

Corrigendum 2 dated Mar 18, 2015 to Tender Specification BHEL PSSR SCT 1580

A) The following clause is added in addition to the existing clauses of Chapter X - GENERAL of Part I of Volume IA of Technical Conditions of Contract (TCC)

1.10.1.1.5 BHEL shall recover an amount of 1% (one percent) from every RA Bill of the contractor towards BOCW Cess Act 1996 and shall be remitted to the Authority by BHEL by way adjustment of BOCW Cess recovery by customer.

B) The clause Sl No: 8 as mentioned below is added in addition to the existing clauses of Chapter 1 - CORRECTIONS / REVISIONS IN SPECIAL CONDITIONS OF CONTRACT, GENERAL CONDITIONS OF CONTRACT AND FORMS & PROCEDURES of Part II of Volume IA of Technical Conditions of Contract (TCC)

The following clauses are to be added under Volume-I Book-II - SPECIAL CONDITIONS OF CONTRACT (SCC): Chapter-IX: Occupational Health, Safety & Environment Management / Quality Assurance Programme

9.63 Comprehensive Automobile Insurance

This insurance shall be in such a form to protect the contractor against all claims for injures, disability, disease or death to members of public including the employer's men and damage to the property of other arising from the use of motor vehicle during on or off the site operations, irrespective of the Employership of such vehicles. The liability covered shall be as herein indicated

Fatal injury - Rs.100, 000 each person
- Rs. 200,000 each occurrence

Property Damage - Rs. 100,000 each occurrence

9.64 Emergency action plan

The contractor shall prepare an emergency action plan approved by his competent authority to handle any emergency occurred during construction work. Regular mock drills shall be organized to practice this emergency plan. The emergency action plan should be widely circulated to all the employees and suitable infrastructure shall be provided to handle the emergencies.

9.65 Vehicular traffic

The contractor should employ vehicle drivers who hold a valid license under the Motor vehicle act 1988.

9.66 Excessive noise, Vibration

The contractor shall take adequate measures to protect the workers against the harmful effect of excessive noise or vibration. The noise should not exceed the limits prescribed under the rules, noise pollution (Regulation and control) rules, 2000.

9.67 Safety organization

The contractor employing more than 250 workmen whether temporary, casual, probationary, regular or permanent shall employ at least one full time safety officer exclusively to supervise safety aspects of all the equipments and workmen, who will coordinate with the NTPC safety officer. Further requirement of safety officers, if any shall be guided by rule 209 of the building and other construction worker (Regulation of Employment and Conditions of Service) central rule 1998.

9.68 Right to stop work

The engineer I/C shall have the right at his sole discretion to stop the work, if in his opinion the work is being carried out in such a way that it may cause accidents and endanger the safety of the persons/and /or property ,and /or equipments. In such cases, the contractor shall be informed in writing about the nature of hazards and possible injury/accident and he shall comply to remove shortcomings promptly.

The contractor shall not be entitled for any damages/compensation for stoppage of work due to safety reasons and the period of such stoppage of work shall not be taken as an extension of time for completion of work and will not be the ground for waiver of levy or liquidated damages.

C) Some of the bidders had raised queries in the published tender specification. The Clarifications issued by BHEL are furnished below:

<u>No</u>	<u>Reference clause</u>	<u>Existing provision</u>	<u>Bidder's query</u>	<u>BHEL's clarification</u>
1)	Price Bid Serial No. 1 of part I of price bid of both packages	Erection, Testing & Commissioning and completion of Trial Operation of the Boiler & Aux, Bunker structures, Coal bunkers, Transfer houses, Conveyor galleries, Trestles, ID- Ducts,to normal erection works.	Please confirm a) Hopper shall be supplied with SS lining fixed and contractor has to fix SS lining only on joint b) Bunker plate shall be provided to contractor duly rolled, edge prepared with stiffener duly fixed	Refer clause 1.14.3 of Volume-IA part-I of TCC
2)	Price Bid ST.No.915 (e) of part II of price bid of both packages.	6mm thick multi (twin) wall fire retardant (Continuous use under temperature 1000 deg C), impact resistant and ultraviolet resistant polycarbonate sheet with sealed open edges.	Please confirm the temperature and area of work.	ST No 915 (e) modified as below: 6 mm thick multi (twin) wall fire retardant (continuous use under temperature 100 deg C), impact resistant and ultraviolet resistant polycarbonate sheet with sealed open edges. Area: Conveyor gallery(transfer houses)

<u>No</u>	<u>Reference clause</u>	<u>Existing provision</u>	<u>Bidder's query</u>	<u>BHEL's clarification</u>
3)	Price Bid ST. No 2317 in price bid of both packages.	Providing and fixing in position PTFE type sliding bearingsetc all complete for following vertical loads. 40 Ton- 05 each 50 Ton- 05 each 60 Ton- 05 each 70 Ton- 05 each 80 Ton- 05 each	Please mention the size of PTFE type sliding bearing each loadwise	Design of bearing for the given load is in the bidder's scope.
4)	Price Bid		The space given for writing of rates and amount in words is too small, please confirm that the same proforma can be typed again for filling the rate and amount is words	The details like item description, quantity, unit of measurement in BHEL issued price bid shall be binding on the bidder in case the bidder submits the price bid typed again by him.
5)			Provide the structural drawings for sheeting works for the subject work.	Drawing will be made available only during detail Engineering Stage.
6)	TCC Volume IA, Part-I, Chapter – II SCOPE OF WORKS Clause No. 1.2.8	The terminal points can be inferred from the relevant appendices / annexures..... instructed by BHEL Engineer, with in the quoted rate.	The terminal points can be inferred from the relevant appendices / annexures (scope of work) and any further clarifications..... Please provide the terminal points for Transfer points, Trestles and conveyor galleries.	Drawing no 9549-102-POC-A-001 (2 sheets) provided in the last few pages of this corrigendum is for information.

No	Reference clause	Existing provision	Bidder's query	BHEL's clarification
7)	TCC Volume IA, Part-I, Chapter – II SCOPE OF WORKS Clause no 1.2.10	MILL BUNKER STRUCTURE, COAL BUNKER, TRANSFER POINTS, GALLERIES ETC. Also Refer Subsection V of Conditions of Contract (Volume I Book I). Erection, alignment, welding, Trestles, Conveyor galleries etc, Supply and installation of items as Galleries etc. Where ever the design & supply execution of the contract. Contractor shall procure and supply the items from BHEL / NTPC approved vendors, meeting the specification (enclosed), Drawings and instructions of the Engineer.	Please clarify the delivery condition of Bunker shell and Hopper (conical portion) to enable us to assess the scope of work. Whether bunker is in front side of Boiler or side bunker. Please clarify. Please provide the list of BHEL /NTPC approved vendors	Details are provided in clause 1.14.3 of Volume IA part I Chapter XIV of TCC Side bunker. Agency to follow the tender specification / IS (Indian Standards). During the execution necessary approval to be taken for the vendor from BHEL / NTPC.

<u>No</u>	<u>Reference clause</u>	<u>Existing provision</u>	<u>Bidder's query</u>	<u>BHEL's clarification</u>
8)	TCC VOLUME-IA PART-I Chapter IX BILL OF QUANTITY clause 1.9.1.1.	PG MA 66-101, 66-151, 66-125 Stainless steel lining	We presume Hopper shall be supplied with SS lining fixed in it. Please confirm. Please confirm a) Hopper shall be supplied with SS lining fixed and contractor has to fix SS lining only on joint. b) Bunker plate shall be provided to contractor duly rolled, edge prepared with stiffener duly fixed.	Details are provided in clause 1.14.3 of Volume IA part I Chapter XIV of TCC
9)	TCC Volume IA, Part-I Chapter - III FACILITIES IN THE SCOPE OF BIDDER / BHEL Clause 1.3.2.1.1	Scope of Providing the erection drawings for all the equipments covered under this scope is partly by Bidder and partly by BHEL	Please confirm the detail of equipment for which drawings has to be in bidder scope	As such all equipments / structure erection drawing are in BHEL scope. However for the items 2301, Doors, Windows, etc. if any required erection drawings to be prepared and the same in the bidder scope.
10)	TCC Volume IA, Part-I, Chapter-III FACILITIES IN THE SCOPE OF BIDDER / BHEL Clause 1.3.4.1	The construction power (415V) will be provided at a single point for construction purpose only at free of any charges and the further distribution is to be arranged by the bidder at his cost. Construction power shall be provided from the nearest Substation / tapping point.	Please confirm the approximate distance from erection site to substation from where the power connection shall be provided by BHEL	Tentative location will be within 500 metre. It may vary according to site condition.

