

**Sub: Pre bid meeting Technical and commercial Clarification against open tender enquiry for Construction of all the Main Civil, Structural & Architectural works in main plant area and BOPs related to buildings and foundations including supply of all materials except those proposed to be supplied by BHEL for UNIT - 7 at Anpara-D Thermal Power Plant of 2 x 500 MW units (UNIT 6 & 7) of UPRUVNL at Anpara , Sonebhadra , UP.**

**TENDER NO. BHEL/ NR/SCT/ ANPARA D/U 7/ CIVIL MAIN AND STR/ 689**

**Pre bid meeting Technical and commercial Clarification on TENDER NO. BHEL/ NR/SCT/ ANPARA D/U 7/ CIVIL MAIN AND STR/ 689 contains following clarifications in the specifications and shall form a part of the above tender. This Pre bid meeting is to be submitted, duly signed and stamped, along with the Technical bid (Part-I) of both the tenders.**

Sl. No.	Reference Cl. No. of Bidding Document	Description of existing provision of NIT	Bidders questionnaire for clarification sought / modification proposed towards existing provision of NIT.	Clarification by BHEL
	<b><u>CIVIL PART :</u></b>			
	<b><u>Bill of Quantities (BOQ)</u></b>			
1	ST-102(i) (a) to (d)	Extra over item 101.....depth upto 15 mtrs.	Soil Investigation Report / Bore Log Data may please be provided.	Indicative Bore Log is attached . However , this bore log may not necessarily reflect the Soil Conditions in all areas of the plant .
2	ST-106 (i)	Filling with slected materials	Considering the availability of materials, filling with ash only obtained from ash pond, free of cost, may please be allowed. - Please confirm and ammend the item accordingly.	<b>In description of ST-106 (i), "or ash obtained from the ash pond" may be treated as deleted and Amended Item may be read as :</b> With selected soil brought from borow areas arranged by contractor, including royalties, fees etc. for all leads and compacted to following densities
3	ST-106 (iii) & ST-108A	Filling with non-expansive materials & Providing & laying C.N.S materials in layers.....	* Please confirm that Morrur available in the locality within 1 Km to 4 Km of project site shall satisfy the requirement of non-expensive materials and C.N.S. materials as per BOQ items.  * Also specify the areas where this material will be used.	Material is to be brought from all leads. Accordingly , " (from 1 to 4 K.M.)" stands deleted . This item will normally be used in foundations without piling where the ash is to be replaced to increase bearing capacity .

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4	ST-202A, 202B, 203, 203A, 204, 204A, 204B, 208	Concrete of different Grades	Please specify whether cost of Plasticizer (IS-9103) to be included or not in these items.	"Cost of plasticizer to be included in the rate of concrete"
5	ST-204, 204A, 204B	Concreting of various grades	These items will be operated at all heights from finished floor level. - Please confirm and ammend the description of each item accordingly.	Description to be read as " at all heights " insterad of "heights" .
6	ST-209(i)	M-30 in water retaining / conveying structures..... Below ground level.	* Quantity for this item not given. - Please provide this. * Scope of Bitumen Painting may please be provided under separate item.	Item 209(i) is <b>deleted</b> . Bitumen painting is covered under Item no 213
7	ST-209(iii)	Waterproofing shall be ..... Bitumen 1.5 mm	Different types of waterproofing, PVC water bar, chemical injection, grouting has been combined in the item which is beyond the norms. Please provide separate item for respective kind of waterproofing treatment.	Item 209 (iii) to be read as : " Painting with mimimum two coats of such coating ,as applicable on internal/external surface of above structures with acrylic based polymer modified cementatious composite coating system . Qty - <b>2536 sq m</b> .
8	ST-212 & ST-214	Cutting and making opening in existing concrete work & chipping of concrete.	* Please confirm whether any special mechanical device to be deployed manditorily or not. * Quantity for item no. ST-214 appears high. - Please check this.	Mechanised methods to be considered for this item . Qty of Item No 214 is correct
9	ST-306	Formwork in block-outs / pockets.....	Plan area shall be below 0.1 sqm. - Please confirm.	Earlier description " (below 0.1 sqm contact surface area with concrete) " to be read as " (below 0.1 sqm plan surface area with concrete)
10	ST-401, 402 & 403	Reinforcement Steel	The word "providing" should be deleted since Reinforcement (MS & HYSD) will be issued as FOC item. - Please confirm.	In the Item Description " reinforcement " is already struck off
11	ST-500 & ST-501	Elastomeric Water Proofing membrane	* Guarantee period shall be 10 years instead of 20 years. - Please confirm. * Please clarify whether the application of water proofing membrane (Elastomeric) shall be directly on concrete surface of roof slab or not. If any grade plaster is to be done on roof slab it will be paid separately. - Please confirm.	*Accepted. *Grade plaster is considerd included in the item . Please refer to the technical specifications of the tender and also to ASTM-C- 898 as mentioned .

