

GEOTECHNICAL INVESTIGATION (PART - B)						
SL. NO.	DESCRIPTION OF ITEM	UNIT	QTY.	RATE (INR)	AMOUNT (INR)	Weightage in %
1	Mobilisation of necessary equipments, men and materials to the project site for carrying out the geotechnical investigation and demobilisation of the same after completion of all the field works etc all complete as per specification, drawings and as directed by the engineer-in-charge.	LS	1			43.868975%
2	Making 150mm nominal diameter bore hole up to a maximum depth of 20 m below ground level at various locations in all types of soil including laterite using suitable approved method of boring including chiselling, cleaning, providing casing pipes as required or as directed; performing standard penetration test at every 1 m interval alternate to collection of undisturbed soil samples up to 10 m depth below ground level and at every 1.5 m interval alternate to collection of undisturbed soil samples beyond 10 m depth, at change of strata and at depths wherever undisturbed soil samples could not be collected; collection of undisturbed sample (UDS) at every 1 m interval alternate to conducting standard penetration test up to 10 m depth below ground level and at every 1.5 m interval alternate to conducting standard penetration test beyond 10 m depth; collection of disturbed soil samples and water samples, sealing and packing of samples, observation such as ground water table etc; transportation of all the collected samples to the laboratory and back filling of boreholes with sand on completion of the same etc all complete as per specification and as directed by the engineer-in-charge for depth below ground level.	RM	108			14.159642%
3	Core drilling (Nx size) in rock/ reinforced concrete using hydraulic feed rotary drill and double tube core barrel with diamond bit including collection of core samples, performing SPT at locations where core recovery is less than 20%, maintaining continuous record of core recovery and RQD, keeping the cores in wooden core boxes, transporting the cores to laboratory, back filling the holes with 1 part of cement : 3 part of sand grout on completion of the same etc all complete as per specification, drawings and as directed by the engineer-in-charge.	RM	12			3.630593%
4	Excavating trial pit of size 2m x 2m at various locations through reinforced concrete grade slab for establishing the locations of existing foundations without disturbing the existing plinth beam/foundation etc including sheeting or shoring the sides for the purpose of stability, dewatering and maintaining the pit dry at all times, collecting disturbed/undisturbed samples and conducting field density test at 1m interval, starting from 1m depth below ground level and transporting all the collected samples to the laboratory; backfilling of the pit with excavated material etc all complete as per specification and as directed by the engineer-in-charge.	CuM	48			3.434076%
5	Excavating trial pit of size 2m x 2m at various locations below ground level in all types of soil/rock which can be excavated with pick axe/crow bar etc for establishing the locations of existing foundations without disturbing the existing plinth beam/foundation etc including sheeting or shoring the sides for the purpose of stability, dewatering and maintaining the pit dry at all times, collecting disturbed/undisturbed samples and conducting field density test at 1m interval, starting from 1m depth below ground level and transporting all the collected samples to the laboratory; backfilling of the pit with excavated material etc all complete as per specification and as directed by the engineer-in-charge. (Depth of trial pit shall be up to bottom of existing foundation for pits near by foundation, and 2m for other locations)	CuM	96			1.888058%
6	Conducting plate load test in various locations at specified depth complete as per specification, drawings and as directed by the engineer-in-charge. Payment for making the pit of suitable size, maintaining it dry and backfilling etc shall be paid as separate item.	NO	2			5.294577%
7	Conducting field vane shear test in various locations at specified depth including collection of disturbed soil sample etc. all complete as per specification, drawings and as directed by the engineer-in-charge.	EACH	4			3.157021%
8	Conducting electrical resistivity test at various locations complete as per specification, drawings and as directed by the engineer-in-charge.	NO	6			2.269118%
9	Conducting laboratory test on soil samples at an approved laboratory including preparation of soil samples to determine the following properties etc all complete as per specification.					0.000000%
a)	Natural moisture content	NO	10			0.060518%
b)	Sieve analysis	NO	10			0.151301%
c)	Hydrometer analysis	NO	10			0.151301%
d)	Liquid limit, plastic limit, Shrinkage limit and Plasticity Index	NO	10			0.151301%
e)	Bulk & Dry density	NO	15			0.136175%
f)	Specific gravity & Void Ratio	NO	15			0.226952%
g)	Unconfined compressive strength	NO	15			0.340408%
h)	Triaxial shear test					0.000000%
(i)	Undrained test	NO	8			0.157338%
(ii)	Drained test	NO	8			0.157338%
i)	Direct shear test	NO	10			0.264743%
j)	consolidation test (Oedometer)	NO	8			0.363069%
k)	Differential free swell index	NO	8			0.181551%
l)	CBR test					0.000000%
(i)	Soaked Condition	NO	8			0.605107%
(ii)	unsoaked Condition	NO	8			0.605107%
10	Conducting laboratory test on rock samples including preparation of the samples to determine the following properties etc all complete as per specification.					0.000000%
a)	Specific gravity	NO	5			0.064294%
b)	Crushing strength					0.000000%
(i)	Soaked Condition	NO	5			0.264736%
(ii)	Unsoaked Condition	NO	5			0.264736%
11	Chemical analysis for					0.000000%
a)	Soil	NO	15			2.269131%
b)	Subsoil Water	NO	15			2.269131%
12	Submitting Preparation and submission of draft report in 4 copies and final report in 5 hard copies and 2 soft copies on CD after the approval of draft report including all field records, laboratory test results, graphs, analysis of test results and recommendation etc all complete as per specification.	LS	1			13.613701%
TOTAL (PART-B) Excluding GST						100.0%