

**2X800 MW SINGRAULI:
BALANCE WORKS OF
CUSTOMER OFFICE,
SAFETY PARK AND
CLOSED SHEDS**

VOLUME - IA

TECHNICAL CONDITIONS OF CONTRACT (TCC)

BALANCE WORKS OF DESIGNING, MANUFACTURING, SUPPLY, PACKING, LOADING, TRANSPORTATION, UNLOADING, INSTALLING AND COMMISSIONING (INCLUDING CIVIL, STRUCTURAL, ARCHITECTURAL AND FINISHING WORKS), PRE-FABRICATED PORTABLE, DETACHABLE- 01 NO. CUSTOMER OFFICE (SIZE: 1700 SQM), 01 NO. SAFETY PARK AND 04 NOS. CLOSED SHEDS (SIZE: 1050 SQM EACH) INCLUDING FOUNDATIONS, SUB-STRUCTURES, SUPER-STRUCTURES, SEWAGE TREATMENT PLANT (STP), WATER SUPPLY, SANITARY WORKS, PARKING SHEDS, FURNITURE, FURNISHING, OVERHEAD TANKS, AIR CONDITIONING, ELECTRICAL AND FINISHING WORKS ETC. COMPLETE IN ALL RESPECTS AS PER LAYOUT & CONSTRUCTION DRAWINGS AND DIRECTIONS OF ENGINEER- IN-CHARGE AT 2X800MW SINGRAULI STPP STAGE-III, DISTRICT: SONEBHADRA, UTTAR PRADESH, INDIA.

BHARAT HEAVY ELECTRICALS LIMITED



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Chapter - I: PROJECT INFORMATION

Sl. No.	Description	Details
1	Project Title	2X800MW SINGRAULI STPP (STAGE-III)
2	Customer	National Thermal Power Corporation Limited (NTPC Limited)
3	Location	Singrauli STPS is located in Sonebhadra district of Uttar Pradesh. The project is located at 118km towards South of District Head Quarters Robertsganj and is well connected by State Highway SH-5A.
4	Nearest Airport	The nearest airport is Lal Bahadur Shastri International Airport, Varanasi at a distance of about 220km from project site.
5	Access By Road/Rail/Major Cities	<p>Nearest National Highway NH-39 is at a distance of about 5 km from the project.</p> <p>The nearest major town is Robertsganj, which is approx. 118 km from the project. Nearest major city is Renukoot, located at a distance of 60km to the project.</p> <p>The nearest railway station is Shaktinagar at 3Km. Other nearby Important Stations are Renukoot Junction about 60 Km, Mirzapur Station about 198 Km, Mughal Sarai Junction About 196 Km and Varanasi Cant About 202 Km.</p>
6	Temperature & Wind Speed	Meteorological data from nearest observatory is placed as a Annexure-II (Attached)
7	Seismic Zone	As per Annexure-E of NTPC Technical Specifications, Section-VI, part-B (Attached).
1	INSTRUCTIONS TO BIDDERS	
1.1	The Bidder shall visit project site and acquire full knowledge and information about conditions prevailing at site and in & around the plant premises, together with site conditions, transportation routes, various distances, all the statutory, obligatory, mandatory requirements of various authorities and all information that may be necessary for preparing the bid and entering into the Contract. All costs for and associated with site visits shall be borne by the bidder.	
1.2	Other contractors would be working in this area and their structures are to be protected. The material brought and stacked for construction should not make hindrance to other contractors.	
1.3	The information given herein is for general guidance and shall not be contractually binding on BHEL/Owner. All relevant site data /information as may be necessary shall have to be obtained /collected by the Bidder.	

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1.4	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.	
1.5	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.	
1.6	Bidders may fix up their site visit in consultation with below mentioned contact person:	
	Name:	Praveen Singh Negi
	Designation:	Sr. Engineer
	Email:	psnegi@bhel.in
	Ph no:	7772988891
	Name:	Priyanka
	Designation:	Sr. Manager
	Email:	priyanka.com@bhel.in
Ph no:	9871754521	

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2	<p>Scope of Works:</p> <p>Balance Works of Designing, Manufacturing, Supply, Packing, Loading, Transportation, Unloading, Installing and Commissioning (Including Civil, Structural, Architectural and Finishing Works) for Pre-Fabricated, Portable, Detachable- 01 No. Customer Office (Size: 1700 Sqm), 01 No. Safety Park and 04 Nos. Closed Sheds (Size: 1050 Sqm Each) including Foundations, Sub-Structures, Super-Structures, Sewage Treatment Plant (STP), Water Supply, Sanitary works, Parking Sheds, Furniture, Furnishing, Overhead Tanks, Air Conditioning, Electrical and Finishing works etc. complete in all respects as per layout & construction drawings and directions of Engineer- In-Charge at 2x800MW Singrauli STPP Stage-III, District: Sonebhadra, Uttar Pradesh, India.</p> <p>NOTES:</p> <p>i) The scope under this contract was part of works awarded to another BHEL's vendor at 2X800 MW SINGRAULI STAGE III.</p> <p>ii) The new vendor to be finalized under this tender, (hereinafter referred as bidder / contractor) shall take up the work from as and where basis and as per the scope of work mentioned in the tender.</p> <p>iii) It is advisable that the bidders shall visit the site before bidding to take actual stock of the working situations of the site w.r.t work processes, safety requirements, gate entry exit etc. to name a few.</p>
2.1	<p>iv) Existing vendor has taken up the customer office work. However, no work is done in safety park and closed sheds area. Details of work completed by existing vendor is mentioned elsewhere in the tender document.</p> <p>v) After award of work agency in consultation with BHEL in charge shall reconcile the work completed by previous agency for finalising the scope of work of this tender.</p> <p>vi) Contractor is advised to visit the site to assess the status of actual execution of works at site and acquaint himself completely with regards to approaches and hinderances before quoting. No extra claim shall be entertained by BHEL on this behalf later on.</p> <p>vii) For reference purpose details of major civil works done by previous agency are as follows:</p> <p>a) Foundation of customer office completed.</p> <p>b) Structural material of customer office i.e. Columns, truss and purlins erected at site. However, Structural material not limited to column, truss, roof sheet, side sheeting for porch area, water tank structure or any other area required for completeness of customer office as per NTPC drawing no. 1150-001-POC-A-001 REV NO. B is to be supplied by contractor.</p>

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	<p>c) Supply and fixing of Roof sheeting of customer office is partly completed.</p> <p>d) Outer wall of side cladding i.e. silica fibreboard cladding supplied at site.</p> <p>viii) The existing contractor presently executing the “DESIGNING, MANUFACTURING, SUPPLY, PACKING, LOADING, TRANSPORTATION, UNLOADING, INSTALLING AND COMMISSIONING (INCLUDING CIVIL, STRUCTURAL, ARCHITECTURAL AND FINISHING WORKS), PRE-FABRICATED PORTABLE, DETACHABLE, 01 NO. CUSTOMER OFFICE (SIZE: 1700SQM), 01 NO. SAFETY PARK AND 04 NO. CLOSED SHEDS (SIZE: 1050SQM EACH) INCLUDING FOUNDATIONS, SUB STRUCTURES, SUPER STRUCTURES, SEWAGE TREATMENT PLANT (STP), WATER SUPPLY, SANITARY WORKS, PARKING SHEDS, FURNITURE, FURNISHING, OVERHEAD TANKS, AIR CONDITIONING, ELECTRICAL WORKS AND FINISHING WORKS ETC. COMPLETE IN ALL RESPECTS AS PER LAYOUT & CONSTRUCTION DRAWINGS AND DIRECTIONS OF ENGINEER- IN-CHARGE AT 2X800MW SINGRAULI STPP STAGE-III, DISTRICT-SONEBHADRA, UTTAR PRADESH, INDIA” shall not be eligible to quote in this tender.</p>
2.2	The scope of CUSTOMER OFFICE (SIZE: 1700sqm) (as per Drawing No. 1150-001-POC-A-001 REV NO. B) shall include but not limited to following major works:
2.2.1	This building shall be a single storied building with floor area of 1700 SQM of prefabricated detachable portable cabins type construction. The clear height from finished floor level to false ceiling shall be minimum 3.0m. The design of the building shall be such to have faster construction of building and to provide a ready to use building, complete and finished in all respects. This building shall provide offices for senior officers, conference room large working halls with layout and occupancy as shown in the tender drawing.
2.2.2	Designing, Manufacturing, Supply, Packing, Loading, Transportation, Unloading, Installing and Commissioning the pre-fabricated portable, detachable, double layer insulated porta cabins as per layout shown including foundations, sub structures and super structures and all finishing, complete in all respects.
2.2.3	Main MS frame with MS standard bracings with vertical and horizontal grids with dipped anti-corrosive coatings be grouted to RCC floor / platform. the plinth shall be 500 mm high with peripheral RCC wall and 100 mm thick PCC.
2.2.4	Roofing shall be in pre-fabricated insulated metal sandwich panels.
2.2.5	Wall cladding shall consist of an outer wall of half hour fire rated, 10 mm thick silica fiberboard cladding (100 % asbestos and termite free, with density > 1200 kg/ cu. m) fixed over steel grid by self-threaded studs / pasted with under water Italian epoxy. The internal wall cladding shall consist of 8 mm thick both sides pre-laminated grade-II fiberboard having density of 800 kg /CuM and screw holding of 125 kg. The edge of the board shall be properly sealed with PU high epoxy and standard channels wherever required. Insulation of glass wool (64 D) shall be provided in between outer and internal cladding. Outer cladding shall be treated with transparent silicon coating and polyurethane textured coating over layer of PU epoxy and fire-resistant polymer coating in desired shades.
2.2.6	Door & Windows shall be provided as per the layout shown with minimum window area of 20 % of the carpet area. French type automotive DUCCO painted wooden windows / aluminums sliding windows with automotive DUCCO coated wire gauge and French type MS tubular grills and wall finish laminated flush doors (semi glazed for cabins) with powder aluminum hardware.

