

Broad Scope of job: All Civil and Architectural work for CHP including final micro level grading, backfilling up to required level and handing over of all foundations/buildings/structures to structural/ mechanical/electrical agencies and final handing over to customer for onward operation purposes at 1X800 MW Thermal Power Station, Wanakbori, Distt- Kheda, Gujarat.

ST NO	Description	UNIT	Quantity	Rate	Amount	% weightage w.r.t. the total price
101	Earth work in excavation in all types of soil including ash which can be excavated by any means including setting out, levelling, dewatering (but excluding special type of dewatering viz. well point method), shoring & strutting (wherever required), dressing the sides & bottom, all lifts, ramming/compacting the excavated bottom, stacking, disposal of surplus excavated materials within a lead upto 500 m, spreading/levelling of disposed materials etc all complete for following depths below ground level.					
a	Depth from ground level but not exceeding 2 m	CUM	28300			0.835895500
b	Depth exceeding 2 m but not exceeding 4 m	CUM	24820			0.997025430
c	Depth exceeding 4 m but not exceeding 6 m	CUM	9060			0.473660330
d	Depth exceeding 6 m but not exceeding 8 m	CUM	6290			0.483047170
e	Depth exceeding 8 m but not exceeding 10 m	CUM	5890			0.455808200
f	Depth exceeding 10 m but not exceeding 15 m	CUM	11312			1.045801560
g	Depth exceeding 15 m but not exceeding 20 m	CUM	755			0.093215640
h	Depth exceeding 20 m but not exceeding 25 m	CUM	400			0.060255360
102	Extra over ST No. 101 for dewatering of ground water by well point method as per IS-9759	CUM	500			0.024367970
103	Earth work in excavation in soft rock (rock without any recovery of excavated materials in the form of hard stone/boulder) including weathered rock which can be excavated by means of crow bar, pick axe, pneumatic rock breaker attachment with excavator machine etc but does not require chiselling or blasting including setting out, levelling, dewatering (wherever required), shoring & strutting (wherever required), dressing the sides & bottom, all lifts, ramming/compacting the excavated bottom, stacking, disposal of surplus excavated materials within a lead upto 500 m, spreading / levelling of disposed materials etc all complete for following depths below ground level.					
a	Depth from ground level but not exceeding 2 m	CUM	50			0.002170960
b	Depth exceeding 2 m but not exceeding 4 m	CUM	60			0.004111540
c	Depth exceeding 4 m but not exceeding 6 m	CUM	70			0.005706530
d	Depth exceeding 6 m but not exceeding 8 m	CUM	80			0.007419680
e	Depth exceeding 8m but not exceeding 10 m	CUM	100			0.010042560
f	Depth exceeding 10 m but not exceeding 15 m	CUM	300			0.036950710
g	Depth exceeding 15 m but not exceeding 20 m	CUM	220			0.036129580
h	Depth exceeding 20 m but not exceeding 25 m	CUM	100			0.019139930
107	Back filling upto any depth below ground level around foundations, plinths, trenches, drains etc to proper grade and level in layers not exceeding 250 mm thickness using/with selected materials from compulsorily excavated soil available within a lead upto 500m and compacted as specified including re-excavation of stacked earth, watering, ramming/compaction by manual/mechanical means, dressing etc all complete for the following.					
a	Each layer compacted so as to achieve at least 95% maximum dry density as per IS-2720 (Part-VII)	CUM	48			0.001176750
b	Each layer compacted so as to achieve at least 90% maximum dry density as per IS-2720 (Part-VII)	CUM	11372			0.278792120
c	Each layer compacted so as to achieve at least 85% maximum dry density as per IS-2720 (Part-VII)	CUM	5512			0.125361870
108	Back filling upto any depth below ground level around foundations, plinths, trenches, drains etc to proper grade and level in layers not exceeding 250 mm thickness using/with selected materials directly from excavation and compacted as specified including watering, ramming/compaction by manual/mechanical means, dressing etc all complete for the following.					
a	Each layer compacted so as to achieve at least 95% maximum dry density as per IS-2720 (Part-VII)	CUM	48			0.001134210
b	Each layer compacted so as to achieve at least 90% maximum dry density as per IS-2720 (Part-VII)	CUM	7502			0.177268920
c	Each layer compacted so as to achieve at least 85% maximum dry density as per IS-2720 (Part-VII)	CUM	4780			0.073417020
109	Extra over ST No. 101 and 103 to 107 for carriage of all types of excavated earth/selected materials beyond the initial lead of 500 m (initial lead, loading and unloading included in item 101 and 103 to 107) all complete as per specifications, drawings and instructions of the engineer for the following leads					
a	Carriage beyond initial lead of 500 m but not exceeding 1 Km	CUM	14861			0.158021460
b	Carriage beyond 1 Km and not exceeding 2 Km	CUM	14451			0.307323620
c	Carriage beyond 2 Km and not exceeding 3 Km	CUM	10218			0.325953160
d	Carriage beyond 3 Km and not exceeding 4 Km	CUM	8350			0.355152210
110	Back filling upto any depth below ground level around foundations, plinths, trenches, drains etc to proper grade and level in layers not exceeding 250 mm thickness using/with approved borrowed soil (borrowed soil to be arranged by the bidder) and compacted as specified including supplying borrowed soil, royalty (if any), watering, ramming/compaction by manual/mechanical means, dressing etc all complete for the following.					
a	Each layer compacted so as to achieve at least 95% maximum dry density as per IS-2720 (Part-VII)	CUM	48			0.003955580
b	Each layer compacted so as to achieve at least 90% maximum dry density as per IS-2720 (Part-VII)	CUM	5350			0.444043640
c	Each layer compacted so as to achieve at least 85% maximum dry density as per IS-2720 (Part-VII)	CUM	1598			0.120832090
111	Supplying and filling sand upto any depth under floors, around foundations, plinths etc. in layers not exceeding 250 mm thickness and compacted so as to achieve at least 85% relative density as per IS-2720 (Part-XIV) including spreading, watering, ramming/compaction by manual / mechanical means, dressing, royalty (if any) etc. all complete.	CUM	1742			0.434086230
200 CONCRETE WORKS						
	Providing and placing concrete work including cost of labour, materials and equipment for handling, transportation, batching, mixing, placing, vibrating and curing, (excluding cost of centering, shuttering and reinforcement) with mechanised equipments like batching plant, transit mixer, concrete pump etc. complete as per drawing, specifications and as per direction of engineer in charge for the following. (Cement will be supplied by BHEL free of cost as per TCC):					
202	Concrete of grade M10 (1 part cement, 3 part sand, 6 parts of 40 mm graded aggregate by volume) as lean concrete, levelling course, mud mat under and around foundations/floors at any depth below finished floor level etc.	CUM	3868			2.406767280
203	Concrete of grade M15 (1 part cement, 2 part sand, 4 parts of 40 mm graded aggregate by volume) as lean concrete, levelling course, mud mat under and around foundations/floors at any depth below finished floor level etc.	CUM	368			0.233000640
204	Concrete under floors, paving, plinth protection, pipe encasing etc complete with 20 mm nominal size graded aggregate at any depth below finished floor level for the following grades.					
a	M15 Grade	CUM	387			0.253717970
b	M20 Grade	CUM	1			0.000651470
205	Providing and laying Design Mix cement concrete conforming to IS:456 & IS 10262-2009 for reinforced concrete works with coarse sand and graded hard stone aggregate of 20mm nominal size in foundations/ substructure, grade slab, paving, drains, under floors etc at any level below finished floor level, any shape, position or thickness etc complete including use of plasticizer/ superplasticizer conforming to IS:9103 (latest) to achieve required slump in concrete all complete as per specification & drawing for the following.					
a	M25 Grade	CUM	12277			9.232724050
b	M30 Grade	CUM	89			0.087407200
206	Providing and laying Design Mix cement concrete conforming to IS:456 & IS 10262-2009 for reinforced concrete works with coarse sand and graded hard stone aggregate of 20mm nominal size in superstructure at any level above finished floor level, any shape, position or thickness etc complete including use of plasticizer/ superplasticizer conforming to IS:9103 (latest) to achieve required slump in concrete all complete as per specification & drawing for the following.					
a	M25 Grade	CUM	4017			3.928374870