<u>No</u>	<u>Reference clause</u>	<u>Existing provision</u>	<u>Bidder's query</u>	<u>BHEL's clarification</u>
11)	TCC Volume IA, Part-I, Chapter-III FACILITIES IN THE SCOPE OF BIDDER / BHEL Clause 1.3.4.2	Any duty, deposit involved in getting the Electricity shall be borne by the bidder. As regards to contractor's office shed also, all such expenditure shall be borne by the contractor.	Since Electricity is provided by BHEL "at any free of charge" as per cl.1.3.4.1, Any duty, deposit involved in getting the electricity shall be borne by the BHEL only. Please confirm.	Read along with clause 1.3.1.2.2.3 of Volume IA part I Chapter III of TCC
12)	TCC VOLUME-IA PART-I Chapter – IV T&Ps and MMEs TO BE DEPLOYED BY BIDDER Clause no 1.4.2	In the eventuality of contractor not deploying cranes prevailing BHEL Corporate Crane hire charges (may vary from time to time) shall be recovered from the contractor's running bills. Corresponding pages of Corporate Crane hire charges are enclosed in chapter 6 of part II of Technical Conditions of Contract (Volume-I Book-I). (Please note that these charges are as valid up to May 31, 2015 and may get revised further).	It is mentioned that hire charges are enclosed in chapter VI whereas the chapter VI is meant for time schedule, please clarify and provide details	Refer chapter 8 in VOLUME-IA PART-II of TCC

No	Reference clause	Existing provision	Bidder's query	BHEL's clarification
13)	TCC VOLUME-IA PART-I, Chapter-IV T&Ps and MMEs TO BE DEPLOYED BY BIDDER Clause no 1.4.5	For transportation, material handling, loading & unloading of heavier components / equipments like Ceiling girders, large dia pipes etc., the contractor has to make his own arrangements at his own cost. BHEL will not provide any crane / T & P's for unloading the above components.	As per tender condition bidder responsibility is to deploy 60 MT trailer (refer clause 1.4.1) only. We presumed all material weighing more than 60MT is unloaded at site only	Expected all items are below 60 MT
14)	TCC Volume IA, Part-I, Chapter V, T&Ps & MMEs TO BE DEPLOYED BY BHEL ON SHARING BASIS Clause No. 1.5.1	1.5.1 BHEL will provide Induction heating machine.	We do not find details of P-91 piping joints, please confirm where induction heating machine is to be used, if there is P-91 piping joint please provide details.	Clause no 1.15.3 of Volume IA part- I Chapter XV of TCC may be referred.
			Please confirm whether Induction heating machine will comprise of following: Main Panel, Capacitor Panel, Interconnection power & control cables between panels, 185 Sq. mm special connecting cables from capacitor panel output.	Induction Heating machine with accessories will be provided by BHEL. Contractor to provide following for P 91 welding 1.Required no of operators/ Technicians/ Electrician for installation, commissioning & operating continuously.

				<p>2. Gas Burners arrangement with required gas for maintaining temperature in the event of power failure.</p> <p>3. Ultrasonic Flaw detector with recording device & complete accessories (Digital Type – Krautkramer Model USN 50 or equivalent) capable of storing calibration data. All recordable indications will be stored in memory of digital flaw detector and in PC (to be provided by the contractor) for review at later period.</p> <p>4. EQUOTIP or MICRODUR make or equivalent portable hardness tester.</p> <p>5. MPI/LPI Kits with required consumables.</p> <p>6. Consumables</p> <ul style="list-style-type: none"> • Glass fibre cloth –1mm X 1000 mm – Temp rating– 1260° C
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No	Reference clause	Existing provision	Bidder's query	BHEL's clarification
				<ul style="list-style-type: none"> • Glass fibre cord – Dia 3mm (twisted) Temp rating–1260⁰ C • Ceramic fibre Blanket – RT Grade, density 96Kg/M³ - Temp rating – 1260⁰ C • Ceramic fibre rope – Fibre Glass braided, Dia 12mm - Temp rating – 1260⁰ C • K Type Thermocouple – 0.5mm Dia Single Strand individual fibre glass insulated • heavy duty TC connectors for - K Type Thermocouple – 0.5mm Dia Single Strand individual fibre glass insulated • All other consumables / equipments required to carry out the work <p>Also refer clause 1.5.5 and 1.5.8 Volume IA Part I Chapter V of TCC</p>

No	Reference clause	Existing provision	Bidder's query	BHEL's clarification
15)	TCC Volume IA, Part-I, Chapter V, T&Ps & MMEs TO BE DEPLOYED BY BHEL ON SHARING BASIS Clause No. 1.5.11	In case of non-availability of these equipments, due to any reason i.e., unavoidable breakdown, major overhaul or any other reason etc., the contractor should make arrangement at his own cost to meet the erection targets. No extra claim will be admitted due to non-availability of any of the above equipments. No delay in execution of work shall be accepted on this account.	Please confirm what type of arrangement can be made by the contractor in place of heavy lift crane i.e. 400 ~ 600 MT cap.	It is clarified that 400-600 MT crane is not expected from Contractor.
16)	TCC Volume IA, Part-I, Chapter-V, T&Ps & MMEs TO BE DEPLOYED BY BHEL ON SHARING BASIS Clause No. 1.5.4 & 1.5.13	1.5.4 For high capacity crane, the required consolidation and preparation for placing crane for operation (civil work) is under Bidder scope WITHIN HIS QUOTED RATE. 1.5.13. For higher capacity crane, the required consolidation under BHEL scope .	As per clause 1.5.4 the consolidation and preparation for placing of crane (civil work) is in bidder scope whereas as per clause 1.5.13 it is shown in BHEL scope, please clarify. These clauses are contradictory. Please clarify which of this clause is applicable.	The scope is included in Bidder's scope , and hence Clause 1.5.13 stands deleted.

<u>No</u>	<u>Reference clause</u>	<u>Existing provision</u>	<u>Bidder's query</u>	<u>BHEL's clarification</u>
17)	TCC VOLUME-IA PART-I Chapter – VI TIME SCHEDULE Clause 1.6.5	The guarantee period of Eighteen months shall commence from the date of handing over of Unit to Customer (Provided all erection, testing, and commissioning works are completed in all respects).	The guarantee period of Eighteen months shall commence from the date of handing over of Unit to Employer only. Please confirm.	Tender condition prevails
18)	TCC VOLUME-IA PART-I Chapter-IX BILL OF QUANTITY clause 1.9.1.1.		The weight indicated of various items of unit – 1 & 2 in BOQ are different. But, in detailed PGMA wise weight, the breakup of weight of different items are shown as same for two units. Please clarify.	Weight mentioned in BOQ are in order.
19)	TCC VOLUME-IA PART-I Chapter – X GENERAL Clause 1.10.2.14	If applicable, all boiler, piping layout drawings received from BHEL for pipeline erection to be submitted to Boiler Inspector for approval. After (Volume-IB in Volume-I Book-II) shall be paid by BHEL.	We presumed all drawing approval will be in the scope of BHEL and scope of bidder is limited to for getting approval from IBR authorities for erection works only. The statutory fees and incidental expenses shall be borne by BHEL	Erection approval from local IBR is in contractor scope. Only statutory fee will be borne by BHEL.

No	Reference clause	Existing provision	Bidder's query	BHEL's clarification
20)	VOLUME-IA PART-I Chapter – XII FOUNDATIONS AND GROUTING Clause no 1.12.7 and 1.12.15	<p>1.12.7 Non shrink cementitious flowable grout shall of the base concrete. Minimum grade of grout shall be M30.</p> <p>However, for Equipment Foundations, contractor. The quoted rate shall inclusive of the same.</p> <p>1.12.15 Providing & grouting of pocket holes, pipe sleeves and under base plates of structural steel work / machinery / pipe supporting structures including roughening of surface, cleaning, ramming, curing etc. all complete with Conbextra GP-1 / Conbextra GP-2 or its equivalent.</p>	<p>Total grouting of the columns / equipments including pocket grouting, grouting at the gap between foundation and base plates top surface of column / equipments is in the scope of the BIDDER. All the grouting should be carried out by non-shrink cement like conbextra GPI / Conbextra GP II / Shrinkkomp or its equivalent etc</p> <p>Please confirm the tentative requirement of grouting cement.</p>	Bidder to quote as per standard practice.

