

TENDER Ref: IS-1-08-2013 Date: 05. 02.2009

Notice inviting Tender for Pre tender tie-up for Augmentation of Raw Material Receipt & Handling Facilities with New OHP, PART-B (Package No. 061) of Bhilai Steel Plant

1	Tender inviting Officer :	S. Mani/Sr DGM (BG-II, II & IV) Bharat Heavy Electricals Ltd. Industrial Systems Group P.B. No. 1249, IISc Post Malleswaram BANGALORE 560 012
2	Scope of work :	Design, Engineering, Manufacture, Supply, Erection & Commissioning of a) CIVIL WORKS (Enquiry No. 88/08/6041/NSA; Specification No. IS-1-08-2013-003)
3	Tender document available place :	BHEL web site www.bhelisg.com and Government web site http://tenders.gov.in
4	Due date and time for submission of tender	25-03-2009 by 02.00 PM
5	Place of submission of tender :	ISG Tender box placed at the Reception of ISG & EPD at the following address: Bharat Heavy Electricals Limited Industrial Systems Group Opp. to Prof. CNR Rao Circle Malleswaram BANGALORE 560 012
6	Place of tender opening	Technical bid will be opened in Camera on 25-03-2009 at 3.00 PM at BHEL/ISG
7	Qualification criteria	AS PER ANNEXURE – 1
8	Commercial Terms & Conditions	AS PER ANNEXURE – 2
9	Pre-bid meeting	17-03-2009 at 10.00 AM

10 Registration of the Bidder:

The bidders, who are not already registered with BHEL/ISG, shall include the following information and documents with their bids and they should get registered as the Vendor. Vendor registration forms can be down loaded form BHEL/ISG web site, namely, www.bhelisg.com.

- I. Copies of original documents defining the constituent local status, place of registration, and principal place of business.
- II. Total monetary value of turnover of a firm, each of the last ten years.



TENDER Ref: IS-1-08-2013 Date: 05. 02.2009

Notice inviting Tender for Pre tender tie-up for Augmentation of Raw Material Receipt & Handling Facilities with New OHP, PART-B (Package No. 061) of Bhilai Steel Plant

- III. Major Project executed in the last Three years.
- IV. Qualification & Experience in case of Indian Agency:

Reports of the financial standing such as profit and loss account, balance sheet, information regarding any reputation in which the bidder is involved.

11 Amendment of the bidding documents:

Before the dead-line of submission of bids, the Employer may modify the bidding documents by issuing addendum.

Any addendum such issued carry part of the bidding documents and this will be available at the web site from where the original documents have been received /Downloaded by the bidder.

- 12 Language of the tender Submission of bids : Only in English
- 13 Sealing & marking of bids:

The tender shall be submitted for each items in three parts, Part-II& Part-III Each shall be placed in an independent sealed envelope, each part shall be labelled as follows:

Part-I:

Qualifying Requirement Envelope

Tender No. : IS-1-08-2013 Dt.23-02-2009

Enquiry No. : Specification No.:

Due date & time: 25-03-2009 by 02.00 PM

This envelope shall consist of the following:

- 1. Covering Letter
- 2. Qualification documents mentioned in this NIT/ addendum.
- 3. Documentary evidence of fulfilment of eligibility criteria.
- 4. Latest income tax clearance certificate and sales tax clearance certificate.
- 5. Duly filled in forms with supporting Documents for Vendor Registration with BHEL/ISG, for the bidders, who are not already registered with BHEL/ISG,.
- 6. Techno commercial & Price bids of vendors qualifying with above criteria only, will be opened.



TENDER Ref: IS-1-08-2013 Date: 05. 02.2009

Notice inviting Tender for Pre tender tie-up for Augmentation of Raw Material Receipt & Handling Facilities with New OHP, PART-B (Package No. 061) of Bhilai Steel

Plant

Part – II

Techno-Commercial Tender Envelope

Tender No. : IS-1-08-2013 Dt.23-02-2009

Enquiry No. : Specification No.:

Due date & time: 25-03-2009 by 02.00 PM

- 1) Declaration of the Tenderer that this tender is without any technical and commercial deviations and if the deviations are there, they are as mentioned in the deviation format as per Specification.
- 2) The complete tender document available on the web site shall be signed by the authorised signatory and should be enclosed in this cover.
- 3) Full technical description of the items and services proposed by the Tenderer.
- 4) Necessary catalogues, technical brochures and list of items which shall be part of the scope of this tie up.
- 5) Details of manpower and Organization who execute this tie- up.
- 6) Work methodology and plan.
- 7) Confirmation of performance guarantee and liability period as mentioned in the tender.
- 8) Confirmation of techno-commercial terms and conditions.
- 9) Any other technical details.
- 10) The technical tender envelope shall not contain schedule of price or any other price information. Any indication either direct or indirect shall cause outright disqualification of the tender document.
- 11) Integrity pact signed by the vendor.
- 12) The un-priced bid confirming quoting as per BOM,

Part-III:

Price envelope

Tender No. : IS-1-08-2013 Dt.23-02-2009

Enquiry No. : Specification No.:

Due date & time: 25-03-2009 by 02.00 PM

Price format as enclosed in the tender which are duly filled in and signed.

Part-I, Part-II & Part – III shall be submitted together on the prescribed date mentioned in the web site.



STEEL AUTHORITY
OF INDIA LIMITED

BHILAI STEEL PLANT (BSP)

BHEL-ISG BANGALORE

SCOPE OF WORK

VOLUME -II SECTION A

SECTION - A

-: SCOPE OF WORK :-

- 1.0 The scope shall cover complete civil work for the proposed plant within its battery limit on Lump Sum basis including detailed design engineering and execution. The major civil works involved for installation of the OHP PART B Package shall pertain to the following areas:
 - i) New Ore Handling Plant-Part B for feeding raw material to new BF-8
 - & Sinter Plant III
 - ii) New route parallel to existing route from OHP-I to JH-20
 - iii) New route from junction house JH N102 to new Lime Plant RMP 3 and SMS-III

The scope of civil work, in general, comprises the design, detailed engineering and construction of all civil, architectural and finishing works required for the civil works of ore handling plant of the BHILAI STEEL PLANT (BSP) on 'Lump sum' basis, for all the structures / buildings described elsewhere in this section along with tentative dimensions and construction features.

- 2.0 Primarily the kind of civil works required for the structures and buildings of the OHP shall consist of, but not limited to, the following:-
 - 2.1 Area clearance the area to be excavated shall be cleared of all vegetation / foreign materials and the spoils shall be deposited at places directed by Engineer-in-Charge.
 - 2.2 All excavation works in all types of soils / rocks including backfilling, dewatering, as necessary, transportation and stock pilling of excavated material as directed by Engineer, shoring, strutting, leveling and grading.
 - 2.3 Enabling works like diaphragm walls / sheet piling / closely spaced RS joists

Document No. IS-1-08-2013 -003	Sh. 1 / 17	Rev. : R0
--------------------------------	------------	-----------



STEEL AUTHORITY
OF INDIA LIMITED

BHILAI STEEL PLANT (BSP)

BHEL-ISG BANGALORE

SCOPE OF WORK

VOLUME -II SECTION A

/ scaffoldings to ensure availability of suitable working areas with due regard to safety of the existing structures and their foundations.

- 2.4 Construction of RCC piles for foundations, as required, including load tests.
- 2.5 RCC work in underground structures, foundations, pile caps, storm anchors for stacker reclaimer, etc. at all levels.
- 2.6 RCC work in superstructure frames, floors, lintels, roof slabs, precast concrete, etc. at all levels.
- 2.7 Subgrade and base preparation with rubble soling, etc. for pavements, grade slabs, etc.
- 2.8 Brick masonry work (clay / fly ash) in cement mortar at all levels.
- 2.9 Cement plaster / stone veneering / any other finish as specified, on internal and external walls.
- 2.10 Steel / aluminum doors, windows and ventilators including glazing, etc. complete.
- 2.11 Painting of plastered masonry / RCC walls, doors, windows, rolling shutters, etc.
- 2.12 All types of floor finishing such as IPS, Ironite, mosaic tiles, etc.
- 2.13 Damp proofing and cement / chemical grouting of underground structures.



STEEL AUTHORITY
OF INDIA LIMITED

BHILAI STEEL PLANT (BSP)

BHEL-ISG BANGALORE

SCOPE OF WORK

- 2.14 Roof water proofing treatment, over / under deck roof insulation, Roof gutters and rain water down comer pipes.
- 2.15 Plinth protection, garland drains, storm water drains connected to nearest existing drains / final disposal point, as required.
- 2.16 All sanitary and sewage fittings and plumbing work for water supply and sewerage.
- 2.17 Septic tanks, soak pits, sewer lines, inspection chambers, manholes, etc.
- 2.18 Supply and Placement of insert plates, kerb angles, anchor bolts, etc. and also fixing of any other embedments in RCC members supplied free by others. However liner plate shall be supplied and fixed by BHEL other agencies
- 2.19 Roads, pavements, drains, culverts, common settling basin, etc.
- 2.20 Civil works for fire fighting and dust suppression system. However buried lines shall be done by other agencies.
- 2.21 Surveying, geotechnical investigations, field and laboratory testings, etc., as necessary.
- 2.22 Area clearance and grading in the end.
- 3.0 The works covered in the contract shall include supplying of all materials (except materials supplied, if any by BHEL free / at issue rates, as stipulated in special condition of contract, section-C, Vol-1), labour, tools, plant and



STEEL AUTHORITY
OF INDIA LIMITED

BHILAI STEEL PLANT (BSP)

BHEL-ISG BANGALORE

SCOPE OF WORK

VOLUME -II SECTION A

equipments, transportation, fabrication, supervision, construction as per drawings including embedment of bolts, inserts, leaving holes, pockets, grooves, chamfers as shown therein and all incidental items not shown or specified but reasonably implied and necessary for satisfactorily completing the project as a whole.

- 4.0 It is not the intent to specify completely herein all details of design and construction of the works covered under this specification. All works shall be done as per specification and as per approved for construction drawings and in a manner acceptable to "Engineer", who shall have the power to reject any work or material which in his judgment is not in full accordance therewith. In case of any conflict regarding the interpretation of the intent or meaning of the specifications or drawings, Engineer shall interpret such intent or meaning, which will be final and binding on the contractor.
- 5.0 The scope of work shall include detailed engineering, submission and obtaining approvals on designs, drawings and other engineering documents from all the approval authorities involved including statutory authorities, where applicable.
- 6.0 The scope of work also includes attending meetings at Owner / Consultant's offices (Project site / Delhi / Bangalore /Bhilai/Ranchi) or at places decided by Owner as and when necessary for review, discussions, co-ordination, etc.
- 7.0 The scope of work also includes collection of materials from Stores / unloaded from the trucks and transportation of materials supplied, <u>if any</u>, by the Owner / Purchaser from his stores / located in the plant site.
- 8.0 The scope of work also includes making all necessary arrangements for access to the storage yard from the nearest approach roads and further to the actual site of work including dewatering, as necessary, and maintenance of the same in order to facilitate transportation of machinery and equipment such as cranes, etc. Refurbishment of existing access roads, if necessary, shall also be



STEEL AUTHORITY
OF INDIA LIMITED

BHILAI STEEL PLANT (BSP)

BHEL-ISG BANGALORE

SCOPE OF WORK

VOLUME -II SECTION A

done by Contractor at no extra cost.

- 9.0 The scope of work also includes checking the adequacy and doing the appropriate modifications in some of the structures of the existing OHP for interconnection with the new OHP structures.
- 10.0 The scope of work shall include all other civil works not specifically mentioned above but necessary for the satisfactory completion of the OHP package as a whole.
- 11.0 The Contractor shall be fully responsible for arranging all materials to meet requirements of the project.
- 12.0 <u>STRUCTURE / BUILDING WISE SCOPE OF CIVIL& STRUCTURAL</u> WORKS:
- 12.1 The OHP contracting is being divided in the following main packages as below:
 - a) Mechanical: Machinery and technological structures
 - b) Electrical: Electrical items
 - c) Structural Steel Works: Structural steel, metal claddings, etc.
 - d) <u>Civil Works</u>: Earthwork, Piling, Concrete / RCC works, Building works, Drainage, Roads, etc as specified elsewhere in this section.
- 12.2 The structures / buildings required for the OHP are described separately in this section. The plant layout and the flow diagram are also appended therein.
- 12.3 <u>Tentative</u> longitudinal profiles along the conveyor galleries/tunnels from Wagon Tippler and Track Hopper to the final discharge point Including tentative dimensions of structures / buildings given in the drawings listed in section H "Tender Drawings" and are appended with these tender specifications.
- 12.4 Eventually detailed working drawings viz., plant layout, flow diagrams, longitudinal profiles along the conveyor galleries, electro mechanical and

<u>Document No.</u> IS-1-08-2013 -003 Sh. 5 /	17 Rev. : R0
---	--------------



STEEL AUTHORITY
OF INDIA LIMITED

BHILAI STEEL PLANT (BSP)

BHEL-ISG BANGALORE

SCOPE OF WORK

VOLUME -II SECTION A

civil assignment GA (General Arrangement) drawings, structural steel drawings including the foundation load data will be submitted and got approved by the respective package contractors and those drawings shall then be the design reference base drawings for <u>final dimensions and loadings</u> for the the 'Civil Works' contractor's detailed engineering and the further working.

The 'Civil Works' bidder shall have to make his own assessment of the desired design data and quote **lump sum prices**, as asked for in Volume – 4 of this tender specification. The detailed engineering and construction by the Contractor shall, however, be as per the approved electro-mechanical / str. steel package contractors only.



STEEL AUTHORITY OF INDIA LIMITED

BHILAI STEEL PLANT (BSP)

BHEL-ISG BANGALORE

SCOPE OF WORK

S.No.	ITEM WAGON TIPPLER	Width (m)	Length (m)	Depth (m)	Height (m)	RCC Pit	RCC Superstr. Frame on RCC Fdn.	RCC Floors	RCC Roof	RCC Fdn. For str.Steel Shed	Brick Panel Walls
<u>A</u>	WAGON TIPPLER	18	30	15	0.3	#	1	#		#	
В	TRACK HOPPER	. •			0.0						
		9.5	230	12	0.3	#		#		#	
	Ground Hopper								<u>l</u>		
		4	4			#				#	
С	PENT HOUSES						•		•		
1	PH - Conv Z3 C1/C2	7.5	4.5		6		#	#	#		#
2	PH - Conv Z2 C1/C2	7.5	4.5		6		#	#	#		#
D	JUNCTION TOWE shall be extra and									bay wh	ich
1	JH -Z1	12	8	11	3	#	#	#	#		
2	JH-Z2	15	17		16			#		#	
3	JH -Z3	15	17		12						
4	JH-Z4	8	7		16						
5	JH -Z5	8	7		16						
6	JH-Z6	8	7		12						
7	JH-Z6A	8	7		12						
8	JH -Z6B	8	7		12						
9	JH-Z5A	8	7		12			,,		,,	
10	JH -Z5B	8	7		12			#		#	
11	JH-Z4A	8	7		12			#		#	



STEEL AUTHORITY OF INDIA LIMITED

BHILAI STEEL PLANT (BSP)

BHEL-ISG BANGALORE

SCOPE OF WORK

S.No.	ITEM	∞ Width (m)	∠ Length (m)	Depth (m)	Theight (m)	RCC Pit	RCC Superstr. Frame on RCC Fdn.	# RCC Floors	RCC Roof	RCC Fdn. For str.Steel Shed	Brick Panel Walls
12	JH -Z4B									#	
13	JH-Z7	10	8		12			#		#	
14	JH -Z8	8	10		11			#		#	
15	JH-Z9	8	10		15			#		#	
16	JH -Z10	8	13		13			#		#	
17	JH-Z11	22	22		21			#		#	
18	JH -Z12	8	10		15			#		#	
19	JH-Z13	10	8		16			#		#	
20	JH -Z15	10	8		37			#			
12	J9A	24	8					#		#	
13	J9	27	20					#		#	
23	JH-9H	20	8					#		#	
24	JH-10	12	53.5		27			#		#	
25	JH - 11	30	21		22			#		#	
26	JH - 14	19	14		19			#		#	
27	JH - 15	30	9.2		29			#		#	
28	JH - 16A	12	8		22			#		#	
29	JH - 17	20	29.5		20			#		#	
30	JH - 17A	10	10		30			#		#	



STEEL AUTHORITY OF INDIA LIMITED

BHILAI STEEL PLANT (BSP)