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12	ST-503	Pressed Pre-cast Concrete Tiles	Size of Tile 600 x 600 mm please be replaced by 250x250 / 300x300 mm x 22 mm due to availability of materials. - Please confirm.	The item description has been operated before . However , as the item Qty is in SQM, 300 x 300 may also be considered .
13	ST-701A	Embedments	All steel materials under the scope of this item will be issued by BHEL as FOC material. - Please reconfirm.	All items under this item is envisaged as FOC item . However , if any additional item is required to be supplied to complete the itm , the additional supplied item will be paid under Item ST No 701
14	ST-702	Embedments	Fabricated materials will be issued by BHEL free of cost. - Please confirm.	All items under this item is envisaged as FOC item . However , if any additional item is required to be supplied to complete the item , the additional supplied item will be paid under Item ST No 701
15	ST-802	Grouting	Grouting material shall be Conbextra GP2 instead of Conbextra GPX-2. - Please confirm.	"Conbextra GPX-2" may be read as "Conbextra GP2 ".
16	ST-902	Steel Windows and Ventilators	Glazing shall be paid separately. - Please confirm.	Confirmed
17	ST-906	Fireproof Steel Door ..... with minimum rating shall be 3 hrs.	Unit of this item has been given as 'Kg'. Please change this unit in ' <b>Sqm</b> ' as the specialised sub-vendors informed that they will give the rate in 'Sqm' only, not in 'Kg'. - Please confirm and change in unit accordingly.	Unit of Item No ST-906 is revised to Sq. M and Qty is revised to 100 Sq m i. e. Unit mentioned in Rev - 1 of BOQ may be read as Sq m and Qty mentioned as 483 may be read as 100 Sq m
18	ST-1010	Encasing of Structural Steel with masonry work.....	Proportion of Cement mortar of brickwork not specified. - Please specify this.	Please refer to the Technical Specification Sec D08 for Encasement Masonary work .
19	ST-1011	Dry Brick Aggregates	Quantity not given in this item. - Please provide the same.	Qty - 1000 Sq. m,
20	ST-1301	Exterior masonry paint.....	Please specify the type of paint with approved name of manufacturers and also specify the relevant I.S. Code No.	Please consider Sand Text Mat or equivalent
21	ST-1303 & ST-1307	Oil Bound Distemper & Acrylic Emulsion paint	These items shall be inclusive of cost of plaster of paris punning of minimum 2 mm thick. - Please re-confirm.	Confirmed .
22	ST-1403, 1404	Concrete Tiles	Thickness and mix proportion of bed mortar not specified. - Please specify.	Please refer to the Technical Specification Sec D10 for details of Floor Finish