<u>No</u>	<u>Reference clause</u>	<u>Existing provision</u>	<u>Bidder's query</u>	<u>BHEL's clarification</u>
21)	TCC Volume IA, Part-I, Chapter XIII, MATERIAL HANDLING, TRANSPORTATI ON AND SITE STORAGE Clause No. 1.13.1	Loading at BHEL / Customer stores and storage yard, transport to site, unloading of materials will be in the scope of contractor.	Kindly specify the location of BHEL's / Customer's store and storage yard from site / working area. Kindly confirm that the stores and storage yard is inside the plant premises.	Store & storage yard are located inside the plant premises and is approximately 500 metre away.
22)	TCC VOLUME-IA PART-I Chapter - XIV ERECTION Clause No. 1.14.1.14	All welded joints should be painted with anti-corrosive paint, once NDE works are over.	Kindly provide the specification and quantum of anti-corrosive paint	Specification is as per IS (indian standard) and quantity may be arrived at as per standard practice.
23)	TCC VOLUME-IA PART-I Chapter - XIV ERECTION Clause No. 1.14.1.26	No separate payment will be made for the edge preparation of pipes, Standard fittings such as bends, Tees etc.,	Since the scope of critical piping is not under scope of contractor this clause should be deleted, please confirm	Tender condition prevails.

<u>No</u>	<u>Reference clause</u>	<u>Existing provision</u>	<u>Bidder's query</u>	<u>BHEL's clarification</u>
24)	TCC VOLUME-IA PART-I Chapter - XIV ERECTION Clause No. 1.14.2.2 (f)	The contractor should get the formal approval from the Boiler inspectorate to take up the boiler erection work (mainly pressure parts, piping etc).Necessary assistance will be extended by BHEL for the same	We presumed all drawing approval will be in the scope of BHEL and scope of bidder is limited to for getting approval from IBR authorities for erection works only. The statutory fees and incidental expenses shall be borne by BHEL	Erection approval from local IBR is in contractor scope. Only statutory fee will be borne by BHEL.
25)	TCC VOLUME-IA PART-I Chapter - XIV ERECTION Clause No. 1.14.2.12	Certain adjustments in length of steel / pipe / tube members may be is in contractor scope.	Since the scope of critical piping is not under scope of contractor this clause should be deleted, please confirm.	Tender condition prevails.
26)	TCC VOLUME-IA PART-I Chapter - XIV ERECTION Clause No. 1.14.2.40	Certain extra lengths of various tubes / pipes and fabricated ducts are provided as erection allowance to match site conditions without any extra payment.	Since the scope of critical piping is not under scope of contractor this clause should be deleted, please confirm.	Tender condition prevails.

<u>No</u>	<u>Reference clause</u>	<u>Existing provision</u>	<u>Bidder's query</u>	<u>BHEL's clarification</u>
27)	TCC Volume IA, Part-I Chapter - XIV ERECTION Clause No. 1.14.2.55	The civil foundation for passenger cum goods lifts (temporary lift) shall be provided by BHEL . The contractor has to erect the passenger cum goods lifts including civil foundation , as per instructionwhichever is earlier. Foundation drawing for the proposed passenger lifts is enclosed for information.	In first line, the foundation for passenger cum goods lift shall be provided by BHEL however in line third the civil foundation is in scope of contractor, please clarify.	The civil foundation for passenger cum goods lift is in the bidder's scope. Drawings on General arrangement (two sheets) and Foundation (one sheet) for the proposed passenger cum goods lift provided in the last few pages of this corrigendum are for information.
28)	TCC Volume IA, Part-I Chapter - XIV ERECTION Clause No. 1.14.3.8	SS liners will be fixed in the shells and for site joint location it will be supplied as loose, which has to be fixed by the contractor by welding.	Please confirm the thickness of SS liner	SS liner thickness is 4 mm.
29)	TCC Volume IA, Part-I Chapter - XIV ERECTION Clause No. 1.14.4.18	All piping insulations shall be carried out in such a manner as to facilitate removal of bolts nuts and washers from the flanges.	Since the scope of critical piping is not under scope of contractor this clause should be deleted, please confirm.	Tender condition prevails.

30)	<p>TCC Volume IA, Part-I Chapter - XVII TESTING & COMMISSIONING G Clause No. 1.17.48</p>	<p>After floating of safety valves, the commissioning activities and post-commissioning activities are as follows:</p> <ul style="list-style-type: none"> a) Pipe fitters b) Millwright Fitters c) HP& structural welders d) Riggers e) Unskilled workers f) Supervisors g) Electricians h) Lagers i) Sheet metal fabricator/fitter j) Any other category of workers as may be required. <p>Further in addition to the above, contractor has to arrange the following minimum manpower exclusively for assisting BHEL commissioning engineers during stabilization and trial operation period. This manpower will be directly controlled by BHEL commissioning engineers.</p>	<p>Kindly confirm the following points :</p> <p>1) The period of months from trial operation to hand over of unit is not given in project schedule .Kindly specify that. Manpower requirements are given in nos.Please specify the manpower requirement in shift / day or mandays / Manhours</p> <p>Please confirm the period for stabilization or approximate manpower requirement for BHEL IN mandays/Manhours</p>	<p>1.17.48 is revised as under:</p> <p>After floating of safety valves, the commissioning activities and post-commissioning activities are as follows:</p> <ul style="list-style-type: none"> a) Pipe fitters b) Millwright Fitters c) HP& structural welders d) Riggers e) Unskilled workers f) Supervisors g) Electricians h) Lagers i) Sheet metal fabricator/fitter j) Any other category of workers as may be required <p>Further in addition to the above, contractor has to arrange the following minimum manpower exclusively for assisting BHEL commissioning engineers during trial operation period. This manpower will be directly</p>
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No	Reference clause	Existing provision	Bidder's query	BHEL's clarification
		<ol style="list-style-type: none"> 1. One Engineer in charge for three shifts. 2. Two supervisors per shift for three shifts 3. Three fitters per shift for three shifts 4. Six helpers per shift for three shifts <p>It shall be specifically noted that the above employees of the contractor may have to work round the clock along with BHEL commissioning Engineers and hence, overtime, may be involved. The contractor's quoted rate shall be inclusive of all these factors also.</p>		<p>controlled by BHEL commissioning engineers</p> <ol style="list-style-type: none"> 1. One Engineer in charge for three shifts. 2. Two supervisors per shift for three shifts 3. Three fitters per shift for three shifts 4. Six helpers per shift for three shifts <p>It shall be specifically noted that the above employees of the contractor may have to work round the clock along with BHEL commissioning Engineers and hence, overtime, may be involved. The contractor's quoted rate shall be inclusive of all these factors also.</p>

<u>No</u>	<u>Reference clause</u>	<u>Existing provision</u>	<u>Bidder's query</u>	<u>BHEL's clarification</u>
31)	TCC Volume IA, Part-I Chapter - XVIII PAINTING Clause No 1.18.1.5	All the exposed metal parts of the equipments including piping, structures, hangers etc., wherever applicable after installation unless otherwise specified the surface protected, are to be first painted with at least one coat of suitable primer and as per the instructions of BHEL / Customer official.	Since only final painting is in scope of contractor, please confirm the approximate area for application of primer.	Area cannot be specified at this stage. Bidder to quote in line with standard practice followed in any power project.
32)	TCC Volume IA, Part-II Chapter -1 CORRECTIONS / REVISIONS IN SPECIAL CONDITIONS OF CONTRACT, GENERAL CONDITIONS OF CONTRACT AND FORMS & PROCEDURES SI.No.3	PRICE VARIATION COMPENSATION (PVC) Clause 2.17.9 (iv) is deleted:	Please confirm the maximum limit of PVC	Maximum limit not applicable

No	Reference clause	Existing provision	Bidder's query	BHEL's clarification
33)	<p>TCC Volume IA, Part-II Chapter - XVIII CORRECTIONS / REVISIONS IN SPECIAL CONDITIONS OF CONTRACT, GENERAL CONDITIONS OF CONTRACT AND FORMS & PROCEDURES Sl.No 4</p>	<p>Additional security deposit (SD) shall be submitted by the successful bidder with value as follows :</p> <p>If the final price of successful bidder is lesser by 'more than 20%' of BHEL's estimates then only, bidder with value as follows:</p> <p>Additional Security Deposit = 30 % of (A-B) will be calculated as below:</p> <p>A = 80 % of BHEL estimate</p> <p>B = The final offered price of successful bidder (in case of paper bid)</p> <p>Additional security deposit may bethe 'Security Deposit' as per relevant clause of GCC.</p> <p>The BHEL's estimated value shall be disclosed to successful bidder (on request) in case 'Additional Security Deposit' is applicable.</p>	<p>Please provide the BHEL estimate.</p>	<p>In the clause it is already mentioned that The BHEL's estimated value shall be disclosed to successful bidder (on request) in case 'Additional Security Deposit' is applicable.</p>

No	Reference clause	<u>Existing provision</u>	<u>Bidder's query</u>	<u>BHEL's clarification</u>
34)	TCC Volume IA, Part-II Chapter -1 CORRECTIONS / REVISIONS IN SPECIAL CONDITIONS OF CONTRACT, GENERAL CONDITIONS OF CONTRACT AND FORMS & PROCEDURES SI.No.7 REVERSE AUCTION		Please confirm that submission of on line sealed bid price by the bidder is to be the same as that quoted in sealed price bid submitted to BHEL in hard copy or can be differed.	Tentative rules mentioned in Volume IA Part II chapter 1 of TCC is for information only. However RA clauses that will be provided before RA through RA service provider will be final.
35)	TCC Volume IA, Part-II Chapter -2 WELDING SCHEDULE	<u>Note to Welding Schedule</u> 1) Imported electrodes/TIG welding wires released under XX992 will be given by BHEL. All electrodes are to be supplied by contractor under his scope.	The word "All Electrodes" should be "all other electrodes". Please confirm	Note (1) revised as below: 1) Imported electrodes/TIG welding wires released under XX992 will be given by BHEL. All other electrodes are to be supplied by contractor under his scope.

