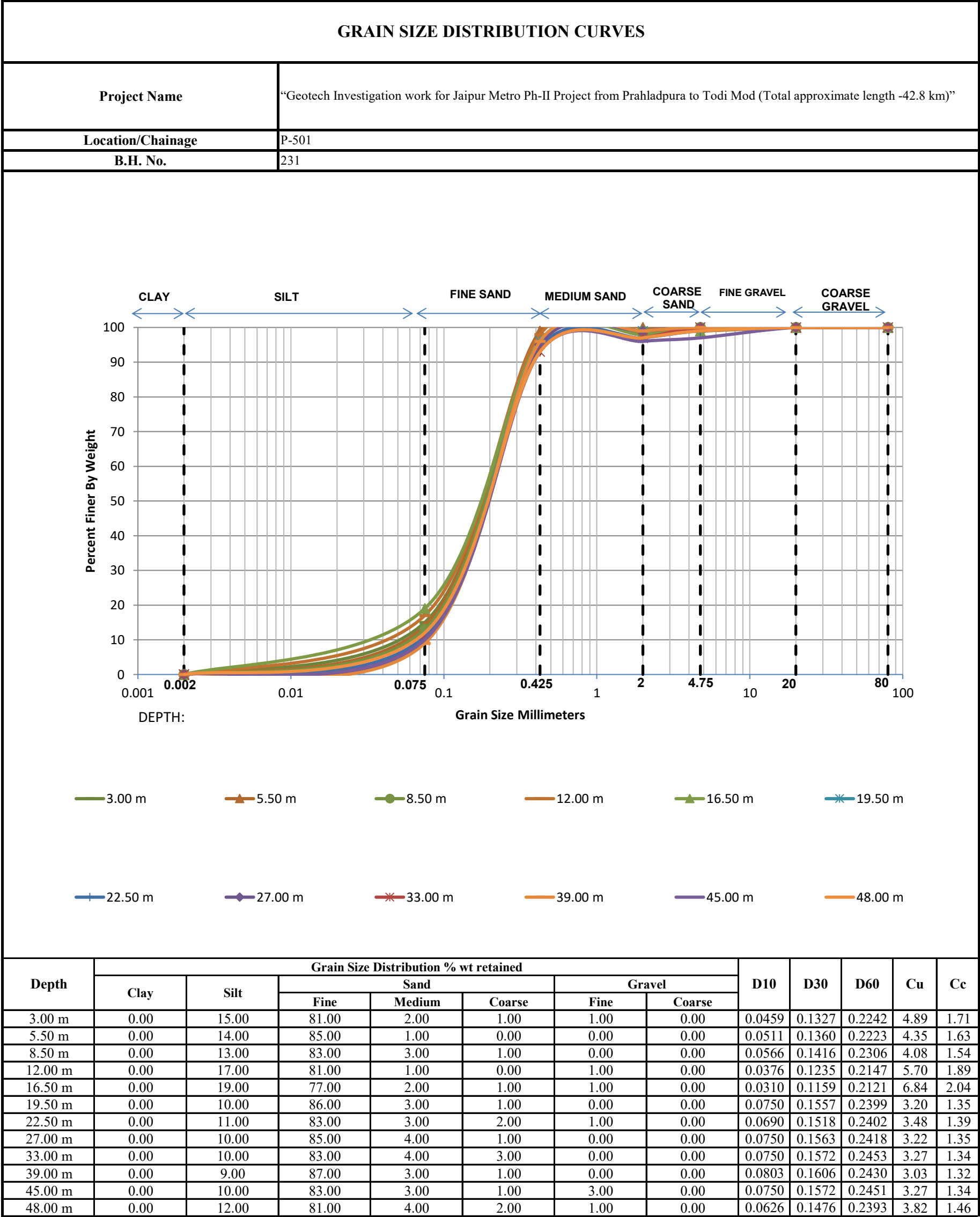


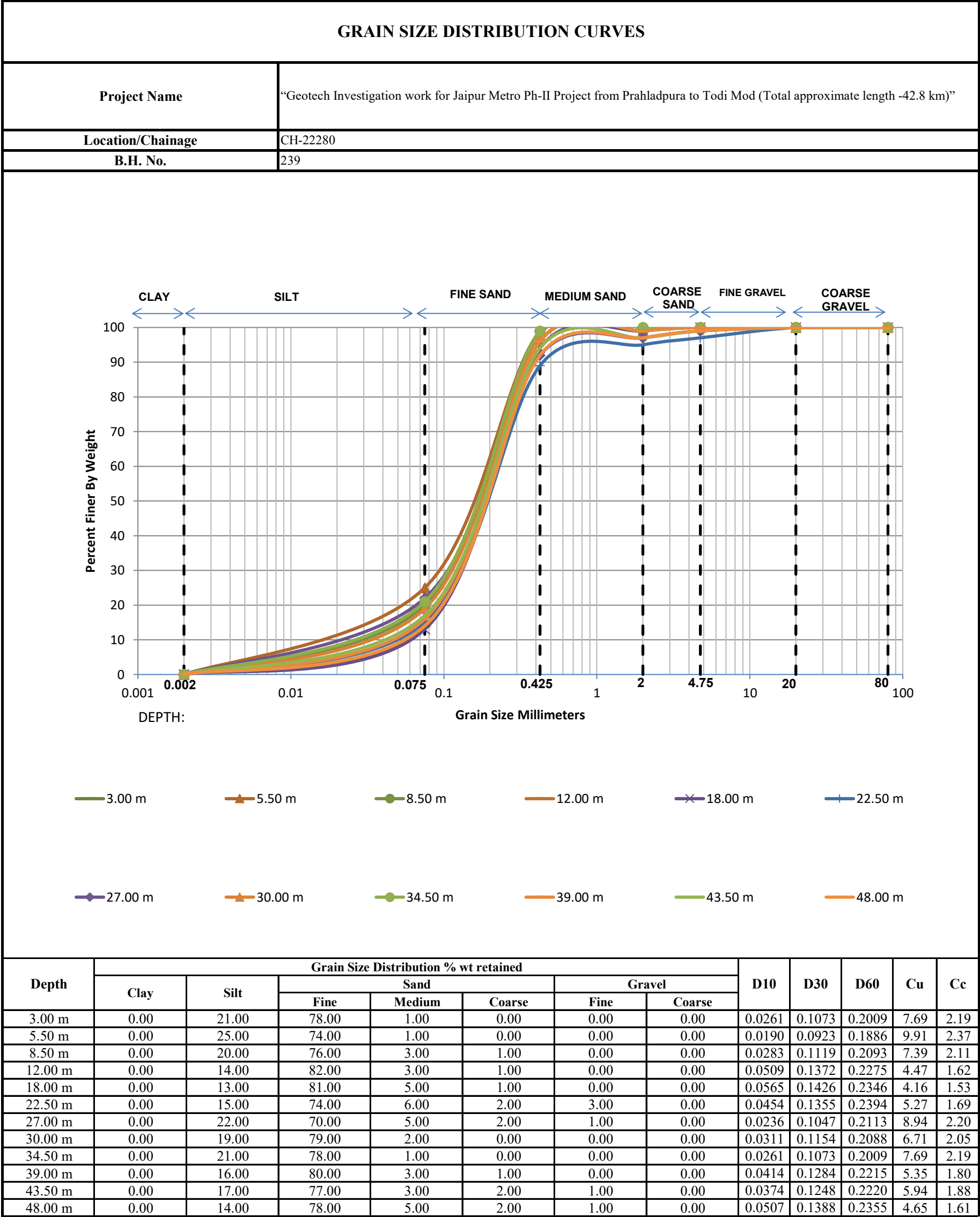
Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	19.00	80.00	1.00	0.00	0.00	0.00	0.0312	0.1151	0.2070	6.64	2.05
5.50 m	0.00	14.00	85.00	1.00	0.00	0.00	0.00	0.0511	0.1360	0.2223	4.35	1.63
8.50 m	0.00	17.00	80.00	2.00	1.00	0.00	0.00	0.0376	0.1238	0.2165	5.76	1.89
12.00 m	0.00	13.00	86.00	1.00	0.00	0.00	0.00	0.0568	0.1404	0.2254	3.97	1.54
18.00 m	0.00	18.00	80.00	1.00	1.00	0.00	0.00	0.0342	0.1194	0.2116	6.19	1.97
22.50 m	0.00	27.00	72.00	1.00	0.00	0.00	0.00	0.0165	0.0852	0.1824	11.04	2.41