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23	ST-1413, 1415, 1416, 1416A, 1417, 1418, 1419, 1420, 1421, 1422	Flooring Items	Thickness and mix proportion of bed mortar not specified. - Please specify.	Please refer to the Technical Specification Sec D10 for details of Floor Finish
24	ST-1423	Heavy Duty Cement Concrete Flooring	* Description of item appears incomplete. Thickness of Topping and Underbed not specified and also type of Hardener whether metallic or non-metallic not specified. - Please specify the above in the item description.  * It also appears that item no. ST-1401 & ST-1423 identical. - Please clarify.	Hardner for Item No ST-1401 is Metallic . Hardner for Item No ST-1423 is Non-Metallic
25	ST-1415	IPS Flooring	* Item description is incomplete. - Please provide the full description of this item.	Please refer to the Technical Specification Sec D10 for details of Floor Finish.
26	ST-1427	Cindor Filling	Quantity not given. - Please provide the same.	<b>Qty to be taken as - 100 CuM</b>
27	ST-1429	Marble Slab	20 mm thick cement sand (1:4) bed mortar shall be used in place of lime-surki bed mortar. - Please confirm.	Item description confirmed . In case cement motar is used , cement will be FOC .
28	ST-1430	RCC Grade Slab	Average maximum thickness of RCC (M-15) grade slab may please be specified instead of minimum 150 mm thick as per item description. - Please confirm.	Item does not exist in revised BOQ
29	ST-1502	Profiled / Plane Deck Sheet	* Description of item not clear. Please specify the type of sheeting with profile to be used along with other parameters like thickness, painting etc. for supporting RCC floors at all heights.	Item does not exist in revised BOQ
30	ST-1504 & ST-1505	Metal cladding for external walls	The description for both the items appear identical. - Please check and clarify.	<b>In ST 1505 , " cladding for external walls" is to be replaced by " cladding for internal walls "</b>
31	ST-1601, 1602 & 1603	False Ceiling	All materials for structural platform grid made-up of MS Channels / Beams / Angles etc. shall be supplied by BHEL as FOC materials and shall be paid separately under item no. ST-2301. - Please confirm.	All final structural sections to be provided for movement of personnel above false ceiling will be supplied as FOC items and paid under fabrication , erections items under ST 2301A and 2314A respectively .
32	ST-1604	Aluminium ceiling	All materials for structural platform grid made-up of MS Channels / Beams / Angles etc. shall be supplied by BHEL as FOC materials. - Please re-confirm.	All final structural sections to be provided for movement of personnel above false ceiling will be supplied as FOC items

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33	ST-1808A, 1808B, 1808C & 1808D	Earthing System	* Relevant drawings for earthing system may please be provided to us.  * All Civil Works like excavation, backfilling, concreting, formwork, reinforcement (free supply) etc. may please be paid separately under applicable BOQ items. - Please confirm.	"Item 1808C modified to include item 1808A, Item 1808D deleted and accordingly BOQ cum Rate Schedule Revised".
34	ST-2105 to 2111	GI Pipes	Class of GI Pipes not specified. - Please specify.	Medium Class
35	ST-2201, ST-2204 & ST-2205	Wash Basin, Pan with Foot Rest & Urinals	All these sanitary fittings shall be of white colour. - Please confirm.	Item to be considered - Non-Premium . Coloured .
36	ST-2218	CI Manhole Cover (600x450 mm)	Grade of CI Manhole cover not specified. - Please specify.	Heavy Duty
37	ST-2417 & ST-2418	RCC Hume Pipe	Class of pipe not specified. - Please specify.	NP2 class RCC pipes
38	ST-2418	75 mm thick interlocking blocks	Grade of concrete for interlocking block not specified. - Please specify.	The item refers to PCC Interlocking blocks on shoulder
39	ST-1006 , 1007	Qty mentioned		Qty mentioned to be deleted .
	<b><u>Special Conditions of Contract (SCC)</u></b>			
40	Annexure-II to SCC	List of T&P to be arranged by the Contractor.	As per Annexure-II it is mentioned that 1(one) no. Batching Plant (30 Cum/Hr.) is to be arranged. But in the Notes No.5 of Rate Schedule (Part-II / Page-27 of 27) it is mentioned that cost will be deducted from Contractor for non-mobilisation of 2 (two) nos. Batching Plant within 45 days of start of work which contradicts each other. - Please clarify.	Note 5 in the BOQ CUM Rate Schedule may be treated as deleted .

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41	Clause No.54.3 & 54.4 of SCC	Terms of Payment	* As per clause no. 54.4, it is understood that first 2.5% of Final Contract Value (out of 5% Retention Money) shall be payable on submission and passing of Final Bill. - Please confirm.  * As per clause no. 54.3, balance 2.5% of Final Contract Value shall be payable on completion of all pending works, rework wherever required, site clearing & reconciliation of material. - Please clarify that this is correlated with expiry of Defect Liability Period (DLP).	May please see Clause No. 54.3 and 54.4 along with NOTE of the SCC.
42	Clause No.51.0 of SCC	Price Variation	Since the stipulated time of completion is 25 (twenty-five) months i.e. more than 18 months, then as per CPWD norms, Price Variation Clause both for material and labour should be applicable for the entire period of contract including authorised extended period. - Please confirm.	Not accepted
43	General	-	Secured Advance against the following non-perishable materials may please be payable @75%(seventy-five) of value of materials brought at site which will be recovered from R.A Bill as incorporated in the work progressively. a) All steel windows & doors. b) <u>Steel Rolling Shutters.</u>	Not accepted
44	General	Annexure-X General Terms and Conditions of Reverse Auction (RA)	Excel Sheet of Price Schedule (PART-II) may please be provided to us to facilitate the preparation of our offer.	File attached .

