

Ref: BHE/PW/PUR/HZGG-CVL/1653/Corg 2

Date: 09/08/2016

To,

ALL BIDDERS,

Sub: Corrigendum-02: Revised Price Bid (Rev 01)

Job: CONSTRUCTION OF MISC. CIVIL WORKS AND REPAIRS / RENOVATION OF EXISTING PLANT ROADS AND DRAINS INCLUDING ALL ASSOCIATED FINISHING & ARCHITECTURAL WORKS AT 1X350MW CCPP, GUJARAT STATE ENERGY GENERATION LIMITED (GSEG) HAZIRA - GUJARAT.

References:-

1. E-Tender Specification Nos: BHE/PW/PUR/HZGG-CVL/1653
2. Corrigendum 01 dated 06/08/2016 for Extension in last date of offer submission up to 12/08/2016

Bidders to kindly take note of the following:

AA) Revision in Volume II 'Price Bid':

Bidders to note that "Vol-II Price Bid" issued along with the referred tender enquiry stands null & void.

BILL OF QUANTITIES AND % WEIGHTAGE OF INDIVIDUAL ITEMS has been incorporated in this tender. Accordingly, offer must be submitted only as per "Instructions to the Bidders" given in Part-A of "VOLUME- II- PRICE BID - Rev 01 Dt. 09/08/2016" attached with this corrigendum. **Please note that Price submitted in other than given format is liable to be rejected.**

BB) IMPORTANT: Procedure for uploading of 'Revised Volume II Price Bid-Rev-01 dated 08/08/2016 in EPS System' → <https://bheleps.buyjunction.in>

- The bidders are requested to download the Part-C of "Revised Volume II Price Bid Rev-01 dated 09/08/2016" in excel format (issued along with this corrigendum).
- Bidders have to fill their total lump-sum price for entire scope of work in Part-C of "Revised Volume II Price Bid Rev-01 dated 09/08/2016" in excel format.
- The duly filled Part-C of "Revised Volume II Price Bid Rev-01 dated 09/08/2016" shall be uploaded only at "Quotation File Format - Price Format" in EPS System → <https://bheleps.buyjunction.in>

Ref: BHE/PW/PUR/HZGG-CVL/1653/Corg 2

Date: 09/08/2016

- Prior to uploading the Part-C of “Revised Volume II Price Bid Rev-01 dated 09/08/2016” in “Quotation File Format – Price Format”, ensure that the file already available at “Quotation File Format – Price Format” is downloaded and name of the Old Price excel Format is noted.
- Rename the duly filled Part-C of “Revised Volume II Price Bid Rev-01 dated 09/08/2016” (issued with this corrigendum) with the name of ‘Old Price Format available at Quotation File Format’.
- Encrypt the duly filled and renamed Part-C of “Revised Volume II Price Bid Rev-01 dated 09/08/2016” (issued with this corrigendum) and upload the same at ‘Quotation File Format’.

In case of any query pertaining to submission/uploading of Revised Price bid, Bidders may contact Mr Shabir Khan (Mob: 9300770104, Email: shabir.khan@mjunction.in) of M-Junction

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All other Terms and conditions of the Tender Specification shall remain unaltered unless expressly amended by BHEL in writing.

Bidders are requested to submit as a part of their offer, a copy of this corrigendum duly Digitally countersigned by the authorized signatory as a token of Bidder’s unqualified acceptance of this corrigendum.

BIDDERS MAY PLEASE NOTE THAT SUBJECT TENDER IS E-TENDER AND THE OFFER IS TO BE SUBMITTED ONLY IN E-PROCUREMENT PORTAL → <https://bheleps.buyjunction.in>

BIDDERS WHO HAVE ALREADY SUBMITTED THEIR OFFERS PRIOR TO ISSUANCE OF THIS CORRIGENDUM IN E-TENDER PORTAL ARE REQUIRED TO RE-SUBMIT THEIR OFFER AFTER TAKING COGNIZANCE OF THIS CORRIGENDUM.

Thanking you,

Yours faithfully,

AGM (Purchase)

TENDER SPECIFICATION
NO: BHE/PW/PUR/HZGG-CVL/1653

**CONSTRUCTION OF MISC. CIVIL WORKS AND REPAIRS / RENOVATION OF EXISTING
PLANT ROADS AND DRAINS INCLUDING ALL ASSOCIATED FINISHING &
ARCHITECTURAL WORKS**

AT

**1X350MW CCPP, GUJARAT STATE ENERGY GENERATION LIMITED (GSEG) HAZIRA -
GUJARAT.**

VOLUME- II- PRICE BID - Rev 01 Dt. 09/08/2016



Bharat Heavy Electricals Limited
(A Government of India Undertaking)
Power Sector - Western Region
345-Kingsway, Nagpur – 440001

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VOLUME - II - PRICE BID – REV 01 dt: 09/08/2016

T.S. No. BHE/PW/PUR/HZGG-CVL/1653

Part A: Instructions to the Bidders

1. **Bidders shall quote Total Lump-sum Price for the entire scope of work for in the Excel Sheet (Titled as Vol-II Price Bid Rev-01 “Part-C”) of price bid.** Any other entry elsewhere in the offer of the bidder shall be treated as Null and Void.
2. BHEL has fixed the % weightages for the amount of individual items of Schedule of Quantity w.r.t. the total price in “Part C” of Vol-II Price Bid Rev-01.
3. Based on the pre-fixed % weightages, amount of individual items shall be derived by BHEL. This amount shall not be rounded off.
4. Based on the quantities of individual item and the amount arrived in Sl No 3 above, item rate of individual items shall be derived by BHEL. This item rate shall be rounded off up to two decimal places and shall be used to calculate the total amount of an item.
5. For the convenience of bidders, BHEL has issued an excel sheet with all requisite formulae as detailed above. ***However this excel sheet shall not form part of contract document.***

PART B: % weightage for amount of individual items of Schedule of quantity w.r.t. the total price (as quoted by the bidder in Part C of Vol-II-Price Bid Rev 01 dt: 08/08/2016)

Note: This **BOQ and Percentage Weightage** is available with this corrigendum from next page.