25.50 m	0.00	12.00	87.00	1.00	0.00	0.00	0.00	0.0629	0.1449	0.2285	3.63	1.46
31.50 m	0.00	11.00	88.00	1.00	0.00	0.00	0.00	0.0692	0.1495	0.2316	3.35	1.39
37.50 m	0.00	29.00	70.00	1.00	0.00	0.00	0.00	0.0145	0.0783	0.1761	12.15	2.40
43.50 m	0.00	29.00	68.00	2.00	1.00	0.00	0.00	0.0144	0.0784	0.1793	12.44	2.38
48.00 m	0.00	14.00	84.00	1.00	1.00	0.00	0.00	0.0511	0.1363	0.2238	4.38	1.63

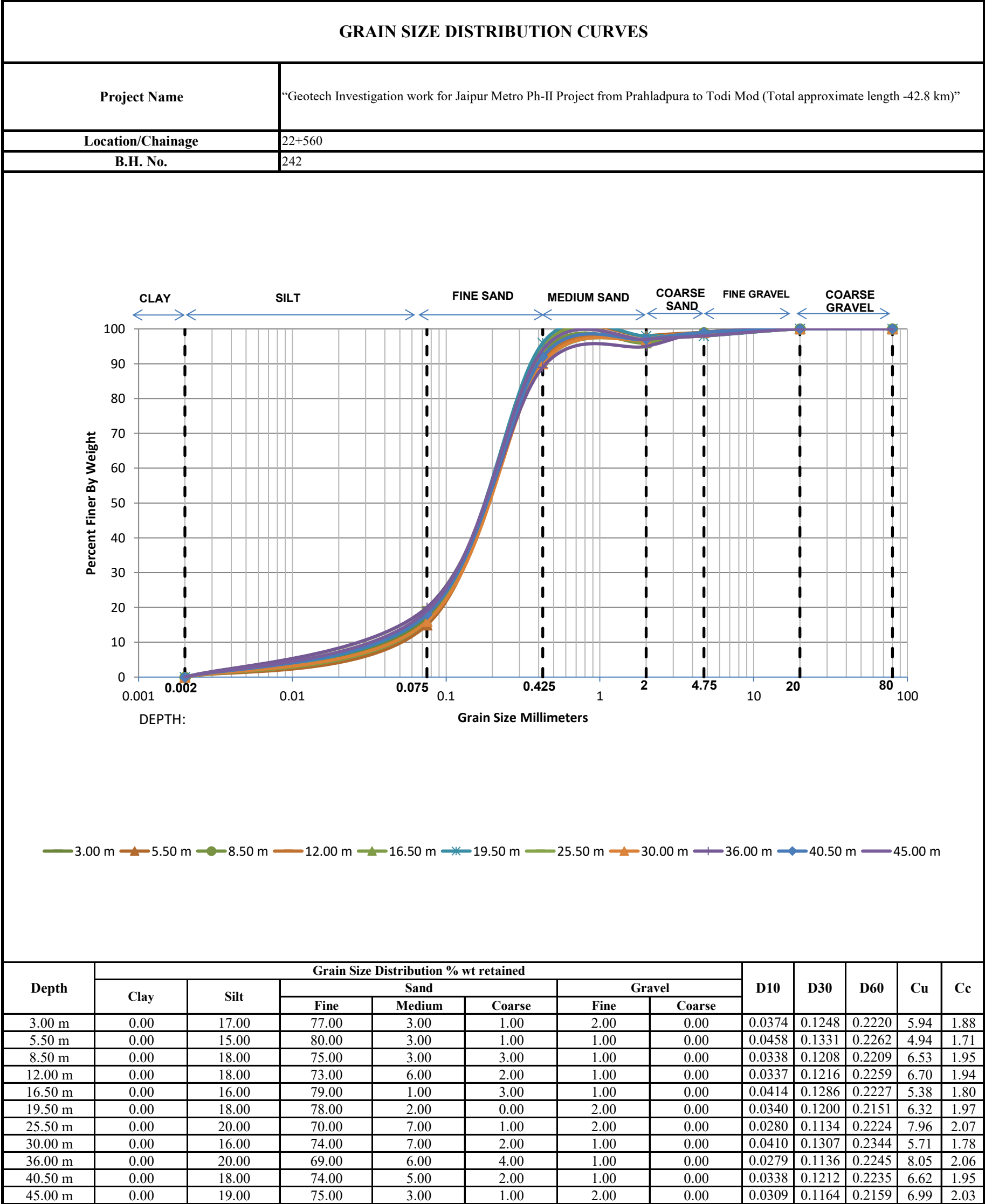
GRAIN SIZE DISTRIBUTION CURVES	
Project Name	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”
Location/Chainage	P-598
B.H. No.	230