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ST NO	Description	UNIT	Quantity	Rate	Amount	% weightage w.r.t. the total price
b	M30 Grade	CUM	460			0.421196810
211	Providing and encasing of structural steel member with concrete using nominal aggregate size of 12.5mm down. Encased member shall be wrapped with welded wire mesh/chicken wire mesh with proper lap etc. complete as per specification for the following grades .(Payment of welded wire mesh ,chicken wire mesh shall be made separately)					
a	M20 Grade	CUM	8			0.004798310
b	M25 grade	CUM	8			0.007296990
212	Screed concrete conforming to IS 456 with coarse sand and graded hard stone aggregate 12.5mm/6 mm nominal size on the roof at any level or thickness, drains etc complete as per following.					
a	1:2:4 (1 part cement, 2 part sand, 4 parts of aggregate by volume)	CUM	225			0.187345440
b	1:1.5:3 (1 part cement, 1.5 part sand, 3 parts of aggregate by volume)	CUM	46			0.046924580
213	Providing and laying Design Mix cement concrete as per IS:456 & IS 10262:2009 for reinforced concrete works using graded aggregate for Concrete in precast works like roof slabs/trench covers, fins, lintels, chajjas, beams, columns, wall panels, facias etc.at all levels in all kinds of work including formwork/moulds, curing, rendering the top exposed surface with cement sand mortar (1:3), handling, storing, transporting, all leads, erection without damage, setting in position with cement sand mortar (1:3), filling the gaps between adjacent precast units with M30 grade concrete or cement sand mortar (1:3) and including making of holes for bolts for fixing, welding etc.complete with graded aggregate (20/12.5/10 mm) and as per specification and drawing for following grades.					
a	M 25 grade	CUM	150			0.229328370
214	Providing and laying Design Mix cement concrete as per IS:456, IS 3370 & IS 10262:2009 for reinforced concrete works using graded aggregate for Concrete in water retaining/conveying structures including addition of suitable plasticizer cum water-proofing cement additives conforming to IS 9103 latest to achieve a slump more than 125 mm in concrete as per manufacturers recommendation and conforming to limits of permeability as per IS 2545 and specification with 20 mm nominal size graded aggregate for following grades, below plinth level upto any level.					
a	M 25 grade	CUM	165			0.129836480
b	M 30 grade	CUM	10549			12.215386900
215	Dismantling concrete work for all types of structures at all levels including stacking of servicable material to a lead of 500 m and disposal of unservicable material upto a lead of 2 km, cutting of reinforcement, labour, equipment, safety precautions etc all complete as per drawings, specification and instructions of engineer in charge.					
a	Plain cement concrete of all grades	CUM	58			0.031007880
b	Reinforced cement concrete of all grades	CUM	2049			1.546316590
216	Chipping of concrete in reinforced concrete work, cutting pockets, making openings at all levels and according to shapes, disposal of waste materials upto a lead of 2 km as directed by engineer including equipment, safety precautions, making good the broken surface etc all complete as per specification, drawing, instructions of engineer in charge but excluding cutting of reinforcement.	CUDM	5			0.000137340
217	Extra over and above St No 216 for cutting of reinforcement , all sizes and types including labour, equipment, return of cut reinforcement to store etc all complete as per specification, drawings and instructions of engineer in charge. Measurement shall be on the cross sectional area of reinforcement cut.	SQCM	10			0.000313090
218	Cutting Reinforced concrete with mechanised tools like Core drilling machine etc. for cutting pockets, holes, cores in slab, beam, column or foundation as per direction of engineer in charge.	CUDM	10			0.000286500
219	Providing and applying curing compound of approved make where ever required as per manufacturer's specification.	SQM	5			0.000063500
220	Providing & laying Plum cement concrete 1:3:6 with 75% graded metal of maximum size 40 mm and 25%plums of maximum size 150 mm.	CUM	325			0.206350990
300 FORM WORKS						
	Providing, fixing and removing formwork at any elevations for all structures, as per specifications and including all labour, material, scaffoldings and centering complete including pockets etc. complete as per drawing, specifications and as per direction of engineer in charge for the following.					
301	Fairface form work with good quality water proof ply wood of required thickness and smooth surface below finished ground floor level for foundations, footings, base of columns, walls, columns, pilasters, beams, concrete, trenches etc.	SQM	51163			4.684715800
302	Fairface form work with good quality water proof ply wood of required thickness and smooth surface above finished ground floor level for columns, beams, suspended floors, roofs, lintels, cantilevers, staircases, landings, balconies, domes, arches, circular overhead tanks etc. for all heights.	SQM	17762			2.061816300
304	Providing, fixing and removing formwork in block-outs/pockets and openings (below 0.1 sqm plan area) at all elevations including cutting, formation of all shapes and all other operations required for making the required shape and size all complete as per specification, drawing and instruction of engineer in charge.					
a	Upto 150 mm depth	Each	125			0.013660830
b	Pockets of depths more than 150mm and upto 300 mm depth	Each	62			0.007032150
c	Pockets of depths more than 300mm and upto 600 mm depth	Each	25			0.004511760
d	Pockets of depths more than 600mm and upto 1000 mm depth	Each	1			0.000250470
e	Pockets of depths more than 1000mm and upto 1500 mm depth	Each	1			0.000368320
400 REINFORCEMENT						
401	Transportation, straightening, cutting, bending, placing in position at any level, binding of mild steel reinforcements conforming to grade 1 of IS:432 part 1 in concrete including cost of binding wire, labour, scaffolding, transportation to & from stores etc complete all as per specifications, drawings and as directed by Engineer. (Reinforcement shall be provided by M/S BHEL Free of cost)	MT	10			0.023387350
402	Transportation, straightening, cutting, bending, placing in position at any level, binding of at any level, binding in position of steel reinforcements of TMT steel of grade Fe-500/500D/ 500EQR conforming to IS:1786 including cost of binding wire, labour, scaffolding, transportation to & from stores etc complete all as per specifications, drawings and as directed by Engineer. (Reinforcement shall be provided by M/S BHEL Free of cost)	MT	4282			8.011065380
407	Transportation, straightening, cutting, bending, placing in position at any level, binding of at any level, binding in position high yield strength steel reinforcements in brickwork including cost of binding wire, labour, scaffolding, transportation to & from stores etc complete all as per specifications, drawings and as directed by Engineer.(Reinforcement shall be provided by M/S BHEL Free of cost)	MT	2.0			0.004677470
500 WATER PROOFING WORKS						
	Water proofing works including all labour, material, equipment, transportation, handling, curing, sampling, testing etc at any level as per specification, drawings and as directed by engineer-in-charge.					
501	Providing and laying underbed grading plaster with cement mortar 1:4 (1 cement : 4 sand) and average thickness of 25 mm including preparation of surface, batching, mixing, leveling etc. all complete.(Cement will be supplied by BHEL free of cost as per TCC):	SQM	135			0.003867860
502	Providing and laying rigid insulation (Expanded polystyrene blocks) with tongue & groove arrangement for easy application as per relevant IS Code in suitable panels over roofs followed by a layer of 15 mm thick cement sand plaster 1:4 (1 cement: 4 coarse sand) and providingof expansion joint at intervals and filling with sealant in both directions as per the recommendation of manufacturer. The insulating properties shall be such that the thermal conductivity shall not exceed 0.026 Kcal m/m deg C or as per specification. The block shall be strong enough to withstand without deformation the workload and standard loads expected on the roof and water absorption capacity of the board should be low (appx. 0.05-0.07%) per relevant IS/ASTM standard. Cost shall include making of fillets, cleaning & preparation of surface, expansion joints at suitable intervals etc all complete for following.					

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ST NO	Description	UNIT	Quantity	Rate	Amount	% weightage w.r.t. the total price
a	Average 50mm thickness	SQM	801			0.189509320
506	Providing and applying PU based bitumen modified water proofing treatment with one coat of polyurethane or any other equivalent material based primer with an application rate of minimum 6 sq.m per litre and two successive liquid coatings of high solids content polyurethane pre-polymers or equivalent material based finish coats as per relevant IS/ASTM standards to form an elastomeric membrane with overall dry film thickness 1.5 mm subject to minimum 500 gm/sqm/coat application rate. Item includes surface preparation, polyscrim cloth/fabric for edges, polymerised mortar base preparation, joints & vulnerable points etc all complete as per specifications and directions of engineer in charge.	SQM	630			0.131932660
A507	Providing and laying wearing course consisting of 25mm thick plain cement concrete of grade M15 (1:2:4) with graded aggregate of 12.5mm size cast in panels of maximum size 1.2m x 1.2m and reinforced with 0.56 mm dia. galvanised chicken wire mesh and sealing of joints (in grooves of 6mm X 6mm) using silicon /elastomeric compound etc all complete. (Cement will be supplied by BHEL free of cost as per TCC).	SQM	630			0.046892850
A508	Providing and laying pressed precast cement concrete chequered flooring tiles of minimum 20 mm thickness and size 250 x 250 mm/ 300 x 300 mm conforming to IS 13801 with 15 mm thick 1:4 cement mortar over the top most/intermediate layer in pathways and entire equipment area with fine joints including sealing of joints (polysulphide sealant) etc all complete. (Water proofing paid elsewhere) (Cement will be supplied by BHEL free of cost as per TCC).	SQM	337			0.043299680
509	Providing and applying two coats of bitumen grade 85/25 as per IS 702 (@ 1.7kg/sqm) with 1% antistripping compound conforming to IS 6241 in foundation, wall, column etc on concrete surfaces exposed to soil / ash including surface preparation etc. all complete.	SQM	5034			0.220059680
512	Anti termite chemical treatment of soil with Chloropyrifos emulsifiable concentrates (1%) conforming to IS :8944 all complete.	SQM	365			0.008409160
A 513	Providing integral water proof treatment consisting of screed concrete, comprising of one coat of water proof chemicals of rubberized modified bituminous emulsion similar to EMUFAL TE of TEXSA or approved equivalent and 1.5 mm thick Self adhesive water proof membrane similar to Texself H.D of TEXSA or approved equivalent over chemical treatment. Top of water proof membrane shall be protected with 25 mm thick cement concrete 1:2:4 with 0.56 dia. chicken wire mesh. Top of protective layer shall be covered with extruded high density polystyrene insulation as per HVAC requirement but not less than 50mm thick. Top of insulation shall be protected with 25 mm thick cement concrete 1:2:4 with 0.56 dia. chicken wire mesh in panels of maximum size 1.2Mx1.2M. Joints shall be sealed with polysulphide sealant. Rate is inclusive of all system mentioned in item	SQM	2234			1.605427990
JNTS AND FILLERS						
Joints & fillers including all labour, material, equipment, transportation, handling etc at any level as per specification, drawings and as directed by engineer - in - charge.						
601	Supplying & installation of bitumen impregnated fibre board conforming to IS 1838 as joint filler at joints in concrete including nailing, coating of both faces with coal tar pitch/bitumin etc. all complete.					
a	12 mm wide joints.	SQM	392			0.114279610
c	25 mm wide joints	SQM	392			0.185139920
d	50 mm wide joints	SQM	329			0.200183680
A601	Supplying and installation of Dura board HD100 or its equivalent as approved by the Engineer, as filler material in joints including nailing, installation as per manufacturer's recommendation etc. all complete.					
a	12 mm wide joints.	SQM	5			0.000531660
c	25 mm wide joints	SQM	5			0.001107630
d	50 mm wide joints	SQM	5			0.002215270
602	Providing and applying polysulphide based sealant conforming to IS:12118 in expansion joints in concrete including cleaning of joints, raking out groove, application of primer, scaffolding etc. all complete for following size grooves:					
a	12mm X 25mm	RM	639			0.026989970
c	25mm X 25mm	RM	217			0.025381680
d	50mm X 25mm	RM	79			0.018480670
603	Supplying and filling in position hot applied bitumin sealing compound (Grade A) conforming to IS 1834 including cleaning, mixing, heating, pouring/injecting sealing compound in gaps in joints including application of primer etc. all complete.					
a	10mm X 40mm	RM	5			0.000017720
b	12mm X 25mm	RM	5			0.000013290
606	Providing and fixing PVC water stops in joints conforming to IS 12200 & IS 15058 all complete for the following:					
a	150 mm wide and 8 mm thick	RM	50			0.004430540
b	230 mm wide and 8 mm thick	RM	896			0.109300860
IS EMBEDMENTS						
Embedments including all labour, material, equipment, transportation, handling etc. at any level as per specification, drawings and as directed by engineer - in - charge.						
701	Supply, Fabricating and fixing of mild steel embedments, inserts, pipe sleeves, angle pieces, rungs of various diameters, plates of dimensions as required etc. including welding, bolting, cutting, drilling, scaffolding, setting etc. all complete	MT	18			0.367205050
702	Transport from store, fabricating and fixing of mild steel embedments, inserts, angle, channel, ISMBs, pieces, plates of dimensions as required etc. including welding, bolting, cutting, drilling, scaffolding, setting etc. all complete. BHEL will supply plates, angles, channel & ISMB etc. free of cost as per TCC.	MT	18			0.115504210
703	Assembly, welding, Fixing of embedments, inserts, pipe sleeves, angle pieces, anchor bolts of various diameters, plates of dimensions as required etc. including scaffolding, setting in position, transportation from BHEL site stores to work spot etc. all complete. Fabricated material will be supplied by BHEL free of cost as per TCC.	MT	18			0.077468900
704	Transportation from store and erection, installation and alignment of mild steel foundation bolt assembly conforming to IS:2062 and grade 1 of IS:432 in concrete along with nuts, lock nuts (as per IS:1363, 1364 and IS:3138), washers, anchor plates, stiffner plates, protective tape, pipe sleeves, templates etc. including welding, etc. all complete with protective coating as per specification. (BHEL will supply Fabricated material free of Cost as Per TCC)	MT	25			0.126477190
704 A	Supply, Fabrication, transportation, delivery at site and erection, installation and alignment of mild steel foundation bolt assembly conforming to IS:2062 and grade 1 of IS:432 in concrete along with nuts, lock nuts (as per IS:1363, 1364 and IS:3138), washers, anchor plates, stiffner plates, protective tape, pipe sleeves, templates etc. including welding, cutting, grinding, threading, drilling etc. all complete.	MT	25			0.632385960
705	Supplying, fabricating, erecting and installing following items in concrete/brickwall for all kind of works, including setting material in concrete, layout, scaffolding, cutting, forming, grinding, drilling, bolting, welding, jointing, testing etc. all complete. Contractor to supply all materials.					
a	MS pipes of all diameters	Quintal	7			0.017963180
d	Expansion fasteners (mechanical galvanised) of HILTI make or equivalent of safe tensile capacity as specified below for brick work with expansion sleeve of A6 polyamide:					
i	Upto 250 kg	Each	4			0.000322540
ii	Beyond 250 Kg and upto 500 kg	Each	4			0.000500940
iii	Beyond 500 Kg and upto 750 kg	Each	4			0.000808130
e	Expansion fasteners (mechanical galvanised) of HILTI make or equivalent of safe tensile capacity as specified below for concrete work with expansion sleeve of stainless steel:					
i	Upto 250 kg	Each	3			0.000286210