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PART-B: BILL OF QUANTITY AND % WEIGHTAGE OF INDIVIDUAL ITEMS				
E-Tender Specification No			BHE/PW/PUR/HZGG-CVL/1653	
Scope of Work: Misc. civil works and construction / repairs / renovation of plant roads and drains				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% WEIGHTAGE
PART-A	NAME OF WORK: REPAIRS / RENOVATION OF DAMAGED ROADS AND DRAINS, BREAKING AND REBUILDING OF OLD RCC / BRICK DRAINS INCLUDING ALL ASSOCIATED FINISHING WORKS REQUIRED, ETC. ALL COMPLETE.			
100	EARTH WORK IN EXCAVATION, BACKFILLING AND DISPOSAL AS PER SPECIFICATION, DRAWINGS AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:			
101	Earth work in excavation upto 2m 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, levelling to grade and ramming the bottom, stacking/disposal of surplus excavated material within a lead of 1.0 KM etc complete for all types of soils including ash, laterite, morrum, weathered rock, decomposed rock, soft rock etc which can be excavated by means of crow bar, pick axe, pneumatic rock breaker attachment with poclain/excavator etc but does not require chiselling or blasting.	CUM	500.0	0.13435381
102	Earth work in excavation for depth exceeding 2m but not exceeding 4m below ground level for foundation, trenches, pipe lines, storm water drains etc including dewatering if required, strutting, shoring/sheet piling if required, dressing the sides, levelling to grade and ramming the bottom, stacking/disposal of surplus excavated material within a lead of 1.0 KM etc complete for all types of soils including ash, laterite, morrum, weathered rock, decomposed rock, soft rock etc which can be excavated by means of crow bar, pick axe, pneumatic rock breaker attachment with poclain/excavator etc but does not require chiselling or blasting.	CUM	50.0	0.01827212
103	Earth work in excavation for depth exceeding 4m but not exceeding 6m below ground level for foundation, trenches, pipe lines, storm water drains etc including dewatering if required, strutting, shoring/sheet piling if required, dressing the sides, levelling to grade and ramming the bottom, stacking/disposal of surplus excavated material within a lead of 1.0 KM etc complete for all types of soils including ash, laterite, morrum, weathered rock, decomposed rock, soft rock etc which can be excavated by means of crow bar, pick axe, pneumatic rock breaker attachment with poclain/excavator etc but does not require chiselling or blasting.	CUM	10.0	0.00475613
107	Extra over item nos. 101 to 103 for disposal of surplus excavated earth/rock beyond an initial lead of 1km and upto a maximum lead of 2 Km. or part thereof	CUM	100.0	0.00967347
108	Extra over item nos. 101 to 103 for disposal of surplus excavated earth/rock beyond an initial lead of 1km and upto a maximum lead of 3 Km. or part thereof	CUM	50.0	0.00967347
109	Extra over item nos. 101 to 103 for disposal of surplus excavated earth/rock beyond an initial lead of 1km and upto a maximum lead of 4 Km. or part thereof	CUM	10	0.00290204

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PART-B: BILL OF QUANTITY AND % WEIGHTAGE OF INDIVIDUAL ITEMS				
E-Tender Specification No			BHE/PW/PUR/HZGG-CVL/1653	
Scope of Work: Misc. civil works and construction / repairs / renovation of plant roads and drains				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% WEIGHTAGE
110	Extra over item nos. 101 to 103 for disposal of surplus excavated earth/rock beyond an initial lead of 1km and upto a maximum lead of 5 Km. or part thereof	CUM	5	0.00193469
113	Back filling around foundations and plinths etc to proper grade and level with selected excavated soil directly from excavation area within a lead of 1Km including watering and ramming/compacting in layers of 15cm thickness to atleast 90% of its maximum dry density by manual/ mechanical means, dressing etc complete including re-excavation, loading, transportation, unloading spreading etc.	CUM	250	0.07792521
114	Back filling around foundations in plinths etc to proper grade and level with selected soil within a lead beyond 1 Km but not exceeding 5Km from available excavated materials including re-excavating loose thickness, spreading, watering and ramming/compacting in layers of 15cm thickness to atleast 90% of its maximum dry density by manual/mechanical means, dressing etc complete including transportation.	CUM	100	0.06019051
115	Back filling around foundations in plinths, trenches, drains etc to proper grade and level with selected good soil from excavated earth within a lead of 1 Km free from shingle, salts, organic materials, roots, sod or any other foreign substance including re-excavating loose thickness, watering and ramming in layers of 15cm thickness compacted to 75% of relative density for non cohesive soil and 90% of its maximum dry density for cohesive soils by manual/ mechanical means, dressing etc complete including re-excavation, loading, transportation, unloading spreading etc.	CUM	50.0	0.01397280
116	Back filling around foundations in plinths, trenches, drains etc to proper grade and level with borrowed cohesive non swelling(CNS) soil free from shingle, salts, organic materials, roots, sod or any other foreign substance including excavation, transportation, watering and ramming in layers of 15cm thickness compacted to 90% of its maximum dry density by manual/ mechanical means, dressing etc complete. Borrowed CNS soil shall be arranged by the contractor him/herself from their own borrow area (without extra cost to BHEL). Item rate shall be inclusive of any FEE, ROYALTY etc. as applicable & no separate payment will be maid on this account.	CUM	50	0.03748471
117	Supplying and filling sand under floors, in foundation and plinths including cost of sand, transporting for all leads, loading, unloading, spreading in layers in 250mm loose thickness at all depths, watering, compaction with mechanised compaction machine or manually to acheive a minimum 80% of relative density, dressing and levelling etc complete.	CUM	5	0.00800749

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PART-B: BILL OF QUANTITY AND % WEIGHTAGE OF INDIVIDUAL ITEMS				
E-Tender Specification No			BHE/PW/PUR/HZGG-CVL/1653	
Scope of Work: Misc. civil works and construction / repairs / renovation of plant roads and drains				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% WEIGHTAGE
119	Supplying and filling in trenches, plinths, area paving and other underground structures with stones using 63 mm and down sized aggregates in layers not exceeding 225 mm thickness including breaking of 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 instructions of engineer-in-charge.	CUM	250.0	0.76205483
LEVELLING & GRADING				
122	Earth work in stripping of top soil upto a minimum depth of 300mm below existing ground level so as to exclude all debris, grass, vegetation, bushes, trees (with girth upto 299mm) including roots and organic materials etc for levelling and grading including dressing to specified levels & grades and compacting of graded /stripped surface by manual or mechanical means as per specification, drawing and as directed by the Engineer. Surplus earth, debris, vegetation, bushes, trees, etc unsuitable for filling shall be transported to areas within a lead of 1km and shall be dumped and levelled as directed by the Engineer-in-charge.	SQM	700	0.04583357
123	Earth work in cutting (excavation) for levelling and grading downto any level in all types of soil including laterite, moorum, soft rock etc which can be excavated by means of crow bar, pick axe, pneumatic rock breaker attachment with poclain etc but does not require chiselling or blasting including dressing the sides, levelling to grade and ramming the bottom, stacking/disposal of excavated material within a lead of 1km etc all complete as per specification and as directed by the engineer.	CUM	50	0.01517865
124	Extra over item nos. 122 & 123 for carriage of excavated earth/selected materials for every 1 km or part thereof beyond an initial lead of 1 km.	CUM	60	0.01035720
126	Earth work in filling for levelling and grading using approved good quality of borrowed earth (from contractor's own borrow area without any extra cost to BHEL) including fee, royalty etc. on prepared surface obtained by compacting with mechanical means including setting out, sorting, breaking clods, handling, excavation, transportation, spreading, dewatering if necessary, watering, compaction in layers not exceeding 250mm loose thickness compacting to atleast 95% of its maximum dry density obtained as per IS 2720, part-VII, levelling, dressing, finishing to required slopes and grades including all lifts and leads etc all complete as per specification and as directed by the engineer.	CUM	150	0.11245414
127	Providing, stacking and laying 300mm thick hand placed rip-rap on the slopes of earth fill/cut with approved quality of rock fragments including necessary excavation (if any), compaction etc all complete as per specification, drawing and as directed by the engineer.	CUM	250	0.71800962