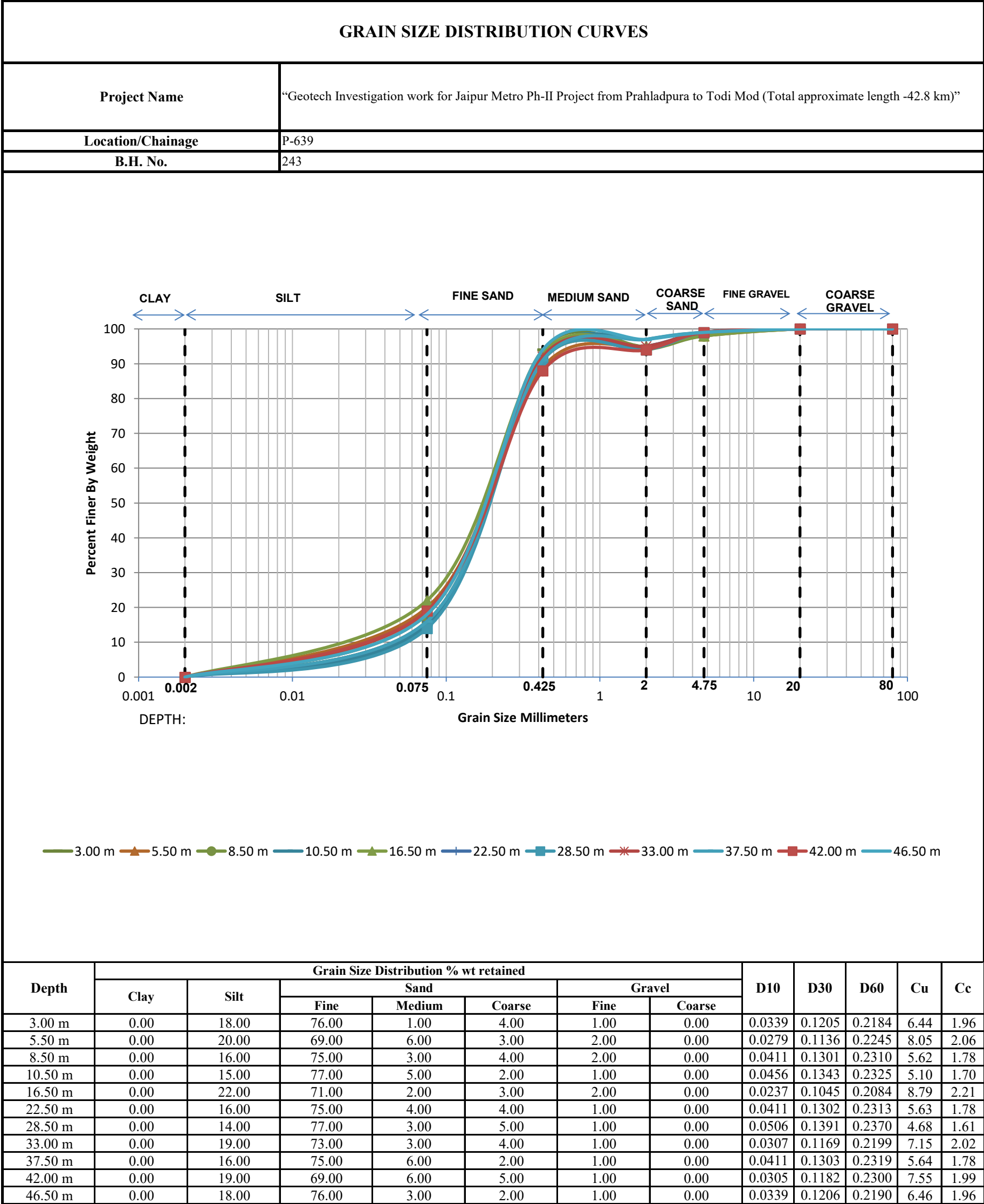


Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	13.00	79.00	1.00	1.00	6.00	0.00	0.0563	0.1431	0.2374	4.21	1.53
6.00 m	0.00	18.00	80.00	1.00	0.00	1.00	0.00	0.0342	0.1194	0.2116	6.19	1.97
9.00 m	0.00	16.00	82.00	1.00	1.00	0.00	0.00	0.0416	0.1277	0.2177	5.24	1.80
13.50 m	0.00	17.00	77.00	5.00	1.00	0.00	0.00	0.0374	0.1249	0.2225	5.96	1.88
18.00 m	0.00	14.00	83.00	2.00	1.00	0.00	0.00	0.0510	0.1367	0.2256	4.42	1.62
21.00 m	0.00	18.00	81.00	0.00	0.00	1.00	0.00	0.0342	0.1322	0.3005	8.78	1.70