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			ANNEXURE-II	
SI No	ST. NO	DESCRIPTION	CLARIFICATIONS SOUGHT BY BIDDER.	Clarification by BHEL
45	200	<b>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) COMPLETE AS PER DRAWING AND SPECIFICATIONS UNLESS SPECIFIED OTHERWISE FOR THE FOLLOWING ( OPC and PPC Cement will be issued as FOC item ):</b>		
46	209	Concrete of grade <b>M30 in water retaining/conveying structures/overhead tanks etc</b> including addition of suitable plastisizer cum waterproofing cement additives conforming to IS 9103 latest to achieve a slump more than 125 mm in concrete as per manufacturers recommendation and subsequent reduction in cement content upto a maximum 10% complete and conforming to limits of permeability as per IS 2545 as per specification with 20 mm nominal size graded aggregate.	Kindly mention the SI. No. of this item .	Serial No is not required as this is item description
47	i)	Below Ground Level including providing with minimum two coats of bituminous painting of grade 85/25 @ 1.7 Kg/sqm for water/damp proofing conforming to IS 702 on soil face.	Kindly mention the unit & quantity for this item.	Item deleted . Refer SI No 6 of Main List
48	ii)	Above Ground Level		
49	iii)	Water proofing shall be provided for liquid retaining/ carrying structures and basement type structures (requiring dry working condition). Dense and durable concrete with water cement ratio not more than 0.45 shall be used. Plasticiser/super plasticiser cum water proofing compound shall be added to the concrete. All the construction / expansion joints shall be properly treated with PVC water bar and/or chemical injection grouting as per IS:6494. As applicable internal/external surface of such structures shall be provided with acrylic based polymer modified cementitious composite coating system for critical structures. For liquid carrying / retaining structures, minimum two coats of such coating shall be applied. For external application wherever the surface is in contact with the earth, fine silica/quartz sand of 0.6 mm nominal size shall be added in the coating mix for better abrasion resistance and total nominal structures minimum two coats of bitumen 1.5mm.	Kindly clarify Whether the unit will be in Sqm or Cum.	Item modified . Refer SI No 7 of Main List
50	213	Minimum Two coats of hot bitumen painting, below ground level, of grade 85/25 @ 1.7 Kg/sqm/coat for water/damp proofing conforming to IS:702 on soil face with anti-stripping compound.	Kindly mention the quantity if any.	Item deleted
51	500	<b>WATER PROOFING AS PER SPECIFICATIONS. (Contractor has to furnish a guarantee for material and workmanship for a minimum period of 20 years.)</b>	Twenty yrs guarantee seems to be on higher side. Kindly reduce it to 10yrs against a corporate guarantee.	Refer SI No 11 of Main List
52	900	<b>DOORS, WINDOWS, VENTILATORS, LOUVERS, ROOF VENTILATORS, ROLLING SHUTTERS, PARTIONS ETC. COMPLETE AT ALL ELEVATION INCLUDING FRAMING, KICK PLATES, STOPPERS AS PER SPECIFICATION AND DRAWINGS (all steel doors, windows and rolling shutters etc. shall be painted with two coat of red oxide zinc primer and finished with two coats of synthetic enamel paint conforming to IS2074)</b>		
53	933	Providing and fixing factory made prelaminate particle board (MDF ext gr) <b>doors</b> incl all fitting & fixtures as per specification, drawing and instructions of engineer in charge.	Kindly indicate the thk. Of particle board.	Please refer to the Technical Specification Sec D12 for details of Doors .