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ii	Beyond 250 Kg and upto 500 kg	Each	4			0.000581280
iii	Beyond 500 Kg and upto 750 kg	Each	4			0.000913280
706	Placing, locking and releasing of Vibration Isolation spring modules over the foundation at all elevations including providing all assistance under the supervision of the supplier, transportation from BHEL store, necessary staging, platforms, leveling, alignment etc. all complete.	Each	5			0.001784030
90 GROUTING						
	Grouting including all labour, material, equipment, roughening surface, cleaning, ramming, curing etc. at any level unless otherwise specified as per specification, drawings and as directed by engineer - in - charge.					
801	Providing & grouting with cement slurry mix of approved ratio using pressure pump for water retaining concrete structures as per approved procedure including cost of nipples/ nozzles, cement, admixture, curing, pressure pumps, slurry agitator etc. all complete. Cost shall include fixing of nipples at minimum 500 mm centre to centre spacing, cutting of nipples after completing of grouting, making good of the nipple hole with appropriate non-shrink cement paste, water tightness test etc. all complete wherever specified in the drawing. (Cement will be supplied by BHEL free of cost as per TCC);	SQM	250			0.032195260
802	Providing & grouting of pocket holes, pipe sleeves under base plates, machinery, pipe supporting structures etc. with mix 1:1 (cement :1 sand) using non shrink admixture etc. all Complete. (Cement will be supplied by BHEL free of cost as per TCC);	CUM	6			0.032637140
803	Providing & grouting of pocket holes, pipe sleeves and under base plate of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing etc. all complete with mix 1:1:2 (1 cement : 1 coarse sand : 2 aggregate of 6 mm down graded stonechips) using non shrink admixture as per specification, drawing and direction of engineer-in-charge. (Cost of all material and cleaning the pocket by compressed air shall be in the scope of the contractor). (Cement will be supplied by BHEL free of cost as per TCC);	CUM	4			0.014441200
804	Providing & grouting (Non shrink precision) of pocket holes, pipe sleeves and under base plates of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing etc. all complete with Conbextra GP-1 / MasterFlow 718 or equivalent as per specification, drawing and direction of engineer-in-charge. (Cost of all material and cleaning of the pockets by compressed air shall be in the scope of the contractor).	CUM	18			0.282159920
805	Providing & grouting (Non shrink precision) of pocket holes, pipe sleeves and under base plates of structural steel work/ machinery/ pipesupporting structures including roughening of surface, cleaning, ramming, curing, etc. all complete with Conbextra GP-2 / MasterFlow 928or equivalent as per specification, drawing and direction of engineer-in-charge. (Cost of all material and cleaning of the pockets by compressed air shall be in the scope of the contractor).	CUM	12			0.208884080
900 DOORS, WINDOWS, VENTILATORS, LOUVERS						
	Doors, windows, ventilators, louvers, roof ventilators, rolling shutters, partitions including all labour, material, equipments, transportation, handling, preparation of working drawings etc. at any level as per specification, drawings and as directed by engineer - in - charge.					
901	Providing and fixing wooden frame conforming to IS 4021 made of best quality seasoned CP teakwood free from large or loose knots, cracks or other defects including sand paper smoothing, hold fasts, beading, primer and finish painting / polishing etc. all complete with proper wood joinery, accurately set to required lines or levels and rigidly secured in place. (Finish painting / polishing paid separately)	CUM	1			0.030851040
902	Providing and fixing teakwood frame panel door shutter as per IS 1003 with 35 mm x 150 mm vertical rail & 35mm x 125 mm horizontal rail and 12 mm thick interlocked marine panels of teakwood with proper wood joinery including beading, preparation of working drawings, godrej or equivalent make mortice lock with handels on both sides, approved ISI mark anodised fittings like door stopper, 300mm long tower bolts, 16x300mm long aldrops , 125mm long handles on both sides etc. butt hinges, sliding bolt, knobs, (all fitting shall be anodised aluminium color dyed), screws, primer and finish painting / polishing etc. all complete. (Finish painting / polishing paid separately)	SQM	4			0.004284030
A903	Providing, fitting and fixing solid core flush door shutter as per IS 2202 part II, 35mm thick homogenous ply board bonded with BWP type phenolformaldehyde synthetic resin, ply board core conforming to IS 3087 type I, 35x12 mm thick teakwood beading all around including preparation of working drawings, godrej or equivalent make mortice lock with handels on both sides, approved ISI mark anodised fittings like door stopper, 300mm long tower bolts, 16x300mm long aldrops , 125mm long handles on both sides etc. butt hinges, sliding bolt, knobs, (all fittings shall be anodised aluminium color dyed), finish synthetic paint over primer, screws etc. all complete as per drawing, specification and instruction of engineer in charge. with commercial faces and teak wood edges. (Finish painting paid separately)	SQM	4			0.004504970
904	Providing and fixing single or double steel door shutters with 45mm thk flush design shutter comprising of two outer sheets of 18gauge steel sheets rigidly connected and reinforced inside with continuous vertical 20 gauge stiffeners, spot welded in position at not more than 150mm on centres including void filled with mineral wool (density as per specification), all fittings, Godrej or equivalent makemortice lock with handle on both sides, shop and final painting etc all complete.	SQM	422			0.720577960
906	Providing and fixing anodized extruded aluminium doors (single or double shutter) conforming to IS:1948, IS:1949 fabricated from extruded sections of HINDALCO/JINDAL or equivalent make having minimum 3mm wall thickness as per IS:1285, IS:733 and anodized and electro color coating of required shade as per IS 1868 (minimum anodized coating of grade AC15). fixed with rawl plugs, expansion fasteners, SS screws / fixing clips necessary filling of gaps at Junctions, at top, bottom & sides with required PVC / neoprene felt for bimetallic protection etc. Glazing shall be clear float glass of 6mm thickness including snap fit type beading, concealed screws, fixtures, Godrej or equivalent make Mortice lock with handle on both sides, etc all complete. Aluminium section shall be smooth, free of stains, straight, mitred & jointed mechanically wherever required. (Glazing shall be paid separately)	SQM	21			0.033687170
907	Providing and fixing automatically closing fire proof steel door satisfying LPA regulations (single or double shutter) with panic device shall be minimum 44mm thk flush design comprising of two outer sheets of 18 gauge steel sheets rigidly connected and reinforced inside with continuous vertical 20 gauge stiffeners, spot welded in position at not more than 150mm centres to centers including all fittings, vision glass, shop painting with approved post office/signal red color fire resistant paint and mineral wool insulation (64 kg/cum density) complete and shall be fire proof as per IS:3614. LPA requirements and as per specification. Minimum ratings shall be 2 Hrs. All hardware fittings shall be fire rated. Payment terms - a) On receipt of materials at site - 65%; b) On completion of erection & fixing - 35%.	SQM	4			0.017276740
908	Providing and fixing steel windows/ventilators with steel sections as per IS-1038 , IS-1361, IS- 7452 latest revision including all fittings , metal beadings , hold fast , shop and final painting , glazing etc. all complete. (glazing shall be paid seperately)					
a	Operable type	SQM	797			0.653025780
b	Fixed Type	SQM	342			0.268501450

Broad Scope of job: All Civil and Architectural work for CHP including final micro level grading, backfilling up to required level and handing over of all foundations/buildings/structures to structural/ mechanical/electrical agencies and final handing over to customer for onward operation purposes at 1X800 MW Thermal Power Station, Wanakbori, Distt- Kheda, Gujarat.