BHEL-ISG BANGALORE

SCOPE OF WORK

S.No.	ITEM	Width (m)	Length (m)	Depth (m)	Height (m)	RCC Pit	RCC Superstr. Frame on RCC Fdn.	RCC Floors	RCC Roof	RCC Fdn. For str.Steel Shed	Brick Panel Walls
31	JH - 17B	10	10		36			#		#	
32	JH - 20	18	26		33			#		#	
33	J-N102							#		#	
34	JH-L1							#		#	
35	JH-L2							#		#	
36	JH-L3							#		#	
37	JH-L4							#		#	
38	JH-L5							#		#	
39	JH-L6							#		#	
40	JH-L7							#		#	
41	JH-L8							#		#	
42	JH-L9							#		#	
43	JH-L10							#		#	
E	STACKER RECLA		₹								
1	Stacker Rail Tracks 3 Nos	7.5	400				#				
2	Reclaimer Rail Tracks 3 Nos	7.5	400				#				
3	Stock pile area - 6Nos	36	350								



STEEL AUTHORITY OF INDIA LIMITED

BHILAI STEEL PLANT (BSP)

BHEL-ISG BANGALORE SCOPE OF WORK

S.No.	ITEM	Width (m)	Length (m)	Depth (m)	Height (m)		RCC Superstr. Frame on RCC Fdn.	RCC Floors	RCC Roof	RCC Fdn. For str.Steel Shed	Brick Panel Walls
F	ELECTRICAL MC							ilue :==	061-		
	(Only basic building Transformer Yards									,	
1	SWGR Rooms - 3 Nos	50	20		5		#	#	#		#
2	OHP Main control room	50	20		5		#	#	#		#
3	Control Room First Floor	20	10		4		#	#	#	#	#
4	Wagon Tippler Control Room	30	20		5		#	#	#		#
5	Battery Room						#		#		#
6	Cable Galleries / trenches	2		2		#				#	
G	MISCELLANEOU	S									
1	Sprinkler Lines	5	150							#	
2	Settling Tank	10	15	4		#		#			
3	Roads	3.5	6000								
4	Drains	1	12000	1.5		#					
5	Room for Rail Weigh Bridge										
		6	6		4						



STEEL AUTHORITY OF INDIA LIMITED

BHILAI STEEL PLANT (BSP)

BHEL-ISG BANGALORE

SCOPE OF WORK

S.No.	ITEM	Width (m)	Length (m)	Depth (m)	Height (m)	RCC Pit	RCC Superstr. Frame on RCC Fdn.	RCC Floors	RCC Roof	RCC Fdn. For str.Steel Shed	Brick Panel Walls
6	Yard master Building (2 Storey)										
		24	11		8		#	#	#	<u> </u>	#
7	Workers Rest Room (2 Nos - 250Sq.M)										
							#		#		#
8	Canteen Buildings - (2Nos - 200Sq.M)										
							#		#		#
9	Office Buildings with separate Parking area (1No 700Sq.M and 1 No 500Sq.M)										
							#	#	#		#
10	Toilet Blocks - 2 Nos										
							#		#		#
11	Area Repair Shop										
		18	9		6		#			#	



STEEL AUTHORITY OF INDIA LIMITED

BHILAI STEEL PLANT (BSP)

BHEL-ISG BANGALORE SCOPE OF WORK

S.No.	ITEM	Width (m)	Length (m)	Depth (m)	Height (m)	RCC Pit	RCC Superstr. Frame on RCC Fdn.	RCC Floors	RCC Roof	RCC Fdn. For str.Steel Shed	Brick Panel Walls
11	Ore Handling Area										
	(a) Closed Sub Store										
		9	18		6		#		#		#
	(b) Open Ended Fence										
		18	18				#				
12	Dust Suppression Pump Houses - 6 Nos										
		20	7		5		#		#	#	#
13	Dust Suppression Water Tank - 6 Nos										
		6	5		3		#			#	
14	Air Compressor House - DS & RMS plant										
		15	15		4		#		#	#	#
15	VentilationRooms										
		6	6		5		#		#		



STEEL AUTHORITY OF INDIA LIMITED

BHILAI STEEL PLANT (BSP)

BHEL-ISG BANGALORE

SCOPE OF WORK

16 Air Conditioning Room 6 6 4 # 17 Fire Fighting System- Pump House & Reservoir 30 20 3 3 # # #			Width (m)	Length (m)	Depth (m)	Height (m)	RCC Pit	RCC Superstr. Frame on RCC Fdn.	RCC Floors	RCC Roof	RCC Fdn. For str.Steel Shed	Brick Panel Walls
17 Fire Fighting System- Pump House & Reservoir	16											
System- Pump House & Reservoir			6	6		4					#	
30 20 3 3 # # # # # #	17	System- Pump House &										
<u> </u>			30	20	3	3	#	#		#	#	
18 Foundation for Flood Light Mast in Stock Yard - 6Nos #	18	Flood Light Mast in Stock Yard -										



STEEL AUTHORITY OF INDIA LIMITED

BHILAI STEEL PLANT (BSP)

BHEL-ISG BANGALORE

SCOPE OF WORK

Н	CONVEYOR	SYSTEM	1								
S. No.	ITEM	Type of Gallery	Horizontal Length of the Gallery (m)	General Slope of conveyor in Degrees	Head Room (m)	RCC Pit	SAND Pit	RCC Floors	RCC Roof	RCC Fdn. For str.Steel Shed	Brick Panel Walls
	/.TUNNELS										
1	CT-Z1 C1/C2	Double				#		#	#		
2	CT-Z2 C1/C2	Double		9		#		#	#		
CONV.	GALLERIES										
3	Conv Z2 C1/C2	Double	80	9	2.4		#	#		#	
4	Conv Z3 C1/C2	Double	106	6	2.4		#	#		#	
5	Conv Z3 C1/C2/C3	Triple	41.5	9	2.4		#	#		#	
6	Conv Z6 C1/C2/C3	Triple	169	6	2.4		#	#		#	
7	Conv Z6 C1/C2/C3	Triple	123	0	8		#	#		#	
8	Conv Z6 C2/C3	Double	83	2	2.4		#	#		#	
9	Conv Z6A C1	Single	56	8.5	2.4		#	#		#	
10	Conv Z6B C1	Single	56	8.5	2.4		#	#		#	
11	Conv Z5A C1	Single	56	8.5	2.4		#	#		#	



STEEL AUTHORITY OF INDIA LIMITED

BHILAI STEEL PLANT (BSP)

BHEL-ISG BANGALORE

SCOPE OF WORK

S. No.	ITEM	Type of Gallery	Horizontal Length of the Gallery (m)	General Slope of conveyor in Degrees	Head Room (m)	RCC Pit	SAND Pit	RCC Floors	RCC Roof	RCC Fdn. For str.Steel Shed	Brick Panel Walls
12	Conv Z5B C1	Single	56	8.5	2.4		#	#		#	
13	Conv Z4A C1	Single	56	8.5	2.4		#				
14	Conv Z4B C1	Single	56	8.5	2.4		#	#		#	
15	Conv Z7 C1/C2 -	Double	190	0	2.4		#	#		#	
16	Conv Z7 C1/C2	Double	38	9	2.4		#	#		#	
17	Conv Z7 C3	Single	56	9	2.4		#	#		#	
18	Conv Z8 C1/C2	Double	215.2	6	2.4		#	#		#	
19	Conv Z9 C1/C2	Double	577	6	2.4		#	#		#	
20	Conv Z10 C1/C2	Double	968	6	2.4		#	#		#	
21	Conv Z11 C1/C2	Double	485	6	2.4		#	#		#	



STEEL AUTHORITY OF INDIA LIMITED

BHILAI STEEL PLANT (BSP)

BHEL-ISG BANGALORE

SCOPE OF WORK

S. No.	ITEM	Type of Gallery	Horizontal Length of the Gallery (m)	General Slope of conveyor in Degrees	Head Room (m)	RCC Pit	SAND Pit	RCC Floors	RCC Roof	RCC Fdn. For str.Steel Shed	Brick Panel Walls
22	Conv Z12 C1/C2	Double	357.2	0	2.4		#	#		#	
23	Conv Z13 C1/C2	Double	193	0 & 6	2.4		#	#		#	
24	Conv Z15 C1/C2	Double	258	6	2.4		#	#		#	
25	Conv Z15 C1/C2/C3	Triple	22	0	2.4		#	#		#	
24	J-15 C2	Single	170	4	2.4		#	#		#	
25	J-16C3	Single	245	3	2.4		#	#		#	
26	J-17C3	Single	342	0	2.4		#	#		#	
27	J-17A -C1	Single	91	11	2.4		#	#		#	
28	J-17BC1	Single	66	8.23	2.4		#	#		#	
29	J -20 C3	Single	27	10.6	2.4		#	#		#	
30	J-42-C2	Single	12	0	2.4		#	#		#	
31	Conv.L1C1	Single	152.2		2.4		#	#		#	
32	Conv.L2C1	Single	466		2.4		#	#		#	



STEEL AUTHORITY
OF INDIA LIMITED

BHILAI STEEL PLANT (BSP)

BHEL-ISG BANGALORE SCOPE OF WORK VOLUME -II SECTION A

S. No.	ITEM	Type of Gallery	Horizontal Length of the Gallery (m)	General Slope of conveyor in Degrees	Head Room (m)	RCC Pit	SAND Pit	RCC Floors	RCC Roof	RCC Fdn. For str.Steel Shed	Brick Panel Walls
33	Conv.L3C1	Single	35		2.4		#	#		#	
34	Conv.L4C1	Single	192		2.4		#	#		#	
35	Conv.L5C1	Single	25		2.4		#	#		#	
36	Conv.L6C1	Single	106		2.4		#	#		#	
37	Conv.L7C1	Single	105		2.4		#	#		#	
38	Conv.L8C1	Single	130		2.4		#	#		#	
39	Conv.L9C1	Single	216		2.4		#	#		#	
40	Conv.L9C2	Single	71		2.4		#	#		#	
41	Conv.L10C1	Single	561		2.4		#	#		#	_

Indicates Scope to be Considered.

NOTE: Civil Works for Laying of all Water Supply and Fire Fighting System is Excluded from Bidder Scope

Document No. IS-1-08-2013 -003	Sh. 17 / 17	Rev. : R0
--------------------------------	-------------	-----------



BHEL-ISG

BANGALORE

Augmentation of Raw Material Receipt & Handling facilities with new OHP, Part-B Civil Works

STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

GENERAL SCOPE OF WORK

This tender specification covers detail design, engineering, construction of all the civil & architecture works related to buildings and foundations which includes earth work, plain & reinforced cement concrete, reinforcement, scaffolding, form work, masonry work, floor finishes including dado & skirting, plastering painting, roof finishes, doors, windows, ventilators, rolling shutters, internal & external plumbing, water supply, water proofing, drainage & sewerage, fencing, roads, MS embedment foundation bolts/anchor bolts etc. as well as including supply of all materials except those proposed to be supplied by BHEL, consumables, labour, tools & plants, transportation and storage, sample testing etc. all complete as per specifications and approved drawings for proper and successful execution of the job for New Ore Handling Plant - Part B

The detailed scope of work and the technical requirements for work to be executed under this specification shall be as per specification enclosed with this tender document (Annexure III).

The scope of work will also include providing Qualified Supervisors for direct supervision of various works other then the scope covered under this tender. These Qualified Supervisors shall be provided as per the site conditions. The supervisors shall possess a minimum qualification of a civil engineering. They shall be deployed in all area covered under various specifications as well as other related areas as may be deemed essential based upon work requirements, though not specified. They shall be guided by BHEL Engineers to ensure smooth work progress as and when/where required/deployed.

The work may involve installation & cast-in-situ reinforced concrete piles. The scope will cover all works connected with installations and testing of bored cast-in-situ piles

Document No: IS-1-08-2013-003 PAGE: 1 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

VOLUME – I SECTION C

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

including mobilization of rigs and other equipments their erection/ dismantling/ transportation/assembling and erecting from one area to another, preparation of firm ground as required for supporting the pile rigs, supply of materials, sampling and testing of materials consumables, labour, transportation etc. all complete as required for the proper and satisfactory completion of the job. Bidder shall either own the adequate number of piling equipment or shall have a pre bid tie up with qualified piling agency for mobilizing adequate number of piling equipment so as to achieve an average target of 15 piles per day and around 400 piles per month. Documentary evidence for same shall form part of technical bid offer to be submitted by bidder.

The scope of work will also include such other related works although they may not be specifically mentioned in the above paragraph and all such incidental items not specified but reasonably implied and necessary for completion of the job as a whole all as desired and as directed by the engineer.

The detail scope of work covered above is not a comprehensive list of items of work involved. The detail scope of work may vary considerably depending on the actual construction requirements.

ALSO INCLUDED IN THE SCOPE:

Unless otherwise specified, the work to be provided by the contractor for the items mentioned in the Bill of Quantities / price schedule shall include but not be limited to the following:

Furnishing all labour, materials, supervision, construction plans, equipment, supplies, transport to & from the site, fuel, electricity, compressed air, water, transit and storage insurance and all other incidental items and temporary works not shown on specified but reasonably implied or necessary for the proper completion, maintenance and

Document No: IS-1-08-2013-003 PAGE: 2 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME - I SECTION C

handing over the works, except in accordance with the stipulations laid down in the contract documents and additional stipulations as may be provide by the engineer during the course of works.

Furnishing samples of all materials required by the engineers for testing/inspection and approval for use in the works. The samples may be retained by the engineer for final incorporation in the works.

Furnishing test reports for the products used or intended to be used, if called for the specifications or if so desired by the engineer.

Giving all notices, paying all fees, taxes etc., in accordance with the general conditions of contract, that are required for all works including temporary works.

Arranging manufacturer's supervision for items of work done as per manufacturer's specifications when so specified.

Carrying out topographic survey of the entire and establish levels and coordinates at suitable intervals from existing grid levels and coordinates furnished by the owner established bench marks, setting out the locations and levels of proposed structures, constructions and marking of reference pillars and other identifications works etc. The contractor shall provide the owner/BHEL such a assistance, instruments, machines, labour and materials as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any material used.

Providing all incidental items not shown or specified but reasonably implied or necessary for the successful completion of the work in accordance with contract.

BHEL/ISG/Bangalore is ISO 9001-2000, ISO 14001-1996 and OHSAS 18001-1999 certified company, quality of work, to customer's satisfaction and system requirements is the essence of these certifications. The contractor in all respects will organize his work, systems, environment, process control documentation, tools, plant, inspection, measuring and testing equipments etc. as per instructions of BHEL engineer.

Document No: IS-1-08-2013-003 PAGE: 3 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

The contractor shall also comply with applicable legislation and regulations with regard to health, safety and environmental aspects for minimizing risk arising from occupational health, safety hazards, controlling pollution and wastages.

The customer M/s. STEEL AUTHORITY OF INDIA LIMITED BHILAI STEEL PLANT (BSP) and/or their consultant may depute their representative for checking and supervision of important stages of work. The contractor shall be required to provide all facilities for inspection of works at no extra cost to BHEL. Any defect in quality of work or deviations from drawings/specifications pointed out during such inspection shall be made good by the contractor in the same way as if pointed out by the BHEL Engineer, without any cost implications to BHEL.

INSTRUCTION TO TENDERERS:

The tenderer are advised to physically visit the site and fully acquaint themselves with site conditions, transportation routes, various distances and the fact that other contractors would be working in this area their structures are to be protected. The material brought and stacked for construction should not make hindrance to other contractors. Necessary precaution and arrangements including sprinkling of water during work as acceptable to BHEL for safety & security for the above have to be made by the contractor. No claim will be entertained by BHEL on ground of lack of knowledge and the contractor's rates shall be deemed to have taken this into account.

The contractor, in the event of this work awarded to him, shall establish an office at site and keep posted an authorized, responsible officer with valid Power of Attorney for the purpose of the contract. Any order or instructions of the engineer or his duly authorized representative, communicated to the contractor's representative at site office will be deemed to have been communicated to the contractor at his legal address.

Document No: IS-1-08-2013-003 PAGE: 4 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

CONTRACTOR'S SUPERVISION:

The contractor shall either himself supervise the execution of the contract or shall appoint a competent engineer / agent approved by the engineer to act in his stead.

The contractor shall employ an engineer having atleast a Degree of Bachelor in Civil Engineering from a recognised university

The employment of an engineer as aforesaid shall not be necessary if the contractor himself is in possession of a recognised technical qualification and is in the opinion of the engineer capable of receiving instructions of the engineer and of executing the work to the satisfaction of the engineer.

If the contractor fails to appoint a suitable engineer as aforesaid, the engineer shall have full powers to suspend the execution of work and stop payment of any money that may have become due until such date as a suitable engineer/agent is appointed and the contractor shall be held responsible for the delay caused to the work and no extension of time on this account shall be given to him.

Orders given to the contractor's engineer/agent shall be considered to have the same force as if they had been given to the contractor himself.

The contractor or his agent shall be in attendance at the site during all working hours and shall superintend the execution of work with such additional assistance in each grade as the engineer may consider necessary.

The contractor or his accredited agent shall attend, when required and without making any claim for doing so, either the office of the engineer or the work site to receive instructions.