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PART-B: BILL OF QUANTITY AND % WEIGHTAGE OF INDIVIDUAL ITEMS				
E-Tender Specification No			BHE/PW/PUR/HZGG-CVL/1653	
Scope of Work: Misc. civil works and construction / repairs / renovation of plant roads and drains				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% WEIGHTAGE
200	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) ETC COMPLETE AT ALL ELEVATIONS AS PER DRAWING, SPECIFICATIONS UNLESS SPECIFIED OTHERWISE AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:			
201	Plain Cement Concrete of grade 1:4:8 as binding layer below foundations, trenches and under ground structures etc all complete using OPC 43/53 GRADE	CUM	145	1.14394212
202	Plain Cement Concrete of grade 1:3:6 as levelling course, under water retaining structures, equipment foundations, under foundations/floors etc all complete OPC 43/53 GRADE	CUM	5	0.04521006
203	Concrete of grade M-30 conforming to IS:456 with coarse sand and graded hard stone aggregate 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 using Ordinary Port Land cement of 43/53 grade.	CUM	96.0	1.46856243
205	Concrete of grade M-30 conforming to IS:456 with coarse sand and graded hard stone aggregate 20mm nominal size in superstructure at all heights from finished floor level at any level, shape, position or thickness complete including use of plasticizer/superplasticizer conforming to IS:9103 (latest) to achieve required slump in concrete all complete, using Ordinary Port Land cement of 43/53 grade.	CUM	5.0	0.07346467
209	Concrete of grade M-30 conforming to IS:456 with coarse sand and graded hard stone aggregate 20mm nominal size in precast works like trench covers etc including formwork/moulds for thicknesses varying from 50mm to 250mm including transportation, erection, fixing in position at all elevations and use of plasticizer wherever required all complete but excluding the cost of reinforcement.	CUM	5	0.09920686
210	Concrete of Grade M-20 conforming to IS:456 with coarse sand and graded hard stone aggregate 20mm nominal size in plinth protection.	CUM	5	0.05753030
211	Breaking existing concrete work at any level including removing the debris within a lead of 1Km including transportation, loading, unloading, etc all complete.	CUM	100	0.63495613
212	Breaking existing concrete work at any level including cutting reinforcements, removing the rubbish within a lead of 1Km including making good the broken edges/surface with cement mortar, painting, finishing to match with existing finishing, scaffolding/supporting at any level, all complete and as directed by Engineer.	CUM	50	0.33843726

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PART-B: BILL OF QUANTITY AND % WEIGHTAGE OF INDIVIDUAL ITEMS				
E-Tender Specification No			BHE/PW/PUR/HZGG-CVL/1653	
Scope of Work: Misc. civil works and construction / repairs / renovation of plant roads and drains				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% WEIGHTAGE
300	SUPPLYING, FIXING AND REMOVING FORMWORK AT ANY ELEVATION INCLUDING ALL LABOUR, MATERIAL, SCAFFOLDING COMPLETE INCLUDING POCKETS ETC AS PER SPECIFICATIONS AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:			
301	Ordinary form work (reasonably good steel/plywood surface) below finished ground floor level for foundations, footings, bases of columns, walls, columns pilasters, beams, mass concrete, trenches etc.	SQM	930	0.74969428
302	Fairface form work (using commercial laminated ply wood with steel/wooden frame) below finished ground floor level for foundations, footings, base of columns, walls, columns, pilasters, beams, mass concrete, trenches etc for exposed concrete works.	SQM	50.0	0.04164968
303	Ordinary form work (reasonably good steel/plywood surface) above finished ground floor level for columns, beams, suspended floors, roofs, lintels, cantilevers, staircases, landings, balconies, domes, arches etc for all heights.	SQM	50.0	0.04836737
304	Fairface form work (using commercial laminated ply wood with steel/wooden frame) above finished ground floor level for columns, beams, suspended floors, roofs, lintels, cantilevers, staircases, landings, balconies, domes, arches etc for all heights.	SQM	50.0	0.05280105
305	Extra over item no.301, 302, 303, 304 for curved form work for beams, walls, trenches etc as per specification.	SQM	10	0.00940477
400	REINFORCEMENTS (Reinforcement steel is in BHEL's scope of supply)			
402	Taking delivery of steel from BHEL stores/store yard, loading, transporting and unloading at site, straightening, cutting, bending, placing in position at any level, binding in position of Tor steel reinforcements (TMT) supplied by BHEL free of cost, confirming to HCR -M Grade FE - 500 including cost of binding wire, labour, transportation to & from stores etc complete all as per specifications, drawings and as directed by Engineer.	MT	10.0	0.20153072
500	WATER PROOFING AS PER SPECIFICATIONS.			
501	Providing and mixing approved water proofing compound in concrete or cement mortar for works wherever specified or directed as per specification/ manufacturer's instructions, testing of samples for water proofing etc complete.	KG	5	0.00080612
509	Screed concrete 1:2:4 conforming to IS 456 with coarse sand and graded hard stone aggregate 12.5mm/6 mm nominal size in underfloors, manholes etc all complete as per drawing and specification.	CUM	1	0.01249222
510	Providing three coats of bituminous paint on concrete surfaces in contact with soil in foundations of grade 85/25 confirming to IS 702 @ 1.7 kg/sqm.	SQM	900.0	0.15719396