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	Front back and Side doors and windows shall be protected by automotive DUCCO coated Italian type sunshade and fiber reinforced pillars as per design. All joints and corners should be covered with automotive DUCCO coated decorative type moldings and cornices etc. on inside cladding and fiber reinforced skirting all over the cabin.
2.2.7	Mirror polished vitrified tile flooring (size 1000mm x 1000 mm) of Kajaria / Johnson /Regent / Marbonite / Somany make shall be provided for office areas. For conference rooms and HOP office, engineered wooden flooring shall be provided. Anti-skid ceramic tiles flooring 450mm x450mm shall be provided for toilets & pantries / kitchen with designer decorative ceramic tile on wall cladding up to false ceiling shall be provided. Toilet / pantries wall shall be brick of masonry walls.
2.2.8	All the partitions as per the layout - full height partitions with same finish on both sides as for internal wall cladding above and low height partitions based on modular partition design of Godrej / Featherlite / Wipro / Jasani or equivalent.
2.2.9	All the furniture as shown including modular work stations Of Godrej / Featherlite / Wipro / Jasani Or equivalent and executive chairs & tables, conference tables, storage cabinets / compactors, visitor chairs, sofas, reception table, dining table & chairs etc. of Godrej / Featherlite / Jasani or equivalent.
2.2.10	All the toilets in working conditions (with concealed water supply and sanitary pipes) with oval wash basin set in granite counters, urinals, dual flush European W.C. with PVC cistern (of make Parryware, Hindustan, Cera or equivalent) & C.P bib cock / pillar cock (of jaguar or equivalent). All the necessary accessories of premium quality shall be provided. Pantry / kitchen with fittings and fixtures (including water supply and sanitary pipes) with SS sink with drain board in granite platform and water cooler shall be provided.
2.2.11	Energy efficient lighting with minimum 450 LUX level with concealed copper wiring, power distribution board, recessed mounted type, mirror optics fluorescent type fixtures, recessed mounted CFL down lighters, CFL surface mounted type fixtures, bracket fans, exhaust fans, light points, power points (Philips / Wipro / Crompton Greaves / Havells or Equivalent) complete in all respects.
2.2.12	The building shall be completely air-conditioned building. Split AC shall be provided for office cabins and cassette type air- conditioners for conference room, HOP office and work station area. Capacity of the AC system shall be @ 1 Ton per 10 sq.m carpet area and AC equipment shall conform to 4-star rating of BEE and shall be of LG/ Voltas/ Blue star/Hitachi or equivalent make.
2.2.13	Fire detection system and fire extinguishers as per fire safety regulations.
2.2.14	Concealed cabling network for IT network, communication networks and audio visual connections.
2.2.15	R.O. plant of 200 liters / heure capacity and 2 no. refrigerator of 300 litres capacity (of make Samsung / LG / Panasonic / Godrej or equivalent)
2.2.16	1 no. bore well with submersible pump and associated pipes and fittings for filling overhead water tank, 1 nos. PVC overhead water tank of 5000 liters, and 1 Nos. new generation sewage treatment plant of capacity of 5 cubic meters shall be provided.
2.2.17	Covered parking shed in coloured poly carbonate sheet & steel structure for 40 numbers car & 80 numbers two wheeler shall be provided.
2.2.18	Exclusions in construction office - 1. Pantry / kitchen equipment 2. Computers, audio visual equipment and telephone sets
2.3	The scope of SAFETY PARK (as per Drawing No. 1150-001-POC-A-002 REV NO. B) shall include but not limited to following major works:

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2.3.1	This building shall be a single storied building with floor area as / drg. the plan layout/ building profile shall be as shown of pre-engineered building type with steel frame construction and insulated sandwich cladding for walls and sandwiched metal sheet roofing. The design of the building shall be such so as to have faster construction of building and so as to provide a ready to use building, complete and finished in all respects to the owner and so as to enable shifting and relocation of superstructure at later date.
2.3.2	Designing, Manufacturing, Supplying, Packing, Loading, Transportation, Unloading, Installing and Commissioning of pre -engineered building with sandwiched metal sheet wall & roofing, & rain water down comer as per layout including RCC foundations/pedestals, (including any foundation required for equipment) embedment of foundation bolts using templates, encasement of column bases, supply & erection of door/windows/ventilators/rolling shutters, masonry work, plastering, painting (interior & exterior) flooring, finishing, paving slab,plinth protection etc.
2.3.3	Wall cladding, roofing shall be in pre-fabricated insulated metal sandwich panels.
2.3.4	Door & Windows shall be provided as per the layout shown. Powder coated AL frames with minimum wall thickness of 2 mm for doors, windows & ventilators with 6 mm thick toughened glass for windows and 8 mm thick toughened glass for glazed doors & partition. Main entrance door shall be aluminum glazed. For toilet laminated flush door shutter shall be provided. Steel door shall be provided in store room. All the necessary accessories and hardware shall be provided. Vertical venetian blinds in premium fabric quality shall be provided for windows of class room.
2.3.5	External face of brick wall shall be finished with 20 mm thick plaster (1:5 cement: sand) and premium acrylic smooth exterior paint with silicone additives over suitable primer of water proof cement paint. Internal face and internal brick walls shall be finished with 12 mm thick cement sand plaster (1:5) and acrylic emulsion paint over wall putty of minimum 2 mm thickness
2.3.6	False ceiling in mineral fiberboards (600 mm x 600 mm) shall be provided in class room & store, which is suspended from catwalk consisting of MS steel member having maximum grid size of 1200mm x 600mm for supporting panels of specified size. The steel member shall be painted with suitable painting system.
2.3.7	Flooring in safety park hall shall be of minimum 18 mm thick (600mmx600mm) Jhonson, Endura industrial tiles or equivalent. For class room matt finished vitrified tile flooring minimum 10 mm thick (size 600 mm x 600 mm) of Kajaria / Jhonson make shall be provided. Toilet shall be provided with dust pressed ceramic tiles flooring and designer decorative ceramic tile on wall dado up to false ceiling / true ceiling. Internal walls shall be finished with acrylic emulsion paint over 2mm thick wall putty.
2.3.8	All the furniture as shown in layout (chair & desks in classroom etc) of Godrej / Featherlite / Jasani or equivalent make shall be provided.
2.3.9	Toilet in working condition complete in all respects with sensor-based washbasin set in granite counters, dual flush wall hung W.C. with sensor-based taps of Jaguar or equivalent. All the necessary accessories of premium quality shall be provided. 2 nos. PVC overhead loft water tank capacity 500 liter shall be provided. All the walls of toilet shall be in brick masonry. Rust proof and leak proof plastic underground septic tank of adequate capacity and of make Sintex septic tank or equivalent shall be provided.
2.3.10	Intelligent and energy efficient led lighting with minimum LUX level as mentioned below with recessed optic luminaries / led down lighters/ medium bay/ pendant light/ ascent light of Philips/ Wipro/ Crompton Greaves/ Havells or equivalent, complete in all respects with