ST NO	Description	UNIT	Quantity	Rate	Amount	% weightage w.r.t. the total price
909	Providing and fixing anodised aluminium work of Jindal, Hindalco or other equivalent approved make for door frames, windows, ventilators, partitions, railing etc with extruded standard tubular and other sections including all fittings & fixtures and accessories of approved make conforming to IS733 and IS1285, anodised and electro color dyed to required shade according to IS 1868 (minimum anodic coating of grade AC15), fixed with rawl plugs, expansion fasteners, SS screws or with fixing clips, including necessary filling of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt for bi-metallic protection etc. including preparation of working drawings, aluminium cleat angle, aluminium snap-on-beading for glazing/panelling, stair case tread nosing, with all fittings and fixtures (like tower bolts, handles, door stopper with rubber shoes, 'L' drops, stays, floor springs, hydraulic door closures etc.), CP brass/stainless steel screws, providing and fixing hinges/pivots, and making provision for fixing of fitting wherever required including cost of PVC/neoprene gasket, all complete as per drawing, specification and instructions of engineer in charge (Glazing and panelling shall be paid separately). Weight of aluminium section only shall be measure	Kg	170			0.022696180
912	Providing and fixing pressed steel frames fabricated from 16 gauge M.S sheet mortised, filled with concrete/cement sand mortar 1:6, reinforced drilled and tapped for hinges and locks bolts strikes, hold fasts adjustable floor anchors, floor tiles/weather bars, paintings etc all complete as per specifications.	Kg	5			0.000162450
913	Providing and fixing in position rolling shutter of hot rolled double dipped galvanised steel lath section of 18 SWG tested mild steel strips at 75mm rolling centres interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides of 75mm wide and 3mm thick (min.) and arrangements for inside and outside locking with push and pull operation including wire springs, single top/hood cover 0.9 mm thick (min.), primer & shop coats of approved enamel paint etc, all complete as per IS 6248 and specification of approved make of following types: The bottom lath shall be coupled to a lock plate fabricated from 3mm thick galvanised steel plate and securely rivetted with stiffening angles (partly coiled and latvfull lath).					
b	Mechanically Operated	SQM	11			0.012479650
914	Providing and fixing PVC frame with PVC doors (25 thk double skin) of sintex or equivalent make including all fitting & fixtures as per specification, drawing and instructions of engineer in charge.	SQM	14			0.010962340
915	Providing, fixing and fitting of glazing of first grade class in steel/aluminium/wooden frames, where ever required, cleaning after fixing including hardware, gaskets, clips, beadings etc. all complete.					
f	4 mm thick ground glass	SQM	150			0.024899640
i	Two nos. 6 mm thick clear toughened float glass hermetically sealed and separated by 10 mm (min.) thick air gap for thermal insulation (only single elevation area to be measured)	SQM	150			0.127998340
k	One outer 6mm thick tinted heat-reflecting type toughened float glass and one inner 6mm thick toughened clear float glass hermetically sealed and separated by 10 mm (min.) thick gap for thermal insulation (only single elevation area to be measured).	SQM	150			0.120776560
n	6 mm thick clear float glass	SQM	432			0.094423700
A916	Providing Block board construction flush door with teak wood ply on both faces 25 mm thick including ISI marked nickel plated bright finished M.S. Piano hinges IS : 3818 marked with necessary screws	SQM	30			0.017407150
A917	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick					
a	Second class teak wood	SQM	14			0.010598440
b	Decorative plywood both side decorative veneer (Type - I) conforming to IS 1328 BWR type	SQM	14			0.007364740
918	Providing and fixing Steel louvered window with ISMC 100 frame all round including verticals with 18G pressed steel louvers, painting etc. All complete.	SQM	6			0.005320190
A922	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.					
a)	Fixed to steel windows by welding	Kgs	80			0.002437380
1000 BRICKWORK						
	Brickwork masonry including all labour, material, equipment, transportation, handling, scaffolding etc. at all levels as per specification, drawings and as directed by engineer - in - charge. (Cement for Mortar will be supplied by BHEL free of cost as per TCC):					
1001	Providing brick work in cement mortar 1:6 (1 part cement 6 parts coarse sand) in walls, chambers etc. in thickness varying from 230mm to 460mm at all depths, places and positions below plinth including raking out joints, curing, scaffolding etc. complete excluding plastering and painting					
a	Using fly ash lime bricks conforming to IS 12894-2002 with minimum crushing strength of 50 kg/cm2	CUM	179			0.133023760
1002	Providing brick work in cement mortar 1:6 (1 cement 6 coarse sand) in walls, chambers etc. in thickness 230mm at all heights, places and position above plinth including raking out joints, curing, scaffolding etc complete excluding plastering and painting.					
a	Using fly ash lime bricks conforming to IS 12894 with minimum crushing strength of 50 kg/cm2	CUM	1738			1.725376340
1003	Providing brick work in cement mortar 1:4 (1 cement 4 coarse sand) in partition walls, chambers etc. in thickness 115mm at all heights, places and position above or below plinth/graded level including providing two nos. 6 mm diameter MS bars at every third layer, raking out joints, curing, scaffolding etc complete excluding plastering and painting as per specification.					
a	Using fly ash lime bricks conforming to IS 12894 with minimum crushing strength of 50 kg/cm2	SQM	415			0.057734380
1004	Providing brick soling including spreading of earth, ramming, watering including 25mm thick cushion of sand complete but excluding excavation and disposal of surplus earth (excavation and disposal of surplus earth shall be measured under applicable item). Using brick on edge.					
a	Using fly ash lime bricks conforming to IS 12894 with minimum crushing strength of 50 kg/cm2	SQM	50			0.004327160
1005	Providing brick soling including spreading of earth, ramming, watering including 25mm thick cushion of sand complete but excluding excavation and disposal of surplus earth (excavation and disposal of surplus earth shall be measured under applicable item). - Using flat bricks.					
a	Using fly ash lime bricks conforming to IS 12894 with minimum crushing strength of 50 kg/cm2	SQM	60			0.004448260
1006	Breaking of existing brick work at all levels including plastering, removing the rubbish up to a distance of 500 m including transportation, loading, unloading etc. all complete as directed by the engineer.	CUM	10			0.002534260
1007	Providing and encasing of structural steel member with masonry work around flanges, webs etc. and filling the gap between steel and masonry by minimum 12mm thick mortar. Encased member shall be wrapped with chicken wire mesh with 50mm lap etc. complete as per specification	CUM	45			0.037535540
1008	Providing and laying 75 mm thick bed of dry brick aggregate including of excavation, disposal of surplus earth spreading of earth, ramming, watering etc. complete in all respects as directed by the engineer	SQM	45			0.002153240
1009	Making openings in existing brick wall or partition wall including making good the broken edges/surface with cement mortar etc.	CUM	10			0.003396740
1010	supply and placing in position mild steel wire fabric of square mesh 25 mm size and wire diameter of 2 mm for encasing of steel section in concrete including cutting, bending, fixing etc. complete.	SQM	50			0.003706880
1011	Filling existing brick wall partition wall opening at all level including making good the broken edges/surface with cement mortar, painting, finishing to match with existing finishing, scaffolding/supporting at any level, removal of debris upto a lead of 1 km including loading, unloading, transportation etc. all complete	SQM	20			0.003928410
1012	Providing and filling brick bats in soak pits all complete.	CUM	36			0.011398890
1100 DAMP PROOF COURSE						