Document No: IS-1-08-2013-003 PAGE: 5 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

The BHEL engineer shall have full powers to instruct the contractor to arrange for immediate termination of services in connection with this contract, of any agent, servant or employee whose continued employment is, in his opinion, undesirable without assigning any reason.

SUPERVISORY STAFF AND WORKMEN:

The contractor shall deploy all the experienced skilled, semi skilled and unskilled workmen required for all the works under these specification. BHEL reserves the right to decide on the suitability of the workers and other personnel who will be deployed by the contractor. BHEL reserves the right to insist on removal of any employee of the contractor at any time, if they find him unsuitable and the contractor shall forth with remove him.

The supervisory staff including qualified engineers deployed by the contractor shall ensure proper out-turn of work and discipline on the part of the labour put on the job by the contractor and in general see that the works are carried out in a safe and proper manner and in coordination with other labour and staff deployed directly by BHEL or other contractors of BHEL / BHEL's client / other agency.

The work shall be executed under the usual conditions like rain, insufficient space, improper approach roads etc., effecting major construction work and in conjunction with numerous other operations at site. The contractor and his personnel shall cooperate with other personnel/contractor, coordinating his work with others and proceed in a manner that shall not delay or hinder the progress of work as a whole.

The contractor's supervisory staff shall execute the work in the most substantial and workman like manner in the stipulated time. Accuracy of work and aesthetic finish are essential part of this contract. The contractor shall be responsible to ensure that

Document No: IS-1-08-2013-003 PAGE: 6 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

assembly and workmanship conform to the dimensions and tolerances given in the drawings/documents/instructions given by BHEL engineer from time to time.

It is the responsibility of the contractor to engage his workmen in shifts or on overtime basis for achieving the targets set by BHEL. The contractor's finally accepted rates shall include all these contingencies.

During the course of construction, if the progress is found unsatisfactory, or in the opinion of BHEL, if it is found that the skilled workmen like welder, fitters, technicians etc. deployed are not sufficient, BHEL after giving reasonable opportunity to the contractor, will induct on the work the required workmen in addition to contractor's workmen to improve the progress and recover from the contractor's bills.

If the contractor or his workmen or employees shall break, deface, injure or destroy any part of a building, road kerb, fence, enclosure, water pipes, cables, drains, electric or telephone posts or wire, trees or any other property or to any part of erected components etc., the contractor shall make the same good at his own expense or in default, BHEL may cause the same to be made good by other workmen or by other means and deduct the expenses (of which BHEL's decision will be final) from any money due to the contractor.

The monthwise manpower deployment plan to be submitted as per format (at Annexure-C to general conditions of contract) is only to assess the capability as well as understanding of the contractor to execute the work. It shall be the contractor's responsibility to deploy the required manpower, for timely and successful completion of the job, to any extent over and above those indicated in the above deployment plan (including those which are not covered in the plan submitted) without any compensation on this account.

Document No: IS-1-08-2013-003 PAGE: 7 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

VOLUME – I SECTION C

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

All supervision and labour required for maintenance and attending breakdowns of equipment shall be arranged by the contractor at his own cost. Required number of mechanic and helpers shall be exclusive marked for the above work.

All distribution boards, connecting cables/welding cables, wire ropes, hoses etc., including temporary air/water/electrical connectors etc. shall have to be arranged by the contractor at his own cost.

Contractor shall ensure deployment of serviced and healthy T&Ps including cranes, lifting tackles, wire ropes, manila ropes, winches and slings etc. History card and maintenance records for major T&Ps will be maintained by the contractor and will be made available to BHEL engineer for inspection as and when required. Identification for such T&Ps will be done as per BHEL Engineer's advice.

Contractor shall ensure deployment of reliable and calibrated IMTEs (Inspection Measuring and Test Equipment). The IMTEs shall have test/calibration certificates from authorised / Govt. approved / accredited agencies traceable to National / International standards. Each IMTE shall have a label indicating calibration status i.e., date of calibration, calibration agency and due date for calibration. A list of such instruments deployed by contractor at site with its calibration status is to be submitted to BHEL engineer for control.

Retesting / re-calibration shall also be arranged at regular intervals during the period of use as advised by BHEL Engineer within the contract price. The contractor will also have alternate arrangements for such IMTE so that work does not suffer when the particular instrument is sent for calibration. Also if any IMTEs not found fit for use, BHEL shall have the right to stop the use of such item and instruct the contractor to deploy proper item and recall i.e., repeat the readings taken by that instrument, failing which BHEL may deploy IMTEs and retake the readings at contractor's 'cost.

Document No: IS-1-08-2013-003 PAGE: 8 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME - I SECTION C

BHEL shall have lien on all T&P, IMTEs and other equipment of the contractor brought to the site for the purpose of erection, testing and commissioning. BHEL shall continue to hold the lien on all such items through out the period of contract. No material brought to the site shall be removed from the site by the contractor and/or his sub-contractors without the prior written approval of the engineer.

The month wise machinery, equipment, manpower deployment plan to be submitted as per format is only to assess the capability as well as understanding of the contractor to execute the work. It shall be the contractor's responsibility to deploy the required T&Ps, for timely and successful completion of the job, to any extent over and above those indicated in the above deployment plan (including those which are not covered in the plan submitted) without any compensation on this account.

MATERIALS

The contractor shall at his own expenses provide all materials including paints, welding electrodes etc required for the work. However for permanent works cement, reinforcement steel shall be by BHEL issued free of cost as per terms & conditions MATERIAL SUPPLY BY BHEL FREE OF COST

BHEL will supply reinforcement steel and cement on free issue basis as per following terms & conditions.

Materials will be issued only for permanent works and not for making templates, other temporary works, enabling works etc. and the same shall not be taken into account for purpose of material reconciliation.

Document No: IS-1-08-2013-003 PAGE: 9 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I
SECTION C

BHEL-ISG BANGALORE

The contractor shall bear all other costs including the lifting, carting from issue points to works site/contractor's stores, custody and handling etc. and return of surplus/serviceable materials to owner's stores to be designated by the Engineer-incharge and all expenditure will be made by the contractor.

All reinforcement steel shall be issued in available lengths on weight basis and cost of all straightening, cutting and jointing if any required shall be borne by the contractor and no claims for extra payment on account of issue of non-standard lengths/shapes will be entertained by BHEL. Cement will be issued in bags of 50 Kg each. The difference in weight if any shall be to the contractor's account and contractor shall quote the rates for corresponding item to take care of such difference.

For the purpose of accounting of reinforcement steel, the steel received by the contractor on weight basis from BHEL stores / directly from steel supplier on F.O.R site basis shall be the basis for received quantity of steel. The charges of weighing if any , loading and unloading of steel, further transport, lead, lift etc., shall be borne by the contractor. The difference in unit weight as per IS and actual as issued, if any shall be to the contractor's account and contractor shall quote the rates for corresponding item to take care of such difference.

Measurement of work done and reconciliation will be done on the following basis:

REINFORCEMENT STEEL

Measurement of work done shall be on the basis of approved bar bending schedule drawings OR as per the revised sections mutually agreed at site due to non-availability of sections mentioned in the drawings. The difference in unit weight as per IS and actual as issued, if any shall be to the contractor's account.

Document No: IS-1-08-2013-003 PAGE: 10 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

3% allowance for all kinds of permissible wastages, over theoretical quantity / consumption incorporated in the works considering the unit weight as per IS code of practice shall be considered for reconciliation purpose but not for payment. However scrap generated due to the wastages mentioned above belongs to BHEL.

Balance steel shall be returned to BHEL in good condition and in acceptable length not less than 3m lengths.

Quoted price by the contractor shall be deemed to include the above and the permissible wastages mentioned. No claim whatsoever shall be entertained on account of wastage and difference in weight as referred to above.

CEMENT

3% allowance for all kinds of permissible wastages, over theoretical quantity / consumption incorporated in the works considering the rate of consumption as per approved mix design for RCC works and as per IS code of practice for other items of works shall be considered for reconciliation purpose

Balance cement bags shall be returned to BHEL in good condition and in acceptable quality

Quoted price by the contractor shall be deemed to include the above and the permissible wastages mentioned. No claim whatsoever shall be entertained on account of wastage and difference in weight as referred to above.

Issue of stores material is subject to availability and the contractor shall not be entitled to any claim or compensation for non supply or delay in the supply under any circumstances. The material will be issued generally during the working hours.

Document No: IS-1-08-2013-003 PAGE: 11 of 37



BHEL-ISG

BANGALORE

Augmentation of Raw Material Receipt & Handling facilities with new OHP, Part-B Civil Works

STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

SPECIAL CONDITIONS OF CONTRACT

VOLUME - I SECTION C

The contractor shall submit proper account of material / material reconciliation statement for the material drawn by him from stores once in every month along with running account bill. Failing compliance of this requirement further issue of steel to the contractor may be suspended and no claim of compensation for delay in execution on this account shall be entertained.

Any unused / serviceable quantity of structural steel, reinforcement steel and cement not returned in good condition & wastages/loss/consumption beyond specified/agreed limits shall be charged at penal rate as decided by BHEL.

All materials to be provided by the contractor shall be of the best kind in conformity with the specifications laid down in the contract or as per relevant Indian standards and the contractor shall, if requested by the engineer, furnish proof to the satisfaction of engineer that the materials so comply.

The contractor shall, at his own expenses and without delay, supply to the engineer samples of materials proposed to be used in the works. The engineer shall within seven days of supply of samples or within such further period as he may require will intimate to the contractor in writing, whether samples are approved by him or not. If samples are not approved, the contractor shall forthwith arrange to supply to the engineer for his approval fresh samples complying with the specifications laid down in the contract. Any delay in approval of samples (original or fresh ones) shall not make the contractor eligible for any compensation.

The BHEL engineer shall have full powers for removal of any or all of the materials brought to site by the contractor which are not in accordance with the contract specifications or do not conform in character or quality to samples approved by him. In case of default on the part of the contractor in removing rejected materials, the

Document No: IS-1-08-2013-003 PAGE: 12 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

engineer shall be at liberty to have them removed by other means and deduct the cost incurred from the payable bills.

The engineer shall be entitled to have tests carried out as specified in the contract for any materials supplied by the contractor other than those for which, as stated above, satisfactory proof has already been furnished, at the cost of the contractor and the contractor shall provide at his expense all facilities which the engineer may require for the purpose. If no tests are specified in the contract and such tests are required by the engineer, the contractor shall provide all facilities required for the purpose and the charges for these tests shall be borne by the contractor only.

Materials will be issued only for permanent works and not for making templates, other temporary works, enabling works etc. and the same shall not be taken into account for purpose of material reconciliation.

The contractor shall bear all other costs including the lifting, carting from issue points to works site/contractor's stores, custody and handling etc. and return of surplus/serviceable materials to owner's stores to be designated by the Engineer-incharge and all expenditure will be made by the contractor.

Cement, as received from the manufacturer / stockiest will be issued to the contractor. The theoretical weight of each bag of cement for issue purpose will be considered as 50 kgs. Per bag. Any type of cement and in any container as received from manufacturer / stockiest shall be issued to the contractor no claim whatsoever shall be entertained on this. Cement bags weighing upto 4% less will be accepted by the contractor and accounted for as 50 kg. Per bag.

Document No: IS-1-08-2013-003 PAGE: 13 of 37



BHEL-ISG

BANGALORE

Augmentation of Raw Material Receipt & Handling facilities with new OHP, Part-B Civil Works

STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

The contractor shall maintain good stores for storing the cement issued to him. The flooring of the storage house, the clearance of cement bags from the side walls etc. shall be as per the instructions of the Engineer-in-charge.

The cement stores shall be open for supervision and verification by the Engineer-incharge or his authorised representative by any time when the Engineer-in-charge feels the need to do so.

In the case of steel materials, the same shall be issued generally on the basis of weight. For the purpose of billing and accounting, actual weight shall be considered. Quoted price shall be deemed to include permissible wastages. BHEL has the right to penalize/charge extra if the wastages are above the permissible.

Issue of stores material is subject to availability and the contractor shall not be entitled to any claim or compensation for non supply or delay in the supply under any circumstances. The material will be issued generally during the working hours.

The contractor shall bear all incidental costs including site lifting, carting from issue points to site / contractor's store, custody and handling etc., and return of surplus / serviceable / scrap materials to owner's storage points designated by the owner etc. and no separate payment for such expenditure shall be made.

The contractor will have to submit their design mix for different grades of concrete keeping in view the requirements stipulated in IS-456

The theoretical consumption of cement, reinforcement steel and structural steel required for the work will be calculated and given to BHEL. In the case of cement, the theoretical consumption shall be decided by the Engineer as mentioned above and his decision in this regard shall be final and binding on the contractor. Reinforcement

Document No: IS-1-08-2013-003 PAGE: 14 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE SPEC

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

and structural steel shall be measured by weight in tones. The weight will be arrived at by multiplying the used length by the sectional weight. The sectional weight will be same as were applied at the time of issue. Standard hooks, cranks, bends and authorised laps, chairs, separator pieces etc. specified in drawing or instructed by engineer as required shall be measured and paid for. No payment shall be made for binding wires, spacer block etc. required for keeping the steel in position unless otherwise specified in the contract. No extra payment will be made for modification of already embedded reinforcement, if required due to faulty fabrication or placement.

The contractor shall submit proper account of material / material reconciliation statement for the material drawn by him from stores once in every month. Failing compliance of this requirement further issue of steel to the contractor may be suspended and no claim of compensation for delay in execution on this account shall be entertained.

All the steel thus issued shall be properly accounted for as per the following permissible wastage over the theoretical quantity / consumption incorporated in the works.

Structural Steel Accountable (visible) 3%
----do----- Un accountable (invisible) ½ %

Any unused / serviceable quantity of cement, reinforcement steel & structural steel not returned in good condition & wastages/loss/consumption beyond specified/agreed limits shall be charged at penal rate.

Since the steel is being issued free of cost, the scrap generated shall belong to BHEL.

EXECUTION OF WORK

Document No: IS-1-08-2013-003 PAGE: 15 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

VOLUME - I SECTION C

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

The work shall be executed in a workman like manner and to the entire satisfaction of the engineer and as per technical specification issued with tender, IS codes, CPWD specifications as applicable. In case of conflict, the decision of the engineer shall be final and binding.

The engineer will communicate or confirm his instructions to the contractor in respect of the execution of the work in a "Work Site Order Book" maintained at his office and the contractor shall visit this office daily and shall confirm receipt of such instructions by signing the relevant entries in this book. Such entries will rank as order or notices in writing within the intent and meaning of these conditions.

Only BHEL approved make of electrodes will be used. All electrodes shall be heated and dried in the electric electrode drying oven to the required temperature for the period specified by the engineer before these are used in erection work. All welders shall have electrodes drying portable oven at the work spot. The electrodes brought to site will have valid manufacturing test certificates. The test certificate will have corelation with the lot no. / batch no. given on electrode packets. No electrodes will be allowed to be used in the absence of above requirement. The thermostat and thermometer of electrode drying over will be also calibrated and test certificate from Govt. approved/accredited test house traceable to National / International standards will be submitted to BHEL before putting the over in use. Periodical calibration for the same shall also be arranged by the contractor within the finally accepted rates.

SETTING OUT:

All the works shall be set out to the true lines, grades and elevation indicated on the drawing. The contractor shall be responsible to locate and set out the works. Only one grid reference line and bench mark all be made available for setting out the

Document No: IS-1-08-2013-003 PAGE: 16 of 37



BHEL-ISG

BANGALORE

Augmentation of Raw Material Receipt & Handling facilities with new OHP, Part-B Civil Works

STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

works under the contract. This reference lines shall be used as datum for the works under the contract and the contractor has to establish for his work area at available points horizontal and vertical control points. The contractor shall inform BHEL well in advance of the times and places at which he wishes to do work in the area allotted to him so that suitable datum points established by him are checked by BHEL / customer to enable the contractor to proceed with the works. Any work done without being properly located may be removed and / or dismantled by BHEL / customer at contractors expense.

The contractor shall at his own expense take all proper and responsible precautions to preserve and maintain these datum marks to its true position. In the event of these marks being disturbed or obliterated by accident or due to any other cause whatsoever, the same may be deemed necessary placed by BHEL / customer at contractor's expenses.

SITE DRAINAGE

All water including sub-soil water which may accumulate on the site during the progress of the works or in trenches and excavations, including monsoon period shall be removed by the contractor from the site to the satisfaction of the engineer. It will also be responsibility of the contractor to de-water all the foundation pits, trenches with suitable de-watering methods like, pumping out, well point system etc. considering the depth of water table at plant site. All such expenditure on de-watering shall be deemed to be included in quoted rates.