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PART-B: BILL OF QUANTITY AND % WEIGHTAGE OF INDIVIDUAL ITEMS				
E-Tender Specification No			BHE/PW/PUR/HZGG-CVL/1653	
Scope of Work: Misc. civil works and construction / repairs / renovation of plant roads and drains				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% WEIGHTAGE
600	SUPPLYING & INSTALLATION OF PREMOULDED JOINT FILLER IN BETWEEN EQUIPMENT FOUNDATIONS, MAT FOUNDATIONS, PILE CAPS, WALLS, BASEMENT SLABS ETC. COMPLETE INCLUDING LABOUR, EQUIPMENT AND MATERIALS, SEALING OF JOINTS INCLUDING COST OF SEALING COMPOUND (POLYSULFIDE BASE SEALANT AS PER IS:12118) ETC COMPLETE AS PER SPECIFICATIONS AND DRAWINGS OR AS DIRECTED BY ENGINEER FOR THE FOLLOWING:			
603	25mm thick joints.	SQM	5.0	0.00940477
700	M.S. EMBEDMENTS			
701	Supplying, fabricating and fixing of embedments, MS inserts, pipe sleeves, guide rails, angle pieces, rungs of various diameters, anchor bolts, foundation bolts of various diameters, plates of dimensions as required including cost of all labour, materials and equipment, transportation, loading, unloading, handling, welding, cutting, drilling, scaffolding and setting complete as per specifications, drawings and as directed by Engineer.	KG	200.0	0.03711766
702	Extra over item No 701 for hot dip galvanising at the rate of minimum 610gm/sqm to an average of 750gm/sqm including treating the galvanised members with sodium dichromate solution as per specification and as directed by the Engineer-in-charge.	KG	100	0.01074831
705	Transportation from stores, delivery at work spot and erection, installation and alignment of embedments, MS inserts, pipe sleeves, rails, guide rails, angle pieces, anchor bolts, foundation bolts of various diameters, plates of dimensions as required including cost of all labour, equipment, material, loading, unloading But excluding supply of materials all complete as per specifications, drawings and as directed by Engineer.	KG	100	0.00583767
1000	BRICKWORK MASONRY INCLUDING SUPPLY OF MATERIAL, COST OF LABOUR, SCAFFOLDING ETC COMPLETE AS PER SPECIFICATIONS, DRAWING AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:			
1001	Providing brick work in cement mortar 1:6 (1 part cement: 6 parts coarse sand) in walls, chambers etc of 230mm & above in thickness at all depths, places and positions below plinth including raking out joints, curing, scaffolding etc. all complete excluding plastering and painting, using burnt clay/Fly ash bricks of class designation 5 (crushing strength of 5N/sq.mm) quality of nominal dimensions as per specification.	CUM	810	7.13684775

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PART-B: BILL OF QUANTITY AND % WEIGHTAGE OF INDIVIDUAL ITEMS				
E-Tender Specification No			BHE/PW/PUR/HZGG-CVL/1653	
Scope of Work: Misc. civil works and construction / repairs / renovation of plant roads and drains				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% WEIGHTAGE
1002	Providing brick work in cement mortar 1:6 (1 cement : 6 coarse sand) in walls, chambers , drain works etc at all heights, places and position above plinth including raking out joints, curing, scaffolding, providing 2 nos. 6mm dia. MS bars at every sixth layer including cutting, bending, placing, tying/welding of reinforcement bar etc complete but excluding plastering and painting, using burnt clay/fly ash bricks of class designation 5 (crushing strength of 5N/sq.mm) quality of nominal dimensions as per specification.	CUM	4	0.03671621
1003	Providing 115mm thick brick work in cement mortar 1:4 (1 cement : 4 coarse sand) in partition walls, chambers, drains etc at all heights, places and position above or below plinth/graded level including providing 2 nos. 6mm dia. MS bars at every third layer, raking out joints, curing, scaffolding etc. all complete using burnt clay/fly ash bricks of class designation 5 (crushing strength of 5N/sq.mm) quality of nominal dimensions as per specification.	SQM	4	0.00627701
1005	Making openings in existing finished brick wall or partition wall including making good the broken edges/surface with cement mortar, fixing steel /precast concrete section as lintel (steel/precast concrete section to be paid separately under Item ST no.701/ 211 respectively), painting, finishing to match with existing finishing, scaffolding/ staging works, gas cutting of reinforcement/structural work, cleaning and removing of all debris within 1Km lead etc. all complete and as directed by Engineer.	SQM	4	0.01074831
1006	Dismantling existing brick work at all level including stacking and removing the debris within a lead of 1Km., including transportation, loading, unloading, etc all complete and as directed by Engineer.	CUM	5	0.01152756
1200	CEMENT MORTAR PLASTER INCLUDING MAKING GROOVES WHEREVER REQUIRED, ALL MATERIALS, SCAFFOLDING, CURING ETC COMPLETE AS PER SPECIFICATION, DRAWING AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:			
1201	Providing 20mm thick plaster in two layers (with an under layer 14 mm thick in cement mortar 1:6 and top 6 mm thick layer in cement mortar 1:4. The top 6mm layer shall be mixed with water proofing compound) on outside the brick walls finished to a smooth finish as per specification including providing 3mmx3mm size grooves at junctions of two dissimilar materials.	SQM	15	0.00806123
1202	Providing 18mm thick plaster in cement mortar 1:6 inside uneven surface of the brick walls with smooth finish as per specification.	SQM	15	0.00695281
1203	Providing 12mm thick plaster in cement mortar 1:6 inside the brick walls with smooth finish as per specification.	SQM	15	0.00463521
1205	Providing 15mm thick neat plaster in drains/culverts as per specification.	SQM	3238	1.19498230

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PART-B: BILL OF QUANTITY AND % WEIGHTAGE OF INDIVIDUAL ITEMS				
E-Tender Specification No			BHE/PW/PUR/HZGG-CVL/1653	
Scope of Work: Misc. civil works and construction / repairs / renovation of plant roads and drains				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% WEIGHTAGE
1700	PROVIDING AND FIXING RAIN WATER DOWN TAKE PIPES INCLUDING 2 COATS OF APPROVED PAINT OVER A PRIMARY COAT, ALL SPECIALS AND ACCESSORIES ETC COMPLETE AS PER SPECIFICATION FOR THE FOLLOWING:			
1703	UPVC down take pipes of 100mm diameter- Class 3 as per IS:4985.	RM	5	0.00721480
1704	UPVC down take pipes of 160mm diameter- Class 3 as per IS:4985.	RM	5	0.01119167
1800	MISCELLANEOUS			
1801	Providing and fixing PVC water stops - 225mm wide, 8mm thick	RM	5	0.00554881
1802	Providing and fixing in position 25mm wide and 25mm thick blown bitumen in expansion joints as per specification.	RM	5	0.00161225
1804	Providing and fixing bitumen impregnated fibre joint filling board of 25mm thickness , fillers along with PVC water bar etc for expansion joint in water retaining structures all complete as per specifications, drawing and as directed by Engineer. PVC water stop shall be paid under Item no. 1801.	SQM	5	0.02148317
1815	Providing and fixing LDPE pipes in cable duct banks, openings in RCC work at all elevations of following sizes including cutting, fixing and levelling in position as per drawings, specifications all complete.			
i)	100 mm diameter	RM	5	0.00806123
ii)	150 mm diameter	RM	5	0.01209184
iii)	200 mm diameter	RM	5	0.01612246
1818	Additional miscellaneous items			
B	C:M 1:4 12mm thick for skirting	SQM	10	0.00671769
C	60 mm thick interlocking cement concrete bricks	SQM	1463	2.94839445
E	Removal of slush/mud from drains, roads etc.	CUM	2000	2.41836866
F	Dewatering			
i	2HP	Hrs.	250	0.17633938
ii	5HP	Hrs.	250	0.30229608
2200	SANITARY WORKS			
2210(ii)	Supply, laying and jointing 75mm diameter UPVC pipe conforming to class 3 of IS:4985 including bends, branches and all other necessary fittings, cutting and making good the walls and floors, jointing, testing etc all complete as per specifications.	RM	5	0.00541385
2211(ii)	Supply, laying and jointing 100mm diameter UPVC pipe conforming to class 3 of IS:4985 including bends, branches and all other necessary fittings, cutting and making good the walls and floors, jointing, testing etc all complete as per specifications.	RM	5	0.00721846
2212(ii)	Supply, laying and jointing 150mm diameter UPVC pipe conforming to class 3 of IS:4985 including bends, branches and all other necessary fittings, cutting and making good the walls and floors, jointing, testing etc all complete as per specifications.	RM	5	0.01049219