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	<p>associated cabling, fixtures like fans, switches, MCB, Energy Management System like dimmers / sensors etc.</p> <p>a) Class Room: - 300 LUX, decorative mirror optic type LED luminaries, LED down lighter.</p> <p>b) Portico: -50 LUX, industrial type LED luminaries.</p> <p>c) Corridor / Passage: - 50 LUX, LED luminaries.</p> <p>d) Building periphery lighting: - 50 LUX, LED luminaries / LED street light fixtures.</p> <p>e) Other areas not covered above: - lighting principles shall be based as mentioned above.</p> <p>f) Other space area, non-a/c area: - 200 lux-medium bay led luminaries.</p> <p>g) Store: - 150 LUX, led luminaries.</p> <p>h) Ceiling fans & bracket fan: - Tentatively one number of ceiling fan shall be provided for 10 Sqm. area at suitable mounting height. Fans shall be 1200mm sweep, class -E or better insulated copper wound single phase motor along with down rods etc. & nos. of 400mm bracket ceiling fans shall be provided at strategic locations.</p>
2.3.11	Adequate numbers of supply / exhaust fans shall be provided for ventilating the building and toilet area
2.3.12	Complete concealed cabling network for IT - integrated building with intranet connections and the associated communication networks.
2.3.13	R.O. shall be provided for drinking water, water coolers as shown in the layout (of make Samsung / LG / Kent/ Aqua guard / Panasonic / Godrej or equivalent)
2.3.14	Audio- visual equipment like overhead projectors, display boards in the classroom of Sony/ Samsung make shall be provided in class room.
2.3.15	EXCLUSIONS IN SAFETY PARK - SAFETY EQUIPMENTS AS SHOWN IN THE DRAWING.
2.4	The scope of CLOSED SHED (as per Drawing No. 1150-001-POC-A-012 REV NO. A) shall include but not limited to following major works:
2.4.1	Work to be executed as per the layout drawing attached in the tender.
2.4.2	Wall finish (Internal) is to be of Acrylic distemper on brickwork as per specification without POP punning.
2.4.3	Wall finish (External) is to be of Premium acrylic smooth exterior paint.
2.4.4	Steel frame door/window to be provided.
2.4.5	Flooring shall be of cement concrete flooring with metallic hardener.
2.4.6	Detail of roof sheeting and side cladding is as per the attached layout drawing.
2.5	OTHER GENERAL SCOPE OF WORK
2.5.1	Unloading, receipt, verifying, stacking, stock keeping, shifting, preservation & handling of supplied material using contractor's own T & P and manpower.
2.5.2	Entire civil work like Excavation, Foundation, Toilet, Plumbing, Sewerage System etc. as required.
2.5.3	Installation of temporary structures (Scaffolding, Access ladders, Working Platforms etc.), Complete with all labour, electrodes and other consumables.

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2.5.4	Installation of all items required to complete the scope of work in totality.
2.6	SALIENT TECHNICAL REQUIREMENTS
2.6.1	<p>All design documents and drawings of OFFICE, SAFETY PARK & CLOSED SHED shall be submitted to BHEL/NTPC for final approval. All execution shall be as per the drawings approved by BHEL/NTPC.</p> <p>Note:</p> <ol style="list-style-type: none"> a. Existing vendor has done some engineering and provided the civil and architectural drawing. Same drawings are attached in this tender for taking reference. b. However, contractor has to prepare and submit drawings as per requirement of the work like fixing of wall cladding, furniture layout, civil & architectural drawings for safety park and closed sheds, etc. c. All work is to be executed as per the drawing approved by BHEL/NTPC. Vendor has to submit all working drawings to BHEL well in time for final approval and to proceed with the execution. d. The contractor shall note that any defects, deficiencies, or pending works in the works executed by the existing vendor shall be deemed to be within the scope of the contractor (including guarantee of already executed works). e. All works necessary for the complete and functional completion of the Customer's office facilities (including but not limited to parking shed), safety park and storage shed, shall be included in the contractor's scope of work. f. All drawings required for the completion of the works shall be prepared and submitted by the contractor at no additional cost to BHEL. g. Contractor has to hire an Architect for providing architectural solutions for Customer office, Safety Park and Closed Sheds. Details of Architect to be hired by the contractor shall be submitted to BHEL for final approval. If during execution of the work there is a need of change of Architect, contractor has to change the same without any additional cost to BHEL. All Architectural drawings need approval from NTPC and same need to be complied by the contractor before start of any work.
2.6.2	<p>The contractor shall visit the site, ascertain the local conditions, entry/traffic restrictions, all obstructions in the area, and ascertain all site conditions and particularly the sub-soil conditions etc.</p> <p>The contractor at his own cost shall carry out the survey to study the properties of soil/sub soil like strength to withstand the weight of structure during all weather conditions without sinking of foundation.</p> <p>If any of such defects like cracks, sinking of foundation etc. occur after completion of work till the performance guarantee period, it shall be rectified by contractor free of cost including the supply of materials required. No claim shall be entertained on this account under any circumstances from the contractor.</p>
2.6.3	All designs have to be carried out as per relevant IS codes / Technical specifications of NTPC.
2.6.4	Since these are detachable sheds intended for repetitive use at other locations, proper marking (permanent) shall be made for identification to ease re-erection.
2.6.5	The roof truss should have bolted joints at crown /at both ends. Both roof and side cladding is to be made "Water Tight".
2.6.6	The materials and workmanship must be of good quality and accepted standards and specifications. The site Engineer reserves the right to reject any material not up to the specification.

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2.6.7	<p>The layout, construction, architectural and finishing details for work to be executed under this contract shall be as per following drawing enclosed with this tender document:</p> <ol style="list-style-type: none"> 1. CUSTOMER OFFICE (as per Drawing No. 1150-001-POC-A-001 REV NO. B) 2. SAFETY PARK (as per Drawing No. 1150-001-POC-A-002 REV NO. B) 3. CLOSED SHED (as per Drawing No. 1150-001-POC-A-012 REV NO. A) 4. Other miscellaneous drawing as submitted by existing vendor. 															
2.6.8	<p>List of drawings to be submitted for approval shall be finalized on the start of contract.</p> <p>contractor's scope includes but not limited to following major drawings:</p> <ol style="list-style-type: none"> a) 3D view drawing of Office, Safety Park and Closed Sheds. b) Design drawings with detailed design calculations. c) Detailed Furniture Layout drawings. d) Parking shed design, detail and layout drawings. e) New Generation Package STPS layout and design details drawings. f) Electrical Wiring & Fixtures detailed layout drawings. g) Water Supply/Plumbing, Sanitary arrangements and layout drawings. h) Water Tank Support Structure design and detail drawings. <p>Note: Drawings as submitted by existing vendor are provided along with tender for reference. Drawings approved by BHEL as on date shall be followed for further execution of works and need not to be re-submitted until and unless revision is required due to change in specification of material being used, loading, any change proposed by contractor etc. in the approved drawing.</p>															
2.6.9	<p>PREFERABLE MAKE/BRANDS FOR VARIOUS ITEMS TO BE INSTALLED</p> <p>Electrical Component Makes:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">SL. NO.</th> <th style="width: 40%;">ELECTRICAL COMPONENT</th> <th style="width: 50%;">PREFERABLE MAKE / BRAND</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>LT ACB</td> <td>L&T /TM/SIEMENS/GEC ALSTOM/GE OR EQUIVALENT</td> </tr> <tr> <td style="text-align: center;">2</td> <td>POWER CONTROLS</td> <td>SCHNEIDER / C&S / SPACEAGE /HYUNDAI OR EQUIVALENT</td> </tr> <tr> <td style="text-align: center;">3</td> <td>FUSE SWITCH UNIT</td> <td>ALSTOM / SIEMENS / L&T / CGL / STANDARDS / HAVELS / SCHNEIDER / C&S / GE POWER OR EQUIVALENT</td> </tr> <tr> <td style="text-align: center;">4</td> <td>MCB/MCCB STANDARD</td> <td>MDS / INDO KOPP / C&S / SIEMENS / ABB OR EQUIVALENT</td> </tr> </tbody> </table>	SL. NO.	ELECTRICAL COMPONENT	PREFERABLE MAKE / BRAND	1	LT ACB	L&T /TM/SIEMENS/GEC ALSTOM/GE OR EQUIVALENT	2	POWER CONTROLS	SCHNEIDER / C&S / SPACEAGE /HYUNDAI OR EQUIVALENT	3	FUSE SWITCH UNIT	ALSTOM / SIEMENS / L&T / CGL / STANDARDS / HAVELS / SCHNEIDER / C&S / GE POWER OR EQUIVALENT	4	MCB/MCCB STANDARD	MDS / INDO KOPP / C&S / SIEMENS / ABB OR EQUIVALENT
SL. NO.	ELECTRICAL COMPONENT	PREFERABLE MAKE / BRAND														
1	LT ACB	L&T /TM/SIEMENS/GEC ALSTOM/GE OR EQUIVALENT														
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4	MCB/MCCB STANDARD	MDS / INDO KOPP / C&S / SIEMENS / ABB OR EQUIVALENT														