<u>No</u>	<u>Reference clause</u>	<u>Existing provision</u>	<u>Bidder's query</u>	<u>BHEL's clarification</u>
36)	TCC Volume IA, Part-II Chapter -4 Subsection-V of Technical Specification - Section VI of customer contract	Clause 1.00 to 8.00 on page 1 to 24 of technical requirement of NTPC. The scope covers design, engineering, Manufacturing, Preparation of drawings, fabrication, supply of materials, inserts, embedment, Foundation Load, civil work etc.	Please confirm that the scope design, engineering, Manufacturing Preparation of drawings, fabrication, supply of materials, inserts, embedment, Foundation Load, civil work etc.is limited to the scope which is given in price bid	Yes. limited to scope given in price bid
37)	TCC Volume IA, Part-II Chapter -7 TYPICAL PAINTING SCHEDULE FOR APH, FAN, GATES & DAMPER ETC	Painting schedule for bowl mill, APH, fan, gate and damper is for Gadawara STPP,	The painting schedule is prepared for Gadawara STPP, please confirm the same is also applicable for this project	Painting schedule of Gadawara is provided for Reference. Actual will be provided during execution.

<u>No</u>	<u>Reference clause</u>	<u>Existing provision</u>	<u>Bidder's query</u>	<u>BHEL's clarification</u>
38)	TCC Volume IA, Part-II Chapter -7 PAINTING SCHEDULE FOR BOILER AND AUX. BOILER SI.No 4	Heat resistance aluminum paint to be applied on ducting (PG-48)	We feel that most of the duct has been insulated, please confirm the approximate quantum of work which is to be painted	Paint to be applied in the portion wherever paint that is already applied got damaged.

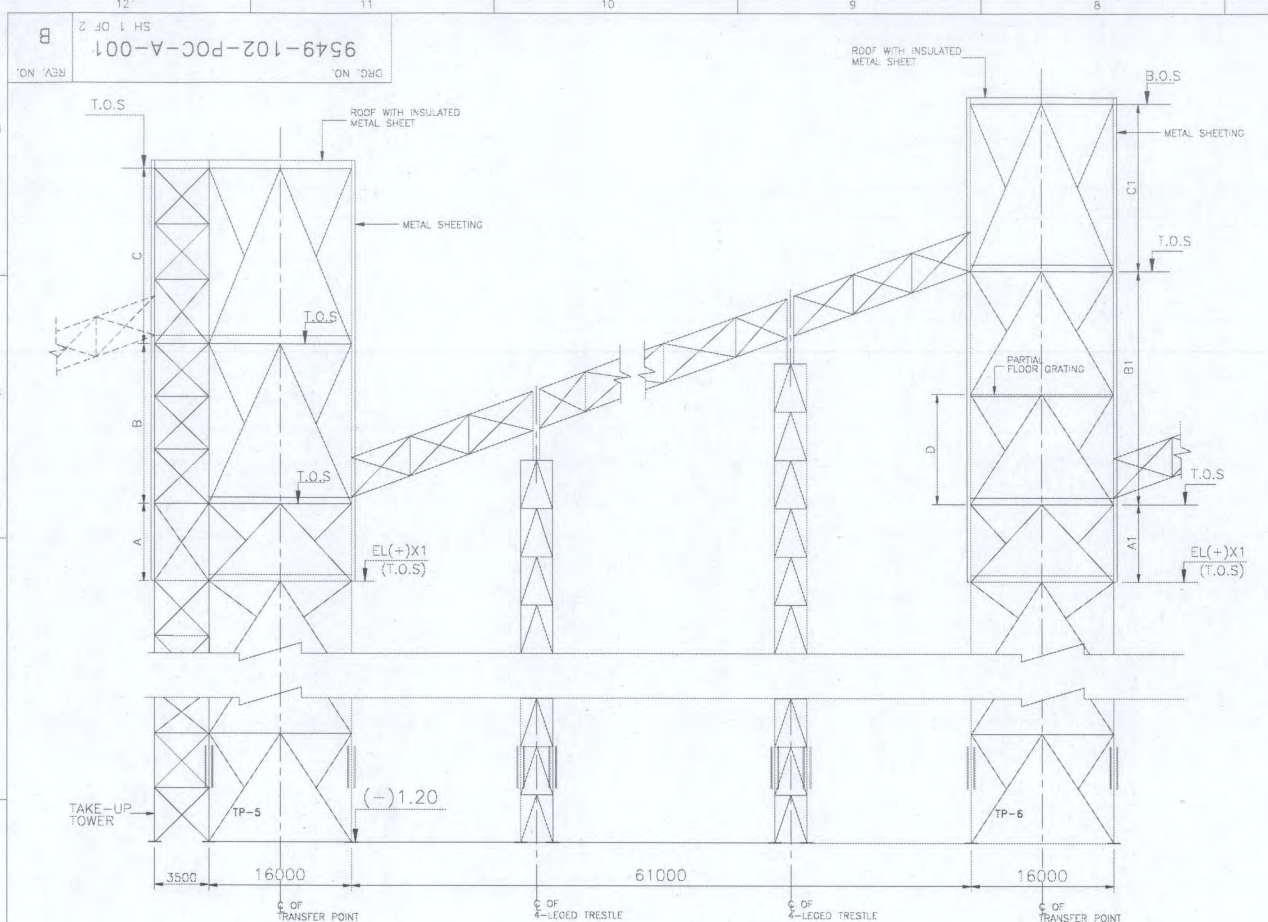
The drawings mentioned in SI no.6 and 27 of the above table are available in the next five pages.

Bidders are requested to consider this corrigendum as part of tender specification and quote accordingly.

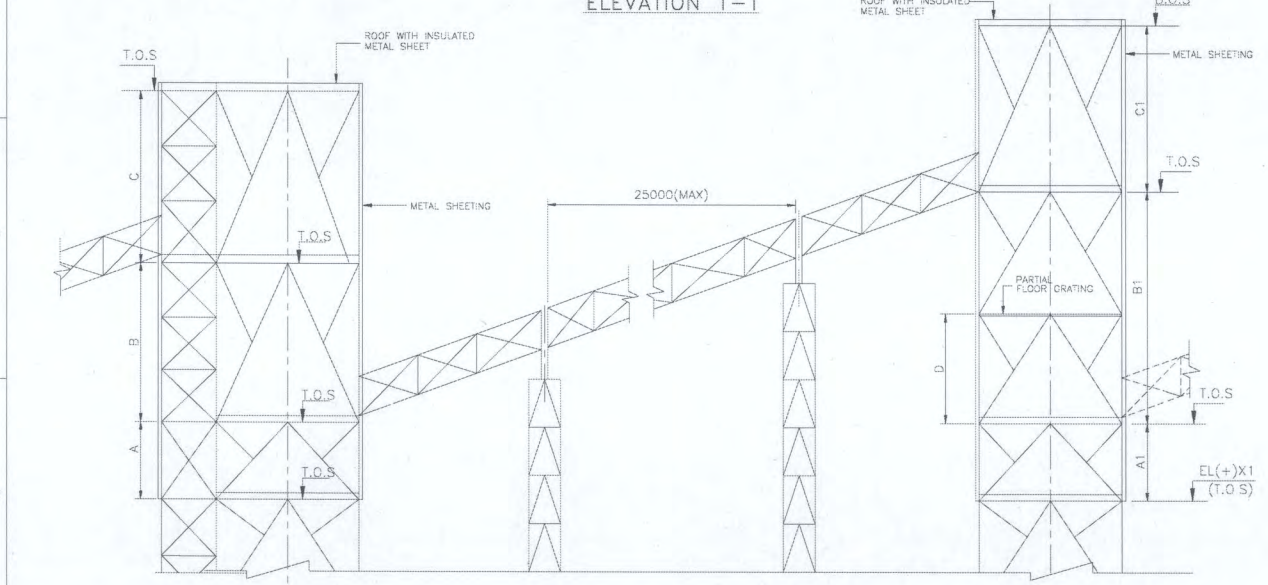
All other conditions of the tender specification remain unchanged.