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PART-B: BILL OF QUANTITY AND % WEIGHTAGE OF INDIVIDUAL ITEMS				
E-Tender Specification No			BHE/PW/PUR/HZGG-CVL/1653	
Scope of Work: Misc. civil works and construction / repairs / renovation of plant roads and drains				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% WEIGHTAGE
2213	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 complete - 200mm diameter as per specification.	RM	5	0.01058708
2214	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 complete - 300mm diameter as per specification.	RM	5	0.01637773
2215	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 complete - 450mm diameter as per specification.	RM	5	0.03170750
2223	Construction of road/yard gullies in 250mm thick brickwork 750mm deep with cement concrete M-20 grade foundation, including reinforcement, 12mm cement mortar (1:3) plastering both inside and outside, M.S. rungs @ 250mm c/c including C.I. Grating along with frames as per IS standards including necessary earthwork in excavation, backfilling etc complete as per drawings/specifications.	Each	5	0.04564011
2400	ROAD WORK			
2401	Preparation of sub grade by excavating earth to required depth for all types of soil, dressing to camber and consolidating the base including making good the undulation etc and disposal of surplus earth within plant boundary in accordance with IS:2720 all complete as per specification.	CUM	900	0.97465631
2402	Supplying and filling with selected good earth of approved quality under pavement and shoulders etc in compacted layers of maximum depth 200mm including watering, rolling/consolidating and dressing etc to required camber including transportation, royalties complete.	CUM	17	0.02101294
2403	Providing, stacking and laying granular morrum for shoulder including watering, compaction with road roller to required level etc complete as per specification.	CUM	50	0.09515609
2404	Providing and Laying water bound macadam base/sub base course in layers of required thickness with stone aggregate 90mm to 40mm size , stone screening and binding material including screening, sorting, spreading to template and consolidation with road roller including carriage spreading and consolidation of blinding material moorum etc Including cost of material, labour, all complete.	CUM	368	1.32594102
2405	Providing and laying water bound macadam base / sub base course in layers of required thickness with stone aggregate 63mm to 40mm size , stone screening and blinding material including screening sorting, spreading to template and consolidation with road roller including carriage, spreading and consolidation of blinding material moorum etc Including cost of material labour etc. all complete as per specification.	CUM	147	0.56522556

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Scope of Work: Misc. civil works and construction / repairs / renovation of plant roads and drains				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% WEIGHTAGE
2406	Providing and laying water bound macadam base course with stone aggregate 50mm to 20mm size stone screening and binding material including screening, sorting, spreading to template and consolidation with road roller including carriage spreading and consolidation of blinding material moorum etc Including cost of material labour etc. all complete as per specification.	CUM	1316	5.37837182
2407	Providing and applying Tack coat of low viscosity liquid bitumen of a suitable approved grade confirming to IS 73, 217 or 454 as applicable @ 10 kg/10sqm for an untreated WBM surface including scraping, cleaning with compressed air etc complete.	SQM	22216	3.10419651
2408	Providing, mixing and laying of compacted 75 thick Bituminous Macadam Course . Bitumen shall be of a suitable grade complying with IS 73 and aggregates, binder material as specified in specification including hot mixing, hot laying, rolling all complete.	SQM	22216	41.78726074
2409	Providing and laying 25mm thick premix carpet surfacing with 2.25cum and 1.12 cum of stone chippings of size 12.5mm and 10mm respectively per 100 sqm with hot bitumen @ 52 kg. and 56 kg. per cu.m. of 12.5mm & 10mm size stone chippings respectively including a tack coat with hot bitumen @ 1.00 kg. per sq.m. of road surface including consolidation with road roller etc all complete with bitumen heated and then mixed with solvent at the rate of 70gms per kg of bitumen including cost of all material, labour all complete as per specification, drawings and instructions of the Engineer.	SQM	22216	9.96029208
2410	Providing and applying liquid seal coat comprising of an application of a layer of bituminous binder at the rate of 9.8kg/10sqm followed by a cover of stone chips at the rate of 0.09 cum/10sqm including rolling as per specification all complete.	SQM	22216	5.07416738
2411	Providing and laying edge protection on both edges of black topping using brick on edge (bricks with crushing strength of 75kg/Sqcm) with full brick width (230mm) etc. all complete as per drawings and specifications.	RM	10	0.00184525
2412	Supply and laying (400mm x 150mm X 350mm deep) precast concrete kerb stone of shape as per detailed drawing including fixing in 13mm thick cement mortar 1:2 in joints, finishing of joints with neat cement paste, making drainage opening where required etc complete as per specifications.	RM	968	0.93639234
2415	Supply and laying 150mm diameter R.C.C NP-2 type Hume pipe in raised shoulders as rain water drains as per detailed drawing including fixing in 13mm thick cement mortar, finishing of joints with neat cement paste complete as per specifications.	RM	300	0.32244915

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E-Tender Specification No			BHE/PW/PUR/HZGG-CVL/1653	
Scope of Work: Misc. civil works and construction / repairs / renovation of plant roads and drains				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% WEIGHTAGE
2416	Dismantling of existing road consisting of premix carpet, curb 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. complete as per specification and as directed by Engineer.	SQM	10	0.02380965
2417	Providing 25mm thick premix carpet on existing/damaged road surfaces by spreading of 2.25cum and 1.12 cum of stone chippings of size 12.5mm and 10mm respectively per 100 sqm with hot bitumen @ 52 kg and 56 kg per cum of 12.5mm & 10mm size stone chippings respectively including a tack coat with hot bitumen @ 1kg/sqm of road surface including consolidation with road roller etc all complete with bitumen heated and then mixed with solvent at the rate of 70 gm/kg of bitumen including cost of all material, labour, cleaning, repairing damaged carpet, WBM, sub grade/sub base, to the required thickness wherever required, consolidation with road roller etc all complete as per specification and as directed by Engineer.	SQM	10	0.00633932
PART-B	Name of work : Construction of civil, structural, architectural works for CO2 storage building, Fencing and ventilator work of H2 storage building, False flooring work in ETP area & Additional new foundations in STP area, Cable trench, duct bank, Pipe laying for Air quality monitoring rooms and STP area At 1x 350 MW CCPP, GSEGL Hazira.			
101	Earth work in excavation in all types of soil including ash, laterite, murrum etc. upto 2m 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, levelling to grade and ramming the bottom, stacking/disposal of surplus excavated material within a lead of 1.0 KM	CUM	577	0.15504430
102	Earth work in excavation in all types of soil including ash, laterite, murrum etc. for depth exceeding 2m but not exceeding 4m below ground level for foundation, trenches, pipe lines, storm water drains etc including dewatering if required, strutting, shoring/sheet piling if required, dressing the sides, levelling to grade and ramming the bottom, stacking/disposal of surplus excavated material within a lead of 1.0 KM .	CUM	200	0.07308847
103	Earth work in excavation in all types of soil including ash, laterite, murrum etc. for depth exceeding 4m but not exceeding 6m below ground level for foundation, trenches, pipe lines, storm water drains etc including dewatering if required, strutting, shoring/sheet piling if required, dressing the sides, levelling to grade and ramming the bottom, stacking/disposal of surplus excavated material within a lead of 1.0 KM.	CUM	230	0.10939088