28.50 m	0.00	13.00	84.00	1.00	1.00	1.00	0.00	0.0566	0.1411	0.2285	4.03	1.54
34.50 m	0.00	19.00	77.00	1.00	1.00	2.00	0.00	0.0310	0.1158	0.2118	6.83	2.04
39.00 m	0.00	18.00	80.00	1.00	1.00	0.00	0.00	0.0342	0.1194	0.2116	6.19	1.97
45.00 m	0.00	15.00	84.00	1.00	0.00	0.00	0.00	0.0461	0.1316	0.2192	4.76	1.71

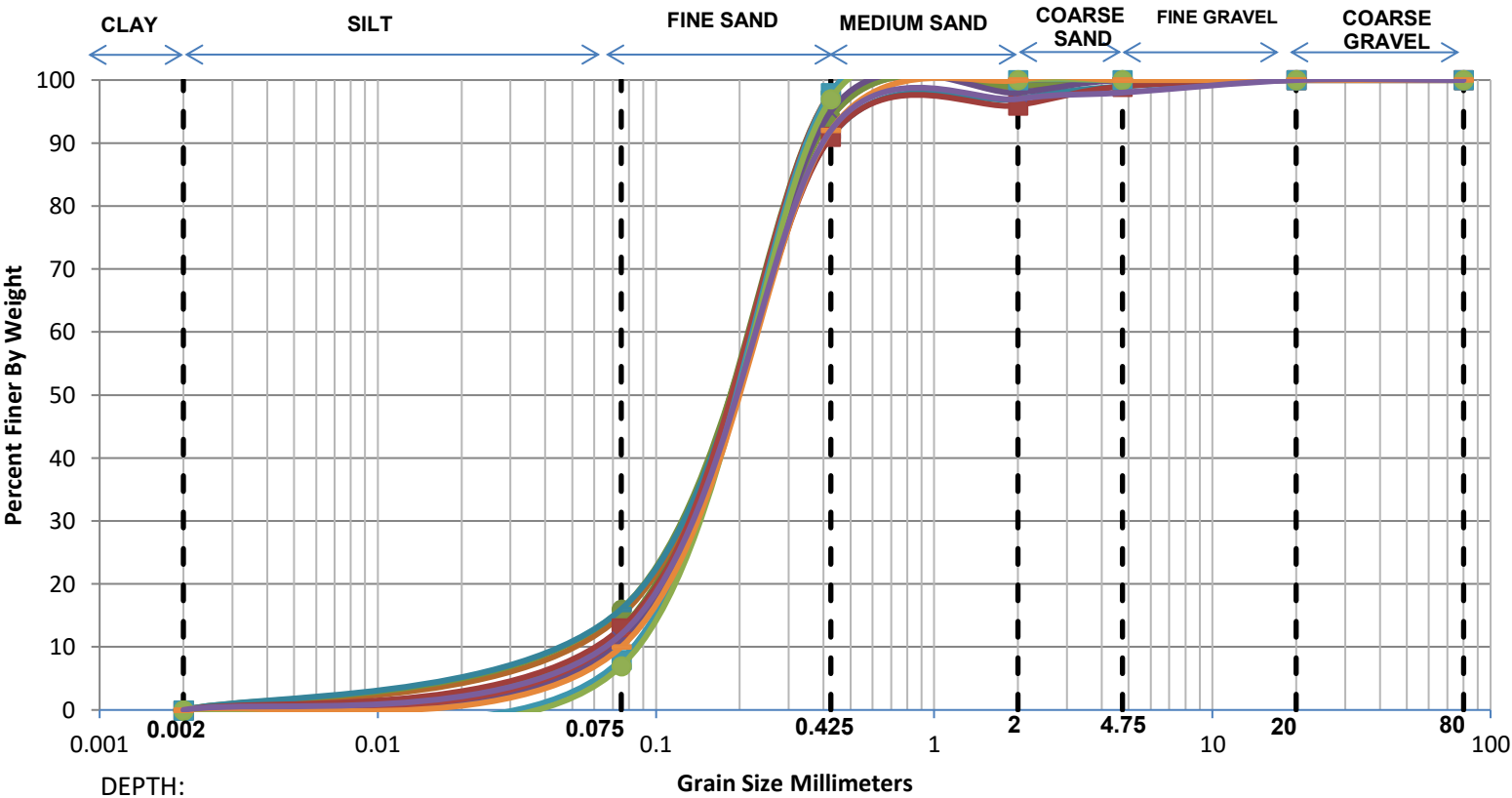








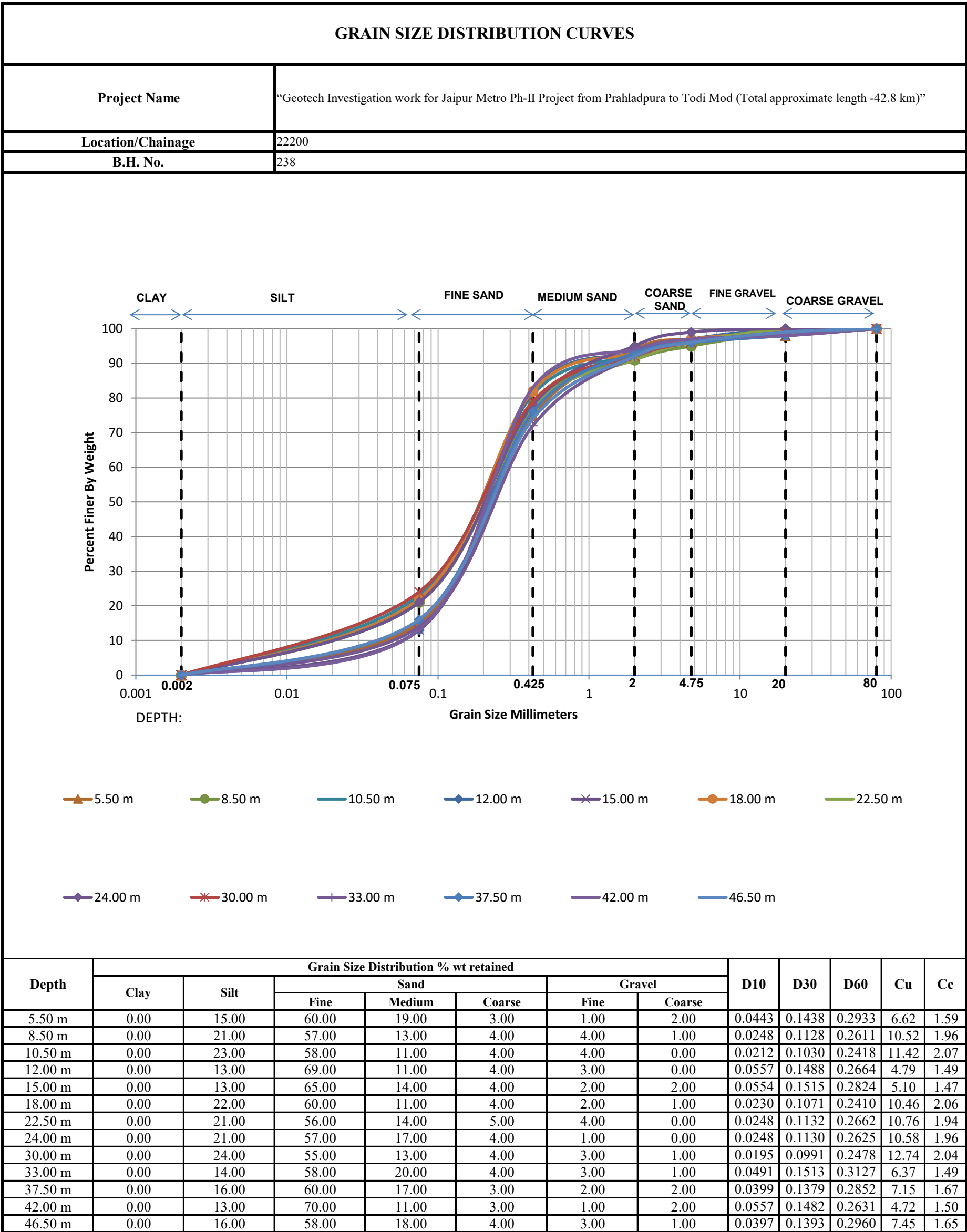
GRAIN SIZE DISTRIBUTION CURVES	
Project Name	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”
Location/Chainage	23+160
B.H. No.	248



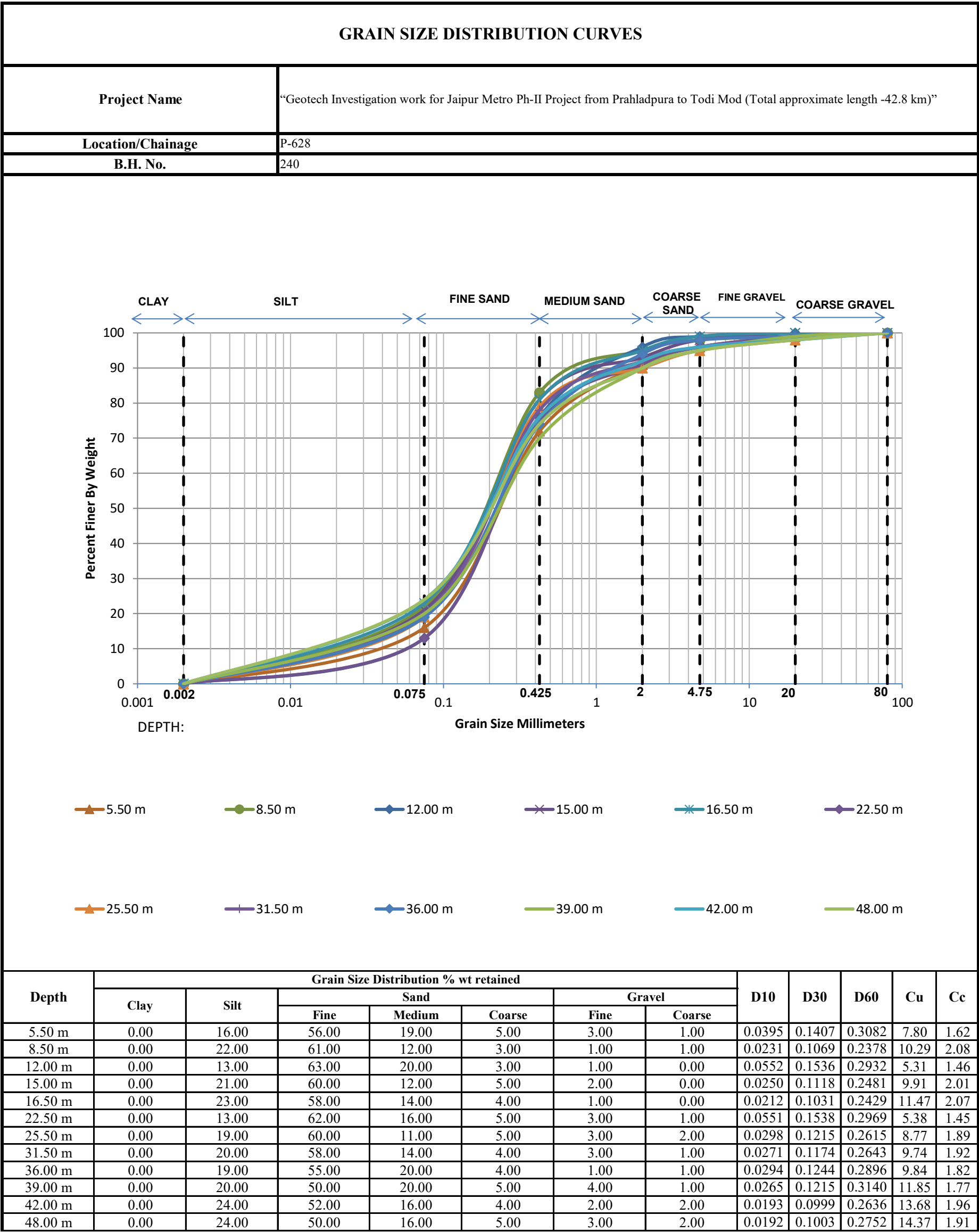