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5	HRC FUSES	SIEMENS / L&T / ALSTOM / S&S / STANDARD / INDO ASIAN / HAVELS / VERSATRIP / BUSMAN / GE POWER OR EQUIVALENT
6	CONTROL SWITCHES	SIEMENS / ALSTOM / L & T / KAYCEE OR EQUIVALENT
7	INDICATING LAMPS (LEDS)	SIEMENS / L&T / ALSTOM OR EQUIVALENT
8	LIGHTING FITTINGS	PHILIPS / BAJAJ / CROMPTON / GE / PLOYCAB OR EQUIVALENT
9	SWITCH SOCKET OUTLET	ANCHOR / ALSTOM / CGL / CROMPTON OR EQUIVALENT
10	MODULAR SWITCH	ANCHOR / ELLORA / MAK ELECTRIC / ALSTOM OR EQUIVALENT
11	LT POWER & CONTROL CABLES	FORT GLOSTER / ASIAN CABLES / CCI / UNIVERSAL / NICCO / DELTON CABLES / FINOLEX /INDUSTRIAL CABLES / CMI / OMEGA / RADIANT CABLES /POLYCAB / KEI OR EQUIVALENT
12	TERMINAL BLOCKS	ESSEN / CONNECT WELL / ELMEX / PHOENIX / WAGO OR EQUIVALENT
<p>The list given above is indicative. Contractor to get the approval for final brands/makes by BHEL/NTPC before procurement.</p>		
2.7	Other Important Conditions	
2.7.1	Providing all incidental items not shown or specified but reasonably implied or necessary for the successful completion of the work in accordance with contract.	
2.7.2	The drawings enclosed with this tender are to provide information regarding the layout, construction specifications, type and extent of work involved. Detailed design and construction drawings are to be prepared and get approved from BHEL/NTPC by the contractor based on the drawings and construction details provided in this specifications.	
2.7.3	Further, this is to be noted that the drawings and the documents furnished along with this specification are the sole property of BHEL. It must not be used directly or indirectly in any way detrimental to the interest of the company.	
2.7.4	Furnishing all labour, materials, supervision, construction plans, equipment, supplies, transport, to and fro 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 handling over the works 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.	
2.7.5	Manpower hired/deployed by contractor for this project shall be monitored through online project monitoring system. Workers / Operators / Personnel entering in to Customer site premises for carrying out any work shall be tracked. Tracking devices shall be provided by BHEL on chargeable basis to contractor. BHEL will provide tags free of cost at first instance. In case of damage or missing of issued worker tag, Rs. 1000/- per tag will be charged for issuing new worker tag.	
2.7.6	The area of work shall be cleared of all vegetation, rubbish and other objectionable matter and materials. No separate payment for these operations shall be made for such works.	

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – II: SCOPE OF WORKS

2.7.7	All the works areas shall be adequately flood lighted to the satisfaction of the Engineer-in-Charge when the work is in progress during the night shifts.
2.7.8	VOID
2.7.9	All necessary arrangement for safety like Hard Barricading around deep excavation area with scaffolding pipes and providing of safety net on the slope as required is in contractor's scope.
2.7.10	The Customer (NTPC) will 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 implication to BHEL.
2.7.11	Giving all notices, paying all fees, taxes etc., in accordance with the general conditions of contract, that is required for all works including temporary works.
2.7.12	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 identification 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.
2.7.13	Arranging for joint checking (with BHEL / BHEL's Customer / Consultant) of all site construction activities. Preparation of joint protocols for each & every activity and maintaining quality records for audit/inspection as per approved FQP by BHEL.
2.8	Field Quality Assurance:
2.8.1	The contractor shall be responsible for day-to-day quality checks for civil, structural and architectural works including concrete and other building materials in line with approved Field Quality Plan (FQP) and Manufacturing Quality Plan (MQP) during the progress of work. All quality records and log sheets shall be maintained as per the requirement of BHEL/CUSTOMER and as per FQP/MQP approved by BHEL/CUSTOMER.
2.8.2	The contractor has to arrange the tie up with already established civil laboratory at site or any other NTPC approved laboratories near to the Singrauli project for taking up the regular civil works testing as per the NTPC approved Field Quality Plan. All cost towards the testing through tie-up or through third party labs for any specific work (civil, mechanical or electrical) is in the scope of the contractor. No extra cost shall be given by BHEL towards the regular testing work.
2.8.3	VOID
2.8.4	Approved mix design available at site shall be shared with the contractor. Contractor has to arrange the raw material from the same source (as approved in Design Mix), if for some reason contractor wish to change the sources then they have to arrange the required testing of raw material and new mix design to be carried out from NCCBM/IITs/NITs/other reputed laboratories approved by CUSTOMER/BHEL. Contractor has to ensure adding of high-grade PCE based admixture to minimize the cement content in line with ASTM C 494 as advised by BHEL without any additional cost.
2.8.5	In case of change of brand of cement in a particular design mix, contractor has to re-design the concrete mix with new brand of cement before actual usage at site; cost incurred will be borne by contractor.
2.8.6	The following specifications of PCE-type high performance super plasticizer shall be used for concrete work:

TECHNICAL CONDITIONS OF CONTRACT (TCC)
Chapter – II: SCOPE OF WORKS

2.8.7	<p>High performance super plasticizer PCE-based water reducing admixture of Type-G/F as per ASTM C-494 of approved make FOSROC/SIKA/BASF or Equivalent having minimum water reduction capability of 30%.</p> <p>The performance compliance of the Super-plasticizer should be ensured based on the following tests:</p> <p>a) Marsh cone test for optimum dosage of admixture with specific brand of cement.</p> <p>b) Slump retention test of concrete.</p> <p>c) Water reduction capability test by doing trial mix.</p> <p>d) Rheological properties of fresh concrete on trial mix.</p>
2.8.8	<p>In case ambient temperature is greater than 32 Degree Celsius, Placement temperature should be controlled with necessary temperature correction of concrete.</p>
2.9	<p>HEIRARCHY</p>
2.9.1	<p>In case of any conflict/deviations amongst various documents, the order of precedence shall be as follows:</p> <ol style="list-style-type: none">1. Items Description in BOQ Cum Rate Schedule2. Technical Conditions of Contract (TCC)3. Technical Specifications as per NTPC contract (Section-C)4. IS Standards

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – III: FACILITIES IN THE SCOPE OF CONTRACTOR/BHEL (SCOPE MATRIX)

Sl. No.	Description	SCOPE		REMARKS
		BHEL	BIDDER	
3.1	Establishment:			
3.1.1	For Construction Purpose:			
a	Open space for office (as per availability within project premises)	Yes		Location will be finalized after joint survey with owner.
b	Open space for storage (as per availability within project premises)	Yes		Location will be finalized after joint survey with owner.
c	Construction of bidder's office, canteen and storage building including supply of materials and other services		Yes	
d	Bidder's all office equipment, office / store / canteen consumables		Yes	
e	Canteen facilities for the bidder's staff, supervisors and engineers etc.		Yes	
f	Firefighting equipment like buckets, extinguishers etc.		Yes	
g	Fencing of storage area, office, canteen etc of the bidder		Yes	
3.1.2	For living purpose of the bidder:			
a	Open space for labour colony		Yes	Contractor has to make his own arrangements for shelter and transportation of workers as per requirement.
b	Labour Colony with internal roads, sanitation, complying with statutory requirements		Yes	Construction Plan shall be approved by BHEL
3.2	Electricity:			
3.2.1	Electricity for construction purposes (for Site/Project works only) 3 Phase 415/440 V (Chargeable) within project premises			
a	Single point source (Chargeable)		Yes	Available single source shall be provided to draw the construction power on chargeable basis.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – III: FACILITIES IN THE SCOPE OF CONTRACTOR/BHEL (SCOPE MATRIX)

				However, in case of any disruptions, contractor should also arrange for construction power through DG sets at his own cost.
b	Further distribution including all materials, Energy Meter, Protection devices and its service		Yes	
c	Duties and deposits including statutory clearances if applicable		Yes	
3.2.2	Electricity for office, stores, canteen etc. of the bidder (Chargeable) within project premises			
a	Single point source (Chargeable)		Yes	Contractor has to make his own arrangements
b	Further distribution including all materials, Energy Meter, Protection devices and its service		Yes	
c	Duties and deposits including statutory clearances if applicable		Yes	
3.2.3	Electricity for living accommodation of the bidder's staff, engineers, supervisors, labour Hutment etc.			Contractor has to make his own arrangements
a	Single point source		Yes	
b	Further distribution including all materials, Energy Meter, Protection devices and its service		Yes	
c	Payment/Duties and deposits including statutory clearances if applicable		Yes	
3.3	Water Supply:			
3.3.1	For construction, bidder's office, stores, canteen purposes:			
a	Making the water available at single point		Yes	
b	Further distribution and treatment as per the requirement of work including supply of materials and execution		Yes	
3.3.2	Water supply for Living Purpose			Contractor has to make his own arrangement
a	Making the water available at single point		Yes	

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – III: FACILITIES IN THE SCOPE OF CONTRACTOR/BHEL (SCOPE MATRIX)

b	Further distribution and treatment as per the requirement of work including supply of materials and execution		Yes	
3.4	Lighting			
a	For construction work (Supply and execution of the lighting work/ arrangements)		Yes	
	1. At office/storage area			
	2. At the preassembly area			
	3. At the construction site /area			
b	Lighting for the living purposes of the bidder at the colony / quarters		Yes	
3.5	Communication facilities for site operations of the bidder			
a	Téléphone, internet, intranet, e-mail etc		Yes	
3.6	Demobilization of all the above facilities		Yes	
3.7	Erection Facilities			
3.7.1	Engineering works for construction:			Not Applicable
a	Providing the erection/constructions drawings for all the equipment / structures covered under this scope	Yes		
b	Drawings for construction methods	Yes	Yes	In consultation with BHEL
c	As-built drawings where ever deviations observed and executed and also based on the decisions taken at site		Yes	Changes are to be marked in drawing & handover to BHEL on completion of work.
d	Preparation of site erection schedules and other input requirements as per Form-14.	Yes	Yes	In consultation with BHEL
e	Review of performance and revision of site erection schedules in order to achieve the end dates and other commitments	Yes	Yes	In consultation with BHEL