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PART-B: BILL OF QUANTITY AND % WEIGHTAGE OF INDIVIDUAL ITEMS				
E-Tender Specification No			BHE/PW/PUR/HZGG-CVL/1653	
Scope of Work: Misc. civil works and construction / repairs / renovation of plant roads and drains				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% WEIGHTAGE
107	Extra over item nos. 101 to 103 for disposal of surplus excavated earth/rock beyond an initial lead of 1km and upto a maximum lead of 2 Km. or part thereof.	CUM	425	0.04111227
115	Back filling around foundations in plinths, trenches, drains etc to proper grade and level with selected good soil from excavated earth within a lead of 1 Km free from shingle, salts, organic materials, roots, sod or any other foreign substance including re-excavating loose thickness, watering and ramming in layers of 15cm thickness compacted to 75% of relative density for non cohesive soil and 90% of its maximum dry density for cohesive soils by manual/ mechanical means, dressing etc complete including re- excavation, loading, transportation, unloading spreading etc..	CUM	420	0.13430007
116	Back filling around foundations in plinths, trenches, drains etc to proper grade and level with borrowed cohesive non swelling(CNS) soil free from shingle, salts, organic materials, roots, sod or any other foreign substance including excavation, transportation, watering and ramming in layers of 15cm thickness compacted to 90% of its maximum dry density by manual/ mechanical means, dressing etc complete. Borrowed CNS soil shall be arranged by the contractor him/herself from their own borrow area (without extra cost to BHEL). Item rate shall be inclusive of any FEE, ROYALTY etc. as applicable & no separate payment will be maid on this account.	CUM	5	0.00374847
119	Supplying and filling in trenches, plinths, area paving and other underground structures with stones using 63 mm and down sized aggregates in layers not exceeding 225 mm thickness including breaking of 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 instructions of engineer-in-charge.	CUM	18	0.06418350
	LEVELLING & GRADING/ CONCRETE WORKS			
200	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) ETC COMPLETE AT ALL ELEVATIONS AS PER DRAWING, SPECIFICATIONS UNLESS SPECIFIED OTHERWISE AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:			
202	Plain Cement Concrete of grade 1:3:6 as levelling course, under water retaining structures, equipment foundations, under foundations / floors etc all complete with OPC 43 GRADE cement.	CUM	19	0.17179822

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PART-B: BILL OF QUANTITY AND % WEIGHTAGE OF INDIVIDUAL ITEMS				
E-Tender Specification No			BHE/PW/PUR/HZGG-CVL/1653	
Scope of Work: Misc. civil works and construction / repairs / renovation of plant roads and drains				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% WEIGHTAGE
203	Concrete of grade M-30 conforming to IS:456 with coarse sand and graded hard stone aggregate 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/super plasticizer conforming to IS:9103 (latest) to achieve required slump in concrete all complete using Ordinary Port Land cement of 43 grade (with C3A Tri calciam aluminate between 5 to 8% or Portland slag cement.	CUM	58	0.88725647
205	Concrete of grade M-30 conforming to IS:456 with coarse sand and graded hard stone aggregate 20mm nominal size in superstructure at all heights from finished floor level at any level, shape, position or thickness complete including use of plasticizer/ super plasticizer conforming to IS:9103 (latest) to achieve required slump in concrete all complete, using Ordinary Port Land cement of 43 grade.	CUM	15	0.22039400
209	Concrete of grade M-30 conforming to IS:456 with coarse sand and graded hard stone aggregate 20mm nominal size in precast works like trench covers etc. including formwork/moulds for thicknesses varying from 50mm to 250mm including transportation, erection, fixing in position at all elevations and use of plasticizer wherever required all complete but excluding the cost of reinforcement . using Ordinary Port Land cement of 43 grade.	CUM	1	0.01374440
210	Concrete of Grade M-20 conforming to IS:456 with coarse sand and graded hard stone aggregate 20mm nominal size in plinth protection. using Ordinary Port Land cement of 43 grade.	CUM	9	0.10355455
211	Breaking existing concrete work at any level including removing the debris within a lead of 1Km including transportation, loading, unloading, etc all complete.	CUM	1	0.00486361
212	Breaking existing concrete work at any level including cutting reinforcements, removing the rubbish within a lead of 1Km including making good the broken edges/surface with cement mortar, painting, finishing to match with existing finishing, scaffolding/ supporting at any level, all complete and as directed by Engineer.	CUM	1	0.00729541
300	SUPPLYING, FIXING AND REMOVING FORMWORK AT ANY ELEVATION INCLUDING ALL LABOUR, MATERIAL, SCAFFOLDING COMPLETE INCLUDING POCKETS ETC AS PER SPECIFICATIONS AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:			
301	Ordinary form work (reasonably good steel/plywood surface) below finished ground floor level for foundations, footings, bases of columns, walls, columns pilasters, beams, mass concrete, trenches etc.	SQM	138	0.11124496
302	Fairface form work (using commercial laminated ply wood with steel/wooden frame) below finished ground floor level for foundations, footings, base of columns, walls, columns, pilasters, beams, mass concrete, trenches etc for exposed concrete works.	SQM	40	0.03331975