INSPECTION AND STAGE APPROVAL OF THE WORK:

The owner or his duly authorised representative shall have at all reasonable times access to the contractor's premises or works and shall have the power to inspect

Document No: IS-1-08-2013-003 PAGE: 17 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

drawings or any portion of the work, examine the materials and workmanship and shall have the authority to reject any work. This would be implemented through joint inspection by the representative of the owner and BHEL and in the form of joint protocols without any extra claims and loss of time and amount.

All work embracing more than one process shall be subject to examination and approval at each stage thereof and the contractor shall give due notice in writing to the engineer when each stage is ready. In default of such notice being received, the engineer shall be entitled to approve the quality and extent thereof at any time he may choose and in the event of any dispute, the decision of the engineer thereon shall be final and conclusive.

UNCOVERING AND MAKING GOOD

The contractor shall uncover any part of the works and/or make openings in or through the same as the engineer may from time to time direct for his verification and shall reinstate and make good such part to the satisfaction of the engineer. If any such part has been covered up or put out of view after being approved by the engineer and is subsequently found on uncovering to be executed in accordance with the contract, the expenses of uncovering and / or making opening in or through reinstating and making good the same shall be borne by BHEL. In any other case all such expenses shall be borne by the contractor.

DISCREPANCIES AND ADJUSTMENT OF ERRORS

The several documents forming the contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawings

Document No: IS-1-08-2013-003 PAGE: 18 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

and figures dimensions in preference to scale and special conditions in preference to general conditions.

In case of discrepancies between schedules of quantities, the specification and/or the drawings, the following order of preference shall be observed.

Description in schedule of quantities
Special conditions
Drawings
Technical specifications

General conditions of contract

If there are varying or conflicting provisions made in any one document forming part of the contract, the engineer shall be the deciding authority with regard to the document.

Any error in description, quantity in schedule of quantities or any omission there from shall not vitiate the contract or release the contractor from the execution of the whole or any part of the works comprised there in according to the drawings and specifications or from any of his obligations under the contract.

If on check there are found to be differences between the rates given by the contractor in words and figures or in the amount worked out by him in the schedule of quantities and general summary, the same shall be adjusted in accordance with the following rules:

In the event of discrepancies between description in words and figures quoted by a tenderer, the lesser of the two will be treated as valid rate.

Document No: IS-1-08-2013-003 PAGE: 19 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

In the event of an error occurring in the amount column of schedule of quantities as a result of wrong extension of the unit rate and quantity, the unit rate shall be regarded as firm and extension shall be amended on the basis of the rate.

All errors in totaling in the amount column and in carrying forward totals shall be corrected.

The totals of various sections of bill of quantities amended shall be carried over to the general summary and the tendered sum amended accordingly. The tendered sum so altered shall, for the purpose of tender, be substituted for the sum originally tendered and considered for acceptance instead of the original sum quoted by the tenderer. Any rounding of quantities or in sections of bill of quantities or in general summary, by the tenderer, shall be ignored.

If neither drawing nor specification contain any mention of minor details of construction which in the opinion of the engineer whose decision shall be final and conclusive, are reasonable and obviously and fairly intended for satisfactory completion of work, such details shall be provided by the contractor without any extra cost, as if they were specially mentioned and shall be deemed to be included in the drawing.

SAFETY CODE:

Besides provision with regard to safety under relevant clause, contractor shall note that explosives shall not be used on the work by contractor except with permission in writing of the engineer and in manner and to the extent to which he has prescribed. Where explosives are used, the same shall be stored in a special magazine to be provided by and at the cost of the contractor who shall be liable for all damages, losses and injury to any person or property and shall be responsible for complying with all statutory obligations in these respect.

Document No: IS-1-08-2013-003 PAGE: 20 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

The contractor will be responsible for health, safety and environment management at site for the construction activities to be carried out by them in accordance with requirements given under section 1 (a) of this document.

Contractor shall arrange for following provisions of HSE:

Contractor has to maintain contact with local hospital having scanning and other modern medical facilities required during emergency.

Contractor has to ensure pre-employment medical check for all staff and workers Contractor has to ensure that adequate first aid facilities.

NUISANCE

The contractor shall not at any time do, cause or permit any nuisance on site or do anything which shall cause unnecessary disturbance or inconvenience to owners, tenants or occupiers of other properties near the site and to the public generally.

MATERIAL OBTAINED FROM EXCAVATION:

Materials of any kind obtained from excavation on the site shall remain the property of BHEL / its client and shall be disposed of as the engineer may direct at no extra cost.

TREASURE, TROVE, FOSSILS ETC.

All fossils, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the site shall be the absolute property of BHEL / BHEL's client and the contractor shall take reasonable precautions to prevent his workmen or any other person from removing or damaging

Document No: IS-1-08-2013-003 PAGE: 21 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

any such article or thing, shall immediately upon discovery and carryout the engineer's directions as to the disposal of the same.

PROTECTION OF WORKS

Trees designated by the engineer shall be protected from damage during the course of the works and earth level within 1 meter of each such tree shall not be charged. Where necessary, such trees shall be protected by providing temporary fencing.

The contractor shall provide and maintain at his own expense all lights, guards, fencing and watching when and where necessary or required by the engineer for the protection of the works or for the safety and convenience of those employed on the works or the public.

The contractor shall have total responsibility for protecting his works till it is finally taken over by the engineer. No claim will be entertained by the engineer for any damage or loss to the contractor's works and the contractor shall be responsible for the complete restoration of the damaged works to its original condition to comply with the specifications and drawings. Should any such damage to the contractor's works occur because of other party not under his supervision or control, the contractor shall make his claim directly with the party concerned. The contractor shall not cause any delay in the repair of such damaged works because of any delay in the resolution of such disputes. The contractor shall proceed to repair the work immediately and no cause thereof will be assigned pending resolution of such disputes.

RECORD FOR MATERIALS CONSUMED

The contractor shall maintain and furnish to the engineer the record of materials consumed in the works for each activity. The statement showing the theoretical vis-à-

Document No: IS-1-08-2013-003 PAGE: 22 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME - I SECTION C

vis actual consumption of specified materials, such as structural/ reinforcement steel, cement, bitumen, lead, paint etc. shall be enclosed along with the running bills submitted by the contractor. Contractor has to also furnish the test results of the materials used in the work as per IS specifications

PROTECTION OF EMBEDMENTS, BOLTS ETC.

The contractor shall ensure proper protection to the satisfaction of the engineer, of all bolts, inserts, embedments etc. from weather etc. by greasing, rapping them with gunny bags or canvas or by any other means as directed by engineer. Cost of such protections shall be deemed to be included in the rates quoted for the item.

CLEARANCE OF SITE AND REPAIRS

Contractor has to clear the site/area where mechanical and electrical erection work is to be commenced or in progress. The contractor shall remove construction materials and equipment lying in the vicinity and causing obstruction in the erection work within 24 hrs. notice. In case, he fails to clear the site, this will be done at his risk and cost by BHEL.

QUALITY ASSURANCE

The contractor has to establish / arrange at site the field testing facilities for testing of civil construction materials and concrete cubes for ensuring the proper quality, grade and strength of the materials used in the construction in line with approved field quality check list of BHEL / its client. Contractor has to submit detailed report for testing of all material used etc. All testing shall be done as per IS code specifications / BHEL's quality plan. If further test is required by the engineer to be carried from outside laboratory, the cost of the same shall be borne by the contractor.

Document No: IS-1-08-2013-003 PAGE: 23 of 37



BANGALORE

Augmentation of Raw Material Receipt & Handling facilities with new OHP, Part-B Civil Works

STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

COMPLETION OF WORK

The works shall be completed to the entire satisfaction of the engineer and in accordance with the completion schedule as specified in the contract and all unused stores and materials, tools, plant, equipment, temporary buildings, site office, labour hutments and other things shall be removed and the site and work cleared of rubbish and all waste materials and delivered up clean and tidy to the satisfaction of the engineer at the contractor's expenses.

BHEL shall have power to take over from the contractor from time to time such sections of the work as have been completed to the satisfaction of the engineer. Such work however shall not be treated as have been completed until the extra works are executed to the satisfaction of engineer. The guarantee period shall commence only after handing over of the entire works.

The engineer shall certify to the contractor the date on which the work is completed and the date thereof.

RECORDS AND MEASUREMENTS

All items having a financial value shall be entered in BHEL measurement book so that a complete record is obtained of all works performed under the contract.

Lump sum omissions will be entered for deduction. Measurement shall be restricted to that required to ascertain the financial liability of BHEL under the contract.

Work which fails to be measured in details shall be measured physically without reference to any local custom that may obtain excepting where it may otherwise be

Document No: IS-1-08-2013-003 PAGE: 24 of 37



BANGALORE

Augmentation of Raw Material Receipt & Handling facilities with new OHP, Part-B Civil Works

STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

directed in the tender documents. The measurements shall be taken jointly by any person duly authorised on the part of BHEL and by the contractor.

The engineer shall give reasonable notice in writing to the contractor of appointment for measurement.

The contractor shall, without extra charge, provide assistance with appliances and other things necessary for measurement and shall bear all the cost of measurement of his work.

Measurement shall be entered in BHEL Measurement Book and signed and dated by both parties each day at the site on completion of measurement. If the contractor objects to any of the measurements recorded on behalf of BHEL, a note to that effect will be made in BHEL Measurement Book or against the item or items objected to and such note shall be signed and dated by both the parties engaged in taking the measurement.

If, as a result of such objection, it becomes necessary to re-measure the work wholly or in part the expense of such re-measurement shall be borne by the contractor.

If the contractor's representative fails to attend when required, the engineer shall have power to proceed by himself to take measurements and in that case these measurements shall be accepted by the contractor as final.

The contractor shall, once in every month, submit to the engineer details of his claims for the work done by him upto and including the previous month which are not covered by this contract agreement in any of the following respects:

Deviation from the items and specifications provided in the contract documents

Document No: IS-1-08-2013-003 PAGE: 25 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME - I SECTION C

Extra items/new items of work

Quantities in excess of those provided in the contract schedule

Items in respect of which rates have not been settled

METHOD OF MEASUREMENT

Method of measurements shall be as per standard specifications included in the tender. For other items measurements shall be as per relevant IS codes.

DEVIATION

The contractor shall not make any alteration in addition to or omission from the work as described in the tender documents.

COMPLIANCE TO REGULATIONS AND BYELAWS

The contractor shall conform to the provisions of any statue relating to the work and regulations and bylaws of any local authority and of any water and lighting companies or undertaking with whose system the work is proposed to be connected. He shall, before making any variation from the drawings or the specifications that may be necessitated for such connections give the engineer, notice specifying the variation proposed to be made and the reasons therefore and shall not carryout any variation until he has received instructions from the engineer in respect thereof. The contractor shall be bound to give all notices required by statute, regulations or bye-laws as aforesaid and to pay all fees and taxes payable to any authority in respect thereof.

FACILITIES TO BE PROVIDED BY BHEL / CONTRACTOR

Document No: IS-1-08-2013-003 PAGE: 26 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

BHEL shall provide free of charge limited open space, for office and storage shed, as and where made available by M/s.PSEB. It is the responsibility of the contractor to construct sheds, provide all utilities and dismantle and clear the site after completion of work or as and when required, as a part of his scope of work.

Contractor shall be responsible for providing all necessary facilities like residential accommodation, transport, electricity, water, medical facilities etc. as required under various labour laws and statutory rules and regulations framed there under to the personnel employed by him.

Construction power, for construction purposes will be provided free of cost and at one point near erection site (at a distance upto 500 meters) from supply point. Further distribution of power shall be done by contractor at his cost. All wiring must comply with local regulations and will be subject to engineer's inspection and approval before connecting supply.

Provision of distribution lines of power from the central points to the required place with proper distribution boards observing the safety rules laid down by the authorities of the state shall be done by the contractor, supplying all the materials like cables, distribution board, switch board, TPN, CBS, ELCBS, MCCBs, Copper, brass clamps, copper conductor, change over switches, pipes etc. at his own cost. If any failure is caused in supply of the power and water, it is the responsibility of the contractor to make alternate arrangements at his cost. The contractor shall adjust his working shift / hours accordingly and deploy additional manpower if necessary so as to achieve the targets.

In case of power cuts / load shedding no compensation for idle labour or extension of time for completion of work will be given to contractor.

Document No: IS-1-08-2013-003 PAGE: 27 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

Adequate lighting facilities such as flood lamps, hand lamps and area lighting shall be arranged by the contractor at the site of construction, contractor's material storage area etc. within finally accepted rates.

No claim for damaged will be entertained by the company on account of interruptions of water supply or limitation of quantity of water as aforesaid or on account of the water so taken being not fit for construction purposes or on any other account in connection with such water supply.

DEVIATION

The contractor shall not make any alteration in addition to or ommission from the work as described in the tender documents except in pursuance of the written instructions of the engineer. No such deviation from the work described in the tender documents shall be valid unless the same has been specifically confirmed and accepted by the engineer in writing and incorporated in the contract.

The engineer may deviate, either by way of addition or deduction, from the work so described, provided that the contract sum be not thereby varied on the whole by more than the percentage set our in the tender documents. The value of all additions and deductions shall be added to or deducted from the contract sum. Whenever the engineer intends to exercise such a right his intentions shall specify the deviations which are to be made, the lumpsum assessment or the proposed basis of payment, the extra time allowed, if any, and the date for completion of the entire contract. Any objection by the contractor to any matter concerning the order shall be notified by him in writing to the engineer within seven days from the date of such order, but under no circumstances shall the work be stopped unless so ordered by the engineer, owing to differences or controversy that may arise from such an objection. In the absence of

Document No: IS-1-08-2013-003 PAGE: 28 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

such a notification of objection by the contractor, he will be deemed to have accepted the order and the conditions stated therein.

VALUATION OF DEVIATIONS:

Rates for deviated items or new items of work shall be as follows:

If the rates for the additional, altered or substituted work are not specifically provided in the contract for the work, the rates will be derived from the rates for a similar class of work as are specified in the contract for the work.

If the rates for the altered, additional or substituted work cannot be determined in the manner specified in above clauses, the rates for such part or parts will be determined by the engineer on the basis of prevailing market rates when the work was done and the decision given in this behalf shall be final and binding on the contract. Rate analysis will be worked on CPWD manual of rate analysis as guidance.

If the rates for the altered, additional or substituted work cannot be determined in the manner specified in above clauses, then the contractor shall within 7 days of the date of receipt of order to carry out the work inform the engineer of the rate at which it is his intention or charge for such class of work, supported by analysis of the rate or rates claimed, and the engineer shall determine the rate or rates on the basis of prevailing market rates and pay the contractor accordingly. However, the engineer, by notice in writing, will be at liberty to cancel his order to carry out such class of work and arrange to carry it out in such manner as he may consider advisable. But under no circumstance the contractor shall suspend the work on the plea of non-settlement of rates falling under the clause or claim any compensation on that account. Elements of profit, overheads, supervision and establishment charges will be taken as 15% over direct cost.

Document No: IS-1-08-2013-003 PAGE: 29 of 37



BANGALORE

Augmentation of Raw Material Receipt & Handling facilities with new OHP, Part-B Civil Works

STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

SPECIA

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

Contractor has to arrange for construction water by providing suitable bore well within the quoted rates. Contractor to satisfy himself that the water drawn by him is fit for construction/consumption and adequately treat such water at his cost when it is not found fit for the said purposes.

The contractor should make arrangements for storage of sufficient quantity of water required for work.

The contractor shall during the progress of the work, provide, erect and maintain at his own expenses all necessary temporary workshops, stores, consumables, offices etc. required for the proper and efficient execution of the work. The planning, setting and erection of these buildings shall have the approval of the engineer and the contractor shall at all times keep them tidy and in a clean and sanitary condition to the entire satisfaction of the engineer.

On completion of work or as and when required by BHEL, all the temporary buildings, structures, pipe lines, cables etc. shall be dismantled and leveled and debris shall be removed as per instruction of BHEL by the contractor at his cost. In the event of his failure to do so, same will be got done by the engineer and expenses incurred shall be recovered from the contractor along with prevailing overhead. The decision of BHEL engineer in this regard shall be final.

PROGRESS REPORTING

Contractor is required to draw mutually agreed monthly programme in consultation with BHEL well in advance. Contractor shall ensure achievement of agreed

Document No: IS-1-08-2013-003 PAGE: 30 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

programme and shall also timely arrange additional resources considered necessary at no extra cost to BHEL.

Weekly progress review meetings will be held at site during which actual progress during the week vis-à-vis scheduled programme shall be discussed for actions to be taken for achieving targets. The programme for subsequent week shall also be presented by contractor for discussions. The contractor shall constantly update/revise his work programme to meet the over all requirement. All quality problems shall be discussed during above review meetings. Necessary preventive and corrective action, shall be discussed and decided upon in such review meetings and shall be implemented by the contractor in time bound manner so as to eliminate the cause of non-conformities.

The contractor shall submit weekly and monthly progress reports, materials reports, consumables (gases/electrodes) report and other reports as per proforma considered necessary by the engineer.