Broad Scope of job: All Civil and Architectural work for CHP including final micro level grading, backfilling up to required level and handing over of all foundations/buildings/structures to structural/ mechanical/electrical agencies and final handing over to customer for onward operation purposes at 1X800 MW Thermal Power Station, Wanakbori, Distt- Kheda, Gujarat.						
ST NO	Description	UNIT	Quantity	Rate	Amount	% weightage w.r.t. the total price
	Damp proof course including all labour, material, equipment, transportation, handling, shuttering, centering, curing etc at any level as per specification, drawings and as directed by engineer - in - charge.(Cement will be supplied by BHEL free of cost as per TCC):					
A1101	Providing Damp Proof Course 50mm thick 1:1.5:3 concrete (10mm and down graded aggregate) with 2% of approved admixture of water proofing compound all complete. Two layers of hot bitumen coating 85/25 grade as per IS:702 @ 1.7Kg./sqm shall be applied one before & one after the DPC.	SQM	855			0.094054300
	1200 CEMENT MORTAR PLASTER					
	Cement mortar plaster including making grooves wherever required including all labour, material, scaffolding, curing etc at any level as per specification, drawings and as directed by engineer-in-charge. (Cement will be supplied by BHEL free of cost as per TCC):					
1201	Providing 20mm thick plaster in two layers(bottom layer 12mm thick with 1:3 cement sand mortar and top layer 8mm thick with 1:1 cement sand mortar with fine sand) outside the building/boundary walls etc., finished to a smooth finish including providing 3mmx3mm size grooves at junctions of two dissimilar materials all complete.	SQM	7322			0.259283100
1202	Providing 12mm thick plaster inside the building/boundary wall etc. in cement mortar 1:6 on walls finished to a smooth finish as per specification all complete.	SQM	6378			0.177083420
1203	Providing 15mm thick plaster in cement mortar 1:6 on walls with rough finish all complete.	SQM	944			0.028022280
1204	Providing 10 mm thick plaster on ceiling in cement mortar 1:4 finished to a smooth all complete.	SQM	1515			0.069061800
1206	Providing and making decorative plaster of all types and design on walls, ceilings, arcs, columns with various thickness upto 18 mm including finishing all complete.	SQM	30			0.001692460
1207	Forming groove of uniform size from 12X12 mm upto 20X15 mm in plastered surface as per approved pattern, using wooden battens nailed to the under layer, including removal of wooden battens, repair of the edges of plaster panel and finishing the groove etc. complete as per specification, drawing and the instructions of engineer in charge.	RM	75			0.000708880
1208	Providing drip course, moldings, cornices on plastered surface at all elevations for all type of work such as chajias, parapet, projections etc. including scaffolding, finishing etc. complete with all labour, tools and plants as per specification, drawing and instructions of engineer in charge	RM	75			0.000443050
1210	Ruled pointing in masonry in CM 1:3 (1 cement and 3 fine sand) including raking out joints, curing etc. complete.	SQM	75			0.001351310
	1300 FINISHES TO CONCRETE / PLASTERED SURFACES					
	Finishes, painting to concrete, plastered surfaces including all labour, material, equipment, surface preparation, scaffolding etc. at any level as per specification, drawings and as directed by engineer-in-charge. (PAINTS OF REPUTED BRAND OF REPUTED MANUFACTURER LIKE IC/BURGER/ASIAN PAINTS OR EQUIVALENT)					
1304	Two or more coats of acrylic washable distemper of approved brand and manufacture to give an even shade including a priming coat with distemper primer complete.	SQM	5709			0.126469800
1305	Providing and applying two or more coats of acrylic emulsion paint as per IS 5411 of approved brand, shade and manufacture to give smooth, hard, durable & glossy finish over a coat of primer over prepared plaster surface as per manufacturers guideline.	SQM	1868			0.065658260
1306	Providing and applying 2 or more coats of acid/alkali resistant paint of approved brand and colour to floors, walls and ceiling including preparation of surface to receive paint, providing and applying bitumen primer conforming to IS 158 complete all as per manufacturer's recommendations and as approved by engineer, at all heights above or below grade level, complete as per specifications.	SQM	10			0.000930410
1307	Two or more coats of fire resistant transparent paint as per IS 162 on all woodwork over french polish as per IS 348 or flat oil paint as per IS 137 of approved grade and manufacture to give an even shade as per specifications.	SQM	10			0.001169660
1309	Two or more coats of synthetic enamel paint of approved make made from synthetic resins and drying oil with rutile titanium dioxide and other selected pigments to give smooth, hard, durable & glossy finish to all interior and exterior surfaces complete.	SQM	11			0.000292410
A1312	Providing and applying 2 mm thick white cement punning on walls including preparation of surface ,staging etc to achieve a smooth even surface all complete as per specification and as directed by engineer	SQM	1868			0.047119450
A1313	Providing and applying ready made Epoxy Paint over areas other than steel structure with suitable pigments of approved shade as per specification and direction of Engineer. The epoxy paint shall be a two pack material and shall be resistant to water, splash, spillage & acidic environment. The epoxy paint coating shall be of 250 micron thickness over epoxy primer.	SQM	11			0.001873620
B1313	Providing and applying ready made Epoxy oil resistant Paint over areas with suitable pigments of approved shade as per specification and direction of Engineer. The epoxy paint shall be a two pack material and shall be resistant to water, splash, spillage & acidic environment. The epoxy paint coating shall be of 250 micron thickness over epoxy primer.	SQM	11			0.001874700
1315	Providing and applying two or more coats of Acrylic based weather coat paint of approved brand and manufacture and required shade over one coat of primer after necessary cleaning/ washing, preparing the surface using coir brush/ wire brush, sand paper, including filling of cracks with putty wherever required etc. all complete to give smooth, hard, durable & glossy finish over a coat of primer over prepared plaster surface as per manufacturers guidelines. The final finished coating shall be fungus resistant, UV resistant, water repellent and extremely durable with color fastness as per specification	SQM	145			0.005524880
	1400 FLOORING AND SKIRTING					
	Flooring and skirting at any level including base layer, labour, material, equipments, transportation, handling, curing, polishing etc. at any level as per specification, drawings and as directed by engineer - in - charge.(Cement will be supplied by BHEL free of cost as per TCC):					
1401	Providing and laying 50 mm thick heavy duty cement concrete in flooring with metallic hardener pigmented topping 12mm thick uniform graded treated iron particles in flooring. Under layer of 38mm thick cement concrete mix 1:2:4 (1 cement: 2 sand : 4 stone aggregates 12.5mm well graded) and top layer of 12mm thick metallic concrete of mix 1:2 (1 cement hardner mix with approved quality metallic hardening compound :2 stone aggregate 6mm nominal size) by volume including cement slurry, rounding off edges, aluminium strips etc. all complete for following (Quoted item rate shall be inclusive of providing glass joint strips):	SQM	488			0.038117030
A1401	Providing and laying 50 mm thick heavy duty cement concrete in flooring with nonmetallic hardener as per specification. Hadenershall of hard granules of mineral origin. Under layer of 38mm thick cement concrete mix 1:2:4 (1 cement: 2 sand : 4 stone aggregates 12.5mm well graded) and top layer of 12mm thick nonmetallic concrete of mix 1:2 (1 cement hardner mix with approved quality nonmetallichardening compound : 2 stone aggregate 6mm nominal size) by volume including cement slurry, rounding off edges, aluminium strips etc.all complete for following (Quoted item rate shall be inclusive of providing suitable aluminium dividing strips):	SQM	8139			0.611686380
1402	Providing and laying 25 mm thick heavy duty cement concrete mix 1:2:4 (1 cement: 2 sand : 4 stone aggregates) flooring with metallic hardener pigmented topping of 10 mm thick uniform graded treated iron particles in skirting and dado complete as per specification.	SQM	488			0.048642210
A1402	Providing and laying 25 mm thick heavy duty cement concrete mix 1:2:4 (1 cement: 2 sand : 4 stone aggregates) in skirting and dado complete as per specification.	SQM	90			0.008713040

Broad Scope of job: All Civil and Architectural work for CHP including final micro level grading, backfilling up to required level and handing over of all foundations/buildings/structures to structural/ mechanical/electrical agencies and final handing over to customer for onward operation purposes at 1X800 MW Thermal Power Station, Wanakbori, Distt- Kheda, Gujarat.