-Sd-
Manager / Subcontracts

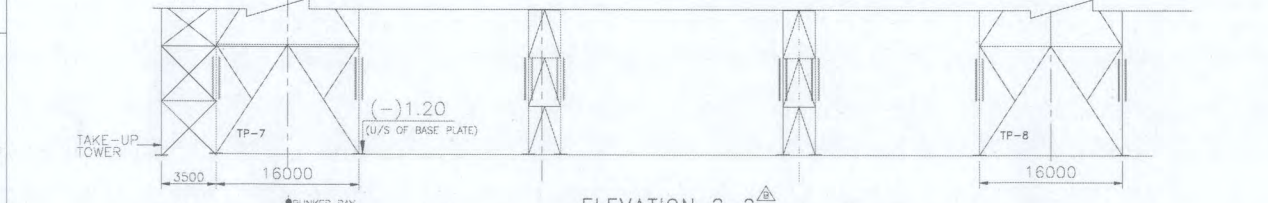
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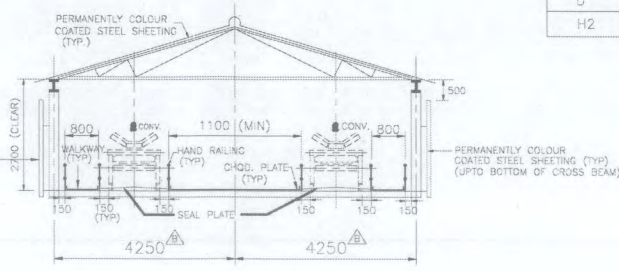
ELEVATION 1-1



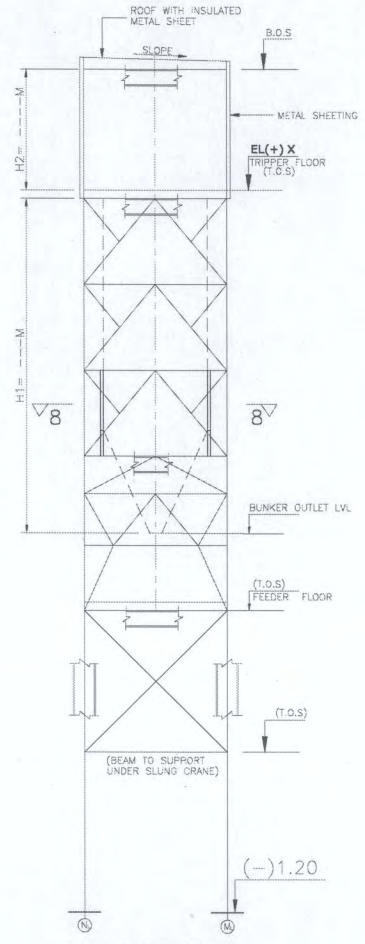
ELEVATION 2-2



SECTION 3-3 (AS SHOWN)
SECTION 3'-3' (MIRROR IMAGE)



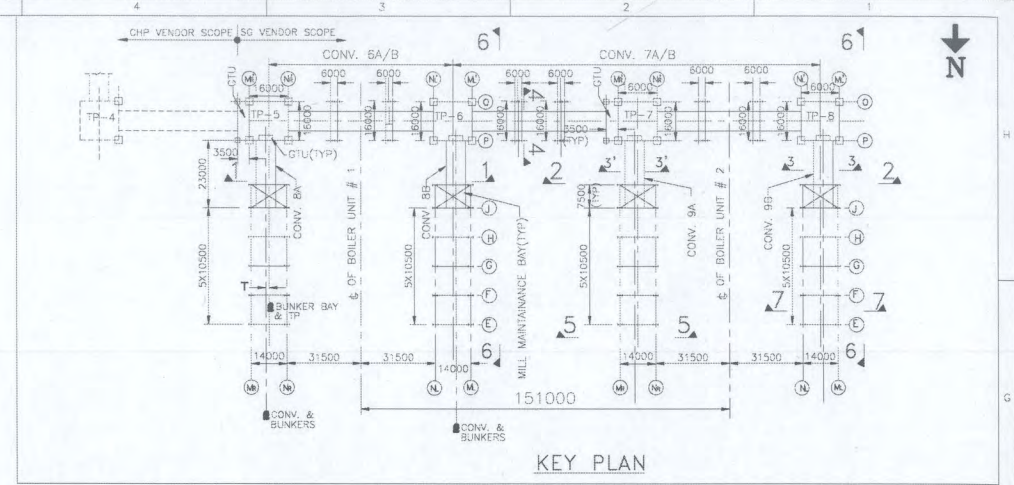
SECTION 4-4



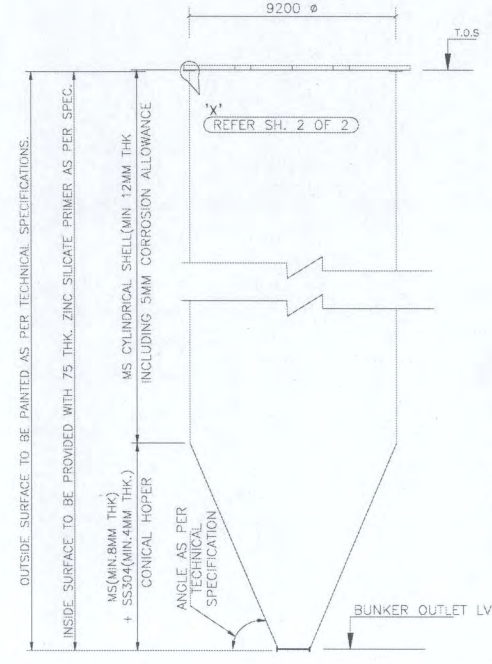
SECTION 5-5

TABLE-1:

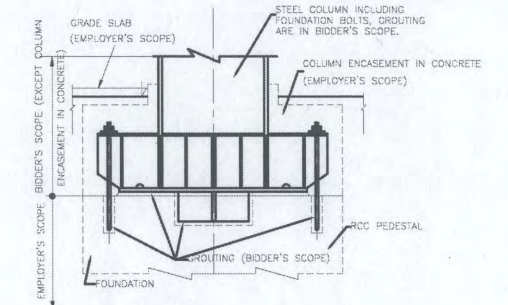
DIMENSION NOTATION	VALUE (METRE)
A	7.2
B	9.3
C	8.0
A1	7.7
B1	14.5
C1	8.0
D	5.8
H2	10.0



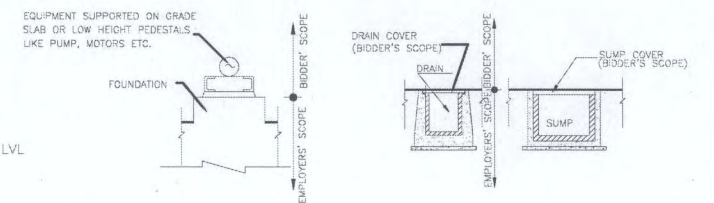
KEY PLAN



ELEVATION FOR BUNKER



FOUNDATION DETAILS OF STEEL SUPER STRUCTURE



FOUNDATION, PAVING, COLUMN ENCASEMENT DRAINS & SUMP ARE IN EMPLOYER'S SCOPE.