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SI No	ST. NO	DESCRIPTION	CLARIFICATIONS SOUGHT BY BIDDER.	Clarification by BHEL
54	1000	<b>BRICKWORK MASONRY INCLUDING SUPPLY OF MATERIAL, COST OF LABOUR ETC. COMPLETE, AS PER SPECIFICATIONS. ( OPC and PPC Cement will be issued as FOC item for plastering / mortar ):</b>		
55	1006	Providing <b>brick soling</b> including spreading of earth, ramming, watering including 12mm 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.).- <b>Using flat bricks.</b>	Please confirm the unit of item.	Qty to be deleted as this is main description . Items are in ST No 1006 (i) to ( iii)
56	1007	Providing <b>brick soling</b> including 12mm thick <b>cushion of sand</b> excavation, disposal of surplus earth spreading of earth, ramming, watering etc. complete in all respects.- <b>Using bricks on edge.</b>	...do as above....	Qty to be deleted as this is main description . Items are in ST No 1006 (i) to ( iii)
57	1011	Providing and laying 75 mm thick bed of <b>dry brick aggregate</b> including of excavation, disposal of surplus earth spreading of earth, ramming, watering etc. complete in all respects as directed by the engineer.	Kindly mention the quantity if any.	Refer SI No 19 of Main List for Qty
58	1400	<b>FLOORING AND SKIRTING INCLUDING BASE LAYER AND ALL MATERIALS, LABOUR, CURING, POLISHING, FINISHING, EXPANSION JOINTS, GROOVES, ETC. COMPLETE IN ALL RESPECTS AS SHOWN ON DRAWINGS AND DESCRIBED IN SPECIFICATIONS. ( OPC and PPC Cement will be issued as FOC item for plaster / mortar ):</b>		
59	1427	Providing and laying <b>cinder filling</b> in the toilets complete as directed by engineer in charge.	Kindly mention the quantity if any.	Refer SI No 26 of Main List for Qty
60	1700	<b>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.</b>		
61	1701	<b>MS</b> (ERW) down take pipes as per specification of following dia.		
62	i)	100 mm dia	Kindly mention the grade and class of pipe.	Medium Grade
63	ii)	150 mm dia	...do....	Medium Grade
64	iii)	200 mm dia	...do....	Medium Grade
65	1809	Providing and fixing <b>weep holes</b> in Drains consisting of 100 mm dia LDPE pipe sleeves along with single side covering for the pipe mouth with galvanised welded wire fabric of 20 mm sq. opening along with 300 X 300 mm sq., 300 mm deep, 40 mm aggregates to cover fabric mesh mouth complete as directed by engineer in charge.	Kindly indicate the class and rating of LDPE Pipe.	
66	1811	Design, supply, fabrication, erection of <b>stoplog gates in CW Pumps</b> as per specification with embedments required, lifting beams, special tools & plants, spare parts for three years, machining, casting, all materials such as structural steel, cast steel, stainless steel, brass used for seals, rubber seals, gears, ball and roller bearing, branch bushings, greasing, bolts, nuts, lugs, threaded fastners etc., cleaning, sand blasting, hot double dip galvanised with minimum coating of zinc 750 gms/sqm., following by an application of etching primer and dipping in black bitumen as per B.S. 3416, erection along with a second stage concreting to true plumb and levels, submission of drawings / fabrication drawings for engineers approval etc., all complete as per specifications and approved drawings. The leakage through rubber seal shall not be more than 5 lit/min/metre length of seal under maximum head.(only weight of structural steel including embedments shall be considered for payment purpose)	Kindly furnish us the detailed specification and GA drawing of stoplog gates or provide us the name of approved vendors.	Technical details is mentioned in the description and design is in the scope of the bidder .
67	1814	Providing and fixing <b>LDPE pipes</b> 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.		
68		i) 100 mm dia	Kindly mention the grade of resin and pressure rating of the pipe.	Please consider the item as " UPVC Class 2 as per IS 4985 "
69		ii) 150 mm dia	...do.....	
70		iii) 200 mm dia	...do.....	
71	1815	Providing and fixing <b>PVC pressure release valve</b> of minimum dia 90mm in water retaining structure including 160 mm dia housing pipe of minimum length 3.75 m with perforation as per IS4558, nylon jali, perforated end plug, collar, graded filter, excavation, fixing in concrete slab/wall all complete as per specification, drawing and instruction of engineer in charge.	Kindly mention the pressure rating of the valve.	Please refer to IS 4558 for details