3.8	Land/Open Space:-
3.8.1	Availability of land within plant boundary is very limited and the contractor has to plan and use the existing land considering the use of land by other Civil /Mechanical/ Electrical contractors and the storage of plant machineries and materials. The existing land shall be shared by all erection agencies. BHEL shall provide free of charge limited open space for office, storage shed and laydown area as and where made available by Customer. It is the responsibility of the contractor to construct sheds, office, develop storage area, 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.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – III: FACILITIES IN THE SCOPE OF CONTRACTOR/BHEL (SCOPE MATRIX)

3.9	<p>Worker Accommodations and Staff Colony:</p> <p>Following are in the Bidder's scope of work:</p>
3.9.1	Worker Accommodations are to be developed / arranged by bidder for all the laborer required to be deployed for the works.
3.9.2	Land for Worker's Accommodations shall be arranged by Contractor at their own cost as per availability outside project area within 5Km, Necessary levelling/dressing of land shall be done by the contractor. All arrangement for electricity and drinking/service water to be arranged by the contractor within his quoted price.
3.9.3	Development and Maintenance of Bidder's temporary staff colony and labour colony having adequate no. of rest rooms along with toilets etc. shall be done in compliance of statutory norms and as per BHEL's Standard Guidelines.
3.9.4	All Civil and Structural work associated with drinking and service water for Bidder's labour and other personnel at the work site/colony/offices including pump houses, pipes, overhead tank, tube wells etc.
3.9.5	Providing and maintaining facilities for safety, welfare, drinking water and sanitation, hygiene, biennial health check-up etc. for construction workers at their workplaces as well as at labour & staff colonies.
3.9.6	Development and maintenance of above facilities for construction workers deployed by the Contractor shall solely rest with the Contractor.
3.10	<p>Installation of necessary amenities and temporary infrastructure for construction activities at Project site locations-</p> <p>Following are the minimum amenities to be provided by the bidder within the quoted price including removal/disposal of the same in environment friendly manner after its intended use/completion of scope of work:</p> <ul style="list-style-type: none"> i. Labour rest facility near work spot. ii. Drinking water facility. iii. Labour Bio toilets near work spot in sufficient nos. with regular cleaning & maintenance arrangement. iv. Worker's Accommodations should have all hygienic condition, dining area, toilets, proper sewerage system, good drinking water arrangements.
3.11	Construction Power:
3.11.1	Single Point source shall be provided to draw the construction power on chargeable basis. Distribution of construction power shall also be arranged by the contractor at his own cost (including supply of necessary distribution boards, cables etc.) Contractor shall be responsible for fulfilment of all requirements including statutory requirements in this regard. However, in case of any disruption or delay in availability of construction power from single point source, same shall be arranged by contractor through DG sets at his own cost.
3.11.2	Contractor shall make necessary arrangements for onward distribution of construction power taking due care of surrounding construction activities like movement of cranes & vehicles, civil work, fabrication/construction/assembly/ erection etc. and safety of personnel. It may become necessary to relocate some of the installations to facilitate work by other agencies or by him.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – III: FACILITIES IN THE SCOPE OF CONTRACTOR/BHEL (SCOPE MATRIX)

3.11.3	It shall be the responsibility of the Contractor to provide, maintain the complete installation on the load side of the supply with due regard to the safety requirements at site. All cabling and installations shall comply in all respects with the appropriate statutory requirements. The installation and maintenance of this shall be done by licensed and experienced electrician.
3.11.4	Contractor himself shall be responsible for any loss or damage to their equipment as a result of variations in voltage or frequency or interruptions in power supply.
3.11.5	The bidder will have to Procure & install General mobile illumination system during construction right from start of his work. This system will include temporary pole lighting, portable lighting towers with DG back-up, within the quoted price. The illumination should be such that minimum illumination requirement as specified by Indian standards for general illumination is maintained.
3.11.6	Supply of electricity shall be governed by Indian Electricity Act and Installation Rules and other Rules and Regulation as applicable. The contractor shall ensure usage of electricity in an efficient manner and the same may be audited by BHEL time to time. In case of any major deviation from normally accepted norms is observed, BHEL will reserve the right to impose penalty as deemed fit for such cases.
3.12	Construction water:
3.12.1	Construction water shall be arranged by bidder. Bidder has to make arrangement of further distribution of water at his own cost. No extra payment shall be made under this account.
3.12.2	The Contractor should make arrangements for storage of sufficient quantity of water required for work. The agency should also construct sumps (if required) of suitable size for storage of construction water as per their requirement for use in construction works.
3.12.3	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.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – IV: T&PS AND MMES TO BE DEPLOYED BY CONTRACTOR

4.0	Tools and Plants: Nos. of T&Ps to be deployed at site shall be decided w.r.t. monthly plan and review format (F-14) based on site requirement. Below given Nos. are tentative for planning purposes by the bidder.	
Sl. No.	Description of T&P	Tentative Quantity
4.1	For Civil Works	
4.1.1	Hydraulic Excavator /Poclain	APR*
4.1.2	Dumper	APR*
4.1.3	Dozer	APR*
4.1.4	Trailer (20MT Capacity)	APR*
4.1.6	Mobile Batching Plant	APR*
4.1.7	Concrete Transit Mixer	APR*
4.1.9	Concrete Pump	APR*
4.1.10	Concrete Mixture Machine	APR*
4.1.11	Vibrators (electrical/diesel)	APR*
4.1.12	Reinforcement bending machine	APR*
4.1.13	Reinforcement cutting machine	APR*
4.1.11	Farana crane (Required Capacity) *Note- Hydra is not allowed at project site	APR*
4.1.10	Self-priming Dewatering pump of various capacity (Diesel/Electric) From 2 HP to 15 HP	APR*
4.1.9	Curing / dewatering pump – 1.5 / 2 HP	APR*
4.1.8	De-watering pump (diesel operated) – 20 HP & 30 HP	APR*
4.1.6	Pneumatic rock breaker with jack hammer	APR*
4.1.5	Ply Shuttering board with adequate supporting structure – (Old steel shuttering plates will not be allowed).	APR*
4.1.4	MS Scaffolding Pipes.	APR*
4.1.25	Tractor mounted grader/ loader	APR*
4.1.26	Plate compactor	APR*
4.1.27	Earth Compactor- 3MT Capacity	APR*
4.1.28	Total Station	APR*
4.1.29	Auto level & staff	APR*
4.1.30	Road roller/Vibro roller	APR*
4.1.31	Water Tanker with sprinkler attachment	APR*
4.1.32	Man lift crane of Minimum 20m reach	APR*
4.1.33	DG Set of 125 KVA Capacity	APR*
4.1.34	Electrical Winches with Building Hoist	APR*
4.1.35	Construction Cable and Water Pipe Line	APR*
4.2	For Structural Steel Works	
4.2.2	40/45 MT Crawler / Tyre Mounted Crane	APR*
4.2.3	Farana crane (Required Capacity) *Note- Hydra is not allowed at project site	APR*

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – IV: T&PS AND MMES TO BE DEPLOYED BY CONTRACTOR

4.2.4	Magnetic Base Drill Machine	APR*
4.2.5	Submerged Arc Welding Machine	APR*
4.2.6	MIG Machine	APR*
4.2.7	Welding Rectifier	APR*
4.2.8	Trailer- 15 MT	APR*
4.2.11	Torque Tightening Machine	APR*
4.2.12	Power Winch- 03 MT	APR*
4.2.14	Ultrasonography Testing Machine	APR*
4.2.15	Pipe Cutting Machine	APR*
4.2.16	Plate Bending Machine	APR*
4.2.17	Heating Ovens	APR*
4.2.18	Portable Ovens	APR*
4.2.19	Spray Painting Equipment	APR*
	APR*- As per Requirement	
4.3	Measuring and Monitoring Equipment (MMEs): To be finalized as per site requirement.	
4.4	T&Ps shown in the above-mentioned list is suggestive requirement. However, mobilization schedule as mutually agreed at site for major T&Ps, have to be adhered to. Numbers/time of requirement will be reviewed from time to time at site and contractor will provide required T&Ps/equipment to ensure completion of entire work within schedule/target date of completion without any additional financial implication to BHEL. Contractor will give advance intimation & certification regarding capacity etc. prior to dispatch of heavy equipment. Also, on completion of the respective activity, demobilization of T&Ps in total or in part can be done with the due approval of Engineer-In-Charge. Retaining of the T&Ps during the contract period will be mutually agreed in line with construction requirement.	
4.5	The contractor shall arrange crane operator, diesel, petrol and other consumables including electrical / water / air connections required for the tools and plants, equipment etc. Preventive and routine maintenance of T & P are also to be arranged by the contractor at his cost without any delay. Required number of experienced mechanics and helpers for routine maintenance of the above T&Ps shall be provided by the contractor within his quoted rate.	
4.6	The age of the cranes deployed by contractor should be within 15 years as on date of deployment. Contractor has to provide documentary proof for the age of the crane at the time of deployment to the BHEL Engineer.	
4.7	Other terms and conditions regarding T&Ps to be deployed by Contractor, shall be as per clause No. 4.2 of SCC.	