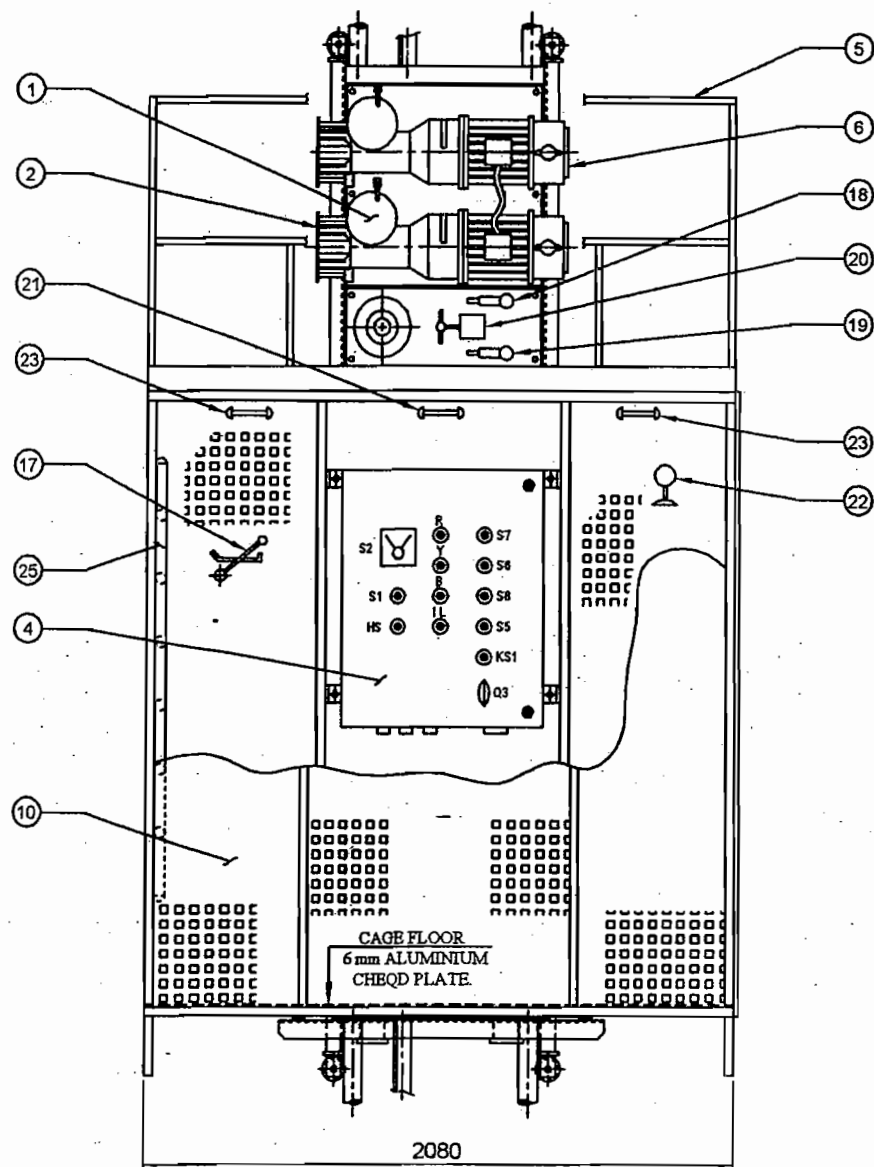
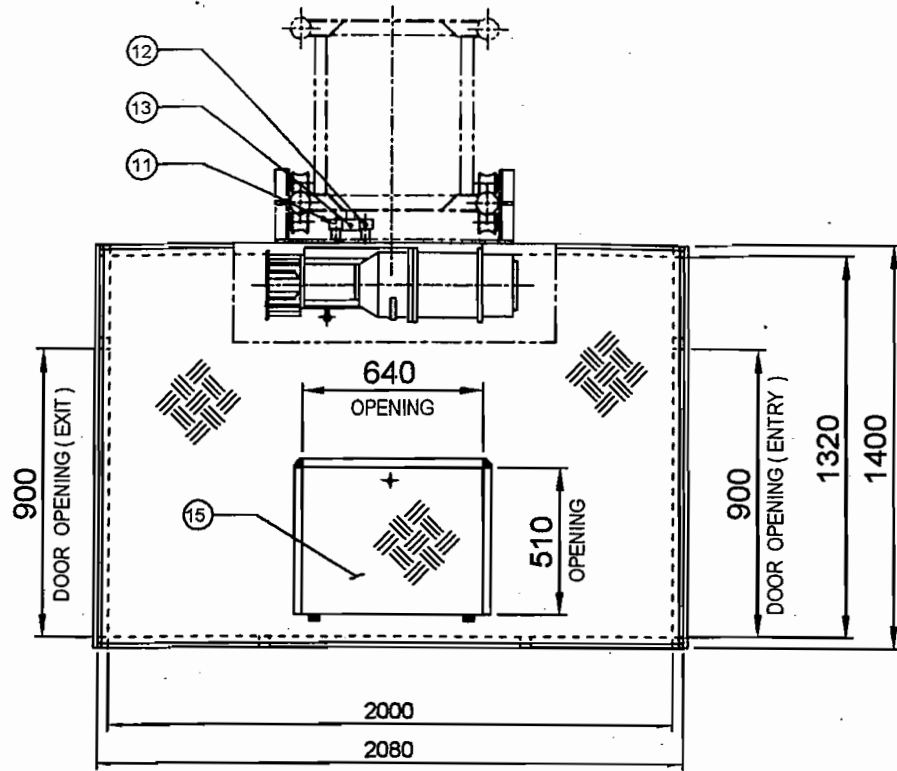
NOTES:-

1. ALL DIMENSIONS ARE IN MM AND LEVELS IN METRE
2. THE STRUCTURAL DETAILS & BRACING ARRANGEMENTS ARE INDICATIVE AND ARE TO BE FINALISED BY THE BIDDER CONSIDERING FUNCTIONAL REQUIREMENT SPECIFIED IN THE TECHNICAL SPECIFICATIONS.
3. RCC FLOORS SHALL BE PROVIDED BY EMPLOYER, WHICH SHALL BE SUPPORTED ON PROFILED METAL DECK SHEET & ANCHORED THROUGH SHEAR STUDS WELDED TO THE STRUCTURAL BEAMS. FOR LOAD ASSESSMENT PURPOSE, THE SLAB THICKNESS MAY BE CONSIDERED AS 150MM ABOVE THE TOP OF METAL DECK. 50 TH. FLOOR FINISH SHALL ALSO BE CONSIDERED ABOVE THE RCC SLAB.
4. ALL ELEVATIONS ARE GIVEN WITH RESPECT TO T.O.S OF TRIPPER FLOOR IN THE BUNKER BUILDING MARKED AS 'EL(+)' X'. FURTHER, EL(+)' X1 SHALL BE X-3.8M(T.O.S), THIS MAY VARY BETWEEN X-3.5 TO X-4(T.O.S). BIDDER TO PROVIDE LEVEL 'X' IN THE GA DRAWING ALONG WITH THE BID.
5. ALL CHP EQUIPMENT & ACCESSORIES, CONVEYORS, SHORT SUPPORTS, STRINGERS, DECK, HEAD AND TAIL END FRAMES, OPERATING AND MAINTENANCE GUIDES FOR THE VGTU, INTERMEDIATE PLATFORMS/ LADDERS/HANDRAILS IN THE VGTU STRUCTURE ALONG WITH ACCESS PLATFORMS, COMPLETE TECHNOLOGICAL STRUCTURES INCLUDING FESTOON CABLES IN BUNKER BUILDING, MONORAILS ETC. ARE EXCLUDED FROM THE SCOPE OF BIDDER.
6. CENTRE LINE DISTANCE BETWEEN BUNKER BAY/TP & BUNKER/CONVEYOR MARKED AS 'T' TO BE PROVIDED BY THE BIDDER ALONG WITH THE BID.
7. BIDDER TO PROVIDE LEVEL 'X' & DIMENSION 'T' IN THE GA DRAWING WHICH IS TO BE SUBMITTED ALONG WITH BID.
8. ALL DIMENSIONS & LEVELS SHOWN IN THIS DRAWING ARE TENTATIVE ONLY & SHALL BE FINALIZED DURING DETAILED ENGINEERING STAGE BY THE BIDDER.