ST NO	Description	UNIT	Quantity	Rate	Amount	% weightage w.r.t. the total price
A1406	Providing and laying polished Kota stone 22mm to 25mm thk in flooring. Under bed shall average 15mm thk of 1 cement : 2 sand : 4 stone aggregates by volume and brought to proper level. The kota stone slabs/tiles laid over under bed, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete.	SQM	15			0.004172520
A1408	Providing polished Kota stone 25mm thk in skirting projecting 6mm from adjacent plaster including cutting brickwall upto the required depth, edging, finishing etc. all complete.	SQM	15			0.005131730
A1412	Providing and laying 18-20mm thick Mirror polished Granite stone of approved color and texture in flooring in large slab with brass/stainless steel strips. Under bed shall average 30mm thk of 1 cement : 2 sand : 4 stone aggregate by volume and brought to proper level. The granite stone slabs/tiles laid over under bed, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete.	SQM	15			0.014900150
1414	Providing and laying polished Granite stone 18-20mm thk in skirting and dado with 6mm thick projection from adjacent plaster including mortar, cement slurry, pigments, curing, grinding, moulding, granite polishing etc. all complete.	SQM	15			0.015360920
1416	Providing and laying vitrified ceramic tiles of polished variety of size 600x600 from reputed / approved manufacturer, complete including underbed of cement mortar 1:3 with neat cement slurry etc. all complete for following					
b	10mm thick tiles in flooring	SQM	144			0.061293330
d	10mm thick tiles in skirting and dado upto specific height	SQM	20			0.009828280
A1417	Providing and laying vitrified ceramic tiles of matt finish variety from reputed / approved manufacturer, complete including underbed of cement mortar 1:3 with neat cement slurry etc. all complete for following					
a	7.2 mm thick tiles in flooring	SQM	60			0.019141940
c	8 mm thick coloured glazed tiles of size 300x450x8mm thick in skirting and dado upto specific height	SQM	60			0.019000160
1418	Providing and laying 10 mm thk non-skid fully vitrified tiles of make 'MARBONITE' or 'FERRASTONE' of BOSS Profile limited' or equivalent in flooring and skirting over 30 mm thick underbed of 1 part cement and 3 parts coarse sand by weight mixed with sufficient water, complete as per specification laid in pattern of following sizes					
b	600X600 mm	SQM	10			0.003646180
1419	Providing and laying granite stone slab of 20mm thickness single piece for wash basin / sink slab /facia of black or approved colour with cutting, making corners, moulding and opening etc. all complete.	SQM	10			0.010374700
1422	Providing & fixing Acid / Alkali resistant (Chemical resistant) tiles conforming to IS:4457 in flooring/Dado and shall be laid over bitumastic lining of min 12mm thick (to be laid in layers of 6mm each). The tiles shall be applied with 6mm thick Potassium Silicate bedding epoxy mortar as per IS:4441, 4443 & 4832 and including preparation of surface, application of bitumen primer, curing etc. all complete for following thicknesses. The tiles should be abrasion resistant & durable.					
a	20mm thick	SQM	15			0.010872540
1429	Providing and fixing removable type flooring system consisting of fire resistant particle board of size 600X600X35 mm with 0.05 mm thick aluminium foil lining at bottom and with 2 mm thick anti static PVC topping including proprietary floor supporting system complete as per specification. Maximum height of false ceiling shall be 600mm from RCC floor.	SQM	466			0.838103090
1430	Providing and fixing dividing strips in joints of cast in situ floorings at various elevations, finishing, all labour, material etc. complete as per drawing, specification and instructions of engineer in charge.					
a	Glass strips 40 mm wide and minimum 6 mm thick.	RM	15			0.000159490
b	Aluminium strips 40 mm wide and minimum 3 mm thick	RM	15			0.000389880
1500 ROOFING / SIDE CLADDING						
	Roofing/side cladding work including all labour, material, equipment, transportation, handling, scaffolding, laps, hooks, washers, corner pieces etc. at any level as per specification, drawings and as directed by engineer-in-charge.					
1506	Providing under deck insulation of resin bonded mineral wool of 50 mm nominal thickness as per HVAC requirement conforming to IS:183(maximum value shall be 1.0W/sq.m/deg C) having a density of 32 kg/cum glass wool for thermal and acoustic insulation including application of glue and tying with lacing wire, for glass wool as per manufacturer's recommendations(fixing shall be paid in item no. 1508).	SQM	450			0.064464370
B1506	Providing and fixing polystyrene blocks of 50 mm nominal thickness high density of 30 kg/cum as per HVAC requirement for underdeck insulation as per manufacturer's recommendations.	SQM	450			0.087724720
1508	Installing under deck insulation using minimum 0.05 mm thick aluminium foil on exposed surface followed by 0.56 mm dia and 25 mm mesh GI wire netting, fixed at various elevations with rawl plugs including clips (but excluding cost of insulation.)	SQM	450			0.058084390
1600 FALSE CEILING						
	False ceiling including all labour, material, equipment, transportation, handling, suspension system etc at any level as per specification, drawings and as directed by engineer-in-charge.					
1604	Transport and fixing and laying permanently colour coated aluminium false ceiling of approved colour with stove enamel finish of approved make in LINEAR and SQUARE type with corrosion resistance aluminium alloys panels of minimum thickness 0.5mm including 50mm thick mineral wool insulation (as per IS:8183) bound in polythene bags on top of panels. Additional hangers and height adjustment clips shall be provided for return air grills, light fixtures, A.C. ducts etc. suitable M.S. channel (minimum MC 75) grid 1200 c/c maximum shall also be provided above the false ceiling level for movement of personnel to facilitate maintenance of lighting fixtures, AC ductsetc. The work to be complete as per specifications, drawings and direction of engineer. (Materials for structural platform grid for movement made up of MS Channels/ Beams / Angles shall be supplied by BHEL and shall be paid under ST No 2301)	SQM	450			0.297466550
1606	Providing and Fixing 12mm thick Gypsum board plain/perforated false ceiling tiles(600x600mm) of India Gypsum or equivalent make in plan or elevation with aluminium grid, metal suspension system, anchor fastener adjustable hangers etc. including two or more coats of acrylic emulsion paint of approved colour to give an even shade with smooth finish all complete.as per architectural design and detail. metal suspension system as per ASTM C-635 shall be hot dipped M.S. galvanized (grade 180 as per is :277) nominal size of T-section shall be 24 x 38 mm or 24 x 25 mm cross runners, 24mm wide exposed flange surface shall be permanently color coated. suspension system shall be as per manufacturer's specification supported over movement platform. The work to be complete as per specifications, drawings and direction of engineer. (Materials for structural platform grid for movement made up of MS Channels/ Beams / Angles shall be supplied by BHEL and shall be paid under ST No 2301)	SQM	450			0.137834140
1700 RAIN WATER DOWN TAKE PIPES						
	Rain water down take pipes including all labour, material, transportation, 2 coats of approved paint over one primary coat, fixtures, accessories etc at any level as per specification, drawings and as directed by engineer-in-charge.					
1704	Providing & Fixing galvanised MS down take pipes of 150 mm dia- Medium quality as per IS:1239(part-I) all complete.	RM	24			0.013256180
A1705	Providing & Fixing heavy duty PVC down take pipes of 110mm diameter- Class 3 as per IS:4985 all complete.	RM	72			0.012568560
A1706	Providing & Fixing heavy duty PVC down take pipes of 160mm diameter- Class 3 as per IS:4985 all complete.	RM	2260			0.556056590
1800 MISCELLANEOUS WORKS						
	Miscellaneous works including all labour, material, equipment etc. at any level unless otherwise specified as per specification, drawings and as directed by engineer - in - charge.					

Broad Scope of job: All Civil and Architectural work for CHP including final micro level grading, backfilling up to required level and handing over of all foundations/buildings/structures to structural/ mechanical/electrical agencies and final handing over to customer for onward operation purposes at 1X800 MW Thermal Power Station, Wanakbori, Distt- Kheda, Gujarat.

ST NO	Description	UNIT	Quantity	Rate	Amount	% weightage w.r.t. the total price
1801	Providing and Filling in trenches, plinths, area paving and other underground structures with graded stone aggregate of size range 63 mm to 45 mm in layers not exceeding 230 mm in thickness including breaking of stone boulders to required sizes, filling the interstices with selected sand and compacting to 85 % of original volume of stone stack for all lifts etc. all complete as per the direction of the Engineer and as per specification. Payment shall be made for the measurement of the volume of the compacted fill.	CUM	8609			3.374342670
1803	Anti termite chemical treatment of soil with Chlorpyrifos/Lindane E.C. 20% with 1% concentration conforming to IS:8944 and as per IS 6313 all complete. (Plinth area of building at ground floor only shall be measured for payment)	SQM	14			0.000306000
1808	Providing and fixing aluminium strips minimum 18 SWG thk and 300mm wide over expansion joints with minimum lap of 50mm length including brass / aluminium screws, rawl plugs etc. all complete.	Kg	50			0.006852570
1809	Providing Chemical epoxy injection grouting with pressure pump for water retaining concrete structures conforming to IS:6494, including fixing nozzles, cost of approved cement, admixture, curing etc. all complete . Payment shall be made as per the consumption of chemical.	Kg	440			0.139839700
1810	Providing, laying and fixing rails and guide rails in concrete for transformer, rail track including cutting of rails, joining of rails, anchoring lugs etc all complete.	MT	1.00			0.024396920
1811	Providing and fixing weep holes in Drains consisting of 100 mm dia HDPE pipe sleeves with single side covering for the pipe mouth with galvanised welded wire fabric of 20 mm sq. opening covered with 40 mm downgraded aggregates in 300 X 300 mm sq. and 300 mm deep size all complete.	EACH	250			0.057523190
1812	Laying of earthing mats/rods including risers, transportation from yard stores, loading, unloading, cutting to length, welding, protective painting of joints etc. all complete. (Excavation & Back filling shall be paid separately under respective item of earth work. Earthing mats/rods shall be supplied by BHEL free of cost)	MT	7			0.025239020
1813	Providing Earthing pit as per drawing with charcoal & salt, GI pipes, GI earth electrodes, GI wire, GI strips, brick chamber with covers including associated earthwork etc. all complete.	EACH	3			0.009006400
1815	Providing and fixing GI rungs in concrete/brick walls having zinc coating of minimum 900 g/sqm etc. all complete.	Kg	15			0.000451910
1817	Providing and fixing HDPE pipes in concrete/ brick work of following sizes including cutting, fixing and levelling in position etc. all complete.					
c	150 mm dia	RM	20			0.003189980
d	200 mm dia	RM	50			0.012863330
1818	Providing and laying dry stone pitching of 230 mm thickness for slope protection in cement mortar 1:6 including hammer dressing, raking of joints, pointing, preparing the bedding surface and voids filling with stone aggregate etc. all complete.	SQM	1100			0.387938210
1826	Supply and laying approved quality rounded pebbles / gravels of 40mm size in transformer yards.	CUM	35			0.018504890
1828	Dismantling old existing reinforced/non-reinforced brickwork/blockwork/stone masonry work in mud/time/ cement mortar at any level including clearing/cleaning, stacking the serviceable materials at plant site and disposal of unserviceable materials within a lead upto 1km all complete.	CUM	3			0.000704450
1829	Dismantling old existing plain/re-inforced concrete work at any level including clearing/cleaning, stacking the serviceable materials at plant site and disposal of unserviceable materials within a lead upto 1km all complete.	CUM	3			0.002093870
1830	Dismantling old existing structural steel work at any level including plates, bolts, cutting rivets, welding, dismembering and stacking the dismantled materials within a lead upto 1km etc all complete.	MT	175			0.506248440
1836	Providing and laying cinder filling in the toilets/sunken slab complete as directed by engineer in charge.	CUM	3			0.000949900
A1837	Providing and laying foam concrete blocks in the toilets/sunken slab complete as directed by engineer in charge	CUM	3			0.002995040
B1837	Providing and fixing sliding layer of bitumen/craft/LDP paper over the screed layer for water retaining structures to destroy the bond between the screed and the base slab concrete of the water retaining structure etc all complete	SQM	60			0.001329160
A1838	supplying and providing copper sheet in expansion joint for underground water retaining structures including installing in position with proper water splices ,including butting straight lengths and support system all complete as per direction of engineer in charge.	Kg	100			0.009590640
A1839	Providing Guniting 50 mm thick at all heights and levels including all cost of materials including fabricated wire mesh reinforcement, labour etc complete as per specification given below, approved drgs and direction of Engineer-in-charge					
	Generally shotcreting shall be done in accordance with IS:9102. Guniting of RCC members, where specified shall be with an intimate mixture of cement, sand (or fine aggregate) and water. This mixture is forced or ejected through a cement gun and shot into place by compressed air. Uniformly graded, thoroughly mixed dry materials, with low water / cement ratio are charged into the gun and shot under pressure by compressed air. Sand shall be slightly moist to works better. The usual proportions of cement and fine aggregate are 1:3. The fine aggregate should be well graded upto a maximum size of 10mm, preferably 4.75mm downwards. Reinforcement for shotcreting shall be as detailed below, unless specified otherwise. a) Reinforcement in one direction consisting of 6mm MS bars at 750mm c/c shall be connected to the lugs for fastening of the wire fabric. This shall be used in case of 50mm or above thick shotcreting. b) Wire fabric conforming to IS:1566 shall be used as reinforcement and shall consist of wire, 3mm diameter, spaced 50mm both ways and shall be electrically cross welded. Wire fabric shall be securely tied to 6mm bars for 50mm thickness. Adjacent sheet of wire fabric shall be lapped at least 100mm and tied. c) Clear cover to reinforcement mesh shall not be less than 15mm.	Sqm	594			0.338266530
2000 FENCING AND GATES						
	Fencing and gates including all labour, material, equipment etc at any level as per specification, drawings and as directed by engineer - in - charge.					
A2001	Supplying and erecting in position 2.4 m high PVC coated galvanised chain linked fencing of minimum 8 gauge (including PVC coating) of mesh size 75mm x 75mm. The diameter of the hot dip galvanised steel wire for chain link fencing excluding PVC coating shall not be less than 11 gauge. GI barbed wire fencing of height of 600 mm conforming to IS 298 at top of chain link fencing shall be provided with 4strands of barbed wire hot dip galvanised wire of 12G comprising of 2 ply of wires with barbs of 16G spaced at 100mm. Cost to include for GI hook bolts, rings & washers, hot dip galvanised tension wires, 25X6 mm GI flat stretcher bar at end posts, accessories etc. all complete.(Structural post shall be separately under item 2007)	RM	60			0.030553010
2007	Supply and fixing of hot dip galvanised mild steel posts for fencing. Rate of zinc coating shall not be less than 710 g/m2 on steel posts.	MT	2			0.056448640
2009	Supply, fabrication and installing in position and testing galvanised MS Gates out of channels, joists, angles, flats, plates, pipes, welded steel wire mesh & sheets including stiffners, bracings, fabricated hinges, MS Aldrops with locking arrangement, tempered steel pivot, guidetrack of MS Tee, bronze aluminium ball bearing arrangements, Gun metal shoe ,castor wheels, paintings etc. all complete..	MT	3			0.085643250
2100 WATER SUPPLY						
	Water supply work including men, material, equipment etc. at any level as per specification, drawings and as directed by engineer - in - charge.					
2101	Providing and fixing in position tested heavy duty type chromium plated (CP) brass long neck bib cocks including sockets, union, nuts etc all complete - 15mm nominal bore.	EACH	8			0.001791120
2102	Providing and fixing in position heavy duty brass stop cock of approved quality including all specials etc all complete - 15mm nominal bore.	EACH	8			0.001543000