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter- V: T&PS AND MMES TO BE PROVIDED BY BHEL

5	<p>LIST OF T&P TO BE PROVIDED BY BHEL FREE OF HIRE CHARGES ON SHARING BASIS:- BHEL shall not provide any T&Ps for this scope of work. All T&Ps required for handling of items / materials to be arranged by bidder.</p>
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TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter- VI: TIME SCHEDULE

6	Time Schedule and Mobilization:	
6.1	<p>Initial Mobilization and Time Schedule:</p> <p>After issue of LOA (though Fax/courier/email) the contractor shall report to the Construction Manager/Site In-Charge of BHEL at site within seven (07) days from date of LOA and submit detailed mobilization plan to start work within 15 days from date of LOA; unless instructed by BHEL to differ start of work in writing.</p> <p>The contractor has to subsequently augment his resources in such a manner that the entire works are completed within the contract period of 07 (Seven) Months from the date of start of work in a manner required by BHEL to match with the project schedule.</p> <p>Date of Start of work shall be considered as 15 days after date of LOA or as instructed by BHEL in writing.</p>	
6.2	<p>Schedule of Completion: The entire work under the scope of this contract shall be carried out in such a manner that the following listed major milestones are achieved as per completion schedule given against each activity & fronts released for erection by other agency.</p>	
Sl. No.	Activity	Schedule of completion from date of start of work
6.2.1	COMPLETION OF BALANCE WORKS OF CUTOMER OFFICE (1700SQM) ALONG WITH PARKING SHEDS (M1)	03 Months
6.2.1.1	Balance Structural Framing Cladding and Roofing Works of Customer Office including Parking Sheds,	01 Month
6.2.1.2	Internal Finishing Works including Flooring, False Ceiling, Electrical Wiring, Fittings & Fixtures, Water Supply, Plumbing, Sanitary (including STP), Furniture Supply & Installation etc.	02 Month
6.2.1.3	Completion of HVAC Works, Balance finishing works and handing over of customer along with parking sheds.	03 Month
6.2.2	SAFTEY PARK (M2)	04 Months
6.2.3	CLOSED SHEDS (1050SQM EACH)	
6.2.3.1	1st closed shed	03 months
6.2.3.2	2nd closed shed	04 months
6.2.3.3	3rd closed shed	05 months
6.2.3.4	4th closed shed	06 months
6.2.4	Final handing over of all facilities and complete finishing	07 months
6.3	<p>The above schedule is only tentative. The above schedule shall be advanced, if there are requirements to advance the project schedule and the civil works in the scope of the contractor is to be advanced to meet the project requirement. No extra payment whatsoever shall be paid on this account.</p>	
6.4	<p>In order to meet the above schedule in general, and any other intermediate targets set, to meet customer/ project schedule requirements, Contractor shall arrange & augment all necessary resources from time to time on the instructions of BHEL Engineer.</p>	

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter- VI: TIME SCHEDULE

6.5	Intermediate milestones:	
6.5.1	Two Major Intermediate Milestones are identified as M1 and M2 hereunder:	
Milestones	Activity	Schedule of completion from start of work
M1	CUTOMER OFFICE (1700SQM)	03 Months
M2	SAFTEY PARK	04 Months
6.6	<u>Provision of Penalty in case of slippage of Intermediate Milestones:</u> <u>In case of slippage of Two Major Intermediate Milestones, mentioned as M1 & M2 above, delay Analysis shall be carried out on achievement of each of these two Intermediate Milestones in reference to F-14.</u>	
6.6.1	In case of slippage of these identified Intermediate Milestones, Delay Analysis shall be carried out on achievement of each of these two Intermediate Milestones.	
6.6.2	<u>In case delay in achieving M1 Milestone is solely attributable to the contractor, 0.5% per week of executable contract value*, limited to maximum 2% of executable contract value, will be withheld.</u>	
6.6.3	In case delay in achieving M2 Milestone is solely attributable to the contractor, 0.5% per week of executable contract value*, limited to maximum 3% of executable contract value, will be withheld.	
6.6.4	Amount already withheld, if any against slippage of M1 milestone, shall be released only if there is no delay attributable to contractor in achievement of M2 Milestone.	
6.6.5	Amount required to be withheld on account of slippage of identified intermediate milestone(s) shall be withheld out of respective milestone payment (corresponding RA Bill) and balance amount (if any) shall be withheld @10% of RA Bill amount from subsequent RA bills.	
6.6.6	Final deduction towards LD (if applicable), on account of delay attributable to contractor shall be based on final delay analysis on completion/ closure of contract. Withheld amount, if any due to slippage of identified intermediate milestone(s) shall be adjusted against LD or released as the case may be.	
6.6.7	In case of termination of contract due to any reason attributable to contractor before completion of work, the amount already withheld against slippage of intermediate milestones shall not be released and be converted into recovery.	
6.7	Common activities shall be completed in Phase wise manner/ Instruction of Engineer within the Contractual time.	
6.8	Above milestone dates has to be completed in parallel.	
6.9	Bidders are requested to submit Resource deployment plan Area wise with detail program in line with above schedule in the form of Bar Chart/ MS project planer along with their offer.	
*	Executable Contract Value - Value of work for which inputs/ fronts were made available to contractor and were scheduled for execution till the date of achievement of that milestone.	
6.1	COMPLETION OF WORK AND COMMENCEMENT OF GUARANTEE PERIOD	

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter- VI: TIME SCHEDULE

6.10.1	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, labor 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.
6.10.2	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 remaining / pending works are executed to the satisfaction of Engineer.
6.10.3	The Engineer shall certify to the contractor the date on which the work is completed and the date thereof for commencement of Guarantee Period. Guarantee Period shall be as given in GCC.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter– VII: Terms of Payment

7	<p>Terms of Payment:</p> <p>The contractor on certification of the engineer at site be entitled for payments of his running bills, which shall be subject to any deduction/retention specifically under clauses 2.22 of GCC and 10.0 of SCC.</p> <p><u>Broad Break-up of Payment:</u></p> <p>a) For Customer office respective payment shall be processed as per the following broad breakup-</p> <ol style="list-style-type: none"> 1. On Completion of balance structural framing, roofing and wall cladding works of customer office and Parking Sheds- 10% 2. On Completion of Flooring and False Ceiling of Office- 20% 3. On Completion of Supply & Receipt of Furniture at site – 20% 4. On Completion of Electrical Wiring, Fixtures & Networking – 10% 5. On Completion of HVAC Works of Office- 20% 6. On Completion of Plumbing, Sanitary & Other Misc. Finishing Works – 10% 7. On Handing-over of Office along with Parking Sheds in all respects- 10% <p>b) For Safety Park respective payment shall be processed as per the following broad breakup-</p> <ol style="list-style-type: none"> 1. On Completion of Foundation Work -15% 2. On Completion of Supply & Receipt of Super Structure Material at site - 25% 3. On Completion of Erection of Super Structure & civil works – 20% 4. On Completion of Supply & Receipt of Furniture at site – 20% 5. On Completion of Electrical Wiring, Fixtures & Networking – 5% 6. On Completion of Plumbing & Other Misc. Finishing Works – 5% 7. On Handing-over of Safety park in all respects- 10%
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TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter– VII: Terms of Payment

	<p>c) For closed sheds payment shall be processed as per the following broad breakup-</p> <ol style="list-style-type: none"> 1. On Completion of Engineering Duly approved by BHEL/NTPC- 5% 2. On Completion of Foundation Work -10% 3. On Completion of Supply & Receipt of Super Structure Material at site - 35% 4. On Completion of Erection of Super Structure & civil works – 30% 5. On Completion of Electrical Wiring & Fixtures – 5% 6. On Completion of Plumbing & Other Misc. Finishing Works – 5% 7. On Handing-over of closed sheds in all respects- 10% <p>After approval of final Engineering Drawing by BHEL/NTPC, vendor to submit detailed Billing Break-Up of above along with Bill of Material (for the entire work) for BHEL’s Approval. Based on approved billing break-up RA Bills shall be submitted by Bidder.</p>
7.2	<p>Progressive Payment/ Final Payment: The payments for works under the scope of this contract shall be as per clause no 2.6; 2.22; 2.23 of General Conditions of Contract and Volume-IB, Chapter-X of SCC.</p>
7.2.1	<p><u>Documents required for RA Bill:</u></p> <ul style="list-style-type: none"> • GST Complied Invoice of the work done as per approved BBU. • WAM -6 for RA Bill. • Jointly signed Measurement sheet. • Power of Attorney before submission of Bill. • Validity of Bank Guarantees as applicable under the contract. • Certified Quality Documents and protocols as per FQP. • HR/IR compliance documents: <ol style="list-style-type: none"> i. Wages payment sheet as per applicable minimum wages. ii. Proof of PF contribution submission. iii. Proof of ESI/ WC contribution submission iv. Proof of Bonus payment as per Bonus Act if applicable. v. Proof of EL payment if applicable. vi. Any other statutory document if applicable. vii. Royalty challan and statutory documents shall be submitted along with RA Bills for processing of Bills.