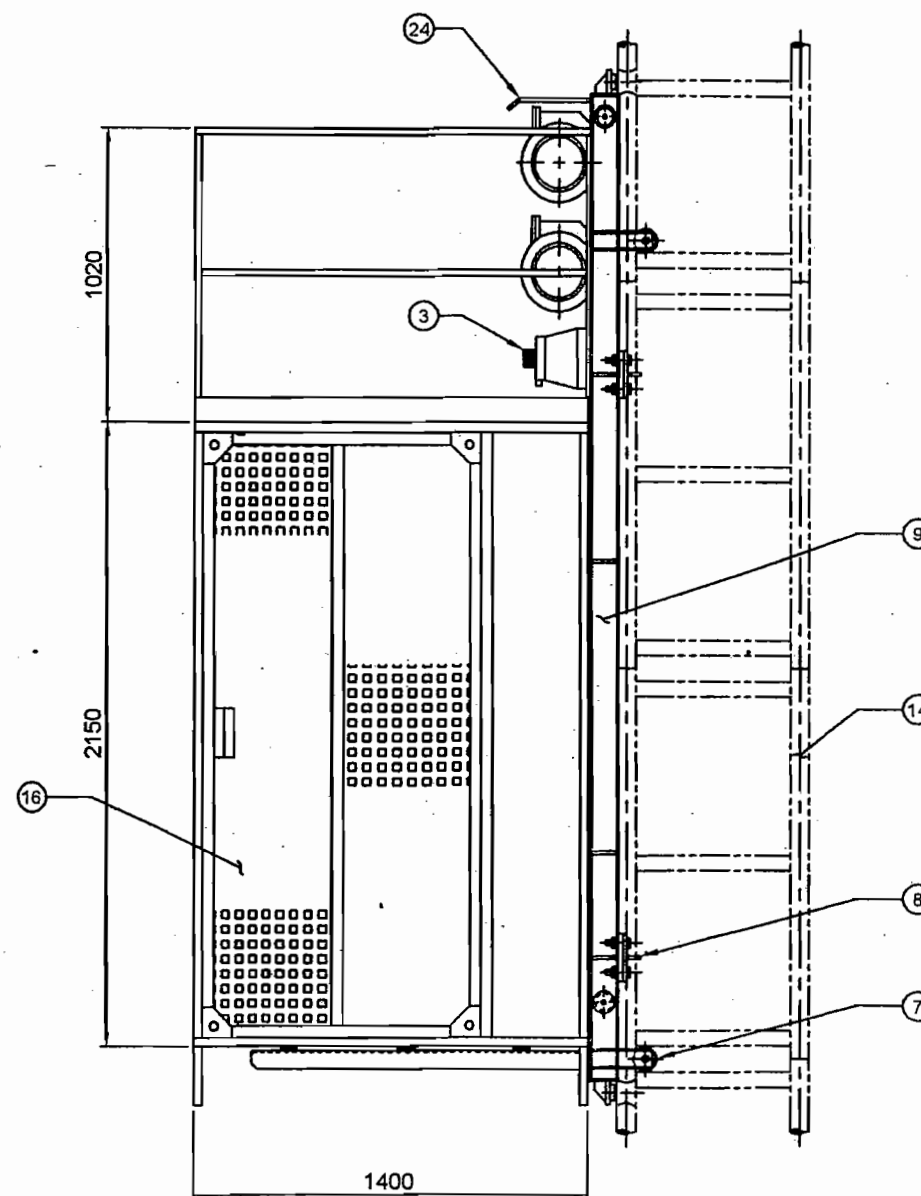
FOR TENDER PURPOSE ONLY

एन टी पी सी लिमिटेड
NTPC Limited
(A GOVERNMENT OF INDIA ENTERPRISE)
ENGINEERING DIVISION

PROJECT		DARLIPALI SUPER THERMAL POWER PROJECT	
TITLE		S G PACKAGE	
DETAILS OF MILL & BUNKER BUILDING, CONVEYOR GALLERIES AND TRANSFER POINTS		STAGE-(2x3500MW)	
REV. NO.	DESCRIPTION	DATE	SCALE
B	REVISED AS PER MECHANICAL COMMENTS	25.03.11	1:200
A	RELEASED FOR TENDER PURPOSE	20.01.11	
DRAWN DESIGN CHKD.		APPROD	DATE
M	E	C	ARCH
Cleared By		AP	GB
SIZE	SCALE	DRG. NO.	REV. NO.
A1	1:200	9549-102-POC-A-001	B



FRONT VIEW




SIDE VIEW

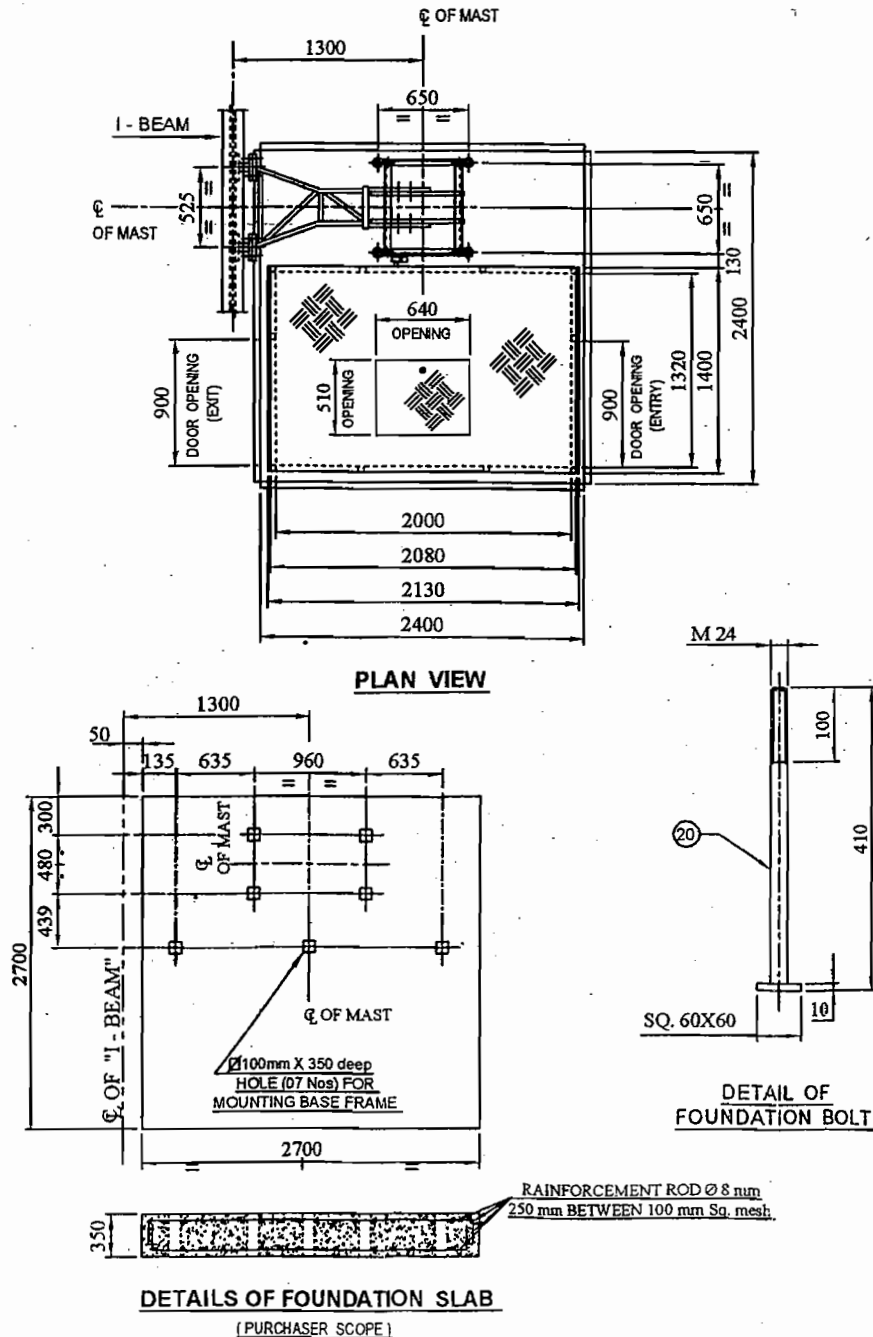
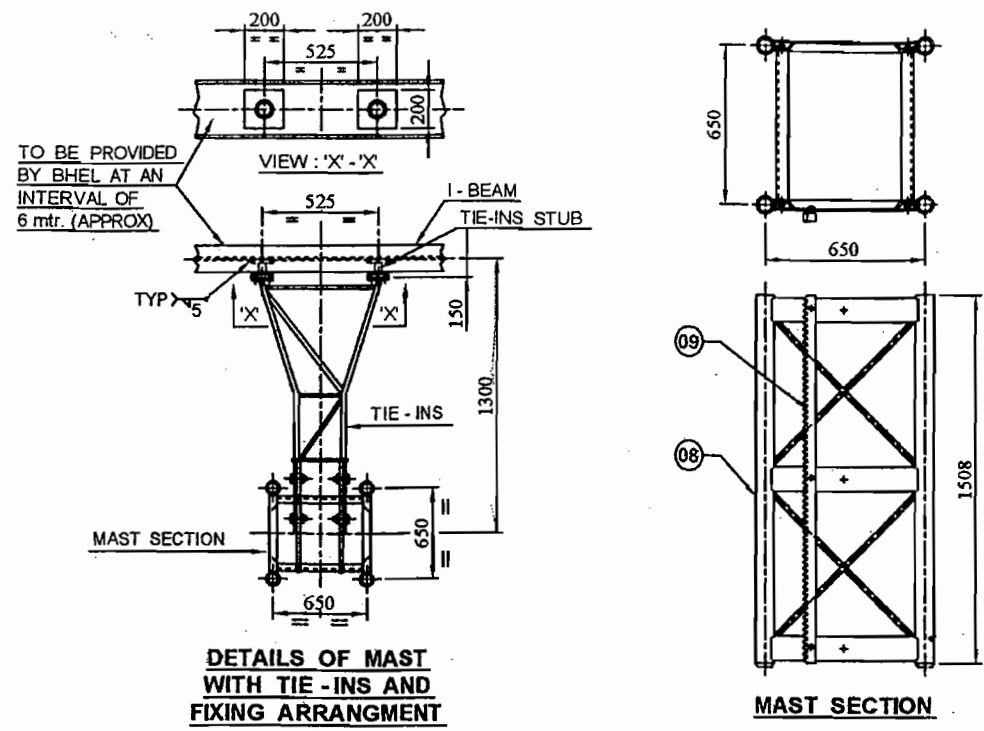
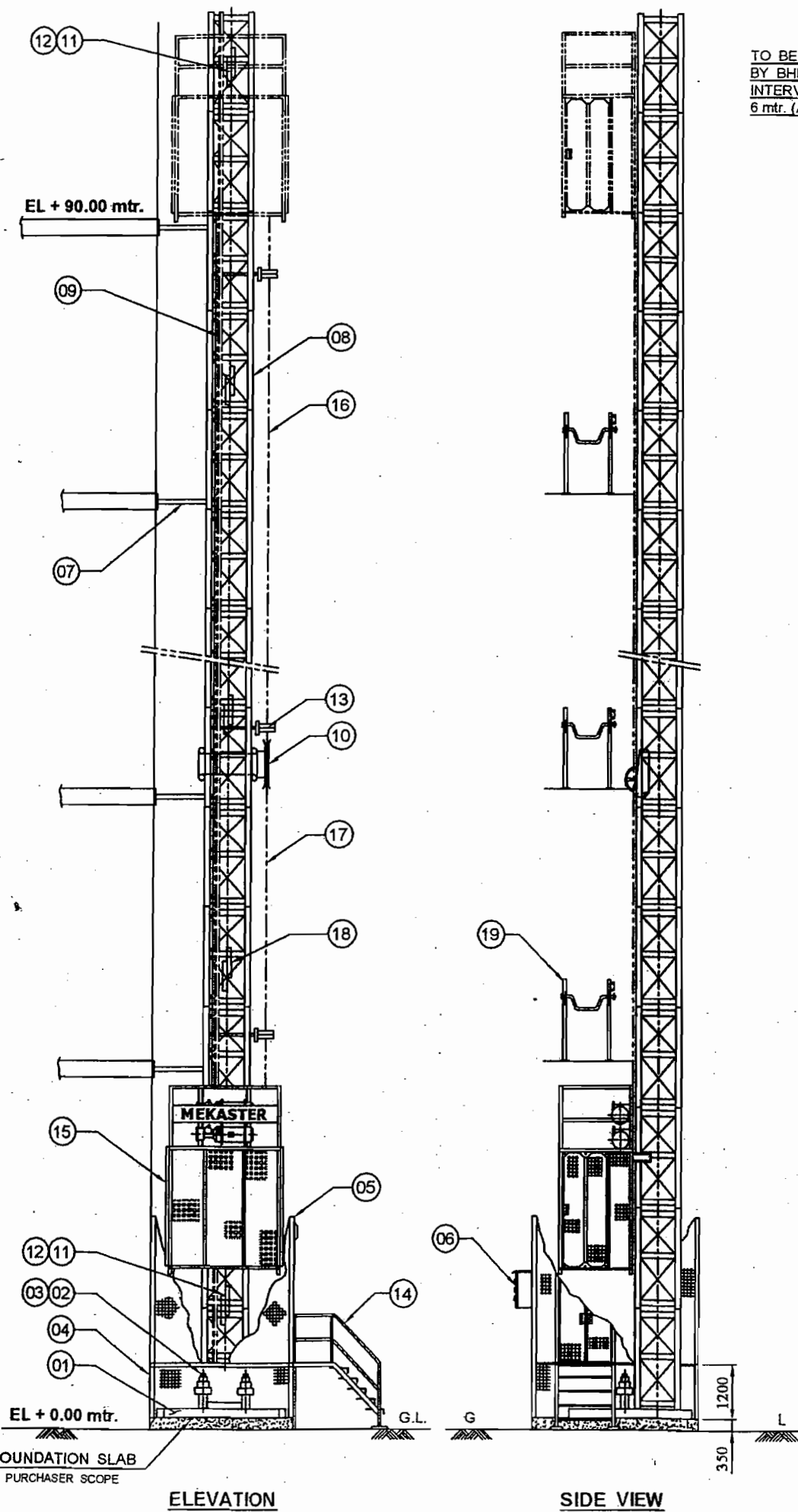
ITEM	DESCRIPTION	QTY/ ELEVATOR
25	LADDER (STD.)	01 No
24	CANOPY	01 No
23	TUBE LIGHT (230 V AC)	02 Nos
22	OSCILLING CAGE FAN	01 No
21	EMERGENCY LIGHT (12 VDC)	01 No
20	3-PHASE LIMIT SWITCH	01 No
19	LIMIT SWITCH (DOWN)	01 No
18	LIMIT SWITCH (UP)	01 No
17	BRAKE LIFTER	01 No
16	CAGE SLIDING DOOR (R.H. & L. H.)	01 No
15	TRAP DOOR	01 No
14	MAST	63 Nos
13	RACK	63 Nos
12	COUNTER ROLLER	04 Nos
11	PINION	02 Nos
10	CAGE	01 No
9	CAGE FRAME	01 No
8	SAFETY HOOK	04 Nos
7	GUIDE ROLLER	12 Nos
6	BRAKE MOTOR	02 Nos
5	SAFETY RAILING	01 No
4	CAGE ELECTRICAL PANEL	01 No
3	SAFETY DEVICE	01 No
2	CENTRIFUGAL BRAKE - (OVER SPEED GOVERNOR)	02 Nos
1	WORM REDUCTION GEAR	02 Nos