The progress report shall indicate the progress achieved against planned, with reasons indicating delays, if any, and shall give the remedial actions which the contractor intends to take to make good the slippage or lost time, so that further works again proceed as per the original programme and the slippages do not accumulate and effect the overall programme.

The daily manpower reports shall clearly indicate the manpower deployed, categorywise specifying also the activities in which they are engaged.

DRAWING AND DOCUMENTS

The detailed drawings, specifications available with BHEL engineers will form part of this tender specification. These documents will be made available to the contractor

Document No: IS-1-08-2013-003 PAGE: 31 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

during execution of work at site. The contractor will also ensure availability of all drawings/documents at work place.

Necessary drawings/documents by BHEL to carryout the construction work will be furnished to the contractor by BHEL (except those proposed to be prepared by contractor, as mentioned in this contract) on loan which shall be returned to BHEL engineer at site after completion of work. Contractor shall ensure safe storage and quick retrieval of these documents.

The contractor shall maintain a record of all drawings and documents available with him in a register as per format given by BHEL engineer. Contractor shall ensure use of pertinent drawings / data/ documents and removal of obsolete ones from work place and return to BHEL.

The data furnished in various annexures enclosed with this tender specification are only approximate and for guidance. However, the change in the design and in the quantity may occur as is usual in any such large scale of work.

Should any error or ambiguity be discovered in the specification or information the contractor shall forthwith bring the same to the notice of BHEL before commencement of work. BHEL's interpretation in such cases shall be final and binding on the contractor.

Deviation from design dimensions should not exceed permissible limit. The contractor shall not correct or alter any dimension / details, without specific approval of BHEL.

DELAY AND EXTENSION OF TIME

If, in the opinion of the engineer, the work is delayed:

by reason of abnormally bad weather, or

by reason of serious loss or damage by fire, or

Document No: IS-1-08-2013-003 PAGE: 32 of 37



BHEL-ISG

BANGALORE

Augmentation of Raw Material Receipt & Handling facilities with new OHP, Part-B Civil Works

STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

SPECIAL CONDITIONS OF CONTRACT

VOLUME - I SECTION C

by reason of civil commotion, local combination of workmen, strike or lockout, affecting any of the trades employed on the work, or

by delay on the part of the agency or tradesmen engaged by the BHEL in executing work not forming part of the contract, or

by reason of any other cause which in the absolute discretion of the engineer is beyond the contractor's control, then in any such case, the engineer (or higher authority) may make fair and reasonable extension in the completion dates of the individual items of work or the contract as a whole. Such extension which will be communicated to the contractor by the engineer in writing shall be final and binding on the contractor. No other claim in this respect for compensation or otherwise howsoever is admissible. Upon the happening of any such event causing delay, the contractor shall immediately give notice thereof in writing to the engineer but shall nevertheless use constantly his best endeavor to prevent or make good the delay and shall do all that may reasonably be required to the satisfaction of the engineer to proceed with the work.

PRICE VARIATION AND OVERRUN

The finally accepted rates for scope of work as defined in this tender are subjected to price variation provisions as per formula enclosed elsewhere in the tender document.

With the provision of price variation as per the clause, NO CLAIM/ COMPENSATION / OVER RUN on account of any increase whatsoever, irrespective of whether escalation are steep/unanticipated or not compensated by the above escalation provisions in full towards minimum wages, consumables, coarse / fine aggregates, steel, wood, electrodes, gases or any other item/reason, will be payable during the entire period of execution including extended period, if any.

Document No: IS-1-08-2013-003 PAGE: 33 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME – I SECTION C

INCOME TAX AND SALES TAX

Income Tax at the prevailing rate on gross value of work done and applicable surcharge shall be deducted from the running bills unless exempted by the Income Tax Authorities.

Price quoted shall be exclusive of sales tax, works tax and service tax. These taxes shall be borne by BHEL, if applicable.

Contractor shall get his organisation registered with concerned sales tax authorities within 15 days of award of this contract. The delay on this account and delay in bringing the material shall be to contractor's account and no extension of time shall be allowed on this account. The sales tax registration for this contract shall be forwarded to BHEL within 30 days from the date of LOI. In case the contractor is already registered for sales tax with Govt. Authorities he must quote his registration no. while submitting their tender.

Contractor has to make his own arrangement at his cost for completing the formalities, if required, with Sales Tax Authorities, for bringing their materials, plants, and equipment at site for the execution of the work under this contract.

TIME SCHEDULE

The contractor is required to commence the work within 15 days from the date of issue of letter of intent unless BHEL decided to fix any other later date.

Entire work as detailed in tender specification shall be completed within 26 months from the scheduled date of start of work as per the programs / milestones indicated by BHEL (Tentative programme for subject tender is enclosed as Annexure - A). – Contractor has to mobilise adequate resources to meet BHEL's commitments to their

Document No: IS-1-08-2013-003 PAGE: 34 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

VOLUME – I SECTION C

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

customer as indicated from time to time. In case due to reasons not attributable to the contractor, the work gets delayed and additional manpower/resources have to be mobilised so as to expedite the work to meet various milestones, same shall be done within the quoted rates as per Rate Schedule, at no extra cost to BHEL. In the event the contractor fails to respond to these requirements, BHEL shall take appropriate actions to meet customer's commitments in line with the provisions of general conditions of contract.

In case due to reasons not attributable to the contractor, the work gets delayed and scheduled completion gets extended, time extension will be granted by BHEL but in no case over run compensation will be payable.

The work under the scope of this contract is deemed to be completed in all respects, only when all the works are carried out as per satisfaction of BHEL. The decision of BHEL on completion date shall be final & binding on the contractor.

TERMS OF PAYMENT:

The contractor shall be paid monthly running bill to a maximum of 95% of the value of the work actually executed on site provided the work has been executed to the satisfaction of the engineer. BHEL site incharge, at his discretion can split this 95% payment, to facilitate site operations. The engineer may after a measured bill allow and certify payment to the contractor on the basis of abstract measurement bill submitted by the contractor. Contractor will also submit the floppy/CD containing abstract and measurement sheets of the bill which will be returned to him after correction for further resubmission of bill. From this amount recovery such as advances, security deposit taxes etc. would be made. The certificate of the engineer regarding such approval and passing of sums so payable shall be final and conclusive against the contractor.

Document No: IS-1-08-2013-003 PAGE: 35 of 37



STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

BHEL-ISG BANGALORE

SPECIAL CONDITIONS OF CONTRACT

VOLUME - I SECTION C

The 2.5% final contract value (worked out based on actual work carried out) shall be payable on completion of all pending work, rework wherever required, site clearing and reconciliation of materials.

Note: Above payment shall be released after working out the contract value based on actual work carried out.

The balance 2.5% of final contract value will be payable on submission and passing of final bill. The certificate of engineer regarding such approval and passing of sums shall be final and conclusive against the contractor.

Any certificate relating to the work done may be modified by any subsequent interim certificates or by the final certificates and no certificate of the engineer supporting an advance payment shall of itself be conclusive evidence that any work or materials to which is relates are in accordance with the contract.

INSURANCE

Besides provisions under clause No.29.0 of GCC regarding insurance, the following shall also be applicable. The contractor shall also take care of the same while submitting their offer.

BHEL/its customer shall arrange for insuring the materials of BHEL / its customer covering the risks during transit, storage, erection and commissioning.

Document No: IS-1-08-2013-003 PAGE: 36 of 37



BHEL-ISG

BANGALORE

Augmentation of Raw Material Receipt & Handling facilities with new OHP, Part-B Civil Works

STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

VOLUME - I

SECTION C

SPECIAL CONDITIONS OF CONTRACT

If due to negligence / carelessness on the part of the contractor, any material/equipment gets damaged, the contractor shall submit necessary documents for lodging insurance claims as required by BHEL engineer. BHEL shall however reserve the right to recover deductible franchise and also unsettled portion of insurance claim amount from the contractor.

If due to negligence / carelessness on the part of the contractor, any surrounding properties gets damaged, the contractor shall submit necessary documents for lodging insurance claims as required by BHEL engineer. BHEL shall however reserve the right to recover deductible franchise and also unsettled portion of insurance claim amount from the contractor.

The contractor may note that BHEL T&Ps / IMTEs are not insured. The contractor will take necessary precautions and due care to protect the same while in his custody from any damage / loss is due to carelessness / negligence on the part of the contractor, the contractor is liable to get them repaired/replaced immediately and in case of his failure to do so within a reasonable time BHEL will reserve the right to recover the loss from the contractor.

RATE SCHEDULE CUM BOQ/VARIATION

Contractor shall fully understand description and scope of work before quoting. The scope of work and responsibility of the contractor as mentioned under these specification shall be covered within the quoted/finally accepted rates.

The tenderer shall quote the prices/rates for entire scope of work as per the rate schedule only, in part II price bid (original). Conditional price bids or price bids with any deviation / clarification etc. are liable to be rejected. No cutting / erasing / over writing shall be done.

Document No: IS-1-08-2013-003 PAGE: 37 of 37



BHEL-ISG

BANGALORE

Augmentation of Raw Material Receipt & Handling facilities with new OHP, Part-B Civil Works

STEEL AUTHORITY
OF INDIA LIMITED
BHILAI STEEL
PLANT (BSP)

PRIC

PRICE SCHEDULE NOTES

VOLUME – III
SECTION A

- 1.0 The various parts of the schedule shall be read in conjunction with the corresponding sections in the Technical Specifications, including amendments, and additions, if any, and also the tender drawings. All works shall conform to specifications and drawings whether actually specified herein or not. The prices quoted shall include minor details of construction, which are obviously and fairly intended and which may not have been referred to in these documents, but are essential for the satisfactory completion of the work.
- 2.0 The contract is an EPC (Engineering, Procurement & Construction) contract and hence the prices quoted in the schedule shall include all costs for the works on a Lump Sum turnkey basis. The civil & structural (C&S) contractor shall design the structures as per the dimensions and loading data given on approved E&M (Electrical and Mechanical) drawings.
- 3.0 Approved E&M drawings are not yet available. For the tender purpose the basic dimensions for the structures and buildings are given in Section-A "Scope Of Work" and the type of work involved is shown in Section-H "Tender Drawings" for general guidance of the bidders.the C&S bidder shall base his offer has to make his own assumptions based on the information given in "Design Memorandum" and the Tender Drawings and quote a firm lump sum price for the works.
- The dimensions of structures / buildings in the finally approved E&M drawings are not likely to vary considerably from the dimensions on the tender drawings. However, owner takes no responsibility in this regard. The quoted price shall be firm accounting for any variations in the finally approved E&M drawings.
- This C&S tender documents are being given to the eligible bidders having experience in execution of similar projects and hence it is expected of them that they have capability of assessing rationally the work involved in such plants and shall quote a good firm price. They shall have to absorb plus/minus price variations consequent to the variations, if any, between the tender drawings and the approved E&M drawings. The quoted LS price shall be firm and not subject to any variations later. No claim in this regard shall be entertained and no extras of any kind shall be payable on this account. The bidder shall take note of this special condition of this contract very critically.

Document No: IS-1-07-2013-003 PAGE: 1 of 1



No.		Farth wo				in all kinds of Lean concrete P.C.C Lean concrete P.C.C For			C Form work for concrete R.C.C M20 gra						
Ų		all kind depth dewate structing	rk excavation in is of soil at all is including ering shoring g stacking etc.	rocks includi blasting	on in all kinds of at all depths ng controlled g and stacking (Cum)	grade1:4	ncrete P.C.C :8 Excluding ement (Cum)	M10 grad	ncrete P.C.C de Excluding ement (Cum)	(Ordinary	for concrete / Plywood) ą.M)	concrete Exclud	M20 grade e at all levels ling cost of ement	concrete Exclud	M25 grade at all levels ing cost of ement
l		Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate
	WAGON TIPPLER WITH Side Arm Charger														
	TRACK HOPPER														
	Ground Hopper														
	HOUSES														
4	PENT HOUSES PH - Conv Z3 C1/C2														
5	PENT HOUSES PH - Conv Z2 C1/C2														
JUNC	TION TOWERS														
6	JH -Z1														
7	JH-Z2		İ						İ				İ		İ
	JH -Z3														
	JH-Z4														
	JH -Z5														
	JH-Z6														
12	JH-Z6A														
	JH -Z6B														
14	JH-Z5A														
	JH -Z5B														
	JH-Z4A														
	JH -Z4B														
	JH-Z7														
	JH -Z8														
	JH-Z9														
	JH -Z10 JH-Z11														
	JH-Z11 JH -Z12														
	JH-Z13														
25	JH -Z15														
	J9A			1							†			1	1
	J9														
	JH-9H														
	JH-10														
	JH - 11														
	JH - 14														
32	JH - 15														
	JH - 16A														
	JH - 17														
	JH - 17A														
	JH - 17B		İ						Ì				Ì		İ
	JH - 20		1								İ				
	J-N102														
	JH-L1		 						1				1		1
	JH-L2		-								1				-



S. No.	BUILDING / STRUCTURE		Esti	mated Qu	uantities and U	nit rates	for Major Ite	ms as Co	nsidered in	Lumpsum P	rice				
		all kind depth dewate structing	rk excavation in is of soil at all ns including ering shoring g stacking etc. (Cum)	rocks includi blasting	on in all kinds of at all depths ing controlled g and stacking (Cum)	grade1:4	ncrete P.C.C :8 Excluding ement (Cum)	M10 grad	ncrete P.C.C de Excluding ement (Cum)	(Ordinary	for concrete / Plywood) ₁ .M)	concrete Exclud	M20 grade e at all levels ling cost of ement	concrete Exclud	M25 grade e at all levels ing cost of ement
		Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate
41	JH-L3														
42	JH-L4														
43	JH-L5														
44	JH-L6														
45	JH-L7														
	JH-L8														
	JH-L9														
	JH-L10														
	KER RECLAIMER Stacker Rail Tracks 3 Nos														
50	Reclaimer RailTracks 3 Nos														
	Stock pile area - 6Nos														
FLEC	TRICAL MCC & CONTROL														
52	SWGR Rooms - 3 Nos														
	Main control room - Ground Floor & First Floor														
	Wagon Tippler Control Room														
	Battery Room														
	Cable Galleries / trenches														
MISC	ELLANEOUS Sprinkler Lines for Wagon Tippler						-								
58	Ore Settling Tank														
59	Roads														
60	Drains														
	Room for Rail Weigh Bridge														
62	Yard master Building (2 Storey)														
63	Workers Rest Room (2 Nos)		İ											1	
	Canteen Buildings - (2Nos)														
	Office Buildings with seperate Parking area (2Nos)														
	Toilet Blocks - 2 Nos														
	Area Repair Shop													<u> </u>	
68	Ore Handling Area														
	(a) Closed Sub Store														
	(b) Open Ended Fenced yard														
	Dust Supression Pump Houses - 6 Nos														
70	Dust Supression Water Tank - 6 Nos														
71	Air Compressor House - DS & RMS plant														
72	Ventillation Rooms														



S.	BUILDING / STRUCTURE		Esti	mated Qu	uantities and U		for Maior Ite		nsidered in	Lumpsum P	rice				
No.		all kind depth dewate structing	k excavation in s of soil at all is including ering shoring g stacking etc.	Excavation rocks including blasting	on in all kinds of at all depths ing controlled g and stacking (Cum)	Lean con grade1:4 cost of ce	ncrete P.C.C :8 Excluding ement (Cum)	Lean co	ncrete P.C.C de Excluding ement (Cum)	Form work (Ordinary (Sc	for concrete / Plywood) µ.M)	concrete Exclude c	M20 grade e at all levels ling cost of ement	concrete Exclud	M25 grade e at all levels ling cost of ement
		Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate
73	Air Conditioning Room														
74	Fire Fighting System- Pump House &														
	Reservoir														
75	Flood Light Mast Foundation in Stock														
	Yard- 6nos														
CON	/EYOR TUNNELS														
	CT-Z1 C1/C2														
	CT-Z2 C1/C2														
CON	/.TRESTLE FOUNDATIONS &														
CON	/.WALKWAY SLAB														
78	Conv Z2 C1/C2														
	Conv Z3 C1/C2														
80	Conv Z3 C1/C2/C3														
	Conv Z6 C1/C2/C3														
	Conv Z6 C1/C2/C3														
	Conv Z6 C2/C3														
	Conv Z6A C1														
85	Conv Z6B C1														
86	Conv Z5A C1														
87	Conv Z5B C1														
88	Conv Z4A C1														
89	Conv Z4B C1														
	Conv Z7 C1/C2														
	Conv Z7 C1/C2														
	Conv Z7 C3														
93	Conv Z8 C1/C2														
94	Conv Z9 C1/C2														
	Conv Z10 C1/C2														
96	Conv Z11 C1/C2														
	Conv Z12 C1/C2														
	Conv Z13 C1/C2														_
	Conv Z15 C1/C2														
	Conv Z15 C1/C2/C3														
	J-15 C2														
	J-16C3														
	J-17C3 J-17A -C1				-						-				
	J-17A -C1 J-17BC1				-						-				
	J-17BC1 J-20 C3														
	J-42-C2				1		1		1		1		1		
	Conv.L1C1										+				
109	Conv.L2C1										+				
	Conv.L3C1			1							1	1		1	<u> </u>
	Conv.L4C1			1							1	1		1	<u> </u>
	Conv.L5C1						1		1		1		1		
	Conv.L6C1														