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PART-B: BILL OF QUANTITY AND % WEIGHTAGE OF INDIVIDUAL ITEMS				
E-Tender Specification No			BHE/PW/PUR/HZGG-CVL/1653	
Scope of Work: Misc. civil works and construction / repairs / renovation of plant roads and drains				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% WEIGHTAGE
303	Ordinary form work (reasonably good steel/plywood surface) above finished ground floor level for columns, beams, suspended floors, roofs, lintels, cantilevers, staircases, landings, balconies, domes, arches etc for all heights.	SQM	5	0.00483674
304	Fairface form work (using commercial laminated ply wood with steel/wooden frame) above finished ground floor level for columns, beams, suspended floors, roofs, lintels, cantilevers, staircases, landings, balconies, domes, arches etc for all heights.	SQM	205	0.21648430
305	Extra over item no.301, 302, 303, 304 for curved form work for beams, walls, trenches etc as per specification.	SQM	5	0.00470238
307	Providing and removing formwork in Pockets/block outs and openings (below 0.1 sqm contact surface area with concrete) at all elevations including cutting, formations all shapes for foundation bolts, embedments, etc all complete.			
i)	Up to 300 mm depth	Each	9	0.00928654
ii)	Up to 600 mm depth	Each	1	0.00164180
400	REINFORCEMENTS (Reinforcement steel is in BHEL's scope of supply)			
402	Taking delivery of steel from BHEL stores/store yard , loading, transporting and unloading at site, straightening, cutting, bending, placing in position at any level, binding in position of Tor steel reinforcements (TMT) supplied by BHEL free of cost, confirming to HCR -M Grade FE - 500 including cost of binding wire, labour, transportation to & from stores etc complete all as per specifications, drawings and as directed by Engineer.	MT	7	0.14107151
500	WATER PROOFING AS PER SPECIFICATIONS.			
502	Providing and fixing roof water proofing treatment using high solid content liquid applied PU Based elastomeric water proofing membrane with separate wearing course per ASTM C-898. Thickness of the membrane shall be 1.5mm. This treatment shall includes application of polymerised mottar over sloped roof to achieve a smooth surface and a primer coat. Wearing course shall be paid separately under item no. 504.	SQM	45	0.08209863
503	Providing and grading under bed over roof slab, floors to achieve the specified slope with 1:4 cement mortar plaster (by volume) of average 25mm thickness at all elevations including all labour, material, equipment, handling, preparation of surface, transportation, batching, mixing, placing, levelling, curing, testing etc. complete as per specification, drawing and instruction of engineer.	SQM	45	0.01825868

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E-Tender Specification No			BHE/PW/PUR/HZGG-CVL/1653	
Scope of Work: Misc. civil works and construction / repairs / renovation of plant roads and drains				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% WEIGHTAGE
504	Providing and laying protective wearing course of 40 mm thick PCC (1:2:4) with 6 mm down aggregate laid in 1200mm square panels alternatively cast reinforced with 0.56 mm diameter galvanised chicken wire mesh with a gap of 6 mm between two adjacent panels, gaps shall be filled with silicon sealant for expansion and contraction all complete with labour, material, equipment and as per specification/drawing and to the satisfaction of engineer in charge.	SQM	45	0.05765391
508	Screed concrete M20 conforming to IS 456 with coarse sand and graded hard stone aggregate 12.5mm/6mm nominal size on the roof at any level or thickness to maintain the required grade complete.	CUM	2	0.02971906
510	Providing three coats of bituminous paint on concrete surfaces in contact with soil in foundations of grade 85/25 confirming to IS 702 @ 1.7 kg/sqm.	SQM	110	0.01921260
700	M.S. EMBEDMENTS			
701	Supplying, fabricating and fixing of embedments, MS inserts, pipe sleeves, guide rails, angle pieces, Fencing post, rungs of various diameters, plates of dimensions as required including cost of all labour, materials and equipment, transportation, loading, unloading, handling, welding, cutting, drilling, scaffolding and setting complete as per specifications, drawings and as directed by Engineer.	MT	3	0.55676489
702	Extra over item No 701 for hot dip galvanising at the rate of minimum 610gm/sqm to an average of 750gm/sqm including treating the galvanised members with sodium dichromate solution as per specification and as directed by the Engineer-in-charge.	KG	200	0.02149661
900	DOORS, WINDOWS, VENTILATORS, LOUVERS, ROOF VENTILATORS, ROLLING SHUTTERS, PARTITIONS ETC. COMPLETE INCLUDING FRAMING, KICK PLATES, STOPPERS AS PER SPECIFICATION, DRAWINGS AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:			
903	Providing and fixing steel openable windows/ventilators with steel sections as per IS:1038, IS:1361 & IS:7452 latest revision. Glazing shall be of 4mm thick float glass panes including all fittings, metal beadings, hold fasts, primer painting as per specification all complete. Rate shall be inclusive of glazing.	SQM	7	0.05217765
906	Providing and fixing steel single or double door shutters . Shutters shall be 45mm thick 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 on centres including all fittings, Godrej make Mortice lock with handle on both sides, primer painting complete as per specification. Pressed steel frame shall be paid separately under relevant items.	SQM	4	0.06213595

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E-Tender Specification No			BHE/PW/PUR/HZGG-CVL/1653	
Scope of Work: Misc. civil works and construction / repairs / renovation of plant roads and drains				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% WEIGHTAGE
914	Providing and fixing pressed steel door frames fabricated using 16 gauge MS steel mortised , reinforced, drilled and tapped for hinges and locks, bolts, strikes, holdfast, adjustable floor anchors, floor tiles/ weather bar, painting etc. all complete as per specification	KG	34	0.01004967
1000	BRICKWORK MASONRY INCLUDING SUPPLY OF MATERIAL, COST OF LABOUR, SCAFFOLDING ETC COMPLETE AS PER SPECIFICATIONS, DRAWING AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:			
1001	Providing brick work in cement mortar 1:6 (1 part cement: 6 parts coarse sand) in walls, chambers etc of 230mm & above in thickness at all depths, places and positions below plinth including raking out joints, curing, scaffolding etc. all complete excluding plastering and painting, using burnt clay bricks of class designation 5 (crushing strength of 5N/sq.mm) quality of nominal dimensions as per specification.	CUM	8	0.07048739
1002	Providing brick work in cement mortar 1:6 (1 cement : 6 coarse sand) in walls, chambers etc at all heights, places and position above plinth including raking out joints, curing, scaffolding, providing 2 nos. 6mm dia. MS bars at every sixth layer including cutting, bending, placing, tying/welding of reinforcement bar etc complete but excluding plastering and painting, using burnt clay bricks of class designation 5 (crushing strength of 5N/sq.mm) quality of nominal dimensions as per specification. Reinforcement shall be supplied by BHEL free of cost.	CUM	15	0.13768579
1003	Providing 115mm thick brick work in cement mortar 1:4 (1 cement : 4 coarse sand) in partition walls, chambers etc. at all heights, places and position above or below plinth/graded level including providing 2 nos. 6mm dia. MS bars at every third layer, raking out joints, curing, scaffolding etc. all complete using burnt clay bricks of class designation 5 (crushing strength of 5N/sq.mm) quality of nominal dimensions as per specification.	SQM	5	0.00784626
1005	Making openings in existing finished brick wall or partition wall including making good the broken edges/surface with cement mortar, fixing steel /precast concrete section as lintel (steel/precast concrete section to be paid separately under Item ST no.701/ 209 respectively), painting, finishing to match with existing finishing, scaffolding/ staging works, gas cutting of reinforcement/ structural work, cleaning and removing of all debris within 1Km lead etc. all complete and as directed by Engineer.	SQM	5	0.01343538
1006	Dismantling existing brick work at all level including stacking and removing the debris within a lead of 1Km., including transportation, loading, unloading, etc all complete and as directed by Engineer.	CUM	1	0.00230551