#REF! 4.50 m 7.50 m 9.00 m 13.50 m 16.50 m 22.50 m 27.00 m 33.00 m 37.50 m 43.50 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
#REF!	0.00	13.00	85.00	1.00	1.00	0.00	0.00	0.0567	0.1408	0.2269	4.00	1.54
4.50 m	0.00	15.00	79.00	5.00	1.00	0.00	0.00	0.0458	0.1336	0.2286	4.99	1.71
7.50 m	0.00	16.00	78.00	5.00	1.00	0.00	0.00	0.0413	0.1292	0.2256	5.46	1.79
9.00 m	0.00	16.00	75.00	6.00	2.00	1.00	0.00	0.0411	0.1303	0.2319	5.64	1.78
13.50 m	0.00	13.00	78.00	5.00	3.00	1.00	0.00	0.0563	0.1439	0.2405	4.27	1.53
16.50 m	0.00	11.00	84.00	3.00	2.00	0.00	0.00	0.0691	0.1514	0.2384	3.45	1.39
22.50 m	0.00	12.00	86.00	2.00	0.00	0.00	0.00	0.0628	0.1453	0.2302	3.66	1.46
27.00 m	0.00	8.00	90.00	2.00	0.00	0.00	0.00	0.0856	0.1646	0.2429	2.84	1.30
33.00 m	0.00	7.00	90.00	3.00	0.00	0.00	0.00	0.0913	0.1703	0.2479	2.72	1.28
37.50 m	0.00	10.00	82.00	8.00	0.00	0.00	0.00	0.0750	0.1581	0.2483	3.31	1.34
43.50 m	0.00	12.00	80.00	5.00	1.00	2.00	0.00	0.0625	0.1481	0.2415	3.86	1.45

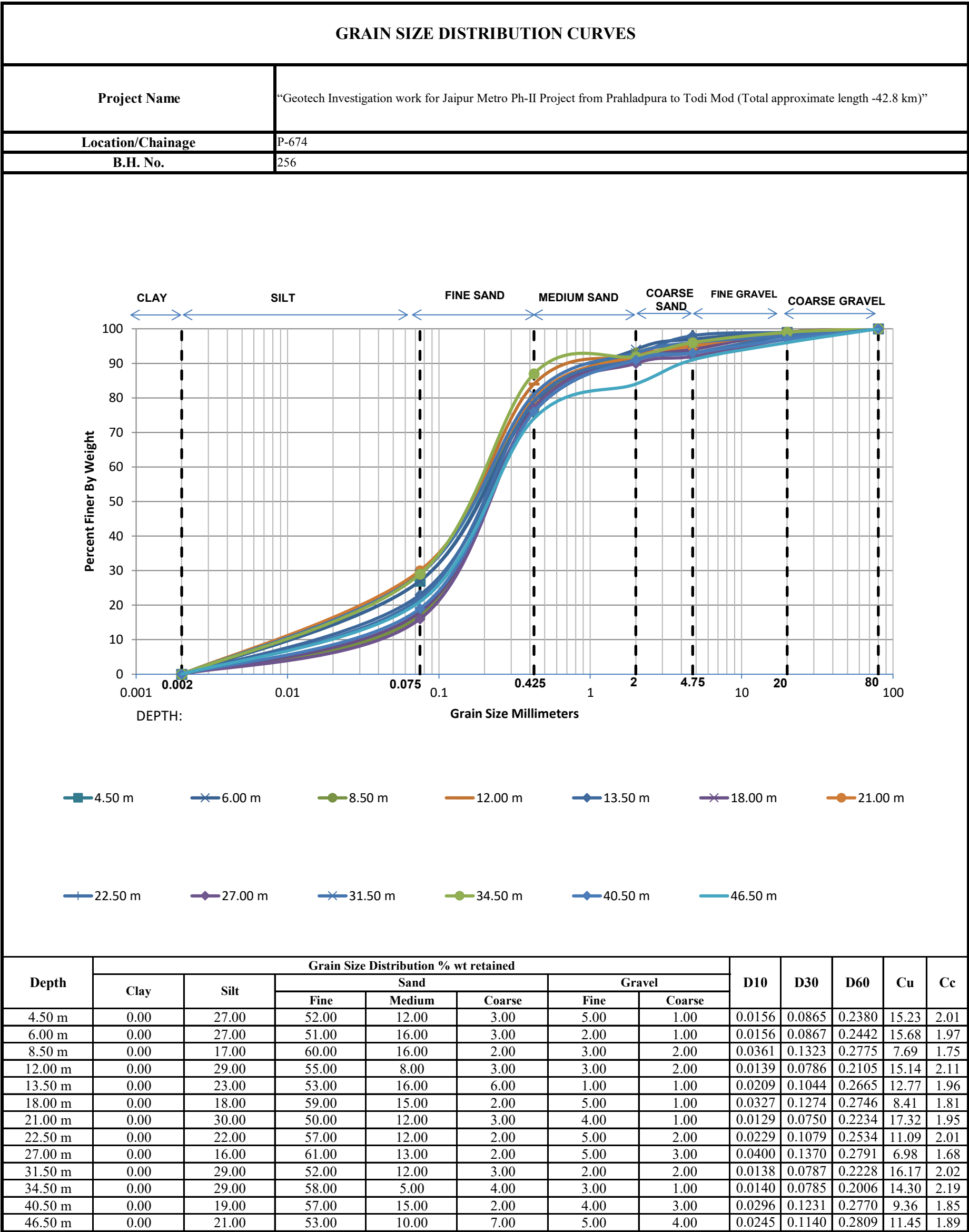
SOIL CHARACTERISTICS

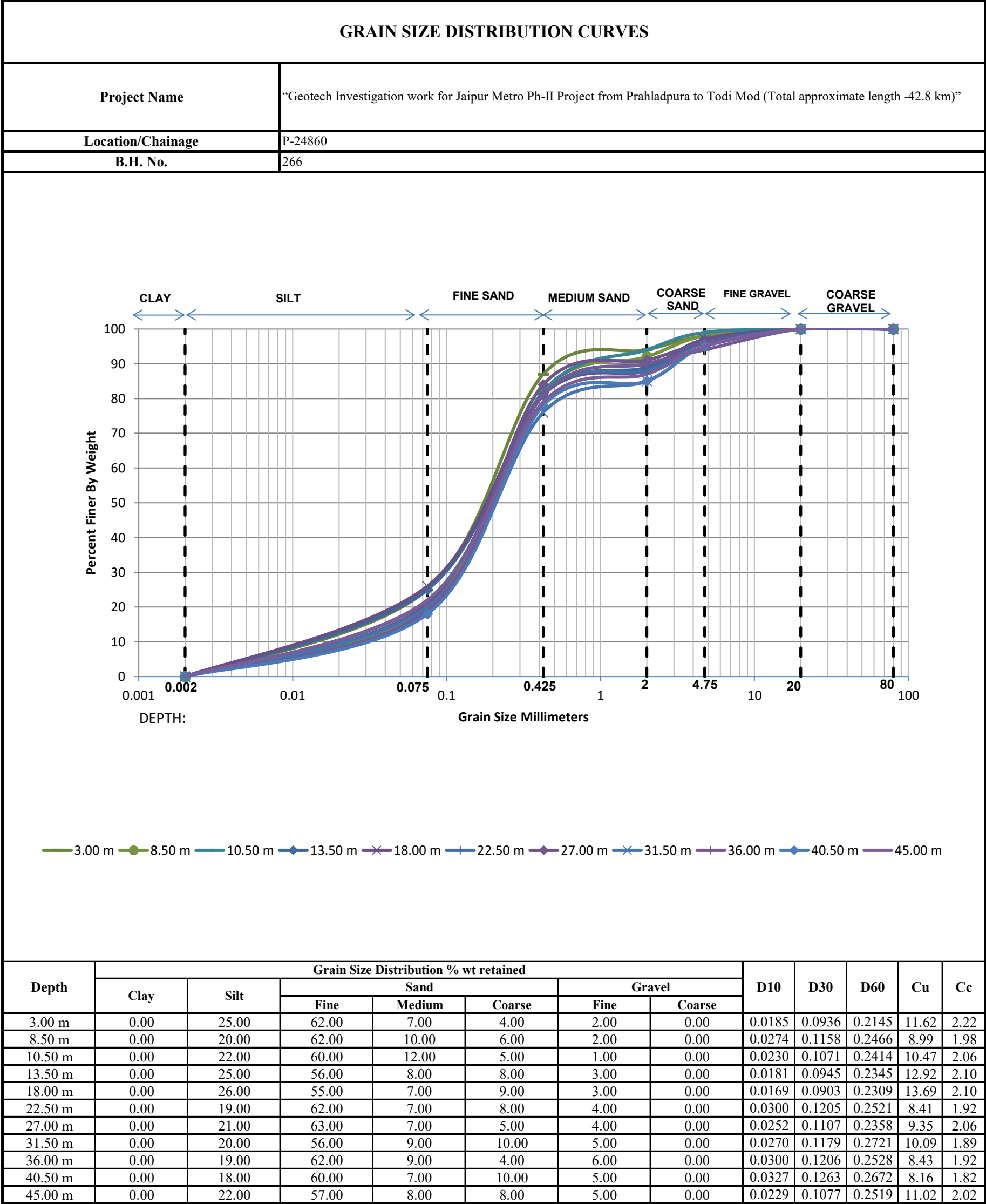


SOIL CHARACTERISTICS

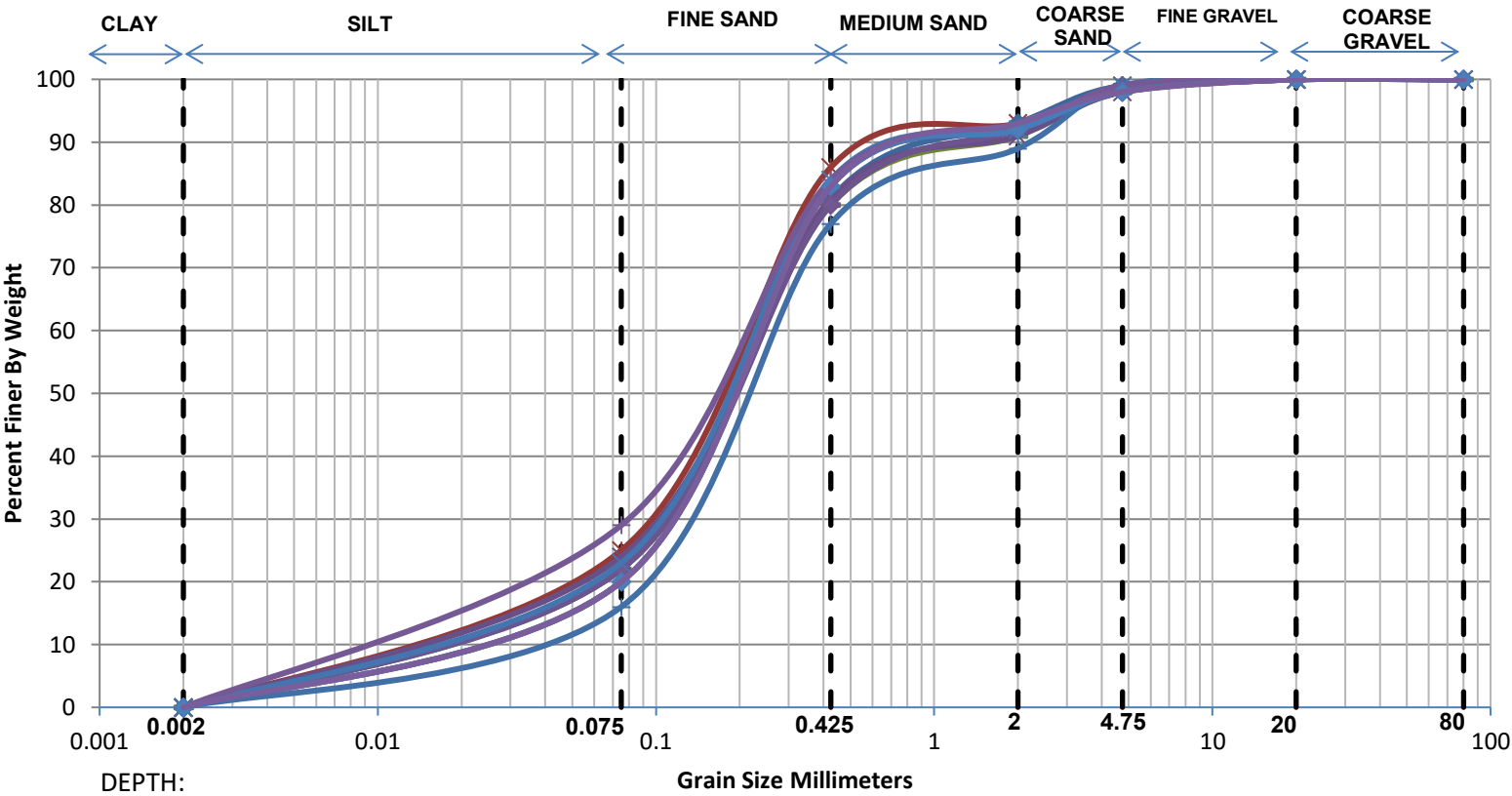


SOIL CHARACTERISTICS





