

Bill of Quantity (BOQ)

Name Of Work:- Construction of balance civil works (CTO requirement) for boiler area Paving, drains & culverts, pre-settling pit And Rain water harvesting pond for unit #3&4 at IPTS.

A	Construction of Civil Works for balance Drain, paving in boiler area & pre-settling pit .				
Item No	Description of items	Unit	Quantity	Rate	Amount
1	<p>Earth work in excavation up to 2.0 m depth below ground level for foundation , trenches, pipe lines, storm water drains etc including setting out, clearing & grubbing, removal of debris, dewatering if required, strutting, shoring/sheet piling if required, dressing the sides, leveling to grade and ramming the bottom, stacking/disposal of surplus excavated material within a lead of 2.0 KM etc complete for all types of soils including clay, ash, sand, laterite morrum, weathered rock, decomposed rock, soft rock etc which can be excavated by Mechanical means (Hydraulic excavator)/Manual means of crow bar, pick axe etc but does not require chiselling or blasting.</p> <p>(For payment purpose, excavation volume shall be measured only by considering the concrete outline as per drawing plus working clearance as 0.6 M away from the foundation concrete edge/line on either side or actual volume of excavation done whichever is less.)</p>	cum	11666		
2	<p>Back filling in trenches, around foundations in plinths, drains etc. to proper grade and level with selected excavated materials within a lead of 2 km but not exceeding 5 km, from available excavated soil including re-excavating loose thickness, watering and compacting in layers of max 30cm thickness to min 95% procter density by manual/mechanical means, compaction with machined compaction machine, dressing etc. complete.</p> <p>(Payment for Back filling under this item of work shall be net of excavated volume as calculated in Item no. 1 & 2 as above, minus the volume of concrete surface & volume of paving materials below finished <u>Ground Level as shown in the drawing</u>).</p>	cum	2331		
3	<p>Back filling around foundations in plinths etc. to proper grade and level with selected materials Extra for lead beyond 2 km & upto 5 km in transportation, from available excavated soil including re-excavating loose thickness, watering and compacting in layers of max 30cm thickness to min 95% procter density by manual/mechanical means, compaction with machined compaction machine, dressing etc. complete.</p> <p>(Payment for Back filling under this item of work shall be net of excavated volume as calculated in Item no. 1 & 2 as above, minus the volume of concrete surface & volume of paving materials below finished <u>Ground Level as shown in the drawing</u>).</p>	cum	750		
4	<p>Providing & laying metal soling, using broken hard stone of nominal size, in layers as specified below, for all leads and all lifts, filling, dressing, testing, with all labour, material, equipment, handling, transportation, etc., for all types of works at all levels, all complete, as per specifications, drawings and instructions of the Engineer: 63 mm - 45mm downgraded hard stone aggregate as per IRC specification , watering and compaction to minimum of 95% Standard Proctor density, including filling the interstices of stone aggregates with sand), over well compacted earth. Each layer (not exceeding 200 mm in thickness) to minimum of 85% of original volume of stone stack including filling the interstices of stone aggregates with sand.</p>	cum	1568		
5	<p>Providing and laying Plain Cement Concrete as specified in the drawings, at all levels, for all kinds of works, such as mass concrete, lean concrete, bed blocks, mud-mat, grading, underbed, filling, screed concreting, paving, plinth protection, damp proof course, drains, gully chambers, trenches, etc., with all labour, material including cement, equipment, handling, batching, transporting, pumping, mixing, conveying, placing and compacting, protecting and curing, testing, for all working conditions, etc., all complete, as per specifications, drawings and instructions of the Engineer. M10 (1:3:6) (with graded aggregate of nominal size 12-20mm) (CEMENT OPC GRADE : -ULTRA-TECH/ ACC/GUJARAT AMBUJA/LAFARGE)</p>	cum	902		
6	<p>Providing and laying M25 Controlled grade Design Mix Concrete conforming to IS : 456 with coarse sand and graded hard stone aggregate 20mm nominal size in foundations, drains, under floors & in other places etc. at any level below finished floor level, any shape, position or thickness etc complete including mix design, testing, all materials including cement, tools & plants, use of super-plasticizer, conforming to IS:9103 (latest) to achieve required slump in concrete, compacting, curing etc. all complete.</p> <p>(CEMENT OPC 53 GRADE : -ULTRA-TECH/ ACC/GUJARAT AMBUJA/LAFARGE)</p>	cum	3111		