Broad Scope of job: All Civil and Architectural work for CHP including final micro level grading, backfilling up to required level and handing over of all foundations/buildings/structures to structural/ mechanical/electrical agencies and final handing over to customer for onward operation purposes at 1X800 MW Thermal Power Station, Wanakbori, Distt- Kheda, Gujarat.

ST NO	Description	UNIT	Quantity	Rate	Amount	% weightage w.r.t. the total price
2103	Providing and fixing in position heavy duty brass full way valve with wheel of approved quality including all specials etc all complete for following sizes:					
a	25mm nominal bore.	EACH	8			0.002767020
b	50mm nominal bore.	EACH	8			0.006878560
A2104	Providing and fixing MS pipe of heavy duty class conforming to IS:1239 pipes shall be concealed and painted with anticorrosive paint,complete for internal works with GI sockets, unions, elbows, tees, nipples etc and clamps including cutting and making good the walls etc all complete for following sizes:					
a	15 mm nominal bore.	RM	20			0.001535920
b	20 mm nominal bore.	RM	20			0.001807660
c	25 mm nominal bore.	RM	20			0.002262520
2105	Providing and fixing GI pipes class B/ complete for external work with GI sockets, unions, elbows, tees, nipples etc including trenching & refilling, anti-corrosive paint etc all complete for following sizes:					
a	15 mm nominal bore.	RM	20			0.001742670
b	20 mm nominal bore.	RM	20			0.001937620
c	25 mm nominal bore.	RM	20			0.002422020
d	50 mm nominal bore.	RM	20			0.003845710
2106	Providing and fixing 610mmx453mmx6mm thk mirror from reputed mirror manufacturer. Mirror shall be mounted with glass adjustable revolving CP brackets with CP screws etc all complete.	EACH	4			0.001109400
A2108	Providing and fixing 20 mm diameter stainless steel towel rails (600mm X 20mm) all complete.	EACH	4			0.001094040
2109	Providing and fixing 20mm dia chromium plated M.S. pipes wall mounted towel rod with C.P. Brackets etc all complete.	EACH	4			0.000732510
2110	Providing and fixing C.P. soap holder mounted with C.P. screws etc all complete.	EACH	4			0.000477310
2111	Providing and fixing stainless steel / C.P. liquid soap dispenser . Dispenser shall be round and easily revolving with removable threaded nozzle and mounted on C.P. brackets etc all complete.	EACH	4			0.000728970
2112	Providing and fixing glazed vitreous wall mounted paper holder with suitable cover cum cutter fitted with CP screws etc. sll complete.	EACH	4			0.000666350
A2113	Providing and fixing chromium plated wall mixture with provision of shower all complete.	EACH	4			0.001055050
B2113	Providing and fixing chromium plated wall mounted sink mixture all complete.	EACH	2			0.000527520
2114	Providing & fixing in position P.V.C. water tank of Syntex or approved equivalent including making all necessary inlet & outlet pipes, fixture, ball cocks, valves etc all complete for following capacities. GI pipes shall be paid separately under ST No. 2105.					
a	500 litres capacity	EACH	2			0.002364430
b	1000 litres capacity	EACH	2			0.004728860
c	2000 litres capacity	EACH	1			0.004665650
2115	Providing and fixing approved stainless steel sink with integrated drainboard as per IS:13983 of size 915x460x178mm with CI brackets, stainless steel chain with rubber plug 40mm, cp brass waste trap with necessary union complete including painting the fittings, cutting and making good the wall where required etc. all complete.	EACH	4			0.005556480
2200 SANITARY WORKS						
	Sanitary work including all labour, material, equipment etc. at any level as per specification, drawings and as directed by engineer - in - charge.					
2201	Supply and fixing glazed vitreous china Wash Basin conforming to IS:2556 part 4 of oval shape with R.S. or C.I. brackets painted white, 15mm chromium plated brass hot & cold faucets with nylon washers, chromium plated brass chain with rubber plug, 32mm chromium plated brass bottle trap and waste of standard pattern, 32mm dia chromium plated brass trap unions, plastic connection pipe with chromium plated nuts, fittings, cutting and making good the walls where required etc all complete.(Cement will be supplied by BHEL free of cost as per TCC):					
a	White	EACH	5			0.006862900
b	Colored	EACH	2			0.003148630
2203	Providing and fixing stainless steel kitchen sink of size 610x510x200mm conforming to IS: 13983 including all fittings etc. all complete.	EACH	1			0.001216330
2204	Providing and fixing colour glazed vitreous china European type water closet conforming to IS:2556 with siphon, open front solid plastic seat and plastic cover, low level 12.5 litre PVC flushing cistern (same colour as WC) with valveless fittings, necessary C.P connections etc all complete.(Cement will be supplied by BHEL free of cost as per TCC):					
a	Floor mounted	EACH	4			0.006828940
2205	Providing and fixing colour glazed vitreous indian type Orissa pattern (580x440mm) water closet conforming to IS:2556 part 3 with all fittings including foot rests, low level 12.5 litre PVC flushing cistern with valveless fittings, necessary C.P connections etc all complete.(Cement will be supplied by BHEL free of cost as per TCC):	EACH	4			0.006196850
A2206	Providing and fixing white flat back glazed vitreous china urinals of size 590x400x380 mm with photo voltaic control flushing system as per IS:2556 (part 6, section 1) with flush pipes, lead pipes, gratings, traps and necessary C.P. fittings etc. all complete.	EACH	7			0.018719920
A2207	Supply, laying and jointing HDPE pipes including bends, branches and all other necessary fittings, M.S holder bats/clamps, cutting and making good the walls and floors, jointing, testing etc all complete for following.					
c	160mm dia pipes	RM	5			0.000850660
d	200mm dia pipes	RM	2			0.000514530
2208	Providing, laying light duty non pressure NP3 class RCC pipes with collars jointed with stiff mixture of cement mortar 1:2 including testing of joints etc all complete for following.					
a	200mm dia	RM	40			0.009262780
b	300mm dia	RM	8			0.002866260
c	450mm dia	RM	10			0.006950040
b	600mm dia	RM	20			0.016410720
e	900mm dia	RM	1			0.001566340
2209	Providing, laying light duty non pressure NP2 class RCC pipes with collars jointed with stiff mixture of cement mortar 1:2 including testing of joints etc complete for following.					
a	150mm dia	RM	5			0.000877240
b	250mm dia	RM	5			0.001052990
c	300mm dia	RM	5			0.001445830
d	500mm dia	RM	5			0.002153240
2211	Providing and fixing C.I Manhole heavy duty cover of size 600mmx450mm including frame from reputed manufacture etc. all complete.	EACH	6			0.009772000
2212	Providing and fixing circular heavy duty C.I. manhole cover of 600 mm dia with frame etc. all complete.	EACH	6			0.018649030
2213	Providing and fixing square mouth S.W Gully trap grade 'A' complete with CI grating, brick masonry chamber and water tight CI coverwith 300x300mm (inside). The weight of cover to be not less than 4.53 Kg and frame to be not less than 2.72 Kg etc all complete for following sizes:					