	मे एव ई एल मार्गामा	Augm	nentation of		terial Receip	OF INDIA L		AI STEEL F		, Part-B C	Civil Works	5			
S. No.	BUILDING / STRUCTURE		Esti	mated Qu	antities and U	nit rates	for Major Ite	ms as Co	nsidered in l	Lumpsum P	rice				
		Earth work excavation in all kinds of soil at all depths including dewatering shoring structing stacking etc.		ing including controlled oring blasting and stacking		Lean concrete P.C.C grade1:4:8 Excluding cost of cement (Cum)		Lean concrete P.C.C M10 grade Excluding cost of cement (Cum)		Form work for concrete (Ordinary / Plywood) (Sq.M)		concrete Exclud	M20 grade e at all levels ling cost of ement	R.C.C M25 grade concrete at all leve Excluding cost of cement	
		Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate
114	Conv.L7C1														
	Conv.L8C1														
	Conv.L9C1														
	Conv.L9C2														
118	Conv.L10C1														
									Signature of	of Bidder with	Office seal				



S. BUILDING / STRUCTURE			Estim	ated Quant		d Unit rate		ajor Items a	s Consid	ered in L	umpsu	ım Price		
No.	concre	C M30 grade te at all levels g cost of cement (Cum)	M15 grad levels Ex		Providing steel in c levels Exc	reinforcement oncrete at all luding cost of	Providing a bolts in R including pipes nuts including nuts as we	and fixing anchor CC foundations providing sleeve washers welding structural bolt, ell as protection threads	Groutin column/po non shrir	g under ckets using ik cement	Providing all levels	p brick work at s with cement motor	weather	ing course
	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate
1 WAGON TIPPLER WITH Side Arm Charger														
2 TRACK HOPPER														
3 Ground Hopper														
PENT HOUSES														
4 PENT HOUSES PH - Conv Z3 C1/C2														
5 PENT HOUSES PH - Conv Z2 C1/C2														
JUNCTION TOWERS												1		
6 JH -Z1														
7 JH-Z2														
8 JH -Z3														
9 JH-Z4														
10 JH -Z5														
11 JH-Z6														
12 JH-Z6A														
13 JH -Z6B														
14 JH-Z5A														
15 JH -Z5B														
16 JH-Z4A														
17 JH -Z4B														
18 JH-Z7														
19 JH -Z8														
20 JH-Z9														
21 JH -Z10	1						-			-				
22 JH-Z11	1						-			-				
23 JH -Z12	-										ļ			
24 JH-Z13	-										ļ			
25 JH -Z15	1						-			-				
26 J9A	1						-			-				
27 J9	ļ						ļ					ļ		
28 JH-9H	ļ						ļ					ļ		
29 JH-10	ļ						ļ					ļ		
30 JH - 11							ļ			ļ		ļ		
31 JH - 14												ļl		
32 JH - 15														
33 JH - 16A														
34 JH - 17														
35 JH - 17A														
36 JH - 17B		-							<u> </u>					
37 JH - 20	1]			1				1	1		1



S. BUILDING / STRUCTURE						PRICE SCHE								
No.			Estim	ated Quant	ities an	d Unit rate	es for M	ajor Items a	s Consid	ered in L	.umpsu	ım Price		
	concret	C M30 grade te at all levels g cost of cement (Cum)	levels Ex	le concrete at all ccluding cost of cement	steel in c	oncrete at all luding cost of	bolts in R including pipes nuts including nuts as we	and fixing anchor CC foundations providing sleeve washers welding structural bolt, ell as protection threads	column/po non shrir	g under ckets using ik cement	all levels	g brick work at s with cement motor	weather	ring course
	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate
38 J-N102														
39 JH-L1														
40 JH-L2														
41 JH-L3												+		
42 JH-L4												-		
42 JH-L5										1				
44 JH-L6														+
45 JH-L7														
46 JH-L8														
47 JH-L9														
48 JH-L10														
STACKER RECLAIMER														
49 Stacker Rail Tracks 3 Nos														
50 Reclaimer RailTracks 3 Nos														
51 Stock pile area - 6Nos												+		
ELECTRICAL MCC & CONTROL												-		
														↓
52 SWGR Rooms - 3 Nos														
53 Main control room - Ground Floor &														
First Floor										-				
54 Wagon Tippler Control Room 55 Battery Room						-						-		
56 Cable Galleries / trenches														
MISCELLANEOUS														
57 Sprinkler Lines for Wagon Tippler														
58 Ore Settling Tank												-		
59 Roads														+
60 Drains														†
61 Room for Rail Weigh Bridge														1
62 Yard master Building (2 Storey)														
63 Workers Rest Room (2 Nos)														
64 Canteen Buildings - (2Nos)														<u> </u>
65 Office Buildings with seperate Parking										1				
area (2Nos)														
66 Toilet Blocks - 2 Nos														↓
67 Area Repair Shop			l		l					1	ı			



A DUIL DING (OTDUCTURE		Estimated Quantities and Unit rates for Major Items as Considered in Lumpsum Price												
S. BUILDING / STRUCTURE No.			Estim	ated Quant	ities an	d Unit rate	es for M	ajor Items a	s Consid	ered in L	.umpsu	m Price		
	concre	C M30 grade te at all levels g cost of cement (Cum)	levels Ex	le concrete at all scluding cost of cement	steel in co	oncrete at all luding cost of	bolts in R including pipes nuts including nuts as we	and fixing anchor CC foundations providing sleeve washers welding structural bolt, ell as protection threads	column/po	g under ckets using k cement	all levels	brick work at with cement notor	weather	ing course
	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate
68 Ore Handling Area														
(a) Closed Sub Store														
(b) Open Ended Fenced yard														
69 Dust Supression Pump Houses - 6														
Nos														
70 Dust Supression Water Tank - 6 Nos														
71 Air Compressor House - DS & RMS	+										-			
plant														
72 Ventillation Rooms	+													
73 Air Conditioning Room														
74 Fire Fighting System- Pump House &	+													
Reservoir														
75 Flood Light Mast Foundation in Stock														
Yard- 6nos														
CONVEYOR TUNNELS														
76 CT-Z1 C1/C2														
77 CT-Z2 C1/C2														
CONV.TRESTLE FOUNDATIONS &														
CONV.WALKWAY SLAB														
78 Conv Z2 C1/C2														
79 Conv Z3 C1/C2														
80 Conv Z3 C1/C2/C3														
81 Conv Z6 C1/C2/C3														
82 Conv Z6 C1/C2/C3														
83 Conv Z6 C2/C3														
84 Conv Z6A C1														
85 Conv Z6B C1														
86 Conv Z5A C1														
87 Conv Z5B C1	1													
88 Conv Z4A C1						1	-			-				
89 Conv Z4B C1 90 Conv Z7 C1/C2	+					ļ					1			
91 Conv Z7 C1/C2 91 Conv Z7 C1/C2	-	-			-	-	-			-		-		
92 Conv Z7 C3	+		1			1	1			1	1			
93 Conv Z8 C1/C2	1													
94 Conv Z9 C1/C2														
95 Conv Z10 C1/C2														
96 Conv Z11 C1/C2														
97 Conv Z12 C1/C2														
98 Conv Z13 C1/C2														
99 Conv Z15 C1/C2														
100 Conv Z15 C1/C2/C3														



S. No.	BUILDING / STRUCTURE			Estima	ated Quant		d Unit rate		ajor Items a	s Consid	ered in L	umpsu	m Price		
NO.		concret Excluding	C M30 grade te at all levels g cost of cement (Cum)	M15 grad levels Ex		Providing steel in c levels Exc	reinforcement oncrete at all luding cost of	Providing a bolts in R including p pipes nuts including nuts as we	nund fixing anchor CC foundations providing sleeve washers welding structural bolt, ell as protection threads		g under ckets using	Providing all levels	prick work at with cement notor	weather	ring course
		Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate	Qty	Unit Rate
101	J-15 C2														
102	J-16C3														
	J-17C3														
	J-17A -C1														
	J-17BC1														
	J -20 C3														
	J-42-C2														
108	Conv.L1C1														
109	Conv.L2C1														
110	Conv.L3C1														
111	Conv.L4C1														
112	Conv.L5C1														
113	Conv.L6C1														
	Conv.L7C1														
115	Conv.L8C1														
	Conv.L9C1														
	Conv.L9C2														
118	Conv.L10C1								_	•					
		1					1			Signature of	Bidder with C	ffice seal			I



Notice inviting Tender for Pre tender tie-up for Augmentation of Raw Material Receipt & Handling Facilities with New OHP, PART-B (Package No. 061) of Bhilai Steel Plant

Qualifying Requirement:

SI no	Area	Qualifying Requirement
1.0	The Bidder should fulfill the	he following eligibility criteria:
1.1	General (Common to SI. No. 1.2 to 1.4	a) Documentary evidence such as attested copy of award letter / contract and also completion certificates / performance certificates of previous works executed by him giving name and address of clients, value of each of the works done, completion period, date of completion should be submitted by the Bidder
		b) The Bidder shall submit Audited Annual Financial Reports for last three (3) consecutive financial years in support of their meeting above stipulated financial requirements. The Bidder shall submit a certificate from Chartered Accountant, showing turn over for the last three (3) consecutive financial years, duly notarized in support of their financial requirements.
1.2	Mechanical Package-1 (Machines)	a) The bidder should quote Equipment / component as per approved vendor list of SAIL-Bhilai Steel Plant. However, In the event of a response from bidder quoting Equipment / component of non customer approved vendor list, it will be necessary for bidder to get approved the Equipment / component from the customer before submission of the bid.
		b) The bidder should have supplied and commissioned similar equipment in



		minimum 2 installations and working satisfactorily for minimum two years within last seven years as on date of submission of bid. c) Minimum Annual Turnover INR 500 Million during last three (03) consecutive financial years ending 31.03.2008
1.3	Mechanical Package-2 (Conveyors System & Structures)	The Bidder should have successfully designed and executed the following works. a) Experience of executing Industrial type structural work consisting of at least 7,500 MT fabrication & erection of structural steel (Building/ Technological Structures) under a single Contract/multiple contract in a single year. He should also possess experience of executing structural works (at least 30 m above Ground Level) viz.: buildings, junction houses, conveyor galleries, bunkers, hoppers, chutes, etc. b) Bidder should have successfully Designed, Engineered, manufactured/ Supplied, Erected, Tested commissioned and established the performance Guarantees of at least one (1) number Mechanized Raw Material Handling/ Coal Handling Plant with a minimum Conveying rated capacity of 1000 tons per hour and minimum conveying length of 3kM in single plant which is in successful operation for a minimum period of two (2) years as on 31.10.2008 giving satisfactory performance but not before 10 years. c) The bidder should quote Equipment / component as per approved vendor list of SAIL-Bhilai Steel Plant d) Minimum Annual Turnover INR 500 Million during last three (03) consecutive financial years ending 31.03.2008
1.4	Civil Works	years ending 31.03.2008 The Bidder should have successfully designed and executed the following works within last 10
		years: a) Basement type structures such as Wagon



		Tipplers, Track Hoppers, Tunnels, Hoppers etc. (at least 12m below ground level) involving deep excavation, extensive dewatering and industrial buildings. b) Experience of executing of RCC concreting of 10,000 m3 of industrial type civil works under a single contract/ multiple contract in a single year. c) Proven experience in the design of track hopper and wagon tippler. d) Minimum Annual Turnover INR 1000 Million during last three (03) consecutive financial years ending 31.03.2008
2.0	The bid will consist of three	ee parts :
2.1	PART - I	This part shall be marked as "QUALIFYING REQIREMENT" and Shall not contain any price at all.
2.2	PART – II	This part shall be marked as "TECHNO-COMMERCIAL BID" and shall not contain any price at all and un-priced copy as per tender
2.3	PART – III	This part shall be marked as "PRICE BID" and shall contain prices only without any terms and conditions.



Notice inviting Tender for Pre tender tie-up for Augmentation of Raw Material Receipt & Handling Facilities with New OHP, PART-B (Package No. 061) of Bhilai Steel Plant

Commercial Terms and Conditions

Name of the Bidder	
Tender Ref. and Date	IS-1-08-2013 Dt.23-02-2009
Enquiry Ref. and Date	
Project	Pre-Tender tie-up for OHP, Part B (Package
	061) of Bhilai Steel Plant
Scope of Work	Design, engineering, manufacture, supply, erection and commissioning of

Sl No	BHEL Requirement	Vendor Acceptance /
		Remarks
1	All Commercial terms & conditions are on 'back to	
	back' basis in line with ultimate customer contract	
	terms detailed in tender volumes GS, TS, SBD, BDS,	
	IFB (enclosed in CD)	
2	Validity:	
	Vendor shall extend validity of MOU prices as required	
	time to time inline with ultimate customer's	
	requirement of BHEL's offer validity	
3	In the event of price reduction during negotiation by	
	BHEL with the ultimate customer, corresponding	
	reduction (i.e., on pro-rata basis with respect to	
	vendor's price) shall be effected on to the vendor's	
	MOU price	
4	BID BOND: 1% of the value of MOU price shall be	
	furnished by the vendor through bank guarantee	
	towards bid bond within 30 days of signing MOU	
5	Detailed item wise price break up shall invariably be	
	furnished strictly in line with price format / BOQ	
	along with Addition / Deletion / Takeoff prices	
6	Price Bid opening:	
	Vendor shall submit their most competitive offer.	
	Price bids shall be opened in Camera.	
	'L1' party would be decided based on competitive	
	price bids received from vendors for the "Pre Tender	
	tie-up"	
7	Once vendor qualifies for entering in to MOU then the	
	vendor shall refrain from quoting directly to ultimate	
	customer, Bhilai Steel Plant for this package. The tie-	
	up shall be exclusive with BHEL so that the vendors	
	will not participate with other competitors	



Important Notes:

- 1. Deviations will not be accepted by BHEL. Bids with deviations will be rejected.
- 2. Vendor shall fill all the above columns by indicating "Yes" or "Deviations" and to sign with seal on all the pages of terms & specifications as token of acceptance
- 3. No prices to be filled in this format. All prices are to be filled up in the enclosed price bid format. Breakup prices shall be indicated As per price bid format
- 4. Unpriced bid to be enclosed with the techno commercial bid.

Memorandum of understanding

Project:
This Memorandum of Understanding made on exclusive basis on this
between M/s. BHARAT HEAVY ELECTRICALS LIMITED, an existing
company registered under the Companies Act, 1956 and having its registered office
at BHEL House, Siri fort, New Delhi 110043 (hereinafter called "BHEL", which
expression shall repugnant to the context of meaning thereof, include its successors
and assigns) of the ONE PART,
AND
M/s, an existing company having its registered office at
(hereinafter referred to as "SUPPLIER", which expression shall repugnant to the context of meaning thereof, include its successors and assigns) of the OTHER PART,
1. WHEREAS, M/s, hereinafter
referred to as 'CUSTOMER" to whom BHEL shall submit the bid for Design,
Engineering, Manufacture/ Supply of Plant and Equipment and technological
structures, Dismantling, Civil & Structural works, Erection, Testing and
Commissioning, Demonstration and Establishment of Performance Guarantee

	and	Handing		Over		of
	(Hereinafter	referred to as "Proje	ect") against	tender		
2.	AND WHER	EAS pursuant to B	HEL tender	Ref		
	for pretender	rtie up for Design, I	Engineering,	Manufacture/	Supply of Pl	ant and
	Equipment	and technological	structures,	Dismantling,	Structural	works,
	Erection, Te	sting and Commiss	sioning, Den	nonstration and	d Establish	ment of
	Performance	Guarantee for the				as
	per Annexu	re,		becar	ne the suc	cessful
	bidder . In c	ase of award of wo	rk to BHEL	by CUSTOME	R, TSL has	agreed
	to execute t	he abve job upon	quoted price	and other ter	ms and co	nditions
	agreed with	BHEL.				

- WHEREAS SUPPLIER shall furnish all documents / technical details for bid preparation as per NIT requirements. On securing the Order, Bank Guarantee shall also be furnished by them as per NIT conditions pro-rata to their scope of work.
- 4. WHEREAS the parties agree that in so far as applicable the rights and obligations of the Main Contract between the Employer and BHEL become part of the Agreement between BHEL and SUPPLIER for agreed scope of work.
- 5. NOW THEREFORE, in consideration of the above, the following broad understanding is mutually agreed between the parties and their relationship for the project will be guided as follows:

Article 1 – Purpose of Agreement of Association

SUPPLIER and BHEL will work jointly to execute the project. BHEL will be the prime Bidder and SUPPLIER will be the Associate for the agreed Scope of work.