7	Providing and fixing ordinary ply wood/battens or steel Form work in good condition for cast-in-situ plain / reinforced cement concrete, to give an even & smooth surface to exposed face of concrete work below plinth level to foundations, footings, base of column, mass concrete, in encasement concrete work, wall, trenches etc. including shoring, strutting, staging, scaffolding, bolting, cambering, removal of formwork & staging etc. all complete.	SQM	19496		
8	Providing and fixing reinforcement as specified in the drawings for R.C.C. works at all levels including works below ground level with all labour, material, equipment, handling, transportation, cleaning, straightening, cutting, testing, bending, placing, binding in position, fixing concrete cover blocks, chairs & spacers, with all laps and anchorages, preparation of bar bending schedule & getting it approved etc. all complete as per drawing & instruction of the Engineer-in-charge. [High strength deformed TMT bars of Grade Fe – 500 of IS 1786. (SAIL/ RINL/ TATA TISCO/JINDAL)]	MT	200		
9	Supplying, fabricating, erecting, painting of all types of Mild steel Iron work (sectional weight upto 19.8 kg/m) for all type of structures, sheds, grills, doors, fencing posts etc with approved quality (SAIL/ TISCO/Jindal make) steel structural, angles, channels, plates of all sections at all levels and elevations, painting with 2 (two) coats of high gross enamel paint over a coat of red oxide primer including all cost of materials, transportation, conveyance, taxes, labour charges, T & P, scaffoldings, sundries etc complete in all respect as per direction of Engg- In- Charge	MT	5		
10	Providing , Laying , placing & fixing 50 mm dia PVC Weep holes (150mm length) in Drain walls at different heights, as per drawing including all cost of materials, conveyance, taxes, labour charges, T & P, scaffoldings, sundries etc complete in all respect as per direction of Engg- In- Charge.	No	2500		
TOTAL AMOUNT (A)					
B	Construction of Civil Works for Rain water Harvesting pond.				
11	Earth work in excavation up to 2.0 m depth below existing ground level and Lift upto 8.0 m for the harvesting pond, foundation , trenches, pipe lines, storm water drains etc including setting out, clearing & grubbing, removal of debris, dewatering if required, strutting, shoring/sheet piling if required, as well as simultaneous backfilling for the bund/dyke, dressing the sides, leveling to grade and compacting the bed/formation level by rolling, stacking/disposal of surplus excavated material within a lead of 2.0 KM etc complete for all types of soils including clay, ash, sand, laterite morrum, weathered rock, decomposed rock, soft rock etc by Mechanical means (Hydraulic excavator) etc but does not require chiselling or blasting.	cum	31680		
12	Earthwork in back filling in bund wall, dyke, trenches, around foundations in plinths, drains etc. to proper grade and level with selected excavated materials stacked within a lead of 2 km but not exceeding 5 km, from available excavated soil including re-excavating, loading, transporting, spreading, levelling, watering and compacting in layers of max 30cm thickness to min 95% procter density by mechanical means, compaction with machined compaction machine, dressing etc. complete. (Payment for Back filling under this item of work shall be the actual volume as calculated from site measurement, not exceeding drawing dimensions, minus the volume of concrete surface & volume of paving materials below finished Ground Level as shown in the drawing).	CUM	72540		
13	Supplying and filling of local borrowed earth (including royalty) by mechanical transport upto a lead of 5km also including ramming and watering of earth in layers not exceeding 20cm to 90% to 95% procter density by manual/mechanical means, compaction with machined compaction machine, dressing etc. complete.in dyke,trenches ,plinth, sides of foundation etc. complete as per direction of EIC.	cum	17100		
14	Providing and laying 1000NB non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) for jointing, including testing of joints etc. complete including cost of materials ,loading , un-loading , transporting ,taxes , conveyance etc. all complete as per drawing & instruction of the Engineer-in-charge.	RM	84		

15	Providing and laying Plain Cement Concrete as specified in the drawings, at all levels, for all kinds of works, such as mass concrete, lean concrete, bed blocks, mud-mat, grading, underbed, filling, screed concreting, paving, plinth protection, damp proof course, drains, chambers, trenches, etc., with all labour, ingredient material including cement, equipment, handling, batching, transporting, shuttering, pumping, mixing, shuttering, conveying, placing and compacting, protecting and curing, testing, for all working conditions, etc., all complete, as per specifications, drawings and instructions of the Engineer.M10 (1:3:6) (with graded aggregate of nominal size 12-20mm) (CEMENT - OPC/PSC GRADE 53 :-ULTRA-TECH/ ACC/ AMBUJA/LAFARGE)	cum	631		
16	Providing, laying and fixing M25 grade precast cement concrete solid block / pavement slab conforming to IS:456 (with graded aggregate of nominal size 12-20mm) of size 600mm SQ or 300mm SQ x 75mm thk including proper casting bed preparation, handling, hoisting and setting in position as per drawing, with all labour, tools & plants, material including cement, admixture, equipment, handling, batching, transporting, pumping, mixing, conveying, placing and compacting, protecting and curing, testing, for all working conditions, etc., all complete, as per specifications, drawings and instructions of the Engineer.(CEMENT OPC GRADE 43/53:-ULTRA-TECH/ ACC/ AMBUJA/LAFARGE)	SQM	8408		
17	Supplying & laying 150 mm thick Random rubble stone pitching with cement mortar 1:3 (pointing with CM 1 : 2) with quarried stone boulders of approved quality including providing all materials including cement, transportation, machineries and labour etc complete as per the direction of Engineer-in-charge including construction of necessary ramps, cat ways etc. for all lifts and delifts upto 10m of dyke from average FGL.	cum	255		
18	Providing and laying min 200 micron LDPE lining of approved manufacturer including jointing the sheets by heat jointing with proper laps, anchoring the top edge of sheet into trench filling, labour, tools& plant, conveyance, royalty etc.	SQM	8408		
TOTAL AMOUNT (B)					
Grand Total = A+B (GST SHALL BE EXTRA AT ACTUALS)					
GST SHALL BE EXTRA AT ACTUALS, SAC CODE ALONG WITH APPLICABLE % TO BE INDICATED IN THE BID					