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SI No	ST. NO	DESCRIPTION	CLARIFICATIONS SOUGHT BY BIDDER.	Clarification by BHEL
72	2000	<b>FENCING AND GATES.</b>		
73	2002	Supplying and fixing <b>G.I. barbed wire in fencing</b> including G.I clips etc. complete as per specification	Kindly furnish the specification.	Supplying and erecting in position <b>2.4 m high PVC coated gavanised chain linked fencing</b> of minimum <b>8 gauge</b> (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 <b>12 gauge. GI barbed wire fencing of height of 600 mm</b> confirming to IS 298 at top of chain link fencing shall be provided with 4 strands 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)
74	2100	<b>WATER SUPPLY</b>		
75	2120	Providing and fixing in position in the base slab of water retaining structures <b>non return valves</b> of 90mm diameter non metallic PRV pipe and 160mm diameter OD perforated PVC housing pipe 430mm long including graded gravel filters as per IS:4558-1995 and as shown in the drawings all complete.	Kindly mention the pressure rating of the valve.	Please refer to IS 4558 for details
76	2121	Providing and fixing approved <b>stainless steel sink with integrated drainboard</b> complete including painting the fittings, cutting and making good the wall where required as per specification. The work to be complete as per specifications, drawings and direction of engineer	Kindly indicate the size of sink.	Ssize stainless steel sink 915x460x178mm
77	2200	<b>SANITARY WORKS</b>		
78	2218	Providing and fixing <b>C.I Manhole cover</b> of size <b>600mmx450mm</b> including frame from reputed manufacture all complete as per specifications.	Kindly mention the class and weight of each Manhole with cover.	Heavy Duty
79	2219	Providing and fixing circular heavy duty <b>man hole cover of 600mm</b> dia with frame all complete as per specification.	Kindly mention the weight of each Manhole with cover.	Heavy Duty
80	2226	Providing and fixing white vitreous <b>urinal partitions</b> all complete as per specification.	Kindly indicate the size of partition .	Providing and fixing white vitreous <b>urinal partitions</b> of size <b>675x325x85mm</b> all complete.
81	2300	<b>Structural steel works. All items for fabrication should include supply, fabrication drawings as per specifications including painting with a coat of primer and also inclusive of all necessary quality test to the satisfaction of engineer/customer for the following :</b>		
82	2301	Fabrication, erection, alignment, welding, primer painting (primer coat consisting of 2 coats of redoxide zinc-chromate as per IS:2074 & IS:1477 (Parts I & II). One coat to be applied at shop and the other after erection ) of <b>structural steel made from mild steel</b> conforming to IS:2062, pipes conforming to IS:1161/ IS:1239, chequered plate conforming to IS: 3052 and mild steel rounds, at all elevations involving rolled sections (including mild steel rounds), built up sections fabricated out of plates, rolled sections and combination of plates and rolled sections, in columns, beams, gantry girders, bunkers, silos, hoppers, roof trusses, gratings, portals, laced purlins, space frames, shear connectors, hangers, struts, monorails, galleries, stiffeners, wall beams, sheeting runners, brackets, stub columns, bracings, cleats, trestles, base plates, splice plates, chequered plate flooring, decking and seal plates, diaphragm, steel frame grid over false ceiling, walkway platforms, ladders, stairs, stringers, treads, landings, hand-rails (G.I. & M.S.),	It seems the quantity and unit shown here needs to be deleted.	Please refer the BOQ corrigendum