Article 2 - Responsibilities of SUPPLIER and BHEL

i.	SUPPLIER's Scope of work will be limited to Design, Engineering,
	Manufacture/ Supply of Plant and Equipment and technological
	structures, Dismantling, Structural works, Erection, Testing and
	Commissioning, Demonstration and Establishment of Performance
	Guarantee for the as per
	Annexure .

- ii. The price quoted by SUPPLIER will be discussed, negotiated and finalized with BHEL before their submission of BID to CUSTOMER.
- iii. Any further price discounts, to be given to CUSTOMER by BHEL to secure the order, will be shared by BHEL and SUPPLIER pro-rata for their scope of work after mutual discussions and consent.
- iv. In case of BHEL getting Order for the Project from CUSTOMER, BHEL will place order on SUPPLIER for the respective Scope of work based on agreed price and terms and conditions.
- v. SUPPLIER shall offer delivery of equipment to meet requirements of delivery schedule of CUSTOMER. However, during negotiations with CUSTOMER if any adjustment is required to be done, the same shall be mutually discussed and agreed.
- vi. The SUPPLIER shall execute his scope of work, in line with L2 network, to be worked out during the detailed engineering and adhere to the delivery & completion schedule.
- vii. Technical Specification shall be as per tender document and all the subsequent discussions with CUSTOMER, CONSULTANT, BHEL. These shall be consolidated and enclosed along with the Order on Supplier.
- viii. The Technical specification of the equipment shall be as per clause vii above, however depending on technical discussion with CUSTOMER during execution, SUPPLIER shall agree to the specification as finally accepted by CUSTOMER within Tender

- scope of work and the performance guarantee parameters without any cost implications. Any requirement beyond Tender Scope of Work, which will have financial implications, will be discussed jointly with CUSTOMER and the resultant financial implication shall be discussed and mutually agreed upon.
- ix. BHEL along with SUPPLIER will participate in the discussions with CUSTOMER, as required, to give all technical clarifications.
- x. All Commercial Terms and conditions shall be as per _____ tender
 Documents on back to back basis as per the Bidding
 Documents issued by CUSTOMER (document dated
 _____ and ____ dated ____ between
 BHEL and CUSTOMER.
- xi. SUPPLIER shall confirm validity of their offer for one month beyond the date Contract is signed with CUSTOMER, in the event of BHEL getting the order.
- xii. The SUPPLIER shall be fully responsible and liable for the complete performance of its SCOPE OF WORK according to the CONTRACT and shall bear all cost whatsoever connected therewith.
- xiii. The SUPPLIER shall be responsible for the completion of project as per the agreed schedule for his scope of work as indicated in the Scope matrix given in Annexure-__ and any other item required for completion of his scope of work, shall be included and supplied without any commercial implication.
- xiv. The SUPPLIER shall closely cooperate in order to obtain the award of the CONTRACT and to achieve a smooth and complete performance thereof.
- xv. The SUPPLIER shall prepare and submit in due time all data and information Necessary for the fulfillment of the SCOPE OF WORK.
- xvi. In case of an order, SUPPLIER and BHEL shall take respective leading role to get the design/ drawing approved by CUSTOMER for respective scope of work.

- xvii. The SUPPLIER is responsible for getting the approval from _____ for undertaking erection and commissioning.
- xviii. SUPPLIER will take entire responsibility for correct design and manufacture of equipment in SUPPLIER's scope.
- xix. The SUPPLIER shall be responsible for the performance guarantee parameter as per the contract.
- xx. All drawings documents design calculations operation and maintenance manual erection drawings, as-built drawings etc to the extent applicable shall be submitted by SUPPLIER in requisite numbers. These shall be as per CUSTOMER requirement plus two copies for BHEL's use. SUPPLIER will also furnish the reproducible and CD as per CUSTOMER's requirement plus(1) one set for BHEL's use.
- xxi. In case the CONTRACT will not be awarded to BHEL, any claim by the SUPPLIER is excluded.

<u>Article 3 – Exchange of Information & Completeness</u>

The SUPPLIER is obliged to execute the job on the basis of the CONTRACT and this MOU. Separate Purchase Order will be placed on SUPPLIER by BHEL after signing of Contract between BHEL and CUSTOMER.

Services and supplies necessary for the complete performance of the CONTRACT which are not specified in the SCOPE OF WORK shall be executed by the SUPPLIER to whose SCOPE OF WORK such services and supplies belong. In case of any ambiguity these will be attributed by their nature.

Each party shall exchange with the other party in a timely manner all necessary information required by the other party, so as to effect full and timely performance of the tender/contract.

<u>Article 4 – Confidentiality</u>

Each party shall be obliged to keep in strict confidence, and bind all of its employees/ associates and subcontractors to keep in strict confidence all information received directly or indirectly from the other party under this agreement and shall not at any time, disclose such information to any third party without prior written consent of the other party.

Any such disclosure to a third party shall be limited to the extent required for the performance of this PROJECT and the third party shall be bound to the provisions of secrecy and restriction of use as expressed herein.

Press releases, prospectuses and official publications relating to the PROJECT will be agreed upon between the PARTIES beforehand.

Publications concerning only one PARTY's SCOPE OF WORK must contain a suitable reference to the type and scope of the other PARTY's SCOPE OF WORK.

This MOU shall not be disclosed by the SUPPLIER to any third party unless agreed upon by BHEL .

<u>Article 5 – Amendments</u>

In case of any amendment to this agreement, it must be in writing and signed by the duly authorized representatives of both the parties. The provisions of the Article 5 shall survive till expiration or termination of this MOU.

Article 6 – Duration of MOU

This Agreement shall be valid from the date of signing, and continue to be in force, and terminate without prejudice to any antecedent liabilities upon the occurrence any of the following, whichever is earliest:

- a) By mutual agreement
- b) By substituting this Memorandum of Understanding with a detailed Purchase Order
- c) If the contract is awarded by CUSTOMER on other Bidder.

<u>Article 7 – Force Majeure</u>

Without prejudice and without antecedent liability, neither party shall be responsible for non-performance or non-fulfillment of any nor all their obligations under this agreement if such non-performance or non-fulfillment is due to "Force Majeure" as defined in the Tender Document of CUSTOMER

<u>Article 8 – EMD/ Security Deposit/ Performance Guarantee/Payment</u>

SUPPLIER shall furnish a Bank Guarantee for 1% of the value of the SUPPLIER"S scope as per MOU within 30 days of signing the MOU. This BG shall be valid till a formal Purchase Order is placed on the SUPPLIER.

BHEL shall agree to furnish DD/ Bank Guarantees for EMD for the entire Project, as applicable. SUPPLIER shall furnish BG for Performance Guarantee and other Guarantees for their respective scope of work to BHEL as per Tender/contract conditions agreed with CUSTOMER.

Project financing shall be by the respective partners for execution of the project.

All invoicing of the parties shall be to BHEL. Payment against supplies made and services provided by the SUPPLIER shall be made within 15 days from date of receipt of the payment from CUSTOMER by BHEL

This MOU will be amended with consideration of the development in the PRE-CONTRACT PHASE and of the final provisions of the CONTRACT.

The failure of any PARTY to enforce at any time any of the provisions of this MOU shall in no way be construed to be a waiver of such provision, nor in any way to affect the validity of this MOU or any part hereof.

Should elements of this MOU be discovered to be ineffective, or contain omission's all remaining clauses of the MOU shall continue to be effective.

With regard to the ineffective or missing elements, the PARTIES shall agree upon a correction to these elements which corresponds to the spirit of this MOU as well as its economic purpose and sense, which in any case the PARTIES would have agreed upon, if the ineffective or missing elements would have been discovered before the signature of this MOU

No. PARTY shall assign or in any way transfer its rights or obligations arising out of the present MOU without obtaining the prior written consent of the other PARTY hereto.

All notices to be given under this MOU shall be in writing and shall be deemed to have been properly given upon dispatch by registered or certified mail or telefax to the PARTY's address as set forth below or to such other address as the PARTY may subsequently designate;

BHARAT HEAVY ELECTRICALS LIMITED INDUSTRIAL SYSTEMS GROUP,
PB NO 1249, PROF. CNR RAO CIRCLE,
MALLESWARAM
BENGALURU- B560012, INDIA
FAX NO: 080 2356 2713

M/s		 		

Article 9 Arbitration

Any dispute or question that may arise between the parties as to the meaning and or interpretation of any matter pertaining to or arising out of this agreement shall be settled according to Indian Arbitration and conciliation ACT 1996.

Article 10 Approval of Make

It shall be the responsibility of SUPPLIER to get the any make of equipments and erection & commissioning subcontract other than NIT approved makes, approved by CUSTOMER, if necessary. In the event of non-approval, supplier shall supply as per the approved makes of NIT. BHEL shall offer necessary support to SUPPLIER in the approval process.

In witness whereof BHEL and SUPPLIER through their authorized representatives have executed these present and affixed common seal of their respective companies on the DAY, month and year first mentioned above.

The following Annexes form integral parts of this MOU:					
	SCOPE OF WORK of each PARTY Standard Bidding Documents between BHEL and CUSTOMER dated				
LIMITED	AVY ELECTRICALS	For			
Witnesses:					
1)					
2)					



TENDER Ref: IS-1-08-2013 Date: 16. 03.2009

Addendum to Notice inviting Tender for Pre tender tie-up for Augmentation of Raw Material Receipt & Handling Facilities with New OHP, PART-B (Package No. 061) of Bhilai Steel Plant

1	Tender inviting Officer :	S. Mani/Sr DGM (BG-II, II & IV) Bharat Heavy Electricals Ltd. Industrial Systems Group P.B. No. 1249, IISc Post Malleswaram BANGALORE 560 012
2	Scope of work :	Design, Engineering, Manufacture, Supply, Erection & Commissioning of a) MACHINES (Enquiry No. 77/08/6327/NSA; Specification No. IS-1-08-2013-001) b) CONVEYORS & STRUCTURES (Enquiry No. 77/08/6328/NSA; Specification No. IS-1-08-2013-002) c) CIVIL WORKS (Enquiry No. 88/08/6041/NSA; Specification No. IS-1-08-2013-003)
3	Tender document available place :	BHEL web site www.bhelisg.com and Government web site http://tenders.gov.in
4	Due date and time for submission of tender	Extended to 25-03-2009 by 02.00 PM
5	Place of submission of tender :	ISG Tender box placed at the Reception of ISG & EPD at the following address: Bharat Heavy Electricals Limited Industrial Systems Group Opp. to Prof. CNR Rao Circle Malleswaram BANGALORE 560 012
6	Place of tender opening	Technical bid will be opened in Camera on 25-03-2009 at 3.00 PM at BHEL/ISG
7	Qualification criteria	ANNEXURE-I SI. No. 1.3 Mechanical Package-2 (Conveyors System & Structures) a) Experience of executing Industrial type structural work consisting of at least 5,000 MT fabrication & erection of structural steel (Building/ Technological Structures) under a single Contract/multiple contract in a single year. He should also possess experience of executing structural works (at least 30 m



TENDER Ref: IS-1-08-2013 Date: 16. 03.2009

Addendum to Notice inviting Tender for Pre tender tie-up for Augmentation of Raw Material Receipt & Handling Facilities with New OHP, PART-B (Package No. 061)

of Bhilai Steel Plant

		above Ground Level) viz.: buildings, junction houses, conveyor galleries, bunkers, hoppers, chutes, etc.
		 New Clause after d) e) 10,000MT of structural steel shall be supplied by BHEL as a free issue item to vendor & supply of remaining structural steel required to meet the specification of NIT shall be in the scope of vendor. However, total responsibility as per the NIT/ technical specification for the whole package will be in the scope of vendor. All other qualification criteria shall remain same as per our NIT dated 23-02-2009
8	Integrity Pact	Integrity pact enclosed along with Addendum to NIT shall be filled and submitted along with Qualifying requirement PART-I
9	NIT dated 23-02-2009	All other terms shall remain unchanged

INTEGRITY PACT

Between

Bharat Heavy Electricals Ltd. (BHEL), a company registered under the Companies Act 1956 and having its registered office at "BHEL House", Siri Fort, New Delhi – 110049 (India) hereinafter referred to as "The Principal", which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the ONE PART

Preamble

The Principal intends to award, under laid-down organizational procedures, contract/s for Pre-tender tie-up for Augmentation of Raw Material Receipt and Handling Facilities with New OHP, PART-B (Package No. 061) Bhilai Steel Plant for Design, Engineering, Manufacture, Supply, Erection & Commissioning of; a) MACHINES (Enquiry No. 77/08/6327/NSA; Specification No. IS-1-08-2013-001), b) CONVEYORS & STRUCTURES (Enquiry No. 77/08/6328/NSA; Specification No. IS-1-08-2013-002), c)CIVIL WORKS (Enquiry No. 88/08/6041/NSA; Specification No. IS-1-08-2013-003)

(a), b) or c) to be mentioned as Applicable)

The Principal values full compliance with all relevant laws of the land, rules and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder(s)/ Contractor(s).

In order to achieve these goals, the Principal will appoint Independent External Monitor(s), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 – Commitments of the Principal

- 1.1 The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-
- 1.1.1 No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- 1.1.2 The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
- 1.1.3 The Principal will exclude from the process all known prejudiced persons.
- 1.2 If the Principal obtains information on the conduct of any of its employees which is a penal offence under the Indian Penal Code 1860 and Prevention of Corruption Act 1988 or any other statutory penal enactment, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 – Commitments of the Bidder(s)/ Contractor(s)

- 2.1 The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
- 2.1.1 The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to the Principal or to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material, immaterial or any other benefit which he / she is not legally entitled to, in

order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

- 2.1.2 The Bidder(s)/ Contractor(s) will not enter with other Bidder(s) into any illegal or undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- 2.1.3 The Bidder(s)/ Contractor(s) will not commit any penal offence under the relevant IPC/ PC Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- 2.1.4 The Bidder(s)/ Contractor(s) will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- 2.2 The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 – Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/ Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above, or acts in any other manner such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidders(s)/ Contractor(s) from the tender process or take action as per the separate "Guidelines for Suspension of Business Dealings with Suppliers/ Contractors" framed by the Principal.

Section 4 – Compensation for Damages

- 4.1 If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.
- 4.2 If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/Performance Bank Guarantee, whichever is higher.

Section 5 – Previous Transgression

- 5.1 The Bidder declares that no previous transgressions occurred in the last 3 years with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- 5.2 If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 – Equal treatment of all Bidders/ Contractors/ Sub-contractors

- 6.1 The Bidder(s)/ Contractor(s) undertake(s) to demand from his sub-contractors a commitment consistent with this Integrity Pact. This commitment shall be taken only from those sub-contractors whose contract value is more than 20% of Bidder's/ Contractor's contract value with the Principal.
- 6.2 The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors.
- 6.3 The Principal will disqualify from the tender process all bidders who do not sign this pact or violate its provisions.

Section 7 – Criminal Charges against violating Bidders/ Contractors /Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 – Independent External Monitor(s)

- 8.1 The Principal appoints competent and credible Independent External Monitor for this Pact.

 The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 8.2 The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, BHEL.
- 8.3 The Bidder(s)/ Contractor(s) accepts that the Monitor has the right to access without restriction to all contract documentation of the Principal including that provided by the Bidder(s)/ Contractor(s). The Bidder(s)/ Contractor(s) will grant the monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his contract documentation. The same is applicable to Sub-contractor(s). The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s) / Sub-contractor(s) with confidentiality.
- 8.4 The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the contract provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- 8.5 As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or

take corrective action, or heal the situation, or to take other relevant action. The Monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

- 8.6 The Monitor will submit a written report to the CMD, BHEL within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
- 8.7 The CMD, BHEL shall decide the compensation to be paid to the Monitor and its terms and conditions.
- 8.8 If the Monitor has reported to the CMD, BHEL, a substantiated suspicion of an offence under relevant IPC / PC Act, and the CMD, BHEL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- 8.9 The number of Independent External Monitor(s) shall be decided by the CMD, BHEL.
- 8.10 The word 'Monitor' would include both singular and plural.

Section 9 – Pact Duration

- 9.1 This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract and for all other Bidders 6 months after the contract has been awarded.
- 9.2 If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified as above, unless it is discharged/ determined by the CMD, BHEL.

Section 10 - Other Provisions

- 10.1 This agreement is subject to Indian Laws and jurisdiction shall be registered office of the Principal, i.e. New Delhi.
- 10.2 Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- 10.3 If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- 10.4 Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 10.5 Only those bidders/ contractors who have entered into this agreement with the Principal would be competent to participate in the bidding. In other words, entering into this agreement would be a preliminary qualification.