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Chapter– VII: Terms of Payment

7.2.2	<p>The final bill is drawn as soon as the entire work is completed. From the final amount due, all amounts already claimed up to the previous running account bill will be deducted. It should be ensured that in the final bill the following additional particulars have been provided:</p> <ul style="list-style-type: none"> • Final Bill in WAM-7 Format. • 'No claim' certificate from the contractor. • Clearance certificates where ever applicable viz. Clearance Certificates from Customer, various Statutory Authorities like Labour department, PF Authorities, Commercial Tax Department, Mining Dept(if applicable), etc. • Final Material re-conciliation statement duly approved by BHEL. • Indemnity Bond as per prescribed format. • Deviation statement showing the difference between the actuals and as per the contract. • Final Delay Analysis.
7.3	<p>SECURED RECOVERABLE ADVANCES:</p> <p>Interest Free Secured Mobilization Advance as per GCC Clause No. 2.13.1 will be payable under exceptional circumstances on certification of BHEL Construction Manager at Site. Interest Free Mobilization Advance shall be disbursed in specifically mentioned stages of major resource mobilization as specified hereunder:</p> <ol style="list-style-type: none"> 1. For Mobilization of Major T&Ps i.e. Excavators, Dumper, Reinforcement cutting, bending machines - 2.0% 2. For Arrangement of required construction material (Sand, Aggregate, Admixture etc.) in sufficient quantity as per instruction of BHEL Engineer-In-Charge to start the work- 1.5% 3. For Establishment of Contractor's Site Infrastructure by contractor i.e. site office, stores, labour accommodations etc.- 1.5% <p>Notes:-</p> <ol style="list-style-type: none"> 1. BHEL Site-CM shall be the deciding authority for assessing the admissibility of advance payment to contractor. 2. In case contractor do not fulfil the agreed conditions of payment of 1st mobilization advance, BHEL Construction Manager will have the authority to not allow the 2nd mobilization advance to contractor.

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Chapter– VIII: Taxes and other Duties

8.0	TAXES & DUTIES
8.1	<p>The contractor shall pay all (save the specific exclusions as enumerated in this clause) taxes, fees, license, charges, deposits, duties, tools, royalty, commissions, other charges, etc. which may be levied on the input goods & services consumed and output goods & services delivered in course of his operations in executing the contract. In case BHEL is forced to pay any of such taxes/duties, BHEL shall have the right to recover the same from his bills or otherwise as deemed fit.</p> <p>However, provisions regarding GST on output supply (goods/service) and TDS/TCS as per Income Tax Act shall be as per following clauses.</p>
8.2	GST (Goods and Services Tax)
8.2.1	GST as applicable on output supply (goods/services) are excluded from contractor's scope; therefore, contractor's price/rates shall be exclusive of GST. Reimbursement of GST is subject to compliance of following terms and conditions. BHEL shall have the right to deny payment of GST and to recover any loss to BHEL on account of tax, interest, penalty etc. for non-compliance of any of the following condition.
8.2.2	The admissibility of GST, taxes and duties referred in this chapter or elsewhere in the contract shall be limited to direct transactions between BHEL & its Contractor. BHEL shall not consider GST on any transaction other than the direct transaction between BHEL & its Contractor.
8.2.3	Contractor shall obtain prior written consent of BHEL before billing the amount towards such taxes. Where the GST laws permit more than one option or methodology for discharging the liability of tax/levy/duty, BHEL shall have the right to adopt the appropriate one considering the amount of tax liability on BHEL/Client as well as procedural simplicity with regard to assessment of the liability. The option chosen by BHEL shall be binding on the Contractor for discharging the obligation of BHEL in respect of the tax liability to the Contractor.
8.2.4	Contractor has to submit GST registration certificate of the concerned state. Contractor also needs to ensure that the submitted GST registration certificate should be in active status during the entire contract period.
8.2.5	Contractor/Vendor has to issue Invoice/Debit Note/Credit Note indicating HSN/SAC code, Description, Value, Rate, applicable tax and other particulars in compliance with the provisions of relevant GST Act and Rules made thereunder.
8.2.6	Vendor has to submit GST compliant invoice within the due date of invoice as per GST Law. In case of delay, BHEL reserves the right of denial of GST payment if there occurs any hardship to BHEL in claiming the input thereof. In case of goods, vendor has to provide scan copy of invoice & GR/LR/RR to BHEL before movement of goods starts to enable BHEL to meet its GST related compliances. Special care should be taken in case of month end transactions.
8.2.7	Vendor has to ensure that invoice in respect of such services which have been provided/completed on or before end of the month should not bear the date later than last working day of the month in which services are performed.
8.2.8	<p>Subject to other provisions of the contract, GST amount claimed in the invoice shall be released on fulfilment of all the following conditions by the Contractor: -</p> <ol style="list-style-type: none"> a. Supply of goods and/or services have been received by BHEL. b. Original Tax Invoice has been submitted to BHEL. c. Contractor/ Vendor has submitted all the documents required for processing of bill as per contract/ purchase order/ work order.

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Chapter– VIII: Taxes and other Duties

	<p>d. In cases where e-invoicing provision is applicable, vendor/contractor is required to submit invoice in compliance with e-invoicing provisions of GST Act and Rules made thereunder.</p> <p>e. Contractor has filed all the relevant GST return (e.g. GSTR-1, GSTR-3B, etc.) pertaining to the invoice submitted and submit the proof of such return along with immediate subsequent invoice. In case of final invoice/ bill, contractor has to submit proof of such return within fifteen days from the due date of relevant return.</p> <p>f. Respective invoice has appeared in BHEL’s GSTR - 2A for the month corresponding to the month of invoice and in GSTR-2B of the month in which such invoices has been reported by the contractor along with status of ITC availability as “YES” in GSTR-2B. Alternatively, BG of appropriate value may be furnished which shall be valid at least one month beyond the due date of confirmation of relevant payment of GST on GSTN portal or sufficient security is available to adjust the financial impact in case of any default by the contractor.</p> <p>g. Contractor has to submit an undertaking confirming the payment of all due GST in respect of invoices pertaining to BHEL.</p>
8.2.9	Any financial loss arises to BHEL on account of failure or delay in submission of any document as per contract/purchase order/work order at the time of submission of Tax invoice to BHEL, shall be deducted from contractor’s bill or otherwise as deemed fit.
8.2.10	TDS as applicable under GST law shall be deducted from contractor’s bill.
8.2.11	Contractor shall comply with the provisions of e-way bill wherever applicable. Further wherever provisions of GST Act permits, all the e-way bills , road permits etc. required for transportation of goods needs to be arranged by the contractor.
8.2.12	Contractor shall be solely responsible for discharging his GST liability according to the provisions of GST Law and BHEL will not entertain any claim of GST/interest/penalty or any other liability on account of failure of contractor in complying the provisions of GST Law or discharging the GST liability in a manner laid down thereunder.
8.2.13	In case declaration of any invoice is delayed by the vendor in his GST return or any invoice is subsequently amended/altere/deleted on GSTN portal which results in any adverse financial implication on BHEL, the financial impact thereof including interest/penalty shall be recovered from the Contactor’s due payment.
8.2.14	Any denial of input credit to BHEL or arising of any tax liability on BHEL due to non-compliance of GST Law by the Contractor in any manner, will be recovered along with liability on account of interest and penalty (if any) from the payments due to the Contactor.
8.2.15	In the event of any ambiguity in GST law with respect to availability of input credit of GST charged on the invoice raised by the contractor or with respect to any other matter having impact on BHEL, BHEL’s decision shall be final and binding on the contractor.
8.2.16	<p><u>Variation in Taxes & Duties:</u></p> <p>Any upward variation in GST shall be considered for reimbursement provided supply of goods and services are made within schedule date stipulated in the contract or approved extended schedule for the reason solely attributable to BHEL. However downward variation shall be subject to adjustment as per actual GST applicability.</p> <p>In case the Government imposes any new levy/tax on the output service/goods after price bid opening, the same shall be reimbursed by BHEL at actual. The reimbursement under this clause</p>

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Chapter– VIII: Taxes and other Duties

	is restricted to the direct transaction between BHEL and its contactor only and within the contractual delivery period only. In case any new tax/levy/duty etc. becomes applicable after the date of Bidder's offer but before opening of the price Bid, the Bidder/Contractor must convey its impact on his price duly substantiated by documentary evidence in support of the same before opening of price bid. Claim for any such impact after opening the price bid will not be considered by BHEL for reimbursement of tax or reassessment of offer.
8.3	<u>Income Tax:</u> TDS/TCS as applicable under Income Tax Act, 1961 or rules made thereunder shall be deducted/collected from contractor's bill.