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Scope of Work: Misc. civil works and construction / repairs / renovation of plant roads and drains				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% WEIGHTAGE
1007	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 etc all complete and as directed by Engineer.	SQM	1	0.00178691
1100	DAMP PROOF COURSE INCLUDING ALL MATERIALS, LABOUR, SHUTTERING, CENTERING, CURING ETC COMPLETE WITH THICKNESS AS SPECIFIED/SHOWN ON DRAWINGS OR AS DIRECTED BY ENGINEER FOR THE FOLLOWING:			
1101	Damp Proof Course 50mm thick 1:1.5:3 concrete (10mm and down graded aggregate) with 2% of approved admixture of water proofing compound. Two layers of hot bitumen coating 85/25 grade as per IS:702 @ 1.7Kg./sqm shall be applied before & after the DPC as per specification.	SQM	5	0.00511888
1200	CEMENT MORTAR PLASTER INCLUDING MAKING GROOVES WHEREVER REQUIRED, ALL MATERIALS, SCAFFOLDING, CURING ETC COMPLETE AS PER SPECIFICATION, DRAWING AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:			
1201	Providing 20mm thick plaster in two layers (with an under layer 14 mm thick in cement mortar 1:6 and top 6 mm thick layer in cement mortar 1:4. The top 6mm layer shall be mixed with water proofing compound) on outside the brick walls finished to a smooth finish as per specification including providing 3mmx3mm size grooves at junctions of two dissimilar materials.	SQM	135	0.07255106
1203	Providing 12mm thick plaster in cement mortar 1:6 inside the brick walls with smooth finish as per specification.	SQM	100	0.03090138
1204	Providing 6mm thick plaster in cement mortar 1:4 on ceiling with smooth finish as per specification.	SQM	35	0.01006310
1207	Providing Plaster of Paris 2 mm thick punning over finished plaster surface and finished with smooth surface as per specification.	SQM	100	0.01827212
1300	FINISHES, PAINTING TO CONCRETE, PLASTERED SURFACES, SURFACE PREPARATION INCLUDING ALL MATERIALS, LABOUR, SCAFFOLDING ETC ALL COMPLETE AS PER SPECIFICATION, DRAWING AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:			
1303	Providing and applying Two or more coats of water proofing cement paint of approved brand and manufacture and of required shade to give an even shade on walls complete.	SQM	135	0.02067705
1304	Providing and applying Two or more coats of distempering with oil bound washable distemper as per IS:428 of approved brand and manufacture to give an even shade including a priming coat with distemper primer complete over P.O.P. (P.O.P. shall be paid separately)	SQM	100	0.02015307

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Scope of Work: Misc. civil works and construction / repairs / renovation of plant roads and drains				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% WEIGHTAGE
1306	Providing and applying 2 or more coats of exterior Granular finish (vineratex) paint of approved make and colour on exterior surfaces at all heights including material, labour, scaffolding, curing etc complete as per specification.	SQM	200	0.16122458
1400	FLOORING AND SKIRTING INCLUDING BASE LAYER AND ALL MATERIALS, LABOUR, CURING, POLISHING ETC COMPLETE IN ALL RESPECTS AS SHOWN ON DRAWINGS, SPECIFICATIONS AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:			
1402	Providing and laying 50mm thick heavy duty I.P.S flooring with non - metallic hardener pigmented topping 12mm thick uniform graded including an under layer of 38mm thick cement concrete mix 1:2:4 (1 part cement, 2 parts sand and 4 parts stone chips 12.5 mm well graded) and top layer of 12mm thick non metallic concrete of mix 1:2 (1 cement : 1 hardner mixed with approved quality of non metallic hardening compound : 2 stone aggregates 6mm nominal size)	SQM	30	0.03160002
1404	Same as item no. 1402 but in skirting and dado.	SQM	5	0.00540102
1700	PROVIDING AND FIXING RAIN WATER DOWN TAKE PIPES INCLUDING 2 COATS OF APPROVED PAINT OVER A PRIMARY COAT, ALL SPECIALS AND ACCESSORIES ETC COMPLETE AS PER SPECIFICATION FOR THE FOLLOWING:			
1704	UPVC down take pipes of 160mm diameter- Class 3 as per IS:4985.	RM	10	0.02238335
1800	MISCELLANEOUS			

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E-Tender Specification No			BHE/PW/PUR/HZGG-CVL/1653	
Scope of Work: Misc. civil works and construction / repairs / renovation of plant roads and drains				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% WEIGHTAGE
1809	Design, supply, fabrication, installation of truly levelled and aligned 800 - 1000 mm high cavity flooring comprising of 35mm thick Nova teak or approved equivalent make superparticle board of size 610mm x 610mm floor panels having 2mm thick anti-static PVC sheet on top, 2mm thick hard PVC strip lipping on edges and 26G aluminium sheet fixed with araldite on underside including cutting of panels where required for cables etc with supporting system comprising of 25mm diameter galvanised MS threaded rod and pressure die cast zinc alluminium alloy adjustable head attachment at top and welded to contd..	SQM	105	1.71796879
	contd..... 100mmx100mmx8mm base plate, pedestal fixed to floor by means of expension fasteners to existing floor at a distance of 610mm center to center bothways etc all complete as per specification and as directed by Engineer.			
1815	Providing and fixing LDPE pipes in cable duct banks, openings in RCC work at all elevations of following sizes including cutting, fixing and levelling in position as per drawings, specifications all complete.			
iii)	200 mm diameter	RM	5	0.01612246
2002	Providing and fixing M.S gates excluding civil works viz. excavation, concreting which shall be as per specifications complete.	MT	1	0.24908391
2003	Supplying and erecting in position 2.4m high PVC coated gavanised chain linked fencing of minimum 8gauge (including PVC coating) of mesh size 50mm. The diameter of the steel wire for chain link fencing excluding PVC coating shall not be less than 12gauge. GI barbed wire fencing confirming to IS 298 at top of chain link fencing shall be provided with 4 stands of height of 600 mm including all accesories as per specification all complete. The rate to include the cost of line wire but to exclude the cost of chain link posts, which will be measured separately under item no. 701	SQM	170	0.78752832
2200	SANITARY WORKS			
2213	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 complete - 200mm diameter as per specification.	RM	750	1.58806209
2400	ROAD WORKS			
2403	Providing, stacking and laying granular morrum below foundation, trenches including watering, compaction with mechanical compactor to required level etc complete as per specification.	CUM	152	0.28927451