

Name of Work:- Construction of STP, Pond development and CD work in KSU main campus at shilaj.

INDEX OF SPECIFICATIONS

ITEM NO.	ITEM DISCRIPTION	UNIT	Item As per General Technical Specification for building works/SOR
1	Excavation for foundation upto 1.5 m depth including sorting out and stacking of useful materials and disposing off the excavated stuff including shoring, strutting and dewatering of any kind of soil upto any lead and lift. (a) Loose or soft Soil	Cumt.	Refer General Technical Specification
2	Excavation for foundation for depth from 1.5 m to 3.0 m including sorting out and stacking of useful materials and disposing off the excavated stuff including shoring, strutting and dewatering of any kind of soil upto any lead and lift. (a) Hard Soil	Cumt.	Refer General Technical Specification
3	Excavation for foundation for depth from 3.0 m to 5.0 m including sorting out and stacking of useful materials and disposing off the excavated stuff including shoring, strutting and dewatering of any kind of soil upto any lead and lift. (a) Hard Soil	Cumt.	Refer General Technical Specification
4	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm. in depth consolidating each deposited layer by ramming and watering upto optimum moisture content level.	Cumt.	Refer General Technical Specification
5	Providing and laying cement concrete 1:4:8 (1-Cement : 4-coarse sand : 8- hand broken stone aggregates 40 mm nominal size) and curing complete excluding cost of formwork in (A) Foundation and Plinth	Cumt.	Refer General Technical Specification
6	Providing and laying cement concrete 1:3:6 (1-Cement : 3-coarse sand : 6- hand broken stone aggregates 40 mm nominal size) and curing complete excluding cost of formwork in (A) Foundation and Plinth	Cumt.	Refer General Technical Specification

Name of Work:- Construction of STP, Pond development and CD work in KSU main campus at shilaj.

INDEX OF SPECIFICATIONS

ITEM NO.	ITEM DISCRIPTION	UNIT	Item As per General Technical Specification for building works/SOR
7	Providing and laying in position Ready Mixed M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for a lead up to 10 kms having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cementconcrete work including pumping of R.M.C. from transit mixer to site of laying, including the cost of centering shuttering finishing and reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction ofthe Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall bemaintained) (Cement level 475 kg )(A) Foundations, footings, Base of columns and Mass concrete	Cumt.	As per attached Sheet
8	Providing and laying in position Ready Mixed M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for a lead up to 10 kms having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cementconcrete work including pumping of R.M.C. from transit mixer to site of laying, including the cost of centering shuttering finishing and reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction ofthe Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall bemaintained) (Cement level 475 kg ) (B) Walls, from top of foundationlevel upto floor two level	Cumt.	As per attached Sheet

## INDEX OF SPECIFICATIONS

ITEM NO.	ITEM DISCRIPTION	UNIT	Item As per General Technical Specification for building works/SOR
9	Providing and laying in position Ready Mixed M-300 grade concrete for reinforced cement concrete work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for a lead up to 10 kms having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of R.M.C. from transit mixer to site of laying, excluding the cost of centering shuttering finishing and reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 475 kg ) ©Slabs,landing,shelves,Balconies Lintels, Beams, Girders and Cantilever upto floor two level.	Cumt.	As per attached Sheet
10	Providing TMT Bar FE 550D reinforcement for R.C.C. work including bending, binding and placing in position complete upto floor two level	KG	Refer General Technical Specification
11	Masonry work using Aerated light weight concrete block having crushing strength not less than 35kg/sqcm for super structure above plinth level upto floor two level in cement mortar 1:5 ( 1 cement : 5fine sand ) complete as per Technical Specification	Cumt.	Refer General Technical Specification
12	Providing 15mm thick cement plaster in single coat on Rough (Similar)side of single or half brick walls for interior plastering upto floor two level and finished even and smooth in (i) Cement mortar 1:3(1-cement:3-sand)	Sqmt.	Refer General Technical Specification
13	Providing 20 mm thick double coat mala cement plaster on interior brick / concrete work for plastering comprising of base coat of 12 mm thick cement plaster in cement mortar (1 Cement : 4 coarse sand) in rough finishing and 8 mm thick top coat of cement mortar 1:2 (1 Cement : 2 Coarse sand) finished with trowel including scaffolding curing etc. complete.	Sqmt.	Refer General Technical Specification

Name of Work:- Construction of STP, Pond development and CD work in KSU main campus at shilaj.

INDEX OF SPECIFICATIONS

ITEM NO.	ITEM DISCRIPTION	UNIT	Item As per General Technical Specification for building works/SOR
14	Providing 20 mm thick water proof cement plaster using water proofing powder 1Kg/1bag of cement for all floors on brick / concrete wall work using water proofing materials in C M 1: 4 ( 1 cement 4 coarsse sand) including finishing with a floating coat of neat cement slurry etc complete for all floor. and shall be guaranteed for minimum period of 10 years after handing over the completed building by the main contractor to be finished as directed. Stamp paper guarantee 10 years to be furnished before receiving any payment from the client.	Smt	As per attached Sheet
15	Finishing wall with weather proof low velocity ultima exterior emulsion paint on wall surface (two coats) to give an required shape even shade after thoroughly brushing the surface to remove all dirt, and remains of loose powdered materials.etc complete for all height	Sqmt.	Refer General Technical Specification
16	Structural steel work ( Confirming to IS 4923-1997) riveted, bolted or welded in builtup for all type sections, in framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete as per the structural designs and directions of Engineer incharge.	KG	Refer General Technical Specification
17	Constructing brick masonry chamber for underground C.I. Inspection chamber and bends with briocks having croshing strength not less than 35Kg. Cm2 in C.M. 1:5 C.I. cover with frame (Light duty) 455mm x 610mm intenal dimensions total weight of cover with frame to be not less than 38Kg. (Wt. of cover 23 Kg.) and Wt. of frame 15Kg. ) (R.C.C. top slabe with 1:2:4 mix (1-cement :2- coarse sand :4-graded stone aggregate 20mm size) foundation concrete 1:5:10 inside plaster 15mm thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete.(iii) Inside dimensions 600mm x mm and 450mm deep for pipe lines with three or more inlets. (upto 10 ton)	Each	Refer General Technical Specification