CUSTOMER :  **BHARAT HEAVY ELECTRICALS LIMITED.**
PSSR CHENNAI

PROJECT : KTPS, Simhadri, Raichur, Bellary, Vallur, North Chennai

Surface condition	Title	Assy. no.
All dimensions are in m.m. unless specified	GENERAL ARRANGEMENT OF EQUIPMENT ON CAGE UNIT	Ref. dg. no.
		Scale N.T.S. Replace
Product	P. O. No.	Code no.
ELEVATOR	6HEL/PSSR/PUR/C-17201 Dtd-06/03/2008	

 MEKASTER ENGINEERING & EQUIPMENTS (P) LTD. 2507 GDC. HALOL	Drawn	H.M.D.	11/03/08	Drg. no. D - MEK - 280/08	Rev. no. 0
	Check	V.K.P.	12/03/08		
	Appr.	B.M.D.	12/03/08		



BRIEF DATA

TYPE OF ELEVATOR	: RACK & PINION TYPE
PAY LOAD CAPACITY	: 1000 Kg
CAGE INTERNAL SIZE (WXLXH)	: 2000 X 1320 X 2100 mm.
TRAVEL HEIGHT	: 90 mtr
NOS OF LANDINGS	: GL + 06 Nos
SPEED	: 28 mtr / min
MOTOR KW	: 2 X 9.2 KW
STARTING CURRENT MOTOR AT 415 V, 50 Hz	: 90 Amps
POWER SUPPLY FUSES (415V, 50 Hz)	: 63 Amps
CONTROL VOLTAGE	: 110 VAC
METHOD OF CONTROL	: SEMI AUTOMATIC CONTROL SYSTEM THROUGH TON FREQUENCY EQUIPMENT.
QTY. OF ELEVATOR	: 06 Nos (01 NO-KTPS, 01 NO-VALLUR, 01 NO-SIMHADRI, 01 NO-BELLARY, 01 NO-RAICHUR, 01 NO-NORTH CHENNAI)

ITEM	DESCRIPTION	QTY/ELEVATOR
21	FOUNDATION BOLT	07
19	LANDING BAR WITH CALLING P.B.STATION	06
18	LANDING CAM	05
17	FIXED POWER CABLE	60 mtr
16	TRAILING CABLE	60 mtr
15	CAGE UNIT	01
14	STAIR CASE	01
13	CABLE GUIDE	15
12	LIMIT CAM	02
11	3 - PHASE CAM	02
10	CABLE TROLLEY	01
09	RACK	63
08	MAST	63
07	TIE - INS WITH STUB	15
06	BASE PANEL	01
05	LANDING ENCLOSURE WITH DOOR	01
04	GROUND ENCLOSURE	01
03	BUFFER SPRING	02
02	BUFFER BRACKET	01
01	BASE FRAME	01

CUSTOMER: **BHARAT HEAVY ELECTRICALS LIMITED.**
PSSR CHENNAI

PROJECT: KTPS, Simhadri, Raichur, Bellary, Vallur, North Chennai

Surface condition	Title	Assy. no.
All dimensions are in m.m. unless specified	GENERAL ARRANGEMENT OF RACK & PINION ELEVATOR	Ref. dng. no.
Product	P. O. No.	Scale N.T.S.
ELEVATOR	BHEL / PSSR / PUR / C - 17201 Dtd - 06 / 03 / 2008	Replace
Code no.		

MEKASTER
ENGINEERING & EQUIPMENTS
(P) LTD. 2507 GIDC, HALOL

Drawn	H.M.D.	11/03/08	Drg. no.	Rev. no.
Check	V.K.P.	12/03/08	D - MEK - 279/08	0