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83		toeplates, MS Rungs, insert plates, edge angles, embedments, lugs, posts, stays, louvers, lacings, gusset plates, safety chains for walkways adjacent to crane girders etc. collection of steel from stores, transportation, straightening, making cutting plan, cutting, bending, rolling, grinding, drilling, bolting, erection bolts & nuts (weight erection bolts & nuts not payable, Supply of permanent bolt of grade C mild steel bolts & nuts to be paid separately under ST NO. 2309 (i)), assembly, edge preparation, preheating(minimum preheat and interpass temperature of 66 degrees centigrade for welding over 40 mm and upto 63 mm & 110 degrees centigrade for thickness over 63 mm) & use of low hydrogen/ radiogenic electrodes as per specification, post heating, testing of welders, inspection of welds, visual inspection, non destructive and special testing, rectification and correction of defective welding works, production test plate, inspection and testing, erection scheme,		
84		protection against damage in transit, stability of structures, installation of temporary structures (Scaffolding, Access ladders, Working Platforms etc.), setting column bases, surface preparation protection against damage in transit, stability of structures, installation of temporary structures (Scaffolding, Access ladders, Working Platforms etc.), setting column bases, surface preparation by means of manual or mechanical power tools as per IS:1477 part 1, touch-up painting, dismantling and removal of all temporary structures (weight of temporary structures not payable) complete with all labour, material, electrodes and other consumables, equipment, testing (mechanical and non- destructive), preparation of fabrication drawings, joint design calculations and all other general and special requirements <b>including appointment of a seperate agency, approved by BHEL, for review and approval of fabrication drawings, in consultation with BHEL,</b>		
85		prepared by the bidder and all other activities required for completion of the work including return of surplus/ waste steel materials to store etc. as per specification, drawings and instructions of the Engineer. Approval of fabrication drawings does not relieve the bidder from the responsibility of its correctness and accuracy.		
86	2301 A	Power House Structure , Structural Building ( ESP CR , CWPH ) , Pipe Racks etc		
87	2301 B	Bunker Structures , Transfer Tower and Gallery ,MS Circular Coal Bunker		
88	2313	Supply, fabrication and delivery at site, transportation, loading/unloading of various sizes, <b>stainless steel pipe hand railing</b> of 65 mm dia including fixing , as per specification, labour and material complete for heavy duty class.	Kindly indicate the class of SS Pipe SS304L or SS316L.	SS Pipe SS 304 to be considered
89	2319	Providing and fixing in position <b>PTFE type sliding bearings</b> of reputed manufacturer, individual bearing suitable for required vertical loads as per the construction drawings and for maximum displacement of (+or -) 50 mm including all taxes, duties, transportation, installation, drilling, bolting, erecting, aligning etc complete as per specification, drawing and instruction of the	Kindly furnish any G.A drawing of PTFE Sliding bearing & also indicate name of approved vendors if any.	Drawings will be provide in post award stage
90				
91	2400	<b>ROAD WORK INCLUDING SUPPLY OF MATERIAL, COST OF LABOUR, MACHINERY ALL COMPLETE AS PER SPECIFICATION, RELEVANT IRC &amp; IS CODES AND AS DIRECTED BY ENGINEER- IN -CHARGE FOR THE FOLLOWING.</b>		
92	2411A	Providing and laying 75 mm thick <b>concrete tiles</b> with cement mortar 1:6 complete.	Kindly specify ( underbed ) thickness of mortar.	Please refer to the Technical Specification Sec D10 for details of Floor Finish
93	2417	Providing laying in position 150 dia. <b>RCC HUMEPipe</b> for scrapper drain at 15m intervals with all labour, tools and materials etc., complete.	Kindly mention the class of pipe .	NP2 class RCC pipes
SI No	DESCRIPTION		CLARIFICATIONS SOUGHT BY BIDDER.	Clarification by BHEL
			ANNEXURE-I	
1	Kindly clarify whether Secured Advance @ 75% of landed cost at site shall be paid against nonperishable materials or not			No change in the existing clause
2	As per payment terms vide clause no. 54.3 & 54.4 of 'Special Condition of Contract' 2.5% +2.5% =5% of payment shall be retained till final bill . Please clarify whether Bank Guarantee in lieu of cash retention is acceptable or not.			No change in the existing clause

		<b>ANNEXURE-II</b>	
<b>SI No</b>	<b>ST. NO</b>	<b>DESCRIPTION</b>	<b>CLARIFICATIONS SOUGHT BY BIDDER.</b>
			<b>Clarification by BHEL</b>
3		Land for disposal of unserviceable materials are to be arranged by the customer /Client at their cost.	No change in the existing clause
4		Royalty towards all sorts of earth work excluding bought out earth to be borne by the Customer /Client if applicable.	No change in the existing clause
5		Increase in applicable taxes and duties or levy of new taxes and duties during the pendency of the contract needs to be compensated as per actual.	No change in the existing clause
6		Kindly indicate the fixed rate of electricity charges to be provided by you on chargeable basis at labour colony only .	No change in the existing clause