à Maile	
For & On behalf of the Principal	For & On behalf of the Bidder/ Contractor
(Office Seal)	(Office Seal)
Place Baugalass Date 16/03/2009 superputy G BHELISS	MANI 5 हाप्रबंधक (बी पी 2) eneral Manager (6 G 2) tiSc Post Bangalore - 12
Witness:	Witness:
(Name & Address) RM Sexadelli	(Name & Address)
18HEL/159, Bougalore	



TENDER Ref: IS-1-08-2013 Date: 25. 03.2009

Notice inviting Tender for Pre tender tie-up for Augmentation of Raw Material Receipt & Handling Facilities with New OHP, PART-B (Package No. 061) of Bhilai Steel Plant

1	Tender inviting Officer :	S. Mani/Sr DGM (BG-II, II & IV) Bharat Heavy Electricals Ltd. Industrial Systems Group P.B. No. 1249, IISc Post Malleswaram BANGALORE 560 012
2	Scope of work :	Design, Engineering, Manufacture, Supply, Erection & Commissioning of a) CIVIL WORKS (Enquiry No. 88/08/6041/NSA; Specification No. IS-1-08-2013-003)
3	Tender document available place :	BHEL web site www.bhelisg.com and Government web site http://tenders.gov.in
4	Due date and time for submission of tender	Extended to 10-04-2009 by 02.00 PM
5	Place of submission of tender :	ISG Tender box placed at the Reception of ISG & EPD at the following address: Bharat Heavy Electricals Limited Industrial Systems Group Opp. to Prof. CNR Rao Circle Malleswaram BANGALORE 560 012
6	Place of tender opening	Technical bid will be opened in Camera on 10-04-2009 at 3.00 PM at BHEL/ISG
		1

BILL OF QUANTITIES

CIVIL WORKS (Enquiry No. 88/08/6041/NSA; Specification No. IS-1-08-2013-003) VOLUME -					
SL.No	DESCRIPTION	QTY	UNIT	RATE (Rs)	
ı	Earth Work				
1	Earth work in excavation for all kinds of works in foundation,	Rate Only	Cu. M		
	trenches, pipelines, cable trenches etc. in ordinary soil/loose to				
	medium dense sand including soil inter mixed with boulder/				
	kankar and slushy soil for a depth up to 1.0 M below ground level				
	including preparation of slopes, beams, storing etc. with all labor,				
	materials, tools & tackles complete and dressing of sides, leveling,				
	grading and ramming of bottoms, dewatering, shoring shuttering				
	etc as required backfilling around foundations at all depths with				
	selected excavated materials and compacting the backfilling to				
	90% standard Procter density in layers not exceeding 150 mm in				
	thickness, disposal or stacking of surplus excavated material with				
	a lead of 1Km and lifts as directed by engineer providing				
	temporary supports to existing service lines like water pipes,				
	sewerage etc.				
a)	Extra over item (1) beyond initial depth of 1.0 M and up to a	-do-	Cu. M		
	depth of 5.0 M 1m to 2m				
b)	2m to 3m	-do-	Cu. M		
c)	3m to 5m	-do-	Cu. M		
2. a)	Same as item (1) above but excavation in soft rock for the	-do-	Cu. M		
	excavation measured from grade/ground level Over 1 meter. And				
	up to 2 meter				
b)	Over 2 meter & up to 5 meter	-do-	Cu. M		
3.a)	Do as item No-1 above work excavation in hard rock from ground	-do-	Cu. M		
b)	level up to 2M		Cu M		
b) 5	Beyond 2M to 5M	-do-	Cu. M		
5	Disposal of surplus non-utilizable earth excavated earth/ rock for	-do-	Cu. M		
	back filling upto a lead of 10 Km by mechanical means. Dumping				
	and leveling the dumped soil and leveling the area from where the				
	material is transported, complete with all lifts as specified and				
	Idirected by engineer		1		

SL.No	DESCRIPTION	QTY	UNIT	RATE (Rs)
5.1	Extra over item 5 (above) for carriage of all types of exca materails beyond the initial lead of 10 km dressing, levellin disposal area, all complete as per specifications, drawin instructions of engineer for following leads (following sub shall be paid individually and not cummulatively).	g the gs &		
	i) Carriage beyond 10.0 km and not exceeding 11.0 km.	-do-	CUM	
	ii) Carriage beyond 11.0 km and not exceeding 12.0 km.	-do-	CUM	
	iii) Carriage beyond 12.0 km and not exceeding 13.0 km.	-do-	CUM	
	iv) Carriage beyond 13.0 km and not exceeding 14.0 km.	-do-	CUM	
	v) Carriage beyond 14.0 km and not exceeding 15.0 km.	-do-	CUM	
6	Back filling around foundations in plinths etc, to proper grade level with selected and approved earth from barrow areas free from vegetation and organic materials with in a lead beyon the beyone the barrow selection and selection with mechanical means, compaction with mechanical means, compaction with mechanical means, and leveling etc. complete including properties of transportation.	/ pits ond 1 ity by nized	Cu. M	
7	Providing and injecting chemical emulsion for pre-construct anti termite/weed treatment as per IS:6313 and creat chemical barrier under and around the column pits, wall trembasement excavation, top surface of plinth filling, junction wall and floor along the external perimeter of building together with plinth protection, expansion joints surroundi pipes and conduits etc., chlorpyrifos emulsifiable conconforming to IS:8944 with 1% concentration has to be (plinth area of building at Ground floor only shall be measured by specification agency with 10 years guarantee) com as per specification and as directed by Engineer-in-charge.	ing a sches, of the floor ng of acrete used, sured,	Sq. M	
Ш	Structural steel			

SL.No	DESCRIPTION	QTY	UNIT	RATE (Rs)
1	Supply, fabricate and installing in concrete and masonry miscellaneous fixtures <u>e.g.</u> <u>anchor bolts, anchors, pipe sleeves, insert plates, cables, hangers and any other miscellaneous fixtures of mild steel including necessary templates, staging, cutting, bolting and welding as required, painting exposed surfaces with one coat of red oxide and chromate primer for all heights complete including cost of all steel.</u>	Rate Only	MT	
a)	Same as above but <u>fabricated</u> <u>material</u> will be supplied by BHEL/other agencies free of cost.	-do-	MT	
2	Fabricate and erect in position including one shop coat of red oxide and chromate primer in structures of rolled sections, built up sections, steel work of stair, built up girder, checquered platform, MS plates etc. as per specification. (Structural steel will be supplied by BHEL on free issue basis as specified in special conditions of contract. Rate quoted by bidder shall exclude cost of structural steel but include cost of handling, loading, unloading and carting from issue points as required.)	-do-	MT	
a)	Same as (item.no.2) above but fabricated material with shop coat painting will be supplied by BHEL/other agencies free of cost.	-do-	MT	
b)	Same as (item.no.2) above for all types of gratings as per drawing but including cost of all types of steel material.	-do-	MT	
c)	Same as (item.no.2) above for structural works using all size of MS flats as per drawing but include cost of all types of steel material.	-do-	MT	
3	Providing two coats of approved synthetic enamel painting to mild steel surfaces at various elevations of 100 micron total DFT (minimum) as per manufacturer's specification, including surface preparation, application, with one site coat of red oxide zinc chromate primer protecting, cleaning etc. complete with all materials as specified and directed.	-do-	MT	

SL.No	DESCRIPTION	QTY	UNIT	RATE (Rs)
4	50 mm thick damp proof course with concrete (1:2:4) (cement sand stone chips 10 mm down) nominal mix by volume with approved admixture of water proofing compound conforming in IS-2645	-do-	Sq. m	
5	Damp proof course 40mm 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. / Sq. m shall be applied before & after the DPC as per specification	-do-	Sq. m	
6	Min. 250mm thick brick work in CM 1:6(cement: sand) in foundation, plinth, and walls in super structure etc. at all elevations. Using bricks of approved make & quality. Min. compressive strength of brick shall be 75 kg/sg mm	-do-	Cu. M	
7	Providing 125mm thick brick work cement mortar 1:4 in partition walls, chambers etc. at all heights, places and position above or below plinth / graded level including providing 2 nos 6mm / 8mm dia MS bars at every forth layer raking curing scaffolding etc. all complete using brick of class designation 7.5 or best locally available quality of approved make as per specification. (Reinforcement work will be measured and paid under respective	-do-	Sq. M	
8	Preparation of sub base over compacted soil consisting of 65mm and down size stone laid in layers with interstices filled with selected sand to give the compacted thickness of 225mm	-do-	Cu. M	
9	Preparation of sub-base over compacted soil consisting of dry brick aggregates with interstices filled with selected sand to give the compacted th/kness of 75mm	-do-	Cu. M	
10	Min. 18 mm thick 1 (cement) : 6(sand) : plaster to outer wall / Rough side interior walls	-do-	Sq. m	
11	Min. 12 mm thick 1(cement): 6 (sand) plaster to interior surface	-do-	Sq. m	
12	Min. 6mm thick (1:4) cement sand ceiling plaster	-do-	Sq. m	

SL.No		DESCRIPTION	QTY	UNIT	RATE (Rs)
13		20 mm X 20 mm thick 1:3 cement :sand drip course to chajjas	-do-	Sq. m	
		wall etc.			
14		12mm deep X 20 mm wide groove in plaster	-do-	Sq. m	
15		Providing & laying of hume pipes of class NP2 including collar	-do-		
		jointing with all material, labor, tools & tackles complete			
	a)	For 300 dia hume pipe	-do-	RM	
	b)	For 600 dia hume pipe	-do-	RM	
16		Dismantling of existing RCC work at all elevation including removal	-do-	Cu. M	
		of dismantled materials complete			
17		Dismantling of existing brick work at all elevation including	-do-	Cu. M	
		removal of dismantled materials complete			
18		Dismantling of existing RCC/PCC pavement, bituminous road	-do-	Cu. M	
		including removal of dismantled materials complete as per			
		specification.			
111		Special item			
1		Jungle clearance in all kinds of thorny bushes, plants, roots etc. up	Rate Only	Sq.m	
		to 15 cm girth as directed by engineer in charge.			
2		Cutting and felling of trees, for a girth above 15 cm up to 60 cm	-do-	No	
		and clearing and stacking the branches including roots as per			
		directions of engineer in charge			
3		Breaking existing concrete work (PCC & RCC) at any level	-do-	Cu. M	
		including reinforced concrete & cutting of reinforcement removing			
		the rubbish within a lead of 1Km. Including transportation, loading			
		Unloading, etc all complete as per specification and Engineer in			
		charge		0 14	
4		Breaking existing concrete work at any level including cutting of	-do-	Cu. M	
		reinforcements removing the rubbish within a lead of 1Km.			
		Including making the 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			
		hy Engineer	al a	C 1.4	
5		Demolishing dry brick pitching in floors, drains etc. incliding	-do-	Cu.M	
		stacking serviceable material and disposal of unserviceable mataisl			
		with in 50 M lead:			

SL.No		DESCRIPTION	QTY	UNIT	RATE (Rs)
6		Dismantling and stacking within 50 Mts lead, fencing posts or	-do-		
		structs including all earth work and dismantling of concrete etc. in			
		base of			
	a)	T' or L' iron or pipe	-do-	Each	
	b)	RCC	-do-	Each	
7		Cutting ballies or wooden posts of fencing at the point of	-do-	Each	
		projection above the concrete or gound and stacking the same			
		with in 50 Mts lead.			
8		Dismantling barbed wire or flexible wire rope in fencing including	-do-	Kg	
		making rools and stacking with in 50M lead			
9		Dismantling expanded metal or I.R.C fabrics with necessary	-do-	Sq.M	
		battens and beading including stacking the serviceable material			
		with in 50 Mts lead.		+	
10		Dismantling wooden boardings in lining of walls and	-do-		
		partitions, excluding supporting members but including stacking			
	->	within 50 metres lead	-l-	Co. M	
	a)	Up to 10 mm thick	-do-	Sq.M	
	b)	Thickness above 10 mm up to 25 mm	-do-	Sq.M	
11	c)	Thickness above 25 mm up to 40 mm	-do-	Sq.M	
11		Dismantling precast concrete or stone slabs in walls, partition	-do-		
	a)	walls etc. including stacking within 50 metres lead: Thickness up to 40 mm	-do-	Sq.M	
	b)	Thickness up to 40 mm up to 75 mm	-do-	Sq.M	
12	D)	Dismantling cement asbestos or other hard board ceiling or	-do-	Sq.M	
12		partition walls including stacking of serviceable materials and	-40-	34.101	
		l'			
		disposal of unserviceable materials within 50 metres lead			
13		Dismantling C.I. or asbestos rain water pipe with fittings and	-do-		
		clamps including stacking the material within 50 metres lead :			
	a)	75 to 80 mm dia pipe.	-do-	Metre	
	b)	100 mm dia pipe	-do-	Metre	
	c)	150 mm dia pipe	-do-	Metre	

SL.No		DESCRIPTION	QTY	UNIT	RATE (Rs)
14	S	Dismantling manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50metres lead as per direction of Engineer-in-charge:			
	a) \	Water bound macadam road	-do-	Sq.M	
	b)	bituminous road	-do-	Sq.M	
15	r ti n ir o	Dismantling G.I. pipes (external work) including excavation and refilling renches after taking out the pipes, manually/ by mechanical means including stacking of pipes within 50 metres lead as per direction of Engineer-in-charge			
	a) '	15 mm to 40 mm nominal bore	-do-		
	b)	Above 40 mm nominal bore	-do-		
16	a ta le c s o E	Dismantling C.I. pipes including excavation and refilling trenches after aking out the pipes, manually/ by mechanical means breaking ead caulked joints, melting of lead and making into blocks including stacking of pipes, lead at site within 50 metre lead as per direction of Engineer-in-charge			
	a) l	Up to 150 mm diameter	-do-	Metre	
	1	Above 150 mm dia up to 300 mm dia.	-do-	Metre	
	c) A	Above 300 mm diameter	-do-	Metre	

SL.No	DESCRIPTION	QTY	UNIT	RATE (Rs)
17	Dismantling steel cylinder R.C. pipes including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes, lead at site within 50 metres lead as per direction of Engineer-in-charge:	-do-		
	a) Up to 600 mm diameter	-do-	Metre	
	b) Above 600 mm diameter	-do-	Metre	
18	Dismantling asbestos cement pressure pipes including excavation and refilling trenches after taking out the pipes manually/ by mechanical means and stacking the pipes within 50 metres lead as per direction of Engineer-in-charge:	-do-		
	a) Up to 150 mm diameter	-do-	Metre	
	b) Above 150 mm diameter	-do-	Metre	
19	Taking out C.I. cover with frame from R.C.C. top slab of manholes of various sizes including demolishing of R.C.C. work manually/ by mechanical means and stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50 metres lead as per direction of Engineer-in-charge	-do-	Each	

SL.No	DESCRIPTION	QTY	UNIT	RATE (Rs)
20	Taking out C.I. cover with frame from R.C.C. top slab of inspection chambers of various sizes including demolishing of R.C.C. work manually/ by mechanical means and stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50 metres lead as per direction of Engineer-in-charge.	-do-	Each	
21	Dismantling of R.C.C. spun vent shaft including excavating the cement concrete pit completely, taking out the shaft, refilling the excavated gap, stacking the useful materials near the site and disposal of unserviceable materials within 50 metres lead.	-do-	Each	
22	Dismantling of road gully chamber of various sizes including C.I. grating with frame including stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50 metres lead including refilling the excavated gap.	-do-	Each	
23	Dismantling of flushing cistern of any size including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead.	-do-	Each	
24	Dismantling of C.I. sluice valve including stacking of useful materials within a lead of 50 metres	-do-		

SL.No		DESCRIPTION	QTY	UNIT	RATE (Rs)
	a)	Up to 150 mm diameter each 52.70	-do-	Each	
	b)	Above 150 mm diameter	-do-	Each	
25		Dismantling of spindle fire hydrant including stacking of useful materials within 50 metres lead	-do-	Each	
26		Dismantling of cement concrete platform along with curtain walls and base concrete etc. including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead	-do-		
	a)	120x120 cm (outside to outside)	-do-	Each	
	b)	210 x 120 cm (outside to outside)	-do-	Each	
	c)	320 x 120 cm (outside to outside)	-do-	Each	
27		Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead	-do-	Sq.M	
28		Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge	-do-	Sq.M	

SL.No	DESCRIPTION	QTY	UNIT	RATE (Rs)
29	Demolishing C.C. /R.C.C. work by mechanical means and stockpiling at designated locations and disposal of dismantled materials up to a lead of 1000m, stacking serviceable and unserviceable material separately including cutting reinforcement bars.		Cu. M	
30	Dismantling of flexible pavement (bituminous courses) by mechanical means and disposal of dismantled material up to a lead of 1000 metres, as per direction of Engineer-in-charge		Cu. M	