GRAIN SIZE DISTRIBUTION CURVES	
Project Name	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”
Location/Chainage	CH-25960
B.H. No.	277



#REF! 6.00 m 8.50 m 12.00 m 16.50 m 21.00 m 25.50 m 30.00 m 34.50 m 39.00 m 43.50 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
#REF!	0.00	22.00	58.00	11.00	7.00	2.00	0.00	0.0229	0.1076	0.2488	10.85	2.03
6.00 m	0.00	25.00	61.00	7.00	6.00	1.00	0.00	0.0184	0.0938	0.2173	11.80	2.20
8.50 m	0.00	20.00	63.00	9.00	6.00	2.00	0.00	0.0275	0.1155	0.2428	8.83	2.00
12.00 m	0.00	22.00	59.00	12.00	6.00	1.00	0.00	0.0230	0.1074	0.2451	10.67	2.05
16.50 m	0.00	24.00	57.00	10.00	7.00	2.00	0.00	0.0196	0.0987	0.2384	12.18	2.09
21.00 m	0.00	16.00	61.00	12.00	10.00	1.00	0.00	0.0400	0.1369	0.2787	6.97	1.68
25.50 m	0.00	22.00	58.00	12.00	6.00	2.00	0.00	0.0229	0.1076	0.2491	10.87	2.03
30.00 m	0.00	23.00	61.00	8.00	7.00	1.00	0.00	0.0214	0.1023	0.2300	10.77	2.13
34.50 m	0.00	29.00	55.00	8.00	7.00	1.00	0.00	0.0139	0.0786	0.2105	15.14	2.11
39.00 m	0.00	20.00	63.00	9.00	6.00	2.00	0.00	0.0275	0.1155	0.2428	8.83	2.00
43.50 m	0.00	20.00	63.00	10.00	5.00	2.00	0.00	0.0275	0.1155	0.2431	8.84	2.00