8.4 BOCW Act & Cess Act

8.4.1 BOCW Cess is not to be borne by contractor. Refer Annexure-I for BOCW Act & Cess Act.

Annexure-I:	
Bidder may please note that the sub-contractor/bidder of BHEL engaging building or construction worker in connection with building or other construction work, are required to follow the procedures enumerated below:	
1.	It shall be the sole responsibility of the contractor as employer to ensure compliance of all the statutory obligations under the Building and other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996 and the Building and other Construction Workers' Welfare Cess Act, 1996 and the rules made thereunder.
2.	It shall be sole responsibility of the contractor engaging Building Workers in connection with the building or other construction works in the capacity of employer to apply and obtain registration certificate specifying the scope of work under the relevant provisions of the Building and Other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996 from the appropriate Authorities.
3.	It shall be responsibility of the contractor to furnish a copy of such Registration Certificate within a period of one month from the date of commencement of Work.
4.	It is responsibility of the contractor to register under the Building and other Construction Workers' Welfare Cess Act, 1996 and deposit the required Cess for the purposes of the Building and other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996 at such rate as the Central Government may, by notification in the Official Gazette, from time to time specify. However, before registering and deposit of Cess under the Building and other Construction Workers' Welfare Cess Act, 1996, the contractor will seek written prior approval from the Construction Manager.
5.	It shall be sole responsibility of the contractor as employer to get registered every Building Worker, who is between the age of 18 to 60 years of age and who has been engaged in any building or other construction work for not less than ninety days during the preceding twelve months as Beneficiary under the Building and other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996.
6.	It shall be sole responsibility of the contractor as employer to maintain all the registers, records, notices and submit returns under the Building and other Construction Workers' (Regulation of

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	Employment and Conditions of Service) Act, 1996 and the Building and other Construction Workers' Welfare Cess Act, 1996 and the rules made thereunder.
7.	It shall be sole responsibility of the contractor as employer to provide notice of poisoning or occupation notifiable diseases, to report of accident and dangerous occurrences to the concerned authorities under the Building and other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996 and the rules made thereunder and to make payment of all statutory payments & compensation under the Employees' Compensation Act, 1923.
8.	It shall be the responsibility of the sub-contractor as employer to make payment/deposit of applicable cess amount on the extent of work involving building or construction workers engaged by the sub-contractor within a period of one month from the receipt of payment. It shall also be responsibility of the Contractor to furnish BHEL on monthly basis, Receipts/ Challans towards Deposit of the Cess under the Building and other Construction Workers' Welfare Cess Act, 1996 and the rules made thereunder along with following statistics: (i) Number of Building Workers employed during preceding one month. (ii) Number of Building workers registered as Beneficiary during preceding one month. (iii) Disbursement of Wages made to the Building Workers for preceding wage month. (iv) Remittance of Contribution of Beneficiaries made during the preceding month
9.	BHEL shall reimburse the contractor the Cess amount deposited for the purposes of the Building and other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996 under the Building and other Construction Workers' Welfare Cess Act, 1996 and the rules made thereunder. However, BHEL shall not reimburse the Fee paid towards the registration of establishment, fees paid towards registration of Beneficiaries and Contribution of Beneficiaries remitted.
10.	It shall be responsibility of the Building Worker engaged by the Contractor and registered as a beneficiary under the Building and other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996 to contribute to the Fund at such rate per mensem as may be specified by the State government by notification in the Official Gazette. Where such beneficiary authorizes the contractor being his employer to deduct his contribution from his monthly wages and to remit the same, the contractor shall remit such contribution to the Building and other construction Workers' Welfare Board in such manner as may be directed by the Board , within the fifteen days from such deduction.
11.	Bidders may please note that though the quoted price is exclusive of BOCW (which will be reimbursed by BHEL as per sub-clause 9 above) , however, If at any point of time during the contract period, non-compliance of the provisions of the Building and other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996 and the Building and other Construction Workers' Welfare Cess Act, 1996 and the rules made thereunder is observed, BHEL reserves the right to deduct the applicable cess (1%) on the contract value and penalty (if any, imposed by Cess Authorities) from the payables on account of non-compliance.
12.	The contractor shall declare to undertake any liability or claim arising out of employment of building workers and shall indemnify BHEL from all consequences / liabilities / penalties in case

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of non-compliance of the provisions of the Building and other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996 and the Building and other Construction Workers' Welfare Cess Act, 1996 and the rules made thereunder.

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Chapter-IX : MATERIAL

9	MATERIAL
9.1	Material to be issued by BHEL (Free of Cost): NIL
9.2	All materials required for proper completion of job shall be provided by the contractor and is deemed to be inclusive in the quoted price. Bidder's scope also includes following:
9.2.1	Furnishing samples of all materials required by the BHEL Engineer for testing/inspection and approval for use in the works. The samples may be retained by the Engineer for final incorporation in the works.
9.2.2	Furnishing test reports for the products used or intended to be used, if called for the specifications or if so desired by the engineer.
9.2.3	Arranging manufacturer's supervision for items of work done as per manufacturer's specifications when so specified.
9.3	Contractor shall set up suitable storage facilities for Cement, sand, cladding sheets, bolts, aggregate, reinforcement steel, structural steel, handrail, grating, foundation bolts, shuttering item, inserts, water proofing material, admixture other BOI's etc. and all are to be stored properly as per IS recommendation/technical specifications/ manufacturer recommendation. Wastage due to inadequate storage facilities will be on account of contractor and same shall be replaced by contractor at their own risk & cost without affecting the time schedule for completion of works.
9.4	Procurement and Testing of Materials by Contractor: Material required for the entire job like sand, aggregates, windows, doors, ventilators, rolling shutter, sanitary fixtures, painting & finishing material, electrical fittings and wiring material and all other material required for the completion of entire scope have to be arranged by the contractor. BHEL reserves the right to reject any material not found satisfactory. Rates quoted shall be inclusive of all such contingencies and no additional payment shall be made on this account. For this purpose, sample shall be collected at site in presence of BHEL/NTPC representative.

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Chapter-X : BILL OF QUANTITIES AND % WEIGHTAGE OF INDIVIDUAL ITEMS

This Chapter consists of Part A & Part B of Volume II “Price bid”:

<u>CONTENTS</u>	
Description	Remarks
PART A: Instructions to the Bidders	Instructions
PART B: % weightage for amount of individual items of Schedule of quantity	BILL OF QUANTITIES AND % WEIGHTAGE OF INDIVIDUAL ITEMS ATTACHED SEPARATELY.
PART C: Total Lump Sum Price for entire scope of Work	This part is implanted in the E- Procurement portal entitled as “Part-C of Vol-II Price Bid”.
<u>Part A:</u>	<u>Instructions to the Bidders</u>
1.	Bidders shall quote Total Lump-sum Price for the entire scope of work in Rupees in VOL II PRICE BID at BHEL E-procurement Portal. Any other entry elsewhere in the offer of the bidder shall be treated as Null and Void.
2.	BHEL has fixed the % weightages as in “Part-B” for individual items i.e. Office, Safety Park and Closed Sheds w.r.t. the total price of Price Bid Vol-II.
3.	Based on the pre-fixed % weightages and quantities in the BOQ cum Rate Schedule, item rate of individual items shall be derived by BHEL. This item rate shall be used to calculate the total amount of an item.
4.	For the convenience of bidders, BHEL has issued an excel sheet with all requisite formulae as detailed above. However, this excel sheet shall not form part of contract document. Further, this sheet should not be uploaded at the e-Portal.
4.	Bidders to note that this is an ‘ Lump Sum contract ’. Payment shall be made stage wise as per payment terms “Chapter-VII”
<u>PART B:</u>	% weightage for amount of individual items w.r.t. the total lump sum price (as quoted by the bidder in “Part C of Vol-II-Price Bid”)- attached separately.

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Chapter-XI : TECHNICAL SPECIFICATIONS AND DRAWINGS

11.0 Following Drawings and technical Specifications shall be the part of this tender:

SL. NO.	Document
11.1	Following specifications/ documents shall be integral parts of this tender:
11.1.1	Customer Office (Size: 1700 SQM), Drawing No. 1150-001-POC-A-001 REV NO. B
11.1.2	Safety Park Drawing No. 1150-001-POC-A-002 REV NO. B
11.1.3	Closed Shed Drawing No. 1150-001-POC-A-012 REV NO. A
11.1.4	Miscellaneous Drawings of Customer Office, Parking Shed and Safety Park as submitted by existing vendor.
11.1.5	Section-C: Customer Contract specific Technical Requirements
11.1.6	Climatological Table
11.1.7	Seismic Design Criteria & Wind Design Criteria
11.2	Following Tender stage specifications, drawing & documents are provided for bidder's information and reference purpose only. Final drawings shall be provided to successful bidder after award of contract.
11.2.1	Plot Plan (GLP)
NOTES:	
1	Contractor has to make him well conversant with the Customer and BHEL's Technical Specification. In case of ambiguity between BHEL and customer specification, customer specification shall prevail.
2	Above documents have been uploaded Separately.