Broad Scope of job: All Civil and Architectural work for CHP including final micro level grading, backfilling up to required level and handing over of all foundations/buildings/structures to structural/ mechanical/electrical agencies and final handing over to customer for onward operation purposes at 1X800 MW Thermal Power Station, Wanakbori, Distt- Kheda, Gujarat.						
ST NO	Description	UNIT	Quantity	Rate	Amount	% weightage w.r.t. the total price
a	100x100mm P or S Type.	EACH	3			0.001725250
b	150x100mm P or S Type.	EACH	3			0.001877660
c	150x150mm P or S Type.	EACH	3			0.002008800
2215	Providing and fixing C.I. floor traps with C.P jalli all complete.	EACH	3			0.000646850
2216	Providing and fixing heavy duty UPVC floor traps with C.P jalli all complete.	EACH	3			0.000411150
A2217	Providing and installing approved brand single tap water cooler of 50 L cooling capacity all complete with two year free maintenance and guarantee.	EACH	2			0.009123170
A2218	Providing and installing approved brand single tap water cooler of 150 L cooling capacity all complete with two year free maintenance and guarantee.	EACH	1			0.013684760
2219	Providing and fixing white vitreous urinal partitions of size 675x325x85mm all complete.	EACH	11			0.005877550
2220	Providing and fixing eye and face drinking water fountain (combined unit with receptacle conforming to IS: 10592) all complete as per specification	EACH	1			0.011331250
A2221	Providing and fixing heavy duty cast iron pipes for above and below ground sanitary works with water tight lead joint, fixing clamps,excavation, filling, disposal etc. all complete for the following.		0			
c	150mm dia pipes	RM	6			0.003186440
d	200mm dia pipes	RM	6			0.004248590
e	250mm dia pipes	RM	6			0.005310740
2400 ROAD WORKS						
	Providing Road Work including necessary material, labour, machinery, transportation etc as per specification, drawing, relevant IRC & IS codes and as directed by the Engineer-in-charge for the following.					
2401	Preparation of sub grade by excavating earth to required depth for all types of soil/ rock, dressing to camber and consolidating the base including making good the undulation etc and disposal of surplus earth within a lead upto 1 km etc. all complete.	CUM	5400			0.118029620
2402	Supplying and filling with selected good earth of approved quality in layers not exceeding 300 mm loose thickness using borrowedsoil (borrowed soil to be arranged by the bidder) and compacted so as to achieve at least 95 % maximum dry density (modified proctor), as per IS-2720 (Part-VIII) including royalty/seignorage fee (if any), sorting, spreading, breaking clods, watering, ramming/compaction by manual/mechanical means, dressing, finishing to required lines, grades and slopes, tesing etc all complete.	CUM	2700			0.222501790
2403	Providing, stacking & laying granular morrum for shoulder including watering, compaction with road roller to required camber etc all complete.	CUM	1350			0.257631560
2412	Supplying and laying 300mmx150mmx300mm deep precast concrete kerb stone of grade M-20 with 20 mm nominal size stoneaggregate and of shape as per detailed drawing including fixing with cement mortar (1:2) in 13mm thick joints, finishing of joints with neat cement paste, making drainage opening where required etc all complete.	RM	2000			0.160680970
A2414	Supply and laying 200mm dia R.C.C NP-2 type Hume pipe in raised shoulders as rain water drains as per detailed drawing including fixingwith cement mortar (1:2) in 13mm thick joints, finishing of joints with neat cement paste etc all complete.(Cement for Mortar will be supplied by BHEL free of cost as per TCC).	RM	170			0.039768540
2415	Dismantling of existing road consisting of premix carpet, kerb stone/ brick on edge, bitumen macadem course, WBM, preparing subgrade to receive new WBM including camber consolidation including disposal of debris within a lead of 1 km etc all complete.	SQM	1			0.000534610
	Providing and placing concrete work including cost of labour, materials and equipment for handling, transportation, batching,mixing, placing, vibrating, shuttering, formwork and curing (excluding cost of reinforcement), with mechanised equipments like batching plant, transit mixer, concrete pump etc. complete as per drawing, specification and as per direction of engineer in charge for the following.(Cement will be supplied by BHEL free of cost as per TCC):					
2418	Providing and laying cement concrete of grade M30 using 20 mm nominal size stone aggregate with approved admixture (if required),provision for necessary joints including compaction, finishing to lines and grades, curing and providing & fixing forwork etc. all complete.(Excluding the cost of reinforcement and dowel bar)	CUM	1620			1.483785520
2419	Providing & laying dry lean cement concrete of grade M15 with 20 mm nominal size graded stone aggregate over a prepared sub-grade including compaction, finishing, curing and laying of 125 micron polythene sheet etc all complete.	CUM	810			0.512950370
REINFORCEMENT						
2420	Transportation, straightening, cutting, bending, placing in position at any level, binding of of mild steel reinforcements/ dowel bars conforming tograde 1 of IS:432 part 1 in concrete including cost of binding wire, labour, scaffolding, transportation to & from stores etc complete all as per specifications, drawings and as directed by Engineer. (Reinforcement shall be provided by M/S BHEL Free of cost)	MT	81			0.189437550
2421	Transport, straightening, cutting, bending, placing in position at any level, binding in position of steel reinforcements of TMT steel of grade Fe-500 conforming to IS:1786 including cost of binding wire, labour, scaffolding, transportation to & from stores etc all complete as per specification, drawing and as directed by Engineer. (Reinforcement will be supplied by BHEL as per TCC free of cost)	MT	81			0.151540470
MISCELLANEOUS						
	Miscellaneous works including all labour, material, equipment etc. at any level unless otherwise specified as per specification, drawings and as directed by engineer - in - charge.					
A2423	Providing & installation of bitumen impregnated fibre board of specified thickness conforming to IS 1838 as joint filler including nailing,coating of both faces with coal tar pitch/bitumin etc. all complete as per specification, drawing and as directed by engineer.	RM	160			0.029206120
2424	Providing and filling in position hot applied bitumen sealing compound (Grade A) of specified thick conforming to IS 1834 includingcleaning, mixing, heating, pouring/injecting sealing compound in gaps in joints, sealant primer etc all complete as per specification, drawing and as directed by Engineer.	RM	160			0.000708880
2425	Providing and laying debonding strip/tape of specified thickness before applying sealant including cleaning etc all complete as per specification, drawing and as directed by Engineer.	SQM	50			0.000177220
A2426	Providing & laying 80 mm thick precast interlocking concrete pavers of approved colour and pattern as per specification and recommendation of manufacturer.	SQM	3600			0.695311460
2427	Providing and laying 50mm thick sand layer below concrete pavers including compaction etcall complete as per specification, drawingand as directed by Engineer.	SQM	3600			0.031687230
2500 PILING WORKS						
2501	Mobilisation of hydraulic rotary piling rigs and accessories capable of pile boring/drilling in all types of strata/installing various size ofbored cast in situ RCC piles to project site and demobilisation of the same after completion of piling works etc all complete.Bidder has to get clearance for both mobilisation and demobilisation from Engineer incharge.	Nos	3			0.458122420

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ST NO	Description	UNIT	Quantity	Rate	Amount	% weightage w.r.t. the total price
2503	Installation of Bored cast-in-situ RCC vertical pile as per IS 2911 (Part 1 Sec 2) with diameter and length as specified (length to be measured from pile cut-off level to the bottom of pile) using cement concrete grade M25 conforming to IS:456 with 20 mm nominal size stone aggregates with a minimum cement content of 400Kg per cum of concrete including providing all materials (but excluding reinforcement steel for which measurement/payment shall be made separately), boring/drilling in all types of soil/ash etc, providing bentonite slurry/ Polymer based solution along with temporary MS casing (Temporary casing of minimum of 12 M to be adopted for stabilizing the pile bore. The casing to be further lowered in case of bore not getting stabilized through bentonite solution) for stabilization of pile bore, flushing of pile bore, cleaning, providing plasticizer wherever required, breaking pile head to cut off level and exposing pile reinforcement for embedment in pile cap etc including empty boring from ground level to pile cutoff level etc all complete as per specification, drawing and as directed by the engineer-in-charge .					
a	Pile with 450 mm diameter and 23 m length below cut off level	Each	290			4.033106550
b	Pile with 500 mm diameter and 23 m length below cut off level	Each	10			0.156345130
d	Pile with 600 mm diameter and 23 m length below cut off level	Each	441			8.699299090
e	Pile with 760 mm diameter and 26 m length below cut off level	Each	24			0.816638180
f	Pile with 900 mm diameter and 26 m length below cut off level	Each	1			0.039169040
B2504	Extra over ST. No. 2503 for pile length more than the specified length of 23m below cut off level for the following.					
a	For 450 mm diameter pile	RM	600	0.03 Time 2503 a		
d	For 600 mm diameter pile	RM	2360	0.03 Time 2503 d		
e	For 760 mm diameter pile	RM	10	0.03 Time 2503 e		
A2506	Rebate on ST.No.2503 for pile length less than the specified length of 23m below cut off level for the following.					
a	For 450 mm diameter pile	RM	600	0.02 Time 2503 a		
d	For 600 mm diameter pile	RM	240	0.02 Time 2503 d		
A2506	Rebate on ST.No.2503 for pile length less than the specified length of 26m below cut off level for the following.					
e	For 760 mm diameter pile	RM	10	0.02 Time 2503e		
2508	Conducting routine load test on single job pile as specified in accordance with IS 2911 (Part-4) including preparation of pile head for testing, necessary excavation, providing all arrangements of loading, unloading, test equipments/accessories, jacks, recording of results, labour, submission of test report etc but excluding the cost of installation of job pile complete as per specification, drawing and as directed by the engineer-in-charge for the following.					
a	For vertical compression test by maintained load method					
i	450 mm diameter pile	Each	2			0.043917890
iii	600 mm diameter pile	Each	8			0.269367470
iv	760 mm diameter pile	Each	2			0.119713230
v	900 mm diameter pile	Each	1			0.073225030
b	For lateral load test					
i	450 mm diameter pile	Each	2			0.023610060
iii	600 mm diameter pile	Each	8			0.093015370
iv	760 mm diameter pile	Each	2			0.021738000
v	900 mm diameter pile	Each	1			0.011829250
A2509	Carrying out low strain pile integrity test on 450mm/600mm/760mm diameter pile including all arrangements for test,equipments/accessories, materials, labour, submission of test report etc but excluding the cost of installation of job pile all complete as per specification and as directed by the engineer-in-charge.	Each	731			0.266439180
A2511	Providing and driving sheet pile upto all depths in various types of soils, cost inclusive of all materials like sheet, tools and plants, anchoring arrangement, labour etc all complete including removing the sheet piles on completion of respective Civil Works as per the direction of engineer in charge. Quoted price is inclusive of design and approval of sheet pile system with anchoring. (The item shall be executed on specific approval by the Engineer-in-charge on a case-to-case basis depending on space constraints).	SQM	2340			9.420837220
GRAND TOTAL						100