Name of Work:- Construction of STP, Pond development and CD work in KSU main campus at shilaj.

INDEX OF SPECIFICATIONS

ITEM NO.	ITEM DISCRIPTION	UNIT	Item As per General Technical Specification for building works/SOR
18	STP on MBBR_Technology(75_KLD) PART -A, MEP WORK Planning, Designing, Detailing, Manufacturing, Supplying,Erection, Testing and Commissioning of Sewage Treatment Plant (STP) of 75 cu mt per day , including all electrical ,mechanical equipment, interconnected piping, valves,pumps,instruments. Design and construction of RCC tanks i.e. oil & greace chamber , collection tank, bio reactor tank , tube settler , chlorine contact tank and final treated water tank with manhole cover & all other civil structure of the pump room of the plant to complete the job. Connection of the underground sewage line to STP as well as connection of treated water of STP to nearest drain and Bypass connection of STP to the drain point with required civil,piping work & accesories all included in the scope of work. Suitable size of Shade to be provided to cover up the entire STP plant. Aeration should be provided in both Collection as well as Bio-Reactor Tank. All wetted parts should be in SS304. STP should be based on MBBR Technology including primary treatment secondary treatment and tertiary treatment of having Multi Grade Filter, Activated Carbon Filter with necessary chlorine contact system , Poly Electrolyte Dosing system complete to treat raw seawge from Domestic liquid waste with output characteristics as follows : Parameter pH : 7 to 7.5 B.O.D. (mg / Lit) : < 5 to 20 mg/Lit C.O.D. (mg / Lit) : < 10 to 30 mg/Lit	Each	As per attached Sheet
19	Supplying and fixing reinforced concrete heavy duty non-pressure pipes with collars for culverts including setting and joining the pipes in C.M. 1:2 watering and laying (To level of slops of I.S. 458 / 1971 Class NP3 of following internal diameter. 1800 mm dia.	Rmt	Refer General Technical Specification

Name of Work:- Construction of STP, Pond development and CD work in KSU main campus at shilaj.

INDEX OF SPECIFICATIONS

ITEM NO.	ITEM DISCRIPTION	UNIT	Item As per General Technical Specification for building works/SOR
20	Providing and laying in position Ready Mixed M-200 grade concrete for reinforced cement concrete work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for a lead up to 10 kms having continuous agitated mixer, manufactured as per design of specified grade for reinforced cement concrete work including pumping of R.M.C. from transit mixer of laying ,excluding the cost of centering shuttering finishing and reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained)(B) Walls, from top of foundation level upto floor two level	cmt	Refer General Technical Specification
21	Providing formwork of sheathing steel foamwork so as to give a rough finish including centering shuttering strutting and propping etc. height of propping and centering below supporting floor to ceiling not exceeding 4 M. and removal of the same for in situ reinforced concrete and plain concrete work in. (C) Vertical surface such as walls (any thickness) partitions and the like including attached buttresses & string course & the like.	Smt	Refer General Technical Specification
22	Providing & laying weep hole in Abutments, and returns by using A.C. pipe of 100mm including laying in proper grade and jointing the completed as per detailed specification.	no	Refer General Technical Specification
23	Providing and fixing M.S. grills of required pattern to wooden frames of windows etc. with M.S. flats at required spacings and frame around, square or round bars with round headed bolts and nuts or by screws (A) Plain Grill.	KG	Refer General Technical Specification
24	Earthwork in cutting in all sorts of soil and soft murrum including conveying and spreading the stuff, embankment as and where directed within 200meters from the end of the cutting with all required lead and lift.	Cumt.	Refer General Technical Specification
25	Providing and fixing post and pipe railing as per detail drawing including 3(three) coats of painting to steel works complete.	Rmt	Refer General Technical Specification
26	Providing & Filling farm clay or selected soil (Outside earth) in including watering with any lead & lift as directed by EIC etc. complete	Cumt.	As per attached Sheet

Name of Work:- Construction of STP, Pond development and CD work in KSU main campus at shilaj.

INDEX OF SPECIFICATIONS

ITEM NO.	ITEM DISCRIPTION	UNIT	Item As per General Technical Specification for building works/SOR
27	Providing pure doob (dharo )grass including watering and maintenance of the lawn for 1 year or more till the grass forms a thick lawn, freefrom weeds and fit for mowing including supplying necessary farm clay , sludge, manure, pesticides , extra earth, disposal of rubbish, trench excavation and all labour with lead and lift etc. complete as directed by EIC.	Smt	As per attached Sheet